## 50- A- DESIGN / BUILD

<table>
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<th>Details</th>
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<tr>
<td></td>
<td>This item to be used for Districts letting Design-Build projects. This item to be used only when identified by the District as a &quot;Design-Build&quot; project. Include Initial Contingency Amount under 999- 25 (2999- 25) item.</td>
</tr>
<tr>
<td></td>
<td>When multi-category work is called for, use the pay item structure that represents the largest percentage of the total dollars.</td>
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<tr>
<td></td>
<td>Estimators: Verify that contract type is CDB (Construction Design Build). When entering the pay item, 0 50- A-, use &quot;zero, space, fifty, space, space, operation number&quot;, to correctly align pay item digits.</td>
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<td>Forms and Documentation: Follow Design-Build Guidelines.</td>
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### Related Items

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### Design Forms and Documentation

<table>
<thead>
<tr>
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### Construction Forms and Documentation

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<tr>
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### References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Trns-port</th>
<th>Other Standards</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>T: Plan Details and/or Technical Specifications required</td>
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### Prep & Doc Manual Chapter(s)

| 11 |

### TRNS*PORT Category (DRAFT FIELD):

| 0200 Roadway |

## Structure

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<thead>
<tr>
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<th>LS/LS</th>
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<tbody>
<tr>
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<td></td>
</tr>
<tr>
<td>1 (Resurfacing)</td>
<td></td>
</tr>
<tr>
<td>2 (Roadway Construction)</td>
<td></td>
</tr>
<tr>
<td>4 (Bridge Construction)</td>
<td></td>
</tr>
<tr>
<td>5 (Buildings/Toll Facilities/Rest Areas/Service Plaza)</td>
<td></td>
</tr>
<tr>
<td>6 (Traffic Operations)</td>
<td></td>
</tr>
<tr>
<td>7 (Rail)</td>
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### Notes

| The following items were open, as of the publication date. Refer to the Master Pay Item list for current items. |

---

Details and Structure: Complete- Items 000 to 1999

Page 1 of 769
### Basis of Estimates

#### 60-Maint

**ASSET MANAGEMENT**

Maintenance Contracts Only

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
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<th>PlanQuantity?</th>
<th>Details</th>
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<tbody>
<tr>
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<td>Maintenance Item: Not Valid for Construction Contracts</td>
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**Notes**

Additional BOE details pending

**Related Items**

Required

Recommended

**Design Forms and Documentation**

**Construction Forms and Documentation**

**References**

- PPM Chapter
- Trns-port
- Other Standards
- Specifications
- Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):**

**Struct. 60-Maint**

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<thead>
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**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

#### 99-Maint

**LUMP SUM**

Maintenance Contracts Only

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</thead>
<tbody>
<tr>
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<td></td>
<td>no</td>
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</table>

**Details**

MAINTENANCE CONTRACTS ONLY

Additional BOE details pending

**Related Items**

Required

Recommended

---

**Details and Structure:** Complete- Items 000 to 1999

Page 2 of 769
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tr>
<td>E099 1</td>
<td>LUMP SUM</td>
<td>LS</td>
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<td>E099 2</td>
<td>PERIODIC PAYMENTS OF LUMP SUM</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
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</tbody>
</table>

101-1-MOBILIZATION

Unit LS/LS  Accuracy Lump Sum PlanQuantity? yes


Details Consists of work and operations necessary to begin work on a project. Includes moving in equipment and personnel, establishing temporary offices, safety equipment and sanitary facilities. May include surveying, bond and insurance expenses. In some cases, may consist of security services and/or expenses associated with night work.

For contracts with more than one project, the pay item for Mobilization will be shown on each project's Summary of Pay Items. An exception to this is when the contract contains a Joint Project Agreement (JPA): the Mobilization will not be shown on the Summary of Pay Items for the JPA; the cost of Mobilization will be included in the prime project.

For projects with multiple locations (separate bridges- without connecting roadway, separate intersections), use MOB and MOT only once per project.

TRNSPORT: MOB and MOT are normally loaded in the Roadway category. When no roadway category exists, the designer may load the items into the category that corresponds to the primary work, i.e. structures, signals, or lighting, or a Roadway category may be created for the MOB and MOT items. Refer to Estimates Bulletin 12-13 for additional details.
COMP 700-050-05: Lump Sum Quantities

Use a quantity of 1, but calculations and computation book documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

PPM Chapter
Trns-port
Other Standards
Specifications Section 101
Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 101-1 MOBILIZATION LS/LS

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<td>LS</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

101-Maint MOBILIZATION

Maintenance Contracts Only

Unit Mixed Accuracy Refer to item structure and details PlanQuantity? no

Notes Maintenance Item: Not Valid for Construction Contracts

Details MAINTENANCE CONTRACTS ONLY

Additional BOE details pending

Required Recommended

Design Forms and Documentation

Construction Forms and Documentation

References PPM Chapter
Trns-port
Other Standards
Specifications
Prep & Doc Manual Chapter(s)
**TRNS*PORT Category (DRAFT FIELD):** 0200 or other  
**Struct.** 101-Maint  
**MOBILIZATION**  
Maintenance Contracts Only

---

**Notes**

---

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tr>
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<td>MOBILIZATION (EMERGENCY RESPONSE)</td>
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</table>

---

**102- 1- MAINTENANCE OF TRAFFIC**

**Unit** LS/DA  
**Accuracy** Lump Sum (Day)  
**Plan Quantity?** no

---

**Notes**

**Details**

Includes all items required to safely maintain traffic throughout a transportation work zone with minimal inconvenience to the public and fit into one of the following categories:

1. cannot reasonably be quantified;
2. cannot be addressed under current pay items;
3. are incidental to the operations necessary to safely maintain traffic throughout a work zone.

Code the second unit of measure (number of days) from the construction day estimate.

For contracts with more than one project, the pay item for Maintenance of Traffic will be shown on each project's Summary of Pay Items. An exception to this is when the contract contains a Joint Project Agreement (JPA): the Maintenance of Traffic will not be shown on the Summary of Pay Items for the JPA; the cost of Maintenance of Traffic will be included in the prime project.

---

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

COMP 700-050-05: Lump Sum Quantities

Use a quantity of 1, but calculations and computation book documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

---

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

---

**References**

PPM Chapter Trns-port

Other Standards Index No. 600

Specifications Section 102

Prep & Doc Manual Chapter(s) 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200  
**Struct.** 102- 1-  
**MAINTENANCE OF TRAFFIC**  
LS/DA

---

**Notes**

---

Details and Structure: Complete- Items 000 to 1999  
Page 5 of 769
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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### 102- 2- AA SPECIAL DETOUR

<table>
<thead>
<tr>
<th>Unit</th>
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<th>Accuracy</th>
<th>Lump Sum</th>
<th>PlanQuantity?</th>
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<tbody>
<tr>
<td>Notes</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Details</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Consists of work and materials necessary to construct a diversion (Temp Roadway). May also include temporary bridge (Acrow panel, or similar.) The quantities for major items necessary for the Special Detour shall be shown in the plans but paid for under Special Detour. Items that will be used in the Special Detour that will remain as part of the final product will be paid for under the appropriate pay item (i.e., earthwork). Show the limits of each Special Detour in the plans. Traffic control devices, warning devices, barriers, signing and pavement markings will be paid for separately.

Temporary Detour Bridge: When a temporary detour bridge is used, refer to index 21600 and instructions. The designer should include the following information in the plans: contact information, location (maintenance yard) of bridge components, and pick-up/delivery instructions.

#### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

#### Design Forms and Documentation

- `sumqrd: Roadway Summary of Quantities Sheet`
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

#### Construction Forms and Documentation

- No additional form required; use plans summary or comp book
- Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

#### References

- **PPM Chapter**
  - Trns-port
- **Other Standards**
  - Index No. 21600 Series- Temporary Detour Bridge
- **Specifications**
  - Section 102
- **Prep & Doc Manual Chapter(s)**
  - 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

### Struct. 102- 2- AA SPECIAL DETOUR LS/LS

AA = Detour Number
1 (First Detour Of Several)
2 (Second Detour Of Several)
3 (Third Detour Of Several)
4 (Fourth Detour Of Several)
N (Nth Detour Of Several)
N = 1 Thru 30

#### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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### 102-3- COMMERCIAL MATERIAL FOR DRIVEWAY MAINTENANCE

<table>
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<tr>
<th>Unit</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY; M3</td>
<td>Cubic Yard; Cubic Meter</td>
</tr>
</tbody>
</table>

**Notes**

Consists of furnishing and placing suitable material which may be necessary for providing safe access to businesses and residences affected by the construction. If authorized, portions of this material may be salvaged and reused at other driveways along the length of the project.

**Details**

Quantity Estimation: Use 250 cubic yards per mile (200 cubic meters per kilometer) on rural projects and 500 cubic yards per mile (400 cubic meters per kilometer) on urban projects. Use 250 cubic yards (200 cubic meters) as a minimum, unless otherwise directed by the District Construction Office.
Per the specification, "The quantity to be paid for will be the certified volume, in cubic yards, of all materials authorized by the Engineer, acceptably placed and maintained for driveway maintenance. The volume, which is authorized to be reused, and which is acceptably salvaged, placed, and maintained in other designated driveways will be included again for payment."

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
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<tbody>
<tr>
<td>COMP 700-050-04: Volume Measure Items and Continuation</td>
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</tr>
<tr>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
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</tr>
</tbody>
</table>

**Construction Forms and Documentation**

| No additional form required; use plans summary or comp book |  |
| Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book). |  |

**References**

- PPM Chapter
- Trns-port
- Other
- Standards
- Specifications Section 102
- Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct. 102-3-** COMMERCIAL MATERIAL FOR DRIVEWAY MAINTENANCE CY

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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</table>

**102-11-** SERVICE PATROL- ROAD RANGER OR SIMILAR

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
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<tbody>
<tr>
<td>MH</td>
<td>Hour</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

**Details**

Used when it is determined during design that an active service patrol ("Road Ranger" or similar service) will be needed to keep traffic flowing. The Traffic Control Plan (TCP) or Technical Special Provisions should explain when and where the service patrol will be needed, as well as what type of services will be provided, and what type of service vehicle will be needed. Time shall be based on an 8 hour day.

Coordinate services with District Office(s) that may have a Road Ranger service in effect-Maintenance, Operations, Construction, or other. Do not duplicate services that are available under a separate contract. Refer to Traffic Operations web page for additional information on Road Ranger services.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.
### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
</tr>
<tr>
<td></td>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
</tr>
<tr>
<td></td>
<td>Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
<tr>
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<td>PPM Chapter</td>
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<td></td>
<td>Standards Index No. 600</td>
</tr>
<tr>
<td></td>
<td>Specifications</td>
</tr>
</tbody>
</table>

*T: Plan Details and/or Technical Specifications required*

**Prep & Doc Manual Chapter(s)**  7, 13

### TRNSPORT Category (DRAFT FIELD):

0200 Roadway

### Struct.

102- 11- SERVICE PATROL- ROAD RANGER OR SIMILAR MH

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0102 11</td>
<td>SERVICE PATROL- ROAD RANGER OR SIMILAR</td>
<td>MH</td>
<td>D</td>
<td>1/1/2010</td>
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</table>

### 102- 14- TRAFFIC CONTROL OFFICER

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>MH</td>
<td>Hour</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

Refer to 999-102 for Speed/Law Enforcement

**Details**

Provide uniformed traffic control officers, including marked law enforcement vehicles, to assist in controlling and directing traffic in the work zone ONLY when the following types of work is necessary on projects:

1 (through Dec 2011) traffic control in a signalized intersection when signals are not in use,
1* (effective January 2012) Directing traffic/overriding the signal in a signalized intersection.
2 when standard index no. 619 is used on Interstate roadway at nighttime and called for in the plans,
3 when standard index 655 Traffic Pacing for overhead work is called for in the plans or approved by the Engineer, or
4 When pulling conductor/cable above an open traffic lane on limited access facilities, when called for in the plans or approved by the Engineer.

The Department will include pay item 102- 14 for officers directing traffic as defined above. Pay Item note/plan details are recommended to identify work in accordance with specification. DO NOT USE this pay item for "slowing traffic" or "as needed" law enforcement. For Speed and Law Enforcement officers, see pay item 999-102.
*ESTIMATING GUIDANCE:
For signalized intersections being resurfaced, use 4 hours per each approach lane (through and turn) per lift. Do not count bike lanes or shoulders. The estimate includes the number of TCO hours needed for the operation of milling, sweeping, tacking, paving, installing temporary and permanent pavement markings, and installing loops/other vehicle detection devices.

For pacing operations, the number of officers varies by location/project conditions. Contact the District Construction Office for estimating guidance based on project conditions.

NOTE: This guidance does not include TCO hours at a signalized intersection for other types of work such as reconstruction, traffic signal components (other than loops), or for other situations specified under FDOT specification 102-7. Include additional hours for these activities.

PLAN DETAILS:
The specifications (summarized above) control when the 102-14 pay item will be used. The designer may summarize the use of the pay item in the plans as applicable to the project. DO NOT expand or restrict the intent of the specification language with a plan note.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
<td>999-102-xxa</td>
</tr>
</tbody>
</table>

Notes
Refer to 999-102 for Speed/Law Enforcement

Contractor’s Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Trns-port
Other Standards Index No. 600, 619, 625, 655
Specifications Section 102
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Item Description Unit TSP/Detail Valid Date Obsolete Date
0102 14 TRAFFIC CONTROL OFFICER MH 1/1/2010

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<td>0102 14</td>
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<td>1/1/2010</td>
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</tbody>
</table>

102- 60-
WORK ZONE SIGN

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED</td>
<td>Each Day</td>
<td>no</td>
</tr>
</tbody>
</table>

Notes
Details

Used for the purpose of informing motorists of the work zone and work zone related (i.e. temporary regulatory or temporary route) conditions that will be encountered. Tabulate the number of individual sign panels (20 square feet or less)/(1.9 square meters or less) as recorded per day for each phase of the project. When multiple signs are located together on a single or multiple posts, each sign panel will be paid for individually.

Non-standard sign panels, including Project Information Signs, (greater than 20 square feet)/(greater than 1.9 square meters) will be detailed in the plans and paid for under Maintenance of Traffic, Lump sum.

Refer to PPM (Plans Preparation Manual) Vol 1, Chapter 10 for additional information.

Work zone sign systems must be listed on the QPL.

Related Items

Required Recommended
Design Forms and Documentation COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Trns-port
Other Standards  Index No. 600
Specifications  Section 102
Prep & Doc Manual Chapter(s)  7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Notes

Signs LESS THAN 20 ft² only- see details above

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<td>0102 60</td>
<td>WORK ZONE SIGN</td>
<td>ED</td>
<td>1/1/2010</td>
<td></td>
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</tr>
</tbody>
</table>

102- 61- BUSINESS SIGN

Unit  EA  Accuracy  Each  PlanQuantity?  no

Notes

Effective January 2011, not needed for resurfacing type projects. See detail below.

Details

Used to assist motorists with finding the appropriate business driveway entrance while the roadway is under construction. The quantity is based on one business sign for each business whose driveway entrance could be affected. When several businesses share a common driveway, one sign per common driveway should be estimated.

Effective January 2011: Per Index 600, Business entrance signs are intended to guide motorist to business entrances moved/modified or disturbed during construction projects. Business entrance signs are not required where there is minimal disruption to business.
driveways such as with resurfacing type projects.

Per the specifications, "Provide and place signs in accordance with the plans and Design Standards. The maximum sign size is 24 by 36 inches. Use signs with specific business names on each sign. Install logos provided by business owners and approved by the Engineer. Standard Business entrance signs meeting the requirements of Index 17355 without specific business names may be used only with the approval of the Engineer."

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
</tr>
</tbody>
</table>

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Trns*port
- Other Standards Index No. 600
- Specifications Section 102
- Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 102- 61- BUSINESS SIGN EA

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<th>TSP/Detail</th>
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<tbody>
<tr>
<td>0102 61</td>
<td>BUSINESS SIGN</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**102- 71- AB TEMPORARY BARRIER WALL**

**Unit** LF; M1  **Accuracy** Linear Foot; 1/10 Meter  **PlanQuantity?** no

**Notes**

Included for the protection of the traveling public and workers.

**BARRIER TYPES:**
For bridge applications, ONLY Type K permitted.
For roadway applications, all types of barriers are permitted. Refer to design standards and/or QPL for deflection space and offset from travel way requirements.

**MEASUREMENT:**
May be moved from one location to another on the project. Estimate length of wall needed for each phase, and then choose the maximum length anticipated for any one phase to be paid for as Temporary Barrier. Phasing in plans must indicate adequate quantity of barrier prior to calling for relocating of barrier. Add the estimated lengths for the remaining phases together and pay for under Barrier Wall (Temporary) Relocate. When this item is used,
include lights or glare screen.

For example:
200 LF needed for phase 1 = 200 LF F&I
300 LF needed for phase 2 = 100 LF left in place from phase 1 (no movement; no payment) +100 LF Relocated from phase 1 +100 LF F&I
150 LF needed for phase 3 = 150 LF relocated from phase 2 (remaining quantity stockpiled; no payment)
400 LF needed for phase 4 = 300 LF relocated from earlier phase(s) or stockpile + 100 LF F&I
200 LF needed for phase 5 using phase 4 wall in existing location = 0 LF relocated (remaining quantity stockpiled, if needed for later use)

Note: No separate payment for "removal" or "stockpiling"

Maximum quantity F&I for above example: 400 LF
Relocate paid when moved to a new phase, NOT when removing or stockpiling.

QPL- Temporary barrier wall shall conform to the requirements of the pre-approved alternatives listed on the Department's Qualified Products List (QPL), unless otherwise called for in the plans.

Type K Barriers, refer to Instructions for Design Standards, Index No. 411

Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>102- 79 or 102- 94-xab</th>
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<td>Recommended</td>
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<tr>
<td></td>
<td>102- 81-  1, and/or 102- 89-xxa</td>
</tr>
</tbody>
</table>

Design Forms and Documentation

COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Trns-port
Other Standards Index No. 411, 412, 600
Specifications Section 102
Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 102- 71- AB TEMPORARY BARRIER WALL LF

A = Operation
1 (Furnish & Install)
2 (Relocate)
B = Material
1 (Concrete)
2 (Water filled)
3 (Low Profile Concrete) Index 412
4 (Type K) see details above
Notes  Effective 1/04 letting: B= 3, 4

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
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<td>1/1/2010</td>
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<tr>
<td>0102 71 12</td>
<td>BARRIER WALL, TEMPORARY, F&amp;I, WATERFILLED</td>
<td>LF</td>
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<td>1/1/2010</td>
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<tr>
<td>0102 71 13</td>
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<td>LF</td>
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<td>1/1/2010</td>
<td></td>
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<tr>
<td>0102 71 14</td>
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<td>0102 71 24</td>
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<td>LF</td>
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<td>1/1/2010</td>
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</tbody>
</table>

102-73- TEMPORARY GUARDRAIL

Unit LF; M1 Accuracy Linear Foot; 1/10 Meter PlanQuantity? no

Notes

For Temporary applications, use in accordance with Index 400. Payment includes installation, maintenance, and removal of guardrail.

For permanent applications, refer to 536 items.

Per the specification, "The quantity to be paid for will be the length, in feet, of temporary guardrail constructed and certified as installed/used on the project. The length of a run of guardrail will be determined as a multiple of the nominal panel lengths."

Related Items

Required Recommended

Design Forms and Documentation

COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Trns-port

Other Standards Index No. 400

Specifications Section 102

Prep & Doc Manual Chapter(s) 7, 13
### TEMPORARY GUARDRAIL

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
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<td>1/1/2010</td>
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</table>

## 102- 74- A TEMPORARY BARRICADE/CHANNELIZING DEVICE

<table>
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<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED</td>
<td>Each Day</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

Included for the protection of workers and the public from hazards within the traffic control zone. The designer is NOT to add plan notes specifying one type of barricade/channelizing device (Type I, II, DI, VP, Drum, or LCD).

DI = Direction Indicator Barricade, shown on Index 600.
VP= Vertical Panel
LCD= Longitudinal Channelization Device. Includes both pedestrian and vehicular applications.

Estimate for each Traffic Control Plan phase based on the type of operation and duration anticipated as follows: Quantity= (Length of Setup / Spacing) X Phase Duration.

**Related Items**

- **Design Forms and Documentation**
  - COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
  - Locate in the plans. Summarize quantities by location in the computation book.

---

**References**

- **PPM Chapter**
- **Trns-port**
- **Other Standards** Index No. 600
- **Specifications** Section 102
- **Prep & Doc Manual Chapter(s)** 7, 13

---

**Notes**

Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<th>Obsolete Date</th>
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<tr>
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<td>1/1/2010</td>
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</tbody>
</table>

**102- 75- A** TEMPORARY SEPARATOR

**Notes**

MOT/Construction item effective January 2013 letting, per specification change (previously paid under LS MOT).

Maintenance/Push Button items are effective July 2012, with details included in the contract.

**Details**

Temporary Separator is to be used in accordance with Index 600. Products are listed on the Qualified Products List (QPL).

For construction applications, the product remains the property of the contractor; payment will include Furnish, Install, and removal. Do not specify materials or upright type. Vertical elements will be orange, or orange/white, in accordance with the design standard.

For Maintenance or Push Button applications, the product becomes the property of the Department. Include a contact name and number for pick-up/delivery instructions. The vertical element color may be specified, as needed. Do not restrict the element type or limit suppliers in the contract documents.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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**Design Forms and Documentation**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

**References**

PPM Chapter
Trns-port
Other Standards
Specifications
Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):** 0200 or other Roadway or other- see details

**Struct.** 102- 75- A TEMPORARY SEPARATOR LF

A= Operation
1 (F&I, remove) MOT Operations during construction contract, effective 1-1-13
2 (F&I, remain) Maintenance and Push Button Operations only
3 (Install) Maintenance and Push Button Operations only
4 (Relocate) Maintenance and Push Button Operations only
5 (Remove) Maintenance and Push Button Operations only
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<tr>
<td>0102 75 1</td>
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<td>7/1/2012</td>
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<td></td>
<td>7/1/2012</td>
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</table>

### 102-76- ARROW BOARD / ADVANCE WARNING ARROW PANEL

**Unit**: ED  
**Accuracy**: Each Day  
**Plan Quantity?**: no

**Notes**

Included for the purpose of providing advanced warning of a lane closure. (Not intended for lane shifts.) Estimate the number needed for each Traffic Control Plan phase times the phase duration.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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</thead>
<tbody>
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</table>

**Design Forms and Documentation**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Contractor’s Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Trns-port</th>
<th>Other Standards</th>
<th>Specifications</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Index No. 600</td>
<td>Section 102</td>
</tr>
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</table>

**TRNS*PORT Category (DRAFT FIELD)**: 0200 Roadway

**Struct.** 102-76- ARROW BOARD / ADVANCE WARNING ARROW PANEL

**Notes**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tr>
<td>0102 76</td>
<td>ARROW BOARD / ADVANCE WARNING ARROW PANEL</td>
<td>ED</td>
<td>1/1/2010</td>
<td></td>
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</tr>
</tbody>
</table>

**102-77-**  
**HIGH INTENSITY FLASHING LIGHT, TEMPORARY, TYPE B**

**Notes**

**Details**

Included as a safety device, to draw attention to the warning sign. The lights shall be mounted on the first advanced post mounted warning sign where only one sign is used, and on the first and second advanced post mounted warning signs where two or more signs are used. This applies to all approaches to any work zone. When this item is used, item 102-60 (2102-60) must be used.

Refer to the PPM for Warning Lights.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

**Design Forms and Documentation**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Vol 1, Ch 10.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trns-port</td>
<td></td>
</tr>
<tr>
<td>Other Standards</td>
<td>Index No. 600</td>
</tr>
<tr>
<td>Specifications</td>
<td>Section 102</td>
</tr>
<tr>
<td>Prep &amp; Doc Manual Chapter(s)</td>
<td>7, 13</td>
</tr>
</tbody>
</table>

**TRNS*PORT Category (DRAFT FIELD):** 0200  Roadway  

**Struct.** 102-77-  
**HIGH INTENSITY FLASHING LIGHT, TEMPORARY, TYPE B**

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0102 77</td>
<td>HIGH INTENSITY FLASHING LIGHTS, TEMP, TYPE B</td>
<td>ED</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**102-78-**  
**TEMPORARY RETROREFLECTIVE PAVEMENT MARKER**

**Notes**

**Details**

Class A, B, D, or E RPMs used to supplement pavement markings, as shown in Index 600.
Struct. 102-78- TEMPORARY RETROREFLECTIVE PAVEMENT MARKER

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0102 78</td>
<td>TEMPORARY RETROREFLECTIVE PAVEMENT MARKER</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

Note: These lights are placed on Barrier Wall (Temp), excluding low profile. The standard spacing will be:
- 50’ on centers for transitions, 100’ on centers for curves, 200’ on centers tangents (15 meters on centers for transitions, 30 meters on centers for curves, 60 meters on centers for tangent);
- Curves that are flat enough to maintain a normal 2% cross slope shall have spacing equal to that of a tangent.

QPL: Temporary barrier wall mount lights shall conform to the requirements of the pre-approved alternatives for temporary concrete or water filled barrier wall listed on the Department’s Qualified Products List (QPL).

Barrier mounted wall lights will not be required when glare screen is used.

Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
</tr>
</tbody>
</table>

Notes

No additional form required; use plans summary or comp book

Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).
Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>010279</td>
<td>LIGHTS, BARRIER WALL MOUNT, TEMP, TYPE C, STEADY BURN ED</td>
<td>ED</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

102-81- A TEMPORARY CRASH CUSHION

Unit LO Accuracy Location PlanQuantity? no

Notes Effective January 2013 for gating crash cushion.

Details Additional details pending…

Gating crash cushions may be used on bridge decks, where anchorage of redirective crash cushions is not practical.

Related Items

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Trns-port
Other
Standards
Specifications Section 102
Prep & Doc Manual Chapter(s)
Basis of Estimates
January 22, 2013

Struct.  102- 81-  A  TEMPORARY CRASH CUSHION  LO

A = Type
3 (Gating)
13 (Gating, less than 50) see details above

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0102 81 3</td>
<td>TEMPORARY CRASH CUSHION-GATING, REDIRECTIVE OPTION</td>
<td>LO</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

102- 89-  A  TEMPORARY CRASH CUSHION

Unit  LO  Accuracy  Location  PlanQuantity?  no

Notes
Effective January 2012: Special Provision may apply with new pay item A=17. Refer to Estimates Bulletin 11-10.

Details
Payment will be made based on each location of the crash cushion/attenuator. Redirective cushions selected by contractor, subject to Design Standards. Restricted options to be detailed in plans and documented in project file.

Through December 2011: All temporary crash cushions use A=7 Redirective Option.

Effective January 2012: Refer to Estimates Bulletin 11-10 and Mandatory Specification change. Special Provision SP1021312 and pay item 102-89-17 will be used "on projects with less than 50 crash cushions and one of the following work types: Add Lanes and Reconstruction, Add Lanes and Rehab pavement, Interchanges and new road construction."

MULTIPLE PROJECTS ON ONE CONTRACT: If any project within a contract is a capacity project, ALL projects will be considered capacity projects. DO NOT USE both temporary, or both permanent pay items on a contract. (Remember: the specifications will apply equally to all projects on a contract.)

Formerly known as "Impact Attenuators"

Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>
| Design Forms and Documentation | COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book. |

Construction Forms and Documentation
No additional form required; use plans summary or comp book
Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Trns-port
Other Standards  See detail; Index No. 415, 430
Specifications Section 102
Prep & Doc Manual Chapter(s) 7, 13

Struct. 102- 89- A TEMPORARY CRASH CUSHION LO

A = Type
7 (Redirective Option)
17 (Redirective Option, less than 50) see details above

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0102 89 7</td>
<td>TEMPORARY CRASH CUSHION, REDIRECTIVE OPTION, NON-CAPACITY PROJECTS OR &gt;50</td>
<td>LO</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0102 89 17</td>
<td>TEMPORARY CRASH CUSHION, REDIRECTIVE OPTION, CAPACITY PROJECTS AND LESS THAN 50</td>
<td>LO</td>
<td></td>
<td>1/1/2012</td>
<td></td>
</tr>
</tbody>
</table>

102- 94- AB GLARE SCREEN

Unit LF; M1 Accuracy Linear Foot; 1/10 Meter PlanQuantity? no

Notes

Details
See barrier wall detail for measurement. This item is used with Temporary Barrier Wall (Concrete).

Refer to specification from QPL requirements.

When glare screen is used, barrier mounted lights will not be required.

Related Items
Required 102- 71-xab Recommended

Design Forms and Documentation
COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation
No additional form required; use plans summary or comp book

Contractor’s Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Trns-port
Other Standards
Specifications Section 102
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway
### Struct. 102-94-AB  GLARE SCREEN  LF

- **A = Operation**
  - Blank (Furnish and Install)
  - 1 (Relocate)
- **B = Wall Material**
  - 1 (Concrete)

#### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0102 94 1</td>
<td>GLARE SCREEN, TEMPORARY, F&amp;I, WALL MATERIAL-CONCRETE</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0102 94 11</td>
<td>GLARE SCREEN, TEMPORARY, RELOCATE, WALL MATERIAL-CONCRETE</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 102-98- A  BARRICADE TYPE III- TO REMAIN  EA

#### Notes

- **Unit**: EA
- **Accuracy**: Each
- **Plan Quantity?**: no

#### Design Forms and Documentation

**Required**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Recommended**

- No additional form required; use plans summary or comp book
- Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

#### References

- **PPM Chapter**
- **Trns-port**
- **Other Standards**: Index No. 600
- **Specifications**: Section 102
- **Prep & Doc Manual Chapter(s)**: 7, 13

#### TRNS*PORT Category (DRAFT FIELD):

- **0200 Roadway**

**Details and Structure:** Complete- Items 000 to 1999
PORTABLE CHANGEABLE MESSAGE SIGN- TEMPORARY

**Unit** | ED | **Accuracy** | Each Day | **Plan** | **Quantity?** | no
---|---|---|---|---|---|

**Notes**
Should be considered for use in complex, high-density work zones. Messages must be simple, with a minimum number of words and lines, and should require no more than two displays of no more than three lines each. The Traffic Control Plan (TCP) shall include the location and messages to be displayed. Refer to the PPM for message guidelines and acceptable abbreviations.

Estimate the number needed for each traffic control plan phase, times the number of days needed (phase duration). May be used 14 days before contract time begins, as authorized by the Engineer. Not to be used when standard signs are available. Refer to the Plans Preparation Manual for proper usage.

**Related Items**

**Required**
COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

**Recommended**
Locate in the plans. Summarize quantities by location in the computation book.

**Notes**
Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter | Vol 1, Ch 10
Trns-port
Other Standards | Index No. 600
Specifications | Section 102
Prep & Doc Manual Chapter(s) | 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 102-99- PORTABLE CHANGEABLE MESSAGE SIGN- TEMPORARY

**Notes**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0102 99</td>
<td>PORTABLE CHANGEABLE MESSAGE SIGN, TEMPORARY</td>
<td>ED</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TEMPORARY SIGNALIZATION AND MAINTENANCE OF INTERSECTION

**Unit** | ED | **Accuracy** | Each Day | **Plan** | **Quantity?** | no
---|---|---|---|---|---|

**Notes**
Effective with January 2012 letting & specification changes. Replaces 102-104-A

**Details**
For existing intersections, the quantity to be paid for will be the number of signalized intersections (per each, per day) for the full duration of the Contract. For temporary intersections, the quantity to be paid for will be the number of signalized intersections per day for the duration of the temporary intersection. No separate payment will be made for
temporary signalization and maintenance at new intersections.

For estimating purposes, the number of days for a temporary intersection will be based on the duration of the applicable Maintenance of Traffic (MOT) phase(s). For payment purposes, the actual number of days will be used.

Estimated Quantity = (# of existing intersections x estimated total contract days) + (# of temporary intersections x estimated # of days for temporary intersection)

Payment Quantity = (# of existing intersections x actual contract days) + (# of temporary intersections x actual # of days for temporary intersection)

NOTE: This pay item should be used on all projects with milling and resurfacing, and signalized intersections. For projects without milling and resurfacing, the designer or project manager should coordinate with the local agency to determine whether the contractor will be required to maintain the signalization equipment within the project limits. Per the specification, this pay item covers shifting signal heads, trouble calls, and maintaining intersection and coordination timing.

For most projects, use this pay item with 102-107-1 Temporary Detection and Maintenance

*************

Traffic Control with portable signals used around a work area (signal lane closure, two-lane two way, work with in the travelway): When a pair of portable signals is used together to control traffic around a work area, the pair of signals should be considered one intersection. Refer to index 606 and/or detail in plans.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
<td>Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
</table>

References

PPM Chapter
Trns-port
Other Standards
Specifications
Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 102-104- TEMPORARY SIGNALIZATION AND MAINTENANCE OF INTERSECTION

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### 102-104- A TEMPORARY TRAFFIC CONTROL SIGNAL

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0102104</td>
<td>TEMPORARY SIGNALIZATION AND MAINTENANCE, INTERSECTION</td>
<td>ED</td>
<td>1/1/2012</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

- **Valid through 12-31-2011**

**Details**

Estimate based on the number of completed installations (each signalized location) in operation on the project.

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

- COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

- Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book

- Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Trns_port
- Other Standards Index No. 606
- Specifications Section 102
- Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 102-104- A TEMPORARY TRAFFIC CONTROL SIGNAL ED

- A = Type
  - 1 (Portable)
  - 2 (Fixed)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

---

### 102-107- TEMPORARY TRAFFIC DETECTION, INTERSECTION

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0102107</td>
<td>TEMPORARY TRAFFIC DETECTION, INTERSECTION</td>
<td>DA</td>
<td>Day</td>
<td>no</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

- **Valid through 12-31-2011; replaced by 102-107-1.**

**Details**

Identify intersections where required. Estimate number of intersections times number of contract days. Do not include “new” intersections. Payment will be for number of days Temp Traffic Detection Technology is used and authorized by Engineer.

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

- COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

- Locate in the plans. Summarize quantities by location in the computation book.
### 102-107- 1  TEMPORARY TRAFFIC DETECTION AND MAINTENANCE OF INTERSECTION

<table>
<thead>
<tr>
<th>Notes</th>
<th>Effective with January 2012 letting &amp; specification changes. Replaces 102-107-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
<td>For existing intersections, the quantity to be paid for will be the number of signalized intersections (per each, per day) beginning the day contract time begins and ending the day the permanent detection is operational and in the final lane configuration. For temporary and new intersections, the quantity to be paid for will be number of signalized intersections per day beginning the day the temporary detection is functional and ending the day the permanent detection is operational and in the final lane configuration for a new intersection or when the detection is removed for a temporary intersection. For estimating purposes, the number of days for a temporary intersection will be based on the duration of the applicable Maintenance of Traffic (MOT) phase(s). For payment purposes, the actual number of days will be used. Estimated Quantity = (# of existing intersections x estimated total contract days) + (# of temporary and new intersections x estimated days for temporary intersection) Payment Quantity = (# of existing intersections x actual # of contract days until permanent detection is “operational and in the final lane configuration”) + (# of temporary and new intersections x actual # of days for temporary detection) NOTE: This pay item should be used on all projects with milling and resurfacing, and signalized intersections. For projects without milling and resurfacing, the designer or project manager should coordinate with the local agency to determine whether the contractor will be required to maintain the signalization equipment within the project limits. Per the specification, the work included under this pay item includes maintenance of detection for existing intersections. For most projects, use this pay item with 102-104 Temporary Signalization and Maintenance.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit</th>
<th>ED</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Each Day</td>
<td>no</td>
</tr>
</tbody>
</table>

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**Related Items**

**Required**

**Recommended**

---

**Details and Structure:** Complete- Items 000 to 1999
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0102107</td>
<td>TEMPORARY TRAFFIC DETECTION AND MAINTENANCE, INTERSECTION</td>
<td>ED</td>
<td></td>
<td>1/1/2012</td>
<td></td>
</tr>
</tbody>
</table>

**102-150- 1 PORTABLE REGULATORY SIGN**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED</td>
<td>Each Day</td>
<td>no</td>
</tr>
</tbody>
</table>

Notes

This device is part of the Motorist Awareness System (MAS). Design should work with Construction to determine the estimated days for each component of the motorist awareness system to be included in the contract.

Portable Regulatory Sign (PRS): The purpose of this device is to highlight the regulatory speed for the work zone. A PRS is a trailer that has the regulatory sign mounted with flashing lights on each side of the sign. The lights are used to draw the driver's attention to the regulatory speed.

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0102150</td>
<td>PORTABLE REGULATORY, SIGN</td>
<td>ED</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 102-150-2 RADAR SPEED DISPLAY UNIT

**Unit**: ED  
**Accuracy**: Each Day  
**PlanQuantity?**: no

#### Details

This device is part of the Motorist Awareness System. Refer to item 102-150-1 for additional detail information.

Radar Speed Display Unit (RSDU): The purpose of this device is to display the motorist's work zone speed. A radar speed display unit is a portable trailer that displays the speed of approaching motorists on a LED display panel. The radar mounted on the unit detects the speed. A regulatory sign with the posted speed is mounted above the LED display panel. The unit is fitted with a device which counts the number of vehicles passing the Radar Speed Display Unit. The counter device is capable of: digital readout of the total number of vehicles passing the radar speed display unit, and digital readout of the number of vehicles exceeding the speed limit shown on the radar speed display unit. The device can be set that only speeds greater than the work zone speed are displayed.

#### Related Items

- **Required**: COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
- **Recommended**: Locate in the plans. Summarize quantities by location in the computation book.

### References

- **PPM Chapter**: Prep & Doc Manual Chapter(s) 6, 7, 13
- **Trns-port**: Section 102
- **Other Standards**: Index No. 670
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0102150</td>
<td>RADAR SPEED DISPLAY UNIT</td>
<td>ED</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

#### 102-910- TEMPORARY RAISED RUMBLE STRIP SET

**Unit**: PS  
**Accuracy**: Per Set  
**PlanQuantity?**: no

**Notes**

Effective January 2011 letting. Refer to specification and Index 600 for usage.

**Details**

Prior to January 2011, payment is included in LS MOT. Effective January 2011, payment is made per set, when used as shown in Index 600. If no pay item is provided, include under LS MOT.

Per Index 600, Temporary raised rumble strip sets shall be placed in advance of each flagging station, when called for in the plans. They are used to supplement a series of advanced warning signs. There are 4 strips per set.

**Related Items**

**Required**: COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

**Recommended**: Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter  
Trns-port  
Other Standards  
Specifications Section 102  
Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD)**: 0200 Roadway

#### Struct. 102-910- TEMPORARY RAISED RUMBLE STRIP SET

**Unit**: PS

#### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0102910</td>
<td>TEMPORARY RAISED RUMBLE STRIP SET</td>
<td>PS</td>
<td></td>
<td>1/1/2011</td>
<td></td>
</tr>
</tbody>
</table>

#### 102-911- A REMOVABLE TAPE PAVEMENT MARKING - WHITE/BLACK

**Unit**: LF; M1; SF; M2  
**Accuracy**: Linear Foot; 1/10 Meter; Square Foot; Square  
**PlanQuantity?**: no
Use of removable work zone pavement markings shall be as defined by 102-10 of the specifications.

OTHER (SF): Pay item 102-911-3 (2102-911-3) is used for stop bars, turn arrows, etc.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
<td></td>
</tr>
</tbody>
</table>

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Contractor’s Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter
Trns-port
Other Standards Index No. 600
Specifications Section 102
Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct. 102-911- A** REMOVABLE TAPE PAVEMENT MARKING - WHITE/BLACK

A = Type
1 (Skip) LF
2 (Solid) LF
3 (Other) SF

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0102911 1</td>
<td>PAVEMENT MARKING REMOVABLE TAPE, WHITE-BLACK, SKIP</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0102911 2</td>
<td>PAVEMENT MARKING REMOVABLE TAPE, WHITE-BLACK, SOLID</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0102911 3</td>
<td>PAVEMENT MARKING REMOVABLE TAPE, WHITE-BLACK, OTHER</td>
<td>SF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**102-912- A** REMOVABLE TAPE PAVEMENT MARKING - YELLOW

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF; M1; SF; M2</td>
<td>Linear Foot; 1/10 Meter; Square Foot; Square Meter</td>
<td>no</td>
<td></td>
</tr>
</tbody>
</table>

**Details and Structure:** Complete- Items 000 to 1999
Use of removable work zone pavement markings shall be as defined by 102-10 of the specifications.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

### Design Forms and Documentation

- COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

### Construction Forms and Documentation

- No additional form required; use plans summary or comp book

Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

- PPM Chapter
- Trns-port
- Other Standards: Index No. 600
- Specifications: Section 102
- Prep & Doc Manual Chapter(s): 7, 13

### TRNS*PORT Category (DRAFT FIELD)

- 0200 Roadway

### Struct.

- **102-912- A** REMOVABLE TAPE PAVEMENT MARKING - YELLOW LF; SF

<table>
<thead>
<tr>
<th>A = Type</th>
<th>1 (Skip) LF</th>
<th>2 (Solid) LF</th>
<th>3 (Other) SF</th>
</tr>
</thead>
</table>

### Notes

**The following items were open, as of the publication date.** Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0102912 1</td>
<td>PAVT MARKING REMOVABLE TAPE, YELLOW, SKIP</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0102912 2</td>
<td>PAVEMENT MARKING REMOVABLE TAPE, YELLOW, SOLID</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>0102912 3</td>
<td>PAVEMENT MARKING REMOVABLE TAPE, YELLOW, OTHER</td>
<td>SF</td>
<td></td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

### 102-Maint

**MAINTENANCE OF TRAFFIC**

**Maintenance Contracts Only**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Mixed</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Refer to item structure and details</td>
<td>?</td>
<td><strong>Maintenance Item: Not Valid for Construction Contracts</strong></td>
</tr>
</tbody>
</table>

### Details

- MAINTENANCE CONTRACTS ONLY
- Additional BOE details pending

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>
### Design Forms and Documentation

### Construction Forms and Documentation

#### References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Trns-port</th>
<th>Other Standards</th>
<th>Specifications</th>
<th>Prep &amp; Doc Manual Chapter(s)</th>
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</table>

#### TRNS*PORT Category (DRAFT FIELD):

<table>
<thead>
<tr>
<th>Struct.</th>
<th>PPM Chapter</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>102-Maint</td>
<td></td>
<td>MAINTENANCE OF TRAFFIC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maintenance Contracts Only</td>
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</table>

#### Notes

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

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<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>E102 1 2</td>
<td>MAINTENANCE OF TRAFFIC</td>
<td>DA</td>
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<td>1/1/2010</td>
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<tr>
<td>E102 1 3</td>
<td>MAINTENANCE OF TRAFFIC</td>
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<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>E102 1 4</td>
<td>MAINTENANCE OF TRAFFIC (NIGHT WORK)</td>
<td>LO</td>
<td></td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>E102 10</td>
<td>OFF-DUTY LAW ENFORCEMENT OFFICER</td>
<td>MH</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>E102 10 1</td>
<td>WORKSITE TRAFFIC SUPERVISOR (REGULAR TIME)</td>
<td>HR</td>
<td></td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>E102 11 1</td>
<td>SERVICE PATROL</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>E102 20</td>
<td>PORTABLE LIGHTING UNIT (MAST MOUNTED)</td>
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<td>1/1/2010</td>
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<tr>
<td>E102 74 9</td>
<td>TRAFFIC CONES</td>
<td>ED</td>
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<td>1/1/2010</td>
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<tr>
<td>E102 75 1</td>
<td>TEMPORARY CURB INSTALL ONLY</td>
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<td>1/1/2010</td>
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</tr>
<tr>
<td>E102 97 1</td>
<td>TRUCK MOUNTED ATTENUATOR (TEMPORARY)</td>
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<td>1/1/2010</td>
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<tr>
<td>E102 97 2</td>
<td>TRUCK MOUNTED ATTENUATOR (WITH OPERATOR)</td>
<td>HR</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>E102 99 1</td>
<td>SIGN VARIABLE MESSAGE (FURNISH ONLY)</td>
<td>ED</td>
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<td>1/1/2010</td>
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<tr>
<td>E102100 9</td>
<td>MAINTENANCE SERVICE MONTHLY</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>E102100 12</td>
<td>NECESSARY MAINTENANCE SERVICE (STRAIGHT TIME)</td>
<td>HR</td>
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<td>1/1/2010</td>
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<tr>
<td>E102100 13</td>
<td>NECESSARY MAINT SERVICE OVERTIME SUNDAY/HOLIDAY</td>
<td>HR</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>E102100 14</td>
<td>NECESSARY MAINT SERVICE OVERTIME WEEKDAYS &amp; SAT</td>
<td>HR</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>E102100 16</td>
<td>NECESSARY MAINT SERVICE (ROUND TRIP EXPENSE)</td>
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<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>
## TEMPORARY WORK STRUCTURE

**Unit**: LS/LS  
**Accuracy**: Lump Sum  
**PlanQuantity?**: yes

### Notes

**Monitor**: Tom Andres

This item is monitored by the State Structures Design Office. Coordinate with the structures office on the use of this item.

### Details

The plans shall include drawings depicting the construction methods assumed in the preparation of the plans. The designer shall determine if a temporary structure (temporary bridges, platforms, etc.) is needed to furnish the contractor with access to the site to enable the bridge to be built. When a temporary structure is required, the anticipated structure type will be shown in the plans.

Temporary Structures will be paid separately only if they are required for access or to comply with permit restrictions. If access is available by including, but not limited to, barges, mats, or existing ground, no temporary structure is required.

State Structures Office must request unblock pay item structure.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-05: Lump Sum Quantities</td>
</tr>
</tbody>
</table>

Use a quantity of 1, but calculations and computation book documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

### References

**PPM Chapter**

**Trns-port**

**Other Standards**

**Specifications** Section 103

**M: Monitored Item**

**Prep & Doc Manual Chapter(s)** 6, 7, 13

### TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

**Struct.** 103- 1- A TEMPORARY WORK STRUCTURE LS/LS

A= Project Number
1 (valid through 12-31-2008; for any project)
2…next number (project number, as approved by State Structures Design Office)

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0103 1 7</td>
<td>TEMPORARY WORK STRUCTURE, PROJECT NUMBER 218946-1-52-01</td>
<td>LS</td>
<td>M</td>
<td>1/1/2010</td>
<td>12/31/2013</td>
</tr>
<tr>
<td>0103 1 11</td>
<td>TEMPORARY WORK STRUCTURE, PROJECT NUMBER 212379-3-52-01</td>
<td>LS</td>
<td>M</td>
<td>1/1/2013</td>
<td>12/31/2013</td>
</tr>
</tbody>
</table>
This item may be used for several purposes. Estimate and/or calculate according to the following information. The total quantity is the sum used for the applicable purposes below. Tabulate the quantity and purpose of each in the plans. Install the product(s) in accordance with the Erosion and Sediment Control Manual.

**FOR PAUSES IN CONSTRUCTION:** Used for pauses in construction due to inclement weather or other circumstances. For this purpose, artificial coverings may be composed of natural or synthetic fiber mats, plastic sheeting or netting. Estimate 1% of the total permanent grassing area, where the total grassing area is defined as the sum of the seeding + seeding and mulching + sodding areas. Coverings used for this purpose are typically removed when construction resumes.

**FOR EROSION CONTROL:** Used for erosion control that facilitates plant growth, while permanent grass is established. Biodegradable erosion control blankets are installed over a seeded area and may be used on fill slopes and in ditches, and left in place to biodegrade. Show in plans (plan view or tabulation of quantities) the locations where erosion control blankets are to be used. Calculate the quantity in square yards (square meters).

**FOR DRAINAGE CHANNEL:** Use the E&SC Manual Selection Guide to determine the correct product type. Shear Stress and velocity calculations must be completed, as shown in the E&SC manual.

**Related Items**

**Design Forms and Documentation**

- sumqem: EMO Summary of Quantities Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- TransPort
- Other Standards
- Specifications Section 104
- Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
Basis of Estimates

January 22, 2013

<table>
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<tr>
<th>Item</th>
<th>Description</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0104 1</td>
<td>ARTIFICIAL COVERINGS /ROLLED EROSION CONTROL PRODUCTS</td>
<td>SY</td>
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<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 104- 6- TEMPORARY SLOPE DRAIN / RUNOFF CONTROL STRUCTURE

<table>
<thead>
<tr>
<th>Notes</th>
<th>Pay Item Description changed to Runoff Control Structure. Refer to Specification for current usage.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
<td>Refer to the Erosion and Sediment Control manual (E&amp;SC manual) for correct use of this item. Runoff Control Structures include temporary slope drains and check dams. All items shown in the manual or design standard are included in the payment, per length, along the centerline of the structure.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>104- 5, 575- 5 (2104-5, 2575-5)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Design Forms and Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>sumqem: EMO Summary of Quantities Sheet</td>
</tr>
<tr>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Construction Forms and Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>No additional form required; use plans summary or comp book</td>
</tr>
<tr>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPM Chapter</td>
</tr>
<tr>
<td>Trns-port</td>
</tr>
<tr>
<td>Other Standards</td>
</tr>
<tr>
<td>Specifications</td>
</tr>
<tr>
<td>Prep &amp; Doc Manual Chapter(s)</td>
</tr>
</tbody>
</table>

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct. 104- 6- TEMPORARY SLOPE DRAIN / RUNOFF CONTROL STRUCTURE LF**

### 104- 7- SEDIMENT BASIN/CONTAINMENT SYSTEM

<table>
<thead>
<tr>
<th>Notes</th>
<th>Refer to Estimates Bulletin 09-02 and E&amp;SC manual for correct usage.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
<td>Refer to the Erosion and Sediment Control manual (E&amp;SC manual) for correct use of this item. These systems work to retain sediment, as well as to slow water velocities. Payment will include all items shown in the plans or E&amp;SC manual, for a complete system. Cleanings to maintain the system will be paid under pay item 104-9.</td>
</tr>
</tbody>
</table>

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct. 104- 7- SEDIMENT BASIN/CONTAINMENT SYSTEM LF**

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**Details and Structure: Complete- Items 000 to 1999**
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0104 7</td>
<td>SEDIMENT BASIN / CONTAINMENT SYSTEM</td>
<td>EA</td>
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</table>

**Notes**

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

**104- 9-**

**SEDIMENT BASIN/CONTAINMENT SYSTEM-CLEANOUT**

**Notes**

Refer to Estimates Bulletin 09-02 and E&SC manual for correct usage.

**Details**

Estimate one cleanout per sediment Basin/Containment system, Item 104- 7 (2104- 7), on the project.

Sediment shall be removed or "cleaned-out" from the basin/containment system, as indicated in the plans, or as directed by the Engineer. Actual number of cleanings will depend on project conditions, as necessary to maintain the containment system(s).
Specifications Section 104
Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
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<tr>
<td>0104 9</td>
<td>SEDIMENT BASIN / CONTAINMENT SYSTEM- CLEANOUT</td>
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<td>1/1/2010</td>
<td></td>
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</table>

**104- 10- 3  SEDIMENT BARRIER**

<table>
<thead>
<tr>
<th>Notes</th>
<th>See details below for estimating quantities. DO NOT USE PLAN NOTE for replacement after xx months.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
<td>To be used in accordance with the Erosion and Sediment Control Manual to protect against downstream accumulation of sediment. Includes synthetic bales, silt fence, and other similar materials shown in the manual. Refer to the manual for examples of appropriate and inappropriate use of materials. Payment is made per length of material, for each location on the project, regardless of whether the materials are new or relocated. The contractor must maintain the sediment barrier, by removing sediment, throughout the installed life of the product. No separate payment is made for maintaining the barrier. Refer to the specification for complete payment information. DO NOT INCLUDE PAY ITEM NOTES for &quot;based on replacement every xx months&quot;; payment includes maintenance of the product in the specified locations, until permanent erosion control features are in place. DO NOT USE this pay item FOR CURB INLETS or ditch bottom inlet protection; see pay item 104-18.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>sumqem: EMO Summary of Quantities Sheet</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
<td></td>
</tr>
<tr>
<td>References</td>
<td>PPM Chapter Trns-port Other Standards</td>
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(see Index modifications for July 2010; Index 101 is deleted)
Specifications Section 104

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
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<tr>
<td>0104 11</td>
<td>FLOATING TURBIDITY BARRIER</td>
<td>LF</td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

Notes

Details

To be used in accordance with the Erosion and Sediment Control Manual. Common uses include areas where dredging, filling or other construction activities may cause turbidity in water. Permit requirements may be applicable.

Per the specifications, each location is paid per length, regardless of whether the barrier is new, used, or relocated from a previous location. The designer should estimate the quantity based on the tabulated length at each location.

Related Items

Required

Recommended

Design Forms and Documentation

sumqem: EMO Summary of Quantities Sheet

Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Trns-port

Other Standards

Index No. 103

(see Index modifications for July 2010; Index 103 is deleted)

Specifications Section 104

Prep & Doc Manual Chapter(s) 6, 7, 13

Details and Structure: Complete- Items 000 to 1999
### 104-12- A

**STAKED TURBIDITY BARRIER- NYLON REINFORCED PVC**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 1/10 Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

To be used in accordance with the Erosion and Sediment Control Manual and the Design Standards.

This item is commonly used in areas where continuous construction activities change the natural contour and drainage runoff. Permit requirements may be applicable.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

**Design Forms and Documentation**

- sumqem: EMO Summary of Quantities Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Trns-port
- Other Standards
  - Index No. 103
    - (see Index modifications for July 2010; Index 103 is deleted)
- Specifications
  - Section 104
- Prep & Doc Manual Chapter(s)
  - 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct. 104-12- A**

**STAKED TURBIDITY BARRIER- NYLON REINFORCED PVC**

- LF

**Notes**

A = Blank (Standard)

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0104 12</td>
<td>STAKED TURBIDITY BARRIER- NYLON REINFORCED PVC</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

---

### 104-15-

**SOIL TRACKING PREVENTION DEVICE**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA</td>
<td>Each</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

Should be constructed at points of egress from unstabilized areas of the project to minimize offsite tracking of sediment. To minimize tracking from the roadway portion of the project, use one device per mile (one device per 2 kilometers) with a minimum of two per project. Include an additional device for each storm water pond or mitigation site that is not adjacent to the roadway right-of-way. RRR projects should be handled on a case-by-case basis.

Payment includes excavation, grading, pipe, filter fabric, aggregate, etc., as indicated in Design Standard 106. Separate payment is made for hay bales and silt fence.
### Required

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0104 15</td>
<td>SOIL TRACKING PREVENTION DEVICE</td>
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<td>1/1/2010</td>
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### Recommended

<table>
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<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SOIL TRACKING PREVENTION DEVICE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes

Temporary fence for sand locations, used for erosion control purposes.

Tech Specs and/or plan details to include: fence size, slat size, post and fence materials, construction, installation, maintenance, removal, measurement, and payment. Spec to include option to allow fence to remain in place, at the discretion of the Engineer.

### Design Forms and Documentation

sumqem: EMO Summary of Quantities Sheet

Locate in plans. Summarize quantities by location on summary sheet in the plans.

### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).
T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 104-17 SAND FENCE LF

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<tbody>
<tr>
<td>0104 17</td>
<td>SAND FENCE</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

104-18 INLET PROTECTION SYSTEM

Notes Details

This item is to be used in accordance with the Erosion and Sediment Control Manual for the protection of inlets. Payment per each inlet includes all work and materials shown in the E&SC manual, or as detailed in the plans, for a complete system. Curb Inlet filters, such as GutterBuddy, GutterGator, and similar are included in this pay item. Ditch Bottom inlet protection systems ("caps", barriers, and other materials, as shown in the manual) are also included in this pay item.

Related Items

Design Forms and Documentation

sumqem: EMO Summary of Quantities Sheet
Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Trns-port
Other Standards
Specifications Section 104
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 104-18 INLET PROTECTION SYSTEM EA

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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<td>0104 18</td>
<td>INLET PROTECTION SYSTEM</td>
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<td>1/1/2010</td>
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</table>

104-19 CHEMICAL TREATMENT- POWDERED (For Erosion Control)
### Polyacrylamides and Aluminum Sulfate

Polyacrylamides and Aluminum Sulfate are used to “clarify turbid or sediment laden water that does not yet meet surface water quality standards… or as an amendment to other erosion prevention and sediment control products, to aid in their performance.” This pay item is typically used for soil stabilization in conjunction with Rolled Erosion Control Products (RECP); designers should estimate the same amount of area used for RECPs. The product must be installed in accordance with the chemical manufacturer’s suggested application rate.

### Required and Recommended

<table>
<thead>
<tr>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
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### Structure

**CHEMICAL TREATMENT- POWDERED (For Erosion Control)**

**Chemical Treatment - Powdered (For Erosion Control)**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
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<tbody>
<tr>
<td>CHEMICAL TREATMENT- POWDERED, FOR EROSION CONTROL</td>
<td>SY</td>
<td>1/1/2010</td>
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</table>
design without contacting Larry Ritchie, Environmental Specialist, in the State Construction Office.

<table>
<thead>
<tr>
<th>Related Items</th>
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<tbody>
<tr>
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</tr>
<tr>
<td>sumqem: EMO Summary of Quantities Sheet</td>
<td></td>
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<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
<td></td>
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<tr>
<td>Construction Forms and Documentation</td>
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<tr>
<td>No additional form required; use plans summary or comp book</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>References</th>
<th>PPM Chapter</th>
<th>Trns-port</th>
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<tr>
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<td></td>
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<tr>
<td>Specifications</td>
<td>Section 104</td>
<td></td>
</tr>
<tr>
<td>Prep &amp; Doc Manual Chapter(s)</td>
<td></td>
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</table>

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 104-20- CHEMICAL TREATMENT- FLOC LOGS, ALUM DRUMS EA (For Erosion Control)

**Notes**

DO NOT USE WITHOUT APPROVAL OF THE MONITOR- Environmental Specialist, State Construction Office.

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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**104-Maint MOWING**

**Maintenance Contracts Only**

<table>
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<th>Unit</th>
<th>Accuracy</th>
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**Notes**

Maintenance Item: Not Valid for Construction Contracts

**Details**

MAINTENANCE CONTRACTS ONLY

Additional BOE details pending

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<th>Related Items</th>
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<th>Recommended</th>
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<tr>
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<tr>
<td>Construction Forms and Documentation</td>
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<td>PPM Chapter</td>
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Details and Structure: Complete- Items 000 to 1999
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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<tr>
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<td>E104 4 4</td>
<td>MOWING (INTERMEDIATE MACHINE)</td>
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<td>E104 41</td>
<td>MOWING (PERFORMANCE)</td>
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<td>1/1/2010</td>
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<tr>
<td>E104 50</td>
<td>WEED CONTROL MANUAL</td>
<td>AC</td>
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<td>1/1/2010</td>
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</tbody>
</table>

**106-Maint**

**REMOVAL AND DISPOSAL**

Maintenance Item: Not Valid for Construction Contracts

**Notes**

Maintenance Item: Not Valid for Construction Contracts

**Details**

MAINTENANCE CONTRACTS ONLY

Additional BOE details pending

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

**Construction Forms and Documentation**

**References**

PPM Chapter

Trns-port

Other Standards

Specifications

**TRNS*PORT Category (DRAFT FIELD):**

**Struct.** 106-Maint

REMOVAL AND DISPOSAL

Maintenance Contracts Only
Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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<tr>
<td>E106</td>
<td>REM &amp; DISPOSAL OF DEAD ANIMALS (0 - 100 LBS)</td>
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<td>1/1/2010</td>
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<tr>
<td>E106</td>
<td>REM &amp; DISPOSAL OF DEAD ANIMALS (&gt;100 LBS)</td>
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<tr>
<td>E106</td>
<td>LIVE ANIMAL REMOVAL</td>
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<tr>
<td>E106</td>
<td>REMOVAL &amp; DISPOSAL MATERIALS</td>
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<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

107- 1- LITTER REMOVAL AND DISPOSAL

Unit  AC; HA  Accuracy  1/100 Acre; 1/100 Hectare  PlanQuantity?  no*

Notes


Details

Estimate the area for each phase, based on the Temporary Traffic Control plans. Use the total area of existing and proposed turf or vegetation to be mowed within the project limits. It is not necessary to adjust for inlets, drains, slopes, small variations in tree lines, etc.

Estimate one litter removal and mowing cycle per 30 days, or at 15 day increments (e.g. 30 days, 45 days, or 60 days), for the duration of the project. Do not adjust the estimated number of cycles for growing season, special events, or project location; these will be adjusted by the engineer during construction, as needed. NOTE: 30 days is the minimum number of days, unless otherwise recommended by District policy.

Use a summary table in the plans to show the duration, estimated area, mowing frequency, and estimated number of cycles for each phase and the estimated total area. Use a minimum of 1 cycle per phase; after dividing the cycle duration by the frequency, round to the nearest cycle.

Payment will be based on the area calculated by the Engineer, per litter removal or mowing cycle.

*PQ Additional comments: If the contractor changes phasing, the CEI will still base the payment for that mowing and litter removal cycle by determining the “actual area completed and accepted…determined by calculation using the lengths and widths based on the station to station dimensions shown in the plans.” This means that the CEI will figure the area the contractor mowed (or is supposed to mow) by measurements on the plans...i.e., the approximate width mowed on each side times the length, less any areas deducted by engineer (areas not mowed). While this is a final calculation determination of pay area, per 9-1.3, the dimensions should be determined from the plans, rather than field measured, per the 107 spec.

If the number of cycles changes (due to wet or dry weather conditions, grass height, or other), payment will be made for the actual area and number of cycles completed.

While litter removal is normally completed prior to mowing, It is possible to have additional litter cycles (without mowing cycles), when directed by the Engineer.

Urban Areas without mowing: Do not include litter removal pay item without

**********

Mowing/Litter removing contracts separate from construction contracts: When there is an overlap of responsibilities between a construction contract and a maintenance contract,
refer to Topic 850-000-005, "Maintenance Responsibilities on Construction Projects". Do not include duplicate mowing/litter removal pay items on the construction contract. Mowing & litter removal operations will be coordinated through the Resident Engineer and the District Maintenance Engineer.

********************
TRNSPORT: For projects with federal funds, this item will appear a "non-participating". For projects without federal funds, no funding flag is needed.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td></td>
<td>SBLitterMowing: Summary of Litter Removal and Mowing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td></td>
<td>No additional form required; use plans summary or comp book</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPM Chapter</td>
</tr>
<tr>
<td>PPM Vol 2, 7.4</td>
</tr>
<tr>
<td>Trns·port</td>
</tr>
<tr>
<td>This item will default to &quot;non-participating&quot; on projects with Federal Funds.</td>
</tr>
<tr>
<td>Other Standards</td>
</tr>
<tr>
<td>Specifications</td>
</tr>
<tr>
<td>Section 107</td>
</tr>
<tr>
<td>Prep &amp; Doc Manual Chapter(s)</td>
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</table>

**TRNS·PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 107- 1- LITTER REMOVAL AND DISPOSAL AC

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<tbody>
<tr>
<td>0107</td>
<td>1 LITTER REMOVAL</td>
<td>AC</td>
<td></td>
<td>7/1/2010</td>
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</tr>
</tbody>
</table>

107- 2- MOWING

<table>
<thead>
<tr>
<th>Notes</th>
</tr>
</thead>
</table>

Details
Estimate the area for each phase, based on the Temporary Traffic Control plans. It is not necessary to adjust for inlets, drains, slopes, small variations in tree lines, etc.

Estimate one litter removal and mowing cycle, at 15 day increments (e.g. 30 days, 45 days, or 60 days), for the duration of the project. Do not adjust the estimated number of cycles for growing season, special events, or project location; these will be adjusted by the engineer during construction, as needed.

Use a summary table in the plans to show the duration, estimated area, mowing frequency, and estimated number of cycles for each phase and the estimated total area. Use a minimum of 1 cycle per phase; after dividing the phase duration by the frequency, round to the nearest cycle.

Payment will be based on the area calculated by the Engineer, per litter removal or mowing
cycle.

*PQ Additional comments: If the contractor changes phasing, the CEI will still base the payment for that mowing and litter removal cycle by determining the “actual area completed and accepted...determined by calculation using the lengths and widths based on the station to station dimensions shown in the plans.” This means that the CEI will figure the area the contractor mowed (or is supposed to mow) by measurements on the plans...i.e., the approximate width mowed on each side times the length, less any areas deducted by engineer (areas not mowed). While this is a final calculation determination of pay area, per 9-1.3, the dimensions should be determined from the plans, rather than field measured, per the 107 spec.

If the number of cycles changes (due to wet or dry weather conditions, grass height, or other), payment will be made for the actual area and number of cycles completed.

While litter removal is normally completed prior to mowing, it is possible to have additional litter cycles (without mowing cycles), when directed by the Engineer.

************
Mowing/Litter removing contracts separate from construction contracts: When there is an overlap of responsibilities between a construction contract and a maintenance contract, refer to Topic 850-000-005, “Maintenance Responsibilities on Construction Projects”. Do not include duplicate mowing/litter removal pay items on the construction contract. Mowing & litter removal operations will be coordinated through the Resident Engineer and the District Maintenance Engineer.

************
TRNSPORT: For projects with federal funds, this item will appear a "non-participating". For projects without federal funds, no funding flag is needed.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
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</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>SBLitterMowing: Summary of Litter Removal and Mowing</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>References</th>
<th>PPM Chapter</th>
<th>PPM Vol 2, 7.4</th>
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</thead>
<tbody>
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<td></td>
</tr>
<tr>
<td>Other Standards</td>
<td>Specifications</td>
<td>Section 107</td>
</tr>
<tr>
<td>Prep &amp; Doc Manual Chapter(s)</td>
<td></td>
<td></td>
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</tbody>
</table>

**TRNS*PORT Category (DRAFT FIELD)**: 0200 Roadway

Struct. 107-2 MOILING AC

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
The designer should contact the District Construction Office to determine if this item should be used on a project. Consists of providing, furnishing and maintaining an Engineer's field office for exclusive use by the Department.

Type B Fencing shall be used as detailed on Roadway and Traffic Design Standards, Index No. 452 for enclosing the field office. Payment for the fence shall be included in the bid price of the field office.

Through December 2011 letting, per the specifications, "Provide a Field Office for Department use beginning 10 calendar days before contract time begins, and remain for 30 days after final acceptance, unless the Department request removal earlier."

Effective January 2012 letting, per the specifications, "Provide a Field Office for Department use beginning 30 calendar days before contract time begins, and remain for 30 days after final acceptance, unless the Department request removal earlier."

**Notes**

- Effective January 2012 letting- note change in number of days before contract time begins.

**Details**

The field office shall be a building or mobile trailer erected at locations selected by the engineer. The field office shall be paid for at the contract unit price per day.

Related Items

- Required
- Recommended

**Design Forms and Documentation**

- COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
- Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the computation book.

**References**

- PPM Chapter
- Trns-port
- Other Standards Index No. 802
- Specifications Section 109
- Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.**

109- 71- A FIELD OFFICE

- A = Size
  - 1 (300 Sq ft)
  - 2 (600 Sq ft)
  - 3 (900 Sq ft)
  - 4 (1200 Sq ft)
  - 5 (1500 Sq ft)

**Definitions**

- Effective January 2012 letting- note change in number of days before contract time begins.
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0109 71 1</td>
<td>FIELD OFFICE, 300 SQ FT</td>
<td>DA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0109 71 2</td>
<td>FIELD OFFICE, 600 SQ FT</td>
<td>DA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0109 71 3</td>
<td>FIELD OFFICE, 900 SQ FT</td>
<td>DA</td>
<td>1/1/2010</td>
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<tr>
<td>0109 71 4</td>
<td>FIELD OFFICE, 1200 SQ FT</td>
<td>DA</td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0109 71 5</td>
<td>FIELD OFFICE, 1500 SQ FT</td>
<td>DA</td>
<td>1/1/2010</td>
<td></td>
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</tr>
</tbody>
</table>

110-1-1 CLEARING AND GRUBBING

Unit: LS/AC; LS/HA
Accuracy: Lump Sum (1/100 Acre); Lump Sum (1/100 Hectare)

PlanQuantity?: yes

Notes

Details

Consists of complete removal and disposal of all vegetation, debris, drainage structures, flexible pavement, buildings or any other obstructions in all areas where excavation is to be done, or where embankments or structures will be constructed. This includes roadway area, ditch area, borrow and material pits, and areas where culverts or pipe lines will be constructed. Code the number of acres (hectares). Locate or define the scope of work involved on the contract plans.

Refer to Pay Item 110-4 for removal of concrete pavement, sidewalk, curb and gutter, etc.

Refer to specifications for guidance "when no direct payment is provided" for clearing and grubbing.

Related Items

Required

Recommended

Design Forms and Documentation

COMP 700-050-05: Lump Sum Quantities

Use a quantity of 1, but calculations and computation book documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter
Trns*port
Other Standards
Specifications Section 110
Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Structure: 110-1-1 CLEARING AND GRUBBING LS/AC

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### 110- 2- 1 CLEARING AND GRUBBING (PUSH BUTTON CONTRACT)

**Unit** | AC; HA | **Accuracy** | 1/100 Acre; 1/100 Hectare | **PlanQuantity?** | no
---|---|---|---|---|

**Notes**

FOR PUSH BUTTON CONTRACTS ONLY

Consists of complete removal and disposal of all vegetation, debris, drainage structures, flexible pavement, buildings or any other obstructions identified in the plans or specifications. Locate or define the scope of work involved. (Removal of concrete pavement, non-asphalt, to be paid under 110- 4- (2110- 4-))

**Related Items**

**Required** | **Recommended**
---|---

**Design Forms and Documentation**

COMP 700-050-01: Area Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

**References**

- PPM Chapter
- Trns-port
- Other
- Standards
- Specifications

**T:** Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 110- 2- 1 CLEARING AND GRUBBING (PUSH BUTTON CONTRACT)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0110 2 1</td>
<td>CLEARING &amp; GRUBBING (PUSH BUTTON CONTRACT)</td>
<td>AC</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 110- 3- REMOVAL OF EXISTING STRUCTURE

**Unit** | LS/SF; LS/M2 | **Accuracy** | Lump Sum (Square Foot); Lump Sum (Square Meter) | **PlanQuantity?** | yes
---|---|---|---|---|---|

**Notes**

Used for the removal of existing bridge structures and box culverts. Includes all work of removal (complete and/or partial), and disposal of the designated structures. Code the number of square feet (square meters), out-to-out of coping from begin bridge to end bridge.
If bridge debris is to be delivered to another agency, refer to specifications for delivery location. Delivery costs are included in the price for Removal of Existing Structure.

Add pay item note in plans that address bridges to be completely removed and bridges to be partially removed.

Tabulate bridges by bridge number and deck area to be removed. Quantities are based on out-to-out of coping from begin bridge to end bridge or from coping line to saw cut line from begin bridge to end bridge as applicable. Do not include rip-rap, fill slope area in removal quantity. Detail items to be removed in pay item note. Insert existing bridge plans into plan set. Show existing piling on Foundation Layout Sheet that requires complete removal (conflict with proposed foundations, or conflicts with future channel dredging per permit requirements, etc.).

### Required and Recommended Standards

**Specifications**

**Section 110**

**Notes**

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

---

**References**

**PPM Chapter**

**Trns·port**

**Other Standards**

**Specifications Section 110**

**Prep & Doc Manual Chapter(s) 6, 13**

---

**TRNS*PORT Category (DRAFT FIELD):**

0100 Structures

---

**Struct. 110- 3-**

**REMOVAL OF EXISTING STRUCTURE LS/SF**

---

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
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<th>Valid Date</th>
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<tr>
<td>0110</td>
<td>REMOVAL OF EXISTING STRUCTURE</td>
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</table>

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**110- 4-**

**REMOVAL OF EXISTING CONCRETE PAVEMENT**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>SY; M2</td>
<td>Square Yard; Square Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

---

**Notes**

Consists of removing and disposing of existing concrete pavement, concrete sidewalks, slope pavement, ditch pavement and curb and gutter, where required because of construction operations. Specifically excludes retaining walls and drainage structures.

**Details**

NOTE: Do not include removal of flexible pavement removal under this item.

Guidance: When is payment included under Clearing and Grubbing? When is Removal of...
Existing Concrete Pavement needed?
Consider project specific conditions:
If curb & gutter, sidewalk, etc. would likely be removed during standard clearing and grubbing operations (widening projects), then payment could be included in pay item 110-1. No separate payment is needed.
If the project involves removal of concrete pavement, sidewalk, etc., without the broad removal of items normally considered standard clearing and grubbing, then the Removal of Existing Pavement item might be the best choice. The square yard measurement would be clearly defined for these areas.
If the project involves replacement of a section of sidewalk and/or curb, the “no direct payment” option might be best; payment would be included in the cost for the new item(s).

Related Items

Required Recommended
Design Forms and Documentation

COMP 700-050-01: Area Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Record final quantity on the computation book form.

References

PPM Chapter
Trns·port
Other
Standards
Specifications Section 110
Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 110- 4- REMOVAL OF EXISTING CONCRETE PAVEMENT SY

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
<th>Description</th>
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<td>REMOVAL OF EXISTING CONCRETE PAVEMENT</td>
<td>SY</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 110- 5- PLUGGING WATER WELL- ARTESIAN |

| Unit | EA | Accuracy | Each | PlanQuantity? | no |

Notes Details

Artesian is defined in specifications as “an artificial hole in the ground from which water supplies may be obtained and which penetrates any water bearing rock, the water in which is raised to the surface by natural flow…”

The Each pay item is to be used for caps placed on the well. Specifications or plan details are required to detail cap dimensions, materials, and installation instructions.

If the well is to be plugged with flowable fill or similar material, detail work and materials in the contract documents. Tabulate the approximate volume of material to be included in the payment for plugging each well.
**Section 110**

**Struct. 110-5- PLUGGING WATER WELL- ARTESIAN EA**

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<td>PLUGGING WATER WELLS, ARTESIAN</td>
<td>EA</td>
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</tbody>
</table>

**110-6- PLUGGING WATER WELL- NON-ARTESIAN**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA</td>
<td>Each</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

Non-Artesian is defined in the specifications as "a well in which the source of water is an unconfined aquifer. The water… does not rise above the source bed."

The Each pay item is to be used for caps placed on the well. Specifications or plan details are required to detail cap dimensions, materials, and installation instructions.

If the well is to be plugged with flowable fill or similar material, detail work and materials in the contract documents. Tabulate the approximate volume of material to be included in the payment for plugging each well.

**Related Items**

**Design Forms and Documentation**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

**References**

PPM Chapter
Trns-port
Other Standards
Specifications Section 110
Prep & Doc Manual Chapter(s) 7, 13

*TRNS*PORT Category (DRAFT FIELD): 0200 Roadway
### PPM Chapter

#### Trns-port

#### Other

#### Standards

#### Specifications Section 110

#### Prep & Doc Manual Chapter(s) 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

#### Struct. 110- 6- PLUGGING WATER WELL- NON-ARTESIAN EA

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**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0110 6</td>
<td>PLUGGING WATER WELLS, NON-ARTESIAN</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

---

**110- 7- A MAILBOX**

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

---

**Details**

Used for replacement of residential or business mailboxes that must be removed during construction operations. Refer to Index 532 for details.

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

SBMailBox: Summary of Mail Boxes

Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

---

**References**

PPM Chapter

Trns-port

Other

Standards Index No. 532

Specifications Section 110

Prep & Doc Manual Chapter(s) 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

#### Struct. 110- 7- A MAILBOX EA

A = Description

1 (Furnish & Install Single)
### UNDERWATER DEBRIS REMOVAL

| Unit | Mixed | Accuracy | Refer to item structure and details | PlanQuantity? | no |

#### Notes

**Details**

The specification must describe the item in detail, including its acceptance criteria, method of measurement, and for lump sum items, any secondary units of measure. This item should only be used when the designer is reasonably sure of the number of days which will be required for the task. The daily unit cost for the cranes and barges typically used in this item is relatively high and can quickly lead to large overrun costs if the number of days cannot be accurately estimated. Item 110-3 (2110-3) is a more appropriate item to use when an accurate estimate of days required cannot be made.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

#### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

**Design Forms and Documentation**

- See Details Above
- Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

#### References

- PPM Chapter
- Trns-port
- Other Standards
- Specifications

**T: Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

### Struct. 110-8- A UNDERWATER DEBRIS REMOVAL Mixed

A = Method of Measurement

- blank (Day) DA
- 1 (Weight) TN
- 2 (Length) LF

#### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0110 8</td>
<td>UNDERWATER DEBRIS REMOVAL</td>
<td>DA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0110 8 1</td>
<td>UNDERWATER DEBRIS REMOVAL</td>
<td>TN</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0110 8 2</td>
<td>UNDERWATER DEBRIS REMOVAL</td>
<td>LF</td>
<td>T</td>
<td>7/1/2010</td>
<td></td>
</tr>
</tbody>
</table>
### 110-12- A HYDRODEMOLITION

| Unit | SY; M² | Accuracy | Square Yard; Square Meter | PlanQuantity? | no |

**Notes**
Specifications/Plan details should include limits of payment (in words and/or graphic) for work to be completed. Any additional areas where hydrodemolition is used will be at the contractor's option, at no additional cost to the department.

This item is not intended for the removal/repair of bridge deck joints; include joint rehabilitation work in the appropriate joint pay item.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**
| Required | Recommended |

**Design Forms and Documentation**
COMP 700-050-01: Area Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**
No additional form required; use plans summary or comp book
Record final quantity on the computation book form.

**References**
PPM Chapter
Trns-port
Other Standards
Specifications

*T: Plan Details and/or Technical Specifications required*

**Prep & Doc Manual Chapter(s)**
6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):**
0200 Roadway

### Struct. 110-12- A HYDRODEMOLITION SY

A = Description/Unit of Measure
1 (Removal Of Deck Surface) SY

---

**Notes**

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**The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0110 12 1</td>
<td>HYDRODEMOLITION, REMOVAL OF DECK SURFACE</td>
<td>SY</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

---

**110-15- A ARBORIST WORK**

| Unit | Mixed | Accuracy | Refer to item structure and details | PlanQuantity? | no |

**Notes**
Effective July 2012 lettings and later, per Estimates Bulletin 12-05.

**Details**
This pay item is intended for the Arborist work necessary to protect trees during
construction. DO NOT use this pay item for routine tree trimming.

Detail all work by tree location in the plans.

TYPE OF WORK:
Complete- Intended for Arborist Work required on multiple trees within a contract's limits. Multiple activities (trimming, relocation, etc.) may be included under this Lump Sum pay item.
Tree Trimming- Intended for arborist cutting of limbs and/or roots. Payment is for each tree trimmed, regardless of the number of roots or branches to be cut on each.
Tree Preservation/Relocation- Intended for the protection of large/historical trees which may require a combination of trimming, relocation, and/or protection. DO NOT USE this item for routine "batterboard" tree protection; standard tree protection is incidental to related roadway items.
Relocate Tree- Intended for the standard relocation of a tree.

TRANSPORT: Load this pay item in the category 0200- ROADWAY. Do not include this pay item in the Landscape plans or landscape category.

Note- When loaded in the Roadway category, this work will NOT be captured with Landscape expenditures.

Related Items

Design Forms and Documentation
COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

References
PPM Chapter
Trns-port
Other Standards
Specifications Section 110
D: Plan details required

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):

Struct. 110-15- A ARBORIST WORK Mixed

A= Type of Work
blank (Complete) LS, detailed work in plans
1 (Tree Trimming- Limbs and Roots) EA, for single tree detailed in plans
2 (Tree Preservation/Relocation) EA
4 (Relocate Tree) EA

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### 110-20- A  REMOVAL OF EXISTING WALL

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0110 15</td>
<td>ARBORIST WORK, COMPLETE</td>
<td>LS</td>
<td>7/1/2012</td>
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<tr>
<td>0110 15 1</td>
<td>ARBORIST WORK, TREE TRIMMING- LIMBS/ROOTS</td>
<td>EA</td>
<td>7/1/2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0110 15 2</td>
<td>ARBORIST WORK, TREE PRESERVATION/ RELOCATION</td>
<td>EA</td>
<td>7/1/2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0110 15 4</td>
<td>ARBORIST WORK, RELOCATE TREE</td>
<td>EA</td>
<td>7/1/2012</td>
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<td></td>
</tr>
</tbody>
</table>

#### Notes

**Unit**  LS/SF, LS/M2  **Accuracy**  Lump Sum (Square Foot);  **PlanQuantity?**  yes  **Lump Sum (Square Meter)**

#### Details

Includes straps, leveling pad, and all incidentals. Horizontal limits and wall heights are to be clearly shown in the plans.

This pay item is intended to separate the wall removal costs from standard clearing and grubbing (earthwork), when significant wall quantities are to be removed. For small quantities, wall removal may be included in standard clearing and grubbing.

#### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

#### Design Forms and Documentation

- sumqrd: Roadway Summary of Quantities Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

#### Construction Forms and Documentation

- PPM Chapter
- Trns-port
- Other Standards
- Specifications
- Prep & Doc Manual Chapter(s)

#### TRNS*PORT Category (DRAFT FIELD):

**Struct.**  110-20- A  **REMOVAL OF EXISTING WALL**  LS/SF

A= Wall Type
1 (MSE Wall)
2 (Retaining Wall)
3 (Noise Wall)

#### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
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<tr>
<td>0110 20 1</td>
<td>REMOVAL OF EXISTING WALL, MSE WALL</td>
<td>LS</td>
<td></td>
<td>7/1/2012</td>
<td></td>
</tr>
<tr>
<td>0110 20 2</td>
<td>REMOVAL OF EXISTING WALL, RETAINING WALL</td>
<td>LS</td>
<td></td>
<td>7/1/2012</td>
<td></td>
</tr>
<tr>
<td>0110 20 3</td>
<td>REMOVAL OF EXISTING WALL, NOISE WALL</td>
<td>LS</td>
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<td>7/1/2012</td>
<td></td>
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</tbody>
</table>

### 110- 25- A ASBESTOS ABATEMENT

**Unit:** Mixed  
**Accuracy:** Refer to item structure and details  
**Plan Quantity?** no

**Notes**

This item is to be used ONLY when approved by the State Construction Office, when asbestos has been identified, and the abatement work will be completed through the construction contract (by a qualified subcontractor), rather than through a separate CARS contract.

**Related Items**

- **Required:**  
- **Recommended:**

**Design Forms and Documentation**

- COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation  
- Locate in the plans. Summarize quantities by location in the computation book.

---

### Construction Forms and Documentation

- **PPM Chapter**
- **Trns·port**
- **Other**
- **Standards**
- **Specifications**
- **Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0200 or other Roadway or other- see details

**Struct. 110- 25- A ASBESTOS ABATEMENT** Mixed

Z= Project Number  
1 (Project )

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<td>0110 25 1</td>
<td>ASBESTOS ABATEMENT, PROJECT</td>
<td>LS</td>
<td>T</td>
<td>1/1/2013</td>
<td>6/1/2013</td>
</tr>
</tbody>
</table>

### 110- 71- 1 BRIDGE FENDER SYSTEM, REMOVAL & DISPOSAL- REHAB PROJECTS ONLY

**Unit:** LF; M1  
**Accuracy:** Linear Foot; 1/10 Meter  
**Plan Quantity?** no

**Notes**

Details and Structure: Complete- Items 000 to 1999
For use on Fender System Rehab projects only.
For projects with bridge and fender system replacement, payment for removal and disposal of existing fender system is included under Removal Of Existing Structures, item 110-3. Plan Details and/or Tech Spec must address proper disposal of timber, as well as measurement and payment of rehab work. Refer to Section 110 of Specifications.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
</tr>
<tr>
<td></td>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
</tr>
<tr>
<td></td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
</table>

### References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Trns·port</th>
<th>Other Standards</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>T: Plan Details and/or Technical Specifications required</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Prep & Doc Manual Chapter(s)

6, 7, 13

### TRNS*PORT Category (DRAFT FIELD)

0200 Roadway

### Struct.

110- 71- 1

BRIDGE FENDER SYSTEM, REMOVAL & DISPOSAL- REHAB PROJECTS ONLY

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0110 71 1</td>
<td>BRIDGE FENDER SYSTEM, REMOVAL &amp; DISPOSAL</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**110- 73-**

REMOVE EXISTING BULKHEAD

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 1/10 Meter</td>
<td>no</td>
<td>For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.</td>
</tr>
</tbody>
</table>

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>
### Design Forms and Documentation

COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

**PPM Chapter**

**Trns-port**

**Other Standards**

### Notes

**D: Plan Details and/or Technical Specifications required**

Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 100 or 200 Structures or Roadway

### Struct.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0110 73</td>
<td>REMOVE EXISTING BULKHEAD</td>
<td>LF</td>
<td>D</td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

### Item Description

<table>
<thead>
<tr>
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<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>110-82-</td>
<td>REMOVE &amp; DISPOSE STRUCTURAL TIMBER</td>
<td>MB; M3</td>
<td>1/10 Thou Board Measure; 1/10 Cubic Meter</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**110-82-**

### Unit

MB; M3

### Accuracy

1/10 Thou Board Measure; 1/10 Cubic Meter

### Plan Quantity?

no

### Notes Details

one board foot= one foot square by one inch thick; convert to thousand board foot for pay item.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

**Required**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Recommended**

700-050-56: Daily Log Sheet Miscellaneous Tabulation Form Site Source Record

Record final quantity on the tabulation sheet (plans) or computation form (comp book).
### 110- 82- REMOVE & DISPOSE STRUCTURAL TIMBER MB

**Notes**

> The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0110 82</td>
<td>REMOVE &amp; DISPOSE STRUCTURAL TIMBER</td>
<td>MB</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**110- 84- TRANSPORT EXISTING MATERIAL FOR REEF ESTABLISHMENT**

| Unit | LS/LS | Accuracy | Lump Sum | PlanQuantity? | yes |

**Notes**

- For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Design Forms and Documentation**

- COMP 700-050-05: Lump Sum Quantities
  - Use a quantity of 1, but calculations and computation book documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
  - Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

- PPM Chapter
- Trns-port
- Other Standards
- Specifications

---

**TRNS*PORT Category (DRAFT FIELD):** 100 or 200 Structures or Roadway

**Struct.** 110- 82- REMOVE & DISPOSE STRUCTURAL TIMBER MB

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 110- 84- TRANSPORT EXISTING MATERIAL FOR REEF ESTABLISHMENT LS/LS
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0110 84</td>
<td>TRANSPORT EXISTING MATERIAL FOR REEF ESTABLISHMENT</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### Item 110-85- CLEANING INTERIOR OF SEGMENTAL BOX GIRDER SPAN

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

#### Notes

Valid for maintenance use. Detail cleaning requirements in the plans or specifications.

#### Related Items

**Required**

#### Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

#### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

#### References

PPM Chapter
Trns-port
Other Standards
Specifications

#### Prep & Doc Manual Chapter(s)

7, 13

### TRNS*PORT Category (DRAFT FIELD):

0200 Roadway

### Struct. 110-85- CLEANING INTERIOR OF SEGMENTAL BOX GIRDER SPAN

#### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0110 85</td>
<td>CLEANING INTERIOR OF SEGMENTAL BOX GIRDER SPAN</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### Item 110-86- DELIVERY OF SALVAGEABLE MATERIAL TO FDOT

<table>
<thead>
<tr>
<th>Unit</th>
<th>LS/LS</th>
<th>Accuracy</th>
<th>Lump Sum</th>
<th>PlanQuantity?</th>
<th>yes</th>
</tr>
</thead>
</table>

#### Notes

Designer must coordinate with Maintenance Office prior to using this item. Plan details should include contact information and delivery location of salvageable material. (This may be accomplished with a pay item note.)

For Plan Detail/Tech Spec items: The Designer should ensure that the description,
materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Transport Funding: This pay item should remain "participating", unless items of work are specifically identified by Federal Highway to be "non-participating". If used for construction operations, the item will remain "participating".

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>sumqrd: Roadway Summary of Quantities Sheet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
<td></td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
</tr>
</tbody>
</table>

References

- PPM Chapter
- Trns-port
- Other Standards
- Specifications Section 110

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 110-86- DELIVERY OF SALVAGEABLE MATERIAL TO FDOT LS/LS

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0110 86</td>
<td>DELIVERY OF SALVAGEABLE MATERIAL TO FDOT</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
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</tbody>
</table>

110-Maint CLEARING AND GRUBBING

Maintenance Contracts Only

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed</td>
<td>Refer to item structure and details</td>
<td>?</td>
</tr>
</tbody>
</table>

Notes

- Maintenance Item: Not Valid for Construction Contracts

Details

- MAINTENANCE CONTRACTS ONLY
- Additional BOE details pending

Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Design Forms and Documentation

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</table>

Details and Structure: Complete- Items 000 to 1999
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>E110 2</td>
<td>CLEARING &amp; GRUBBING</td>
<td>AC</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>E110 3 2</td>
<td>REM OF EXIST STRUCTURES</td>
<td>SF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>E110 3 3</td>
<td>REMOVAL OF EXITING STRUCTURE (INLET)</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>E110 30</td>
<td>LITTER REMOVAL</td>
<td>AC</td>
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<td>1/1/2010</td>
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<tr>
<td>E110 301</td>
<td>LITTER REMOVAL (PERFORMANCE)</td>
<td>LS</td>
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<td>1/1/2010</td>
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<tr>
<td>E110 31</td>
<td>SWEEPING (MECHANICAL)</td>
<td>PM</td>
<td></td>
<td>1/1/2010</td>
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<td>E110 32 1</td>
<td>EDGING AND SWEEPING</td>
<td>PM</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>E110 70</td>
<td>REMOVAL OF FLEXIBLE PAVEMENT</td>
<td>SY</td>
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<td>1/1/2010</td>
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</tbody>
</table>

120- 1- REGULAR EXCAVATION

**Notes**

Refer to Plans Preparation Manual, Volume 1, Chapter 3 for guidance on Earthwork Items. This item should be used on projects with cross sections to pay for the quantity of excavation on the project.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>120- 6 (2120- 6)</td>
</tr>
</tbody>
</table>

**Design Forms and Documentation**

SBE Earthwork: Summary of Earthwork, or COMP 700-050-04: Volume Measure Items and Continuation

Locate in plans. Summarize quantities by location on summary sheet in the plans, or detail calculations in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter Vol 1, Chapter 3
Struct.  120-  1-  REGULAR EXCAVATION

Notes  Item used for Price Trends Report

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
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<tbody>
<tr>
<td>0120</td>
<td>REGULAR EXCAVATION</td>
<td>CY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

120-  2-  A  BORROW EXCAVATION

Notes  Refer to Plans Preparation Manual, Volume 1, Chapter 3 for guidance on Earthwork Items.

TRUCK MEASURE: This item should only be used on projects with limited or no cross sections. The method to determine the quantity of borrow excavation is as follows:

Fill x Fill Adjustment Factor x Truck Adjustment Factor = Borrow Excavation (Truck Measure).

For example, if the fill adjustment is 20%, the fill adjustment factor is 1.2; and if the truck adjustment is 25%, the truck adjustment factor is 1.25

Applied to the above equation, an original fill amount of 253 CY would become:

253 X 1.2 X 1.25 = 380 CY of Borrow, Truck Measure

Note- the adjustments vary based on the type of material. Per the PPM, contact the District Materials of District Construction Office for project specific numbers.

For final quantity, measure the width, height, and length inside the truck bed; calculate the volume by multiplying those three dimensions. Subtract 2% of the result to account for the hoist box and bed fillets.

Related Items  Required  Recommended  120-  71 (2120-  71)

Design Forms and Documentation  SBEarthwork: Summary of Earthwork, or COMP 700-050-04: Volume Measure Items and Continuation

Locate in plans. Summarize quantities by location on summary sheet in the plans, or detail calculations in the computation book.

Construction Forms and Documentation  No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References  PPM Chapter  Vol 1, Chapter 3

Trns-port
### TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

**Struct. 120-2- A**

**BORROW EXCAVATION CY**

A = Measure Type
2 (Truck Measure)

**Notes**: Item used for Price Trends Report

---

**The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0120</td>
<td>BORROW EXCAVATION, TRUCK MEASURE</td>
<td>CY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 120-3- LATERAL DITCH EXCAVATION

**Unit**: CY; M3  
**Accuracy**: Cubic Yard; Cubic Meter  
**PlanQuantity?**: yes

**Notes**

**Details**: Consists of excavation on portions of lateral ditches beyond the limits of the roadway ROW. Includes inlet and outlet ditches, ditches parallel to the roadway, and may include channel excavation if Item 120-5 (2120-5) is not used.

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

- SBEarthwork: Summary of Earthwork, or COMP 700-050-04: Volume Measure Items and Continuation
- Locate in plans. Summarize quantities by location on summary sheet in the plans, or detail calculations in the computation book.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

- PPM Chapter Vol 1, Chapter 3
- Trns-port
- Other Standards Index No. 281, 500
- Specifications Section 120
- Prep & Doc Manual Chapter(s) 6, 8, 13

---

**TRNS*PORT Category (DRAFT FIELD): 0200 Roadway**

**Struct. 120-3-**

**LATERAL DITCH EXCAVATION CY**

**Notes**: Item used for Price Trends Report

---

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*
### 120- 4- SUBSOIL EXCAVATION

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUBSOIL EXCAVATION CY</td>
<td>CY; M3</td>
<td>Cubic Yard; Cubic Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**
Refer to Plans Preparation Manual, Volume 1, Chapter 3 for guidance on Earthwork Items. Consists of excavation and disposal of muck, clay, rock or other material that is unsuitable in its original position, and that is excavated below the finished grade line template. Also includes all suitable material necessary to be removed in order to excavate the unsuitable material. The areas used to calculate subsoil excavation must also be used in calculating the fill areas, if material is to be replaced.

**Related Items**
- Required: 120- 2- 2 or 120- 6 (2120- 2- 2 or 2120- 6)

**Design Forms and Documentation**
- SBEarthwork: Summary of Earthwork, or COMP 700-050-04: Volume Measure Items and Continuation
- Locate in plans. Summarize quantities by location on summary sheet in the plans, or detail calculations in the computation book.

**Construction Forms and Documentation**
- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- PPM Chapter Vol 1, Chapter 3
- Trns-port
- Other Standards Index No. 500, 505
- Specifications Section 120
- Prep & Doc Manual Chapter(s) 9, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

### 120- 5- CHANNEL EXCAVATION

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHANNEL EXCAVATION CY</td>
<td>CY; M3</td>
<td>Cubic Yard; Cubic Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**
Consists of excavation and disposal of all material from the limits of the channel, within the lines and grades indicated in the plans and permit.

**Related Items**
- Required
- Recommended
### Design Forms and Documentation
SBEarthwork: Summary of Earthwork, or COMP 700-050-04: Volume Measure Items and Continuation
Locate in plans. Summarize quantities by location on summary sheet in the plans, or detail calculations in the computation book.

### Construction Forms and Documentation
No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References
- **PPM Chapter** Vol 1, Chapter 3
- **Trns-port**
- Other Standards
- **Specifications** Section 120
- **Prep & Doc Manual Chapter(s)** 9, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

### Struct. 120-5- CHANNEL EXCAVATION CY

**Notes** Item used for Price Trends Report

---

### Other Construction Forms and Documentation
Locate in plans. Summarize quantities by location on summary sheet in the plans, or detail calculations in the computation book.

No additional form required; use plans summary or comp book

---

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0120</td>
<td>CHANNEL EXCAVATION</td>
<td>CY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

---

**120-6- EMBANKMENT**

**Notes** Refer to Plans Preparation Manual, Volume 1, Chapter 3 for guidance on Earthwork Items. This item should be used on projects with cross sections to pay for the quantity of embankment on the project.

**Related Items**
- **Required**
- **Recommended** 120-1 (2120-1)

**Design Forms and Documentation**
SBEarthwork: Summary of Earthwork, or COMP 700-050-04: Volume Measure Items and Continuation
Locate in plans. Summarize quantities by location on summary sheet in the plans, or detail calculations in the computation book.

**Construction Forms and Documentation**
No additional form required; use plans summary or comp book
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

---

**References**
- **PPM Chapter** Vol 1, Chapter 3
- **Trns-port**
- Other Standards
- **Specifications** Section 120
The following item was open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0120 6</td>
<td>EMBANKMENT</td>
<td>CY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**120-11- EMBANKMENT - SPECIAL SELECT FOR RIGID PAVEMENT**

- **Unit**: CY; M³
- **Accuracy**: Cubic Yard; Cubic Meter
- **Plan Quantity**: ?
- **Effective**: 7-1-12; refer to Estimates Bulletin 12-06.
- **Notes**: This item is to be used for the Special Select material (S+) shown on Index 505, sheet 4. Note from Index, "Special Select Soil Option may be used only when approved in writing by the District Materials Engineer and shown in the plans."
- **Specifications**: Specifications are required to detail materials, placement, measurement and payment.
- **Related Items**: Required 180-72-, Recommended
- **Design Forms and Documentation**: COMP 700-050-04: Volume Measure Items and Continuation
- **Construction Forms and Documentation**: Locate in the plans. Summarize quantities by location in the computation book.
- **References**: PPM Chapter
- **Trns-port**: T: Plan Details and/or Technical Specifications required
- **Prep & Doc Manual Chapter(s)**

**120-71- REGULAR EXCAVATION (3R PROJECTS ONLY)**

Details and Structure: Complete- Items 000 to 1999
Refer to Plans Preparation Manual, Volume 1, Chapter 3 for guidance on Earthwork Items. To be used only on resurfacing or minor widening and resurfacing projects which conform to the guidelines in the Plans Preparation Manual. The designer will calculate quantities based on information obtained from the field and the proposed typical section. The designer will continue to show the Summary of Earthwork in the plans. The summary should show all quantities and adjustments.

Effective 7/2000 letting: This item should be used on projects with limited or no cross sections, to pay for the quantity of excavation on the project. Item 120-2-2 (2120-2-2) should be considered.

### Required

<table>
<thead>
<tr>
<th>Design Forms and Documentation</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 700-050-05: Lump Sum Quantities</td>
<td>Use a quantity of 1, but calculations and computation book documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.</td>
<td></td>
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</table>

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

#### Item 0120 71

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<thead>
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<td>0120 71</td>
<td>REGULAR EXCAVATION (3-R PROJECTS ONLY)</td>
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#### Item 120-72

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<td>120-72-</td>
<td>GRAVEL FILL</td>
<td>CY; M3</td>
<td>Cubic Yard; Cubic Meter</td>
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---

**Details and Structure:** Complete- Items 000 to 1999
Required Recommended

### Design Forms and Documentation

- **SBEarthwork: Summary of Earthwork, or COMP 700-050-04: Volume Measure Items and Continuation**
- **Locate in plans. Summarize quantities by location on summary sheet in the plans, or detail calculations in the computation book.**

### Construction Forms and Documentation

- **No additional form required; use plans summary or comp book**
- **Measure inside the truck bed; calculate the volume by multiplying those three dimensions. Subtract 2% to account for the hoist box and bed fillets. Record all field records on site source record form and transfer final quantity to computation book.**

### References

- **PPM Chapter** Vol 1, Chapter 3
- **Trns-port**
- **Other Standards**
- **Specifications**

**D: Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)** 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

### Notes

**Details**

- **The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.**

<table>
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<tr>
<th>Item</th>
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<td>CY</td>
<td>D</td>
<td>1/1/2010</td>
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</table>

**120- 73- LIGHTWEIGHT AGGREGATE FILL**

- **Unit** CY; M3
- **Accuracy** 1/10 Cubic Yard; 1/10 Cubic Meter
- **PlanQuantity?** no

**Notes**

Calculations will be made by the average end area method for all material placed within the limits and according to the detail shown in the plans.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

- **Required**
- **Recommended**

**Design Forms and Documentation**

- **SBEarthwork: Summary of Earthwork, or COMP 700-050-04: Volume Measure Items and Continuation**
- **Locate in plans. Summarize quantities by location on summary sheet in the plans, or detail calculations in the computation book.**

---

Details and Structure: Complete- Items 000 to 1999
The work of constructing surcharge fills, as shown in the plans and any extensions thereof, directed by the engineer, shall be included in the price and payment for surcharge embankment. The quantity shall be measured as provided in Section 120, with the exception that the original ground line used in computations shall be the finished grading template for the permanent construction. The measurement shall include only surcharge material actually placed above the original ground line (as defined above) and within the lines and grades for surcharge construction, as indicated in the plans or directed by the engineer. No allowance will be made for subsidence of material below the original ground line, as defined above. The price and payment for surcharge embankment shall be full compensation for all work required to construct and remove surcharge fills, including furnishing from areas provided by the contractor and borrow excavation required. Surcharge embankment requires a Technical Specification for materials, placement, measurement, and payment.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Required Recommended

Design Forms and Documentation
SBEarthwork: Summary of Earthwork, or COMP 700-050-04: Volume Measure Items and Continuation
Locate in plans. Summarize quantities by location on summary sheet in the plans, or detail calculations in the computation book.
Standards
Specifications

Vol 1, Chapter 3

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>SURCHARGE EMBANKMENT</td>
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120-Maint

CLEAN AND RESHAPE DITCH/CANAL

Maintenance Contracts Only

Unit Mixed Accuracy Refer to item structure and details PlanQuantity? ?

Notes Maintenance Item: Not Valid for Construction Contracts

Details MAINTENANCE CONTRACTS ONLY Additional BOE details pending

Required Recommended

Construction Forms and Documentation

References

PPM Chapter
Trns-port
Other Standards Specifications

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 120-Maint CLEAN AND RESHAPE DITCH/CANAL Maintenance Contracts Only Mixed
# Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>CLEAN AND RESHAPE DITCH (SPREAD)</td>
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<tr>
<td>E120 10</td>
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<tr>
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<tr>
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<td>1/1/2010</td>
<td></td>
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<tr>
<td>E120 10</td>
<td>DREDGING</td>
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## 121- 70-

**FLOWABLE FILL**

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<tr>
<td><strong>PlanQuantity?</strong></td>
<td>no</td>
</tr>
</tbody>
</table>

### Notes

Applications for flowable fill include: beddings, encasements, closure for tanks, pipes, and general backfill for trenches.

### Related Items

**Required**

**Recommended**

### Design Forms and Documentation

SBEarthwork: Summary of Earthwork, or COMP 700-050-04: Volume Measure Items and Continuation

Locate in plans. Summarize quantities by location on summary sheet in the plans, or detail calculations in the computation book.

### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

PPM Chapter

Trns-port

Other Standards | Index No. 307

Specifications | Section 121

### Prep & Doc Manual Chapter(s)

7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 121- 70-

**FLOWABLE FILL**

| Unit | CY |

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>1/1/2010</td>
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## 125- 1-

**EXCAVATION FOR STRUCTURES**

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</thead>
<tbody>
<tr>
<td><strong>Accuracy</strong></td>
<td>Cubic Yard; Cubic Meter</td>
</tr>
<tr>
<td><strong>PlanQuantity?</strong></td>
<td>no</td>
</tr>
</tbody>
</table>

Details and Structure: Complete- Items 000 to 1999
Includes excavation for bridge foundations, box culverts, pipe culverts, retaining walls, headwalls for pipe culverts and drains, manholes, and similar structures.

Direct Payment: refer to Method of Measurement in specifications.

No Direct Payment: work is included in the price for concrete or other related items.

**Required**

**Recommended**

**Design Forms and Documentation**

SBEarthwork: Summary of Earthwork, or COMP 700-050-04: Volume Measure Items and Continuation

Locate in plans. Summarize quantities by location on summary sheet in the plans, or detail calculations in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**PPM Chapter**

**Trns-port**

**Other Standards**

**Specifications Section 125**

**Prep & Doc Manual Chapter(s)** 6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct. 125-1-**

**EXCAVATION FOR STRUCTURES**

**CY**

---

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
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<tbody>
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<td>EXCAVATION FOR STRUCTURES</td>
<td>CY</td>
<td>no</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

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**125-3-**

**SELECT BEDDING MATERIAL**

**Unit** CY; M3

**Accuracy** Cubic Yard; Cubic Meter

**PlanQuantity?** no

**Notes**

No payment for this material will be made when available from excavation of pipe culvert or from other material from grading operations at a location not sufficiently remote to require loading on trucks.

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

SBEarthwork: Summary of Earthwork, or COMP 700-050-04: Volume Measure Items and Continuation

Locate in plans. Summarize quantities by location on summary sheet in the plans, or detail calculations in the computation book.
No additional form required; use plans summary or comp book

Measure inside the truck bed; calculate the volume by multiplying those three dimensions. Subtract 2% to account for the hoist box and bed fillets. Record all field records on site source record form and transfer final quantity to computation book.

References
PPM Chapter
Trn·sport
Other
Standards
Specifications Section 125
Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct.  125- 3- SELECT BEDDING MATERIAL  CY

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<td>0125 3</td>
<td>SELECT BEDDING MATERIAL</td>
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</table>

**129- 1-AAA NATURAL DISASTER/PRE-EVENT CONTRACTS**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
<th>Details</th>
</tr>
</thead>
</table>
| Mixed  | Refer to item structure and details | no | Coordinate with the State Maintenance Office prior to using these items. | Valid for Emergency Pre-event or Emergency Response contracts. May need to be coordinated with FEMA for post-event response contracts. Do NOT use these items on standard Design-Construction contracts.

Crew Pre-positioning: Specifications should indicate that payment will be made for each crew, per day. This item is normally used with cut and toss, for pre-event contracts.

Crew: 2 People and vehicle, per hour. Specifications should indicate any specialized equipment that may need to be included with the vehicle. Overtime, after 8 hours, needs to be defined in the specifications- per 24 hour period, continuous shift, etc.

Cut and Toss: Hourly rate normally includes vehicle, 2 chain saw operators, and a supervisor. Specifications should detail specific requirements for contract. This item is normally used with crew pre-positioning, for pre-event contracts.

COLLECTION, HAULING, AND REDUCTION ITEMS:

Loading and Hauling debris to TDS site: Specifications must define measurement of the load, i.e. per truck volume, for a full to "slightly mounded" load. Quantity to be reduced for a partial load, based on truck volume. Price to include Maintenance of Traffic (MOT), CY

Reduction by grinding at the TDS, CY: Specifications to indicate whether this is based on volume of ground material, or truck load of loose unground material.

Reduction by incineration at the TDS, CY: Specifications to indicate how material is to be measured, before or after incineration.
Stump removal, per each. Specifications should indicate that no separate payment is made for stumps less than 24”.

MISCELLANEOUS ITEMS:
Sweeping Curb and Gutter, HR: Payment will be made per person for sweeping with power blower. Equipment provided by the contractor.

Vacuum Inlets, HR: Payment will be made for clearing debris from inlets.

Removal of Hanging Limbs, HR: Payment will be made for each person removing hanging limbs.

Loading and hauling construction and demolition debris, CY: Specifications must define measurement of the load, i.e. per truck volume, for a full to "slightly mounded" load. Quantity to be reduced for a partial load, based on truck volume. Price to include Maintenance of Traffic (MOT), CY

White Goods and Hazardous Household Waste Disposal, EA: Specifications should indicate that payment is based on each "white good". Define Hazardous waste disposal?

Freon Recovery, EA: Specifications need to define the work (remove, recover, etc.) to be completed. Payment is for each white good properly serviced to recover the Freon.

LOADING OF REDUCED MATERIAL, FINAL DISPOSITION
Loading and Hauling Reductions to a final disposition site, including MOT, CY: Specifications to indicate whether this is based on volume of ground material, or truck load of loose unground material. DO NOT USE BOTH CY AND TN Item on the same contract.

Loading and Hauling Reductions to a final disposition site, including MOT, TN: Specifications to indicate when/where weight measurements are to be made. DO NOT USE BOTH CY AND TN Item on the same contract.

Disposal/Tipping Fees: no-bid item, Contractor will be paid actual cost for this item.

Required
Recommended

Design Forms and Documentation
See Details Above
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation
No additional form required; use plans summary or comp book

References
PPM Chapter
Trns*port
Other Standards
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0200 or other Roadway or other- see details

Struct. 129- 1-AAA NATURAL DISASTER/PRE-EVENT CONTRACTS Mixed
AAA= Operation and Unit of Measure
Pre-event, First response
1 (Crew Pre-positioning) DA
2 (Cut and Toss) HR
3 (Crew, 2 people and service Truck, Regular Time) HR
4 (Crew, 2 people and service Truck, After 8 Hours) HR
5 (Crew, 2 people and Bucket Truck, Regular Time) HR
6 (Crew, 2 people and Bucket Truck, After 8 Hours) HR

Collection, Hauling, and Reduction
11 (Loading and Hauling debris to TDS site) CY
12 (Reduction by grinding at the TDS) CY
13 (Reduction by incineration at the TDS) CY

Stump Removal
21 (24-48” diameter stump removal) EA
22 (>48” diameter stump removal) EA

Miscellaneous Work
31 (Sweeping Curb and Gutter) HR
32 (Vacuum Inlets) HR
33 (Removal of Hanging Limbs) HR
34 (Loading and hauling construction and demolition debris) CY
35 (White Goods and Hazardous Household Waste Disposal) EA
36 (Freon Recovery) EA

Loading of Reduced Material, Final Disposition
50 (Disposal/Tipping Fees- no-bid item, Contractor will be paid actual cost for this item)
51 (Loading and Hauling Reductions to a final disposition site, including MOT) CY; see detail to distinguish between CY and TN items.
52 (Loading and Hauling Reductions to a final disposition site, including MOT) TN; see detail to distinguish between CY and TN items.

Notes

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<table>
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<th>Item</th>
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<tr>
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<td>NATURAL DISASTER /PRE EVENT CONTRACTS, FREON RECOVERY</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0129 1 50</td>
<td>NATURAL DISASTER /PRE EVENT CONTRACTS, DISPOSAL AND TIPPING FEES-DO NOT BID</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0129 1 51</td>
<td>NATURAL DISASTER /PRE EVENT CONTRACTS, LOADING AND HAULING REDUCTIONS TO FINAL DISP, INC MOT</td>
<td>CY</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0129 1 52</td>
<td>NATURAL DISASTER /PRE EVENT CONTRACTS, LOADING AND HAULING REDUCTIONS TO FINAL DISP, INC MOT</td>
<td>CY</td>
<td>T</td>
<td>1/1/2010</td>
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</tbody>
</table>
Standards Index No. 540
Specifications

T: Plan Details and/or Technical Specifications required
Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0141 70</td>
<td>SETTLEMENT PLATE ASSEMBLY</td>
<td>AS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**142- 70-** SAND FILL

Notes

Complete specifications are required, including material and placement/installation requirements.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Related Items

Required  Recommended

Design Forms and Documentation

SBEarthwork: Summary of Earthwork, or COMP 700-050-04: Volume Measure Items and Continuation

Locate in plans. Summarize quantities by location on summary sheet in the plans, or detail calculations in the computation book.

Construction Forms and Documentation

700-050-54: Daily Report or Truck-Measured Material Site Source Record (and Sketch)

References

PPM Chapter
Trns-port
Other
Standards
Specifications
**D: Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s):** 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 142- 70-  SAND FILL

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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<th>TSP/Detail</th>
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<tr>
<td>0142 70</td>
<td>FILL SAND</td>
<td>CY</td>
<td>D</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**144- 1- A DIGITAL INCLINOMETER CASING**

**Notes**

Coordinate the use of this item with Larry Jones, State Geotechnical Engineer.

**Details**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

**References**

**PPM Chapter**

**Trns-port**

**Other Standards**

**Specifications**

**T: Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s):** 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 144- 1- A DIGITAL INCLINOMETER CASING LF

A = Description

1 (Vertical)

2 (Horizontal) to be opened with approval of State Geotech Engineer

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0144 1 1</td>
<td>DIGITAL INCLINOMETER CASING, VERTICAL</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
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</tr>
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</table>
### 144-71- A PORE-PRESSURE TRANSDUCER (PIEZOMETER)

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
<th>no</th>
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</thead>
</table>

**Notes**
Coordinate the use of this item with Larry Jones, State Geotechnical Engineer.

**Details**
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**
- **Required**
- **Recommended**

**Design Forms and Documentation**
- COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
- Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**
- No additional form required; use plans summary or comp book
- Record final quantity on the computation book form.

**References**
- PPM Chapter
- Trns-port
- Other Standards
- Specifications

**T: Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**
- 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):**
- 0200 Roadway

**Struct.**
- 144-71- A PORE-PRESSURE TRANSDUCER (PIEZOMETER) EA

A= Transducer Type
- blank (type defined in plans/specs) valid through 6/30/2009
- 1 (Pneumatic) also use item 144-72 for tubing; effective 7/1/2009
- 2 (Vibrating Wire) do not use item 144-72; effective 7/1/2009

**Notes**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0144 71 1</td>
<td>PORE-PRESSURE TRANSDUCER-PIEZOMETER, PNEUMATIC</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0144 71 2</td>
<td>PORE-PRESSURE TRANSDUCER-PIEZOMETER, VIBRATING WIRE</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
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</table>

### 144-72- TUBING FOR PIEZOMETER

<table>
<thead>
<tr>
<th>Unit</th>
<th>LF; M1</th>
<th>Accuracy</th>
<th>Linear Foot; 1/10 Meter</th>
<th>PlanQuantity?</th>
<th>no</th>
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</thead>
</table>

**Notes**
Coordinate the use of this item with Larry Jones, State Geotechnical Engineer.

**Details**
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.
### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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</thead>
</table>

### Design Forms and Documentation

- **COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation**
  - Locate in the plans. Summarize quantities by location in the computation book.

### Construction Forms and Documentation

- No additional form required; use plans summary or comp book
  - Record final quantity on the computation book form.

### References

- **PPM Chapter**
- **Trns·port**
- **Other Standards**
- **Specifications**

**T: Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**: 7, 13

### TRNS*PORT Category (DRAFT FIELD):

- **0200 Roadway**

### Struct.

- **144- 72-**
  - **TUBING FOR PIEZOMETER**
  - **LF**

### Notes

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
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<tbody>
<tr>
<td>0144 72</td>
<td>TUBING FOR PIEZOMETER</td>
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<td>T</td>
<td>1/1/2010</td>
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</table>

### 144- 74- A

**PORE-PRESSURE TRANSDUCER- CONTROL/READOUT UNIT**

<table>
<thead>
<tr>
<th>Note Details</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinate the use of this item with Larry Jones, State Geotechnical Engineer.</td>
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**Notes**

**Details**

- For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
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</table>

### Design Forms and Documentation

- **COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation**
  - Locate in the plans. Summarize quantities by location in the computation book.

### Construction Forms and Documentation

- No additional form required; use plans summary or comp book
  - Record final quantity on the computation book form.

### References

- **PPM Chapter**
- **Trns·port**
- **Other Standards**
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct.  144- 74-  A PORE-PRESSURE TRANSDUCER-CONTROL/READOUT UNIT

A= Transducer Type
blank (type defined in plans/specs) valid through 6/30/2009
1 (Pneumatic) effective 7/1/2009
2 (Vibrating Wire) effective 7/1/2009

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0144 74 1</td>
<td>PORE-PRESSURE TRANSDUCER, CONTROL / READOUT UNIT PNEUMATIC</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0144 74 2</td>
<td>PORE-PRESSURE TRANSDUCER, CONTROL / READOUT UNIT VIBRATING WIRE</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
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</tbody>
</table>

145- 1- GEOSYNTHETIC REINFORCED SOIL SLOPE

Unit SF; M2  Accuracy Square Foot; 1/10 Square Meter  PlanQuantity? yes

Notes

***CAUTION- CALCULATE QUANTITY PER SPECIFICATION****

Refer to Plans Prep Manual, Volume 1, Chapter 31, to establish design guidelines, parameters, and limitations for these systems. The designer must provide the requirements in the plans for choosing the material from those listed in Index 501. See also the Instructions for Design Standards and Index No. 501. For design assistance, contact the State Geotechnical Engineer.

Payment will be based on Plan Quantity, regardless of the length or number of layers of geosynthetic, including any reinforcement required below ground line. Does not include the cost of backfill material or placement of backfill.

Plan measurement will be based on the projected vertical height of the slope, from top of slope to the ground line at the toe of slope, regardless of the number of layers; multiply by the width (beginning and end limits). DO NOT USE THE SLOPE FACE AREA or material area. Refer to the specifications for method of measurement.

Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-01: Area Computation and Continuation</td>
</tr>
<tr>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
<td></td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
</tr>
<tr>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
<td></td>
</tr>
</tbody>
</table>
### 145-1- GEOSYNTHETIC REINFORCED SOIL SLOPE SF

**Notes**

Refer to Plans Prep Manual, Volume 1, Chapter 31, to establish design guidelines, parameters, and limitations for these systems. The designer must provide the requirements in the plans for choosing the material from those listed in Index 501. See also the Instructions for Design Standards and Index No. 501. For design assistance, contact the State Geotechnical Engineer.

Payment will be based on Plan Quantity, regardless of the length or number of layers of geosynthetic, including any reinforcement required below ground line. Does not include the cost of backfill material or placement of backfill.

Plan measurement will be based on the area of embankment to be reinforced. Refer to specifications.

**Related Items**

**Design Forms and Documentation**

COMP 700-050-01: Area Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter

Trns-port

Other

Standards Index No. 501

Specifications Section 145

T: Plan Details and/or Technical Specifications required

---

### 145-2- GEOSYNTHETIC REINFORCED FOUNDATION OVER SOFT SOIL

**Notes**

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**Related Items**

**Design Forms and Documentation**

COMP 700-050-01: Area Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter

Trns-port

Other

Standards Index No. 501

Specifications Section 145

T: Plan Details and/or Technical Specifications required
REINFORCEMENT GRID FOR SOIL STABILIZATION

Unit SY; M2  Accuracy Square Yard; Square Meter  PlanQuantity? no

Notes Coordinate the use of this item with Larry Jones, State Geotechnical Engineer.

Details Geosynthetic Reinforced Roadway Base for Construction Expedient, as shown on Index 501. Full material technical specifications are required. See the Instructions for Design Standards and Index No. 501.

This item is intended for Soil Stabilization applications. For drainage/erosion control applications, refer to Section 530 items.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Design Forms and Documentation COMP 700-050-01: Area Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation No additional form required; use plans summary or comp book
Record final quantity on the computation book form.

References PPM Chapter
Trns-port
Other Standards Index No. 501
Specifications
T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 7, 13
### CELLULAR CONFINEMENT FOR SOIL STABILIZATION

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<td>0145 72</td>
<td>CELLULAR CONFINEMENT FOR SOIL STABILIZATION</td>
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<td>1/1/2010</td>
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</table>

### TYPE B STABILIZATION

<table>
<thead>
<tr>
<th>Item</th>
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<tbody>
<tr>
<td>160- 4-</td>
<td>TYPE B STABILIZATION</td>
<td>SY; M2</td>
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</table>
No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter

Trns-port

Other

Standards Index No. 506

Specifications Section 160

Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct. 160-4- TYPE B STABILIZATION SY**

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
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<td></td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

**161- PREDESIGNED STABILIZED SUBGRADE**

**Unit** SY; M2  
**Accuracy** Square Yard; Square Meter  
**PlanQuantity?** yes

**Notes** Specification change pending.

**Details** Per the specifications, Section 161 is valid only for shoulder and non-traffic areas. Refer to Section 160 for roadway stabilization.

**Related Items**

**Required**

Design Forms and Documentation

COMP 700-050-01: Area Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Recommended**

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter

Trns-port

Other

Standards

Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct. 161- PREDESIGNED STABILIZED SUBGRADE SY**
**Notes**  Pay Item structure to be determined, pending specification change.

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

---

### 162- 1- AB  PREPARED SOIL LAYER

<table>
<thead>
<tr>
<th>Unit</th>
<th>SY; M²</th>
<th>Accuracy</th>
<th>Square Yard; Square Meter</th>
<th>PlanQuantity?</th>
<th>yes</th>
</tr>
</thead>
</table>

**Notes**

**Details**

Not to be used for Section 580: Landscape Operations. Refer to 580 specifications.

FINISH SOIL LAYER: to be used for areas to be seeded, seeded and mulched, or planted areas when called for in the plans. Refer to 162 specifications and Index 105. Note: per index 105, treatment I conditions are included under performance turf pay item. For treatment II conditions, payment is made for Finish Soil Layer and Performance Turf items. Refer to Index 105 for additional information.

ORGANIC SOIL LAYER: only when required by permit. 6" depth.

BLANKET MATERIAL: only when required by permit. Show depth in plans

**Related Items**

**Design Forms and Documentation**

COMP 700-050-01: Area Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

**PPM Chapter**

**Trns-port**

Other Standards  Index No. 105

Blanket Material: Index No. 505

**Specifications**  Section 162

P: Selected items to be used by Permit only

**Prep & Doc Manual Chapter(s)**

---

**TRNS*PORT Category (DRAFT FIELD):**  0200  Roadway

**Struct.**  162- 1- AB  PREPARED SOIL LAYER  SY

A= Material

1 (Finish Soil Layer)

2 (Organic Soil Layer) Note: by Permit only. 6" depth, per specification.

3 (Blanket Soil Layer) Note: By Permit Only

B= Depth

1 (6") Standard depth for finish soil

2 (12") A=1 or 3

3 (Special Depth) A=2 or 3 only, as required by permit

**Notes**

---

**Details**

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<td>0162 11</td>
<td>PREPARED SOIL LAYER, FINISH SOIL LAYER, 6&quot;</td>
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<td>1/1/2010</td>
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<tr>
<td>0162 12</td>
<td>PREPARED SOIL LAYER, FINISH SOIL LAYER, 12&quot;</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>0162 21</td>
<td>PREPARED SOIL LAYER, ORGANIC SOIL LAYER, 6&quot;</td>
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<td>P</td>
<td>1/1/2010</td>
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<tr>
<td>0162 33</td>
<td>PREPARED SOIL LAYER, BLANKET SOIL LAYER, SPECIAL DEPTH</td>
<td>SY</td>
<td>P</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 165-70- SUBGRADE, LIME TREATED

**Unit** SY; M2  **Accuracy** Square Yard; Square Meter  **PlanQuantity?** yes

#### Notes

**Details**

**Related Items:**
- Required
- Recommended

**Design Forms and Documentation:**
- COMP 700-050-01: Area Computation and Continuation

  Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation:**
- No additional form required; use plans summary or comp book

  Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

#### References

- PPM Chapter
- Trns-port
- Other Standards
- Specifications

**T:** Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s):** 6, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

#### Struct. 165-70- SUBGRADE, LIME TREATED SY

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0165 70</td>
<td>SUBGRADE LIME TREATED</td>
<td>SY</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 165-71- HYDRATED LIME

**Unit** TN; MT  **Accuracy** 1/10 Ton; 1/10 Metric Ton  **PlanQuantity?** no

#### Notes

**Details**

Details and Structure: Complete- Items 000 to 1999
### Design Forms and Documentation

Required: COMP 700-050-06: Weight Measure or Liquid Volume Comp & Cont.

Located in the plans. Summarize quantities by location in the computation book.

### Construction Forms and Documentation

700-050-56: Daily Log Sheet Miscellaneous Tabulation Form Site Source Record

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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</thead>
<tbody>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes

- Plan Details and/or Technical Specifications required

### PPM Chapter References

- COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Located in the plans. Summarize quantities by location in the computation book.

### Transportation Category (DRAFT FIELD)

0200 Roadway

### Structure

165-71- HYDRATED LIME TN

### Design Forms and Documentation

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0165 71</td>
<td>HYDRATED LIME</td>
<td>TN</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 173-71- DRILLING HOLES FOR PRESSURE GROUTING

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA</td>
<td>Each</td>
<td>no</td>
<td>For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.</td>
</tr>
</tbody>
</table>

### Required

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Located in the plans. Summarize quantities by location in the computation book.

### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

### References

- PPM Chapter
- Trans-Port
- Other Standards Specifications

Details and Structure: Complete- Items 000 to 1999
**T: Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)** 6, 7, 13

---

**Struct.** 173-71- **DRILLING HOLES FOR PRESSURE GROUTING EA**

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
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<tbody>
<tr>
<td>0173 71</td>
<td>DRILLING HOLES FOR PRESSURE GROUTING</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**173-76- GROUT PIPE INSTALLATION**

**Unit** LF; M1  **Accuracy** Linear Foot; 1/10 Meter  **PlanQuantity?** no

**Notes**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required** COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

**Recommended** Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

**References**

PPM Chapter
Trns-port
Other Standards
Specifications

**T: Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)** 6, 7, 13

---

**Struct.** 173-76- **GROUT PIPE INSTALLATION LF**

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<tbody>
<tr>
<td>0173 76</td>
<td>GROUT PIPE INSTALLATION</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**173-77- A SUBSURFACE PRESSURE GROUTING**

Details and Structure: Complete- Items 000 to 1999
Unit CY; M3  Accuracy 1/10 Cubic Yard; 1/10 Cubic Meter  

Notes Contact the State Geotechnical Engineer prior to using this item.

Details This item to be used for subsurface applications only. May be used for sinkhole repair. Tech Specs should indicate that this item includes all work and materials for grout injection; drilling holes and grout pipe may be paid separately under related 173 items. Clearly define material properties in specifications. For concrete structures, refer to Structures items 400 to 460.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items Required Recommended 173- 71-, 173- 76-

Design Forms and Documentation sumqr: Roadway Summary of Quantities Sheet Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation No additional form required; use plans summary or comp book Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References PPM Chapter Trns-port Other Standards Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 173- 77- A SUBSURFACE PRESSURE GROUTING CY

A= Grout Material
1 (Sand-Cement)
2 (Sand Cement with Calcium Chloride) CaCl_2
3 (Cement Slurry)

Notes The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<tbody>
<tr>
<td>0173 77 1</td>
<td>SUBSURFACE PRESSURE GROUTING, SAND CEMENT</td>
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<tr>
<td>0173 77 2</td>
<td>SUBSURFACE PRESSURE GROUTING, SAND CEMENT WITH CALCIUM CHLORIDE</td>
<td>CY</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0173 77 3</td>
<td>SUBSURFACE PRESSURE GROUTING, CEMENT SLURRY</td>
<td>CY</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

173- 78- A SOIL IMPROVEMENT BY VIBRO-COMPACTION
Unit: LF; M1  
Accuracy: Linear Foot; 1/10 Meter  
Plan Quantity: no

**Notes**

Contact the State Geotechnical Engineer prior to using this item.

**Details**

This item to be used for subsurface applications, as approved by the State Geotechnical Engineer.

Tech Specs should be coordinated with the State Geotechnical Engineer and the District Materials Office.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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</thead>
</table>

**Design Forms and Documentation**

COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

**References**

PPM Chapter
Trns-port
Other Standards
Specifications

T: Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

**Struct. 173-78- A**

SOIL IMPROVEMENT BY VIBRO-COMPACTION LF

A= Vibrator Horsepower
1 (Up to 125 hp vibrator)
2 (126 to 205 hp vibrator)
3 (Over 206 hp vibrator)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0173 78 1</td>
<td>SOIL IMPROVEMENT BY VIBRO-COMPACTION, UP TO 125 HP VIBRATOR</td>
<td>LF</td>
<td>T</td>
<td>7/1/2010</td>
<td></td>
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<tr>
<td>0173 78 2</td>
<td>SOIL IMPROVEMENT BY VIBRO-COMPACTION, 126-205 HP VIBRATOR</td>
<td>LF</td>
<td>T</td>
<td>7/1/2010</td>
<td></td>
</tr>
<tr>
<td>0173 78 3</td>
<td>SOIL IMPROVEMENT BY VIBRO-COMPACTION, OVER 206 HP VIBRATOR</td>
<td>LF</td>
<td>T</td>
<td>7/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**173-79- A**

SOIL STABILIZATION BY AUGERED CONCRETE COLUMNS

Details and Structure: Complete- Items 000 to 1999
This item is to be used for strengthening of organics and soft soils, and the reduction of settlements of superimposed embankments by placing dry concrete mix to desired depth via continuous flight auger or SCV technique. NOT TO BE USED for auger-cast piles.

For assistance with this item, contact the State Geotech Engineer in the State Structures Design Office. Technical Special Provisions are required to detail the materials, construction method, and/or acceptance criteria.

### Required Related Items

**Standards**

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Section 173</th>
</tr>
</thead>
</table>

**Notes**

**Details**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### Required References

**PPM Chapter**

- Trns-port

**Other Standards**

**Specifications**

- Section 173

**T:** Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

- 6, 13

### TRNS*PORT Category (DRAFT FIELD):

- 0200 Roadway

### Struct.

<table>
<thead>
<tr>
<th>173-79- A</th>
<th>SOIL STABILIZATION BY AUGERED CONCRETE COLUMNS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A= Diameter</td>
<td>1 (6” to 8”)</td>
</tr>
</tbody>
</table>

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0173 79 1</td>
<td>SOIL STABILIZATION BY AUGERED CONCRETE COLUMNS, 6”-8” DIAMETER</td>
<td>LF</td>
<td>T</td>
<td>1/1/2012</td>
<td></td>
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</tbody>
</table>

### 173-Maint

**SOIL STABILIZATION Maintenance Contracts Only**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Mixed</th>
</tr>
</thead>
</table>

**Notes**

Maintenance Item: Not Valid for Construction Contracts

**Details**

MAINTENANCE CONTRACTS ONLY

Additional BOE details pending

### Required Related Items

**Notes**

**Details**

Refer to item structure and details

**PlanQuantity?**

?
Design Forms and Documentation

Construction Forms and Documentation

References

PPM Chapter
Trns-port
Other Standards
Specifications
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):

Struct. 173-Maint SOIL STABILIZATION Maintenance Contracts Only

Mixed

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>E173 77 1</td>
<td>CHEMICAL GROUT SOIL STABILIZATION</td>
<td>GA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>E173 78 1</td>
<td>SAND CEMENT GROUT ORDERED, NOT PUMPED</td>
<td>CY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

175- 1- RESEATING CONCRETE PAVEMENT

Unit SY; M2
Accuracy Square Yard; Square Meter
PlanQuantity? yes

Notes

Perform controlled cracking of concrete pavement and reseating of the cracked slabs, by rolling, tamping, etc., on the underlying subgrade to provide a firm base for asphalt concrete surfacing.

Related Items

Required
Recommended

Design Forms and Documentation

COMP 700-050-01: Area Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter
Trns-port
Other Standards
Specifications Section 175
Prep & Doc Manual Chapter(s) 6, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct.  175-1- RESEATING CONCRETE PAVEMENT SY

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<tr>
<td>0175</td>
<td>RESEATING CONCRETE PAVEMENT</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

180-72- RIGID PAVEMENT STABILIZED SUBBASE- SPECIAL WORK PLATFORM

Unit SY; M2  Accuracy Square Yard; Square Meter  PlanQuantity?  ?

Notes Effective 7-1-12

Details This item is to be used for the Work Platform (*) shown on Index 505, sheet 4, for the 3" of #57 or #89 Coarse Aggregate Mixed into the Top 6".

Note from Index, "Special Select Soil Option may be used only when approved in writing by the District Materials Engineer and shown in the plans."

Specifications are required to detail materials, placement, measurement and payment.

Related Items Required 120-11- Recommended

Design Forms and Documentation COMP 700-050-01: Area Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

References PPM Chapter

Trns-port

Other Standards Index 505

Specifications T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):

Struct.  180-72- RIGID PAVEMENT STABILIZED SUBBASE- SPECIAL WORK PLATFORM

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
210- 1- AA  REWORKING LIMEROCK BASE

Notes
Details
Rework (or rework and widen) the existing rock base, by adding new limerock material as required by the plans and Section 210 of the specifications. Construct adjacent turnouts, entirely with new limerock.

Related Items
Required 210- 2
Recommended

Design Forms and Documentation
COMP 700-050-01: Area Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation
No additional form required; use plans summary or comp book
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References
PPM Chapter
Trns-port
Other
Standards
Specifications Section 210, 285
Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD):  0200  Roadway

Struct.  210- 1- AA  REWORKING LIMEROCK BASE  SY

AA = Thickness
1 (6")
8 (4")
9 (3")

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<tr>
<td>0210 1 1</td>
<td>REWORKING LIMEROCK BASE, 6&quot;</td>
<td>SY</td>
<td>1/1/2010</td>
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<tr>
<td>0210 1 8</td>
<td>REWORKING LIMEROCK BASE, 4&quot;</td>
<td>SY</td>
<td>1/1/2010</td>
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<tr>
<td>0210 1 9</td>
<td>REWORKING LIMEROCK BASE, 3&quot;</td>
<td>SY</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

210- 2-  LIMEROCK, NEW MATERIAL FOR REWORKING BASE

Notes
Details
To be used in accordance with Section 210 of the specifications.
Measurement, from specification: The quantity to be paid for will be the number of cubic yards of only the new limerock material actually placed in the road and accepted. The quantity will be determined by measurement in loose volume, in truck bodies, at the point of dumping on the road, with proper deduction for all materials wasted, left in trucks or otherwise not actually used in the road. For this purpose, level the material in the truck bodies to facilitate accurate measurement.

### Required and Recommended

**Required**
210-1-A

**Recommended**

### Design Forms and Documentation

**SBEarthwork: Summary of Earthwork, or COMP 700-050-04: Volume Measure Items and Continuation**

Locate in plans. Summarize quantities by location on summary sheet in the plans, or detail calculations in the computation book.

### Construction Forms and Documentation

**700-050-54: Daily Report or Truck-Measured Material Site Source Record (and Sketch)**

Measure inside the truck bed; calculate the volume by multiplying those three dimensions. Subtract 2% to account for the hoist box and bed fillets. Record all field records on site source record form and transfer final quantity to computation book.

### References

**PPM Chapter**

**Trns-port**

**Other**

**Standards**

**Specifications** Section 210, 285

**Prep & Doc Manual Chapter(s)** 6, 7, 13

### TRNS*PORT Category (DRAFT FIELD):

0200 Roadway

### Struct.

210-2 LIMEROCK, NEW MATERIAL FOR REWORKING BASE CY

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0210 2</td>
<td>LIMEROCK-NEW MATERIAL FOR REWORKING BASE</td>
<td>CY</td>
<td></td>
<td>1/1/2010</td>
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</tbody>
</table>

### 285-7AA- OPTIONAL BASE

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>SY; M2</td>
<td>Square Yard; Square Meter</td>
<td>yes</td>
</tr>
</tbody>
</table>

**Notes**

Consists of base construction of one of the optional materials shown in the plan typical sections. The plans will include typical sections specifying only the base group on new construction and complete reconstruction projects, permitting the maximum number of general use options that the contractor can utilize. Note that there are still limitations given in the notes. Also, the designer can still specify base materials, if this is appropriate for the project. The Optional Base item is also used when specifying only one option, such as ABC III. The quantity must include a 4" (0.1 m) overhang, as shown on the typical section for rural projects.

**NOTE:** The cost of prime or tack coats used between layers of the base are included in the cost of the Optional Base.
Construction Forms & Text: A Contractor's Certification of Quantities will be required when Asphalt Base is used. The pay quantity will be adjusted per the specifications.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

**Design Forms and Documentation**

- COMP 700-050-01: Area Computation and Continuation
  - Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

- See details above
  - Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

- **PPM Chapter**
- Trns-port
- Other
- **Standards** Index No. 514
- **Specifications** Section 285

**Prep & Doc Manual Chapter(s)** 6, 9, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 285-7AA- OPTIONAL BASE SY

AA = Is 01 Thru 15 which indicates Base Group, as shown on Index 514

**Notes**

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tr>
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<td>0285706</td>
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<td>0285707</td>
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<td>0285709</td>
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<td>SY</td>
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<td>0285714</td>
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<tr>
<td>0285715</td>
<td>OPTIONAL BASE, BASE GROUP 15</td>
<td>SY</td>
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**286- 1-** TURNOUT CONSTRUCTION

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
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<tbody>
<tr>
<td>SY; M2</td>
<td>Square Yard; Square</td>
<td>yes</td>
</tr>
</tbody>
</table>

Details and Structure: Complete- Items 000 to 1999
To be used in accordance with Section 286 of the specifications and Index 516. Consists of constructing new turnouts or extending existing turnouts on resurfacing and widening/resurfacing projects. Consists of excavation and construction of base course, and specifically excludes placing of AC surface course.

---

**Notes**

**Details**

To be used in accordance with Section 286 of the specifications and Index 516. Consists of constructing new turnouts or extending existing turnouts on resurfacing and widening/resurfacing projects. Consists of excavation and construction of base course, and specifically excludes placing of AC surface course.

**Related Items**

**Design Forms and Documentation**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBTurnouts: Summary of Turnouts</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
</tbody>
</table>

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

---

**References**

**PPM Chapter**

**Trns·port**

**Other Standards**

Index No. 516

**Specifications**

Section 286

**Prep & Doc Manual Chapter(s)**

6, 9, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 286- 1-

**TURNOUT CONSTRUCTION**

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0286</td>
<td>TURNOUT CONSTRUCTION</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

---

**Notes**

---

**Details**

To be used in accordance with Section 286 of the specifications and Index 516. Consists of constructing new turnouts or extending existing turnouts on resurfacing and widening/resurfacing projects. Consists of excavation and construction of asphalt base course, and specifically excludes placing of AC surface course.

**Related Items**

**Design Forms and Documentation**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBTurnouts: Summary of Turnouts</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
</tbody>
</table>

**Construction Forms and Documentation**

700-050-56: Daily Log Sheet Miscellaneous Tabulation Form Site Source Record

Record final quantity on the tabulation sheet (plans) or computation form (comp book).
### STRUCT. 286-2 - TURNOUT CONSTRUCTION - ASPHALT TN

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0286</td>
<td>TURNOUT CONSTRUCTION - ASPHALT TN</td>
<td>TN</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### STRUCT. 287-1 - ASPHALT TREATED PERMEABLE BASE

**Notes**

Details and Structure: Complete - Items 000 to 1999
## 288-001- CEMENT TREATED PERMEABLE BASE

<table>
<thead>
<tr>
<th>Unit</th>
<th>CY; M3</th>
<th>Accuracy</th>
<th>Cubic Yard; Cubic Meter</th>
<th>PlanQuantity?</th>
<th>yes</th>
</tr>
</thead>
</table>

### Notes

**Details**

**Related Items**

- **Required**
- **Recommended**

**Design Forms and Documentation**

- sumqrqd: Roadway Summary of Quantities Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

- 700-050-56: Daily Log Sheet Miscellaneous Tabulation Form Site Source Record
- Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

### References

- **PPM Chapter**
- **Trns-port**
- **Other Standards**
  - Index No. 287
- **Specifications**
  - Section 288
- **Prep & Doc Manual Chapter(s)**
  - 13

### TRNS*PORT Category (DRAFT FIELD):

- 0200 Roadway

### Struct.

- 288-001- CEMENT TREATED PERMEABLE BASE CY

### Notes

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<tr>
<td>0288001</td>
<td>CEMENT TREATED PERMEABLE BASE</td>
<td>CY</td>
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<td>1/1/2010</td>
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</tr>
</tbody>
</table>

---

## 305- 1- ?? CRACK AND JOINT SEALING FOR ASPHALT PAVEMENT

<table>
<thead>
<tr>
<th>Unit</th>
<th>LF; M1</th>
<th>Accuracy</th>
<th>Linear Foot; 1/10 Meter</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

**DEVELOPMENTAL ITEM**

### Notes

**Details**

**Related Items**

- **Required**
- **Recommended**

**Design Forms and Documentation**

- COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
- Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

**References**

- **PPM Chapter**
- **Trns-port**
315-1- STRESS ABSORBING MEMBRANE

Unit: SY; M2
Accuracy: Square Yard; Square Meter
PlanQuantity?: no

Notes:
- CONTACT THE STATE PAVEMENT DESIGN OFFICE for approval, prior to using this item.
- Project specific specifications, including material and installation requirements, are needed.
- Payment for this item includes all work and materials for the membrane.
- NOTE: This item may serve as a replacement for Pavement Overlay fabric (Item 518-70), when approved by State Pavement Design Office.

Related Items
- Required
- Recommended

Design Forms and Documentation:
- COMP 700-050-01: Area Computation and Continuation
- Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation:
- No additional form required; use plans summary or comp book
- Record final quantity on the computation book form.

References:
- PPM Chapter
- Trns·port
- Other
- Standards
- Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 315-1- STRESS ABSORBING MEMBRANE SY

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### MILLING EXISTING ASPHALT PAVEMENT

<table>
<thead>
<tr>
<th>Unit</th>
<th>SY; M2</th>
<th>Accuracy</th>
<th>Square Yard; Square Meter</th>
<th>Plan Quantity?</th>
<th>yes</th>
</tr>
</thead>
</table>

**Notes**

**Details**

Consists of removing existing AC pavement to improve the rideability of the finished pavement, to lower the finished grade adjacent to existing curb prior to resurfacing, or to completely remove existing pavement. Includes transporting the milled material to the asphalt plant site, and stockpiling the material. Also includes removal of existing Reflective Pavement Markers. Show basis of calculation, include exceptions.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>300-1-1 (2300-1-1)</td>
<td></td>
</tr>
</tbody>
</table>

**Design Forms and Documentation**

COMP 700-050-01: Area Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter

Trns-port

Other

Standards

Specifications Section 327

Prep & Doc Manual Chapter(s) 6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 327-70- AA MILLING EXISTING ASPHALT PAVEMENT SY

AA =

1 (1" Avg. Depth)
2 (3 1/2" Avg. Depth)
3 (4 1/2" Avg. Depth)
4 (3" Avg. Depth)
5 (2" Avg. Depth)
6 (1 1/2" Avg. Depth)
7 (4" Avg. Depth)
8 (2 1/2" Avg. Depth)
9 (5 1/4 Avg. Depth)
10 (5" Avg. Depth)
11 (2 1/4" Avg. Depth)
12 (1 1/4" Avg. Depth)
13 (1 3/4" Avg. Depth)
14 (6 1/2" Avg. Depth)
15 (2 3/4" Avg. Depth)
16 (1/2" Avg. Depth)
17 (3 1/4" Avg. Depth)
18 (5 1/2" Avg. Depth)
19 (3/4" Avg. Depth)
20 (3 3/4" Avg. Depth)
21 (7" Avg. Depth)
22 (4 1/4" Avg. Depth)
23 (6” Avg. Depth)  
26 (4 3/4” Avg. Depth)  
27 (5 3/4” Avg. Depth)  
28 (6 3/4” Avg. Depth)  
29 (6 1/4” Avg. Depth)  
30 (11.5” Avg. Depth)  

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0327 70 1</td>
<td>MILLING EXIST ASPH PAVT, 1” AVG DEPTH</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0327 70 2</td>
<td>MILLING EXIST ASPH PAVT, 3 1/2” AVG DEPTH</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0327 70 3</td>
<td>MILLING EXIST ASPH PAVT, 4 1/2” AVG DEPTH</td>
<td>SY</td>
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<td>1/1/2010</td>
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</tr>
<tr>
<td>0327 70 4</td>
<td>MILLING EXIST ASPH PAVT, 3” AVG DEPTH</td>
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<td>1/1/2010</td>
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</tr>
<tr>
<td>0327 70 5</td>
<td>MILLING EXIST ASPH PAVT, 2” AVG DEPTH</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0327 70 6</td>
<td>MILLING EXIST ASPH PAVT, 1 1/2” AVG DEPTH</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0327 70 7</td>
<td>MILLING EXIST ASPH PAVT, 4” AVG DEPTH</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0327 70 8</td>
<td>MILLING EXIST ASPH PAVT, 2 1/2” AVG DEPTH</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0327 70 9</td>
<td>MILLING EXIST ASPH PAVT, 5 1/4” AVG DEPTH</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0327 70 10</td>
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<td>1/1/2010</td>
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</tr>
<tr>
<td>0327 70 11</td>
<td>MILLING EXIST ASPH PAVT, 2 1/4” AVG DEPTH</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0327 70 12</td>
<td>MILLING EXIST ASPH PAVT, 1 1/4” AVG DEPTH</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0327 70 13</td>
<td>MILLING EXIST ASPH PAVT, 1 3/4” AVG DEPTH</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0327 70 14</td>
<td>MILLING EXIST ASPH PAVT, 6 1/2” AVG DEPTH</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0327 70 15</td>
<td>MILLING EXIST ASPH PAVT, 2 3/4” AVG DEPTH</td>
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<td>1/1/2010</td>
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<tr>
<td>0327 70 16</td>
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<td>1/1/2010</td>
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<tr>
<td>0327 70 17</td>
<td>MILLING EXIST ASPH PAVT, 3 1/4” AVG DEPTH</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0327 70 18</td>
<td>MILLING EXIST ASPH PAVT, 5 1/2” AVG DEPTH</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0327 70 19</td>
<td>MILLING EXIST ASPH PAVT, 3/4” AVG DEPTH</td>
<td>SY</td>
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<td>1/1/2010</td>
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<tr>
<td>0327 70 20</td>
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<td>1/1/2010</td>
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<tr>
<td>0327 70 21</td>
<td>MILLING EXIST ASPH PAVT, 7” AVG DEPTH</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0327 70 22</td>
<td>MILLING EXIST ASPH PAVT, 4 1/4” AVG DEPTH</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0327 70 23</td>
<td>MILLING EXIST ASPH PAVT, 6” AVG DEPTH</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>
### 327-Maint MILLING Maintenance Contracts Only

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
<th>Details</th>
<th>Related Items</th>
<th>Design Forms and Documentation</th>
<th>Construction Forms and Documentation</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed</td>
<td>Refer to item structure and details</td>
<td>?</td>
<td>Maintenance Item: Not Valid for Construction Contracts</td>
<td>MAINTENANCE CONTRACTS ONLY Additional BOE details pending</td>
<td>Required</td>
<td>Recommended</td>
<td></td>
<td>PPM Chapter Trns-port Other Standards Specifications Prep &amp; Doc Manual Chapter(s)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TRNS*PORT Category (DRAFT FIELD):</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Struct. 327-Maint MILLING Maintenance Contracts Only</td>
<td>Mixed</td>
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</table>

#### Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>E327 73</td>
<td>MILLING EXISTING ASPHALT PAVEMENT</td>
<td>TN</td>
<td>1/10</td>
<td>1/10</td>
<td>1/10</td>
</tr>
</tbody>
</table>

### 334-1 AA SUPERPAVE ASPHALTIC CONCRETE

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>TN; MT</td>
<td>1/10 Ton; 1/10 Metric Ton</td>
<td>no</td>
<td>Selected items valid through 12-31-12 and 6-30-13, per Estimates Bulletin 12-16.</td>
</tr>
</tbody>
</table>
Details

Consists of using SUPERPAVE asphalt mixture design and analysis test equipment and procedures, Gyratory Compactor to better simulate actual pavement loadings (five different traffic levels available) to provide for a better rut-resistant mix design. Use 110 lb per square yard per 1 inch (24 kg/m² per 10 mm) lift. Note: Other rates and PG 76-22 Binder may be used only when recommended by District Materials Engineer.

From specification 334-1.4: Plan quantities are based on a Gmm of 2.540, corresponding to a spread rate of 110 lbs/yd²-in. Pay quantities will be based on the actual maximum specific gravity of the mix being used.

***********************
Safety Edge is currently under review with selected projects. It is to be used only when approved in accordance with State Roadway Design Office guidelines. For approved projects, calculate the additional asphalt required for the safety edge, and include the quantities with Superpave Asphalt (surface course), per ton. Plan Details will be required, in accordance with the developmental specifications.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-06: Weight Measure or Liquid Volume Comp &amp; Cont.</td>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>700-050-66: Contractor's Certification of Quantities- Asphalt &amp; Bituminous Materials</td>
<td>Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
</table>

References
PPM Chapter
Trnsport
Other
Standards
Specifications: Section 334
Prep & Doc Manual Chapter(s): 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway
Struct. 334-1-AA SUPERPAVE ASPHALTIC CONCRETE TN

AA = Traffic Level
11 (Traffic A)
12 (Traffic B)
13 (Traffic C)
14 (Traffic D)
15 (Traffic E)
21 (Traffic A, PG 76-22) valid through 12-31-2012
22 (Traffic B, PG 76-22, PMA)
23 (Traffic C, PG 76-22, PMA)
24 (Traffic D, PG 76-22, PMA)
25 (Traffic E, PG 76-22, PMA)
31 (Traffic Level A, PG 82-22) valid through 12-31-12
32 (Traffic Level B, PG 82-22) valid through 12-31-12
33 (Traffic Level C, PG 82-22, PMA)
34 (Traffic Level D, PG 82-22, PMA)
35 (Traffic Level E, PG 82-22, PMA)
41 (Traffic Level A, PG 67-22) valid through 6-30-13
42 (Traffic Level B, PG 67-22) valid through 6-30-13
43 (Traffic Level C, PG 67-22) valid through 6-30-13
44 (Traffic Level D, PG 67-22) valid through 6-30-13
45 (Traffic Level E, PG 67-22) valid through 6-30-13

Notes
Item used for Price Trends Report

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0334 1 11</td>
<td>SUPERPAVE ASPHALTIC CONC, TRAFFIC A</td>
<td>TN</td>
<td>1/1/2010</td>
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<tr>
<td>0334 1 12</td>
<td>SUPERPAVE ASPHALTIC CONC, TRAFFIC B</td>
<td>TN</td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0334 1 13</td>
<td>SUPERPAVE ASPHALTIC CONC, TRAFFIC C</td>
<td>TN</td>
<td>1/1/2010</td>
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<td>0334 1 14</td>
<td>SUPERPAVE ASPHALTIC CONC, TRAFFIC D</td>
<td>TN</td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0334 1 15</td>
<td>SUPERPAVE ASPHALTIC CONC, TRAFFIC E</td>
<td>TN</td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0334 1 22</td>
<td>SUPERPAVE ASPH CONC, TRAFFIC B, PG76-22, PMA</td>
<td>TN</td>
<td>1/1/2010</td>
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<td>TN</td>
<td>1/1/2010</td>
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<td></td>
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<td>0334 1 24</td>
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<td>TN</td>
<td>1/1/2010</td>
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<td></td>
</tr>
<tr>
<td>0334 1 25</td>
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<td>TN</td>
<td>1/1/2010</td>
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<td>0334 1 34</td>
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<td>TN D</td>
<td>1/1/2011</td>
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<td>0334 1 42</td>
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<td>TN</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
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<tr>
<td>0334 1 43</td>
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<td>6/30/2013</td>
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337- 7- AA  ASPHALT CONCRETE FRICITION COURSE

Notes
Selected items valid through 12-31-12 and 6-30-13, per Estimates Bulletin 12-16.

The maximum spread rate used for estimating quantities are as follows:
a=5~ FC-5(Rubber): 80 lb/yd2 (44 kg/m2); recommended thickness 3/4 in (20mm)
a=7~ FC-9.5 (Rubber): 110 lb/yd2 (72 kg/m2); recommended thickness 1 in (30mm)
a=6~ FC-12.5 (Rubber): 165 lb/yd2 (96 kg/m2); recommended thickness 1 1/2 in (40mm)
a=21~ FC-9.5 (PG 76-22): 110 lb/yd2 (72 kg/m2); recommended thickness 1 in (30mm)
a=20~ FC-12.5 (PG 76-22): 165 lb/yd2 (96 kg/m2); recommended thickness 1 1/2 in (40mm)
a=22~ FC-5 (PG 76-22): 80 lb/yd2 (44 kg/m2); recommended thickness 3/4 in (20mm)

The actual spread rate will be based on the contractor's mix design per specifications. Designers must specify on the Typical Section, the traffic Level for structural Friction Courses FC-9.5 and FC-12.5. Refer to Pavement Design Manual for additional information.

Related Items
<table>
<thead>
<tr>
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<th>Recommended</th>
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Design Forms and Documentation
COMP 700-050-06: Weight Measure or Liquid Volume Comp & Cont.
Locate in the plans. Summarize quantities by location in the computation book.
700-050-66: Contractor’s Certification of Quantities- Asphalt & Bituminous Materials
Contractor’s Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter
Trns·port
Other
Standards
Specifications Section 337
Prep & Doc Manual Chapter(s) 11, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 337- 7- AA ASPHALT CONCRETE FRICTION COURSE TN

AA = Type
5 (FC-5, Rubber) valid through 6-30-13
22 (FC-5, PG 76-22, PMA)
23 (FC-5, PG 82-22, PMA)
24 (FC-5, PG 76-22, ARB) effective 7-1-13

29 (Traffic B, FC 4.75, Rubber) valid through 6-30-13
30 (Traffic B, FC-9.5, Rubber) valid through 6-30-13
31 (Traffic B, FC-12.5, Rubber) valid through 6-30-13
32 (Traffic C, FC-9.5, Rubber) valid through 6-30-13
33 (Traffic C, FC-12.5, Rubber) valid through 6-30-13
35 (Traffic D, FC-12.5, Rubber) valid through 6-30-13

39 (Traffic B, FC 4.75, PG 76-22, PMA)
40 (Traffic B, FC-9.5, PG 76-22, PMA)
41 (Traffic B, FC-12.5, PG 76-22, PMA)
42 (Traffic C, FC-9.5, PG 76-22, PMA)
43 (Traffic C, FC-12.5, PG 76-22, PMA)
45 (Traffic D, FC-12.5, PG 76-22, PMA)
48 (Traffic E, FC-12.5, PG 76-22, PMA)

50 (Traffic B, FC 4.75, PG 82-22) valid through 12-31-12
51 (Traffic B, FC-9.5, PG 82-22) valid through 12-31-12
52 (Traffic B, FC-12.5, PG 82-22) valid through 12-31-12
53 (Traffic C, FC 4.75, PG 82-22) valid through 12-31-12
54 (Traffic C, FC-9.5, PG 82-22, PMA)
55 (Traffic C, FC-12.5, PG 82-22, PMA)
56 (Traffic D, FC 4.75, PG 82-22) valid through 12-31-12
57 (Traffic D, FC-9.5, PG 82-22) valid through 12-31-12
58 (Traffic D, FC-12.5, PG 82-22, PMA)

60 (Traffic B, FC 4.75, PG 67-22) valid through 12-31-12
61 (Traffic B, FC-9.5, PG 67-22) valid through 12-31-12
62 (Traffic B, FC-12.5, PG 67-22) valid through 12-31-12
63 (Traffic C, FC 4.75, PG 67-22) valid through 12-31-12
64 (Traffic C, FC-9.5, PG 67-22) valid through 12-31-12
65 (Traffic C, FC-12.5, PG 67-22) valid through 12-31-12
66 (Traffic D, FC 4.75, PG 67-22) valid through 12-31-12
67 (Traffic D, FC-9.5, PG 67-22) valid through 12-31-12
68 (Traffic D, FC-12.5, PG 67-22) valid through 12-31-12
70 (Traffic B, FC-4.75, PG 76-22, ARB) effective 7-1-13  
71 (Traffic B, FC-9.5, PG 76-22, ARB) effective 7-1-13  
72 (Traffic B, FC-12.5, PG 76-22, ARB) effective 7-1-13  
73 (Traffic C, FC-9.5, PG 76-22, ARB) effective 7-1-13  
74 (Traffic C, FC-12.5, PG 76-22, ARB) effective 7-1-13  

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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</table>
### 339- 1- MISCELLANEOUS ASPHALT PAVEMENT

**Unit** TN; MT  
**Accuracy** 1/10 Ton; 1/10 Metric Ton  
**Plan Quantity?** no

**Notes**  
Consists of construction of asphalt pavement in areas which will not be subjected to vehicular traffic, such as pavement under guardrail, bicycle paths, median pavement, sidewalks, etc. The pay quantity will be based on the average spread rate or dimensions for the project, limited to a maximum of 105% of the plan quantity. For calculation, use a weight of 100 lb/sy-in (22kg/m² per 10mm) thickness.

**Related Items**  
**Required**  
**Recommended**

**Design Forms and Documentation**  
SBAsphaltMisc: Miscellaneous Asphalt  
Locate in plans. Summarize quantities by location on summary sheet in the plans.  
NOTE: When included on guardrail summary, do not duplicate quantities on Misc Asphalt Summary.

**Construction Forms and Documentation**  
700-050-66: Contractor's Certification of Quantities- Asphalt & Bituminous Materials  
Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**  
**PPM Chapter**
**Trns-port**
**Other Standards** Index No. 400 for guardrail applications  
**Specifications** Section 339  
**Prep & Doc Manual Chapter(s)** Contact Final Estimates

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 339- 1- MISCELLANEOUS ASPHALT PAVEMENT TN

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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### 339-Maint ASPHALTIC CONCRETE- COLD PATCH

**Maintenance Contracts Only**  
**Unit** Mixed  
**Accuracy** Refer to item structure and details  
**Plan Quantity?** ?

**Notes**  
Maintenance Item: Not Valid for Construction Contracts
### Details

**MAINTENANCE CONTRACTS ONLY**

Additional BOE details pending

### Related Items

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### Design Forms and Documentation

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### Construction Forms and Documentation

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**TRNS*PORT Category (DRAFT FIELD):**

#### Struct. 339-Maint

**ASPHALTIC CONCRETE- COLD PATCH**

Mixed  

**Maintenance Contracts Only**

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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#### 341-70-

**ASPHALT RUBBER MEMBRANE INTERLAYER**

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<td>SY; M2</td>
<td>Square Yard; Square Meter</td>
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### Notes

Details

Consists of a separate application of asphalt rubber binder covered with a single application of aggregate. Payment for bituminous material (rubber binder) is incidental to this item.

### Related Items

<table>
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### Design Forms and Documentation

| COMP 700-050-01: Area Computation and Continuation |
| Locate in the plans. Summarize quantities by location in the computation book. |

### Construction Forms and Documentation

| 700-050-66: Contractor's Certification of Quantities- Asphalt & Bituminous Materials |
| Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book). |

### References

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### Other Standards Specifications Section 341 Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct. 341-70-** ASPHALT RUBBER MEMBRANE INTERLAYER SY

#### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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**350-1-AA** CEMENT CONCRETE PAVEMENT PLAIN

| Unit | SY; M2 | Accuracy | Square Yard; Square Meter | PlanQuantity? | yes |

#### Notes

- Consists of placement of plain Portland Cement Concrete pavement and also of construction of pavement joints.
- For colored concrete, see 523 items.

- Through June 2011: Payment for grinding new concrete pavement is included with new concrete.
- Effective July 2011: Pay for grinding separately, under Section 352 for all new concrete pavement.

#### Related Items

**Required** 352-70- **Recommended**

**Design Forms and Documentation**

- COMP 700-050-01: Area Computation and Continuation
- Locate in the plans. Summarize quantities by location in the computation book.

#### Construction Forms and Documentation

- No additional form required; use plans summary or comp book
- Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

#### References

- PPM Chapter
- Trns-port
- Other Standards Index No. 305, 560
- Specifications Section 350
- Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct. 350-1-AA** CEMENT CONCRETE PAVEMENT PLAIN SY

- AA = Average thickness
- 1 (6")
- 2 (7")

Details and Structure: Complete- Items 000 to 1999
3 (8")
4 (9")
5 (10")
8 (7 1/2")
10 (12")
11 (13")
12 (11")
13 (11 1/2")
14 (14")
15 (13 1/2")
16 (10 1/2")
17 (8 1/2")
19 (12 1/2")
20 (9 1/2")
21 (Var. 11" Avg.) after 6-30-12, use AA=12
22 (Var. 11 1/2" Avg.) after 6-30-12, use AA=13
23 (14 1/2")

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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350- 2- AA  CEMENT CONCRETE PAVEMENT, REINFORCED

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Details and Structure: Complete- Items 000 to 1999
Notes

Details

Consists of placement of steel reinforced Portland Cement Concrete pavement and also of construction of pavement joints, as described in Section 350.

For fiber reinforced concrete, contact the State Pavement Design Office.
For colored concrete, see 523 items.

Through June 2011: Payment for grinding new concrete pavement is included with new concrete.
Effective July 2011: Pay for grinding separately, under Section 352 for all new concrete pavement.

Related Items

Required 352- 70- Recommended

Design Forms and Documentation

COMP 700-050-01: Area Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter
Trnsport
Other
Standards Index No. 305, 560
Specifications Section 350

Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 350- 2- AA CEMENT CONCRETE PAVEMENT, REINFORCED SY

AA = thickness
1 (6")
3 (8")
4 (9")
10 (12")
12 (11")
17 (8.5")

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>0350 2 1</td>
<td>CEMENT CONC PAVT REINFORCED, 6&quot;</td>
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<tr>
<td>0350 2 3</td>
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<tr>
<td>0350 2 4</td>
<td>CEMENT CONC PAVT REINFORCED, 9&quot;</td>
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<td>0350 2 10</td>
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<tr>
<td>0350 2 12</td>
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<td>0350 2 17</td>
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<td>1/1/2010</td>
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</tr>
</tbody>
</table>
### 350-72-

**CLEANING & RESEALING JOINTS IN CONCRETE PAVEMENT**

<table>
<thead>
<tr>
<th>Unit</th>
<th>LF; M1</th>
<th>Accuracy</th>
<th>Linear Foot; 1/10 Meter</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

**Notes**

**Details**

Longitudinal and transverse joints must be summarized. This item to be used on existing concrete pavement only.

DO NOT Use on bridge structures; refer to 458- items

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Trns-port

Other

Standards

Index No. 305

Specifications

Section 350

Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

<table>
<thead>
<tr>
<th>Struct.</th>
<th>CLEANING &amp; RESEALING JOINTS IN CONCRETE PAVEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>350-72-</td>
<td>LF</td>
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</table>

**Notes**

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0350 72</td>
<td>CLEANING &amp; RESEALING JOINTS- EXISTING CONCRETE PAVEMENT: REHAB</td>
<td>LF</td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

### 350-78-

**CLEANING AND SEALING RANDOM CRACKS IN CONCRETE PAVEMENT**

<table>
<thead>
<tr>
<th>Unit</th>
<th>LF; M1</th>
<th>Accuracy</th>
<th>Linear Foot; 1/10 Meter</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

**Notes**

**Details**

Longitudinal and transverse joints must be summarized. This item to be used on existing concrete pavement only.

DO NOT Use on bridge structures; refer to Section 400 items.

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.
No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Trns-Port
Other
Standards
Specifications Section 350
Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 350-78- CLEANING AND SEALING RANDOM CRACKS IN CONCRETE PAVEMENT LF

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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<tr>
<td>0350 78</td>
<td>CLEANING &amp; SEALING RANDOM CRACKS IN EXISTING CONCRETE PAVEMENT- REHAB</td>
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<td>1/1/2010</td>
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</table>

350-Maint CONCRETE PAVEMENT Maintenance Contracts Only

<table>
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<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
<th>Details</th>
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<td>Maintenance Item: Not Valid for Construction Contracts</td>
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</table>

Related Items
Required Recommended

Design Forms and Documentation

Construction Forms and Documentation

References
PPM Chapter
Trns-port
Other
Standards
Specifications
Prep & Doc Manual Chapter(s)
Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>E350 72 1</td>
<td>CLEANING &amp; RESEALING JOINTS (EXPANSION)</td>
<td>LF</td>
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<tr>
<td>E350 74 6</td>
<td>PAVEMENT JOINT (HOT Poured &gt; 3/4&quot;)</td>
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<tr>
<td>E350 74 8</td>
<td>PAVEMENT JOINT (SILICON)</td>
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<td>E350 99</td>
<td>CLEANING &amp; SEALING CRACKS IN ASPHALT PAVEMENT</td>
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</tr>
</tbody>
</table>

352-70-
GRINDING CONCRETE PAVEMENT

Unit: SY; M2

Notes

Details

Through June 2011: This item to be used on existing concrete pavement only. Grinding of new concrete pavement included in the bid price for Cement Concrete Pavement.

Effective July 2011: This item will be used for grinding (1) existing concrete pavement shown in the plans, (2) new concrete pavement- the full width of the travel lanes, (3) shoulders, when shown in the plans to promote drainage. (Separate payment for grinding will be made for all concrete pavement- new and existing concrete.)

DO NOT Use on bridge structures; refer to Section 400 items for grinding deck slabs.

Related Items

Required
Recommended

Design Forms and Documentation

COMP 700-050-01: Area Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

References

PPM Chapter
Trns·port
Other Standards
Specifications Section 352
Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 352-70- GRINDING CONCRETE PAVEMENT SY

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
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<tbody>
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<td>0352 70</td>
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<td>SY</td>
<td>1/1/2010</td>
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Details and Structure: Complete- Items 000 to 1999
352-Maint  CONCRETE PAVEMENT
Maintenance Contracts Only

Unit  Mixed  Accuracy  Refer to item structure and details  PlanQuantity?  ?

Notes  Maintenance Item: Not Valid for Construction Contracts
Details  MAINTENANCE CONTRACTS ONLY
Additional BOE details pending

Design Forms and Documentation

References  PPM Chapter
Trns-port
Other Standards
Specifications
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):

Struct.  352-Maint  CONCRETE PAVEMENT  Mixed
Maintenance Contracts Only

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
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<th>Obsolete Date</th>
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<td>E352 1</td>
<td>CUT OR GRIND RDWY TO REMOVE SPILL IRREGULARITIES</td>
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<td>1/1/2010</td>
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</tr>
</tbody>
</table>

353- 70-  CONCRETE PAVEMENT SLAB REPLACEMENT

Unit  CY; M3  Accuracy  1/10 Cubic Yard; 1/10 Cubic Meter  PlanQuantity?  no

Notes

Details  For use on existing Concrete Pavement roadways only.

Per specification, "the quantity will be calculated on the basis of field measured horizontal dimensions and pavement design thickness. No additional compensation will be allowed for additional concrete required to bring the proposed concrete slab up to finished grade."
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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</table>

**Notes**

**354-Maint**

**SUBSURFACE POLYURETHANE INJECTION**

**Maintenance Contracts Only**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Refer to item structure and details</td>
<td>?</td>
<td>Maintenance Item: Not Valid for Construction Contracts</td>
<td>MAINTENANCE CONTRACTS ONLY Additional BOE details pending</td>
</tr>
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</table>

**Related Items**

Required

Recommended

**Design Forms and Documentation**

**Construction Forms and Documentation**

**References**

PPM Chapter

Trns-port

Other

Standards

Specifications Section 353

Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 353-70- CONCRETE PAVEMENT SLAB REPLACEMENT CY
**TRNS*PORT Category (DRAFT FIELD):**

**Struct.  354-Maint**  
SUBSURFACE POLYURETHANE INJECTION  
Maintenance Contracts Only  
Mixed

---

**Notes**

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<td>1/1/2010</td>
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</tr>
</tbody>
</table>

---

**370- 1-**  
BRIDGE APPROACH EXPANSION JOINT FOR CONCRETE PAVEMENT

---

**Unit**  
LF; M1

**Accuracy**  
Linear Foot; 1/10 Meter

**Plan Quantity?**  
yes

---

**Notes**

---

**Details**

To be used in accordance with Index 306. Consists of the construction of special expansion joints for concrete pavement near the bridge approach slabs. These joints contain a section of reinforced concrete subslab supporting the concrete pavement, and a portion of the pavement over the subslab interrupted by a galvanized sheet metal strip.

Pay quantity of expansion joint is to be calculated across pavement at right angles to the centerline of the roadway pavement. Shoulder pavement joint is included in the total length.

For Bridge Deck Expansion Joints (on the bridge, rather than concrete pavement), use pay item 458-1-AB.

NOTE: This is a roadway pay item.

---

**Related Items**

**Required**

**Recommended**

---

**Design Forms and Documentation**

COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

---

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

---

**References**

PPM Chapter

Trns-port

Other Standards  
Index No. 306

Specifications  
Sections 350, 370, 932

Prep & Doc Manual Chapter(s)  
6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):**

100 or 200  
Structures or Roadway

**Struct.  370- 1-**  
BRIDGE APPROACH EXPANSION JOINT FOR CONCRETE PAVEMENT  
LF

---

**Notes**

---

Details and Structure: Complete- Items 000 to 1999
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
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400- ALL  
Class NS, I, II, III, IV, V, VI Details

<table>
<thead>
<tr>
<th>Notes</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NOTES BELOW ARE FOR CLASS NS, I, II, III, IV, and V, VI Concrete</td>
</tr>
</tbody>
</table>

No separate payment made for deck scuppers, poured expansion joints, deck control joints, preformed anchor bolt holes, plain neoprene bearing pads. These items are included in the cost of the concrete.

Reinforcement steel may be incidental to the cost of the concrete; refer to Section 400 of the specifications. Reinforcement is incidental for concrete jackets on steel piles, steel in barriers, traffic separators, and parapets. For Gravity Walls, reinforcement steel is incidental to cost of concrete.

Include quantity block in plans by component (except for misc. concrete). Mass concrete should be broken out in the quantity block separately. See SDG’s 3.9. When component is phased, break down quantity by phase. Concrete quantity is PLAN QUANTITY (except for misc. concrete). See Section 400-22.2.2 of the Specifications.

CULVERTS: Refer to Design Standards for correct class of concrete and other payment details. For index 289, 291 and 292, class 1 is valid through 12/2011.

ENDWALLS: Refer to Design Standards for correct class of concrete and other payment details. For some U-endwalls, including Index 260 and 261, payment is made under 430 items. For Index 250, reinforcing steel is included in cost of concrete.

JUNCTION SLAB FOR GRAVITY WALLS: (Effective July 2010-June 2011) Payment for Junction Slab on Gravity Wall (Index 520) will be included in payment for 521-8 Retaining Wall with Junction Slab. Do not include junction slab quantities with CY gravity wall quantities.

JUNCTION SLAB FOR GRAVITY WALLS: (Effective July 2011) Payment for Junction Slab on Gravity Wall (Index 6011) will be included in payment for 521-8 Concrete Traffic Railing Barrier with Junction Slab. Do not include junction slab quantities with CY gravity wall quantities.

STEPS: Per Index 521, Payment for reinforcing steel shall be made under 415-1-13 misc steel.

Misc Concrete (through June 2009 letting): Estimate 5 CY (5 M3) minimum. PENDING: To be replaced by Class NS concrete or other non-concrete items, to which concrete is incidental.

Misc Concrete (effective July 2009 letting): No separate payment is made for Misc Concrete. Work and materials are to be included in the item to which it is incidental- pull & junction box, lighting, signing, etc.

Precast Deck Overlay: consists of Class II with steel fiber reinforcement; Class IV with polymer fiber reinforcement and low shrinkage admixtures. Coordinate Use of this item with the State Structures Design Office. Requires modified specifications.
Seal Concrete, Class III: When it is not practical to dewater land pier footings, show seal concrete in the plans. For water piers, both waterline and mud line footings require seal concrete to be shown in the plans. See SDG’s 3.7.

Precast Segmental Production: Refer to Section 452 of the specifications, as needed.

Superstructure Light-Weight Concrete requires plan notes and/or a TSP for unit weight, aggregate requirements, etc.

Low Shrink Deck Concrete requires a TSP.

Self-Consolidating Concrete requires a Tech Spec. Coordinate this specification with the State Structures Design Office.

Counterweight Concrete may require plan notes and/or a TSP for unit weight, aggregate requirements, etc.

Concrete for bascule bridge pier should be paid for under Substructure or Mass-Substructure pay items. See SDG’s 3.9.

Clearly delineate limits of microsilica concrete in the plans. Clearly delineate limits of calcium nitrite in the plans. CIP concrete requiring calcium nitrite should be paid for using the normal concrete pay item. See SDG’s 1.4.3.

Class VI: Coordinate the use of these items with the State Structures Design Office.

ORIGINAL MEASUREMENT:
ALL, Except MISC: Detailed calculations are required in the computation book, calculate carefully to reflect actual scope of work. PLAN QUANTITY will be basis of payment to the Contractor.
MISC: Detailed calculations are required in computation book.
FINAL:
ALL, Except MISC: No calculations required unless item is to be adjusted. Final pay quantity will be PLAN QUANTITY with proper considerations for Specification tolerances.
MISC: Final measurements should be recorded in field book showing detailed calculations. (Refer to subarticle 400-22.2.2 in the specifications.) Transfer final quantity to proper form in computation book.

Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

Design Forms and Documentation

- COMP 700-050-07: Concrete & Reinforcing Steel Comp & Cont.
  Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

- No additional form required; use plans summary or comp book
  see detail

References

- PPM Chapter
- Trns-port
- Other
  Mass Concrete SDG 3.9, Class and Admixtures SDG 1.4.3, Cofferdams and Seals SDG 3.7.
  Normally requires SHOP DRAWINGS

- Standards
- Specifications
  See pay item structure for applicable Index numbers.
AAA = Applications, Valid Class(es)
1 (Culverts) Class II, IV
2 (Endwalls) Class I, II, IV, excluding Index 260 & 261 U-endwalls
4 (Superstructure) Class II, IV
5 (Substructure) Class II, IV
6 (Counterweight) Class IV
8 (Bulkhead) Class II, III, IV: Index 6040*
10 (Approach Slabs) Class II
11 (Retaining Walls) CIP Retaining walls; DO NOT use this item for walls covered by 548 specifications
   Class NS: Gravity Wall Index 520/6011*
   Class II, III, IV: 5000 series/6010*
12 (Trench Slabs) Class II
13 (Concrete Steps) Class NS, Index 521
15 (Miscellaneous) **Valid through June 2009 letting**
20 (Seal) Class III
22 (Superstructure Closure Joint) Class IV, VI
25 (Mass- Substructure) Class I, II, IV
39 (Precast Segmental Superstructure) Class IV, VI. Refer to Section 452.
40 (Precast Segmental Substructure) Class IV, V. Refer to Section 452.
41 (Precast Deck Overlay) Class II with steel fiber reinforcement; Class IV with polymer fiber reinforcement & low shrink admixtures
42 (Substructure Self-Consolidating Concrete) Class VI, Tech Spec required
43 (Superstructure Self-Consolidating Concrete) Class VI, Tech Spec required
45 (Precast Substructure) Class III
104 (Superstructure Light-Weight) Class IV
105 (Superstructure Special) Class ??
106 (Microsilica Substructure) Class V
107 (Microsilica Substructure-Mass) Class V
239 (Low Shrink Deck) Material Only, Class V
*Index numbers show both old (through June 2011)/ new (effective July 2011) references.

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

400- 0-AAA CLASS NS CONCRETE

<table>
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<th>Unit</th>
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<th>PlanQuantity?</th>
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</thead>
<tbody>
<tr>
<td>Notes</td>
<td>Refer to 400- -ALL for details on all classes of concrete</td>
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<tr>
<td>Related Items</td>
<td>Required</td>
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<td>415- 1- A</td>
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<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-07: Concrete &amp; Reinforcing Steel Comp &amp; Cont.</td>
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<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
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</tr>
</tbody>
</table>
Construction Forms and Documentation

No additional form required; use plans summary or comp book
see detail

References
PPM Chapter
Trns-port
Other
Mass Concrete SDG 3.9, Class and Admixtures SDG 1.4.3, Cofferdams and Seals SDG 3.7.
Normally requires SHOP DRAWINGS

Standards
Refer to 400- -ALL for details on all classes of concrete
Specifications Sections 346, 400

Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 100 or 200 Structures or Roadway

Struct.  400- 0-AAA CLASS NS CONCRETE CY
AAA = Class 0 Applications
11 (Gravity Wall) Index 520/6011*
13 (Concrete Steps) Index 521

Notes
see detail

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tr>
<td>0400 0 13</td>
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400- 1-AAA CLASS I CONCRETE

Unit CY; M3
Accuracy 1/10 Cubic Yard; 1/10 Cubic Meter
PlanQuantity? yes/no

Notes
Refer to 400- -ALL for details on all classes of concrete

Related Items
Required 415- 1- A
Recommended

Design Forms and Documentation
COMP 700-050-07: Concrete & Reinforcing Steel Comp & Cont.
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation
No additional form required; use plans summary or comp book
see detail

References
PPM Chapter
Trns-port
Other
Mass Concrete SDG 3.9, Class and Admixtures SDG 1.4.3, Cofferdams and Seals SDG 3.7.
Normally requires SHOP DRAWINGS

Standards
Refer to 400- -ALL for details on all classes of concrete
Specifications Sections 346, 400

Prep & Doc Manual Chapter(s) 6, 7, 13
Struct. 400-1-AAA CLASS I CONCRETE CY

AAA = Class I Applications
1 (Culverts) valid through 12/2011, per index change to 289, 291, 292
2 (Endwalls) Note: Does not include Index 260 or 261 U-endwalls

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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Notes

Details
Refer to 400-1-ALL for details on all classes of concrete

Related Items
Required 415-1-A

Design Forms and Documentation
COMP 700-050-07: Concrete & Reinforcing Steel Comp & Cont.
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation
No additional form required; use plans summary or comp book

References
PPM Chapter
Trns-port
Other Mass Concrete SDG 3.9, Class and Admixtures SDG 1.4.3, Cofferdams and Seals SDG 3.7.

Specifications
Sections 346, 400

Prep & Doc Manual Chapter(s)

Struct. 400-2-AAA CLASS II CONCRETE CY

AAA = Class II Applications
1 (Culverts)
2 (Endwalls) Note: Does not include Index 260 or 261 U-endwalls
4 (Superstructure)
5 (Substructure)
10 (Approach Slabs)
11 (Retaining Walls) CIP retaining walls. NOTE: DO NOT use this item for walls covered by 548 specifications.
12 (Trench Slabs)
15 (Miscellaneous) **Valid through June 2009 letting**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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### 400-3-AAA CLASS III CONCRETE

**Notes**

Refer to 400-3-ALL for details on all classes of concrete

**Related Items**

Required: 415-3-1-A

**Design Forms and Documentation**

COMP 700-050-07: Concrete & Reinforcing Steel Comp & Cont.

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

**References**

PPM Chapter

**Transport**

Other: Mass Concrete SDG 3.9, Class and Admixtures SDG 1.4.3, Cofferdams and Seals SDG 3.7.

**Standards**

Refer to 400-3-ALL for details on all classes of concrete

**Specifications**

Sections 346, 400

**Prep & Doc Manual Chapter(s)**

TRNS*PORT Category (DRAFT FIELD): 100 or 200 Structures or Roadway

**Struct.**

400-3-AAA CLASS III CONCRETE CY

AAA = Class III Applications

11 (Retaining Walls) CIP retaining walls. NOTE: DO NOT use this item for walls covered by 548 specifications.

20 (Seal) Class III

45 (Precast Substructure)
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
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#### 400- 4-AAA CLASS IV CONCRETE

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<th>Accuracy</th>
<th>PlanQuantity?</th>
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**Notes**

Refer to 400- 4-ALL for details on all classes of concrete. Class IV normally used for aggressive environments.

**Related Items**

**Required**

**Recommended**

415- 1- A

**Design Forms and Documentation**

COMP 700-050-07: Concrete & Reinforcing Steel Comp & Cont.

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

see detail

**References**

PPM Chapter

Trns·port

Other Mass Concrete SDG 3.9, Class and Admixtures SDG 1.4.3, Cofferdams and Seals SDG 3.7.

Standards Refer to 400- 4-ALL for details on all classes of concrete

Specifications Sections 346, 400

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 100 or 200 Structures or Roadway

**Struct.**

400- 4-AAA CLASS IV CONCRETE CY

AAA = Class IV Applications

1 (Culverts)

2 (Endwalls) Note: Does not include Index 260 or 261 U-endwalls

4 (Superstructure)

5 (Substructure)

6 (Counterweight)

8 (Bulkhead)

11 (Retaining Walls) CIP retaining walls. NOTE: DO NOT use this item for walls covered by 548 specifications.

22 (Superstructure Closure Joint)

25 (Mass- Substructure)

39 (Precast Segmental Superstructure)

40 (Precast Segmental Substructure)
41 (Precast Deck Overlay) w/admixtures

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
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400- 6- PRECAST ANCHOR BEAMS

| Unit | EA | Accuracy | Each | PlanQuantity? | no |

Notes

Details

Intended for Precast Tie Back anchors for use in anchored wall systems. Include in anchored wall quantity block in plans.

Related Items

Required | Recommended

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

References

PPM Chapter

Trns·port

Other

Normally requires SHOP DRAWINGS

Standards

Specifications Section 400

Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 100 or 200 Structures or Roadway

Struct. 400- 6- PRECAST ANCHOR BEAMS EA
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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</table>

### 400- 7- BRIDGE DECK GROOVING- DECK THICKNESS LESS THAN 8.5"

**Unit** SY; M2  **Accuracy** Square Yard; Square Meter  **PlanQuantity?** yes

**Notes**

Item intended for cases where deck profilograph and planing is not required by specification. When rigid approach slab is utilized, include approach slab area only. Quantity based on area bound by bridge gutter lines, begin/end of bridge or begin/end approach slab (if not covered by asphalt wearing surface).

**Related Items**

- **Required**
- **Recommended**

**Design Forms and Documentation**

COMP 700-050-01: Area Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter  
Trns-port  
Other Standards  
Specifications Section 400  
Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct. 400- 7-**

BRIDGE DECK GROOVING- DECK THICKNESS LESS THAN 8.5"

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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### 400- 8-AAA CLASS V CONCRETE

**Unit** CY; M3  **Accuracy** 1/10 Cubic Yard; 1/10 Cubic Meter  **PlanQuantity?** yes/no

**Notes**

Refer to 400- ALL for details on all classes of concrete

**Related Items**

- **Required**
- **Recommended** 415- 1- A
Standards
Refer to 400- ALL for details on all classes of concrete Specifications
Section 400

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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</table>

400- 9-

BRIDGE DECK GROOVING AND PLANING- DECK THICKNESS 8.5" or GREATER

Unit SY; M2 Accuracy Square Yard; Square Meter PlanQuantity? yes

Notes
Details
Item intended for cases where deck profilograph, and planing is required by specification. When rigid approach slab is utilized, include approach slab area. Quantity based on area bound by bridge gutter lines, begin/end of bridge or begin/end approach slab (if not covered by asphalt wearing surface).
### Required and Recommended Standards

**Standards**

**Specifications**

Section 400

**Notes**

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

### Related Items

**Design Forms and Documentation**

COMP 700-050-01: Area Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

### References

**PPM Chapter**

**Trns-port**

Other Standards

Specifications Section 400

**Prep & Doc Manual Chapter(s)** 7, 13

### TRNS*PORT Category (DRAFT FIELD):

0100 Structures

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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### Related Items

**400-10- PRECAST PANEL (ARCHITECTURAL)**

**Notes**

**Unit** EA

**Accuracy** Each

**PlanQuantity?** no

**Details**

**Related Items**

**Required**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

**References**

**PPM Chapter**

**Trns-port**

**Other Standards Specifications**

Normally requires SHOP DRAWINGS
### Prep & Doc Manual Chapter(s)

6, 7, 13

### TRNS*PORT Category (DRAFT FIELD):

0100 Structures

### Struct.

**400-10-** PRECAST PANEL (ARCHITECTURAL) EA

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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### 400-16-AAA CLASS VI CONCRETE

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### Notes

Details

Refer to 400- ALL for details on all classes of concrete

Related Items

Required 415-1-A

Recommended 415-1-A

### Design Forms and Documentation

COMP 700-050-07: Concrete & Reinforcing Steel Comp & Cont.

Locate in the plans. Summarize quantities by location in the computation book.

### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Reference

PPM Chapter

Trns-port

Other Standards

Refer to 400- ALL for details on all classes of concrete

Specifications Section 400

T: Plan Details and/or Technical Specifications required

### Prep & Doc Manual Chapter(s)

0100 Structures

### Struct.

**400-16-AAA** CLASS VI CONCRETE CY

### Notes

AAA = Application

22 (Superstructure Closure Joint)

25 (Mass- Substructure)

39 (Precast Segmental Superstructure)

42 (Substructure Self-Consolidating Concrete)

43 (Superstructure Self-Consolidating Concrete)

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### Item Description
- **0400 16 22**: CONCRETE, CLASS VI, SUPERSTRUCTURE - CLOSURE JOINT
- **0400 16 25**: CONCRETE CLASS VI, MASS, SUBSTRUCTURE
- **0400 16 39**: CONCRETE CLASS VI, PRECAST SEG SUPERST
- **0400 16 42**: CONCRETE CLASS VI, SUBSTRUCTURE SELF-CONSOLIDATING CONCRETE
- **0400 16 43**: CONCRETE CLASS VI, SUPERSTRUCTURE SELF-CONSOLIDATING CONCRETE

#### 400-20- GRINDING BRIDGE DECK - REHABILITATION ONLY

**Unit**: SY; M2  
**Accuracy**: Square Yard; Square Meter  
**PlanQuantity?**: no

**Notes**: Estimates Support: Contact the State Structures Design Office before opening item.

**Details**: For use on bridge rehabilitation projects only.

**Related Items**: Required

**Design Forms and Documentation**: COMP 700-050-01: Area Computation and Continuation  
Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**: No additional form required; use plans summary or comp book  
Record final quantity on the computation book form.

**References**: PPM Chapter  
Trns-port  
Other Standards  
Specifications

**M: Monitored item**

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD)**: 0100 Structures

### Notes
- The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### Item Description
- **0400 20**: GRINDING BRIDGE DECK - REHABILITATION

#### 400-32- CONCRETE FOR JOINT REPAIR

**Unit**: CY; M3  
**Accuracy**: 1/10 Cubic Yard; 1/10 Cubic Meter

**Notes**: Details and Structure: Complete- Items 000 to 1999
Intended for rehabilitation or widening projects to repair or replace concrete deck at expansion joints. Include in Quantity Block in Plans.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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**400-40-**  
**GROUT FOR FULL DEPTH PRECAST DECK**

Unit: CY; M3  
Accuracy: Cubic Yard; Cubic Meter  
PlanQuantity?: ?

Valid through 12-31-12; replaced by 404 items.

Developmental Item: Contact State Structures Office prior to use.

Details

Monitor: Gevin McDaniel

DRAFT DETAIL: This item is intended ONLY for use with Full Depth Precast Decks. Note that transverse joints are included with the payment for Full Depth Precast Decks, per SY. This item is used to grout longitudinally between the beams and the under side of the deck.

**Related Items**

**Required**  
COMP 700-050-04: Volume Measure Items and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Recommended**

400-41-ABB
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>400-41-ABB</th>
<th>FULL DEPTH PRECAST DECK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit</td>
<td>SY; M2</td>
</tr>
<tr>
<td>Accuracy</td>
<td>Square Yard; Square Meter</td>
</tr>
<tr>
<td>PlanQuantity?</td>
<td>?</td>
</tr>
</tbody>
</table>

Notes

Valid through 12-31-12; replaced by 404 items.

Developmental Item: Contact State Structures Office prior to use.

Details

Monitor: Gevin McDaniel

DRAFT DETAIL: This item is intended ONLY for Full Depth Precast Decks. Materials and construction of concrete transverse joints are included with payment for the deck.

Separate payment will be made for grout placed longitudinally between the beams and the underside of the deck, and for expansion joints covered by Section 548.

Related Items

Required  400-40-  Recommended

Design Forms and Documentation

COMP 700-050-01: Area Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

References

PPM Chapter
Trns-port
Other Standards Specifications

Prep & Doc Manual Chapter(s)
Struct.  400- 41-ABB  FULL DEPTH PRECAST DECK  SY

A= Type
1 (Pretensioned)
2 (Precast)
B= Nominal Thickness: Open in .5" increments only
80 (8.0")
85 (8.5")
90 (9.0)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

400- 60-  A  CATHODIC PROTECTION- ELECTRICAL WORK

Unit  LS/LS  Accuracy  Lump Sum  PlanQuantity?  no

Notes

Details

Intended for Electrical Work associated with Cathodic Protection. 3 pay items (power, conduit, and equipment, as described below) are needed for a complete electrical system. Use with either 400-142 Cathodic Protection (CP) of mass concrete products, 455-81 CP for piles, or 457 items- CP for integral pile jackets. Contact the Materials Lab for assistance with using this item.

AC or DC POWER SOURCE ASSEMBLY: Includes all work and materials for providing power to the Cathodic Protection System. For AC assemblies, this includes all costs associated with connection between system and external power source. For DC assemblies, includes solar panels, batteries, incidentals, and wiring necessary to provide power.

CONDUIT: Includes all conduit from power source assembly to end location(s), junction boxes, wiring, and all incidentals. Measure as the length of conduit from the power system, along the bridge, and down each pier to be protected.

EQUIPMENT & INSTRUMENTATION: Lump sum item to include all remaining items necessary for a complete system. Detail major equipment, by location, in the plans or Tech Specs.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Required
400-142, 455-81, or 457 items.

Recommended

Related Items

Design Forms and Documentation

COMP 700-050-05: Lump Sum Quantities
Use a quantity of 1, but calculations and computation book documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Trns-port
Other Standards Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Struct. 400-60- A CATHODIC PROTECTION- ELECTRICAL WORK LS/LS

A= Components (Select only 1 power source assembly; use with BOTH A= 3 and 4)
1 (AC Power Source Assembly) LS
2 (DC Power Source Assembly) LS
3 (Conduit, Wiring, and Accessories) LS/LF
4 (Equipment & Instrumentation) LS

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0400 60 1</td>
<td>CATHODIC PROTECTION - ELECTRICAL WORK, AC POWER SOURCE ASSEMBLY</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0400 60 2</td>
<td>CATHODIC PROTECTION - ELECTRICAL WORK, DC POWER SOURCE ASSEMBLY</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0400 60 3</td>
<td>CATHODIC PROTECTION - ELECTRICAL WORK, CONDUIT, WIRING, AND ACCESSORIES</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0400 60 4</td>
<td>CATHODIC PROTECTION - ELECTRICAL WORK, EQUIPMENT &amp; INSTRUMENTATION</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

400-72- PRECAST BULKHEAD PANELS

Unit SF; M2 Accuracy Square Foot; 1/10 Square Meter Plan Quantity? yes

Notes

Details

Intended for precast panels used as part of a soldier pile wall system. Pay Item note recommended; coordinate with specifications. Add pay item note similar to concrete sheet piles (Spec. 455-9.4 and 455-12.7) to include cost of trenching, preformed holes in cost of precast panels. Include in Soldier Wall Quantity Block in Plans. May require specification modifications as follows: 455-5.15.2 and 455-5.15.3 Placement Tolerances (+/-1") and Batter Tolerances (1/8 in/ft)

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required

Recommended 455-34- AA

Design Forms and Documentation

COMP 700-050-01: Area Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.
No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**T: Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)** 7, 13

---

**400- 72-**  
PRECAST BULKHEAD PANELS  
SF

---

**400- 73- A**  
SPAN JACKING

---

**Notes**

Contact the State Structures Design Office

To be used only for permanently raising a bridge for vertical clearance.

Paid per each span, for simple span bridges. Paid per each unit for continuous spans.

---

**Design Forms and Documentation**

---

**References**

PPM Chapter

Trns port

Other

SDG 3.12.9 and Figure 3-13.  Normally requires SHOP DRAWINGS

---

**TRNS*PORT Category (DRAFT FIELD):** 0100  Structures

---

**Struct.** 400- 73- A  
SPAN JACKING  
EA
A= Project Number (assigned after approval)
1 (432641-1-52-01LS) letting date ??

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0400</td>
<td>SPAN JACKING (PROJECT 432641-1-52-01)</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

400-91- DEWATERING FOR SPREAD FOOTINGS

Notes

Details

Required on all spread footing projects where dewatering is anticipated due to high water table. Include in Footing Quantity Block in Plans.

Usually used with Pay Items 400-4-25, 400-2-25, 415-1-5. Include Pay Item 125-1 only when additional excavation is required below bottom of footing elevation.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required

Recommended

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter
Trns-port
Other Standards
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Struct. 400-91- DEWATERING FOR SPREAD FOOTINGS EA

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0400</td>
<td>DEWATERING FOR SPREAD FOOTINGS</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>
COFFERDAM

Unit: EA  Accuracy: Each  Plan Quantity?: yes

Notes

Details

Intended to construct/dewater cofferdams. Cofferdams may be required to construct or demolish mud line footings located in the waterway. This pay item is not to be utilized when full containment structures are required due to special environmental turbidity requirements, or when a pier footing is located at the shoreline making dewatering difficult. Do not use for waterline or slightly submerged footings.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required  400-3-20  Recommended

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter
Trns-port
Other Standards
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100  Structures

Struct.  400-95- A  COFFERDAM  EA

A =
1 (Bascule Pier)
3 (Special)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0400 95</td>
<td>COFFERDAM, BASCULE PIER</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0400 95</td>
<td>COFFERDAM, SPECIAL</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

GROUTING PRECAST DECK PANELS (NON-SHRINK GROUT)

Unit: LF; M1  Accuracy: Linear Foot; 1/10 Meter  Plan Quantity?: no

Notes

Details

Intended for grouting the keyways of precast deck panels for both new and rehabilitation
projects, in accordance with Design Standard.

A Pay Item note is recommended to indicate that payment is based on the length of the keyway, for the work shown on the Design Standard. Payment for materials and labor includes grout, backer rod (when needed), and incidental materials.

On rehabilitation projects, include pay item notes to address payment of the various work items involved. A Tech Spec may be required to address removal of existing asphalt overlay, removal and preparation of existing keyways, grouting of keyways, post-tensioning and new overlay requirements.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms</td>
<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day</td>
<td>Locate in the plans. Summarize quantities by</td>
</tr>
<tr>
<td>and</td>
<td>or Per Each Computation and Continuation</td>
<td>location in the computation book.</td>
</tr>
<tr>
<td>Documentation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>No additional form required; use plans summary or comp book</td>
<td>Record final quantity on the computation book</td>
</tr>
<tr>
<td>Forms and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Documentation</td>
<td></td>
<td></td>
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<tr>
<td>Index No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20350</td>
<td></td>
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</tr>
<tr>
<td>Notes</td>
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<td></td>
</tr>
<tr>
<td>References</td>
<td>PPM Chapter</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trns-port</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other Standards Index No. 20350</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Specifications</td>
<td></td>
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<tr>
<td>Prep &amp; Doc</td>
<td></td>
<td></td>
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<tr>
<td>Manual Chapter(s) 6, 13</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct. 400-128-** GROUTING PRECAST DECK PANELS (NON-SHRINK GROUT) LF

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0400128</td>
<td>GROUTING PRECAST DECK PANELS, NON-SHRINK GROUT</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**400-136-** EPOXY CONCRETE OVERLAY- STRUCTURES REHAB

**Unit** SY; M2  
**Accuracy** Square Yard; Square Meter  
**PlanQuantity?** yes

**Notes**

Used for rehabilitation of existing bridges. Item includes all costs for shotblasting deck, cleaning deck surface, testing cohesion, furnishing & installing epoxy overlay wearing surface. Contact State Structures Office for assistance.

Add a plan note to indicate the payment surface area, as well as application guidance: "Deck surface area to be covered is #### SY. The cost of this pay item includes two applications." Similarly, if the coating thickness and/or number of coats varies by manufacturer, the note could be "Deck surface area to be covered is #### SY. Apply the coating(s) in accordance with the manufacturer's instructions." If additional surface
preparation guidance and/or coating application instructions are needed, consider using a tech spec.

Pay area should be the plan area, regardless of the number of applications or thickness required.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-01: Area Computation and Continuation</td>
</tr>
<tr>
<td></td>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
</tr>
<tr>
<td></td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>References</th>
<th>PPM Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Trns-port</td>
</tr>
<tr>
<td></td>
<td>Other</td>
</tr>
<tr>
<td></td>
<td>Standards</td>
</tr>
<tr>
<td></td>
<td>Specifications</td>
</tr>
</tbody>
</table>

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0400136</td>
<td>EPOXY CONCRETE OVERLAY- STRUCTURES REHAB SY</td>
<td>SY</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>400-140- A</td>
<td>NEOPRENE PAD REPLACEMENT</td>
<td>EA</td>
<td>Each</td>
<td>no</td>
<td></td>
</tr>
</tbody>
</table>

Notes

Intended for rehabilitation and widening projects to replace existing damaged pads. Show locations w/ quantity block in plans. Include pay item note to include cost of neoprene pads, jacking bridge, disposal of old pads, and all other labor and materials required to replace existing bearing incidental to cost of this item.

For Composite pads, refer to pay item 400-147.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed.

Details and Structure: Complete- Items 000 to 1999
for payment under this item.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

### Design Forms and Documentation

- **COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation**
- Locate in the plans. Summarize quantities by location in the computation book.

### Construction Forms and Documentation

- No additional form required; use plans summary or comp book
- Record final quantity on the computation book form.

### References

- **PPM Chapter**
- **Trns·port**
- **Other**
  - SDG 6.5
- **Standards**
  - Index No. 20500, 20501
- **Specifications**

  **T**: Plan Details and/or Technical Specifications required

### Prep & Doc Manual Chapter(s)

- 6, 7, 13

### TRNS*PORT Category (DRAFT FIELD):

- 0100 Structures

### Struct. 400-140- A NEOPRENE PAD REPLACEMENT EA

- \( A = \)
  - 1 (Bent / Pier)
  - 2 (Abutment)

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0400140</td>
<td>NEOPRENE PAD REPLACEMENT, BENT/PIER</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0400140</td>
<td>NEOPRENE PAD REPLACEMENT, ABUTMENT</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 400-142- A CATHODIC PROTECTION SYSTEM

- **Unit**: SF; M^2
- **Accuracy**: Square Foot; 1/10 Square Meter
- **PlanQuantity?**: no

### Notes

Intended for rehabilitation projects when galvanic or impressed current cathodic systems are used for mass concrete or structural components. Contact State Materials Office, Corrosion Lab for assistance in use of this item. Show locations in plans w/ quantity block.

Use Item 400-60 for Electrical Work associated with this item.

DO NOT USE this item for Pile or Pile Jacket Cathodic Protection. See 455-81 (pile) or 457-71 (pile jacket) for other Cathodic Protection items.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0400142</td>
<td>CATHODIC PROTECTION SYSTEM, ZINC ALUMINUM SPRAY</td>
<td>SF</td>
<td>T</td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0400142</td>
<td>CATHODIC PROTECTION SYSTEM, ZINC ALUMINUM SHEETS</td>
<td>SF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0400142</td>
<td>CATHODIC PROTECTION SYSTEM, TITANIUM MESH</td>
<td>SF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0400142</td>
<td>CATHODIC PROTECTION SYSTEM, TITANIUM BARS</td>
<td>SF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0400142</td>
<td>CATHODIC PROTECTION SYSTEM, OTHER MATERIAL</td>
<td>SF</td>
<td>T</td>
<td>1/1/2010</td>
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</tbody>
</table>

**400-143-** CLEANING AND COATING CONCRETE SURFACES, CLASS 5

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF; M2</td>
<td>Square Foot; 1/10 Square Meter</td>
<td>yes</td>
<td>This is a concrete texture coating utilized as a final concrete finish. This item is used on bridge widening jobs for applying a class 5 finish coating to existing concrete surfaces or where existing bridges/walls within the limits of a project require a class 5 finish coating.</td>
</tr>
</tbody>
</table>
Per specification, "The cost of coating new concrete will not be paid for separately, but will be included in the cost of the item to which it is applied."

Show locations in plans w/ quantity block.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

### Design Forms and Documentation

<table>
<thead>
<tr>
<th>Required</th>
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</table>

| COMP 700-050-01: Area Computation and Continuation
| Locate in the plans. Summarize quantities by location in the computation book. |

<table>
<thead>
<tr>
<th>Recommended</th>
</tr>
</thead>
</table>

| No additional form required; use plans summary or comp book |

| Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances. |

### References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Trns-port</th>
</tr>
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<table>
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<tr>
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<tr>
<th>Specifications</th>
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</table>

| Section 400 |  |

<table>
<thead>
<tr>
<th>Prep &amp; Doc Manual Chapter(s)</th>
</tr>
</thead>
</table>

| 6, 7, 13 |

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0400143</td>
<td>CLEANING &amp; COATING CONCRETE SURFACE, CLASS 5</td>
<td>SF</td>
<td>1/1/2010</td>
<td></td>
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</tbody>
</table>

### 400-145- A

**CLEANING CONCRETE SURFACE**

<table>
<thead>
<tr>
<th>Unit</th>
<th>LS/SF; LS/M2</th>
<th>Accuracy</th>
<th>Lump Sum (Square Foot); PlanQuantity? yes</th>
</tr>
</thead>
</table>

### Notes

Intended for cleaning existing class 5 finish coating of existing bridge. Show locations in plans w/ quantity block. Include pay item note in plans.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>COMP 700-050-05: Lump Sum Quantities</th>
</tr>
</thead>
</table>

Use a quantity of 1, but calculations and computation book documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.
### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

---

### References

PPM Chapter

Trns·port

Other

Standards

Specifications

**T: Plan Details and/or Technical Specifications required**

Prep & Doc Manual Chapter(s)  6, 7, 13

---

<table>
<thead>
<tr>
<th>TRNS*PORT Category (DRAFT FIELD):</th>
<th>100 or 200</th>
<th>Structures or Roadway</th>
</tr>
</thead>
</table>

---

### Struct.  400-145-  A CLEANING CONCRETE SURFACE LS/SF

A = location
Blank (Above Water)
1 (Underwater)

---

### Notes

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)  6, 7, 13

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0400145</td>
<td>CLEANING CONCRETE SURFACE</td>
<td>SF</td>
<td>T</td>
<td>1/1/2010</td>
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</tbody>
</table>

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### 400-147-  COMPOSITE NEOPRENE PADS

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CF; M3</td>
<td>1/10 Cubic Foot; 1/100 Cubic Meter</td>
<td>yes</td>
<td>Intended for composite (steel reinforced) neoprene bearing pads for bridges. Include cost of plain neoprene bearing pads in cost of concrete superstructure component. Add pay item note for this case. Show locations in plans w/ quantity block. For replacement of neoprene pads, refer to pay item 400-140. Note: Designers should refer to Instructions for Design Standards (IDS) to verify if this pay item (separate payment) is to be used, or whether payment is included in the prestressed beams they are used with. The cost of beveled and embedded bearing plates is incidental to the cost of the prestressed beams they are used with.</td>
</tr>
</tbody>
</table>

---

### Related Items

**Required**

COMP 700-050-04: Volume Measure Items and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

---

### Table

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
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</thead>
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<tr>
<td>CLEANING CONCRETE SURFACE</td>
<td>SF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

---

### Design Forms and Documentation

700-050-56: Daily Log Sheet Miscellaneous Tabulation Form Site Source Record

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

---

### References

PPM Chapter

Trns·port
Other  SDG 6.5, Normally requires SHOP DRAWINGS
Standards  Index No. 20500, 20510
Specifications  Section 400
Prep & Doc Manual Chapter(s)  6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):**  0100  Structures

**Struct.**  400-147-  COMPOSITE NEOPRENE PADS  CF

**Notes**

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
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<tbody>
<tr>
<td>0400147</td>
<td>COMPOSITE NEOPRENE PADS</td>
<td>CF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**400-150-**  CLEANING AND SEALING EXISTING CONCRETE SURFACES (Maintenance Use Only)

**Unit**  SF; M2  **Accuracy**  Square Foot; 1/10 Square Meter  **PlanQuantity?**  yes

**Notes**

FOR MAINTENANCE ACTIVITIES ONLY; do not use for new construction.

Intended for the cleaning and sealing/staining/coating of existing concrete surfaces. Specs should detail the materials and application instructions/rates, as needed.

**Related Items**

<table>
<thead>
<tr>
<th>Design Forms and Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>sumqr: Roadway Summary of Quantities Sheet</td>
</tr>
<tr>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
</tbody>
</table>

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Trans-port
- Other
- Standards
- Specifications  Section 400

**T:** Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):**  0100  Structures

**Struct.**  400-150-  CLEANING AND SEALING EXISTING CONCRETE SURFACES (Maintenance Use Only)

**Notes**

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*
### Item 0400150

**Description:** CLEANING AND SEALING EXISTING CONCRETE SURFACE

**Unit:** SF

**TSP/Detail:** T

**Valid Date:** 1/1/2012

### Item 400-153

**Description:** NON SHRINK GROUT- MISCELLANEOUS

**Unit:** CF, M3

**Accuracy:** 1/10 Cubic Foot, 1/100 Cubic Meter

**Plan Quantity?** no

**Notes**

For rehabilitation/widening projects only. Use 10.0 CF (0.03 M3) as a minimum quantity. Show locations in plans w/ quantity block. Include pay item note in plans.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Required**

**Recommended**

**Design Forms and Documentation**

COMP 700-050-04: Volume Measure Items and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

**References**

PPM Chapter

Trns-port

Other Standards

Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct.** 400-153 NON SHRINK GROUT- MISCELLANEOUS CF

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**Item** 0400153

**Description:** NON SHRINK GROUT, F&I, MISCELLANEOUS- STRUCTURES REHAB

**Unit:** CF

**TSP/Detail:** T

**Valid Date:** 1/1/2010

**Notes**

- **Maintenance Item: Not Valid for Construction Contracts**

- **Detailed Construction Forms and Documentation:** MAINTENANCE CONTRACTS ONLY
Additional BOE details pending

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
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<tr>
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</tr>
<tr>
<td>Construction Forms and Documentation</td>
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</tr>
</tbody>
</table>

### References

- PPM Chapter
- Trns·port
- Other
- Standards
- Specifications
- Prep & Doc Manual Chapter(s)

### TRNS*PORT Category (DRAFT FIELD):

**Struct. 400-Maint**

**STRUCTURES**

**Maintenance Contracts Only**

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<th>Item</th>
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<td>E400403</td>
<td>CONCRETE REMOVAL</td>
<td>SF</td>
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**401- 70- A  RESTORE SPALLED AREAS**

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<tr>
<th>Unit</th>
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<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
<tbody>
<tr>
<td>CF</td>
<td>1/10 Cubic Foot; 1/100 Cubic Meter</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes

**Details**

Used on rehabilitation projects to cover costs of patching existing concrete spalls. Show locations in plans w/ quantity block. Include pay item note in plans. Cost includes cost of preparation, labor and material of concrete patch. Use 10.0 CF (1.00 M3) as a minimum quantity.


For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
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<tr>
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<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td></td>
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</tbody>
</table>

COMP 700-050-04: Volume Measure Items and Continuation

Locate in the plans. Summarize quantities by location in the computation book.
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0401 70</td>
<td>RESTORE SPALLED AREAS, GUNITE</td>
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<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0401 70 1</td>
<td>RESTORE SPALLED AREAS, EPOXY</td>
<td>CF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0401 70 2</td>
<td>RESTORE SPALLED AREAS, LATEX MODIFIED MORTAR- STYRENE BUTADIENE</td>
<td>CF</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0401 70 3</td>
<td>RESTORE SPALLED AREAS, LATEX MODIFIED MORTAR- ACRYLIC</td>
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<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0401 70 4</td>
<td>RESTORE SPALLED AREAS, PORTLAND CEMENT GROUT</td>
<td>CF</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0401 70 5</td>
<td>RESTORE SPALLED AREAS, CONTRACTORS OPTION</td>
<td>CF</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0401 70 6</td>
<td>SPALLED AREAS RESTORE, THERMOSETTING POLYMER CONC</td>
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401- 71- AB RESTORE SPALLED AREAS- Maintenance Contracts only

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>CF; M3</td>
<td>1/10 Cubic Foot; 1/100 Cubic Meter</td>
<td>no</td>
<td>Maintenance Item: Not Valid for Construction Contracts</td>
<td>MAINTENANCE CONTRACTS ONLY- Specific locations not known; Used on rehabilitation projects to cover costs of patching existing concrete spalls. Cost includes cost of preparation, labor and material of concrete patch. Use 10.0 CF (1.00 M3) as a minimum quantity.</td>
</tr>
</tbody>
</table>

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
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<tbody>
<tr>
<td><strong>Design Forms and Documentation</strong></td>
<td>COMP 700-050-04: Volume Measure Items and Continuation</td>
</tr>
<tr>
<td></td>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
</tr>
<tr>
<td><strong>Construction Forms and Documentation</strong></td>
<td>No additional form required; use plans summary or comp book</td>
</tr>
<tr>
<td></td>
<td>Record final quantity on the computation book form.</td>
</tr>
</tbody>
</table>

### References

- PPM Chapter
- Trns-port
- Other Standards
- Specifications

**T**: Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**: 6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD)**: 0100 Structures

**Struct. 401- 71- AB RESTORE SPALLED AREAS- Maintenance Contracts CF only**

A = Material
1 (Gunite)
Additional Materials, per Maintenance Office

B = Location
1 (Over Land and < or = 20’ bridge height)
2 (Over Land and > 20’ bridge height)
3 (Over water and < or = 20’ bridge height)
4 (Over water and > 20’ bridge height)

### Notes

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<tr>
<th>Item</th>
<th>Description</th>
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<th>Obsolete Date</th>
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<td>1/1/2012</td>
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<tr>
<td>0401 71 12</td>
<td>RESTORE SPALLED AREAS- MAINTENANCE CONTRACTS ONLY, GUNITE, OVER LAND AND &gt; 20’ BRIDGE HEIGHT</td>
<td>CF</td>
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<td>1/1/2012</td>
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<tr>
<td>0401 71 13</td>
<td>RESTORE SPALLED AREAS- MAINTENANCE CONTRACTS ONLY, GUNITE, OVER WATER AND &lt;= 20’ BRIDGE HEIGHT</td>
<td>CF</td>
<td>T</td>
<td>1/1/2012</td>
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<tr>
<td>0401 71 14</td>
<td>RESTORE SPALLED AREAS- MAINTENANCE CONTRACTS ONLY, GUNITE, OVER WATER AND &gt; 20’ BRIDGE HEIGHT</td>
<td>CF</td>
<td>T</td>
<td>1/1/2012</td>
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Details and Structure: Complete- Items 000 to 1999
### 404-1 PRECAST BENT CAPS

<table>
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<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY; M3</td>
<td>1/10 Cubic Yard; 1/10 Cubic Meter</td>
<td>yes</td>
</tr>
</tbody>
</table>

**Notes**
Specifications are under development; contact the State Structures Design Office before using this pay item.

**Details**
Intended for precast bent caps supported by driven piles or drilled shafts. Refer to Section 404 of the specifications for additional information.

**Related Items**

#### Design Forms and Documentation
COMP 700-050-04: Volume Measure Items and Continuation
Located in the plans. Summarize quantities by location in the computation book.

#### Construction Forms and Documentation
No additional form required; use plans summary or comp book
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**
PPM Chapter
Trns-port
Other
Standards
Specifications Section 404
Prep & Doc Manual Chapter(s)

---

**TRNS*PORT Category (DRAFT FIELD):**

**Struct.** 404-1 PRECAST BENT CAPS CY

**Notes**
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<table>
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<tr>
<th>Item</th>
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<tr>
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<td>1/1/2013</td>
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</tr>
</tbody>
</table>

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### 404-5-AB PRECAST DECK PANEL

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
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<tbody>
<tr>
<td>SY; M2</td>
<td>Square Yard; Square Meter</td>
<td>yes</td>
</tr>
</tbody>
</table>

**Notes**
Specifications are under development; contact the State Structures Design Office before using this pay item.

**Details**
Intended for use on precast deck panels spanning transversely across beam lines. Refer to Section 404 of the specifications for additional information.

For non-post-tensioned prestressed bridge deck panels spanning longitudinally w/ concrete wearing surface, see Section 450 items.

**Related Items**

#### Design Forms and Documentation
COMP 700-050-01: Area Computation and Continuation
Located in the plans. Summarize quantities by location in the computation book.
### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

### References

**PPM Chapter**
- Trns-port

**Other Standards**
- Specifications Section 404

**Prep & Doc Manual Chapter(s)**

---

### TRNS*PORT Category (DRAFT FIELD):

<table>
<thead>
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<th>Struct.</th>
<th>404- 5- AB</th>
<th>PRECAST DECK PANEL</th>
<th>SY</th>
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<tbody>
<tr>
<td></td>
<td>A = Reinforcement</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 (Non-prestressed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 (Pretensioned)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B = Thickness</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 (8&quot;)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 (8.5&quot;)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 (9&quot;)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 (9.5&quot;)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 (10&quot;)</td>
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</table>

### Notes

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<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0404 5 11</td>
<td>PRECAST DECK PANEL, NON-PRESTRESSED, 8&quot;</td>
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<td>1/1/2013</td>
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<td>1/1/2013</td>
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<td>0404 5 23</td>
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<td>1/1/2013</td>
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<tr>
<td>0404 5 24</td>
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<td>T</td>
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<tr>
<td>0404 5 25</td>
<td>PRECAST DECK PANEL, PRETENSIONED, 10.0&quot;</td>
<td>SY</td>
<td>T</td>
<td>1/1/2013</td>
<td></td>
</tr>
</tbody>
</table>

### 404- 6- GROUT FOR PRECAST DECK PANEL

| Unit     | CY; M3 | Accuracy | 1/10 Cubic Yard; 1/10 | PlanQuantity? | yes |

---

Details and Structure: Complete- Items 000 to 1999
Cubic Meter

**Notes** Specifications are under development; contact the State Structures Design Office before using this pay item.

**Details** Includes the materials and labor to grout precast deck panels with a Precision Grout. Contact the State Structures Design Office before using this pay item.

Ensure that material and installation requirements are included in the Contract Documents.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Design Forms and Documentation**

<table>
<thead>
<tr>
<th>COMP 700-050-04: Volume Measure Items and Continuation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
</tr>
</tbody>
</table>

**Construction Forms and Documentation**

<table>
<thead>
<tr>
<th>No additional form required; use plans summary or comp book</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
</tr>
</tbody>
</table>

**References**

<table>
<thead>
<tr>
<th>PPM Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trns·port</td>
</tr>
<tr>
<td>Other Standards</td>
</tr>
<tr>
<td>Specifications Section 404</td>
</tr>
<tr>
<td>Prep &amp; Doc Manual Chapter(s)</td>
</tr>
</tbody>
</table>

**TRNS*PORT Category (DRAFT FIELD):**

<table>
<thead>
<tr>
<th>Struct.</th>
<th>404- 6-</th>
<th>GROUT FOR PRECAST DECK PANEL</th>
<th>CY</th>
</tr>
</thead>
</table>

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0404 6</td>
<td>GROUT FOR PRECAST DECK PANEL</td>
<td>CY</td>
<td>T</td>
<td>1/1/2013</td>
<td></td>
</tr>
</tbody>
</table>

**404- 7-**

**CLOSURE JOINT FOR PRECAST DECK PANEL**

<table>
<thead>
<tr>
<th>Unit</th>
<th>LF; M1</th>
<th>Accuracy</th>
<th>Linear Foot; 1/10 Meter</th>
<th>PlanQuantity?</th>
<th>yes</th>
</tr>
</thead>
</table>

**Notes** Specifications are under development; contact the State Structures Design Office before using this pay item.

**Details** Includes the materials and labor to complete the closure joint between precast deck panels with Shrinkage Reducing Admixtures.

Ensure that material and installation requirements are included in the Contract Documents.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

**Design Forms and Documentation**

<table>
<thead>
<tr>
<th>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
</tr>
</tbody>
</table>

Details and Structure: Complete- Items 000 to 1999
**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter
Trns·port
Other
Standards
Specifications Section 404
Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):**

**Struct. 404-7-** CLOSURE JOINT FOR PRECAST DECK PANEL LF

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0404 7</td>
<td>CLOSURE JOINT FOR PRECAST DECK PANEL</td>
<td>LF</td>
<td>T</td>
<td>1/1/2013</td>
<td></td>
</tr>
</tbody>
</table>

**405-70- A** LATEX MODIFIED PORTLAND CEMENT CONCRETE

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>CF; M3</td>
<td>1/10 Cubic Foot; 1/100 Cubic Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

Intended for thin deck overlays. Show locations in plans w/ quantity block. Include pay item note in plans. Cost includes cost of preparation, labor and material of latex modified concrete overlay. Use 10.0 CF (1.00 M3) as a minimum quantity.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Design Forms and Documentation**

COMP 700-050-07: Concrete & Reinforcing Steel Comp & Cont.

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter
Trns·port
Other
Standards
Specifications Section 404

**T:** Plan Details and/or Technical Specifications required
Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Struct. 405-70- A LATEX MODIFIED PORTLAND CEMENT CONCRETE CF

A =
1 (Type I Cement)
2 (Type III Cement)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0405 70 1</td>
<td>LATEX MODIFIED PORTLAND CEMENT CONCRETE, TYPE I</td>
<td>CF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0405 70 2</td>
<td>LATEX MODIFIED PORTLAND CEMENT CONC, TYPE III</td>
<td>CF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

407-1-AB PRECAST THREE SIDED CULVERT

| Unit | Accuracy | PlanQuantity? | LF; M1 | Linear Foot; 1/10 Meter | yes |

Notes

Details

Per specifications, 3 sided box culverts are not an equivalent substitution for Precast Concrete Box Culverts. Refer to PPM for selection and design criteria.

Related Items

Required

Recommended

Design Forms and Documentation

sumdr.dgn: Summary of Drainage Structures
Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter Vol 1, Chapter 33
Trns-port
Other
Standards
Specifications Section 407
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 100 or 200 Structures or Roadway

Struct. 407-1-AB PRECAST THREE SIDED CULVERT LF

A= Span (Total width of culvert when multiple barrels)
1 (up to 20 ft)
2 (20-29 ft)
3 (30-39 ft)
4 (40-49 ft)
5 (50 ft or greater)
B= Height
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0407-1</td>
<td>PRECAST CONCRETE 3 SIDE BOX CULVERT, 20-29' SPAN, &lt; OR = 10' HEIGHT</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 411-1- EPOXY MATERIAL FOR CRACK INJECTION

<table>
<thead>
<tr>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items 411-1 and 411-2 are for separate payment of materials and labor for Epoxy Injection of cracks in existing concrete surfaces, in accordance with specification Section 411.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Details</th>
</tr>
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<tbody>
<tr>
<td>No additional form required; use plans summary or comp book</td>
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</tbody>
</table>

#### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0411-1</td>
<td>EPOXY MATERIAL FOR CRACK INJECTION - STRUCTURES REHAB</td>
<td>GA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 411-2- INJECT AND SEAL CRACK

<table>
<thead>
<tr>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Item 411-1 for detail information.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required</td>
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</tbody>
</table>

#### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0411-2</td>
<td>EPOXY MATERIAL FOR CRACK INJECTION - STRUCTURES REHAB</td>
<td>GA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Design Forms and Documentation**

COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

---

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

---

**References**

PPM Chapter  
Trns-port  
Other Standards  
Specifications Section 411  
Prep & Doc Manual Chapter(s)

---

**TRNS*PORT Category (DRAFT FIELD):**

0100 Structures

---

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0411 2</td>
<td>CRACKS INJECT &amp; SEAL - STRUCTURES REHAB</td>
<td>LF</td>
<td>no</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

---

### 411- 2- A INJECT AND SEAL CRACK-Maintenance Contracts only

**Notes**

Maintenance Item: Not Valid for Construction Contracts

**Details**

MAINTENANCE CONTRACTS ONLY  
Additional BOE details pending

**Related Items**

Required Recommended

---

**Design Forms and Documentation**

COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

---

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

---

**References**

PPM Chapter  
Trns-port  
Other Standards  
Specifications Section 411
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Struct. 411-2-A INJECT AND SEAL CRACK Maintenance Contracts only

A = Location
1 (Over Land and ≤ 20’ bridge height)
2 (Over Land and > 20’ bridge height)
3 (Over water and ≤ 20’ bridge height)
4 (Over water and > 20’ bridge height)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0411 2 1</td>
<td>INJECT AND SEAL CRACK-MAINTENANCE CONTRACTS ONLY, GUNITE, OVER LAND AND &lt;= 20' BRIDGE HEIGHT</td>
<td>LF</td>
<td>T</td>
<td>1/1/2012</td>
<td></td>
</tr>
<tr>
<td>0411 2 2</td>
<td>INJECT AND SEAL CRACK-MAINTENANCE CONTRACTS ONLY, GUNITE, OVER LAND AND &gt; 20' BRIDGE HEIGHT</td>
<td>LF</td>
<td>T</td>
<td>1/1/2012</td>
<td></td>
</tr>
<tr>
<td>0411 2 3</td>
<td>INJECT AND SEAL CRACK-MAINTENANCE CONTRACTS ONLY, GUNITE, OVER WATER AND &lt;= 20' BRIDGE HEIGHT</td>
<td>LF</td>
<td>T</td>
<td>1/1/2012</td>
<td></td>
</tr>
<tr>
<td>0411 2 4</td>
<td>INJECT AND SEAL CRACK-MAINTENANCE CONTRACTS ONLY, GUNITE, OVER WATER AND &gt; 20' BRIDGE HEIGHT</td>
<td>LF</td>
<td>T</td>
<td>1/1/2012</td>
<td></td>
</tr>
</tbody>
</table>

413-149- PENETRANT SEALER

Unit GA; LI Accuracy Gallon; Liter PlanQuantity? no

Notes

Details

NO SEPARATE PAYMENT FOR NEW, PRECAST ITEMS. Pay Item for Rehabilitation jobs only. Intended to cover material cost of penetrant sealer. Pay Item 413-154 to cover labor costs. Show locations in plans w/ quantity block.

Related Items

Required 413-154 Recommended

Design Forms and Documentation

COMP 700-050-04: Volume Measure Items and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

700-050-56: Daily Log Sheet Miscellaneous Tabulation Form Site Source Record

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Trns·port
Other Standards
Specifications Section 413

Prep & Doc Manual Chapter(s)
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0413149</td>
<td>PENETRANT SEALER</td>
<td>GA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

For use on rehabilitation projects to seal existing deck cracks. Contact State Materials (Gainesville Corrosion) Lab for assistance with Specs. Intended to cover material cost of methacrylate monomer. Pay Item 413-154 to cover labor costs. Show locations in plans w/ quantity block.

**Design Forms and Documentation**

COMP 700-050-04: Volume Measure Items and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

700-050-56: Daily Log Sheet Miscellaneous Tabulation Form Site Source Record

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter
Trns·port
Other Standards
Specifications Section 413
Prep & Doc Manual Chapter(s)

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0413151</td>
<td>METHACRYLATE MONOMER</td>
<td>GA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

NO SEPARATE PAYMENT for prestressed, precast items.
REFER TO SECTION 400 for other coatings. Intended to cover labor cost of penetrant sealer or Methacrylates. Pay Item 413-149 or 413-151 to cover material costs. Show locations in plans w/ quantity block.

**Related Items**
- **Required**: 413-149 or 413-151
- **Recommended**: 

**Design Forms and Documentation**
- COMP 700-050-01: Area Computation and Continuation
- Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**
- No additional form required; use plans summary or comp book
- Record final quantity on the computation book form.

**References**
- PPM Chapter
- Trns-port
- Other
- Standards
- Specifications Section 413
- Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):** 100 or 200 Structures or Roadway

**Struct. 413-154-**
CLEANING AND SEALING CONCRETE SURFACES: PENETRANT SEALER OR METHACRYLATES

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0413154</td>
<td>CLEANING &amp; SEALING CONCRETE SURFACES - PENETRANT SEALER OR METHACRYLATES</td>
<td>SF</td>
<td></td>
<td>1/1/2010</td>
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</table>

**415- 1- A**
REINFORCING STEEL

<table>
<thead>
<tr>
<th>Unit</th>
<th>LB; KG</th>
<th>Accuracy</th>
<th>Pound; Kilogram</th>
<th>PlanQuantity?</th>
</tr>
</thead>
</table>

**Notes**

Show locations in plans w/ quantity block by component (when component is constructed in phases break down quantity by phase). Include complete bar lists in plans.

APPROACH SLABS: Item No. 415- 1- 9 (2415- 1- 9) to be used with Item No. 400- 2-10 (2400- 2- 10).

Misc Reinforcing Steel: Used per Index 289, 291, 2-2

**Related Items**
- **Required**: 
- **Recommended**: 

**Design Forms and Documentation**
- COMP 700-050-07: Concrete & Reinforcing Steel Comp & Cont.
- Locate in the plans. Summarize quantities by location in the computation book.
Standards
ENDWALLS: Index No. 295
MISC: Index No. 280 for guard at pipe end
STEPS: Index No. 521

Specifications Section 415

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 100 or 200 Structures or Roadway

Struct. 415- 1- A REINFORCING Steel LB

A =
1 (Roadway)
3 (Retaining Wall)
4 (Superstructure)
5 (Substructure)
6 (Miscellaneous)
8 (Bulkhead)
9 (Approach Slabs)
13 (Steps) valid through 12-31-2010; replaced by A=6

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0415 1 1</td>
<td>REINF STEEL- ROADWAY</td>
<td>LB</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0415 1 3</td>
<td>REINFORCEING STEEL- RETAINING WALL</td>
<td>LB</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0415 1 4</td>
<td>REINFORCEING STEEL - SUPERSTRUCTURE</td>
<td>LB</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0415 1 5</td>
<td>REINFORCEING STEEL- SUBSTRUCTURE</td>
<td>LB</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0415 1 6</td>
<td>REINFORCEING STEEL- MISCELLANEOUS</td>
<td>LB</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0415 1 8</td>
<td>REINFORCEING STEEL- BULKHEAD</td>
<td>LB</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0415 1 9</td>
<td>REINFORCEING STEEL- APPROACH SLABS</td>
<td>LB</td>
<td></td>
<td>1/1/2010</td>
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</table>

415- 2- A REINFORCEING Steel- STAINLESS

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LB; KG</td>
<td>Pound; Kilogram</td>
<td>no</td>
</tr>
</tbody>
</table>

Notes
Coordinate the use of Stainless Steel with the State Structures Office.
Intended for stainless steel or stainless steel clad reinforcing. Show locations in plans w/ quantity block. Include bar lists.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.
**Related Items**

Required: COMP 700-050-07: Concrete & Reinforcing Steel Comp & Cont.

Recommended:

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Trns-port

Other Standards

Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

**TRNSPORT Category (DRAFT FIELD):**

100 or 200 Structures or Roadway

**Struct.  415-  2-  A REINFORCING STEEL- STAINLESS LB**

A = 

6 (Miscellaneous)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**Item**

0415  2  6 REINF STEEL- STAINLESS, MISCELLANEOUS LB T 1/1/2010

---

**425-  1-AAB INLETS**

**Unit**

EA

**Accuracy**

Each

**PlanQuantity?**

no

**Notes**

"Partial" is used when an existing structure is to be modified.

"Modified" is used when the standard structure on new construction is modified by adding weirs, notches, skimmers, and/or a change to dimensions and reinforcement; details are to be included in the plans.

"Special" is not limited to any particular inlet type. If a designer has a need for something other than an inlet covered by the standard indexes, it is regarded as special (as in special design). Special Designs require complete signed and sealed drawings to be included in the plans. DO NOT USE Special for minor changes to existing standards.

Median Barrier Inlet descriptions, from Index 217:

Type 1 Single throat, one side of barrier wall.

Type 2 Double throats, one side of barrier wall.

Type 3 Two single throats, opposite side of Wall.

Type 4 Two double throats, opposite sides of barrier wall.

Type 5 Double throats, one side of barrier wall, and single throat other side of barrier wall.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed.

Details and Structure: Complete- Items 000 to 1999
Related Items

### Design Forms and Documentation

<table>
<thead>
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<td>sumdr.dgn: Summary of Drainage Structures</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
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### Construction Forms and Documentation

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<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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### References

#### PPM Chapter

- **Trns-port**
- **Other**

#### Specifications

- Section 425

* T: Selected Items may require Plan Details and/or Technical Specifications

#### Prep & Doc Manual Chapter(s)

- 7, 13

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**TRNS*PORT Category (DRAFT FIELD):** 0200  
**Roadway**

**Struct.** 425- 1-AAB  
**INLETS**  
**EA**

AA = Inlet Type  
20 (Curb Type 9) Index 214  
21 (Curb Type 10) Index 215  
31 (Curb Type P-1) B not 3, 4, 7, or 8  
32 (Curb Type P-2) B not 3, 4, 7, or 8  
33 (Curb Type P-3) B not 3, 4, 7, or 8  
34 (Curb Type P-4) B not 3, 4, 7, or 8  
35 (Curb Type P-5) B not 3, 4, 7, or 8  
36 (Curb Type P-6) B not 3, 4, 7, or 8  
41 (Curb Type J-1) B not 3, 4, 7, or 8  
42 (Curb Type J-2) B not 3, 4, 7, or 8  
43 (Curb Type J-3) B not 3, 4, 7, or 8  
44 (Curb Type J-4) B not 3, 4, 7, or 8  
45 (Curb Type J-5) B not 3, 4, 7, or 8  
46 (Curb Type J-6) B not 3, 4, 7, or 8  
47 (Curb Type 7) Index 212  
48 (Curb Type 8) Index 213  
50 (Ditch Bottom Type A) Index 230  
51 (Ditch Bottom Type B) Index 231  
52 (Ditch Bottom Type C) Index 232  
53 (Ditch Bottom Type C Mod) Index 282 Back of Sidewalk; B not 9  
54 (Ditch Bottom Type D) Index 232  
55 (Ditch Bottom Type E) Index 232  
56 (Ditch Bottom Type F) Index 233  
57 (Ditch Bottom Type G) Index 233  
58 (Ditch Bottom Type H) Index 232  
60 (Ditch Bottom Type J) Index 234  
61 (Ditch Bottom Type K) Index 235  
70 (Gutter Type S) Index 220  
71 (Gutter Type V) Index 221
80 (Med Barrier Type 1) Index 217  
81 (Med Barrier Type 2) Index 217  
84 (Med Barrier Type 3) Index 217  
85 (Med Barrier Type 4) Index 217  
86 (Med Barrier Type 5) Index 217  
88 (Barrier Wall, Rigid, Curb & Gutter) Index 219  
89 (Barrier Wall) Index 218  
90 (Special) B not 7 or 8*  
91 (Closed Flume) B= 0; Index 216  

B = Inlet depth/height  
1 (≤ 10')  
2 (> 10')  
3 (J Bot, < 10') Index 200  
4 (J Bot, > 10') Index 200  
5 (Partial)  

7 (J Bottom, <10', Special) valid through 12-31-12; consider B= 3  
8 (J Bottom, >10', Special) valid through 12-31-12; consider B= 4  
9 (Modify)  
0 (N/A)  

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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### 425- 2-AAB MANHOLES

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<th>PlanQuantity</th>
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</thead>
<tbody>
<tr>
<td>EA</td>
<td>D</td>
<td></td>
<td>no</td>
</tr>
</tbody>
</table>

#### Notes

The designer should consider calling for a ring and cover where routine cleanout and inspection is anticipated, such as a French Drain.

Per Index 201, the height used to determine if a drainage structure is greater than 10 feet shall be computed using:

a) the elevation of the top of the manhole lid, b) the grate elevation or the theoretical gutter grade elevation of an inlet, or c) the outside top elevation of a junction box less the flow line elevation of the lowest pipe or to top of sump floor.

#### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

#### Design Forms and Documentation

sumrd.dgn: Summary of Drainage Structures

Locate in plans. Summarize quantities by location on summary sheet in the plans.

#### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

#### References

PPM Chapter
Trns*port

Other Standards Index No. 200, 201
Specifications Section 425

Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

<table>
<thead>
<tr>
<th>Struct.</th>
<th>MANHOLES</th>
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<tbody>
<tr>
<td>425- 2-AAB</td>
<td>EA</td>
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</tbody>
</table>

AA =
4 (P-7)
6 (P-8)
7 (J-7)
9 (J-8)
10 (Special) Plan Detail and/or Tech Spec required
11 (Repair) B=0

B =
1 (≤ 10') Refer to Index 201
2 (> 10') " " " "
3 (Partial)

#### Notes

-----------------------------------------------------------------------------------------------------------------
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
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<td>1/1/2010</td>
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<tr>
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<tr>
<td>0425</td>
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<td>1/1/2010</td>
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<tr>
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<tr>
<td>0425</td>
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<td>EA</td>
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<td>1/1/2010</td>
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<tr>
<td>0425</td>
<td>MANHOLES, J-7, PARTIAL</td>
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<tr>
<td>0425</td>
<td>MANHOLES, J-8, &lt;10'</td>
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<td></td>
<td>1/1/2010</td>
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</tr>
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<td>0425</td>
<td>MANHOLES, J-8, &gt;10'</td>
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<td>1/1/2010</td>
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<tr>
<td>0425</td>
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<tr>
<td>0425</td>
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<tr>
<td>0425</td>
<td>MANHOLES, REPAIR</td>
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### 425- 3-AAB JUNCTION BOX (DRAINAGE)

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<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

**Notes**
Refer to the specifications for requirements.

**Details**
REPAIR: Detail repairs to be completed in the plans or specifications.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

**Design Forms and Documentation**
sumdrd.dgn: Summary of Drainage Structures
Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**
No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

<table>
<thead>
<tr>
<th>PPM Chapter</th>
</tr>
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<tr>
<td>Trns-port</td>
</tr>
<tr>
<td>Other Standards</td>
</tr>
<tr>
<td>Specifications</td>
</tr>
</tbody>
</table>

**T: Selected Items may require Plan Details and/or Technical Specifications**

Details and Structure: Complete- Items 000 to 1999
Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200  Roadway

Struct.  425-  3-AAB  JUNCTION BOX (DRAINAGE)  EA

AA =
4 (P-7)
6 (J-7)
5 (Repair) B=0
8 (Special)*
9 (Utility)
10 (Utility, Modify)
11 (Utility, Remove)

B =
1 ( ≤ 10')  Refer to Index 201
2 ( > 10')  "  "
3 (Partial)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
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<td>JUNCTION BOX, DRAINAGE, P-7, &lt;10’</td>
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<td>1/1/2010</td>
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<tr>
<td>0425 3 42</td>
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<tr>
<td>0425 3 43</td>
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<tr>
<td>0425 3 52</td>
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<tr>
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</tbody>
</table>

425- 4-  INLET- ADJUST

Unit  EA  Accuracy  Each  PlanQuantity?  no

Notes

Details

Consists of changing the vertical placement of an existing inlet so that it will conform to the finished grade as designated in the plans.

Related Items

Required  Recommended

Design Forms and Documentation

sumdrd.dgn: Summary of Drainage Structures
Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
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<td>INLETS, ADJUST</td>
<td>EA</td>
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<td>1/1/2010</td>
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</tbody>
</table>

425- 5- A MANHOLES- ADJUST

**Unit**: EA  
**Accuracy**: Each  
**PlanQuantity**: no

**Notes**
Consists of changing the vertical placement of an existing manhole so that it will conform to the finished grade as designated in the plans.

Note: When lowering/raising manholes for milling, payment is per manhole. Do not double manhole quantity for each activity.

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**
sumdrd.dgn: Summary of Drainage Structures  
Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**
No additional form required; use plans summary or comp book  
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
PPM Chapter
Trns-port
Other
Standards Index No. 200, 201
Specifications Section 425
Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 425- 5- A MANHOLES- ADJUST EA

A =  
Blank (Standard)  
1 (Utilities)

**Notes**

Details and Structure: Complete- Items 000 to 1999
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
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<tr>
<td>0425 5 1</td>
<td>MANHOLE, ADJUST, UTILITIES</td>
<td>EA</td>
<td>1/1/2010</td>
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</table>

### 425- 6- VALVE BOX- ADJUST

| Unit | EA | Accuracy | Each | PlanQuantity? | no |

**Notes**

**Details**

**Related Items**

- **Required**: sumdrd.dgn: Summary of Drainage Structures
- **Recommended**: Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Design Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- **PPM Chapter**
- **Trns-port**
- **Other**
- **Standards**
- **Specifications** Section 425
- **Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 425- 6- VALVE BOX- ADJUST EA

**Notes**

**Details**

- DO NOT USE FOR NEW MANHOLE INSTALLATIONS.

**Related Items**

- **Required**: COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

**Design Forms and Documentation**

- Locate in the plans. Summarize quantities by location in the computation book.

Details and Structure: Complete- Items 000 to 1999
### Construction Forms and Documentation

#### References

- **PPM Chapter**
- **Trns-port**
- **Other**
- **Standards**
- **Specifications**
- **Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):**

**Struct.  425- 7-** MANHOLE COVER- REPLACE EA

#### Notes

_The following items were open, as of the publication date. Refer to the Master Pay Item list for current items._

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<th>Item</th>
<th>Description</th>
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</tr>
</tbody>
</table>

### 425- 8- DRAINAGE STRUCTURES, MISCELLANEOUS- ADJUST

#### Unit

- **EA**

#### Accuracy

- **Each**

#### PlanQuantity?

- **no**

#### Notes

Refer to related pay items for the vertical adjustment of inlets, manholes, valves, and junction boxes:

- 425-4 Adjusting Inlets
- 425-5 Adjusting Manholes
- 425-6 Adjusting Valve Boxes

Plan details required.

#### Related Items

**Required**

**Recommended**

#### Design Forms and Documentation

- **sumdrd.dgn: Summary of Drainage Structures**

Locate in plans. Summarize quantities by location on summary sheet in the plans.

#### Construction Forms and Documentation

- **No additional form required; use plans summary or comp book**

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

#### References

- **PPM Chapter**
- **Trns-port**
- **Other**
- **Standards**
- **Specifications Section 425**
- **Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):**

**Struct.  425- 8-** DRAINAGE STRUCTURES, MISCELLANEOUS- ADJUST EA

---

*Details and Structure: Complete- Items 000 to 1999*
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
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#### 425-10- YARD DRAIN

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<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

**Notes**

- For use outside of the R/W. Refer to Design Standard for details.

**Related Items**

- **Required**
- **Recommended**

**Design Forms and Documentation**

- sumdrd.dgn: Summary of Drainage Structures

  Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book

  Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- **PPM Chapter**
- **Trns-port**
- **Other Standards** Index No. 282
- **Specifications** Section 425

**Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 425-10- YARD DRAIN EA

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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#### 425-11- DRAINAGE STRUCTURE- MODIFY EXISTING

<table>
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<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

**Notes**

- This pay item is used for the modification of EXISTING drainage structures.

  For vertical adjustment of drainage structures, refer to related pay items for inlets, manholes, valves, and junction boxes:
  - 425-4 Adjusting Inlets
  - 425-5 Adjusting Manholes
  - 425-6 Adjusting Valve Boxes

**Related Items**

- **Required**
- **Recommended**

**Details and Structure:** Complete- Items 000 to 1999
**Design Forms and Documentation**

sumdrd.dgn: Summary of Drainage Structures

Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Trns·port

Other

Standards

Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 425- 11- DRAINAGE STRUCTURE- MODIFY EXISTING EA

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
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**425- 12- A RETRACTABLE CURB INLET SCREEN**

<table>
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<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
<th>no</th>
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</thead>
</table>

**Notes**

Developmental Specification Required; contact the monitor for approval.

**Details**

Monitor: Amy Tootle, State Drainage Office

This is a developmental Item. It must be used with the developmental specification. Contact the monitor for additional information. Payment is made for each screen- normally 1 per inlet.

**Related Items**

Required

Recommended

**Design Forms and Documentation**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**References**

PPM Chapter

Trns·port

Other

Standards

Specifications
Struct. 425-12- A RETRACTABLE CURB INLET SCREEN EA

A= Size
1 (less than or equal to 5' wide)
2 (greater than 5' wide)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tr>
<td>0425 12 2</td>
<td>RETRACTABLE CURB INLET SCREEN &gt; 5' WIDE</td>
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425-13- AA DRAINAGE STRUCTURE PIPE CONNECTION SCREEN

<table>
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<table>
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<th>Details</th>
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</thead>
<tbody>
<tr>
<td>Monitor: Amy Tootle, State Drainage Office</td>
</tr>
</tbody>
</table>

This is a developmental Item. It must be used with the developmental specification. Contact the monitor for additional information. Payment is made for each screen, based on pipe diameter.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
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</table>

Design Forms and Documentation

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<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
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References

PPM Chapter
Trns*port
Other
Standards
Specifications
Prep & Doc Manual Chapter(s)
24 (24")
30 (30")
36 (36")
42 (42")
48 (48")
54 (54")
60 (60")
66 (66")
72 (72")
78 (78")
84 (84")
90 (90")
96 (96")
99 (99" or greater) Note size in plans

Notes

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<th>Item</th>
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425- 71- INLETS RELOCATION

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Notes

Details

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Design Forms and Documentation

sumdr.dgn: Summary of Drainage Structures
Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Trns·port
Other Standards
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13
TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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425- 74- A MANHOLES AND INLETS, CLEANING & SEALING

Notes

Details

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required Recommended

Design Forms and Documentation

sumdrd.dgn: Summary of Drainage Structures
Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Trns-port
Other Standards
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 425- 74- A MANHOLES AND INLETS, CLEANING & SEALING EA

A =
1 (≤10')
2 (>10')

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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Details and Structure: Complete- Items 000 to 1999
## Basis of Estimates

**Inlet Cap, Precast**

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**Notes**

- Spec or plan detail should indicate that payment includes "new grates, and removing and stockpiling existing grates".

**Related Items**

- Required
- Recommended

**Design Forms and Documentation**

- sumdrd.dgn: Summary of Drainage Structures
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Trns-port

---

**Transport Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 425-78  **Inlet Cap, Precast**  **EA**

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### Item Details and Structure: Complete- Items 000 to 1999
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**425-Maint MANHOLE**

**Maintenance Contracts Only**

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**Notes**

Maintenance Item: Not Valid for Construction Contracts

**Details**

MAINTENANCE CONTRACTS ONLY

Additional BOE details pending

**Related Items**

Required

Recommended

**Design Forms and Documentation**

**Construction Forms and Documentation**

**References**

PPM Chapter
Trns-port
Other Standards Specifications

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):**

**Struct.** 425-Maint MANHOLE Maintenance Contracts Only Mixed

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### Topic No. 600-000-002

#### Basis of Estimates

**2012 Edition**

**January 22, 2013**

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### 430- 94- AA DESILT PIPE

- **Unit**: LF; M1
- **Accuracy**: Linear Foot; 1/10 Meter
- **PlanQuantity?**: no

**Notes**

Includes furnishing equipment and labor necessary to desilt the pipe, and also includes disposing of all silt and debris removed during the desilting operation. Summarize on plans by pipe location, diameter (or equivalent round diameter), and length to be desilted.

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

dromrd: Drainage Optional Materials Tabulation

Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter
Trns-port
Other Standards
Specifications

**Prep & Doc Manual Chapter(s)**: 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 0200 Roadway

**Struct.**: 430- 94- AA DESILT PIPE LF

AA= Pipe Diameter
1 (0 to 24")
2 (25-36")
3 (37-48")
4 (49-60")
5 (61" or greater)

**Notes**

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

---

**Details and Structure: Complete- Items 000 to 1999**

Page 187 of 769
### Item Description

<table>
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### 430-17A-BCC PIPE CULVERT OPTIONAL MATERIAL

**Unit** LF; M1  
**Accuracy** Linear Foot; 1/10 Meter  
**PlanQuantity?** yes

**Notes**

Effective July 2013, Jack & Bore is included under Optional Pipe for drainage applications; refer to Estimates Bulletin 12-14.

**Details**

Show application, size, and material with class/gage/corrugation on the contract plans. Refer to Index 205 for valid sizes, class/gage/corrugation.

For pipe other than round (elliptical concrete and metal pipe arch) show actual size, class/gage/corrugation shown on standard index 205. Use equivalent round pipe size for payment.

**Related Items**

**Required**  
**Recommended**

**Design Forms and Documentation**

Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

**Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.**

**References**

PPM Chapter  
Trns·port  
Other Drainage Manual  
Standards Index No. 205  
Specifications Section 430

Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 430-17A-BCC PIPE CULVERT OPTIONAL MATERIAL LF

A = Application  
3 (Gutter Drain) GD  
4 (Side Drain) SD  
5 (Storm and Cross Drain)

B = Shape  
1 (Round Shape)  
2 (Other –Elliptical/Arch)

CC = Standard Pipe Sizes, available for projects let 7-1-10; required Effective 1-1-2011  
12 (12")  
15 (15")  
18 (18")  
24 (24")  
30 (30")
36 (36")
42 (42")
48 (48")
54 (54")
60 (60")
66 (66")
72 (72")
78 (78")
84 (84")
90 (90")
96 (96")
99 (99" or greater) Note size in plans

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<td>Effective July 2013, Jack &amp; Bore is included under Optional Pipe for drainage applications; refer to Estimates Bulletin 12-14.</td>
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**430-18A-BCC PIPE CULVERT OPTIONAL MATERIAL - JACK & BORE**

**Unit** LF; M1  **Accuracy** Linear Foot; 1/10 Meter  **Plan Quantity?** yes

**Notes**

Effective July 2013, Jack & Bore is included under Optional Pipe for drainage applications; refer to Estimates Bulletin 12-14.

**Details**

This item is intended for Optional pipe installed by Jack & Bore.

Show application, size, and material with class/gage/corrugation on the contract plans. Refer to Index 205 for valid sizes, class/gage/corrugation.

Refer to specification for measurement when optional pipe is installed with a casing, and when optional pipe is installed as a carrier (without a casing).

**Related Items**

**Required**

- COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

**Recommended**

- Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

- PPM Chapter
- Trans-port
Other Standards Specifications Section 430 Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):

Struct.  430-18A-BCC PIPE CULVERT OPTIONAL MATERIAL- JACK & BORE LF

A = Application
3 (Gutter Drain) GD
4 (Side Drain) SD
5 (Storm and Cross Drain)

B = Shape
1 (Round Shape)

CC = Standard Pipe Sizes
12 (12")
15 (15")
18 (18")
24 (24")
30 (30")
36 (36")
42 (42")
48 (48")
54 (54")
60 (60")
66 (66")
72 (72")
78 (78")
84 (84")
90 (90")
96 (96")
99 (99" or greater) Note size in plans

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

430-200-ABB FLARED END SECTION

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Notes Details

Intended for use outside the clear zone on median drain and cross drain installations. Pipe sizes 12" and 15" (300 mm and 375 mm) are permitted within the clear zone. Specifically not intended for side drain installation.

Related Items

Design Forms and Documentation

SBSDMES or SBSDMESFL: Summary of Side Drain & Mitered End Sections

Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).
### References
- **PPM Chapter**: 
- **Trns-port**: 
- **Other Standards**: Index No. 270
- **Specifications**: Section 430
- **Prep & Doc Manual Chapter(s)**: 7, 13

### EnviroPORT Category (DRAFT FIELD): 0200 Roadway

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</table>

**A** = Blank (Concrete)

**BB** = Standard Pipe Sizes
- 21 (12")
- 23 (15")
- 25 (18")
- 27 (21")
- 29 (24")
- 31 (27")
- 33 (30")
- 34
- 38 (36")
- 40 (42")
- 41 (48")
- 42 (54")
- 43 (60")
- 44 (66")
- 45 (72")

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**430-6AB-CDD** U-ENDWALL

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**Notes**

Details and Structure: Complete- Items 000 to 1999
Refer to Standard Index 260 or 261 for proper selection. to be used only in the clear zone for the drainage of medians and other areas having low design velocities. Precasting or cast-in-place will be permitted. Cost of this item shall include concrete, reinforcing steel, grate and all accessories.

For items included on Index 250, payment will be made under concrete and steel items. Refer to Design Standards.

**Details**

Refer to Standard Index 260 or 261 for proper selection. to be used only in the clear zone for the drainage of medians and other areas having low design velocities. Precasting or cast-in-place will be permitted. Cost of this item shall include concrete, reinforcing steel, grate and all accessories.

For items included on Index 250, payment will be made under concrete and steel items. Refer to Design Standards.

**Related Items**

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<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
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**Design Forms and Documentation**

No additional form required; use plans summary or comp book.

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter
Trns-port

**Other Standards**

Index No. 260, 261

**Specifications**

Section 430

**Prep & Doc Manual Chapter(s)**

7, 13

**TRNS*PORT Category (DRAFT FIELD):**

0200 Roadway

**Struct.**

430-6AB-CDD U-ENDWALL EA

A = Index No.
0 (Std 260) when A =0, BC =21
1 (Std 261)

B = Appurtenance
0 (none)
1 (baffles)
2 (grate)
3 (baffles and grate)

C = slope
0 (1:6)
1 (1:4)
2 (1:3)
3 (1:2)

DD = Standard Pipe Sizes
23 (15")
25 (18")
29 (24")
33 (30")

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
<table>
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<tr>
<th>Item</th>
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**430-82A- BB** CLEANING & SEALING EXISTING PIPE JOINT

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<th>Accuracy</th>
<th>Each</th>
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<tr>
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Details and Structure: Complete- Items 000 to 1999
Notes
Details
For cleaning and sealing existing joints only.
Coordinate use of this item w/ State Drainage Office to evaluate the condition of the existing pipe. Replacement of the pipe (paid under optional pipe) should be considered.
Tech Specs should detail the work to be completed, the sealing materials, and any testing that may be required.
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Required
Recommended

Design Forms and Documentation
dromrd: Drainage Optional Materials Tabulation
Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation
No additional form required; use plans summary or comp book
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References
PPM Chapter
Trns-port
Other
Standards
Specifications

T: Plan Details and/or Technical Specifications required
Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 430-82A- BB CLEANING & SEALING EXISTING PIPE JOINT EA
A =
1 (Storm Sewer)
2 (Cross Drain)
BB = Standard Pipe Sizes
23 (15")
25 (18")
27 (21")
29 (24")
31 (27")
33 (30")
34
38 (36")
40 (42")
41 (48")
42 (54")
43 (60")
61 (61" and greater)

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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**430-830-** PIPE FILLING AND PLUGGING- PLACE OUT OF SERVICE

**Notes**

Unit    CY; M3  Accuracy Cubic Yard; Cubic Meter  PlanQuantity?  no

**Details**

This pay item is used for filling/plugging existing drainage pipe, where called for in the plans. Per the specifications, "The cost of filling and plugging pipe shown in the plans as existing, to be placed out of service"

This pay item may also be used for filling/plugging drainage structures associated with placing drainage pipe out of service, when it is not practical to remove the drainage structure. Tabulate quantities in the plans.

Temporary Plugging: "The cost of plugging pipe, shown in the plans as proposed new pipe, will be included in the contract unit price for pipe culvert." (Do not use this pay item for temporarily plugging new pipe.)

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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Design Forms and Documentation

sumdrd.dgn: Summary of Drainage Structures

Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Trns·port

Details and Structure: Complete- Items 000 to 1999
Other
Standards  Index No. 280
Specifications  
Prep & Doc Manual Chapter(s)  6, 7, 13

TRNS*PORT Category (DRAFT FIELD):  0200  Roadway

Struct.  430-830-  PIPE FILLING AND PLUGGING- PLACE OUT OF SERVICE

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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430-860-  A  STORM SEWER TRENCH

Notes

Unit  LF; M1  Accuracy  Linear Foot; 1/10 Meter  PlanQuantity?  yes

Details

Required  Recommended

Design Forms and Documentation
- dromrd: Drainage Optional Materials Tabulation
  - Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation
- No additional form required; use plans summary or comp book
  - Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References
- PPM Chapter
- Trns-port
- Other Standards Specifications
- Prep & Doc Manual Chapter(s)  7, 13

TRNS*PORT Category (DRAFT FIELD):  0200  Roadway

Struct.  430-860-  A  STORM SEWER TRENCH  LF

A =
- 2 (2' Wide)
- 3 (3' Wide)
- 4 (4' Wide)
- 5 (5' Wide)
- 6 (6' Wide)

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
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**430-880- AA FLAP GATES**

- **Unit**: EA
- **Accuracy**: Each
- **Plan Quantity**: no

**Notes**

Refer to Drainage Manual for additional information.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
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<th>Required</th>
<th>Recommended</th>
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**Design Forms and Documentation**

- sumdrd.dgn: Summary of Drainage Structures
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Trns·port
- Other Standards
- Specifications

T: Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 430-880- AA FLAP GATES EA

AA= Standard Pipe Sizes (effective 1/1/2007)
- 01 (0 to 24")
- 02 (25 to 36")
- 03 (37 to 48")
- 04 (49 to 60")
- 05 (61" or greater)

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**430-950- DESILTING CONCRETE BOX CULVERT**

Details and Structure: Complete- Items 000 to 1999
Unit: CY; M3  
Accuracy: Cubic Yard; Cubic Meter  
PlanQuantity?: no

Notes
Details: Payment is for the VOLUME OF SILT removed, based on the length and width of the box culvert, and the average DEPTH OF SILT to be removed.

Related Items
Required  
Recommended  

Design Forms and Documentation:
- dromrd: Drainage Optional Materials Tabulation  
  Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation:
- 700-050-54: Daily Report or Truck-Measured Material Site Source Record (and Sketch)  
  Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter  
Trns·port  
Other  
Standards  
Specifications: Section 430  
Prep & Doc Manual Chapter(s): 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 | Roadway

Struct. 430-950- DESILTING CONCRETE BOX CULVERT CY

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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430-963- AA PVC PIPE FOR BACK OF SIDEWALK DRAINAGE

Notes
Details: For use according to Design Standard for back of sidewalk applications. Index calls for 4" PVC. Non-standard diameters must be shown with plan details and material requirements. For all other applications, including gutter drain, use Optional Pipe.

Related Items
Required  
Recommended  

Design Forms and Documentation:
- dromrd: Drainage Optional Materials Tabulation  
  Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation:
- No additional form required; use plans summary or comp book  
  Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter  
Trns·port
Basis of Estimates

2012 Edition
January 22, 2013

Standards Index No. 282
Specifications
Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):** 0200    Roadway

**Struct.** 430-963- AA    PVC PIPE FOR BACK OF SIDEWALK DRAINAGE    LF

A= Size
1 (4” diameter) Standard
2 (Non-Standard diameter)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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430-98A-BCC    MITERED END SECTION

**Unit**    EA
**Accuracy** Each
**PlanQuantity?** no

Notes

Details

Includes all pipe, grates (when required), fasteners, reinforcement, connectors, anchors, concrete, sealants, jackets, coupling bands, and all work required to install the mitered end section. Show shape and size on the contract plans. Refer to Index 273 for valid sizes. Use equivalent round pipe size for payment.

Sodding is paid separately under Performance Turf- Sod, per SY.

Related Items

Required
Recommended

Design Forms and Documentation

SBSDMES or SBSDMESFL: Summary of Side Drain & Mitered End Sections
Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Trns-port
Other Standards Index No. 205, 272, 273
Specifications Section 430
Prep & Doc Manual Chapter(s) 6, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200    Roadway

**Struct.** 430-98A-BCC    MITERED END SECTION    EA

A = Application
2 (Cross Drain)

Details and Structure: Complete- Items 000 to 1999
4 (Side Drain)
B = Shape
1 (Optional Round)
6 (Optional Other – Elliptical/Arch)
CC = Standard Round or Equivalent Other Shape Pipe Sizes
Standard Pipe Sizes
20 (8")
21 (12")
23 (15")
25 (18")
27 (21")
29 (24")
31 (27")
33 (30")
34
38 (36")
40 (42")
41 (48")
42 (54")
43 (60")
44 (66")
45 (72")
46 (78")
47 (84")
48 (90")
49 (96")
50 (102")
51 (108")
52 (120")
53 (132")
54 (144")
55 (156")
56 (168")
57 (180")

Refer to Standard Index 205

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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**430-991-** MITERED END SECTION, REPLACE SLAB

**Notes**

This item is intended for the replacement of slabs for Mitered End Sections. Tech Specs or Plan Details should include all incidentals (including grate) for a complete installation, in accordance with current standards. DO NOT USE 430-990 item with this pay item for duplicate payment of grate.

If the existing pipe is not currently in good condition, the entire MES should be replaced using the appropriate 430-98A-BCC pay item.

**Related Items**

Required:  
Recommended:

**Design Forms and Documentation**

SBSDMES or SBSDMESFL: Summary of Side Drain & Mitered End Sections

Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

---

**References**

PPM Chapter

Trns-port

Other

Standards: Index No. 205, 272, 273

Specifications

Prep & Doc Manual Chapter(s)
## Item Description Unit TSP/Detail Valid Date Obsolete Date

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### 430-Maint

**DRRAINAGE PIPE**

**Maintenance Contracts Only**

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<th>PlanQuantity?</th>
<th>Notes</th>
<th>Details</th>
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| Mixed | Refer to item structure and details | ? | Maintenance Item: Not Valid for Construction Contracts | MAINTENANCE CONTRACTS ONLY
Additional BOE details pending |

### Related Items

**Required**

- **Struct.** 430-Maint

**Recommended**

- **Struct.** 430-Maint

### Design Forms and Documentation

### Construction Forms and Documentation

### References

**PPM Chapter**

**Trns*port**

**Other**

**Standards**

**Specifications**

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):**

**Struct.** 430-Maint

**DRRAINAGE PIPE**

**Maintenance Contracts Only**

**Mixed**

### Notes

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

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<tr>
<td>E430 82 11</td>
<td>CLEAN &amp; SEAL EXISTING PIPE JOINT, 0-24&quot; STORM SEWER</td>
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<tr>
<td>E430 82 12</td>
<td>CLEAN &amp; SEAL EXISTING PIPE JOINT, 25-36&quot; STORM SEWER</td>
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<td>CLEAN &amp; SEAL EXISTING PIPE JOINT, 37-48&quot; STORM SEWER</td>
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<td>E430 82 15</td>
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**PIPE LINER, OPTIONAL MATERIAL**

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<td>Linear Foot; 1/10 Meter</td>
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**Notes**

This item is used to rehabilitate an existing pipe by forming a lining on the host pipe's interior, thereby allowing a debilitated pipe to regain strength and performance capabilities. Box to Box liners are preferred.

Contact the State Drainage Office if sectional liners are considered (see item 908-431-A).

Design with manufacturer's lengths in mind for all practical applications. Refer to specifications for current industry practices.

Per Specifications, "The plans will indicate the location of the pipe to be rehabilitated, the material composition and the alternate liner types that may be used to rehabilitate the pipe, and the method of liner installation."

**Related Items**

<table>
<thead>
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<tr>
<td>121- 70, 430- 94-AA</td>
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**Design Forms and Documentation**

- dromrd: Drainage Optional Materials Tabulation
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Trns-port
- Other Standards
- Specifications Section 431

**T: Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)** 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 431- 1- A PIPE LINER, OPTIONAL MATERIAL LF

A= Size Range

1 (0-24")
2 (25-36")
3 (37-48")
4 (49-60")
5 (61" and greater)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
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### 432-3- A CHEMICAL GROUT REPAIR - PIPE, NON-TEST

**Notes**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

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**Design Forms and Documentation**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

**References**

PPM Chapter

Trns-port

Other Standards

Specifications

T: Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 432-3- A CHEMICAL GROUT REPAIR - PIPE, NON-TEST EA

A =
1 (15")
2 (18")
3 (21")
4 (24")
5 (30")
6 (36")
7 (42")
8 (48")
9 (54")
10 (66")

**Notes**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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432-Maint STORM SEWER INSPECTION
Maintenance Contracts Only

Unit: Mixed
Accuracy: Refer to item structure and details
PlanQuantity?: ?

Notes: Maintenance Item: Not Valid for Construction Contracts
Details: MAINTENANCE CONTRACTS ONLY
Additional BOE details pending

Related Items
Required
Recommended

Design Forms and Documentation

Construction Forms and Documentation

References
PPM Chapter
Trns-port
Other Standards
Specifications
Prep & Doc Manual Chapter(s)
TRNS*PORT Category (DRAFT FIELD):

Struct. 432-Maint

STORM SEWER INSPECTION
Maintenance Contracts Only

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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433-1-

CHEMICAL GROUT REPAIR- MANHOLE/INLET

Notes

Details

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Required

Recommended

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

References

PPM Chapter
Trns-port
Other Standards
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):

Struct. 433-1-

CHEMICAL GROUT REPAIR- MANHOLE/INLET

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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### 435- 1- AA  STRUCTURAL PLATE PIPE CULVERT

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<th>Design Forms and Documentation</th>
<th>Construction Forms and Documentation</th>
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<td></td>
<td>Coordinate the use of this item with the State Drainage Office prior to requesting pay items.</td>
<td>Required</td>
<td>dromrd: Drainage Optional Materials Tabulation</td>
<td>No additional form required; use plans summary or comp book</td>
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**References**

- PPM Chapter
- Trns-port
- Other Standards
- Specifications Section 435
- Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 435- 1- AA  STRUCTURAL PLATE PIPE CULVERT  LF

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<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0435 1</td>
<td>STRUCTURAL PLATE PIPE CULVERT</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0435 1 99</td>
<td>STRUCTURAL PLATE PIPE CULVERT SPECIAL- ANIMAL CROSSING</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 436- 1- A  TRENCH DRAIN

<table>
<thead>
<tr>
<th>Notes</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Use in accordance with Index 206. Various alternatives are available on the standard.</td>
</tr>
<tr>
<td></td>
<td>Special should only be used if you have a significant design change. Plan Details and/or Tech Spec will be required.</td>
</tr>
<tr>
<td></td>
<td>Minor changes to the standard may be noted in the plans, and used with the &quot;standard&quot; pay item.</td>
</tr>
<tr>
<td></td>
<td>For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.</td>
</tr>
</tbody>
</table>

**Details and Structure:** Complete- Items 000 to 1999


**Basis of Estimates**

**January 22, 2013**

**Required**

**Recommended**

---

**Design Forms and Documentation**

- **SBEdgeDrains: Summary of Edge Drains**
  - Locate in plans. Summarize quantities by location on summary sheet in the plans.
  
- **Specifications**
  - **Section 436**

**Construction Forms and Documentation**

- **Index No. 206**
  - **Specifications**
    - **Section 436**

---

**References**

- **PPM Chapter**
- **Trns-port**
- **Other Standards**
  - **Index No. 206**
- **Specifications**
  - **Section 436**

**Notes**

- **T: Selected Items may require Plan Details and/or Technical Specifications**

---

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):**

- **0200**
  - **Roadway**

**Struct. 436- 1- A**

- **TRENCH DRAIN**
- **LF**

---

**Notes**

- **TRENCH DRAIN**
  
---

**The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0436 1 1</td>
<td>TRENCH DRAIN, STANDARD</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0436 1 2</td>
<td>TRENCH DRAIN, SPECIAL</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

---

**438- ??? Buoyant Stormwater Flow Control Device**

**Notes**

- **Pending pay item structure. Specification is under development.**

---

**Design Forms and Documentation**

- **COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation**

---

**Construction Forms and Documentation**

---

**References**

- **PPM Chapter**
- **Trns-port**

---

**Details and Structure:** Complete- Items 000 to 1999
**Other Standards Specifications Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):**

**Struct. 438- ??? Buoyant Stormwater Flow Control Device EA**

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>440- 1- AA UNDERDRAIN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit</strong></td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
</tr>
<tr>
<td><strong>PlanQuantity?</strong></td>
</tr>
</tbody>
</table>

**Details**

Item based on the size of the smooth interior product. Price per length shall include cost of pipe, fittings, aggregate, sock, filter fabric, cleanouts, and concrete aprons.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

**Design Forms and Documentation**

SBUnderdrain: Summary Box: Underdrains

Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Trns-port

Other Standards

Index No. 286

Specifications Section 440

Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

<table>
<thead>
<tr>
<th>Struct. 440- 1- AA UNDERDRAIN LF</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA = 10 (Type I) 20 (Type II) 30 (Type III) 50 (Type V) 60 (Type Special)</td>
</tr>
</tbody>
</table>

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### UNDERDRAIN INSPECTION BOX

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0440  70</td>
<td>UNDERDRAIN INSPECTION BOX</td>
<td>EA</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

- Per Index 245, includes concrete apron.

**Details**

- Required

**Related Items**

- SBUnderdrain: Summary Box: Underdrains
  - Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Design Forms and Documentation**

- No additional form required; use plans summary or comp book
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Trns-port
- Other Standards: Index No. 245, 286
- Specifications: Section 440
- Prep & Doc Manual Chapter(s): 6, 7, 13

**PREN*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 440- 70- UNDERDRAIN INSPECTION BOX EA

### UNDERDRAIN OUTLET PIPE

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0440  73</td>
<td>UNDERDRAIN OUTLET PIPE</td>
<td>LF; M1</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

- Use in accordance with Standard Index. Price per length includes trench excavation, pipe, fittings, concrete aprons, hardware cloth for concrete aprons, stubbing into drainage structures, backfill in place, and removal of excess materials.

**Related Items**

- Required

---

Details and Structure: Complete- Items 000 to 1999
### Design Forms and Documentation
SBUnderdrain: Summary Box: Underdrains
Locate in plans. Summarize quantities by location on summary sheet in the plans.

### Construction Forms and Documentation
No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References
PPM Chapter
Trns-port

Other Standards Index No. 286
Specifications Section 440
Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

### Struct. 440-73- A UNDERDRAIN OUTLET PIPE LF

A = Size
1 (4"
2 (6"
3 (8"
4 (10"
5 (12") Note: 12" is non-standard; will require plan details and/or Tech Spec

### Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0440 73 1</td>
<td>UNDERDRAIN OUTLET PIPE, 4&quot;</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0440 73 2</td>
<td>UNDERDRAIN OUTLET PIPE, 6&quot;</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0440 73 3</td>
<td>UNDERDRAIN OUTLET PIPE, 8&quot;</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0440 73 4</td>
<td>UNDERDRAIN OUTLET PIPE, 10&quot;</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0440 73 5</td>
<td>UNDERDRAIN OUTLET PIPE, 12&quot;</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 440-Maint UNDERDRAIN CLEANOUT PIPE Maintenance Contracts Only

<table>
<thead>
<tr>
<th>Unit</th>
<th>Mixed</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Refer to item structure and details</td>
<td>?</td>
</tr>
</tbody>
</table>

**Notes**
Maintenance Item: Not Valid for Construction Contracts

**Details**
MAINTENANCE CONTRACTS ONLY
Additional BOE details pending

**Related Items**
Required
Recommended

### Design Forms and Documentation

---

**Details and Structure:** Complete- Items 000 to 1999
### References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Trns-port</th>
<th>Other</th>
<th>Standards</th>
<th>Specifications</th>
</tr>
</thead>
</table>

**Prep & Doc Manual Chapter(s)**

### TRNS*PORT Category (DRAFT FIELD):

**Struct.** 440-Maint

UNDERDRAIN CLEANOUT PIPE

Maintenance Contracts Only

### Notes

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>E440 78</td>
<td>UNDERDRAIN CLEANOUT PIPE (24&quot;)</td>
<td>LF</td>
<td>1/1/2010</td>
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</table>

### 442-70-

**VERTICAL DRAINAGE WICKS**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF M1</td>
<td>Linear Foot; 1/10 Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

### Notes

**Details**

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
</tr>
</tbody>
</table>

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

### References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Trns-port</th>
<th>Other</th>
<th>Standards</th>
<th>Specifications</th>
</tr>
</thead>
</table>

**Prep & Doc Manual Chapter(s)** 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 442-70-

**VERTICAL DRAINAGE WICKS**

LF
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0442 70</td>
<td>VERTICAL DRAINAGE WICKS</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**443- 70- AA  FRENCH DRAIN**

**Unit** LF; M1  
**Accuracy** Linear Foot; 1/10 Meter  
**Plan Quantity?** no

**Notes**

This item includes furnishing and placing pipe, pipe plugs, pipe fittings, coarse aggregate and filter fabric, and also includes trenching, backfilling, sheeting and, when necessary, pavement restoration.

When using elliptical pipe, payment will be according to the equivalent round size, as noted in the plans.

Note: French Drain greater than 36” should be approved by the District Drainage Engineer as stated in the Exfiltration Handbook.

**Related Items**

**Required**  
**Recommended**

**Design Forms and Documentation**

SBEdgeDrains: Summary of Edge Drains  
Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book  
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter  
Trns-port  
Other Standards Index No. 285  
Specifications Section 443  
Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 443- 70- AA FRENCH DRAIN LF

AA = Size. Additional sizes per index 285
3 (18")
4 (24")
5 (30")
6 (36")
7 (42")*
8 (48")*
9 (54")*
10 (60")*

*Contact District Drainage prior to use of sizes greater than 36"

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### Item Description

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0443 70 3</td>
<td>FRENCH DRAIN, 18&quot;</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0443 70 4</td>
<td>FRENCH DRAIN, 24&quot;</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0443 70 5</td>
<td>FRENCH DRAIN, 30&quot;</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0443 70 6</td>
<td>FRENCH DRAIN, 36&quot;</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0443 70 7</td>
<td>FRENCH DRAIN, 42&quot;</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0443 70 8</td>
<td>FRENCH DRAIN, 48&quot;</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0443 70 9</td>
<td>FRENCH DRAIN, 54&quot;</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0443 70 10</td>
<td>FRENCH DRAIN, 60&quot;</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**444- 70- AA DEEP WELL- OPEN HOLE**

**Unit** LF; M1  
**Accuracy** Linear Foot; 1/10 Meter  
**PlanQuantity?** no

**Notes**

This item is to be used in accordance with Index 288 for drainage applications.

For irrigation wells, see pay item 730-83.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>
| Design Forms and Documentation | COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation  
Locate in the plans. Summarize quantities by location in the computation book. |

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book  
Record final quantity on the computation book form.

**References**

PPM Chapter  
Trns-port  
Other Standards Index No. 288  
Specifications

**T: Plan Details and/or Technical Specifications required**

Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 444- 70- AA DEEP WELL- OPEN HOLE LF  
AA = Well Diameter  
11 (24")

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### 444-71- AA  DEEP WELL CASING

<table>
<thead>
<tr>
<th>Unit</th>
<th>LF; M1</th>
<th>Accuracy</th>
<th>Linear Foot; 1/10 Meter</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

**Notes**

This item is to be used in accordance with Index 288 for drainage applications.

For irrigation wells, see pay item 730-83.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

**References**

PPM Chapter

Trns-port

Other Standards

Index No. 288

Specifications

T: Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)** 6, 7, 13

---

**STRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 444-71- AA  DEEP WELL CASING  LF

AA = Well Diameter

11 (24")

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0444 71 11</td>
<td>DEEP WELL CASING, 24&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

---

### 444-72- AA  DEEP WELL CLEANING

<table>
<thead>
<tr>
<th>Unit</th>
<th>LF; M1</th>
<th>Accuracy</th>
<th>Linear Foot; 1/10 Meter</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

**Notes**

This item is to be used in accordance with Index 288 for drainage applications.
For irrigation wells, see pay item 730-83.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Design Forms and Documentation</strong></td>
<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
</tr>
<tr>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
<td></td>
</tr>
</tbody>
</table>

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

**References**

PPM Chapter

Trns-port

Other Standards Index No. 288

Specifications

T: Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 444- 72- AA DEEP WELL CLEANING LF

AA = Well Diameter
11 (24")

**Notes**

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0444 72 11</td>
<td>DEEP WELL CLEANING, 24&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>446- 1- A</td>
<td>EDGEDRAIN DRAINCRETE</td>
</tr>
</tbody>
</table>

**Notes**

**Details**

Price per length includes removal of existing shoulder pavement, trench excavation, disposal of excess materials, filter fabric, draincrete, edgedrain pipe and fittings. Refer to Design Standard for payment details, based on new/rehab construction.

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

SBEdgeDrains: Summary of Edge Drains

Locate in plans. Summarize quantities by location on summary sheet in the plans.
No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**Construction Forms and Documentation**

**References**

PPM Chapter

Trns·port

Other

Standards 

Index No. 286, 287

Specifications 

Section 446

Prep & Doc Manual Chapter(s) 

6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct. 446- 1- A EDGEDRAIN DRAINCRETE LF**

A= pipe size

1 (Standard) per Index 287 is 4"

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0446 1 1</td>
<td>EDGEDRAIN DRAINCRETE, STANDARD</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**446- 71- A EDGEDRAIN OUTLET PIPE**

**Unit** LF; M1

**Accuracy** Linear Foot; 1/10 Meter

**PlanQuantity?** no

**Notes**

Includes removal of existing shoulder pavement, trench excavation, pipe and fitting, concrete apron, sod, stubbing into existing inlets and paved ditches, etc. Refer to Design Standard for details.

**Related Items**

Required

Recommended

**Design Forms and Documentation**

SBEdgeDrains: Summary of Edge Drains

Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Trns·port

Other

Standards 

Index No. 287

Specifications 

Section 446

Prep & Doc Manual Chapter(s) 

6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct. 446- 71- A EDGEDRAIN OUTLET PIPE LF**

A= pipe size
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0446</td>
<td>71 EDGEDRAIN OUTLET PIPE, 4&quot;</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
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</table>

### 448-73- PUMPING STATION- DRAINAGE

**Unit**: LS/LS  
**Accuracy**: Lump Sum  
**PlanQuantity?**: yes

**Notes**

Intended for Drainage applications. For Utility or Rest Area Sewer applications, refer to 1000-series (Utilities) or 750-series (Architectural).

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
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<tr>
<td>sumqrd: Roadway Summary of Quantities Sheet</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
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</table>

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Trns-port</th>
<th>Other Standards</th>
<th>Specifications</th>
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</thead>
<tbody>
<tr>
<td>T: Plan Details and/or Technical Specifications required</td>
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</table>

**Prep & Doc Manual Chapter(s)**

6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):**

0200 Roadway
### Notes
- **Maintenance Item: Not Valid for Construction Contracts**

### Details
- MAINTENANCE CONTRACTS ONLY
- Additional BOE details pending

### Related Items
<table>
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<th>Accuracy</th>
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<td></td>
<td>Refer to item structure and details</td>
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### Design Forms and Documentation
- Required
- Recommended

### Construction Forms and Documentation

### References
- PPM Chapter
- Trns·port
- Other
- Standards
- Specifications
- Prep & Doc Manual Chapter(s)

### TRNS*PORT Category (DRAFT FIELD):

#### Struct.
- **448-Maint**
- **PUMP STATION**
- Maintenance Contracts Only

### Notes

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
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<tr>
<td>E448 1</td>
<td>WATER LEVEL FLOOD CONTROL PUMPING SYSTEM MOBILIZED AND ACTIVE</td>
<td>DA</td>
<td>1/1/2010</td>
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<tr>
<td>E448 2</td>
<td>WATER LEVEL FLOOD CONTROL PUMPING SYSTEM MOBILIZED ON STANDBY</td>
<td>DA</td>
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<tr>
<td>E448 73 1</td>
<td>PUMP STATION WEEKLY INSPECTION AND MAINTENANCE</td>
<td>EA</td>
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<td>E448 73 2</td>
<td>PUMP STATION MANUFACTURER ANNUAL MAINTENANCE</td>
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<td>1/1/2010</td>
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<tr>
<td>E448 73 3</td>
<td>PUMP STATION 5 YEAR MANUFACTURER MAINTENANCE</td>
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<td>E448 73 4</td>
<td>PUMP STATION EMERGENCY MAINTENANCE</td>
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</table>

### 449-Maint
- **RAKING FOR FLOOD CONTROL**
- Maintenance Contracts Only

### Notes
- **Maintenance Item: Not Valid for Construction Contracts**

### Details
- MAINTENANCE CONTRACTS ONLY
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<th>Item</th>
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</table>

### Notes

**450- 1-AAA PRESTRESSED BEAMS**

**Unit** LF; M1  
**Accuracy** Linear Foot; 1/10 Meter  
**PlanQuantity?** yes

**Details**

Intended for prestressed beams for bridge construction. Summarize quantities by location per span.

AAA= 201, 202, 203 are typically used for bridge widening projects. These are non-standard and will require project specific design. Designers must work with the District and/or State Structures Office when using these items.

AAA=278, 378 are typically used for post-tensioned beams. These are non-standard and will require project specific design. Designers must work with the District and/or State Structures Office when using these items.

Non-Standard beam types: Coordinate standards (as applicable / if available), with details shown in the plans.

Florida-I Beams: See pay item 450- 2-. Pay items will be effective with implementation of Design Standards. For earlier implementation, contact the State Structures Design Office. Full design details will be required in the plans.

Other beam types: Pay Items for other beam types may be expanded upon request. Minor "non-standard" changes may be paid under the applicable beam type, with applicable details in the plans or specifications.
**Design Forms and Documentation**

COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter

Trns-port

Other Standards

Index No. 20110 series: 20110, 20120, 20130, 20140, 20150, 20160, 20172, 20178, 20199, 20310, 20320.

**Specifications**

Section 450

Prep & Doc Manual Chapter(s) 6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct.** 450-1-AAA PRESTRESSED BEAMS LF

AAA = Type

1 (Type II)

2 (Type III)

3 (Type IV)

4 (Type V)

5 (Type VI)

7 (Special) see pay item details

54 (Bulb T, 54") *non-standard

63 (Bulb T, 63") *non-standard

72 (Bulb T, 72")

78 (Bulb T, 78")

118 (Florida Double Tee, Fdt18) *non-standard

124 (Florida Double Tee, Fdt24) *non-standard

130 (Florida Double Tee, Fdt30) *non-standard

201 (Type II Modified) *non-standard

202 (Type III Modified) *non-standard

203 (Type IV Modified) *non-standard

250 (Inverted T, 20")

251 (Inverted T from FIB, 26.5")

278 (Bulb T, 78", Modified, w/post tensioning) *non-standard

378 (Bulb T, 78", Haunched, Modified, w/post tensioning) *non-standard

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
**PRESTRESSED BEAMS: FLORIDA-I BEAM**

**Unit**: LF; M1  
**Accuracy**: Linear Foot; 1/10 Meter  
**PlanQuantity?**: yes

**Notes**

*June 2009: Refer to Temporary Design Bulletin on Structures Office Web Page for implementation instructions.*

**Details**

Intended for prestressed beams for bridge construction.
Summarize quantities by location per span.

Non-Standard beam types: Coordinate standards (as applicable / if available), with details shown in the plans.

Florida-I Beams: Pay items will be effective with implementation of Design Standards. For earlier implementation, contact the State Structures Design Office. Full design details will be required in the plans.

Other beam types: Pay Items for other beam types may be expanded upon request. Minor "non-standard" changes may be paid under the applicable beam type, with applicable details in the plans or specifications.

**********

**BEARING PADS**: Refer to IDS for index 20510

### Related Items

**Required**  
**Recommended**

#### Design Forms and Documentation

- COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
  
- Locate in the plans. Summarize quantities by location in the computation book.

#### Construction Forms and Documentation

- No additional form required; use plans summary or comp book
  
- Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.
Specifications

**Section 450**

Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct.** 450- 2-AAA PRESTRESSED BEAMS: FLORIDA-I BEAM LF

AAA = Size
36 (36")
45 (45")
54 (54")
63 (63")
72 (72")
78 (78")
84 (84")

178 (78" Modified, with Post Tensioning)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<tr>
<td>0450 2 63</td>
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<td>LF</td>
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<tr>
<td>0450 2 72</td>
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<tr>
<td>0450 2 78</td>
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<td>LF</td>
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<tr>
<td>0450 2 84</td>
<td>PREST BEAMS: FLORIDA-I BEAM 84&quot;</td>
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<tr>
<td>0450 2 96</td>
<td>PREST BEAMS: FLORIDA-I BEAM 96&quot;</td>
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<tr>
<td>0450 2178</td>
<td>PREST BEAMS: FLORIDA-I BEAM 78&quot; MODIFIED, WITH POST TENSIONING</td>
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<td>D</td>
<td>1/1/2012</td>
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</tbody>
</table>

**450- 3- AB PRESTRESSED SLAB UNITS**

Unit LF; M1 Accuracy Linear Foot; 1/10 Meter PlanQuantity? yes

Notes

Details

Intended for non-post-tensioned unstressed bridge deck panels spanning longitudinally with concrete wearing surface.

For precast deck panels spanning transversely across beam lines, see Section 404 items.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed.
for payment under this item.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

### Design Forms and Documentation

COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

### References

**PPM Chapter**

SDG 4.4, Normally requires SHOP DRAWINGS

**Trn*s-port**

**Other Standards**

Index 20350 series: 20350, 20353, 20354, 20355, 20363, 20364, 20365, 20399

Effective July 2012 lettings: Refer to Developmental Design Standards.

**Specifications**

T: Plan Details and/or Technical Specifications required

### Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct. 450- 3- AB**

PRESTRESSED SLAB UNITS LF

A = Width
1 (48")
2 (60")
3 (96")
4 (72")
5 (36") valid through 12/2008
6 (54")
7 (57")
9 (Variable 30-47") Per design standard index, B=1 or 5 only

B = Thickness
1 (12")
2 (16")
3 (10")
4 (18")
5 (15")

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### Topic No. 600-000-002
#### Basis of Estimates

**2012 Edition**  
January 22, 2013

<table>
<thead>
<tr>
<th>Item</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0450 3 11</td>
<td>PRESTRESSED SLAB UNITS, WIDTH 48&quot;, THICKNESS 12&quot;</td>
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<td>1/1/2010</td>
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<tr>
<td>0450 3 15</td>
<td>PRESTRESSED SLAB UNITS, WIDTH 48&quot;, THICKNESS 15&quot;</td>
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<td>1/1/2010</td>
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<td>0450 3 21</td>
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<td>0450 3 22</td>
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<td>PRESTRESSED SLAB UNITS, WIDTH 60&quot;, THICKNESS 15&quot;</td>
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<td>0450 3 41</td>
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<tr>
<td>0450 3 62</td>
<td>PRESTRESSED SLAB UNITS, WIDTH 54&quot;, THICKNESS 16&quot;</td>
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<tr>
<td>0450 3 72</td>
<td>PRESTRESSED SLAB UNITS, WIDTH 57&quot;, THICKNESS 16&quot;</td>
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<tr>
<td>0450 3 91</td>
<td>PRESTRESSED SLAB UNITS, VARIABLE WIDTH 30-47&quot;, THICKNESS 12&quot;</td>
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<td>0450 3 95</td>
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</tbody>
</table>

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**450- 4-AAA**

**PRESTRESSED BEAM (FLORIDA U-BEAM)**

**Unit**  
LF; M1

**Accuracy**  
Linear Foot; 1/10 Meter

**PlanQuantity?**  
yes

**Notes**

**Details**

Intended for prestressed Florida U-beams for bridge construction, as shown in the design standards. Summarize quantities by location per span.

Per IDS for Index 20502, Cost of beveled and embedded bearing plates is incidental to the cost of the prestressed beams they are used with. No separate payment is made.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

---

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

---

**References**

PPM Chapter
Trns-port
Standards Index No. 20210 series: 20210, 20284, 20254, 20263, 20272, 20299
Beveled Bearing Plate for use with prestressed Florida U-Beams: 20502

Specifications

T: Plan Details and/or Technical Specifications required
Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Struct.  450-  4-AAA PRESTRESSED BEAM (FLORIDA U-BEAM) LF

AAA =
1 (48")
2 (54")
3 (63")
4 (72")

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<td>PRESTRESSED BEAM- FL U-BEAM, 54&quot;</td>
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<td>PRESTRESSED BEAM- FL U-BEAM, 63&quot;</td>
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<td>1/1/2010</td>
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</table>

450- 5- PRESTRESSED PAVEMENT

Unit  SY; M2  Accuracy Square Yard; Square Meter  PlanQuantity? no

Notes Coordinate the use of this item with the State Structures Design Office

Details This item was opened for a test section, monitored by District 5 and the State Structures Design Office. DO NOT USE THIS ITEM WITHOUT COORDINATING WITH THE STATE STRUCTURES DESIGN OFFICE.

Related Items Required Recommended
Design Forms and Documentation COMP 700-050-01: Area Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation No additional form required; use plans summary or comp book
Record final quantity on the computation book form.

References PPM Chapter
Trns-port
Other Standards Specifications

T: Plan Details and/or Technical Specifications required
Prep & Doc Manual Chapter(s) 7, 13
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
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<td>1/1/2010</td>
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</tbody>
</table>

### 450-82- BEAM REPAIR

- **Unit**: LF; M1
- **Accuracy**: Linear Foot; 1/10 Meter
- **Plan Quantity?**: yes

**Notes**

Intended for rehabilitation projects to strengthen or repair existing concrete beams. Show locations in plans. Include pay item note to clarify payment for various work items. See also item 450-83.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
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<th>Required</th>
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<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
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<tr>
<td>Construction Forms and Documentation</td>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
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<tr>
<td>References</td>
<td>Normally requires SHOP DRAWINGS</td>
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</table>

**Prep & Doc Manual Chapter(s)**

7, 13

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**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct.** 450-82- BEAM REPAIR LF

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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**450- 82- A** BEAM REPAIR-
Maintenance Contracts only

<table>
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<th>Unit</th>
<th>LF; M1</th>
<th>Accuracy</th>
<th>Linear Foot; 1/10 Meter</th>
<th>PlanQuantity?</th>
<th>yes</th>
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</table>

**Notes**
Maintenance Item: Not Valid for Construction Contracts

**Details**
MAINTENANCE CONTRACTS ONLY
Additional BOE details pending

**Related Items**
**Required**

**Design Forms and Documentation**
COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

---

**Construction Forms and Documentation**
No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

---

**References**
PPM Chapter
Trns-port
Other
Standards
Specifications

**T:** Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)** 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct.** 450- 82- A BEAM REPAIR-
Maintenance Contracts only

A= Location
1 (Over Land and ≤ 20’ bridge height)
2 (Over Land and > 20’ bridge height)
3 (Over water and ≤ 20’ bridge height)
4 (Over water and > 20’ bridge height)

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**Notes**

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*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0450 82</td>
<td>1 BEAM REPAIR- MAINTENANCE CONTRACTS ONLY, GUNITE, OVER LAND AND &lt;= 20’</td>
<td>LF</td>
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<td>1/1/2012</td>
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<tr>
<td>0450 82</td>
<td>1 BEAM REPAIR- MAINTENANCE CONTRACTS ONLY, GUNITE, OVER LAND AND &lt;= 20’</td>
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</tbody>
</table>
BEAM REPAIR- SPLICES

Unit EA Accuracy Each PlanQuantity? no

Notes
Intended for rehabilitation projects to strengthen or repair existing concrete beams. Show locations in plans. Include pay item note to clarify payment for various work items. See also item 450-82.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items
Required Recommended

Design Forms and Documentation
COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation
No additional form required; use plans summary or comp book
Record final quantity on the computation book form.

References
PPM Chapter
Trns-port
Other Standards
Specifications

T: Plan Details and/or Technical Specifications required
Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Struct. 450- 83- A BEAM REPAIR- SPLICES EA

A = 1 (Strand Splices)
2 (Bar Splices)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<td>0450</td>
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<td>0450</td>
<td>BEAM REPAIR, BAR SPLICES</td>
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<td>T</td>
<td>1/1/2010</td>
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</tbody>
</table>

450- 83- AB  BEAM REPAIR- SPLICES-
Maintenance Contracts Only

Unit EA Accuracy Each PlanQuantity? no

Notes

Maintenance Item: Not Valid for Construction Contracts

Details

MAINTENANCE CONTRACTS ONLY
Additional BOE details pending

Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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</thead>
</table>

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Record final quantity on the computation book form.

References

PPM Chapter
Trns-port
Other Standards
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Struct. 450- 83- AB  BEAM REPAIR- SPLICES-
Maintenance Contracts Only

A =
1 (Strand Splices)
2 (Bar Splices)
B = Location
1 (Over Land and < or = 20' bridge height)
2 (Over Land and > 20' bridge height)
3 (Over water and < or = 20' bridge height)
4 (Over water and > 20' bridge height)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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<tr>
<td>0450 83 12</td>
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<td>1/1/2012</td>
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<tr>
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<td>0450 83 21</td>
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</table>

### 450- 88- AA  PRESTRESSED SLAB UNITS TRANSVERSELY POST TENSIONED

**Unit**  SF; M2  **Accuracy**  Square Foot; 1/10 Square  **Plan Quantity**? no  Meter

**Notes**  Intended for post-tensioned prestressed bridge deck panels w/ concrete or asphalt wearing surface.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>COMP 700-050-01: Area Computation and Continuation</td>
<td></td>
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</table>

**Design Forms and Documentation**  Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**  No additional form required; use plans summary or comp book  Record final quantity on the computation book form.

**References**  PPM Chapter  SDG 4.4, Normally requires SHOP DRAWINGS

**Transport**  Other Standards Specifications  Complete- Items 000 to 1999
PRESTRESSED SLAB UNITS TRANSVERSELY POST TENSIONED

AA =
12 (12")
14 (14")
15 (15")
16 (16")
18 (18")
19 (19")
20 (20")
21 (21")
24 (24")

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<td>0450 88 18</td>
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</tr>
</tbody>
</table>

PRESTRESSED SOIL ANCHOR

Unit   EA  Accuracy Each  PlanQuantity?  no

Notes

For permanent applications only. Do not pay for separately when prestressed soil anchors are part of a temporary steel sheet pile wall system. Intended for payment of prestressed soil anchor, proof and creep test. See specification 451-12. Show anchor spacing and force-anchor. Show locations in plans w/ quantity block.

Related Items

Required Recommended

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Record final quantity on the computation book form.

References

PPM Chapter
Trns-port
Other Standards
Specifications Section 451

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 100 or 200 Structures or Roadway

Struct. 451-70- AA PRESTRESSED SOIL ANCHOR EA

AA =
Blank (F&I, With Standard Tests)
1 (Performance Test)
2 (Creep Test)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<td>0451 70 1</td>
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<tr>
<td>0451 70 2</td>
<td>PRESTRESSED SOIL ANCHOR, CREEP TEST</td>
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</tr>
</tbody>
</table>

452-70- PRECAST SEGMENT PRODUCTION

Unit LS/LS Accuracy Lump Sum Plan Quantity? yes

Notes

Details

Intended to cover for segmental casting yard set-up costs. Required on all Precast Segmental Bridge Projects.

Refer to the specifications for payment schedule. Partial payments are made for purchasing casting forms, producing the first operable form and approved segment, and producing succeeding segments.

Related Items

Required Recommended

Design Forms and Documentation

COMP 700-050-05: Lump Sum Quantities

Use a quantity of 1, but calculations and computation book documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter
Trns-port
Other Standards
Specifications Section 452
Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Struct. 452-70- PRECAST SEGMENT PRODUCTION LS/LS

Details and Structure: Complete- Items 000 to 1999
Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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</table>

455- 2- A TREATED TIMBER PILING

Unit LF; M1
Accuracy Linear Foot; 1/10 Meter
PlanQuantity? no

Notes

Designer must verify material requirements with State Materials Lab prior to requesting item.

Details

Intended for temporary detour bridge applications, or special use structures.

Summarize quantities by location per bent. The quantity to be paid for shall be the length, in feet (meters), of piling actually remaining in the completed structure below the elevation of cut-off shown in the plans or designated by the Engineer.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required Recommended

Design Forms and Documentation

COMP 700-050-08: Piling Tabulation and Cont.
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Trns-port
Other Standards
Specifications Section 455

T: Plan Details and/or Technical Specifications required
Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 100 or 200 Structures or Roadway

Struct. 455- 2- A TREATED TIMBER PILING LF

A = Treatment
Blank (Single Treatment)
1 (Dual Treatment)

Notes

Designer must verify material requirements with State Materials Lab prior to requesting item.
CONCRETE SHEET PILING

Unit: LF; M1
Accuracy: Linear Foot; 1/10 Meter
Plan Quantity: no

Notes
Details
Intended for concrete sheet pile walls. Show locations in plans. Include quantity block in plans.

Related Items
Required
Recommended

Design Forms and Documentation
COMP 700-050-08: Piling Tabulation and Cont.
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation
No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Trns-port
Other Standards
Normally requires SHOP DRAWINGS
Through June 2011, Index 20400 series: 20400, 20410, 20412, 40230, 20440
Effective July 2011, Index 6040
Specifications
Section 455
Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 100 or 200 Structures or Roadway

Struct. 455-14- AA CONCRETE SHEET PILING LF

A = Size
1 (7" X 30")
2 (8" X 30")
3 (10" X 30")
4 (12" X 30")
5 (Special)
6 (6" X 30")
7 (5" X 24")
8 (6" X 48")
9 (6" X 36")
10 (9" X 48")

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<tr>
<td>0455 14 5</td>
<td>CONCRETE SHEET PILING, SPECIAL</td>
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<td>1/1/2010</td>
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</tbody>
</table>

455-18- PROTECTION OF EXISTING STRUCTURES

Details and Structure: Complete- Items 000 to 1999
The item is to protect adjacent buildings, RR tracks, existing bridge structures, etc that may be impacted by vibration effects of the new construction.

Survey existing older bridges and monitor vibration/settlement of existing structures located within a few hundred feet of the following construction operations: pile driving, drilled shaft excavations, blasting, vibro-compaction, steel sheet pile installations, well point dewatering systems, etc. Of special concern are old bridge structures on timber piles, existing retaining walls, existing building on shallow foundations, etc.

IN THE PLANS, list the adjacent structures not covered under 455-1.1 that require surveying and vibration monitoring, or structures that require special attention during construction.

The item is usually loaded as a structures items due to pile driving operations. However, blasting, sheet pile wall installations and super-pave vibratory compaction operations can cause vibrations sufficient to create damage to adjacent structures also.

NOTE: Protection of structures that are under construction (existing portion of a bridge during widening) is incidental to the bridge costs. No separate pay item is needed.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
<thead>
<tr>
<th>Unit</th>
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<tr>
<td>Details</td>
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</table>

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

COMP 700-050-05: Lump Sum Quantities

Use a quantity of 1, but calculations and computation book documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter

Trns-port

Other Standards

Specifications Section 455

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):**

100 or 200 Structures or Roadway

**Struct.**

455-18- PROTECTION OF EXISTING STRUCTURES LS/LS

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
**Item Description:** PROTECTION OF EXISTING STRUCTURES
**Unit:** LS
**TSP/Detail:** T
**Valid Date:** 1/1/2010

### 455-34- AA PRESTRESSED CONCRETE PILING

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
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<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 1/10 Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

For projects let January 2009 and later: Intended to cover cost and installation of the square prestressed concrete piling. Design quantity computed as the total anticipated length of pile WITHOUT ALLOWANCES for cutoffs, splices, dynamic load tests, or preforming. Construction Final Quantity will be adjusted based on allowances, per the specifications. Related item 455-143, except for fender system piling, & piling for soldier pile walls. Per specification, "No payment will be made for dynamic load tests used to evaluate the integrity of a pre-planned epoxy-bonded dowel splice. Include all costs associated with dynamically testing production piles with epoxy-bonded dowel splices in the Pay Item 455-34."

For projects let through December 2008: Intended to cover cost and installation of the square prestressed concrete piling. Quantity computed as the total anticipated length of pile without allowances for cutoffs, splices or preforming. Related items 455-143 & 455-137, except for fender system piling, & piling for soldier pile walls

**Required**

- COMP 700-050-08: Piling Tabulation and Cont.
- Locate in the plans. Summarize quantities by location in the computation book.

**Recommended**

- No additional form required; use plans summary or comp book
- Record final quantity on the computation book form.

**Specifications**

- Section 455

**Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct.** 455-34- AA PRESTRESSED CONCRETE PILING LF

A =
1 (12" Sq.)
2 (14" Sq.)
3 (18" Sq.)
4 (20" Sq.)
5 (24" Sq.)
6 (30" Sq.)
7 (36" Sq.)
8 (Special)
## Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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</table>

### 455-35-AA PILING, STEEL

**Unit**: LF; M1  
**Accuracy**: Linear Foot; 1/10 Meter  
**Plan Quantity?**: no

#### Notes

Intended to cover cost and installation of the steel "H" or pipe piling. Quantity computed as the total anticipated length of pile without allowances for cutoffs, splices or preforming.

#### Details

Quantity computed as the total anticipated length of pile without allowances for cutoffs, splices or preforming.

#### Related Items

**Required**  
**Recommended**

#### Design Forms and Documentation

COMP 700-050-08: Piling Tabulation and Cont.  
Locate in the plans. Summarize quantities by location in the computation book.

#### Construction Forms and Documentation

No additional form required; use plans summary or comp book  
Record final quantity on the computation book form.

#### References

**PPM Chapter**  
**Trns-port**  
**Other** SDG 3.5  
**Specifications** Section 455  
**Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

### Struct. 455-35-AA PILING, STEEL LF

AA =  
1 (Hp 8 X 36)  
2 (Hp 10 X 36)  
3 (Hp 10 X 42)  
4 (Hp 12 X 53)  
5 (Hp 14 X 73)  
6 (Hp 14 X 89)  
7 (Hp 14 X 102)  
8 (Hp 14 X 117)  
9 (Special)
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0455 35 1</td>
<td>STEEL PILING, HP 8 X 36</td>
<td>LF</td>
<td>Detail</td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0455 35 3</td>
<td>STEEL PILING, HP 10 X 42</td>
<td>LF</td>
<td>Detail</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455 35 4</td>
<td>STEEL PILING, HP 12 X 53</td>
<td>LF</td>
<td>Detail</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455 35 5</td>
<td>STEEL PILING, HP 14 X 73</td>
<td>LF</td>
<td>Detail</td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>0455 35 6</td>
<td>STEEL PILING, HP 14 X 89</td>
<td>LF</td>
<td>Detail</td>
<td>1/1/2010</td>
<td></td>
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<tr>
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<td>STEEL PILING, HP 14 X 102</td>
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<tr>
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<td>STEEL PILING, HP 14 X 117</td>
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<td></td>
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<tr>
<td>0455 35 9</td>
<td>STEEL PILING, SPECIAL</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0455 35 20</td>
<td>STEEL PILING, 18&quot; DIA. PIPE</td>
<td>LF</td>
<td>Detail</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455 35 21</td>
<td>STEEL PILING, 20&quot; DIA. PIPE</td>
<td>LF</td>
<td>Detail</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455 35 22</td>
<td>STEEL PILING, 24&quot; DIA. PIPE</td>
<td>LF</td>
<td>Detail</td>
<td>1/1/2010</td>
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<tr>
<td>0455 35 23</td>
<td>STEEL PILING, 30&quot; DIA. PIPE</td>
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<td>Detail</td>
<td>1/1/2010</td>
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### 455-36- A CONCRETE CYLINDER PILES- FURNISHED & DRIVEN

<table>
<thead>
<tr>
<th>Unit</th>
<th>LF; M1</th>
<th>Accuracy</th>
<th>Linear Foot; 1/10 Meter</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

**Notes**

Intended to cover cost and installation of the concrete cylinder piling. Concrete cylinder piles may be precast pretensioned or spun cast post tensioned concrete. Quantity computed as the total anticipated length of pile without allowances for cutoffs, splices or preforming.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Trns-port

Other Standards

SDG’s 3.5

Index No. 20654, 20660.
Specifications Section 455
Plan Details and/or Technical Specifications required
Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Struct. 455-36- A CONCRETE CYLINDER PILES- FURNISHED & DRIVEN LF

A =
1 (54" Diameter)
2 (60" Diameter)

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>455-37- A FIBERGLASS STRUCTURALLY REINFORCED COMPOSITE PILES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit</td>
</tr>
<tr>
<td>Notes</td>
</tr>
<tr>
<td>Details</td>
</tr>
<tr>
<td>Related Items</td>
</tr>
<tr>
<td>Design Forms and Documentation</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
</tr>
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<td>References</td>
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<tr>
<td></td>
</tr>
<tr>
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</tr>
</tbody>
</table>

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Struct. 455-37- A FIBERGLASS STRUCTURALLY REINFORCED COMPOSITE PILES LF

A = Size
1 (13" Diameter) to be opened only with Structures Design Approval
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<tbody>
<tr>
<td>0455 76</td>
<td>WRAP PILE CLUSTERS</td>
<td>EA</td>
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<td>1/1/2010</td>
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The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>Accuracy</th>
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<tbody>
<tr>
<td>455-76-</td>
<td>WRAP PILE CLUSTERS</td>
<td>EA</td>
<td>Each</td>
<td>no</td>
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</table>

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<tr>
<td>455-81-</td>
<td>CATHODIC PROTECTION</td>
<td>EA</td>
<td>Each</td>
<td>no</td>
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</tbody>
</table>

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>Accuracy</th>
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</thead>
<tbody>
<tr>
<td>455-76-</td>
<td>WRAP PILE CLUSTERS</td>
<td>EA</td>
<td>Each</td>
<td>no</td>
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</table>

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
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<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>Accuracy</th>
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</tr>
</thead>
<tbody>
<tr>
<td>455-81-</td>
<td>CATHODIC PROTECTION</td>
<td>EA</td>
<td>Each</td>
<td>no</td>
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</table>

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>455-76-</td>
<td>WRAP PILE CLUSTERS</td>
<td>EA</td>
<td>Each</td>
<td>no</td>
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</table>

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>455-81-</td>
<td>CATHODIC PROTECTION</td>
<td>EA</td>
<td>Each</td>
<td>no</td>
</tr>
</tbody>
</table>
with quantity block. Contact State Materials Office, Corrosion Lab for assistance in use of this item.

Electrical Work paid under item 400-60-A.

DO NOT USE this item with 400-142 (Cathodic Protection for mass concrete or structural components) or 457 items (integral pile jackets).

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
<thead>
<tr>
<th>Required</th>
<th>400-60</th>
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<table>
<thead>
<tr>
<th>Recommended</th>
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</table>

**Design Forms and Documentation**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

<table>
<thead>
<tr>
<th>Construction Forms and Documentation</th>
</tr>
</thead>
</table>

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

**PPM Chapter**

**Trns-port**

**Other Standards**

**Specifications**

**T: Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**

07, 13

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct.** 455- 81-ABB CATHODIC PROTECTION EA

- A = Operation
- 1 (Furnish & Install)
- BB = Assembly Material
- 01 (Pile, Zinc Anode Assembly)
- 02 (Pier, Zinc Anode Assembly)
- 04 (Pile, Titanium Anode Assembly)
- 05 (Pier, Titanium Anode Assembly)
- 06 (Other) specified in the plans

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0455 81101</td>
<td>CATHODIC PROTECTION, F&amp;I, PILE, ZINC ANODE ASSEMBLY</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0455 81102</td>
<td>CATHODIC PROTECTION, F&amp;I, PIER, ZINC ANODE ASSEMBLY</td>
<td>EA</td>
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<tr>
<td>0455 81104</td>
<td>CATHODIC PROTECTION, F&amp;I, PILE, TITANIUM ANODE PROTECTION</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>
### 455-87- STEEL ANCHOR BAR

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA</td>
<td>Each</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**
- Intended for wall anchor tiebacks to connect wall to dead men, or anchor piles. Not for prestressed soil anchor applications. Show locations in plans w/ quantity block. Design for sacrificial thickness and coat with coal tar epoxy, if required.

**Related Items**
- Required
- Recommended

**Design Forms and Documentation**
- COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
- Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**
- No additional form required; use plans summary or comp book
- Record final quantity on the computation book form.

**References**
- PPM Chapter
- Trns-port
- Other Standards
- Specifications
- Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):**
- 0100 Structures

### 455-88- AA DRILLED SHAFT

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 1/10 Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**
- PAY ITEM VALID FOR BRIDGE STRUCTURES ONLY. Drilled Shaft foundations for High Mast Lighting, Overhead Signs, and Mast Arms are included in the price of the item being installed; no separate payment for these items.

- Intended to pay for the cost of concrete and steel, temporary casing, all labor, materials, equipment and incidentals necessary to complete the drilled shaft. Length is measured from top-of-shaft elevation to the design tip elevation shown in the plans. Pay Item 455-
122-XAA is required with this item. Pay Item 455-122 covers the cost of the shaft excavation. Clearly specify in plans CSL testing requirements as required. Cost of Shaft Inspection Device included in cost of drilled shaft, 455-88-XAA. CSL tubes included under 455-88-XAA. CSL testing paid for under Item 455-142.

### Related Items

| Required | 455-122 (2455-122) | Recommended | 455-142 when CSL testing is required |
---|---|---|---|

### Design Forms and Documentation

COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

**PPM Chapter**

**Trns-port**

**Other Standards**

SDG 3.6

**Specifications**

Section 455

**Prep & Doc Manual Chapter(s)**

6, 7, 13

### TRNS*PORT Category (DRAFT FIELD):

0100 Structures

**Struct.**

455-88-AA DRILLED SHAFT LF

AA = Diameter

1 (24" Diameter)

2 (30" Diameter)

3 (36" Diameter)

4 (42" Diameter)

5 (48" Diameter)

6 (60" Diameter)

7 (72" Diameter)

8 (54" Diameter)

9 (66" Diameter)

15 (84" Diameter)

19 (90" Diameter)

20 (108" Diameter)

21 (96" Diameter)

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0455 88 1</td>
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<tr>
<td>0455 88 2</td>
<td>DRILLED SHAFT, 30&quot; DIA</td>
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<td>LF</td>
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<td>1/1/2010</td>
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<tr>
<td>0455 88 6</td>
<td>DRILLED SHAFT, 60&quot; DIA</td>
<td>LF</td>
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<td>1/1/2010</td>
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</tr>
</tbody>
</table>
### 455-93- THERMAL INTEGRITY TESTING FOR DRILLED SHAFTS

**Notes**
- Monitor: Larry Jones, State Geotechnical Engineer
  - Contact the monitor prior to use. Project specific approval required; do not use without approval of the State Geotechnical Engineer. Specifications are under development by the monitor.

- Estimate the quantity based on the number of drilled shafts to be tested.

**Related Items**
- **Required**
- **Recommended**

**Design Forms and Documentation**
- COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
  - Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**
- No additional form required; use plans summary or comp book
  - Record final quantity on the computation book form.

**References**
- PPM Chapter
- Trns-port
- Other Standards
- Specifications
  - T: Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):**
- 100 or 200 Structures or Roadway

#### 455-93- THERMAL INTEGRITY TESTING FOR DRILLED SHAFTS

- **Unit** EA
- **Accuracy** Each
- **PlanQuantity?** no

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
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<td>LF</td>
<td>1/1/2010</td>
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<tr>
<td>8</td>
<td>DRILLED SHAFT, 54&quot; DIA</td>
<td>LF</td>
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<tr>
<td>9</td>
<td>DRILLED SHAFT, 66&quot; DIA</td>
<td>LF</td>
<td>1/1/2010</td>
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<td>1/1/2010</td>
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<td>LF</td>
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</tr>
</tbody>
</table>

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

---

**455-101- A LOAD TEST- OSTERBERG**

**Notes**
- Intended to load test drilled shafts using Osterberg Cells. Show location and test load of o-cells test shafts. Show number and depth of o-cells for each test shaft.

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):**
- 100 or 200 Structures or Roadway

---

*Details and Structure: Complete- Items 000 to 1999*
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**  455-129-XXA  
**Recommended**  455-131- and 455-132-required for test located on water.

**Design Forms and Documentation**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

**References**

PPM Chapter

Trns-port

Other Standards Specifications

Soils and Foundations Handbook 10.3.3

**T: Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**

TRNS^PORT Category (DRAFT FIELD):  0100  Structures

**Struct.  455-101- A LOAD TEST- OSTERBERG EA**

A =

1 (Less Than 5 Cells)

2 (5 Or More Cells)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0455101 1</td>
<td>TEST LOAD, OSTERBERG CELL, LESS THAN FIVE CELLS</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455101 2</td>
<td>TEST LOAD, OSTERBERG CELL, 5 OR MORE CELLS</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**455-103-ABB LOAD TEST- STATNAMIC**

**Notes**

Intended for Statnamic load testing of piles or drilled shafts. Show location and test load of test shafts or piles.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.
**Basis of Estimates**

**2012 Edition**

**January 22, 2013**

**Required** 455-129- A

**Recommended** 455-131- and 455-132- required for test located on water.

**Design Forms and Documentation**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

**References**

PPM Chapter

Trns-port

Other Standards Specifications

Soils and Foundations Handbook 10.3.1

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct. 455-103-ABB LOAD TEST- STATNAMIC EA**

A = Type

1 (Compression)

2 (Lateral)

BB = Test Capacity

01 (100 Tons)

02 (200 Tons)

03 (300 Tons)

04 (400 Tons)

05 (500 Tons)

06 (600 Tons)

07 (700 Tons)

08 (800 Tons)

09 (900 Tons)

10 (1000 Tons)

11 (1100 Tons)

12 (1200 Tons)

13 (1300 Tons)

14 (1400 Tons)

15 (1500 Tons)

16 (1600 Tons)

30 (3000 Tons)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

---

**Details and Structure:** Complete- Items 000 to 1999  
**Page 252 of 769**
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<td>0455103114</td>
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**455-107- AA  DRILLED SHAFT CASING**

<table>
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<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 1/10 Meter</td>
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</tbody>
</table>

**Notes**

Intended on drilled shaft projects when plans require permanent casing method be used. Permanent casing is typically not paid for separately for portions of shaft in waterway unless permanent casing method is required for shaft below the mud line. Show locations and depths in drilled shaft data table.

**Related Items**

Required 455-122- AA, 455-88- AA

Recommended

**Design Forms and Documentation**

COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Trns·port

Other SDG 3.6

Standards

Specifications Section 455

Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct.  455-107- AA  DRILLED SHAFT CASING  LF**

AA = Diameter

1 (24")
2 (30")
3 (36")
4 (42")
5 (48")
6 (60")
7 (72")
8 (54")
9 (66")
18 (84)
19 (90")
20 (108")
21 (96")

Details and Structure: Complete- Items 000 to 1999
Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<td>0455107 21</td>
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</tbody>
</table>

455-111- CORE/PILOT HOLE- DRILLED SHAFT EXCAVATION

Notes

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 1/10 Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

Details

Intended for payment of pilot holes or cores for drilled shaft projects to determine the quality of the material below the tip. Pilot holes are taken at shaft locations prior to shaft excavation. Cores are taken below the tip of an excavated shaft. Pilot holes or cores when deemed necessary, are typically taken 3 to 5 shaft diameters below the shaft's planned tip elevation. Use 3 shaft diameters unless otherwise noted in the plans. Show location in the plans. Clarify whether pilot holes or cores are to be taken. Base quantity on the anticipated pilot hole and/or core length needed. Include pay item note.

Establish quantities as follows: Cores: measured from the bottom of shaft elevation to the bottom of the core (3 to 5 shaft diameters below tip); Pilot holes: measured from the ground elevation to the bottom elevation of the pilot hole (3 to 5 shaft diameters below tip).

Related Items

- **Required**: 455- 88- AA, 455-122- AA
- **Recommended**: COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each

Design Forms and Documentation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Trns-port
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<td>CORE-PILOT HOLE, DRILLED SHAFT EXCAVATION</td>
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</tbody>
</table>

**455-112- A PILE- AUGER GROUTED**

**Notes**

Intended for payment of auger cast piles in tangent auger cast pile walls or secant auger cast pile walls only. Do not use with pay item 534-72-1AA or to pay separately for foundations for miscellaneous structures. Not for use to support bridge structures.

Foundations for walls, signs, lighting, and mast arms are included in the item being installed. No separate payment is made for foundations on these items. Refer to the specifications for additional information.

**Related Items**

**Design Forms and Documentation**

COMP 700-050-08: Piling Tabulation and Cont.

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter
Trns-port
Other Standards
Specifications Section 455
Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct. 455-112- A PILE- AUGER GROUTED LF**

A =
1 (16" Diameter)
2 (14" Diameter)
3 (24" Diameter)
4 (30" Diameter)
Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
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<tr>
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<tr>
<td>0455112 5</td>
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455-119-ABB LOAD TEST- STATIC

**Unit**: EA  **Accuracy**: Each  **PlanQuantity?**: no

**Notes**
Intended for static axial or lateral load testing of piles or drilled shafts. Not used for Osterberg-Cell or Statnamic tests. Show location and test load in plans.

**Related Items**
- Required: 455-129- A
- Recommended: 455-131- and 455-132- required for test located on water.

**Design Forms and Documentation**
COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**
No additional form required; use plans summary or comp book
Record final quantity on the computation book form.

**References**
- PPM Chapter
- Trans-port
- Other: Soils and Foundations Handbook 10.3.1, Normally requires SHOP DRAWINGS

**Standards**
- Specifications: Section 455

**Prep & Doc Manual Chapter(s)**: 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 0100 Structures

**Struct.** 455-119-ABB LOAD TEST- STATIC EA

A = Type Load
1 (Compression)
2 (Tension)
3 (Lateral)

BB = Amount Of Load
01 (0 - 50 Tons)
02 (51 - 100 Tons)
03 (101 - 600 Tons)
04 (601 -1200 Tons)
05 (1201-1800 Tons)

**Notes**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<tr>
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<tr>
<td>0455119301</td>
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</tbody>
</table>

**455-120- A PILE POINT PROTECTION**

**Unit**: EA  **Accuracy**: Each  **Plan Quantity?**: no

**Notes**

**Details**: Intended for steel “H” or pipe piling and steel sheet piling projects when borings show soils that may be difficult to penetrate. Show locations in plans w/ quantity block.

Other sizes/shapes available, with approval of State Structures Design Office.

**Related Items**

**Required**: 455-35, 455-133  **Recommended**

**Design Forms and Documentation**

COMP 700-050-08: Piling Tabulation and Cont.

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter
Trns-port
Other Standards
Specifications Section 455
Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct.** 455-120- A **PILE POINT PROTECTION**  **EA**

A =
1 (HP 14” X 89)
2 (20” Sq.)
3 (24” Sq.)
4 (HP 14” X 117)
5 (HP 14” X 73")
6 (20” round)
7 (24” round)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<td>0455120 5</td>
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<td>0455120 6</td>
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<td>1/1/2010</td>
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<tr>
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## 455-122- AA UNCLASSIFIED SHAFT EXCAVATION

<table>
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<th>Unit</th>
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<th>PlanQuantity?</th>
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<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 1/10 Meter</td>
<td>no</td>
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</table>

**Notes**

PAY ITEM VALID FOR BRIDGE STRUCTURES ONLY. Drilled Shaft foundations for High Mast Lighting, Overhead Signs, and Mast Arms are included in the price of the item being installed; no separate payment for these items.

Intended for the excavation of the drilled shafts. Pay Item 455-88-XAA is required with this item. Quantity is the depth of excavated hole from ground elevation to tip of shaft.

**Related Items**

- Required: 455-88-AA
- Recommended: UNCLASSIFIED SHAFT EXCAVATION

**Design Forms and Documentation**

COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each:

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book.

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Trns-port
- Other SDG 3.6
- Standards
- Specifications Section 455
- Prep & Doc Manual Chapter(s) 6, 7, 13

**TRANSPORT Category (DRAFT FIELD):** 0100 Structures

Struct. 455-122- AA UNCLASSIFIED SHAFT EXCAVATION LF

AA =

1 (24" Diameter.)
2 (30" Diameter.)
3 (36" Diameter.)
4 (42" Diameter.)
5 (48" Diameter.)
6 (60" Diameter.)
7 (72" Diameter.)
8 (54" Diameter.)
9 (66" Diameter.)
Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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455-129- A  INSTRUMENTATION AND DATA COLLECTION (STRUCTURES FOUNDATIONS)

<table>
<thead>
<tr>
<th>Unit</th>
<th>LS/LS</th>
<th>Accuracy</th>
<th>Lump Sum</th>
<th>PlanQuantity?</th>
<th>yes</th>
</tr>
</thead>
</table>

Notes

Details

Intended for use with all static, statnamic and Osterberg Cell load tests.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required 455-101, 455-103, or 455-119

Recommended

Design Forms and Documentation

COMP 700-050-05: Lump Sum Quantities

Use a quantity of 1, but calculations and computation book documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter

Trns-port

Other

Soils and Foundations Handbook 10.3

Standards

Specifications Section 455

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures
struct. 455-129- A Instrumentation and Data Collection (Structures Foundations)  LS/LS

A =

2 (Drilled Shaft Foundation)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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<tr>
<td>0455129</td>
<td>Instrumentation &amp; Data Collect, Drill Shaft Found</td>
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</tr>
</tbody>
</table>

455-133- AAA Sheet Piling

Unit  SF; M2  Accuracy  Square Foot; 1/10 Square Meter  PlanQuantity?  yes

Notes

Selected items are monitored by the State Geotechnical Engineer. Contact Larry Jones, State Geotechnical Engineer in the State Structures Design Office, prior to including the monitored items on any project.

Details

STEEL PERMANENT: Complete designs and details must be provided in the plans including the Steel sheeting section, begin and end stations, top and bottom pile elevations. Refer to Section 455 for current specifications.

STEEL TEMPORARY: This item should be utilized for temporary sheet pile installations that are installed at “critical locations.” Critical walls” are walls necessary to maintain the safety of the traveling public or structural integrity of nearby structures, roadways and utilities during construction. Refer to Section 455 for current specifications. For temporary critical walls requiring soil anchors, dead men etc., provide full details in plans (design of wale, soil anchor spacing and load, dead men anchor, number of proof test and creep test required, etc.).

COMPOSITE POLYURETHANE & GLASS FIBER: Low height sheet pile for shoreline protection. Polyurethane resin/glass fiber matrix pultruded material. Experimental use only. The use of this item must be approved by the State Geotechnical Engineer.

VINYL: The Interlocking Vinyl Sheet Piling Wall consists of Vinyl sheet piling manufactured from extruded, UV stabilized Polyvinyl Chloride (PVC). The use of this item must be approved by the State Geotechnical Engineer.

Complete design and details must be provided in the plans including the section modulus, begin and end stations, top and bottom pile elevations. See 455-12.6.2 for additional information.

********

TRANSPORT Category: When walls are used for construction of a structure and shown in the structures plans, load the item in the corresponding structures category. When walls are used for other applications (roadway or utilities), load the item in the corresponding category.

MEASUREMENT: The area to be paid for will be measured from top of pile elevation to bottom of pile elevation and longitudinally from beginning to end of wall, as shown in the plans.

PAYMENT: PLAN QUANTITY will be the basis of payment to the contractor. No separate payment will be made for the cost of the anchor system for anchored...
### 455-120

**SDG 3.5, Normally requires SHOP DRAWINGS**

- **AAA = Material & Operation**
  - for Concrete- use Item 455-14-
  - 2 (Steel, Temporary- Critical)
  - 3 (Steel, Furnish & Install Permanent)
  - 4 (Composite Polyurethane & glass fiber) *
  - 5 (Vinyl, Furnish & Install Permanent) *

*Must be approved by State Geotechnical Engineer for each project; Tech Specs required.

**Notes**

- Selected Items may require Plan Details and/or Technical Specifications
- Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

### 455-133-AAA SHEET PILING SF

**Struct.** 455-133-AAA SHEET PILING SF

**Notes**

- Selected Items may require Plan Details and/or Technical Specifications
- Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

### 455-142

**CROSSHOLE SONIC LOGGING / DRILLED SHAFT TESTING**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA</td>
<td>Each</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

- Intended for integrity testing of drilled shafts. CSL tubes are required to be placed in all drilled shafts, but only a portion of shafts will actually be tested. Determine number of shafts to be CSL tested; identify shafts in the plans.

- This pay item should NOT be included for miscellaneous structures with drilled shafts. If the Engineer suspects defects in any drilled shaft installation, additional CSL testing may be required. If the installation is found to be defective, no additional payment will be made for testing or required corrections. If the installation is found to meet specifications, then payment for CSL testing will be made as unforeseeable work.

### Related Items

- **Required** 455-88, 455-122-XAA
- **Recommended**

**Details**

- COMP 700-050-08: Piling Tabulation and Cont.
- Locate in the plans. Summarize quantities by location in the computation book.

- No additional form required; use plans summary or comp book
- Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

- PPM Chapter
- Trns-port
- Other Standards Specifications Section 455
- T: Selected Items may require Plan Details and/or Technical Specifications
- Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):**

100 or 200 Structures or Roadway
**COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation**

Locate in the plans. Summarize quantities by location in the computation book.

---

**Design Forms and Documentation**

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

---

**References**

PPM Chapter

Trns-port

Other Standards

Specifications Section 455

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct. 455-142-** CROSSHOLE SONIC LOGGING / DRILLED SHAFT TESTING EA

---

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0455142</td>
<td>CROSSHOLE SONIC LOGGING</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**455-143- AA TEST PILES- PRESTRESSED CONCRETE**

**Unit** LF; M1

**Accuracy** Linear Foot; 1/10 Meter

**Plan Quantity?** no

**Notes**

For Projects let January 2009 and later: Intended to cover cost and installation of the prestressed concrete test piling. Includes the payment for dynamic load test on test piles. The plan quantity (bid quantity, as listed in the Summary of Pay Items) is computed as the total anticipated length of pile, without allowances for cutoffs, splices, or preforming. Final quantities will be adjusted according to specification allowances.

For projects let through December 2008: Intended to cover cost and installation of the prestressed concrete test piling. PDA paid for separately under item 455-137. Intended to cover cost and installation of the prestressed concrete piling. Quantity computed as the total anticipated length of pile, without allowances for cutoffs, splices, or preforming.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

---

**Related Items**

**Required** 455-137, 455-34

**Recommended**

---

**Design Forms and Documentation**

COMP 700-050-08: Piling Tabulation and Cont.

Locate in the plans. Summarize quantities by location in the computation book.

---

Details and Structure: Complete- Items 000 to 1999

Page 262 of 769
No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Trans-port

Other Standards

Specifications Section 455

T: Selected Items may require Plan Details and/or Technical Specifications

Prep & Doc Manual Chapter(s) 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct.** 455-143- AA

**TEST PILES- PRESTRESSED CONCRETE**

<table>
<thead>
<tr>
<th>Item</th>
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<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
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<td>0455143 1</td>
<td>TEST PILES-PRESTRESSED CONCRETE, 12&quot; SQ</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455143 2</td>
<td>TEST PILES-PRESTRESSED CONCRETE, 14&quot; SQ</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455143 3</td>
<td>TEST PILES-PRESTRESSED CONCRETE, 18&quot; SQ</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455143 4</td>
<td>TEST PILES-PRESTRESSED CONCRETE, 20&quot; SQ</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455143 5</td>
<td>TEST PILES-PRESTRESSED CONCRETE, 24&quot; SQ</td>
<td>LF</td>
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<td>1/1/2010</td>
<td></td>
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<tr>
<td>0455143 6</td>
<td>TEST PILES-PRESTRESSED CONCRETE, 30&quot; SQ</td>
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<td>1/1/2010</td>
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<tr>
<td>0455143 7</td>
<td>TEST PILES-PRESTRESSED CONCRETE, 36&quot; SQ</td>
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<td></td>
<td>1/1/2010</td>
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</tbody>
</table>

**Notes**

* Special may require Tech Spec and/or Plan Detail

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

---

**455-144- AA** TEST PILES- STEEL

<table>
<thead>
<tr>
<th>Unit</th>
<th>LF; M1</th>
<th>Accuracy</th>
<th>Linear Foot; 1/10 Meter</th>
<th>PlanQuantity?</th>
</tr>
</thead>
</table>

**Details**

Intended to cover cost and installation of the steel test piling. PDA paid for separately under item 455-137.
Design quantity computed as the total anticipated length of test pile without allowances for cutoffs, splices or preforming. Show locations on Foundation Layout Sheet. Give test pile lengths in Pile Installation Table.

Construction/Final quantity for Test Piles is computed as follows:

\[(\text{Sum of test pile lengths}) + [(0.3) \times \text{Sum of required preformed pile hole depths for test piles}]\]

Do not add allowances for splices.

Include quantity for preformed holes only if preforming is known to be required and shown in the plans. Do not use as contingency.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>455-137, 455-34</th>
<th>Recommended</th>
</tr>
</thead>
</table>

### Design Forms and Documentation

- COMP 700-050-08: Piling Tabulation and Cont.
  - Locate in the plans. Summarize quantities by location in the computation book.

### Construction Forms and Documentation

- No additional form required; use plans summary or comp book
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

- **PPM Chapter**
  - Trnsp ort
  - Other
  - Standards
  - Specifications Section 455

- **Soils and Foundation Handbook**
  - 10.1, 10.2

- **T: Selected Items may require Plan Details and/or Technical Specifications**

- **Prep & Doc Manual Chapter(s)**
  - 7, 13

### Struct.

<table>
<thead>
<tr>
<th>455-144- AA</th>
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</thead>
</table>

**TEST PILES- STEEL**

<table>
<thead>
<tr>
<th>LF</th>
</tr>
</thead>
</table>

**AA =**

1. (Hp 8 X 36)
2. (Hp 10 X 36)
3. (Hp 10 X 42)
4. (Hp 12 X 53)
5. (Hp 14 X 73)
6. (Hp 14 X 89)
7. (Hp 14 X 102)
8. (Hp 14 X 117)
9. (Special)*
10. (18” Dia Pipe)
11. (20” Dia Pipe)
12. (24” Dia Pipe)
13. (30” Dia Pipe)

### Notes

- * Special may require Tech Spec and/or Plan Detail

---

**Details and Structure:** Complete- Items 000 to 1999

Page 264 of 769
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0455144 1</td>
<td>TEST PILES - STEEL, HP 8 x 36</td>
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<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455144 2</td>
<td>TEST PILES - STEEL, HP 10 x 36</td>
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<td>1/1/2010</td>
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</tr>
<tr>
<td>0455144 3</td>
<td>TEST PILES - STEEL, HP 10 x 42</td>
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<td></td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0455144 4</td>
<td>TEST PILES - STEEL, HP 12 x 53</td>
<td>LF</td>
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<td>1/1/2010</td>
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</tr>
<tr>
<td>0455144 5</td>
<td>TEST PILES, STEEL, HP 14 X 73</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0455144 6</td>
<td>TEST PILES - STEEL, HP 14 x 89</td>
<td>LF</td>
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<td>1/1/2010</td>
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</tr>
<tr>
<td>0455144 8</td>
<td>TEST PILES - STEEL, HP 14 x 117</td>
<td>LF</td>
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<td>1/1/2010</td>
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<tr>
<td>0455144 9</td>
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<tr>
<td>0455144 20</td>
<td>TEST PILES - STEEL, 18&quot; DIA PIPE</td>
<td>LF</td>
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<td>1/1/2010</td>
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<tr>
<td>0455144 21</td>
<td>TEST PILES - STEEL, 20&quot; DIA PIPE</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0455144 22</td>
<td>TEST PILES - STEEL, 24&quot; DIA PIPE</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>0455144 23</td>
<td>TEST PILES - STEEL, 30&quot; DIA PIPE</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

**455-146- EMBEDDED DATA COLLECTOR**

- **Unit**: EA
- **Accuracy**: Each
- **Plan Quantity?**: no

**Notes**
Refer to Structures Design Bulletin C10-02 (Dated 3-17-10) for additional information.

**Details**
Pay Item valid through 6-30-11. Refer to the specification for projects let after July 2011. Payment for EDC or PDA will be included in the piling, when required by plans or specs.

Estimate one EDC per square prestressed concrete test pile.
Each collector system will include gauges at the top and tip, as well as antenna and incidental equipment for installation in each pile, as shown in the standard.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
<td></td>
</tr>
</tbody>
</table>

**Design Forms and Documentation**
Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**
No additional form required; use plans summary or comp book
Record final quantity on the computation book form.

**References**
PMM Chapter
Trns-port
Other Standards
Index No. 20602
Specifications
Special Provision available

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct.** 455-146- EMBEDDED DATA COLLECTOR EA

**Notes**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 457- 1- AB  STANDARD INTEGRAL PILE JACKET

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 1/10 Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

Intended for rehabilitation projects to repair concrete pile damage or to protect sheet piles. Project details (plans or specs) must include jacket lengths. Grout material(s) should be specified in the plans or specifications. Epoxy Grout filler may be used ONLY with permission of the State Materials Office, Corrosion Lab. No separate payment for grout/filler material.

Estimate quantity based on measurement from the bottom of the form to the top of the form, per the specifications. Show locations in plans w/ quantity block. Contact State Materials Office, Corrosion Lab for assistance in use of this item.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

**Design Forms and Documentation**

- COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each
- Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Trans-port</th>
<th>Other Standards Specifications</th>
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<tr>
<td>T: Plan Details and/or Technical Specifications required</td>
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<tr>
<td>Prep &amp; Doc Manual Chapter(s)</td>
<td>6, 7, 13</td>
<td></td>
</tr>
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</table>

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct. 457- 1- AB  STANDARD INTEGRAL PILE JACKET LF**

A = Type
- 1 (non-structural)
- 2 (Structural)

B= Pile Size
- 1 (up to 16")
- 2 (16.1 to 30")

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0457  1 11</td>
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<td>1/1/2010</td>
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<tr>
<td>0457  1 12</td>
<td>STANDARD INTEGRAL PILE JACKET, NON-STRUCTURAL, 16.1 to 30.0&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0457  1 21</td>
<td>STANDARD INTEGRAL PILE JACKET, STRUCTURAL, UP TO 16&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0457  1 22</td>
<td>STANDARD INTEGRAL PILE JACKET, STRUCTURAL, 16.1 to 30.0&quot;</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
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</table>

**457- 2- AB  CATHODIC PROTECTION INTEGRAL PILE JACKET**

**Unit**: LF; M1  
**Accuracy**: Linear Foot; 1/10 Meter  
**PlanQuantity?**: no

**Notes**
Pay item valid through 12-31-2012; replaced by 457-2-ABC

**Details**
Intended for rehabilitation projects to repair concrete pile corrosion damage. Project details (plans or specs) must include jacket lengths, anode type and configuration, as well as connection methods and materials for cathodic protection. Grout material(s) should be specified in the plans or specifications. No separate payment for grout/filler material.

Estimate quantity based on measurement from the bottom of the form to the top of the form, per the specifications. Show locations in plans w/ quantity block. Contact State Materials Office, Corrosion Lab for assistance in use of this item.

Electrical Work will be paid under 400-60, when required for impressed current jackets. For galvanic jackets, include a note in the plans or specifications indicating that electrical work is incidental to the cost of the integral Cathodic protection pile jacket.

See items 400-142 (structure) and 455-81 (pier or pile) for other Cathodic Protection work.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**: 400-60-  
**Recommended**: 

**Design Forms and Documentation**
COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**
No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
PPM Chapter  
Trns-port  
Other Standards  
Specifications
Normally requires SHOP DRAWINGS

**T**: Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**: 6, 7, 13

Details and Structure: Complete- Items 000 to 1999
### CATHODIC PROTECTION INTEGRAL PILE JACKET

**Unit**: LF; M1  
**Accuracy**: Linear Foot; 1/10 Meter  
**Plan Quantity?**: no

**Notes**
- **Pay item effective 1-1-2013; replaces by 457-2-AB**

**Details**
Intended for rehabilitation projects to repair concrete pile corrosion damage. Project details (plans or specs) must include jacket lengths, anode type and configuration, as well as connection methods and materials for cathodic protection. Grout material(s) should be specified in the plans or specifications. No separate payment for grout/filler material.

Estimate quantity based on measurement from the bottom of the form to the top of the form, per the specifications. Show locations in plans w/ quantity block. Contact State Materials Office, Corrosion Lab for assistance in use of this item.

Electrical Work will be paid under 400-60, when required for impressed current jackets. For galvanic jackets, include a note in the plans or specifications indicating that electrical work is incidental to the cost of the integral Cathodic protection pile jacket.

See items 400-142 (structure) and 455-81 (pier or pile) for other Cathodic Protection work.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**
- **Required**: 400-60-  
- **Recommended**: 

**Design Forms and Documentation**
- COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each
- Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**
- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- PPM Chapter
- Trns-port
- Other Standards
- Normally requires SHOP DRAWINGS

---

**Notes**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

---

**Struct. 457-2-AB CATHODIC PROTECTION INTEGRAL PILE JACKET LF**

- A = Type  
  1 (non-structural)  
  2 (Structural)  
- B= Pile Size  
  1 (up to 16")  
  2 (16.1 to 30")

---
T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s): 6, 7, 13

TRNS**PORT Category (DRAFT FIELD): 0100 Structures

Struct.  457- 2-ABC CATHODIC PROTECTION INTEGRAL PILE JACKET LF

A = Type
1 (non-structural)
2 (Structural)

B = Pile Size
1 (up to 16")
2 (16.1 to 30")

C = Mode
1 (Galvanic System)
2 (Impressed Current System)
3 (Contractors Option)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<td>LF</td>
<td>T</td>
<td>1/1/2013</td>
<td></td>
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<tr>
<td>0457 2121</td>
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<td>1/1/2013</td>
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<tr>
<td>0457 2122</td>
<td>CATHODIC PROTECTION INTEGRAL PILE JACKET, NON-STRUCTURAL, 16.1-30.&quot;, IMPRESSED CURRENT</td>
<td>LF</td>
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<td>1/1/2013</td>
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<tr>
<td>0457 2132</td>
<td>CATHODIC PROTECTION INTEGRAL PILE JACKET, NON-STRUCTURAL, 30.1&quot; AND LARGER, IMPRESSED CURRENT SYSTEM</td>
<td>LF</td>
<td>T</td>
<td>1/1/2013</td>
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<tr>
<td>0457 2211</td>
<td>CATHODIC PROTECTION INTEGRAL PILE JACKET, STRUCTURAL, UP TO 16&quot;, GALVANIC SYSTEM</td>
<td>LF</td>
<td>T</td>
<td>1/1/2013</td>
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<tr>
<td>0457 2221</td>
<td>CATHODIC PROTECTION INTEGRAL PILE JACKET, STRUCTURAL, 16.1-30.&quot;, GALVANIC SYSTEM</td>
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<tr>
<td>0457 2222</td>
<td>CATHODIC PROTECTION INTEGRAL PILE JACKET, STRUCTURAL, 16.1-30.&quot;, IMPRESSED CURRENT</td>
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</tr>
</tbody>
</table>

458- 1- AB BRIDGE DECK EXPANSION JOINT

Unit LF; M1 Accuracy Linear Foot; 1/10 Meter PlanQuantity? yes

Notes

Details

Refer to Design Standards and Specifications for selection and use of these joints.
Poured joints- Type A, B, or C silicone is included in the cost of the concrete item; no separate payment.
Poured Joints with Backer Rod- Type D silicone is paid under this item.
Strip Seal Joint System- Elastomeric material, as indicated in specs & standards, is paid under this item.
Drill & Epoxy Armor Angle- Work and Materials are included under this item. Intended for Rehabilitation projects only. Coordinate with the District Bridge Maintenance Engineer, prior to use.

Per specification section 458, payment includes all work and materials, not limited to preparing the surface, temporary supports, and any sidewalk cover plates required.

Note: Tech Specs are required for selected types of joints/materials, as shown in the pay item structure. Include surface preparation and related sealant material requirements, as well as Measurement and Payment information.

For Bridge Approach Expansion Joints near bridge approach slabs, refer to 370 items. For Concrete Joint repairs in Structures, refer to 400 items.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
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<tr>
<th>Construction Forms and Documentation</th>
<th>No additional form required; use plans summary or comp book</th>
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</thead>
</table>

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

### References

PPM Chapter
Trns-port
Other Standards Index No. 21100, 21110
Specifications Section 458

### Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Struct. **458- 1- AB** BRIDGE DECK EXPANSION JOINT LF

A= Operation
1 (New Construction- F&I)
2 (Rehabilitation- Clean, Seal, Replace)

B= Type
1 (Poured Joint with Backer Rod) Type D silicone
2 (Strip Seal Joint System)
3 (Modular) Note: Tech Spec Required, including material and installation specs
4 (Finger Joint) Note: Tech Spec Required, including material and installation specs
5 (Compression Elastomeric) Note: For Rehab only. Tech Spec Required, including material and installation specs
6 (Other) Note: For Rehab only. Tech Spec Required, including material and installation specs
7 (Drill & Epoxy Armor Angle) For Rehab only. Tech Spec Required, including material and installation specs
Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0458 1 11</td>
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<tr>
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<td>0458 1 27</td>
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<td>T</td>
<td>7/1/2012</td>
<td></td>
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</tbody>
</table>

458-2 POLYMER NOSING FOR BRIDGE EXPANSION JOINT

| Unit   | CF; M3 | Accuracy          | 1/10 Cubic Foot; 1/100 Cubic Meter | PlanQuantity? | no |

Notes

Details

Intended for use on bridge repair/rehabilitation projects only. Includes the materials and installation of the nosing near the bridge expansion joints.

Note: This item is to be used with pay item 458-1-.

Complete material and installation requirements must be included in the contract documents.

Related Items

Required

Recommended

Design Forms and Documentation

COMP 700-050-04: Volume Measure Items and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

Details and Structure: Complete- Items 000 to 1999
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<td></td>
<td>7/1/2012</td>
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</tr>
</tbody>
</table>

459- 71- PILES, POLYETHYLENE SHEETING

Unit: SY; M2
Accuracy: Square Yard; Square Meter
PlanQuantity?: no

Details
Intended on piling or drilled shaft projects to wrap portion of end bent pile or shaft within the fill height to reduce down-drag. Add note on Foundation Layout Sheet. Pay quantity is the pile area wrapped, NOT the quantity of material applied. For each pile, record the perimeter and the height to be wrapped. Payment includes 2 layers, lubricant, and overlap, as required by specification. Bitumen Coating paid separately.

Related Items

Design Forms and Documentation
COMP 700-050-08: Piling Tabulation and Cont.
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation
No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Struct. 459- 71- PILES, POLYETHYLENE SHEETING SY
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
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<tr>
<td>0459 71</td>
<td>PILES, POLYETHYLENE SHEETING</td>
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<td>1/1/2010</td>
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</tbody>
</table>

### 460- 1- AA STRUCTURAL STEEL- REHAB

**Unit**  
LB; KG

**Accuracy**  
Pound; Kilogram

**PlanQuantity?**  
yes

#### Notes

Do not use for new steel structures. Includes the work and materials to replace structural steel elements. This item will be used on all rehabilitation work only. Show steel quantities in quantity blocks on plans. Refer to Section 560/561 for coating and painting structural steel.

#### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
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</table>

#### Design Forms and Documentation

COMP 700-050-07: Concrete & Reinforcing Steel Comp & Cont.

Locate in the plans. Summarize quantities by location in the computation book.

#### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

#### References

PPM Chapter

Trns-port

Other Standards

Normally requires SHOP DRAWINGS

Specifications Section 460

Prep & Doc Manual Chapter(s)  
7, 13

#### TRNS*PORT Category (DRAFT FIELD):

0100 Structures

**Struct.**  
460- 1- AA STRUCTURAL STEEL- REHAB

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#### Notes

Details and Structure: Complete- Items 000 to 1999
### Details and Structure: Complete- Items 000 to 1999

#### Topic No. 600-000-002

**Basis of Estimates**

**2012 Edition**

January 22, 2013

<table>
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<td>STRUCT STEEL, REHAB, LOW ALLOY</td>
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<td>0460</td>
<td>STRUCT STEEL - REHABILITATION, SHOE ASSEMBLIES</td>
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<tr>
<td>0460</td>
<td>STRUCT STEEL - REHABILITATION, BASCULE LEAVES</td>
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<td>1/1/2010</td>
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<tr>
<td>0460</td>
<td>STRUCTURAL STEEL REHAB-SCREWS,BOLTS &amp; WASHER ASSEMBLIES</td>
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<tr>
<td>0460</td>
<td>STRUCTURAL STEEL REHAB- BOLTS, NUTS, WASHERS &amp; PLATES</td>
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**460- 2- AA  STRUCTURAL STEEL- NEW/WIDENING**

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<td></td>
<td></td>
<td></td>
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**Notes**

**Details**

Intended for new construction of steel structures and bridge widening. When painting is specified, cost of painting is incidental to this item.

WEATHERING item used when uncoated weathering steel is specified.

CARBON item used for Grades 36 and higher including weathering steel when painted.

LOW ALLOY item used for Grade 50 steel.

BASCULE LEAVES item used for all grades of steel in bascule leaf except steel used for decking, and steel counterweight blocks. When flanking span remains within the limits of bascule pier, pay under BASCULE PIERS. If not, include under CARBON or LOW ALLOY. Cost of F-shaped or vertical shape steel traffic railing barrier located on bascule leaf included in steel quantity under BASCULE PIERS. Leaf Centering Device Assembly included in steel quantity under BASCULE LEAVES.

BASCULE PIERS item used for all grades of steel in bascule pier except for steel for decking. Cost of F-shaped or vertical shape steel traffic railing barrier located within limits of bascule pier included in steel quantity under BASCULE PIERS.

Calculate weight of steel for estimating purposes only. Due not tabulate steel quantities in the plans. On steel box girder projects add note to include cost of all access hatches, and screen doors in cost of structural steel.

**Related Items**

- **Required**
- **Recommended**

**Design Forms and Documentation**

- COMP 700-050-07: Concrete & Reinforcing Steel Comp & Cont.
- Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.
### References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Prep &amp; Doc Manual Chapter(s)</th>
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<tr>
<td>Trns-port</td>
<td>7, 13</td>
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<td>Specifications</td>
<td>Section 460</td>
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**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

### Struct.

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<td>LS/LB</td>
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</table>

\[ AA = \\
1 (Carbon) \\
2 (Low Alloy) \\
3 (Shoe Assemblies) \\
5 (Bascule Leaves) \\
6 (Bascule Piers) \\
15 (Miscellaneous) \\
18 (Carbon, Truss) \\
19 (Low Alloy, Truss) \\
20 (Weathering) \]

### Notes

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
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<th>Item</th>
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### 460- 5-

**PREFABRICATED ALUMINUM PEDESTRIAN BRIDGE**

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<tr>
<td>SF; M2</td>
<td>Square Foot; 1/10 Square Meter</td>
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</table>

### Notes

*Intended for small pedestrian bridges, including sidewalk crossing over small ditches and rails to trails projects. Substructure/abutments should be paid separately from aluminum superstructure.*

*Tech Spec/Plan Details: Coordinate plan details with Section 460 requirements for miscellaneous metals. For measurement/payment, note plan quantity in contract documents.*

### Related Items

**Required**

**Recommended**

### Design Forms and Documentation

Details and Structure: Complete- Items 000 to 1999
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
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**Notes**

**Effective July 2012, note changes to pay item structure.**

*Intended for both steel and aluminum ladders and platforms when necessary for personnel/maintenance access. Clearly define location with quantity block in plans.*

*Through June 2012, measurement and payment will be made as noted in the contract documents.*

*Effective July 2012:*

**NEW Construction:** all components detailed in the contract documents will be paid at the LS unit price.

**REHAB Construction:** components will be paid per pound, as detailed in the plans.

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

COMP 700-050-07: Concrete & Reinforcing Steel Comp & Cont.

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter

Trns-port
Struct. 460-6- A LADDERS & PLATFORMS Mixed

A= Work Type, units
blank = new or rehab, LB, valid through June 2012

1 (New) LS, effective July 2012
2 (Rehab) LB, effective July 2012

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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460-7- PREFABRICATED STEEL TRUSS PEDESTRIAN BRIDGE

Unit SF; M2 Accuracy Square Foot; 1/10 Square Meter PlanQuantity? yes

Notes New Item Effective January 1, 2012.

Details PENDING ITEM- Details under review.

This pay item applies only to the spans on a pedestrian bridge that are comprised of prefabricated steel trusses. The term steel truss bridge, as applied to this pay item, refers only to stand-alone steel truss structures or to the steel truss spans of a hybrid bridge structure.

Prefabricated Steel Truss Pedestrian Bridge Spans are intended for simply supported pedestrian bridge spans meeting the following criteria:
1. the steel truss span lies within a tangent horizontal alignment,
2. the maximum length of the steel truss span does not exceed 200 feet,
3. the width of the steel truss span is constant
4. the steel truss span supports have a skew angle not to exceed 20 degrees.

Recommended pay item note for the plans: Prefabricated steel truss pedestrian bridge shall be paid for at the contract unit price per square foot of deck area under pay item no. 460-7-. This pay item includes furnishing and installing the prefabricated steel truss pedestrian bridge superstructure, including steel trusses, flow system, deck, bearing assemblies, deck joints, and bridge railing/fencing.

Related Items

Required

Recommended

Design Forms and Documentation

Details and Structure: Complete- Items 000 to 1999
### 460-9- A ACCESS HATCH ASSEMBLY

<table>
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<th>Unit</th>
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<th>PlanQuantity?</th>
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</table>

**Notes**

Prior to July 2011, payment for Access Hatch is included in structural steel item(s). Effective July 2011, separate payment for access hatch assembly is included in this item.

Refer to Index 21250 or 21251 and Instructions for Design Standards.

A=1 or 2: Includes all materials and incidentals shown on design standard for an Inspection Access Hatch Assembly.

A=3: Equipment Access Hatch Assembly is intended for a larger hatch used to bring equipment into a box girder section. Complete details must be included in the bridge plans.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
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</tr>
</tbody>
</table>

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

**References**

PPM Chapter
Trns-port
Other Standards Index 21250 (Steel Box Girder) or 21251 (Concrete Box Girder) Specifications Section 460
### Struct. 460- 9- A ACCESS HATCH ASSEMBLY EA

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0460 9 1</td>
<td>ACCESS HATCH, CONCRETE BOX SECTION</td>
<td>EA</td>
<td>1/1/2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0460 9 2</td>
<td>ACCESS HATCH, STEEL BOX SECTION</td>
<td>EA</td>
<td>1/1/2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0460 9 3</td>
<td>ACCESS HATCH, EQUIPMENT</td>
<td>EA</td>
<td>1/1/2012</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 460- 13- A STRUCTURAL STEEL REHAB- SANDWICH PLATE SYSTEM

**Unit** SY; M2  
**Accuracy** Square Yard; Square Meter  
**PlanQuantity?** yes

**Notes**  
*Experimental Item. Requires State Structures Design Office Approval / FHWA*

**Details**

Must be coordinated with State Structures Design Office.  
Consists of Furnishing and Installing Sandwich Plate System, including wearing surface, bridge deck, and supporting stringer.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>
| **Design Forms and Documentation** | COMP 700-050-01: Area Computation and Continuation  
Locate in the plans. Summarize quantities by location in the computation book. |
| **Construction Forms and Documentation** | No additional form required; use plans summary or comp book  
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances. |

**References**

PPM Chapter  
Trns-port  
Other Standards  
Specifications Section 460  
*T: Plan Details and/or Technical Specifications required*  
Prep & Doc Manual Chapter(s)
SYSTEM

A=
1 (Deck and Stringer)
2 (Deck)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<p>| | | | | |</p>
<table>
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<tr>
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<tbody>
<tr>
<td>460-15-</td>
<td>STAINLESS STEEL VERMIN GUARD- For Maintenance or Rehab work only</td>
<td>Unit</td>
<td>EA</td>
<td>Accuracy</td>
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</tbody>
</table>

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0460 15</td>
<td>STAINLESS STEEL VERMIN GUARD- FOR MAINTENANCE OR REHAB PROJECTS ONLY</td>
<td>EA</td>
<td>T</td>
<td>1/1/2012</td>
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</table>

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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</thead>
<tbody>
<tr>
<td>460-70- A</td>
<td>ALUMINUM BULLET RAILINGS</td>
<td>Unit</td>
<td>LF; M1</td>
<td>Accuracy</td>
</tr>
</tbody>
</table>
and 515-2-xxa.

**Related Items**

**Required** 521-6- A when Index 820 Pedestrian Bicycle railing is used

**Recommended**

**Design Forms and Documentation**

COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter
Trns-port

**Other Standards**

Index No. 423, 820, 821, 822

**Specifications**

Section 460

**Prep & Doc Manual Chapter(s)**

6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):**

100 or 200 Structures or Roadway

**Struct. 460-70- A**

ALUMINUM BULLET RAILINGS LF

\[ A = \]

1 (Single Rail) Index 821, 822
2 (Double Rail) Index 821, 822
3 (Triple Rail) Index 822

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0460 70 1</td>
<td>ALUMINUM BULLET RAILINGS, SINGLE RAIL</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0460 70 2</td>
<td>ALUMINUM BULLET RAILINGS, DOUBLE RAIL</td>
<td>LF</td>
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<td>1/1/2010</td>
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<tr>
<td>0460 70 3</td>
<td>ALUMINUM BULLET RAILINGS, TRIPLE RAIL</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**460-71- A**

METAL TRAFFIC RAILING

**Unit** LF; M1
**Accuracy** Linear Foot; 1/10 Meter
**PlanQuantity?** yes

**Notes**

Consists of furnishing and installing metal traffic barriers, for new construction or barrier retrofit.

Thrie Beam Retrofit: Use in accordance with the Instructions for Design Standards, Index No. 470.

Thrie Beam Panel Retrofit, Concrete Handrail: Refer to pay item 460-72-A.

**Related Items**

**Required**

**Recommended**

---

**Details and Structure:** Complete- Items 000 to 1999
**Structure 460-71- A**

**METAL TRAFFIC RAILING**

**Unit:** LF; M1  
**Accuracy:** Linear Foot; 1/10 Meter  
**Plan Quantity:** yes

**Notes:**

New item effective with Developmental Design Standard D00477, July 2012 lettings and later.  
Refer to Developmental Design Standards Policy for additional instructions.

**Details:**

Consists of furnishing and installing thrie beam panels along a concrete handrail, in accordance with Index 477.  
For other applications, refer to the Index 470 series, along with the Instructions for Design Standards.

Limits of Payment: This pay item is limited to the "end to end” measurement on the bridge.  
For roadway transition and additional guardrail lengths, refer to Section 536 Guardrail or Section 538 Resetting Guardrail pay items. Remember- roadway transition panels are included in the "end to end" roadway guardrail length.

**Related Items**

**Required**

**Recommended**

---

**Design Forms and Documentation**

COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

---

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

---

**References**

**PPM Chapter**

Trns-port

Other  
SDG 6.7

**Standards**

Index No. 470 series: 470, 471, 472, 473, 474, 475, and 476

**Specifications**

Section 460

**Prep & Doc Manual Chapter(s)**

6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):**

100 or 200  
Structures or Roadway

---

**Item Description**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0460 71 1</td>
<td>METAL TRAFFIC RAILING,THRIE BEAM RETROFIT</td>
<td>LF</td>
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<td>1/1/2010</td>
<td></td>
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<tr>
<td>0460 71 2</td>
<td>METAL TRAFFIC RAILING,STEEL POST AND RAIL</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
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</table>

---

**Details and Structure:** Complete- Items 000 to 1999
COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

PPM Chapter
Trns-port

Other
Specifications Section 460

No additional form required; use plans summary or comp book

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

TRNS*PORT Category (DRAFT FIELD):

Struct. 460- 72- A THRIE BEAM PANEL RETROFIT LF

A= Application
1 (Concrete Handrail) Index 477

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0460 72 1</td>
<td>THRIE BEAM PANEL RETROFIT, CONCRETE HAN&lt;ref&gt;DRAIL&lt;/ref&gt;</td>
<td>LF</td>
<td></td>
<td>7/1/2012</td>
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</tbody>
</table>

460- 81- A RIVET / HIGH STRENGTH BOLT REPLACEMENT

Unit EA Accuracy Each PlanQuantity? no

For Rehabilitation projects only.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Required Recommended

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.
Standards
Specifications

Section 460

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

<table>
<thead>
<tr>
<th>TRNS*PORT Category (DRAFT FIELD):</th>
<th>100 or 200</th>
<th>Structures or Roadway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Struct. 460- 81- A</td>
<td>RIVET / HIGH STRENGTH BOLT REPLACEMENT EA</td>
<td></td>
</tr>
</tbody>
</table>

A =
Blank (Standard)
1 (Special)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0460 81</td>
<td>RIVETS - HIGH STRENGTH BOLTS, REPLACEMENT</td>
<td>EA T</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

460- 95-

STRUCTURAL STEEL REPAIR

Details

Intended on rehabilitation projects for in-place heat straightening. Quantity based on weight of steel components to be repaired. Show locations in the plans w/ pay item note to address all work items required.

Required 460- 1-XAA

Recommended

Design Forms and Documentation

COMP 700-050-07: Concrete & Reinforcing Steel Comp & Cont.
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter
Trns-port
Other Standards
Specifications Section 460

Prep & Doc Manual Chapter(s) 7, 13

<table>
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<tr>
<th>TRNS*PORT Category (DRAFT FIELD):</th>
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<th>Structures</th>
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<tbody>
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<td>Struct. 460- 95-</td>
<td>STRUCTURAL STEEL REPAIR LB</td>
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The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Unit</th>
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<th>Valid Date</th>
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<tbody>
<tr>
<td>0460 95</td>
<td>STRUCTURAL STEEL REPAIR</td>
<td>LB</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 460-98- A PIPE HANGER

**Unit**: EA  
**Accuracy**: Each  
**PlanQuantity?**: No

**Notes**

to be used ONLY for non-drainage system applications such as structure utility attachments. When deck inserts are required for utility attachments by others, do not include this item. Deck inserts are included in the cost of the superstructure concrete. Show location spacing w/ quantity block in plans.

Note: Pipe hangers for bridge drainage system paid for under 506-2.

**Related Items**

- **Required**:  
- **Recommended**:  

**Design Forms and Documentation**

- COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
- Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the computation book form.

**References**

- PPM Chapter
- Trns-port
- Other
- Standards
- Specifications Section 460
- Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 0100  
**Struct.** 460-98- A PIPE HANGER  
**Unit**: EA

A =  
1 (Carbon)  
2 (Stainless)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0460 98 1</td>
<td>PIPE HANGER, CARBON</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0460 98 2</td>
<td>PIPE HANGER, STAINLESS</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
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</tbody>
</table>

### 460-112- ANCHOR BOLT REPLACEMENT

**Unit**: EA  
**Accuracy**: Each  
**PlanQuantity?**: No

**Notes**

Details and Structure: Complete- Items 000 to 1999
For rehabilitation jobs only. Show location with quantity block in plans.

For rehabilitation jobs only. Show location with quantity block in plans.

Required

Recommended

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

PPM Chapter

Trns·port

Other

Specifications Section 460

Prep & Doc Manual Chapter(s) 7, 13

Struct. 460-112- ANCHOR BOLT REPLACEMENT EA

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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<td>0460112</td>
<td>ANCHOR BOLT REPLACEMENT</td>
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<td>1/1/2010</td>
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</tbody>
</table>

460-Maint STRUCTURES JOINT SEAL

Maintenance Contracts Only

Unit Mixed

Accuracy Refer to item structure and details

PlanQuantity? ?

Maintenance Item: Not Valid for Construction Contracts

Additional BOE details pending

PPM Chapter

Trns·port

Other

Specifications

Prep & Doc Manual Chapter(s) 7, 13

Details and Structure: Complete- Items 000 to 1999
Specifications

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):

Struct. 460-Maint STRUCTURES JOINT SEAL Maintenance Contracts Only

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>E460 19 1</td>
<td>ARMOR ANGLE (REMOVE)</td>
<td>LF</td>
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<td>1/1/2010</td>
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<tr>
<td>E460 20 1</td>
<td>POLYMER JOINT REPLACEMENT</td>
<td>CF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>E460 20 2</td>
<td>POLYMER CONCRETE HEADER REPAIR</td>
<td>CF</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>E460 20 3</td>
<td>MODIFIED POLYMER CONCRETE REPAIR (PAVEMENT OR DECK)</td>
<td>LB</td>
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<td>1/1/2010</td>
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<tr>
<td>E460 20 11</td>
<td>ELASTOMERIC STRUCT JOINT SEAL REPLACE (&lt; 1.5&quot;)</td>
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<td>1/1/2010</td>
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<tr>
<td>E460 20 12</td>
<td>ELASTOMERIC STRUCT JOINT SEAL REPLACE (1.5&quot;-2.5&quot;)</td>
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<tr>
<td>E460 20 13</td>
<td>ELASTOMERIC STRUCT JOINT SEAL REPLACE (&gt; 2.5&quot;)</td>
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<tr>
<td>E460 20 14</td>
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<tr>
<td>E460 82</td>
<td>BOLT TIGHTENING</td>
<td>EA</td>
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<td>1/1/2010</td>
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</tbody>
</table>

461-113- AB MULTI ROTATIONAL BEARING ASSEMBLY- FIXED

Notes

Details

Intended furnish and installing pot, disc or cylindrical bearing assemblies. Include location w/ quantity block in plans.

Related Items

Required

Recommended

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

References

PPM Chapter

Trns-port

Other

SDG 6.5, Normally requires SHOP DRAWINGS

Standards

Specifications Section 461

Prep & Doc Manual Chapter(s) 7, 13

Details and Structure: Complete- Items 000 to 1999
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
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<td>0461113 12</td>
<td>MULTIROTATIONAL BEARING ASSEMBLY, F&amp;I, 251-500 KIPS</td>
<td>EA</td>
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<td>1/1/2010</td>
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<tr>
<td>0461113 13</td>
<td>MULTIROTATIONAL BEARING ASSEMBLY, F&amp;I, 501-750 KIPS</td>
<td>EA</td>
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<td>1/1/2010</td>
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<td>MULTIROTATIONAL BEARING ASSEMBLY, F&amp;I, 751-1000 KIPS</td>
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<td>1/1/2010</td>
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<td>1/1/2010</td>
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<tr>
<td>0461113 16</td>
<td>MULTIROTATIONAL BEARING ASSEMBLY, F&amp;I, 1251-1500 KIPS</td>
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<td>0461113 17</td>
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<td>0461113 19</td>
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<td>1/1/2010</td>
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</tr>
</tbody>
</table>

### 461-114- AB MULTI ROTATIONAL BEARING ASSEMBLY- EXPANSION

#### Notes

Intended furnish and installing pot, disc or cylindrical bearing assemblies. Include location w/ quantity block in plans.

#### Related Items

**Required**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

**Recommended**

Locate in the plans. Summarize quantities by location in the computation book.

#### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.
Standards Section 461

SDG 6.5, Normally requires SHOP DRAWINGS

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Struct. 461-114- AB MULTI ROTATIONAL BEARING ASSEMBLY-EXPANSION EA

A = Operation
1 (Furnish & Install)
B =
1 (1 - 250 Kips)
2 (251 - 500 Kips)
3 (501 - 750 Kips)
4 (751 - 1000 Kips)
5 (1001 - 1250 Kips)
6 (1251 - 1500 Kips)
7 (1501 - 1750 Kips)
8 (1751 - 2000 Kips)
9 (≥2001 Kips)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tr>
<td>0461114 11</td>
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<td>0461114 12</td>
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462-2-AA POST TENSIONING TENDONS

Unit LB; KG Accuracy Pound; Kilogram PlanQuantity? yes

Notes

Details and Structure: Complete- Items 000 to 1999
Refer to the Method of Measurement text within Section 462 of the specifications for weight per unit length quantity determinations (table). Post-tensioning tendons will be paid for at the Contract unit price per pound of steel tendon, completed and accepted.

Payment includes stressing and grouting tendons, anchorage assemblies, testing, and lubricants, as described in the specifications.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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</thead>
<tbody>
<tr>
<td>COMP 700-050-07: Concrete &amp; Reinforcing Steel Comp &amp; Cont.</td>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
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</table>

### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

### References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Trns-port</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normally requires SHOP DRAWINGS</td>
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</table>

### Specifications

Section 462

### Prep & Doc Manual Chapter(s)

7, 13

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**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

### Struct. 462- 2- AA POST TENSIONING TENDONS LB

| AA = |
| 11 (Superstructure Strand) |
| 12 (Superstructure Bar) |
| 13 (Substructure Strand) |
| 14 (Substructure Bar) |

---

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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### 462- 3- ADDITIONAL POST-TENSIONING IN SEGMENTAL BOX SPAN

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<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
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</table>

### Notes

Intended for rehabilitation projects intended to strengthen span with the installation of...
additional post-tensioning. Show location in plans. Include a schedule of post tensioning tendons w/ quantity block in plans. Include a pay item notes as necessary to cover the work activity.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
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</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
<td>Record final quantity on the computation book form.</td>
</tr>
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</table>

References

<table>
<thead>
<tr>
<th>PPMD Chapter</th>
<th>Other Standards</th>
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<tbody>
<tr>
<td>SDG 4.5</td>
<td>Index 21801, 21802, and 21803</td>
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</table>

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Struct. 462-3 ADDITIONAL POST-TENSIONING IN SEGMENTAL BOX EA SPAN

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

| 462-20- A POST TENSIONING REPAIR | Unit EA; LF; CF | Accuracy Each; Linear Foot; Cubic Foot | PlanQuantity? no |

Notes

NOT FOR USE ON NEW CONSTRUCTION. Details to be included in Tech Specs.

Tendon Inspection: Do not include repairs under this item, except for repair of inspection holes.

Anchorage Inspection: Do not include void repairs or pour backs under this item.

Tendon Repair Set-up: to be used every time a void is detected and is to cover the cost of installing injection and outlet points, preparing to fill void, and sealing of these areas after completion. Shop drawings may be required.

Replace Anchorage Protect Sys: Includes replacement of the tendon anchorage protect system.

Repair External Ducts: Not for use to repair areas damaged while repairing voids.

Tendon Replace: Remove & replace complete tendons, including anchorage components, placement & stressing new tendon, grouting, inspection, and protection system.

Grout Tendon Voids: Includes installation & material, detailed in Tech Spec Install Grout Ports: includes drilling and installing grout ports suitable for connection to grouting equipment.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of
payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
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<tr>
<th>Related Items</th>
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<tr>
<td>Design Forms and Documentation</td>
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<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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**References**
- PPM Chapter
- Trns·port
- Other Standards
- Specifications

**T: Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

### Struct. 462-20- A POST TENSIONING REPAIR EA; LF; CF

A=
1 (Tendon Inspection) LF
2 (Anchorage Inspection) EA
3 (Tendon Repair Set-up) EA
4 (Replace Anchorage Protection System) EA
5 (Repair External Tendon Ducts) LF
6 (Replace Tendon) LF
7 (Vacuum Grout Tendon Voids) CF
8 (Install Grout Ports) EA

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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### MOVABLE BRIDGE - MECHANICAL EQUIPMENT

<table>
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<th>Accuracy</th>
<th>Lump Sum</th>
<th>PlanQuantity?</th>
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</table>

**Notes**

For new bridge construction only. Intended for furnishing and installing complete mechanical system for bascule bridge. Includes all mechanical equipment and appurtenances (speed reducer and gear train, trunnion assemblies, span locks, couplings, live load shoes, flat & curved tracks, plain journal bearings, spherical bearings, supports and brackets, hydraulic systems, and all other equipment/service) required for a complete mechanical system on new bascule bridges. Clearly define scope of work in plans and specifications.

Contact State Structures Design for boiler plate Specification 465 to be modified as required for project specifics.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>sumqrqd: Roadway Summary of Quantities Sheet</td>
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</tr>
<tr>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
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</tr>
</tbody>
</table>

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter

Trns-port

Other Standards Specifications

SDG Chapter 8

T: Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct.** 465-1- MOVABLE BRIDGE - MECHANICAL EQUIPMENT LS/LS

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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### MOVABLE BRIDGE MACHINERY AND CASTINGS - REHAB

<table>
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<tr>
<th>Unit</th>
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<th>PlanQuantity?</th>
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**Notes**

Details and Structure: Complete- Items 000 to 1999

Page 293 of 769
Details

Intended for rehabilitation projects for bascule bridge machinery and castings. For new structures, the complete machinery system is included under 465-1, LS. Contact C.O. Structures Design for boiler plate 465 Specification to be modified as required for project specifics.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required                             Recommended

Design Forms and Documentation
See Details Above
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation
No additional form required; use plans summary or comp book
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter
Trns-port
Other
Standards
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Struct. 465-2-ABB MOVABLE BRIDGE MACHINERY AND CASTINGS-REHAB

A= Operation
1 (Furnish & Install)
4 (Recondition)
5 (Adjust/Modify)
6 (Remove & Dispose) Note: Contractor takes ownership
7 (Remove & Stockpile/Salvage) Note: DOT/maintaining agency retains ownership
8 (Field Machining)

BB= Equipment
01 (Speed Reducer And Gear Train) LS/LS
04 (Trunnion Assembly) EA
05 (Span Locks) AS
07 (Couplings) EA
08 (Live Load Shoes) LS/LS
10 (Flat Rack, Curved Rack, Flat Track) EA
11 (Hopkins Frame) EA
21 (Plain Journal Bearing) EA
22 (Spherical Bearing) EA
52 (Hydraulic Cylinder) EA
53 (Hydraulic Motor) EA
54 (Hydraulic Power Pack) EA
55 (Temporary Hydraulic System) EA
60 (Other Machinery Components) LS
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
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<td>0465 2601</td>
<td>MOVABLE BRIDGE MACHINERY &amp; CASTING- REHABILITATION, REMOVE &amp; DISPOSE, SPEED REDUCER &amp; GEAR TRAIN</td>
<td>LS</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0465 2605</td>
<td>MOVABLE BRIDGE MACHINERY &amp; CASTING- REHABILITATION, REMOVE &amp; DISPOSE- CONTRACTOR OWNS, SPAN LOCKS</td>
<td>AS</td>
<td>1/1/2010</td>
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<tr>
<td>0465 2607</td>
<td>MOVABLE BRIDGE MACHINERY &amp; CASTING- REHABILITATION, REMOVE &amp; DISPOSE- CONTRACTOR OWNS, COUPLINGS</td>
<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>0465 2608</td>
<td>MOVABLE BRIDGE MACHINERY &amp; CASTING- REHABILITATION, REMOVE &amp; DISPOSE- CONTRACTOR OWNS, LIVE LOAD SHOES</td>
<td>LS</td>
<td>1/1/2010</td>
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<tr>
<td>0465 2610</td>
<td>MOVABLE BRIDGE MACHINERY &amp; CASTING- BR REHABILITATION, REMOVE &amp; DISPOSE, FLAT RACK/ CURVED TRACK/ FLAT TRACK</td>
<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>0465 2611</td>
<td>MOVABLE BRIDGE MACHINERY &amp; CASTING- REHABILITATION, REMOVE &amp; DISPOSE- CONTRACTOR OWNS, HOPKINS FRAME</td>
<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>0465 2654</td>
<td>MOVABLE BRIDGE MACHINERY &amp; CASTING- REHABILITATION, REMOVE &amp; DISPOSE- CONTRACTOR OWNS, HYDRAULIC POWER PACK</td>
<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>0465 2660</td>
<td>MOVABLE BRIDGE MACHINERY &amp; CASTING- REHABILITATION, REMOVE &amp; DISPOSE- CONTRACTOR OWNS, OTHER MACHINERY COMP</td>
<td>LS</td>
<td>1/1/2010</td>
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<tr>
<td>0465 2752</td>
<td>MOVABLE BRIDGE MACHINERY &amp; CASTING- REHABILITATION, REMOVE &amp; SALVAGE, HYDRAULIC CYLINDER</td>
<td>EA</td>
<td>1/1/2010</td>
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<td></td>
</tr>
</tbody>
</table>
### Notes
Applies for either rehabilitation or new bridge projects. Intended for work items related to bascule bridge counterweights (balance calculations, balance blocks, steel ballast, transition slabs, sump pumps, bumper blocks). Steel ballast intended for bulk steel counterweight (transition slabs, steel plates). Show location & quantity block in plans. When using "Adjust" item, Tech Spec must clearly define method of measurement: adjustment of each bridge, leaf, or after specific operations.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>See Details Above</td>
</tr>
<tr>
<td></td>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
</tr>
<tr>
<td></td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
</table>

### References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Trns-port</th>
<th>Other Standards</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>SDG Chapter 8</td>
<td>T: Plan Details and/or Technical Specifications required</td>
</tr>
<tr>
<td>Prep &amp; Doc Manual Chapter(s)</td>
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### TRNS*PORT Category (DRAFT FIELD): 0100 Structures

<table>
<thead>
<tr>
<th>Struct.</th>
<th>MOBILE BRIDGE COUNTERWEIGHT</th>
<th>EA; TN</th>
</tr>
</thead>
<tbody>
<tr>
<td>A= Operation</td>
<td>1 (Furnish &amp; Install)</td>
<td>5 (Adjust) EA; for A=5, B=0</td>
</tr>
<tr>
<td>B= Item</td>
<td>1 (Fiberglass Pocket Cover) EA</td>
<td>2 (Sump Pump) EA</td>
</tr>
<tr>
<td></td>
<td>6 (Pockets) EA</td>
<td>7 (Balance Blocks) EA</td>
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</tbody>
</table>

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### MOVABLE BRIDGE SPAN JACKING

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0465  3 11</td>
<td>MOVABLE BRIDGE COUNTERWEIGHT, F&amp;I, FIBER GLASS POCKET COVER</td>
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<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0465  3 14</td>
<td>MOVABLE BRIDGE COUNTERWEIGHT, F&amp;I, BUMPER BLOCK</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0465  3 16</td>
<td>MOVABLE BRIDGE COUNTERWEIGHT, F&amp;I, POCKETS</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0465  3 17</td>
<td>MOVABLE BRIDGE COUNTERWEIGHT, F&amp;I, BALANCE BLOCKS</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>0465  3 19</td>
<td>MOVABLE BRIDGE COUNTERWEIGHT, F&amp;I, STEEL BALLAST</td>
<td>TN</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0465  3 50</td>
<td>MOVABLE BRIDGE COUNTERWEIGHT, ADJUST</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0465  3 96</td>
<td>MOVABLE BRIDGE COUNTERWEIGHT, CLEAN, POCKETS</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

**Details**

Intended for rehabilitation projects to jack bascule span off trunnion supports. Used in conjunction with trunnion reconditioning or bearing replacement. Tech Spec should include jacking procedure, and require that procedures and calculations be completed by a Florida Licensed Engineer.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

COMP 700-050-05: Lump Sum Quantities

Use a quantity of 1, but calculations and computation book documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**

**Trns-port**

**Other Standards**

**Specifications**

T: Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):**

0100 Structures

**Struct.**

465- 4- MOVABLE BRIDGE SPAN JACKING LS/EA
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0465 20</td>
<td>MOVABLE BRIDGE- PREVENTATIVE MAINTENANCE &amp; ROUTINE REPAIR</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
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</table>

### 465-20- MOBILE BRIDGE- PREVENTATIVE MAINTENANCE

<table>
<thead>
<tr>
<th>Unit</th>
<th>LS/DA</th>
<th>Accuracy</th>
<th>Lump Sum (Day)</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

**Notes**

This item covers the cost of maintaining a movable bridge during construction.

Contact the Movable Bridge Section of the State Structures Design Office prior to use of this item. Specifications may be available.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

**Design Forms and Documentation**

- COMP 700-050-05: Lump Sum Quantities
- Use a quantity of 1, but calculations and computation book documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book

**References**

- PPM Chapter
- Trans Port
- Other Standards
- Specifications

**T: Plan Details and/or Technical Specifications required**

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct.** 465-20- MOBILE BRIDGE- PREVENTATIVE MAINTENANCE LS/DA

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
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<tbody>
<tr>
<td>0465 21</td>
<td>MOVABLE BRIDGE OPERATOR</td>
<td>DA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

This item covers the cost of furnishing a bridge tender during construction.

Contact the Movable Bridge Section of the State Structures Design Office prior to use of this item. Specifications may be available.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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</table>
### Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

### References

PPM Chapter
Trns-port
Other Standards
Specifications

**T**: Plan Details and/or Technical Specifications required

### Prep & Doc Manual Chapter(s)

### TRNS*PORT Category (DRAFT FIELD): 0100 Structures

**Struct.** 465-21-

**MOVABLE BRIDGE OPERATOR**

**DA**

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0465 21</td>
<td>MOVABLE BRIDGE OPERATOR</td>
<td>DA</td>
<td>T</td>
<td>1/1/2010</td>
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</table>

### 465-22-

**MOVABLE BRIDGE- ON CALL OPENING**

### Notes

### Details

### Related Items

**Required**

**Recommended**

### Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

### Construction Forms and Documentation

### References

PPM Chapter
Trns-port
Other Standards
Specifications

### Prep & Doc Manual Chapter(s)

### TRNS*PORT Category (DRAFT FIELD): 0100 Structures
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Struct.</th>
<th>465-71- A</th>
<th>MOVABLE BRIDGE FUNCTIONAL CHECKOUT</th>
<th>LS/LS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Details</td>
<td>Phase A to be used to test first-two leaves of a four leaf bascule, Phase B to be used for the Second-two leaves, and Phase C to be used for the complete bridge. Sometimes Phase C and Phase B are combined for simplicity. This item is required on all new bascule bridges and on all bascule bridge rehabilitation projects where the leaf operation, weight is being affected. Where phasing is not required, only a single checkout (Phase C) is required. Contact State Structures Design for boiler plate 465 Specification to be modified as required for project specifics. For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Related Items</td>
<td>Required</td>
<td>Recommended</td>
<td></td>
</tr>
<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-05: Lump Sum Quantities</td>
<td>Use a quantity of 1, but calculations and computation book documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.</td>
<td></td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
<td></td>
</tr>
<tr>
<td>References</td>
<td>PPM Chapter</td>
<td>Trns·port</td>
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<tr>
<td>Other Standards Specifications</td>
<td>SDG 8.7.19</td>
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<tr>
<td>T: Plan Details and/or Technical Specifications required</td>
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<tr>
<td>Prep &amp; Doc Manual Chapter(s)</td>
<td>6, 7, 13</td>
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<tr>
<td>TRNS*PORT Category (DRAFT FIELD):</td>
<td>0100 Structures</td>
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<tr>
<td>Struct.</td>
<td>465-71- A</td>
<td>MOVABLE BRIDGE FUNCTIONAL CHECKOUT</td>
<td>LS/LS</td>
</tr>
<tr>
<td>Notes</td>
<td>A = See detail for Phasing  1 (Phase A) for 1st 2 leaves  2 (Phase B) for 2nd leaves  3 (Phase C) for Complete</td>
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</table>
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<tbody>
<tr>
<td>0465 71 1</td>
<td>MOVABLE BRIDGE FUNCTIONAL CHECKOUT, PHASE A</td>
<td>LS</td>
<td>T</td>
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<tr>
<td>0465 71 3</td>
<td>MOVABLE BRIDGE FUNCTIONAL CHECKOUT, PHASE C</td>
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</table>

### 465-Maint

**MOVABLE BRIDGE REPAIR**

**Maintenance Contracts Only**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Mixed</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
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<tr>
<td></td>
<td></td>
<td>Refer to item structure and details</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

Maintenance Item: Not Valid for Construction Contracts

**Details**

MAINTENANCE CONTRACTS ONLY
Additional BOE details pending

**Related Items**

Required | Recommended

**Design Forms and Documentation**

**Construction Forms and Documentation**

**References**

PPM Chapter
Trns-port
Other Standards
Specifications
Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):**

<table>
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<tr>
<th>Struct.</th>
<th>465-Maint MOVABLE BRIDGE REPAIR Maintenance Contracts Only</th>
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**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>E465 99 14</td>
<td>MOVABLE BRIDGE REPAIR SERVICES</td>
<td>HR</td>
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<td>1/1/2010</td>
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<tr>
<td>E465 99 22</td>
<td>MOVABLE BRIDGE TENDING SERVICES</td>
<td>DA</td>
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<td>1/1/2010</td>
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<tr>
<td>E465 99 33</td>
<td>MOVABLE BRIDGE PREVENTIVE MAINTENANCE</td>
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### 470- 1-

**TREATED TIMBER, STRUCTURAL**

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<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
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<tbody>
<tr>
<td>MB; M3</td>
<td>1/10 Thou Board Measure; 1/10 Cubic Meter</td>
<td>yes</td>
</tr>
</tbody>
</table>

Details and Structure: Complete- Items 000 to 1999
Notes

Intended for the cost of treated structural timber. The quantity of timber to be based on the final width and thickness shown in the plans. When applicable, indicate in the plans the nominal size (2x6) and dressed dimension. Quantity is to be based on the dressed volume. For rough cut or “full sawn” sizes, the nominal size is the finished size and the basis of the quantity. Timber piles paid for under 455-2-XXA.

Example calculation:

800’ - 12X6 Rough Sawn = 800x12x6/12,000 = 4.8 MB
800’ - 12X6 Dressed Lumber (Dressed 11 ½” X 5 ½”) = 800X11.5X5.5/12,000 = 4.2 MB

Related Items

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter
Trns-port
Other

Structures Detailing Manual Chapter 12.

Specifications Section 470
Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Struct. 470-1- TREATED TIMBER, STRUCTURAL MB

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0470 1</td>
<td>TREATED TIMBER, STRUCTURAL</td>
<td>MB</td>
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</tbody>
</table>

470-Maint FENDER SYSTEM
Maintenance Contracts Only

Unit Mixed Accuracy PlanQuantity? ?

Notes Maintenance Item: Not Valid for Construction Contracts

Details MAINTENANCE CONTRACTS ONLY
Additional BOE details pending

Details and Structure: Complete- Items 000 to 1999
### Design Forms and Documentation

----------------------------------------

### Construction Forms and Documentation

----------------------------------------

#### References

PPM Chapter
Trns-port
Other Standards
Specifications
Prep & Doc Manual Chapter(s)

### TRNS*PORT Category (DRAFT FIELD):

**Struct.** 470-Maint  
**FENDER SYSTEM**  
Maintenance Contracts Only

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>E470 1 1</td>
<td>BOARDWALK, REMOVE AND REPLACE INC TREATED TIMBER, HARDWARE, LABOR &amp; EQUIPMENT</td>
<td>BF</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>E470 1 2</td>
<td>BOARDWALK MAINTENANCE INC TREATED TIMBER, HARDWARE, LABOR &amp; EQUIPMENT</td>
<td>BF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>E470 1 3</td>
<td>BOARDWALK BOLT TIGHTENING ALL BOLTS PER BENT LOCATION</td>
<td>LO</td>
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<td>1/1/2010</td>
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<tr>
<td>E470 75</td>
<td>TIMBER FENDER SYSTEM REPAIR INCLUDES REMOVAL/DISPOSAL OF DAMAGED MATERIALS</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>E470 75 1</td>
<td>FENDER SYSTEM FASTENING REPLACEMENT - GALVANIZED INCLUDES U-BOLT, CARRIAGE BOLTS AND COUPLING NUTS</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
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</table>

### 471- 1- A  
**FENDER SYSTEM, PLASTIC MARINE LUMBER**

<table>
<thead>
<tr>
<th>Unit</th>
<th>MB; M3</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>yes</th>
</tr>
</thead>
</table>

#### Notes

Specification changes were effective with the January 2012 letting; additional specification changes are effective July 2013 letting.

#### Details

DO NOT USE this item with pay item 471-3 Polymeric Fender System.

This pay item is to be used for wales and dimensional lumber for fender systems using QPL Listed pile configurations. Refer to Instructions for Design Standards, Index 21900.

Through December 31, 2011 lettings: Plastic piling to be paid separately under Section 455.
Effective January 2012 letting: Polymeric Piles for Fender Systems will be paid under 471-2 item. Concrete Piles will be paid under 455-34-2.

Effective July 2013 letting: Refer to Structures Bulletin 12-14 for possible Contractor designed system.

***************

one board foot= one foot square by one inch thick; convert to thousand board foot for pay item.
Refer to Design Standards and Specifications for additional information.

**Related Items**  
**Required**  455- 37- a or 471- 2-  
**Recommended**

**Design Forms and Documentation**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

 Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter
Trns-port
Other Standards

Through December 2011: Index No. 21900 series: 21900, 21910, 21920, 21930

Effective January 2012: Index 21900 and 21930.

**Specifications**

Section 471

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):**  0100  
Struct.  471- 1- A  
FENDER SYSTEM, PLASTIC MARINE LUMBER MB

A= Reinforcement  
1 (Reinforced)  
2 (non-reinforced)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0471 1 1</td>
<td>FENDER SYSTEM, PLASTIC MARINE LUMBER, REINFORCED</td>
<td>MB</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0471 1 2</td>
<td>FENDER SYSTEM, PLASTIC MARINE LUMBER, NON-REINFORCED</td>
<td>MB</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
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</table>

**471- 2-**

FENDER SYSTEM, POLYMERIC PILES

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LS/LS</td>
<td>Lump Sum</td>
<td>yes</td>
</tr>
</tbody>
</table>

**Notes**

Effective January 2012 lettings, and later.
DO NOT USE this item with pay item 471-3, Polymeric Fender System.

This pay item is to be used for Fender Systems using QPL listed pile configurations, in accordance with the Instructions for Design Standards, Index 21900.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Design Forms and Documentation**

COMP 700-050-05: Lump Sum Quantities

Use a quantity of 1, but calculations and computation book documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter

Trns-port

Other

SDG 3.14

Specifications

Index 21900 and 21930

Prep & Doc Manual Chapter(s)

Section 471

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct.**

471-2-

FENDER SYSTEM, POLYMERIC PILES

**LS/LS**

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0471 2</td>
<td>FENDER SYSTEM, POLYMERIC PILES</td>
<td>LS</td>
<td>1/1/2012</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**471-3- A**

POLYMERIC FENDER SYSTEM

<table>
<thead>
<tr>
<th>Unit</th>
<th>LS/LS</th>
<th>Accuracy</th>
<th>Lump Sum</th>
<th>PlanQuantity?</th>
<th>yes</th>
</tr>
</thead>
</table>

**Notes**


**Details**

DO NOT USE pay items 471-1 or 471-2 with this pay item.

This pay item is intended for use with Contractor Designed Systems. Per the specification, it will include all items- piles, wales, dimensional lumber, and incidentals for a complete fender system.

Design Standards are not applicable for the contractor designed system.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

**Design Forms and Documentation**

COMP 700-050-05: Lump Sum Quantities

Use a quantity of 1, but calculations and computation book documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

**Notes**

Details and Structure: Complete- Items 000 to 1999
Standards
Specifications

Struct.  471-  3-  A POLYMERIC FENDER SYSTEM LS/LS

A= Required Energy Capacity
1 (≤ 40 kip-ft)
2 (41-200 kip-ft)
3 (201-400 kip-ft)
4 (401-600 kip-ft)
5 (601-1000 kip-ft)
6 (1001-2000 kip-ft)
7 (> 2000 kip-ft)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

499-Maint RAKING FOR FLOOD CONTROL
Maintenance Contracts Only

Unit  Mixed
Accuracy  Refer to item structure and details
PlanQuantity?  ?

Notes

Maintenance Item: Not Valid for Construction Contracts

Details

MAINTENANCE CONTRACTS ONLY
Additional BOE details pending

Related Items

Required
Recommended

Design Forms and Documentation

Construction Forms and Documentation

References

PPM Chapter
Trns-port
Other
Standards
Specifications
Prep & Doc Manual Chapter(s)
### 500-Maint HANDRAIL

**Maintenance Contracts Only**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
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<tbody>
<tr>
<td>Mixed</td>
<td>Refer to item structure and details</td>
<td>?</td>
</tr>
</tbody>
</table>

**Notes**

Maintenance Item: Not Valid for Construction Contracts

**Details**

MAINTENANCE CONTRACTS ONLY

Additional BOE details pending

**Related Items**

**Required**

**Recommended**

### 504- 1- AA STEEL ROADWAY FLOOR

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>E500 71</td>
<td>HANDRAIL STEEL (REMOVE &amp; REINSTALL)</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>E500 72</td>
<td>HANDRAIL ALUMINUM (REMOVE &amp; REINSTALL)</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
Intended for steel grating for sidewalks and bridge decks usually on bascule leaves. Show location w/ quantity block in plans. Make deductions in quantities for openings or joints. When concrete filled decks are called for in the plans, no separate payment is made for fill concrete. See Section 504 for Specifications.

Required

Recommended

Design Forms and Documentation

COMP 700-050-01: Area Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter
Trns-port
Other
Standards
Specifications
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):
0100 Structures

Struct. 504- 1- AA STEEL ROADWAY FLOOR SF

A =
1 (5" Open)
2 (3" Armored)
5 (5 1/2" Armored)
10 (5" Armored)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0504 1 1</td>
<td>ROADWAY FLOOR, STEEL, 5&quot; OPEN</td>
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<td></td>
<td>1/1/2010</td>
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<tr>
<td>0504 1 2</td>
<td>ROADWAY FLOOR, STEEL, 3&quot; ARMORED</td>
<td>SF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0504 1 5</td>
<td>ROADWAY FLOOR, STEEL, 5.5&quot; ARMORED</td>
<td>SF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0504 1 10</td>
<td>ROADWAY FLOOR, STEEL, 5&quot; ARMORED</td>
<td>SF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

504- 2- SIDEWALK FLOOR, STEEL - REHAB

Unit SF; M2
Accuracy Square Foot; 1/10 Square

Notes

Intended for rehabilitation projects when steel sidewalks gratings is required without roadway grating. Clearly identify work to be completed including area, type of rehab work, and acceptance criteria. On new bascule bridge projects, include both sidewalk and roadway grating quantity under 504-1.

Show location w/ quantity block in plans. Make deductions in quantities for openings or

Details and Structure: Complete- Items 000 to 1999
joints. When concrete filled decks are called for in the plans, include cost of the concrete fill under this pay item (add pay item note).

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-01: Area Computation and Continuation</td>
</tr>
<tr>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
<td></td>
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### Construction Forms and Documentation

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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</thead>
<tbody>
<tr>
<td>No additional form required; use plans summary or comp book</td>
<td></td>
</tr>
<tr>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
<td></td>
</tr>
</tbody>
</table>

### References

**PPM Chapter**

**Trns-port**

**Other**

**Standards**

**Specifications** Section 504

**T:** Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)** 6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0100 Structures

**Struct. 504- 2-** SIDEWALK FLOOR, STEEL - REHAB SF

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0504 2</td>
<td>SIDEWALK FLOOR, STEEL, REHABILITATION</td>
<td>SF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

---

**506- 2-** BRIDGE DRAIN PIPE

### Notes

**Unit** LF; M1

**Accuracy** Linear Foot; 1/10 Meter

**PlanQuantity?** yes

### Details

Intended for payment for drainage pipes located on bridge structure to convey water from deck inlets to ends of bridge or down to ground at pier locations. Include piping that is cast into concrete components in the quantity. Bridge drains paid separately under 506-3. Show location w/ quantity block in plans.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
</tr>
<tr>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
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</table>

### Construction Forms and Documentation

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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</thead>
<tbody>
<tr>
<td>No additional form required; use plans summary or comp book</td>
<td></td>
</tr>
<tr>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
<td></td>
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</table>
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<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0506 2</td>
<td>BRIDGE DRAINAGE PIPE</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

Intended for payment for deck inlets located on bridge structure. Bridge piping paid under 506-2. Deck scuppers holes cast into bridge deck should not be paid for under this item unless they consist of a casting. Pay for deck scupper holes under superstructure concrete (add pay item note). Show location w/ quantity block in plans.

**Related Items**

Required 506-2- Recommended

**Design Forms and Documentation**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter

Trns-port

Other Standards

Specifications Section 506

Prep & Doc Manual Chapter(s) 7, 13
Item | Description | Unit | TSP/Detail | Valid Date | Obsolete Date |
--- | --- | --- | --- | --- | --- |
0506 3 | BRIDGE DRAINS | EA | | 1/1/2010 | |

### 506- 72- POWER CLEAN BRIDGE DOWN DRAIN

**Unit** | EA  
**Accuracy** | Each  
**PlanQuantity?** | yes

**Notes**
Valid for Maintenance Use. Plans or Specifications must detail cleaning requirements including: method(s), permitted chemicals, etc.

**Related Items**

**Design Forms and Documentation**
COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**
No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**
PPM Chapter  
Trns_port  
Other Standards Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 100 or 200 Structures or Roadway

**Struct.** | 506- 72- POWER CLEAN BRIDGE DOWN DRAIN | EA

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**Item** | Description | Unit | TSP/Detail | Valid Date | Obsolete Date |
--- | --- | --- | --- | --- | --- |
0507 2 | BRIDGE POWER CLEAN DRAIN DRAIN | EA | | 1/1/2010 | |

### 507- 70- ALUMINUM SIDEWALK FLOOR

**Unit** | SF; M2  
**Accuracy** | Square Foot; 1/10 Square Meter  
**PlanQuantity?** | yes

**Notes**
Intended for aluminum sidewalks usually on bascule leaves. Show location w/ quantities block in plans.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Details**

**Related Items**

Required | Recommended

**Details and Structure:** Complete- Items 000 to 1999
Standards Specifications
Normally requires SHOP DRAWINGS

Struct.  507-  70-  ALUMINUM SIDEWALK FLOOR SF

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<tr>
<td>0507 70</td>
<td>ALUMINUM SIDEWALK FLOOR</td>
<td>SF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

508- 1- A MOVABLE BRIDGE ELECTRICAL EQUIPMENT, NEW CONSTRUCTION ONLY

Notes
For NEW BRIDGE CONSTRUCTION ONLY. Intended for furnishing and installing complete electrical system for bascule bridge.

Includes all electrical equipment and appurtenances (wire, cables, submarine cable assembly, conduits, wiring, wiring devices, light fixtures, motors, controllers, motor control centers, panel boards, relays, control equipment, safety switches, traffic signals, all traffic gates, traffic barriers, Variable Speed Controllers, drive motors, stand-by generator and transfer switch, motor control equipment, air horns, navigation lights, limit switches, system grounding scheme, tender house amenities, and all other apparatus and accessories indicated, specified, or required) required for a complete operating electrical system on new bascule bridges. Clearly define scope of work in plans and specifications.

Contact State Structures Design for boiler plate Specification 508 to be modified as required for project specifics.

For plan detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.”

************
Valid through 6-30-10. Replaced by 508-4- Movable Bridge Rehabilitation. The old detail is
included below:

For movable bridges only. Clearly define scope of work in plans and specifications. Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

NEW- FURNISH & INSTALL: Includes complete, new, electrical system for bascule bridge. Includes all electrical equipment and appurtenances (emergency generator, submarine cable, motors, control console, brakes, programmable controller, motor control center, drive system, CCTV system, navigation lights, gates, signals, and all other equipment/service) required for a complete installation on bascule bridges.

EXISTING- ADJUST/MODIFY/REHAB: Includes all electrical system equipment, components, and/or work not paid for separately under other items. May include furnishing/wiring/installation of new or rehab electrical components.

REMOVAL: Clearly identify which items are to be stockpiled or disposed. For stockpiled items, include a location for delivery (define limits of contractor's work) and a contact name.

### Related Items

<table>
<thead>
<tr>
<th>Design Forms and Documentation</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>sumqr: Roadway Summary of Quantities Sheet</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Construction Forms and Documentation</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>No additional form required; use plans summary or comp book</td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
<td></td>
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</tbody>
</table>

### References

PPM Chapter

Trns-port

Other Standards

Specifications

**T: Plan Details and/or Technical Specifications required**

### Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):**

0100 Structures

**Struct.**

508- 1- A

MOVABLE BRIDGE ELECTRICAL EQUIPMENT, NEW LS/LS CONSTRUCTION ONLY

A= Operation
1 (New- Furnish & Install)
4 (Relocate) *Valid through 6-30-10
5 (Existing- Adjust/Modify/Rehab) *Valid through 6-30-10
6 (Remove & Dispose) Note: Contractor takes ownership *Valid through 6-30-10
7 (Remove & Stockpile/Salvage) Note: DOT/maintaining agency retains ownership *Valid through 6-30-10

### Notes

Details and Structure: Complete- Items 000 to 1999
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0508 1 1</td>
<td>MOVABLE BRIDGE ELECTRICAL EQUIPMENT, F&amp;I</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 508- 2- A MOVABLE BRIDGE GATE

**Notes**

For use on movable bridges only. This item may be used with 508-1 for rehab bridge projects. (DO NOT use on New Bridge Construction.) Clearly define scope of work in plans and specifications. Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

Design Standards shows location. Remaining specs/details are needed.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

FURNISH & INSTALL: Furnish & Install new gates on an existing bascule bridge.

ADJUST/MODIFY/REHAB: Includes all work and materials necessary for rehab of existing gates. Include pay item 508-1 for other electrical system work.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>sumqrd: Roadway Summary of Quantities Sheet</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
<tr>
<td>No additional form required; use plans summary or comp book</td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
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</table>

**References**

PPM Chapter
Trns·port
Other Standards Index No. 17890
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):**

<table>
<thead>
<tr>
<th>Struct.</th>
<th>MOVABLE BRIDGE GATE</th>
<th>AS</th>
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</thead>
<tbody>
<tr>
<td>0508- 2- A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A= Operation
1 (Furnish & Install)
4 (Relocate)
5 (Adjust/Modify/Rehab)
6 (Remove & Dispose) Note: Contractor takes ownership
Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0508 2 1</td>
<td>MOVABLE BRIDGE GATE, F&amp;I</td>
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<td>1/1/2010</td>
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<tr>
<td>0508 2 5</td>
<td>MOVABLE BRIDGE GATE, ADJUST/MODIFY/REHAB</td>
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<tr>
<td>0508 2 6</td>
<td>MOVABLE BRIDGE GATE, REMOVE &amp; DISPOSE</td>
<td>AS</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0508 2 7</td>
<td>MOVABLE BRIDGE GATE, REMOVE &amp; STOCKPILE/SALVAGE</td>
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<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

508-3- A MOBILE BRIDGE SIGNAL

Unit: AS Accuracy: Assembly Plan Quantity?: yes

Notes

For use on movable bridges only. This item may be used with 508-4 for rehab bridge projects.

DO NOT use on New Bridge Construction.

Clearly define scope of work in plans and specifications. Contact State Structures Design for boiler plate specification to be modified as required for project specifics. Coordinate with details shown on Design Standard.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

FURNISH & INSTALL: Furnish & Install new signals on an existing bascule bridge. Includes the mast arm, monotube, or other supports, as shown in the standards or plans.

ADJUST/MODIFY/REHAB: Includes all work and materials necessary for rehab of existing signals. Include pay item 508-1 for other electrical system work.

Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>sumqrd: Roadway Summary of Quantities Sheet</td>
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</table>
l | Locate in plans. Summarize quantities by location on summary sheet in the plans. |

References

PPM Chapter
Trns-port
Other Standards
Index No. 17890
Specifications

T: Plan Details and/or Technical Specifications required
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Struct.  508- 3- A MOVABLE BRIDGE SIGNAL AS

A= Operation
1 (Furnish & Install)
4 (Relocate)
5 (Adjust/Modify/Rehab)
6 (Remove & Dispose) Note: Contractor takes ownership
7 (Remove & Stockpile/Salvage) Note: DOT/maintaining agency retains ownership

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<td>T</td>
<td>1/1/2010</td>
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</tbody>
</table>

508- 4- MOVABLE BRIDGE ELECTRICAL EQUIPMENT, REHABILITATION PROJECTS ONLY

Unit LS/LS Accuracy Lump Sum PlanQuantity? no

Notes Details Intended for REHABILITATION PROJECTS for bascule bridge electrical systems. (For new structures, the complete electrical system is included under 508-1, LS.) Contact Central Office Structures Design for boiler plate 508 Specification to be modified as required for project specifics.

As needed, the removal, repair, replacement or rehabilitation of specific components will be included, as defined in the project specifications.

For Plan Detail/Tech Spec Items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

<table>
<thead>
<tr>
<th>Required</th>
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<td>Design Forms and Documentation</td>
<td>sumqr: Roadway Summary of Quantities Sheet</td>
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<tr>
<td>Construction Forms and Documentation</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
<tr>
<td>References</td>
<td>PPM Chapter Trns-port</td>
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</table>

Details and Structure: Complete- Items 000 to 1999
Struct.  508- 4-  MOBILE BRIDGE Electrical Equipment, Rehabilitation Projects Only

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<thead>
<tr>
<th>Item</th>
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<td>1/1/2010</td>
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</table>

508- 72- A  MOBILE BRIDGE EMERGENCY GENERATOR

Notes

Details

Includes standby generator system (generator, transfer switch, control panel, etc.) for bascule bridge rehabilitation projects only.

For new structures, emergency generator is included under 508- 1-. Clearly define work in plans and specifications.

Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required | Recommended

Design Forms and Documentation

sumqr: Roadway Summary of Quantities Sheet
Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter
Trns-port
Other Standards Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)  6, 7, 13
Struct. 508-72- A  MOVABLE BRIDGE EMERGENCY GENERATOR AS

A = 1 (Furnish & Install)
3 (Install)
4 (Remove)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>T</td>
<td>1/1/2010</td>
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</table>

508-73- A  SUBMARINE CABLE ASSEMBLY

Unit LS/LF; LS/M1  Accuracy Lump Sum (Linear Foot); Lump Sum (Meter)  PlanQuantity? yes

Notes

Details

Intended for sub-aqueous cable. For bascule bridge rehabilitation projects only or fixed new bridge projects.
For new bascule bridge projects, submarine cable is included under 508-1-. Clearly define work in plans and specifications. Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Design Forms and Documentation

COMP 700-050-05: Lump Sum Quantities
Use a quantity of 1, but calculations and computation book documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter
Trns-port
Other Standards
Specifications

T: Plan Details and/or Technical Specifications required
Prep & Doc Manual Chapter(s) 7, 13
A =
1 (Furnish & Install)
3 (Install)
4 (Remove)

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>0508 73 4</td>
<td>SUBMARINE CABLE ASSEMBLY, REMOVE</td>
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</table>

508- 76- A MOVABLE BRIDGE REHAB- SPAN MOTORS AND CONTROLLERS

Unit LS/LS Accuracy Lump Sum PlanQuantity? yes

Notes
Details
Includes span drive motors and speed controllers for bascule bridge rehabilitation only. For new structures, span motors are included under 508- 1-. Clearly define work in plans and specifications. Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items
Required Recommended

Design Forms and Documentation
COMP 700-050-05: Lump Sum Quantities
Use a quantity of 1, but calculations and computation book documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

Construction Forms and Documentation
No additional form required; use plans summary or comp book
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References
PPM Chapter
Trns·port
Other SDG Chapter 8
Standards Specifications

T: Plan Details and/or Technical Specifications required
Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Struct. 508- 76- A MOVABLE BRIDGE REHAB- SPAN MOTORS AND CONTROLLERS LS/LS
A =
1 (Furnish & Install)
3 (Install)
4 (Remove)
5 (Recondition)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<tbody>
<tr>
<td>0508 76 1</td>
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<tr>
<td>0508 76 4</td>
<td>MOVABLE BRIDGE - REHAB, SPAN MOTORS &amp; CONTROLLERS, REMOVE</td>
<td>LS</td>
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<td>1/1/2010</td>
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<tr>
<td>0508 76 5</td>
<td>MOVABLE BRIDGE - REHAB, SPAN MOTORS &amp; CONTROLLERS, RECONDITION</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
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</tbody>
</table>

508- 77- A MOVABLE BRIDGE REHAB- PROGRAMMABLE LOGIC CONTROLLER

Notes

Includes programmable logic controllers (controllers, I/O racks, power supplies, programming) for bascule bridge rehabilitation only. For new structures, logic controllers are included under 508- 1-. Clearly define work in plans and specifications. Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

<table>
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<th>Recommended</th>
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<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
</tr>
<tr>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
<td></td>
</tr>
</tbody>
</table>

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Trns-port</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>Other SDG Chapter 8</td>
</tr>
<tr>
<td>Standards Specifications</td>
<td></td>
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</table>

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Struct. 508- 77- A MOVABLE BRIDGE REHAB- PROGRAMMABLE LOGIC CONTROLLER

Details and Structure: Complete- Items 000 to 1999
A = 1 (Furnish & Install)
3 (Install)
4 (Remove)
5 (Programming)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0508 77 1</td>
<td>MOBILE BRIDGE REHAB, PROGRAMMABLE LOGIC CONTROLLER F&amp;I</td>
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<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0508 77 4</td>
<td>MOBILE BRIDGE REHAB, PROGRAMMABLE LOGIC CONTROLLER REMOVE</td>
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<td>1/1/2010</td>
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</tr>
<tr>
<td>0508 77 5</td>
<td>MOBILE BRIDGE REHAB, PROGRAMMABLE LOGIC CONTROLLER PROGRAMMING</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

508- 78- A MOVABLE BRIDGE REHAB- LIMIT SWITCHES AND TRANSDUCERS

Notes

Details
Includes limit switches and transducers for bascule bridge rehabilitation only. For new structures, limit switches and transducers are included under 508- 1-. Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required Recommended

Design Forms and Documentation
sumqr: Roadway Summary of Quantities Sheet
Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation
No additional form required; use plans summary or comp book
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References
PPM Chapter
Trns-port
Other SDG Chapter 8
Standards
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Details and Structure: Complete- Items 000 to 1999
**Struct. 508-78- A MOVABLE BRIDGE REHAB- LIMIT SWITCHES AND TRANSDUCERS**

A =
1 (Furnish & Install)
3 (Install)
4 (Remove)
5 (Programming)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<th>Item</th>
<th>Description</th>
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<tr>
<td>0508 78 1</td>
<td>MOVABLE BRIDGE-REHAB, LIMIT SWITCHES &amp; TRANSDUCERS F&amp;I</td>
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<td>MOVABLE BRIDGE-REHAB, LIMIT SWITCHES &amp; TRANSDUCERS REMOVE</td>
<td>LS T</td>
<td>1/1/2010</td>
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</tbody>
</table>

**508-79- A MOVABLE BRIDGE REHAB- CONTROL CONSOLE**

- **Unit**: EA
- **Accuracy**: Each
- **Plan Quantity?**: no

**Details**

Includes control console and associated equipment (switches, indicating lights, relays, etc.) for bascule bridge rehabilitation only. For new structures, control console is included under 508-1-. Clearly define work in plans and specifications. Contact State Structures Design Office for boiler plate specification to be modified as required for project specifics.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

- **Required**: COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
- **Recommended**: Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the computation book form.

**References**

- **PPM Chapter**
- **Trns-port**
- **Other Standards Specifications**

**TRNS*PORT Category (DRAFT FIELD):** 0100  Structures

**Struct. 508-79- A MOVABLE BRIDGE REHAB- CONTROL CONSOLE**

**Details and Structure**: Complete- Items 000 to 1999
A =
1 (Furnish & Install)
3 (Install)
4 (Remove)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<td>0508 79 4</td>
<td>MOVABLE BRIDGE-REHAB,CONTROL CONSOLE, REMOVE</td>
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<td>T</td>
<td>1/1/2010</td>
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</table>

508-80- A MOVABLE BRIDGE REHAB- BRAKE SYSTEM

Unit EA Accuracy Each PlanQuantity? no

Notes

Includes brake systems (brake shoes, brake drums, brake operators) for bascule bridge rehabilitation only. For new structures, brake system is included under 508-1-. Clearly define work in plans and specifications.

Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items Required Recommended

Design Forms and Documentation COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

References

PPM Chapter
Trns-port
Other SDG Chapter 8
Standards
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Struct. 508-80- A MOVABLE BRIDGE REHAB- BRAKE SYSTEM EA

A =
1 (Furnish & Install)
3 (Install)
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<td>0508 80 4</td>
<td>MOVABLE BRIDGE-REHAB, BRAKE SYSTEM, REMOVE</td>
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<tr>
<td>0508 80 5</td>
<td>MOVABLE BRIDGE-REHAB, BRAKE SYSTEM, RECONDITION</td>
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### 508- 82- A MOVABLE BRIDGE REHAB- CONTROL PANEL / MOTOR CONTROLLER

<table>
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<th>Notes</th>
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<tbody>
<tr>
<td>Details</td>
</tr>
<tr>
<td>Includes motor control center and starters for bascule bridge rehabilitation only. For new structures, control panel or motor controller is included under 508- 1-. Clearly define work in plans and specifications. Contact State Structures Design for boiler plate specification to be modified as required for project specifics. For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.</td>
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### Related Items

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<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
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### Construction Forms and Documentation

| No additional form required; use plans summary or comp book |
| Record final quantity on the computation book form. |

### References

<table>
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<th>PPM Chapter</th>
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<tr>
<td>Trns-port</td>
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<tr>
<td>Other Standards</td>
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<tr>
<td>SDG Chapter 8</td>
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</table>

### Prep & Doc Manual Chapter(s)

| 6, 7, 13 |

### TRNS*PORT Category (DRAFT FIELD)

| 0100 |

### Struct. 508- 82- A MOVABLE BRIDGE REHAB- CONTROL PANEL / MOTOR CONTROLLER

| A = Operation |
| 1 (Furnish & Install) |
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
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</tbody>
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### Note Details

Includes drive systems (motor(s), variable speed drive, shop testing) for bascule bridge rehabilitation only. For new structures, integrated drive system is included under 508-1.-. Contact State Structures Design for boiler plate specification to be modified as required for project specifics.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

---

### Related Items

#### Required

- COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

#### Recommended

- Locate in the plans. Summarize quantities by location in the computation book.

---

### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

---

### References

- PPM Chapter
- Trns-port
- SDG Chapter 8

**T: Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**: 7, 13

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### TRNS*PORT Category (DRAFT FIELD)

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<tr>
<th>Struct.</th>
<th>MOBILE BRIDGE REHAB- INTEGRATED DRIVE SYSTEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>508-83-ABB</td>
<td>AS</td>
</tr>
</tbody>
</table>

A = Operation
1 (Furnish & Install)
2 (Replace)
3 (Recondition)
4 (Repair)

BB = Drive Type
01 (25 kW Or Less)
02 (26 - 40 kW)
03 (41 - 60 kW)
04 (61 - 80 kW)
05 (81 - 115 kW)
06 (116 - 155 kW)
07 (156 - 190 kW)
08 (191 Or Larger)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0508 83101</td>
<td>MOVABLE BRIDGE INTEGRATED DRIVE SYS, F&amp;I, 25KW OR LESS</td>
<td>AS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0508 83107</td>
<td>MOVABLE BRIDGE-REHAB, INTEGRATED DRIVE SYSTEM, F&amp;I 156 - 190 KW</td>
<td>AS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

510-1 A  NAVIGATION LIGHTS- FIXED BRIDGE

Unit Mixed Accuracy Refer to item structure and details PlanQuantity? yes/no

Notes

Details

LS System: Includes all work related to the navigation lights and accessories for fixed bridges, including the fender and channel lights, clearance gauge light, wiring, conduit, wiring devices, transformers, enclosures, grounding system, controls, and protective devices, as detailed in the specs and design standard index. (No separate payment for conduit and pull boxes.) The designer should ensure that all details are complete, to correspond to spec references. Note: For dual bridges, use one system; pay item may be entered with either bridge.

NOTE: Per index 21930, the clearance gauge will be furnished by FDOT and erected by the contractor. The clearance gauge light will and installation of the gauge will be included under the navigation light LS payment.

Repair/Rehab, EA light: Tech Spec and Plan Details are required to detail location and work to be completed. Measurement and payment will be per light. (If the entire system of lights is to be repaired/rehabilitated, use the LS system pay item.)

For bascule bridges, navigation lights are included under 508-1.

DOCUMENTATION

LUMP SUM: No calculations required unless item is to be adjusted. All calculations and documentation of adjustments, in accordance with the Specifications, are required. EACH: Final quantity must be recorded in space provided on summary sheet in the plans. All changes must be shown on final plan sheets.

Related Items

<table>
<thead>
<tr>
<th>Design Forms and Documentation</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Details Above</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
No additional form required; use plans summary or comp book

see detail

References

PPM Chapter
Trns·port
Other
Standards
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)  7, 13

Normally requires SHOP DRAWINGS

Index No. 21220

Section 510

TRNS*PORT Category (DRAFT FIELD):  0100  Structures

Struct.  510-  1-  A  NAVIGATION LIGHTS- FIXED BRIDGE  Mixed

A =
Blank (System) LS/LS
4 (Repair/Rehab light) EA, see details above

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0510 1</td>
<td>NAVIGATION LIGHTS- FIXED BRIDGE, SYSTEM</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0510 1 4</td>
<td>NAVIGATION LIGHTS- FIXED BRIDGE, REPAIR/REHAB</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

512-  1-  A  MOVABLE BRIDGE- CONTROL HOUSE

Unit  LS/LS  Accuracy  Lump Sum  PlanQuantity?  yes

Notes

Details

Intended for the complete cost of control house for bascule bridges. Include cost of foundation under separate pay items (piling, shaft, etc.) Contact State Structures Design for boiler plate specification to be modified as required for project specifics. Clearly show limits in plans for payment purposes. Include complete bar lists for control house in the plans, Including cost of reinforcing steel for walls and floors.

Related Items

Required  Recommended

Design Forms and Documentation

sumqrqd: Roadway Summary of Quantities Sheet

Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter
Trns·port
Other
Standards

Normally requires SHOP DRAWINGS
Specifications

T: Plan Details and/or Technical Specifications required
Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Struct. 512-1- A MOVABLE BRIDGE-CONTROL HOUSE LS/LS

A =
1 (Renovation)
Blank (New)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0512</td>
<td>MOVABLE BRIDGE-CONTROL HOUSE, NEW</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0512 1</td>
<td>MOVABLE BRIDGE-CONTROL HOUSE, RENOVATE</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

512-71- A MOVABLE BRIDGE PLUMBING SYSTEM

Unit EA Accuracy Each PlanQuantity? no

Notes

Details

Related Items

Required Recommended

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Record final quantity on the computation book form.

References

PPM Chapter
Trns-port
Other Standards Specifications

T: Plan Details and/or Technical Specifications required
Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0100 Structures

Struct. 512-71- A MOVABLE BRIDGE PLUMBING SYSTEM EA

A = Operation
1 (Furnish & Install)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
**514-71- A FILTER FABRIC, PLASTIC**

**Unit** SY; M2  **Accuracy** Square Yard; Square Meter  **PlanQuantity?** no

**Notes**

Intended for Subsurface Drainage or Stabilization applications, as detailed in Section 514 and 985 of Specifications.

Effective 1/2011 lettings: DO NOT USE pay item for French Drain applications, per design standard and specification change. French Drain item includes payment for filter fabric.

Geotextile fabrics are divided into the following three main classes:
1. Drainage- under all rubble riprap, including cyclopean stone and under gabions; wrapped around drains, pipe joints, and edge-drains; filter behind walls, etc.
2. Erosion Control- silt fence, staked silt barrier, plastic erosion mat.
3. Stabilization- separator between embankment and soft subsoil, reinforcement and pipe bedding.

NOTE: When this item is incidental to other work, no separate payment is made for filter fabric.

Refer to specifications and/or design standards:
Ditch Pavement, Section 524: no separate payment for filter fabric
Box Culvert weep holes, Section 400; no separate payment for filter fabric

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>514-72 for impermeable liner</td>
<td>514-71- A FILTER FABRIC, PLASTIC SY</td>
</tr>
</tbody>
</table>

**Design Forms and Documentation**

COMP 700-050-01: Area Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book
Record final quantity on the computation book form.

**References**

PPM Chapter
Trns·port
Other
Standards Index No. 199
Specifications Section 514
Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct. 514-71- A FILTER FABRIC, PLASTIC SY**

A =
1 (Subsurface)
2 (Stabilization)

**Notes**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 514-72- LINER IMPERMEABLE PVC

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0514 71 1</td>
<td>PLASTIC FILTER FABRIC, SUBSURFACE</td>
<td>SY</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0514 71 2</td>
<td>PLASTIC FILTER FABRIC, STABILIZATION</td>
<td>SY</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Unit**: SY; M2  
**Accuracy**: Square Yard; Square Meter  
**Plan Quantity?**: No

**Details**
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**
- Required: 514-71 for "filter" fabric

**Design Forms and Documentation**
- COMP 700-050-01: Area Computation and Continuation  
  Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**
- No additional form required; use plans summary or comp book  
  Record final quantity on the computation book form.

**References**
- PPM Chapter  
- Transportsport  
- Other Standards  
- Specifications

**Notes**
- **T:** Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**
- 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):**  
- 0200 Roadway

**Struct.**
- 514-72- LINER IMPERMEABLE PVC SY

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 514-73- GEOSYNTHETIC CLAY LINER

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0514 72</td>
<td>LINER IMPERMEABLE PVC</td>
<td>SY</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**Unit**: SY; M2  
**Accuracy**: Square Yard; Square Meter  
**Plan Quantity?**: No

**Notes**
- Contact Larry Jones, State Geotechnical Engineer

**Details**
Contact the State Geotechnical Engineer prior to using this item.

For Plan Detail/Tech Spec items: The Designer should ensure that the description,
materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 700-050-01: Area Computation and Continuation</td>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
</tr>
<tr>
<td>No additional form required; use plans summary or comp book</td>
<td>Record final quantity on the computation book form.</td>
</tr>
</tbody>
</table>

### References

**PPM Chapter**
- Trns-port
- Other Standards
- Specifications

**T**: Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**
- 6, 7, 13

### TRNS*PORT Category (DRAFT FIELD):

- 0200 Roadway

### Struct. 514- 73- GEOSYNTHETIC CLAY LINER SY

### Notes

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0514 73</td>
<td>GEOSYNTHETIC CLAY LINER SY</td>
<td>SY</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 515- 1- A PIPE HANDRAIL- GUIDERAIL

**Unit**: LF; M1  **Accuracy**: Linear Foot; 1/10 Meter  **PlanQuantity?**: yes

**Notes**

*Effective with the July 2011 letting, valid drop-off height changed from 30" to 60". Refer to standards for additional information.*

**Details**

To be used as detailed on Design Standards Index 870 (aluminum) or 880 (steel). Two pipe handrail is generally used in locations where drop-off is between 10" and 60". Additional applications may include "steering" pedestrians next to a sidewalk or out of a parking lot (with or without drop-off).

For use next to drop-off greater then 60", refer to Index 800 series and pay items 460-70 or 515-2.

Not valid for use on bridge.

When PVC guiderail is used, complete specifications are needed; consider weather, UV requirements, etc when specifying material requirements.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.
Pipe Rail: Pipe rail is a guardrail component. Refer to pay item 536-6. DO NOT use guiderail for guardrail installations.

Required Standards
Index No. 870 (aluminum) or 880 (steel) only

Specifications
Struct. 515-1- A PIPE HANDRAIL- GUIDERAIL LF

Notes
T: Selected Items may require Plan Details and/or Technical Specifications
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References
PPM Chapter Trns-port
Other Standards Index No. 870 (aluminum) or 880 (steel) only
Specifications

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 515-1- A PIPE HANDRAIL- GUIDERAIL LF

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>05151 1</td>
<td>PIPE HANDRAIL - GUIDERAIL, STEEL</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>05151 2</td>
<td>PIPE HANDRAIL - GUIDERAIL, ALUMINUM</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>05151 5</td>
<td>PIPE HANDRAIL- GUIDERAIL, PVC</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

515-2-ABB PEDESTRIAN/BICYCLE RAILING

Notes
Effective July 2012, Index 850 and 860 are obsolete; refer to design standards and notes below.

Effective with the July 2011 letting, valid drop-off height changed from 30" to 60". Refer to standards for additional information.

Details
To be used for pedestrian railing next to drop-offs greater than 60". Use in accordance with the Index 850 and 860 series. These rails are not intended for use on top of traffic
barriers or where motor vehicle containment is required.

Special Materials: Full material specifications will be required. Ensure that material requirements address UV issues, strength, etc.

Non-standard type/height to be used only when existing design standards do not apply. For minor deviations from standards, note changes in the plans with pay item corresponding to applicable standard & height. Ensure that smaller railing heights are not a climbing issue.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Documentation: When Index 852 or 862 is used, tabulate quantities on the CADD cell, as directed on the Instructions for Design Standards. Note the infill panel type. All other items, tabulate quantities in the plans.

### Related Items

<table>
<thead>
<tr>
<th>Design Forms and Documentation</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index 852: Pedestrian/Bicycle Railing Data Tables &amp; Estimated Quantities</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Construction Forms and Documentation</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>No additional form required; use plans summary or comp book</td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
<td></td>
</tr>
</tbody>
</table>

### References

- **PPM Chapter**: Vol 1, Section 8.8
- **Trns·port**
- **Other Standards**
  - Index No. 851, 852, 861, 862
  - Index 850, 860 valid through June 2012.
  - Index 852, 862 effective July 2012.

### Specifications

**T: Selected Items may require Plan Details and/or Technical Specifications**

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 515- 2-ABB PEDESTRIAN/BICYCLE RAILING LF

A = Required Material Types
1 (Non Specified Material)
2 (Steel Only) Index 851, 852
3 (Aluminum Only) Index 861, 862
4 (Special Materials) full material specifications needed

BB = Rail Type

Note: The following items are valid through 6-30-2012
01 (42” Picket Railing) Index 850 and 860
02 (54” Picket Railing) Index 850 and 860
03 (Non-standard Height) see detail requirements above
Additional types available July 2011 letting and later (see index for infill panel details):

11 (42" Type 1) Picket infill panel
12 (42" Type 2) Chain link, continuous infill panel
13 (42" Type 3) Sunshine infill panel
14 (42" Type 4) Broadway infill panel
15 (42" Type 5) Perforated infill panel
19 (42" Custom Panel) Details & material requirements in plans
21 (54" Type 1) Picket infill panel
22 (54" Type 2) Chain link, continuous infill panel
23 (54" Type 3) Sunshine infill panel
24 (54" Type 4) Broadway infill panel
25 (54" Type 5) Perforated infill panel
29 (54" Custom Panel) Details & material requirements in plans

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0515</td>
<td>PEDESTRIAN / BICYCLE RAILING, NS, 42&quot; TYPE 1</td>
<td>LF</td>
<td>7/1/2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0515</td>
<td>PEDESTRIAN / BICYCLE RAILING, STEEL, 42&quot; TYPE 1</td>
<td>LF</td>
<td>7/1/2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0515</td>
<td>PEDESTRIAN / BICYCLE RAILING, STEEL, 42&quot; TYPE 2</td>
<td>LF</td>
<td>7/1/2011</td>
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<tr>
<td>0515</td>
<td>PEDESTRIAN / BICYCLE RAILING, STEEL, 42&quot; TYPE 3</td>
<td>LF</td>
<td>7/1/2011</td>
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<tr>
<td>0515</td>
<td>PEDESTRIAN/ BICYCLE RAILING, STEEL ONLY, 54&quot; TYPE 1</td>
<td>LF</td>
<td>7/1/2011</td>
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</tr>
<tr>
<td>0515</td>
<td>PEDESTRIAN/ BICYCLE RAILING, ALUMINUM ONLY, 42&quot; TYPE 1</td>
<td>LF</td>
<td>7/1/2011</td>
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<td></td>
</tr>
<tr>
<td>0515</td>
<td>PEDESTRIAN/ BICYCLE RAILING, ALUMINUM ONLY, 54&quot; TYPE 1</td>
<td>LF</td>
<td>7/1/2011</td>
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<tr>
<td>0515</td>
<td>PEDESTRIAN/ BICYCLE RAILING, SPECIALS, MATERIAL 42&quot; CUSTOM PANEL</td>
<td>LF</td>
<td>7/1/2011</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**515- 3- A Handrail**

Unit LF; M1  
**Accuracy** Linear Foot; 1/10 Meter  
PlanQuantity? yes

**Notes**

DO NOT USE WITH 515-1 or 515-2. Handrails shown on Index Nos. 850-880 include the handrail with the picket or guiderail installation.

This item includes only the ADA handrail. Plan details or tech specs may refer to Index 850-880 for handrail materials and/or installation. Intended for retrofit applications to add ADA handrail to existing railing or guiderail.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
<td></td>
</tr>
</tbody>
</table>

Locate in the plans. Summarize quantities by location in the computation book.
Standards
Specifications

Struct.

515- 3- A Handrail LF

A= Material
1 (Steel)
2 (Aluminum)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0515 3 1</td>
<td>PIPE HANDRAIL, STEEL</td>
<td>LF</td>
<td>T</td>
<td>1/1/2011</td>
<td></td>
</tr>
<tr>
<td>0515 3 2</td>
<td>PIPE HANDRAIL, ALUMINUM</td>
<td>LF</td>
<td>T</td>
<td>1/1/2011</td>
<td></td>
</tr>
</tbody>
</table>

519- 78- BOLLARDS

Notes

Details

Intended for posts placed at the ends of pedestrian or special-use facilities. Space/locate as necessary to restrict certain vehicles, while allowing others.

Tech Spec should indicate that this is a plan quantity item. Details to consider include: materials (concrete, wood, metal, other), installation methods and/or construction requirements. Materials spec to address UV, strength, and/or other applicable issues.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0519 78</td>
<td>BOLLARDS</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

**520- 1- AA CONCRETE CURB AND GUTTER**

**Notes**

Includes construction of concrete curb and/or curb and gutter, and all forming, contraction joint forming, expansion joint construction, steel reinforcement, finishing and backfilling and compaction. Deduct inlet top lengths as shown in the standards from the length of curb and gutter. Length to be measure along the face of the curb. Cost of asphalt curb pad, and additional curb thickness required, to be included in the cost of curb and gutter.

Special Type: To be used for any curb & gutter, other than "Type E" or "Type F", as shown in the design standards or plans.

**Related Items**

**Design Forms and Documentation**: COMP 700-050-02: Curb/Gutter Calculations and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**: No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter

Trns-port

Other Standards Index No. 300

Specifications Section 520

Prep & Doc Manual Chapter(s) 6, 7, 13
**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
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<tr>
<td>0520 1 7</td>
<td>CONCRETE CURB &amp; GUTTER, TYPE E</td>
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<tr>
<td>0520 1 8</td>
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<tr>
<td>0520 1 10</td>
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</table>

---

**520- 2- AA CONCRETE CURB**

**Unit** LF; M1  
**Accuracy** Linear Foot; 1/10 Meter  
**PlanQuantity?** yes

**Notes**

For use next to concrete or flexible pavement. Per specification, asphalt curb pad will be included in unit price, when detailed in the plans.

Per the standard, joints are required between curb and concrete pavement. Per the spec, "Joint materials shall be included in the Contract unit price for the item in which it is used." (No separate payment for joint.)

SPECIAL: Use in accordance with Index 403, for bridge transition block.  
Do not use SPECIAL for Types A, B, or D. Small changes to Index 300 should be noted in the plans and paid under the applicable type.

**Related Items**

Required:  
Recommended:

**Design Forms and Documentation**

COMP 700-050-02: Curb/Gutter Calculations and Continuation  
Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book  
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter  
Trns-port  
Other Standards Index No. 300, 403  
Specifications Section 520  
Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct. 520- 2- AA CONCRETE CURB LF**

AA =  
1 (Type A)  
2 (Type B)  
4 (Type D)  
8 (Type RA)
9 (Special- bridge transition block) Index 403

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<td>0520</td>
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<td>T</td>
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</tbody>
</table>

### 520- 3- CONCRETE VALLEY GUTTER

**Unit** LF; M1  
**Accuracy** Linear Foot; 1/10 Meter  
**PlanQuantity?** yes

**Notes**

Details and Structure: Complete- Items 000 to 1999
accordance with Index 302. Includes all forming, contraction joint forming, expansion joint construction, steel reinforcement, finishing and backfilling and compaction. Include the length of the nose when calculating the linear feet (meters). Refer to Plans Preparation Manual for proper use.

When used on bridges, refer to Instructions for Design Standards.

For separator of variable width, consider item 520-70, paid per area.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>520-70</td>
<td>520-70 (2520-70)</td>
</tr>
</tbody>
</table>

### Design Forms and Documentation

- **Required**
  - COMP 700-050-02: Curb/Gutter Calculations and Continuation
- **Recommended**
  - Locate in the plans. Summarize quantities by location in the computation book.

### Construction Forms and Documentation

- **Required**
  - No additional form required; use plans summary or comp book
- **Recommended**
  - Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

### References

- **PPM Chapter**
  - Trns-port
- **Other Standards**
  - Index No. 300, 302, 212, 213
- **Specifications**
  - Section 520

**T: Selected Items may require Plan Details and/or Technical Specifications**

**Prep & Doc Manual Chapter(s)**
- 6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** Roadway

**Struct.** 520-5-AB: CONCRETE TRAFFIC SEPARATOR

A =
- 1 (Type I)
- 2 (Type II)
- 4 (Type IV)
- 5 (Type V)

B =
- 1 (4' Wide)
- 2 (6' Wide)
- 6 (8.5' Wide)

**Notes**

Valid widths based on current design standards. All other widths use 520-70 item.

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tr>
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<tr>
<td>0520 5 12</td>
<td>TRAFFIC SEPARATOR CONCRETE-TYPE I, 6' WIDE</td>
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<td>0520 5 16</td>
<td>TRAFFIC SEPARATOR CONCRETE-TYPE I, 8.5' WIDE</td>
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<tr>
<td>0520 5 21</td>
<td>TRAFFIC SEPARATOR - CONCRETE, TYPE II, 4' WIDE</td>
<td>LF</td>
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</tbody>
</table>
### 520-6- SHOULDER GUTTER, CONCRETE

**Details**
Deduct inlet top lengths as shown in the standards from the length of curb and gutter. For Type S, length to be measured along the face of the curb.

When spillway is needed, as shown on Index 284, include payment for spillway in shoulder gutter. Add the length of the spillway to the shoulder gutter quantity for payment.

**Unit** LF; M1  **Accuracy** Linear Foot; 1/10 Meter  **Plan Quantity?** yes

**Notes**
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**Related Items**
- Required
- Recommended

**Design Forms and Documentation**
- COMP 700-050-02: Curb/Gutter Calculations and Continuation
  - Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**
- No additional form required; use plans summary or comp book
  - Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**
- PPM Chapter
- Trans-Port
- Other
  - Standards Index No. 220, 284, 300
  - Specifications Section 520
  - Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct. 520-6-** SHOULDER GUTTER, CONCRETE LF

### Item Details

<table>
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<tr>
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**Notes**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway
Unit: LF; M1  Accuracy: Linear Foot; 1/10 Meter  Plan Quantity?: no

Notes

Details

Measured by Plan Quantity.

This item is used to repair/maintain existing granite curb, as requested by local agency.

Tech Specs required to detail materials, construction/placement, as well as measurement and payment. Tech specs should indicate that damage due to contractors operations will be repaired/replaced at no additional cost to the department.

Related Items

Required  Recommended

Design Forms and Documentation

COMP 700-050-02: Curb/Gutter Calculations and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Record final quantity on the computation book form.

References

PPM Chapter
Trnsp-ort
Other
Standards
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

TRNSPORT Category (DRAFT FIELD): 0200 Roadway

Struct.  520- 7- A  GRANITE CURB  LF

A= Operation
1 (Furnish & Install)
2 (Reset)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<td>GRANITE CURB, FURNISH &amp; INSTALL</td>
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<tr>
<td>0520 7 2</td>
<td>GRANITE CURB, RESET</td>
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<td>1/1/2010</td>
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</tbody>
</table>

520-70-  CONCRETE TRAFFIC SEPARATOR, SPECIAL- VARIABLE WIDTH

Unit: SY; M2  Accuracy: Square Yard; Square Meter  Plan Quantity?: yes

Notes

Details

Includes construction of traffic separator in variable width, as well as non-standard widths. Refer to Plans Preparation Manual for proper use.

This item may also be used when replacing grassed medians with concrete.

When used on bridges, refer to Instructions for Design Standards.
Use item 520-5 for standard constant width separator, paid per length.

Plan Detail requirement: Show the limits of the special/variable width separator. Tabulate the area, by location, in the plans. This item will be paid per plan quantity.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

### Design Forms and Documentation

- sumqrds: Roadway Summary of Quantities Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

### Construction Forms and Documentation

- No additional form required; use plans summary or comp book
- Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

### References

- PPM Chapter
- Trns-port
- Other
- Standards: Index No. 302
- Specifications: Section 520
- Prep & Doc Manual Chapter(s): 6, 7, 13

### TRNS*PORT Category (DRAFT FIELD):

- 0200 Roadway

### Struct.

| 520-70- | CONCRETE TRAFFIC SEPARATOR, SPECIAL-VARIABLE WIDTH |

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>CONCRETE TRAFFIC SEPARATOR, SPECIAL-VARIABLE WIDTH</td>
<td>SY</td>
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### 521-1-A MEDIAN CONCRETE BARRIER WALL

<table>
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<th>Unit</th>
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<th>PlanQuantity?</th>
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<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 1/10 Meter</td>
<td>yes</td>
</tr>
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</table>

### Details

Median Concrete Barrier Wall is to be used when calling for concrete barrier wall that is to be located in a median (double face or full wall barrier); see pay item 521-72- (2521-72-) for shoulder wall. Consists of construction of plain or reinforced barrier wall, as shown in the design standards. The contractor may request approval for precast construction in lieu of cast-in-place.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
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</table>

### Design Forms and Documentation

- COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
- Locate in the plans. Summarize quantities by location in the computation book.
Construction
Forms and
Documentation

No additional form required; use plans summary or comp book
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter
Trns port

Other

Normally requires SHOP DRAWINGS

Specifications

Index No. 217, 410, 415

Prep & Doc Manual Chapter(s)

Section 521

6, 7, 13

TRNS*PORT Category (DRAFT FIELD):

0200 Roadway

Struct. 521- 1- A MEDIAN CONCRETE BARRIER WALL LF

A =
Blank (Cast In Place)
1 (Precast)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
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<td>MEDIAN BARRIER WALL CONC, PRECAST</td>
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</table>

521- 5- AA CONCRETE TRAFFIC RAILING- BRIDGE

Unit LF; M1
Accuracy Linear Foot; 1/10 Meter

Plan Quantity? yes

Notes

Details

Items to be used in accordance with the Instructions for Design Standards and the Index(es), for Concrete Traffic Railings located on a BRIDGE. Include barriers located on approach slabs in this item, as applicable.

If any modification is made to a standard barrier, the "Special" pay item should be used along with complete plan details. Details for any modified/non-standard barrier must be submitted to the Structures Design Office for approval, due to crash testing requirements.

Standard Indexes:
Index 420: 32” F-Shape
Index 425: 42” F-Shape
Index 421: 32” F-Shape Median, Double Face
Index 423: 32” Vertical Face
Index 422: 42” Vertical Face
Index 424: Corral With Curb
Index 424: Corral W/O Curb
Index 480 thru Index 483: Retrofit-Vertical Face
Index 5210: F–Shaped with Sound/Noise Barrier Wall, 8’Ht.

REPAIR EXISTING: The repair pay item should only be used for maintenance/operations contracts, where the type of barrier and/or repair details are provided in the plans or specifications. Ensure that complete details are provided for materials, repair requirements, measurement and payment.
NOTE: For shoulder/ground mounted traffic railings, see pay item 521-72-. For Retaining Wall mounted traffic railings, see pay item 521-7-.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required Standards</th>
<th>Recommended Standards</th>
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<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>See detail</td>
<td>Index No. 420, 421, 422, 423, 424, 425, 480, 481, 482, 483, 5210</td>
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<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
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</table>

References

**PPM Chapter** Vol 1, Ch 2
**Trns-port** SDG 6.7
**Other Standards** See detail Index No. 420, 421, 422, 423, 424, 425, 480, 481, 482, 483, 5210
**Specifications** Section 521
**Prep & Doc Manual Chapter(s)** 6, 7, 13

<table>
<thead>
<tr>
<th>TRNS*PORT Category (DRAFT FIELD):</th>
<th>0100 Structures</th>
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<tbody>
<tr>
<td><strong>Struct.</strong> 521- 5- AA</td>
<td>CONCRETE TRAFFIC RAILING- BRIDGE LF</td>
</tr>
</tbody>
</table>

AA =
1 (32“ F-Shape)
2 (42” F-Shape) Index 425
3 (32“ F-Shape Median, Double Face)
4 (32” Vertical Face)
5 (42” Vertical Face)
6 (Corral With Curb)
7 (Corral W/O Curb)
8 (Retrofit-Vertical Face) Index 480
9 (Special Design) see BOE Detail above
10 (Repair Existing Railing) see BOE Detail above
20 (F–Shaped with Sound/Noise Barrier Wall 8’Ht.) Index 5210

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>0521 5 2</td>
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<tr>
<td>0521 5 3</td>
<td>CONCRETE TRAFFIC RAILING, BRIDGE, 32” F - SHAPE, MEDIAN, DOUBLE FACE</td>
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<tr>
<td>0521 5 4</td>
<td>CONCRETE TRAFFIC RAILING, BRIDGE, 32” VERTICAL FACE</td>
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<tr>
<td>0521 5 5</td>
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<tr>
<td>Code</td>
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</table>
| 0521 5 6 | CONCRETE TRAFFIC RAILING- BRIDGE, CORRAL W/CURB                             | LF   | 1/10 Meter | yes           | **521- 6- AB CONCRETE PARAPET** \n\n**Unit**: LF; \n**Accuracy**: Linear Foot; 1/10 Meter; \n**PlanQuantity?**: yes \n\n**Notes**: PROPOSED: New items effective 1-1-11; replaces 521- 6- A. Structures and/or Estimates Bulletin pending with actual effective dates. \n\n**Details**: Intended for pedestrian/ bicycle railings located on bridge or on retaining walls. Includes cost of concrete portion of the parapet (including cost of sidewalk as applicable). Railing mounted on the top of 27” parapets are to be paid for separately. \n\nShow location w/ quantity block on bridge superstructure sheets and wall sheets as required. \n\nWhen Index 800, 27” Pedestrian Bicycle Railing is utilized, Pay Item 460-70-3 also Required \n\n*Index Number 5300 valid through 6/2011. Index Number 6130 effective 7/2011. \n\nSpecial Design: If significant modifications are made to the design standards, the "Special" pay item should be used along with complete plan details. \n\n**Related Items** \n**Required**: COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation \n**Recommended**: Locate in the plans. Summarize quantities by location in the computation book. \n\n**Construction Forms and Documentation**: No additional form required; use plans summary or comp book \n\n**Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.** \n\n**References** \n**PPM Chapter Trns-port**: \n**Other Standards**: Index No. 820, 825, 826, 5212, and 5300/6130*. \nIndex 826 valid through June 2012. \n**Specifications Section 521** \n**Prep & Doc Manual Chapter(s)**: 6, 7, 13
Struct.  521-  6- AB  CONCRETE PARAPET  LF

A = Type
1 (Pedestrian/Bicycle)
2 (Special Design) see BOE detail; B=0
3 (Retaining Wall System Mounted w/ Sidewalk) Index 5300/6130*
4 (Retaining Wall System Mounted w/ sidewalk and 8’ Sound/Noise Wall) Index 5300/5212*

B= Height
1 (27”) Index 820, with metal railing, paid under 460-70-3
2 (42”) Index 825
3 (54”) Index 826, valid through 12-31-2011

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<td>CONCRETE PARAPET, PEDESTRIAN/BICYCLE, 42” HEIGHT</td>
<td>LF</td>
<td>7/1/2011</td>
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<tr>
<td>CONCRETE PARAPET, RETAINING WALL SYSTEM MOUNTED W/SIDEWALK, 27” HEIGHT</td>
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</table>

521-  7- AA  CONCRETE TRAFFIC RAILING BARRIER- RETAINING WALL SYSTEM

Unit  LF; M1  Accuracy  Linear Foot; 1/10 Meter  PlanQuantity?  yes

Notes

Details

Intended for 8’ retaining wall mounted sound/noise barrier with junction slab. Use in accordance with Instructions for Design Standards and Index 5210 and 5212.

Show location with quantity block on wall sheets

Related Items

Required  Recommended

Design Forms and Documentation

COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter
Trns·port
Other
Standards  Index No. 5210 and 5212
Specifications  Section 521
Prep & Doc Manual Chapter(s)
**TRNS*PORT Category (DRAFT FIELD):** 100 or 200

**Struct.** 521- 7- AA

**CONCRETE TRAFFIC RAILING BARRIER- RETAINING WALL SYSTEM**

\[ A = 1 \text{ (F Shape with Sound/Noise Barrier Wall 8' Ht.) Index 5210} \]

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0521 7 1</td>
<td>CONCRETE TRAFFIC RAILING BARRIER- RETAINING WALL SYSTEM, F SHAPE WITH SOUND/NOISE BARRIER WALL, 8' HEIGHT</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**521- 8- AA**

**CONCRETE TRAFFIC RAILING- WITH JUNCTION SLAB**

**Unit** LF; M1  **Accuracy** Linear Foot; 1/10 Meter  **PlanQuantity?** yes

**Notes**

November 2010: Pay Item descriptions updated to correspond to Standard Index terminology

**Details**

Item to be used in accordance with the Instructions for Design Standards and the Index(es). Show location with quantity block in wall plans.

Sometimes used with item 521- 5- A for traffic railing systems that extend onto bridge.

Note description change from "Sleeper Slab" to "Junction Slab", in accordance with Design Standards.

Index Numbers valid through June 2011:

Index No. 420 & 5300: 32" F-Shape
Index 425 & 5300: 42" F-Shape)
Index 423 & 5300: 32" Vertical Face
Index 422 & 5300: 42" Vertical Face
Index 424 & 5300: Corral With Curb
Index 520: Gravity Wall- see Class 0 concrete for gravity wall payment

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

**PPM Chapter**

**Trns-port**

**Other Standards**

Effective July 2011:

Index No. 420 & 6110: 32" F-Shape
Index No. 425 & 6110: 42" F-Shape)
Index No. 423 & 6110: 32" Vertical Face
### Specifications

**Section 521**

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 100 or 200 Structures or Roadway

### Struct. 521- 8- AA

**CONCRETE TRAFFIC RAILING- WITH JUNCTION SLAB LF**

AA =
1 (32" F-Shape)
2 (42" F-Shape)
3 (32" Vertical Face)
4 (42" Vertical Face)
5 (Corral With Curb)

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0521 8 1</td>
<td>CONCRETE TRAFFIC RAILING BARRIER WITH JUNCTION SLAB, 32&quot; F SHAPE</td>
<td>LF</td>
<td>1/1/2010</td>
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<tr>
<td>0521 8 2</td>
<td>CONCRETE TRAFFIC RAILING BARRIER, WITH JUNCTION SLAB, 42&quot; F SHAPE</td>
<td>LF</td>
<td>1/1/2010</td>
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<tr>
<td>0521 8 3</td>
<td>CONCRETE TRAFFIC RAILING BARRIER, WITH JUNCTION SLAB, 32&quot; VERTICAL FACE</td>
<td>LF</td>
<td>1/1/2010</td>
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<td></td>
</tr>
<tr>
<td>0521 8 4</td>
<td>CONCRETE TRAFFIC RAILING BARRIER, WITH JUNCTION SLAB, 42&quot; VERTICAL FACE</td>
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<td>1/1/2010</td>
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<tr>
<td>0521 8 5</td>
<td>CONCRETE TRAFFIC RAILING BARRIER, WITH JUNCTION SLAB, CORRAL WITH CURB</td>
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<td>1/1/2010</td>
<td></td>
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</tr>
</tbody>
</table>

### 521- 72- AA

**SHOULDER CONCRETE BARRIER WALL**

**Unit** LF; M1  **Accuracy** Linear Foot; 1/10 Meter  **PlanQuantity?** yes

### Notes

Intended for rigid shoulder roadway barriers with 8'-14' shoulder mounted sound/noise barrier walls and box culvert mounted barriers.

Use 521- 1- (2521- 1-) for median wall.

May be used for bridge pier protection, in accordance with Instructions for Design Standards, Index No. 411.

AA= 21 and 22 (F-Shape with sound/noise wall): See Instructions for Design Standards, Index 5200 series. Project specific details are required for 10' and 12' heights.

When transitioning between two wall heights, include the transition length with the quantity for the larger height.

### Related Items

**Required** COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

**Recommended** Locate in the plans. Summarize quantities by location in the computation book.
Construction Forms and Documentation

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter
Trns-port

Other

Standards

Index No. 410, 411, 5210, 5211, 5213, 5214, 5215

Specifications

Section 521

Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 100 or 200 Structures or Roadway

Struct. 521-72- AA SHOULDER CONCRETE BARRIER WALL LF

AA =
2 (Box Culvert)
3 (Rigid - Shoulder) 32", Index 410
4 (Rigid - Retaining)
5 (Rigid - Curb & Gutter)
6 (Plain - Shoulder) A=6 valid through 12-31-2009
7 (Rigid - Shoulder, With 8' Sound/Noise Wall)
10 (Rigid Shoulder 42") Index 411
11 (Rigid Shoulder 54") Index 410, 411
20 (F-Shaped, With 8’ Sound/Noise Wall) Index 5210
21 (F-Shaped, With 10’ Sound/Noise Wall) project specific details required
22 (F-Shaped, With 12’ Sound/Noise Wall) project specific details required
23 (F-Shaped, With 14’ Sound/Noise Wall) details on index 5211

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>Obsolete Date</th>
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<tr>
<td>0521722</td>
<td>SHOULDER CONCRETE BARRIER WALL, BOX CULVERT</td>
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<tr>
<td>0521723</td>
<td>SHOULDER CONCRETE BARRIER WALL, RIGID-SHOULDER</td>
<td>LF</td>
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<td>1/1/2010</td>
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<tr>
<td>0521724</td>
<td>SHOULDER CONCRETE BARRIER WALL, RIGID RETAINING</td>
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<tr>
<td>0521725</td>
<td>SHOULDER CONCRETE BARRIER WALL, RIGID-CURB &amp; GUTTER</td>
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<tr>
<td>0521727</td>
<td>SHOULDER CONCRETE BARRIER WALL, RIGID - SHOULDER WITH 8’ SOUND/NOISE WALL</td>
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<tr>
<td>05217210</td>
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<td>05217211</td>
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<td>05217220</td>
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<tr>
<td>05217221</td>
<td>SHOULDER CONCRETE BARRIER WALL, F SHAPED, WITH 10’ SOUND/NOISE WALL</td>
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</table>
521-73- CONCRETE BARRIER WALL REMOVAL

<table>
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<tr>
<th>Unit</th>
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</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 1/10 Meter</td>
<td>no</td>
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</tbody>
</table>

**Notes**
- This work normally paid for under Clearing and Grubbing or removal of existing structures. Read standards and specifications carefully before use; plan details may be required.
- To be used for Roadway barrier only. For bridge barrier, refer to Structures Standards.

**Related Items**
- **Required**
  - Design Forms and Documentation: COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
- **Recommended**
  - Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**
- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- PPM Chapter 521
- Trans-port
- Other Standards: Section 521
- Specifications

- **T:** Plan Details and/or Technical Specifications required
- Prep & Doc Manual Chapter(s): 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):**
- 100 or 200 Structures or Roadway

**Struct.**
- 521-73- CONCRETE BARRIER WALL REMOVAL LF

---

**521-Maint**

**CONCRETE BARRIER WALL REPAIR**

**Maintenance Contracts Only**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
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</thead>
<tbody>
<tr>
<td>Mixed</td>
<td>Refer to item structure and details</td>
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</tbody>
</table>

**Notes**
- Maintenance Item: Not Valid for Construction Contracts

**Details**
- MAINTENANCE CONTRACTS ONLY
- Additional BOE details pending

**Related Items**
- **Required**
  - **Recommended**

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0521 73</td>
<td>CONCRETE BARRIER WALL, REMOVAL</td>
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</table>
Design Forms and Documentation

Construction Forms and Documentation

References

<table>
<thead>
<tr>
<th>Struct.</th>
<th>Notes</th>
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<tbody>
<tr>
<td>521-Maint</td>
<td>CONCRETE BARRIER WALL REPAIR Mixed Maintenance Contracts Only</td>
</tr>
</tbody>
</table>

TRNS*PORT Category (DRAFT FIELD):

Item Description Unit TSP/Detail Valid Date Obsolete Date
--- | --- | --- | --- |
E521 1 | CONCRETE BARRIER WALL REPAIR CY 1/1/2010 |

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

522- 1- CONCRETE SIDEWALK, 4" THICK

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
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</thead>
<tbody>
<tr>
<td>SY; M2</td>
<td>Square Yard; Square Meter</td>
<td>yes</td>
</tr>
</tbody>
</table>

Notes

Consists of construction of plain or reinforced sidewalk. Includes all materials, foundation preparation, joint forming (or sawing), placing, finishing and curing. Specifically excludes excavation.

Sidewalk 6" (0.15 meter) is used in traffic-bearing situations, i.e., driveways.

Detectable Warning for sidewalk ramps is incidental to the cost of new sidewalk; for retrofit of ramps, refer to Section 527 of the specifications.

Additional details on Index 310.

For designs near significant trees, consult with Environmental Management Office.

Related Items

Design Forms and Documentation
- COMP 700-050-01: Area Computation and Continuation
  - Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation
- No additional form required; use plans summary or comp book
  - Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

- PPM Chapter Vol 1, Ch 8
- Trns-порт

Details and Structure: Complete- Items 000 to 1999
Other
Standards  Index No. 282, 304, 310, 515
Specifications  Section 522
Prep & Doc Manual Chapter(s)  6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct.  522- 1- CONCRETE SIDEWALK, 4" THICK SY

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0522 1</td>
<td>SIDIWALK CONCRETE, 4&quot; THICK</td>
<td>SY</td>
<td>1/1/2010</td>
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<td></td>
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</tbody>
</table>

522- 2- CONCRETE SIDEWALK, 6" THICK

Unit  SY; M2  Accuracy  Square Yard; Square Meter  PlanQuantity?  yes

Notes

Details
Refer to pay item 522-1 for details.

Related Items

Required Recommended

Design Forms and Documentation

COMP 700-050-01: Area Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter  Vol 1, Ch 8
Trns-port
Other
Standards  Index No. 282, 304, 310
Specifications  Section 522
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct.  522- 2- CONCRETE SIDEWALK, 6" THICK SY

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<td>0522 2</td>
<td>SIDIWALK CONCRETE, 6&quot; THICK</td>
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<td>1/1/2010</td>
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</table>

522- 3- BUS BAY/BOARDING PAD- CONCRETE

Details and Structure: Complete- Items 000 to 1999
### BUS BAY/BOARDING PAD- CONCRETE

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0522 3</td>
<td>BUS BOARDING PAD- CONCRETE</td>
<td>SY</td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

**Unit**: SY; M2  
**Accuracy**: Square Yard; Square Meter  
**Plan Quantity?**: yes

**Notes**: New item available 1-1-10.  
To be used for the roadway portion of a bus pad, when a concrete bay is shown in the plans. Show dimensions, including pad thickness, in the plans. Details or specifications are required to indicate the thickness, reinforcement, and/or joints, as needed. Concrete class, per Section 522 should be non-structural.

Do not use this pay item for the pedestrian/sidewalk areas of a bus stop.

**Related Items**

**Design Forms and Documentation**  
COMP 700-050-01: Area Computation and Continuation  
Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**  
No additional form required; use plans summary or comp book  
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**  
PPM Chapter Vol 1, Ch 8  
Trns-port  
Other Standards  
Specifications

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD)**: 0200 Roadway

### BUS SHELTER PAD- CONCRETE

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
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<tbody>
<tr>
<td>522- 4-</td>
<td>BUS SHELTER PAD- CONCRETE</td>
<td>SY</td>
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<td>1/1/2010</td>
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</tr>
</tbody>
</table>

**Unit**: SY; M2  
**Accuracy**: Square Yard; Square Meter  
**Plan Quantity?**: yes

**Notes**: New item available 1-1-10.  
To be used for the pedestrian (non-roadway) portion of a bus pad, when a shelter area is to be included. Show dimensions, including pad thickness, in the plans. Details or specifications are required to indicate the thickness, reinforcement, and/or joints, as needed. Concrete class, per Section 522 should be non-structural. Include transition details between sidewalk and curb, in compliance with ADA requirements.

Note: If a pedestrian shelter is not required, a bus landing pad (connecting the sidewalk to the curb) may be included in the sidewalk quantities. Refer to the Plans Preparation Manual, Vol 1, Chapter 8 for additional information.

**Related Items**

**Required**

**Recommended**
Standards
Specifications

Vol 1, Ch 8

Struct. 522-4  BUS SHELTER PAD- CONCRETE SY

Notes

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter Vol 1, Ch 8
Trns-port
Other
Standards
Specifications
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 522-4  BUS SHELTER PAD- CONCRETE SY

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Description</th>
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</table>

522-Maint CURB RAMP
Maintenance Contracts Only

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
<th>Details</th>
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<td>Refer to item structure and details</td>
<td>?</td>
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<td>MAINTENANCE CONTRACTS ONLY Additional BOE details pending</td>
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</table>

Related Items

Required

Recommended

Design Forms and Documentation

Construction Forms and Documentation

References

PPM Chapter
Trns-port
Other
Standards
Specifications
Prep & Doc Manual Chapter(s)
TRNS*PORT Category (DRAFT FIELD):

Struct.  522-Maint CURB RAMP Maintenance Contracts Only Mixed

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
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<td>CURB RAMP (RETROFIT)</td>
<td>EA</td>
<td>1/1/2010</td>
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</tbody>
</table>

523- 1- A PATTERNED / TEXTURED PAVEMENT

Unit SY; M2
Accuracy Square Yard; Square Meter
PlanQuantity? yes

Notes
Valid through 12-31-11; replaced by 523-1 (Vehicular Areas) and 523-2 (Non-Vehicular Areas)

Details
Includes placement of a patterned (colored) and/or textured (imprinted, stamped) treatment. Work/materials (coloring, coating, etc.) for treatment included under this item. Underlying asphalt/concrete material paid for separately. Refer to the PPM for application restrictions.

Unit of measure is Plan Quantity, without deductions for trees, manholes, etc, per specification.

Related Items
- Required
- Recommended

Design Forms and Documentation
- COMP 700-050-01: Area Computation and Continuation
- Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation
- No additional form required; use plans summary or comp book
- Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References
- PPM Chapter Vol 1, Ch 2
- Trns-port
- Other Standards
- Specifications Section 523
- Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):

Struct.  523- 1- A PATTERNED / TEXTURED PAVEMENT SY

A= Underlying Pavement Material
1 (Asphalt)
2 (Concrete)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
**523- A- B**  
**PATTERNED PAVEMENT**

**Unit**  SY; M2  
**Accuracy**  Square Yard; Square Meter  
**PlanQuantity?**  yes

---

**Notes**  
Effective 1-1-12; replaces 523-1-A. Refer to the new specification effective with the January 2012 letting.

**Details**  
Designers/Reviewers- Review latest PPM guidance prior to using this item. Maintenance Agreements may be necessary.

Includes placement of a patterned pavement. Work and materials (coloring, coating, etc.) for treatment are included under payment this item. Products must be listed on the QPL.

Per the specification, "patterned pavements are defined as surface markings applied either as an overlay to the pavement surface, or imprinted in the pavement surface." Products requiring removal of pavement, or requiring blockout trenches below the top of pavement, shall not be used.

NOTE: Stamped concrete (created using a construction process that stamps the uncured, and often colored, concrete surface into a pattern) is NOT covered by the 523 specification or pay items.

GREEN BIKE LANES: Pay Item 523-1-3 is valid for use within bike lanes, ONLY when the requirements of Roadway Design Bulletin 12-01 have been met. Refer to Bulletin and/or PPM for complete details. Show/tabulate bike lane areas in the plans.

SPECIAL EMPHASIS CROSSWALK MARKINGS: Refer to the PPM, Vol 1, 7.2 when patterned pavement is proposed for special emphasis crosswalks.

Unit of measure is Plan Quantity, without deductions for trees, manholes, etc, per specification.

---

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-01: Area Computation and Continuation</td>
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<tr>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
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**Construction Forms and Documentation**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>No additional form required; use plans summary or comp book</td>
<td></td>
</tr>
<tr>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
<td></td>
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**References**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPM Chapter</td>
<td>Vol 1, Ch 2</td>
</tr>
<tr>
<td>Trns-port</td>
<td></td>
</tr>
<tr>
<td>Other Standards</td>
<td></td>
</tr>
<tr>
<td>Specifications Section 523</td>
<td></td>
</tr>
<tr>
<td>Prep &amp; Doc Manual Chapter(s)</td>
<td></td>
</tr>
</tbody>
</table>

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**TRNS*PORT Category (DRAFT FIELD):** 0200  
Roadway

**Struct.**  
523- A- B  
PATTERNED PAVEMENT  SY

A= Location  
1 (Vehicular Areas)
2 (Non-Vehicular Areas) B=blank

B= Specific Application
blank (regular roadway)
3 (Green Bike Lane)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0523</td>
<td>PATTERNED PAVEMENT, VEHICULAR AREAS SY</td>
<td>SY</td>
<td>1/1/2012</td>
<td></td>
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<tr>
<td>0523</td>
<td>PATTERNED PAVEMENT, VEHICULAR AREAS- GREEN BIKE LANE</td>
<td>SY</td>
<td>1/1/2012</td>
<td></td>
<td></td>
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<tr>
<td>0523</td>
<td>PATTERNED PAVEMENT, NON-VEHICULAR AREAS</td>
<td>SY</td>
<td>1/1/2012</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

524- 1- A  CONCRETE DITCH PAVEMENT: NON-REINFORCED

Unit SY; M2  Accuracy Square Yard; Square Meter  PlanQuantity? yes

Notes

Details

Consists of construction of concrete pavement in the flow channel of drainage ditches. Includes excavation below the finished grade, refilling and tamping, and disposal of surplus material. Also includes all costs of providing joints and weep holes, ditch blocks within ditch pavement area, furnishing and placing the filter fabric, skimmers, and any incidental materials, as detailed in the plans.

Refer to Index 281 for additional information.

Tabulate ditch pavement and ditch blocks, by location in the plans.

Related Items

Required
Recommended

Design Forms and Documentation

SBDitchPvmt: Summary of Ditch Pavement and Performance Turf, Sod
Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter
Trns-port
Other Standards Index No. 281
Specifications Section 524
Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 524- 1- A  CONCRETE DITCH PAVEMENT: NON-REINFORCED SY

A = 1 (3"")
Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0524 1 1</td>
<td>CONCRETE DITCH PAVT, NON REINFORCED, 3&quot;</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0524 1 2</td>
<td>CONCRETE DITCH PAVEMENT, NON REINFORCED, 4&quot;</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0524 1 3</td>
<td>CONCRETE DITCH PAVEMENT, NON REINFORCED, 5&quot;</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0524 1 4</td>
<td>CONCRETE DITCH PAVEMENT, NON REINFORCED, 6&quot;</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**524- 1- AB CONCRETE DITCH PAVEMENT:REINFORCED**

**Unit** SY; M2  **Accuracy** Square Yard; Square Meter  **PlanQuantity?** yes

Notes

Details

Consists of construction of concrete pavement in the flow channel of drainage ditches. Includes excavation below the finished grade, refilling and tamping, and disposal of surplus material. Also includes all costs of providing joints and weep holes, ditch blocks within ditch pavement area, furnishing and placing the filter fabric, skimmers, and any incidental materials, as detailed in the plans. Refer to Index 281 for additional information. When reinforcement is called for, detail quantities in the plans. No separate payment is made for reinforcement.

Tabulate ditch pavement and ditch blocks, by location in the plans.

Related Items

**Required**

**Recommended**

**Design Forms and Documentation**

SBDitchPvmt: Summary of Ditch Pavement and Performance Turf, Sod Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter
Trns-port
Other
Standards Index No. 281
Specifications Section 524
Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 524- 1- AB CONCRETE DITCH PAVEMENT:REINFORCED SY

Details and Structure: Complete- Items 000 to 1999
Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0524 1 19</td>
<td>CONCRETE DITCH PAVT, 3&quot;, REINFORCED</td>
<td>SY</td>
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<tr>
<td>0524 1 29</td>
<td>CONCRETE DITCH PAVEMENT, 4&quot;,</td>
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<td>1/1/2010</td>
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<td>REINFORCED</td>
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<tr>
<td>0524 1 49</td>
<td>CONCRETE DITCH PAVEMENT, 6&quot;,</td>
<td>SY</td>
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<td></td>
<td>REINFORCED</td>
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</tr>
</tbody>
</table>

524- 2- A CONCRETE SLOPE PAVEMENT: NON-REINFORCED

Notes

Details

Intended for non-reinforced slope pavement to protect bridge fill slopes, to line flow channels, and drainage ditches. Refer to 524-1-xxa for details.

Related Items

Required

Recommended

Design Forms and Documentation

SBDitchPvmt: Summary of Ditch Pavement and Performance Turf, Sod
Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter
Trns-port
Other Standards
Specifications Section 524
Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 524- 2- A CONCRETE SLOPE PAVEMENT: NON-REINFORCED SY

A =
1 (3")
2 (4")
3 (5")
4 (6")

Notes

Details and Structure: Complete- Items 000 to 1999
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<tr>
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<td>CONCRETE SLOPE PAVEMENT, NON REINFORCED, 3&quot;</td>
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<td>1/1/2010</td>
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<tr>
<td>0524 2 2</td>
<td>CONCRETE SLOPE PAVEMENT, NON REINFORCED, 4&quot;</td>
<td>SY</td>
<td>1/1/2010</td>
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<td></td>
</tr>
<tr>
<td>0524 2 4</td>
<td>CONCRETE SLOPE PAVEMENT, NON REINFORCED, 6&quot;</td>
<td>SY</td>
<td>1/1/2010</td>
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<td></td>
</tr>
</tbody>
</table>

524- 2- AB  CONCRETE SLOPE PAVEMENT: REINFORCED

Unit  SY; M2  Accuracy  Square Yard; Square Meter  PlanQuantity?  yes

Notes

Details

Intended for reinforced slope pavement to protect bridge fill slopes, to line flow channels, and drainage ditches. Refer to 524- 1-xxa for details.

Related Items

Required  Recommended

Design Forms and Documentation

SBDitchPvmt: Summary of Ditch Pavement and Performance Turf, Sod

Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter

Trns-port

Other Standards

Specifications  Section 524

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):  0200  Roadway

Struct.  524- 2- AB  CONCRETE SLOPE PAVEMENT: REINFORCED  SY

A =
1 (3")
2 (4")
3 (5")
4 (6")
B =
9 (Reinforced)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
# 524-3- Concrete Core Ditch Blocks

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>Plan Quantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY; M3</td>
<td>1/10 Cubic Yard; 1/10 Cubic Meter</td>
<td>yes</td>
</tr>
</tbody>
</table>

**Notes**
Cubic Yard item for concrete core ditch blocks to be used ONLY for grass or earth ditches without other ditch pavement. Tabulate each location and cubic yard quantity of concrete in the plans. Plan quantity payment also includes any necessary earthwork.

Do not use this pay item for Ditch Blocks within areas where payment is made for Concrete Ditch Pavement.

**Related Items**
- **Required**
  - SBDitchPvmt: Summary of Ditch Pavement and Performance Turf, Sod
- **Recommended**
  - Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**
No additional form required; use plans summary or comp book

**Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.**

**PPM Chapter**
- Trns-port
- Other Standards
- Specifications

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 524-3- **Concrete Core Ditch Blocks** CY

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
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<td>CONC CORE DITCH BLOCKS</td>
<td>CY</td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

# 524-4-1 Cleaning and Sealing Random Cracks in Concrete Slope Pavement

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>Plan Quantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 1/10 Meter</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**
Plan details required to identify locations. Tech Spec needed to detail materials, cleaning, and sealing instructions.

**Related Items**
- **Required**
- **Recommended**
### Design Forms and Documentation
COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

### Construction Forms and Documentation

#### References
PPM Chapter
Trns-port
Other
Standards
Specifications

Plan Detail and/or Tech
Prep & Doc Manual Chapter(s)

#### TRNS*PORT Category (DRAFT FIELD):

<table>
<thead>
<tr>
<th>Struct.</th>
<th>Item Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>524- 4- 1</td>
<td>CLEANING AND SEALING RANDOM CRACKS IN CONCRETE SLOPE PAVEMENT</td>
<td>LF</td>
<td>1/1/2013</td>
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</table>

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### Notes

**524-Maint**

DITCH AND SLOPE PAVEMENT REPAIR
Maintenance Contracts Only

<table>
<thead>
<tr>
<th>Unit</th>
<th>Mixed</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Refer to item structure and details</td>
<td>?</td>
</tr>
</tbody>
</table>

**Notes**

Maintenance Item: Not Valid for Construction Contracts

**Details**

MAINTENANCE CONTRACTS ONLY
Additional BOE details pending

**Related Items**

Required
Recommended

#### Design Forms and Documentation

#### Construction Forms and Documentation

#### References
PPM Chapter
Trns-port
Other
Standards

---

**Details and Structure:** Complete- Items 000 to 1999
Specifications

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):

Struct.  524-Maint  DITCH AND SLOPE PAVEMENT REPAIR  Mixed
Maintenance Contracts Only

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tr>
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<td>CONCRETE DITCH PAVEMENT REPAIR</td>
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<td>E524 2 1</td>
<td>CONCRETE SLOPE PAVEMENT REPAIR</td>
<td>CY</td>
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<td>1/1/2010</td>
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<tr>
<td>E524 2 2</td>
<td>CONC SLOPE PVMT (CLEAN &amp; RESEAL JNTS)</td>
<td>LF</td>
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<tr>
<td>E524 2 3</td>
<td>CONC SLOPE PVMT (CLEAN &amp; SEAL CRACKS)</td>
<td>LF</td>
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<tr>
<td>E524 3 1</td>
<td>SIDEWALK REPAIR TO ELIMINATE TRIP HAZARD</td>
<td>SF</td>
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<td>1/1/2010</td>
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</tbody>
</table>

525-  1-  ASPHALTIC CONCRETE CURB

Unit       LF; M1       Accuracy  Linear Foot; 1/10 Meter       PlanQuantity?  yes

Notes

Details  Not intended for temporary or MOT applications. Use in accordance with Index 300.

Related Items

Required      Recommended

Design Forms and Documentation

COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References

PPM Chapter
Trns-port
Other Standards  Index No. 300
Specifications  Section 525
Prep & Doc Manual Chapter(s)  6, 7, 13

TRNS*PORT Category (DRAFT FIELD):  0200  Roadway

Struct.  525-  1-  ASPHALTIC CONCRETE CURB  LF

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### 526- 1- A PAVERS, ARCHITECTURAL

<table>
<thead>
<tr>
<th>Unit Description</th>
<th>Unit</th>
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<td>CURB ASPHALTIC CONC</td>
<td>LF</td>
<td>1/1/2010</td>
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</tbody>
</table>

**Notes**

**Details**

Used for roadway (roadway, commercial driveways) and/or sidewalk (sidewalks, medians, and residential driveway) applications. Refer to the PPM for restricted applications.

Measurement is per square yard, with no deduction for ornamental trees, manholes, inlets, or other public appurtenances within the normal area of the pavers. Refer to the specifications for measurement details.

For Patterned/Textured pavement (asphalt or concrete), use 523 items.

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

COMP 700-050-01: Area Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

**References**

PPM Chapter Vol 1, Ch 2

Trns-port

Other Standards Index No. 515

Specifications Section 526

Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS^PORT Category (DRAFT FIELD):** 0800

Architectural

### 527- 1- DETECTABLE WARNING ON EXISTING WALKING SURFACE

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAVERS, ARCHITECTURAL, ROADWAY</td>
<td>SY</td>
<td>1/1/2010</td>
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<td></td>
</tr>
<tr>
<td>PAVERS, ARCHITECTURAL, SIDEWALK</td>
<td>SY</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

**Details**

This pay item is to be used for Detectable Warnings applied to existing walking surfaces.

**TRNS^PORT Category (DRAFT FIELD):** 0800

Architectural

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### Related Items

**Required**

**Recommended**

**Design Forms and Documentation**

COMP 700-050-01: Area Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

**References**

PPM Chapter Vol 1, Ch 2

Trns-port

Other Standards Index No. 515

Specifications Section 526

Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS^PORT Category (DRAFT FIELD):** 0800

Architectural

### Notes

**Details**

This pay item is to be used for Detectable Warnings applied to existing walking surfaces.

**TRNS^PORT Category (DRAFT FIELD):** 0800

Architectural
(RETOFIT for previous projects), used in coordination with Index 304.

For new installations (detectable warnings constructed under the current project/proposal), use index 304; cost of detectable warning for new installations is included in the cost of the walking surface- sidewalk, curb, etc. Refer to specifications for a complete description of acceptable products.

**Related Items**

<table>
<thead>
<tr>
<th>Design Forms and Documentation</th>
<th>Required</th>
<th>Recommended</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
</tr>
</tbody>
</table>

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

**References**

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Trns-port</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Other Standards</td>
</tr>
<tr>
<td></td>
<td>Specifications</td>
</tr>
</tbody>
</table>

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct. 527-1- DETECTABLE WARNING ON EXISTING WALKING SURFACE EA**

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0527 1</td>
<td>DETECTABLE WARNING ON EXISTING WALKING SURFACE, RETROFIT</td>
<td>EA</td>
<td>1/1/2010</td>
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</tbody>
</table>

**530-1- RIPRAPP- SAND - CEMENT**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY; M3</td>
<td>1/10 Cubic Yard; 1/10 Cubic Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

This item entails the use of sand-cement bags to construct endwalls, provide fill slope protection, and/or provide ditch bottom and ditch slope protection. To be used in accordance with Design Standards.

Note, per specification: Record and show how quantity was arrived at on tabulation form 700-050-56. If sand-cement is proportioned by volume, the sand shall be measured loose in an approved measure prior to mixing with cement. If proportioned by weight, approved scales shall be used for this purpose and the volume shall be calculated using a standard conversion factor for sand of 85 lb/ft³ (1360 kg/m³).

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>
### Design Forms and Documentation

COMP 700-050-04: Volume Measure Items and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

### Construction Forms and Documentation

700-050-56: Daily Log Sheet Miscellaneous Tabulation Form Site Source Record

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

- **PPM Chapter**
- **Trns-port**
- **Other Standards** Index No. 258, 268
- **Specifications** Section 530
- **Prep & Doc Manual Chapter(s)** 6, 13

### TRNS*PORT Category (DRAFT FIELD):

| Struct. 530-1- | RIPRAP- SAND - CEMENT | CY |

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0530 1</td>
<td>RIPRAP, SAND-CEMENT</td>
<td>CY</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 530-3- A  RIPRAP- RUBBLE

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>TN; MT</td>
<td>1/10 Ton; 1/10 Metric Ton</td>
<td>no</td>
</tr>
</tbody>
</table>

### Notes

To be used for bank and shore, bridge abutment, ditch, and outlet structure protection. Refer to Drainage Manual for design criteria. Gradation is given in the specifications. Design quantity is based on the following: W = Vol.s X S.G. X Ww X Vf

- **W** = Weight of Stone (lbs)
- **Vol.s** = Volume of Stone (ft³)
- **S.G.** = Specific Gravity
  - 2.3 for Bank & Shore Protection
  - 1.9 for Ditch Lining
- **Ww** = 62.4 lb/ft³ (1 MT/M³) Weight of Water
- **Vf** = .90 (Void Factor)

NOTE: remember to convert weight (LB) to (TN) for unit of measure & payment.

COASTAL SHORE- LARGE BOULDERS: Contact the State Drainage Office, prior to using this item. The standard specifications must be modified to detail the boulder size and specific gravity.

Final measure, per specifications, will be by railroad scales, truck scales, or barge displacement.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>514-71</td>
<td>514-71</td>
</tr>
</tbody>
</table>

### Design Forms and Documentation

COMP 700-050-06: Weight Measure or Liquid Volume Comp & Cont.

Locate in the plans. Summarize quantities by location in the computation book.
### Struct. 530-3- A RIPRAP- RUBBLE TN

**A =**
- 3 (Bank & Shore)
- 4 (Ditch Lining)
- 5 (Coastal Shore- Large Boulders) to be used only with approval; see details above.

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0530 3 3</td>
<td>RIPRAP- RUBBLE, BANK AND SHORE</td>
<td>TN</td>
<td>1/1/2010</td>
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<td></td>
</tr>
<tr>
<td>0530 3 4</td>
<td>RIPRAP, RUBBLE, F&amp;I, DITCH LINING</td>
<td>TN</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0530 3 5</td>
<td>RIPRAP- RUBBLE, COASTAL SHORE- LARGE BOULDERS</td>
<td>TN</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 530-74- BEDDING STONE

**Unit** | TN; MT  
**Accuracy** | 1/10 Ton; 1/10 Metric Ton  
**PlanQuantity?** | no

**Notes**

Quantities should be based on 115 lbs per cubic foot (1840 kg per cubic meter).

**Related Items**

**Required** | COMP 700-050-06: Weight Measure or Liquid Volume Comp & Cont.  
**Recommended** | Locate in the plans. Summarize quantities by location in the computation book.

**Design Forms and Documentation**

700-050-56: Daily Log Sheet Miscellaneous Tabulation Form Site Source Record  
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter  
Trns-port  
Other  
Standards  
Specifications Section 530  
Prep & Doc Manual Chapter(s) 6, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 or other  
Roadway or other- see details
Struct. 530-74- BEDDING STONE TN

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0530</td>
<td>BEDDING STONE</td>
<td>TN</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

530-76- A GABION MAT

Unit SY; M2

Accuracy Square Yard; Square Meter

PlanQuantity? no

Notes

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required Recommended

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

References

PPM Chapter
Trns-port
Other Standards
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 530-76- A GABION MAT SY

A = Thickness
1 (6" Thick)
2 (9" Thick)
3 (18")
4 (12")
5 (15")

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### 530-77-A GABION BASKET

**Unit** | SY; M2 | **Accuracy** | Square Yard; Square Meter | **Plan Quantity?** | no
--- | --- | --- | --- | --- | ---

**Notes**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

**References**

PPM Chapter

Trns-port

Other Standards

Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) | 6, 7, 13
--- | ---

**TRNS*PORT Category (DRAFT FIELD):** | 0200 Roadway

**Struct.** | 530-77-A GABION BASKET SY

A =

1 (12" Thick)

2 (36" Thick)

3 (30" Thick)

4 (18" Thick)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0530 77 2</td>
<td>GABION BASKET, 36&quot; THICK</td>
<td>SY</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0530 77 3</td>
<td>GABION BASKET, 30&quot; THICK</td>
<td>SY</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0530 77 4</td>
<td>GABION BASKET, 18&quot; THICK</td>
<td>SY</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
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</table>

**Details and Structure:** Complete- Items 000 to 1999
### 530-78- RIPRAP- ARTICULATING BLOCK

<table>
<thead>
<tr>
<th>Unit</th>
<th>SY; M2</th>
<th>Accuracy</th>
<th>Square Yard; Square Meter</th>
</tr>
</thead>
<tbody>
<tr>
<td>PlanQuantity?</td>
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<td></td>
<td></td>
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</table>

**Notes**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Required**

**Recommended**

### Design Forms and Documentation

- COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
  - Locate in the plans. Summarize quantities by location in the computation book.

### Construction Forms and Documentation

- No additional form required; use plans summary or comp book
  - Record final quantity on the computation book form.

### References

- PPM Chapter
- Trns-port
- Other
- Standards
- Specifications

**T**: Plan Details and/or Technical Specifications required

### Prep & Doc Manual Chapter(s)

- TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

### Struct. 530-78- RIPRAP- ARTICULATING BLOCK SY

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0530 78</td>
<td>RIPRAP - ARTICULATING BLOCK</td>
<td>SY</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 530-79- PLASTIC CELLULAR CONFINEMENT SYSTEM

<table>
<thead>
<tr>
<th>Unit</th>
<th>SY; M2</th>
<th>Accuracy</th>
<th>Square Yard; Square Meter</th>
</tr>
</thead>
<tbody>
<tr>
<td>PlanQuantity?</td>
<td>no</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

Contact the State Drainage Office for approval, prior to using this item.

**Details**

Technical Specifications should be reviewed by Drainage Office, Construction Office, and/or State Geotechnical Engineer.

Intended for permanent erosion control applications. Temporary applications are covered under Section/Items 104. Reinforced Soil Slopes and/or Soft Soil reinforcement covered under Section/Items 145.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of...
payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

### Design Forms and Documentation

- **COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation**
  - Locate in the plans. Summarize quantities by location in the computation book.

### Construction Forms and Documentation

- **No additional form required; use plans summary or comp book**
  - Record final quantity on the computation book form.

### References

- **PPM Chapter**
- **Trns-port**
- **Other Standards**
- **Specifications**

**T: Plan Details and/or Technical Specifications required**

### Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

### Struct.

- **530-79-**
  - **PLASTIC CELLULAR CONFINEMENT SYSTEM**
  - **SY**

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

---

### 534-72-1AA

**CONCRETE SOUND/NOISE BARRIERS- INCLUDING FOUNDATION**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF; M2</td>
<td>Square Foot; 1/10 Square Meter</td>
<td>yes</td>
<td>Effective January 2011 letting: New index 5207</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Effective July 2011 letting: Indexes 5200 through 5207 combined into new index 5200.</td>
</tr>
</tbody>
</table>

**Details**

- To be used for panel-type concrete sound/noise barrier (wall) construction, in accordance with Section 534.
  - Walls are coated with either a class 5 or anti-graffiti coating, as shown in the plans. Class 5 coatings are incidental to all new construction. Anti-graffiti coatings are paid separately under Section 563. Show locations and quantities in the plans.
  - Special details must be included in the plans.
  - NOTE: Sound/Noise barriers on bridges or MSE wall sections are not covered by this pay item.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

### Design Forms and Documentation

- **Index 5200 Series: Sound/Noise Barrier Data Tables- Includes Summary of Foundations and Wall Quantities, Aesthetic Requirements, and Limits of Anti-Graffiti Coating**
  - Locate in plans. Summarize quantities by location on summary sheet in the plans.
Construction Forms and Documentation

No additional form required; use plans summary or comp book
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

References
PPM Chapter Vol 1, Chapter 32
Trns*port Structures Design Manual (SDM) Vol 1, Chapters 2 and 3
Other Effective July 2011- Index 5200
Specifications Section 534
Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 534-72-1AA CONCRETE SOUND/NOISE BARRIERS- INCLUDING SF FOUNDATION

A= Type
01 (Permanent)
02 (Temporary)

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0534 72101</td>
<td>SOUND/NOISE BARRIER-INC FOUNDATION, PERMANENT</td>
<td>SF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0534 72102</td>
<td>SOUND/NOISE BARRIER-INC FOUNDATION, TEMPORARY</td>
<td>SF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

534-73- PERIMETER WALL

Unit SF; M2  Accuracy Square Foot; 1/10 Square Meter  PlanQuantity? yes

Notes
Monitor: Steve Nolan, State Structures Design Office

Details
To be used for perimeter wall construction, in accordance with Developmental Design Index D5250. Contact the State Structures Design Office for drawings and details. Also used with Developmental Specification Dev534.

Includes the cost of the foundation (auger cast piles or spread footings when called for in the plans), test wall, etc. Area bounded by top of panel, bottom of panel, without deductions for openings; refer to specs for additional information.

NOTE: There is currently no specific criteria specifying when perimeter walls are justified. This will be a project by project decision based on project demands and resolved by the District.

Related Items
Required Recommended
Design Forms and Documentation
COMP 700-050-01: Area Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.
No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**Notes**

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0534 73</td>
<td>PERIMETER WALL</td>
<td>SF</td>
<td>M</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**534-Maint**

SOUND/NOISE BARRIER REPAIR

Maintenance Contracts Only

**Unit** Mixed

**Accuracy** Refer to item structure and details

**PlanQuantity?** ?

**Notes** Maintenance Item: Not Valid for Construction Contracts

**Details** MAINTENANCE CONTRACTS ONLY

Additional BOE details pending

**Related Items**

Required

Recommended

**Design Forms and Documentation**

**Construction Forms and Documentation**

**References**

PPM Chapter

Trns-port

Other

Standards Specifications

**Prep & Doc Manual Chapter(s)** 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):**

**Struct.** 534-Maint

SOUND/NOISE BARRIER REPAIR

Maintenance Contracts Only

Mixed
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>E534 72 1</td>
<td>SOUND/NOISE BARRIER PANELS, F&amp;I, REPLACE</td>
<td>SF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>E534 72 2</td>
<td>SOUND/NOISE BARRIER POSTS, F&amp;I, REPLACE, INC FOUNDATION</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**GUARDRAIL**

Unit: LF; M1  Accuracy: Linear Foot; 1/10 Meter  PlanQuantity?: yes

**Notes**


**Details**

Consists of the construction of metal guardrail on posts of timber or steel, installed in accordance with Index 400.

Note: Panels are 12.5' (3.810 meters) in length. The plan length of a run of guardrail should normally be determined as a multiple of the nominal panel lengths. Object markers used for facing reverse lanes of traffic are included in the cost of the guardrail.

Guardrail is measured as the "end to end" plan quantity.

DO NOT deduct the length of guardrail transition, nested panels, end anchorage assembly, or bridge anchorage assembly.

DO NOT tabulate separate guardrail quantities for transition panels, nested panels, or components of the anchorage assemblies.

**EXAMPLES:**

- **W-BEAM:** If the run of guardrail between the end/barrier/bridge anchorages or guardrail transitions is W-Beam, tabulate the entire length as W-Beam guardrail. Measure as the "end to end" plan quantity.

- **THRIE BEAM:** If the run of guardrail between the end/barrier/bridge anchorages or guardrail transitions is "TL-3 Thrie beam", tabulate the entire length as Thrie Beam guardrail. Measure as the "end to end" plan quantity.

- **MODIFIED THRIE BEAM:** If the run of guardrail between the end/barrier/bridge anchorages or guardrail transitions is "TL-4 Modified Thrie beam", tabulate the entire length as Roadway, Modified Thrie Beam. Measure as the "end to end" plan quantity.

- **DOUBLE FACED:** Plan quantity length, end-to-end, for double faced guardrail will be made along the centerline of the posts. Double Faced guardrail is a single post with panels on two sides.

- **MIXED TYPES:** See Guardrail Calculations on BOE web page for additional examples.

**DOCUMENTATION:** Document locations in the Summary of Guardrail tabulation box on the plans. Refer to PPM Vol 2, Chapter 7 for details. As noted above, the "end to end" lengths are used for measurement. See Guardrail Calculations on BOE web page for additional examples.

**OPERATIONS:**

- **INSTALL ONLY:** Plan details are needed to indicate location of panels (FDOT maintenance office, or other) and contact information.

- **RUB RAIL, PIPE RAIL, and BRIDGE ANCHORAGES:** Effective July 2012, rub rail, pipe rail, and bridge anchorages are paid separately; see pay items 536-5, 536-6, and 536-8 for details.
### Related Items

| Required | 339-1 (2339-1) | Recommended | 536-7 and 536-8 (2536-7, 2536-8) |

### Design Forms and Documentation

SBGuardrail: Summary of Guardrail (Includes Pipe Rail, Rub Rail, End Anchorage Assy, etc.)

Locate in plans. Summarize quantities by location on summary sheet in the plans.

### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

### References

PPM Chapter

Trns-port

Other Normally requires SHOP DRAWINGS

Standards Index No. 400, 402

Specifications Section 536

Prep & Doc Manual Chapter(s) 6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 536-1 AA GUARDRAIL LF

A = Primary Type, including "end to end" measured panels of any type. See details above.

1 (Roadway, W-Beam)

3 (Roadway, W-Beam, Double Face)

5 (Roadway, Thrie Beam) TL-3 with wood blocks.

9 (Roadway, Thrie Beam, Double Face) TL-3 with wood blocks

11 (Roadway, Modified Thrie Beam) TL-4

12 (Roadway, Modified Thrie Beam, Double Face) TL-4

13 (Roadway, Install only- materials available at FDOT Maintenance Yard)

Refer to Section 460 pay items for structures applications and thrie beam retrofits

### Notes

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0536 1 1</td>
<td>GUARDRAIL -ROADWAY</td>
<td>LF</td>
<td>1/1/2010</td>
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<tr>
<td>0536 1 2</td>
<td>GUARDRAIL -BRIDGE</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
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<tr>
<td>0536 1 3</td>
<td>GUARDRAIL -ROADWAY, DOUBLE FACE</td>
<td>LF</td>
<td>1/1/2010</td>
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<td></td>
</tr>
<tr>
<td>0536 1 5</td>
<td>GUARDRAIL -ROADWAY, THRIE BEAM</td>
<td>LF</td>
<td>1/1/2010</td>
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<tr>
<td>0536 1 8</td>
<td>GUARDRAIL, ROADWAY, WITH RUB RAIL</td>
<td>LF</td>
<td>1/1/2010</td>
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<td>0536 1 9</td>
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<td>1/1/2010</td>
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<td>0536 1 11</td>
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<td>GUARDRAIL</td>
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</tr>
<tr>
<td><strong>Unit</strong></td>
<td>LF; M1</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>Linear Foot; 1/10 Meter</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td><strong>PlanQuantity?</strong></td>
<td>yes</td>
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</tbody>
</table>

**Notes**

Notes and selected items are valid through June 30, 2012. See 536-1- below for projects let July 2012 and later.

**Details**

Consists of the construction of metal guardrail on posts of timber or steel. Panels are 12.5’ (3.810 meters) in length. The plan length of a run of guardrail should normally be determined as a multiple of the nominal panel lengths. Note that the limits of guardrail for measurement and payment extend through the limits of the end anchorage assembly, as shown in the design standards.

When attaching guardrail to a new or widened bridge railing, the guardrail (including transition and thrie beam panels) is paid for under item 536-1- (2536-1-). The cost of connecting the guardrail to the bridge railing is included in the cost of the guardrail. Refer to Index 402 for limits of payment.

When connecting guardrail to an existing bridge railing or to vertical face rail retrofits, the guardrail (including transition and thrie beam panels) is paid for under the item 536-1- (2536-1-) and item 536-8 is included for the cost of connecting the guardrail to the existing bridge railing. Other situations should be noted in the plans.

Pipe rail is a pedestrian safety treatment; it is to be included in the cost of the guardrail, as indicated on standards. Tabulate the length of pedestrian pipe rail on the Summary of Guardrail in the plans. Refer to Index 400, Pedestrian Treatments, for additional information.

Rub rail is used for guardrail placed on slopes, as shown on the standards, mounted approximately 12 inches below the center of the standard guardrail. Per the standard, payment is included in the contract unit price for guardrail. Tabulate the length of rubrail on the Summary of Guardrail in the plans. Use the “Roadway, with rubrail” pay item.

Document locations on summary table. Refer to PPM Vol 2, Chapter 7 for details.

Object markers used for facing reverse lanes of traffic are included in the cost of the guardrail.

Metal Traffic Railing, Bridge Thrie Beam Retrofit: Refer to Index 470. Payment is made under 460-71-1

INSTALL ONLY: Plan details are needed to indicate location of panels (FDOT maintenance office, or other) and contact person.

**Related Items**

**Required**  339-1 (2339-1)  
**Recommended**  536-7 and 536-8 (2536-7, 2536-8)

**Design Forms and Documentation**

SBGuardrail: Summary of Guardrail (Includes Pipe Rail, Rub Rail, End Anchorage Assy, etc.)

Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.
Standards Index No. 400, 402
Specifications Section 536
Prep & Doc Manual Chapter(s) 6, 7, 13

Normaly requires SHOP DRAWINGS

Struct. 536-1 AA old GUARDRAIL LF

A = Type
1 (Roadway) w-beam
2 (Bridge) valid through June 2012
3 (Roadway, Double Face)

5 (Roadway, Thrie Beam) TL-3 with wood blocks.

8 (Roadway, With Rub Rail) valid through 6-30-2012
9 (Roadway, Thrie Beam, Double Face) TL-3 with wood blocks
11 (Roadway, Modified Thrie Beam) TL-4
12 (Roadway, Modified Thrie Beam, Double Face) TL-4
13 (Roadway, Install only- materials available at FDOT Maintenance Yard)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### 536- 2- GUARDRAIL- SHOP BENT PANELS LF

#### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Valid Date</th>
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<tr>
<td>0536</td>
<td>GUARDRAIL- SHOP-BENT PANELS</td>
<td>LF</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 536- 4- A RETROFIT EXISTING GUARDRAIL LF

**Unit** LF; M1  **Accuracy** Linear Foot; 1/10 Meter  **PlanQuantity?** no

**Notes**
Valid through 6-30-2012. Replaced by separate pay items for pipe rail and rub rail.

**Details**
This item to be used when existing guardrail is to be retrofitted with additional components. Do not use this item for replacement of complete guardrail system.

**Related Items**

**Design Forms and Documentation**
SBGuardrail: Summary of Guardrail (Includes Pipe Rail, Rub Rail, End Anchorage Assy, etc.)
Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**
No additional form required; use plans summary or comp book

**References**
PPM Chapter  Trns-port  Other  Standards  Specifications

T: Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

### 536- 5- A GUARDRAIL- RUB RAIL LF

**Unit** LF; M1  **Accuracy** Linear Foot; 1/10 Meter  **PlanQuantity?** yes

**Notes**
Effective July 2012: Separate payment for Rub Rail and Pipe Rail.

**Details**
Rub rail is used for guardrail placed on slopes, as shown on the standards. It is mounted 12 inches below the center of the guardrail panel.
Tabulate the length of rub rail in the Summary of Guardrail tabulation box on the plans. Payment will be made for the plan quantity length along the centerline of the posts. When double sided rub rail is needed (median locations), use the pay item for "double sided". DO NOT double the length for measurement along both rub rail faces.

### Required

**A= Rub Rail Type**
- 1 (Single Sided)
- 2 (Double Sided)

### Recommended

- SBGuardrail: Summary of Guardrail (Includes Pipe Rail, Rub Rail, End Anchorage Assy, etc.)
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

---

**Struct.** 536- 5- A GUARDRAIL- RUB RAIL LF

- A= Rub Rail Type
  - 1 (Single Sided)
  - 2 (Double Sided)

**Notes**

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<td>0536 5 2</td>
<td>GUARDRAIL- RUB RAIL, DOUBLE SIDED</td>
<td>LF</td>
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<td>7/1/2012</td>
<td></td>
</tr>
</tbody>
</table>

---

### Effective July 2012: Separate payment for Rub Rail and Pipe Rail.

Pipe rail is a pedestrian safety treatment for steel guardrail posts only, per Index 400. Ends shall be tapered down, with the pipe rail end fixture attached to a timber post. Cost of the end fixture is included with the pipe rail. Cost of the timber post is included with the guardrail.

**Notes**

- NOTE: Pipe rail is required when the backs of the steel guardrail posts are 4’ or less from the near front edge of the pedestrian way or bikeway.

- Tabulate the quantity of pipe rail, by station along the centerline of the posts, in the Summary of Guardrail tabulation box on the plans.
GUIDERAIL: Guiderail is not a guardrail component. Refer to Section 515 pay items if a pipe handrail (guiderail) is needed.


design forms and documentation

SBGuardrail: Summary of Guardrail (Includes Pipe Rail, Rub Rail, End Anchorage Assy, etc.)
Locate in plans. Summarize quantities by location on summary sheet in the plans.


construction forms and documentation


design forms and documentation


transport
category (DRAFT FIELD): 0200 Roadway


Struct. 536-6- GUARDRAIL- PIPE RAIL LF

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<td>GUARDRAIL- PIPE RAIL</td>
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536-7- SPECIAL GUARDRAIL POST

<table>
<thead>
<tr>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
</tr>
</tbody>
</table>

Refer to Index 400 for all types of special posts: timber, steel, and others. Used when culvert, pier footing or other concrete structure precludes normal post installation and special fabrication is required. Specifically excludes posts for double-faced median guardrail. When this item is used, item 536-1-xxa (2536-1-xxa) must be used.

Special Posts, as shown in index 400 and 402, are paid under 536-7, only when meeting spec requirement of "special fabrication". Refer to 536-6.2 of the specifications.

"Special Length" posts must be detailed in the plans, along with the vertical depth for installation. Special length posts are paid under item 536-76.

Required Recommended

Design Forms and Documentation

SBGuardrail: Summary of Guardrail (Includes Pipe Rail, Rub Rail, End Anchorage Assy, etc.)
Locate in plans. Summarize quantities by location on summary sheet in the plans.
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0536 7</td>
<td>SPECIAL GUARDRAIL POST</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

536- 8- A GUARDRAIL BRIDGE ANCHORAGE ASSEMBLY

| Notes | Effective July 2012: Per design standards, payment is made for new, widened, or retrofit of existing bridge anchorages. Prior to July 2012, payment was only for retrofit, unless otherwise designated in the contract documents. |
|       | Use when connecting guardrail to a bridge. Includes furnishing and installing special end shoes, wood blocks or retrofit wing posts, concrete anchor posts, thrie beam terminal connectors, backup plates, filler plates, and necessary hardware. Refer to Specifications and Design Standards for additional information. |
|       | Per the index, when the attachment overlays the bridge number, the cost of a new sign panel shall be included in the cost of the anchorage assembly. |
|       | INSTALL: The install operation is only used when the materials are furnished by FDOT or other maintaining agency. |
|       | RELOCATE: Relocate the assembly within the contract limits. Includes the complete removal and reinstallation, as noted in the plans or specifications. |
|       | REMOVE: The plans or specs must indicate the disposal or salvage/stockpile instructions. NOTE- Separate payment for removal/disposal is NOT made when incidental to "Removal of Existing Structures". |

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required 536- 1- AA</th>
<th>Recommended</th>
</tr>
</thead>
</table>

Design Forms and Documentation

<table>
<thead>
<tr>
<th>Design Forms and Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBGuardrail: Summary of Guardrail (Includes Pipe Rail, Rub Rail, End Anchorage Assy, etc.)</td>
</tr>
<tr>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
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Construction Forms and Documentation

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<tr>
<td>No additional form required; use plans summary or comp book</td>
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<tr>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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</tbody>
</table>
Standards Index No. 402
Specifications Section 536
Prep & Doc Manual Chapter(s) 7, 13

Struct. 536-8- A GUARDRAIL BRIDGE ANCHORAGE ASSEMBLY EA

A = Operation
Blank (Furnish & Install)
1 (Install)
3 (Relocate)
6 (Remove)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0536 8</td>
<td>GUARDRAIL- BRIDGE ANCHORAGE ASSEMBLY, FURNISH &amp; INSTALL</td>
<td>EA</td>
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<td>1/1/2010</td>
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<tr>
<td>0536 8</td>
<td>GUARDRAIL, BRIDGE ANCHORAGE ASSEMBLY, INSTALL</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0536 8</td>
<td>GUARDRAIL, BRIDGE ANCHORAGE ASSEMBLY, REMOVE</td>
<td>EA</td>
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<td>1/1/2010</td>
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</tr>
</tbody>
</table>

536-10-ABB GUARDRAIL REPAIR/REPLACEMENT

Unit Mixed Accuracy Refer to item structure and details PlanQuantity? no

Notes

Details

Related Items Required Recommended

Design Forms and Documentation SGBGuardrail: Summary of Guardrail (Includes Pipe Rail, Rub Rail, End Anchorage Assy, etc.) Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation

References PPM Chapter
Trns-port
Other Standards Specifications
Prep & Doc Manual Chapter(s)

Details and Structure: Complete- Items 000 to 1999
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 536-73- GUARDRAIL REMOVAL

<table>
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<tr>
<th>Unit</th>
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<th>PlanQuantity?</th>
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</thead>
<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 1/10 Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

For single run, double face guardrail: measurement and payment are based on the single run length. Refer to specification for details. (Do not double the centerline length for double face guardrail.)

Payment includes disposition of the guardrail, as specified in the plans.

**Related Items**

**Design Forms and Documentation**

SBGuardrail: Summary of Guardrail (Includes Pipe Rail, Rub Rail, End Anchorage Assy, etc.)

Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Trns-port

Other Standards

Index No. 400

Specifications

Section 536

Prep & Doc Manual Chapter(s) 7, 13

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**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 536-73- GUARDRAIL REMOVAL LF

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
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<tr>
<td>0536 73</td>
<td>GUARDRAIL REMOVAL</td>
<td>LF</td>
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</table>

**536-76- SPECIAL LENGTH GUARDRAIL POST**

<table>
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<th>Unit</th>
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</tr>
</thead>
<tbody>
<tr>
<td>EA</td>
<td>Each</td>
<td>no</td>
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</tbody>
</table>
Notes
Details
Refer to index 400 for guardrail posts.
Special Posts, as shown in index 400 and 402, are paid under 536-7, only when meeting
spec requirement of "special fabrication". Refer to 536-6.2 of the specifications.

Special Length posts must be detailed in the plans, along with the vertical depth for
installation.

Related Items
Required
Recommended

Design Forms
and
Documentation
SBGuardrail: Summary of Guardrail (Includes Pipe Rail, Rub Rail, End Anchorage Assy,
e tc.)
Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction
Forms and
Documentation
No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Trns-port
Other
Specifications
Index No. 400
Section 536
Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 536-76-
SPECIAL LENGTH GUARDRAIL POST EA

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
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<tr>
<td>0536 76</td>
<td>GUARDRAIL POST - SPECIAL LENGTH</td>
<td>EA</td>
<td>D</td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

536-82-
GUARDRAIL- CONCRETE BARRIER ANCHORAGE ASSEMBLY

Notes

Details
DO NOT USE FOR BRIDGE ANCHORAGE.

Independent stand alone anchorage to be used between guardrail and a concrete barrier.
Includes furnishing and installing special end shoes, wood blocks, thrie beam terminal
connectors, backup plates, and necessary hardware. Refer to Index 400 and 410 of the
Design Standards for additional information.

See pay item 536-8 for bridge anchorages.

Related Items
Required
Recommended

Design Forms
and
Documentation
SBGuardrail: Summary of Guardrail (Includes Pipe Rail, Rub Rail, End Anchorage Assy,
e tc.)
Locate in plans. Summarize quantities by location on summary sheet in the plans.

Details and Structure: Complete- Items 000 to 1999
Standards Index No. 400, 410
Specifications Section 536
Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 536-82- GUARDRAIL- CONCRETE BARRIER ANCHORAGE ASSEMBLY

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>1/1/2010</td>
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**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**Related Items**

Required

Recommended

Design Forms and Documentation

SBGuardrail: Summary of Guardrail (Includes Pipe Rail, Rub Rail, End Anchorage Assy, etc.)
Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter
Trns*port

Other Standards Index No. 400
Specifications Section 536
Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 536-83- A GUARDRAIL POST REPLACEMENT EA

**Notes**

This item is for maintenance and repair use only.
To be used in accordance with Index 400.

**Details**

This item is for maintenance and repair use only.
To be used in accordance with Index 400.
## Topic No. 600-000-002

### Basis of Estimates

**2012 Edition**  
January 22, 2013

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
<th>Description</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0536</td>
<td>GUARDRAIL POST REPLACEMENT, REGULAR</td>
<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>536-85-AA</td>
<td>GUARDRAIL END ANCHORAGE ASSEMBLY</td>
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### GUARDRAIL END ANCHORAGE ASSEMBLY

<table>
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<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

**Notes**

Includes furnishing and installing all necessary hardware, as shown in Standard Index 400.

End anchorage is paid per each. Refer to 536-1 for limits of guardrail payment; DO NOT tabulate guardrail components separately for the end anchorage assembly.

**Related Items**

- Required: 536-1
- Recommended: 536-1

**Design Forms and Documentation**

- SBGuardrail: Summary of Guardrail (Includes Pipe Rail, Rub Rail, End Anchorage Assy, etc.)
  - Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Trnsp-port
- Other Standards: Index No. 400
- Specifications: Section 536
- Prep & Doc Manual Chapter(s): 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.**  
536-85-AA GUARDRAIL END ANCHORAGE ASSEMBLY EA

<table>
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**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
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<td>05368522</td>
<td>GUARDRAIL END ANCHORAGE ASSEMBLY-FLARED</td>
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<td>05368524</td>
<td>GUARDRAIL END ANCHORAGE ASSEMBLY-PARALLEL</td>
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<td>05368525</td>
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<tr>
<td>05368527</td>
<td>GUARDRAIL END ANCHORAGE ASSEMBLY-DOUBLE FACE TERMINAL</td>
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</tbody>
</table>

**Notes:**

Maintenance Item: Not Valid for Construction Contracts

Details:

MAINTENANCE CONTRACTS ONLY
Additional BOE details pending

**Related Items:**

Required
Recommended

**Design Forms and Documentation:**

**Construction Forms and Documentation:**

No additional form required; use plans summary or comp book

**References:**

PPM Chapter
Trns-port
Other Standards
Specifications
Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):**

Struct. 536-Maint END ANCHORAGE ASSEMBLY Maintenance Contracts Only Mixed

**Notes:**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tbody>
<tr>
<td>E536 3122</td>
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<td>1/1/2010</td>
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<tr>
<td>E536 3131</td>
<td>GUARDRAIL STANDARD PANEL (F&amp;I) (SHOP BENT)</td>
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<td>1/1/2010</td>
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<tr>
<td>E536 3132</td>
<td>GUARDRAIL STANDARD PANEL (F&amp;I)(0' - 50')</td>
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<tr>
<td>E536 3133</td>
<td>GUARDRAIL STANDARD PANEL (F&amp;I)(51' - 200')</td>
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ES36308517 END ANCHOR ASSEM SRT-350 (REPL BRK TRM POST SLV) EA 1/1/2010
ES36309506 END ANCH ASSEM BEST (REPL GUARDRAIL BEAM) EA 1/1/2010
ES36309510 END ANCH OR ASSEM BEST (REPL CABLE ASSEMBLY) EA 1/1/2010
ES36312501 END ANCH ASSEM LET (REPL TIMBER BREAK POST) EA 1/1/2010
ES36312503 END ANCH ASSEM LET (REPL CABLE ANCHOR ASSEM) EA 1/1/2010
ES36312506 END ANCH ASSEM LET (REPL GUARDRAIL EXTRUDER) EA 1/1/2010
ES36312507 END ANCH ASSEM LET (REPL STEEL TUBE/POST) EA 1/1/2010
ES36313508 END ANCHOR ASSEMBLY SKT-350 (REPL GUARDRAIL BEAM) EA 1/1/2010
ES36313509 END ANCHOR ASSEMBLY SKT-350 (REPL MISC HARDWARE) EA 1/1/2010
ES36313514 END ANCHOR ASSEMBLY SKT-350 (REPL IMPACT HEAD) EA 1/1/2010
ES36314501 END ANCHOR ASSEM SRT-350/8 (REPL CABLE ASSEMBLY) EA 1/1/2010
ES36314503 END ANCHOR ASSEM SRT-350/8 (REPL AMBER REFL SHT) EA 1/1/2010
ES36314504 END ANCHOR ASSEM SRT-350/8 (REPL BEARING PLATE) EA 1/1/2010
ES36314505 END ANCHOR ASSEM SRT-350/8 (REPL TIMBER BRK POST) EA 1/1/2010
ES36314506 END ANCHOR ASSEM SRT-350/8 (REPL STEEL TUBE/PLT) EA 1/1/2010
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ES36314509 END ANCHOR ASSEM SRT-350/8 (REPL STRUT/YOKE ASSM) EA 1/1/2010
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ES36314511 END ANCHOR ASSEM SRT-350/8 (REPL GUARDRAIL BEAM) EA 1/1/2010
ES36314514 END ANCHOR ASSEM SRT-350/8 (REPL SLOT GUARD) EA 1/1/2010
ES36315503 END ANCHOR ASSEM REGENT (REPL AMBER REFL SHEET) EA 1/1/2010
ES36315508 END ANCHOR ASSEM REGENT (REPL SHELF ANGLE) EA 1/1/2010
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END ANCHOR ASSEM PARALLEL (REPL AMBER REFLECT SHEET)  EA  1/1/2010
END ANCHOR ASSEM PARALLEL (REPL SHORT TIMBR BREAK POST)  EA  1/1/2010

### 538-1 GUARDRAIL-RESET

| Notes Details | Consists of the removal of existing guardrail and resetting of the salvaged guardrail along with necessary new materials. Locations of the existing and proposed guardrail must be shown in the plans. Coordinate the use of this item with District Maintenance Office.
| Bridge Traffic Railing Retrofits: This pay item may be used in accordance with the Instructions for Design Standards, Index 403.
| Misc Asphalt, when needed, will be paid under Section 339-.

#### Related Items

**Required**

**Recommended**

#### Design Forms and Documentation

- SBGuardrail: Summary of Guardrail (Includes Pipe Rail, Rub Rail, End Anchorage Assy, etc.)
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

#### Construction Forms and Documentation

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

#### References

- **PPM Chapter**
- **Trns-port**
- **Other Standards** Index No. 400, 403
- **Specifications** Section 538
- **Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

<table>
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<tr>
<th>Struct.</th>
<th>Item</th>
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<th>Unit</th>
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<th>Obsolete Date</th>
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<td>538-1</td>
<td>0538</td>
<td>GUARDRAIL RESET</td>
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<td>1/1/2010</td>
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</table>

### 539-75-ABC GLARE SCREEN

| Notes Details | Material and installation requirements are needed for project specific conditions.
| This item is for permanent installations only. For temporary installations (during

| Notes Details | |
| Material and installation requirements are needed for project specific conditions.
| This item is for permanent installations only. For temporary installations (during
construction/maintenance contract), see MOT Section 102 items.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
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<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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<tr>
<th>References</th>
<th>PPM Chapter</th>
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<tbody>
<tr>
<td>Trns-port</td>
<td>Other Standards</td>
</tr>
<tr>
<td>Specifications</td>
<td>T: Plan Details and/or Technical Specifications required</td>
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<td>Prep &amp; Doc Manual Chapter(s)</td>
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TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

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<td>1 (Furnish &amp; Install)</td>
<td>3 (Install) BC=00</td>
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<tr>
<td>B = Material</td>
<td>1 (Modular)</td>
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<td>C = Height</td>
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Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
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<td>0539 75400</td>
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539-80-ABC OPAQUE VISUAL BARRIER

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<tr>
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Details and Structure: Complete- Items 000 to 1999
The Designer should coordinate the details on Index 461 with project specific conditions. Payment for barrier includes concrete and reinforcing steel, as shown on design standard.

Non-concrete materials will require details and material specifications.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
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<th>Recommended</th>
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<td>COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
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</tbody>
</table>

Locate in the plans. Summarize quantities by location in the computation book.

### Notes

*Only concrete option included on design standard

### References

PPM Chapter
Trns Port
Other Standards

Index No. 461 Specifications

Special Provision available for compensation information

T: Selected Items may require Plan Details and/or Technical Specifications

Prep & Doc Manual Chapter(s) 6, 7, 13

### TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

<table>
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<tr>
<th>Struct.</th>
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<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

Details and Structure: Complete- Items 000 to 1999
### 540- HIGH TENSION CABLE BARRIER SYSTEM WITH ANCHORS

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**Notes**

Future item; refer to developmental item 904-540-xx1

**Details**

**Related Items**

Required

Recommended

**Design Forms and Documentation**

No additional form required; use plans summary or comp book

**References**

PPM Chapter

Trns-port

Other Standards

Specifications

Prep & Doc Manual Chapter(s)

**Transport Category (DRAFT FIELD):**

0200 Roadway

**Struct.**

540- HIGH TENSION CABLE BARRIER SYSTEM WITH ANCHORS LF

pending

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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### 540-Maint CABLE BARRIER- MAINTENANCE

**Maintenance Contracts Only**

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<th>Refer to item structure and details</th>
<th>PlanQuantity?</th>
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</table>

**Notes**

Maintenance Item: Not Valid for Construction Contracts

**Details**

MAINTENANCE CONTRACTS ONLY

Additional BOE details pending

**Related Items**

Required

Recommended

**Design Forms and Documentation**

**References**

PPM Chapter

Trns-port

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Details and Structure: Complete- Items 000 to 1999
TRNS*PORT Category (DRAFT FIELD):

Struct.  540-Maint  CABLE BARRIER- MAINTENANCE  Mixed  Maintenance Contracts Only

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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E540 2 09  (CABLE SAFETY BARRIER) (CASS) GUARDRAIL SECTION REPLACEMENT  EA  1/1/2010
E540 3 01  CABLE SAFETY BARRIER (SAFENCE) STANDARD POST REPLACEMENT  EA  1/1/2010
E540 3 02  CABLE SAFETY BARRIER (SAFENCE) STANDARD POST REPLACEMENT > 4  EA  1/1/2010

542-70-  BUMPER GUARDS, CONCRETE

Notes

Details

Parking space bumper, used in rest areas, service plazas, etc. Concrete Bumper guard dimensions are shown on index 300. The Designer should coordinate the design standard and/or plan details as needed. If other materials are acceptable, detail the material requirements in the plans/specs.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

References

PPM Chapter
Trns·port
Other
Standards
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)  7, 13

TRNS*PORT Category (DRAFT FIELD):  0200 or other  Roadway or other- see details

Struct.  542-70-  BUMPER GUARDS, CONCRETE  EA

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tr>
<td>0542 70</td>
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<td>EA</td>
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Details and Structure: Complete- Items 000 to 1999
544- 1- ABB  

**Overview:** Pending for New/Replacement/Removal: CRASH CUSHION

<table>
<thead>
<tr>
<th>Notes</th>
<th>PENDING- DO NOT OPEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
<td>Intended for New or Replacement crash cushions. For Construction Contracts let through December 2013, see pay items 544-74 and 544-75. New crash cushions by category will be available in 2014, pending updates to the Design Standards. For Maintenance Contracts effective January 2013, include pay items 544-1-402 and 544-1-403, Replace TL-2 and TL-3. Pay Items by brand/model should be included only for new/replacement of crash cushions with a &quot;high repair frequency&quot;.</td>
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<tr>
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<td>Required</td>
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<td>Design Forms and Documentation</td>
<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
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<td>Construction Forms and Documentation</td>
<td></td>
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<td>References</td>
<td>PPM Chapter</td>
</tr>
<tr>
<td>TRNS*PORT Category (DRAFT FIELD):</td>
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**Struct. 544- 1- ABB  

**Pending for New/Replacement/Removal: CRASH CUSHION**

A= Operation
1 (Furnish & Install)
3 (Install) Department Furnished BB=00
4 (Replace) "In Kind" replacement, BB= 02 or 03
5 (Relocate) BB=0
6 (Remove) BB=0

BB= Type
Unspecified Brand/Model
02 (TL-2)
03 (TL-3)

Specified Brand/ Model/ Category (easily repaired/high impact frequency)
10 ( ?)
11 ( ?)
12 ( ?)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

Details and Structure: Complete- Items 000 to 1999
544-2- A  PENDING "Hands Off" Work: CRASH CUSHION INSPECTION AND ASSESSMENT

Unit  Mixed  Accuracy  Refer to item structure and details  PlanQuantity?

Notes  PENDING- DO NOT OPEN

Details  Intended for "hands off" inspection and assessment work to be completed by a Maintenance Contractor. Note: The "Hands On" work should not be completed by the same contractor as the "Hands Off" inspection/assessment contractor.

DO NOT USE 544-2-A and 544-3-AB pay items on the same contract.

Related Items  Required  Recommended

Design Forms and Documentation

Construction Forms and Documentation

References  PPM Chapter  Trns·port  Other
Standards  Specifications  Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):

Struct.  544-2- A  PENDING "Hands Off" Work: CRASH CUSHION INSPECTION AND ASSESSMENT  Mixed

A= Operation
1 (Standard Periodic Inspection- Type 1)
2 (Standard Periodic Inspection- Type 2)
3 (Damage Assessment)

Notes  The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

544-3-ABB  PENDING "Hands On" Work: CRASH CUSHION MAINTENANCE AND REPAIR

Unit  Mixed  Accuracy  Refer to item structure and details  PlanQuantity?

Notes  PENDING- DO NOT OPEN

Details  Intended for "hands on" inspection and assessment work to be completed by a Maintenance Contractor. Note: The "Hands On" work should not be completed by the same contractor as the "Hands Off" inspection/assessment contractor.

DO NOT USE 544-2-A and 544-3-AB pay items on the same contract.
544-1-ABB items should be included for New/Replacement crash cushions, when repairs are not cost effective.
Struct. 544-3-ABB PENDING "Hands On" Work: CRASH CUSHION MAINTENANCE AND REPAIR

A= Operation
1 (Standard Maintenance) BB=00; EA
2 (Hazard Neutralization) BB=00; EA
3 (Damage Restoration/Repair)

B= Type, Component, or Work Detail
1 (Reset/Restore Assembly) "Pull Out", valid for brand/model ??? and ???
2 (Replace Cartridge) per each cartridge, valid for brand/model ??? and ???
3 (Reflective Sheeting/Reflector Assy)
4
5 (Parts) Brand B, Brand C
98
99

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

544-74- AA RELOCATE CRASH CUSHION

Notes Details
Items to be relocated/installed in accordance with the Design Standards and/or manufacturer's instructions.

Effective July 2012: The only pay item will be "Optional". Per the PPM, the designer may limit valid options in the plans only when location specific conditions exist. Refer to design standard for guidance.

Related Items Required Recommended
Design Forms and Documentation SBCushion: Summary of Permanent Crash Cushions
Locate in plans. Summarize quantities by location on summary sheet in the plans.
No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

PPM Chapter
Trns-port
Other
Specifications
Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct.  544- 74- AA  RELOCATE CRASH CUSHION  EA

AA = Brand Names, valid through 6-30-2012
8 (Cat)
9 (Brakemaster)
10 (Dragnet)
13 (React 350)
14 (Quadgard)
17-20 Hold
23 (SCI)
24 (Quest)
25 (HEART)
26 (X-MAS)

AA = Type, continues to be valid after 7-1-2012
40 (Optional)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<td>RELOCATE CRASH CUSHION - ALL OPTIONS</td>
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544- 75- AA  CRASH CUSHION

Notes


NOTE: BRAND NAMES VALID THROUGH 6-30-12; use "Optional" pay item.

Details

Refer to Plans Preparation Manual and Design Standards prior to selecting a specific option. Items are to be installed in accordance with Standards and/or manufacturer's instructions. All items must be listed on QPL, per specifications.

Through December 2011: Separate payment will be made for parts +% for repairs/restoration, as needed during construction.

Effective January 2012: Refer to Estimates Bulletin 11-10 and Mandatory Specification change. Special Provision SP5440400 and pay item structure 544-75-1AA will be used for projects with less than 50 crash cushions and one of the following mix types: Add Lanes and Reconstruction, Add Lanes and Rehab Pavement, Interchanges and New Road Construction.
Effective July 2012: The only pay item will be "Optional". The designer may limit valid options, when location specific conditions exist. Refer to design standard for guidance.

MULTIPLE PROJECTS ON ONE CONTRACT: If any project within a contract is a capacity project, ALL projects will be considered capacity projects. DO NOT USE both temporary, or both permanent pay items on a contract. (Remember: the specifications will apply equally to all projects on a contract.)

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms</td>
<td>SBCushion: Summary of Permanent Crash Cushions</td>
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<tr>
<td>and</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
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<tr>
<td>Documentation</td>
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<tr>
<td>Construction</td>
<td>No additional form required; use plans summary or comp book</td>
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<td>Forms and</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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<td>Documentation</td>
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<td>Vol 1, Chapter 4</td>
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<td>Trns-port</td>
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<td>Other Standards</td>
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<td>Specifications</td>
<td>Section 544</td>
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<td>Prep &amp; Doc Manual Chapter(s)</td>
<td>7, 13</td>
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</tbody>
</table>

TRNS*PORT Category (DRAFT FIELD):  0200  Roadway

Struct.  544- 75- AA  CRASH CUSHION  EA

AA = Brand Names, valid through 6-30-2012
DOES NOT INCLUDE SAND FILLED ATTENUATORS; Project Specific Design Required.
8 (Cat)*
9 (Brakemaster)* @9-8-1997
10 (Dragnet)*
13 (React 350)* @10-13-1995
14 (Quadguard)* @2-3-1999
16 (Tracc)* @Temporary use only; valid through ???
17 (QuadGuard Elite)* @11-18-1999
18 (QuadGuard LMC)* @11-9-1998
19 (QuadGuard LMA)*
20 (QuadTrend)*
21 (TAU-II)* @6-16-2004
22 (Widetracc)*
23 (SCI)* @6-10-2005
24 (Quest)* @7-24-2006
25 (Heart)* @4-9-2009
26 (X-MAS: X-tension Median Attenuator System)* @2-1-2010
27 (Energete Ill)* @new 11-9-1998
28 (QuadTrend 350)* @new 7-20-1999
29 (Quadguard HS)* @new 10-7-2002
31 (Absorb 350 TM)* @new 6-16-2004
32 (Quadguard CZ system on a Plate)* @new 1-12-2005
33 (Quadguard Wide 10 Flare)* @new 2-6-2006
34 (TRACC 05)* @new 2-6-2006
35 (Quadguard Elite Family)* @new 2-23-2010
36 (Quadguard II System)* @new 4-6-2010
?? (ACZ-350-TL 3) approvals pending
?? (NEAT) approvals pending

AA=Type, continues to be valid after 7-1-2012
40 (Optional)

Notes *AA=40 (Optional) should be used, unless there is a specific reason why options are limited to a single product. Refer to index 430 for additional information.

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
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<td>1/1/2010</td>
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</tbody>
</table>

544-75-1AA CRASH CUSHION (Capacity Projects, Less than 50)

NOTE: BRAND NAMES VALID THROUGH 6-30-12; use "Optional" pay item.

Details Refer to Plans Preparation Manual and Design Standards prior to selecting a specific option. Items are to be installed in accordance with Standards and/or manufacturer's instructions. All items must be listed on QPL, per specifications.

Through December 2011: Separate payment will be made for parts +% for repairs/restoration, as needed during construction. Pay item structure for all crash cushions is 544-75-AA.

Effective January 2012: Refer to Estimates Bulletin 11-10 and Mandatory Specification change. Special Provision SP5440400 and pay item structure 544-75-1AA will be used for projects with less than 50 crash cushions and one of the following mix types: Add Lanes and Reconstruction, Add Lanes and Rehab Pavement, Interchanges and New Road Construction.

Effective July 2012: The only pay item will be "Optional". The designer may limit valid options, when location specific conditions exist. Refer to design standard for guidance.

Related Items

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</tr>
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<tr>
<td>Design Forms and Documentation</td>
<td>SBCushion: Summary of Permanent Crash Cushions</td>
</tr>
<tr>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
<td></td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
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References

| PPM Chapter Vol 1, Chapter 4 |
| Trns-port |
| Other Standards Index No. 430, valid through June 2012 |
| Specifications Section 544 |
| Prep & Doc Manual Chapter(s) 7, 13 |
**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct. 544-75-1AA CRASH CUSHION (Capacity Projects, Less than 50) EA**

AA = Brand Name, valid through 6-30-2012

DOES NOT INCLUDE SAND FILLED ATTENUATORS; Project Specific Design Required.

8 (Cat)*
9 (Brakemaster)* @9-8-1997
10 (Dragnet)*
13 (React 350)* @10-13-1995
14 (Quadguard)* @2-3-1999
16 (Tracc)* @Temporary use only; valid through ???
17 (QuadGuard Elite)* @11-18-1999
18 (QuadGuard LMC)* @11-9-1998
19 (QuadGuard LMA)*
20 (QuadTrend)*
21 (TAU-II)* @6-16-2004
22 (Widetracc)*
23 (SCI)* @6-10-2005
24 (Quest)* @7-24-2006
25 (Heart)* @4-9-2009
26 (X-MAS: X-tension Median Attenuator System)* @2-1-2010
27 (Energite III)* @new 11-9-1998
28 (QuadTrend 350)* @new 7-20-1999
29 (Quadguard HS)* @new 10-7-2002
31 (Absorb 350 TM)* @new 6-16-2004
32 (Quadguard CZ system on a Plate)* @new 1-12-2005
33 (Quadguard Wide 10 Flare)* @new 2-6-2006
34 (TRACC 05)* @new 2-6-2006
35 (Quadguard Elite Family)* @new 2-23-2010
36 (Quadguard II System)* @new 4-6-2010
?? (ACZ-350-TL 3) approvals pending
?? (NEAT) approvals pending

AA=Type, continues to be valid after 7-1-2012

40 (Optional)

**Notes** *AA=40 (Optional) should be used, unless there is a specific reason why options are limited to a single product. Refer to index 430 for additional information.*

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Obsolete Date</th>
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<tr>
<td>CRASH CUSHION - OPTIONAL, CAPACITY PROJECTS LESS THAN 50</td>
<td>EA</td>
<td>1/1/2012</td>
<td></td>
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</tbody>
</table>

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**544-Maint CRASH CUSHION- Maintenance Contracts Only**

**Unit** EA

**Accuracy** Each

**PlanQuantity?** no

**Notes** Maintenance Item: Not Valid for Construction Contracts

**Details** MAINTENANCE CONTRACTS ONLY

Additional BOE details pending

**Related Items**

Required

Recommended

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**Details and Structure:** Complete- Items 000 to 1999
### Design Forms and Documentation

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### Construction Forms and Documentation

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#### References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
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<tr>
<td>Trns-port</td>
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<td>Other Standards</td>
</tr>
<tr>
<td>Specifications</td>
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<td>Prep &amp; Doc Manual Chapter(s)</td>
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</table>

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 544-Maint CRASH CUSHION-

Maintenance Contracts Only

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#### Notes

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<td>E544 75501</td>
<td>05 TRACC NOSEPICE / REFLECTIVE SHEETING</td>
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<td>E544 75502</td>
<td>05 TRACC SLED / SHREDDER ASSEMBLY</td>
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### 546- 71- RUMBLE STRIP SETS

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<th>Per Set</th>
<th>PlanQuantity?</th>
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**Notes**

Raised rumble strip SETS shall be constructed at all structures with less than full width shoulders. They will also be constructed at intersection approaches only when specified in the plans. This item is to be used in accordance with Standard Index 518.

Note that thermoplastic sets typically include 4 strips; Asphalt sets include 6 strips. Refer to Index for details.

For ground-in strips, refer to item 546-72-AB.

**Related Items**

<table>
<thead>
<tr>
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<th>Recommended</th>
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**Details and Structure: Complete- Items 000 to 1999**
### Structural 546-71- RUMBLE STRIP SETS PS

#### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
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<td>RUMBLE STRIPS</td>
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### 546-72- AB RUMBLE STRIPS

#### Notes

Ground-in rumble strips (16" minimum width, 400 mm minimum width) shall be constructed on freeway and other limited access per Index No. 518. Other methods and types of applications shall not be used unless approved in writing by the State Roadway Design Engineer. Approval will be considered only with sufficient documented justification for variance from this standard.

For Raised Rumble Strips, refer to item 546-71-.

Measurement, per specification: The quantity of will be the plan quantity in miles, constructed and accepted. The plan quantity will be determined based on the roadway length minus bridge lengths for each shoulder on which Rumble Strips are to be constructed.

Per specifications, plan quantity will be determined based on the roadway length, minus bridge lengths for each shoulder on which Rumble Strips are to be constructed. (No deduction is made for skip section of skip array.)

#### Related Items

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Locate in the plans. Summarize quantities by location in the computation book.
### References

- **Standards**
  
  Index No. 518

- **Specifications**
  
  Section 546

- **Prep & Doc Manual Chapter(s)**
  
  6, 7, 13

### Struct. 546-72-AB RUMBLE STRIPS PM; KM

- **A** = Type
  - 5 (Ground-In)
- **B** =
  - 1 (16" Min. Width)
  - 0 (Non Standard)

### Notes

- Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.
- No additional form required; use plans summary or comp book
- Record final quantity on the computation book form.

### Item Description Table

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</tbody>
</table>

### 547-70-ARIPRAP, FABRIC-FORMED CONCRETE

- **Unit**
  - SY; M2
- **Accuracy**
  - Square Yard; Square Meter
- **PlanQuantity?**
  - no

### Notes

- Future use may require development of specs and/or standards.

### Details

- DO NOT USE FOR RIPRAP WITH GEOTEXTILE FABRIC, as described in Section 530.


- For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

- **Required**
  - COMP 700-050-01: Area Computation and Continuation

- **Recommended**
  - Locate in the plans. Summarize quantities by location in the computation book.
Struct.  547- 70-  A  RIPRAP, FABRIC-FORMED CONCRETE  SY

A =
1 (8" Filter Points)
2 (10" Filter Points)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<td>T</td>
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<tr>
<td>0547 70 2</td>
<td>RIPRAP FABRIC-FORMED CONCRETE, 10&quot; FILTER POINTS</td>
<td>SY</td>
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</tbody>
</table>

548- AA-  RETAINING WALL SYSTEM

Unit  SF; M2  Accuracy  Square Foot; 1/10 Square Meter  PlanQuantity?  yes

Details

Approved MSE walls are listed on the Qualified Products List (QPL). Walls are to be detailed in the plans, in accordance with the Instructions for Design Standards and index number(s) 6020 and 6030.

Per the specifications, the quantity to be paid for will be plan quantity, subject to the following:
- For permanent retaining wall systems: the top of the coping, the top of the leveling pad, top of structural footings, and the beginning and end wall limits as shown on the wall control drawings.
- For temporary retaining wall systems: the top of wall and the beginning and end wall limits as shown on the wall control drawings.

This pay item is not intended for Soldier Pile, Concrete Steel Sheet Pile, or cast-in-place walls. For these wall types, use the appropriate pay items for concrete and steel.

*For Permanent-Widening walls, compensation information is needed in the specifications. Coordinate with Specs to modify existing spec.

NOTE: Include item in TRNS*PORT Roadway Category.

Related Items  Required  Recommended  521- 6-xxa, or 521-8-xaa

Design Forms and Documentation  COMP 700-050-01: Area Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.
Standards

Through June 2011, Index No. 5300, 5301.

Effective July 2011, Index 6020 and 6030.

Specifications

Section 548

Prep & Doc Manual Chapter(s) 6, 7, 13

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter

Chapter 30

Trns-port

Other

Specifications Section 548

Prep & Doc Manual Chapter(s) 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 100 or 200 Structures or Roadway

**Struct:** 548- AA-

RETAINING WALL SYSTEM

SF

AA = Type

12 (Permanent) excluding barrier

13 (Temporary) excluding barrier

14 (Permanent- Widening) attached to existing wall; *see BOE detail

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<td>0548 13</td>
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</table>

**549-1-**

GRS RETAINING WALL

<table>
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<tr>
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</table>

**Notes**

New pay item effective July 2012, or upon implementation of specification.

**Details**

Per the spec, the area for payment will be "the area bounded by the top of the coping, the top of the reinforced soil footing and the begin and end wall limits as shown in the plans. Plan quantity for GRS Bridge Abutments includes wing walls."

**Related Items**

Required Recommended

**Design Forms and Documentation**

**Construction Forms and Documentation**
### GRS RETAINING WALL

**Unit:** SF; M2  
**Accuracy:** Square Foot; 1/10 Square Meter  
**PlanQuantity?:** yes

**Details:** Per the spec, the area for payment will be "the area bounded by the top of the coping, the top of the reinforced soil footing and the begin and end wall limits as shown in the plans. Plan quantity for GRS Bridge Abutments includes wing walls."

### GRS BRIDGE ABUTMENT

**Unit:** SF; M2  
**Accuracy:** Square Foot; 1/10 Square Meter  
**PlanQuantity?:** yes

**Notes:** New pay item effective July 2012, or upon implementation of specification.

**Details:** Per the spec, the area for payment will be "the area bounded by the top of the coping, the top of the reinforced soil footing and the begin and end wall limits as shown in the plans. Plan quantity for GRS Bridge Abutments includes wing walls."

### FENCING

**Unit:** LF; M1  
**Accuracy:** Linear Foot; 1/10 Meter  
**PlanQuantity?:** yes

**Notes:**
Includes all fence, posts, and incidental materials. Gates to be paid under 550-60-ABC.

A=1 (Type A) is to be used in accordance with Design Standard 801. Note that standard features include the barbed wire attachment; use C=0 for new installations, or C=8 for resetting fence.

A= 3 (Type R) is to be used in accordance with the Instructions for Design Standards and Index Nos. 810, 811, 812.

A= 9 (Special) is used for decorative/wood fencing, other than A, B, or R. Tech Spec and/or plan details required to specify materials, installation, and payment.

Details/Features C=8 (Reset Existing), per the specification, measurement & payment is for “the actual length of existing fence reset, including gates when applicable.” Restore fence and barbed wire to original condition. Estimate the quantity from post-to-post, for the length to be reset.

Details/Features C=9 (Special) may be used for Type A or B fence, when special features, other than barbed attachment or coatings are needed. For example, fine mesh added to standard Type B fence, for restricting small critters.

PQ Measurement: Per the specification, all items are plan quantity, with the exception of resetting fence.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

---

### Related Items

<table>
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<th>Recommended</th>
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<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>550-60-ABC</td>
</tr>
</tbody>
</table>

### Design Forms and Documentation

SBFence: Summary of Fence (no posts); SBFence Type A: Summary of Fence, Type A w/Posts; or SBFence Type B: Summary of Fence, Type B w/ Posts

Locate in plans. Summarize quantities by location on summary sheet in the plans.

---

### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

---

### References

PPM Chapter: Vol 1, Ch 2 for Bridge Fencing

Trns-port

Other Standards: Index 800 series: 800, 801, 802, 803, Type R: Index No. 810, 811, 812

Specifications: Section 550

T: Selected Items may require Plan Details and/or Technical Specifications

Prep & Doc Manual Chapter(s)

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### TRNS*PORT Category (DRAFT FIELD)

0200 Roadway

- Struct. 550-10-ABC FENCING LF
  - A = Type/Fence Material
  - 1 (Type A)

Details and Structure: Complete- Items 000 to 999
2 (Type B)  
3 (Type R)  
9 (Special) Not Type A, B, or R; C= 8 or 9

B = Nominal Fabric Height  
Verify height recommendations with Design Standards

1 (0.0- 5.0’ Height)  
2 (5.1- 6.0’ Height)  
3 (6.1- 7.0’ Height)  
4 (7.1- 8.0’ Height)  
5 (8.1-10.0’ Height)

C = Details/Features  
0 (Standard features) per design standards  
1 (w/Barbed Wire Attachment), Type B Only  
2 (w/Vinyl Coating), Type B Only  
3 (Full Enclosure), Type R Only  
4 (Partial Enclosure), Type R Only  
5 (Vertical) Type R Only  
8 (Reset Existing) see detail for measurement  
9 (Special Feature) other than coating, barbs, or enclosure; see details above

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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Notes  
Maintenance Item: Not Valid for Construction Contracts

Details  
FOR USE ON MAINTENANCE PROJECTS ONLY

DO NOT USE this item with new fence installations, or where standard "resetting" of fence material is required.

This item is intended for repair work where the existing fence material is in good condition, but the specified post is in need of replacement. Included with the payment will be any incidental work or materials necessary to restore the fence to meet design standards (i.e. tensioning, barbed wire, braces, or wire).

Related Items  
Required | Recommended

Design Forms and Documentation

Construction Forms and Documentation

References  
PPM Chapter
Trns-port
Other Standards
Specifications
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct.  550-15-AB FENCE REPAIR- Maintenance Contracts Only

A= Fence Type
1 (Type A)
2 (Type B)
3 (Type R)

B= Assembly Type
1 (Corner Post Assembly)
2 (Line Post Assembly)
3 (Pull Post Assembly)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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# 550-60-ABC FENCE GATE

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<th>Each</th>
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## Notes Details
Fence to be installed in accordance with standards, Index Nos. 800-812.

Special Type: This option is intended for wood, plastic, and other fence materials not covered by the specs or standards. Tech Spec and/or plan details are required to specify materials, installation, and payment. Do not use "special" item for type A, B, or R fencing.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

## Related Items

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## Design Forms and Documentation

- SBFence: Summary of Fence (no posts); SBFence Type A: Summary of Fence, Type A w/Posts; or SBFence Type B: Summary of Fence, Type B w/ Posts
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

## Construction Forms and Documentation

- No additional form required; use plans summary or comp book
- Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

## References

- PPM Chapter
- Trns-port
- Other
- Standards Indexes 800, 801, 802, 803, 810, 811, 812
- Specifications Section 550
- Prep & Doc Manual Chapter(s)

## TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

### Struct. 550-60-ABC FENCE GATE EA

- A = Type
- 1 (Type A)
- 2 (Type B)
- 9 (Special) *Not Type A or B
- B = Type
- 1 (Single)
- 2 (Double)
- 3 (Sliding / Cantilever)
- C = Size of Opening
- 1 (0-6.0’ Opening)
- 2 (6.1-12.0’ Opening)
- 3 (12.1-18.0’ Opening)
- 4 (18.1-20.0’ Opening)
- 5 (20.1-24.0’ Opening)
- 6 (24.1-30.0’ Opening)
- 7 (> 30’ Opening)

Details and Structure: Complete- Items 000 to 1999
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<th>Item</th>
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**550-Maint**

**FENCE REPAIR- Maintenance Contracts Only**

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**Notes**

Maintenance Item: Not Valid for Construction Contracts

**Details**

MAINTENANCE CONTRACTS ONLY
Additional BOE details pending

**Related Items**

Required: Recommended

**Design Forms and Documentation**

**Construction Forms and Documentation**

**References**

PPM Chapter
Trns-port
Other
Standards
Specifications

**TRNS*PORT Category (DRAFT FIELD):**

Structured 550-Maint FENCE REPAIR- Maintenance Contracts Only Mixed
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<td>E550  655</td>
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<td>FENCE MAINTENANCE (TYPE B) (FENCE FABRIC) (8')</td>
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<td>Item</td>
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<td>Unit</td>
<td>Date</td>
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<tr>
<td>E550 9</td>
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<td>E550 10949</td>
<td>FENCING, SPECIAL TYPE, 7.1-8.0', SPECIAL FEATURES HIGH SECURITY</td>
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<tr>
<td>E550 21 10</td>
<td>FENCE, TYP B (ZINC/ALUM) (4')</td>
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<tr>
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<tr>
<td>E550 22 30</td>
<td>FENCE, TYP B (PVC COAT) (6')</td>
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<tr>
<td>E550 22 31</td>
<td>FENCE, TYP B (W/BARB WIRE ATTACH) (6')</td>
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<td>CORNER POST ASSEM (TYPE A) (4')</td>
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<td>1/1/2010</td>
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<tr>
<td>E550 31 11</td>
<td>FENCE, CORNER POST ASSEM (TYP A, 4', W/BARB WIRE ATTACH)</td>
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<tr>
<td>E550 32 30</td>
<td>FENCE, CORNER POST ASSEMBLY (TYPE B) (6')</td>
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<tr>
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<tr>
<td>E550 33 30</td>
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<tr>
<td>E550 40222</td>
<td>FENCE, END POST ASM (TYP B, VINYL COATING) (6') REPLACE</td>
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<tr>
<td>E550 51 10</td>
<td>FENCE, PULL POST ASSEMBLY (TYPE B, ZINC COAT) (4')</td>
<td>EA</td>
<td>1/1/2010</td>
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<td>E550 51 30</td>
<td>FENCE, PULL POST ASSEMBLY (TYPE B, ZINC COAT) (6')</td>
<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>E550 52 30</td>
<td>FENCE, PULL POST ASSEMBLY (TYPE B, PVC COAT) (6')</td>
<td>EA</td>
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<tr>
<td>E550 53 11</td>
<td>FENCE, PULL POST ASSEMBLY (TYPE A, BARB WIRE ATTACH) (4')</td>
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<tr>
<td>E550 60912</td>
<td>FENCE GATE, SPECIAL TYPE, SINGLE, 6.1-12' OPENING</td>
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<td>1/1/2010</td>
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<tr>
<td>E550 61 10</td>
<td>FENCE, END POST ASM (TYP B, ZINC) (4')</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
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</tr>
<tr>
<td>E550 61 30</td>
<td>FENCE, END POST ASM (TYP B, ZINC) (6')</td>
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<td>1/1/2010</td>
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<tr>
<td>E550 61 40</td>
<td>FENCE, END POST ASM (TYP B, ZINC) (8')</td>
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<tr>
<td>E550 62 30</td>
<td>FENCE, END POST ASM (TYP B, PVC) (6')</td>
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<tr>
<td>E550 63 11</td>
<td>FENCE, END POST ASM (TYP A, BARB WIRE ATTACH) (4')</td>
<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>E550 80</td>
<td>FENCE GATE (REPAIR)</td>
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<tr>
<td>E550 761121</td>
<td>FENCE GATE (TYPE B, SINGLE, ZINC/ALUMINUM) (12')</td>
<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>E550 761162</td>
<td>FENCE GATE (TYPE B, DOUBLE, ZINC/ALUMINUM) (16')</td>
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<tr>
<td>E550 762 31</td>
<td>FENCE GATE (TYPE B, SINGLE, PVC COAT) (3')</td>
<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>E550 762121</td>
<td>FENCE GATE (TYPE B, SINGLE, PVC COAT) (12')</td>
<td>EA</td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>
**555- 1- A  DIRECTIONAL BORE**

**Unit**  LF; M1

**Accuracy**  Linear Foot; 1/10 Meter

**PlanQuantity?**  no

**Notes**
Valid through June 30, 2013. Refer to revised Section 630 for conduit specification and payment, and Estimates Bulletin 12-14.

**Details**
Estimate quantities in accordance with the specification; tabulate quantities CLEARLY in the plans.

Payment will include work and materials, including casing, to be installed in accordance with specified method. Review alternate installation methods to determine best method for each location/crossing.

Through June 2011 lettings: Per Specification, Bundled products in a single bore will be paid as a single bore, based on the required drill bit head or back reamer head size.

Effective July 2011 lettings: Per specification, Bundled products in a single bore will be paid as a single bore, based on the equivalent outside pipe diameter (not restrained joint diameter).

When not part of a bundled product, the cost to populate the installed product (such as wires, pipes, or carriers/conduit/ducts) will be paid separately.

Notes: Most often, the casing is furnished & installed (paid with jack & bore or Directional Drilling), and then the contents- conduit & conductor are installed as a secondary operation (with conduit and conductor pay items).

When no outer casing is called for, the Jack & bore or Directional Drilling item includes only the labor & materials for the hole. The contents- conduit & conductor that installed as a secondary operation continue to be paid separately with conduit and conductor pay items.

PAY ITEM NOTE OR SPECIFICATIONS: Ensure that the contract clearly defines, by location, when the casing/bundled product is included in the price of the directional bore.

This item should be loaded into the category for which the item is used (Roadway, Lighting, Signals, etc.) The Item may appear on multiple categories, as needed.

**Required**

**Recommended**

556-1-xxa, 557-1-xxa

**Design Forms and Documentation**

COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Trns-port

Other

Standards

Specifications  Section 555
### Struct. 555-1-ADIRECTIONAL BORE LF

A = Diameter Of Outer Pipe/Conduit*

1 (Less Than 6")
2 (6" to <12")
3 (12" to <18")
4 (18" to <24")
5 (24" to <36")
6 (36" to <48")
7 (48" to <60")

**Notes**
*Refer to detail information when working with bundled products*

---

**Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 or other Roadway or other- see details

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The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<td>0555 1 1</td>
<td>DIRECTIONAL BORE, LESS THAN 6&quot;</td>
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<td>1/1/2010</td>
<td>6/30/2013</td>
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<tr>
<td>0555 1 2</td>
<td>DIRECTIONAL BORE, 6&quot; TO &lt; 12&quot;</td>
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<td>1/1/2010</td>
<td>6/30/2013</td>
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<tr>
<td>0555 1 3</td>
<td>DIRECTIONAL BORE, 12&quot; TO &lt; 18&quot;</td>
<td>LF</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
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<tr>
<td>0555 1 4</td>
<td>DIRECTIONAL BORE, 18&quot; TO &lt; 24&quot;</td>
<td>LF</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
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</tr>
<tr>
<td>0555 1 5</td>
<td>DIRECTIONAL BORE, 24&quot; TO &lt; 36&quot;</td>
<td>LF</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
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<tr>
<td>0555 1 6</td>
<td>DIRECTIONAL BORE, 36&quot; TO &lt; 48&quot;</td>
<td>LF</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
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<tr>
<td>0555 1 7</td>
<td>DIRECTIONAL BORE, 48&quot; TO &lt; 60&quot;</td>
<td>LF</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
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</tr>
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</table>

---

**556-1-A JACK AND BORE**

**Unit** LF; M1  
**Accuracy** Linear Foot; 1/10 Meter  
**Plan Quantity?** no

**Notes**

**Details**
Payment will include work and materials, including casing, to be installed in accordance with specified method. See pay item 555- Directional Bore for additional details.

**Related Items**
**Required**
**Recommended** 556-1-xaa, 557-1-xxa

**Design Forms and Documentation**
COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each  
Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**
No additional form required; use plans summary or comp book  
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
PPM Chapter  
Trns-port  
Other Standards  
Specifications Section 556  
Prep & Doc Manual Chapter(s) 7, 13
**Struct. 556-1- A JACK AND BORE LF**

AA = Diameter Of Casing
1 ( <6")
2 ( 6" to < 12")
3 ( 12" to < 18")
4 ( 18" to < 24")
5 ( 24" to < 36")
6 ( 36" to < 48")
7 ( 48" to < 60")
8 ( 60" to < 72")
9 ( 72" to < 84")
10 (84" to < 96")
11 (96" to < 108")

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tr>
<td>0556 1 1</td>
<td>JACK AND BORE, CASING DIAMETER &lt;6&quot;</td>
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<tr>
<td>0556 1 4</td>
<td>JACK AND BORE, CASING DIAMETER 18&quot;TO&lt;24&quot;</td>
<td>LF</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
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<td>0556 1 5</td>
<td>JACK AND BORE, CASING DIAMETER 24&quot;TO&lt;36&quot;</td>
<td>LF</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
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<tr>
<td>0556 1 6</td>
<td>JACK AND BORE, CASING DIAMETER, 36&quot; TO &lt;48&quot;</td>
<td>LF</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
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<tr>
<td>0556 1 7</td>
<td>JACK AND BORE, CASING DIAMETER 48&quot;TO&lt;60&quot;</td>
<td>LF</td>
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<td>0556 1 8</td>
<td>JACK AND BORE, CASING DIAMETER 60&quot;TO&lt;72&quot;</td>
<td>LF</td>
<td>1/1/2010</td>
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<td>0556 1 9</td>
<td>JACK AND BORE, CASING DIAMETER 72&quot;TO&lt;84&quot;</td>
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<td>0556 1 10</td>
<td>JACK AND BORE, CASING DIAMETER 84&quot;TO&lt;96&quot;</td>
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<td>0556 1 11</td>
<td>JACK AND BORE, CASING DIAMETER 96&quot;TO&lt;108&quot;</td>
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**560-Maint PAINTING STRUCTURAL STEEL**

Maintenance Contracts Only

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<tr>
<th>Unit</th>
<th>Mixed</th>
<th>Accuracy</th>
<th>Refer to item structure and details</th>
<th>PlanQuantity?</th>
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<tr>
<td>LF</td>
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</table>

**Notes**

Maintenance Item: Not Valid for Construction Contracts

**Details**

MAINTENANCE CONTRACTS ONLY

Additional BOE details pending

**Related Items**

Required | Recommended
--------|------------

**Design Forms and Documentation**

Details and Structure: Complete- Items 000 to 1999
### Construction Forms and Documentation

**References**
- PPM Chapter
- Trns-port
- Other
- Standards
- Specifications
- Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):**

**Struct.** 560-Maint  
**Note:** PAINTING STRUCTURAL STEEL  
**Maintenance Contracts Only**

---

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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### 561-1- COATING EXISTING STRUCTURAL STEEL

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<th>PlanQuantity?</th>
<th>Notes</th>
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<tbody>
<tr>
<td>LS/TN; LS/MT</td>
<td>Lump Sum (Ton); Lump Sum (Metric Ton)</td>
<td>yes</td>
<td>Coordinate the use of this item with the District Materials Office and the State Materials Office. Specifications are available for products listed on the QPL. Consists of removing and replacing the existing coating, or using an overcoating system. Do not include quantities in the plans. The weight of the steel to be painted is for estimating purposes only. NOTE: &quot;Rehab&quot; steel may have a primer and/or shop coating when installed. Normally, all surfaces (existing and new &quot;rehab&quot; steel) will be cleaned and coated according to Section 561 specifications. Include both the existing and new &quot;rehab&quot; steel in the estimated quantities for this item.</td>
</tr>
</tbody>
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**Related Items**
- **Required**
  - Design Forms and Documentation: COMP 700-050-05: Lump Sum Quantities

**Recommended**
- Construction Forms and Documentation: No additional form required; use plans summary or comp book

**Notes**
- Use a quantity of 1, but calculations and computation book documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

**References**
- PPM Chapter
- Trns-port
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<tr>
<td>0561 1</td>
<td>COATING EXISTING STRUCTURAL STEEL</td>
<td>LS</td>
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<td>7/1/2010</td>
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<tr>
<td>0561 1</td>
<td>COATING EXISTING STRUCTURAL STEEL</td>
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561-Maint  

PAINTING STRUCTURAL STEEL  
Maintenance Contracts Only  

<table>
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<tr>
<th>Unit</th>
<th>Mixed</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
<th>Details</th>
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|      | Mixed | Refer to item structure and details | ? | Maintenance Item: Not Valid for Construction Contracts | MAINTENANCE CONTRACTS ONLY  
Additional BOE details pending |

<table>
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<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
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Design Forms and Documentation  

Construction Forms and Documentation  

References  

PPM Chapter  
Trns-port  
Other Standards  
Specifications  
Prep & Doc Manual Chapter(s)
### Item E561
**Description:** PAINT STRUCTURAL STEEL (INORGANIC ZINC)
**Unit:** SF
**Valid Date:** 1/1/2010
**TSP/Detail:**

### Item E562
**Description:** PAINTING STRUCTURAL STEEL
**Unit:** Mixed
**Accuracy:** Refer to item structure and details
**Plan Quantity?:** ?

**Notes:**
- **Maintenance Item:** Not Valid for Construction Contracts
- **Details:** MAINTENANCE CONTRACTS ONLY
  - Additional BOE details pending

**Related Items:**
- **Required:**
- **Recommended:**

**Design Forms and Documentation:**

**Construction Forms and Documentation:**

**References:**
- **PPM Chapter:**
- **Trns Port**
- **Other Standards**
- **Specifications**
- **Prep & Doc Manual Chapter(s):**

**TRNS*PORT Category (DRAFT FIELD):**

**Struct. E562-Maint PAINTING STRUCTURAL STEEL**
**Maintenance Contracts Only**
**Mixed**

**Notes:**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### Item E562
**Description:** PAINT STRUCTURAL STEEL (ZINC)
**Unit:** SF
**Valid Date:** 1/1/2010
**TSP/Detail:**

### Item 563- A
**Description:** ANTI-GRAFFITI COATING
**Unit:** SF; M2
**Accuracy:** Square Foot; 1/10 Square Meter
**Plan Quantity?:** yes

**Notes:**
Coordinate the use of this item with District Maintenance Office. Consists of furnishing and applying anti-graffiti coating to the surfaces indicated in the plans. The work also includes surface preparations prior to application of the coating. All coatings are to be clear, unless otherwise specified in the plans, or approved by the Engineer. Pay Item specifies whether material is sacrificial or non-sacrificial.
Measurement is based on the projected area of the wall (height x length) or surface, with no additional allowance for surface texture or the number of coats to be applied; thickness
an number of coats must be in accordance with manufacturer's instructions.

For projects let before 7/2008, measurement/payment will be based on measured area, as indicated above.
For projects let 7/2008 and later, measurement will be based on plan quantity, as indicated above.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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</thead>
</table>

### Design Forms and Documentation

- COMP 700-050-01: Area Computation and Continuation
- Locate in the plans. Summarize quantities by location in the computation book.

### Construction Forms and Documentation

- No additional form required; use plans summary or comp book
- Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

### References

- PPM Chapter
- Trns-port
- Other Standards
- Specifications Section 563
- Prep & Doc Manual Chapter(s) 6, 7, 13

### TRNS*PORT Category (DRAFT FIELD)

**100 or 200** Structures or Roadway

<table>
<thead>
<tr>
<th>Struct.</th>
<th>Item Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>563- A</td>
<td>ANTI-GRAFFITI COATING</td>
<td>SF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
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<td></td>
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</table>

### Notes

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
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<tbody>
<tr>
<td>0563 3</td>
<td>ANTI-GRAFFITI COATING, SACRIFICIAL</td>
<td>SF</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>0563 4</td>
<td>ANTI-GRAFFITI COATING, NON-SACRIFICIAL</td>
<td>SF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
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</tbody>
</table>

### 563-Maint

**GRAFFITI REMOVAL**
- Maintenance Contracts Only

<table>
<thead>
<tr>
<th>Unit</th>
<th>Mixed</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>Refer to item structure and details</td>
<td>?</td>
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### Notes

- Maintenance Item: Not Valid for Construction Contracts

### Details

- MAINTENANCE CONTRACTS ONLY
- Additional BOE details pending

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

### Design Forms and Documentation

-
Construction
Forms and
Documentation

References
PPM Chapter
Trns port
Other
Standards
Specifications
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):

Struct. 563-Maint GRAFFITI REMOVAL Maintenance Contracts Only

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>E56399</td>
<td>GRAFFITI REMOVAL</td>
<td>SF</td>
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<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

570- 1- A PERFORMANCE TURF

<table>
<thead>
<tr>
<th>Note</th>
<th>Effective July 2010, Mowing is paid separately. Refer to Estimates/Roadway Design Bulletin and specifications Section 107 for details.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
<td>Consists of establishing a stand of grass on slopes, shoulders, or other areas by seeding (includes seeding, seeding &amp; mulching, hydroseeding, bonded fiber matrix, or any combination), or sodding, in accordance with Section 570. Coordinate the use of this item with Sections 104, 107, 162, and 580. Through June 2010 lettings: This item includes the mowing of all areas, including undisturbed areas, within the project limits, as noted in the plans. DO NOT use item 104-4 when this item is used. Payment for all mowing is incidental to the turf payment. Effective July 2010 letting: Litter Removal and Mowing are paid separately under Section 107. Per Section 570 specification, the Statewide Disputes Review Board specifications must be included on projects with this item. SHOULDER SODDING: When Performance Turf is used in accordance with Index 105-Treatment II, separate payment for Finished Soil Layer should also be included. Refer to specification section 162 and index no. 105 for additional information.</td>
</tr>
</tbody>
</table>

Required Recommended

162-1 Prepared Soil Layer

Design Forms and Documentation

SBSodding: Summary of Performance Turf & Sod, or COMP 700-050-01: Area Computation and Continuation

Locate in plans. Summarize quantities by location on summary sheet in the plans, or detail calculations in the computation book.
Standards Index No. 105 for shoulder sodding and turf on existing facilities
Specifications Section 570

**TRNS*PORT Category (DRAFT FIELD):**

<table>
<thead>
<tr>
<th>Struct.</th>
<th>570- 1- A</th>
<th>PERFORMANCE TURF</th>
<th>SY</th>
</tr>
</thead>
<tbody>
<tr>
<td>A= Type</td>
<td>1 *leave secondary description blank- Contractor's Option</td>
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<td></td>
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<tr>
<td></td>
<td>2 (Sod)</td>
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**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
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<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0570 1 1</td>
<td>PERFORMANCE TURF</td>
<td>SY</td>
<td>1/1/2010</td>
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<tr>
<td>0570 1 2</td>
<td>PERFORMANCE TURF, SOD</td>
<td>SY</td>
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**570-Maint**

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Refer to item structure and details</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

Maintenance Item: Not Valid for Construction Contracts

**Details**

MAINTENANCE CONTRACTS ONLY
Additional BOE details pending

**Related Items**

Required

Recommended

**Design Forms and Documentation**

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**Construction Forms and Documentation**

---

**References**

PPM Chapter
Trns-port
Other Standards Specifications
Prep & Doc Manual Chapter(s)
**TRNS*PORT Category (DRAFT FIELD):**

Struct.  570-Maint  GRASSING  Maintenance Contracts Only  Mixed

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>Obsolete Date</th>
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<tr>
<td>E570 1 3</td>
<td>TURF MANAGEMENT (PERFORMANCE)</td>
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<tr>
<td>E570 2</td>
<td>SEED &amp; MULCH</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>E570 5</td>
<td>FERTILIZER</td>
<td>TN</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>E570 6</td>
<td>FERTILIZER (SLOW RELEASE)</td>
<td>TN</td>
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<tr>
<td>E570 9 1</td>
<td>WATER FOR GRASS &amp; PLANTS</td>
<td>MG</td>
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<td>1/1/2010</td>
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**571- 1- AB  PLASTIC EROSION MAT**

<table>
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<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>no</th>
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<tbody>
<tr>
<td>SY; M2</td>
<td>Square Yard; Square Meter</td>
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</tbody>
</table>

**Notes**

Geosynthetic rolled erosion control product that retains soil, moisture, and seed; promotes vegetative growth while preventing erosion in ditches, channels, and spillways. to be used where conditions prevent vegetation that lasts past a single growing season.

Design standard 199 lists standard criteria/material properties. Plans/Specs need to detail installation requirements and compensation.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>COMP 700-050-01: Area Computation and Continuation</td>
</tr>
</tbody>
</table>

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

**References**

PPM Chapter
Trns-port
Other Standards  Index No. 199
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)  6, 7, 13
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<tbody>
<tr>
<td>0571 1 11</td>
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<tr>
<td>0571 1 12</td>
<td>PLASTIC EROSION MAT, TRM, TYPE 2</td>
<td>SY</td>
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<tr>
<td>0571 1 13</td>
<td>PLASTIC EROSION MAT, TURF REINFORCED MAT, TYPE 3</td>
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</table>

**573-Maint HYDROSEEDING**

Maintenance Contracts Only

Unit: Mixed  Accuracy: Refer to item structure and details  PlanQuantity?: ?

Notes: Maintenance Item: Not Valid for Construction Contracts

Details: MAINTENANCE CONTRACTS ONLY  Additional BOE details pending

Related Items: Required  Recommended

Design Forms and Documentation

Constructions Forms and Documentation

References: PPM Chapter  Trns-port  Other Standards  Specifications

Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):**

Struct.  573-Maint HYDROSEEDING Maintenance Contracts Only  Mixed

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### Item Description

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<thead>
<tr>
<th>Item</th>
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<tr>
<td>ES73 1</td>
<td>HYDRO-SEEDING - APPLICATION OF SLURRY INCLUDING WOOD FIBER, SEED, FERTILIZER, TACKIFIER &amp; DYE</td>
<td>SY</td>
<td></td>
<td>1/1/2010</td>
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</tbody>
</table>

#### 575-Maint SODDING Maintenance Contracts Only

**Unit**: Mixed  
**Accuracy**: Refer to item structure and details  
**PlanQuantity?**: ?

**Notes**: Maintenance Item: Not Valid for Construction Contracts

**Details**: MAINTENANCE CONTRACTS ONLY  
Additional BOE details pending

### Design Forms and Documentation

### Construction Forms and Documentation

### References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Trns*port</th>
<th>Other Standards</th>
<th>Specifications</th>
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</thead>
</table>

### Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):**

**Struct.** 575-Maint SODDING Maintenance Contracts Only

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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<tbody>
<tr>
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<td>SODDING</td>
<td>SY</td>
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<tr>
<td>ES75 1 2</td>
<td>SODDING (CENTIPEDE)</td>
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<td>ES75 1 4</td>
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<td>1/1/2010</td>
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<td>ES75 1 6</td>
<td>SODDING (BERMUDA)</td>
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#### 577-Maint SHOULDER REWORK Maintenance Contracts Only

**Unit**: Mixed  
**Accuracy**: Refer to item structure and details  
**PlanQuantity?**: ?

**Notes**: Maintenance Item: Not Valid for Construction Contracts

**Details**: MAINTENANCE CONTRACTS ONLY
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
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<th>TSP/Detail</th>
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<tbody>
<tr>
<td>E577 70</td>
<td>SHOULDER REWORK</td>
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<td>1/1/2010</td>
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<tr>
<td>E577 70 1</td>
<td>REWORKING SHOULDERS (SPOT REPAIRS)</td>
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<tr>
<td>E577 70 2</td>
<td>REWORKING UTILITY STRIPS</td>
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<td></td>
<td>1/1/2010</td>
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</tbody>
</table>

580- 1- A LANDSCAPE COMPLETE

Notes: Effective July 2012 letting, refer to Estimates Bulletin 12-05 for correct usage of landscape and related pay items.

Details: This item is for the complete installation of plants, in accordance with Specification Section 580, including all incidental work. The designer should coordinate plan details with installation requirements shown in the specifications.

Through June 2010: Mowing included as part of the landscape work will be identified in the contract documents. If mowing is required outside of the landscape areas, use pay item 104-4, unless 570-1-A is included.

July 2010 and later: Mowing included as part of the landscape work will be identified in the contract documents. If mowing is required outside of the landscape areas, use pay item 107-2.

Small plants includes all ground covers, shrubs to less than 7 gallon, trees to less than 7 gallon, palms clustering type less than 6 foot overall height, cycads to less than 7 gallon. Incidentals, as shown in the landscaping plans, should be included on the tabulation sheet for payment along with small plans.
Large plants include shrubs 7 gallon or greater, trees 7 gallon or greater, all palms single trunk, palms clustering type 6 foot overall height and greater, cycads 7 gallon or greater, all Sabal palms (aka Sabal palmetto, cabbage palm, state tree)

Refer to the latest edition of the Florida Grades and Standards for Nursery Plants for classification. All plants must be detailed in the plans in accordance with Volume 2, Chapter 26 of the PPM. See also PPM Vol 1, Chapter 9.

The computation book will use form 70-050-05 Lump Sum Quantities. On the form, refer to the plans tabulation sheet for calculations; do not repeat tabulation sheet information on the comp book form.

************

Tree Trimming or Relocation: When arborist work is needed during construction (tree trimming, root trimming, and/or tree relocation) for non-maintenance activities, the work should be included under Section 110- Clearing and Grubbing, and associated pay items. Plan details should be included with Roadway work. DO NOT include this work in the Landscape plans or Landscape category.

************

TRNSPORT Category and reporting:
Items loaded in the Landscape Category (0600 Landscape) will be included on the Landscape Report. Items 580-1-A and 590-70 should be included in the landscape category.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms</td>
<td>tabld: Landscape Tabulation of Quantity Sheet, or SHTabQuantLD2: Landscape Tabulation or Quantities</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
<tr>
<td>and Documentation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Construction Forms and Documentation | No additional form required; use plans summary or comp book | Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances. |

<table>
<thead>
<tr>
<th>References</th>
<th>PPM Chapter Vol 1, Chapter 9; Vol 2, Chapter 26</th>
</tr>
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<tbody>
<tr>
<td>Trns-port</td>
<td></td>
</tr>
<tr>
<td>Other Standards</td>
<td>Index No. 544</td>
</tr>
<tr>
<td>Specifications</td>
<td>Section 580</td>
</tr>
</tbody>
</table>

**TRNSPORT Category (DRAFT FIELD):** 0600 Landscaping

**Struct.** 580-1-A LANDSCAPE COMPLETE LS/LS

A= Plant Size
1 (Small Plants) Includes incidental landscape work
2 (Large Plants)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0580 1 1</td>
<td>LANDSCAPE COMPLETE- SMALL PLANTS</td>
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<tr>
<td>0580 1 2</td>
<td>LANDSCAPE COMPLETE- LARGE PLANTS</td>
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</table>

**580-Maint**  
LANDSCAPING- MAINTENANCE  
Maintenance Contracts Only  

**Unit** Mixed  
**Accuracy** Refer to item structure and details  
**Notes** Maintenance Item: Not Valid for Construction Contracts  
**Details** MAINTENANCE CONTRACTS ONLY  
Additional BOE details pending  
**Related Items**  
**Required**  
**Recommended**  

**Design Forms and Documentation**  

**Construction Forms and Documentation**  

**References**  
PPM Chapter  
Trns-port  
Other Standards  
Specifications  
Prep & Doc Manual Chapter(s)  

**TRNS*PORT Category (DRAFT FIELD):**  
\[Struct.\] 580-Maint  
LANDSCAPING- MAINTENANCE  
Maintenance Contracts Only  
Mixed  

**Notes**  
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
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<th>Code</th>
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<td>TREE REMOVAL (25&quot; TO 36&quot;)</td>
<td>EA</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>E580332 24</td>
<td>TREE REMOVAL (37&quot; TO 48&quot;)</td>
<td>EA</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>E580332 25</td>
<td>TREE REMOVAL (&gt; 48&quot;)</td>
<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>E580332 97</td>
<td>TREE TRIMMING</td>
<td>EA</td>
<td>1/1/2010</td>
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<td>E580332 98</td>
<td>TREE AND BRUSH REMOVAL</td>
<td>PM</td>
<td>1/1/2010</td>
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<tr>
<td>E580332 99</td>
<td>TREE AND BRUSH REMOVAL</td>
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<td>E580333  1</td>
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<td>1/1/2010</td>
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<tr>
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<td>STUMP REMOVAL (4&quot; TO 24&quot;)</td>
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<tr>
<td>E580333  3</td>
<td>STUMP REMOVAL (25&quot; TO 48&quot;)</td>
<td>EA</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>E580334  1</td>
<td>STUMP GRINDING (4&quot; TO 24&quot;)</td>
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<td>1/1/2010</td>
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<td>STUMP GRINDING (25&quot; TO 48&quot;)</td>
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</tr>
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<td>1/1/2010</td>
</tr>
<tr>
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<td>PRUNING AND TRIMMING (4&quot; TO 24&quot;)</td>
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<td>1/1/2010</td>
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<td>PRUNING AND TRIMMING (TREES AND SHRUBS)</td>
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<td>1/1/2010</td>
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<tr>
<td>E580336 12</td>
<td>POWER SHEARING &gt;0' TO 15' WIDTH AND 20' HEIGHT</td>
<td>LF</td>
<td>1/1/2013</td>
</tr>
<tr>
<td>E580336 13</td>
<td>POWER SHEARING &gt;0' TO 15' WIDTH GREATER THAN 20' HEIGHT</td>
<td>LF</td>
<td>1/1/2013</td>
</tr>
<tr>
<td>E580336 14</td>
<td>PRUNING AND TRIMMING (PALMS)</td>
<td>EA</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>E580337  2</td>
<td>HERBICIDE (STRIP APPLICATION)</td>
<td>AC</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>E580337  3</td>
<td>HERBICIDE (SPOT APPLICATION &lt; 100 SF)</td>
<td>SF</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>E580337  4</td>
<td>HERBICIDE (STRIP APPLICATION)(AQUATIC)</td>
<td>AC</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>E580337  5</td>
<td>HERBICIDE (ROOT CONTROL FABRIC)</td>
<td>LF</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>E580337  6</td>
<td>HERBICIDE (HAND APPLICATION)</td>
<td>AC</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>E580337  8</td>
<td>HERBICIDE (MOWER APPLICATION)</td>
<td>AC</td>
<td>1/1/2010</td>
</tr>
<tr>
<td>E580337 11</td>
<td>HERBICIDE (MANUAL APPLICATION)</td>
<td>GA</td>
<td>1/1/2010</td>
</tr>
</tbody>
</table>
Unit | Mixed | Accuracy | Refer to item structure and details | Plan Quantity? | ?
--- | --- | --- | --- | --- | ---

Notes

**Maintenance Item: Not Valid for Construction Contracts**

Details

MAINTENANCE CONTRACTS ONLY

Additional BOE details pending

Related Items

Required | Recommended
--- | ---

Design Forms and Documentation

Construction Forms and Documentation

References

PPM Chapter

Trns port

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

*TRNS*PORT Category (DRAFT FIELD):

Struct. | 581-Maint | GROUND COVER | Mixed |
--- | --- | --- | ---

Maintenance Contracts Only

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>E581 2</td>
<td>GROUND COVER (10&quot; TO 18&quot; HEIGHT OR SPREAD)</td>
<td>PL</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

---

582-Maint | SHRUBS | Maintenance Contracts Only
---

Unit | Mixed | Accuracy | Refer to item structure and details | Plan Quantity? | ?
--- | --- | --- | --- | --- | ---

Notes

**Maintenance Item: Not Valid for Construction Contracts**

Details

MAINTENANCE CONTRACTS ONLY

Additional BOE details pending

Related Items

Required | Recommended
--- | ---

Design Forms and Documentation

Construction Forms and Documentation

---

Details and Structure: Complete- Items 000 to 1999 \ Page 444 of 769
### TRNS*PORT Category (DRAFT FIELD):

#### Struct. 582-Maint SHRUBS Maintenance Contracts Only

#### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>E582 2</td>
<td>SHRUBS (10&quot; TO 18&quot; HEIGHT OR SPREAD)</td>
<td>PL</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E582 3</td>
<td>SHRUBS (19&quot; TO 7' HEIGHT OR SPREAD)</td>
<td>PL</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 583-Maint TREE Maintenance Contracts Only

#### Notes

Maintenance Item: Not Valid for Construction Contracts

#### Details

MAINTENANCE CONTRACTS ONLY
Additional BOE details pending

#### Related Items

Required

Recommended

#### Design Forms and Documentation


#### Construction Forms and Documentation


#### References

PPM Chapter
Trns-port
Other Standards
Specifications
Prep & Doc Manual Chapter(s)
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>E583 3</td>
<td>TREE (19&quot; TO 7' HEIGHT OR SPREAD)</td>
<td>PL</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E583 2</td>
<td>TREE (10&quot; TO 18&quot; HEIGHT OR SPREAD)</td>
<td>PL</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E583 3</td>
<td>TREE (19&quot; TO 7' HEIGHT OR SPREAD)</td>
<td>PL</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E583 4</td>
<td>TREE (8' TO 20' HEIGHT OR CLEAR TRUNK)</td>
<td>PL</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E583 5</td>
<td>TREE (21' OR MORE HEIGHT OR CLEAR TRUNK)</td>
<td>PL</td>
<td>1/1/2010</td>
<td></td>
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</tr>
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</table>

### 584-Maint PALMS

**Maintenance Contracts Only**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed</td>
<td>Refer to item structure and details</td>
<td>?</td>
</tr>
</tbody>
</table>

**Notes**

- Maintenance Item: Not Valid for Construction Contracts

**Details**

- MAINTENANCE CONTRACTS ONLY
- Additional BOE details pending

**Related Items**

- Required
- Recommended

**Design Forms and Documentation**

**Construction Forms and Documentation**

**References**

- PPM Chapter
- Trans-Port
- Other Standards
- Specifications
- Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):**

**Struct.** 584-Maint PALMS Maintenance Contracts Only

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>E584 4</td>
<td>PALM SINGLE TRUNK (8' TO 20' HEIGHT OR CLEAR TRUNK)</td>
<td>PL</td>
<td>1/1/2010</td>
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<td></td>
</tr>
</tbody>
</table>

### 590-70- A IRRIGATION SYSTEM

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LS/LS</td>
<td>Lump Sum</td>
<td>yes</td>
</tr>
</tbody>
</table>

**Notes**

Effective July 2012 letting, refer to Estimates Bulletin 12-05 for correct usage of
landscape and related pay items.

Details

This pay item is intended for the installation/repair of an Irrigation System.

New Systems: For new systems, the designer is responsible for full details/specifications, including material requirements for components. A summary table in the plans should list component parts. Load the pay item in the Landscape category.

Repairs: For minor repairs to existing systems, the work and materials required should be detailed in the plans/specifications. When no landscape plans/category exists on a project, load the Irrigation System Repair pay item in the Roadway category. When repairs are completed as part of a Landscape project, no pay item is needed; the work can be included with existing Landscape and/or Irrigation System pay items.

TRNSPORT Category and reporting:

Items loaded in the Landscape Category (0600 Landscape) will be included on the Landscape Report. Items 580-1-A and 590-70 should be included in the landscape category.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and</td>
<td>sumqr: Roadway Summary of Quantities Sheet</td>
<td></td>
</tr>
<tr>
<td>Documentation</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
<td></td>
</tr>
<tr>
<td>Construction Forms</td>
<td>No additional form required; use plans summary or comp book</td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
</tr>
<tr>
<td>and Documentation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

References

PPM Chapter
Trns-port
Other Standards
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNSPORT Category (DRAFT FIELD): 0600 Landscaping

Struct. 590-70- A IRRIGATION SYSTEM LS/LS

A= Type of Work
blank (New System) included in Landscape Category
1 (Repairs) normally included in Roadway category

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
**591- 1- A  LANDSCAPE IRRIGATION SLEEVE**

**Unit**  LF; M1  
**Accuracy**  Linear Foot; 1/10 Meter  
**PlanQuantity?**  yes

**Notes**
Effective July 2012 letting, refer to Estimates Bulletin 12-05 for correct usage of landscape and related pay items.

**Details**
This item is intended for Landscape Sleeves installed during roadway construction; they may be used for irrigation systems installed during the existing contract, or a separate contract at a later date. Per the standard, two sleeves are normally installed: one for water pipe, the other for electrical/control wires. Each sleeve is paid separately, measured from cap to cap.

Pay Item Category: Show the location of the sleeves in the Roadway plans. Load the pay items in the Roadway category. If no roadway plans exist (Landscape contract), both the sleeve and pay item may be included in the landscape plans/category.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

**Design Forms and Documentation**

- tabqld: Landscape Tabulation of Quantity Sheet, or SHTabQuantLD2: Landscape Tabulation or Quantities
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Trns-port
- Other Standards  Index No. 591
- Specifications  Section 591
  
**TRNS*PORT Category (DRAFT FIELD):**  200 or 600  
Roadway or Landscaping

**Struct.**  591- 1- A  
**LANDSCAPE IRRIGATION SLEEVE**  LF

- A= Nominal Pipe Diameter
  1 (2")
  2 (4")

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0591 1 1</td>
<td>IRRIGATION SLEEVE, 2&quot; DIAMETER</td>
<td>LF</td>
<td>T</td>
<td>7/1/2012</td>
<td></td>
</tr>
<tr>
<td>0591 1 2</td>
<td>IRRIGATION SLEEVE, 4&quot; DIAMETER</td>
<td>LF</td>
<td>T</td>
<td>7/1/2012</td>
<td></td>
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</tbody>
</table>
### Topic No. 600-000-002

**Basis of Estimates**

**2012 Edition**

**January 22, 2013**

#### Unit

<table>
<thead>
<tr>
<th>Item</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0604 3 1</td>
<td>TIMING IMPLEMENTATION, CONTROLLER</td>
<td>PI</td>
<td>T</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
</tr>
<tr>
<td>0604 3 2</td>
<td>TIMING IMPLEMENTATION, CONTROLLER &amp; COORDINATION UNIT</td>
<td>PI</td>
<td>T</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
</tr>
<tr>
<td>0604 3 3</td>
<td>TIMING IMPLEMENTATION, MASTER CLOCK UNIT</td>
<td>PI</td>
<td>T</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
</tr>
</tbody>
</table>

#### Related Items

**Required**
- **Design Forms and Documentation**
  - Tabqsg: Signalization Tabulation of Quantity Sheet
  - Locate in plans. Summarize quantities by location on summary sheet in the plans.
- **Construction Forms and Documentation**
  - No additional form required; use plans summary or comp book
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**Recommended**
- **T: Plan Details and/or Technical Specifications required**
- **PPM Chapter**
- **Trnsport**
- **Other Standards**
- **Specifications**

**Prep & Doc Manual Chapter(s)**
- 7, 13

#### Notes

- **Struct. 604-3- A TIMING IMPLEMENTATION PI**
  - A = Controller Type
  - 1 (Controller)
  - 2 (Controller And Coordination Unit)
  - 3 (Master Clock Unit)

---

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization (or ITS)

---

**Notes**

- **The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.**

---

**Details and Structure: Complete- Items 000 to 1999**
allowance for sweeps or vertical distance, per the specification. Do not include additional lengths for vertical measurement.

TYPE: Use 'Underground' in locations where the placement of the conduit will not necessitate saw-cutting of pavement. Most conduit placed on new construction projects will be placed underground prior to the placement of pavement, and should be paid for as 'Underground.' 'Underpavement' should be used when it is necessary to saw-cut and backfill the pavement in order to place the conduit, i.e. EXISTING PAVEMENT.

NOTE: per the specifications (Section 630), payment for conduit used for fiber optic applications includes the locate wire and testing.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and</td>
<td>tabqsg: Signalization Tabulation of Quantity Sheet</td>
<td></td>
</tr>
<tr>
<td>Documentation</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
<td></td>
</tr>
<tr>
<td>Construction Forms</td>
<td>No additional form required; use plans summary or comp book</td>
<td></td>
</tr>
<tr>
<td>and Documentation</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
<td></td>
</tr>
</tbody>
</table>

References

PPM Chapter
Trns-port
Other
Standards
Specifications
Section 630
Min Specs: Section A630
Prep & Doc Manual Chapter(s)
6, 7, 13

TRNSPORT Category (DRAFT FIELD): 0500 Signalization (or ITS)

Struct. 630-1-AB CONDUIT LF

A = Operation
1 (Furnish & Install)

Remove: see pay item 690-90- for removal within intersection

B= Conduit Installation Type
1 (Aboveground)
2 (Underground_
3 (Underpavement Sawcut) Note: Only when sawcutting is necessary for location under existing pavement
4 (Underground- jacked)
5 (Bridge Mount)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### 630-2-AB CONDUIT

**Unit**: LF; M1  
**Accuracy**: Linear Foot; 1/10 Meter  
**Plan**: no

### Notes
NOTE MEASUREMENT CHANGES BELOW.

### Details
This item is valid for signals, lighting, and other electrically powered or operated devices.

MEASUREMENT- TRENCH or BORE: Measurement is for the straight line HORIZONTAL DISTANCE of the trench or bore, from pull box to pull box, with no allowance for sweeps or vertical distance. No additional payment will be made for multiple runs of conduit within a trench or bore.

MEASUREMENT- ABOVEGROUND or BRIDGE MOUNT: Measurement will be for the actual length of conduit used.

***************

B=1 OPEN TRENCH is used when box-to-box length is underground, and can be open trenched. If the contractor chooses to use an alternate method, payment will remain "open trench".

B=2 DIRECTIONAL BORE is used when box-to-box length includes any distance under EXISTING pavement, sidewalk, or other location where open trench is not practical.

B=3 JACK & BORE is typically used for casing/conduit installations under railroad.

NOTE: B=1, 2, and 3 are based on EXISTING conditions, prior to construction. The contractor may choose an alternate method of installation, based on their operations, with no change in compensation. DO NOT consider new pavement or sidewalk when choosing installation method/pay item.

***************

TRNS*PORT: Load the quantity for each component set of plans into the corresponding category- signals quantity in the signals category, lighting quantity in the lighting category, etc.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td><strong>Design Forms and Documentation</strong></td>
<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
</tr>
<tr>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
<td></td>
</tr>
</tbody>
</table>
Standards
Specifications

Struct. 630-2-AB CONDUIT LF

A = Operation
1 (Furnish & Install)

Remove: see pay item 690-90- for removal within intersection

B = Installation Method/location- see details above
1 (open trench) Underground *
2 (Directional Bore) Underground or Underpavement*
3 (Jack & Bore) Typically under railroad*
4 (Aboveground)**
5 (Bridge Mount)**

*Measured as the horizontal length of the trench or bore; no additional payment for multiple conduits in trench.
**Measured as the actual length of each conduit.

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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<tr>
<td>0630 2 11</td>
<td>CONDUIT, FURNISH &amp; INSTALL, OPEN TRENCH</td>
<td>LF</td>
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<tr>
<td>0630 2 12</td>
<td>CONDUIT, FURNISH &amp; INSTALL, DIRECTIONAL BORE</td>
<td>LF</td>
<td>7/1/2013</td>
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</tr>
<tr>
<td>0630 2 14</td>
<td>CONDUIT, FURNISH &amp; INSTALL, ABOVEGROUND</td>
<td>LF</td>
<td>7/1/2013</td>
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</tr>
<tr>
<td>0630 2 15</td>
<td>CONDUIT, FURNISH &amp; INSTALL, BRIDGE MOUNT</td>
<td>LF</td>
<td>7/1/2013</td>
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</table>

632-6-A SIGNALS- CABLE OUTSIDE OF INTERSECTION

Unit LF; M1
Accuracy Linear Foot; 1/10 Meter
PlanQuantity? no

Notes

Valid through 6-3-13; replaced by 632 and 633 pay items. Refer to Estimates Bulletin 12-18.

Details

This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.

Use for runs to flashing beacon, signs, etc. beyond the normal limits of the intersection. Includes cable, support wire, cable ties, cable clamps, lashing wire, terminal connectors and cable grounding. Use item 632-7- (2632-7-) for cable within the intersection.
**Related Items**

**Required**
- tabqsg: Signalization Tabulation of Quantity Sheet

**Recommended**
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

**Required**
- No additional form required; use plans summary or comp book

**Recommended**
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**

**Trns-port**

**Other Standards**

- Normally requires SHOP DRAWINGS
- Index No. 17727

**Specifications**

- Min Specs: Section A632

**Prep & Doc Manual Chapter(s)**

- 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization (or ITS)

**Struct.** 632-6- A SIGNALS- CABLE OUTSIDE OF INTERSECTION LF

- A = Operation
- 1 (Furnish & Install)
- 3 (Install) Furnished by FDOT or Local Agency
- 4 (Adjust)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0632 6 1</td>
<td>CABLE, FURNISH &amp; INSTALL</td>
<td>LF</td>
<td>1/1/2010</td>
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<td></td>
</tr>
<tr>
<td>0632 6 3</td>
<td>CABLE, INSTALL</td>
<td>LF</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
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</table>

**632-7- A SIGNAL CABLE- WITHIN INTERSECTION**

<table>
<thead>
<tr>
<th>Unit</th>
<th>PI</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Per Intersection</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

- This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.

- Includes cable, support wire, cable ties, cable clamps, lashing wire, terminal connectors and cable grounding, within the normal limits of the intersection. May include total intersection replacement, and/or pedestrian signals, as noted in the plans. Consider 632-6- (2632-6-) for runs outside the limits of the intersection.

---

**Details**

- tabqsg: Signalization Tabulation of Quantity Sheet

- Locate in plans. Summarize quantities by location on summary sheet in the plans.

---

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book

- Record final quantity on the tabulation sheet (plans) or computation form (comp book).
Standards Index No. 17727
Specifications Section 632
Min Specs: Section A632
Prep & Doc Manual Chapter(s) 6, 7, 13

Struct. 632-7-A Signal Cable - Within Intersection

A = Operation
1 (Furnish & Install)
4 (Adjust)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0632 7 1</td>
<td>SIGNAL CABLE, FURNISH &amp; INSTALL</td>
<td>PI</td>
<td>1/1/2010</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0632 7 4</td>
<td>SIGNAL CABLE, ADJUST</td>
<td>PI</td>
<td>1/1/2010</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

632-8-ABC Signals - Interconnect Cable

Unit LF; M1
Accuracy Linear Foot; 1/10 Meter
Plan/Quantity? no

Notes
Valid through 6-3-13; replaced by 632 and 633 pay items. Refer to Estimates Bulletin 12-18.

Details
This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.

INSTALL: To be used ONLY when the item is to be furnished by the Department or other maintaining agency. Plans or specs should clearly identify the item(s) to be installed, pickup/delivery instructions, as well as installation instructions. Payment includes any incidentals necessary (furnished by the Contractor) for a complete installation.

RELOCATE: Plans or specs should clearly identify the item and initial/final locations. As needed, detail incidental items to be furnished by the Contractor for a complete installation. Clearly identify conditions under which item replacement (damaged by contractor) is needed.

Related Items

Design Forms and Documentation

tabqsg: Signalization Tabulation of Quantity Sheet
Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Trns-port
Other Normally requires SHOP DRAWINGS for Items 632-8-111 thru 632-8-
Standards  Index No. 17733
Specifications  Section 632
Min Specs: Section A632

Prep & Doc Manual Chapter(s)  7, 13

TRNS*PORT Category (DRAFT FIELD):  0500 Signalization (or ITS)

Struct.  632- 8-ABC SIGNALS- INTERCONNECT CABLE LF

A = Number Of Pairs
1 (to Be Determined By Contractor)
2 (1-25)
3 (26-50)
4 (51-100)
5 (101-150)

B = Operation
1 (Furnish & Install)
3 (Install)
4 (Relocate) A=1, C=0
For remove, see item 690-91

C = Type Of Interconnect Cable Installation
0 used for relocate item; details in plans
1 (Aerial)
2 (Underground)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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<td>6/30/2013</td>
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<tr>
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<td>1/1/2010</td>
<td>6/30/2013</td>
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<td>1/1/2010</td>
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<td>0632 8412</td>
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### Maintenance Contracts Only

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<th>PlanQuantity?</th>
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<tr>
<td>Mixed</td>
<td>Refer to item structure and details</td>
<td>?</td>
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</table>

**Notes**

Maintenance Item: Not Valid for Construction Contracts

Valid through 12-31-12; see 690-91 items for removal of interconnect cable.

**Details**

MAINTENANCE CONTRACTS ONLY

Additional BOE details pending

---

**Related Items**

<table>
<thead>
<tr>
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<th>Recommended</th>
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---

**Design Forms and Documentation**

---

**Construction Forms and Documentation**

---

**References**

- PPM Chapter
- Trns-port
- Other Standards
- Specifications
- Prep & Doc Manual Chapter(s)

---

**TRNS*PORT Category (DRAFT FIELD):**

- Struct. 632-Maint INTERCONNECT CABLE Maintenance Contracts Only Mixed

---

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

---

**633- 1-ABC FIBER OPTIC CABLE**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
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<td>LF; M1</td>
<td>Linear Foot; 1/10 Meter</td>
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</table>

**Notes**

Effective July 2013, refer to updated specifications and Estimates Bulletin 12-18

**Details**

For use in fiber optic networks that support ITS devices and their connection to communication hubs, transportation management centers, and related facilities. Use "overhead" for installations involving bridges and other aboveground structures. Use "underground" for cable placed in buried conduit along the roadside.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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</thead>
</table>

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**Design Forms and Documentation**

- tabqsg: Signalization Tabulation of Quantity Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

---

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).
**Struct. 633-1-ABC**

**FIBER OPTIC CABLE**

- **A** = Operation
  - 1 (Furnish & Install)
  - 3 (Install) Furnished by FDOT or local agency; C=0
  - 4 (Relocate) C=0
  - For removal, see 690 items
- **B** = Location
  - 1 (Overhead)
  - 2 (Underground)
- **C** = Number of Fibers in Cable
  - 1 (2 to 12)
  - 2 (13 to 48)
  - 3 (49 to 96)
  - 4 (97 to 144)

**Notes**

- *Remove item may require plan details and/or tech spec*

---

**The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>Obsolete Date</th>
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<tr>
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</table>

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**633-2-AB**

**SIGNALS- FIBER OPTIC CONNECTION**

- **Unit** EA
- **Accuracy** Each
- **PlanQuantity?** no

**Notes**

- Effective July 2013, refer to updated specifications and Estimates Bulletin 12-18

**Details**

For use in fiber optic networks where segments of fiber optic cable must be spliced together, or when cables must be terminated at the end of a segment. Note that each
connection involves the fusing of individual optical fibers in a cable. Payment “each” is for each FIBER to be connected. Type of connection must be noted in the plans.

### Related Items

<table>
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<tr>
<th>Required</th>
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<tbody>
<tr>
<td>783-3</td>
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### Design Forms and Documentation

**tabqsg: Signalization Tabulation of Quantity Sheet**

Locate in plans. Summarize quantities by location on summary sheet in the plans.

### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

**PPM Chapter**

**Trns·port**

**Other Standards**

**Specifications**

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization (or ITS)

### Struct. 633- 2- AB SIGNALS- FIBER OPTIC CONNECTION EA

New items for Signals use, pending spec approval.

A = Operation

3 (Install)

B = Type

1 (Splice)

2 (Termination)

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0633 232</td>
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</tbody>
</table>

### 633- 3- AB SIGNALS- FIBER OPTIC CONNECTION HARDWARE

Effective July 2013, refer to updated specifications and Estimates Bulletin 12-18

For use in fiber optic networks, where segments of cable must be spliced together.

**Notes**

**Related Items**

<table>
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<th>Required</th>
<th>Recommended</th>
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</table>

**Design Forms and Documentation**

**tabqsg: Signalization Tabulation of Quantity Sheet**

Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).
New items for Signals use, pending spec approval.

A= Operation
1 (Furnish & Install)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)

B=Component
1 (Splice Enclosure)
2 (Splice Tray)
3 (Preterminated Connector Assembly)
4 (Buffer Tube Fan Out Kit)
5 (Patch Panel, Preterminated)
6 (Patch Panel, Field Terminated)
7 (Connector Panel)

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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<tr>
<td>0633 3 12</td>
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<td>1/1/2010</td>
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<td>0633 3 14</td>
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---

**Beam - A**

**TWISTED PAIR CABLE**

**Unit**: LF; M1  
**Accuracy**: Linear Foot; 1/10 Meter  
**PlanQuantity?**

**Notes**: Effective July 2013, refer to updated specifications and Estimates Bulletin 12-18

---

**Details and Structure**: Complete- Items 000 to 1999
Refer to Section 633 for specifications.

**Struct. 633-4- A**  
**TWISTED PAIR CABLE**  
**LF**

A= Operation  
1 (Furnish & Install)  
3 (Install) Furnished by FDOT or local agency  
4 (Relocate)  
For removal, see 690 items

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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</table>

**633-ABC- D**  
**SIGNALS- FIBER OPTIC CABLE**

**Unit**  
**LF; M1**  
**Accuracy**  
**Linear Foot; 1/10 Meter**  
**PlanQuantity?**  
**no**

**Notes**

This pay item is for traffic signals and traffic control devices only. NOT TO BE USED FOR ITS Projects. Refer to 780 items.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
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<tbody>
<tr>
<td>tabqsg: Signalization Tabulation of Quantity Sheet</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
</tbody>
</table>
Standards and Specifications

Normally requires SHOP DRAWINGS

A = Operation
1 (Furnish & Install)
3 (Install)
4 (Relocate) CD=00

B = Type Of Interconnect Cable Installation
1 (Aerial)
2 (Underground)
3 (Drop)

C = Type Of Fiber
1 (Single Mode)
2 (Multi Mode)
3 (Composite)

D = Number Of Fibers In Cable
1 ( 1 - 25)
2 (26 - 50)
3 (51 - 100)
4 (101 - 150)
5 (151 - 200)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<td>6/30/2013</td>
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<td>6/30/2013</td>
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<td>0633138</td>
<td>CABLE - FIBER OPTIC, RELOCA, AERIAL, SGL MODE, 51-100 PR</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
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<tr>
<td>0633139</td>
<td>CABLE - FIBER OPTIC, RELOCA, UNDERGROUND, SGL MODE, 1-25 PR</td>
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<td>1/1/2010</td>
<td>6/30/2013</td>
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<tr>
<td>0633140</td>
<td>SIGNALS - FIBER OPTIC CABLE, RELOCA, DROP, SINGLE MODE, 1-25 PR</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
</tr>
</tbody>
</table>
For projects let July 2009 and later, use the single or two point attachment type pay items, as applicable. (Estimates Bulletin 09-01, 2009 PPM implementation letter.)

Perpendicular spans, box spans or drop box spans shall be used for all signal span wire assemblies. Diagonal span assemblies shall only be used for flashing beacon installations. (2009 PPM- Plans Preparation Manual, Design Bulletin 09-01; Vol 1, Ch 7.4.18)

Other Span Type: Do not use for perpendicular, box, or diagonal spans. Complete plan details are required.

INSTALL Span wire in accordance with Design Standards. For minor installation changes, note details in the plans with standard span type.

OPERATIONS:
INSTALL: Materials furnished by FDOT or local agency.

Adjust: NOT TO BE USED FOR MOT or Temporary Signals. Adjust existing Span Wires, as detailed in the plans.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>tabqsg: Signalization Tabulation of Quantity Sheet</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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</table>

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<tr>
<th>References</th>
<th>PPM Chapter</th>
<th>Vol 1, Ch 7.4.18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trns·port</td>
<td>Other</td>
<td>Normally requires SHOP DRAWINGS for Items 634- 4-111 thru 634- 4-311</td>
</tr>
<tr>
<td>Standards</td>
<td>Index No. 17727</td>
<td></td>
</tr>
<tr>
<td>Specifications</td>
<td>Section 634</td>
<td></td>
</tr>
</tbody>
</table>

Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0500 Signalization (or ITS)

STRUCT. 634- 4-ABC SIGNALS- SPAN WIRE ASSEMBLY PI

A = Operation
1 (Furnish & Install)
3 (Install) Furnished by FDOT or local agency
4 (Adjust) BC=00
Remove: Use item 690-80

B = Type Assembly
1 (Two Wire) valid through 6-30-2009
2 (Three Wire) valid through 6-30-2009

B= Attachment Type
4 (Single Point) effective July 2009, or earlier
5 (Two Point) effective July 2009, or earlier

C = Type Span
1 (Perpendicular)
2 (Diagonal) see details above; flashing beacon installations only
Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0634 4141</td>
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<tr>
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<td>1/1/2010</td>
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<td>0634 4143</td>
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<td>0634 4144</td>
<td>SPAN WIRE ASSEMBLY, F&amp;I, SINGLE POINT, OTHER TYPE</td>
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<tr>
<td>0634 4151</td>
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<tr>
<td>0634 4153</td>
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<tr>
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<tr>
<td>0634 4341</td>
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<tr>
<td>0634 4343</td>
<td>SPAN WIRE ASSEMBLY, INSTALL, SINGLE POINT ATTACH, BOX SPANS</td>
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<tr>
<td>0634 4344</td>
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<tr>
<td>0634 4351</td>
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<td>1/1/2010</td>
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<tr>
<td>0634 4352</td>
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<tr>
<td>0634 4353</td>
<td>SPAN WIRE ASSEMBLY, INSTALL, TWO POINT ATTACH, BOX SPANS</td>
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<tr>
<td>0634 4354</td>
<td>SPAN WIRE ASSEMBLY, INSTALL, TWO POINT ATTACH, OTHER SPAN TYPE</td>
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<tr>
<td>0634 4400</td>
<td>SPAN WIRE ASSEMBLY, ADJUST</td>
<td>PI</td>
<td>1/1/2011</td>
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</tbody>
</table>

634- 5- A SIGNS- FIBERGLASS INSULATOR

Unit LF; M1
Accuracy Linear Foot; 1/10 Meter
PlanQuantity? no

Notes
This pay item is for traffic signals and traffic control devices only.

Details
Fiberglass Insulators are to be used on span wires located within 6 feet of overhead electric power lines. Detail length of each insulator in the plans.

Related Items

Details and Structure: Complete- Items 000 to 1999
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0634</td>
<td>FIBERGLASS INSULATOR, FURNISH &amp; INSTALL</td>
<td>LF</td>
<td>D</td>
<td>1/1/2010</td>
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</tbody>
</table>

**634- 6- A SIGNALS- MESSENGER WIRE**

**Notes**
- This pay item is for traffic signals and traffic control devices only.
- **Unit** LF; M1
- **Accuracy** Linear Foot; 1/10 Meter
- **Plan Quantity?** no

**Design Forms and Documentation**
tabqsg: Signalization Tabulation of Quantity Sheet
Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**
No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- PPM Chapter
- Trns-port
- Other:
- Standards: Normally requires SHOP DRAWINGS
- Specifications: Section 634

**T: Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)** 7, 13
TRNS*PORT Category (DRAFT FIELD): 0500 Signalization (or ITS)

Struct.  634-  6-  A SIGNALS- MESSENGER WIRE LF

A = Operation
1 (Furnish & Install)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0634 6 1</td>
<td>MESSENGER WIRE, F&amp;I</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

634-Maint SPAN WIRE ASSEMBLY Maintenance Contracts Only

Unit Mixed Accuracy Refer to item structure and details PlanQuantity? ?

Notes Maintenance Item: Not Valid for Construction Contracts

Details MAINTENANCE CONTRACTS ONLY Additional BOE details pending

Related Items Required Recommended

Design Forms and Documentation

Construction Forms and Documentation

References PPM Chapter Trns-port Other Standards Specifications Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):

Struct.  634-Maint SPAN WIRE ASSEMBLY Mixed Maintenance Contracts Only

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

635-  1-  AB PULL & JUNCTION BOXES

Unit EA Accuracy Each PlanQuantity? no

Notes PENDING Specification changes for July 2013; continue to use this item until

Details and Structure: Complete- Items 000 to 1999
Estimates Bulletin is issued.

Valid through 6-30-13; replaced by 635-2 and 635-3 pay items.

Details
Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.

Use in accordance with Section 635 of the specifications.

Special (B=6): MONITORED ITEM- APPROVAL NEEDED prior to letting; Contact the State Traffic Operations Office- Carl Morse or Ron Meyer.
Detail the size, shape, and material properties in the plans or specifications.

INSTALL (A=3): Item furnished by maintaining agency. Plan details required to inform contractor how to obtain pull & junction box. Include Agency name, contact name & number, storage location, and/or delivery instructions (agency delivery or contractor pick-up).

RELOCATE (A=4): Depending on the type of box, current condition, and the extent of the relocation, replacement versus relocation should be considered. When a box is to be relocated, specs or plan details should include the removal, protection/relocation, and reinstallation- in accordance with the specs & standards.

REMOVE: No separate payment will be made for the removal of pull and junction boxes. Removal is included under clearing and grubbing or other related pay items.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>tabqsg: Signalization Tabulation of Quantity Sheet</td>
</tr>
</tbody>
</table>

Locate in plans. Summarize quantities by location on summary sheet in the plans.

<table>
<thead>
<tr>
<th>Construction Forms and Documentation</th>
<th>No additional form required; use plans summary or comp book</th>
</tr>
</thead>
<tbody>
<tr>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
<td></td>
</tr>
</tbody>
</table>

References

PPM Chapter
Trnsport
Other

Standards
Index No. 17500- lighting, 17700- ground mount, 17733- aerial
Specifications
Min Specs: Section A635

Prep & Doc Manual Chapter(s) 7, 13

TRNSPORT Category (DRAFT FIELD): 0500 Signalization (or ITS)

Struct. 635- 1- AB PULL & JUNCTION BOXES EA

A = Operation
1 (Furnish & Install)
3 (Install) B=0; item furnished by FDOT or local agency
4 (Relocate) B=0; see detail

B = Type Of Box
1 (Pull Box)
2 (Aerial Junction Box)
3 (Mounted Junction Box)
5 (Fiber Optics)
6 (Special) MONITORED ITEM- APPROVAL NEEDED From Traffic Ops- see details above

Notes
* Special may require Tech Spec and/or Plan Detail

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0635 1 11</td>
<td>PULL &amp; JUNCTION BOX, F&amp;I, PULL BOX</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td>6/30/2013</td>
</tr>
<tr>
<td>0635 1 12</td>
<td>PULL &amp; JUNCTION BOX, F&amp;I, AERIAL</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td>6/30/2013</td>
</tr>
<tr>
<td>0635 1 13</td>
<td>PULL &amp; JUNCTION BOX, F&amp;I, MOUNTED</td>
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<td>6/30/2013</td>
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<tr>
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<tr>
<td>0635 1 40</td>
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<td>1/1/2010</td>
<td>6/30/2013</td>
</tr>
</tbody>
</table>

**635- 2- AB** PULL & SPLICE BOX

**Unit** EA **Accuracy** Each **Plan** Quantity?

**Notes**

PENDING for July 2013?

DO NOT OPEN AT THIS TIME

Effective July 2013. Replaces 635-1, 715-14, and 783 pay items.

Details

Use in accordance with Section 635 of the specifications.

DIMENSIONS: For signals applications, the spec calls for size B=1. For fiber optic cable applications, the spec calls for size B=2. When a different size is needed, it should be noted in the plans.

INSTALL (A=3): Item furnished by maintaining agency. Plan details required to inform contractor how to obtain pull & junction box. Include Agency name, contact name & number, storage location, and/or delivery instructions (agency delivery or contractor pick-up).

RELOCATE (A=4): Depending on the type of box, current condition, and the extent of the relocation, replacement versus relocation should be considered. When a box is to be relocated, specs or plan details should include the removal, protection/relocation, and reinstallation- in accordance with the specs & standards.

TRNSPORT: Load this pay item into the applicable category. For signals applications, load in the signals category; for lighting applications, load in the lighting category; similarly for other applications.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

**Design Forms and Documentation**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.
Construction
Forms and
Documentation

References

PPM Chapter
Trns-port
Other
Standards
Specifications
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):

Struct. 635- 2- AB  PULL & SPLICE BOX  EA

A= Operation
1 (Furnish & Install)
3 (Install) B=0; item furnished by FDOT or local agency
4 (Relocate) B=0; see detail

B= Cover Size; minimum depth per specification
1 (13 x 24) standard size
2 (24 x 36) large size
3 (30" X 60" rectangular or 36" round) splice vault

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0635 2 11</td>
<td>PULL &amp; SPLICE BOX, F&amp;I, 13&quot; x 24&quot; COVER SIZE</td>
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<td>7/1/2013</td>
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<tr>
<td>0635 2 12</td>
<td>PULL &amp; SPLICE BOX, F&amp;I, 24&quot; X 36&quot; COVER SIZE</td>
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<td>7/1/2013</td>
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<tr>
<td>0635 2 13</td>
<td>PULL &amp; SPLICE BOX, F&amp;I, 30&quot; X 60&quot; RECTANGULAR OR 36&quot; ROUND COVER SIZE</td>
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<td>0635 2 40</td>
<td>PULL &amp; SPLICE BOX, RELOCATE</td>
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</table>

635- 3- AB  JUNCTION BOX

Unit EA  Accuracy Each  PlanQuantity?

Notes

PENDING for July 2013?
DO NOT OPEN AT THIS TIME

Effective July 2013. Replaces 635-1, 715-14, and 783 pay items.

Details

Use in accordance with Section 635 of the specifications.

INSTALL (A=3): Item furnished by maintaining agency. Plan details required to inform contractor how to obtain pull & junction box. Include Agency name, contact name & number, storage location, and/or delivery instructions (agency delivery or contractor pick-up).

RELOCATE (A=4): Depending on the type of box, current condition, and the extent of the relocation, replacement versus relocation should be considered. When a box is to be relocated, specs or plan details should include the removal, protection/relocation, and
reinstallation- in accordance with the specs & standards.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td></td>
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</table>

**Design Forms and Documentation**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

**References**

PPM Chapter
Trns·port
Other Standards
Specifications
Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):**

**Struct.  635- 3- AB  JUNCTION BOX  EA**

A= Operation
1 (Furnish & Install)
3 (Install) B=0; item furnished by FDOT or local agency
4 (Relocate) B=0; see detail

B= Type
1 (Aerial)
2 (Mounted)*
3 (Embedded)*

*May be incidental for some applications

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
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<tr>
<td>0635 3 12</td>
<td>JUNCTION BOX, FURNISH &amp; INSTALL, MOUNTED</td>
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<tr>
<td>0635 3 40</td>
<td>JUNCTION BOX, RELOCATE</td>
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**639- 1- AB  ELECTRICAL POWER SERVICE**

<table>
<thead>
<tr>
<th>Unit</th>
<th>AS</th>
<th>Accuracy</th>
<th>Assembly</th>
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<tr>
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</table>

**Notes**

Valid through 6-30-2013; replaced by 639-1-ABC. NOTE: Either item is valid for Jan-June 2013. DO NOT USE BOTH pay items.

Effective July 2012: Min Spec A639 included with specification Section 639.

**Details**

This pay item is for signals, lighting, ITS, and other roadway applications.

Grounding, per index 17736 and Section 620, is incidental to power service.
### 639- 1- AB

**ELECTRICAL POWER SERVICE**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
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<td>1/1/2010</td>
<td>6/30/2013</td>
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<tr>
<td>0639 1 12</td>
<td>ELECTRICAL POWER SERVICE, OVERHEAD, METER FURNISHED BY CONTRACTOR</td>
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<td>1/1/2010</td>
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<tr>
<td>0639 1 13</td>
<td>ELECTRICAL POWER SERVICE, OVERHEAD</td>
<td>AS</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
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</tr>
</tbody>
</table>

**Notes**

*Effective 1-1-2013; replaces 639-1-AB. NOTE: Either item is valid for Jan-June 2013. DO NOT USE BOTH pay items.*

*Grounding, per index 17736 and Section 620, is incidental to power service.*

### 639- 1-ABC

**ELECTRICAL POWER SERVICE**

| Unit  | AS | Accuracy | Assembly | PlanQuantity? | no |
|-------|----|----------|----------|---------------|

**Notes**

*Grounding, per index 17736 and Section 620, is incidental to power service.*

**Details**

*This pay item is for signals, lighting, ITS, and other roadway applications.*

**Related Items**

Required | Recommended |
### Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

---

### Construction Forms and Documentation

#### References

PPM Chapter

Trns-port

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

---

#### TRNS*PORT Category (DRAFT FIELD):

Multiple Roadway, Signals, Lighting, etc

---

### Structural

<table>
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<tr>
<th>Struct.</th>
<th>Description</th>
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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<td>6/30/2013</td>
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<td>0639 1 21</td>
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### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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Details and Structure: Complete- Items 000 to 1999
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</table>

**639- 2- A SIGNALS- ELECTRICAL SERVICE WIRE**

**Unit** LF; M1  
**Accuracy** Linear Foot; 1/10 Meter  
**PlanQuantity?** no

**Notes**  
Effective July 2012: Min Spec A639 included with specification Section 639.

**Details**  
This pay item is for signals, lighting, ITS, and other roadway applications.

MEASUREMENT (Effective January 2013): Payment is per length of complete wire run (all conductors included), not per each conductor.

MEASUREMENT (Through December 2012) Verify with contract documents- plans and specs. Payment may be based on wire, or the linear foot (meter) of a single conductor.

**Required**

**Recommended**

Design Forms and Documentation  
- tabqsg: Signalization Tabulation of Quantity Sheet  
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation  
- No additional form required; use plans summary or comp book  
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References  
- PPM Chapter  
- Trns-port  
- Other Standards

**Specifications** Section 639

Min Specs: Section A639 (valid through June 2012)

**Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization (or ITS)

**Struct. 639- 2- A SIGNALS- ELECTRICAL SERVICE WIRE LF**

A = Operation  
1 (Furnish & Install)  
4 (Relocate)  
for Remove, see 690 items

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
639- 3- AB  SIGNALS- ELECTRICAL SERVICE DISCONNECT

Notes
Effective July 2012: Min Spec A639 included with specification Section 639.

Details
This pay item is for signals, lighting, ITS, and other roadway applications.

Related Items
Required
Recommended

Design Forms and Documentation

Notes
Details
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Trns-port
Other
Standards
Specifications

Min Specs: Section A639 (valid through June 2012)

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0500  Signalization (or ITS)

Struct.  639- 3- AB  SIGNALS- ELECTRICAL SERVICE DISCONNECT  EA

A = Operation
1 (Furnish & Install)
B = Type Mount
1 (Pole)
2 (Cabinet)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<td>ELECTRICAL SERVICE DISCONNECT, F&amp;I, POLE MOUNT</td>
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<td>1/1/2010</td>
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<tr>
<td>0639 3 12</td>
<td>ELECTRICAL SERVICE DISCONNECT, F&amp;I, CABINET</td>
<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>0639 3 60</td>
<td>ELECTRICAL SERVICE DISCONNECT, REMOVE</td>
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<td>1/1/2010</td>
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</tbody>
</table>

639- 4- A  SIGNALS- EMERGENCY GENERATOR (PORTABLE)

Unit  Mixed  Accuracy  Refer to item structure and details  PlanQuantity?  no
Selected items are for Emergency / Pre-Event contract use only.

This pay item is for traffic signals and traffic control devices only.

FURNISH & INSTALL: COORDINATE THE USE OF THIS ITEM WITH THE STATE TRAFFIC OPERATIONS OFFICE. Tech Spec needs to address several issues related to the generator: Size, capacity, mounting, maintenance, and security.

*** Generators cannot be furnished to the maintenance yard or maintaining agency using construction funds.***

If Generator is to be installed at the signals location, maintenance agreements should be completed with maintaining agency. Installation details should address securing generator to minimize potential theft.

INSTALL: For Pre-Event or Emergency contracts, coordinate the use of this item with the District Maintenance Office, to ensure the availability of generators. Tech Spec should detail security of generator and instructions for returning unit to FDOT maintenance yard.

Retrofit: Signalized location has been retrofit to accept generator connection.

Not Retrofit: Signalized location has NOT been retrofit to accept generator connection; contractor must complete the retrofit prior to generator installation. Payment for retrofit operation is included in the payment for installing generator.

Monitor & Refuel: Tech Specs should detail monitoring requirements. Fuel to be included in payment for hourly rate. (No separate payment for fuel.)

Install Generator Housing (Item furnished by maintaining agency): Details or Tech Spec should indicate that the contractor is to coordinate with the maintaining agency for pick-up/delivery of the housing to the project site. Contractor will install housing. Details or specs should indicate approximate housing dimensions, and whether a foundation/pad (included in this item for payment) is necessary.

---

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>tabqsg: Signalization Tabulation of Quantity Sheet</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
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</table>

<table>
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<tr>
<th>Construction Forms and Documentation</th>
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<tr>
<td>No additional form required; use plans summary or comp book</td>
</tr>
<tr>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
</table>

**References**

PPM Chapter

Trns-port

Other Standards Index 17841

Specifications Min Specs A678

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization (or ITS)

**Struct.** 639- 4- A SIGNALS- EMERGENCY GENERATOR (PORTABLE) Mixed

A = Operation
1 (Furnish & Install) Blocked 8-10-08
3 (Install - Retrofit; FDOT furnished) EA; For Emergency /Pre-Event contracts only. Signalized
location HAS BEEN RETROFIT to accept generator connection.
4 (Install - Not Retrofit; FDOT furnished) EA; For Emergency /Pre-Event contracts only. Signalized location HAS NOT BEEN RETROFIT to accept generator connection.
5 (Monitor and Refuel) HR; For Emergency /Pre-Event contracts only
6 (Install Generator Housing only) EA; housing furnished by maintaining agency.

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<td>EMERGENCY GENERATOR - PORTABLE, MONITOR &amp; REFUEL</td>
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</table>

639- 5- A  EMERGENCY GENERATOR- PERMANENT

Notes

Details

Related Items

Required | Recommended
--- | ---
tabqsg: Signalization Tabulation of Quantity Sheet | Locate in plans. Summarize quantities by location on summary sheet in the plans.

Design Forms and Documentation

Construction Forms and Documentation

No additional form required; use plans summary or comp book

References

PPM Chapter
Trns-port
Other Standards
Specifications
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0500  Signalization (or ITS)

Struct.  639- 5- A  EMERGENCY GENERATOR- PERMANENT  EA

A= Generator Size
1 (up to 25 KW)
2 (25-50 KW)
3 (50-)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### Item Description

<table>
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<tr>
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</table>

### 639-10- ELECTRICAL POWER SERVICE DIAGNOSTIC AND MISCELLANEOUS REPAIR

#### Notes
- Intended for Maintenance Contracts Only.

#### Related Items
- **Required**
- **Recommended**

#### Design Forms and Documentation
- COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
- Locate in the plans. Summarize quantities by location in the computation book.

#### Construction Forms and Documentation

#### References
- PPM Chapter
- Trns-port
- Other Standards
- Specifications

#### Prep & Doc Manual Chapter(s)
- TRNS*PORT Category (DRAFT FIELD):

#### Structural Notes
- 639-10- ELECTRICAL POWER SERVICE DIAGNOSTIC AND MISCELLANEOUS REPAIR

#### The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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### 639-Maint EMERGENCY GENERATOR & ELECTRICAL POWER SERVICE

#### Notes
- Maintenance Item: Not Valid for Construction Contracts

#### Details
- MAINTENANCE CONTRACTS ONLY
- Additional BOE details pending

#### Related Items
- **Required**
- **Recommended**
Design Forms and Documentation

Construction Forms and Documentation

References

PPM Chapter
Trns-port
Other Standards
Specifications
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):

Struct.  639-Maint EMERGENCY GENERATOR & ELECTRICAL POWER SERVICE Mixed
Maintenance Contracts Only

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>EMERGENCY GENERATOR MONITORING &amp; RE-FUELING INC ALL INCIDENTALS REQUIRED FOR OPERATING GENERATOR</td>
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641-  1- SIGNALS- STRAIN POLES, GUYING, CONCRETE

Unit EA Accuracy Each PlanQuantity? no

Notes

Details

Related Items

Required

Recommended

Design Forms and Documentation

tabqsg: Signalization Tabulation of Quantity Sheet
Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Trns-port

Details and Structure: Complete- Items 000 to 1999
Other

Standards  Index No. 17725
Specifications  Section 641
Prep & Doc Manual Chapter(s)  7, 13

TRNS*PORT Category (DRAFT FIELD):  0500  Signalization (or ITS)

Struct.  641- 1-  SIGNALS- STRAIN POLES, GUYING, CONCRETE  EA

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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641- 2- AB  PRESTRESSED CONCRETE POLE

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Notes

Details

This pay item is for traffic signals and traffic control devices only.
Pole description, including the type, height, and other details must be included in the signal plans.
This item is used as detailed on index 17725 and Index 17764 (pedestrian pedestal).
Poles must be on the QPL.

B=9 (Custom Design): For use ONLY when design standard index does NOT apply.
Designer must show complete dimensions for pole. Supporting calculations must be completed for intended signals application. Review specification requirements to determine if notes or modified specs are needed.

Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
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<tr>
<td>SBStrainPoles: Summary of Strain Poles, or SHStrainPole: Strain Pole Schedule</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
</tbody>
</table>

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Trns-port
Other Standards  Index No. 17725, 17764
Specifications  Section 641
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):  0500  Signalization (or ITS)

Struct.  641- 2- AB  PRESTRESSED CONCRETE POLE  EA

A= Operation
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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643- 1- STRAIN POLE, GUYING, WOOD

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<th>Each</th>
<th>PlanQuantity?</th>
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</tr>
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Notes

Details

This pay item is for traffic signals and traffic control devices only.

Related Items

Required

Recommended

Design Forms and Documentation

SBStrainPoles: Summary of Strain Poles, or
SHStrainPole: Strain Pole Schedule

Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<th>Unit</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0643-1</td>
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<td>1/1/2010</td>
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</table>

**Notes**
This pay item is for traffic signals and traffic control devices only.

**Related Items**
- **Required**: 643-1 (2643-1)
- **Recommended**: 643-1 (2643-1)

**Design Forms and Documentation**
- SBStrainPoles: Summary of Strain Poles, or
- SHStrainPole: Strain Pole Schedule
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**
- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- PPM Chapter
- Trns-port
- Other Standards
- Specifications

**Prep & Doc Manual Chapter(s)**
- 7, 13

**TRNS*PORT Category (DRAFT FIELD)**
- 0500 Signalization (or ITS)

**Struct.**
- 643-ABB- STRAIN POLE, WOOD EA

A = Operation
1 (Furnish & Install)
3 (Install) furnished by local agency
4 (Relocate)
BB = Pole Length (Specified In 5’ Increments Only)
Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
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<tr>
<td>0643125</td>
<td>STRAIN POLE, WOOD, F&amp;I, 25'</td>
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<tr>
<td>0643130</td>
<td>STRAIN POLES, WOOD, FURNISH &amp; INSTALL, 30'</td>
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<td>1/1/2010</td>
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<tr>
<td>0643140</td>
<td>STRAIN POLE, WOOD, FURNISH &amp; INSTALL, 40'</td>
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<tr>
<td>0643145</td>
<td>STRAIN POLES, WOOD, FURNISH &amp; INSTALL, 45'</td>
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<td>1/1/2010</td>
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<tr>
<td>0643150</td>
<td>STRAIN POLE, WOOD, F&amp;I, 50'</td>
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<td>1/1/2010</td>
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</tr>
</tbody>
</table>

646- 1- AB ALUMINUM SIGNALS POLE

Unit: EA  Accuracy: Each  PlanQuantity?: no

Notes: Effective 1-1-12; replaces aluminum pedestal previously paid under pay item 659-107.

Details: To be used in accordance with Design Standards and Min Specifications.

INSTALL: The install operation should only be used when the item is furnished by FDOT or the local agency, for installation by the contractor. Include instructions in the plans for obtaining the pole.

Related Items

Required: 

Recommended: 

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

References

PPM Chapter
Trns-port
Other
Standards: Index 17764
Specifications
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0500 Signalization (or ITS)

Struct.  646- 1- AB ALUMINUM SIGNALS POLE EA

A= Operation
1 (Furnish & Install)
3 (Install)
4 (Relocate)
6 (Remove)
B= Pole Type
1 (Pedestal)
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0646 1 11</td>
<td>ALUMINUM SIGNALS POLE, PEDESTAL</td>
<td>EA</td>
<td>7/1/2011</td>
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<tr>
<td>0646 1 41</td>
<td>ALUMINUM SIGNALS POLE, PEDESTAL, RELOCATE</td>
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<td>7/1/2011</td>
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<tr>
<td>0646 1 61</td>
<td>ALUMINUM SIGNALS POLE, PEDESTAL, REMOVE</td>
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<td>7/1/2011</td>
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</table>

### 649-1-AB STEEL STRAIN POLE

**Unit**: EA  
**Accuracy**: Each  
**PlanQuantity?**: no

**Notes**

This pay item is for traffic signals and traffic control devices only. Pole description, including the type, height, and other details must be included in the signal plans.

**PEDESTRIAN PEDESTAL**: Details are provided on Index 17723 and 17764.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>SBStrainPoles: Summary of Strain Poles, or</td>
<td>SHStrainPole: Strain Pole Schedule</td>
</tr>
</tbody>
</table>

Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**  
**Trns-port**  
**Other Standards**  
Index 17723 and 17764.

**Specifications**

* T: Selected Items may require Plan Details and/or Technical Specifications

**Prep & Doc Manual Chapter(s)**

**TRNSPORT Category (DRAFT FIELD):** 0500  
Signalization (or ITS)

**Struct.**: 649-1-AB  
STEEL STRAIN POLE  
EA

- A= Operation
- 1 (Furnish & Install)
- 3 (Install) B=0
- B = Pole Type (defined in Design Standards)
- 0 (Pedestal)
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<td>1/1/2010</td>
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<tr>
<td>0649 1 11</td>
<td>STEEL STRAIN POLE, F&amp;I, TYPE PS- IV</td>
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<tr>
<td>0649 1 12</td>
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<tr>
<td>0649 1 13</td>
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<td>1/1/2010</td>
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<tr>
<td>0649 1 14</td>
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<td>1/1/2010</td>
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<tr>
<td>0649 1 15</td>
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<tr>
<td>0649 1 16</td>
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<td>0649 1 17</td>
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<td>1/1/2010</td>
<td></td>
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</tbody>
</table>

This pay item is for traffic signals and traffic control devices only.

After December 2007: Design Standards are no longer available. Please contact the State Structures Office for assistance. Ensure that the maintaining agency and local authorities have agreed to the use of a monotube. Tech Specs and/or Plan Details will be required for structural size/shape, material requirements, installation details, and measurement/payment. Foundation is to be included in the price for the complete assembly.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

NOT TO BE USED FOR ITS Projects. Refer to 780 items. Item used for monotube structures which carry signals. Refer to Plans Preparation Manual, Vol I Chapters 7 and 29, Vol II Chapter 24 for details.

Use Monotube Tabulation Sheet (available from CADD bar menu).

**649-1A-BBB MONOTUBE ASSEMBLIES, STEEL**

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

**Notes**

This pay item is for traffic signals and traffic control devices only.

**Details**

After December 2007: Design Standards are no longer available. Please contact the State Structures Office for assistance. Ensure that the maintaining agency and local authorities have agreed to the use of a monotube. Tech Specs and/or Plan Details will be required for structural size/shape, material requirements, installation details, and measurement/payment. Foundation is to be included in the price for the complete assembly.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

NOT TO BE USED FOR ITS Projects. Refer to 780 items. Item used for monotube structures which carry signals. Refer to Plans Preparation Manual, Vol I Chapters 7 and 29, Vol II Chapter 24 for details.

Use Monotube Tabulation Sheet (available from CADD bar menu).

**Related Items**

- Required
- Recommended

**Design Forms and Documentation**

SHMono Tube: Monotube Tabulation

Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).
Struct.  649- 1A-BBB  MONOTUBE ASSEMBLIES, STEEL  EA

A = Operation
1 (Furnish & Install)

BBB = Size
001 (Special) see detail
002 (Special 2) see detail
003 (Special 3) see detail
110 (Standard 110’ span)
135 (Standard 135’ span)
160 (Standard 160’ span)
185 (Standard 185’ span)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0649 11160</td>
<td>STEEL MONOTUBE ASSEMBLY, FURNISH &amp; INSTALL, STANDARD 160’ SPAN</td>
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<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0649 11185</td>
<td>STEEL MONOTUBE ASSEMBLY, FURNISH &amp; INSTALL, STANDARD 185’ SPAN</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

649- 3A-BCC  STEEL MAST ARM ASSEMBLY

Unit  EA  Accuracy  Each  PlanQuantity?  no

Details

This pay item is for traffic signals and traffic control devices only.

Refer to PPM (Plans Preparation Manual) Vol 1, Chapters 7 and 29 for current FDOT Policy on the use of Mast Arms: in general, only to be used within 10 miles of coastline.

Pole description, including the type, height, and other details must be included in the signal plans. Payment includes foundation, as well as all incidentals, per specifications.

When "w/ Luminaire" is used, detail luminaire requirements in the plans.

Double Arm with luminaire requires special design (CC=99); not covered by design standard index. Complete calculations are required.

BCC=999 (Custom) to be used only when wind loads, specifications and/or standards do not apply, due to significant design changes. Complete design calculations, including wind loads, are required in the plans.

Note: For minor changes in arm lengths, such as field cuts, use the standard pay item, with
When street name signs are to be located on a signals mast arm, tabulate and detail the sign (size, shape, letters, etc.) in the SIGNING plans. Load the pay item in the SIGNING category. The installation location may be shown on the signal plans.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
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<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>SHMastArmTab 1 or SHMastArmTab 2: Signalization Mast Arm Tabulation, or SHSpecialMastArmDsgn or SHStandardMastArmDsgn: Mast Arm Assembly 17745 or 17743</td>
</tr>
</tbody>
</table>

Locate in plans. Summarize quantities by location on summary sheet in the plans.

<table>
<thead>
<tr>
<th>Construction Forms and Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>No additional form required; use plans summary or comp book</td>
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</table>

| Record final quantity on the tabulation sheet (plans) or computation form (comp book). |

<table>
<thead>
<tr>
<th>References</th>
<th>PPM Chapter Vol 1, 7.4</th>
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<tr>
<td>Trns-port</td>
<td>Other Standards</td>
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<tr>
<td>Standards</td>
<td>Specifications</td>
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</tbody>
</table>

T: Selected Items may require Plan Details and/or Technical Specifications

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization (or ITS)

**Struct.** 649- 3A-BCC STEEL MAST ARM ASSEMBLY EA

- **A:** Operation
  - 1 (Furnish & Install)
  - 3 (Install) BCC=000
  - 4 (Relocate) BCC=000
  - 8 (Repair) BCC=000
- **B:** Wind Speed
  - 1 (150 with signal backplates)
  - 2 (130 with signal backplates or 150 without signal backplates)
  - 3 (110 with signal backplates)
  - 9 (Custom) CC=99 see details above
- **CC:** Arm Length(s)
  - For Single Arms
  - 01 (36)
  - 02 (46)
  - 03 (60)
  - 04 (70.5)
  - 05 (78)
  - 06 (36 w/ Luminaire)
  - 07 (46 w/ Luminaire)
  - 08 (60 w/ Luminaire)
09 (70.5 w/ Luminaire)

For Double Arm w/o Luminaire
10 (36-36)
11 (36-46)
12 (36-60)
13 (36-70.5)
14 (46-46)
15 (46-60)
16 (46-70.5)
17 (60-60)
18 (60-70.5)
19 (70.5-70.5)

Custom/Non-Standard Arm Combinations
99= (Custom) B=9, see details above

Notes
Include Arm Type/luminaire in TRNS*PORT description

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<tbody>
<tr>
<td>0649 31101</td>
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<tr>
<td>0649 31102</td>
<td>MAST ARM,F&amp;I, WIND SPEED-150,SINGLE ARM, W/0 LUMINAIRE-46</td>
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<td>0649 31103</td>
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<td>0649 31108</td>
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<td>0649 31109</td>
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<tr>
<td>0649 31110</td>
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<td>1/1/2010</td>
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<tr>
<td>0649 31111</td>
<td>MAST ARM,F&amp;I, WIND SPEED-150,DOUBLE ARM, W/0 LUMINAIRE-36-46</td>
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<td>1/1/2010</td>
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<tr>
<td>0649 31113</td>
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<td>1/1/2010</td>
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<tr>
<td>0649 31114</td>
<td>MAST ARM,F&amp;I, WIND SPEED-150,DOUBLE ARM, W/0 LUMINAIRE, 46-46</td>
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<td>1/1/2010</td>
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<tr>
<td>0649 31115</td>
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<td>0649 31116</td>
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0649 31117 MAST ARM,F&I, WIND SPEED-150,DOUBLE ARM, W/0 LUMINAIRE, 60-60  EA 1/1/2010
0649 31118 MAST ARM,F&I, WIND SPEED-150,DOUBLE ARM, W/0 LUMINAIRE, 60-70.5  EA 1/1/2010
0649 31119 MAST ARM,F&I, WIND SPEED-150,DOUBLE ARM, W/0 LUMINAIRE, 70.5' AND 70.5'  EA 1/1/2010
0649 31201 MAST ARM,F&I, WIND SPEED-130,SINGLE ARM, W/0 LUMINAIRE-36  EA 1/1/2010
0649 31202 MAST ARM,F&I, WIND SPEED-130, SINGLE ARM, W/0 LUMINAIRE-46  EA 1/1/2010
0649 31203 MAST ARM,F&I, WIND SPEED-130, SINGLE ARM, W/0 LUMINAIRE-60  EA 1/1/2010
0649 31204 MAST ARM,F&I, WIND SPEED-130, SINGLE ARM, W/0 LUMINAIRE, ARM LENGTH 70.5  EA 1/1/2010
0649 31205 MAST ARM,F&I, WIND SPEED-130, SINGLE ARM, W/0 LUMINAIRE, ARM LENGTH 78  EA 1/1/2010
0649 31206 MAST ARM,F&I, WIND SPEED-130, SINGLE ARM, W/0 LUMINAIRE, ARM LENGTH 36'  EA 1/1/2010
0649 31207 MAST ARM,F&I, WIND SPEED-130, SINGLE ARM, W/ LUMINAIRE, ARM LENGTH 46  EA 1/1/2010
0649 31208 MAST ARM,F&I, WIND SPEED-130, SINGLE ARM, W/ LUMINAIRE, ARM LENGTH 60  EA 1/1/2010
0649 31209 MAST ARM,F&I, WIND SPEED-130, SINGLE ARM, W/ LUMINAIRE, ARM LENGTH 70.5  EA 1/1/2010
0649 31210 MAST ARM,F&I, WIND SPEED-130, DOUBLE ARM, W/ LUMINAIRE, ARM LENGTH 36' AND 36'  EA 1/1/2010
0649 31211 MAST ARM,F&I, WIND SPEED-130, DOUBLE ARM, W/ LUMINAIRE, 36-46  EA 1/1/2010
0649 31212 MAST ARM,F&I, WIND SPEED-130, DOUBLE ARM, W/ LUMINAIRE, 36-60  EA 1/1/2010
0649 31213 MAST ARM,F&I, WIND SPEED-130, DOUBLE ARM, W/ LUMINAIRE, 36-70.5  EA 1/1/2010
0649 31214 MAST ARM,F&I, WIND SPEED-130, DOUBLE ARM, W/ LUMINAIRE, 46' AND 46'  EA 1/1/2010
0649 31215 MAST ARM,F&I, WIND SPEED-130, DOUBLE ARM, W/ LUMINAIRE, 46-60  EA 1/1/2010
0649 31216 MAST ARM,F&I, WIND SPEED-130, DOUBLE ARM, W/ LUMINAIRE, 46-70.5  EA 1/1/2010
0649 31217 MAST ARM,F&I, WIND SPEED-130, DOUBLE ARM, W/ LUMINAIRE, 60-60  EA 1/1/2010
0649 31218 MAST ARM,F&I, WIND SPEED-130, DOUBLE ARM, W/ LUMINAIRE, 60-70.5  EA 1/1/2010
0649 31219 MAST ARM,F&I, WIND SPEED-130, DOUBLE ARM, W/ LUMINAIRE, 70.5' AND 70.5'  EA 1/1/2010
0649 31299 MAST ARM,F&I, WIND SPEED-130, CUSTOM  EA D 1/1/2010
0649 31301 MAST ARM,F&I, WIND SPEED-110, SINGLE ARM, W/0 LUMINAIRE-36  EA 1/1/2010
### Details and Structure: Complete- Items 000 to 1999

#### 650- A-BCD TRAFFIC SIGNAL

<table>
<thead>
<tr>
<th>Unit</th>
<th>AS</th>
<th>Accuracy</th>
<th>Assembly</th>
<th>Plan</th>
<th>Quantity?</th>
<th>Notes</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>no</td>
<td>Effective 7-1-12; replaces 650-5A-BCD</td>
<td>This pay item is for &quot;permanent&quot; traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable. For Maintenance of Traffic (MOT) activities, refer to MOT specifications, section 102.</td>
</tr>
</tbody>
</table>

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0649 31302 MAST ARM, F&I, WIND SPEED-110, SINGLE ARM, W/O LUMINAIRE-46
0649 31303 MAST ARM, F&I, WIND SPEED-110, SINGLE ARM, W/O LUMINAIRE-60
0649 31304 MAST ARM, F&I, WIND SPEED-110, SINGLE ARM, W/O LUMINAIRE-70.5
0649 31305 MAST ARM, F&I, WIND SPEED-110, SINGLE ARM, W/O LUMINAIRE-78
0649 31306 MAST ARM, F&I, WIND SPEED-110, SINGLE ARM, WITH LUMINAIRE-36
0649 31307 MAST ARM, F&I, WIND SPEED-110, SINGLE ARM, WITH LUMINAIRE-46
0649 31308 MAST ARM, F&I, WIND SPEED-110, SINGLE ARM, WITH LUMINAIRE-60
0649 31309 MAST ARM, F&I, WIND SPEED-110, SINGLE ARM, W/ LUMINAIRE-70.5
0649 31310 MAST ARM, F&I, WIND SPEED-110, DOUBLE ARM, W/O LUMINAIRE, 36' AND 36'
0649 31311 MAST ARM, F&I, WIND SPEED-110, DOUBLE ARM, W/O LUMINAIRE, 36' AND 46'
0649 31312 MAST ARM, F&I, WIND SPEED-110, DOUBLE ARM, W/O LUMINAIRE, 36' AND 60'
0649 31313 MAST ARM, F&I, WIND SPEED-110, DOUBLE ARM, W/O LUMINAIRE, 36' AND 70.5'
0649 31314 MAST ARM, F&I, WIND SPEED-110, DOUBLE ARM, W/O LUMINAIRE, 46' AND 46'
0649 31315 MAST ARM, F&I, WIND SPEED-110, DOUBLE ARM, W/O LUMINAIRE, 46' AND 60'
0649 31316 MAST ARM, F&I, WIND SPEED-110, DOUBLE ARM, W/O LUMINAIRE, 46' AND 70.5'
0649 31317 MAST ARM, F&I, WIND SPEED-110, DOUBLE ARM, W/O LUMINAIRE, 60' AND 60'
0649 31318 MAST ARM, F&I, WIND SPEED-110, DOUBLE ARM, W/O LUMINAIRE, 60-70.5
0649 31319 MAST ARM, F&I, WIND SPEED-110, DOUBLE ARM, W/O LUMINAIRE, 70.5 AND 70.5
0649 31999 MAST ARM, F&I, CUSTOM WIND SPEED, CUSTOM ARM LENGTH(S)  
0649 33000 MAST ARM, INSTALL  
0649 34000 MAST ARM, RELOCATE  
0649 38000 MAST ARM, REPAIR
Includes standard traffic signal, with LED indicators, backplates, visors, and all other materials necessary for a complete and accepted installation. If a non-standard hanger is required, detail it in the plans.

INSTALL only: Signal to be furnished by FDOT or Maintaining Agency. Plans or Specifications must provide pick-up or delivery instructions. Contractor to furnish any incidentals for a complete installation.

RELOCATE: Includes the removal of the signal head and installation at the location shown in the plans. Payment includes signal cable and all other materials necessary for a complete and accepted relocation. DO NOT USE this item for Maintenance of Traffic (MOT) adjustments.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms</td>
<td>tabqsg: Signalization Tabulation of Quantity Sheet</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
<tr>
<td>and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
</table>

References
- PPM Chapter
- Trns·port
- Other
- Standards
- Specifications Min Specs: Section A650
- Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization (or ITS)

**Struct.** 650- A-BCD TRAFFIC SIGNAL AS

A = Operation
1 (Furnish & Install)
3 (Install) BCD=blank. Signal furnished by FDOT or Maintaining Agency.
4 (Relocate) BCD=blank. DO NOT USE for MOT activities.
Remove: Use item 690-10
5 (Retrofit Existing Hanger Assembly) BCD=blank
B = Number Of Sections On Each Face
C = Number Of Directions
D = Type
1 (Aluminum)
2 (Polycarbonate with Aluminum Top Section)
3 (Polycarbonate)
4 (Programmable)

Notes

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<td>0650</td>
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<td>7/1/2012</td>
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<tr>
<td>0650</td>
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<td>7/1/2012</td>
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<td>7/1/2012</td>
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<td>7/1/2012</td>
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<td>0650</td>
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<td>7/1/2012</td>
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<td>0650</td>
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<td>7/1/2012</td>
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<tr>
<td>0650</td>
<td>TRAFFIC SIGNAL, F&amp;I, 5 SECTION, 1 WAY, PROGRAMMABLE</td>
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<td>7/1/2012</td>
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<td>0650</td>
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**650- 5A-BCD TRAFFIC SIGNAL**

<table>
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<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>Assembly</th>
<th>PlanQuantity?</th>
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<tbody>
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</tbody>
</table>

**Notes**
- Valid through 6-30-12; replaced by 650-A-BCD
- Effective July 2011 letting, specifically includes backplates and visors. (Previous
**Topics:**

- Basis of Estimates

**Date:** January 22, 2013

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**Details**

This pay item is for "permanent" traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable. For Maintenance of Traffic (MOT) activities, refer to MOT specifications, section 102.

Includes standard traffic signal, with LED indicators, backplates, and all other materials necessary for a complete and accepted installation.

**INSTALL only:** Signal to be furnished by FDOT or Maintaining Agency. Plans or Specifications must provide pick-up or delivery instructions. Contractor to furnish any incidentals for a complete installation.

**RELOCATE:** Includes the removal of the signal head and installation at the location shown in the plans. Payment includes signal cable and all other materials necessary for a complete and accepted relocation. DO NOT USE this item for Maintenance of Traffic (MOT) adjustments.

Special: DO NOT Use this item for LED (standard) signals. "Special" types should be submitted to the State Traffic Ops office for review.

---

**Related Items**

<table>
<thead>
<tr>
<th>Design Forms and Documentation</th>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>tabqsg: Signalization Tabulation of Quantity Sheet</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
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**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

---

**References**

- PPM Chapter
- Trns-port
- Other Standards
- Specifications Min Specs: Section A650
- Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization (or ITS)

<table>
<thead>
<tr>
<th>Struct.</th>
<th>TRAFFIC SIGNAL AS</th>
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<tbody>
<tr>
<td>A = Operation</td>
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<tr>
<td>1 (Furnish &amp; Install)</td>
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<tr>
<td>3 (Install) BCD=blank. Signal furnished by FDOT or Maintaining Agency.</td>
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</tr>
<tr>
<td>4 (Relocate) BCD=blank. DO NOT USE for MOT activities.</td>
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<tr>
<td>Remove: Use item 690-10</td>
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<tr>
<td>5 (Retrofit Existing Hanger Assembly) BCD=blank</td>
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<tr>
<td>B = Number Of Sections On Each Face</td>
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<tr>
<td>C = Number Of Directions</td>
<td></td>
</tr>
<tr>
<td>D = Type</td>
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<tr>
<td>1 (Standard) LED indicators</td>
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<td>2 (Light Weight)</td>
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<td>3 (Special) see detail</td>
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**Notes**

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**Details and Structure:** Complete- Items 000 to 1999
### 653-ABC- PEDESTRIAN SIGNAL

<table>
<thead>
<tr>
<th>Notes</th>
<th>Details</th>
<th>Related Items</th>
<th>Design Forms and Documentation</th>
<th>Construction Forms and Documentation</th>
<th>References</th>
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<tbody>
<tr>
<td>Unit AS</td>
<td>This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.</td>
<td>Required</td>
<td>tabqsg: Signalization Tabulation of Quantity Sheet</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
<td>PPM Chapter Vol 1, Ch 7</td>
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<td>Accuracy</td>
<td>LED Countdown is the current standard; refer to PPM Vol 1, Chapter 7.</td>
<td>Recommended</td>
<td></td>
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<td>Trns-port</td>
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<td>Assembly</td>
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<td>PlanQuantity?</td>
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<td>Specifications Min Specs: Section A653</td>
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<td>Prep &amp; Doc Manual Chapter(s) 7, 13</td>
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</table>

**TRNSPORT Category (DRAFT FIELD):** 0500 Signalization (or ITS)

**Struct.** 653-ABC- PEDESTRIAN SIGNAL AS

- A = Operation
- 1 (Furnish & Install)
- 3 (Install) Items provided by local maintaining agency; BC=00
- 4 (Relocate) BC=00
- Remove: use item 690-20
- B = Type Signal
- 1 (12" Incandescent)
- 7 (Neon International Symbol Low Wattage)
- 8 (LED)
- 9 (LED- Countdown) STANDARD
- C = Number Of Directions (Ways)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### 654- 1- AB PENDING: IN-ROADWAY LIGHTS

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<td>1/1/2010</td>
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<tr>
<td>0653112</td>
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<td>0653171</td>
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<td>1/1/2010</td>
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<tr>
<td>0653181</td>
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<td>1/1/2010</td>
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<td>0653182</td>
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<td>1/1/2010</td>
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<tr>
<td>0653191</td>
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<td>0653400</td>
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</table>

#### Notes

**Unit** EA  
**Accuracy** Each  
**Plan** Quantity? yes

**PENDING SPECIFICATION for July 2013 and later**

A Maintenance Agreement with the local agency is required; refer to the Traffic Engineering Manual for additional information. Per the MUTCD, "In-Roadway Warning Lights at crosswalks shall be installed only at marked crosswalks with applicable warning signs. They shall not be used at crosswalks controlled by YIELD signs, STOP signs, or traffic control signals."

COMPLETE SYSTEM: Includes cabinet, controller/timer, voltage converter, and incidentals for a complete installation. Individual lights paid separately- see 654-2 items.

All hardware, wiring, grounding, detectors, controller cabinets, etc. required for at a single crosswalk

CONTROLLER ASSEMBLY: Used for Maintenance activities only. For new installations, this item is included in the complete system.

LIGHT FIXTURE: Individual in-roadway lights.

#### Related Items

**Required**

**Recommended**

**Design Forms and Documentation**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.
Standards
Specifications
Min Specs: Section A654

Struct.  654-  1- AB PENDING: IN-ROADWAY LIGHTS EA

A= Operation
1 (Furnish & Install)
3 (Install) Dept Furnished Equipment
4 (Relocate) B=1
5 (Adjust/Modify) ??
6 (Remove) ??

B= Component
1 (Complete System) Use with B=3
2 (Controller assembly) For Maintenance activities only; DO NOT use with B=1
3 (In-roadway light fixture)

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

659-  A- BB SIGNAL HEAD- RETROFIT AUXILIARIES

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
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<tr>
<td></td>
<td>EA</td>
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<td>no</td>
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</table>

Notes
NOTE: THIS ITEM IS FOR RETROFIT APPLICATIONS ONLY.

Details
This pay item is for the retrofit of traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable. NOTE: Auxiliary Items for new installations are included in the Traffic Signal assembly.

INSTALL: Items to be furnished by FDOT or local/maintaining agency.

Related Items
Required: 
Recommended:

Design Forms and Documentation
tabqsg: Signalization Tabulation of Quantity Sheet
Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation
No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Trns-port
Other
Standards
Specifications Min Specs: Section A659
Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0500 Signalization (or ITS)

Struct.  659- A- BB SIGNAL HEAD- RETROFIT AUXILIARIES EA

A = Operation
1 (Furnish & Install)
3 (Install) item furnished by local agency

BB = RETROFIT Item
01 (Backplate – Black)
02 (Backplate – Black with Retroreflective Border)
03 (Disconnect Hanger)
04 (Pivotal Hanger Assembly)
05 (Tunnel Visor)
06 (12" LED Module – Standard)
07 (8" LED Module – Emergency Signal)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<td>0659 1 05</td>
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<tr>
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</table>

659-ABB- SIGNAL HEAD AUXILIARIES

| Unit | EA | Accuracy | Each | PlanQuantity? | no |

Notes
Valid through 12-31-2011; replaced by 659- A-BB, for retrofit applications only.
Auxiliary Items for new installations are included in the Traffic Signal assembly (effective July 2010, per specification change).

Details
This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.

NOTE: SPEC CHANGE Effective 7/2011; backplates are included in the payment for traffic signals. (Previously, payment was either included in signal, or separate payment per backplate, as noted in the plans.)
INSTALL: Items to be furnished by FDOT or local/maintaining agency.

RELOCATE: Items to be relocated within current project. DO NOT USE this item for Maintenance of Traffic relocations.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>tabqsg: Signalization Tabulation of Quantity Sheet</td>
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<td>No additional form required; use plans summary or comp book</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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</table>

**References**

PPM Chapter

Trns-port

Other Standards Specifications Min Specs: Section A659

Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization (or ITS)

**Struct.** 659-ABB- SIGNAL HEAD AUXILIARIES EA

A = Operation
1 (Furnish & Install)
3 (Install) item furnished by local agency
4 (Relocate) BB= 7, 8, or 9
Remove: for signal pedestal, use item 690-31

VALID THROUGH 12-31-11:

BB = Item
01 (Back Plates, 3 Section) *
06 (Tunnel Visor)*
07 (Aluminum Pedestal) see 646-1-11
08 (Steel Pedestal) see 649-1-10
09 (Concrete Pedestal, Type II) see 641-2-AB
18 (Back Plates, 5-Section Cluster)*

*Backplates and visors included with payment for new signal heads.

NO LONGER VALID

BB = Item
02 (Back Plates, 4 Section)
03 (Disconnect Hanger)
04 (Signal Lamps 140 Watt Max.)
05 (Signal Lamps 60 Watt Max.)
10 (Louvers)
11 (Back Plates, 1-Section)
12 (Mounting Brackets, 2-Way)
13 (Mounting Brackets, 3-Way)
14 (Mounting Brackets, 4-Way)
15 (12” Lens)
16 (8” Lens)
17 (Signal Frame)
20 (LED Module)
Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 660-1-ABB LOOP DETECTOR, INDUCTIVE

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<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each Plan</th>
<th>Quantity?</th>
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**Notes**

Refer to Estimates Bulletin 12-17 for other types of Vehicle Detectors, effective June 2013 lettings.

**Details**

This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.

Use with pay item 660-2.

DO NOT USE with other types of vehicle detectors, pay items 660-3 through 660-6

**Related Items**

Required | Recommended
---|---

**Design Forms and Documentation**

tabqsg: Signalization Tabulation of Quantity Sheet

Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Trns-port

Other Standards

Specifications Min Specs: Section A660

Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization (or ITS)

**Struct. 660-1-ABB LOOP DETECTOR, INDUCTIVE**

A = Operation
1 (Furnish & Install)
3 (Install) BB=00, Furnished by FDOT or Maintaining Agency

BB = Type
01 (Type 1, 1 Ch, R, S)
02 (Type 2, 1 Ch, R, S, TD)
03 (Type 3, 1 Ch, SS, S))
04 (Type 4, 1 Ch, SS, S, TD)
05 (Type 5, 2 Ch, SS, S)
06 (Type 6, 2 Ch, SS, S, TD)
07 (Type 7, 4 Ch, SS, S)
08 (Type 8, 4 Ch, SS, S, TD)
09 (Type 9, 2 Ch, SS, RM)
10 (Type 10, 2 Ch, SS, RM, TD)
11 (Type 11, 4 Ch, SS, RM)
12 (Type 12, 4 Ch, SS, RM, TD)

Legend
Ch = Channel
R = Relay Output
Table with details:

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<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<td>0660 1111</td>
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**660-2-ABB LOOP ASSEMBLY**

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</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
<td>This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable. Includes cost of loop material, labor, etc. according to specifications. Use with pay item 660-1. DO NOT USE with other types of vehicle detectors, pay items 660-3 through 660-6</td>
</tr>
<tr>
<td>Related Items</td>
<td>Required</td>
</tr>
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<td>Design Forms and Documentation</td>
<td>tabqsg: Signalization Tabulation of Quantity Sheet</td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
</tr>
<tr>
<td>References</td>
<td>PPM Chapter</td>
</tr>
</tbody>
</table>

Notes:

- **S** = Shelf Mounted
- **TD** = Time Delay
- **RM** = Rack Mounted
- **SS** = Solid State

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*
Other Standards Index No. 17781
Specifications Min Specs: Section A660
Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0500 Signalization (or ITS)

Struct. 660- 2-ABB LOOP ASSEMBLY AS

A = Operation
1 (Furnish & Install)
BB = Type
01 (Type A)
02 (Type B)
03 (Type C)
04 (Type D)
05 (Type E)
06 (Type F)
07 (Type G)
08 (Type H)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<td>0660 2104</td>
<td>LOOP ASSEMBLY, F&amp;I, TYPE D</td>
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<td>1/1/2010</td>
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<tr>
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660- 3- AB VEHICLE DETECTION SYSTEM- MICROWAVE

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<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
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</tr>
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</table>

Notes


Details

This item is intended for Vehicle Detection Systems, excluding Loop Systems. Details such as location of detectors, detection zones, and roadside components must be detailed in the plans.

For Loop Systems, see 660-1 and 660-2 pay items.

Related Items

Required

Recommended

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.
**VEHICLE DETECTION SYSTEM- MICROWAVE**

**A** = Operation
1 (Furnish & Install)
3 (Install) Department furnished equipment
4 (Relocate)
5 (Adjust/Modify)
8 (Preventative Maintenance) B=0
0 (Diagnosis and Misc Repair) B

**B** = Component
0 (Complete System) only for A=8, 0
1 (Cabinet Equipment) Note: Pay item callout shall be used in plans to depict QTY and location of system components installed in cabinet.
2 (Above ground Equipment) Note: Pay item callout shall be used in plans to depict QTY and location of sensor(s). Mounting hardware and cabling is considered incidental to sensor.

---

**VEHICLE DETECTION SYSTEM- VIDEO**

**Notes**


**Details**

This item is intended for Vehicle Detection Systems, excluding Loop Systems. Details such as location of detectors, detection zones, and roadside components must be detailed in the plans.

For Loop Systems, see 660-1 and 660-2 pay items.
### Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

### Construction Forms and Documentation

#### References

- PPM Chapter
- Trns-port
- Other
- Standards
- Specifications
- Prep & Doc Manual Chapter(s)

#### TRNS*PORT Category (DRAFT FIELD):

Multiple Roadway, Signals, Lighting, etc

### Struct. 660-4-AB VEHICLE DETECTION SYSTEM- VIDEO EA

- A= Operation
- 1 (Furnish & Install)
- 3 (Install) Department furnished equipment
- 4 (Relocate)
- 5 (Adjust/Modify)
- 8 (Preventative Maintenance) B=0
- 0 (Diagnosis and Misc Repair) B
- 0 (Complete System) only for A=8, 0
- 1 (Cabinet Equipment) Note: Pay item callout shall be used in plans to depict QTY and location of shelf-mount or detector-card style video processor(s). Supplemental interface hardware, cabling, and other system components are considered incidental to video processor(s).
- 2 (Above ground Equipment) Note: Pay item callout shall be used in plans to depict QTY and location of camera(s). Mounting hardware and cabling is considered incidental to camera(s).

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<tr>
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<td>VEHICLE DETECTION SYSTEM- VIDEO, FURNISH &amp; INSTALL CABINET EQUIPMENT</td>
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<tr>
<td>0660 4 12</td>
<td>VEHICLE DETECTION SYSTEM- VIDEO, FURNISH &amp; INSTALL ABOVE GROUND EQUIPMENT</td>
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<td>7/1/2013</td>
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### 660-5-AB VEHICLE DETECTION SYSTEM- WIRELESS MAGNETOMETER

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</table>

**Notes**


**Details**

This item is intended for Vehicle Detection Systems, excluding Loop Systems. Details such as location of detectors, detection zones, and roadside components must be detailed in the plans.

For Loop Systems, see 660-1 and 660-2 pay items.
Required Recommended

Design Forms and Documentation
COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

References
PPM Chapter
Trns-port
Other Standards
Specifications
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): Multiple Roadway, Signals, Lighting, etc

Struct. 660- 5- AB VEHICLE DETECTION SYSTEM- WIRELESS MAGNETOMETER EA

A= Operation
1 (Furnish & Install)
3 (Install) Department furnished equipment
4 (Relocate)
5 (Adjust/Modify)
8 (Preventative Maintenance) B=0
0 (Diagnosis and Misc Repair) B
0 (Complete System) only for A=8, 0
1 (Cabinet Equipment) Note: Pay item callout shall be used in plans to indicate QTY and location of shelf mount or detector-card style cabinet interface hardware required. Cabling, and other system components are considered incidental to interface card(s).
2 (Above ground Equipment) Note: Pay item callout shall be used in plans to indicate QTY and location of access point(s) or repeater(s) required. Mounting hardware and cabling is considered incidental to access point(s) and repeater(s).
3 (In-Road Electronic) Note: Pay item callout shall be used in plans to indicate QTY and location of wireless magnetometer sensors embedded in roadway

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

660- 6-ABC VEHICLE DETECTION SYSTEM- AVI "Automatic Vehicle Identification"

<table>
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<tr>
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<td></td>
<td>Each</td>
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</tr>
</tbody>
</table>

Notes

Details
This item is intended for Vehicle Detection Systems, excluding Loop Systems. Details such as location of detectors, detection zones, and roadside components must be detailed in the plans.

For Loop Systems, see 660-1 and 660-2 pay items.
Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

References

PPM Chapter
Trns·port
Other
Standards
Specifications
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): Multiple Roadway, Signals, Lighting, etc

Struct. 660- 6-ABC VEHICLE DETECTION SYSTEM- AVI "Automatic Vehicle Identification"

A= Operation
1 (Furnish & Install)
3 (Install) Department furnished equipment
4 (Relocate)
5 (Adjust/Modify)
8 (Preventative Maintenance) BC=00
0 (Diagnosis and Misc Repair) BC=00

B= System Type
1 (Transponder)
2 (Bluetooth)
3 (License Plate)

C= Component
0 (Complete System) only for A=8, 0
1 (Cabinet Equipment)
Note: Pay item callout shall be used in plans to depict QTY and location of processing equipment. Supplemental interface hardware, cabling, and other system components are considered incidental to processing hardware.

2 (Above ground Equipment)
Note: Pay item callout shall be used in plans to depict QTY and location of cameras required by license plate system, QTY and location of antennas required by transponder or Bluetooth® systems. Additional pole-mounted hardware is considered incidental to camera(s) or antenna(s).

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

660-Maint LOOP ASSEMBLY Maintenance Contracts Only

<table>
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<tr>
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Notes

Valid through June 2013; replaced by new Section 660 specification and pay items. Refer to Estimates Bulletin 12-17.
**Maintenance Item: Not Valid for Construction Contracts**

### Details

MAINTENANCE CONTRACTS ONLY

Additional BOE details pending

### Related Items

<table>
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<tr>
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### Design Forms and Documentation

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### Construction Forms and Documentation

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### References

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<td>Prep &amp; Doc Manual Chapter(s)</td>
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**TRNS*PORT Category (DRAFT FIELD):**

**Struct.**

660-Maint LOOP ASSEMBLY

Maintenance Contracts Only

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
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<td>6/30/2013</td>
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**663- 1-ABC SIGNAL PRE-EMPTION**

### Notes

Effective July 2013. Refer to Estimates Bulletin 12-17

### Details

This item is intended for bus and emergency vehicle pre-emption.

Tech Specs and/or plan details will be required, until specifications are available.

### Related Items

<table>
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### Design Forms and Documentation

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### Construction Forms and Documentation

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</table>

### References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Trns-port</th>
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</thead>
</table>

Details and Structure: Complete- Items 000 to 1999
### Standards
- **A** = Operation
  - 1 (Furnish & Install)
  - 3 (Install)
  - 4 (Relocate) BC=00
  - 5 (Adjust/Modify) BC=00
- **B** = Type
  - 1 (Optical)
  - 2 (GPS)
- **C** = Components
  - 0 (Complete System)

### Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### VEHICLE DETECTOR ASSEMBLIES

<table>
<thead>
<tr>
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<td></td>
<td>Valid through June 30, 2013; replaced by 660- pay items.</td>
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</table>

This pay item is for traffic signals and traffic control devices only. Includes all work and materials necessary for a complete assembly, as detailed in the plans or specifications.

For Relocate operation, ensure that plans/specs detail removal and re-installation instructions, as well as guidance if detector is damaged or broken.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

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<td>Design Forms and Documentation</td>
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<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
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</tbody>
</table>

| Construction Forms and Documentation | No additional form required; use plans summary or comp book |
|                                         | Record final quantity on the tabulation sheet (plans) or computation form (comp book). |

### References
- PPM Chapter
- Trns-port
- Other
- Standards
- Specifications

---

**Details and Structure:** Complete- Items 000 to 1999
**663-74-AB** VEHICLE DETECTOR ASSEMBLIES EA

A = Operation
1 (Furnish & Install)
4 (Relocate) B=0
Remove: use item 690-60
B = Assembly Type
1 (Optical Type)
2 (Infrared)
3 (Road Tube)
4 (Emergency Pre-emption)
5 (Video)
6 (Wireless Magnetometer)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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**665-AB** PEDESTRIAN DETECTOR - STANDARD

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**Notes**

This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices and APL, as applicable.

Includes pedestrian signs, as shown on index 17784.

For Accessible (Audible/Tactile) detector, see pay item 665-1AB.

INSTALL: Detector and Sign to be furnished by FDOT or Maintaining agency. Plans or Specs must indicate pick-up or delivery instructions. Incidental parts to complete the installation to be furnished by the contractor.

RELOCATE: Ensure that plans/specs detail removal and re-installation instructions, as well as guidance if detector is damaged or broken.

**Related Items**

**Required**

**Recommended**

---

Details and Structure: Complete- Items 000 to 1999
Standards  
Min Specs: Section A665

Specifications  

T: Selected Items may require Plan Details and/or Technical Specifications

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0500  
Signalization (or ITS)

Struct. 665-AB- PEDESTRIAN DETECTOR - STANDARD EA

A = Operation
1 (Furnish & Install)
3 (Install) B=0. Furnished by FDOT or Maintaining Agency
4 (Relocate) B=0 see details above
Remove: use item 690-70

B = Assembly Type
1 (Pole Or Controller Cabinet Mounted Detector Station & Sign)
2 (Detector Station With Post & Sign)
3 (Detector With Sign Only)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Valid Date</th>
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<td>0665 40</td>
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665-1AB- PEDESTRIAN DETECTOR- ACCESSIBLE

Unit EA  Accuracy Each  PlanQuantity? no

Notes Details


Details and Structure: Complete- Items 000 to 1999
This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices and APL, as applicable.

Includes pedestrian signs, as shown on index 17784. Audible pedestrian signals should be installed in accordance with MUTCD 4E.09 and Traffic Engineering Manual, Section 3.7.

INSTALL: Detector and Sign to be furnished by FDOT or Maintaining agency. Plans or Specs must indicate pick-up or delivery instructions. Incidental parts to complete the installation to be furnished by the contractor.

RELOCATE: Ensure that plans/specs detail removal and re-installation instructions, as well as guidance if detector is damaged or broken.

### Related Items

<table>
<thead>
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<th>Required</th>
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<tbody>
<tr>
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<tr>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
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### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

PPM Chapter
Trns-port

Other Standards | Index No. 17784 |
Specifications | Min Specs: Section A665 |
Prep & Doc Manual Chapter(s) | 7, 13 |

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization (or ITS)

**Struct. 665-1AB-** PEDESTRIAN DETECTOR- ACCESSIBLE

A = Operation
1 (Furnish & Install) Audible/Tactile- see detail
3 (Install) B=0. Furnished by FDOT or Maintaining Agency
4 (Relocate) B=0 see details above
Remove: use item 690-70

B = Assembly Type
1 (Pole Or Controller Cabinet Mounted Detector Station & Sign)
2 (Detector Station With Post & Sign)
3 (Detector With Sign Only)

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
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Details and Structure: Complete- Items 000 to 1999
### 668- AB- DETECTOR CABINET (SIGNALS)

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<th>Unit</th>
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<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
<th>no</th>
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**Notes**
This pay item is for traffic signals and traffic control devices only.

A=4 (Relocate): Plan details/pay item note is required to detail any incidentals included with the relocate item, including batteries, internal electronics, reconnection, new concrete pad, removal of the old pad, etc.

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

- [tabqsg: Signalization Tabulation of Quantity Sheet](#)
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**

**Trns-port**

**Other**

**Standards**

Index No. 17841

**Specifications**

Min Specs: Section A676

**Prep & Doc Manual Chapter(s)**

7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization (or ITS)

**Struct.** 668- AB- DETECTOR CABINET (SIGNALS)

A =
1 (Furnish & Install)
3 (Install)
4 (Relocate) B=0
Remove: use item 690-60

B = Cabinet Size (Minimum)
1 (Type I 13" X 10" X 6")
2 (Type II 27" X 15" X 12")
3 (Type III 32" X 20" X 14")
4 (Type IV 48" X 29" X 16")
5 (Type V 54" X 38" X 24")
6 (Type VI 74" X 38" X 24")

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### Topic No. 600-000-002

#### Basis of Estimates

**2012 Edition**  
**January 22, 2013**

<table>
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**670- 4- A FLAShING BEACON CONTROLLER ASSEMBLY**

<table>
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<tr>
<th>Notes</th>
<th>Valid through 12-31-2012; refer to 700-90 for complete assembly.</th>
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<tbody>
<tr>
<td>Details</td>
<td>This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.</td>
</tr>
<tr>
<td>See pay item 700-90 for flashing beacon sign assembly. NO SEPARATE PAYMENT is made for the controller with sign, per Specification 700-12.</td>
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**Related Items**

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<th>Recommended</th>
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**Design Forms and Documentation**

| tabqsg: Signalization Tabulation of Quantity Sheet |
| Locate in plans. Summarize quantities by location on summary sheet in the plans. |

**Construction Forms and Documentation**

| No additional form required; use plans summary or comp book |
| Record final quantity on the tabulation sheet (plans) or computation form (comp book). |

**References**

<table>
<thead>
<tr>
<th>PPM Chapter</th>
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**Other Standards**

<table>
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<th>Index No. 17841</th>
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**Specifications**

| Min Specs: Section A670 |

**Prep & Doc Manual Chapter(s)**

| 7, 13 |

**TRNS*PORT Category (DRAFT FIELD): 0500 Signalization (or ITS) |

**Struct. 670- 4- A FLAShING BEACON CONTROLLER ASSEMBLY AS**

A = 1 (Furnish & Install)
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

---

#### 670-5-ABC TRAFFIC CONTROLLER ASSEMBLY

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</table>

- This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.

- For Modify, detail all work to be completed.
- For Special Type, detail all components.

- For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

#### Related Items

- **Required**
- **Recommended**

#### Design Forms and Documentation

- tabqsg: Signalization Tabulation of Quantity Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

#### Construction Forms and Documentation

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

#### References

- PPM Chapter
- Trns-port
- Other Standards

**Specifications**

- Min Specs: Section A670

**T: Selected Items may require Plan Details and/or Technical Specifications**

**Prep & Doc Manual Chapter(s)**: 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization (or ITS)

**Struct.** 670-5-ABC TRAFFIC CONTROLLER ASSEMBLY AS

- **A** =
  - 1 (Furnish & Install)
  - 3 (Install) BC=00
  - 4 (Modify) BC=00
  - 5 (Relocate) BC=00

- **B** = Type
  - 1 (NEMA)
  - 2 (170)
  - 3 (Special)

- **C** = Special Features
  - 0 (None)
  - 1 (One Preemption Plan)
  - 2 (Two Preemption Plans)

---

**Details and Structure:** Complete- Items 000 to 1999
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<th>Item</th>
<th>Description</th>
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### 671- 2- AB TRAFFIC CONTROLLER

**Unit**: EA  
**Accuracy**: Each  
**PlanQuantity?**: no

**Notes**

This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

tabqsg: Signalization Tabulation of Quantity Sheet  
Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book  
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter  
Trns·port  
Other  
**Standards**  
**Specifications** Min Specs: Section A671  
**Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization (or ITS)

<table>
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<tr>
<th>Struct.</th>
<th>671- 2- AB TRAFFIC CONTROLLER</th>
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<tr>
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**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Valid Date</th>
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</table>
This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.

Details
This pay item is for traffic signals and traffic control devices only. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.

Related Items
Required
Recommended

Design Forms and Documentation
- tabqsg: Signalization Tabulation of Quantity Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation
- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
- Trns-port
- Other
- Standards

Specifications
Min Specs: Section A678

Prep & Doc Manual Chapter(s)
- 7, 13

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
<table>
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<th>Item</th>
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<td>0678 1105</td>
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<td>0678 1305</td>
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680-ABB- SYSTEM CONTROL EQUIPMENT

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<tr>
<th>Unit</th>
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<th>Accuracy</th>
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<th>Quantity?</th>
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**Notes**

This pay item is for traffic signals and traffic control devices only. Detailed plan notes or specifications to be provided by designer.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

**Design Forms and Documentation**

- tabqsg: Signalization Tabulation of Quantity Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Trns-port
- Other Standards
- Specifications

T: Plan Details and/or Technical Specifications required
Struct.  680-ABB- SYSTEM CONTROL EQUIPMENT EA

A = Operation
  1 (Furnish & Install)
  3 (Install) Item furnished by local agency
BB = Item As Described
  06 (Communications Interface)
  11 (Roadside Master)
  14 (Central Modem Card)
  15 (Autodial/Answer Ext Communications Modem)
  16 (Fiber Optic, FSK Modem)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<td>0680115</td>
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681-100- SIGNALS- TRAFFIC CONTROL SYSTEM SOFTWARE

<table>
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<th>Details</th>
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<th>Related Items</th>
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<td>tabqsg: Signalization Tabulation of Quantity Sheet</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
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| Construction Forms and Documentation | No additional form required; use plans summary or comp book | Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances. |

<table>
<thead>
<tr>
<th>References</th>
<th>PPM Chapter Trns-port Other Standards</th>
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Details and Structure: Complete- Items 000 to 1999
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0500 Signalization (or ITS)

Struct. 681-100- SIGNALS- TRAFFIC CONTROL SYSTEM SOFTWARE LS/LS

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

682-ABB- SYSTEM DISPLAY

<table>
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<tr>
<th>Unit</th>
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Notes

Pay Item valid through 12-31-11. Use ITS pay items (780s group), or contact Traffic Ops.

Details

This pay item is for traffic signals and traffic control devices only. Refer to ITS Items for Intelligent Transportation System applications.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required  Recommended

Design Forms and Documentation

tabqsg: Signalization Tabulation of Quantity Sheet

Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Trns-port
Other Standards
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0500 Signalization (or ITS)

Struct. 682-ABB- SYSTEM DISPLAY EA

A = Operation
1 (Furnish & Install)
3 (Install) BB=00 Item furnished by local agency
4 (Modify) BB=00

BB = Item As Described
01 (CRT Display)
02 (Panel Board Map)
03 (Projected Display)
## Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 683-ABB- SYSTEM COMMUNICATIONS

<table>
<thead>
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<th>Unit</th>
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**Notes**

```
This pay item is for traffic signals and traffic control devices only.
Tabulation summary required on all projects.
```

**Details**

```
For Plan Detail/Tech Spec items: The Designer should ensure that the description,
materials, construction/installation requirements, method of measurement and basis of
payment are available in the contract documents to clearly define the work to be completed
for payment under this item.
```

**Required**

```
tabqsg: Signalization Tabulation of Quantity Sheet
```

**Recommended**

```
Locate in plans. Summarize quantities by location on summary sheet in the plans.
```

**Related Items**

```
No additional form required; use plans summary or comp book
```

**Design Forms and Documentation**

```
Record final quantity on the tabulation sheet (plans) or computation form (comp book).
```

**References**

```
PPM Chapter
Trns-port
Other Standards
Specifications
```

T: Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization (or ITS)

**Struct. 683-ABB- SYSTEM COMMUNICATIONS LS/LS**

```
A = Operation
1 (Furnish & Install)
3 (Install)
4 (Modify)
BB= Item As Described
01 (FDM) Frequency Division Multiplexor
02 (TDM)
03 (TDM Hardware)
04 (TDM Radio)
05 (TDM Coaxial)
06 (Central Site Radio)
07 (System Communications Modems)
08 (Voice Equipment)
```

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**Details and Structure:** Complete- Items 000 to 1999

Page 519 of 769
<table>
<thead>
<tr>
<th>Item</th>
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684- AB- SYSTEM COMMUNICATIONS CARRIER

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Notes

Valid through 6-30-13; refer to Estimates Bulletin 12-18.

Details

This pay item is for traffic signals and traffic control devices only.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

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<th>Required</th>
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<tr>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
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Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Trns·port
Other Standards
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0500 Signalization (or ITS)

Struct.

684- AB- SYSTEM COMMUNICATIONS CARRIER LF

A = Operation
1 (Furnish & Install)
3 (Install) Item furnished by local agency
B = Item As Described
1 (Multi-Pair Cable)
2 (Coaxial Cable)
3 (Lead Jacketed Coaxial Cable)
4 (Fiber Optic Cable)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
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<th>Item</th>
<th>Description</th>
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<td>6/30/2013</td>
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<td>0684 12</td>
<td>SYSTEM COMMUNICATIONS CARRIER, F&amp;I, COAXIAL CABLE</td>
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<td>6/30/2013</td>
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<td>0684 14</td>
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<td>6/30/2013</td>
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### 684-Maint

**ITS OPERATION**

*Maintenance Contracts Only*

- **Unit**: Mixed
- **Accuracy**: Each
- **Plan Quantity?**: No

**Notes**

- **Maintenance Item: Not Valid for Construction Contracts**
- **Details**
  - MAINTENANCE CONTRACTS ONLY
  - Additional BOE details pending

**Related Items**

<table>
<thead>
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<th>Required</th>
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</table>

**Design Forms and Documentation**

**Construction Forms and Documentation**

**References**

- PPM Chapter
- Trns-port
- Other
- Standards
- Specifications
- Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):**

**Struct.**

- 684-Maint
  - ITS OPERATION
  - Maintenance Contracts Only

**Notes**

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
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<th>Item</th>
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</table>

### 685-ABB-

**SYSTEM AUXILIARIES**

- **Unit**: EA
- **Accuracy**: Each
- **Plan Quantity?**: No

**Notes**

**Details**

- This pay item is for traffic signals and traffic control devices only.
NOT TO BE USED FOR ITS Projects. Refer to 780 items.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
<thead>
<tr>
<th>Related Items</th>
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<tbody>
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<tr>
<td>tabqsg: Signalization Tabulation of Quantity Sheet</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
</tr>
<tr>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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</table>

**References**

PPM Chapter

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization (or ITS)

**Struct. 685-ABB- SYSTEM AUXILIARIES EA**

A = Operation  
1 (Furnish & Install)  
3 (Install)  
BB = Item As Described  
01 (RF Modulator)  
02 (Multi-Plex Field Transceiver, Wire)  
03 (Multi-Plex Field Transceiver, Radio)  
04 (Data Accumulator)  
05 (Master Clock Unit)  
06 (Uninterruptible Power Source)  
07 (Test Equipment)  
08 (Equipment Cabinet, Type A)  
09 (Equipment Cabinet, Type B)  
10 (Equipment Cabinet, Type C)  
11 (Equipment Cabinet, Type D)  
13 (Pier Vibration Detection System-Sensors)  
14 (Pier Vibration Detection System-Monitor/Controller)  
16 (Remote Site-Radio)  
17 (Citizen Band-Radio)  
18 (Telemetry Transmitter)  
19 (Telemetry Receiver)  
20 (Telemetry Transceiver)  
21 (Pre-Timed Controller Adapter)  
22 (2-Phase Or Full Actuated Adapter)  
23 (3/Phase Thru 8-Phase Full Actuated Adapter)  
24 (Universal Adapter)  
25 (Standby System Relay)  
26 (Standby System Timer)
27 (Telephone Connection Box)  
28 (Interface Panel)  
29 (Pneumatic Transport Tube Assembly)  
30 (Weigh In Motion Scale Assembly)  
31 (Static Scale Assembly)  
32 (Public Address System Assembly)  
33 (RF Demodulator)  
34 (Dimensional Measurement Assembly)  
36 (Low Band Vhf Radio)  
37 (Line Amplifier)  
38 (CCTV Camera Assembly)  
39 (Fiber Optic Video Amplifier, Transmitter & Receiver)  
40 (Fiber Optic, Modulator/Demodulator)  
41 (Fiber Optic, Multiplexor/Demultiplexor)  
42 (Video Central Control Equipment)  
43 (Video Monitors)  
44 (Video System Support Equipment)  
55 (PLP FSK Card)  
56 (FSK Modem, Interface Panel Wall)  
57 (FSK Modem, Multiplexor Interface Panel)  
58 (FSK Modem, Interface Panel Rack)  
60 (Microwave Radar Detection Unit Assembly)  

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<td>0685139</td>
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This pay item is for traffic signals and traffic control devices only.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**686-ABB- CLOSED CIRCUIT TELEVISION EQUIPMENT**

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**Notes**

This pay item is for traffic signals and traffic control devices only.

**Details**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

- **Required**
- **Recommended**

**Design Forms and Documentation**

- tabqsg: Signalization Tabulation of Quantity Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Trns-port
Other Standards Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0500 Signalization (or ITS)

Struct. 686-ABB- CLOSED CIRCUIT TELEVISION EQUIPMENT EA

A = Operation
1 (Furnish & Install)
3 (Install)

BB = Item As Described
01 (Camera Assembly)
02 (Monitor)
03 (Recorder)
04 (Central Controls)
05 (Camera Support)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
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690-10- TRAFFIC SIGNAL HEAD ASSEMBLY, REMOVAL

Unit EA Accuracy Each PlanQuantity? no

Notes

Details

This pay item is for traffic signals and traffic control devices only. DO NOT use this item for Maintenance of Traffic (MOT) activities; refer to specifications section 102.

Per the specifications, the Department retains ownership of the equipment removed unless otherwise stated in the Contract Documents. The designer should indicate where materials are to be stockpiled, as needed.

For items being reused within the contract, consider "Relocate" item(s). DO NOT USE both "Remove" and "Relocate" pay items for the same signal equipment item. "Relocate"
includes both the removal and new installation of the specified item.

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<th>Related Items</th>
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<td><strong>Design Forms and Documentation</strong></td>
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<td>tabqsg: Signalization Tabulation of Quantity Sheet</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
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| Construction Forms and Documentation | | |
|--------------------------------------|---------------------------|
| No additional form required; use plans summary or comp book | Record final quantity on the tabulation sheet (plans) or computation form (comp book). |

| References | | |
|------------|---------------------------|
| PPM Chapter | |
| Trns·port | |
| Other Standards | |
| Specifications | |
| Prep & Doc Manual Chapter(s) | 7, 13 |

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization (or ITS)

**Struct. 690-10-** TRAFFIC SIGNAL HEAD ASSEMBLY, REMOVAL EA

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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**690-20-** SIGNAL PEDESTRIAN ASSEMBLY, REMOVE

**Notes**

This pay item is for traffic signals and traffic control devices only. DO NOT use this item for Maintenance of Traffic (MOT) activities; refer to specifications section 102.

Per the specifications, the Department retains ownership of the equipment removed unless otherwise stated in the Contract Documents. The designer should indicate where materials are to be stockpiled, as needed.

For items being reused within the contract, consider "Relocate" item(s). DO NOT USE both "Remove" and "Relocate" pay items for the same signal equipment item. "Relocate" includes both the removal and new installation of the specified item.

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| Construction Forms and Documentation | | |
|--------------------------------------|---------------------------|
| No additional form required; use plans summary or comp book | Record final quantity on the tabulation sheet (plans) or computation form (comp book). |
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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**690-31- SIGNAL PEDESTAL- REMOVE**

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<tr>
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<td>Per the specifications, the Department retains ownership of the equipment removed unless otherwise stated in the Contract Documents. The designer should indicate where materials are to be stockpiled, as needed.</td>
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<td>For items being reused within the contract, consider &quot;Relocate&quot; item(s). DO NOT USE both &quot;Remove&quot; and &quot;Relocate&quot; pay items for the same signal equipment item. &quot;Relocate&quot; includes both the removal and new installation of the specified item.</td>
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**Related Items**

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**Construction Forms and Documentation**

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**References**

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### 690-32- A POLE REMOVAL- SHALLOW

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<td>Each</td>
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</table>

**Notes**

This pay item is for traffic signals and traffic control devices only. Separate items exist for "shallow" and "deep" pole removal, as defined in the specifications. Shallow: includes complete removal of the above ground portion of the pole, attachments, and removal of the pole foundation, including buried attachments to a depth of 4 feet (1.2 m) below existing grade, measured per each.

NOTE ALL: Plans should identify locations for pole removal, and type of pole to be removed at each location. Not to be used on poles for highway lighting, unless they are jointly used to support traffic signal mast arms or span wire assemblies.

---

### Related Items

**Required**

**Recommended**

**Design Forms and Documentation**

tabqsg: Signalization Tabulation of Quantity Sheet

Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Trns-port

Other Standards

Specifications

Prep & Doc Manual Chapter(s)

---

**TRNS*PORT Category (DRAFT FIELD):**

0500 Signalization (or ITS)

**Struct.** 690-32- A POLE REMOVAL- SHALLOW EA

A =

1 (Direct Burial)

2 (Bolt on Attachment)

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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### 690-34- A COMPLETE POLE REMOVAL- DEEP

---

Details and Structure: Complete- Items 000 to 1999

This pay item is for traffic signals and traffic control devices only. Separate items exist for "shallow" and "deep" pole removal, as defined in the specifications. Deep: includes complete removal of the above ground portion of the pole and attachments, and the complete removal of the pole foundation. Refer to the specifications for additional information.

NOTE ALL: Plans should identify locations for pole removal, and type of pole to be removed at each location. Not to be used on poles for highway lighting, unless they are jointly used to support traffic signal mast arms or span wire assemblies.

**Struct. 690-34- A COMPLETE POLE REMOVAL- DEEP EA**

A = Pole Type
blank (pole type not identified) valid through 6-30-11; use A= 1 or 2
1 (Direct Burial)
2 (Bolt on Attachment)

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
<th>Description</th>
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This pay item is for traffic signals and traffic control devices only. DO NOT use this item for Maintenance of Traffic (MOT) activities; refer to specifications section 102.
Per the specifications, the Department retains ownership of the equipment removed unless otherwise stated in the Contract Documents. The designer should indicate where materials are to be stockpiled, as needed.

For items being reused within the contract, consider "Relocate" item(s). DO NOT USE both "Remove" and "Relocate" pay items for the same signal equipment item. "Relocate" includes both the removal and new installation of the specified item.

### Related Items

- **Required**

### Design Forms and Documentation

- **tabqsg: Signalization Tabulation of Quantity Sheet**
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

### Construction Forms and Documentation

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

- **PPM Chapter**
- **Trns-port**
- **Other Standards**
- **Specifications**

- **Prep & Doc Manual Chapter(s)** 7, 13

### TRNS*PORT Category (DRAFT FIELD):

- **0500**
  - Signalization (or ITS)

### Struct. **690- 50- A**

- **CONTROLLER ASSEMBLY- REMOVE**
  - **EA**

A =
- 'Blank' = Complete Assembly
- 1 (Cabinet Assembly, Less Foundation)
- 2 (Controller Unit)

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
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### 690- 60-** DETECTOR VEHICLE ASSEMBLY, REMOVE**

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### Notes

This pay item is for traffic signals and traffic control devices only. DO NOT use this item for Maintenance of Traffic (MOT) activities; refer to specifications section 102.

Per the specifications, the Department retains ownership of the equipment removed unless otherwise stated in the Contract Documents. The designer should indicate where materials are to be stockpiled, as needed.
For items being reused within the contract, consider "Relocate" item(s). DO NOT USE both "Remove" and "Relocate" pay items for the same signal equipment item. "Relocate" includes both the removal and new installation of the specified item.

### Required Related Items

**Design Forms and Documentation**
- tabqsg: Signalization Tabulation of Quantity Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

### Recommended Related Items

**Construction Forms and Documentation**
- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

**PPM Chapter**
**Trns·port**
**Other Standards**
**Specifications**

**PPM Chapter**
7, 13

### Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):** 0500 Signalization (or ITS)

### Struct.

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### Notes

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</table>

This pay item is for traffic signals and traffic control devices only. DO NOT use this item for Maintenance of Traffic (MOT) activities; refer to specifications section 102.

Per the specifications, the Department retains ownership of the equipment removed unless otherwise stated in the Contract Documents. The designer should indicate where materials are to be stockpiled, as needed.

For items being reused within the contract, consider "Relocate" item(s). DO NOT USE both "Remove" and "Relocate" pay items for the same signal equipment item. "Relocate" includes both the removal and new installation of the specified item.

### Related Items

**Design Forms and Documentation**
- tabqsg: Signalization Tabulation of Quantity Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.
## 690- 70- DETECTOR PEDESTRIAN ASSEMBLY, REMOVE EA

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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### Details

This pay item is for traffic signals and traffic control devices only. DO NOT use this item for Maintenance of Traffic (MOT) activities; refer to specifications section 102.

Per the specifications, the Department retains ownership of the equipment removed unless otherwise stated in the Contract Documents. The designer should indicate where materials are to be stockpiled, as needed.

For items being reused within the contract, consider "Relocate" item(s). DO NOT USE both "Remove" and "Relocate" pay items for the same signal equipment item. "Relocate" includes both the removal and new installation of the specified item.

### Related Items

- **Required**: tabqsg: Signalization Tabulation of Quantity Sheet
- **Recommended**: Locate in plans. Summarize quantities by location on summary sheet in the plans.

### Construction Forms and Documentation

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

- PPM Chapter
- Trns·port
- Other
- Standards
- Specifications
- Prep & Doc Manual Chapter(s) 7, 13

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## 690- 80- SPAN WIRE ASSEMBLY REMOVE EA

### Notes

This pay item is for traffic signals and traffic control devices only. DO NOT use this item for Maintenance of Traffic (MOT) activities; refer to specifications section 102.

Per the specifications, the Department retains ownership of the equipment removed unless otherwise stated in the Contract Documents. The designer should indicate where materials are to be stockpiled, as needed.

For items being reused within the contract, consider "Relocate" item(s). DO NOT USE both "Remove" and "Relocate" pay items for the same signal equipment item. "Relocate" includes both the removal and new installation of the specified item.

### Related Items

- **Required**: tabqsg: Signalization Tabulation of Quantity Sheet
- **Recommended**: Locate in plans. Summarize quantities by location on summary sheet in the plans.

### Construction Forms and Documentation

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

- PPM Chapter
- Trns·port
- Other
- Standards
- Specifications
- Prep & Doc Manual Chapter(s) 7, 13
### Structural 690-80- SPAN WIRE ASSEMBLY REMOVE EA

**Notes**

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0690 80</td>
<td>SPAN WIRE ASSEMBLY, REMOVE</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

#### 690-90- REMOVE CONDUIT & CABLING

**Notes**

This pay item is for traffic signals and traffic control devices only.

**Related Items**

Required Recommended

**Design Forms and Documentation**

- tabqsg: Signalization Tabulation of Quantity Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Trns-port
- Other Standards
- Specifications
- Prep & Doc Manual Chapter(s) 7, 13

---

### Structural 690-90- REMOVE CONDUIT & CABLING PI

**Notes**

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0690 90</td>
<td>CONDUIT &amp; CABLING REMOVE</td>
<td>PI</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

#### 690-91- SIGNAL INTERCONNECT CABLE, REMOVE

**Notes**

This pay item is for traffic signals and traffic control devices only.

**Related Items**

Required Recommended

**References**

- PPM Chapter
- Trns-port
- Other Standards
- Specifications
- Prep & Doc Manual Chapter(s) 7, 13

---

Details and Structure: Complete- Items 000 to 1999
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0690</td>
<td>SIGNAL INTERCONNECT CABLE REMOVE</td>
<td>LF</td>
<td>no</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

This pay item is for traffic signals and traffic control devices only. DO NOT use this item for Maintenance of Traffic (MOT) activities; refer to specifications section 102.

Per the specifications, the Department retains ownership of the equipment removed unless otherwise stated in the Contract Documents. The designer should indicate where materials are to be stockpiled, as needed.

For items being reused within the contract, consider "Relocate" item(s). DO NOT USE both "Remove" and "Relocate" pay items for the same signal equipment item. "Relocate" includes both the removal and new installation of the specified item.

**Related Items**

<table>
<thead>
<tr>
<th>Design Forms and Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>tabqsg: Signalization Tabulation of Quantity Sheet</td>
</tr>
<tr>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Construction Forms and Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>No additional form required; use plans summary or comp book</td>
</tr>
<tr>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPM Chapter</td>
</tr>
<tr>
<td>Trns-port</td>
</tr>
</tbody>
</table>
### Internally Illuminated Sign

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0690100</td>
<td>SIGNAL EQUIPMENT MISCELLANEOUS REMOVE</td>
<td>PI</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

- This item should be used when requested by maintaining agency. Refer to Minimum Specifications for Traffic Control Signal Devices, as applicable.
- The internally illuminated street name sign is normally attached to the signals mast arm or span wire. This item should be shown on the signals plans and loaded in the signals category.
- **INSTALL**: To be used ONLY when the item is to be furnished by the Department or other maintaining agency. Plans or specs should clearly identify the item(s) to be installed, pick-up/delivery instructions, as well as installation instructions. Payment includes any incidentals necessary (furnished by the Contractor) for a complete installation.
- **RELOCATE**: Plans or specs should clearly identify the item and initial/final locations. As needed, detail incidental items to be furnished by the Contractor for a complete installation. Clearly identify conditions under which item replacement (damaged by contractor) is needed.

**Related Items**

- **Required**: tabqsg: Signalization Tabulation of Quantity Sheet
- **Recommended**: Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- **PPM Chapter**
- **Trns·port**
- **Other Standards** Index No. 17748
- **Specifications** Min Specs: Section A699
- **Prep & Doc Manual Chapter(s)**
**Struct. 699-1 AB**

INTERNALLY ILLUMINATED SIGN EA

A = Operation
- blank (Furnish & Install)
- 2 (Install)
- 3 (Modify)
- 4 (Relocate)

B = Sign type
- 1 (Street Name)

Notes

---

**The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0699 1 1</td>
<td>INTERNAL ILLUM SIGN, FURNISH &amp; INSTALL, STREET NAME</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0699 1 21</td>
<td>INTERNAL ILLUM SIGN, INSTALL, ST NAME</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0699 1 31</td>
<td>INTERNAL ILLUM SIGN, MODIFY, ST NAME</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0699 1 41</td>
<td>INTERNAL ILLUM SIGN, RELOCATE, ST NAME</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

---

**699-2 ??**

ILLUMINATED SIGNS (Reserved pay item, pending specification development)

**Notes**

Under development for January 2013; pay item not available until specs, standards, and products are approved.

**Details**

**Related Items**

- **Required**
- **Recommended**

**Design Forms and Documentation**

**Construction Forms and Documentation**

**References**

- PPM Chapter
- Trns-port
- Other Standards
- Specifications
- Prep & Doc Manual Chapter(s)

---

**TRNS*PORT Category (DRAFT FIELD):**

**Struct. 699-2 ??**

ILLUMINATED SIGNS (Reserved pay item, pending specification development)

Z = Type
- ?? Outside border illumination
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**700-20-AB SINGLE POST SIGN**

<table>
<thead>
<tr>
<th>Unit</th>
<th>AS</th>
<th>Accuracy</th>
<th>Assembly</th>
<th>PlanQuantity?</th>
</tr>
</thead>
</table>

Includes sign panel, post, any foundation or breakaway base as required by the Design Standards or plans. Per specifications, "for the purpose of payment, a sign assembly consists of all the signs mounted on a single structure (one, two, or three posts, or overhead structure)..." Maximum wind load from single direction for ground mounted signs is 30 SF.

MEDIAN BARRIER MOUNTED: Refer to Bulletin ?? And design standard index 11871 for instructions. Intended for median barrier applications, where ground mounted signs are not practical. May be used on outside barrier, per bulletin guidelines/standard. Maximum wind load from a single direction is 20 SF.

BRIDGE MOUNTED: Intended for bridge mounted signs, in accordance with Index 11870. DO NOT USE this pay item (A=5) for barrier mounted signs.

MULTIPLE SIGNS ON A SINGLE POST, BACK-TO-BACK, PANELS WITH MULTI-DIRECTIONS (street names signs): Detail the signs in the plans. Select the panel size based on the combined total sign area.

IN-STREET FLEXIBLE POST SIGN: Used for R1-6 crosswalk signs. All signs must meet MUTCD requirements. Recommended plan note: "In-street flexible post sign must meet MUTCD requirements." A maintenance agreement with the maintaining agency must be included with the project file.

CUSTOM: If project conditions require a single post-ground mounted sign greater than 30 ft² from a single direction, a custom sign may be used. Plan details will be needed, as design standard does not apply. Verify with Roadway Design Office prior to using this pay item on a project. MULTI-POST SIGNS are recommended where site conditions allow installation.

VALID THROUGH DECEMBER 2009 LETTING: Standards limit single post sign area (wind resistance area from any one direction) to 20 ft².

EFFECTIVE JANUARY 2010 LETTING: Standards limit single post-ground mounted sign area (wind resistance area from any one direction) to 30 ft².

*******************

**OPERATIONS**

INSTALL: Install includes the installation of existing panel(s) on a new sign post. This item is used for signs furnished by FDOT or a local agency. The contractor will provide the post(s) and foundation, as needed to meet current design standards.

RELOCATE: Relocate includes the removal of the sign assembly in accordance with the specifications, and the relocation/installation of the sign within the project limits, in accordance with the current design standards. If new sign post(s) are needed, they should be noted in the plans, and included in the cost of the relocated sign.

REMOVE: Includes the removal of the sign, post, and foundation. Do not use the "remove" operation for a sign that is to be relocated. Signs become the property of the contractor, unless otherwise noted in the plans or specs.
### Required

- 0700 20 11: SINGLE POST SIGN, F&I, LESS THAN 12 SF
  - Unit: AS
  - TSP/Detail: 1/1/2010

- 0700 20 12: SINGLE POST SIGN, F&I, 12-20 SF
  - Unit: AS
  - TSP/Detail: 1/1/2010

- 0700 20 14: SINGLE POST SIGN, F&I, 21-30 SF
  - Unit: AS
  - TSP/Detail: 1/1/2010

- 0700 20 15: SINGLE POST SIGN, F&I, 31+ SF
  - Unit: AS
  - TSP/Detail: 1/1/2011

- 0700 20 18: SINGLE POST SIGN, F&I, IN-STREET FLEXIBLE POST
  - Unit: AS
  - TSP/Detail: 1/1/2010

- 0700 20 21: SINGLE POST SIGN, F&I BARRIER MOUNTED, LESS THAN 12 SF
  - Unit: AS
  - TSP/Detail: 7/1/2012

### Notes

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>AS</th>
<th>Accuracy</th>
<th>Assembly</th>
<th>Plan</th>
<th>Quantity?</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0700 20 22</td>
<td>SINGLE POST SIGN, F&amp;I BARRIER MOUNTED, 12-20 SF</td>
<td>AS</td>
<td>7/1</td>
<td>1/2012</td>
<td></td>
<td></td>
<td>no</td>
<td>Effective with the January 2011 letting, refer to Roadway Design Bulletin 10-07 for business logo signs.</td>
</tr>
<tr>
<td>0700 20 24</td>
<td>SINGLE POST SIGN, F&amp;I BARRIER MOUNTED, 21-30 SF TOTAL AREA TWO DIRECTIONAL</td>
<td>AS</td>
<td>7/1</td>
<td>1/2012</td>
<td></td>
<td></td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>0700 20 25</td>
<td>SINGLE POST SIGN, F&amp;I BARRIER MOUNTED, 31+ SF TWO DIRECTIONAL</td>
<td>AS</td>
<td>7/1</td>
<td>1/2012</td>
<td></td>
<td></td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>0700 20 31</td>
<td>SINGLE POST SIGN, INSTALL, LESS THAN 12 SF</td>
<td>AS</td>
<td>1/1</td>
<td>1/2010</td>
<td></td>
<td></td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>0700 20 32</td>
<td>SINGLE POST SIGN, INSTALL, 12-20 SF</td>
<td>AS</td>
<td>1/1</td>
<td>1/2010</td>
<td></td>
<td></td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>0700 20 40</td>
<td>SINGLE POST SIGN, RELOCATE</td>
<td>AS</td>
<td>1/1</td>
<td>1/2010</td>
<td></td>
<td></td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>0700 20 51</td>
<td>SINGLE POST SIGN, F&amp;I BRIDGE MOUNT, &lt;12 SF</td>
<td>AS</td>
<td>1/1</td>
<td>1/2010</td>
<td></td>
<td></td>
<td>no</td>
<td></td>
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<tr>
<td>0700 20 52</td>
<td>SINGLE POST SIGN, F&amp;I BRIDGE MOUNT, 12-20 SF</td>
<td>AS</td>
<td>1/1</td>
<td>1/2010</td>
<td></td>
<td></td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>0700 20 60</td>
<td>SINGLE POST SIGN, REMOVE</td>
<td>AS</td>
<td>1/1</td>
<td>1/2010</td>
<td></td>
<td></td>
<td>no</td>
<td></td>
</tr>
</tbody>
</table>

**700-21-AB MULTI-POST SIGN**

**Notes**

- Includes sign panel, posts, any foundation or breakaway base as required by the Design Standards or plans. The number and size of post and the average post length must be shown in the plans. Per specifications, "for the purpose of payment, a sign assembly consists of all the signs mounted on a single structure (one, two, or three posts, or overhead structure)..."

**Details**

- INSTALL: Install includes the installation of existing panel(s) on new sign posts. This item is used for signs furnished by FDOT or a local agency. The contractor will provide the post(s) and foundation, as needed to meet correct design standards.

- RELOCATE: Relocate includes the removal of the sign assembly in accordance with the specifications, and the relocation/installation of the sign within the project limits, in accordance with the current design standards. If new sign post(s) are needed, they should be noted in the plans, and included in the cost of the relocated sign.

- REMOVE: Includes the removal of the sign, post, and foundation. Do not use the "remove" operation for a sign that is to be relocated. Signs become the property of the contractor, unless otherwise noted in the plans or specs.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>
| Design Forms and Documentation | tabqsp: Signing & Pavement Marking Tabulation of Quantity Sheet  
Locate in plans. Summarize quantities by location on summary sheet in the plans. |
| Construction Forms and Documentation | No additional form required; use plans summary or comp book  
Record final quantity on the tabulation sheet (plans) or computation form (comp book). |

**References**

- PPM Chapter  
- Trns-port
Other Standards

Index Nos. 11200 series: 11200, 11300, 11310, 11320, 11860, 13417, 17302, 17328, 17344, 17345, 17346, 17347, 17349, 17350, 17351, 17352, 17354, 17355, 17356, 17357, 17359

Specifications

Prep & Doc Manual Chapter(s)  7, 13

TRNS*PORT Category (DRAFT FIELD):  0300  Signing and Pavement Markings

Struct.  700-21- AB  MULTI-POST SIGN  AS

A= Operation
1 (Furnish & Install)
3 (Install ) Furnished by FDOT or local agency, installed on new contractor furnished posts
4 (Relocate) B=0
6 (Remove) B=0

B = Sign Panel Size, square feet
1 (50 or less)
2 (51 to 100)
3 (101 to 150)
4 (151 to 200)
5 (201 to 250)
6 (251 to 300)
7 (over 300)

Notes  *B=9 (Custom) for non-standard designs. Verify with Roadway Design Office prior to opening.

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0700 21 11</td>
<td>MULTI- POST SIGN, F&amp;I, 50 SF OR LESS</td>
<td>AS</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0700 21 12</td>
<td>MULTI- POST SIGN, F&amp;I, 51 - 100 SF</td>
<td>AS</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0700 21 13</td>
<td>MULTI- POST SIGN, F&amp;I, 101 - 150 SF</td>
<td>AS</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0700 21 14</td>
<td>MULTI- POST SIGN, F&amp;I, 151 - 200 SF</td>
<td>AS</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0700 21 15</td>
<td>MULTI- POST SIGN, F&amp;I, 201 - 250 SF</td>
<td>AS</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0700 21 16</td>
<td>MULTI- POST SIGN, F&amp;I, 251 - 300 SF</td>
<td>AS</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0700 21 17</td>
<td>MULTI- POST SIGN, F&amp;I, GREATER THAN 300 SF</td>
<td>AS</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0700 21 31</td>
<td>MULTI- POST SIGN, INSTALL, 50 SF OR LESS</td>
<td>AS</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0700 21 32</td>
<td>MULTI- POST SIGN, INSTALL, 51 - 100 SF</td>
<td>AS</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0700 21 33</td>
<td>MULTI- POST SIGN, INSTALL, 101 - 150</td>
<td>AS</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0700 21 34</td>
<td>MULTI- POST SIGN, INSTALL, 151 - 200 SF</td>
<td>AS</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0700 21 35</td>
<td>MULTI- POST SIGN, INSTALL, 201 - 250 SF</td>
<td>AS</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0700 21 36</td>
<td>MULTI- POST SIGN, INSTALL, 251 - 300 SF</td>
<td>AS</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0700 21 37</td>
<td>MULTI- POST SIGN, INSTALL, &gt; 300 SF</td>
<td>AS</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0700 21 40</td>
<td>MULTI- POST SIGN, RELOCATE</td>
<td>AS</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0700 21 60</td>
<td>MULTI- POST SIGN, REMOVE</td>
<td>AS</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

700-22-ABC  OVERHEAD TRUSS SPAN SIGN

Unit  AS  Accuracy  Assembly  PlanQuantity?  no

Notes  Refer to Roadway Design Bulletin 12-17 for User of Overhead Signs on Freeways

Details and Structure: Complete- Items 000 to 1999
and Expressways

Details

FOR ITS APPLICATIONS, USE 780 items

Per Roadway Design Bulletin 12-17, overhead signs are to be used when required by MUTCD, or as indicated in the Bulletin. All other locations shall utilize ground mounted signs.

Includes sign panels, overhead structure, foundations and other incidentals required for a complete assembly. Complete design and details of the structure and foundation must be shown in the plans. Includes all components listed in the Standards and all external conduit and conductors for the service.

All signs are to be lighted, unless otherwise noted in the plans. Payment is included in assembly. (Note: The lighting included in the cost of the sign should be all lighting along the structure, up to and including a pull box near the foundation of the structure. When an electrical point of connection is not available near the foundation, separate payment will be made for conduit and conductors to the point of connection. Detail quantities in the plans.)

REPAIR: Coordinate the use of the repair operation with the District Maintenance Office. Plan Details and/or specifications will be required.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>SHSpanSign: Span Sign 11320</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
</table>

References

PPM Chapter Vol 1, Ch 7 and 29
Trns-port
Other Standards Index No. 11320
Specifications

T: Selected Items may require Plan Details and/or Technical Specifications

Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0300 Signing and Pavement Markings

**Struct.** 700-22-ABC OVERHEAD TRUSS SPAN SIGN AS

A= Operation
1 (Furnish & Install) Truss & Sign
2 (Furnish & Install TRUSS ONLY) C=0
3 (Install) BC=00
4 (Relocate) BC=00
5 (Repair) BC=00
6 (Remove) BC=00

**Details and Structure:** Complete- Items 000 to 1999
B = Truss Span Length (feet)
1 (50 or less)
2 (51-100)
3 (101-150)
4 (151-200)
5 (Greater than 200)

C = Sign Panel Size (square feet)
1 (300 or less)
2 (301-500)
3 (501-700)
4 (Greater than 700)

**Notes**

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### OVERHEAD TRUSS SPAN SIGN, FURNISH & INSTALL, TRUSS LENGTH 151-200', SIGN AREA >700 SF
- **Unit:** 0700 22144
- **Basis:** AS 1/1/2010

### OVERHEAD TRUSS SPAN SIGN, FURNISH & INSTALL, TRUSS LENGTH >200', SIGN AREA 300 OR LESS
- **Unit:** 0700 22151
- **Basis:** AS 1/1/2010

### OVERHEAD TRUSS SPAN SIGN, FURNISH & INSTALL, TRUSS LENGTH >200', SIGN AREA 301-500
- **Unit:** 0700 22152
- **Basis:** AS 1/1/2010

### OVERHEAD TRUSS SPAN SIGN, FURNISH & INSTALL, TRUSS LENGTH >200', SIGN AREA 501-1000SF
- **Unit:** 0700 22153
- **Basis:** AS 1/1/2010

### OVERHEAD TRUSS SPAN SIGN, FURNISH & INSTALL TRUSS ONLY, TRUSS LENGTH 51-100'
- **Unit:** 0700 22154
- **Basis:** AS 1/1/2010

### OVERHEAD TRUSS SPAN SIGN, FURNISH & INSTALL TRUSS ONLY, LENGTH >200'
- **Unit:** 0700 22220
- **Basis:** AS 1/1/2010

### OVERHEAD TRUSS SPAN SIGN, RELOCATE
- **Unit:** 0700 22250
- **Basis:** AS 1/1/2010

### OVERHEAD TRUSS SPAN SIGN, REPAIR
- **Unit:** 0700 22250
- **Basis:** D 1/1/2010

### OVERHEAD TRUSS SPAN SIGN, REMOVE
- **Unit:** 0700 22260
- **Basis:** AS 1/1/2010

#### 700-23-ABC OVERHEAD TRUSS CANTILEVER SIGN

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<th>Accuracy</th>
<th>Assembly</th>
<th>PlanQuantity?</th>
<th>Notes</th>
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<td>Notes</td>
<td>Refer to Roadway Design Bulletin 12-17 for User of Overhead Signs on Freeways and Expressways</td>
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<tr>
<td>Details</td>
<td>FOR ITS APPLICATIONS, USE 780 items</td>
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<td></td>
<td>Per Roadway Design Bulletin 12-17, overhead signs are to be used when required by MUTCD, or as indicated in the Bulletin. All other locations shall utilize ground mounted signs.</td>
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<td></td>
<td>Includes sign panels, overhead structure, foundations and other incidentals required for a complete assembly. Complete design and details of the structure and foundation must be shown in the plans. Includes all components listed in the Standards and all external conduit and conductors for the service.</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>All signs are to be lighted, unless otherwise noted in the plans. Payment is included in assembly. (Note: The lighting included in the cost of the sign should be all lighting along the structure, up to and including a pull box near the foundation of the structure. When an electrical point of connection is not available near the foundation, separate payment will be made for conduit and conductors to the point of connection. Detail quantities in the plans.)</td>
<td></td>
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<tr>
<td></td>
<td>For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.</td>
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#### Related Items

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**Details and Structure:** Complete- Items 000 to 1999
Design Forms and Documentation  
Tabqsp: Signing & Pavement Marking Tabulation of Quantity Sheet  
Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation  
No additional form required; use plans summary or comp book  
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References  
PPM Chapter Vol 1, Ch 7 and 29  
Trns-port  
Other Standards Index No. 11310  
Specifications  
T: Selected Items may require Plan Details and/or Technical Specifications  
Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0300 Signing and Pavement Markings

Struct. 700-23-ABC OVERHEAD TRUSS CANTILEVER SIGN AS

A= Operation  
1 (Furnish & Install) Truss & Sign  
2 (Furnish & Install TRUSS ONLY) C=0  
3 (Install) BC=00  
4 (Relocate) BC=00  
5 (Repair) BC=00  
6 (Remove) BC=00  
B= Truss Span Length (feet)  
1 (30 or less)  
2 (31-40)  
3 (41-50)  
4 (over 50)  
C= Sign Panel Size (square feet)  
1 (100 or less)  
2 (101-200)  
3 (201-300)  
4 (Greater than 300)

Notes  
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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Details and Structure: Complete- Items 000 to 1999  
Page 544 of 769
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700- 38-AAB SIGN LIGHTED OVERHEAD TRUSS- MONOTUBE

**Notes**

Includes sign panel, post, any foundation or breakaway base as required by the plans. Also includes sign luminaries, electrical enclosure and other incidentals required for a complete assembly. Conduit, conductors, pull boxes and service point equipment, if required to get power to the sign structure, are not covered by this item.

For projects let January 2008 and later: Ensure that complete drawings and specifications are available with the contract documents. Contact the maintaining agency prior to design;
some agencies have requested standard sign structures be used, rather than monotubes.

<table>
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| **Prep & Doc Manual Chapter(s)** | 7, 13 |

**TRNS•PORT Category (DRAFT FIELD):** 0300

**Struct.** 700-38-AAB SIGN LIGHTED OVERHEAD TRUSS- MONOTUBE AS

**Notes**

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### Topic No. 600-000-002
#### Basis of Estimates

**2012 Edition**

**January 22, 2013**

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</table>

**Notes**

- Includes sign panel, post, any foundation or breakaway base as required by the plans. Also includes sign luminaries, electrical enclosure and other incidentals required for a complete assembly. Conduit, conductors, pull boxes and service point equipment, if required to get power to the sign structure, are not covered by this item.

- For projects let January 2008 and later: Ensure that complete drawings and specifications are available with the contract documents. Contact the maintaining agency prior to design; some agencies have requested standard sign structures be used, rather than monotubes.

**Related Items**

### Required

**Design Forms and Documentation**

SHMono Tube: Monotube Tabulation

Locate in plans. Summarize quantities by location on summary sheet in the plans.

### Recommended

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

#### PPM Chapter

- Trns-port

#### Other Standards

#### Specifications

**T: Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**

7, 13

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**TRNS**PORT Category (DRAFT FIELD): 0300 Signing and Pavement Markings

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**Struct. 700- 39- AB SIGN LIGHTED OVERHEAD CANTILEVER- MONOTUBE AS**

<table>
<thead>
<tr>
<th>A = Length Of Cantilever</th>
<th>1 (20 Or Less)</th>
<th>2 (21 - 30)</th>
<th>3 (31 - 40)</th>
<th>4 (41 - 50)</th>
<th>5 (51 - 60)</th>
<th>6 (61 - 70)</th>
<th>7 (71 - 80)</th>
<th>8 (81 - 90)</th>
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<tr>
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<td>1 (50 Or Less)</td>
<td>2 (51 to 100)</td>
<td>3 (101 to 150)</td>
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<td>5 (201 - 250)</td>
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## Notes

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</table>

### 700-46-AB EXISTING SIGN

**Unit** | AS  
**Accuracy** |  
**Assembly** |  
**Plan Quantity?** | no

**Notes**

The REMOVE item includes the removal of the sign panels and the complete support
The RELOCATE item includes the reinstallation of the complete assembly at the location shown in the plans.
The INSTALL item includes the installation of the assembly, at the location shown in the plans. Includes the breakaway base and foundation, if required for installation of the new assembly. For a multi-post assembly, the number and size of the post and the average post length must be shown in the plans.

For new/replace operations, the sign supports are included in the price for the sign. When the new sign panel differs from the existing panel, note the sizes in the plans, so that the contractor may consider the available/needed supports.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>tabqsp: Signing &amp; Pavement Marking Tabulation of Quantity Sheet</td>
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<tr>
<td></td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
</tr>
<tr>
<td></td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
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### References

PPM Chapter
Trns-port
Other Standards Specifications
Prep & Doc Manual Chapter(s) 7, 13

### TRNS*PORT Category (DRAFT FIELD):

0300  Signing and Pavement Markings

### Struct.

#### 700-46-AB  EXISTING SIGN  AS

A = Operation
1 (Remove)
2 (Relocate) see detail
3 (Install)

B = Sign Assembly Type
5  (Span Wire)
6  (Bridge Mounted)

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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### 700-48-AB  SIGN PANEL

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<tbody>
<tr>
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Details and Structure: Complete- Items 000 to 1999
This item is for the sign panel only. For posts, structures, etc, refer to other Section 700 items. For new/replace operations, the sign supports are included in the price for the sign. When the new sign panel differs from the existing panel, note the sizes in the plans, so that the contractor may consider the available/needed supports.

For multiple sign panels on an existing post or structure, detail the panels in the plans. Note: Each panel is paid separately. Tabulate by location.

The FURNISH AND INSTALL item includes the sign panel and materials required for installation on an existing post, span wire, mast arm or other support. (When a new post is needed, see pay item 700-20- or 700-21-.)

The INSTALL item includes the materials required for installation. The sign panel will be furnished by FDOT Maintenance or other local agency. Install on an existing post. Note in plans/specs- contractor must furnish any supports necessary to complete the installation.

The OVERLAY item includes the sign panel and the materials required for installation.

The RELOCATE item includes the removal of the sign panel and the reinstallation at the location noted in the plans.

The REPLACE item includes the new sign panel, the removal of the existing panel and the installation of the new panel. If lighting for replacement sign needs to be repaired/replaced, note incidental work in the plans, by location.

The REMOVE item includes the removal of the existing sign panel. The sign post or structure is to remain. (If post/structure needs to be removed, see item remove items within single post sign, multi-post sign, or sign structure.)

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<tr>
<th>Required</th>
<th>Recommended</th>
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<td>tabqsp: Signing &amp; Pavement Marking Tabulation of Quantity Sheet</td>
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<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
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<tr>
<td>Construction Forms and Documentation</td>
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<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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<tr>
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<td>Trns-port</td>
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<td>Other Standards</td>
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<td>Specifications</td>
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<td>7, 13</td>
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</table>

**TRNS*PORT Category (DRAFT FIELD):** 0300 Signing and Pavement Markings

**Struct.** 700-48-AB SIGN PANEL EA

- A = Operation
- 1 (Furnish & Install) NOT to be used for "additional signs" on a new sign post.
- 2 (Install)
- 3 (Overlay)
- 4 (Relocate)
5 (Replace)  
6 (Remove) B=0  

B = Square Footage Of Sign Panel
2 (101 to 200)  
3 (201 to 300)  
4 (301 to 400)  
5 (401 to 500)  
6 (501 to 600)  
7 (601 or greater)  
8 (15 Or Less)  
9 (16 to 100)  
0 (N/A)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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### 700-70-
**SIGN, LIGHTED OVERHEAD- BRIDGE MOUNTED**

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<th>Notes</th>
<th>Details</th>
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<tbody>
<tr>
<td>Includes sign panels, overhead structure, sign luminaries, electrical enclosure and other incidentals required for a complete assembly. Conduit, conductors, pull boxes and service point equipment, if required to get power to the sign structure, are not covered by this item. Complete design and details of the structure and connections to the bridge must be shown in the plans. Includes all components listed in the Standards and all external conduit and conductors for the service.</td>
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<table>
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<tr>
<th>Related Items</th>
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<th>Recommended</th>
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<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
<td></td>
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<tr>
<td></td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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<th>PPM Chapter</th>
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<tr>
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<td>Other Standards Specifications</td>
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**Prep & Doc Manual Chapter(s)**: 7, 13

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### 700-82-
**OVERHEAD SIGN- SPAN WIRE MOUNTED**

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<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
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**TRNS*PORT Category (DRAFT FIELD):** 0300 Signing and Pavement Markings

**Struct.** 700-70- SIGN, LIGHTED OVERHEAD- BRIDGE MOUNTED AS

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### Items Table

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**Details and Structure:** Complete- Items 000 to 1999
Design Forms and Documentation

No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 0700 82- OVERHEAD SIGN- SPAN WIRE MOUNTED AS

- **Unit**: AS
- **Accuracy**: Assembly
- **Plan?**: no
- **Valid Date**: 1/1/2010

**Details**

This item includes sign panels, overhead structure, and incidentals required for a complete assembly. Complete design and details of the structure and connections to the bridge must be shown in the plans.

**Related Items**

- **Required**:
- **Recommended**:

**Design Forms and Documentation**

- tabqsp: Signing & Pavement Marking Tabulation of Quantity Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Trns-port
- Other Standards Index No. 17356
- Specifications
- Prep & Doc Manual Chapter(s) 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 0300 Signing and Pavement Markings

---

**700-83- OVERHEAD SIGN- BRIDGE MOUNTED**

**Unit**: AS

**Notes**

This item includes sign panels, overhead structure, and incidentals required for a complete assembly. Complete design and details of the structure and connections to the bridge must be shown in the plans.

**Details**

- **Required**:
- **Recommended**:

**Design Forms and Documentation**

- tabqsp: Signing & Pavement Marking Tabulation of Quantity Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Trns-port
- Other Standards
- Specifications
- Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD)**: 0300 Signing and Pavement Markings

---

**Details and Structure**: Complete- Items 000 to 1999
700-83 OVERHEAD SIGN- BRIDGE MOUNTED AS

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>070083</td>
<td>OVERHEAD SIGN, BRIDGE MOUNTED</td>
<td>AS</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

700-89 AA ELECTRIC POWERED SIGN

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

Notes
Valid through 6-30-11; replaced by 700-89-ABC.

Details
NOTE: not to be used for ITS projects; refer to 780 items for ITS systems
Refer to 699 items for Internally Illuminated signs.
Includes the complete sign assembly, support and any foundation required. Conduit, conductors, pull boxes and service point equipment, if required to get power to the sign structure, are not covered by this item. Includes all components listed in the Standards and all external conduit and conductors for the service.

"Special" signs to be approved by Roadway Design. Plan Details and/or Tech Specs required to provide materials, construction, and payment information.

Related Items
Required  Recommended

Design Forms and Documentation
tabqsp: Signing & Pavement Marking Tabulation of Quantity Sheet
Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation
No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Trns-port
Other Standards
Specifications
Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0300 Signing and Pavement Markings

Struct. 700-89- AA ELECTRIC POWERED SIGN EA

AA =
2 (Blank-Out)
3 (Changeable Message - Fiber Optics)*

Notes
* Consider ITS (780 items) for changeable message signs
** Special requires Tech Spec and/or Plan details. Do not use "Special" for Radar Display Sign Units; contact the Basis of Estimates Coordinator for the current status of this item.
Electronic Display Signs are categorized by type, such as Electronic Warning Sign, Electronic Regulatory Sign, Electronic Speed Feedback Sign, or Blank-Out Sign. Electronic Display Signs are often comprised of a static sign panel with an integrated electronic display portion, such as a “Your Speed” sign that displays the speed of approaching vehicles.

All electronic display signs must be listed on the Department's Approved Products List.

Designer should detail the size of sign, sign text and graphics, type of structure and/or attachment, and installation details in the plans.

PREVENTATIVE MAINTENANCE: Intended for Maintenance Contracts only. Contract documents must indicate work to be completed.

DIAGNOSTIC AND MISC REPAIR: Intended for Maintenance Contracts only. Contract documents must indicate work to be completed.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Design Forms and Documentation</strong></td>
<td>tabqsp: Signing &amp; Pavement Marking Tabulation of Quantity Sheet</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
<tr>
<td><strong>Construction Forms and Documentation</strong></td>
<td>No additional form required; use plans summary or comp book</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
</table>

**PPM Chapter**

**Trns-port**

**Other Standards**

**Specifications** Section 700, Min Specs A700

**T:** Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0200 or other Roadway or other- see details

**Struct.** 700-89-ABC ELECTRONIC DISPLAY SIGN AS

<table>
<thead>
<tr>
<th>A= Operation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Furnish &amp; Install)</td>
<td></td>
</tr>
<tr>
<td>3 (Install) Dept or local agency furnished Sign; Contractor provides support/attachment for installation</td>
<td></td>
</tr>
<tr>
<td>4 (Relocate Sign) to a new location; C=0</td>
<td></td>
</tr>
<tr>
<td>8 (Preventative Maintenance) BC=00</td>
<td></td>
</tr>
<tr>
<td>9 (Diagnostic and Misc Repair) BC=00</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B=Sign Type</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Electronic Warning Sign)</td>
<td></td>
</tr>
<tr>
<td>2 (Electronic Regulatory Sign)</td>
<td></td>
</tr>
<tr>
<td>3 (Electronic Speed Feedback Sign)</td>
<td></td>
</tr>
<tr>
<td>4 (Blank-Out Sign)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C=Sign Support / Attachment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Single Column)</td>
<td></td>
</tr>
<tr>
<td>2 (Multi-Column)</td>
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</tr>
</tbody>
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### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0700 89111</td>
<td>ELECTRONIC DISPLAY SIGN, FURNISH &amp; INSTALL, ELECTRONIC WARNING SIGN, SINGLE COLUMN</td>
<td>AS</td>
<td></td>
<td>1/1/2011</td>
<td></td>
</tr>
<tr>
<td>0700 89113</td>
<td>ELECTRONIC DISPLAY SIGN, FURNISH &amp; INSTALL, ELECTRONIC WARNING SIGN, OVERHEAD ATTACHMENT</td>
<td>AS</td>
<td></td>
<td>1/1/2011</td>
<td></td>
</tr>
<tr>
<td>0700 89121</td>
<td>ELECTRONIC DISPLAY SIGN, FURNISH &amp; INSTALL, ELECTRONIC REGULATORY SIGN, SINGLE COLUMN</td>
<td>AS</td>
<td>D</td>
<td>1/1/2011</td>
<td></td>
</tr>
<tr>
<td>0700 89123</td>
<td>ELECTRONIC DISPLAY SIGN, FURNISH &amp; INSTALL, ELECTRONIC REGULATORY SIGN, OVERHEAD ATTACHMENT</td>
<td>AS</td>
<td></td>
<td>1/1/2011</td>
<td></td>
</tr>
<tr>
<td>0700 89131</td>
<td>ELECTRONIC DISPLAY SIGN, FURNISH &amp; INSTALL, ELECTRONIC SPEED FEEDBACK SIGN, SINGLE COLUMN</td>
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<td>D</td>
<td>1/1/2011</td>
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<tr>
<td>0700 89141</td>
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<td></td>
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<tr>
<td>0700 89143</td>
<td>ELECTRONIC DISPLAY SIGN, FURNISH &amp; INSTALL, BLANK OUT, OVERHEAD ATTACHMENT</td>
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<tr>
<td>0700 89800</td>
<td>ELECTRONIC DISPLAY SIGN, PREVENTATIVE MAINTENANCE</td>
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<td></td>
<td>7/1/2012</td>
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<tr>
<td>0700 89900</td>
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### 700-90-AB FLASHING BEACON SIGN

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<tr>
<th>Unit</th>
<th>AS</th>
<th>Accuracy</th>
<th>Assembly</th>
<th>Plan Quantity?</th>
<th>no</th>
</tr>
</thead>
</table>

#### Notes

Includes the complete sign, flashing beacon, flashing beacon controller, support and any foundation required. Conduit, conductors, pull boxes and service point equipment, if required to get power to the sign, are not covered by this item. Includes all components listed in the Standards and all external conduit and conductors for the service.

If solar powered, add note to plans to refer to the APL for solar panels.

RETROFIT: Remove existing flashing beacon and replace with new Rapid Rectangular Flashing Beacon (RRFB) assembly. Includes all incidental items necessary to complete the installation.

#### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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</thead>
<tbody>
<tr>
<td>tabqsp: Signing &amp; Pavement Marking Tabulation of Quantity Sheet</td>
<td></td>
</tr>
</tbody>
</table>

#### Design Forms and Documentation

- Locate in plans. Summarize quantities by location on summary sheet in the plans.

#### Construction Forms and Documentation

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

---

Details and Structure: Complete- Items 000 to 1999
## Applications

### Standards
- PPM Chapter: 17344, 17882, 17881
- Prep & Doc Manual Chapter(s): 7, 13

### Specifications
- TRNS*PORT Category (DRAFT FIELD): 0300, Signing and Pavement Markings

### Struct.

<table>
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<tr>
<th>A</th>
<th>Description</th>
<th>Unit</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 = Operation</td>
<td>SIGN FLASHING BEACON, F&amp;I GROUND MOUNT</td>
<td>AS</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>1 = Furnish &amp; Install</td>
<td>SIGN FLASHING BEACON, F&amp;I, OVERHEAD MOUNT</td>
<td>AS</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>2 = Relocate</td>
<td>SIGN FLASHING BEACON, F&amp;I, BRIDGE MOUNT</td>
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<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>3 = Remove</td>
<td>SIGN FLASHING BEACON, RELOCATE, GROUND MOUNT</td>
<td>AS</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>4 = Retrofit for new RRFB</td>
<td>SIGN FLASHING BEACON, REMOVE, GROUND MOUNT</td>
<td>AS</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>5 = Replace with New Contractor furnished</td>
<td>SIGN FLASHING BEACON, REPLACE, GROUND MOUNT</td>
<td>AS</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>6 = Replace with FDOT furnished</td>
<td>SIGN FLASHING BEACON, REMOVE, OVERHEAD MOUNT</td>
<td>AS</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>7 = Replace with FDOT furnished</td>
<td>SIGN FLASHING BEACON, REPLACE, OVERHEAD MOUNT</td>
<td>AS</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>8 = Replace with FDOT furnished</td>
<td>SIGN FLASHING BEACON, REMOVE, BRIDGE MOUNT</td>
<td>AS</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>9 = Replace with FDOT furnished</td>
<td>SIGN FLASHING BEACON, REPLACE, BRIDGE MOUNT</td>
<td>AS</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>10 = Replace with FDOT furnished</td>
<td>SIGN FLASHING BEACON, REPLACE, SPAN WIRE</td>
<td>AS</td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>11 = Replace with FDOT furnished</td>
<td>SIGN FLASHING BEACON, RETROFIT, GROUND MOUNT</td>
<td>AS</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>12 = Replace with FDOT furnished</td>
<td>SIGN FLASHING BEACON, RETROFIT, OVERHEAD MOUNT</td>
<td>AS</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>13 = Replace with FDOT furnished</td>
<td>SIGN FLASHING BEACON, RETROFIT, BRIDGE MOUNT</td>
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<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>14 = Replace with FDOT furnished</td>
<td>SIGN FLASHING BEACON, RETROFIT, SPAN WIRE</td>
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<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### Other

**Prep & Doc Manual Chapter(s):**
- 7
- 13

---

**Details and Structure:** Complete- Items 000 to 1999

---

Page 558 of 769
### Maintenance Contracts Only

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
<th>Details</th>
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<tr>
<td>Mixed</td>
<td></td>
<td></td>
<td>Maintenance Item: Not Valid for Construction Contracts</td>
<td>MAINTENANCE CONTRACTS ONLY Additional BOE details pending</td>
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</table>

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

**Construction Forms and Documentation**

**References**

- PPM Chapter
- Trans-port
- Other Standards
- Specifications
- Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):**

<table>
<thead>
<tr>
<th>Struct.</th>
<th>SIGN- MAINTENANCE</th>
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<tbody>
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</table>

**Notes**

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>E700 42 1</td>
<td>SIGN SPAN WIRE (RE-TENSION CABLE)</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>E700 42 2</td>
<td>SIGN SPAN WIRE (REPLACE CABLE)</td>
<td>EA</td>
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<td></td>
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<tr>
<td>E700 46 31</td>
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<td>1/1/2010</td>
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<tr>
<td>E700 46 32</td>
<td>REPAIR EXISTING SIGN (MULTI POST)</td>
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<td>1/1/2010</td>
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<tr>
<td>E700 46 33</td>
<td>REPAIR EXISTING SIGN (OVHD TRUSS)</td>
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<tr>
<td>E700 46 34</td>
<td>REPAIR EXISTING SIGN (OVHD CANTILEVER)</td>
<td>AS</td>
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<td>1/1/2010</td>
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<tr>
<td>E700 46110</td>
<td>SIGN REMOVE EXIST (SINGLE POST)</td>
<td>SF</td>
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<td>1/1/2010</td>
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<tr>
<td>E700 46120</td>
<td>SIGN REMOVE EXIST (MULTI POST)</td>
<td>SF</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>E700 46160</td>
<td>SIGN REMOVE EXIST (BRIDGE MOUNT)</td>
<td>SF</td>
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<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>E700 46210</td>
<td>SIGN RELOCATE EXIST(SINGLE POST)</td>
<td>SF</td>
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<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>E700 46310</td>
<td>SIGN REPAIR EXIST (SINGLE POST)</td>
<td>SF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>E700 46320</td>
<td>SIGN REPAIR EXIST (MULTI POST)</td>
<td>SF</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>E700 481E1</td>
<td>SIGN PANELS (F&amp;J)(SINGLE POST)</td>
<td>SF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>E700 481E2</td>
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<td></td>
<td>1/1/2010</td>
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<td>E700 481E3</td>
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<tr>
<td>E700 482E1</td>
<td>SIGN PANELS (INSTALL) (SINGLE POST)</td>
<td>SF</td>
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</tr>
</tbody>
</table>
For use on "all rural construction projects, excluding limited access facilities". More specifically, "OUTSIDE EDGE line for all 2-lane and multi-lane undivided rural projects" (From FDOT Executive Committee Policy, approved March 19, 2008)

CENTERLINE: Audible and Vibratory pavement markings should be used on centerline of two lane rural roadways ONLY when there is a history of centerline cross over crashes.

Other applications: Audible and Vibratory markings shall also be considered on flush shoulder roadways within Urban 2 and Urban 3 boundaries; noise is the primary consideration in these areas.

Width = 8": Due to the application of this pavement marking, the standard width is 6". Contact the State Roadway Design Office prior to using the 8" width.
Topic No. 600-000-002
Basis of Estimates

Basis of Estimates
2012 Edition
January 22, 2013

Longitudinal stripes (along the direction of traffic) are normally applied by truck; these stripes are paid per NET MILE (solid) or GROSS MILE (skip). Most of these stripes are 6" in width. 3-9 and 10-30 skip stripes are included in the gross mile measurement. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe, and shall include the unpainted intervals, subject to 9-1.3. It will not include any lengths of unpainted intervals which are greater than 30 ft, per the specifications.

Refer to the specification for complete Method of Measurement information. Accuracy: GM and NM items are measured to 1/1000 of a mile.

TRNS*PORT quantities:
For Category 0200- MOT, continue to use 710 and 102-78 items.
For Category 0300- Signing and Pavement Markings, include either item 710-90, or pay item(s) for final marking materials, as called for in the plans.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>tabqsp: Signing &amp; Pavement Marking Tabulation of Quantity Sheet</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
<td>Contractor’s Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
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</table>

References
PPM Chapter
Trns-port
Other Standards
Specifications
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0300
Signing and Pavement Markings

<table>
<thead>
<tr>
<th>Struct.</th>
<th>701- 1A-BCD</th>
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<td></td>
<td></td>
<td>2 (Yellow)</td>
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<td>Type of Marking</td>
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<tr>
<td></td>
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<td>D</td>
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<td></td>
<td>2 (8&quot;) approval required*</td>
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Notes
*See details above for 8" width.

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

Details and Structure: Complete- Items 000 to 1999
Page 561 of 769
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0701 11111</td>
<td>AUDIBLE &amp; VIBRATORY PAVEMENT MARKING, STANDARD, WHITE, SOLID, 6&quot;</td>
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<tr>
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<tr>
<td>0701 11211</td>
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<td>0701 11212</td>
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<tr>
<td>0701 11221</td>
<td>AUDIBLE &amp; VIBRATORY PAVEMENT MARKING, STANDARD, YELLOW, SKIP, 6&quot;</td>
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</tbody>
</table>

### 702-1A-BCD WET WEATHER PAVEMENT MARKINGS

**Unit**: Mixed  
**Accuracy**: Refer to item structure and details  
**PlanQuantity?**: no

**Notes**

Wet weather markings shall only be used where there are sufficient nighttime wet weather crashes to justify the markings. A benefit/cost analysis must be performed to justify the use of these markings.

**Related Items**

- **Required**:  
- **Recommended**:  

**Design Forms and Documentation**

- Design Forms and Documentation:  
  - tabqsp: Signing & Pavement Marking Tabulation of Quantity Sheet  
  - Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

- Construction Forms and Documentation:  
  - No additional form required; use plans summary or comp book  
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter  
- Trns-port  
- Other Standards  
- Specifications  

**Prep & Doc Manual Chapter(s)**

<table>
<thead>
<tr>
<th>TRNS*PORT Category (DRAFT FIELD):</th>
<th>0300</th>
<th>Signing and Pavement Markings</th>
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<tbody>
<tr>
<td><strong>Struct.</strong></td>
<td>702-1A-BCD</td>
<td>WET WEATHER PAVEMENT MARKINGS</td>
</tr>
</tbody>
</table>

| A= Class  | 1 (Standard)  | 2 (with Audible)  |
| B= Color  | 1 (White)     | 2 (Yellow)        |
| C= Type   | 1 (Solid) NM  | 2 (Skip) GM       |
Notes formerly known as INVERTED RIB PROFILE MARKINGS

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<tr>
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**704-Maint**

CERAMIC PAVEMENT MARKER

Maintenance Contracts Only

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<th>Unit</th>
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</table>

Notes Maintenance Item: Not Valid for Construction Contracts

Details MAINTENANCE CONTRACTS ONLY

Additional BOE details pending

Related Items

Required Recommended

Design Forms and Documentation

Construction Forms and Documentation

References

PPM Chapter

Trns-port

Other Standards

Specifications

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):

Struct. 704-Maint CERAMIC PAVEMENT MARKER Mixed

Details and Structure: Complete- Items 000 to 1999
Maintenance Contracts Only

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
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</table>

705-10- A OBJECT MARKER

Notes

Unit EA Accuracy Each PlanQuantity? no

Details

Object Markers are to be used to mark obstructions within or adjacent to the roadway, as indicated in the Design Standards or on the plans. Additional details are available in the MUTCD, 2C.63 in 2009 edition; see figure on page 135.

Refer to Delineators for marking the roadway alignment

Guardrail and Concrete Barrier Wall: Reflective Railing Markers, as shown on Index 420, 421, and 422, are included in the cost of the railing; no separate payment is made for these markers. For repair/rehab work, include payment for replacement markers in related work.

Related Items

Required 705-11

Recommended

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

References

PPM Chapter Vol 1, 7.2.9
Trns-port
Other Standards Index No. 17349 (Object Markers), 17345 and 17346 (Delineators), 17349 (Object Markers) 17359 (Object Markers and Delineators)

Specifications

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0300 Signing and Pavement Markings

Struct. 705-10- A OBJECT MARKER EA

A= Type
1 (Type 1) 18"+ diamond
2 (Type 2) at least 6" x 12"
3 (Type 3) 12" x 36" black/yellow
4 (Type 4) End of Highway, 18"+ diamond

Notes

*Note: The Type is defined in the MUTCD, Chapter 2C.
### 705-11- A Delineator

#### Unit
EA

#### Accuracy
Each

#### Plan Quantity?
no

#### Notes
Delineators are to be used along the side of the roadway to indicate the alignment of the roadway, as indicated in the Design Standards or on the plans. Additional details are available in the Plans Preparation Manual (PPM) Vol 1, Chapter 7, and the MUTCD, Chapter 3D.

The Department uses delineators to mark median opening for both rural and urban openings. In general, flexible delineators are used on urban median openings and nonflexible are used on rural median openings. A high visibility median delineator should be used on traffic separators in the following locations:

1. At multilane intersections where additional visibility is required for the marking of the traffic separator,
2. Where the separator is obstructed due to crest vertical curves,
3. At intersections where the alignment thru the intersection is not straight, and
4. Where traditional flexible delineators are constantly being replaced.

High visibility median delineators can be specified for urban median separators.

High performance delineators should be used in all applications where the delineator is being used to maintain lane positions, restrict vehicle movements or any other area where the delineator is subject to being frequently hit.

Refer to Object Markers to mark obstructions.

Reflective Railing Markers, as shown on Index 420, 421, and 422, are included in the cost of the railing; no separate payment is made for these markers.

#### Design Forms and Documentation

**COMP 700-050-03:** Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

#### References

**PPM Chapter** Vol 1, 7.2.9

**Trns-port Other Standards** Index No. 17349 (Object Markers), 17345 and 17346 (Delineators), 17349 (Object Markers) 17359 (Object Markers and Delineators)
Struct.  705- 11- A  DELINEATOR  EA

A= Type, see above for selection guidance
1 (Flexible Tubular)
2 (non-Flexible)
3 (Flexible High Visibility Median)
4 (Flexible High Performance)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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706- 3- RETRO-REFLECTIVE PAVEMENT MARKER

Notes

Record final quantity on the computation book form.

Details

Refer to 710- 90 for final surface payment.
Use Type B, unless otherwise shown in the plans. Use Pavement markers to supplement lane lines and gore markings, as shown on design standards.
BLUE RPMs: Refer to the Traffic Engineering Manual, Section 4.3. Note that blue RPMs are installed and maintained by local agencies.

Related Items

Design Forms and Documentation
COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation
No additional form required; use plans summary or comp book
Record final quantity on the computation book form.

References
PPM Chapter
Trns·port

Other Standards Index No. 17345, 17352
Specifications
Prep & Doc Manual Chapter(s)  7, 13
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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Notes

Maintenance Item: Not Valid for Construction Contracts

Details

MAINTENANCE CONTRACTS ONLY

Additional BOE details pending

Related Items

Required

Recommended

Design Forms and Documentation

Construction Forms and Documentation

References

PPM Chapter

Trns-port

Other

Standards

Specifications

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):

Struct.  706-Maint  REFLECTIVE PAVEMENT MARKER  Maintenance Contracts Only  Mixed

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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Notes

Reserved pay item group for possible new specification. No pay items valid at this time.
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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**Details and Structure: Complete- Items 000 to 1999**
Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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</table>

709-1A-BCD TRAFFIC STRIPE- TWO REACTIVE COMPONENTS

Unit: EA, LF, GM, NM; GK, NK

Accuracy: Each; Linear Foot; 1/1000

PlanQuantity?: no mile

Notes: Refer to Roadway Design Bulletin 12-18 for markings at Gore Areas and Urban Islands.

Details: Consists of "Two Reactive Component Traffic Stripe and Markings" used in areas representing final and work zone pavement markings.

Broken (skip) stripes shall consist of a succession of solid stripes.

Measurement and Payment for Pavement Markings:

LINEAR FOOT ITEMS: Intended for solid stripes 8" wide and greater. The linear foot quantity shall also be used to pay for 2-4 "guide line" and 6-10 "gap extension through cross-over area" (all skip lines, except 3-9 or 10-30 skip traffic stripe sections), as indicated in the plans. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe, and it shall NOT include the unpainted intervals.

GROSS MILE & NET MILE ITEMS: Intended for 6" stripe. The gross mile quantity shall be used to pay for all 3-9 or 10-30 skip traffic stripes, as indicated in the plans. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe, and shall include the unpainted intervals, subject to 9-1.3. It will not include any lengths of unpainted intervals which are greater than 30 ft, per the specifications. The net mile quantity shall be used to pay for all 6" solid stripe, except those identified above for payment as linear foot items.

CONTRASTING ALTERNATING SKIP: Use one application of white skip thermoplastic and one application of black skip paint. Payment will be made for the length of white + length of black stripe applied.

REMOVAL ITEM (A=7): The cost for removing any conflicting pavement markings is to be included in the cost of MOT Lump Sum, per Specification 710-4 and 102-5.8. Pay item 710-17 is only to be used for Maintenance projects to remove non-conflicting pavement markings (i.e. removal of paint prior to applying a two-component reactive material; or 711-17- for removal of thermoplastic prior to applying more thermo, because the maximum thickness will be exceeded if existing thermo is not removed).

CHEVRONS/GORE AREAS: Per Design Bulletin 12-18, 12" stripe will be used at interstate gore areas; 8" stripe will be used at urban islands. Refer to the bulletin and design standards for complete details. For payment purposes, these stripes should use the Linear Foot pay items, as they are normally applied by hand at these locations.
YIELD LINE: Per the MUTCD, a yield line is a series of solid white isosceles triangles, used at intersection approaches controlled by a yield sign. It is measured per linear foot, with a length approximately equal to the lane width(s).

PAVEMENT MESSAGES: Each word is paid as one message. For example, "SUN PASS ONLY" will be paid as 3 messages. Other example messages include "YIELD", "MERGE", "LEFT", "TURN", Bike symbol and wheelchair/"Universal Symbol of Accessibility". Additional messages shown on index 17346.

CURB FACE MESSAGE: The complete message, such as "NO PARKING" is paid as one message. Plan details or Tech Specs are needed to show the dimensions and define materials/colors. Tabulate the number of curb face messages in the plans.

GREEN BIKE LANES: Refer to PPM and 523- pay items for Green Bike Lanes.

---------------------
Refer to the Specification for the complete Method of Measurement.

ACCUACY: LF items are measured to the nearest Linear Foot; Mile items are measured to 1/1000th of a mile; and Square Foot items are measured to the nearest square foot.

TRNS*PORT quantities:
For Category 0200- MOT, continue to use 710 and 102-78 items.
For Category 0300- Signing and Pavement Markings, include either item 710-90, or pay item(s) for final marking materials, as called for in the plans.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
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<tbody>
<tr>
<td>Design Forms and</td>
<td>See Details Above</td>
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<tr>
<td>Documentation</td>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
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</tr>
<tr>
<td>Construction Forms</td>
<td>No additional form required; use plans summary or comp book</td>
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</tr>
<tr>
<td>and Documentation</td>
<td>Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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<tr>
<td>References</td>
<td>PPM Chapter Vol 1, 7.2.8 for material selection guidance</td>
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<td>Trns-port</td>
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<td>Prep &amp; Doc Manual Chapter(s)</td>
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**TRNS*PORT Category (DRAFT FIELD):** 0300 Signing and Pavement Markings

**Struct.** 709-1A-BCD TRAFFIC STRIPE- TWO REACTIVE COMPONENTS EA, LF, GM,

- **A= Class**
  - 1 (Standard)
  - 7 (Remove) SF, BCD= Blank. NOT FOR MOT marking removal; see details above.

- **B= Color**
  - 1 (White)
  - 2 (Yellow)
  - 3 (Black)
C= Type of Marking
1 (Solid) NM
2 (Solid) LF
3 (Skip) GM; D= 1 for 6" wide 10-30 or 3-9 skip, or D=2 for 12" wide 3-9 lane drop
5 (Dotted/Guideline/6-10 Gap Extension) LF

D= Width
1 (6")
2 (8")
3 (12")
4 (18")
5 (24")

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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710- 1A-BCD  PAINTED PAVEMENT MARKINGS

Unit  Mixed  Accuracy  Refer to item structure and details  PlanQuantity?  no

Notes  Refer to Roadway Design Bulletin 12-18 for markings at Gore Areas and Urban
Islands.

*****

Effective July 2010, Durable Paint is valid for use on Maintenance Contracts Only, unless otherwise approved by the State Construction Office.

Details

Consists of paint used in areas representing final and work zone pavement markings. Broken (skip) stripes shall consist of a succession of solid stripes.

Durable Paint is valid for use on Maintenance Contracts Only. Refer to the special provisions for current requirements.

******************************************************************************

Measurement and Payment for Pavement Markings:
Longitudinal stripes (along the direction of traffic) are normally applied by truck; these stripes are paid per NET MILE (solid) or GROSS MILE (skip). Most of these stripes are 6" in width. 3-9 and 10-30 skip stripes are included in the gross mile measurement. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe, and shall include the unpainted intervals, subject to 9-1.3. It will not include any lengths of unpainted intervals which are greater than 30 ft, per the specifications.

Transverse stripes (across the direction of traffic) are applied by walking with a hand operated machine; these stripes are paid per linear foot. Most of these stripes are 8"-24" wide. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe, and it shall NOT include the unpainted intervals.

Dotted, 2-4 Guideline, and 6-10 Gap Extension Through Cross-over Area stripes are also paid per LF, due to the walking/hand application required. Most of these stripes are 6" wide.

CHEVRONS/GORE AREAS: Per Design Bulletin 12-18, 12" stripe will be used at interstate gore areas; 8" stripe will be used at urban islands. Refer to the bulletin and design standards for complete details. For payment purposes, these stripes should use the Linear Foot pay items, as they are normally applied by hand at these locations.

APPROACH TO TOLL PLAZA: 12" wide Longitudinal lines used for the approach to toll plaza are paid per mile.

Non-standard stripe applications should be coordinated with the State Roadway Design Office, prior to including notes/items in the plans.

******************************************************************************

CONTRASTING ALTERNATING SKIP: Use one application of white skip thermoplastic and one application of black skip paint. Payment will be made for the length of white + length of black stripe applied.

REMOVAL ITEM (A=7): The cost for removing any conflicting pavement markings is to be included in the cost of MOT Lump Sum, per Specification 710-4 and 102-5.8. Pay item 710-17 is only to be used for Maintenance projects to remove non-conflicting pavement markings (i.e. removal of paint prior to applying a two-component reactive material; or 711-17- for removal of thermoplastic prior to applying more thermo, because the maximum thickness will be exceeded if existing thermo is not removed). Use Maintenance item E710-17.

YIELD LINE: Per the MUTCD, a yield line is a series of solid white isosceles triangles, used at intersection approaches controlled by a yield sign. It is measured per linear foot, with a length approximately equal to the lane width(s).

PAVEMENT MESSAGES: Each word is paid as one message. For example, "SUN PASS ONLY" will be paid as 3 messages. Other example messages include "YIELD", "MERGE", "LEFT", "TURN", "bicycle person", "bicycle with chevron" and wheelchair/"Universal
Symbol of Accessibility”. Additional messages shown on index 17346 and 17347. BLUE markings (accessible parking) will be paid per LF or EA. Note: When an arrow is used with "bicycle person", the arrow is paid separately. For the "bicycle with chevron" message, the complete message is a quantity of 1, as shown on the index.

CURB FACE MESSAGE: The complete message, such as "NO PARKING" is paid as one message. Plan details or Tech Specs are needed to show the dimensions and define materials/colors. Tabulate the number of curb face messages in the plans.

ARROWS (Refer to Estimates Bulletin 11-03): Each arrow is paid as a complete marking, regardless of the number of “points” or directions. Single, bi-directional and tri-directional arrows may be subtotaled in the plans, but the pay quantity will be for each complete marking. When used in a two-way left turn lane, the double arrows are counted as two each, since they are two separate locations, approximately 12’ apart.

GREEN BIKE LANES: Refer to PPM and 523- pay items for Green Bike Lanes.

Refer to the Specification for the complete Method of Measurement.

ACCURACY: LF items are measured to the nearest Foot; NM and GM items are measured to 1/1000th of a mile (about +/-5 ft); and SF items are measured to the nearest square foot.

TRNS*PORT quantities:
For Category 0200- MOT, continue to use 710 and 102-78 items.
For Category 0300- Signing and Pavement Markings, include either item 710-90, or pay item(s) for final marking materials, as called for in the plans.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>tabqsp: Signing &amp; Pavement Marking Tabulation of Quantity Sheet</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>References</th>
<th>PPM Chapter</th>
<th>Trns-port</th>
<th>Other Standards</th>
<th>Specifications</th>
<th>Prep &amp; Doc Manual Chapter(s)</th>
</tr>
</thead>
</table>

TRNS*PORT Category (DRAFT FIELD): 0300 Signing and Pavement Markings

Struct. 710- 1A-BCD PAINTED PAVEMENT MARKINGS Mixed
A= Class
1 (Standard)
2 (Durable) for Maintenance Contracts Only
7 (Remove) SF, BCD=blank. Maintenance use only. NOT FOR MOT marking removal; see details above.
B= Color
1 (White)
2 (Yellow) C=1, 2, 3, 4, 5, 9
3 (Black)
4 (Blue) C=2, 6

C= Type of Marking
1 (Solid) NM; D = 1
2 (Solid) LF; D = 2, 3, 4, 5
3 (Skip) GM; D= 1 for 6" wide 10-30 or 3-9 skip, or D=3 for 12" wide 3-9 lane drop
5 (Dotted / Guide line/ 6-10 Gap Extension) LF; D=1
6 (Message) EA; D=0, Includes YIELD message and painted curb face
7 (Arrows) EA complete marking; D=0
8 (Yield Line) LF; D=0 see details above
9 (Island Nose) SF; D=0

D= Width
1 (6")
2 (8")
3 (12")
4 (18")
5 (24")

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<td>PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SKIP, 6&quot;, 10-30 or 3-9 SKIP AND APPROACH TO TOLL PLAZA</td>
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### 710-90- 
**PAINTED PAVEMENT MARKINGS - FINAL SURFACE**

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<tr>
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<tr>
<td>0710 11251</td>
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<td>EA</td>
<td>1/1/2010</td>
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</tbody>
</table>

**Notes**
- Includes payment for painted final surface pavement markings (1 or 2 applications of 710 paint), including RPMs (1 application). The number of applications will be indicated in the specifications, depending upon whether thermoplastic will be applied during construction or maintenance operations. Coordinate with District Design for district specific policy.

**Details**
- Note: some districts will be using Thermoplastic in Construction contracts. Coordinate with District Design for district specific policy.

- If thermo is placed as part of the construction project, then the following pay items should be used:
  - 710 items for work zone markings
  - 710-90 for painted pavement markings final surface (one coat of paint and RPMs)
  - 711 items for thermo (or other "permanent markings")

- DOES NOT include pavement markings used for Maintenance of Traffic. Must continue to
use other 710 items for MOT applications.

TRNS*PORT quantities:
For Category 0200- MOT, continue to use 710 and 102-78 items.
For Category 0300- Signing and Pavement Markings, include either item 710-90, or pay item(s) for final marking materials, as called for in the plans.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Design Forms and Documentation

- sumqrd: Roadway Summary of Quantities Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

### Construction Forms and Documentation

- No additional form required; use plans summary or comp book
- Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

- PPM Chapter
- Trns-port
- Other Standards
- Specifications
- Prep & Doc Manual Chapter(s)

### TRNS*PORT Category (DRAFT FIELD):

0300  Signing and Pavement Markings

### Struct.

710-90  PAINTED PAVEMENT MARKINGS- FINAL SURFACE  LS/LS

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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</table>

### 710-Maint

- PAINTED PAVEMENT MARKINGS
  - Maintenance Contracts Only

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<th>Accuracy</th>
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<td>Refer to item structure and details</td>
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</table>

### Notes

- Maintenance Item: Not Valid for Construction Contracts

### Details

- MAINTENANCE CONTRACTS ONLY
- Additional BOE details pending

### Related Items

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### Design Forms and Documentation

### Construction Forms and Documentation

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Details and Structure: Complete- Items 000 to 1999
TRNS*PORT Category (DRAFT FIELD):

**Struct.**  710-Maint  PAINTED PAVEMENT MARKINGS  Mixed  
**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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**711- 1A-BCD**  THERMOPLASTIC PAVEMENT MARKINGS

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<td>Refer to item structure and details</td>
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</tbody>
</table>

**Notes**

Refer to Roadway Design Bulletin 12-18 for markings at Gore Areas and Urban Islands.

*****

Multi-color pavement marking symbols or route shields: Please coordinate with the State/District Traffic Operations Engineer for the latest criteria and guidance.

**Details**

Effective July 2009: Some districts will be using Thermoplastic in Construction contracts. Coordinate with District Design for district specific policy.

Consists of Thermoplastic used for permanent pavement markings. Thermoplastic may be used on construction projects, in accordance with District specific policy.

Broken (skip) stripes shall consist of a succession of solid stripes.

*********************

Measurement and Payment for Pavement Markings:

Longitudinal stripes (along the direction of traffic) are normally applied by truck; these stripes are paid per NET MILE(solid) or GROSS MILE (skip). Most of these stripes are 6" in width. 3-9 and 10-30 skip stripes are included in the gross mile measurement. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe, and shall include the unpainted intervals, subject to 9-1.3.
It will not include any lengths of unpainted intervals which are greater than 30 ft, per the specifications.

Transverse stripes (across the direction of traffic) are applied by walking with a hand operated machine; these stripes are paid per linear foot. Most of these stripes are 8"-24" wide. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe, and it shall NOT include the unpainted intervals.

Dotted, 2-4 Guideline, and 6-10 Gap Extension Through Cross-over Area stripes are also paid per LF, due to the walking/hand application required. Most of these stripes are 6" wide.

Non-standard stripe applications should be coordinated with the State Roadway Design Office, prior to including notes/items in the plans.

******************************************************
CONTRASTING ALTERNATING SKIP: Use one application of white skip thermoplastic and one application of black skip paint. Payment will be made for the length of white + length of black stripe applied.

WHITE W/BLACK CONTRAST: See 713 items for contrast markings- White stripe with outside contrast black, applied as preformed tape.

REMOVAL ITEM (A=7): The cost for removing any conflicting pavement markings is to be included in the cost of MOT Lump Sum, per Specification 710-4 and 102-5.8. Pay item 710-17 is only to be used for Maintenance projects to remove non-conflicting pavement markings (i.e. removal of paint prior to applying a two-component reactive material; or 711-17- for removal of thermoplastic prior to applying more thermo, because the maximum thickness will be exceeded if existing thermo is not removed).

CHEVRONS/GORE AREAS: Per Design Bulletin 12-18, 12" stripe will be used at interstate gore areas; 8" stripe will be used at urban islands. Refer to the bulletin and design standards for complete details. For payment purposes, these stripes should use the Linear Foot pay items, as they are normally applied by hand at these locations.

SUN PASS LANES: The 3-9 skip, 12" wide, per GM is used to designate a sun pass lane or similar approach to a toll plaza.

YIELD LINE: Per the MUTCD, a yield line is a series of solid white isosceles triangles, used at intersection approaches controlled by a yield sign. It is measured per linear foot, with a length approximately equal to the lane width(s).

PAVEMENT MESSAGES: Each word is paid as one message. For example, "SUN PASS ONLY" will be paid as 3 messages. Other example messages include "YIELD", "MERGE", "LEFT", "TURN", "bicycle person", "bicycle with chevron" and wheelchair/"Universal Symbol of Accessibility". Additional messages shown on index 17346 and 17347. BLUE markings (accessible parking) will be paid per LF or EA. Note: When an arrow is used with "bicycle person", the arrow is paid separately. For the "bicycle with chevron" message, the complete message is a quantity of 1, as shown on the index.

CURB FACE MESSAGE: The complete message, such as "NO PARKING" is paid as one message. Plan details or Tech Specs are needed to show the dimensions and define materials/colors. Tabulate the number of curb face messages in the plans.

ARROWS (Refer to Estimates Bulletin 11-03): Each arrow is paid as a complete marking, regardless of the number of "points" or directions. Single, bi-directional and tri-directional arrows may be subtotaled in the plans, but the pay quantity will be for each complete marking. When used in a two-way left turn lane, the double arrows are counted as two each, since they are two separate locations, approximately 12' apart.
GREEN BIKE LANES: Refer to PPM and 523- pay items for Green Bike Lanes.

******************************

Refer to the Specification for the complete Method of Measurement.

ACCURACY: LF items are measured to the nearest Linear Foot; Mile items are measured to 1/1000th of a mile; and Square Foot items are measured to the nearest square foot.

TRNS*PORT quantities:
For Category 0200- MOT, continue to use 710 and 102-78 items.
For Category 0300- Signing and Pavement Markings, include either item 710-90, or pay item(s) for final marking materials, as called for in the plans.

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<th>Related Items</th>
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<td>tabqsp: Signing &amp; Pavement Marking Tabulation of Quantity Sheet</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
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<tr>
<th>Construction Forms and Documentation</th>
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<td>Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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References
PPM Chapter  Vol 1, 7.2 for material selection and guidance
Trns-port
Other
Standards
Specifications
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0300  Signing and Pavement Markings

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<td>2 (Refurbishment)</td>
<td>3 (Hot Spray)</td>
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<td>4 (Preformed)</td>
<td>5 (Standard- Open graded asphalt surfaces) for 6&quot; and 8&quot; longitudinal stripes; C=1 or 3</td>
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<td>6 (Standard- Other surfaces) for 6&quot; and 8&quot; longitudinal stripes on dense graded asphalt or concrete surfaces; C=1 or 3</td>
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<td>7 (Remove) SF, BCD=blank. NOT FOR MOT marking removal; see details above.</td>
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<td>B=Color</td>
<td>1 (White) C=1-8</td>
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<td>2 (Yellow) C=1-5</td>
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<td>3 (Black) not valid as of 12-15-05; use 710 paint items. See details above.</td>
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<td>4 (Blue) C=2,6</td>
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<td>6 (Multi-color) defined in plans; specs may be needed- DO NOT OPEN</td>
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<td>C= Type of Marking</td>
<td>1 (Solid) NM, longitudinal lines</td>
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<td>2 (Solid) LF, transverse lines; D = 2, 3, 4, 5</td>
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<td>3 (Skip) GM, longitudinal lines; D= 1 for 6&quot; wide 10-30 or 3-9 skip;</td>
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D=3 for 12" wide 3-9 lane drop
5 (Dotted/Guideline/6-10 Gap Extension) LF, D=1
6 (Message) EA Includes Yield Messages and painted curb face, D=0
7 (Arrows) EA ; D=0
8 (Yield Line) LF, D=0

D= Width
0 valid for C=6, 7, or 8
1 (6")
2 (8")
  8" 3-9 Skip stripe not valid after 12-31-11
  8" Solid stripe valid for channelizing line
3 (12")
  12" solid for transverse lines
  12" 3-9 skip for lane drop
4 (18")
5 (24")

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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**711-Maint**

**THERMOPLASTIC PAVEMENT MARKINGS**

**Maintenance Contracts Only**

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**Notes**

Maintenance Item: Not Valid for Construction Contracts

**Details**

MAINTENANCE CONTRACTS ONLY

Details and Structure: Complete- Items 000 to 1999

Page 583 of 769
Additional BOE details pending

### Related Items

#### Required

**Design Forms and Documentation**

**Construction Forms and Documentation**

**References**

PPM Chapter
- Trnsport
- Other Standards
- Specifications
- Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):**

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**Notes**

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

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Notes

Refer to Roadway Design Bulletin 12-18 for markings at Gore Areas and Urban Islands.


Details

Consists of Preformed Tape used for permanent pavement markings; it should be considered for use on concrete surfaces. For MOT (Maintenance of Traffic) operations, “temporary” removable tape should be paid under 102-911- and 102-912- items.

High performance tapes are required for longitudinal markings. Standard tapes are limited to transverse lines, arrows and messages on high speed concrete facilities where tape is being used on the edge marking. If other edge markings are used such as thermoplastic, the transverse markings should be the same material as the edge line. For transverse lines on urban concrete facilities and ramps, preformed thermoplastic markings should be used.

Note: Do not use high performance tape for transverse markings without the approval of the District Design Engineer, due to the increased cost of this material.

Effective January 2012: High Performance Contrast Tape is required for skip pavement markings on all new concrete pavement surfaces, except bridges, on projects with a minimum of 1/2 mile of skip pavement markings. Refer to the Estimates Bulletin 11-07 for additional details.

Broken (skip) stripes shall consist of a succession of solid stripes.

Measurement and Payment for Pavement Markings:

Longitudinal stripes (along the direction of traffic) are normally applied by truck; these stripes are paid per NET MILE (solid) or GROSS MILE (skip). Most of these stripes are 6" in width. 3-9 and 10-30 skip stripes are included in the gross mile measurement. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe, and shall include the unpainted intervals, subject to 9-1.3. It will not include any lengths of unpainted intervals which are greater than 30 ft, per the specifications.

Transverse stripes (across the direction of traffic) are applied by walking with a hand operated machine; these stripes are paid per linear foot. Most of these stripes are 8”-24” wide. Measurement will be taken as the distance from the beginning of the first painted stripe to the end of the last painted stripe, and it shall NOT include the unpainted intervals.

Dotted, 2-4 Guideline, and 6-10 Gap Extension Through Cross-over Area stripes are also paid per LF, due to the walking/hand application required. Most of these stripes are 6” wide.

Non-standard stripe applications should be coordinated with the State Roadway Design Office, prior to including notes/items in the plans.

WHITE W/BLACK CONTRAST: The white with black contrast stripe is normally used as
above for 6" stripe, although the total width is 9" (a 6" white stripe, plus additional black material to improve contrast). Similarly, for 8" contrast applications, the 11" total with stripe is available. Contrast markings also available for arrows, messages, and dotted/guidelines. Effective January 2012: Contrast high performance tape shall be used for skip pavement markings on all new concrete pavement surfaces, except bridges, on projects with a minimum of 1/2 mile of skip pavement markings, per Estimates Bulletin 11-07 and Roadway Design Bulletin 11-12.

CONTRASTING ALTERNATING SKIP: Use one application of white skip thermoplastic and one application of black skip paint. Payment will be made for the length of white + length of black stripe applied.

REMOVAL ITEM (A=7): The cost for removing any conflicting pavement markings is to be included in the cost of MOT Lump Sum, per Specification 710-4 and 102-5.8. Pay item 710-17 is only to be used for Maintenance projects to remove non-conflicting pavement markings (i.e. removal of paint prior to applying a two-component reactive material; or 711-17- for removal of thermoplastic prior to applying more thermo, because the maximum thickness will be exceeded if existing thermo is not removed).

CHEVRONS/GORE AREAS: Per Design Bulletin 12-18, 12" stripe will be used at interstate gore areas; 8" stripe will be used at urban islands. Refer to the bulletin and design standards for complete details. For payment purposes, these stripes should use the Linear Foot pay items, as they are normally applied by hand at these locations.

YIELD LINE: Per the MUTCD, a yield line is a series of solid white isosceles triangles, used at intersection approaches controlled by a yield sign. It is measured per linear foot, with a length approximately equal to the lane width(s).

PAVEMENT MESSAGES: Each word is paid as one message. For example, "SUN PASS ONLY" will be paid as 3 messages. Other example messages include "YIELD", "MERGE", "LEFT", "TURN", "bicycle person", "bicycle with chevron" and wheelchair/"Universal Symbol of Accessibility". Additional messages shown on index 17346 and 17347. BLUE markings (accessible parking) will be paid per LF or EA. Note: When an arrow is used with "bicycle person", the arrow is paid separately. For the "bicycle with chevron" message, the complete message is a quantity of 1, as shown on the index.

CURB FACE MESSAGE: The complete message, such as "NO PARKING" is paid as one message. Plan details or Tech Specs are needed to show the dimensions and define materials/colors. Tabulate the number of curb face messages in the plans.

ARROWS (Refer to Estimates Bulletin 11-03): Each arrow is paid as a complete marking, regardless of the number of "points" or directions. Single, bi-directional and tri-directional arrows may be subtotaled in the plans, but the pay quantity will be for each complete marking. When used in a two-way left turn lane, the double arrows are counted as two each, since they are two separate locations, approximately 12' apart.

GREEN BIKE LANES: Refer to PPM and 523- pay items for Green Bike Lanes.

****************************
Refer to the Specification for the complete Method of Measurement.

ACCURACY: LF items are measured to the nearest Linear Foot; Mile items are measured to 1/1000th of a mile; and Square Foot items are measured to the nearest square foot.

TRNS*PORT quantities:
For Category 0200- MOT, continue to use 710 and 102-78 items.
For Category 0300- Signing and Pavement Markings, include either item 710-90, or pay item(s) for final marking materials, as called for in the plans.
### Related Items

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<th>Recommended</th>
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<td>tabqsp: Signing &amp; Pavement Marking Tabulation of Quantity Sheet</td>
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<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
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<tr>
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<td>Contractor's Certification of Quantities must be submitted. Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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### References

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<th>PPM Chapter</th>
<th>Vol 1, 7.2 for material selection and guidance</th>
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<td>Other Standards</td>
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<td>Prep &amp; Doc Manual Chapter(s)</td>
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### TRNS*PORT Category (DRAFT FIELD): 0300  
Signing and Pavement Markings

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<td>(White w/Black Contrast)</td>
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Details and Structure: Complete- Items 000 to 1999 | Page 587 of 769
5 (18")
6 (24")
7 (11") valid for 8" white/black contrast applications only, B=5
  8" 3-9 Skip stripe not valid after 12-31-11
  8" Solid stripe valid for channelizing line
8 (15") valid for 12" white/black contrast applications only, B=5
  12" solid for transverse lines
  12" 3-9 skip for lane drop

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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**713-Maint**  
**PREFORMED TAPE PAVEMENT MARKINGS**  
**Maintenance Contracts Only**  

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<tr>
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<th><strong>Accuracy</strong></th>
<th><strong>Notes</strong></th>
<th><strong>Details</strong></th>
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**Details and Structure:** Complete- Items 000 to 1999
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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Notes

**MOTORIST AID CALL BOX**

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<th>Unit</th>
<th>Accuracy</th>
<th>Assembly</th>
<th>PlanQuantity?</th>
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</tr>
</thead>
</table>

**Notes**

*Note: Pay items for microwave towers, console, and support equipment have been removed. Contact BOE coordinator to restore these items.*

**Details**

New installations- estimate quantity on basis of 2 per mile (1 per 804 meters) in project length for rural areas.

For projects let through June 2009: Per Index, concrete pad is paid under Class II concrete, Misc.

For projects let July 2009 and later: Concrete pad is included in cost of call box assembly. Refer to updated design standards.

NOTE: Call Box system pay items removed from BOE structure. They may be restored upon approval of responsible Office.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed.
for payment under this item.

Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

Design Forms and Documentation

- COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
  - Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

- No additional form required; use plans summary or comp book
  - Record final quantity on the computation book form.

References

- PPM Chapter
- Trns·port
- Other Standards Index No. 17600
- Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 714- 1-ABC MOTORIST AID CALL BOX AS

A = Operation
1 (Furnish & Install)
3 (Install) BC=00
4 (Modify Existing Roadside Terminal) BC=00
5 (Relocate Existing Roadside Terminal) BC=00
6 (Remove) BC=00
7 (Refurnish) BC=00

B = Installation Type
1 (Roadside Call Terminal)
2 (Call Box Assembly)
3 (Central Terminal)

C = Form
1 (Coded Message, Radio)
2 (Coded Message, Wire)
3 (Voice, Radio)
4 (Voice, Wire)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<tr>
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<tr>
<td>0714 1123</td>
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<td>0714 1400</td>
<td>MOTORIST AID CALL BOX, MODIFY EXISTING ROADSIDE TERMINAL</td>
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<td>0714 1500</td>
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<td>T</td>
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</table>
714-Maint  MOTORIST AID CALL BOX
Maintenance Contracts Only

Unit  Mixed  Accuracy  Refer to item structure and details  PlanQuantity?  ?

Notes  Maintenance Item: Not Valid for Construction Contracts

Details  MAINTENANCE CONTRACTS ONLY
Additional BOE details pending

Related Items  Required  Recommended

Design Forms and Documentation

References  PPM Chapter
Trns-port
Other Standards
Specifications
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):

Struct.  714-Maint  MOTORIST AID CALL BOX
Maintenance Contracts Only  Mixed

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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</table>

715- 1- AB  LIGHTING- CONDUCTORS

Unit  LF; M1  Accuracy  Linear Foot; 1/10 Meter  PlanQuantity?  no

Notes

Includes conductors as per the plans and standard indexes. Design quantity shall be based on the length of single conductor in horizontal measurement.

REMOVE & DISPOSE: Contractor takes ownership of the removed material. Any salvage value may be incorporated into the contractor's bid price.

REMOVE & STOCKPILE: FDOT or maintaining agency retains ownership. Do not use this item, unless specifically requested by District Maintenance or the maintaining agency.

For Plan Detail/Tech Spec items: The Designer should ensure that the description,
materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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<tr>
<td><strong>Design Forms</strong></td>
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<tr>
<td><strong>and</strong></td>
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<tr>
<td><strong>Documentation</strong></td>
<td></td>
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<tr>
<td>tabQt: Lighting Tabulation of Quantity Sheet, or SHPoleData 1 or SHPoleData 2: Light Pole Data (Sheet 1 or Sheet 2)</td>
<td></td>
</tr>
<tr>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
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<tr>
<td><strong>Construction</strong></td>
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</tr>
<tr>
<td><strong>Documentation</strong></td>
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</tr>
<tr>
<td>No additional form required; use plans summary or comp book</td>
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<tr>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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</tr>
<tr>
<td><strong>References</strong></td>
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<td>Trns-port</td>
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<td>Index No. 17500, 17501, 17502</td>
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</table>

**TRNS*PORT Category (DRAFT FIELD):** 0400 Lighting

**Struct.** 715- 1- AB LIGHTING- CONDUCTORS LF

A= Operation
1 (Furnish & Install)
5 (Adjust /Modify)B=0
6 (Remove & Dispose) B=0, Note: Contractor takes ownership.
7 (Remove & Stockpile)B=0, Note: ONLY when requested by maintaining agency
8 (Place out of Service) B=0
B= Size
1 (No. 10 or smaller)
2 (No 8 to No. 6)
3 (No. 4 to No. 2)
4 (No. 1 to No. 0)
5 (No. 1/0 to No. 3/0)
6 (No. 4/0 or larger)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>Obsolete Date</th>
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<tr>
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<td>1/1/2010</td>
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</tbody>
</table>
For highway lighting applications only. Includes conduit, elbows, sweeps, connecting hardware, trenching and backfill as per the plans and standard indexes. Also includes the cost of restoring cut pavement, sidewalks, sod, etc. to its original condition.

Use 'Underground' in locations where the placement of the conduit will not necessitate saw-cutting of pavement. Most conduit placed on new construction projects will be placed underground prior to the placement of pavement, and should be paid for as Underground. Most underground conduit is installed in an open trench. If Directional Bore or similar is required, consider 555- items. Conduit installed with directional bore is included in the 555- items; do not include separate payment under 715- items for the 555- payment length.

Underpavement should be used when it is necessary to saw-cut and backfill the pavement in order to place the conduit, i.e. under EXISTING PAVEMENT.

Surface Mount should be used for conduit installed on external surface of a bridge.

Conduit embedded in a barrier (median, bridge, or other) is included in the barrier pay item, per Section 521 of the specifications.

Additional conduit placed for future use should be detailed in the plans; tabulate quantity as furnished & installed conduit.

MEASUREMENT: measurement is based on the horizontal path between the center of pull boxes, cabinet, or pole, without any allowance for sweeps or vertical distances.

Example Calculation: 4 conduits are placed in a trench from point A to B. The total conduit length is 4x the distance AB. No additional quantity or payment is made for the vertical "up and down" between junction boxes.

Related Items
Required
Recommended

Design Forms and Documentation
tabqtl: Lighting Tabulation of Quantity Sheet, or SHPoleData 1 or SHPoleData 2: Light Pole Data (Sheet 1 or Sheet 2)

Try to locate in plans. Summarize quantities by location on summary sheet in the plans.
Standards
Index No. 17721
Specifications

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

Notes
See details above for furnish item

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>6/30/2013</td>
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Notes
Details
For standard light pole designs; poles listed on Qualified Products List (QPL). If a special foundation is needed, select the pay item based on the pole type; detail the special foundation in the plans, including concrete and steel quantities to be included in light pole payment. No separate payment (concrete, steel, or drilled shaft pay items) for special foundation.

INSTALL: Plans or specs should identify agency furnishing pole, as well as pick-up or delivery instructions. Payment includes foundation and all incidentals for installation/operation.

REMOVE: Plans or specs should identify if contractor is to take ownership of the poles, stockpile, or deliver to a FDOT maintenance yard. Plans/specs to indicate if foundation is to be removed.

RELOCATE: Plans or specs should identify location(s) of poles, as well as compensation: Payment includes removal of old foundation, installation of new foundation, and all incidentals for installation/operation. Detail in plans.
Use C=Custom only when the pole height is non-standard. Plans should clearly identify height for pole(s) included under this item. Remaining design standards apply.

For Special Design (non-standard) light poles, refer to 715-5AB-CDD.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
<thead>
<tr>
<th>Related Items</th>
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<td>and Documentation</td>
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**TRNS*PORT Category (DRAFT FIELD):**

*0400 Lighting*

**Struct. 715- 4-ABC**

**LIGHT POLE COMPLETE**

**EA**

A= Operation
0 (Furnish & Install Standard Pole, Special Foundation) *foundations other than as shown on index 17515; details in plans
1 (Furnish & Install) Standard pole, standard foundation
3 (Install) BC=00, Pole furnished by local agency
4 (Relocate) BC=00, see detail above.
6 (Remove) BC=00

B= Wind Speed (mph)
1 (150)
2 (130)
3 (110)

C= Pole Height (feet)
1 (40)
2 (45)
3 (50)
9 (Custom height)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
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<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
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### 715- 5- AB LUMINAIRE & BRACKET ARM

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<th>Each</th>
<th>PlanQuantity?</th>
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**Notes**
Includes the bracket arm, luminaire with lamp and all necessary mounting hardware as per the plans and indexes.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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</table>

**Design Forms and Documentation**

- tabqlt: Lighting Tabulation of Quantity Sheet, or SHPoleData 1 or SHPoleData 2: Light Pole Data (Sheet 1 or Sheet 2)
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

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<tr>
<th>PPM Chapter</th>
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<td>Prep &amp; Doc Manual Chapter(s)</td>
<td>7, 13</td>
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**TRNS*PORT Category (DRAFT FIELD):** 0400 Lighting

**Struct. 715- 5- AB LUMINAIRE & BRACKET ARM EA**

- A = Operation
  - 1 (Furnish & Install)
  - 3 (Install) B=0
  - 4 (Relocate) B=0
  - 5 (Remove) B=0

- B = Material Type
  - 1 (Aluminum)
  - 2 (Galvanized Steel)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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</table>
LOAD CENTER

Unit: EA  Accuracy: Each  PlanQuantity: no

Notes: Includes all components listed in the Standards and all external and internal conduit and conductors for the service.

Related Items:
- Standards: Index No. 17504
- Specifications

Design Forms and Documentation:
- Tabqt: Lighting Tabulation of Quantity Sheet, or SHPoleData 1 or SHPoleData 2: Light Pole Data (Sheet 1 or Sheet 2)
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation:
- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References:
- PPM Chapter
- Trns-port
- Other
- Standards: Index No. 17504
- Specifications
- Prep & Doc Manual Chapter(s): 7, 13

TRNS*PORT Category (DRAFT FIELD): 0400 Lighting

Struct. 715- 7- AB LOAD CENTER EA

A = Operation
1 (Furnish & Install)
2 (Rework)
3 (Relocate)
4 (Remove)

B = Service
1 (Secondary Voltage)
2 (Primary Voltage)

Notes: The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<thead>
<tr>
<th>Item</th>
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</table>
715- 10- A LIGHT POLE FOUNDATION

**Unit:** EA  **Accuracy:** Each  **PlanQuantity?:** no

**Details**
DO NOT USE WITH LIGHT POLE COMPLETE. Foundation is included in cost of complete pole installation, relocate, or removal.

This item is normally used for maintenance type functions. Includes the foundation and anchor bolts with lock nuts and washers as per the plans and standard indexes. Includes all components listed in the Standards and all external conduit and conductors for the service.

**Related Items**

<table>
<thead>
<tr>
<th><strong>Required</strong></th>
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<tr>
<td>tabqtl: Lighting Tabulation of Quantity Sheet, or SHPoleData 1 or SHPoleData 2: Light Pole Data (Sheet 1 or Sheet 2)</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
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</table>

**Construction Forms and Documentation**
No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**

**Trns-port**

**Other Standards**
Index No. 17501, 17503, 17504  
(Index No. 17503 valid through July 2009)

**Specifications**

**Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0400 Lighting

**Struct.** 715- 10- A LIGHT POLE FOUNDATION EA

A = Operation
2 (Furnish & Install) Do not use with F&I or Relocate light poles. Pole furnished by FDOT or local agency.
3 (Repair)
4 (Straighten Existing Foundation)
5 (Remove) Do not use with light pole removal.

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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715- 11-ABC LUMINAIRE

Details and Structure: Complete- Items 000 to 1999
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### Notes

Includes the luminaire with lamp and necessary mounting hardware as per the plans and standard indexes.

DO NOT USE WITH items 715-4-ABC Light Pole Complete or 715-5AB-CDD Light Pole Complete, Special Design; the luminaire is included with the complete pole.

DO NOT USE WITH NEW SIGN INSTALLATIONS; lighting for new signs is included in the cost of the sign. Refer to Section 700 of the specifications.

### Required Recommended

<table>
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</table>

Locate in plans. Summarize quantities by location on summary sheet in the plans.

### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

PPM Chapter

Trns-port

Other Normally requires SHOP DRAWINGS for Furnish & Install Items

Specifications

Index No. 17500, 17501, 17502, 17505

Prep & Doc Manual Chapter(s) 7, 13

### TRNS*PORT Category (DRAFT FIELD): 0400 Lighting

### Structural

715- 11-ABC LUMINAIRE EA

A = Operation
1 (Furnish & Install)
3 (Install) BC=00
4 (Relocate) BC=00
5 (Remove) BC=00
6 (Repair & Reinstall) BC=00

B = Classification
1 (Roadway) Do not use with "Light Pole, Complete" or "Light Pole, Special Design"
2 (Underdeck)
3 (Sign) for Retrofits only; no separate payment for lighting on new signs

C = Type
1 (Cobra Head)
2 (High Mast)
3 (Pole Top)
4 (Shoe Box)
5 (Wall Mount)
6 (Pendant Hung)
7 (Sign Mount)
8 (Flood)
9 (Special)*

### Notes

*Selected Items require Tech Spec and/or Plan Details.
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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**715-14- AB  LIGHTING- PULL BOX**

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<th>Each</th>
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**Notes**
Valid through June 30, 2013; replaced by 635 items. Refer to Estimates Bulletin 12-xx for additional details.

**Details**
Includes the pull box and cover as per plans and standard indexes.

**Related Items**

**Design Forms and Documentation**
tagqt: Lighting Tabulation of Quantity Sheet, or
SHPoleData 1 or SHPoleData 2: Light Pole Data (Sheet 1 or Sheet 2)
Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**
No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
PPM Chapter

**Other Standards**
Normally requires SHOP DRAWINGS for Furnish & Install Items
Index No. 17500, 17503
(Index No. 17503 valid through July 2009)
Specifications

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0400 Lighting

Struct.  715-14-AB LIGHTING- PULL BOX EA

A = Operation
1 (Furnish & Install)
4 (Relocate)
5 (Remove)
6 (Furnish & Install Cover Only) Maintenance/Repairs
7 (Repair)

B = Placement
1 (Roadside) - Molded
2 (Sidewalk)
3 (Embedded) - Bridge
4 (Surface Mount)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<td>0715 14 64</td>
<td>LIGHTING - PULL BOX, F&amp;I COVER ONLY, SURFACE MOUNT</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0715 14 71</td>
<td>LIGHTING - PULL BOX, REPAIR, ROADSIDE-MOULDED</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

715-16-A LIGHTING- BALLAST

Unit EA  Accuracy Each  PlanQuantity? no

Notes
Details

Related Items | Required | Recommended
--- | --- | ---

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

References

PPM Chapter
Trns·port
Other Standards
Specifications
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):

Struct. 715-16- A LIGHTING- BALLAST EA

A= Operation
5 (Replace)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0715 16 5</td>
<td>LIGHTING- BALLAST, REPLACE</td>
<td>EA</td>
<td>T</td>
<td>7/1/2012</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>715-17- AB</td>
<td>LIGHTING- LAMP</td>
<td>EA</td>
<td>Each</td>
<td>no</td>
</tr>
</tbody>
</table>

Notes

Details

Related Items | Required | Recommended
--- | --- | ---

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

References

PPM Chapter
Trns·port
Other Standards
Specifications

Prep & Doc Manual Chapter(s)

---

**TRNS*PORT Category (DRAFT FIELD):**

Struct.  715-17-AB LIGHTING- LAMP EA

A= Operation
5 (Replace)
B=Type
2 (Mercury Vapor)
3 (Metal Halide)
5 (Low Pressure Sodium)

---

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0715 17 52</td>
<td>LIGHTING - LAMP, REPLACE, MERCURY VAPOR</td>
<td>EA</td>
<td>T</td>
<td>7/1/2012</td>
<td></td>
</tr>
<tr>
<td>0715 17 53</td>
<td>LIGHTING - LAMP, REPLACE, METAL HALIDE</td>
<td>EA</td>
<td>T</td>
<td>7/1/2012</td>
<td></td>
</tr>
<tr>
<td>0715 17 55</td>
<td>LIGHTING - LAMP, REPLACE, LOW PRESSURE SODIUM</td>
<td>EA</td>
<td>T</td>
<td>7/1/2012</td>
<td></td>
</tr>
</tbody>
</table>

---

715-19- A LIGHTING- SURGE PROTECTOR

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
</tr>
</thead>
</table>

**Notes**

**Details**

**Related Items**

Design Forms and Documentation

| tabqtl: Lighting Tabulation of Quantity Sheet, or SHPoleData 1 or SHPoleData 2: Light Pole Data (Sheet 1 or Sheet 2) |
| Locate in plans. Summarize quantities by location on summary sheet in the plans. |

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Trns-port
Other Standards
Specifications

**TRNS*PORT Category (DRAFT FIELD):** 0400 Lighting

Struct.  715-19- A LIGHTING- SURGE PROTECTOR EA

A = 1 (Pole Base)
Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0715 19 1</td>
<td>LIGHTING - SURGE PROTECTOR, POLE BASE</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 715- 19-ABC HIGH MAST LIGHT POLE, COMPLETE

**Unit**: EA  
**Accurary**: Each  
**PlanQuantity?**: no

**Details**

Includes the pole, luminaires with lamps, lowering system, breakers and anchor bolts with lock nuts and washers as indicated in the plans and the Design Standards.

NO SEPARATE PAYMENT for the foundation, drilled shaft excavation, CSL tubes, or concrete pad around pole or pull box; all foundation work is included in the payment for a complete light pole.

**Related Items**

**Required**  
**Recommended**

**Design Forms and Documentation**

- tabqlt: Lighting Tabulation of Quantity Sheet, or  
- SHPoleData 1 or SHPoleData 2: Light Pole Data (Sheet 1 or Sheet 2)

Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book  
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter  
- Trans-Port  
- Other Standards [Index No. 17502](#)  
- Specifications  
- Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD)**: 0400 Lighting

**Struct.** 715- 19-ABC HIGH MAST LIGHT POLE, COMPLETE EA

A = Operation  
1 (Furnish & Install)  
3 (Install) BC=00, Pole furnished by local agency  
6 (Remove) BC=00  
B = Wind Speed (mph)  
1 (150)  
2 (130)  
3 (110)  
C = Pole Height (feet)  
1 (80)  
2 (100)  
3 (120)  
9 (Custom Height)
Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0715 19111</td>
<td>HIGH MAST LIGHT POLE, F&amp;I, WIND SPEED-150 MPH, POLE 80'</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0715 19112</td>
<td>HIGH MAST LIGHT POLE, F&amp;I, WIND SPEED-150 MPH, POLE 100'</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0715 19113</td>
<td>HIGH MAST LIGHT POLE, F&amp;I, WIND SPEED-150 MPH, POLE 120'</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0715 19119</td>
<td>HIGH MAST LIGHT POLE, F&amp;I, WIND SPEED-150 MPH, CUSTOM HEIGHT</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0715 19121</td>
<td>HIGH MAST LIGHT POLE, F&amp;I, WIND SPEED-130 MPH, POLE 80'</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0715 19122</td>
<td>HIGH MAST LIGHT POLE, F&amp;I, WIND SPEED-130 MPH, POLE 100'</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0715 19123</td>
<td>HIGH MAST LIGHT POLE, F&amp;I, WIND SPEED-130 MPH, POLE 120'</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0715 19129</td>
<td>HIGH MAST LIGHT POLE, F&amp;I, WIND SPEED-130 MPH, CUSTOM HEIGHT</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>0715 19132</td>
<td>HIGH MAST LIGHT POLE, F&amp;I, WIND SPEED-110 MPH, POLE 100'</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>0715 19133</td>
<td>HIGH MAST LIGHT POLE COMPLETE, F&amp;I, WIND SPEED-110 MPH, POLE HEIGHT 120'</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>0715 19300</td>
<td>HIGH MAST LIGHT POLE, INSTALL</td>
<td>EA</td>
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<td>1/1/2010</td>
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<tr>
<td>0715 19600</td>
<td>HIGH MAST LIGHT POLE, REMOVE</td>
<td>EA</td>
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<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

715-20- A LIGHTING- SCHEDULED CLEANING

Notes

This is a maintenance operation. Coordinate the use of this item with the District Maintenance Office. Verify correct funding for this pay item.

Details

Related Items

Design Forms and Documentation

Design Forms and Documentation

Construction Forms and Documentation

References

PPM Chapter
Trns-port
Other Standards
Specifications

Prep & Doc Manual Chapter(s) 7, 13
### STRUCT.

<table>
<thead>
<tr>
<th>A =</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Pole Mounted &lt;50')</td>
</tr>
<tr>
<td>2 (Underdeck)</td>
</tr>
<tr>
<td>3 (Sign Luminaire)</td>
</tr>
<tr>
<td>4 (High Mast)</td>
</tr>
</tbody>
</table>

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0715 20 4</td>
<td>LIGHTING - SCHEDULED CLEANING, HIGH MAST</td>
<td>LU</td>
<td>1/1/2010</td>
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</table>

### STRUCT.

<table>
<thead>
<tr>
<th>715-22- LIGHTING- GROUND ROD (Pre-event, Push Button, and Maintenance Contracts Only)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit</strong></td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
</tr>
<tr>
<td><strong>PlanQuantity?</strong></td>
</tr>
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</table>

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0715 22</td>
<td>LIGHTING - GROUND ROD</td>
<td>EA</td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>
### 715-24- A LIGHTING- FUSE- POLE BASE (Pre-event, Push Button, and Maintenance Contracts Only)

<table>
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<tr>
<th>Notes</th>
<th>Details</th>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 715-26- A QUICK DISCONNECT PLUG

<table>
<thead>
<tr>
<th>Notes</th>
<th>Details</th>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>tabqtl: Lighting Tabulation of Quantity Sheet, or SHPoleData 1 or SHPoleData 2: Light Pole Data (Sheet 1 or Sheet 2)</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter
Trns-port
Other
Standards
Specifications
Prep & Doc Manual Chapter(s)  7, 13

**TRNS*PORT Category (DRAFT FIELD):**  0400  Lighting

**Struct.**  715- 26-  A  QUICK DISCONNECT PLUG  EA

A =MAINTENANCE CONTRACTS ONLY
1 (Switch Boxing - For Sign Structure)
2 (Plug Pole Base - High Mast)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0715 26 1</td>
<td>QUICK DISCONNECT PLUG, SWITCH BOXING FOR SIGN</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0715 26 2</td>
<td>QUICK DISCONNECT PLUG, PLUG POLE BASE, HIGH MAST</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**715- 30- AA**  GROUP RELAMPING (LIGHTING)

**Notes**

**Details**

**Related Items**

**Design Forms and Documentation**

tabqlt: Lighting Tabulation of Quantity Sheet, or
SHPoleData 1 or SHPoleData 2: Light Pole Data (Sheet 1 or Sheet 2)
Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter
Trns-port
Other
Standards
Specifications
Prep & Doc Manual Chapter(s)
Struct.  715- 30- AA  GROUP RELAMPING (LIGHTING)  LU

AA =
1 (Mercury Vapor)
2 (High Pressure Sodium)
3 (Metal Halide)
4 (Bridge Mounted HPS)
5 (High Mast/HPS)
6
7
8 (Low Pressure Sodium)
9 (Fluorescent)
10 (Incandescent)
11 (State Furnished Lamps)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0715 30 2</td>
<td>LIGHTING - GROUP RELAMPING, HIGH PRESSURE SODIUM</td>
<td>LU</td>
<td>1/1/2010</td>
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<td></td>
</tr>
<tr>
<td>0715 30 5</td>
<td>GROUP RELAMPING, LIGHTING, HIGH MAST/HPS</td>
<td>LU</td>
<td>1/1/2010</td>
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<td></td>
</tr>
</tbody>
</table>

715- 31- AA  LIGHTING - ROUTINE MAINTENANCE

Unit  LU  Accuracy  Luminaire  PlanQuantity?  no

Notes

Details

Related Items

Required  Recommended

Design Forms and Documentation

tabqlt: Lighting Tabulation of Quantity Sheet, or
SHPoleData 1 or SHPoleData 2: Light Pole Data (Sheet 1 or Sheet 2)
Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter
Trns-port
Other Standards
Specifications
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):  0400  Lighting

Struct.  715- 31- AA  LIGHTING - ROUTINE MAINTENANCE  LU

AA =
1 (Shoulder, Single Arm)
2 (Shoulder, Double Arm)
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0715 31 1</td>
<td>ROUTINE LIGHTING MAINTAINANCE, SHOULDER, SINGLE ARM</td>
<td>LU</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0715 31 6</td>
<td>ROUTINE LIGHTING MAINTAINANCE, UNDERDECK</td>
<td>LU</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

#### 715-32- LIGHTING- DIAGNOSTIC WORK (Pre-event, Push Button, and Maintenance Contracts Only)

- **Unit**: LO
- **Accuracy**: Location
- **Plan Quantity?**: no

**Notes**

**Details**

**Related Items**

- **Required**: COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

**Design Forms and Documentation**

- **LOC**: LOC
- **Location**: Location
- **Plan Quantity?**: no

**Construction Forms and Documentation**

**References**

- **PPM Chapter**
- **Trnsport**
- **Other**
- **Standards**
- **Specifications**
- **Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):**

**Struct. 715-32- LIGHTING- DIAGNOSTIC WORK (Pre-event, Push Button, and Maintenance Contracts Only)**

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0715 32</td>
<td>LIGHTING- DIAGNOSTIC WORK</td>
<td>LO</td>
<td>T</td>
<td>7/1/2012</td>
<td></td>
</tr>
</tbody>
</table>
### 715-36-AB  LIGHT POLE FRANGIBLE BASE

| Unit | EA | Accuracy | Each | PlanQuantity? | no |

#### Notes

**Details**

DO NOT use with Light Pole Complete. Frangible base is included with light pole complete.

Normally used for maintenance activities. Includes the frangible base, attachments, bolts and washers as per the plans and standard indexes.

#### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

#### Design Forms and Documentation

| tabqt: Lighting Tabulation of Quantity Sheet, or SHPoleData 1 or SHPoleData 2: Light Pole Data (Sheet 1 or Sheet 2) |
| Locate in plans. Summarize quantities by location on summary sheet in the plans. |

#### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

#### References

PPM Chapter

Trns-port

Other Standards | Index No. 17501 |

Specifications

Prep & Doc Manual Chapter(s) | 7, 13 |

---

**TRNS*PORT Category (DRAFT FIELD):** 0400 Lighting

**Struct.** 715-36-AB  LIGHT POLE FRANGIBLE BASE  EA

A = Operation
1 (Furnish & Install)
4 (Remove)
5 (Leveling In-Place Pole)

B = Type
1 (Shoe Base)
2 (Transformer Base)
3 (Frangible Insert)
4 (Door Assembly)

#### Notes

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0715 36 12</td>
<td>LIGHT POLE, FRANGIBLE BASE, F&amp;I, TRANSFORMER BASE</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0715 36 14</td>
<td>LIGHT POLE, FRANGIBLE BASE, F&amp;I, DOOR ASSEMBLY</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0715 36 42</td>
<td>LIGHT POLE, FRANGIBLE BASE, REMOVE, TRANSFORMER BASE</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

---

### 715-37- A  LIGHTING MAINTENANCE/REHAB- POLE PHOTO ELECTRIC CONTROL ASSEMBLY

| Unit | EA | Accuracy | Each | PlanQuantity? | no |

#### Details and Structure: Complete- Items 000 to 1999
Notes
For maintenance/rehab work only; payment for photo electric controller shown on index 17504 is included with payment for load center, pay item 715-7-AB.

Includes the photo electric control, transformer, conduit and conductors as per the plans and standard indexes.

Related Items
<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Design Forms and Documentation
- tabqlt: Lighting Tabulation of Quantity Sheet, or SHPoleData 1 or SHPoleData 2: Light Pole Data (Sheet 1 or Sheet 2)
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation
- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
- PPM Chapter
- Trns-port
- Other Standards
- Normally requires SHOP DRAWINGS for Item 715- 37- 1
- Index No. 17504

Prep & Doc Manual Chapter(s)
- 7, 13

TRNS*PORT Category (DRAFT FIELD): 0400 Lighting

Struct. 715- 37- A LIGHTING MAINTENANCE/REHAB- POLE PHOTO ELECTRIC CONTROL ASSEMBLY EA

A = Operation
1 (Furnish & Install)
3 (Install)
4 (Remove)
5 (Relocate)

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
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<tr>
<td>0715 37 1</td>
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Notes
Intended for lighting system within box girder structures. Coordinate the use of this item with the Mechanical/Electrical Section of the State Structures Office. All work must be detailed in the plans/specifications, including a tabulation of materials. Refer to Index and Instructions for Structures Related Design Standards.

LS System: Includes all work & materials tabulated in the plans, including conduit and wiring (within the box girder), power distribution, switches, light fixtures, etc.
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Required and Recommended

<table>
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<tr>
<th>Design Forms and Documentation</th>
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</thead>
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<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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### References

**Prep & Doc Manual Chapter(s)**

*TRNS*PORT Category (DRAFT FIELD): 0400 Lighting

**Struct.** 715-50- LIGHTING- INSIDE BOX GIRDER LS/LS

**Notes**

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

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#### 715-500- A LIGHT POLE CABLE DISTRIBUTION SYSTEM

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</thead>
<tbody>
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**Notes**

Includes the surge protector, fuse holders with fuses, waterproof connectors and waterproof wiring connection to the luminaire. Refer to Section 992 of the Specifications for details.

### Related Items

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<tr>
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**Prep & Doc Manual Chapter(s)**

*TRNS*PORT Category (DRAFT FIELD): 0400 Lighting

**Struct.** 715-50- LIGHTING- INSIDE BOX GIRDER LS/LS

**Notes**

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#### 715-500- A LIGHT POLE CABLE DISTRIBUTION SYSTEM

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### References

PPM Chapter
- Trns-port
- Other
- Standards
- Specifications

Prep & Doc Manual Chapter(s) 7, 13

### TRNS*PORT Category (DRAFT FIELD):

0400 Lighting

### Struct.

715-500- A LIGHT POLE CABLE DISTRIBUTION SYSTEM EA

- **A** = Type
- **1** = (Conventional)
- **2** = (High Mast)
- **3** = (Wall Mounted)

### Notes

**The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.**

<table>
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<tr>
<th>Item</th>
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### 715-5AB-CDD LIGHT POLE COMPLETE, SPECIAL DESIGN

| Unit | EA | Accuracy | PlanQuantity? | no |

### Notes

**Details**

Used for Specially Designed Poles, including decorative or non-standard aluminum.

Requires shop drawings.

Includes the pole, internal vibration damping device, bracket arm, luminaire with lamp, anchor bolts with lock nuts and washers, frangible base and foundation.

For special foundations, select pay item based on pole type; detail foundation in the plans.

For standard aluminum poles, use item 715-4-ABC.

FURNISH (A=2): Do not furnish additional light fixtures to DOT maintenance yards using construction funds. When requested, and funded by the maintaining agency, the furnish only item may be used. Plans or specifications must detail instructions for delivery of item(s) to the maintaining agency.

Effective 7/2010 letting:

For Median Barrier Mounted Aluminum, refer to Index 17515. Do not use "Special Design" pay item for standard poles included on design standard; use pay item 715-4- for Light Pole Complete, for all standard poles.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

- **Required**
- **Recommended**
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<tbody>
<tr>
<td>and</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
<tr>
<td>Documentation</td>
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| Construction | No additional form required; use plans summary or comp book                                             |
| Forms and    | Record final quantity on the tabulation sheet (plans) or computation form (comp book).                   |
| Documentation|                                                                                                          |

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<tr>
<td>Other</td>
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<tr>
<td>Standards</td>
<td>Index No. 17500, 17501, 17503 (Index No. 17503 valid through July 2009)</td>
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| Specifications| T: Plan Details and/or Technical Specifications required                                                  |

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<thead>
<tr>
<th>Prep &amp; Doc Manual Chapter(s)</th>
<th>7, 13</th>
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<th>LIGHT POLE COMPLETE, SPECIAL DESIGN EA</th>
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<tr>
<td>3</td>
<td>(Install)</td>
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</tr>
<tr>
<td>4</td>
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<tr>
<td>5</td>
<td>(Remove) B-CDD = 0-000</td>
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<tr>
<td>6</td>
<td>(Repair &amp; Reinstall) B-CDD = 0-000</td>
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<td>7</td>
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<td>B</td>
<td>= No. Arms &amp; Location</td>
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<tr>
<td>1</td>
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<tr>
<td>2</td>
<td>(Double Arm Shoulder Mount)</td>
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<tr>
<td>3</td>
<td>(Single Arm Wall Mount) Do not used for designs shown on Index 17515.</td>
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<tr>
<td>4</td>
<td>(Double Arm Wall Mount) Effective 7/2010, do NOT use for poles covered by Index 17515, Median Barrier Wall Mount.</td>
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<tr>
<td>5</td>
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<td>6</td>
<td>(Pole Top Mount)</td>
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<td>(Double Arm Bridge Mount)</td>
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<td>(Double Arm, Pole Top Mount)</td>
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| DD = Mounting Height (Open In Five Foot Increments |

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Details and Structure: Complete- Items 000 to 1999
<table>
<thead>
<tr>
<th>Item</th>
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### 715-Maint LIGHTING- MAINTENANCE

**Maintenance Contracts Only**

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#### Notes

**Maintenance Item: Not Valid for Construction Contracts**

#### Details

MAINTENANCE CONTRACTS ONLY
Additional BOE details pending

#### Design Forms and Documentation

#### Related Items

**Required**

**Recommended**

#### Construction Forms and Documentation

#### References

PPM Chapter
Trns·port
Other Standards
Specifications
Prep & Doc Manual Chapter(s)

#### TRNS*PORT Category (DRAFT FIELD):

**Struct.** 715-Maint LIGHTING- MAINTENANCE Mixed

**Maintenance Contracts Only**

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### Topic No. 600-000-002
Basis of Estimates

**2012 Edition**

January 22, 2013

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### 721-70-AB
PASSENGER SHELTER- ALUMINUM, PREFABRICATED

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**Notes**
Valid through 6-30-2012; replaced by 751-35-AB items.

**Details**
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**
- Required
- Recommended

**Design Forms and Documentation**
- COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
- Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**
- No additional form required; use plans summary or comp book
- Record final quantity on the computation book form.

**References**
- PPM Chapter
- Trns-port

---

Details and Structure: Complete- Items 000 to 1999
Other Standards Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13

TRNS*PORT Category (DRAFT FIELD): 0800 Architectural

Struct. 721-70-AB PASSENGER SHELTER-ALUMINUM, PREFABRICATED EA

A = 1 (Aluminum)
B = 1 (Pre-Fabricated)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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721-74- A TRASH RECEPTACLE

Unit EA Accuracy Each Plan Quantity? no

Notes Valid through 6-30-2012; replaced by 751-35-AB items.

Details For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items Required Recommended

Design Forms and Documentation COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

References PPM Chapter
Trns-port
Other Standards Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13
A = Type
1 (Pre-Fabricated)
2 (Precast)

Notes

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### 721-75- A BENCHES

**Unit** EA  
**Accuracy** Each  
**PlanQuantity?** yes

**Notes**
Valid through 6-30-2012; replaced by 751-35-AB items.

**Details**
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**
**Required**  
**Recommended**

**Design Forms and Documentation**
COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**
No additional form required; use plans summary or comp book
Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**
PPM Chapter  
Trns-port  
Other Standards  
Specifications

T: Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0800 Architectural

### Struct. 721-75-A BENCHES EA

A = Type  
1 (Pre-Fabricated)  
2 (Precast)

**Notes**

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### 721-77- BICYCLE PARKING RACK

Details and Structure: Complete- Items 000 to 1999
Valid through 6-30-2012; replaced by 751-35-AB items.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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Valid through 6-30-2012; replaced by 751-35-AB items.

May include pedestrian banners, drinking fountains, kiosk, and other items, as detailed in the plans. Tabulation summary required on all projects.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

sumqr: Roadway Summary of Quantities Sheet

Locate in plans. Summarize quantities by location on summary sheet in the plans.
No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0721 80</td>
<td>PEDESTRIAN PLAZA</td>
<td>LS</td>
<td>T</td>
<td>1/1/2012</td>
<td></td>
</tr>
</tbody>
</table>

**730-76-ABB STEEL CASING, OPEN TRENCH**

**Notes**

Unit: LF; M1

**Accuracy**

Linear Foot; 1/10 Meter

Plan Quantity? no

**Details**

a=1, 4, 5 valid for open cut trench applications only. For Jack & Bore, Directional Bore, and/or vibratory plowing, refer to Items 555, 556, and/or 557.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**

COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each

**Recommended**

Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter

Trns-port

Other

Standards

Specifications
Struct. 730-76-ABB  STEEL CASING, OPEN TRENCH  LF

A = Operation
1 (Furnish & Install)

BB = Size
01 (2”)
02 (3”)
03 (4”)
04 (6”)
05 (8”)
06 (10”)
07 (12”)
08 (14”)
09 (16”)
10 (18”)
11 (20”)
12 (22”)
13 (24”)
14 (26”)
15 (28”)
16 (30”)
17 (32”)
18 (34”)
19 (36”)
20 (38”)
21 (40”)
22 (42”)
23 (48”)
24 (54”)
25 (60”)
26 (66”)
27 (64”)
28 (78”)
29 (84”)
30 (72”)
31 (90”)
32 (108”)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0730 76101</td>
<td>STEEL CASING, OPEN TRENCH, F&amp;I, 2”</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>0730 76103</td>
<td>STEEL CASING, OPEN TRENCH, F&amp;I, 4”</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0730 76104</td>
<td>STEEL CASING, OPEN TRENCH, F&amp;I, 6”</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>0730 76105</td>
<td>STEEL CASING, OPEN TRENCH, F&amp;I, 8”</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0730 76107</td>
<td>STEEL CASING, OPEN TRENCH, F&amp;I, 12”</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0730 76108</td>
<td>STEEL CASING, OPEN TRENCH, F&amp;I, 14”</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0730 76109</td>
<td>STEEL CASING, OPEN TRENCH, F&amp;I, 16”</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0730 76110</td>
<td>STEEL CASING, OPEN TRENCH, F&amp;I, 18”</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>
IRRIGATION WELL

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>PW; EA; LF; M1</td>
<td>Per Well; Each; Linear Foot; 1/10 Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

Irrigation well for roadway, architectural, or landscaping applications. Designer should determine if permits are required by local and/or state agencies. For drainage deep wells, see 444- pay items and index 288.

When used for landscape applications, load pay item in landscape category. For Roadway applications, load item in roadway category.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Final Measure:
For Per Each/Well Items: Final tabulation of quantities must be recorded on proper form in computation book by location.
For Length Measurements: Record final measurements on proper form in computation book or field book. When measurements have been recorded in the field book, transfer final quantities to computation book.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Details Above</td>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
</tr>
<tr>
<td>No additional form required; use plans summary or comp book</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
</table>

**References**

- PPM Chapter
- Trns-port
- Other Standards
- Specifications
Basis of Estimates
2012 Edition
January 22, 2013

Struct. 730- 83- AB IRRIGATION WELL PW; EA; LF;

A = Depth
blank (up to 250') per well
1 (250' and greater) per LF
A =
4 (4" Casing)
6 (6" Casing)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0730</td>
<td>WELL, TO 250' DEPTH, 4&quot; CASING</td>
<td>PW</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0730</td>
<td>WELL, TO 250' DEPTH, 6&quot; CASING</td>
<td>PW</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

730- 88- PUMPING SYSTEM- IRRIGATION WELL

Unit EA Accuracy Each PlanQuantity? no

Notes

Details

Irrigation well for roadway, architectural, or landscaping applications. Designer should determine if permits are required by local and/or state agencies. For drainage deep wells, see 444- pay items and index 288.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required Recommended

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

References

PPM Chapter
Trns.port
Other Standards
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 6, 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 or other Roadway or other- see details
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<td>0730 88</td>
<td>PUMPING SYSTEM</td>
<td>EA</td>
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<td>1/1/2010</td>
<td></td>
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</tbody>
</table>

#### 735-74- AA TOLL PLAZA

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LS/LS</td>
<td>Lump Sum</td>
<td>yes</td>
</tr>
</tbody>
</table>

**Notes**

Tabulation summary required on all projects. See 735-88-AA for modifications to existing toll plazas.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Design Forms and Documentation**

sumqr: Roadway Summary of Quantities Sheet

Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter

Trns-port

Other Standards

Specifications

Normally requires SHOP DRAWINGS

**TRNS*PORT Category (DRAFT FIELD):** 0800 Architectural

**Struct.** 735-74- AA TOLL PLAZA LS/LS

AA =
blank (single location)
1 (Location 1)
2 (Location 2)
3 (Location 3)
4 (Location 4)
5 (Location 5)
6 (Location 6)
7 (Location 7)
8 (Location 8)
9 (Location 9)
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0735 74</td>
<td>TOLL PLAZA, SINGLE LOCATION</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0735 74 1</td>
<td>TOLL PLAZA, LOCATION 1</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0735 74 2</td>
<td>TOLL PLAZA, LOCATION 2</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0735 74 3</td>
<td>TOLL PLAZA, LOCATION 3</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0735 74 4</td>
<td>TOLL PLAZA, LOCATION 4</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0735 74 5</td>
<td>TOLL PLAZA, LOCATION 5</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0735 74 6</td>
<td>TOLL PLAZA, LOCATION 6</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0735 74 7</td>
<td>TOLL PLAZA, LOCATION 7</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0735 74 8</td>
<td>TOLL PLAZA, LOCATION 8</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0735 74 9</td>
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<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0735 74 10</td>
<td>TOLL PLAZA, LOCATION 10</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0735 74 11</td>
<td>TOLL PLAZA, LOCATION 11</td>
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<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0735 74 12</td>
<td>TOLL PLAZA, LOCATION 12</td>
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<td>T</td>
<td>1/1/2010</td>
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</tbody>
</table>

### 735-79- SERVICE PLAZA- SEWAGE AND WATER MODIFICATIONS

<table>
<thead>
<tr>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>Details</td>
</tr>
<tr>
<td>Required</td>
</tr>
<tr>
<td>Design Forms and Documentation</td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
</tr>
<tr>
<td>References</td>
</tr>
</tbody>
</table>

**Notes**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Design Forms and Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>sumqrd: Roadway Summary of Quantities Sheet</td>
</tr>
<tr>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Construction Forms and Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>No additional form required; use plans summary or comp book</td>
</tr>
<tr>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPM Chapter</td>
</tr>
<tr>
<td>Trns-port</td>
</tr>
<tr>
<td>Other Standards Specifications</td>
</tr>
</tbody>
</table>

**T**: Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**: 6, 7, 13

**TRNS*PORT Category (DRAFT FIELD)**: 0800 Architectural

Details and Structure: Complete- Items 000 to 1999

Page 635 of 769
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0735</td>
<td>SERVICE PLAZA- SEWAGE AND WATER MODIFICATIONS</td>
<td>LS</td>
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</tbody>
</table>

**Notes**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

Required: sumqrde: Roadway Summary of Quantities Sheet

Recommended: Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter
Trns-port
Other Standards
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)  6, 7, 13

**Struct.** 735- 80- SERVICE PLAZA RENOVATION  LS/LS

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**Notes**

Valid for Turnpike/Service Plaza use only.

Detail the size, depth, and any material requirements in the plans or specifications. If structure is to be similar to drainage structure, consider reference to Section 425 of the

Details and Structure: Complete- Items 000 to 1999
specifications.
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
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</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Construction Forms and Documentation</th>
<th>No additional form required; use plans summary or comp book</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Record final quantity on the computation book form.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>References</th>
<th>PPM Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Trns-port</td>
</tr>
<tr>
<td></td>
<td>Other</td>
</tr>
<tr>
<td>Standards</td>
<td>Specifications</td>
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</tbody>
</table>

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0800 Architectural

Struct. 735-81- SERVICE/TOLL PLAZA- UNDERGROUND STRUCTURE EA

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

735-82- A TOLL PLAZA CANOPY

<table>
<thead>
<tr>
<th>Unit</th>
<th>SF; M²</th>
<th>Accuracy</th>
<th>Square Foot; 1/10 Square Meter</th>
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</thead>
<tbody>
<tr>
<td>PlanQuantity?</td>
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<td></td>
<td></td>
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</tbody>
</table>

Notes

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-01: Area Computation and Continuation</td>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Construction Forms and Documentation</th>
<th>No additional form required; use plans summary or comp book</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.</td>
</tr>
</tbody>
</table>

Details and Structure: Complete- Items 000 to 1999
735-82- A  TOLL PLAZA CANOPY

A =
1 (Concrete)
2 (Aluminum)
3 (Steel)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

735-84- A  TOLL PLAZA ISLAND

Unit  EA  Accuracy  Each  PlanQuantity?  no

Notes

Details

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required  Recommended

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

References

PPM Chapter  Trns-port  Other  Standards  Specifications

Normally requires SHOP DRAWINGS

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)  7, 13

TRNS*PORT Category (DRAFT FIELD):  0800  Architectural
**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0735</td>
<td>TOLL PLAZA ISLAND, REMOVE</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 735- 88- AA  TOLL PLAZA MODIFY EXISTING

**Notes**

**Details**

For use on Turnpike and other toll roads. Tabulation summary required on all projects. For NEW plaza construction, see item 735-74-AA.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>sumqrd: Roadway Summary of Quantities Sheet</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
</tbody>
</table>

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

- PPM Chapter
- Trns-port
- Other Standards
- Specifications

T: Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0800 Architectural

**Struct.** 735- 88- AA  TOLL PLAZA MODIFY EXISTING  LS/LS

AA = blank (single location)
1 (Location 1)
2 (Location 2)
3 (Location 3)
4 (Location 4)
5 (Location 5)
6 (Location 6)
7 (Location 7)
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0735 88</td>
<td>TOLL PLAZA MODIFY EXISTING</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0735 88 1</td>
<td>TOLL PLAZA MODIFY EXISTING, LOCATION 1</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0735 88 2</td>
<td>TOLL PLAZA MODIFY EXISTING, LOCATION 2</td>
<td>LS</td>
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**735- 89-**  
REST AREA/SERVICE PLAZA- AUTOMATIC WINDSHIELD WASHER

<table>
<thead>
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<tr>
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<td>Each</td>
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<td>PlanQuantity?</td>
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### Notes

- **Details**: For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
<thead>
<tr>
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<th>Recommended</th>
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<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
</tr>
<tr>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
<td></td>
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</tbody>
</table>

### Construction Forms and Documentation

- No additional form required; use plans summary or comp book
- Record final quantity on the computation book form.

### References

- **PPM Chapter**
- **Trns-port**
- **Other Standards**
- **Specifications**
  
  
  T: Plan Details and/or Technical Specifications required

### Prep & Doc Manual Chapter(s)

- 7, 13

### TRNS*PORT Category (DRAFT FIELD):

- 0200 Roadway

### Struct.

- 735- 89-  
  REST AREA/SERVICE PLAZA- AUTOMATIC WINDSHIELD WASHER  
  EA

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### 735-Maint TOLL PLAZA Maintenance Contracts Only

<table>
<thead>
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#### Design Forms and Documentation

#### Construction Forms and Documentation

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<td>Other</td>
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<td>Standards</td>
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<td>Specifications</td>
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<td>Prep &amp; Doc Manual Chapter(s)</td>
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**TRNS**-PORT Category (DRAFT FIELD):  

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>E735 74 23</td>
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<td>E735 74 26</td>
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### 737- 70- A UTILITY LOCATE

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<th>Notes</th>
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<td>SUE Level A, as defined in 556, FS (See inside front cover of 2010 UAM.) Used to &quot;dig and expose&quot; to determine exact location in 3 dimensions.</td>
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**Details and Structure:** Complete- Items 000 to 1999
This item is intended to be used for verification of utility locations designated in the plans, when necessary to specifically identify a location. This item is not to be used for incidental work covered by 7-11 of the specifications. Refer to the Utility Accommodation Manual and PPM for additional guidance.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
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### Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

### References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Vol 1, Ch 5</th>
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**Notes**

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### Struct.

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### Related Items

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The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 737-Maint

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Details and Structure: Complete- Items 000 to 1999
### Design Forms and Documentation

### Construction Forms and Documentation

#### References

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<td>Specifications</td>
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#### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>UTILITY LOCATE (DOT OWNED) (UNDERGROUND)</td>
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### 740- 71-ABC WALL

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#### Notes

**Details**

**Related Items**

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<tr>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
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**Construction Forms and Documentation**

| No additional form required; use plans summary or comp book |
| Record final quantity on the tabulation sheet (plans) or computation form (comp book). |

#### References

<table>
<thead>
<tr>
<th>Design Forms and Documentation</th>
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<tr>
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<td>Trns-port</td>
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<tr>
<td>Normally requires SHOP DRAWINGS</td>
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<td>Specifications</td>
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<tr>
<td>Prep &amp; Doc Manual Chapter(s)</td>
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</table>
**TRNS*PORT Category (DRAFT FIELD):** 0800 Architectural

**Struct.** 740-71-ABC WALL LF

A = Operation
1 (Furnish & Install)
3 (Install)
4 (Removal)
5 (Rehab) LS, BC=00

B = Material
1 (Drywall)
2 (Panel Wall)
3 (Block Wall)
4 (Other)

C = Height
1 (8')
2 (10')
3 (12')
4 (Other)

---

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tr>
<td>0740 71500</td>
<td>WALL, REHABILITATION</td>
<td>LS</td>
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</table>

**741-1-AB** TRAFFIC MONITORING SITE VEHICLE SENSOR- NON-WEIGHT APPLICATIONS

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
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**Notes**

Effective with the July 2012 letting. Replaces 741-70- pay items.

**Details**

Valid for use with Traffic Monitoring Systems only. Refer to the specification for additional details.

**Related Items**

Required Recommended

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

**References**

PPM Chapter
Trns-port
Other Standards Index No. 17900
Specifications
Prep & Doc Manual Chapter(s)

---

**TRNS*PORT Category (DRAFT FIELD):**

**Struct.** 741-1-AB TRAFFIC MONITORING SITE VEHICLE SENSOR- NON-WEIGHT APPLICATIONS

---
A = Operation
1 (Furnish & Install)
3 (Install)

B = Vehicle Sensor Type
1 (Type I – Axle Sensor, In-Road)
2 (Type II – Wireless, Off-Road)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0741 1 11</td>
<td>TRAFFIC MONITORING SITE VEHICLE SENSOR-NON-WEIGHT, FURNISH &amp; INSTALL, TYPE I AXLE SENSOR- IN ROAD</td>
<td>EA</td>
<td>7/1/2012</td>
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<tr>
<td>0741 1 12</td>
<td>TRAFFIC MONITORING SITE VEHICLE SENSOR-NON-WEIGHT, FURNISH &amp; INSTALL, TYPE II- WIRELESS, OFF ROAD</td>
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<td>7/1/2012</td>
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741- 70-ABC  TRAFFIC MONITORING SITE, VEHICLE SENSOR- CLASS II

<table>
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<tr>
<th>Unit</th>
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<td>Notes</td>
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<td>Details</td>
<td>Refer to Specifications for use and application.</td>
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<td>Related Items</td>
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<td>Recommended</td>
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<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
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<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
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</table>

| Construction Forms and Documentation | No additional form required; use plans summary or comp book |
| |
| References | PPM Chapter |
| | Trns-port |
| | Other Standards | Index No. 17900 |
| | Specifications |
| | Prep & Doc Manual Chapter(s) | 7, 13 |

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 741- 70-ABC  TRAFFIC MONITORING SITE, VEHICLE SENSOR- CLASS II

A = Operation
1 (Furnish & Install)
3 (Install)
4 (Modify)

B = Vehicle Sensor Type
1 (Type I)
2 (Type II)
C = Sensor Length
1 (Half Lane Width)
2 (Full Lane Width)
3 (Non-Intrusive)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>742- 1- A</th>
<th>TRAFFIC MONITORING SITE, WEIGH-IN-MOTION ELECTRONICS UNIT</th>
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<tbody>
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<td>Unit</td>
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<tr>
<td>Notes</td>
<td>Valid for use with Traffic Monitoring Systems only.</td>
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<td>Details</td>
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<td>Related Items</td>
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<tr>
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<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
</tr>
<tr>
<td>References</td>
<td>PPM Chapter</td>
</tr>
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<td>Trns-port</td>
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<tr>
<td>Other Standards</td>
<td>Index No. 17900</td>
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<td>Specifications</td>
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<td>T: Plan Details and/or Technical Specifications required</td>
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Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0200 or other       Roadway or other- see details

Struct. 742- 1- A TRAFFIC MONITORING SITE, WEIGH-IN-MOTION ELECTRONICS UNIT

A = Operation
1 (Furnish & Install)
3 (Install)
4 (Remove)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<th>Unit</th>
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<td>TMS WEIGH- IN- MOTION, ELECTRONICS UNIT, F&amp;I</td>
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Details and Structure: Complete- Items 000 to 1999
**742- 2- AB TRAFFIC MONITORING SITE, WEIGH-IN-MOTION ELECTRONICS SENSORS**

| Unit | EA | Accuracy | Each | PlanQuantity? | no |

**Notes**

Valid for use with Traffic Monitoring Systems only.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

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<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
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| **Construction Forms and Documentation** | No additional form required; use plans summary or comp book |
| Record final quantity on the computation book form. |

**References**

PPM Chapter
Trns-port
Other
Specifications
Index No. 17900

**T**: Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0200 or other Roadway or other- see details

**Struct.** 742- 2- AB TRAFFIC MONITORING SITE, WEIGH-IN-MOTION ELECTRONICS SENSORS EA

A = Operation
1 (Furnish & Install)
3 (Install)
4 (Remove)

B = Weight Sensor Type
1 (Bending Plate)
2 (Piezoelectric/ Quartz Piezoelectric)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
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<td>TMS WEIGHT- IN- MOTION, ELECTRONICS SENSORS,F&amp;I BENDING PLATE</td>
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**743- 70- AB TRAFFIC MONITORING SITE, VEHICLE SPEED/CLASSIFICATION UNIT**

Details and Structure: Complete- Items 000 to 1999
Notes

Details: Refer to Specifications for use and application.

Related Items

Required Recommended

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

References

PPM Chapter

Trns-port

Other

Standards: Index No. 17900

Specifications

Prep & Doc Manual Chapter(s): 7, 13

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 743-70-AB TRAFFIC MONITORING SITE, VEHICLE SPEED/CLASSIFICATION UNIT

A = Operation
1 (Furnish & Install)
3 (Install)
4 (Modify)
B = Assembly Component
1 (Electronics Unit With Equipment Cable)
2 (Electronics Unit Only)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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744-70-AB TRAFFIC MONITORING SITE, SOLAR POWER UNIT

Notes

Details: Refer to Specifications for use and application.

Related Items

Required Recommended

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.
### Struct. 744-70-AB TRAFFIC MONITORING SITE, SOLAR POWER UNIT AS

A = Operation
1 (Furnish & Install)
3 (Install)
4 (Relocate)

B = Mounting
1 (New Pole)
2 (Existing Pole)

---

**Notes**

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0744 70 11</td>
<td>TMS SOLAR POWER UNIT, F&amp;I, NEW POLE</td>
<td>EA</td>
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<tr>
<td>0744 70 12</td>
<td>TMS SOLAR POWER UNIT, F&amp;I, EXISTING POLE</td>
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---

### 745-70-AB TRAFFIC MONITORING SITE, INDUCTIVE LOOP ASSEMBLY

| Unit | AS | Accuracy | Assembly | PlanQuantity? | no |
|------|----|----------|----------|---------------|

---

**Notes**

Refer to Specifications for use and application.

**Design Forms and Documentation**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

---

**References**

PPM Chapter
Trns-port

**Specifications**

Index No. 17900
Struct. 745-70-AB  TRAFFIC MONITORING SITE, INDUCTIVE LOOP ASSEMBLY

A = Operation
1 (Furnish & Install)
3 (Install)

B = Number Of Loops Per Lane
1 (One)
2 (Two)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<thead>
<tr>
<th>Item</th>
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<th>Obsolete Date</th>
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<tr>
<td>0744 70 42</td>
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</table>

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**746-7A-BCD  TRAFFIC MONITORING SITE, CABINET**

| Unit | EA | Accuracy | Each | PlanQuantity? | no |
|------|-----|----------|------|---------------|

Notes

Details

Refer to Specifications for use and application.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

Required

Recommended

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

References

PPM Chapter
Trns-port
Other Standards
Index No. 17900
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) 7, 13
### Notes
Existing Specs apply for A=1-3; Plan Detail and/or Tech Spec Required for A=4 or 5

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
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<th>Obsolete Date</th>
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Details and Structure: Complete- Items 000 to 1999
747-70-AB  TRAFFIC MONITORING SITE, MODEM

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Notes

Details

Refer to Specifications for use and application.

Related Items

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Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

References

PPM Chapter
Trns·port
Other
Standards

Specifications

Index No. 17900

Prep & Doc Manual Chapter(s) 7, 13

TRNS·PORT Category (DRAFT FIELD): 0200 Roadway

Struct. 747-70-AB  TRAFFIC MONITORING SITE, MODEM  AS

A = Operation
1 (Furnish & Install)
3 (Install)
4 (Modify)
B = Item
1 (Modem)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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750-1-AB  ARCHITECTURAL-BUILDING

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Notes

Details

For all new/major rehab Architectural work. Includes all work (building, plumbing, electrical, water, HVAC, etc.) for a complete building. Tech Specs must detail all items, construction, and materials.

For limited incidental work, see 751 items.

Do not use for movable bridge structures; see 508 items and/or contact Movable Bridge Section. Do not use for Signing, Lighting, ITS, or Signalization.
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
<thead>
<tr>
<th>Related Items</th>
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<td>Design Forms and Documentation</td>
<td>sumqr: Roadway Summary of Quantities Sheet</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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</table>

**References**

PPM Chapter

Trns-port

Other Standards

Specifications

**T: Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**

**TRNS**PORT Category (DRAFT FIELD): 0800 Architectural

**Struct.** 750-1-AB ARCHITECTURAL-BUILDING LS/SF

A= Operation
1 (New)
5 (Rehab)
6 (Remove)
B= Facility
1 (Rest Area)
2 (Welcome Center)
3 (Weigh Station)
4 (Maintenance Facility Building)
5 (Office)
6 (Parking Garage)
7 (Storage/Mechanical)
8 (Uncovered Storage)
9 (Other building)*

*Contact Architectural Section for approval

**Notes**

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<td>0750 1 13</td>
<td>ARCHITECTURAL, BUILDING, NEW, WEIGH STATION</td>
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<tr>
<td>0750 1 17</td>
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</table>
### 751- 2- ARCHITECTURAL- ELECTRICAL/POWER

<table>
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<tr>
<th>Unit</th>
<th>LS/LS</th>
<th>Accuracy</th>
<th>Lump Sum</th>
<th>PlanQuantity?</th>
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**Notes**

For use on Architectural projects only. Not to be used with 750-1 (New/Rehab building) item.
Includes all work, hardware (lighting fixtures, generator, etc.), and materials for a complete electrical system, as detailed in the plans and/or tech specs. Do not use for Signing, Lighting, ITS, or Signalization.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

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<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
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<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
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<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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**References**

- PPM Chapter
- Trns port
- Other Standards
- Specifications
  - T: Plan Details and/or Technical Specifications required

**TRNS*PORT Category (DRAFT FIELD):** 0800 Architectural

**Struct.** 751- 2- ARCHITECTURAL- ELECTRICAL/POWER LS/LS

**Notes**

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### 751-3- ARCHITECTURAL- TELEPHONE/COMMUNICATION

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<td>Lump Sum</td>
</tr>
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<td>PlanQuantity?</td>
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</table>

For use on Architectural projects only. Not to be used with 750-1 (New/Rehab building) item.

DO NOT USE FOR: Signing, Lighting, ITS, or Signalization.

Includes all work, hardware, and materials for a complete Telephone/Communication system, as detailed in the plans and/or tech specs. Communications may include cable and/or fiber optic connections necessary for a complete system.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

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### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

<table>
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<th>Standards</th>
<th>Specifications</th>
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T: Plan Details and/or Technical Specifications required

### Prep & Doc Manual Chapter(s)

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<td>Struct. 751-3-</td>
<td>ARCHITECTURAL- TELEPHONE/COMMUNICATION LS/LS</td>
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The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 751-4- ARCHITECTURAL- WATER/SEWER INTERIOR

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</tr>
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<td>PlanQuantity?</td>
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</table>

For use on Architectural projects only. Not to be used with 750-1 (New/Rehab building) item.

Includes all work, hardware (sinks, toilets, water fountains), and materials for a complete water/sewer system for the interior of a building, as detailed in the plans and/or tech specs.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of
payment are available in the contract documents to clearly define the work to be completed for payment under this item.

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<td>Construction Forms and Documentation</td>
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<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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<td>Other Standards Specifications</td>
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**T: Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0800 Architectural

**Struct.** 751-4- ARCHITECTURAL- WATER/SEWER INTERIOR LS/LS

**Notes**

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<td><strong>PlanQuantity?</strong></td>
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**Notes Details**

For use on Architectural projects only. May be used with 750-1 (New/Rehab building) item for major items of work. For minor water/sewer work associated with building, include with 750-1 item.

Includes all work, hardware (lift station, treatment plant, etc.) for a complete water/sewer system for the exterior of a building, as detailed in the plans and/or tech specs.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

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<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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### Standards

**Struct. 751-5- ARCHITECTURAL- WATER, SANITARY SEWER/SEWAGE TREATMENT**

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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**751-6- ARCHITECTURAL- HVAC**

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<td>For use on Architectural projects only. Not to be used with 750-1 (New/Rehab building) item. Includes all work, hardware (AC, ventilation, and/or heating units), and materials for a complete HVAC system, as detailed in the plans and/or tech specs. For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.</td>
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**Related Items**

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**Construction Forms and Documentation**

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**References**

PPM Chapter
Trns-port
Other
Standards
Specifications

**T: Plan Details and/or Technical Specifications required**

Prep & Doc Manual Chapter(s)
### ARCHITECTURAL - ASBESTOS ABATEMENT

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<tr>
<th>751-10-</th>
<th>ARCHITECTURAL - ASBESTOS ABATEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit</td>
<td>LS/LS</td>
</tr>
<tr>
<td>Accuracy</td>
<td>Lump Sum</td>
</tr>
<tr>
<td>Plan</td>
<td>Quantity? no</td>
</tr>
</tbody>
</table>

#### Notes
- **Contact Architectural Section before opening, due to possible CARS contract.**
- Check for possible CARS contract prior to using this item.

#### Details
- For use on Architectural projects only. Not to be used with 750-1 (New/Rehab building) item.
- Includes all work, hardware, and materials for Asbestos Abatement, as detailed in the plans and/or tech specs.
- For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

#### Related Items

**Required**

- Design Forms and Documentation
  - sumqrd: Roadway Summary of Quantities Sheet
  - Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Recommended**

- Construction Forms and Documentation
  - No additional form required; use plans summary or comp book
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Trns-port
- Other Standards Specifications

**T:** Plan Details and/or Technical Specifications required

### ARCHITECTURAL - SPECIAL

<table>
<thead>
<tr>
<th>751-11- A</th>
<th>ARCHITECTURAL - SPECIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit</td>
<td>LS/LS</td>
</tr>
<tr>
<td>Accuracy</td>
<td>Lump Sum</td>
</tr>
<tr>
<td>Plan</td>
<td>Quantity? no</td>
</tr>
</tbody>
</table>

#### Notes
- **Contact State Structures Design Office and/or State Architectural Section prior to**

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
use in any contract

**Details**

For use on Structural/Architectural plans only.

This item is intended to cover Special Architectural elements not included with "Buildings". Structural/Architectural details must be included in the plans or specifications.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>

**Design Forms and Documentation**

- sumqrq: Roadway Summary of Quantities Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book

**References**

- PPM Chapter
- Trns-port
- Other Standards
- Specifications

T: Plan Details and/or Technical Specifications required

---

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0800 Architectural

<table>
<thead>
<tr>
<th>Struct.</th>
<th>Item Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>751-11- A</td>
<td>ARCHITECTURAL- SPECIAL</td>
<td>LS/LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0751 11 1</td>
<td>ARCHITECTURAL- SPECIAL, WALLS/TOWERS</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
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**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>751-20- A</td>
<td>ARCHITECTURAL- LIGHTNING PROTECTION SYSTEM</td>
<td>LS/LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**Details**

- For use on Architectural projects only. Not to be used with 750-1 (New/Rehab building) item.
- For movable bridge structures, refer to Section 508 items. For all other applications, lightning protection is incidental to the item being protected.
- Do not use for Signing, Lighting, ITS, or Signalization.

Inclueds all work, hardware, and materials for a complete lightning protection system, as detailed in the plans and/or tech specs.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.
### Design Forms and Documentation
- **Required:** sumqrqd: Roadway Summary of Quantities Sheet
- **Recommended:** Locate in plans. Summarize quantities by location on summary sheet in the plans.

### Construction Forms and Documentation
- **Required:** No additional form required; use plans summary or comp book
- **Recommended:** Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### Notes
- **T:** Plan Details and/or Technical Specifications required

### TRNS*PORT Category (DRAFT FIELD):
- **0800 Architectural**

### Struct. 751-20- A ARCHITECTURAL- LIGHTNING PROTECTION SYSTEM LS/LS

<table>
<thead>
<tr>
<th>A= Type of System</th>
<th>1 (Point Discharge)</th>
<th>2 (Static Charge Dissipation)</th>
<th>3 (Surge Suppression)</th>
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</thead>
</table>

### Notes
- The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0751 20 1</td>
<td>ARCHITECTURAL- LIGHTNING PROTECTION SYSTEM, POINT OF DISCHARGE</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0751 20 3</td>
<td>ARCHITECTURAL- LIGHTNING PROTECTION SYSTEM, SURGE SUPPRESSION</td>
<td>LS</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### 751-30- A ARCHITECTURAL- PICNIC PAVILION

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
<th>no</th>
</tr>
</thead>
</table>

### Notes
- **Details:** For use on Architectural projects only. Size (small/large) and details as shown on Design Standards. Non-standard sizes must be approved by the Architectural Section, with a new pay item request.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items
- **Required:** sumqrqd: Roadway Summary of Quantities Sheet
- **Recommended:** Locate in plans. Summarize quantities by location on summary sheet in the plans.
### Struct. 751-30-1 A

**Architectural-Picnic Pavilion, Small EA**

<table>
<thead>
<tr>
<th>A= Size, per index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Small)</td>
</tr>
<tr>
<td>2 (Large)</td>
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**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0751 30 1</td>
<td>Architectural, Picnic Pavilion, Small</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

### Item 751-35-AB

**Bus Shelter**

**Unit** EA

**Accuracy** Each

**Plan Quantity?** no

**Notes**

Includes work and materials to install a bus shelter. Detail components to be included with shelter, such as bench, solar panel, light, etc.

Size of shelter is based on the plan area projected by the shelter roof, not the complete shelter pad.

Shelter pad will be paid under Section 522 pay items.

Bike rack and trash receptacle paid under Section 751 pay items.

Signs mounted to the shelter may be detailed and included with shelter components. All other single post signs will be paid under Section 700 pay items.

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**References**

PPM Chapter

Trns-port
Other Standards Specifications Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0200 or other Roadway or other- see details

Struct. 751-35-AB BUS SHELTER EA

A= Operation
1 (Furnish & Install)
3 (Install) Furnished by local agency

B= Size, square feet of area covered by shelter
1 (up to 50)
2 (50-100)
3 (101-150)
4 (151-200)
5 (Greater than 200 SF)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0751 35 11</td>
<td>ARCHITECTURAL, BUS SHELTER, F&amp;I, UP TO 50 SF</td>
<td>EA</td>
<td>T</td>
<td>7/1/2012</td>
<td></td>
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<tr>
<td>0751 35 12</td>
<td>ARCHITECTURAL, BUS SHELTER, F&amp;I, 50-100 SF</td>
<td>EA</td>
<td>T</td>
<td>7/1/2012</td>
<td></td>
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<tr>
<td>0751 35 13</td>
<td>ARCHITECTURAL, BUS SHELTER, F&amp;I, 101-150 SF</td>
<td>EA</td>
<td>T</td>
<td>7/1/2012</td>
<td></td>
</tr>
</tbody>
</table>

751-36-AB BICYCLE RACK

Unit EA Accuracy Each PlanQuantity? no

Notes

Includes work and materials to install bicycle rack(s). Note that when installed with a bus pad, the foundation/concrete pad will be paid under Section 522 items. When multiple racks are installed together, payment should be made for each "inverted U" rack. When other rack shapes are used, detail the shape in the plans.

Related Items

Required Recommended

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

References

PPM Chapter
Trns-port
Other Standards
Specifications

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0200 or other Roadway or other- see details

Struct. 751-36-AB BICYCLE RACK EA

A= Operation
1 (Furnish & Install)
3 (Install) Furnished by local agency

B= Capacity
1 (1-2 bicycles) inverted U or similar separate racks
2 (2-6 bicycles) small, continuous rack
3 (7-10 Bicycles) medium, continuous rack
4 (more than 10 Bicycles) large, continuous rack

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0751 36 11</td>
<td>BICYCLE RACK, FURNISH &amp; INSTALL, 1-2 BICYCLES</td>
<td>EA</td>
<td>T</td>
<td>7/1/2012</td>
<td></td>
</tr>
<tr>
<td>0751 36 12</td>
<td>BICYCLE RACK, FURNISH &amp; INSTALL, 2-6 BICYCLES</td>
<td>EA</td>
<td>T</td>
<td>7/1/2012</td>
<td></td>
</tr>
<tr>
<td>0751 36 13</td>
<td>BICYCLE RACK, FURNISH &amp; INSTALL, 7-10 BICYCLES</td>
<td>EA</td>
<td>T</td>
<td>7/1/2012</td>
<td></td>
</tr>
<tr>
<td>0751 36 14</td>
<td>BICYCLE RACK, FURNISH &amp; INSTALL, MORE THAN 10 BICYCLES</td>
<td>EA</td>
<td>T</td>
<td>7/1/2012</td>
<td></td>
</tr>
<tr>
<td>0751 38 11</td>
<td>BENCH, F&amp;I, ALUMINUM</td>
<td>EA</td>
<td>T</td>
<td>7/1/2012</td>
<td></td>
</tr>
</tbody>
</table>

751-37- TRASH RECEPTACLE

Unit EA Accuracy Each PlanQuantity? ?

Notes

Details Includes work and materials to install trash receptacle. Note that when installed with a bus pad, the foundation/concrete pad will be paid under Section 522 items.

Related Items

Required Recommended

Design Forms and Documentation

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation

References

PPM Chapter
Trns-port
Other
Standards
Specifications
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### Item 751-37
**Description**: TRASH RECEPTACLE
**Unit**: EA
**TSP/Detail**: T
**Valid Date**: 7/1/2012

**Notes**
Includes work and materials to install a pedestrian bench. Detail size and materials in the plans.

**Related Items**
- **Required Standards**: COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
- **Recommended Documentation**: Locate in the plans. Summarize quantities by location in the computation book.

#### Prep & Doc Manual Chapter(s)
- **TRNS*PORT Category (DRAFT FIELD)**: 0200 or other Roadway or other- see details
- **Struct.**: 751-37 TRASH RECEPTACLE EA

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### Item 751-38-AB
**Description**: BENCH
**Unit**: EA
**Accuracy**: Each
**PlanQuantity?**: 

**Notes**
Includes work and materials to install a pedestrian bench. Detail size and materials in the plans.

**Related Items**
- **Required Standards**: COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
- **Recommended Documentation**: Locate in the plans. Summarize quantities by location in the computation book.

#### Prep & Doc Manual Chapter(s)
- **TRNS*PORT Category (DRAFT FIELD)**: 0200 or other Roadway or other- see details
- **Struct.**: 751-38-AB BENCH EA

---

**Construction Forms and Documentation**

**PPM Chapter**
- Trns·port
- Other
- Standards
- Specifications

**Prep & Doc Manual Chapter(s)**
- **TRNS*PORT Category (DRAFT FIELD)**: 0200 or other Roadway or other- see details
- **Struct.**: 751-38-AB BENCH EA

---

**Notes**
### 751-39 PEDESTRIAN PLAZA

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>Plan Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>LS/LS</td>
<td>Lump Sum</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

May include pedestrian banners, drinking fountains, kiosk, and other items, as detailed in the plans. Tabulation summary required on all projects.

**Related Items**

- Required: COMP 700-050-05: Lump Sum Quantities
- Recommended: Use a quantity of 1, but calculations and computation book documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

**Design Forms and Documentation**

- COMP 700-050-05: Lump Sum Quantities
  - Use a quantity of 1, but calculations and computation book documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.

**Construction Forms and Documentation**

**References**

- PPM Chapter
- Trns-port
- Other Standards
- Specifications
- Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):** 0200 or other Roadway or other- see details

**Struct.** 751-39 PEDESTRIAN PLAZA LS/LS

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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### 770-75- A PRE-PASS SENSOR

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>Plan Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA</td>
<td>Each</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

For use at weigh/inspection stations only.

**Details**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

- Required: COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
- Recommended: Locate in the plans. Summarize quantities by location in the computation book.

**Design Forms and Documentation**

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the computation book form.

---

**Details and Structure:** Complete- Items 000 to 1999
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 770-78- STATIC/WEIGH-IN-MOTION SCALE SYSTEM

**Unit**: EA  
**Accuracy**: Each  
**PlanQuantity?**: no  

**Notes**

- The designer should detail all requirements and components to be included in the system.
- **Related Items**
  - **Required**
    - COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
  - **Recommended**
    - Locate in the plans. Summarize quantities by location in the computation book.

**Design Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the computation book form.

**References**

- PPM Chapter
- Trns-port
- Other Standards
- Specifications
  - Normally requires SHOP DRAWINGS

**TRNS*PORT Category (DRAFT FIELD):** 0800 Architectural

**Struct.** 770-78- **STATIC/WEIGH-IN-MOTION SCALE SYSTEM** EA

**Notes**

- Details and Structure: Complete- Items 000 to 1999
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**Item** | **Description** | **Unit** | **TSP/Detail** | **Valid Date** | **Obsolete Date**
--- | --- | --- | --- | --- | ---
0770 78 | STATIC / WEIGH-IN-MOTION SCALE SYSTEM | EA | T | 1/1/2010 |  

**Notes**

**Details**

The designer should detail all requirements and components to be included in the station.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required** | **Recommended**
--- | ---

**Design Forms and Documentation**

sumqrqd: Roadway Summary of Quantities Sheet

Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

PPM Chapter

Trns-port

Other

Standards

Specifications

Normally requires SHOP DRAWINGS

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s) | 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0800 Architectural

**Struct.** 770- 79- WEIGH STATION LS/LS

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**Item** | **Description** | **Unit** | **TSP/Detail** | **Valid Date** | **Obsolete Date**
--- | --- | --- | --- | --- | ---
0770 79 | WEIGH STATION | LS | T | 1/1/2010 |  

**770-Maint**

**LABOR**

Maintenance Contracts Only

**Notes**

**Details**

Maintenance Item: Not Valid for Construction Contracts

MAINTENANCE CONTRACTS ONLY

Details and Structure: Complete- Items 000 to 1999
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>E770 50 1</td>
<td>FACILITY MAINTENANCE (REST AREA)</td>
<td>MO</td>
<td></td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>E770 51 14</td>
<td>LABOR, PROFESSIONAL (ENGINEERING TECHNICIAN)</td>
<td>HR</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>E770 51 15</td>
<td>LABOR, PROFESSIONAL (CONSTRUCTION INSPECTOR)</td>
<td>HR</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>E770 55 8</td>
<td>REST AREA SECURITY SERVICES</td>
<td>MO</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>E770 81</td>
<td>RE-ROOF BUILDING</td>
<td>SF</td>
<td></td>
<td>1/1/2010</td>
<td></td>
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Notes

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.
### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

### References

PPM Chapter

Trns-port

Other

Standards

Specifications

T: Plan Details and/or Technical Specifications required

### Prep & Doc Manual Chapter(s)

### TRNS*PORT Category (DRAFT FIELD):

0800  Architectural

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

#### FORMS AND DOCUMENTATION

<table>
<thead>
<tr>
<th>775- 70-</th>
<th>SCALE PIT STRUCTURES</th>
<th>EA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### DESIGN FORMS AND DOCUMENTATION

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

#### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

### References

PPM Chapter

Trns-port

Other

Standards

Specifications

T: Plan Details and/or Technical Specifications required

### Prep & Doc Manual Chapter(s)

### TRNS*PORT Category (DRAFT FIELD):

0800  Architectural

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

#### FORMS AND DOCUMENTATION

<table>
<thead>
<tr>
<th>775- 72-</th>
<th>SCALE FOUNDATION</th>
<th>EA</th>
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</thead>
<tbody>
<tr>
<td>Notes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### DESIGN FORMS AND DOCUMENTATION

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

#### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

### References

PPM Chapter

Trns-port

Other

Standards

Specifications

T: Plan Details and/or Technical Specifications required

### Prep & Doc Manual Chapter(s)

### TRNS*PORT Category (DRAFT FIELD):

0800  Architectural

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

#### FORMS AND DOCUMENTATION

<table>
<thead>
<tr>
<th>775- 72-</th>
<th>SCALE FOUNDATION</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Notes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### DESIGN FORMS AND DOCUMENTATION

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

#### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

### References

PPM Chapter

Trns-port

Other

Standards

Specifications

T: Plan Details and/or Technical Specifications required

### Prep & Doc Manual Chapter(s)

### TRNS*PORT Category (DRAFT FIELD):

0800  Architectural

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

#### FORMS AND DOCUMENTATION

<table>
<thead>
<tr>
<th>775- 72-</th>
<th>SCALE FOUNDATION</th>
<th>EA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 780- 1- AB  ITS ELECTRICAL POWER

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed</td>
<td>Refer to item structure and details</td>
<td>no</td>
<td>Valid through 6-30-2012; Payment for power service will be included under Section 639 items.</td>
</tr>
</tbody>
</table>

**Details**
For use in providing electrical power service to ITS devices in the field. Installations of service assemblies can be either for overhead or underground service, in accordance with the details in the plans, or in Index 17736 of the Design Standards. A service assembly may include a weather head, conduit, service wire, a meter base, service disconnect, and a transient protection device.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>tabqit: ITS Tabulation Quantity Sheet</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
</tbody>
</table>

**Construction Forms and Documentation**
No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Vol 1, Chapter 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trns-port</td>
<td></td>
</tr>
<tr>
<td>Other Standards</td>
<td></td>
</tr>
<tr>
<td>Specifications</td>
<td></td>
</tr>
</tbody>
</table>

**TRNS*PORT Category (DRAFT FIELD):** 0550 ITS or Signalization

**Struct. 780- 1- AB  ITS ELECTRICAL POWER  Mixed**

- **A**= Operation
  - 1 (Furnish & Install)
  - 3 (Install)
  - 4 (Relocate)
  - 5 (Adjust & Modify)
  - 6 (Remove and Dispose- Contractor takes ownership)
- **B**= Type
  - 1 (Service) AS
  - 2 (Service Wire) LF
  - 3 (Service Disconnect) EA

**Notes**
Note: Accuracy for LF items is per Linear Foot.

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 781- 2- AB  ITS HIGHWAY ADVISORY RADIO

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA</td>
<td>Each</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

Details and Structure: Complete- Items 000 to 1999
Details

For installation along the roadway for the purpose of broadcasting traffic advisories to vehicle radios. The HAR assembly installation consists of a radio antenna mounted on a pole, a control cabinet containing the transmitter, power supply, communication hardware, and conduit. The system includes a roadside HAR sign with flashing beacons to alert motorists that a message is being broadcast.

Transmitter wattage, siting information, and installation details should be noted in the plans.

REPLACE: Intended for Maintenance Contracts only. Includes removal of existing item and replacement with new/refurbished item provided by the contractor. Contract documents should indicate whether existing item remains the property of the Department, or becomes the property of the Contractor.

REMOVE AND INSTALL: Intended for Maintenance Contracts only. Includes removal of existing item and replacement with new/refurbished item provided by the Department. Contract documents should indicate whether existing item remains the property of the Department, or becomes the property of the Contractor.

PREVENTATIVE MAINTENANCE: Intended for Maintenance Contracts only. Contract documents must indicate work to be completed.

DIAGNOSTIC AND MISC REPAIR: Intended for Maintenance Contracts only. Contract documents must indicate work to be completed.

Required  Recommended

Design Forms and Documentation

tabqit: ITS Tabulation Quantity Sheet

Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

Vol 1, Chapter 7

PPM Chapter

Trns-port

Other Standards

Specifications

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0550 ITS or Signalization

Struct.  781- 2- AB ITS HIGHWAY ADVISORY RADIO EA

A= Operation
1 (Furnish & Install) B=1 or 2
3 (Install) FDOT Furnished
4 (Relocate) B=1 or 2
5 (Adjust /Modify) B=0; details in plans
6 (Replace) Contractor furnished parts
7 (Remove and Install) Maintenance use only
8 (Preventative Maintenance) B=0
9 (Diagnostic and Miscellaneous Repair) B=0

B= Power Type
1 (Solar)
2 (AC)
**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0781 2 11</td>
<td>ITS HIGHWAY ADVISORY RADIO, FURNISH &amp; INSTALL, SOLAR POWER</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>0781 2 12</td>
<td>ITS HIGHWAY ADVISORY RADIO, F&amp;I, AC POWER</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0781 2 41</td>
<td>ITS HIGHWAY ADVISORY RADIO, RELOCATE, SOLAR POWER</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0781 2 42</td>
<td>ITS HIGHWAY ADVISORY RADIO, RELOCATE, AC</td>
<td>EA</td>
<td>D</td>
<td>1/1/2010</td>
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<tr>
<td>0781 2 52</td>
<td>ITS HIGHWAY ADVISORY RADIO, ADJUST/MODIFY, AC</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>0781 2 80</td>
<td>ITS HIGHWAY ADVISORY RADIO, PREVENTATIVE MAINTENANCE</td>
<td>EA</td>
<td></td>
<td>7/1/2012</td>
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<tr>
<td>0781 2 90</td>
<td>ITS HIGHWAY ADVISORY RADIO, DIAGNOSTIC AND MISCELLANEOUS REPAIR</td>
<td>EA</td>
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<td>7/1/2012</td>
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</tbody>
</table>

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**781- 2-ABB** ITS HIGHWAY ADVISORY RADIO- Components for Maintenance Use Only

<table>
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<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Each</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

These items are intended for repair/replacement of HAR components only. For complete systems, use pay item 781-2-AB.

REPLACE: Intended for Maintenance Contracts only. Includes removal of existing item and replacement with new/refurbished item provided by the contractor. Contract documents should indicate whether existing item remains the property of the Department, or becomes the property of the Contractor.

REMOVE AND INSTALL: Intended for Maintenance Contracts only. Includes removal of existing item and replacement with new/refurbished item provided by the Department. Contract documents should indicate whether existing item remains the property of the Department, or becomes the property of the Contractor.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
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</table>

**Design Forms and Documentation**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

**References**

PPM Chapter
Trn·sport
Other Standards Specifications
Prep & Doc Manual Chapter(s)
Struct. 781-2-ABB

ITS HIGHWAY ADVISORY RADIO - Components for Maintenance Use Only

A = Operation
6 (Replace) Contractor furnished parts
7 (Remove and Install)

BB = Components - Repair/Replacement parts
1 (Transmitter)
2 (Digital Recorder and Playback Unit)
3 (Antenna Assembly)
4 (Ground Plane)
5 (Surge Protective Devices)
6 (Power Supply)
7 (Digital Controller Card)
8 (GPS Card)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0781 2601</td>
<td>ITS HIGHWAY ADVISORY RADIO, REPLACE TRANSMITTER</td>
<td>EA</td>
<td></td>
<td>7/1/2012</td>
<td></td>
</tr>
<tr>
<td>0781 2602</td>
<td>ITS HIGHWAY ADVISORY RADIO, REPLACE DIGITAL RECORDER AND PLAYBACK UNIT</td>
<td>EA</td>
<td></td>
<td>7/1/2012</td>
<td></td>
</tr>
<tr>
<td>0781 2603</td>
<td>ITS HIGHWAY ADVISORY RADIO, REPLACE ANTENNA ASSEMBLY</td>
<td>EA</td>
<td></td>
<td>7/1/2012</td>
<td></td>
</tr>
<tr>
<td>0781 2604</td>
<td>ITS HIGHWAY ADVISORY RADIO, REPLACE GROUND PLANE</td>
<td>EA</td>
<td></td>
<td>7/1/2012</td>
<td></td>
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<tr>
<td>0781 2605</td>
<td>ITS HIGHWAY ADVISORY RADIO, REPLACE SURGE PROTECTIVE DEVICES</td>
<td>EA</td>
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<td>7/1/2012</td>
<td></td>
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<tr>
<td>0781 2606</td>
<td>ITS HIGHWAY ADVISORY RADIO, REPLACE POWER SUPPLY</td>
<td>EA</td>
<td></td>
<td>7/1/2012</td>
<td></td>
</tr>
<tr>
<td>0781 2607</td>
<td>ITS HIGHWAY ADVISORY RADIO, REPLACE DIGITAL CONTROLLER CARD</td>
<td>EA</td>
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<td>7/1/2012</td>
<td></td>
</tr>
<tr>
<td>0781 2608</td>
<td>ITS HIGHWAY ADVISORY RADIO, REPLACE GPS CARD</td>
<td>EA</td>
<td></td>
<td>7/1/2012</td>
<td></td>
</tr>
<tr>
<td>0781 2701</td>
<td>ITS HIGHWAY ADVISORY RADIO, REMOVE AND INSTALL TRANSMITTER</td>
<td>EA</td>
<td></td>
<td>7/1/2012</td>
<td></td>
</tr>
<tr>
<td>0781 2702</td>
<td>ITS HIGHWAY ADVISORY RADIO, REMOVE AND INSTALL DIGITAL RECORDER AND PLAYBACK UNIT</td>
<td>EA</td>
<td></td>
<td>7/1/2012</td>
<td></td>
</tr>
<tr>
<td>0781 2706</td>
<td>ITS HIGHWAY ADVISORY RADIO, REMOVE AND INSTALL, POWER SUPPLY</td>
<td>EA</td>
<td></td>
<td>7/1/2012</td>
<td></td>
</tr>
<tr>
<td>0781 2707</td>
<td>ITS HIGHWAY ADVISORY RADIO, REMOVE AND INSTALL DIGITAL CONTROLLER CARD</td>
<td>EA</td>
<td></td>
<td>7/1/2012</td>
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</tr>
<tr>
<td>0781 2708</td>
<td>ITS HIGHWAY ADVISORY RADIO, REMOVE AND INSTALL, GPS CARD</td>
<td>EA</td>
<td></td>
<td>7/1/2012</td>
<td></td>
</tr>
</tbody>
</table>
For installation at the roadside, on bridges or other new or existing structures to provide real-time weather data on temperature, humidity, precipitation, wind speed, and direction, and visibility. The RWIS is furnished with the weather instruments necessary to produce the readings desired and collects, stores, and processes the data for transmittal to the transportation management center (TMS). An RWIS with one central monitoring site can serve multiple field installations. The weather sensors are typically mounted on either a dedicated RWIS tower or existing structures.

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>tabqit: ITS Tabulation Quantity Sheet</td>
</tr>
<tr>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
<td></td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
</tr>
<tr>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
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</tr>
</tbody>
</table>

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0781 3112</td>
<td>ITS ROAD WEATHER INFORMATION SYSTEM, FURNISH &amp; INSTALL, FIELD HARDWARE, MOUNTED TO EXISTING STRUCTURE</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0781 3121</td>
<td>ITS ROAD WEATHER INFORMATION SYSTEM, FURNISH &amp; INSTALL, CTRL MONITOR/PROC EQIP, NEW TOWER MOUNT</td>
<td>EA</td>
<td>1/1/2010</td>
<td></td>
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</tbody>
</table>
### Dynamic Message Sign Support Structure

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0781 5113</td>
<td>ITS Dynamic Message Sign Support Structure, F&amp;I, Span, 51-100'</td>
<td>EA</td>
<td>7/1/2012</td>
<td></td>
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</tr>
<tr>
<td>0781 5114</td>
<td>ITS Dynamic Message Sign Support Structure, F&amp;I, Span, 101-150'</td>
<td>EA</td>
<td>7/1/2012</td>
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<tr>
<td>0781 5121</td>
<td>ITS Dynamic Message Sign Support Structure, F&amp;I, Cantilever, Up To 25'</td>
<td>EA</td>
<td>7/1/2012</td>
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</table>

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
781- 6- AB  ITS GREENHOUSE GAS MONITORING SYSTEM

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>Plan Quantity?</th>
</tr>
</thead>
</table>

**Notes**
New item effective 7-1-12. Details pending

**Details**
Specification should indicate that payment includes "furnishing, placement, and testing of all materials and equipment, establishing communication, and for all tools, labor, equipment, hardware, flexible tubing, pump, operational software package(s) and firmware(s), supplies, support, personnel training, shop drawings, documentation, and incidentals necessary to complete the work."

**Related Items**

**Design Forms and Documentation**
COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

**References**
PPM Chapter
Trns-port
Other Standards Specifications

T: Plan Details and/or Technical Specifications required
Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):**

**Struct.**
781- 6- AB  ITS GREENHOUSE GAS MONITORING SYSTEM  EA

A= Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)

B= Sensor Mounting
1 (New Tower Included)
2 (Mounted to Existing Structure)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### ITS DYNAMIC MESSAGE SIGN

**Unit** EA  **Accuracy** Each  **PlanQuantity?** no

**Notes**

Valid through 6-30-2012; replaced by 781-4A-BCD for the sign, and 781-5-ABC for the support structure. Refer to Estimates Bulletin 12-03

**Details**

From the PPM, "The DMS is an electronic sign capable of displaying more than one message, which is changeable manually, by remote control, or by automatic control. The DMS is intended primarily to advise approaching motorists of freeway conditions, such as road construction or a traffic incident ahead, so that they can take appropriate action. In some instances the DMS could be used to display other messages, such as AMBER Alerts or traveler information related to special events, emergencies, and incidents impacting mobility and safety. A DMS generally displays messages that can be selected or modified by electronic means from a TMC or other central command location. As such, system designs utilizing DMS must also include designs for a communication infrastructure that supports this remote control capability."

18" Character Displays: for installation along interstate, expressway, or limited access corridors, or speed limits of 45 MPH or higher.

12" Character Displays: may only be used on roadways with speed limits lower than 45mph

**STRUCTURE TYPES:** Mid-span- across one direction of travel; full span- across all lanes; cantilever- at the roadside.

**SIGN TYPE:** Front display surface, with either line matrix- pixels arranged in rows, or full matrix- pixels fully covering the surface. Designer should note the size of sign, structure, and installation details in the plans.

Note- Guardrail or barrier wall may be needed for structures within the clearzone, in accordance with design standard. Catwalk and/or handrail are included in the cost of the sign/structure.

**OPERATIONS**

A=1, FURNISH & INSTALL: includes the furnishing of both the truss/structure and sign

A=2, FURNISH: Furnish the sign only (Signs are available on State purchase contracts). Does not include installation.

A=3, INSTALL: Install sign on existing structure. Do not use with A=2.

A=4 or 5 RELOCATE: Includes the removal and reinstallations of the sign with/without structure. New foundation, electrical, communications, and any necessary incidentals are included in the relocate operation. Plans should clearly show the existing and new locations

A=6, REMOVE: Plan details are required to indicate whether sign and/or structure is to be removed. As necessary, note whether the structure has 1 (cantilever) or 2 (full span) foundations to be removed.

A=8, FURNISH & INSTALL SIGN ON EXISTING STRUCTURE: Contractor provides sign & installs it as detailed in the plans. The designer must ensure that the existing structure and foundation is capable of supporting the new sign.
A=9, FURNISH & INSTALL STRUCTURE, INSTALL SIGN: When sign is provided by FDOT (may have been purchased on state contract, or relocated from another location). Contractor must provide/construct truss, install sign.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>785-2-</td>
<td></td>
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</tbody>
</table>

### Design Forms and Documentation

- tabqit: ITS Tabulation Quantity Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

### Construction Forms and Documentation

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

- **PPM Chapter**: Vol 1, Chapter 7
- **Trns-port**
- **Other Standards**: Index No. 18300
- **Specifications**

### TRNS*PORT Category (DRAFT FIELD): 0550

- ITS or Signalization

### Struct. 781-1A-BCD ITS DYNAMIC MESSAGE SIGN EA

- **A**: Operation
  - 1 (Furnish & Install) Sign and structure; C=1, 2, or 3
  - 2 (Furnish) Sign only; CD = 40
  - 3 (Install) Dept Furnished Sign on existing structure; BCD = 040
  - 4 (Relocate Sign) to another existing structure; CD = 40
  - 5 (Relocate Sign and Structure) to a new location; CD = 50
  - 6 (Remove) BC=40 or 50, plan details required
  - 8 (Furnish & Install Sign on Existing Structure) C=4, D=0
  - 9 (Furnish & Install structure; Install Sign) C = 1, 2, or 3
- **B**: Sign Type
  - 1 (LED Line Matrix- 18" Character Display)
  - 2 (LED Full Matrix- 18" Character Display)
  - 3 (LED Line Matrix- 12" Character Display)
  - 4 (LED Full Matrix- 12" Character Display)
- **C**: Sign Support Structure
  - 1 (Mid-span)
  - 2 (Full Span)
  - 3 (Cantilever) D=1, 2, or 3 only
  - 4 NA: (Sign Only) no structure, furnished by Contractor; D=0
  - 5 NA: (Sign and Structure) valid for A=5 only
  - 6 (Multi-Post) D=0
  - 7 (Single Post) D=0
- **D**: Horizontal Structure Length
  - 0 (Blank; No Structure) when C=2, 3, 4, 5
  - 1 (0' to 40')
  - 2 (41' to 60')
  - 3 (61' to 80')
  - 4 (81' to 100')
  - 5 (101' to 120')
  - 6 (121 to 140')
  - 7 (141 to 161')

**Details and Structure**: Complete- Items 000 to 1999

Page 678 of 769
### Notes
See detail for Furnish/Install options

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The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>781-20-AB</th>
<th>ITS CB RADIO ADVISORY SYSTEM</th>
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</thead>
<tbody>
<tr>
<td><strong>Unit</strong></td>
<td>EA</td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>Each</td>
</tr>
<tr>
<td><strong>PlanQuantity?</strong></td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**
These items are intended for Maintenance Contracts Only.

The CBRAS is used on the Turnpike Enterprise.

REPLACE: Intended for Maintenance Contracts only. Includes removal of existing item and replacement with new/refurbished item provided by the contractor. Contract documents should indicate whether existing item remains the property of the Department, or becomes the property of the Contractor.

REMOVE AND INSTALL: Intended for Maintenance Contracts only. Includes removal of existing item and replacement with new/refurbished item provided by the Department. Contract documents should indicate whether existing item remains the property of the Department, or becomes the property of the Contractor.

**Related Items**

**Design Forms and Documentation**
COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

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Specifications
Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):**

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<th>Struct.</th>
<th>781-20-AB</th>
<th>ITS CB RADIO ADVISORY SYSTEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>A= Operation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 (Replace)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 (Remove and Install)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 (Preventive Maintenance) B=0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 (Diagnostic &amp; Misc Repair) B=0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B= Component</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 (Complete Antenna Assembly)</td>
<td></td>
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<td>2 (Controller)</td>
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The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Valid Date</th>
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<tr>
<td>0781 20 51</td>
<td>ITS CB RADIO ADVISORY SYSTEM, REPLACE, COMPLETE ANTENNA ASSEMBLY</td>
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<td>0781 20 62</td>
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<td>7/1/2012</td>
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<td>0781 20 80</td>
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<td>0781 20 90</td>
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**781-40-ABB**  **ITS DYNAMIC MESSAGE SIGN- COMPONENTS For Maintenance Use Only**

<table>
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<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA</td>
<td>Each</td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

These items are intended for Maintenance Contracts Only. Additional items/components added upon request.

MISC COMPONENTS: Miscellaneous components must be detailed in the plans. When the replace operation is used, ensure that the number of each component is detailed in the plans/specs.

REPLACE: Intended for Maintenance Contracts only. Includes removal of existing item and replacement with new/refurbished item provided by the contractor. Contract documents should indicate whether existing item remains the property of the Department, or becomes the property of the Contractor.

REMOVE AND INSTALL: Intended for Maintenance Contracts only. Includes removal of existing item and replacement with new/refurbished item provided by the Department. Contract documents should indicate whether existing item remains the property of the Department, or becomes the property of the Contractor.

**Related Items**

Required | Recommended
---|---

**Design Forms and Documentation**

<table>
<thead>
<tr>
<th>References</th>
<th>PPM Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trns-port</td>
<td>Other</td>
</tr>
<tr>
<td>Other</td>
<td>Standards</td>
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<tr>
<td>Standards</td>
<td>Specifications</td>
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<td>Specifications</td>
<td>Prep &amp; Doc Manual Chapter(s)</td>
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**TRNS*PORT Category (DRAFT FIELD):**

Struct.  **781-40-ABB**  **ITS DYNAMIC MESSAGE SIGN- COMPONENTS For**  **EA**
Maintenance Use Only

A= Operation
5 (Replace)
6 (Remove and Install)

BB= Component
1 (LED Display Panel/Driver Board)
2 (Power Supply)
3 (Controller)
9 (Misc Component) must be detailed in plans/specs

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Unit</th>
<th>Accuracy</th>
<th>Plan Quantity?</th>
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</thead>
<tbody>
<tr>
<td>781</td>
<td>DYNAMIC MESSAGE SIGN</td>
<td>EA</td>
<td>Each</td>
<td>no</td>
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</table>

**Notes**
Effective July 2012 letting; refer to Estimates Bulletin 12-03.

**Details**
THIS PAY ITEM INCLUDES ONLY THE SIGN, and incidentals noted in the specifications. Separate payment for the sign structure or pedestal will be made under 781-5-ABC Dynamic Message Sign Support Structure, EA.

The cost of the foundation is included with the support structure.

PREVENTIVE MAINTENANCE: Intended for Maintenance Contracts Only.

DIAGNOSTIC AND MISC REPAIR: Intended for Maintenance Contracts Only.

**Related Items**
- Required: 781-5-ABC
- Recommended: 781-5-ABC

**Design Forms and Documentation**
- tabqit: ITS Tabulation Quantity Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**
- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- PPM Chapter Vol 1, Chapter 7
- Trns-port
- Other
- Standards Index No. 18000 series
- Specifications
- Prep & Doc Manual Chapter(s)

**TRANSPORT Category (DRAFT FIELD):** 0200 or other Roadway or other- see details

**Struct.**

<table>
<thead>
<tr>
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<th>Description</th>
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<tbody>
<tr>
<td>781-4A-BCD</td>
<td>DYNAMIC MESSAGE SIGN</td>
<td>EA</td>
</tr>
</tbody>
</table>
| A= Operation
1 (Furnish & Install, with UPS)
2 (Furnish & Install, without UPS)
3 (Install) Department furnished sign to be installed by the contractor
4 (Relocate Sign) to another structure, BC=00
6 (Remove) BC=00

Details and Structure: Complete- Items 000 to 1999
7 (Preventive Maintenance) BCD=000
8 (Diagnostic and Misc Repair) BCD=000

B= Sign Housing Type
1 (Front Access)
2 (Walk-In)
3 (Embedded) static sign paid separately

C= Sign Display Type
1 (Monochrome)
2 (Tri-Color)
3 (Full-Color)

D= Sign Size
1 (up to 25 SF)
2 (26 to 50)
3 (51 to 100)
4 (101 to 200)
5 (201 to 300)
6 (Greater than 300 SF)

Notes
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0781 40501</td>
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<td>7/1/2012</td>
<td>7/1/2012</td>
<td></td>
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<tr>
<td>0781 40502</td>
<td>ITS DYNAMIC MESSAGE SIGN, REPLACE POWER SUPPLY</td>
<td>EA</td>
<td>7/1/2012</td>
<td>7/1/2012</td>
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</tr>
<tr>
<td>0781 40503</td>
<td>ITS DYNAMIC MESSAGE SIGN, REPLACE CONTROLLER</td>
<td>EA</td>
<td>7/1/2012</td>
<td>7/1/2012</td>
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<tr>
<td>0781 40509</td>
<td>ITS DYNAMIC MESSAGE SIGN, REPLACE MISCELLANEOUS COMPONENT</td>
<td>EA</td>
<td>7/1/2012</td>
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<tr>
<td>0781 40601</td>
<td>ITS DYNAMIC MESSAGE SIGN, REMOVE AND INSTALL LED DISPLAY PANEL / DRIVER BOARD</td>
<td>EA</td>
<td>7/1/2012</td>
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<tr>
<td>0781 40602</td>
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<td>EA</td>
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<tr>
<td>0781 40603</td>
<td>ITS DYNAMIC MESSAGE SIGN, REMOVE AND INSTALL CONTROLLER</td>
<td>EA</td>
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<td>0781 40609</td>
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<tr>
<td>0781 41214</td>
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Details and Structure: Complete- Items 000 to 1999
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<th>Accuracy</th>
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<th>Notes</th>
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<td>ITS DYNAMIC MESSAGE SIGN, F&amp;I WITH UPS, WALK-IN, MONOCHROME, 201-300 SF</td>
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<td>7/1/2012</td>
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<tr>
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<td>7/1/2012</td>
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<tr>
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<tr>
<td>0781 42215</td>
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</table>
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

782-1 AB  ITS CCTV CAMERA

**Unit**   EA   **Accuracy** Each

**PlanQuantity?** no

**Notes**

For installations along the roadway or intersections, to provide video of traffic movements. Includes mounting hardware, cabling, and power supply. Cameras can be dome style enclosures, or "barrel type" units with external positioners. Either unit can be pressurized to reduce the effects of moisture, dust, and other contaminants.

For repair, replacement, and Maintenance Activities, see 782-4- pay items.

REMOVE & DISPOSE: Plans or Specs should identify the limits of the item to be removed (incidental components, wiring, or other work).

REMOVE & STOCKPILE: Plans or Specs should indicate if the Contractor is to stockpile the item(s) within the project limits, or deliver to a FDOT maintenance yard. Include notes for protection of the camera until delivered to FDOT.

PREVENTIVE MAINTENANCE: Intended for Maintenance Contracts Only.

DIAGNOSTIC AND MISC REPAIR: Intended for Maintenance Contracts Only.

**Related Items**  
**Required**  
**Recommended**

**Design Forms and Documentation**

tabqit: ITS Tabulation Quantity Sheet
Locate in plans. Summarize quantities by location on summary sheet in the plans.
### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

<table>
<thead>
<tr>
<th>PPM Chapter</th>
<th>Vol 1, Chapter 7</th>
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<tr>
<td>Trns port</td>
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<td>Standards</td>
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<tr>
<td>Prep &amp; Doc Manual Chapter(s)</td>
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### TRNS*PORT Category (DRAFT FIELD):

0550 ITS or Signalization

### Struct.

<table>
<thead>
<tr>
<th>782- 1- AB</th>
<th>ITS CCTV CAMERA</th>
<th>EA</th>
</tr>
</thead>
</table>
| A= Operation  
1 (Furnish & Install)  
3 (Install)  
4 (Relocate) B=0  
5 (Adjust /Modify) B=0  
6 (Remove & Dispose) B=0  
7 (Remove & Stockpile) B=0 |
| B= Type  
1 (Dome enclosure, pressurized)  
2 (External positioner, pressurized)  
3 (Dome enclosure, non-pressurized)  
4 (External positioner, non-pressurized) |

#### Notes

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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
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<td>ITS CCTV CAMERA, F&amp;I, DOME ENCLOSURE - PRESSURIZED</td>
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<td>1/1/2010</td>
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<tr>
<td>0782 1 12</td>
<td>ITS CCTV CAMERA, F&amp;I, EXTERNAL POSITIONER - PRESSURIZED</td>
<td>EA</td>
<td>1/1/2010</td>
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<tr>
<td>0782 1 13</td>
<td>ITS CCTV CAMERA, F&amp;I, DOME ENCLOSURE - NON PRESSURIZED</td>
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<tr>
<td>0782 1 14</td>
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<td>0782 1 40</td>
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<tr>
<td>0782 1 50</td>
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<tr>
<td>0782 1 60</td>
<td>ITS CCTV CAMERA, REMOVE &amp; DISPOSAL</td>
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#### 782- 2-ABC

<table>
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<tr>
<th>ITS VIDEO DISPLAY</th>
</tr>
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<tbody>
<tr>
<td><strong>Unit</strong></td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
</tr>
<tr>
<td><strong>PlanQuantity?</strong></td>
</tr>
</tbody>
</table>

#### Notes

For use in the Transportation Management Center (TMC) to display video from the CCTV cameras in the field, and for displaying maps, graphics, traffic counts, and other visuals.
Video Display cubes can be stacked to form a wall display. Other monitors are positioned in the room or on the operator's desktops for control purposes. The video controller receives the incoming video signals and arranges them on the various displays. Display types, room layout, and installation details must be noted in the plans.

### Related Items

#### Design Forms and Documentation

- **tabqit:** ITS Tabulation Quantity Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

#### Construction Forms and Documentation

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

- **PPM Chapter**
- **Trns-port**
- **Other Standards**
- **Specifications**
- **Prep & Doc Manual Chapter(s)**

### TRNS-PORT Category (DRAFT FIELD): 0550 ITS or Signalization

<table>
<thead>
<tr>
<th>Struct.</th>
<th>ITS VIDEO DISPLAY EA</th>
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<tbody>
<tr>
<td>A= Operation</td>
<td></td>
</tr>
<tr>
<td>1 (Furnish &amp; Install)</td>
<td></td>
</tr>
<tr>
<td>2 (Furnish)</td>
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</tr>
<tr>
<td>3 (Install) Item furnished by local agency</td>
<td></td>
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<tr>
<td>4 (Relocate)</td>
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</tr>
<tr>
<td>5 (Adjust /Modify)</td>
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</tr>
<tr>
<td>B= Component</td>
<td></td>
</tr>
<tr>
<td>1 (Cube for video wall) C=2</td>
<td></td>
</tr>
<tr>
<td>2 (Workstation) C=1 or 3</td>
<td></td>
</tr>
<tr>
<td>3 (Monitor)</td>
<td></td>
</tr>
<tr>
<td>4 (Controller) C=0</td>
<td></td>
</tr>
<tr>
<td>C= Technology</td>
<td></td>
</tr>
<tr>
<td>1 (LCD- Liquid Crystal Display)</td>
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</tr>
<tr>
<td>2 (Rear Projection)</td>
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</tr>
<tr>
<td>3 (CRT- Cathode Ray Tube) valid through 6-30-10</td>
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<td>4 (Special)</td>
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### Notes

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<tr>
<td>0782 2121</td>
<td>ITS VIDEO DISPLAY, F&amp;I, WORK STATION, LIQUID CRYSTAL DISPLAY</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0782 2131</td>
<td>ITS VIDEO DISPLAY, F&amp;I, MONITOR, LIQUID CRYSTAL DISPLAY</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0782 2140</td>
<td>ITS VIDEO DISPLAY, F&amp;I, CONTROLLER</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>
### 782- 3- A  ITS REST AREA INFORMATION SYSTEMS

<table>
<thead>
<tr>
<th>Notes</th>
<th>Details</th>
<th>Related Items</th>
<th>Design Forms and Documentation</th>
<th>Construction Forms and Documentation</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>For use in highway rest areas for the display of traffic conditions and other information for the traveling public. The system is rack mounted and has the necessary processing power, memory, network connection, and video output capability to provide images for LCD displays in the lobby or concourse area of rest plazas.</td>
<td>Required</td>
<td>tabqit: ITS Tabulation Quantity Sheet</td>
<td>No additional form required; use plans summary or comp book</td>
<td>PPM Chapter</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
<td>Trns·port</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Other Standards</td>
</tr>
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<td>Specifications</td>
</tr>
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<td></td>
<td></td>
<td>Prep &amp; Doc Manual Chapter(s)</td>
</tr>
</tbody>
</table>

**TRNS*PORT Category (DRAFT FIELD):** 0550  ITS or Signalization

**Struct.** 782- 3- A  ITS REST AREA INFORMATION SYSTEMS  EA

A= Operation
1 (Furnish & Install)
3 (Install)
4 (Relocate)
5 (Adjust & Modify)

### 782- 4- AB  ITS CCTV CAMERA COMPONENTS For Maintenance Use Only

<table>
<thead>
<tr>
<th>Notes</th>
<th>Details</th>
<th>Related Items</th>
<th>Design Forms and Documentation</th>
<th>Construction Forms and Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intended for the repair, replacement, and maintenance of CCTV components.</td>
<td>Required</td>
<td></td>
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</tr>
</tbody>
</table>

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### TRNS*PORT Category (DRAFT FIELD):

**Struct.** 782-4-AB  
**ITS CCTV CAMERA COMPONENTS** For Maintenance Use Only

A= Operation  
5 (Replace)  
6 (Remove and Install)  
8 (Preventative Maintenance) B=0  
9 (Diagnostic & Misc Repair) B=0  
B= Component  
1 (Cable, 0-75 ft)  
2 (Surge Protector)  
3 (Power Supply)

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
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<tbody>
<tr>
<td>0782 4 50</td>
<td>ITS CCTV CAMERA, REPLACE, COMPLETE ASSEMBLY</td>
<td>EA</td>
<td>7/1/2012</td>
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<tr>
<td>0782 4 51</td>
<td>ITS CCTV CAMERA, REPLACE, CABLE 0-75 FT</td>
<td>EA</td>
<td>7/1/2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0782 4 52</td>
<td>ITS CCTV CAMERA, REPLACE, SURGE PROTECTOR</td>
<td>EA</td>
<td>7/1/2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0782 4 53</td>
<td>ITS CCTV CAMERA, REPLACE, POWER SUPPLY</td>
<td>EA</td>
<td>7/1/2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0782 4 60</td>
<td>ITS CCTV CAMERA, REMOVE AND INSTALL, COMPLETE ASSEMBLY</td>
<td>EA</td>
<td>7/1/2012</td>
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<tr>
<td>0782 4 80</td>
<td>ITS CCTV CAMERA, PREVENTATIVE MAINTENANCE</td>
<td>EA</td>
<td>7/1/2012</td>
<td></td>
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<tr>
<td>0782 4 90</td>
<td>ITS CCTV CAMERA, DIAGNOSTIC AND MISCELLANEOUS REPAIR</td>
<td>EA</td>
<td>7/1/2012</td>
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</table>

### 782-Maint ITS-MAINTENANCE

<table>
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<tr>
<th>Unit</th>
<th>Mixed</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Refer to item structure and details</td>
<td>?</td>
</tr>
</tbody>
</table>

**Notes**

Maintenance Item: Not Valid for Construction Contracts

**Details**

MAINTENANCE CONTRACTS ONLY  
Additional BOE details pending

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

**Design Forms and Documentation**

Details and Structure: Complete-Items 000 to 1999
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>783- 1-ABC</th>
<th>ITS FIBER OPTIC CABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit</strong></td>
<td>LF; M1</td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>Linear Foot; 1/10 Meter</td>
</tr>
<tr>
<td><strong>PlanQuantity?</strong></td>
<td>no</td>
</tr>
</tbody>
</table>

**Notes**

For use in fiber optic networks that support ITS devices and their connection to communication hubs, transportation management centers, and related facilities. Use "overhead" for installations involving bridges and other aboveground structures. Use "underground" for cable placed in buried conduit along the roadside.

******

REPLACE: Intended for Maintenance Operations. Includes the removal of an existing cable and installation of new fiber optic cable provided by the Contractor.

INSTALL: Includes the installation of Fiber Optic cable provided by the Department.

RELOCATE: Includes the removal and reinstallation of the cable from one location/conduit to another.

ADJUST/MODIFY:

REMOVE (A=6): For cable to be removed, detail location and size of cable (approximate number of fibers) to be removed. Contractor takes ownership (remove & dispose), unless otherwise indicated in the plans or specs.

REMOVE & STOCKPILE (A=7): For cable to be removed, detail location and size of cable (approximate number of fibers) to be removed. FDOT retains ownership of cable. Detail in plans location for stockpile, i.e. Maintenance yard.

**Related Items**

<table>
<thead>
<tr>
<th><strong>Required</strong></th>
<th><strong>Recommended</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>tabqit: ITS Tabulation Quantity Sheet</td>
<td></td>
</tr>
</tbody>
</table>

**Design Forms and Documentation**

Locate in plans. Summarize quantities by location on summary sheet in the plans.
No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter Vol 1, Chapter 7
Trns·port
Other
Standards
Specifications
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0550 ITS or Signalization

Struct.  783- 1-ABC ITS FIBER OPTIC CABLE LF

A= Operation
1 (Furnish & Install)
2 (Replace)
3 (Install)
4 (Relocate) C=0
5 (Adjust /Modify) C=0
6 (Remove) BC=00
B= Location
1 (Overhead)
2 (Underground)
C= Number of Fibers in Cable
1 (2 to 12)
2 (13 to 48)
3 (49 to 96)
4 (97 to 144)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0783</td>
<td>ITS FIBER OPTIC CABLE, F&amp; I, OVERHEAD, 2 -12 FIBERS</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td>6/30/2013</td>
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<tr>
<td>0783</td>
<td>ITS FIBER OPTIC CABLE, F&amp; I, OVERHEAD, 49-96 FIBERS</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td>6/30/2013</td>
</tr>
<tr>
<td>0783</td>
<td>ITS FIBER OPTIC CABLE, F&amp; I, UNDERGROUND, 2 -12 FIBERS</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td>6/30/2013</td>
</tr>
<tr>
<td>0783</td>
<td>ITS FIBER OPTIC CABLE, F&amp; I, UNDERGROUND, 97-144 FIBERS</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td>6/30/2013</td>
</tr>
<tr>
<td>0783</td>
<td>ITS FIBER OPTIC CABLE, REPLACE, UNDERGROUND, 2-12 FIBERS</td>
<td>LF</td>
<td></td>
<td>1/1/2010</td>
<td>6/30/2013</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
<td>Unit</td>
<td>Start Date</td>
<td>End Date</td>
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<tr>
<td>0783 1223</td>
<td>ITS FIBER OPTIC CABLE, REPLACE, UNDERGROUND, 49 - 96 FIBERS</td>
<td>LF</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
<td></td>
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<tr>
<td>0783 1224</td>
<td>ITS FIBER OPTIC CABLE, REPLACE, UNDERGROUND, 97-144 FIBERS</td>
<td>LF</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
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<tr>
<td>0783 1321</td>
<td>ITS FIBER OPTIC CABLE, INSTALL, UNDERGROUND, 2-12 FIBERS</td>
<td>LF</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
<td></td>
</tr>
<tr>
<td>0783 1323</td>
<td>ITS FIBER OPTIC CABLE, INSTALL, UNDERGROUND, 97-144 FIBERS</td>
<td>LF</td>
<td>1/1/2010</td>
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<tr>
<td>0783 1410</td>
<td>ITS FIBER OPTIC CABLE, RELOCATE, OVERHEAD</td>
<td>LF</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
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</tr>
<tr>
<td>0783 1420</td>
<td>ITS FIBER OPTIC CABLE, RELOCATE, UNDERGROUND</td>
<td>LF</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
<td></td>
</tr>
<tr>
<td>0783 1510</td>
<td>ITS FIBER OPTIC CABLE, ADJUST/MODIFY, OVERHEAD</td>
<td>LF</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
<td></td>
</tr>
<tr>
<td>0783 1520</td>
<td>ITS FIBER OPTIC CABLE, ADJUST/MODIFY, UNDERGROUND</td>
<td>LF</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
<td></td>
</tr>
<tr>
<td>0783 1600</td>
<td>ITS FIBER OPTIC CABLE, REMOVE</td>
<td>LF</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
<td></td>
</tr>
<tr>
<td>0783 1700</td>
<td>ITS FIBER OPTIC CABLE, REMOVE &amp; STOCKPILE</td>
<td>LF</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
<td></td>
</tr>
</tbody>
</table>

---

### 783-2-AB ITS FIBER OPTIC CONNECTION

**Notes**
- For use in fiber optic networks where segments of fiber optic cable must be spliced together, or when cables must be terminated at the end of a segment. Note that each connection involves the fusing of individual optical fibers in a cable. Payment "each" is for each FIBER to be connected.
- Type of connection must be noted in the plans.

**Related Items**
- **Required:**
- **Recommended:** 783-3

**Design Forms and Documentation**
- **tabqit: ITS Tabulation Quantity Sheet**
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**
- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- PPM Chapter
- Trns-port
- Other Standards
- Specifications

**TRNS*PORT Category (DRAFT FIELD):** 0550 ITS or Signalization

**Struct.** 783-2-AB ITS FIBER OPTIC CONNECTION EA
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0783 2 31</td>
<td>ITS FIBER OPTIC CONNECTION, INSTALL, SPLICE</td>
<td>EA</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
<td></td>
</tr>
<tr>
<td>0783 2 32</td>
<td>ITS FIBER OPTIC CONNECTION, INSTALL, TERMINATION</td>
<td>EA</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
<td></td>
</tr>
<tr>
<td>0783 2 41</td>
<td>ITS FIBER OPTIC CONNECTION, RELOCATE, SPLICE</td>
<td>EA</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
<td></td>
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<tr>
<td>0783 2 42</td>
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<td>EA</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
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<tr>
<td>0783 2 51</td>
<td>ITS FIBER OPTIC CONNECTION, ADJUST/MODIFY, SPLICE</td>
<td>EA</td>
<td>D</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
</tr>
<tr>
<td>0783 2 52</td>
<td>ITS FIBER OPTIC CONNECTION, ADJUST/MODIFY, TERMINATION</td>
<td>EA</td>
<td>D</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
</tr>
</tbody>
</table>

### 783-3- AB  ITS FIBER OPTIC CONNECTION HARDWARE

**Unit**: EA  
**Accuracy**: Each  
**Plan Quantity?**: No

#### Notes

For use in fiber optic networks, where segments of cable must be spliced together. This item includes hardware and incidental materials for splices; payment for splicing individual fibers is made under 783-2.

For B=8 (Patch Cord), tech spec needed to describe the patch cord requirements. FO patch cords or Cat5 cables may be considered as incidental to the hardware to be installed. Ensure that the plans/specs clearly define if separate payment will be made for patch cords. Otherwise, payment will be considered as incidental to hardware being installed. When multiple cords/cables are needed, use a tabulation sheet in the plans to clearly identify the number of pairs and length of each cord/cable.

#### Related Items

- **Required**: 783-2  
- **Recommended**:

#### Design Forms and Documentation

- **tabqit: ITS Tabulation Quantity Sheet**  
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

#### Construction Forms and Documentation

- No additional form required; use plans summary or comp book  
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

#### References

- **PPM Chapter**  
- Trns-port
### Other Standards Specifications

**Prep & Doc Manual Chapter(s)**

<table>
<thead>
<tr>
<th><strong>TRNS*PORT Category (DRAFT FIELD):</strong></th>
<th>0550</th>
<th>ITS or Signalization</th>
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<tbody>
<tr>
<td><strong>Struct.</strong>  783- 3- AB</td>
<td>ITS FIBER OPTIC CONNECTION HARDWARE</td>
<td>EA</td>
</tr>
</tbody>
</table>

A= Operation
1 (Furnish & Install)
2 (Replace)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)

B=Component
1 (Splice Enclosure)
2 (Splice Tray)
3 (Preterminated Connector Assembly)
4 (Buffer Tube Fan Out Kit)
5 (Patch Panel, Preterminated)
6 (Patch Panel, Field Terminated)
7 (Connector Panel)
8 (Patch Cord)* Tech Spec needed; see BOE detail

**Notes**

*B=8: Tech Spec needed. Coordinate the use of this item with ITS Office.

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0783 3 12</td>
<td>ITS FIBER OPTIC CONNECTION HARDWARE, F&amp;I, SPLICE, TRAY</td>
<td>EA</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
<td></td>
</tr>
<tr>
<td>0783 3 13</td>
<td>ITS FIBER OPTIC CONNECTION HARDWARE, F&amp;I, PRETERMINATED CONNECTOR ASSEMBLY</td>
<td>EA</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
<td></td>
</tr>
<tr>
<td>0783 3 14</td>
<td>ITS FIBER OPTIC CONNECTION HARDWARE, F&amp;I, BUFFER TUBE FAN OUT KIT</td>
<td>EA</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
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</tr>
<tr>
<td>0783 3 15</td>
<td>ITS FIBER OPTIC CONNECTION HARDWARE, F&amp;I, PATCH PANEL, PRETERMINATED</td>
<td>EA</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
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</tr>
<tr>
<td>0783 3 16</td>
<td>ITS FIBER OPTIC CONNECTION HARDWARE, F&amp;I, PATCH PANEL. FIELD TERMINATED</td>
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<td>1/1/2010</td>
<td>6/30/2013</td>
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<td>0783 3 17</td>
<td>ITS FIBER OPTIC CONNECTION HARDWARE, F&amp;I, CONNECTOR PANEL</td>
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<td>1/1/2010</td>
<td>6/30/2013</td>
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<tr>
<td>0783 3 21</td>
<td>ITS FIBER OPTIC CONNECTION HARDWARE, REPLACE, SPLICE ENCLOSURE</td>
<td>EA</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
<td></td>
</tr>
<tr>
<td>0783 3 32</td>
<td>ITS FIBER OPTIC CONNECTION HARDWARE, INSTALL, SPLICE TRAY</td>
<td>EA</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
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</tr>
<tr>
<td>0783 3 41</td>
<td>ITS FIBER OPTIC CONNECTION HARDWARE, RELocateI, SPLICE ENCLOSURE</td>
<td>EA</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
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783- 4-1AB  
ITS CONDUIT

<table>
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<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
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<tbody>
<tr>
<td>LF; M1</td>
<td>Linear Foot; 1/10 Meter</td>
<td>no</td>
<td>Valid through June 30, 2013. Replaced by 630-2-AB. Refer to Estimates Bulletin 12-15.</td>
</tr>
</tbody>
</table>

Details
For fiber optic cable and ITS devices only. Quantity is based on the total length of conduit installed, regardless of whether multiple conduits are located within a trench or casing. Underground: to be used when conduit is installed prior to placement of pavement, or where it does not interfere with existing pavement. Underpavement Sawcut: to be used only when sawcutting is necessary for location under EXISTING PAVEMENT.

Note: Specification change effective 7-1-08 letting has separate payment for Electronic Locate Transmitter & Receiver. Refer to specification for payment details.

REPLACE: Intended for Maintenance operations. Includes the removal of existing conduit, and the replacement with new (contractor furnished) conduit.

Related Items

<table>
<thead>
<tr>
<th>Design Forms and Documentation</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>tabqit: ITS Tabulation Quantity Sheet</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
<td></td>
</tr>
</tbody>
</table>

| Construction Forms and Documentation | |
|-------------------------------------| |
| No additional form required; use plans summary or comp book | Record final quantity on the tabulation sheet (plans) or computation form (comp book). |
Standards
Specifications

Struct.  783-  4-1AB ITS CONDUIT LF

A= Operation
1 (Furnish & Install)
2 (Replace)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)
6 (Remove and Dispose) B=0

B= Location
1 (Aboveground)
2 (Underground)
3 (Underpavement Sawcut) Note: to be used only when sawcutting is necessary
9 (Special)*

Notes
*Special to be used only with approval of the ITS Office
Plan Details and/or Tech Specs needed for Install, Relocate, Adjust/Modify, and Remove items.

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
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<tbody>
<tr>
<td>0783 4111</td>
<td>ITS CONDUIT, F&amp; I, ABOVEGROUND</td>
<td>LF</td>
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</tbody>
</table>

783-  5-  A ITS PULL BOX FOR FIBER OPTIC

| Unit | EA | Accuracy | Each | PlanQuantity? | no |

Notes
Details
For use in fiber optic networks as an access point for moving cable into position during installation. Refer to specification for size, materials, and other details for box.

Related Items
Required
Recommended
Design Forms and Documentation  
- tabqit: ITS Tabulation Quantity Sheet
  - Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation  
- No additional form required; use plans summary or comp book
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References  
- PPM Chapter
- Trns-port
- Other Standards Specifications
- Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0550 ITS or Signalization

Struct. 783- 5- A ITS PULL BOX FOR FIBER OPTIC EA
A= Operation
1 (Furnish & Install)
2 (Replace)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)

Notes  
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0783 5 1</td>
<td>ITS PULL BOX FOR FIBER OPTIC CABLE, FURNISH AND INSTALL</td>
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<td>TSP</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
</tr>
<tr>
<td>0783 5 4</td>
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<td>TSP</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
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<td>D</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
</tr>
</tbody>
</table>

783- 6- A ITS SPLICE BOX FOR FIBER OPTIC

Notes  
Details  
- For use in fiber optic networks as a housing for the connection or termination of cable segments. Refer to specification for size, materials, and other details for box.
- REMOVE AND DISPOSE (A=6): Detail size and location in the plans. Contractor assumes ownership after removal- for disposal by the contractor.
- REMOVE AND STOCKPILE (A=7): Detail size and location in the plans. FDOT retains ownership of the item. Detail location for stockpile, i.e. Maintenance yard or project Right of way.

Related Items  
- Required
- Recommended
### Design Forms and Documentation

- **tabqt: ITS Tabulation Quantity Sheet**
  - Locate in plans. Summarize quantities by location on summary sheet in the plans.

### Construction Forms and Documentation

- No additional form required; use plans summary or comp book
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

- PPM Chapter
- Trns-port
- Other Standards
- Specifications
- Prep & Doc Manual Chapter(s)

#### TRNS*PORT Category (DRAFT FIELD):

- 0550 ITS or Signalization

### Struct.  783-  6-  A

- **ITS SPLICE BOX FOR FIBER OPTIC**
  - **EA**

  - **A**= Operation
  - 1 (Furnish & Install)
  - 3 (Install)
  - 4 (Relocate)
  - 5 (Adjust /Modify)
  - 6 (Remove & Dispose)
  - 7 (Replace)

### Notes

- The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0783 6 1</td>
<td>ITS SPLICE BOX FOR FIBER OPTIC CABLE, F &amp; I</td>
<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td>6/30/2013</td>
</tr>
<tr>
<td>0783 6 3</td>
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<td></td>
<td>1/1/2010</td>
<td>6/30/2013</td>
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<tr>
<td>0783 6 4</td>
<td>ITS SPLICE BOX FOR FIBER OPTIC CABLE, RELOCATE</td>
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<td>1/1/2010</td>
<td>6/30/2013</td>
</tr>
<tr>
<td>0783 6 5</td>
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<td>EA</td>
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<td>1/1/2010</td>
<td>6/30/2013</td>
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<td>0783 6 6</td>
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<td>1/1/2010</td>
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<td>0783 6 7</td>
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<td>EA</td>
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</tr>
</tbody>
</table>

### 783-  7-  A

- **ITS PULL AND JUNCTION BOX**
  - **EA**

### Notes

- For use on ITS projects. To be used for non-fiber optic wiring needs (power, communication, etc for ITS systems). Full details/specs are needed for this item. Designer may refer to other specification sections, as needed to detail required box.

  - NOTE: THIS ITEM IS NOT covered by current 783 specification.
For Pull/Junction or Splice Box for Fiber Optics, refer to items 783-5 and 783-6, as detailed in the specifications.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

*********

REMOVE AND STOCKPILE (A=7): Detail size and location in the plans. FDOT retains ownership of the item. Detail location for stockpile, i.e. Maintenance yard or project Right of way.

---

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

- tabqit: ITS Tabulation Quantity Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

---

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

---

**References**

- PPM Chapter
- Trns-port
- Other Standards
- Specifications

T: Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0550

**Struct. 783-7- A**

ITS PULL AND JUNCTION BOX

- EA
- A= Operation
- 1 (Furnish & Install)
- 2 (Replace)
- 3 (Install)
- 4 (Relocate)
- 5 (Adjust /Modify)
- 7 (Remove and Stockpile)

---

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<tr>
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<td>6/30/2013</td>
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<td>0783</td>
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<td>1/1/2010</td>
<td>6/30/2013</td>
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</tbody>
</table>

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Details and Structure: Complete- Items 000 to 1999
### Notes

**Details**

For use on ITS projects. Tech Spec and/or plan detail needed to specify material requirements and/or number of conductors. Primarily for communications, may carry incidental low voltage device power. When multiple cables are needed, use a tabulation sheet in the plans to clearly identify the number of pairs and length of each cable. Record the total length for payment under this pay item.

Note: FO patch cords or Cat5 cables may be considered as incidental to the hardware to be installed. Refer to 783-3 for patch cords.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
<thead>
<tr>
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<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
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### Construction Forms and Documentation

No additional form required; use plans summary or comp book

### References

PPM Chapter  
Trns-port  
Other Standards  
Specifications

**T**: Plan Details and/or Technical Specifications required

### TRNS*PORT Category (DRAFT FIELD):

0550 ITS or Signalization

### Struct.

783-8- A  
ITS MULTI-CONDUCTOR COMMUNICATION CABLE  
LF

A = Operation  
1 (Furnish & Install)  
3 (Install)  
4 (Relocate)  
5 (Adjust /Modify)

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### 783- 9- AB  ITS LOCATE SYSTEM ELECTRONIC EQUIPMENT

<table>
<thead>
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<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
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</table>

**Notes**

For use on ITS projects. This pay items is intended for the electronic equipment used to detect buried conduit and other underground duct, cable, and infrastructure. The electronics used for this activity typically includes a portable transmitter, a hand-held receiver, and electronic markers that can be used together to determine the location of the underground utilities and other objects. Special configuration and/or installation details should be detailed in the plans on a project-by-project basis.

Electronic Box Marker: Specifications call for one electronic box marker in each pull box and splice box BURIED BELOW FINISH GRADE.

**Related Items**

- **Required**
  - tabqit: ITS Tabulation Quantity Sheet
- **Recommended**
  - Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book.

**PPM Chapter**

**Trns-port**

**Other Standards**

**Specifications**

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0550  ITS or Signalization

**Struct.** 783- 9- AB  ITS LOCATE SYSTEM ELECTRONIC EQUIPMENT  EA

A= Operation
1 (Furnish & Install)
3 (Install)
4 (Relocate)
5 (Adjust /Modify)
B = Equipment Type
1  (Transmitter)
2  (Receiver)
3  (Electronic Box Marker) Note: Do not use this item for Electronic Route Markers

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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783-Maint  ITS- MAINTENANCE

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TRNS*PORT Category (DRAFT FIELD):

Struct.  783-Maint  ITS- MAINTENANCE  Mixed

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

784- 1- A  ITS MANAGED FIELD ETHERNET SWITCH

<table>
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<td>no</td>
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</table>

Details and Structure: Complete- Items 000 to 1999
Details

For use in ITS communication networks to provide wire-speed fast Ethernet connections for ITS field devices. The Ethernet switch is hardened to withstand harsh environments and provides transmission rates of 100 megabits per second from the remote ITS device installation location to the ITS network trunk interconnection point.

Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>tabqit: ITS Tabulation Quantity Sheet</td>
</tr>
</tbody>
</table>

Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References

PPM Chapter

Trns-port

Other Standards

Specifications

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0550 ITS or Signalization

Struct. 784- 1- A ITS MANAGED FIELD ETHERNET SWITCH EA

A= Operation
1 (Furnish & Install)
3 (Install) FDOT Furnished
4 (Relocate)
5 (Adjust /Modify)
6 (Remove and Dispose) Contractor takes ownership
7 (Replace) Contractor furnished
8 (Remove and Install) FDOT Furnished

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tr>
<td>0784 1 4</td>
<td>ITS MANAGED FIELD ETHERNET SWITCH, RELOCATE</td>
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<tr>
<td>0784 1 5</td>
<td>ITS MANAGED FIELD ETHERNET SWITCH, ADJUST/MODIFY</td>
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</tr>
<tr>
<td>0784 1 6</td>
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</tbody>
</table>
ITS DEVICE SERVER

| Unit      | EA  | Accuracy | Each | PlanQuantity? | no |

**Notes**

**Details**
For use when an ITS field device must connect to an Ethernet network but the device is only equipped with serial communication ports (i.e. EIA-232, EIA-422, or EIA-485 connections). Field devices that may require use of device servers include highway advisory radio field assemblies, microwave vehicle detection system devices, magnetic traffic detection systems, road weather information system stations, and other low-speed data output devices.

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

- tabqit: ITS Tabulation Quantity Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

**PPM Chapter**

**Trns-port**

**Other**

**Standards**

**Specifications**

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0550 ITS or Signalization

**Struct. 784-2-A ITS DEVICE SERVER EA**

A= Operation
1 (Furnish & Install)
2 (Replace with FDOT Furnished) "Remove and Install"
3 (Install)
4 (Adjust /Modify)
5 (Relocate)
6 (Remove and Dispose) Contractor takes ownership
7 (Replace) Contractor furnished

**Notes**

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<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
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<tbody>
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</tr>
<tr>
<td>0784 2 3</td>
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<td>EA</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0784 2 4</td>
<td>ITS DEVICE SERVER, ADJUST/MODIFY</td>
<td>EA</td>
<td>D</td>
<td>1/1/2010</td>
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<tr>
<td>0784 2 5</td>
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<td>1/1/2010</td>
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<tr>
<td>0784 2 7</td>
<td>ITS DEVICE SERVER, REPLACE</td>
<td>EA</td>
<td>D</td>
<td>7/1/2012</td>
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</tr>
</tbody>
</table>
ITS DIGITAL VIDEO ENCODER WITH SOFTWARE DECODER

Unit: EA  Accuracy: Each  PlanQuantity?: no

Notes:

Details:
For use when analog video and data signals obtained in the field must be converted to
digital signals for transmission across IP networks. The encoder and decoder are
independent, network-based devices that utilize MPEG-2 and other video compression
algorithms for transmission of high-bandwidth signals. Encoders may be hardened devices
and are installed in the field. Decoders are housed in transportation management centers
and can be either a hardware device or a decoder software program running on a
computer.

NOTE: Software based decoder is incidental to the digital video encoder, per specifications.

Related Items:

Required  Recommended
Design Forms and Documentation  tabqt: ITS Tabulation Quantity Sheet
Locate in plans. Summarize quantities by location on summary sheet in the plans.

Construction Forms and Documentation  No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References:
PPM Chapter
Trns-port
Other
Standards
Specifications
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):  0550  ITS or Signalization

 Struct.  784- 3- AB  ITS DIGITAL VIDEO ENCODER WITH SOFTWARE DECODER  EA

A= Operation
1 (Furnish & Install)
2 (Replace) B=0
3 (Install) B=0
4 (Relocate) B=0
5 (Remove and Install) B=0
6 (Remove and Dispose) Contractor takes ownership, B=0
9 (Diagnostic & Misc Repair) B=0

B= Component
1 (Hardened Encoder)

Notes:
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0784 3 11</td>
<td>ITS DIGITAL VIDEO ENCODER WITH SOFTWARE DECORDER, F&amp;I, HARDENED ENCODER</td>
<td>EA</td>
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<td>1/1/2010</td>
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<tr>
<td>0784 3 20</td>
<td>ITS DIGITAL VIDEO ENCODER WITH SOFTWARE DECODER, REPLACE</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0784 3 30</td>
<td>ITS DIGITAL VIDEO ENCODER WITH SOFTWARE DECODER, INSTALL</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0784 3 40</td>
<td>ITS DIGITAL VIDEO ENCODER WITH SOFTWARE DECODER, RELOCATE</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0784 3 50</td>
<td>ITS DIGITAL VIDEO ENCODER WITH SOFTWARE DECODER, REMOVE AND INSTALL</td>
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<td>T</td>
<td>7/1/2012</td>
<td></td>
</tr>
<tr>
<td>0784 3 60</td>
<td>ITS DIGITAL VIDEO ENCODER WITH SOFTWARE DECODER, REMOVE &amp; DISPOSE, HARDENED ENCODER</td>
<td>EA</td>
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<td>1/1/2010</td>
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<tr>
<td>0784 3 90</td>
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</tbody>
</table>

### 784- 4- AB ITS DIGITAL VIDEO DECODER

**Unit**: EA  
**Accuracy**: Each  
**Plan Quantity**: no

**Notes**
- DO NOT USE with Digital Video Encoder; see details with 784-3 item.
- This item to be used only when a hardware-based decoder, or additional copies of the software-based decoder are needed.
- Contact ITS Section prior to opening.

**Related Items**
- **Required**
- **Recommended**

**Design Forms and Documentation**
- tabqt: ITS Tabulation Quantity Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**
- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**
- PPM Chapter
- Trns-port
- Other
- Standards
- Specifications
- Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):** 0550 ITS or Signalization

**Struct.** 784- 4- AB ITS DIGITAL VIDEO DECODER EA

- A= Operation
- 1 (Furnish & Install)
- 3 (Install) B=0
- 4 (Relocate) B=0
**Notes**

Contact ITS Section prior to opening.

---

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*

---

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>784-5-AB</td>
<td><strong>ITS MANAGED ETHERNET HUB SWITCH</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Each</td>
<td>no</td>
</tr>
</tbody>
</table>

**Details**

For use in ITS communication networks to provide centralized Ethernet connections for ITS field devices utilizing field or edge switches. The Ethernet hub switch is hardened to withstand harsh environments and installation at remote locations. "Long haul" and "short haul" are common terms applied to telecommunication equipment in order to generally describe a device's ability to transmit information over various distances.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**
- tabqit: ITS Tabulation Quantity Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Recommended**
- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

- PPM Chapter
- Trns-port
- Other Standards
- Specifications

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0550

**Struct.**

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>784-5-AB</td>
<td><strong>ITS MANAGED ETHERNET HUB SWITCH</strong></td>
</tr>
</tbody>
</table>

- A = Operation
- 1 (Furnish & Install)
- 3 (Install)
- 4 (Relocate)
- 5 (Adjust /Modify)
- 6 (Remove and Dispose) Contractor takes ownership

- B = Type
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0784 5 11</td>
<td>ITS MANAGED ETHERNET HUB SWITCH, F&amp;I, LONG HAUL</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
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<td>0784 5 12</td>
<td>ITS MANAGED ETHERNET HUB SWITCH, F&amp;I, SHORT HAUL</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0784 5 30</td>
<td>ITS MANAGED ETHERNET HUB SWITCH, INSTALL</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>0784 5 51</td>
<td>ITS MANAGED ETHERNET HUB SWITCH, ADJUST/MODIFY, LONG HAUL</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
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**784- 6- AB ITS WIRELESS COMMUNICATION DEVICE**

<table>
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<th>Unit</th>
<th>EA</th>
</tr>
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<tbody>
<tr>
<td>Accuracy</td>
<td>Each</td>
</tr>
</tbody>
</table>

**Notes**

For use in transmitting and receiving data in ITS networks, especially between remotely located field devices and the mainline communications infrastructure that serves them. Devices include radio transmitter-receivers and antennas, power-over-Ethernet (PoE) injectors, serial cable, power supplies and mounting hardware. Access points and subscriber units are typically associated with Ethernet systems. Specifications needed to detail equipment requirements.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Design Forms and Documentation**

- tabqt: ITS Tabulation Quantity Sheet
- Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter
- Trnsport
- Other
- Standards
- Specifications

T: Plan Details and/or Technical Specifications required

**TRNS*PORT Category (DRAFT FIELD):** 0550 ITS or Signalization

**Struct.** 784- 6- AB ITS WIRELESS COMMUNICATION DEVICE EA
A = Operation
1 (Furnish & Install)
3 (Install) B=0
4 (Relocate) B=0
5 (Adjust/Modify) B=0
6 (Remove and Dispose) B=0, Contractor takes ownership

B = Type
1 (Ethernet Access Point)
2 (Ethernet Subscriber Unit)
3 (Serial Data Unit)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
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<tbody>
<tr>
<td>0784 6 11</td>
<td>ITS WIRELESS COMMUNICATION DEVICE, F&amp;I, ETHERNET ACCESS POINT</td>
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<td>T</td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>0784 6 12</td>
<td>ITS WIRELESS COMMUNICATION DEVICE, F&amp;I, ETHERNET SUBSCRIBER UNIT</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>0784 6 40</td>
<td>ITS WIRELESS COMMUNICATION DEVICE, RELOCATE</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>0784 6 60</td>
<td>ITS WIRELESS COMMUNICATION DEVICE, REMOVE &amp; DISPOSE</td>
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784-10-AB ITS MANAGED FIELD ETHERNET SWITCH- COMPONENTS for Maintenance Use

<table>
<thead>
<tr>
<th>Unit</th>
<th>EA</th>
<th>Accuracy</th>
<th>Each</th>
<th>PlanQuantity?</th>
</tr>
</thead>
</table>

Notes

Details

These items intended for replacement of components; for complete assembly, see pay items 784-1- pay items.

Related Items

Required | Recommended

Design Forms and Documentation

Construction Forms and Documentation

References

PPM Chapter
Trns-port
Other Standards
Specifications
Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):

Struct. 784-10-AB ITS MANAGED FIELD ETHERNET SWITCH- COMPONENTS for Maintenance Use EA

A = Operation
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>Item</th>
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<th>Unit</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0784 10 51</td>
<td>ITS MANAGED FIELD ETHERNET SWITCH, REPLACE POWER SUPPLY</td>
<td>EA</td>
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<td>7/1/2012</td>
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<tr>
<td>0784 10 52</td>
<td>ITS MANAGED FIELD ETHERNET SWITCH, REPLACE OPTICS</td>
<td>EA</td>
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<td>7/1/2012</td>
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</table>

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**Details**

MAINTENANCE CONTRACTS ONLY
Additional BOE details pending

**Related Items**

Required
Recommended

**Design Forms and Documentation**

**Construction Forms and Documentation**

**References**

PPM Chapter
Trns-port
Other Standards
Specifications

**TRNS*PORT Category (DRAFT FIELD):**

Struct. 784-Maint ITS- MAINTENANCE Mixed

**Notes**

Use a lowering device in field locations where a CCTV camera or other ITS device is...
mounted on a pole, but the height precludes easy access to the equipment for maintenance or repair. The lowering device is provided along with a steel or concrete pole. Refer to design standards for pole and mounting details.

FURNISH & INSTALL: Includes the pole, with or without lowering device (per pay item), installed per design standard. No separate payment for drilled shaft foundation.

REMOVE: Plans or specs should identify if contactor is to take ownership, stockpile, or deliver item(s) to a FDOT maintenance yard.

Retrofit: to be used where a pole is already provided, to include furnishing & installation of lowering device.

---

**Related Items**

**Required**

- Design Forms and Documentation
  -pidlit: ITS Pole Tabulation & Details for all Types
  - Locate in plans. Summarize quantities by location on summary sheet in the plans.

**Recommended**

- Construction Forms and Documentation
  - No additional form required; use plans summary or comp book
  - Record final quantity on the tabulation sheet (plans) or computation form (comp book).

---

**References**

- PPM Chapter
- Trns-port
- Other Standards
  - Index 18110, 18111 (steel), and 18113 (Concrete)
- Specifications
- Prep & Doc Manual Chapter(s)

---

**TRNS*PORT Category (DRAFT FIELD):** 0550

ITS or Signalization

---

**Struct. 785-1-AB**

- A= Operation
- 1 (Furnish & Install)
- 2 (Replace)
- 3 (Install) B=0
- 4 (Relocate) B=0
- 5 (Adjust /Modify) B=0
- 6 (Remove) B=0
- 9 (Retrofit lowering device on existing pole) B=0

- B= Type
- 1 (Concrete Pole w/ lowering device)
- 2 (Steel Pole w/ lowering device)
- 3 (Concrete Pole w/o lowering device)
- 4 (Steel Pole w/o lowering device)

---

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### Topic No. 600-000-002

#### Basis of Estimates

**2012 Edition**  
*January 22, 2013*

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<th>Obsolete Date</th>
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<td>1/1/2010</td>
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<tr>
<td>0785 1 14</td>
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<td>7/1/2012</td>
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<tr>
<td>0785 1 40</td>
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<td>EA</td>
<td>1/1/2011</td>
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<tr>
<td>0785 1 60</td>
<td>ITS POLE, REMOVE</td>
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<td>1/1/2010</td>
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<table>
<thead>
<tr>
<th>785- 2-ABC</th>
<th><strong>ITS FIELD CABINET</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit</strong></td>
<td>EA</td>
</tr>
</tbody>
</table>

**Notes**

For use on ITS project. Refer to Specification for cabinets covered by Section 785 and applicable design standards. Specifications for Install only items should include existing location of materials/equipment (i.e. maintenance yard address).

**Details**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

| tabqt: ITS Tabulation Quantity Sheet |
| Locate in plans. Summarize quantities by location on summary sheet in the plans. |

**Construction Forms and Documentation**

| No additional form required; use plans summary or comp book |
| Record final quantity on the tabulation sheet (plans) or computation form (comp book). |

**References**

**PPM Chapter Trns-port**

**Other Standards**

Index No. 18300

**Specifications**

**T: Selected Items may require Plan Details and/or Technical Specifications**

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0550  
ITS or Signalization

**Struct.** 785- 2-ABC  
**ITS FIELD CABINET**  
EA

A= Operation

---

*Details and Structure: Complete- Items 000 to 1999*  
Page 711 of 769
1 (Furnish & Install)  
2 (Replace) C=0  
3 (Install) BC=00  
4 (Relocate) BC=00  
5 (Adjust/Modify) BC=00  
6 (Remove and Dispose) Contractor takes ownership BC=00  

B= Type  
1 (Type 336)  
2 (Type 336 w/ sunshields)  
3 (Type 336S)  
4 (Type 336S w/ sunshields)  
5 (Type 332)  
6 (Type 332 w/ sunshields)  
9 (Special)*  

C= Mounting  
1 (Pole Mount)  
2 (Ground Mount)  

**Notes**  
* Special may require Tech Spec and/or Plan Detail

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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<td>0785 2112</td>
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<tr>
<td>0785 2121</td>
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<tr>
<td>0785 2600</td>
<td>ITS CABINET, REMOVE &amp; DISPOSE</td>
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<td>1/1/2010</td>
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</table>
### Notes Details
For use on ITS Projects. Refer to Specification for cabinets/shelter covered by Section 785. All shelter/building incidentals must be detailed in the plans or specifications, including electrical, mechanical, and/or HVAC.

DO NOT Use 750 Architectural Items with this item.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

#### Design Forms and Documentation

<table>
<thead>
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<th>Required</th>
<th>Recommended</th>
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<td>tabqit: ITS Tabulation Quantity Sheet</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
</tr>
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</table>

#### Construction Forms and Documentation

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>No additional form required; use plans summary or comp book</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
</table>

### References

- PPM Chapter
- Trns-port
- Other Standards
- Specifications

**T: Selected Items may require Plan Details and/or Technical Specifications**

### Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):** 0550 ITS or Signalization

### Struct.

<table>
<thead>
<tr>
<th>785- 3-ABC ITS EQUIPMENT SHELTER</th>
<th>EA</th>
</tr>
</thead>
</table>

A= Operation

1 (Furnish & Install)
3 (Install) BC=00*
4 (Relocate) BC=00*
5 (Adjust /Modify) BC=00
6 (Remove and Dispose) Contractor takes ownership
9 (Preventive Maintenance) BC=00

B= Size (from exterior dimensions)

1 (up to 120 ft²)
2 (121 to 170 ft²)
3 (171 to 250 ft²)
9 (Special)*

C= Interior Ceiling Height

1 (8 ft)
2 (9 ft)

**Notes**

*A=3, 4 verify with ITS Office prior to opening

*B=9 may require Tech Spec or Plan Detail**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tr>
<td>0785 3111</td>
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<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
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</tr>
<tr>
<td>0785 3112</td>
<td>ITS EQUIPMENT SHELTER, F&amp;I, 120 SQUARE FEET OR LESS 9' INTERIOR CEILING HEIGHT</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0785 3142</td>
<td>ITS EQUIPMENT SHELTER, F&amp;I, GREATER THAN 250 SF, 9' INTERIOR CEILING HEIGHT</td>
<td>EA</td>
<td>T</td>
<td>1/1/2012</td>
<td></td>
</tr>
<tr>
<td>0785 3900</td>
<td>ITS EQUIPMENT SHELTER, PREVENTATIVE MAINTENANCE</td>
<td>EA</td>
<td>T</td>
<td>7/1/2012</td>
<td></td>
</tr>
</tbody>
</table>

785-Maint          ITS- MAINTENANCE

Unit       Mixed
Accuracy   Refer to item structure and details
PlanQuantity?  ?

Notes: Maintenance Item: Not Valid for Construction Contracts
Details: MAINTENANCE CONTRACTS ONLY
Additional BOE details pending

Design Forms and Documentation

Construction Forms and Documentation

References
PPM Chapter
Trns�ort
Other Standards Specifications
Prep & Doc Manual Chapter(s)

TRNS�PORT Category (DRAFT FIELD):

Struct.  785-Maint          ITS- MAINTENANCE          Mixed

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

786- 1- AB          ITS VEHICLE DETECTION SYSTEM

Unit       EA
Accuracy   Each
PlanQuantity?  no

Notes: Valid through June 2013; replaced by updated Section 660 specification and related pay items.
Details: For use on ITS Projects. Refer to Specifications for types of detection systems. Special Detection Systems require approval of the State ITS Office.
For Install, Relocate, and Adjust operations, detail work to be completed in the Tech Specs or plan details.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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<tr>
<td><strong>Design Forms and Documentation</strong></td>
<td>tabqt: ITS Tabulation Quantity Sheet</td>
</tr>
<tr>
<td><strong>Construction Forms and Documentation</strong></td>
<td>No additional form required; use plans summary or comp book</td>
</tr>
</tbody>
</table>

**References**
- PPM Chapter
- Trns-port
- Other Standards
- Specifications

T: Selected Items may require Plan Details and/or Technical Specifications

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0550 ITS or Signalization

**Struct.** 786-1-AB ITS VEHICLE DETECTION SYSTEM EA

A= Operation
1 (Furnish & Install)
2 (Replace)
3 (Install) B=0
4 (Relocate) B=0
5 (Adjust /Modify) B=0
6 (Remove and Install) FDOT furnished
7 (Retrofit lowering device on existing pole) B=0
8 (Preventive Maintenance) B=0
9 (Diagnostic and Misc Repair)
B= Detector Type
1 (Microwave)
2 (Video)
3 (Magnetic)
4 (Acoustic)
5 (Travel Time System- TTS)
9 (Special) * Note: Requires prior approval of the ITS Office. Valid through 12-31-2013.

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
### Basis of Estimates

**Topic No. 600-000-002**

**Basis of Estimates**

**2012 Edition**

**January 22, 2013**

#### Item Description

<table>
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<tr>
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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0786 1 11</td>
<td>ITS VEHICLE DETECTION SYSTEM, F&amp;I, MICROWAVE</td>
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<td>1/1/2010</td>
<td>6/30/2013</td>
<td></td>
</tr>
<tr>
<td>0786 1 12</td>
<td>ITS VEHICLE DETECTION SYSTEM, F&amp;I, VIDEO DETECTOR</td>
<td>EA</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
<td></td>
</tr>
<tr>
<td>0786 1 13</td>
<td>ITS VEHICLE DETECTION SYSTEM, F&amp;I, MAGNETIC DETECTOR</td>
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<td>1/1/2010</td>
<td>6/30/2013</td>
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<td>0786 1 19</td>
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<td>6/30/2013</td>
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<tr>
<td>0786 1 30</td>
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<td>6/30/2013</td>
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<td>6/30/2013</td>
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<tr>
<td>0786 1 50</td>
<td>ITS VEHICLE DETECTION SYSTEM, ADJUST &amp; MODIFY</td>
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<td>D</td>
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### 786-Maint

**ITS- MAINTENANCE**

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<tr>
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<td>Refer to item structure and details</td>
<td>?</td>
<td>Maintenance Item: Not Valid for Construction Contracts</td>
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</table>

**Details**

MAINTENANCE CONTRACTS ONLY

Additional BOE details pending

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

**Construction Forms and Documentation**

**References**

PPM Chapter
Trns-port
Other Standards
Specifications
Prep & Doc Manual Chapter(s)

### TRNS*PORT Category (DRAFT FIELD):

**Struct.**

786-Maint ITS- MAINTENANCE Mixed

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 800-

**MASS TRANSIT- RAIL ROAD**

<table>
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<tbody>
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<td></td>
<td></td>
<td>?</td>
<td>Items 800 to 899: Mass Transit items removed due to lack of use. Item Structures</td>
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**Details and Structure:**

Complete- Items 000 to 1999

Page 716 of 769
### 823-1A-BBB SUBBALLAST

<table>
<thead>
<tr>
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<th>PlanQuantity?</th>
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<tbody>
<tr>
<td>SF; M2</td>
<td>Square Foot; 1/10 Square Meter</td>
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</tbody>
</table>

**Notes**

This item is to be used for railroad applications only.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

---

### Details and Structure: Complete- Items 000 to 1999

Page 717 of 769
Other
Standards
Specifications

**T: Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s):** 6, 7, 13

---

**TRNS*PORT Category (DRAFT FIELD):**
0900 Mass Transit

---

**Struct.** 823-1A-BBB  SUBBALLAST SF

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)
5 (Modify)

BBB = Depth
3 (3 in.)
4 (4 in.)
5 (5 in.)
6 (6 in.)
12 (12 in.)

NOTE: Open in one inch increments only

---

**Notes**
Additional pay items opened upon request.

---

**The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0823 11 6</td>
<td>MASS TRANSIT- SUBBALLAST, F&amp;I, 6 IN DEPTH</td>
<td>SF</td>
<td>T</td>
<td>1/1/2012</td>
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<tr>
<td>0823 11 12</td>
<td>MASS TRANSIT- SUBBALLAST, F&amp;I, 12 IN DEPTH</td>
<td>SF</td>
<td>T</td>
<td>1/1/2010</td>
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</table>

---

**825-1AB-CDE  TRACK, STANDARD**

**Notes**
This item is to be used for railroad applications only.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

---

**Related Items**

**Required**
COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

**Recommended**
Locate in the plans. Summarize quantities by location in the computation book.

---

**Construction Forms and Documentation**
No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).
Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)  7, 13

TRNS*PORT Category (DRAFT FIELD):  0900  Mass Transit

Struct.  825-1AB-CDE  TRACK, STANDARD  LF

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Relocate)
5 (Adjust/Modify)
6 (Remove)

B = Rail Size
1 (100 lb/yd)
2 (115 lb/yd)
3 (119 lb/yd)
4 (132 lb/yd)
5 (133 lb/yd)
6 (136 lb/yd)
7 (140 lb/yd)
8 (Special)

C = Joint Type
1 (Continuous Welded Rail, CWR)
2 (Jointed Rail, JR)

D = Tie Type
1 (Timber)
2 (Concrete)
3 (Steel)

E = Rail Head Hardening
0 (Standard Rail Head)
1 (Hardened Rail Head)

Notes
Additional pay items opened upon request.

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<td>T</td>
<td>1/1/2010</td>
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<td></td>
<td>STANDARD RAIL HEAD</td>
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<td>1/1/2010</td>
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<td>HARDENED RAIL HEAD</td>
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<td>1/1/2012</td>
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<tr>
<td></td>
<td>STANDARD RAIL HEAD</td>
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<td></td>
</tr>
<tr>
<td>Date</td>
<td>Description</td>
<td>Unit</td>
<td>T</td>
<td>Quantity</td>
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<tr>
<td>1/1/2010</td>
<td>MASS TRANSIT-TRACK, RELOCATE, 132 LB/YD, CONTINUOUS WELDED RAIL,</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td></td>
<td>TIMBER TIE, HARDENED RAIL HEAD</td>
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<td>1/1/2012</td>
<td>MASS TRANSIT-TRACK, ADJUST/MODIFY, 100 LB/YD, CONTINUOUS WELDED RAIL,</td>
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<td>1/1/2010</td>
<td>MASS TRANSIT-TRACK, ADJUST/MODIFY, 132 LB/YD, CONTINUOUS WELDED RAIL,</td>
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<td>1/1/2010</td>
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<tr>
<td></td>
<td>TIMBER TIE, HARDENED RAIL HEAD</td>
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<tr>
<td>1/1/2010</td>
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<td>1/1/2010</td>
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<tr>
<td></td>
<td>TIMBER TIE, STANDARD RAIL HEAD</td>
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</tr>
<tr>
<td>1/1/2010</td>
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<td>LF</td>
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<td>1/1/2010</td>
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<tr>
<td></td>
<td>TIMBER TIE, HARDENED RAIL HEAD</td>
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**825-6AB-CDE | Crossover**

<table>
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<tr>
<th>Notes</th>
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<th>Each</th>
<th>Plan</th>
<th>Quantity?</th>
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<tbody>
<tr>
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<td>EA</td>
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**Details**
This item is to be used for railroad applications only.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
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<th>Required</th>
<th>Recommended</th>
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**Design Forms and Documentation**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**
No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

**References**

PPM Chapter
Trns-port
Other Standards
Specifications

**T: Plan Details and/or Technical Specifications required**

**Prep & Doc Manual Chapter(s)** 7, 13

**TRNS*PORT Category (DRAFT FIELD):** 0900 Mass Transit

<table>
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<tr>
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<th>825-6AB-CDE</th>
<th>CROSSOVER</th>
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<td>Operation</td>
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<td></td>
</tr>
<tr>
<td>1</td>
<td>(Furnish &amp; Install)</td>
<td></td>
<td></td>
</tr>
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<td>2</td>
<td>(Furnish)</td>
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<td>3</td>
<td>(Install)</td>
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</tr>
<tr>
<td>4</td>
<td>(Remove)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5 (Modify)
B = Rail Size
1 (100 lb/yd)
2 (115 lb/yd)
3 (119 lb/yd)
4 (132 lb/yd)
5 (133 lb/yd)
6 (136 lb/yd)
7 (140 lb/yd)
8 (Special)
C = 1 (Right Hand)
2 (Left Hand)
D = Crossover Size
1 (No. 08)
2 (No. 10)
3 (No. 12)
4 (No. 14)
5 (No. 15)
6 (No. 16)
7 (No. 18)
8 (No. 20)
E = Tie Type
1 (Timber)
2 (Concrete)
3 (Steel)

Notes
Additional pay items opened upon request.

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

830-1AB-CDE   GRADE CROSSING

| Unit       | LF; M1          | Accuracy      | Linear Foot; 1/10 Meter | PlanQuantity? | no |

Notes
This item is to be used for railroad applications only.

Details
For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

<table>
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<tr>
<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
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<tr>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
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<table>
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<th>Construction Forms and Documentation</th>
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</thead>
<tbody>
<tr>
<td>No additional form required; use plans summary or comp book</td>
</tr>
<tr>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
</table>

References
PPM Chapter
Trns-port
Other
Standards
Specifications

Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)  7, 13

TRNS*PORT Category (DRAFT FIELD):  0900 Mass Transit

Struct.  830-1AB-CDE  GRADE CROSSING  LF

A = Operation
1 (Furnish & Install)
2 (Furnish)
3 (Install)
4 (Remove)
5 (Modify)

B = Grade Crossing Type
1 (Concrete)
2 (Rubber)
3 (Timber)
4 (Asphalt)
5 (Timber and Asphalt)
6 (Stone)
7 (Special)
0 (Temporary)

C = Rail Size
1 (100 lb/yd)
2 (115 lb/yd)
3 (119 lb/yd)
4 (132 lb/yd)
5 (133 lb/yd)
6 (136 lb/yd)
7 (140 lb/yd)
8 (Special)

D = Joint Type
1 (Continuous Welded Rail, CWR)
2 (Jointed Rail, JR)

E = Tie Type
1 (Timber)
2 (Concrete)
3 (Steel)

Notes  Additional pay items opened upon request.

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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<tr>
<td>0830111411</td>
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<td>1/1/2010</td>
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<tr>
<td>0830117212</td>
<td>MASS TRANSIT- GRADE CROSSING, F&amp;I, SPECIAL, 115 LB/YD RAIL, CONT WELD RAIL, CONCRETE</td>
<td>LF</td>
<td>T</td>
<td>1/1/2012</td>
<td></td>
</tr>
<tr>
<td>0830140211</td>
<td>GRADE CROSSING, REMOVE, TEMPORARY, 115 LB/YD, CONTINUOUS RAIL, CWR, T IMBER TIE</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

**832- 2- A**

**THERMITE WELD**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>Pay Quantity?</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA</td>
<td>Each</td>
<td>no</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
</table>
| COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation | Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter
Trns-port
Other Standards
Specifications

Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):**

<table>
<thead>
<tr>
<th>Struct.</th>
<th>832- 2- A</th>
<th>THERMITE WELD</th>
<th>EA</th>
</tr>
</thead>
</table>

A = Rail Size
1 (100 lb/yd)
2 (115 lb/yd)
3 (119 lb/yd)
4 (132 lb/yd)
5 (133 lb/yd)
6 (136 lb/yd)
7 (140 lb/yd)
8 (Special)

**Notes**

Additional pay items opened upon request.

*The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.*
### Topic No. 600-000-002

#### Basis of Estimates

**2012 Edition**  
**January 22, 2013**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0832 2 2</td>
<td>MASS TRANSIT- THERMITE WELD, 115 LB/YD RAIL</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0832 2 4</td>
<td>MASS TRANSIT- THERMITE WELD, 132 LB/YD RAIL</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0832 2 6</td>
<td>MASS TRANSIT- THERMITE WELD, 136 LB/YD RAIL</td>
<td>EA</td>
<td>T</td>
<td>1/1/2012</td>
<td></td>
</tr>
</tbody>
</table>

---

### 901-337- 8 BONDED ASPHALT CONCRETE FRICTION COURSE

**Unit**: TN; MT  
**Accuracy**: 1/10 Ton; 1/10 Metric Ton  
**PlanQuantity?**: no

**Notes**: Monitor: Manny Uwaibi, State Pavement Design Office

**Details**: Intended for placement of polymer modified emulsion membrane followed immediately by the placement of a layer of hot mix asphalt concrete friction course.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

**Required**  
**Recommended**

### Design Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

**PPM Chapter**

**Trns·port**

**Other**

**Standards**

**Specifications**

Plan Detail and/or Tech Spec Required

**Prep & Doc Manual Chapter(s)**

__TRNS*PORT Category (DRAFT FIELD):__  
0200 Roadway

**Struct.**  
901-337- 8 BONDED ASPHALT CONCRETE FRICTION COURSE TN

---

### 904-439- A SYNTETIC SUBSURFACE DRAINAGE LAYER

**Unit**: SY; M2  
**Accuracy**: Square Yard; Square Meter  
**PlanQuantity?**: no

**Notes**: Monitor: Larry Jones, State Structures Office

**Details**: For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.
payment are available in the contract documents to clearly define the work to be completed for payment under this item.

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
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<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Design Forms and Documentation

<table>
<thead>
<tr>
<th>Construction Forms and Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>No additional form required; use plans summary or comp book</td>
</tr>
</tbody>
</table>

### References

- **PPM Chapter**
- **Trns·port**
- **Other Standards**
- **Specifications**

**T:** Plan Details and/or Technical Specifications required

### Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

### Struct.

<table>
<thead>
<tr>
<th>Item</th>
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<th>Unit</th>
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<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0904439</td>
<td>SY SYNTHETIC SUBSURFACE DRAINAGE LAYER DOUBLE SIDED</td>
<td>SY</td>
<td>1/1/2010</td>
<td>12/31/2013</td>
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</table>

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<tbody>
<tr>
<td>0904439</td>
<td>SY SYNTHETIC SUBSURFACE DRAINAGE LAYER DOUBLE SIDED</td>
<td>SY</td>
<td>1/1/2010</td>
<td>12/31/2013</td>
<td></td>
</tr>
</tbody>
</table>

### 904-540- A HIGH TENSION CABLE BARRIER SYSTEM

**Unit** | LF; M1  
**Accuracy** | Linear Foot; 1/10 Meter  
**PlanQuantity?** | no

**Notes**

**Monitor:** David O'Hagan, State Roadway Design Engineer

**Details**

This is a trial item; contact the Monitor prior to use. Refer to Design Bulletin 07-08 for additional details.

Through 12/05: A=1 complete system included anchors.
Effective 1/2006: A=2 or 3 defines type of post system, to be used with A=4 end terminal.

Effective 7/2010: Added A=5 and 6 for resetting existing cable system. This item is to be used only for existing systems removed for construction operations. Plan Details or Tech Specs must indicate that the system must be reset according to manufacturer's recommendations.

THE MONITOR WILL SELECT WHICH ITEM(S) are to be used on a given project, as well as advise when specific notes and/or details are to be added to the plans.
Use Miscellaneous Asphalt item for mow strip, if required in the plans.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>See Details Above</td>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
</table>

Notes

*The Monitor will select which item(s) to use on a given project.

**TRNS•PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 904-540- A HIGH TENSION CABLE BARRIER SYSTEM LF

A= Type* TL-3 cable barriers
1 (System with anchors) LF
2 (Socketed Post System) LF
3 (Driven Post System) LF
4 (End Terminal) EA see details above
5 (Reset Existing System) LF see details above
6 (Reset Existing End Terminal) EA
10 (Relocate) LF

TL-4 barriers- pending:
11
12 etc.

Notes

*The Monitor will select which item(s) to use on a given project.

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0904540 2</td>
<td>HIGH TENSION CABLE BARRIER SYSTEM - SOCKETED POST</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0904540 4</td>
<td>HIGH TENSION CABLE BARRIER SYSTEM - END TERMINAL</td>
<td>EA</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0904540 5</td>
<td>HIGH TENSION CABLE BARRIER SYSTEM - RESET EXISTING SYSTEM</td>
<td>LF</td>
<td>T</td>
<td>7/1/2010</td>
<td></td>
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<tr>
<td>0904540 6</td>
<td>HIGH TENSION CABLE BARRIER SYSTEM - RESET EXISTING END TERMINAL</td>
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<td>7/1/2010</td>
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<tr>
<td>0904540 10</td>
<td>HIGH TENSION CABLE BARRIER SYSTEM - RELOCATE</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
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</tbody>
</table>

905-324- A REWORKED ASPHALT- see descriptions below
### 0905324 - A  REWORKED ASPHALT CONCRETE

A = Complete Pay Item Description
1 (REWORKED ASPHALT CONCRETE)
2 (COLD-IN-PLACE RECYCLED ASPHALT) valid through 12-31-2009

#### Notes

Contact the monitor prior to using this item.

The developmental specification must be used with Dev338B and Statewide Disputes Review Board. Refer to Specifications web page for additional guidance.

#### References

PPM Chapter
Trns-port
Other
Pavement Management Guidelines
http://www.dot.state.fl.us/pavementmanagement/PUBLICATIONS.shtm

#### Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

### 906-173 - A  POLYURETHANE INJECTION

#### Notes

Contact the monitor prior to using this item.

To be used only with approval of State Structures Design Office, for specialty geotechnical work.

#### Related Items

Required
Recommended

### Other Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>0905324</td>
<td>REWORKED ASPHALT CONCRETE</td>
<td>SY</td>
<td>D</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>906-173</td>
<td>POLYURETHANE INJECTION</td>
<td>LB; KG</td>
<td>D</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Design Forms and Documentation
COMP 700-050-06: Weight Measure or Liquid Volume Comp & Cont.
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation
No additional form required; use plans summary or comp book
Record final quantity on the tabulation sheet (plans) or computation form (comp book).

References
PPM Chapter
Trns-port
Other Standards Specifications
T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD):

Struct.  906-173- A POLYURETHANE INJECTION LB

A= location
1 (At Box Culvert)
2 (At Bridge Approach Slab)
3 (Shallow Polyurethane Injection, depth < 30 feet)

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0906173</td>
<td>POLYURETHANE INJECTION AT BRIDGE APPROACH SLAB</td>
<td>LB</td>
<td>T</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
</tr>
</tbody>
</table>

908-104- 1 CONTRACTOR’S SEDIMENT AND EROSION CONTROL

Notes
Monitor: Larry Ritchie, State Construction Office

Details
DEVELOPMENTAL SPECIFICATION REQUIRED; to be used only with permission of State Construction Engineer and/or State Drainage Engineer. Valid only for projects approved by the monitor.

When this item is used, DO NOT USE any other Sediment/Erosion Control items (104 items).

************************DRAFT BELOW**********
*******PPM Guidance Pending ************

For the purposes of providing the contractor information needed for the development of its Erosion and Sediment Control Plan, the Department’s Engineer of Record would need to provide the following information in the plans:

1. Delineation of wetland areas
2. Identification of Limits of Construction
3. Hydraulic maps

Details and Structure: Complete- Items 000 to 1999
4. Contour maps
5. existing drainage facilities
6. drainage maps with flow patterns identified
7. forms required for reporting and documenting compliance
8. runoff coefficients
9. NPDES requirements

### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-05: Lump Sum Quantities</td>
</tr>
<tr>
<td>Construction Forms and Documentation</td>
<td>Use a quantity of 1, but calculations and computation book documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.</td>
</tr>
<tr>
<td>No additional form required; use plans summary or comp book</td>
<td></td>
</tr>
</tbody>
</table>

### References

PPM Chapter
Trns-port
Other Standards
Specifications

#### Plan Details and/or Technical Specifications required

#### Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):**

0200 Roadway

**Struct.** 908-104-1 CONTRACTOR’S SEDIMENT AND EROSION CONTROL LS/LS

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

#### 908-170- A DEEP SOIL MIXING

<table>
<thead>
<tr>
<th>Unit</th>
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<th>PlanQuantity?</th>
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</thead>
<tbody>
<tr>
<td>CY; M3</td>
<td>1/10 Cubic Yard; 1/10 Cubic Meter</td>
<td>no</td>
</tr>
</tbody>
</table>

#### Notes

Monitor: Larry Jones, State Geotechnical Engineer

Contact the State Structures Office for approval, prior to using this item.

This item is intended to be used for dry-method of mass soil mixing to stabilize organic subsoils and minimize the potential for future settlements.

The work includes mechanically blending the in-situ surface soils (muck) overlying limestone with a reagent binder to increase the soil strength, reduce settlement characteristics, and provide a stable soil surface for the roadway.

#### Related Items

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>SBEarthwork: Summary of Earthwork, or COMP 700-050-04: Volume Measure Items and Continuation</td>
</tr>
<tr>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans, or detail calculations in the computation book.</td>
<td></td>
</tr>
</tbody>
</table>

---

Details and Structure: Complete- Items 000 to 1999
## Construction Forms and Documentation

No additional form required; use plans summary or comp book.

## References

PPM Chapter, Trans Port, Other, Standards, Specifications

T: Plan Details and/or Technical Specifications required

## Prep & Doc Manual Chapter(s)

## TRNS*PORT Category (DRAFT FIELD):

### Struct. 908-170- A DEEP SOIL MIXING CY

A = Method
1 (Dry)

Notes Valid only for project 220499-1-52-01. Contact Monitor for consideration on other projects.

### The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0908170</td>
<td>DEEP SOIL MIXING, DRY</td>
<td>CY</td>
<td>T</td>
<td>1/1/2010</td>
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</table>

### 908-333- 1 HIGH FRICTION SURFACE COURSE

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
<th>Notes</th>
<th>Related Items</th>
<th>Design Forms and Documentation</th>
<th>Construction Forms and Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SY; M2</td>
<td>Square Yard; Square Meter</td>
<td>no</td>
<td>Monitor: Charles Holzschuher</td>
<td>Required</td>
<td>COMP 700-050-01: Area Computation and Continuation</td>
<td>No additional form required; use plans summary or comp book</td>
</tr>
</tbody>
</table>

Record final quantity on the computation book form.

## References

PPM Chapter, Trans Port, Other, Standards, Specifications

## Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

### Struct. 908-333- 1 HIGH FRICTION SURFACE COURSE SY

Details and Structure: Complete- Items 000 to 1999
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0908333 1</td>
<td>HIGH FRICTION SURFACE COURSE</td>
<td>SY</td>
<td>D</td>
<td>1/1/2010</td>
<td>6/30/2013</td>
</tr>
</tbody>
</table>

**908-350- A** FIBER REINFORCED CONCRETE PAVEMENT

**Notes**

Monitor: Manny Uwaibi, State Pavement Design Office

Technical Specifications required to detail glass fiber reinforcement. Concrete pavement to be installed in accordance with Section 350, unless otherwise noted in the specifications.

**Details**

This is a monitored item. It may be used only with approval of the State Pavement Design Office.

**Related Items**

- **Required**
  - COMP 700-050-01: Area Computation and Continuation
  - Locate in the plans. Summarize quantities by location in the computation book.

- **Recommended**

**Design Forms and Documentation**

- No additional form required; use plans summary or comp book

- Final pay quantity will be PLAN QUANTITY with proper consideration for Specification tolerances.

**References**

- PPM Chapter
- Trns-port
- Other Standards
- Specifications Section 350

T: Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 908-350- A FIBER REINFORCED CONCRETE PAVEMENT SY

A= Thickness
1 (11" Average)
2 (14" Average)
3 (8.5" Average)

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**908-431- A** PIPE LINER- SECTIONAL REPAIR

**Notes**

Monitor: Jennifer Green

Details

Contact the State Drainage Office prior to use.
Box-to-Box repairs are normally preferred (use Item 431-). When a Sectional Repair is considered, coordinate with the State Drainage Office. New materials/methods may be recommended.

### Related Items

<table>
<thead>
<tr>
<th>Design Forms and Documentation</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>dromrd: Drainage Optional Materials Tabulation</td>
<td>Locate in plans. Summarize quantities by location on summary sheet in the plans.</td>
<td></td>
</tr>
</tbody>
</table>

### Construction Forms and Documentation

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>No additional form required; use plans summary or comp book</td>
<td>Record final quantity on the tabulation sheet (plans) or computation form (comp book).</td>
</tr>
</tbody>
</table>

### Notes

- **T:** Plan Details and/or Technical Specifications required

### Prep & Doc Manual Chapter(s)

- TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

### Structure

<table>
<thead>
<tr>
<th>908-431- A PIPE LINER- SECTIONAL REPAIR LF</th>
</tr>
</thead>
<tbody>
<tr>
<td>A= Pipe Diameter Size Range</td>
</tr>
<tr>
<td>1 (0=-24&quot;)</td>
</tr>
<tr>
<td>2 (25-36&quot;)</td>
</tr>
<tr>
<td>3 (37-48&quot;)</td>
</tr>
<tr>
<td>4 (49-60&quot;)</td>
</tr>
<tr>
<td>5 (61&quot; and greater)</td>
</tr>
</tbody>
</table>

### Notes

- The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### Design Forms and Documentation

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
<td></td>
</tr>
<tr>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
<td></td>
</tr>
</tbody>
</table>

### Construction Forms and Documentation

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<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>No additional form required; use plans summary or comp book</td>
<td></td>
</tr>
<tr>
<td>Record final quantity on the computation book form.</td>
<td></td>
</tr>
</tbody>
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**Details and Structure:** Complete- Items 000 to 1999
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

### 908-571-1 TRANSITION MAT

<table>
<thead>
<tr>
<th>Unit</th>
<th>SY; M²</th>
<th>Accuracy</th>
<th>Square Yard; Square Meter</th>
<th>Plan Quantity?</th>
<th>no</th>
</tr>
</thead>
</table>

**Notes**
Monitor: Larry Ritchie, State Construction Office

**Details**
Contact the State Construction Office for approval, prior to using this item.

Transition Mat for scour and permanent erosion control.

See 530-79 for Plastic Cellular Confinement System for other drainage/erosion control applications.

**Related Items**

**Design Forms and Documentation**
COMP 700-050-01: Area Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**
No additional form required; use plans summary or comp book
Record final quantity on the computation book form.

**References**
PPM Chapter
Trns·port
Other
Standards
Specifications

T: Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):**

<table>
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<tr>
<th>Struct.</th>
<th>908-535-1 MOVABLE BARRIER GATE FOR EVACUATION ROUTES</th>
</tr>
</thead>
</table>

**TRNS*PORT Category (DRAFT FIELD):**

0200 Roadway

**Struct.**

908-571-1 TRANSITION MAT
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0909335 1</td>
<td>MICRO-SURFACING FOR PAVEMENT PRESERVATION</td>
<td>SY</td>
<td>D</td>
<td>1/1/2010</td>
<td></td>
</tr>
<tr>
<td>0909335 2</td>
<td>MICRO-SURFACING- CRACK FILLING</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
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</tbody>
</table>

**909-335- A MICRO-SURFACING FOR PAVEMENT PRESERVATION**

**Unit:** SY; M2  
**Accuracy:** Square Yard; Square Meter  
**Plan Quantity:** no

**Notes**
MONITOR: Manny Uwaibi, State Pavement Design Office.  
Developmental Item

**Details**
Contact the State Pavement Design Office for approval, prior to using this item.

This item is a polymer-modified emulsion aggregate mixture, placed as a thin overlay, for the preservation of mildly distressed pavements and as a means to restore friction resistance to pavement.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Design Forms and Documentation**

COMP 700-050-01: Area Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

**References**

PPM Chapter  
Trns-port  
Other Standards  
Specifications

T: Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 909-335- A MICRO-SURFACING FOR PAVEMENT PRESERVATION SY

A= Project Number  
1 no number required
### Floating Manhole Frame and Cover System

**Unit**: EA  
**Accuracy**: Each  
**Plan Quantity?**: no  
**Monitor**: ???, State Construction Engineer  
**Details**: This is a monitored item, to be used only with approval of the State Construction Engineer. Coordinate specifications with ??? or David Wang.

**Related Items**
- **Required**: COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
- **Recommended**: Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**
- No additional form required; use plans summary or comp book
- Record final quantity on the computation book form.

**References**
- PPM Chapter
- Trns-port
- Other
- Standards
- Specifications

**TRNS*PORT Category (DRAFT FIELD)**: 0200 Roadway

**Struct.**: 910-425-1  
**Description**: FLOATING MANHOLE FRAME AND COVER SYSTEM

---

### Repaved Asphalt Concrete

**Unit**: SY; M2  
**Accuracy**: Square Yard; Square Meter  
**Plan Quantity?**: ?  
**Monitor**: ???  
**Details**: Developmental specification required.

**Related Items**
- **Required**:  
- **Recommended**:  

**Design Forms and Documentation**

**Construction Forms and Documentation**

**References**
- PPM Chapter
- Trns-port
- Other
- Standards
- Specifications

---

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.
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<tr>
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<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
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<th>Obsolete Date</th>
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<tr>
<td>0911325</td>
<td>1 REPAVED ASPHALT CONCRETE SY</td>
<td>SY</td>
<td>D</td>
<td>1/1/2012</td>
<td></td>
</tr>
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</table>

911-710-1  Pavement Markings, Final Surface- durable paint

<table>
<thead>
<tr>
<th>Notes</th>
<th>Monitor:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
<td>Specification is under development.</td>
</tr>
<tr>
<td>Related Items</td>
<td>Required</td>
</tr>
<tr>
<td>Design Forms and Documentation</td>
<td>COMP 700-050-05: Lump Sum Quantities</td>
</tr>
<tr>
<td>Use a quantity of 1, but calculations and computation book documentation must be to the second unit of measure. Locate or define the scope of work involved on the plans.</td>
<td></td>
</tr>
</tbody>
</table>

942-Maint  ROADWAY CHARACTERISTICS INVENTORY SERVICES

<table>
<thead>
<tr>
<th>Notes</th>
<th>Maintenance Item: Not Valid for Construction Contracts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
<td>MAINTENANCE CONTRACTS ONLY Additional BOE details pending</td>
</tr>
<tr>
<td>Related Items</td>
<td>Required</td>
</tr>
</tbody>
</table>

Details and Structure: Complete- Items 000 to 1999
### TRNS*PORT Category (DRAFT FIELD):

**Struct.**  942-Maint  ROADWAY CHARACTERISTICS INVENTORY  SERVICES  Mixed

**Maintenance Contracts Only**

### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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</thead>
<tbody>
<tr>
<td>E942</td>
<td>ROADWAY CHARACTERISTICS INVENTORY SERVICES</td>
<td>HR</td>
<td>1/1/2010</td>
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</tbody>
</table>

### 999-  2-  LUMP SUM CONTRACT (ALTERNATIVE BIDDING)

<table>
<thead>
<tr>
<th>Unit</th>
<th>Accuracy</th>
<th>PlanQuantity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LS/LS</td>
<td>Lump Sum</td>
<td>no</td>
</tr>
</tbody>
</table>

### Notes

See latest guidelines for Innovative Bidding practices.

For use on Lump Sum contracts ONLY.

DO NOT use this pay item for other Lump Sum items/purposes.

Estimators: Verify that contract type is CLS (Construction Lump Sum).

### Related Items

**Required**  
**Recommended**

### Design Forms and Documentation

No additional form required; use plans summary or comp book

### Construction Forms and Documentation

### References

PPM Chapter  
Trns-port  
Other  
Standards
Specifications

Prep & Doc Manual Chapter(s) Contact Final Estimates

TRNS*PORT Category (DRAFT FIELD): 0200 Roadway

Struct.  999- 2- LUMP SUM CONTRACT (ALTERNATIVE BIDDING) LS/LS

Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0999</td>
<td>LUMP SUM CONTRACT, ALTERNATIVE BIDDING</td>
<td>LS</td>
<td></td>
<td>1/1/2010</td>
<td></td>
</tr>
</tbody>
</table>

999-16- PARTNERING (DO NOT BID)

Unit LS/LS Accuracy Lump Sum PlanQuantity? yes

Notes

Details

The use of this pay item will be initiated by the District Construction Office. The purpose is to provide an amount of money to the contractor to pay for the cost of a partnering session(s). Designers will load the pay item and provide the cost to be overrun to the District Estimates Coordinator.

NOTE: Construction will advise the designer when to use this item. They will also provide the designer with the number of days and the cost per day.

Load the Partnering pay item only once on a contract, on the lead project number.

Related Items

Required Recommended

Design Forms and Documentation

Construction Forms and Documentation

No additional form required; use plans summary or comp book

References

PPM Chapter
Trns-port
Other
Standards
Specifications

Prep & Doc Manual Chapter(s) 11, 13
DISPUTE REVIEW BOARD (DO NOT BID)

**Notes**
Valid through 6-30-2011. Replaced by 999-20- A. Refer to specification change.

**Details**
The use of this pay item will be initiated by the District Construction Office. The purpose is to require a Dispute Resolution Board to be established for the project and to provide the contractor a specific amount of money to pay for the services of each of the three Board members. Designers will load the pay item and the number of days (meetings).

NOTE: Construction will advise the designer when to use this item. They will also provide the designer with the number of days (meetings), based on 1 meeting per month for the length of the contract. The cost has been hard coded at $3,300.00* as the unit price for this item. Only the Director of Construction can approve a change to this amount.

*Verify current amount with specification.

**Notes**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**Details**

The use of this pay item will be initiated by the District Construction Office. The purpose is to require a Dispute Resolution Board to be established for the project and to provide the contractor a specific amount of money to pay for the services of each of the three Board members. Designers will load the pay item and the number of days (meetings).

NOTE: Construction will advise the designer when to use these items. (Both items are used together on a project.) They will also provide the designer with the number of days (meetings), based on 1 meeting per month for the length of the contract. The cost has been hard coded at $3,300.00* as the unit price for this item. Only the Director of Construction can approve a change to this amount.

---

**Details and Structure: Complete- Items 000 to 1999**
Verify current amount with specification.

Hearings will be estimated at 2 each per project. The total cost of $8000 will be shared between FDOT and the contractor. The cost has been coded as $4000 per each, for estimating purposes. The actual amounts to be paid will be in accordance with the specification, based on the number of meetings and hearing days.

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0999 20 1 DISPUTES REVIEW BOARD, MEETING- DO NOT BID</td>
<td>DA</td>
<td></td>
<td>7/1/2011</td>
<td></td>
</tr>
<tr>
<td>0999 20 2 DISPUTES REVIEW BOARD, HEARING- DO NOT BID</td>
<td>EA</td>
<td></td>
<td>7/1/2011</td>
<td></td>
</tr>
</tbody>
</table>

**Initial Contingency Amount (Do Not Bid)**

**Notes**

Effective January 2012 lettings: DO NOT USE ON PUSH-BUTTON CONTRACTS

IMPORTANT: INITIAL CONTINGENCY TOTAL IS BASED ON PROPOSAL TOTAL. Do not include Speed & Law Enforcement Officer or other non-bid items. Refer to CPAM 7.4.7.

DESIGN: Use when requested by Construction, in accordance with the CPAM (Construction Project Administration Manual). The item will be loaded as "Non-Participating" and the cost will be input by the District Estimates Coordinator. Load item in Roadway Category.

When a contract contains multiple projects, this item will be pro-rated on each project within the contract, per CPAM 7.4. Note that the totals listed in the CPAM are per PROPOSAL/CONTRACT, not per project.

Department Policy (per F. Simmons, 10-1-02): Include Initial Contingency Amount on all
Design-Build Contracts. Refer to Design-Build Guidelines, Chapter 12.1.

Effective January 2012 lettings: This item shall not be loaded on push button contracts. Refer to Estimates Bulletin 12-01/ Construction Bulletin 01-12, dated January 5, 2012 and CPAM 7.4.

CONSTRUCTION: Participating/Non-Participating payment for work orders will be determined by Construction, in accordance with the CPAM.

FORMS: No comp book forms are added by design; construction will add form(s) if/when funds are used.

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>References</th>
<th>PPM Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trns-port</td>
<td>Other Standards</td>
</tr>
<tr>
<td>Specifications</td>
<td></td>
</tr>
<tr>
<td>Prep &amp; Doc Manual Chapter(s)</td>
<td>Contact Final Estimates</td>
</tr>
</tbody>
</table>

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 999-25- INITIAL CONTINGENCY AMOUNT (DO NOT BID) $

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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<tbody>
<tr>
<td>0999 25</td>
<td>INITIAL CONTINGENCY AMOUNT, DO NOT BID</td>
<td>LS</td>
<td></td>
<td>1/1/2010</td>
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</tr>
</tbody>
</table>

**999-102- A SPEED AND LAW ENFORCEMENT OFFICER**

<table>
<thead>
<tr>
<th>Notes</th>
<th>Monitor: Stefanie Maxwell</th>
</tr>
</thead>
<tbody>
<tr>
<td>A=Contract Type refers to the contract between FDOT and Law enforcement, NOT the type of Construction Contract.</td>
<td></td>
</tr>
</tbody>
</table>

| Notes | |
|-------| |
| Details | This item is used by the Construction Engineer to provide uniformed traffic control officers, including marked law enforcement vehicles, to assist in controlling speed and enforcing traffic laws in the work zone. Officers should be actively involved in either directing traffic or reducing speeding and traffic violations present in our work zones. |
| Note: The type of construction contract and/or location for letting (Tallahassee or District letting) is not a factor in selecting the type of Law Enforcement contract. Contact your Project Manager to determine the available Law Enforcement Contract(s) available in your district. |
Per the PPM, “The documentation for Speed and Law Enforcement Officer will be shown in the Computation Book only and there will be no reference made to these services in the plans, except as shown on the Summary of Pay Items Sheet.” Refer to the PPM for calculation and documentation of this item.

### Required and Recommended

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SPEED &amp; LAW ENFORCEMENT OFFICER, STATE FURNISHED, CENTRAL CONTRACT, NON BID ITEM</td>
<td>MH</td>
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<tr>
<td>2</td>
<td>SPEED &amp; LAW ENFORCEMENT OFFICER, STATE FURNISHED, DISTRICT CONTRACT, NON BID ITEM</td>
<td>MH</td>
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<td>1/1/2010</td>
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</tbody>
</table>

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

**Related Items**

Required: 102- 14 (2012- 14)

Recommended: 102- 14 (2012- 14)

**Design Forms and Documentation**

- COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation
- Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

- No additional form required; use plans summary or comp book
- Record final quantity on the computation book form.

**References**

- **PPM Chapter** Vol 1, Ch 10
- Trns-port
- Other
- Standards
- Specifications
- Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):** 0200 Roadway

**Struct.** 999-102- A SPEED AND LAW ENFORCEMENT OFFICER MH

A = Contract Type (Between FDOT and the Law Enforcement Agency)
1 = Central Office Statewide Contract
2 = District Contract

STATE FURNISHED; NON BID ITEM

**999-Maint** LABOR /EQUIPMENT/NO BID ITEMS

Maintenance Contracts Only

- Unit: Mixed
- Accuracy: Refer to item structure and details
- PlanQuantity?: ?

**Notes**

Maintenance Item: Not Valid for Construction Contracts

**Details**

MAINTENANCE CONTRACTS ONLY

Additional BOE details pending

**Related Items**

Required: 102- 14 (2012- 14)

Recommended: 102- 14 (2012- 14)
**Design Forms and Documentation**

**Construction Forms and Documentation**

**References**

- PPM Chapter
- Trns-port
- Other
- Standards
- Specifications
- Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):**

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<th>Struct.</th>
<th>999-Maint</th>
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<tbody>
<tr>
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<td>Maintenance Contracts Only</td>
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</table>

**Notes**

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<th>Obsolete Date</th>
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<tbody>
<tr>
<td>E999 1 1</td>
<td>LABOR (REGULAR TIME)</td>
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<td>E999 1 2</td>
<td>SKILLED LABOR (REGULAR TIME)</td>
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<td>E999 1 4</td>
<td>SKILLED LABOR (SPECIAL TIME)</td>
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<tr>
<td>E999 1 6</td>
<td>CONTRACT ADMINISTRATION</td>
<td>LS</td>
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<td>1/1/2010</td>
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<tr>
<td>E999 2 1</td>
<td>TRUCK PICKUP (3/4 TON OR LESS)(INCLUDES OPERATOR)</td>
<td>HR</td>
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<td>1/1/2010</td>
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<tr>
<td>E999 2 2</td>
<td>TRUCK FLATBED (2 TON OR LESS)(INCLUDES OPERATOR)</td>
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<td>1/1/2010</td>
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<tr>
<td>E999 2 3</td>
<td>TRUCK DUMP BODY (INCLUDES OPERATOR)</td>
<td>HR</td>
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<td>1/1/2010</td>
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<tr>
<td>E999 2 5</td>
<td>LOADER FRONT END  (INCLUDES OPERATOR)</td>
<td>HR</td>
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<tr>
<td>E999 2 17</td>
<td>LOADER SKID STEER (INCLUDES OPERATOR)</td>
<td>HR</td>
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<td>1/1/2010</td>
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<tr>
<td>E999 2 18</td>
<td>RIDING MOWER</td>
<td>ED</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>E999 2 19</td>
<td>WOOD CHIPPER</td>
<td>ED</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>E999 3 1</td>
<td>HYDRAULIC PUMP (4&quot;)</td>
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<td>1/1/2010</td>
<td></td>
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<tr>
<td>E999 3 2</td>
<td>HYDRAULIC PUMP (6&quot;)</td>
<td>HR</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>E999 5111</td>
<td>LIFT, PERSONNEL (TELESCOPIC BOOM, W/OPERATOR) (80')</td>
<td>HR</td>
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<td>1/1/2010</td>
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</tr>
<tr>
<td>E999 30</td>
<td>TRAFFIC OPERATIONS - DO NOT BID</td>
<td>LS</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>E999 40</td>
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<td>LS</td>
<td></td>
<td>1/1/2010</td>
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<tr>
<td>E999999999</td>
<td>CO ADJUSTMENT, NON-BID(SITEMANAGER ONLY)</td>
<td>LS</td>
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<td>1/1/2010</td>
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</table>
### 9AA-BBB- CC: SPECIAL, DEVELOPMENTAL, OR TRIAL PAY ITEMS: SECTION

<table>
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<tr>
<th>Notes</th>
<th>Details</th>
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<tbody>
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</table>

<table>
<thead>
<tr>
<th>Related Items</th>
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<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Design Forms and Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>No additional form required; use plans summary or comp book</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>References</th>
<th>PPM Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>TRNS*PORT Category (DRAFT FIELD):</th>
<th>0000 Administrative</th>
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</thead>
</table>

### 0000-DDD-AAA: GENERIC PAY ITEM

<table>
<thead>
<tr>
<th>Notes</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Generic Items: Contact the State Specifications and Estimates Office prior to use. Refer to guidance in Chapter 6 of BOE.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Examples of Appropriate Use:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boat Ramp, gangway, and incidentals</td>
</tr>
<tr>
<td>Utility work</td>
</tr>
<tr>
<td>Skyway Bridge- specialty items</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Examples of Inappropriate Use:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design-Build or Lump Sum contracts- These contract types have specific rules for alternative contracting.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Related Items</th>
<th>Required</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Design Forms and Documentation

No additional form required; use plans summary or comp book

### Construction Forms and Documentation

#### References

PPM Chapter
Trns-port
Other Standards Specifications
Prep & Doc Manual Chapter(s)

#### TRNS*PORT Category (DRAFT FIELD):

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### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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**Notes Details**

This pay item for Utility JPA projects Only. Tech Specs are required for all work to be completed.

Coordinate the use of this item with District Utilities Office. This is a LS project pay item; do NOT use separate pay items along with the LS item for any given JPA. Payment covers all work and materials for the entire utility project number. (Note: The Roadway project(s) may be either LS or standard pay items. Each utility project number may be either LS or standard pay items.)

Additional guidance: As with roadway projects, Utility LS projects should only be considered when the work to be completed (including known quantities) is clearly defined in the plans. LS projects should not be considered for unknown conditions.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

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**Design Forms and Documentation**

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**Construction Forms and Documentation**

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Details and Structure: Complete- Items 000 to 1999
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

TRNS*PORT Category (DRAFT FIELD): 0700 Utilities

Struct. 1000- AA- UTILITY WORK LS/LS

AA =
5 (Sewer)
6 (Water)
7 (Power)
8 (Communications)
9 (Fuel)

Notes

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1050- 1A-BCD UTILITY PIPE

Unit LF; M1  Accuracy Linear Foot; 1/10 Meter  PlanQuantity? no

Notes

Details

This pay item for Utility JPA projects Only

For new pipe, payment includes anchors & incidentals, as well as connections to existing systems; detail all work in the plans or specifications. HISTORICAL PRICES vary considerably based on location, depth, installation length, specification requirements (sanitizing, leak detection) and other factors. Consult the maintaining agency for guidance on unit prices.

For pipe up to 7.9" diameter, payment includes all fittings.

Material requirements and pressure ratings must be included in the specifications.

For Casings, payment includes vents/air release valves.

For Plug/Place out of service, Specs/Details should indicate that payment includes all work & materials necessary. Plans should indicate length of pipe to be filled (payment length). For pipe up to 4", caps may be used, as allowed by the utility; this is an "each" item, valid only for A=8 (plug/place out of service). Caps must be detailed in the contract documents.

Tech Specs are required for all items.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed.
for payment under this item.

### Related Items

#### Design Forms and Documentation

- **COMP 700-050-09**: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

#### Construction Forms and Documentation

- No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

### References

- **PPM Chapter**
  - **Trns-port**
  - **Other Standards**
  - **Specifications**

_T: Plan Details and/or Technical Specifications required_

### Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):** 0700 Utilities

<table>
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<th>UTILITY PIPE</th>
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<td>2 (Furnish)</td>
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<td>3 (Install) BC=00</td>
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<td>4 (Relocate) BC=00</td>
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<tr>
<td>5 (Adjust /Modify) BC=00</td>
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<td>6 (Remove &amp; Dispose) BC=00, Note: Contractor takes ownership</td>
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<tr>
<td>7 (Remove &amp; Stockpile/Salvage) BC=00, Note: DOT/maintaining agency retains ownership</td>
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<td>6 (Copper)</td>
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<td>2 (Water/Sewer)</td>
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<td>3 (Gas)</td>
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<td>4 (Fuel Transmission)</td>
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# Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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### 1050- 16002 UTILITY PIPE, REMOVE & DISPOSE, 2-4.9" LF T 1/1/2010

### 1050- 16003 UTILITY PIPE, REMOVE & DISPOSE, 5-7.9" LF T 1/1/2010

### 1050- 16004 UTILITY PIPE, REMOVE & DISPOSE, 8-19.9" LF T 1/1/2010

### 1050- 16005 UTILITY PIPE, REMOVE & DISPOSE, 20-49.9" LF T 1/1/2010

### 1050- 16006 UTILITY PIPE, REMOVE & DISPOSE, 50" OR LARGER LF T 1/1/2010

### 1050- 17004 UTILITY PIPE, REMOVE & STOCKPILE/SALVAGE, 8-19.9" LF T 1/1/2010

### 1050- 17005 UTILITY PIPE, REMOVE & STOCKPILE/SALVAGE, 20-49.9" LF T 1/1/2010

### 1050- 18000 UTILITY PIPE, PLUG & PLACE OUT OF SERVICE, CAP FOR UP TO 4" DIAMETER PIPE EA T 1/1/2010

### 1050- 18001 UTILITY PIPE, PLUG & PLACE OUT OF SERVICE, 0-1.9" LF T 1/1/2010

### 1050- 18002 UTILITY PIPE, PLUG & PLACE OUT OF SERVICE, 2-4.9" LF T 1/1/2010

### 1050- 18003 UTILITY PIPE, PLUG & PLACE OUT OF SERVICE, 5-7.9" LF T 1/1/2010

### 1050- 18004 UTILITY PIPE, PLUG & PLACE OUT OF SERVICE, 8-19.9" LF T 1/1/2010

### 1050- 18005 UTILITY PIPE, PLUG & PLACE OUT OF SERVICE, 20-49.9" LF T 1/1/2010

### 1050- 19222 UTILITY PIPE, TEMPORARY, PVC, WATER/SEWER, 2-4.9" LF T 1/1/2010

### 1050- 19223 UTILITY PIPE, TEMPORARY, PVC, WATER/SEWER, 5-7.9" LF T 1/1/2010

### 1050- 19224 UTILITY PIPE, TEMPORARY, PVC, WATER/SEWER, 8-19.9" LF T 1/1/2010

### 1050- 19321 UTILITY PIPE, TEMPORARY, PE, WATER/SEWER, 0-1.9" LF T 1/1/2010

### 1050- 19323 UTILITY PIPE, TEMPORARY, PE, WATER/SEWER, 5-7.9" LF T 1/1/2010

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### 1055- 1A-BCD UTILITY FITTINGS

<table>
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<th>EA</th>
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<th>Each</th>
<th>PlanQuantity?</th>
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</table>

**Notes and Structure:** Complete- Items 000 to 1999

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**Details**

This pay item for Utility JPA projects Only

For pipe up to 7.9" diameter, payment includes all fittings. Include thrust blocks, when needed, with payment for fittings. Material requirements and pressure ratings to be included in the specifications.

SPECIAL TYPE: Detail fitting type in the plans or specs.

Tech Specs are required for all items.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of
payment are available in the contract documents to clearly define the work to be completed for payment under this item.

<table>
<thead>
<tr>
<th>Related Items</th>
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<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
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<td>Construction Forms and Documentation</td>
<td>No additional form required; use plans summary or comp book</td>
<td>Record final quantity on the computation book form.</td>
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**References**

PPM Chapter

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

**TRNS*PORT Category (DRAFT FIELD):** 0700 Utilities

**Struct.** 1055-1A-BCD 

**UTILITY FITTINGS** EA

A= Operation

1 (Furnish & Install)

2 (Furnish)

3 (Install) BCD=blank

4 (Relocate) BCD=blank

5 (Adjust /Modify) BCD=blank

6 (Remove & Dispose) BCD=blank, Note: Contractor takes ownership

7 (Remove & Stockpile/Salvage) BCD=blank, Note: DOT/maintaining agency retains ownership

B=Material

1 (Concrete)

2 (PVC)

3 (PE)

4 (DI/CI)

5 (Steel)

C= Fitting Type

1 (Elbow)

2 (Tee)

3 (Reducer)

4 (Union)

5 (Cap/Plug)

6 (Y)

7 (Cleanout)

9 (Special)

D= Size or Equivalent Diameter

Sizes up to 7.9" includes the cost of all fittings

4 (8.0 -19.9")

5 (20.0 - 49.9")

6 (50.0" or larger)

**Notes**
The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
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<tr>
<th>Item</th>
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**1060- 1A-BCD**  
UTILITY STRUCTURE- BELOW GROUND

**Unit** | **EA** | **Accuracy** | **Each Plan Quantity?** | **no**

**Notes**  
This pay item for Utility JPA projects Only  
DO NOT USE for Milling adjustments; see 425 items for adjusting manholes & utility valves  
For Utility Structures BELOW ground.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**  
Required | Recommended

**Design Forms and Documentation**  
COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.
### Construction Forms and Documentation

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

### References

PPM Chapter

Trns-port

Other

Standards

Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

### TRNS*PORT Category (DRAFT FIELD): 0700 Utilities

#### Struct. 1060- 1A-BCD UTILITY STRUCTURE- BELOW GROUND EA

<table>
<thead>
<tr>
<th>A= Operation</th>
<th>B=Utility</th>
<th>C= Volume</th>
<th>D=Depth</th>
</tr>
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<tbody>
<tr>
<td>1 (Furnish &amp; Install)</td>
<td>1 (Electrical /Communications)</td>
<td>1 (0-80 FT3)</td>
<td>1 (0-6’)</td>
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<tr>
<td>2 (Furnish)</td>
<td>2 (Water/Sewer)</td>
<td>2 (&gt;80 FT3)</td>
<td>2 (6.1-12’)</td>
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<td>3 (Install)</td>
<td>3 (Other)*</td>
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<td>4 (Relocate)</td>
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<td>5 (Adjust /Modify) BCD= blank See detail information for milling adjustments</td>
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<td>7 (Remove &amp; Stockpile/Salvage) BCD= blank Note: DOT/maintaining agency retains ownership</td>
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Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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Details and Structure: Complete- Items 000 to 1999
### 1060-2A-BC  
**UTILITY STRUCTURE- ABOVE GROUND**

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<th>PlanQuantity?</th>
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#### Notes

This pay item for Utility JPA projects Only  
For Utility Structures ABOVE ground.  
Calculate pad volume as the length x width x depth of concrete. Covers are for non-electrical applications, aesthetic or weather enclosures. Material requirements to be included in the specifications.  

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

#### Related Items

<table>
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#### Design Forms and Documentation  
COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation  
Locate in the plans. Summarize quantities by location in the computation book.

#### Construction Forms and Documentation  
No additional form required; use plans summary or comp book  
Record final quantity on the computation book form.

#### References

PPM Chapter  
Trns-port
Other Standards Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)

TRNSPORT Category (DRAFT FIELD): 0700 Utilities

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Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<th>1080-1A-BCC</th>
<th>UTILITY FIXTURES</th>
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<tbody>
<tr>
<td>Unit</td>
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Notes Details

This pay item for Utility JPA projects Only Additional fixtures to be added as needed. Submit Request through District Estimates Office. Tabulate all items in the plans. For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

Related Items

<table>
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<th>Required</th>
<th>Recommended</th>
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<tr>
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<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
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<td>Locate in the plans. Summarize quantities by location in the computation book.</td>
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<td>Record final quantity on the computation book form.</td>
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</table>

Details and Structure: Complete- Items 000 to 1999
Struct. 1080-1A-BCC  

**UTILITY FIXTURES**  

**EA**

A= Operation  
1 (Furnish & Install)  
2 (Furnish)  
3 (Install)  
4 (Relocate) BCC= blank  
5 (Adjust /Modify) BCC= blank  
6 (Remove & Dispose) Note: Contractor takes ownership, BCC= blank  
7 (Remove & Stockpile/Salvage) Note: DOT/maintaining agency retains ownership, BCC= blank  

B= Size or Equivalent Diameter  
1 (0 - 1.9")*  
2 (2.0 - 4.9")*  
3 (5.0 - 7.9")*  
4 (8.0 -19.9")  
5 (20.0 - 49.9")  
6 (50.0" or larger)  
*NOTE: Fittings for pipe sizes up to 8" are included in the cost of the pipe. Fixtures, any size, may be paid under this item.

CC= Fixture  
1 (Valve/Meter Box)  
2 (Backflow Assembly)  
3 (Tapping Saddle/Sleeve)  
4 (Valve Assembly)  
5 (Blowoff Assembly)  
6 (VAC/AIR Assembly)  
7 (Line Stop Assembly)  
8 (Mechanical Joint Separator)  
9 (Mechanical Joint Restraint)  
10 (Flexible Expansion Joint)  
11 (Fan Guard)  
12... submit request to expand structure  
Note: CC list to be expanded as needed.

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
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### 1501- 1- UTILITY LIFT STATION, SANITARY SEWER

**Unit** | EA  
---|---
**Accuracy** | Each  
**Plan Quantity?** | no

**Notes**
This pay item for Utility JPA projects Only
Includes pump(s), power, internal piping, housing, and incidentals associated with the station.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

<table>
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<tr>
<th>Required</th>
<th>Recommended</th>
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<td>COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation</td>
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</table>

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book  
Record final quantity on the computation book form.

**References**

PPM Chapter  
Trns·port  
Other Standards  
Specifications

*T: Plan Details and/or Technical Specifications required

**TRNS*PORT Category (DRAFT FIELD):** Utilities

**Struct.** 1501- 1- UTILITY LIFT STATION, SANITARY SEWER  
**EA**

**Notes**

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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Details and Structure: Complete- Items 000 to 1999
1644-ABC- DD  FIRE HYDRANT

Unit  EA  Accuracy  Each  PlanQuantity? no

Notes Details
This pay item for Utility JPA projects Only
Items to be used for Water Main & Service Applications.

For Plan Detail/Tech Spec items: The Designer should ensure that the description,
materials, construction/installation requirements, method of measurement and basis of
payment are available in the contract documents to clearly define the work to be completed
for payment under this item.

Related Items
Required  Recommended

Design Forms and Documentation
COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per
Each Computation and Continuation
Locate in the plans. Summarize quantities by location in the computation book.

Construction Forms and Documentation
No additional form required; use plans summary or comp book
Record final quantity on the computation book form.

References
PPM Chapter
Trns-port
Other
Standards
Specifications

T: Plan Details and/or Technical Specifications required

Prep & Doc Manual Chapter(s)  7, 13

TRNS*PORT Category (DRAFT FIELD):  0700  Utilities

Struct.  1644-ABC- DD  FIRE HYDRANT  EA

A = Operation
1  (Furnish & Install)
2  (Furnish)
3  (Install)  BC = 00, DEE = Blank
4  (Salvage & Store)  BC = 00, DEE = Blank
5  (Salvage & Reuse)  BC = 00, DEE = Blank
6  (Plug & Placed Out Of Service)  BC = 00, DEE = Blank
7  (Adjust & Modify)  BC = 00, DEE = Blank
8  (Relocate)  BC = 00, DEE = Blank
9  (Remove)  BC = 00, DEE = Blank

B = Type Of Hydrant
1  (Standard)
2  (Airport)
3  (Traffic)

C = Number Of Ways
1  (Hose)
2  (Two Hose)
3  (Two Hose, One Pumper)
4  (2 Way, Flush Type, One Hose, One Pumper)
5  (4 Way, Three Hose, One Pumper)
6  (3 Way, Two Hose, One Pumper)
**1720-ABB- UTILITY WORK- TRANSFORMER**

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<th>PlanQuantity?</th>
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**Notes**

This pay item for Utility JPA projects Only

Plans or Technical Specifications must detail item, materials, construction/installation requirements, as well as compensation.

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the computation book form.

**References**

PPM Chapter

Trns·port

Other Standards Specifications

**T:** Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0700 Utilities

**Struct.**

1720-ABB- UTILITY WORK- TRANSFORMER EA

A = Operation

1 (Furnish & Install)

2 (Furnish)

3 (Install) BB=00

8 (Relocate) BB=00

9 (Remove) BB=00

BB = Configurations

01 (25 kVA Continuous Single Phase)

02 (75 kVA Continuous Single Phase)

03 (250 kVA Continuous Single Phase)
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

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<td>1720103</td>
<td>TRANSFORMER, F&amp;I, 250 KVA CONTINUOUS SINGLE PHASE</td>
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<td>T</td>
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### 1820-1-AB UTILITY CABLE, TELEPHONE/COMMUNICATIONS

**Unit**: LF; M1  
**Accuracy**: Linear Foot; 1/10 Meter  
**PlanQuantity?**: no

**Notes**

This pay item for Utility JPA projects Only

For Plan Detail/Tech Spec items: The Designer should ensure that the description, materials, construction/installation requirements, method of measurement and basis of payment are available in the contract documents to clearly define the work to be completed for payment under this item.

**Related Items**

**Required**

**Recommended**

**Design Forms and Documentation**

COMP 700-050-09: Linear Measure Comp with Components and Cont., or COMP 700-050-03: Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computation and Continuation

Locate in the plans. Summarize quantities by location in the computation book.

**Construction Forms and Documentation**

No additional form required; use plans summary or comp book

Record final quantity on the tabulation sheet (plans) or computation form (comp book).

**References**

PPM Chapter  
Trns·port  
Other Standards  
Specifications  

**T**: Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD)**: 0700 Utilities

**Struct.**: 1820-1-AB UTILITY CABLE, TELEPHONE/COMMUNICATIONS LF

A= Operation  
1 (Furnish & Install)  
2 (Furnish)  
3 (Install) B=0  
4 (Relocate) B=0  
5 (Adjust/Modify) B=0  
6 (Remove & Dispose) B=0, Note: Contractor takes ownership  
7 (Remove & Stockpile/Salvage) B=0, Note: DOT/maintaining agency retains ownership  
8 (Place out of Service) B=0  
B= # of pairs  
1 (up to 10 pair)  
2 (11-50 pair)
### Notes

The following items were open, as of the publication date. Refer to the Master Pay Item list for current items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit</th>
<th>TSP/Detail</th>
<th>Valid Date</th>
<th>Obsolete Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1820 1 50</td>
<td>UTILITY CABLE, TELEPHONE/COMMUNICATIONS, ADJUST &amp; MODIFY</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
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<tr>
<td>1820 1 60</td>
<td>UTILITY CABLE, TELEPHONE/COMMUNICATIONS, REMOVE AND DISPOSE, CONTRACTOR TAKES OWNERSHIP</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
<td></td>
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<tr>
<td>1820 1 70</td>
<td>UTILITY CABLE, TELEPHONE/COMMUNICATIONS, REMOVE &amp; STOCKPILE/SALVAGE</td>
<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
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**1820- 2- AB**  
UTILITY FIBER OPTIC, TELEPHONE/COMMUNICATIONS

<table>
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<tr>
<th>Unit</th>
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<th>PlanQuantity?</th>
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<td>LF; M1</td>
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**Details**

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**Related Items**

**Required**

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**Recommended**

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**References**

PPM Chapter
Trns-port
Other Standards Specifications

T: Plan Details and/or Technical Specifications required

**Prep & Doc Manual Chapter(s)**

**TRNS*PORT Category (DRAFT FIELD):** 0700  
Utilities

**Struct. 1820- 2- AB**  
UTILITY FIBER OPTIC, TELEPHONE/COMMUNICATIONS  
LF
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<tr>
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<td>LF</td>
<td>T</td>
<td>1/1/2010</td>
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