The Type K Temporary Concrete Barrier System has been crash tested to NCHRP Report 350 TL-3 criteria or structurally evaluated to meet the requirements of NCHRP Report 350 TL-3 criteria for the installation configurations as shown utilizing the types, sizes, lengths, shapes and grades of the barrier material and all installation materials as shown.

In order to maintain crashworthiness of the system, do not substitute different types, sizes, shapes, or types of reinforcing steel for those shown for constructing Type K Barrier Units. Also, do not substitute different type, size, length or material grade anchor bolts, nuts, washers, adhesives, connector pins, stakes, keeper pins, or guardrail components for installing Type K Barrier Units.

**Fabrication Notes:**

**Fabricator Prequalification:** The Barrier Units shall be made in a prestressed concrete plant that meets the requirements of Specification Section 450 or in a precast plant meeting the requirements of Specification Section 105.

**Concrete:** Concrete shall be Class IV in accordance with Specification Section 346. Specification Sections 346-10.2 through 346-10.4 are not applicable. Barrier Units represented by concrete acceptance strength tests which fall below 5000 psi will be rejected.

**Reinforcing Steel:** All reinforcing steel shall be ASTM A 615, Grade 60 except for Bars 6D1, 6D2 and 6D3. Bars 6D1, 6D2 and 6D3 shall be ASTM A 706 except that a 3/8 inch diameter pin must be used for the 180 degree bend test. After Fabrication, all or part of Bars 6D shall be hot dip galvanized in accordance with Specification Section 962 or coated with a cold galvanizing compound in accordance with Specification Section 975. The minimum limit of galvanizing or coating is shown in the Bending Diagrams. At the Fabricator's option, the entire length of Bars 6D may be galvanized or coated. Install Bars 6D within 5/8 of the plan dimensions. Correct placement of Bars 6D is critical for proper fit up and performance of individual Barrier Units.

As the option of the Fabricator, Deformed Welded Wire Fabric in accordance with Specification Section 931 and the details shown on Sheet 2 may be utilized in lieu of Bars 4A and 5B.

All dimensions in the Bending Diagrams are out to out. All reinforcing steel shall have a 2 inch minimum cover except as noted.

**Lifting Sleeve Assembly:** Inclusion of the Lifting Sleeve Assemblies is optional. Steel for Pipe Sleeve shall be in accordance with ASTM A 53. Hot-dip galvanize the Lifting Sleeve Assemblies after their fabrication in accordance with the Specifications.

**Surface Finish:** Construct Barrier Units in accordance with Specification Sections 400 and 521. Finish the top and sides of the Barrier Units with a General Surface Finish. Finish the bottom of the Barrier Units to a dense uniform surface by floating in lieu of the General Surface Finish. Use stationary metal forms or stationary timber forms with a form liner.

**Marking:** Permanently mark the top left end of each Barrier Unit by the use of an embedded and anchored metallic plate with letters floating in lieu of the General Surface Finish. Use stationary metal forms or stationary timber forms with a form liner.

**Handling:** At no time shall the Barrier Units be lifted or moved by use of Bars 6D that extend from the ends of the units. Approximate weight of one unit equals 2.7 tons.

Alternate Designs: Manufacturers/vendors seeking approval of proprietary Temporary Barrier Systems for inclusion on the Qualified Products List (QPL) as alternative designs shall submit a Product Application package. The application package shall include manufacturer's product drawings, specifications, installation manual, National Cooperative Highway Research Program (NCHRP) Report 350 or Manual for Assessing Safety Hardware (MASH) Test Level 3 (TL-3) crash test documentation and the FHWA "Letter of Acceptance." The posted QPL drawings will need to include the following:

1. Anchorages, bolting, and staking details for connections to asphalt and concrete pavement.
2. Sections and tables showing required deflection space and minimum offsets to above ground hazards or drop-offs.
3. Alignment and length of need details.
4. Transition and overlap details.
5. End treatment details.
PLAN VIEW

ELEVATION VIEW

SECTION THRU LIFT/DRAIN SLOT

ANCHOR BLOCKOUT DETAIL

LIFTING SLEEVE ASSEMBLY DETAIL (OPTIONAL)

ESTIMATED TEMPORARY CONCRETE BARRIER QUANTITIES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete</td>
<td>CY</td>
<td>1.29</td>
</tr>
<tr>
<td>Reinforcing Steel</td>
<td>L</td>
<td>218</td>
</tr>
</tbody>
</table>

The above quantities are for one Barrier Unit.

Cross References:
For Section A-A, Section B-B and Section C-C see Sheet 3.

* Measured from end of Barrier Unit to outside edge of Bars 6D.

Bar 4E (Bend to clear Bars 6D) (Typ.)

Anchor Blockout (Typ.)

Plan View

Item

UNIT

Concrete

2.29 CY

Reinforcing Steel

18 L

The above quantities are for one Barrier Unit.

Cross References:
For Section A-A, Section B-B and Section C-C see Sheet 3.

Note: Section B-B

* Measured from end of Barrier Unit to outside edge of Bars 6D.

Bar 4E (Bend to clear Bars 6D) (Typ.)

Anchor Blockout (Typ.)

Plan View

Item

UNIT

Concrete

2.29 CY

Reinforcing Steel

18 L

The above quantities are for one Barrier Unit.

Cross References:
For Section A-A, Section B-B and Section C-C see Sheet 3.

Note: Section B-B

* Measured from end of Barrier Unit to outside edge of Bars 6D.

Bar 4E (Bend to clear Bars 6D) (Typ.)

Anchor Blockout (Typ.)

Plan View

Item

UNIT

Concrete

2.29 CY

Reinforcing Steel

18 L

The above quantities are for one Barrier Unit.

Cross References:
For Section A-A, Section B-B and Section C-C see Sheet 3.

Note: Section B-B

* Measured from end of Barrier Unit to outside edge of Bars 6D.
No. 4 Bar over drain slots (Conventional Steel), placed with D 17.2's (Typ.)

2 - No. 5 Bars (Conventional Steel), placed with D 17.2's (Typ.)

No. 4 Typical Bar (Conventional Steel), placed with D 19.7's (Typ.)

D 19.7's spacing shall match spacings for Bars 4A shown in Elevation View, Sheet 2. Field trim D 19.7's to clear drain slots by 2".

No. 4 Bar over drain slots (Conventional Steel), placed with D 17.2's (Typ.)

2 - No. 5 Bars (Conventional Steel), placed with D 17.2's (Typ.)

No. 4 Typical Bar (Conventional Steel), placed with D 19.7's (Typ.) except over drain slots

No. 4 Typical Bar (Conventional Steel), placed with D 19.7's (Typ.)

D 63 (2 required)
See Connection Pin Installation Note

1. LIMITATION OF USE: This Temporary Concrete Barrier System is intended for work zone traffic control and other temporary applications. It shall not be used for permanent traffic control or other uses without the written approval of the Board of Directors of the Florida Board of Registration for Engineers and Surveyors, except as shown on transition installations, Type K Barrier Units are not intended to be bolted down or staked down in locations where they can be impacted from the back side.

2. HANDLING: At no time shall the Barrier Units be lifted or moved by use of Bars 6D that extend from the ends of the units. Approximate weight of one unit equals 2.7 tons.

3. SURFACE PREPARATION: Except as shown for the Back Filled Roadway Installations, remove all grass, debris, loose dirt and sand from the pavement, bridge deck or Asphalt Pad surface within the barrier footprint just prior to placement of the Barrier Units.

4. OFFSET TO TRAVELWAY: Offset shall meet requirements as shown on sheet 1 of Index 415.

5. CONNECTION PIN ASSEMBLY: Steel for Connection Pin and Top Plate assemblies shall be in accordance with ASTM A36 or ASTM A709 Grade 36.

6. NONPROCISION OF WORK: Nonprovision of work shall not be required. At the Contractor’s option, a 3/8” diameter hole may be provided at the bottom of the Connection Pin, as shown, for the installation of a vandal resistance bolt.

7. CONNECTION PIN INSTALLATION: Initially set Barrier Units by using a 3 1/2” wooden block between ends of adjacent units. Install Connection Pin between adjacent Barrier Units as shown, then pull newly placed Barrier Unit away from adjacent Barrier Unit to remove slack between Connection Pin and Bars 6D (except as shown on Sheet 5). Barrier Units shall not be used unconnected.

8. INSTALLATION OF TRANSITIONS: Transitions are required between freestanding, bolted down, slotted back and back filled Type K Barrier installations; see Sheet 8 for transition requirements and details. Transitions are also required between installations of Type K Barrier and other types of temporary barrier, see Index No. 415 for transition requirements and details. Splices and transitions are required between installations of Type K Barrier and permanent bridge or roadway traffic railings; see Sheets 9 through 13 for transition requirements and details. Transitions are required between installations of Type K Barrier and Proprietary (QPL) Barrier Systems; see Sheets 14 and 15 for transition requirements and details.

9. PAYMENT: Barrier Units for work zone traffic control and other temporary applications shall be paid for under the contract unit price for Barrier Wall (Temporary) (F&I) (Type K), LF. Any relocation of the Barrier Units required for the project shall be paid for under the contract unit price for Barrier Wall (Temporary) (Reinforced) (Type K), LF. Type C Steady-Burn lights are paid for under the contract unit price for lights (Temp. Barrier Wall Mount) (Type C, Steady Burn), ED. The Contractor shall furnish Barrier Units except when the Plans stipulate the availability of Department owned units. Regardless of unit source the Contractor shall furnish all hardware and shall be responsible for all handling including loading, transporting, unloading, stockpiling, installation, removal and return. Unless otherwise noted on the Plans, the Barrier Units shall become the property of the Contractor and shall be removed from the site prior to acceptance of the completed project.

NOTES FOR ALL INSTALLATIONS:

1. CONNECTION PIN INSTALLATION: Initially set Barrier Units by using a 3 1/2” wooden block between ends of adjacent units. Install Connection Pin between adjacent Barrier Units as shown, then pull newly placed Barrier Unit away from adjacent Barrier Unit to remove slack between Connection Pin and Bars 6D (except as shown on Sheet 5). Barrier Units shall not be used unconnected.

2. INSTALLATION OF TRANSITIONS: Transitions are required between freestanding, bolted down, slotted back and back filled Type K Barrier installations; see Sheet 8 for transition requirements and details. Transitions are also required between installations of Type K Barrier and other types of temporary barrier, see Index No. 415 for transition requirements and details. Splices and transitions are required between installations of Type K Barrier and permanent bridge or roadway traffic railings; see Sheets 9 through 13 for transition requirements and details. Transitions are required between installations of Type K Barrier and Proprietary (QPL) Barrier Systems; see Sheets 14 and 15 for transition requirements and details.

3. PAYMENT: Barrier Units for work zone traffic control and other temporary applications shall be paid for under the contract unit price for Barrier Wall (Temporary) (F&I) (Type K), LF. Any relocation of the Barrier Units required for the project shall be paid for under the contract unit price for Barrier Wall (Temporary) (Reinforced) (Type K), LF. Type C Steady-Burn lights are paid for under the contract unit price for lights (Temp. Barrier Wall Mount) (Type C, Steady Burn), ED. The Contractor shall furnish Barrier Units except when the Plans stipulate the availability of Department owned units. Regardless of unit source the Contractor shall furnish all hardware and shall be responsible for all handling including loading, transporting, unloading, stockpiling, installation, removal and return. Unless otherwise noted on the Plans, the Barrier Units shall become the property of the Contractor and shall be removed from the site prior to acceptance of the completed project.

NOTES FOR THRIE-BEAM GUARDRAIL SPLICE INSTALLATIONS:

1. THRIE-BEAM GUARDRAIL: Provide Thrie-Beam Guardrail for splices in accordance with AASHTO M 180, Type II (Zinc coated) and as follows:

   a. Two panels per splice (one panel per side) of Class B (10 Gauge), or
   b. Four panels per splice (two panels per side) of Class A (12 Gauge)

   Guardrail panel length shall be 12'-6". Provide and install all other associated metallic guardrail components (Terminal Connectors, Shoulder Bolts, Hex Bolts and Nuts, Filler Plates, etc.) in accordance with Index No. 400.

   Install five Guardrail Anchor Bolts at each end of each splice in any of the standard seven anchor bolt holes in the Thrie-Beam Terminal Connector.

   If reinforcing steel is encountered when drilling holes for Guardrail Anchor Bolts in Type K Barrier Units, shift Thrie-Beam Terminal Connector so as to drill or cut through reinforcing steel within any of the standard seven anchor bolt holes in the Thrie-Beam Terminal Connector.

   Drilling or cutting through reinforcing steel within permanent concrete traffic railings is permitted. Do not drill or cut through reinforcing steel within Type K Barrier Units. Drilling or cutting through reinforcing steel within permanent concrete traffic railings is permitted. Do not drill or cut through reinforcing steel within permanent concrete traffic railings.

   GUARDRAIL OFFSET BLOCKS: Provide and install timber Offset Blocks meeting the material requirements of Index No. 400. Field from Offset Blocks as required for proper fit. Utilize Offset Blocks as shown and required in order to prevent bonding or kinking of Thrie-Beam Guardrail panels.

   CONCRETE FOR FILLING TAPERED TRAFFIC RAILING HOLES: Provide concrete for filling tapered holes of Traffic Railings as shown meeting the material requirements of Specification Section 346, any Class, or a commercially available prebagged concrete mix (3000 psi minimum compressive strength). Sampling, testing, evaluation and certification of the concrete in accordance with Specification Section 346 is not required. Saturate with water the surfaces upon and against which the concrete fill will be placed prior to placing concrete. Use a fine shotcreting material or a standard concrete finishing material to finish the concrete fill. Cure the concrete fill by application of a curing compound, or by covering with a wet burlap or burlap for a minimum of 24 hours. Completely remove the concrete fill upon relocation or removal of the Type K Temporary Concrete Barrier.
NOTES FOR BOLTED DOWN BRIDGE, APPROACH SLAB, ROADWAY AND TRANSITION INSTALLATIONS:

LIMITATION OF USE: This installation technique can only be used on rigid pavement and concrete deck structures as shown. Barrier Units shall not be bolted down on bridge superstructures that contain post-tensioned tendons within the concrete deck (Top Flange of concrete box girders) or on bridge superstructures consisting of longitudinally prestressed, transversely post-tensioned, solid or voided concrete slabs. Anchor Bolts must not be installed on both sides of the Barrier Units. Do not bolt down Barrier Units across bridge finger or modular expansion joints.

ANCHOR BOLTS, NUTS AND WASHERS: Adhesive-Bonded Anchor Bolts shall be fully threaded rods in accordance with ASTM F 1554 Grade 36. Anchor Bolts for through boring shall be in accordance with ASTM A 367 or ASTM F 1554 Grade 36. Nuts shall be in accordance with ASTM A 563 or ASTM A 194. Flat Washers shall be in accordance with ASTM F 436 and Plate Washers shall be in accordance with ASTM A 36 or ASTM A 709 Grade 36.

Install three (3) Anchor Bolts per Barrier Unit on the traffic side of the Barrier Units as shown, except for Transition Installations. For the number and positions of Anchor Bolts required in Transition Installations see Sheets 8 and 9 and Index No. 415. Drilling through deck reinforcement shall be performed at the Contractor's option. Barrier Units may be installed by through bolting (where geometrically possible) or by the use of Adhesive-Bonded Anchor Bolts. Do not drill into or otherwise damage the tops of supporting beams or girders; bridge deck expansion joints or drains. Install Anchor Bolts and Nuts so that the maximum extension beyond the face of the Barrier Units is 3/8. Snug tighten the Nuts on the Anchor Bolts. For through bolted installations, snug tighten the double Nuts on the underside of the deck against each other to minimize the potential for loosening.

Omit one (1) Anchor Bolt within a single Barrier Unit if a conflict exists between the Anchor Bolt location and a bridge deck expansion joint or drain. The adjacent Barrier Units must each be installed with the standard three (3) Anchor Bolts.

Omit one (1) Anchor Bolt in a single Barrier Unit as shown in the Treatment at Bridge Deck Expansion Joint Schematic if the Barrier Unit straddles a bridge deck expansion joint. The adjacent Barrier Units must each be installed with the standard three (3) Anchor Bolts.

ADHESIVE BONDING MATERIAL SYSTEMS: Adhesive Bonding Material Systems for Anchor Bolts shall be Type HSHV in accordance with Specification Section 930 and shall be installed in accordance with Specification Section 415. Prior to the installation of the Barrier Units in the Plan location(s), install a demonstration Barrier Unit using the proposed production installation method, at a location approved by the Engineer. In lieu of the production test requirements of Specification Section 416-B, install six (6) Adhesive-Bonded Anchor Bolts in the demonstration Barrier Unit and test each Anchor Bolt with a 29,800 pound remote pull load. Install and test additional demonstration Barrier Units when requested by the Engineer. Remove the demonstration Barrier Unit prior to testing the Anchor Bolts. Remove the test Anchor Bolts after testing as directed by the Engineer.

REMOVAL OF ANCHOR BOLTS: Upon removal or relocation of Barrier Units, remove all Anchor Bolts and completely fill the remaining holes in bridge decks, approach slabs and roadway rigid pavements that are to remain with Magnesium Ammonium Phosphate Concrete in accordance with Specification Section 930 or with an Epoxy Resin Compound, Type 1 or G, in accordance with Specification Section 926. If a flexible pavement overlay is present and to remain, completely fill the remaining holes in the flexible pavement with hot or cold patch asphalt material.

BOLTED DOWN BRIDGE, APPROACH SLAB, ROADWAY AND TRANSITION INSTALLATIONS
NOTES FOR STAKED DOWN ROADWAY AND TRANSITION INSTALLATIONS:

LIMITATION OF USE: This installation technique can only be used on flexible pavement or on an Asphalt Pad as shown. Stakes must not be installed on both sides of the Barrier Units.

ASPHALT PAD: Where existing flexible pavement is not present, construct the Asphalt Pad using Miscellaneous Asphalt Pavement in accordance with Specification Section 339 with the exception that the use of a pre-emergent herbicide is not required. Payment for the asphalt pad will be included in the cost of the barrier.

STAKES: Provide steel for Stake assemblies in accordance with ASTM A 36 or ASTM A 709 Grade 36. All welding shall be in accordance with the American Welding Society Structural Welding Code (Sheets AWS/D1.1 (current edition)). Weld metal shall be E60XX or E70XX. Nondestructive testing of welds is not required.

REMOVAL OF STAKES: Upon removal or relocation of Barrier Units, completely remove all Stakes and completely fill the remaining holes in flexible pavement that is to remain with hot or cold patch asphalt material. REUSE OF STAKES: Stakes may be reused if they have the structural integrity of new stakes.

REMOVED KEEPERS: Keepers Pins are to be b" diameter, smooth steel bar in accordance with ASTM A 36 or ASTM A 709 Grade 36. As directed by the Engineer in order to limit vibration induced translation of the Barrier Units, install one (1) Keeper Pin per Barrier Unit on the traffic side of the Barrier Units as shown. Do not drill into or otherwise damage bridge deck expansion joints or drains.

REMOVAL OF KEEPERS: Upon removal or relocation of Barrier Units, completely remove all Keeper Pins and completely fill the remaining holes in flexible pavement that is to remain with hot or cold patch asphalt material.

NOTES FOR FREE STANDING ROADWAY INSTALLATION:

LIMITATION OF USE: This installation technique can only be used on flexible pavement or on an Asphalt Pad as shown. Stakes must not be installed on both sides of the Barrier Units.

ASPHALT PAD: Where existing flexible pavement is not present, construct the Asphalt Pad using Miscellaneous Asphalt Pavement in accordance with Specification Section 339 with the exception that the use of a pre-emergent herbicide is not required. Payment for the asphalt pad will be included in the cost of the barrier.

STAKES: Provide steel for Stake assemblies in accordance with ASTM A 36 or ASTM A 709 Grade 36. All welding shall be in accordance with the American Welding Society Structural Welding Code (Sheets AWS/D1.1 (current edition)). Weld metal shall be E60XX or E70XX. Nondestructive testing of welds is not required.

REMOVAL OF STAKES: Upon removal or relocation of Barrier Units, completely remove all Stakes and completely fill the remaining holes in flexible pavement that is to remain with hot or cold patch asphalt material.

REUSE OF STAKES: Stakes may be reused if they have the structural integrity of new stakes.

FREESTANDING ROADWAY INSTALLATION:

NOTES FOR FREE STANDING ROADWAY INSTALLATION:

LIMITATION OF USE: This installation technique can only be used on flexible pavement or on an Asphalt Pad as shown. Stakes must not be installed on both sides of the Barrier Units.

ASPHALT PAD: Where existing flexible pavement is not present, construct the Asphalt Pad using Miscellaneous Asphalt Pavement in accordance with Specification Section 339 with the exception that the use of a pre-emergent herbicide is not required. Payment for the asphalt pad will be included in the cost of the barrier.

STAKES: Provide steel for Stake assemblies in accordance with ASTM A 36 or ASTM A 709 Grade 36. All welding shall be in accordance with the American Welding Society Structural Welding Code (Sheets AWS/D1.1 (current edition)). Weld metal shall be E60XX or E70XX. Nondestructive testing of welds is not required.

REMOVAL OF STAKES: Upon removal or relocation of Barrier Units, completely remove all Stakes and completely fill the remaining holes in flexible pavement that is to remain with hot or cold patch asphalt material.
NOTES FOR FREESTANDING MEDIAN INSTALLATION:

KEEPER PINS: Required for Bridge Decks only. Keeper Pins shall be 3/4" diameter, smooth steel bar in accordance with ASTM A 36 or ASTM A 709 Grade 36. As directed by the Engineer in order to limit vibration induced translation of the Barrier Units, install one (1) Keeper Pin per Barrier Unit as shown. Arrange Keeper Pin locations from side to side of Barrier Units along the length of the installation. Do not drill into or otherwise damage bridge deck expansion joints or drains. Upon removal or relocation of Barrier Units, remove all Keeper Pins and completely fill the remaining holes in bridge decks and approach slabs that are to remain with Magnesium Ammonium Phosphate Concrete in accordance with Specification Section 930 or with an Epoxy Resin Compound, Type I or Q. In accordance with Specification Section 926, if a flexible pavement overlay is present and is to remain, completely fill the remaining holes in the flexible pavement with hot or cold patch asphalt material.

ASPHALT PAD: Where existing pavement is not present, construct the Asphalt Pad using Miscellaneous Asphalt Pavement in accordance with Specification Section 339 with the exception that the use of a pre-emergent herbicide is not required. No separate payment will be made for the Asphalt Pad.

NOTES FOR SOIL BACK FILLED ROADWAY INSTALLATIONS:

SOIL BACK FILL MATERIALS: Provide Back Fill Material consisting of any available clean soil. Compact Back Fill Material until the soil mass is firm and unyielding. Provide erosion control as specified in the Plans. If none is specified in the Plans, provide erosion control as required to maintain the integrity of the Back Fill embankment.

GEOTEXTILE FABRIC: Provide Type D-5 Geotextile Fabric in accordance with Index No. 199 to contain Back Fill Material behind Barrier Units. Geotextile Fabric may be continuous over the length and height of the installation or may be individual pieces as required to cover the Lift / Drain Slits and open vertical joints between Barrier Units.

FLOWABLE FILL BACK FILL ROADWAY INSTALLATIONS:

NOTES FOR FLOWABLE FILL BACK FILL ROADWAY INSTALLATIONS:

FLOWABLE FILL: Provide Flowable Fill in accordance with Specification Section 121.
APPROACH TRANSITION FROM FREESTANDING TO BOLTED OR STAKED DOWN TYPE K TEMPORARY CONCRETE BARRIERS

LEGEND:
- Freestanding Units (13 Units Min.)
- Freestanding Units (13 Units Min.) *
- Transition Units (4 Units)
- Transition Units (4 Units) *
- Bolted or Staked Units
- Bolted - 1'-0" Nominal
- Staked - 3'-0" Min.
- Drop-off or Hazard
- Back Fill
- See Sheet 6 for dimensions

NOTE:
Where Barrier is located within Clear Zone of opposing traffic, Approach Transition is required.

APPROACH TRANSITION FROM FREESTANDING TO BACK FILLED TYPE K TEMPORARY CONCRETE BARRIERS

LEGEND:
- Freestanding Units (13 Units Min.)
- Freestanding Units (13 Units Min.) *
- Transition Units (4 Units)
- Transition Units (4 Units) *
- Bolted or Staked Units
- Bolted - 1'-0" Nominal
- Staked - 3'-0" Min.
- Drop-off or Hazard
- Back Fill
- See Sheet 6 for dimensions

TRAILING END TRANSITION FROM BOLTED OR STAKED DOWN TO FREESTANDING TYPE K TEMPORARY CONCRETE BARRIERS

LEGEND:
- Freestanding Units
- Freestanding Units
- Back Filled Units
- Transition Units (4 Units)
- Bolted or Staked Units
- Bolted - 1'-0" Nominal
- Staked - 3'-0" Min.
- Drop-off or Hazard
- See Sheet 6 for dimensions

TRAILING END TRANSITION FROM BACK FILLED TO FREESTANDING TYPE K TEMPORARY CONCRETE BARRIERS

LEGEND:
- Freestanding Units
- Freestanding Units
- Back Filled Units
- Transition Units (4 Units)
- Bolted or Staked Units
- Bolted - 1'-0" Nominal
- Staked - 3'-0" Min.
- Drop-off or Hazard
- See Sheet 6 for dimensions
TRAFFIC RAILING / NOISE WALLS (CONCRETE BARRIER WALL SIMILAR)

FOR F AND NEW JERSEY SHAPE TRAFFIC RAILINGS AND 8' & 14' TRAFFIC RAILING / NOISE WALLS (CONCRETE BARRIER WALL SIMILAR)

PARTIAL PLAN VIEW AT MEDI AN TRAFFIC RAILING

32" F Shape Traffic Railing (shown).
32" New Jersey Shape and 42" F Shape Traffic Railings and 8' or 14 Traffic Railing / Noise Walls (similar)

PARTIAL PLAN VIEW AT SHOULDER TRAFFIC RAILING

32" F Shape Traffic Railing (shown).
32" New Jersey Shape and 42" F Shape Traffic Railings and 8' or 14 Traffic Railing / Noise Walls (similar)

PARTIAL ELEVATION VIEW - FLORIDA CORRAL TRAFFIC RAILING

32" Florida Corral Traffic Railing (shown).
32" Vertical Shape Traffic Railings (similar)

PARTIAL ELEVATION VIEW - VERTICAL SHAPE TRAFFIC RAILINGS

42" Vertical Shape Traffic Railing (shown).
42" Vertical Shape Traffic Railing (similar)

APPROACH TRANSITION SPLICE DETAIL

FOR FLORIDA CORRAL AND VERTICAL SHAPE TRAFFIC RAILINGS

1'-0" ±
DESCRIPTION:

Freestanding Type K Barrier Units shown; Bolted or Staked similar. See Plans for specific requirements.

* See Thrie-Beam Guardrail Splice Installations, Sheet 4.

For F and New Jersey Shape Traffic Railings and 8' & 14' Traffic Railing / Noise Walls (similar).

Cross References: See Sheet 13 for Section A-A, Section B-B and Section C-C.

PARTIAL ELEVATION VIEW

FOR FLORIDA CORRAL AND VERTICAL SHAPE TRAFFIC RAILINGS

TRAILING END SPLICE DETAIL

PARTIAL PLAN VIEW

TRAILING END SPLICE DETAIL

For Florida Corral Traffic Railing (shown), 32" & 42" Vertical Shape Traffic Railings (similar).
Description:

**PARTIAL PLAN VIEW**

- Freestanding Type K Barrier units shown. Bolted or Staked.
- Down units similar; see Plans for specific requirements.

**PARTIAL ELEVATION VIEW**

- For 32" F and New Jersey Shape Traffic Railings with Railing Transition and End Post.
- Cross References:
  - See Sheet 13 for Section B-B, Section C-C and Section D-D.

**APPRAOCH TRANSITION SPLICE DETAIL**

- For 32" F and New Jersey Shape Traffic Railings with Railing Transition and End Post.
- Cross References:
  - See Sheet 13 for Section B-B, Section C-C and Section E-E.
**APPROACH TRANSITION FROM FREESTANDING PROPRIETARY TEMPORARY BARRIERS TO BOLTED OR STAKED DOWN TYPE K TEMPORARY CONCRETE BARRIERS**

**TRAILING END TRANSITION FROM BOLTED OR STAKED DOWN TYPE K TEMPORARY CONCRETE BARRIERS TO FREESTANDING PROPRIETARY TEMPORARY BARRIERS**

**APPROACH AND TRAILING END TRANSITIONS FROM FREESTANDING TYPE K TEMPORARY CONCRETE BARRIERS TO FREESTANDING PROPRIETARY TEMPORARY BARRIERS**

**TYPE K-PROPRIETARY TEMPORARY CONCRETE BARRIER TRANSITIONS**
**TYPE K-PROPRIETARY TEMPORARY CONCRETE BARRIER TRANSITIONS**

**APPROACH TRANSITION FROM FREESTANDING PROPRIETARY TEMPORARY BARRIERS TO BACK FILLED TYPE K TEMPORARY CONCRETE BARRIERS**

NOTE: Where Barrier is located within Clear Zone of opposing Traffic, Approach Transition is required.

**TRAILING END TRANSITION FROM BACK FILLED TYPE K TEMPORARY CONCRETE BARRIERS TO FREESTANDING PROPRIETARY BARRIERS**

**MEDIAN APPROACH AND TRAILING END TRANSITIONS FROM FREESTANDING TYPE K TEMPORARY CONCRETE BARRIERS TO FREESTANDING PROPRIETARY TEMPORARY BARRIERS**

**TYPE K-PROPRIETARY TEMPORARY CONCRETE BARRIER TRANSITIONS**