

## MAINTENANCE OF TRAFFIC - TEMPORARY PORTABLE ACCESS SURFACES AND CURB RAMPS (TPSC).

(REV 1-29-24)

SUBARTICLE 102-6.2 is deleted and the following substituted:

**102-6.2 Construction:** Plan, construct, and maintain detours for the safe passage of traffic in all conditions of weather. Provide the detour with all facilities necessary to meet this requirement.

Install detectable warnings on temporary ramps in accordance with Section 527. Detectable warning for temporary portable curb ramps may be surface applied or integral to the device.

When the Plans call for the Department to furnish detour bridge components, construct the pile bents in accordance with the Plans, unless otherwise authorized by the Engineer.

Provide two Contractor representatives, who will be directly involved in the erection of Department-owned temporary bridging, to attend a mandatory one-day training session to be conducted at the Department's storage facility. No bridging will be released to the Contractor prior to the completion of this training.

Submit the following: company name, phone number, office address, project contact person, names of the representatives who will attend the training described above, project number, detour bridge type, bridge length, span length, location and usage time frames, to the Engineer at least 30 calendar days before the intended pick-up date, to obtain the storage facility location and list of components for the project. Upon receipt, the Engineer will, within 10 calendar days submit an approved material list to the Contractor and the appropriate Department storage yard.

Submit the name of the representative with authority to pick up components, to the Engineer at least 10 calendar days before the proposed pick-up date. The Department is not obligated to load the bridge components without this notice. Take responsibility and sign for each item loaded at the time of issuance.

Provide timber dunnage, and transport the bridge components from the designated storage facility to the job site. Unload, erect, and maintain the bridge, then dismantle the bridge and load and return the components to the designated storage facility.

Notify the Engineer in writing at least 10 calendar days before returning the components. Include in this notice the name of the Contractor's representative authorized to sign for return of the bridge components. The yard supervisor is not obligated to unload the bridge components without this notice.

The Department will provide equipment and an operator at the Department's storage facility to assist in loading and unloading the bridge components. Furnish all other labor and equipment required for loading and unloading the components.

The Department's representative will record all bridge components issued or returned on the Detour Bridge Issue and Credit Ticket. The tickets must be signed by a Department and a Contractor representative, after loading or unloading each truck to document the quantity and type of bridging issued or returned.

Bind together all bridge components to be returned in accordance with the instructions given by the storage facility. The yard supervisor will repack components that are

not packed in compliance with these instructions. Upon request, written packing instructions will be made available to the Contractor, before dismantling of the bridge for return to the Department's storage facility.

Assume responsibility for any shortage or damage to the bridge components. Monies due the Contractor will be reduced at the rate of \$35.00 per hour plus materials for repacking, repairs or replacement of bridge components.

The skid resistance of open steel grid decking on the detour bridge may decrease gradually after opening the bridge to traffic. The Department will furnish a pneumatic floor scabbler machine for roughening the roadway surface of the detour bridge decking. Provide an air compressor at the job site with 200 cubic feet per minute capacity, 90 psi air pressure for the power supply of the machine, and an operator. Transport the scabbler machine to and from the Department's structures shop. Repair any damage to the scabbler machine caused by operations at no expense to the Department. Perform scabbling when determined necessary by the Engineer. The Department will pay for the cost of scabbling as Unforeseeable Work in accordance with 4-4.

Return the bridge components to the designated storage facility beginning no later than 10 calendar days after the date the detour bridge is no longer needed, the date the new bridge is placed in service, or the date Contract Time expires, whichever is earliest. Return the detour bridging at an average of not less than 200 feet per week. Upon failure to return the bridge components to the Department within the time specified, compensate the Department for the bridge components not returned at the rate of \$5.00 per 10 feet, per day, per bridge, for single lane; and \$10.00 per 10 feet, per day, per bridge, for dual lane until the bridge components are returned to the Department.

SUBARTICLE 102-6.8 is deleted and the following substituted:

**102-6.8 Pedestrian or Bicycle Special Detour:** A pedestrian or bicycle special detour is defined as a temporary pedestrian or bicycle way that requires temporary pavement or temporary portable access surface.

ARTICLE 102-9 is expanded by the following:

**102-9.19 Temporary Portable Access Surfaces and Curb Ramps:** Provide temporary portable access surfaces and curb ramps, or a combined system thereof, in accordance with the TTCP and meeting the requirements of Section 990. Use a consistent type and color throughout the work zone. Install and maintain in accordance with the manufacturer's recommendations. If handrails are provided, install to a minimum height of 32in in accordance with manufacturer's recommendations.

ARTICLE 102-11 is expanded by the following:

**102-11.28 Temporary Portable Access Surfaces and Curb Ramps:** The quantity to be paid for will be paid as the number of temporary portable access surface and curb ramps certified as installed/used and have been properly maintained, per location, per day.

ARTICLE 102-13 is deleted and following substituted:

**102-13 Basis of Payment.**

**102-13.1 Maintenance of Traffic (General Work):** When an item of work is included in the proposal, price and payment will be full compensation for all work and costs specified under this Section except as may be specifically covered for payment under other items.

**102-13.2 Traffic Control Officers:** Price and payment will be full compensation for the services of the traffic control officers.

**102-13.3 Special Detours:** Price and payment will be full compensation for providing all detour facilities shown in the Plans and all costs incurred in carrying out all requirements of this Section for general MOT within the limits of the detour, as shown in the Plans.

**102-13.4 Commercial Materials for Driveway Maintenance:** Price and payment will be full compensation for all work and materials specified for this item, including specifically all required shaping and maintaining of driveways.

**102-13.5 Work Zone Signs:** Price and payment will be full compensation for all work and materials for furnishing signs, supports and necessary hardware, installation, relocating, maintaining, covering, and removing signs.

**102-13.6. Business Signs:** Price and payment will be full compensation for all materials and labor required for furnishing, installing, relocating, maintaining, and removing the signs as well as the cost of installing any logos provided by business owners.

**102-13.7 Channelizing Devices:** Prices and payment will be full compensation for furnishing, installing, relocating, maintaining and removing the channelizing devices.

**102-13.8 Temporary Barrier:** Price and payment will be full compensation for furnishing, installing, maintaining, and removing the barrier and asphalt pad. When called for, temporary barrier (relocate) will be full compensation for relocating the barrier.

**102-13.9 Temporary Glare Screen:** Price and payment will be full compensation for furnishing, installing, maintaining, and removing the glare screen certified as installed/used on the project. When called for, glare screen (relocate) will be full compensation for relocating the glare screen.

**102-13.10 Temporary Crash Cushion (Redirective or Gating):** Price and payment will be full compensation for furnishing, installing, maintaining, and removing crash cushions, object markers, and concrete or asphalt pads.

**102-13.11 Temporary Guardrail:** Price and payment will be full compensation for furnishing all materials required for a complete installation, including end anchorage assemblies and any end connections to other structures and for installing, maintaining and removing guardrail.

**102-13.12 Arrow Board:** Price and payment will be full compensation for furnishing, installing, operating, relocating, maintaining and removing arrow boards.

**102-13.13 Portable Changeable Message Sign:** Price and payment will be full compensation for furnishing, installing, operating, relocating, maintaining and removing portable changeable message signs.

**102-13.14 Portable Regulatory Signs:** Price and payment will be full compensation for furnishing, installing, relocating, operating, maintaining and removing a completely functioning system as described in these Specifications.

Payment will include all labor, materials, incidentals, repairs and any actions necessary to operate and maintain the unit at all times that work is being performed or traffic is being affected by construction and/or MOT operations.

**102-13.15 Radar Speed Display Unit:** Price and payment will be made only for a completely functioning system as described in these Specifications. Payment will include all labor, hardware, accessories, signs, and incidental items necessary for a complete system. Payment will include any measurements needed to ensure that the unit conforms to all Specification requirements.

Payment will include all labor, materials, incidentals, repairs and any actions necessary to operate and maintain the unit at all times that work is being performed or traffic is being affected by construction and MOT operations. Price and payment will be full compensation for furnishing, installing, operating, relocating, maintaining and removing radar speed display unit.

**102-13.16 Temporary Signalization and Maintenance:** Price and payment will constitute full compensation for furnishing, installing, operating, maintaining and removing temporary traffic control signals including all equipment and components necessary to provide an operable traffic signal. Payment will be withheld for each day at each intersection where the temporary signalization is not operational within 12 hours after notification.

**102-13.17 Temporary Traffic Detection and Maintenance:** Price and payment will constitute full compensation for furnishing, installing, operating, maintaining and removing temporary traffic detection including all equipment and components necessary to provide an acceptable signalized intersection. Take ownership of all equipment and components. Payment will be withheld for each day at each intersection where the temporary detection is not operational within 12 hours after notification.

**102-13.18 Existing ITS Maintenance:** Price and payment will constitute full compensation for diagnosing, troubleshooting, configuring, installing, operating, maintaining, and removing existing ITS devices including all auxiliary equipment and device components. Payment will be withheld for each day where the ITS device is not operational within the allowable downtime, beginning at the time of notification. Payment will not be withheld for days of delay when the Department or Maintaining Agency is unable to furnish the replacement ITS device to the Contractor.

**102-13.19 Work Zone Pavement Markings:** Price and payment will be full compensation for all work specified including, all cleaning and preparing of surfaces, furnishing of all materials, application, curing and protection of all items, protection of traffic, furnishing of all tools, machines and equipment, and all incidentals necessary to complete the work. Final payment will be withheld until all deficiencies are corrected.

Removable tape or durable paint may be substituted for standard paint at no additional cost to the Department.

Payment for temporary RPMs used to supplement line markings will be paid for under temporary raised pavement markers. Install these RPMs as detailed in the Standard Plans.

**102-13.20 Temporary Raised Rumble Strips:** Price and payment will be full compensation for all work and materials described in this Section, including all cleaning and preparing of surfaces, disposal of all debris, furnishing of all materials, application, curing, removal, reinstalling and protection of all items, protection of traffic, furnishing of all tools, machines and equipment, and all incidentals necessary to complete the work.

**102-13.21 Temporary Lane Separator:** Price and payment will be full compensation for all work specified in this Section.

**102-13.22 Temporary Signals for Lane Closures on Two-Lane, Two-Way Roadways:** Price and payment will be full compensation for furnishing, installing, operating, maintaining and removing temporary traffic signal including all equipment and components necessary to provide an operable portable traffic signal.

**102-13.23 Temporary Highway Lighting:** Price and payment will be full compensation for providing all temporary highway lighting shown in the Plans.

**102-13.24 Pedestrian or Bicycle Special Detours:** Price and payment will be full compensation for providing all pedestrian or bicycle special detours shown in the Plans.

**102-13.25 Type III Barricades:** Prices and payment will be full compensation for furnishing, installing, relocating, maintaining, and removing the type III barricades.

**102-13.26 Temporary Access Surfaces and Curb Ramps:** Price and payment will be full compensation for furnishing all materials required for a complete installation, including connectors and ground anchors.

**102-13.27 Payment Items:** Payment will be made under:

Item No. 102- 1-	Maintenance of Traffic - lump sum.
Item No. 102- 2-	Special Detour - lump sum.
Item No. 102- 3-	Commercial Material for Driveway Maintenance - per cubic yard.
Item No. 102- 4-	Pedestrian or Bicycle Special Detour - lump sum.
Item No. 102- 14-	Traffic Control Officer - per hour.
Item No. 102- 30-	Temporary Highway Lighting - lump sum.
Item No. 102- 60-	Work Zone Sign - per each per day.
Item No. 102- 61-	Business Sign - each.
Item No. 102- 62-	Barrier Mounted Work Zone Sign – per each per day
Item No. 102- 71-	Temporary Barrier - per foot.
Item No. 102- 75-	Temporary Lane Separator - per foot
Item No. 102- 73-	Temporary Guardrail - per foot.
Item No. 102- 74-	Channelizing Devices
Item No. 102- 76-	Arrow Board - per each per day.
Item No. 102- 78-	Temporary Raised Pavement Markers - each.
Item No. 102- 81-	Temporary Crash Cushion, Gating - per location.
Item No. 102- 89-	Temporary Crash Cushion, Redirective - per location.
Item No. 102- 94-	Glare Screen - per foot.
Item No. 102- 99-	Portable Changeable Message Sign - per each per day.
Item No. 102-104-	Temporary Signalization and Maintenance - per intersection per day.
Item No. 102-107-	Temporary Traffic Detection and Maintenance - per intersection per day.
Item No. 102-ABC-	Existing ITS Maintenance – per day

Item No. 102-115-	Type III Barricade - per each per day.
Item No. 102-120-	Temporary Signal for Lane Closures on Two-Lane, Two-Way Roadways – per each per day.
Item No. 102-150-	Portable Regulatory Sign - per each per day.
Item No. 102-150-	Radar Speed Display Unit - per each per day.
Item No. 102-909-	Temporary Raised Rumble Strips - per day.
Item No. 102-913-	Removable Tape.
Item No. 922-102-	Temporary Portable Access Surfaces and Curb Ramps – per location per day.
Item No. 710-	Painted Pavement Markings.
Item No. 711-	Thermoplastic Pavement Markings.

Do Not Use Without CO Spec Authorization

## TEMPORARY TRAFFIC CONTROL DEVICE MATERIALS - TEMPORARY PORTABLE ACCESS SURFACES AND CURB RAMPS (TPSC).

(REV 1-29-24)

SECTION 990 is expanded by the following:

### 990-18 Temporary Portable Access Surfaces.

**990-18.1 General:** Temporary portable access surfaces may be either a rigid panel or a flexible mat type as described below. Temporary portable access surfaces must come in connectable sections and be capable of providing an ADA compliant, firm, stable and slip-resistant surface for pedestrian and bicycle traffic.

Provide Manufacturer's Installation Instructions.

#### 990-18.1.1 Rigid Panel Type:

Table 990-4	
Characteristic	Requirement
Width	5 feet (minimum)
Length	3 feet (minimum)

#### 990-18.1.2 Flexible Mat Type:

Table 990-5	
Characteristic	Requirement
Composition	Polyester
Width	5 feet (minimum)
Length	16.5 feet (minimum)
Anchoring	Mechanical ground anchor (staple or spike)

### 990-19 Temporary Portable Curb Ramp.

**990-19.1 General:** Temporary portable curb ramps can be a standalone ramp, or a ramp system comprised of a ramp and platform. Temporary portable curb ramps must be capable of providing an ADA compliant, firm, stable and slip-resistant surface for pedestrian and bicycle traffic. Temporary portable curb ramps must meet the following:

1. Minimum 48 inches unobstructed clear width.
2. Maximum slope of 8.3% (1:12).
3. Maximum cross slope of 2%.
4. 8 inches continuous detectable edging above walking surface.
5. Capable of installing handrails to a minimum height of 32 inches. If hand rails are provided, provide a continuous smooth surface for handtrailing with no opportunities for abrasion, splintering, or pinch points.