#### SECTION 01421

## TEMPORARY CONCRETE BARRIER FOR MAINTENANCE OF TRAFFIC

## 01421.01 GENERAL

# A. Description

This work shall consist of furnishing, placing, resetting, and removal of precast concrete barriers for temporary use during construction along highways, streets, and at locations indicated on the Plans or as directed by the Engineer. The barrier shall meet the requirements of the precast concrete barrier details as shown on the Plans or Standard Details and in accordance with the Contract Documents.

## **B.** Related Work Included Elsewhere

- 1. Traffic control plan; Section 01411.
- 2. Traffic barriers; Section 02721.
- 3. Portland cement concrete; Section 03310.

## C. To Be Provided By County

# D. Quality Assurance

The Engineer will inspect all materials before and/or after installation to ensure compliance with the Contract Documents.

## E. Submittals

Shop drawings shall be submitted as specified in the "General Provisions" for all concrete barriers furnished. The shop drawings shall provide the information specified in Sections 02721.01, 03200.01 and 03310.01.

## **01421.02 MATERIALS**

# A. Materials Furnished by the County

The County will not furnish any materials for concrete barrier installation.

# **B.** Contractor's Options

1. The Contractor may furnish either "Temporary" or "Permanent" type concrete barriers as shown on the Standard Details for temporary maintenance of traffic when

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the barriers will ultimately be removed. In a single run of barriers, only one type of barrier shall be used.

2. If the barrier used is located in its ultimate permanent location, only "Permanent" type concrete barriers shall be used.

# C. Detailed Material Requirements

- 1. Precast concrete barriers shall be fabricated in accordance with the Standard Details.
- 2. Welded wire fabric shall be as specified in Section 03200.02.
- 3. Portland cement concrete for barriers shall be Mix No. 6 as specified in Section 03310.02.
- 4. Each unit of precast concrete barriers, as a minimum requirement, shall be completely covered with white acrylic water-base paint in accordance with the manufacturer's recommendations.
- 5. Warning lights and/or reflectors shall be furnished in accordance with MUTCD and shall be approved by the Engineer before installation.

#### **01421.03 EXECUTION**

#### A. General

Temporary concrete barriers shall be furnished and placed at locations indicated on the Plans or as directed by the Engineer. Care shall be taken by the Contractor to assure that the precast sections are not damaged during the placing operations. Particular care shall be exercised to assure that the connecting plate is not struck during installation operations. The Contractor shall be responsible to maintain the precast barrier in a safe and effective condition. Damaged units shall be replaced by the Contractor.

## B. Painting

The exposed face and top of the temporary precast concrete barrier shall be painted in accordance with Section 01421.02, Article C, Paragraph 4. The Contractor shall repaint the barriers when peeling, flaking, aging, and/or deterioration of the reflective delineation of the units are evident.

# C. Warning Lights and/or Reflectors

Warning lights and/or reflectors shall be installed on the temporary barrier with a spacing in feet not to exceed the speed limit in miles per hour.

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## **D.** Resetting Barriers

Resetting temporary concrete barriers shall consist of removing, relocating, and resetting the temporary concrete barrier at a new location as directed by the Engineer.

## 01421.04 METHOD OF MEASUREMENT

## A. Temporary Concrete Barrier

- 1. Measurement for temporary concrete barrier installation will be made of the length of barrier, measured along the centerline of the top of the barrier, satisfactorily installed.
- 2. Sections damaged as a result of vehicular traffic and deemed unusable by the Engineer and replaced, will be measured for payment as temporary concrete barrier.
- 3. Sections damaged as a result of the Contractor's operations will not be measured, but shall be replaced at the Contractor's expense.

# **B.** Reset Temporary Concrete Barrier

Measurement for resetting temporary concrete barriers will be made of the length of barrier, measured along the centerline of the top of the barrier, satisfactorily reset.

## 01421.05 BASIS OF PAYMENT

## A. Temporary Concrete Barrier

Payment for temporary concrete barrier will be made at the price bid per linear foot for temporary concrete barrier installed complete in place. The price bid shall include all painting, warning lights and/or reflectors, maintenance, labor, materials, equipment, and incidentals including the furnishing, placing, and removal from the job site at the termination of the Project.

# **B.** Reset Temporary Concrete Barriers

Payment for resetting temporary concrete barrier will be made at the price bid per linear foot for reset temporary concrete barrier, complete in place. The price bid shall include furnishing all labor, equipment, and incidentals, including removal from its original placement, transporting, and resetting in its own new temporary location. Sections damaged by the Contractor during these operations which the Engineer indicates are not usable shall be replaced at the expense of the Contractor.

# C. Warning Lights and/or Reflectors

No separate payment will be made for warning lights and/or reflectors, but these items will be considered incidental to Temporary Concrete Barrier.

# D. Ownership of Removed Materials

Temporary concrete barrier units for maintenance of traffic and all associated hardware and incidentals after satisfactorily removed from the project site shall become the property of the Contractor.