

Payment will be made under:

| <u>Pay Item</u> | <u>Pay Unit</u>                           |      |
|-----------------|---|------|
| 523.52          | Bearing Installation                      | Each |
| 523.5301        | Steel Bearings, Fixed, Sliding Plate      | Each |
| 523.5302        | Steel Bearings, Expansion, Sliding Plate  | Each |
| 523.5303        | Steel Bearings, Fixed, Rocker             | Each |
| 523.5304        | Steel Bearings, Expansion, Rocker         | Each |
| 523.5401        | Laminated Elastomeric Bearings, Fixed     | Each |
| 523.5402        | Laminated Elastomeric Bearings, Expansion | Each |
| 523.5403        | Plain Elastomeric Bearings                | Each |
| 523.5551        | Pot or Disc Bearings, Fixed               | Each |
| 523.5552        | Pot or Disc Bearings, Expansion           | Each |
| 523.5601        | Spherical Bearings                        | Each |

## SECTION 524 - TEMPORARY STRUCTURAL SUPPORTS

524.01 Description This work shall consist of the designing, fabricating, erecting, maintaining, and dismantling of temporary structural support(s) as called for on the contract plans, all in conformity with these specifications. Temporary structural supports proposed by the Contractor to facilitate the work shall also conform to these specifications.

524.02 Materials Materials used may be either sawn timber or steel, or a combination of both, at the Contractor's option, and, whether new or used, shall be sound and of adequate cross section for the intended loads. Blocking needed below the temporary supports to accommodate differences in elevation, and/or pads required to distribute loads to the soil may additionally incorporate plain and reinforced concrete.

524.03 Design Temporary structural support(s) shall be designed to support all vertical loading including live load and impact, differential settlement forces, horizontal and longitudinal forces, and shall account for any temporary unbalanced loading due to jacking forces and other loading during load transfer. Sufficient redundancy shall be designed into the support structure so that failure of one member will not cause the collapse of the entire system and the supported structure.

Temporary support(s) shall be designed by a registered Professional Engineer and all plans, computations, and working drawings shall be signed by that Engineer, and shall be submitted to the Resident for approval.

Temporary supports, which are adjacent to traveled ways or which support structures carrying traffic, shall additionally be designed to resist any vibration or impact forces due to traffic and shall incorporate sufficient protection against impact by errant vehicles.

524.04 Erection and Removal The erection of temporary support(s) shall be in strict conformance with the approved design and details and shall use only the materials approved for use. No loads shall be placed on the temporary support(s) without the prior approval of the Resident.

No loads shall be placed on temporary supports which are adjacent to traveled ways or which support structures carrying traffic unless the Engineer responsible for the design has certified to the Resident that the system was erected in conformance with the approved plans and design details.

The approval by the Resident of all or part of temporary support(s) shall not be construed as in any way relieving the Contractor of their responsibility and the work shall be entirely at the Contractor's risk.

Upon completing the work requiring the use of the temporary structural supports, they shall be removed and the area under and around the temporary structural supports shall be restored to its original condition.

524.28 Method of Measurement Temporary structural supports will be measured as the number of individual units called for on the plans, satisfactorily designed, erected, and dismantled. Temporary supports used by the Contractor for their convenience will not be measured for payment. The removal and reinstallation of existing highway appurtenances (e.g. guardrails, sign supports, etc.) to facilitate the erection of temporary supports will not be measured for payment, but will be considered incidental to the work under this specification.

524.29 Basis of Payment Temporary structural supports will be paid for at the contract unit price each which price shall be full compensation for all materials, equipment, labor and incidentals necessary for the design, erection, maintenance, and dismantling of such supports in accordance with these specifications.

Pay Item

Pay Unit

524.30 Temporary Structural Support

Each

## SECTION 525 - GRANITE MASONRY

525.01 Description This work shall consist of furnishing and placing granite pier facing in accordance with these specifications and as shown on the plans.

525.02 Materials The granite shall be obtained from an approved quarry and be free from materials which, by weathering, would cause discoloration or deterioration. The granite for the entire Project shall be uniform in color and free from seams, cracks and other structural defects.

Caulking of joints shall be accomplished with a two-component, epoxy-resin system designed for the intended use. A quartzite aggregate shall be added in accordance with the manufacturer's recommendations. The material shall be moisture insensitive, of low modulus of elasticity, and of a gel-like non-sag viscosity. Color shall be gray. The materials shall be subject to the approval of the Resident.

Anchors shall be of either ASTM A36/A36M steel, galvanized in accordance with AASHTO M111 (ASTM A123), or ASTM A276 Type 304 stainless steel, 19 mm [ $\frac{3}{4}$  in] diameter, as indicated on the plans. Other types of anchors may be used with prior approval of the Resident.

Joint mortar shall comply with Section 705.02 - Joint Mortar, except it shall contain an additive to insure water-tightness. The additive shall not contain a retarding agent or hydrated lime and shall be approved by the Resident.

525.03 General Granite masonry shall have all stones dressed and cut to exact dimensions and laid up in joint mortar, with joints 12.5 mm +/- 3 mm [ $\frac{1}{2}$  in +/- • in] in thickness.

A complete setting plan shall be submitted for approval before ordering any stone.

The arrangement and the length of the stones shall be as approved by the Resident.