



STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

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**NOTICE TO CONTRACTORS  
AND  
SPECIAL PROVISIONS  
FOR CONSTRUCTION ON STATE HIGHWAY IN  
DEL NORTE COUNTY NEAR GASQUET  
FROM 0.3 KM SOUTH OF HARDCRABBLE CREEK BRIDGE  
TO 0.2 KM NORTH OF HARDCRABBLE CREEK BRIDGE**

**DISTRICT 01, ROUTE 199**

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**For Use in Connection with Standard Specifications Dated JULY 1999, Standard Plans Dated JULY 2004 and Labor  
Surcharge and Equipment Rental Rates.**

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**CONTRACT NO. 01-293144**

**01-DN-199-17.4/18.0**

**Federal Aid Project**

**ACBRNH-P199(031)E**

**Bids Open: April 18, 2007  
Dated: March 19, 2007**

**OSD**

A "CALTRANS BIDDER - DBE INFORMATION" form will be included in the contract documents to be executed by the successful bidder. The purpose of the form is to collect data required under 49 CFR 26. Even if no DBE participation will be reported, the successful bidder must execute and return the form.

The bidder's "CALTRANS BIDDER - DBE INFORMATION" form should include the names, addresses and phone numbers of DBE firms that will participate, with a complete description of work or supplies to be provided by each, and the dollar value of each DBE transaction. When 100 percent of a contract item of work is not to be performed or furnished by a DBE, a description of the exact portion of that work to be performed or furnished by that DBE should be included in the DBE information, including the planned location of that work. A bidder certified as a DBE should describe the work it has committed to performing with its own forces as well as any other work that it has committed to be performed by DBE subcontractors, suppliers and trucking companies.

The bidder is encouraged to provide written confirmation from each DBE that the DBE is participating in the contract. A copy of a DBE's quote will serve as written confirmation that the DBE is participating in the contract. If a DBE is participating as a joint venture partner, the bidder is encouraged to submit a copy of the joint venture agreement.

The "CALTRANS BIDDER - DBE INFORMATION" form should be returned to the Department by the successful bidder with the executed contract, contract bonds and the documents identified in Section 3-1.025, "Insurance Policies," of the Standard Specifications.

A "Payee Data Record" form will be included in the contract documents to be executed by the successful bidder. The purpose of the form is to facilitate the collection of taxpayer identification data. The form shall be completed and returned to the Department by the successful bidder with the executed contract, contract bonds and the documents identified in Section 3-1.025, "Insurance Policies," of the Standard Specifications. For the purposes of the form, payee shall be deemed to mean the successful bidder. The form is not to be completed for subcontractors or suppliers. Failure to complete and return the "Payee Data Record" form to the Department as provided herein will result in the retention of 31 percent of payments due the Contractor and penalties of up to \$20,000. This retention of payments for failure to complete the "Payee Data Record" form is in addition to any other retention of payments due the Contractor.

#### **SECTION 4. BEGINNING OF WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES**

The first working day is the fifteenth day after contract approval.

The work shall be diligently prosecuted to completion before the expiration of **230 WORKING DAYS**.

The Contractor shall pay to the State of California the sum of \$2500 per day, for each day's delay in finishing the work in excess of the number of working days specified above.

The time limit specified for the completion of the work contemplated herein is considered insufficient to permit completion of the work by the Contractor working a normal number of hours per day or week on a single shift basis. Should the Contractor fail to maintain the progress of the work in conformance with "Progress Schedule (Critical Path Method)" of these special provisions, additional shifts will be required to the extent necessary to ensure that the progress conforms to the above mentioned schedule and that the work will be completed within the time limit specified.

Full compensation for any additional costs occasioned by compliance with the provisions in this section shall be considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed therefor.

#### **SECTION 5. GENERAL**

##### **SECTION 5-1. MISCELLANEOUS**

###### **5-1.01 PLANS AND WORKING DRAWINGS**

When the specifications require working drawings to be submitted to the Division of Structure Design, the drawings shall be submitted to: Division of Structure Design, Documents Unit, Mail Station 9, 1801 30th Street, Sacramento, CA 95816, Telephone 916 227-8252.

###### **5-1.013 LINES AND GRADES**

Attention is directed to Section 5-1.07, "Lines and Grades," of the Standard Specifications.

Stakes or marks will be set by the Engineer in conformance with the requirements in Chapter 12, "Construction Surveys," of the Department's Surveys Manual.

###### **5-1.017 CONTRACT BONDS**

Attention is directed to Section 3-1.02, "Contract Bonds," of the Standard Specifications and these special provisions.

The payment bond shall be in a sum not less than one hundred percent of the total amount payable by the terms of the contract.

- A. What is causing each defect?
- B. Why the repair will not degrade the material properties?
- C. What steps are being taken to prevent similar defects from happening again?

The Contractor shall allow the Engineer one week to review these procedures. No remedial work shall begin until the repair procedures are approved in writing by the Engineer. In the event the Engineer fails to complete the review within the time allowed, and if, in the opinion of the Engineer, completion of the work is delayed or interfered with by reason of the Engineer's delay in completing the review, the Contractor will be compensated for any resulting loss, and an extension of time will be granted, in the same manner as provided for in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

The QCM shall sign and furnish to the Engineer, a Certificate of Compliance in conformance with the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications for each item of work for which welding was performed. The certificate shall state that all of the materials and workmanship incorporated in the work, and all required tests and inspections of this work, have been performed in conformance with the details shown on the plans, the Standard Specifications, and these special provisions.

**PAYMENT**

Full compensation for conforming to the requirements of "Welding" shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefor.

**SECTION 9. DESCRIPTION OF BRIDGE WORK**

The bridge work to be done consist, in general, of replacing the existing structure with a single span cast-in-place prestressed concrete box girder, as shown on the plans, at the following bridge:

HARDSCRABBLE CREEK BRIDGE (REPLACE)  
(Bridge No. 01-0040)

**SECTION 10. CONSTRUCTION DETAILS**

**SECTION 10-1. GENERAL**

**10-1.01 CONSTRUCTION PROJECT INFORMATION SIGNS**

Before any major physical construction work readily visible to highway users is started on this contract, the Contractor shall furnish and erect 2 Type 1 Construction Project Information signs at the locations designated by the Engineer.

The signs and overlays shall be of a type and material consistent with the estimated time of completion of the project and shall conform to the details shown on the plans.

The sign letters, border and the Department's construction logos shall conform to the colors (non-reflective) and details shown on the plans, and shall be on a white background (non-reflective). The colors blue and orange shall conform to PR Color Number 3 and Number 6, respectively, as specified in the Federal Highway Administration's Color Tolerance Chart.

The sign message to be used for fund types shall consist of the following, in the order shown:

FEDERAL HIGHWAY TRUST FUNDS
STATE HIGHWAY FUNDS

The sign message to be used for type of work shall consist of the following:

**BRIDGE CONSTRUCTION**

The sign message to be used for the Year of Completion of Project Construction will be furnished by the Engineer. The Contractor shall furnish and install the "Year" sign overlay within 10 working days of notification of the year date to be used.

The letter sizes to be used shall be as shown on the plans. The information shown on the signs shall be limited to that shown on the plans.

The signs shall be kept clean and in good repair by the Contractor.

Upon completion of the work, the signs shall be removed and disposed of outside the highway right of way in conformance with the provisions in Section 7-1.13 of the Standard Specifications.

Full compensation for furnishing, erecting, maintaining, and removing and disposing of the construction project information signs shall be considered as included in the contract lump sum price paid for construction area signs and no additional compensation will be allowed therefor.

#### **10-1.02 ORDER OF WORK**

Order of work shall conform to the provisions in Section 5-1.05, "Order of Work," of the Standard Specifications and these special provisions.

A first order of work shall be the submittal of working drawings for the moving of the Hardscrabble Creek Bridge, Bridge No. 01-0008.

Prior to beginning work on concrete with architectural surfaces, the Contractor shall construct a test section conforming to "Concrete Barrier (Type 80)" of these special provisions.

The Contractor shall notify the Engineer not less than 15 days before the anticipated start of work which reduces the width of the traveled way to less than 4.9 meters.

Signs indicating the hours and days of the impending full road closure shall be in place a minimum of 7 days prior to the actual closure. The signs shall indicate the planned period for the road closure and shall be updated to convey current and accurate information to the public.

Work within the stream zone of Hardscrabble Creek shall be restricted to periods of low flow and shall be confined to the period between June 15 and October 15.

The Contractor shall notify the Engineer in writing two weeks prior to any closures on Route 199.

During jack and slide operations, a minimum of 6 additional portable changeable message signs shall be placed at locations directed by the Engineer.

All trees and brush shall only be cut down from September 1 to February 1 of any year to avoid impacts to birds nesting within the project area. The Contractor may submit a written request to the Engineer asking to cut selected areas of vegetation outside of this work window. The State Biologist will survey identified areas of vegetation and certify whether or not nesting birds are present. This survey must be conducted not more than 7 days prior to the vegetation removal. If birds are nesting, the nest site must be designated an Environmentally Sensitive Area and no vegetation removal shall occur within a radius 46 meters until nesting is complete. If nesting birds are present, no vegetation shall be cut outside the work window. No vegetation shall be cut outside the work window without permission in writing from the Engineer.

Temporary railing (Type K) shall be secured in place prior to commencing work for which the temporary railing and crash cushions are required.

Attention is directed to "Environmentally Sensitive Area" and "Temporary Fence (Type ESA)" of these special provisions. Prior to beginning work, the boundaries of the Environmentally Sensitive Areas (ESA) shall be clearly delineated in the field. The boundaries shall be delineated by the installation of temporary fence (Type ESA).

Attention is directed to "Water Pollution Control" of these special provisions regarding the submittal and approval of the "Storm Water Pollution Prevention Plan" prior to performing work having potential to cause water pollution.

Attention is directed to "Maintaining Traffic" and "Temporary Pavement Delineation" of these special provisions and to the stage construction sheets of the plans.

The work shall be performed in conformance with the stages of construction shown on the plans. Nonconflicting work in subsequent stages may proceed concurrently with work in preceding stages, provided satisfactory progress is maintained in the preceding stages of construction.

In each stage, after completion of the preceding stage, the first order of work shall be the removal of existing pavement delineation as directed by the Engineer. Pavement delineation removal shall be coordinated with new delineation so that lane lines are provided at all times on traveled ways open to public traffic.

At the end of each working day if a difference in excess of 0.046-meter exists between the elevation of the existing pavement and the elevation of excavations within 2.4 m of the traveled way, material shall be placed and compacted against the vertical cuts adjacent to the traveled way. that is not separated from public traffic by temporary railing (Type K).

During excavation operations, native material may be used for this purpose; however, once placing of the structural section commences, structural material shall be used. The material shall be placed to the level of the elevation of the top of existing pavement and tapered at a slope of 1:4 (vertical:horizontal) or flatter to the bottom of the excavation. Full compensation for placing the material on a 1:4 slope, regardless of the number of times the material is required, and subsequent removing or reshaping of the material to the lines and grades shown on the plans shall be considered as included in the contract price paid for the materials involved and no additional compensation will be allowed therefor. No payment will be made for material placed in excess of that required for the structural section.

At those locations exposed to public traffic where guard railings or barriers are to be constructed, reconstructed, or removed and replaced, the Contractor shall schedule operations so that at the end of each working day there shall be no post holes open nor shall there be any railing or barrier posts installed without the blocks and rail elements assembled and mounted thereon and terminal sections temporarily attached to exposed ends of guardrail elements.

6. Rocks to be placed directly over the fabric shall be spread in the direction of traffic, longitudinally and along the alignment of the temporary construction entrance.
7. During spreading of the rocks, vehicles or equipment shall not be driven directly on the fabric. A layer of rocks a minimum 150 mm thick shall be placed between the fabric and the spreading equipment to prevent damage to the fabric.

Fabric damaged during rock placement shall be repaired by placing a new piece of fabric over the damaged area. The piece of fabric shall be large enough to cover the damaged area and provide a minimum 450-mm overlap on all edges.

Details for a proposed alternative temporary construction entrance or alternative sump shall be submitted to the Engineer for approval at least 7 days before installation. The Contractor may eliminate the sump if approved in writing by the Engineer.

When no longer required as determined by the Engineer, temporary construction entrances shall be removed and disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.

Ground disturbance, including holes and depressions, caused by the installation and removal of the temporary construction entrance, including the sumps, shall be backfilled and repaired in conformance with the provisions in Section 15-1.02, "Preservation of Property," of the Standard Specifications.

While the temporary construction entrance is in use, pavement shall be cleaned and sediment removed at least once a day, and as often as necessary when directed by the Engineer. Soil and sediment or other extraneous material tracked onto existing pavement shall not be allowed to enter drainage facilities.

## **MAINTENANCE**

The Contractor shall maintain temporary construction entrances throughout the contract or until removed. The Contractor shall prevent displacement or migration of the rock surfacing. Significant depressions resulting from settlement or heavy equipment shall be repaired by the Contractor, as directed by the Engineer.

Temporary construction entrances shall be maintained to minimize tracking of soil and sediment onto existing public roads.

If buildup of soil and sediment deter the function of the temporary construction entrance, the Contractor shall immediately remove and dispose of the soil and sediment, and spread additional rocks to increase the capacity of the temporary construction entrance.

Temporary construction entrances shall be repaired or replaced on the same day the damage occurs. Damage to the temporary construction entrance resulting from the Contractor's vehicles, equipment, or operations shall be repaired at the Contractor's expense.

## **MEASUREMENT AND PAYMENT**

Quantities of temporary construction entrances will be determined from actual count in place.

The contract unit price paid for temporary construction entrance shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing temporary construction entrance, complete in place, including excavation and backfill, maintenance, and removal, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

### **10-1.12 TEMPORARY ABUTMENTS**

Temporary abutments shall conform with provisions in Section 15-4, "Bridge Removal," Section 19, "Earthwork," Section 51, "Concrete Structures," and Section 52, "Reinforcement," of the Standard Specifications and these special provisions.

Temporary abutments will be paid for on the basis of a contract lump sum price.

The contract lump sum price paid for temporary abutments shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in constructing and removing the temporary abutments, including elastomeric bearing pads and galvanized sheet metal, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

### **10-1.13 PROGRESS SCHEDULE (CRITICAL PATH METHOD)**

The Contractor shall submit to the Engineer practicable critical path method (CPM) progress schedules in conformance with these special provisions. Whenever the term "schedule" is used in this section it shall mean CPM progress schedule.

The provisions in Section 8-1.04, "Progress Schedule," of the Standard Specifications shall not apply.

If a test or production area fails to meet the acceptance criteria, as determined by the Engineer, the treatment will be rejected, and the treatment shall be removed and replaced until the area complies with the acceptance criteria.

### **Construction**

Equipment shall be fitted with suitable traps, filters, drip pans, or other devices as necessary to prevent oil or other deleterious material from being deposited on the deck.

Before deck treatment with methacrylate resin, the bridge deck surface shall be cleaned by abrasive blasting, and all loose material shall be blown from visible cracks using high-pressure air. Concrete curing seals shall be cleaned from the deck surface to be treated, and the deck shall be dry when blast cleaning is performed. If the deck surface becomes contaminated at any time before placing the resin, the deck surface shall be cleaned by abrasive blasting.

Where abrasive blasting is being performed within 3 m of a lane occupied by public traffic, the residue including dust shall be removed immediately after contact between the abrasive and the surface being treated. The removal shall be by a vacuum attachment operating concurrently with the abrasive blasting operation.

A compatible promoter/initiator system shall be capable of providing the resin gel time range shown on the placement plan. Gel time shall be adjusted to compensate for the changes in temperature throughout treatment application.

Resin shall be applied by machine and by using a two-part resin system with a promoted resin for one part and an initiated resin for the other part. This two-part resin system shall be combined at equal volumes to the spray bars through separate positive displacement pumps. Combining of the 2 components shall be by either static in-line mixers or by external intersecting spray fans. The pump pressure at the spray bars shall not be great enough to cause appreciable atomization of the resin. Compressed air shall not be used to produce the spray. A shroud shall be used to enclose the spray bar apparatus.

At the Contractor's option, manual application may be used when necessary to prevent over spray of resin onto adjacent traffic. For manual application, the quantity of resin mixed with promoter and initiator shall be limited to 20 L at a time.

The Contractor shall apply methacrylate resin only to the specified area. Barriers, railing, joints, and drainage facilities shall be adequately protected to prevent contamination by the treatment material. Contaminated items shall be repaired at the Contractor's expense.

The relative humidity shall be less than 90 percent at time of treatment. The prepared area shall be dry and the surface temperature shall be at least 10°C , and not more than 38°C when the resin is applied. The rate of application of promoted/initiated resin shall be 2.2 square meters per liter; the exact rate shall be determined by the Engineer.

The deck surfaces to be treated shall be completely covered with resin so the resin penetrates and fills all cracks. The resin shall be applied within 5 minutes after complete mixing. A significant increase in viscosity shall be cause for rejection. Excess material shall be redistributed by squeegees or brooms within 10 minutes after application. For textured deck surfaces, including grooved surfaces, excess material shall be removed from the texture indentations.

After the resin has been applied, at least 20 minutes shall elapse before applying sand. The sand shall be commercial quality dry blast sand. At least 95 percent of the sand shall pass the 2.36-mm sieve and at least 95 percent shall be retained on the 850-µm sieve. The sand shall be applied at a rate of approximately one kilogram per square meter or until refusal as determined by the Engineer.

Traffic will not be allowed on treated areas until the acceptance criteria has been meet as determined by the Engineer.

### **MEASUREMENT AND PAYMENT**

Measurement and payment for concrete in structures shall conform to the provisions in Section 51-1.22, "Measurement," and Section 51-1.23, "Payment," of the Standard Specifications and these special provisions.

Full compensation for deck crack treatment, including a program for public safety shall be considered as included in the contract price paid per cubic meter for structural concrete, bridge and no additional compensation will be allowed therefor.

#### **10-1.41 MOVE BRIDGE**

Move bridge shall consist of jacking and moving the superstructure of the new Hardscrabble Creek Bridge, Bridge No. 01-0040, as shown on the plans and in accordance with the requirements in these special provisions.

The Contractor shall design, furnish, construct, monitor, maintain, and remove the moving system, including any temporary supports for the superstructure and determine the methods and equipment for raising, moving, and lowering the superstructure in conformance with the requirements in these special provisions.

Construction sequence and jacking loads shall be as shown on the plans. Proposed changes to the construction sequence and jacking loads shall be subject to the Engineer's approval.

The moving system shall include jacking and moving assemblies and appurtenant items necessary to raise, support, move, and lower the structure.

Attention is directed to the sections "Order of Work" and "Maintaining Traffic" of these special provisions regarding the construction sequences.

Approval by the Engineer of the moving system working drawings or moving system inspection performed by the Engineer will in no way relieve the Contractor of full responsibility for the jacking or moving assemblies and the raising and lowering operation.

**WORKING DRAWINGS**

The Contractor shall submit to the Engineer working drawings and design calculations for the moving system, including any temporary supports. Such drawings and design calculations shall be signed by an engineer who is registered as a Civil Engineer in the State of California. The temporary support working drawings and design calculations shall conform to the requirements in Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications. The number of sets of drawings and design calculations and times for review for temporary supports shall be the same as specified for falsework working drawings in Section 51-1.06A, "Falsework Design and Drawings," of the Standard Specifications.

In addition to the requirements in Section 51-1.06A, "Falsework Design and Drawings," of the Standard Specifications, the following requirements shall apply:

- A. The time to be provided for the Engineer's review of the working drawings for specific structures, or portions thereof, shall be as follows:

Structure or Portion of Structure	Review Time - Weeks
Hardscrabble Creek Bridge (Bridge No. 01-0040)	5

Working drawings for the moving system shall contain all information required for the construction and quality control of the operations, including the following:

- A. Descriptions and values of all loads, including construction equipment loads.
- B. Descriptions of equipment to be used.
- C. Complete details and calculations for jacking and moving the superstructure.
- D. Complete details of the raising, moving and lowering operations showing the methods and sequences of each operation. The details shall demonstrate the stability of all or any portions of the structures during all stages of each operations.
- E. Descriptions of the displacement monitoring system. The displacement monitoring system shall include equipment to be used, location of control points, method and schedule of taking measurements.

A supplement to the working drawings shall include the following:

- A. Construction details, structural details, and assembly details from at least 3 previous successful projects that involved moving a superstructure. The moving operation shall be from 3 separate projects. The moving operation shall be similar to those proposed for this contract.

Systems involving modifications to the bridge that impair the structural integrity, intended serviceability or design capacity of the bridge shall not be used.

A redundant system of supports shall be provided during the entire jacking operation for backup should any of the jacks fail. The redundant system shall include stacks of steel plates added as necessary to maintain the redundant supports at each jack location within 6 mm of the jacking sill or corbels.

When footing type foundations are to be used, the Contractor shall determine the bearing value of the soil and shall show the values assumed in the design of the moving system on the working drawings. Anticipated foundation settlement shall be shown on the working drawings.

The jacking locations shall bear directly on center line of each girder stems. When raising and lowering the superstructure, the jacking loads shall be operated simultaneously to all the jacking locations throughout the width of the superstructure.

**DESIGN CRITERIA**

The jacking system shall have initial jacking loads and minimum jacking loads as shown on the plans.

### **Manufactured Assemblies**

Manufactured assemblies shall conform to the provisions in Section 51-1.06A(2), "Design Stresses, Loadings, and Deflections," of the Standard Specifications and these special provisions.

Each jack shall be equipped with either a pressure gage or a load cell for determining the jacking force. Pressure gages shall have an accurately reading dial at least 150 mm in diameter. Each jack shall be calibrated by a private laboratory approved by the Transportation Laboratory within 6 months prior to use and after each repair. Each jack and its gage shall be calibrated as a unit with the cylinder extension in the approximate position that it will be at final jacking force and shall be accompanied by a certified calibration chart. Load cells shall be calibrated and provided with an indicator by which the jacking force is determined.

### **CONSTRUCTION**

Attention is directed to section "Falsework" of these special provisions and to paragraphs 1 through 7 of Section 51-1.06B, "Falsework Construction," of the Standard Specifications. All reference to falsework in these paragraphs shall also apply to temporary supports.

Prior to proceeding with jacking and moving operations, an engineer for the Contractor who is registered as a Civil Engineer in the State of California shall inspect the jacking and moving assemblies, including jacking and displacement monitoring systems, for conformance with the working drawings. The Contractor's registered engineer shall certify in writing that the jacking and moving assemblies, including jacking and displacement monitoring systems, conform to the working drawings, and that the material and workmanship are satisfactory for the purpose intended. A copy of this certification shall be available at the site of the work at all times.

The Contractor's registered engineer shall be present at the bridge site at all times when jacking and moving operations or adjustments are in progress. The Contractor's registered engineer shall inspect the jacking and moving operation and report in writing on a daily basis the progress of the operation and the status of the remaining structure. A copy of the daily report shall be available at the site of the work at all times. Should an unplanned event occur, the Contractor's registered engineer shall submit immediately to the Engineer for approval, the procedure or proposed operation to correct or remedy the occurrence.

The Contractor shall perform an initial survey as part of the displacement monitoring system to record the location of the structure prior to the jacking operations. Two copies of the survey shall be signed by an engineer, who is registered as a Civil Engineer in the State of California, and submitted to the Engineer.

In the event that the Contractor is unable to move the superstructure to its final location, the void created by the moving operation shall be bridged with a temporary roadway structural section.

The Contractor shall provide, at the job site, a sufficient quantity, as determined by the Engineer, of a commercial quality cold-laid plant mixture, sand and a suitable cover for the open joint, for construction of a temporary roadway structural section. The temporary structural section shall be maintained, and later removed as a first order of work when the Contractor is able to complete the moving operation. The temporary structural section shall consist of a 75-mm depth of cold-laid plant mixture over sand and a temporary cover for the joint.

The temporary structural section shall remain in place and be maintained until it is no longer needed to fill the void, at which time it shall be removed from the new structure.

### **LOWERING OPERATIONS**

Jacking operations shall be carefully controlled and monitored to ensure that the jacking loads are applied simultaneously to prevent distortion and excessive stresses that would damage the structure. The superstructure shall be jacked as necessary to maintain the total vertical displacements at control points to less than 6 mm from the elevations recorded prior to jacking or as modified by the Engineer.

The superstructure shall be lowered to the position shown on the plans so that the load is distributed uniformly across each abutment. Galvanized shims shall be placed as approved by the Engineer, when required to provide uniform loading at bearing pads.

Should unanticipated displacements, cracking or other damage occur, the construction shall be discontinued until corrective measures satisfactory to the Engineer are performed. Damage to the structure as a result of the Contractor's operations shall be repaired by the Contractor in conformance with the provisions in Section 7-1.11, "Preservation of Property," of the Standard Specifications.

### **PAYMENT**

Move bridge will be paid for on the basis of a contract lump sum price.

The contract lump sum price paid for move bridge shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in designing, constructing, maintaining, and removing the moving system, including temporary supports and monitoring displacements, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.



Full compensation for furnishing, stockpiling and disposing of material for construction of temporary roadway structural sections; and for constructing, maintaining, removing and disposing of temporary roadway structural sections shall be considered as included in the contract lump sum paid for move bridge and no separate payment will be made therefor.

#### **10-1.42 SEALING JOINTS**

Joints in concrete bridge decks and joints between concrete structures and concrete approach slabs shall be sealed in conformance with the details shown on the plans, the provisions in Section 51, "Concrete Structures," of the Standard Specifications, and these special provisions.

Where polyurethane seals are shown on the plans, a silicone sealant conforming to the provisions in Section 51-1.12F, "Sealed Joints," of the Standard Specifications may be used.

When ordered by the Engineer, a joint seal larger than called for by the Movement Rating shown on the plans shall be furnished and installed. Payment to the Contractor for furnishing the larger seal and for saw cutting the increment of additional depth of groove required will be determined as provided in Section 4-1.03, "Changes," of the Standard Specifications.

#### **10-1.43 ARCHITECTURAL TEXTURE (STONE VENEER)**

Architectural texture stone veneer for surfaces of the wingwalls shall consist of providing and installing stone veneer, mortar, and trim to concrete surfaces as shown on the plans and in conformance with the provisions in these special provisions.

The Contractor shall submit to the Engineer product data for specified products including manufacturer's installation instructions 5 days prior to the installation of the stone veneer.

A Certificate of Compliance shall be furnished for simulated masonry products in accordance with the requirements specified in Section 4-1.04, "Certificates of Compliance," of the General Conditions.

Materials shall be delivered to the jobsite in the manufacturer's original, unopened, undamaged containers with identification labels intact.

Ambient air temperature shall be in conformance with manufacturer's requirements.

#### **REFEREE SAMPLE**

The stone veneer shall match the texture, color, and pattern of the referee sample available for inspection by bidders at Department of Transportation, Office of Transportation Architecture, 1801 30<sup>th</sup> Street, Sacramento, California 95816.

#### **MATERIALS**

Stone veneer shall be one of the following: Owens Corning Corp. "Cultured Stone;" "G.S. Harris Company Harristone," Coronado Stone Products "Coronado," or equal.

Random sizes, shapes, and textures of finished product shall duplicate natural stones. Stone diameter shall vary from 51 mm to 762 mm. Thickness may vary 25.4 mm to 90 mm depending on the texture.

Colors and textures shall be selected from manufacturer's standard products matching the referee sample.

Mortar shall be Portland Cement, ASTM C150, Type I or masonry cement (Type N), ASTM C91. Use masonry sand and iron oxide pigments.

Lime shall be ASTM Designation: C207.

Proprietary mortar mixes shall be mixed in conformance with manufacturer's instructions, including product data and product technical bulletins. Mortar shall be mixed in the quantities needed for immediate use in conformance with ASTM C 270, Type N. Anti-freeze compounds shall not be used to lower the freezing point of the mortar.

#### **CONSTRUCTION**

The Contractor shall comply with manufacturer's product data, including product technical bulletins, product catalog installation instructions, and product carton instructions for installation.

The Contractor shall protect installed product and finish surfaces from damage during construction.

#### **MEASUREMENT AND PAYMENT**

Architectural texture will be measured and paid for by the square meter.

The contract price paid per square meter for architectural texture of the types listed in the Engineer's Estimate shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in architectural texture, complete in place, including test panels, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.