

**REQUEST FOR BID**  
**FOR**  
**PREFABRICATED PEDESTRIAN BRIDGE**

**MIDDLE RIO GRANDE CONSERVANCY DISTRICT**  
**1931 SECOND STREET, S.W.**  
**POST OFFICE BOX 581**  
**ALBUQUERQUE, NEW MEXICO 87103**  
**(505) 247-0234**



**DEADLINE FOR RESPONSE**

**OCTOBER 5, 2022**  
**10:00 A.M.**

**COMMODITY CODE; 15508**

**NOTICE**

**THE NEW MEXICO PROCUREMENT CODE,  
SECTIONS 13-1-28 THROUGH 13-1-199 NMSA 1978  
IMPOSES CIVIL AND CRIMINAL PENALTIES FOR ITS VIOLATION.  
IN ADDITION, THE NEW MEXICO CRIMINAL STATUTES  
IMPOSE FELONY PENALTIES FOR ILLEGAL BRIBES,  
GRATUITIES AND KICK-BACKS**

## I. INTRODUCTION

The Middle Rio Grande Conservancy District (hereafter referred to as MRGCD) will be accepting Sealed Bids for Rock Hauling.

1. A. Release of Bid September 16th, 2022.
- B. Deadline for Submission; 10:00A.M., Wednesday, October 5th, 2022.
- C. Acknowledgement of Receipt forms deadline by C.O.B. Friday September 23rd, 2022.

One (1) original and (1) copy of the bid and supporting documentation and Bids must be in the format specified. Bids must be signed, and the authority of the individual signing must be stated on the bid.

The deadline for receipt of bids shall be October 5th, 2022, no later than 10:00 a.m. Bids will be time stamped upon receipt. Please mail or hand deliver Bids. **No Bids will be accepted by electronic transmission,**

All bids shall be submitted in a sealed envelope marked **Prefabricated Pedestrian Bridge.**

All bids shall be delivered to and received by:

Middle Rio Grande Conservancy District  
Mr. Richard DeLoia, CPO  
1931 Second Street, S.W.  
Albuquerque, New Mexico 87102

**Bid Modifications:** Only modifications received prior to the time specified for the closing will be accepted. No modifications will be accepted following the opening. Technical clarifications of the offer may be requested by the MRGCD following the opening.

**Withdrawal of Bids:** Bids may be withdrawn by written notice of in person by a bidder or an authorized representative any time prior to the award.

**Late Submission:** Late submissions of bids will not be considered unless it is determined by the MRGCD that the late receipt was due solely to mishandling by the MRGCD or if the bid is the only one received. All other late submissions will be returned unopened.

**Debarment/Suspension:** In performing services and/or furnishing the goods specified in this invitation, the vendor/contractor certifies that it is not suspended, debarred or declared ineligible from entering into contract with the Executive Branch of the Federal Government, and State agencies or local public boding, nor is in receipt of a notice of proposed debarment or suspension from the Executive Branch of the Federal Government and "Contracting Officer: shall mean "MRGCD" respectively.

**Resident Business or Resident Veteran Business Certificate (As required by Section 13-1-22 NMSA if applying for a preference under Section 13-1-21 NMSA)**  
**Resident Veterans Business Preference Certification**  
**(If applying for Resident Veteran Business preference; See Appendix 3.)**

**II. RFB MANDATORY REQUIREMENTS:**

1. Bidder must provide documentation as an established business for a minimum of 5 years.
2. Bidder will accept that MRGCD reserves the right to order the quantity that is bid, in increments that are acceptable to our needs at that time. MRGCD may go over or under the amount bid with no price increase or penalty.
3. Documentation, paperwork, brochures of product(s) being offered must be presented with bid.
4. All paperwork, Invoices are due on delivery and before payment will be made.

**III. EVALUATION OF BIDS:**

Bids will be evaluated by the MRGCD officer using the criteria as listed in this Request for Bid. During the evaluation process, the MRGCD may seek additional clarification from offerors.

All bids received by the deadline will be evaluated by the MRGCD. Evaluation made by MRGCD staff will not be made public until after the selection process is complete.

**Evaluation criteria as follows:**

- |    |  |     |
|----|--|-----|
| 1. | Bid Amount   | 40% |
| 2. | Compliance to Bid Specifications and ALL”<br>Mandatory Requirements in RFB | 40% |
| 3. | Mandatory Forms  | 20% |

**IV. SELECTION OF OFFEROR**

The Contractor selected to provide the materials and the MRGCD will notify those not selected in writing.

## **V. SPECIFICATIONS FOR PREFABRICATED PEDESTRIAN BRIDGE**

### **521.1 GENERAL**

#### **521.1.1 Scope**

These specifications are for a fully engineered clear span bridge of steel construction and shall be regarded as minimum standards for design and construction. identified below:

#### **521.1.2 Qualified Suppliers**

Each bidder is to have at least 5 years of experience fabricating these type structures and be certified by the American Institute of Steel Construction (AISC).

BRIDGE SUPPLIER shall have a technical representative present during bridge installation for on-site consultation.

### **521.2 GENERAL FEATURES OF DESIGN**

**521.2.1 General** All bridge and overlook dimensions shall conform to the construction plans.

**521.2.2 Span** There is one (1) bridge span that shall measure approximately 60'-0" (straight line dimension – verify with construction plans) from each end of the bridge structure. The bridge span that shall measure 59'-8" (straight line dimension – verify with construction plans) from the centerlines of bearing at each abutment.

**521.2.3 Width** Bridge width shall not exceed 6'-0" (verify with construction plans) and shall be as measured from the outside face of structural elements. The clear width, measured rail to rail, shall be 4'-0".

**521.2.4 Chord Height** Chord height for the bridge shall be a minimum of 4'-6" above the surface of the deck.

**521.2.5 Overlook** Not used.

#### **521.2.3 Bridge System Type**

Bridge shall be designed as a modified bowstring truss (as shown on construction plans), that has one (1) diagonal per panel.

**521.2.3.1** Bridge shall be designed utilizing an underhung or H-Section configuration where the floor beams are placed up inside the trusses and attached to the truss verticals. See construction plans for floor beam location guidelines, paying particular attention to the overlook areas.

#### **521.2.4 Member Components**

All members of the vertical trusses (top and bottom chords, verticals, and diagonals) shall be fabricated from square and/or rectangular structural steel tubing. Other structural members and bracing shall be fabricated from structural steel shapes or square and rectangular

structural steel tubing.

Unless the floor and fastenings are specifically designed to provide adequate lateral support to the top flange of open shape stringers (w-shapes or channels), a minimum of one stiffener shall be provided in each stringer at every floor beam location.

## **521.2.5 Attachments**

**521.2.5.1 Safety Rails** Vertical safety rails shall be placed on the structure up to a minimum height of 3'-6" above the deck surface. Safety rails shall be placed so as to prevent a 4" sphere from passing through the truss. Safety rails shall be placed on the inside of the structure. Safety rails shall have their ends sealed and ground smooth so as to produce no sharp edges.

The safety rail system shall be designed for an infill loading of 200 pounds, applied horizontally at right angles, as a concentrated point at any point in the system.

**521.2.5.2 Toe Plate** The bridge shall be supplied with a steel toe plate mounted to the inside face of both trusses. The toe plate shall be a minimum of 4 inches high. Toe plating will be welded to the truss members at a height adequate to provide a 1" gap between the bottom of the plate and the top of the deck or the top of the bottom chord, whichever is higher. The span of unstiffened flat toe plating (from center to center of supports) shall not exceed 5'-8".

**521.2.5.3 Handrail** Not used.

**521.2.6 Camber** The bridge shall have a vertical camber dimension at midspan equal to 100% of the full dead load not to exceed 6 inches.

**521.2.7 Elevation Difference** The bridge and abutments shall be constructed per the construction plan details and seat elevations.

## **521.3 ENGINEERING**

Structural design of the bridge structure shall be performed by or under the direct supervision of a licensed professional engineer and done in accordance with recognized engineering practices and principles. The engineer shall be licensed to practice in the **STATE OF NEW MEXICO**. Design shall be in accordance with the latest edition of *AASHTO Guide Specifications for Design of Pedestrian Bridges*.

**521.3.1 Design Loads** In considering design and fabrication issues, this structure shall be Supplemental Technical Specs STS-521-3 assumed to be statically loaded. No dynamic analysis shall be required, nor shall fabrication issues typically considered for dynamically loaded structures be considered for this bridge.

**521.3.1.1 Dead Load** The bridge structure design shall consider its own dead load (superstructure and decking), as well as the additional loads listed below:

**521.3.1.2 Uniform Live Load**

**521.3.1.2.1 Pedestrian Live Load**

**Main Members:** Main supporting members, including girders, trusses and arches shall be designed for a pedestrian live load of 90 pounds per square foot of bridge walkway area. The

pedestrian live load shall be applied to those areas of the walkway so as to produce maximum stress in the member being designed.

**Secondary Members:** Bridge decks and supporting floor systems, including secondary stringers, floor beams and their connections to main supporting members shall be designed for a live load of 90 pounds per square foot, with no reduction allowed.

### **521.3.1.3 Concentrated Loads**

The bridge superstructure, floor system and decking shall be designed for each of the following point load conditions:

**521.3.1.3.1** A concentrated Equestrian load of 1,000 pound placed on any area 4 in x 4 in square.

**521.3.1.3.2** Not used.

### **521.3.1.4 Wind Load**

**521.3.1.4.1 Horizontal Forces** The bridge shall be designed for a wind load of 25 pounds per square foot on the full vertical projected area of the bridge as if enclosed. The wind load shall be applied horizontally at right angles to the longitudinal axis of the structure. The wind loading shall be considered both in the design of the lateral load bracing system and in the design of the truss vertical members, floor beams and their connections.

**521.3.1.4.2 Overturning Forces** The effect of forces tending to overturn structures shall be calculated assuming that the wind direction is at right angles to the longitudinal axis of the structure. In addition, an upward force shall be applied at the windward quarter point of the transverse superstructure width. This force shall be 20 pounds per square foot of deck.

**521.3.1.5 Top Chord/Railing Loads** The top chord, truss verticals, and floor beams shall be designed for lateral wind loads (per section 521.3.1.4.1) and for any loads required to provide top chord stability as outlined in Section 521.3.3.3; however, in no case shall the load be less than 50 pounds per lineal foot or a 200 pound point load, whichever produces greater stresses, applied in any direction at any point along the top chord or at the top of the safety system (42" or 54" above deck level), if higher than the top chord.

**521.3.1.6 Load Combinations** The loads listed herein shall be considered to act in the following combinations, whichever produce the most unfavorable effects on the bridge superstructure or structural member concerned.

[DL=Dead Load; PL = Pedestrian Live Load; WL = Wind Load; LL = Vehicle Load]

DL + PL

DL + LL

DL+WL

DL+PL+0.3WL

DL+LL+0.3WL

NOTE: For service load design, the percentage of the basic unit stress used for each combination shall be in accordance with table 3.22.1A of the AASHTO "Standard Specifications for Highway Bridges."

## 521.3.2 Design Limitations

### 521.3.2.1 Deflection

**521.3.2.1.1 Vertical Deflection** The vertical deflection of the main trusses due to service pedestrian live load shall not exceed  $1/500$  of the span. The vertical deflection of the cantilever overlook areas of the structure due to service pedestrian live load shall not exceed  $1/300$  of the cantilever arm length.

The deflection of the floor system members (floor beams and stringers) due to service pedestrian live load shall not exceed  $1/360$  of their respective spans. The service pedestrian live load shall be 90 PSF non-reducible.

**521.3.2.1.2 Horizontal Deflection** The horizontal deflection of the structure due to lateral wind loads shall not exceed  $1/500$  of the span under a 35 psf wind load.

**521.3.2.2 Minimum Thickness of Metal** The minimum thickness of all structural steel members shall be  $3/16$ " nominal and be in accordance with the AISC Manual of Steel Constructions' "Standard Mill Practice Guidelines". For ASTM A500 and ASTM A847 tubing, the section properties used for design shall be per the Steel Tube Institute of North America's Hollow Structural Sections "Dimensions and Section Properties".

**521.3.3 Governing Design Codes / References** Structural members shall be designed in accordance with recognized engineering practices and principles as follows:

**521.3.3.1 Structural Steel Allowable Stresses** American Association of State Highway and Transportation Officials (AASHTO). Allowable Design Stresses shall be in accordance with the "Standard Specifications for Highway Bridges" latest edition (AASHTO).

**521.3.3.2 Welded Tubular Connections** American National Standards Institute / American Welding Society (ANSI/AWS) and the Canadian Institute of Steel Construction (CISC). All welded tubular connections shall be checked, when within applicable limits, for the limiting failure modes outlined in the ANSI/AWS D1.1 Structural Welding Code or in accordance with the "Design Guide for Hollow Structural Section Connections" as published by the Canadian Institute of Steel Construction (CISC).

When outside the "validity range" defined in these design guidelines, the following limit states or failure modes must be checked:

- \* Chord face plastification
- \* Punching shear (through main member face)
- \* Material failure
  - Tension failure of the web member
  - Local buckling of a compression web member
- \* Weld failure
  - Allowable stress based on "effective lengths"
  - "Ultimate" capacity
- \* Local buckling of a main member face
- \* Main member failure:

- Web or sidewall yielding
- Web or sidewall crippling
- Web or sidewall buckling
- Overall shear failure

All tubular joints shall be plain unstiffened joints (made without the use of reinforcing plates) except as follows:

- \* Floor beams which frame directly into the truss verticals (H-Section bridges) may be designed with or without end stiffening plates as required by design.
- \* Where chords, end floor beams and in high profiles the top end struts weld to the end verticals, the end verticals (or connections) may require stiffening to transfer the forces from these members into the end vertical.
- \* Truss vertical to chord connections.

NOTE: The effects of fabrication tolerances shall be accounted for in the design of the structure. Special attention shall be given to the actual fit-up gap at welded truss joints.

### **521.3.3.3 Top Chord Stability** Structural Stability Research Council (SSRC), formerly Column Research Council.

The top chord shall be considered as a column with elastic lateral supports at the panel points. The critical buckling force of the column, so determined, shall exceed the maximum force from dead load and live load (uniform or vehicular) in any panel of the top chord by not less than 50 percent for parallel chord truss bridges or 100 percent for bowstring bridges. The design approach to prevent top chord buckling shall be as outlined by E.C. Holt's research work in conjunction with the Column Research Council on the stability of the top chord of a half-through truss. See Appendix A for the calculation of the spring constant C and the determination of an appropriate K factor for out-of-plane buckling.

In addition, for the dead load plus vehicle load combination, the spring constant "C" furnished by the transverse "U-Frames" shall not be less than "C" required as defined by:

$$C_{\text{required}} = 1.46 \frac{P_c}{L}$$

Where  $P_c$  is the maximum top chord compression due to dead load plus the vehicle load  
Supplemental Technical Specs STS-521-6

times the appropriate safety factor (1.5 for parallel chord truss bridges or 2.0 for bowstring bridges) and L is the length in inches of one truss panel or bay.

For uniformly loaded bridges, the vertical truss members, the floor beams, and their connections (transverse frames) shall be proportioned to resist a lateral force of not less than 1/100k times the top chord compressive load, but not less than .004 times that top chord load, applied at the top chord panel points of each truss. The top chord load is determined by using the larger top chord axial force in the members on either side of the "U-frame" being analyzed. For end frames, the same concept applies except the transverse force is 1% of the axial load in the end post member.

For bridges with vehicle loads, the lateral force applied at the top chord elevation for design of the transverse frames shall not be less than 1% of the top chord compression due to dead load plus any vehicle loading.

The bending forces in the transverse frames, as determined above, act in conjunction with all forces produced by the actual bridge loads as determined by an appropriate analysis which assumes that the floor beams are "fixed" to the trusses at each end.



NOTE: The effects of three-dimensional loading (including “U-frame” requirements) shall be considered in the design of the structure. The “U-frame” forces shall be added to the forces derived from a three-dimensional analysis of the bridge.

## **521.4 MATERIALS**

### **521.4.1 Steel**

**521.4.1.1 Structural Steel** All structural steel shall be new (unused) material. The Contractor shall provide the Engineer and the Staff Bridge Branch Fabrication Inspection Unit with copies of all certified mill test reports for all structural steel and bolts. Floor beams, stringers, and members of each Half-through truss (upper and lower chords, diagonals, end posts and vertical posts) utilized in the bridges shall meet a longitudinal Charpy V notch (CVN) value of 25 ft. lbs. at 40 degrees Fahrenheit. Testing shall be in accordance with AASHTO T 243 (ASTM A 673). The H frequency of heat testing shall be used. The Contractor shall provide the Engineer with certified copies of all CVN test reports.

All square and rectangular structural steel tubing shall conform to the requirements of ASTM A 847, Cold-Formed Welded and Seamless High Strength, Low Alloy Structural Tubing with Improved Atmospheric Corrosion Resistance.

All structural steel shapes and plates shall conform to the requirements of ASTM A 588, High-Strength Low-Alloy Structural Steel with Atmospheric Corrosion Resistance.

All anchor bolts and nuts shall conform to the requirements of ASTM F 1554, Grade 105, Carbon Steel Bolts and Studs, and shall be galvanized in accordance with the requirements of ASTM A 153. Each anchor bolt shall be provided with two nuts for jamming.

All structural steel field connections shall be bolted with high strength bolts. High strength bolts, including suitable nuts and plain hardened washers, shall conform to the requirements of ASTM A 325. Bolts shall be Type 3.

### **521.4.2 Decking**

**521.4.2.1 Hardwood Decking** Wood decking shall be naturally durable hardwood lpe (Tabebuia Spp. (Lapacho Group)). All planks shall be partially air dried to a moisture content of 15% to 20% and shall be supplied S4S (surfaced four sides), E4E (eased four edges), with the edges eased to a radius of 1/8". Measured at 30% moisture content, the width and thickness shall not vary from specified dimensions by more than  $\pm 0.04$  inches. All planks shall be supplied with the end sealed with “Anchorseal” Mobil CER-M or an equal aqueous wax end grain sealer.

All planks shall be graded as FEQ-CAH (First Export Quality -Clear All Heart) grading rules, defined as follows:

- Lumber shall be graded both faces and both edges.
- Lumber shall be straight grained, maximum slope of grain to be 1:10.
- Lumber shall be parallel cut without heart centers or sap wood.
- Lumber shall be in sound condition, free from worm holes or knots.
- Allowable Imperfections are:
  - All faces: Natural drying checks, Discoloration caused by weathering or chemical reaction, Bow or Spring which can be removed using normal installation methods and tools.
- Imperfections Not Allowed:
  - Longitudinal heart cracks, Internal cracks, Firm or Soft sap wood, Splits, End splits, Ring shades, Fungi affects (blue to gray, brown to red, white to yellow, or incipient decay), Deformation (twisting or cupping) which cannot be removed using normal installation methods and tools.

All planks shall meet or exceed the following mechanical properties (based on the 2" standard) as defined by the U.S. Forest Products Laboratory publications and testing data:

MC%	Modulus of Rupture	Modulus of Elasticity	Max. Crush Strength
12%	22,360 psi	3,140,000 psi	13,010 psi

- Janka side hardness is 3680 lbs. at 12% moisture content
- Average air-dry density is 66 to 75 pcf.
- Basic specific gravity is 0.85 - 0.97.

All planks shall be naturally fire resistant without the use of any fire-resistant preservatives to meet NFPA Class A and IBC Class A.

Planks shall be supplied that meet or exceed the Static Coefficient of Friction for both Neolite and leather shoes in accordance with ASTM Test Method C1028-89.

SHOE MATERIAL – NEOLITE – DRY 0.73 – WET 0.69

LEATHER – DRY 0.55 – WET 0.79

For transverse wood decking, wheel loads shall be assumed to act on one plank only. The wheel loads shown in Section 521.3.1.3.2 shall be distributed on the plank along a length equal to the tire print width (W). The plank shall be designed for shear and bending in accordance with the support conditions and spacing. For design, the following unfactored Supplemental Technical Specs STS-521-8 allowable values shall be used:

1. Allowable Bending = 3700 psi
2. Allowable Shear = 320 psi
3. Modulus of Elasticity = 3,000,000 psi

#### **521.4.2.2 Wood Decking Attachment**

- At time of installation, planks are to be placed tight together with no gaps.
  - Every plank must be attached with at least one fastener at each end.
  - All fasteners to be zinc plated. Self-tapping screws or hex-head bolts, with a steel plank hold-down, are to be used at the ends of planks. Self-tapping screws or carriage bolts are to be used as interior connection fasteners when required. Power actuated fasteners will not be allowed.
  - Planks are to be drilled prior to installation of bolts and/or screws.
  - In addition to at least one fastener at each end of every plank (typical for all installations), planks for bridges with widths of 72" to 143" shall be attached with a minimum of two fasteners at a location approximately near the center of the bridge width. Bridges wider than 143" are to have two fasteners located at a minimum of two interior stringer locations, approximately at the third points of the bridge width.
- NOTE: Attachments at the ends of the planks may be modified as required when obstructions, such as interior safety system elements, prevent installation of the specified hold-down system.

## **521.5 WELDING**

**521.5.1 Welding** Welding and weld procedure qualification tests shall conform to the provisions of ANSI/AWS D1.1 "Structural Welding Code," 1996 Edition. Filler metal shall be in accordance with the applicable AWS Filler Metal Specification (i.e., AWS A 5.28 for the GMAW Process). For exposed, bare, unpainted applications of corrosion resistant steels (i.e., ASTM A588 and A847), the filler metal shall be in accordance with AWS D1.1 "Structural Welding Code", 1996 Edition, Section 3.7.3.

**521.5.2 Welders** Welders shall be properly accredited operators, each of whom shall submit certification of satisfactorily passing AWS standard qualification tests for all positions with unlimited thickness of base metal, have a minimum of 6 months experience in welding tubular structures and have demonstrated the ability to make uniform sound welds of the type required.

## **521.6 SUBMITTALS**

**521.6.1 Submittal Drawings** Schematic drawings and diagrams shall be submitted to the owner for their review after receipt of order. Submittal drawings shall be unique drawings, prepared to illustrate the specific portion of the work to be done. All relative design information such as member sizes, bridge reactions, and general notes shall be clearly specified on the drawings. Drawings shall have cross referenced details and sheet numbers. All drawings shall be signed and sealed by a Professional Engineer who is licensed in accordance with Section 521.3.

**521.6.2 Structural Calculations** Structural calculations for the bridge superstructure shall be submitted by the bridge manufacturer and reviewed by the approving engineer. All calculations shall be signed and sealed by a Professional Engineer who is licensed in Supplemental Technical Specs STS-521-9 accordance with Section 521.3. The calculations shall include all design information necessary to determine the structural adequacy of the bridge. The calculations shall include the following:

- \* All AASHTO allowable stress checks for axial, bending and shear forces in the critical member of each truss member type (i.e., top chord, bottom chord, floor beam, vertical, etc.).
- \* Checks for the critical connection failure modes for each truss member type (i.e., vertical, diagonal, floor beam, etc.). Special attention shall be given to all welded tube on tube connections (see section 521.3.3.2 for design check requirements).
- \* All bolted splice connections.
- \* Main truss deflection checks.
- \* U-Frame stiffness checks (used to determine K factors for out-of-plane buckling of the top chord) for all half through or "pony" truss bridges.
- \* Deck design.

NOTE: The analysis and design of triangulated truss bridges shall account for moments induced in members due to joint fixity where applicable. Moments due to both truss deflection and joint eccentricity must be considered.

**521.6.3 Welder certifications in compliance with AWS standard qualification tests.**

**521.6.4 Welding procedures in compliance with Section 521.5.1.**

**521.6.5 Splicing and erection procedures in compliance with Section 521.9.**

**521.6.6 AISC Shop Certification in compliance with Section 521.7.2**

## **521.7 FABRICATION**

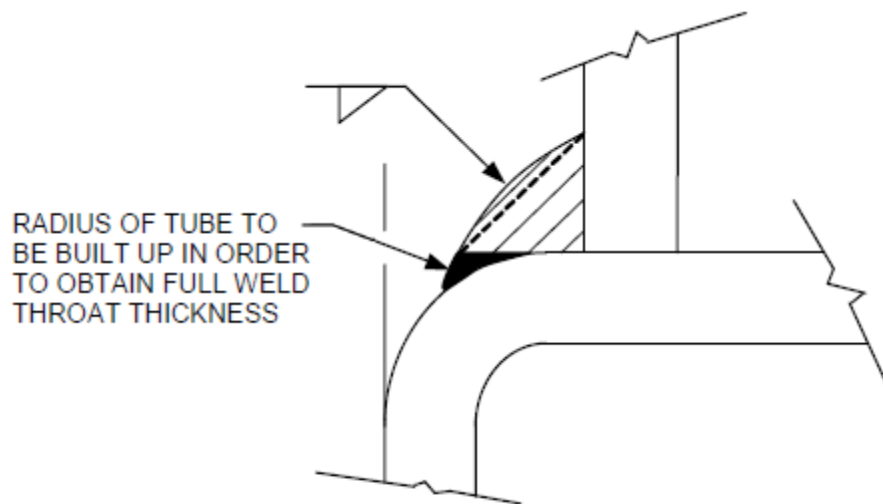
### **521.7.1 General Requirements**

**521.7.1.1 Water Entrapment** When the collection of water inside a structural tube is a possibility, either during construction or during service, the tube shall be provided with a drain hole at its lowest point to let water out.

The perimeter of all steel faying surfaces shall have a seal weld to prevent corrosion due to water collection.

Supplemental Technical Specs STS-521-10

**521.7.1.2 Welds** Special attention shall be given to developing sufficient weld throats on tubular members. Fillet weld details shall be in accordance with AWS D1.1, Section 3.9 (See AWS Figure 3.2). Unless determined otherwise by testing, the loss factor “Z” for heel welds shall be in accordance with AWS Table 2.8. Fillet welds which run onto the radius of a tube shall be built up to obtain the full throat thickness (See Figure 7.1). The maximum root openings of fillet welds shall not exceed  $3/16$ ” in conformance with AWS D1.1, Section 5.22. Weld size or effective throat dimensions shall be increased in accordance with this same section when applicable (i.e., fit-up gaps  $> 1/16$ ”).



**FIGURE 7.1 BUILD UP RADIUS WELD**

The fabricator shall have verified that the throat thickness of partial joint penetration groove welds (primarily matched edge welds or the flare-bevel-groove welds on underhung floor beams) shall be obtainable with their fit-up and weld procedures. Matched edge welds shall be “flushed” out when required to obtain the full throat or branch member wall thickness. For full penetration butt welds of tubular members, the backing material shall be fabricated prior to installation in the tube so as to be continuous around the full tube perimeter, including

corners. Backing may be of four types:

- \* A "box" welded up from four (4) plates.
- \* Two "channel" sections, bent to fit the inside radius of the tube, welded together with full penetration welds.
- \* A smaller tube section which slides inside the spliced tube.
- \* A solid plate cut to fit the inside radius of the tube.

Corners of the "box" backing, made from four plates, shall be welded and ground to match the inside corner radii of the chords. The solid plate option shall require a weep hole either in the chord wall above the "high side" of the plate or in the plate itself. In all types of backing, the minimum fit-up tolerances for backing must be maintained at the corners of the tubes as well as across the "flats."

**521.7.1.3 Sealing and Caulking** To prevent rust runs on painted structures, open ends of all tubes shall be capped, and seal welded. Wherever practical, member end connections and

RADIUS OF TUBE TO  
BE BUILT UP IN ORDER  
TO OBTAIN FULL WELD  
THROAT THICKNESS

#### **FIGURE 7.1**

#### **BUILD UP RADIUS WELD**

Supplemental Technical Specs STS-521-11

steel on steel contact surfaces, such as stringer to floor beam connections, shall be welded all around. Long seams between members or any seam which cannot be practically welded shall be caulked.

**521.7.2 Quality Certification** Bridge shall be fabricated by a fabricator who is currently certified by the American Institute of Steel Construction to have the personnel, organization, experience, capability, and commitment to produce fabricated structural steel for the category "Major Steel Bridges" as set forth in the AISC Certification Program with Fracture Critical Endorsement. Quality control shall be in accordance with procedures outlined for AISC certification. For painted structures, the fabricator must hold a "Sophisticated Paint Endorsement" as set forth in the AISC certification program. Furthermore, the bridge shall be fabricated in a facility owned and/or leased by the corporate owner of the manufacturer, and fully dedicated to bridge manufacturing.

#### **521.8 NOT USED**

#### **521.9 DELIVERY AND ERECTION**

Delivery is made to a location nearest the site which is easily accessible to normal over-the-road tractor/trailer equipment. All trucks delivering bridge materials will need to be unloaded at the time of arrival.

The manufacturer will provide detailed, written instruction in the proper lifting procedures and splicing procedures (if required). The contractor is responsible for submitting the placement method, staging locations, and sequence of erection.

The bridge manufacturer shall provide written inspection and maintenance procedures to be followed by the Owner.

#### **521.10 BEARINGS**

**521.10.1 Bearing Devices** Fabricator shall provide expansion and fixed bearings where indicated in plan. Expansion bearings shall utilize elastomeric bearing pads or "frictionless" plates to permit thermal expansion and contraction parallel to axis of bridge. One end of the bridge will be fixed by fully tightening the nuts on the anchor bolts at that end. The opposite end will have finger tight only nuts to allow movement under thermal expansion or contraction.

The bearing seat shall be as shown in the construction drawings. The step height (from bottom of bearing to top-of-deck) shall be as shown in the construction drawings. Bridges may have elastomeric or "frictionless" plate bearings designed and detailed by the bridge manufacturer. Design shall be in accordance with AASHTO LRFD Specifications, Article 14.7.6, Method A. The range in thermal movement used in bearing pad design shall not be less than 75% of the total anticipated movement due to temperature. See construction drawings for minimum bearing assembly depths.

#### **521.11 FOUNDATIONS**

Unless specified otherwise, the bridge manufacturer shall determine the number, diameter, minimum grade, and finish of all anchor bolts. The anchor bolts shall be designed to resist all horizontal and uplift forces to be transferred by the superstructure to the supporting

Supplemental Technical Specs STS-521-12

foundations. The contractor shall provide all materials for (including anchor bolts) and construction of the bridge supporting foundations. The contractor shall install the anchor bolts in accordance with the manufacturer's anchor bolt spacing dimensions.

Information as to bridge support reactions and anchor bolt locations will be furnished by the bridge manufacturer after receipt of order and after the bridge design is complete.

#### **521.12 BASIS OF PAYMENT**

##### **Pay Item Pay Unit**

*Prefabricated Steel Pedestrian Bridges LS*

#### **521.13 WORK INCLUDED IN PAYMENT**

The following work and items will be considered as included in the payment for the main item and will not be measure or paid for separately:

- A. Shipping, assembly, erection, and installation of bridges.
- B. Bearing assemblies, bolts, and all necessary equipment and hardware required for assembly and installation of bridges.
- C. Safety railing, handrails, toe plates, and all other appurtenances.

#### **521.14 WARRANTY**

The bridge manufacturer shall warrant that it can convey good title to the goods, that they are free of liens and encumbrances and that their steel structure(s) are free of design, material, and workmanship defects for a period of ten years from the date of delivery.

#### **521.15 APPROVAL CHECKLIST**

The following checklist will be used in the evaluation of all submittals to assure compliance with the Special Specifications for Prefabricated Bridge. This checklist is considered the minimum acceptable requirements for compliance with these specifications. Any deviations from this checklist shall be considered grounds for rejection of the submittal. Any costs associated with delays caused by the rejection of the submittal, due to non-compliance with this checklist, shall be fully borne by the contractor and bridge supplier.

## SUBMITTAL DRAWINGS

### *Data Required to be Shown:*

- ☐ Weld Failure Checks (Ultimate)
  - ☐ Bridge Elevation ☐ Local Buckling of the Main Member Face Checks
  - ☐ Bridge Cross Section ☐ Main Member Yielding Failure Checks
  - ☐ All Member Sizes ☐ Main Member Crippling Failure Checks
  - ☐ All Vertical Truss Members are Square ☐ Main Member Buckling Failure Checks or Rectangular Tubing ☐ Main Member Shear Failure Checks
  - ☐ Bridge Reactions ☐ All Bolted Splice Checks (if applicable)
  - ☐ General Notes Indicating ☐ Main Truss Deflection Checks
  - ☐ AISC Stress Conformance ☐ Decking Material Checks
  - ☐ Material Specifications to be Followed ☐ "U-Frame" Stiffness Checks (if applicable)
  - ☐ Design Live Load ☐ Interior and End Portal Design Checks (if applicable)
  - ☐ Design Vehicle Load (If Applicable) ☐ Determination of Top Chord K Factor
- Based on "U-Frame" Stiffness (if applicable)
- ☐ Design Wind Load
  - ☐ Other Specified Design Loads ☐ Consideration of Individual Member Moments Due to
  - ☐ Welding Process Truss Deflection, Joint Fixity and Joint Eccentricity
  - ☐ Blast Cleaning

## FABRICATION SUBMITTALS

### *Data Required to be Shown:*

- ☐ Paint Color Chart (If Applicable)
  - ☐ Detailed Bolted Splices (If Applicable)
  - ☐ Bolted Splice Location (If applicable) ☐ \*\* Written Installation Instructions
  - ☐ Signature and Seal of Professional Engineer, ☐ \*\* Written Splicing Instructions
- licensed in Accordance with Section 3.0 ☐ \*\* Written Maintenance & Inspection Instructions
- ☐ \*\* Welder Certifications
  - ☐ \*\* Contractor's erection/placement plan

## DESIGN CALCULATIONS ☐ \*\* Welding Procedures

### *Data Required to be Shown:* ☐ Material Certifications (if applicable)

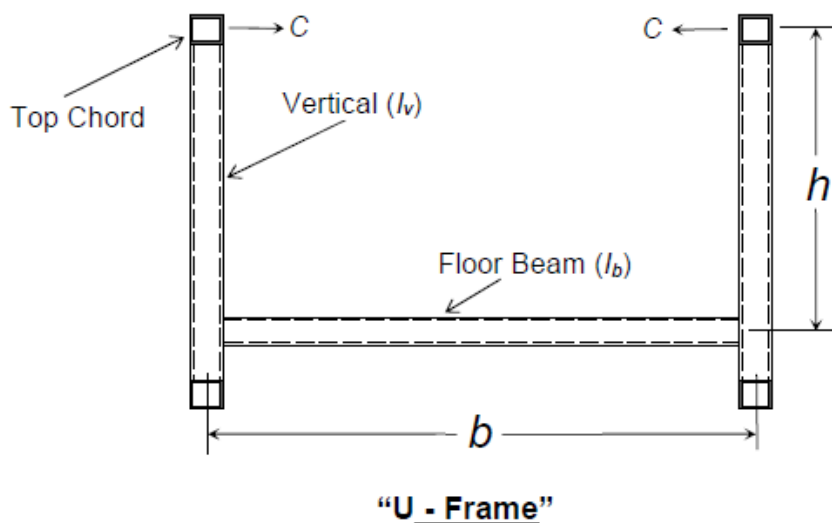
- ☐ Structural Steel (if applicable)
  - ☐ Data Input for 3-D Analysis of Bridge ☐ Decking (if applicable)
  - ☐ Joint Coordinates & Member Incidences ☐ Structural Bolts (if applicable)
  - ☐ Joint and Member Loads ☐ \*\* Quality Control Section of AISC
  - ☐ Member Properties Certification Manual (if applicable)
  - ☐ Load Combinations
  - ☐ AASHTO Member Stress Checks for Each Member Type ☐ Weld Testing Reports (if applicable)
  - ☐ Critical Connection Failure Mode Checks For Each
- Member Type

- ☐ Chord Face Plastification Checks \*\* NOTE: These items are required to be submitted
- ☐ Punching Shear Checks along with Submittal Drawings and Design Calculations
- ☐ Material Failure Checks (Truss Webs) Those Fabrication Submittal Items not marked are to be
- ☐ Weld Failure Checks (Effective Length) submitted prior to shipment of the bridge.

## Appendix A

1/K FOR VARIOUS VALUES OF  $CL/P_c$  and  $n$ :

	n						
1/K	4	6	8	10	12	14	16
1.000	3.686	3.616	3.660	3.714	3.754	3.785	3.809
0.980		3.284	2.944	2.806	2.787	2.771	2.774
0.960		3.000	2.665	2.542	2.456	2.454	2.479
0.950			2.595				
0.940		2.754		2.303	2.252	2.254	2.282
0.920		2.643		2.146	2.094	2.101	2.121
0.900	3.352	2.593	2.263	2.045	1.951	1.968	1.981
0.850		2.460	2.013	1.794	1.709	1.681	1.694
0.800	2.961	2.313	1.889	1.629	1.480	1.456	1.465
0.750		2.147	1.750	1.501	1.344	1.273	1.262
0.700	2.448	1.955	1.595	1.359	1.200	1.111	1.088
0.650		1.739	1.442	1.236	1.087	0.988	0.940
0.600	2.035	1.639	1.338	1.133	0.985	0.878	0.808
0.550		1.517	1.211	1.007	0.860	0.768	0.708
0.500	1.750	1.362	1.047	0.847	0.750	0.668	0.600
0.450		1.158	0.829	0.714	0.624	0.537	0.500
0.400	1.232	0.886	0.627	0.555	0.454	0.428	0.383



Where:  $C = \frac{E}{h^2 [h/3I_v + b/2I_b]}$

$L$  = Length in inches of one truss panel

$P_c$  = Buckling Load (= Top Chord Compression x F.S.)

$n$  = Number of Panels

Reference: Galambos, T.V. (1988) "Guide to Stability Design Criteria for Metal Structures", 4<sup>th</sup> Ed., PP 515-529. Copyright © 1988. Reprinted by permission of John Wiley and Sons, Inc.



GENERAL NOTES

PEDESTIAN BRIDGE STRUCTURAL NOTES

1. THESE NOTES APPLY TO THE CONSTRUCTION OF THE PEDESTRIAN BRIDGE ONLY. THIS INCLUDES BOTH ABUTMENTS, STEEL TRUSS SUPERSTRUCTURE AND DECK IN THEIR ENTIRETY.
2. STANDARD SPECIFICATIONS AND STANDARD DETAILS REFERENCED IN THIS PROJECT ARE PER NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS, LATEST EDITION.
3. THE PEDESTRIAN BRIDGE SUBSTRUCTURE IS DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, NINTH EDITION, 2014 WITH ALL CURRENT INTERIM REVISIONS AS MODIFIED BY THE LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES, SECOND EDITION, 2020 WITH ALL CURRENT INTERIM REVISIONS.
4. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE DESIGN AND FABRICATION OF THE PEDESTRIAN BRIDGE SUPERSTRUCTURE. THE PEDESTRIAN BRIDGE SUPERSTRUCTURE DESIGN SHALL BE IN ACCORDANCE WITH SECTION 541-A OF THE SUPPLEMENTAL TECHNICAL SPECIFICATIONS. THE DESIGN SHALL BE STAMPED BY A STATE OF NEW MEXICO REGISTERED PROFESSIONAL ENGINEER.
5. THE CONTRACTOR SHALL PROVIDE AND SUBMIT A 3-D MEMBER IDENTIFICATION MODEL OF THE STEEL TRUSS BRIDGE ALONG WITH A STAMPED/SIGNED LETTER DOCUMENTATION OF A THIRD-PARTY INDEPENDENT STATE OF NEW MEXICO REGISTERED PROFESSIONAL ENGINEER'S REVIEW OF THE TRUSS DESIGN AND FABRICATION SHOP DRAWINGS.
6. IN THE EVENT OF A CONFLICT BETWEEN NMDOT SPECIFICATIONS AND SUPPLEMENTARY TECHNICAL SPECS, THE SUPPLEMENTARY SPECIFICATIONS SHALL TAKE PRECEDENCE.
7. REINFORCING BARS SHALL BE GRADE 60. DIMENSIONS SHOWN REFER TO THE CENTERLINE OF THE BARS UNLESS NOTED OTHERWISE.
8. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION. THE ENGINEER OF RECORD SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES.
9. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE SHOWN ON DRAWINGS.
10. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.
11. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION, AS WELL AS WORKER SAFETY AND COMPLIANCE WITH OSHA OR OTHER AGENCY SAFETY GUIDELINES. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC..
12. NOTCHING OR CUTTING OF ANY STRUCTURAL MEMBER IN THE FIELD IS PROHIBITED, UNLESS APPROVED BY THE STRUCTURAL ENGINEER.
13. A REGISTERED, LICENSED GEOTECHNICAL ENGINEER SHALL OBSERVE ALL CONTROLLED EARTHWORK. THE GEOTECHNICAL ENGINEER SHALL PROVIDE PERIODIC ON-SITE OBSERVATION BY EXPERIENCED PERSONNEL DURING CONSTRUCTION OF CONTROLLED EARTHWORK.
14. THE GEOTECHNICAL ENGINEER SHALL SUBMIT THE RESULTS OF ALL REQUIRED TESTS TO THE OWNER OR OWNER'S REPRESENTATIVE.
15. FABRICATOR SHALL PROVIDE EXPANSION AND FIXED BEARINGS WHERE INDICATED IN PLAN. EXPANSION BEARINGS SHALL UTILIZE ELASTOMERIC BEARING PADS OR "FRICTIONLESS" PLATES TO PERMIT THERMAL EXPANSION AND CONTRACTION PARALLEL TO AXIS OF BRIDGE.
16. THE CONTRACTOR SHALL FURNISH AND INSTALL EIGHT REFLECTOR DEVICES. REFLECTOR DEVICE TYPE, COLOR AND INSTALLATION SHALL BE COORDINATED WITH MRGCD.

DESIGN CRITERIA

- GRAVITY LOADS:

PEDESTRIAN LIVE LOAD= 90 PSF
- WIND LOADS:

HORIZONTAL WIND LOADS:

STRENGTH III 3-SECOND GUST WIND SPEED,  $V_{STR,III}$ = 115 MPH

SERVICE I 3-SECOND GUST WIND SPEED,  $V_{SVC,I}$ = 70 MPH

EXPOSURE CATEGORY= C

PRESSURE EXPOSURE AND ELEVATION COEFFICIENT,  $K_z$ = 1.00

GUST EFFECT FACTOR, G= 1.00

WINDWARD DRAG COEFFICIENT,  $C_{D,W}$ = 2.0

LEEWARD DRAG COEFFICIENT,  $C_{D,L}$ = 1.0

VERTICAL WIND LOADS:

STRENGTH III VERTICAL WIND PRESSURE,  $P_{STR,III}$ = 0.020 KSF

SEISMIC LOADS:

DESIGN DESIGN PEAK GROUND ACCELERATION,  $A_g$ = 0.239-g

DESIGN 0.2-SEC PERIOD SPECTRAL ACCELERATION,  $S_{DS}$ = 0.556-g

DESIGN 1.0-SEC PERIOD SPECTRAL ACCELERATION,  $S_{D1}$ = 0.248-g

SEISMIC ZONE= 2

MINIMUM SUPERSTRUCTURE CONNECTION LOAD= 0.239 W

MINIMUM SUPPORT LENGTH= 8.125 IN

THERMAL LOADS:

COEFFICIENTS OF THERMAL EXPANSION:

CONCRETE THERMAL EXPANSION COEFFICIENT,  $\alpha_c$ = 0.000072 IN"/F-FT

STEEL THERMAL EXPANSION COEFFICIENT,  $\alpha_s$ = 0.000078 IN"/F-FT

DESIGN TEMPERATURE RANGES:

CONCRETE DESIGN TEMPERATURE RANGE,  $\Delta T$  STEEL= 80°F (0°F TO 80°F)

= 130°F (-20°F TO 110°F)

DESIGN SOIL PARAMETERS:

MAXIMUM ALLOWABLE SOIL BEARING PRESSURE= 1500 PSF

EQUIVALENT FLUID PRESSURE - ACTIVE= 35 PSF/FT

EQUIVALENT FLUID PRESSURE - AT REST= 50 PSF/FT

EQUIVALENT FLUID PRESSURE - PASSIVE= 200 PSF/FT

COEFFICIENT OF FRICTION= 0.25

CONCRETE:

CLASS A CONCRETE

AIR ENTRAINED

( $f'_c$  = 4000 psi @ 28 DAYS)

STEEL REINFORCEMENT:

ASTM A 615  $f_y$  = 60 KSI
- | BRIDGE COLOR TABLE          |           |       |
|-----------------------------|-----------|-------|
| AREAS FOR COLOR TREATMENT   | TREATMENT | COLOR |
| BRIDGE SUPERSTRUCTURE       | 2         | -     |
| ABUTMENT CAPS AND WINGWALLS | 1         | 1     |
| STATIONARY BOLLARDS         | 3         | 2     |
- TREATMENTS:

1. SMOOTH FORM FINISH

COLORS:

1. SUBMIT COLOR WHEEL TO OWNER FOR SELECTION

2. SELF WEATHERING STEEL

2. YELLOW WITH WARNING TAPE PER COA STD 2250

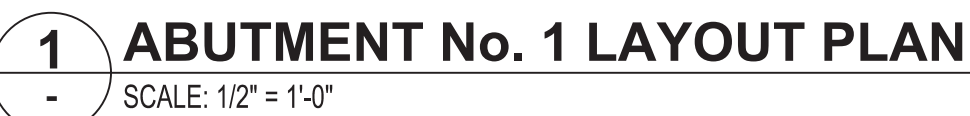
3. PAINTED STEEL
- | MINIMUM REBAR SPLICE LENGTHS FOR CONCRETE |                |
|---|----------------|
| BAR SIZE                                  | MIN LAP SPLICE |
| #4  | 21 IN          |
| #5  | 27 IN          |
| #6  | 33 IN          |
| #7  | 45 IN          |
| #8  | 60 IN          |
- 1  
-STRUCTURE LOCATION PLAN
- SCALE: 1" = 10'-0"
- 2  
-STRUCTURE PROFILE
- SCALE: 1" = 10'-0"
- The Structure Location Plan shows the bridge alignment from station 0+00 to 1+20. It includes the centerline of the bridge (CL BRG), the centerline of the abutments (CL ABUT No. 1 and CL ABUT No. 2), and the centerline of the dirt road. The plan shows the bridge crossing the Peralta Lower Riverside Drain. Key features include the maintenance ramp, the backwall to backwall, the edge of the water surface, the edge of the road, the edge of the grading, and the channel grading (by owner). The plan also shows the culvert extension in-kind and grading (by owner), the existing double swing metal gate, and the 24" existing CMP culvert with a minimum cover of 3.17'. The plan includes a north arrow and a scale of 1" = 10'-0".
- | BRIDGE POINT TABLE |               |               |          |                        |
|--------------------|---------------|---------------|----------|------------------------|
| X                  | POINT         | NORTHING      | EASTING  | STATION                |
| 1                  | 1,335,712.19' | 1,493,058.44' | 0+00.00' | BEGINNING OF ALIGNMENT |
| 2                  | 1,335,706.55' | 1,493,077.55' | 0+19.92' | CENTER OF BRG.         |
| 3                  | 1,335,689.67' | 1,493,134.77' | 0+79.58' | CENTER OF BRG.         |
| 4                  | 1,335,678.23' | 1,493,173.54' | 1+20.00' | END OF ALIGNMENT       |
- The Structure Profile shows the bridge elevation from station 0+00 to 1+00. It includes the finished grade, the existing grade, the channel grading (by owner), and the approximate existing grade (below water surface). The profile shows the bridge crossing the Peralta Lower Riverside Drain. Key features include the maintenance ramp, the backwall to backwall, the edge of the water surface, the edge of the road, the edge of the grading, and the channel grading (by owner). The profile also shows the culvert extension in-kind and grading (by owner), the existing double swing metal gate, and the 24" existing CMP culvert with a minimum cover of 3.17'. The profile includes a north arrow and a scale of 1" = 10'-0".
- NOTE:  
ELEVATIONS ARE GIVEN  
AT THE TOP OF DECK  
SURFACE.
- 
- MIDDLE RIO GRANDE CONSERVANCY DISTRICT

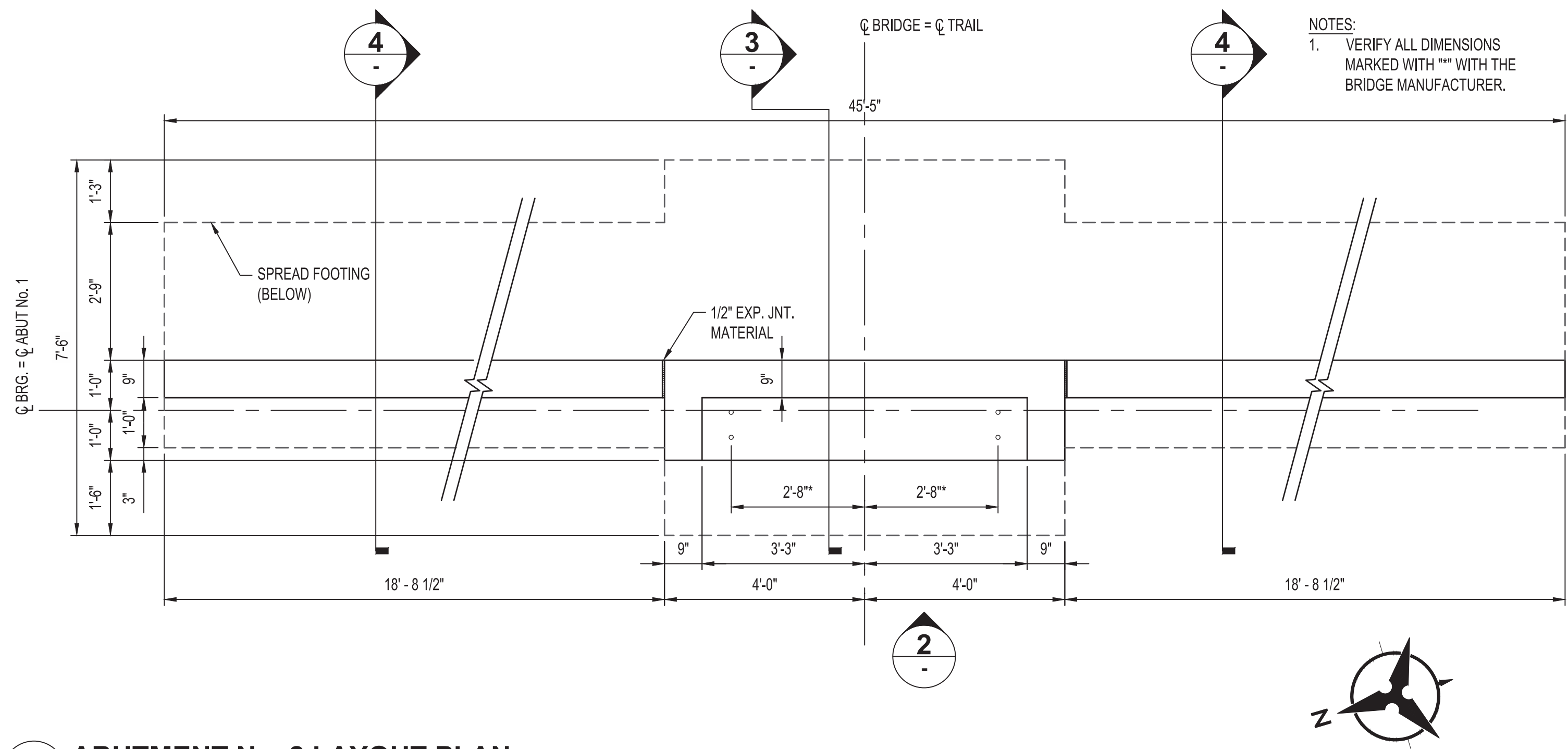
PERALTA-PEDESTRIAN-BRIDGE

SHEET-1/4

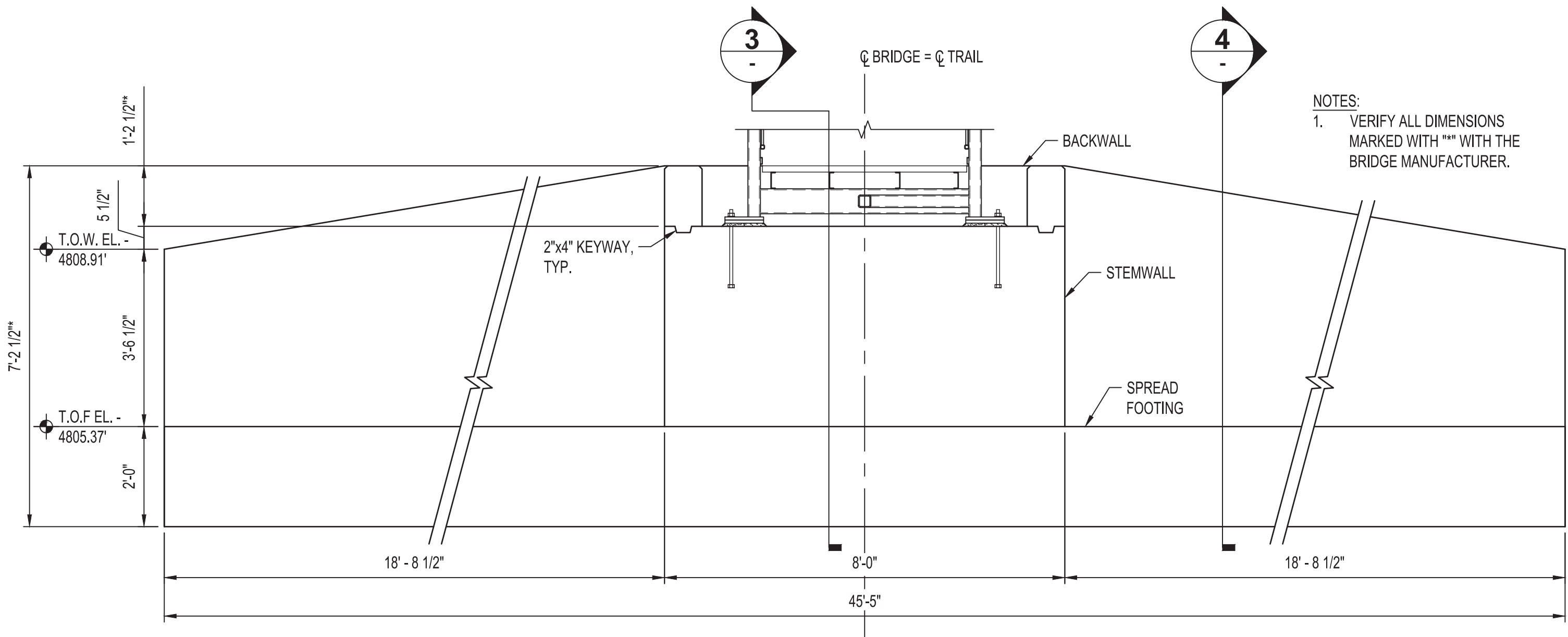
LOWER-RIVERSIDE-DRAIN/STA-43+50
- 
- Thu, 23-Jun-2022 - 10:38 am. Plotted by: JCLAYSHULTE  
P:\0220156\STRUCT\Drawings\ACAD\0220156-1-LOCATION PLAN AND PROFILE.dwg



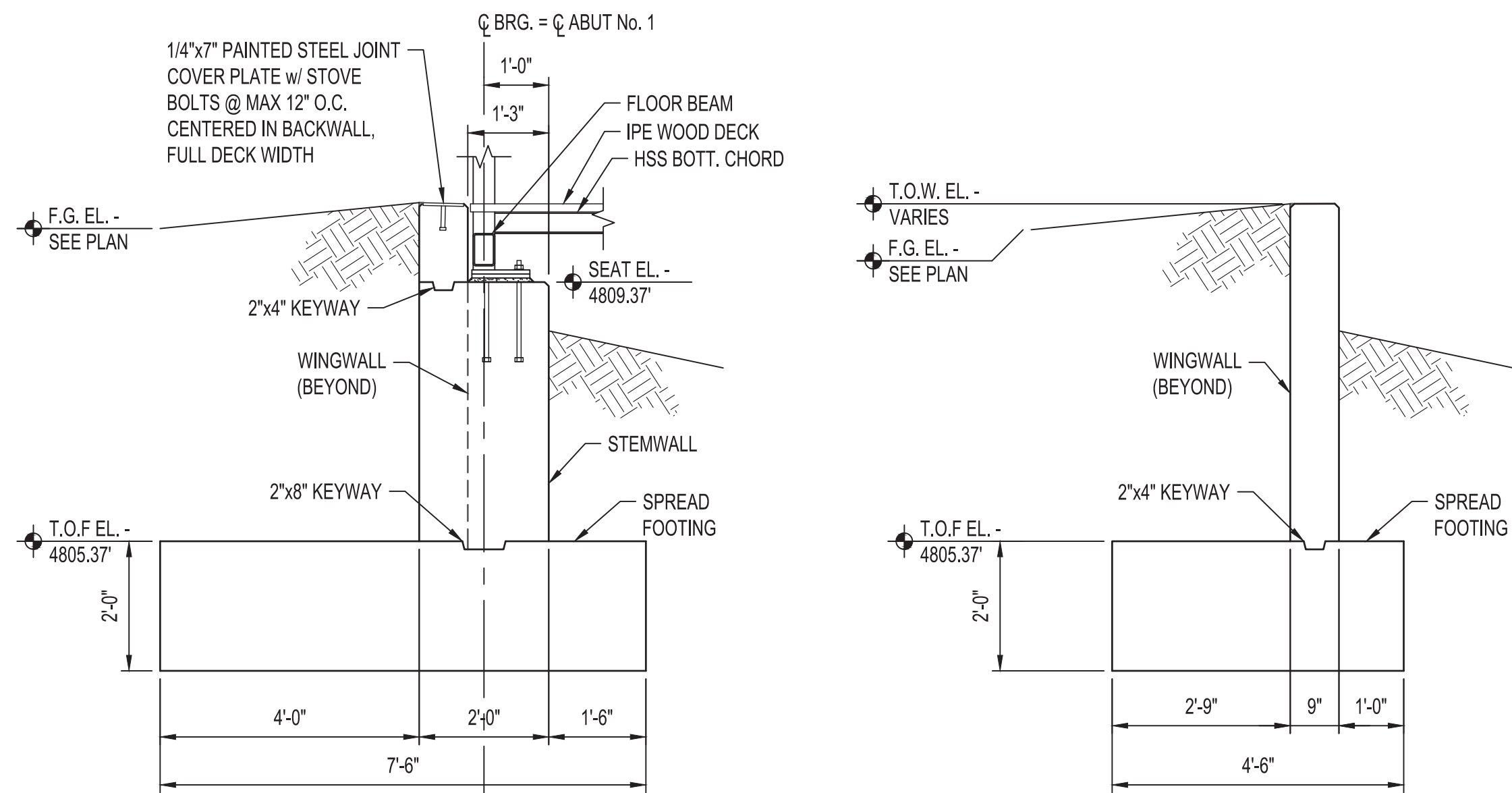




1 ABUTMENT No. 2 LAYOUT PLAN  
SCALE: 1/2" = 1'-0"

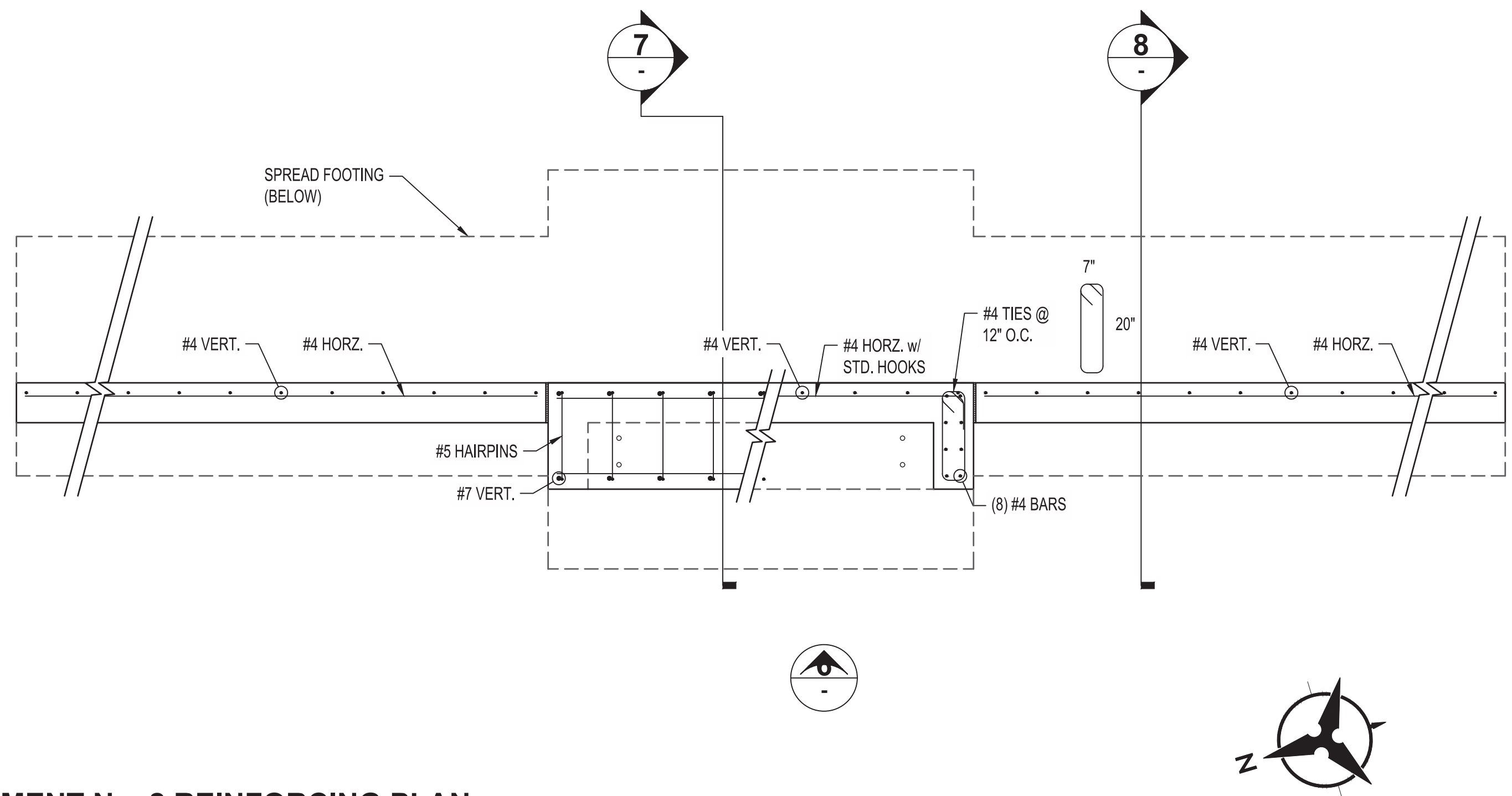


2 ABUTMENT No. 2 ELEVATION  
SCALE: 1/2" = 1'-0"

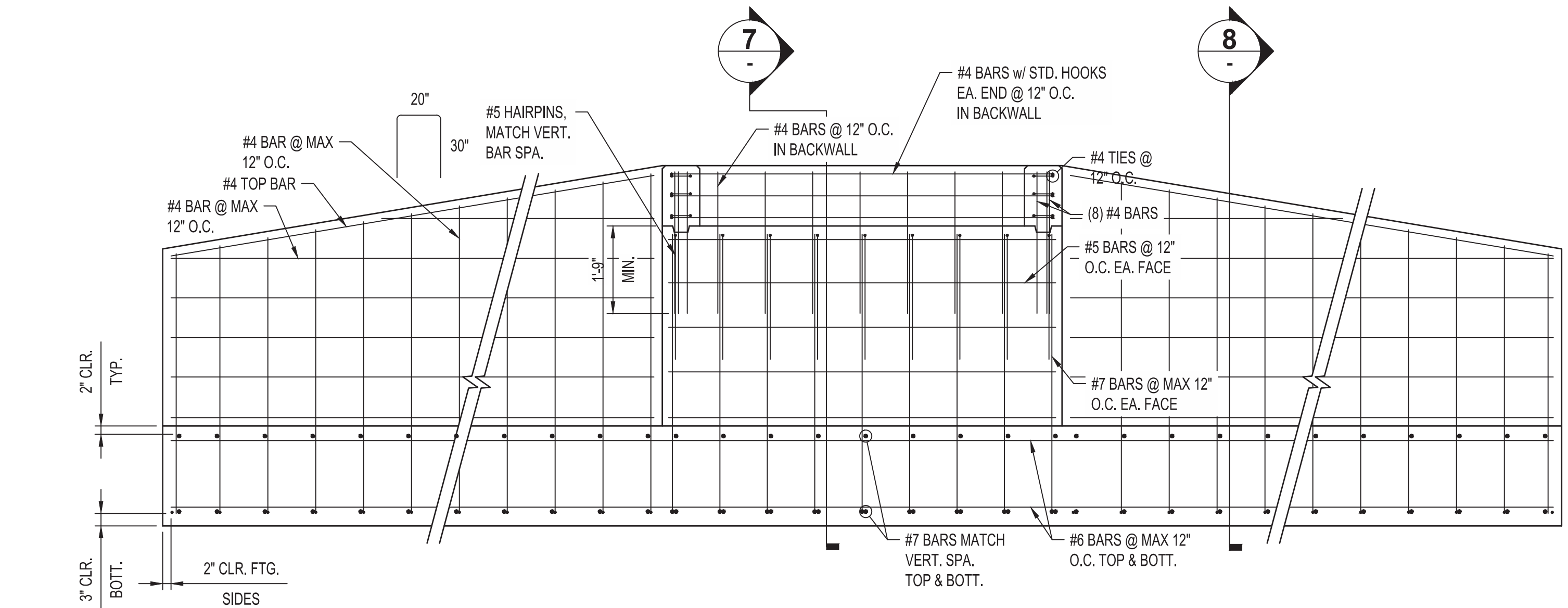


3 SECTION  
SCALE: 1/2" = 1'-0"

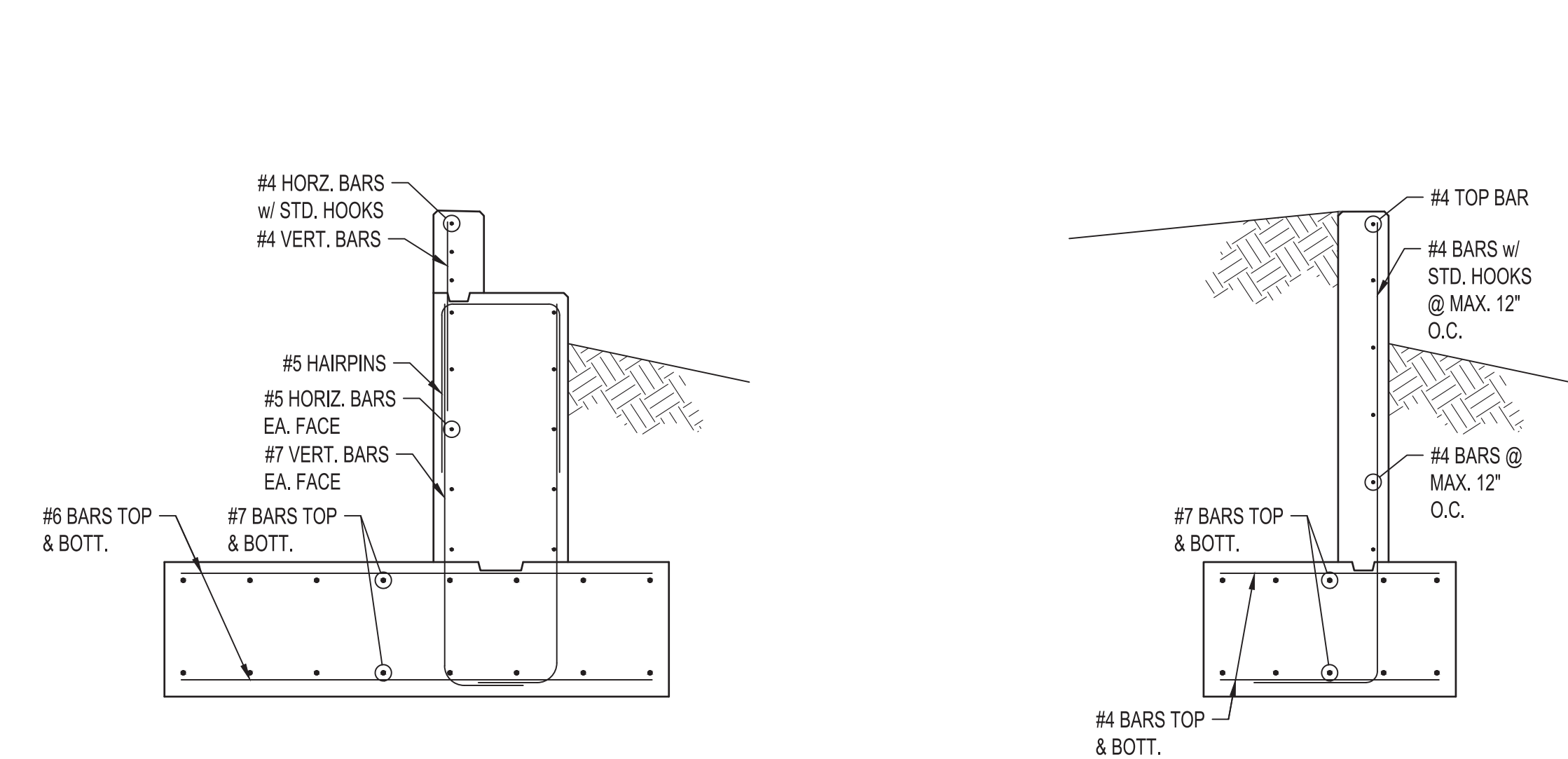
4 SECTION  
SCALE: 1/2" = 1'-0"



5 ABUTMENT No. 2 REINFORCING PLAN  
SCALE: 1/2" = 1'-0"

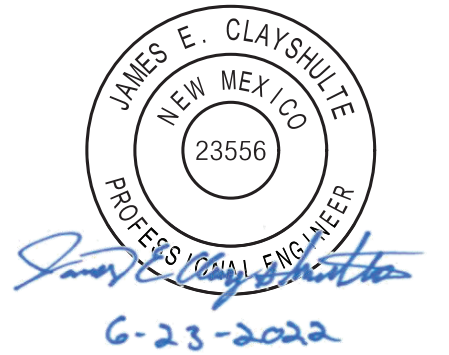


6 ABUTMENT No. 2 REINFORCING ELEVATION  
SCALE: 1/2" = 1'-0"



7 SECTION  
SCALE: 1/2" = 1'-0"

8 SECTION  
SCALE: 1/2" = 1'-0"



MIDDLE RIO GRANDE CONSERVANCY DISTRICT

PERALTA-PEDESTRIAN-BRIDGE

SHEET-3/4

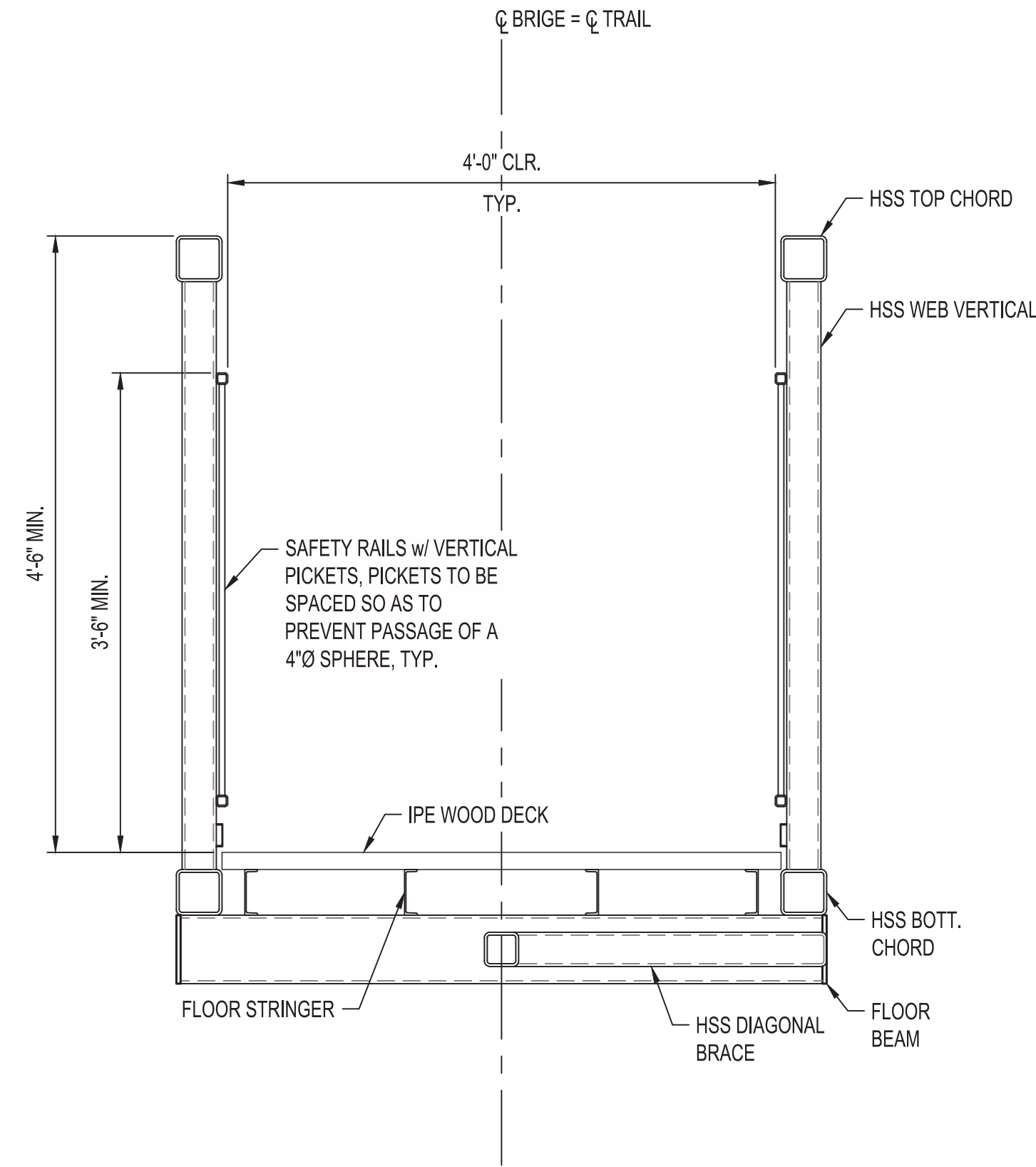
LOWER-RIVERSIDE-DRAIN/STA-43+50

MIDDLE  
RIO GRANDE

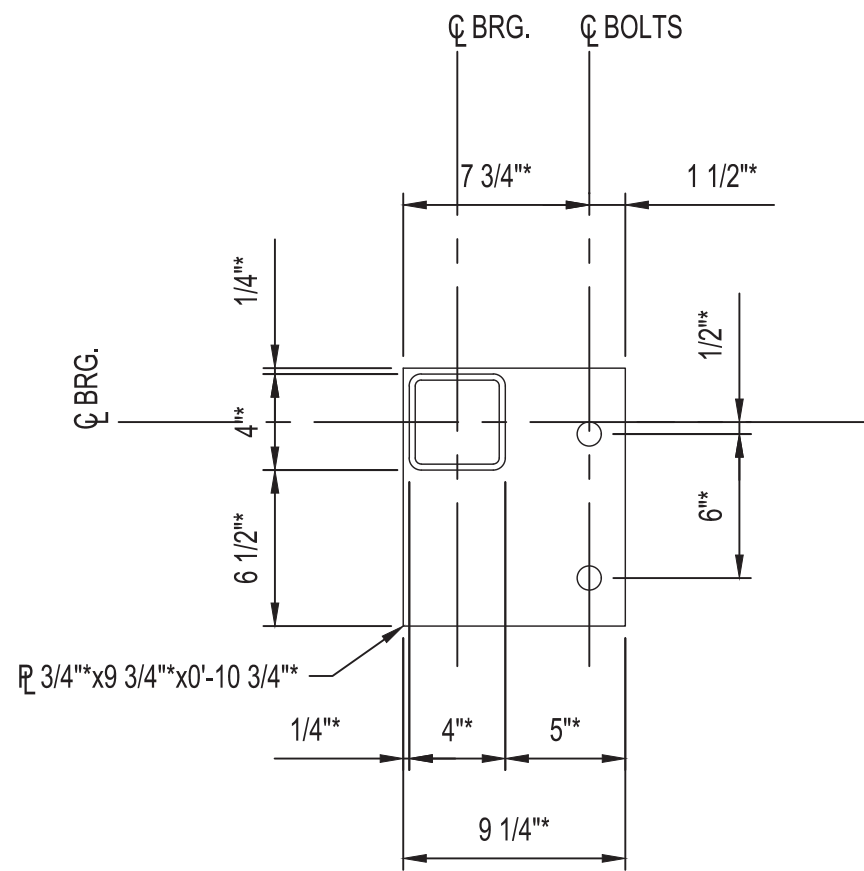


CONSERVANCY  
DISTRICT



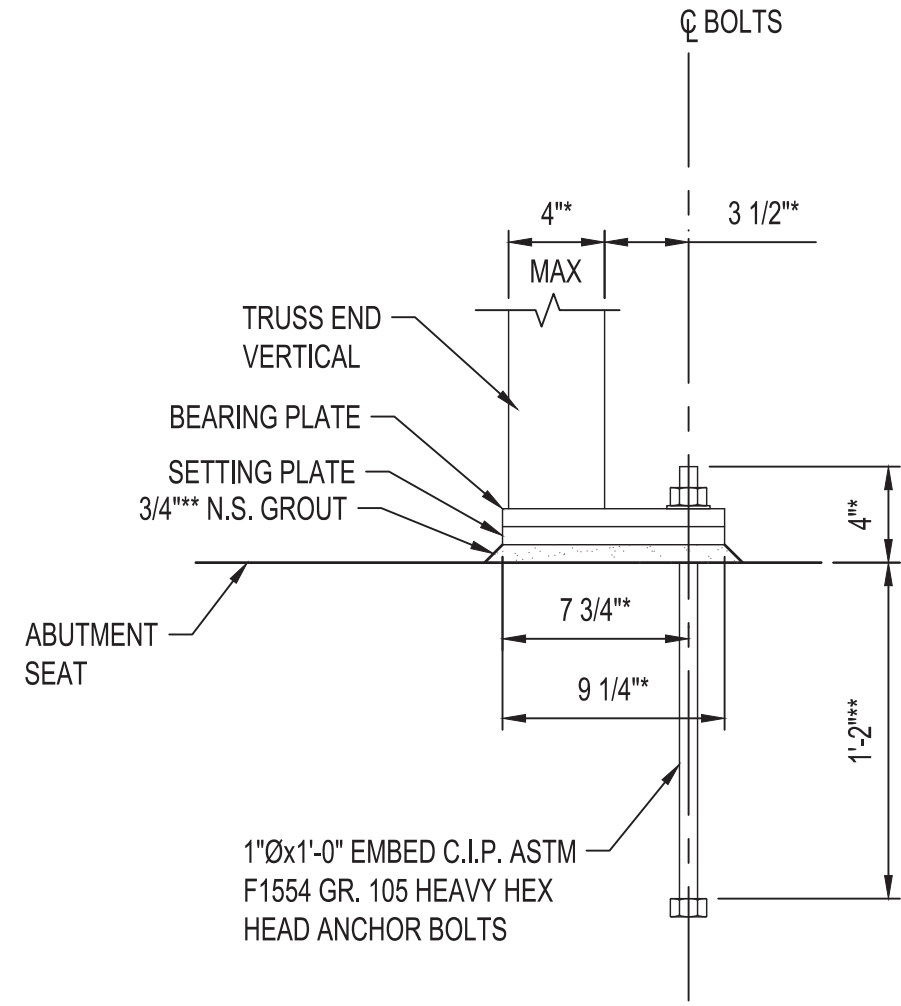


1 TRANSVERSE SECTION  
SCALE: N.T.S.



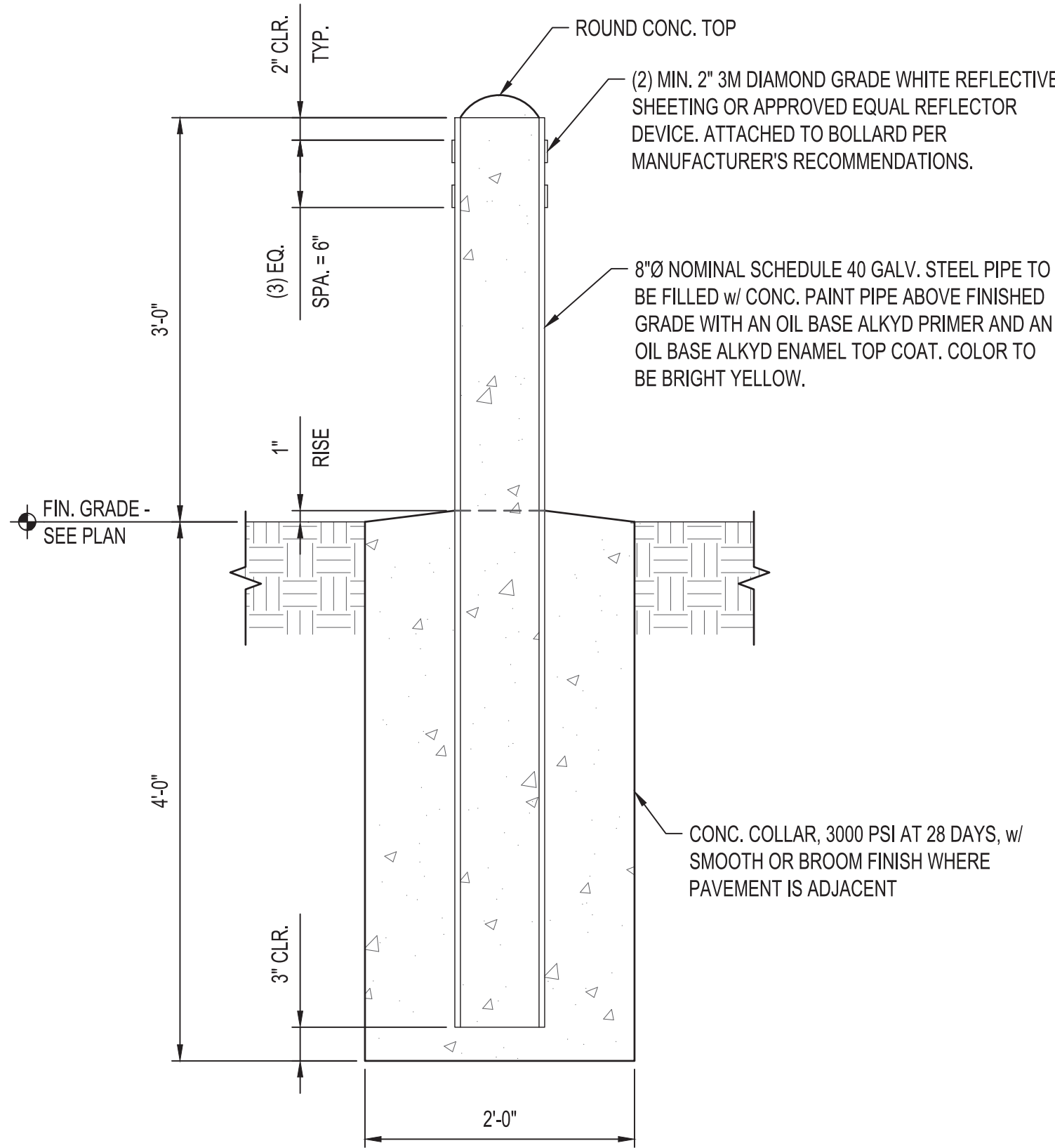
- NOTES:
1. PROVIDE SLOTTED HOLES @ ABUTMENT No. 2.
  2. VERIFY ALL DIMENSIONS MARKED WITH "" WITH THE BRIDGE MANUFACTURER.

2 BEARING PLATE DETAIL  
SCALE: N.T.S.



- NOTES:
1. VERIFY ALL DIMENSIONS MARKED WITH "" WITH THE BRIDGE MANUFACTURER.
  2. DIMENSIONS MARKED WITH "" SHALL BE VERIFIED WITH THE ENGINEER UPON RECEIPT OF THE PREFABRICATED TRUSS BRIDGE DESIGN.

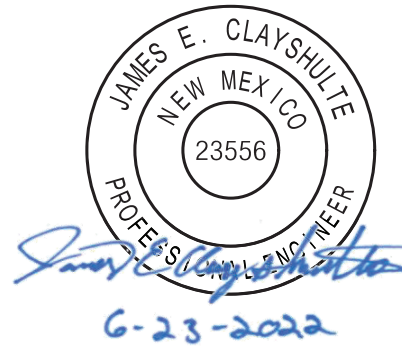
3 BEARING ASSEMBLY DETAIL  
SCALE: N.T.S.



4 BOLLARD DETAIL  
SCALE: N.T.S.

- NOTES:
1. THE CONTRACTOR SHALL PROVIDE EXPANSION AND FIXED BEARINGS WHERE INDICATED IN PLAN. EXPANSION BEARINGS SHALL UTILIZE ELASTOMERIC BEARING PADS OR "FRICTIONLESS" PLATES TO PERMIT THERMAL EXPANSION AND CONTRACTION PARALLEL TO AXIS OF BRIDGE.
  2. SEAT ELEVATION SHALL BE ADJUSTED TO MATCH DESIGNED BEARING ASSEMBLY HEIGHT AS REQUIRED.
  3. CONTRACTOR SHALL LOCATE THE BASEPLATES SUCH THAT THE ANCHOR BOLTS ARE CENTERED IN THE HOLES.
  4. IF PROVIDED, USE MANUFACTURER'S DESIGNED BEARING ASSEMBLY, IN LIEU OF DETAILS 2, 3 & 4. BEARING ASSEMBLY SHALL BE DESIGNED IN ACCORDANCE WITH "DESIGN REQUIREMENTS" NOTES, THIS SHEET.
  5. BEARING PLATES SHALL BE GALVANIZED, ALL WELDING OF GALVANIZED PLATES SHALL BE RECOATED (SEALED).
  6. VERIFY ALL DIMENSIONS DENOTED WITH A "" WITH THE PRE-ENGINEERED BRIDGE MANUFACTURER.

- DESIGN REQUIREMENTS
1. DESIGN OF ELASTOMERIC BEARING PADS SHALL BE IN ACCORDANCE WITH AASHTO LRFD SPECIFICATIONS, ARTICLE 14.7.6, METHOD A, AND STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NEW MEXICO
  2. DESIGN OF PTFE "FRICTIONLESS" BEARING PADS SHALL BE IN ACCORDANCE WITH AASHTO LRFD SPECIFICATIONS ARTICLE 14.7.2, AND STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NEW MEXICO.
  3. THE RANGE IN THERMAL MOVEMENT USED IN BEARING PAD DESIGN SHALL NOT BE LESS THAN 75% OF THE TOTAL ANTICIPATED MOVEMENT DUE TO TEMPERATURE.
  4. ELASTOMERIC BEARING PADS SHALL BE DESIGNED USING 60 DUROMETER HARDNESS UNLESS OTHERWISE APPROVED BY STRUCTURAL ENGINEER.
  5. BEARING CONSISTING OF STEEL ON STEEL OR CONCRETE ON STEEL ARE NOT PERMITTED.



MIDDLE RIO GRANDE CONSERVANCY DISTRICT  
PERALTA-PEDESTRIAN-BRIDGE  
SHEET-4/4  
LOWER-RIVERSIDE-DRAIN/STA-43+50





## VII. COST RESPONSE FORM

### REQUEST FOR BID

**MIDDLE RIO GRANDE CONSERVANCY DISTRICT  
P.O. BOX 581  
ALBUQUERQUE, NEW MEXICO 87103**

**SEALED BIDS**, subject to the conditions on the reverse hereof, will received at this office until 10:00 o'clock a.m. October 5th, 2022, and then publicly opened, for furnishing the following supplies, and / or services.

*Richard DeLoia, CPO*

ITEM NO.	ARTICLE OR SERVICES	AMOUNT	
		DOLLARS	CENTS
1.	PEDESTRIAN BRIDGE	\$	
2.	MISC EXPENSES	\$	
3.	SHIPPING	\$	

EXPECTED COMPLETION TIME FOR BRIDGE \_\_\_\_\_

In compliance with foregoing invitation for bids, and subject to all bid conditions hereof, the undersigned offers and agrees, that pricing for this bid shall be good for \_\_\_\_\_ days from date of the opening, to furnish any or all of the items, at the price set opposite each item.

BIDDER \_\_\_\_\_ DATE \_\_\_\_\_

ADDRESS: \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_

ZIP CODE: \_\_\_\_\_ PHONE# \_\_\_\_\_ EMAIL \_\_\_\_\_

## **BID CONDITIONS**

1. The MRGCD reserves the right to reject any and all bids, to waive any informality in bids and, unless otherwise specified by the bidder, to accept any item in the bid. In case of error in the extension of prices in the bid, the unit prices will govern. Bids will only be considered on each item separately unless otherwise specified by the MRGCD.
2. Bids will be awarded on unit prices to the lowest responsible bidder.
3. Time, in connection with discount offered, will be computed from date of the delivery of the supplies to carrier when final inspection and acceptance are at point of origin, or from date of delivery at destination or port of embarkation when final inspection and acceptance are at those points, or from date correct bill or voucher properly certified by the contractor is received in the latter date is later than the date of delivery. Discounts will be based on invoice price unless otherwise specified on bid.
4. In case of default on the contractor, the MRGCD may procure the articles or services from other sources and hold the contractor responsible for any excess cost occasioned thereby.
5. No director, officer or employee of the MRGCD shall be admitted to any share or part of this contract or to any benefit that may arise therefore, directly or indirectly, unless it is made with a corporation for its general benefit.
6. Time is an important factor in the placing of this order and the MRGCD reserves the right to cancel all items not shipped within period agreed by bidder.

## **INSTRUCTION TO BIDDERS**

1. Samples of items, when required, must be furnished free of expense, prior to the opening of bids, and, if not destroyed will upon receipt, be returned at the bidder's expense.
2. Prices should be stated in units of quantity specified with packing included.
3. Time of proposed delivery must be stated in definite terms. If time varies for different items the bidder shall so state.
4. If the items bid has a trade name or brand, such trade name or brand must be stated in the bid.
5. To insure prompt payment, bills should be certified as follows: "I certify that the above bill is correct and just, and that payment therefore has not been received."

**NOTE:** In general this form is adaptable for use whether a formal contract is required or not.

**TITLE:**

**N O T I C E**  
**TO ALL BIDDERS/OFFERORS**

**THIS IS A REMINDER THAT THE MIDDLE RIO GRANDE CONSERVANCY DISTRICT IS NOT RESPONSIBLE FOR RECEIPT OF UNTIMELY BIDS OR BIDS WHETHER THE DELAYS ARE DUE TO UNTIMELY DELIVERY BY PUBLIC OR PRIVATE (POSTAL OR PERSONAL) DELIVERY SERVICE. THEREFORE, WE ASK YOU TO PLEASE MAKE APPROPRIATE ARRANGEMENTS TO HAVE YOUR BIDS OR BIDS IN BY THE DEADLINE DATE AND TIME AS DESIGNATED ON THE BID OR PROPOSAL.**



## **APPENDIX NO. 1**

### **CAMPAIGN CONTRIBUTION DISCLOSURE FORM**

Pursuant to NMSA 1978, § 13-1-191.1 (2006), any person seeking to enter into a contract with any state agency or local public body **for professional services, a design and build project delivery system, or the design and installation of measures the primary purpose of which is to conserve natural resources** must file this form with that state agency or local public body. This form must be filed even if the contract qualifies as a small purchase or a sole source contract. The prospective contractor must disclose whether they, a family member or a representative of the prospective contractor has made a campaign contribution to an applicable public official of the state or a local public body during the two years prior to the date on which the contractor submits a proposal or, in the case of a sole source or small purchase contract, the two years prior to the date the contractor signs the contract, if the aggregate total of contributions given by the prospective contractor, a family member or a representative of the prospective contractor to the public official exceeds two hundred and fifty dollars (\$250) over the two year period.

Furthermore, the state agency or local public body shall void an executed contract or cancel a solicitation or proposed award for a proposed contract if: 1) a prospective contractor, a family member of the prospective contractor, or a representative of the prospective contractor gives a campaign contribution or other thing of value to an applicable public official or the applicable public official's employees during the pendency of the procurement process or 2) a prospective contractor fails to submit a fully completed disclosure statement pursuant to the law.

THIS FORM MUST BE FILED BY ANY PROSPECTIVE CONTRACTOR WHETHER OR NOT THEY, THEIR FAMILY MEMBER, OR THEIR REPRESENTATIVE HAS MADE ANY CONTRIBUTIONS SUBJECT TO DISCLOSURE.

The following definitions apply:

**"Applicable public official"** means a person elected to an office or a person appointed to complete a term of an elected office, which has the authority to award or influence the award of the contract for which the prospective contractor is submitting a competitive sealed proposal or who has the authority to negotiate a sole source or small purchase contract that may be awarded without submission of a sealed competitive proposal.

**“Campaign Contribution”** means a gift, subscription, loan, advance or deposit of money or other thing of value, including the estimated value of an in-kind contribution, that is made to or received by an applicable public official or any person authorized to raise, collect or expend contributions on that official’s behalf for the purpose of electing the official to either statewide or local office. “Campaign Contribution” includes the payment of a debt incurred in an election campaign, but does not include the value of services provided without compensation or unreimbursed travel or other personal expenses of individuals who volunteer a portion or all of their time on behalf of a candidate or political committee, nor does it include the administrative or solicitation expenses of a political committee that are paid by an organization that sponsors the committee.

**“Family member”** means spouse, father, mother, child, father-in-law, mother-in-law, daughter-in-law or son-in-law.

**“Pendency of the procurement process”** means the time period commencing with the public notice of the request for proposals and ending with the award of the contract or the cancellation of the request for proposals.

**“Person”** means any corporation, partnership, individual, joint venture, association or any other private legal entity.

**“Prospective contractor”** means a person who is subject to the competitive sealed proposal process set forth in the Procurement Code or is not required to submit a competitive sealed proposal because that person qualifies for a sole source or a small purchase contract.

**“Representative of a prospective contractor”** means an officer or director of a corporation, a member or manager of a limited liability corporation, a partner of a partnership or a trustee of a trust of the prospective contractor.

**“Name(s) of Applicable MRGCD Public Official(s)”**  
(Karen Dunning, John Kelly, Joaquin Baca, Glen Duggins, Barbara Baca, Stephanie Russo Baca and Michael T. Sandoval)

**DISCLOSURE OF CONTRIBUTIONS:**

Contribution Made By:

\_\_\_\_\_

Relation to Prospective Contractor:

\_\_\_\_\_

Name of Applicable MRGCD Public  
Official:

\_\_\_\_\_

Date Contribution(s) Made:

\_\_\_\_\_

\_\_\_\_\_

Amount(s) of Contribution(s):

\_\_\_\_\_

\_\_\_\_\_

Nature of Contribution(s):

\_\_\_\_\_

Purpose of Contribution(s):

\_\_\_\_\_

(Attach extra pages if necessary)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title (position)

**--OR--**

**NO CONTRIBUTIONS IN THE AGGREGATE TOTAL OVER TWO HUNDRED FIFTY DOLLARS (\$250) WERE MADE** to an applicable public official by me, a family member or representative.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title (position)

**APPENDIX NO. 2**  
**SUSPENSION AND DEBARMENT REQUIREMENT**

**CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT  
AND OTHER RESPONSIBILITY MATTERS**

The entering of a contract between Middle Rio Grande Conservancy District (MRGCD) and the successful Bidder pursuant to this RFP is a "covered transaction," as defined by 45 C.F.R. Part 76. MRGCD's contract with the successor Bidder shall contain a provision relating to debarment, suspension, and responsibility substantially in the form contained in Article 39 of Attachment D. All Bidders must provide as a part of their bids a certification to MRGCD in the form provided below. Failure of a Bidder to furnish a certification or provide such additional information as requested by the Procurement Manager for this RFP will render the Bidder non-responsible. Furthermore, the Bidder shall provide immediate written notice to the Procurement Manager for this RFP if, at any time prior to contract award, the Bidder learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

*Although MRGCD may review the veracity of the certification through the use of the federal Excluded Parties Listing System or by other means, the certification provided by the Bidder in paragraph (a), below, is a material representation of fact upon which MRGCD will rely when making a contract award. If it is later determined that the Bidder knowingly rendered an erroneous certification, in addition to other remedies available to MRGCD, MRGCD may terminate the contract resulting from this request for bids for default.*

*The certification provided by the Bidder in paragraph (a), below, will be considered in connection with a determination of the Bidder's responsibility. A certification that any of the items in paragraph (a), below, exists may result in rejection of the Bidder's bid for nonresponsibility and the withholding of an award under this RFP. If the Bidder's certification indicates that that any of the items in paragraph (a), below, exists, the Bidder shall provide with its bid a full written explanation of the specific basis for, and circumstances connected to, the item; the Bidder's failure to provide such explanation will result in rejection of the Bidder's bid. If the Bidder's certification indicates that that any of the items in paragraph (a), below, exists, MRGCD, in its sole discretion, may request, that the U.S. Department of Health and Human Services grant an exception under 45 C.F.R. §§ 76.120 and 76.305 if MRGCD believes that the procurement schedule so permits and an exception is applicable and warranted under the circumstances. In no event will MRGCD award a contract to a Bidder if the requested exception is not granted for the Bidder.*

(a)(1) By signing and submitting a bid, the Bidder certifies, to the best of his/her knowledge and belief, that:

(i) The Bidder and/or any of its Principals-

- (A) Are ☐ are not ☐ presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal department or agency; (B) Have ☐ have not ☐, within a three-year period preceding the date of the Bidder's bid, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property;
- (C) Are ☐ are not ☐ presently indicted for, or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with, commission of any of the offenses enumerated in paragraph (a)(1)(i)(B) of this certification;
- (D) Have ☐ have not ☐ within a three-year period preceding the date of Bidder's bid, had one or more public agreements or transactions (Federal, State or local) terminated for cause or default; and
- (E) Have ☐ have not ☐ been excluded from participation from Medicare, Medicaid or other federal health care programs pursuant to Title XI of the Social Security Act, 42 U.S.C. §1320a-7.

(ii) "Principal," for the purposes of this certification, shall have the meaning set forth in 45 C.F.R. §76.995 and shall include an officer, director; owner, partner, principal investigator, or other person having management or supervisory responsibilities related to a covered transaction. "Principal" also includes a consultant or other person, whether or not employed by the participant or paid with Federal funds, who: is in a position to handle Federal funds; is in a position to influence or control the use of those funds; or occupies a technical or professional position capable of substantially influencing the development or outcome of an activity required to perform the covered transaction.

(iii) For the purposes of this certification, the terms used in the certification, such as *covered transaction*, *debarred*, *excluded*, *exclusion*, *ineligible*, *ineligibility*, *participant*, and *person* have the meanings set forth in the definitions and coverage rules of 45 C.F.R. Part 76.

(iv) Nothing contained in the foregoing certification shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of a Bidder is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

BIDDER: \_\_\_\_\_

SIGNED BY: \_\_\_\_\_

TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

## **RESIDENT BUSINESS AND/OR RESIDENT VETERANS BUSINESS CERTIFICATION**

To ensure adequate consideration and application of 13-1-21 NMSA (as amended), Consultant must include a copy of their preference certificate in this section. In addition, for resident Veterans Preference, the attached certification form in this appendix must accompany any offer and any business wishing to receive the preference must complete and sign the form.

☐ Resident Business Certificate

☐ Resident Veterans Certificate

## **RESIDENT BUSINESS CERTIFICATION**

(Copy of Certificate to be included)

Consultant's Company Name: \_\_\_\_\_

Resident Business Certificate Number: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

## **RESIDENT VETERAN'S BUSINESS CERTIFICATION**

Consultant's Company Name: \_\_\_\_\_

Resident Veteran's Business Certificate Number: \_\_\_\_\_

Consultant must include copy of Resident Veteran's Business Certificate with their proposal.

Consultant's submitting a Resident Veteran's Business Certificate must also complete the following certification of prior year's revenue.



## RESIDENT VETERANS PREFERENCE CERTIFICATION

\_\_\_\_\_ (NAME OF CONSULTANT) hereby certifies the following in regard to application of the resident veterans' preference to this procurement.

Please check one box only

- ☐ I declare under penalty of perjury that my business prior year revenue starting January 1 ending December 31 is less than \$1M allowing me the 10% preference discount on this solicitation. I understand that knowingly giving false or misleading information about this fact constitutes a crime.
- ☐ I declare under penalty of perjury that my business prior year revenue starting January 1 ending December 31 is more than \$1M, but less than \$5M allowing me the 8% preference discount on this bid or proposal. I understand that knowingly giving false or misleading information about this fact constitutes a crime.
- ☐ I declare under penalty of perjury that my business prior year revenue starting January 1 ending December 31 is more than \$5M allowing me the 7% preference discount on this bid or proposal. I understand that knowingly giving false or misleading information about this fact constitutes a crime.

"I agree to submit a report, or reports, to the State Purchasing Division of the NM General Services Department declaring under penalty of perjury that during the last calendar year starting January 1 and ending on December 31 the following to be a true and accurate."

"In conjunction with this procurement and the requirements of this business application for a Resident Veteran Business Preference/Resident Veteran Consultant Preference under Section 13-1-21 or 13-1-22 NMSA 1978, when awarded a contract which was on the basis of having such veterans' preference, I agree to report to the State Purchasing Division of the General Services Department the awarded amount involved. I will indicate in the report the award as a purchase from a public body or as a public works contract from a public body as the case may be."

"I understand that knowingly giving false or misleading information on this report constitutes a crime."

I declare under penalty of perjury that this statement is true to the best of my knowledge. I understand that giving false or misleading statement about material fact regarding this matter constitutes a crime.

\_\_\_\_\_  
(Signature of Business Representative)\*

DATE: \_\_\_\_\_

**\* Must be an authorized signatory for the Business.**

*The representations made in checking the boxes constitutes a material representation by the business that is subject to protest and may result in denial of an award or termination of award of the procurement involved if the statements are proven to be incorrect.*

## **APPENDIX 4**

### **CONFLICT OF INTEREST AFFIDAVIT AND DISCLOSURE**

A. "Conflict of Interest Disclosure" A disclosure of clients represented and a formal statement of whether there is any real or perceived conflict of interest in representing the issues and advocacy for the MRGCD, addressing whether or not any conflict of interest exists between this project and other past or on-going projects, including any projects currently being conducted with another client..

B. "Person" includes a bidder, offeror, contractor, consultant, or subcontractor or sub-consultant at any tier, and also includes an employee or agent of any of them if the employee or agent has or will have the authority to control or supervise all or a portion of the work for which a bid or offer is made.

C. The Consultant or Sub consultant warrants that, except as disclosed in §D, below, there are no relevant facts or circumstances now giving rise or which could, in the future, give rise to a conflict of interest.

D. The following facts or circumstances give rise or could in the future give rise to a conflict of interest (explain in detail):

E. The Consultant or Sub consultant agrees that if an actual or potential conflict of interest arises after the date of this affidavit, the consultant or sub consultant shall immediately make a full disclosure in writing to the chief procurement officer of all relevant facts and circumstances. This disclosure shall include a description of actions which the consultant or sub consultant has taken and proposes to take to avoid, mitigate, or neutralize the actual or potential conflict of interest.

The undersigned further states that the firm or individual submitting a proposal is not in violation of any applicable Conflict of Interest laws or regulations, etc.

Date:\_\_\_\_\_

By:\_\_\_\_\_

(Authorized Representative and Affiant)

## **APPENDIX 5**

### **NEW MEXICO EMPLOYEES HEALTH COVERAGE**

- A. If Contractor has, or grows to, six (6) or more employees who work, or who are expected to work, an average of at least 20 hours per week over a six (6) month period during the term of the contract, Contractor certifies, by signing this agreement, to have in place, and agree to maintain for the term of the contract, health insurance for those employees and offer that health insurance to those employees if the expected annual value in the aggregate of any and all contracts between Contractor and the State exceed \$250,000 dollars.
- B. Contractor agrees to maintain a record of the number of employees who have (a) accepted health insurance; (b) declined health insurance due to other health insurance coverage already in place; or (c) declined health insurance for other reasons. These records are subject to review and audit by a representative of the state.
- C. Contractor agrees to advise all employees of the availability of State publicly financed health care coverage programs by providing each employee with, as a minimum, the following web site link to additional information: <http://insurenemexico.state.nm.us/>.
- D. For Indefinite Quantity, Indefinite Delivery contracts (state price agreements without specific limitations on quantity and providing for an indeterminate number of orders to be placed against it); Contractor agrees these requirements shall apply the first day of the second month after the Contractor reports combined sales (from state and, if applicable, from local public bodies if from a state price agreement) of \$250,000.

By signing below, Bidder agrees to be bound by the terms stated in this form:

Signature of Bidder: \_\_\_\_\_ Date: \_\_\_\_\_