

Addendum NO 2

ISSUED BY: *Great River Engineering
2826 S. Ingram Mill Rd.
Springfield, Missouri 65804
(417) 886-7171
(417) 886-7591 --- FAX*

DATE: May 18, 2022

FOR: **Dade County BRO-B029(12)**

The attached revisions hereby supersede any and all data with which they may conflict as indicated on the Drawings, Specifications and related documents issued in the original set. Each trade is responsible for changes in its work caused by changes in the work of other trades. This addendum is a part of and shall be attached to the original set of plans and specifications for the work.

Notification: There has been one change or addendum prior to this addendum.

Changes to:

Plans

C2 - TYPICAL SECTIONS & QUANTITIES

Roadway Quantities have been updated to reflect:

- TYPE 1 AGGREGATE FOR BASE (5 IN. THICK) - 1017 SQ. YARD
- SEAL COAT – 864 SQ. YARD
- GUARDRAIL TYPE A – 62.5 LIN. FOOT

Typical cross sections have been updated to remove note “5” TYPE 1 AGGREGATE (COMPATED)”

Typical cross sections have been updated to add note “SUBBASE COMPACTED BY SHEEP’S FOOT ROLLER (6” MIN.)”

C3 – ROADWAY PLAN & PROFILE

Guardrail has been updated to reflect 6’-3” long transition sections.

Length has been updated to 100 LF and note has been added to SW Type A guardrail to reflect inclusion of 100 LF in Rock Face Guardrail Anchor bid item.

Length has been updated to 62’-6” on SE Type A Guardrail.

NE Type A Crashworthy End Terminal has been updated to note “Type A Crashworthy End Terminal”.

S2 – GENERAL NOTES AND QUANTITIES

Estimated Quantities for Bridge has been updated to reflect:

- Bridge Guardrail (Thrie Beam) – 162.5 LF

S3 – THRIE BEAM DETAILS

SL-1 Bridge Railing has been updated to reflect 10 spa. @ 6'-3" = 62'-6"

Note stating "See Plan Sheet for Guardrail" on SW guardrail has shifted 6'-3" to the north.

Changes to:

Contract Documents

Bid Form

Bid Item 4 "TYPE I AGGREGATE FOR BASE (5 IN. THICK) has been updated to 1017 S.Y.

Bid Item 5 "SEAL COAT" has been updated to 864 S.Y.

Bid Item 6 "GUARDRAIL TYPE A" has been updated to 62.5 L.F.

Job Special Provisions

A new JSP has been added (39. Seal Coat) regarding provisions for Bid Item 5 Seal Coat.

Clarifications:

Question 1: Is the 100 LF on guardrail on the SW part of the Rock Face Guardrail Anchor bid item?

Answer 1: Yes; quantities have been updated to remove the 100 LF from "Guardrail Type A" bid item and that linear footage should be included in bid item, "Rock Face Guardrail Anchor"

There are no other clarifications or changes included with this Addendum.



General Notes:

Design Specifications:
2017 A.A.S.H.T.O. LRFD Bridge Design Specifications (8th Ed.)
Seismic Performance Category 'A'

Design Loading:
Vehicular = HL-93
Future Wearing Surface = 35 psf
Earth = 120 pcf
Equivalent Fluid Pressure = 45 pcf
Superstructure: Non-Composite for dead load.
Composite for live load.

Design Unit Stresses:
Class B Concrete (Substructure) f'c = 3,000 psi
Class B-2 Concrete (Superstructure, except prestressed girders) f'c = 4,000 psi
Reinforcing Steel (Grade 60) fy = 60,000 psi
Structural HP Steel Pile (ASTM A709 Grade 50S) fy = 50,000 psi

For precast prestressed panel stresses, see Sheet No. S10.
For prestressed girder stresses, see Sheet No. S9.

Neoprene Pads:
Plain neoprene bearing pads shall be 60 durometer and shall be in accordance with Sec 716.

Joint Filler:
All joint filler shall be in accordance with Sec 1057 of MoDOT Specifications for preformed sponge rubber expansion and partition joint filler, except as noted.

Reinforcing Steel:
Minimum clearance to reinforcing steel shall be 1 1/2". unless otherwise shown.

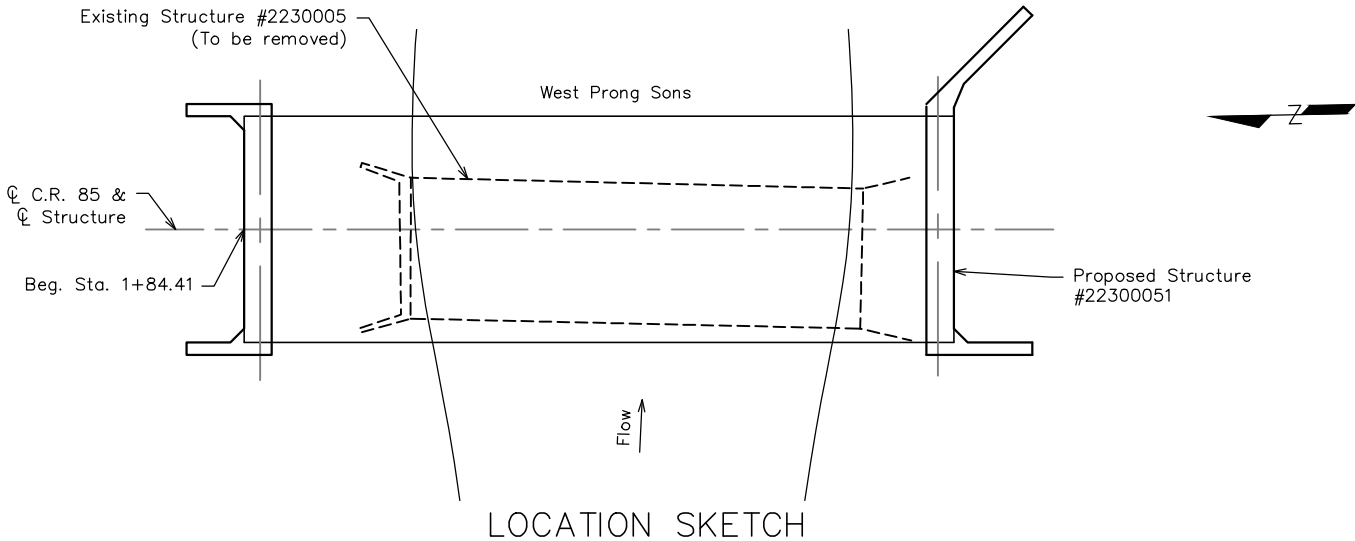
Traffic Handling:
Structure to be closed during construction. Traffic to be maintained on other routes during construction. See roadway plans for traffic control.

| Hydrologic Data | | |
|-------------------------------|---|------------|
| Drainage Area | = | 11 sq. mi. |
| Design Flood Frequency | = | 500 years |
| Design Flood Discharge | = | 8,200 cfs |
| Design Flood (D.F.) Elevation | = | 928.3 feet |
| Base Flood (100 Year) | | |
| Base Flood Elevation | = | 926.9 feet |
| Base Flood Discharge | = | 6,100 cfs |
| Estimated Backwater | = | 0.1 feet |
| Average Velocity Thru Opening | = | 12.8 ft/s |
| Freeboard (50 Year) | | |
| Freeboard | = | 2.7 feet |
| Roadway Overtopping | | |
| Overtopping Flood Discharge | = | 5200 cfs |
| Overtopping Flood Frequency | = | 50 years |
| Overtopping Flood Elevation | = | 925.6 feet |

| Estimated Quantities For Bridge | | | | |
|--|-------------|---------|-----------|-------|
| Item | | Substr. | Superstr. | Total |
| Class 1 Excavation | cu. yard | 35 | | 35 |
| Removal of Bridges | lump sum | | | 1 |
| Galvanized Structural Steel Piles (12 in.) | linear foot | 104 | | 104 |
| Prebore for Piling | linear foot | 40 | | 40 |
| Pile Point Reinforcement | each | 8 | | 8 |
| Class B Concrete (Substructure) | cu. yard | 34.3 | | 34.3 |
| Slab on Concrete NU-Girder | sq. yard | | 210 | 210 |
| NU 35, Prestressed Concrete NU-Girder | linear foot | | 223 | 223 |
| Bridge Guardrail (Thrie Beam) | linear foot | | 162.5 | 162.5 |
| Laminated Neoprene Bearing Pad (Tapered) | each | | 6 | 6 |

All concrete above the construction joint in the end bents is included in the Estimated Quantities for Slab on Concrete NU-Girder.

All reinforcement in the end bents is included in the Estimated Quantities for Slab on Concrete NU-Girder.



LOCATION SKETCH

Note: This drawing not to scale. Follow dimensions.

| Foundation Data | | | | |
|-------------------|--|------------|-------------|-----|
| Type | Design Data | Bent No. 1 | Bent No. 2 | |
| Load Bearing Pile | Pile Type & Size | HP 12x53 | HP 12x53 | |
| | Number | 4 | 4 | |
| | Approximate Length Per Each | ft | 12 | 14 |
| | Pile Point Reinforcement | ea | All | All |
| | Min. Galvanized Penetration (Elev.) | ft | Full Length | |
| | Pile Driving Verification Method | | DF | DF |
| | Resistance Factor | | 0.4 | 0.4 |
| | Minimum Nominal Axial Compressive Resistance | kip | 442 | 477 |

DF = FHWA-modified Gates Dynamic Formula

Minimum Nominal Axial Compressive Resistance = $\frac{\text{Maximum Factored Loads}}{\text{Resistance Factor}}$

Manufactured pile point reinforcement shall be used on all piles in this structure.

Prebore for Piles at Bent No. 2 to Elevation 914.78.

All piles shall be galvanized down to the minimum galvanized penetration (elevation).

Pile point reinforcement need not be galvanized. Shop drawings will not be required for pile point reinforcement.

The contractor shall make every effort to achieve the minimum galvanized penetration (elevation) shown on the plans for all piles. Deviations in penetration less than 5 feet of the minimum will be considered acceptable provided the contractor makes the necessary corrections to ensure the minimum penetration is achieved on subsequent piles.

| Estimated Quantities for Slab on Concrete NU-Girder | |
|---|--------------|
| ITEM | TOTAL |
| Class B-2 Concrete | cu. yard 78 |
| Reinforcing Steel (Epoxy Coated) | pound 17,200 |

The table of estimated quantities for Slab on Concrete NU-Girder represents the quantities used by the county in preparing the cost estimate for concrete slabs. The area of the concrete slab will be measured to the nearest square yard longitudinally from end of slab to end of slab and transversely from out to out of bridge slab (or with the horizontal dimensions as shown on the plan of slab). Payment for prestressed panels conventional forms, all concrete and coated reinforcing steel will be considered completely covered by the contract unit price for the slab. Variations may be encountered in the Estimated Quantities but the variations cannot be used for an adjustment in the contract unit price.

Method of forming the slab shall be shown on the plans and in accordance with Section 703. all hardware for forming the slab to be left in place as a permanent part of the structure shall be coated in accordance with ASTM A123 or ASTM B633 with a thickness Class SC 4 and a finish type I, II or III.

Class B-2 concrete quantity is based on minimum top flange thickness and minimum joint material thickness.

The prestressed panel quantities are not included in the Table of Estimated Quantities for Slab on Concrete NU-Girder.

Great River Engineering - Missouri State Certificate of Authority Numbers:
Engineering: 2000156985, Land Surveying: 2001011716,
Landscape Architecture: 2007015673

| | | | | | |
|----------------|-------------|---|---|---|---|
| Date | 5-17-22 | | | | |
| Revision/Issue | ADDENDUM #2 | | | | |
| No. | A | Δ | Δ | Δ | Δ |

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MELISSA M. MASSAR
MO# PE-2018000237

C.R. 85 BRIDGE #22300051
DADE COUNTY, MISSOURI

GENERAL NOTES AND QUANTITIES

Copyright © 2021 by Great River Engineering

CHECKED BY: LNC

DRAWN BY: KFB

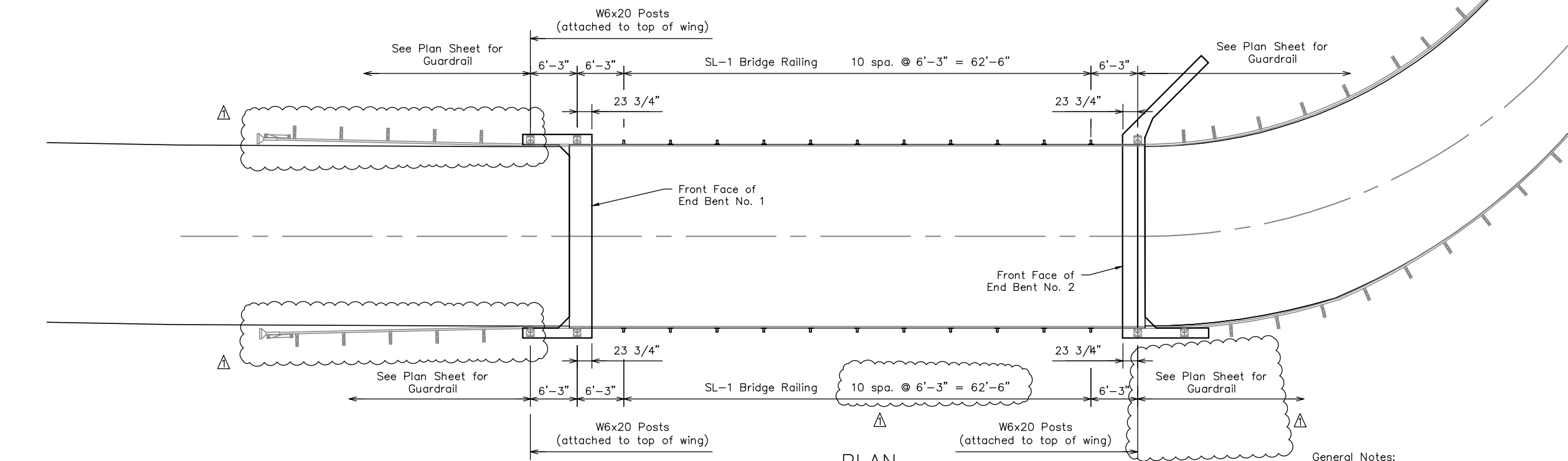
JOB NUMBER: 3628

FILE NAME: 3628_Structural

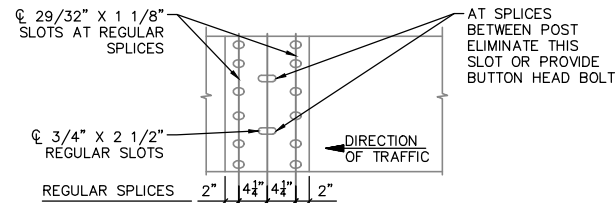
SCALE: NO SCALE

ISSUE DATE: 10.04.2021

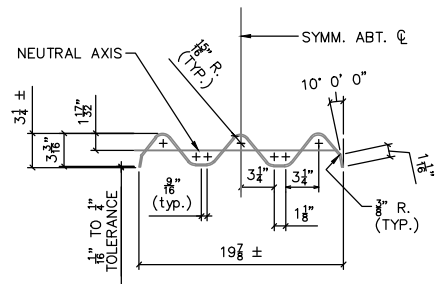
SHEET NUMBER:
S2



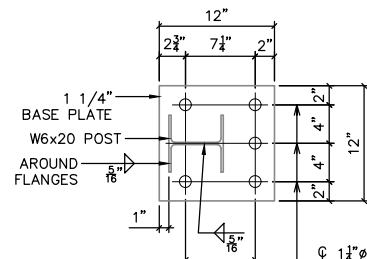
PLAN



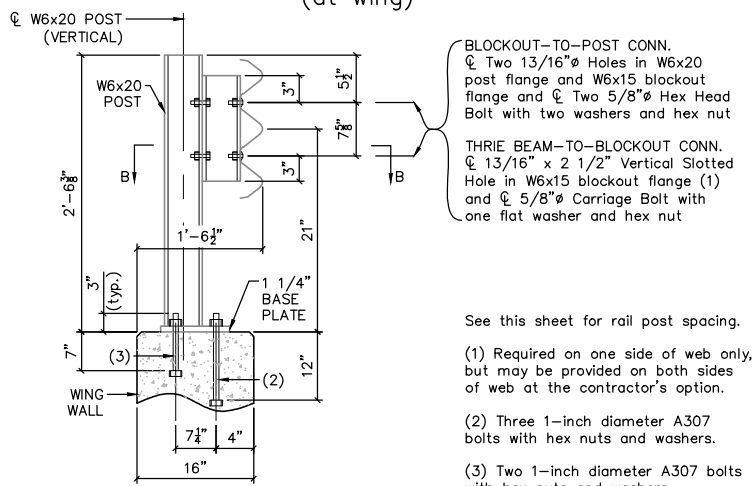
THRIE BEAM RAIL SPLICE DETAIL



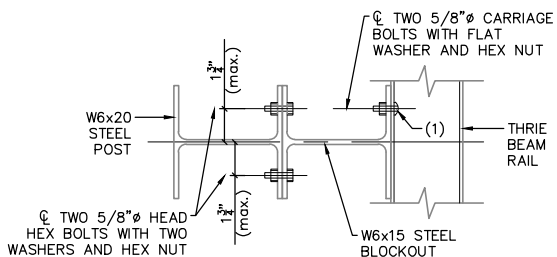
SECTION THRU THRIE BEAM RAIL



BASE PLATE
(at wing)



PART SECTION AT WING



SECTION B-B

General Notes:

Design Specifications: 2002 AASHTO LFD (17th Ed.) Standard Specifications.

Guardrail delineators shall be attached to the top of the guardrail and shall similarly use the delineator details of Missouri Standard Plan 617.10, except that the delineator body shall be attached to the top of the cap rail using galvanized anchorage as shown on Missouri Standard Plan 606.00. Delineators on bridges with two-lane, two-way traffic shall have retroreflective sheeting on both sides. Guardrail delineators will be considered completely covered by the contract unit price for Bridge Guardrail (Thrie Beam).

All bolts, nuts, washers, plates, reinforcement, and elastomeric material will be considered completely covered by the contract unit price for Bridge Guardrail (Thrie Beam).

All steel connecting bolts and fasteners for posts and railing shall be galvanized after fabrication. Protective coating and material requirement of steel railing shall be in accordance with Sec. 1040.

Rail posts shall be set perpendicular to roadway profile grade, vertically in cross section.

Rail posts at wings shall be seated on 1/16" elastomeric pads having the same dimensions as the post base plate. Such pads may be any elastomeric material, plain or fibered, having a hardness (durometer) of 50 or above, as certified by the manufacturer. Additional pads or half pads may be used in shimming for alignment. Post heights shown will increase by the thickness of the pad.

At the thrie beam connection to blackout on wings, the bolts shall be tightened and backed off one-half turn and the threads shall be burred.

Minimum length of thrie beam sections is equal to one post space.

A 5/8" diameter button-head, oval shoulder bolt with a minimum 3/8" thick hex nut shall be used at all slots.

Thrie beam guardrail on the bridge shall be 12-gauge steel.

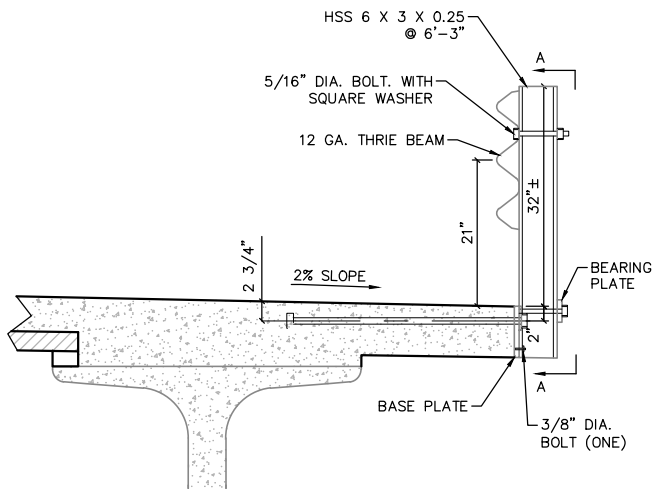
Posts and base plates shall be fabricated from ASTM A709 Grade 36 steel and galvanized.

Flat washers 3" x 1 3/4" x 3/16" minimum shall be used at all post bolts between the bolt head and beam. The washers shall be rectangular in shape with an 11/16 x 1-inch slot, or when necessary of such design as to fit the contour of the beam. Rectangular washers 3" x 1 3/4" x 5/8" shall be used between the blackout and the thrie beam rail.

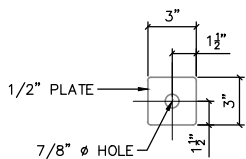
Special drilling of the thrie beam may be required at the splices. All drilling details shall be shown on the shop drawings.

Fabrication of structural steel shall be in accordance with Sec 1080.

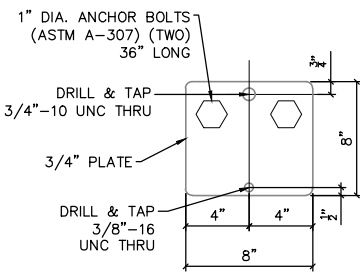
See Missouri Standard Plan 606.00 for details not shown.



PART SECTION MID-SPAN
(SL-1 Bridge Railing)



BEARING PLATE



BASE PLATE
(mid-span)

Detail September 2021
Checked September 2021

Note: This drawing not to scale. Follow dimensions.

Sheet No. S13 of S16

| | |
|----------------|---------|
| Date | 5-17-22 |
| Revision/Issue | #2 |
| ADDENDUM | #2 |
| No. | 1 |

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



MELISSA M. MASSAR
MO# PE-2018000237

C.R. 85 BRIDGE #22300051
DADE COUNTY, MISSOURI

THRIE BEAM DETAILS

Copyright © 2021 by
Great River Engineering

CHECKED BY: LNC
DRAWN BY: KFB
JOB NUMBER: 3628
FILE NAME: 3628_Structural
SCALE: NO SCALE
ISSUE DATE: 10.04.2021
SHEET NUMBER:

S13



CONTRACTOR NAME: _____

ADDRESS LINE 1: _____

ADDRESS LINE 2: _____

PHONE NUMBER: _____

EMAIL: _____

Dade
N. Dade 85
BRO-B029(12)

DATE: _____

ITEMIZED BID FORM

| LINE | ITEM | DESCRIPTION | UNITS | QUANTITY | UNIT PRICE | AMOUNT |
|----------------------|------|---|-------|----------|-------------------------------|--------|
| ROADWAY ITEMS | | | | | | |
| 1 | 201 | CLEARING AND GRUBBING | ACRE | 0.2 | _____ | _____ |
| 2 | 203 | UNCLASSIFIED EXCAVATION (ROADWAY) | C.Y. | 336 | _____ | _____ |
| 3 | 203 | EMBANKMENT IN PLACE W/COMPACTION | C.Y. | 676 | _____ | _____ |
| 4 | 304 | TYPE 1 AGGREGATE FOR BASE (5 IN. THICK) | S.Y. | 1017 | _____ | _____ |
| 5 | 407 | SEAL COAT | S.Y. | 864 | _____ | _____ |
| 6 | 606 | GUARDRAIL TYPE A | L.F. | 62.5 | _____ | _____ |
| 7 | 606 | TYPE A CRASHWORTHY END TERMINAL | EACH | 3 | _____ | _____ |
| 8 | 606 | GUARDRAIL ANCHOR, ROCK FACE | EACH | 1 | _____ | _____ |
| 9 | 606 | ASYMETRICAL TRANSITION SECTION, 6.5 FT. POSTS | EACH | 4 | _____ | _____ |
| 10 | 607 | FENCE | L.F. | 254 | _____ | _____ |
| 11 | 611 | TYPE 2 ROCK BLANKET | C.Y. | 256 | _____ | _____ |
| 12 | 616 | CONSTRUCTION SIGNS | S.F. | 63 | _____ | _____ |
| 13 | 616 | TYPE III MOVEABLE BARRICADE WITH LIGHT | EACH | 4 | _____ | _____ |
| 14 | 618 | MOBILIZATION | L.S. | 1 | _____ | _____ |
| 15 | 805 | SEEDING | ACRE | 0.2 | _____ | _____ |
| 16 | 806 | SILT FENCE | L.F. | 738 | _____ | _____ |
| | | | | | ROADWAY ITEMS SUBTOTAL | _____ |
| BRIDGE ITEMS | | | | | | |
| 17 | 206 | CLASS 1 EXCAVATION | C.Y. | 35 | _____ | _____ |
| 18 | 216 | REMOVAL OF BRIDGES | L.S. | 1 | _____ | _____ |
| 19 | 702 | GALVANIZED STRUCTURAL STEEL PILES (12 IN) | L.F. | 104 | _____ | _____ |
| 20 | 702 | PRE-BORE FOR PILING | L.F. | 40 | _____ | _____ |
| 21 | 702 | PILE POINT REINFORCEMENT | EACH | 8 | _____ | _____ |
| 22 | 703 | CLASS B CONCRETE (SUBSTRUCTURE) | C.Y. | 34.3 | _____ | _____ |
| 23 | 703 | SLAB ON CONCRETE NU-GIRDER | S.Y. | 210 | _____ | _____ |
| 24 | 705 | NU 35 (900), PRESTRESSED CONCRETE NU-GIRDER | L.F. | 223 | _____ | _____ |
| 25 | 713 | BRIDGE GUARD RAIL (THRIE BEAM) | L.F. | 162.5 | _____ | _____ |
| 26 | 716 | LAMINATED NEOPRENE BEARING PAD (TAPERED) | EACH | 6 | _____ | _____ |
| | | | | | BRIDGE ITEMS SUBTOTAL | _____ |
| | | | | | TOTAL CONTRACT | _____ |

Addenda

Signature

- _____
- _____
- _____

Job Special Provisions

DADE COUNTY BRIDGE REPLACEMENT BRO-B029(12)

JOB SPECIAL PROVISIONS – TABLE OF CONTENTS

(Job Special Provisions shall prevail over Specification and/or General Provisions whenever in conflict therewith)

- 1. GOVERNING SPECIFICATIONS AND DEFINITION CHANGES**
- 2. NOTICE OF LETTING**
- 3. BIDDING DOCUMENTS**
- 4. INSURANCE**
- 5. SUBLETTING OF CONTRACT**
- 6. CHANGE ORDERS AND ADDITIONAL WORK**
- 7. SUBSURFACE CONDITIONS**
- 8. PROJECT CONTACT FOR CONTRACTOR/BIDDER QUESTIONS**
- 9. CONTRACT PLANS AND SHOP DRAWINGS**
- 10. EMERGENCY PROVISIONS AND INCIDENT MANAGEMENT**
- 11. COOPERATION WITH UTILITIES**
- 12. UTILITY CONFLICTS**
- 13. INSPECTION OF WORK**
- 14. ACCEPTANCE OF PRECAST CONCRETE MEMBERS AND PANELS**
- 15. CERTIFICATION OF INSPECTORS**
- 16. UNAUTHORIZED AND DEFECTIVE WORK**
- 17. CONTROVERSIES AND CLAIMS FOR ADJUSTMENT**
- 18. SITE CONDITIONS**
- 19. MEASUREMENT AND PAYMENT**
- 20. SAMPLES, TESTS, AND CERTIFICATION**
- 21. PREVAILING WAGE RATE REQUIREMENTS (FEDERAL AND STATE):**
- 22. POSTED NOTICES**
- 23. PERMITS, EASEMENTS, AND RIGHT-OF-WAY**
- 24. TRAFFIC MANAGEMENT SCHEDULE**
- 25. TRAFFIC CONTROL PROVISIONS**
- 26. TRAFFIC SAFETY**
- 27. SAFETY PROVISIONS**
- 28. CONTRACTOR REPRESENTATIVE AND RESPONSIBILITIES**
- 29. CLEARING AND GRUBBING**
- 30. ROADWAY EXCAVATION, EMBANKMENT AND COMPACTION**

- 31. **EMBANKMENT PROTECTION**
- 32. **WOVEN WIRE AND/OR BARBED WIRE FENCE**
- 33. **POLLUTION, EROSION AND SEDIMENT CONTROL**
- 34. **REMOVALS FOR BRIDGE STRUCTURES**
- 35. **EXCAVATION FOR STRUCTURES**
- 36. **LOAD-BEARING PILES**
- 37. **BEARING PADS FOR STRUCTURES**
- 38. **EPOXY COATED REINFORCING STEEL**
- 39. **SEAL COAT**
- 40. **BLASTING**
- 41. **PROTECTION AND MAINTENANCE OF PUBLIC AND PRIVATE PROPERTY**
- 42. **SITE DRAINAGE**
- 43. **TOILET FACILITY LOCATIONS**
- 44. **CONSTRUCTION SITE CLEANUP**
- 45. **TAX EXEMPT**
- 46. **ACCESS**
- 47. **SAW CUTS**
- 48. **LIME AND FERTILIZER**
- 49. **SEEDING**
- 50. **VEGETATIVE MULCH AND MULCH OVERSPRAY**
- 51. **HIGHWAY SIGNING**
- 52. **LIQUIDATED DAMAGES SPECIFIED**
- 53. **CONTRACTOR FURNISHED BORROW**
- 54. **FINAL ACCEPTANCE AND PAYMENT**



JOB SPECIAL PROVISIONS

1. GOVERNING SPECIFICATIONS AND DEFINITION CHANGES

The general requirements, provisions and technical specifications governing the completion of the work contemplated shall be those known and designated as the "Missouri Standard Specifications for Highway Construction, 2021 Edition", and all revisions up until the date shown on the executed contract. The general requirements together with General and Job Special Provisions, if any, and other State and Federal requirements contained in the contract documents. In the event of conflict between the above referenced specifications and special provision, the Job Special Provisions shall have precedence, followed in descending priority by the General Special Provisions, and the MoDOT Standard Specifications. In the event of a disagreement between the Job Special Provisions and the Plans, the Plans shall have precedence.

All reference to the "County," "State" or "Owner" shall be interpreted as the Dade County Commission, Dade County, Missouri. All references to "Engineer" shall be interpreted as "Design Professional".

2. NOTICE OF LETTING

The Notice of Letting shall be in accordance with Missouri Standard Specifications for Highway Construction Section 102.1 and shall be modified to include the following:

After the date is fixed for the receipt of bids, the Owner may, in addition to the notice required by law, give notice of such date by mail/email directly to those contractors known to the consulting Design Professional as being engaged in the type of construction to be bid.

3. BIDDING DOCUMENTS

The project documents shall be distributed as a Hard-Copy. No AutoCAD drawings will be given during the bidding process. All bidders must use the design plans, specifications, and any other needed information for their bidding purposes. This may include pre-bid meeting minutes and addendums.

4. INSURANCE

The Contractor shall provide liability insurance in the type and amount specified in Section 107.13 of the MoDOT Standard Specifications, as summarized in the table below.

| | Minimum Coverage | |
|---|------------------------------------|------------------------------------|
| | Per Claimant | Per Occurrence |
| Worker's Compensation Insurance* | | |
| Commercial General Liability Insurance | \$500,000.00 | \$3,000,000.00 |
| Commercial Auto Liability Insurance | \$500,000.00 | \$3,000,000.00 |
| Jones Act Insurance** | \$2,000,000.00 | \$2,000,000.00 |
| US Longshore & Harbor Worker's Compensation Act Insurance** | \$2,000,000.00 | \$2,000,000.00 |
| Railroad Protective Liability Insurance*** | As Specified in Contract Documents | As Specified in Contract Documents |

* Required for all Contractors and all Subcontractors.

** Required if work is on or adjacent to any waters classified as "navigable waters of the United States by the USACOE.

*** Required if any work is to be performed in railroad right-of-way.

5. SUBLETTING OF CONTRACT

Subletting of the contract shall be in accordance with Missouri Standard Specifications for Highway Construction Section 108.1 and shall be modified to include the following:

The Contractor shall include the names of DBE and other subcontractors to be utilized on the project on the proposal forms. Prior to commencing work, the Contractor shall provide the Design Professional with the names of all subcontractors for approval. The subcontractors listed shall be those who will actually accomplish the work and second-tier subcontracting will not be permitted. Should for any reason a subcontractor not be able to perform the work indicated, the Contractor shall notify the Design Professional and obtain approval for assigning such work to another subcontractor before accomplishing the work.

6. CHANGE ORDERS AND ADDITIONAL WORK

Change orders and additional work of the contract shall be in accordance with Missouri Standard Specifications for Highway Construction Section 109.12 and shall be modified to include the following:

There will be no consideration given to claims for undocumented extras or overruns at the completion of the project. Change orders shall go through the appropriate approval process before the work outside of the original contract is done. Work done outside of the original contract without going through the appropriate approval process will not be considered for payment.

7. SUBSURFACE CONDITIONS

The attached boring logs and other factual subsurface information obtained for the design of this project are made available to bidders so that all have access to identical subsurface information available to the Commission and are not intended as a substitute for personal investigation, interpretations, and judgment of the bidders.

This information was obtained by the Commission for its use only for design purposes and for estimation of quantities for the purpose of bid comparison, and not to determine actual subsurface conditions, the actual quantities of subsurface materials, or the appropriate construction methods. The Commission makes no representation as to the accuracy of the logs or other subsurface information, since the accuracy is limited by the equipment used and the personal judgment of the persons making the investigation, and the logs indicated conditions encountered only at the times and the specific locations shown. Ground water observations are not routinely recorded in all boring logs and the absence of such observations does not mean that no ground water will be encountered. The furnishing of this information is not to be considered as a representation of actual conditions to be encountered during construction and does not relieve a bidder from the responsibility of making their own investigation of conditions to be encountered and basing their bid on information obtained from their own investigation. Any assumptions which a bidder may make from this data, the bidder makes at their own risk; none are intended by the Commission.

The bidder is cautioned that use of this subsurface information and all such interpretations, conclusions and recommendations are not represented or warranted to be accurate or reliable, and the Commission cannot be bound by them, whether or not it may appear to have "relied" on them. These subjective findings have not been confirmed or shown to be reliable, and the bidder assumes the sole risk of liability or loss if the bidder does rely on these documentary interpretations and conclusions to its detriment, delay or loss. The bidder assumes all risks it may encounter in basing its order of work, equipment or personnel determinations, time of performance, cost of performance, working days needed, item bid prices, or any other element of the work, on the attached documents or any other documentation, not expressly warranted, which the bidder obtains from the Commission.

The State of Missouri and, in particular, the area that encompasses this project is known to have, at least in part, bedrock that exhibits karst conditions. One karst condition is sometimes referred to as pinnacle or pinnacled rock. The nature of this condition makes graphical representations of this pinnacled zone

difficult to classify and excavate. It is incumbent upon the bidder to investigate above surface warnings of this rock formation (road cuts, quarry sites and any other exposed faces) and be aware that the same is regularly occurring phenomenon and is not to be regarded as a differing site condition or result in changes in the work, regardless of what any actual boring or lines on the plans may or may not tend to indicated.

8. PROJECT CONTACT FOR CONTRACTOR/BIDDER QUESTIONS

All questions concerning this project during the bidding process shall be forwarded to the project contact listed below:

| | |
|----------------------|---|
| <i>Name</i> | <i>Anne Pierce</i> |
| <i>Address</i> | <i>2826 S Ingram Mill Rd, Springfield, MO 65804</i> |
| <i>Phone Number</i> | <i>417-886-7171</i> |
| <i>Email Address</i> | <i>apierce@greatriv.com</i> |

9. CONTRACT PLANS AND SHOP DRAWINGS

The Contractor shall be supplied with, up to, three (3) sets of approved plans and contract assemblies including the job special provisions. The supplied plan sets shall be the original size plans that were signed and sealed. Additional sets of approved plans and contract assemblies including special provisions may be purchased at a fee of \$40 per set for 11x17 size plans with contract documents. Larger sets may be printed per the request of Contractor at a fee of an additional \$ 1 per sheet at the larger size. One (1) set of approved plans and contract documents including special provisions shall be kept available on the job site at all times. If an approved set is unavailable on the job site then work may be stopped until such time one is produced. All shipping of plans and specifications shall be done at standard shipping cost with no-mark ups.

The Contractor will be required to submit detailed shop and dimension drawings for the following items (as applicable for project):

- A. All Steel Reinforcement
- B. All Pre-Cast Concrete Items
- C. All Structural Steel (including connection details)
- D. All retaining wall structures on jobsite (including block, cast-in-place, MSE...)

Shop drawings shall be prepared in advance of fabrication and give the complete information necessary for the fabrication of the component parts of the structure. The Contractor shall submit a minimum of four (4) sets of required shop drawings to Design Professional. Upon receipt of the shop draw drawings the Design Professional will notify the Contractor that shop drawings have been received. Contractor shall allow two (2) weeks for initial review. If an Intermediate submittal is necessary, the process will be the same as the initial submittal. Allow two (2) weeks for reprocessing each submittal. No extension of Contract Time will be authorized because of failure to transmit submittals to the Design Professional. One set of drawings will be returned to the Contractor with Comments. No precast structure may be set in place until shop drawings are approved in writing.

The following information must be present on the shop drawings:

- A. Project Name/Bridge Number (Must have Federal Project No. if applicable)
- B. Date
- C. Name and Address of the Design Professional Firm
- D. Name and Address of the Contractor
- E. Name and Address of Subcontractor (if applicable)
- F. Name and Address of Supplier
- G. A 4" X 5" space for the approval markings.

A copy of the Design Professional's drawings will not be accepted as shop drawings.

Accuracy of the shop drawings is the responsibility of the fabricator. The approval will cover only the general design features, and in no case shall this approval be considered to cover errors or omission in the shop drawings.

The Contractor may choose to not supply additional steel reinforcing shop drawings. If the Contractor chooses to do so they must in writing accept the responsibility to complete all steel as required in the structural drawings and formally waives their right to request for additional compensation for errors and omissions located within the "bar-bill". The "bar-bill" is only provided to aid in the bidding purposes.

10. EMERGENCY PROVISIONS AND INCIDENT MANAGEMENT

The Contractor shall have communication equipment on the construction site or immediate access to other communication systems to request assistance from the police or other emergency agencies for incident management. In case of traffic accidents or the need for police to direct or restore traffic flow through the job site, the Contractor shall notify police or other emergency agencies immediately as needed. The area Design Professional's office shall also be notified when the Contractor requests emergency assistance.

CONSULTANT:

Name *James Sutton*
Business Number *417-886-7171*
Cell Number *417-840-4843*

CONSULTANT:

Name *Anne Pierce*
Business Number *417-886-7171*
Cell Number *417-299-1730*

PRESIDING COMMISSIONER:

Name: *Randall Daniel*
Phone Number: *417-637-2271*

This list is not all inclusive. Notification of the need for wrecker or tow truck services will remain the responsibility of the appropriate police agency.

The Contractor shall notify law enforcement and emergency agencies before the start of construction to request their cooperation and to provide coordination of services when emergencies arise during the construction at the project site. When the Contractor completes this notification with law enforcement and emergency agencies, a report shall be furnished to the Design Professional on the status of incident management.

No direct pay will be made to the Contractor to recover the cost of the communication equipment, labor, materials or time required to fulfill the above provisions.

11. COOPERATION WITH UTILITIES

For informational purposes only, the following is a list of names, addresses, and telephone numbers of the known utility companies in the area of the construction work for this improvement:

The Contractor shall make suitable and timely written request to all utility owners, all pipe line owners, or other parties affected, and endeavor to have all locations determined and any necessary adjustments of public or private utility fixtures, pipe lines, and other appurtenances within or adjacent to the limits of construction, made as soon as practicable. One (1) copy of all requests shall be submitted to the Design Professional.

The Contractor is responsible for contacting all utility companies on the site for locations of their facilities and for protecting the utilities and coordinating his activities with any required relocations.

The utilities shown on the plans may not be accurate and may have been relocated. The Contractor shall contact all utilities to obtain plans showing their relocation and contact Missouri One-Call (1-800-344-7483) and the utility companies for field locates.

Some of the utilities may not be clear of the project when the Notice to Proceed is issued. It shall be the Contractor's responsibility to contact the utilities, and coordinate work around the utility companies' schedules. The Contractor shall make every effort to coordinate his work in such a manner as to expose possible utility conflicts ahead of Contractor's work. In the event a conflict is found, the Contractor shall contact and coordinate with the utility involved and Design Professional to resolve the conflict.

The Contractor agrees that any effects of the presence of the utilities, their relocation, Contractor's coordination of work with the utilities and any delay in utility relocation shall not be compensable as a suspension of work, extra work, a change in the work, as a differing site condition or otherwise including but, without limitation, delay, impact, incidental or consequential damages. The Contractor's sole remedy for the effects of the presence of utilities, delay in their relocation or any other effects shall be an excusable delay as provided in Section 105.7.3. The Contractor waives, for itself, its subcontractors and suppliers the compensability of the presence of utilities, delay in their relocation and any cost to the Contractor, its subcontractors and suppliers in any claim or action arising out of or in relation to the work under the contract.

The Contractor shall be solely responsible and liable for incidental and consequential damage to any utility facilities or interruption of the service caused by it or its subcontractors operation. The Contractor shall hold and save harmless the Commission from damages to any utility facilities interruption of service by it or its subcontractor's operation.

In the event utility services are interrupted as a result of breakage within the project limits, the Contractor is to notify the appropriate utility authorities and cooperate with them until service has been restored.

The Contractor shall call Missouri One Call System prior to start of construction. Missouri One Call can be reached at 1-800-DIG-RITE (800-344-7483). A copy of all correspondence between the Contractor and Missouri One Call System shall be forwarded to the Design Professional.

12. UTILITY CONFLICTS

The Contractor shall make every effort to locate all underground pipe lines and conduits by contacting owners of underground utilities, by prospecting, or otherwise, in advance of trench excavation operations. Certain pipelines, water mains, propane gas, petroleum lines, telephone cables, power lines, cable television, and other existing underground and above ground installations and structures in the vicinity of the work to be done hereunder are indicated on the plans according to the best information made available to the Design Professional and the Owner. Neither the Design Professional nor the Owner guarantees the accuracy of such information, however.

Connections from the mains to the houses or businesses for sanitary sewers, water and gas services, and other utility lines are not indicated on the plans. Any conflict with these service lines from the house to the main, not specified as part of the utilities relocations, will be the responsibility of the Contractor to either relocate or work around at no cost to the project.

Any delay or extra cost to the Contractor caused by utilities or pipe lines or other underground structures or obstructions not shown by the plans, or found in locations different than those indicated shall not constitute a claim for extra work, additional payment, or damages.

The Contractor will be solely responsible for any or all damages whether direct, indirect or consequential to underground or above ground utilities and pipelines and the surroundings and shall indemnify and hold harmless the Owner and Design Professional for any and all claims, or judgments whenever made as a result of his actions.

13. INSPECTION OF WORK

Inspection of Work shall be in accordance with Missouri Standard Specifications for Highway Construction Section 105.10 and shall be modified to include the following:

Inspections and job control tests will generally be made by the Design Professional on the following items of work. It shall be the responsibility of the Contractor to notify the Design Professional 24 hours preceding any operations which affects the following items:

- A. Initial Layout
- B. Removal of Existing Structure
- C. Any Blasting Operations
- D. Utility Relocation
- E. Trench Excavation
- F. Footing Excavation
- G. Pile Driving Operations
- H. Bedding and Backfill of Storm Drainage Items
- I. Reinforcing Steel Placement
- J. All Concrete Operations
- K. All Asphalt Operations
- L. All Girder and Deck Panel Erection
- M. Embankment Fill and Compaction
- N. Geotextile Placement
- O. Rock Blanket Placement
- P. Seeding and Mulching
- Q. Fencing
- R. Pavement Striping and Marking

If any operation which affects the above mentioned items is to be performed on a Monday, notification must be made to the Design Professional by 12:00 p.m. (noon) of the preceding Friday. If any operation which affects the above mentioned items is to be performed on a Saturday or Sunday, notification must be made to the Design Professional by 3:00 p.m. of the preceding Thursday. The lack of observation or inspection by the Design Professional shall not relieve the Contractor of the responsibility to construct the project in accordance with the plans and specifications. Any work that is performed or materials used without authorization by the Design Professional may be ordered removed and replaced at Contractors Expense. Failure to notify the Design Professional as stated above will result in one of the following actions:

- A. Removal of Work
- B. Work Stoppage
- C. No Payment made for that Item
- D. Partial Payment being made for that Item.

The Contractor shall further notify the Design Professional of the timeframe during which he intends to perform the work being tested. From the time that the Contractor requests that the Design Professional or his appointed representative be on-site, the Contractor shall have a 2 (two) hour window during which to begin the task being observed / tested. If the Contractor is not able to begin the work within this 2 (two) hour window, the additional time that the Design Professional or his representative is on-site due to the delay in beginning the work shall be reimbursed to the Owner by reducing the Contractor's pay request in an amount equal to the Owner's cost.

The Missouri Department of Transportation, Federal Highway Administration and its representative shall have the right to inspect work at any time.

Unless otherwise specified, compliance sampling of the concrete shall be subject to visual inspection, job control tests, and compressive strength tests performed on job control samples. These inspections and job control tests will be performed by a MoDOT certified inspector of the Design Professional at no cost to

the Contractor. Any concrete testing outside of the compliance sampling will be at the Contractor's expense.

14. **ACCEPTANCE OF PRECAST CONCRETE MEMBERS AND PANELS**

The following procedures have been established for the acceptance of precast concrete girders, slab panels, MSE wall systems, and other structural members. Shop drawings shall be submitted for review and approval to the engineer of record for the local public agency (LPA). The approval is expected to cover only the general design features, and in no case shall this approval be considered to cover errors or omissions in the shop drawings. The LPA or their engineer of record has the option of inspecting the precast units during fabrication or requiring the fabricator to furnish a certification of contract compliance and substantiating test reports. In addition, the reports shown below shall be required.

- Certified mill test reports, including results of physical tests on the reinforcing steel and prestressing strands as applicable.
- Concrete mix designs.
- Test reports on concrete cylinder breaks.

The LPA or their engineer of record shall verify and document that the dimensions of the precast units were checked at the jobsite and found to be in compliance with the shop drawings. I-Girders and miscellaneous prestress units shall comply with section 1029.7 of the "Missouri Standard Specification for Highway Construction," 2021 Edition and current supplemental specification revisions. For dimensional requirements are seen below:

| Solid Slab Beams, Voided Slab Beams, and Box Girder Beams | |
|---|---|
| Length of Beam | ± 1/8 inch per 10 feet of beam length, but no greater than 3/4 inch |
| Width (Flanges, Web and Fillets) | +3/8 inch, -1/4 inch |
| Depth (Flanges, Web and Fillets) | ± 1/4 inch |
| Depth (Overall) | ± 1/4 inch |
| Horizontal Alignment – (Deviation from a straight line parallel to centerline of member) | 1/4 inch max., to 40-foot lengths 3/8 inch max., 40 to 60-foot lengths |
| Camber (Deviation from design camber within 7 days of strand release) | ± 1/2 inch, to 80-foot lengths |
| In Final Place - Out of plane deviation from one beam relative to the adjacent beam, measured on the top of the beam with a level at a right angle to the beam length | ± 1/2 inch |
| Stirrup Bars (Projection above top of beam) | ± 3/4 inch |
| Stirrup Bars (Longitudinal spacing) | ± 2 inches |
| Longitudinal Tie Position | ± 1/8 inch center of gravity of reinforcing steel |
| Position of Lifting Devices | ± 6 inches |
| Transverse Tie Inserts | ± 1/2 inch |
| Anchor Rod Sleeves | ± 1 inch |
| Guardrail Embedment Plates | ± 1/2 inch from designated location, |
| Bearing Area (Deviation from plane) | ± 1/8 inch |
| Bearing Plates (Centerline to centerline) | ± 1/8 inch per 10 feet of beam length, but no greater than 3/4 inch |
| Bearing Plates (Centerline to end of beam) | ± 1/2 inch |

The fabricator shall notify the engineer a minimum of 48 hours prior to casting of the precast products.

Forms and formwork, placing and tying of reinforcing bars and placing and vibrating of concrete shall be in accordance with Sections 703 and 706, with the following additions:

- (a) Clamps, bolts or other devices connecting the bulk-head to the side forms, inserts and blockouts shall be capable of being removed or loosened before curing is applied.
- (b) Exterior forms for members shall be metal other than aluminum, mortar-tight and of adequate design to produce members within the tolerances specified. Supplemental forms, such as those used to form steps or to establish slopes, may be made of a material other than metal, so long as dimensional tolerances and mortar-tightness are maintained.
- (c) The temperature of the mixed concrete when placed shall be no higher than 90 F. The forms and reinforcing steel shall be cooled by acceptable methods to an ambient temperature of 90 F or lower.

Curing of concrete members shall be kept continuously wet until the conclusion of the curing period. Curing shall be accomplished by covering with burlap or jute mats kept continuously wet by moist air, live steam or any combination of these methods. Other moist curing methods that will keep the member moist may be used provided the details of the proposed method are submitted to the engineer and approved. As soon as the concrete has set sufficiently that no marring of the surface or distortion will result, wet burlap or jute mats shall be applied, covering the exposed surface. Curing shall be continued until the concrete has attained the design compressive strength shown on the plans. The concrete shall not be exposed to temperatures below freezing until the curing has been completed.

Forms shall not be stripped from concrete members sooner than 12 hours after casting. If the concrete strength has then been attained, forms may be removed and members moved without unnecessary delay to a curing area. If forms are removed before the concrete has attained the strength which will permit the units to be moved or stressed, only the minimum area of the curing enclosure that is necessary to remove each individual form section shall be removed at any one time. The open area in the enclosure shall immediately be closed as each form section is removed. When the surrounding air temperature is below 30 F, no portion of the enclosure shall be removed before the unit has attained the required transfer strength. Forms of test specimens shall be stripped at the same time the forms are removed from the members.

Handling and storage of members shall be performed with the members in an upright position and with points of support in approximately the same position as designated for the final position of the members in the structure. Members shall not be transported nor erected until the concrete has attained the design compressive strength shown on the plans. In storage, the members shall be fully supported across their width on battens that are no less than 4 inches wide. During transportation, the ends of beams shall not extend more than 1 1/2 times their depth beyond the supports on the transporting vehicle. During storage, the supports shall maintain the members in essentially a level position without twisting. Stacking of members in storage shall be done only with the approval of the engineer. If such permission is granted, the supports of all members shall be in the same vertical planes and shall be of adequate thickness to prevent damage to the lifting devices.

Each precast unit shall be identified with the date, manufacturer and identification number. Markings may be indented on the unit or painted thereon with waterproof paint, and shall be located so that they are easily identifiable on-site. These markings shall be shown on the shop drawings for confirmation in the field for final placement.

All work and materials shall be subject to visual inspection and shall be approved by the engineer prior to final acceptance.

Four sets of shop drawings shall be submitted to the engineer for review and approval. Accuracy of the shop drawings is the responsibility of the fabricator. The approval will cover only the general design features, and in no case shall this approval be considered to cover errors or omission in the shop drawings.

15. CERTIFICATION OF INSPECTORS

All technicians who perform, or are required by the FHWA to witness, such sampling and testing of materials and products incorporated into the project, shall be deemed as qualified by virtue of successfully completing the requirement of the MoDOT EPG 106.18 Technician Certification Program, for the specific technical area(s) witnessed or sampled.

16. UNAUTHORIZED AND DEFECTIVE WORK

All construction and materials which have been rejected or declared unsatisfactory shall be remedied or removed and replaced in a manner acceptable to the Design Professional by the Contractor at the Contractor's expense. It shall be the Contractor's responsibility to properly dispose of rejected material in a manner acceptable to the Design Professional. All expense incurred by the owner due to corrections, or removal and replacement of rejected construction materials shall be borne by the Contractor. Upon failure of the Contractor to remedy or remove and properly dispose of rejected materials or work, or to replace them immediately after receiving written notice from Design Professional, the Owner may employ labor to rectify the work, and the cost of rectification will be deducted from any payment due or which may become due to the Contractor. All decisions regarding rejection and remedied construction or materials shall be the final decision of the Design Professional. All expenses including labor time incurred by Design Professional will be billed to the Contractor at Standard Billing Rates for the Project. Failure by Contractor to follow Design Professional's direction regarding unauthorized or defective work will result in a work stoppage.

Please refer to Missouri Department of Transportation State Standard Specifications 105.1.1 for Authority of Design Professional regarding Defective work.

17. CONTROVERSIES AND CLAIMS FOR ADJUSTMENT

If any conditions arise which in the Contractor's opinion will require him to make any claims or demands for extra or additional compensation above that fixed by the Contract, or on which he contemplates bringing claims for such extra compensation, he shall promptly and before incurring any expense, notify in writing the Design Professional of the conditions and circumstances and that he proposes to make such claims. The Contractor agrees that any claims made without such advance notice, and not presented in such manner as to enable the Design Professional to observe conditions as they occur and to verify expenses as they occur and to determine with certainty the correctness of such claims and of the expenses involved, are waived and shall be null and void. No extra compensation shall be awarded in any event without prior written approval from the Owner. The Contractor shall have a maximum of ten (10%) markup on materials and subcontractors for overhead, profit and coordination. The Design Professional reserves the right to request documentation of materials and subcontractor costs from the Contractor and/or any subcontractors.

If any conditions arise which in the Contractor's opinion will require him to make any claims or demands for extra or additional completion time above that fixed by the contract, he shall notify in writing the Design Professional of the conditions and circumstances and that he proposes to make such claims within one (1) calendar day of the delay. The Contractor agrees that any claims made without such notice, and not presented in such manner as to enable the Design Professional to observe conditions as they occur and to verify delays as they occur and to determine with certainty the correctness of such claims and of the delay involved, are waived and shall be null and void. No extra completion time shall be awarded in any event without written approval by the Owner and Design Professional within five (5) days of the occurrence.

All written request from Contractor must be made in a professional manner, personal attacks, slander, or derogatory or threatening tone will be automatically rejected. All written request from Contractor shall contain in the title the County, Bridge No. and Federal Project No. In addition all written request must be signed by the Contractor.

18. SITE CONDITIONS

The Contractor shall view the site of the work and make his own determination of the conditions to be encountered in accomplishing the work. The submission of a bid shall be considered proof that the bidder has made his own examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the plans and specifications.

19. MEASUREMENT AND PAYMENT

Measurement and Payment shall be in accordance with Missouri Standard Specifications for Highway Construction Section 109 and shall be modified to include the following:

The Contractor shall submit to the Design Professional progress payment estimates, as agreed upon at the preconstruction conference, for the work performed and the value thereof at the contract unit prices. The proper percentage with relation to completion will be allowed for all incomplete items. The Design Professional will review the payment estimate and verify percentage of work complete.

No payment will be made on account of materials not yet incorporated into the work without prior approval and written agreement.

Payment may be withheld or nullified in whole or part to such extent as may be necessary to protect the Owner from loss on account of:

- A. Failure of Contractor to properly submit material certifications and substantiating test reports required under the Job Special Provisions.
- B. Failure of Contractor to properly submit certified copies of labor payrolls required under Section 110 of the MoDOT Standard Specifications.
- C. Failure of the Contractor to properly make payment to suppliers or subcontractors for material and/or labor.
- D. A reasonable doubt that the contract can be completed for the balance then unpaid.
- E. Damage by the Contractor to a property owner.
- F. In accordance with the Missouri Prompt Pay Act (34.057 RSMo), the Owner may withhold payment for any of the following reasons:
 - 1. Liquidated damages
 - 2. Unsatisfactory job progress
 - 3. Defective construction work or material not remedied
 - 4. Disputed work
 - 5. Failure to comply with any material provisions of the contract
 - 6. Third party claims filed or reasonable evidence that a claim will be filed
 - 7. Failure to make timely payments for labor, equipment or materials
 - 8. Damage to a Contractor, subcontractor or material supplier
 - 9. Reasonable evidence that a subcontractor or material supplier cannot be fully compensated under its contract with the Contractor for the unpaid balance of the contract sum.
 - 10. Citation by the enforcing authority for acts of the Contractor or subcontractor which do not comply with any material provisions of the contract and which result in a violation of any federal, state or local law, regulation or ordinance applicable to that project causing additional costs or damage to the Owner.

20. SAMPLES, TESTS, AND CERTIFICATION

The Contractor shall submit certifications and substantiating test reports, furnished by the supplier or fabricator for all materials incorporated into the work, certifying that material and manufacturing procedures conform to the specifications. All sampling and testing required by the specifications shall be performed by the supplier in accordance with these specifications, and the results shall be signed, sealed and stamped according to laws related to professional engineers. There shall be no direct charge to the Owner for materials taken as samples, either for field tests or for laboratory tests. If a specification of a recognized national standard agency (ASTM, AASHTO, AWWA, AWS, etc.) is designated, the material may, unless otherwise specified, meet either the designated specification or the latest revision thereof in effect at the time of letting of the contract.

All submittals for samples, tests, and certification shall bear the name and address of the Contractor and supplier; the name of the project, including Federal Project Number and the specification reference for the material being submitted. Submittals not bearing this information will be rejected and returned without further review.

The testing laboratory to be used shall be subject to the approval of the Design Professional. The name of the testing laboratory shall be submitted to the Design Professional at least 10 calendar days prior to any testing.

The Contractor shall require his suppliers to provide the following testing and material certifications:

- A. Aggregate base: Name of supplier, source, gradation, and supplier certification.
- B. Oil for Prime and Tack Coat: Name of supplier, source of oil, and supplier's certification.
- C. Plant mix bituminous base and plant mix bituminous surface: Name of supplier, source of materials used in the mix, mix design to be used, and supplier's certification.
- D. Precast Concrete: Name of source and supplier of concrete and concrete materials, mix design, compressive strength test results, and supplier's certification.
- E. Cast in place concrete: Name of supplier of concrete and source of aggregate, cement, admixtures; mix design; and supplier's certification.
- F. Supplier's certification for all other materials used in work.
- G. Structural Steel Welding: Name of Company performing welding services and applicable certifications.
- H. Sod: Name and address of supplier and supplier's certification.
- I. Permanent Turf Reinforcement Mat: Name and address of supplier and supplier's certification.

Tests and sampling shall be done in accordance with the Specifications, General Special Provisions or Job Special Provision. Three copies of all test reports and certifications shall be submitted to the Design Professional for review. The Design Professional reserves the right to waive certain tests or to require additional tests should job conditions or workmanship warrant. Such additional tests will be provided at the Contractor's expense except as otherwise provided for in Defective Work.

If material is rejected for whatever reason, the Contractor shall pay for all retesting until a suitable material is found.

The Design Professional at no expense to the Contractor may perform or employ a competent testing

laboratory to perform the following field acceptance tests:

- A. Soil Density Tests. One test shall be made per 300 linear feet of roadway on exposed compacted subgrade and in each lift of embankment.
- B. Cast-in-place concrete: One slump test, one air entrainment test, and 3 compression test cylinders will be taken for each concrete placement or for each 50 cubic yards placed.
- C. Soil properties: Classification, Atterberg Limits and a moisture-density relationship curve for each type of proposed borrow material as well as a qualified soils engineer's recommendations as described in the section entitled "Embankment in Place."
- D. Plant mix bituminous base and plant mix bituminous surface: One density, extraction, and gradation test may be taken per 500 linear feet of pavement at locations designated by the Design Professional.

The Contractor will notify the Design Professional in advance of work requiring field inspection or testing in accordance with the section entitled "Inspection of Work" of these Job Special Provision Sections.

Unless otherwise specified, all materials shall be subject to visual inspection and job control tests, as determined by the Design Professional, and shall be certified by the material supplier that the material supplied conforms to the requirements of these specifications. All certifications shall make reference to the specific project name, Federal Project Number and shall contain the supplier's name and address.

Prior to Final Payment, the Contractor shall file with the Owner the following:

- A. The Fig. 136.11.9 Contractor DBE Certification showing the final DBE participation on the project including the DBEs used, the type of work performed, and the dollar amount paid to each DBE.
- B. Fig. 136.11.10 Contractor's Affidavit Regarding Settlement of Claims
- C. Fig. 136.11.11 Affidavit (Compliance with Prevailing Wage Law)
- D. Any other documents which may be required by the contract, Owner or the Consulting Design Professional.

These forms may be found online under section 136.11.20. at

http://epg.modot.org/index.php?title=136.11_Local_Public_Agency_Construction#136.11.19_Final_Acceptance.

When the work has been completed and certified by the Owner, a final estimate will be executed and submitted, which will provide payment to the Contractor for the entire sum due to him as set forth in these specifications, including the amount previously retained by the Owner. All prior partial estimates and payments shall be subject to correction by the Owner in this final estimate and payment.

21. PREVAILING WAGE RATE REQUIREMENTS (FEDERAL AND STATE):

The proposal and contract contains provisions requiring payment of the prevailing hourly rate of wages for each craft or type of workman required to execute the contract as determined by the Missouri Department of Labor and Industrial Relations, and requires adherence to a schedule of minimum wages as determined by the United States Department of Labor. For work performed anywhere on this project, the Contractor and the Contractor's Subcontractors shall pay the higher of these two applicable wage rates.

The Contractor and all subcontractors shall maintain books, accounts, ledgers, invoices, drafts, documents, pages and other business records pertaining to the performance of the contract with such materials available at the Contractor's field or permanent business offices at all reasonable times during the performance of the contract and for three (3) years from the date of final payment under the contract,

for inspection by authorized representatives of the Owner.

The Contractor and each subcontractor shall be required to submit to the Design Professional one certified copy of labor payrolls for each week that work is in progress. Certified payrolls are to be submitted with monthly pay requests. If work is temporarily suspended, the last payroll shall be marked appropriately to note that it will be the last payroll until work is resumed.

Payrolls to be submitted shall be checked for compliance with the contract requirements and will be retained by the Owner for a period of three years following final payment, during which time they will be open to inspection by authorized representatives of the Owner.

The Contractor shall be responsible for the submittal of payrolls and certifications for all subcontractors.

The Design Professional will check payrolls, with the following checks being made to insure proper labor compliance.

1. The employee's full name, identifying number (such as last four digits of Social Security Number) and complete address, including zip code, must appear on each payroll. For projects that are only state-funded projects, addresses will be required to be placed on certified payrolls. For federal-aid projects, placing addresses on the payrolls will be optional. The Contractor is not allowed to include complete Social Security numbers on certified payrolls. The Contractor must assign the employee an identification number and place that identification number on the certified payroll. This identification number can be the last four digits of the employee's Social Security number.
2. Check the payroll for correct employee classification.
 - a. Check to assure each employee has a classification.
 - b. Make sure classifications are correct as related to the type of work the company has subcontracted.
 - c. Employees enrolled in the MoDOT training program must be shown on the payroll in the classification they are enrolled in as trainee. (i.e. Crane Operator Trainee, Carpenter, Laborer, etc.)
 - d. When possible, confirm that employees are classified correctly as to what type work they are performing by using the interview process, jobsite visits, and communication with the inspectors, and by reviewing the Inspector's Daily Report of Construction.
 - e. Foremen or supervisors who perform 20% or less of the day with the tools of the trade are exempt from the Davis Bacon Act. They must appear on the payroll as "foreman" or "supervisor" with a breakdown of hours per day and total hours and, since hourly wage rates are not required, they can be listed under Salary Agreement.
 - f. Foremen or supervisors who work with tools of the trade more than 20% of the day are not entitled to an exemption under the Davis Bacon Act. Thus, if the hourly wage rate is the same for both classifications the employee will be listed on the payroll to show both classifications in which they performed (i.e. Foreman/Carpenter), hours per day listed along with an hourly wage rate, gross amount earned, deductions and net wages paid. But, if the hourly wage rate is not the same for both classifications then multiple listings for the employee shall be included on the payroll to show each classification of work performed in each day along with all the appropriate information.
3. Check the payroll for correct hourly wage and, where applicable, the correct overtime hourly rate.
 - a. Check employee's rate of pay against the state and federal wage rates, where applicable, to make sure he/she is receiving at least the minimum for his/her classification as per the prevailing wage schedule in the contract. For federally funded projects the rate of pay is the highest of either the federal or state wage

- rates.
- b. Make sure fringe benefit amount plus base pay amount matches or exceeds the designated fringe benefit amount plus designated base pay amount from the applicable wage order. For example, the base pay amount could be less than that designated as the prevailing wage, if the fringe benefit amount is more than that designated, and the two together meet or exceed the designated gross prevailing wage. The Contractor should be encouraged to list the exact fringe paid for each employee on the payroll. If the Contractor chooses to certify that the fringe benefits are being paid to approved plans, funds, or programs, the Contractor shall provide documentation that the correct payment amount is being paid to the fund for the individual employees.
 - c. Check the daily and weekly hours worked in each classification including actual overtime hours worked (not adjusted hours).
4. All deductions shall be listed and the net wage shown. The Form WH-347 is to be used where fringe benefits are paid into established programs. However, if fringe benefits are paid in cash to the employee, the amount shall be indicated on the payroll and noted on the statement of compliance.
- a. All deductions must be identified. If a deduction of "other" is listed on the payroll it must be explained on the statement of compliance.
 - b. Some typical deductions include
 - 1) State or federal taxes
 - 2) Voluntary insurance, pension, and/or retirement plans
 - 3) Child support and other payments ordered by a court (but not payments to the employer)
 - 4) Prepaid wages
 - 5) Payments to charitable organizations
 - 6) Union dues when agreed to by the union (fines are not allowable)
 - c. All deductions must be an approved deduction. (If not on the approved list above, documentation giving employee's permission for the deduction must be on file.)
 - d. Non-standard deductions can be approved by the Division of Labor on a yearly basis. The Contractor must provide documentation along with the payroll when any approved non-standard deductions are in use.
5. To assure that the payrolls are arithmetically correct, approximately 10% of the extensions on the first three payrolls shall be checked. The Contractor is to be advised of any violations noted on the labor payroll. All the errors are to be corrected by means of a supplementary payroll.
6. All checking by the local agency shall be initialed by the checker.
7. Final payrolls shall be marked "Final" or "Last Payroll."
8. The local agency is to maintain a secure record of all payrolls.

22. POSTED NOTICES

The contractor shall meet the requirements outlined at http://epg.modot.org/index.php?title=Category:110_State_and_Federal_Wage_Rates_and_Other_Requirements#Required_Notices_and_Posters. Adherence to these requirements is mandatory and will be inspected at the start of the job and every other month until the project is completed. The bulletin board should remain in good condition and display all the required posters.

23. PERMITS, EASEMENTS, AND RIGHT-OF-WAY

Unless specifically stated otherwise, the easements and rights-of-way for the construction will be provided by the Owner. The Contractor shall confine his construction operations to the immediate vicinity of the

location shown on the plans, and shall use due care so as to cause the least possible damage to property. All work shall be completed within the right-of-way and easements.

All licenses, permits, certificates, etc., required for and in connection with the work to be performed under the provisions of these contract documents shall be secured by the Contractor entirely at his own expense.

The Contractor shall not park, store materials, or equipment, etc. off of the right-of-way or temporary construction easement without written permission from the property owner. A copy of such written permission shall be given to the Design Professional. The Contractor shall be fully responsible for any damages to property. The Contractor shall use caution when working in the temporary easement area so as not to unnecessarily damage any existing features on the properties. At the completion of the project, areas of temporary easement shall be restored to a condition equivalent to prior to construction and a release signed by the property owners.

24. TRAFFIC MANAGEMENT SCHEDULE

Traffic management schedules shall be submitted to the Design Professional for review prior to the start of work and prior to any revisions to the traffic management schedule. The traffic management schedule shall include the proposed traffic control measures, hours traffic control will be in place, and work hours.

The Contractor shall notify the Design Professional prior to lane closures or shifting traffic onto detours.

The Design Professional shall be notified as soon as practical of any postponement due to weather, material or other circumstances.

In order to ensure minimal traffic interference, the Contractor shall schedule lane closures for the absolute minimum amount of time required to complete the work. Lanes shall not be closed until material is available for continuous construction and the Contractor is prepared to diligently pursue the work until the closed lane is opened to traffic.

Traffic Congestion:

The Contractor shall, upon approval of the Design Professional, take proactive measures to reduce traffic congestion in the work zone.

25. TRAFFIC CONTROL PROVISIONS

Work Zone Traffic Management shall be in accordance with appropriate portions of Division 100 and Division 600 of the Missouri Standard Specifications for Highway Construction 2021 Edition, and specifically as follows:

All signing and barricades shall conform to the current edition of the Manual on Traffic Control Devices published by the Federal Highway Administration, including any revisions thereto. Where Type III barricades are required, they shall be an 8-foot minimum rather than the 2-foot minimum shown in the Traffic Control Manual.

Traffic control devices shall be set up prior to the start of construction and construction shall not begin until the signing and barricading has been reviewed by the Design Professional. All traffic control devices shall be properly maintained for the project duration. They shall remain in place only as long as they are needed and shall be removed immediately thereafter. When operations are performed in stages, there shall be in place only those devices that apply to the conditions present during the stage in progress.

Signs that do not apply to conditions present shall be removed, covered, or turned so as not to be readable by oncoming traffic. Contractor shall be responsible for providing and maintaining all traffic control devices and flagpersons as necessary to protect the work area and safeguard and direct traffic around the work.

The traffic control provisions called for on the Traffic Control Plans are the minimum requirements for traffic control and the Contractor shall implement additional measures as deemed appropriate by the Design Professional. Cost of all traffic control measures used, including but not limited to flagpersons, channelizer barrels, cones, barricades, flashers, and temporary striping requirements shall be considered covered by the contract amount for the pay items, CONSTRUCTION SIGNS AND MOVABLE BARRICADES. Upon failure of the Contractor to comply with any traffic control directive given by the Design Professional, the Owner shall have the authority to cause said conditions to be corrected and to deduct the associated cost from any payment due, or which may become due, the Contractor.

The Contractor shall not begin a phase of the project that will detour or close the roadway to traffic until the Contractor has all materials necessary for that phase of the work delivered to the site or readily available to him, all necessary equipment and manpower readily available, and is prepared to perform the work with due diligence, so as not to impede traffic for an unnecessary amount of time.

The Contractor shall submit any variations or different concepts for the Traffic Control Plans to the Design Professional in writing and drawing format. The variations will only be allowed if approved by the Design Professional in writing. Failure to maintain the traffic management plan shall be grounds for the Design Professional to issue a stop work order. No further work will be allowed on site until all requirements of the traffic management plan as shown in the plans are in place. The time that work is stopped will not be a basis for extension of the day count. The days for which work is stopped will count toward the days called for in the contract.

26. TRAFFIC SAFETY

Where traffic queues routinely extend to within 1000 feet (300 m) of the ROAD WORK AHEAD, or similar, sign on a divided highway or to within 500 feet (150 m) of the ROAD WORK AHEAD, or similar, sign on an undivided highway, the Contractor shall extend the advance warning area, as approved by the Design Professional.

When a traffic queue extends to within 1000 feet (300 m) of the ROAD WORK AHEAD, or similar, sign on a divided highway or to within 500 feet (150 m) of the ROAD WORK AHEAD, or similar, sign on an undivided highway due to non-recurring congestion, the Contractor shall deploy a means of providing advance warning of the traffic congestion, as approved by the Design Professional. The warning location shall be no less than 1000 feet (300 m) and no more than 0.5 mile (0.8 km) in advance of the end of the traffic queue on divided highways and no less than 500 feet (150 m) and no more than 0.5 mile (0.8 km) in advance of the end of the traffic queue on undivided highways.

27. SAFETY PROVISIONS

The Contractor shall be solely responsible for establishing and conducting a project safety program for the protection of the public and personnel employed by the Contractor and his subcontractor(s) on the project site or in the immediate vicinity of the work.

All costs incurred by the Contractor and his subcontractor(s) for establishment and maintenance of the Safety Program shall be considered completely covered by the total contract amount with no additional compensation being made for acquisition of safety equipment or performance of safety related procedures.

28. CONTRACTOR REPRESENTATIVE AND RESPONSIBILITIES

The Contractor shall have on the work site at all times, as the Contractor's agent, a competent individual who is capable of reading and thoroughly understanding the plans and specifications, has read the specifications, and is thoroughly experienced in the type of work being performed, who shall receive instructions from the Design Professional. That individual shall have full authority to execute orders or directions of the Design Professional without delay, and to promptly supply such material, equipment, tools, labor and incidentals as may be required. That individual shall coordinate work with all subcontractors, utility companies, other Contractors in the area and any other coordination needed.

Failure of the Contractor to have the Contractor's agent on the work site when work is in progress will be grounds for the Design Professional to issue a Stop Work Order. No further work will be allowed on site until the Contractor's agent is on the work site. The time that work is stopped will not be a basis for extension of the day count. The day that work is stopped will count toward the days called for in the contract.

The Contractor shall give the work the constant attention necessary to facilitate the progress thereof, and shall cooperate with the Design Professional in every way possible.

The Contractor shall maintain one set of contract documents on the work site at all times.

29. CLEARING AND GRUBBING

Clearing and Grubbing shall be in accordance with Missouri Standard Specifications for Highway Construction Section 201 and shall be modified to include the following:

No tree or shrub in any Right of Way or Easement (Temporary or Permanent) shall be removed, trimmed or otherwise disturbed without the prior authorization by the Design Professional. Such authorization will be given in the case of any tree or shrub within trench or other excavation limits where a thorough examination shows that the root structure is such that the construction cannot continue.

No tree or shrub outside the limits of any trench located on or across private property shall be removed without the prior written consent of the property owner (or legal representative of the property owner) of the lot or tract of land on which such tree or shrub is located.

The Contractor shall use every precaution to protect and prevent injury to trees and shrubs indicated to remain on or adjacent to the sites of the work, and he shall replace, at his own cost and expense, each and every tree and shrub not authorized by the property owner for removal, which may be damaged or destroyed by him, his employees, or subcontractor.

Payment for Clearing and Grubbing will be made on a plan quantity basis at the unit price per acre for the bid item "CLEARING AND GRUBBING". All costs associated with clearing and grubbing of project area, waste sites, and borrow areas shall be considered completely covered by the bid item "CLEARING AND GRUBBING".

30. ROADWAY EXCAVATION, EMBANKMENT AND COMPACTION

Roadway Excavation, Embankment and Compaction shall be in accordance with Missouri Standard Specifications for Highway Construction Section 203 and shall be modified to include the following:

All roadway excavation shall be unclassified. Payment for unclassified excavation will be made on a plan quantity or change order quantity basis, to the nearest cubic yard, at the contract unit price per cubic yard for bid item "UNCLASSIFIED EXCAVATION (ROADWAY)", and will be considered full compensation for:

- (a) Excavating.
- (b) Hauling any distance.
- (c) Placing and forming embankments.
- (d) Preparation of subgrade
- (e) Shouldering, rounding slopes, obliterating existing roadbeds or temporary construction, finishing of graded earth roadway, picking up and disposing of field stone and other rock.
- (f) Disposal of excess excavation, including provision of, mulching and seeding waste areas.

Payment for embankment and compaction will be made on a plan quantity or change order quantity basis, to the nearest cubic yard at the contract unit price per cubic yard for bid item "EMBANKMENT IN PLACE WITH COMPACTION", and will be considered full compensation for:

- (a) Transporting roadway excavation or stockpile material or furnishing, transporting and placing borrow material from a contractor provided source.
- (b) Placing and forming embankments.
- (c) Compacting embankment or for adding or reducing water content of the embankment.
- (d) Any excavation required to provide embankment material, including mulching and seeding a borrow site.
- (e) Any work noted on the plans to be included in the contract unit price for embankment in place.

The Contractor shall be responsible for disposal of all excavated waste and unsuitable materials in accordance with all applicable Federal, State, and local ordinances. (See Procedures for Environmental Clearance of Borrow Sites and Other Disturbed Areas Outside of Right-of-Way.) This shall include any stockpiles of utility spoils along the project. The Contractor shall provide the Design Professional with copies of all necessary environmental clearances for any location which he intends to use to place such waste material. Disposal shall be considered incidental to the project and no additional payment will be made for compliance with this special provision. This includes, but is not limited to, procurement of all necessary environmental clearances for any proposed waste sites, loading, unloading, and hauling off of waste material, placement of waste material, and restoration of waste site after use, including seeding and mulching the waste area. Submittal for these clearances shall be considered incidental to construction and no direct payment will be made. An adjustment to the contract time will be considered for any delay caused by receiving the required clearances, but will not be a basis for additional compensation.

Embankment shall be constructed in accordance with this Specification. This work shall consist of constructing the required embankment from suitable material excavated on site or borrow materials obtained from sources selected by the contractor and approved by the Design Professional. This work shall be performed in conformance with the lines, grades and typical sections shown on the plans.

Prior to beginning excavation and embankment operations, clearing, grubbing and stripping shall be performed in that area. The existing asphalt driving surface and aggregate base (or existing gravel surface) shall be scarified and completely broken up to a minimum depth of at least six inches the full project length. Existing slopes steeper than 3 horizontal to 1 vertical will be cut and benched as indicated on the plans or as directed by the Design Professional. In areas in which less than 24" of compacted fill is to be placed over the old roadbed, the scarified pavement will be removed or redistributed in areas where more than 24" of fill will be placed.

The scarified material, existing subgrade and embankment in place shall be compacted using a sheepsfoot roller of sufficient weight and number of passes being made until no pumping is observed. The Design Professional shall observe the contractor Proof Rolling the subgrade as defined later in this specification. The Contractor shall endeavor to maintain the exposed subgrade in good condition, primarily by means of providing for proper drainage of the roadbed. If, through negligence on the part of the Contractor, the exposed subgrade degrades and becomes unsuitable, the Contractor, at his own expense, shall perform stabilization measures to eliminate soft spots, pumping, etc.

Embankment Material shall be clayey soils containing high chert content, obtained from sources selected by the Contractor and meeting with the approval of the Design Professional.

The contractor shall submit soil test results from an independent soil testing laboratory demonstrating that the proposed borrow material is suitable for roadway fill and giving a standard Proctor density curve. Embankment and Borrow material shall have characteristics generally as follows:

Liquid Limit <50
Plasticity Index <20
Maximum Density ≥ 90 pcf
Optimum Moisture 10-20%
California Bearing Ratio ≥ 6

The contractor shall endeavor to maintain the completed embankment in good condition, primarily by means of providing for proper drainage of the roadbed and repair of equipment rutting. If, through negligence on the part of the Contractor, the embankment degrades and becomes unsuitable, the Contractor, at his own expense, shall perform corrective measures consisting of removal and replacement of a depth of embankment sufficient to restore the embankment to good condition, i.e., eliminate soft spots, pumping, etc.

Placement of roadway embankment shall be in layers not exceeding 8 inches, an uncompacted measurement, and shall be compacted as specified before the next layer is placed. The layers shall be placed approximately parallel to both the proposed profile grade and to the finished roadbed. Effective spreading equipment shall be used on each lift to obtain uniform thickness prior to compacting. Continuous leveling and manipulating will be required during compacting operations.

Occasional stones or rock fragments exceeding the thickness of the 8 inch layer shall be disposed of by being incorporated in the embankment outside the limits of the proposed surfaced traffic lanes. The thickness of the layer in these areas may be increased if necessary to accommodate the stones, but shall not exceed 12 inches, an uncompacted measurement.

Compaction of embankment on each layer shall consist of distributing all equipment movements over the entire embankment area and of at least three complete passes with a tamping-type roller. The tamping-type roller shall have tampers or feet projecting no less than 6 inches from the surface of the drum and shall have a minimum load on each tamper of 250 psi of tamping area. Compactive efforts shall be continued, if necessary, until the tamping feet penetrate no more than 2 inches into the layer of material being compacted. Continuous leveling and manipulating will be required during compacting operations and the moisture content shall be adjusted as necessary to permit proper consolidation.

Proof Rolling shall be used when verifying the stability and uniformity of the subgrade. This procedure shall be performed in the presence of the Design Professional or its designee.

1. Use a test roller conforming to the following:
 - A. Tandem axle, dual wheel dump truck.
 - B. Tire pressure shall be no less than 90 percent of the manufacturer's recommended maximum inflation.
 - C. The minimum gross weight of the load truck shall be 60,000 pounds (30 ton). A weigh slip shall be provided, showing total weight, front axle weight and rear axle weight.
2. Procedure.
 - A. Operate equipment at a rate not to exceed 3 to 5 mph or a comfortable walking pace. Adjust the speed to allow the Inspector to measure any deflections and/or areas of rutting.
 - B. Operate proof roller in a pattern so that all affected areas are loaded with at least one pass.

C. After proof rolling, check the subgrade for conformance to the plans, and correct all surface irregularities. Re-shape the subgrade within tolerances.

3. Evaluation.

A. Rutting up to 1 inch is acceptable. Rutting in excess of 1 inch shall be considered a failure and will require that the soil be reworked and compacted to the required density.

B. Deflection (pumping) up to 1 inch is acceptable. Deflection in excess of 1 inch but more than 2 inches shall be acceptable if there is not substantial cracking or lateral movement of the soil. Deflection in excess of 2 inches shall be considered failure, and will require that the soil be reworked and compacted to the required density.

C. When remedial work is performed new test roll shall be performed upon completion of the work.

31. EMBANKMENT PROTECTION

Embankment Protection shall be in accordance with Missouri Standard Specifications for Highway Construction Section 611 and shall be modified to include the following:

No broken concrete is allowed in the rock blanket. Broken concrete from the project may be used in fill locations as directed by the engineer and placed per Missouri Standard Specifications for Highway Construction Section 203. No broken concrete shall be brought to the project.

Payment for embankment protection will be made on a plan quantity basis and at the unit price per cubic yard for the bid item "TYPE 2 ROCK BLANKET". All costs associated with furnishing the material, securing the source, quarrying, excavating, breaking and hauling the material to the job site, placement of the material, filter fabric and placement thereof, any excavation, backfilling, or subgrade preparation that may be required, and other work associated with placing the "TYPE 2 ROCK BLANKET" shall be considered completely covered by the bid item "TYPE 2 ROCK BLANKET".

32. WOVEN WIRE AND/OR BARBED WIRE FENCE

Fencing shall be in accordance with Missouri Standard Specifications for Highway Construction Section 710 and shall be modified to include the following:

This work shall consist of furnishing and erecting woven wire and/or barbed wire fence, complete in place, in conformity with the plans, and at locations as shown on the plans, or established by the Design Professional. This bid item shall also include removal of the existing fence and posts.

Generally, fencing shall consist of the following materials:

- A. Steel line post (4" dia X 6'-0") or T-post @ 10' on center.
- B. 5 strand, 4 point barbed wire, 12 gauge.
- C. Zinc-coated or aluminum-coated woven wire fabric equal to or exceeding existing material.
- D. Steel corner posts, 5" dia. @ top x 10'-0"
- E. Steel brace posts, 2" dia. @ top x 10'-0"
- F. Fabricated steel braces.
- G. Brace wire, #9 gauge tension wire.
- H. Heavy duty tubular steel gate.

Fencing shall be moved or adjusted prior to construction as necessary by the contractor to fit the new construction. Temporary fencing shall be provided where existing fencing is removed for construction. Temporary fencing shall consist of at least 3-strand barbed wire with metal "T" post. Wooden corner posts are allowed. Contractor shall maintain temporary fencing in good, working condition until permanent

fencing is completed. Cost for furnishing, installing, and maintaining the temporary fence shall be considered incidental to fence construction or considered completely covered by the contract unit price for other items included in the contract.

Posts shall be set plumb, true to line and grade. Corner post assemblies shall be set at all horizontal angle points greater than 15 degrees in the line of fence. Pull post assemblies shall be set at all vertical angle points greater than 15 degrees but at not greater than 660 feet intervals. Corner post shall have a minimum embedment length of 5-feet into the ground.

Walk gates and drive gates complete with hinges, latches, braces, stops and locking devices shall be installed at locations shown on the plans. They shall be of the type and size shown on the plans.

Final measurement will not be made except for authorized changes during construction which significantly change the contract quantity or where appreciable errors are found in the contract quantity. The revision or correction will be computed and added to or deducted from the contract quantity. Any changes must be approved in writing by the Design Professional prior to work being performed.

Payment will be made on a plan quantity basis at the unit price per lineal foot for the bid item "FENCING". All costs associated with fencing including materials, excavating for posts, backfilling, clearing of fence row, trenching for fabric, placing extra strands of barbed wire for depressions, and all other incidental work or material shall be considered completely covered by the bid item "FENCING".

Payment will be made on a plan quantity basis at the unit price per each for the bid item "GATES". All costs associated with gates shall be considered completely covered by the bid item "GATES".

33. POLLUTION, EROSION AND SEDIMENT CONTROL

Pollution, erosion and sediment control shall be in accordance with Missouri Standard Specifications for Highway Construction Section 806 and shall be modified to include the following:

Payment for rock ditch checks will be made on a plan quantity basis and at the unit price per each for bid item "ROCK DITCH CHECK". All costs associated with constructing, maintaining, and repairing the rock ditch check shall be considered completely covered by the bid item "ROCK DITCH CHECK".

34. REMOVALS FOR BRIDGE STRUCTURES

Removals for Bridge Structures shall be in accordance with Missouri Standard Specifications for Highway Construction Section 216 and shall be modified to include the following:

Payment for removals of bridge structures will be made on a plan quantity basis and at the unit price per lump sum for bid item "REMOVAL OF BRIDGES". All costs associated with removing the existing bridge structures shall be considered completely covered by the bid item "REMOVAL OF BRIDGES".

35. EXCAVATION FOR STRUCTURES

Excavation for Structures shall be in accordance with Missouri Standard Specifications for Highway Construction Section 206 and shall be modified to include the following:

This work shall consist of the necessary excavating for the foundations of all structures, the shaping and clearing of the upstream and downstream banks in the vicinity of the structure, the removing and the disposing of all excavated material, the backfilling around the completed structures, and all related works. Limits of the channel work are shown on the plans. Payment will be made on a plan quantity basis at the unit prices per cubic yard for the bid item "CLASS 1 EXCAVATION".

36. LOAD-BEARING PILES

Load bearing piles shall be in accordance with Missouri Standard Specifications for Highway Construction Section 702 and shall be modified to include the following:

No additional payments will be made for splicing piles and pile point reinforcement. Payment for load bearing piles will be made on an installed quantity basis and at the unit price per linear foot for the bid item "GALVANIZED STRUCTURAL STEEL PILES (12 IN.)". All costs associated with load bearing piles shall be considered completely covered by the bid item "GALVANIZED STRUCTURAL STEEL PILES (12 IN.)".

37. BEARING PADS FOR STRUCTURES

Bearing pads for structures shall be in accordance with Missouri Standard Specifications for Highway Construction Section 1038 and shall be modified to include the following:

Payment for bearing pads for structures will be made on a plan quantity basis and at the unit price per each for bid item "LAMINATED NEOPRENE BEARING PAD (TAPERED)". All costs associated with materials, labor, and equipment needed to furnish and install bearing pads shall be considered completely covered by the bid item "LAMINATED NEOPRENE BEARING PAD (TAPERED)".

38. EPOXY COATED REINFORCING STEEL

Epoxy coated reinforcing steel shall be in accordance with Missouri Standard Specifications for Highway Construction Section 710 and shall be modified to include the following:

No direct payment shall be made for made for epoxy coated reinforcing steel and shall be incidental to bid item, "SLAB ON CONCRETE NU-GIRDER", respectively.

39. SEAL COAT

Seal Coat shall be in accordance with Missouri Standard Specifications for Highway Construction Section 409 and shall be modified to include the following:

Delete Section 409.2.1

Delete Section 409.3.1 (d) and substitute the following:

409.3.1 (d) The pre-coating of aggregate is not required. Minimum application rates are as follows:

Emulsifier – 0.7 to 0.8 gallons per square yard (0.35 to 0.40 gallons per square yard per lift).

Aggregate – 50 pounds per square yard (25 pounds per square yard per lift).

Tack Coat – 0.10 gallons per square yard.

Amend Section 409.5 to include the following:

409.5.7 Application of Cover Aggregate. All portions of the surface not covered by mechanical spreaders shall be hand spotted so that the entire surface will be uniformly covered.

40. BLASTING

No blasting will be permitted for this project.

41. PROTECTION AND MAINTENANCE OF PUBLIC AND PRIVATE PROPERTY

The Contractor shall protect, shore, brace, support and maintain any underground pipes, conduits, drains,

and other underground construction uncovered or otherwise affected by the construction work performed by him. All pavement, surfacing driveways, curbs, walks, buildings, utility poles, guy wires, and other surface structures affected by construction operations in connection with the performance of this contract, together with all trees and shrubs in yards adjacent to the construction limits, shall be maintained and, if removed or otherwise damaged, shall be restored to the original condition whether within or outside the easement. All replacements of such underground construction and surface structures, or parts thereof, shall be made with new materials confirming to the requirement of these specifications, or if not specified, as approved by the Design Professional, at this Contractor's expense.

The Contractor shall be responsible for all damage to streets, roads, highways, shoulders, ditches, embankments, culverts, bridges, or other public or private property or facility, regardless of location or character, which may be caused by moving, hauling or otherwise transporting equipment, materials, or men to or from the work or any part or site thereof whether by him or his subcontractors. The Contractor shall make satisfactory and acceptable arrangements with the owner of, or the agency or authority having jurisdiction over, the damaged property or facility concerning its repair or replacement or payment of costs incurred in connection with said damage.

No fence outside of the right-of-way or easement limits shall be removed without the prior written consent of the property owner of the lot or tract of land on which such fence is located. A copy of such written permission shall be given to the Design Professional. Any damage or disturbance to any item, whether publically or privately owned, which is not noted to be disturbed shall be fixed or replaced to the satisfaction of the Owner and the Design Professional at the Contractor's expense.

42. SITE DRAINAGE

The Contractor shall be responsible for maintaining the site in a free draining condition such that water does not pond. The Contractor shall not construct cuts, embankments, ditches, etc., until provisions for drainage are in place. The Contractor may construct temporary ditches, berms, place temporary pipes, use pumps, etc., to facilitate draining the site. The Contractor shall schedule his work in a manner to meet these requirements. There will be no direct payment for any additional cost for complying with this requirement as it shall be considered incidental to the contract.

43. TOILET FACILITY LOCATIONS

The Contractor shall provide portable toilets at a minimum of one location on the project, to be placed near the majority of the work in progress. No direct payment will be made for furnishing and maintaining toilet facilities.

44. CONSTRUCTION SITE CLEANUP

Cleanup shall follow immediately after and at the same rate as construction. Cleanup shall not be delayed until the entire project is finished. Contractor shall clean all right-of-way and easement areas that were disturbed or occupied by him in connection with the construction. All disturbed brush and trees, all rubbish, excess materials, temporary structures, equipment, etc. shall be removed and the area left in a neat and presentable condition. If at any time during construction the Design Professional determines that cleanup is not being accomplished, the Design Professional may direct that no additional work be accomplished without meeting certain requirements. If so directed, no claim for additional time will be allowed. There will be no direct payment for construction site cleanup as it shall be considered completely covered by the total contract amount.

45. TAX EXEMPT

This project will be tax exempt. The Owner will furnish the necessary information for this project to be considered tax exempt.

46. ACCESS

The road will be closed for the duration of the project. The Contractor shall coordinate with local law enforcement, emergency services, schools, etc. to ensure that the public is aware that the road will be

closed for the duration of construction. A letter confirming that all actions were taken to ensure the public was aware shall then be submitted to the Design Professional prior to proceeding with construction.

47. SAW CUTS

Saw cuts shall be performed at the transition between all new pavement and existing pavement whether or not so labeled on the plans. This includes asphalt and concrete surfacing. Saw cuts shall be full depth. The saw cuts shall include, but not be limited to, ends of project, side streets, driveways, sidewalks, and locations noted on the plans. Saw cuts shall be considered incidental to other work and shall not be paid for directly.

48. LIME AND FERTILIZER

Lime and Fertilizer shall be in accordance with Missouri Standard Specifications for Highway Construction Section 801 and shall be modified to include the following:

Lime and fertilizer application rates are as follows:

Soil Neutralization:

The rate of application of effective neutralizing material shall be 1200 lbs. per acre.

Commercial Fertilizer:

In accordance with Section 801.2.3, the following fertilizer shall be applied at the rate specified:

| | |
|------------------------|------------------|
| Nitrogen (N) | 80 lbs. per acre |
| Phosphoric Acid (P205) | 80 lbs. per acre |
| Potash (K20) | 80 lbs. per acre |

Payment will be made on a plan quantity basis at the unit price per acre for the bid item "SEEDING". All costs associated with fertilizing and seeding shall be considered completely covered by the bid item "SEEDING".

49. SEEDING

Seeding shall be in accordance with Missouri Standard Specifications for Highway Construction Section 805 and shall be modified to include the following:

This work shall consist of preparing, liming and fertilizing the seed bed, and furnishing and sowing the specified seed mixture and mulching. The seed mixture shall be applied at a rate specified elsewhere in this contract.

It shall be the responsibility of the Contractor to notify the Design Professional a minimum of 24 hours prior to beginning any final seeding operation. If such operations are to be performed on a Saturday, Sunday, or Monday, notification must be made to the Design Professional by 12:00 PM of the preceding Friday. The Contractor shall receive approval from the Design Professional of each area to be seeded prior to beginning any seeding activity. The lack of observation or inspection by the Design Professional shall not relieve the Contractor of the responsibility to construct the project according to the plans and specifications. Any work performed or materials used without authorization by the Design Professional may be ordered removed and replaced at the Contractor's expense.

The following seed mixtures shall be applied at the locations and rates specified:

TYPICAL MIX – For all land between Right of Way lines and temporary construction easement.

Mixture Rate

| | | |
|---------------------|-----|--------------|
| Perennial Rye Grass | 60% | 120 lbs/acre |
| Red Fescue | 30% | 60 lbs/acre |
| Red Clover | 10% | 20 lbs/acre |

TOTAL 100% 200 lbs/acre

**Must be seeded by the Broadcast and Roll method.

Payment will be made on a plan quantity basis at the unit price per acre for the bid item "SEEDING". All costs associated with fertilizing and seeding shall be considered completely covered by the bid item "SEEDING".

50. VEGETATIVE MULCH AND MULCH OVERSPRAY

Mulching shall be in accordance with Missouri Standard Specifications for Highway Construction Section 802 and shall be modified to include the following:

Payment will be made on a plan quantity basis at the unit price per acre for the bid item "SEEDING". All costs associated with furnishing and placing vegetative mulch and mulch overspray shall be considered completely covered by the bid item "SEEDING".

51. HIGHWAY SIGNING

Highway signing shall be in accordance with Missouri Standard Specifications for Highway Construction Section 903 and shall be modified to include the following:

Sign posts shall be 14 gauge, nominal 2-3/8 inch diameter triple galvanized steel with sign attachment brackets and clamps meeting the approval of the Design Professional and shall be set in 30" of concrete.

Existing signs and posts that are removed shall be delivered by the Contractor to the County Courthouse or as directed by the Design Professional.

Temporary signing and marking shall remain in place at all times during construction. Temporary signing shall be kept clean and visible through out construction. Failure to do so will result in work stoppage.

Payment will be made on a plan quantity basis at the unit price per each for the bid item "NEW ROADWAY SIGNS". All costs associated with highway signing shall be considered completely covered by the bid item "NEW ROADWAY SIGNS" or considered completely covered by the contract unit price for other items included in the contract.

52. LIQUIDATED DAMAGES SPECIFIED

If the project is not complete and open to traffic prior to the time allowed for completion as given elsewhere in the contract documents, the Owner, the traveling public, state and local Law Enforcement, Emergency Responders, and governmental authorities will be damaged in various ways, including but not limited to, increased construction administration cost, traffic and traffic flow regulation cost, traffic congestion and motorist delay, with its resulting cost to the traveling public. These damages are not reasonably capable of being computed or quantified. Therefore, the contractor will be charged with liquidated damages as specified elsewhere in the contract documents for each day that the project is not complete and open to traffic.

The said liquidated damages will be assessed regardless of whether it would otherwise be charged as liquidated damages under the Missouri Standard Specification for Highway Construction, as amended elsewhere in this contract.

53. CONTRACTOR FURNISHED BORROW

This article provides guidelines for obtaining environmental clearance for disturbed areas such as:

Borrow Sites, Haul Roads, Burn Pits, Staging Areas and Spoil Sites at project-specific locations.

DADE COUNTY COMMISSION
BRO-B029(12)
JOB SPECIAL PROVISIONS

The necessary clearances for disturbed areas such as those referenced above shall be obtained prior to using these areas for projects. The contractor is encouraged to consider using material from previously disturbed locations (substantial disturbance) or disturbed areas that have previously been cleared, precluding the need to address most, if not all, of the issues described below. The contractor should include the federal project number on all correspondence. The following addresses the primary environmental issues related to clearance of disturbed areas such as borrow sites:

127.27.1 The Endangered Species Act

The Federal Endangered Species Act protects rare species and their habitats. The U.S. Fish and Wildlife Service (USFWS) administer the Act. Violations of this act can result in extensive project delays and severe fines. To determine if an activity will impact any rare species or their habitats, contact the Missouri Department of Conservation's Policy and Coordination Section at (573) 751-4115 to request a query of the MDC Heritage Database. All queries must be accompanied by a good quality map illustrating the location of the proposed site with a description of the activity. Allow at least three weeks for a response to all requests.

If there are no known records of rare species or sensitive habitats at the proposed site, and it is unlikely that any will be impacted by the activity, the contractor will be given clearance to proceed. However, if rare species are known or likely to occur at the site, or known critical habitat exists, further coordination with MDC and the USFWS will be necessary. Written clearance from the U.S. Fish and Wildlife Service may be required before the project can proceed.

Missouri Department of Conservation (MDC)
Planning Division
P.O. Box 180
Jefferson City MO 65102-0180
Telephone Number (573) 751-4115 or FAX (573) 751-4495

U.S. Fish and Wildlife Service (FWS)
Columbia Field Office
101 Park DeVille Drive - Suite A
Columbia, MO 65203-0007
Telephone Number (573) 234-2131 or Fax (573) 234-2182

127.27.2 Floodplain/Regulatory Floodway

An evaluation of floodplain impacts is mandated by Executive Order 11988, Floodplain Management, and subsequent federal floodplain management guidelines. When available, flood hazard boundary maps ([National Flood Insurance Program](#)) and flood insurance studies for the project area are used to determine the limits of the base (100-year) floodplain and the extent of encroachment.

The Federal Emergency Management Agency (FEMA) and Federal Highway Administration (FHWA) guidelines 23 CFR 650 have identified the base (100-year) flood as the flood having a one percent probability of being equaled or exceeded in any given year. The base floodplain is the area of 100-year flood hazard within a county or community. The [regulatory floodway](#) is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 100-year flood discharge can be conveyed without increasing the base flood elevation more than a specified amount. FEMA has mandated that projects can cause no rise in the regulatory floodway, and a one-foot cumulative rise for all projects in the base (100-year) floodplain. For projects that involve the state of Missouri, the State Emergency Management Agency (SEMA) issues [floodplain development permits](#). In the case of projects proposed within regulatory floodways, a "[No-Rise](#)" [Certification](#), if applicable, should be obtained prior to issuance of a permit.

Questions regarding floodplain and regulatory floodway should be addressed to:

SEMA

DADE COUNTY COMMISSION
BRO-B029(12)
JOB SPECIAL PROVISIONS

P.O. Box 116
Jefferson City MO
65102
(573) 526-9141

Documentation of consultation with SEMA regarding the presence of 100-year floodplain/regulatory floodway should be included in the final collection of information to be submitted to MoDOT staff.

127.27.3 Federal Emergency Management Agency (FEMA) Buyout Lands

The Flood Disaster Protection Act of 1973, as amended by the Disaster Relief and Emergency Assistance Act of 1988 (The Stafford Act), identified the use of disaster relief funds under Section 404 for the Hazard Mitigation Grand Program (HMGP), including the acquisition and relocation of flood damaged property. The Volkmer Bill further expanded the use of HMGP funds under Section 404 to "buy out" flood damaged property, which had been affected by the Great Flood of 1993.

There are numerous restrictions on these FEMA buyout properties. No structures or improvements may be erected on these properties unless they are open on all sides. The site shall be used only for open space purposes, and shall stay in public ownership. These conditions and restrictions (among others), along with the right to enforce same, are deemed to be covenants running with the land in perpetuity and are binding on subsequent successors, grantees, or assigns. Any decision involving these properties should take into consideration that 2-3 years is necessary to process an exemption from FEMA to utilize this parcel. This exemption would likely be a permanent easement rather than a transfer of property. If any proposed site is located on a FEMA buyout property, an alternative site should be chosen.

127.27.4 Farmland Protection

In order to comply with the Farmland Protection Policy Act, which has the purpose of minimizing Federal programs' contributions to the unnecessary and irreversible conversion of farmland caused by nonagricultural uses, the Form AD-1006 will need to be completed. This can be accomplished through coordination with United States Department of Agricultural (USDA)-Natural Resources Conservation Service (NRCS), and the completion of Form AD-1006. To receive the Form AD-1006, call the NRCS State office in Columbia at (573) 876-9411. An aerial map of the site or sites will also be required with the area to be disturbed identified on the map. This aerial map can be obtained from the local SCS office. In some areas of the state this office may be located in an adjoining county.

The contractor will need to complete Parts I and III of Form AD-1006. The form should then be sent to the NRCS State Office for completion of Parts II, IV and V. The address for NRCS State Office is:

Mr. Dennis Potter
State Soil Scientist
Natural Resource Conservation Service
601 Business Loop 70 West
Parkade Center, Suite 250
Columbia, MO 65203
1-573-876-9411

After the NRCS office returns the form, the contractor will complete remaining Parts VI and VII. The contractor will provide a copy of the completed form to the MoDOT district contact to document compliance with the Farmland Protection Policy Act.

127.27.5 Wetlands

Federal executive order has decreed a national policy of "no net loss of wetlands." Under this policy, impacts to wetlands must be avoided if at all practical. Where wetlands are impacted, these impacts must be mitigated by construction or enhancement of a like quantity **and** quality of new wetlands. For these reasons, avoiding impacts to wetlands is a primary goal.

To determine whether wetlands occur on a site, contact the USDA, NRCS. The NRCS has identified and mapped wetlands as a requirement under the Food Security Act. These maps are available from county

DADE COUNTY COMMISSION
BRO-B029(12)
JOB SPECIAL PROVISIONS

NRCS offices, usually located in the county seat. For all other non-farmland sites, consult the [US Fish and Wildlife Service's Wetlands Map](#). If wetlands are identified on Food Security Act wetland maps, a site visit may be needed to confirm the location of wetlands. If there are no wetland impacts, no other action need be taken.

If there are any questions about the extent of wetlands in the event that wetlands cannot be avoided, contact the U.S. Army Corps of Engineers (COE). If wetlands cannot be avoided, a COE Section 404 permit would be processed through the appropriate COE district. There are five COE districts in Missouri. Information about COE district locations, addresses and phone numbers is available on [the COE website](#).

127.27.6 Water Quality/Land Disturbance

The National Pollutant Discharge Elimination Systems (NPDES) program regulates construction activities where 1 acre or more of land is disturbed. If the project proponent has a general NPDES permit for all of their construction activities, this is adequate. If the project proponent does not have a valid general permit and the site to be disturbed is greater than 1 acre in size, a project-specific NPDES permit from DNR is required. If the project is entirely within MoDOT right of way, the sponsor may use MoDOT's general permit. In either case, the sponsor will need to develop a site-specific stormwater pollution prevention plan for the project. The sponsor shall contact the Missouri Department of Natural Resources (DNR) NPDES Storm Water Program office at (573) 751-1300 or (800) 361-4827 for further directions. A few cities (Kansas City, Columbia, and others) and counties have obtained their own land disturbance permits from DNR for generic land disturbance purposes; see additional discussion on stormwater and erosion control in [136.4 Environmental and Cultural Requirements](#) of the LPA Policy.

127.27.7 Hazardous Waste Sites

More than likely, areas to be disturbed will be located in rural areas that have been used for agriculture or similar purposes. Hazardous wastes are most typically associated with commercial or previous industrial properties.

If the proposed area is basically farmland or pasture, and has not been used for any commercial activity or dumping, hazardous wastes are unlikely. The contractor should simply document the existing and historic land use of the parcel and tell how this assessment was obtained.

In nonrural, suburban or commercial areas a nonintrusive investigation may be used to "diagnose" the environmental conditions of a selected site. The following is a list of suggested items, but not inclusive, for a cursory nonintrusive investigation.

- Examine any noticeable contamination in the form of surface staining, oil sheen, odors, stressed vegetation, spills, leaks, illegal dumping, etc.

- Conduct interviews of local citizens and current owners to identify past land use practices and hazardous waste management practices.

- Consult with local and state (Missouri Department of Natural Resources, Hazardous Waste Program, 573-751-3176) environmental regulatory agencies to identify if any past problems (complaints, citations, etc.) have occurred at the site, if any permits/licenses have been filed for the site, or if enforcement actions have occurred.

If the above analyses produce negative results, the contractor should provide documentation to the MoDOT Design Division-Environmental Section as to who was contacted and the results of the contact. However, if through the search for information described above, potential problems are identified, it would be wise to locate another site.

The potential to encounter wastes from sites that are unknown should always be a consideration. Any unknown sites that are found will be handled in accordance with Federal and State Laws and Regulations.

127.27.8 Historic Preservation

All jobs requiring environmental clearance for historic preservation (archaeological sites, buildings, and

structures) must be reviewed and approved by the State Historic Preservation office (SHPO), Department of Natural Resources. To initiate SHPO's review and clearance of a proposed site for cultural resources, a "Section 106 Project Information Form" must be completed and submitted to SHPO along with a copy of a United States Geological Survey (USGS) topographic map indicating the location of the project. In addition, photographs of any structures that will be impacted must be provided. The "Section 106 Project Information Form" can be obtained from the [SHPO website](#) or requested from the SHPO by telephone, (573) 751-7858, or mail:

Missouri Department of Natural Resources
State Historic Preservation Office
Attn: Section 106 Review
P.O. Box 176
Jefferson City, MO, 65102-0176

Based on the information supplied, SHPO may clear the project at that time or request that the contractor acquire the services of an archaeological consultant to conduct a historic preservation survey of the proposed area. A listing of currently acceptable and available archaeological consultants who can complete a survey if required can be viewed at [the SHPO's website](#). Any questions can be directed to the Design Division-Historic Preservation Section, at (573) 751-0473.

127.27.9 Public Land

If borrow sites are proposed on any publicly owned land, contact the [MoDOT district representative](#) before proceeding. Section 4(f) of the Department of Transportation Act of 1966 (now codified as 49 U.S.C. 303 and 23 U.S.C. 138) protects certain public lands. Section 4(f) requires that all U.S. DOT-funded transportation projects must avoid impacts to public parkland and wildlife refuges (and cultural resources deemed eligible for the National Register of Historic Places), unless it is successfully demonstrated that no feasible and prudent alternative exists that avoid "use" or impacts to the park or refuge. It is strongly recommended that public lands not be considered as potential borrow sites.

Once the contractor has obtained all of the above information, it should be provided to the Design Professional at Great River Engineering. The transmittal letter must include **county, route and job number** of the project, along with a map depicting the location and limits of the site(s).

54. FINAL ACCEPTANCE AND PAYMENT

If the final documents are not completed and ready for project closeout, within 60 calendar days of final acceptance of the project, the Contractor shall pay to the Contracting Authority the amount specified as liquidated damages and as a penalty for each Calendar Day until the final payment documents are completed and ready for final payment. The amount of liquidated damages shall be deducted from any payments due or to become due to the Contractor. Final documentation shall include but not be limited to the following:

1. An affidavit, on the form prescribed by the Contracting Authority, to the effect that all payments have been made and all claims have been released for all material, labor and other items covered by the contract bond.
2. A Certification, on the form prescribed by the Contracting Authority, showing the actual final DBE participation on the project including name of DBE, type of work and amount paid to each DBE firm.
3. An affidavit, on the form prescribed by the Contracting Authority, to the effect that all workers have been paid in compliance with prevailing wage requirements within the contract.
4. Any other documents that may be required by the contract.