

ADDENDUM 04

Issued: 11/12/2024

Project: Vivion Rd Trail Segment 1
PROJECT NO: TAP 3454(401)

Engineer: McClure
Matt Eblen
913-307-2588
meblen@mcclurevision.com

This addendum forms a part of the contract documents and modifies the original procurement documents dated October 2024.

ITEM

- 1. The bid due date has been extended from 11/7/24 at 10:00am to 11/15/24 at 10:00am.**
- 2. Item 26 (Double Sided address sign (NICH Associates LLC Property) has been removed from the bid form... The City will work with a contractor to remove and relocate this sign. Vivion Rd Trail contractor is asked to protect the existing sign and coordinate with City's contractor for removal and replacement timing and activities.**
- 3. Item 26 has been replaced with "Type F Barriers with Tie-Down Straps" (based on lineal footage).**
- 4. Asphalt Pavement has been changed to KC-APWA Type 5 (instead of originally specified SP 125C)**
- 5. A fee for Item 37 (Pressure Transducer Transmitter Box Relocation) has been included on the Bid Form for all contractors. The fee will cover the cost to remove and relocate the Pressure Transducer Transmitter Box.**
- 6. Temporary Shoring has been moved to a Bid Alternate. Disregard item 2 under emailed questions and answers from Addendum 2:**

~~"Is the temporary shoring quantity supposed to be a square foot quantity instead of a linear foot quantity?"~~

~~The quantity is meant to be a linear foot quantity, as it was assumed 1' wide sheet piles would be driven to the length mentioned in Addendum 1 (2,187 ft)."~~

- 7. Temporary Shoring is now listed as a SF quantity. Per MoDOT, any temporary shoring that is left in place and not completely removed should be removed to at least 2 feet below the finished ground line. Shoring shop drawings and calculations shall be designed and stamped by a Missouri Registered Engineer. SF quantity listed on the bid form is based on the shoring depths noted in Item 2 on Addendum 1. If the Contractor's**

Engineer or Contractor's installation method shows the need for less shoring the total units will be adjusted. It is not anticipated that more shoring will be needed.

EMAILED QUESTIONS AND ANSWERS

- 1. The Excavation item quantity appears to be off by quite a bit as the cross sections do not account for excavation to subgrade, so the quantity given in the bid form will likely double. This does not include wall excavation?**

This was checked twice to confirm this question, but the raw numbers (existing to finished grade surface) removed pavement thickness from the finished grade surface to create less fill. This is what was meant by the note under the summary of quantities on page 3 of the plans ("Embankment quantities have removed pavement thickness from surface to surface CAD numbers"). Wall excavation was included insofar as the existing to finished grade surfaces are concerned, but there were no additional calculations regarding gravel backfill behind the wall as regards embankment or excavation.

- 2. Would Ameristar Aegis fence be acceptable for Item 17 Railing?**

The City prefers that the fabricated rail be bid since this matches the aesthetic in other locations throughout the City.

- 3. Will there be revisions coming, specifically there is a lot of confusion about Traffic Control?**

A Type F Barrier with a Tie-Down Strap is now called for in front of the guardrail and shown on sheet 26 of the plans. Appropriate details have also been added. Per discussions with MoDOT, the updates for the Type F Barriers with a Tie-Down Strap also include minimums for lane width adjacent to the barriers on the Temporary Traffic Control Plan (sheet 30 of the plans) to keep the lanes open.

THIS IS THE END OF ADDENDUM 04 – Attachments:

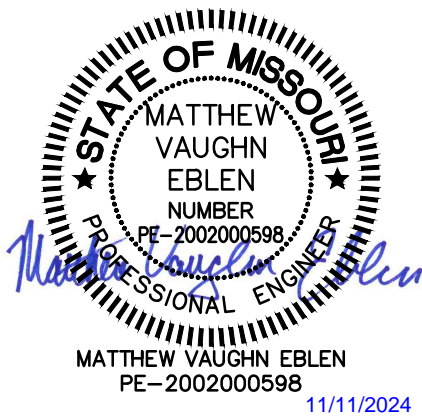
6 plan sheets

Updated bid form

PLOT DATE: 11/11/2024 8:56 AM

BY: EMCOQUEEN

LAYOUT: 24X36 (3)

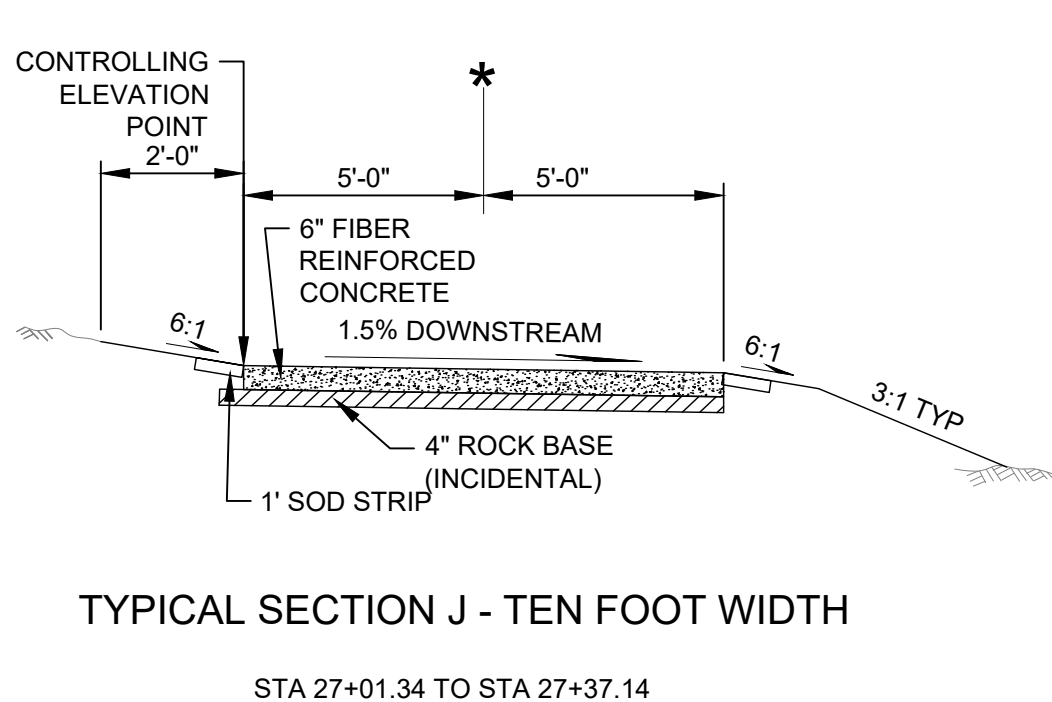
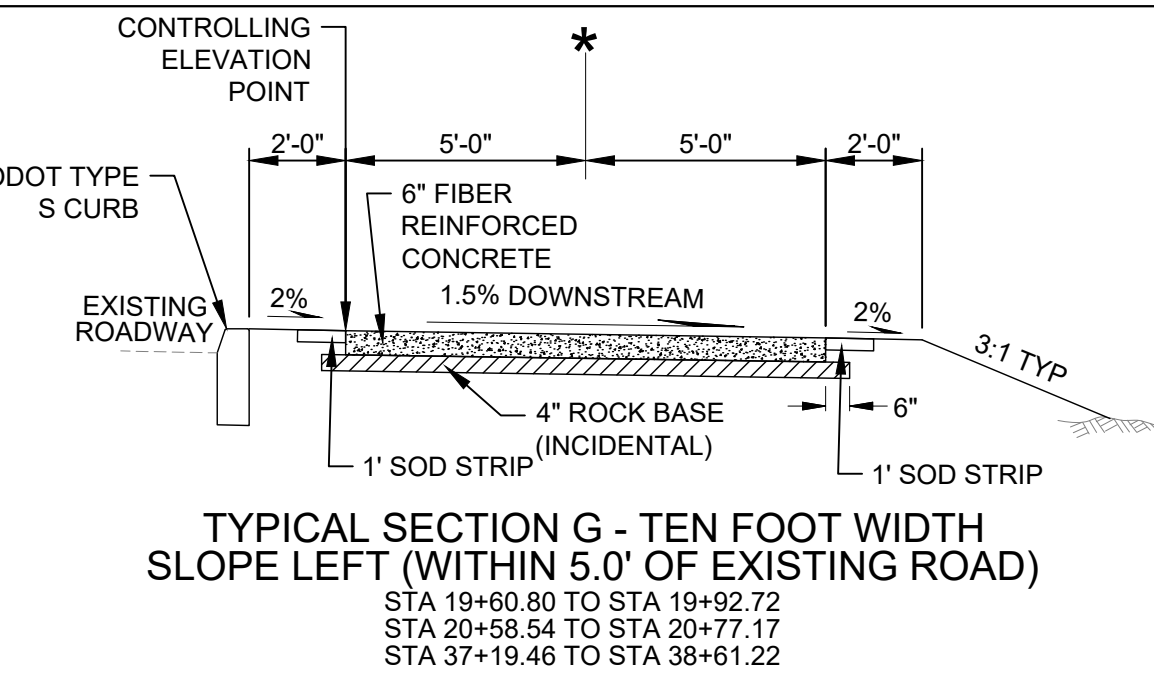
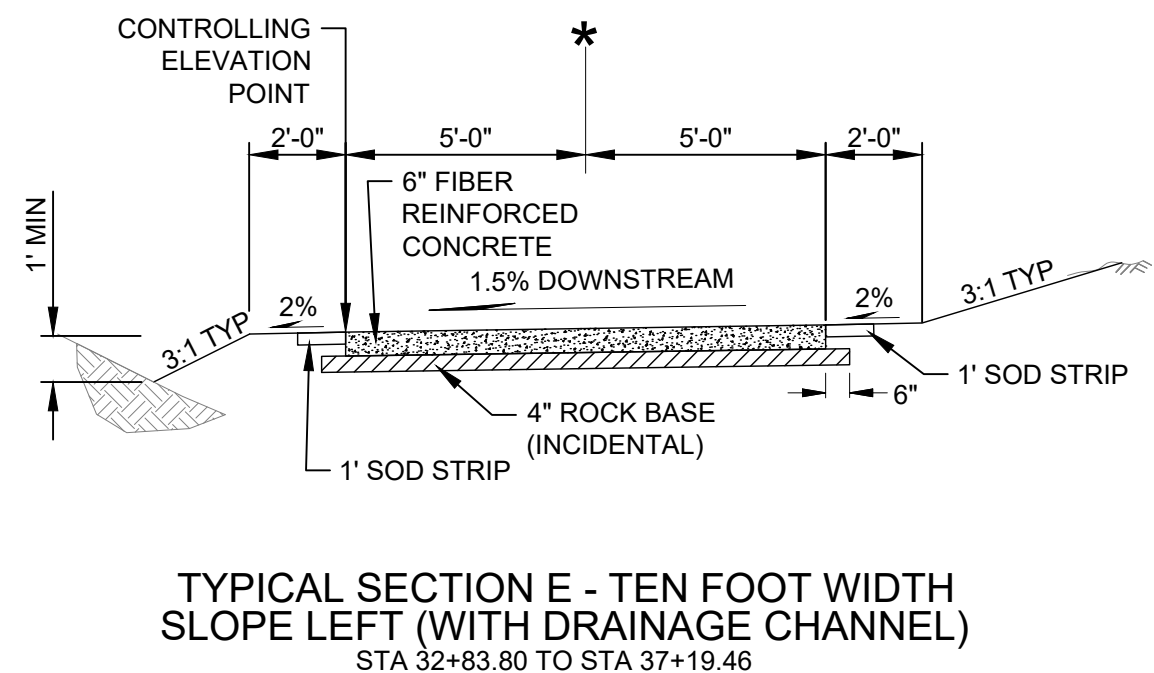
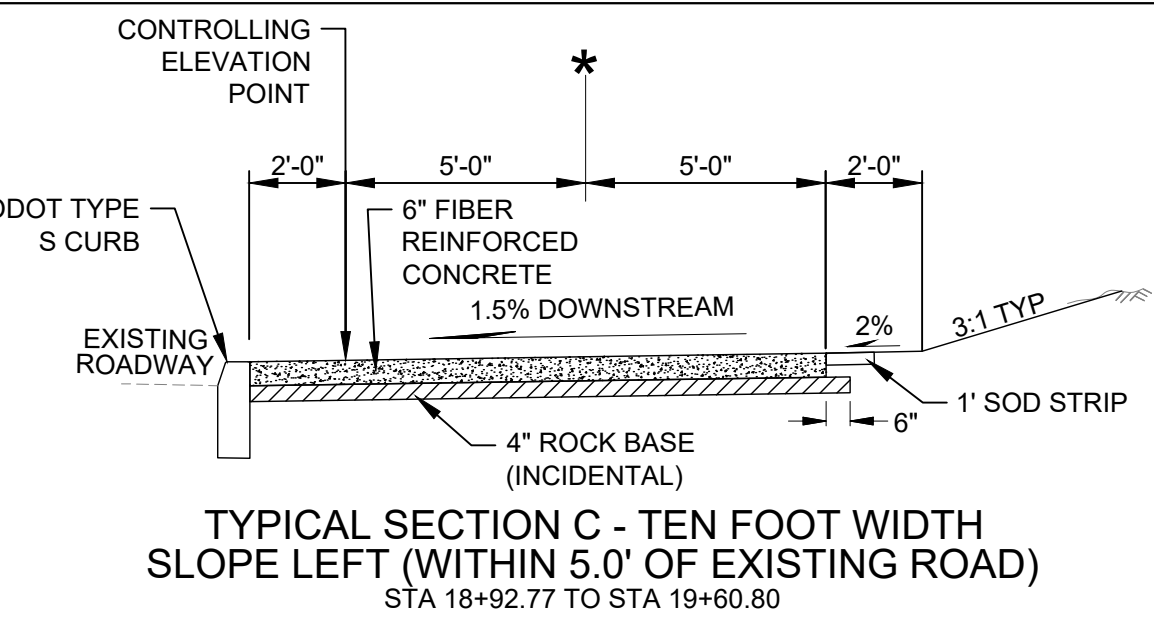
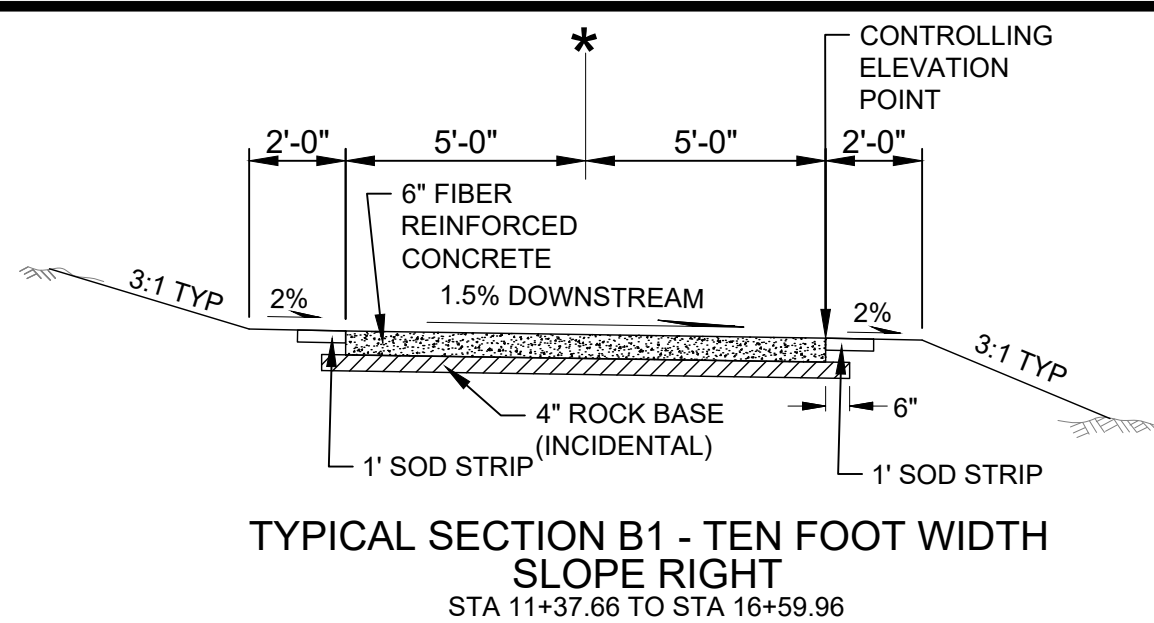
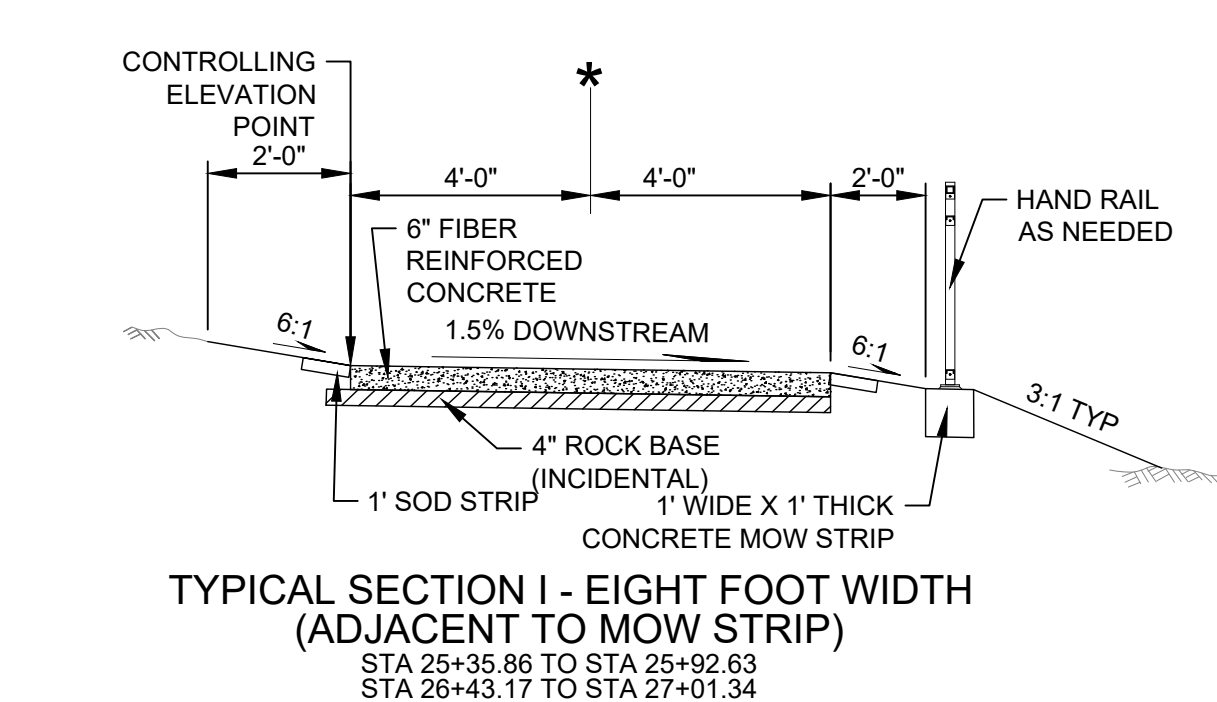
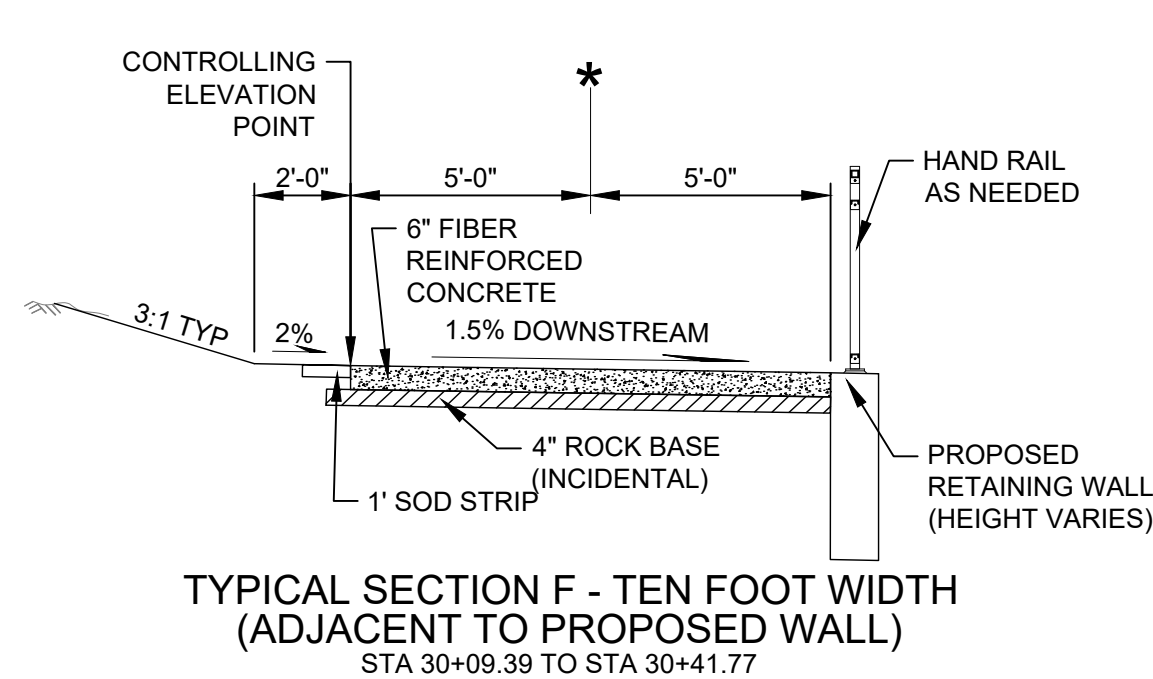
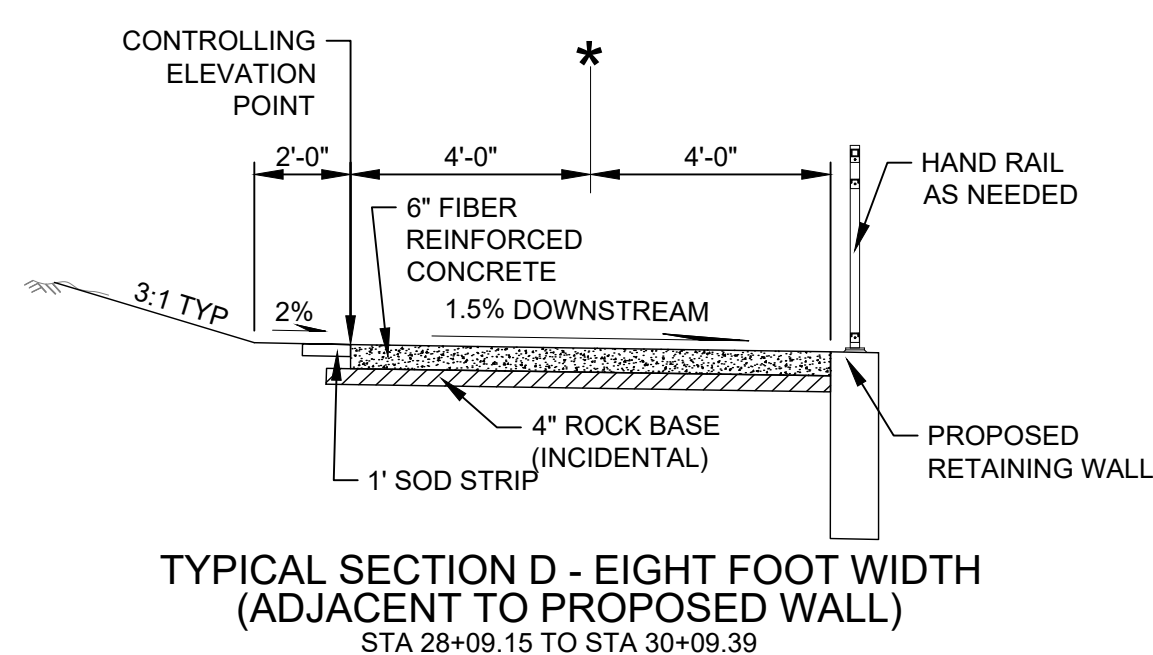
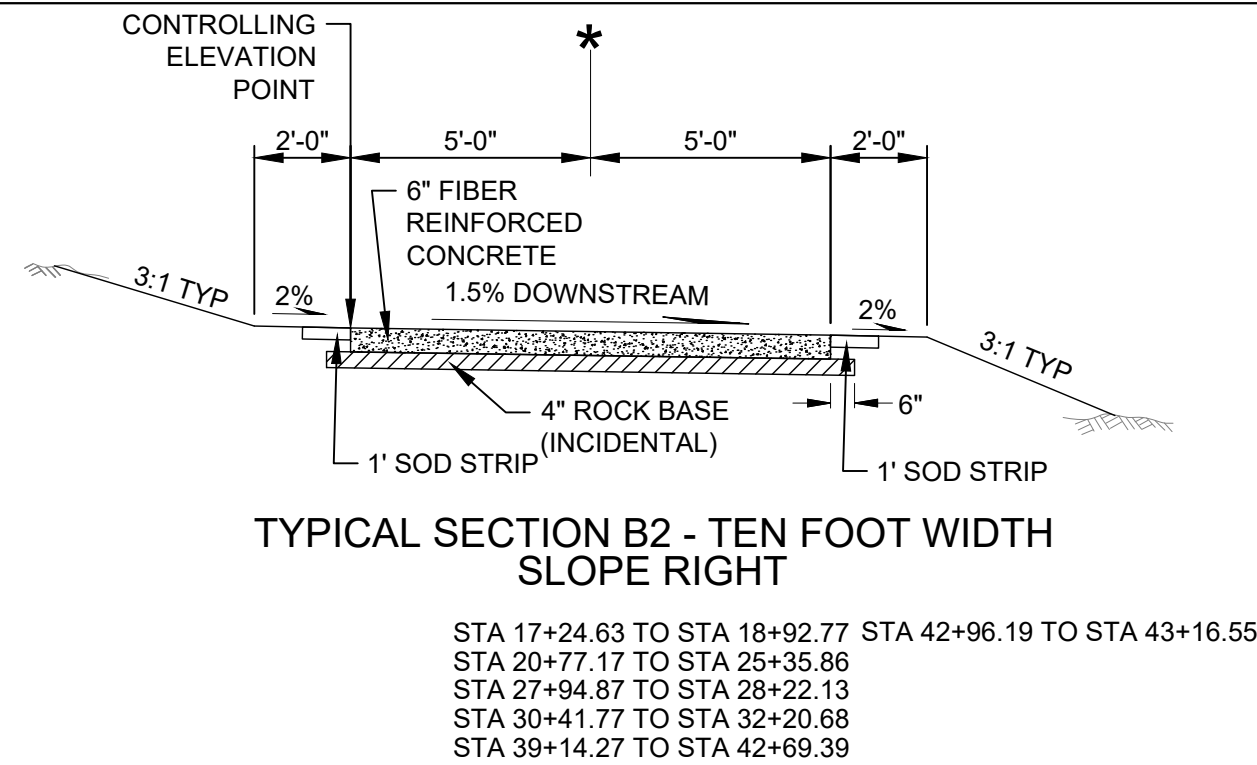
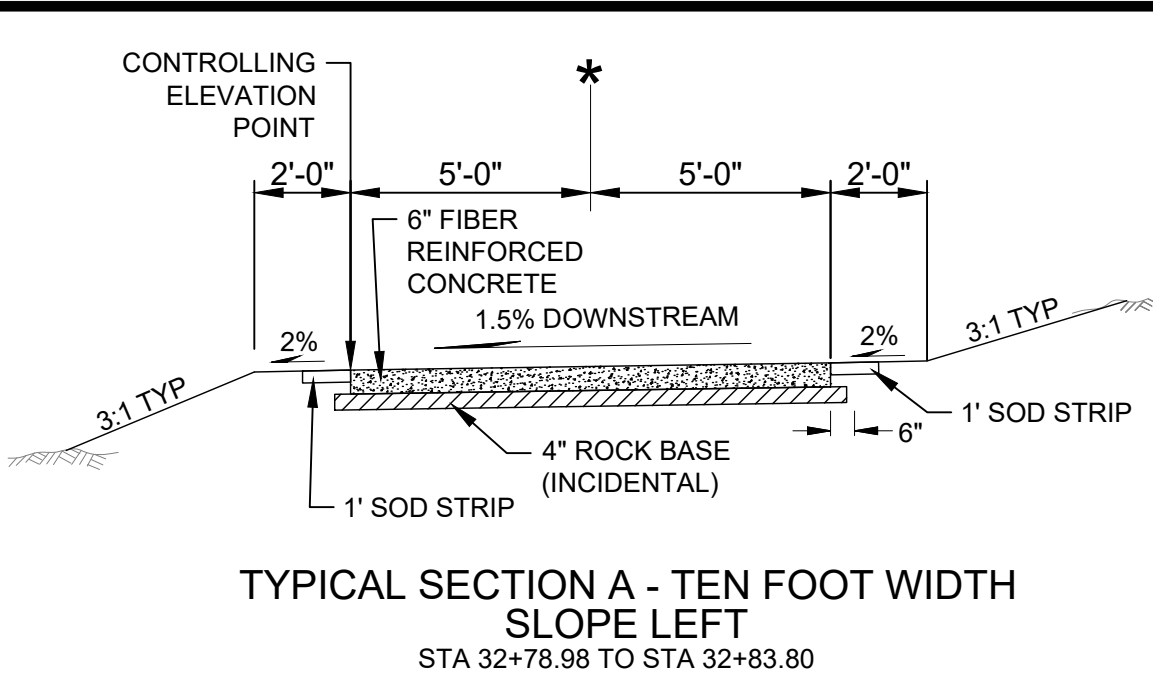
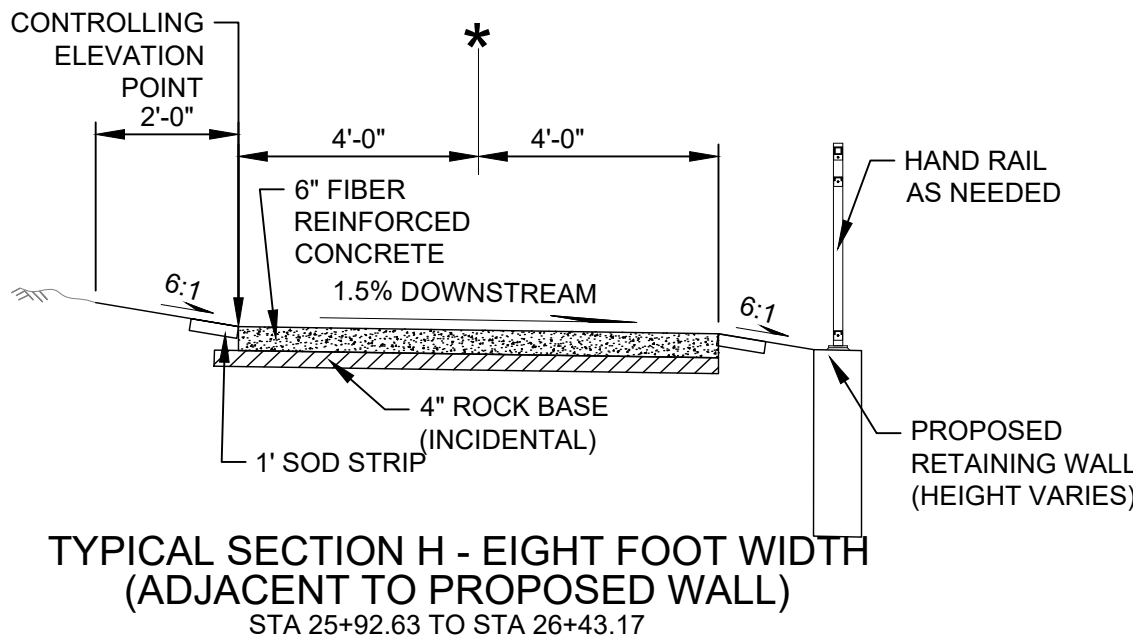


| Item No. | Item | Quantity | Unit |
|----------|--|----------|-------|
| 1 | MOBILIZATION | 1 | LS |
| 2 | CONTRACTOR FURNISHED SURVEYING | 1 | LS |
| 3 | CONSTRUCTION ENTRANCE | 120 | SY |
| 4 | CLEARING, GRUBBING, AND DEMOLITION | 1.71 | ACRES |
| 5 | EXCAVATION | 516 | CY |
| 6 | EMBANKMENT | 1236 | CY |
| 7 | STRAW WATTLE | 5476 | LF |
| 8 | PAVEMENT MARKINGS | 256 | LF |
| 9 | 6" CONCRETE TRAIL (KCMMB-4K) & 4" BASE ROCK (MODOT TYPE 1) | 3315 | SY |
| 10 | 8" CONCRETE PAVEMENT (KCMMB-4K) & 6" BASE ROCK (MODOT TYPE 1) | 352 | SY |
| 11 | TYPE 2 ROCK DITCH LINER, 1' DEPTH | 324 | SF |
| 12 | SEEDING AND STRAW MAT | 0.79 | ACRES |
| 13 | SOD (1' ADJACENT TO TRAIL) | 903 | SY |
| 14 | 18" RCP CULVERT | 44 | LF |
| 15 | 18" RCP FLARED END SECTION | 2 | EACH |
| 16 | RETAINING WALL (INCLUDES BACKFILL, GEOTEXTILE & COMPACTION ABOVE BACKFILL) | 118 | CY |
| 17 | RAILING (AGAINST RETAINING WALL AND ALONG MOW STRIP) | 325 | LF |
| 18 | FORMLINER (916 FACE FEET, INCLUDES STAIN/COLOR & GRAFFITI PROTECTION) | 1442 | SF |
| 19 | 6" CURB (MODOT TYPE S) | 331 | LF |
| 20 | 6" CURB (KC-APWA CG-1) | 257 | LF |
| 21 | UTILITY ADJUSTMENTS | 20 | EACH |
| 22 | 12" RCP | 68 | LF |
| 23 | DOUBLE GRATE INLET (GI-1), 4' DEPTH | 1 | EACH |
| 24 | STORM PIPE ABANDONMENT IN PLACE (17 LF) | 1 | LS |
| 25 | RETAINING WALL ADJUSTMENT (NICH ASSOCIATES LLC PROPERTY) | 1 | LS |
| 26 | TEMPORARY TRAFFIC BARRIER WITH TIE-DOWN STRAP | 225 | LF |
| 27 | ADJUST LANDSCAPE & PROTECT MONUMENT SIGN (SIX ZERO INC PROPERTY) | 1 | LS |
| 28 | STOP SIGN, R1-1 | 8 | EACH |
| 29 | NO MOTOR ACCESS SIGN, R5-3 | 1 | EACH |
| 30 | MOW STRIP | 90 | LF |
| 31 | STOP BAR (TRAIL) | 8 | EACH |
| 32 | CROSS WALK STRIPING | 270 | LF |
| 33 | TEMP SIGN TRAIL CLOSED 200' AHEAD | 1 | EACH |
| 34 | TEMP SIGN TRAIL CLOSED | 1 | EACH |
| 35 | TEMP SIGN SIDEWALK CLOSED | 4 | EACH |
| 36 | TEMP ORANGE VINYL CONSTRUCTION FENCING | 72 | LF |
| 37 | PRESSURE TRANSDUCER TRANSMITTER BOX RELOCATION | 1 | LS |
| 38 | TEMPORARY TRAFFIC CONTROL | 1 | LS |
| 39 | ASPHALT MILL & OVERLAY (KC-APWA TYPE 5-01) | 62 | TONS |
| 40 | BIKES SIGN | 8 | EACH |
| | ALTERNATE | | |
| 1 | TEMPORARY SHORING | 2395 | SF |

QUANTITY NOTES:
1: EMBANKMENT QUANTITIES HAVE REMOVED PAVEMENT THICKNESS FROM SURFACE TO SURFACE CAD NUMBERS.

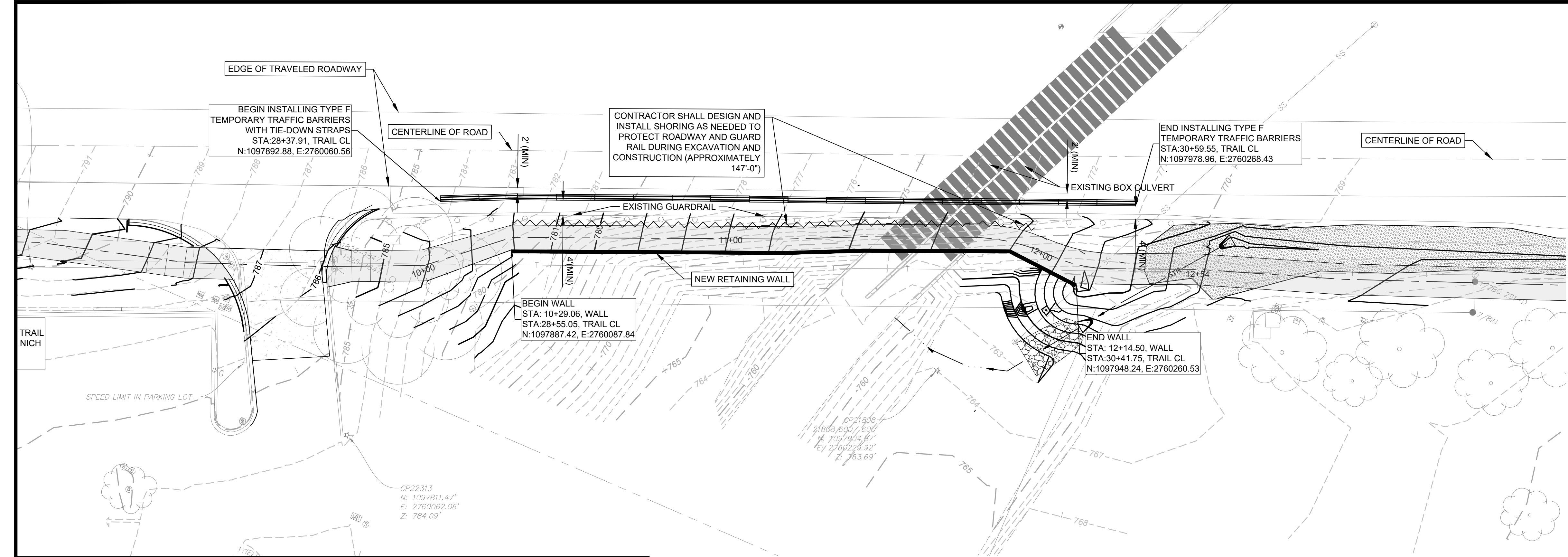
| EROSION CONTROL -- WATTLE TABLE | | | | | |
|---------------------------------|------------|----------|------|------------------------------------|---------|
| SILT FENCE LINE | BEGIN STA. | END STA. | L.F. | DESCRIPTION | SHEET # |
| LINE A | 10+61 | 16+81 | 637 | N EDGE OF TRAIL ALONG ST. JOE AVE. | 5 |
| LINE B | 11+20 | 16+81 | 556 | BEHIND CURB ALONG ST. JOE AVE. | 5 |
| LINE C | 17+14 | 18+93 | 172 | NORTH OF TRAIL ALONG VIVION | 6 |
| LINE D | 17+09 | 20+05 | 305 | SOUTH OF TRAIL ALONG VIVION | 6 |
| LINE E | 20+45 | 27+57 | 685 | NORTH OF TRAIL ALONG VIVION | 6-7 |
| LINE F | 20+75 | 26+53 | 621 | SOUTH OF TRAIL ALONG VIVION | 6-7 |
| LINE G | 26+78 | 27+70 | 103 | SOUTH OF TRAIL ALONG VIVION | 7 |
| LINE H | 28+00 | 32+27 | 63 | NORTH OF TRAIL ALONG VIVION | 7-8 |
| LINE I | 27+94 | 28+64 | 77 | SOUTH OF TRAIL ALONG VIVION | 7-8 |
| LINE J | 28+57 | 29+68 | 112 | SOUTH OF TRAIL ALONG VIVION | 8 |
| LINE K | 30+01 | 32+35 | 260 | SOUTH OF TRAIL ALONG VIVION | 8 |
| LINE L | 32+85 | 38+33 | 45 | NORTH OF TRAIL ALONG VIVION | 8-9 |
| LINE M | 32+68 | 32+94 | 37 | SOUTH OF TRAIL ALONG VIVION | 8 |
| LINE N | 33+36 | 38+73 | 538 | SOUTH OF TRAIL ALONG VIVION | 8-9 |
| LINE O | 39+61 | 42+73 | 525 | NORTH OF TRAIL ALONG VIVION | 9-10 |
| LINE P | 39+03 | 42+77 | 373 | SOUTH OF TRAIL ALONG VIVION | 9-10 |
| LINE Q | 39+61 | 42+77 | 315 | NORTH OF TRAIL ALONG VIVION | 10 |
| LINE R | 42+97 | 43+16 | 21 | SOUTH OF TRAIL ALONG VIVION | 10 |
| LINE S | 43+46 | 43+51 | 21 | NORTH OF TRAIL ALONG VIVION | 10 |
| LINE T | 43+46 | 43+51 | 5 | SOUTH OF TRAIL ALONG VIVION | 10 |
| LINE U | 43+46 | 43+51 | 5 | NORTH OF TRAIL ALONG VIVION | 10 |

CONTROLLING ELEVATION POINT:
THIS POINT IS THE MOST CRITICAL ELEVATION POINT TO ENSURE THE TRAIL IS CONSTRUCTED CORRECTLY.



* STATIONING NOTE:
STATIONS SHOWN HEREON ARE CENTER OF TRAIL.
TYPICAL SECTIONS SHOWN LOOKING UP-TRAIL FROM LOWER STATIONS TO HIGHER STATIONS

MISSOURI CERTIFICATE OF AUTHORITY NO. E-2006023253
EXPIRES: DECEMBER 31, 2024



RETAINING WALL DESIGN CRITERIA

- DESIGN CODES:
A. INTERNATIONAL BUILDING CODE: IBC 2018
B. ACI 318-14, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
- DESIGN LOADS:
DEAD LOADS
UNIT WEIGHT OF CONCRETE = 150 PCF
LIVE LOADS
UNIFORM LIVE LOAD = 100 PSF
EARTH PRESSURE LOADS
BACKFILL = CLEAN CRUSHED STONE
UNIT WEIGHT = 110 PCF
FRICTION ANGLE = 34°
ACTIVE LATERAL SOIL COEFFICIENT = 0.26

CONCRETE

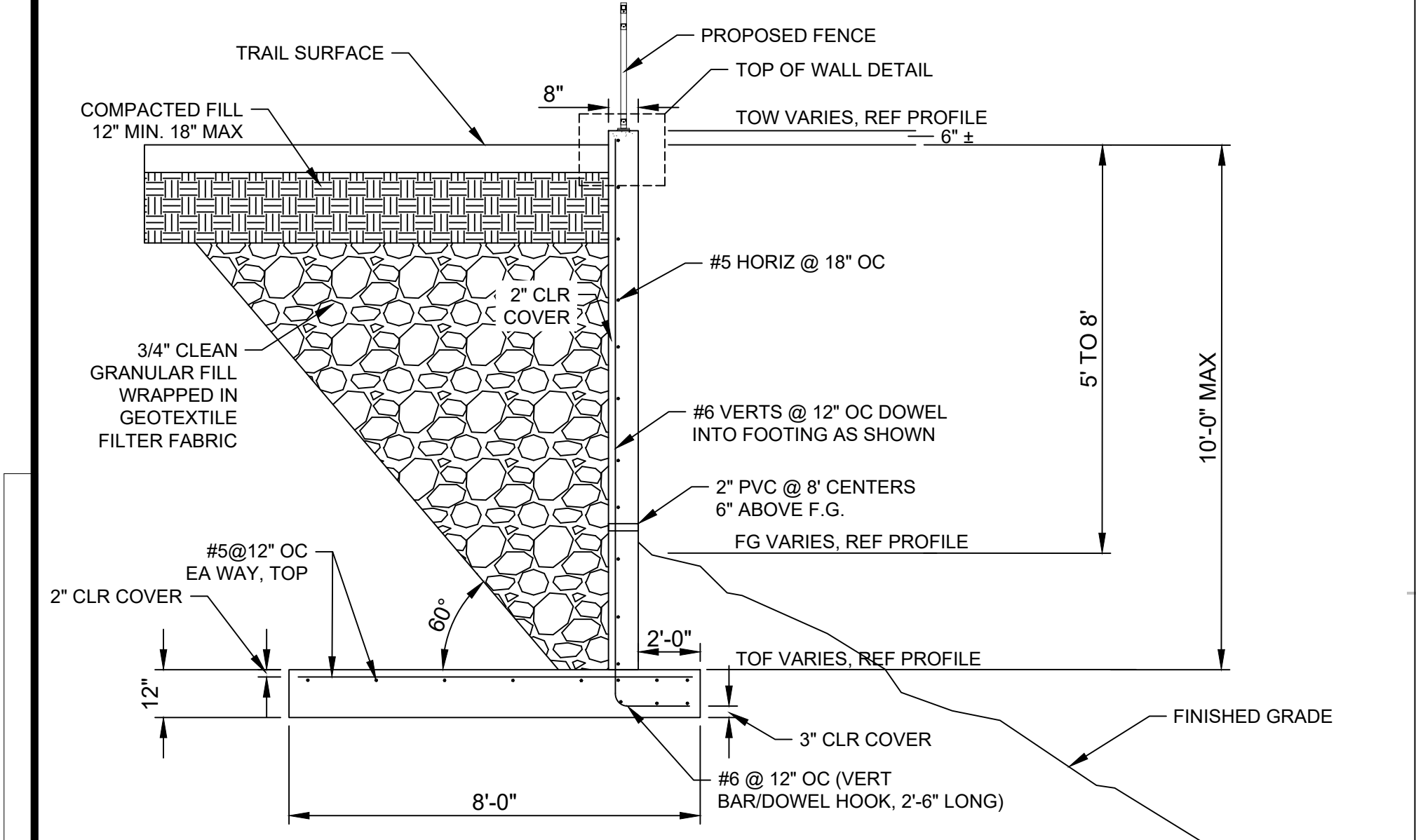
- REINFORCED CONCRETE SHALL HAVE THE FOLLOWING MINIMUM 28 DAY COMPRESSIVE STRENGTHS:
FOOTINGS AND WALLS: 4000 PSI NORMAL WEIGHT
- PROVIDE PROTECTION FOR REINFORCING BARS AS FOLLOWS UNO:
CAST-IN-PLACE CONCRETE:
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3" CONCRETE EXPOSED TO EARTH AND WEATHER (FORMED) #5 AND SMALLER 1-1/2" INTERFACE OF ALL FOOTING AND WALL CONSTRUCTION JOINTS SHALL BE ROUGHENED WITH 1/4" AMPLITUDE.
- CONSTRUCTION JOINTS IN WALLS ARE NOT ALLOWED UNLESS APPROVED BY ENGINEER.
- PLACE VERTICAL CONTRACTION JOINTS AT 30'-0" OC MAX.
- PLACE EXPANSION, AND ISOLATION JOINTS AS INDICATED.

REINFORCING FOR CONCRETE

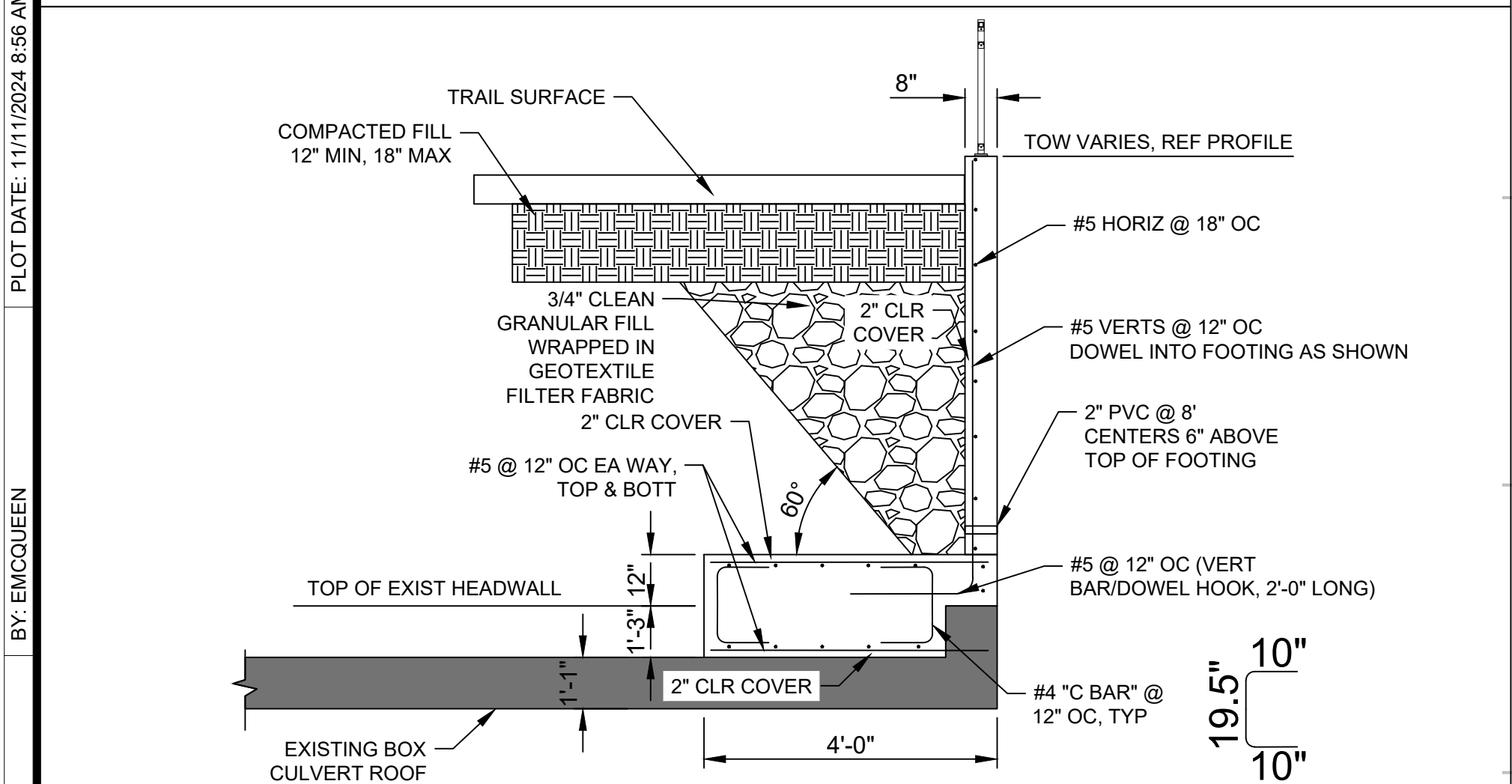
- ALL REINFORCING STEEL TO BE ASTM A615, GRADE 60, DEFORMED BARS, UNLESS NOTED OTHERWISE.
- ALL REINFORCING BARS TO BE DETAILED AND PLACED IN ACCORDANCE WITH THE ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" SPECIFICATIONS.
- ALL REINFORCING, INCLUDING DOWELS, SHALL BE SECURELY TIED AND CAST WITH THE LOWER MEMBER. PLACING REINFORCING AFTER CONCRETE HAS BEEN PLACED WILL NOT BE PERMITTED.
- FIELD BENDING OF REINFORCING PARTIALLY EMBEDDED IN CONCRETE WILL NOT BE ALLOWED UNLESS SPECIFICALLY NOTED ON THE DRAWINGS OR APPROVED BY THE STRUCTURAL ENGINEER.
- ALL REINFORCING BAR SHALL BE CONTACT LAP SPLICED OR DOWELED AS INDICATED.
- DOWELS BETWEEN FOUNDATION AND WALLS SHALL BE INSTALLED AND SHALL BE THE SAME GRADE, SIZE, AND SPACING AS THE VERTICAL WALL REINFORCING, UNLESS NOTED OTHERWISE.

SHORING

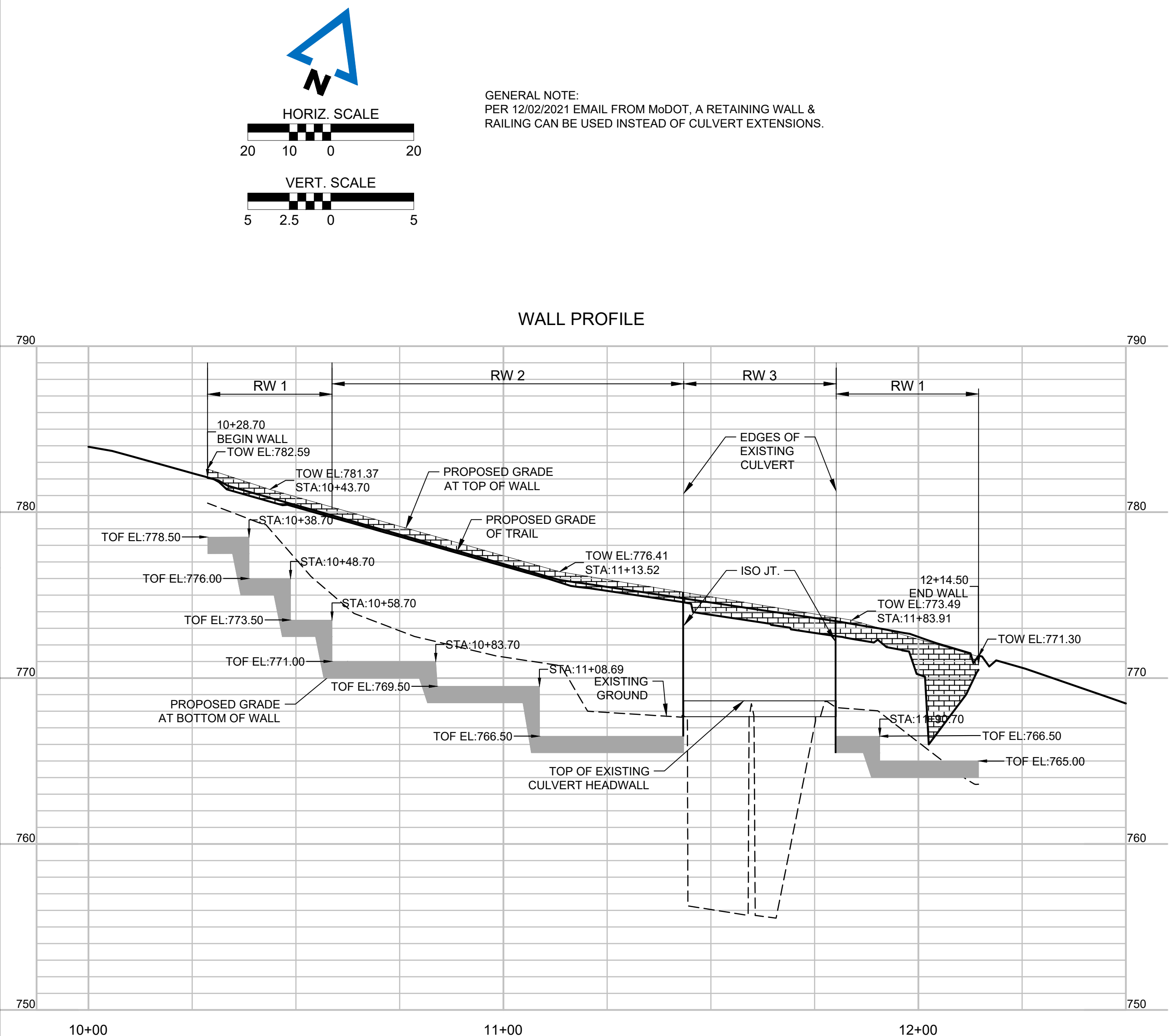
- CONTRACTOR RESPONSIBLE FOR REPAIRING DAMAGE TO PAVEMENT AND/OR GUARDRAIL IN THIS LOCATION.
- SHOP DRAWINGS FOR THE SHORING MUST BE DESIGNED, STAMPED & SEALED BY A PROFESSIONAL ENGINEER.



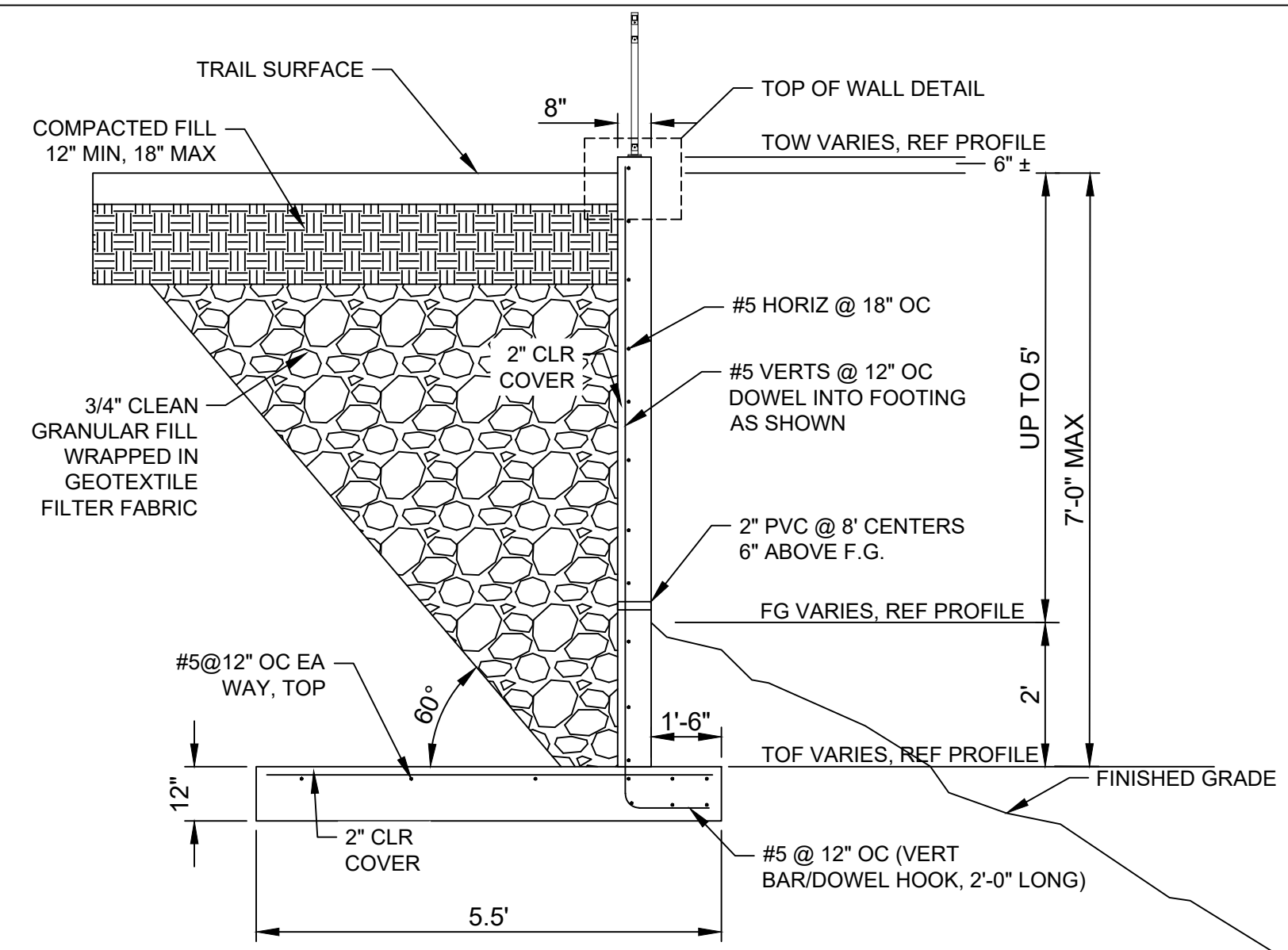
RETAINING WALL RW 2 (5' TO 8' ABOVE FG)



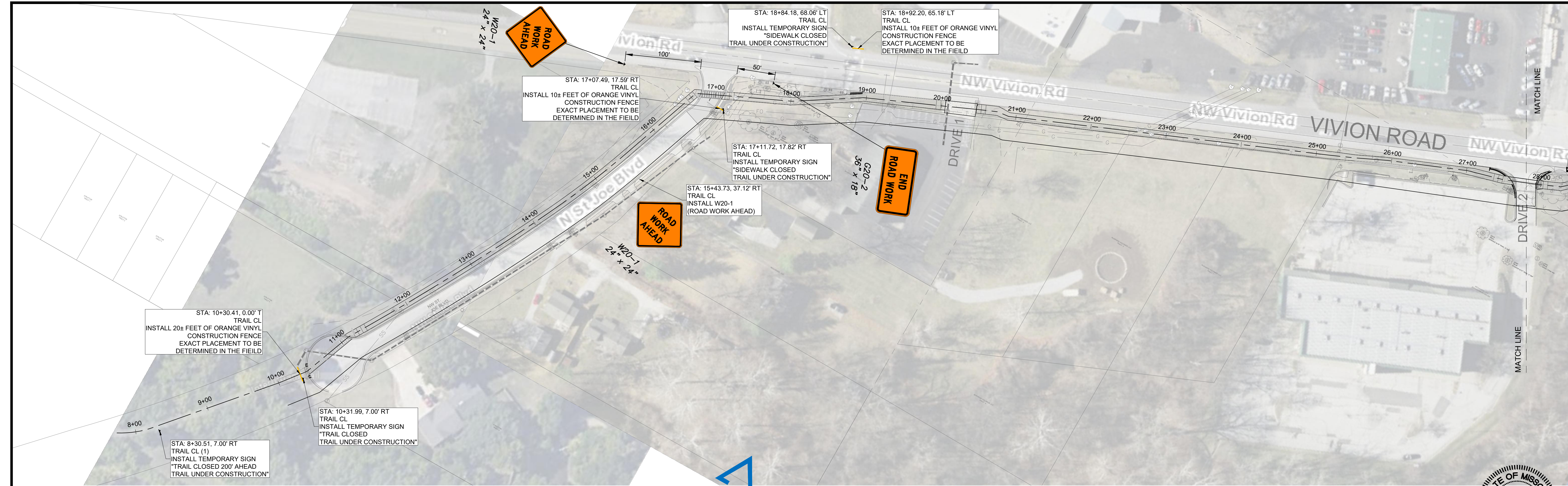
RETAINING WALL RW 3 (ON TOP OF EXISTING CULVERT)



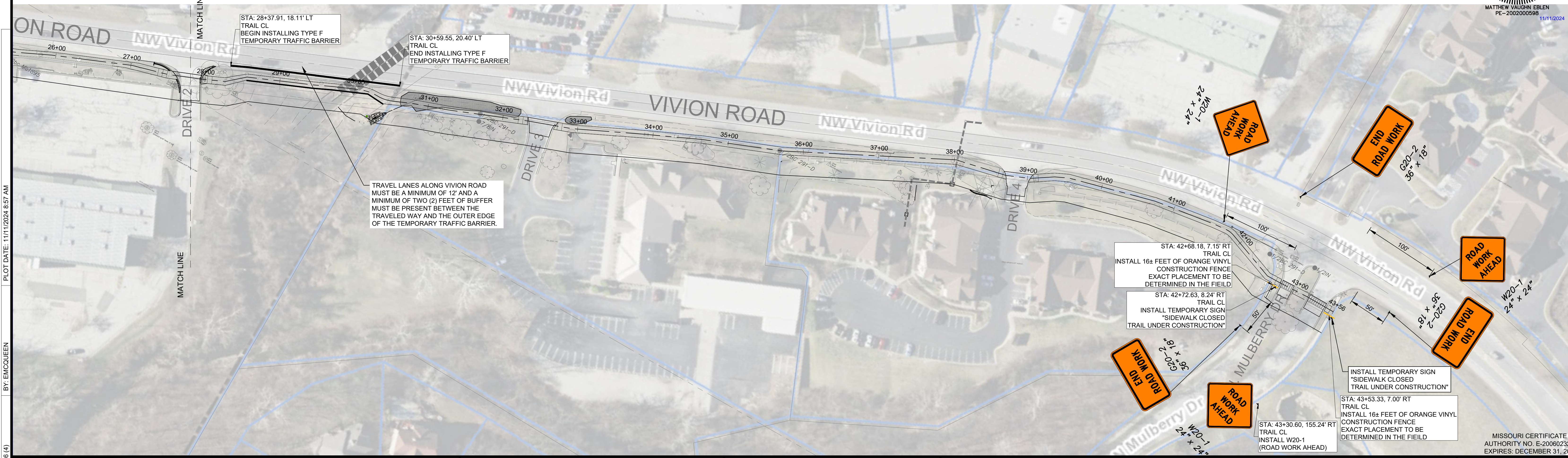
WALL PROFILE



RETAINING WALL RW 1 (UP TO 5' ABOVE FG)



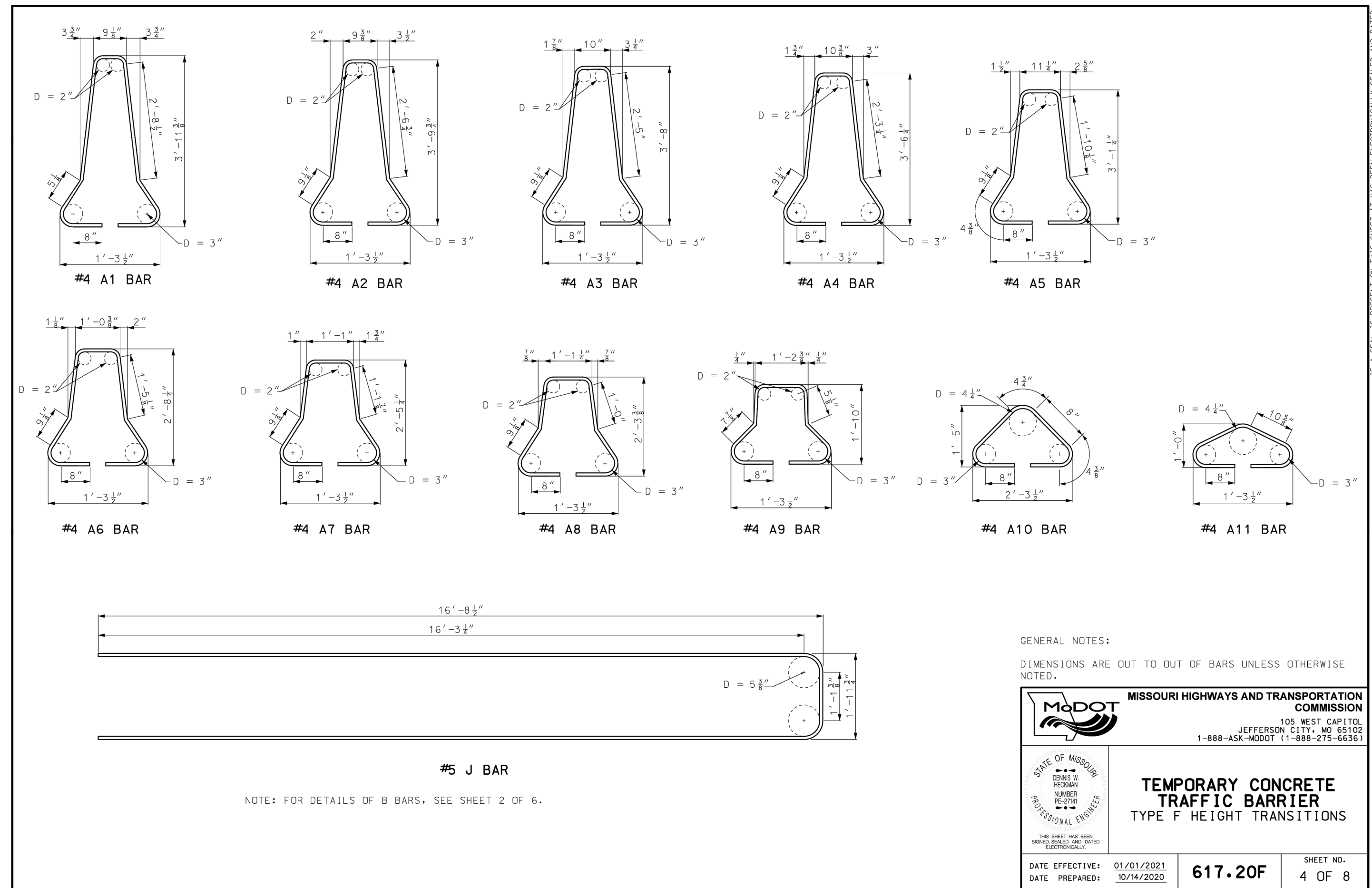
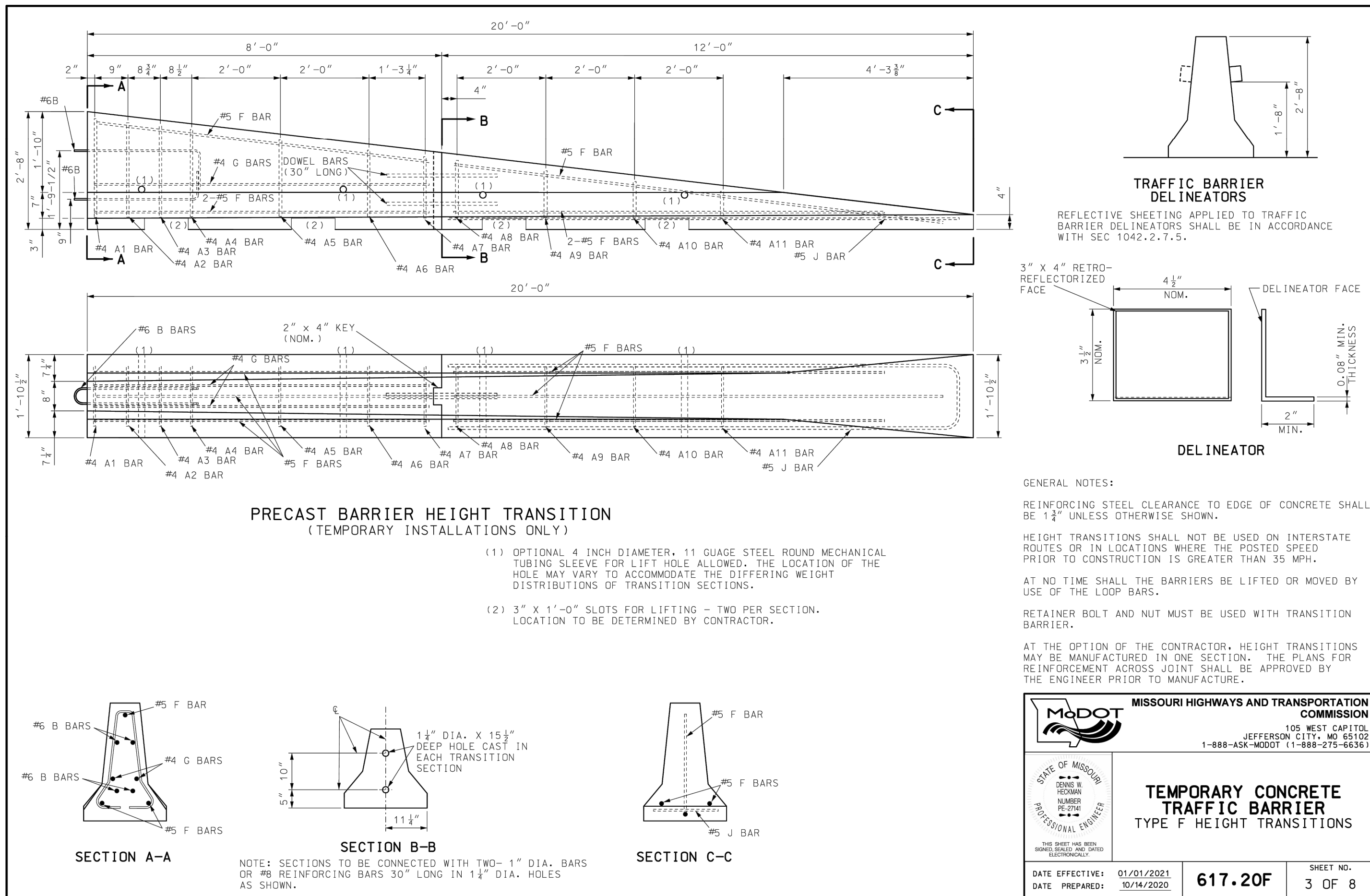
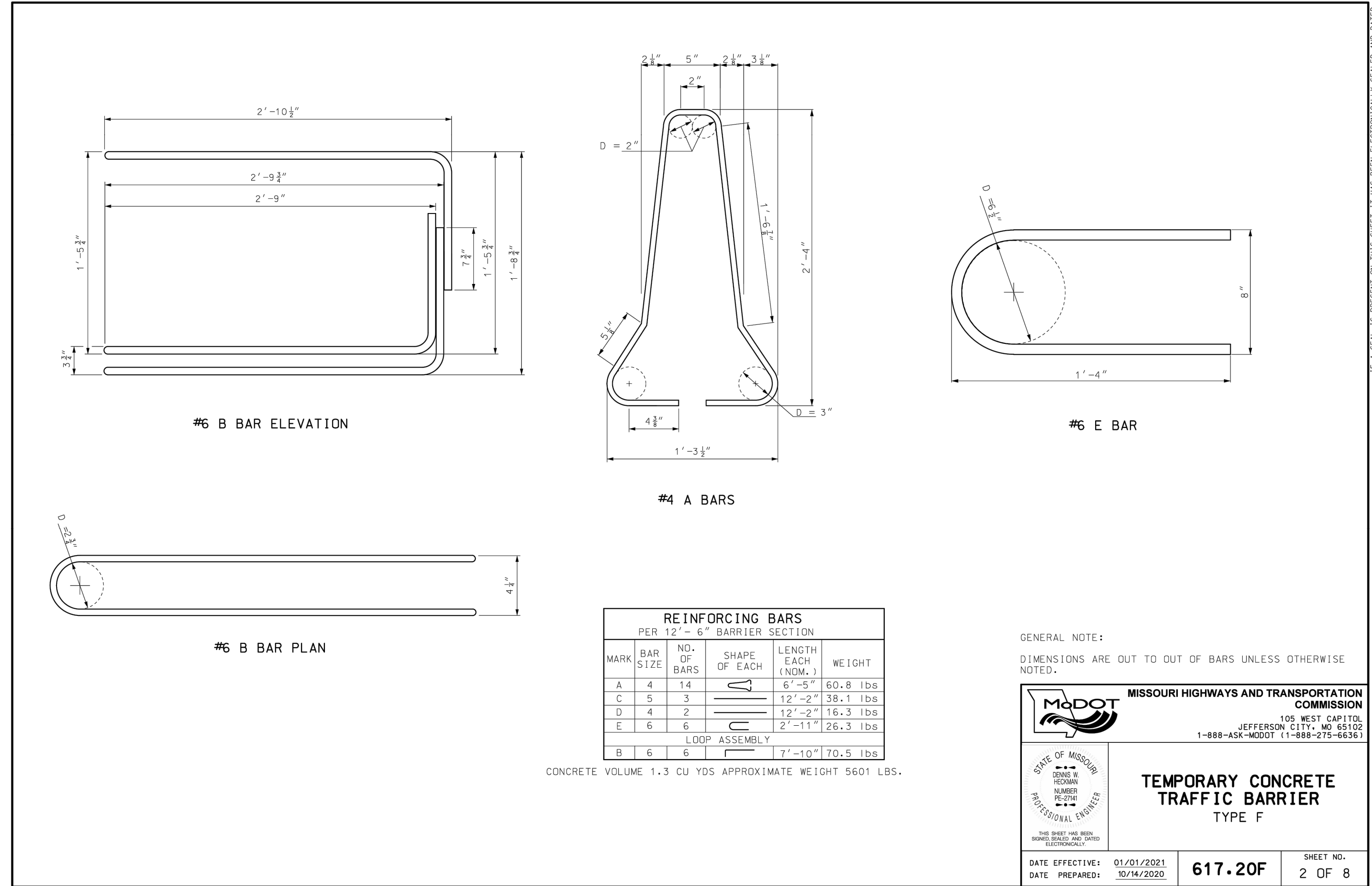
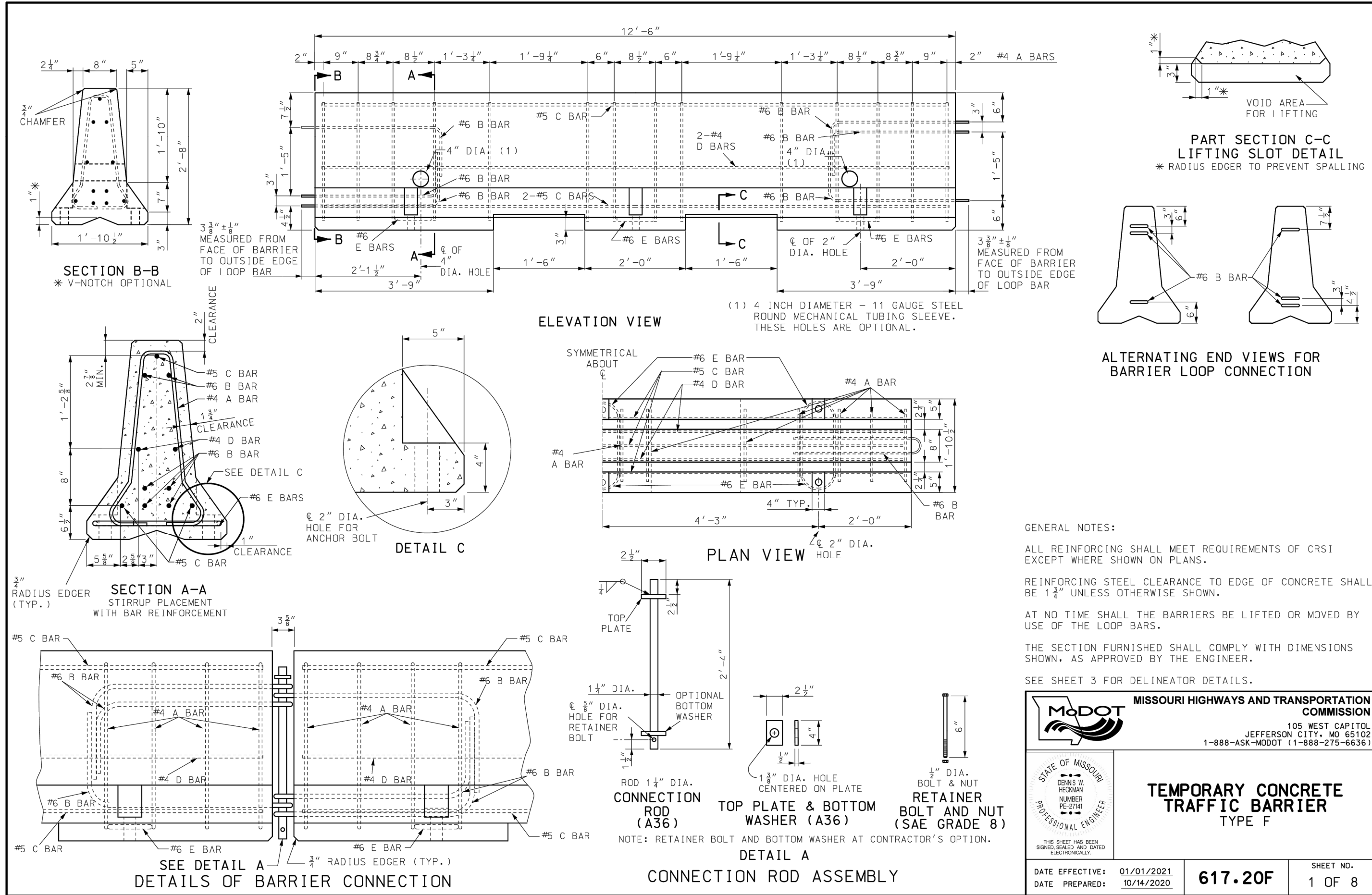
STATE OF MISSOURI
MATTHEW VAUGHN
EBLEN
NUMBER
PE-2002000598
PROFESSIONAL ENGINEER
MATTHEW VAUGHN EBLEN
PE-2002000598
11/11/2024

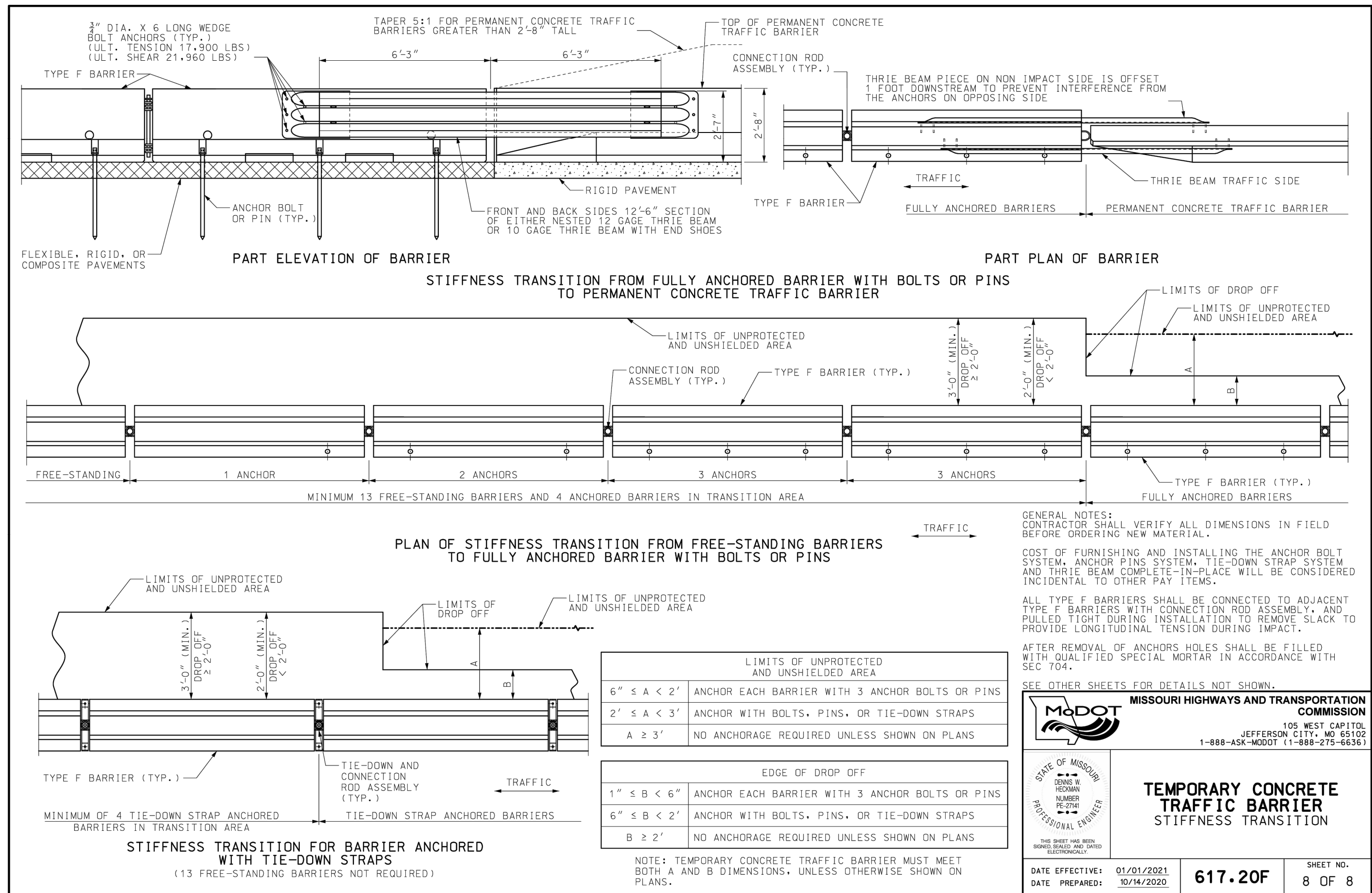
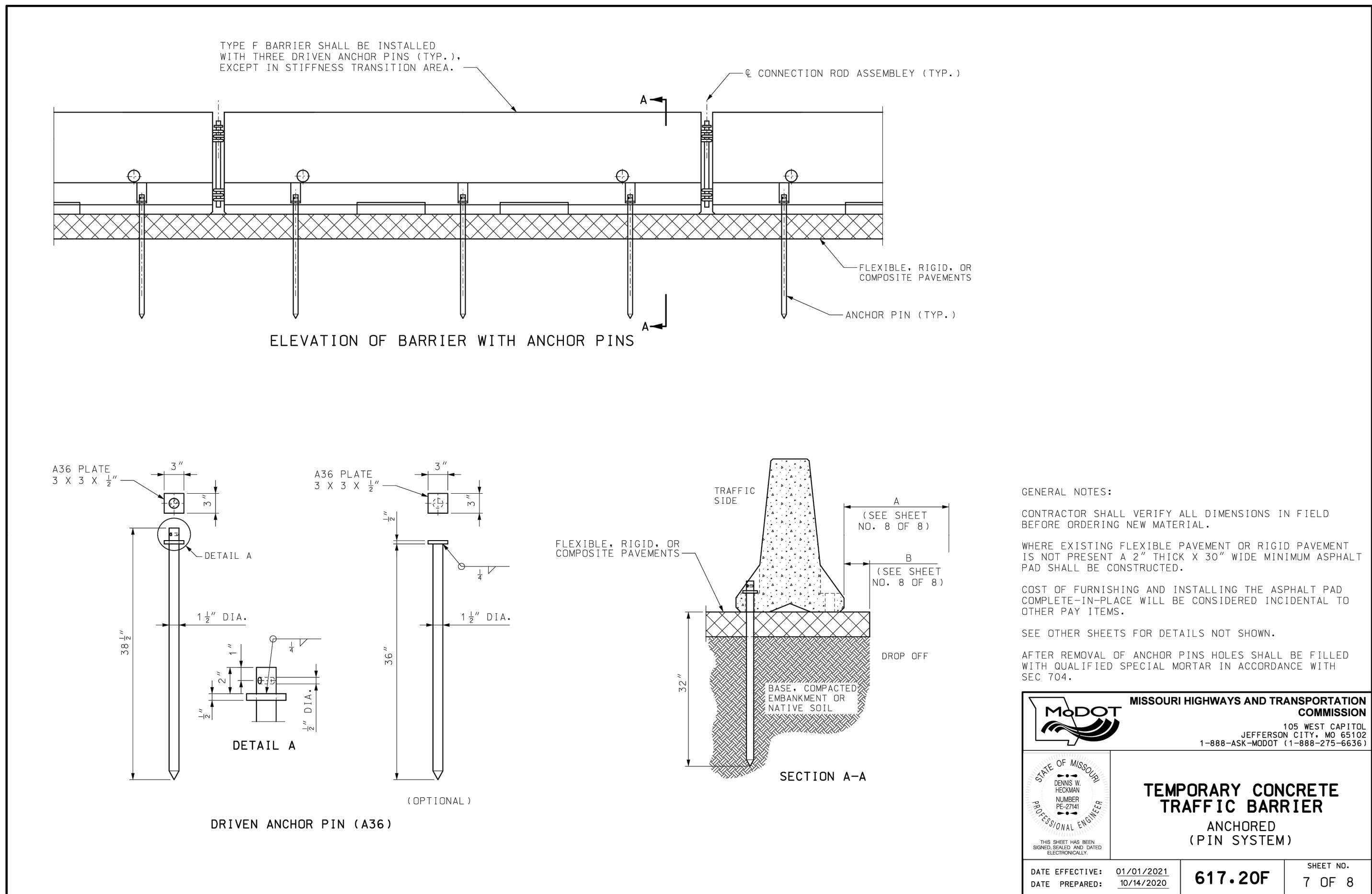
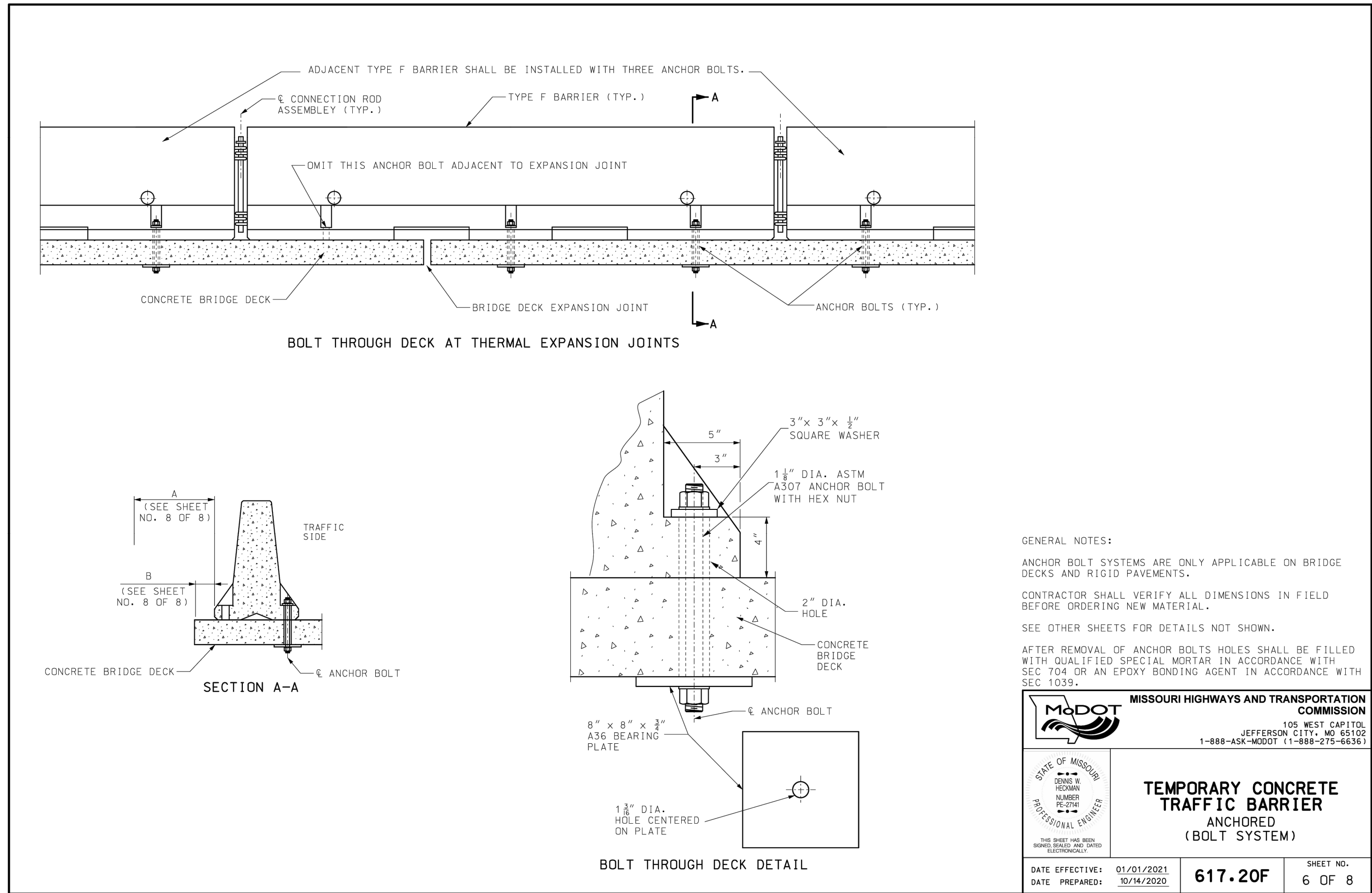
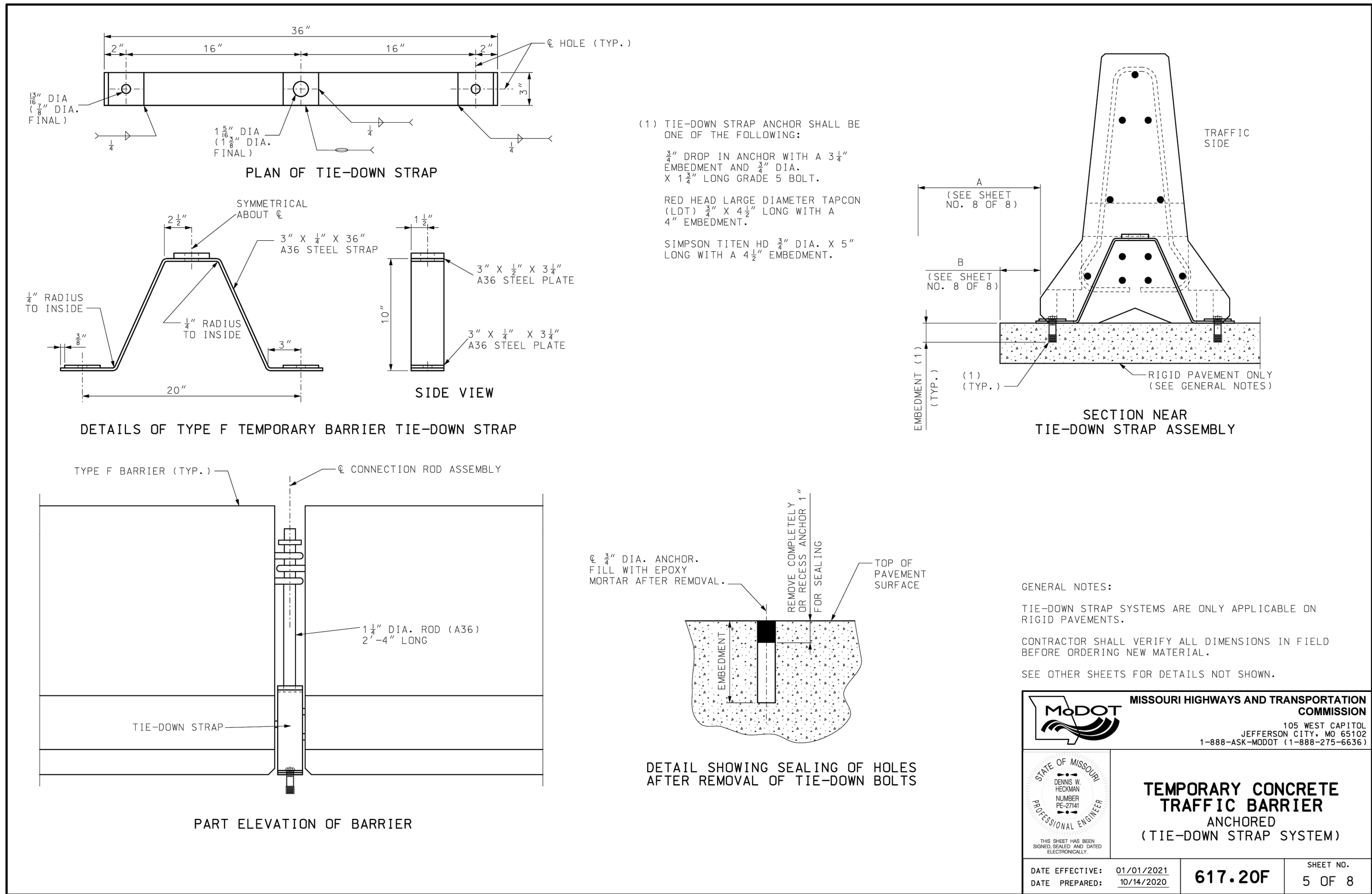
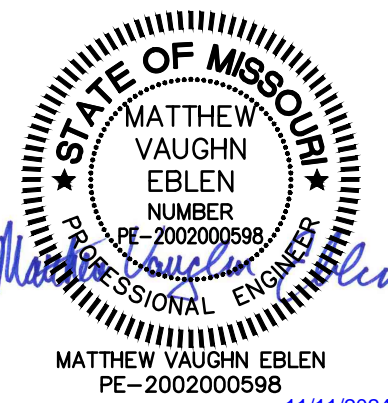


LAYOUT: 24X36 (4)
BY: EMCQUEEN
PLOT DATE: 11/11/2024 8:57 AM

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







BID FORM**BID FOR UNIT PRICE CONTRACTS
(Pricing)****CONTRACTOR:** _____

| NO. | BID ITEM | UNIT | QTY | TOTAL COST |
|-----|--|-------|------|------------|
| 1 | MOBILIZATION | LS | 1 | |
| 2 | CONTRACTOR FURNISHED SURVEYING | LS | 1 | |
| 3 | CONSTRUCTION ENTRANCE | SY | 120 | |
| 4 | CLEARING, GRUBBING, AND DEMOLITION | ACRES | 1.71 | |
| 5 | EXCAVATION | CY | 516 | |
| 6 | EMBANKMENT | CY | 1236 | |
| 7 | STRAW WATTLE | LF | 5476 | |
| 8 | PAVEMENT MARKINGS | LF | 256 | |
| 9 | 6" CONCRETE TRAIL - KCMMB-4K & 4" BASE ROCK (MODOT TYPE 1) | SY | 3315 | |
| 10 | 8" CONCRETE PAVEMENT & 6" BASE ROCK (MODOT TYPE 1) | SY | 352 | |
| 11 | TYPE 2 ROCK DITCH LINER, 1' DEPTH | SF | 324 | |
| 12 | SEEDING AND STRAW MAT | ACRES | 0.79 | |
| 13 | SOD (1' ADJACENT TO TRAIL) | SY | 903 | |
| 14 | 18" RCP CULVERT | LF | 44 | |
| 15 | 18" RCP FLARED END SECTION | EACH | 2 | |
| 16 | RETAINING WALL (INCLUDES BACKFILL, GEOTEXTILE & COMPACTION ABOVE BACKFILL) | CY | 118 | |
| 17 | RAILING (AGAINST RETAINING WALL) | LF | 325 | |
| 18 | FORMLINER (916 FACE FEET, INCLUDES STAIN/COLOR & GRAFFITI PROTECTION) | SF | 1442 | |
| 19 | 6" CURB (MODOT TYPE S) | LF | 331 | |
| 20 | 6" CURB (CG-1) | LF | 257 | |
| 21 | UTILITY ADJUSTMENTS | EACH | 20 | |
| 22 | 12" RCP | LF | 68 | |
| 23 | DOUBLE GRATE INLET (GI-1), 4' DEPTH | EACH | 1 | |
| 24 | STORM PIPE ABANDONMENT IN PLACE (17 LF) | LS | 1 | |
| 25 | RETAINING WALL ADJUSTMENT (NICH ASSOCIATES LLC PROPERTY) | LS | 1 | |
| 26 | TEMPORARY TRAFFIC BARRIER WITH TIE-DOWN STRAP | LF | 225 | |

| | | | | |
|-----------------------|--|------|------|---------|
| 27 | ADJUST LANDSCAPE & PROTECT MONUMENT SIGN (SIX ZERO INC PROPERTY) | LS | 1 | |
| 28 | STOP SIGN, R1-1 | EACH | 8 | |
| 29 | NO MOTOR ACCESS SIGN, R5-3 | EACH | 1 | |
| 30 | MOW STRIP | LF | 90 | |
| 31 | STOP BAR (TRAIL) | EACH | 8 | |
| 32 | CROSS WALK STRIPING | LF | 270 | |
| 33 | TEMP SIGN TRAIL CLOSED 200' AHEAD | EACH | 1 | |
| 34 | TEMP SIGN TRAIL CLOSED | EACH | 1 | |
| 35 | TEMP SIGN SIDEWALK CLOSED | EACH | 4 | |
| 36 | TEMP ORANGE VINYL CONSTRUCTION FENCING | LF | 72 | |
| 37 | PRESSURE TRANSDUCER TRANSMITTER BOX RELOCATION | LS | 1 | \$3,000 |
| 38 | TEMPORARY TRAFFIC CONTROL | LS | 1 | |
| 39 | ASPHALT MILL & OVERLAY (KC-APWA TYPE 5-01) | TONS | 62 | |
| 40 | BIKES SIGN | EACH | 8 | |
| Total Base Bid | | | | |
| | | | | |
| | ALTERNATE | | | |
| 1 | TEMPORARY SHORING) | SF | 2395 | |
| Total Bid | | | | |