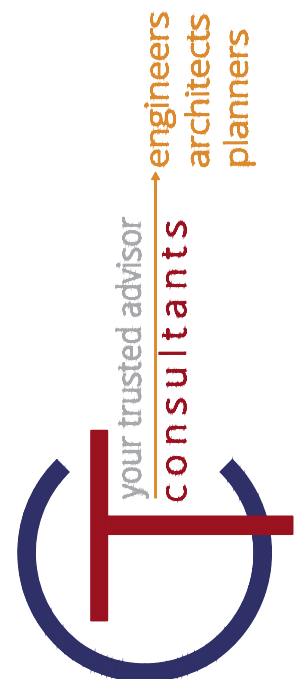


# EAST ALEXANDRIA PIKE BRIDGE REPAIR CAMPBELL COUNTY, KENTUCKY



## INDEX OF SHEETS

|                             |   |
|-----------------------------|---|
| G1 - COVER SHEET.....       | 1 |
| C1 - SITE LAYOUT.....       | 2 |
| C2 - DETAILS.....           | 3 |
| S1 - PLAN AND SECTIONS..... | 4 |
| S2 - ELEVATIONS.....        | 5 |
| S3 - DETAILS.....           | 6 |

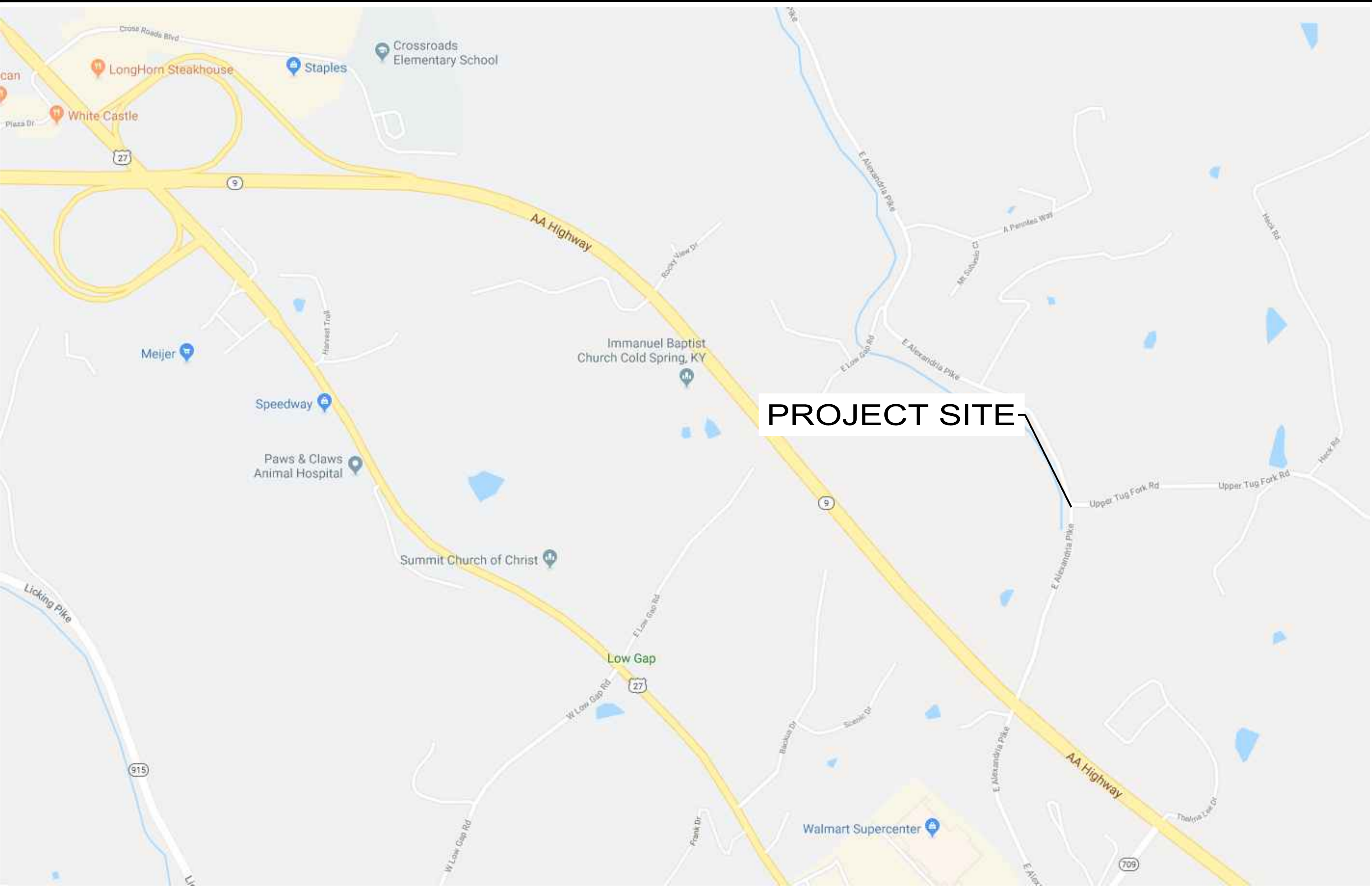
## KYTC STANDARD DRAWINGS

THE CURRENT EDITION OF THE KENTUCKY STANDARD DRAWINGS ARE HEREBY MADE PART OF THESE PLANS.

## PROJECT SPECIFICATIONS

IN GENERAL, THE PROJECT SPECIFICATIONS CONFORM TO THE CURRENT EDITION OF THE KENTUCKY STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

COMPLETION DATE: 6/1/2020  
CONTRACTOR START DATE: ON OR AFTER 3/16/2020



VICINITY MAP



APPROVED FOR CONSTRUCTION BY:

LUKE MANTLE, ROAD SUPERVISOR

DATE



ROBERT F. DREYER, P.E. #20017

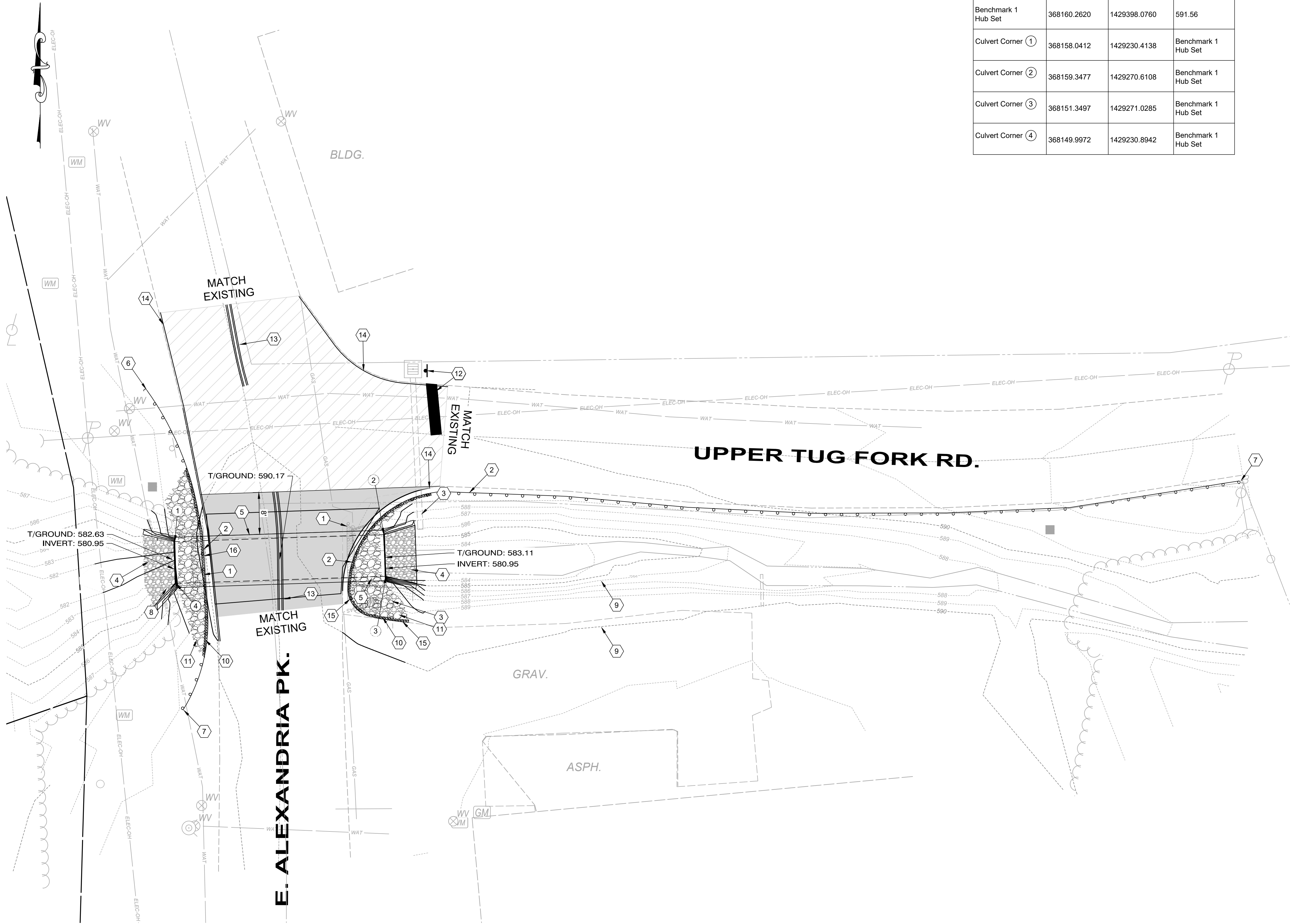
DATE

CAMPBELL COUNTY  
BRIDGE REPAIR  
CAMPBELL COUNTY, KY

COVER SHEET

|                            |         |
|----------------------------|---------|
| PROJECT NO.<br>19052301-02 |         |
| DISCIPLINE<br>GENERAL      |         |
| SHEET NAME<br>G1           |         |
| SHEET<br>1                 | OF<br>6 |





| Description         | Northing    | Easting      | Elevation           |
|---------------------|-------------|--------------|---------------------|
| Benchmark 1 Hub Set | 368160.2620 | 1429398.0760 | 591.56              |
| Culvert Corner ①    | 368158.0412 | 1429230.4138 | Benchmark 1 Hub Set |
| Culvert Corner ②    | 368159.3477 | 1429270.6108 | Benchmark 1 Hub Set |
| Culvert Corner ③    | 368151.3497 | 1429271.0285 | Benchmark 1 Hub Set |
| Culvert Corner ④    | 368149.9972 | 1429230.8942 | Benchmark 1 Hub Set |

KEYNOTES

- ① REMOVE GUARDRAIL
- ② PROPOSED GUARDRAIL
- ③ EXISTING PIPE TO REMAIN
- ④ LIMITS OF CLASS III CHANNEL LINING
- ⑤ PROPOSED 8' x 7' x 8' BOX SECTION. SEE STRUCTURAL DRAWINGS
- ⑥ GUARDRAIL END TREATMENT, TYPE 4A, WITH OBJECT MARKER TYPE 3
- ⑦ GUARDRAIL END TREATMENT, TYPE 7
- ⑧ PROPOSED SLOPE & WINGWALL. SEE DETAIL PAGE 4
- ⑨ DO NOT DISTURB
- ⑩ #8s FROM EDGE OF PAVEMENT TO 6" BEHIND GUARDRAIL. SEE DETAIL.
- ⑪ #2s FROM THE #8s TO THE CULVERT OPENING. SEE DETAIL
- ⑫ PROPOSED STOP SIGN AND STOP BAR
- ⑬ ITEM 713 - PROPOSED DOUBLE YELLOW
- ⑭ ITEM 713 - PROPOSED 4" WHITE EDGE LINE
- ⑮ GUARDRAIL END TREATMENT, TYPE 2A, WITH CABLE ASSEMBLY TYPE 3.
- ⑯ DOUBLE UP GUARDRAIL TO SKIP A POST OVER THE CULVERT

LINETYPE LEGEND

- COMM-OH
- 
- EXISTING OVER-HEAD UTILITIES, APPROX. LOCATION

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HATCH LEGEND

- MILL AND RESURFACE. SEE DETAIL
- FULL DEPTH PAVEMENT. SEE DETAIL

NOTES

- A) CONTRACTOR TO COORDINATE PICKUP OF 8' PRECAST CONCRETE BOXES FROM MAXIM CRANEWORKS IN WILDER, KY. COORDINATE WITH COUNTY
- B) CONTRACTOR MUST BE KTYC APPROVED FOR CULVERT REPAIR AND/OR BRIDGES NOT MORE THAN 70'
- C) DETOUR TRAILBLAZING AND SIGNAGE BY CONTRACTOR TO CURRENT MUTCD STANDARDS AND APPROVED BY ENGINEER.
- D) 2 MOBILE MESSAGE BOARDS MUST BE POSTED WITHIN 500' OF SITE 2 WEEKS PRIOR TO CONSTRUCTION. EXACT LOCATION DETERMINED IN FIELD WITH COUNTY. MESSAGE BOARDS TO STATE ROAD CLOSED CULVERT CONSTRUCTION "DATE" ONE MONTH @ E. ALEXANDRIA PIKE. ONE BOARD ON EACH SIDE OF CULVERT.



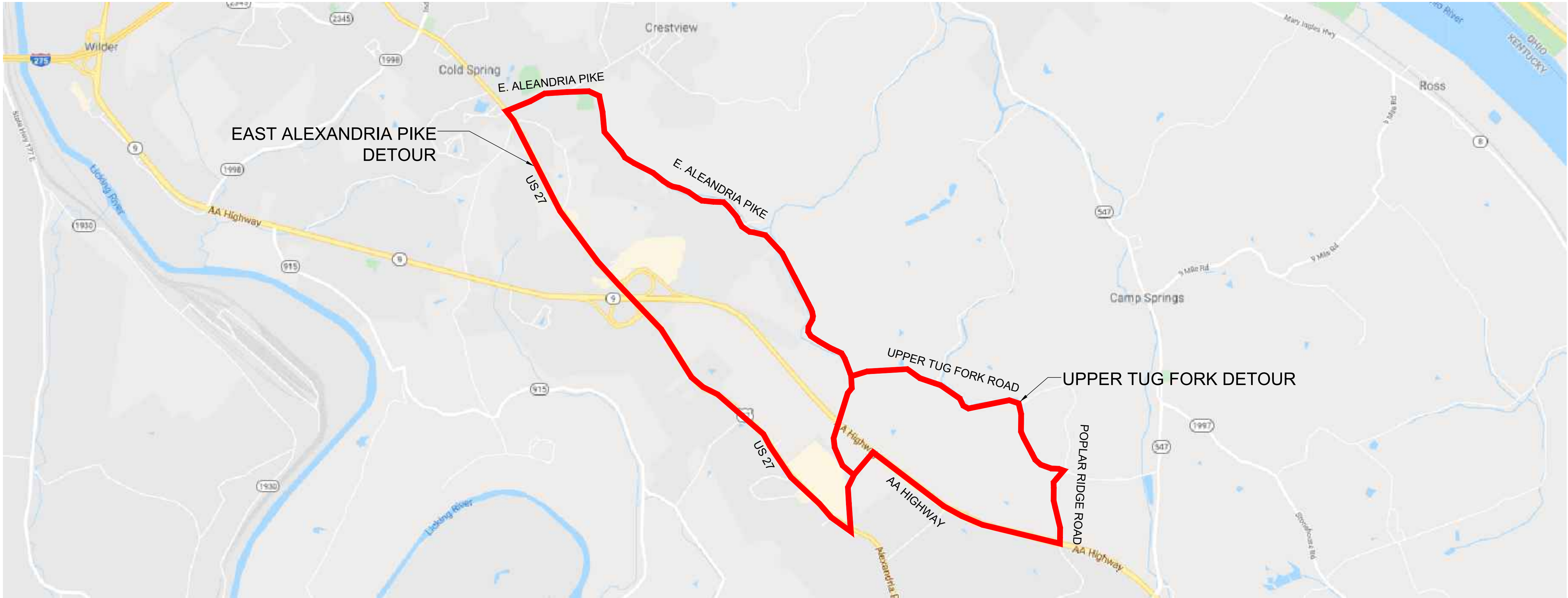
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|------------------------|--------|----|----------|------|
| ISSUE DATE: 10/29/2019 |        |    |          |      |
| SCALE: 1"=10'          |        |    |          |      |
| DESIGNED BY: RDRE      |        |    |          |      |
| DRAWN BY: JLAM         |        |    |          |      |
| CHECKED BY: RDRE       |        |    |          |      |

CAMPBELL COUNTY  
BRIDGE REPAIR  
CAMPBELL COUNTY, KY

EAST ALEXANDRIA PIKE

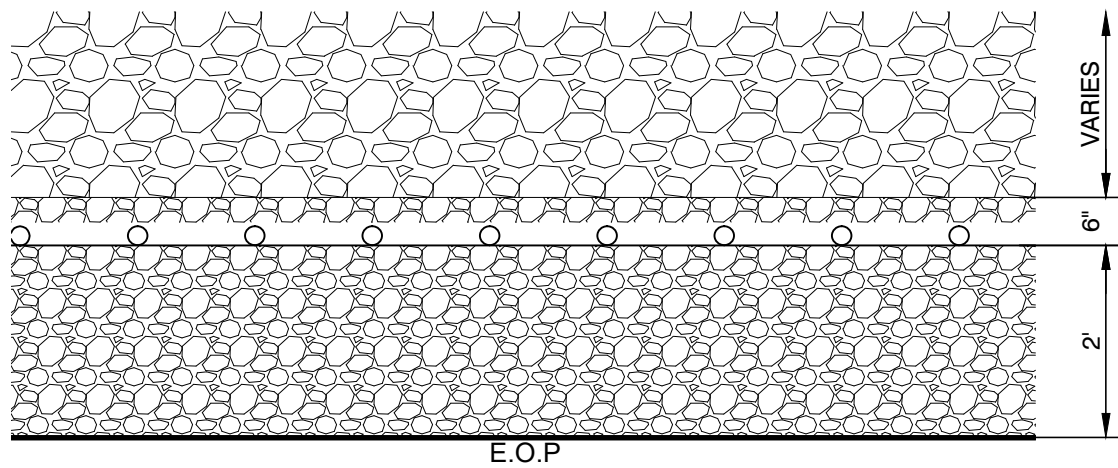
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|----------------------------|---------|
| PROJECT NO.<br>19052301-02 |         |
| DISCIPLINE<br>CIVIL        |         |
| SHEET NAME<br>C1           |         |
| SHEET<br>2                 | OF<br>6 |





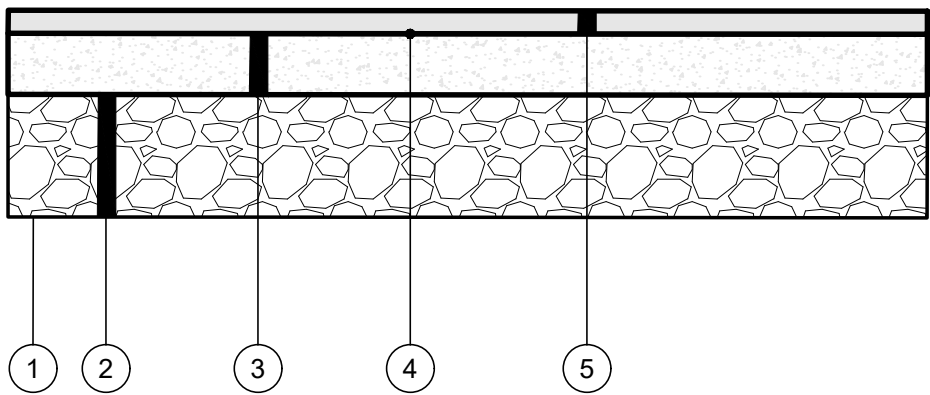
**MOT DETOUR ROUTE.**

SIGNAGE PLAN TO BE DONE BY *N.T.S.*  
CONTRACTOR, APPROVED BY ENGINEER.



**STONE FILL DETAIL**

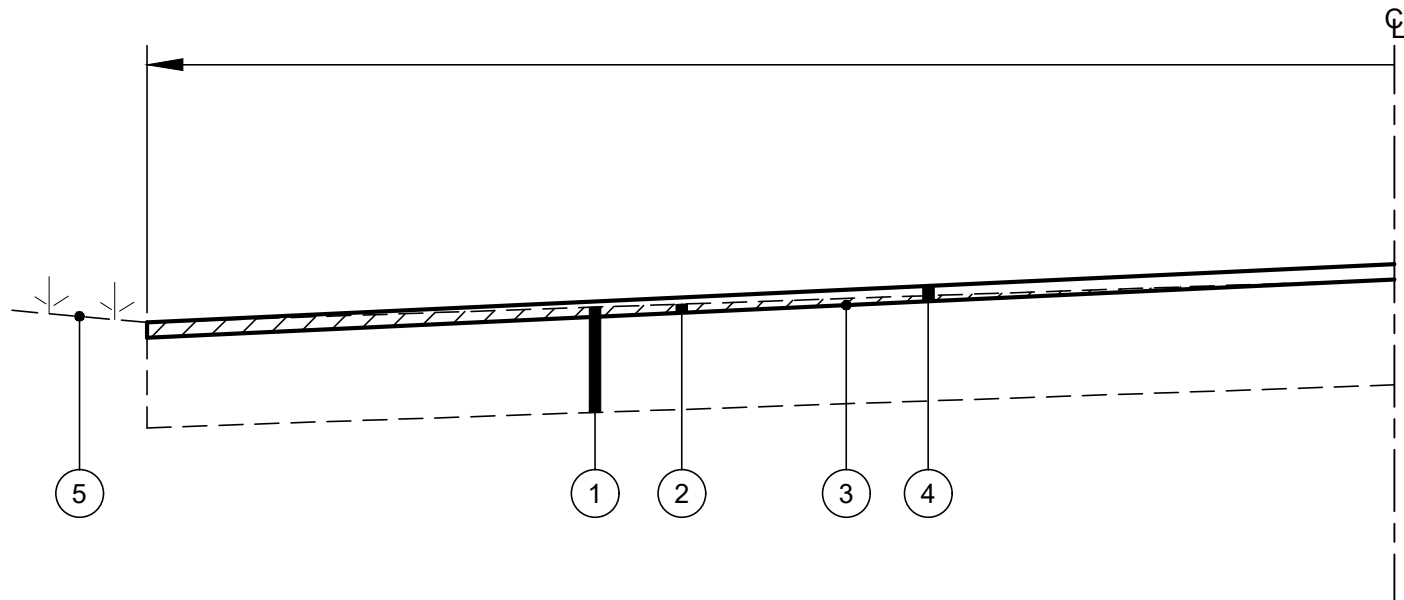
*N.T.S.*



**FULL DEPTH PAVEMENT**

\*OVER PROPOSED CULVERT & CURVE *N.T.S.*  
WIDENING

- ITEM 207 - SUBGRADE COMPACTION
- ITEM 302 - 8" CRUSHED STONE BASE. COORDINATE WITH PROPERTY OWNER
- ITEM 402/403 - ASPHALT LEVELING COURSE, 4"
- ITEM 406 - TACK COAT @ 0.1 GAL/SY (INCIDENTAL)
- ITEM 402/403 - 1.5" ASPHALT SURFACE COURSE



**MILL AND RESURFACE**

*N.T.S.*

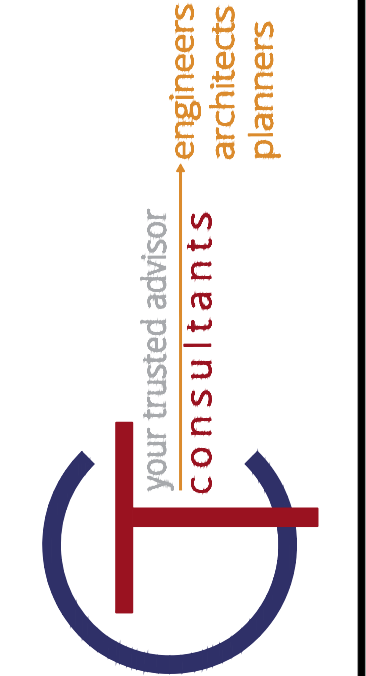
- EXISTING ASPHALT PAVEMENT
- ITEM 408 - ASPHALT MILLING - VARIABLE THICKNESS - DEPTH 1-1/2" AT EOP  
TAPERED TO MEET EXISTING PAVEMENT AT CENTERLINE
- ITEM 406 - TACK COAT @ 0.1 GAL/SY (INCIDENTAL TO ASPHALT PAVEMENT)
- ITEM 402/403 - BITUMINOUS ASPHALT PAVEMENT SURFACE
- DO NOT DISTURB YARD AREA

**CAMPBELL COUNTY  
BRIDGE REPAIR  
CAMPBELL COUNTY, KY**

**EAST ALEXANDRIA PIKE**

|                                   |                |
|-----------------------------------|----------------|
| PROJECT NO.<br><b>19052301-02</b> |                |
| DISCIPLINE<br><b>CIVIL</b>        |                |
| SHEET NAME<br><b>C2</b>           |                |
| SHEET<br><b>3</b>                 | OF<br><b>6</b> |

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| CHECKED BY:  | RDRE       |    |          |      |



COUNTY. CONTRACTOR MUST PURCHASE 8'-0" LIN FT OF THE CULVERT FROM SCIOTO VALLEY PRECAST THAT MATCHES THE SECTIONS IN THE OWNER'S POSSESSION. THE CONTRACTOR MUST ALSO PICK-UP THE 32 LF OF THE CULVERT FROM THE COUNTY AND TRANSPORT 8'-0" x 7'-0" PRECAST CONCRETE CULVERT TO THE SITE AND INSTALL ALL 40' OF THE CULVERT.

T/WING WALL ELEV. 589.75 (TYP)

5'-9 5/8"

1'-6 5/8"

1' (TYP)

4'-3'

8"

40'-0"

A S-01

B S-03

T/WING WALL ELEV. 589.75 (TYP)

PLAN

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

N

3/4" BEVEL, TYP.

1 1/2" CLR.

1'-0"

GEOTEXTILE TYPE A WRAP (INCLUDE W/ #57 STONE BACKFILL FOR PAYMENT)

T/WING WALL ELEV. 589.75 (TYP)

5'-9 5/8"

4'-6 5/8"

1'-6 5/8"


A S-01

B S-03

5'-9 5/8"

1'-6 5/8"

T/WING WALL ELEV. 589.75 (TYP)



VARIES

3/4" BEVEL, TYP.

1 1/2" CLR.

2" CLR.

#5 @ 18" O.C.

#5 @ 18" O.C.

3'-2" LAP

2 1/2" CLR. TYP.

1'-6"

3" CLR. TYP.

2'-0"

1'-0"

1'-0"

3'-6"

6'-6"

1'-0"

1'-0"

2X8 KEY

#5 @ 12" O.C.

#4 @ 1'-0" O.C.

#4 @ 12" O.C.

GEOTEXTILE TYPE A WRAP (INCLUDE W/ #57 STONE BACKFILL FOR PAYMENT)

#7 @ 12" O.C.

#57 STONE BACKFILL INCLUDED IN THE COST OF THE PRECAST BOXES

3" DIA WEEP HOLE. INSTALL ONE WEEP HOLE PER WINGWALL

PLACE 2 CU. FT. OF BAGGED #3 STONE IN FRONT OF WEEP HOLES, TYP. (INCLUDE W/ COST OF #57 STONE)

6"

CONCRETE MUST BE CAST AGAINST UNDISTURBED ROCK OR SOIL

## SECTION A

## STRUCTURAL PLAN

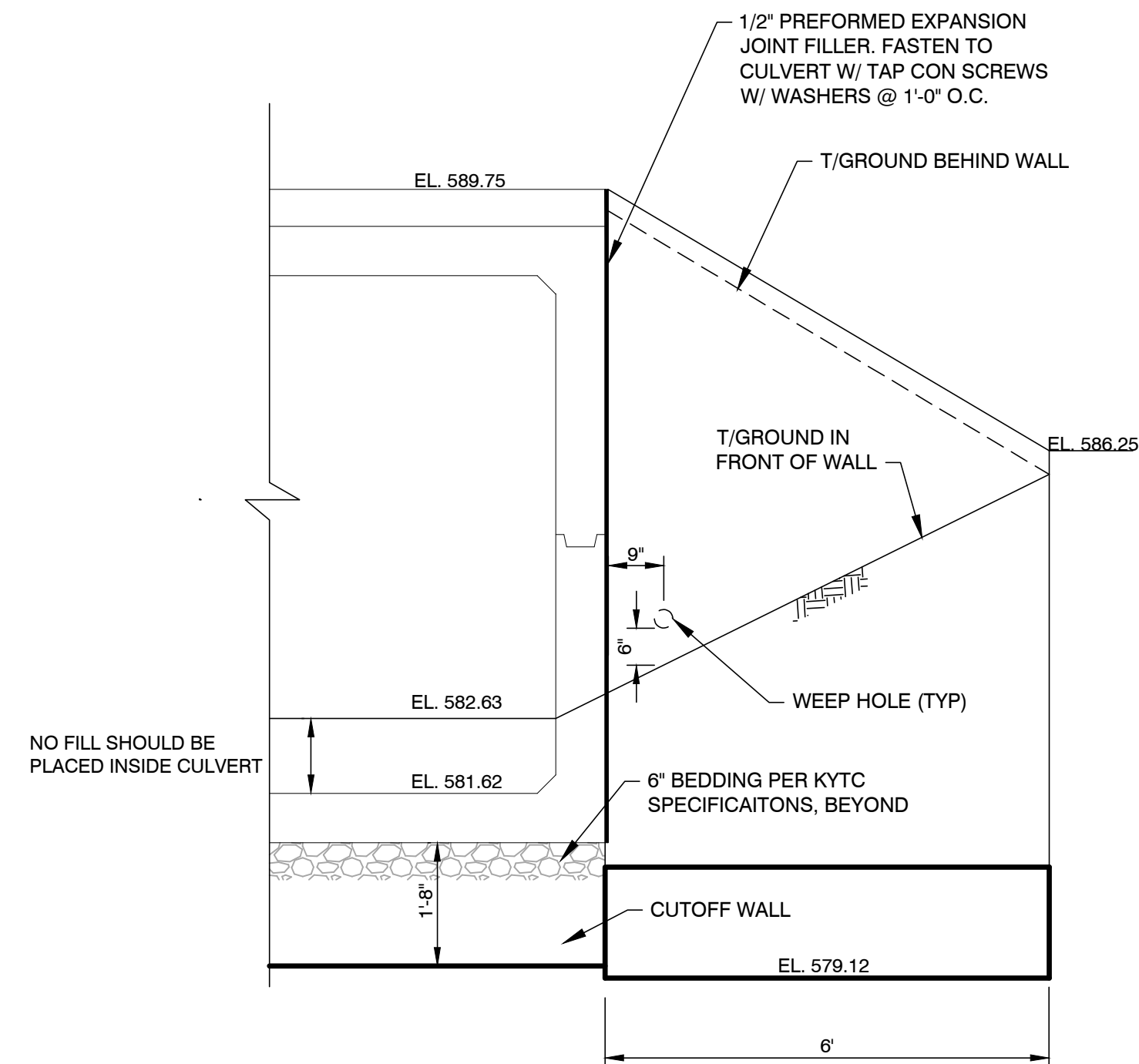
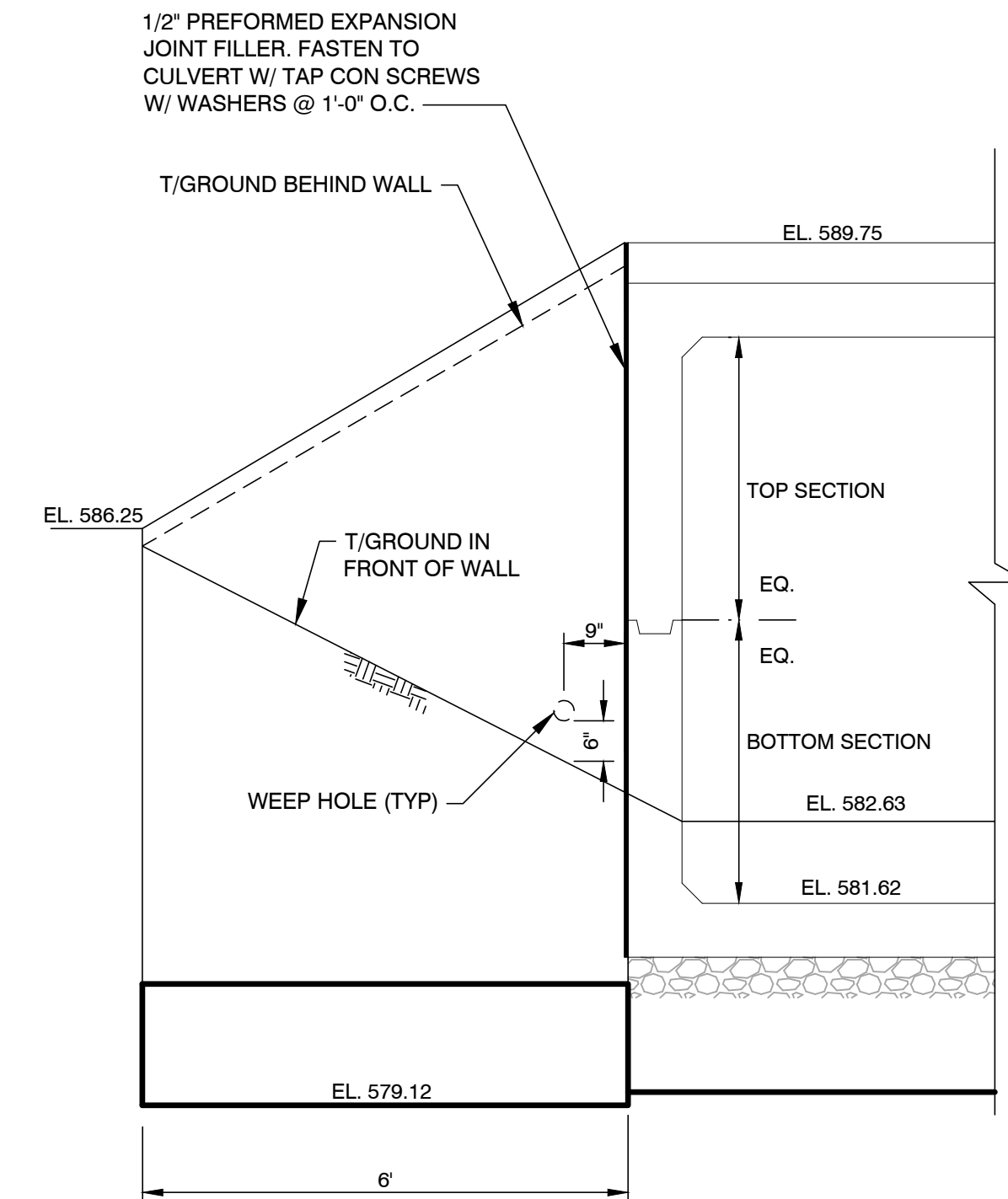
your trusted advisor  
**consultants**

engineers  
architects  
planners

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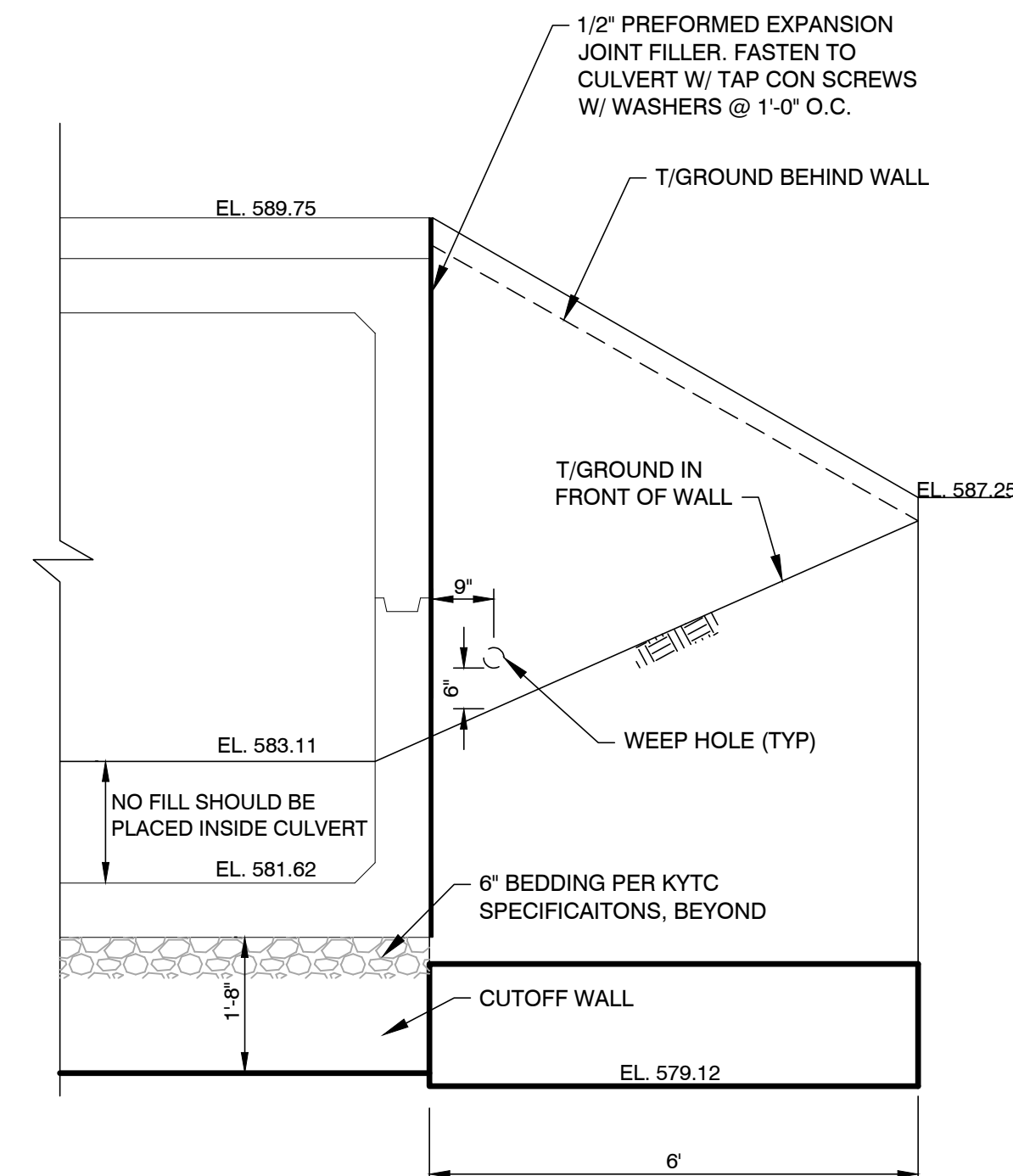
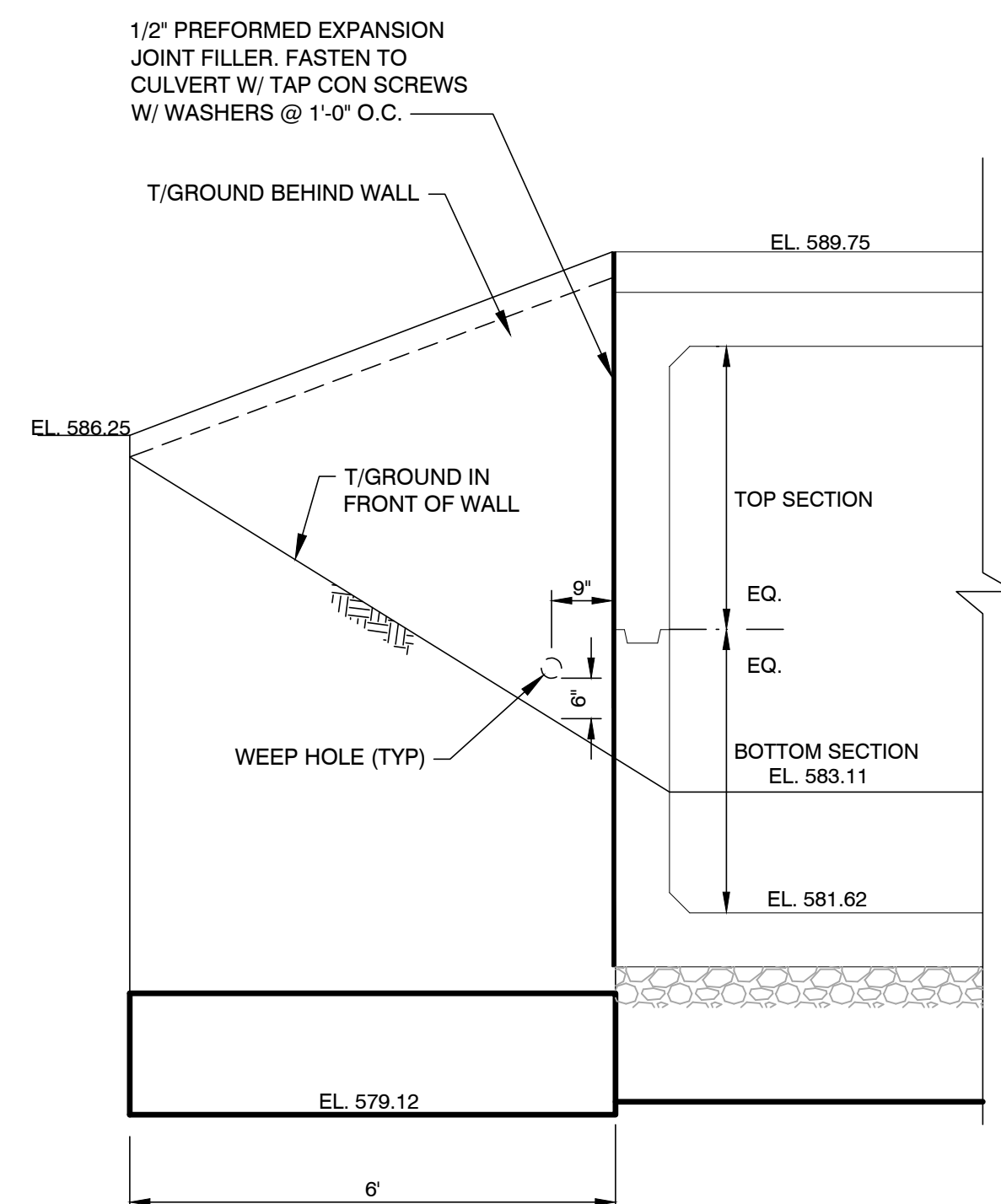
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| PROJECT NO.        |          |
| <b>19052301-02</b> |          |
| DISCIPLINE         |          |
| <b>STRUCTURAL</b>  |          |
| SHEET NAME         |          |
| <b>S-01</b>        |          |
| SHEET              | OF       |
| <b>4</b>           | <b>6</b> |





## ELEVATION WEST WINGWALLS

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



## ELEVATION EAST WINGWALLS

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



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|--------------|------------|----|----------|------|
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| DRAWN BY:    | JAM        |    |          |      |
| CHECKED BY:  | RDR        |    |          |      |

**CAMPBELL COUNTY  
BRIDGE REPAIR  
CAMPBELL COUNTY, KY**

**EAST ALEXANDRIA PIKE AND  
UPPER TUG FORK ELEV.**

|                                   |                |
|-----------------------------------|----------------|
| PROJECT NO.<br><b>19052301-02</b> |                |
| DISCIPLINE<br><b>STRUCTURAL</b>   |                |
| SHEET NAME<br><b>S-02</b>         |                |
| SHEET<br><b>5</b>                 | OF<br><b>6</b> |

STRUCTURAL GENERAL NOTES

GENERAL

IN GENERAL, UNLESS SPECIFICALLY SET FORTH HEREIN, THE WORK, MATERIALS AND METHODS OF MEASUREMENT AND PAYMENT SHALL CONFORM TO THE APPLICABLE DIVISIONS AND PARAGRAPHS (AS NOTED ON THE BID PROPOSAL OR IN THE PLANS) OF THE CURRENT:

STATE OF KENTUCKY TRANSPORTATION CABINET  
DEPARTMENT OF HIGHWAYS

1. STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED BY STATE AND LOCAL CODES AND REGULATIONS.

THE CONTRACTOR WILL BE RESPONSIBLE FOR RECONNECTING ANY UTILITY SERVICES THAT WERE TERMINATED AS A RESULT OF WORK WITHIN THE SCOPE OF THIS PROJECT.

ALL DIMENSIONS PERTAINING TO EXISTING CONSTRUCTION TO BE FIELD VERIFIED BEFORE STARING ANY WORK OR FABRICATION.

REINFORCING STEEL:

ASTM A615, A616, OR A617 GRADE 60 MINIMUM YIELD STRENGTH 60,000 PSI

ALL REINFORCING STEEL MUST BE EPOXY COATED

CONCRETE

ALL CONCRETE WORK SHALL CONFORM TO THE LATEST AMERICAN CONCRETE INSTITUTE AND REINFORCING STEEL INSTITUTE RECOMMENDATIONS.  
CONCRETE SHALL BE PLACED IMMEDIATELY AFTER INSPECTOR'S APPROVAL OF BOTTOM STRATA AND POURED CONTINUOUSLY UNTIL COMPLETED.

WHERE CONCRETE IS PLACED DIRECTLY ON GROUND, REINFORCING STEEL TO HAVE A MINIMUM OF 3" CONCRETE COVER.

POURING TRUNK, CHUTE OR PUMP HOSE SHALL BE USED WHERE FREE FALL OF CONCRETE IS GREATER THAN 8'-0".

SLEEVES, OPENINGS, CONSTRUCTION AND COLD JOINTS NOT SHOWN ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE ENGINEER.

AT CORNERS AND INTERSECTIONS OF FOOTINGS, SLABS AND WALLS, PROVIDE BENT BARS OF EQUAL SIZE AND AT SAME SPACING AS TYPICAL REINFORCING AROUND CORNER AND/OR INTO ABUTTING WALL.

CONCRETE STRENGTH: CLASS A

SUBMITTALS

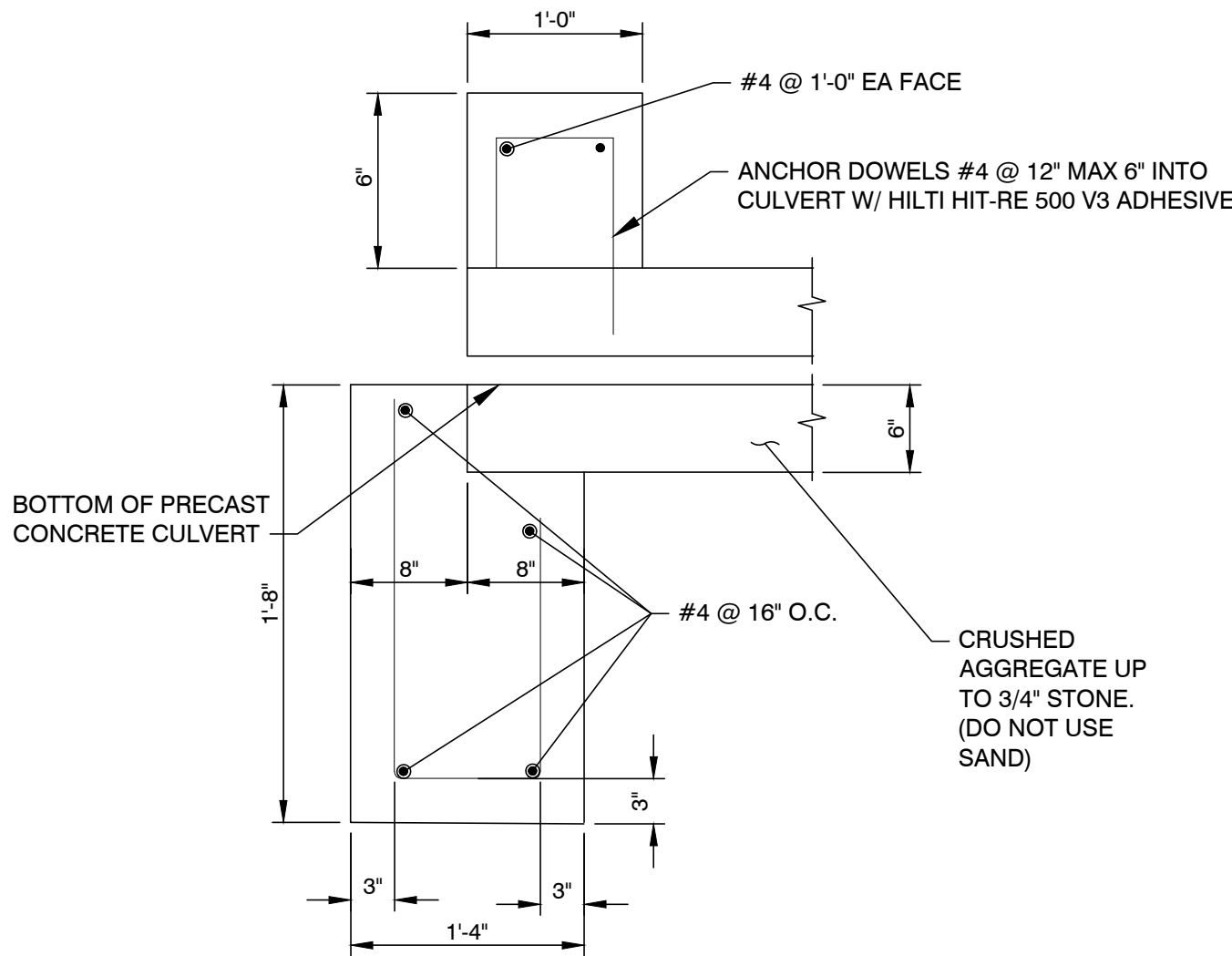
CONTRACTOR SHALL SUBMIT THREE COPIES OF THE FOLLOWING INFORMATION TO THE ENGINEER FOR REVIEW PRIOR TO ORDERING MATERIALS FOR EACH ITEM:

1. CONCRETE MIX DESIGN
2. PRECAST CONCRETE BOX
3. BACKFILL
4. RIP RAP
5. GUARDRAIL
6. ASPHALT
7. BEDDING MATERIAL

TESTING

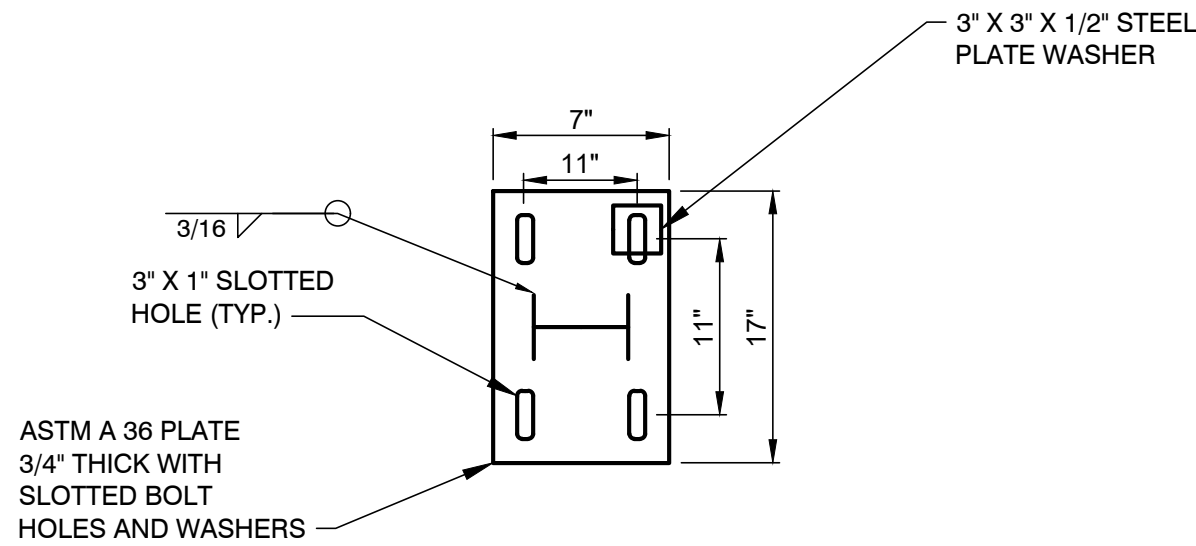
THE CONTRACTOR SHALL EMPLOY A FIRM TO PERFORM CONCRETE TESTING, AS REQUIRED PER THE KENTUCKY STANDARD SPECIFICATIONS.

SOIL BEARING CAPACITY MUST BE DETERMINED BY A GEOTECHNICAL ENGINEER. ASSUMED BEARING PRESSURE - 3000 PSF



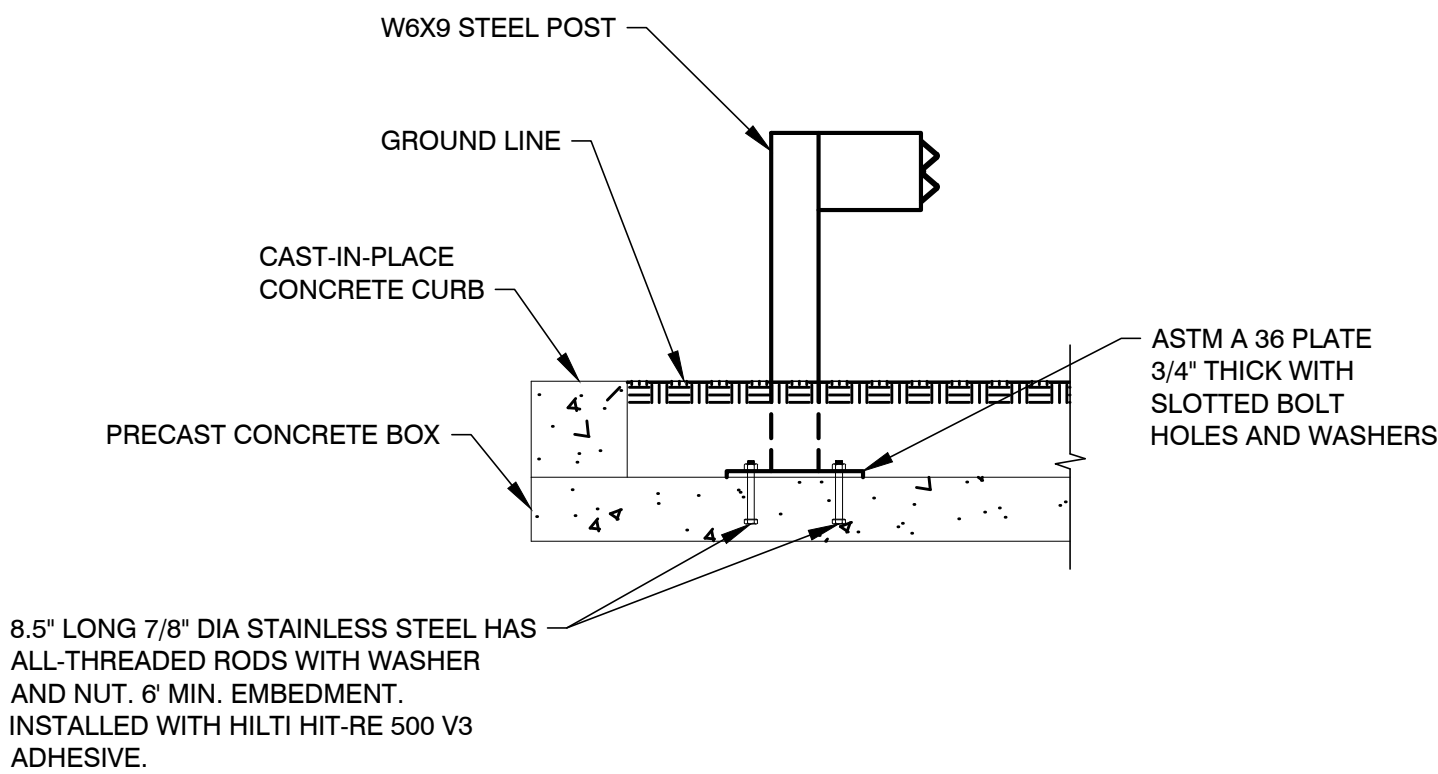
SECTION B

SCALE: 1" = 1'-0"



BASEPLATE DETAIL - 2

SCALE: 1" = 1'-0"



GUARDRAIL POST TO CONCRETE  
BOX CONNECTION DETAIL

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



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| DESIGNED BY: | RBRB       |    |          |      |
| DRAWN BY:    | JLAP       |    |          |      |
| CHECKED BY:  | RBRB       |    |          |      |

CAMPBELL COUNTY  
BRIDGE REPAIR  
CAMPBELL COUNTY, KY

UPPER TUG FORT STRUCTURAL  
DETAILS

|                                   |                |
|-----------------------------------|----------------|
| PROJECT NO.<br><b>19052301-02</b> |                |
| DISCIPLINE<br><b>STRUCTURAL</b>   |                |
| SHEET NAME<br><b>S-03</b>         |                |
| SHEET<br><b>6</b>                 | OF<br><b>6</b> |