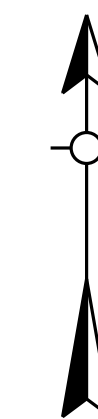
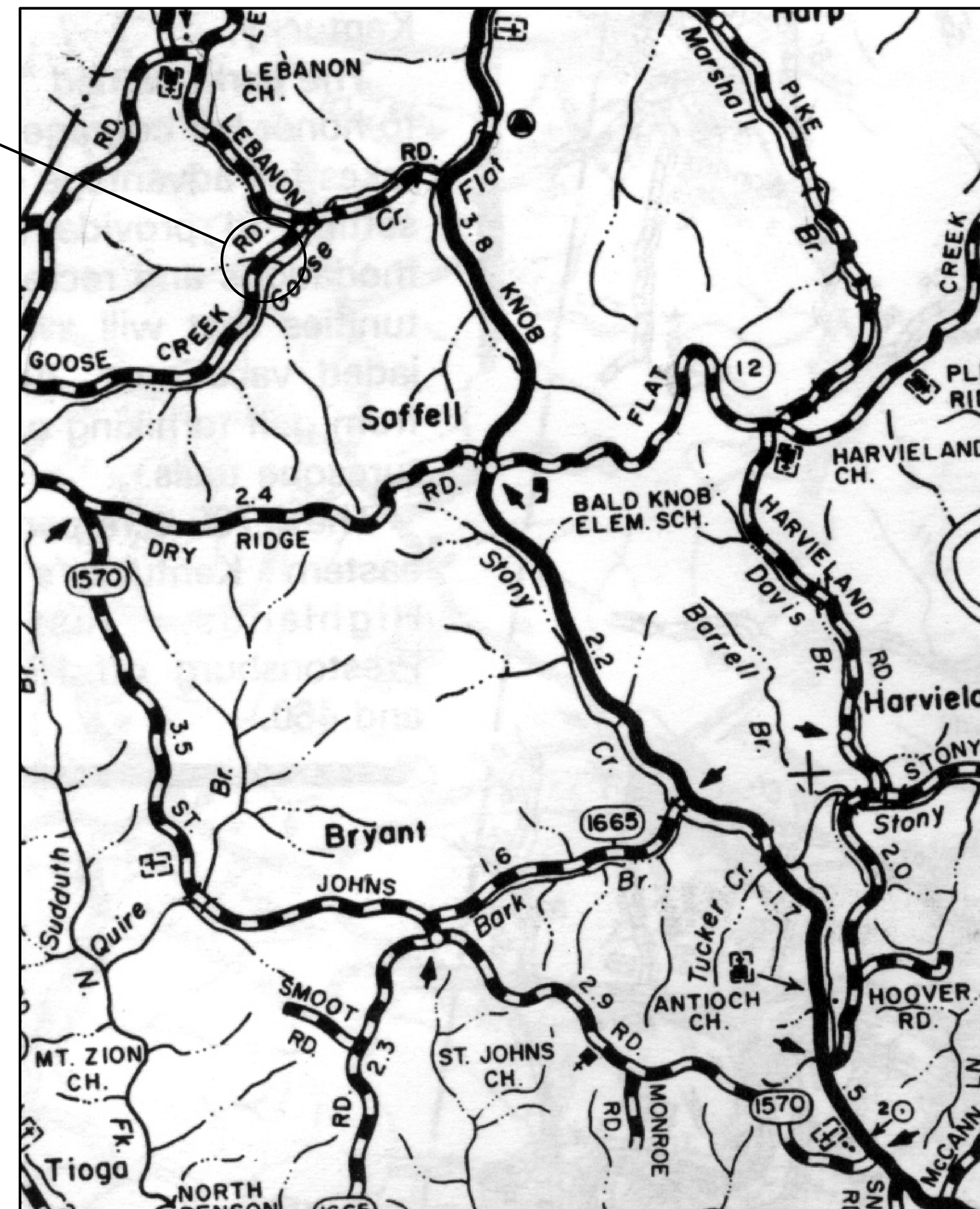


# FRANKLIN COUNTY GOOSE CREEK ROAD STRUCTURE REPLACEMENT

*Prepared For:*  
**FRANKLIN COUNTY FISCAL COURT**

PROJECT  
LOCATION



LOCATION MAP

**FRANKLIN COUNTY FISCAL COURT**

HUSTON WELLS	JUDGE/EXECUTIVE
TAMBRA HARROD	DEPUTY JUDGE/EXECUTIVE
SHERRY SEBASTIAN	MAGISTRATE, DISTRICT 1
JW BLACKBURN	MAGISTRATE, DISTRICT 2
MICHAEL MUELLER	MAGISTRATE, DISTRICT 3
SCOTTY TRACY	MAGISTRATE, DISTRICT 4
MARTI BOOTH	MAGISTRATE, DISTRICT 5
LAMBERT MOORE	MAGISTRATE, DISTRICT 6

**INDEX OF SHEETS**

SHEET	ITEM
1	COVER
2	PLAN AND PROFILE
3	PART PLAN - PART SECTION
4	WING SECTIONS AND ELEVATION

**ESTIMATE OF QUANTITIES**

ITEM	QUANT.	UNIT
CONCRETE, CLASS 'A'	65.9	CU YD
REINFORCING STEEL	8161	LB
STRUCTURAL GRANULAR BACKFILL	41	CU YD
CYCLOPEAN RIPRAP	45	TONS

NOTE: QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY

**STANDARD DRAWINGS**

STANDARD DRAWINGS LISTED BELOW ARE THE CURRENT EDITION AND ARE TO BE USED WITH THESE PLANS.

RGX - 100 - 06	TREATMENT OF EMBANKMENTS AT END BENTS
RGX - 105 - 08	TREATMENT OF EMBANKMENTS AT END BENTS

NO.	DATE	DESCRIPTION	BY

DLZ

KENTUCKY, INC.

1950 HAGGARD CT.  
LEXINGTON, KENTUCKY 40505  
(859) 299-5226

GOOSE CREEK ROAD  
STRUCTURE REPLACEMENT  
FRANKLIN COUNTY, KENTUCKY

COVER SHEET  
STRUCTURE OPTION NO.3  
12'x6' RCBC WITH BOTTOM SLAB

DRAWN BY: JDA	DATE: FEBRUARY 2020
CHECKED BY: EAO	SCALE: N.T.S.
JOB NO.: 1631-0085-90	SHEET: 1 of 4

## GENERAL NOTES

**SPECIFICATIONS:**

ALL REFERENCES TO THE STANDARD SPECIFICATIONS ARE TO THE CURRENT EDITION OF THE KENTUCKY TRANSPORTATION CABINET STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION WITH CURRENT SUPPLEMENTAL SPECIFICATIONS. ALL REFERENCES TO THE AASHTO SPECIFICATIONS ARE TO THE CURRENT EDITION OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, WITH INTERIMS.

**DESIGN LOAD:**

THIS BRIDGE IS DESIGNED FOR KY HL93 LIVE LOAD CONSISTING OF A COMBINATION OF THE DESIGN TRUCK OR DESIGN TANDEM, AND A DESIGN LANE LOAD. THIS BRIDGE IS DESIGNED FOR A WIND LOAD BASED ON A WIND VELOCITY OF 100 MPH.

**DESIGN METHOD:**

ALL REINFORCED CONCRETE MEMBERS ARE DESIGNED BY THE LOAD AND RESISTANCE FACTOR METHOD AS SPECIFIED IN THE CURRENT AASHTO SPECIFICATIONS.

**MATERIALS DESIGN SPECIFICATIONS:**

FOR CLASS "A" REINFORCED CONCRETE	F'C = 3,500 PSI
FOR CLASS "B" CONCRETE	F'C = 2,500 PSI
FOR STEEL REINFORCEMENT	FY = 60,000 PSI

**FOUNDATION DATA:**

SEE FOUNDATION LAYOUT SHEET. PLACE FOOTINGS IN BEDROCK AT THE ELEVATION SHOWN.

**FOUNDATION PRESSURE:**

STRUCTURE FOOTINGS ARE DESIGNED FOR A MAXIMUM LOAD OF 20 KSF.

**CONCRETE:**

CLASS "A" CONCRETE IS TO BE USED THROUGHOUT THE FOOTINGS, EXCEPT AS NOTED.

THE CONTRACTOR SHALL COMPLY WITH SECTIONS 601.03.09(D), 601.03J4, AND 601.03J5 IN THE KYTC STANDARD SPECIFICATIONS IN REGARDS TO CONCRETE CONSTRUCTION.

**FOUNDATION CONSTRUCTION:**

CONTRACTOR SHALL NOTIFY THE ENGINEER 24 HOURS PRIOR TO POURING CONCRETE FOR THE FOUNDATION.

EXCAVATION, CONCRETE FORMING AND REBAR PLACEMENT SHALL BE COMPLETED PRIOR TO ENGINEER INSPECTION.

ENGINEER INSPECTION SHALL BE PERFORMED PRIOR TO POURING OF CONCRETE FOR THE FOUNDATION. IF THE CONCRETE IS POURED PRIOR TO THE ENGINEER INSPECTION, THE CONTRACTOR SHALL BE REQUIRED TO REMOVE THE CONCRETE AT HIS/HER OWN EXPENSE.

**REINFORCEMENT:**

DIMENSIONS SHOWN FROM THE FACE OF CONCRETE TO BARS ARE CLEAR DISTANCES UNLESS OTHERWISE SHOWN. SPACING OF BARS IS FROM CENTER TO CENTER OF BARS. CLEAR DISTANCE TO FACE OF CONCRETE IS 2" UNLESS OTHERWISE NOTED.

**BEVELED EDGES:**

ALL EXPOSED EDGES SHALL BE BEVELED 3/4" UNLESS OTHERWISE SHOWN.

**BENCH MARKS:**

ELEVATIONS OF BENCH MARKS ARE ASSUMED ELEVATIONS.

**REMOVAL OF EXISTING STRUCTURE:**

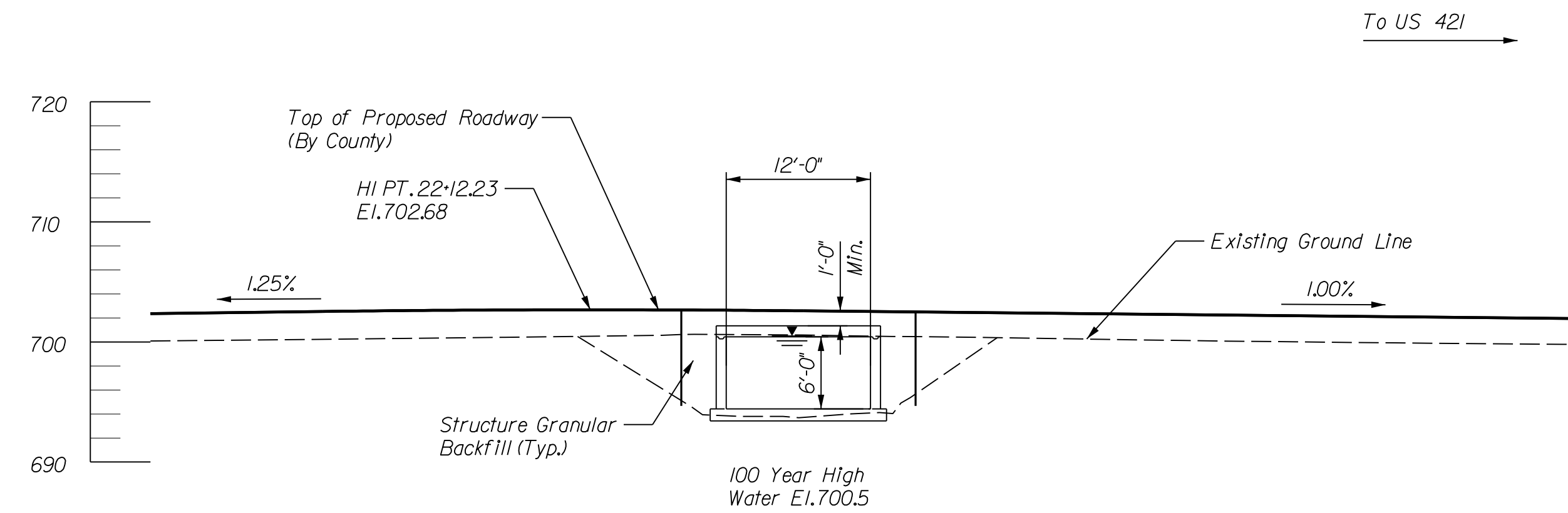
**EXISTING STRUCTURE TO BE REMOVED BY THE CONTRACTOR.**

**CONSTRUCTION IN STREAM:**

CONTRACTOR IS RESPONSIBLE FOR MAINTAINING FLOW OF STREAM DURING CONSTRUCTION AND IS ALSO RESPONSIBLE FOR MAINTAINING A DRY EXCAVATION DURING POURING OF CONCRETE FOR THE FOUNDATION INCLUDING ANY NECESSARY PUMPING, DIKES OR OTHER METHODS REQUIRED TO PROVIDE DRY EXCAVATION.

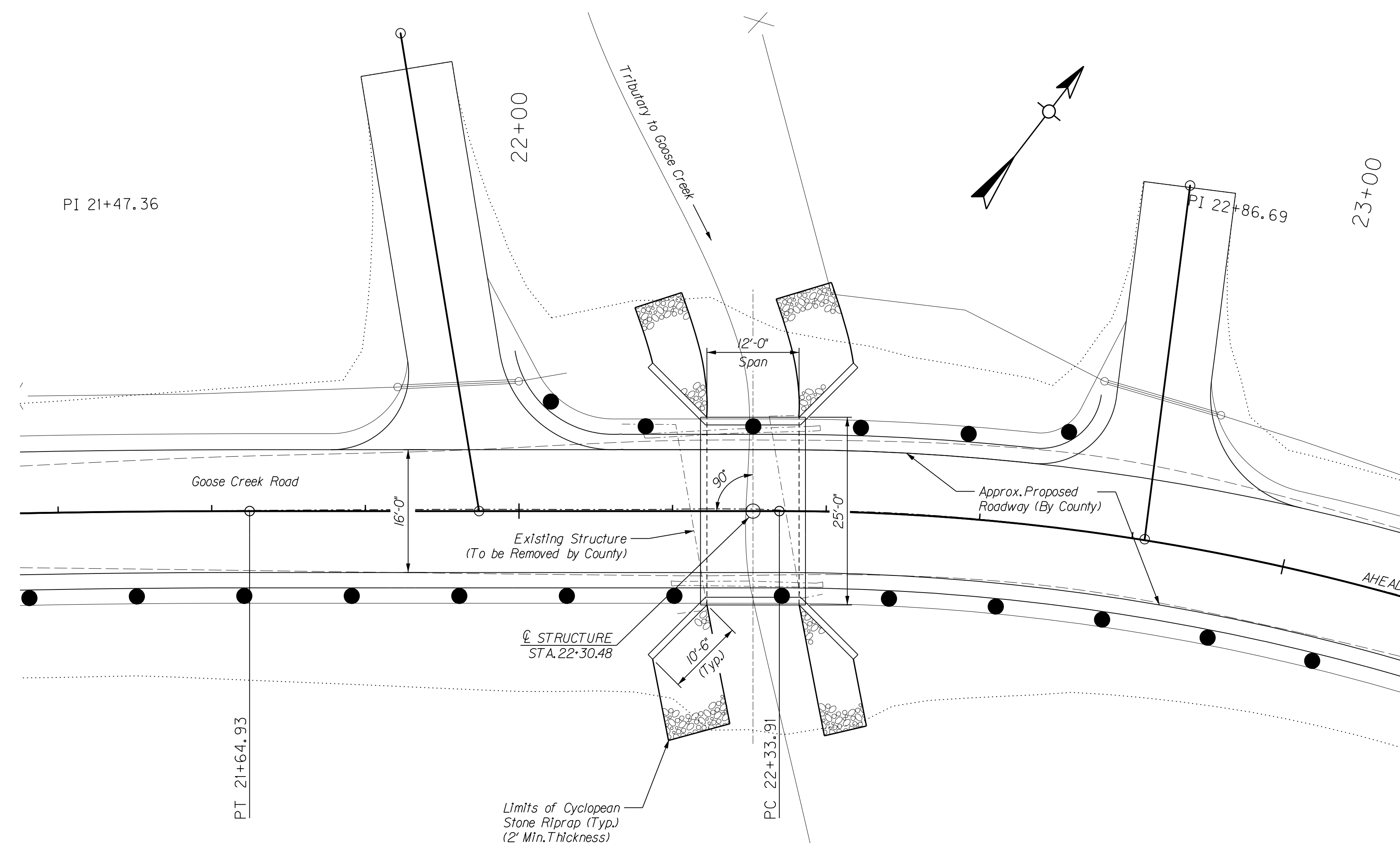
**FLOWLINE REINFORCEMENT:**

REINFORCEMENT IN THE PAVED INLET AND OUTLET SLAB SHALL BE SIZE #4 BARS AT 18" CENTERS IN EACH DIRECTION OR AN EQUIVALENT AREA OF WELDED DEFORMED STEEL FABRIC. THE BARS SHALL EXTEND A MINIMUM OF 1'-0" INTO WING FOOTINGS OR BOTTOM SLAB. THE COST OF THIS REINFORCEMENT SHALL BE INCIDENTAL TO THE UNIT PRICE BID FOR CONCRETE, CLASS "A".



### ELEVATION

12' Span x 6' Rise RCBC Structure  
~16'-0" Roadway 0' 00' 00" Skew ~ KY HL 93 Loading



### PLAN

NO.	DATE	DESCRIPTION	BY



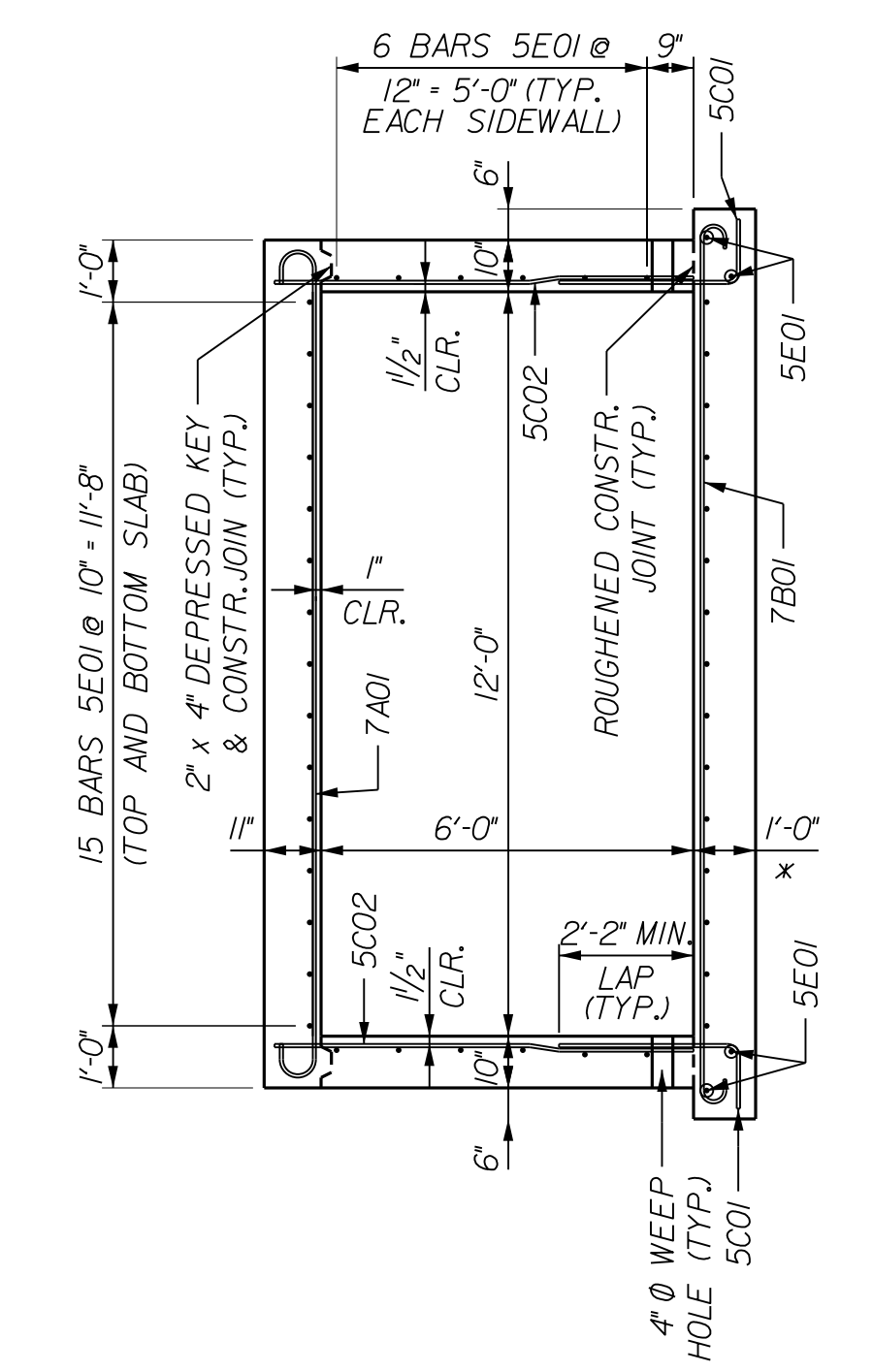
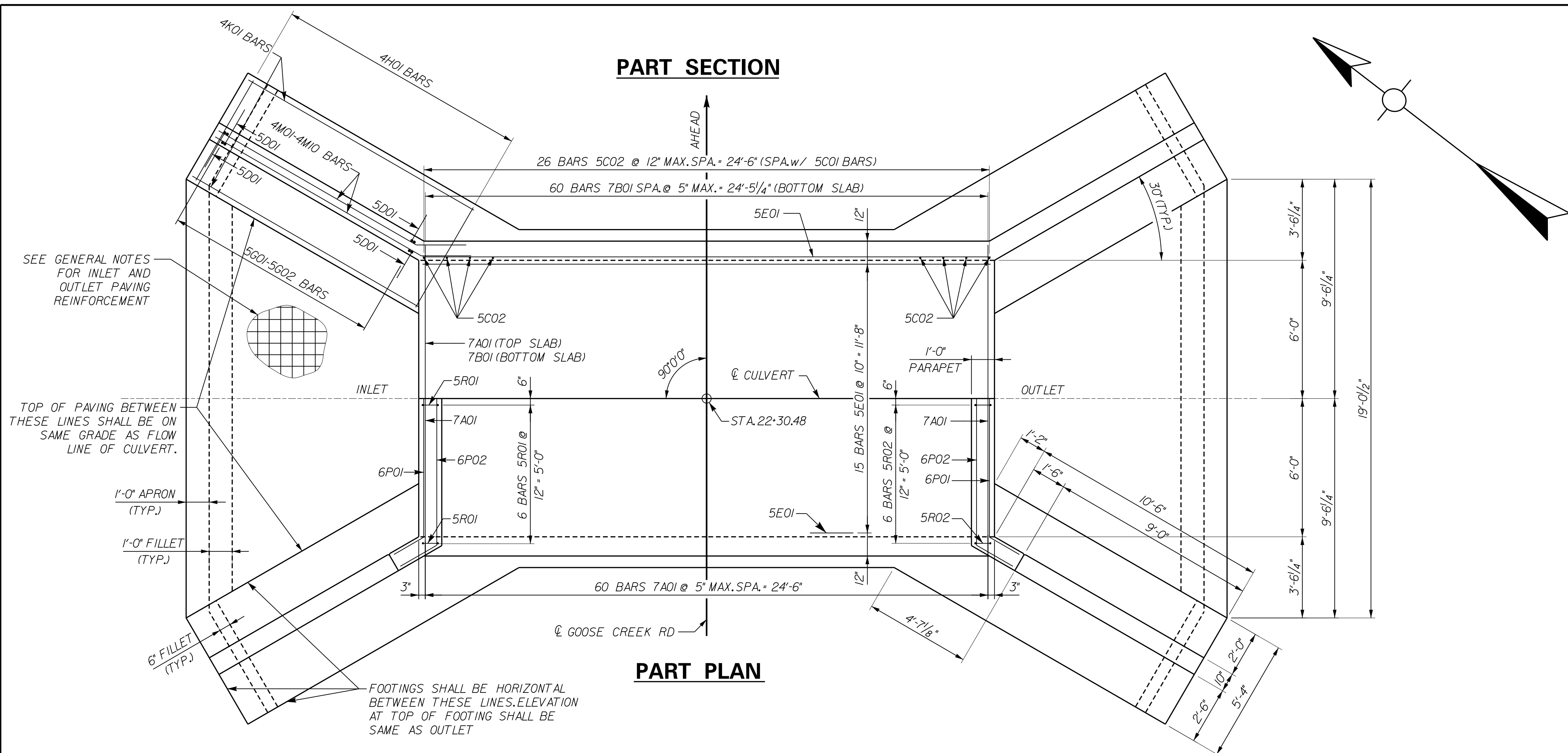
**DLZ**  
KENTUCKY, INC.

1950 HAGGARD CT.  
LEXINGTON, KENTUCKY 40505  
(859) 299-5226

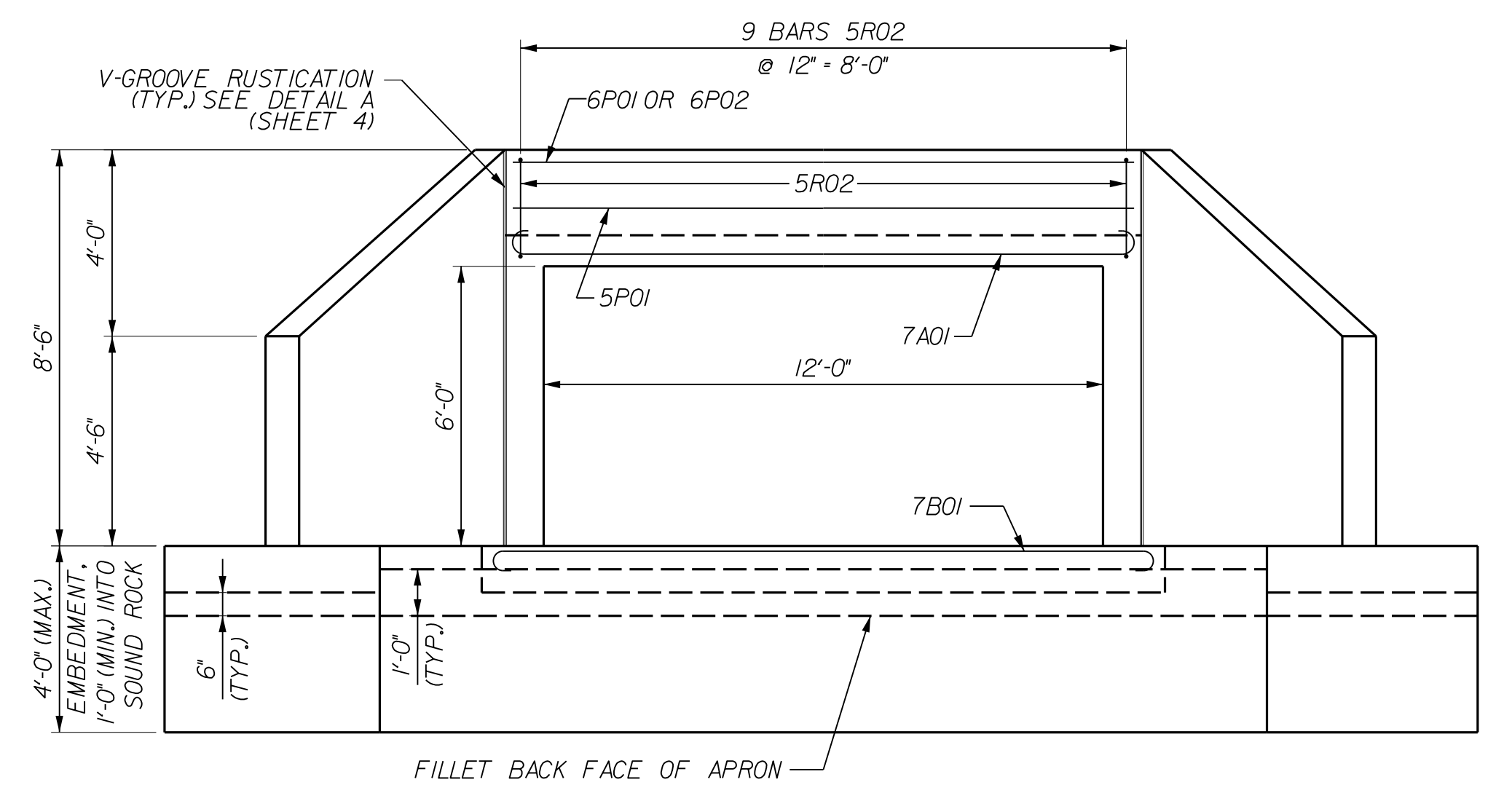
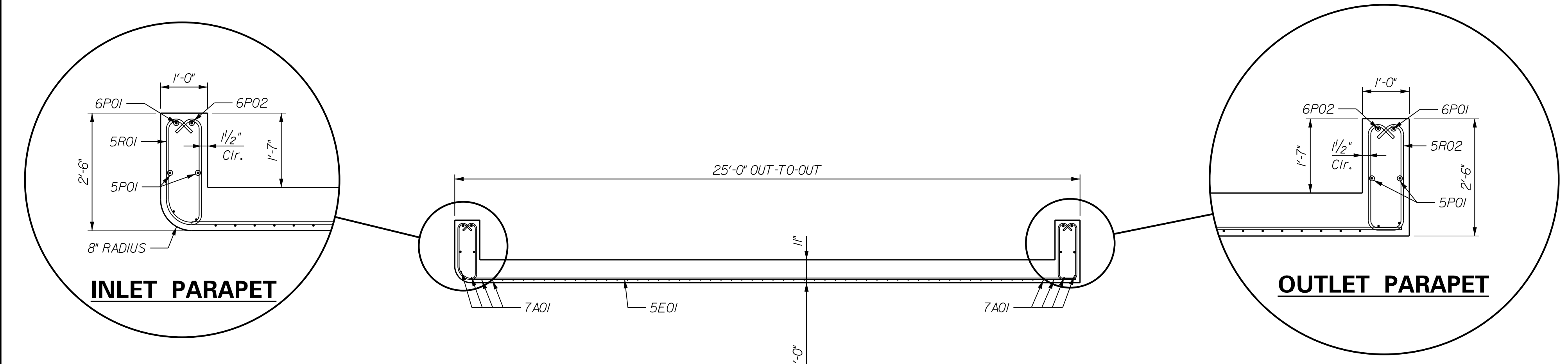
**GOOSE CREEK ROAD  
STRUCTURE REPLACEMENT  
FRANKLIN COUNTY, KENTUCKY**

PLAN AND PROFILE  
STRUCTURE OPTION NO.3  
12'x6' RCBC WITH BOTTOM SLAB

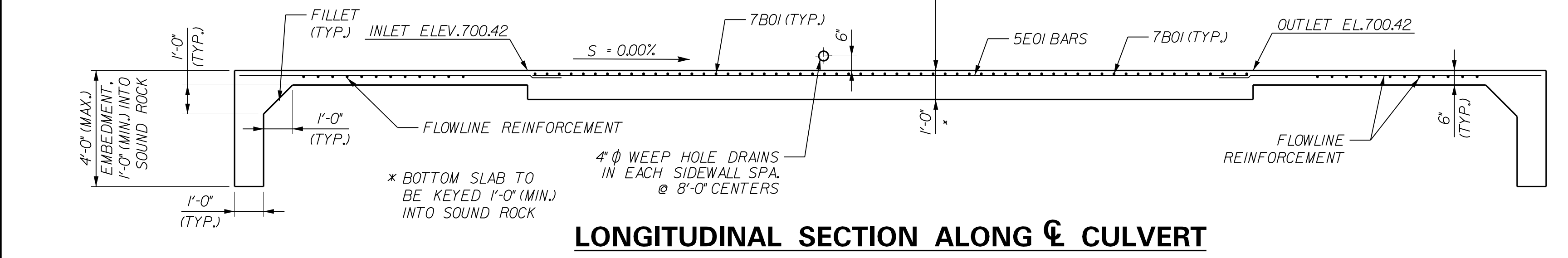
DRAWN BY:	JDA	DATE:	FEBRUARY 2020
CHECKED BY:	EAO	SCALE:	N.T.S.
JOB NO.:	1631-0085-90	SHEET:	2 of 4



\* FOOTING TO BE KEYPED 1'-0" (MIN.) INTO SOUND ROCK



NOTE ① - THE BOTTOM SLAB SHALL BE FOUND ON SOUND ROCK. OVEREXCAVATION TO SOUND ROCK MAY, AT THE CONTRACTOR'S OPTION, BE BACKFILLED WITH CLASS 'B' CONCRETE TO THE ELEVATION OF DESIGN BOTTOM OF THE FOOTING.



NO.	DATE	DESCRIPTION	BY

**DLZ**  
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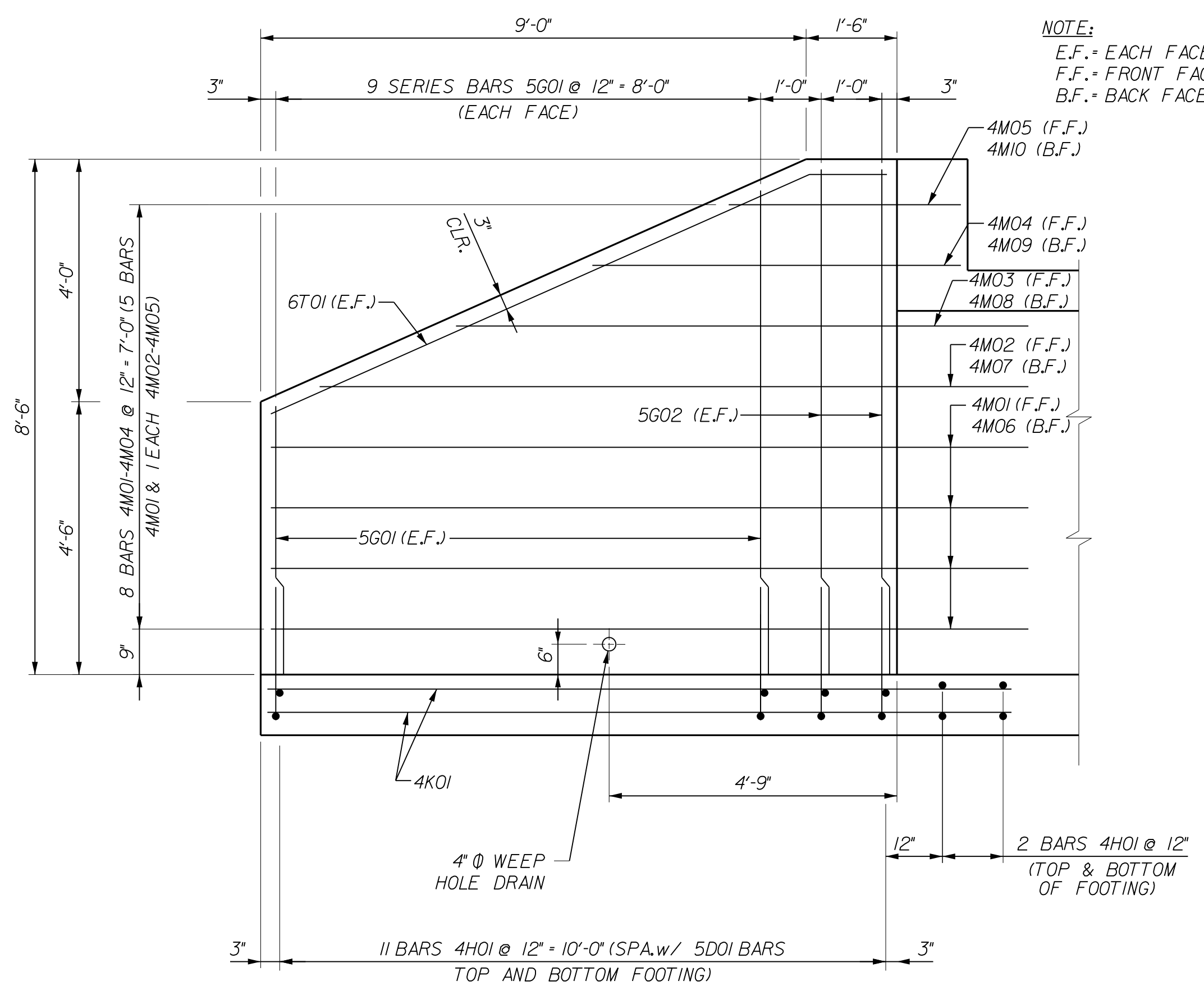
1950 HAGGARD CT.  
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GOOSE CREEK ROAD  
STRUCTURE REPLACEMENT  
FRANKLIN COUNTY, KENTUCKY

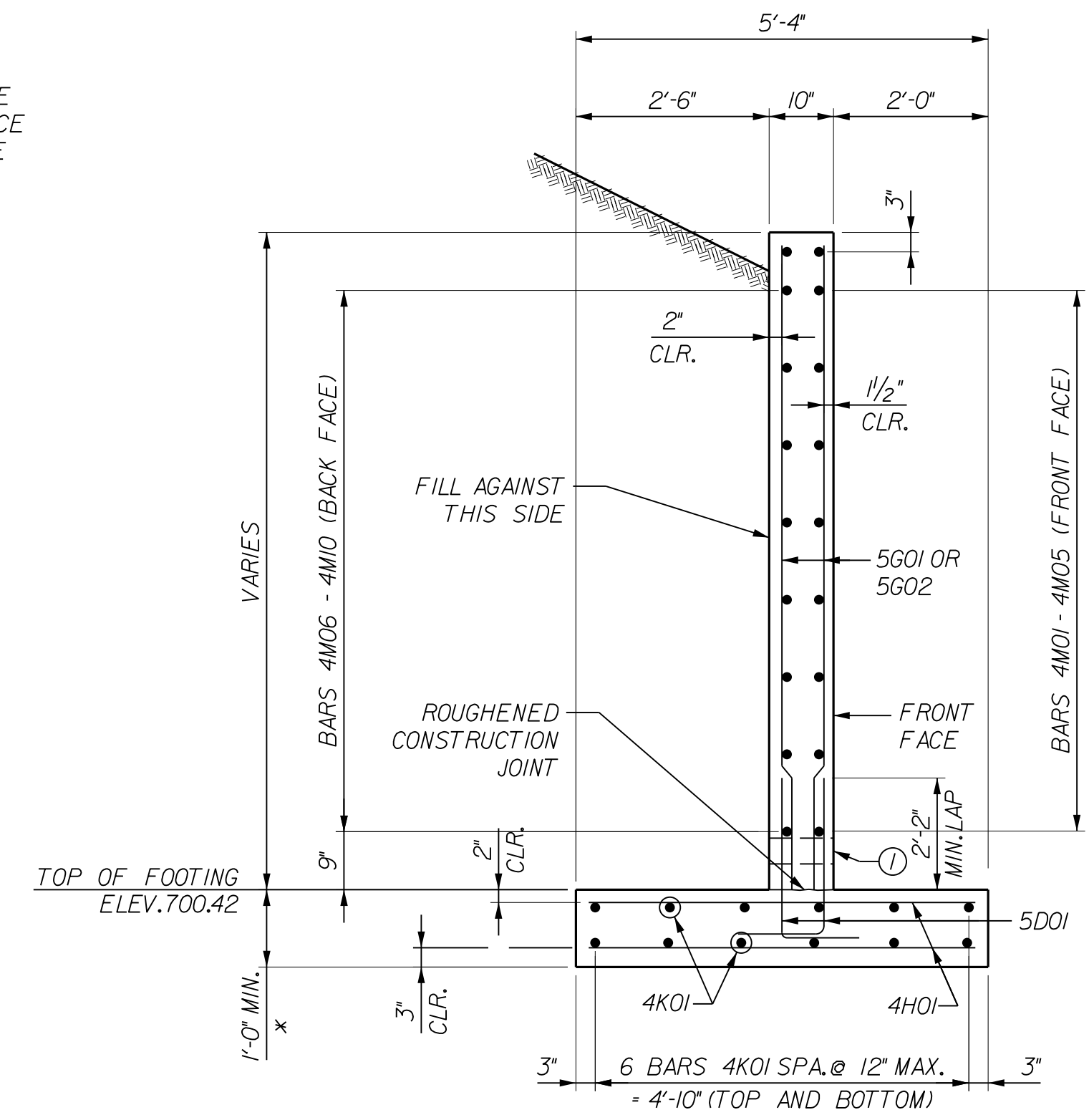
PART PLAN - PART SECTION  
STRUCTURE OPTION NO.3  
12'x6' RCBC WITH BOTTOM SLAB

DRAWN BY: JDA	DATE: FEBRUARY 2020
CHECKED BY: EAO	SCALE: N.T.S.
JOB NO.: 1631-0085-90	SHEET: 3 of 4

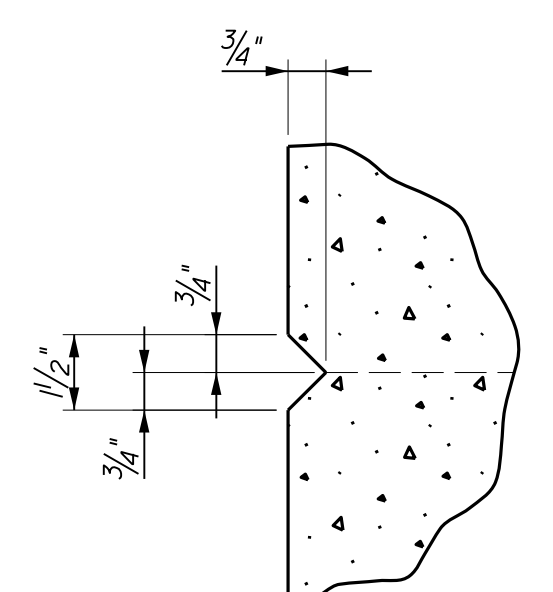




**TYPICAL WING ELEVATION**  
(SHOWING REINFORCEMENT IN FRONT AND BACK FACE)



**TYPICAL WING SECTION**



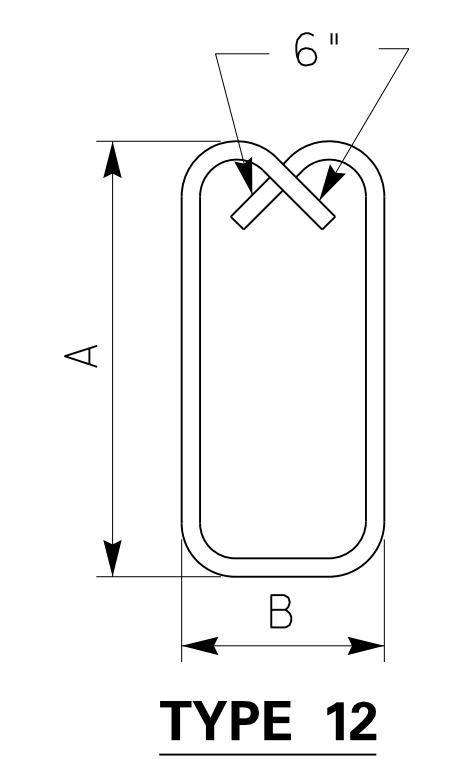
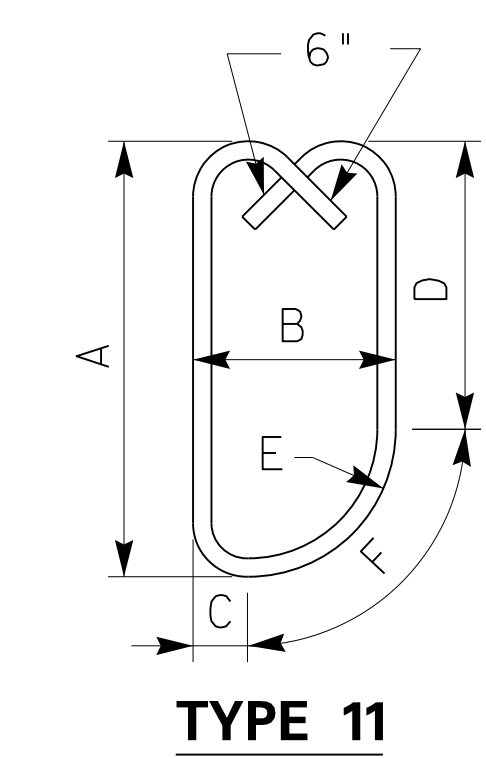
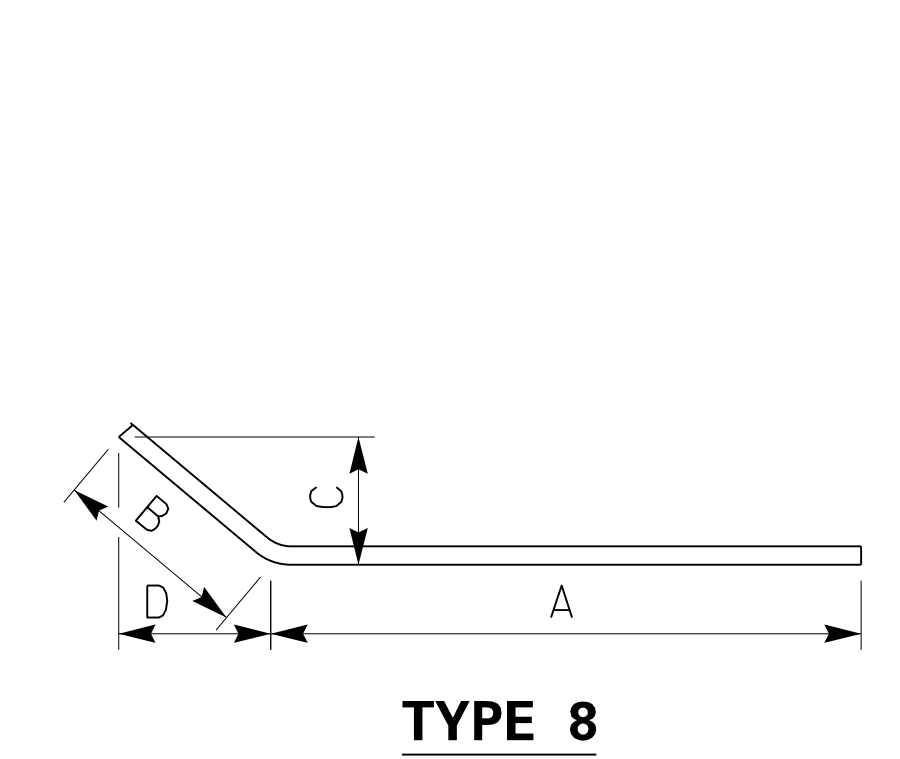
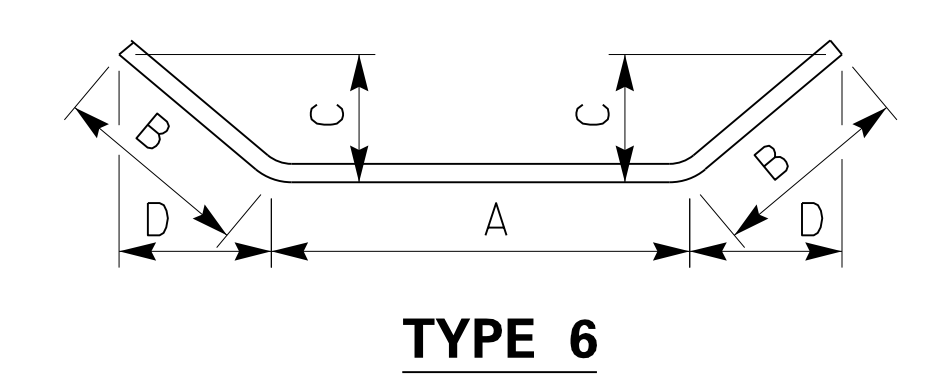
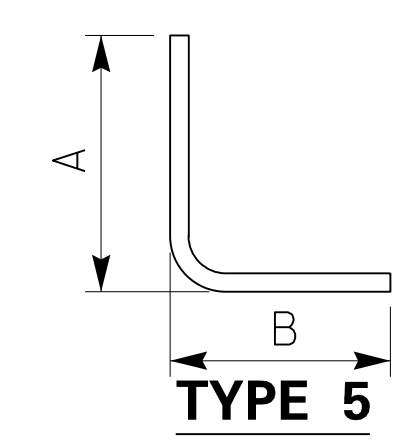
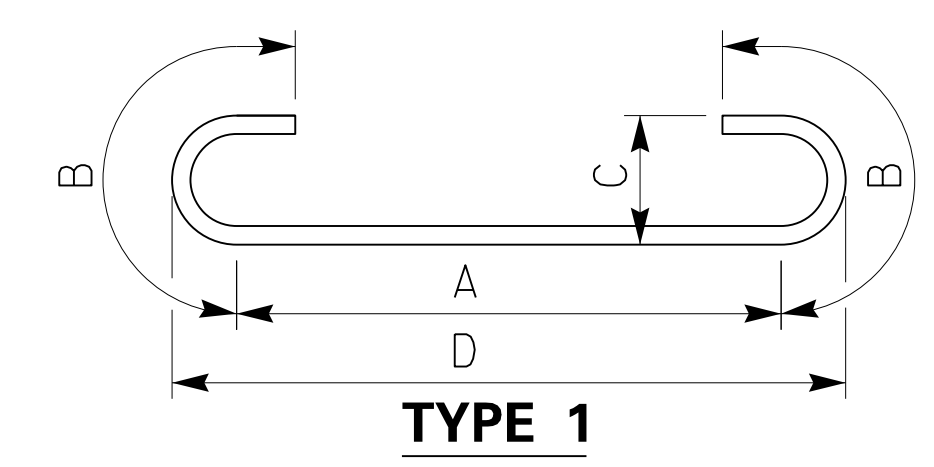
**DETAIL A**  
(RUSTICATION GROOVE)

**NOTE:**  
EXTEND FROM TOP OF THE FOOTING TO THE TOP OF THE WALL ACROSS THE TOP OF THE WALL AND DOWN THE BACK FACE A MINIMUM OF 1'-6"

**BILL OF REINFORCEMENT**

MARK	TYPE	SIZE	NUMBER	LENGTH		A	B	C	D	E	F
				FT.	IN.						
4H01	STR	4	104	5	0						
4K01	STR	4	48	11	4						
4M01	(8)	4	16	12	0	10	3	1	9	0	10 1/2
4M02	(8)	4	4	11	3	9	6	1	9	0	10 1/2
4M03	(8)	4	4	9	0	7	3	1	9	0	10 1/2
4M04	STR	4	4	5	11						
4M05	STR	4	4	3	8						
4M06	(8)	4	16	11	11	10	2	1	9	0	10 1/2
4M07	(8)	4	4	11	0	9	3	1	9	0	10 1/2
4M08	(8)	4	4	8	9	7	0	1	9	0	10 1/2
4M09	STR	4	4	5	8						
4M10	STR	4	4	3	5						
5C01	(5)	5	52	3	11	2	11	1	0		
5C02	STR	5	52	6	9						
5D01	(5)	5	88	4	6	2	10	1	8		
5E01	STR	5	46	24	8						
5G01	STR	5	8 SETS OF 9	447	0	VARIES 4'-5" TO 8'-0" IN 5/8" INCREMENTS					
5G02	STR	5	16	8	4						
5P01	STR	5	4	12	8						
5R01	(11)	5	12	6	2	2	3	0	9	0	2 1/2
5R02	(12)	5	12	6	3	2	3	0	9		
6P01	(6)	6	2	15	1	12	1	1	6	1	2 3/4
6P02	(6)	6	2	16	6	12	8	1	11	1	7 7/8
6T01	(8)	6	8	11	0	9	8 3/4	1	3 1/4	0	6 1/4
7A01	(7)	7	60	15	1	12	9	1	2	0	7
7B01	(7)	7	60	16	1	13	9	1	2	0	7

**BAR MARK DESCRIPTION**



NO.	DATE	DESCRIPTION	BY

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**GOOSE CREEK ROAD  
STRUCTURE REPLACEMENT  
FRANKLIN COUNTY, KENTUCKY**

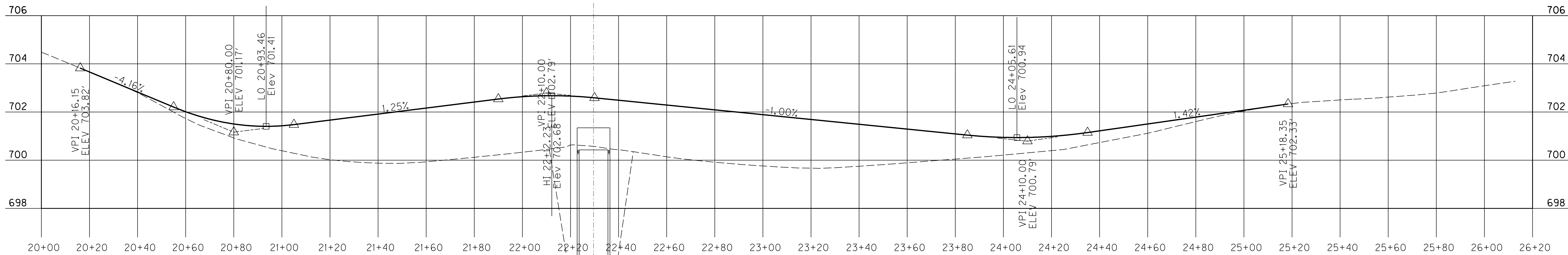
*WING SECTIONS AND ELEVATION  
STRUCTURE OPTION NO.3  
12'x6' RCBC WITH BOTTOM SLAB*

DRAWN BY: JDA	DATE: FEBRUARY 2020
CHECKED BY: EAO	SCALE: N.T.S.
JOB NO.: 1631-0085-90	SHEET: 4 of 4

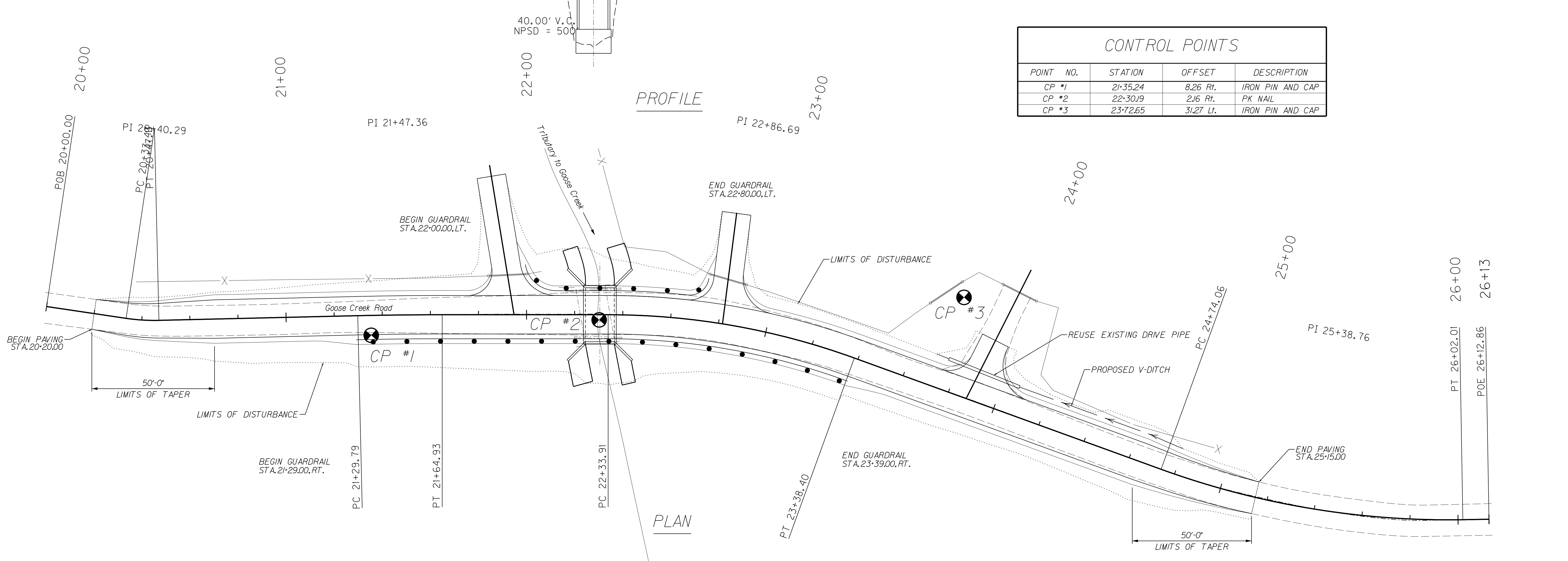
50.00' V.C.  
HLSD = 92'

50.00' V.C.  
HLSD = 388'

TO US 421



CONTROL POINTS			
POINT NO.	STATION	OFFSET	DESCRIPTION
CP #1	21-35.24	8.26 Rt.	IRON PIN AND CAP
CP #2	22-30.19	2.16 Rt.	PK NAIL
CP #3	23-72.65	31.27 Lt.	IRON PIN AND CAP



PROFILE

PLAN

NO.	DATE	DESCRIPTION	BY

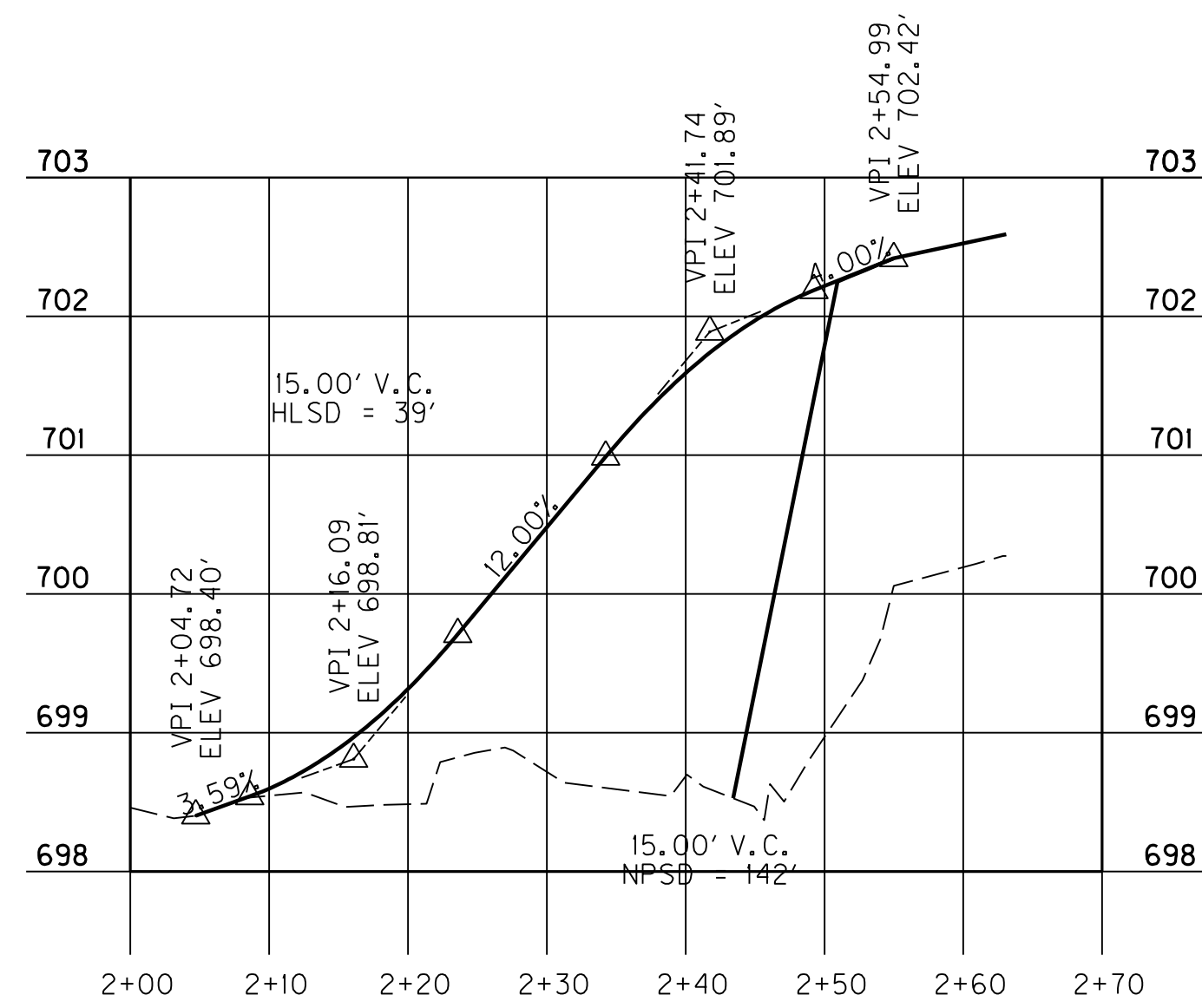
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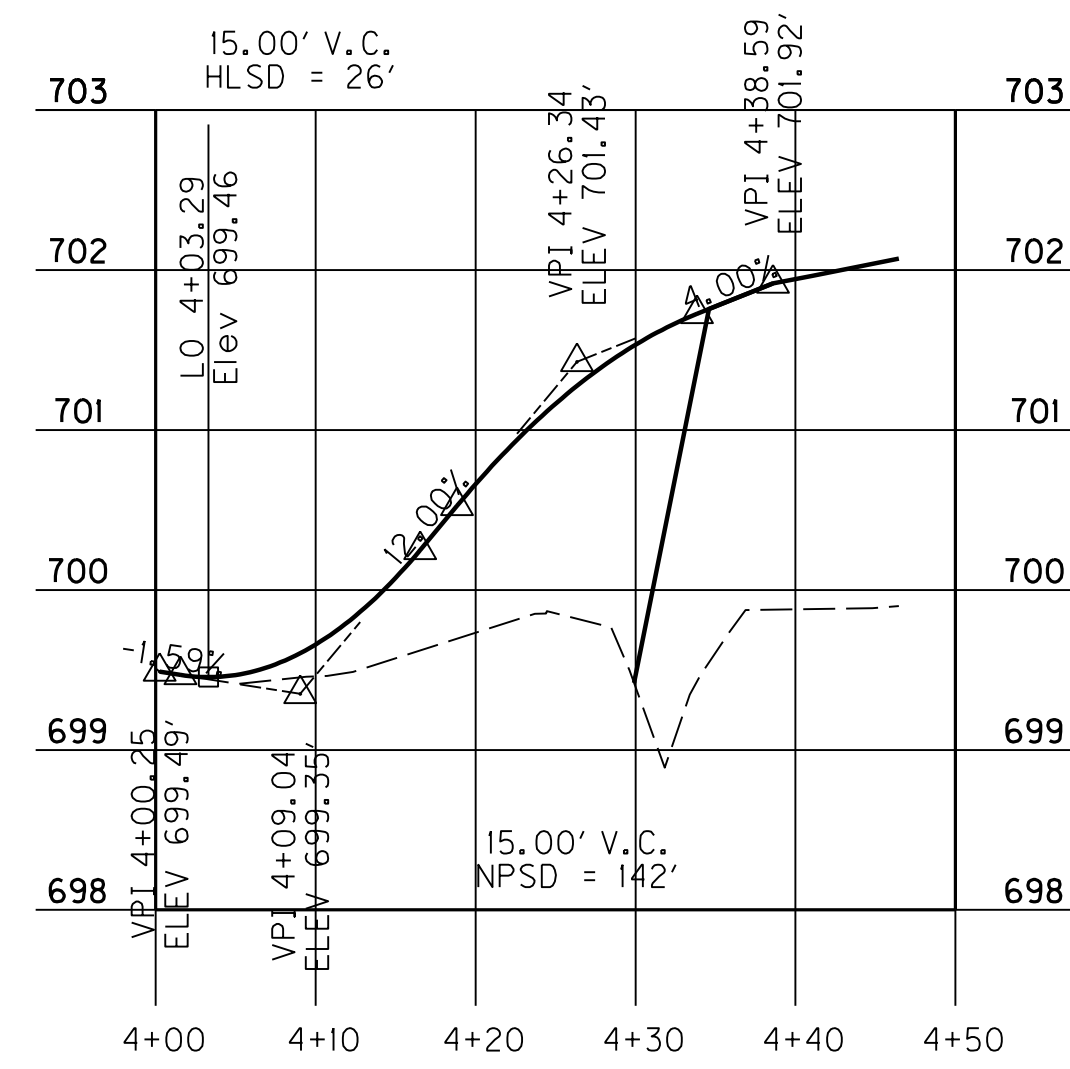
GOOSE CREEK ROAD  
STRUCTURE REPLACEMENT  
FRANKLIN COUNTY, KENTUCKY

ROADWAY EXHIBIT  
(ROADWAY WORK BY OTHERS)

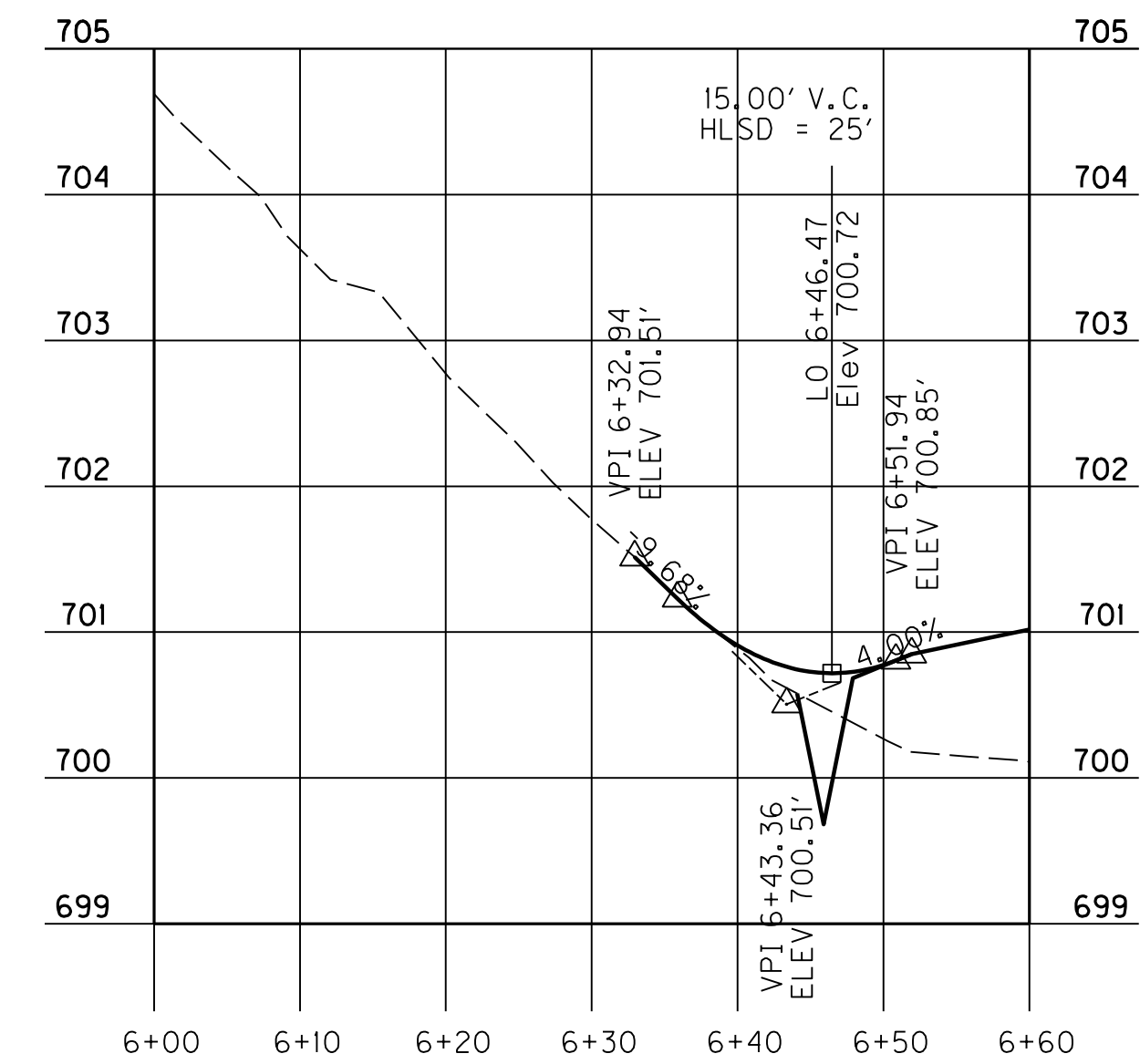
DRAWN BY: JDA	DATE: FEBRUARY 2020
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JOB NO.: 1631-0085-90	SHEET: 1 of 2



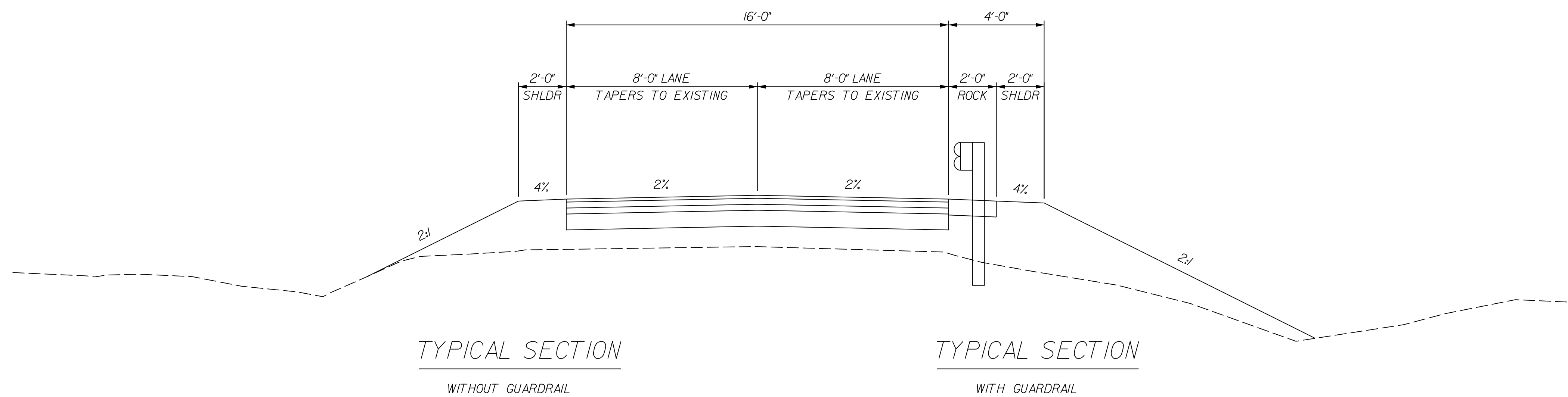
DRIVE STA. 21+95



DRIVE STA. 22+82



DRIVE STA. 23+88



ESTIMATE OF QUANTITIES		
ITEM	QUANT.	UNIT
GUARDRAIL	300	FT
EMBANKMENT	528	CU YD
DENSE GRADED AGGREGATE	576	TONS
CL2 ASPH BASE 0.75D PG 64-22	340	TONS
CL2 ASPH SURF 0.38D PG 64-22	86	TONS

NOTE: QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY

NO.	DATE	DESCRIPTION	BY



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GOOSE CREEK ROAD  
STRUCTURE REPLACEMENT  
FRANKLIN COUNTY, KENTUCKY

ROADWAY EXHIBIT  
(ROADWAY WORK BY OTHERS)

DRAWN BY:	JDA	DATE:	FEBRUARY 2020
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JOB NO.:	1631-0085-90	SHEET:	2 of 2

**FRANKLIN COUNTY FISCAL COURT  
FRANKLIN COUNTY ROAD DEPARTMENT  
GOOSE CREEK ROAD STRUCTURE REPLACEMENT  
SUPPLEMENTAL SPECIFICATIONS**

Project Description:

The proposed project will replace an approximately 12' x 6' three-sided culvert structure with a similar minimum pre-cast 12' x 6' four sided reinforced concrete box culvert with wing walls and standard headwalls (1' - 0" minimum). This request is for demolition and removal and all new necessary materials and installation for the specified replacement structure in same location. The owner will provide traffic control measures for temporary road closure, roadway approach construction and guardrail installation. See construction plans for structure dimensions and general construction. No geotechnical assessment has been made and all contractors should make their own evaluation of existing conditions. No exclusions for solid rock excavation are allowed with bid offers. Material delivery to project site must be coordinated with County Road Department. Contractor's work shall include demolition, full removal of existing structure and maintaining appropriate BMP's for duration of project. All project waste materials to be exported to an acceptable site. Road closure time from start of demolition to completion of contractor's scope of work is thirty (30) calendar days. All bids offered must remain in effect for a minimum of thirty (30) calendar days from opening date.

Additional Feature and Installation Materials requirements:

- Transportation of all equipment and materials to project site including escorts, as necessary
- Minimum 5,000 PSI grout (non-shrink, non-metallic)
- Waterproofing Membrane Joint Wrap and Joint Wrap Primer
- Recessed Pockets, Handholds, and galvanized Conduit cast-in to accept Lateral Tie Cable(s)
- All Hardware and Equipment for stressing lateral tie cables
- Hardware cast-in for handling pre-cast culvert units and structures
- Spreader Beam, Cables, and Rigging provided for lifting pre-cast units
- P.E. (KY) certified Drawings, Design Calculations required with bid proposal
- On-site Manufacturer's Technical Assistance as needed
- As-built Certification

All questions regarding this request for structure replacement should be directed in writing to Jon Mitchell, County Road Department Superintendent.

Franklin County Road Department  
100 Lewis Ferry Road  
Frankfort, Kentucky 40601  
Attn: Jon Mitchell

Road Department phone: (502) 875 – 8765 Email: [jmitchell@franklincountyky.com](mailto:jmitchell@franklincountyky.com)