

OPERATOR: baorinje  
 FILE NAME: pw://PDEDPRAPPW01.penn.dot.icl:Connect\_Pjcts/Projects/OpenRoads/Documents/OpenRoads/Projects/D01120-Crawford/20 0408 B05 (84927)/DESIGN/Roadway/CADD Files/BOX CULVERT FILES/CONSTRUCTION/20040805/EP/PLAN/SECTION/SECTION 4(F).DWG

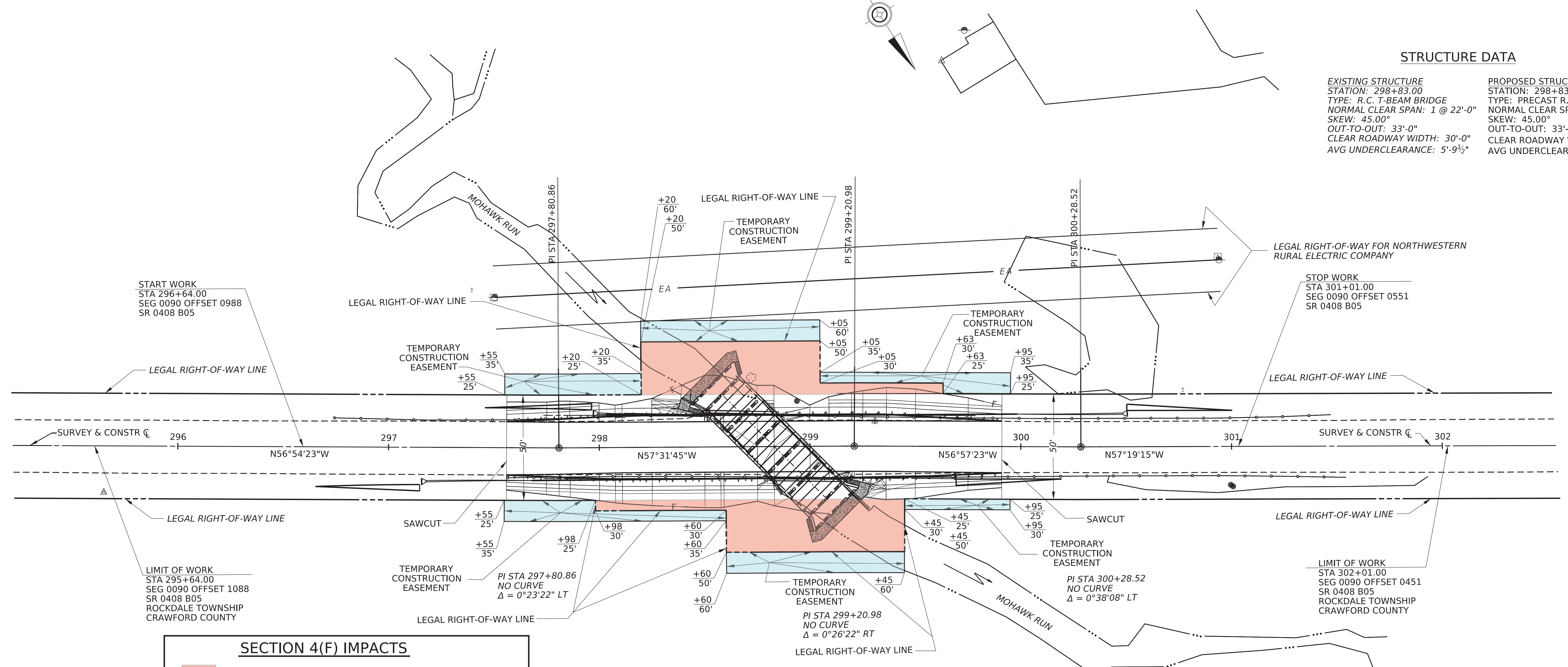
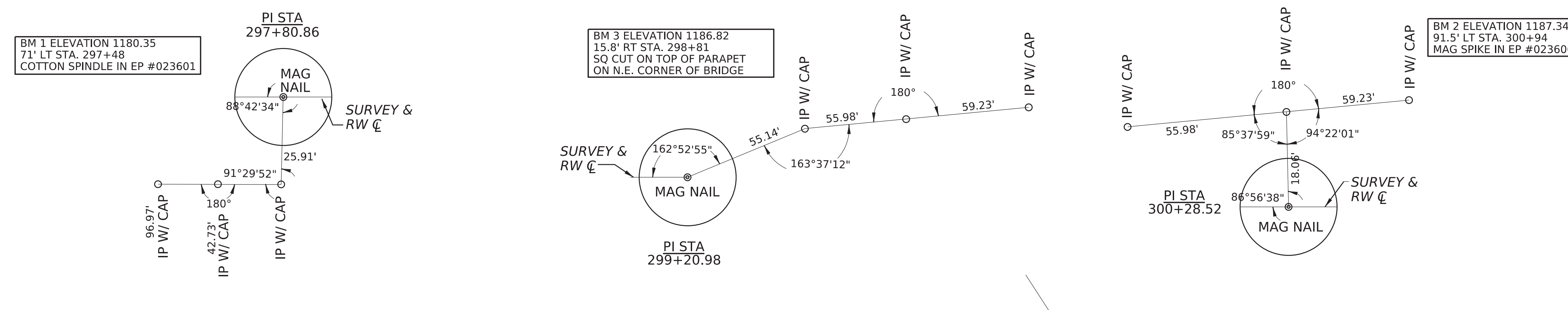
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
01	CRAWFORD	0408	B05	8 OF 9
REV NO	REVISIONS	DATE	BY	APPD

HYDROLOGIC & HYDRAULIC DATA				
DRAINAGE AREA = 3.95 SQ. MILES				
LATITUDE: 41° 46' 58.6416", LONGITUDE: 80° 0' 10.1196"				
PROPOSED STRUCTURE				
FLOOD DESIGN BASIC	FREQ. 25 YR 100 YR	Q (cfs) 595 962	ELEV. 1180.20 1180.79	V (fps) 4.82 5.75
EXISTING STRUCTURE				
FLOOD DESIGN BASIC	FREQ. 25 YR 100 YR	Q (cfs) 595 962	ELEV. 1181.45 1182.18	V (fps) 2.71 3.28

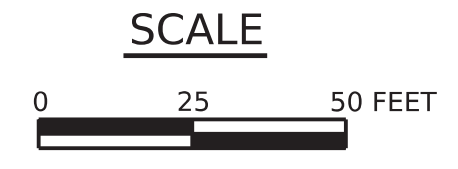
**STRUCTURE DATA**

**EXISTING STRUCTURE**  
 STATION: 298+83.00  
 TYPE: R.C. T-BEAM BRIDGE  
 NORMAL CLEAR SPAN: 1 @ 22'-0"  
 SKEW: 45.00°  
 OUT-TO-OUT: 33'-0"  
 CLEAR ROADWAY WIDTH: 30'-0"  
 AVG UNDERCLEARANCE: 5'-9½"

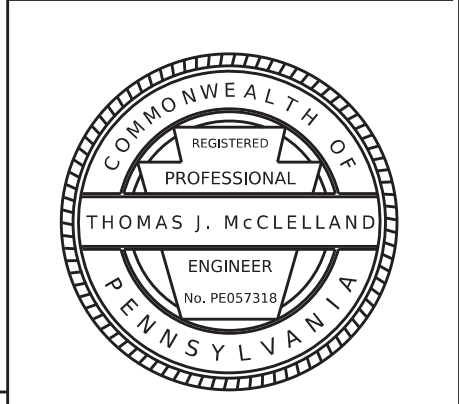
**PROPOSED STRUCTURE**  
 STATION: 298+83.00  
 TYPE: PRECAST R.C. BOX CULVERT  
 NORMAL CLEAR SPAN: 22'-0"  
 SKEW: 45.00°  
 OUT-TO-OUT: 33'-0"  
 CLEAR ROADWAY WIDTH: 29'-2½"  
 AVG UNDERCLEARANCE: 6'-0½"



SECTION 4(F) IMPACTS	
<span style="display:inline-block; width:15px; height:10px; background-color:orange;"></span>	UNDER LEGAL RIGHT-OF-WAY TAKES (4856.76 SF)
<span style="display:inline-block; width:15px; height:10px; background-color:lightblue;"></span>	UNDER TEMPORARY CONSTRUCTION EASEMENT TAKES (3935.88 SF)

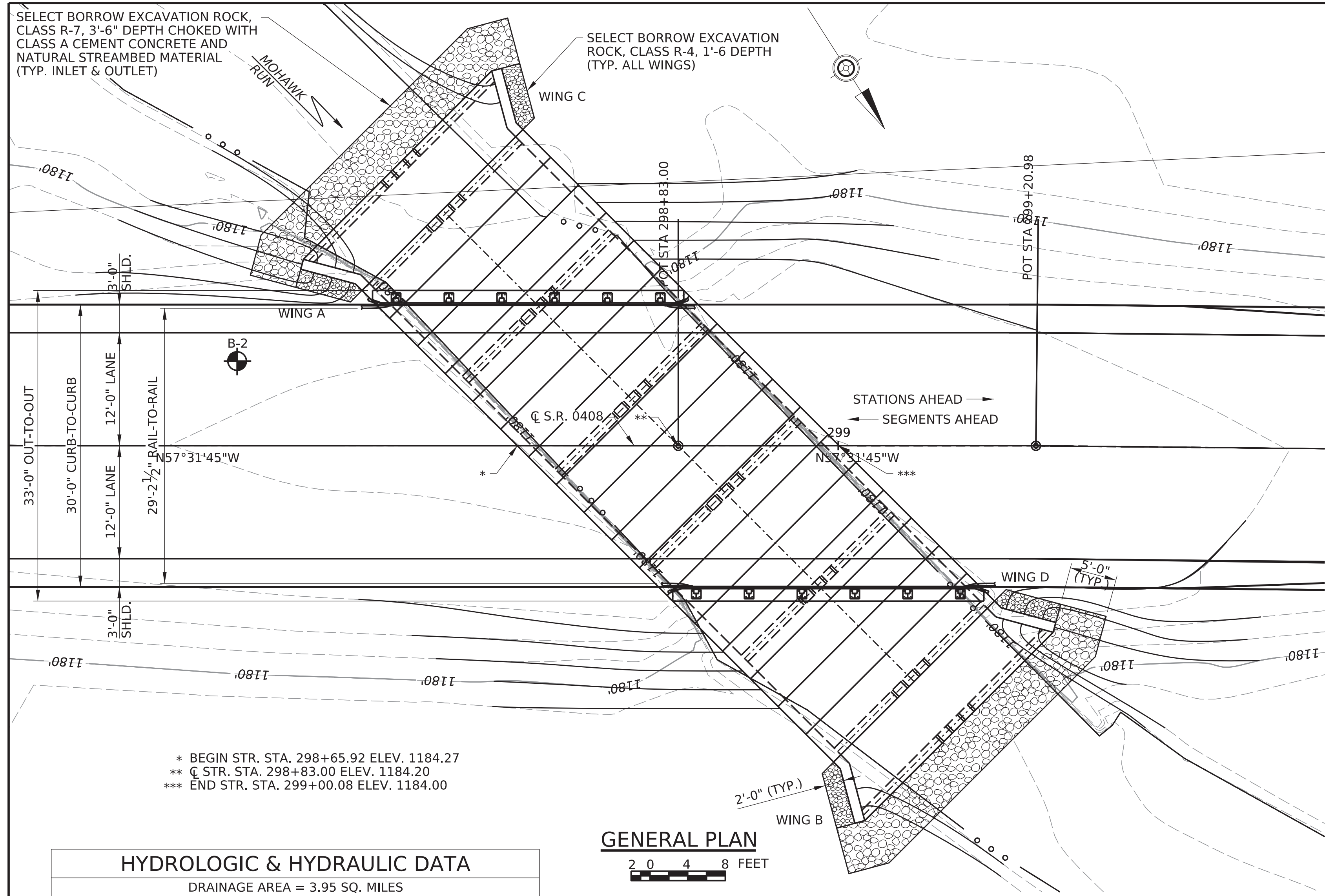


**PRELIMINARY  
NOT FOR  
CONSTRUCTION**



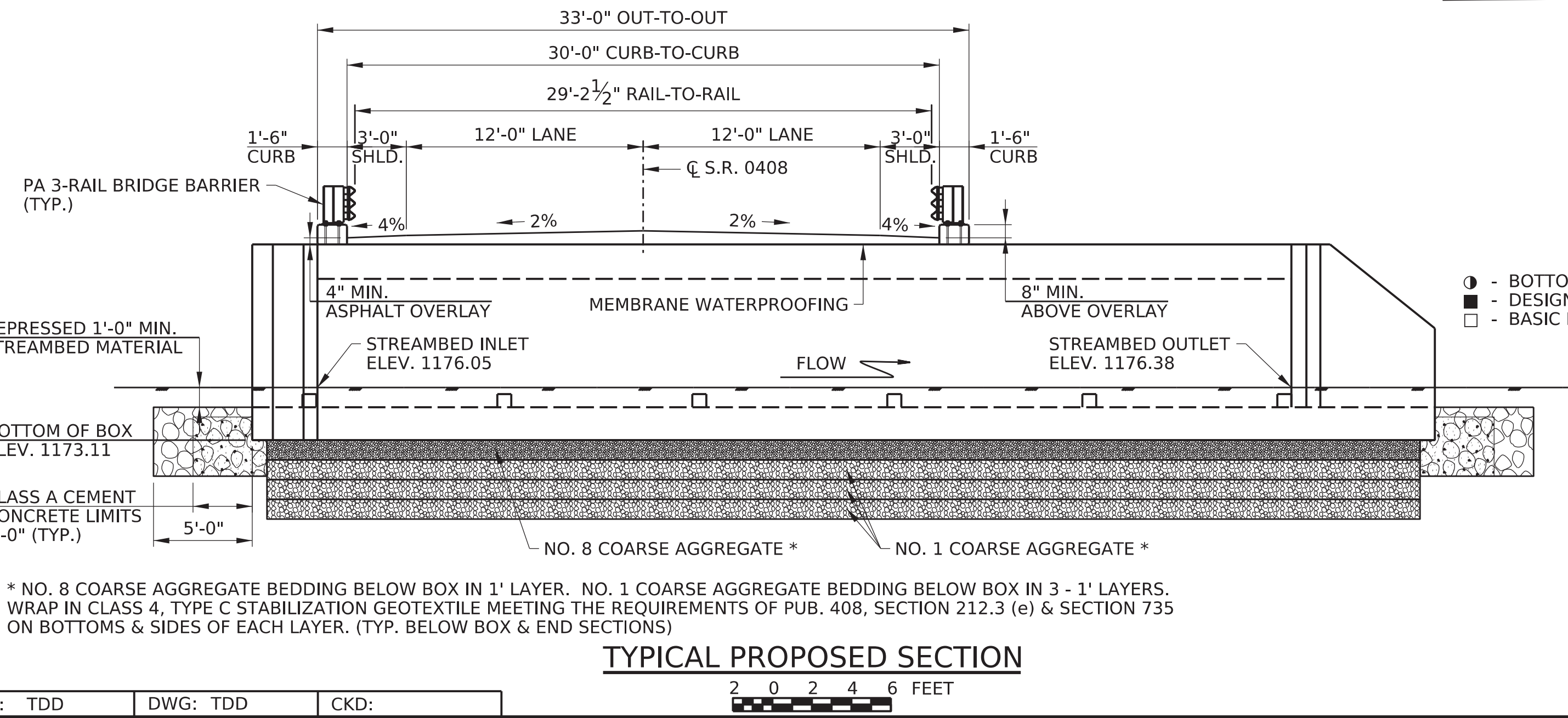
PLOTTED: 25-NOV-2024 14:53

OPERATOR: trdunkle  
FILE NAME: pw://PDEDPRAPPW01.penn.dot.ct:Connect\_Pjcts/Projects/Documents/OpenRoads\_Projects/D01/20-Crawford/20\_0408 B05 (84927)/DESIGN/Bridge/CADD Files/20\_0408 B05\_MSTR



HYDROLOGIC & HYDRAULIC DATA					
DRAINAGE AREA = 3.95 SQ. MILES					
LATITUDE: 41° 46' 58.6416", LONGITUDE: 80° 0' 10.1196"					
PROPOSED STRUCTURE					
FLOOD DESIGN BASIC	FREQ. 25 YR 100 YR	Q (cfs) 595 962	ELEV. 1180.20 1180.79	V (fps) 4.82 5.75	
EXISTING STRUCTURE					
FLOOD DESIGN BASIC	FREQ. 25 YR 100 YR	Q (cfs) 595 962	ELEV. 1181.45 1182.18	V (fps) 2.71 3.28	

STRUCTURE DATA	
EXISTING STRUCTURE STATION: 298+83.00 TYPE: R.C. T-BEAM BRIDGE NORMAL CLEAR SPAN: 1 @ 22'-0" SKEW: 45.00° OUT-TO-OUT: 33'-0" CLEAR ROADWAY WIDTH: 30'-0" AVG UNDERCLEARANCE: 5'-9 1/2"	PROPOSED STRUCTURE STATION: 298+83.00 TYPE: PRECAST R.C. BOX CULVERT NORMAL CLEAR SPAN: 22'-0" SKEW: 45.00° OUT-TO-OUT: 33'-0" CLEAR ROADWAY WIDTH: 29'-2 1/2" AVG UNDERCLEARANCE: 6'-0 1/2"



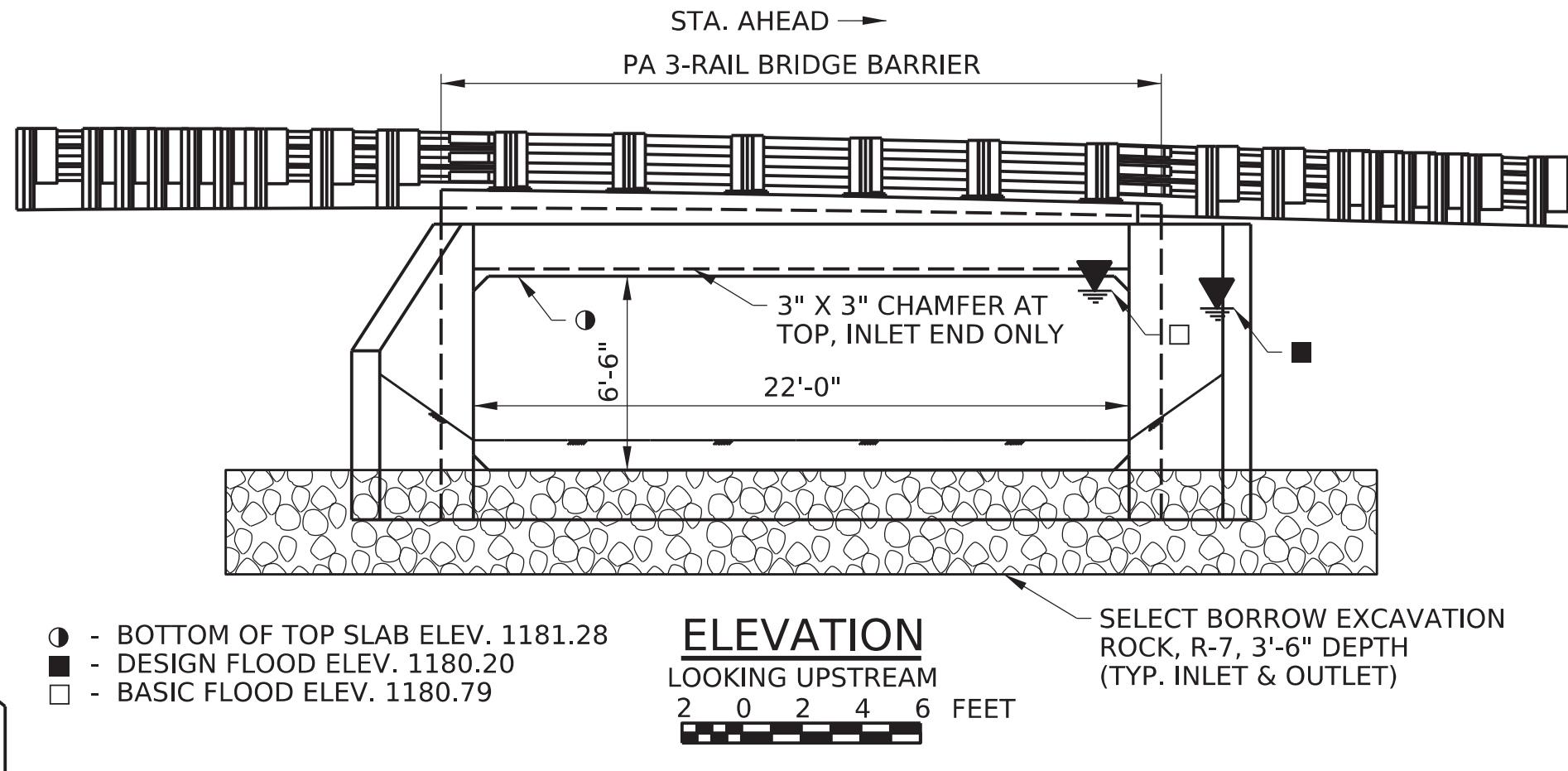
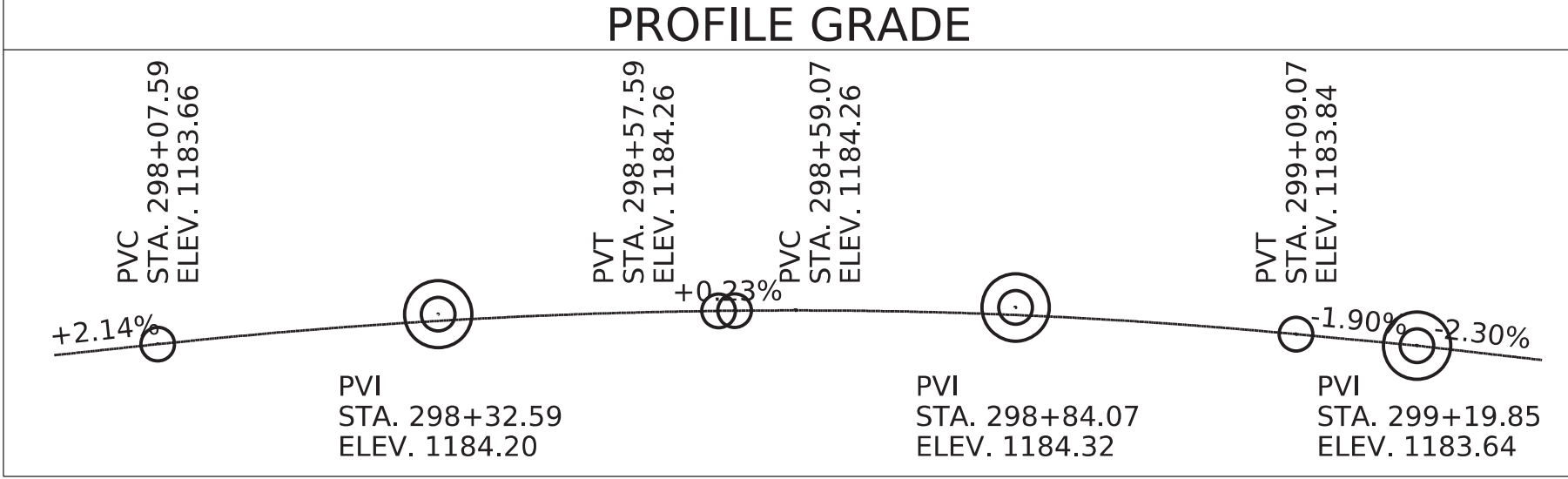
RATING SUMMARY WITH FWS ▲								
INVENTORY RATING (IR)	ADTT = 91	H20	HS20	ML-80	TK527	PHL-93	P-82	P2016-13
	MEMBER	T.S.	B.S.	B.S.	B.S.	T.S.	-	-
	DIST. (FT)	20.03	11.00	11.00	11.00	20.03	-	-
	RATING (TONS)	38.26 V	52.54 F	44.11 F	50.18 V	1.17 V*	-	-
OPERATING RATING (OR)	MEMBER	T.S.	B.S.	B.S.	B.S.	T.S.	B.S.	B.S.
	DIST. (FT)	20.03	11.00	11.00	11.00	20.03	11.00	8.80
	LIMIT STATE	STR-I	STR-I	STR-I	STR-I	STR-I	STR-II	STR-II
	RATING (TONS)	49.59 V	68.11 F	57.18 F	65.05 F	1.51 V*	124.81 F	173.77 F

RATING SUMMARY WITHOUT FWS								
INVENTORY RATING (IR)	ADTT = 91	H20	HS20	ML-80	TK527	PHL-93	P-82	P2016-13
	MEMBER	T.S.	B.S.	B.S.	B.S.	T.S.	-	-
	DIST. (FT)	20.03	11.00	11.00	11.00	20.03	-	-
	RATING (TONS)	39.81 V	56.08 F	47.09 F	53.56 F	1.21 V*	-	-
OPERATING RATING (OR)	MEMBER	T.S.	B.S.	B.S.	B.S.	T.S.	B.S.	B.S.
	DIST. (FT)	20.03	11.00	11.00	11.00	20.03	11.00	8.80
	LIMIT STATE	STR-II	STR-II	STR-II	STR-II	STR-IA	STR-II	STR-II
	RATING (TONS)	51.61 V	72.70 F	61.04 F	69.43 F	1.57 V*	133.23 F	184.17 F

\* PHL-93 IS SHOWN AS A RATING FACTOR. ALL OTHER RATINGS FOR H20, HS20, ML-80, TK527, P-82, AND P2016-13 ARE SHOWN IN TONS.

▲ RATING SUMMARY WITH FWS ARE BASED ON 49 PSF FWS. FABRICATOR MUST UPDATE RATING SUMMARY WITH FWS IN ANY REINFORCEMENT SIZE OR SPACING CHANGES.

F = RATING IS GOVERNED BY FLEXURE  
V = RATING IS GOVERNED BY SHEAR  
T.S. = TOP SLAB  
B.S. = BOTTOM SLAB  
L.W. = LEFT WALL  
R.W. = RIGHT WALL



Mark	Description	By	Chk'd	Recm'd.	Date
REVISIONS					

S.R. 0408 PREVIOUSLY KNOWN AS L.R. 00697  
BMS STR ID: 20-0408-0090-0729 MPMS/ECMS PROJ: 84927 BRKEY: TBD

**COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF TRANSPORTATION**

**CRAWFORD COUNTY  
S.R. 0408 SECTION B05  
SEGMENT 0090 OFFSET 0729  
STA. 298+83.00  
OVER MOHAWK RUN  
22'-0" x 6'-6" PRECAST CONCRETE BOX CULVERT  
TYPE SIZE AND LOCATION**

RECOMMENDED 12-4-2024  
BRIDGE ENGINEER

SHEET 1 OF 1  
S - 42598

PRELIMINARY  
NOT FOR  
CONSTRUCTION