

PROJECT	DESIGNATION
1700141	1700141
CONTRACT	BRIDGE FILE
B-40558	157-28-10455

# INDIANA DEPARTMENT OF TRANSPORTATION



STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
157-28-10455	Composite Prestressed AASHTO Type II Concrete Beam Bridge	1 Span: 57'-0" Skew: Square	Branch Lemon Creek	16+27.83 "PR-A"

KIN PROJECT INFORMATION					
DESIGNATION	PROJECT DESCRIPTION				
	Work Type	Route	Location	Feature Crossed	County
1700174*	Bridge Replacement	US 48	1.16 miles E. of SR 59	Howesville Ditch	Greene County
1700175	Bridge Replacement	US 48	2.66 miles E. of SR 59	UNT Howesville Ditch	Greene County
1701051	Small Structure Replacement	SR 54	2.37 miles E. of SR 59	Unnamed Ditch	Greene County

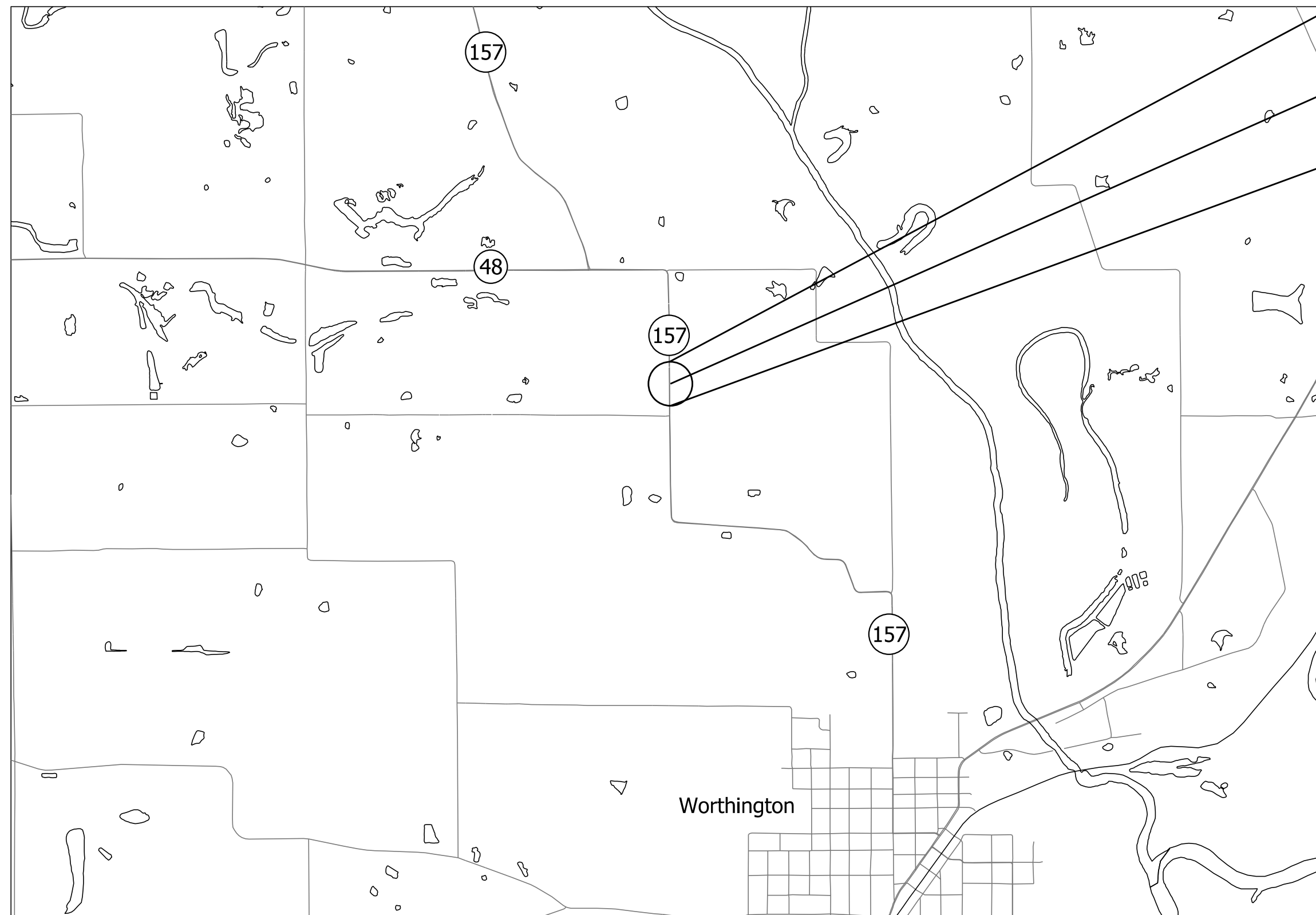
Note: \* Lead Designation Number

## BRIDGE PLANS

FOR SPANS OVER 20 FEET

ROUTE: SR 157 AT: RP 11+84  
 PROJECT NO. 1700141 P.E  
 1700141 R/W  
 1700141 CONST.

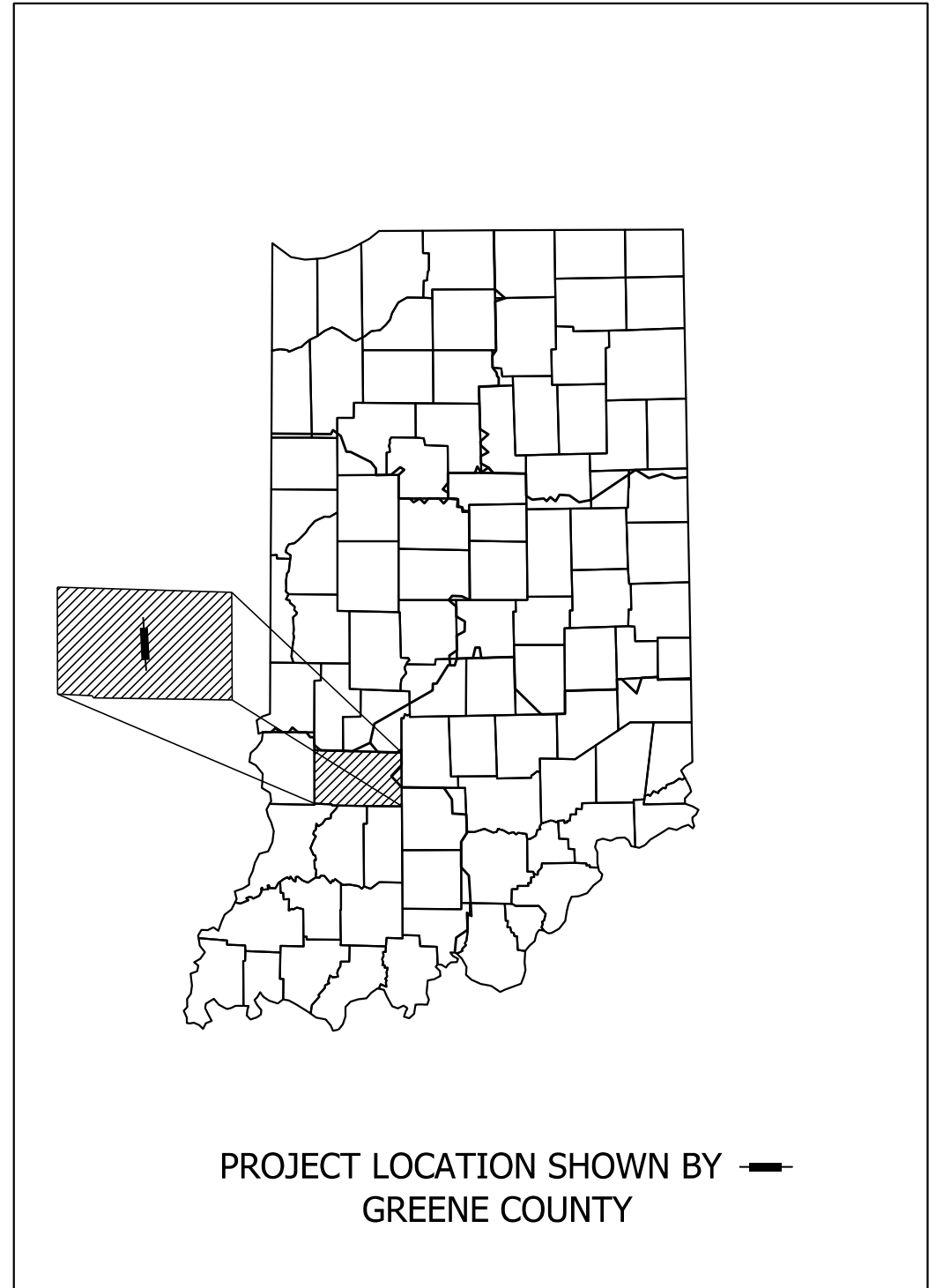
Bridge Replacement on State Road 157 over Branch Lemon Creek located 2.35 miles North of State Road 67 in Section 8 T-8-N, R-5-W, Jefferson Township, Greene Co., IN.



TRAFFIC DATA		
A.A.D.T.	(2021)	1,282 V.P.D.
A.A.D.T.	(2041)	1,442 V.P.D.
D.H.V		142 V.P.H.
DIRECTIONAL DISTRIBUTION		50.4/49.6 %
TRUCKS		7.5 % A.A.D.T. 7.2 % D.H.V.

DESIGN DATA	
DESIGN SPEED	45 M.P.H.
PROJECT DESIGN CRITERIA	3R (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	MAJOR COLLECTOR
RURAL/URBAN	RURAL
TERRAIN	LEVEL
ACCESS CONTROL	NONE



LATITUDE: 39° 8' 28.03" N LONGITUDE: 86° 59' 36.78" W

BRIDGE LENGTH:	0.019	MI.
ROADWAY LENGTH:	0.037	MI.
TOTAL LENGTH:	0.056	MI.
MAX. GRADE:	-1.76	%

H.U.C. 05120203090130



gai consultants

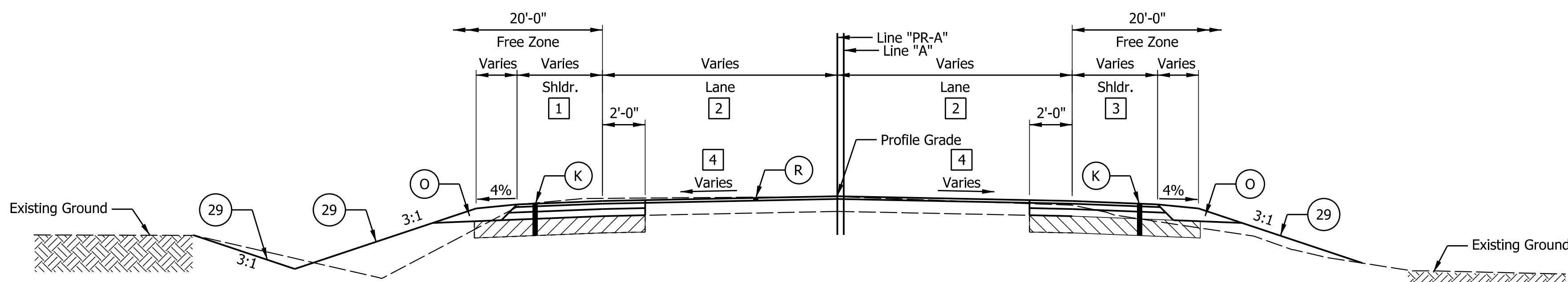
Indianapolis: 201 North Illinois Street, Suite 1700, Indianapolis, IN 46204  
 Fishers: 9998 Crosspoint Boulevard, Suite 110, Indianapolis, IN 46256

INDIANA DEPARTMENT OF TRANSPORTATION  
 STANDARD SPECIFICATIONS DATED 2020  
 TO BE USED WITH THESE PLANS

PLANS PREPARED BY:	GAI Consultants Inc.	(317) 436-9150 PHONE NUMBER
CERTIFIED BY:		DATE
APPROVED FOR LETTING:	INDIANA DEPARTMENT OF TRANSPORTATION	DATE

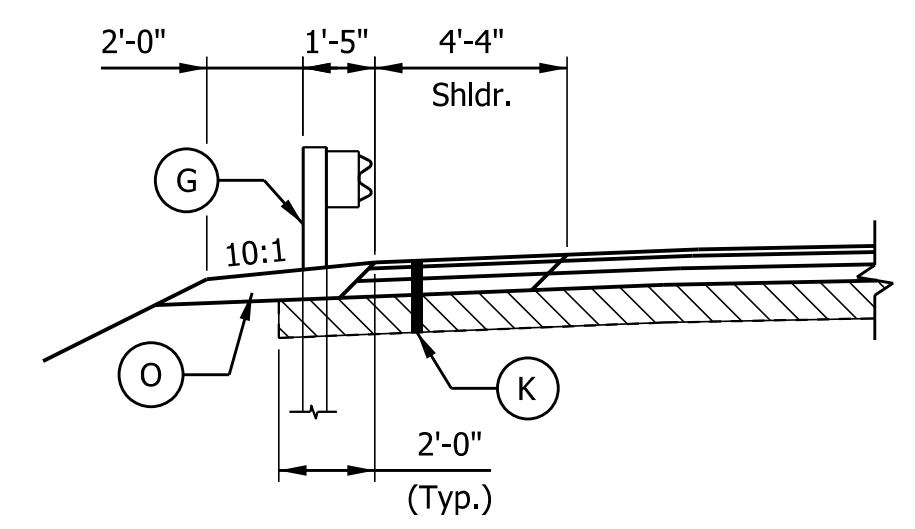
BRIDGE FILE	
157-28-10455	
DESIGNATION	
1700141	
DRAWING NUMBER	SHEETS
	1 of 38
CONTRACT	PROJECT
B-40558	1700141



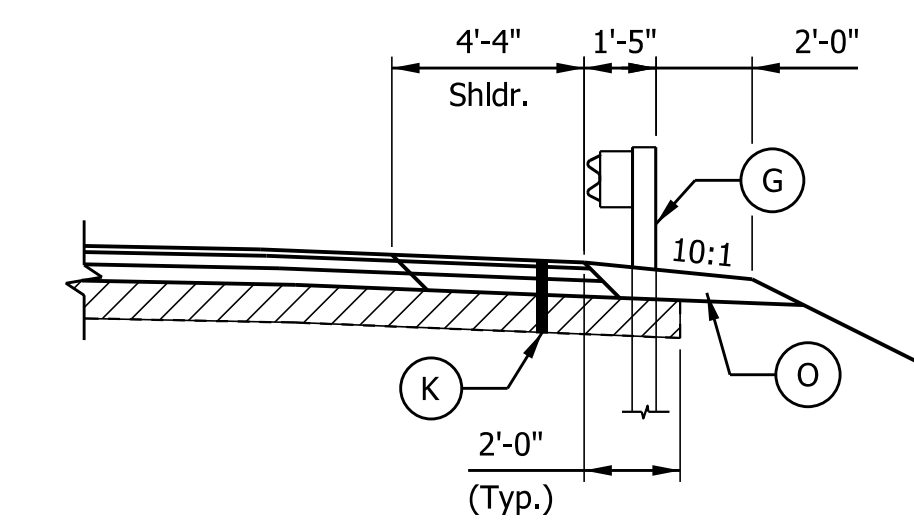


**TANGENT SECTION**  
13+90.00 "PR-A" TO 14+50.00 "PR-A"  
Scale: 1/4" = 1'-0"

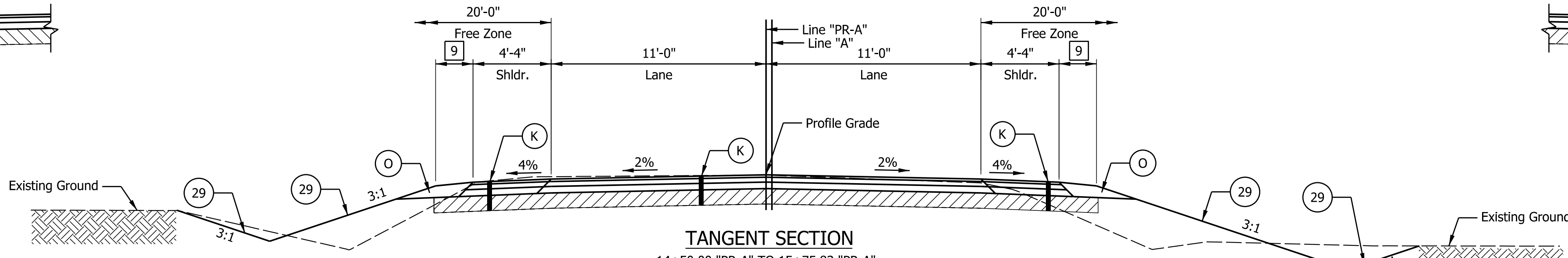
- 1 Varies from 0' to 4'-4"  
From 13+90.00 "PR-A" TO 14+50.00 "PR-A"
- 2 Varies from Existing to 11'-0"  
From 13+90.00 "PR-A" TO 14+50.00 "PR-A"
- 3 Varies from 0' to 4'-4"  
From 13+90.00 "PR-A" TO 14+50.00 "PR-A"
- 4 Transitions from Existing to 2%  
From 13+90.00 "PR-A" TO 14+50.00 "PR-A"



**INSET SECTION  
(LEFT GUARDRAIL)**  
17+13.06 "PR-A" TO 17+81.81 "PR-A"



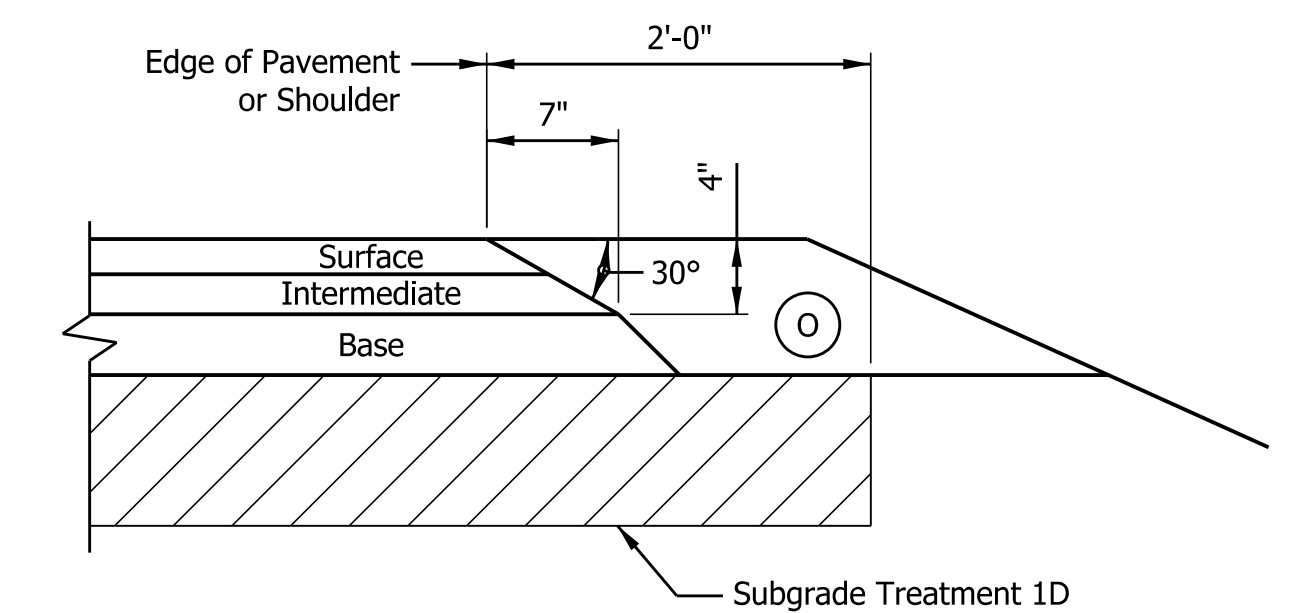
**INSET SECTION  
(RIGHT GUARDRAIL)**  
15+30.10 "PR-A" TO 15+42.60 "PR-A"



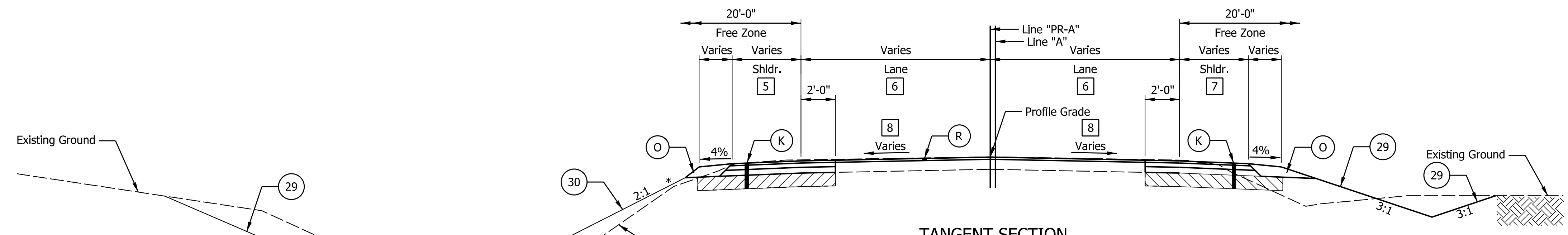
**TANGENT SECTION**  
14+50.00 "PR-A" TO 15+75.83 "PR-A"  
16+79.83 "PR-A" TO 17+50.00 "PR-A"  
Scale: 1/4" = 1'-0"

**PAVING EXCEPTION**  
Sta. 15+75.83 "PR-A" to Sta. 16+79.83 "PR-A"

- 9 3'-5" within Guardrail Limits  
1'-0" outside Guardrail Limits



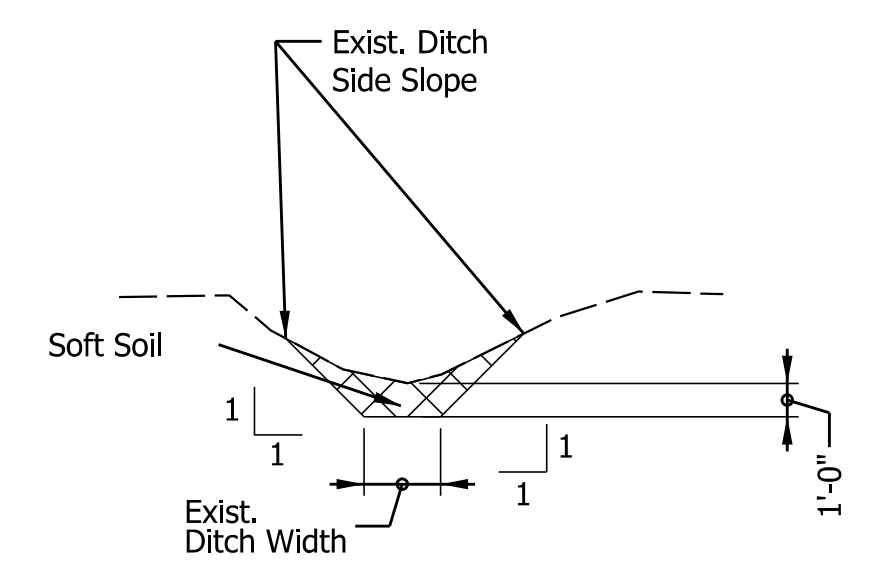
**SAFETY EDGE ON HMA PAVEMENT (LT and RT)**



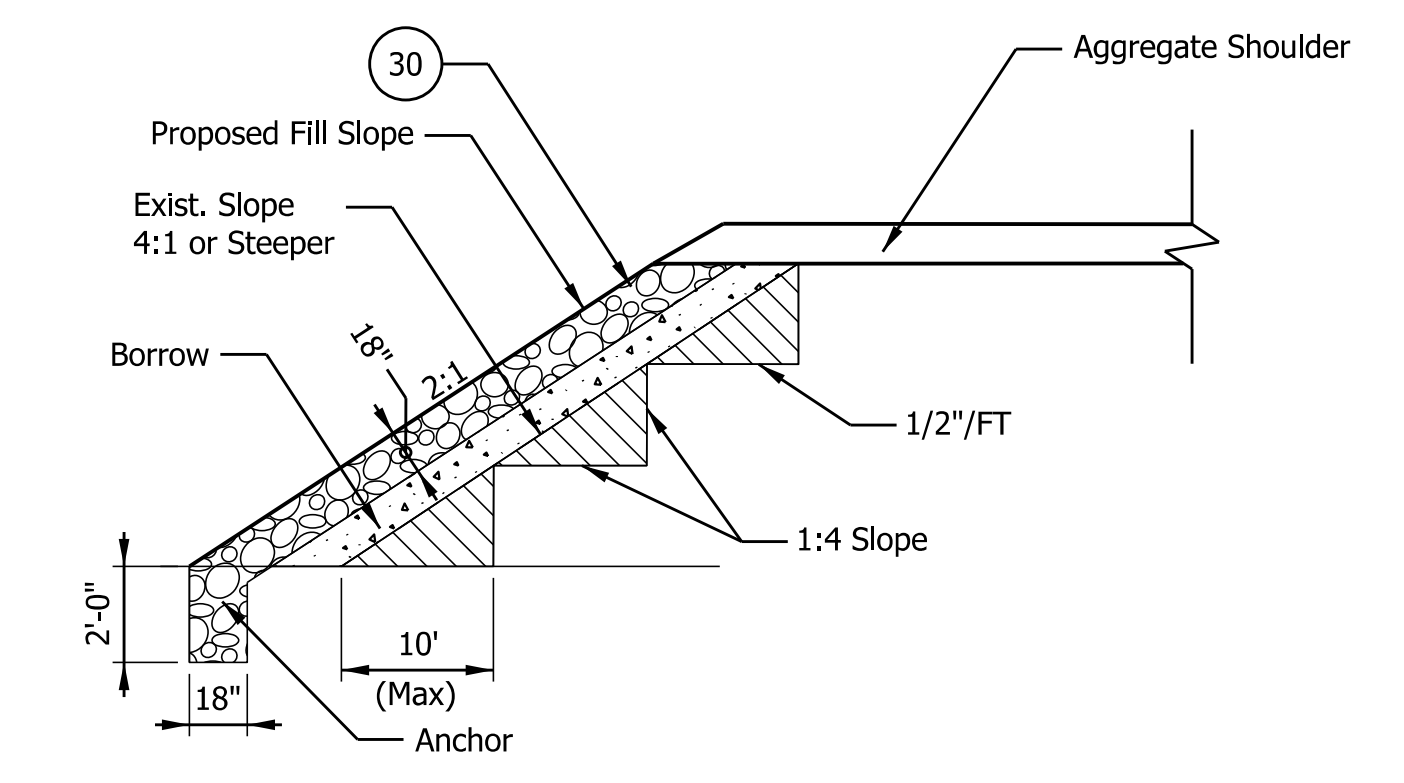
**TANGENT SECTION**  
17+50.00 "PR-A" TO 18+00.00 "PR-A"  
Scale: 1/4" = 1'-0"

- 5 Varies from 4'-4" to 0  
From 17+50.00 "PR-A" TO 18+00.00 "PR-A"
- 6 Varies from 11'-0" to Existing  
From 17+50.00 "PR-A" TO 18+00.00 "PR-A"
- 7 Varies from 4'-0" to 0  
From 17+50.00 "PR-A" TO 18+00.00 "PR-A"
- 8 Transitions from 2% to Existing  
From 17+50.00 "PR-A" TO 18+00.00 "PR-A"

**NOTE:**  
2 ft. wide Bottom Ditch from  
Station 16+80 to Station 19+00, LT, "PR-A"



**SOFT SOIL REMOVAL DETAIL**  
Not To Scale



**BENCHING AND RIPRAP DETAIL**  
Not To Scale

- LEGEND**
- (K) 165 lbs/syd QC/QA-HMA, 3, 64, Surface, 9.5mm on 275 lbs/syd QC/QA-HMA, 2, 64, Intermediate, 19.0mm on 660 lbs/syd QC/QA-HMA, 2, 64, Base, 19.0mm on Subgrade Treatment, Type 1D
  - (R) 165 lbs/syd QC/QA-HMA, 3, 64, Surface, 9.5mm on 1.5" Milling Asphalt
  - (O) Compacted Aggregate No. 53
  - (G) MGS Guardrail
  - (29) Mulched Seeding, RU
  - (30) Revetment Riprap over Geotextile Type 1B



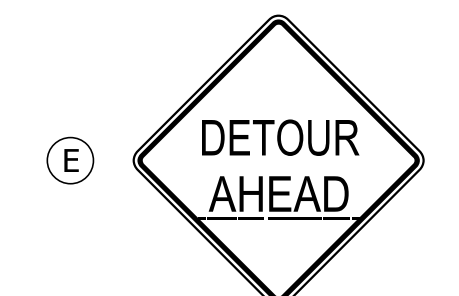
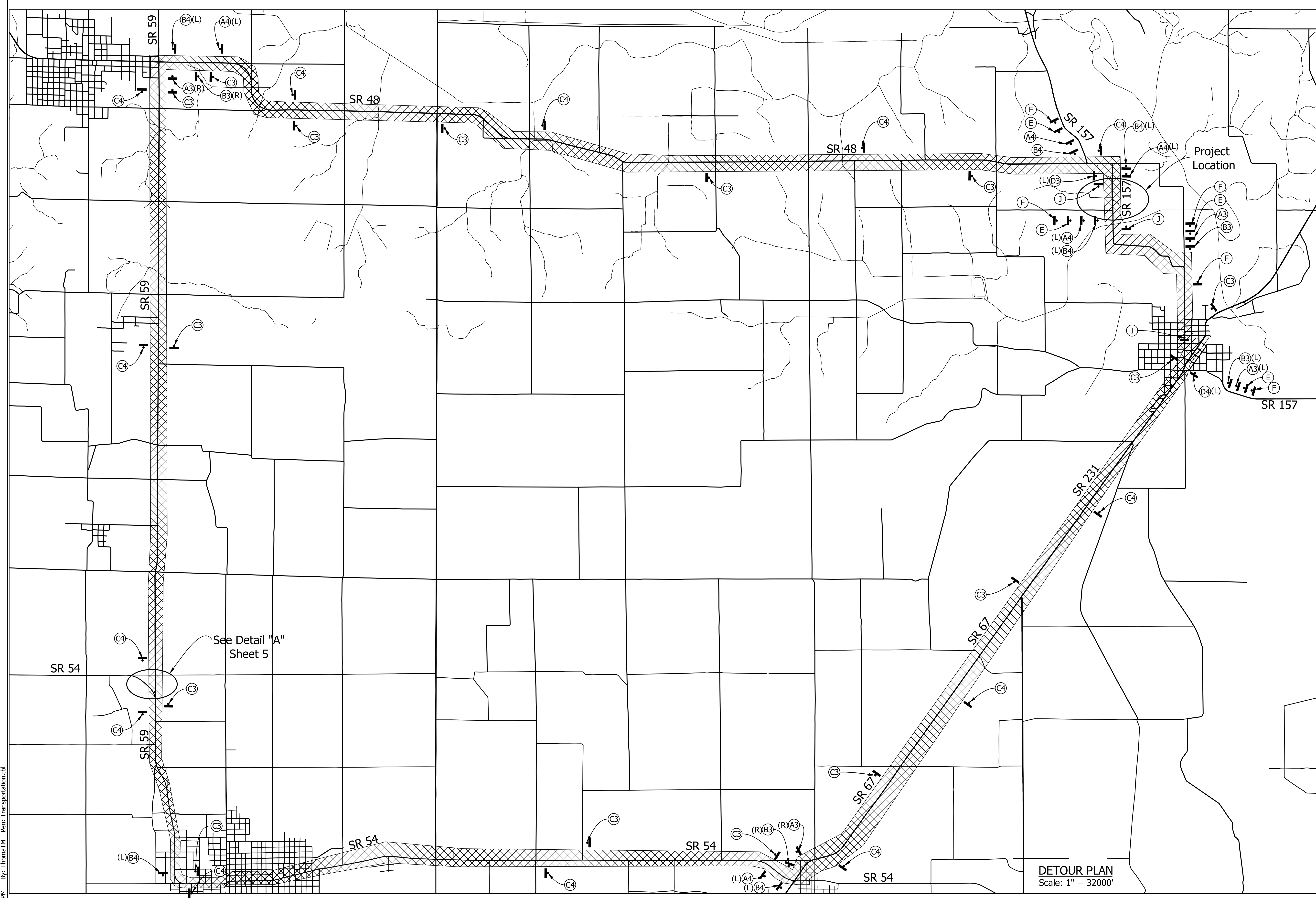
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: KMP	DRAWN: TMT	
CHECKED: MHW	CHECKED: KMP, CH	

INDIANA  
DEPARTMENT OF TRANSPORTATION

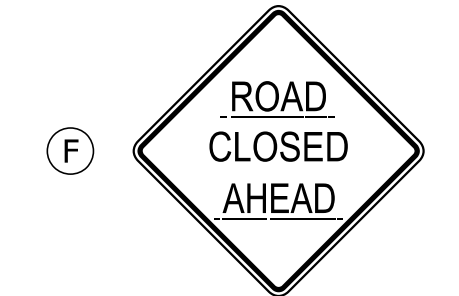
S.R. 157  
TYPICAL CROSS SECTIONS

SCALE	BRIDGE FILE
AS NOTED	157-28-10455
	DESIGNATION
	1700141
DRAWING NUMBER	SHEETS
of	3 of 38
CONTRACT	PROJECT
B-40558	1700141

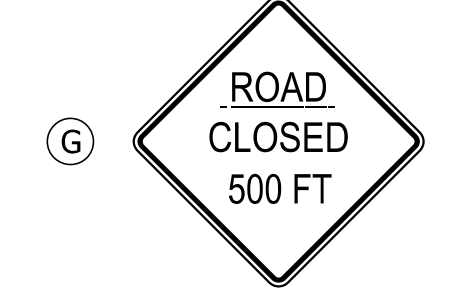
Plot: 12/4/2020 12:08:46 PM By: ThomasTM Per: Transportation.tbl



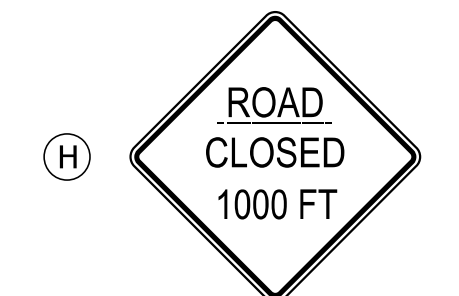
XW20-2  
48"x48"



XW20-3  
48"x48"



XW20-3  
48"x48"



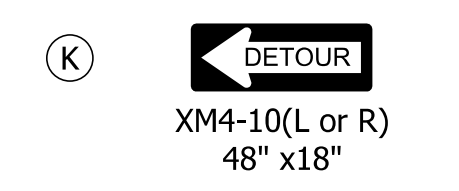
XW20-3  
48"x48"



R11-3  
60"x30"



R11-2  
48"x30"



XM4-10(L or R)  
48" x18"

**LEGEND**

- Detour Route
- Construction Sign
- Type III Barricade

**DETOUR PLAN**  
Scale: 1" = 32000'

Plot: 12/4/2020 12:10:07 PM By: ThomasTM Pen: Transportation.tbl



RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: TMW	DRAWN: MWM	
CHECKED: NRT, CH	CHECKED: NRT, CH	

**INDIANA DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC**

SCALE	BRIDGE FILE
	157-28-10455
	DESIGNATION
	1700141
	SHEETS
	4 of 38
CONTRACT	PROJECT
B-40558	1700141





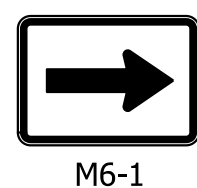
A3 ADVANCE TURN DETOUR ROUTE MARKER ASSEMBLY



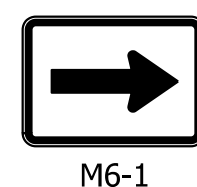
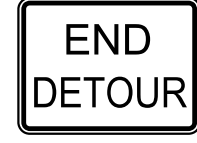
C3 CONFIRMING DETOUR ROUTE MARKER ASSEMBLY



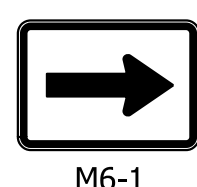
A4 ADVANCE TURN DETOUR ROUTE MARKER ASSEMBLY



B3 DIRECTIONAL DETOUR ROUTE MARKER ASSEMBLY



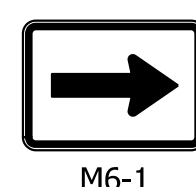
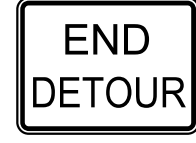
D3 END DETOUR ROUTE MARKER ASSEMBLY



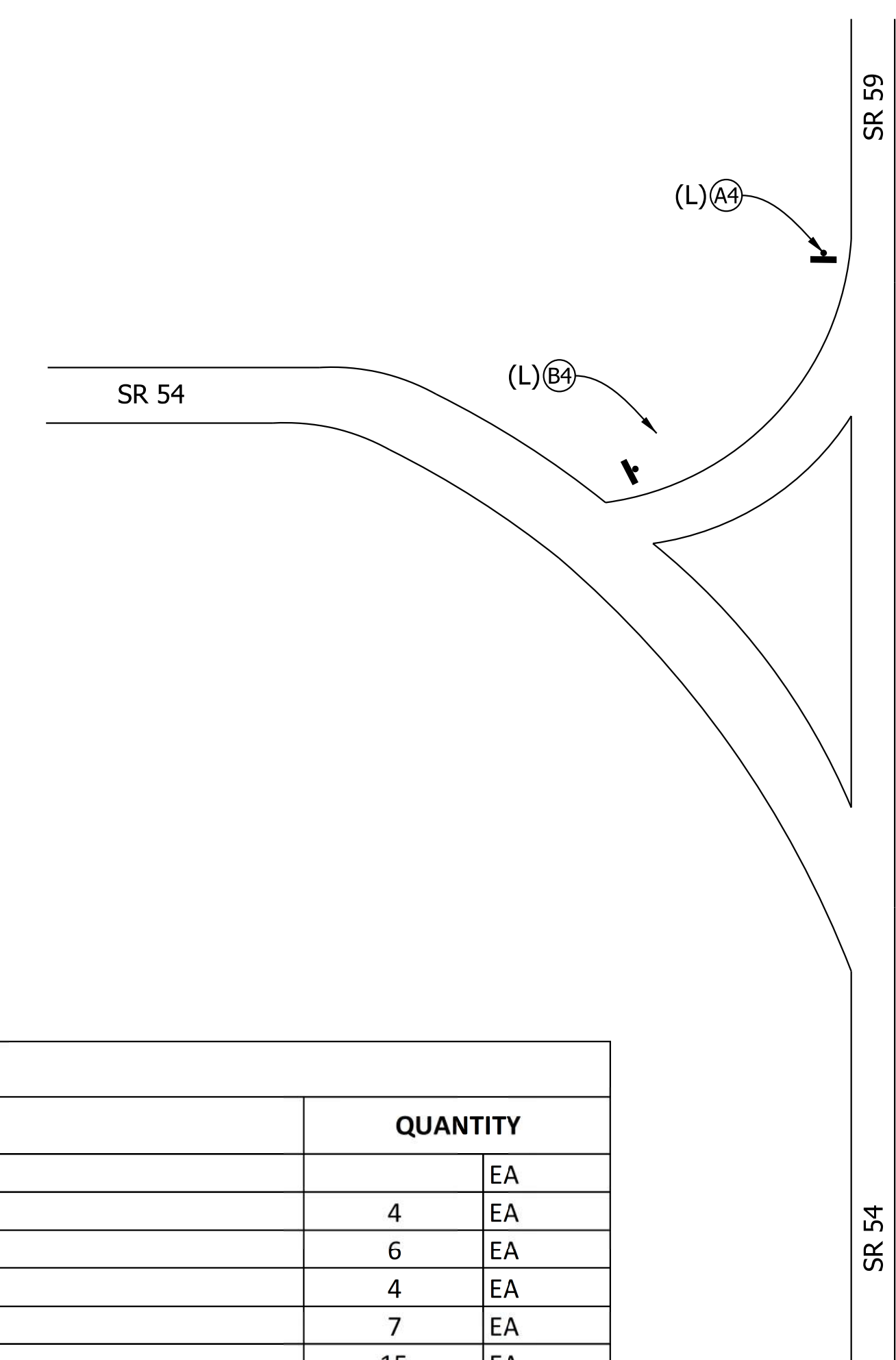
B4 DIRECTIONAL DETOUR ROUTE MARKER ASSEMBLY



C4 CONFIRMING DETOUR ROUTE MARKER ASSEMBLY



D4 END DETOUR ROUTE MARKER ASSEMBLY



DETAIL "A" Not to Scale

CONSTRUCTION SIGN SUMMARY TABLE

Table with 4 columns: PLAN LEGEND/CODE, SIGN TYPE, DESCRIPTION, QUANTITY. Lists various sign assemblies and their quantities.

SUMMARY OF PAY ITEMS

Table with 2 columns: Description, Quantity. Lists pay items for construction signs and their quantities.

Plot: 12/4/2020 12:10:17 PM By: ThomasTM Pen: Transportation.tbl

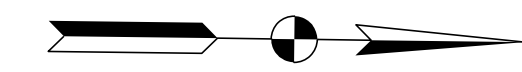


RECOMMENDED FOR APPROVAL DESIGN ENGINEER DATE DRAWN: MWM CHECKED: NRT, CH

INDIANA DEPARTMENT OF TRANSPORTATION

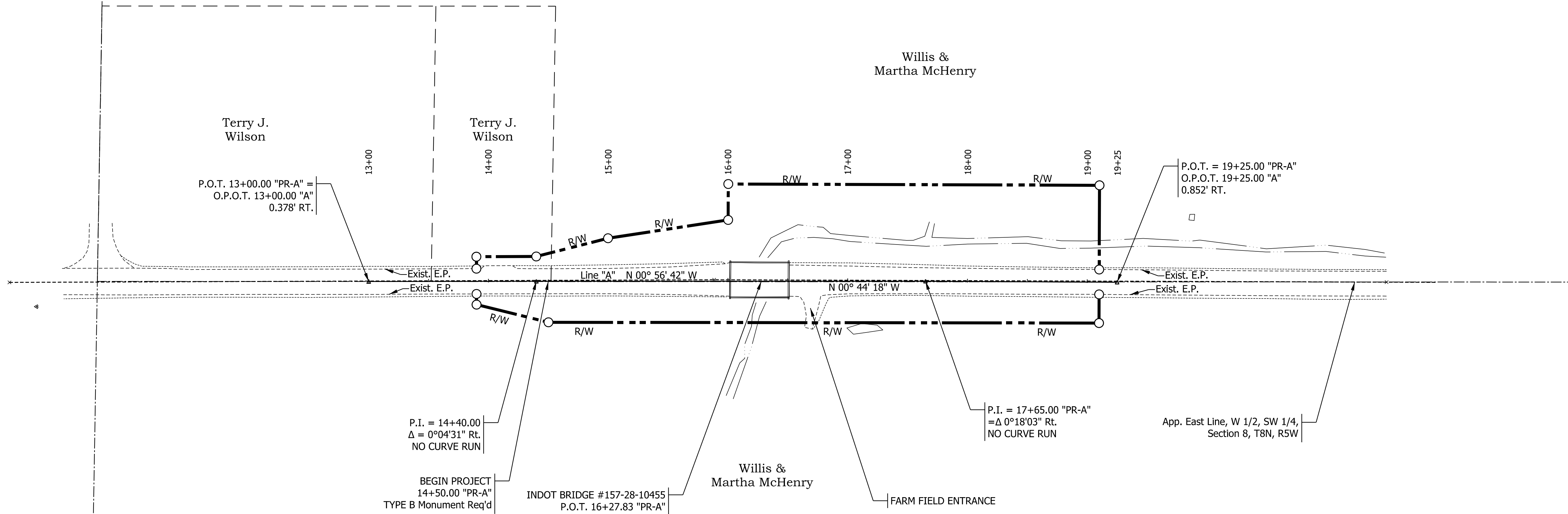
MAINTENANCE OF TRAFFIC

SCALE BRIDGE FILE 157-28-10455 DESIGNATION 1700141 SHEETS 5 of 38 CONTRACT PROJECT B-40558 1700141



SECTION 8 T8N, R5W  
JEFFERSON TOWNSHIP  
GREENE COUNTY

SECTION 17 T8N, R5W  
JEFFERSON TOWNSHIP  
GREENE COUNTY



Plot: 12/4/2020 12:54:15 PM By: ThomasTM Pen: Transportation.tbl



RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: KMP	DRAWN: TMT, MWM	
CHECKED: TDJ	CHECKED: KMP, CH	

INDIANA  
DEPARTMENT OF TRANSPORTATION

PLAT NO.1

SCALE 1" = 50'	BRIDGE FILE 157-28-10455
	DESIGNATION 1700141
DRAWING NUMBER	SHEETS
	6 of 38
CONTRACT B-40558	PROJECT 1700141

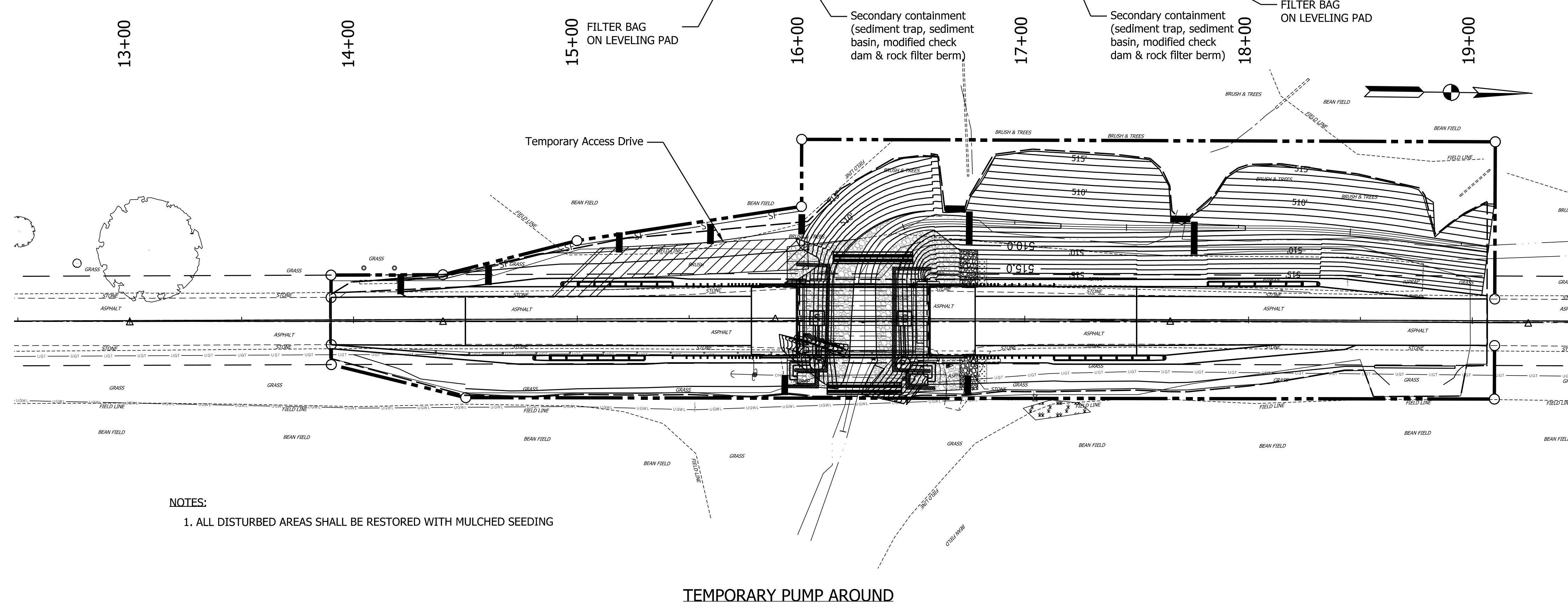
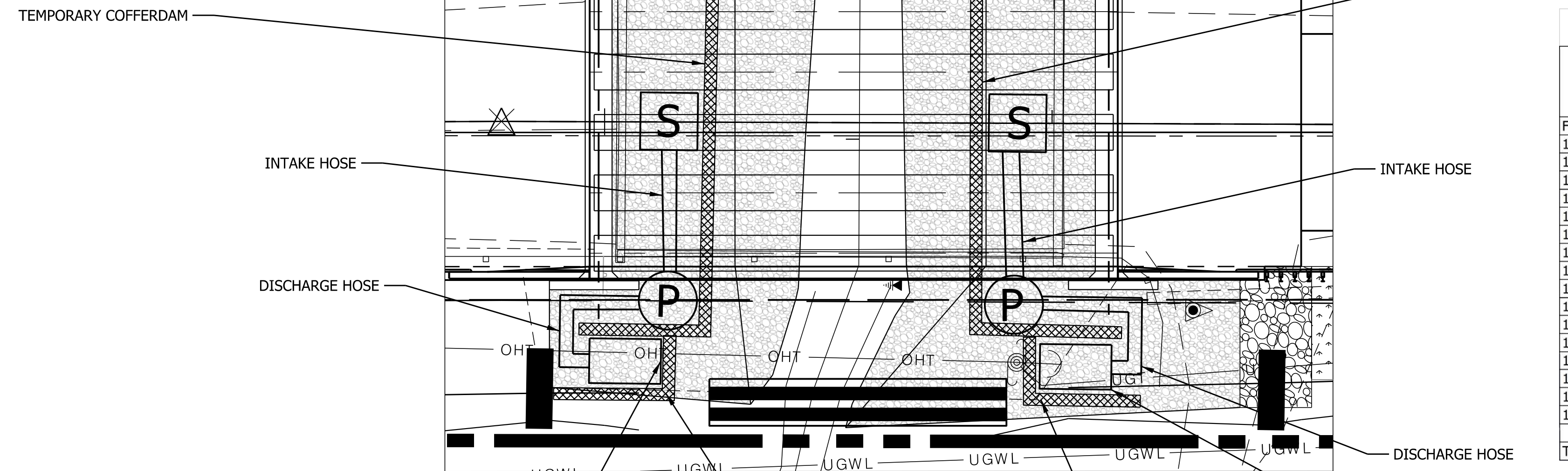


- EROSION CONTROL NOTES:**
- 1) PERIMETER PROTECTION SHOULD BE INSTALLED PRIOR TO LAND DISTURBANCE ACTIVITIES.
  - 2) TEMPORARY SEEDING AND MULCH SHALL BE PLACED ON DISTURBED AREAS WHERE ADDITIONAL WORK IS NOT SCHEDULED FOR AT LEAST 7 CALENDAR DAYS.  
QUANTITIES (ESTIMATED TWO TIMES AREA OF SEED)  
TEMPORARY SEED MIXTURE 156 LBS (150 LBS / ACRE)  
TEMPORARY MULCH 2.6 TON (2.5 TONS / ACRE)
  - 3) CHECK DAMS SHOULD BE INSTALLED AS SOON AS PRACTICAL AFTER DITCH GRADING.
  - 4) SOD / SEEDING SHALL BE PLACED IMMEDIATELY AFTER FINAL GRADE IS ESTABLISHED.
  - 5) EXISTING DITCHES OUTSIDE OF CONSTRUCTION LIMITS SHALL BE UNDISTURBED AS MUCH AS PRACTICAL.
  - 6) ANY VEGETATION DISTURBED DURING INSTALLATION OR REMOVAL OF PERIMETER PROTECTION MEASURES SHALL BE RESTORED IMMEDIATELY.

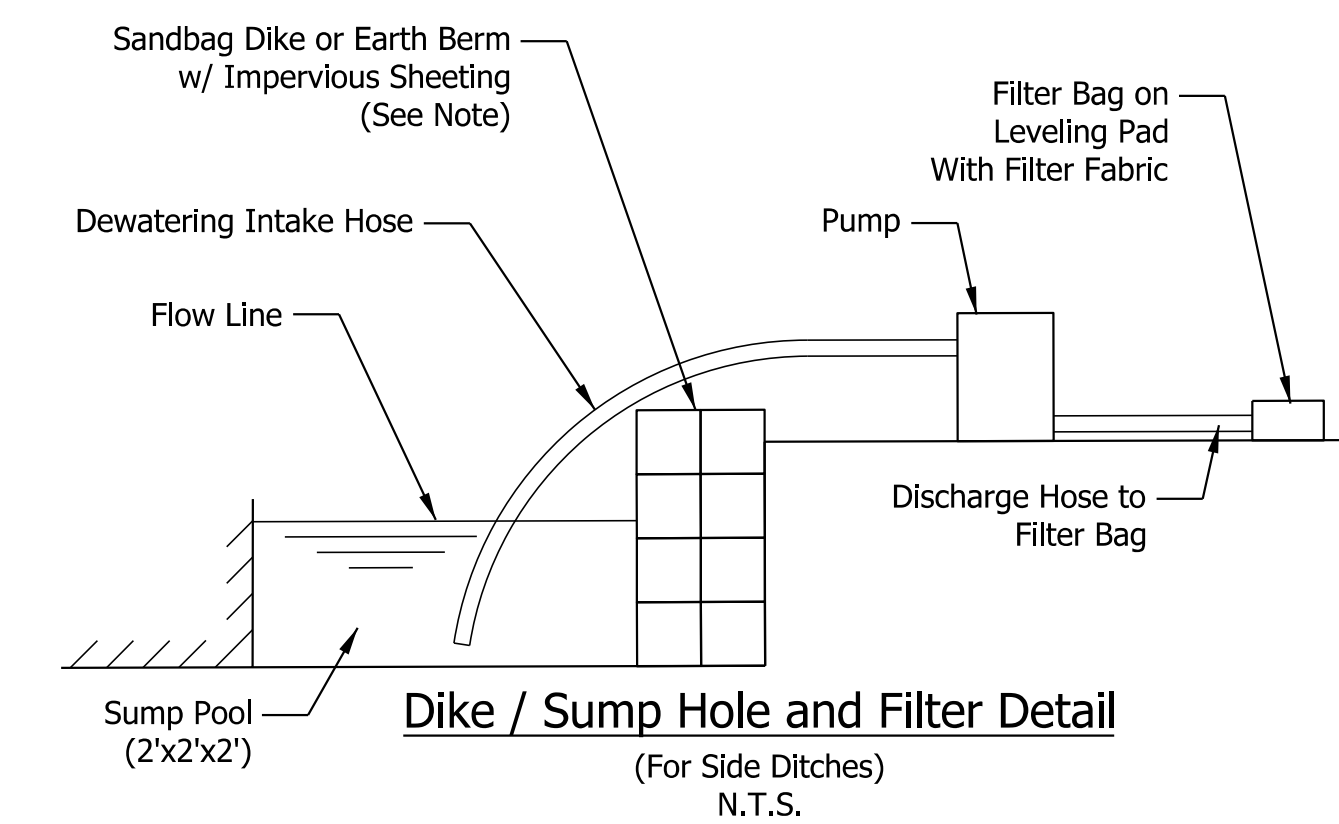
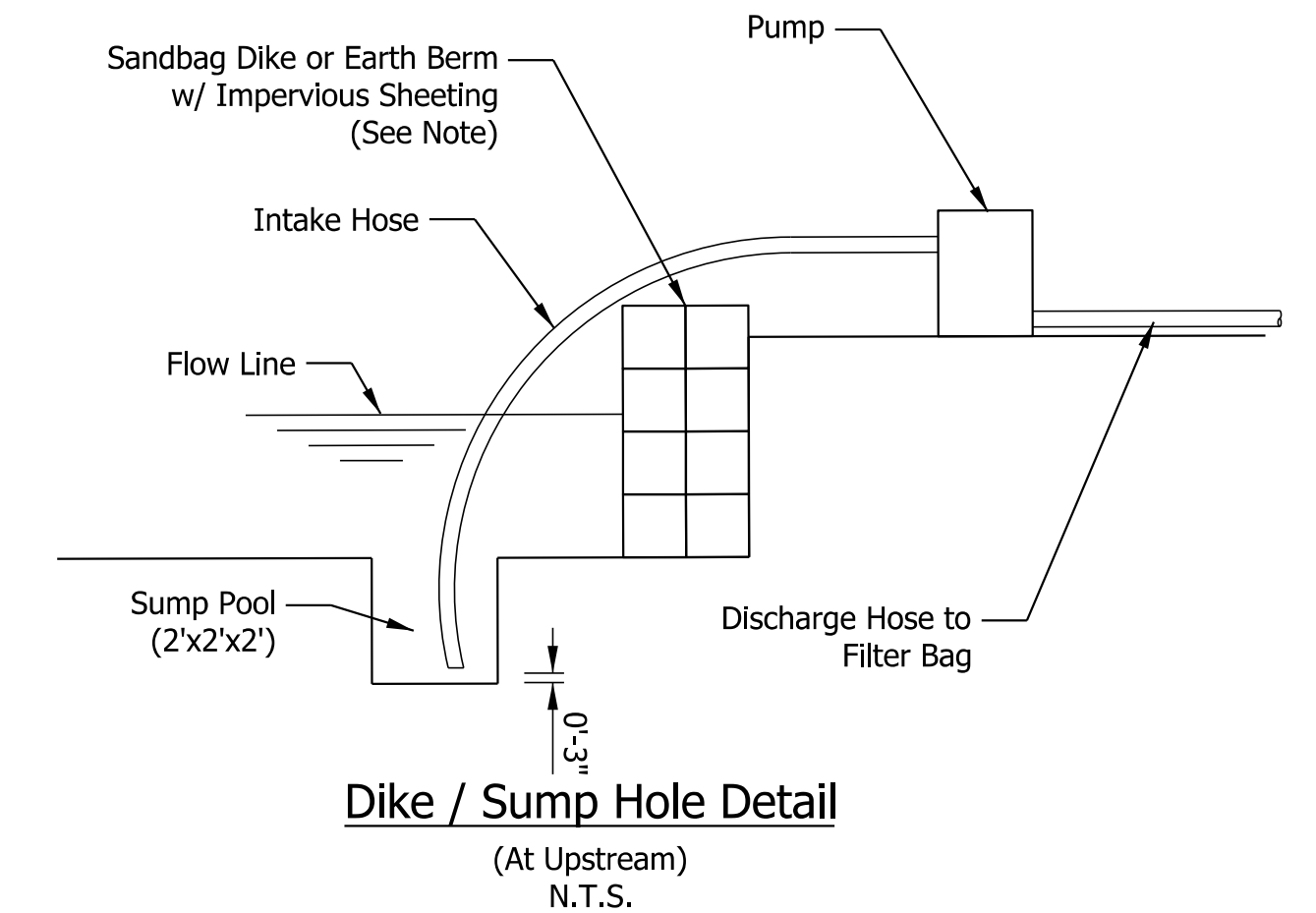
**EROSION CONTROL TABLE**

LOCATION	OFFSET	TEMPORARY SILT FENCE	TEMPORARY CHECK DAM, TRAVERSABLE	TEMPORARY CHECK DAM, REVETMENT RIPRAP	TEMPORARY SEDIMENT TRAP	TEMPORARY SEED MIXTURE	TEMPORARY MULCH		
FROM STATION	TO STATION	LT	RT	LFT	LFT	TON	TON		
13+90	19+07	X							
13+90	19+07		X			21.45	0.4		
14+21	16+00	X		180		58.65	1		
14+21		X			12				
14+60		X			12				
15+19		X			18				
15+60		X			18				
16+00		X				21			
16+00			X			7			
16+28		X					158		
16+28			X				104		
16+75			X			7			
16+70		X				8			
16+75		X				20			
17+70		X				16			
17+75		X				20			
<b>TOTAL</b>				180	60	99	262	80.1	1.4

- LEGEND**
- (P) BYPASS PUMP
  - (S) SUMP HOLE (3'X3'X3')
  - █ TEMPORARY CHECK DAM
  - ▬▬▬ TEMPORARY CHECK DAM



- NOTES:**
1. ALL DISTURBED AREAS SHALL BE RESTORED WITH MULCHED SEEDING



Plot: 12/4/2020 12:13:42 PM By: ThomasTM Per: Transportation.tbl



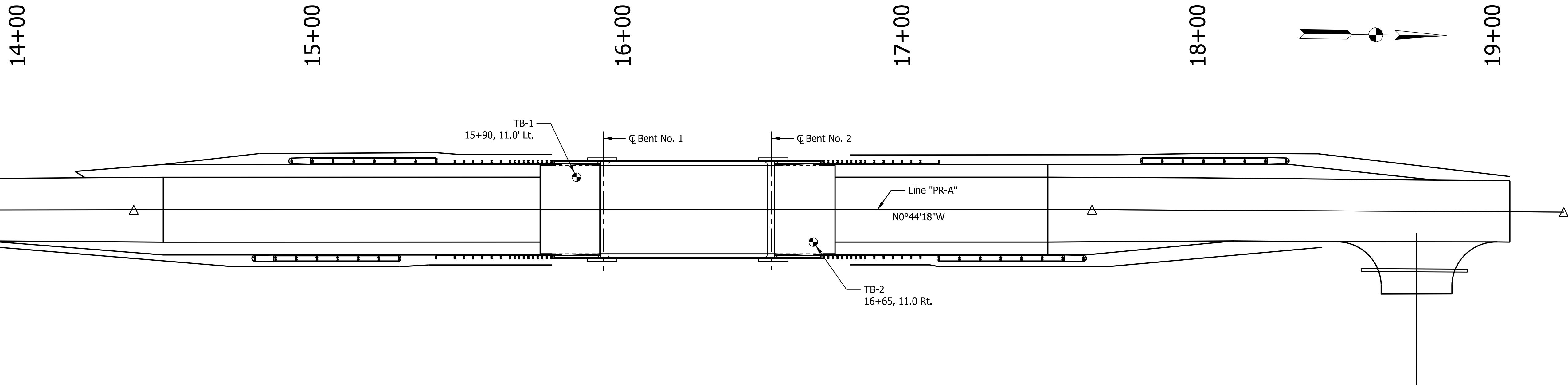
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: KMP	DRAWN: XXX	
CHECKED: MHW, CH	CHECKED: KMP, CH	

INDIANA  
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN AND  
TEMPORARY PUMP AROUND

HORIZONTAL SCALE	BRIDGE FILE
1"=30'-0"	157-28-10455
VERTICAL SCALE	DESIGNATION
1"=10'-0"	1700141
DRAWING NUMBER	SHEETS
	7 of 38
CONTRACT	PROJECT
B-40558	1700141





**INDOT BORING LOG**

BORING NO.: **TB-1**  
SHEET: 1 OF 1  
LATITUDE: \_\_\_\_\_  
LONGITUDE: \_\_\_\_\_  
DATUM: \_\_\_\_\_  
DATE STARTED: 10-01-19  
DATE COMPLETED: 10-01-19

ROUTE #: SR 157 COUNTY: Greene  
PROJECT TYPE: Bridge Replacement  
LOCATION: Over Branch Lemon Creek, 02.35 Miles North Sr-67  
DES. NO.: 1700141 PROJECT NO.: \_\_\_\_\_

ELEVATION: 519.0 BORING METHOD: HSA HAMMER: Auto  
STATION: 15+90 RIG TYPE: ATV DRILLER/INSP: DTLB  
OFFSET: 11.0 ft Left CASING DIA.: 8 in TEMPERATURE: 81 °F  
LINE: 'PRA' CORE SIZE: \_\_\_\_\_ WEATHER: Clear  
DEPTH: 33.0 ft

GROUNDWATER:  Encountered at Dry  At completion Wet  Caved in at 16.8 ft

STRATUM ELEVATION	SAMPLE DEPTH	SOIL/MATERIAL DESCRIPTION	SAMPLE NUMBER	SPT per ft	% RECOVERY	N	MOISTURE CONTENT	UNCONF. COMP., tsf	ATTERBERG LIMITS	REMARKS
									LL PL PI	
517.5	2.5	Asphalt	SS 1	1	100					
	5.0	Silty Loam A-4(0), Gray, Moist, Very Loose To Loose, (Test TB-1, SS-27/B)	SS 2	2	100		24.8		NP NP NP	
	7.5		SS 3	3	100					
	10.0		SS 4	4	100		22.2			
509.0	15.0	Silty Clay Loam A-4(9), Brown, Moist, Loose, (Test TB-1, PT-1)	SS 5	5	100		19.4	1.62 @ 6.9%	33 23 10	
	17.5		ST 1	1	70					
500.5	20.0	Sandstone Gray, Moist, Very Dense, Highly Weathered, (Visual)	SS 6	36	100	83				
	22.5		SS 7	10	50/0.5					22.7, Augur Refusal
496.0	25.0	Sandstone<<B>	RC 1	77%	98					
491.0	28.0		RQD=							
489.5	29.5	Sandstone<<B>	RC 2	29%	70					
486.0	32.5	Shale Dark Gray								
	33.0	Bottom of Boring at 33.0 ft								

**INDOT BORING LOG**

BORING NO.: **TB-2**  
SHEET: 1 OF 1  
LATITUDE: \_\_\_\_\_  
LONGITUDE: \_\_\_\_\_  
DATUM: \_\_\_\_\_  
DATE STARTED: 10-01-19  
DATE COMPLETED: 10-01-19

ROUTE #: SR 157 COUNTY: Greene  
PROJECT TYPE: Bridge Replacement  
LOCATION: Over Branch Lemon Creek, 02.35 Miles North Sr-67  
DES. NO.: 1700141 PROJECT NO.: \_\_\_\_\_

ELEVATION: 518.0 BORING METHOD: HSA HAMMER: Auto  
STATION: 16+65 RIG TYPE: ATV DRILLER/INSP: DTLB  
OFFSET: 11.0 ft Right CASING DIA.: 8 in TEMPERATURE: 90 °F  
LINE: 'PRA' CORE SIZE: \_\_\_\_\_ WEATHER: Clear  
DEPTH: 30.5 ft

GROUNDWATER:  Encountered at Dry  At completion Wet  Caved in at 15.5 ft

STRATUM ELEVATION	SAMPLE DEPTH	SOIL/MATERIAL DESCRIPTION	SAMPLE NUMBER	SPT per ft	% RECOVERY	N	MOISTURE CONTENT	UNCONF. COMP., tsf	ATTERBERG LIMITS	REMARKS
									LL PL PI	
516.8	2.5	Asphalt	SS 1	1	100					
	5.0	Sandy Loam A-4, Brown, Moist, Medium Dense, (Visual)	SS 2	2	100		14.2			
	7.5		SS 3	3	100		19.8			
	10.0	Silty Loam A-4(3), Brown, Moist, Medium Stiff, (Test TB-2, SS-4 T/B)	SS 4	4	100		23.8			
	12.5		SS 5	5	100		15.5		24 17 7	
506.0	15.0	Clay A-7-6(14), Brown, Moist, Stiff, (Test TB-2, PT-1)	SS 6	6	100		22.0	3.86 @ 6.9%	42 20 22	
502.0	17.5	Clay Loam Brown, Moist, Very Dense, With Sand Stone Fragments in SS-6 (Visual)	SS 7	25	64					
	20.0		SS 8	44	20					
498.5	22.5	Sandstone Highly Weathered	SS 9	39	20					
497.5	25.0		SS 10	50/0.1						20.5, Augur Refusal
	27.5	Sandstone<<B>	RC 1	44%						
492.5	30.0	Sandstone Unweathered	RC 2	82%						
487.5	30.5	Bottom of Boring at 30.5 ft								

PILE LOADING FOR GEOTECHNICAL TESTING		
Support	No. 1	No. 2
Pile Size, Type, and Grade	HP 12 x 53 Grade 50	HP 12 x 53 Grade 50
Factored Design Soil Resistance RR (Kips)	213	213
Resistance Factor	0.55	0.55
Downdrag Load DD (Kips)	N/A	N/A
Nominal Soil Resistance Rn (Kips)	388	388
Downdrag Friction R <sub>sdd</sub> (Kips)	0	0
Scour Zone Friction R <sub>s</sub> scour (Kips)	0	N/A
Nominal Driving Resistance R <sub>ndr</sub> (Kips)	388	388
Precore Pile Tip Elevation (Feet)	492	493
Verification of pile resistance to be performed per Standard Specifications 701.05 (a)		

Plot: 12/4/2020 1:00:51 PM By: ThomasTM Per: Transportation.tbl



RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: KMP	DRAWN: TMT	
CHECKED: XXX	CHECKED: XXX	

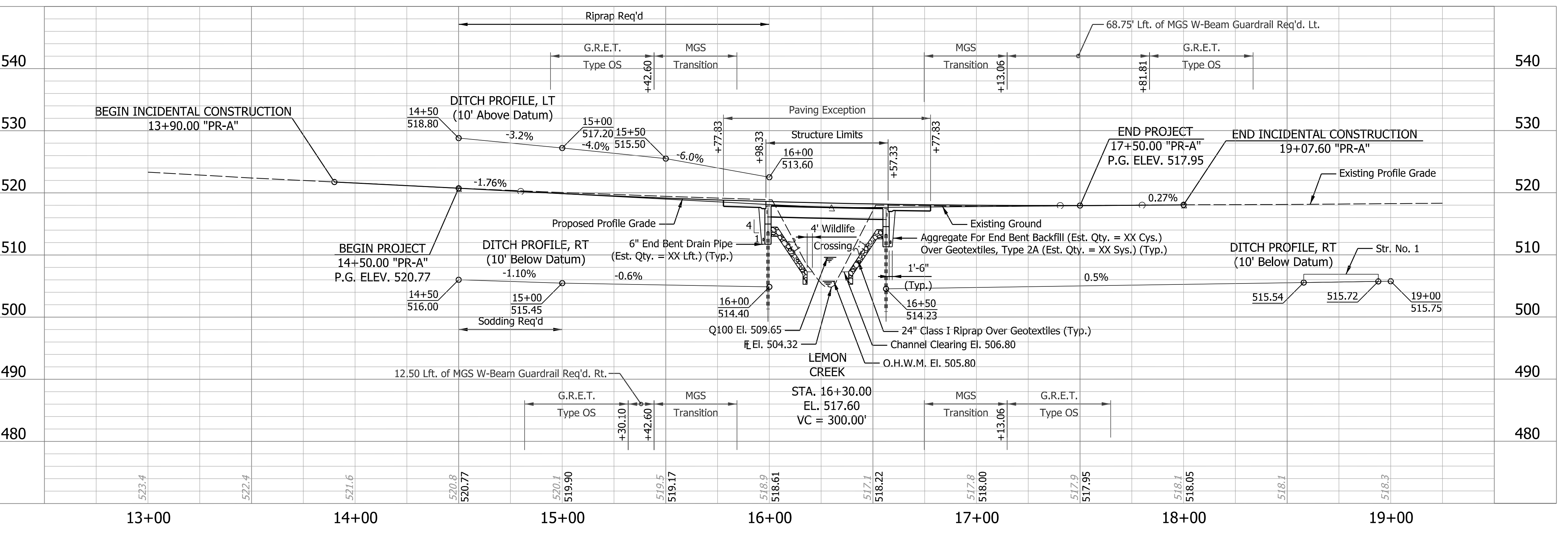
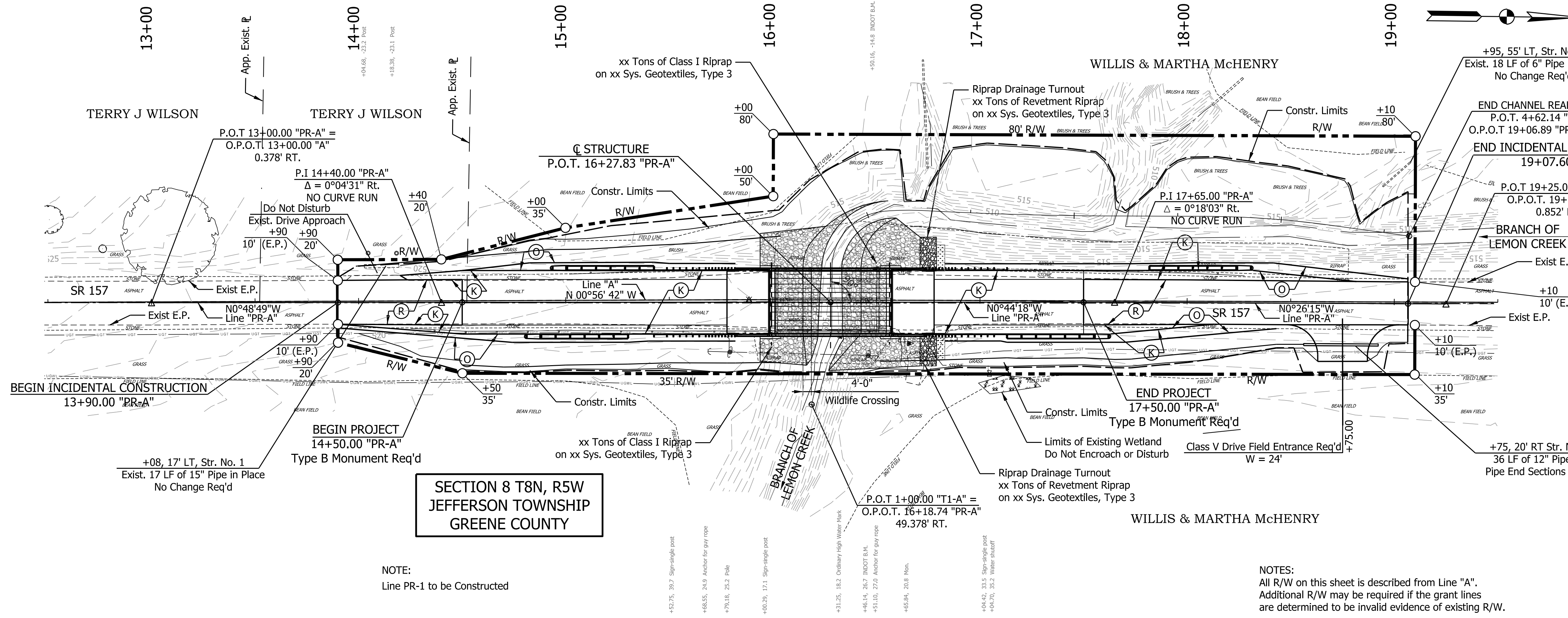
INDIANA  
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS

SCALE 1" = 20'	BRIDGE FILE 157-28-10455
	DESIGNATION 1700141
DRAWING NUMBER of 8	SHEETS of 38
CONTRACT B-40558	PROJECT 1700141

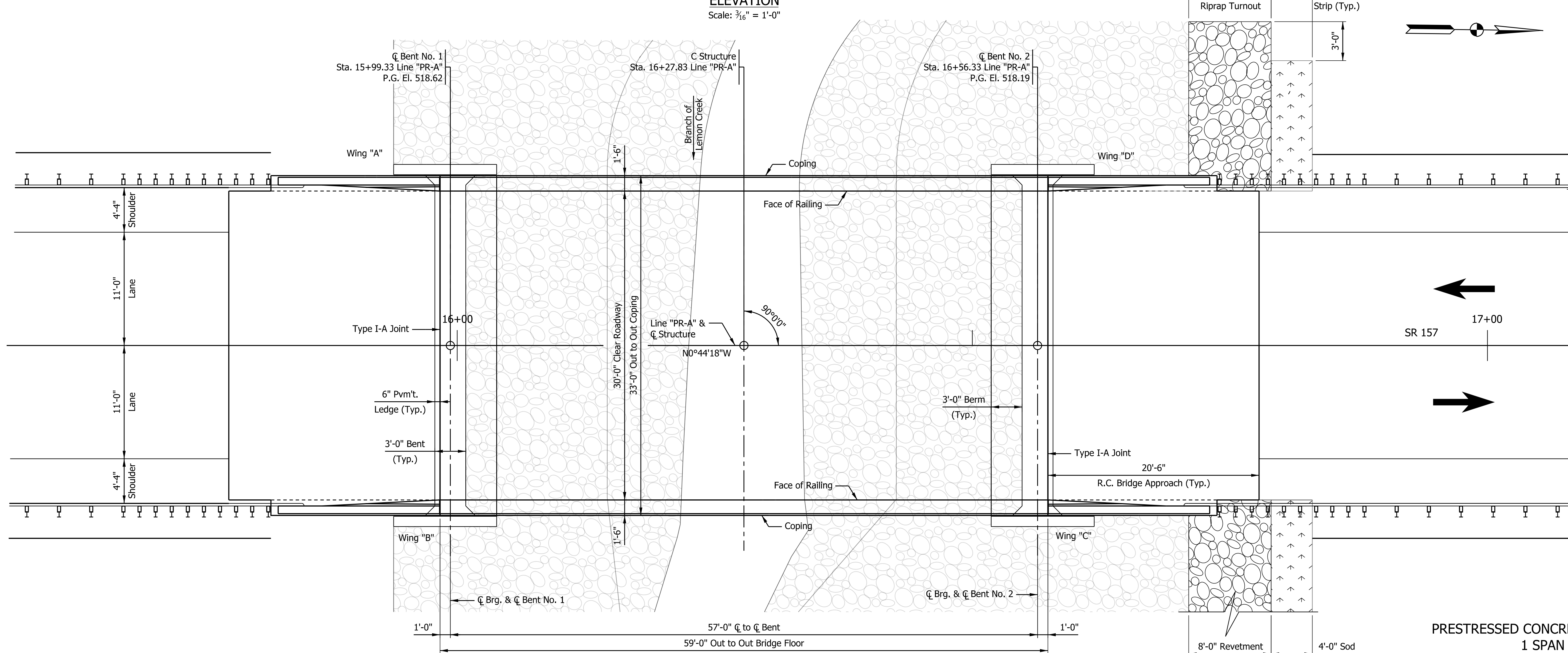
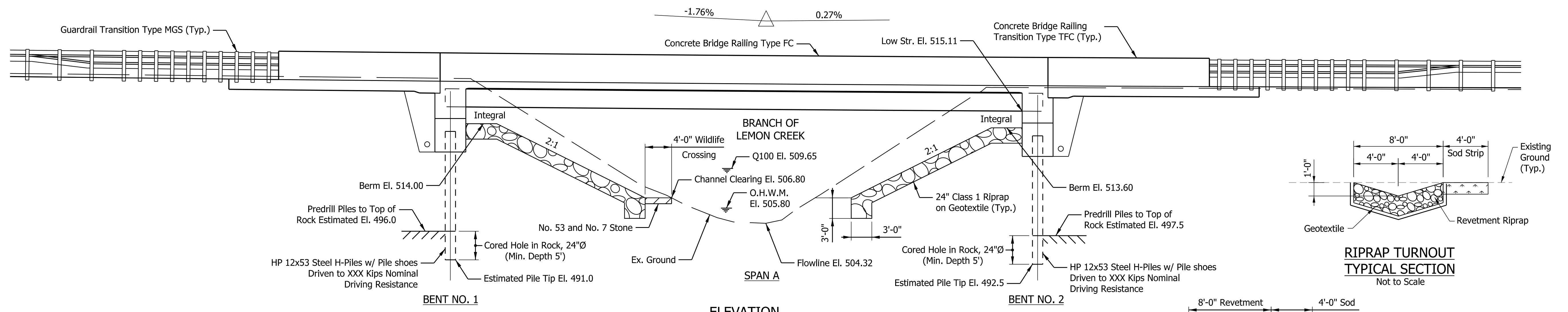






Plot: 12/4/2020 12:17:37 PM By: ThomasTM Per: Transportation.tbl

STRUCTURE TO BE BUILT ON A 300' VERTICAL CURVE



PRESTRESSED CONCRETE BOX BEAM BRIDGE  
1 SPAN @ 57'-0"  
30'-0" CLEAR ROADWAY: SKEW: SQUARE  
SR 157 OVER BRANCH LEMON CREEK  
GREENE COUNTY

Plot: 12/4/2020 12:18:09 PM By: Thomas™ Pen: Transportation.tbl



RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: KMP	DRAWN: TMT	
CHECKED: XXX	CHECKED: XXX	

INDIANA  
DEPARTMENT OF TRANSPORTATION

**GENERAL PLAN**

SCALE	BRIDGE FILE
AS NOTED	157-28-10455
	DESIGNATION
	1700141
DRAWING NUMBER	SHEETS
of	11 of 38
CONTRACT	PROJECT
B-40558	1700141



**GENERAL NOTES**

Reinforcing steel cover shall be 2 1/2" in top and 1" minimum in bottom of floor slab, 3" in footings, except bottom steel which shall be 4", and 2" in all other parts, unless noted.

Plans for the existing structure are on file in the central office of the Indiana Department of Transportation as bridge file 157-28-6075 B and SRS-29740 A are available upon request.

Surface Seal top of bridge deck, concrete railing, concrete transitions, copings, underside of deck from coping to face of outside beam, top of approach slab, and all exposed surfaces of substructures.

**DESIGN DATA**

Superstructure and Substructure designed for HL-93 loading in accordance with AASHTO LRFD Bridge Design Specifications for Highway Bridges 8th Edition, 2019 and its subsequent interims .

**DEAD LOAD**

Actual weight plus 35 psf (composite) for future wearing surface and 15 (non-composite) for permanent metal deck forms.

**FLOOR SLAB**

Designed with a 7 1/2" structural depth plus a 1/2" sacrificial wearing surface.

**DESIGN STRESSES**

**CONCRETE**

Class "A" Concrete: f'c = 3,500 psi  
 Class "B" Concrete: f'c = 3,000 psi  
 Class "C" Concrete: f'c = 4,000 psi

**REINFORCING STEEL**

Grade 60 Fy = 60,000 psi

**CONSTRUCTION LOADING**

The exterior beam has been checked for strength, deflection, and overturning using the construction loads shown below. Cantilever overhang brackets were assumed for support of the deck overhang past the edge of the exterior beam. Finishing machine was assumed to be supported 6 in. outside the vertical coping form. The top overhang brackets were assumed to be located 6 in. past the edge of the vertical coping form. The bottom of overhang brackets were assumed to be braced against the intersection of the girder bottom flange and web.

**DECK FALSEWORK LOADS**

Designed for 15 lb/ft2 for permanent metal stay-in-place deck forms, removable deck forms, and 2-ft exterior walkways.

**CONSTRUCTION LIVE LOAD**

Designed for 20 lb/ft2 extending 2 ft past the edge of coping and 75 lb/ft vertical force applied at a distance of 6 in. outside the face of coping over a 30-ft length of the deck centered with the finishing machine.

**FINISHING MACHINE LOAD**

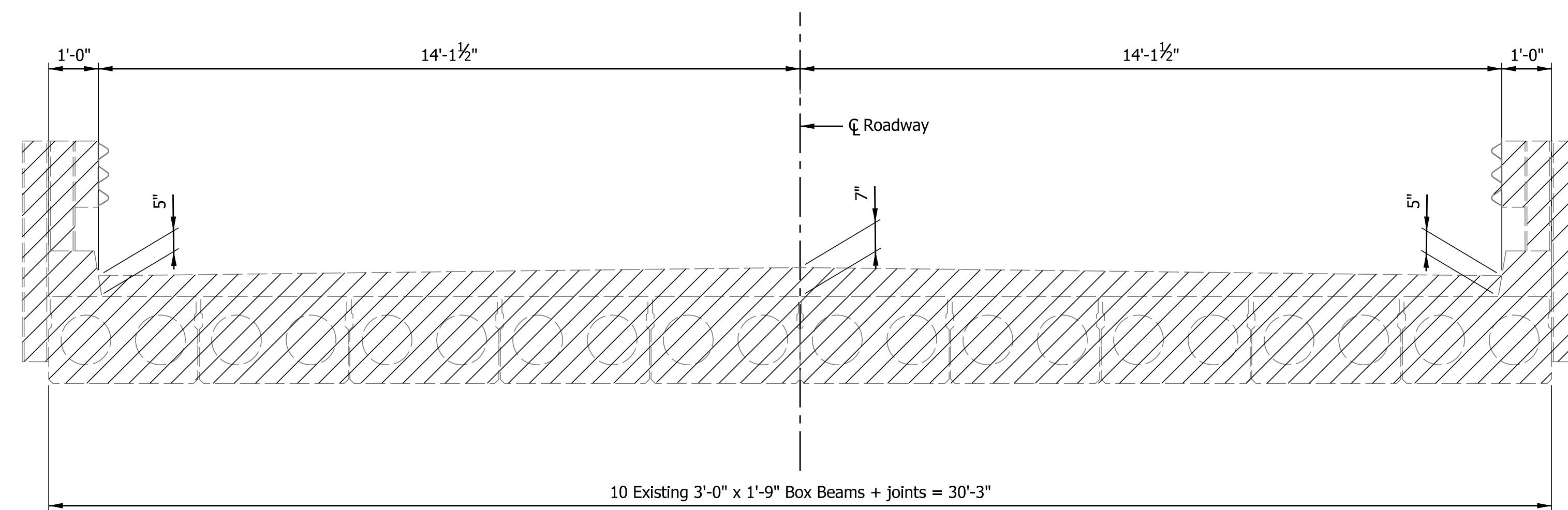
4500 lb distributed over 10 ft along the coping.

**WIND LOAD**

Designed for 70 mph horizontal wind loading in accordance with LRFD 3.8.1.

**SEISMIC DATA**

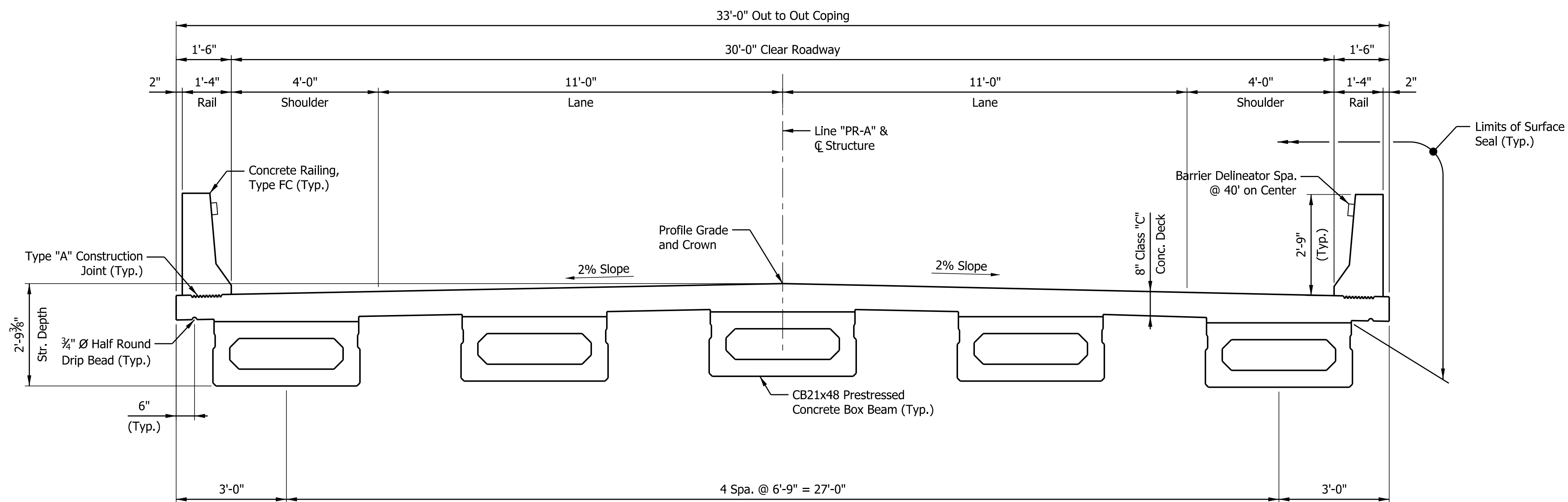
SD1: 0.187  
 Seismic Performance Zone: Zone 2  
 Acceleration Coefficient (As): 0.231  
 Seismic Soil Profile Type: Class D



**EXISTING TYPICAL SECTION**

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

- Indicates Limits of Removal



**PROPOSED TYPICAL SECTION**

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

**PRESTRESSED CONCRETE BOX BEAM BRIDGE**  
 1 SPAN @ 57'-0"  
 30'-0" CLEAR ROADWAY: SKEW: SQUARE  
 SR 157 OVER BRANCH LEMON CREEK  
 GREENE COUNTY

Plot: 12/4/2020 12:18:27 PM By: ThomasTM Pen: Transportation.tbl



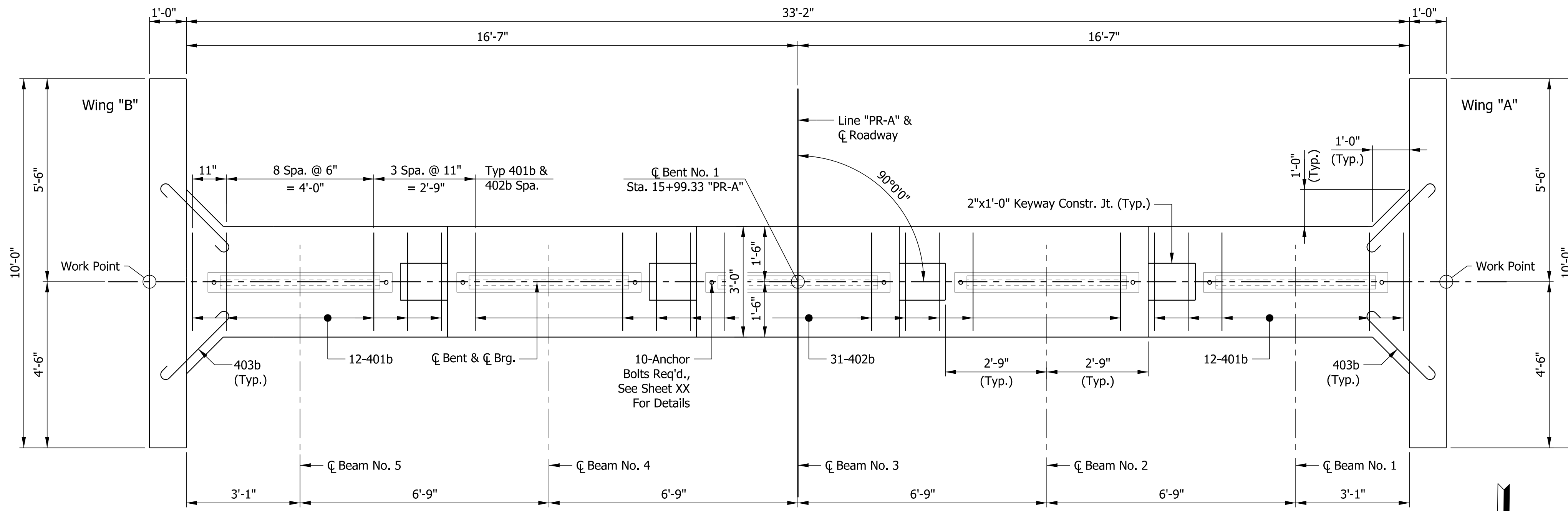
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: KMP	DRAWN: TMT	
CHECKED: XXX	CHECKED: XXX	

INDIANA  
DEPARTMENT OF TRANSPORTATION

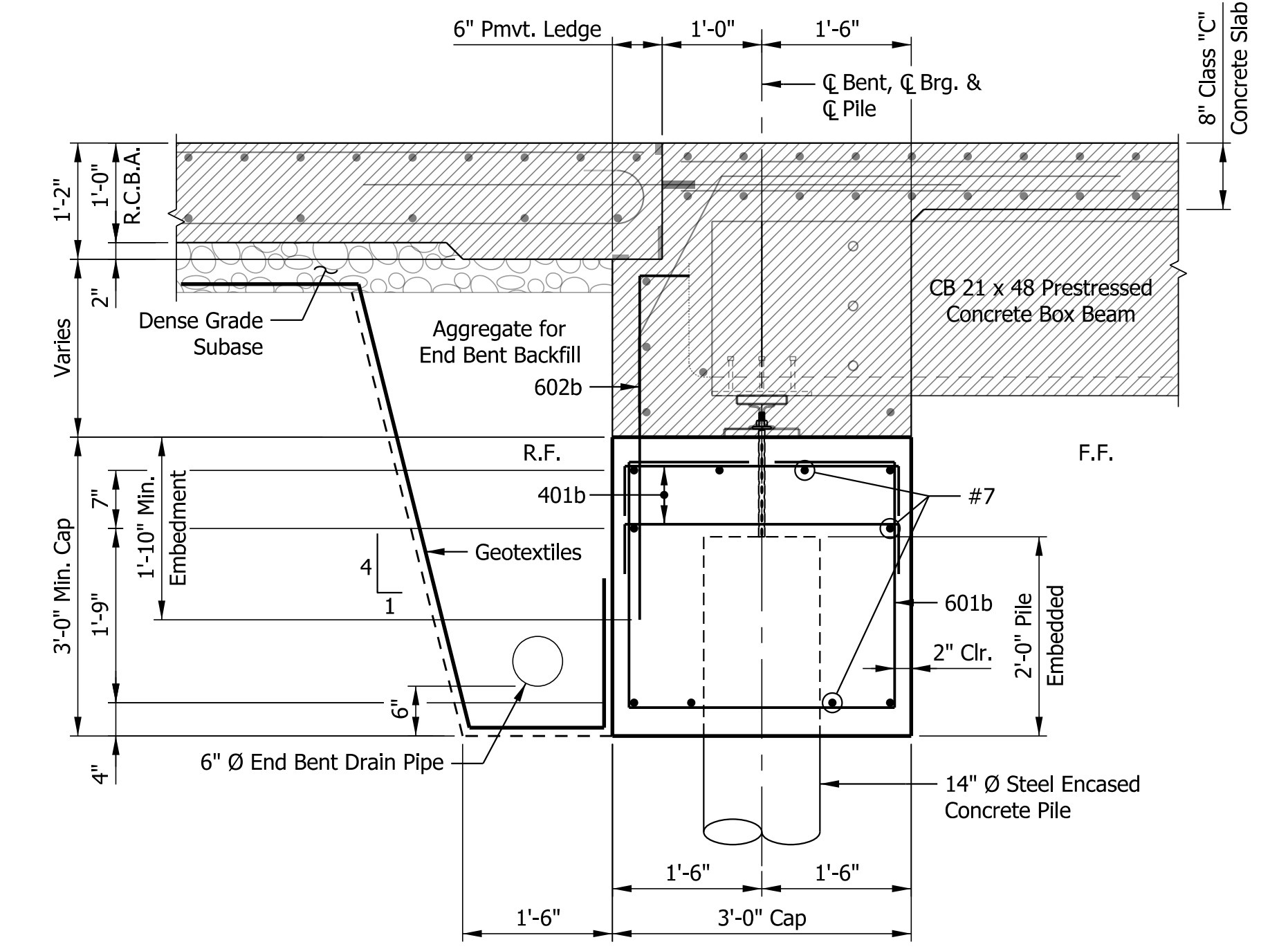
GENERAL PLAN

SCALE	BRIDGE FILE
AS NOTED	157-28-10455
	DESIGNATION
	1700141
DRAWING NUMBER	SHEETS
of	12 of 38
CONTRACT	PROJECT
B-40558	1700141

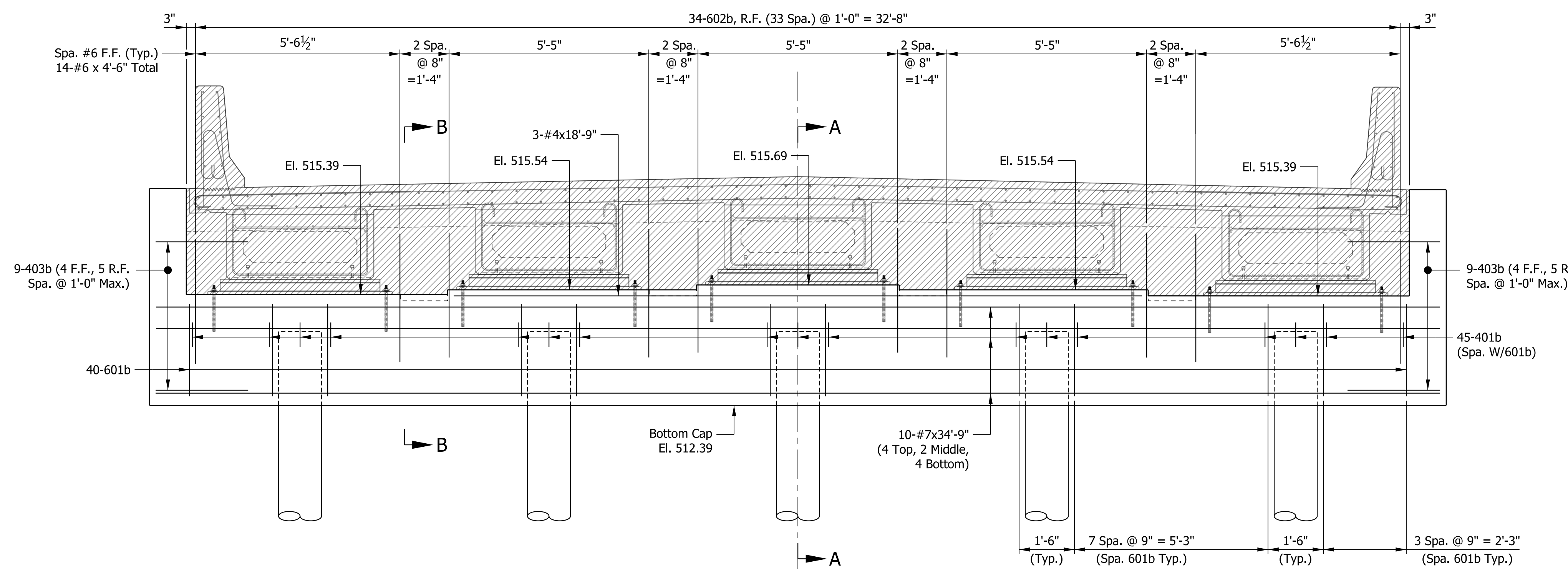




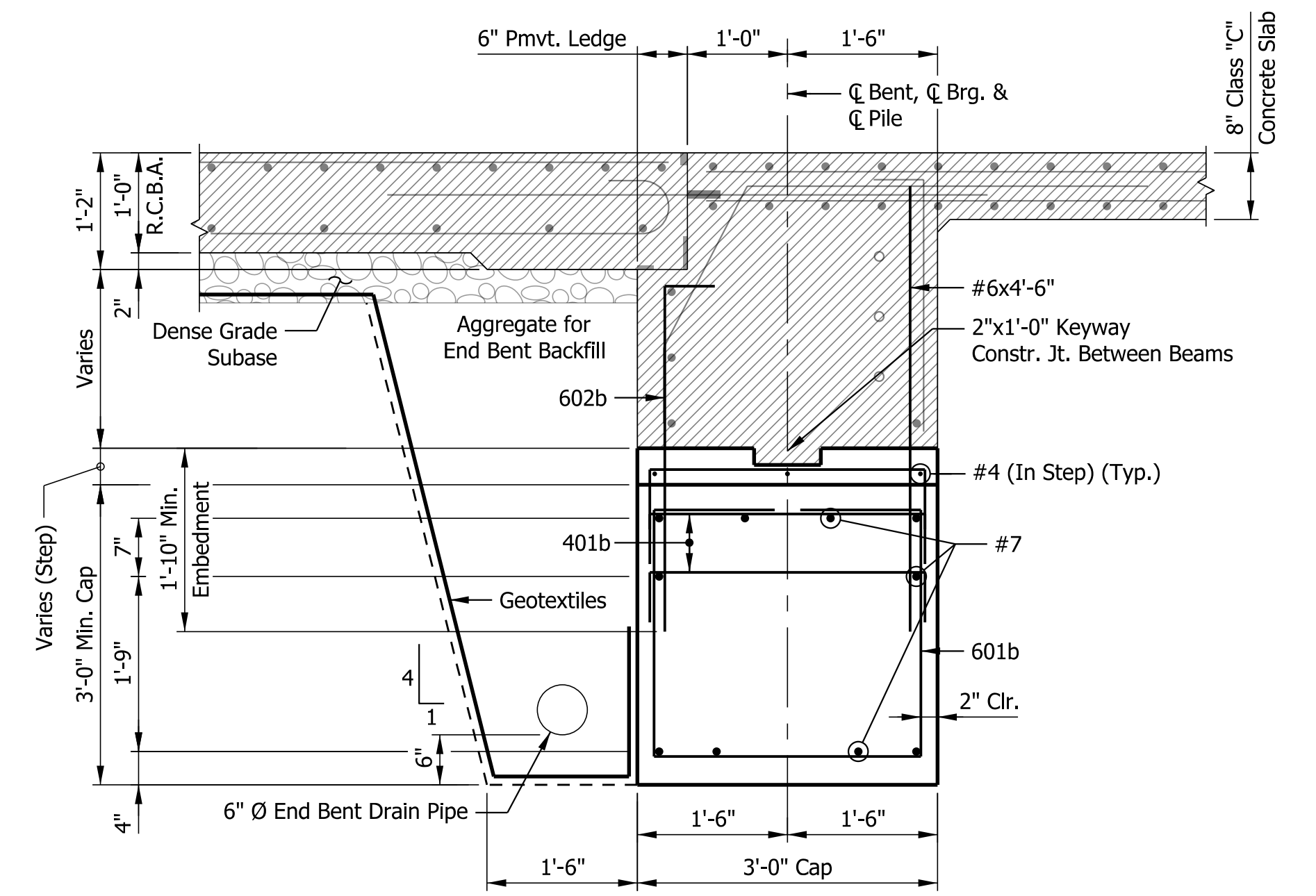
**PLAN**  
Scale: 1/2" = 1'-0"



**SECTION A-A**  
Scale: 3/4" = 1'-0"



**ELEVATION**  
Scale: 1/2" = 1'-0"



**SECTION B-B**  
Scale: 3/4" = 1'-0"

**NOTES**

- For Reinforcing Bar Notes, see Standard Drawing E703-BRST-01.
- All reinforcing steel to be epoxy coated.
- Hatched area to be poured with superstructure.
- Surface Seal all exposed surfaces of wings.
- For additional details and Bill Of Materials, see Sheet No. 12.
- For Anchor bolt Detail and Bearing Assembly Details, see Sheet No. ??.
- For end bent backfill limits and drain pipe details, see Standard Drawing E211-BFIL-04.

Plot: 12/4/2020 12:19:08 PM By: ThomasTM Pen: Transportation.tbl

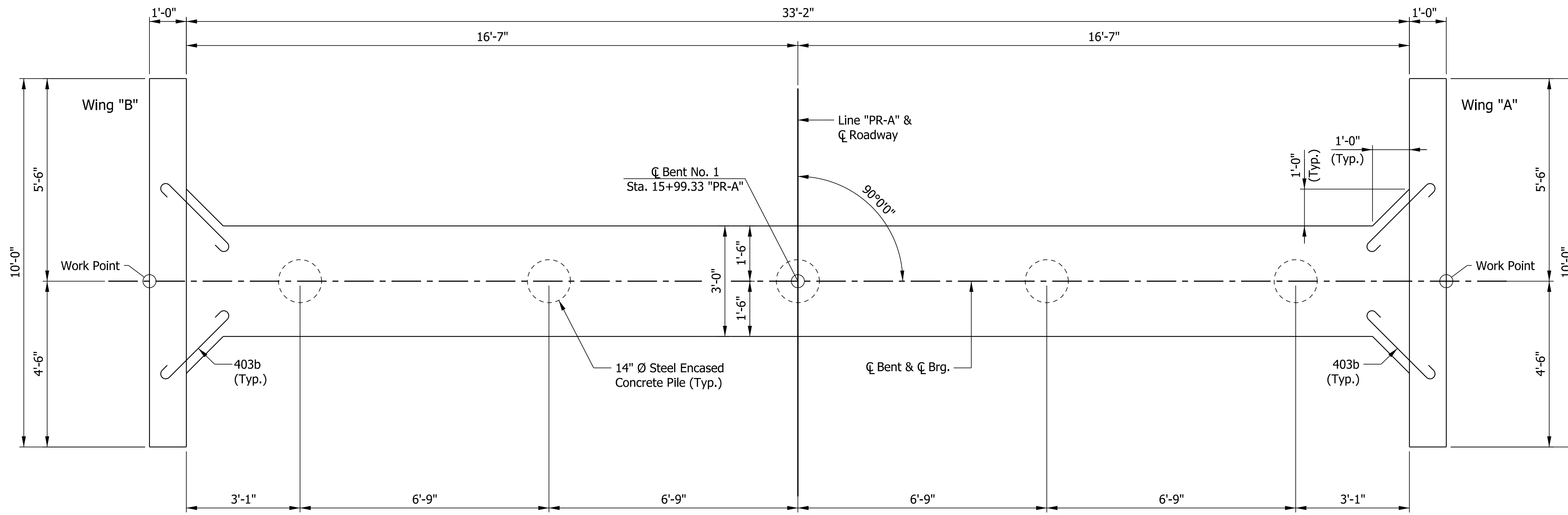


RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: KMP	DRAWN: TMT	
CHECKED: XXX	CHECKED: XXX	

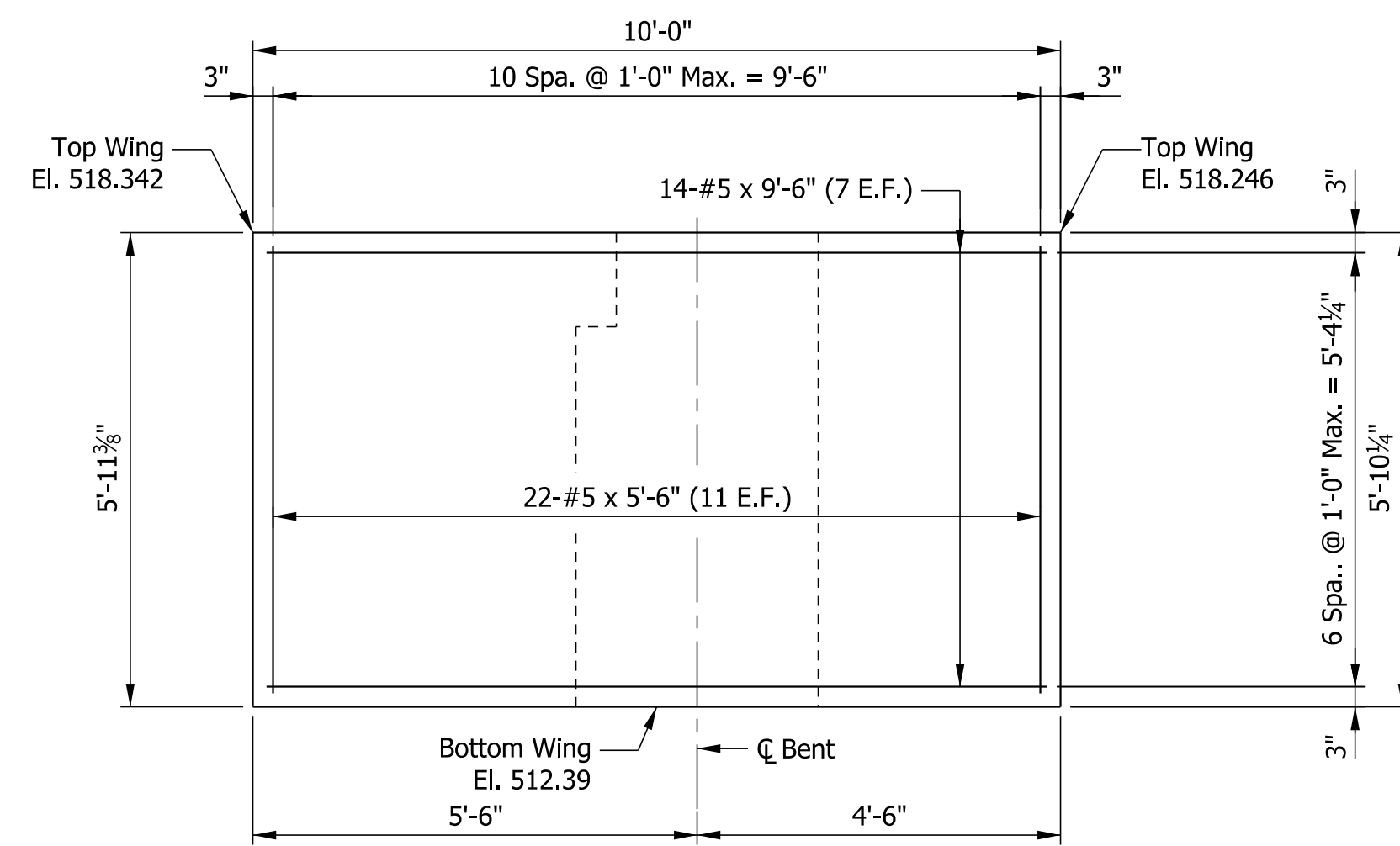
INDIANA  
DEPARTMENT OF TRANSPORTATION

BENT NO. 1 DETAILS

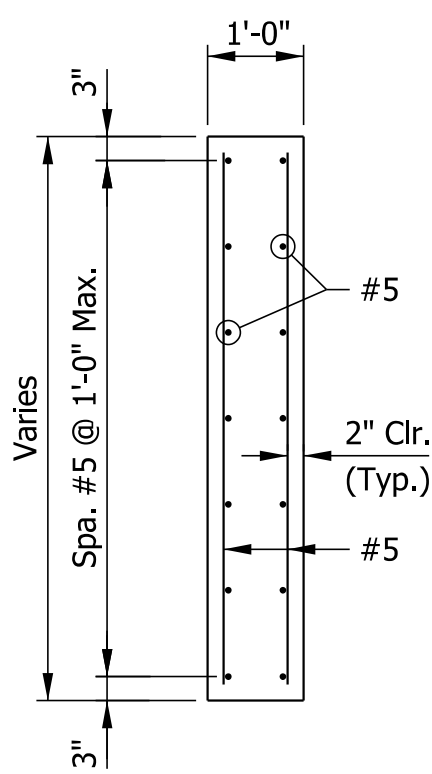
SCALE	BRIDGE FILE
AS NOTED	157-28-10455
	DESIGNATION
	1700141
DRAWING NUMBER	SHEETS
of	13 of 38
CONTRACT	PROJECT
B-40558	1700141



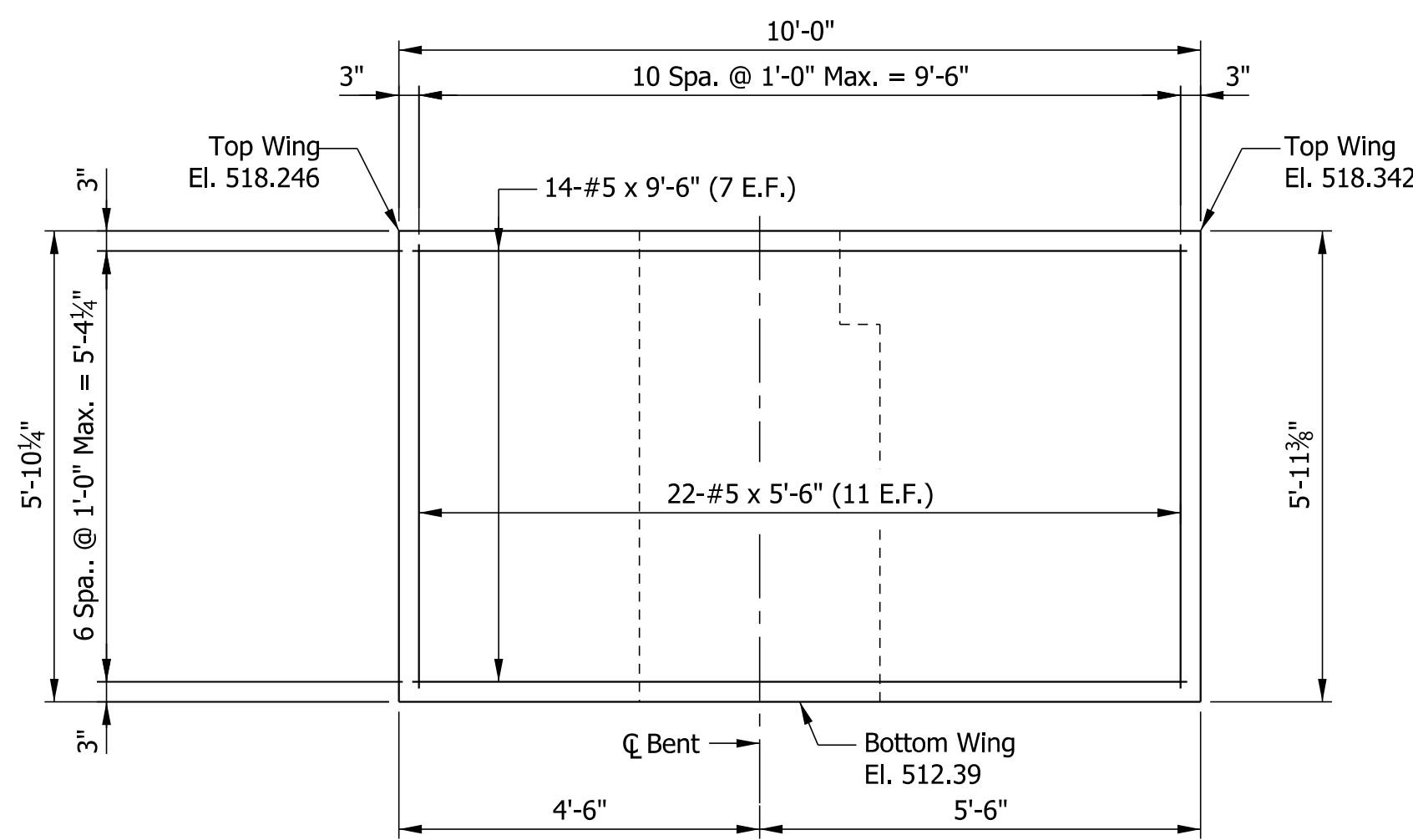
**PILING PLAN**  
Scale: 1/2" = 1'-0"



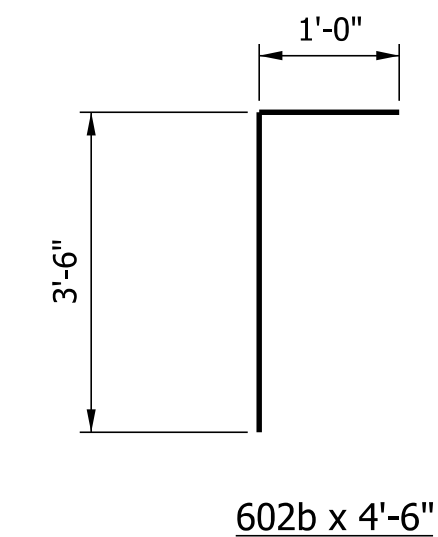
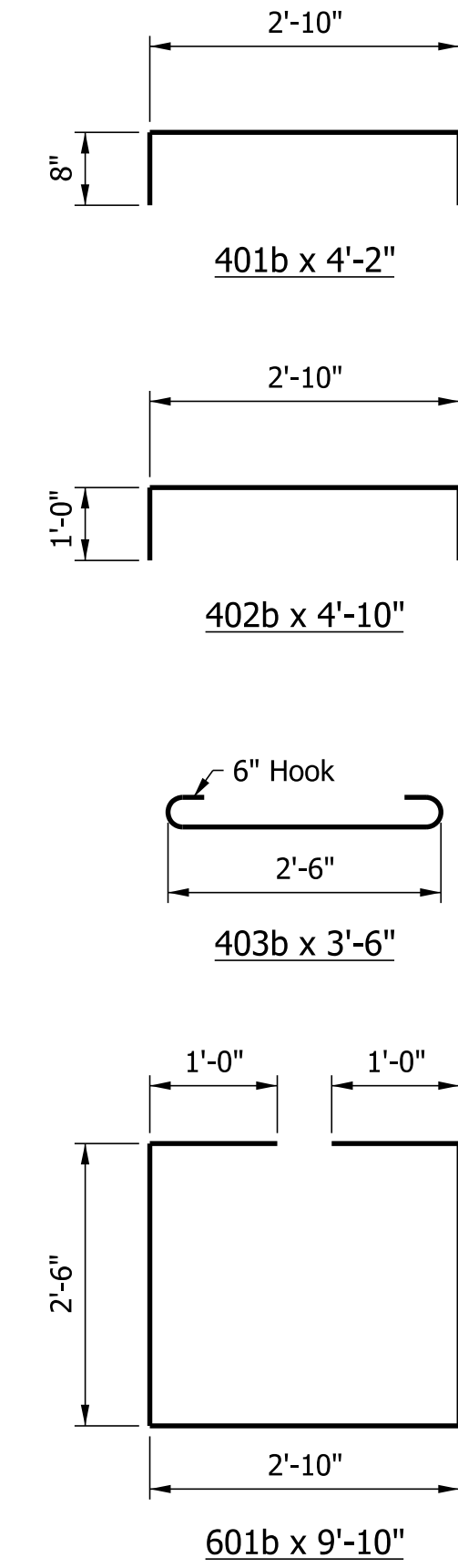
**ELEVATION - WING "B"**  
Scale: 1/2" = 1'-0"



**TYPICAL WINGWALL SECTION**  
Scale: 1/2" = 1'-0"



**ELEVATION - WING "A"**  
Scale: 1/2" = 1'-0"



BILL OF MATERIALS			
BENT NO. 1			
EPOXY COATED REINFORCING STEEL			
Size & Mark	Number of Bars	Length (Ft. - In.)	Weight (Lbs.)
#7	10	34'-9"	
TOTAL #7 BARS			710
601b	40	9'-10"	
602b	34	4'-6"	
#6	14	4'-6"	
TOTAL #6 BARS			915
#5	28	9'-6"	
#5	44	5'-6"	
TOTAL #5 BARS			530
401b	69	4'-8"	
402b	31	4'-10"	
403b	18	3'-6"	
#4	3	18'-9"	
TOTAL #4 BARS			395
TOTAL EPOXY COATED REINF.			2,550
CONCRETE			
CLASS "C" IN SUBSTRUCTURE			? CYS
MISCELLANEOUS			
PILE, STEEL PIPE, 0.312 IN. 14 IN. 4 @ ??			?? LFT
TEST PILE, INDICATOR, PRODUCTION 1 @ ??			?? LFT
TEST PILE, INDICATOR, RESTRIKE			1 EACH
CONICAL PILE TIP, 14 IN.			5 EACH
AGG. FOR END BENT BACKFILL			? CYS
GEOTEXTILE FOR UNDERDRAIN TYPE 3			?? SYS
PIPE, END BENT DRIAN, 6 IN.			? LFT

**NOTES**

- 5 - 14" Ø Steel Encased Concrete Pile Required.
- For Reinforcing Bar Notes, see Standard Drawing E703-BRST-01.
- All reinforcing steel to be epoxy coated.
- Surface Seal all exposed surfaces of wings.

Plot: 12/4/2020 12:19:32 PM By: ThomasTM Pen: Transportation.tbl

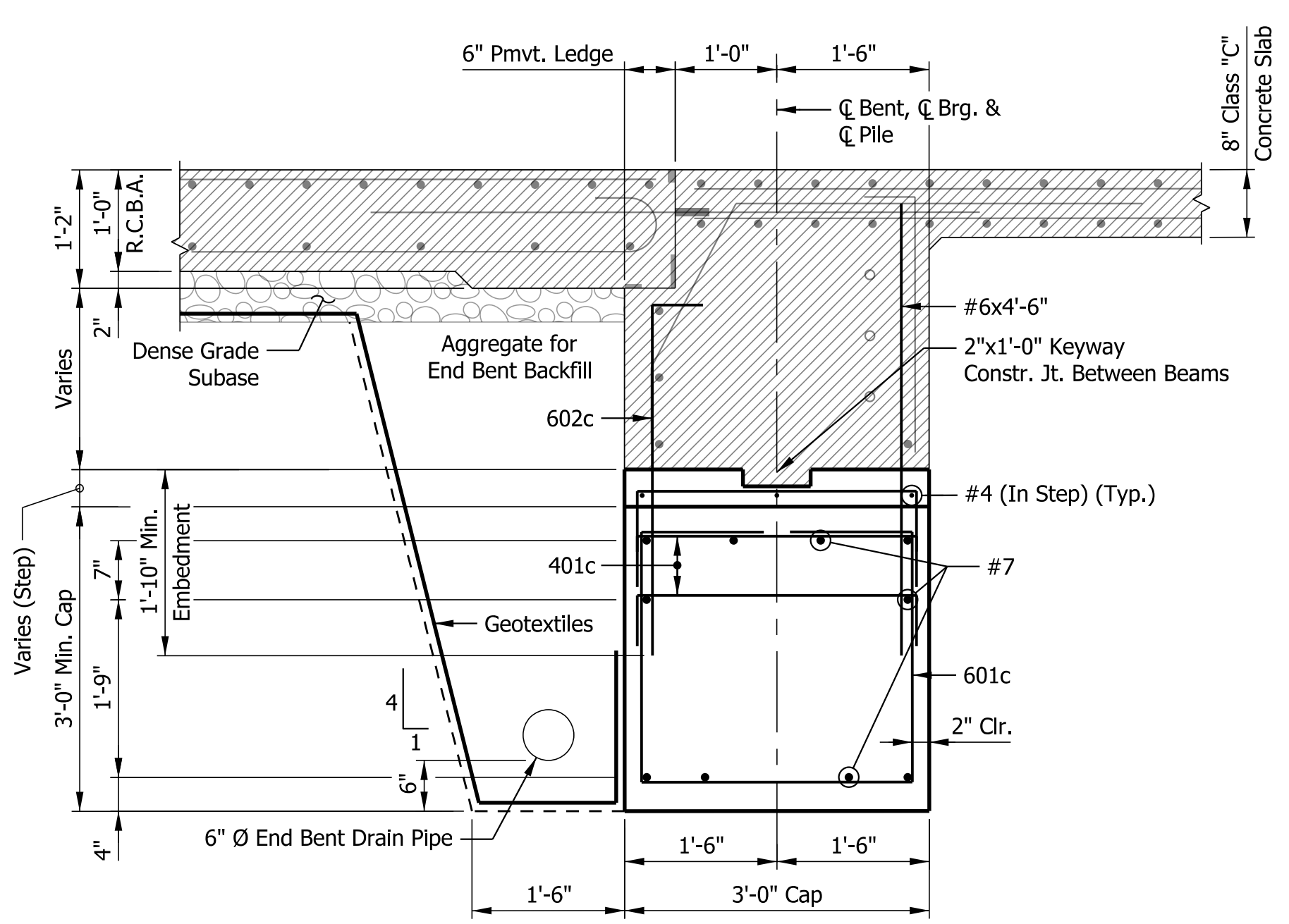
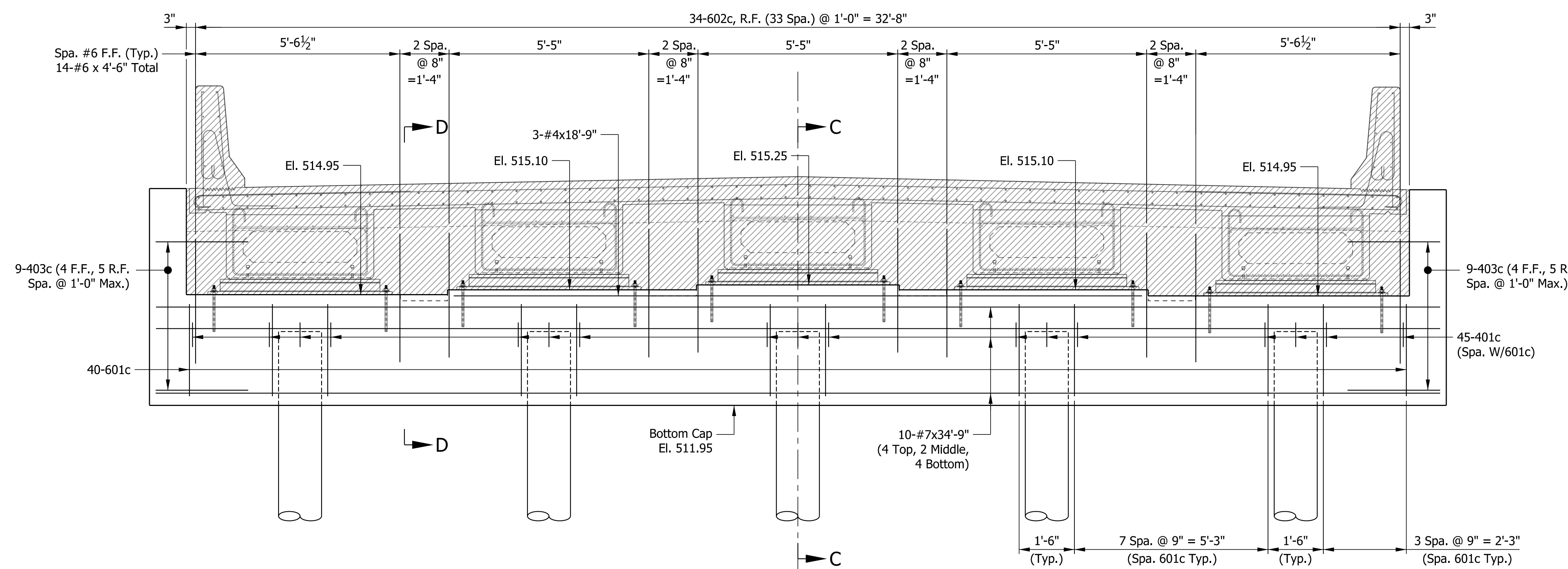
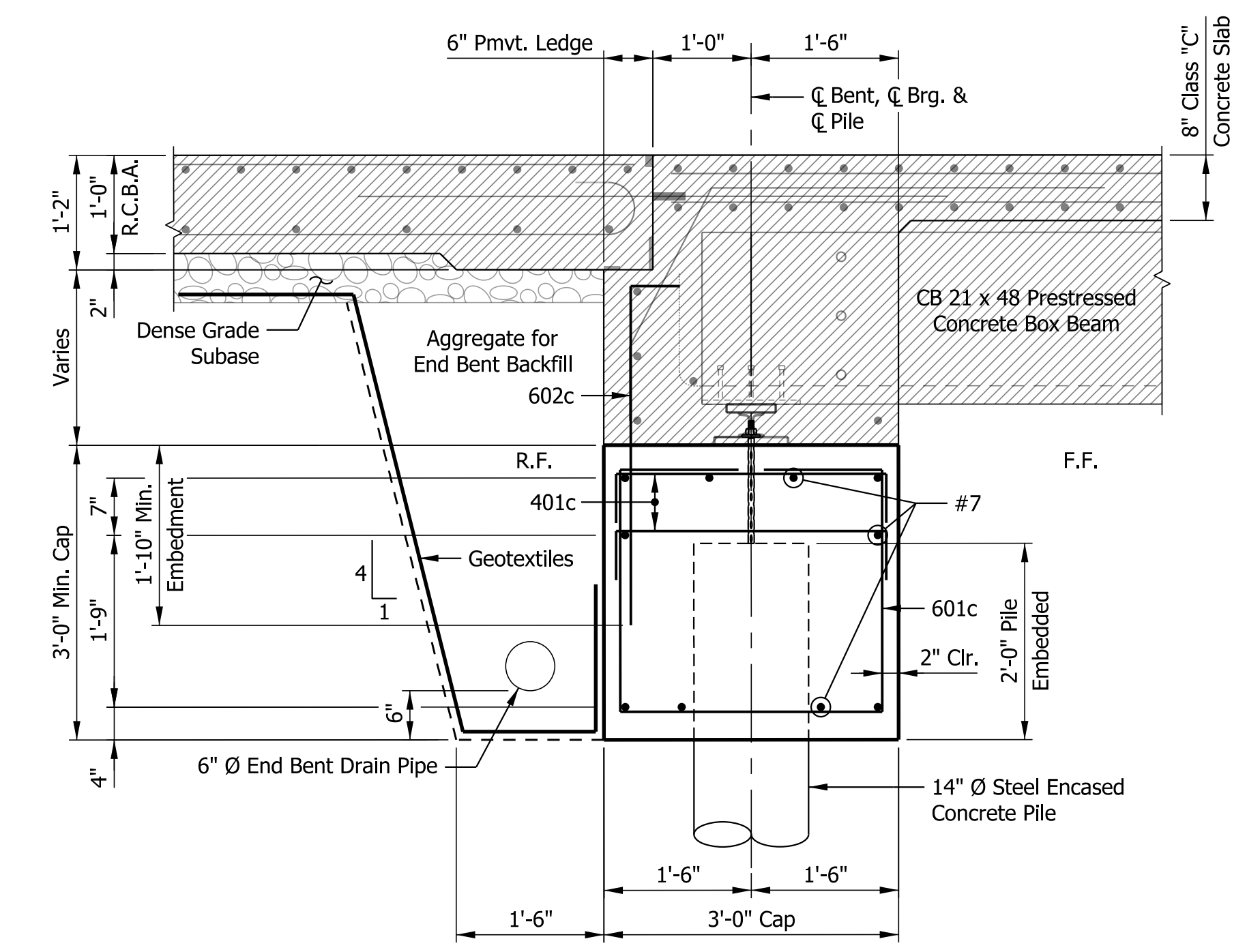
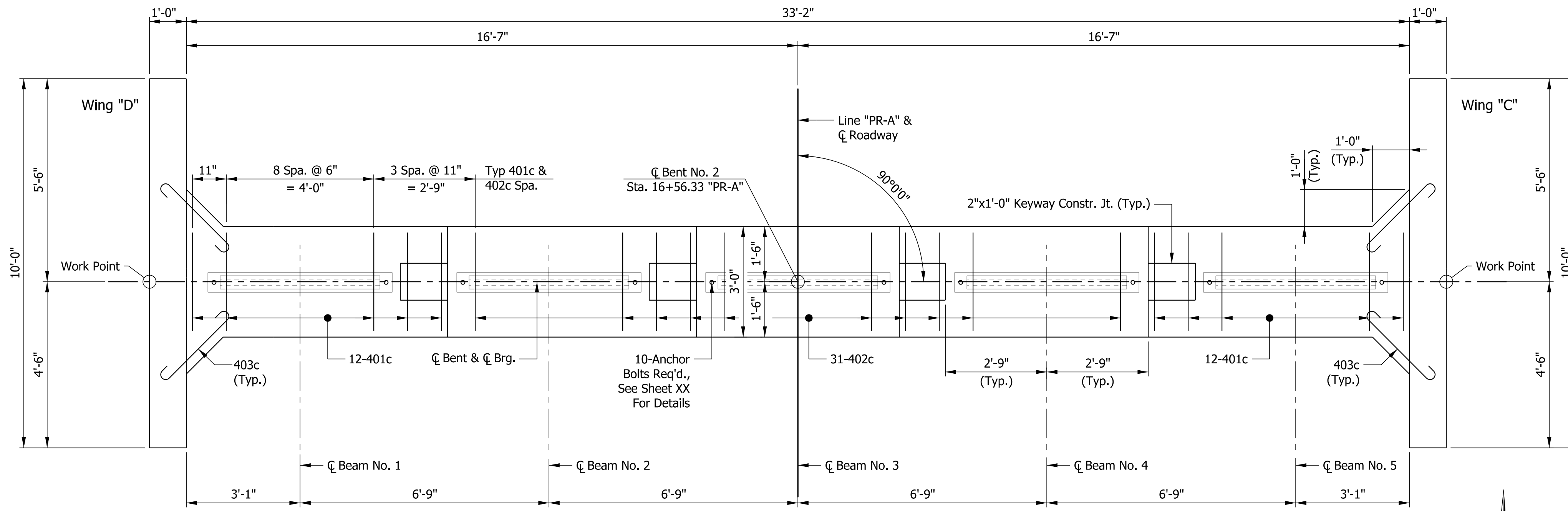


RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: KMP _____	DRAWN: TMT _____	
CHECKED: XXX _____	CHECKED: XXX _____	

INDIANA  
DEPARTMENT OF TRANSPORTATION

BENT NO. 1 DETAILS

SCALE	BRIDGE FILE
AS NOTED	157-28-10455
	DESIGNATION
	1700141
DRAWING NUMBER	SHEETS
of	14 of 38
CONTRACT	PROJECT
B-40558	1700141



- NOTES
- For Reinforcing Bar Notes, see Standard Drawing E703-BRST-01.
  - All reinforcing steel to be epoxy coated.
  - Hatched area to be poured with superstructure.
  - Surface Seal all exposed surfaces of wings.
  - For additional details and Bill Of Materials, see Sheet No. ??.
  - For Anchor bolt Detail and Bearing Assembly Details, see Sheet No. ??.
  - For end bent backfill limits and drain pipe details, see Standard Drawing E211-BFIL-04.

Plot: 12/4/2020 12:20:02 PM By: ThomasTM Pen: Transportation.tbl



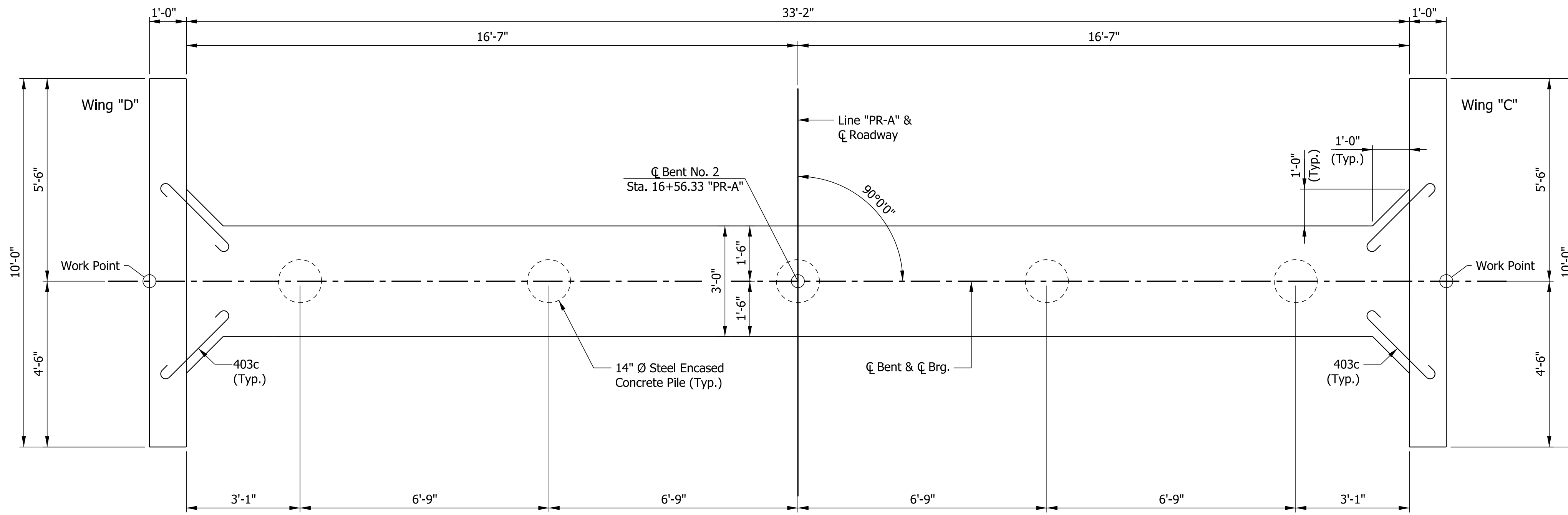
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: KMP	DRAWN: TMT	
CHECKED: XXX	CHECKED: XXX	

INDIANA  
DEPARTMENT OF TRANSPORTATION

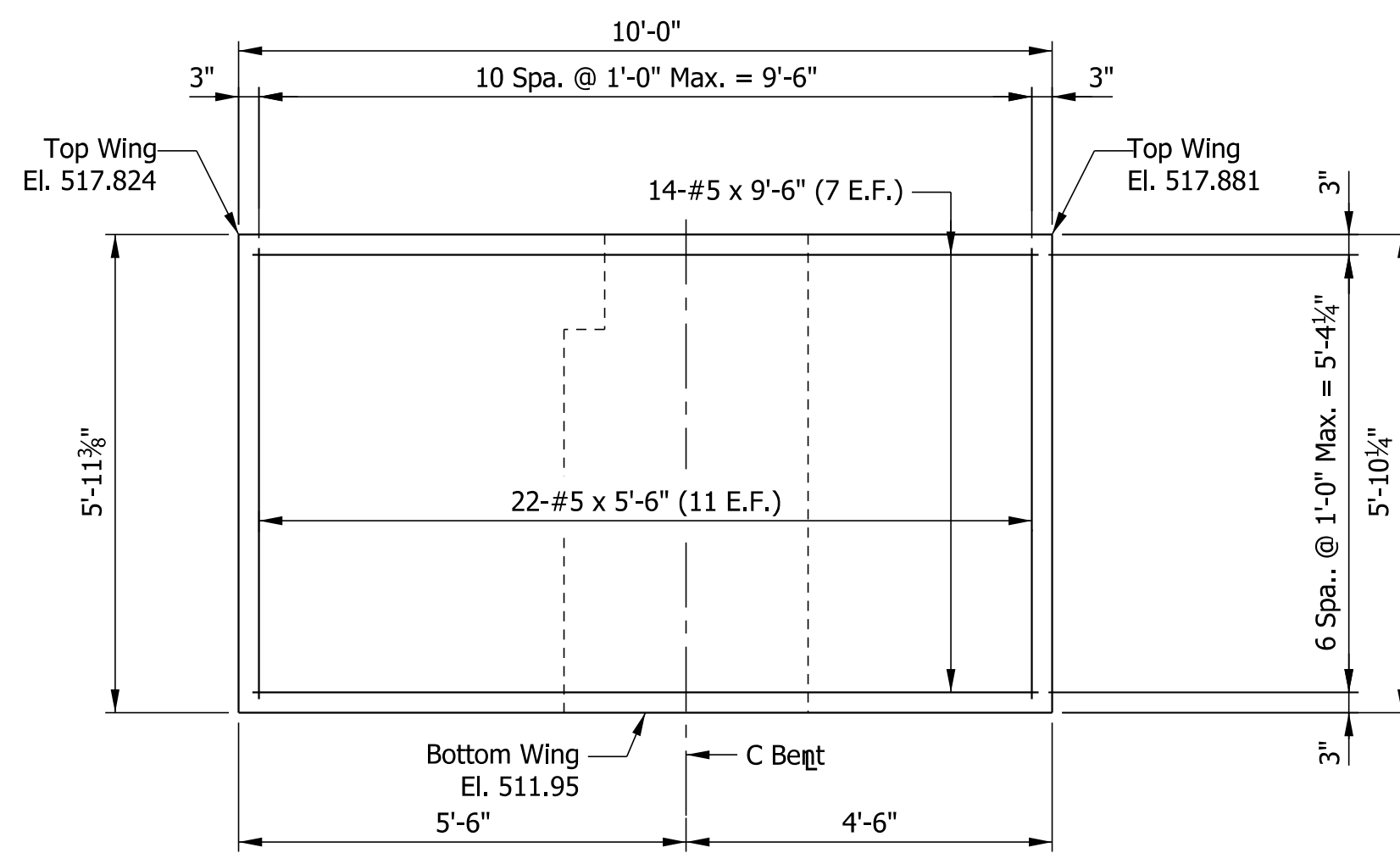
BENT NO. 2 DETAILS

SCALE	BRIDGE FILE
AS NOTED	157-28-10455
	DESIGNATION
	1700141
DRAWING NUMBER	SHEETS
of	15 of 38
CONTRACT	PROJECT
B-40558	1700141

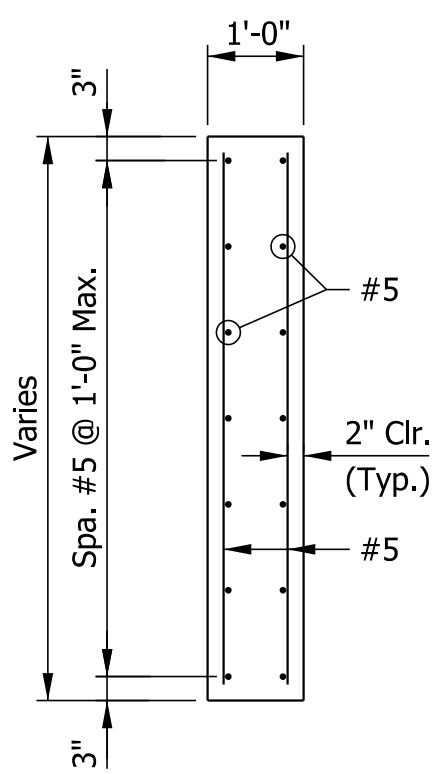




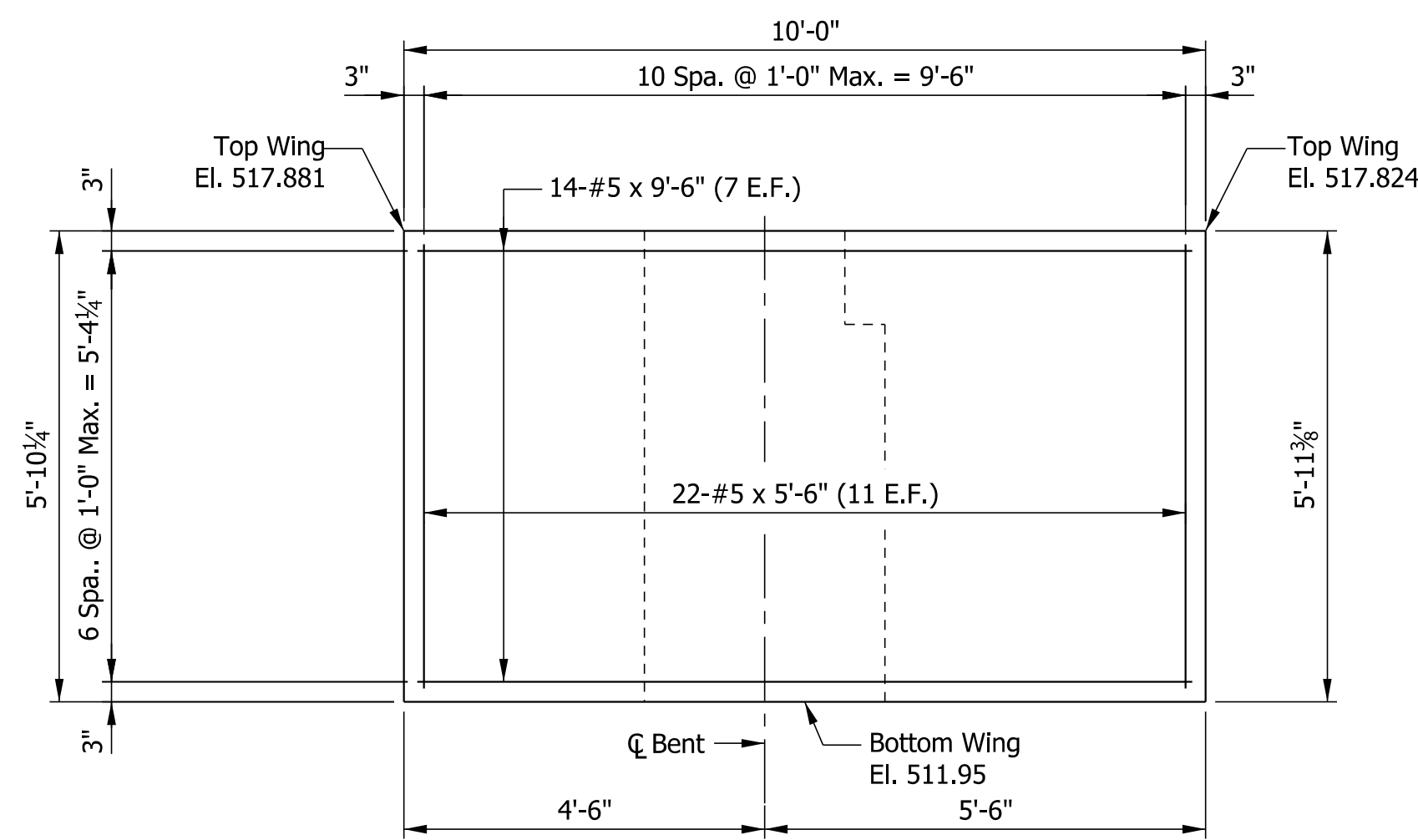
**PILING PLAN**  
Scale: 1/2" = 1'-0"



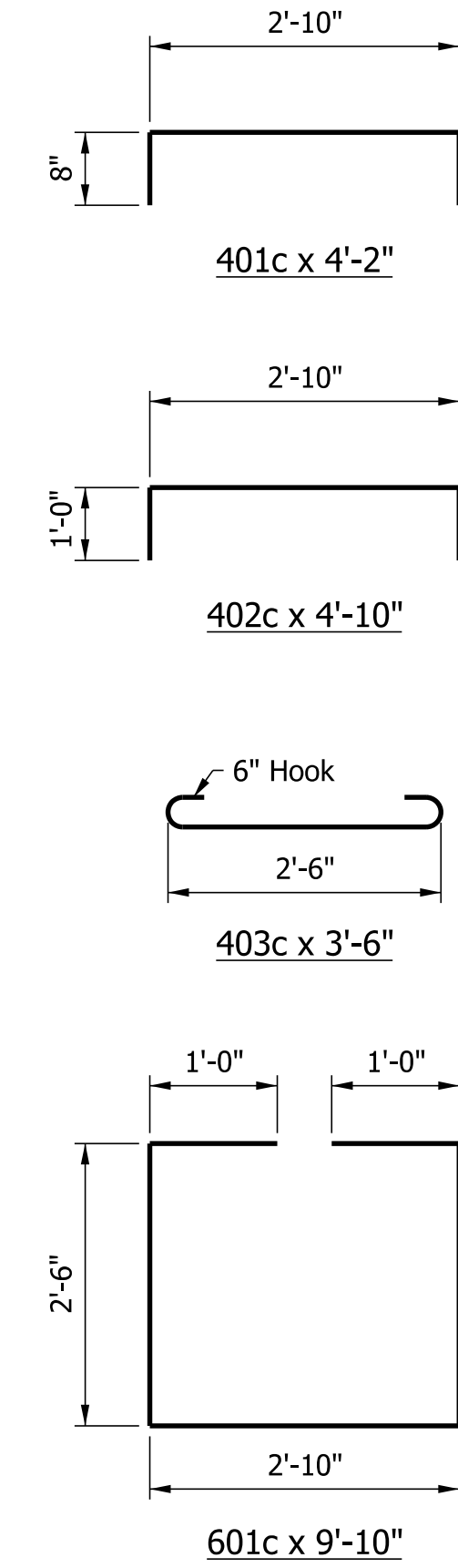
**ELEVATION - WING "D"**  
Scale: 1/2" = 1'-0"



**TYPICAL WINGWALL SECTION**  
Scale: 1/2" = 1'-0"



**ELEVATION - WING "C"**  
Scale: 1/2" = 1'-0"



BILL OF MATERIALS			
BENT NO. 2			
EPOXY COATED REINFORCING STEEL			
Size & Mark	Number of Bars	Length (Ft. - In.)	Weight (Lbs.)
#7	10	34'-9"	
TOTAL #7 BARS			710
601c	40	9'-10"	
602c	34	4'-6"	
#6	14	4'-6"	
TOTAL #6 BARS			915
#5	28	9'-6"	
#5	44	5'-6"	
TOTAL #5 BARS			530
401c	69	4'-8"	
402c	31	4'-10"	
403c	18	3'-6"	
#4	3	18'-9"	
TOTAL #4 BARS			395
TOTAL EPOXY COATED REINF.			2,550
CONCRETE			
CLASS "C" IN SUBSTRUCTURE			? CYS
MISCELLANEOUS			
PILE, STEEL PIPE, 0.312 IN. 14 IN. 4 @ ??			?? LFT
TEST PILE, INDICATOR, PRODUCTION 1 @ ??			?? LFT
TEST PILE, INDICATOR, RESTRIKE			1 EACH
CONICAL PILE TIP, 14 IN.			5 EACH
AGG. FOR END BENT BACKFILL			? CYS
GEOTEXTILE FOR UNDERDRAIN TYPE 3			?? SYS
PIPE, END BENT DRIAN, 6 IN.			? LFT

**NOTES**

- 5 - 14" Ø Steel Encased Concrete Pile Required.
- For Reinforcing Bar Notes, see Standard Drawing E703-BRST-01.
- All reinforcing steel to be epoxy coated.
- Surface Seal all exposed surfaces of wings.

Plot: 12/4/2020 12:20:23 PM By: ThomasTM Pen: Transportation.tbl



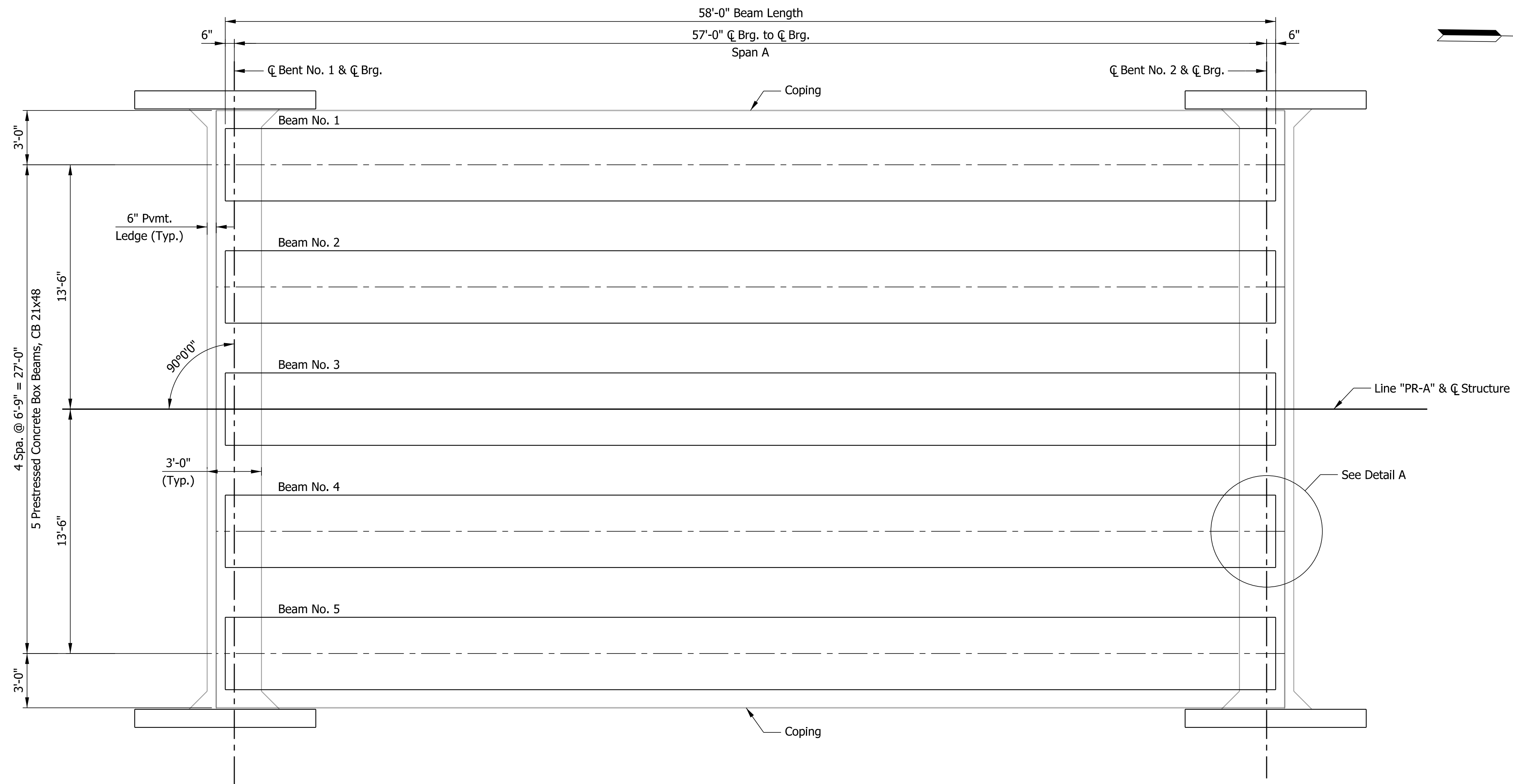
RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: KMP _____	DRAWN: TMT _____	
CHECKED: XXX _____	CHECKED: XXX _____	

INDIANA  
DEPARTMENT OF TRANSPORTATION

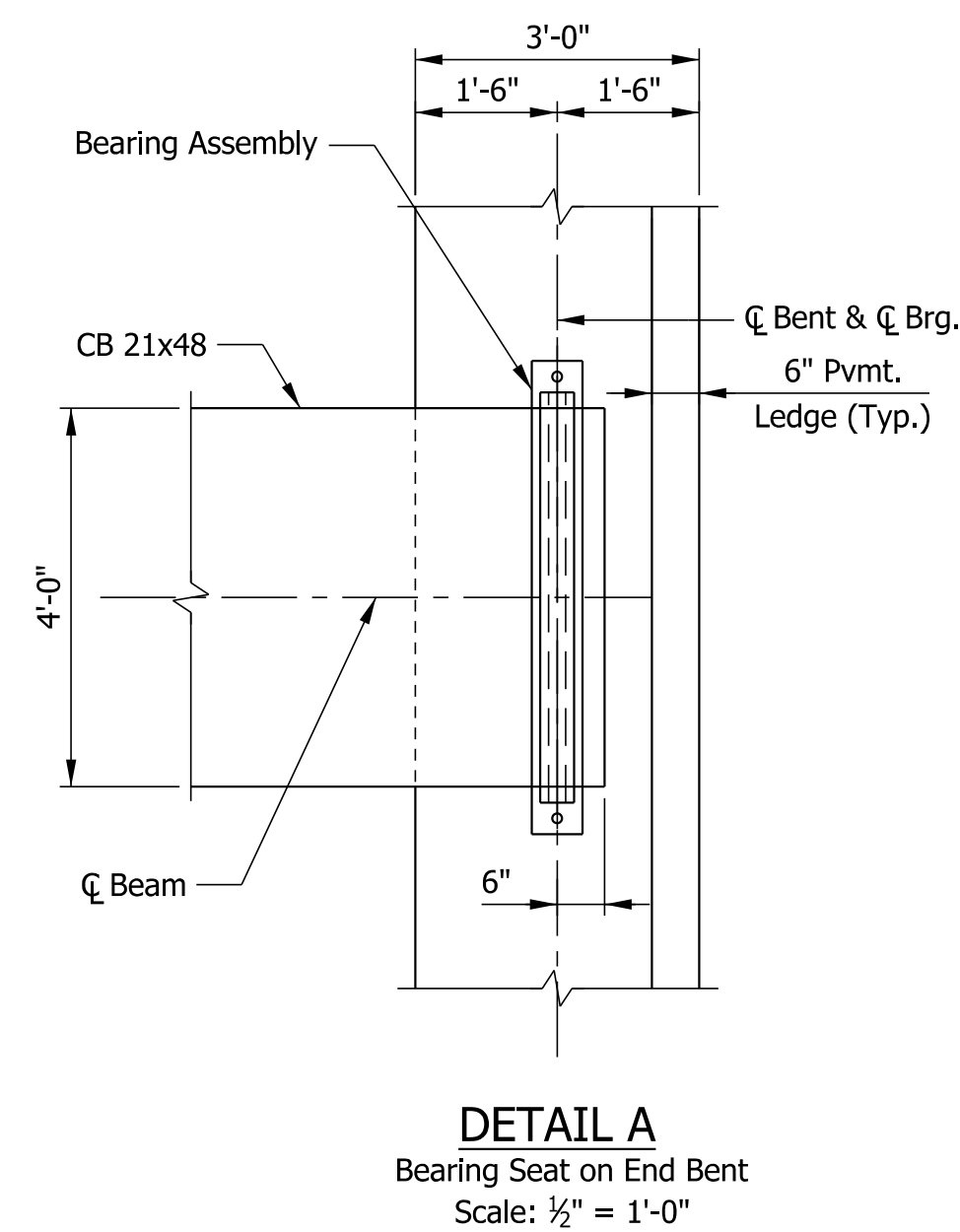
BENT NO. 1 DETAILS

SCALE	BRIDGE FILE
AS NOTED	157-28-10455
	DESIGNATION
	1700141
DRAWING NUMBER	SHEETS
of	16 of 38
CONTRACT	PROJECT
B-40558	1700141





**FRAMING PLAN**  
Scale: 1/4" = 1'-0"



**DETAIL A**  
Bearing Seat on End Bent  
Scale: 1/2" = 1'-0"

**BEAM DESIGN DATA**

1. Prestressing steel shall be 0.5" diameter uncoated, special low relaxation, seven-wire strand, 270 ksi (ASTM A416), with strand area = 0.167 sq.in.
2. Initial pull per prestressing strand to be 33.82 kips.
3. Concrete strength at release,  $f_{ci}$  = 6,000 psi.
4. Concrete strength at 28 days,  $f_c$  = 7,000 psi.
5. Mild reinforcing steel shall be Grade 60 ksi minimum yield strength.

**GENERAL BEAM NOTES**

1. Beams shall be cast a minimum 30 days prior to pouring the deck.
2. Beams are to be lifted and supported at the bearing points during handling, storage, and transportation. Adequate bracing must be provided at all times during storage, transportation and lifting to resist lateral loads.
3. Allowance should be made in beam length for elastic shortening and grade.
4. For Fabrication Tolerances of Prestressed Beams, see Standard Drawings E 707-BPBF-01 and -04.
5. Beams shall be maintained vertically at all times. Suitable restraint shall be provided to prevent the rotation of the beams, particularly the outside beam, from construction load, such as the weight of the concrete deck, finishing machine, forms, etc.
6. Top of beams shall be scored transversely at about 3" on center with pointed tool. Maximum depth of scoring should be 1/4".
7. The ends of the beams at the End Bents shall be cast so that the end of the beam is vertical when placed in final grade condition.
8. Acute angles of box beams shall be chamfered 3" (by Manufacturer).
9. Sealer on the outside face of exterior beams to be done by the fabricator in the shop. Do not rub.

Plot: 12/4/2020 12:20:44 PM By: ThomasTM Pen: Transportation.tbl

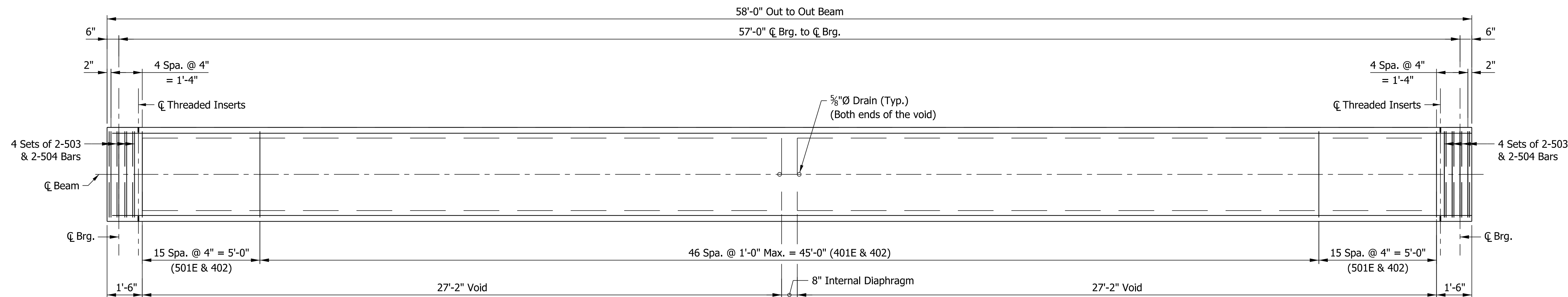


RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: KMP _____	DRAWN: TMT _____	
CHECKED: XXX _____	CHECKED: XXX _____	

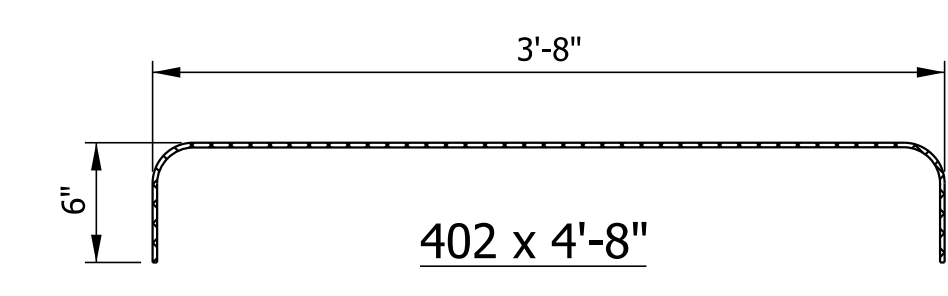
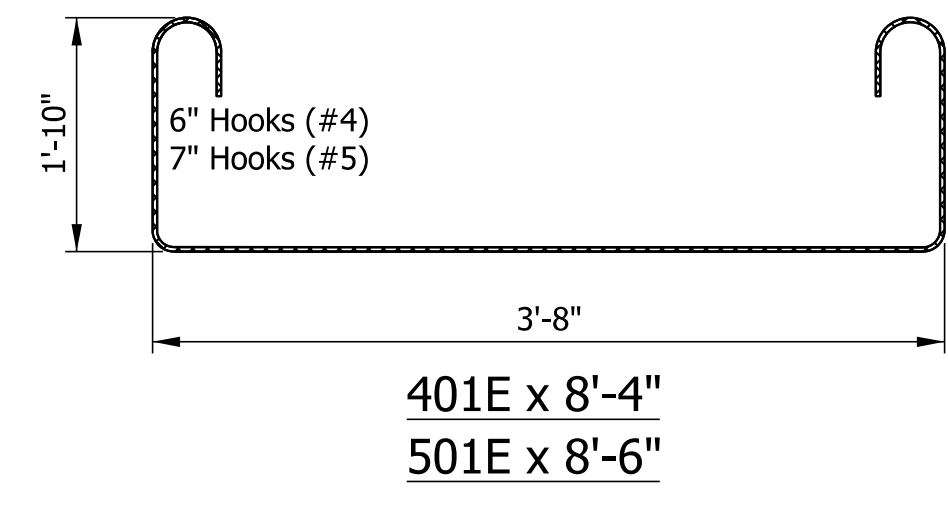
INDIANA  
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN

SCALE AS NOTED	BRIDGE FILE 157-28-10455
	DESIGNATION 1700141
DRAWING NUMBER of	SHEETS of 38
CONTRACT B-40558	PROJECT 1700141

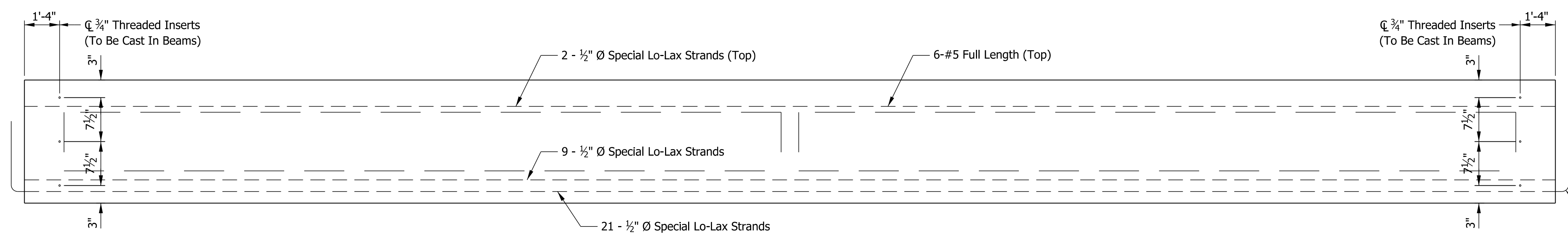


**BEAM PLAN**  
Scale: 3/8" = 1'-0"

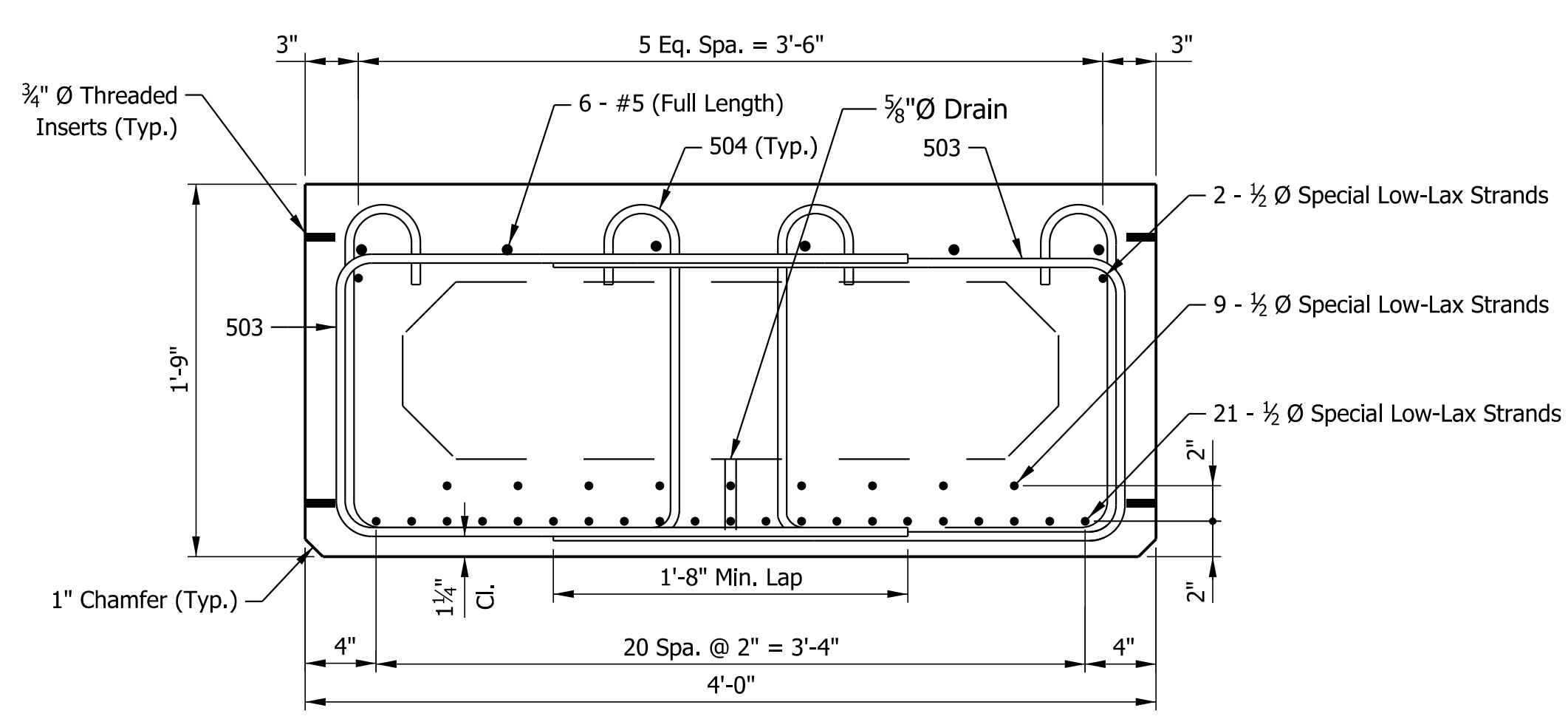
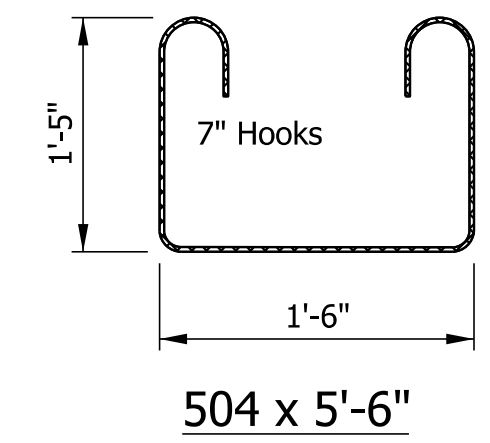
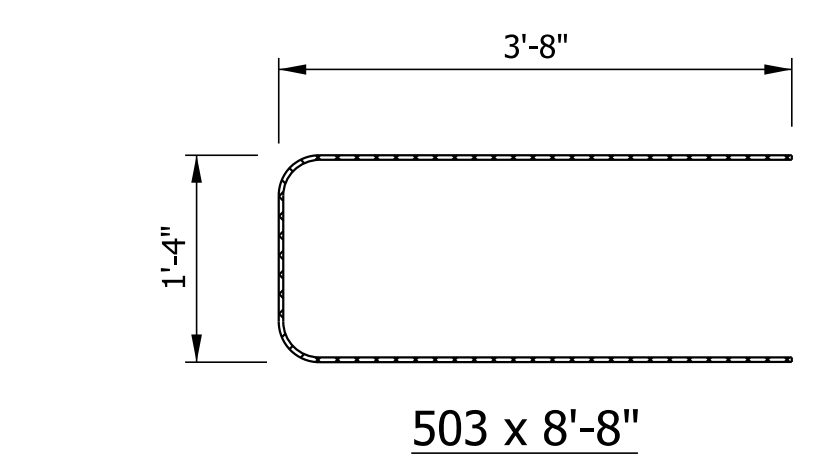


**Bent No. 1**

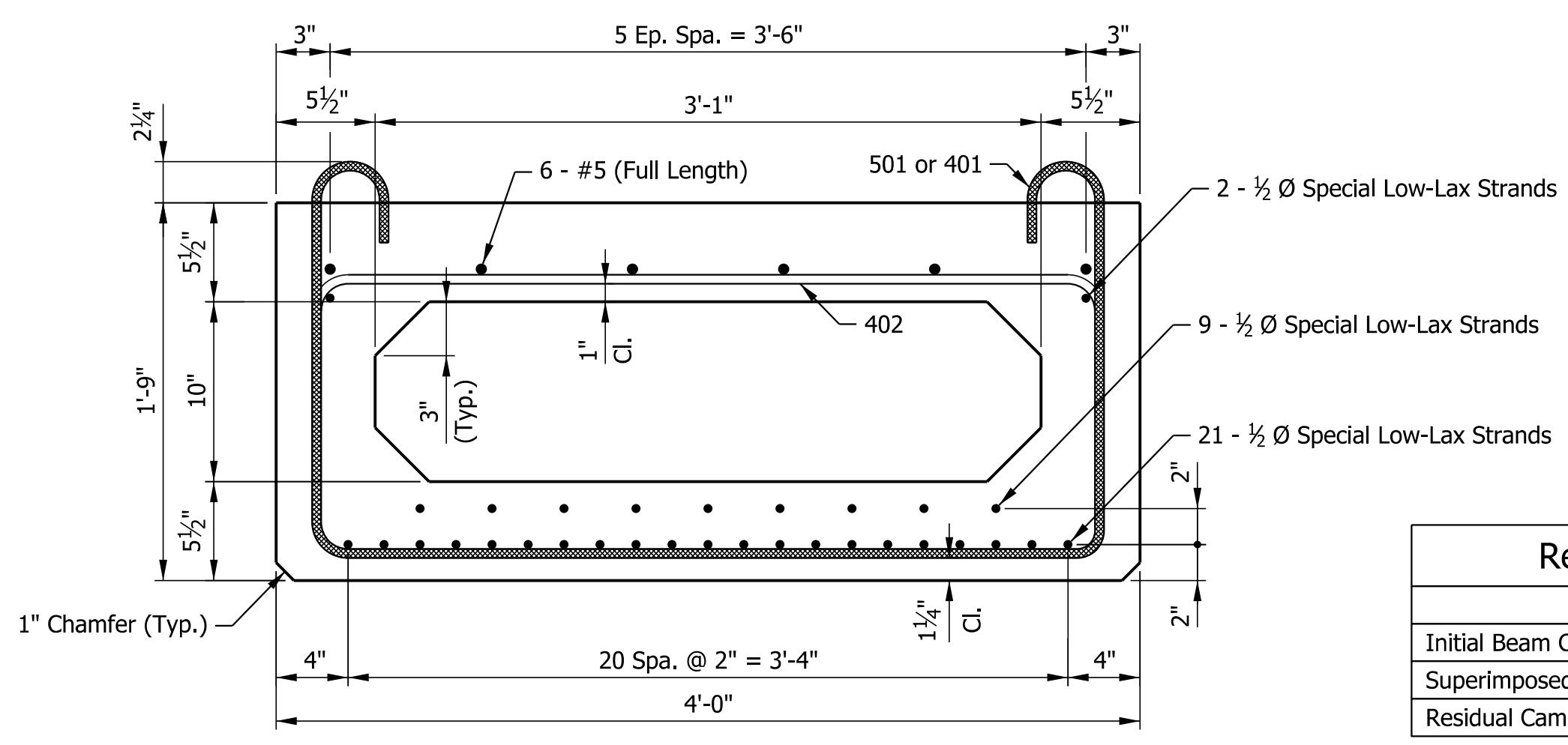
**Bent No. 2**



**BEAM ELEVATION**  
Scale: 3/8" = 1'-0" Horiz.  
1" = 1'-0" Vert.



**TYPICAL SECTION THRU END OF BOX BEAM**  
Scale: 1/2" = 1'-0"



**TYPICAL SECTION THRU BOX BEAM**  
Scale: 1/2" = 1'-0"

Residual Camber Table	
	Span "A"
Initial Beam Camber	?
Superimposed Dead Load Deflection	?
Residual Camber	?

Initial Beam Camber Equals Upward Deflection From Prestressing Force Minus Downward Deflection From Dead Load of the Beam In Inches.

**NOTES**

- For General Beam Notes, see Sheet X.
- For Framing Plan, see Sheet X.
- For Beam Design Data, see Sheet X.
- For reinforcing bar notes, see Standard Drawing E703-BRST-01.
- Reinforcing bars designated (E) shall be epoxy coated.
- All mild reinforcing steel to be Grade 60.
- Minimum Lap for #5 = 3'-3"

Plot: 12/4/2020 12:21:07 PM By: Thomas TMT Pen: Transportation.tbl

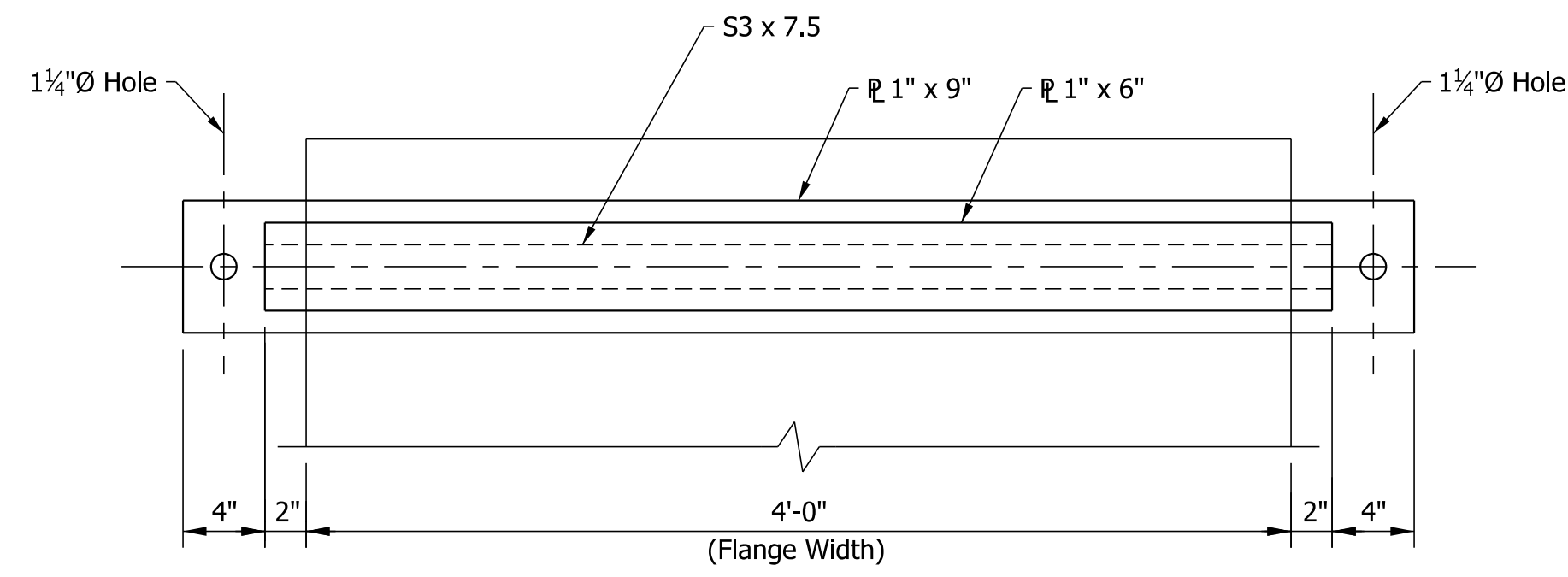


RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: KMP	DRAWN: TMT	
CHECKED: XXX	CHECKED: XXX	

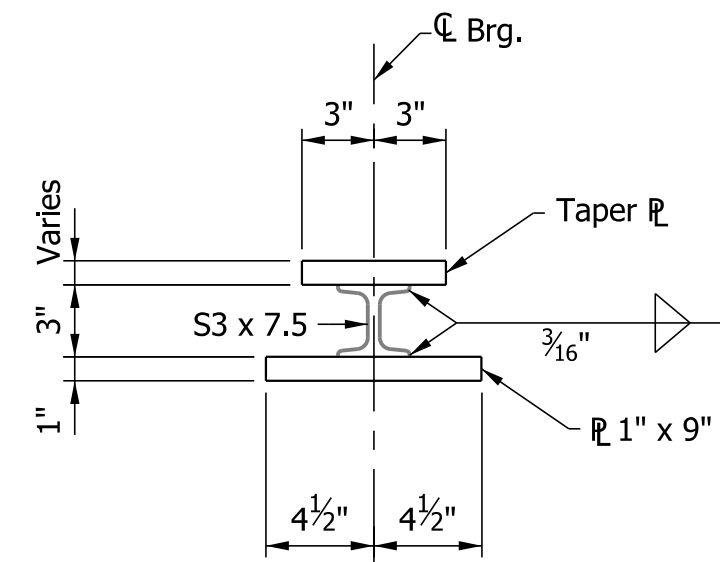
INDIANA  
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS

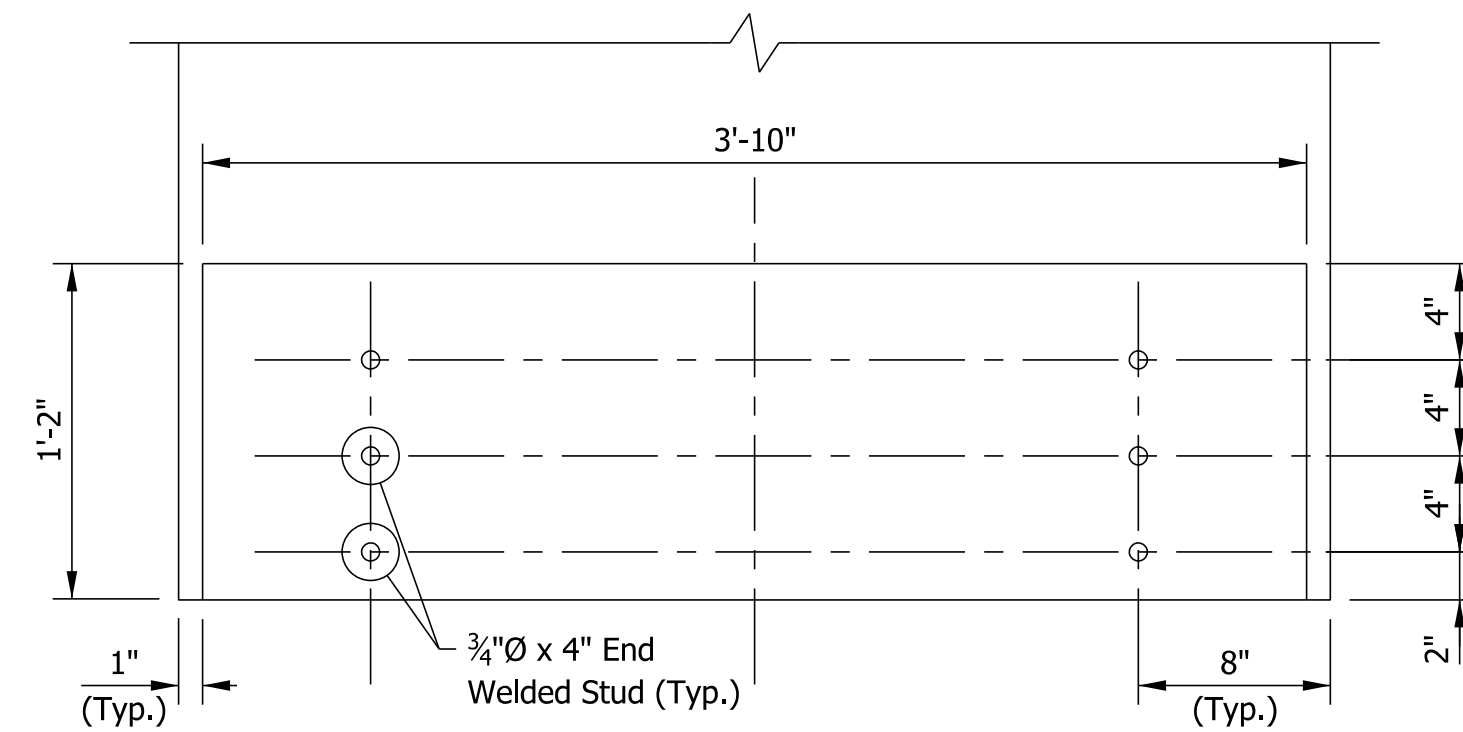
SCALE	BRIDGE FILE
AS NOTED	157-28-10455
	DESIGNATION
	1700141
DRAWING NUMBER	SHEETS
of	18 of 38
CONTRACT	PROJECT
B-40558	1700141



PLAN VIEW

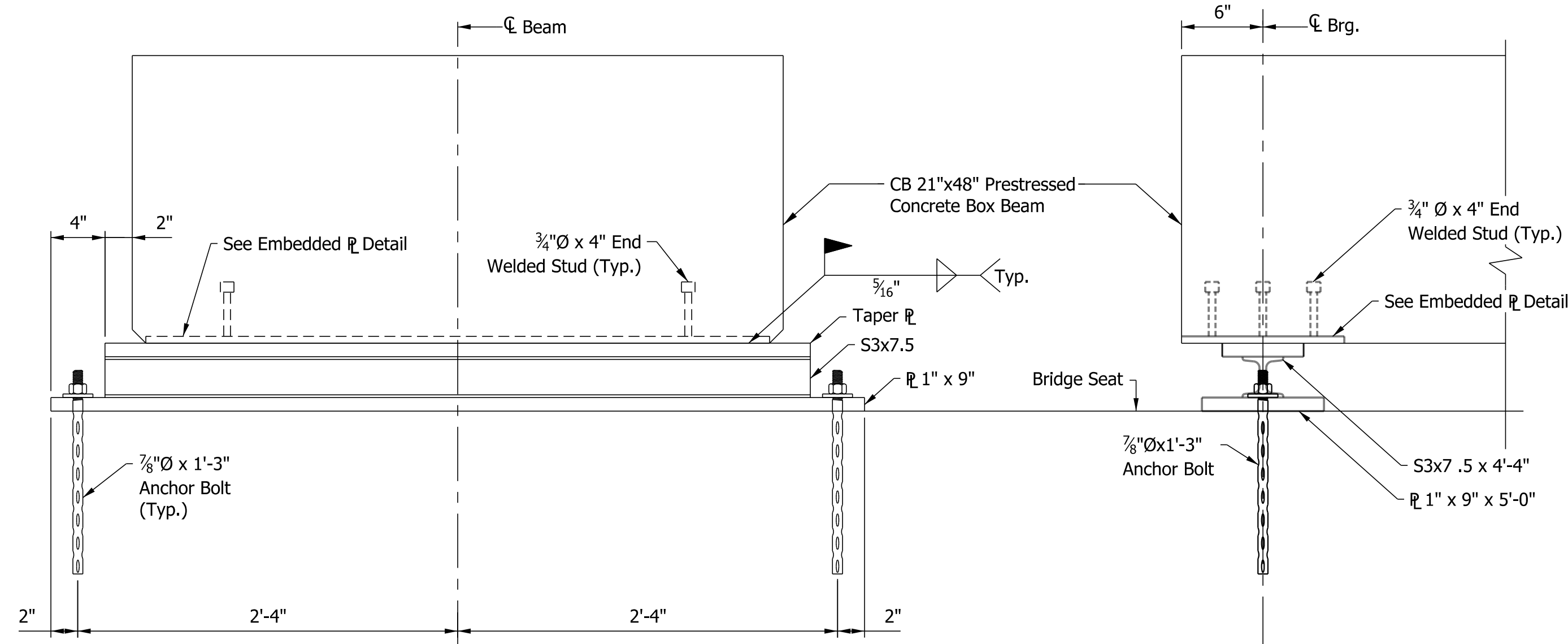


END VIEW



EMBEDDED BEARING PLATE DETAILS  
BENT NO. 1 AND NO. 2

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



BEARING ASSEMBLY DETAILS  
BENT NO. 1 AND NO. 2

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

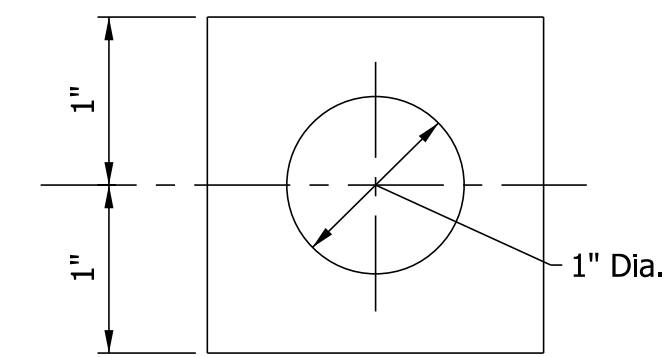
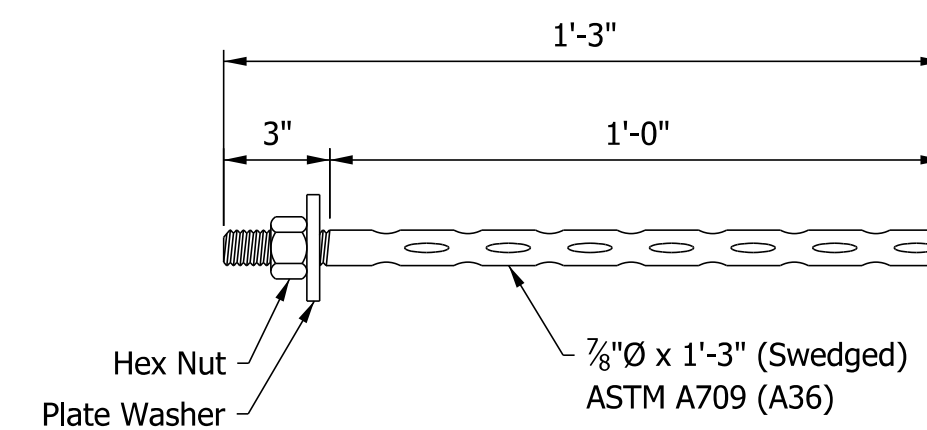
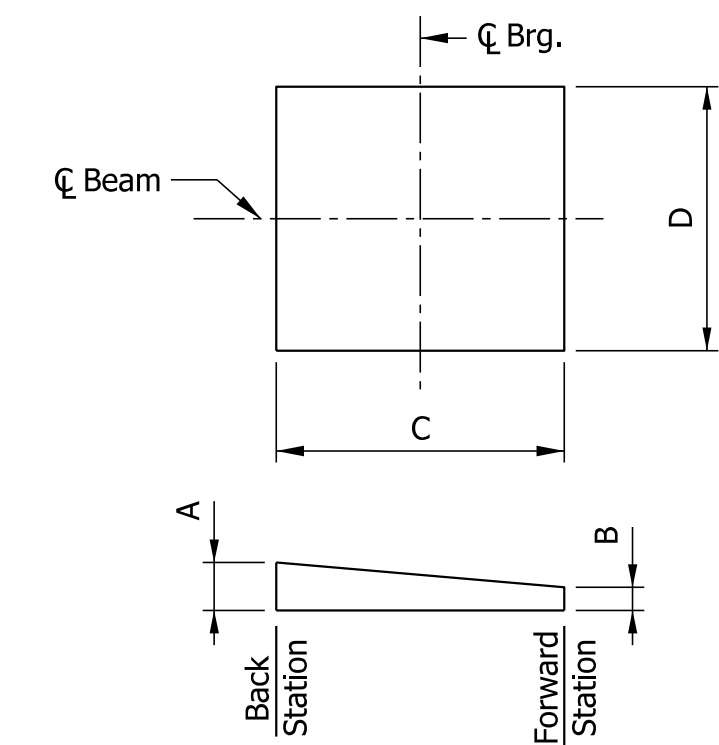


PLATE WASHER  
No Scale



ANCHOR BOLT DETAIL  
No Scale

TAPER PLATES					
Location		A	B	C	D
Bent No. 1	Span A	1"	1 3/16"	6"	4'-7"
Bent No. 2	Span A	1"	1 3/16"	11"	1'-1"



TAPER PLATE  
Not to Scale

NOTES

- Structural Steel for Taper Plates shall be ASTM A709, Grade 50. Structural Steel for Embedded plate in beam shall be ASTM A709, Grade 36.
- Elastomeric Hardness "SHORE A" = 55.
- Design Method: AASHTO Method A.
- Plates shall be Vulcanized to the Elastomeric Bearing.
- Plates and Embedded Bearing Plates shall be Hot Dipped Galvanized in accordance with requirements of A.S.T.M. A123 or A153.
- Fabricate the Elastomeric Bearing Pads to the Design and Dimensions shown on the plans.
- Finish Bearing Surface shall be clean and free of loose material before placing Bearing Pads.
- Elastomeric Bearing Pads are INDOT Std. Pad Type 7B. See Std. Drawing E 726-BEBP-01

Plot: 12/4/2020 12:21:28 PM By: ThomasTM Pen: Transportation.tbl

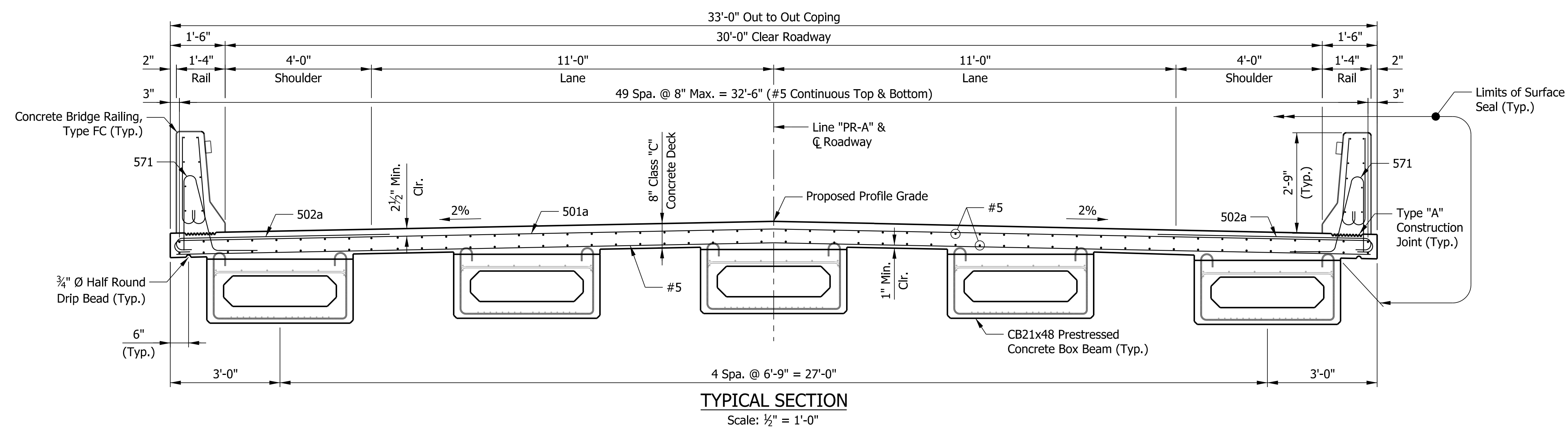
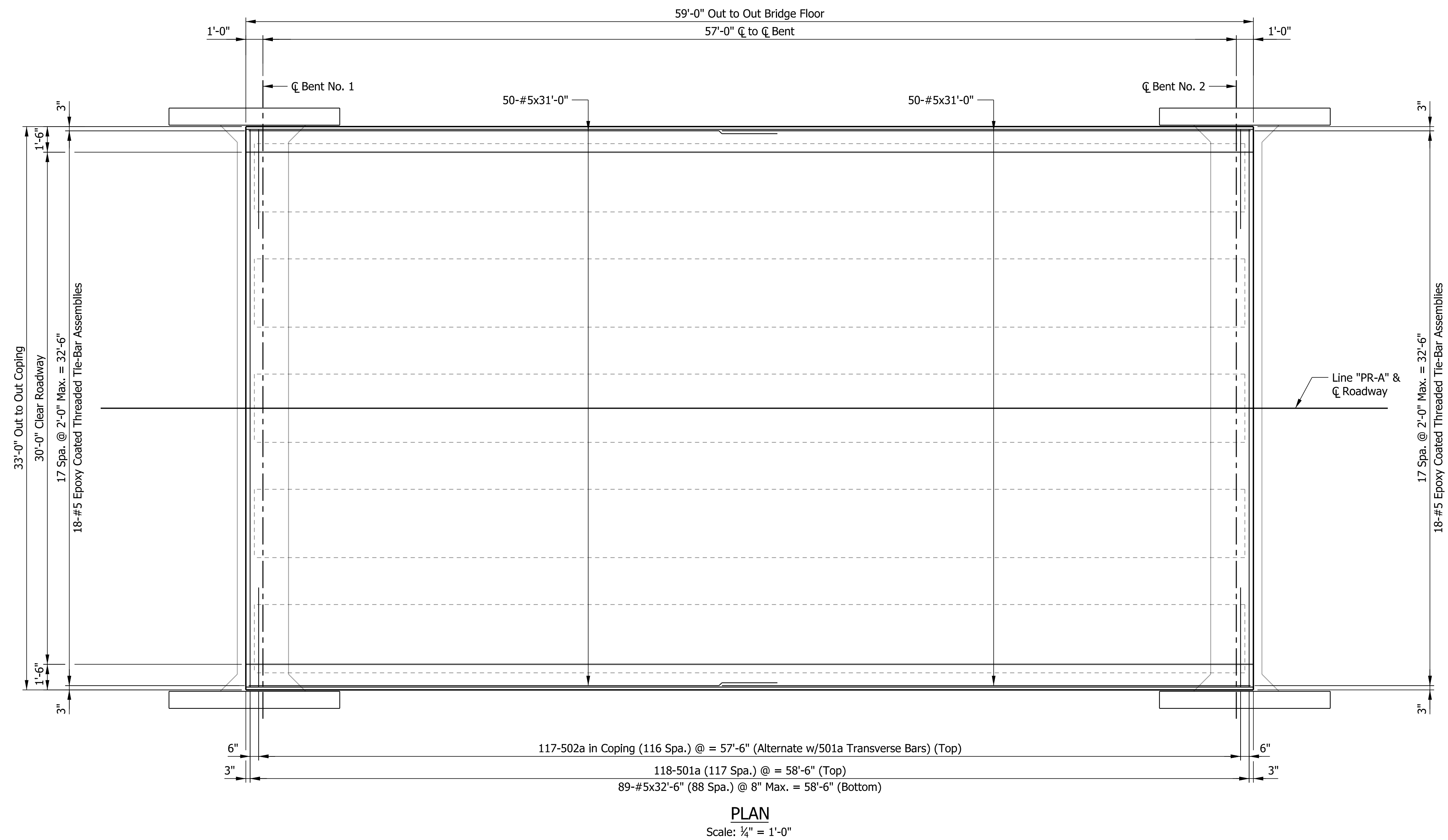


RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: KMP _____	DRAWN: TMT _____	
CHECKED: XXX _____	CHECKED: XXX _____	

INDIANA  
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS

SCALE AS NOTED	BRIDGE FILE 157-28-10455
	DESIGNATION 1700141
DRAWING NUMBER of	SHEETS 19 of 38
CONTRACT B-40558	PROJECT 1700141



**NOTES**

- All Reinforcing Steel shall be Epoxy Coated.
- For Bar Bending Diagrams and Bill of Materials, see sheet 23.
- For Reinforcing Bar Notes and Standard End Hooks, see Standard Drawing E 703-BRST-01.
- The top reinforcing in the deck shall be securely tied down to the deck forms and/or beams to prevent lifting during concrete placement.
- Suitable restraint shall be provided to prevent the rotation of the beams, particularly the outside beam, from construction loads, such as the weight of the concrete deck, finishing machine, forms, etc.
- For section thru railing and additional railing details, see Sheet No. ??.
- Minimum Lap:  
#5 = 3'-3"
- 571 bar extending into the railing shall be placed and cast in deck, but billed with railings.

Plot: 12/4/2020 12:22:02 PM By: ThomasTM Pen: Transportation.tbl



RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: KMP	DRAWN: TMT	
CHECKED: XXX	CHECKED: XXX	

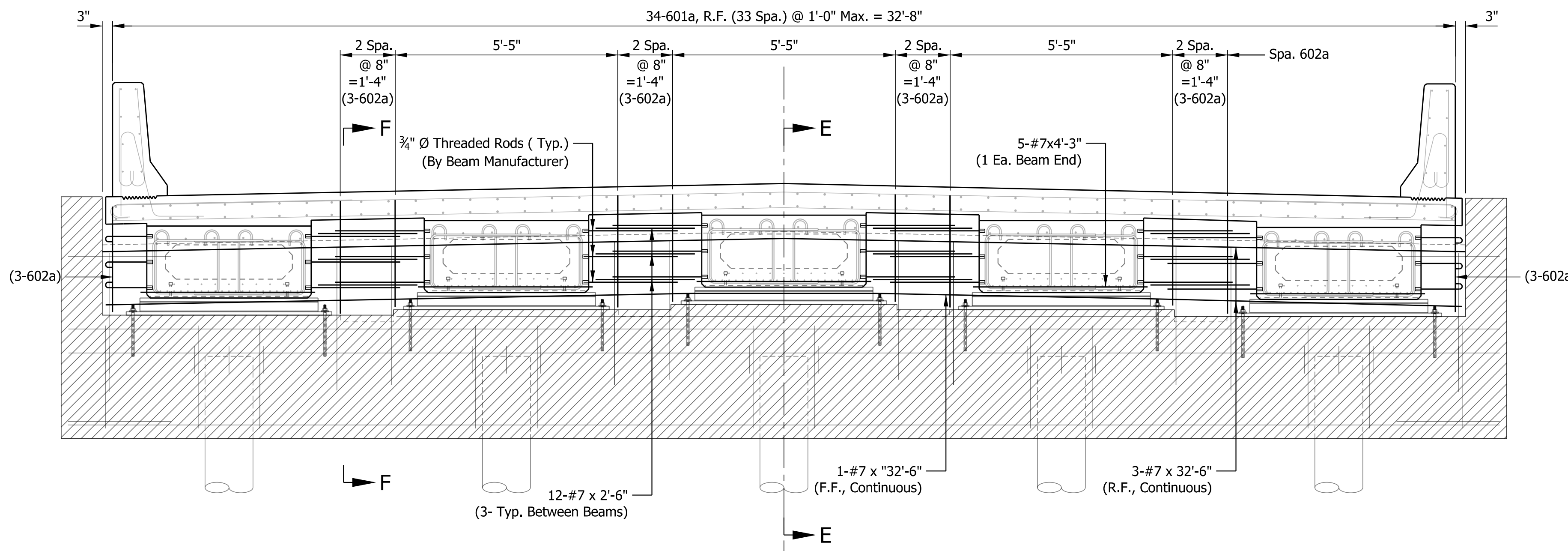
INDIANA  
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS

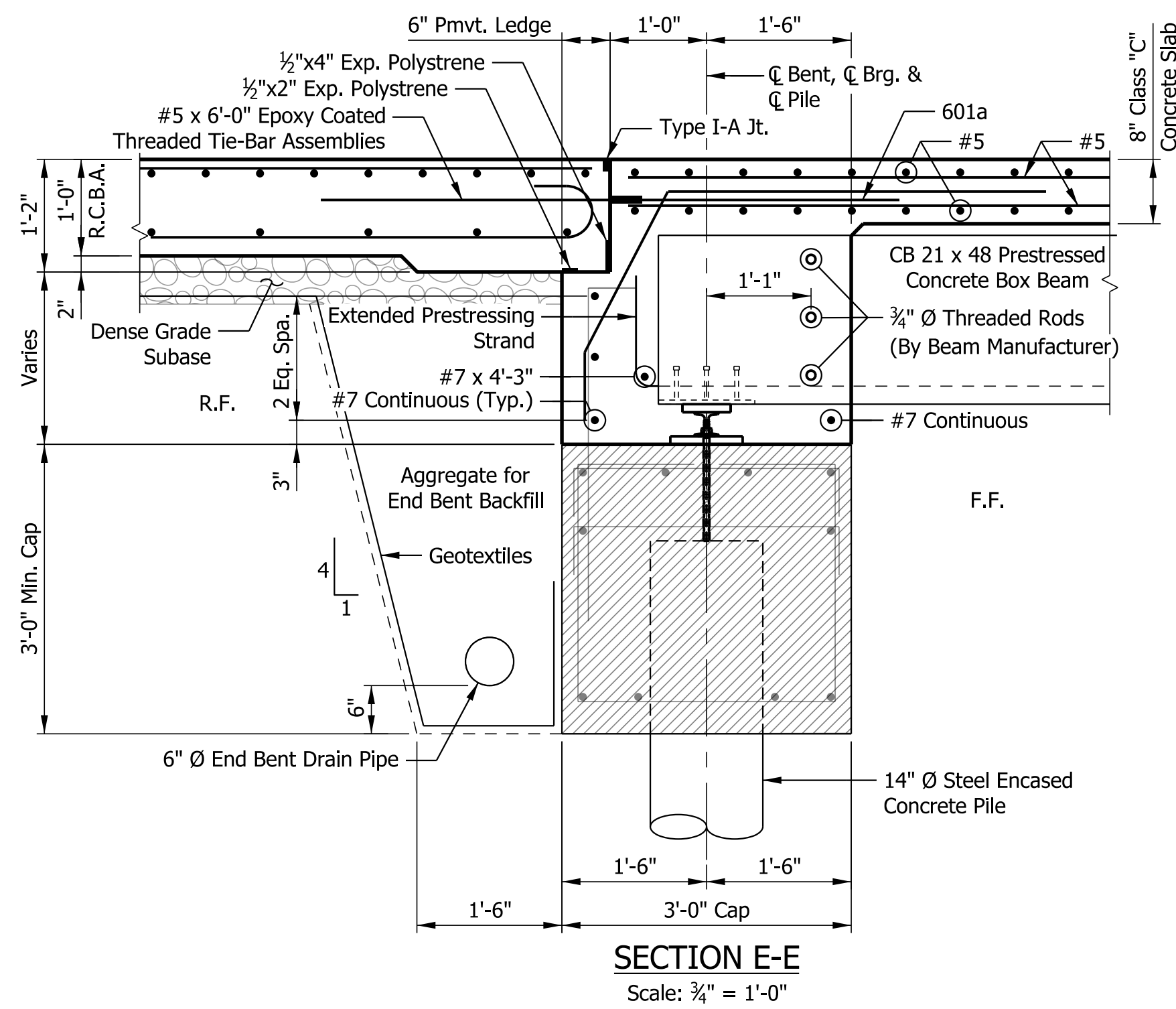
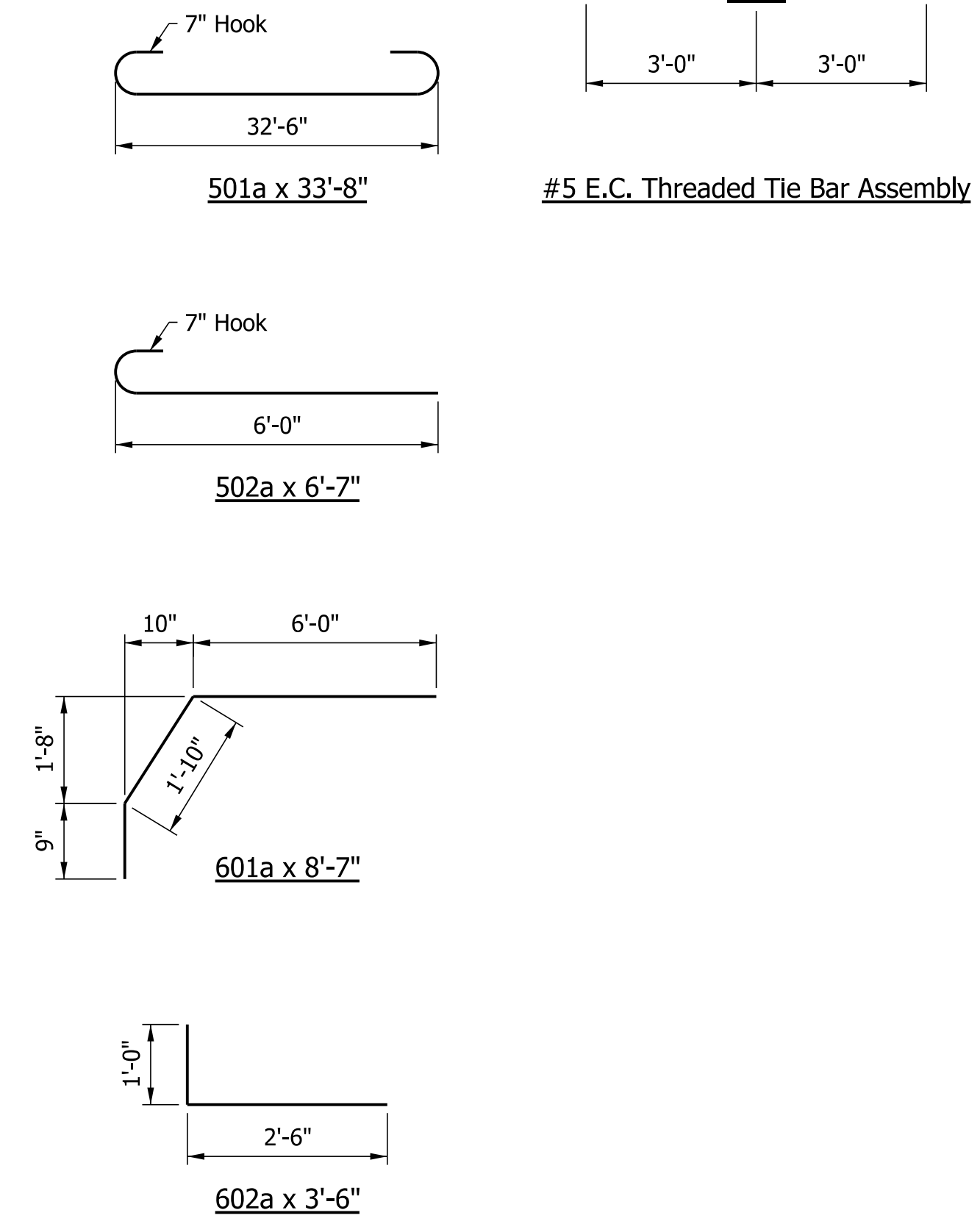
SCALE	BRIDGE FILE
AS NOTED	157-28-10455
	DESIGNATION
	1700141
DRAWING NUMBER	SHEETS
of	20 of 38
CONTRACT	PROJECT
B-40558	1700141



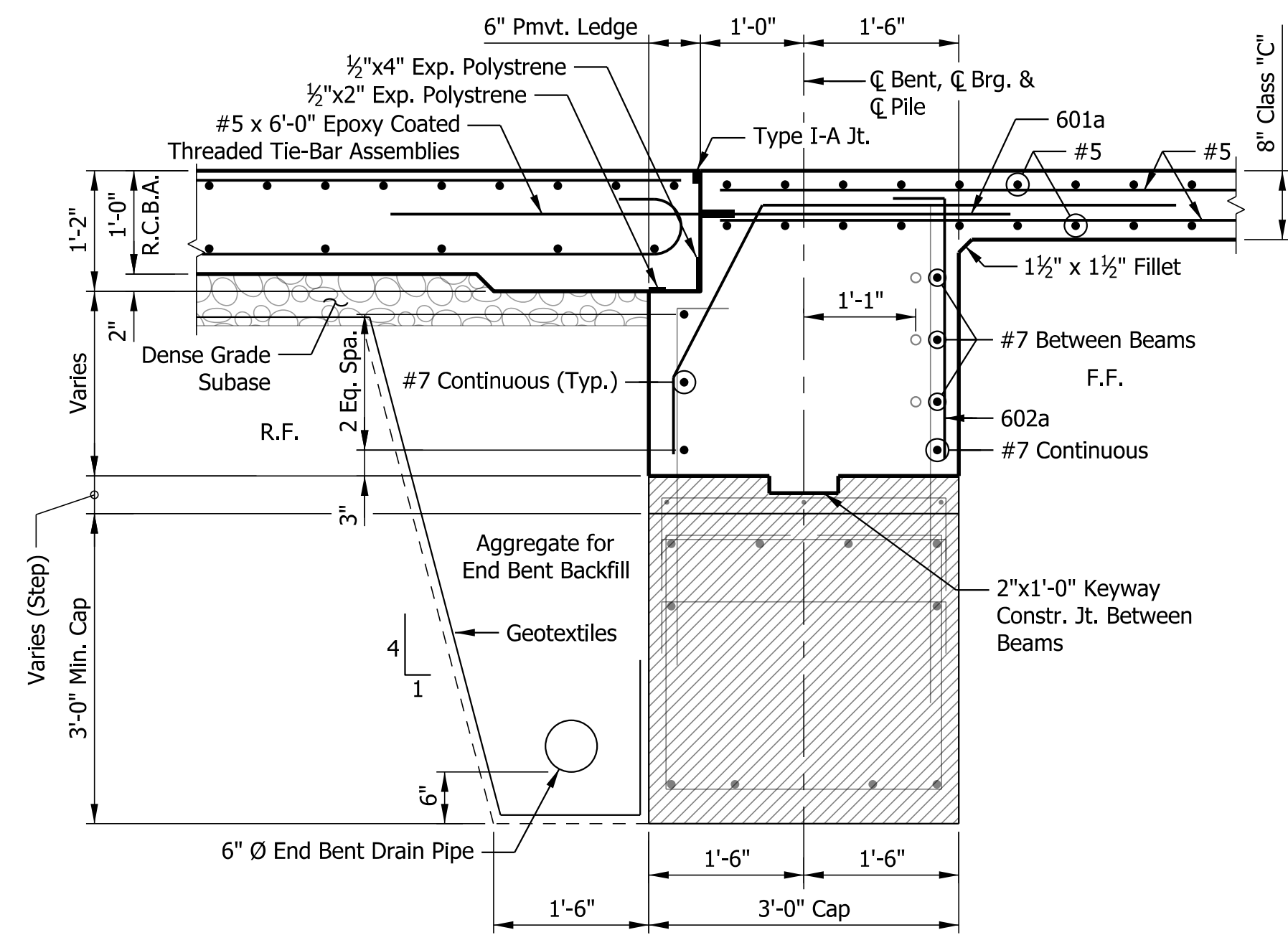
BILL OF MATERIALS SUPERSTRUCTURE			
EPOXY COATED REINFORCING STEEL			
Size & Mark	Number of Bars	Length (Ft. - In.)	Weight (Lbs.)
#7	8	32'-6"	
#7	10	4'-3"	
#7	24	2'-6"	
TOTAL #7 BARS			741
601a	68	8'-7"	
602a	28	3'-6"	
TOTAL #6 BARS			1,024
501a	118	33'-8"	
502a	234	6'-7"	
#5	89	32'-6"	
#5	100	31'-0"	
TOTAL #5 BARS			12,000
TOTAL EPOXY COATED REINF.			13,765
CONCRETE			
CLASS "C" IN SUPERSTRUCTURE			? CYS
MISCELLANEOUS			
SURFACE SEAL			? SFT
E.C. THREADED TIE-BAR ASSEMBLIES			36 EACH



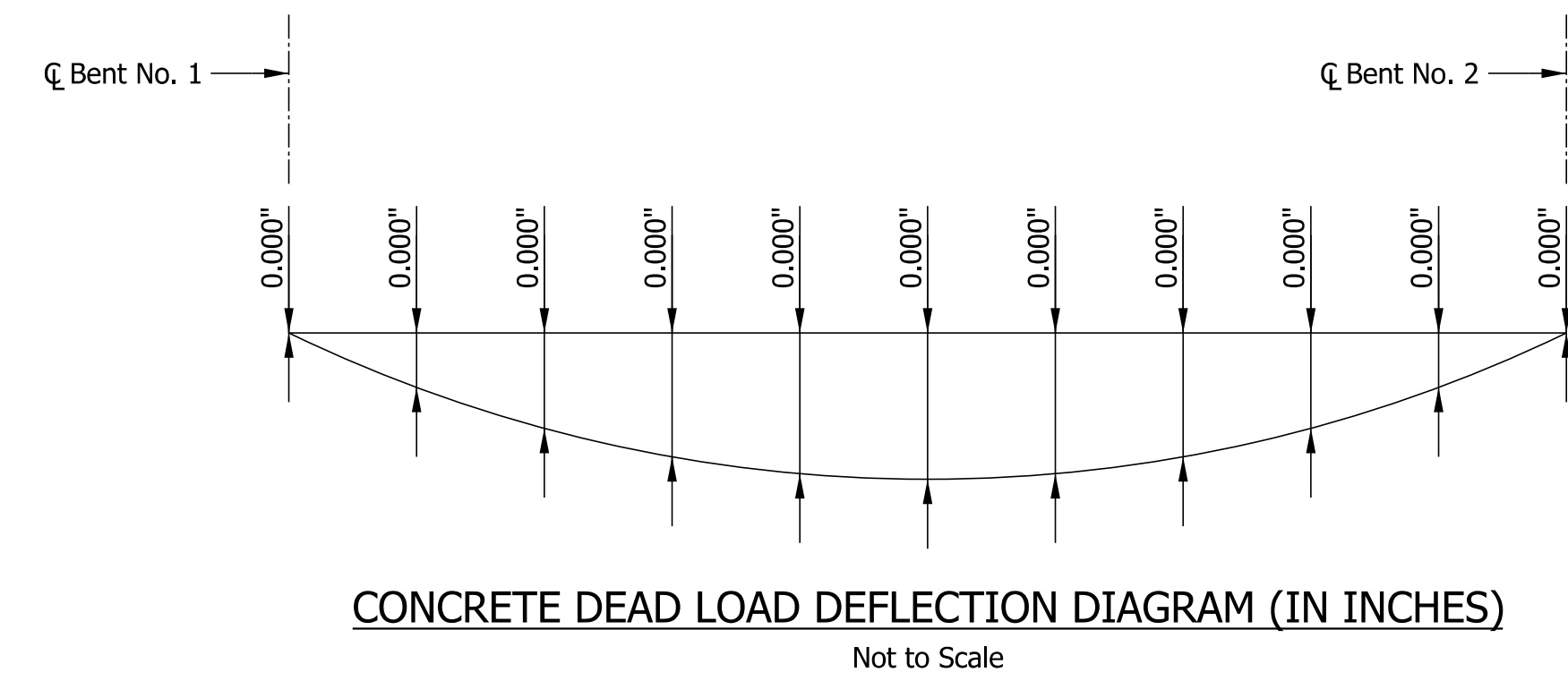
**ELEVATION @ BENT NO. 1**  
Bent No. 2 Same by opposite hand  
Scale: 1/2" = 1'-0"



**SECTION E-E**  
Scale: 3/4" = 1'-0"



**SECTION F-F**  
Scale: 3/4" = 1'-0"



**NOTES**

- For Reinforcing Bar Notes, see Standard Drawing E703-BRST-01.
- All reinforcing steel to be epoxy coated.
- Suitable restraint shall be provided to prevent the rotation of the beams, particularly the outside beam, from construction loads, such as the weight of the concrete deck, finishing machine, forms, etc.
- Hatched area to be poured with substructure.
- For section thru railing and additional railing details, see Sheet No. 22.

Plot: 12/4/2020 12:22:27 PM By: ThomasTM Pen: Transportation.tbl

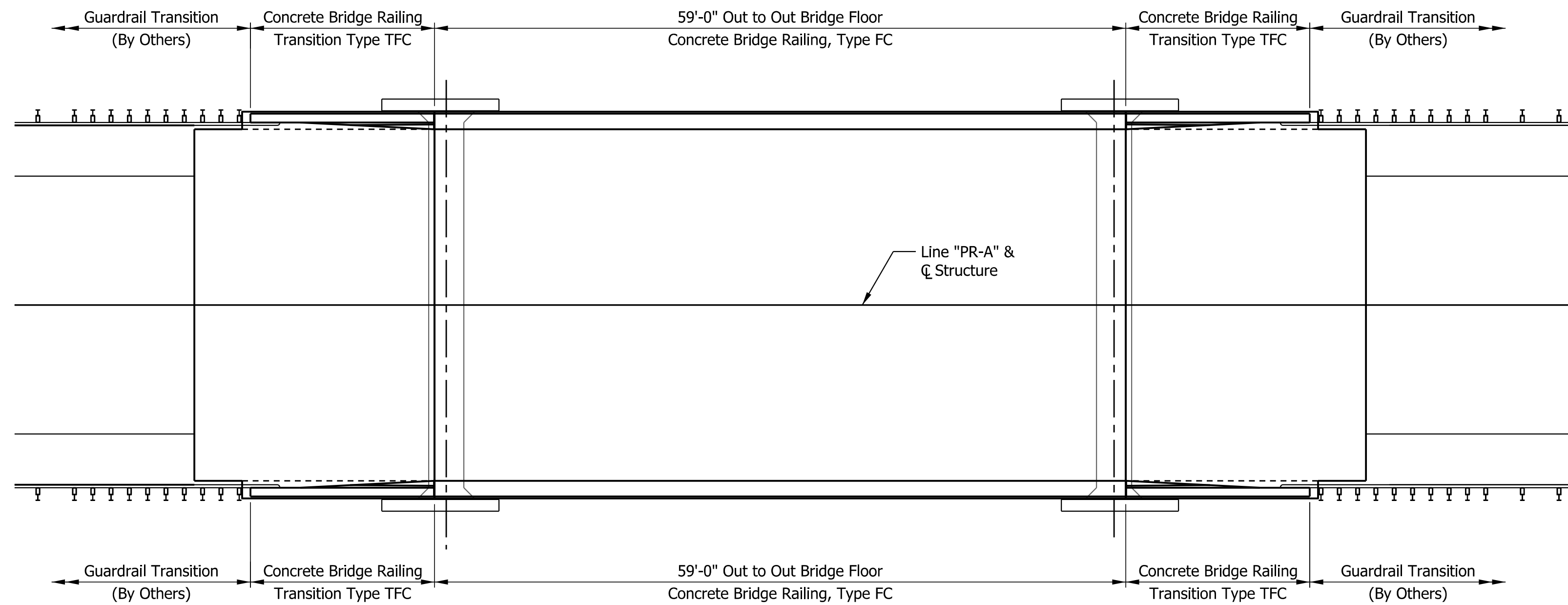


RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: KMP	DRAWN: TMT	
CHECKED: XXX	CHECKED: XXX	

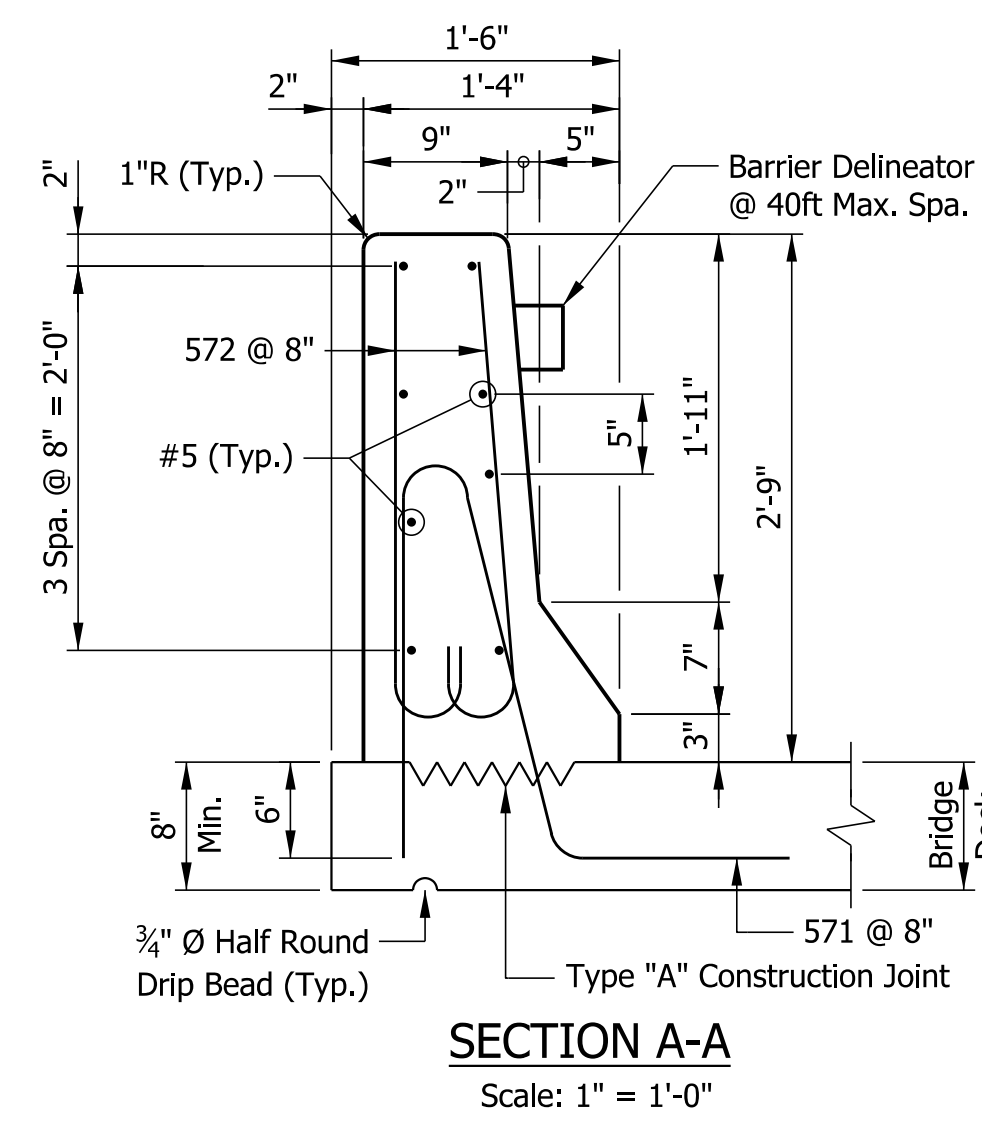
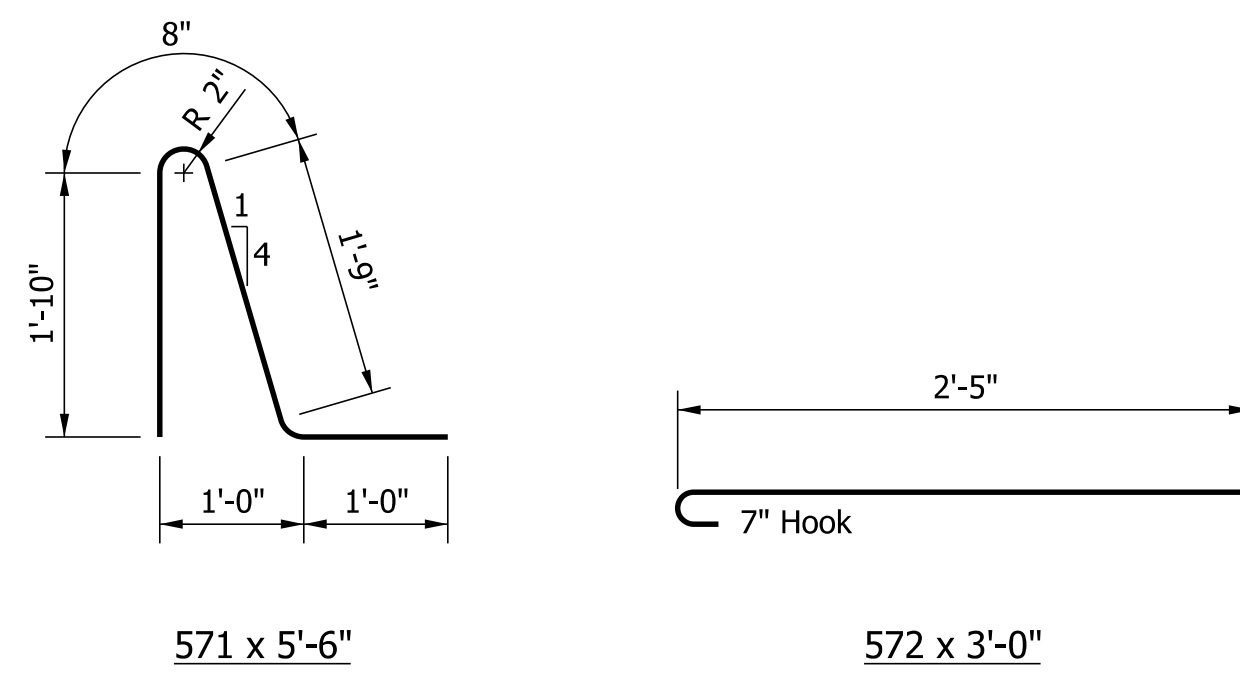
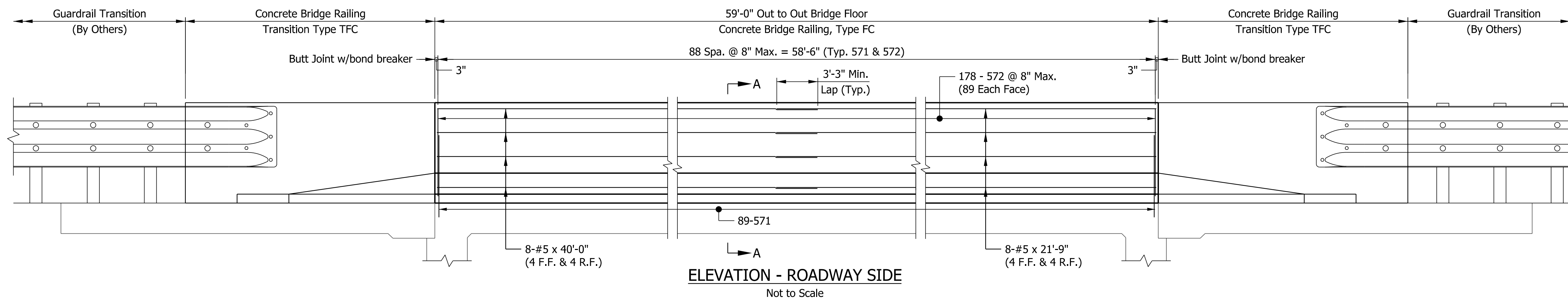
INDIANA  
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS

SCALE	BRIDGE FILE
AS NOTED	157-28-10455
	DESIGNATION
	1700141
DRAWING NUMBER	SHEETS
of	21 of 38
CONTRACT	PROJECT
B-40558	1700141



**RAILING PLAN**  
Scale:  $\frac{1}{8}" = 1'-0"$



BILL OF MATERIALS			
CONCRETE BRIDGE RAILING			
EPOXY COATED REINFORCING STEEL			
Size & Mark	Number of Bars	Length (Ft. - In.)	Weight (Lbs.)
571	89	5'-6"	
572	178	3'-0"	
#5	8	40'-0"	
#5	8	21'-9"	
TOTAL #5 BARS			1,583
CONCRETE BRIDGE RAILING TRANSITION, TYPE FC (2 @ 551)			1102
TOTAL EPOXY COATED REINF.			2,685
CONCRETE			
CONCRETE RAILING CLASS "C"			? CYS
MISCELLANEOUS			
SURFACE SEAL			? SFT
BARRIER DELINEATORS			? EACH

2 REQUIRED

- NOTES**
- For Bridge Railing, Type FC details, see Std. Dwg. E 706-BRSF-02.
  - For TFC Transition details, see Std. Dwg. E 706-TTFC-01 through E 706-TTFC-03.
  - All reinforcing bars shall be Epoxy Coated.

Plot: 12/4/2020 12:23:03 PM By: ThomasTM Pen: Transportation.tbl

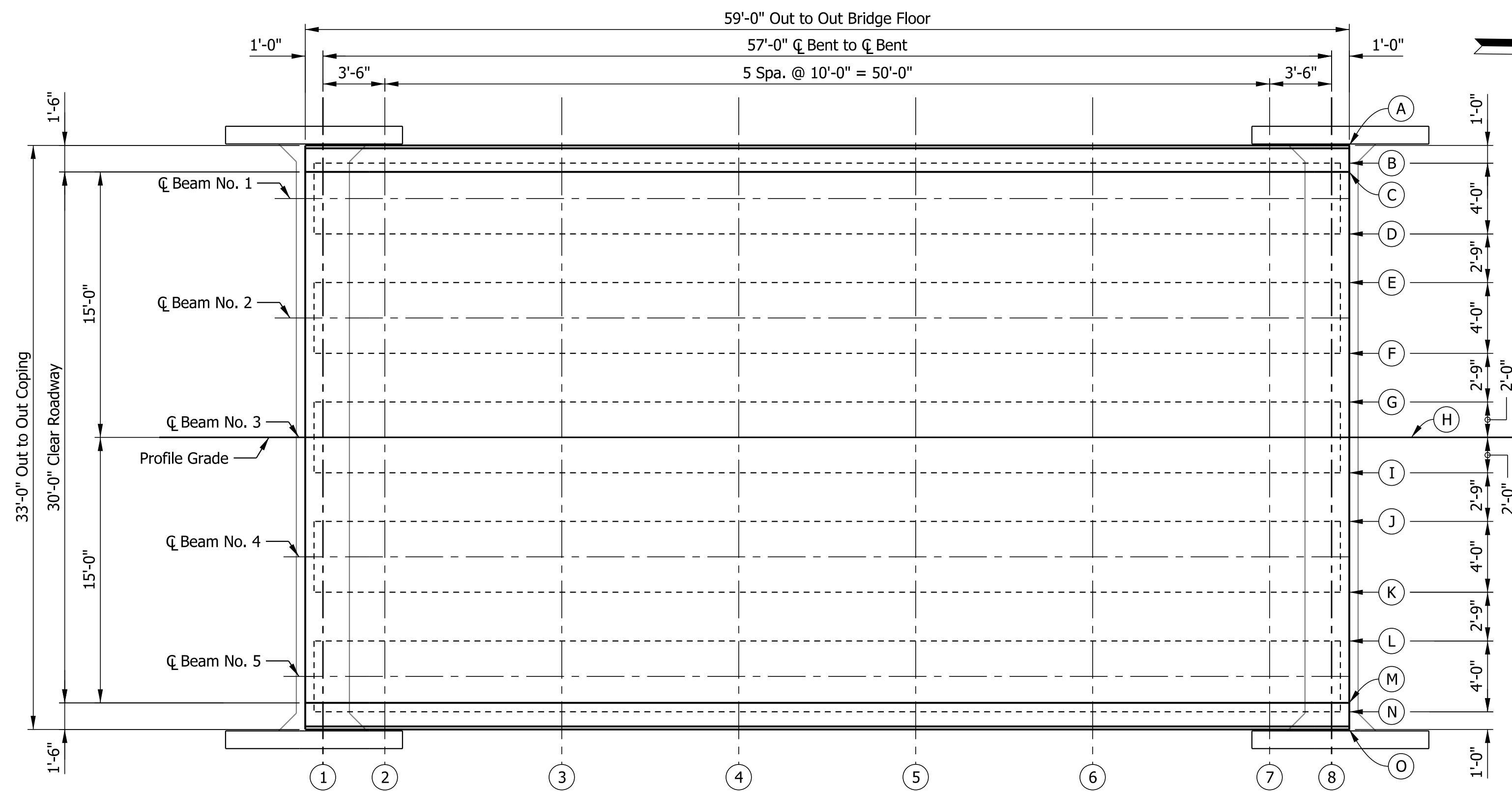


RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: KMP	DRAWN: TMT	
CHECKED: XXX	CHECKED: XXX	

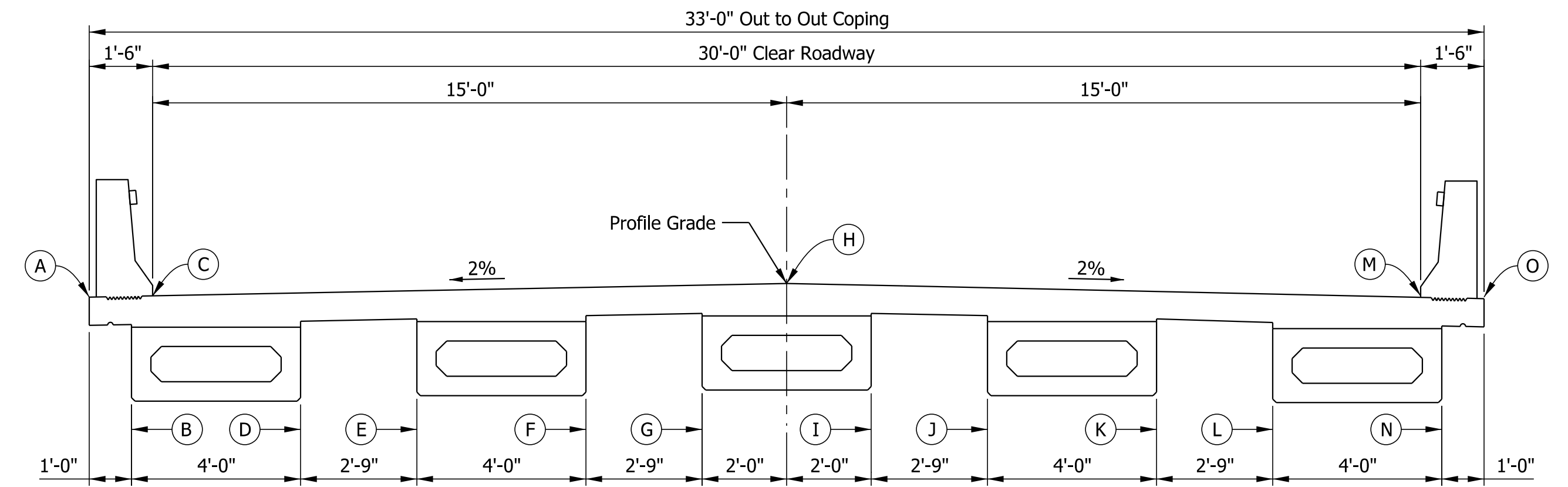
INDIANA  
DEPARTMENT OF TRANSPORTATION

CONCRETE RAILING DETAILS

SCALE AS NOTED	BRIDGE FILE 157-28-10455
	DESIGNATION 1700141
DRAWING NUMBER of	SHEETS of 38
CONTRACT B-40558	PROJECT 1700141



**PLAN OF SCREEDS**  
Scale: 3/16" = 1'-0"



**TYPICAL SECTION**  
Scale: 3/8" = 1'-0"

**PROCEDURE AND NOTES**

1. Screed elevations shall be determined by adding concrete dead load deflections to the final concrete elevations at all screed points. Take elevations at screed points on top of beams. Subtract these elevations from the elevation corrected for deflections and use the resulting dimension as the height for setting the screed or coping form.
2. Do not set screed forms by leveling.
3. No concrete in the floor slab is to be poured until the above operations are completed.
4. Screed elevations as shown in the table include an allowance for concrete dead load deflections.

Plot: 12/4/2020 12:24:23 PM By: ThomasTM Pen: Transportation.tbl



RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: KMP _____	DRAWN: TMT _____	
CHECKED: XXX _____	CHECKED: XXX _____	

INDIANA  
DEPARTMENT OF TRANSPORTATION

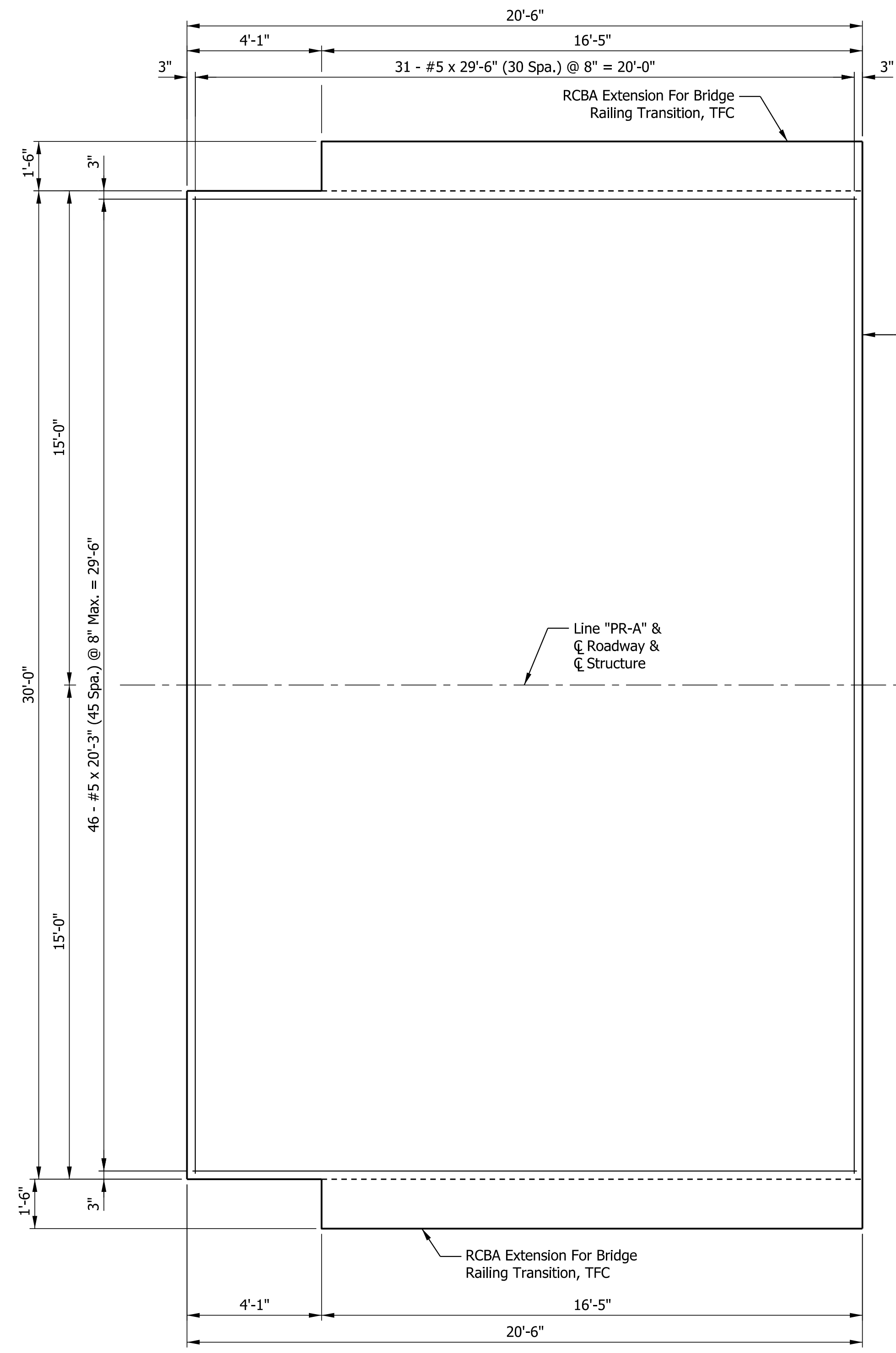
SCREEDS

SCALE AS NOTED	BRIDGE FILE 157-28-10455
	DESIGNATION 1700141
DRAWING NUMBER of	SHEETS 23 of 38
CONTRACT B-40558	PROJECT 1700141

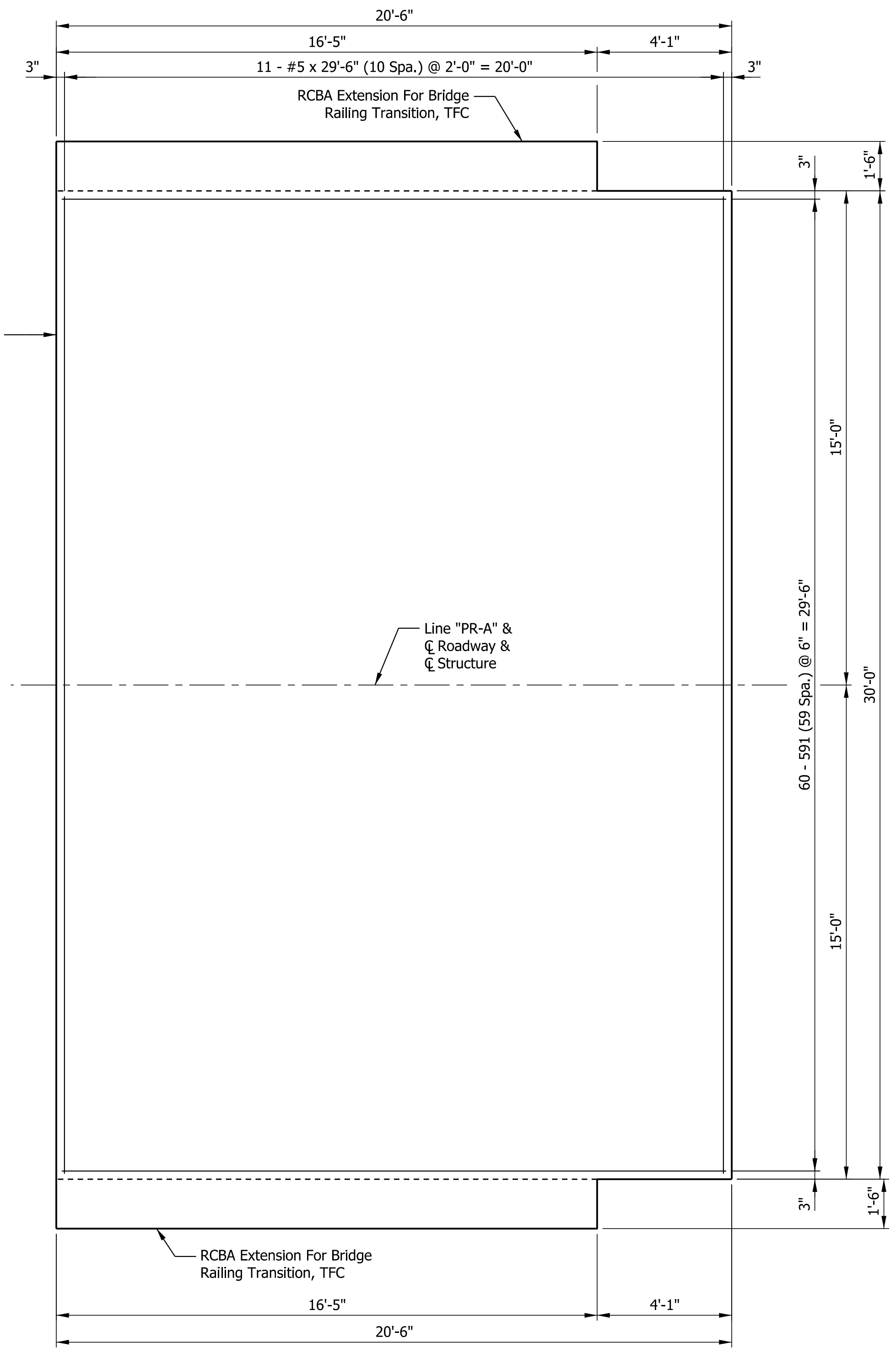
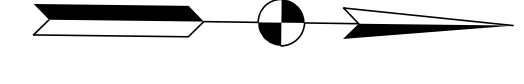


BILL OF MATERIALS			
R.C. BR. APPR. BENT NO. 1			
EPOXY COATED REINFORCING STEEL			
Size & Mark	Number of Bars	Length (Ft. - In.)	Weight (Lbs.)
591	60	20'-9"	
502	42	29'-9"	
#5	46	20'-3"	
TOTAL #5 BARS			3,573
CONCRETE BRIDGE APPROACH EXTENSION (2 @ 269)			538
TOTAL EPOXY COATED REINF.			4,111
CONCRETE			
R.C. BRIDGE APPROACH, 12 IN			? SYS
MISCELLANEOUS			
SURFACE SEAL			? SFT
SUBBASE FOR PCCP			? CYS
GEOTEXTILE FOR SUBGRADE, TYPE 2			? SYS

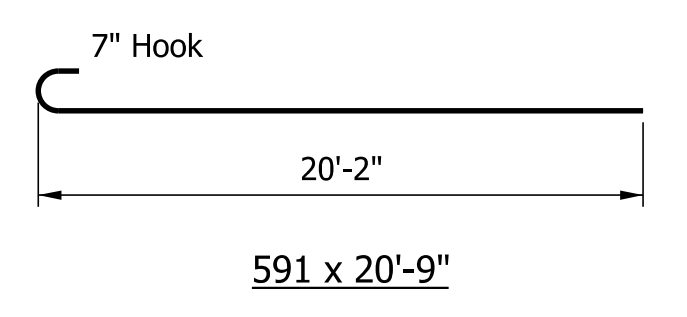
2 REQUIRED



**PLAN @ ABUTMENT NO. 1**  
Showing Top Reinforcement  
Plan @ Abutment No. 2 Same by 180° Rotation  
Scale: 3/8" = 1'-0"



**PLAN @ ABUTMENT NO. 2**  
Showing Bottom Reinforcement  
Plan @ Abutment No. 1 Same by 180° Rotation  
Scale: 3/8" = 1'-0"



**NOTES:**

- For reinforcing bar notes, see Standard Drawing E 703-BRST-01.
- For TFC Transition details, see Standard Drawing E 706-TTFC-01 through E 706-TTFC-03.
- For RCBA Extension for Bridge Railing Transition, Type TFC. See Standard Drawing E 609-TBAE-01.
- For Construction Joint Type I-A see Standard Drawing E 609-BRJT-01.
- All reinforcing bars shall be Epoxy-Coated.
- RCBA's and TFC Transitions shall be surface sealed.
- For section through approach and additional details, see Standard Drawings E 609-RCBA-01 thru E 609-RCBA-03.

Plot: 12/4/2020 12:24:39 PM By: ThomasTM Per: Transportation.tbl



RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: KMP _____	DRAWN: TMT _____	
CHECKED: XXX _____	CHECKED: XXX _____	

INDIANA  
DEPARTMENT OF TRANSPORTATION

APPROACH SLAB DETAILS

SCALE	BRIDGE FILE
AS NOTED	157-28-10455
	DESIGNATION
	1700141
DRAWING NUMBER	SHEETS
of	24 of 38
CONTRACT	PROJECT
B-40558	1700141



Plot: 12/4/2020 12:24:57 PM By: ThomasTM Pen: Transportation.tbl



RECOMMENDED FOR APPROVAL \_\_\_\_\_  
DESIGN ENGINEER DATE

DESIGNED: KMP DRAWN: TMT

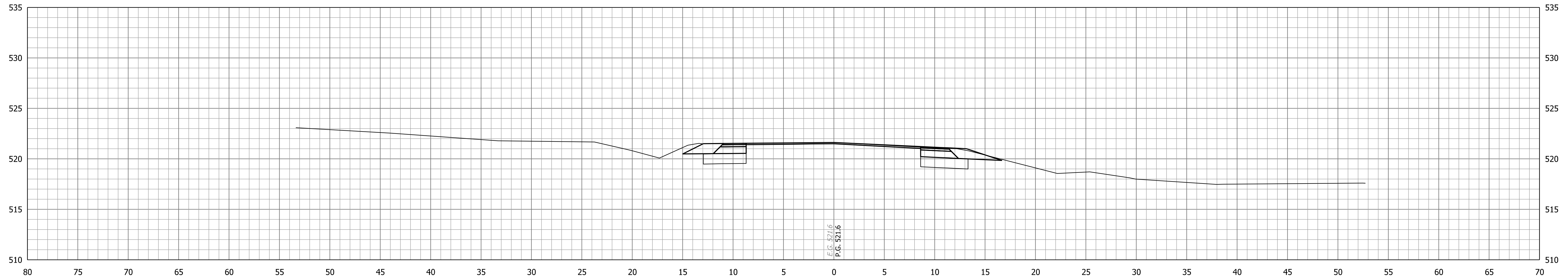
CHECKED: XXX CHECKED: XXX

INDIANA  
DEPARTMENT OF TRANSPORTATION

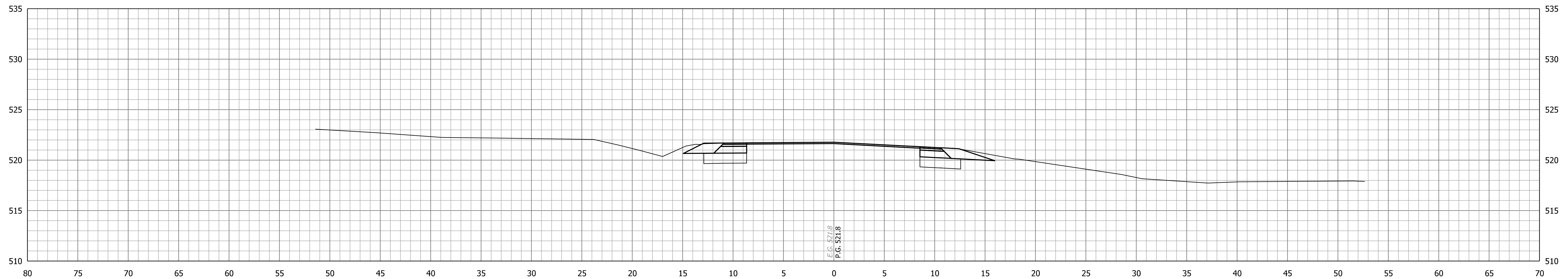
BRIDGE SUMMARY

SCALE	BRIDGE FILE
N/A	157-28-10455
	DESIGNATION
	1700141
DRAWING NUMBER	SHEETS
of	25 of 38
CONTRACT	PROJECT
B-40558	1700141





14+00.00



13+91.00

Plot: 12/4/2020 12:26:56 PM By: Thomas TM Pen: Transportation.tbl

STA. 13+91.00 TO STA. 14+00.00



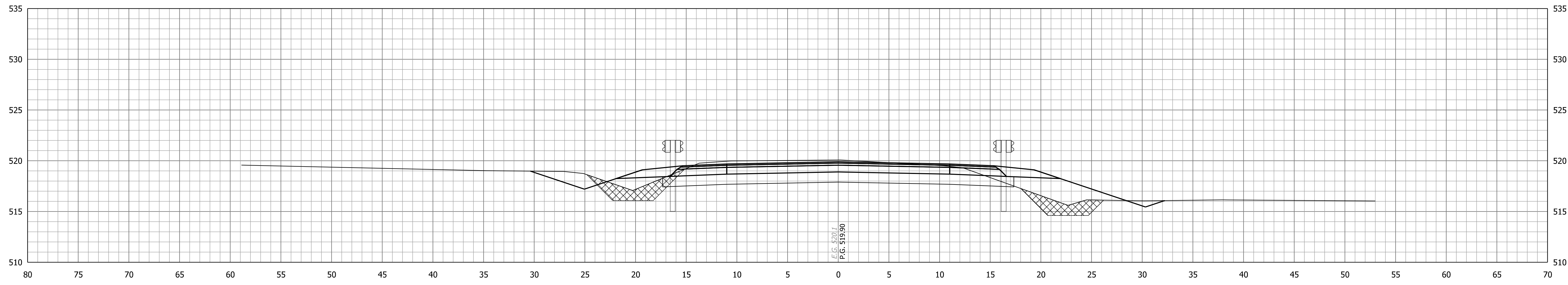
RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____ DATE _____
DESIGNED: KMP _____	DRAWN: TMT _____
CHECKED: MHW _____	CHECKED: KMP _____

INDIANA  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS  
LINE "PR-A"

HORIZONTAL SCALE 1" = 5'	BRIDGE FILE 157-28-10455
VERTICAL SCALE 1" = 5'	DESIGNATION 1700141
DRAWING NUMBER of 27	SHEETS of 38
CONTRACT B-40558	PROJECT 1700174

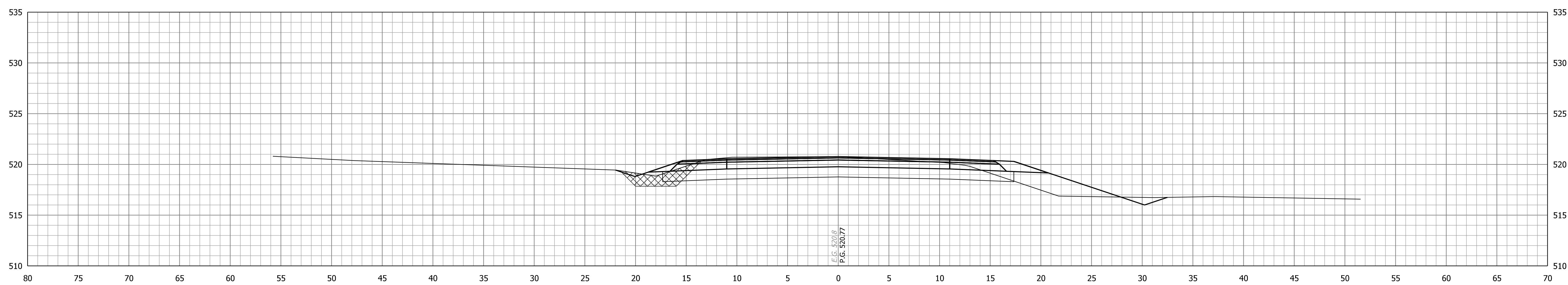




Ac = 74.3 SFT    Af = 18.9 SFT    Ac = 0.0 SFT    Af = 0.0 SFT    Ac = 0.0 SFT    Af = 0.0 SFT  
 Vc = 125 CYS    Vf = 30 CYS    Vc = 0 CYS    Vf = 0 CYS    Vc = 0 CYS    Vf = 0 CYS  
 MAINLINE                      BENCHING                      SOFT SOIL

15+00.00

E.G. 520.1  
P.G. 519.90



Ac = 60.9 SFT    Af = 13.4 SFT    Ac = 0.0 SFT    Af = 0.0 SFT    Ac = 0.0 SFT    Af = 0.0 SFT  
 Vc = 78 CYS    Vf = 12 CYS    Vc = 0 CYS    Vf = 0 CYS    Vc = 0 CYS    Vf = 0 CYS  
 MAINLINE                      BENCHING                      SOFT SOIL

14+50.00

E.G. 520.8  
P.G. 520.77

Plot: 12/4/2020 12:26:58 PM By: Thomas TM Pen: Transportation.tbl

STA. 14+50.00 TO STA. 15+00.00



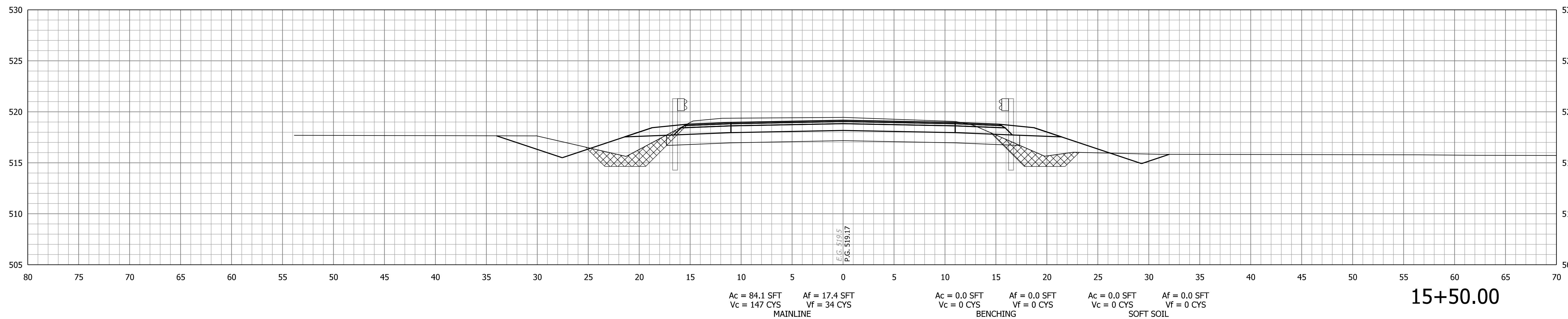
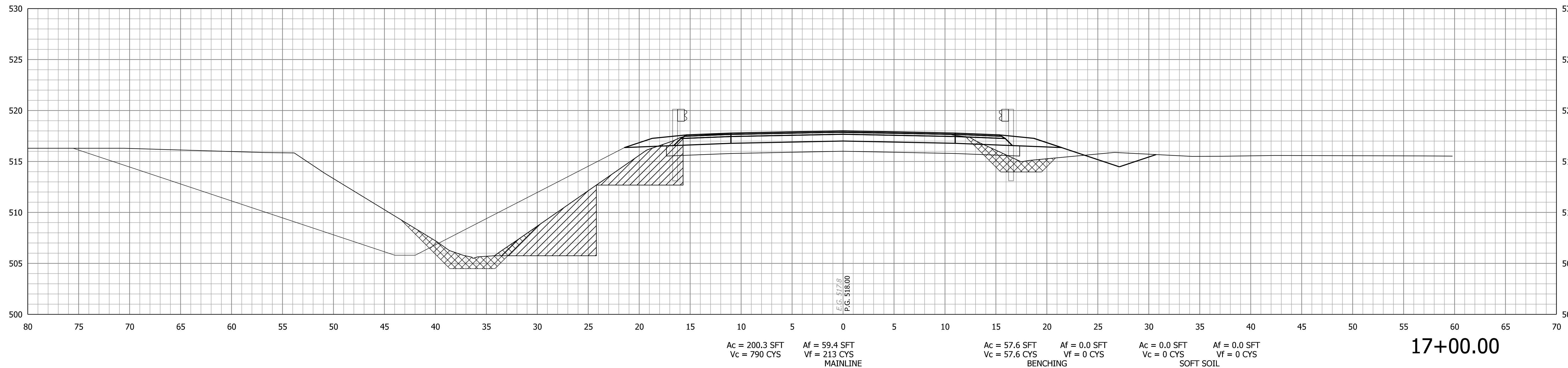
RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: KMP _____	DRAWN: TMT _____	
CHECKED: MHW _____	CHECKED: KMP _____	

INDIANA  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS  
LINE "PR-A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 5'	157-28-10455
VERTICAL SCALE	DESIGNATION
1" = 5'	1700141
DRAWING NUMBER	SHEETS
of	28 of 38
CONTRACT	PROJECT
B-40558	1700174





Plot: 12/4/2020 12:27:00 PM By: Thomas™ Pen: Transportation.tbl

STA. 15+50.00 TO STA. 16+00.00

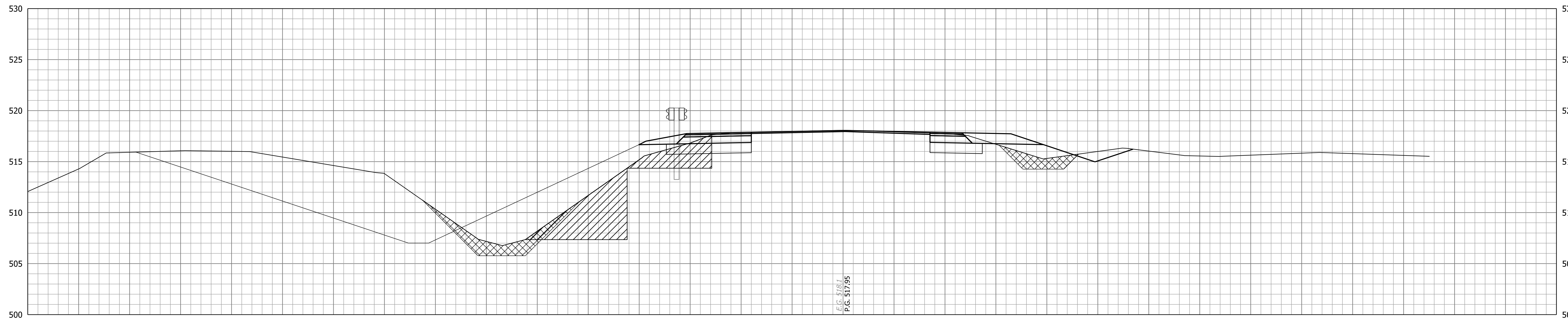


RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: KMP _____	DRAWN: TMT _____	
CHECKED: MHW _____	CHECKED: KMP _____	

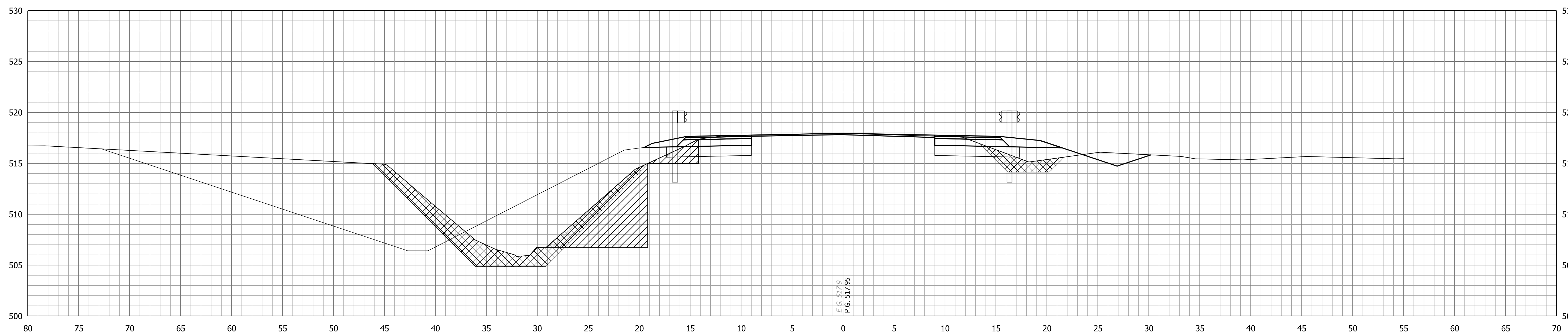
**INDIANA  
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
LINE "PR-A"**

HORIZONTAL SCALE	BRIDGE FILE
1" = 5'	157-28-10455
VERTICAL SCALE	DESIGNATION
1" = 5'	1700141
DRAWING NUMBER	SHEETS
of _____	29 of 38
CONTRACT	PROJECT
B-40558	1700174



18+00.00



17+50.00

Plot: 12/4/2020 12:27:03 PM By: ThomasTM Pen: Transportation.tbl

STA. 16+50.00 TO STA. 17+00.00

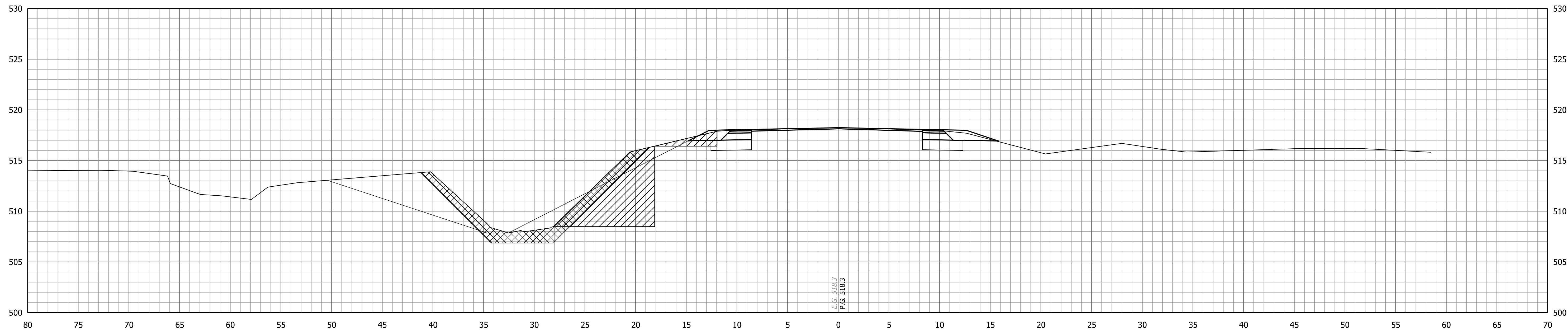


RECOMMENDED FOR APPROVAL \_\_\_\_\_  
 DESIGN ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_  
 DESIGNED: KMP DRAWN: TMT  
 CHECKED: MHW CHECKED: KMP

INDIANA  
DEPARTMENT OF TRANSPORTATION

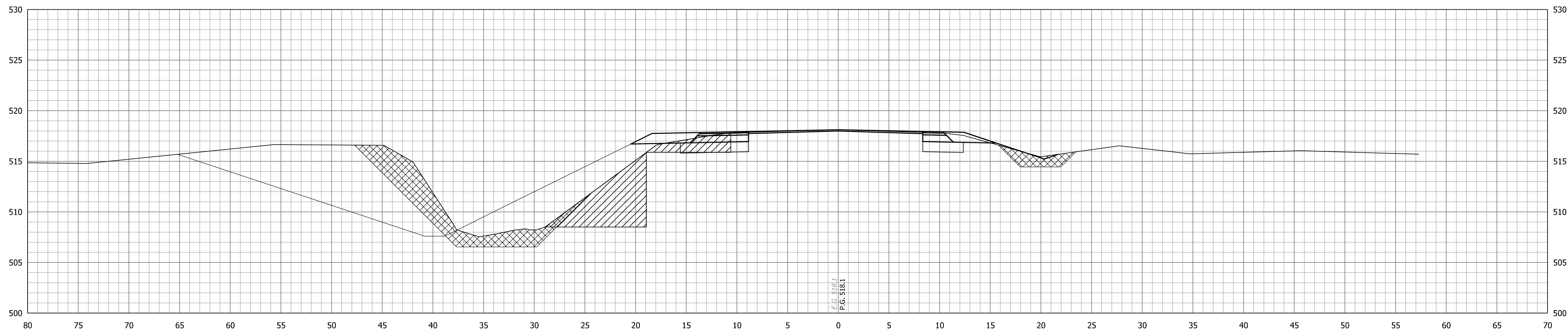
CROSS SECTIONS  
LINE "PR-A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 5'	157-28-10455
VERTICAL SCALE	DESIGNATION
1" = 5'	1700141
DRAWING NUMBER	SHEETS
of	30 of 38
CONTRACT	PROJECT
B-40558	1700174



Ac = 65.9 SFT    Af = 6.8 SFT    Ac = 51.0 SFT    Af = 0.0 SFT    Ac = 0.0 SFT    Af = 0.0 SFT  
 Vc = 194 CYS    Vf = 51 CYS    Vc = 98.2 CYS    Vf = 0 CYS    Vc = 0 CYS    Vf = 0 CYS  
 MAINLINE    BENCHING    SOFT SOIL

19+00.00



Ac = 143.2 SFT    Af = 48.8 SFT    Ac = 47.2 SFT    Af = 0.0 SFT    Ac = 0.0 SFT    Af = 0.0 SFT  
 Vc = 265 CYS    Vf = 97 CYS    Vc = 97.5 CYS    Vf = 0 CYS    Vc = 0 CYS    Vf = 0 CYS  
 MAINLINE    BENCHING    SOFT SOIL

18+50.00

Plot: 12/4/2020 12:27:05 PM By: ThomasTM Pen: Transportation.tbl

STA. 17+50.00 TO STA. 18+00.00



RECOMMENDED FOR APPROVAL \_\_\_\_\_  
 DESIGN ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_  
 DESIGNED: KMP    DRAWN: TMT  
 CHECKED: MHW    CHECKED: KMP

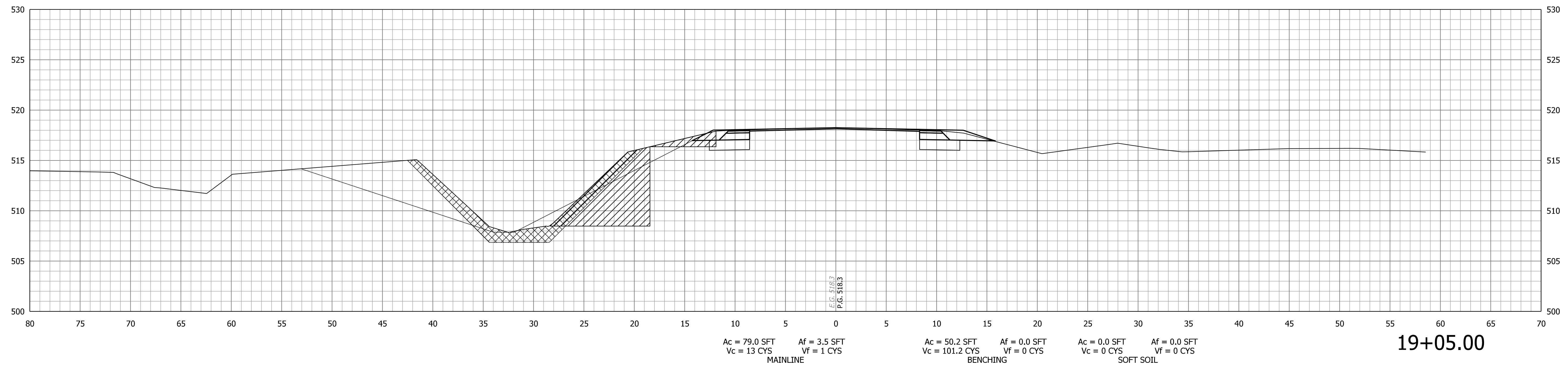
INDIANA  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS  
LINE "PR-A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 5'	157-28-10455
VERTICAL SCALE	DESIGNATION
1" = 5'	1700141
DRAWING NUMBER	SHEETS
of	31 of 38
CONTRACT	PROJECT
B-40558	1700174



Plot: 12/4/2020 12:27:07 PM By: ThomasTM Pen: Transportation.tbl



STA. 18+50.00 TO STA. 19+00.00



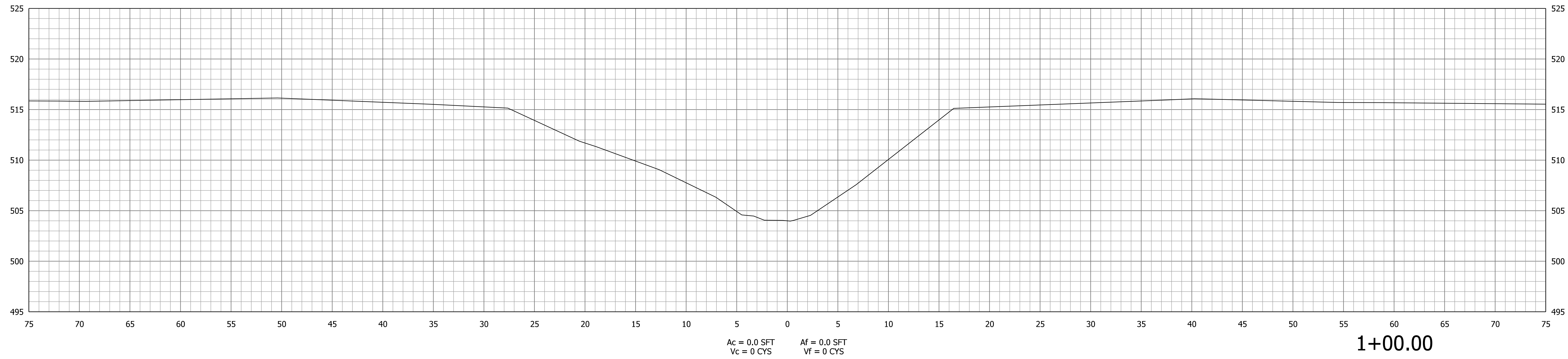
RECOMMENDED FOR APPROVAL _____ <small>DESIGN ENGINEER</small>	_____ <small>DATE</small>
DESIGNED: <u>KMP</u>	DRAWN: <u>TMT</u>
CHECKED: <u>MHW</u>	CHECKED: <u>KMP</u>

**INDIANA  
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
LINE "PR-A"**

HORIZONTAL SCALE 1" = 5'	BRIDGE FILE 157-28-10455
VERTICAL SCALE 1" = 5'	DESIGNATION 1700141
DRAWING NUMBER of _____	SHEETS of 38
CONTRACT B-40558	PROJECT 1700174

Plot: 12/4/2020 12:27:59 PM By: Thomas™ Pen: Transportation.tbl



STA. 1+00.00 TO STA. 1+00.00



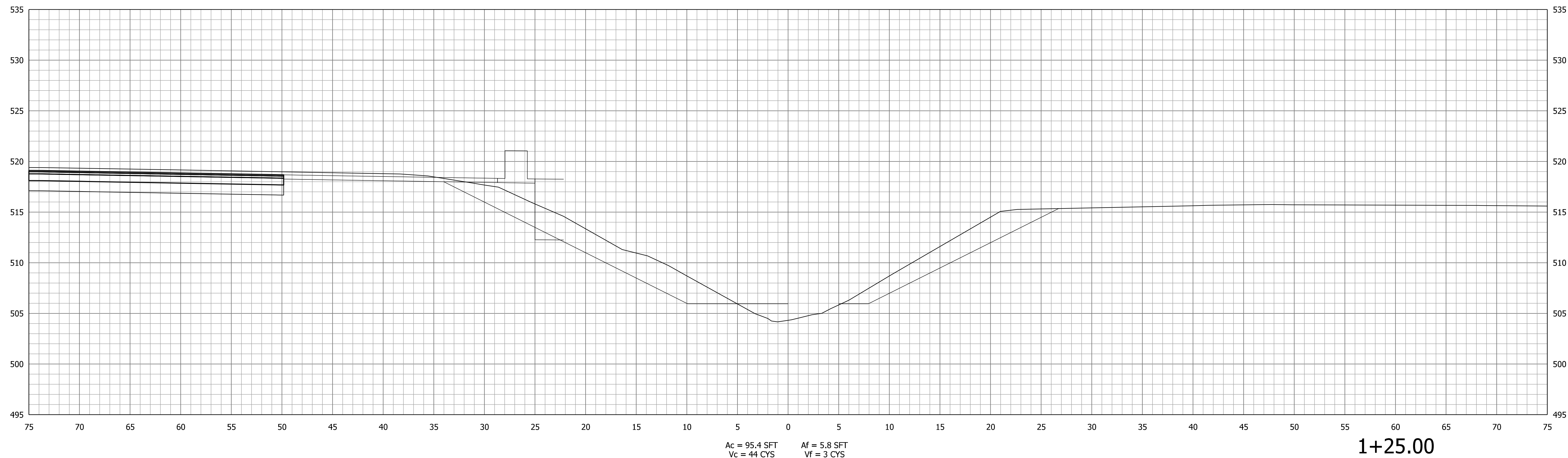
RECOMMENDED FOR APPROVAL _____	
DESIGN ENGINEER	DATE
DESIGNED: <u>KMP</u>	DRAWN: <u>TMT</u>
CHECKED: <u>MHW</u>	CHECKED: <u>KMP</u>

INDIANA  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS  
LINE "PR-A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 5'	157-28-10455
VERTICAL SCALE	DESIGNATION
1" = 5'	1700141
DRAWING NUMBER	SHEETS
of	33 of 38
CONTRACT	PROJECT
B-40558	1700174

Plot: 12/4/2020 12:28:01 PM By: Thomas TM Pen: Transportation.tbl



STA. 1+25.00 TO STA. 1+25.00



RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: <u>KMP</u>	DRAWN: <u>TMT</u>	
CHECKED: <u>MHW</u>	CHECKED: <u>KMP</u>	

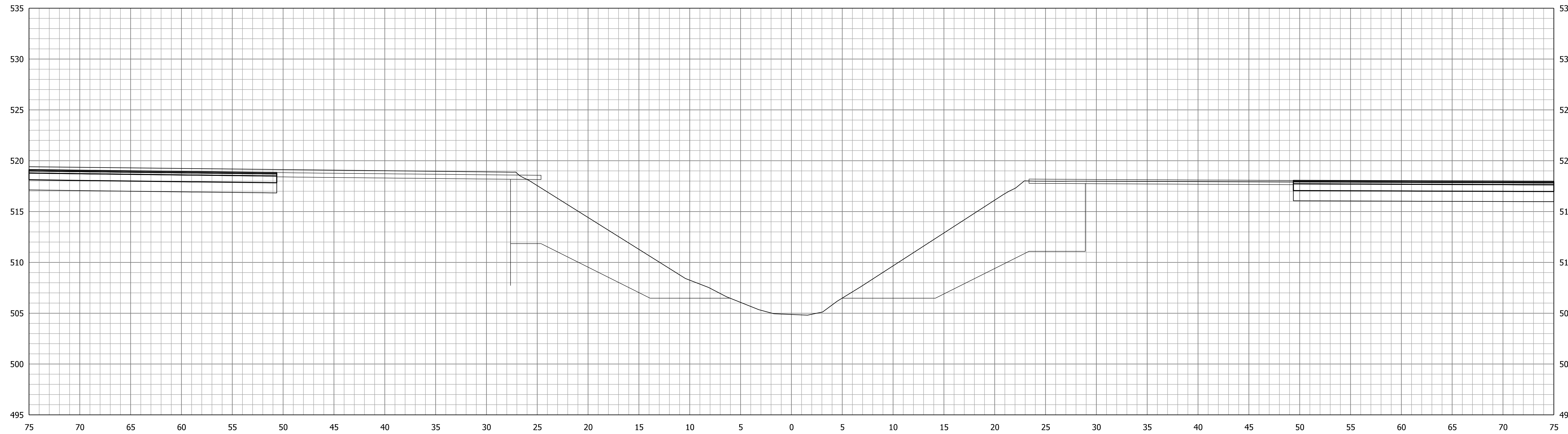
**INDIANA  
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
LINE "PR-A"**

HORIZONTAL SCALE 1" = 5'	BRIDGE FILE 157-28-10455
VERTICAL SCALE 1" = 5'	DESIGNATION 1700141
DRAWING NUMBER of 34	SHEETS of 38
CONTRACT B-40558	PROJECT 1700174



Plot: 12/4/2020 12:28:04 PM By: Thomas TM Pen: Transportation.tbl



Ac = 210.6 SFT    Af = 0.0 SFT  
 Vc = 142 CYS    Vf = 3 CYS

1+50.00

STA. 1+50.00 TO STA. 1+50.00



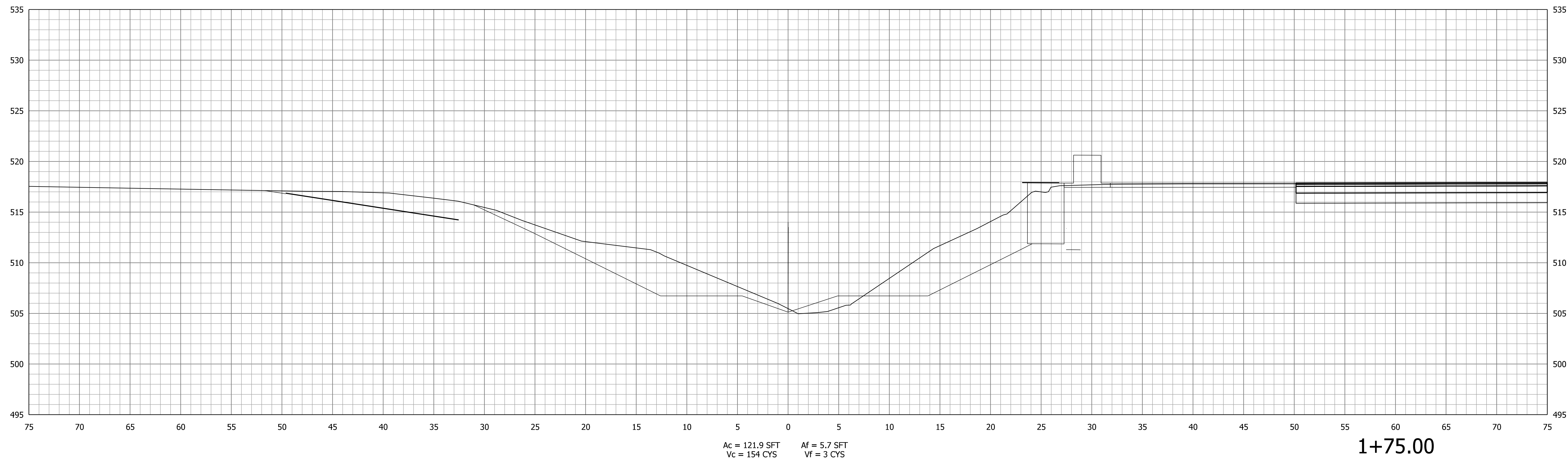
RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: <u>KMP</u>	DRAWN: <u>TMT</u>	
CHECKED: <u>MHW</u>	CHECKED: <u>KMP</u>	

INDIANA  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS  
LINE "PR-A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 5'	157-28-10455
VERTICAL SCALE	DESIGNATION
1" = 5'	1700141
DRAWING NUMBER	SHEETS
of	35 of 38
CONTRACT	PROJECT
B-40558	1700174

Plot: 12/4/2020 12:28:06 PM By: Thomas TM Pen: Transportation.tbl



STA. 1+75.00 TO STA. 1+75.00



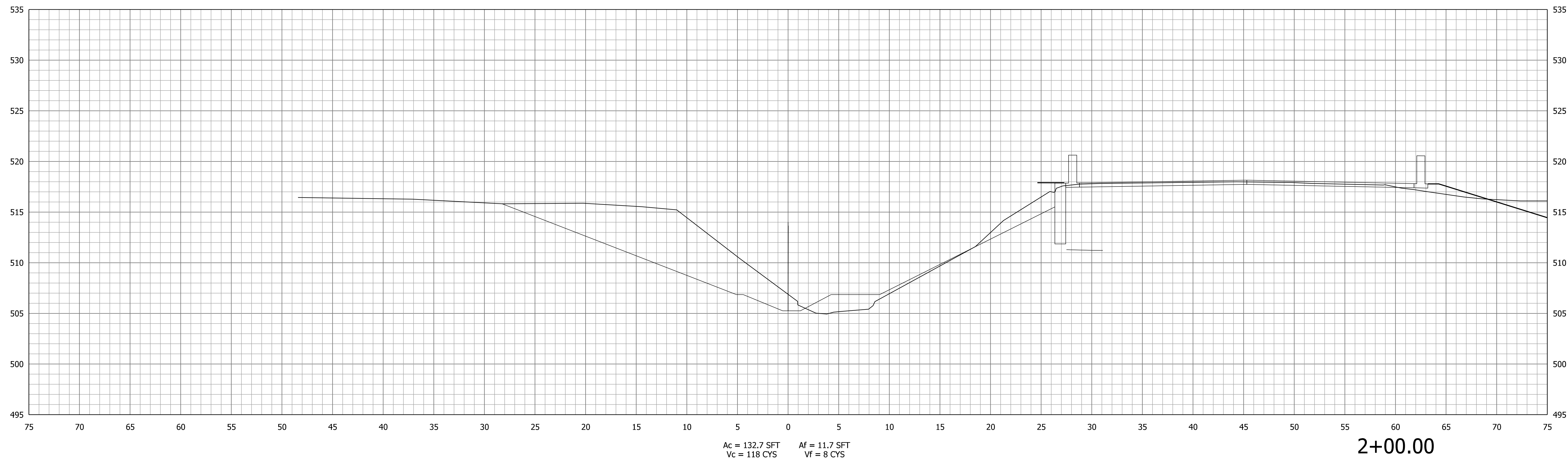
RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: <u>KMP</u>	DRAWN: <u>TMT</u>	
CHECKED: <u>MHW</u>	CHECKED: <u>KMP</u>	

INDIANA  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS  
LINE "PR-A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 5'	157-28-10455
VERTICAL SCALE	DESIGNATION
1" = 5'	1700141
DRAWING NUMBER	SHEETS
of	36 of 38
CONTRACT	PROJECT
B-40558	1700174

Plot: 12/4/2020 12:28:08 PM By: Thomas TM Pen: Transportation.tbl



STA. 2+00.00 TO STA. 2+00.00



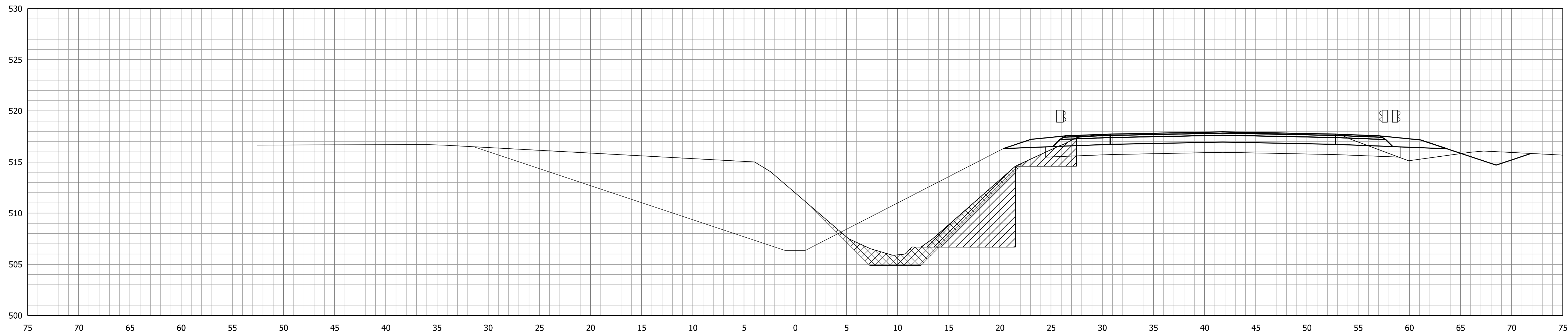
RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: KMP _____	DRAWN: TMT _____	
CHECKED: MHW _____	CHECKED: KMP _____	

INDIANA  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS  
LINE "PR-A"

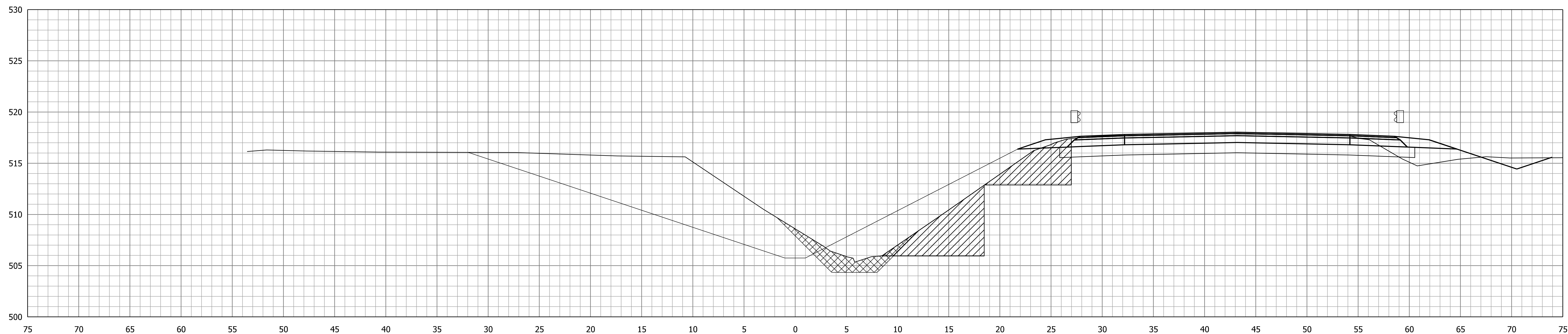
HORIZONTAL SCALE 1" = 5'	BRIDGE FILE 157-28-10455
VERTICAL SCALE 1" = 5'	DESIGNATION 1700141
DRAWING NUMBER of	SHEETS of
CONTRACT B-40558	PROJECT 1700174





Ac = 146.0 SFT    Af = 61.6 SFT  
 Vc = 253 CYS    Vf = 99 CYS

3+00.00



Ac = 127.1 SFT    Af = 44.9 SFT  
 Vc = 241 CYS    Vf = 52 CYS

2+50.00

Plot: 12/4/2020 12:28:10 PM By: ThomasTM Pen: Transportation.tbl

STA. 2+50.00 TO STA. 3+00.00



RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: KMP _____	DRAWN: TMT _____	
CHECKED: MHW _____	CHECKED: KMP _____	

INDIANA  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS  
LINE "PR-A"

HORIZONTAL SCALE 1" = 5'	BRIDGE FILE 157-28-10455
VERTICAL SCALE 1" = 5'	DESIGNATION 1700141
DRAWING NUMBER of 38	SHEETS of 38
CONTRACT B-40558	PROJECT 1700174