

BENCHMARK #1
CHISELED □ @ NW CORNER OF CONCRETE
FOUNDATION FOR LIGHT POST,
STA. 7+687.81, 17.51 m LT.
ELEV.=283.519

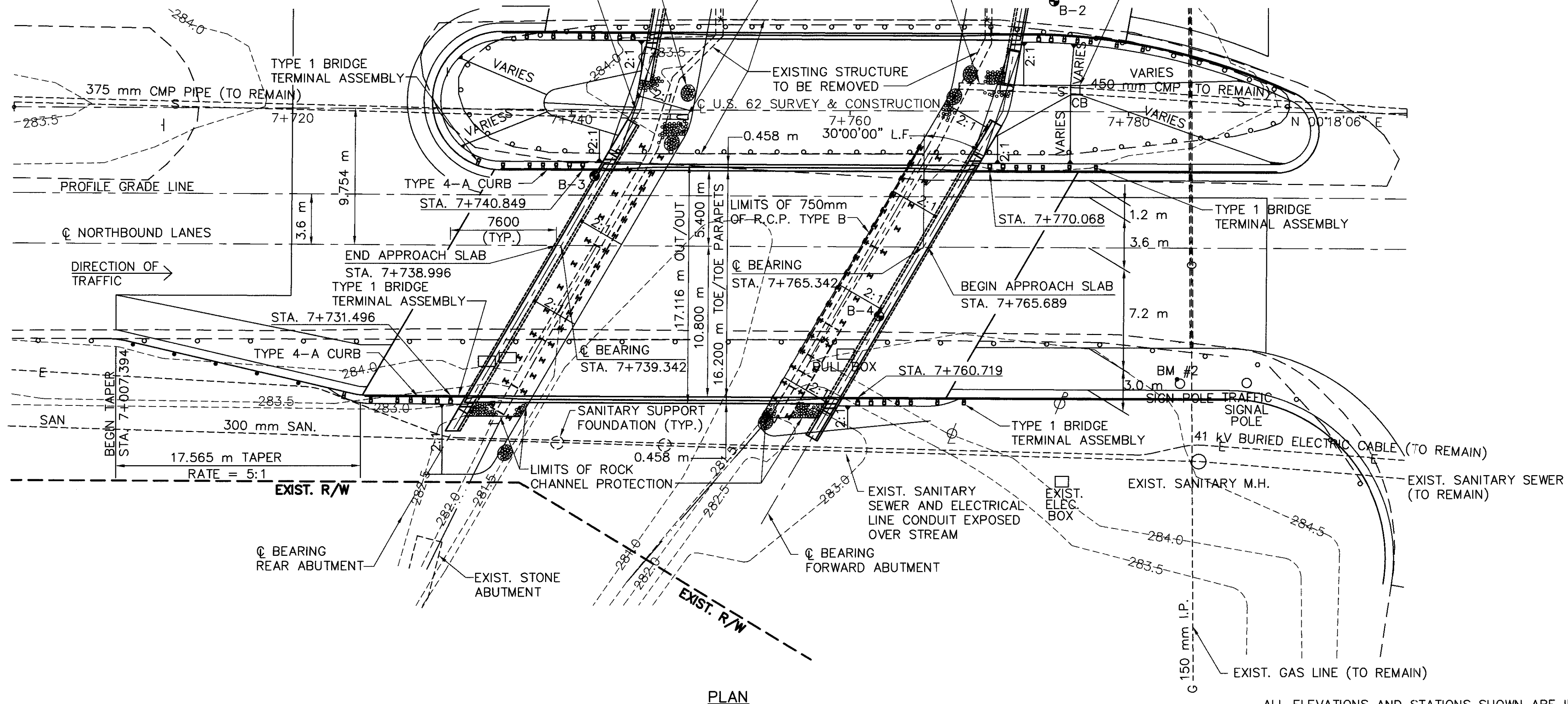
BRIDGE LIMIT @ U.S. 62
SURVEY & CONSTRUCTION
STA. 7+744.628

OUTLET FOR POROUS
BACKFILL DRAIN (TYP.)

EXTEND EXIST.
375 mm CMP

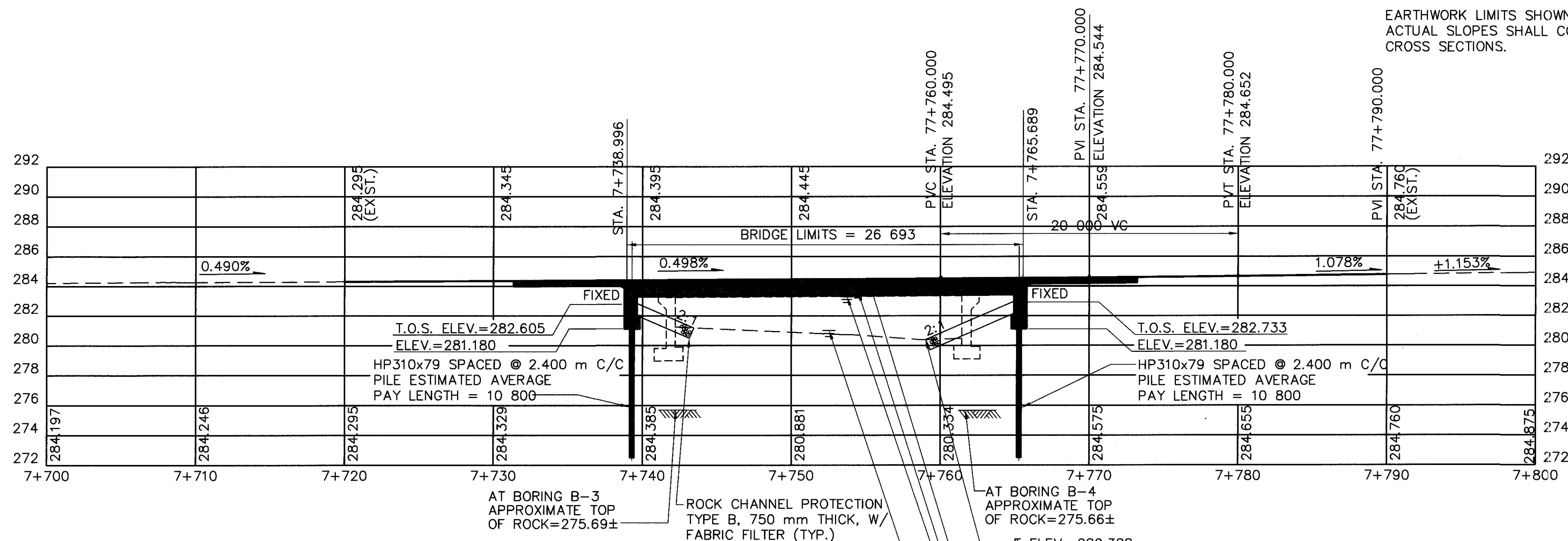
REMOVE END
OF EXIST.
450 mm CMP

ADJUST GRATE
ELEVATION



ALL ELEVATIONS AND STATIONS SHOWN ARE IN
METERS. ALL OTHER DIMENSIONS ARE IN
MILLIMETERS UNLESS NOTED OTHERWISE.

EARTHWORK LIMITS SHOWN ARE APPROXIMATE.
ACTUAL SLOPES SHALL CONFORM TO PLAN
CROSS SECTIONS.



BENCHMARK #2
CHISELED + IN SW ANCHOR BOLT FOR
SIGN POST, STA. 7+783.62, 19.06 m RT.
ELEV.=284.800

NOTE:
ALL EXISTING ABUTMENT INFORMATION
BELOW GRADE IS TAKEN FROM ORIGINAL
BRIDGE PLANS AND IS NOT FIELD VERIFIED.

* - PLAN INFORMATION, NOT FIELD VERIFIED
● - INDICATES BORING LOCATION
T.O.S. - TOP OF SLOPE

HYDRAULIC DATA

DRAINAGE AREA =	49.729 km ²
DISCHARGE =	25 YEAR 53.52 m ³ /s 100 YEAR 71.92 m ³ /s
VELOCITY =	0.99 m/s 1.33 m/s
HIGH WATER =	283.370 284.00

DESIGN INFORMATION

1998 ADT = 16,460
2022 ADT = 22,210
2022 ADTT = 1555
DESIGN SPEED = 90 Km/h

EXISTING STRUCTURE

TYPE: STEEL BEAM WITH REINFORCED
CONCRETE DECK AND CONCRETE
ABUTMENTS SUPPORTED ON PILING.

SPAN: 19.812± C/C BRGS.

ROADWAY: 13.411± F/F RAIL

SKEW: 30°-00'-00" L.F.

LOADING: S-20-46

DATE BUILT: 1950

STRUCTURE FILE NUMBER: 7803184

WEARING SURFACE: BITUMINOUS

PROPOSED STRUCTURE

TYPE: COMPOSITE REINFORCED CONCRETE
DECK ON STEEL BEAMS (A572M) WITH
INTEGRAL ABUTMENTS

SPAN: 26.000 C/C BEARINGS

ROADWAY: 16.200 TOE/TOE PARAPET

DESIGN LOADING: MS18, (CASE 2.) AND THE
ALTERNATE MILITARY LOADING

SKEW: RIGHT BRIDGE - 30°00'00" L.F.

WEARING SURFACE: MONOLITHIC CONCRETE

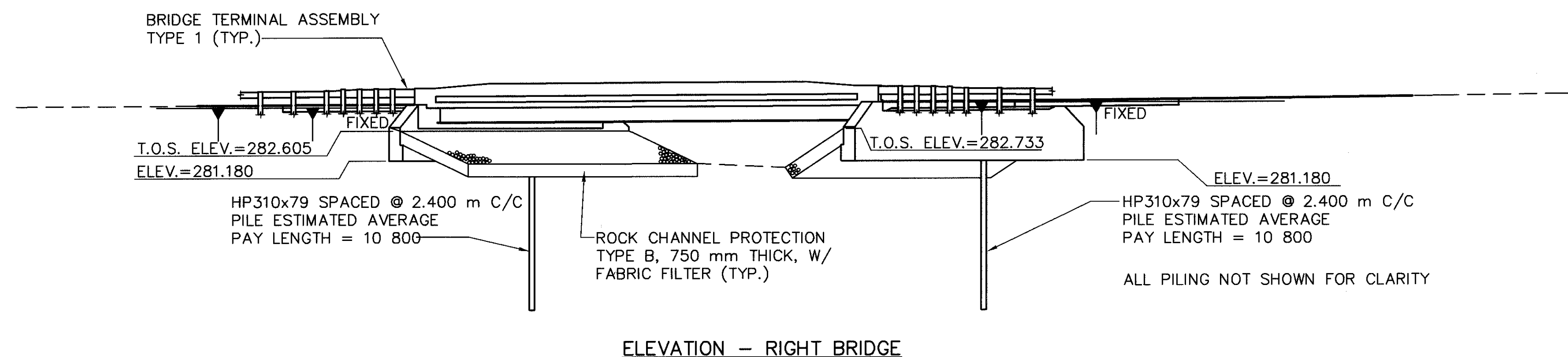
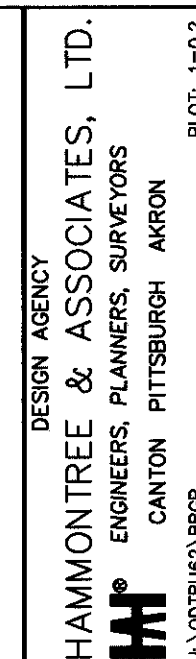
APPROACH SLABS: AS-1-81M (L=7600)

ALIGNMENT: TANGENT

CROWN: 0.016

LONGITUDE: WEST 80°48'56"

LATITUDE: NORTH 41°16'41"



THE SEALER SHALL BE FEDERAL COLOR NO. 27778 - NEUTRAL

GENERAL NOTES

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:

AS-1-81M DATED 10-25-94 ICD-1-82M DATED 3-20-95
BR-1M DATED 1-06-99
GSD-1-96M DATED 11-21-97

AND TO SUPPLEMENTAL SPECIFICATIONS:

814 DATED 6-2-98 899 DATED 10-21-98
842 DATED 1-6-99 905 DATED 4-1-98
863 DATED 10-12-99 907 DATED 10-21-98

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1996, INCLUDING THE 1997 AND 1998 INTERIM SPECIFICATIONS, AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING

DESIGN LOADING - MS18, CASE II AND THE ALTERNATE MILITARY LOADING.
- FUTURE WEARING SURFACE (2.87 kPa)

DESIGN DATA

CONCRETE CLASS S - COMPRESSIVE STRENGTH 31.0 MPa

CONCRETE CLASS C - COMPRESSIVE STRENGTH 27.5 MPa

REINFORCING STEEL - ASTM A615M, A616M, A617M, GRADE 420, MINIMUM YIELD STRENGTH 420 MPa

STRUCTURAL STEEL - ASTM A572, YIELD STRENGTH 350 MPa

DECK PROTECTION METHOD - EPOXY COATED REINFORCING STEEL

- SEALING OF CONCRETE SURFACES
- 65mm CONCRETE COVER

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 25mm THICK.

PORTIONS OF STRUCTURE REMOVED, OVER 6 METER SPAN,

AS PER PLAN: WHEN NO LONGER NEEDED TO MAINTAIN TRAFFIC THE EXISTING STRUCTURES SHALL BE REMOVED. ABUTMENTS SHALL BE REMOVED TO ELEVATION 280.18±.

PROTECTION OF TRAFFIC: PRIOR TO DEMOLITION OF ANY PORTIONS OF THE EXISTING STRUCTURES, THE CONTRACTOR SHALL SUBMIT PLANS FOR THE PROTECTION OF TRAFFIC ADJACENT TO AND/OR UNDER THE STRUCTURE TO THE ENGINEER FOR APPROVAL. THESE PLANS SHALL INCLUDE PROVISIONS FOR ANY DEVICES AND STRUCTURES THAT MAY BE NECESSARY TO ENSURE SUCH PROTECTION.

PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE BID, WHICH PRICE AND PAYMENT SHALL BE FULL COMPENSATION FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK IN CONFORMANCE WITH THESE REQUIREMENTS, WITH PERTINENT PROVISIONS OF 202, AND TO THE SATISFACTION OF THE ENGINEER.

FOR CONTINUATION OF THIS NOTE SEE SHEET [3/17].

PILES DRIVEN TO BEDROCK: PILES SHALL BE DRIVEN TO REFUSAL ON BEDROCK. REFUSAL SHALL BE OBTAINED BY PENETRATING SOFT BEDROCK FOR SEVERAL MILLIMETERS WITH A MINIMUM RESISTANCE OF 20 BLOWS PER 25 mm OR REFUSAL SHALL BE CONSIDERED AS OBTAINED AFTER THE PILE HAS CONTACTED HARD BEDROCK AND THE PILE HAS THEN RECEIVED AT LEAST 20 BLOWS.

THE ULTIMATE BEARING VALUE IS 1213 kN PER PILE FOR THE LEFT BRIDGE ABUTMENT PILES.

THE ULTIMATE BEARING VALUE IS 1053 kN PER PILE FOR THE RIGHT BRIDGE ABUTMENT PILES.

ABUTMENT PILES:

38 PILES 10.8 METERS LONG, ESTIMATED LENGTH.
38 PILES OF ORDER LENGTH 10.8 METERS LONG
19 SPLICES

STRUCTURE EXCAVATION: EXCAVATION NOT MADE AS PART OF 202 OR 518 AND ALL NECESSARY BACKFILL SHALL BE INCLUDED IN THE LUMP SUM BID ITEM "UNCLASSIFIED EXCAVATION" FOR PAYMENT.

ITEM 503 UNCLASSIFIED EXCAVATION: UNCLASSIFIED EXCAVATION SHALL BE IN ACCORDANCE WITH 503 EXCEPT THAT THE BACKFILL MATERIAL BEHIND THE ABUTMENTS SHALL BE 203 GRANULAR MATERIAL PLACED IN 150 mm LIFTS AND COMPACTED IN ACCORDANCE WITH 304.04.

MAINTENANCE OF TRAFFIC: TWO LANE, TWO WAY TRAFFIC SHALL BE MAINTAINED ON STATE ROUTE 62 AT ALL TIMES.

(SEE SHEETS 7/60 TO 24/60 ROADWAY PLANS).

UTILITY LINES: ALL EXPENSE INVOLVED IN RELOCATION THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE UTILITY. THE CONTRACTOR AND UTILITY ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

ITEM 842 CLASS C CONCRETE, ABUTMENT, INCLUDING FOOTING, AS PER PLAN: INSTALL A 900 mm WIDE STRIP, 2.5mm THICK, GENERAL PURPOSE, HEAVY DUTY NEOPRENE SHEET WITH NYLON FABRIC REINFORCEMENT AT LOCATIONS SHOWN IN THE PLANS. SECURE 1 METER WIDE NEOPRENE SHEETING TO THE CONCRETE WITH 32mm x 3mm (LENGTH x SHANK DIAMETER) GALVANIZED BUTTON HEAD SPIKES THROUGH A 25mm OUTSIDE DIAMETER, 3mm GALVANIZED WASHER. MAXIMUM FASTENER SPACING IS 225mm. OTHER SIMILAR GALVANIZED DEVICES WHICH WILL NOT DAMAGE EITHER THE NEOPRENE OR THE CONCRETE MAY BE USED SUBJECT TO THE APPROVAL OF THE ENGINEER.

CENTER THE NEOPRENE STRIPS ON ALL JOINTS. FOR HORIZONTAL JOINTS, SECURE THE HORIZONTAL NEOPRENE STRIP BY USING A SINGLE LINE OF FASTENERS, STARTING AT 150mm± FROM THE TOP OF THE NEOPRENE STRIP. FOR THE VERTICAL JOINTS SECURE THE VERTICAL NEOPRENE STRIP BY USING A SINGLE VERTICAL LINE OF FASTENERS, STARTING AT 150mm± FROM THE VERTICAL EDGE OF THE NEOPRENE STRIP NEAREST TO THE CENTERLINE OF ROADWAY. FOR VERTICAL JOINTS, INSTALL 2 ADDITIONAL FASTENERS AT 150mm CENTER TO CENTER ACROSS THE TOP OF THE NEOPRENE STRIP ON THE SAME SIDE OF THE VERTICAL JOINT AS THE SINGLE VERTICAL ROW OF FASTENERS IS LOCATED.

THE VERTICAL NEOPRENE STRIPS SHOULD COMPLETELY OVERLAP THE HORIZONTAL STRIPS. LAPS IN THE LENGTH OF THE HORIZONTAL STRIPS DUE TO MATERIAL MANUFACTURING SHALL BE AT LEAST 300 mm IN LENGTH, IF NOT VULCANIZED OR ADHESIVE BONDED, OR 150mm IN LENGTH IF THE LAP IS VULCANIZED OR ADHESIVE BONDED. NO LAPS ARE ACCEPTABLE IN VERTICALLY INSTALLED NEOPRENE STRIPS.

THE NEOPRENE SHEETING SHALL BE 2.5mm THICK GENERAL PURPOSE, HEAVY DUTY NEOPRENE SHEET WITH NYLON FABRIC REINFORCEMENT. THE SHEETING SHALL BE "FAIRPRENE NUMBER NN-0003", BY E.I. DUPONT DE NEMOURS AND COMPANY, INC., "WINGPRENE" BY THE GOODYEAR TIRE AND RUBBER COMPANY, OR AN APPROVED ALTERNATE. THE NEOPRENE SHEETING SHALL CONFORM TO THE FOLLOWING:

DESCRIPTION OF TEST	ASTM METHOD	REQUIREMENT
THICKNESS, mm	D751	2.5±.25
BREAKING STRENGTH, GRAB WXF, N, MINIMUM	D751	3130x3130
ADHESIVE 25mm STRIP, 50mm MINIMUM, N MINIMUM	D751	27
BURST STRENGTH(MULLEN) MPa, MINIMUM	D751	9.65
HEAT AGING 70 HOURS T 100°C, 180° BEND WITHOUT CRACKING	D2136	NO CRACKING OF COATING
LOW TEMPERATURE BRITTLINESS 1 HOUR AT -40°C, BEND AROUND 6mm MANDREL	D2136	NO CRACKING OF COATING

IN LIEU OF THE NEOPRENE SHEETING THE CONTRACTOR MAY CHOOSE TO SUPPLY TYPE 3 MEMBRANE, 711.29.

PAYMENT FOR LABOR, MATERIALS AND INSTALLATION OF THESE ITEMS SHALL BE INCLUDED IN ITEM 842 CLASS C CONCRETE, ABUTMENT, INCLUDING FOOTING, AS PER PLAN.

LEFT STRUCTURE ESTIMATED QUANTITIES

CALC. KJO DATE:10/19/99 CHK'D MEF DATE: 3/20/00

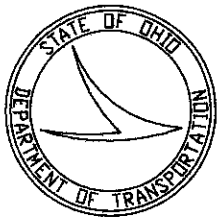
ITEM	ITEM EXT.	QUANTITY	UNIT	DESCRIPTION	ABUT.	SUPER	GEN.	SEE SHEET
202	11203	LUMP		PORTIONS OF STRUCTURE REMOVED, OVER 6 METER SPAN, AS PER PLAN			LUMP	3/17, 4/17
503	11100	LUMP		COFFERDAMS, CRIBS AND SHEETING			LUMP	
503	21300	LUMP		UNCLASSIFIED EXCAVATION			LUMP	
505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION			LUMP	
507	00200	173	METER	STEEL PILES HP310X79, FURNISHED	173			
507	00250	173	METER	STEEL PILES HP310X79, DRIVEN	173			
507	50500	8	EACH	STEEL PILE SPLICES	8			
SPECIAL	51267510	226	SQ METER	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) *	25	201		
518	21200	69	CU METER	POROUS BACKFILL WITH FILTER FABRIC	69			
518	40000	38.1	METER	150 MM PERFORATED CORRUGATED PLASTIC PIPE	38.1			
518	40011	16.0	METER	150 MM NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, AS PER PLAN	16.0			5/17
842	31508	134	CU METER	CLASS S CONCRETE, SUPERSTRUCTURE		134		
842	43501	61	CU METER	CLASS C CONCRETE, ABUTMENT INCLUDING FOOTING, AS PER PLAN	61			4/17
863	10261	57 048	KILOGRAM	STRUCTURAL STEEL MEMBERS, LEVEL THREE (3) FABRICATION, AS PER PLAN		57 048		16/17,17/17
863	20000	1035	EACH	WELDED STUD SHEAR CONNECTOR		1035		

RIGHT STRUCTURE ESTIMATED QUANTITIES

CALC. KJO DATE:10/19/99 CHK'D MEF DATE:10/19/99

ITEM	ITEM EXT.	QUANTITY	UNIT	DESCRIPTION	ABUT.	SUPER	GEN.	SEE SHEET
202	11203	LUMP		PORTIONS OF STRUCTURE REMOVED, OVER 6 METER SPAN, AS PER PLAN			LUMP	3/17, 4/17
503	11100	LUMP		COFFERDAMS, CRIBS AND SHEETING			LUMP	
503	21300	LUMP		UNCLASSIFIED EXCAVATION			LUMP	
505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION			LUMP	
507	00200	238	METER	STEEL PILES HP310X79, FURNISHED	238			
507	00250	238	METER	STEEL PILES HP310X79, DRIVEN	238			
507	50500	11	EACH	STEEL PILE SPLICES	11			
SPECIAL	51267510	248	SQ METER	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) *	30	218		
518	21200	95	CU METER	POROUS BACKFILL WITH FILTER FABRIC	95			
518	40000	51.9	METER	150 MM PERFORATED CORRUGATED PLASTIC PIPE	51.9			
518	40011	16.0	METER	150 MM NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, AS PER PLAN	16.0			5/17
842	31508	172	CU METER	CLASS S CONCRETE, SUPERSTRUCTURE		172		
842	43501	81	CU METER	CLASS C CONCRETE, ABUTMENT INCLUDING FOOTING, AS PER PLAN	81			4/17
863	10261	68 900	KILOGRAM	STRUCTURAL STEEL MEMBERS, LEVEL THREE (3) FABRICATION, AS PER PLAN		68 900		16/17,17/17
863	20000	1242	EACH	WELDED STUD SHEAR CONNECTOR		1242		

* - SEE PROPOSAL NOTE



metric
units

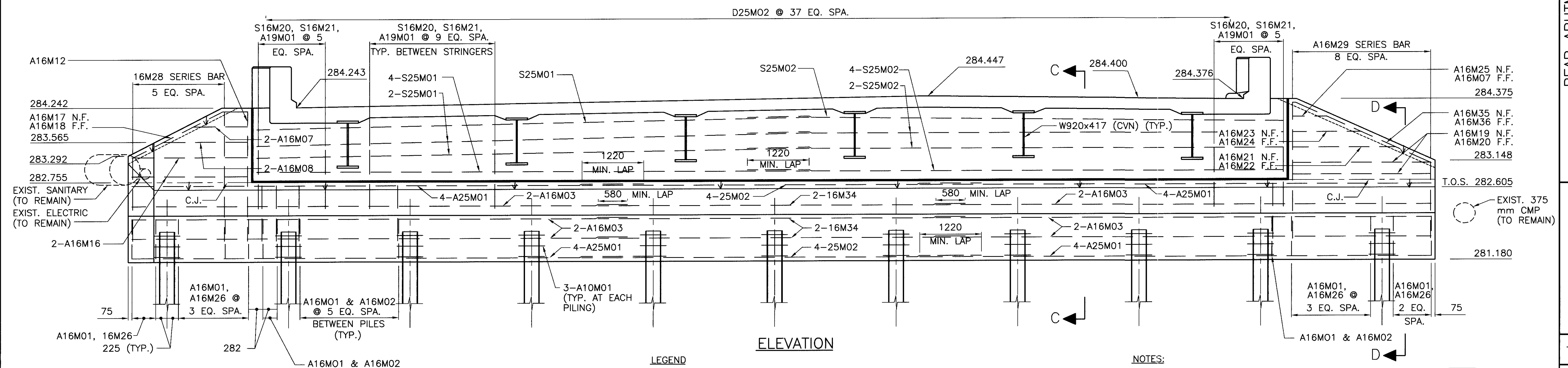
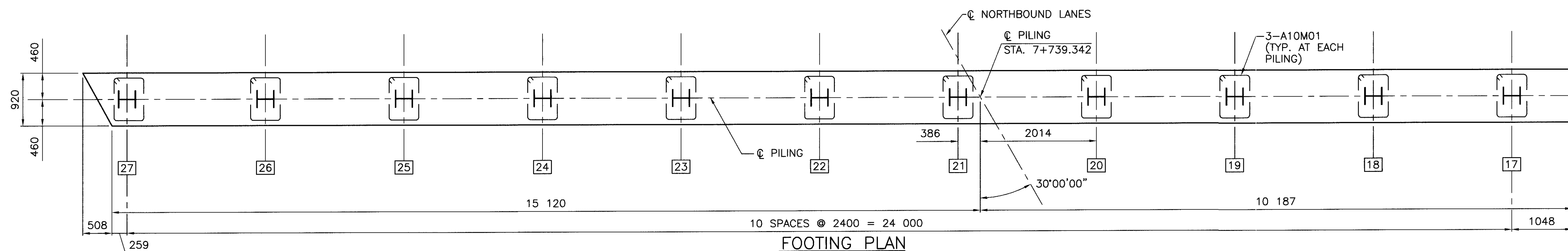
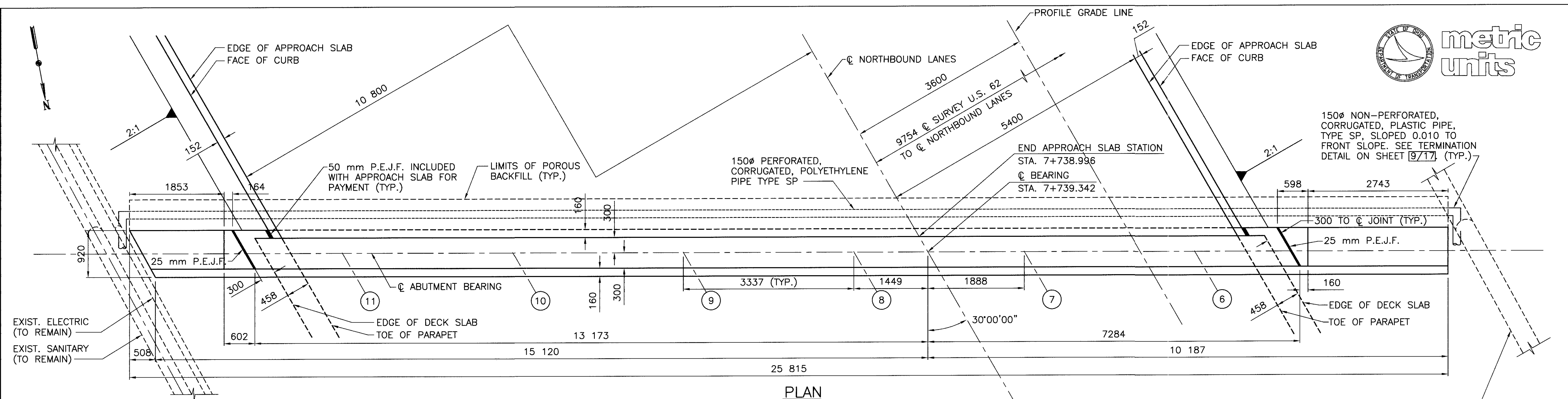
DESIGN AGENCY
HAMMOND & ASSOCIATES, LTD.
ENGINEERS, PLANNERS, SURVEYORS
CANTON PITTSBURGH AKRON
LAUREL COUNTRY, OHIO

DATE
3-10-00
REVIEWED
KAB
DRAWN
CJP
DESIGNED
CJP
CHECKED
KJO
STRUCTURE FILE NUMBER
7803133 L / 7803192 R

GENERAL NOTES & ESTIMATED QUANTITIES
BRIDGE NO. TRU-62-07745L&R
OVER LITTLE YANKEE CREEK

TRU-62-7.720

4 / 17
47
60

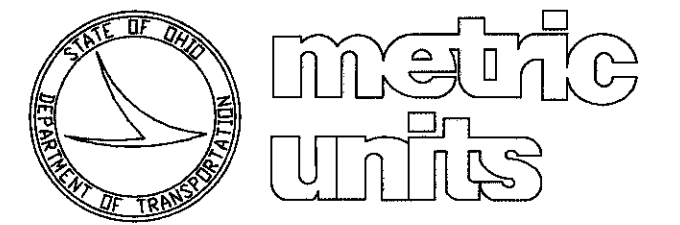


LEGEND
 N.F. — NEAR FACE
 F.F. — FAR FACE
 P.E.J.F.—PREFORMED EXPANSION JOINT FILLER
 C.J.—CONSTRUCTION JOINT

SPA.-SPACES
 (10) - BEAM NUMBER
 [26] - PILING NUMBER

NOTES:

1) FOR ABUTMENT SECTIONS AND ADDITIONAL NOTES SEE SHEET 9/17.



HA HAMMONTREE & ASSOCIATES, LTD.
ENGINEERS, PLANNERS, SURVEYORS
CANTON PITTSBURGH AKRON
J: COTRUB2/BRA3 PLOT: 1=40

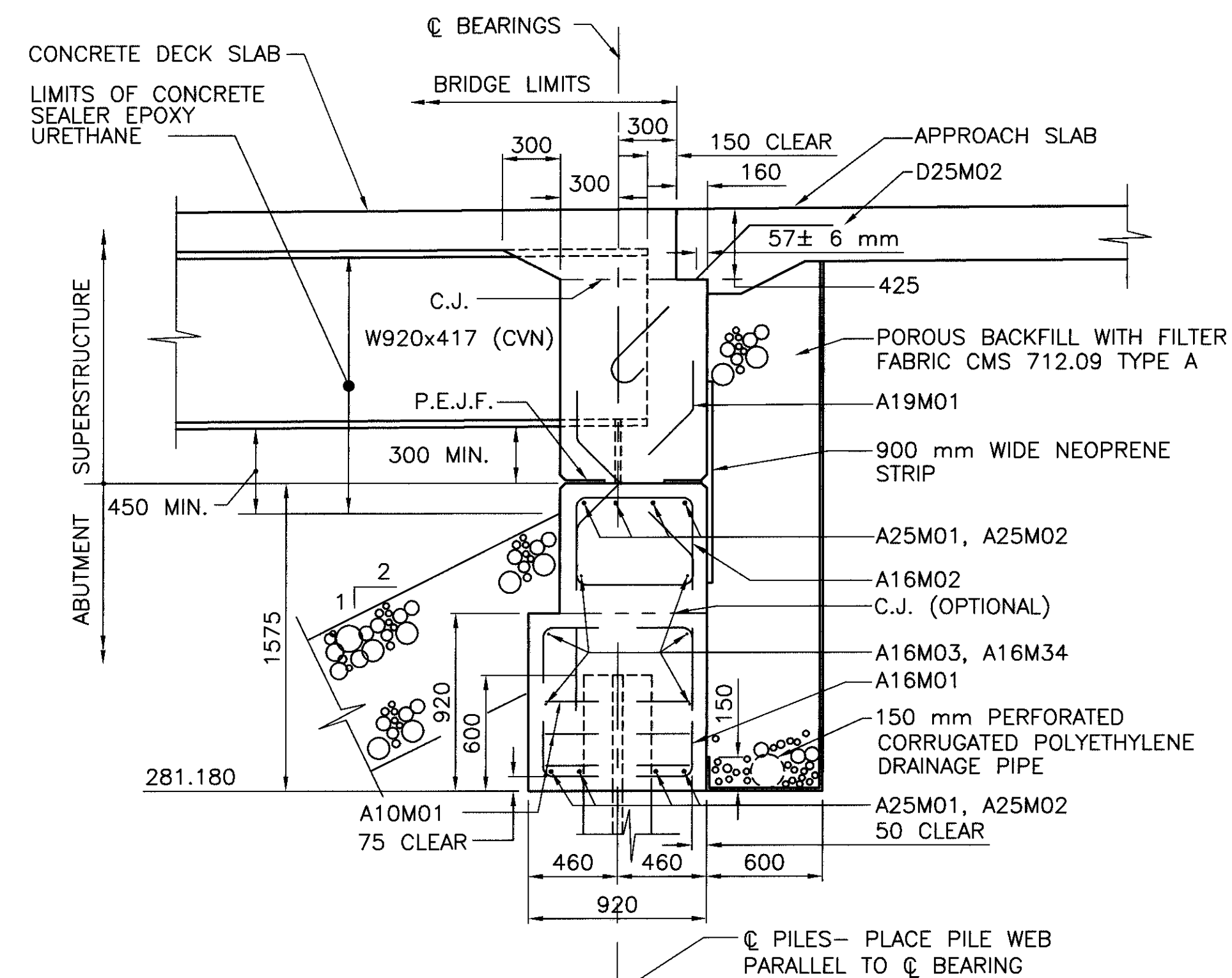
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CHECKED	REVISED	STRUCTURE FILE NUMBER	
KJO		7803192 R	

BRIDGE NO. TRU-62-07745R
OVER LITTLE YANKEE CREEK

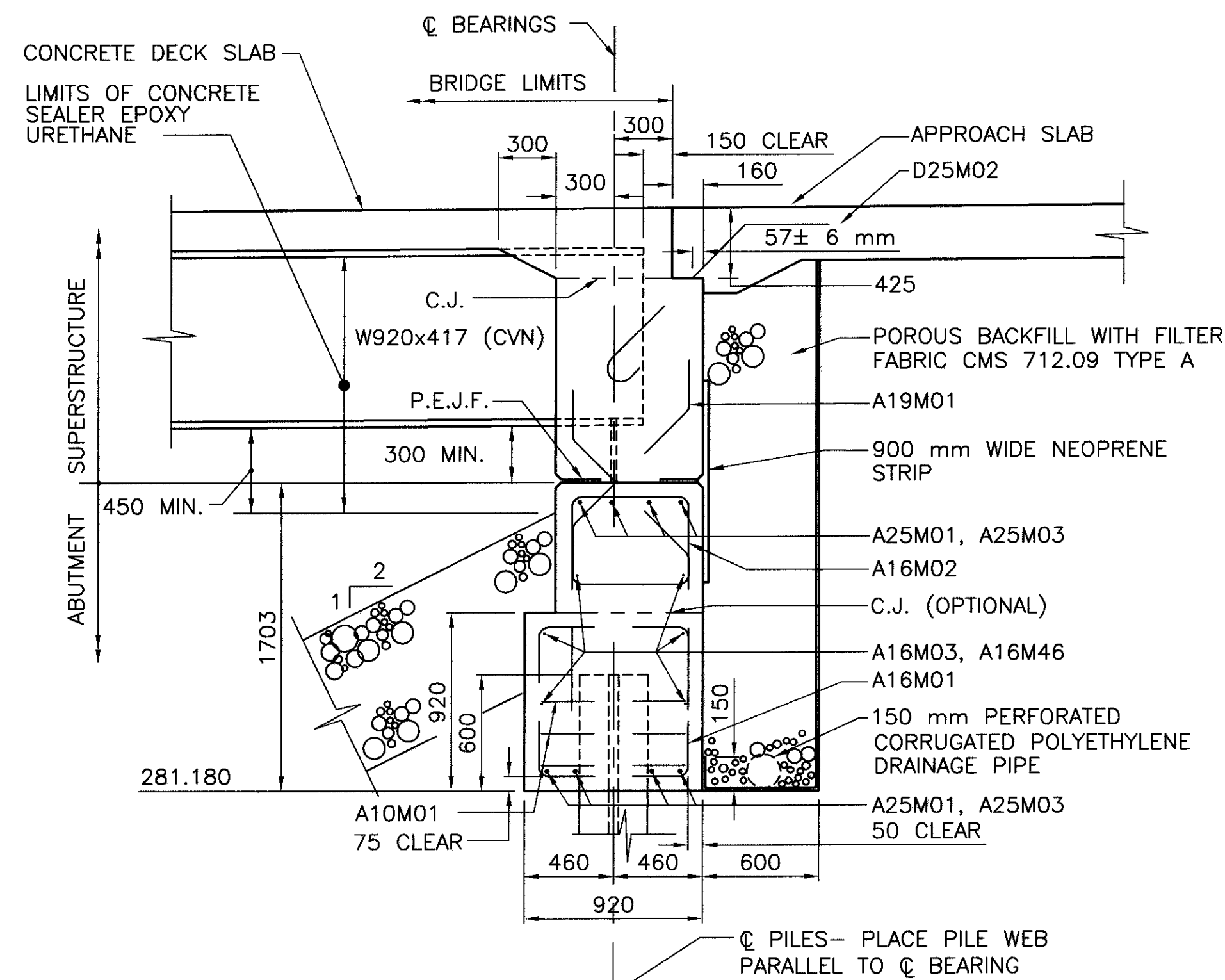
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/ 17

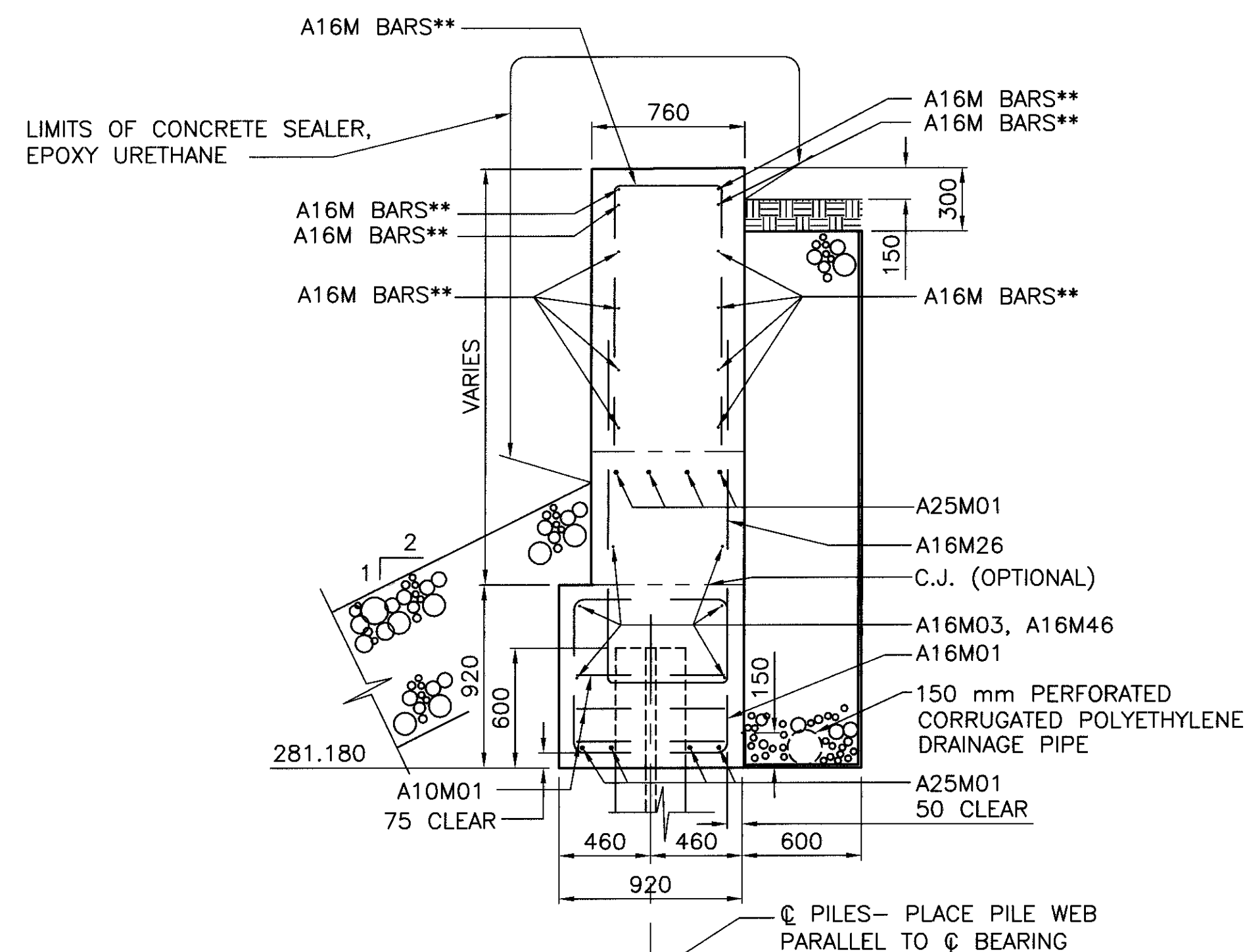
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SECTION C-C
RIGHT REAR

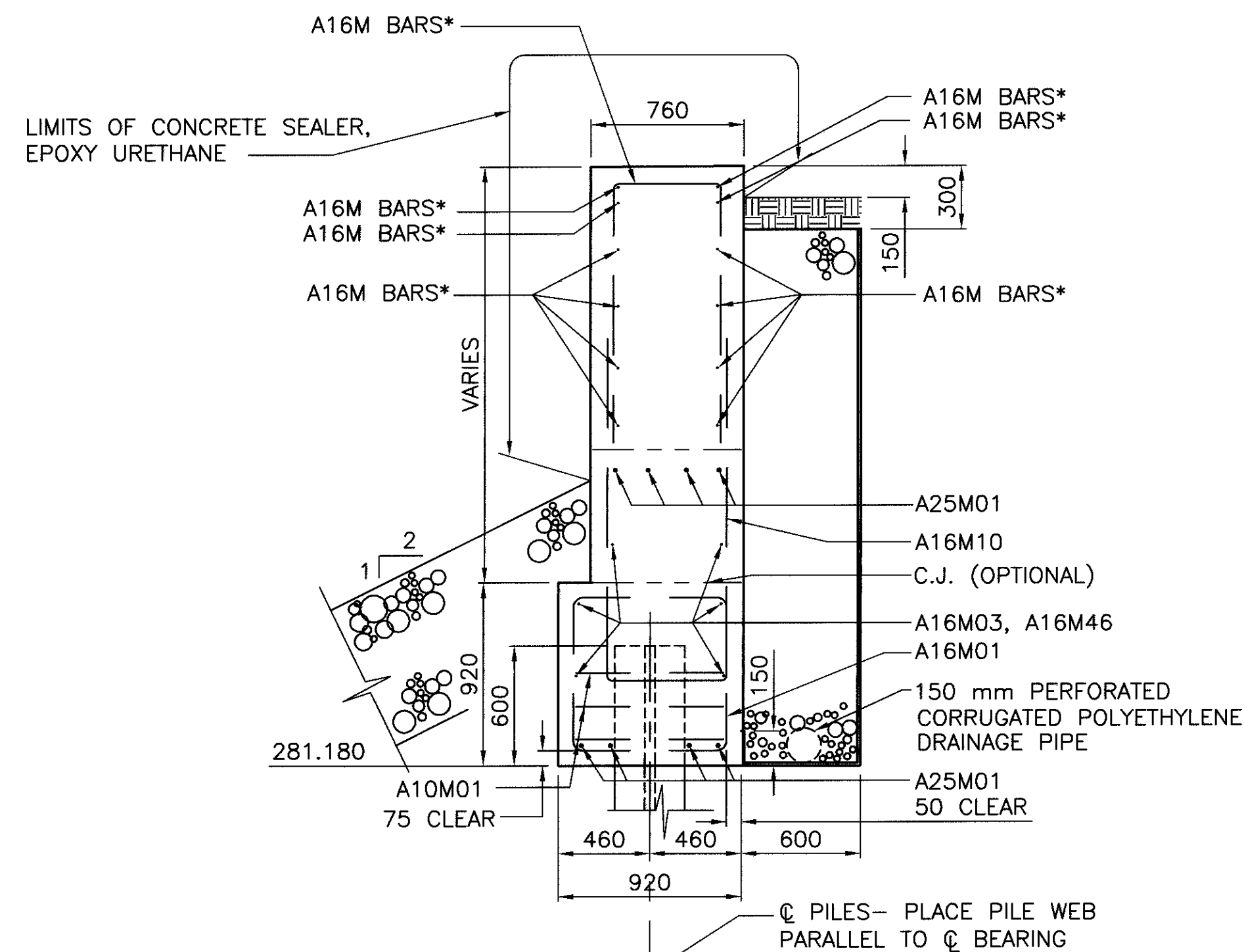


SECTION E-E
RIGHT FORWARD



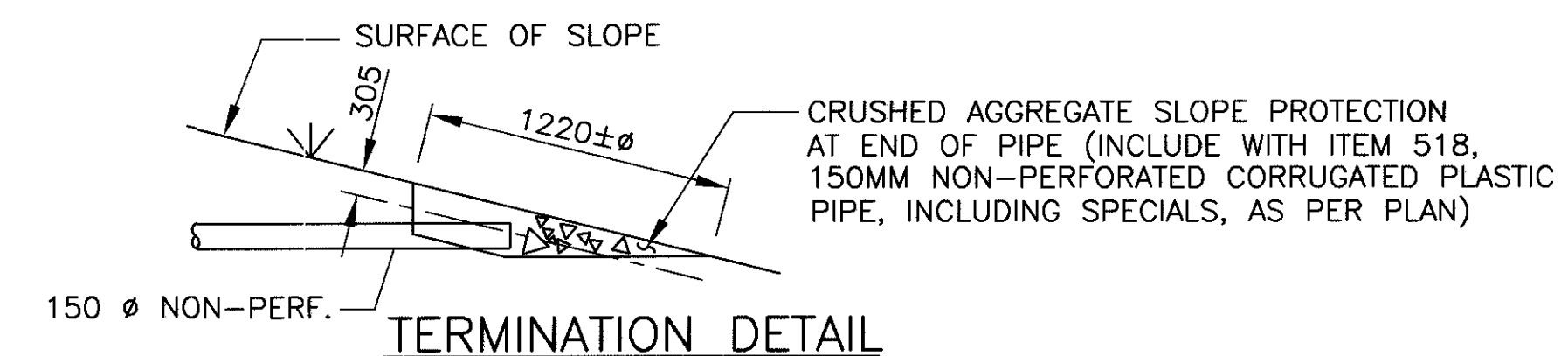
SECTION D-D
RIGHT REAR

** SEE SHEET 7/17 FOR BAR DESIGNATIONS



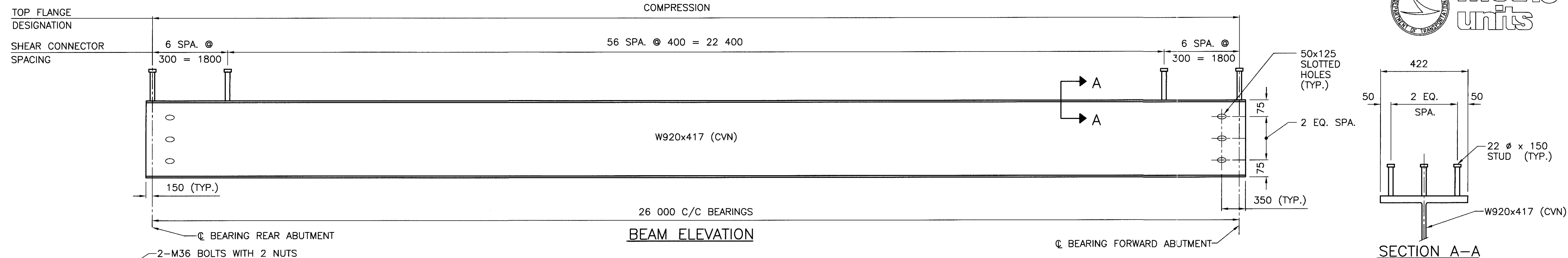
SECTION F-F
RIGHT FORWARD

* SEE SHEET 8/17 FOR BAR DESIGNATIONS



NOTES:

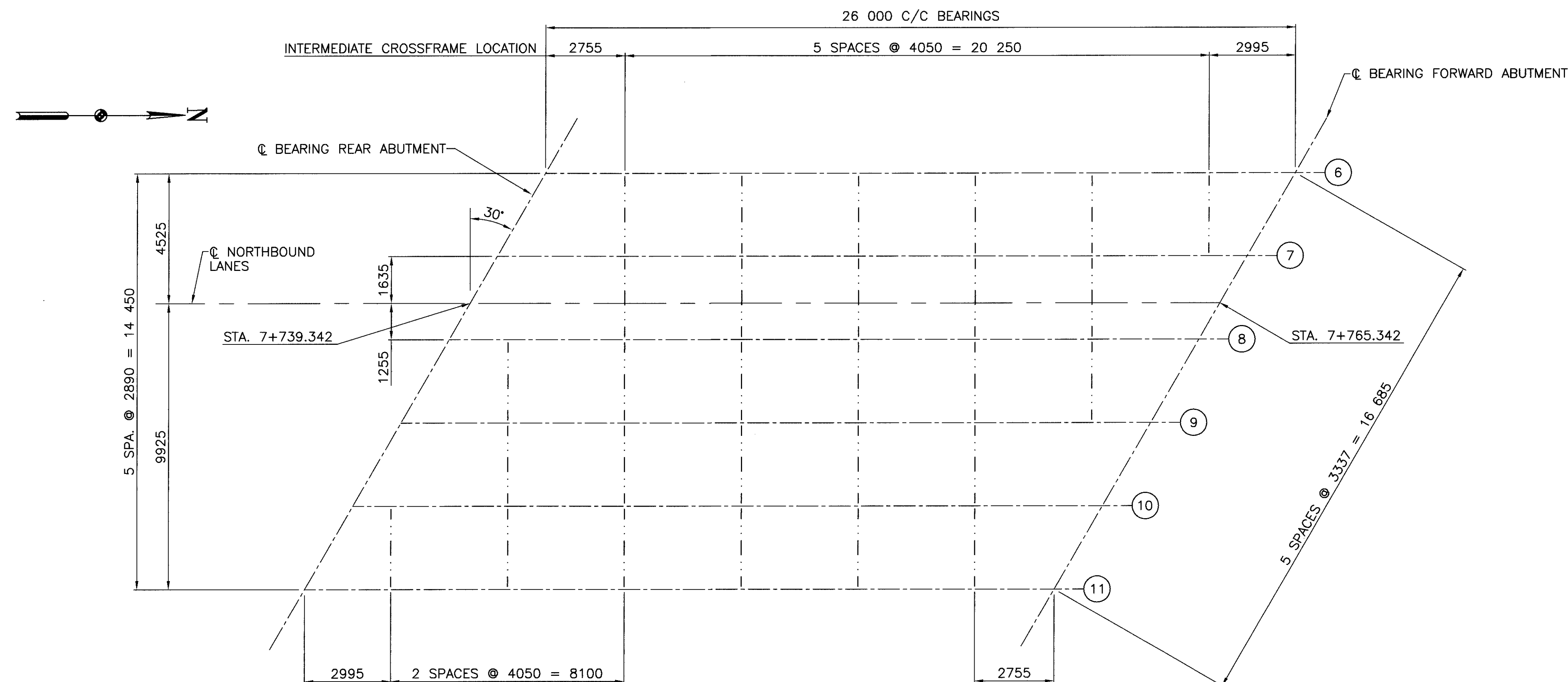
- 1) MINIMUM LAP LENGTHS SHALL BE 580 FOR NUMBER 16M BARS AND 1220 FOR NUMBER 25M BARS.
- 2) POROUS BACKFILL WITH FILTER FABRIC, 600 THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO 300mm BELOW THE EMBANKMENT SURFACE AND Laterally TO THE EDGE OF THE WINGWALL. GEOTEXTILE FABRIC SHALL CONFORM WITH 712.09, TYPE A. GEOTEXTILE FABRIC IS INCLUDED WITH POROUS BACKFILL FOR PAYMENT.
- 3) DECK ELEVATIONS SHOWN ARE ALONG EDGE OF APPROACH SLAB. ALL OTHER ELEVATIONS SHOWN AT NEAR FACE.



DIMENSION A		
BEAM NUMBER	REAR	FORWARD
6	428	439
7	466	473
8	464	468
9	409	412
10	355	356
11	300	302

SCREED ELEVATIONS					
LOCATION	CL BRG. REAR ABUT.	1/4 SPAN	MIDSPAN	3/4 SPAN	CL BRG. FWD. ABUT.
LEFT CURB	284.378	284.469	284.513	284.535	284.518
BEAM 6	284.390	284.481	284.524	284.546	284.528
PROFILE GRADE	284.402	284.493	284.536	284.558	284.539
BEAM 7	284.428	284.519	284.562	284.584	284.563
CL LANES	284.449	284.540	284.584	284.605	284.582
BEAM 8	284.425	284.517	284.560	284.581	284.558
BEAM 9	284.371	284.462	284.505	284.527	284.501
BEAM 10	284.316	284.407	284.451	284.472	284.446
BEAM 11	284.262	284.353	284.396	284.418	284.391
RIGHT CURB	284.245	284.336	284.380	284.401	284.375

DEFLECTION AND CAMBER					
LOCATION	CL BRG. REAR ABUT.	1/4 SPAN	MIDSPAN	3/4 SPAN	CL BRG. FWD. ABUT.
DEFLECTION DUE TO WEIGHT OF STEEL	0	11	16	11	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	59	70	59	0
ADJUSTMENT REQUIRED FOR VERTICAL CURVE	0	0	0	0	0
REQUIRED SHOP CAMBER	0	+70	+86	+70	0



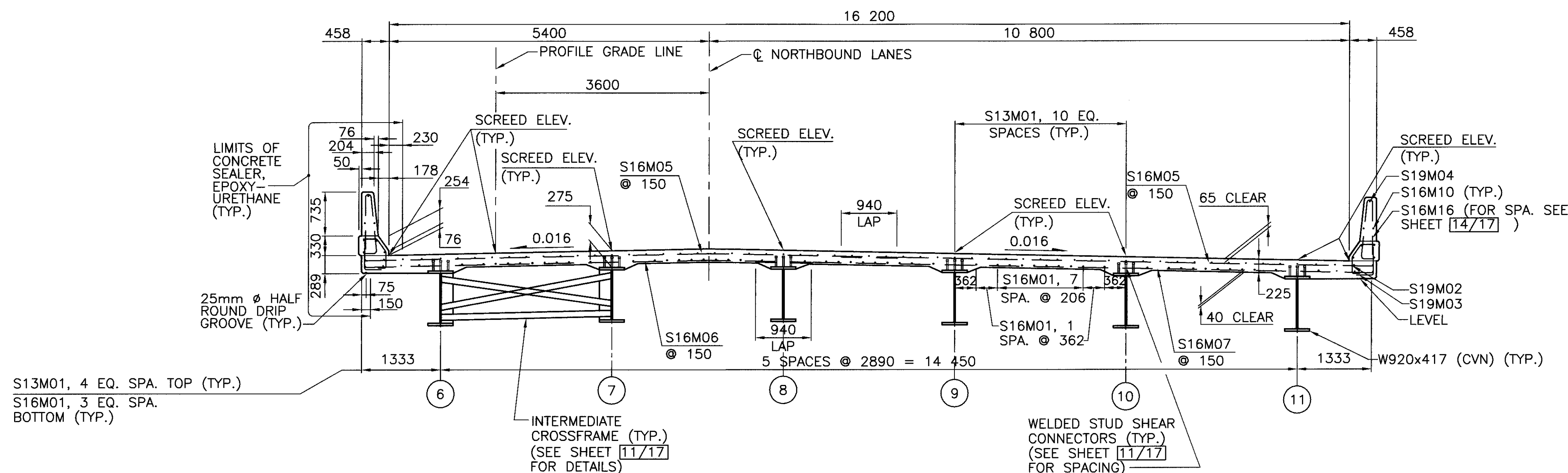
NOTES:

1) FOR ADDITIONAL NOTES SEE SHEET 10/17.

LEGEND:

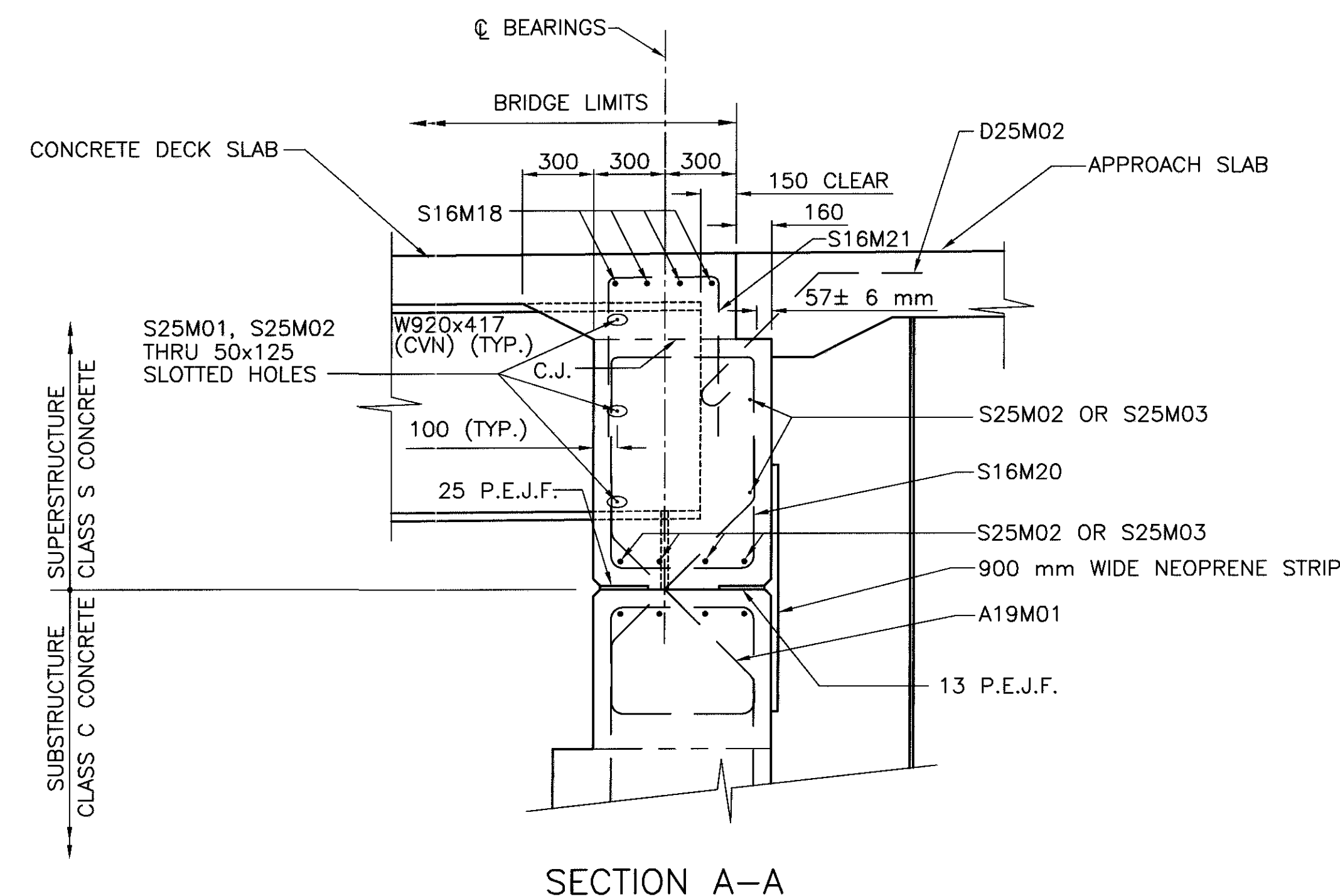
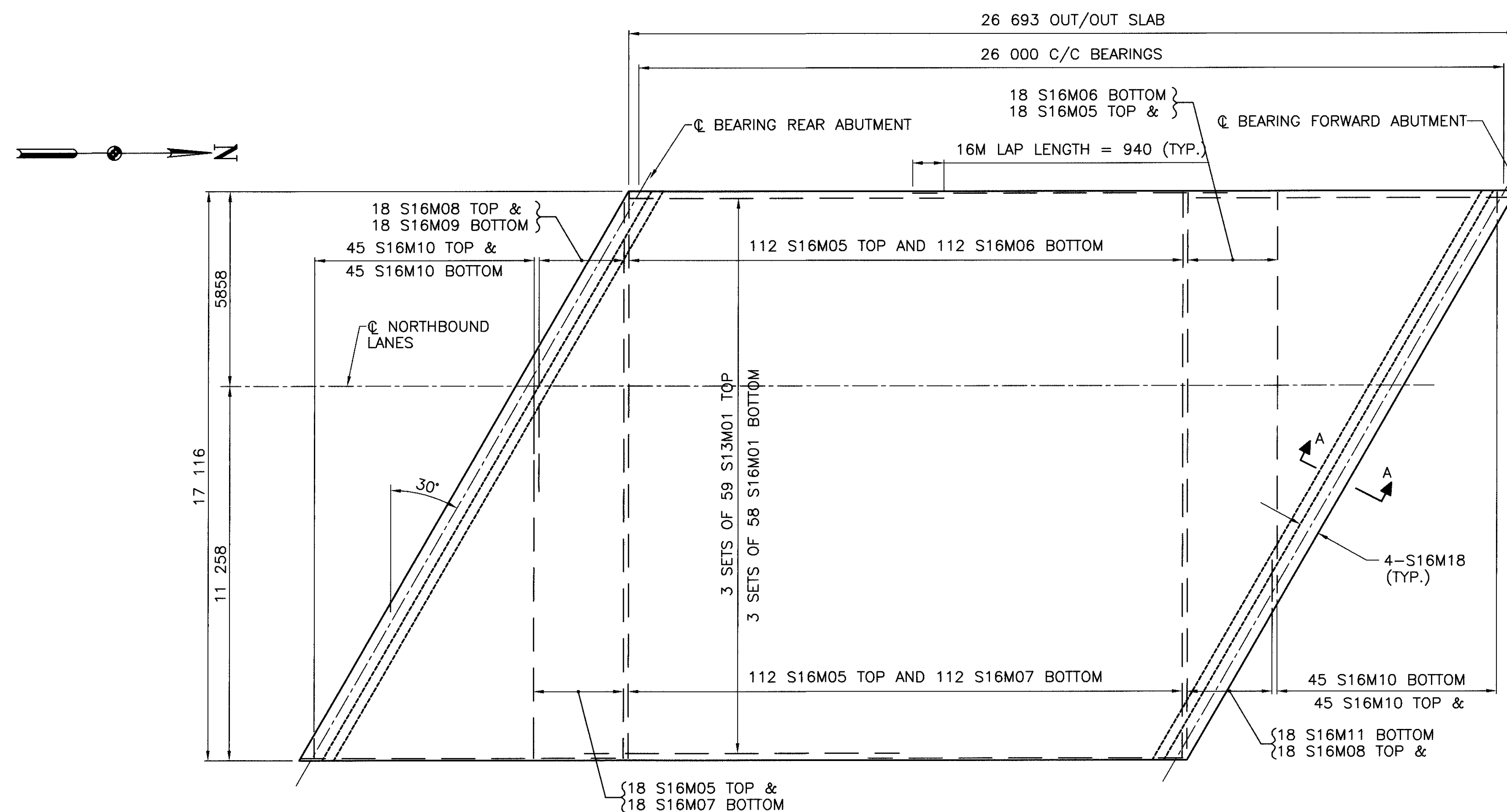
7 - BEAM NUMBER

SPA. - SPACES



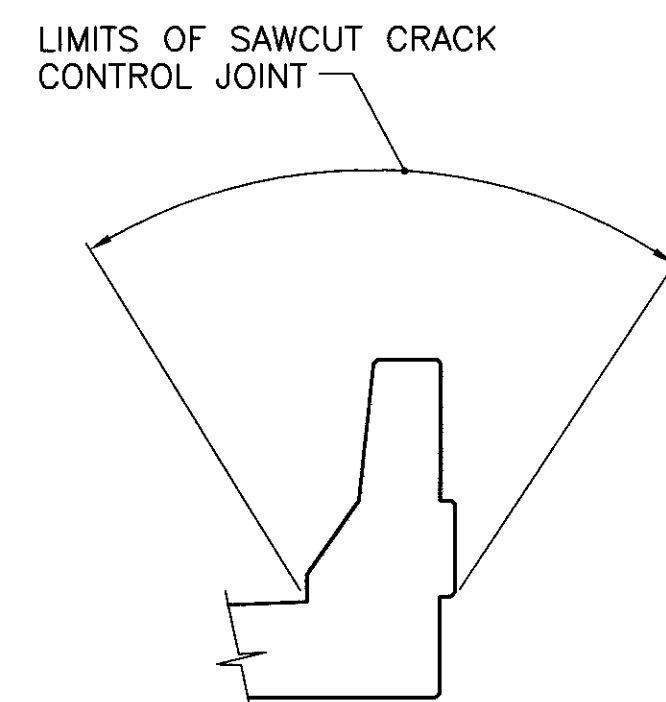
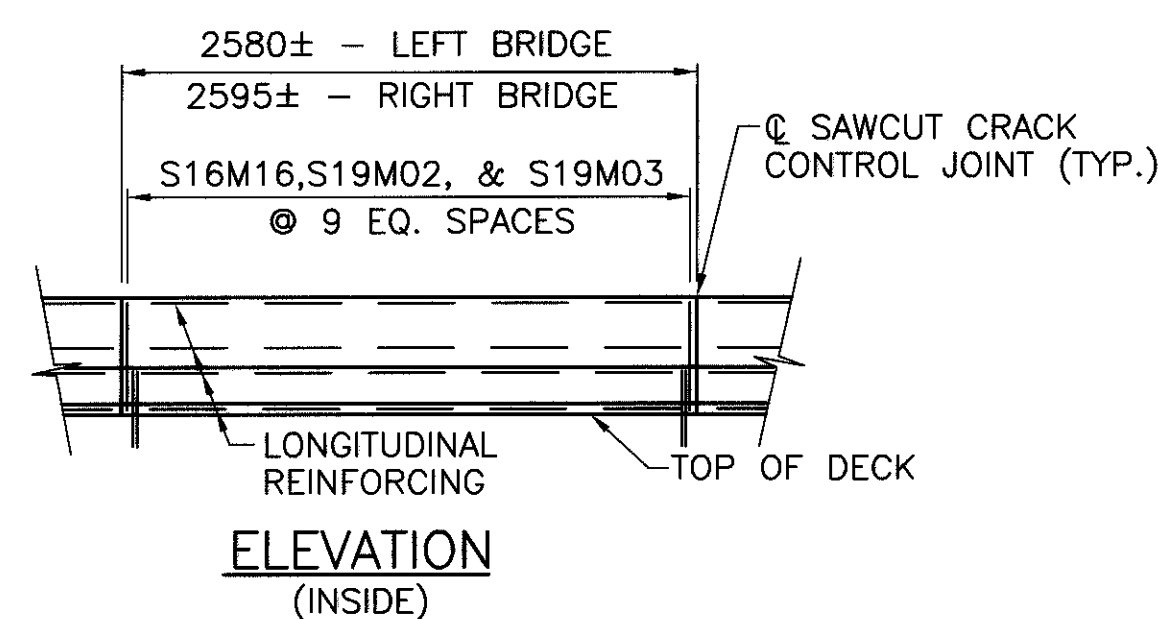
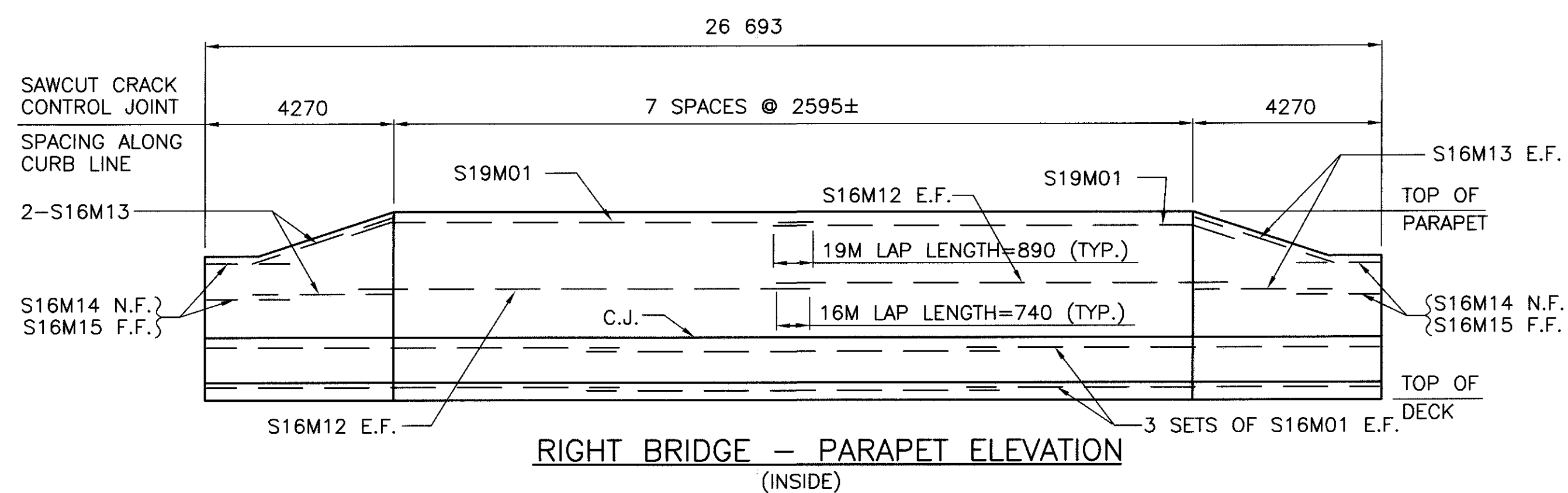
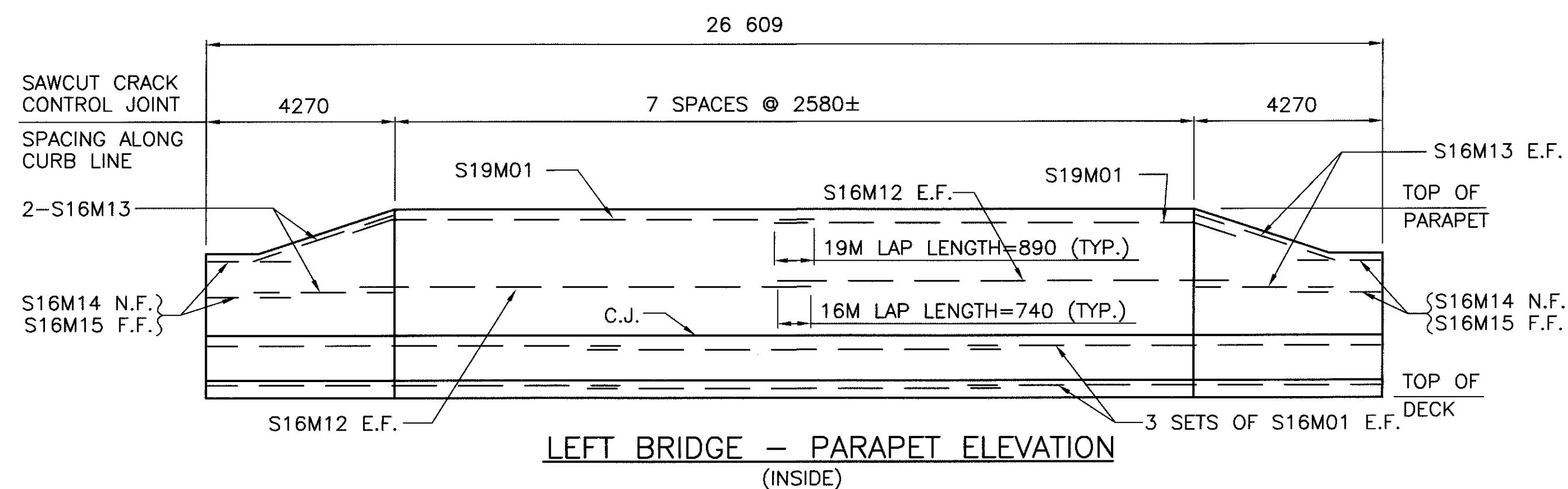
NOTE:

- 1) DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL MEMBER SECTIONS SUPPORTED IN INTEGRAL ABUTMENTS SHALL BE PLACED AT LEAST 48 HOURS BEFORE THE ACTUAL DECK CONCRETE IS PLACED.
- 2) DECK SLAB DEPTH: THE DISTANCE SHOWN FROM TOP OF DECK SLAB TO TOP OF STEEL BEAM IS THE THEORETICAL DESIGN DIMENSION INCLUDING THE DESIGN HAUNCH THICKNESS OF 50mm. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED ON THIS DIMENSION, MINUS THE DESIGN HAUNCH THICKNESS, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE BEAM MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISH GRADE.
- 3) A HAUNCH WIDTH OF 225mm SHALL BE USED FOR THE COMPUTING QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 150mm AND 300mm.
- 4) FOR END BLOCK REINFORCEMENT SPACING, SEE ABUTMENT DETAILS ON SHEETS 5/17 THRU 8/17.
- 5) FOR REINFORCING STEEL LIST, SEE SHEET 15/17.
- 6) FOR REINFORCING STEEL IN PARAPETS, SEE SHEET 14/17.
- 7) ALL REINFORCING TO BE EPOXY COATED.
- 8) ALL TRANSVERSE REINFORCING IN THE TOP OF THE SLAB SHALL BE SPLICED BETWEEN BEAMS 8 AND 9.
- 9) ALL TRANSVERSE REINFORCING IN THE BOTTOM OF THE SLAB SHALL BE SPLICED OVER BEAM 8.

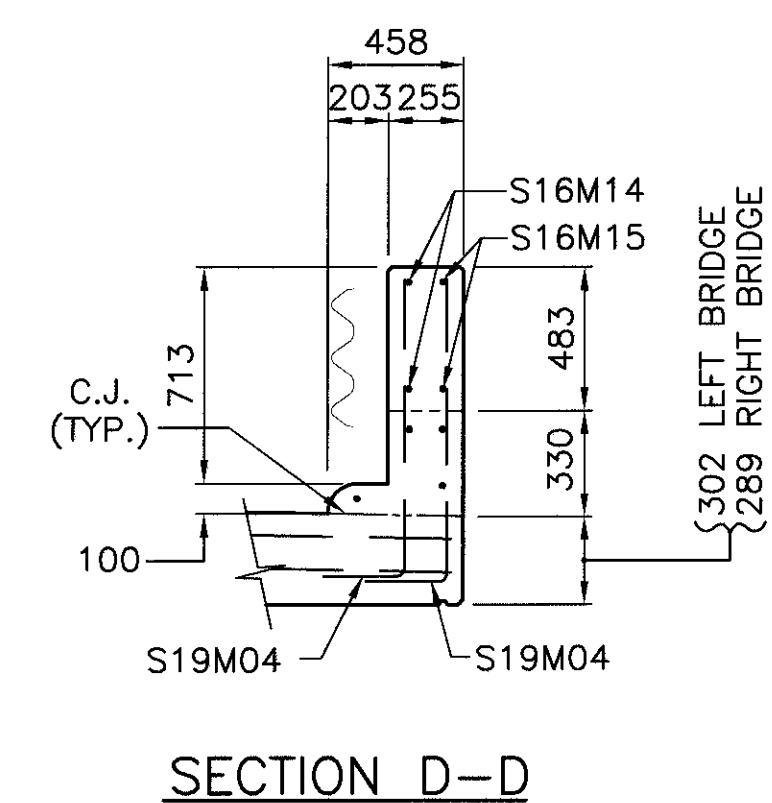
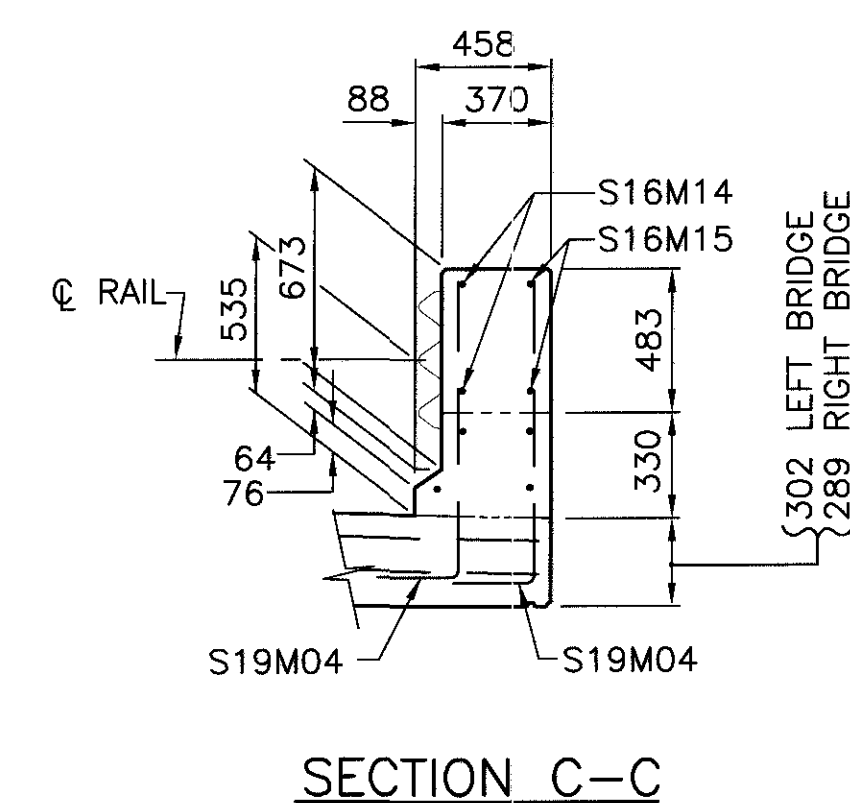
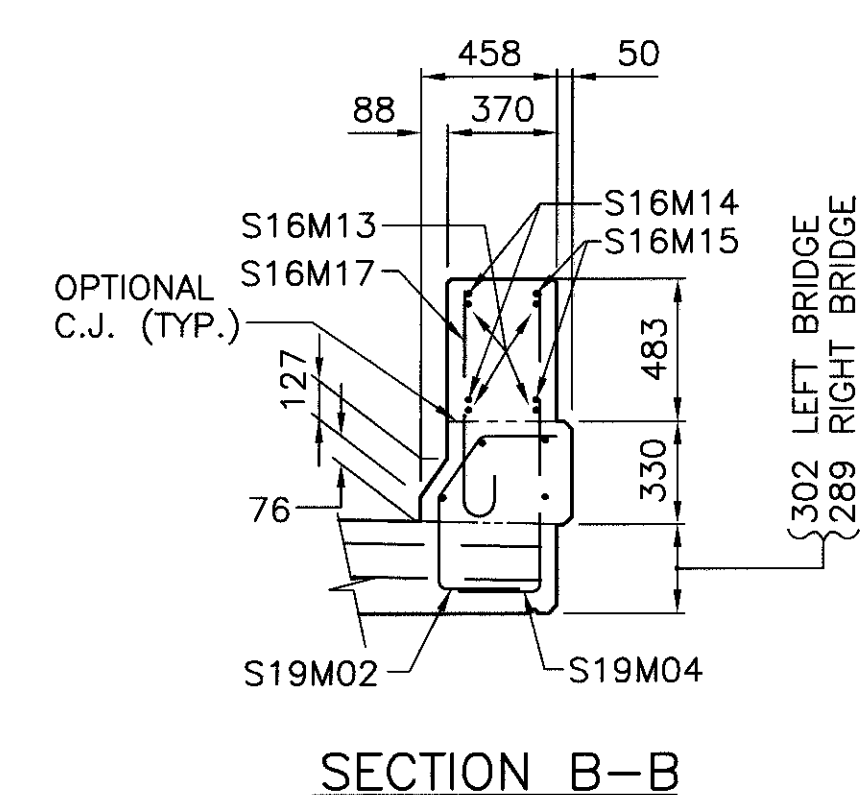
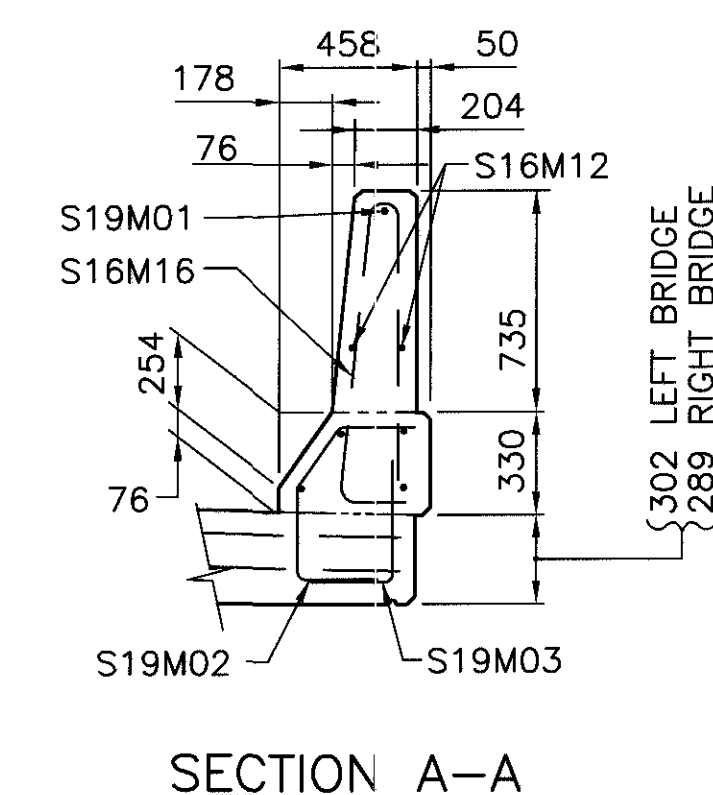
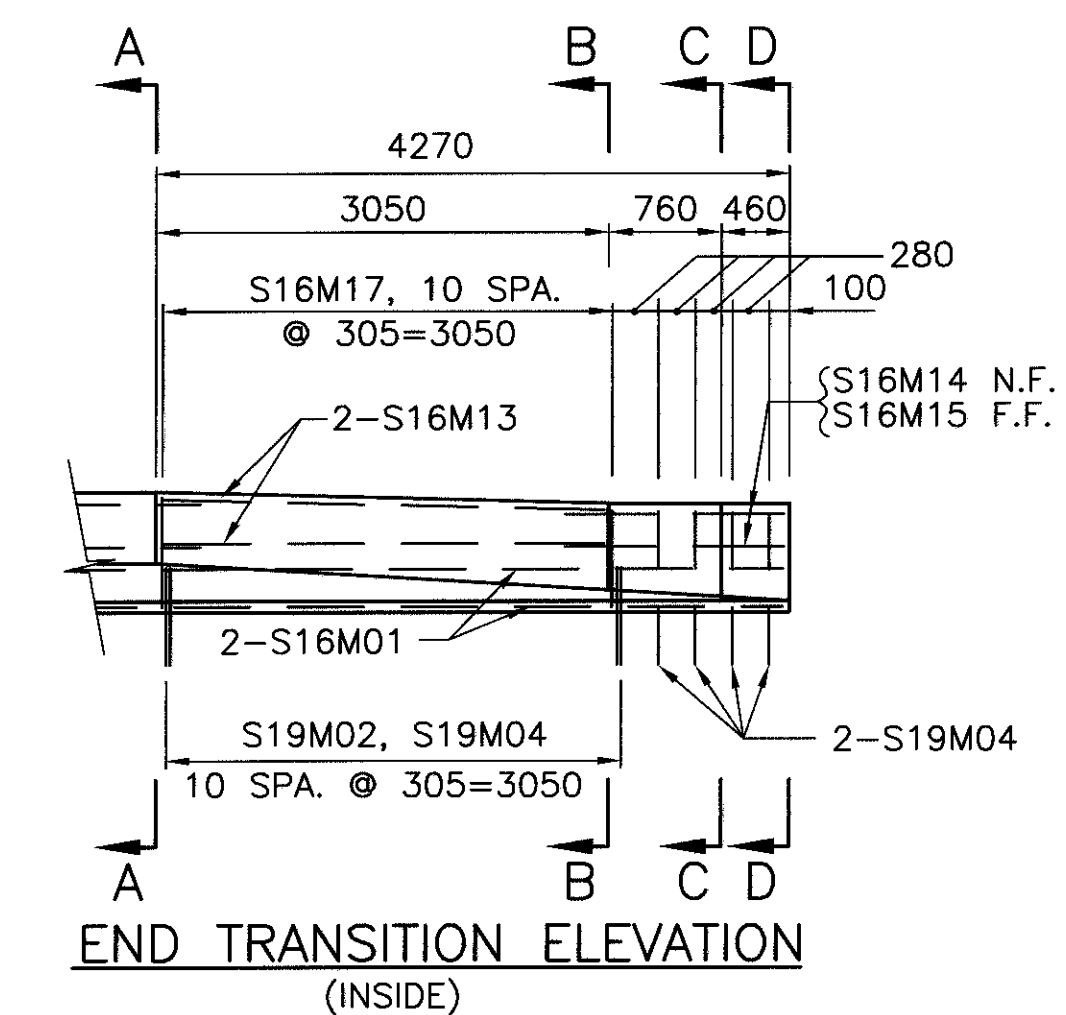


LEGEND:

- ⑦ - BEAM NUMBER
SPA. - SPACES
P.E.J.F. - PREFORMED EXPANSION JOINT FILLER



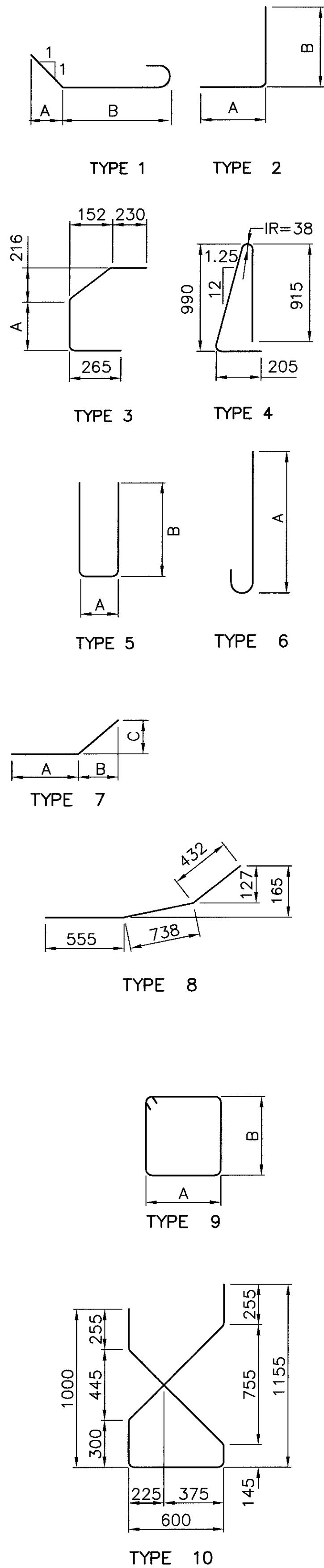
SAWCUT SHALL BE 32mm DEEP AND SHALL BE FILLED WITH CAULK. THE BOTTOM 13mm OF BOTH THE INSIDE AND OUTSIDE FACES OF THE PARAPET SHOULD BE LEFT UNSEALED TO ALLOW ANY WATER TO ESCAPE. CAULKING MATERIAL SHALL BE IN ACCORDANCE WITH FEDERAL SPECIFICATION TT-S-00227E. SEE SHEET 4/17 FOR ADDITIONAL NOTES.



NOTE: ALL LONGITUDINAL BARS ARE TO BE S16M01 UNLESS OTHERWISE NOTED.

LEGEND
E.F.-EACH FACE
N.F.-NEAR FACE
F.F.-FAR FACE
C.J.-CONSTRUCTION JOINT
SPA.-SPACES

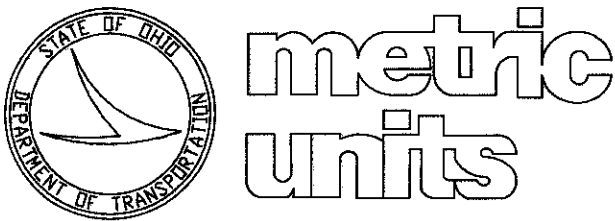
BENDING DIAGRAMS



MARK	NUMBER (LEFT)			NUMBER (RIGHT)			LENGTH	MASS		TYPE	DIMENSIONS				
	REAR	FWD	TOTAL	REAR	FWD	TOTAL		LEFT	RIGHT		A	B	C	SETS	INCR.
ABUTMENTS															
A10M01	24	24	48	33	33	66	2645	72	98	9	740	770			
A16M01	50	51	101	64	67	131	3110	488	633	9	770	770			
A16M02	37	37	74	51	51	102	3175	365	503	5	600	1325			
A16M03	12	12	24	12	12	24	9770	364	364	ST.					
A16M04	2	1	3		1	1	1010	5	2	ST.					
A16M05	2	2	4		1	1	1610	10	3	ST.					
A16M06	4	4	8		2	2	2190	28	7	ST.					
A16M07	2	2	4	3	1	4	1125	7	7	ST.					
A16M08	2	2	4	2		2	1725	11	6	ST.					
A16M09	4	4	8				2310	29		ST.					
A16M10		14	14		16	16	3725	81	93	5	600	1600			
A16M11	1	1	2				3405	11		5	600	1440			
A16M12				1		1	3085		5	5	600	1280			
A16M13	2	2	4				2450	16		7	2360	80	40		
A16M14	2	2	4				2565	16		7	2360	180	95		
A16M15		1	1				1060	2		ST.					
A16M16				4		4	1890		12	ST.					
A16M17				1		1	2065		4	7	1575	435	225		
A16M18				1		1	2105		4	7	1975	115	60		
A16M19				2	2	4	2805		9	ST.					
A16M20				2	2	4	3190		20	ST.					
A16M21				1	1	2	2135		7	ST.					
A16M22				1	1	2	2515		8	ST.					
A16M23				1	1	2	1455		5	ST.					
A16M24				1	1	2	1835		6	ST.					
A16M25				1	1	2	775		3	ST.					
A16M26	13		13	13		13	3445	70	70	5	600	1460			
A16M27	14	14	28		7	7	1180 TO 3405			5	600	330 TO 1440	5	370	
A16M28				7		7	1180 TO 3085			5	600	330 TO 1280	1	380	
A16M29				7	7	14	1180 TO 3585			5	600	330 TO 1530	2	300	
A16M30					1	1	2850		5	7	2360	430	225		
A16M31					1	1	3095		5	7	2965	115	55		
A16M32					1	1	3455		6	7	2965	445	200		
A16M33					1	1	2490		4	7	2360	110	60		
A16M34				6		6	7335		69	ST.					
A16M35				1		1	3075		5	7	2950	110	50		
A16M36				1		1	3435		6	7	2950	440	200		
A16M37					1	1	2015		4	ST.					
A16M38					2	2	2580		8	ST.					
A16M39	1	2	3				570	3		ST.					
A16M40	1		1				685	2		ST.					
A16M41	1	2	3		1	1	420	2		ST.					
A16M42	1		1				535	1		ST.					
A16M43					1	1	830		2	ST.					
A16M44					1	1	3585		6	5	600	1530			
A16M45					1	1	1425		3	ST.					
A16M46					6	6	7620		71	ST.					
A19M01	44	44	88	62	62	124	3100	610	860	10					
A25M01	16	16	32	16	16	32	10 090	1283	1283	ST.					
A25M02				8		8	7975		254	ST.					
A25M03					8	8	8260		263	ST.					
D25M01	30	29	59				1475	346		1	305	763			
D25M02				38	37	75	1590		474	1	305	880			
							TOTAL =	3922	5276						

MARK	NUMBER (LEFT)			NUMBER (RIGHT)			LENGTH	MASS		TYPE	DIMENSIONS				
	REAR	FWD	TOTAL	REAR	FWD	TOTAL		LEFT	RIGHT		A	B	C	SETS	INCR.
SUPERSTRUCTURE															
S13M01			141			177	9490	1330	1670	ST.					
S16M01			162			198	9490	2386	2917	ST.					
S16M02			177				5820	1599		ST.					
S16M03			354				7290	4005		ST.					
S16M04			177				8760	2407		ST.					
S16M05						262	8980		3652	ST.					
S16M06						131	7535		1532	ST.					
S16M07						131	10 425		2120	ST.					
S16M08						36	4270 TO 8690		362	ST.				2	260
S16M09						18	3115 TO 7535		149	ST.				1	260
S16M10						180	620 TO 12 050		1772	ST.				4	260
S16M11						18	5745 TO 10 165		223	ST.				1	260
S16M12			8			8	10 190	127	127	ST.					
S16M13			8			8	3050	38	38	ST.					
S16M14			4			4	1725	11	11	8					
S16M15			4			4	1725	11	11	ST.					
S16M16			140			140	2130	463	463	4					
S16M17			44			44	740 TO 990	60	60	6				8	25
S16M18						4	10 300		64	ST.					
S16M20	44	44	88	62	62	124	2130	291	410	9	650	970			
S16M21	44	44	88	62	62	124	1170	160	226	5	500	650			
S19M01			4			4	10 415	94	94	ST.					
S19M02			184			184	960	395	395	3	300				
S19M03			140			140	990	310	310	2	280	760			
S19M04			76			76	1240	211	211	2	280	1010			
S25M01				9	9	18	12 000		859	ST.					
S25M02	9	9	18	9	9	18	9580	686	686	ST.					
S25M03	9	9	18				5875	421		ST.					
							TOTAL =	15 005	18 783						

NOTE:
1) THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST TWO DIGITS INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, A 15M01 IS A 15M BAR. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE INDICATED. R INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED. "STD." WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BEND AT THE END OF THE BAR.
2) ALL REINFORCING STEEL TO BE EPOXY COATED.



ITEM 863 STRUCTURAL STEEL MEMBERS, LEVEL THREE (3) FABRICATION, AS PER PLAN

ADHESION (QCP #6)

BEFORE SEALING, THE QCPS MUST TEST FOR ADHESION IN ACCORDANCE WITH ASTM D 4541. THE QCPS MUST PERFORM FIVE (5) TESTS AT RANDOM LOCATIONS SELECTED BY THE QA INSPECTOR ON THE FIRST MAIN MEMBER, INCLUDING SPLICE PLATES. THEREAFTER, TEN PERCENT (10%) OF THE MAIN MATERIAL MUST BE TESTED IN THE SAME MANNER. FIVE PERCENT (5%) OF ALL SECONDARY MATERIAL MUST BE TESTED AT A RATE OF ONE (1) RECORDED READING. THE MINIMUM ACCEPTABLE ADHESION VALUE SHALL BE 1000 PSI [6.9 MPA].

SEAL COAT APPLICATION AND THICKNESS (QCP #7)

GENERAL

THE AREAS OF STRUCTURAL STEEL THAT ARE EMBEDDED IN, PARTIALLY EMBEDDED IN, OR IN CONTACT WITH CAST-IN-PLACE CONCRETE MUST BE SEALED (E.G., TOP AND SIDES OF TOP FLANGE). WHEN THE STRUCTURE IS AN INTEGRAL ABUTMENT, ALL METALLIZED SURFACES FROM THE END OF THE BEAM TO ONE (1) FOOT 9 [0.3 METER] PAST THE ABUTMENT INTERFACE MUST BE SEALED.

SEALER MATERIAL

AN AIR DRIED CLEAR PHENOLIC, EITHER "METALLIZING SEALER #9876" OR "9127", MANUFACTURED BY KEELER AND LONG (PPG)P.O. BOX 460, WATERTOWN, CT 06795, OR "METCO AP" MANUFACTURED BY METCO, OR EQUAL TO METCO AP MANUFACTURED BY AKRON PAINT & VARNISH.

SEALERS

ALL SEALER MUST BE DELIVERED TO THE FABRICATOR IN ORIGINAL, UNOPENED CONTAINERS WITH LABELS INTACT. MINOR DAMAGE TO CONTAINERS IS ACCEPTABLE PROVIDED THE CONTAINER HAS NOT BEEN PUNCTURED.

SEALER MUST BE STORED AT THE TEMPERATURE RECOMMENDED BY THE MANUFACTURER TO PREVENT SEALER DETERIORATION.

THE APPLICATOR MUST PROVIDE THERMOMETERS CAPABLE OF MONITORING THE MAXIMUM HIGH AND LOW TEMPERATURES WITHIN THE STORAGE FACILITY. THE APPLICATOR IS RESPONSIBLE FOR PROPERLY DISPOSING OF ALL UNUSED SEALER AND SEALER CONTAINERS.

THE QCPS MUST RECORD THE STORAGE TEMPERATURE, LOT AND STOCK NUMBERS, AND DATE OF MANUFACTURE OF THE SEALANT.

ALL CONTAINERS OF SEALER MUST REMAIN UNOPENED UNTIL USE. THE LABEL INFORMATION MUST BE LEGIBLE AND CHECKED AT THE TIME OF USE. SOLVENT USED FOR CLEANING EQUIPMENT IS EXEMPT FROM THE ABOVE REQUIREMENTS.

EACH CONTAINER OF SEALER MUST BE CLEARLY MARKED OR LABELED TO SHOW SEALER IDENTIFICATION, COMPONENT, LOT NUMBER, STOCK NUMBER, DATE OF MANUFACTURE, AND INFORMATION AND WARNINGS AS MAY BE REQUIRED BY FEDERAL AND STATE LAWS.

SEALER WHICH HAS LIVERED, GELLED OR OTHERWISE DETERIORATED DURING STORAGE MUST NOT BE USED. THE OLDEST SEALER OF EACH KIND MUST BE USED FIRST. NO SEALER MUST BE USED WHICH HAS SURPASSED ITS SHELF LIFE.

ENVIRONMENTAL CONDITIONS

SEALER MUST NOT BE APPLIED WHEN THE METALLIZING STEEL SURFACE TEMPERATURE IS LESS THAN 5° F [2.8° C] ABOVE THE DEW POINT. THE SURFACES TO BE SEALED MUST BE DRY. SEALERS SHALL NOT BE APPLIED IN RAIN, SNOW, FOG OR MIST, OR TO FROSTED OR ICE-COATED SURFACES. THE AMBIENT TEMPERATURE MUST BE PER THE SEALER MANUFACTURER'S RECOMMENDATIONS.

EQUIPMENT AND TECHNIQUES

SEALERS MUST BE APPLIED BY SPRAY METHODS. SPRAY EQUIPMENT MUST BE KEPT CLEAN SO DIRT, DRIED SEALER AND OTHER FOREIGN MATERIALS ARE NOT DEPOSITED IN THE SEALER FILM. ANY SOLVENT LEFT IN THE EQUIPMENT MUST BE COMPLETELY REMOVED BEFORE USING.

THE QCPS MUST DOCUMENT THAT ALL SPRAY EQUIPMENT USED FOLLOWS THE SEALER MANUFACTURER'S EQUIPMENT RECOMMENDATIONS. EQUIPMENT MUST BE SUITABLE FOR USE WITH THE SPECIFIED SEALER TO AVOID SEALER APPLICATION PROBLEMS.

IF AIR SPRAY IS USED, TRAPS OR SEPARATORS MUST BE PROVIDED TO REMOVE OIL AND CONDENSED WATER FROM THE AIR. THE TRAPS OR SEPARATORS MUST BE OF ADEQUATE SIZE AND MUST BE DRAINED PERIODICALLY DURING OPERATIONS.

THE SEAL COAT THICKNESS MUST BE A MINIMUM OF 1 MIL [25 µM] OVER THE SURFACE AND PEAKS OF THE METALLIZING. THIS THICKNESS SHALL BE VERIFIED BY THE QCPS. PINHOLING MUST BE AVOIDED BY METHOD OF APPLICATION.

THE APPLICATOR MUST TAKE PRECAUTION TO PREVENT CONTAMINATION OF SURFACES THAT HAVE BEEN PREPARED FOR SEALING AND SURFACES FRESHLY SEALED. THE SURFACE TO BE SEALED SHALL BE CLEAN AND DRY. THE SEALER MUST BE APPLIED WITHIN EIGHT (8) HOURS OF THE COMPLETION OF THE METALLIZING.

THE SEALER MUST BE APPLIED IN THE SHOP. THE STEEL MUST NOT BE HANDLED UNNECESSARILY OR REMOVED FROM THE SHOP UNTIL THE SEALER HAS DRIED SUFFICIENTLY TO RESIST BEING MARRED IN HANDLING AND SHIPPING.

THE QCPS MUST RECORD THE TIME BETWEEN METALLIZING AND SEAL COAT APPLICATION. THE QCPS MUST RECORD THE AMBIENT TEMPERATURE AND HUMIDITY NO MORE THAN ONE (1) HOUR BEFORE APPLICATION OF THE SEAL COAT. ENVIRONMENTAL CONDITIONS MUST BE MONITORED EVERY FOUR (4) HOURS DURING THE SEALING OPERATION.

THE SAME TEST FOR ABRASIVE BLASTING AIR CONTAMINATION MUST BE MADE BY THE SEALER APPLICATOR AND VERIFIED BY THE QCPS TO ENSURE THAT THE TRAPS OR SEPARATORS ARE WORKING PROPERLY. THIS IS NOT REQUIRED FOR AN AIRLESS SPRAYER.

FIELD REVIEW (QCP #8)

WHILE APPROVAL OF THE SHOP METALLIZED COATING IS REQUIRED BEFORE SHIPMENT THERE WILL BE POSSIBLE DAMAGE TO THE METALLIZED COATING AND THE SEALER DUE TO FIELD ERECTION AND CONSTRUCTION OPERATIONS.

SPECIFIED AREAS OF FIELD WELDING MUST REQUIRE THE REMOVAL OF THE METALLIZED COATING BY GRINDING OR OTHER METHODS ACCEPTABLE TO THE ENGINEER.

APPLICATION OF WELDED SHEAR STUDS WILL REQUIRE WELDING THROUGH A THIN LAYER OF ZINC COATING SIMILAR TO INORGANIC ZINC PAINT. THE WELDING OF THE STUDS WILL NOT REQUIRE REMOVAL OF THE METALLIZED COATING, BUT STUD WELDING PROCEDURES MAY REQUIRE ADJUSTMENT TO MEET THE PRODUCTION CONTROL REQUIREMENTS, SECTION 7.7, OF AWS D1.5 BRIDGE WELDING CODE. OTHER AREAS OF FIELD WELDING WILL REQUIRE REMOVAL OF THE METALLIZED COATING. REMOVAL LIMITS SHOULD BE MINIMIZED TO WHERE THE WELDING IS APPLIED.

SMALL AREAS OF METALLIZING LESS THAN ONE (1) SQUARE FOOT [0.1 SQUARE METER] THAT ARE REMOVED, MARRED, DAMAGED, OR REJECTED MUST BE REPAIRED ACCORDING TO ASTM A780, ANNEX 1 OR 3. LARGER AREAS OF METALLIZING MUST BE REPAIRED BY REMOVAL AND REPLACEMENT AS SPECIFIED HEREIN. THE COATING AT THE WELDED SHEAR STUD LOCATIONS WILL NOT REQUIRE REPAIR. AT THE COMPLETION OF CONSTRUCTION, THE METALLIZED COATING MUST BE UNDAMAGED AND THE SURFACES FREE FROM GREASE, OIL, CHALK MARKS, PAINT, CONCRETE SPLATTER OR OTHER SOILAGE.

THE ENGINEER MUST VISUALLY INSPECT THE METALLIZING TO ESTABLISH THAT FIELD WELDED AND DAMAGED AREAS ARE REPAIRED AS PER THIS SPECIFICATION.

HANDLING AND SHIPPING

REASONABLE CARE MUST BE EXERCISED IN HANDLING THE METALLIZED STEEL DURING SHIPPING, ERECTION, AND SUBSEQUENT CONSTRUCTION OF THE BRIDGE. THE STEEL MUST BE INSULATED FROM THE BINDING CHAINS BY SOFTENERS. HOOKS AND SLINGS USED TO HOIST STEEL MUST BE PADDED. DIAPHRAGMS AND SIMILAR PIECES MUST BE SPACED IN SUCH A WAY THAT NO RUBBING WILL OCCUR DURING SHIPMENT THAT MAY DAMAGE THE METALLIZING. THE STEEL MUST BE STORED ON PALLETS AT THE JOB SITE, OR BY OTHER MEANS, SO THAT IT DOES NOT REST ON THE GROUND OR SO THAT COMPONENTS DO NOT FALL OR REST ON EACH OTHER.

SAFETY REQUIREMENTS AND PRECAUTIONS

THE CONTRACTOR MUST MEET THE SAFETY REQUIREMENTS OF THE OHIO INDUSTRIAL COMMISSION AND THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), IN ADDITION TO THE SCAFFOLDING REQUIREMENTS BELOW.

THE CONTRACTOR IS REQUIRED TO MEET THE APPLICABLE SAFETY REQUIREMENTS OF THE OHIO INDUSTRIAL COMMISSION IN ADDITION TO THE SCAFFOLDING REQUIREMENTS SPECIFIED BELOW.

SCAFFOLDING

RUBBER ROLLERS, OR OTHER PROTECTIVE DEVICES MEETING THE APPROVAL OF THE ENGINEER, MUST BE USED ON SCAFFOLD FASTENINGS. METAL ROLLERS OR CLAMPS AND OTHER TYPES OF FASTENINGS WHICH WILL MAR OR DAMAGE COATED SURFACES MUST NOT BE USED.

INSPECTION ACCESS FOR FIELD REPAIR

IN ADDITION TO THE REQUIREMENT OF 105.11, THE CONTRACTOR MUST FURNISH, ERECT, AND MOVE SCAFFOLDING AND OTHER APPROPRIATE EQUIPMENT, TO PERMIT THE INSPECTOR THE OPPORTUNITY TO INSPECT (CLOSELY OBSERVE), ALL AFFECTED SURFACES. THIS OPPORTUNITY MUST BE PROVIDED TO THE INSPECTOR DURING ALL PHASES OF THE WORK AND CONTINUE FOR A PERIOD OF AT LEAST TEN (10) WORKING DAYS AFTER THE TOUCH-UP WORK HAS BEEN COMPLETED. WHEN SCAFFOLDING IS USED, IT MUST BE PROVIDED IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS. WHEN SCAFFOLDING, OR THE HANGERS ATTACHED TO THE SCAFFOLDING ARE SUPPORTED BY HORIZONTAL WIRE ROPES, OR WHEN SCAFFOLDING IS PLACED DIRECTLY UNDER THE SURFACE TO BE PAINTED, THE FOLLOWING REQUIREMENTS MUST BE COMPLIED WITH:

WHEN SCAFFOLDING IS SUSPENDED 43" [1100 MM] OR MORE BELOW THE COATED SURFACE TO BE REPAIRED, TWO ROWS OF GUARDRAIL MUST BE PLACED ON ALL SIDES OF THE SCAFFOLDING. ONE ROW OF GUARDRAIL MUST BE PLACED AT 42" [1050 MM] ABOVE THE SCAFFOLDING AND THE OTHER ROW AT 20" [500 MM] ABOVE THE SCAFFOLDING.

WHEN THE SCAFFOLDING IS SUSPENDED AT LEAST 21" [530 MM], BUT LESS THAN 43" [1100 MM] BELOW THE COATED SURFACE TO BE REPAIRED, A ROW OF GUARDRAIL MUST BE PLACED ON ALL SIDES OF THE SCAFFOLDING AT 20" [500 MM] ABOVE THE SCAFFOLDING.

TWO ROWS OF GUARDRAIL MUST BE PLACED ON ALL SIDES OF SCAFFOLDING NOT PREVIOUSLY MENTIONED. THE ROWS OF GUARDRAIL MUST BE PLACED AT 42" [1050 MM] AND 20" [500 MM] ABOVE SCAFFOLDING, AS PREVIOUSLY MENTIONED.

ALL SCAFFOLDING MUST BE AT LEAST 24" [610 MM] WIDE WHEN GUARDRAIL IS USED AND 28" [710 MM] WIDE WHEN THE SCAFFOLDING IS SUSPENDED LESS THAN 21" [530 MM] BELOW THE COATED SURFACE TO BE REPAIRED AND GUARDRAIL IS NOT USED. IF TWO OR MORE SCAFFOLDING ARE LAID PARALLEL TO ACHIEVE THE PROPER WIDTH, THEY MUST BE RIGIDLY ATTACHED TO EACH OTHER TO PRECLUDE ANY DIFFERENTIAL MOVEMENT.

ALL GUARDRAIL MUST BE CONSTRUCTED AS A SUBSTANTIAL BARRIER WHICH IS SECURELY FASTENED IN PLACE AND IS FREE FROM PROTRUDING OBJECTS SUCH AS NAILS, SCREWS AND BOLTS. THERE MUST BE AN OPENING IN THE GUARDRAIL, PROPERLY LOCATED, TO ALLOW THE INSPECTOR ACCESS ONTO THE SCAFFOLDING.

THE RAILS AND UPRIGHTS MUST BE EITHER METAL OR WOOD. IF PIPE RAILING IS USED, THE RAILING MUST HAVE A NOMINAL DIAMETER OF NO LESS THAN ONE AND ONE HALF INCHES. IF STRUCTURAL STEEL RAILING IS USED, THE RAILS MUST BE 2 X 2 X 3/8 INCH [50 X 50 X 10 MM] STEEL ANGLES OR OTHER METAL SHAPES OF EQUAL OR GREATER STRENGTH. IF WOOD RAILING IS USED, THE RAILING MUST BE 2 X 4 INCH [50 X 100 MM] (NOMINAL) STOCK. ALL UPRIGHTS MUST BE SPACED AT NO MORE THAN 8 FEET [2.4 M] ON CENTER. IF WOOD UPRIGHTS ARE USED, THE UPRIGHTS MUST BE 2 X 4 INCHES [50 X 100 MM] (NOMINAL) STOCK.

WHEN THE SURFACE TO BE INSPECTED IS MORE THAN 15 FEET [4.6 M] ABOVE THE GROUND OR WATER, AND THE SCAFFOLDING IS SUPPORTED FROM THE STRUCTURE BEING COATED, THE CONTRACTOR MUST PROVIDE THE INSPECTOR WITH A SAFETY BELT AND LIFELINE. THE LIFELINE MUST NOT ALLOW A FALL GREATER THAN 6 FEET [2 M]. THE CONTRACTOR MUST PROVIDE A METHOD OF ATTACHING THE LIFELINE TO THE STRUCTURE INDEPENDENT OF THE SCAFFOLDING, CABLES, OR BRACKETS SUPPORTING THE SCAFFOLDING.

WHEN SCAFFOLDING IS MORE THAN TWO AND ONE HALF FEET [0.75 M] ABOVE THE GROUND, THE CONTRACTOR MUST PROVIDE A LADDER FOR ACCESS ONTO THE SCAFFOLDING. THE LADDER AND ANY EQUIPMENT USED TO ATTACH THE LADDER TO THE STRUCTURE MUST BE CAPABLE OF SUPPORTING 250 POUNDS [115 KG] WITH A SAFETY FACTOR OF AT LEAST FOUR (4). ALL RUNGS, STEPS, CLEATS, OR TREADS MUST HAVE UNIFORM SPACING AND MUST NOT EXCEED 12" [305 MM] ON CENTER. AT LEAST ONE SIDE RAIL MUST EXTEND AT LEAST 36" [915 MM] ABOVE THE LANDING NEAR THE TOP OF THE LADDER.

AN ADDITIONAL LANDING MUST BE REQUIRED WHEN THE DISTANCE FROM THE LADDER TO THE POINT WHERE THE SCAFFOLDING MAY BE ACCESSED, EXCEEDS 12" [305 MM]. THE LANDING MUST BE A MINIMUM OF AT LEAST 24" [610 MM] WIDE AND 24" [610 MM] LONG. IT MUST ALSO BE OF ADEQUATE SIZE AND SHAPE SO THAT THE DISTANCE FROM THE LANDING TO THE POINT WHERE THE SCAFFOLDING IS ACCESSED DOES NOT EXCEED 12" [305 MM]. THE LANDING MUST BE RIGID AND FIRMLY ATTACHED TO THE LADDER; HOWEVER, IT MUST NOT BE SUPPORTED BY THE LADDER. THE SCAFFOLDING MUST BE CAPABLE OF SUPPORTING A MINIMUM OF 1000 LBS [455 KG].

IN ADDITION TO THE AFOREMENTIONED REQUIREMENTS, THE CONTRACTOR IS STILL RESPONSIBLE TO OBSERVE AND COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS, ORDINANCES, REGULATIONS, ORDERS AND DECREES.

THE CONTRACTOR MUST FURNISH ALL NECESSARY TRAFFIC CONTROL TO PERMIT INSPECTION DURING AND AFTER ALL PHASES OF THE PROJECT.

PROTECTION OF PERSONS AND PROPERTY

THE CONTRACTOR MUST INSTALL AND MAINTAIN SUITABLE SHIELDS OR ENCLOSURES TO PREVENT DAMAGE TO ADJACENT BUILDINGS, PARKED CARS, TRUCKS, BOATS, OR VEHICLES TRAVELING ON, OVER, OR UNDER STRUCTURES HAVING GALVANIZED REPAIRS. THEY MUST BE SUITABLY ANCHORED AND REINFORCED TO PREVENT INTERFERING WITH NORMAL TRAFFIC OPERATIONS IN THE OPEN LANES. PAYMENT FOR THE SHIELDS MUST BE INCLUDED AS INCIDENTAL TO THE APPLICABLE FIELD COATING OPERATION. WORK MUST BE SUSPENDED WHEN DAMAGE TO ADJACENT BUILDINGS, MOTOR VEHICLES, BOATS, OR OTHER PROPERTY IS OCCURRING.

WHEN OR WHERE ANY DIRECT OR INDIRECT DAMAGE OR INJURY IS DONE TO PUBLIC OR PRIVATE PROPERTY, THE CONTRACTOR MUST RESTORE, AT HIS OWN EXPENSE, SUCH PROPERTY, TO A CONDITION SIMILAR OR EQUAL TO THAT EXISTING BEFORE SUCH DAMAGE OR INJURY WAS DONE.

POLLUTION CONTROL

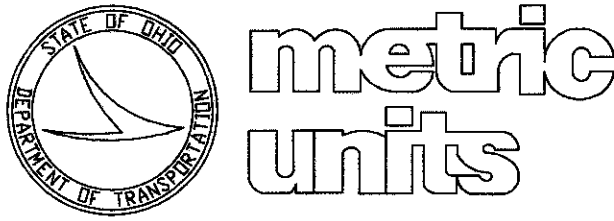
THE CONTRACTOR MUST TAKE ALL NECESSARY PRECAUTIONS TO COMPLY WITH POLLUTION CONTROL LAWS, RULES OR REGULATIONS OF FEDERAL, STATE OR LOCAL AGENCIES.

METHOD OF MEASUREMENT

THE COST OF ALL LABOR, MATERIALS, EQUIPMENT NECESSARY TO METALLIZE , TO FABRICATE THE STRUCTURAL STEEL IN ACCORDANCE WITH SS863 AND PERFORM ANY NECESSARY FIELD REPAIR SHALL BE INCLUDED IN THIS SS 863, AS PER PLAN ITEM.

BASIS OF PAYMENT

PAYMENT WILL BE MADE AT CONTRACT PRICES FOR THE APPLICABLE 863 AS PER PLAN ITEM.



DESIGN AGENCY
HAMMONTREE & ASSOCIATES, LTD.
ENGINEERS, PLANNERS, SURVEYORS
PITTSBURGH AKRON
CANTON
ALDING/CONTRUBA/BRONG

DATE
3-10-00
REVIEWED
KAB
DRAWN
CJP
CHECKED
KJO
STRUCTURE FILE NUMBER
7803133 L / 7803192 R

METALLIZING NOTES 2
BRIDGE NO. TRU-62-07745L&R
OVER LITTLE YANKEE CREEK

TRU-62-7.720

17 / 17

60
60