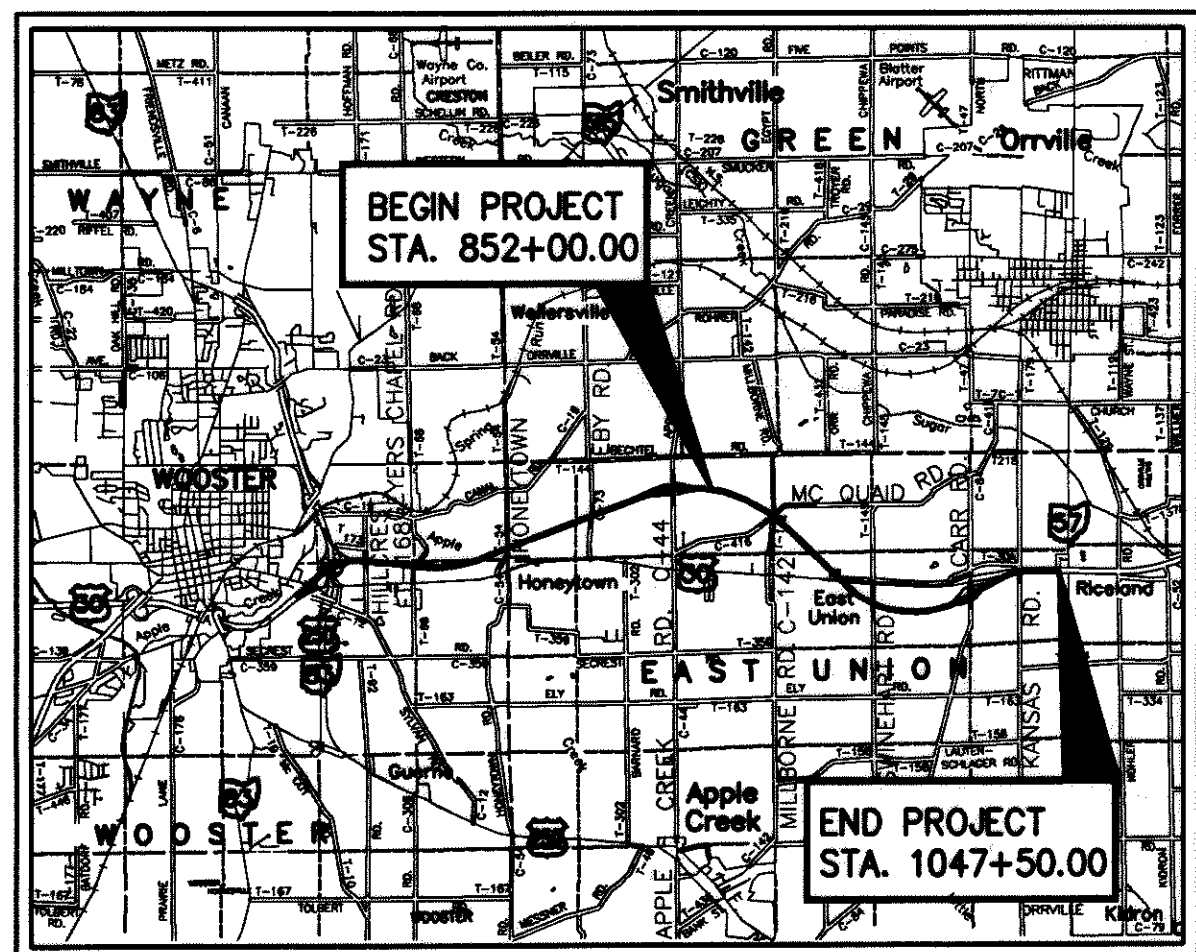


STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
WAY 30-16.14
EAST UNION TOWNSHIP
WAYNE COUNTY



LOCATION MAP
LATITUDE: 40° 47' 40" N LONGITUDE: 81° 48' 30" W

SCALE IN MILES
0 1 2 4 6 8

PORTION TO BE IMPROVED
FEDERAL ROUTES
STATE ROUTES
OTHER ROUTES

DESIGN DESIGNATION

CURRENT ADT (2006) 17810
DESIGN YEAR ADT (2026) 23320
DESIGN HOURLY VOLUME (2026) 2099
DIRECTIONAL DISTRIBUTION 55%
TRUCKS (24 HOUR B&C) 21%
DESIGN SPEED 70 MPH
LEGAL SPEED 65 MPH
FUNCTIONAL CLASSIFICATION RURAL FREEWAY
NHS PROJECT YES

DESIGN EXCEPTIONS

MILLBORNE ROAD (SOUTH):

DESIGN FEATURE

HORIZONTAL ALIGNMENT

SUPERELEVATION RATE

(MILLBORNE ROAD C.R. 142)

APPROVAL DATES

2-13-03

SHEET NUMBERS

2, 248, 249

TITLE SHEET

SCHEMATIC PLAN

GEOMETRIC

TYPICAL SECTIONS

GENERAL NOTES

MAINTENANCE OF TRAFFIC

GENERAL SUMMARY

SUB-SUMMARIES

QUANTITY CALCULATIONS

PAVEMENT CALCULATIONS

PROJECT SITE PLAN

SUPERELEVATION TABLES

PLAN AND PROFILE & QUANTITIES - U.S. 30

CROSS SECTIONS - U.S. 30

PLAN AND PROFILE & QUANTITIES - CARR ROAD

INTERCHANGE RAMP

CROSS SECTION LAYOUT SHEET

CROSS SECTIONS - CARR ROAD

INTERCHANGE RAMP

PLAN AND PROFILE & QUANTITIES - MCQUAID ROAD

CROSS SECTIONS - MCQUAID ROAD

PLAN AND PROFILE & QUANTITIES - MILLBORNE ROAD

CROSS SECTIONS - MILLBORNE ROAD (SOUTH)

PLAN AND PROFILE & QUANTITIES - MILLBORNE ROAD

CROSS SECTIONS - MILLBORNE ROAD (NORTH)

PLAN AND PROFILE & QUANTITIES - SWINEHART ROAD

CROSS SECTIONS - SWINEHART ROAD

SHEETS NOT USED: 62, 304, 305, 330-332, 334-336, 338-341, 341A
344, 370, 453-455

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	SOIL BORINGS	

SPECIAL PROVISIONS

DATE: _____

STANDARD CONSTRUCTION DRAWINGS												SUPPLEMENTAL SPECIFICATIONS	
BP-2.1	07-28-00	GR-3.2	04-18-03	DM-1.1	07-18-03	SBR-1-99	07-19-02	MT-102.20	10-18-02	TC-61.10	01-19-01		
BP-2.2	07-28-00	GR-4.2	04-18-03	DM-1.2	07-19-02			MT-105.10	10-18-02	TC-65.10	10-19-01	802	07-19-02
BP-2.3	07-28-00	GR-5.3	04-18-03	DM-1.4	07-19-02	ICD-1-82	07-19-02	MT-105.11	10-18-02	TC-65.11	10-19-01	832	02-12-03
BP-3.1	07-28-00	GR-6.1	04-18-03	DM-2.1	07-20-01			TC-7.65	07-18-03	TC-65.12	10-19-01	833	02-12-03
BP-4.1	07-28-00	GR-6.2	04-18-03	DM-3.1	07-19-02	SICD-1-96	07-19-02	TC-12.30	01-19-01	TC-71.10	04-19-02	836	12-06-01
BP-5.1	07-28-00			DM-4.1	07-19-02			TC-18.24	01-18-02	TC-72.20	01-19-01	846	04-19-02
BP-6.1	07-28-00	RM-1.1	04-18-03	DM-4.3	07-19-02	HL-30.11	04-19-02	TC-21.10	01-19-01			856	10-18-02
BP-9.1	07-28-00	RM-4.2	04-18-03	DM-4.4	07-19-02			TC-21.20	01-19-01			864	07-11-00
		RM-4.4	04-18-03	DM-5.1	07-19-02			TC-21.40	01-18-02			894	10-18-02
						MT-35.10	04-20-01	TC-22.20	01-19-01			908	04-18-03
F-2.1	07-28-00	RM-4.5	04-18-03			MT-95.30	04-19-02	TC-41.10	01-19-01			954	09-09-97
F-3.1	07-28-00			HW-1.1	07-20-01	MT-95.31	04-19-02	TC-41.20	01-19-01			1027	04-11-02
F-3.3	07-28-00	CB-1.1	07-19-02	HW-2.1	07-19-02	MT-95.40	07-18-03	TC-41.40	01-19-01				
F-3.4	07-28-00	CB-1.2	07-19-02	HW-2.2	07-19-02	MT-95.70	04-19-02	TC-41.50	07-18-03				
		CB-2.2	07-19-02			MT-97.10	04-19-02						
GR-1.1	04-18-03	CB-3.1	07-19-02	MH-1.2	07-19-02	MT-98.17	10-18-02	TC-42.10	01-19-01				
GR-2.1	04-18-03	CB-3.3	07-19-02			MT-100.00	04-19-02	TC-42.20	04-20-01				
GR-2.3	04-18-03	CB-3.4	07-19-02	AS-1-81	07-19-02	MT-101.60	10-18-02	TC-51.11	04-20-01				
GR-3.1	04-18-03					MT-101.70	10-18-02	TC-52.10	04-20-01				
				GSD-1-96	07-19-02	MT-102.10	10-18-02	TC-52.20	04-20-01				

PROJECT DESCRIPTION

CONSTRUCTION OF 3.71 MILES OF FOUR LANE DIVIDED FREEWAY BEGINNING APPROXIMATELY 3350' EAST OF APPLE CREEK ROAD AT THE WEST END OF THE PROJECT AND CONNECTING BACK INTO EXISTING U.S. 30 APPROXIMATELY 1,350 FEET EAST OF T.R. 179 (KANSAS ROAD) AT THE EAST END. THE PROJECT INCLUDES THE CONSTRUCTION OF STRUCTURES C.R. 416 (MCQUAID ROAD) OVER U.S. 30, U.S. 30 OVER EXISTING U.S. 30 (LINCOLN WAY), U.S. 30 OVER T.R. 145 (SWINEHART ROAD), C.R. 94A (CARR ROAD) OVER U.S. 30 AND TWO INTERCHANGE RAMP AND U.S. 30 OVER LITTLE SUGAR CREEK.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA 177 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA 3 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA 180 ACRES

2002 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY, AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON THE MAINTENANCE OF TRAFFIC PLANS.

WHEREVER WAY-30-15.96 APPEARS ON THESE PLANS IT SHALL BE UNDERSTOOD AS WAY-30-16.14.

UNDERGROUND UTILITIES

TWO WORKING DAYS

BEFORE YOU DIG

CALL...1-800-362-2764 (Toll Free)

OHIO UTILITIES

PROTECTION SERVICE

NON-MEMBERS

MUST BE CALLED DIRECTLY

APPROVED Thomas M. O'Leary ^{ACS}
DATE 8/22/03 DISTRICT DEPUTY DIRECTOR
APPROVED Jason Proctor
DATE 9.8.03 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO.
G020(071)

PID NO.
16287

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT
NONE

WAY-30-16.14

1
656

040043 PART B

WAY - USR30 - 11.86 - CONTRACT C
040044
PID #28880
DIST 03
02-04-04

PLT 1:1
ARP 8/21/03

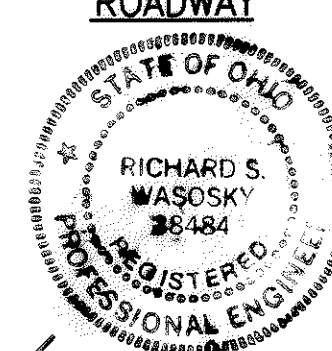
JOSS (470) HIGHWAY/MSD/7/07/02.DWG

SHEETS 602A THROUGH 602CCCC

ENGINEERS SEAL:



Frederick Selung, Jr. 8/22/03
ROADWAY DATE

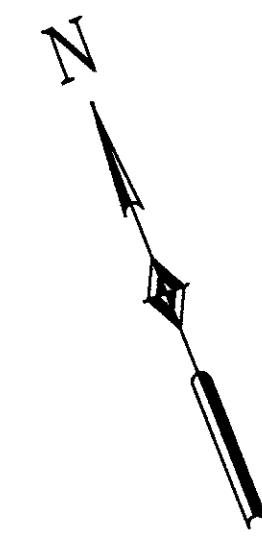
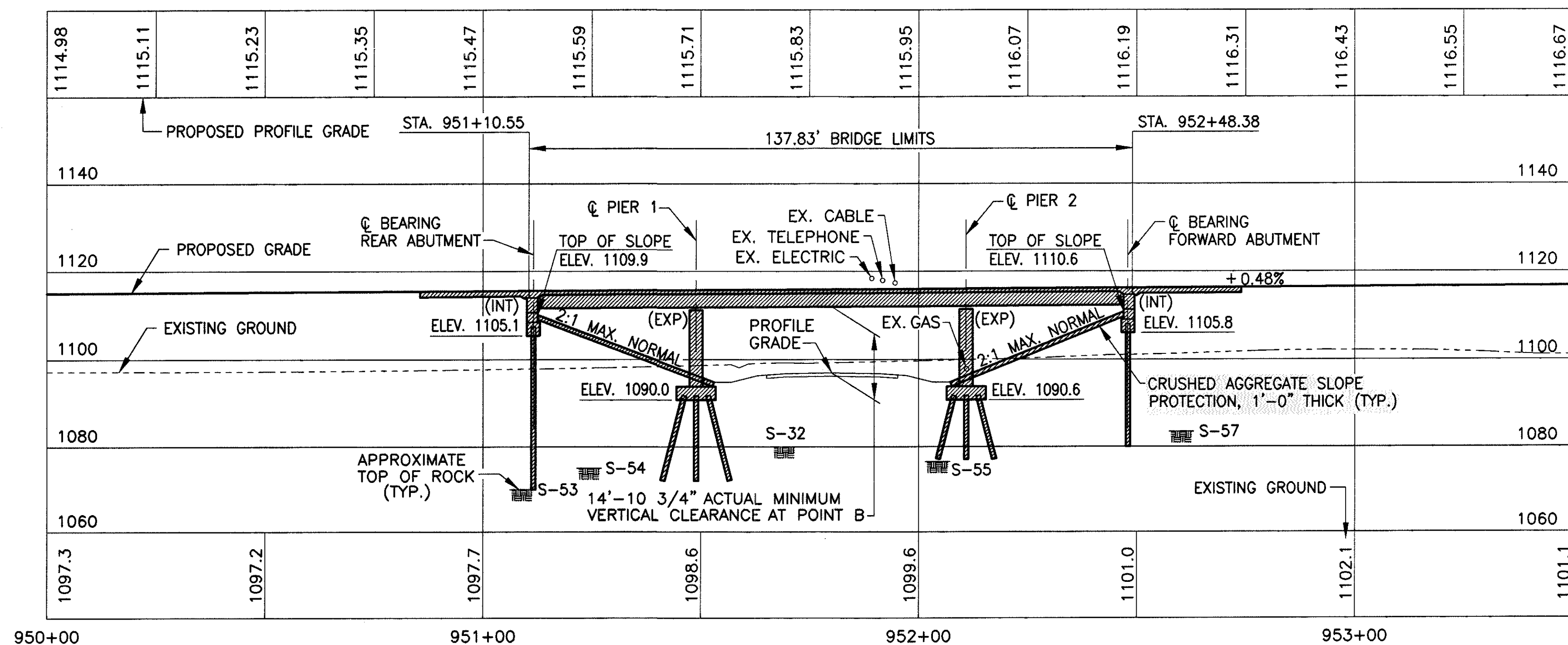
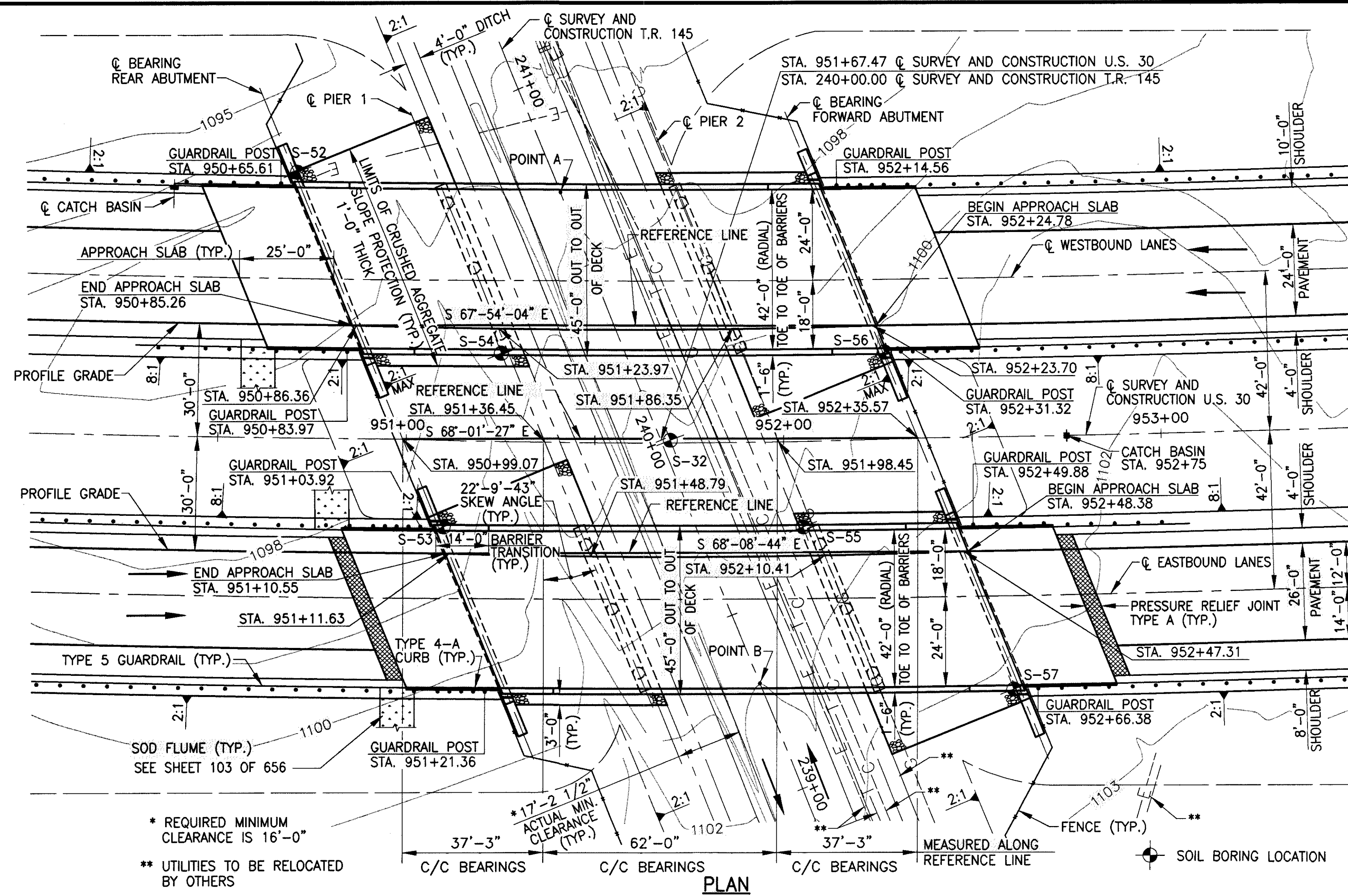


Richard S. Wasosky 08/21/03
STRUCTURES DATE



Euthenics Inc. 8/21/03
PLAN PREPARED BY: DATE

EUTHENICS INC.
CONSULTING ENGINEERS
925 Keynote Circle, Cleveland, Ohio



TEMPORARY BENCHMARKS	
REFERENCE MONUMENT	STA. 238+29.11, 15.33' RT., Q CONSTRUCTION T.R. 145 ELEV. 1103.98
REFERENCE MONUMENT	STA. 248+13.44, 10.89' LT., Q CONSTRUCTION T.R. 145 ELEV. 1087.38

CURVE DATA U.S. 30

PI STA. 973+53.03
 $\Delta = 75^\circ 55' 11''$
 $D_c = 01^\circ 00' 00''$ LT.
 $R = 5729.58'$
 $T = 4469.99'$
 $L = 7591.98'$
 $E = 1537.39'$
 $e_{max} = 0.036$

APPROXIMATE TOP OF ROCK	
BORING NO.	ELEVATION
S-32	1080.0
S-52	1068.5
S-53	1070.0
S-54	1075.0
S-55	1076.5
S-56	1077.5
S-57	1083.5

TRAFFIC DATA

2006 - 17,810 A.D.T.
 3,740 A.D.T.T.
 2026 - 23,320 A.D.T.
 4,900 A.D.T.T.

HP 10 X 42 PILES		
	LOCATION	ESTIMATED LENGTH
WESTBOUND	REAR ABUTMENT	39 FEET
	PIER 1	21 FEET
	PIER 2	18 FEET
EASTBOUND	FORWARD ABUTMENT	33 FEET
	PIER 1	41 FEET
	PIER 2	23 FEET
	FORWARD ABUTMENT	31 FEET

EARTHWORK

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

NOTE:

- REQUIRED MINIMUM VERTICAL CLEARANCE IS 14'-6". ACTUAL MINIMUM VERTICAL CLEARANCE AT POINT A OCCURS AT THE INTERSECTION OF THE LEFT EXTERIOR BEAM AND THE CENTERLINE OF SWINEHART ROAD. ACTUAL MINIMUM VERTICAL CLEARANCE AT POINT B OCCURS AT THE INTERSECTION OF THE RIGHT EXTERIOR BEAM AND THE CENTERLINE OF SWINEHART ROAD.
- FOR PRESSURE RELIEF JOINT DETAILS SEE ODOT STANDARD DRAWING BP 2.3

PROPOSED STRUCTURE

TYPE: CONTINUOUS COMPOSITE STEEL ROLLED BEAM (ASTM A572, METALIZED AND TOP COAT PAINTED) WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE WITH INTEGRAL ABUTMENTS

SPANS: 37'-3" 62'-0" AND 37'-3" C/C BEARINGS

ROADWAY: 42'-0" TOE TO TOE OF BARRIERS

LOADING: HS25, CASE II AND THE ALTERNATE MILITARY LOADING

SKREW: 22'-9"-43" RIGHT FORWARD, TO REFERENCE LINE

WEARING SURFACE: MONOLITHIC CONCRETE

APPROACH SLABS: AS-1-81 (25'-0")

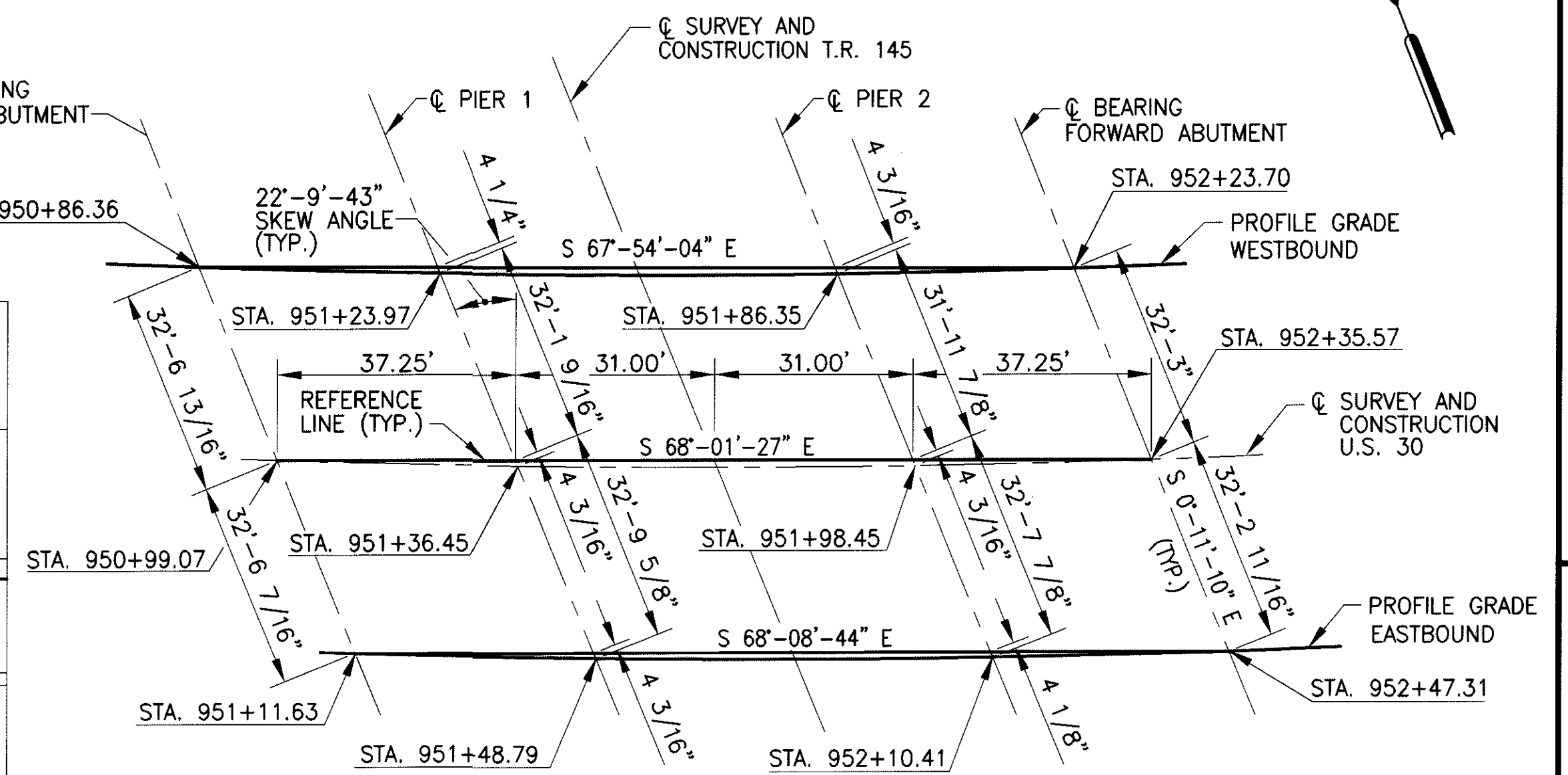
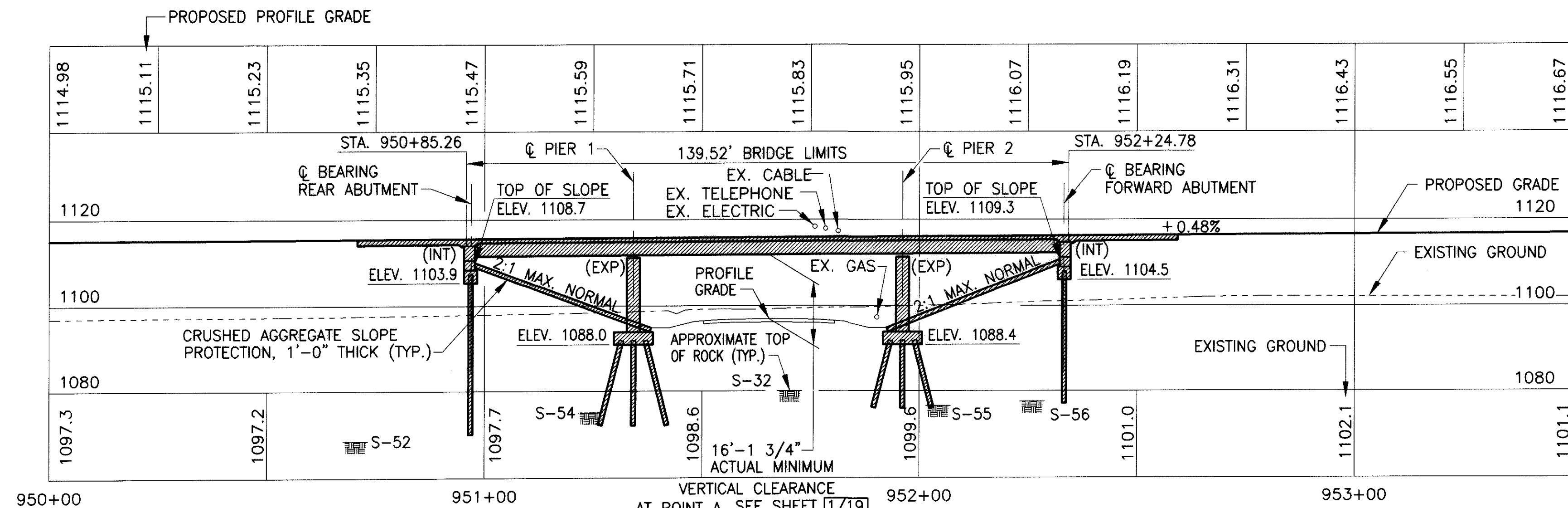
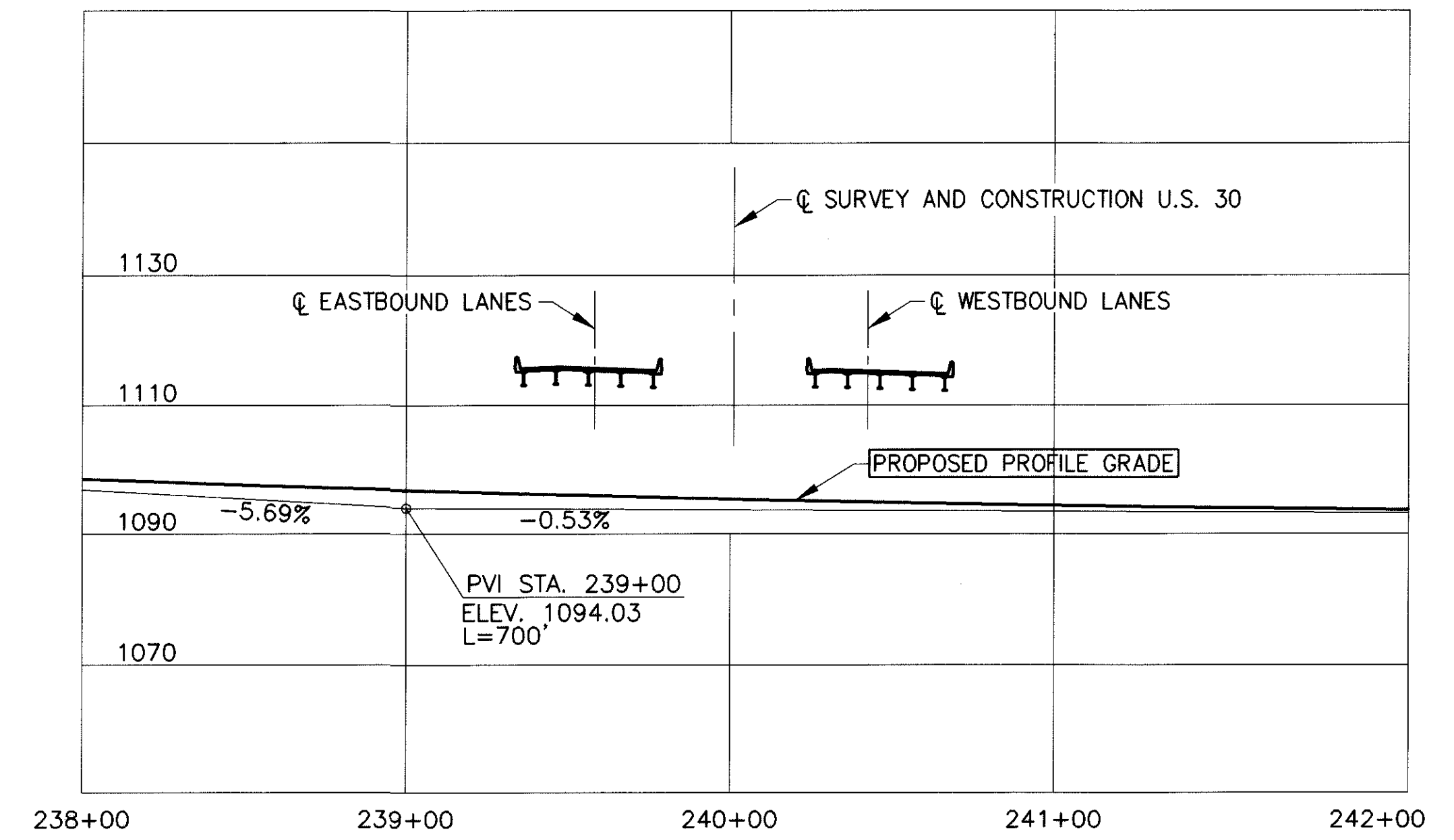
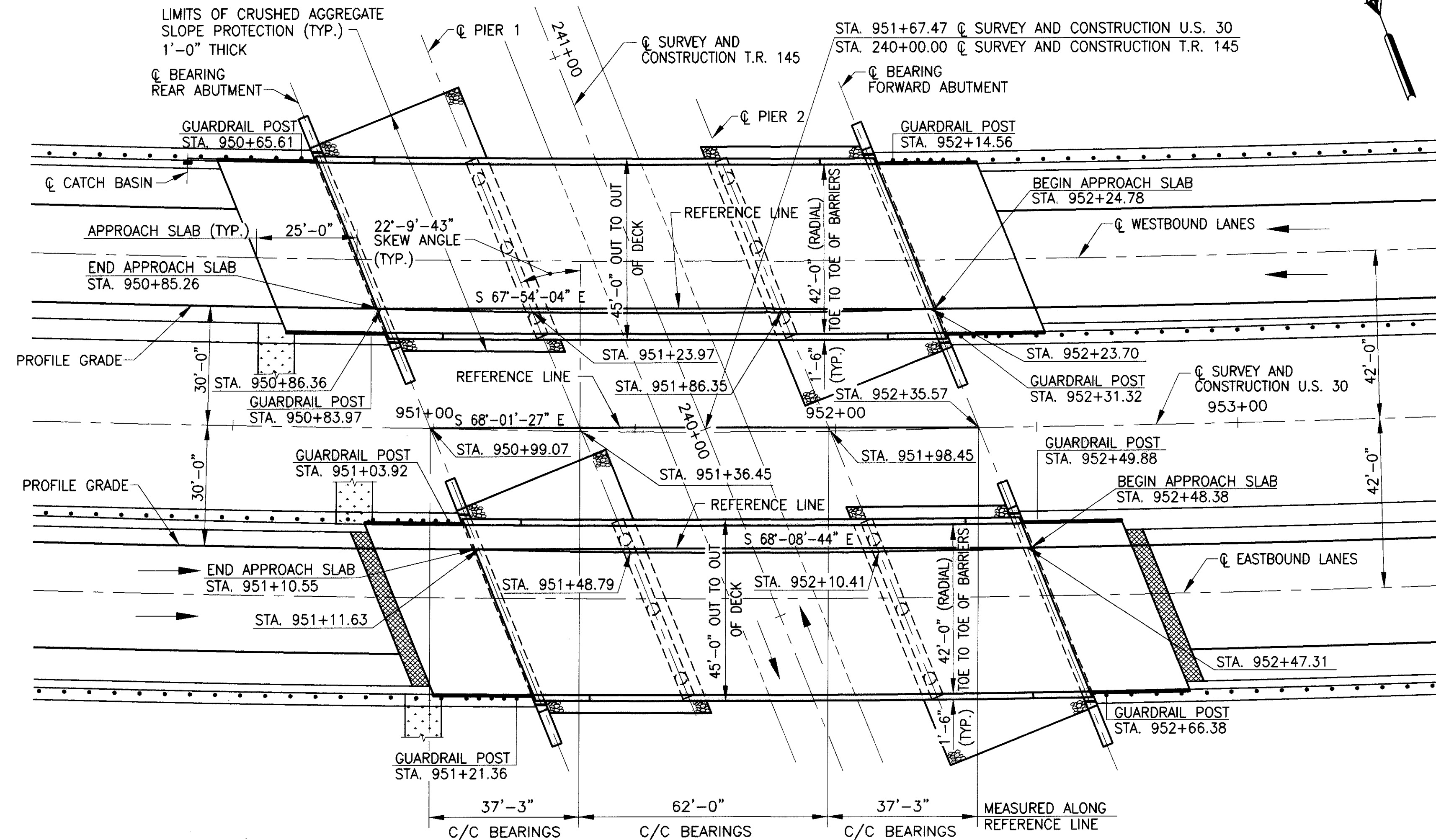
ALIGNMENT: 01'-00'-00" LEFT

SUPERELEVATION: 0.036 FT. PER FT.

LATITUDE: 40°-47'-32" N

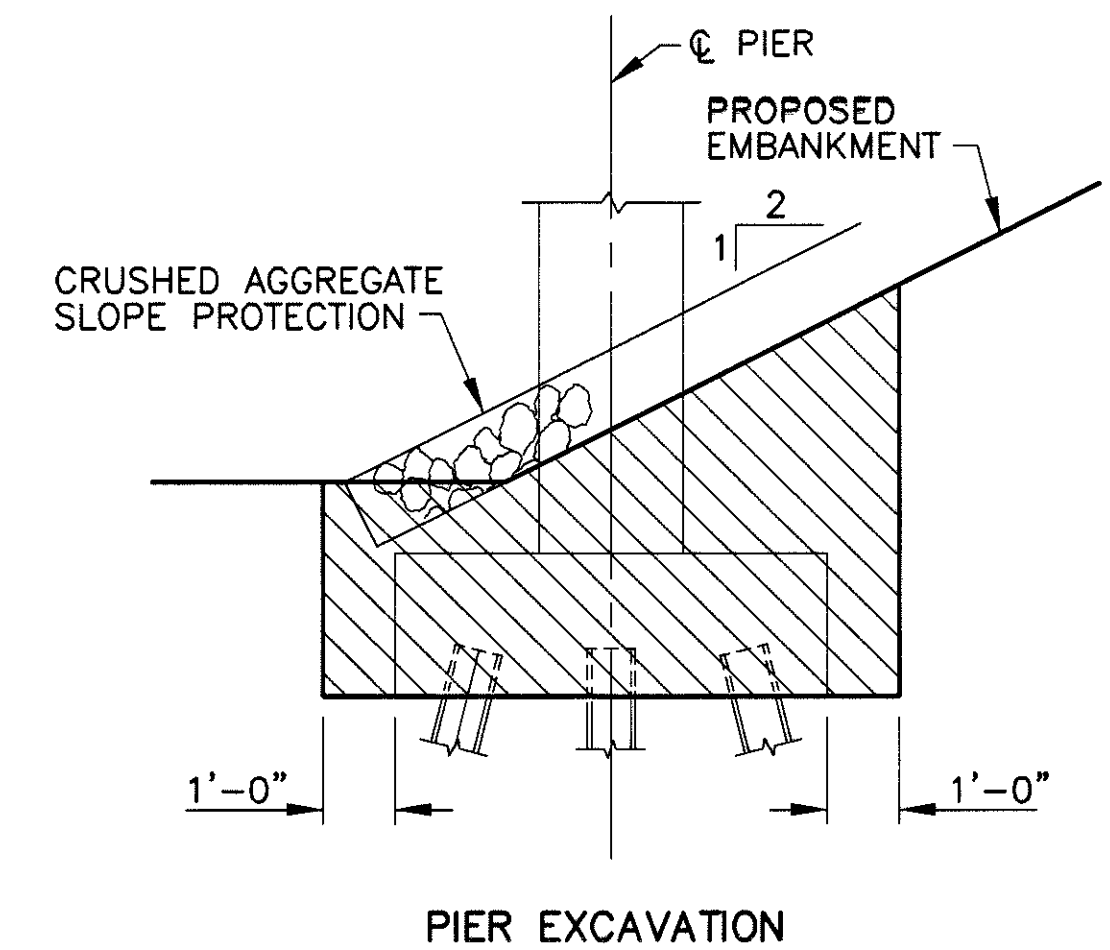
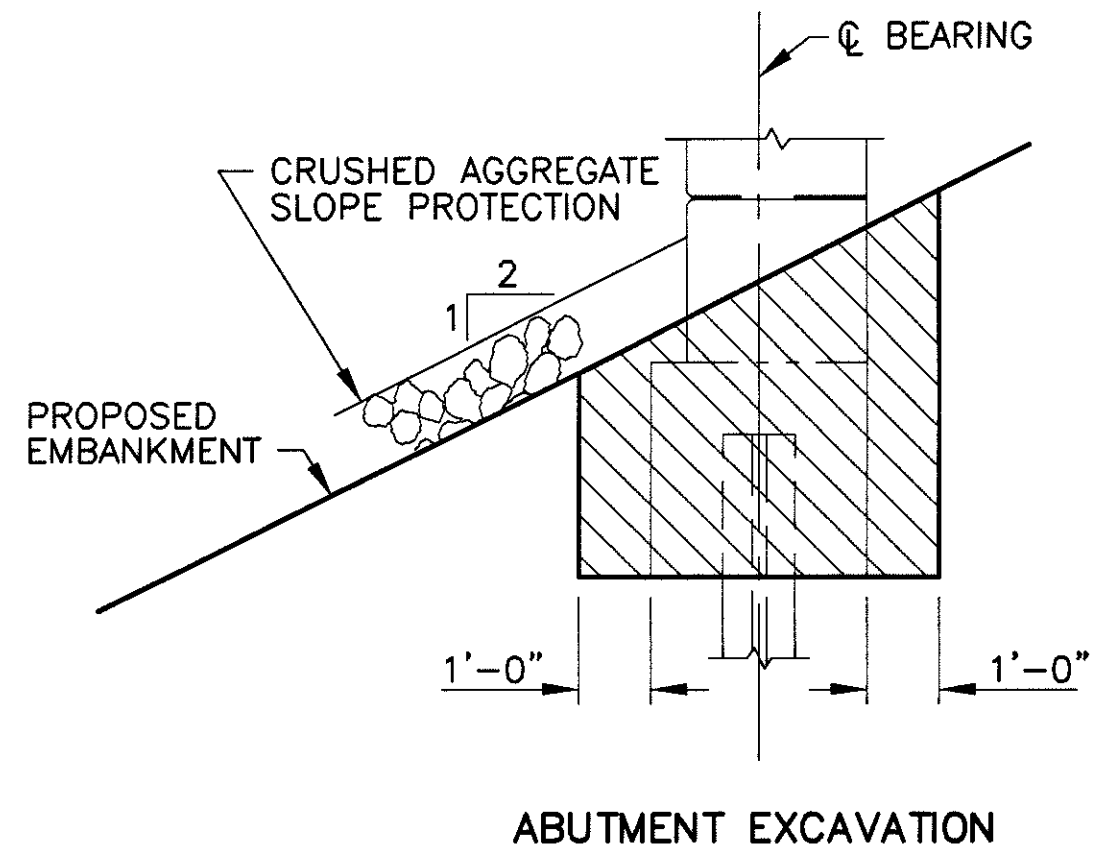
LONGITUDE: 81°-48'-14" W

[F:\JOBS\470\BRIDGE\09\DWG\470GNP09.DWG] GFH 9/27/02 PLOT 1"=20'



NOTE: REFERENCE LINE IS A CHORD BETWEEN INTERSECTIONS OF
ABUTMENT BEARING AND U.S. 30 OR PROFILE GRADE.

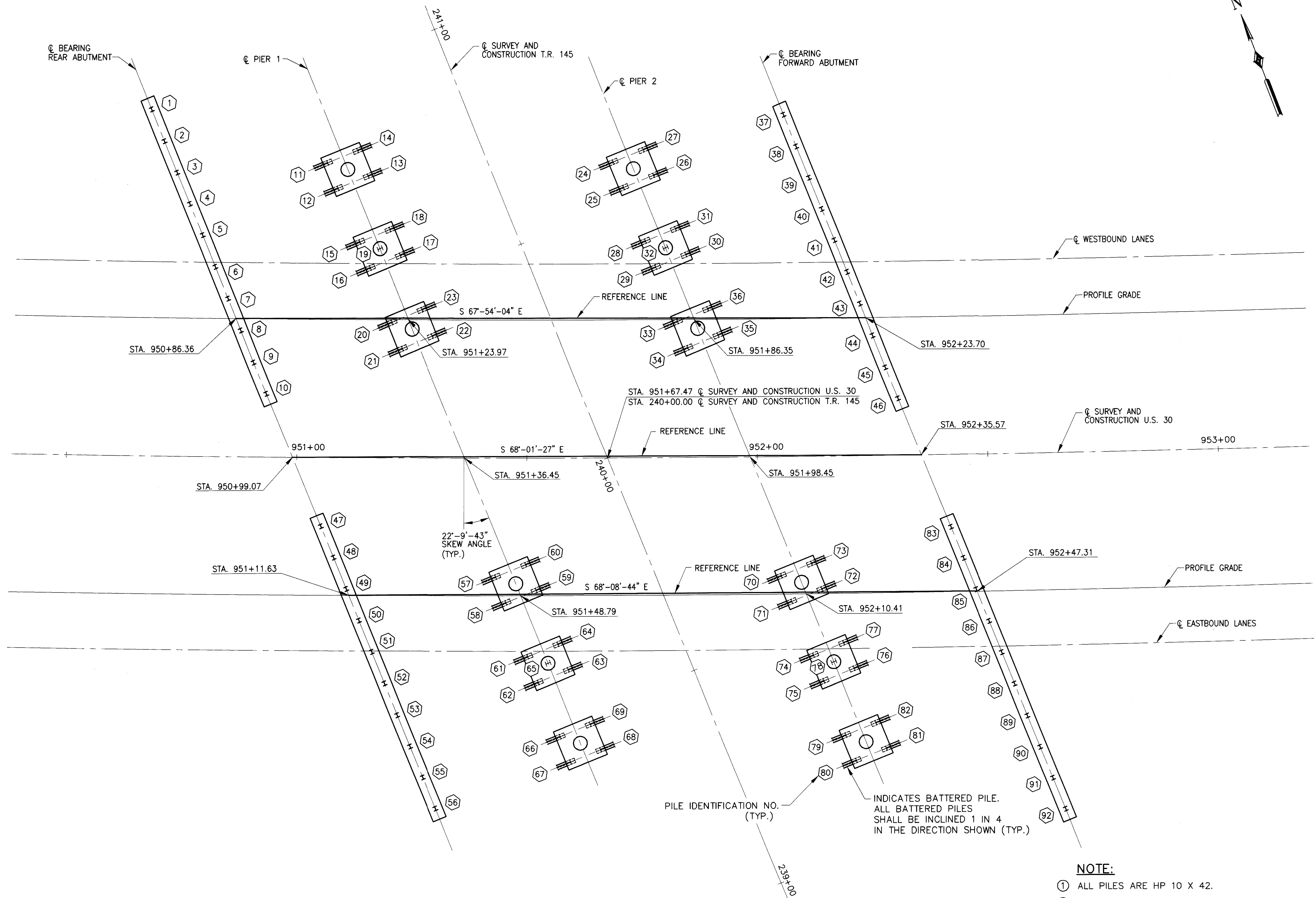
CALC. BY: GFH DATE: 4-02				ESTIMATED QUANTITIES – WESTBOUND – WAY-30-1803 L				CHK'D. BY: YRY DATE: 4-02			
ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUTMENT		PIER	SUPER- STRUCTURE	GENERAL	AS PER PLAN SHEET NUMBERS	
					REAR	FWD					
503	21301	LUMP		UNCLASSIFIED EXCAVATION, AS PER PLAN	LUMP	LUMP	LUMP			GN 1	
505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION					LUMP		
507	00100	1,227	FT.	STEEL PILES HP10X42, FURNISHED	390	330	507				
507	00150	1,063	FT.	STEEL PILES HP10X42, DRIVEN	360	300	403				
507	93300	46	EACH	STEEL POINT OR SHOE	10	10	26				
509	10000	107,309	POUND	EPOXY COATED REINFORCING STEEL	4,510	4,525	22,293	75,981			
511	41001	69	CU. YD.	CLASS C CONCRETE, PIER ABOVE FOOTINGS, AS PER PLAN			69			GN 2	
511	44101	45	CU. YD.	CLASS C CONCRETE, ABUTMENT NOT INCLUDING FOOTING, AS PER PLAN	22	23				GN 2	
511	46501	102	CU. YD.	CLASS C CONCRETE, FOOTING, AS PER PLAN	24	24	54			GN 2	
511	50100	43	CU. YD.	CLASS HP CONCRETE, BRIDGE DECK (PARAPET)				43			
513	10061	LUMP		STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN, A572				LUMP		GN 2	
513	20000	2,685	EACH	WELDED STUD SHEAR CONNECTORS				2,685			
514	00400	LUMP		FIELD PAINTING STRUCTURAL STEEL, FINISH COAT				LUMP			
516	13200	102	SQ. FT.	1/2" PREFORMED EXPANSION JOINT FILLER	51	51					
516	13600	132	SQ. FT.	1" PREFORMED EXPANSION JOINT FILLER	66	66					
516	13900	4	SQ. FT.	2" PREFORMED EXPANSION JOINT FILLER	2	2					
516	14015	136	FT.	INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN	68	68				GN 1	
516	44001	10	EACH	ELASTOMERIC BEARINGS WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN 1.78" x 11 1/2" x 18", WITH 2 1/16" x 12 1/2" x 19" LOAD PLATE (SEE PROPOSAL NOTE)			10			17/19	
518	21231	LUMP		POROUS BACKFILL WITH FILTER FABRIC, AS PER PLAN	LUMP	LUMP				GN 2	
518	40000	142	FT.	6" PERFORATED CORRUGATED PLASTIC PIPE	71	71					
518	40010	48	FT.	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	24	24					
526	25000	238	SQ. YD.	REINFORCED CONCRETE APPROACH SLABS (T=15")					238		
601	20000	585	SQ. YD.	CRUSHED AGGREGATE SLOPE PROTECTION	296	289					
864	10100	660	SQ. YD.	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	22	22	239	377			
894	10000	218	CU. YD.	HIGH PERFORMANCE CONCRETE, FOR BRIDGE DECK WITH WARRANTY				218			

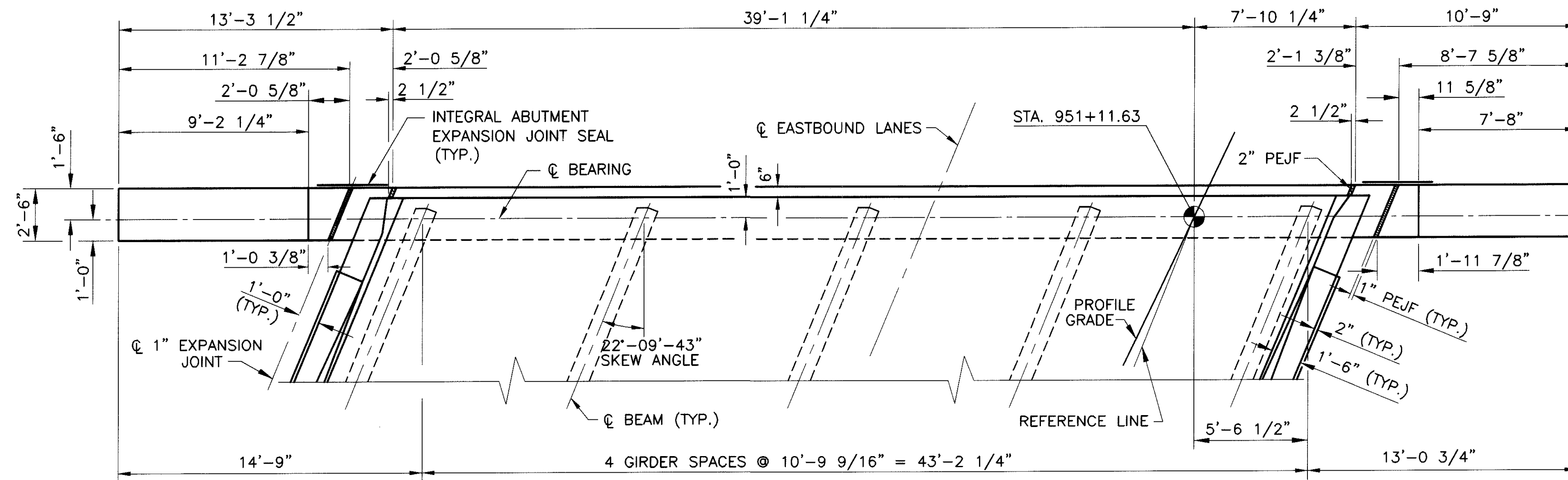


LIMITS OF UNCLASSIFIED EXCAVATION

CALC. BY: GFH DATE: 4-02				ESTIMATED QUANTITIES – EASTBOUND – WAY-30-1803 R				CHK'D. BY: YRY DATE: 4-02			
ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUTMENT		PIER	SUPER- STRUCTURE	GENERAL	AS PER PLAN SHEET NUMBERS	
					REAR	FWD					
503	21301	LUMP		UNCLASSIFIED EXCAVATION, AS PER PLAN	LUMP	LUMP	LUMP			GN 1	
505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION					LUMP		
507	00100	1,266	FT.	STEEL PILES HP10X42, FURNISHED	410	310	546				
507	00150	1,102	FT.	STEEL PILES HP10X42, DRIVEN	380	280	442				
507	93300	46	EACH	STEEL POINT OR SHOE	10	10	26				
509	10000	106,926	POUND	EPOXY COATED REINFORCING STEEL	4,503	4,520	22,022	75,881			
511	41001	66	CU. YD.	CLASS C CONCRETE, PIER ABOVE FOOTINGS, AS PER PLAN			66			GN 2	
511	44101	44	CU. YD.	CLASS C CONCRETE, ABUTMENT NOT INCLUDING FOOTING, AS PER PLAN	22	22				GN 2	
511	46501	102	CU. YD.	CLASS C CONCRETE, FOOTING, AS PER PLAN	24	24	54			GN 2	
511	50100	42	CU. YD.	CLASS HP CONCRETE, BRIDGE DECK (PARAPET)				42			
513	10061	LUMP		STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN, A572				LUMP		GN 2	
513	20000	2,685	EACH	WELDED STUD SHEAR CONNECTORS				2,685			
514	00400	LUMP		FIELD PAINTING STRUCTURAL STEEL, FINISH COAT				LUMP			
516	13200	102	SQ. FT.	1/2" PREFORMED EXPANSION JOINT FILLER	51	51					
516	13600	129	SQ. FT.	1" PREFORMED EXPANSION JOINT FILLER	65	64					
516	13900	4	SQ. FT.	2" PREFORMED EXPANSION JOINT FILLER	2	2					
516	14015	135	FT.	INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN	68	67				GN 1	
516	44001	10	EACH	ELASTOMERIC BEARINGS WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN 1.78" x 11 1/2" x 18", WITH 2 1/16" x 12 1/2" x 19" LOAD PLATE (SEE PROPOSAL NOTE)			10			17/19	
518	21231	LUMP		POROUS BACKFILL WITH FILTER FABRIC, AS PER PLAN	LUMP	LUMP				GN 2	
518	40000	142	FT.	6" PERFORATED CORRUGATED PLASTIC PIPE	71	71					
518	40010	48	FT.	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	24	24					
526	25000	238	SQ. YD.	REINFORCED CONCRETE APPROACH SLABS (T=15")					238		
601	20000	583	SQ. YD.	CRUSHED AGGREGATE SLOPE PROTECTION	295	288					
864	10100	649	SQ. YD.	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	22	22	230	375			
894	10000	217	CU. YD.	HIGH PERFORMANCE CONCRETE, FOR BRIDGE DECK WITH WARRANTY				217			

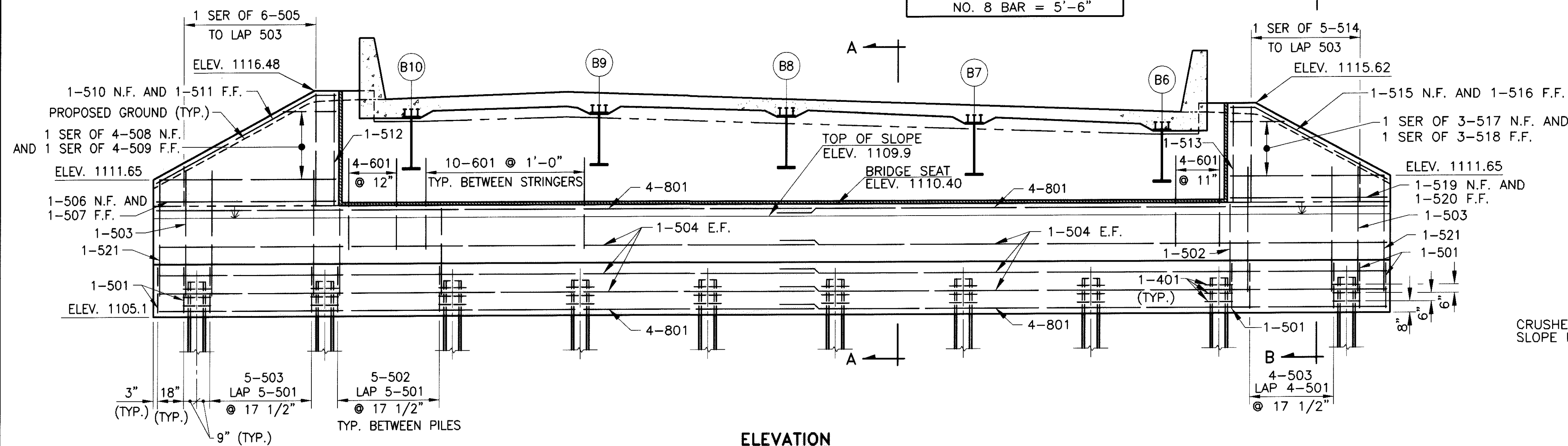
[F:\JOBS\470\BRIDGE\09\DWG\470PLP09.DWG] YR 3/27/02 PLOT 1"=10'



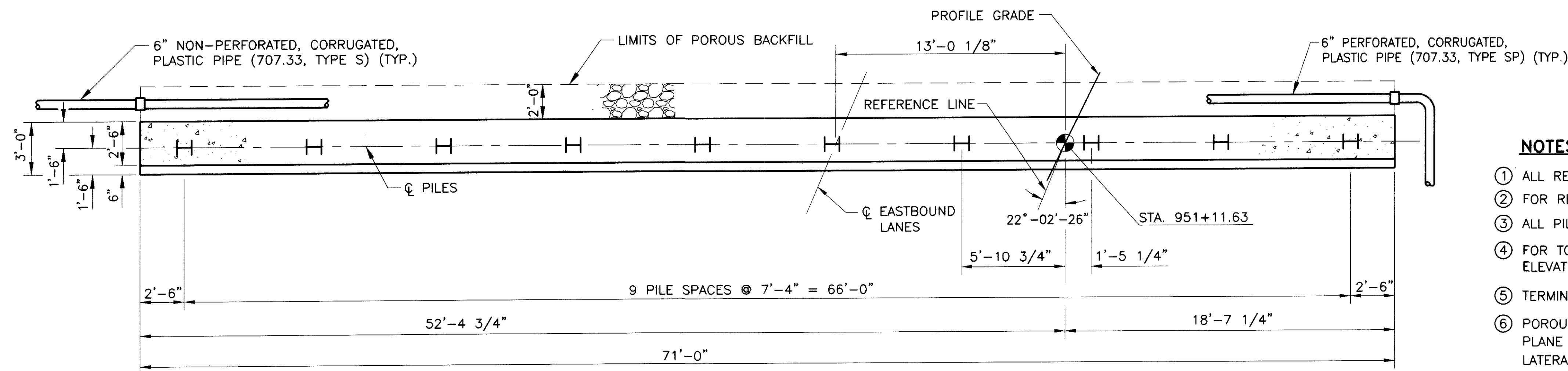


PLAN

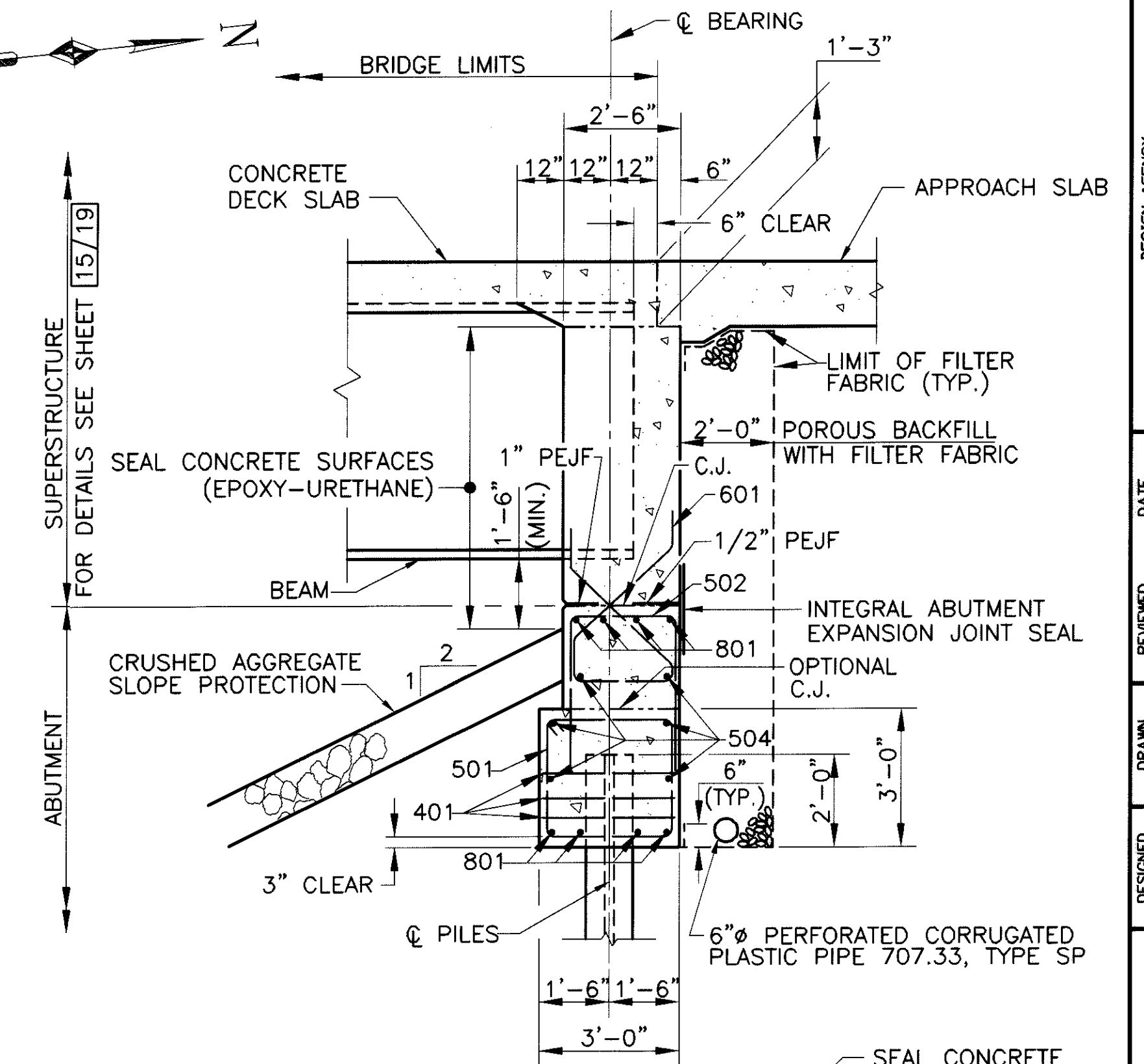
MINIMUM LAP LENGTHS	
NO. 5 BAR	= 2'-0"
NO. 6 BAR	= 2'-4"
NO. 8 BAR	= 5'-6"



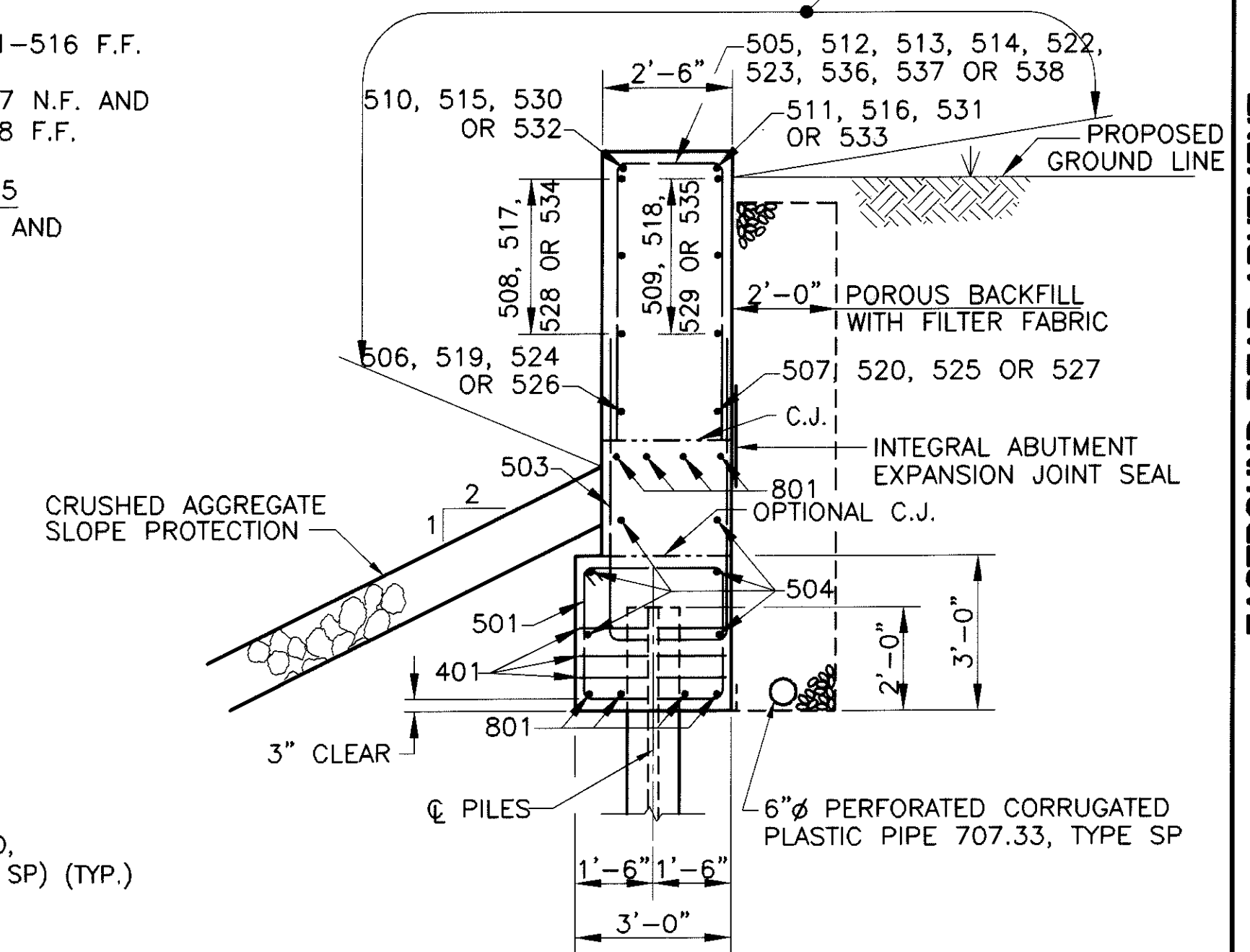
ELEVATION



FOOTING PLAN



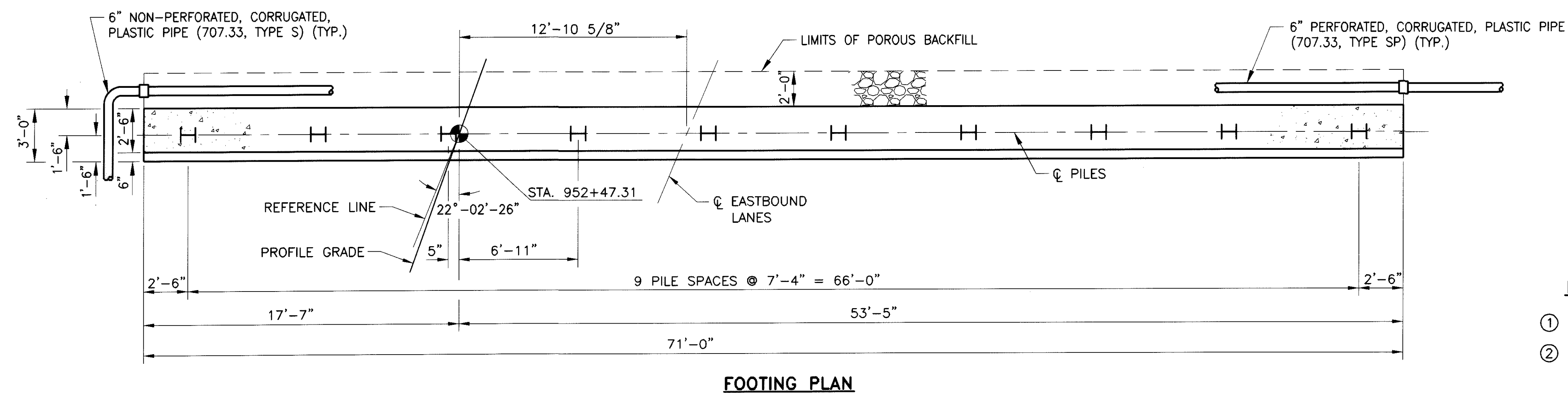
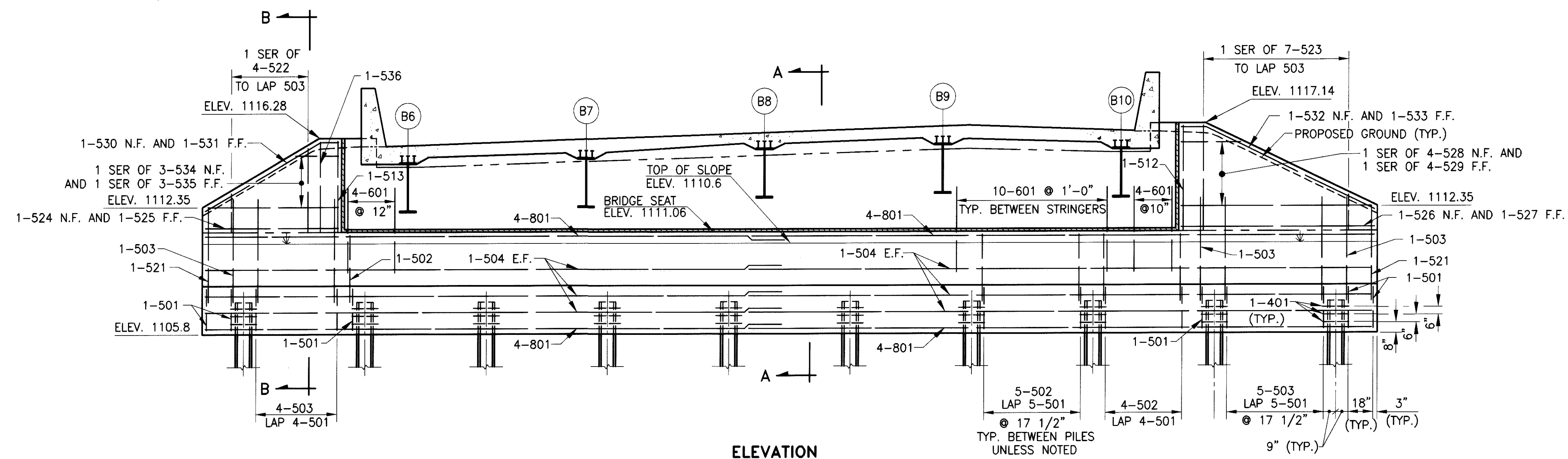
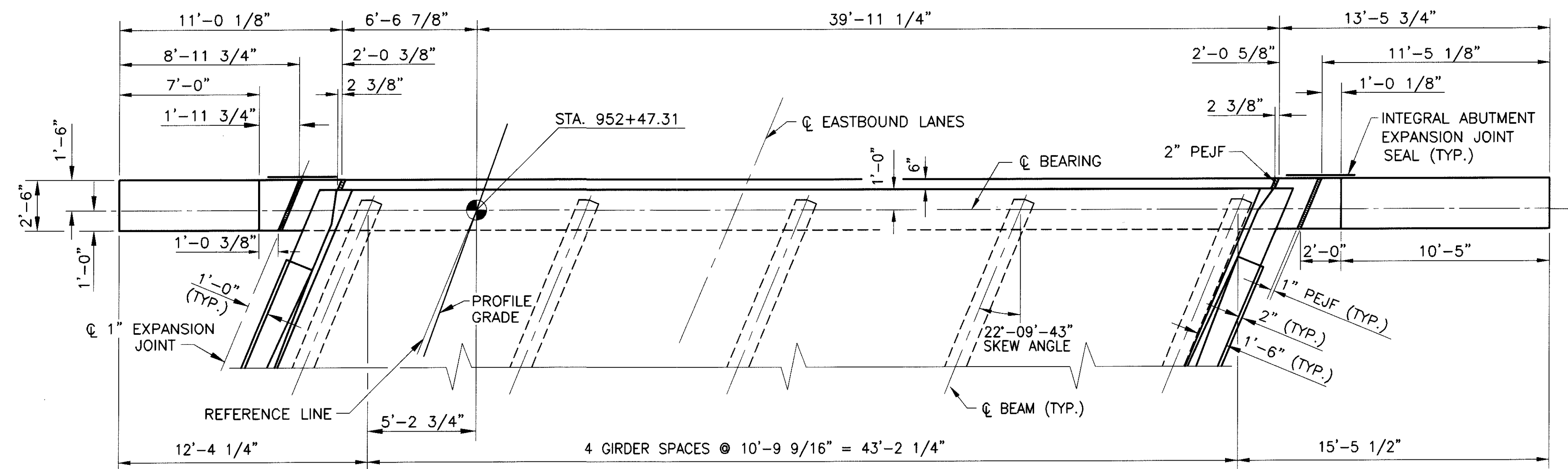
SECTION A-A



SECTION B-B

NOTES:

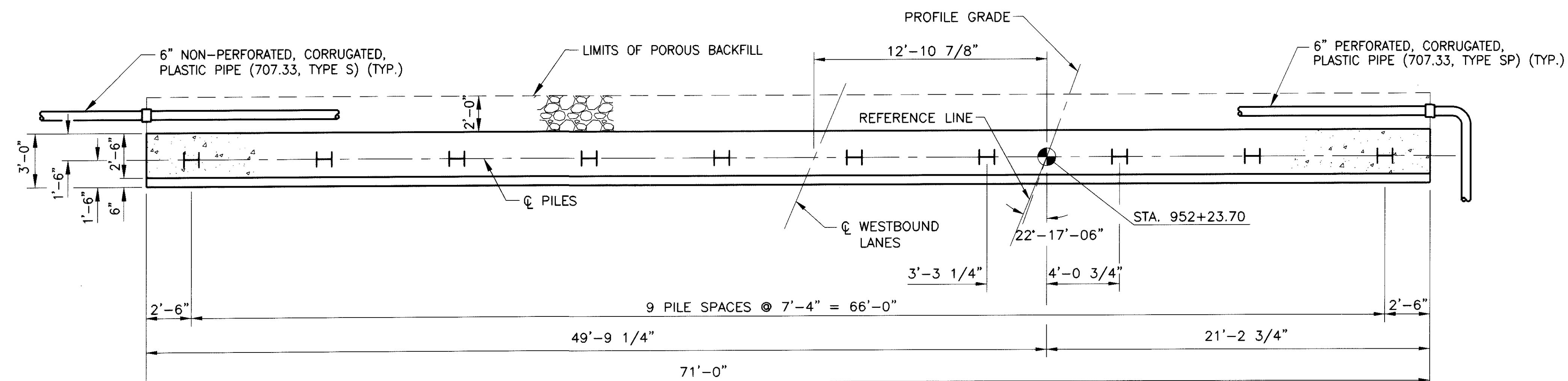
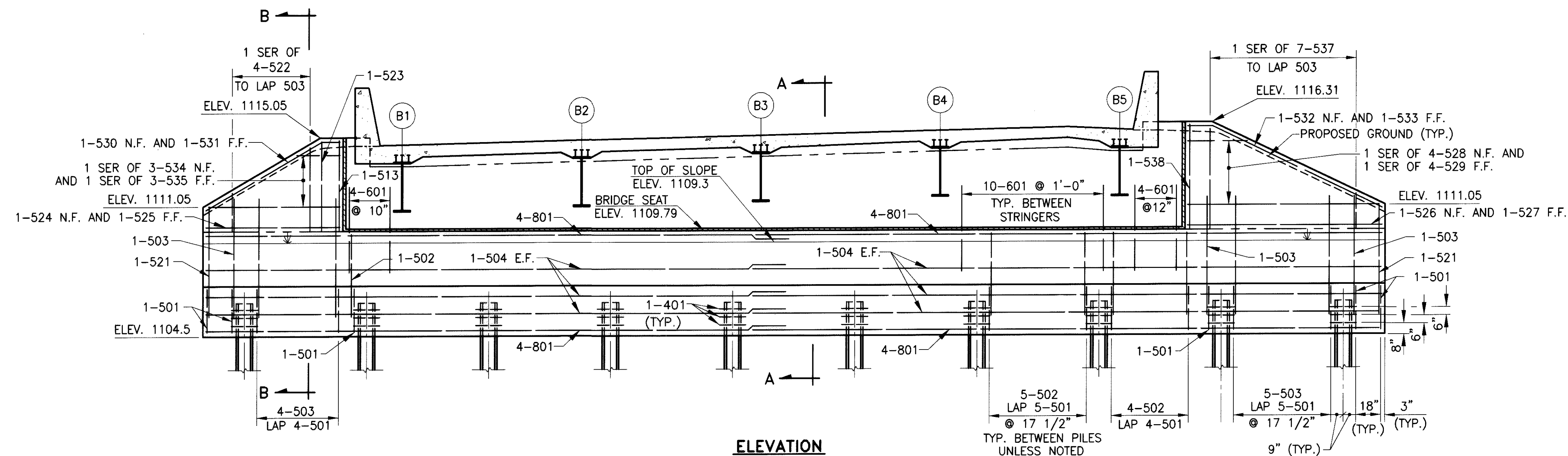
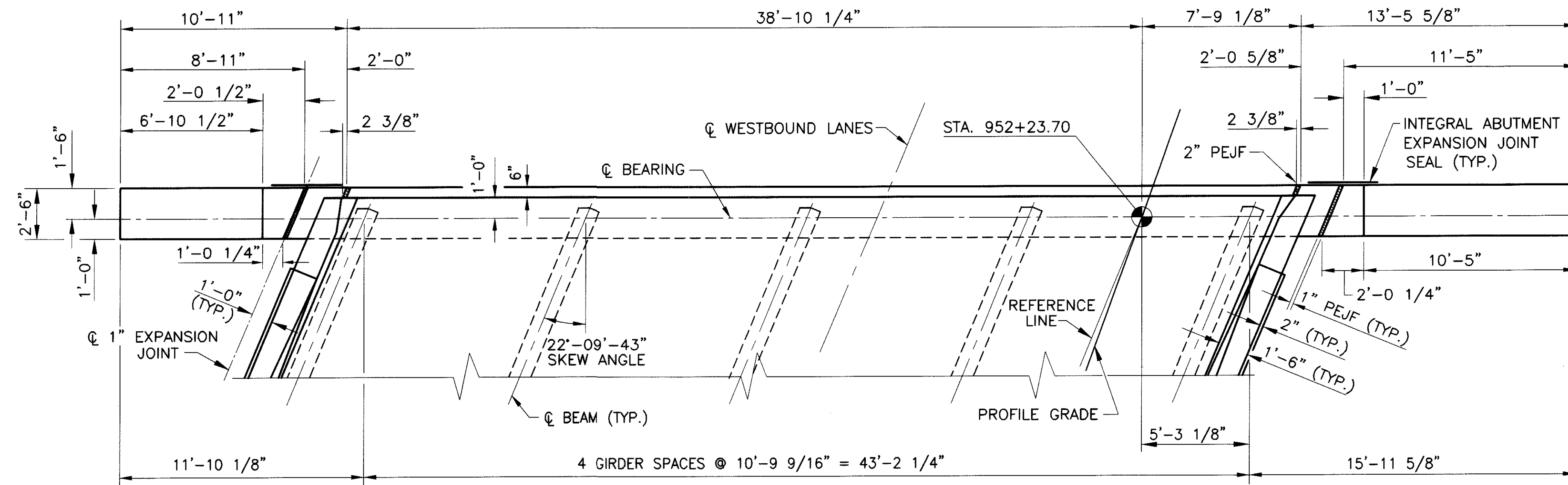
- ALL REINFORCING BARS SHALL BE PREFIXED A (ABUTMENT).
- FOR REINFORCING SCHEDULE SEE SHEET 18/19.
- ALL PILES ARE HP 10X42. FOR PILE IDENTIFICATION NUMBERS SEE SHEET 4/19.
- FOR TOP OF PAVEMENT ELEVATIONS ALONG CENTERLINE BEARING SEE DECK SCREED ELEVATIONS ON SHEET 13/19 AND 14/19.
- TERMINATE PIPE AS SHOWN ON ODOT STANDARD DRAWING ICD-1-82 SHEET 2 OF 5.
- POROUS BACKFILL WITH FILTER FABRIC, 2 FEET THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO 1 FOOT BELOW THE EMBANKMENT SURFACE, AND Laterally TO THE ENDS OF THE WINGWALLS.
- FOR ADDITIONAL ABUTMENT DETAILS AND NOTES SEE ODOT STANDARD DRAWING ICD-1-82.



MINIMUM LAP LENGTHS	
NO. 5 BAR	= 2'-0"
NO. 6 BAR	= 2'-4"
NO. 8 BAR	= 5'-6"

NOTES:

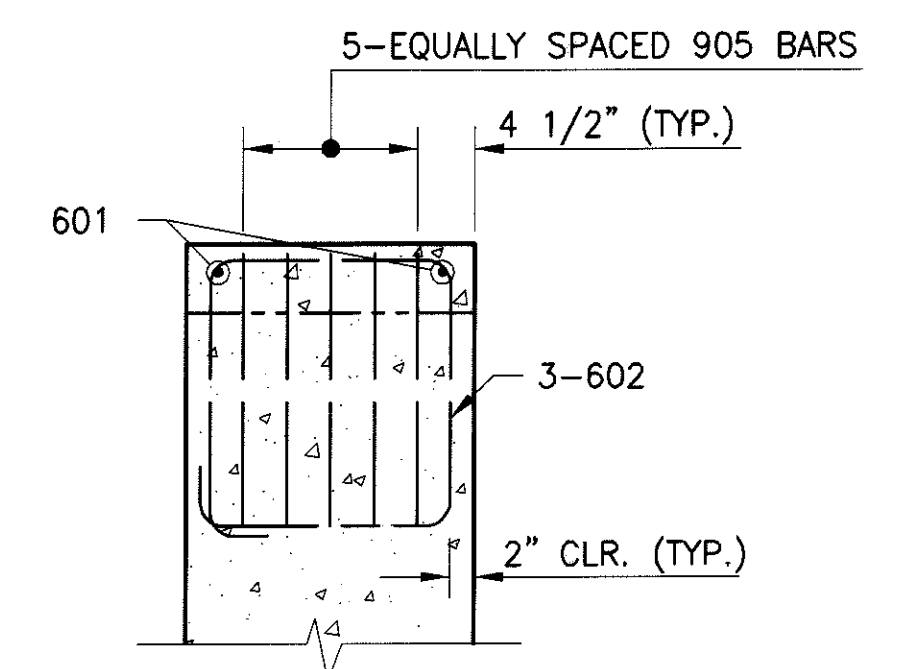
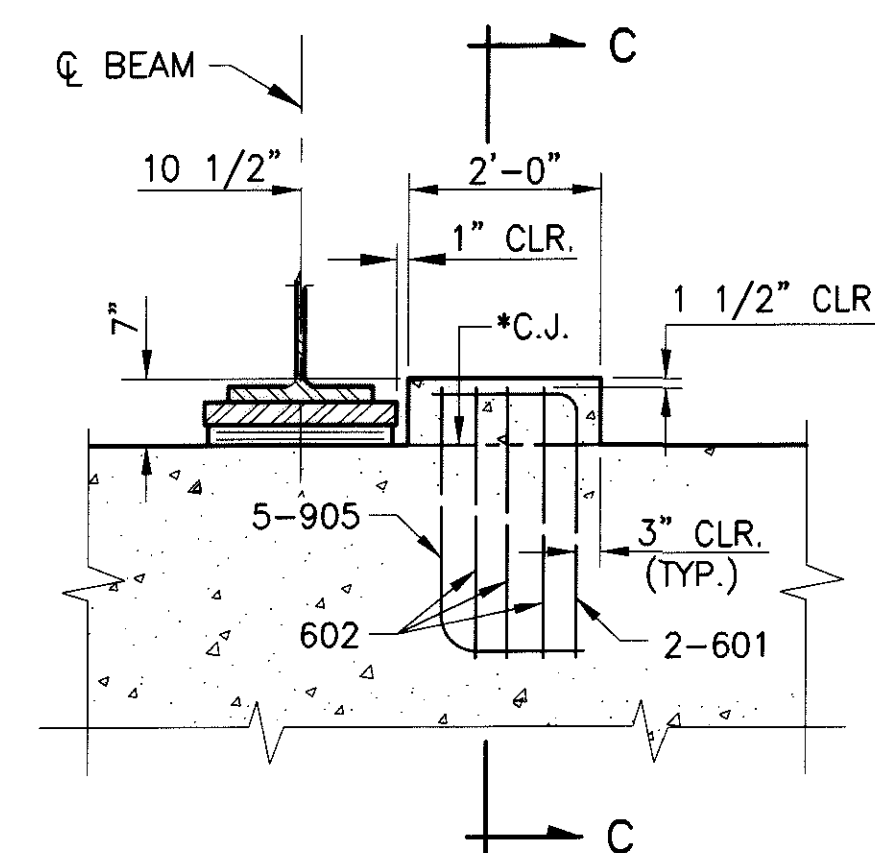
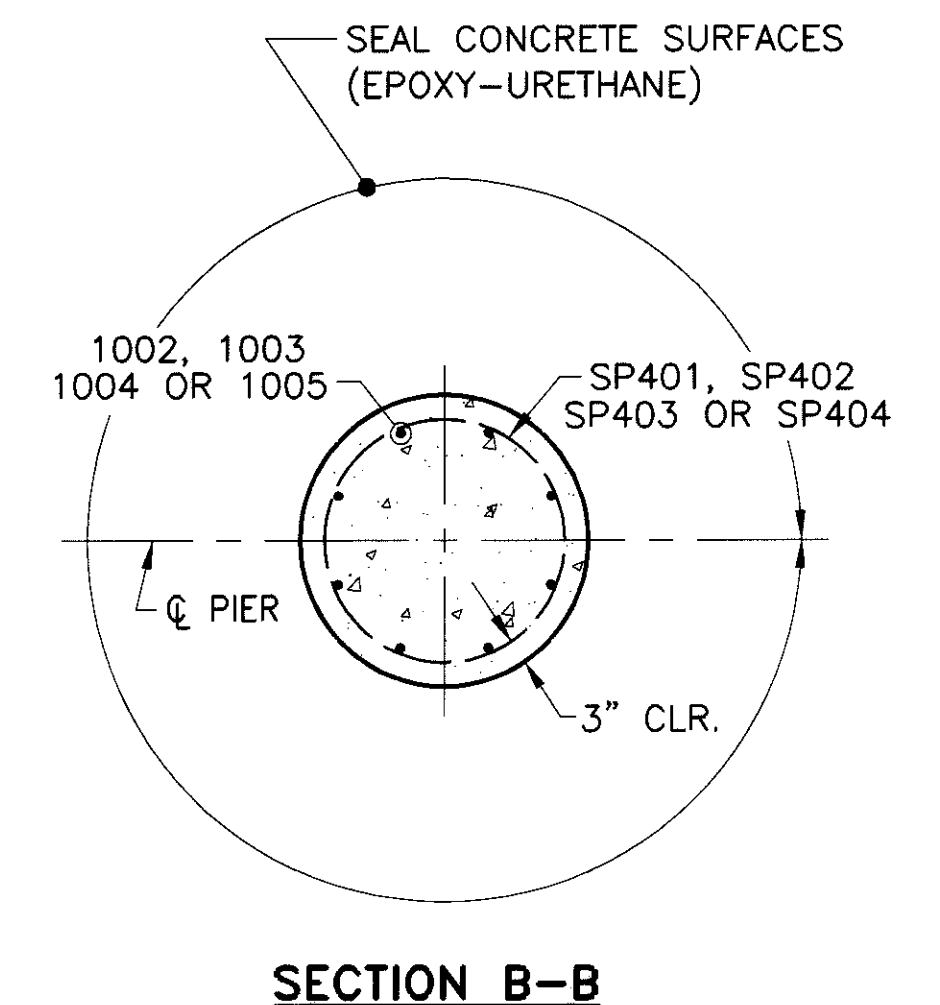
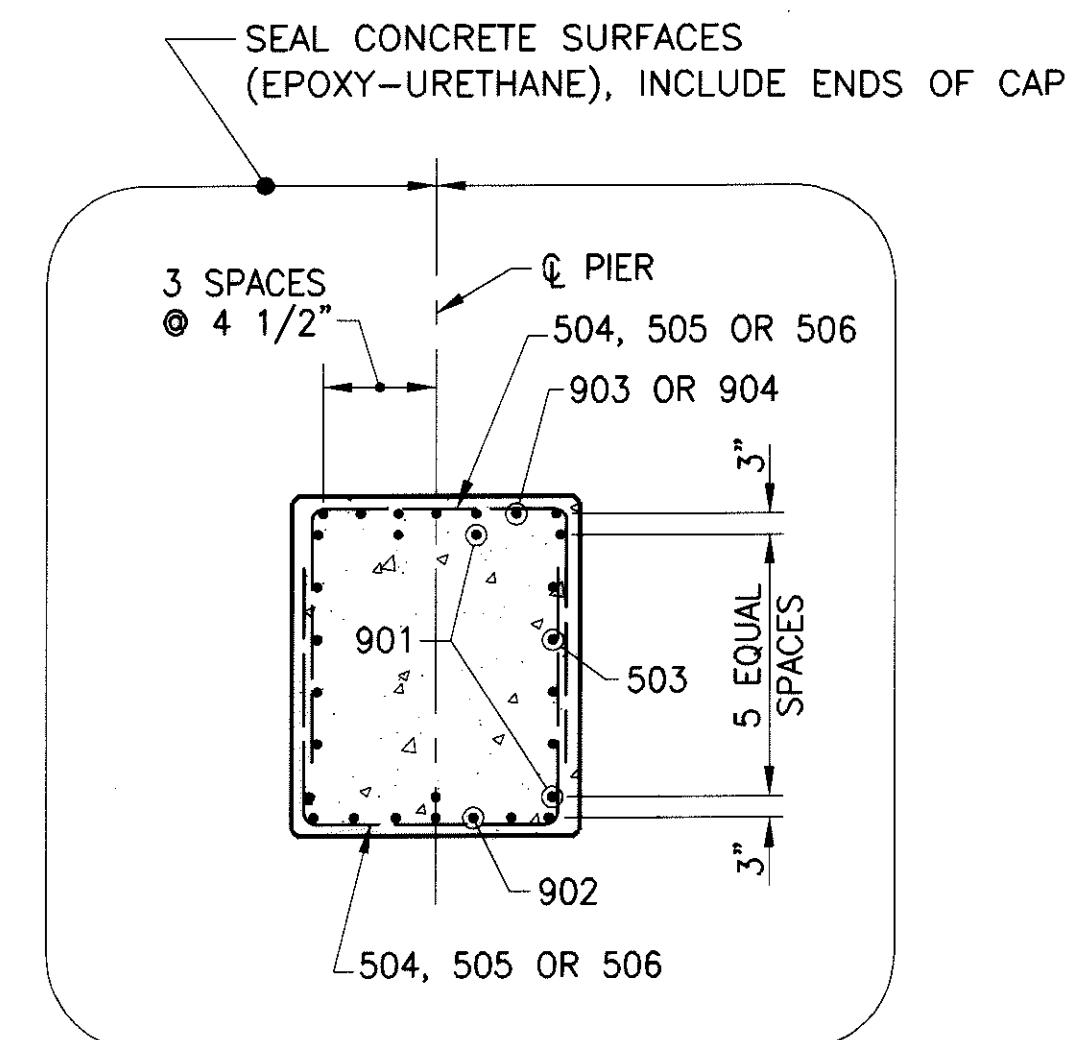
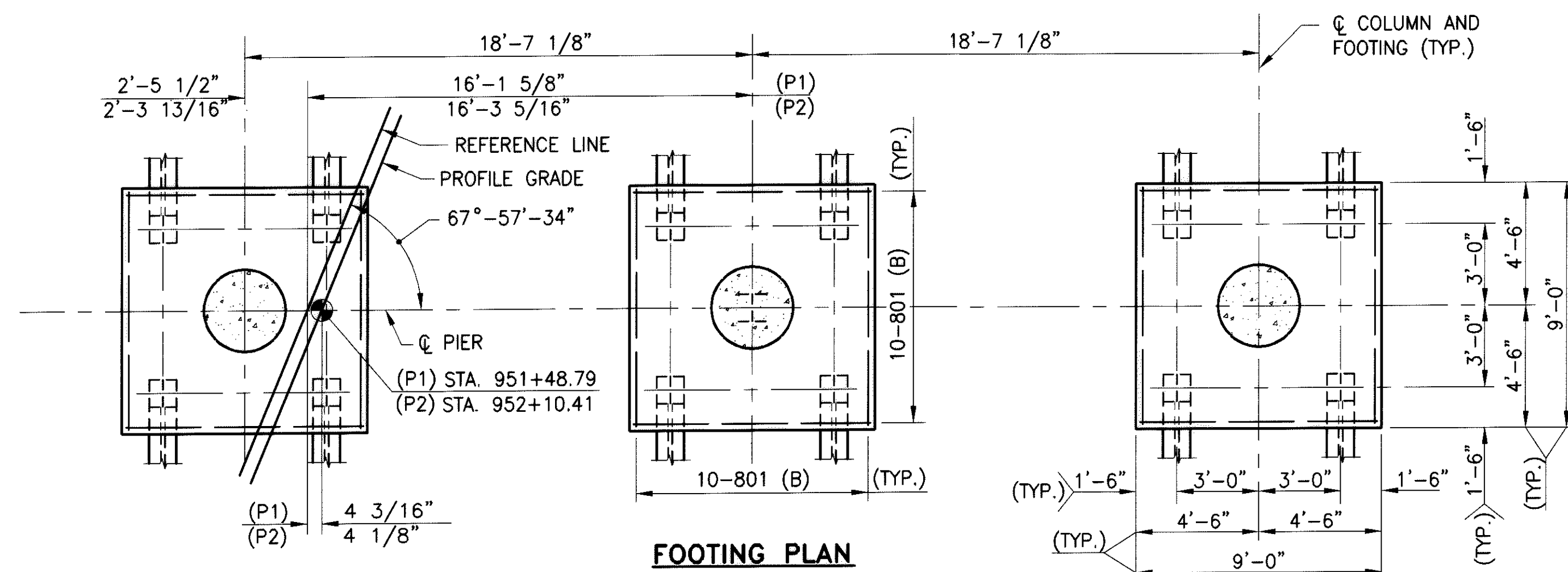
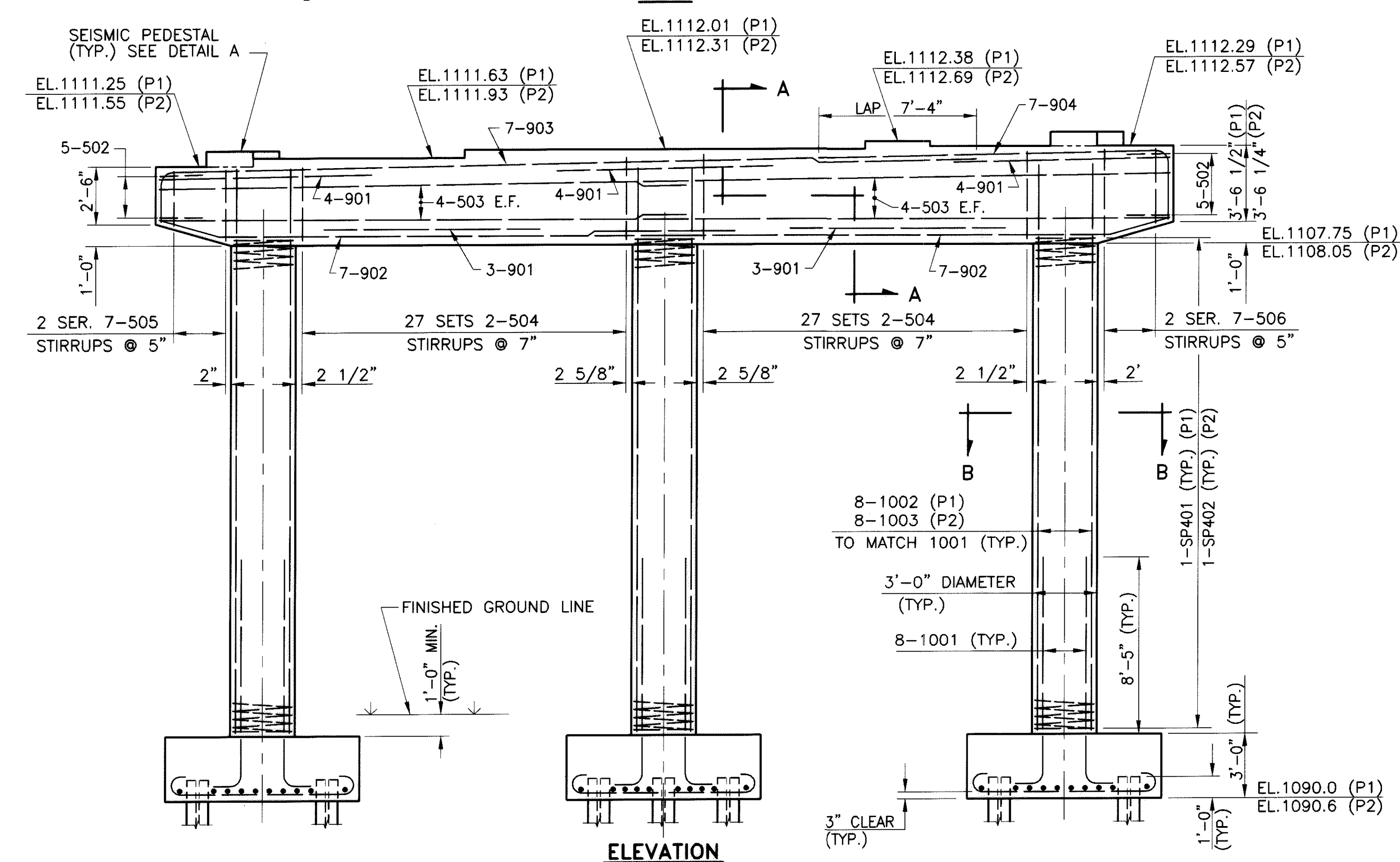
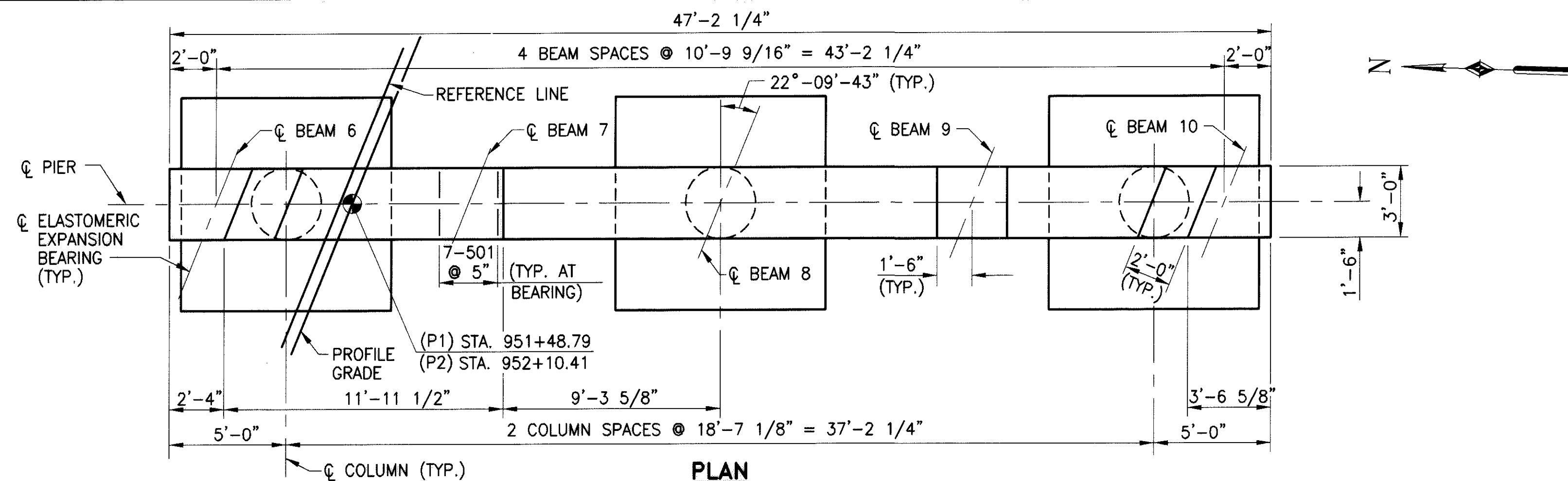
- ① FOR SECTION A-A AND B-B SEE SHEET 5/19 .
- ② FOR ADDITIONAL NOTES SEE SHEET 5/19 .



MINIMUM LAP LENGTHS	
NO. 5 BAR =	2'-0"
NO. 6 BAR =	2'-4"
NO. 8 BAR =	5'-6"

NOTES:

- FOR SECTION A-A AND B-B, SEE SHEET 5/19.
- FOR ADDITIONAL NOTES SEE SHEET 5/19.

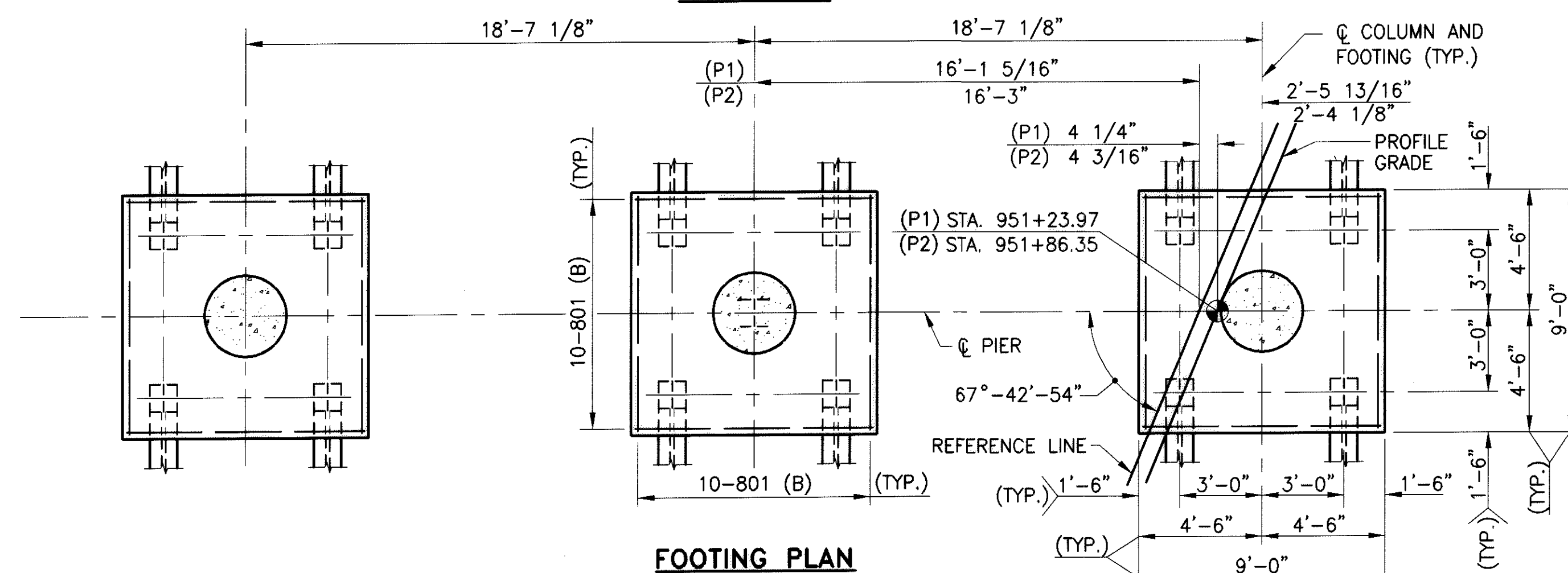
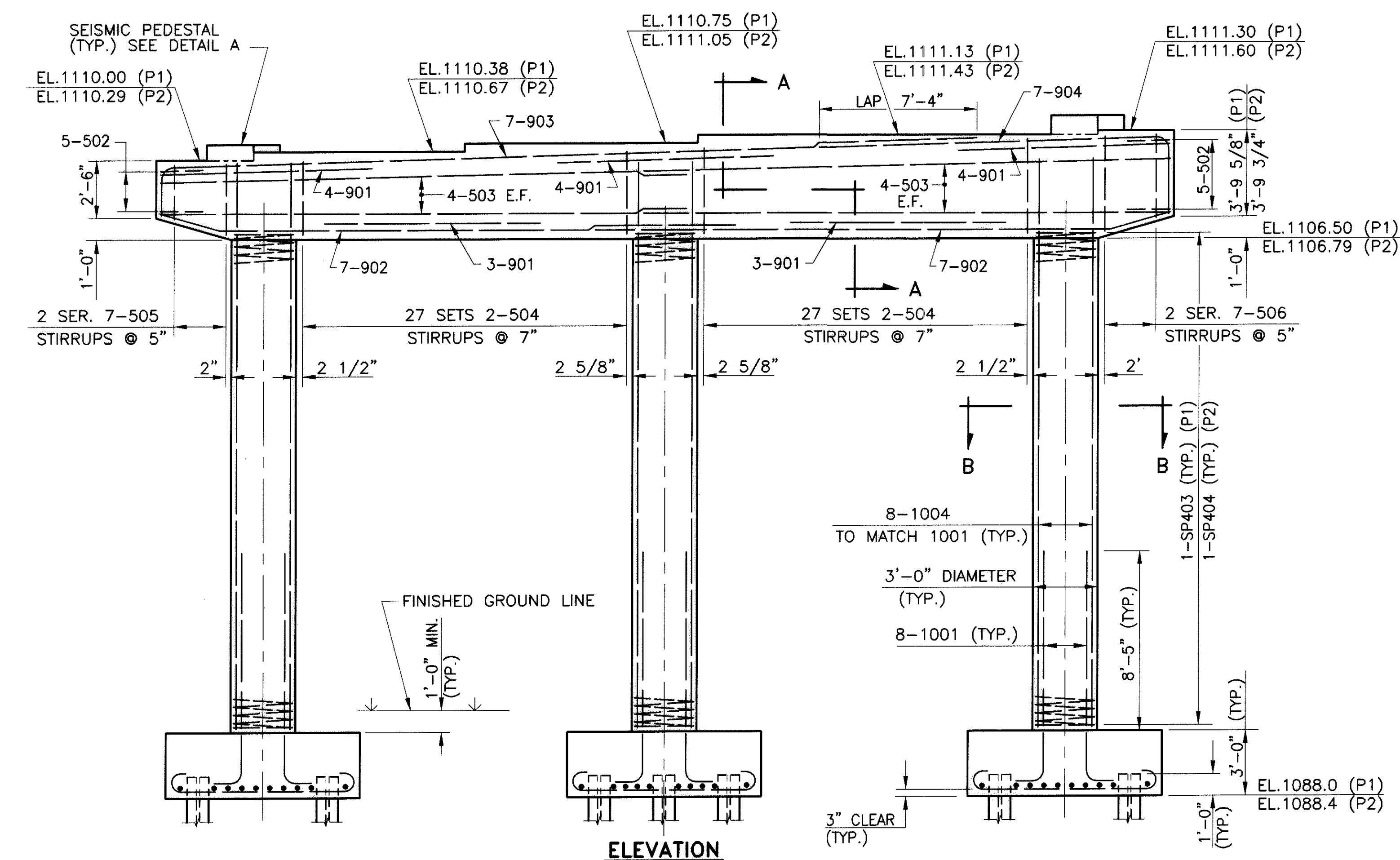
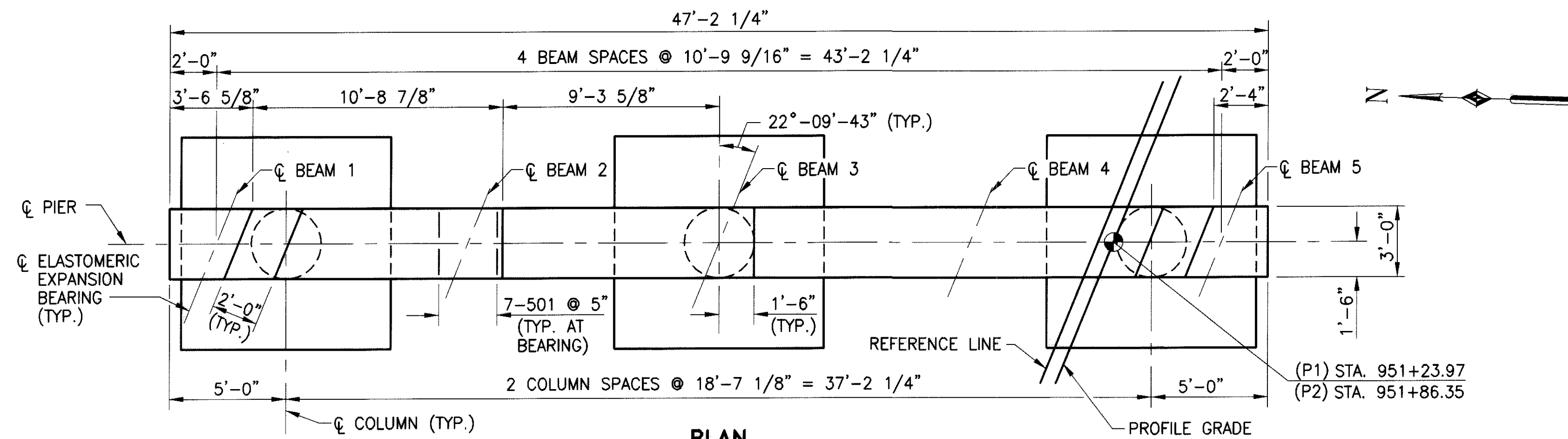


THE LOCATION OF THE MAIN REINFORCEMENT IN THE BEAM SEAT MAY BE ADJUSTED HORIZONTALLY $\pm 1"$ TO ACCOMMODATE THE 905 BARS.
* THE TOP OF THE PIER IN THIS AREA SHALL BE FINISHED WITH A SERRATED TROWEL. THE SERRATIONS SHALL BE 1/4" DEEP MINIMUM.

MINIMUM LAP LENGTH UNLESS OTHERWISE NOTED	
NO. 5 BAR =	2'-0"
NO. 9 BAR =	6'-6"
NO.10 BAR =	8'-3"

NOTES:

- ALL REINFORCING BARS SHALL BE PREFIXED P (PIER), UNLESS OTHERWISE NOTED.
- FOR ELASTOMERIC BEARING DETAILS SEE SHEET 17/19.
- FOR REINFORCING SCHEDULE SEE SHEET 18/19.
- COLUMN SPIRAL REINFORCEMENT SHALL BE EMBEDDED A MINIMUM OF 2" INTO PIER CAP CONCRETE.
- SURFACE UNDER BEARINGS: SPECIAL CARE SHALL BE TAKEN TO FINISH THE CONCRETE UNDER THE BEARINGS TO A FLAT, LEVEL SURFACE. THE CONCRETE SURFACE SHALL BE STEEL TROWEL FINISHED WITHOUT BRUSHING AND THE FLATNESS OF THE FINISHED SURFACE SHALL NOT VARY FROM A STRAIGHT EDGE LAID ON THE SURFACE IN ANY DIRECTION WITHIN THE LIMITS OF THE BEARING FOOTPRINT BY MORE THAN 1/16 INCH. SURFACES WHICH FAIL TO CONFORM TO THE REQUIRED FLATNESS SHALL BE GROUND UNTIL ACCEPTABLE.

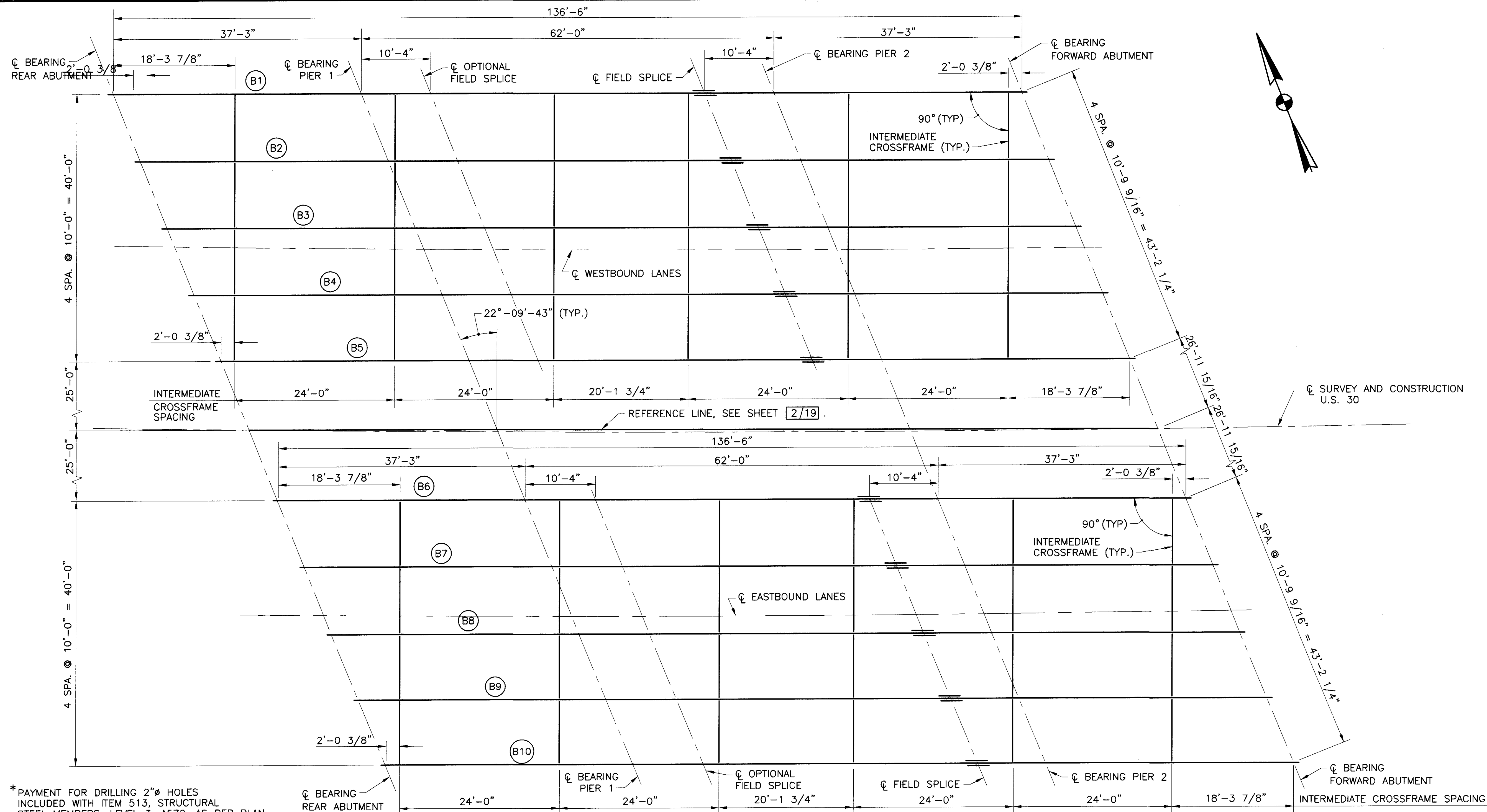


MINIMUM LAP LENGTH	
UNLESS OTHERWISE NOTED	
NO. 5 BAR	= 2'-0"
NO. 9 BAR	= 6'-6"
NO.10 BAR	= 8'-3"

NOTES:

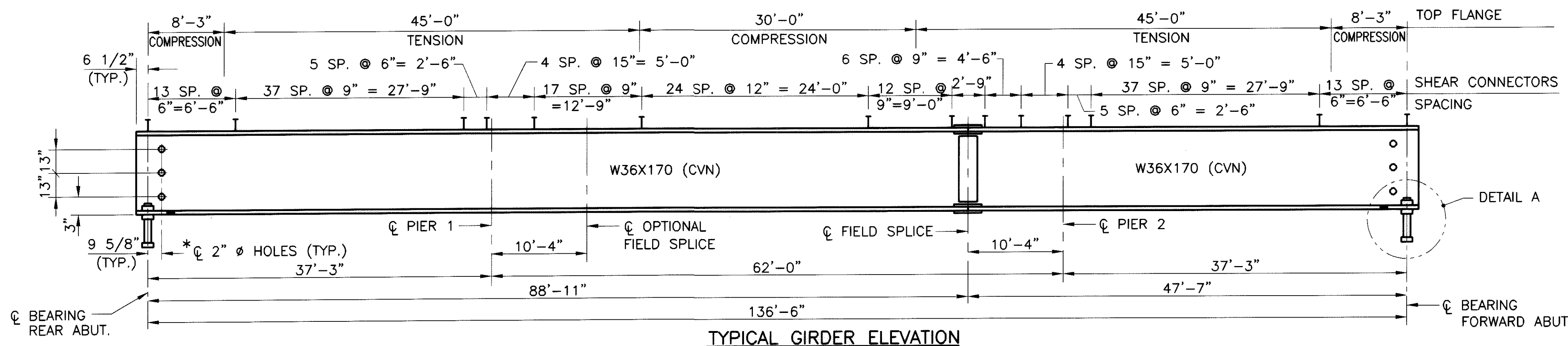
- FOR SECTIONS A-A, B-B, SEISMIC PEDESTAL DETAILS AND ADDITIONAL NOTES SEE SHEET [9/19].

GFH 3/10/03 PLOT18
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* PAYMENT FOR DRILLING 2" Ø HOLES INCLUDED WITH ITEM 513, STRUCTURAL STEEL MEMBERS, LEVEL 3, A572, AS PER PLAN

FRAMING PLAN



TYPICAL GIRDER ELEVATION

NOTES:

- ① WELDED ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE MAY BE MADE TO AREAS OF THE FLANGES OF THE FASCIA BEAMS DESIGNATED "COMPRESSION". ATTACHMENTS SHALL NOT BE MADE TO AREAS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL BE NOT CLOSER THAN 1" FROM EDGE OF THE FLANGE, BE NOT MORE THAN 2" LONG AND BE NOT SMALLER THAN 1/4" FOR THICKNESSES UP TO 3/4" AND 5/16" FOR THICKNESSES GREATER THAN 3/4".
- ② FOR BEARING DETAILS SEE SHEET [17/19].
- ③ FOR DETAIL A AND BEAM SPLICE SEE SHEET [12/19].
- ④ INTERMEDIATE CROSSFRAMES SHALL BE TYPE 4 WITH L 3 X 3 X 5/16 AND 3/8" X 7 1/2" STIFFENERS. FOR ADDITIONAL NOTES AND DETAILS SEE OHIO STANDARD DRAWING GSD-1-96.
- ⑤ CHARPY V-NOTCH TOUGHNESS: WHERE A SHAPE OR PLATE IS DESIGNATED (CVN) THE MATERIAL SHALL MEET THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.

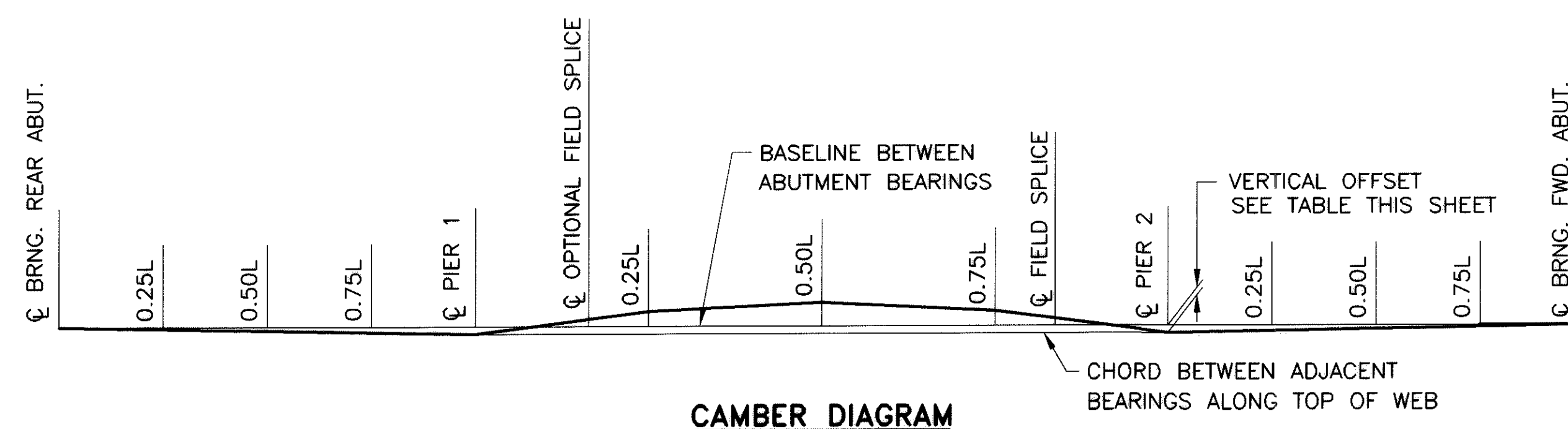
DETAIL A

Technical drawing showing a cross-section of the beam-to-backwall connection. The drawing includes labels for "S WITH PER BOLT" (likely referring to the top flange), "B" (indicating the beam), and "DIMENSION A (SEE TABLE)".

SECTION B-B

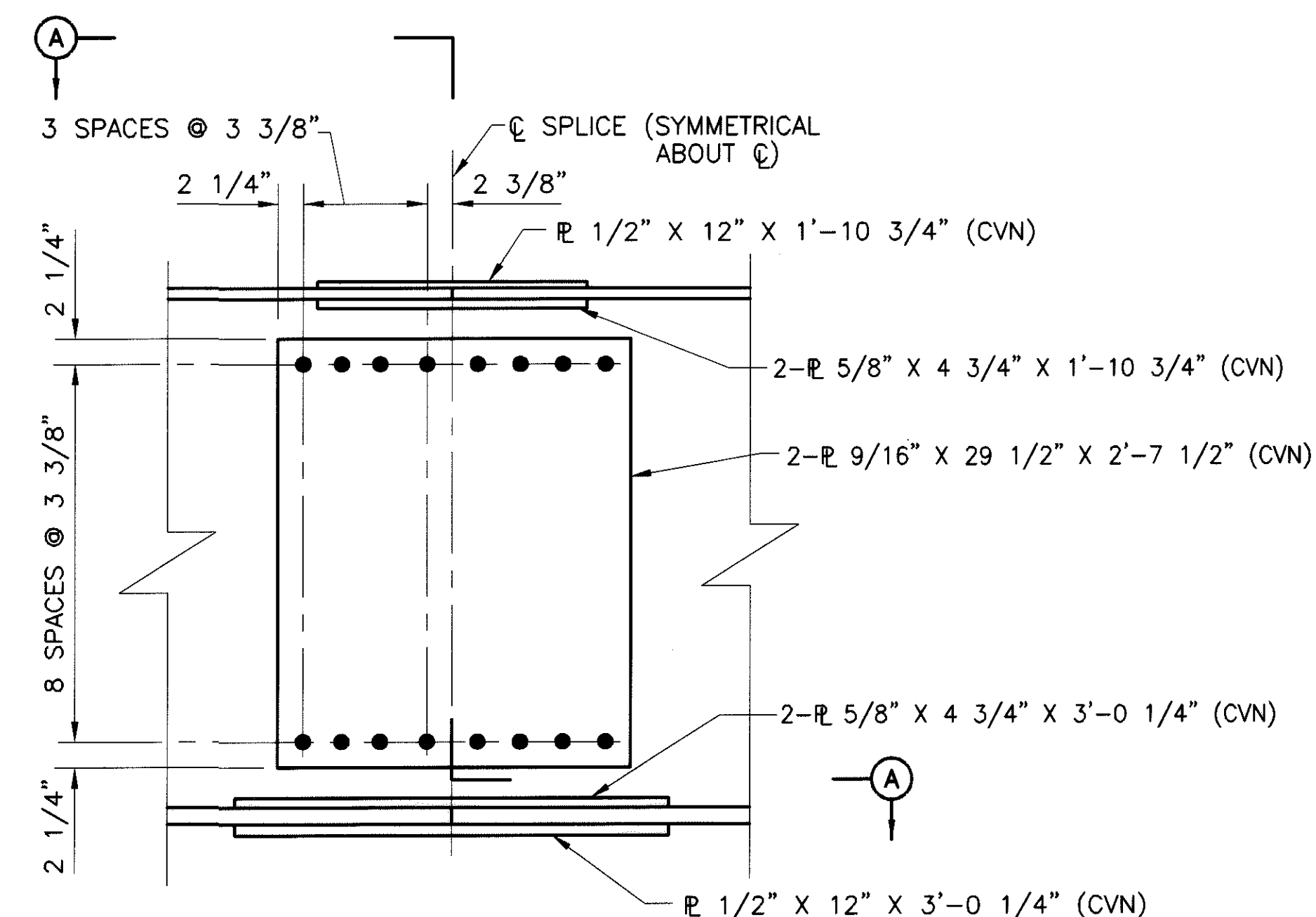
Technical drawing showing a cross-section of the beam-to-backwall connection. The drawing includes labels for "CL BEARING", "22°-09'-43" SKEW ANGLE", "FACE OF BACKWALL", "CL BEAM", "CUT TOP AND BOTTOM FLANGES", "2"Ø HOLES FOR SUPPORT BOLTS (BOTTOM FLANGE ONLY)", "2"Ø VENT HOLES (BOTTOM FLANGE ONLY)", and dimensions of 2", 6", and 6".

DIMENSION A					
WESTBOUND	BEAM 1	BEAM 2	BEAM 3	BEAM 4	BEAM 5
REAR ABUT.	1'-0"	1'-4 9/16"	1'-9 1/8"	2'-1 11/16"	2'-3 1/4"
FORWARD ABUT.	1'-0"	1'-4 9/16"	1'-9 1/8"	2'-1 13/16"	2'-3 5/8"
EASTBOUND	BEAM 6	BEAM 7	BEAM 8	BEAM 9	BEAM 10
REAR ABUT.	1'-0"	1'-4 9/16"	1'-9 1/8"	2'-1 9/16"	2'-0 3/8"
FORWARD ABUT.	1'-0"	1'-4 9/16"	1'-9 1/8"	2'-1 11/16"	1'-11 7/8"

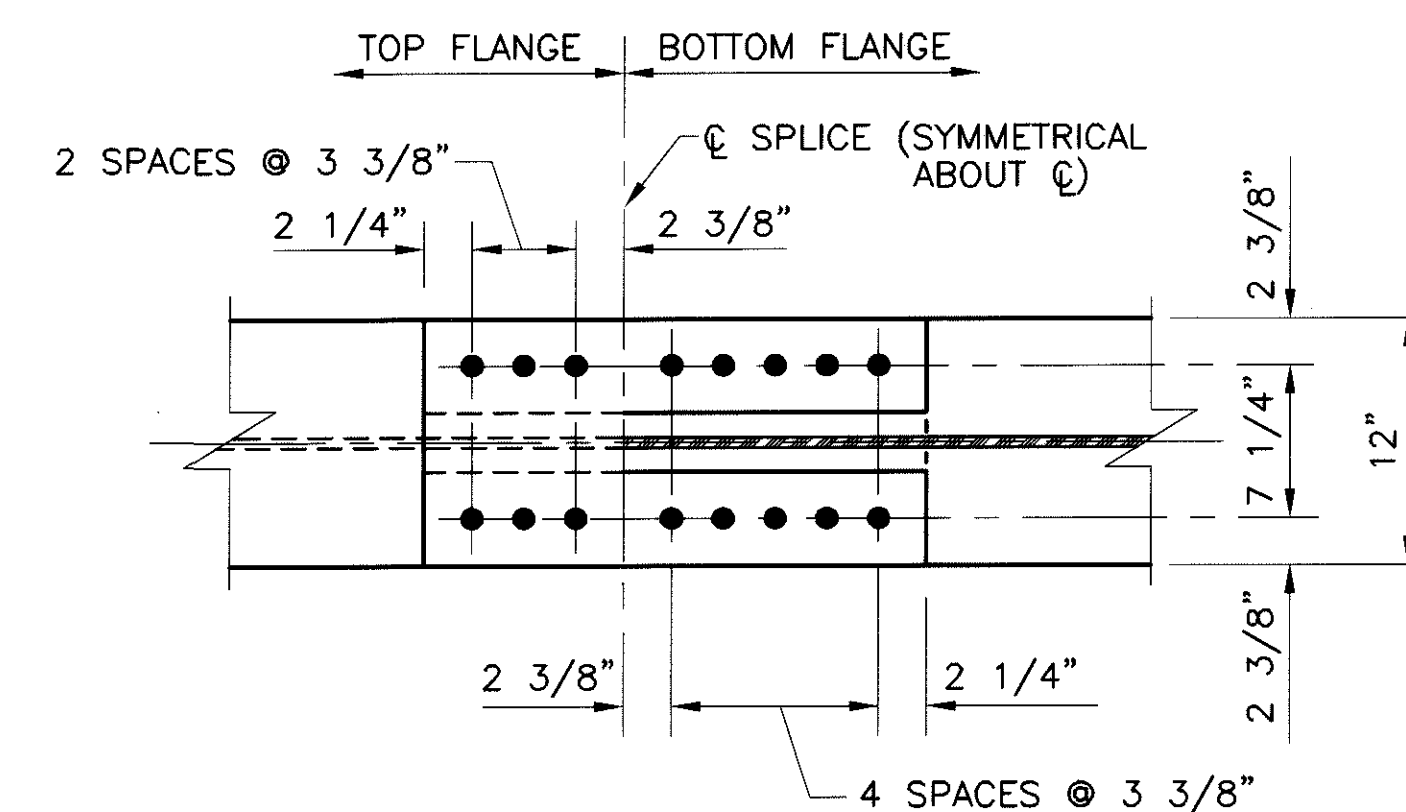


VERTICAL OFFSET		
BEAM NO.	PIER NO. 1	PIER NO. 2
B1, B2, B3, B4 B6, B7, B8, B9	-1/8"	-1/8"
B5, B10	3/16"	3/16"

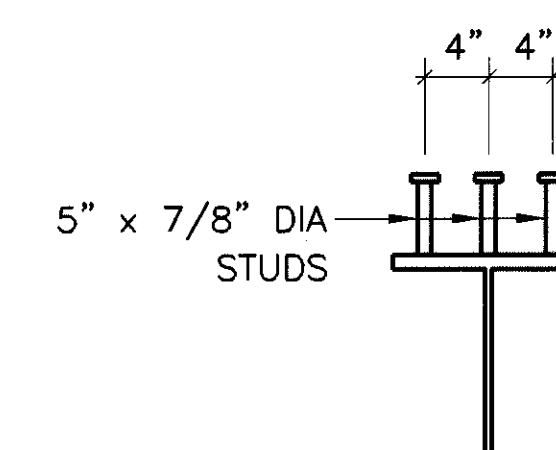
NOTE: NEGATIVE VALUES OF VERTICAL OFFSET
INDICATE VALUES BELOW THE BASELINE.



BEAM FIELD SPLICE DETAIL



SECTION A-A



SHEAR CONNECTOR
DETAIL

DEFLECTION AND CAMBER

DEFLECTION AND CAMBER															
BEAMS 1 AND 6	SPAN 1						SPAN 2					SPAN 3			
	R.A.	0.25L	0.50L	0.75L	PIER 2	OPT. F.S.	0.25L	0.50L	0.75L	F.S.	PIER 2	0.25L	0.50L	0.75L	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	1/16	1/16	1/16	0	0	0	0	0	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	0	0	0	0	1/8	1/4	3/8	1/4	1/8	0	0	0	0	0
ADJUSTMENT DUE TO HORIZONTAL CURVE	0	0	0	0	0	0	0	-1/16	0	0	0	0	0	0	0
TOTAL CAMBER	0	0	0	0	0	1/8	5/16	3/8	5/16	1/8	0	0	0	0	0
BEAMS 2, 3, 4, 7, 8 AND 9	SPAN 1						SPAN 2					SPAN 3			
	R.A.	0.25L	0.50L	0.75L	PIER 2	OPT. F.S.	0.25L	0.50L	0.75L	F.S.	PIER 2	0.25L	0.50L	0.75L	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	1/16	1/16	1/16	0	0	0	0	0	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	0	0	0	0	3/16	1/4	7/16	1/4	3/16	0	0	0	0	0
ADJUSTMENT DUE TO HORIZONTAL CURVE	0	0	0	0	0	0	0	-1/16	0	0	0	0	0	0	0
TOTAL CAMBER	0	0	0	0	0	3/16	5/16	7/16	5/16	3/16	0	0	0	0	0
BEAMS 5 AND 10	SPAN 1						SPAN 2					SPAN 3			
	R.A.	0.25L	0.50L	0.75L	PIER 2	OPT. F.S.	0.25L	0.50L	0.75L	F.S.	PIER 2	0.25L	0.50L	0.75L	F.A.
DEFLECTION DUE TO WEIGHT OF STEEL	0	0	0	0	0	0	1/16	1/16	1/16	0	0	0	0	0	0
DEFLECTION DUE TO REMAINING DEAD LOAD	0	0	0	0	0	1/8	1/4	3/8	1/4	1/8	0	0	0	0	0
ADJUSTMENT DUE TO HORIZONTAL CURVE	0	0	0	0	0	0	1/16	1/16	1/16	0	0	0	0	0	0
TOTAL CAMBER	0	0	0	0	0	1/8	3/8	1/2	3/8	1/8	0	0	0	0	0

L = SPAN LENGTH

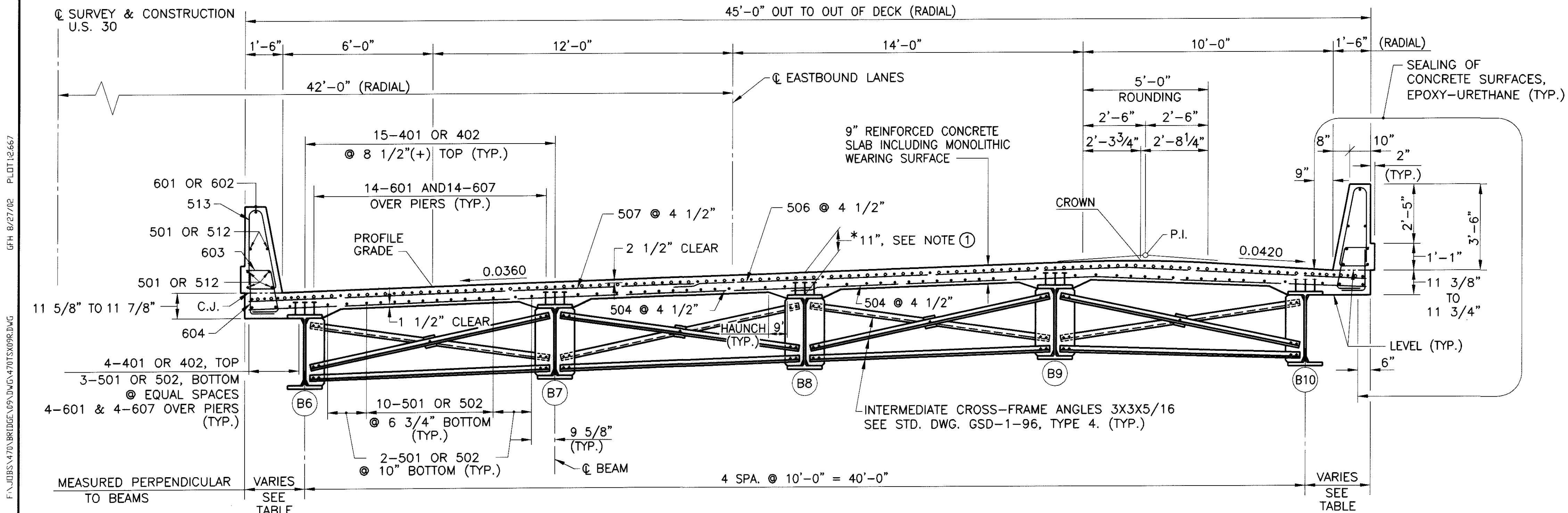
NOTES:

- ① HIGH STRENGTH BOLTS, TYPE 1, SHALL BE 1 1/8" DIAMETER A325, GALVANIZED, UNLESS OTHERWISE NOTED.
- ② FOR ADDITIONAL NOTES SEE SHEET 11/19.
- ③ DIMENSIONS AND ADJUSTMENTS ARE GIVEN TO THE NEAREST 1/16 INCH. NEGATIVE VALUES INDICATE DIMENSIONS BELOW THE CHORD LINES.

SCREED ELEVATIONS TABLE																	
		LEFT CURB LINE		B6		B7		B8		B9		CROWN		B10		RIGHT CURB LINE	
SPAN NO.	LOCATION	STATION	SCREED ELEVATION	STATION	SCREED ELEVATION	STATION	SCREED ELEVATION	STATION	SCREED ELEVATION	STATION	SCREED ELEVATION	STATION	SCREED ELEVATION	STATION	SCREED ELEVATION	STATION	SCREED ELEVATION
SPAN NO.1	REAR ABUT.	951+09.13	1115.29	951+09.50	1115.33	951+13.65	1115.71	951+17.79	1116.09	951+21.91	1116.46	951+23.36	1116.56	951+26.01	1116.36	951+26.53	1116.31
	0.25 L	951+18.44	1115.34	951+18.78	1115.37	951+22.91	1115.75	951+27.03	1116.13	951+31.13	1116.51	951+32.61	1116.60	951+35.22	1116.40	951+35.76	1116.35
	0.50 L	951+27.75	1115.38	951+28.05	1115.41	951+32.16	1115.79	951+36.27	1116.17	951+40.36	1116.55	951+41.84	1116.65	951+44.43	1116.45	951+44.98	1116.39
	0.75 L	951+37.04	1115.43	951+37.32	1115.45	951+41.42	1115.83	951+45.51	1116.21	951+49.58	1116.59	951+51.08	1116.69	951+53.64	1116.49	951+54.20	1116.44
SPAN NO.2	PIER 1	951+46.33	1115.47	951+46.59	1115.50	951+50.68	1115.88	951+54.75	1116.26	951+58.80	1116.63	951+60.30	1116.73	951+62.85	1116.54	951+63.41	1116.48
	OPTIONAL F.S.	—	—	951+56.88	1115.56	951+60.95	1115.94	951+65.00	1116.32	951+69.04	1116.70	—	—	951+73.06	1116.60	—	—
	0.25 L	951+61.78	1115.57	951+62.03	1115.59	951+66.08	1115.97	951+70.13	1116.35	951+74.16	1116.73	951+75.65	1116.83	951+78.17	1116.63	951+78.73	1116.57
	0.50 L	951+77.22	1115.65	951+77.46	1115.68	951+81.49	1116.06	951+85.51	1116.44	951+89.51	1116.82	951+00.97	1116.92	951+93.50	1116.71	951+94.04	1116.66
	0.75 L	951+92.63	1115.71	951+92.89	1115.74	951+96.90	1116.12	952+00.89	1116.50	952+04.86	1116.88	952+06.28	1116.98	952+08.83	1116.77	952+09.32	1116.72
	FS1	—	—	951+98.04	1115.76	952+02.03	1116.14	952+06.01	1116.52	952+09.98	1116.90	—	—	952+13.94	1116.79	—	—
SPAN NO.3	PIER 2	952+08.03	1115.77	952+08.33	1115.80	952+12.30	1116.18	952+16.27	1116.56	952+20.22	1116.94	952+21.58	1117.03	952+24.15	1116.82	952+24.59	1116.78
	0.25 L	952+17.28	1115.81	952+17.60	1115.84	952+21.56	1116.22	952+25.51	1116.60	952+29.44	1116.98	952+30.76	1117.07	952+33.36	1116.86	952+33.76	1116.82
	0.50 L	952+26.51	1115.86	952+26.87	1115.89	952+30.82	1116.27	952+34.75	1116.65	952+38.66	1117.03	952+39.93	1117.12	952+42.57	1116.90	952+42.92	1116.86
	0.75 L	952+35.75	1115.90	952+36.14	1115.94	952+40.07	1116.32	952+43.99	1116.70	952+47.89	1117.08	952+49.10	1117.16	952+51.78	1116.94	952+52.08	1116.91
	FWD. ABUT.	952+44.97	1115.95	952+45.41	1115.99	952+49.33	1116.37	952+53.22	1116.75	952+57.11	1117.13	952+58.26	1117.20	952+60.98	1116.98	952+61.22	1116.95

SCREED ELEVATIONS SHOWN ARE FOR THE DECK SLAB SURFACE PRIOR TO CONCRETE PLACEMENT.
ALLOWANCE HAS BEEN MADE FOR ANTICIPATED CALCULATED DEAD LOAD DEFLECTIONS.

HORIZONTAL OFFSETS TO EDGE OF SLAB (PERPENDICULAR TO BEAMS)													
LOCATION	SPAN 1				SPAN 2				SPAN 3				
	REAR ABUT. C BEARING	1/4	1/2	3/4	C PIER 1	1/4	1/2	3/4	C PIER 2	1/4	1/2	3/4	FWD. ABUT. C BEARING
LEFT EDGE OF SLAB	2'-4 5/8"	2'-3 5/8"	2'-2 3/4"	2'-2 1/16"	2'-1 9/16"	2'-1 1/8"	2'-1 1/4"	2'-1 13/16"	2'-2 7/8"	2'-3 13/16"	2'-4 7/8"	2'-6 1/8"	2'-7 9/16"
RIGHT EDGE OF SLAB	2'-9 1/16"	2'-9 13/16"	2'-10 5/16"	2'-10 11/16"	2'-10 7/8"	2'-10 3/4"	2'-10 1/8"	2'-9 1/16"	2'-7 7/16"	2'-6 1/4"	2'-4 7/8"	2'-3 5/16"	2'-1 9/16"



NOTES:

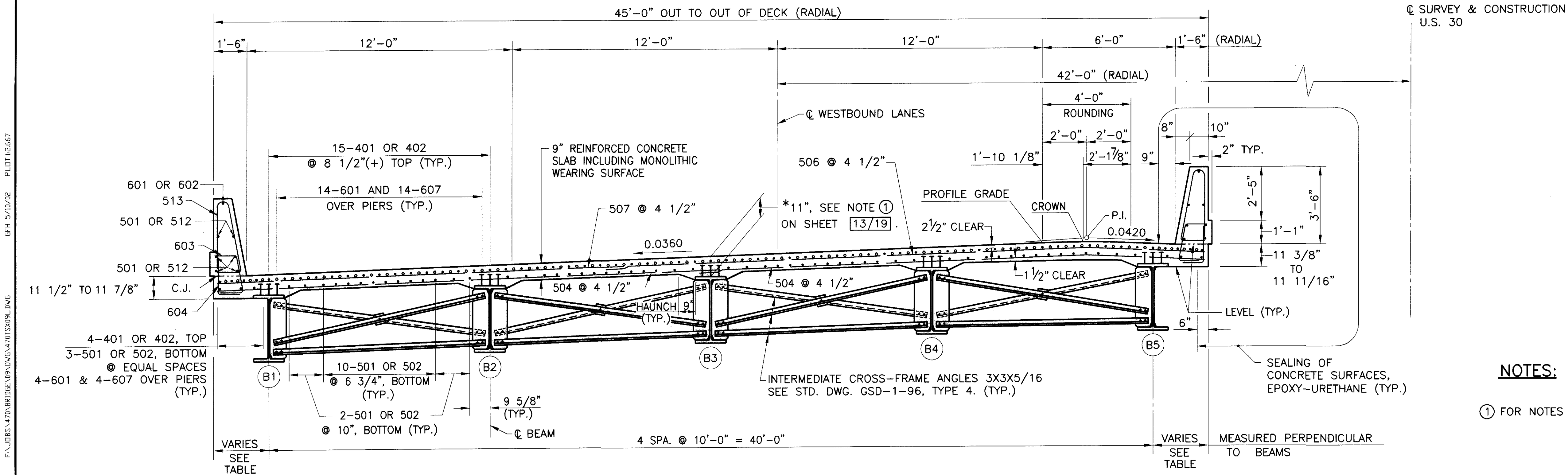
- * DECK SLAB DEPTH FOR CONCRETE QUANTITY:
THE DIMENSION SHOWN FROM THE TOP OF THE CONCRETE DECK TO THE TOP OF THE FLANGE, MINUS THE DESIGN HAUNCH THICKNESS OF 2", HAS BEEN USED FOR COMPUTING THE DECK CONCRETE QUANTITIES. CONCRETE REQUIRED TO FILL THE HAUNCHES, INCLUDING ADDITIONAL OR LESS MATERIAL REQUIRED DUE TO HAUNCH CONSTRUCTION TOLERANCES, SHALL BE CONSIDERED AS INCIDENTAL AND WILL NOT BE INCLUDED IN THE QUANTITY CALCULATIONS FOR PAYMENT.
- CONCRETE DECK HAUNCH WIDTH:
A HAUNCH WIDTH OF 9" SHALL BE USED. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 1'-0".
- FOR SLAB PLAN SEE SHEET 15/19.
- FOR PARAPET REINFORCING AND TRANSITION DETAILS SEE SHEET 16/19.
- FOR ADDITIONAL REINFORCING OVER PIERS SEE SHEET 15/19.
- TRANSVERSE DIMENSIONS MEASURED RADIALY, EXCEPT AS NOTED.

TRANSVERSE SECTION

SCREED ELEVATIONS TABLE																	
		LEFT CURB LINE		B1		B2		B3		B4		CROWN		B5		RIGHT CURB LINE	
SPAN NO.	LOCATION	STATION	SCREED ELEVATION	STATION	SCREED ELEVATION	STATION	SCREED ELEVATION	STATION	SCREED ELEVATION	STATION	SCREED ELEVATION	STATION	SCREED ELEVATION	STATION	SCREED ELEVATION	STATION	SCREED ELEVATION
SPAN NO.1	REAR ABUT.	950+70.91	1114.03	950+71.51	1114.08	950+75.79	1114.46	950+80.06	1114.84	950+84.31	1115.22	950+87.14	1115.44	950+88.54	1115.35	950+88.91	1115.32
	0.25 L	950+80.40	1114.08	950+80.93	1114.13	950+85.19	1114.50	950+89.44	1114.88	950+93.68	1115.26	950+96.55	1115.49	950+97.90	1115.40	950+98.31	1115.36
	0.50 L	950+89.87	1114.12	950+90.35	1114.17	950+94.59	1114.54	950+98.83	1114.92	951+03.04	1115.30	951+05.96	1115.53	951+07.25	1115.45	951+07.71	1115.41
	0.75 L	950+99.34	1114.17	950+99.76	1114.20	951+04.00	1114.58	951+08.21	1114.96	951+12.41	1115.34	951+15.35	1115.57	951+16.60	1115.50	951+17.10	1115.45
SPAN NO.2	PIER 1	951+08.81	1114.21	951+09.18	1114.25	951+13.40	1114.63	951+17.60	1115.00	951+21.78	1115.38	951+24.74	1115.62	951+25.95	1115.55	951+26.48	1115.50
	OPTIONAL F.S.	—	—	951+19.63	1114.31	951+23.83	1114.69	951+28.01	1115.07	951+32.18	1115.45	—	—	951+36.33	1115.61	—	—
	0.25 L	951+24.55	1114.31	951+24.86	1114.34	951+29.05	1114.72	951+33.22	1115.10	951+37.38	1115.48	951+40.36	1115.71	951+41.52	1115.65	951+42.08	1115.59
	0.50 L	951+40.27	1114.39	951+40.54	1114.42	951+44.70	1114.80	951+48.84	1115.18	951+52.98	1115.56	951+55.96	1115.80	951+57.09	1115.73	951+57.67	1115.68
	0.75 L	951+55.97	1114.46	951+56.22	1114.48	951+60.35	1114.87	951+64.47	1115.24	951+68.57	1115.62	951+71.54	1115.86	951+72.66	1115.80	951+73.23	1115.74
	F.S.	—	—	951+61.44	1114.50	951+65.57	1114.88	951+69.68	1115.26	951+73.77	1115.64	—	—	951+77.85	1115.82	—	—
SPAN NO.3	PIER 2	951+71.65	1114.51	951+71.90	1114.54	951+76.00	1114.92	951+80.09	1115.30	951+84.17	1115.68	951+87.10	1115.92	951+88.23	1115.85	951+88.78	1115.80
	0.25 L	951+81.07	1114.56	951+81.32	1114.58	951+85.41	1114.96	951+89.48	1115.34	951+93.54	1115.72	951+96.44	1115.96	951+97.58	1115.89	951+98.12	1115.84
	0.50 L	951+90.48	1114.61	951+90.74	1114.63	951+94.81	1115.01	951+98.87	1115.39	952+02.91	1115.77	952+05.78	1116.01	952+06.94	1115.94	952+07.45	1115.89
	0.75 L	951+99.88	1114.65	952+00.16	1114.68	952+04.21	1115.06	952+08.25	1115.44	952+12.28	1115.82	952+15.11	1116.05	952+16.29	1115.98	952+16.77	1115.93
	FWD. ABUT.	952+09.27	1114.70	952+09.58	1114.72	952+13.61	1115.10	952+17.64	1115.48	952+21.65	1115.87	952+24.43	1116.10	952+25.64	1116.02	952+26.09	1115.98

SCREED ELEVATIONS SHOWN ARE FOR THE DECK SLAB SURFACE PRIOR TO CONCRETE PLACEMENT.
ALLOWANCE HAS BEEN MADE FOR ANTICIPATED CALCULATED DEAD LOAD DEFLECTIONS.

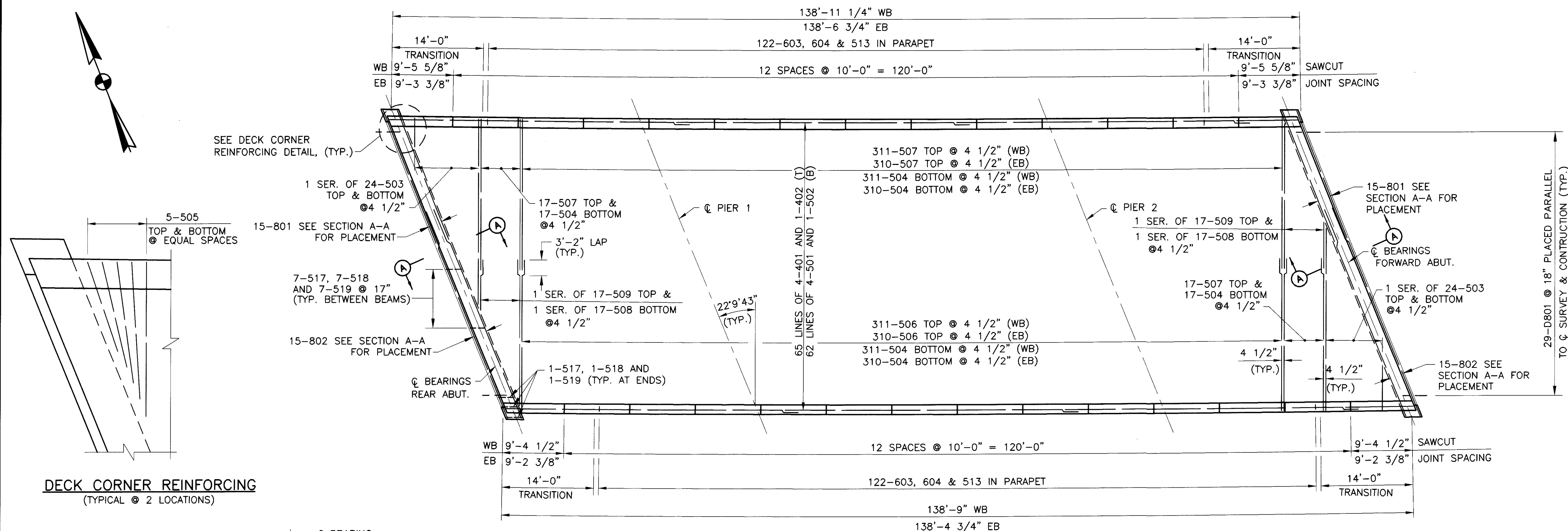
HORIZONTAL OFFSETS TO EDGE OF SLAB (PERPENDICULAR TO BEAMS)													
LOCATION	SPAN 1					SPAN 2				SPAN 3			
	REAR ABUT. C BEARING	1/4	1/2	3/4	C PIER 1	1/4	1/2	3/4	C PIER 2	1/4	1/2	3/4	FWD. ABUT. C BEARING
LEFT EDGE OF SLAB	2'-10 5/8"	2'-8 7/8"	2'-7 1/4"	2'-5 7/8"	2'-4 5/8"	2'-3"	2'-1 7/8"	2'-1 1/4"	2'-1 1/8"	2'-1 5/16"	2'-1 11/16"	2'-2 1/4"	2'-3"
RIGHT EDGE OF SLAB	2'-4 7/16"	2'-5 7/8"	2'-7 1/8"	2'-8 3/16"	2'-9 1/8"	2'-10 3/16"	2'-10 3/4"	2'-10 7/8"	2'-10 7/16"	2'-9 15/16"	2'-9 1/4"	2'-8 3/8"	2'-7 5/16"



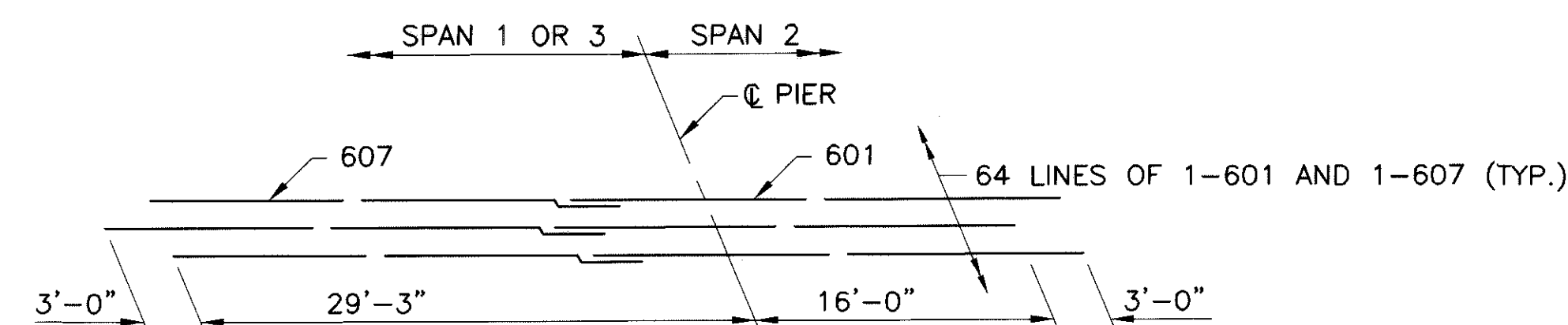
TRANSVERSE SECTION

NOTES:

① FOR NOTES SEE SHEET 13/19.



DECK REINFORCING PLAN



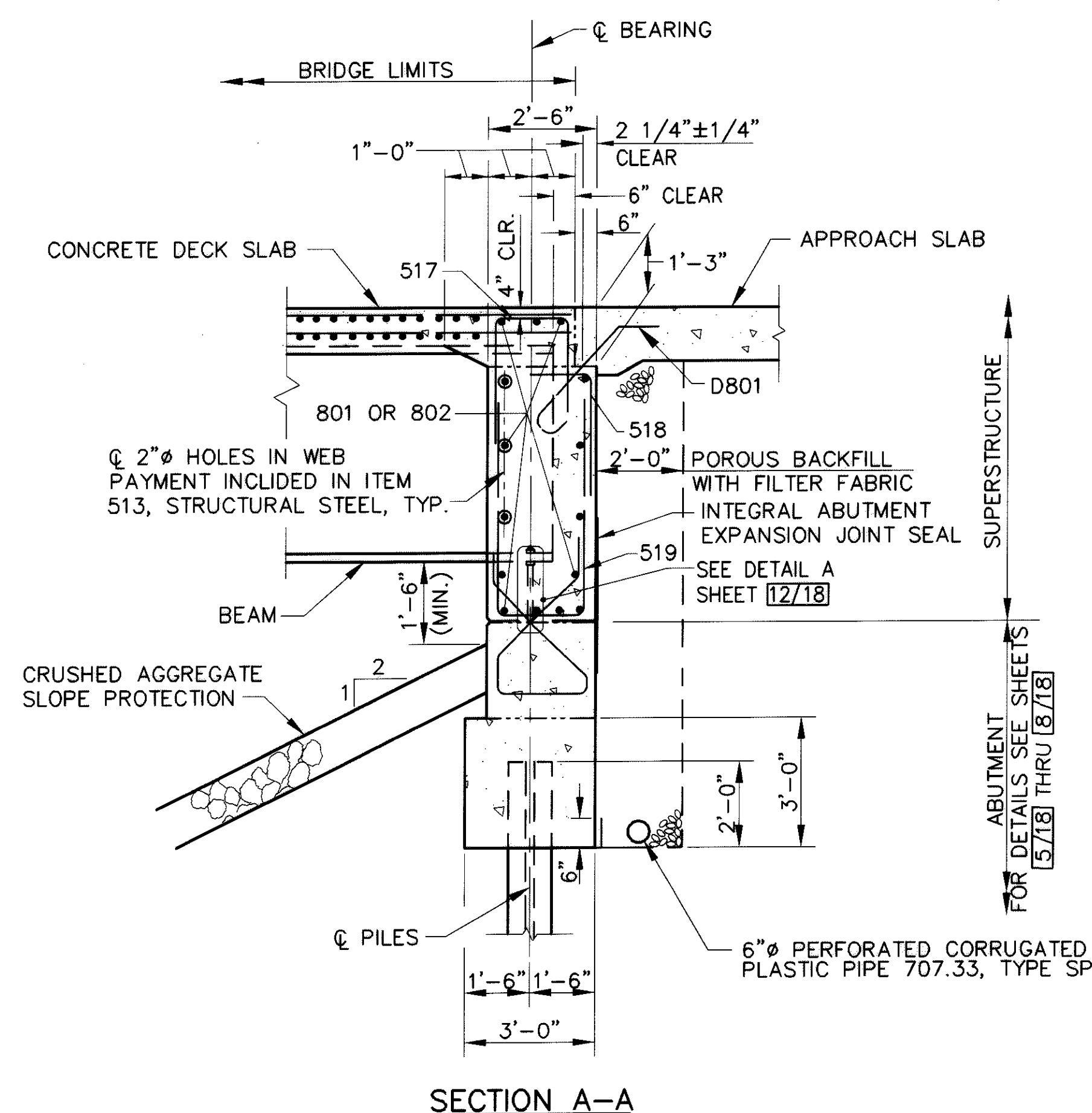
ADDITIONAL REINFORCING OVER PIERS

(PIER 1 REINFORCING SHOWN, PIER 2 SIMILAR, OPPOSITE HAND)

MINIMUM LAP LENGTHS UNLESS OTHERWISE NOTED	
NO. 4 BAR	= 1'-7"
NO. 5 BAR	= 2'-5"
NO. 6 BAR	= 3'-10"
NO. 8 BAR	= 4'-11"

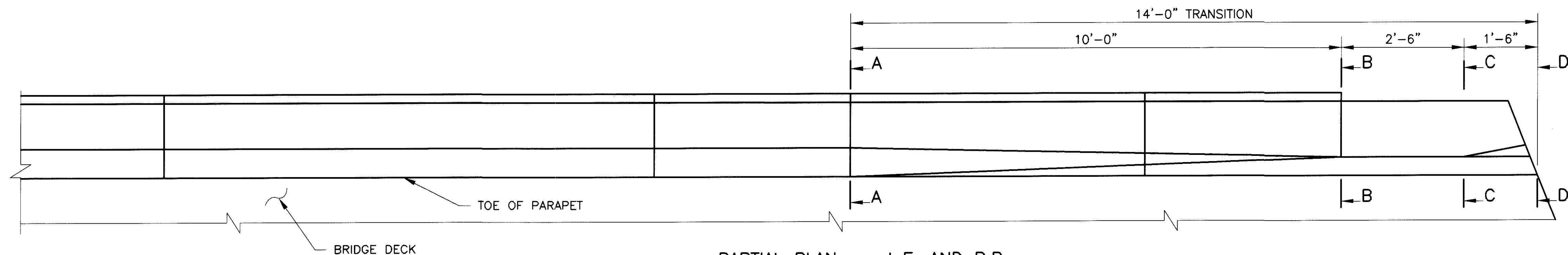
NOTES:

- ① FOR SPACING OF LONGITUDINAL REINFORCING STEEL IN THE SLAB SEE SHEET 13/19 AND 14/19 .
- ② ALL REINFORCING STEEL BAR MARKS SHALL BE PREFIXED "S" (SUPERSTRUCTURE) UNLESS OTHERWISE NOTED.
- ③ THE CONCRETE ENCASING STRUCTURAL STEEL MEMEBERS SUPPORTED IN INTEGRAL TYPE ABUTMENTS SHALL BE PLACED BEFORE THE ACTUAL DECK CONCRETE IS PLACED. THE CONCRETE SHALL HAVE AT LEAST 48 HOURS OF SET TIME BEFORE THE DECK CONCRETE IS PLACED.
- ④ FOR REINFORCING STEEL LIST SEE SHEET 19/19 .
- ⑤ FOR PARAPET TRANSITION DETAILS SEE SHEET 16/19 .
- ⑥ REINFORCING STEEL CALL-OUTS NOT DESIGNATED EASTBOUND (EB) OR WESTBOUND (WB) ARE TO BE CONSIDERED APPLICABLE TO BOTH EASTBOUND AND WESTBOUND.

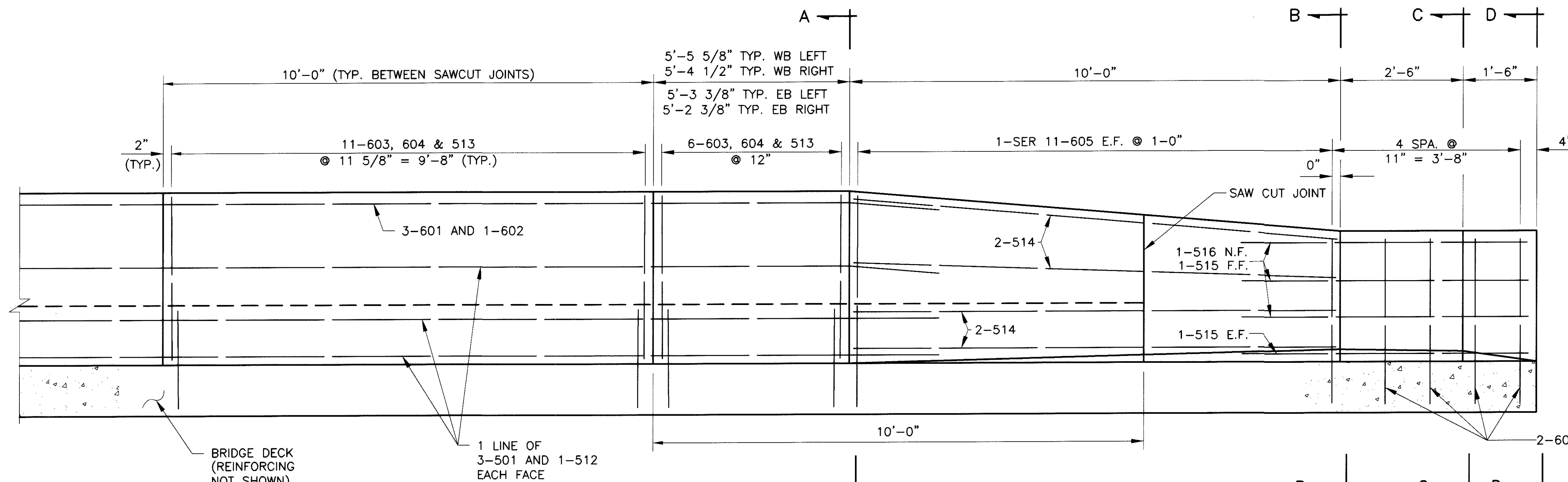


SECTION A-A

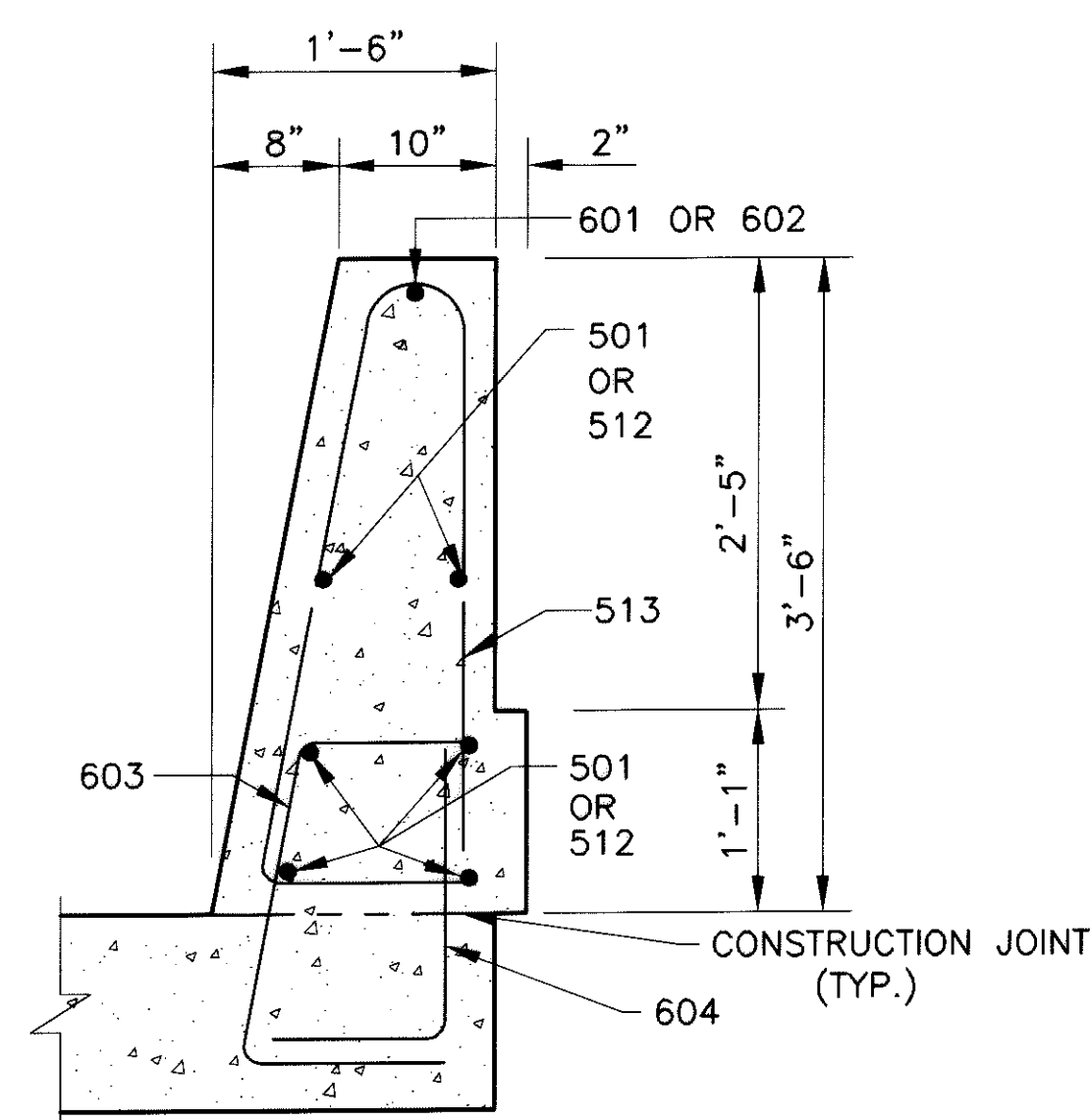
E:\JOBS\470\BRIDGE\09\DWG\470SLB09.DWG YYY 4/16/02 PLOT 1:8



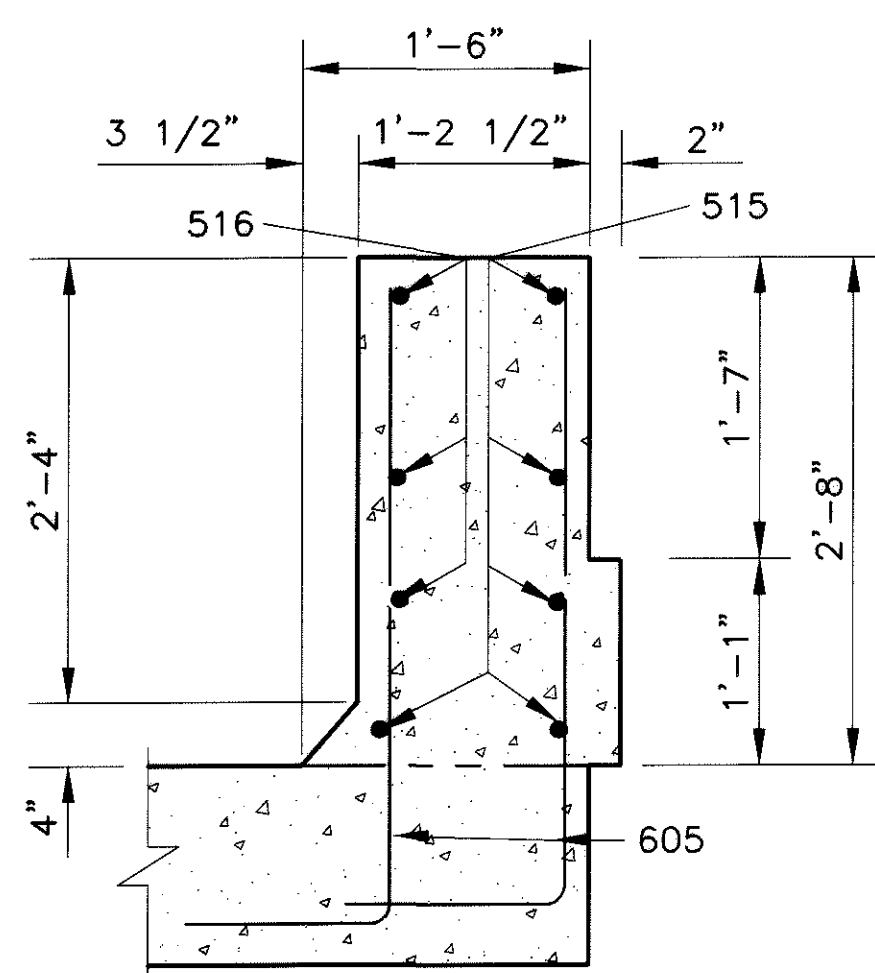
PARTIAL PLAN -- L.F. AND R.R.
(L.R. AND R.F. SIMILAR)



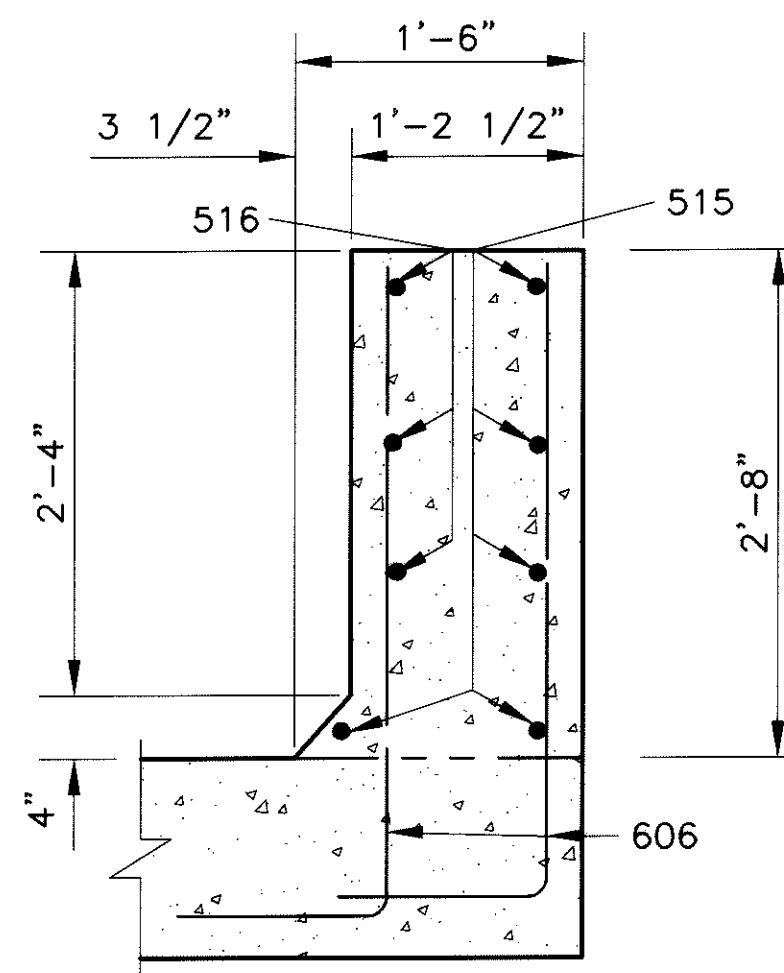
PARTIAL PARAPET ELEVATION
TYPICAL @ BOTH ABUTMENTS



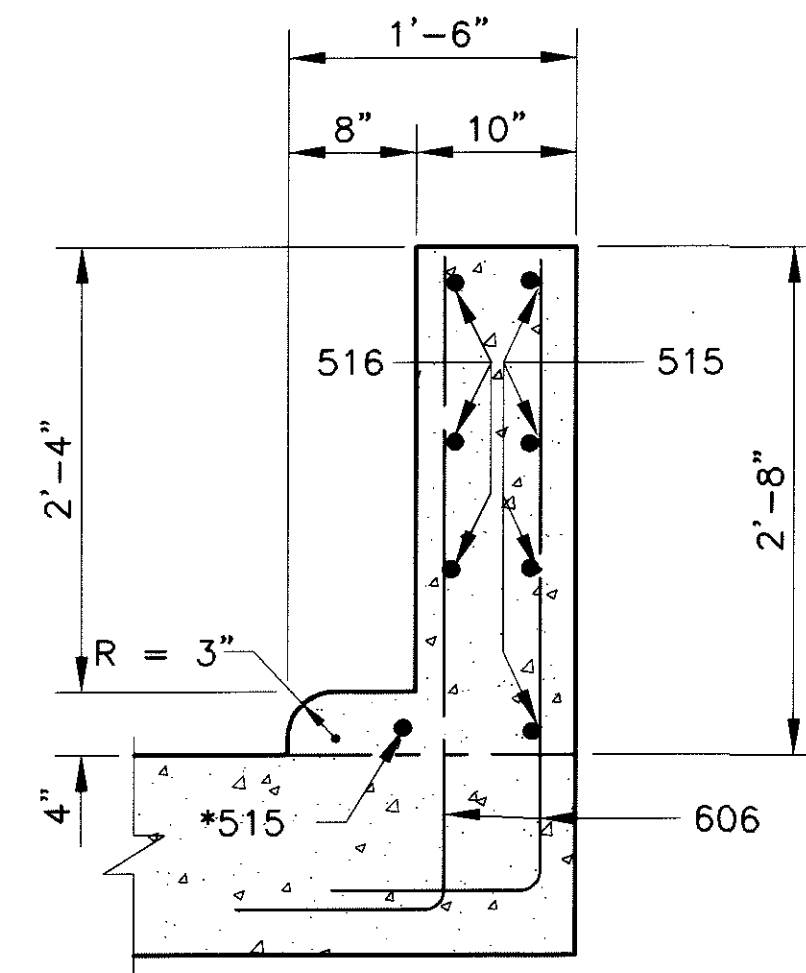
SECTION A-A



SECTION B-B



SECTION C-C

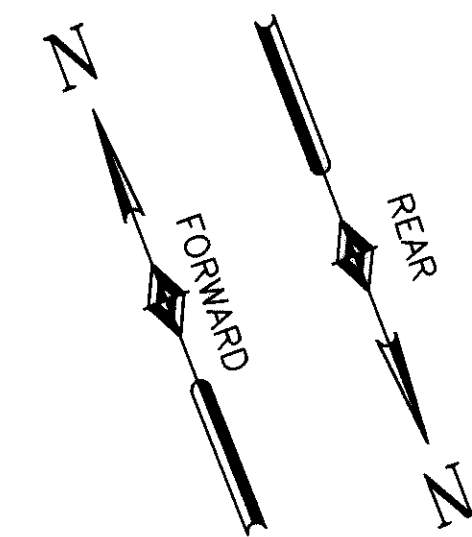


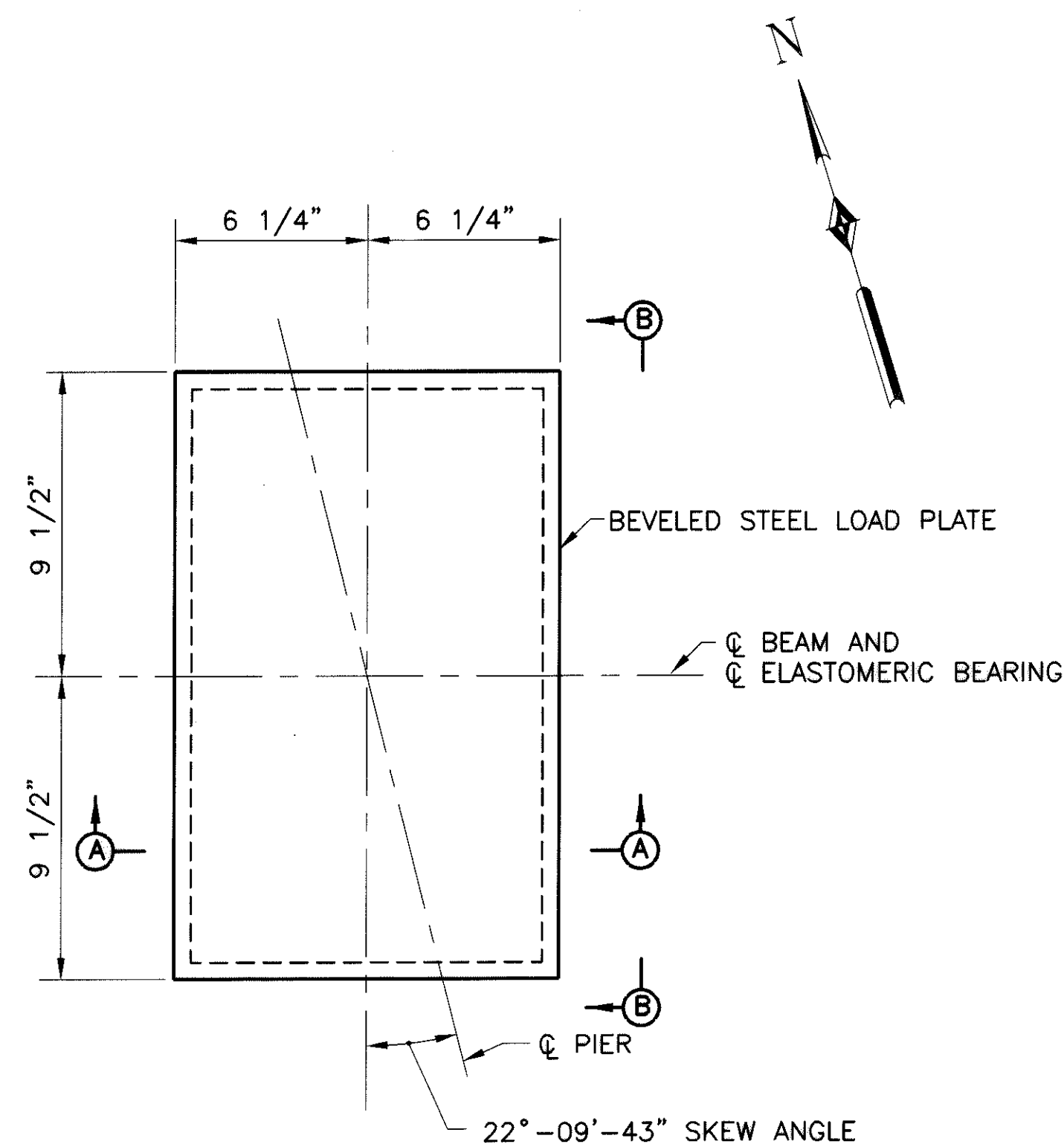
SECTION D-D

MINIMUM LAP LENGTHS	
NO. 5 BAR	= 2'-0"
NO. 6 BAR	= 2'-4"

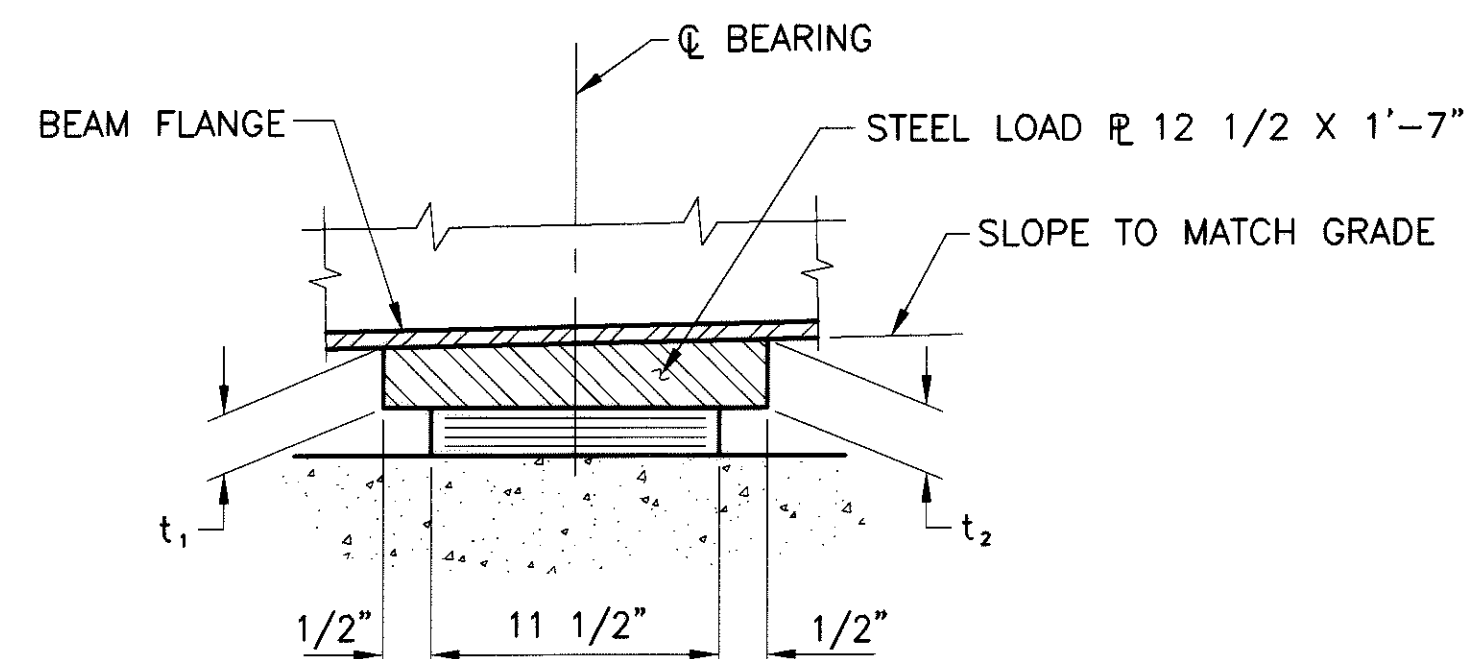
- NOTES**
- SEE ODOT STANDARD DRAWING SBR-1-99 FOR ADDITIONAL NOTES AND DETAILS.
 - SEE ODOT STANDARD CONSTRUCTION DRAWING GR-3.1M FOR TYPE 1 BRIDGE TERMINAL ASSEMBLY DETAILS AND GR-3.2M FOR TYPE 2.
 - FOR ADDITIONAL NOTES SEE SHEET **15/19**.

* FIELD BEND IF NECESSARY

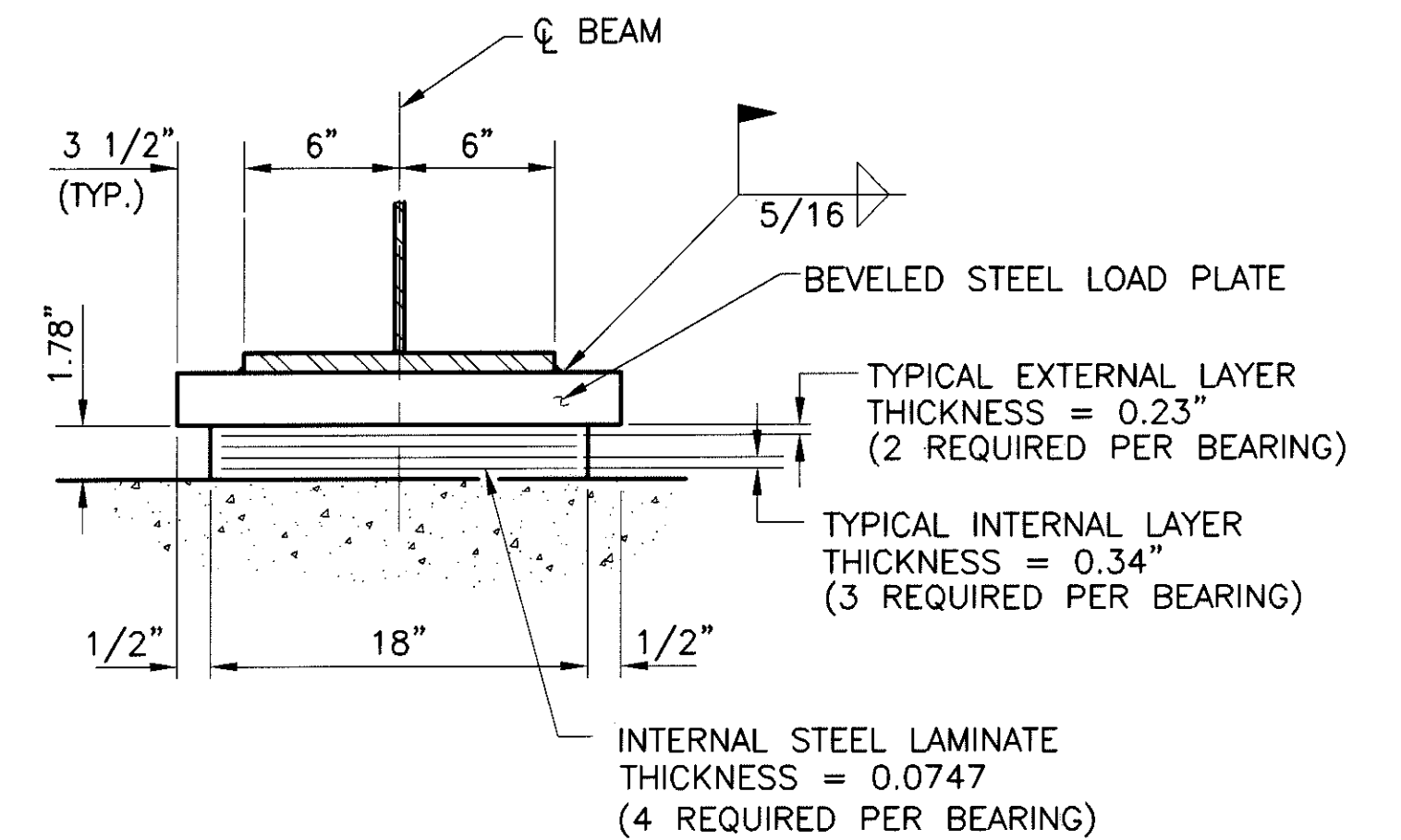




EXPANSION BEARING AT PIERS



SECTION A-A



SECTION B-B

NOTES:

- ELASTOMERIC BEARINGS:** ELASTOMERIC BEARINGS SHALL COMPLY WITH ITEM 516 AND AASHTO STANDARD SPECIFICATION FOR HIGHWAY BRIDGES, SECTION 18, BEARING DEVICES, DIVISION II, CONSTRUCTION, ARTICLES 18.4.5.1 AND 18.5.6.2. BEARINGS SHALL BE GRADE 3, 50 DUROMETER ELASTOMER, AND SHALL BE SUBJECTED TO THE LOAD TESTING REQUIREMENTS DEFINED IN ARTICLE 18.7.4.5 OF THE AASHTO DOCUMENT LISTED ABOVE. BEARINGS WERE DESIGNED UNDER SECTION 14.6.6 OF SECTION 14, BEARINGS, DIVISION I, DESIGN. TESTING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE BEARINGS, EACH.
- LOAD PLATE:** THE STEEL LOAD PLATE (A572) SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS. WELDING OF THE LOAD PLATE TO THE SUPERSTRUCTURE (A572) SHALL BE CONTROLLED SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE SHALL NOT EXCEED 300°F AS DETERMINED BY THE USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
- BASIS OF PAYMENT:** THE UNIT BID PRICE SHALL INCLUDE ALL MATERIALS, LABOR, TESTING, PAINTING AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL LAMINATED ELASTOMERIC BEARINGS. PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR THE ITEM 516, ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN.

LAMINATED ELASTOMERIC BEARINGS											
LOCATION	BEARING DIMENSIONS				STEEL LOAD PLATE				DEAD LOAD	LIVE LOAD WITHOUT IMPACT	TOTAL
	L	W	t _i	t _e	T	N	LENGTH X WIDTH	t ₁			
PIER	11 1/2"	18"	0.34"	0.23"	1.78"	4	12 1/2" X 19"	2"	2 1/16"	120 k	200 k

N = NO. OF STEEL LAMINATES
T = TOTAL THICKNESS OF ELASTOMERIC BEARING

F:\JDBS\470\BRIDGE\JDB\DWG\470R09A.DWG
UPH 3/10/03 PLDT11

MARK	NO.			LENGTH	TYPE	WEIGHT	DIMENSIONS					INCR.
	REAR	FWD	TOTAL			(LBS.)	A	B	C	D	E	
ABUTMENTS (EASTBOUND)												
A401	30	30	60	9'-1"	3	364	1'-9"	2'-6"				
A501	49	49	98	11'-0"	3	1,124	2'-7"	2'-8"				
A502	36	35	71	10'-7"	6	784	4'-4"	2'-2"				
A503	11	12	23	13'-7"	6	326	5'-10"	2'-2"				
A504	12	12	24	36'-6"	STR	914						
	1		1	5'-11"			2'-0"					
A505	SER		SER	TO	6	62	TO	2'-2"				1'-6 3/4"
	6		6	13'-9"			5'-11"					
A506	1		1	9'-10"	STR	10						
A507	1		1	10'-10"	STR	11						
	1		1	2'-6"								
A508	SER		SER	TO	STR	26						2'-5"
	4		4	9'-9"								
	1		1	3'-6"								
A509	SER		SER	TO	STR	30						2'-5"
	4		4	10'-9"								
A510	1		1	11'-1"	9	12	10'-3"	10"	6 5/16"			
A511	1		1	12'-1"	9	13	10'-3"	1'-10"	6 5/16"			
A512	1	1	2	13'-11"	6	29	5'-11"	2'-4"				
A513	1	1	2	12'-1"	6	25	5'-0"	2'-4"				
	1		1	5'-11"			2'-0"					
A514	SER		SER	TO	6	47	TO	2'-2"				1'-6"
	5		5	11'-11"			5'-0"					
A515	1		1	10'-3"	9	11	8'-6"	1'-9"	6 1/4"			
A516	1		1	9'-3"	9	10	8'-6"	9"	6 1/4"			
	1		1	3'-9"								
A517	SER		SER	TO	STR	20						2'-9"
	3		3	9'-3"								
	1		1	2'-9"								
A518	SER		SER	TO	STR	17						2'-9"
	3		3	8'-3"								
A519	1		1	9'-4"	STR	10						
A520	1		1	8'-4"	STR	9						
A521	2	2	4	14'-10"	3	62	5'-0"	2'-2"				
		1	1	6'-1"			2'-1"					
A522		SER	SER	TO	6	36	TO	2'-2"				1'-8"
		4	4	11'-1"			4'-7"					
		1	1	5'-9"			1'-11"					
A523		SER	SER	TO	6	71	TO	2'-2"				1'-4"
		7	7	13'-9"			5'-11"					
A524		1	1	7'-8"	STR	8						
A525		1	1	8'-8"	STR	9						
A526		1	1	12'-1"	STR	13						
A527		1	1	11'-1"	STR	12						
		1	1	3'-8"								
A528		SER	SER	TO	STR	33						2'-9"
		4	4	11'-11"								
		1	1	2'-8"								
A529		SER	SER	TO	STR	28						2'-9"
		4	4	10'-11"								
		1	1	2'-8"								
A530		1	1	8'-9"	9	9	7'-11"	10"	6 3/4"			
A531		1	1	9'-9"	9	10	7'-11"	1'-10"	6 3/4"			
A532		1	1	13'-1"	9	14	11'-4"	1'-9"	5 1/2"			
A533		1	1	12'-1"	9	13	11'-4"	9"	5 1/2"			
		1	1	2'-6"								
A534		SER	SER	TO	STR	16						2'-6"
		3	3	7'-6"								
		1	1	3'-6"								
A535		SER	SER	TO	STR	19						2'-6"
		3	3	8'-6"								
A536		1	1	11'-11"	6	12	5'-0"	2'-2"				
A601	48	48	96	10'-9"	13	1,550						
A801	16	16	32	38'-1"	STR	3,254						
TOTAL						9,023	lbs.					

MARK	NO.			LENGTH	TYPE	WEIGHT	DIMENSIONS					INCR.
	REAR	FWD	TOTAL			(LBS.)	A	B	C	D	E	
ABUTMENTS (WESTBOUND)												
A401	30	30	60	9'-1"	3	364	1'-9"	2'-6"				
A501	49	49	98	11'-0"	3	1,124	2'-7"	2'-8"				
A502	35	35	70	10'-7"	6	773	4'-4"	2'-2"				
A503	12	12	24	13'-7"	6	340	5'-10"	2'-2"				
A504	12	12	24	36'-6"	STR	914						
A505	NOT USED											
A506	1		1	9'-10"	STR	10						
A507	1		1	10'-10"	STR	11						
	1		1	2'-6"								
A508	SER		SER	TO	STR	26						2'-5"
	4		4	9'-9"								
	1		1	3'-6"								
A509	SER		SER	TO	STR	30						2'-5"
	4		4	10'-9"								
A510	1		1	11'-2"	9	12	10'-4"	10"	6 7/8"			
A511	1		1	12'-2"	9	13	10'-4"	1'-10"	6 7/8"			
A512	NOT USED											
A513	1	1	2	12'-1"	6	25	5'-0"	2'-4"				
	1		1	5'-11"			2'-0"					
A514	SER		SER	TO	6	47	TO	2'-2"				1'-6"
	5		5	11'-11"			5'-0"					
A515	1		1	10'-3"	9	11	8'-5"	1'-10"	6 3/16"			
A516	1		1	9'-3"	9	10	8'-5"	10"	6 3/16"			
	1		1	3'-9"								
A517	SER		SER	TO	STR	20						2'-9"
	3		3	9'-3"								
	1		1	2'-9"								
A518	SER		SER	TO	STR	17						2'-9"
	3		3	8'-3"								
A519	1		1	9'-4"	STR	10						
A520	1		1	8'-4"	STR	9						
A521	2	2	4	14'-10"	3	62	5'-0"	2'-2"				
		1	1	6'-1"			2'-1"					
A522		SER	SER	TO	6	36	TO	2'-2"				1'-8 5/8"
		4	4	11'-3"			4'-8"					
A523		1	1	11'-11"	6	12	5'-0"	2'-2"				
A524		1	1	7'-7"	STR	8						
A525		1	1	8'-7"	STR	9						
A526		1	1	12'-1"	STR	13						
A527		1	1	11'-1"	STR	12						
		1	1	3'-8"								
A528		SER	SER	TO	STR	33						2'-9"
		4	4	11'-11"								
		1	1	2'-8"								
A529		SER	SER	TO	STR	28						2'-9"
		4	4	10'-11"								
A530		1	1	8'-8"	9	9	7'-10"	10"	7"			
A531		1	1	9'-8"	9	10	7'-10"	1'-10"	7"			
A532		1	1	13'-3"	9	14	11'-6"	1'-9"	6 1/16"			
A533		1	1	12'-3"	9	13	11'-6"	9"	6 1/16"			
		1	1	2'-6"								
A534		SER	SER	TO	STR	16						2'-6"
		3	3	7'-6"								
		1	1	3'-6"								
A535		SER	SER	TO	STR	19						2'-6"
		3	3	8'-6"								
	1		1	6'-1"			2'-1"					
A536	SER		SER	TO	6	65	TO	2'-2"				1'-8 1/2"
	6		6	14'-7"			6'-4"					
		1	1	5'-11"			2'-0"					
A537		SER	SER	TO	6	75	TO	2'-2"				1'-5 3/8"
		7	7	14'-7"			6'-4"					
A538	1	1	2	14'-9"	6	31	6'-4"	2'-4"				
A601	48	48	96	10'-9"	13	1,550						
A801	16	16	32	38'-1"	STR	3,254						
TOTAL						9,035	lbs.					

MARK	NO.			LENGTH	TYPE	WEIGHT	DIMENSIONS					INCR.	
	P1	P2	TOTAL			(LBS.)	A	B	C	D	E		
PIERS (EASTBOUND)													
SP401	3		3	14'-9"	51	792	2'-6"	42					
SP402		3	3	14'-6"	51	790	2'-6"	42					
P501	35	35	70	4'-5"	6	322	2'-8"	1'-0"					
P502	10	10	20	6'-5"	6	134	2'-8"	2'-0"					
P503	16	16	32	24'-5"	STR	815							
P504	108	108	216	8'-9"	6	1,971	2'-8"	3'-2"					
	2	2	4	7'-1"				2'-4"					
P505	SER	SER	SER	TO	6	214	2'-8"	TO				1"	
	7	7	7	7'-7"				2'-7"					
	2	2	4	8'-5"				3'-0"					
P506	SER	SER	SER	TO	6	253	2'-8"	TO				1"	
	7	7	7	8'-11"				3'-3"					
P601	4	4	8	4'-3"	5	51	2'-8"	1'-9"					
P602	6	6	12	12'-4"	7	222	2'-10"	2'-9"					
P801	60	60	120	10'-6"	1	3,364	8'-8"						
P901	18	18	36	10'-0"	STR	1,224							
P902	14	14	28	26'-9"	9	2,547	23'-4"	3'-5"	3	7/16			
P903	7	7	14	39'-10"	5	1,896	38'-0"	2'-1"					
P904	7	7	14	18'-10"	5	896	16'-2"	2'-11"					
P905	10	10	20	4'-2"	5	283	2'-8"	1'-9"					
P1001	24	24	48	12'-6"	5	2,582	11'-0"	1'-10"					
P1002	24		24	17'-11"	STR	1,850							
P1003		24	24	17'-7"	STR	1,816							
TOTAL						22,022	lbs.						

