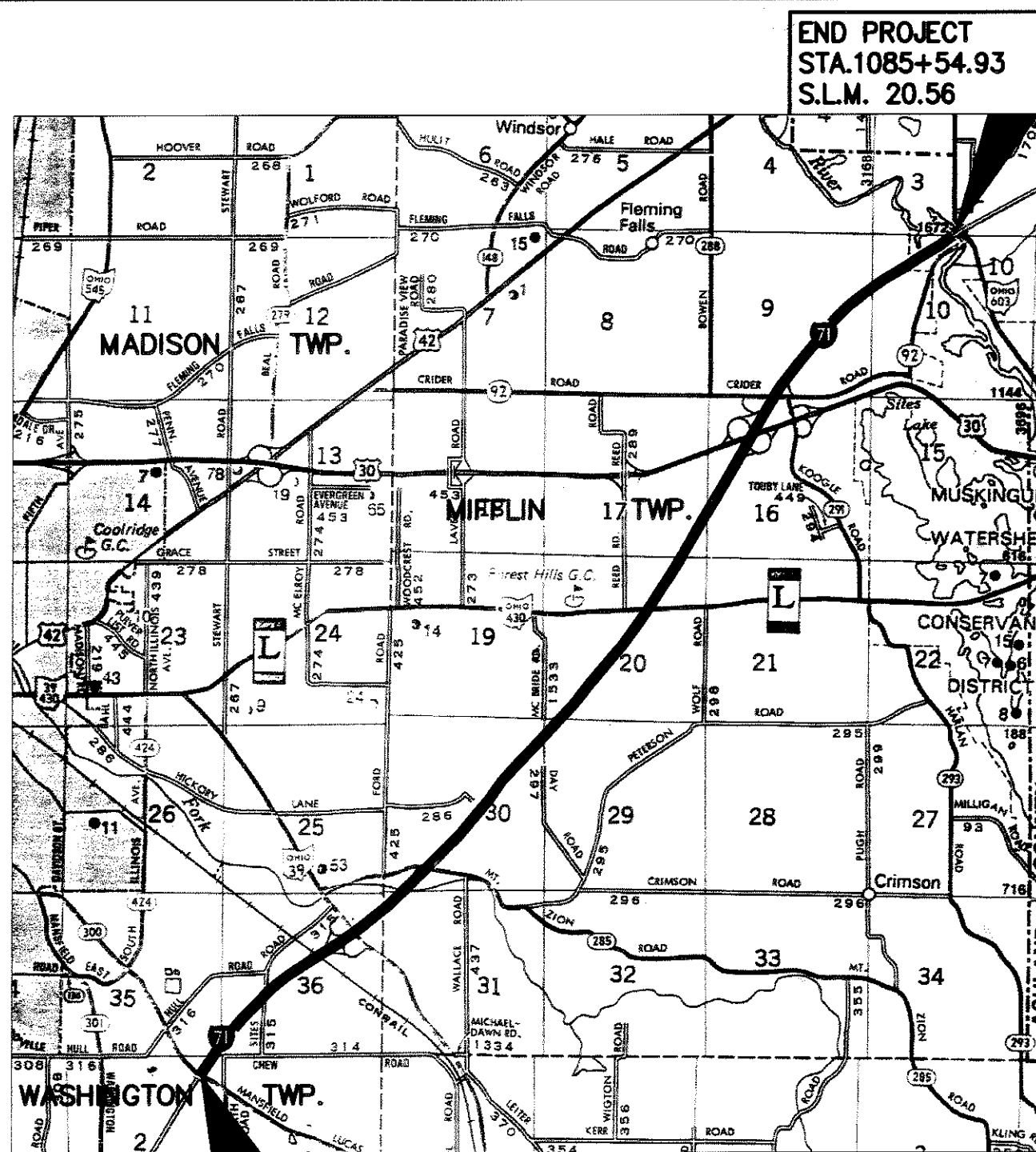


RIC - 71 - 13.66
010116 PID - 11378
Dist 3 3/7/01
User: jn81152
J:\Proj3\7044600\ROADWAY\446GT01.dwg
URS Greiner Woodward Clyde



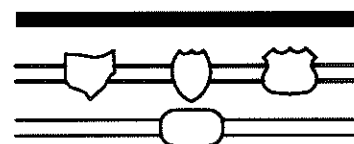
LOCATION MAP

LAT. 40°46'12" LONG. 82°25'17"

SCALE IN MILES



Portion to be Improved
State & Federal Routes
Other Roads



DESIGN DESIGNATION

	INTERSTATE 71	S.R. 430
CURRENT A.D.T. (2004)	= 45,440	= 1,500
DESIGN YEAR A.D.T. (2024)	= 63,230	= 1,580
D.H.V.	= 6,955	= 205
D	= 56%	= 56%
T24	= 25%	= 4%
DESIGN SPEED	= 70 mph	= 55 mph
LEGAL SPEED	= 65 mph	= 55 mph
FUNCTIONAL CLASSIFICATION	= RURAL INTERSTATE	= RURAL MAJOR COLLECTOR

DESIGN EXCEPTIONS

DESIGN FEATURE
NONE REQUIRED

UNDERGROUND UTILITIES
**2 WORKING DAYS
BEFORE YOU DIG**
Call...800-362-2764 (Toll Free)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY



PLANS PREPARED BY

URS Greiner Woodward Clyde
Engineering & Architectural Services

AKRON COLUMBUS CLEVELAND

FRANK A. MONAGO REG. ENGINEER No. 34380

STATE OF OHIO DEPARTMENT OF TRANSPORTATION RIC-71-13.66 WASHINGTON TOWNSHIP MADISON TOWNSHIP MIFFLIN TOWNSHIP RICHLAND COUNTY

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SOIL PROFILE (CR - 285)	

STANDARD CONSTRUCTION DRAWINGS

STANDARD CONSTRUCTION DRAWINGS										SUPPLEMENTAL SPECIFICATIONS		
BP-1.1 07-28-00	DM-1.1M 10-21-97	GR-1.1M 10-21-97	GR-5.1M 04-21-95	RM-4.3M 10-21-97	TC-51.11 9-30-94	HL-10.12M 5-01-95	HL-30.31M 5-01-95	DM-1.1M 10-21-97	816 04-21-97	905 04-01-98		
BP-2.1 07-28-00	DM-1.2M 10-21-97	GR-1.2M 01-03-96	GR-5.2M 11-30-94	RM-4.5M 10-21-97	TC-51.12 1-03-94	HL-10.31M 3-31-95	HL-30.32M 8-14-96	GSD-1-96 2-12-97	830 10-21-97	907 10-21-98		
BP-2.2 07-28-00	DM-2.1M 06-30-95	GR-1.3M 11-30-94	GR-5.3M 11-30-94	TC-12.30 1-20-84	TC-52.10 4-03-79	HL-20.11M 3-31-95	HL-40.10M 3-31-95	PCB-91 7-6-99	837 03-09-99	911 07-10-97		
BP-2.5 07-28-00	DM-4.1M 06-30-95	GR-2.1M 10-21-97	GR-6.1M 01-03-96	TC-21.20 9-01-92	TC-52.20 4-03-79	HL-20.21M 8-31-94	HL-50.11M 3-31-95	SICD-1-96M 2-12-97	842 01-06-99	937 03-09-99		
BP-3.1 07-28-00	DM-4.2M 06-30-95	GR-3.1M 10-21-97	GR-6.2M 01-03-96	TC-35.10 8-29-84	TC-61.10 4-05-82	HL-20.22M 3-31-95	HL-50.21M 8-31-94	SBR-1-99 1-12-99	844 01-06-99	954 09-09-97		
BP-5.1 07-28-00	DM-4.3 04-29-99	GR-3.2M 10-21-97	HW-2.1M 07-12-95	TC-41.10 8-29-84	TC-65.10 7-07-95	HL-20.23M 3-31-95	HL-60.11M 5-01-95	VPF-1-90 3-20-95	855 06-30-98	880 06-15-99		
BP-9.1 07-28-00	F-2.1 07-28-00	GR-4.2M 10-21-97	HW-2.2M 07-12-95	TC-41.20 6-21-94	TC-65.11 7-07-95	HL-60.21M 3-31-95	HL-60.21M 3-31-95		863 09-09-97	894 10-12-99		
CB-3.1M 07-12-95	F-3.1 07-28-00	GR-4.3M 10-21-97	RM-1.1 04-29-99	TC-41.50 6-21-94	TC-71.10 9-10-91	HL-30.11M 3-31-95	HL-60.31M 3-31-95	LA-1.2 7-28-00	870 08-10-99			
CB-3.2M 07-12-95	F-3.3 07-28-00	GR-4.4M 11-30-94	RM-3.1M 10-21-97	TC-42.10 8-19-77	TC-72.20 2-26-82	HL-30.21M 5-01-95	AS-1-81 9-15-94		877 04-13-99			
CB-1.2M 07-12-95	F-3.4 07-28-00	GR-4.5 04-29-99	RM-4.2M 10-21-97	TC-42.20 3-26-79	HL-10.11M 5-01-95	HL-30.22M 3-31-95	BS-1-93 12-19-94		899 10-21-98			

PROJECT DESCRIPTION

WIDENING AND RECONSTRUCTION OF 7.11 MILES OF INTERSTATE 71 TO PROVIDE A THIRD INSIDE LANE INCLUDING STRUCTURES, DRAINAGE, LIGHTING, SIGNING, AND PAVEMENT MARKINGS.

1997 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.

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF INTERSTATE 71 AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES. THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF S.R. 430, AND THE INTERMITTENT CLOSING OF C.R. 92 AND C.R. 285. DETOURS WILL BE PROVIDED AS INDICATED ON SHEET ~~81 & 82~~.

UNDER AUTHORITY OF SECTION 4511.21, DIVISION (I) OF THE OHIO REVISED CODE, THE REVISED PRIMA FACIE SPEED LIMITS AS INDICATED HEREIN ARE DETERMINED TO BE REASONABLE AND SAFE, AND ARE HEREBY ESTABLISHED FOR THE DURATION OF THIS PROJECT. THE PRIMA FACIE SPEED LIMIT OR LIMITS HEREBY ESTABLISHED SHALL BECOME EFFECTIVE WHEN APPROPRIATE SIGNS GIVEN NOTICE THEREOF ARE ERECTED.

APPROVED Thomas M. O'Leary
DATE 11-6-00 DISTRICT DEPUTY DIRECTOR
APPROVED Jordan Proctor
DATE 12-12-00 DIRECTOR, DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS

WATERWAY PERMIT NWP # 3 & 14 DATE 11-24-99

FEDERAL PROJECT NO.
TE 21-GO10 (65)

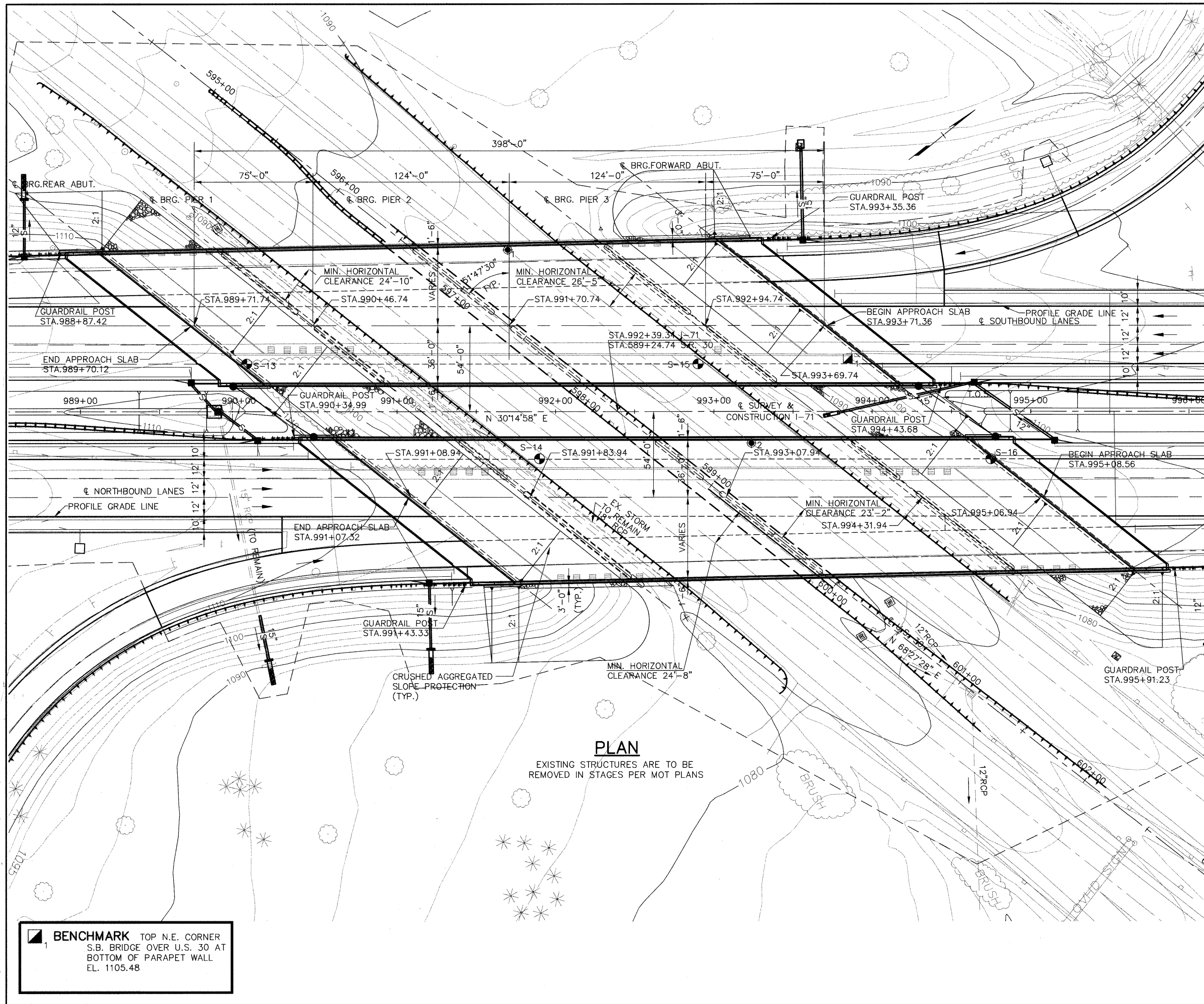
PID NO.
11378

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT
NONE

RIC - 71 - 13.66

1
633



NOTES

① EARTHWORK LIMITS SHOWN ARE APPROXIMATE
ACTUAL SLOPES SHALL CONFORM TO
ROADWAY PLAN CROSS SECTIONS.

 ~ DENOTES SOIL BORING LOCATION

MINIMUM VERTICAL CLEARANCE

LEFT BRIDGE
EXISTING = 14'-7"
REQUIRED = 16'-6"
PROPOSED = 16'-6 1/2"

2 RIGHT BRIDGE
EXISTING = 15'-10"
REQUIRED = 16'-6"
PROPOSED = 18'-8"

EXISTING STRUCTURE

TYPE: CONTINUOUS STEEL GRIDERS WITH
CONCRETE DECK AND CONCRETE
SUBSTRUCTURES.

SPAN: 63'-6"±, 106'-0"±, 106'-0"±,
63'-6"± C/C BEARINGS (L & R)

ROADWAY: WIDTH VARIES FROM 65'-2"± TO
72'-0"± F/F OF PARAPET

SKEW: 51°-47'-49"± R.F. (L. & R.)

LOADING: CF=2000(51), ADEQUATE FOR AASHO
ALTERNATE LOADING.

DATE BUILT: 1960

STRUCTURE FILE NO.: 7004656 (LEFT)
7004680 (RIGHT)

WEARING SURFACE: 1" MONOLITHIC CONCRETE

ALIGNMENT: TANGENT

4 APPROACH SLABS: AS-1-54 (25'-0" LONG)

[illegible]

TYPE: CONTINUOUS STEEL PLATE GIRDERS
WITH COMPOSITE REINFORCED
CONCRETE DECK ON CAP & COLUMN
PIERS AND SEMI-INTEGRAL
ABUTMENTS

SPAN: 75'-0", 124'-0", 124'-0", 75'-0"
C/C BEARINGS (L & R) STRUCTURE

ROADWAY: 80'-6 11/16" TO 88'-8 1/4"
TOE TO TOE W/1'-6" CONCRETE
PARAPETS (L)
88'-8 1/16" TO 80'-6 1/4"
TOE TO TOE W/1'-6" PARAPETS (R)

SKEW: 51°47'30" R.F. (L & R)

LOADING: HS 20-44 (CASE I) AND THE
ALTERNATE MILITARY LOADING.

WEARING SURFACE: 1" MONOLITHIC CONCRETE

APPROACH SLABS: AS-1-81, 25'-0" LONG

ALIGNMENT: TANGENT

CROWN 3/16" / FT.

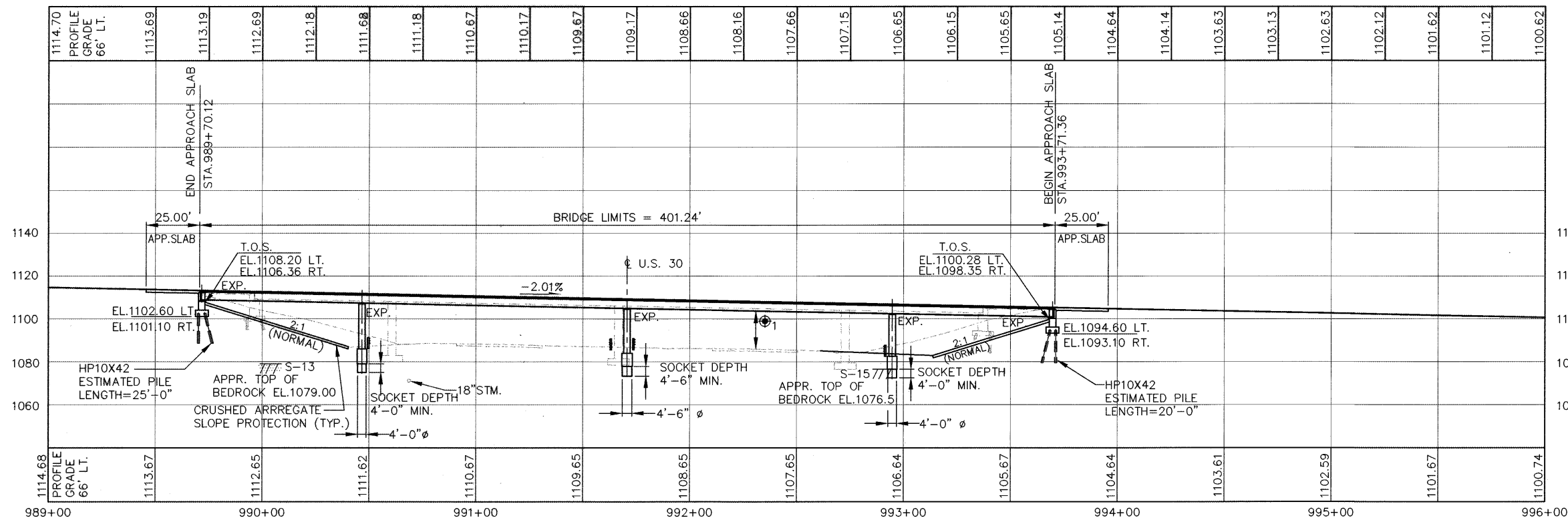
LATITUDE: 40°46'57" N
LONGITUDE: 82°24'42" W

TRAFFIC DATA

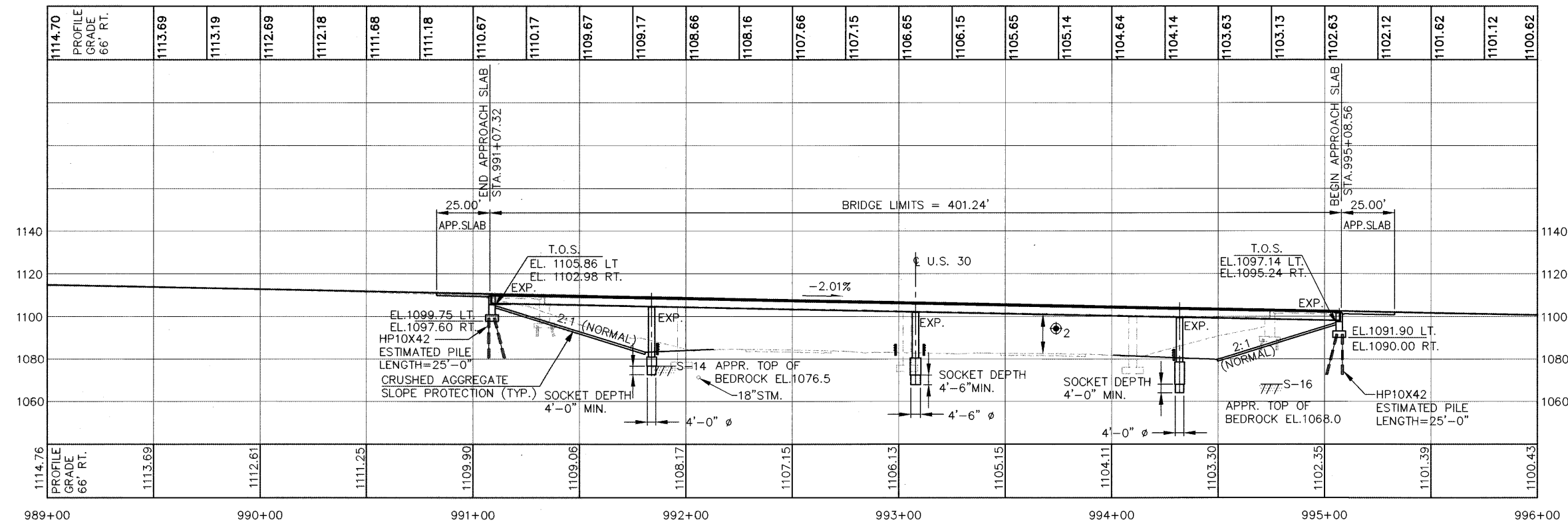
CURRENT A.D.T. (2006) = 23520 (LEFT)
 = 17960 (RIGHT)

DESIGN YEAR, A.D.T. (2026) = 32790 (LEFT)
= 24950 (RIGHT)

DESIGN YEAR, A.D.T.T. (2024) = 8198 (LEFT)
= 6238 (RIGHT)



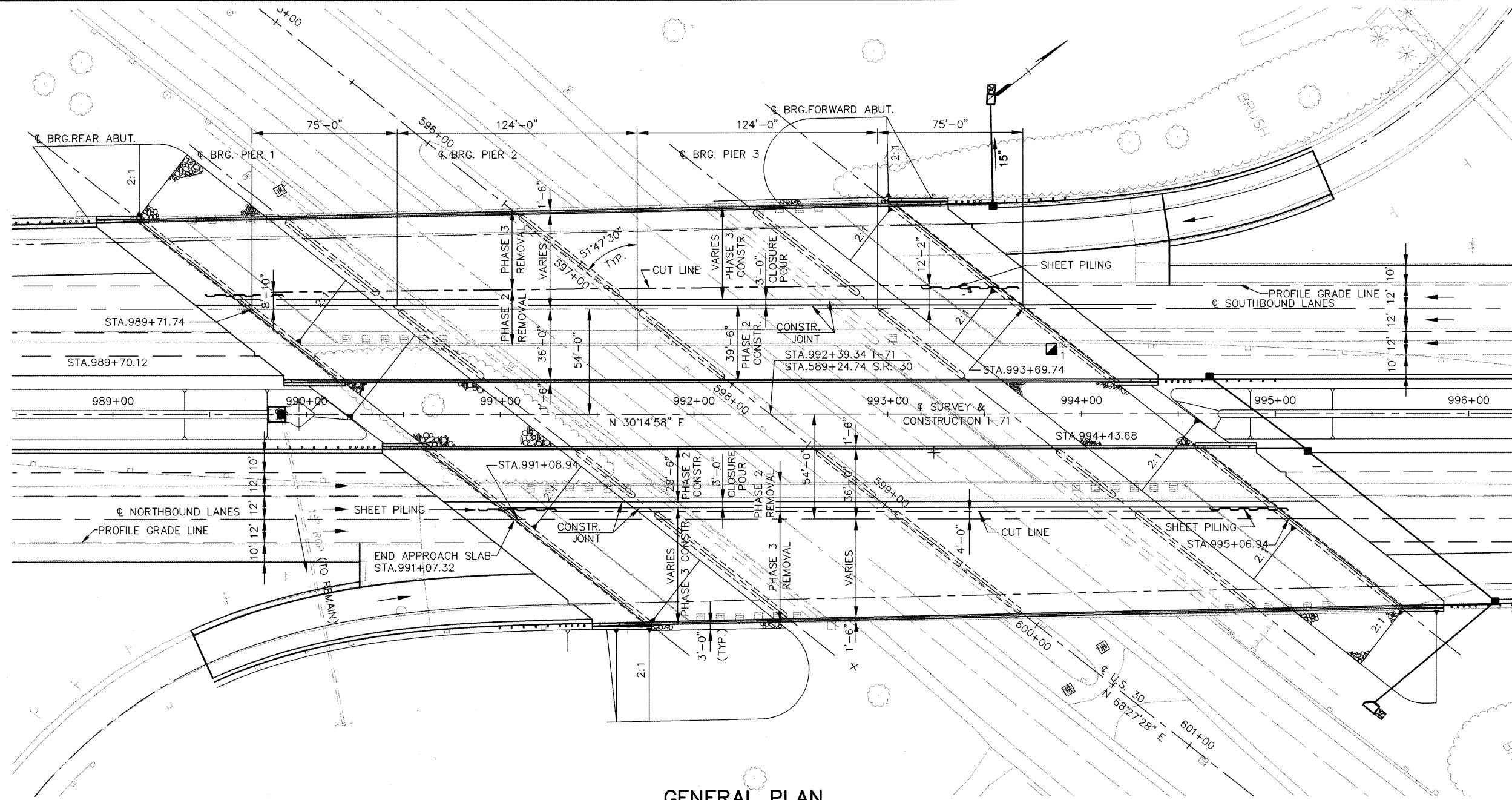
PROFILE ALONG ϕ SOUTHBOUND LANES (L)



PROFILE ALONG ϕ NORTHBOUND LANES (R)

NOTES

- 1 FOR SOUTHBOUND BRIDGE, LEFT AND RIGHT BOTTOM OF FOOTING ELEVATIONS ARE FOR PHASE 3 AND PHASE 2, RESPECTIVELY; FOR NORTHBOUND BRIDGE, LEFT AND RIGHT BOTTOM OF FOOTING ELEVATIONS ARE FOR PHASE 2 AND PHASE 3, RESPECTIVELY.
- 2 SEE SHEET 1 OF 46 FOR VERTICAL CLEARANCE INFORMATION.



GENERAL PLAN

PROPOSED WORK:

REMOVE ENTIRE SUPERSTRUCTURE AND SUBSTRUCTURE IN PHASES. NOTE THAT THE CUTLINE IN SOUTHBOUND BRIDGE IS NOT PARALLEL TO THE CENTERLINE OF SOUTHBOUND LANES. CUTLINE OFFSETS AT REAR ABUTMENT AND FORWARD ABUTMENT OF SOUTHBOUND BRIDGE ARE SHOWN

PROVIDE NEW SEMI-INTEGRAL ABUTMENTS, CAP AND COLUMN PIERS AND CONTINUOUS STEEL PLATE GIRDERS WITH COMPOSITE REINFORCED CONCRETE DECK IN PHASES.

SEAL ALL EXPOSED SUBSTRUCTURE CONCRETE SURFACES AND SEAL THE SUPERSTRUCTURE SURFACES AS SHOWN IN THE PLANS.

INSTALL NEW 1'-0" THICK CRUSHED AGGREGATE SLOPE PROTECTION.

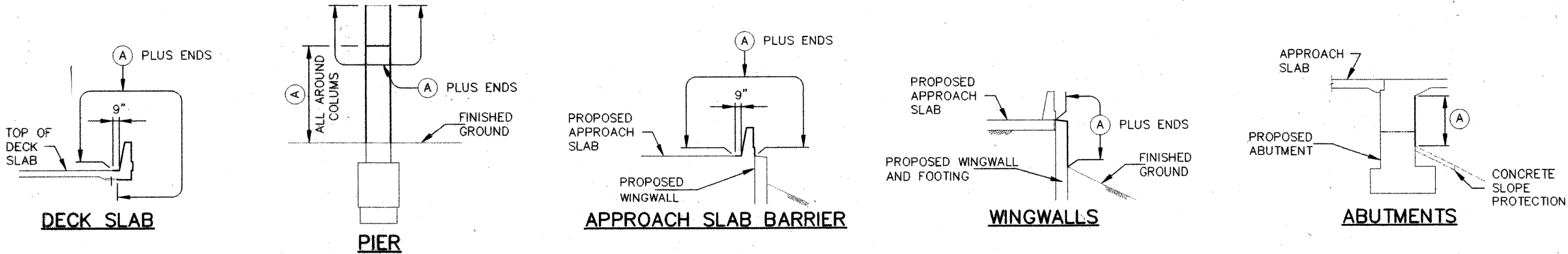
NOTES

- ① FOR ADDITIONAL INFORMATION SEE SHEET 1 OF 46.

ESTIMATED QUANTITIES

CAL'D BY: R.W.H.,D.A.M. DATE: 7/28/00
CHK' D BY: E.N.W.,A.Y.Z. DATE: 8/29/00

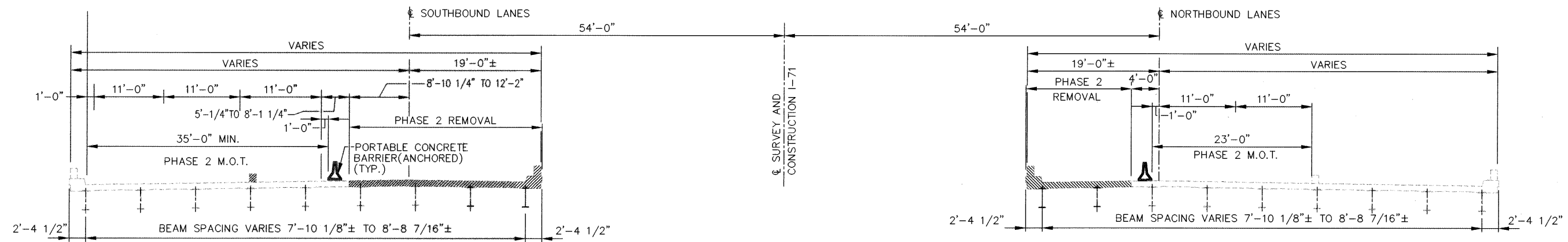
ITEM	ITEM EXT.	LEFT BRIDGE (S.B.) TOTAL	RIGHT BRIDGE (N.B.) TOTAL	UNIT	DESCRIPTION	LEFT BRIDGE (SOUTHBOUND)					RIGHT BRIDGE (NORTHBOUND)					REF. SHEET
						ABUTMENTS		PIERS	SUPER STRU.	GEN'L	ABUTMENTS		PIERS	SUPER STRU.	GEN'L	
						REAR	FORW'D				REAR	FORW'D				
202	11003	LUMP	LUMP		STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN					LUMP					LUMP	473,5 & 6/46
502	11101	LUMP			TEMPORARY STRUCTURE, AS PER PLAN				LUMP							6/46
503	11100	LUMP	LUMP		COFFERDAMS, CRIBS AND SHEETING					LUMP					LUMP	
503	21301	LUMP	LUMP		UNCLASSIFIED EXCAVATION, AS PER PLAN					LUMP					LUMP	473
505	11100	LUMP	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION					LUMP					LUMP	
507	00100	2330	2330	LIN. FT.	STEEL PILES HP10 X 42, FURNISHED	1230	1100				1100	1230				
507	00150	2330	2330	LIN. FT.	STEEL PILES HP10 X 42, DRIVEN	1230	1100				1100	1230				
507	50500	43	43	EACH	STEEL PILE SPLICES	21	22				22	21				
507	93301	85	81	EACH	STEEL POINT, AS PER PLAN	41	44				40	41				474
SPECIAL	51267510	2249	2274	SQ. YD.	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	94	98	849	1113	95	100	91	875	1113	95	474
516	13900	172	176	SQ. FT.	2" PREFORMED EXPANSION JOINT FILLER	87	85				90	86				
516	44101	9	9	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE			9					9			26/46
					(NEOPRENE), AS PER PLAN (18" x 24" x 2.24" PAD, 19" x 25" LOAD PLATE)											
516	44201	18	18	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE			18					18			26/46
					(NEOPRENE), AS PER PLAN (16"x 22"x 3.27" PAD, 17" x 23" LOAD PLATE)											
516	44301	18	18	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE	9	9				9	9				26/46
					(NEOPRENE), AS PER PLAN (14" x 16" x 4.6" PAD, 15" x 17" LOAD PLATE)											
518	21231	LUMP	LUMP		POROUS BACKFILL WITH FILTER FABRIC, AS PER PLAN					LUMP					LUMP	473
518	40000	320	320	LIN. FT.	6" PERFORATED CORRUGATED PLASTIC PIPE	155	165				170	150				
518	40011	40	40	LIN. FT.	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, AS PER PLAN	20	20				20	20				10/46
524	94904	72	72	LIN.FT	DRILLED SHAFTS, 48" DIAMETER, INTO BEDROCK			72					72			
524	94906	180	205	LIN.FT.	DRILLED SHAFTS, 54" DIAMETER, ABOVE BEDROCK			180					205			
524	94908	41	41	LIN.FT.	DRILLED SHAFTS, 54" DIAMETER, INTO BEDROCK			41					41			
524	94914	90	93	LIN.FT.	DRILLED SHAFTS, 60" DIAMETER, ABOVE BEDROCK			90					93			
601	20000	1692	1687	SQ. YD.	CRUSHED AGGREGATE SLOPE PROTECTION	920	772				885	802				
816	00610	978,000	978,000	LB.	FIELD PAINTING OF NEW STEEL, INTERMEDIATE & FINISH COAT, SYSTEM IZEU				978,000					978,000		
842	41001	279	289	CU. YD.	CLASS C CONCRETE, PIER ABOVE FOOTINGS, AS PER PLAN			279					289			473
842	43501	371	379	CU. YD.	CLASS C CONCRETE, ABUTMENT INCLUDING FOOTING, AS PER PLAN	182	189				200	179				473
894	10001	1343	1343	CU. YD.	HIGH PERFORMANCE CONCRETE, FOR BRIDGE DECK WITH WARRANTY, AS PER PLAN (MIX 4)				1343					1343		473
863	10080	LUMP	LUMP		STRUCTURAL STEEL MEMBERS, LEVEL (4) FABRICATION (ASTM A709, GRADE 50)				LUMP					LUMP		
863	20000	12461	12461	EACH	WELDED STUD SHEAR CONNECTORS				12461					12461		



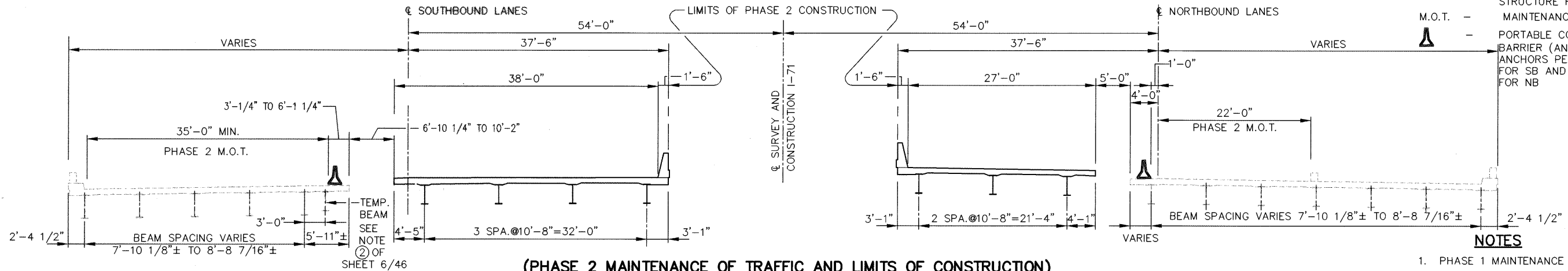
LIMITS OF SEALING OF CONCRETE SURFACES

LEGEND FOR SEALING OF CONCRETE SURFACES

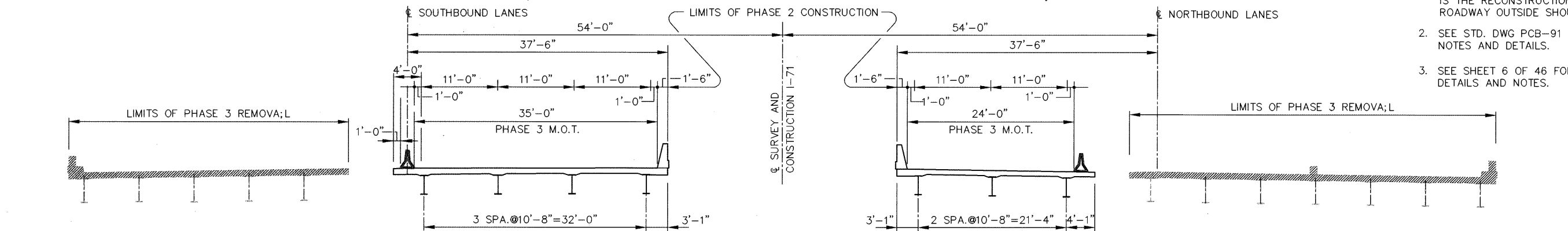
(A) SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)



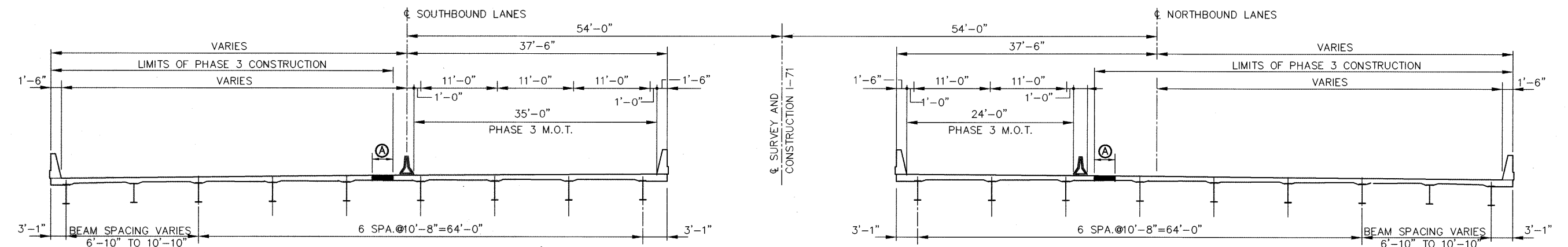
(PHASE 2 MAINTENANCE OF TRAFFIC AND LIMITS OF REMOVAL)



(PHASE 2 MAINTENANCE OF TRAFFIC AND LIMITS OF CONSTRUCTION)



(PHASE 3 MAINTENANCE OF TRAFFIC AND LIMITS OF REMOVAL)



(PHASE 3 MAINTENANCE OF TRAFFIC AND LIMITS OF CONSTRUCTION)

① DENOTES 3'-0" CLOSURE POUR

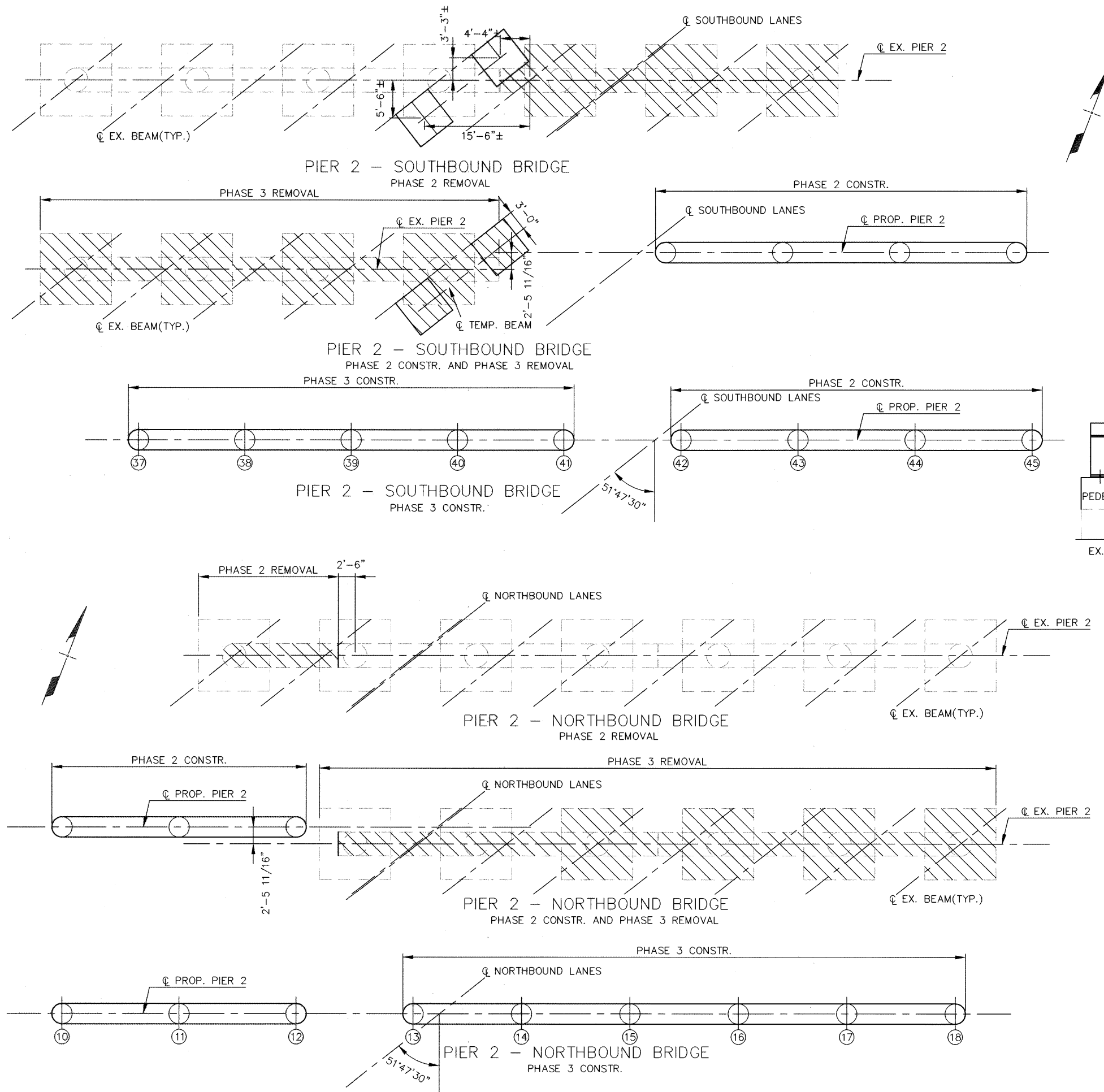
LEGEND

- LIMITS ~ PORTIONS OF STRUCTURE REMOVED
- M.O.T. - MAINTENANCE OF TRAFFIC
- PORTABLE CONCRETE BARRIER (ANCHORED): 3 ANCHORS PER SEGMENT FOR SB AND 2 ANCHORS FOR NB

NOTES

1. PHASE 1 MAINTENANCE OF TRAFFIC IS THE RECONSTRUCTION OF THE ROADWAY OUTSIDE SHOULDER.
2. SEE STD. DWG PCB-91 FOR ADDITIONAL NOTES AND DETAILS.
3. SEE SHEET 6 OF 46 FOR ADDITIONAL DETAILS AND NOTES.

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LEGEND:

LIMITS ~ PORTIONS OF STRUCTURE REMOVED PER ITEM 202

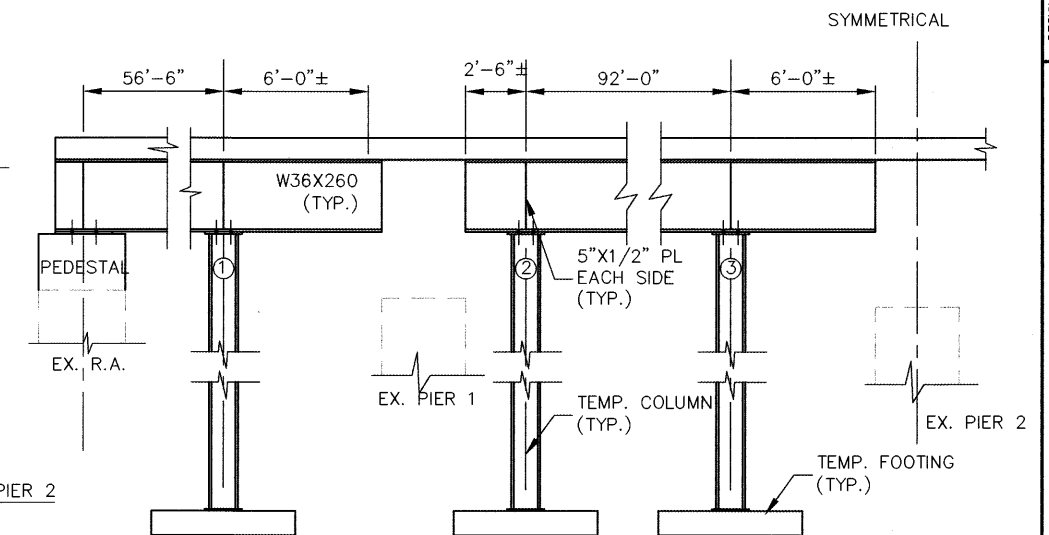
NOTE

① SOUTHBOUND BRIDGE

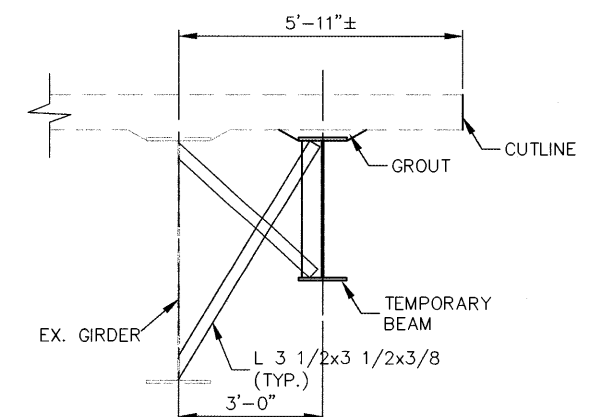
BEFORE PHASE 2 REMOVAL OF SUPERSTRUCTURE, CONTRACTORS SHALL REMOVE THE DIAPHRAGMS WHERE THE TEMPORARY BEAMS WILL BE PLACED. INSTALL TWO (2) TEMPORARY SUPPORTS AT EACH EXISTING PIER. AT EACH ABUTMENT, A CONCRETE PEDESTAL SHALL BE BUILT. FOUR (4) TEMPORARY BEAMS ARE SIMPLY SUPPORTED ON THE TEMPORARY SUPPORTS OR PEDSTALS. PROVIDE INTERMEDIATE DIAPHRAGMS AT 25 FEET MAXIMUM. THE SPACE BETWEEN THE BOTTOM OF THE SLAB AND THE TOP OF THE TEMPORARY BEAM SHALL BE GROUTED. THE MAXIMUM VERTICAL LOAD AT EACH SUPPORT IS 100 KIPS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF TEMPORARY SUPPORTS TO PERFORM THE WORK DESCRIBED IN THE PROJECT PLANS. THREE SETS OF TEMPORARY SUPPORT DETAIL PLANS SHALL BE SUBMITTED TO THE DIRECTOR FOR APPROVAL. THE PLANS SHALL BE PREPARED AND STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF OHIO. ALL MATERIALS, LABOR AND INCIDENTALS TO DESIGN, INSTALL AND REMOVE THE TEMPORARY SUPPORTS ARE INCLUDED IN THE ITEM 502, TEMPORARY STRUCTURE, AS PER PLAN.

② IT IS ANTICIPATED THAT EXISTING PIER FOOTINGS WILL INTERFERE WITH DRILLED SHAFTS NO. 14, 15, 16 17, 38, 39, 40, 41, 42, AND 43. THERE MAY BE INTERFERENCE AT DRILLED SHAFTS NO. 13 AND 37. PORTIONS OF THE INTERFERING PIER FOOTINGS WILL NEED TO BE REMOVED.

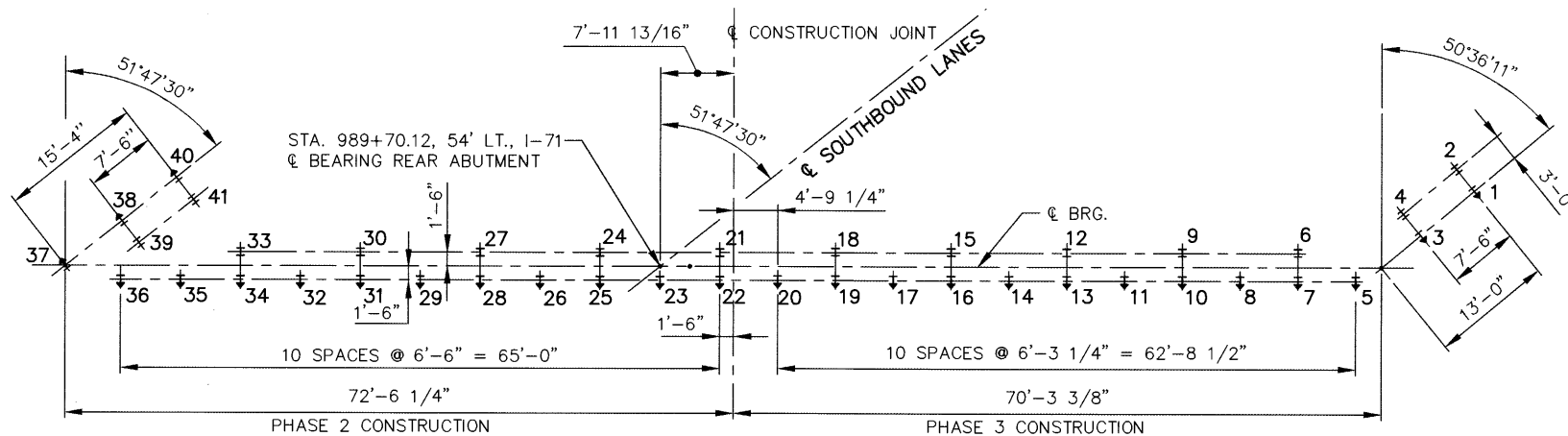


TYPICAL TEMPORARY SUPPORT DETAIL
SOUTHBOUND ONLY

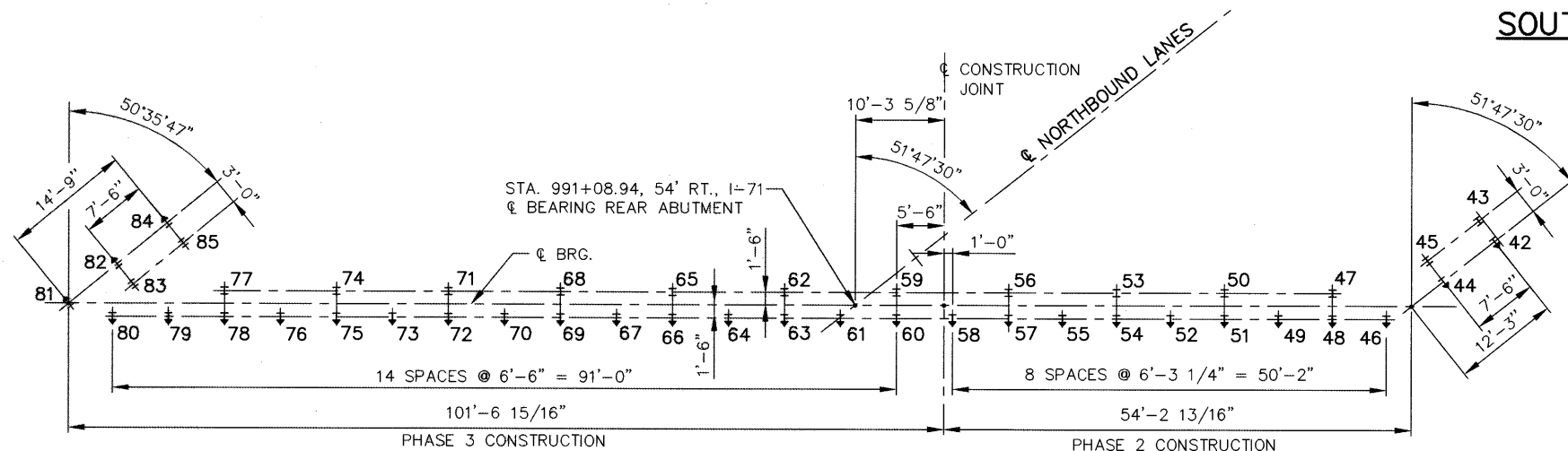


TYPICAL DIAPHRAGM DETAILS
FOR ADDITIONAL DETAILS, SEE STD. DWG. GSD-1-96

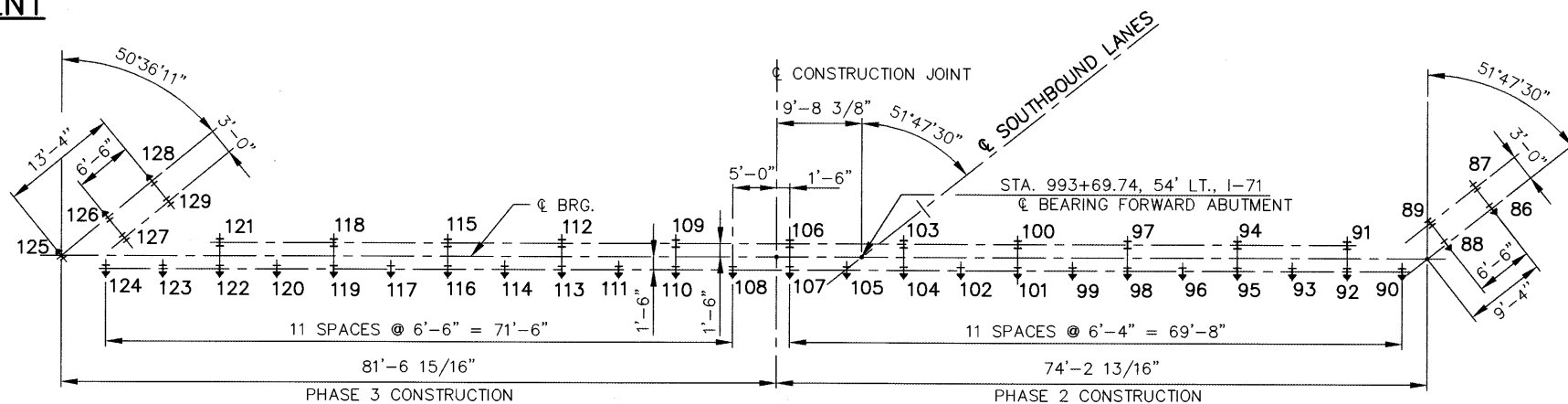
J:\Proj\3\7044600\Struct\1878\Piling-plan.dwg User: cab05502 Sep 27, 2000 - 4:04pm



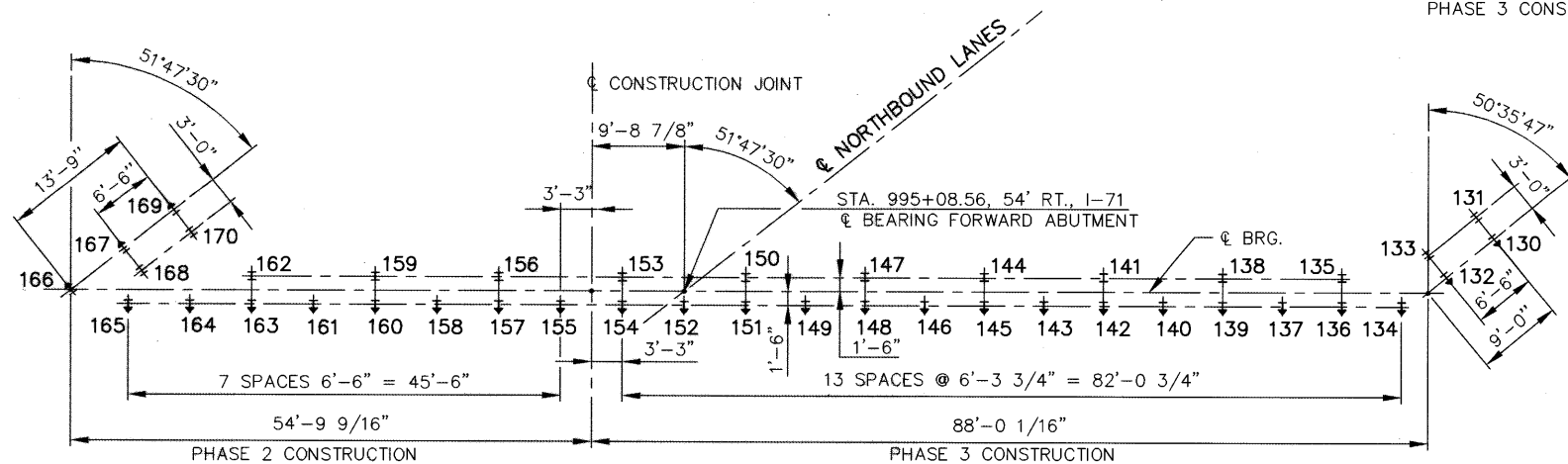
SOUTHBOUND REAR ABUTMENT



NORTHBOUND REAR ABUTMENT



SOUTHBOUND FORWARD ABUTMENT

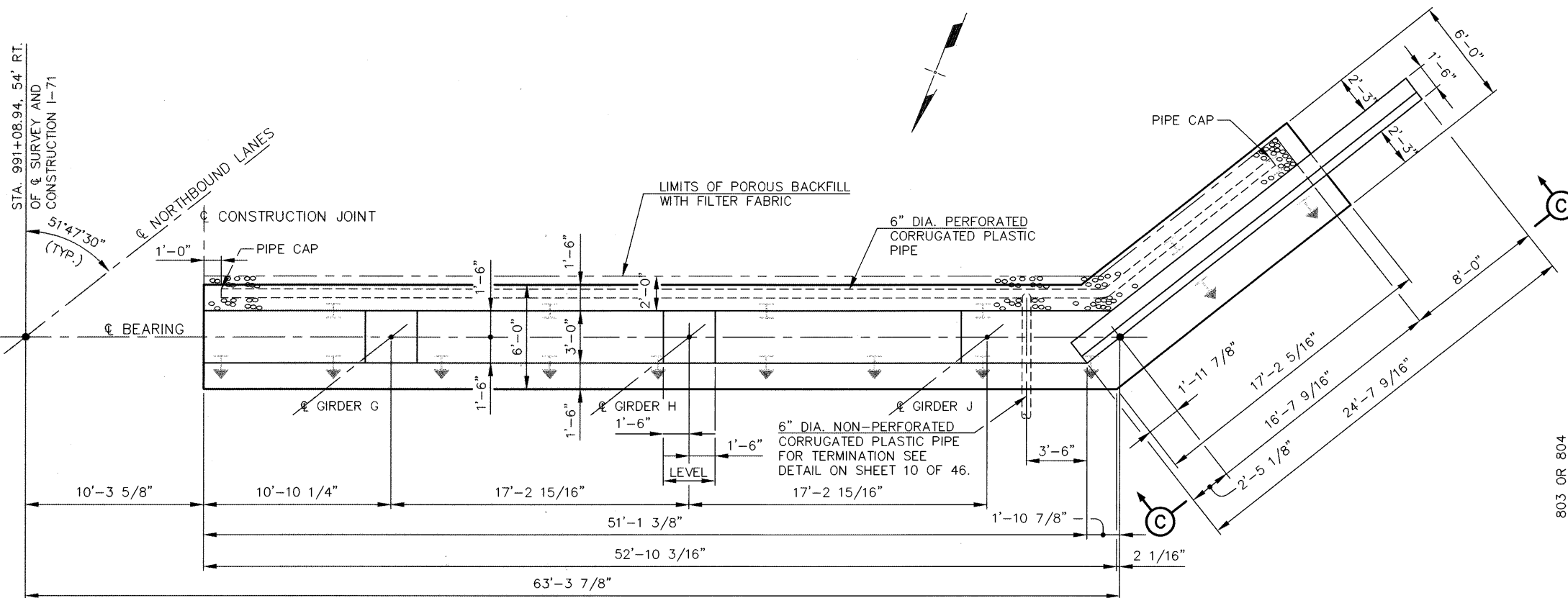


NORTHBOUND FORWARD ABUTMENT

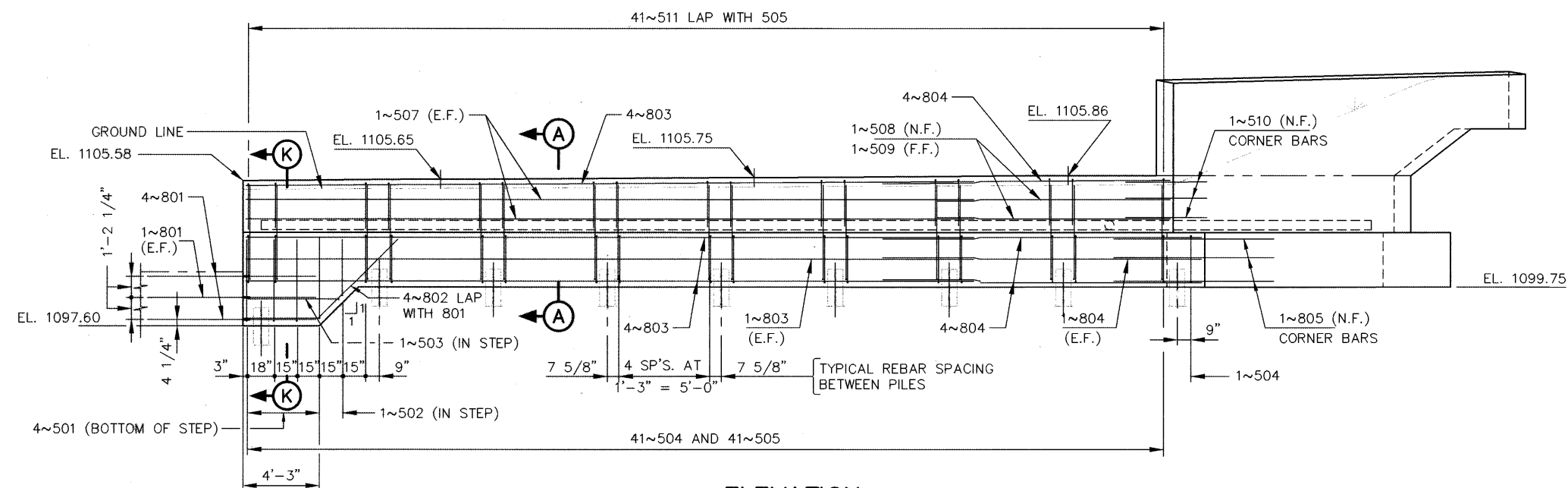
NOTES

- ① FOR STRUCTURE GENERAL NOTES REGARDING PILE DESIGN LOADS AND INSTALLATION SEE SHEET 389 THRU 391.
- ② ↓ DENOTES PILE BATTERED 4:1 IN THE DIRECTION INDICATED

PILING TABLE				
LOCATION	PILE NO.	PILE TYPE	CUT-OFF ELEVATION	ESTIMATED LENGTH
S.B. REAR ABUTMENT	1 THRU 20	HP 10X42	1103.60	30'-0"
	21 THRU 41	HP 10X42	1102.10	30'-0"
N.B. REAR ABUTMENT	42 THRU 57	HP 10X42	1100.75	25'-0"
	58 THRU 85	HP 10X42	1098.60	25'-0"
S.B. FORWARD ABUTMENT	86 THRU 108	HP 10X42	1094.10	25'-0"
	109 THRU 129	HP 10X42	1095.60	25'-0"
N.B. FORWARD ABUTMENT	130 THRU 154	HP 10X42	1091.00	30'-0"
	155 THRU 170	HP 10X42	1092.90	30'-0"



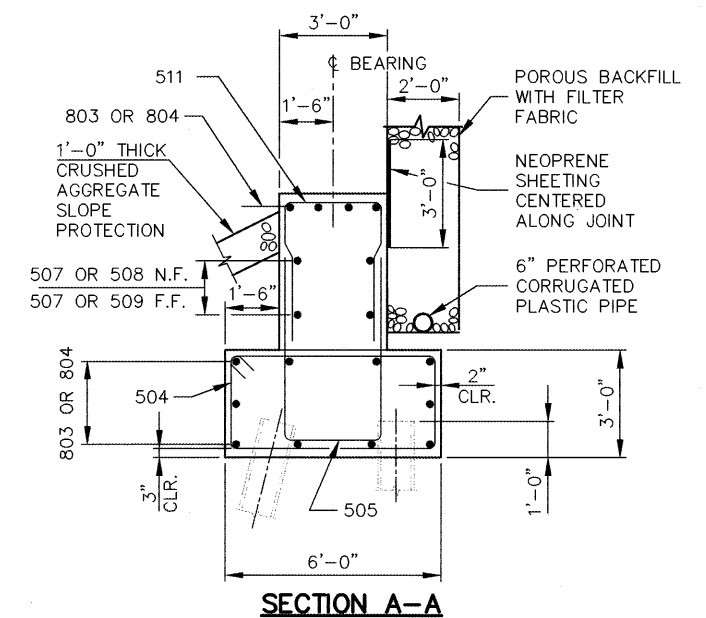
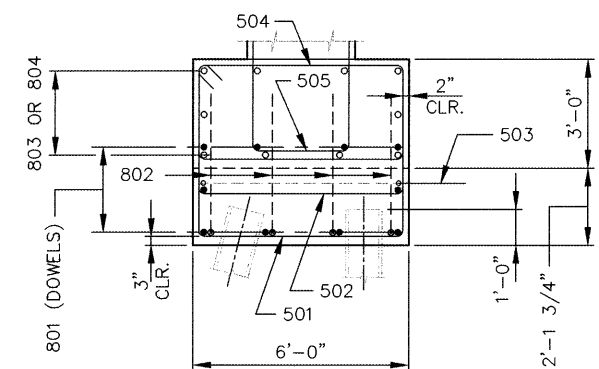
PLAN

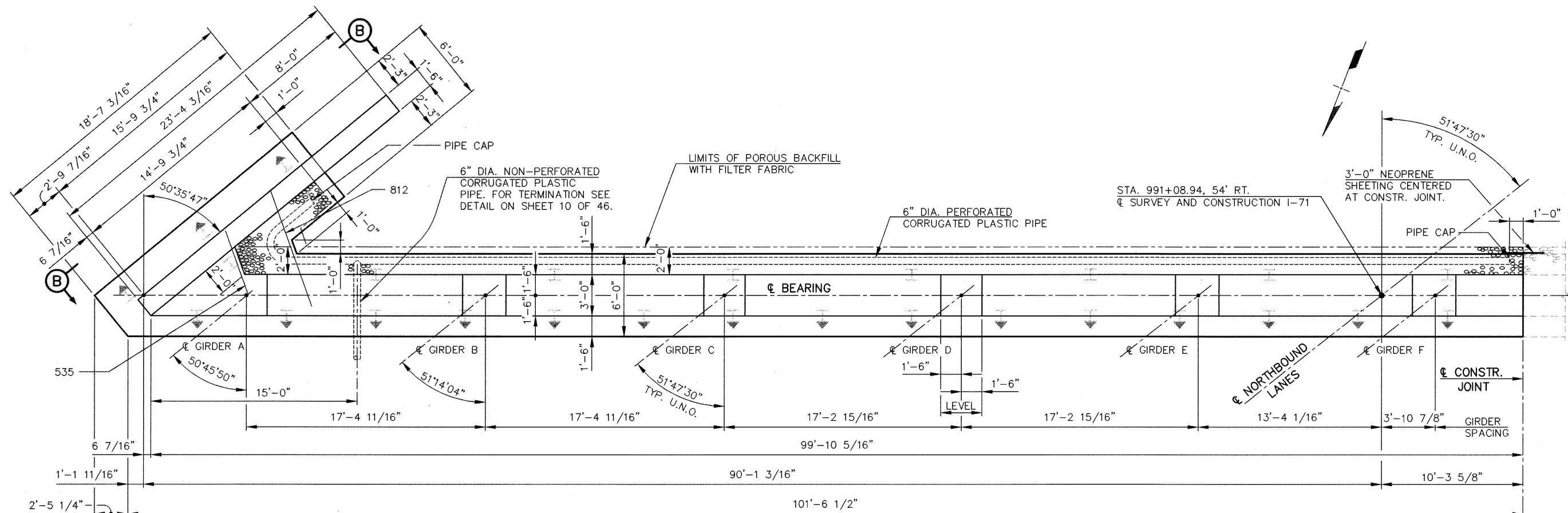


ELEVATION

NOTES

- 1 THE PREFIX 1A SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE NORTHBOUND REAR ABUTMENT.
- 2 FOR VIEW C-C AND ADDITIONAL NOTES SEE SHEET 10 OF 46.
- 3 REINFORCING SPLICE LENGTHS:
(UNLESS SHOWN OTHERWISE)
#5 BAR = 2'-0"
#8 BAR = 4'-11"

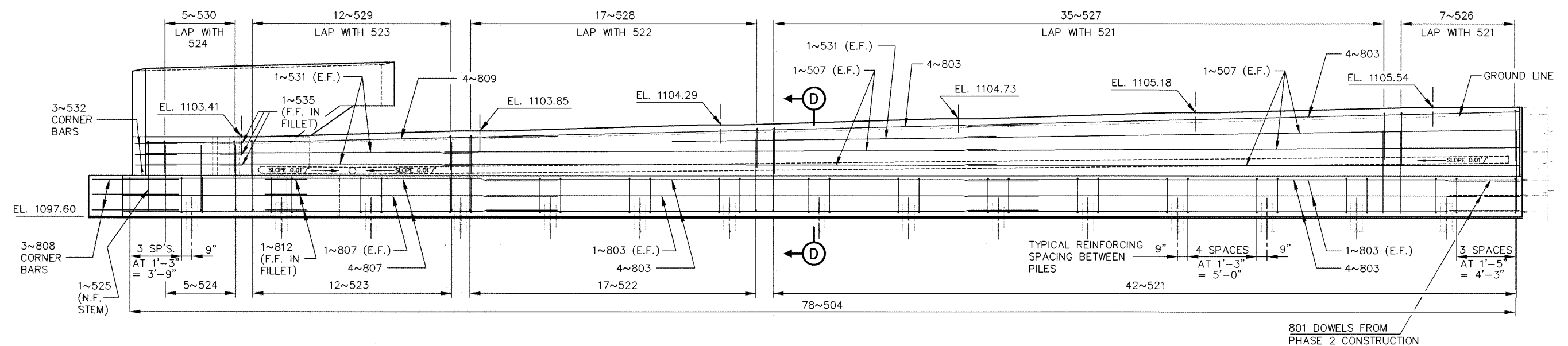


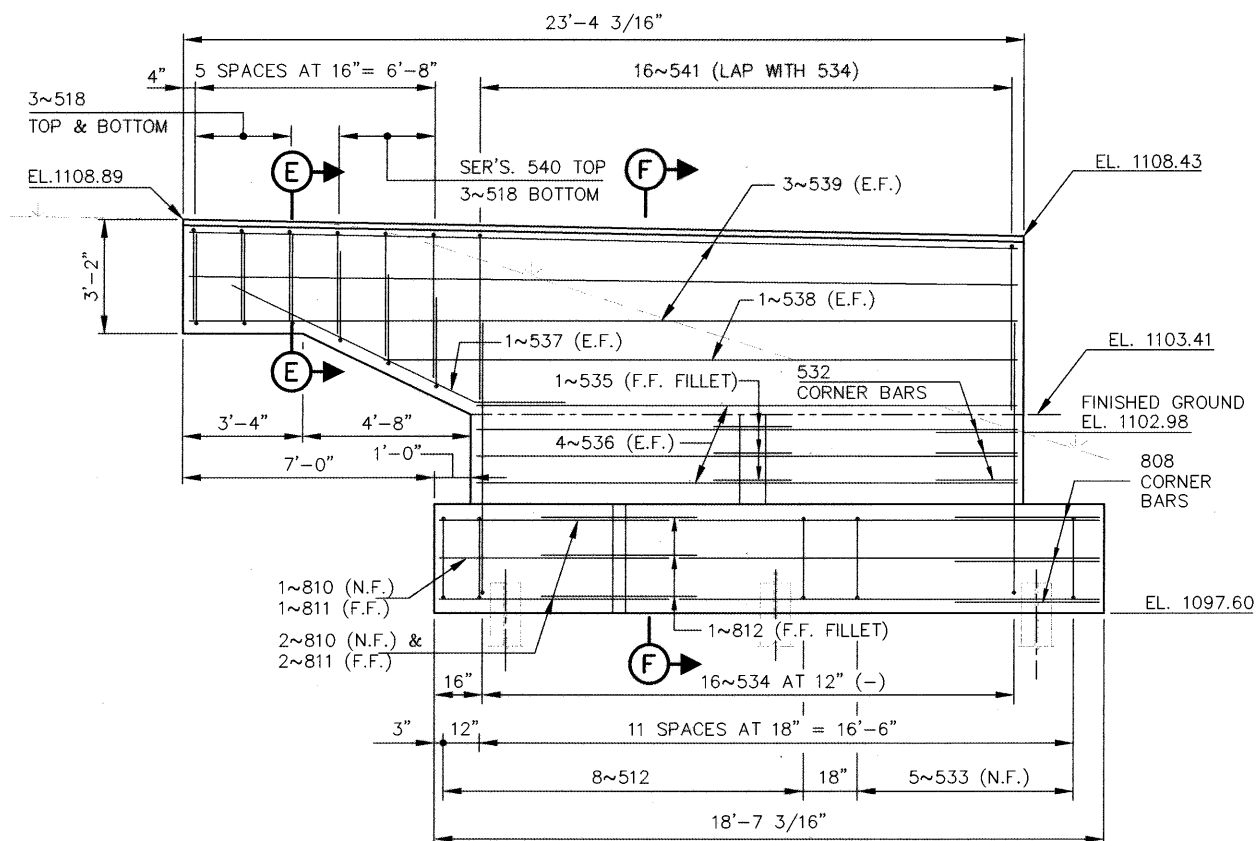


PLAN

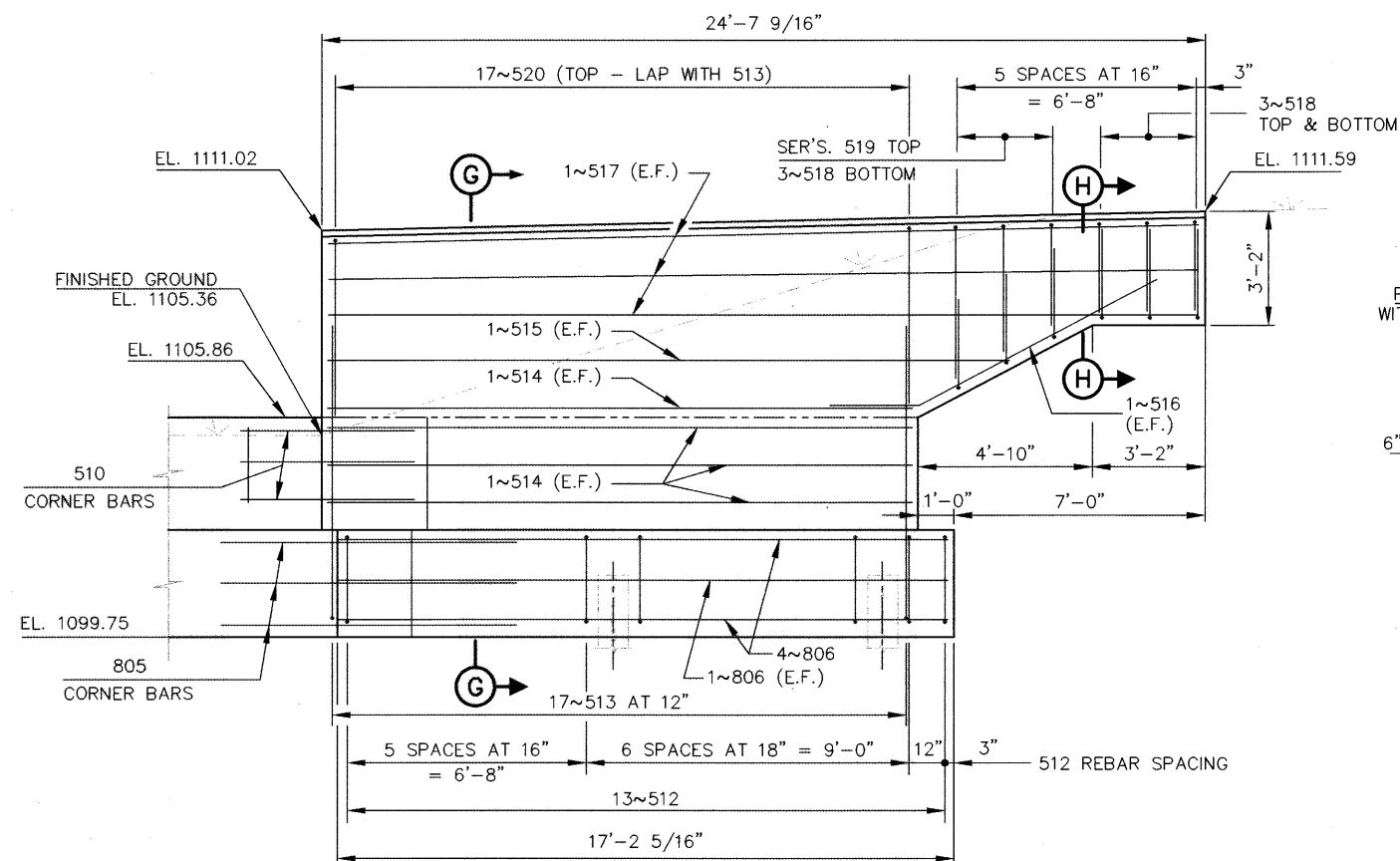
NOTES

- ① THE PREFIX 1A SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE NORTHBOUND REAR ABUTMENT.
- ② FOR VIEW B-B, SECTION D-D AND ADDITIONAL NOTES SEE SHEET 10 OF 46.
- ③ REINFORCING SPLICE LENGTHS:
(UNLESS SHOWN OTHERWISE)
#5 BAR = 2'-0"
#8 BAR = 4'-11"

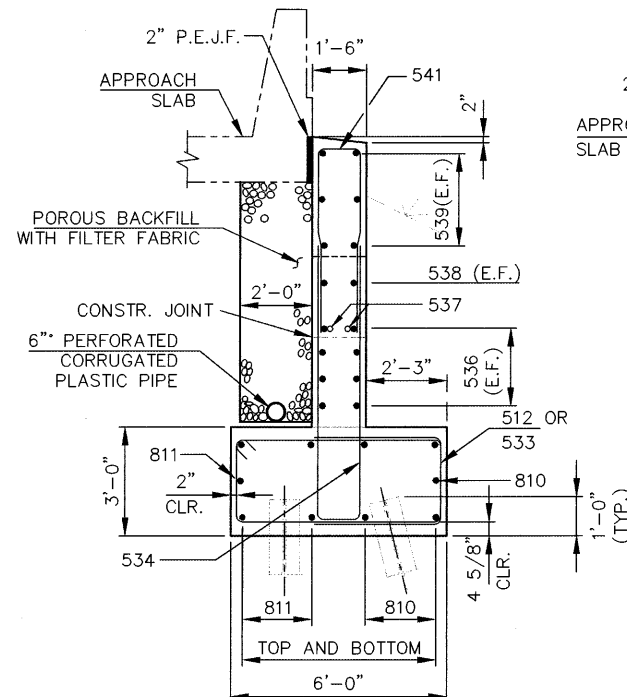
ELEVATION



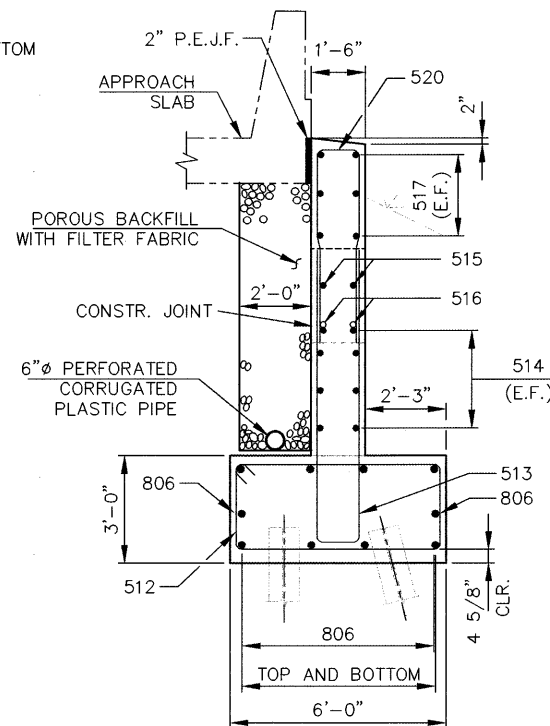
VIEW B-B
NORTHBOUND REAR RIGHT WINGWALL



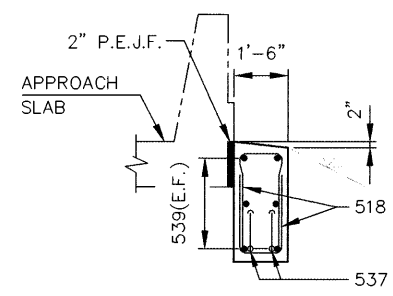
VIEW C-C
NORTHBOUND REAR LEFT WINGWALL



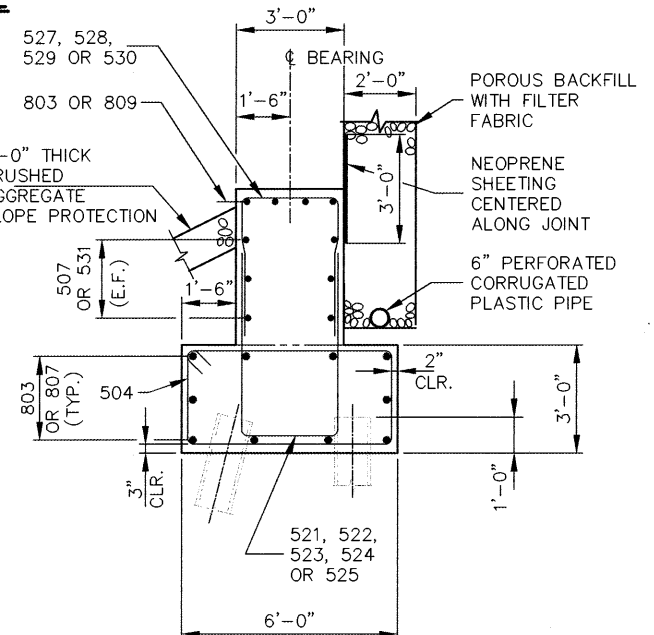
SECTION F-F



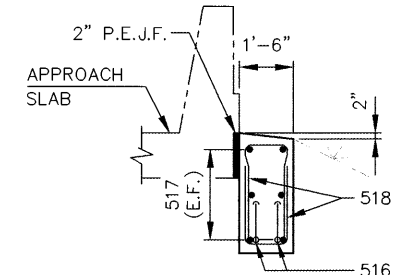
SECTION G-G



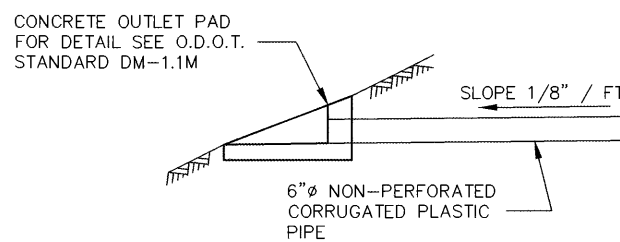
SECTION E-E



SECTION D-D

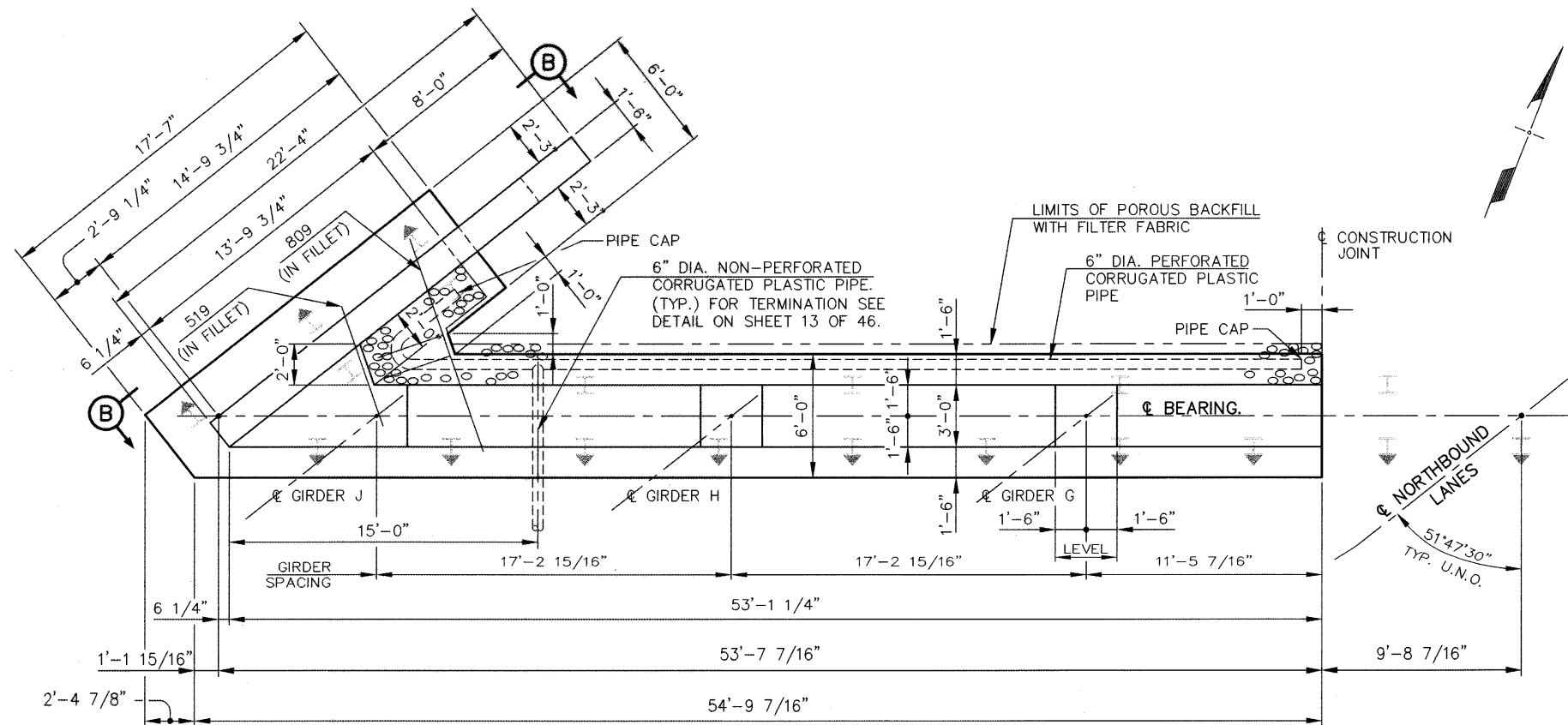


SECTION H-H

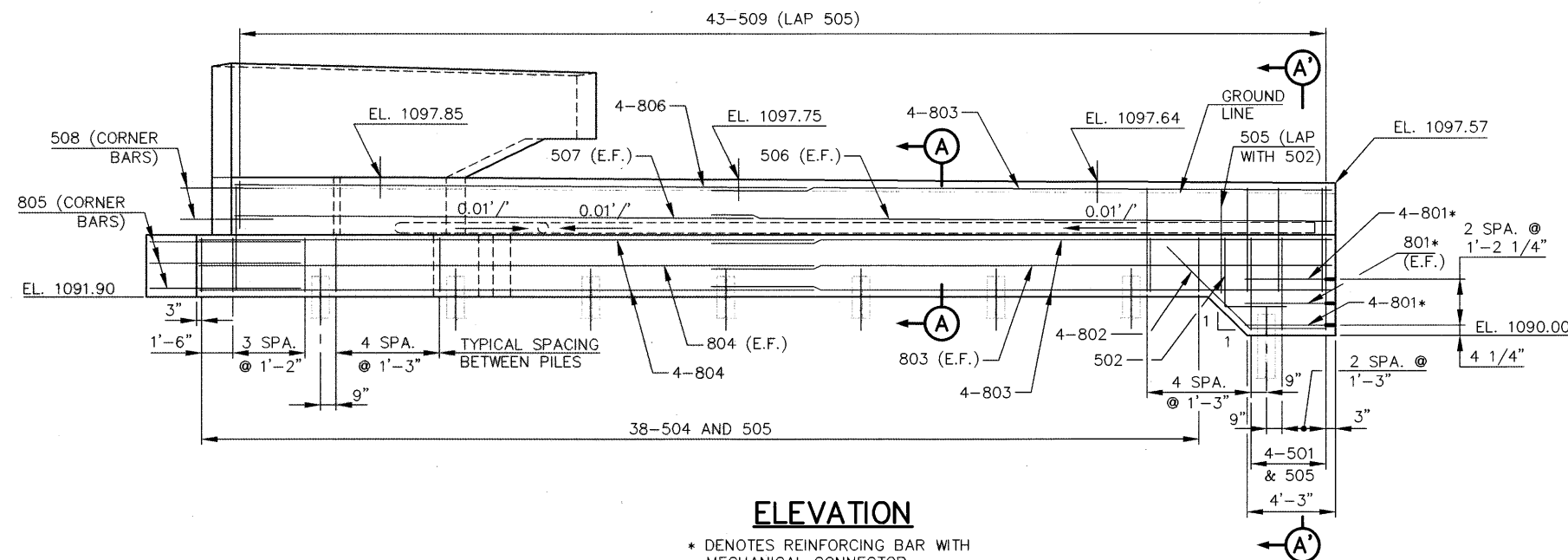


DRAINAGE TERMINATION DETAIL
CONCRETE OUTLET PAD SHALL BE INCLUDED WITH ITEM 518 ~ 6" NON-PERFORATED CORRUGATED PLASTIC PIPE, AS PER PLAN FOR PAYMENT.

- NOTES**
- FOR LOCATION OF VIEW B-B, SECTION D-D AND ADDITIONAL NOTES SEE SHEET 9 OF 46.
 - FOR LOCATION OF VIEW C-C SEE SHEET 8 OF 46.
 - ANIMAL GUARD:** ANIMAL GUARD SHALL BE PROVIDED AT THE OUTLET END OF THE DRAINAGE PIPE. SEE STANDARD CONSTRUCTION DRAWING MC-4 FOR DETAILS. PAYMENT FOR THE ANIMAL GUARD SHALL BE INCLUDED WITH THE DRAINAGE PIPE, ITEM 518 FOR PAYMENT.



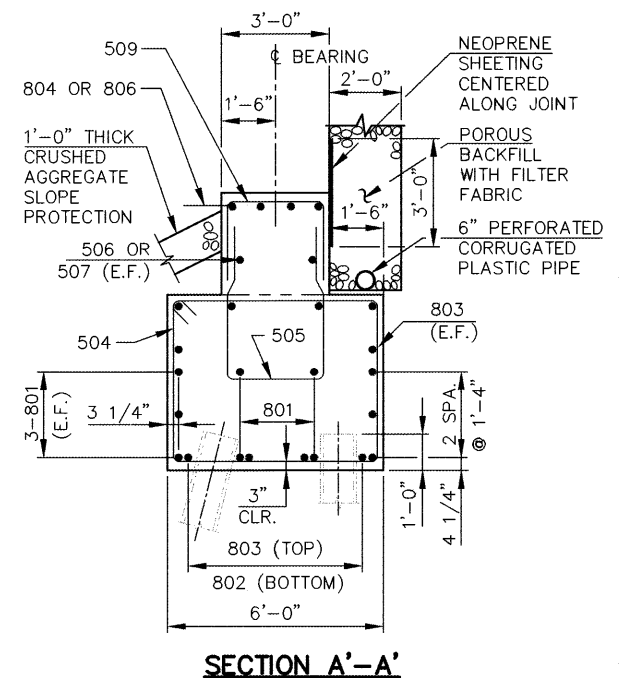
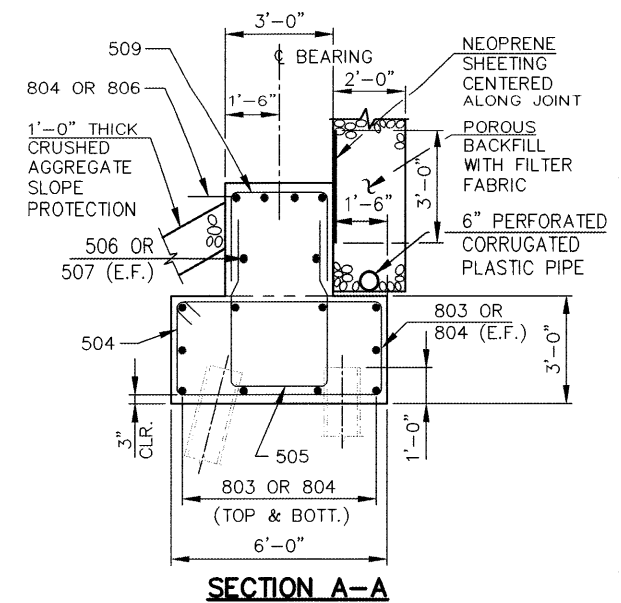
PLAN

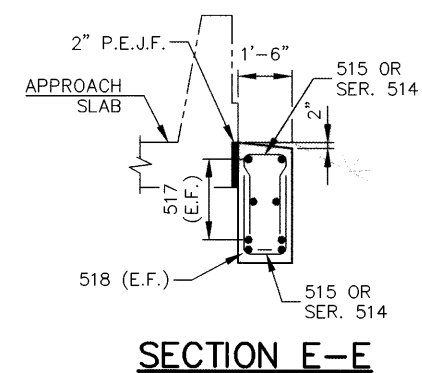
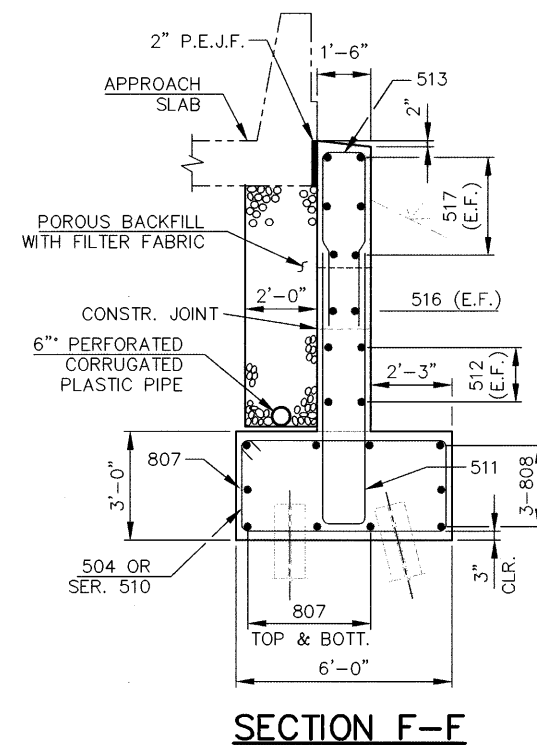
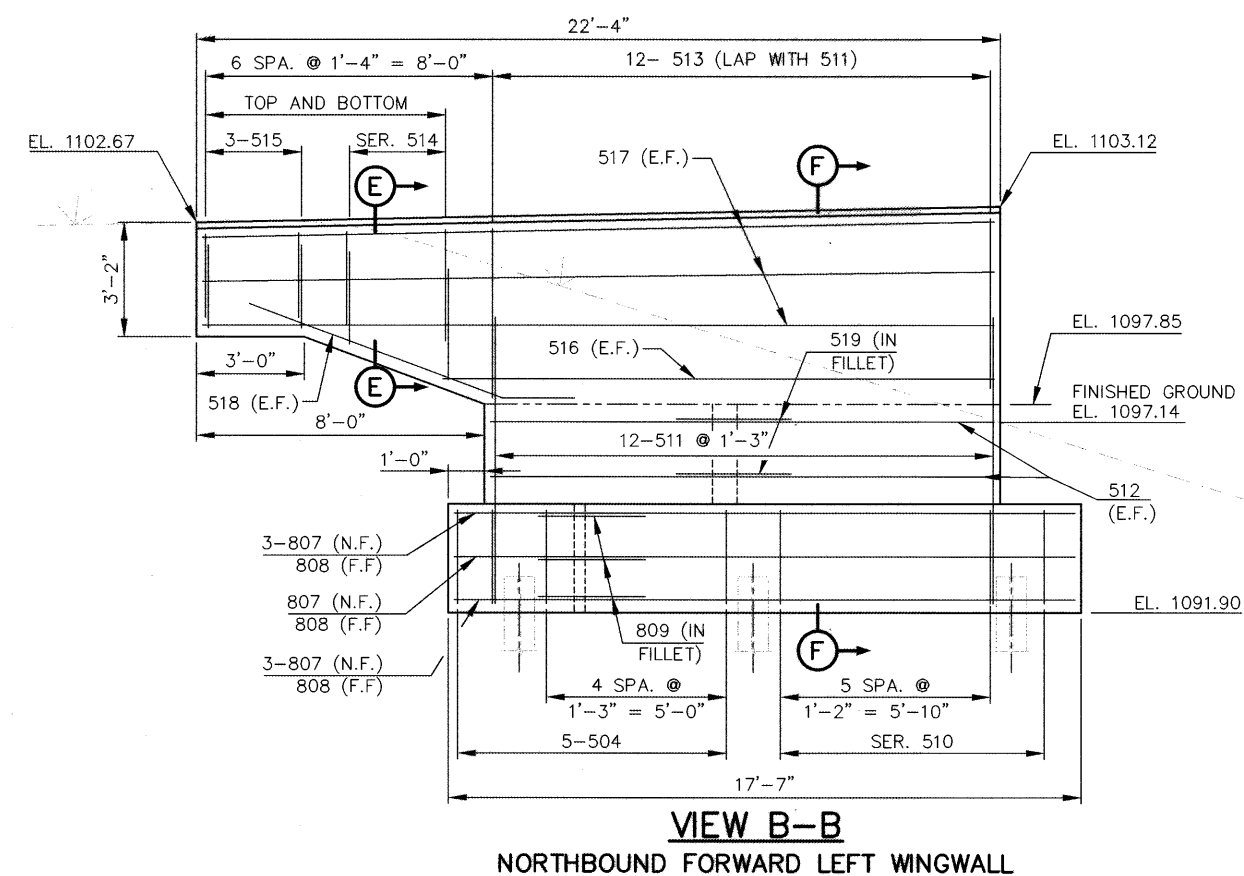


ELEVATION

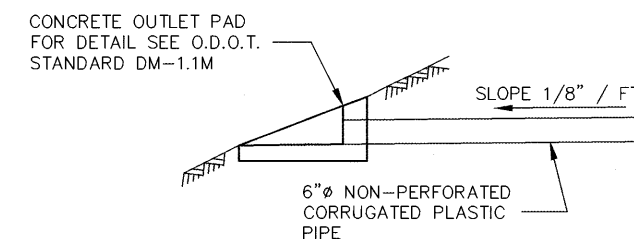
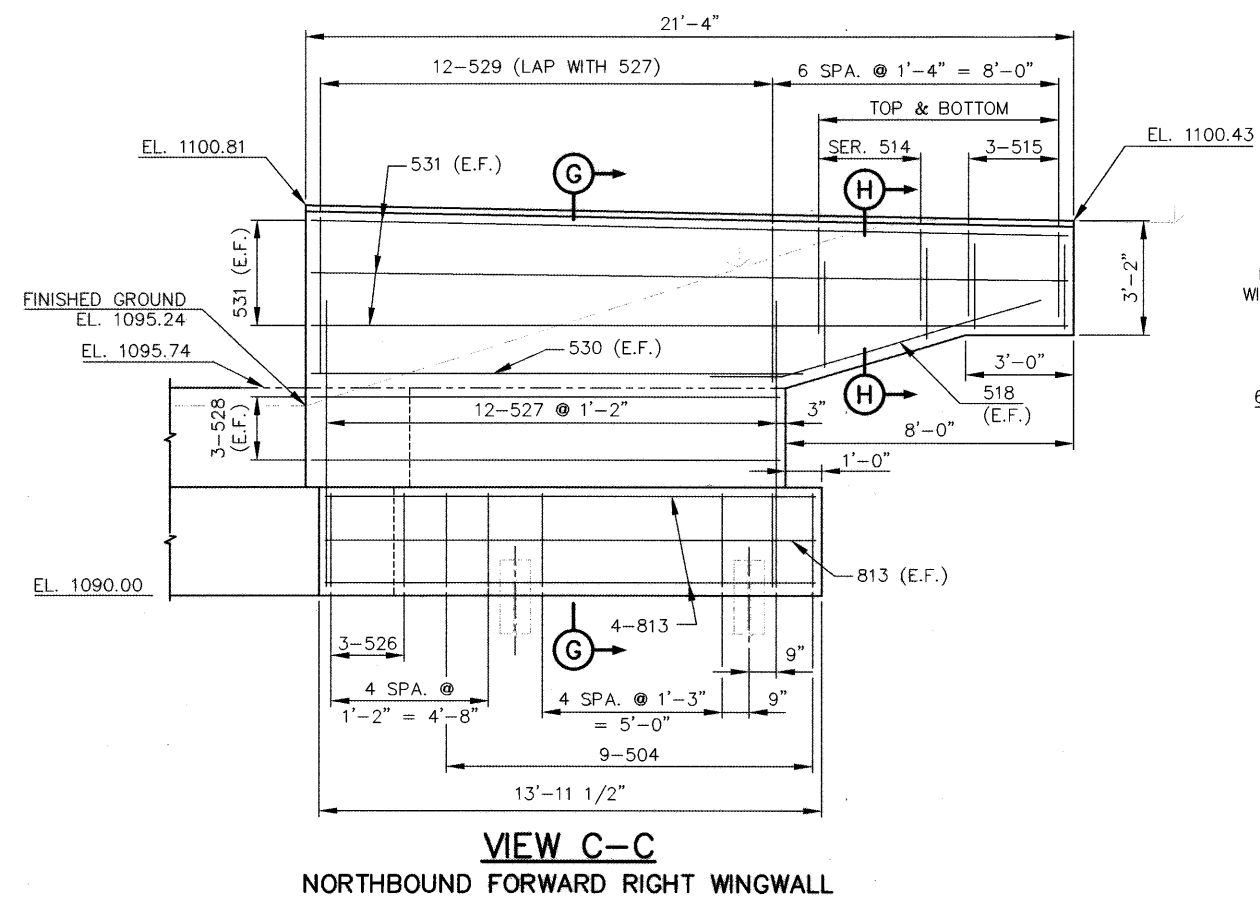
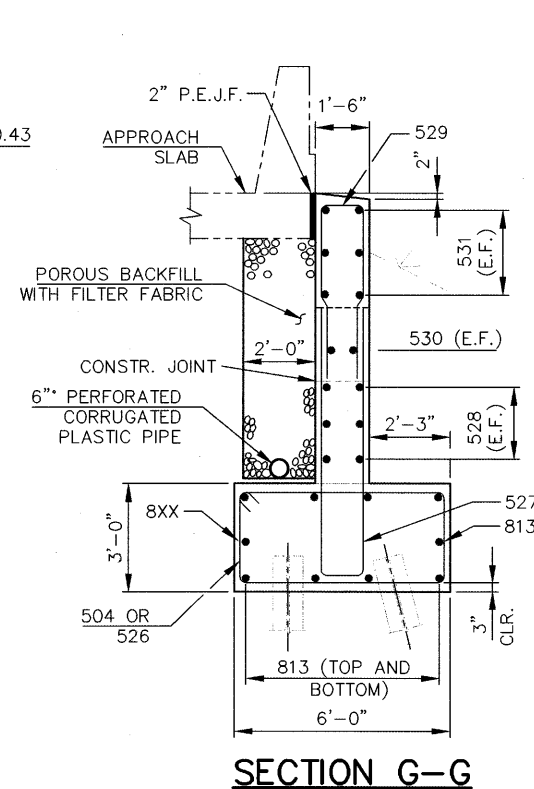
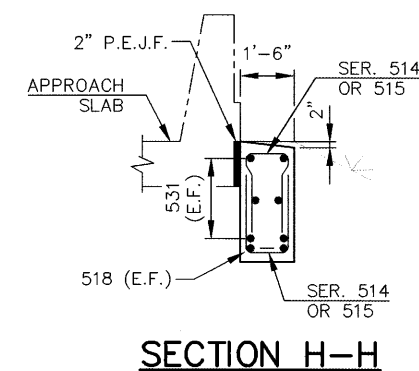
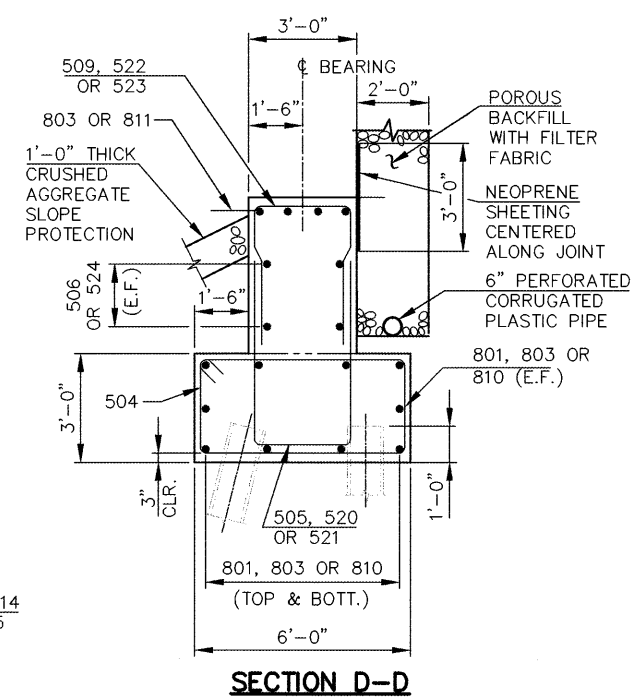
NOTES

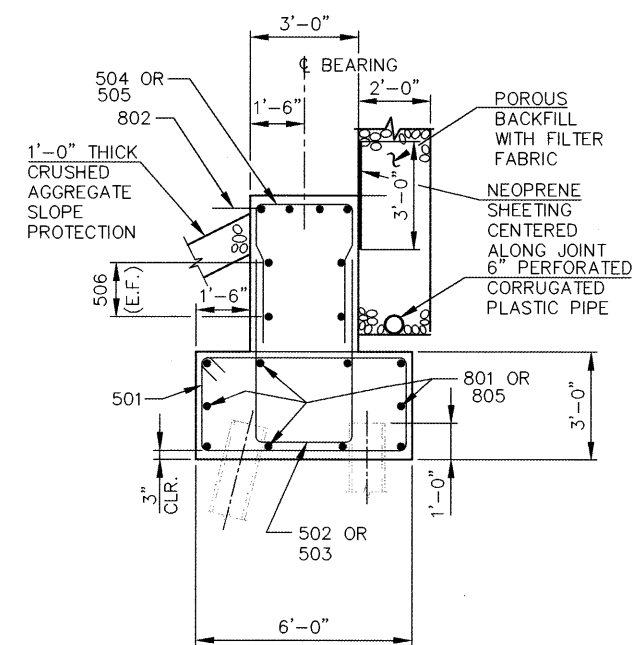
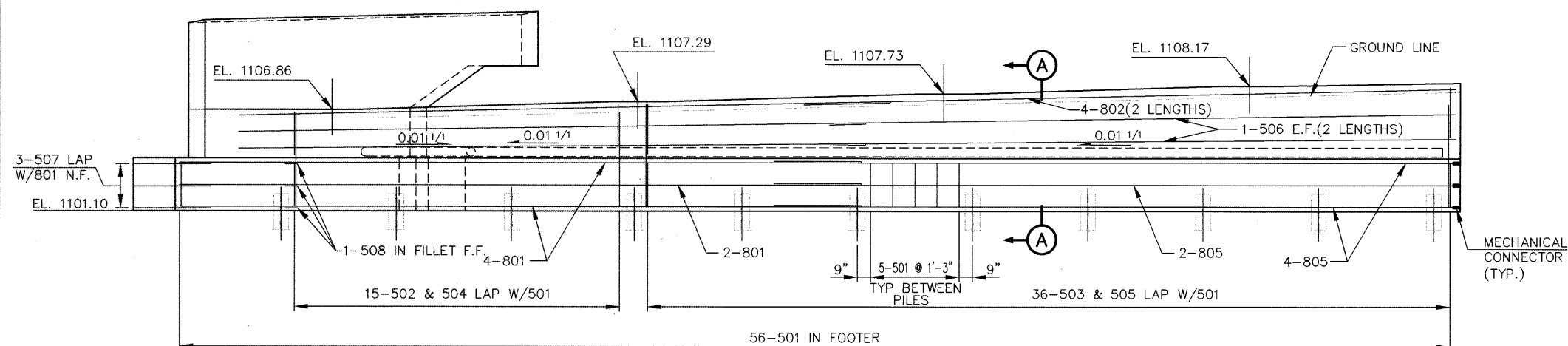
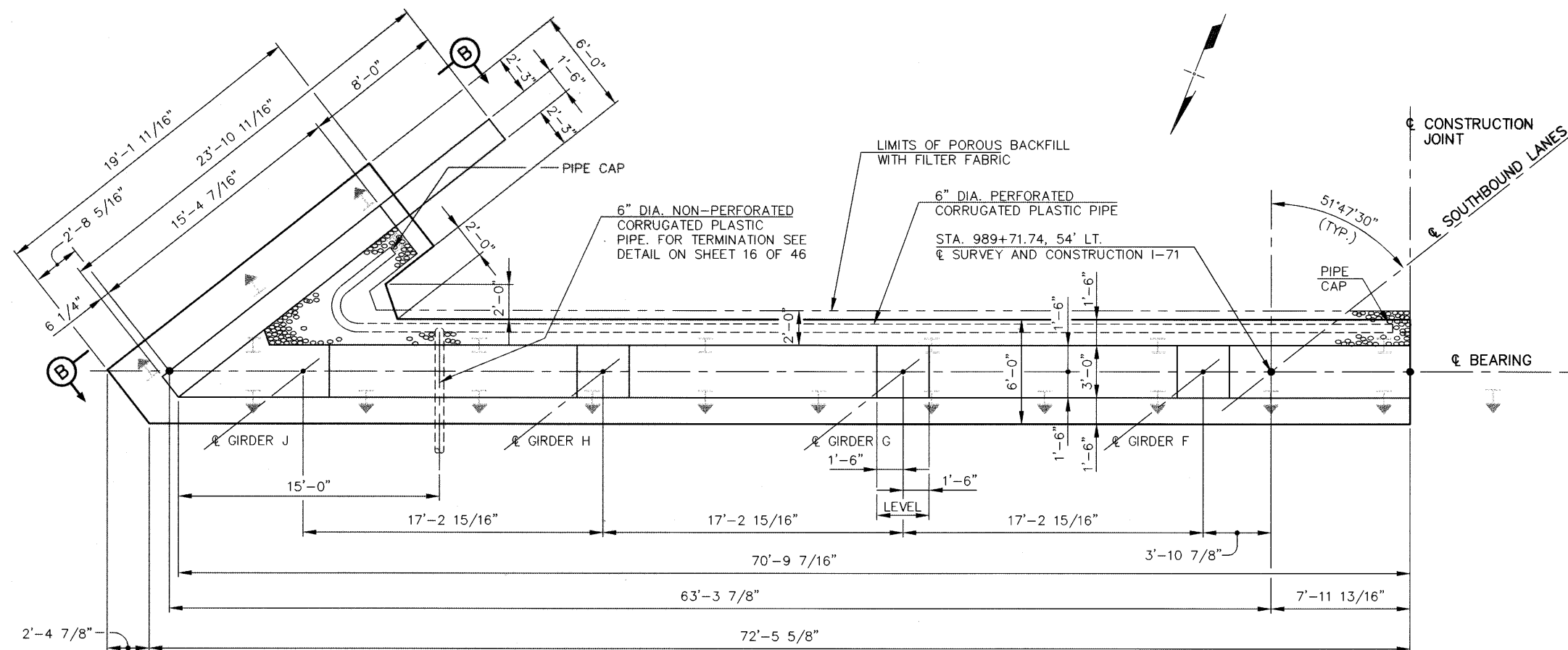
- THE PREFIX 2A SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE NORTHBOUND FORWARD ABUTMENT.
- FOR VIEW B-B SEE SHEET 13 OF 46.
- REINFORCING SPLICE LENGTHS:
(UNLESS SHOWN OTHERWISE)
#5 BAR = 2'-0"
#8 BAR = 4'-11"



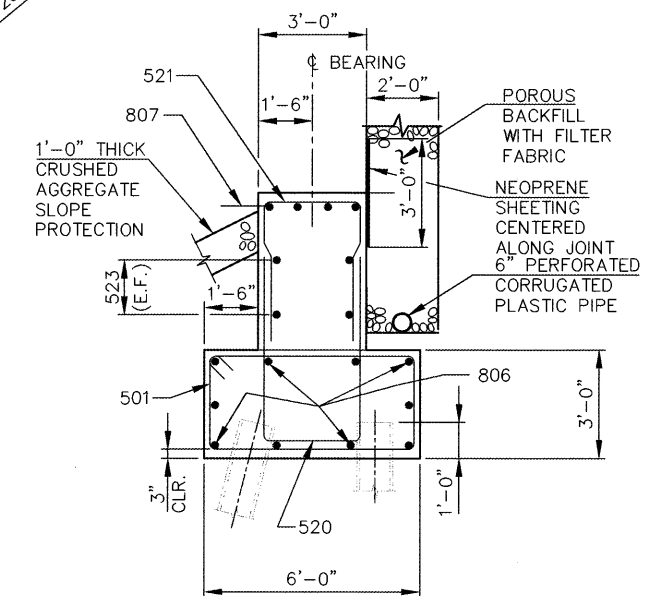


- ### NOTES
- ① FOR LOCATION OF VIEW C-C AND ADDITIONAL NOTES SEE SHEET 12 OF 46.
 - ② FOR LOCATION OF VIEW B-B SEE SHEET 11 OF 46.
 - ③ FOR DRAINAGE TERMINATION LOCATIONS SEE SHEETS 11 AND 12 OF 46.
 - ④ ANIMAL GUARD: ANIMAL GUARD SHALL BE PROVIDED AT THE OUTLET END OF THE DRAINAGE PIPE. SEE STANDARD CONSTRUCTION DRAWING MC-4 FOR DETAILS. PAYMENT FOR THE ANIMAL GUARD SHALL BE INCLUDED WITH THE DRAINAGE PIPE. ITEM 518 FOR PAYMENT.

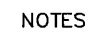




- ## NOTES
- ① THE PREFIX 3A SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE SOUTHBOUND REAR ABUTMENT.
 - ② FOR VIEW B-B AND ADDITIONAL NOTES SEE SHEET 16 OF 46.
 - ③ REINFORCING SPLICE LENGTHS:
(UNLESS SHOWN OTHERWISE)
 #5 BAR = 2'-0"
 #8 BAR = 4'-11"



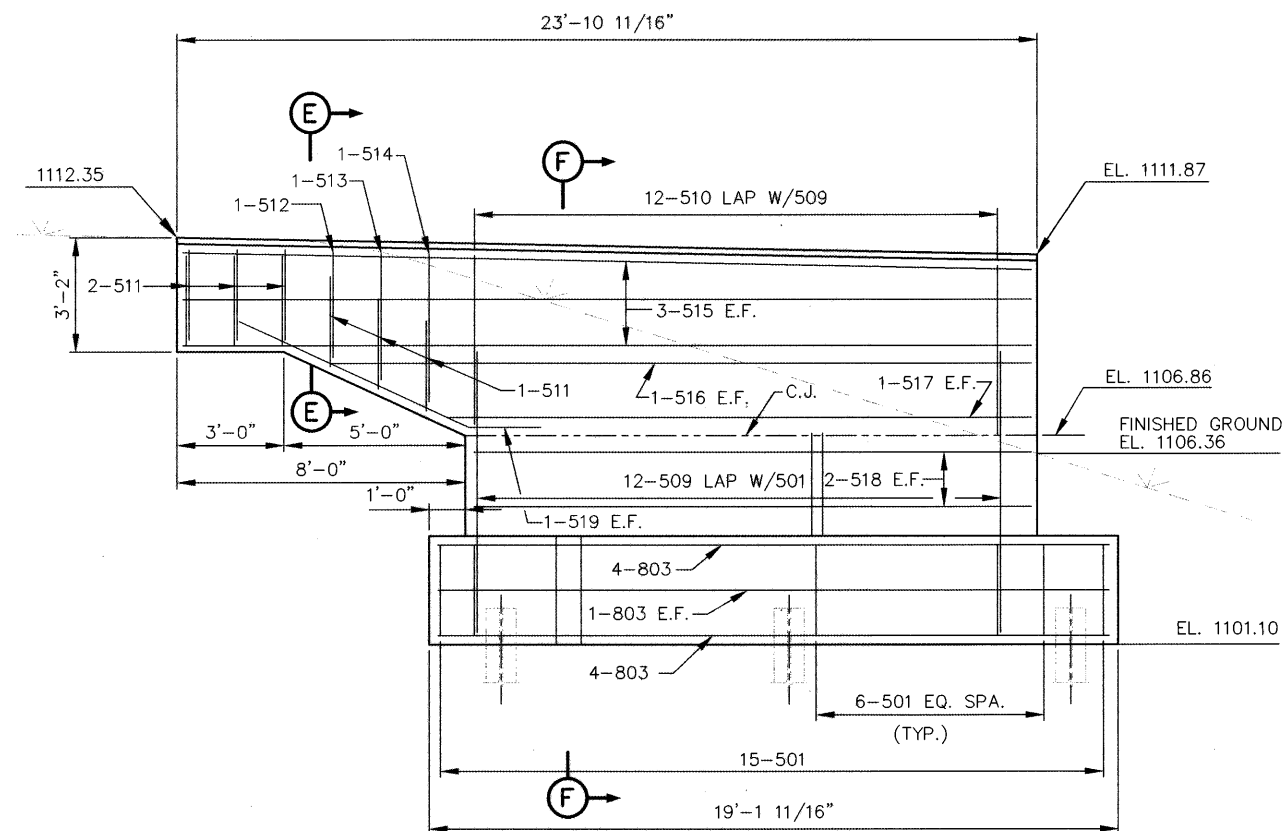
SECTION D-D



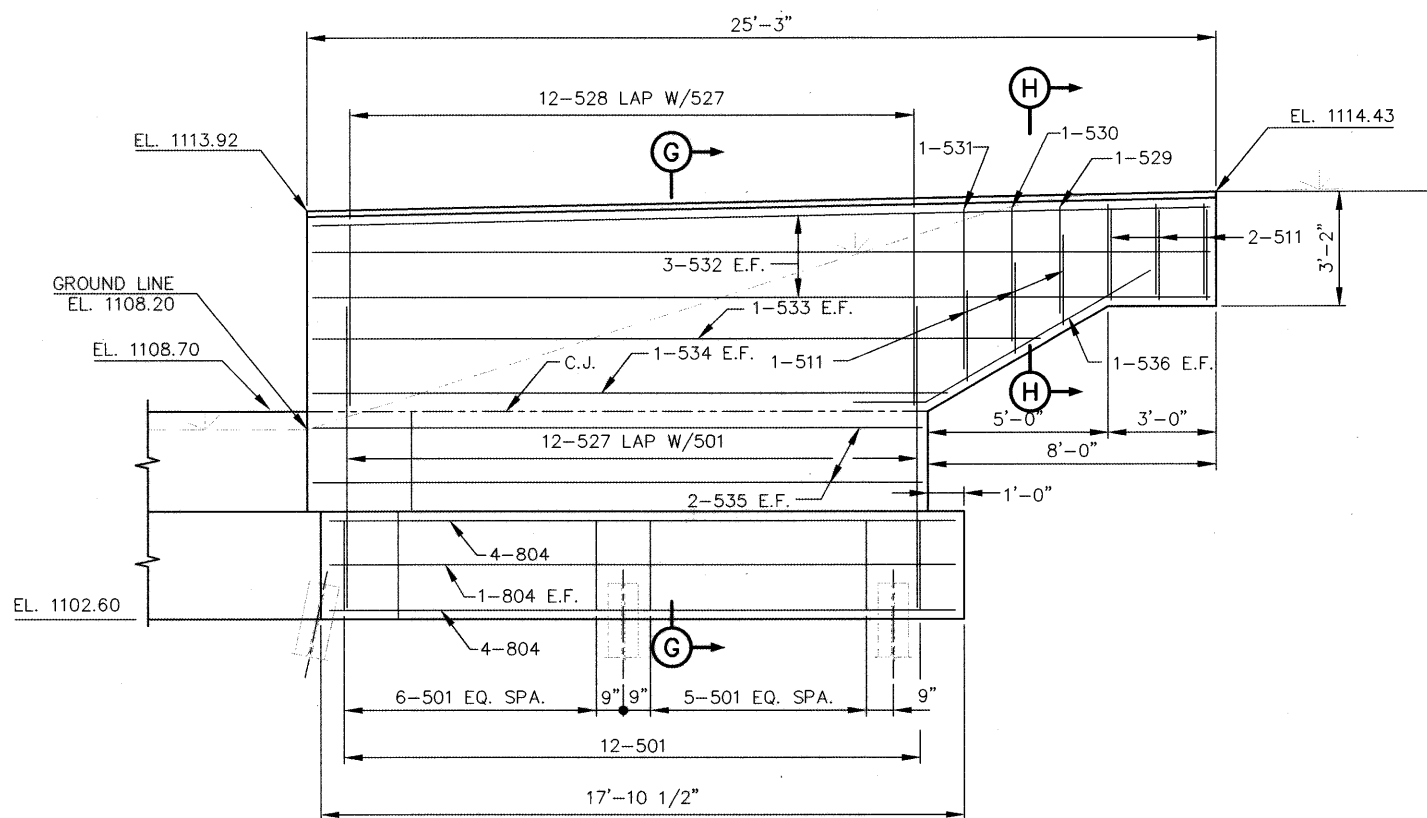
- ① THE PREFIX 3A SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE SOUTHBOUND REAR ABUTMENT.
- ② FOR VIEW C-C, AND ADDITIONAL NOTES SEE SHEET 16 OF 46.
- ③ REINFORCING SPLICE LENGTHS:
(UNLESS SHOWN OTHERWISE)
#5 BAR = 2'-0"
#8 BAR = 4'-11"

ELEVATION

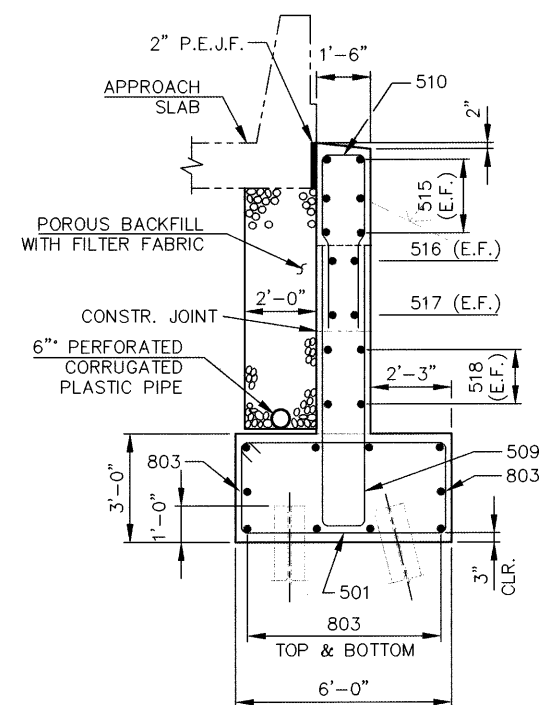
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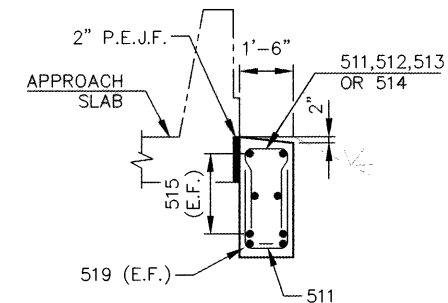
VIEW B-B
SOUTHBOUND REAR RIGHT WINGWALL



VIEW C-C
SOUTHBOUND REAR RIGHT WINGWALL



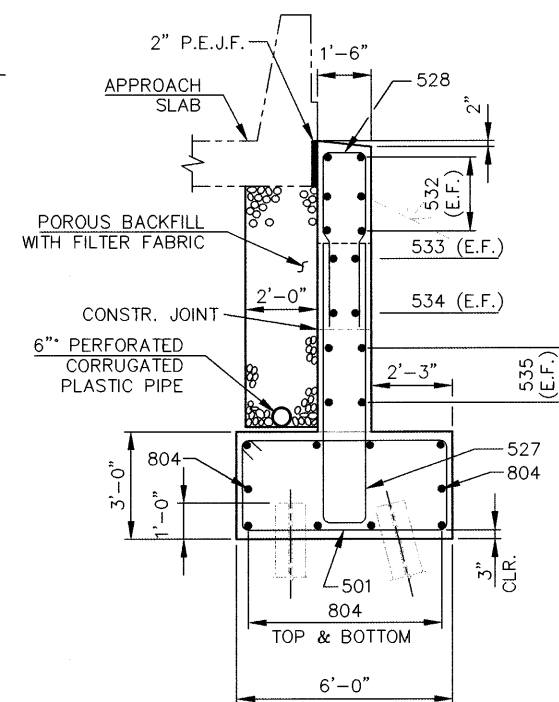
SECTION F-F



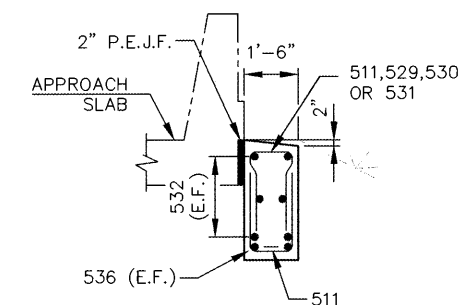
SECTION E-E

NOTES

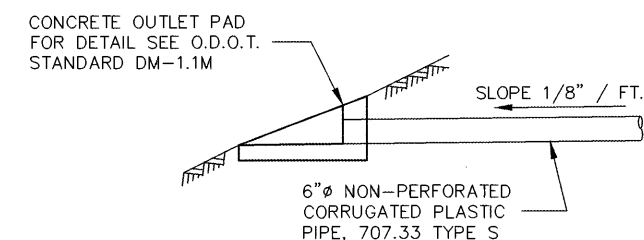
- 1 FOR LOCATION OF VIEWS B-B & C-C AND ADDITIONAL NOTES SEE SHEET 14 AND 15 OF 46.
- 2 ANIMAL GUARD: ANIMAL GUARD SHALL BE PROVIDED AT THE OUTLET END OF THE DRAINAGE PIPE. SEE STANDARD CONSTRUCTION DRAWING MC-4 FOR DETAILS. PAYMENT FOR THE ANIMAL GUARD SHALL BE INCLUDED WITH THE DRAINAGE PIPE, ITEM 518 FOR PAYMENT.



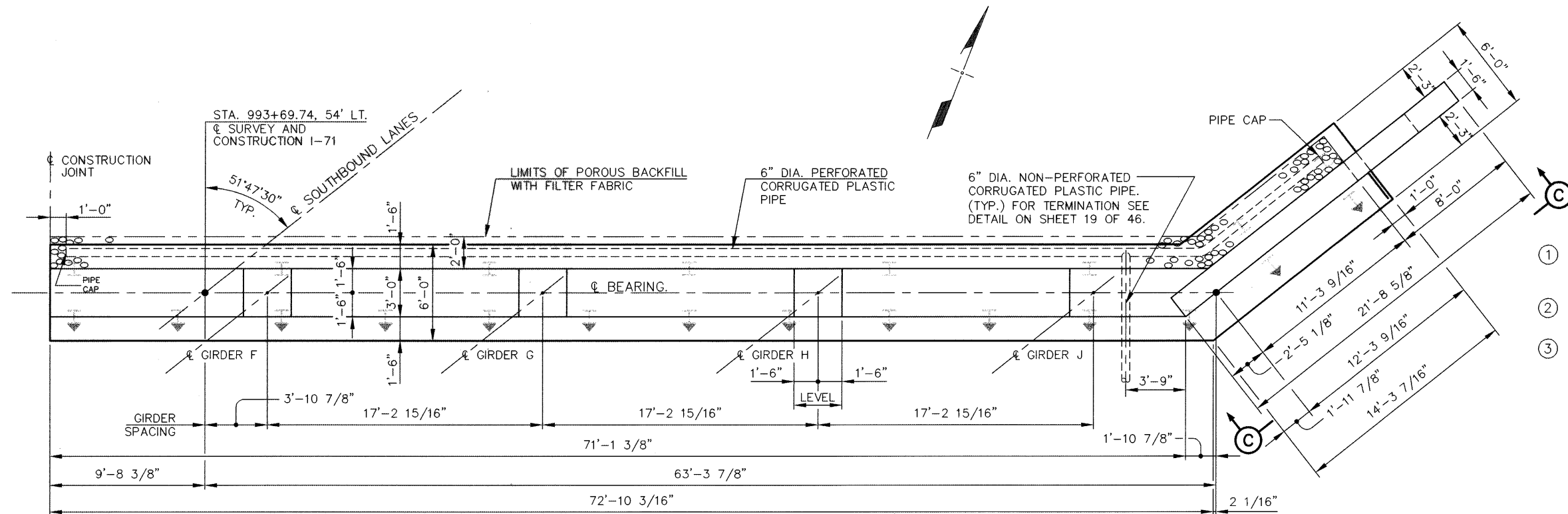
SECTION G-G



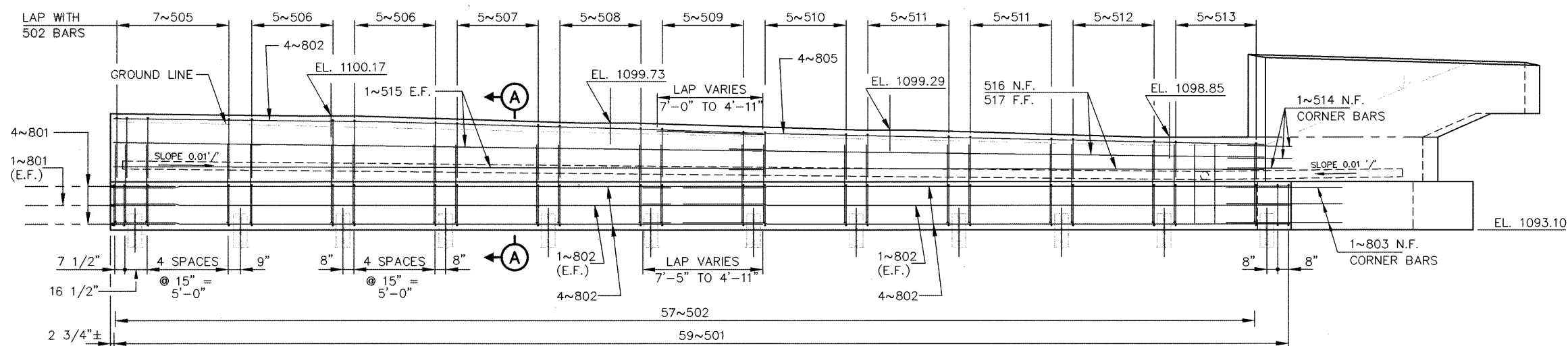
SECTION H-H



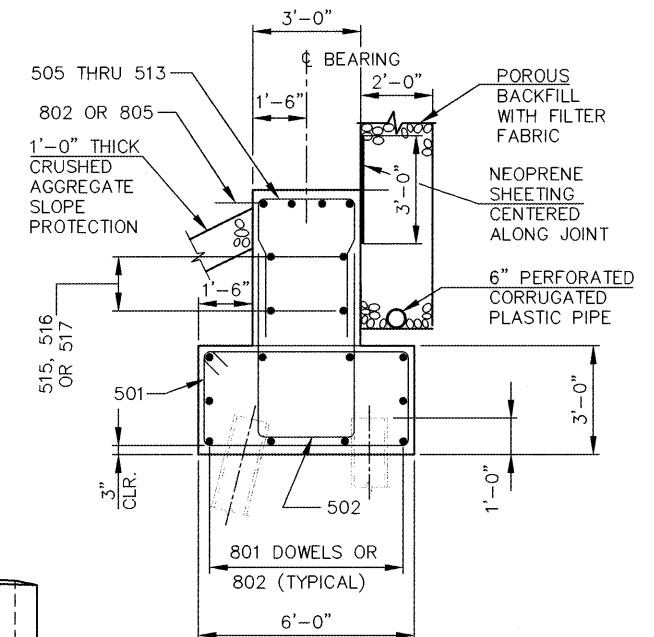
DRAINAGE TERMINATION DETAIL
CONCRETE OUTLET PAD SHALL BE INCLUDED WITH ITEM 518 ~ 6"Ø NON-PERFORATED CORRUGATED PLASTIC PIPE, AS PER PLAN FOR PAYMENT.



PLAN



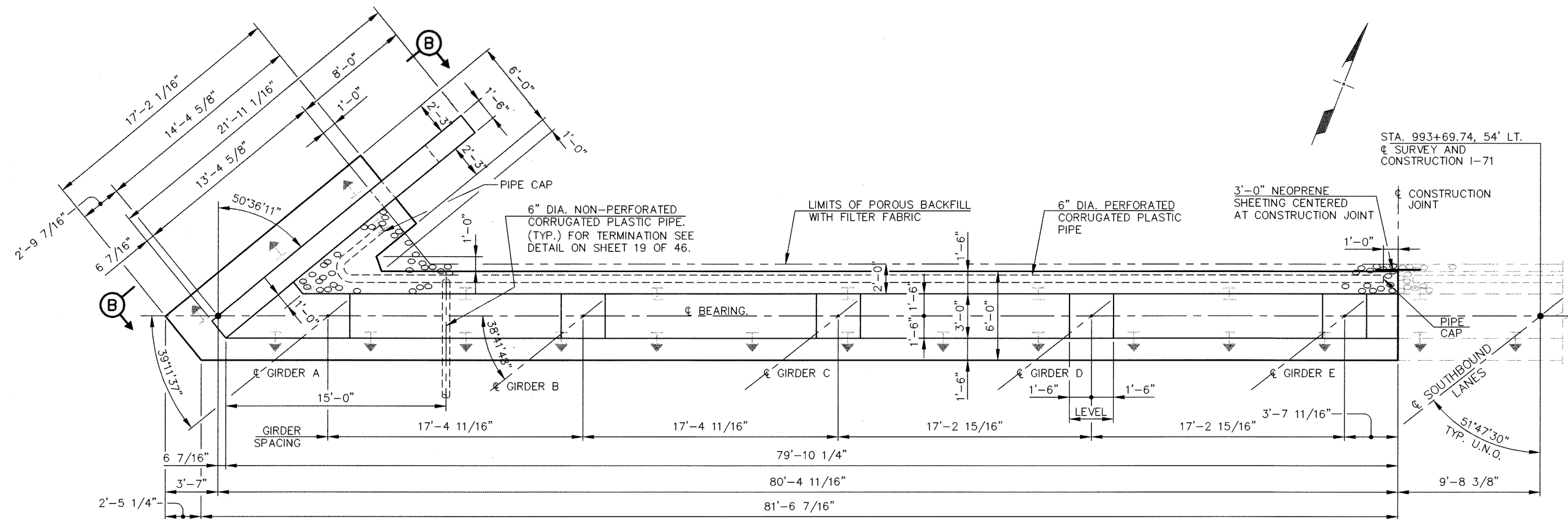
ELEVATION



SECTION A-A

- NOTES**
- THE PREFIX 4A SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE SOUTHBOUND FORWARD ABUTMENT.
 - FOR VIEW C-C AND ADDITIONAL NOTES SEE SHEET 19 OF 46.
 - REINFORCING SPLICE LENGTHS: (UNLESS SHOWN OTHERWISE)
 #5 BAR = 2'-0"
 #8 BAR = 4'-11"

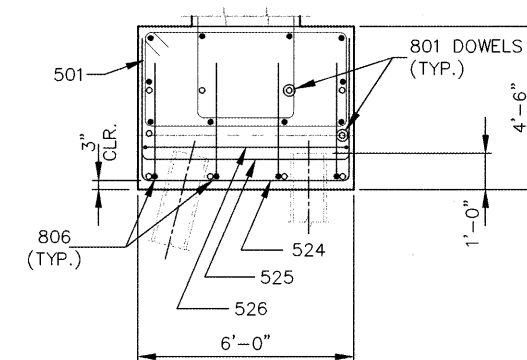
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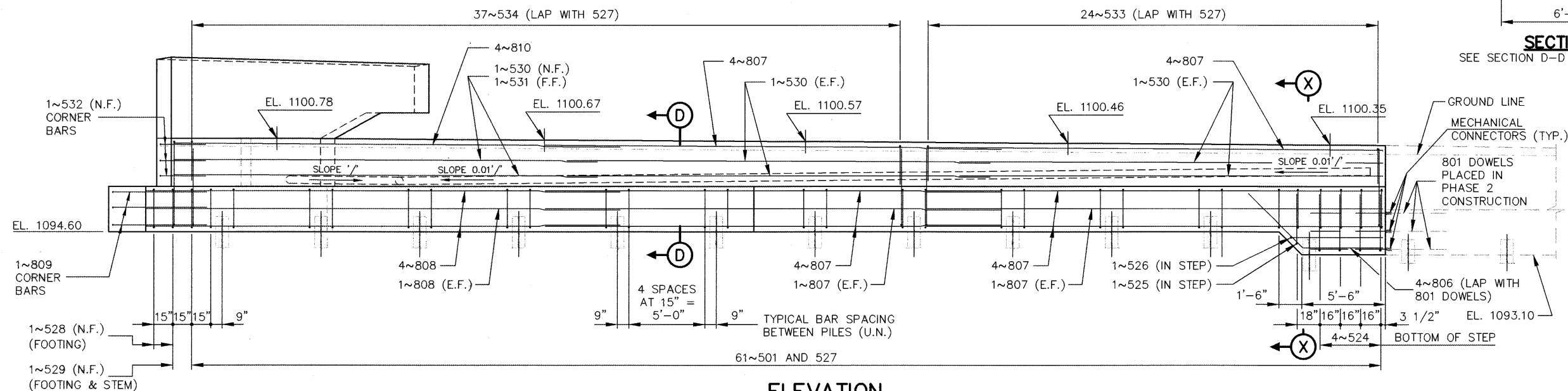
PLAN

NOTES

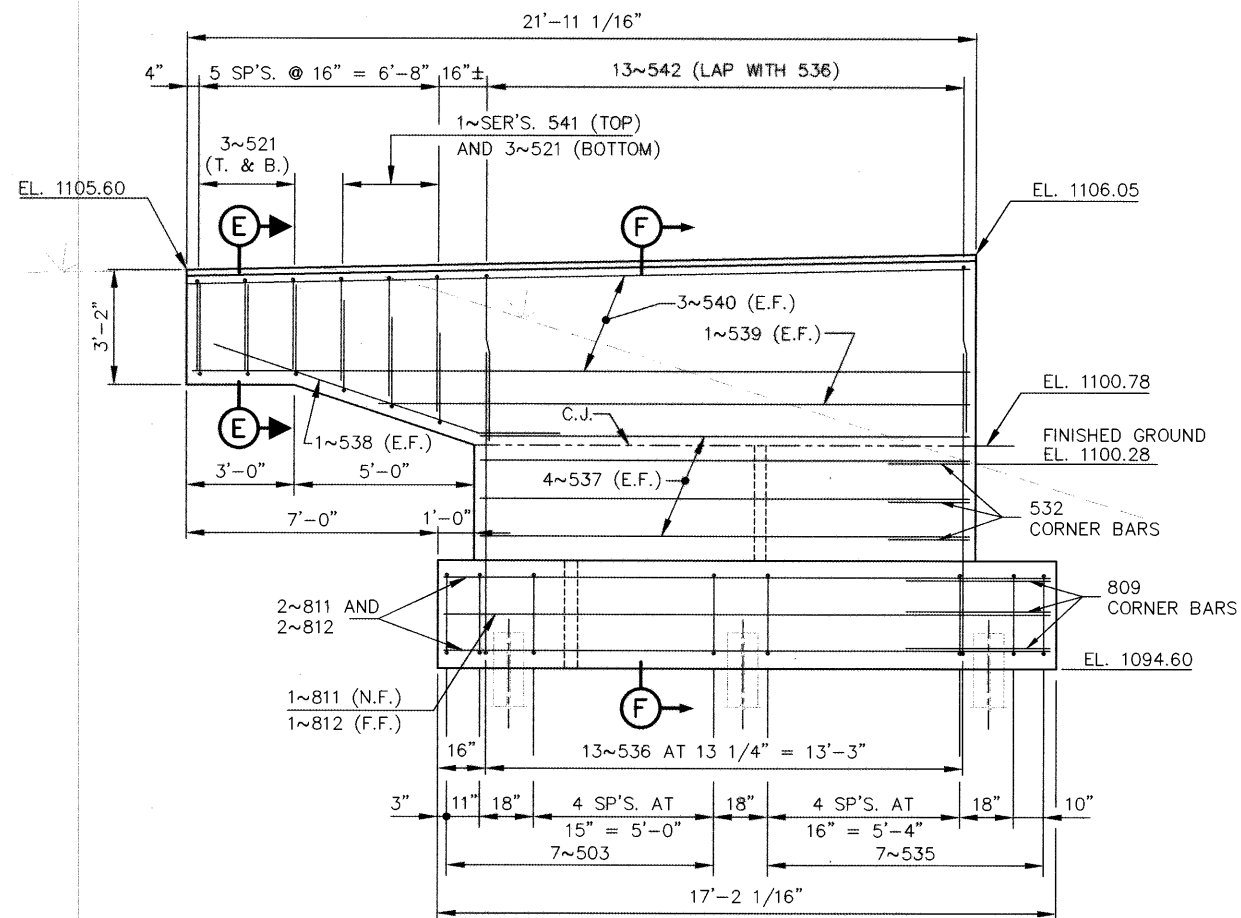
- 1 THE PREFIX 4A SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE SOUTHBOUND FORWARD ABUTMENT.
- 2 FOR VIEW B-B AND SECTION D-D SEE SHEET 19 OF 46.
- 3 REINFORCING SPLICE LENGTHS:
(UNLESS SHOWN OTHERWISE)
#5 BAR = 2'-0"
#8 BAR = 4'-11"



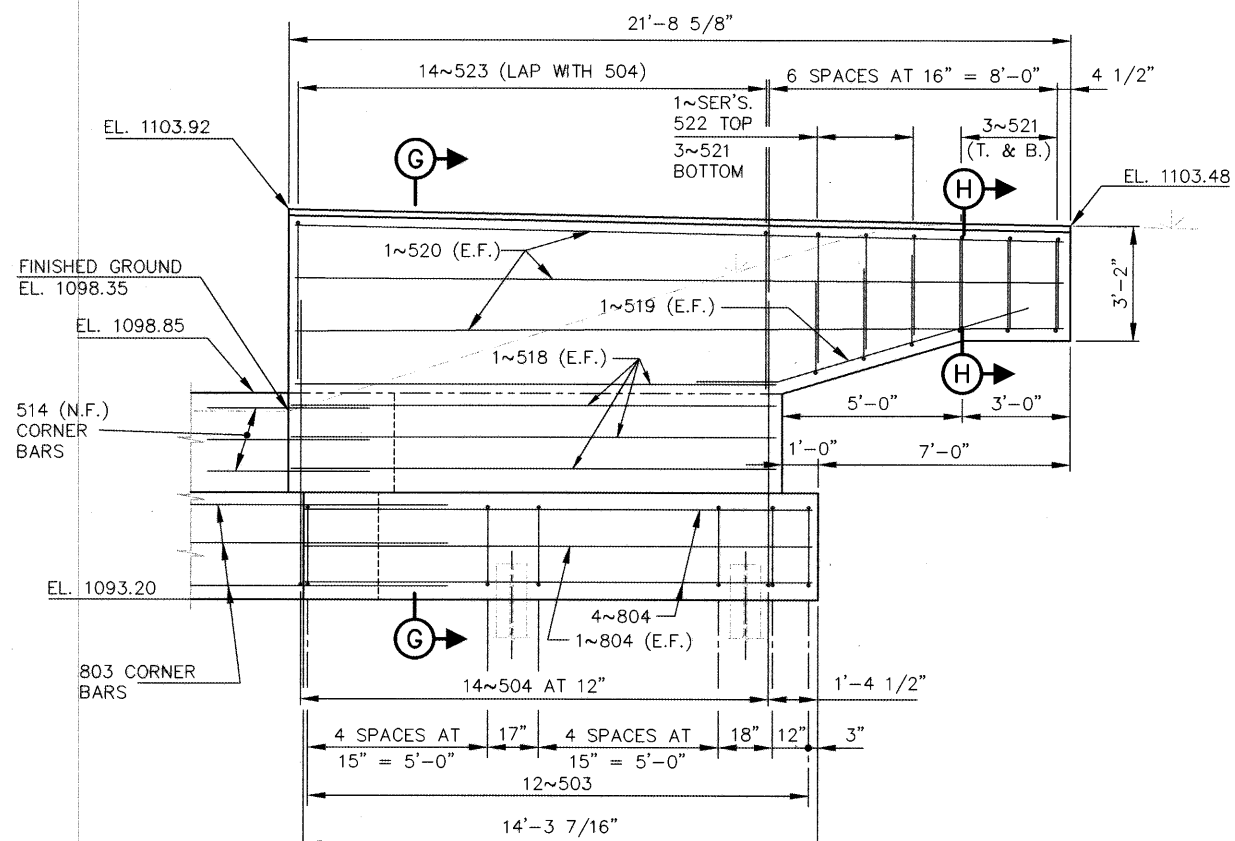
SECTION X-X
SEE SECTION D-D FOR ADDITIONAL DETAIL



ELEVATION

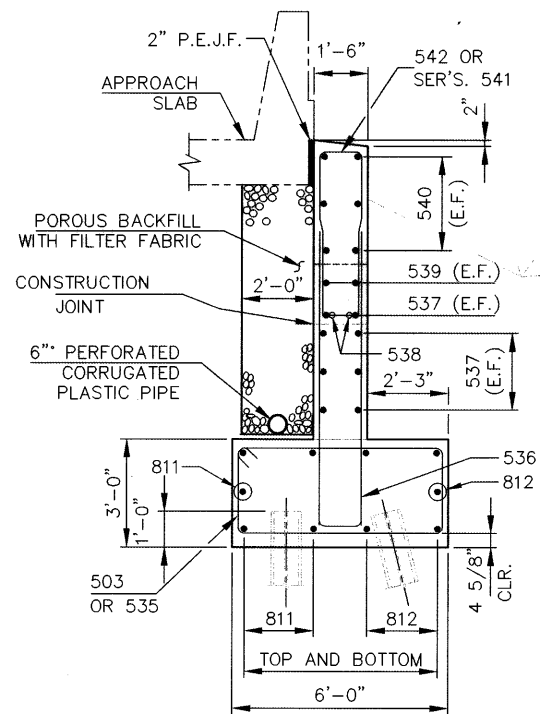


VIEW B-B
SOUTHBOUND FORWARD LEFT WINGWALL

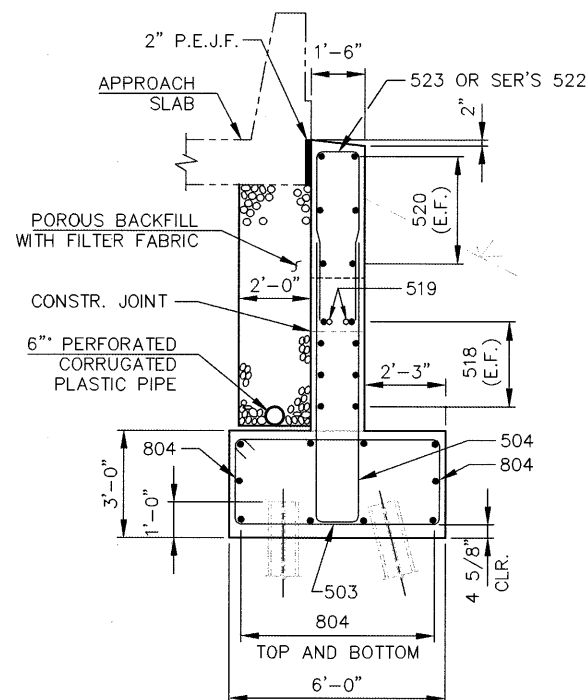


VIEW C-C

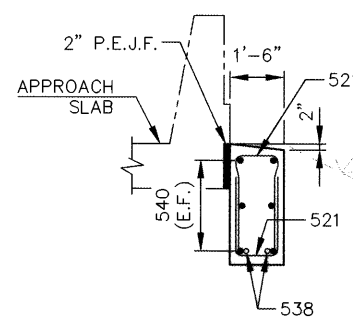
SOUTHBOUND FORWARD RIGHT WINGWALL



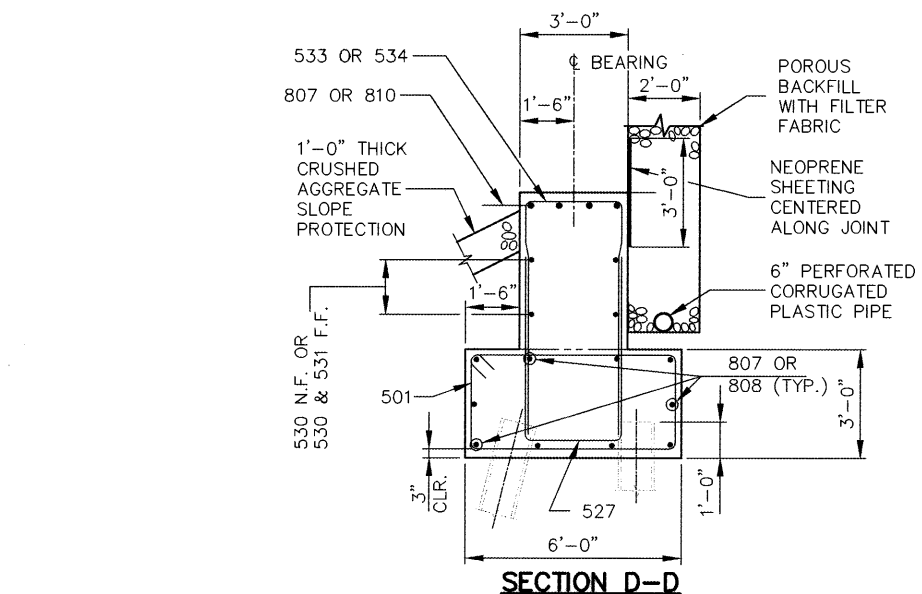
SECTION F-F



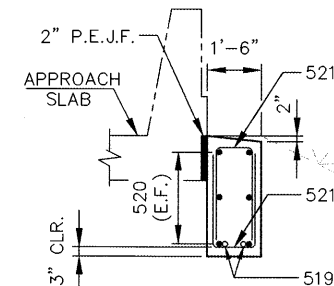
SECTION G-G



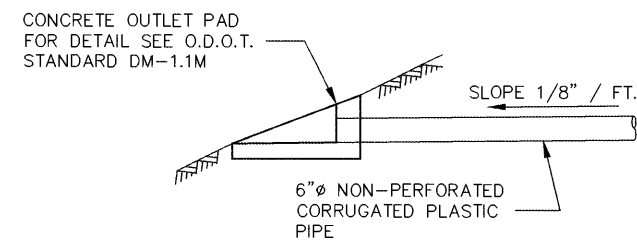
SECTION E-E



SECTION D-D



SECTION H-H

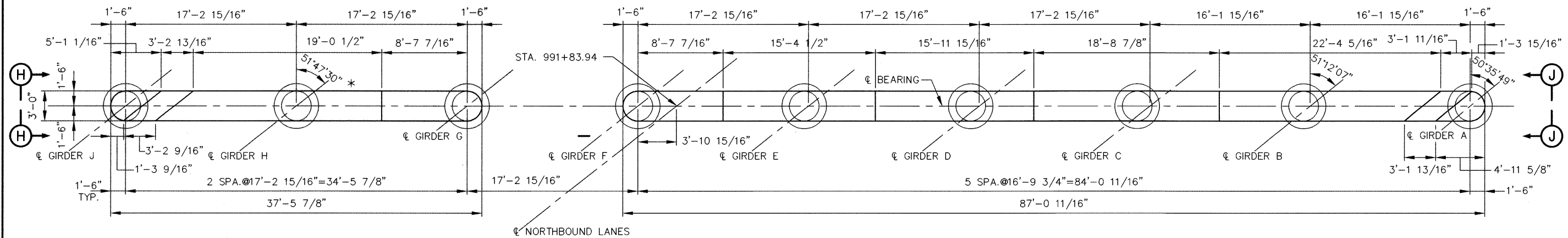


DRAINAGE TERMINATION DETAIL
CONCRETE OUTLET PAD SHALL BE INCLUDED WITH ITEM 518 ~ 6"Ø NON-PERFORATED CORRUGATED PLASTIC PIPE, AS PER PLAN FOR PAYMENT.

NOTES

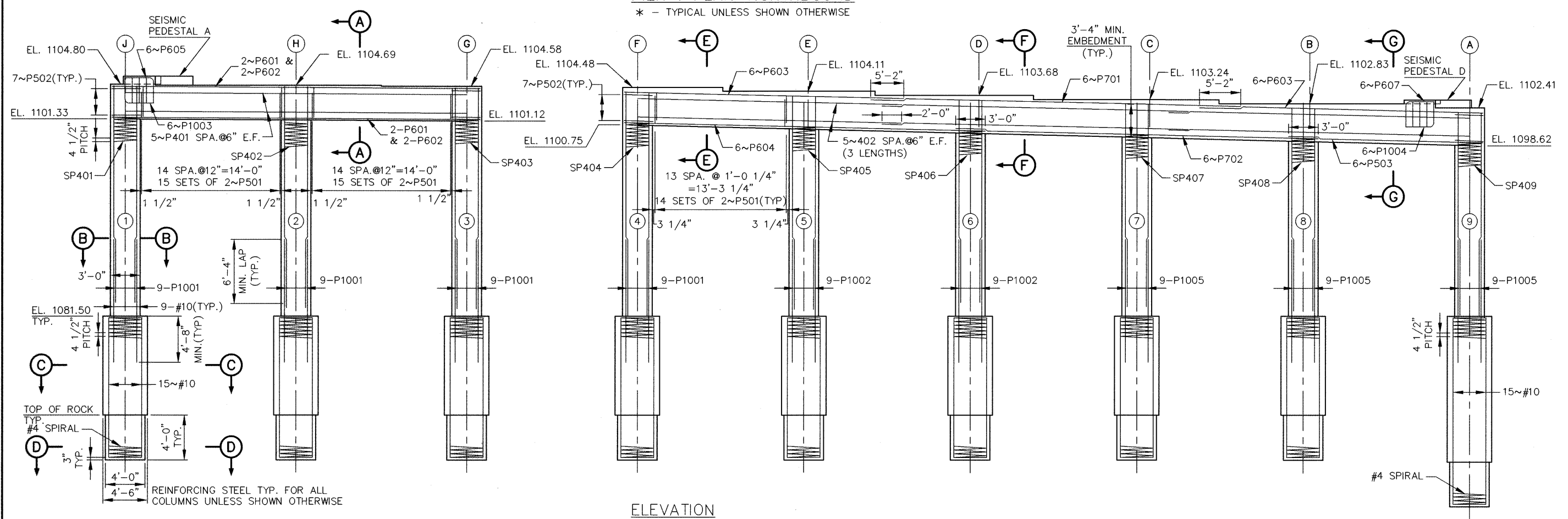
- ① FOR LOCATION OF VIEW B-B AND ADDITIONAL NOTES SEE SHEET 18 OF 46.
- ② FOR LOCATION OF VIEW C-C SEE SHEET 17 OF 46.
- ③ FOR LOCATION OF LOCATIONS OF THE DRAINAGE TERMINATION DETAIL SEE SHEET 17 AND 18 OF 46.
- ④ **ANIMAL GUARD:** ANIMAL GUARD SHALL BE PROVIDED AT THE OUTLET END OF THE DRAINAGE PIPE. SEE STANDARD CONSTRUCTION DRAWING MC-4 FOR DETAILS. PAYMENT FOR THE ANIMAL GUARD SHALL BE INCLUDED WITH THE DRAINAGE PIPE, ITEM 518 FOR PAYMENT.

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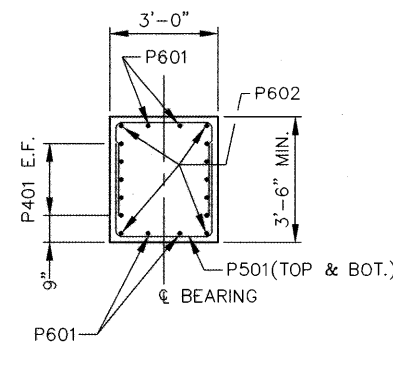


PIER 1 PLAN-NORTHBOUND

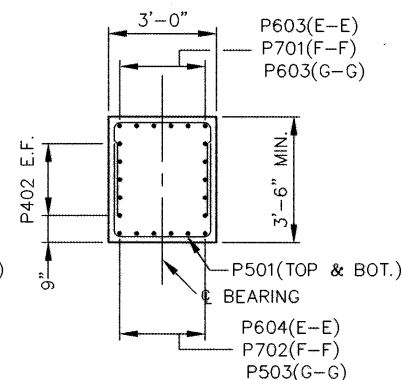
* - TYPICAL UNLESS SHOWN OTHERWISE



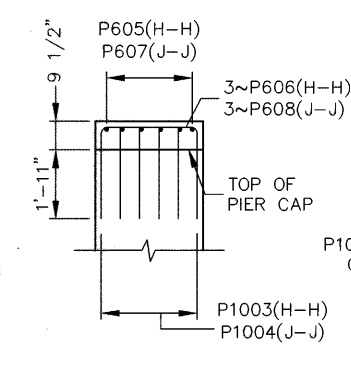
ELEVATION



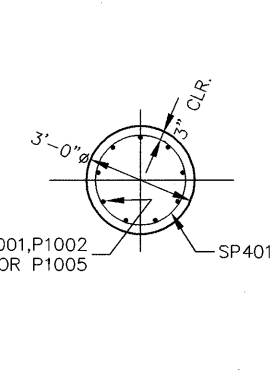
SECTION A-A



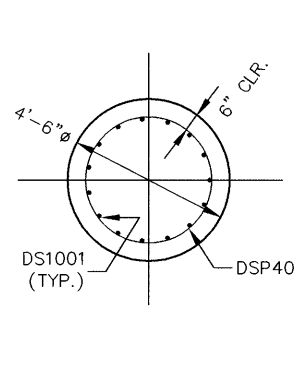
SECTION E-E, F-F & G-G



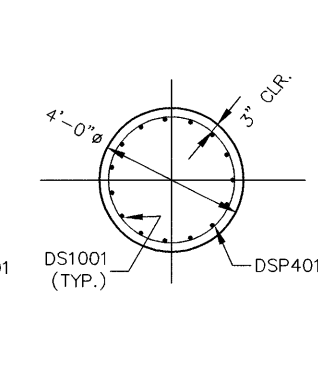
SECTION H-H & J-J



SECTION B-B



SECTION C-C



SECTION D-D

COLUMN NO.	1 THROUGH 8	9
APPR. TOP OF COMPETENT ROCK ELEV.	1071.50	1066.80

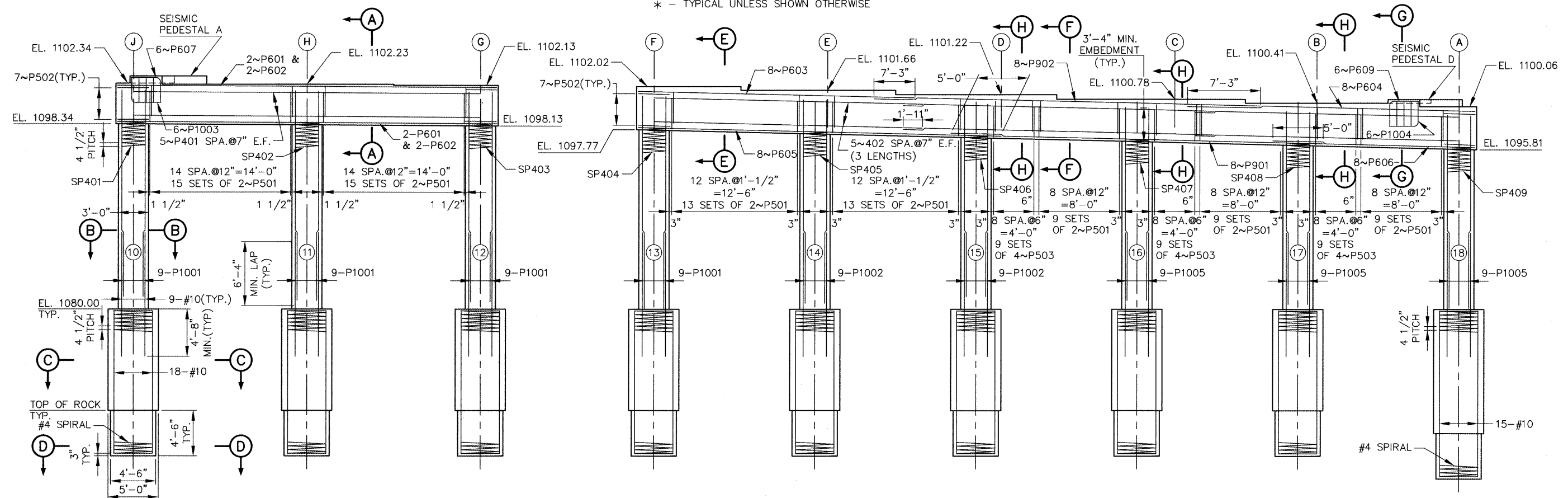
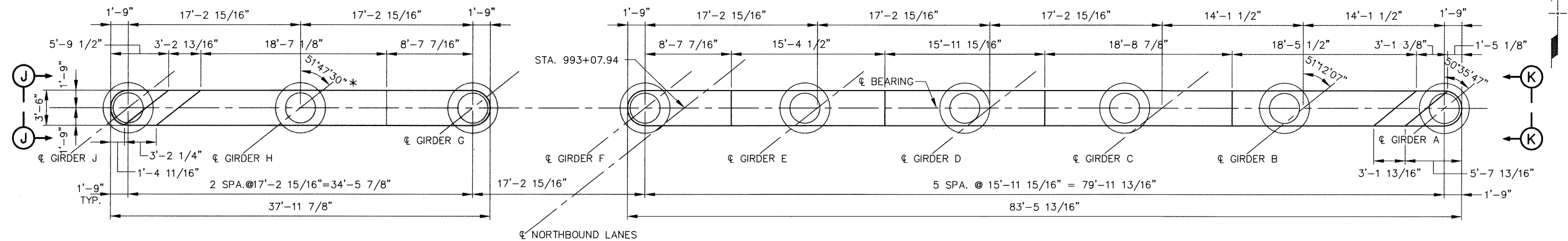
NOTES:

FOR ADDITIONAL BEARING DETAILS, SEE SHEET 26 OF 46.

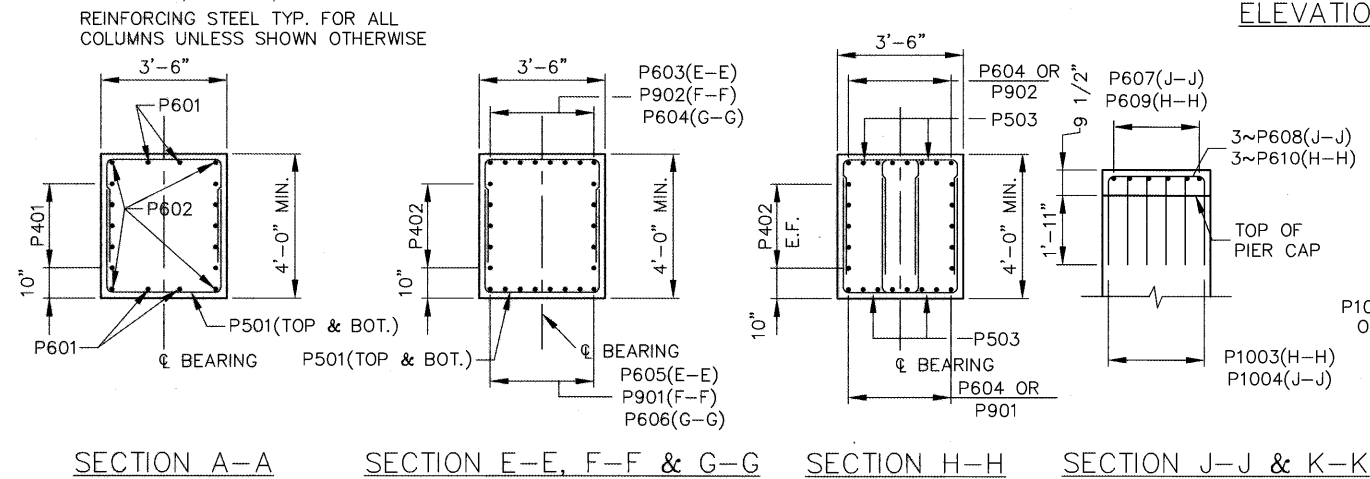
SPIRAL REINFORCING STEEL SHALL EXTEND A MINIMUM OF TWO (2) INCHES INTO THE PIER CAP.

FOR ADDITIONAL NOTES AND REFERENCES SEE STRUCTURAL GENERAL NOTES, SHEET 389 THRU 391.

COMPETENT ROCK IS ESTIMATED TO BE 4 FEET BELOW THE ELEVATION OF THE EXISTING BRIDGE FOOTINGS WHICH WERE FOUNDED IN WEATHERED ROCK.



COLUMN NO.	10 THROUGH 17	18
APPR. TOP OF COMPETENT ROCK ELEV.	1070.00	1067.80



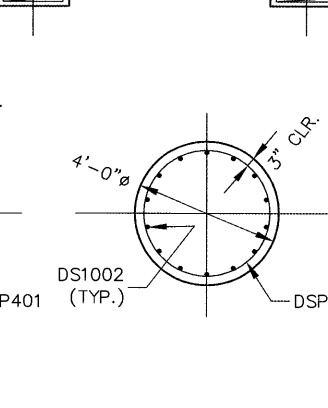
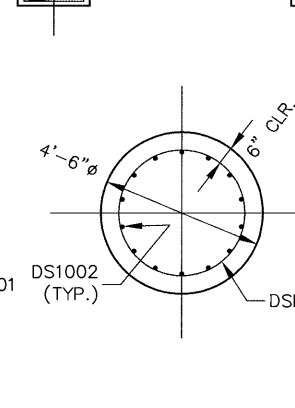
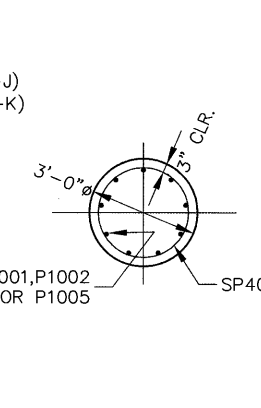
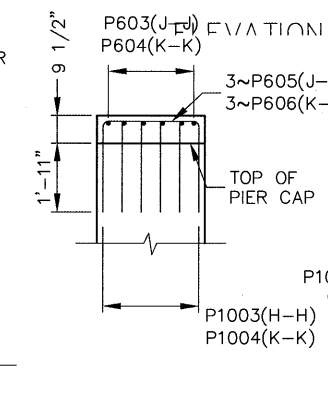
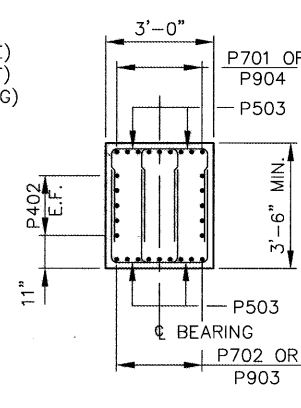
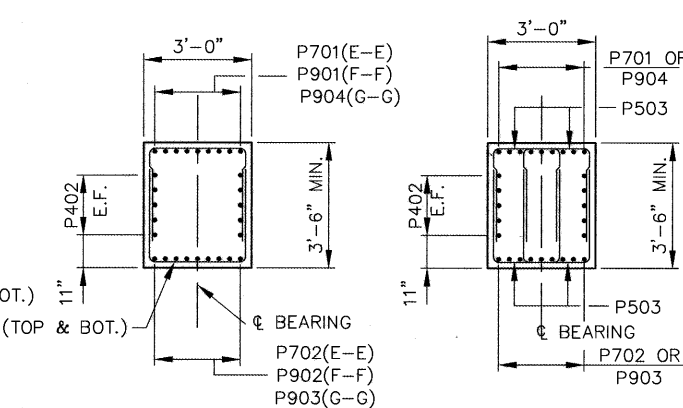
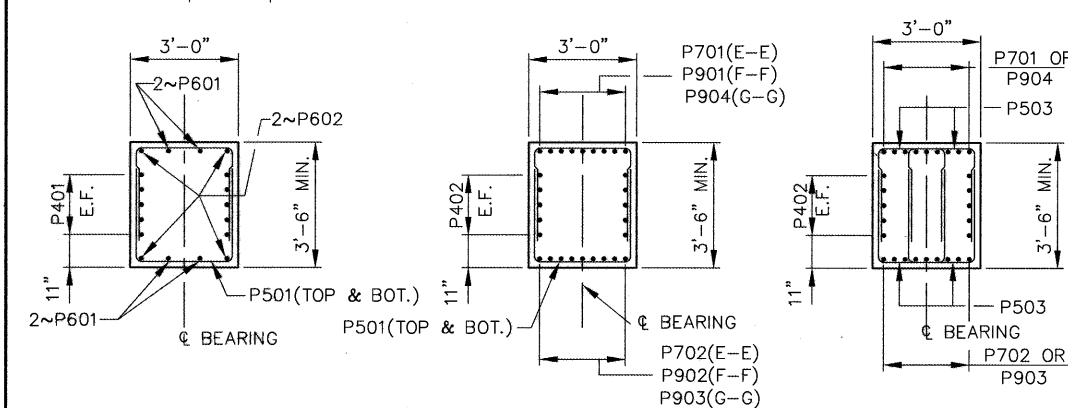
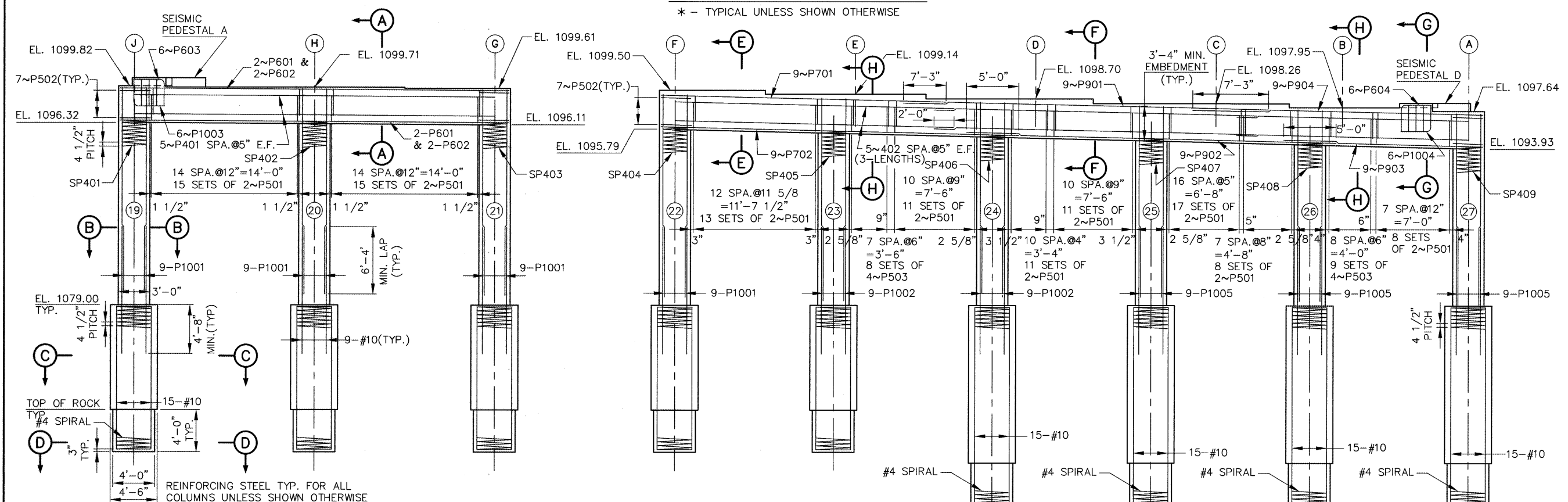
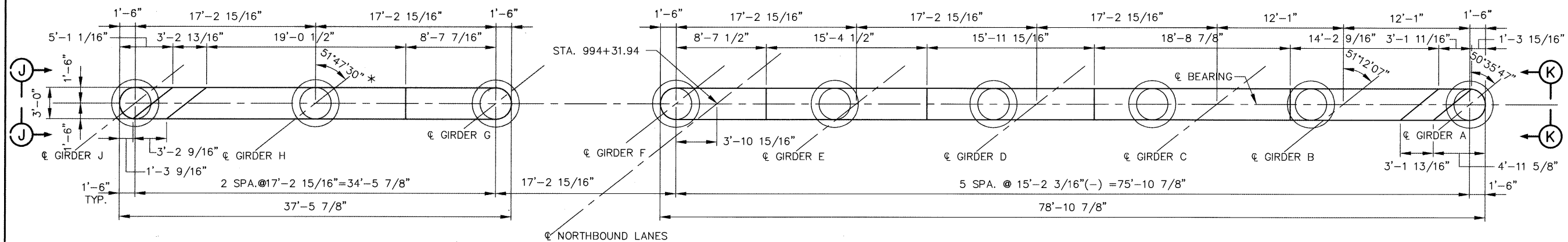
NOTES:

FOR ADDITIONAL BEARING DETAILS, SEE SHEET 26 OF 46.

SPIRAL REINFORCING STEEL SHALL EXTEND A MINIMUM OF TWO (2) INCHES INTO THE PIER CAP.

FOR ADDITIONAL NOTES AND REFERENCES SEE STRUCTURAL
GENERAL NOTES, SHEET 389 THRU 391.

COMPETENT ROCK IS ESTIMATED TO BE 4 FEET BELOW THE ELEVATION OF THE EXISTING BRIDGE FOOTINGS WHICH WERE FOUNDED IN WEATHERED ROCK.



COLUMN NO.	19 THROUGH 23	24 THROUGH 27
APPR. TOP OF COMPETENT ROCK ELEV.	1069.00	1064.00

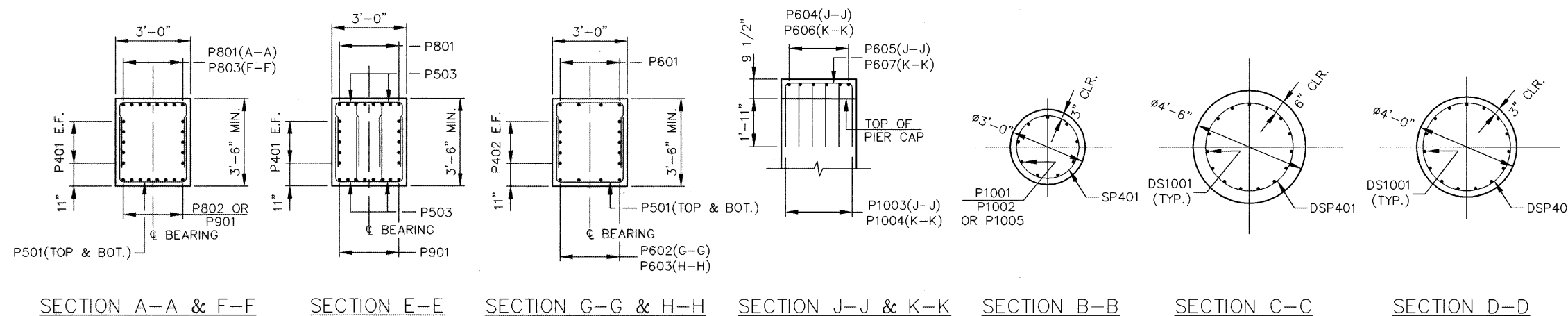
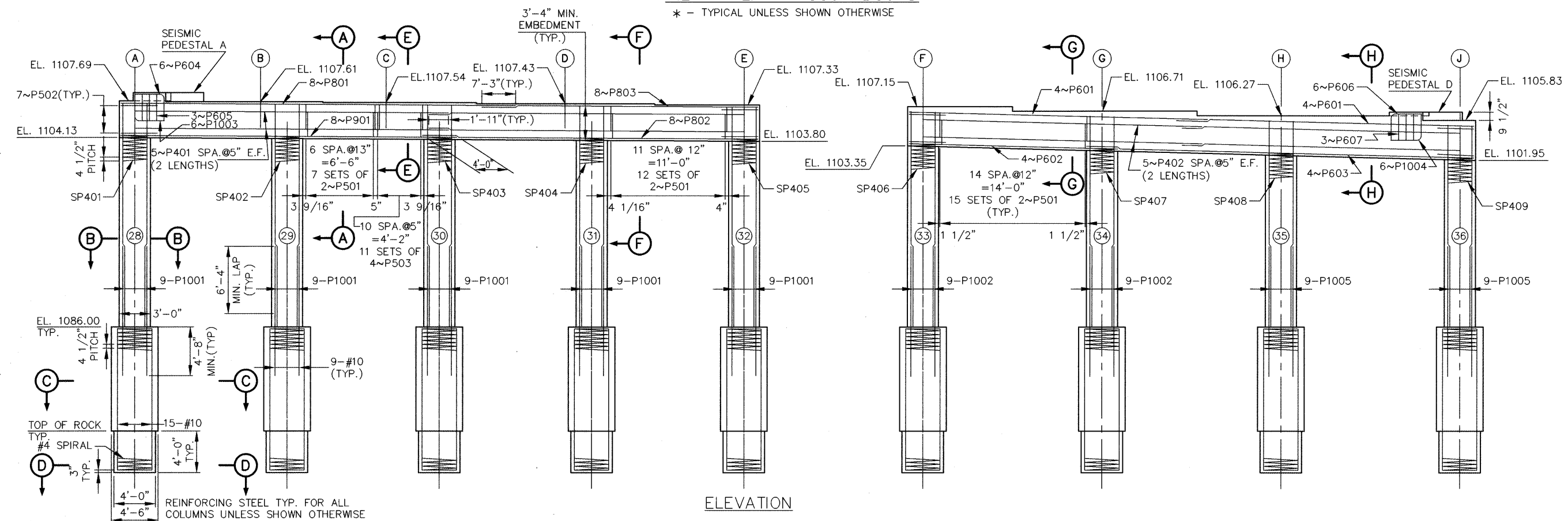
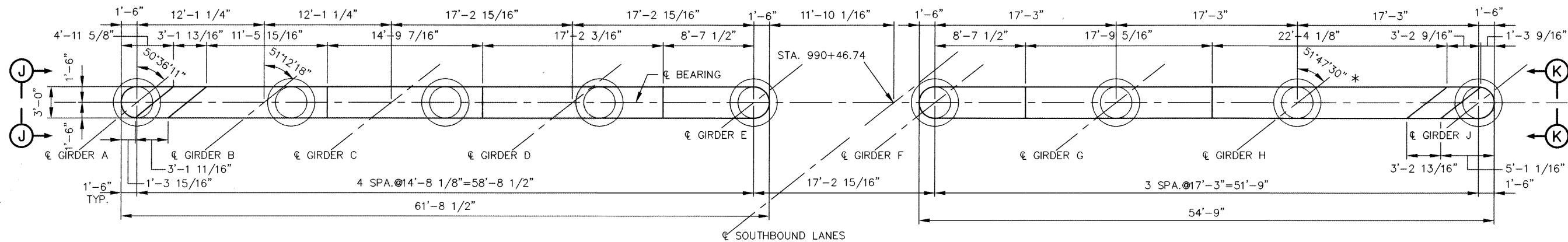
NOTES:

FOR ADDITIONAL BEARING DETAILS, SEE SHEET 26 OF 46.

SPIRAL REINFORCING STEEL SHALL EXTEND A MINIMUM OF TWO (2) INCHES INTO THE PIER CAP.

FOR ADDITIONAL NOTES AND REFERENCES SEE STRUCTURAL GENERAL NOTES, SHEET 389 THRU 391.

COMPETENT ROCK IS ESTIMATED TO BE 4 FEET BELOW THE ELEVATION OF THE EXISTING BRIDGE FOOTINGS WHICH WERE FOUNDED IN WEATHERED ROCK.



COLUMN	28 THROUGH 36
APPR. TOP OF COMPETENT ROCK ELEV.	1076.00

NOTES:

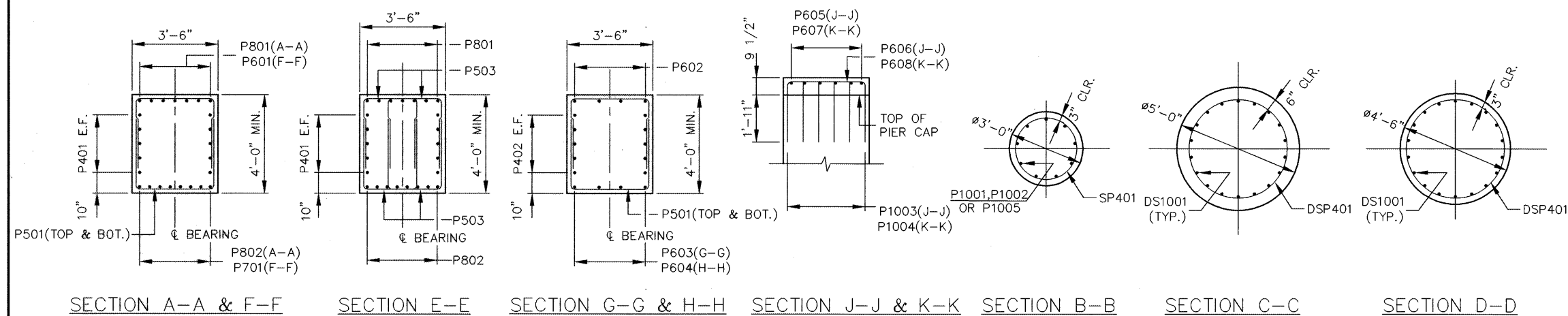
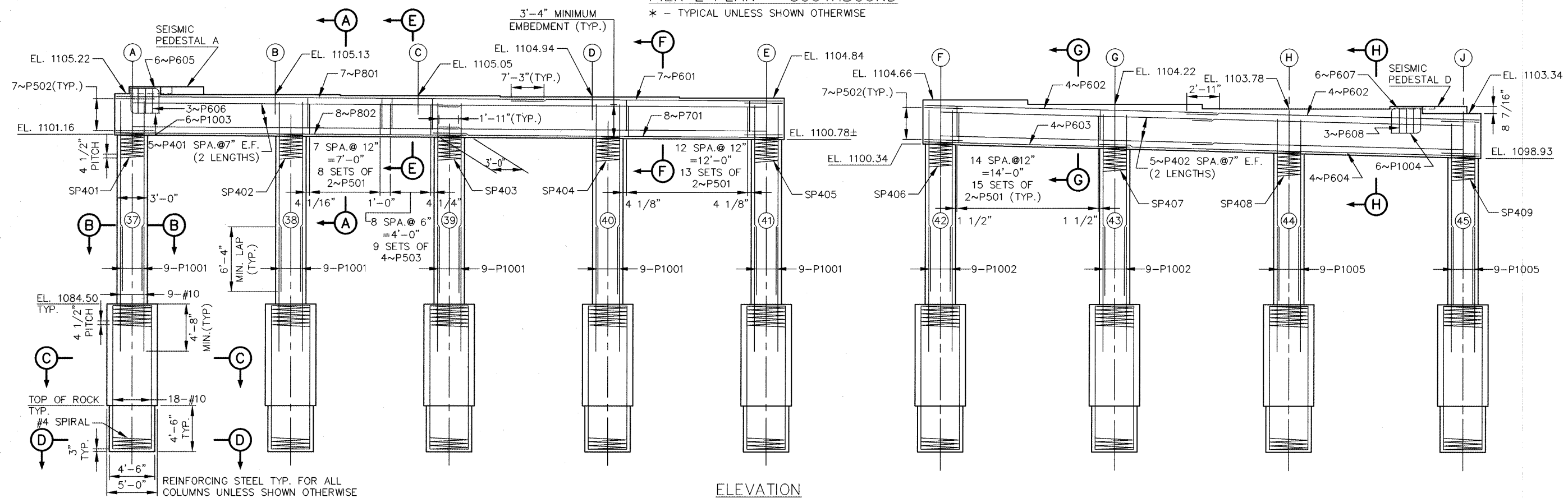
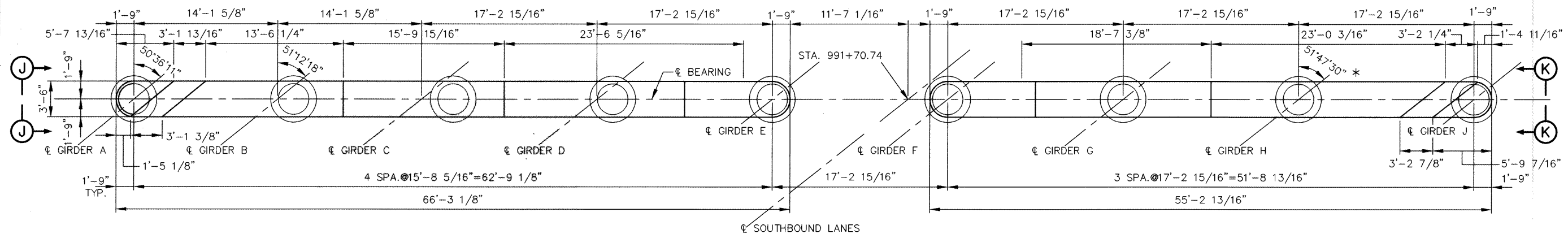
FOR ADDITIONAL BEARING DETAILS, SEE SHEET 26 OF 46.

SPIRAL REINFORCING STEEL SHALL EXTEND A MINIMUM OF TWO (2) INCHES INTO THE PIER CAP.

FOR ADDITIONAL NOTES AND REFERENCES SEE STRUCTURAL
GENERAL NOTES, SHEET 389 THRU 391.

SHEAR REINFORCING P501 AND P503 IN THE PIER CAP ARE TYPICAL BETWEEN COLUMN (1) AND (4).

COMPETENT ROCK IS ESTIMATED TO BE 4 FEET BELOW THE ELEVATION OF THE EXISTING BRIDGE FOOTINGS WHICH WERE FOUNDED IN WEATHERED ROCK.



COLUMN	37 THROUGH 45
APPR. TOP OF COMPETENT ROCK ELEV.	1074.50

NOTES:

FOR ADDITIONAL BEARING DETAILS, SEE SHEET 26 OF 46.

SPIRAL REINFORCING STEEL SHALL EXTEND A MINIMUM OF TWO (2) INCHES INTO THE PIER CAP.

FOR ADDITIONAL NOTES AND REFERENCES SEE STRUCTURAL
GENERAL NOTES, SHEET 389 THRU 391.

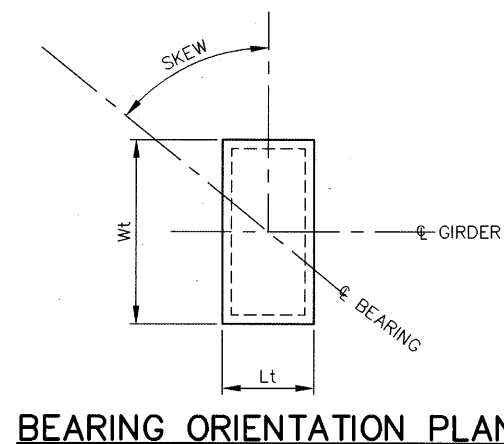
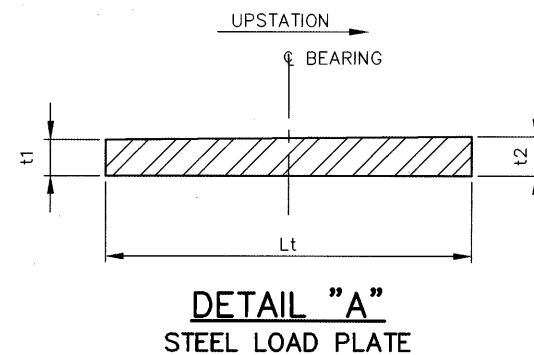
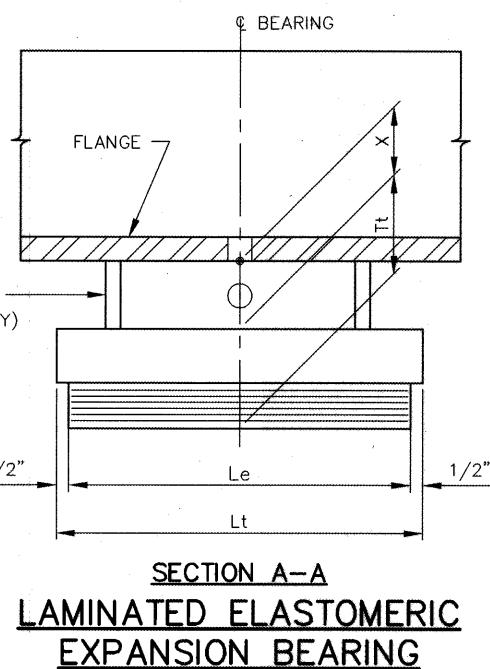
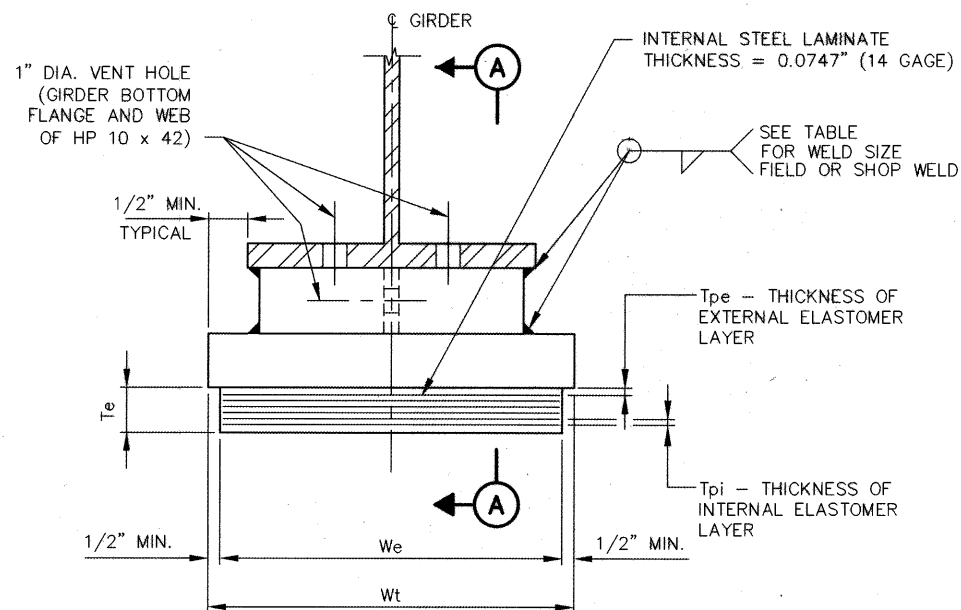
SHEAR REINFORCING P501 AND P503 IN THE PIER CAP ARE TYPICAL BETWEEN COLUMN (1) AND (4).

COMPETENT ROCK IS ESTIMATED TO BE 4 FEET BELOW THE ELEVATION OF THE EXISTING BRIDGE FOOTINGS WHICH WERE FOUNDED IN WEATHERED ROCK.

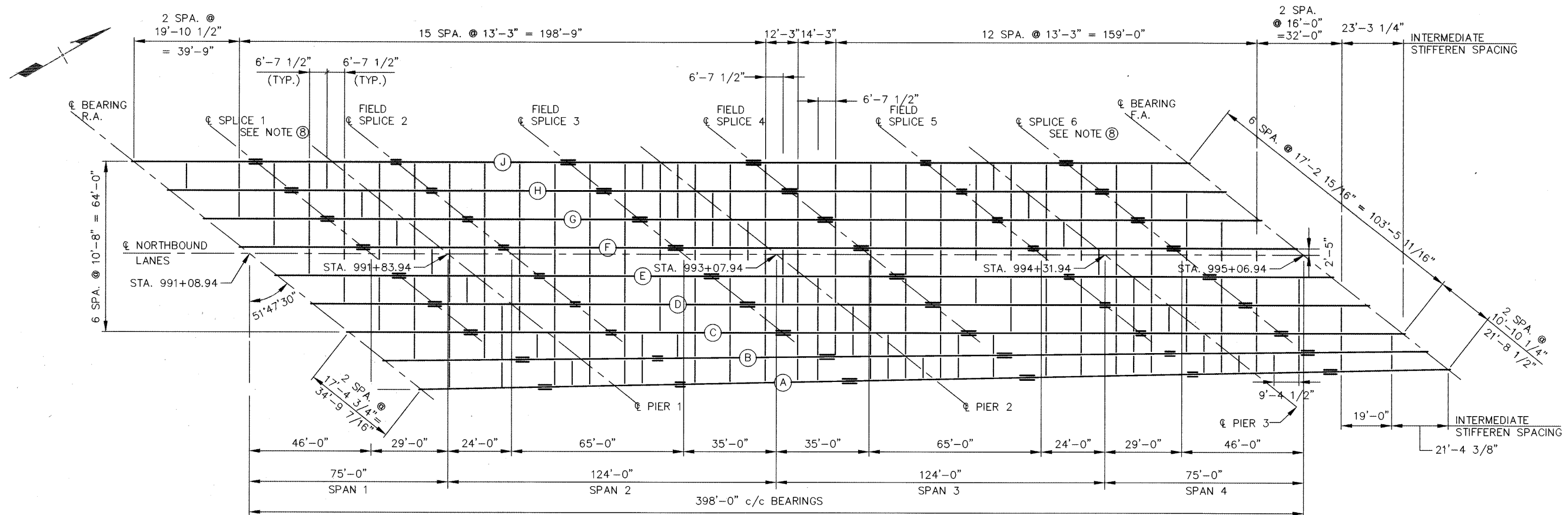
NOTES

- 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. 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.
- WELDING SHALL BE CONTROLLED SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 300° F AS DETERMINED BY THE USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
- BEARING REPOSITIONING: IF THE STEEL IS ERECTED AT AN AMBIENT TEMPERATURE HIGHER THAN 80° F OR LOWER THAN 40° F AND THE BEARING SHEAR DEFLECTION EXCEEDS 1/6 OF THE BEARING HEIGHT AT 60° F ($\pm 10^\circ$ F), THE BEAMS OR GIRDERS SHALL BE RAISED TO ALLOW THE BEARINGS TO RETURN TO THEIR UNDEFORMED SHAPE AT 60° F ($\pm 10^\circ$ F).
- THE STEEL LOAD PLATE SHALL BE ASTM A572 GRADE 50 STEEL.
- THE STEEL LOAD PLATE SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS.
- TOTAL DESIGN LOAD FOR BEARINGS EQUALS THE SUM OF THE DEAD LOADS AND LIVE LOADS TABULATED IN THE BEARING TABLE.
- HP STEEL SHAPE IS INCLUDED WITH ITEM 516 ELASTOMERIC BEARINGS FOR PAYMENT.
- THE UNIT BID PRICE SHALL INCLUDE ALL MATERIALS, LABOR, TESTING AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL LAMINATED ELASTOMERIC BEARINGS, SAMPLE BEARINGS SHALL NOT BE MEASURED FOR PAYMENT.

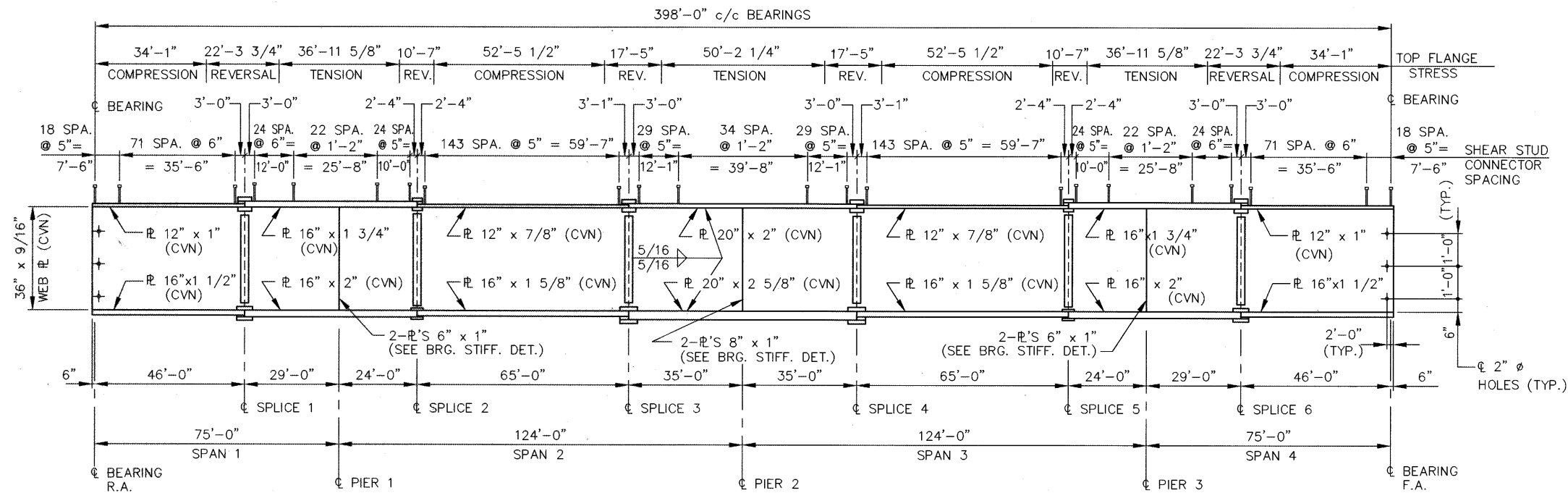
PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR ITEM 516, EACH, ELASTOMERIC BEARINGS WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE): 14" x 16" x 4.60" WITH 15" x 17" LOAD PLATE, 16" x 22" x 3.27" WITH 17" x 23" LOAD PLATE, AND 18" x 24" x 2.24" WITH 19" x 25" LOAD PLATE.



BEARING LOCATION (SB & NB)	BEARING TYPE	NO. REQ'D.	DEAD LOAD KIPS	LIVE LOAD KIPS	TOTAL LOAD (DL+LL) KIPS	Le	We	Tpi	NO. OF Tpi'S	Tpe (2 EA.)	NUMBER OF INTERNAL LAMINATES (14 GAGE)	Te	STEEL LOAD PLATE				Tt	FILLET WELD SIZE
													Wt	Lt	t1	t2		
REAR ABUTMENT	EXP.	18	124.3	61.3	185.6	14	16	0.33	10	0.24	11	4.60	17	15	1.86	1.50	6.28	5/16
FWD. ABUTMENT	EXP.	18	124.3	61.3	185.6	14	16	0.33	10	0.24	11	4.60	17	15	1.70	1.50	6.20	5/16
PIER 1	EXP.	18	249.8	101.4	351.2	16	22	0.44	5	0.31	6	3.27	23	17	2.41	2	5.47	5/16
PIER 2	EXP.	18	316.6	113.6	430.2	18	24	0.44	3	0.31	4	2.24	25	19	2.36	2	4.42	5/16
PIER 3	EXP.	18	249.8	101.4	351.2	16	22	0.44	5	0.31	6	3.27	23	17	2.24	2	5.39	5/16



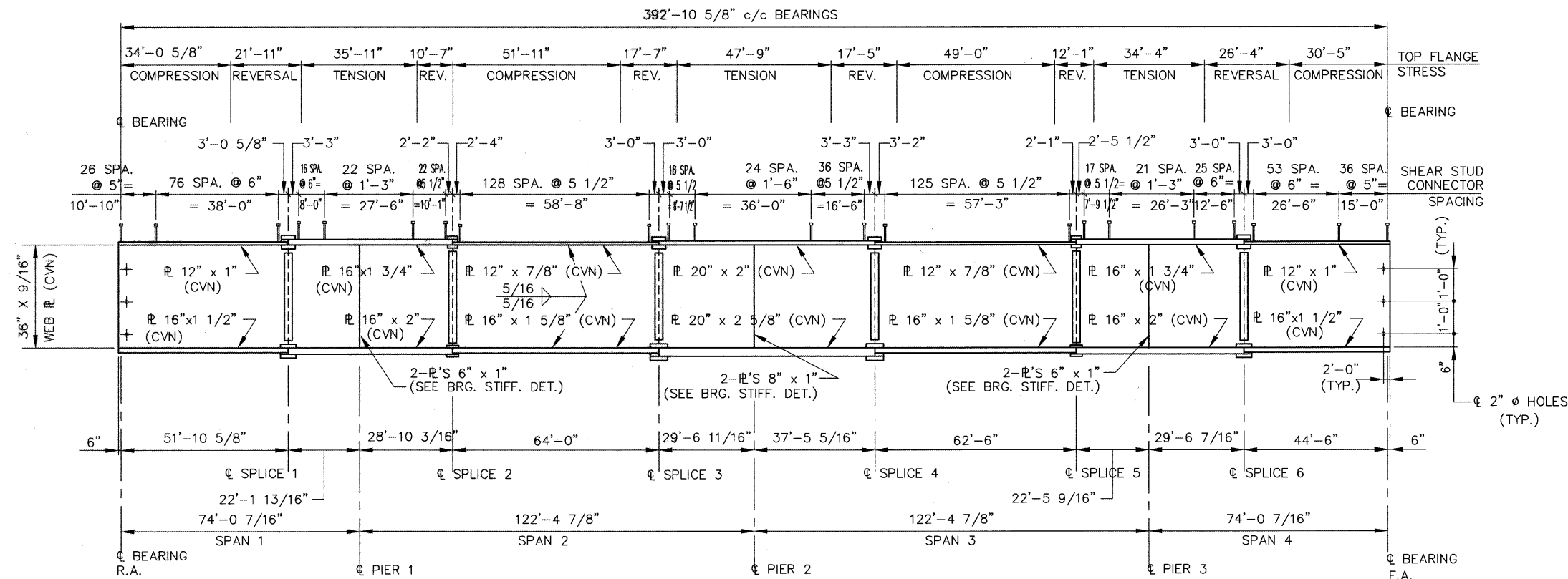
FRAMING PLAN - NORTHBOUND BRIDGE



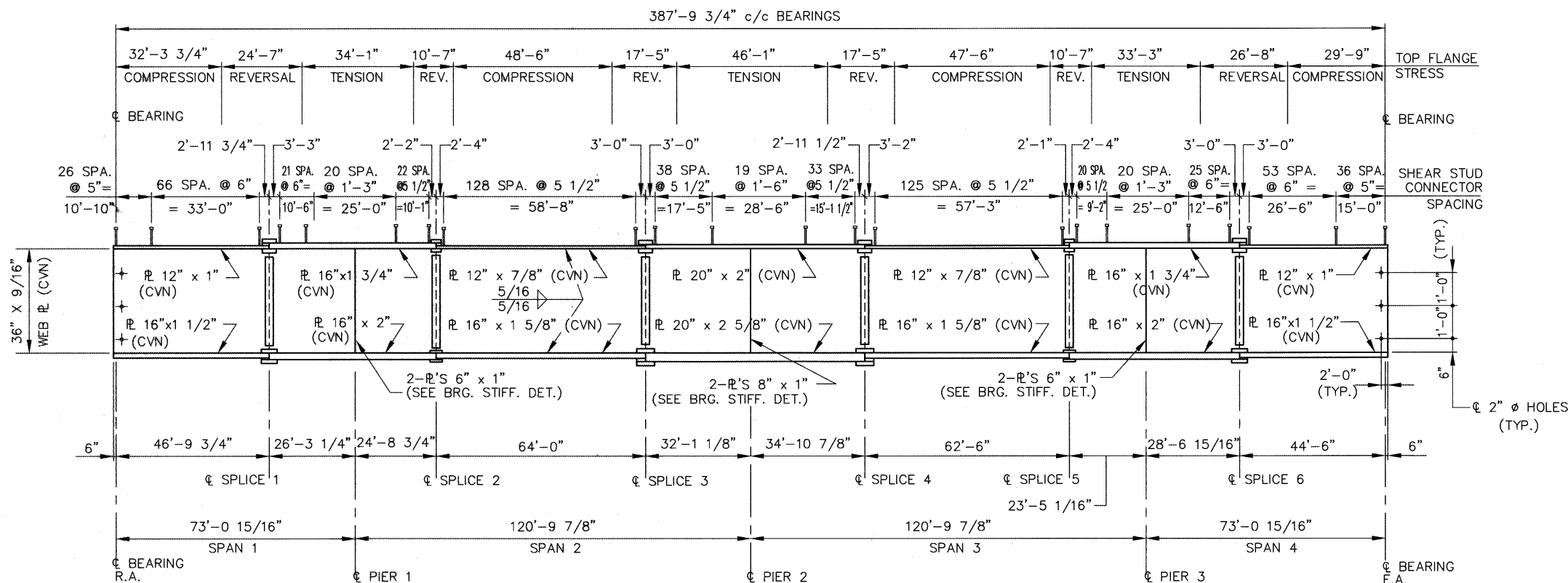
GIRDER ELEVATION OF GIRDER C.D.E.F.G.H & J - NORTHBOUND BRIDGE

NOTES

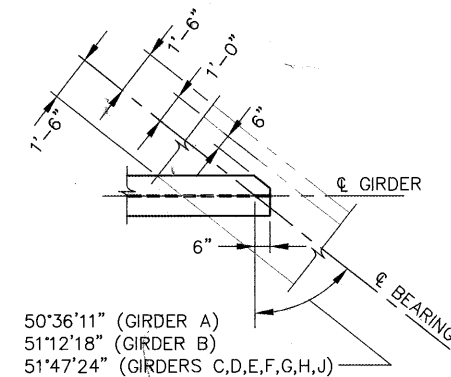
- WELDED ATTACHMENT OF CONCRETE DECK FINISHING MACHINE MAY BE MADE TO AREAS OF THE FACIA STRINGER FLANGES DESIGNATED "COMPRESSION". ATTACHMENTS SHALL NOT BE MADE TO AREAS DESIGNATED "TENSION" OR "REVERSAL". FILLET WELDS TO COMPRESSION FLANGES SHALL BE NOT CLOSER THAN 1" FROM EDGE OF FLANGE, BE NOT MORE THAN 2" LONG, AND BE NOT SMALLER THAN THE MINIMUM SIZE REQUIRED BY AWS D1.5.
- WHERE A SHAPE OR PLATE IS DESIGNATED "CVN" THE MATERIAL SHALL MEET REQUIREMENTS OF ODOT C & M SPECIFICATIONS SECTION 711.01.
- FOR DEFLECTION AND CAMBER TABLE, SEE SHEET 31 OF 46.
- FOR BEARING DETAILS SEE SHEET 26 OF 46.
- ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A572/A709 YIELD STRENGTH 50 KSI AND ALL FASTENERS SHALL BE ASTM-325 EXCEPT NOTED OTHERWISE.
- FOR SPLICE DETAILS SEE SHEET 33 OF 46.
- ALL GIRDERS ARE PLACED PARALLEL TO THE CENTERLINE OF NORTHBOUND LANES EXCEPT GIRDER A & B. SKEW, SPAN AND SPLICE LOCATIONS ARE TYPICAL EXCEPT FOR GIRDER A & B. SEE SHEET 28/46 FOR GIRDER A & B ELEVATION.
- FIELD SPLICE 1 & 6 ARE OPTIONAL.



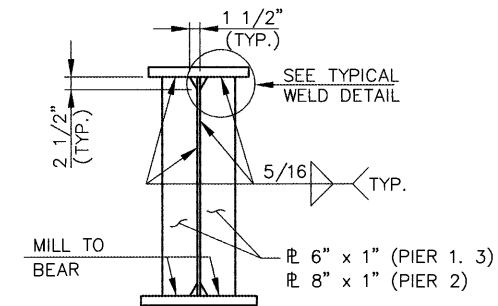
GIRDER B ELEVATION - NORTHBOUND BRIDGE



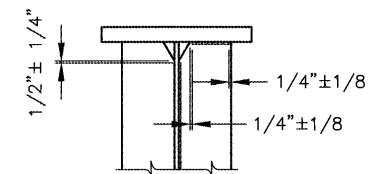
GIRDER A ELEVATION - NORTHBOUND BRIDGE



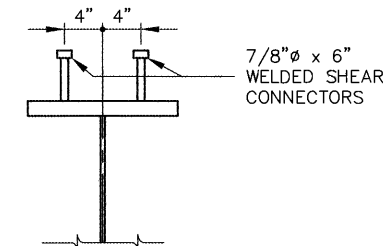
DETAIL A
TOP FLANGE ONLY
FORWARD ABUTMENT SHOWN,
REAR ABUTMENT SIMILAR



BEARING STIFFENER

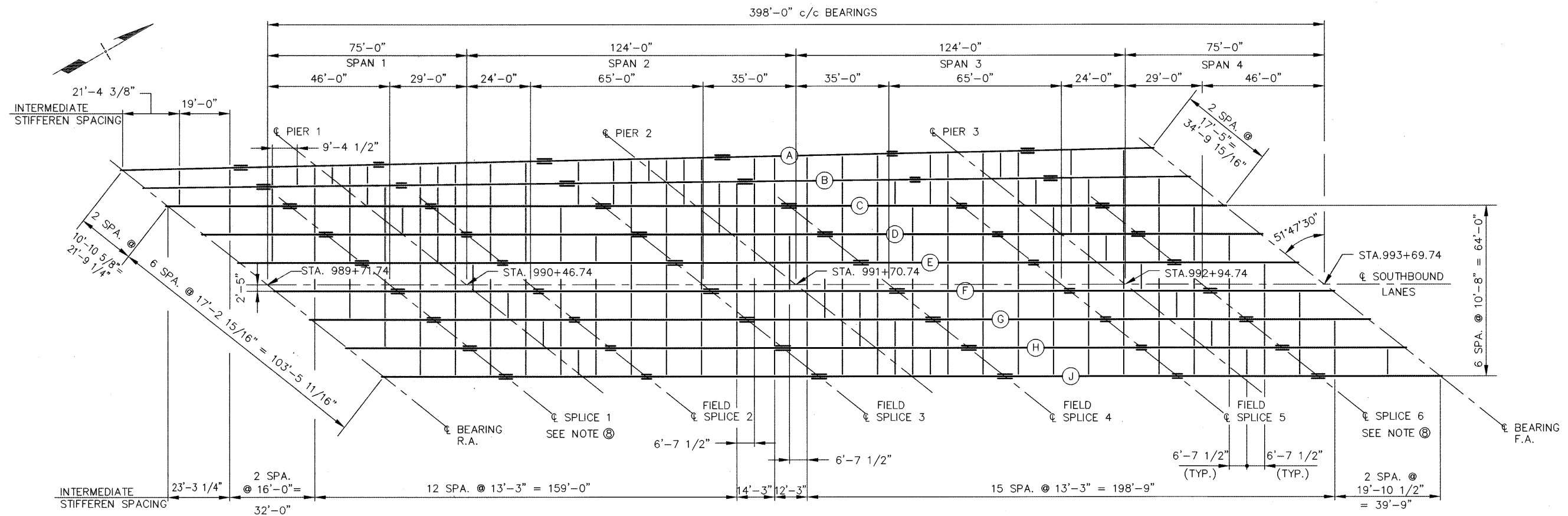


TYPICAL WELD DETAIL



TYPICAL SHEAR STUD DETAIL

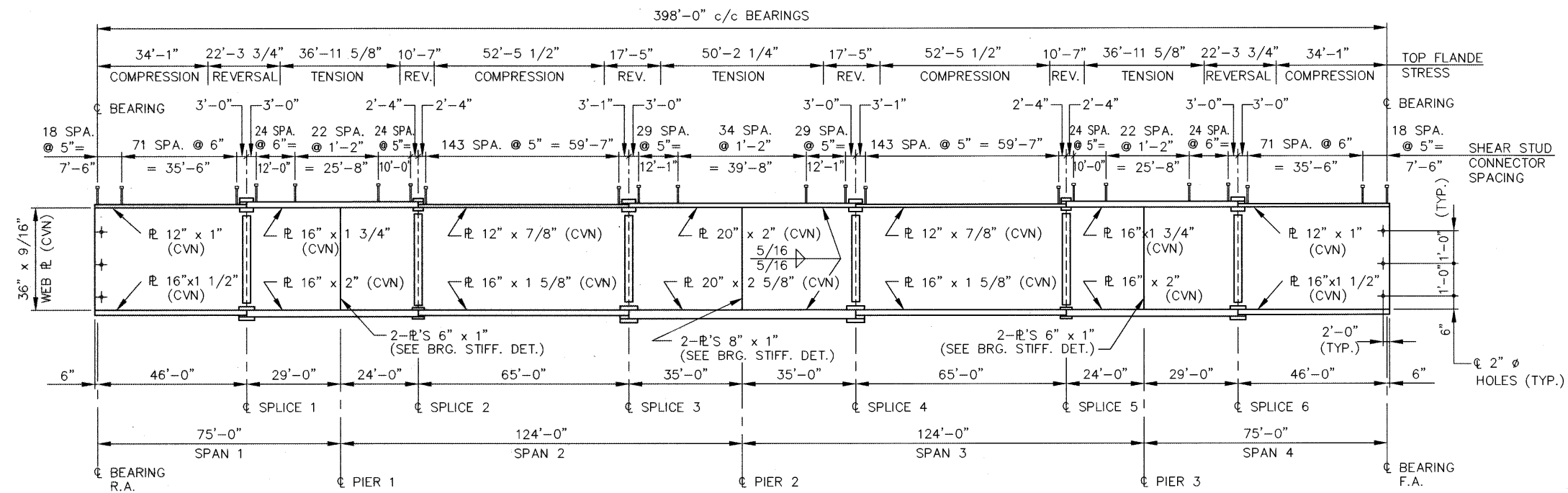
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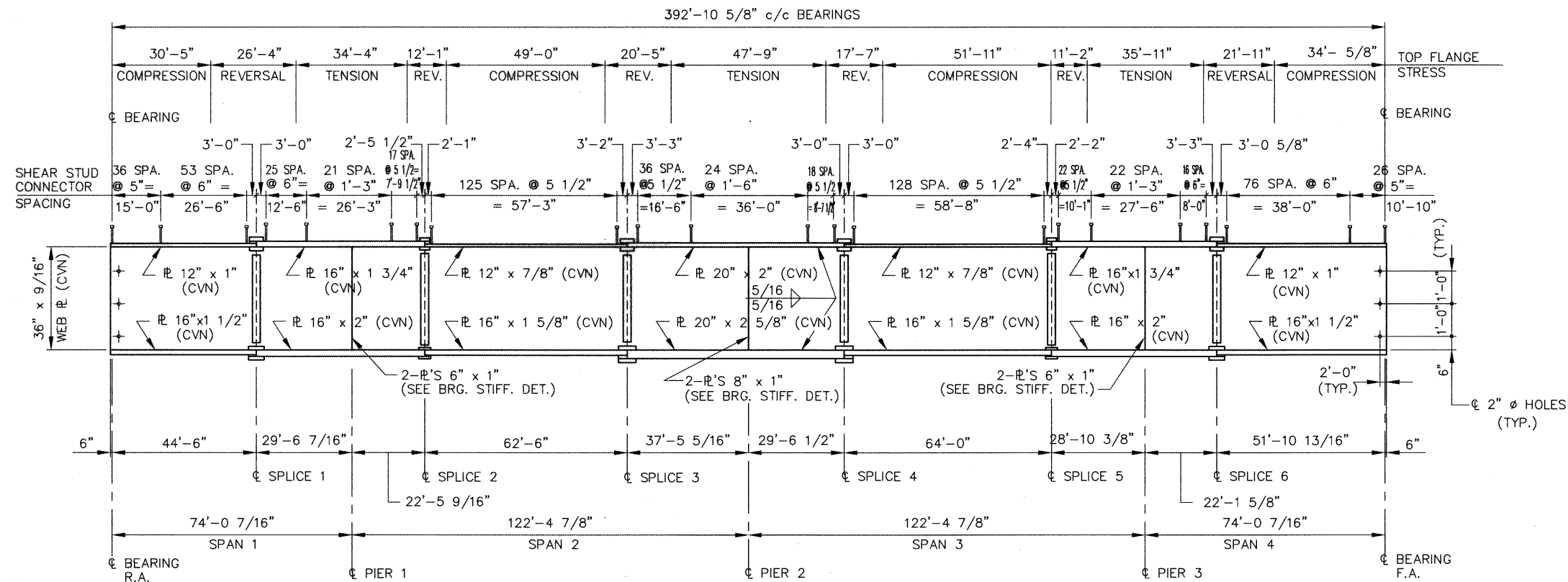
FRAMING PLAN - SOUTHBOUND BRIDGE

NOTES

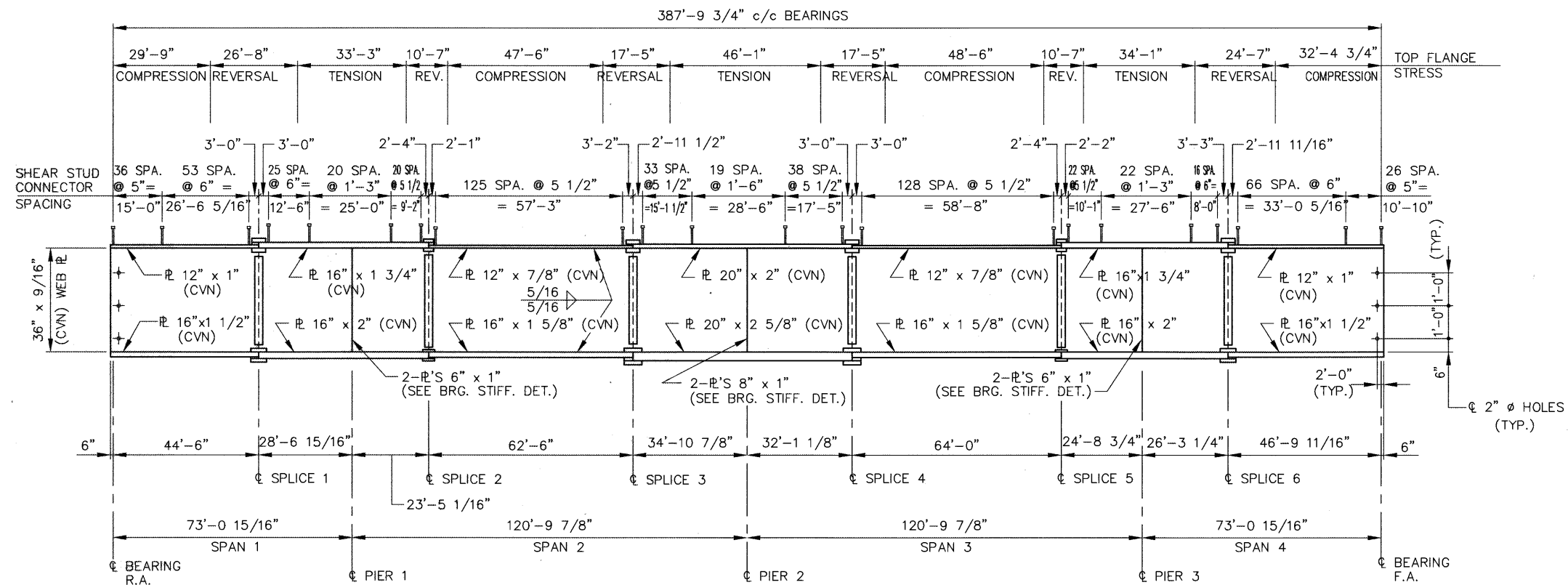
- ① REFER TO SHEET 27/46 FOR NOTES



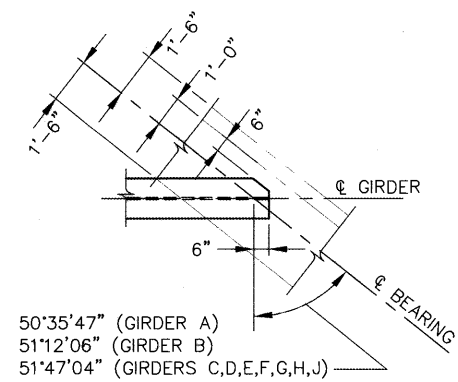
GIRDER ELEVATION OF GIRDER C.D.E.F.G.H & J - SOUTHBOUND BRIDGE



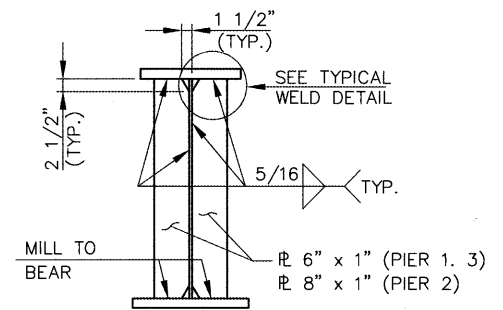
GIRDER B ELEVATION - SOUTHBOUND BRIDGE



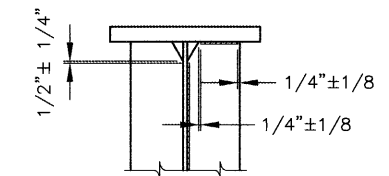
GIRDER A ELEVATION - SOUTHBOUND BRIDGE



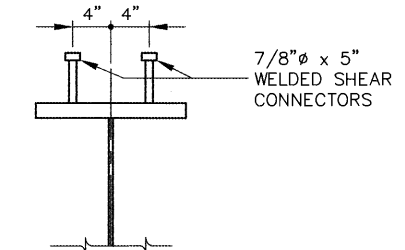
DETAIL A
TOP FLANGE ONLY
FORWARD ABUTMENT SHOWN,
REAR ABUTMENT SIMILAR



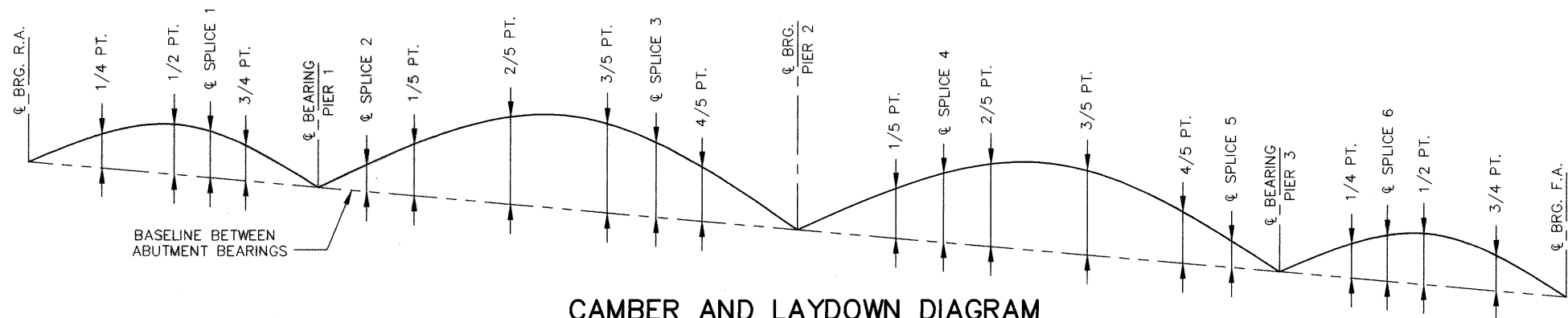
BEARING STIFFNER



TYPICAL WELD DETAIL



TYPICAL SHEAR STUD DETAIL



NOTE:

CAMBER DIAGRAM SHOWN IS TYPICAL FOR NB AND SB GIRDERS C, D, E, F, G, H AND J.
FOR NB AND SB GIRDERS A AND B, THE ORDER OF DEFLECTION LOCATIONS ARE AS SHOWN IN THEIR RESPECTIVE TABLES.

DEFLECTION AND CAMBER (DECIMAL OF AN INCH)																						
BRIDGE	GIRDER	POINT DESCRIPTION	SPAN 1				SPAN 2						SPAN 3						SPAN 4			
			1/4	1/2	SPLICE 1	3/4	SPLICE 2	1/5	2/5	3/5	SPLICE 3	4/5	1/5	SPLICE 4	2/5	3/5	4/5	SPLICE 5	1/4	SPLICE 6	1/2	3/4
N.B. & S.B.	D,E,F,G,H,J	DEFLECTION DUE TO WEIGHT OF STEEL	0.065	0.055	0.030	-0.002	0.219	0.228	0.453	0.411	0.273	0.163	0.163	0.274	0.412	0.454	0.229	0.220	-0.002	0.030	0.055	0.065
		DEFLECTION DUE TO REMAINING DEAD LOAD	0.382	0.313	0.159	-0.033	1.301	1.353	2.647	2.338	1.515	0.886	0.888	1.518	2.342	2.651	1.356	1.304	-0.032	0.160	0.314	0.383
		SUB-TOTAL	0.447	0.368	0.189	-0.035	1.520	1.581	3.100	2.749	1.788	1.049	1.051	1.792	2.754	3.105	1.585	1.524	-0.034	0.190	0.369	0.448
N.B.	C	DEFLECTION DUE TO WEIGHT OF STEEL	0.065	0.055	0.030	-0.002	0.219	0.228	0.453	0.411	0.273	0.163	0.163	0.274	0.412	0.454	0.229	0.220	-0.002	0.030	0.055	0.065
		DEFLECTION DUE TO REMAINING DEAD LOAD	0.388	0.323	0.188	-0.009	1.213	1.256	2.488	2.231	1.471	0.878	0.705	1.237	1.947	2.241	1.159	1.115	-0.047	0.105	0.232	0.297
		SUB-TOTAL	0.453	0.378	0.218	-0.011	1.432	1.484	2.941	2.642	1.744	1.041	0.868	1.511	2.359	2.695	1.388	1.335	-0.049	0.135	0.287	0.362
S.B.	C	DEFLECTION DUE TO WEIGHT OF STEEL	0.065	0.055	0.030	-0.002	0.219	0.228	0.453	0.411	0.273	0.163	0.163	0.274	0.412	0.454	0.229	0.220	-0.002	0.030	0.055	0.065
		DEFLECTION DUE TO REMAINING DEAD LOAD	0.297	0.232	0.105	-0.047	1.115	1.159	2.241	1.947	1.237	0.705	0.878	1.471	2.231	2.488	1.256	1.213	-0.009	0.188	0.323	0.388
		SUB-TOTAL	0.362	0.287	0.135	-0.049	1.334	1.387	2.694	2.358	1.510	0.868	1.041	1.745	2.643	2.942	1.485	1.433	-0.011	0.218	0.378	0.453
BRIDGE	GIRDER	POINT DESCRIPTION	SPAN 1				SPAN 2						SPAN 3						SPAN 4			
			1/4	1/2	SPLICE 1	3/4	SPLICE 2	1/5	2/5	3/5	SPLICE 3	4/5	1/5	SPLICE 4	2/5	3/5	SPLICE 5	4/5	1/4	SPLICE 6	1/2	3/4
S.B.	A	DEFLECTION DUE TO WEIGHT OF STEEL	0.046	0.042	0.027	0.006	0.130	0.128	0.278	0.681	0.137	0.084	0.113	0.203	0.259	0.256	0.080	0.117	0.020	0.061	0.075	0.062
		DEFLECTION DUE TO REMAINING DEAD LOAD	0.200	0.153	0.069	-0.038	0.778	0.808	1.564	1.360	0.893	0.493	0.620	0.950	1.583	1.785	0.936	0.909	-0.019	0.081	0.208	0.265
		SUB-TOTAL	0.246	0.195	0.096	-0.032	0.908	0.936	1.842	2.041	1.030	0.577	0.733	1.153	1.842	2.041	1.016	1.026	0.001	0.142	0.283	0.327
	B	DEFLECTION DUE TO WEIGHT OF STEEL	0.048	0.046	0.033	0.005	0.127	0.205	0.389	0.321	0.316	0.111	0.201	0.074	0.462	0.470	0.522	0.232	0.001	-0.084	0.077	0.080
		DEFLECTION DUE TO REMAINING DEAD LOAD	0.202	0.146	0.057	-0.054	0.865	0.892	1.712	1.465	0.930	0.506	0.771	1.194	1.917	2.141	1.071	1.081	-0.008	0.134	0.277	0.343
		SUB-TOTAL	0.250	0.192	0.090	-0.049	0.992	1.097	2.101	1.786	1.246	0.617	0.972	1.268	2.379	2.611	1.593	1.313	-0.007	0.050	0.354	0.423
BRIDGE	GIRDER	POINT DESCRIPTION	SPAN 1				SPAN 2						SPAN 3						SPAN 4			
			1/4	1/2	SPLICE 1	3/4	1/5	SPLICE 2	2/5	3/5	SPLICE 3	4/5	1/5	SPLICE 4	2/5	3/5	SPLICE 5	4/5	1/4	SPLICE 6	1/2	3/4
N.B.	A	DEFLECTION DUE TO WEIGHT OF STEEL	0.062	0.075	0.061	0.020	0.117	0.080	0.256	0.259	0.203	0.113	0.084	0.137	0.681	0.278	0.130	0.128	0.006	0.027	0.042	0.046
		DEFLECTION DUE TO REMAINING DEAD LOAD	0.265	0.208	0.081	-0.019	0.909	0.936	1.785	1.583	0.950	0.620	0.493	0.893	1.360	1.564	0.778	0.808	-0.038	0.069	0.153	0.200
		SUB-TOTAL	0.327	0.283	0.142	0.001	1.026	1.016	2.041	1.842	1.153	0.733	0.577	1.030	2.041	1.842	0.908	0.936	-0.032	0.096	0.195	0.246
	B	DEFLECTION DUE TO WEIGHT OF STEEL	0.080	0.077	-0.084	0.001	0.232	0.522	0.470	0.462	0.074	0.201	0.111	0.316	0.321	0.389	0.127	0.205	0.005	0.033	0.046	0.048
		DEFLECTION DUE TO REMAINING DEAD LOAD	0.343	0.277	0.134	-0.008	1.081	1.071	2.141	1.917	1.194	0.771	0.506	0.930	1.465	1.712	0.865	0.892	-0.054	0.057	0.146	0.202
		SUB-TOTAL	0.423	0.354	0.050	-0.007	1.313	1.593	2.611	2.379	1.268	0.972	0.617	1.246	1.786	2.101	0.992	1.097	-0.049	0.090	0.192	0.250

URS Greiner Woodward Clyde
ARCHITECTS • ENGINEERS • PLANNERS
10000 WOODBINE DRIVE
AKRON, OHIO 44320-1100

DATE
8/16/00
REVIEWED
B.K.L.
DRAWN
J.D.H.
DESIGNED
A.Y.Z.
CHECKED
R.W.H.

STRUCTURE FILE NUMBER
7004664 (U)
7004699 (R)

DEFLECTION AND CAMBER TABLE
BRIDGE NO. RIC-71-1878
OVER US 30

RIC-71-13.66

31/46

586
633

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TABLE OF SCREED ELEVATIONS – NORTHBOUND																				
LOCATION	SPAN 1					SPAN 2					SPAN 3					SPAN 4				
	℄ BRG. (R.A.)	1/4	1/2	3/4	PIER–1	1/5	2/5	3/5	4/5	PIER 2	1/5	2/5	3/5	4/5	PIER 3	1/4	1/2	3/4	℄ BRG. (F.A.)	
RT. CURB LINE	1108.52	1108.16	1107.77	1107.38	1107.08	1106.65	1106.22	1105.70	1105.11	1104.69	1104.23	1103.79	1103.31	1102.74	1102.30	1101.92	1101.54	1101.17	1100.86	
BEAM A	1108.59	1108.23	1107.83	1107.44	1107.14	1106.72	1106.28	1105.76	1105.18	1104.75	1104.29	1103.86	1103.37	1102.80	1102.36	1101.98	1101.61	1101.24	1100.92	
BEAM B	1109.03	1108.68	1108.28	1107.89	1107.55	1107.14	1106.73	1106.21	1105.61	1105.11	1104.65	1104.23	1103.75	1103.18	1102.67	1102.29	1101.92	1101.55	1101.20	
BEAM C	1109.47	1109.13	1108.73	1108.34	1107.96	1107.57	1107.17	1106.65	1106.04	1105.47	1105.03	1104.64	1104.16	1103.57	1102.98	1102.60	1102.23	1101.87	1101.47	
BEAM D	1109.91	1109.56	1109.18	1108.78	1108.40	1108.02	1107.63	1107.10	1106.48	1105.91	1105.48	1105.11	1104.63	1104.03	1103.42	1103.04	1102.69	1102.29	1101.91	
BEAM E	1110.35	1110.00	1109.62	1109.21	1108.84	1108.46	1108.06	1107.54	1106.92	1106.35	1105.92	1105.55	1105.07	1104.47	1103.86	1103.48	1103.13	1102.72	1102.35	
℄ SURVEY & CROWN	1110.69	1110.34	1109.96	1109.55	1109.18	1108.79	1108.40	1107.88	1107.26	1106.69	1106.26	1105.89	1105.41	1104.81	1104.20	1103.82	1103.47	1103.06	1102.69	
BEAM F	1110.71	1110.37	1109.98	1109.58	1109.20	1108.82	1108.43	1107.90	1107.28	1106.71	1106.29	1105.91	1105.44	1104.83	1104.22	1103.84	1103.49	1103.09	1102.71	
BEAM G	1110.82	1110.47	1110.09	1109.68	1109.31	1108.92	1108.53	1108.01	1107.39	1106.82	1106.39	1106.02	1105.54	1104.94	1104.33	1103.95	1103.60	1103.19	1102.82	
BEAM H	1110.92	1110.58	1110.20	1109.79	1109.42	1109.03	1108.64	1108.12	1107.50	1106.92	1106.50	1106.12	1105.65	1105.04	1104.43	1104.05	1103.70	1103.30	1102.92	
BEAM J	1111.03	1110.68	1110.30	1109.90	1109.52	1109.14	1108.75	1108.22	1107.60	1107.03	1106.60	1106.23	1105.75	1105.15	1104.54	1104.16	1103.81	1103.40	1103.03	
LT. CURBE LINE	1111.04	1110.70	1110.32	1109.91	1109.54	1109.15	1108.76	1108.24	1107.62	1107.04	1106.62	1106.24	1105.77	1105.16	1104.55	1104.17	1103.82	1103.42	1103.04	

TABLE OF SCREED ELEVATIONS – SOUTHBOUND																				
LOCATION	SPAN 1					SPAN 2					SPAN 3					SPAN 4				
	℄ BRG. (R.A.)	1/4	1/2	3/4	PIER–1	1/5	2/5	3/5	4/5	PIER 2	1/5	2/5	3/5	4/5	PIER 3	1/4	1/2	3/4	℄ BRG. (F.A.)	
LT. CURB LINE	1113.89	1113.53	1113.15	1112.76	1112.39	1111.97	1111.54	1111.03	1110.46	1109.93	1109.48	1109.07	1108.59	1108.03	1107.46	1107.08	1106.73	1106.36	1105.97	
BEAM A	1113.87	1113.51	1113.14	1112.75	1112.38	1111.95	1111.52	1111.01	1110.44	1109.91	1109.47	1109.06	1108.58	1108.01	1107.44	1107.07	1106.71	1106.35	1105.95	
BEAM B	1113.80	1113.45	1113.07	1112.67	1112.30	1111.88	1111.45	1110.94	1110.36	1109.82	1109.39	1108.99	1108.51	1107.93	1107.34	1106.97	1106.62	1106.25	1105.84	
BEAM C	1113.74	1113.39	1113.00	1112.60	1112.23	1111.83	1111.42	1110.90	1110.30	1109.74	1109.31	1108.93	1108.45	1107.85	1107.25	1106.87	1106.52	1106.15	1105.74	
BEAM D	1113.63	1113.29	1112.91	1112.50	1112.13	1111.74	1111.35	1110.82	1110.21	1109.63	1109.21	1108.83	1108.36	1107.75	1107.14	1106.76	1106.41	1106.01	1105.63	
BEAM E	1113.53	1113.18	1112.80	1112.39	1112.02	1111.63	1111.24	1110.72	1110.10	1109.53	1109.10	1108.73	1108.25	1107.65	1107.03	1106.66	1106.31	1105.90	1105.53	
℄ SURVEY & CROWN	1113.45	1113.10	1112.72	1112.31	1111.94	1111.55	1111.16	1110.64	1110.02	1109.45	1109.02	1108.64	1108.17	1107.56	1106.95	1106.57	1106.22	1105.82	1105.45	
BEAM F	1113.35	1113.00	1112.62	1112.21	1111.84	1111.45	1111.06	1110.54	1109.92	1109.35	1108.92	1108.54	1108.07	1107.46	1106.85	1106.47	1106.13	1105.72	1105.35	
BEAM G	1112.91	1112.56	1112.18	1111.77	1111.40	1111.01	1110.62	1110.10	1109.48	1108.91	1108.48	1108.10	1107.63	1107.03	1106.41	1106.04	1105.69	1105.28	1104.91	
BEAM H	1112.47	1112.12	1111.74	1111.33	1110.96	1110.57	1110.18	1109.66	1109.04	1108.47	1108.04	1107.67	1107.19	1106.59	1105.98	1105.60	1105.25	1104.84	1104.47	
BEAM J	1112.03	1111.68	1111.30	1110.90	1110.52	1110.14	1109.75	1109.22	1108.60	1108.03	1107.60	1107.23	1106.75	1106.15	1105.54	1105.16	1104.81	1104.40	1104.03	
RT. CURB LINE	1111.96	1111.62	1111.24	1110.83	1110.46	1110.07	1109.68	1109.16	1108.54	1107.96	1107.54	1107.16	1106.69	1106.08	1105.47	1105.09	1104.74	1104.34	1103.96	

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

DESIGNED
A. Y. Z.

DRAWN
J. D. H.

REVIEWED
B. K. L.

DATE
8/16/00

STRUCTURE
7004664 (L)
7004699 (R)

FILE NUMBER
7004664 (L)
7004699 (R)

B.K.L.
8/16/00

URS Greiner Woodward Clyde
ARCHITECTS • ENGINEERS • PLANNERS
564 WHITE POND DRIVE
AKRON, OHIO 44320-1100

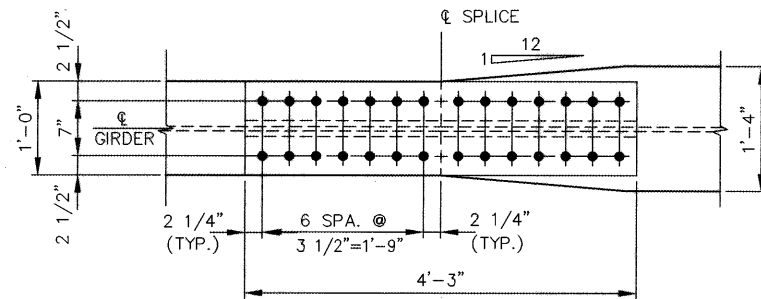
SCREED ELEVATION TABLES
BRIDGE NO. RIC-71-1878
OVER U.S. 30

RICH-71-13.66

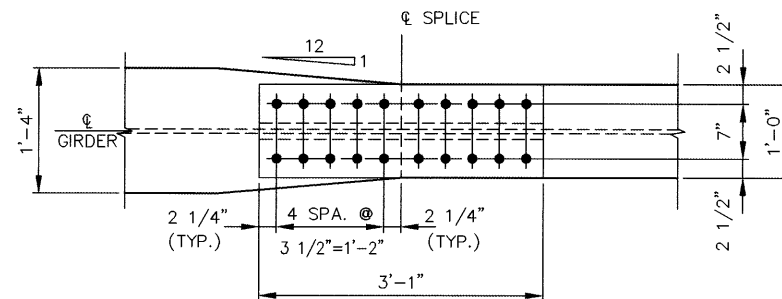
32/46

587
633

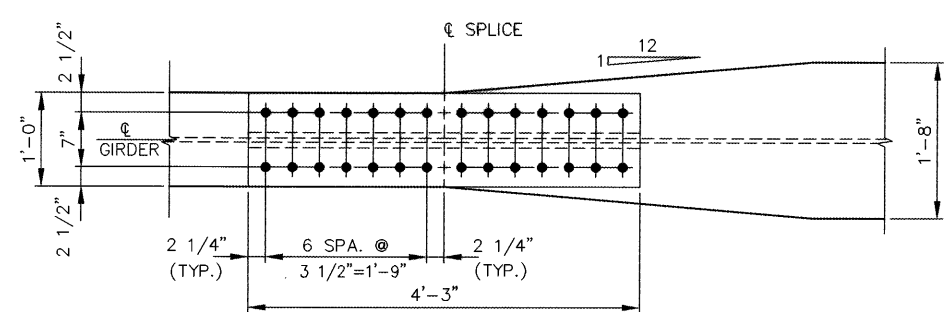
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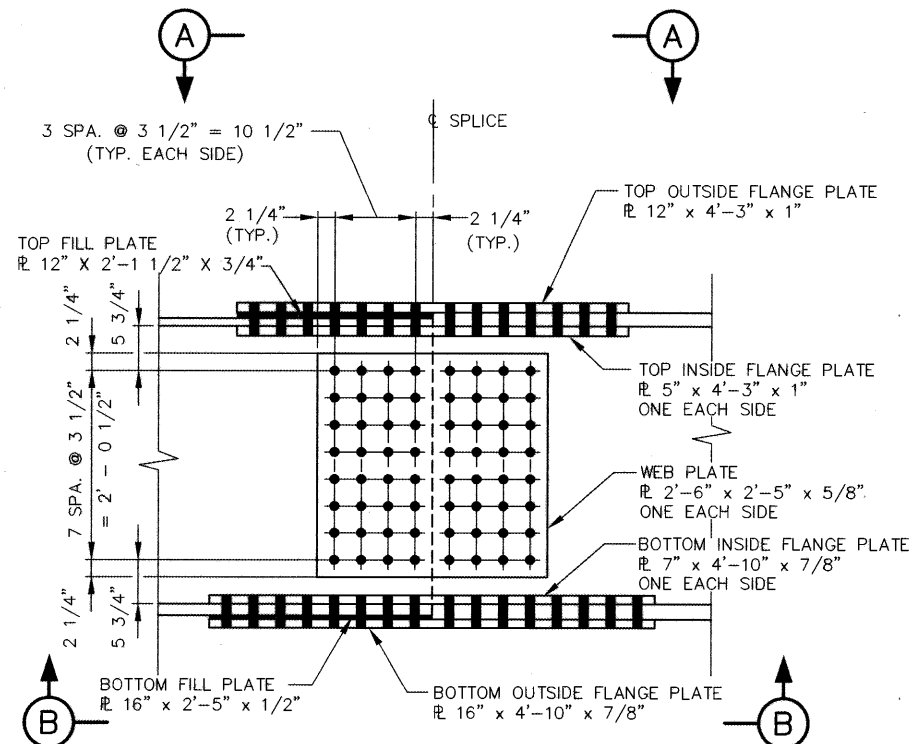
VIEW A-A



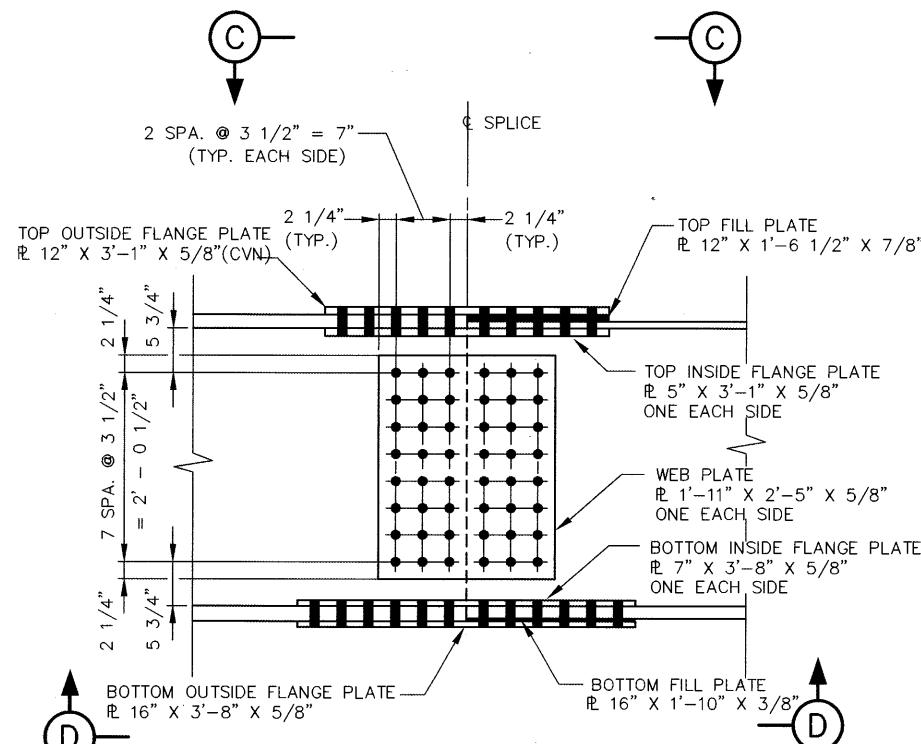
VIEW C-C



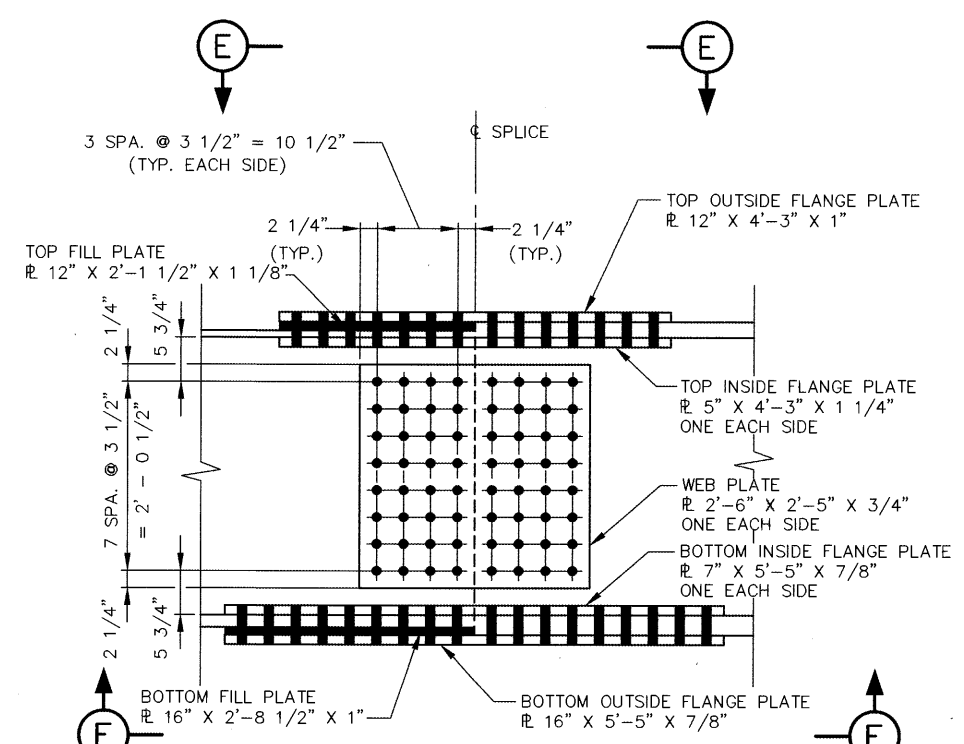
VIEW E-E



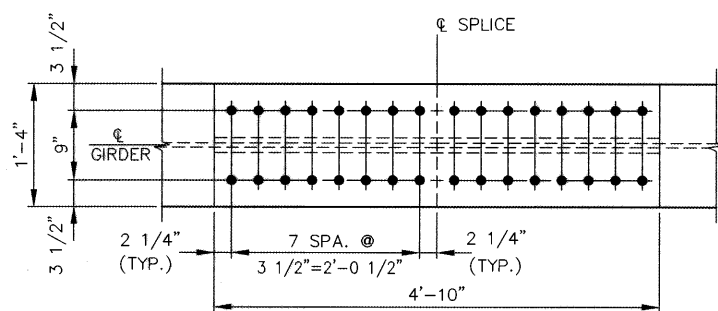
SPLICE 1 ELEVATION VIEW
SPLICE 6 OPPOSITE HAND



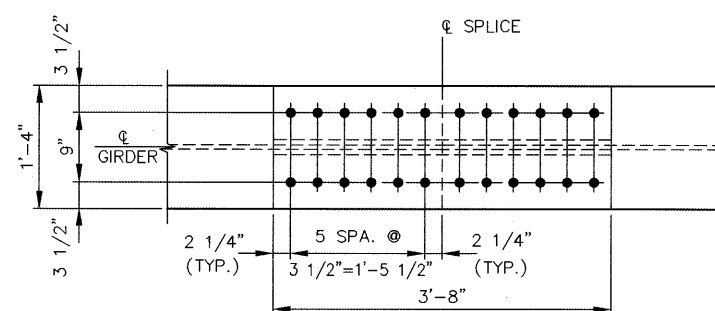
SPLICE 2 ELEVATION VIEW
SPLICE 5 OPPOSITE HAND



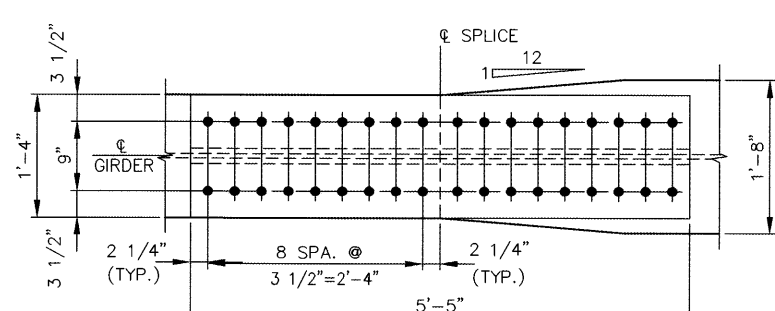
SPLICE 3 ELEVATION VIEW
SPLICE 4 OPPOSITE HAND



VIEW B-B



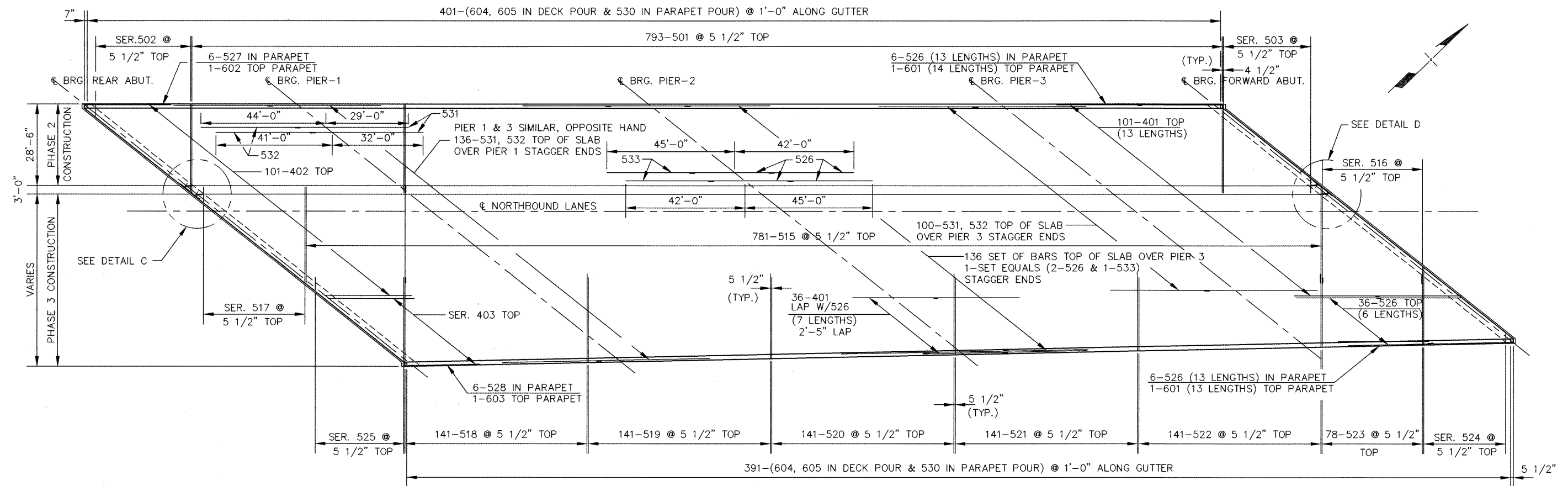
VIEW D-D



VIEW F-F

NOTES

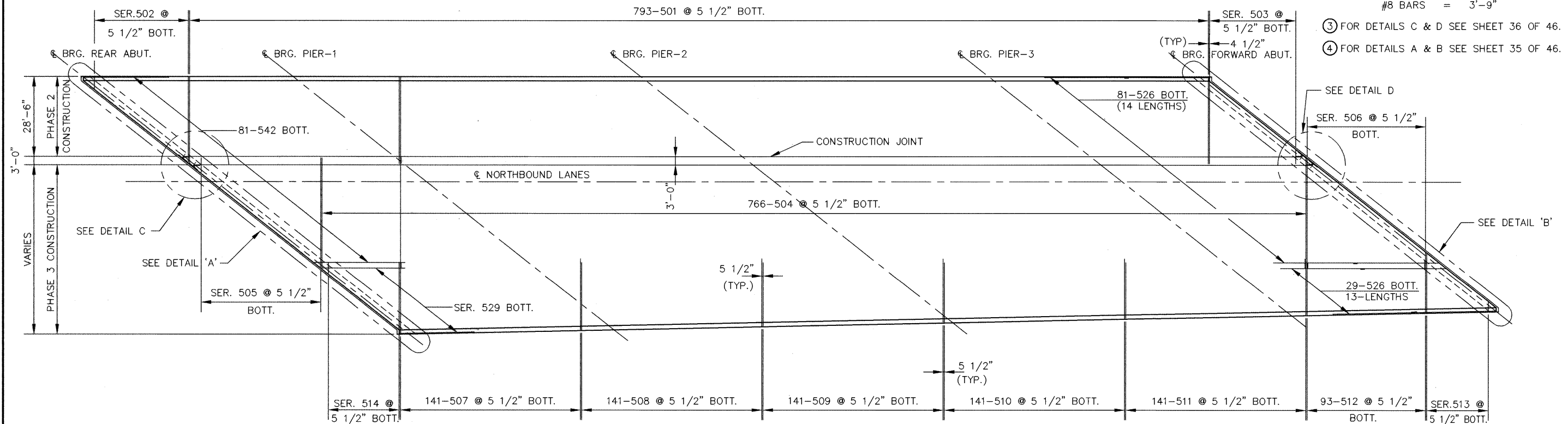
- FASTENERS SHALL BE 1 1/8" DIAMETER HIGH STRENGTH BOLTS, ASTM A-325
- ALL SPLICE PLATES EXCEPT FILL PLATES SHALL BE DESIGNATED (CVN), AND SHALL MEET SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01 OF CMS.
- FABRICATION AND ASSEMBLY: GIRDER ENDS AT SPLICES SHALL BE CUT AND FIT AS PER PLAN. THE OPENING BETWEEN BEAM ENDS AFTER ASSEMBLY SHALL NOT EXCEED 1/4 in.



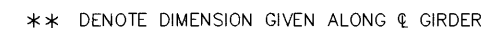
TOP REINFORCING PLAN-NORTHBOUND

NOTE:

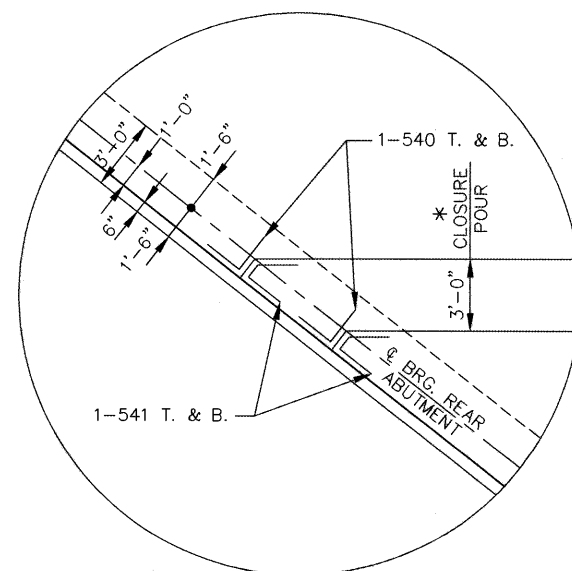
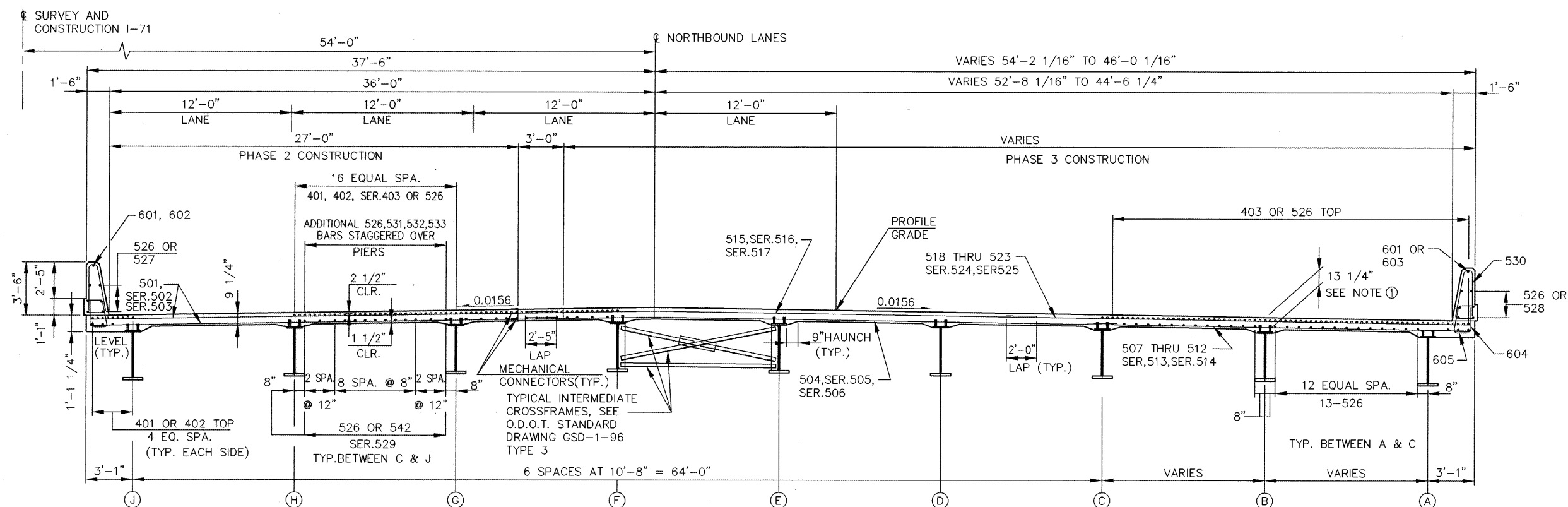
- ① FOR ADDITIONAL NOTES, TRANSVERSE SECTION,
SEE SHEET 36 OF 46.
- ② REINFORCING BAR LAPS AS FOLLOWS:
- | | | |
|---------|---|------------|
| #4 BARS | = | 1'-11" |
| #5 BARS | = | 2'-5" U.N. |
| #6 BARS | = | 2'-4" |
| #8 BARS | = | 3'-9" |
- ③ FOR DETAILS C & D SEE SHEET 36 OF 46.
- ④ FOR DETAILS A & B SEE SHEET 35 OF 46.



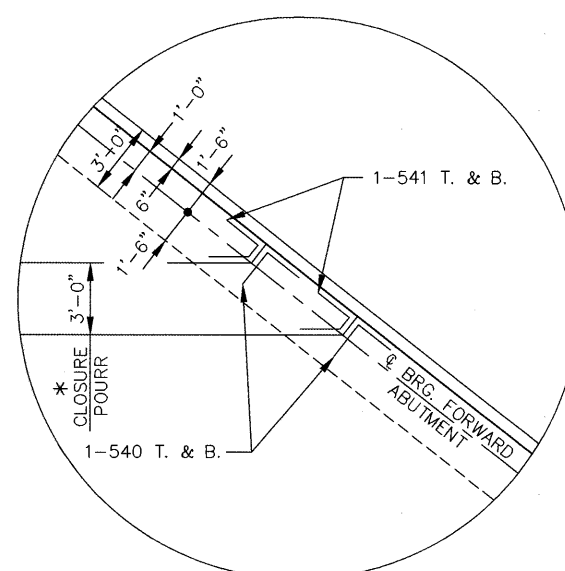
BOTTOM REINFORCING PLAN—NORTHBOUND



NO SEPARATE CLOSURE POUR SECTION IS DETAILED BETWEEN PHASES. THE ABUTMENT DIAPHRAGM CONCRETE SHALL BE POURED SIMULTANEOUSLY WITH THE DECK POUR TO ALLOW FOR EXPECTED DEADLOAD ROTATION AT THE ABUTMENTS.

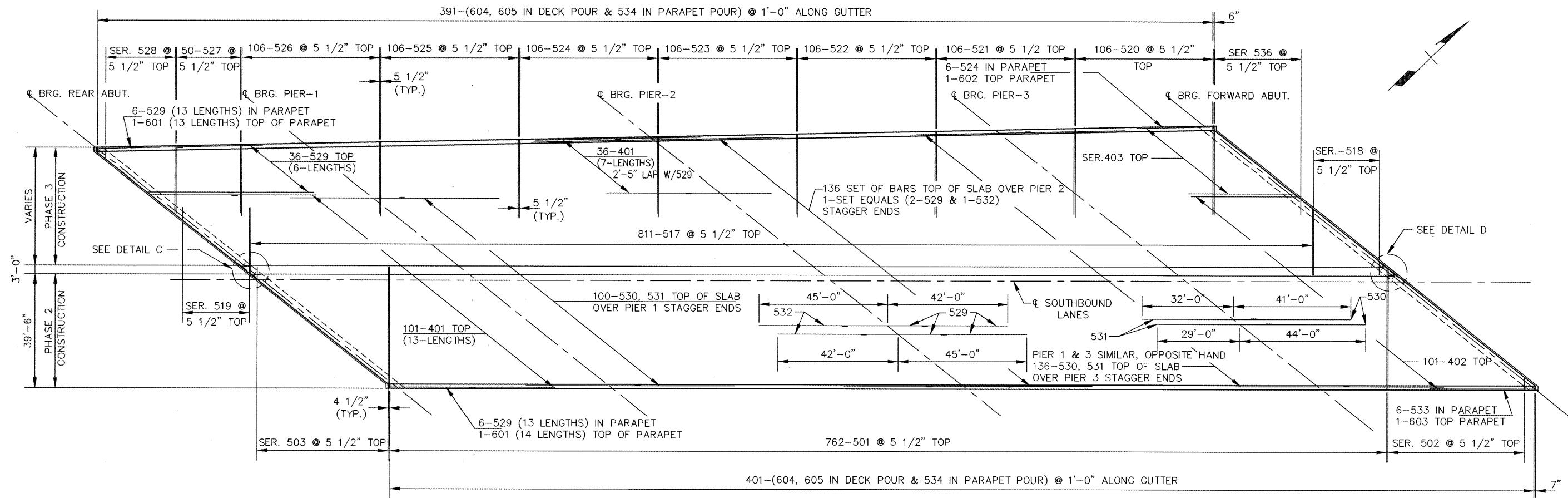


* SEE NOTE ON SHEET 35/46



- NOTES:

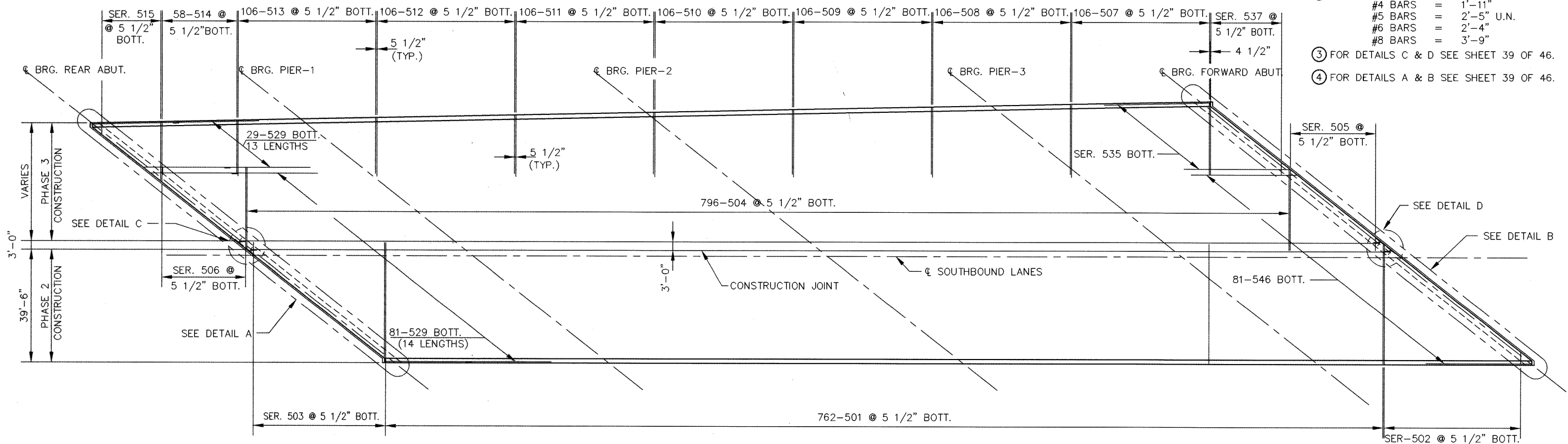
- ① DECK SLAB DEPTH: THE DISTANCE SHOWN FROM THE TOP OF THE DECK SLAB TO THE BOTTOM OF THE TOP FLANGE IS THE THEORETICAL DESIGN DIMENSION INCLUDING THE DESIGN HAUNCH THICKNESS OF 2" MIN. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED UPON THIS DIMENSION, MINUS THE DESIGN HAUNCH THICKNESS, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE GIRDER MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE. DEDUCTION SHALL BE MADE FOR VOLUME OF ENCASED STEEL PLATES AS PER SS 842.18.
- ② A HAUNCH WIDTH OF 9 INCHES SHALL BE USED FOR COMPUTING THE QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6 AND 12 INCHES.
- ③ REINFORCING STEEL: NEW REINFORCING STEEL MAY REQUIRE FIELD CUTTING OR BENDING TO BE PROPERLY FITTED. PAYMENT SHALL BE INCLUDED IN ITEM 844 HIGH PERFORMANCE CONCRETE, SUPERSTRUCTURE (DECK).
- ④ FOR TABLE OF SCREED ELEVATIONS, DEFLECTION AND CAMBER, AND LAYOUT DIAGRAMS SEE SHEET 31 AND 52 OF 46.
- ⑤ FOR ADDITIONAL NOTES SEE STRUCTURAL GENERAL NOTES, SHEET 389 THRU 391.
- ⑥ FOR LOCATION OF DETAIL C AND D, SEE SHEET 34 OF 46.
- ⑦ IN PHASED CONSTRUCTION OF NEW STEEL STRUCTURES CROSS FRAMES SHOULD NOT BE PERMANENTLY ATTACHED BETWEEN PHASES UNTIL ALL DEADLOAD (DECK, PARAPET, ETC.) HAS BEEN APPLIED TO THE MEMBERS. THE CROSS FRAMES CAN THEN BE PERMANENTLY ATTACHED AND A DECK CLOSURE POUR CAN BE COMPLETED TO FINISH THE SUPERSTRUCTURE. SEE SECTION 302.2.9.



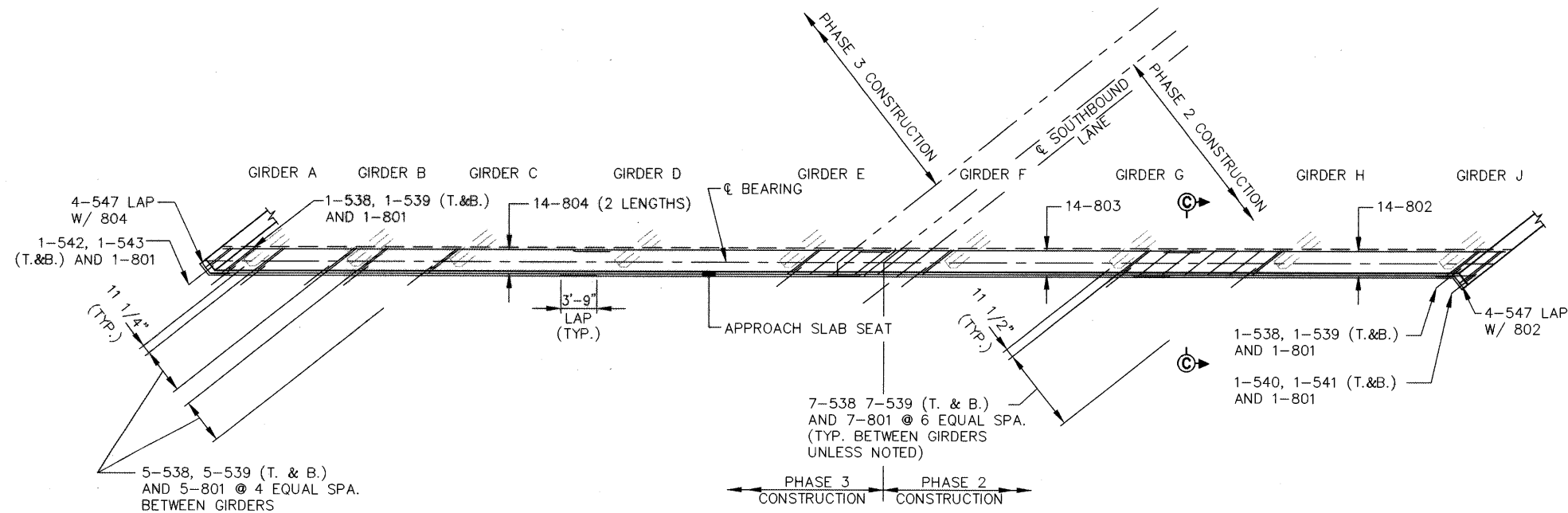
TOP REINFORCING PLAN-SOUTHBOUND

NOTE:

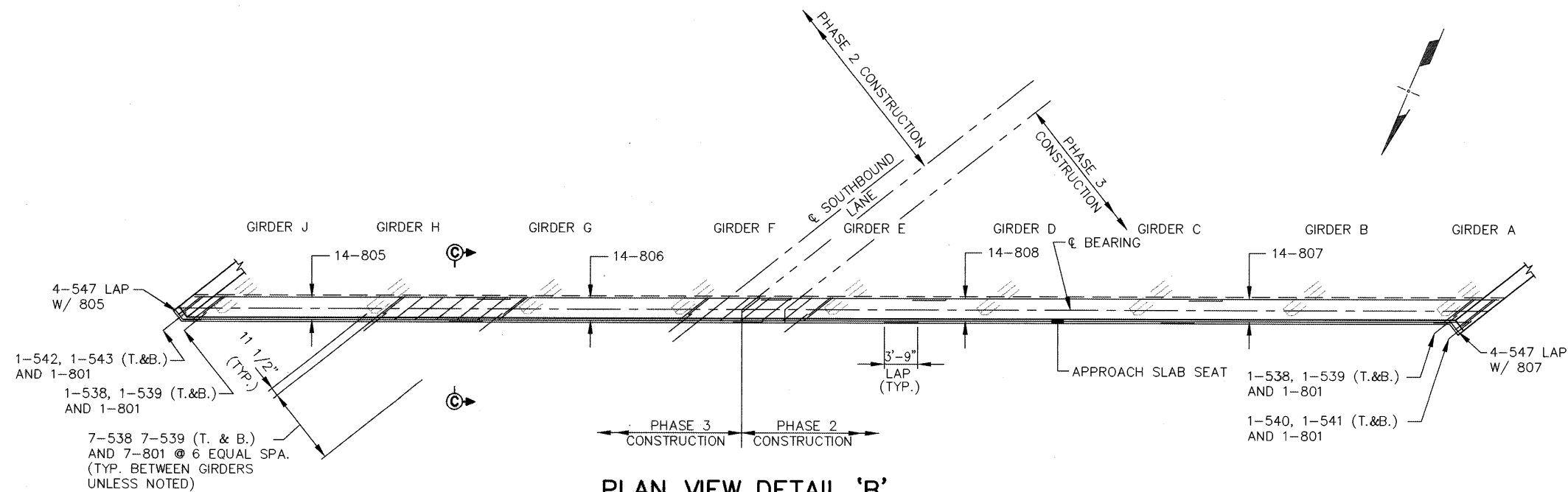
- ① FOR ADDITIONAL NOTES, TRANSVERSE SECTION, SEE SHEET 39 OF 46.
- ② REINFORCING BAR LAPS AS FOLLOWS:
 #4 BARS = 1'-11"
 #5 BARS = 2'-5" U.N.
 #6 BARS = 2'-4"
 #8 BARS = 3'-9"
- ③ FOR DETAILS C & D SEE SHEET 39 OF 46.
- ④ FOR DETAILS A & B SEE SHEET 39 OF 46.



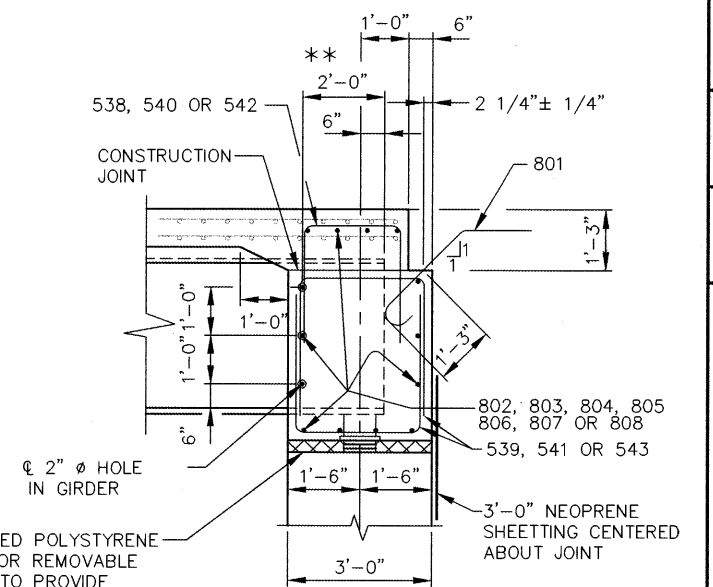
BOTTOM REINFORCING PLAN-SOUTHBOUND



PLAN VIEW DETAIL 'A'
SOUTHBOUND SLAB DETAIL AT REAR ABUTMENT



PLAN VIEW DETAIL 'B'
SOUTHBOUND SLAB DETAIL AT FORWARD ABUTMENT

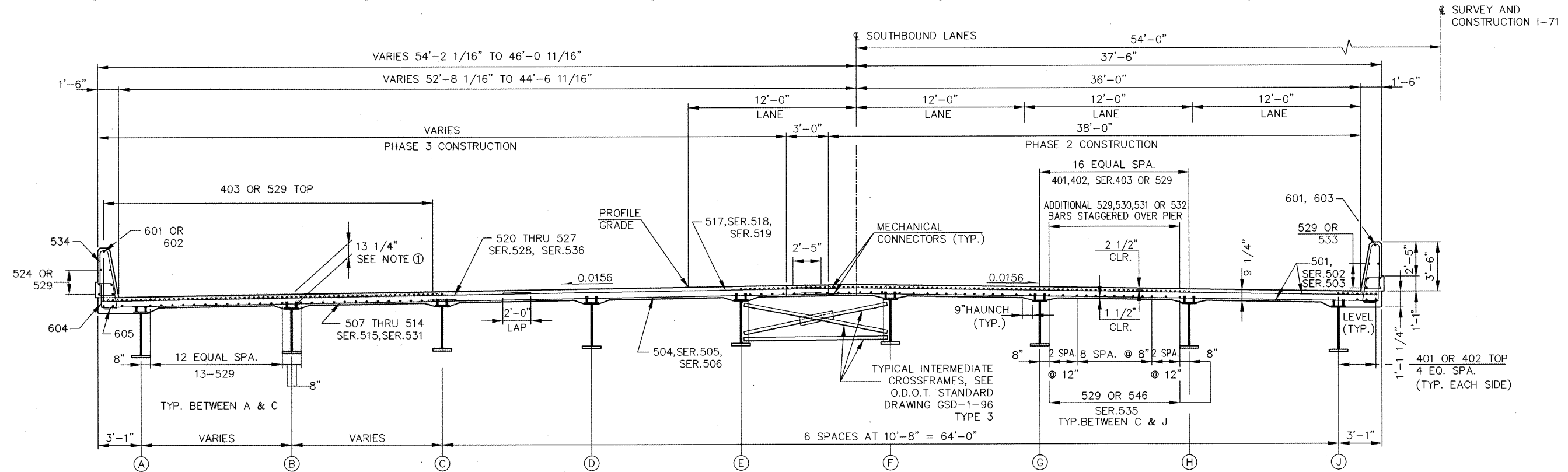


SECTION C-C

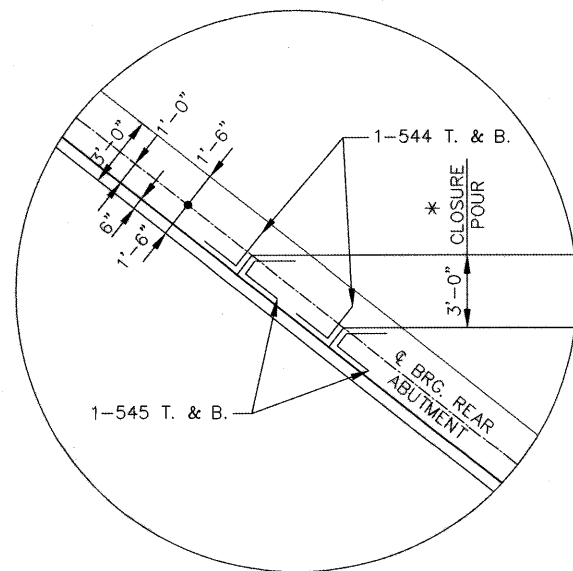
** DENOTE DIMENSION GIVEN ALONG CL GIRDER

NOTES

NO SEPARATE CLOSURE POUR SECTION IS DETAILED BETWEEN PHASES. THE ABUTMENT DIAPHRAGM CONCRETE SHALL BE POURED SIMULTANEOUSLY WITH THE DECK POUR TO ALLOW FOR EXPECTED DEADLOAD ROTATION AT THE ABUTMENTS.

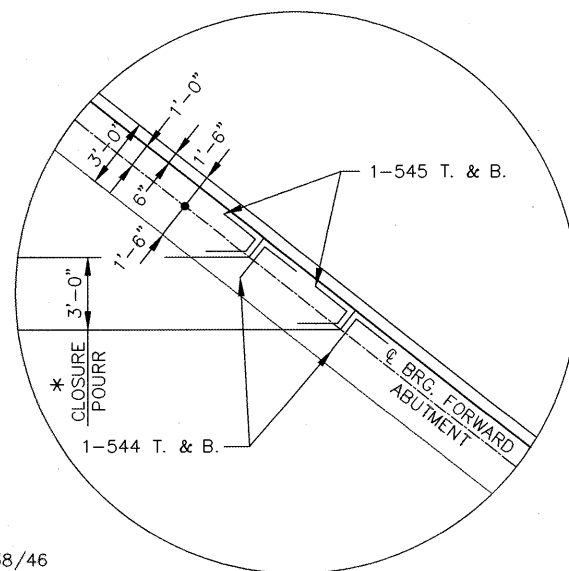


TRANSVERSE SECTION - SOUTHBOUND



DETAIL C

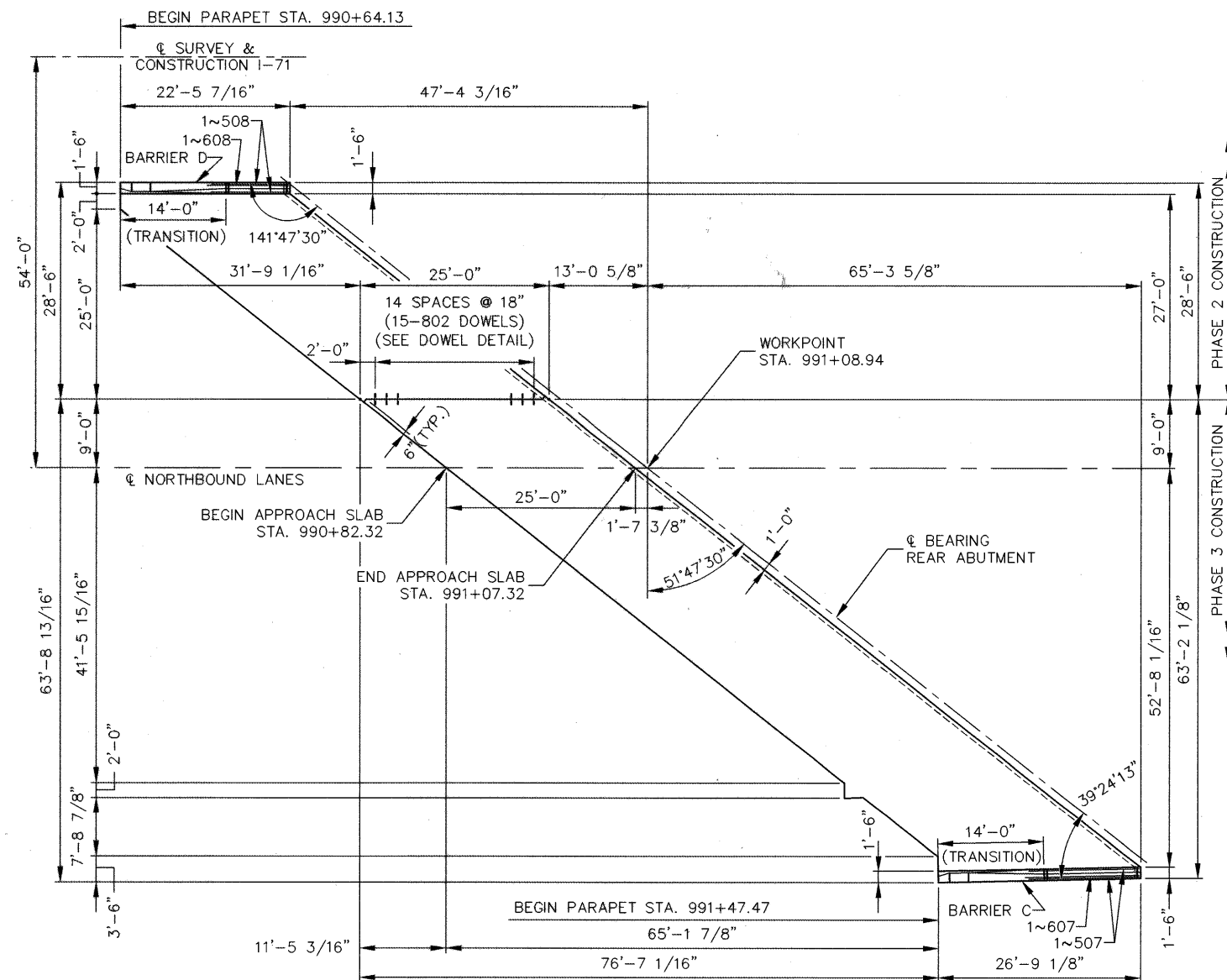
* SEE NOTE ON SHEET 38/46



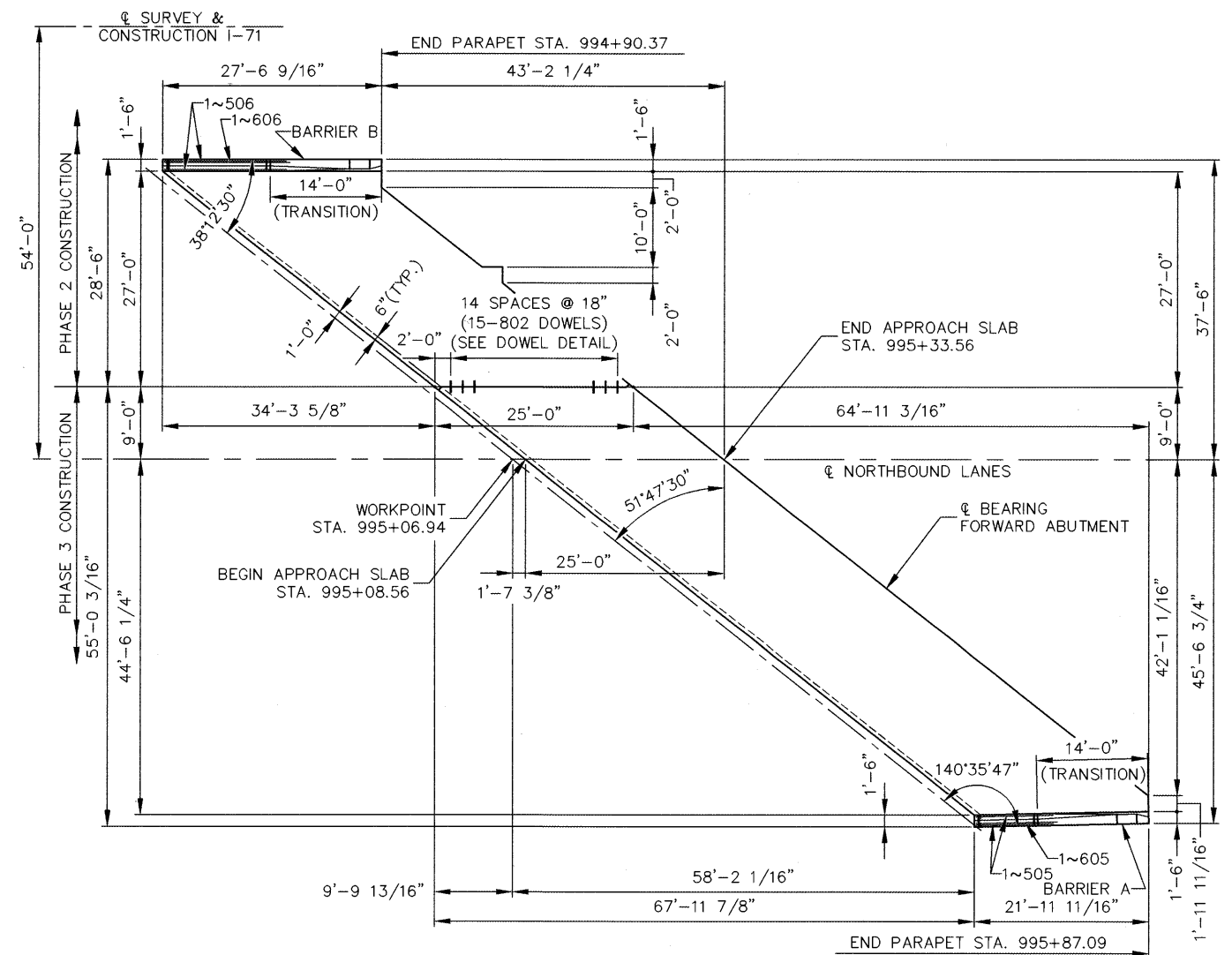
DETAIL D

NOTES:

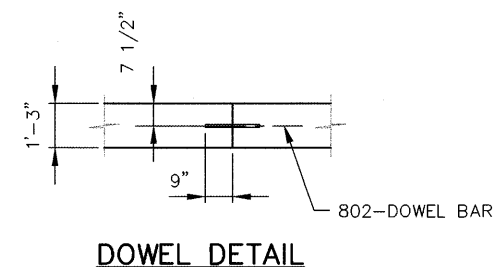
- ① DECK SLAB DEPTH: THE DISTANCE SHOWN FROM THE TOP OF THE DECK SLAB TO THE BOTTOM OF THE TOP FLANGE IS THE THEORETICAL DESIGN DIMENSION INCLUDING THE DESIGN HAUNCH THICKNESS OF 2" MIN. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED UPON THIS DIMENSION, MINUS THE DESIGN HAUNCH THICKNESS, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE GIRDER MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE. DEDUCTION SHALL BE MADE FOR VOLUME OF ENCASED STEEL PLATES AS PER SS 842.18.
- ② A HAUNCH WIDTH OF 9 INCHES SHALL BE USED FOR COMPUTING THE QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6 AND 12 INCHES.
- ③ REINFORCING STEEL: NEW REINFORCING STEEL MAY REQUIRED FIELD CUTTING OR BENDING TO BE PROPERLY FITTED. PAYMENT SHALL BE INCLUDED IN ITEM 844 HIGH PERFORMANCE CONCRETE, SUPERSTRUCTURE (DECK).
- ④ FOR TABLE OF SCREED ELEVATIONS, DEFLECTION AND CAMBER, AND LAYOUT DIAGRAMS SEE SHEET 31 AND 32 OF 46.
- ⑤ FOR ADDITIONAL NOTES SEE STRUCTURAL GENERAL NOTES, SHEET 389 THRU 391.
- ⑥ FOR LOCATION OF DETAIL C AND D, SEE SHEET 37 OF 46.
- ⑦ IN PHASED CONSTRUCTION OF NEW STEEL STRUCTURES CROSS FRAMES SHOULD NOT BE PERMANENTLY ATTACHED BETWEEN PHASES UNTIL ALL DEADLOAD (DECK, PARAPET, ETC.) HAS BEEN APPLIED TO THE MEMBERS. THE CROSS FRAMES CAN THEN BE PERMANENTLY ATTACHED AND A DECK CLOSURE POUR CAN BE COMPLETED TO FINISH THE SUPERSTRUCTURE. SEE SECTION 302.2.9.



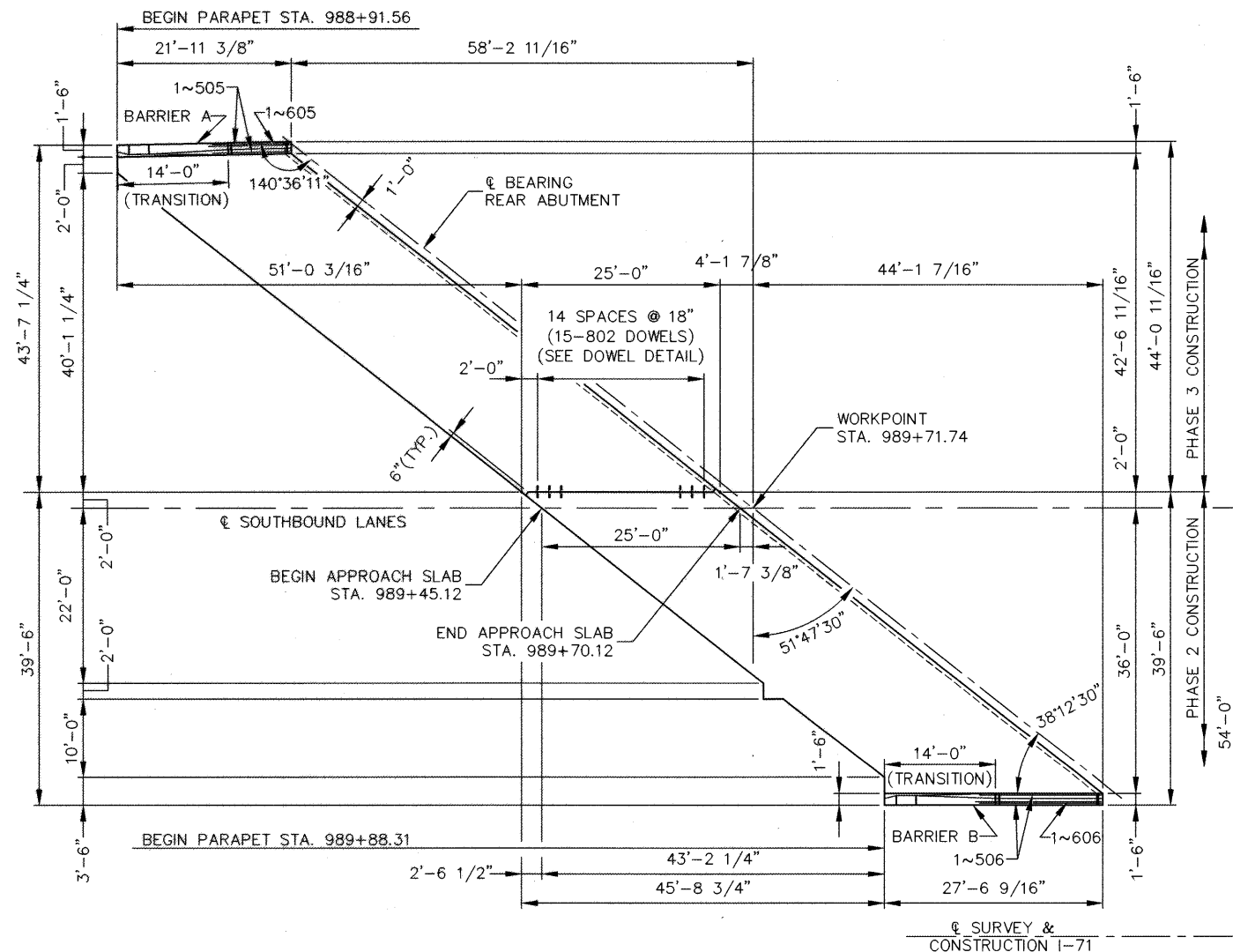
PLAN APPROACH SLAB - NORTHBOUND REAR ABUTMENT
APPROACH SLAB AREA = 255.50 SQ. YDS.



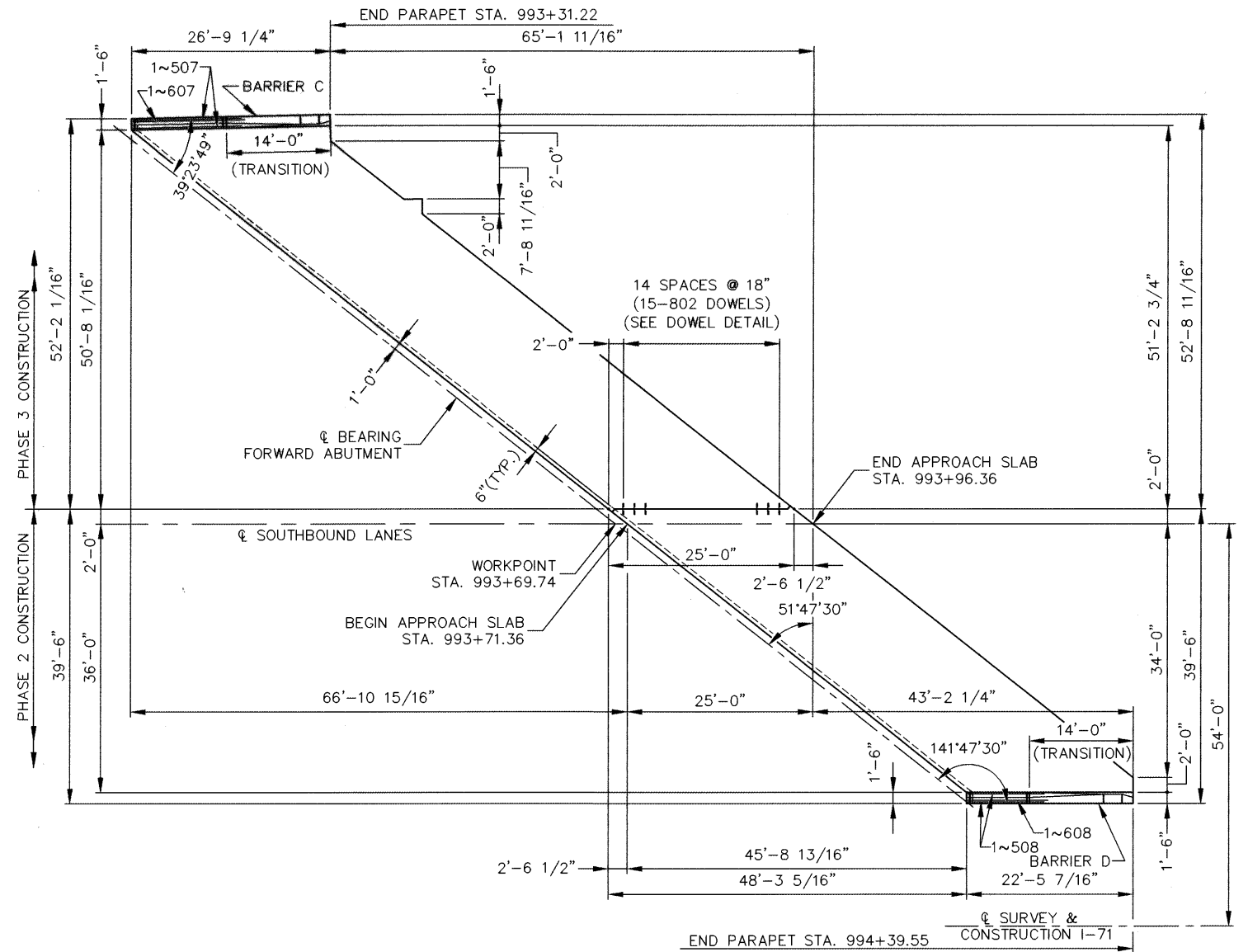
PLAN APPROACH SLAB - NORTHBOUND FORWARD ABUTMENT
APPROACH SLAB AREA = 231.50 SQ. YDS.



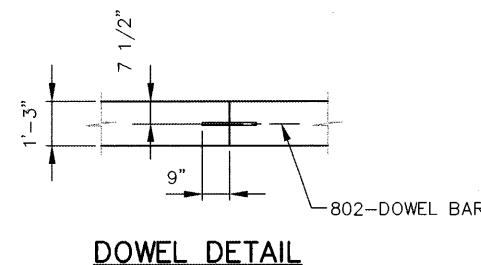
NOTES:
FOR REINFORCING STEEL AND ADDITIONAL APPROACH SLAB DETAILS AND NOTES NOT SHOWN HERE SEE OHIO STATE STANDARD DRAWING AS-1-81.
FOR PARAPET AND TRANSITION REINFORCING AND BAR BENDING DIAGRAMS SEE MISCELLANEOUS APPROACH SLAB DETAILS, SHEET 42 OF 46.



PLAN APPROACH SLAB - SOUTHBOUND REAR ABUTMENT
APPROACH SLAB AREA = 231.61 SQ. YDS.



PLAN APPROACH SLAB - SOUTHBOUND FORWARD ABUTMENT
APPROACH SLAB AREA = 255.50 SQ. YDS.



- NOTES:**
- FOR REINFORCING STEEL AND ADDITIONAL APPROACH SLAB DETAILS AND NOTES NOT SHOWN HERE SEE OHIO STATE STANDARD DRAWING AS-1-81.
 - FOR PARAPET AND TRANSITION REINFORCING AND BAR BENDING DIAGRAMS SEE MISCELLANEOUS APPROACH SLAB DETAILS, SHEET 42 OF 46.

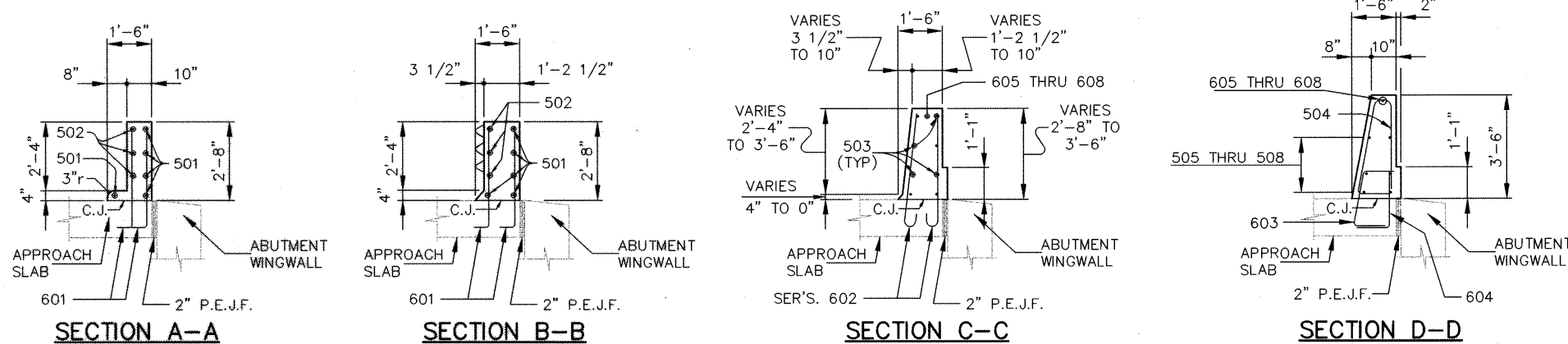
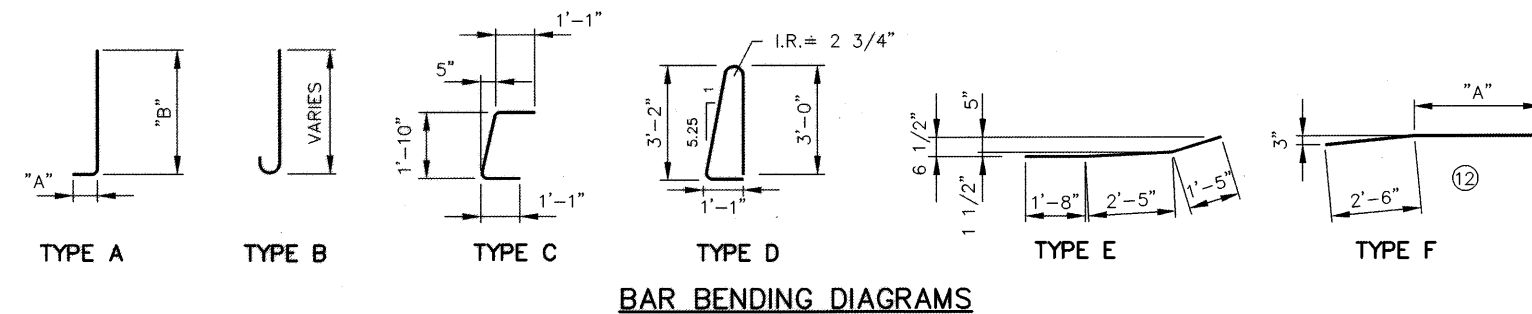
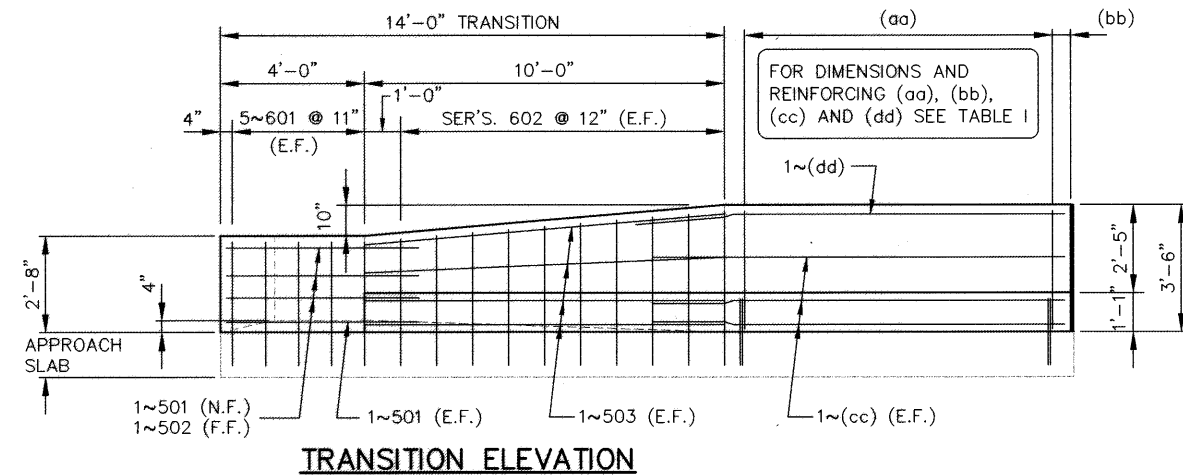
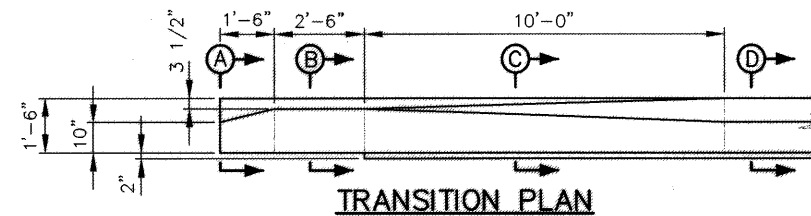


TABLE I				
BARRIER	(aa)	(bb)	(cc)	(dd)
A	8~(603, 604, 504) @ 12" = 7'-0"	5 5/8 "	505	605
B	14~(603, 604, 504) @ 11 1/2" = 12'-5 1/2"	6 1/2 "	506	606
C	13~(603, 604, 504) @ 12" = 12'-0"	4 5/8 "	507	607
D	9~(603, 604, 504) @ 11 1/2" = 7'-8"	4 5/8 "	508	608

APPROACH SLAB PARAPET AND TRANSITION REINFORCING									
MARK	NO. REQ'D.	LENGTH	TYPE	DIMENSIONS				SER'S. INCRM.	
				A	B	C	D		
501	40	5'-6"	ST						
502	24	5'-6"	E						
503	64	10'-0"	ST						
504	88	7'-5"	D						
505	12	9'-8"	ST						
506	12	15'-4"	ST						
507	12	14'-6"	ST						
508	12	10'-2"	ST						
601	80	3'-11"	A	0'-8"	3'-5"				
SER'S. 16-SETS OF 10= 602 160 BAR		4'-2"	B	3'-6"				0'-1"	
		TO 4'-11"		TO 4'-3"					
603	88	3'-9"	C						
604	88	2'-10"	A	1'-1"	1'-11"				
605	2	10'-2"	F	7'-8"					
606	2	15'-9"	F	13'-3"					
607	2	15'-0"	F	12'-6"					
608	2	10'-8"	F	8'-2"					
802	60	1'-6"	ST						

NOTES:

SECTIONS A-A, B-B, C-C, AND D-D ARE SHOWN FOR BARRIER LABELED A, BARRIERS B, C, AND D ARE SIMILAR AS SHOWN.

BARRIER CONCRETE AND REINFORCING STEEL SHALL BE INCLUDED IN THE PRICE BID PER SQ. YD. FOR THE APPROACH SLAB, AS PER PLAN. (R.A. = 231.61 S.Y. + F.A. = 255.50 S.Y.) = (TOTAL = 487.11 S.Y.)

FOR SPECIFICATIONS AND DETAILS FOR BARRIERS A THRU D, NOT SHOWN HERE, SEE O.D.O.T. STANDARD DRAWING SBR-1-99M.

FOR REINFORCING STEEL AND OTHER APPROACH SLAB DESIGN SPECIFICATIONS AND DETAILS, NOT SHOWN HERE, SEE O.D.O.T. STANDARD DRAWING AS-1-81.

NORTHBOUND REINFORCING SCHEDULE

MARK	No. REQD.	LGTH.	TYPE	DIMENSIONS				INCRM.	WEIGHT LBS.
				A	B	C	D		
REAR ABUTMENT									
1 A 501	4	14- 5	2	4- 6	5- 8				60
1 A 502	1	11- 7	2	3- 1	5- 8				12
1 A 503	1	15- 4	2	5- 0	5- 7				16
1 A 504	42	17- 1	14	2- 7	5- 8				748
1 A 505	41	12- 9	2	5- 2	2- 8				545
1 A 506	41	7- 3	2	2- 5	2- 8				310
1 A 507	10	40- 0	ST						417
1 A 508	2	12- 9	ST						27
1 A 509	2	15- 7	ST						33
1 A 510	3	4-11	12	2- 6	2- 6	1- 7			15
1 A 511	41	7- 5	2	2- 6	2- 8				317
1 A 512	21	16- 5	14	2- 3	5- 8				360
1 A 513	17	17- 3	2	8- 2	1- 2				306
1 A 514	8	16- 3	ST						136
1 A 515	2	19- 0	ST						40
1 A 516	2	10- 0	12	7- 6	2- 6	1- 2			21
1 A 517	6	24- 3	ST						152
1 A 518	18	5-11	2	2- 6	1- 2				111
SERIES OF	1-SET OF 3-	6- 7 TO	2	2-10 TO	1- 2 TO			1- 5	25
1 A 519	3 BAR	9- 5		4- 3	1- 2				
1 A 520	17	10- 9	2	4-11	1- 2				191
1 A 521	42	14- 5	2	6- 0	2- 8				632
1 A 522	17	12-11	2	5- 3	2- 8				229
1 A 523	12	12- 5	2	5- 0	2- 8				155
1 A 524	5	11-11	2	4- 9	2- 8				62
1 A 525	1	7- 9	2	1- 6	5- 0				8
1 A 526	7	9- 9	2	3- 8	2- 8				71
1 A 527	35	9- 1	2	3- 4	2- 8				332
1 A 528	17	8- 1	2	2-10	2- 8				143
1 A 529	12	7- 5	2	2- 6	2- 8				93
1 A 530	5	7- 1	2	2- 4	2- 8				37
1 A 531	6	23- 6	ST						147
1 A 532	3	5- 7	16	2- 3	1- 3	1- 5	2- 3		17
1 A 533	5	9- 0	2	3- 6	2- 3				47
1 A 534	16	15-11	2	7- 6	1- 2				266
1 A 535	3	4- 9	ST						15
1 A 536	8	15- 0	ST						125
1 A 537	2	10- 0	12	7- 6	2- 6	1- 1			21
1 A 538	2	17- 7	ST						37
1 A 539	6	23- 0	ST						144
SERIES OF	1-SET OF 3-	6- 7 TO	2	2-10 TO	1- 2 TO			1- 2	24
1 A 540	3 BAR	8-11		4- 0	1- 2				
1 A 541	16	10- 1	2	4- 7	1- 2				168
1 A 801	10	9- 3	62	9- 3	4- 0	5- 3			247
1 A 802	4	10- 1	12	4- 0	6- 2	4- 4			108
1 A 803	42	40- 0	ST						4486
1 A 804	14	17- 6	ST						654
1 A 805	3	9-11	12	5- 0	5- 0	3- 1			79
1 A 806	10	17- 0	ST						454
1 A 807	10	31- 6	ST						841
1 A 808	3	11- 1	16	4- 0	3- 5	2- 6	4- 0		89
1 A 809	4	29- 9	ST						318
1 A 810	5	18- 2	ST						243
1 A 811	5	16- 6	ST						220
1 A 812	3	9- 0	ST						72
				TOTAL		ABUTMENT		1 -	14426

MARK	No. REQD.	LGTH.	TYPE	DIMENSIONS				INCRM.	WEIGHT LBS.
				A	B	C	D		
FORWARD ABUTMENT									
2 A 501	4	20-11	14	4- 6	5- 8				87
2 A 502	1	18- 7	14	3- 4	5- 8				19
2 A 503	2	3- 0	ST						6
2 A 504	121	17- 1	14	2- 7	5- 8				2156
2 A 505	2	5- 0	ST						10
2 A 506	12	30- 0	ST						375
2 A 507	2	27- 0	ST						56
2 A 508	2	5- 0	16	2- 0	1- 2	1- 2	2- 0		10
2 A 509	58	7- 1	2	2- 4	2- 8				428
SERIES OF	1-SET OF 7-	13- 8 TO	2	5- 8 TO	2- 7 TO			11 0- 6--	88
2 A 510	7 BAR	10- 4		4- 0	2- 7			16	
2 A 511	12	17- 1	2	8- 1	1- 2				214
2 A 512	4	14- 0	ST						58
2 A 513	12	10- 5	2	4- 9	1- 2				130
SERIES OF	4-SETS OF 3-	6- 1 TO	2	2- 7 TO	1- 2 TO			0- 6	82
2 A 514	12 BAR	7- 1		3- 1	1- 2				
2 A 515	12	5- 7	2	2- 4	1- 2				70
2 A 516	2	15- 3	ST						32
2 A 517	6	22- 0	ST						138
2 A 518	4	9- 6	12	2- 0	7- 6	2- 1			40
2 A 519	2	5- 0	ST						10
2 A 520	15	13- 5	2	5- 6	2- 8				210
2 A 521	38	14- 5	2	6- 0	2- 8				571
2 A 522	15	7-11	2	2- 9	2- 8				124
2 A 523	38	8- 7	2	3- 1	2- 8				340
2 A 524	4	28- 6	ST						119
2 A 525	3	3-11	12	2- 0	2- 0	1- 4			12
2 A 526	3	13- 8	2	5- 8	2- 7				43
2 A 527	12	16- 9	2	7-11	1- 2				210
2 A 528	6	13- 0	ST						81
2 A 529	12	9- 7	2	4- 4	1- 2				120
2 A 530	2	13- 7	ST						28
2 A 531	6	21- 0	ST						131
2 A 801	10	9- 3	62	9- 3	4- 0	5- 3			247
2 A 802	4	9- 7	12	4- 0	5- 8	4- 1			102
2 A 803	42	30- 0	ST						3364
2 A 804	10	29- 7	ST						790
2 A 805	3	13- 0	16	4-11	3- 6	2-11	4-11		104
2 A 806	4	27- 6	ST						294
2 A 807	7	17- 2	ST						321
2 A 808	3	14- 9	ST						118
2 A 809	3	9- 0	ST						72
2 A 810	10	36- 8	ST						979
2 A 811	4	34- 4	ST						367
2 A 812	3	9- 9	12	4-11	4-11	3- 2			78
2 A 813	10	13- 7	ST						363
				TOTAL		ABUTMENT		2 -	13197
</									

MARK	No. REQD.	LGTH.	TYPE	DIMENSIONS				INCRM.	WEIGHT LBS.
				A	B	C	D		
PIER 1									
1 P 401	10	34- 5	ST						230
1 P 402	30	29- 4	ST						588
1 P 501	210	7- 7	2	2- 7	2- 8				1661
1 P 502	28	8- 6	9	3- 6	2- 8				248
1 P 503	6	18- 3	ST						114
1 P 601	4	36- 9	ST						221
1 P 602	4	34- 5	ST						207
1 P 603	12	29- 2	ST						526
1 P 604	6	36- 6	ST						329
1 P 605	6	5- 2	1	2- 6	2-10				47
1 P 606	3	8-11	2	2- 6	4- 3				40
1 P 607	6	5- 1	1	2- 6	2- 9				46
1 P 608	3	8-10	2	2- 6	4- 2				40
1 P 701	6	38-10	ST						476
1 P 702	6	36- 8	ST						450
1 P1001	36	21-10	ST						3382
1 P1002	18	21- 4	ST						1652
1 P1003	6	5- 0	1	2- 6	2-10				129
1 P1004	6	4-11	1	2- 6	2- 9				127
1 P1005	27	20- 5	ST						2372
				TOTAL			PIER 1 -		12885
PIER 2									
2 P 401	10	34- 5	ST						230
2 P 402	30	28- 0	ST						561
2 P 501	166	8- 7	2	2-10	3- 2				1486
2 P 502	28	8-10	9	3- 6	3- 2				258
2 P 503	108	7- 9	2	2-10	2- 4				873
2 P 601	4	37- 3	ST						224
2 P 602	4	34- 5	ST						207
2 P 603	8	29- 3	ST						351
2 P 604	8	29- 3	ST						351
2 P 605	8	36- 0	ST						433
2 P 606	8	20- 0	ST						240
2 P 607	6	5- 1	1	2- 5	2-10				46
2 P 608	3	9- 7	2	2- 5	5- 1				43
2 P 609	6	5- 0	1	2- 5	2- 9				45
2 P 610	3	9- 5	2	2- 5	4-11				42
2 P 901	8	37- 0	ST						1006
2 P 902	8	39- 3	ST						1068
2 P1001	36	20-10	ST						3227
2 P1002	18	19-11	ST						1543
2 P1003	6	4-11	1	2- 5	2-10				127
2 P1004	6	4-10	1	2- 5	2- 9				125
2 P1005	27	19- 1	ST						2217
				TOTAL			PIER 2 -		14703

NOTES

① FOR NOTES SEE SHEET 44 OF 46

NORTHBOUND REINFORCING SCHEDULE

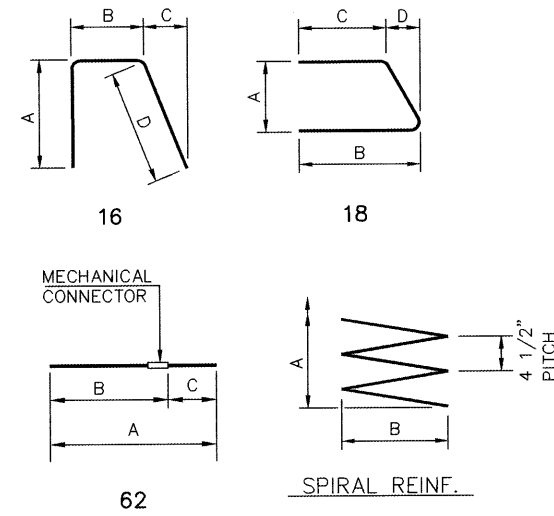
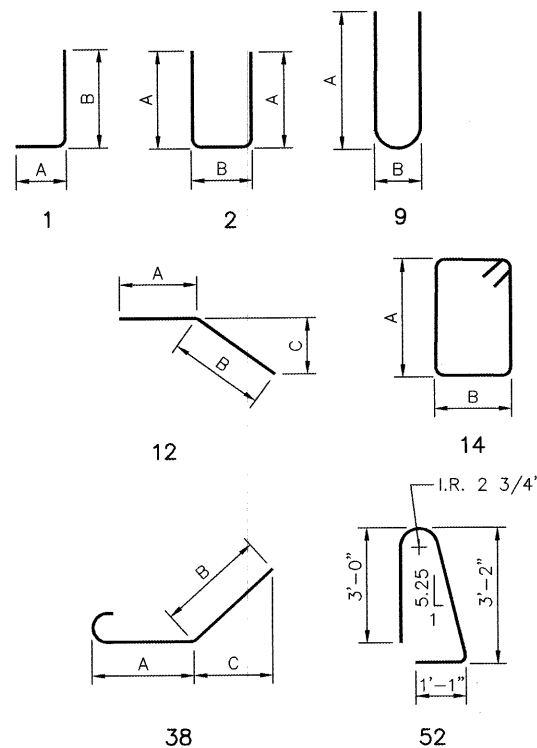
MARK	No. REQD.	LGTH.	WELL	DIMENSIONS				INCRM.	WEIGHT LBS.
				A	B	C	D		
PIER 3									
3 P 401	10	34- 5	ST						230
3 P 402	30	26- 8	ST						534
3 P 501	278	7- 7	2	2- 7	2- 8				2199
3 P 502	28	8- 6	9	3- 6	2- 8				248
3 P 503	68	6- 8	2	2- 7	1- 9				473
3 P 601	4	36- 9	ST						221
3 P 602	4	34- 5	ST						207
3 P 603	6	5- 2	1	2- 6	2-10				47
3 P 604	6	5- 1	1	2- 6	2- 9				46
3 P 605	3	8-11	2	2- 6	4- 3				40
3 P 606	3	8-10	2	2- 6	4- 2				40
3 P 701	9	27- 9	ST						510
3 P 702	9	34- 3	ST						630
3 P 901	9	37- 8	ST						1153
3 P 902	9	35- 5	ST						1084
3 P 903	9	19- 1	ST						584
3 P 904	9	27- 9	ST						849
3 P1001	36	19-10	ST						3072
3 P1002	18	19- 0	ST						1472
3 P1003	6	5- 0	1	2- 6	2-10				129
3 P1004	6	4-11	1	2- 6	2- 9				127
3 P1005	27	18- 2	ST						2111
TOTAL				PIER 3 -				16006	
SUPERSTRUCTURE									
S 401	1565	30- 0	ST						31363
S 402	101	36-10	ST						2485
SERIES OF S 403	1-SET OF 36- 36 BAR	42- 3 TO 31- 1	ST					13 0- 3-- 16	882
S 501	1586	31- 1	62	31- 1	28- 4	2- 9			51418
SERIES OF S 502	2-SETS OF 76- 152 BAR	30- 4 TO 4- 0	ST					3 0- 4-- 16	2722
SERIES OF S 503	2-SETS OF 68- 136 BAR	29- 4 TO 5- 3	ST					5 0- 4-- 16	2453
S 504	766	39- 4	ST						31425
SERIES OF S 505	1-SET OF 94- 94 BAR	39- 0 TO 5- 2	ST					3 0- 4-- 8	2165
SERIES OF S 506	1-SET OF 93- 93 BAR	38- 9 TO 5- 6	ST					5 0- 4-- 16	2146
S 507	141	25- 4	ST						3726
S 508	141	24- 0	ST						3530
S 509	141	22- 7	ST						3321
S 510	141	21- 4	ST						3137
S 511	141	20- 0	ST						2941
S 512	93	18- 7	ST						1803
SERIES OF S 513	1-SET OF 49- 49 BAR	20-11 TO 3- 2	ST					7 0- 4-- 16	615

MARK	No. REQD.	LGTH.	PLATE	DIMENSIONS				INCRM.	WEIGHT LBS.
				A	B	C	D		
SUPERSTRUCTURE									
SERIES OF S 514	1-SET OF 56- 56 BAR	23- 8 TO 3-10	ST					5 0- 4-- 16	803
S 515	781	34- 0	ST						27696
SERIES OF S 516	1-SET OF 78- 78 BAR	33- 5 TO 5- 8	ST					5 0- 4-- 16	1590
SERIES OF S 517	1-SET OF 79- 79 BAR	34- 7 TO 5- 5	ST					1 0- 4-- 2	1648
S 518	141	30- 8	ST						4510
S 519	141	29- 4	ST						4314
S 520	141	28- 0	ST						4118
S 521	141	26- 8	ST						3922
S 522	141	25- 3	ST						3713
S 523	78	23-11	ST						1946
SERIES OF S 524	1-SET OF 64- 64 BAR	26- 6 TO 3- 2	ST					7 0- 4-- 16	990
SERIES OF S 525	1-SET OF 69- 69 BAR	29- 0 TO 4- 6	ST					5 0- 4-- 16	1205
S 526	2155	30- 0	ST						67430
S 527	6	36-10	ST						231
S 528	6	26- 7	ST						166
SERIES OF S 529	1-SET OF 29- 29 BAR	42- 3 TO 32- 0	ST					3 0- 4-- 8	1123
S 530	792	7- 5	52						6127
S 531	236	40- 0	ST						9846
S 532	236	35- 5	ST						8718
S 533	136	32- 0	ST						4539
S 534	112	7- 8	2	2- 5	3- 1				896
S 535	224	9- 7	2	2-10	4- 2				2239
S 536	2	9- 5	2	2- 5	4-10				20
S 537	4	10-10	2	2-10	5- 5				45
S 538	2	7- 4	2	2- 5	2- 9				15
S 539	4	8- 9	2	2-10	3- 4				37
S 540	8	3- 3	1	1- 8	1- 8				27
S 541	8	3- 9	16	1- 8	0- 7	1- 0	1- 8		31
S 542	81	14- 8	ST						1239
S 543	16	3- 2	12	2- 0	1- 3	1- 0			53
S 601	27	30- 0	ST						1217
S 602	1	13- 6	ST						20
S 603	1	30-11	ST						46
S 604	792	2- 8	1	1- 1	1- 9				3172
S 605	792	3- 7	18	1- 9	1- 1	1- 1	0- 4		4263
S 801	116	4- 9	38	2- 5	1- 6	1- 1			1471
S 802	28	26- 9	ST						2000
S 803	42	36- 3	ST						4065
S 804	42	31- 9	ST						3560
S 805	28	26- 9	62	26- 9	22- 8	4- 1			2000
				TOTAL SUPERSTRUCTURE -				327183	

MARK	No. REQD.	LENGTH	CORE DIAM.	PITCH INS.	WEIGHT LBS.
SPIRAL PIER 1 (SEE NOTE ③)					
1 SP401	1	20-0	2-6	4.5	339
1 SP402	1	19-11	2-6	4.5	338
1 SP403	1	19-10	2-6	4.5	336
1 SP404	1	19-5	2-6	4.5	330
1 SP405	1	19-0	2-6	4.5	323
1 SP406	1	18-7	2-6	4.5	316
1 SP407	1	18-1	2-6	4.5	308
1 SP408	1	17-9	2-6	4.5	303
1 SP409	1	17-3	2-6	4.5	295
TOTAL SPIRAL PIER 1 -					2888
SPIRAL PIER 2 (SEE NOTE ③)					
2 SP401	1	18-6	2-6	4.5	315
2 SP402	1	18-5	2-6	4.5	314
2 SP403	1	18-4	2-6	4.5	312
2 SP404	1	17-11	2-6	4.5	305
2 SP405	1	17-6	2-6	4.5	299
2 SP406	1	17-2	2-6	4.5	293
2 SP407	1	16-9	2-6	4.5	287
2 SP408	1	16-4	2-6	4.5	280
2 SP409	1	16-0	2-6	4.5	274
TOTAL SPIRAL PIER 2 -					2679
SPIRAL PIER 3 (SEE NOTE ③)					
3 SP401	1	18-6	2-6	4.5	315
3 SP402	1	18-5	2-6	4.5	314
3 SP403	1	18-3	2-6	4.5	311
3 SP404	1	18-0	2-6	4.5	307
3 SP405	1	17-7	2-6	4.5	300
3 SP406	1	17-3	2-6	4.5	295
3 SP407	1	16-10	2-6	4.5	288
3 SP408	1	16-6	2-6	4.5	283
3 SP409	1	16-1	2-6	4.5	276
TOTAL SPIRAL PIER 3 -					2689

NOTES

- ① ALL REINFORCING STEEL SHALL BE EPOXY-COATED. BAR DIMENSIONS SHOWN ARE FOR INFORMATION PURPOSES ONLY. IF THE REINFORCING STEEL LIST IS USED, IT SHALL BE VERIFIED BY THE CONTRACTOR. ANY REVISIONS IN THE REINFORCING STEEL LIST SHALL NOT BE A REASON FOR ADJUSTMENT OF THE BID PRICE FOR STRUCTURAL CONCRETE.
- ② REINFORCING SAMPLES
REFER TO CMS SECTIONS 106.03, 700, 709.01 THROUGH 709.05 AND 709.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURES BY THE ADDITIONAL STEEL. SPLICED IN ACCORDANCE WITH 509.08.
- ③ CONCRETE SPACERS OR OTHER APPROVED NONCORROSIVE SPACING DEVICES SHALL BE USED AT SUFFICIENT INTERVALS (NEAR THE BOTTOM AND AT INTERVALS NOT EXCEEDING 10 FEET) TO INSURE CONCENTRIC SPACING FOR THE ENTIRE CAGE LENGTH. SPACERS SHALL BE CONSTRUCTED OF APPROVED MATERIAL EQUAL IN QUALITY AND DURABILITY TO THE CONCRETE SPECIFIED FOR THE SHAFT. THE SPACERS SHALL HAVE ADEQUATE DIMENSIONS TO ENSURE A MINIMUM 3 INCH CLEAR SPACE BETWEEN THE OUTSIDE OF THE REINFORCING CAGE AND THE DESIGN DIMENSION OF THE DRILLED SHAFT OR COLUMN. CYLINDRICAL CONCRETE FEET (BOTTOM SUPPORTS) SHALL BE PROVIDED TO ENSURE THAT THE CAGE IS MAINTAINED AT THE BOTTOM OF THE CAGE IS MAINTAINED AT THE PROPER DISTANCE ABOVE THE BASE.
- ④ MECHANICAL CONNECTORS:
AN APPROVED TYPE OF MECHANICAL CONNECTOR FOR REINFORCING STEEL BARS SHALL BE PROVIDED. INSTALLATION OF CONNECTORS SHALL CONFORM WITH MANUFACTURE'S RECOMMENDED PROCEDURES. IF A DOWEL BAR SPLICE TYPE OF CONNECTOR IS FURNISHED, THE MINIMUM DOWEL BAR LENGTH TO BE FURNISHED WITH THE CONNECTOR SHALL BE GIVEN ON THE PLANS.
CONNECTORS AND DOWEL BARS USED WITH EPOXY COATED BARS SHALL BE EPOXY COATED. COATING FOR BOTH CONNECTORS AND BARS SHALL CONFORM TO THE SAME SPECIFICATIONS. COATINGS WHICH HAVE BEEN DAMAGED OR WHICH OTHERWISE DO NOT MEET SPECIFICATIONS WITH RESPECT TO COLOR, CONTINUITY, AND UNIFORMITY MAY BE REPAIRED AS DIRECTED BY THE ENGINEER OR THEY SHALL BE REPLACED WITH MATERIAL WHICH MEETS THE SPECIFICATIONS.
CONNECTORS AND DOWEL BARS SHALL BE INCLUDED IN THE BID PRICE OF ITEM 842 AND 844.



SOUTHBOUND REINFORCING SCHEDULE

MARK	No. REQD.	LGTH.	TYPE	DIMENSIONS				INCRM.	WEIGHT LBS.
				A	B	C	D		
REAR ABUTMENT									
3 A 501	138	16- 7	14	2- 6	5- 6				2387
3 A 502	15	13- 1	2	5- 4	2- 8				205
3 A 503	36	13-11	2	5- 9	2- 8				523
3 A 504	15	7- 3	2	2- 5	2- 8				113
3 A 505	36	7-11	2	2- 9	2- 8				297
3 A 506	8	35- 4	ST						295
3 A 507	3	7- 4	16	2- 0	3- 6	1- 3	2- 0		23
3 A 508	3	2- 0	ST						6
3 A 509	12	16- 5	2	7- 9	1- 2				205
3 A 510	12	10- 3	2	4- 8	1- 2				128
3 A 511	18	5-11	2	2- 6	1- 2				111
3 A 512	1	6- 9	2	2-11	1- 2				7
3 A 513	1	7-11	2	3- 6	1- 2				8
3 A 514	1	9- 1	2	4- 1	1- 2				9
3 A 515	6	23- 6	ST						147
3 A 516	2	19- 5	ST						41
3 A 517	2	16- 2	ST						34
3 A 518	4	15- 5	ST						64
3 A 519	2	9- 0	12	7- 0	2- 0	0-10			19
3 A 520	55	12- 9	2	5- 2	2- 8				731
3 A 521	55	7- 1	2	2- 4	2- 8				406
3 A 522	3	3-11	12	2- 0	2- 0	1- 3			12
3 A 523	8	34- 6	ST						288
3 A 524	2	13- 3	2	4- 0	5- 6				28
3 A 525	4	8- 8	12	3- 9	5- 0	3- 6			36
3 A 526	4	13- 3	2	4- 0	5- 6				55
3 A 527	12	17- 7	2	8- 4	1- 2				220
3 A 528	12	10-11	2	5- 0	1- 2				137
3 A 529	1	6- 9	2	2-11	1- 2				7
3 A 530	1	8- 3	2	3- 8	1- 2				9
3 A 531	1	9- 9	2	4- 5	1- 2				10
3 A 532	6	24-11	ST						156
3 A 533	2	20- 2	ST						42
3 A 534	2	17- 7	ST						37
3 A 535	4	16-11	ST						71
3 A 536	2	9- 0	12	7- 0	2- 0	1- 0			19
3 A 801	10	38- 6	ST						1028
3 A 802	8	36- 9	ST						785
3 A 803	10	18- 8	ST						498
3 A 804	10	17- 4	ST						463
3 A 805	10	42- 6	62	42- 6	38- 6	4- 0			1135
3 A 806	20	36- 8	ST						1958
3 A 807	8	36- 0	ST						769

MARK	No. REQD.	LGTH.	TYPE	DIMENSIONS				INCRM.	WEIGHT LBS.
				A	B	C	D		
FORWARD ABUTMENT									
4 A 501	120	17- 1	14	5- 8	2- 7				2138
4 A 502	57	12- 3	2	4-11	2- 8				728
4 A 503	19	16- 5	14	2- 3	5- 8				325
4 A 504	14	16- 9	2	7-11	1- 2				245
4 A 505	7	9-11	2	3- 9	2- 8				72
4 A 506	10	9- 9	2	3- 8	2- 8				102
4 A 507	5	9- 3	2	3- 5	2- 8				48
4 A 508	5	8-11	2	3- 3	2- 8				47
4 A 509	5	8- 5	2	3- 0	2- 8				44
4 A 510	5	8- 1	2	2-10	2- 8				42
4 A 511	10	7- 9	2	2- 8	2- 8				81
4 A 512	5	7- 3	2	2- 5	2- 8				38
4 A 513	5	6-11	2	2- 3	2- 8				36
4 A 514	3	4- 5	12	2- 3	2- 3	1- 5			14
4 A 515	4	40- 0	ST						167
4 A 516	2	32-11	ST						69
4 A 517	2	35- 1	ST						73
4 A 518	8	13- 6	ST						113
4 A 519	2	9- 6	12	7- 3	2- 3	0- 8			20
4 A 520	6	21- 4	ST						134
4 A 521	18	5-11	2	2- 6	1- 2	1- 2			111
SERIES OF	1-SET OF 3-	6- 5 TO	2	2- 9 TO	1- 2 TO			0-10	23
4 A 522	3 BAR	8- 1		3- 7	1- 2				
4 A 523	14	9- 7	2	4- 4	1- 2				140
4 A 524	4	12-11	2	3- 9	5- 8				54
4 A 525	1	12- 1	2	3- 4	5- 8				13
4 A 526	1	17- 6	2	6- 1	5- 7				18
4 A 527	61	12- 7	2	5- 1	2- 8				801
4 A 528	2	10- 4	2	4- 0	2- 7				22
4 A 529	1	8- 4	2	1- 6	5- 7				9
4 A 530	10	27-10	ST						290
4 A 431	2	26- 0	ST						35
4 A 532	3	5- 5	16	2- 3	1- 1	1- 5	2- 3		17
4 A 533	24	7- 1	2	2- 4	2- 8				177
4 A 534	37	7- 7	2	2- 7	2- 8				293
4 A 535	7	9- 0	2	3- 6	2- 3				66
4 A 536	13	17- 7	2	8- 4	1- 2				238
4 A 537	8	13- 7	ST						113
4 A 538	2	10- 0	12	7- 9	2- 3	0- 9			21
4 A 539	2	16- 5	ST						34
4 A 540	6	21- 7	ST						135
SERIES OF	1-SET OF 3-	6- 7 TO	2	2-10 TO	1- 2 TO			0-11	23
4 A 541	3 BAR	8- 5		3- 9	1- 2				
4 A 542	13	10- 1	2	4- 7	1- 2				137
4 A 801	10	9- 3	62	9- 3	4- 0	5- 3			247
4 A 802	24	40- 0	ST						2563
4 A 803	3	7-11	12	4- 0	4- 0	2- 6			63
4 A 804	10	14- 1	ST						376
4 A 805	4	38- 0	ST						406
4 A 806	4	10- 3	12	5- 3	5- 1	3- 7			109
4 A 807	28	30- 0	ST						2243
4 A 808	10	31- 2	ST						832
4 A 809	3	11- 2	16	4- 0	3- 6	2- 6	4- 0		89
4 A 810	4	29- 4	ST						313
4 A 811	5	16-10	ST						225
4 A 812	5	9- 3	ST						123
TOTAL				ABUTMENT				4 -	14895

MARK	No. REQD.	LGTH.	TYPE	DIMENSIONS				INCRM.	WEIGHT LBS.
				A	B	C	D		
PIER 1									
1 P 401	20	30- 3	ST						404
1 P 402	20	26-10	ST						358
1 P 501	156	7- 7	2	2- 7	2- 8				1234
1 P 502	28	8- 5	9	3- 6	2- 6				246
1 P 503	132	6- 9	2	2- 7	1-10				929
1 P 601	8	28- 9	ST						345
1 P 602	4	20- 1	ST						121
1 P 603	4	37- 4	ST						224
1 P 604	6	5- 1	1	2- 6	2- 9				46
1 P 605	3	8-10	2	2- 6	4- 2				40
1 P 606	6	5- 2	1	2- 6	2-10				47
1 P 607	3	8-11	2	2- 6	4- 3				40
1 P 801	8	40- 0	ST						854
1 P 802	8	32-10	ST						701
1 P 803	8	28- 8	ST						612
1 P 901	8	32-10	ST						893
1 P1001	45	20- 7	ST						3986
1 P1002	18	19- 9	ST						1530
1 P1003	6	5- 0	1	2- 6	2-10				129
1 P1004	6	4-11	1	2- 6	2- 9				127
1 P1005	18	18-11	ST						1465
TOTAL				PIER 1 -				14331	
PIER 2									
2 P 401	20	32- 4	ST						432
2 P 402	20	26-10	ST						358
2 P 501	164	8- 7	2	2-10	3- 2				1468
2 P 502	28	9- 3	9	3- 9	3- 0				270
2 P 503	108	7- 7	2	2-10	2- 2				854
2 P 601	7	33- 6	ST						352
2 P 602	8	29- 1	ST						349
2 P 603	4	20- 5	ST						123
2 P 604	4	37- 9	ST						227
2 P 605	6	5- 0	1	2- 5	2- 9				45
2 P 606	3	9- 5	2	2- 5	4-11				42
2 P 607	6	5- 1	1	2- 5	2-10				46
2 P 608	3	9- 7	2	2- 5	5- 1				43
2 P 701	8	34- 7	ST						566
2 P 801	7	40- 0	ST						748
2 P 802	8	34- 7	ST						739
2 P1001	45	19- 2	ST						3711
2 P1002	18	18- 4	ST						1420
2 P1003	6	4-10	1	2- 5	2- 9				125
2 P1004	6	4-11	1	2- 5	2-10				127
2 P1005	18	17- 5	ST						1349
TOTAL				PIER 2 -				13394	

NOTES

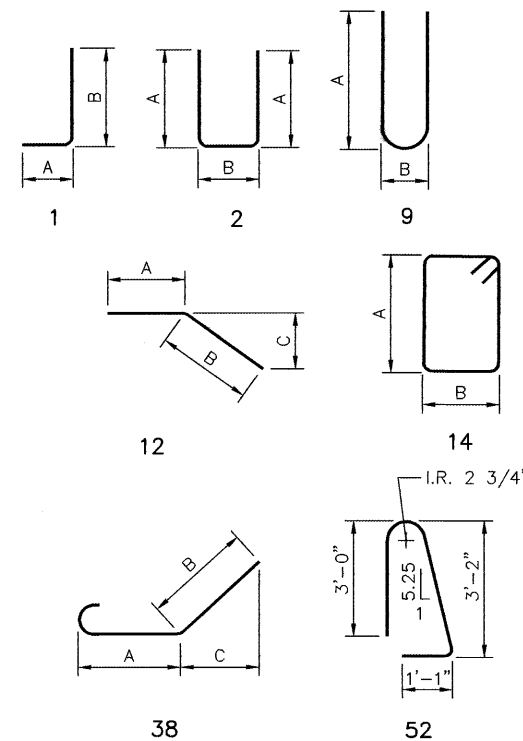
① FOR NOTES SEE SHEET 46 OF 46.

SOUTHBOUND REINFORCING SCHEDULE

MARK	No. REQD.	LGTH.	TYPE	DIMENSIONS				INCRM.	WEIGHT LBS.
				A	B	C	D		
PIER 3									
3 P 401	20	34- 5	ST						460
3 P 402	20	26-10	ST						358
3 P 501	202	7- 7	2	2- 7	2- 8				1598
3 P 502	28	8- 5	9	3- 6	2- 6				246
3 P 601	5	40- 0	ST						300
3 P 602	10	36- 5	ST						547
3 P 603	5	33- 3	ST						250
3 P 604	8	28- 9	ST						345
3 P 605	4	20- 2	ST						121
3 P 606	4	37- 4	ST						224
3 P 607	6	5- 1	1	2- 6	2- 9				46
3 P 608	3	8-10	2	2- 6	4- 2				40
3 P 609	6	5- 2	1	2- 6	2-10				47
3 P 610	3	8-11	2	2- 6	4- 3				40
3 P1001	45	19- 2	ST						3711
3 P1002	18	18- 6	ST						1433
3 P1003	6	4-11	1	2- 6	2- 9				127
3 P1004	6	5- 0	1	2- 6	2-10				129
3 P1005	18	17- 7	ST						1362

MARK	No. REQD.	LGTH.	TYPE	DIMENSIONS				INCRM.	WEIGHT LBS.
				A	B	C	D		
SUPERSTRUCTURE									
SERIES OF S 519	1-SET OF 52- 52 BAR	22- 7 TO 4- 2	ST					5 0- 4-- 16	725
S 520	106	30- 8	ST						3390
S 521	106	29- 8	ST						3280
S 522	106	28- 8	ST						3169
S 523	106	27- 8	ST						3059
S 524	112	26- 8	ST						3115
S 525	106	25- 7	ST						2828
S 526	106	24- 7	ST						2718
S 527	50	23- 7	ST						1230
SERIES OF S 528	1-SET OF 54- 54 BAR	23- 3 TO 3- 7	ST					7 0- 4-- 16	756
S 529	2155	30- 0	ST						67430
S 530	236	35- 5	ST						8718
S 531	236	40- 0	ST						9846
S 532	136	32- 0	ST						4539
S 533	6	36-10	ST						231
S 534	792	7- 5	52						6127
SERIES OF S 535	1-SET OF 29- 29 BAR	42- 3 TO 42- 3	ST					0- 0	1278
SERIES OF S 536	1-SET OF 67- 67 BAR	29- 0 TO 29- 0	ST					0- 0	2027
SERIES OF S 537	1-SET OF 55- 55 BAR	23- 8 TO 23- 8	ST					0- 0	1358
S 538	112	8- 1	2	2- 5	3- 6				944
S 539	224	9- 8	2	2-10	4- 3				2258
S 540	2	9- 5	2	2- 5	4-10				20
S 541	4	10-10	2	2-10	5- 5				45
S 542	2	7- 4	2	2- 5	2- 9				15
S 543	4	8- 9	2	2-10	3- 4				37
S 544	8	3- 3	1	1- 8	1- 8				27
S 545	8	3- 9	16	1- 8	0- 7	1- 0	1- 8		31
S 546	81	14- 8	ST						1239
S 547	16	3- 2	12	2- 0	1- 3	1- 0			53
S 601	27	30- 0	ST						1217
S 602	1	31- 0	ST						47
S 603	1	13- 6	ST						20
S 604	792	2- 8	1	1- 1	1- 9				3172
S 605	792	3- 7	18	1- 9	1- 1	1- 1	0- 4		4263
S 801	110	4- 9	38	2- 5	1- 6	1- 1			1395
S 802	14	35- 9	ST						1336
S 803	14	35- 9	62	35- 9	31- 6	4- 3			1336
S 804	28	36- 9	ST						2747
S 805	14	35- 8	ST						1333
S 806	14	35- 8	62	35- 8	31- 7	4- 1			1333
S 807	28	35- 0	ST						2617
S 808	14	20-10	ST						779
TOTAL SUPERSTRUCTURE -									328282

MARK	No. REQD.	LENGTH	CORE DIAM.	PITCH INS.	WEIGHT LBS.
SPIRAL PIER 1 (SEE NOTE ③)					
1 SP401	1	18-4	2-6	4.5	312
1 SP402	1	18-3	2-6	4.5	311
1 SP403	1	18-2	2-6	4.5	310
1 SP404	1	18-1	2-6	4.5	308
1 SP405	1	18-0	2-6	4.5	307
1 SP406	1	17-6	2-6	4.5	299
1 SP407	1	17-1	2-6	4.5	292
1 SP408	1	16-8	2-6	4.5	285
1 SP409	1	16-2	2-6	4.5	277
TOTAL SPIRAL PIER 1 -					2701
SPIRAL PIER 2 (SEE NOTE ③)					
2 SP401	1	16-10	2-6	4.5	288
2 SP402	1	16-9	2-6	4.5	287
2 SP403	1	16-8	2-6	4.5	285
2 SP404	1	16-7	2-6	4.5	284
2 SP405	1	16-6	2-6	4.5	283
2 SP406	1	16-0	2-6	4.5	274
2 SP407	1	15-7	2-6	4.5	268
2 SP408	1	15-1	2-6	4.5	260
2 SP409	1	14-8	2-6	4.5	253
TOTAL SPIRAL PIER 2 -					2482
SPIRAL PIER 3 (SEE NOTE ③)					
3 SP401	1	16-10	2-6	4.5	288
3 SP402	1	16-9	2-6	4.5	287
3 SP403	1	16-8	2-6	4.5	285
3 SP404	1	16-7	2-6	4.5	284
3 SP405	1	16-5	2-6	4.5	281
3 SP406	1	16-2	2-6	4.5	277
3 SP407	1	15-8	2-6	4.5	269
3 SP408	1	15-3	2-6	4.5	262
3 SP409	1	14-9	2-6	4.5	254
TOTAL SPIRAL PIER 3 -					2487



NOTES

① ALL REINFORCING STEEL SHALL BE EPOXY-COATED. BAR DIMENSIONS SHOWN ARE FOR INFORMATION PURPOSES ONLY. IF THE REINFORCING STEEL LIST IS USED, IT SHALL BE VERIFIED BY THE CONTRACTOR. ANY REVISIONS IN THE REINFORCING STEEL LIST SHALL NOT BE A REASON FOR ADJUSTMENT OF THE BID PRICE FOR STRUCTURAL CONCRETE.

② REINFORCING SAMPLES

REFER TO CMS SECTIONS 106.03, 700, 709.01 THROUGH 709.05 AND 709.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURES BY THE ADDITIONAL STEEL. SPLICED IN ACCORDANCE WITH 509.08.

③ CONCRETE SPACERS OR OTHER APPROVED NONCORROSIVE SPACING DEVICES SHALL BE USED AT SUFFICIENT INTERVALS (NEAR THE BOTTOM AND AT INTERVALS NOT EXCEEDING 10 FEET) TO INSURE CONCENTRIC SPACING FOR THE ENTIRE CAGE LENGTH. SPACERS SHALL BE CONSTRUCTED OF APPROVED MATERIAL EQUAL IN QUALITY AND DURABILITY TO THE CONCRETE SPECIFIED FOR THE SHAFT. THE SPACERS SHALL HAVE ADEQUATE DIMENSIONS TO ENSURE A MINIMUM 3 INCH CLEAR SPACE BETWEEN THE OUTSIDE OF THE REINFORCING CAGE AND THE DESIGN DIMENSION OF THE DRILLED SHAFT OR COLUMN. CYLINDRICAL CONCRETE FEET (BOTTOM SUPPORTS) SHALL BE PROVIDED TO ENSURE THAT THE CAGE IS MAINTAINED AT THE BOTTOM OF THE CAGE IS MAINTAINED AT THE PROPER DISTANCE ABOVE THE BASE.

③ MECHANICAL CONNECTORS:

AN APPROVED TYPE OF MECHANICAL CONNECTOR FOR REINFORCING STEEL BARS SHALL BE PROVIDED. INSTALLATION OF CONNECTORS SHALL CONFORM WITH MANUFACTURE'S RECOMMENDED PROCEDURES. IF A DOWEL BAR SPLICE TYPE OF CONNECTOR IS FURNISHED, THE MINIMUM DOWEL BAR LENGTH TO BE FURNISHED WITH THE CONNECTOR SHALL BE GIVEN ON THE PLANS.

CONNECTORS AND DOWEL BARS USED WITH EPOXY COATED BARS SHALL BE EPOXY COATED. COATING FOR BOTH CONNECTORS AND BARS SHALL CONFORM TO THE SAME SPECIFICATIONS. COATINGS WHICH HAVE BEEN DAMAGED OR WHICH OTHERWISE DO NOT MEET SPECIFICATIONS WITH RESPECT TO COLOR, CONTINUITY, AND UNIFORMITY MAY BE REPAIRED AS DIRECTED BY THE ENGINEER OR THEY SHALL BE REPLACED WITH MATERIAL WHICH MEETS THE SPECIFICATIONS.

CONNECTORS AND DOWEL BARS SHALL BE INCLUDED IN THE BID PRICE OF ITEM 842 AND 844.

