

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
MED - 71 - 15.78

City of Brunswick
Medina, Granger, Brunswick Hills
And Montville Townships
Medina County

PROJECT DESCRIPTION

Reconstruction of 10.6 miles of IR 71 existing lanes and shoulders including construction of widened inside shoulders from Begin Project to SR 303 and additional lanes from SR 303 to End Project. Also reconstruction of the connection lanes between IR 71 and IR 271. The work shall consist of but is not limited to new pavement and shoulders, new underdrains, rehabilitation or replacement of existing drainage, new guardrail, upgrading of signing, replacement of fencing, lighting at the IR 271, SR 3 and SR 303 interchanges, noise walls, replacement of Rest Area parking Areas, pavement markings and rehabilitation or replacement of structures.

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 REVISED CODE OF OHIO.

1997 SPECIFICATIONS

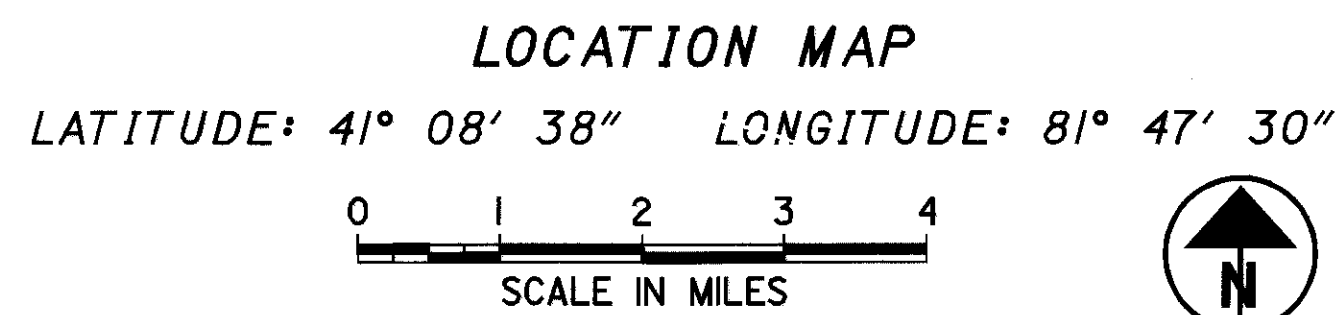
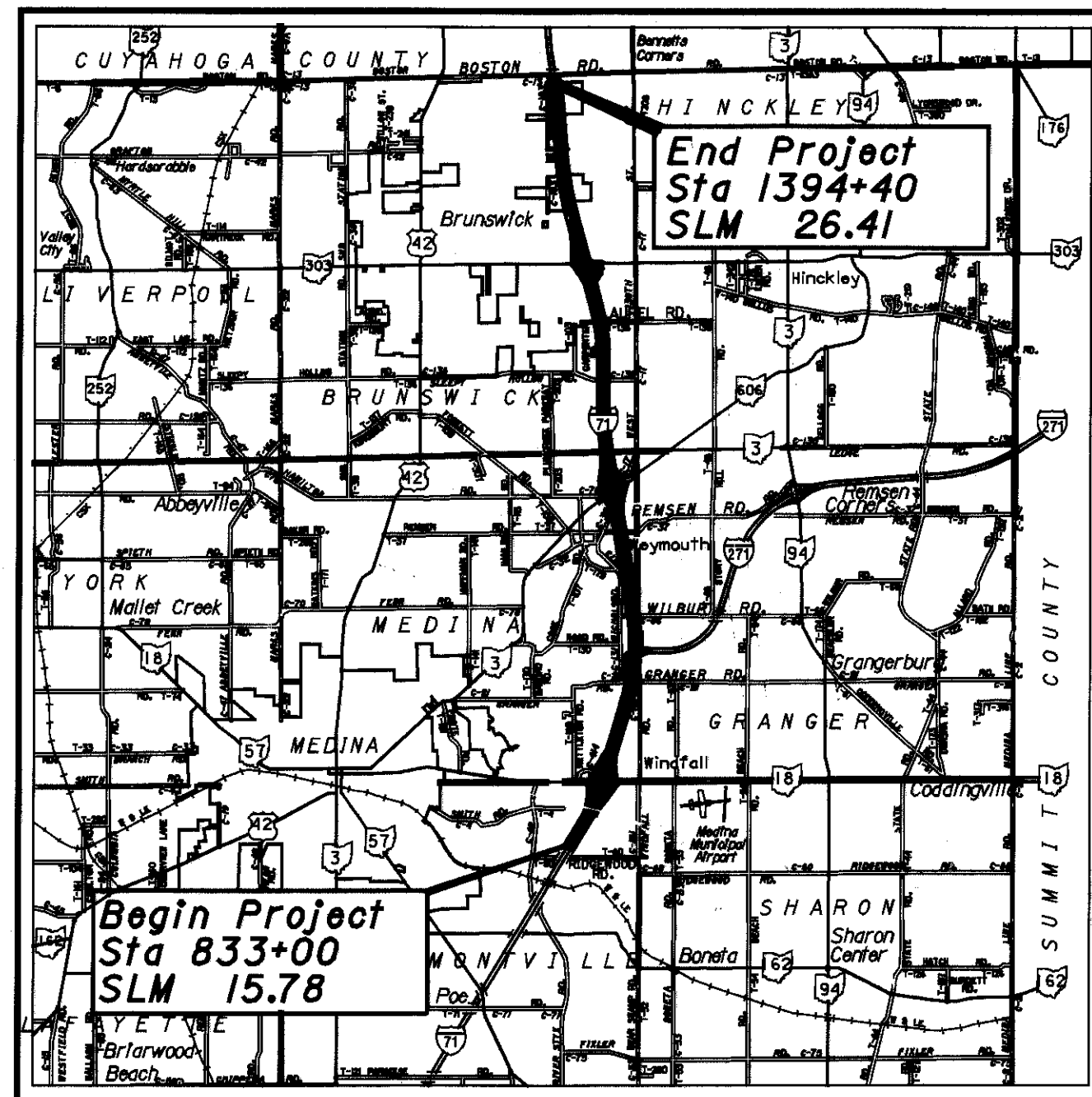
The Standard Specifications of the State of Ohio, Department of Transportation, including changes and supplemental specifications listed in the proposal shall govern this improvement.

I hereby approve the plans and declare that the making of this improvement will not require the closing to traffic of the highway and provisions for the maintenance and safety of the traffic will be as set forth on the plans and estimate.

"Under authority of Section 4511.21, Division (1) of the Revised Code of Ohio, 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 giving notice thereof are erected."

APPROVED *James D. Mawhoun*
DATE 12-17-99 DISTRICT DEPUTY DIRECTOR

APPROVED *Jordan Porter*
DATE 2-18-00 DIRECTOR, DEPARTMENT OF TRANSPORTATION



DESIGN DESIGNATION

CURRENT ADT (2000) 56,530
DESIGN YEAR ADT (2020) 72,470
DESIGN HOURLY VOLUME (2020) 7,247
DIRECTIONAL DISTRIBUTION 55 %
TRUCKS (24 HOUR B&C) 22 %
DESIGN SPEED 70 MPH
LEGAL SPEEDS 55 MPH and 65 MPH

DESIGN FUNCTIONAL CLASSIFICATION -
Interstate Rural/Urban

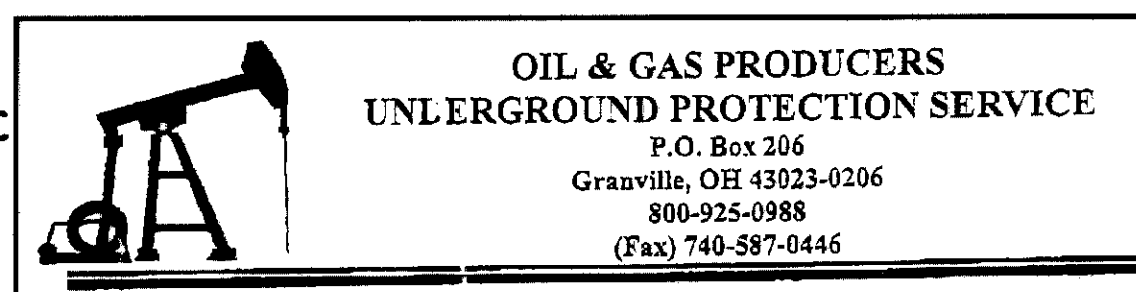
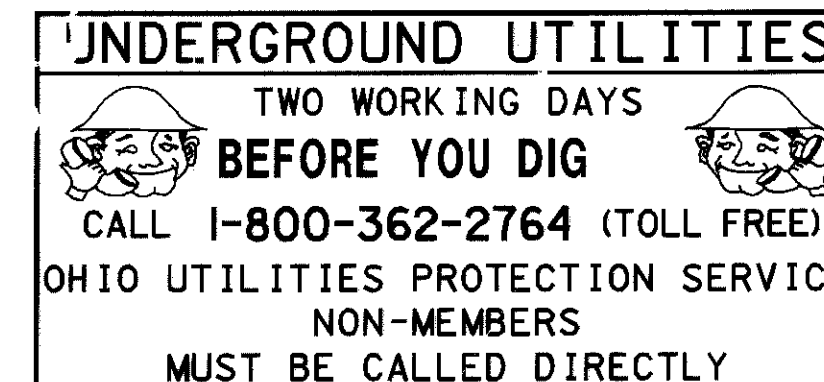
DESIGN EXCEPTIONS

IR 71 - NONE REQUIRED

PLAN PREPARED BY: GRANGER RD APPRV DATE SHT
District One SSD 12/14/99 408,409
Ohio Department of Transportation
SHOULDER WIDTH 12/14/99 402

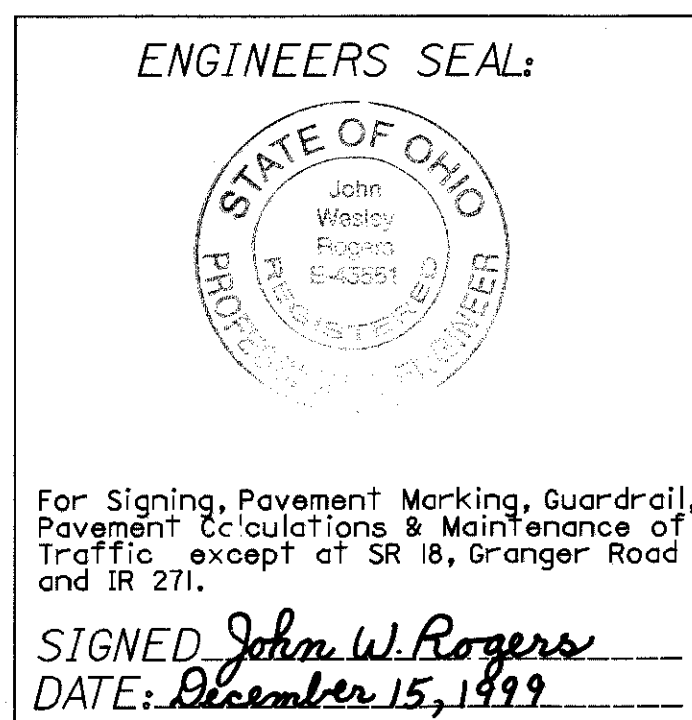
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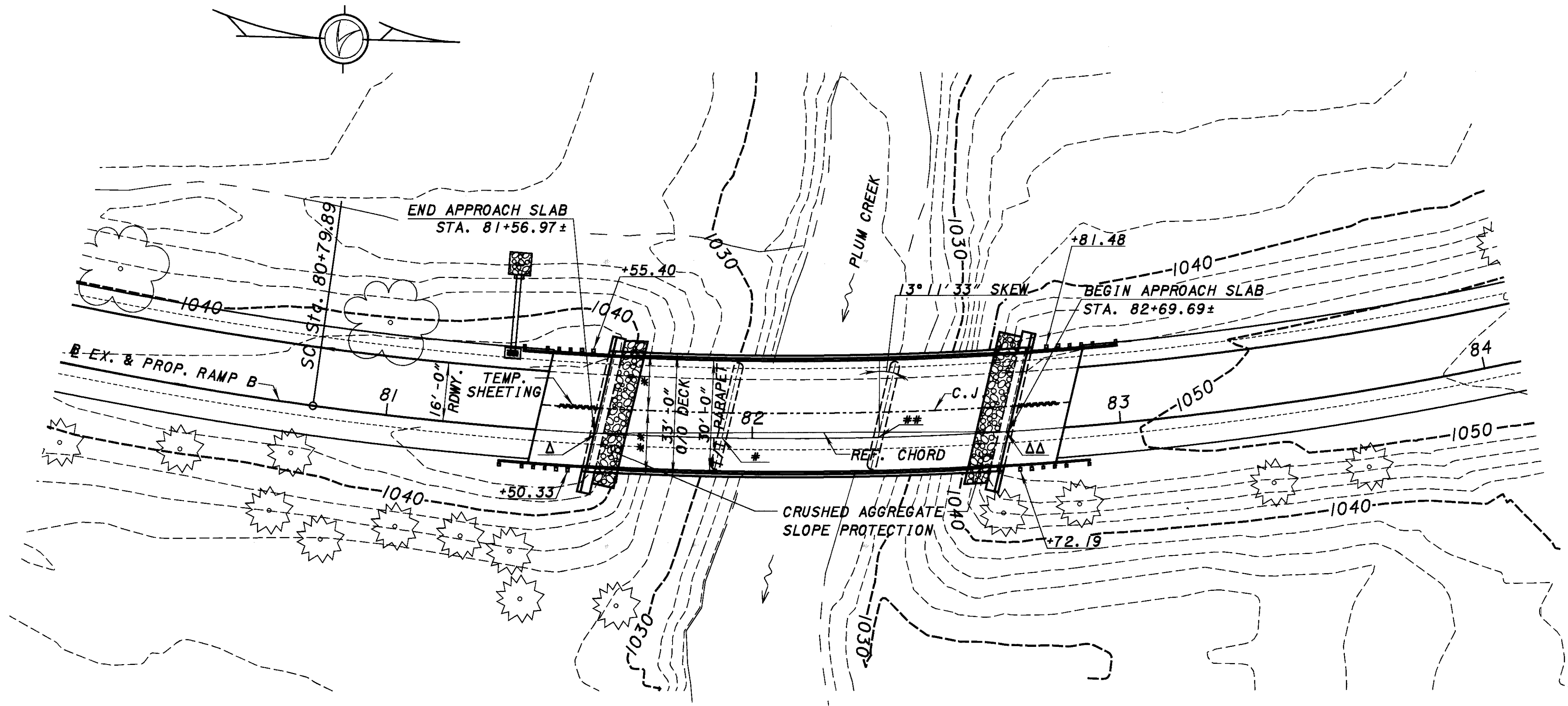
STANDARD CONSTRUCTION DRAWINGS

BP-1.1M	10-28-94	GR-1.1M	10-21-97	CB-1.2M	7-12-95	AS-1-81	09-15-94	TC-22.10M	03-13-97	TC-61.10M	03-31-94	HL-20.22M	03-31-95	MT-95.40M	04-25-94	806	09-09-97	Waterway Permit
BP-2.1M	04-08-97	GR-1.2M	1-3-96	CB-2.1M	7-12-95	GR-3.5M	10-21-97	TC-22.20M	02-01-94	TC-65.10M	11-01-95	HL-20.23M	03-31-95	MT-97.10M	04-25-94	814	06-02-98	NWP# DATE:
BP-2.2M	10-21-97	GR-1.3M	11-30-94	CB-2.2M	7-12-95	BR-1M	01-06-99	TC-31.21M	03-31-94	TC-65.11M	11-01-95			MT-98.12M	06-24-93	815	05-30-96	3 & 14 01-28-98
BP-2.3	04-29-99	GR-2.1M	04-14-98	CB-3.1M	7-12-95	BS-1-93	12-19-94	TC-32.10M	03-31-94	TC-65.12M	11-01-95	HL-30.11M	03-31-95	MT-98.13M	06-24-93	816	04-21-97	
BP-2.4M	10-28-94	GR-3.1M	10-21-97	CB-3.2M	7-12-95	CS-1-93	06-30-95	TC-32.11M	03-31-94	TC-71.10M	09-01-93	HL-30.21M	05-01-95	MT-98.14M	06-24-93	825	9-14-99	
BP-2.5M	04-08-97	GR-3.2M	10-21-97	CB-3.4M	7-12-95	EXJ-4-87M	02-18-97	MT-102.10M	01-30-95	TC-72.20M	09-01-93	HL-30.22M	03-31-95	MT-98.15M	06-24-93	842	01-06-99	
BP3.1M	10-28-94	GR-4.1M	11-30-94	HW-2.1M	07-12-95	VPF-1-90M	03-20-95	TC-41.10M	03-31-94	TC-82.10M	11-24-93	HL-30.31M	05-01-95	MT-98.16M	06-24-93	844	01-06-99	
BP-4.1M	10-28-94	GR-4.2M	10-21-97	HW-2.2M	07-12-95	GSD-1-96	02-12-97	TC-41.20M	07-01-94	TC-83.10M	11-24-93	GR-4.3M	10-27-97	MT-98.17M	04-25-94	855	6-30-98	SUPPLEMENTAL SPECIFICATIONS
BP-5.1M	10-28-94	GR-6.1M	1-3-96	I-2.2M	09-06-95	PCB-1-91	07-06-99	TC-41.50M	07-01-94	RM-4.5M	10-21-97	HL-40.10M	03-31-95	MT-98.18M	04-25-94	863	10-12-99	
BP-9.1	04-29-99	GR-6.2M	1-3-96	MH-1.1M	10-21-97	SBR-1-99	01-12-99	TC-42.10M	03-31-94	HL-10.11M	05-01-95	HL-50.11M	03-31-95	MT-99.20M	01-30-95	870	08-10-99	
BP-9.2	04-29-99	RM-1.1	04-29-99	MH-1.2M	09-06-95	HW-1.1M	07-12-95	TC-42.20M	03-31-94	HL-10.12M	05-01-95	HL-50.21M	08-31-94	MT-101.60M	04-25-94	899	10-21-98	910 07-28-98
F-1.1M	4-8-97	RM-4.1M	10-21-97	MH-3.1M	09-06-95	TC-7.65M	02-01-94	TC-82.11M	01-19-99	HL-10.13M	05-01-95	HL-60.11M	05-01-95	MT102.20M	01-30-95	880	06-15-99	911 07-10-97
F-2.1M	4-8-97	RM-4.2M	10-21-97	DM-1.1M	10-21-97	TC-12.30M	02-01-94	TC-51.11M	09-30-94	HL-10.31M	03-31-95	HL-60.21M	03-31-95	MT-105.10M	04-25-94	904	05-05-98	954 09-09-97
F-3.1M	4-21-95	RM-4.3M	10-21-97	DM-4.2M	6-30-95	TC-18.26M	02-01-94	TC-51.12M	03-31-94	HL-20.11M	03-31-95	HL-60.31M	03-31-95	MT-105.11M	04-25-94	905	04-01-98	877 4-13-99
F-3.3M	4-21-95	RM-4.4M	10-21-97	DM-4.3	04-29-99	TC-21.10M	12-10-96	TC-52.10M	07-29-94	HL-20.15M	03-31-95	MT-95.31M	04-25-94	MT-95.32M	04-25-94	906	05-05-98	925 9-14-99
F-3.4M	4-8-97	CB-1.1M	7-12-95	DM-4.4	04-29-99	TC-21.20M	12-10-96	TC-52.20M	07-29-94	HL-20.21M	08-31-94	MT-95.30M	04-25-94			887	08-10-99	



For additional Seal Blocks, See Sheet 2 of 940.

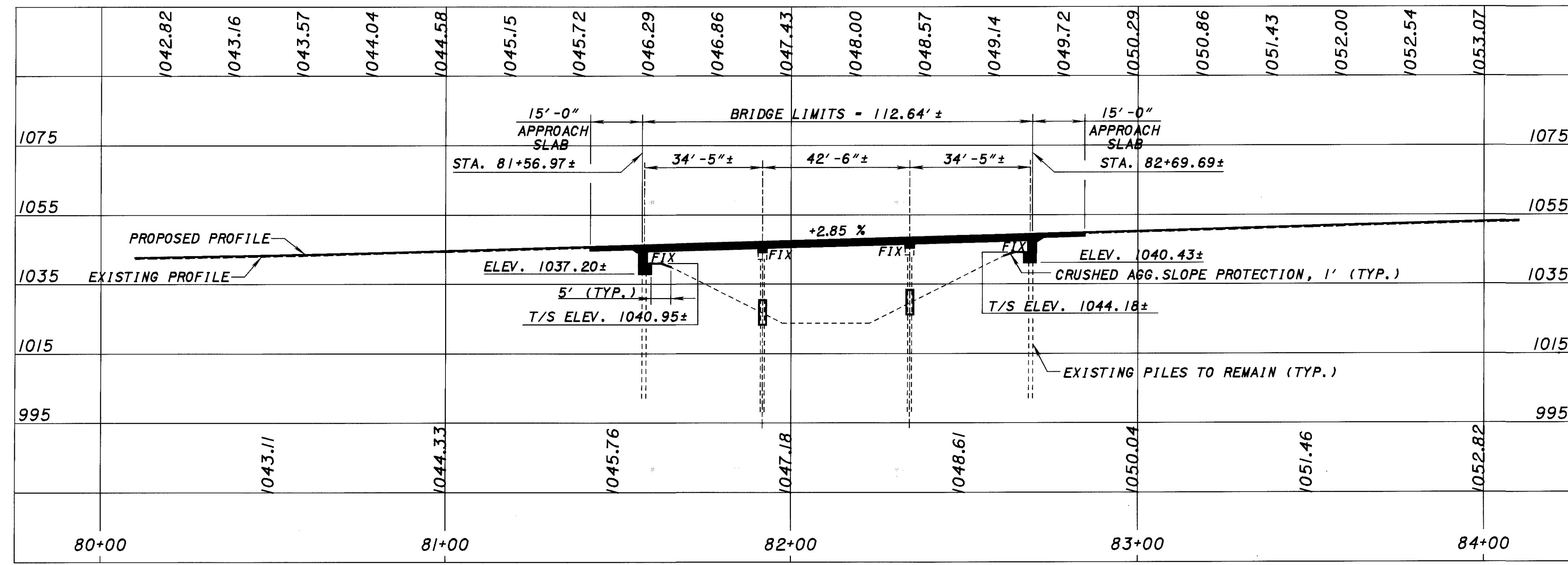
FEDERAL PROJECT NO. TE21-6000(267)
PID NO. 7885
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
MED - 71 - 15.78
940



- LEGEND**
- * 15'-8"; STAGE I CONSTRUCTION
 - ** 17'-4"; STAGE II CONSTRUCTION
 - Δ C BRG. REAR ABUTMENT; STA. 81+57.61
 - ΔΔ C BRG. FWD. ABUTMENT; STA. 82+69.03
 - * C BRG. PIER 1; STA. 81+91.73
 - ** C BRG. PIER 2; STA. 82+34.25

CURVE DATA

P.I. Sta = 82+14.54
Δ = 27° 59' 10" (LT)
Dc = 6° 00' 00"
R = 954.93'
Δc = 21° 59' 10" (LT)
Lc = 366.44'
Es = 30.11'



BENCHMARK DATA

BM#1 - STATION 1110+35.99 IR-71 ELEVATION = 1069.77
ODOT DISC IN HEADWALL, STAMPED

TRAFFIC DATA

CURRENT YEAR ADT (2000) = 890
DESIGN YEAR ADT (2020) = 1290
DESIGN YEAR ADTT (2020) = 90

NOTES:

1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS-SECTIONS.
2. REFERENCE CHORD IS MEASURED FROM THE INTERSECTION OF THE BASELINE OF THE RAMP AND THE FACE OF THE ABUTMENTS. SPAN LENGTHS ARE MEASURED ALONG REFERENCE CHORD.

EXISTING STRUCTURE

TYPE: CONTINUOUS SLAB BRIDGE WITH CAPPED PILE PIERS AND ABUTMENTS

SPANS: 34'-0"; 42'-6"; 34'-0"

ROADWAY: 28'-0" FACE TO FACE OF PARAPETS

LOADING: CF-400(57)

SKEW: 12°-59'-36" (L.F.) TO LOCAL TANGENT

WEARING SURFACE: ASPHALT CONCRETE

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

ALIGNMENT: 6°-00' CURVE LEFT

SUPERELEVATION: 3/4" PER FOOT

DATE BUILT: 1964

SFN: 5203902

PROPOSED STRUCTURE

PROPOSED WORK: NEW SUPERSTRUCTURE ON NEW ABUTMENTS AND EXISTING PIERS

TYPE: CONTINUOUS SLAB BRIDGE WITH REINFORCED CONCRETE SUBSTRUCTURES

SPANS: 34'-5", 42'-6"±, 34'-5" C/C BRGS. (ALONG REFERENCE CHORD)

ROADWAY: 30'-0" T/T PARAPET

LOADING: HS20-44 AND ALTERNATE MILITARY LOADING

SKEW: 13°-11'-33"± L.F. TO LOCAL TANGENT

WEARING SURFACE: 1" MONOLITHIC CONCRETE

APPROACH SLABS: AS-1-81, 15' LONG; 30'-0" T/T CURB

ALIGNMENT: 6°-00'± CURVE LEFT

SUPERELEVATION: 3/4" PER FOOT

LONGITUDE: 81°47'25" LATITUDE 41°11'45"

DESIGN AGENCY
ODOT CENTRAL OFFICE
OFFICE OF PRODUCTION

DATE
9-7-99
DFT
STRUCTURE FILE NUMBER
5203902

DRAWN
TKB
REVIEWED
TKB
CHECKED
RJH

MEDINA COUNTY
STA. 81+56.97
STA. 82+69.69

SITE PLAN
MED-71-2088 E
RAMP "B" OVER PLUM CREEK

MED-71-15.78

1/16
821
940

ESTIMATED QUANTITIES								
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.
202	11203	LUMP		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	LUMP		LUMP	
503	11100	LUMP		COFFERDAMS, CRIBS AND SHEETING				LUMP
503	21301	LUMP		UNCLASSIFIED EXCAVATION, AS PER PLAN	LUMP			
SPECIAL	50771200	252	LIN FT	PILE ENCASEMENT		252		
512	44400	4	SY	TYPE B WATERPROOFING	4			
SPECIAL	51267510	390	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	50	60*	280	
516	13600	11	SF	1" PREFORMED EXPANSION JOINT FILLER	11			
516	13900	8	SF	2" PREFORMED EXPANSION JOINT FILLER	8			
518	21231	LUMP		POROUS BACKFILL WITH FILTER FABRIC, AS PER PLAN	LUMP			
518	40000	93	LF	6" PERFORATED CORRUGATED PLASTIC PIPE	93			
518	40010	54	LF	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	54			
601	20500	17	CY	CRUSHED AGGREGATE SLOPE PROTECTION	17			
842	42501	6	CY	CLASS C CONCRETE, PIER CAP, AS PER PLAN		6		
842	43501	66	CY	CLASS C CONCRETE, ABUTMENT INCLUDING FOOTING, AS PER PLAN	66			
844	48001	241	CY	HIGH PERFORMANCE CONCRETE SUPERSTRUCTURE (DECK), AS PER PLAN, MIX 4			241	
844	48021	35	CY	HIGH PERFORMANCE CONCRETE SUPERSTRUCTURE (PARAPET), AS PER PLAN, MIX 4			35	
844	49000	LUMP		HIGH PERFORMANCE CONCRETE TRIAL MIX			LUMP	

* EXPOSED SURFACES OF PIER CAP, NEW AND EXISTING, TO BE SEALED.

STANDARD DRAWINGS AND SPECIFICATIONS:

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:
AS-1-81 REVISED 09-15-94
SBR-1-99 DATED 01-12-99
PCB-1-91 REVISED 07-6-99
CS-1-93 DATED 06-30-95

AND TO SUPPLEMENTAL SPECIFICATIONS:

842 DATED 01-06-99
844 DATED 01-06-99
899 DATED 10-21-98
911 DATED 07-10-97
954 DATED 09-09-97

DESIGN SPECIFICATIONS:

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

DESIGN LOADING:

HS20-44 AND THE ALTERNATE MILITARY LOADING.

DESIGN DATA:

HIGH PERFORMANCE CONCRETE - COMPRESSIVE STRENGTH 4500 PSI (SUPERSTRUCTURE)
ITEM 842 CONCRETE - COMPRESSIVE STRENGTH 4000 PSI (SUBSTRUCTURE)

REINFORCING STEEL - ASTM A615, A616 OR A617
GRADE 60 MINIMUM YIELD STRENGTH 60 KSI.

DECK PROTECTION METHOD - EPOXY COATED REINFORCING

STEEL AND 2½" CONCRETE COVER AND HIGH PERFORMANCE CONCRETE.

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1" THICK.

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05 & 105.02.

CONTRACT BID PRICES SHALL BE BASED UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE BY THE CONTRACTOR. HOWEVER, ALL PROJECT WORK SHALL BE BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

EXISTING BRIDGE PLANS MAY BE INSPECTED IN THE OFFICE OF STRUCTURAL ENGINEERING IN COLUMBUS, OHIO OR AT THE ODOT DISTRICT THREE OFFICE IN ASHLAND, OHIO.

TRAFFIC MAINTENANCE:

SEE ROADWAY PLANS FOR ADDITIONAL TRAFFIC NOTES AND DETAILS.

ITEM SPECIAL - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE):

EPOXY-URETHANE SHALL BE THE "BUFF" COLOR MEETING FEDERAL COLOR STANDARD NO. 37722 AS PER THE DETAILS IN THE PLAN. FOR ADDITIONAL NOTES, SEE NOTE IN THE PROPOSAL "ITEM SPECIAL - SEALING OF CONCRETE SURFACES".

ITEM 202 PORTIONS OF STRUCTURE REMOVED OVER 20 FOOT SPAN, AS PER PLAN:

PORTION OF THE STRUCTURE REMOVED, AS PER PLAN, SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND ARE NOT SEPARATELY LISTED FOR PAYMENT, EXCEPT FOR WEARING COURSE REMOVAL. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. ALL WORK SHALL BE DONE IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED.

PROTECTION OF TRAFFIC:

PRIOR TO DEMOLITION OF ANY PORTIONS OF THE EXISTING SUPERSTRUCTURE, THE CONTRACTOR SHALL SUBMIT PLANS FOR THE PROTECTION OF TRAFFIC (VEHICULAR, PEDESTRIAN, ETC.) ADJACENT TO AND/OR UNDER THE STRUCTURE TO THE ENGINEER FOR APPROVAL. THESE PLANS SHALL INCLUDE PROVISIONS FOR ANY DEVICES AND STRUCTURES THAT MAY BE NECESSARY TO ENSURE SUCH PROTECTION. TEMPORARY VERTICAL CLEARANCES SPECIFIED IN THE PROPOSAL SHALL BE MAINTAINED AT ALL TIMES EXCEPT AS OTHERWISE APPROVED BY THE ENGINEER.

CUT LINE CONSTRUCTION JOINT PREPARATION:

SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1" DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. WHERE PRACTICABLE, THE EXISTING REINFORCING STEEL WHERE REQUIRED IN THE PLANS SHALL BE LEFT IN PLACE. INSTALL DOWEL BARS IF SPECIFIED. PRIOR TO CONCRETE PLACEMENT ABRASIVELY CLEAN JOINT SURFACE AND EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THE JOINT SURFACE AND EXPOSED REINFORCEMENT SHALL BE THOROUGHLY CLEANED OF ALL DIRT, DUST, OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. CONCRETE BONDING SURFACES SHALL BE WET WITHOUT FREE WATER AS CONCRETE IS PLACED.

SUBSTRUCTURE CONCRETE REMOVAL:

SUBSTRUCTURE CONCRETE REMOVAL SHALL BE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, A HAMMER HEAVIER THAN 35 POUNDS, BUT NOT TO EXCEED 90 POUNDS, MAY BE USED AT THE APPROVAL OF THE ENGINEER. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

PAYMENT

ALL WORK SHALL BE PAID FOR UNDER ITEM 202 PORTIONS OF STRUCTURES REMOVED, AS PER PLAN

ITEM 503, UNCLASSIFIED EXCAVATION, AS PER PLAN:

UNCLASSIFIED EXCAVATION SHALL BE IN ACCORDANCE WITH 503 EXCEPT THAT THE BACKFILL MATERIAL BEHIND THE ABUTMENTS SHALL BE 203 MATERIAL PLACED IN 6" LIFTS. EXCAVATION AT ABUTMENTS IN ADDITION TO THAT NECESSARY TO REMOVE PORTION OF THE EXISTING STRUCTURE SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 503, UNCLASSIFIED EXCAVATION FOR PAYMENT.

ITEM 842 CLASS C CONCRETE, (FOOTINGS, PIERS AND ABUTMENTS) AS PER PLAN

THE COARSE AGGREGATE SHALL BE NO. 8 LIMESTONE. THESE ITEMS SHALL INCLUDE THE COST OF THE REINFORCING STEEL.

ITEM 844 HIGH PERFORMANCE CONCRETE, AS PER PLAN

THE DESIGN MIX SHALL BE MIX NO. 4 LIMESTONE. THE OPTION OF SLIPFORM CONSTRUCTION OF THE BRIDGE PARAPET IS NOT PERMITTED. THESE ITEMS SHALL INCLUDE THE COST OF THE REINFORCING STEEL.

REINFORCING STEEL:

NEW REINFORCING STEEL MAY REQUIRE FIELD CUTTING OR BENDING TO BE PROPERLY FITTED. PAYMENT SHALL BE INCLUDED UNDER ITEM 844 HIGH PERFORMANCE CONCRETE.

ITEM 518 - POROUS BACKFILL WITH FILTER FABRIC, AS PER PLAN:

POROUS BACKFILL SHALL BE #57 GRAVEL ONLY.

SURVEY DISC ON STRUCTURE:

THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST ONE (1) WEEK IN ADVANCE OF POURING THE CONCRETE FOR COMPLETION OF THE ABUTMENT. THE ENGINEER WILL PROVIDE THE CONTRACTOR ONE (1) SURVEY DISC FOR EACH STRUCTURE (OBTAINED FROM THE DISTRICT SURVEYOR) WHICH THE CONTRACTOR SHALL PLACE IN THE SURFACE OF THE FRESH CONCRETE. THE LOCATION OF THE DISC SHALL BE ON THE ABUTMENT, AND ON A FLAT, HORIZONTAL SURFACE BEYOND THE EDGE OF DECK AND PARAPET. THE BENCHMARK SHALL BE ACCESSIBLE TO A SURVEYOR'S ROD WITHOUT ANY OBSTRUCTIONS. COST OF THIS WORK IS CONSIDERED INCIDENTAL TO THE CONCRETE BID ITEM.

ITEM 601 CRUSHED AGGREGATE SLOPE PROTECTION

THE QUANTITIES INCLUDES 10 % OF THE EXISTING AGGREGATE SLOPE PROTECTION SURFACE AREA IN ADDITION TO WHAT IS DETAILED ON THE PLANS.

REPLACEMENT OF EXISTING REINFORCING STEEL

ANY EXISTING REINFORCING BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND WHICH ARE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS SHALL BE REPLACED WITH NEW STEEL AT THE CONTRACTOR'S COST. ANY EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION SHALL BE REPLACED WITH NEW STEEL. AN ALLOWANCE OF 200 POUNDS SHALL BE INCLUDED IN THE COST OF THE APPROPRIATE PIER CONCRETE BID ITEM.

DESIGN AGENCY
ODOT CENTRAL OFFICE
OFFICE OF PRODUCTION

DATE
9-7-99
REVIEWED
DFT
STRUCTURE FILE NUMBER
5203902

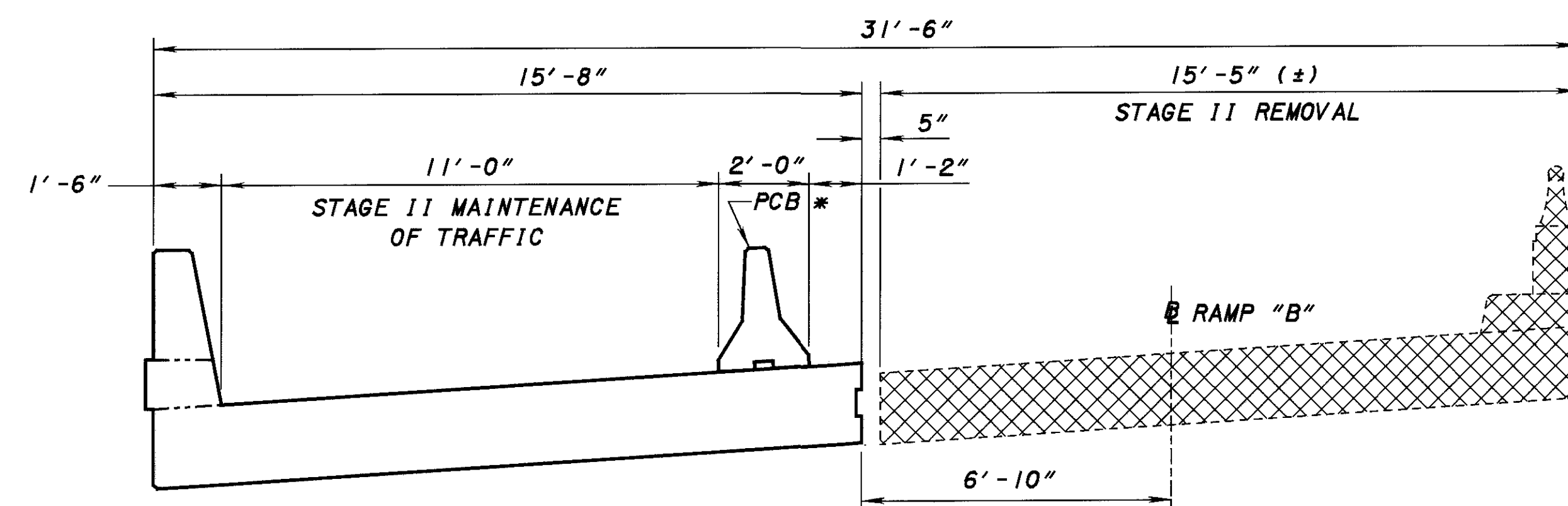
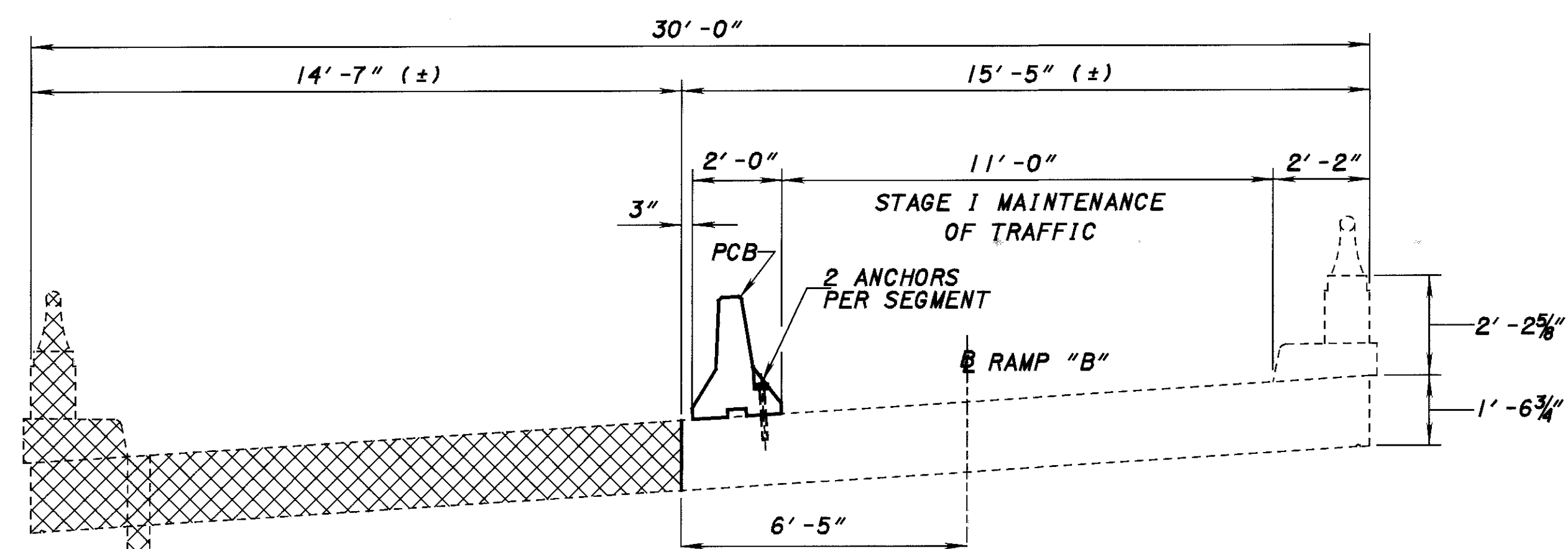
DRAWN
TKB
CHECKED
R/H

GENERAL NOTES
MED-7 1-2088 E
RAMP "B" OVER PLUM CREEK, S.R. 3 INTERCHANGE

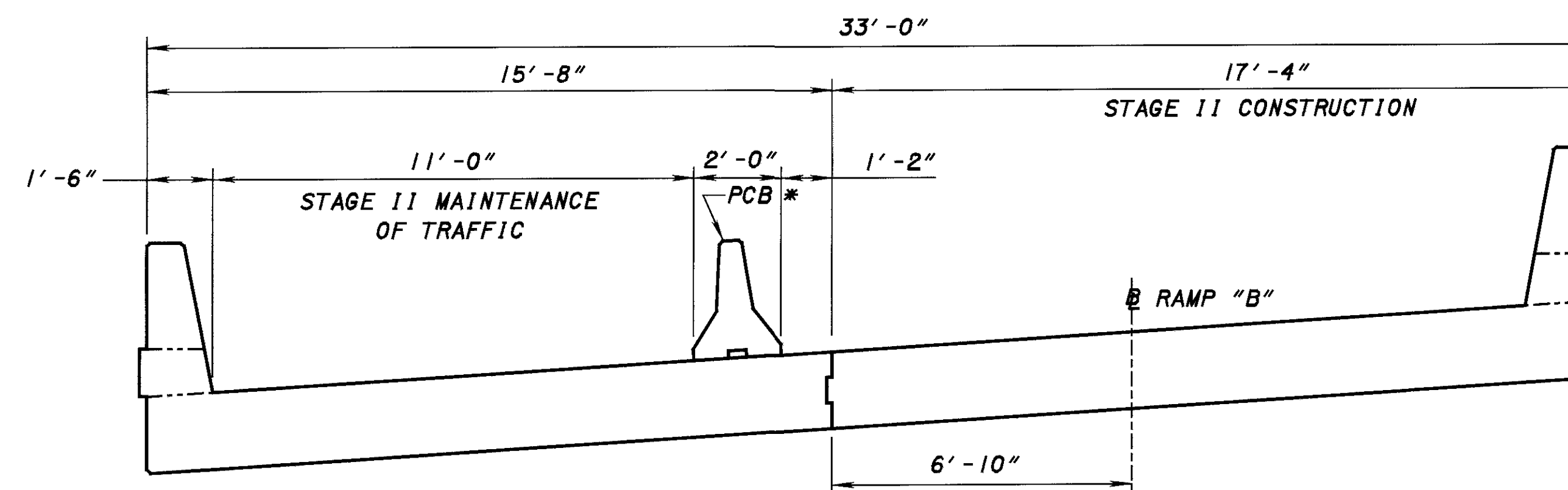
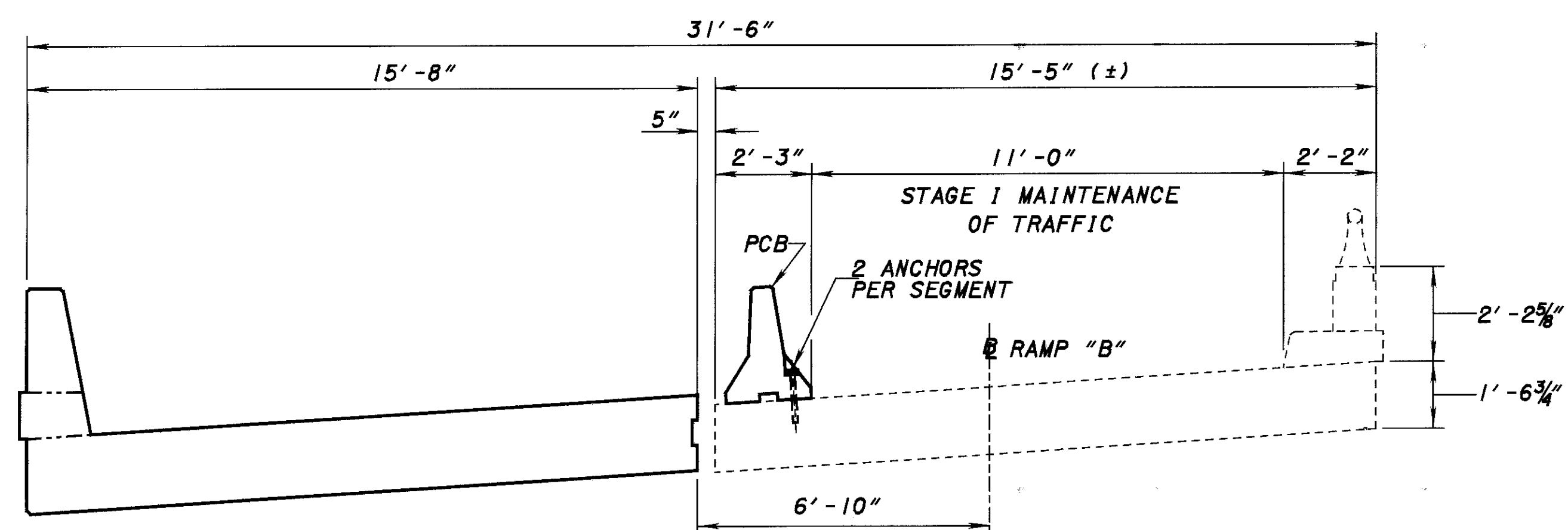
MED-7 1-15.78

3 / 16

823
940

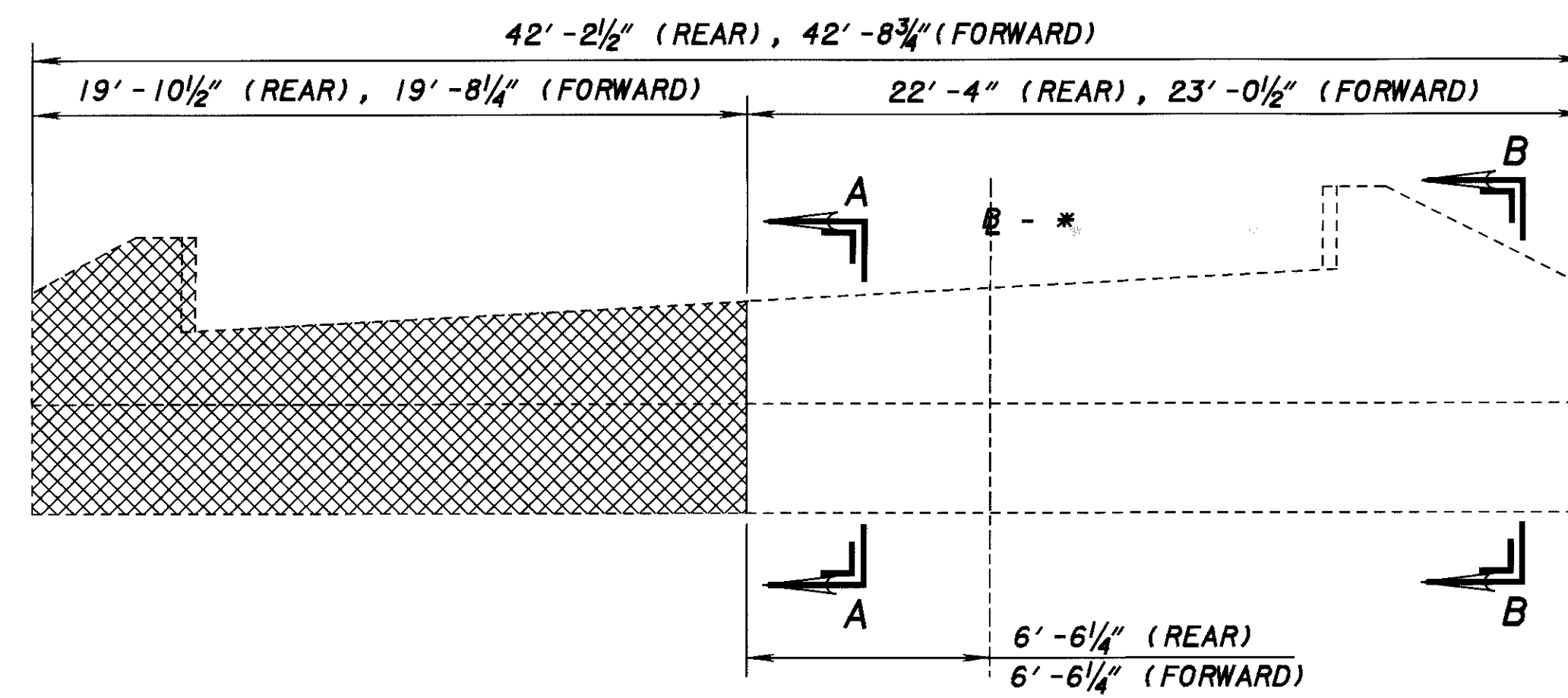


* *BARRIER UNANCHORED*

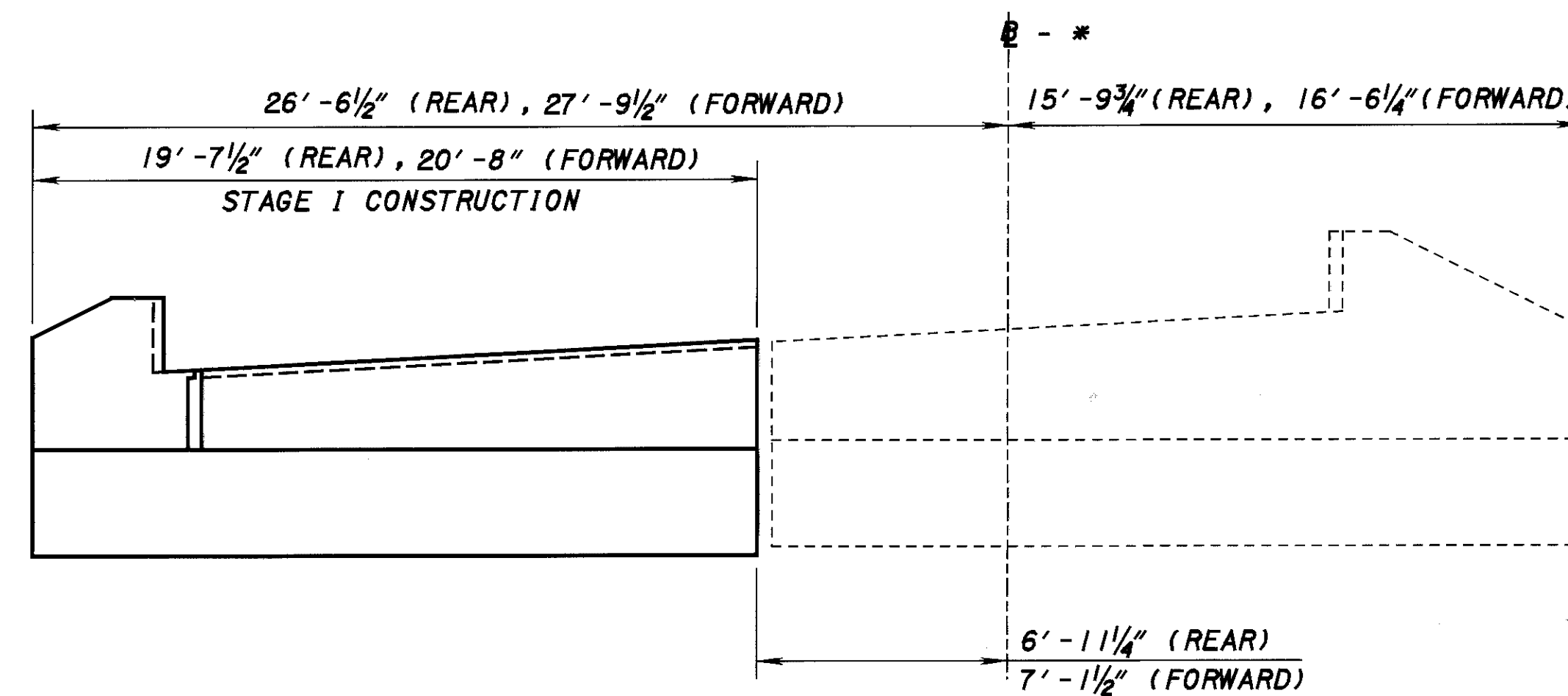


* *BARRIER UNANCHORED*

 - REMOVAL

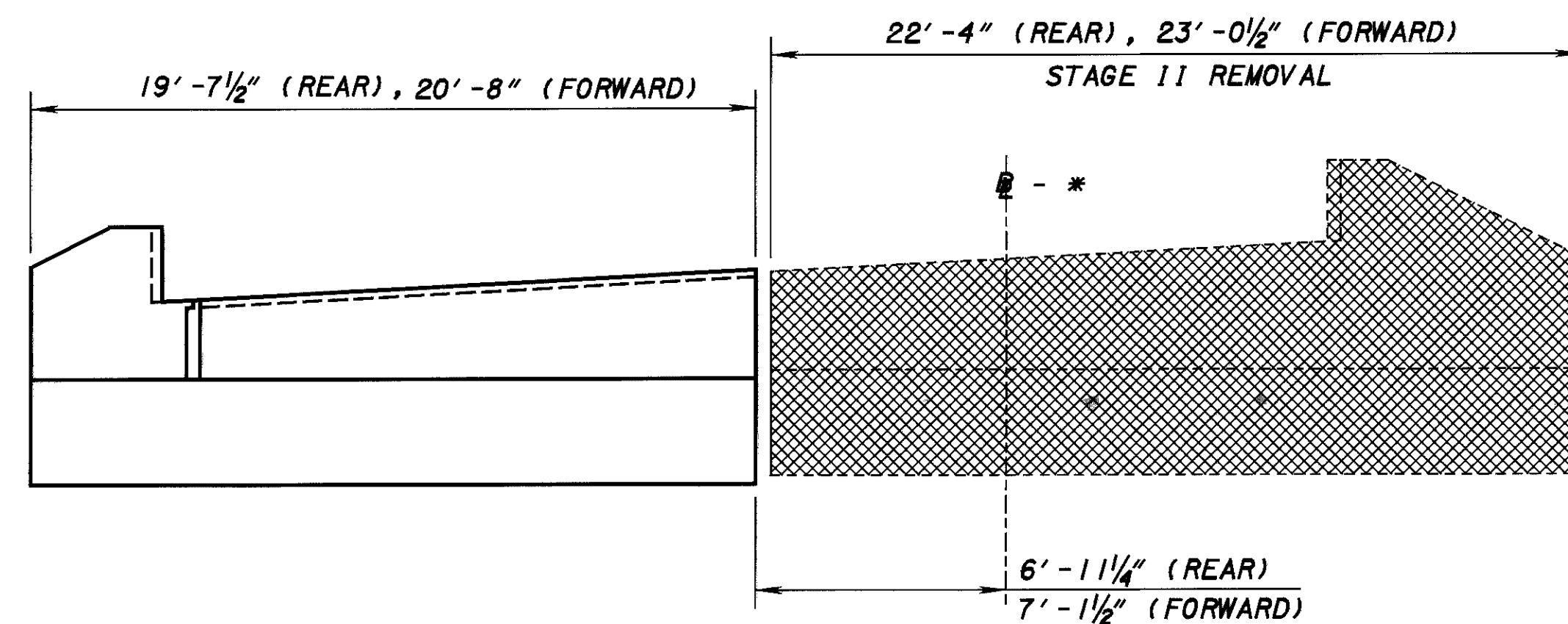


STAGE I REMOVAL

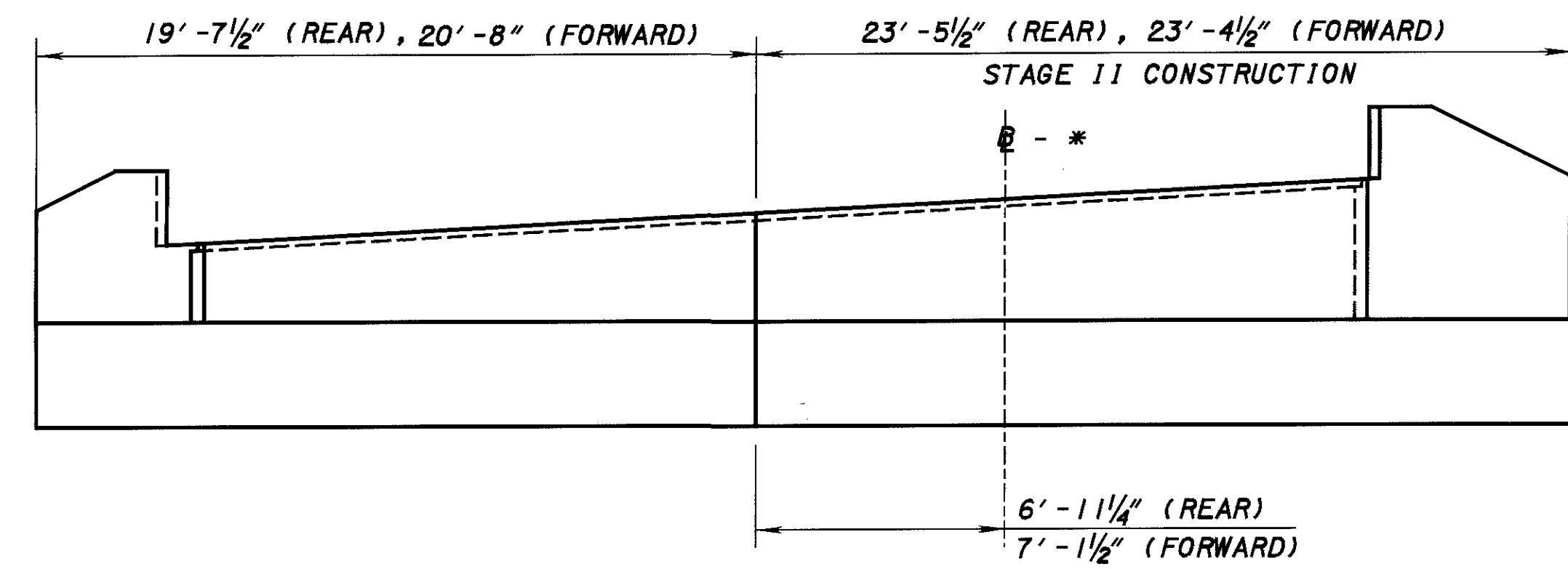


STAGE I CONSTRUCTION

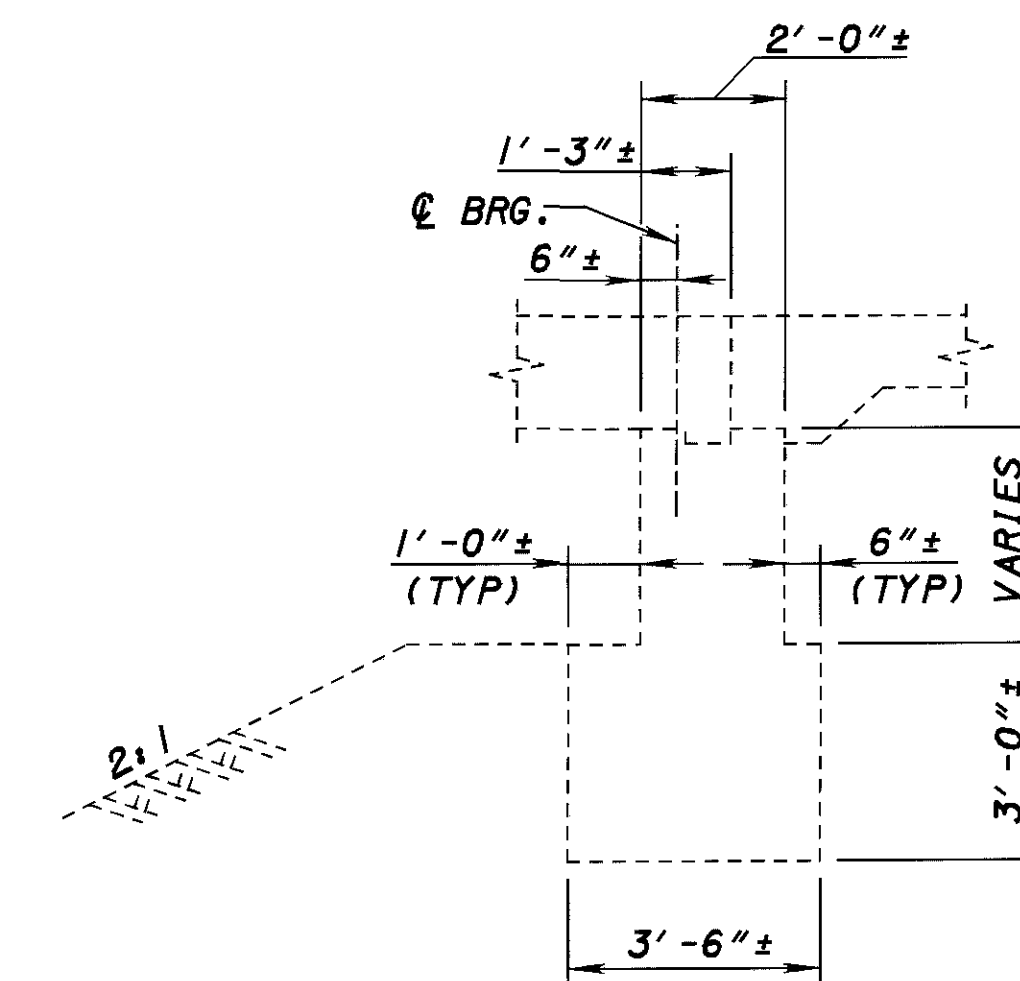
(FORWARD ABUTMENT SHOWN, REAR OPPOSITE HAND)



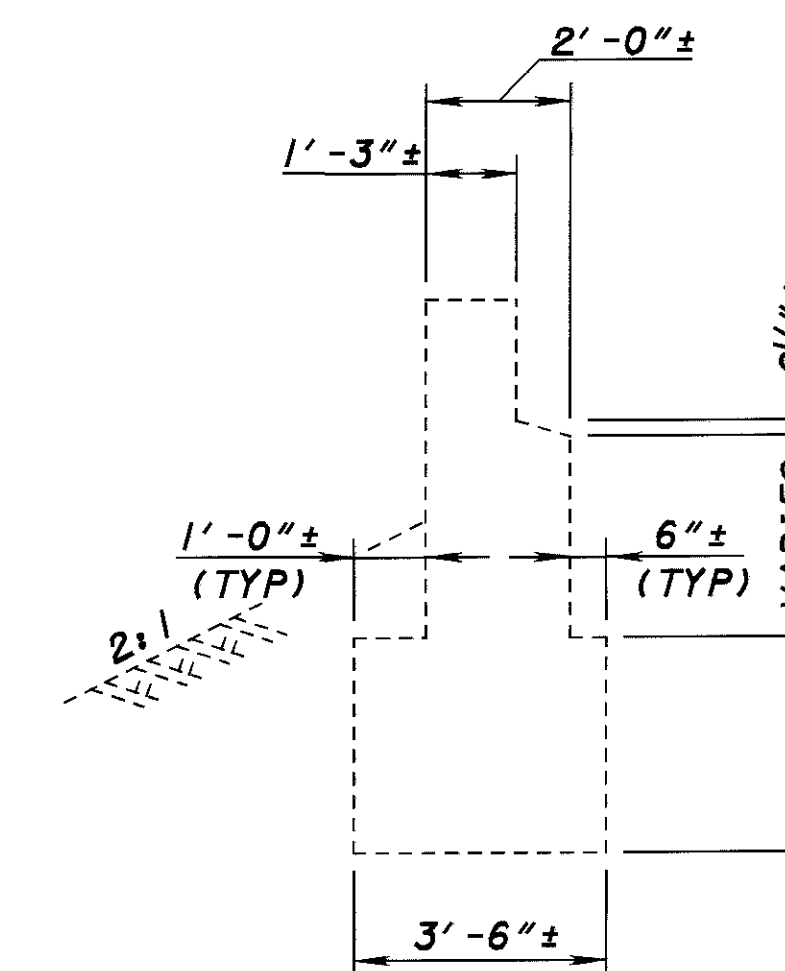
STAGE II REMOVAL



STAGE II CONSTRUCTION



SECTION A-A



SECTION B-B

*: CONSTRUCTION, RAMP B & PROP. STRUCTURE • INTERSECTION REF. CHORD & FACE OF ABUTMENT

825 940 - REMOVAL

DESIGN AGENCY
ODOT CENTRAL OFFICE
OFFICE OF PRODUCTION

DATE
9-7-99
DFT
STRUCTURE FILE NUMBER
5203902

DRAWN
TKB
REVISED

DESIGNED
TKB
CHECKED
RJH

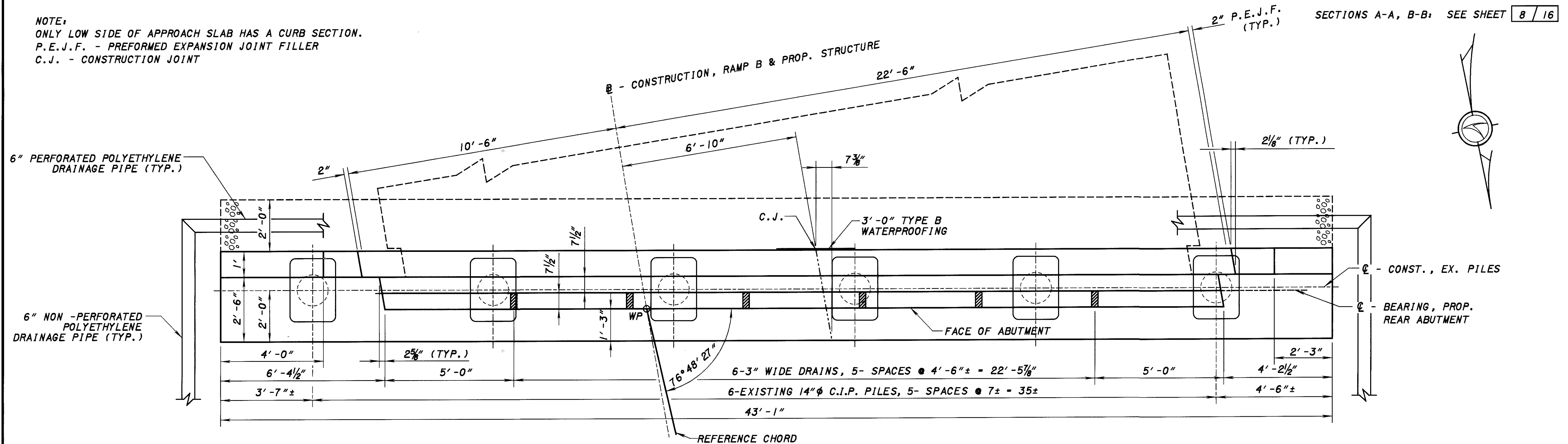
ABUTMENT STAGE CONSTRUCTION DETAILS
MED-71-2088 E
RAMP "B" OVER PLUM CREEK, S.R. 3 INTERCHANGE

MED-71-15.78

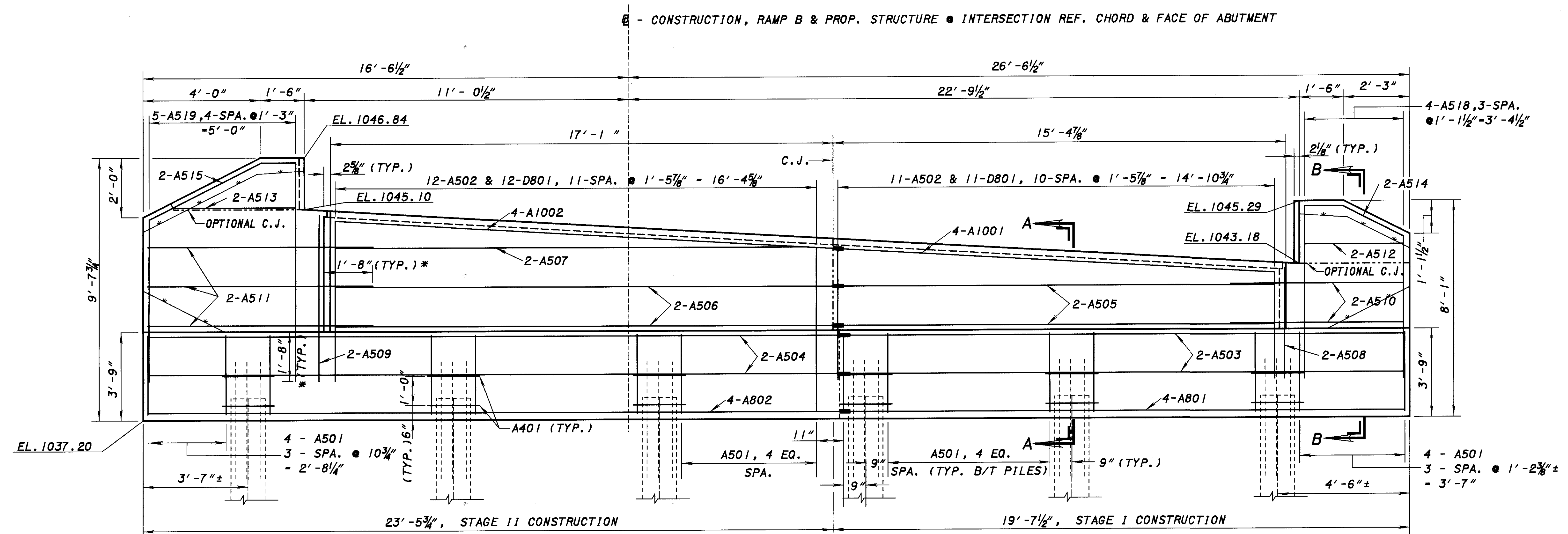
5/16

825 940

NOTE:
 ONLY LOW SIDE OF APPROACH SLAB HAS A CURB SECTION.
 P.E.J.F. - PREFORMED EXPANSION JOINT FILLER
 C.J. - CONSTRUCTION JOINT



PLAN



REAR ABUTMENT ELEVATION

REAR ABUTMENT DETAIL
 MED-711-2088 E
 RAMP "B" OVER PLUM CREEK, S.R. 3 INTERCHANGE

MED-711-15.78

6 / 16

826
940

DESIGN AGENCY
 ODOT CENTRAL OFFICE
 OFFICE OF PRODUCTION

DATE
 9-7-99

DESIGNED
 TKB

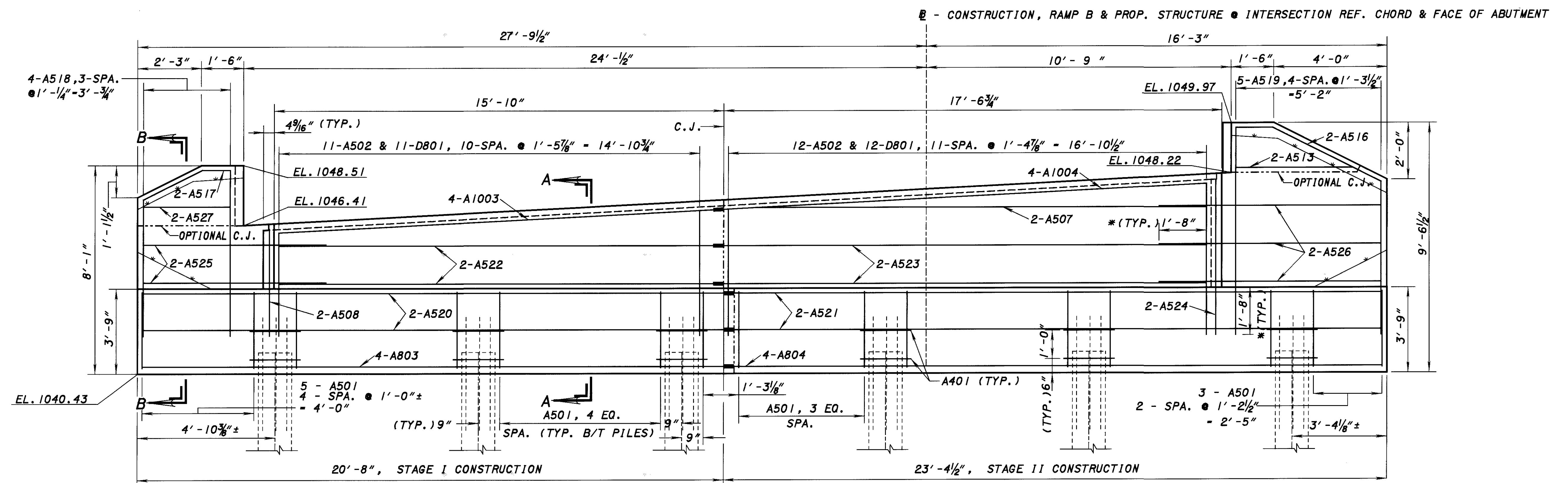
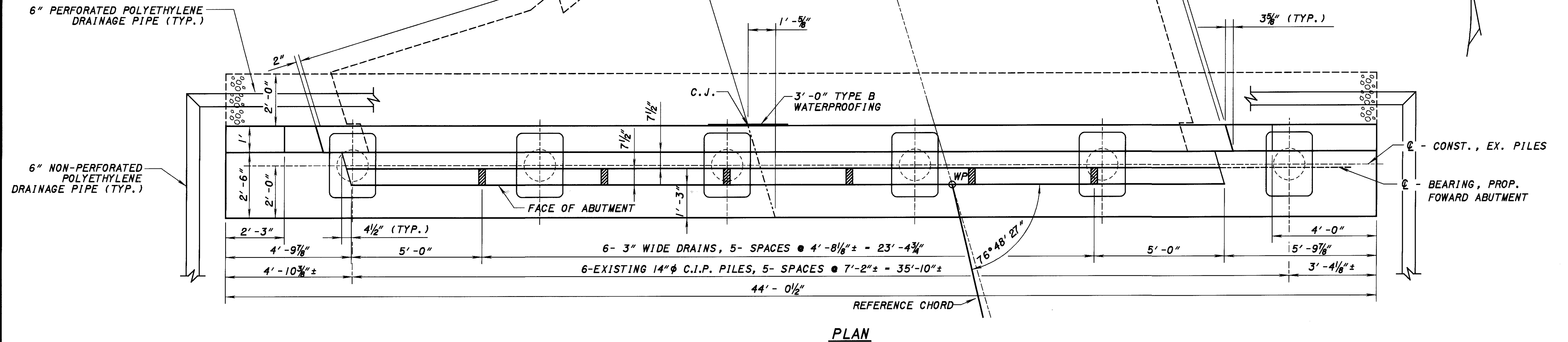
CHECKED
 RJH

REVIEWED
 DFT

STRUCTURE FILE NUMBER
 5203902

NOTE:
ONLY LOW SIDE OF APPROACH SLAB HAS A CURB SECTION.
P.E.J.F. - PREFORMED EXPANSION JOINT FILLER
C.J. - CONSTRUCTION JOINT

SECTIONS A-A, B-B: SEE SHEET 8 / 16



* MIN. DIMENSION

DESIGN AGENCY
ODOT CENTRAL OFFICE
OFFICE OF PRODUCTION

DATE
9-7-99
DFT
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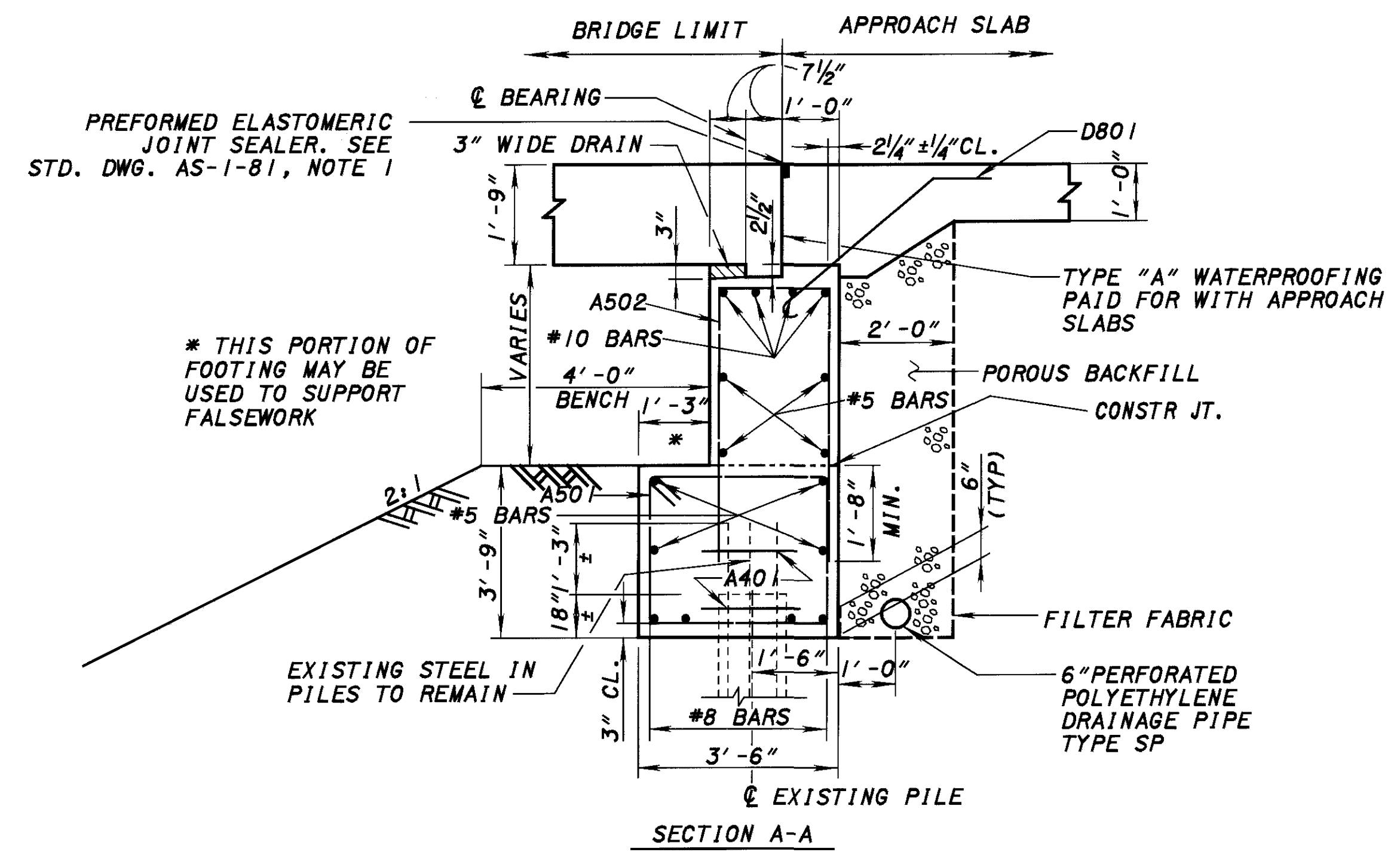
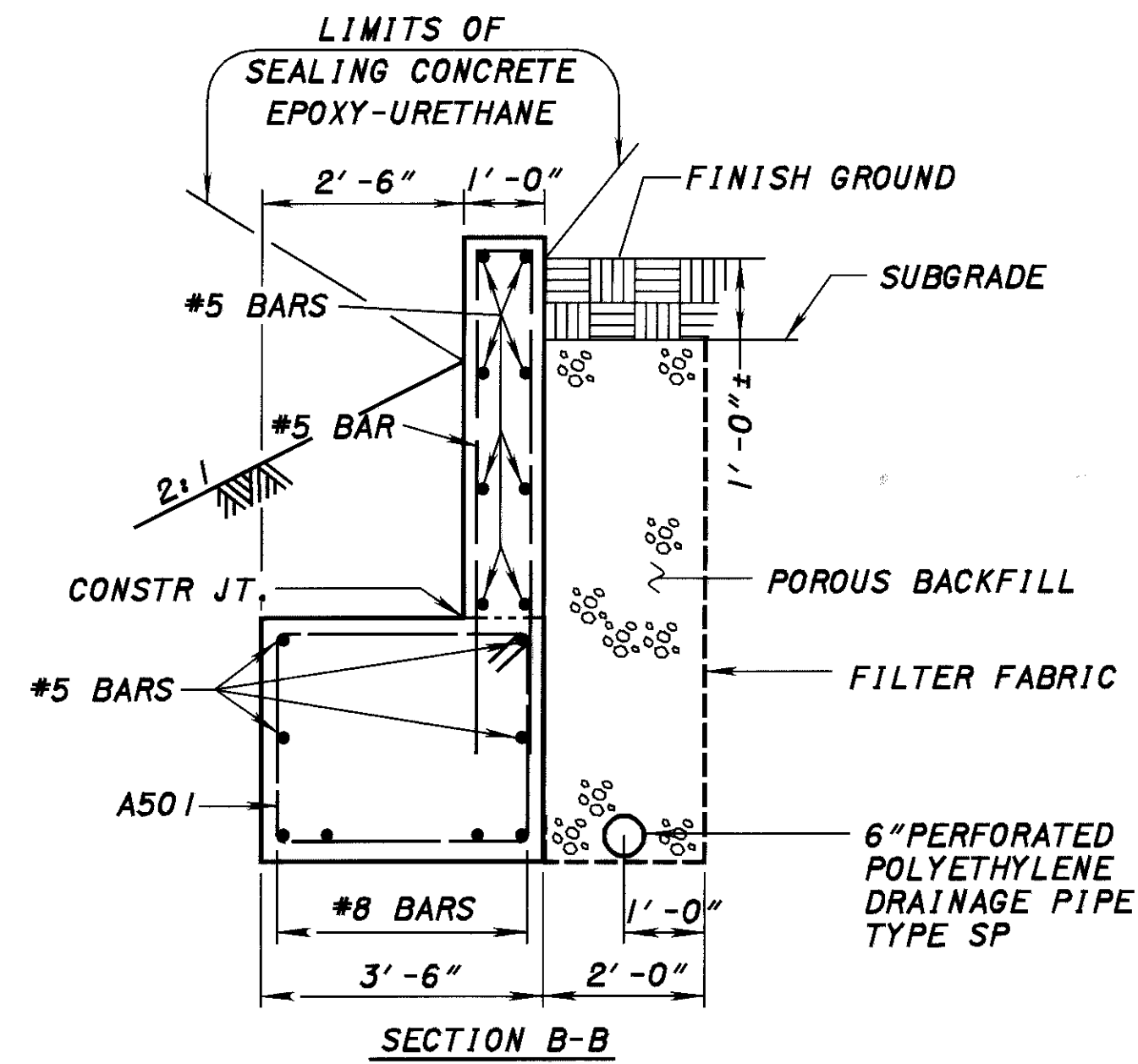
DRAWN
TKB
REVIEWED
TKB
CHECKED
RJH

FORWARD ABUTMENT DETAIL
MED-711-2088 E
RAMP "B" OVER PLUM CREEK, S.R. 3 INTERCHANGE

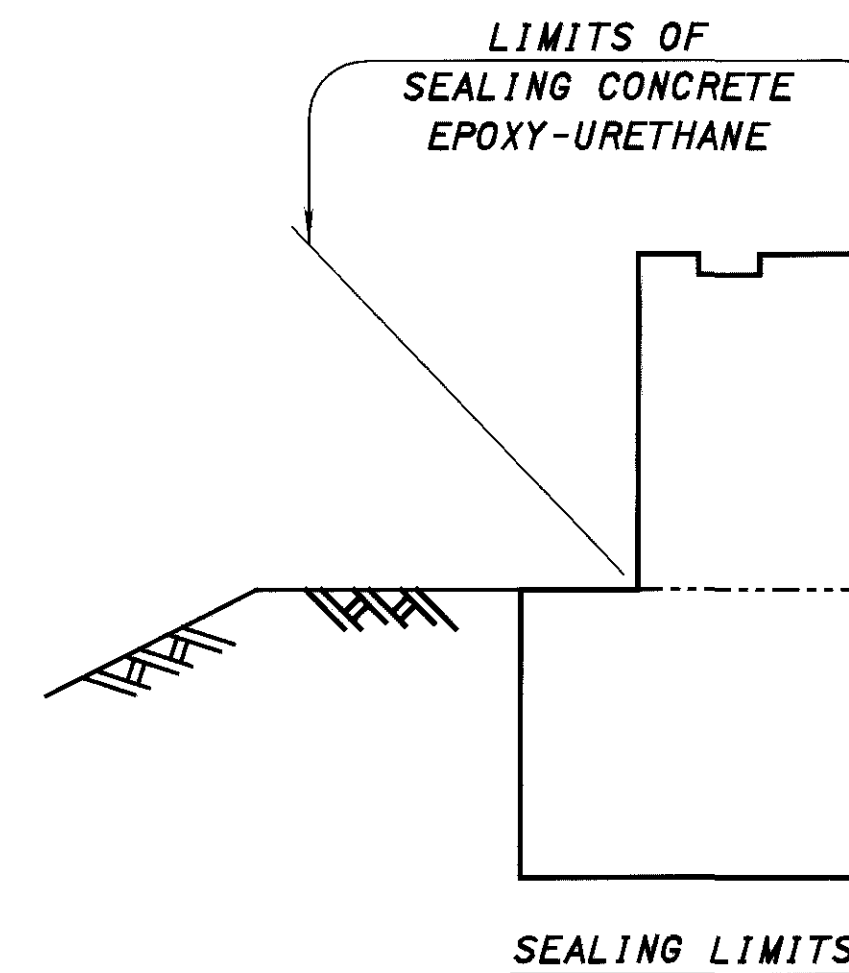
MED-711-15.78

7 / 16

827
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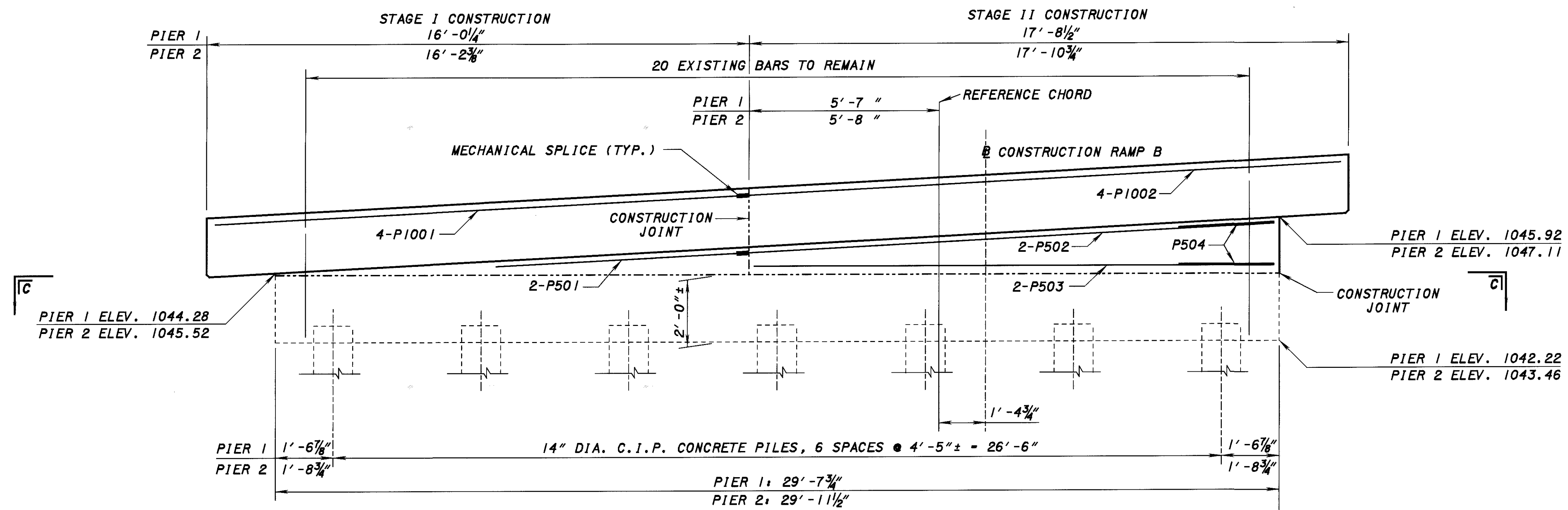


EXISTING REBAR TO BE SALVAGED THAT EXTENDS FROM EXISTING PILES.

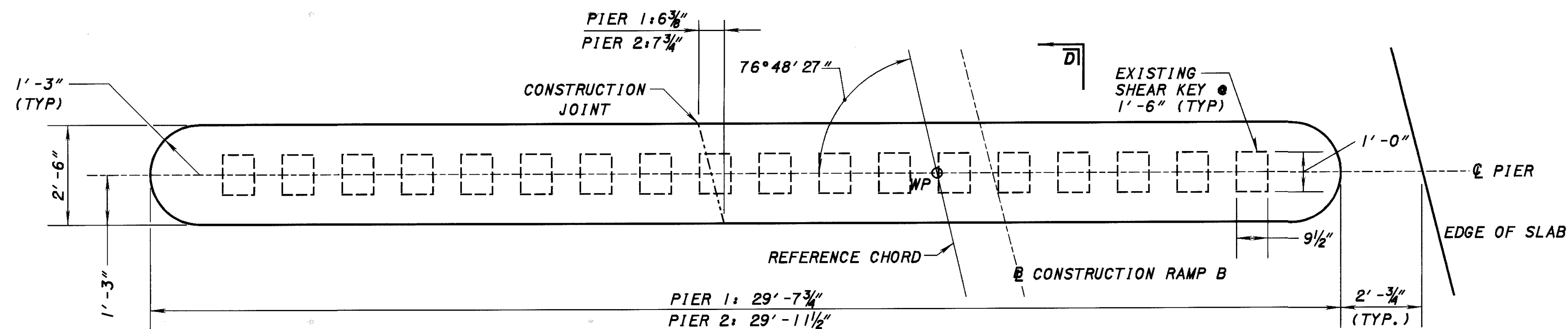


NOTES

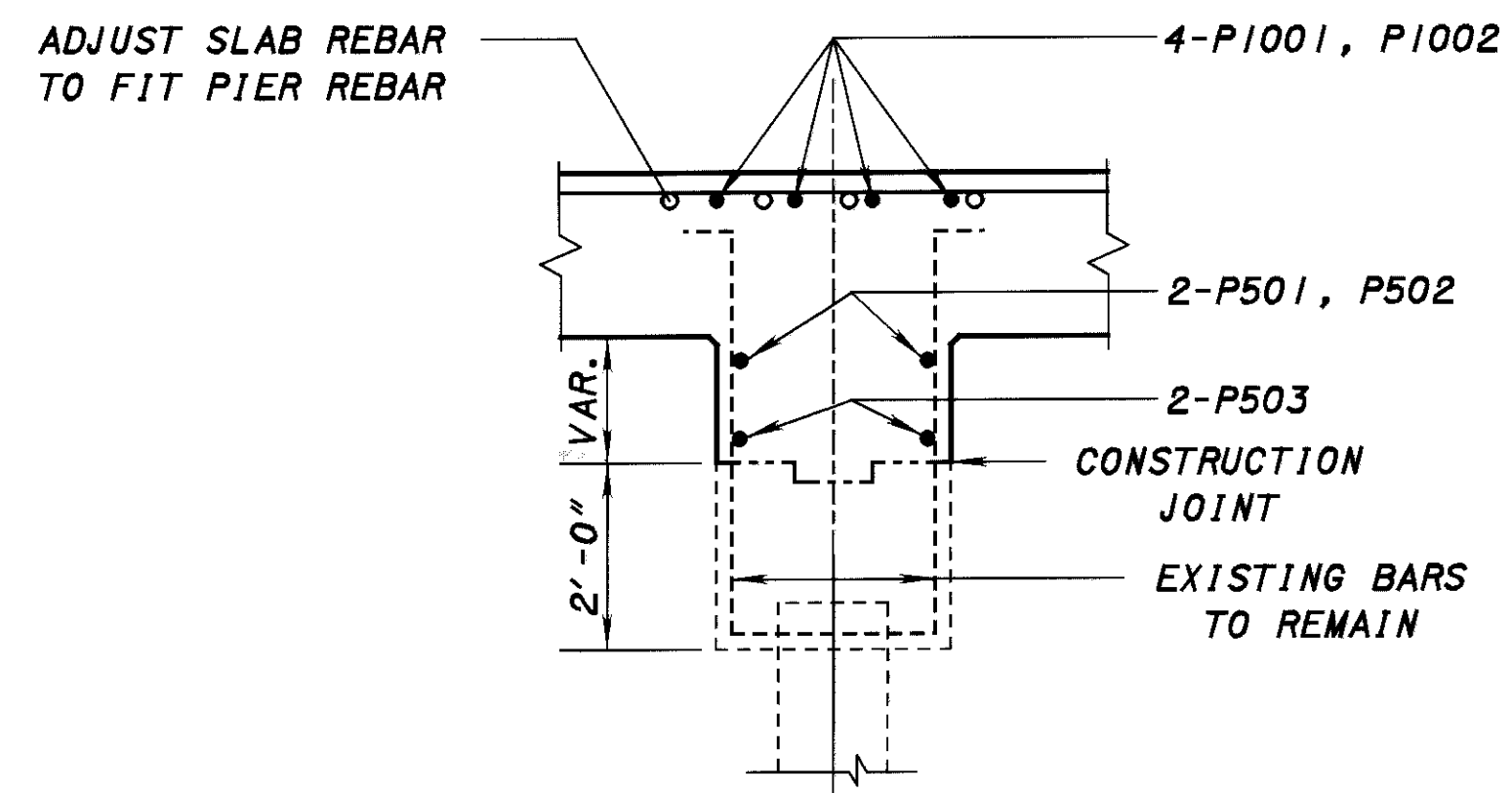
- ALL ELEVATIONS AND DIMENSIONS MEASURED ALONG THE FACE OF ABUTMENT.
- MINIMUM SPLICES ARE AS FOLLOWS:
 #5 BAR = 3'-0"
 #6 BAR = 3'-6"
 #8 BAR = 5'-9"
- TYPE B WATERPROOFING, 3'-0" WIDE. EXTEND FROM THE BOTTOM OF APPROACH SLAB TO THE BOTTOM OF THE FOOTING. NEOPRENE SHEETING MAY BE USED IN LIEU OF TYPE B WATERPROOFING.



ELEVATION - PIERS 1 & 2



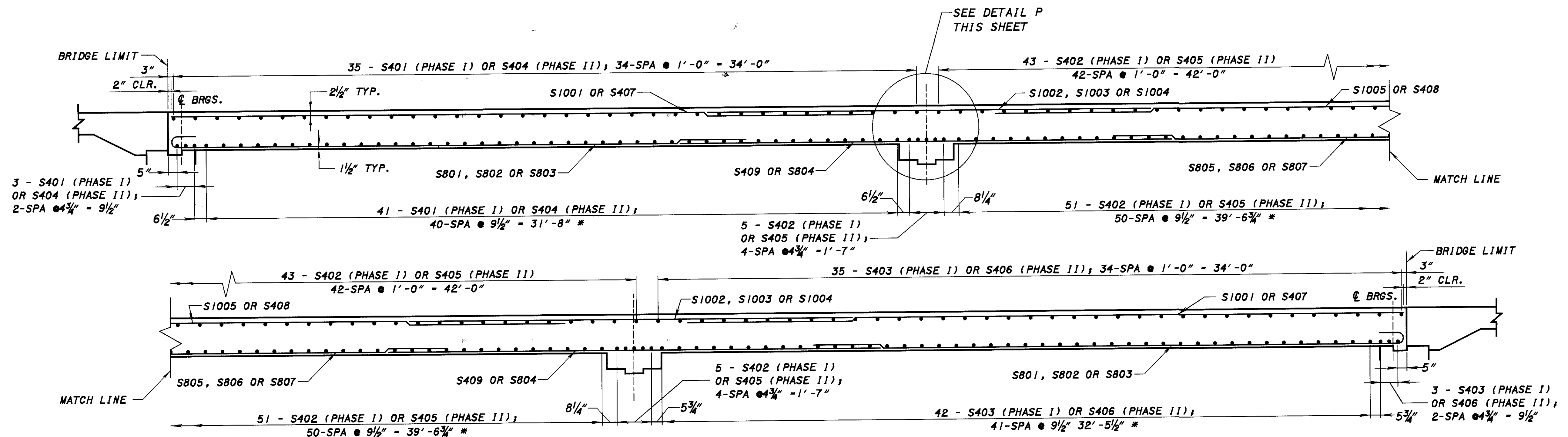
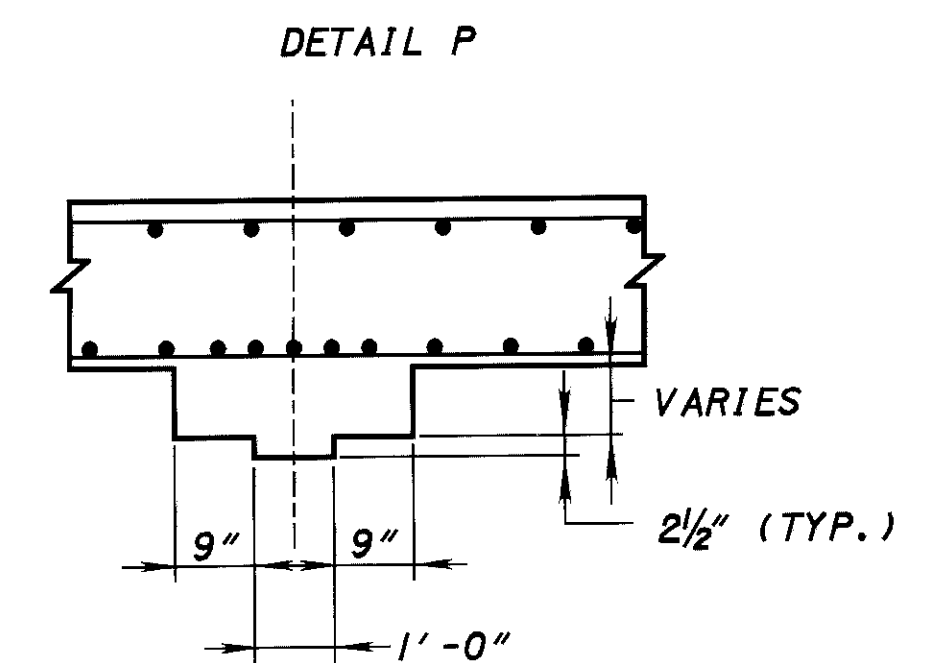
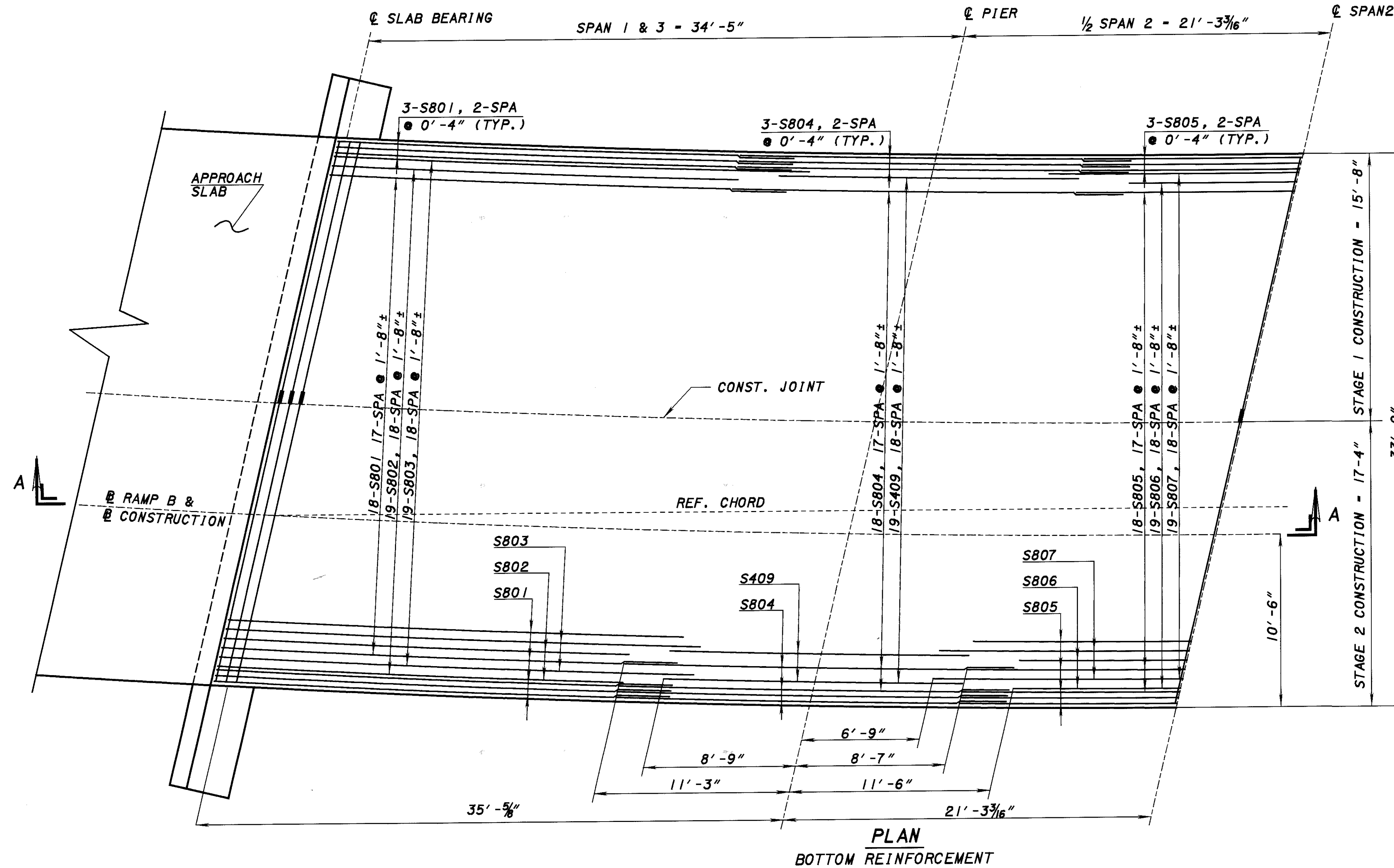
SECTION C-C



SECTION D-D

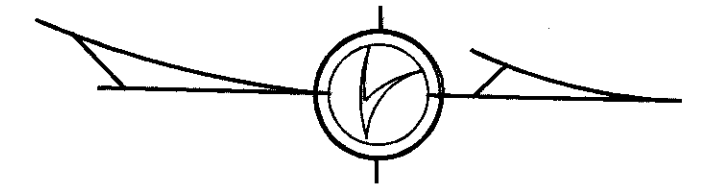
NOTES

1. ALL ELEVATIONS AND DIMENSIONS ARE MEASURED ALONG THE CL BEARINGS.
2. PIER CAP SHALL BE REMOVED AND REPLACED ABOVE ORIGINAL CONSTRUCTION JOINT AS SHOWN IN THE DETAILS.
3. CONCRETE SHALL BE SUFFICIENTLY REMOVED FROM THE ORIGINAL SHEAR KEYS TO PRODUCE A POSITIVE CONNECTION BETWEEN THE EXISTING AND NEW CONCRETE.
4. VERTICAL REINFORCING STEEL SHALL REMAIN IN PLACE.



* MEASURED AT AND ALONG THE CL OF CONSTRUCTION AND SURVEY

SECTION A-A



DESIGN AGENCY
ODOT CENTRAL OFFICE
OFFICE OF PRODUCTION

DATE
9-7-99
DFT
STRUCTURE FILE NUMBER
5203902

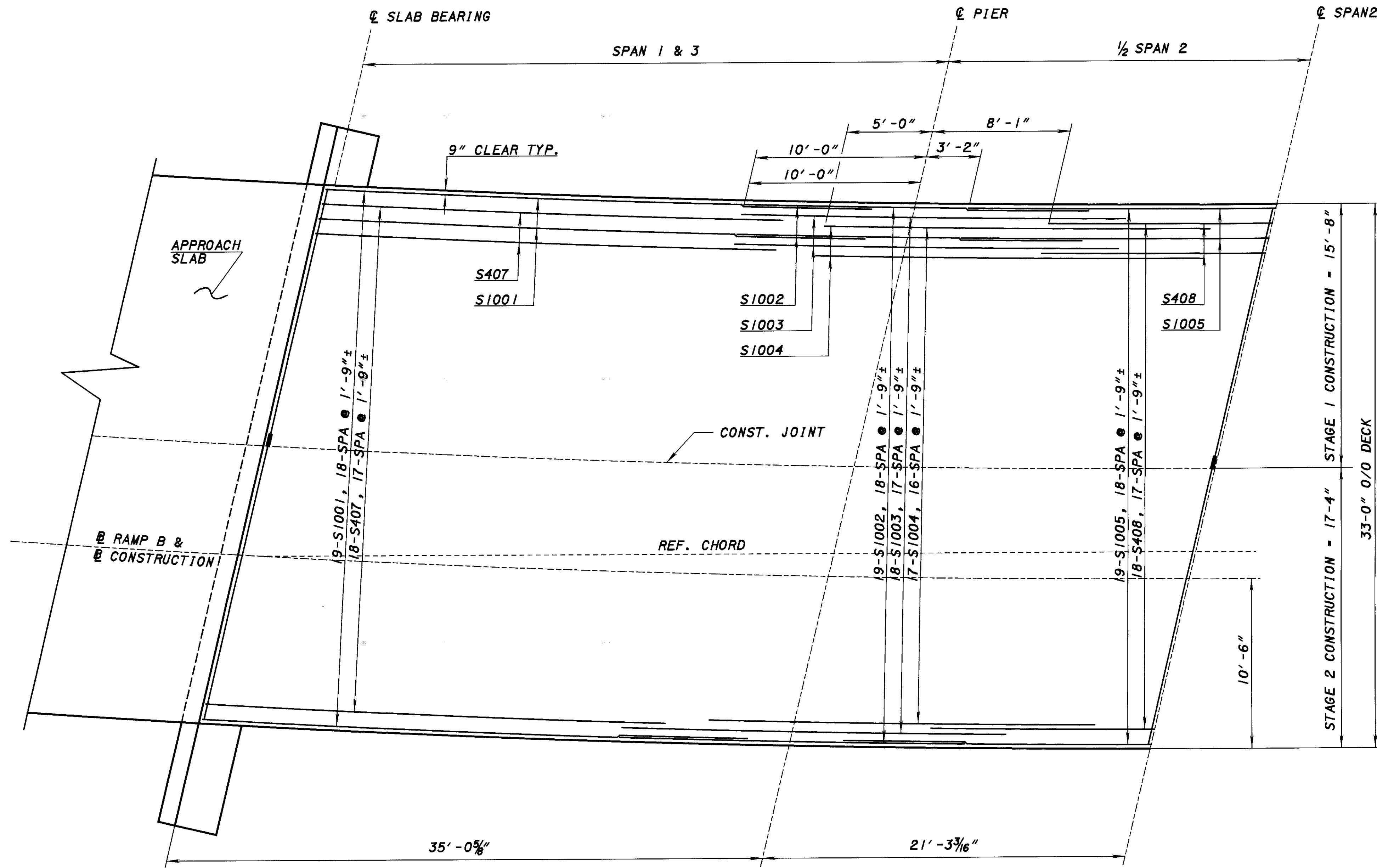
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REVISD
R/H

SUPERSTRUCTURE DETAILS
MED-71-2088 E
RAMP "B" OVER PLUM CREEK, S.R. 3 INTERCHANGE

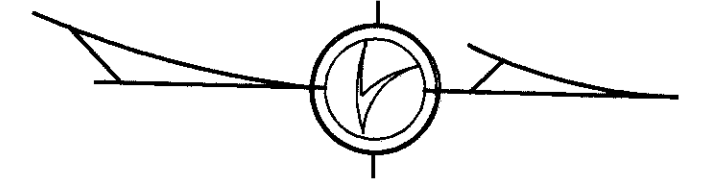
MED-71-15.78

10/16

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PLAN
TOP REINFORCEMENT



MED-71-15.78

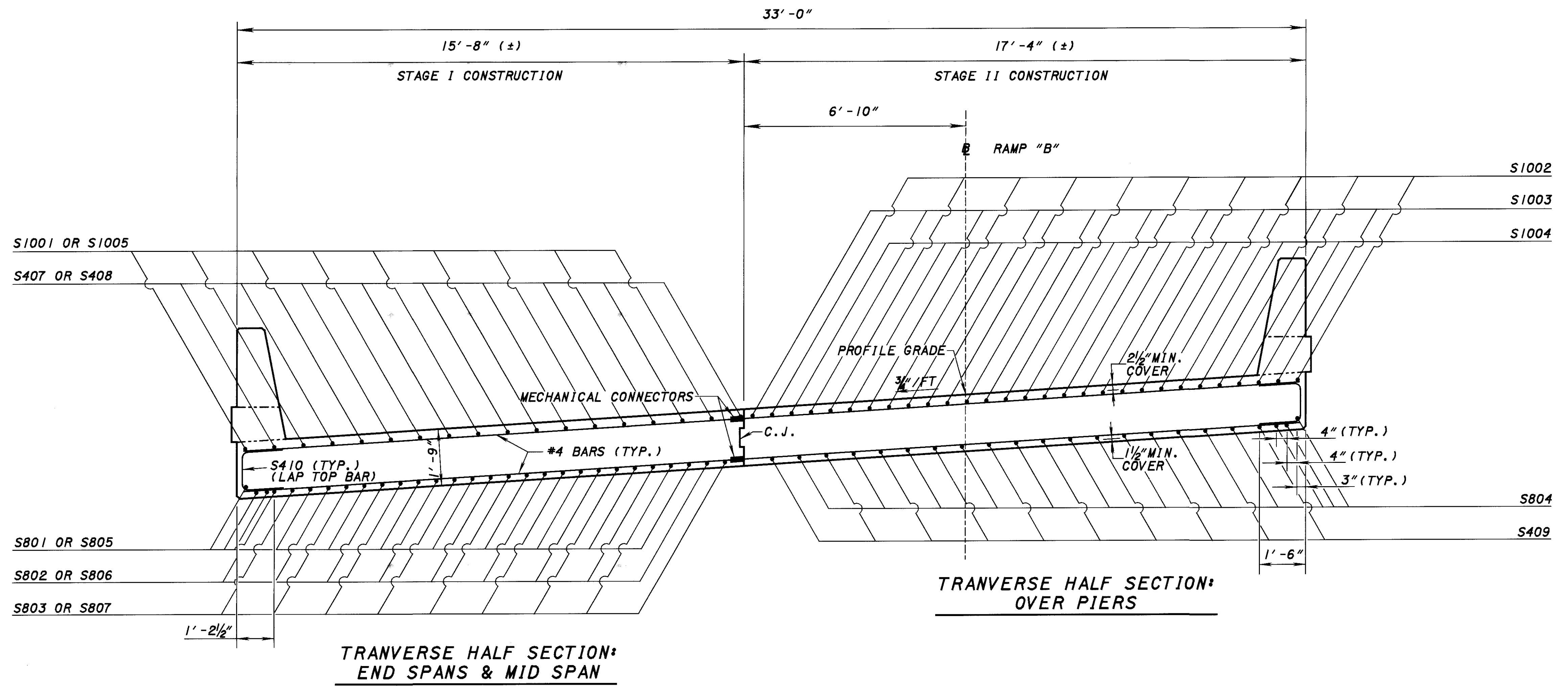
SUPERSTRUCTURE DETAILS
MED-71-2088 E
RAMP "B" OVER PLUM CREEK, S.R. 3 INTERCHANGE

DESIGNED
TKB
CHECKED
RJH

DRAWN
TKB
REVISED

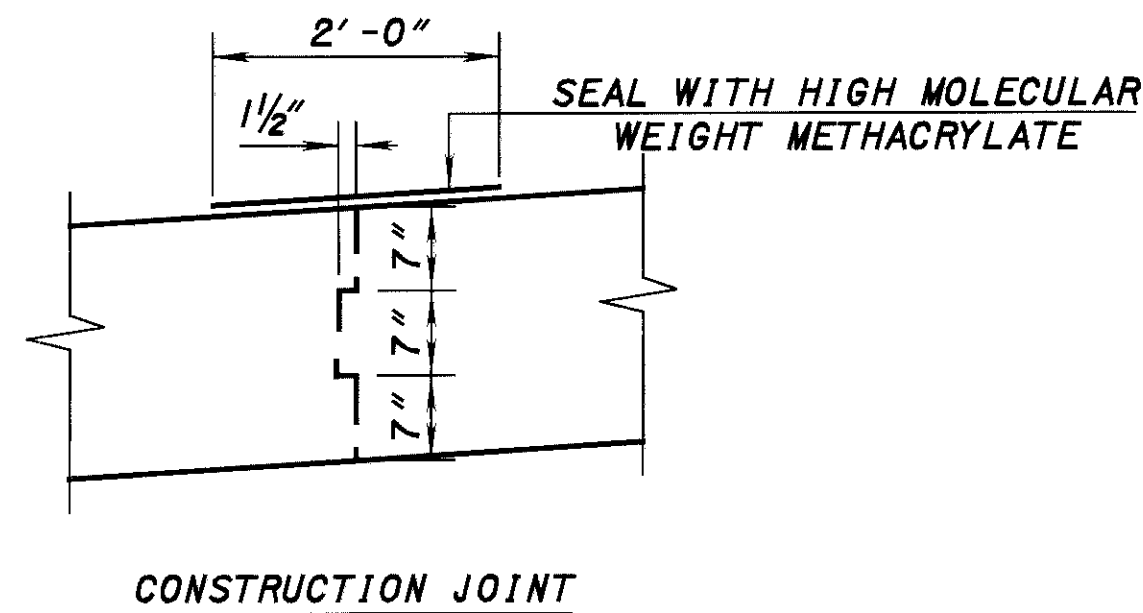
REVIEWED
DFT
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9-7-99
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DESIGN AGENCY
ODOT CENTRAL OFFICE
OFFICE OF PRODUCTION

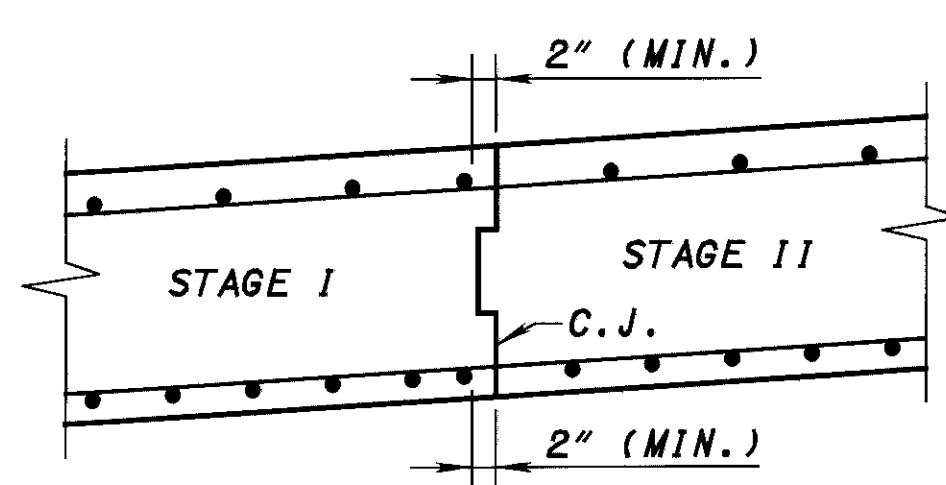


TRANVERSE HALF SECTION:
END SPANS & MID SPAN

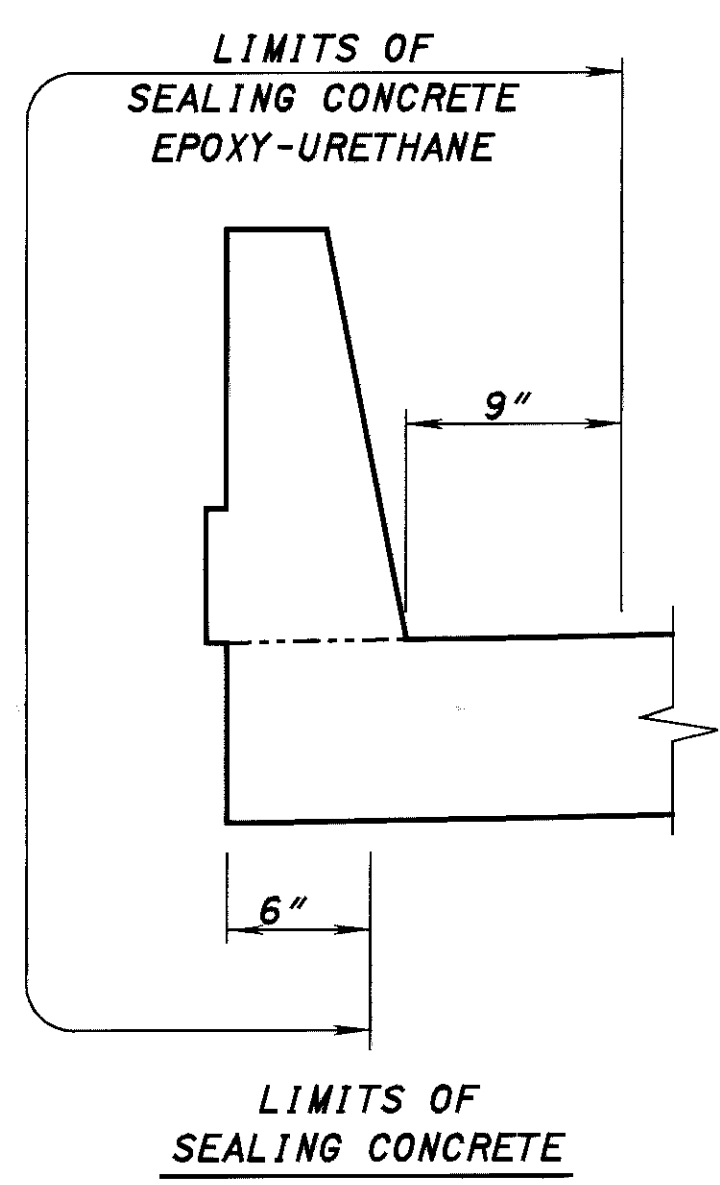
TRANVERSE HALF SECTION:
OVER PIERS



CONSTRUCTION JOINT



NOTE:
ADJUST REBAR SPACING AT THE
CONSTRUCTION JOINT TO MAINTAIN
MIN. 2" CLEAR DISTANCE DURING
STAGE I CONSTRUCTION.



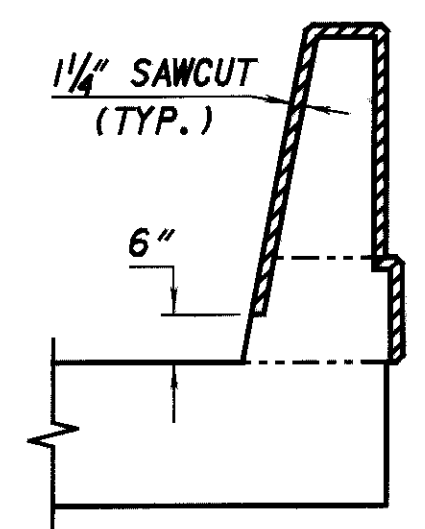
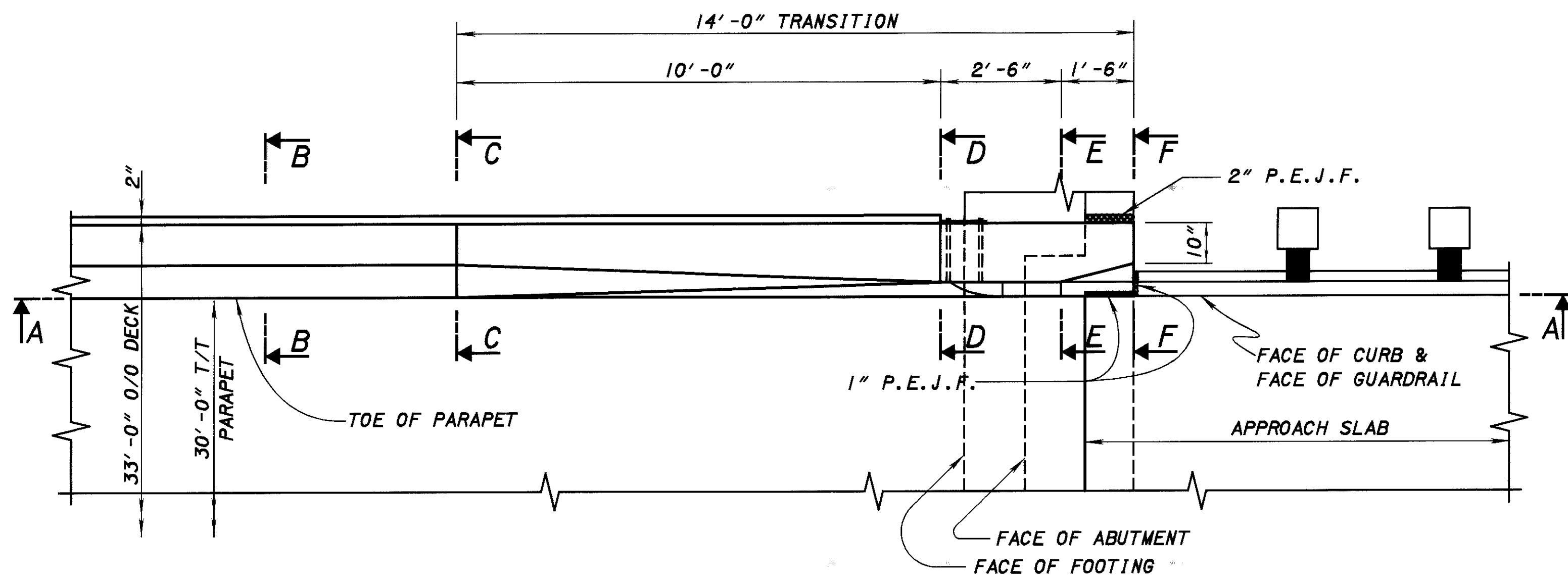
LIMITS OF
SEALING CONCRETE
EPOXY-URETHANE

DECK SLAB NOTES:

1. HIGH MOLECULAR WEIGHT METHACRYLATE SHALL BE INCLUDED IN THE COST OF THE CONCRETE AND NO SEPARATE PAYMENT WILL BE MADE.
2. SEE STD. DWG. CS-1-93 FOR MORE DETAILS.
3. DRIP GROOVES, AS DETAILED IN CS-1-93 SHALL NOT BE PLACED ON THIS STRUCTURE.

FINAL DECK ELEVATIONS				
LOCATION	STATION	LEFT PARAPET TOE	PROFILE GRADE	RIGHT PARAPET TOE
BEGIN APPROACH SLAB	81+41.97	1044.40	1045.78	1046.34
END APPROACH SLAB	81+56.97	1044.89	1046.20	1046.76
MIDSPAN	81+74.35	1045.39	1046.70	1047.26
PIER #1	81+91.73	1045.89	1047.20	1047.76
MIDSPAN	82+13.00	1046.49	1047.80	1048.36
PIER #2	82+34.26	1047.10	1048.41	1048.97
MIDSPAN	82+51.98	1047.61	1048.92	1049.48
BEGIN APPROACH SLAB	82+69.69	1048.11	1049.42	1049.98
END APPROACH SLAB	82+84.69	1048.54	1049.85	1050.41

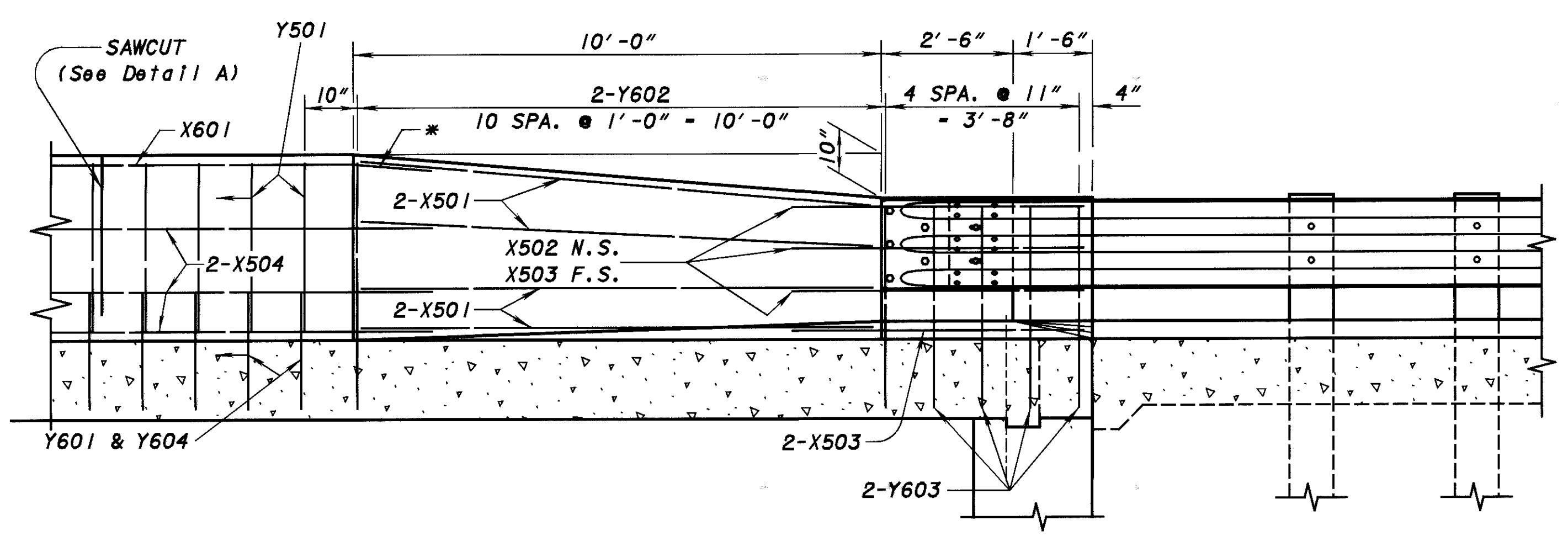
LEGEND: N.S. - NEAR SIDE
F.S. - FAR SIDE



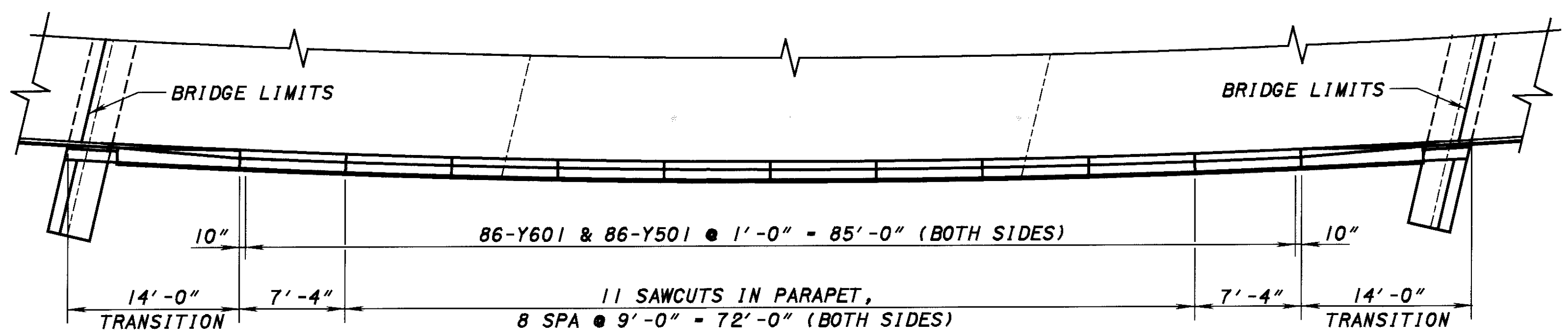
DETAIL A
(Section through sawcut)
Sawcut Perimeter = 7'-6"

NOTE
CURB DETAIL APPLIES ONLY TO THE LEFT SIDE (LOW SIDE OF SUPERELEVATION) OF THE APPROACH SLAB. RIGHT SIDE SHALL BE FLUSH WITH FACE OF GUARDRAIL

PART PLAN AT ABUTMENT



SECTION A-A



CONTROL JOINTS FOR CONCRETE PARAPETS: THE JOINTS SHALL BE CONSTRUCTED BY SAWING 1 1/4 INCH DEEP ALONG THE PERIMETER OF THE PARAPET AS SOON AS THE SAW CAN BE OPERATED WITHOUT DAMAGING THE CONCRETE.

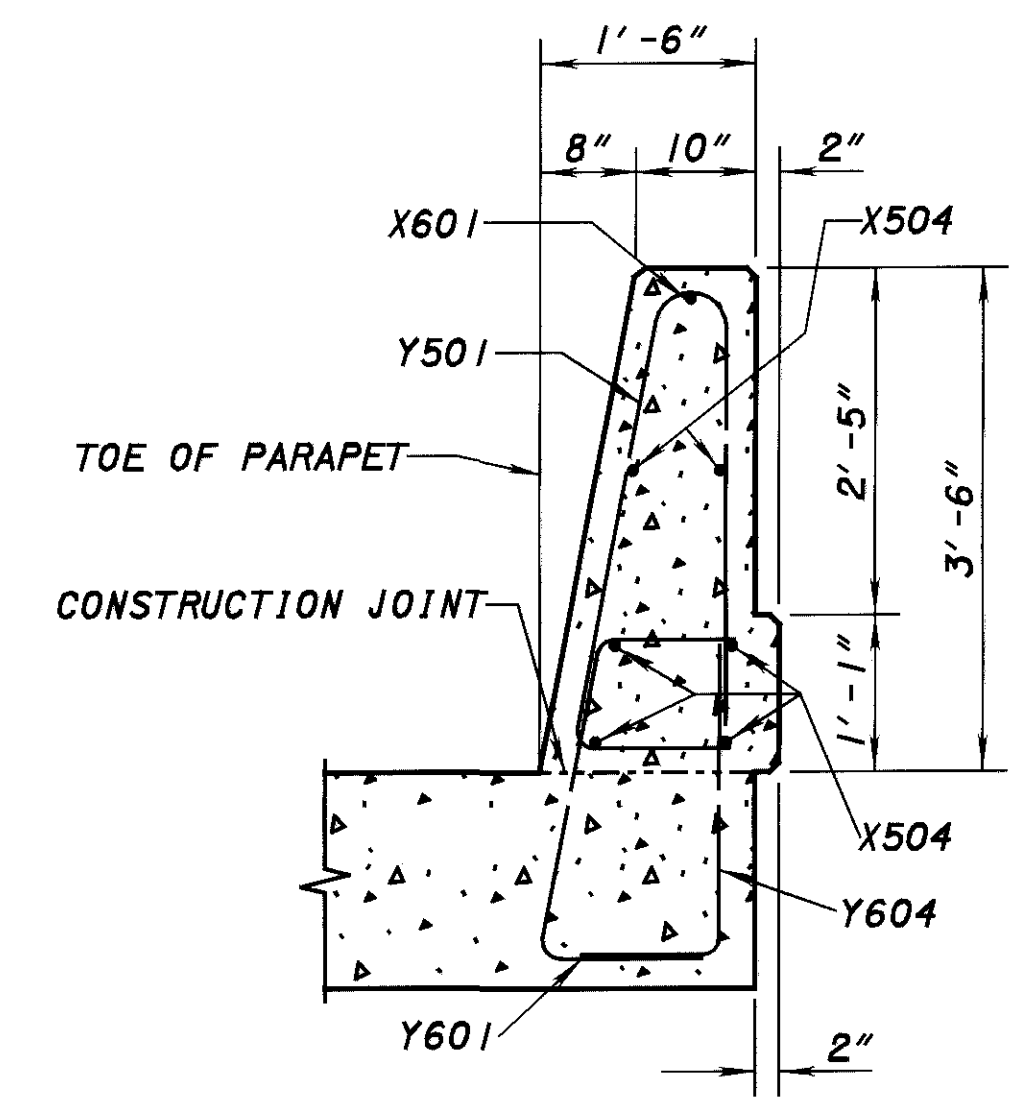
THE USE OF AN EDGE GUIDE, FENCE, OR JIG IS REQUIRED TO ENSURE THAT THE CUT JOINT IS STRAIGHT, TRUE, AND ALIGNED ON ALL FACES OF THE PARAPET. THE JOINT WIDTH SHALL BE THE WIDTH OF THE SAW BLADE, A NOMINAL WIDTH OF 1/4 INCH.

THE PERIMETER OF THE DEFLECTION CONTROL JOINT SHALL BE SEALED WITH A CAULKING MATERIAL TO A MINIMUM DEPTH OF ONE INCH CONFORMING TO FEDERAL SPECIFICATION TT-S-00227E. THE BOTTOM ONE-HALF INCH OF THE OUTSIDE FACE OF THE PARAPET SHOULD BE LEFT UNSEALED TO ALLOW ANY WATER WHICH MAY ENTER THE JOINT TO ESCAPE.

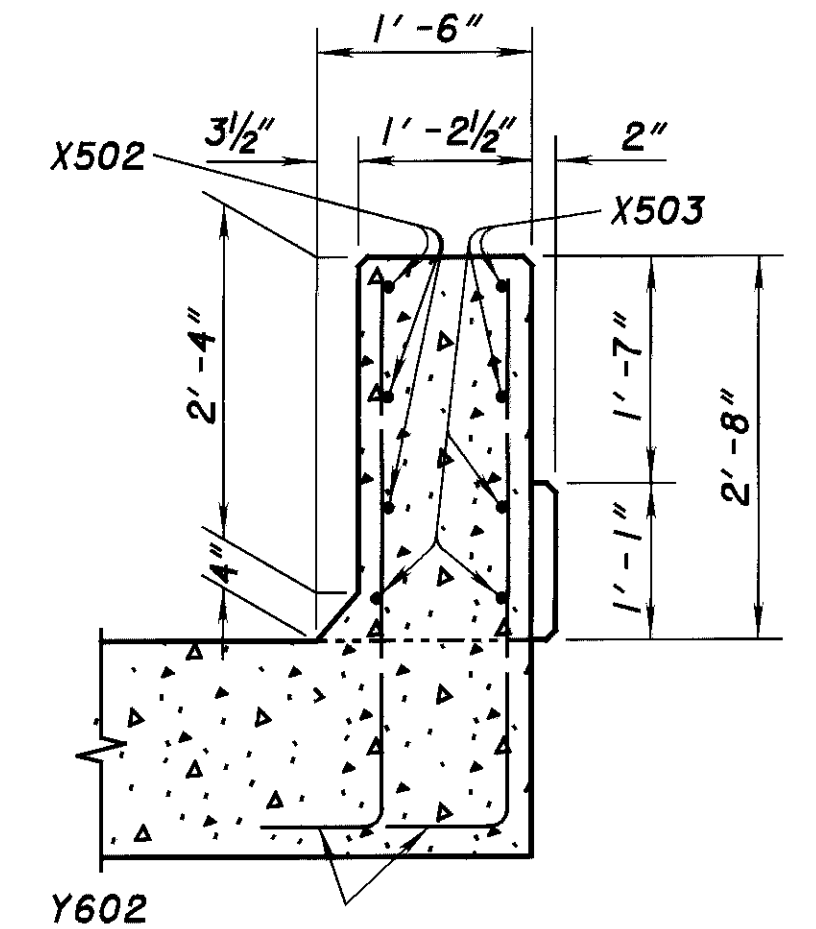
QUANTITIES OF CONCRETE, REINFORCING STEEL, DEFLECTION JOINT SAWCUT AND CAULKING MATERIAL FOR PARAPET ARE INCLUDED WITH ITEM 844 HIGH PERFORMANCE CONCRETE, SUPERSTRUCTURE (PARAPET).

FOR BRIDGE TERMINAL ASSEMBLY SEE STANDARD CONSTRUCTION DRAWING GR-3.1 AND GR-3.2.

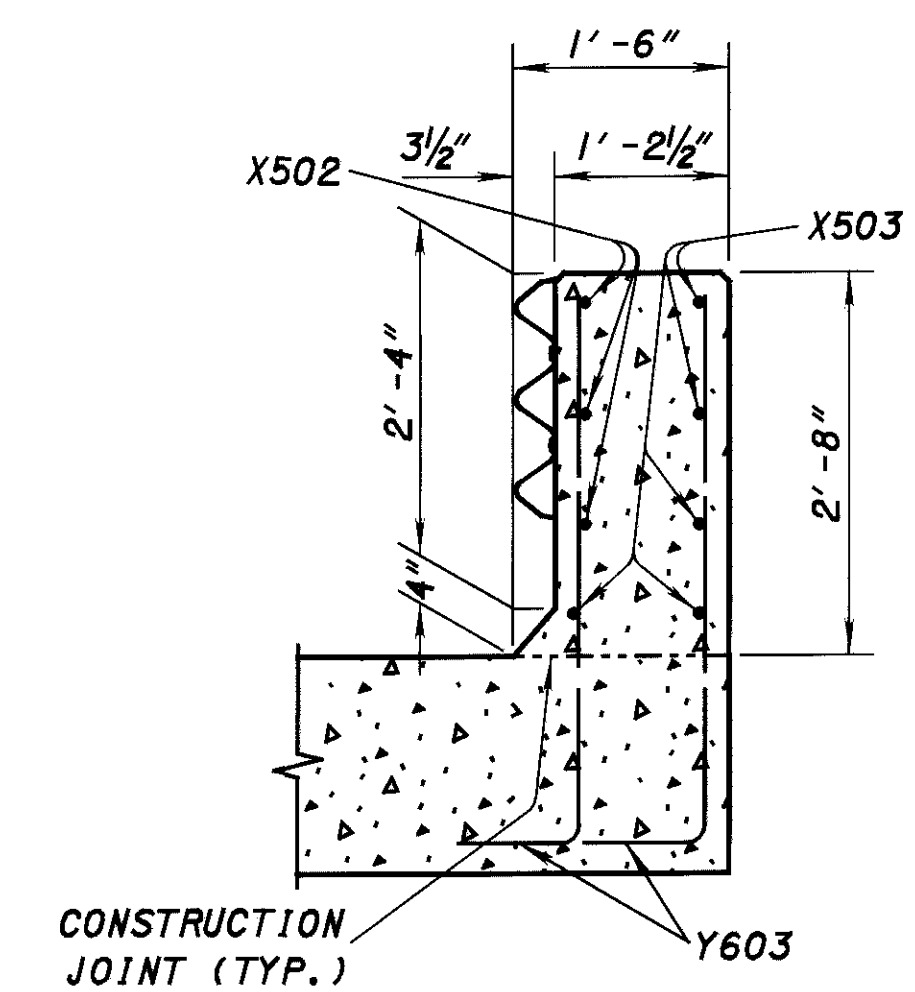
MIN. LAP SPLICES: #5 BAR - 2'-6"
#6 BAR - 3'-0"



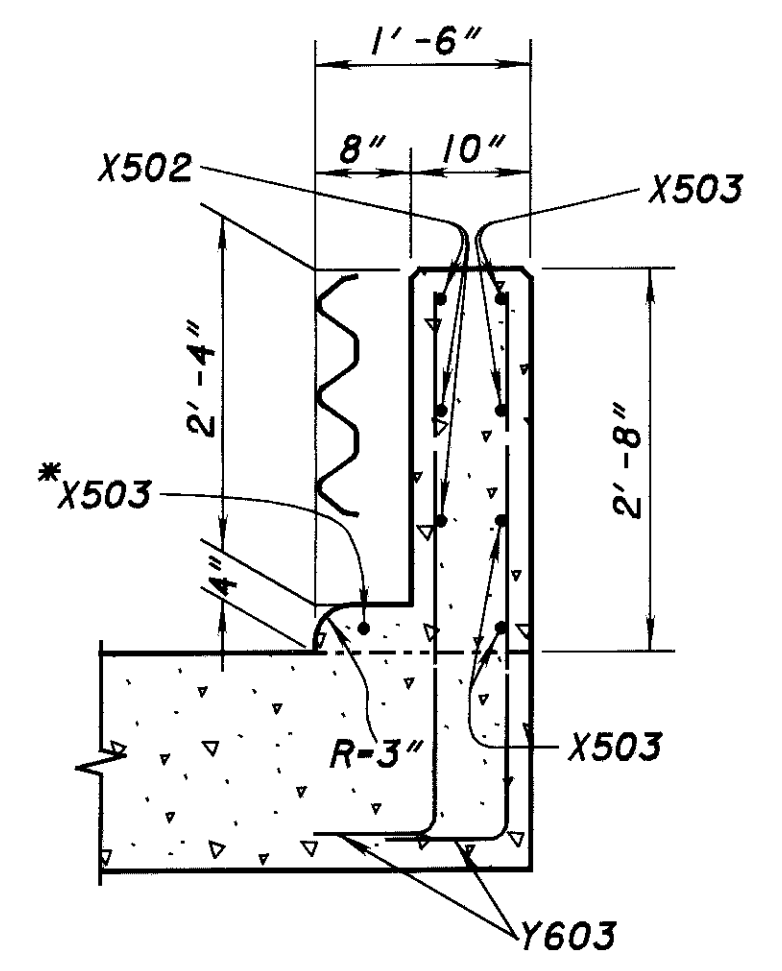
SECTION B-B & C-C
Area = 4.26 ft²



SECTION D-D



SECTION E-E



SECTION F-F

* FIELD BEND IF NECESSARY

DESIGN AGENCY
ODOT CENTRAL OFFICE
OFFICE OF PRODUCTION

DATE
9-7-99
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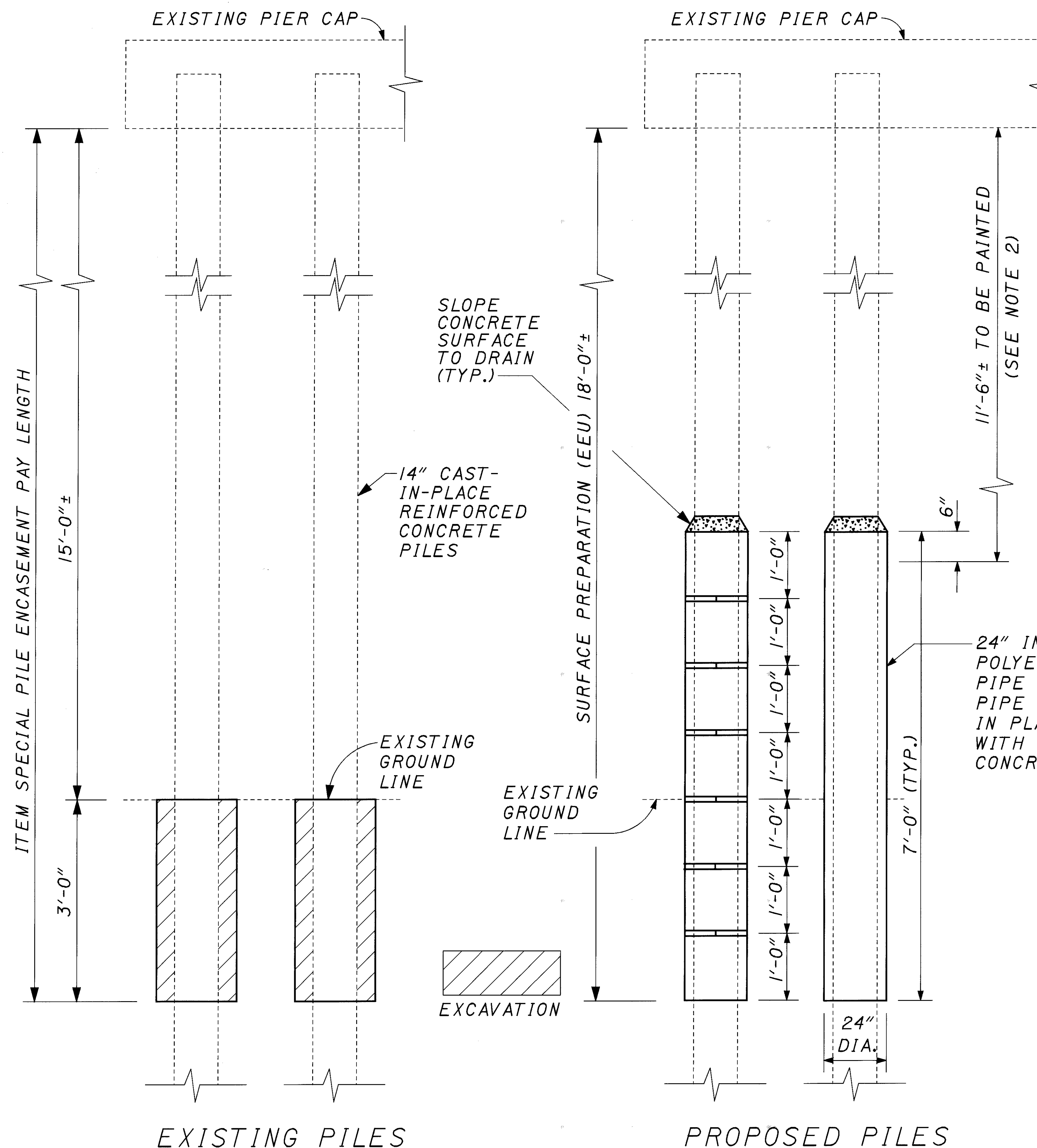
DRAWN
TKB
REVIEWED
TKB
RJH

SUPERSTRUCTURE DETAILS
MED-71-2088 E
RAMP "B" OVER PLUM CREEK, S.R. 3 INTERCHANGE

MED-71-15.78

13/16

833
940



- NOTE:
1. ALL PAINTING AS PER THE FIELD PAINTING OF EXISTING STEEL, USING EPOXY AND URETHANE (EEU) PROPOSAL NOTE OMITTING THE QUALITY CONTROL SPECIALIST AND TEST SECTION.
THERE ARE 7 (SEVEN) COLUMNS PER PIER.
THERE ARE 2 (TWO) PIERS ON STRUCTURE.
 2. AT THE CONTRACTOR'S OPTION AT NO ADDITIONAL COST TO THE STATE, THE CONTRACTOR MAY EXTEND THE ENCASEMENT TO THE BOTTOM OF THE EXISTING PIER CAP IN LIEU OF PAINTING. SURFACE PREPARATION SHALL STILL BE PERFORMED.
 3. STABILITY OF CAPPED PILE PIERS SHALL BE MAINTAINED DURING CONSTRUCTION. THE WORK ON THE EXISTING PIER PILES SHALL TAKE PLACE PRIOR TO STAGE CONSTRUCTION OR AFTER ALL WORK IS COMPLETE ON THE SUPERSTRUCTURE.

ITEM SPECIAL PILE ENCASEMENT
THIS ITEM SHALL INCLUDE THE FOLLOWING: EXCAVATION AND REPLACEMENT OF THE EMBANKMENT TO ITS NATURAL STATE AT THE EXISTING PILES, POLYETHYLENE OR PVC PIPE, GALVANIZED STEEL BANDS, NUTS AND BOLTS. THE POLYETHYLENE 707.33 OR PVC PIPE (707.45) SHALL BE CUT LENGTHWISE ON ONE SIDE OR IN TWO (2) SECTIONS AS NEEDED TO ENCOMPASS THE EXISTING 14" CAST-IN-PLACE PILES. THE BANDS SHALL BE 1" IN WIDTH AND THICKNESS SHALL NOT BE LESS THAN 11 GAUGE (.1196"). BANDS SHALL BE TIGHTENED SO AS NOT TO ELONGATE WHEN CONCRETE IS PLACED WITHIN THE PIPE. MAXIMUM SPACING OF THE BANDS SHALL BE 1'-0". ALTERNATE METHODS MAY BE USED TO CLAMP THE SECTIONS TOGETHER AS APPROVED BY THE ENGINEER. THE POLYETHYLENE OR PVC PIPE SHALL BE FILLED WITH CLASS C CONCRETE AND INCLUDED WITH ITEM SPECIAL, PILE ENCASEMENT FOR PAYMENT. ALL PAINTING PER PLAN NOTES SHALL BE INCLUDED WITH ITEM SPECIAL, PILE ENCASEMENT FOR PAYMENT.