

PLOT SUBMITTED BY: CRMOVSEK
PLOT SUBMITTED: 10-JAN-1991 09:04
ZF1:100,32105731GTA.DGN

8/1/14

SIGN DESIGNATION		MICROFILMED
Current A.D.T.	= 45,810	JUL 19 1994
Design Year A.D.T.	= 54,970	
D.H.V.	= 5,497	
D	= 50%	
T	= 3%	
V (Posted)	= 50 MPH	
V (Design)	= 50 MPH	
Functional Classification = Principal Arterial		

DESIGN EXCEPTIONS
Shoulder Width

APPROVAL DATE
April 6, 1989

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
CUY-2-15.99
CITY OF CLEVELAND
CUYAHOGA COUNTY

CUYAHOGA COUNTY	OHIO
CUY-2-15.99	FHWA REGION 5
F-73(50)	FEDERAL PROJECT

F-73(50)

CONVENTIONAL SIGNS

County Line	-----	Limited Access (only)	-----	L/A
Township Line	-----	Right of Way (only)	-----	R/W
Section Line	-----	Limited Access & Right of Way	-----	L/A & R/W
Corporation Line	-----	Existing Right of Way	-----	R/W
Fence Line (existing)	-----	Property Line	-----	(in existing fence)
Center Line	-----	Railroad	-----	or -----
Trees	⊙, Stumps	Guardrail (existing)	-----	(proposed)
Utility Poles	Telephone ⊕, Power ⊕, Light ⊕			

INDEX OF SHEETS

TITLE SHEET	1
SCHEMATIC PLAN	2
TYPICAL SECTIONS	3-15
GENERAL NOTES	16-22, 22A, 22B
CALCULATIONS & SUB-SUMMARIES	23-42, 42A-D
GENERAL SUMMARY	43-46
PLAN SHEETS	47-53
PLAN DETAILS	54-72, 72A-C
MISCELLANEOUS DETAILS	73-92, 92A, 92B
CROSS SECTIONS	93, 93A, 93B, 94-136
MAINTENANCE OF TRAFFIC	138-189
TRAFFIC CONTROL	190-224, 224A, 225, 225A, 226
LIGHTING	227-245, 245A
CLEVELAND PUBLIC POWER RELOCATION	246-253, 253A
SAFETY SIGNAL SYSTEM RELOCATION	254-256
STRUCTURES 20' SPAN AND UNDER	256A-C
STRUCTURES OVER 20' SPAN	257-281
NOT USED	80, 137

LINE DATA

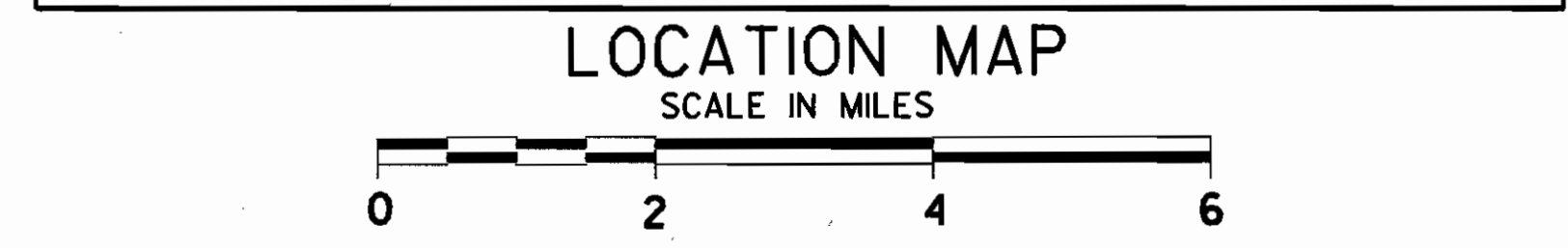
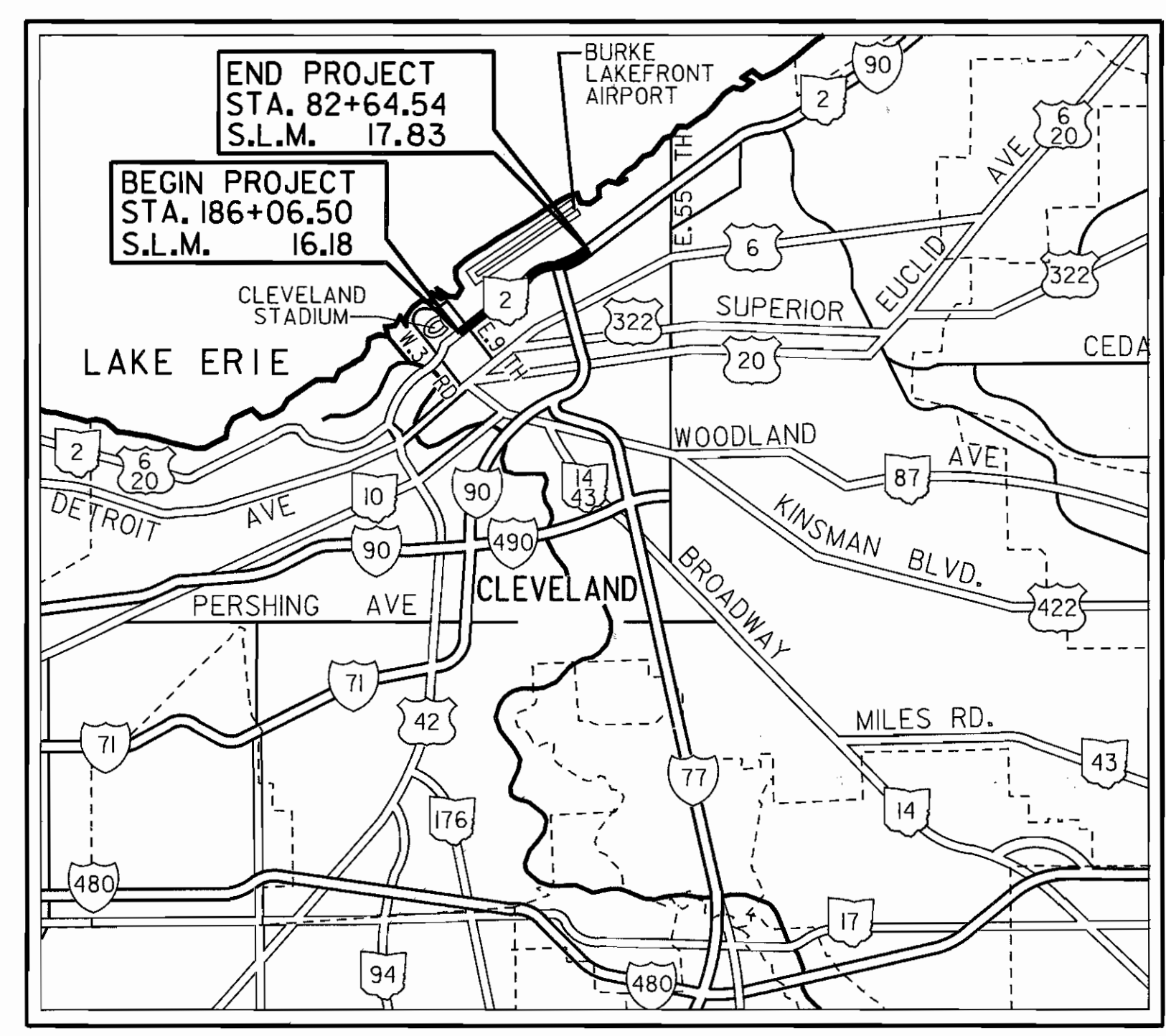
Begin Project	Sta. 186+06.50
Suspend Project	Sta. 59+17.46
Resume Project	Sta. 61+19.96
End Project	Sta. 82+64.54
Additions & / or Deductions *	19,048.10 Lin. Ft.
Length of Project	8512.77 Lin. Ft. or 1.612 Miles
Add for Work	
S.R. 2	
Sta. 180+85.97 to Sta. 186+06.50	520.53 Lin. Ft.
Sta. 59+17.46 to Sta. 61+19.96	202.50 Lin. Ft.
I.R. 90	
Sta. 65+45.03 to Sta. 87+94.65	2249.62 Lin. Ft.
Additions & / or Deductions ***	1609.77 Lin. Ft.
Length of Work	13095.19 Lin. Ft. or 2.480 Miles

* Station Equation (S.R. 2)
Sta. 190+48.10 (Back) =
Sta. 0+00.00 (Ahead) = 19,048.10 Lin. Ft.

* Station Equation (S.R. 2)
Sta. 61+47.03 (Back) =
Sta. 61+37.90 (Ahead) = 9.13 Lin. Ft.

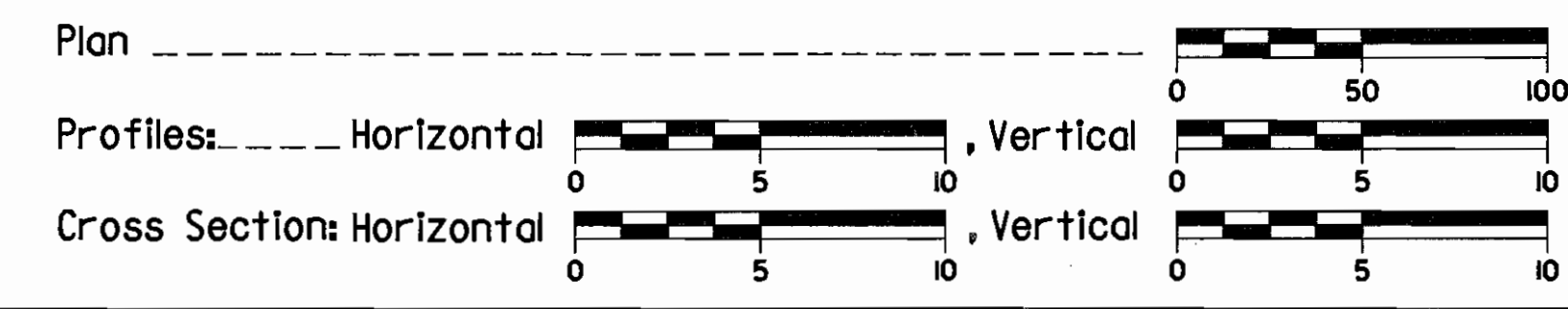
*** Station Equation (I.R. 90)
Sta. 87+09.77 (Back) =
Sta. 71+00.00 (Ahead) = 1609.77 Lin. Ft.

Plan Prepared By:
OHIO DEPARTMENT OF
TRANSPORTATION
DISTRICT 12
Location & Design



Portion to be Improved
State & Federal Routes
Other Roads

SCALES



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

SUPPLEMENTAL SPECIFICATIONS			
802	4-13-90		
	836	11-12-85	
	814	1-21-88	
852	6-10-87		
931	6-18-85		
952	12-14-88		

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS																		
BP-1	6-1-65	GR-1	✓	1-11-85	CB-2-2 A&B	✓	5-1-79	TC-7.65	✓	3-1-79	TC-41.10	✓	8-29-84	MT-95.30	✓	10-10-88	HL-20.13	5-1-87
BP-2	1-11-85	GR-2B	✓	2-5-82				TC-12.30	✓	1-20-84	TC-41.20	✓	3-26-79	MT-98.12	✓	8-25-89	HL-30.11	5-1-87
BP-3	12-6-76	GR-3	✓	10-25-90	CB-5	✓	11-10-83	TC-16.20	✓	1-20-84	TC-41.40	✓	6-18-79	MT-98.13	✓	8-25-89	HL-30.21	5-1-87
BP-4	10-1-87	GR-4	✓	2-5-82	CB-6	✓	5-1-79	TC-18.24	✓	4-25-79	TC-41.50	✓	3-26-79	MT-98.14	✓	8-25-89	HL-30.22	5-1-87
BP-5	10-1-87	GR-4A	✓	1-30-84	CB-3A	✓	5-1-79	TC-21.10	✓	1-20-84	TC-42.10	✓	8-19-77	MT-98.15	✓	8-25-89	HL-30.31	5-1-87
BP-7	10-1-87	GR-5	✓	2-5-82				TC-21.20	✓	1-20-84	TC-42.20	✓	3-26-79	MT-99.10	✓	11-14-86	HL-30.33	5-1-87
BP-9	12-6-76				I-3A & B	✓	4-1-80	TC-21.40	✓	3-1-79	TC-51.10	✓	1-20-84	MT-99.20	✓	4-29-88	HL-50.11	5-1-87
BP-12	10-1-87	MC-1	✓	6-13-69	I-3C & D	✓	4-1-80	TC-22.10	✓	3-1-79	TC-51.11	✓	1-20-84					
BP-13	1-23-90	MC-4	✓	7-26-76	MH-2	✓	6-12-75	TC-22.20	✓	3-1-79	TC-52.10	✓	4-3-79			HL-60.11	5-1-87	
F-7	11-1-77	MC-6	✓	1-30-84	MH-1	✓	12-18-84	TC-31.21	✓	3-6-79	TC-52.20	✓	4-3-79	HL-10.11	✓	5-1-87	LA-1	6-1-79
BR-1	5-29-79	MC-9	✓	1-30-84	MH-3	✓	12-18-84	TC-32.10	✓	3-8-79	TC-82.10	✓	8-29-84	HL-10.12	✓	5-1-87		
SD-1-69	6-12-69	MC-9A	✓	1-11-85	MH-5	✓	6-12-75	TC-32.11	✓	3-21-79	TC-72.20	✓	2-26-82	HL-10.13	✓	5-1-87	HL-60.12	5-1-87
n		MC-11	✓	8-1-78	TC-21.41	✓	3-1-79	TC-35.10	✓	8-29-84	TC-83.20	✓	1-20-84	HL-20.11	✓	5-1-87	HL-60.31	5-1-87

1991 SPECIFICATIONS

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

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

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 Matthew A. Gullett
Date 1-10-90 District Deputy Director of Transportation

Approved B.D. Hanchman
Date 3-13-91 Engineer, Bureau of Bridges and Structural Design

Approved George L. Budge
Date 4-19-91 Chief Engineer, Planning and Design

Approved James Wray
Date 4-9-91 Director, Department of Transportation

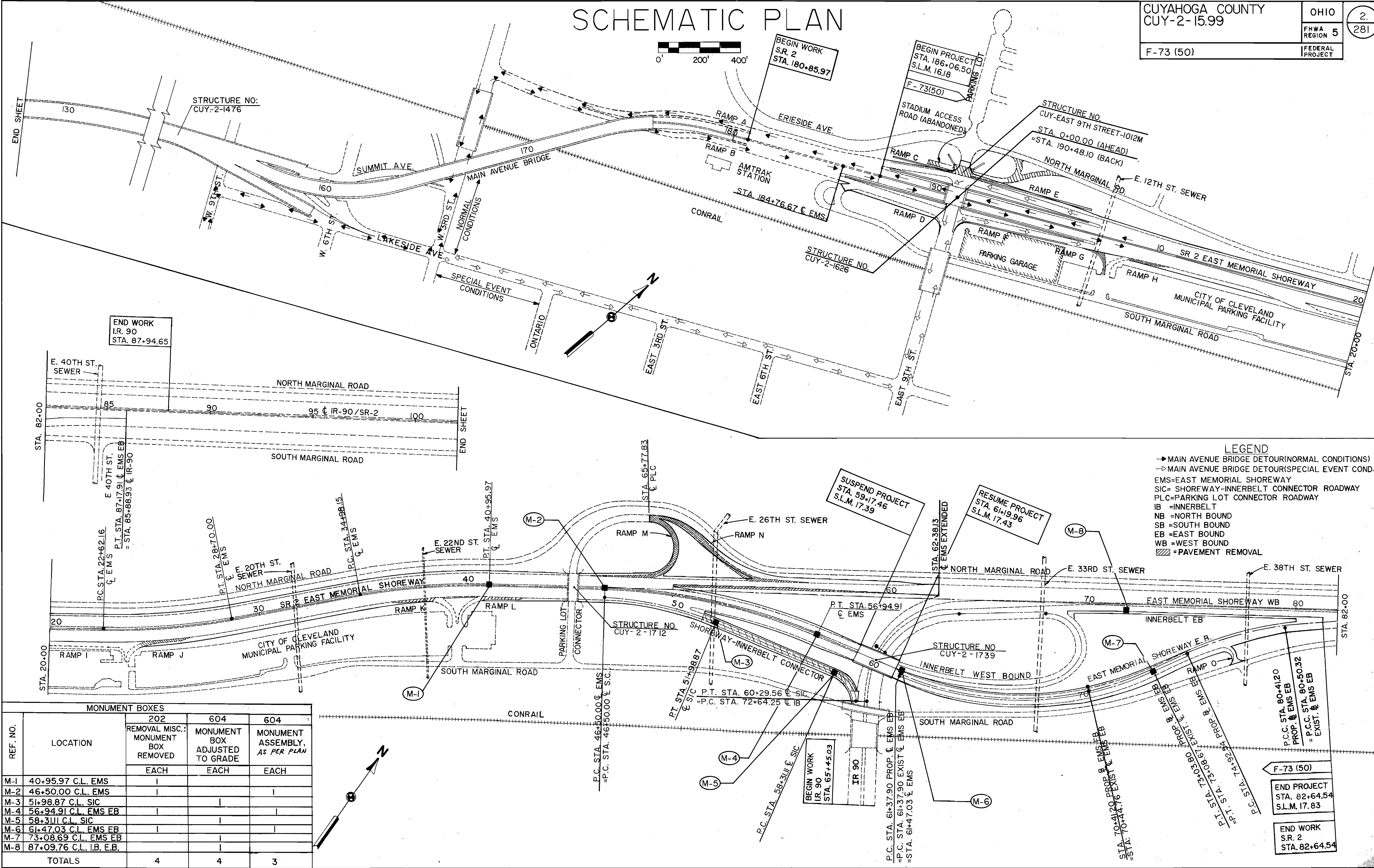
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

DIVISION ADMINISTRATOR DATE

Project: CUY-2-15.99 P.I.D. 05731
Date of Letting 19 Contract No.

SCHEMATIC PLAN



LOCATION	SPECIAL	519	SPECIAL	SPECIAL	SPECIAL
	LOW PRESSURE EPOXY INJECTING DELAMINATED CONCRETE	PATCHING CONCRETE STRUCTURE AS PER PLAN	REPAIRING CONC. STRUCT. W/ SOLVENT FREE EPOXY RESIN	EPOXY INJECTION	SURFACE PREPARATION FOR EPOXY INJECTION & FINISHING
	SQ. FT.	SQ. FT.	SQ. FT.	LIN. FT.	LIN. FT.
EAST ABUTMENT			5	15	15
WEST PIERS		15	5		
WEST ABUTMENT		30	5		
DECK BOTTOM	130				
SOUTH PARAPET		5	5		
ADDITIONAL	70	30	10	10	10
TOTAL	200	80	30	25	25

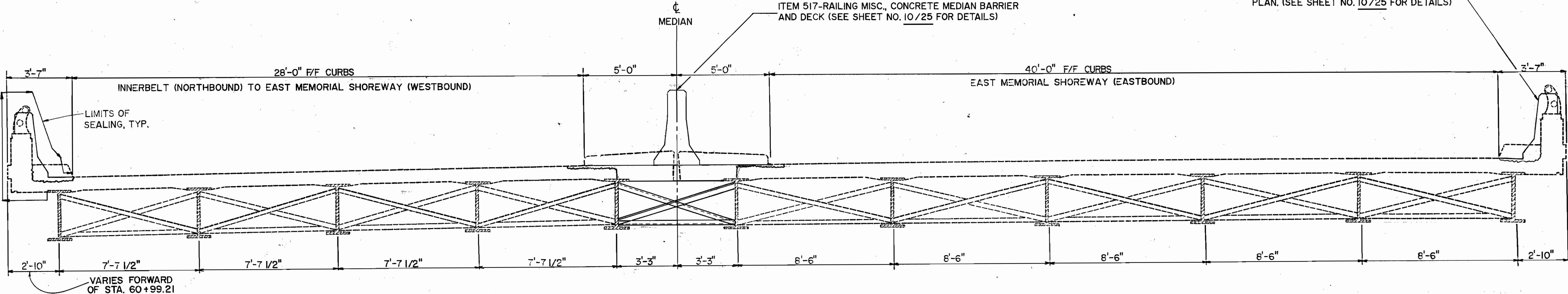
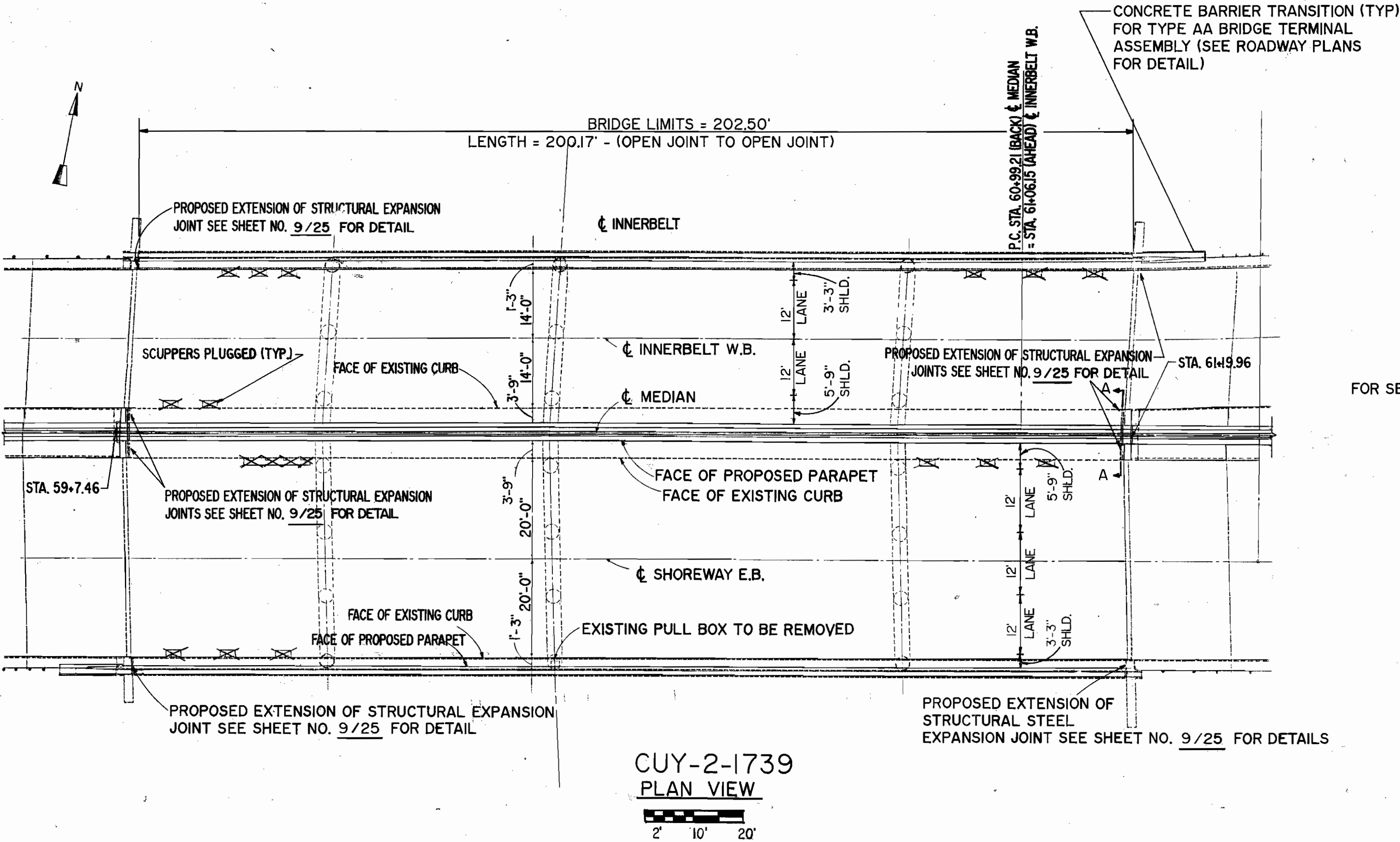
EXISTING STRUCTURE
TYPE: CONT. STEEL BEAMS WITH REINF. CONC. DECK AND REINF. CONC. SUBSTRUCTURE
SPANS: 38'-46"-70'-44' C/C BRG.
ROADWAY: 78'-0" F/F 2'-0" SAFETY CURBS (INCL. 10'-0" MEDIAN)
LOAD FREQUENCY: CF 2000 (5I)
SKEW: 3°-35' LF AND 1°-29' RF
WEARING SURFACE: 1 1/4" LMC
APPROACH SLABS: AS-I-54 (20' LONG)
ALIGNMENT: TANGENT
SUPERELEVATION: ON TRANSITION

FOR SECTION A-A SEE SHEET 11/25

PROPOSED WORK

1. PATCHING AND SEALING OF EXPOSED CONCRETE SURFACES
2. EPOXY INJECTION REPAIR OF CONCRETE CRACKS IN ABUTMENTS
3. SOUNDING AND LOW PRESSURE EPOXY INJECTION REPAIR OF DECK BOTTOMS.
4. INSTALLATION OF SAFETY SHAPE RAILING FACING ON DECK AND WINGWALLS
5. REMOVAL OF MEDIAN JOINT AND REPLACEMENT WITH CONCRETE MEDIAN BARRIER
6. SEAL TRANSVERSE JOINTS

ITEM 517-RAILING FACED, AS PER PLAN. (SEE SHEET NO. 10/25 FOR DETAILS)



MODIFIED TYPICAL SECTION

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
DISTRICT 12 LOCATION & DESIGN

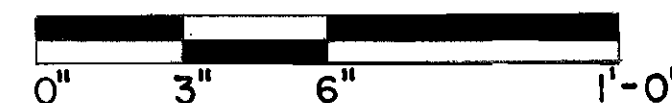
BR. NO. CUY-2-1739 OVER I-90
PLAN AND SECTION

CUYAHOGA COUNTY OHIO

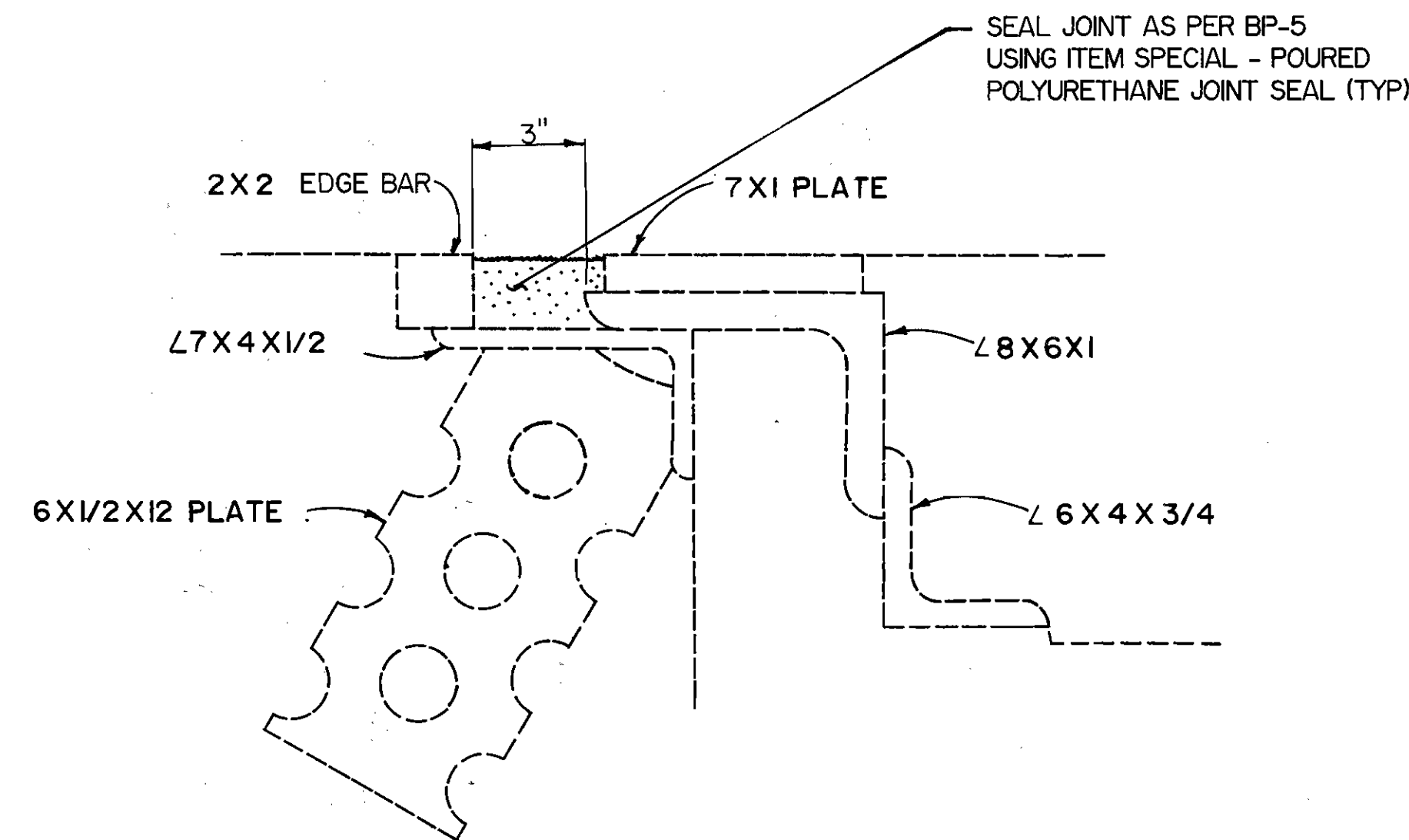
DESIGNED CKH	TRACED	CHECKED LAM	REVIEWED ENF	REVISED
-----------------	--------	----------------	-----------------	---------

SHEET 8/25

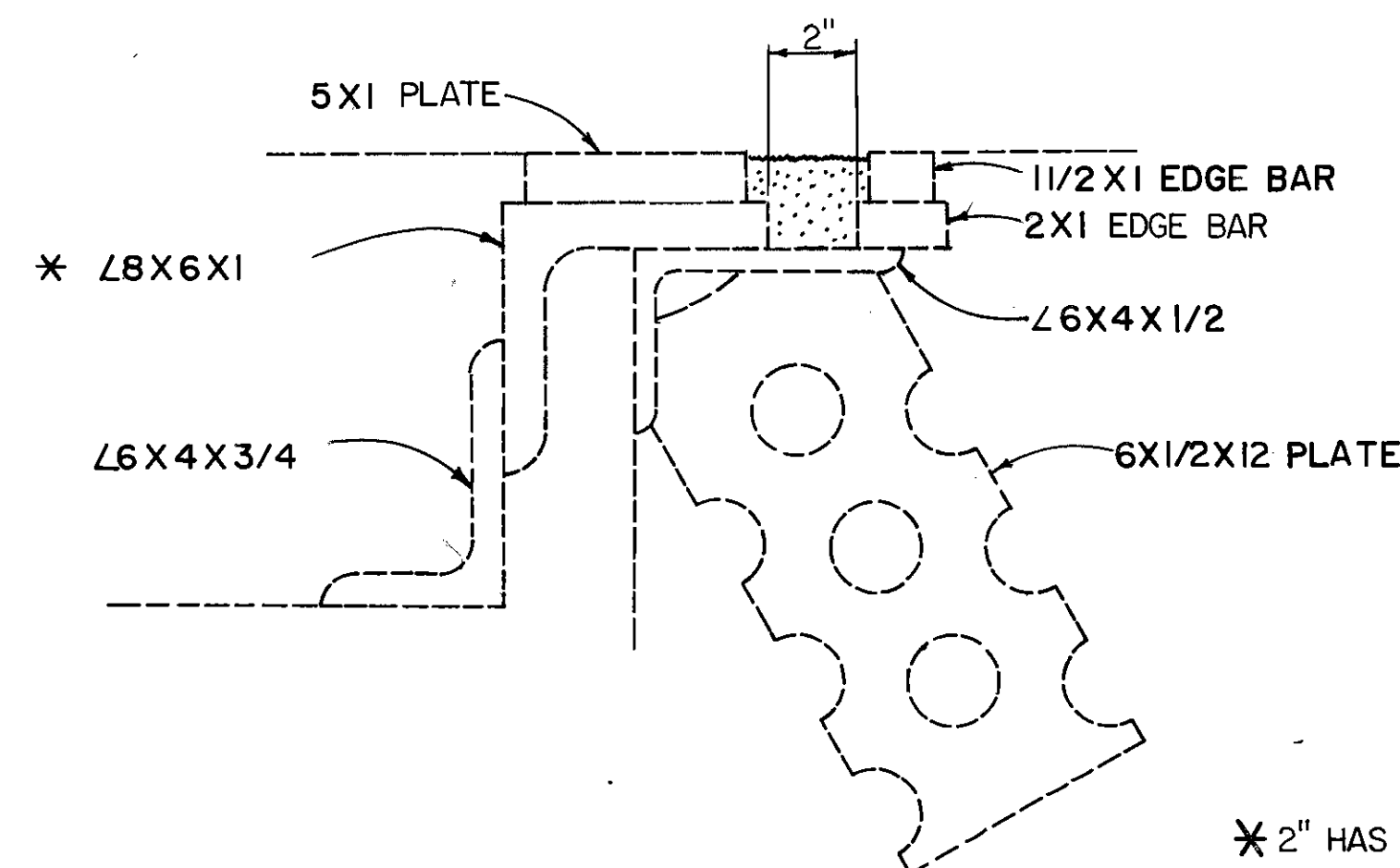
HORIZONTAL EXTENSION OF STRUCTURAL STEEL EXPANSION JOINTS



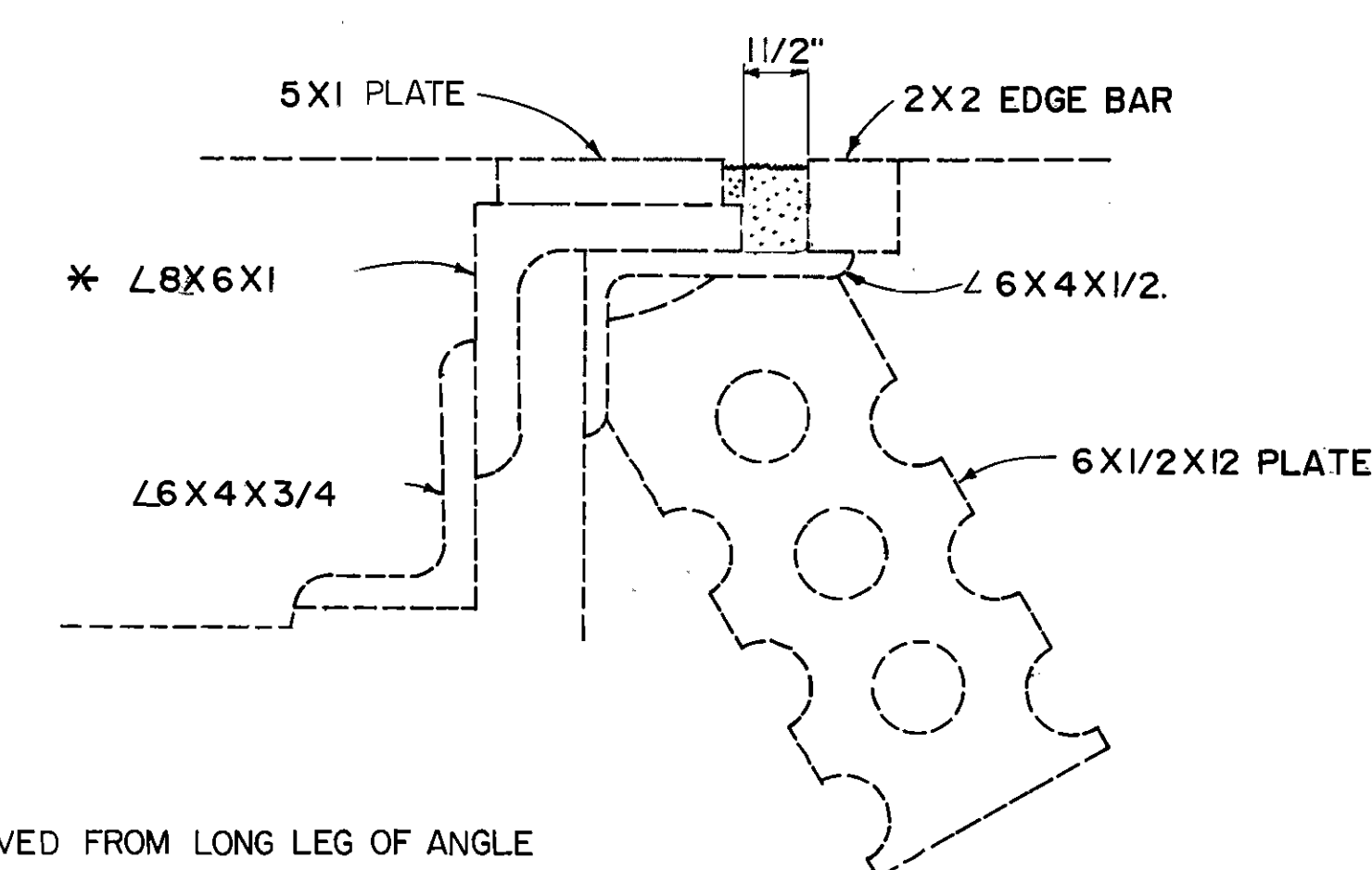
EXISTING STRUCTURAL STEEL EXPANSION JOINTS



REAR ABUTMENT
(SECTION B-B)



FORWARD ABUTMENT
SHOREWAY WESTBOUND
(SECTION B-B)

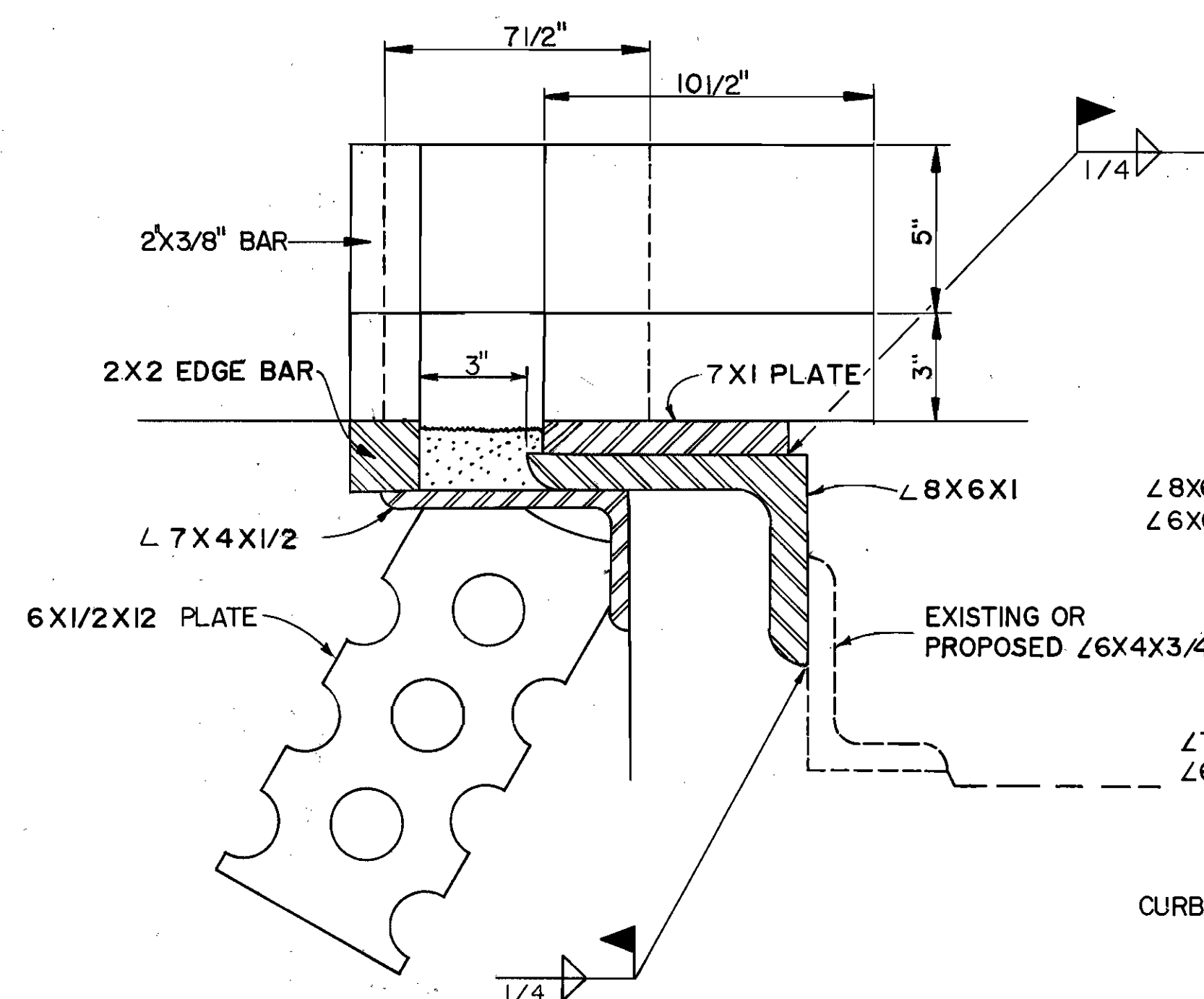


FORWARD ABUTMENT
SHOREWAY EASTBOUND
(SECTION B-B)

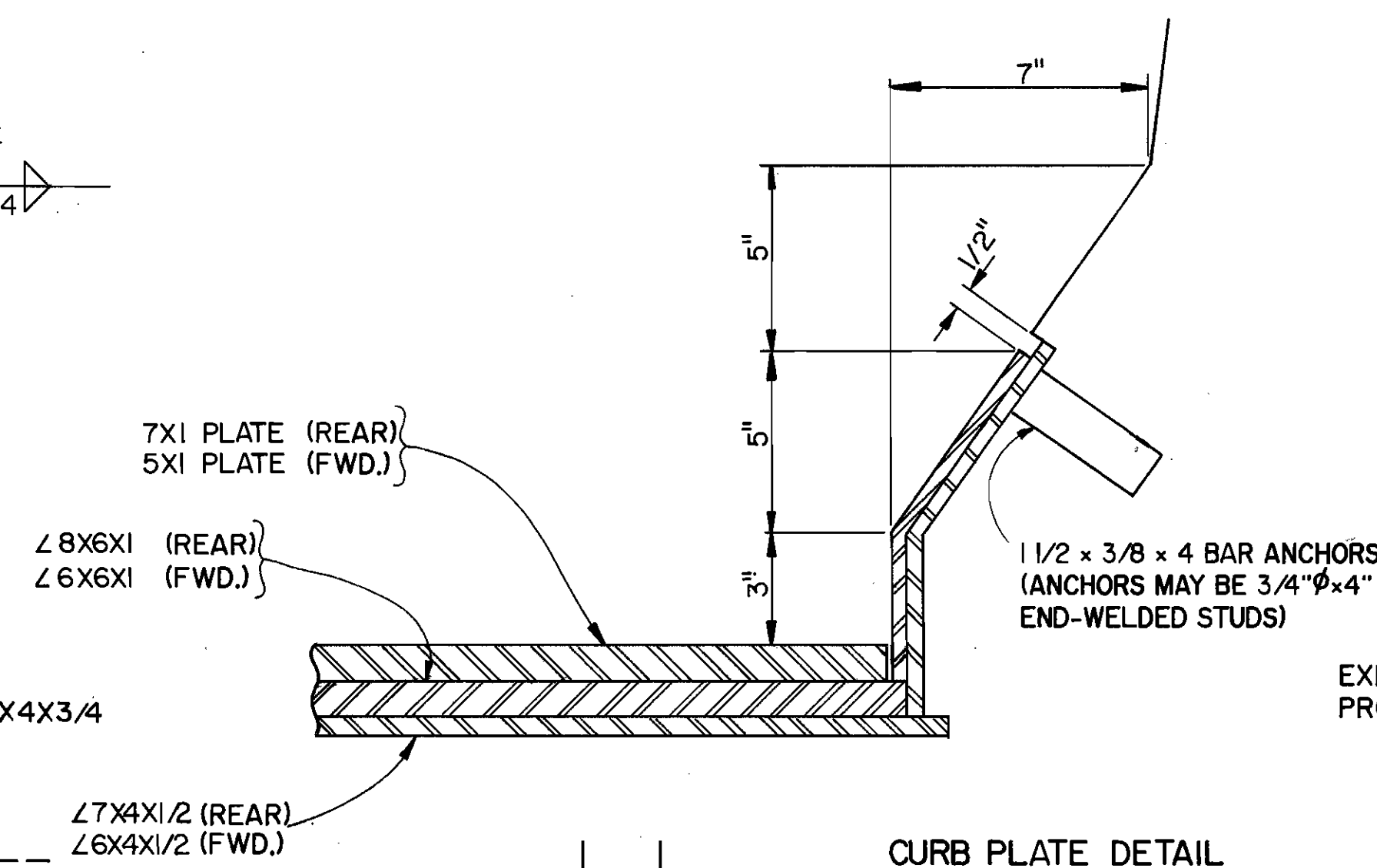
NOTES

1. REMOVE NECESSARY CONCRETE AT BACKWALL TOP TO PERFORM THIS WORK. CONCRETE REMOVAL SHALL NOT EXCEED 2" BELOW PROPOSED 6"x1/2"x12" UNLESS DIRECTED BY THE ENGINEER.
2. 6"x1/2"x12" SHALL BE SPACED AT 1'-4" AT OUTSIDE PARAPETS AND 1'-0" AT MEDIAN AND INITIAL PLACEMENT SHALL BE 3" FROM TOE OF BARRIER OR PARAPET.
3. CONCRETE SHALL BE CLASS S FOR WORK AT OUTSIDE PARAPET LOCATIONS AND SUPERPLASTICIZED CONCRETE FOR MEDIAN ABUTMENT LOCATIONS.
4. RETAIN ALL EXISTING VERTICAL REINFORCING STEEL AND CUT EXISTING HORIZONTAL REINFORCING STEEL WHERE NECESSARY.
5. SEE SD-1 FOR ADDITIONAL NOTES AND DETAILS

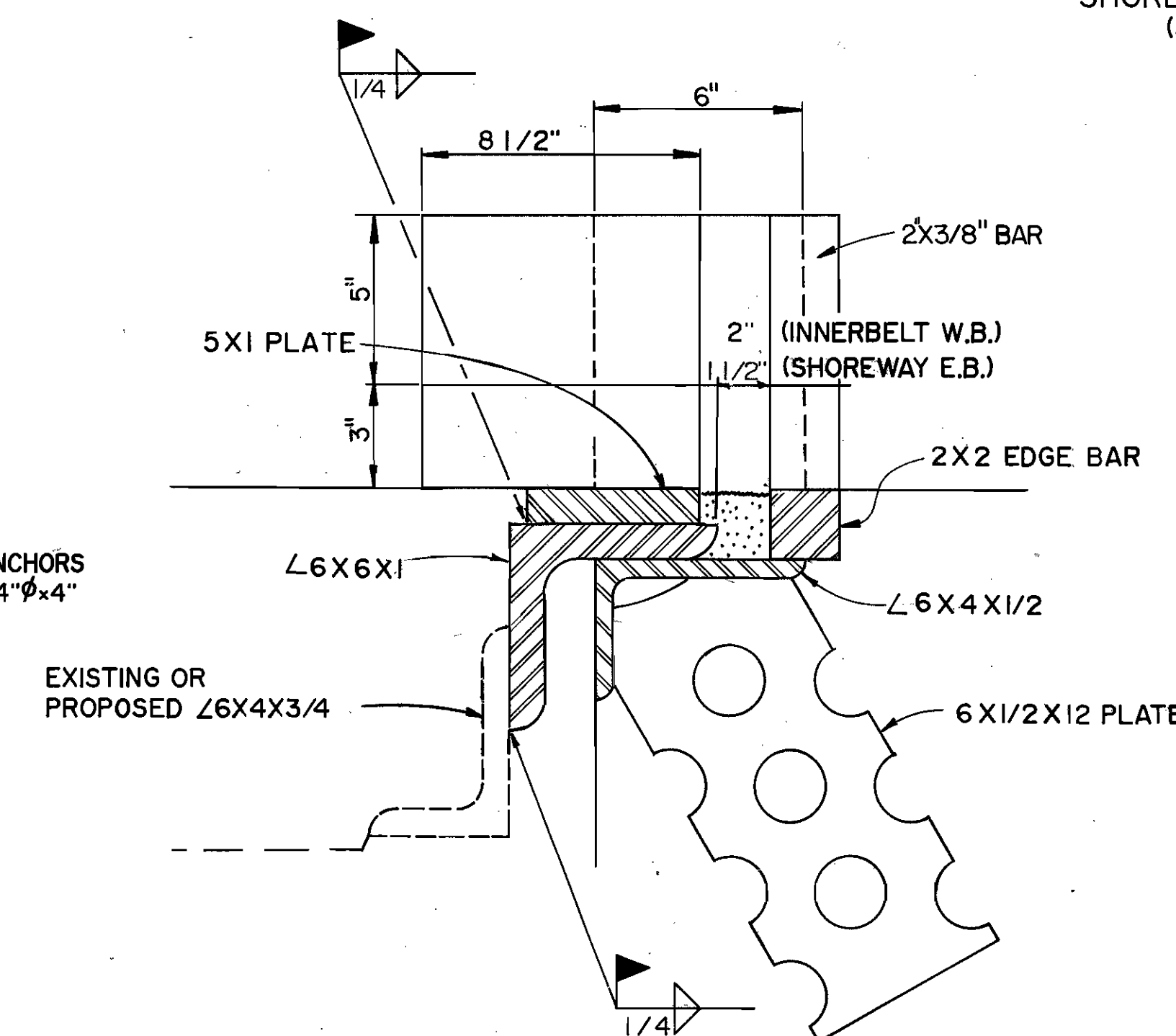
PROPOSED EXTENSION OF STRUCTURAL STEEL EXPANSION JOINTS



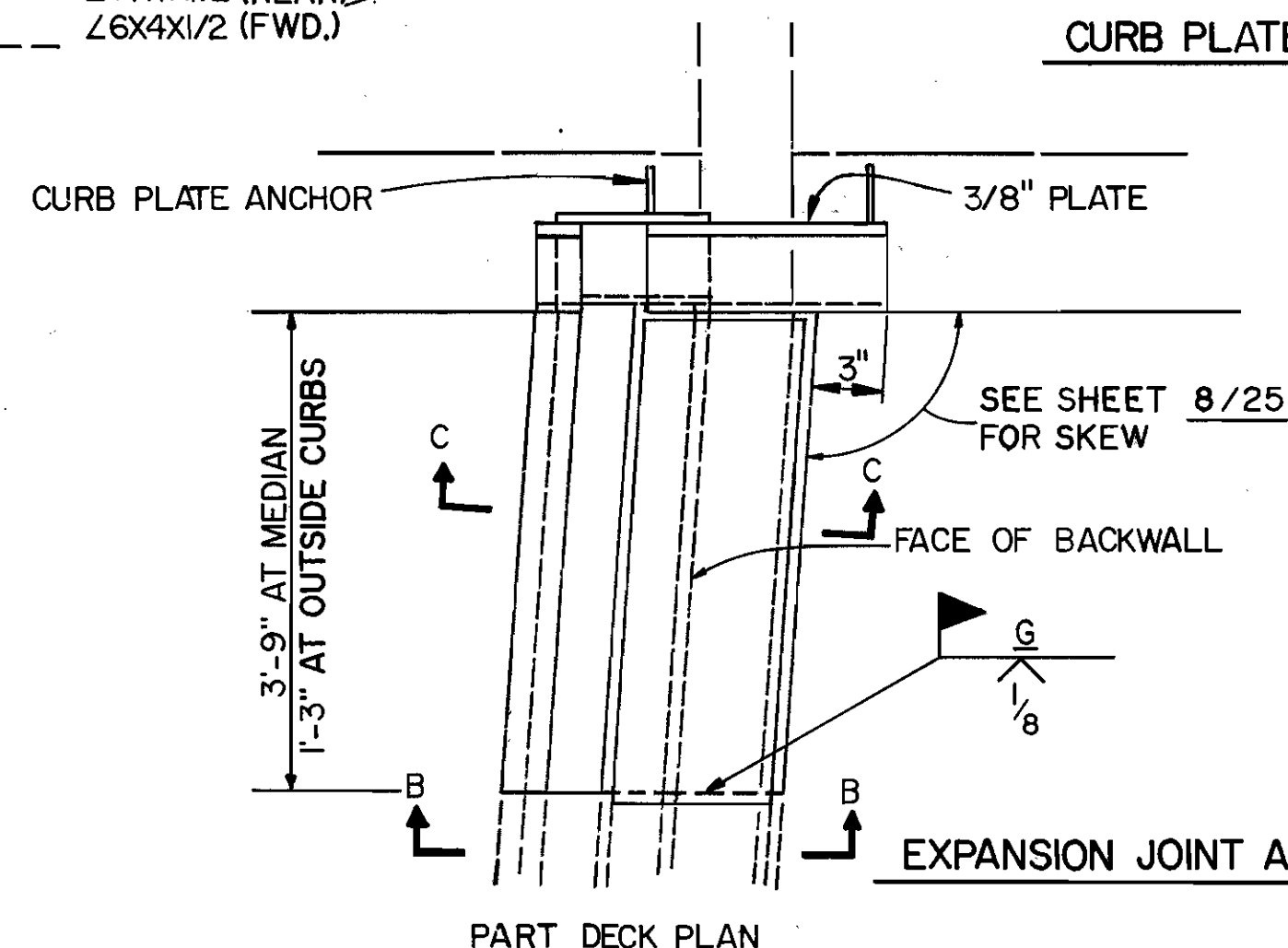
REAR ABUTMENT
(SECTION C-C)



CURB PLATE DETAIL



FORWARD ABUTMENT
(SECTION C-C)



EXPANSION JOINT AND CURB PLATE DETAIL

PART DECK PLAN

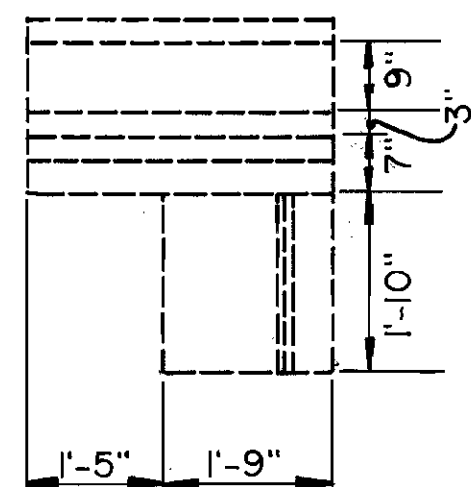
ITEM 517-RAILING MISC., CONCRETE MEDIAN BARRIER AND DECK

DESIGNED LAM	DRAWN JAG	CHECKED ENF	REVIEWED DWL	REVISED
DATE	DATE	DATE	DATE	SHEET 11 / 25

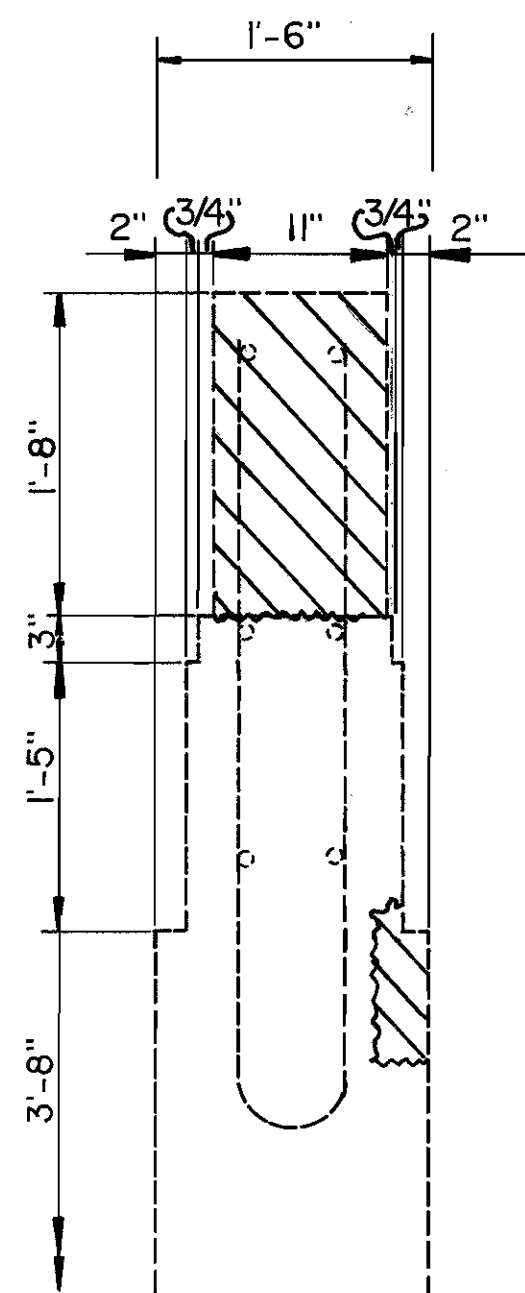
PILOT SUBMITTED BY: GRMOVSEK

ESTIMATING INFORMATION	
REINFORCING STEEL	22 LBS./L.F.
CONCRETE	0.10 CY./L.F.
DOWEL HOLES	1.67 EA./L.F.
CONCRETE REMOVAL	0.07 CY./L.F.

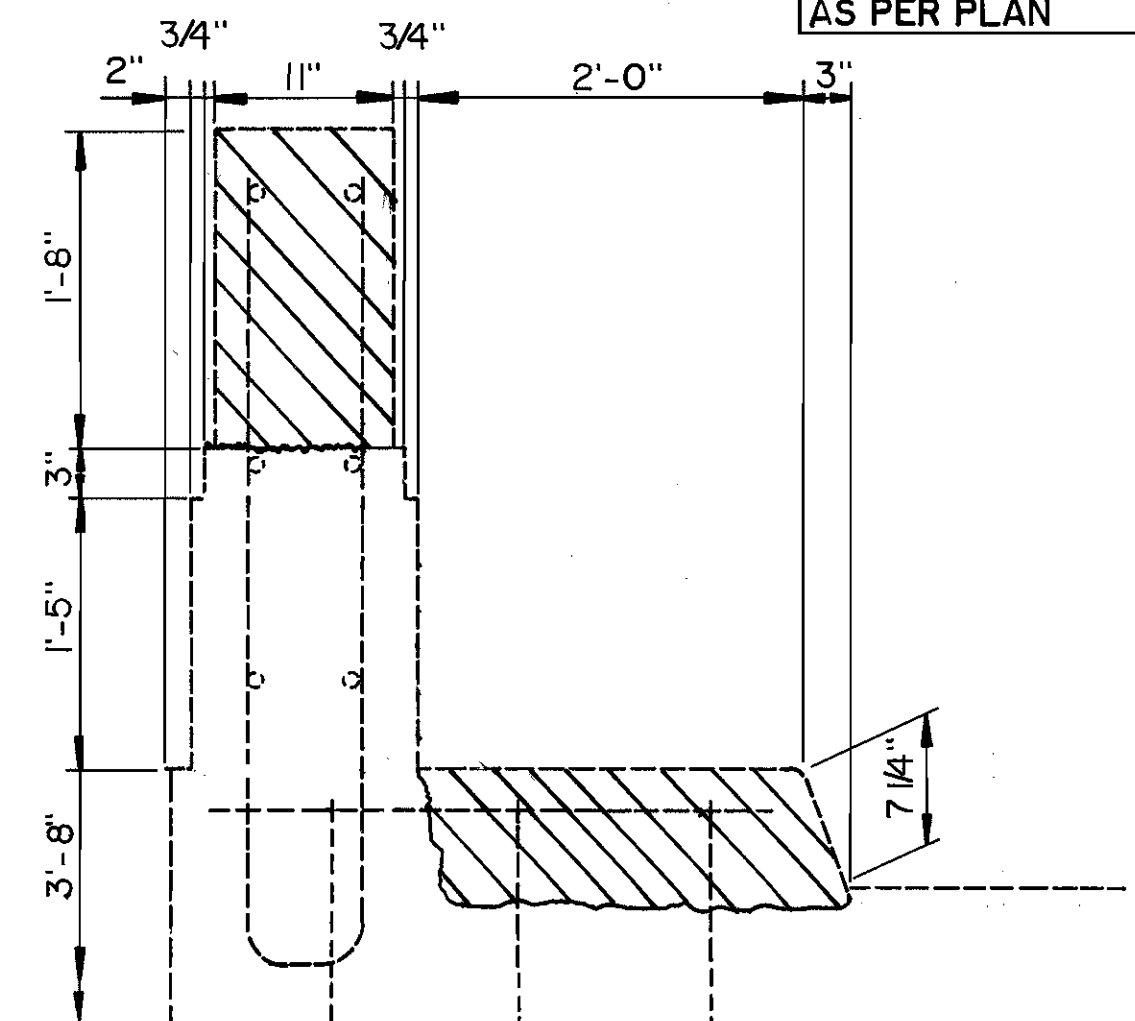
ALL ITEMS INCLUDED UNDER
ITEM 517-RAILING FACED
AS PER PLAN



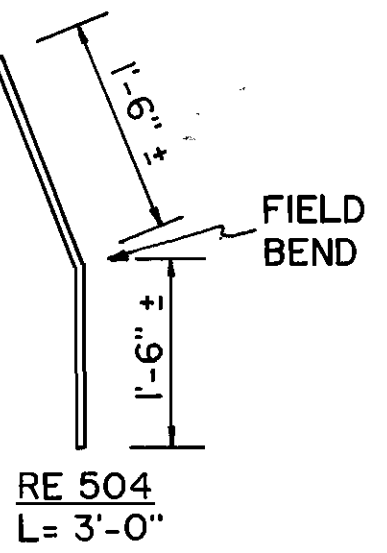
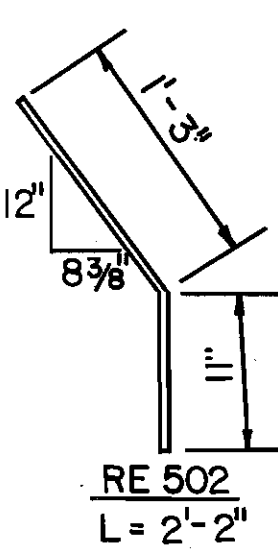
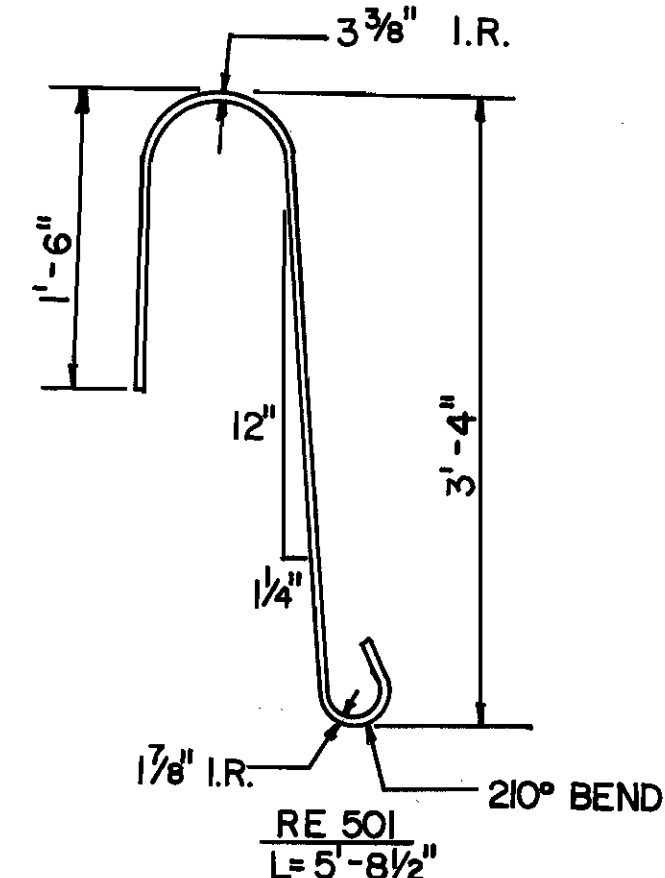
EXISTING WINGWALL
PLAN VIEW



SECTION A-A

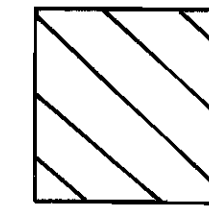


SECTION B-B

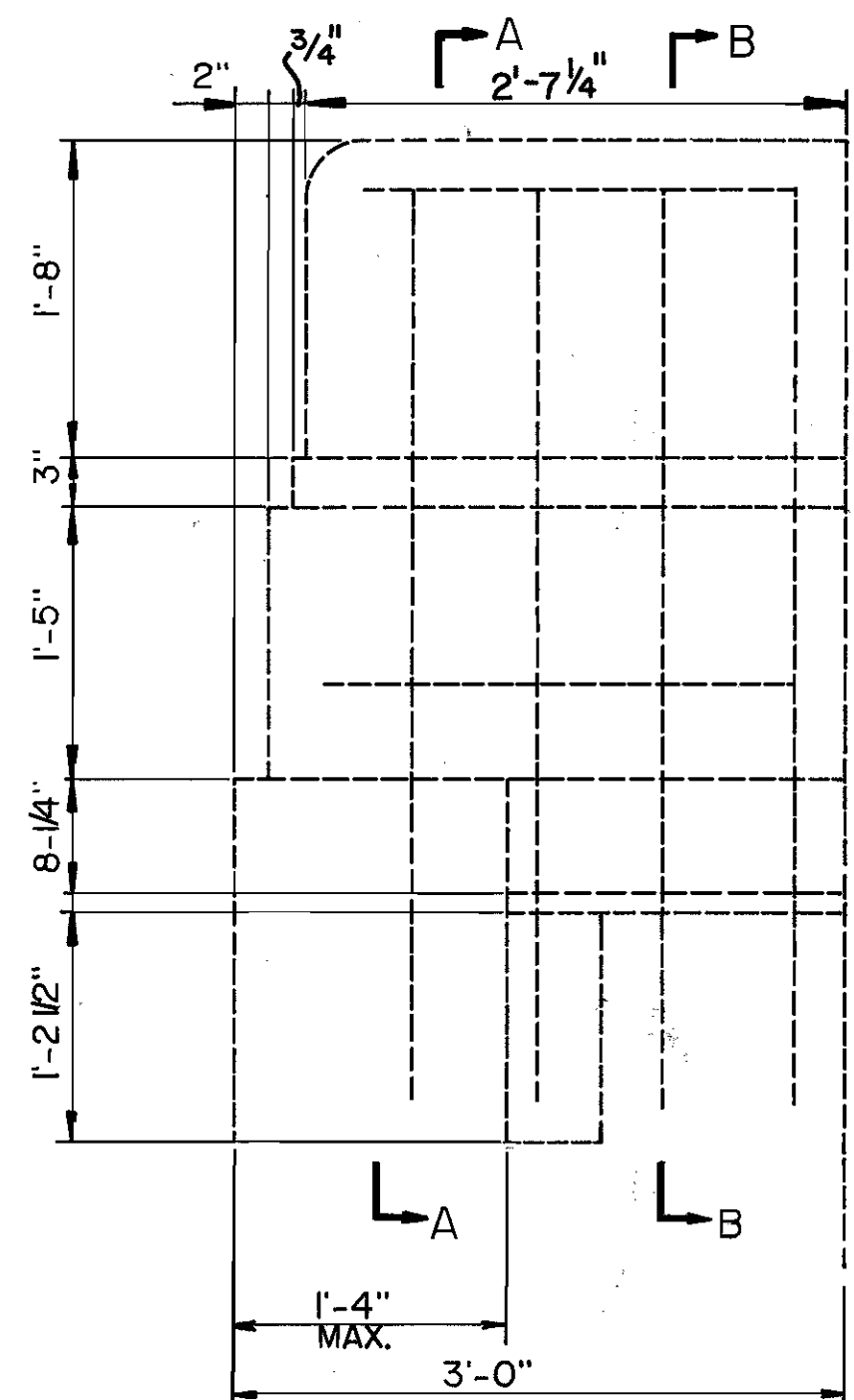


COMMON NOTES:

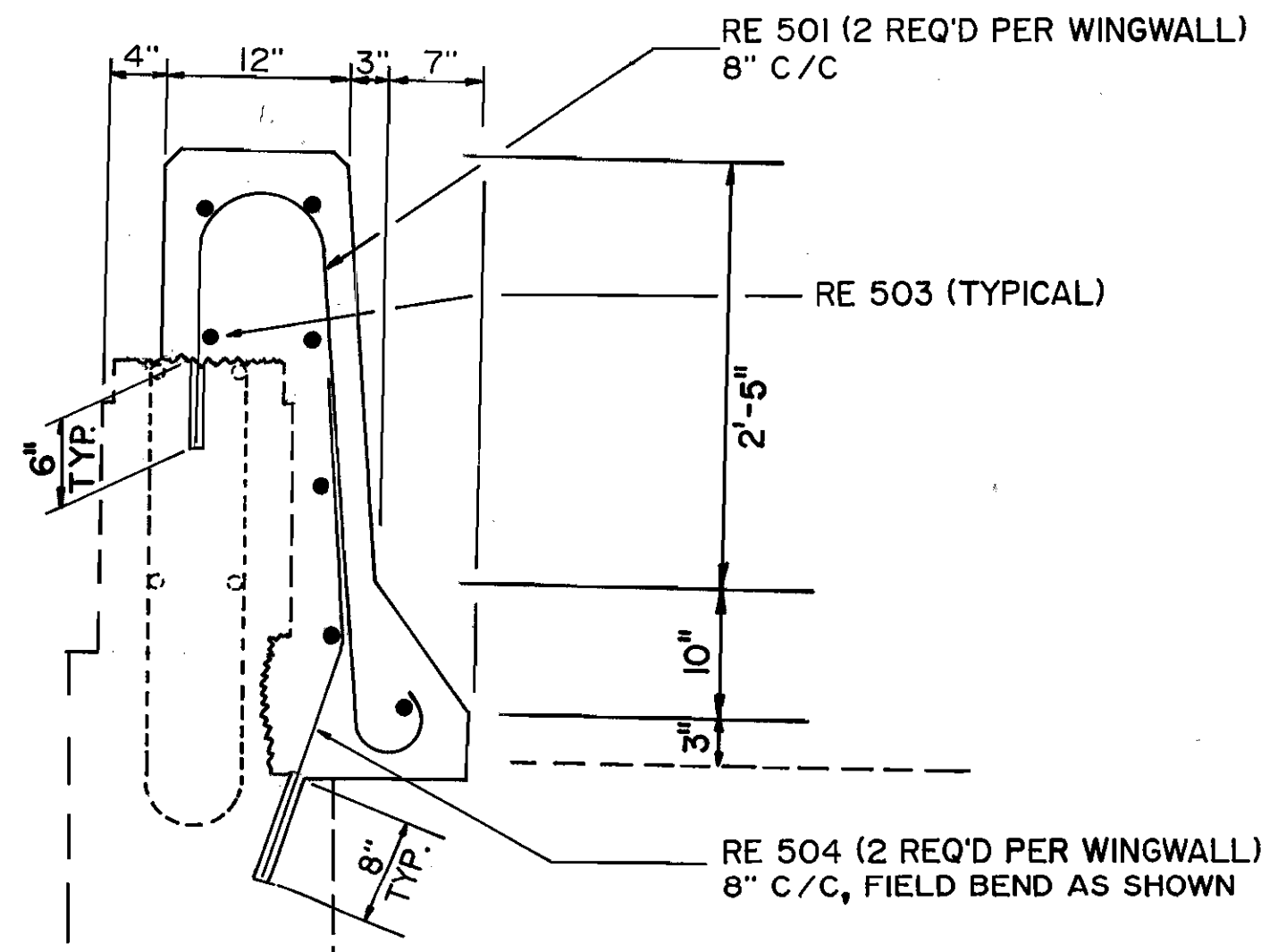
1. EXACT EXISTING REBAR LOCATIONS NOT KNOWN
2. ALL REINFORCING STEEL SHALL BE SPACED AS SHOWN. VERTICAL STEEL SHALL MISS SHRINKAGE CONTROL JOINTS BY 3" MIN.
3. ALL LONGITUDINAL STEEL SHALL BE CONTINUOUS (WITH MIN. LAP SPLICES 1'-8")
4. CONCRETE COVER SHALL BE 2" TYPICAL
5. REINFORCING STEEL - ASTM A615, A616, OR A617, GRADE 60. $f_y = 60$ KSI, $f_s = 24$ KSI.
6. FOR ADDITIONAL NOTES AND INFORMATION SEE THE GENERAL NOTES ON SHEET 3/25.
7. CURING SHALL BE AS PER 511.4, METHOD (a)



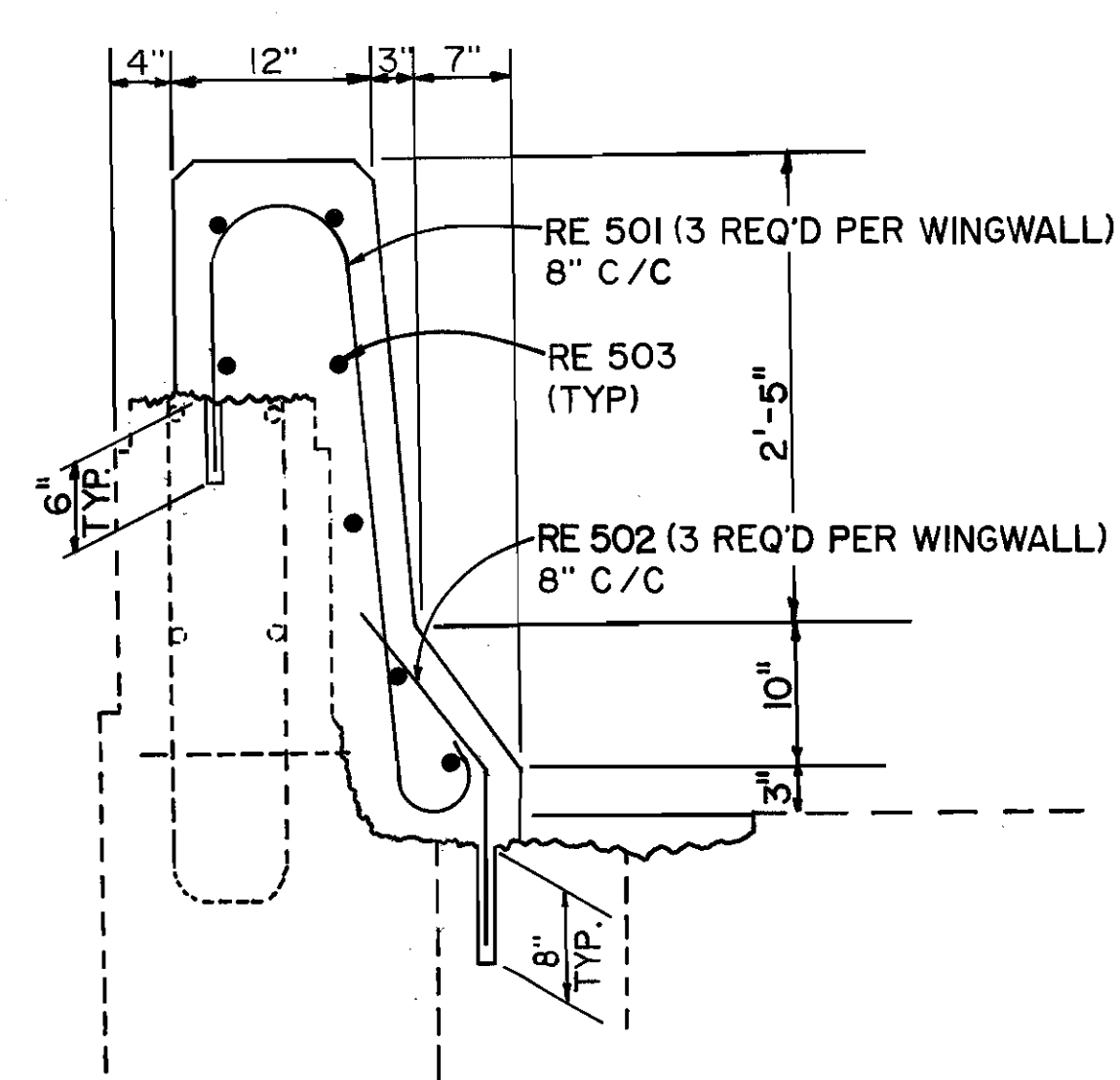
INDICATES REMOVAL AREA
(RETAIN EXISTING STEEL
WHEN SHOWN IN
PROPOSED TYPICAL)
PAYMENT INCLUDED
UNDER ITEM 517 - RAILING
FACED, AS PER PLAN.



EXISTING WINGWALL ELEVATION



ITEM 517 - RAILING FACED, AS PER PLAN
(WINGWALL) PROPOSED SECTION A-A



ITEM 517 - RAILING FACED, AS PER PLAN
(WINGWALL) PROPOSED SECTION B-B

STATE OF OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 12 LOCATION & DESIGN				
BR. N ^o CUY-2-1739 OVER I - 90 RAILING FACING DETAILS WINGWALL PARAPET				
CUYAHOGA COUNTY OHIO				
DESIGNED CKH	TRACED	CHECKED LAM	REVIEWED ENF	REVISED SHEET 12/25

MISCELLANEOUS DETAILS

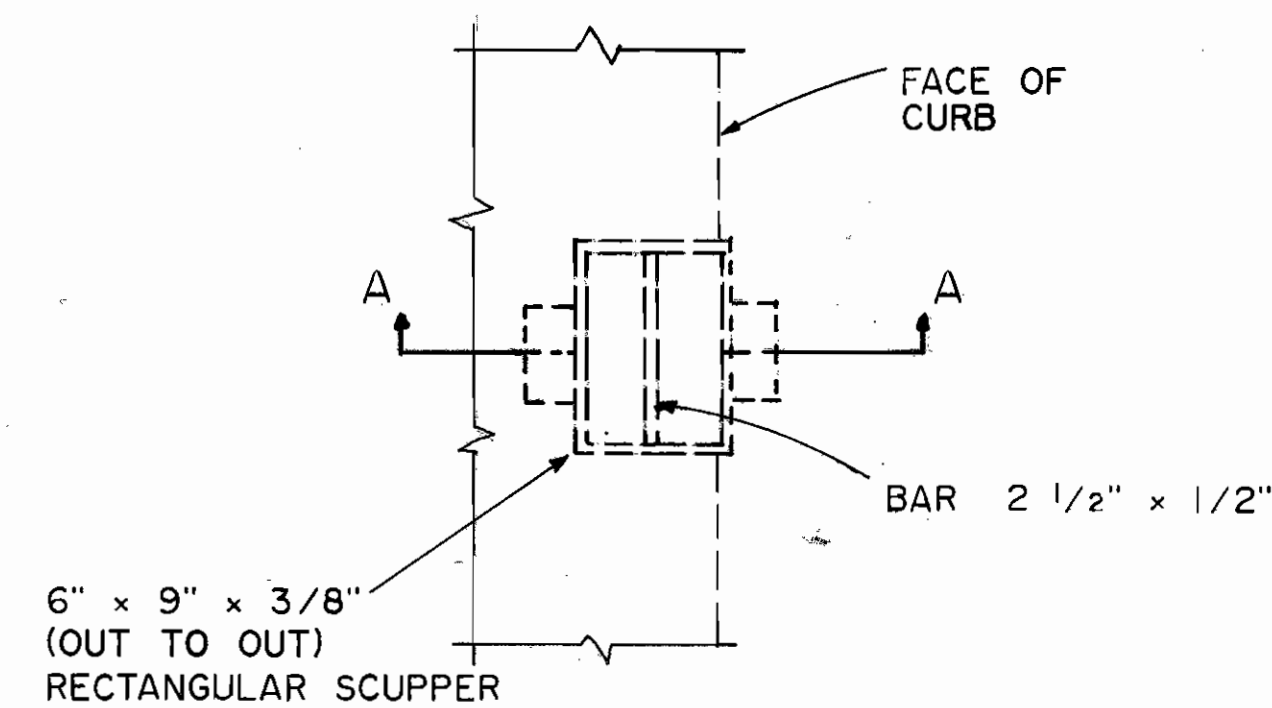
CUYAHOGA COUNTY
CUY - 2 - 15.99

OHIO

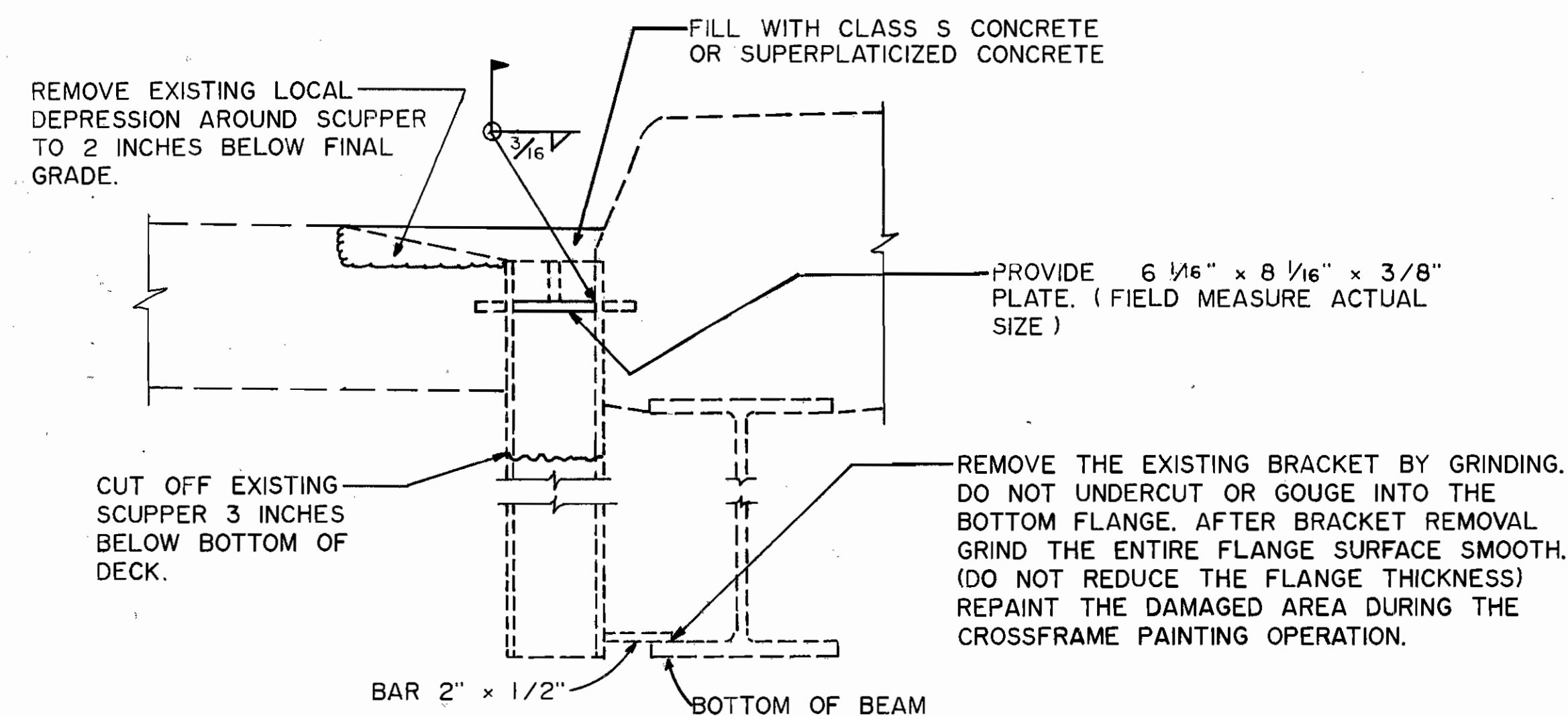
FHWA
REGION 5

FEDERAL
PROJECT

269
281



PLAN VIEW - EXISTING SCUPPER

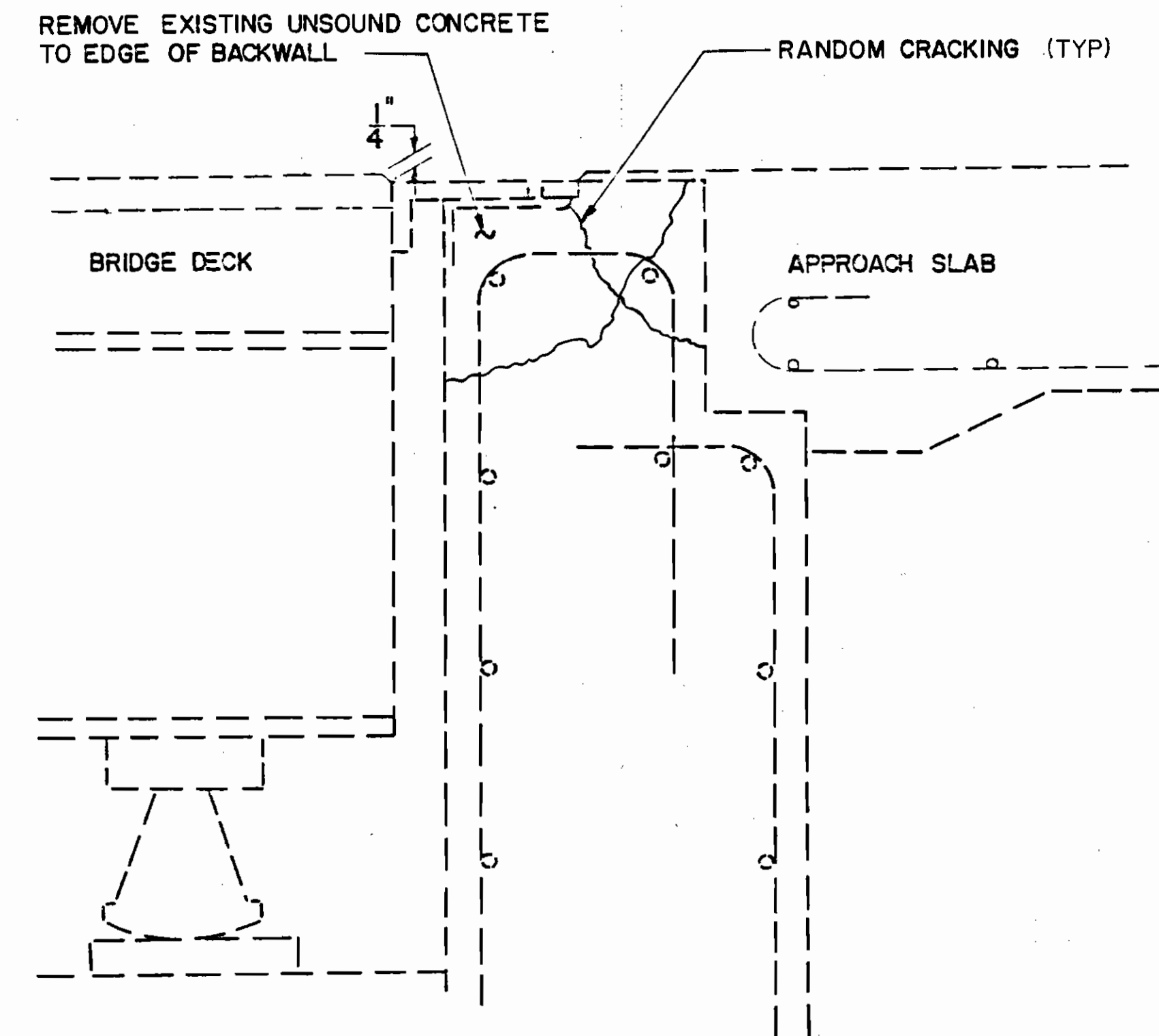


SECTION A - A

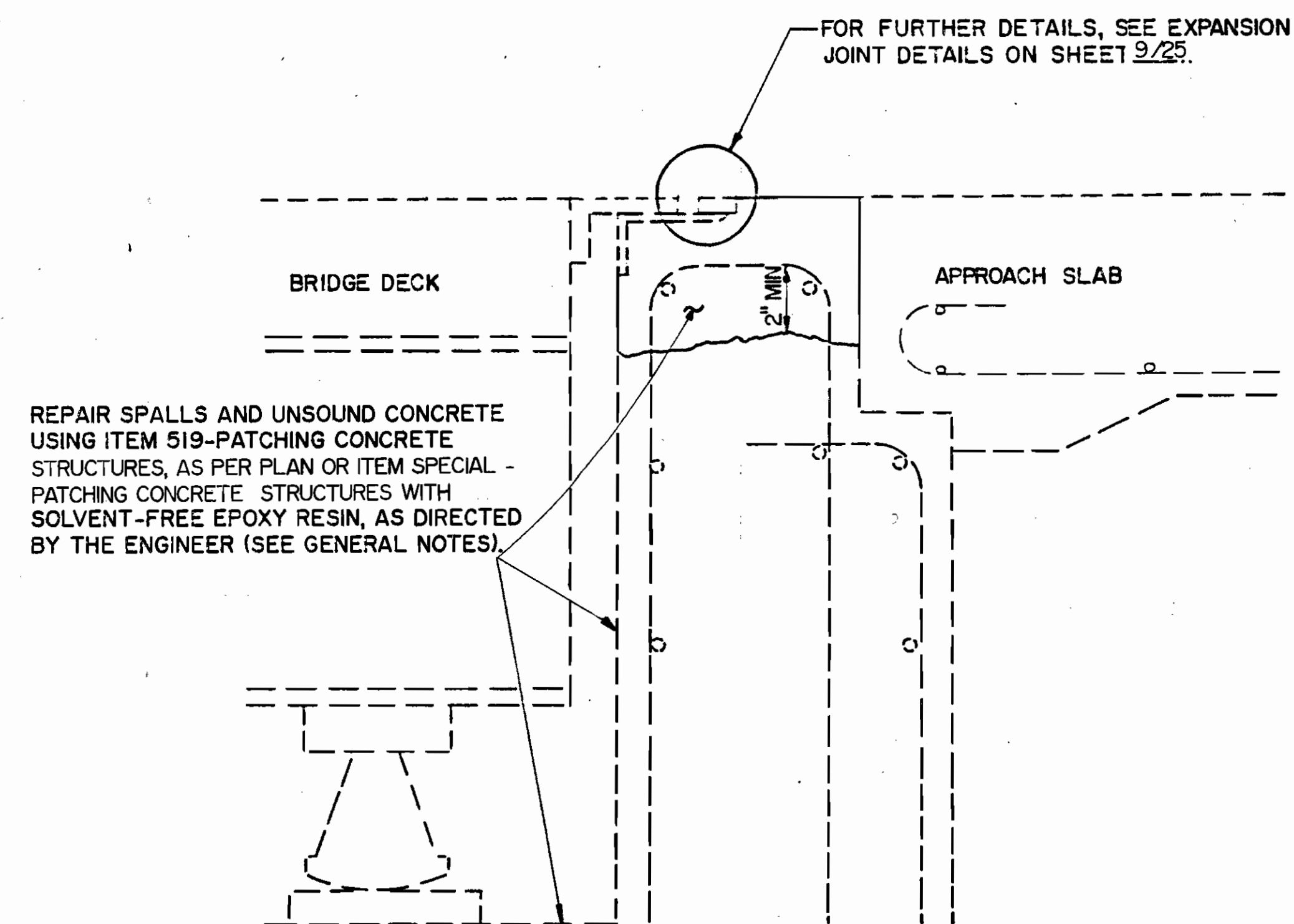
FOR SCUPPER LOCATIONS SEE SHEET 8/25

ITEM 518 - STRUCTURE DRAINAGE MISC.: SCUPPER PLUGGED

PAYMENT FOR THE ABOVE ITEM SHALL INCLUDE ALL COSTS OF SCUPPER AND CONCRETE REMOVAL, PROVIDING AND INSTALLING STEEL PLATE, REPAIR AND REPAINTING OF BEAM FLANGE AND PLACING, FINISHING AND CURING CONCRETE.



EXISTING BACKWALL



PROPOSED BACKWALL REPAIR

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
DISTRICT 12 LOCATION & DESIGN

13 / 25

BR. NO CUY-2-1739
MISCELLANEOUS DETAILS

DESIGNED	DRAWN	CHECKED	REVIEWED	DATE	REVISED
CKH		LAM	ENF		