

TRAFFIC PLAN
 PHASE I (Shown)
 PHASE II (Reverse Temporary
 Portable Concrete Barrier and XW-25A Sign)

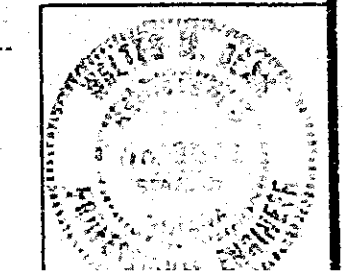
NOTE: See Sheet 4 for signalization details.

NOTE: Check Bolt Circle For Pole Used
POLE ANCHOR DETAIL
PHASE I AND II
TRAFFIC MAINTENANCE
INDIANA STATE HIGHWAY COMMISSION

SCALE: 1" = 30'-0"
 DATE: January 26, 1979

SUBMITTED FOR APPROVAL: *Halterman*

DRAWING: OF SHEET: 2 OF 25
 PROJECT: ST-4555(A)
 CONTRACT NO. B-11990
 BRIDGE FILE: 30-55-21008

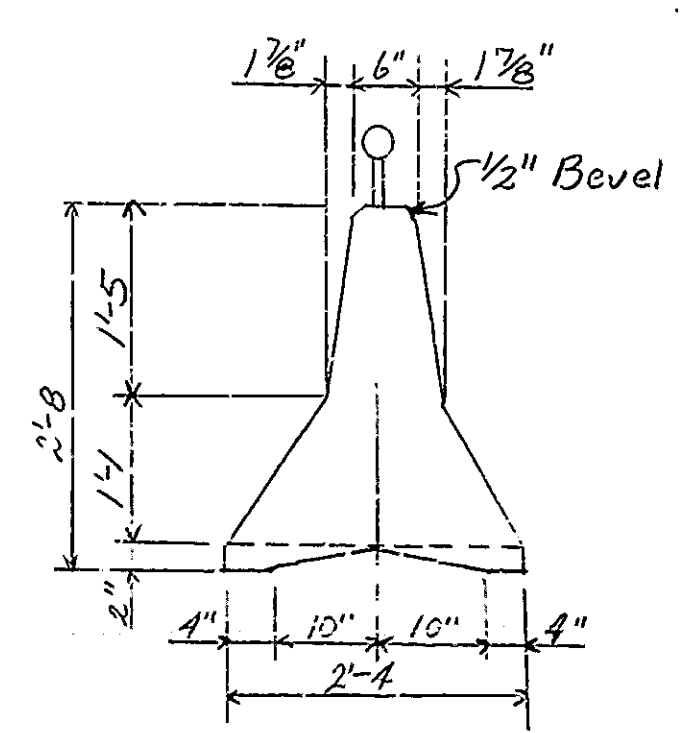
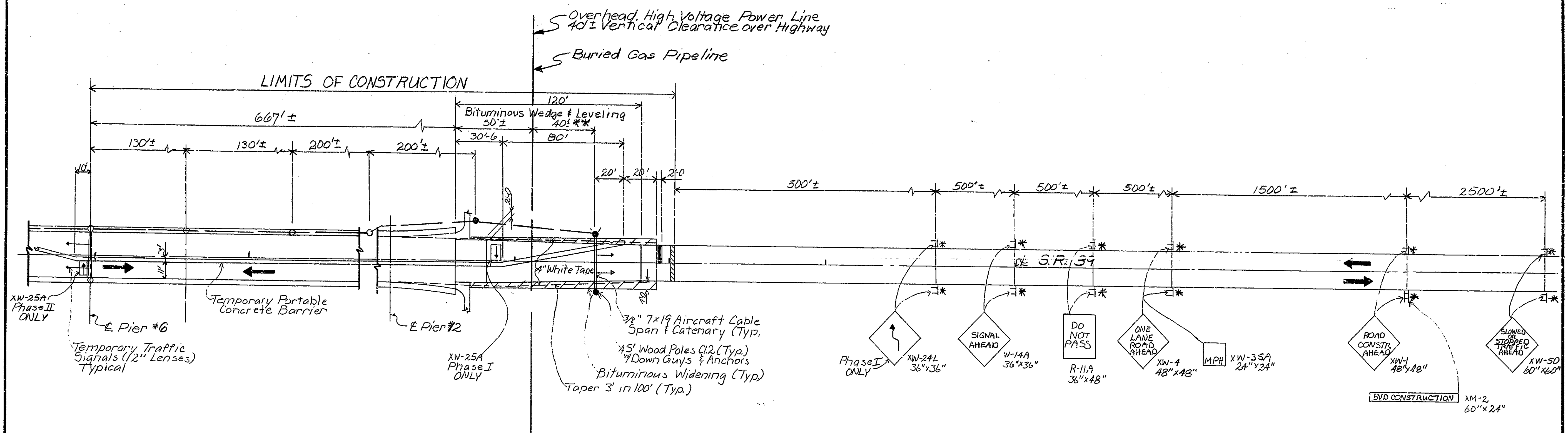


INING 405283 241393

DESIGNED: C.K.D.
 DRAWN: C.K.D.

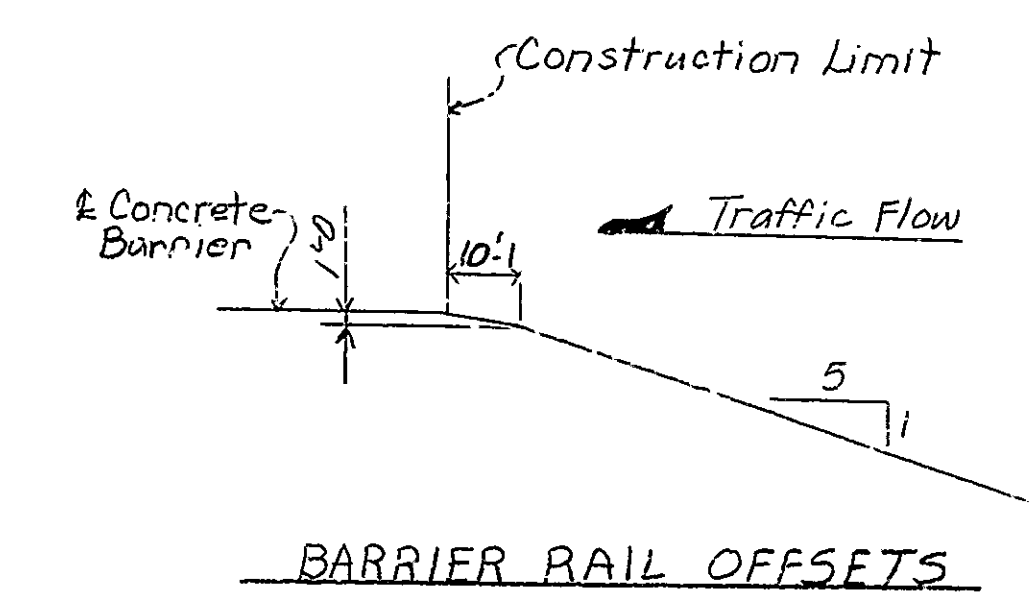
10+00
11+00
17+00
18+00
19+00

** NOTE: Maintain 30' Horizontal Clearance between Signal and nearest high tension cable.



TEMPORARY CONCRETE BARRIER
The configuration of the concrete barrier may be as shown in the above sketch or as detailed on Rd. Std. C.B.2. See the Special Provisions.

TRAFFIC PLAN
PHASE I (Shown)
PHASE II (Reverse Temporary Portable Concrete Barrier and XW-25A Sign)



NOTE: See Sheet 4 for signalization details.

PHASE I AND II TRAFFIC MAINTENANCE INDIANA STATE HIGHWAY COMMISSION

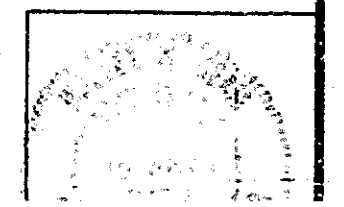
SCALE: 1"=30'-0" DATE: January 26, 1979

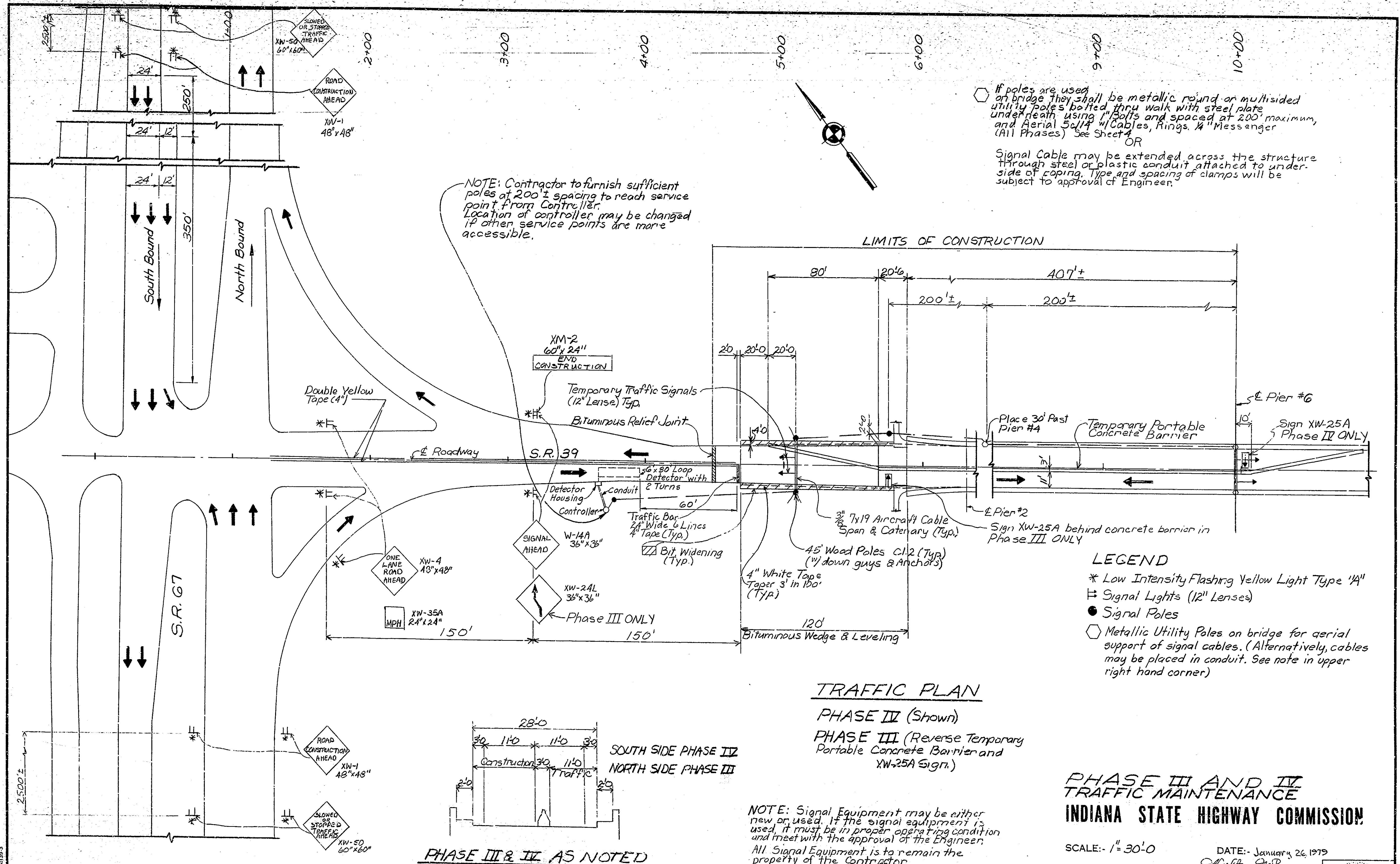
SUBMITTED FOR APPROVAL: *Walter Thomas*

DRAWING: OF SHEET: 3 OF 25
PROJECT: ST-4555(A)

MING 40-2513 2/18/5-3

DESIGNED:	C'KD
DRAWN:	C'KD



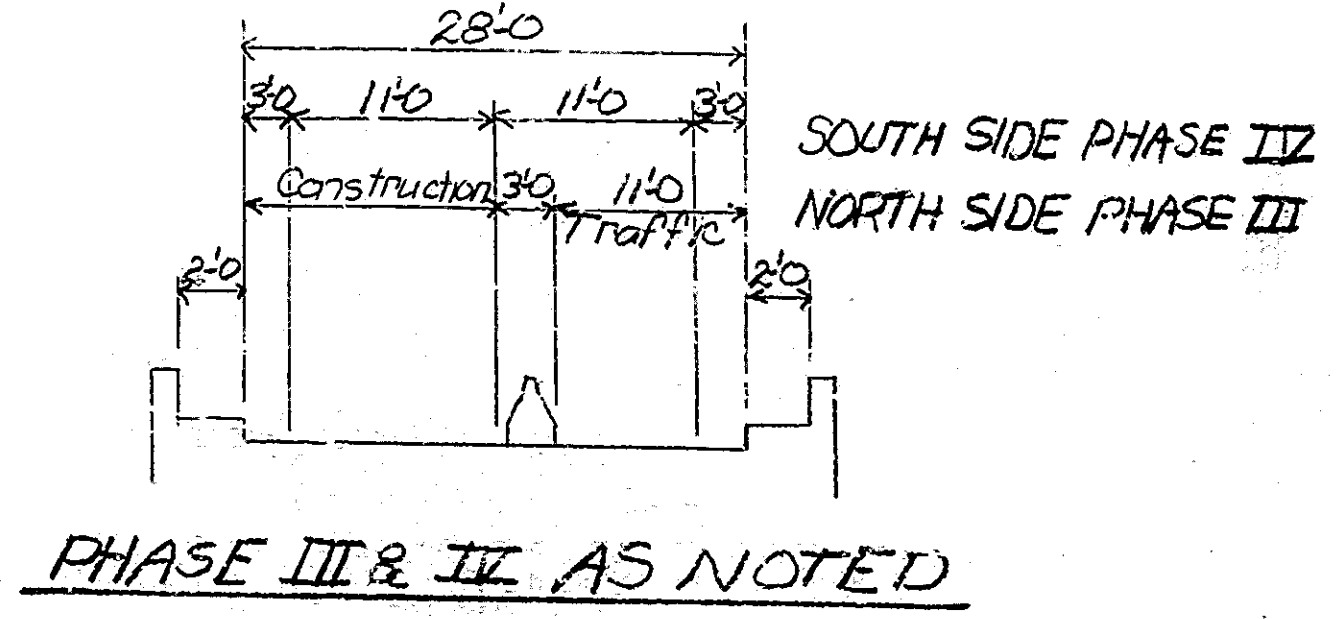


NOTE: Contractor to furnish sufficient poles at 200' ± spacing to reach service point from Controller. Location of controller may be changed if other service points are more accessible.

○ If poles are used on bridge they shall be metallic round or multisided utility poles bolted thru walk with steel plate under head using 1" bolts and spaced at 200' maximum, and Aerial 5/16" w/ Cables, Rings, & Messenger (All Phases) See Sheet 4 OR
 Signal Cable may be extended across the structure through steel or plastic conduit attached to underside of coping. Type and spacing of clamps will be subject to approval of Engineer.

- LEGEND**
- * Low Intensity Flashing Yellow Light Type 'A'
 - ⊞ Signal Lights (12" Lenses)
 - Signal Poles
 - Metallic Utility Poles on bridge for aerial support of signal cables. (Alternatively, cables may be placed in conduit. See note in upper right hand corner)

TRAFFIC PLAN
 PHASE II (Shown)
 PHASE III (Reverse Temporary Portable Concrete Barrier and XW-25A Sign.)

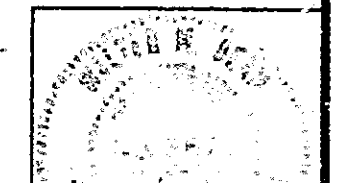


NOTE: Signal Equipment may be either new or used. If the signal equipment is used, it must be in proper operating condition and meet with the approval of the Engineer. All Signal Equipment is to remain the property of the Contractor.

PHASE III AND IV TRAFFIC MAINTENANCE
INDIANA STATE HIGHWAY COMMISSION

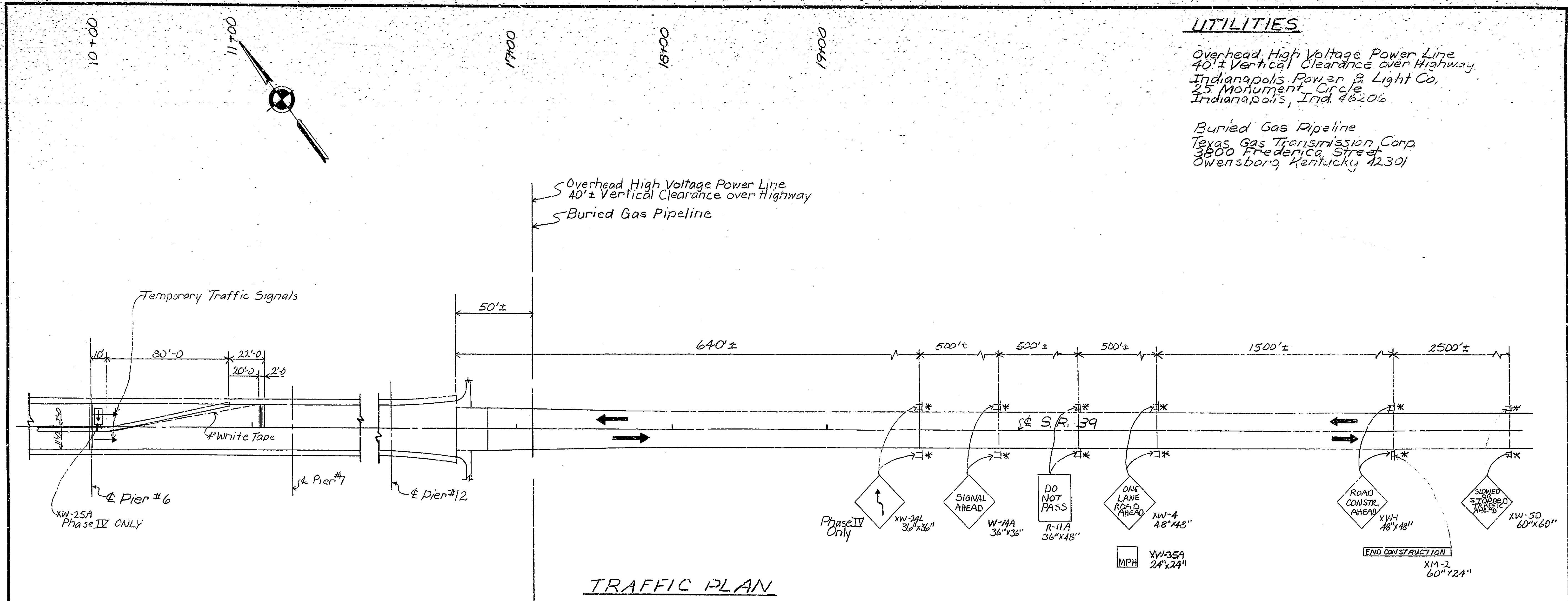
SCALE: 1" = 30'-0
 DATE: January 26, 1979
 SUBMITTED FOR APPROVAL: *Walter M. Beaman*

DRAWING: OF SHEET: 4 OF 25
 PROJECT: ST-4555(A)



NING 40-6253 2-139-3

DESIGNED: CKB
 DRAWN: CKB



UTILITIES

Overhead High Voltage Power Line
 40'± Vertical Clearance over Highway
 Indianapolis Power & Light Co.
 25 Monument Circle
 Indianapolis, Ind. 46206

Buried Gas Pipeline
 Texas Gas Transmission Corp
 3800 Frederica Street
 Owensboro, Kentucky 42301

TRAFFIC PLAN

PHASE IV (Shown)
 PHA = III (Reverse Temporary
 Portable Concrete Barrier and XW-25A)

MAINTAINING TRAFFIC One Lump Sum
 Includes the following:
 Traffic Signals and Hardware

- SEPARATE PAY ITEMS**
- 4 Ea. Signal Ahead Sign Type W-14A
 - 20 Ea. Construction Signs (Type A)
 - 5 Ea. Construction Signs (Type B)
 - 2892 LF. Temporary Pavement Marking Tape
 - 1435 LF. Removal Painted Line Solid White 4"
 - 600 LF. Removal Painted Line Solid Yellow 4"
 - 2660 LF. Painted Line Solid White 4"
 - 3370 LF. Painted Line Solid Yellow 4"
 - 870 LF. Temporary Portable Concrete Barrier

REMOVAL NOTES:

The existing solid white pavement edge lines on the bridge deck and bridge approach slabs and adjacent to the bituminous widening shall be removed prior to setting the barrier rail for Phase I and III at the following locations:

- a) Phase I - Between Stop Bars on the South Side.
- b) Phase III - Between West Stop Bar and the E of Pier No 6 on the North Side.

The existing double yellow centerline shall be removed between the Stop Bar and the Concrete Barrier at each signal location before one lane traffic is established on the structure.

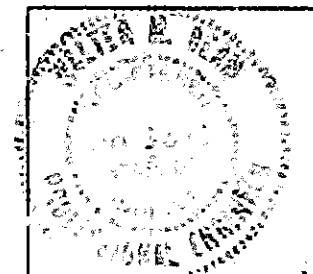
NOTE: See Sheet No 4 for signalization details.

**PHASE III AND IV
 TRAFFIC MAINTENANCE
 INDIANA STATE HIGHWAY COMMISSION**

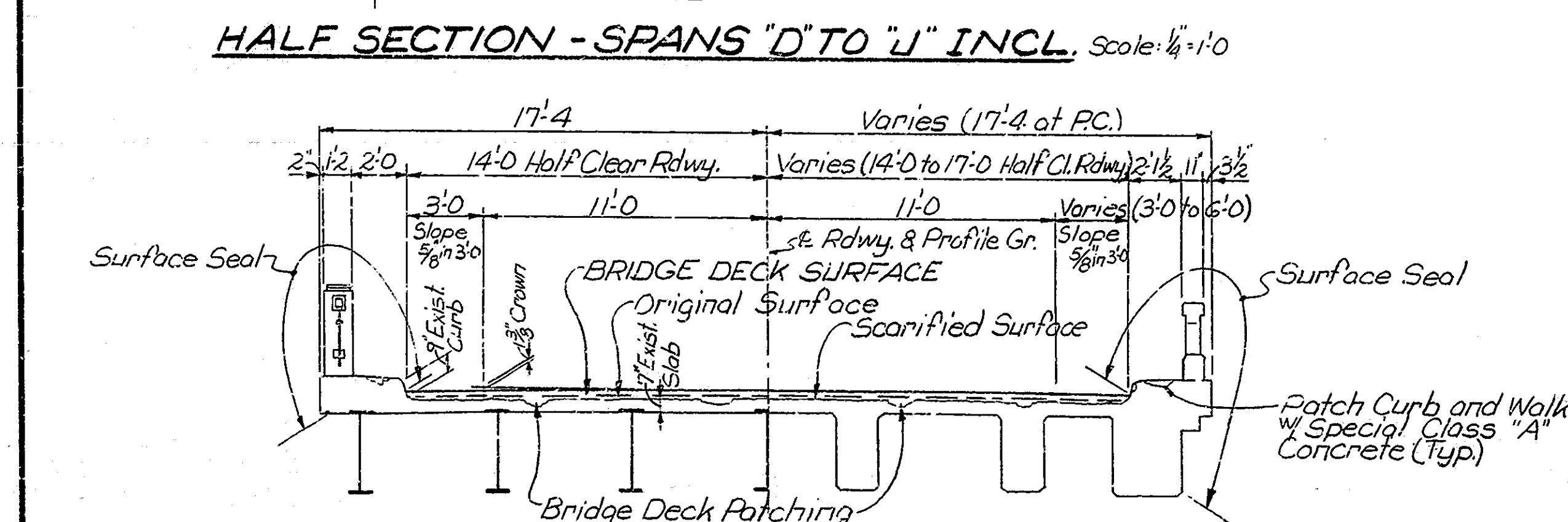
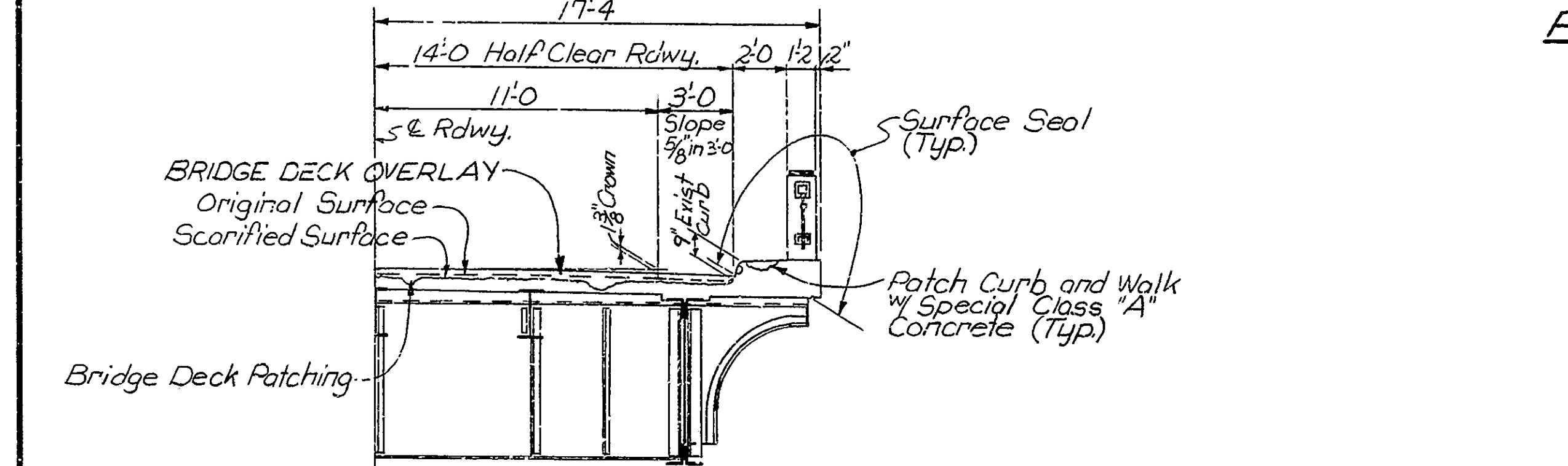
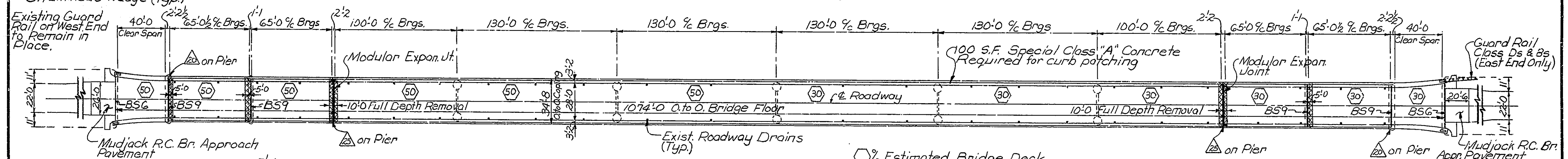
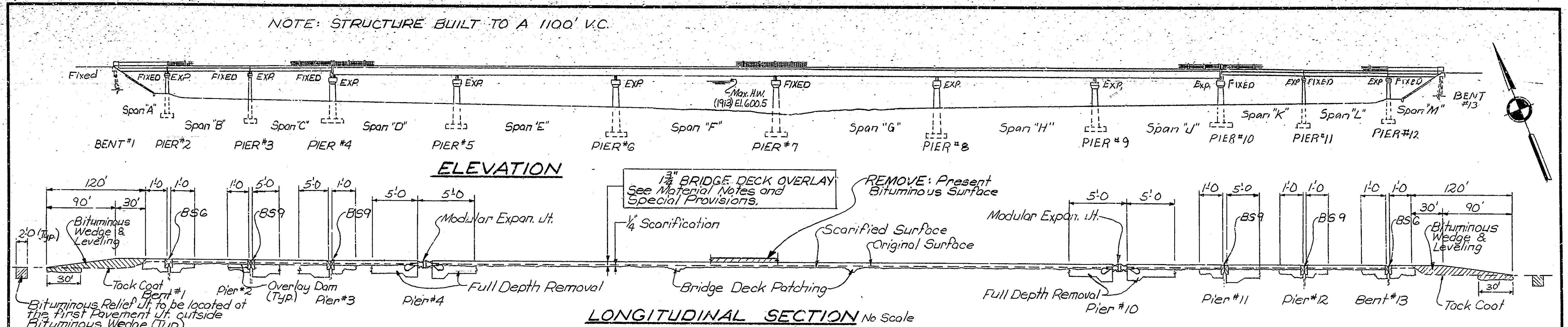
SCALE: 1"=30'-0"
 DATE: January 26 1973
 SUBMITTED FOR APPROVAL: *Walter M. Beaman*
 DRAWING: OF SHEET: 5 OF 25
 PROJECT: ST-4555(A)
 CONTRACT NO. B-11990
 BRIDGE FILE: 39-55-3/03 B

BRUNING 405853 24189-3

DESIGNED	CK'D
DRAWN	CK'D
TRACED	CK'D



NOTE: STRUCTURE BUILT TO A 1100' V.C.



PLAN

GENERAL NOTES

- Plans for this structure are on file in the Central Office as Bridge File 39-A-310B and 3108A and are available on request.
- Where new work is to be fitted to old work, the Contractor shall check all dimensions and conditions in the field and report any errors or discrepancies to the Engineer and assume responsibility for their correctness and the fit of the new part to the old.
- The handchipping and cleaning of deteriorated deck areas shall be as directed by the Engineer. It is the intent of these plans that all such deteriorated concrete be removed and should there be any doubt as to the quality of the concrete, removal shall continue until **PERFECTLY SOUND CONCRETE** is exposed. All existing deck patches are to be removed.
- The boundaries of full depth removal areas shall be saw cut. All saw cuts for full depth removals and curb patching shall be made to a minimum depth of 1 inch below original surface, or to the top of reinforcing if cover is less than 1 inch.
- Concrete in patches for deteriorated deck areas below scarified depth to be Mod. P.C. Concrete or Special Class A Concrete. See Special Provisions.
- See Special Provisions for composition of concrete in Overlay Dams.
- Concrete in full depth removal areas to be Class A.
- All bituminous material required in this contract to be included in the pay item "Bituminous Mixture for Approaches" except Tack Coat to be paid for as separate item.
- Seal all joints and cracks in the approach pavement with a hot poured joint sealer before placing the bituminous wedge. The cost of sealing is to be included in the cost of other items in the contract.
- Modular Expansion Joint must have a minimum expansion capacity of 5.2 inches and a maximum support relief of 10 inches. See Special Provisions.
- The cost of removing, storing and replacing rebar panels (as required to replace concrete) will not be

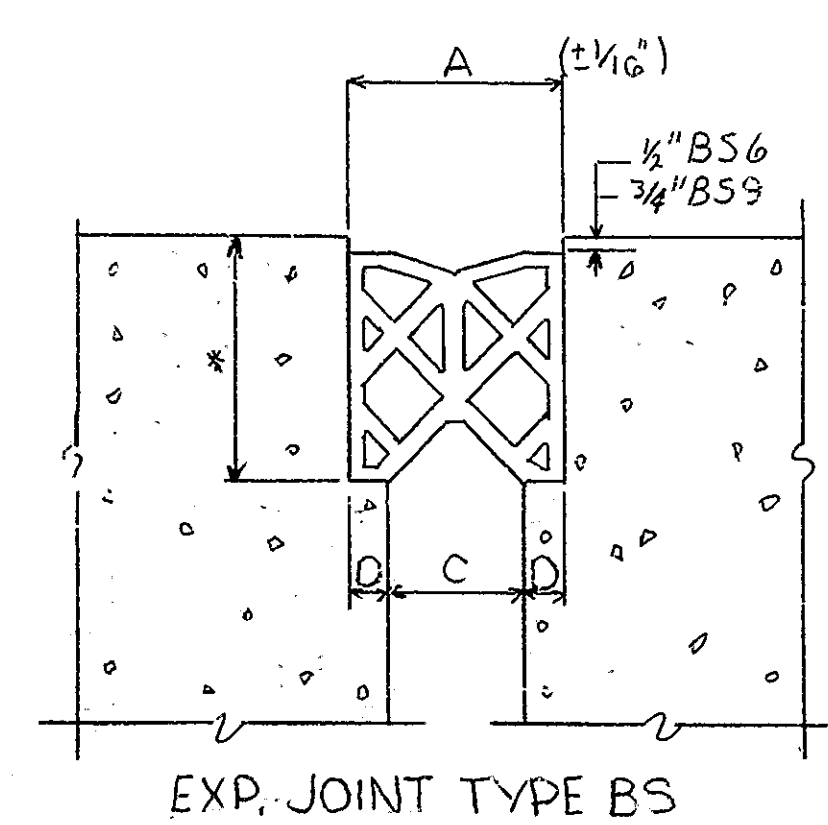
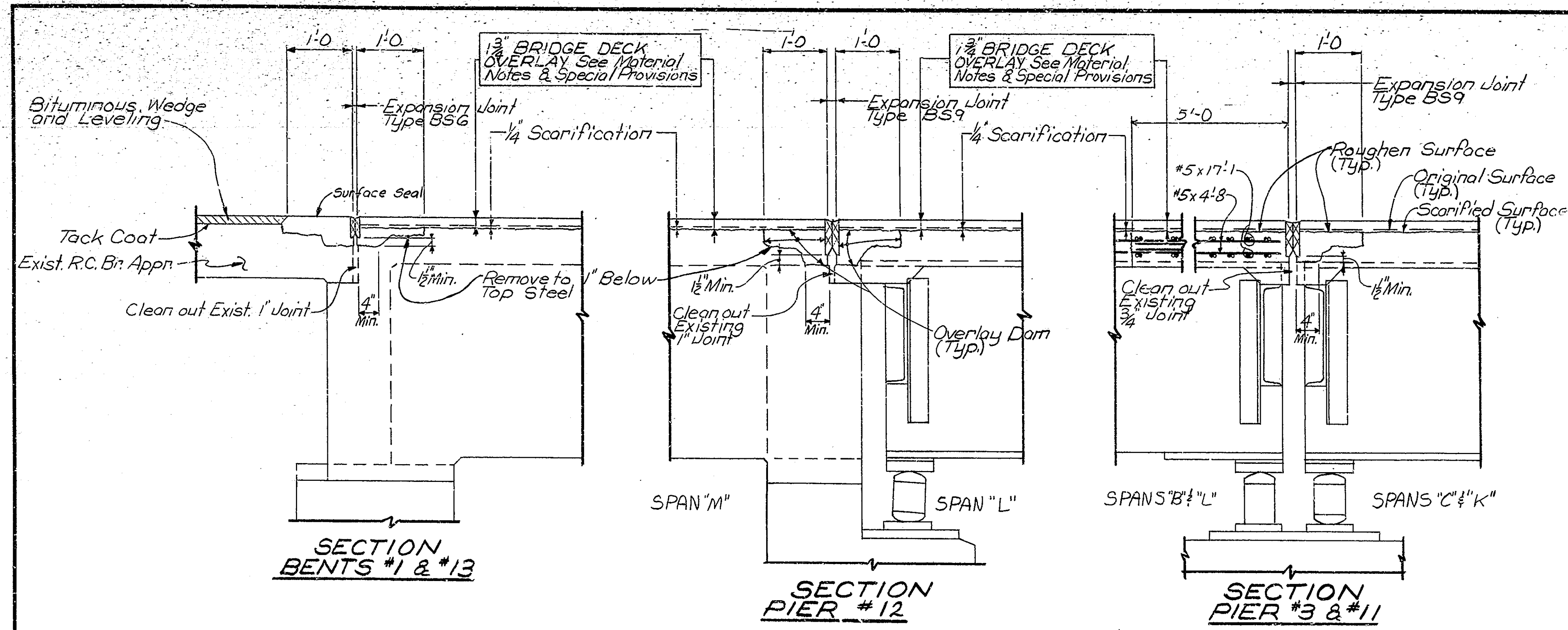
STANDARD DRAWINGS		
BR. STD.	RD. STD.	PURPOSE
CI		Reinforcing Bar Notes
DI		Adjusting Frame for Roadway Drain
	Sht. 9	Traffic Sign Details
	GR 2	Guard Rail Class Bs
	GR 8	Guard Rail Class Ds
	GR 10A	Guard Rail End Treatment
	Sht. CB2	Temporary Conc. Barrier
	Sht. 2	Detour Signs
	Sht. 3	Detour Signs
	Sht. 3A	Detour Signs
	Sht. 4	Detour Signs
	Sht. 5	Sign Design Details

**GENERAL PLAN
DECK RECONSTRUCTION & OVERLAY
CONTINUOUS STEEL PLATE GIRDER
STEEL BEAM AND R.C. GIRDER BRIDGE
12 Spans - 40'-0", 2 @ 65'-0", 100'-0", 4 @ 130'-0", 100'-0", 2 @ 65'-0", 40'-0"
28'-0" Roadway 2'-2" Walks
OVER West Fork of White River ON S.R. 39**

**INDIANA STATE HIGHWAY COMMISSION
MORGAN COUNTY**

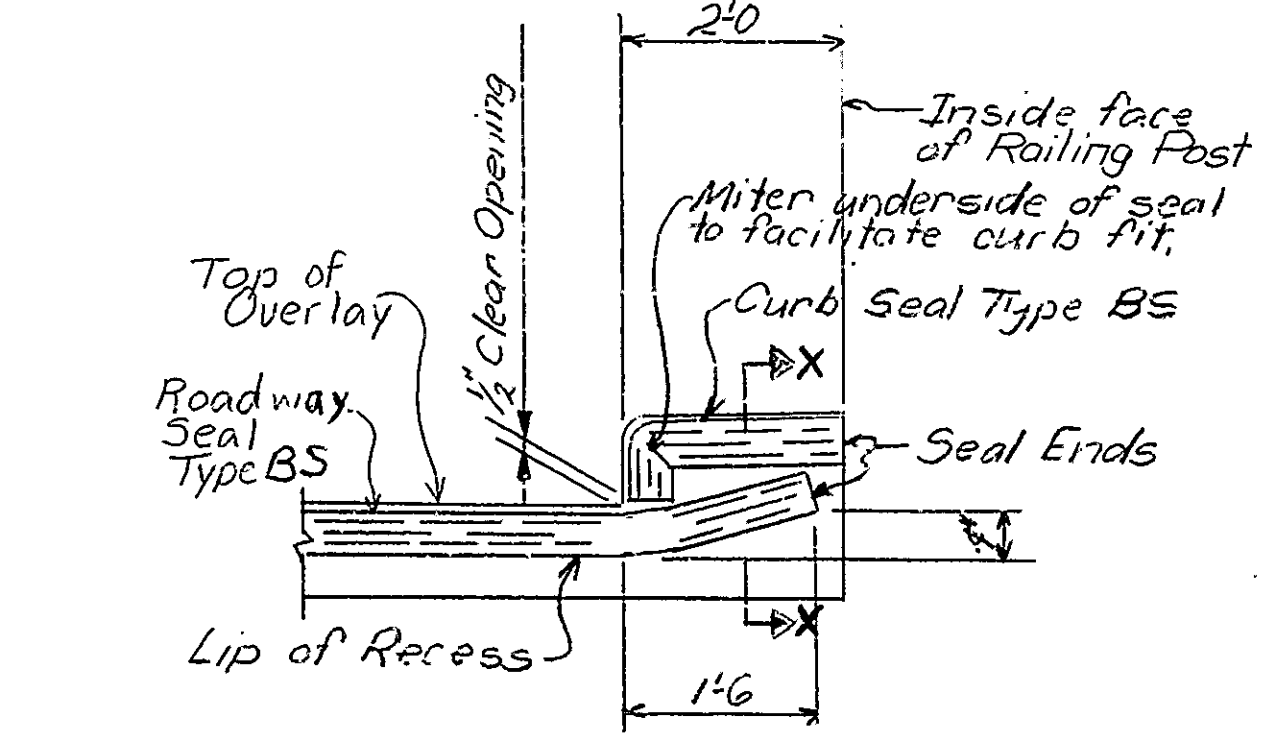
SCALE: As Noted DATE: January 25, 1979
SUBMITTED FOR APPROVAL: *Walter M. ...*
DRAWING: A1 OF 8 SHEET: 6 OF 25
PROJECT: ST-4555(A)
CONTRACT NO. 8-11880

DESIGNED: C.K.D.
DRAWN: D.U.H. C.K.D.



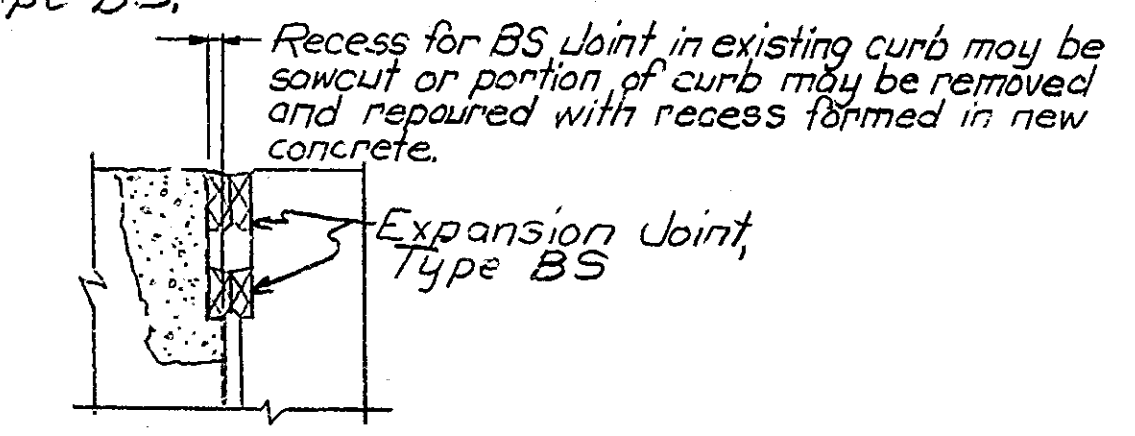
*To be determined in the field. See the Special Provisions.

Bridge Seal	A	C	D
BS 6	1 5/8"	7/8" ±	3/8"
BS 9	2 5/8"	1 5/8" ±	1/2"

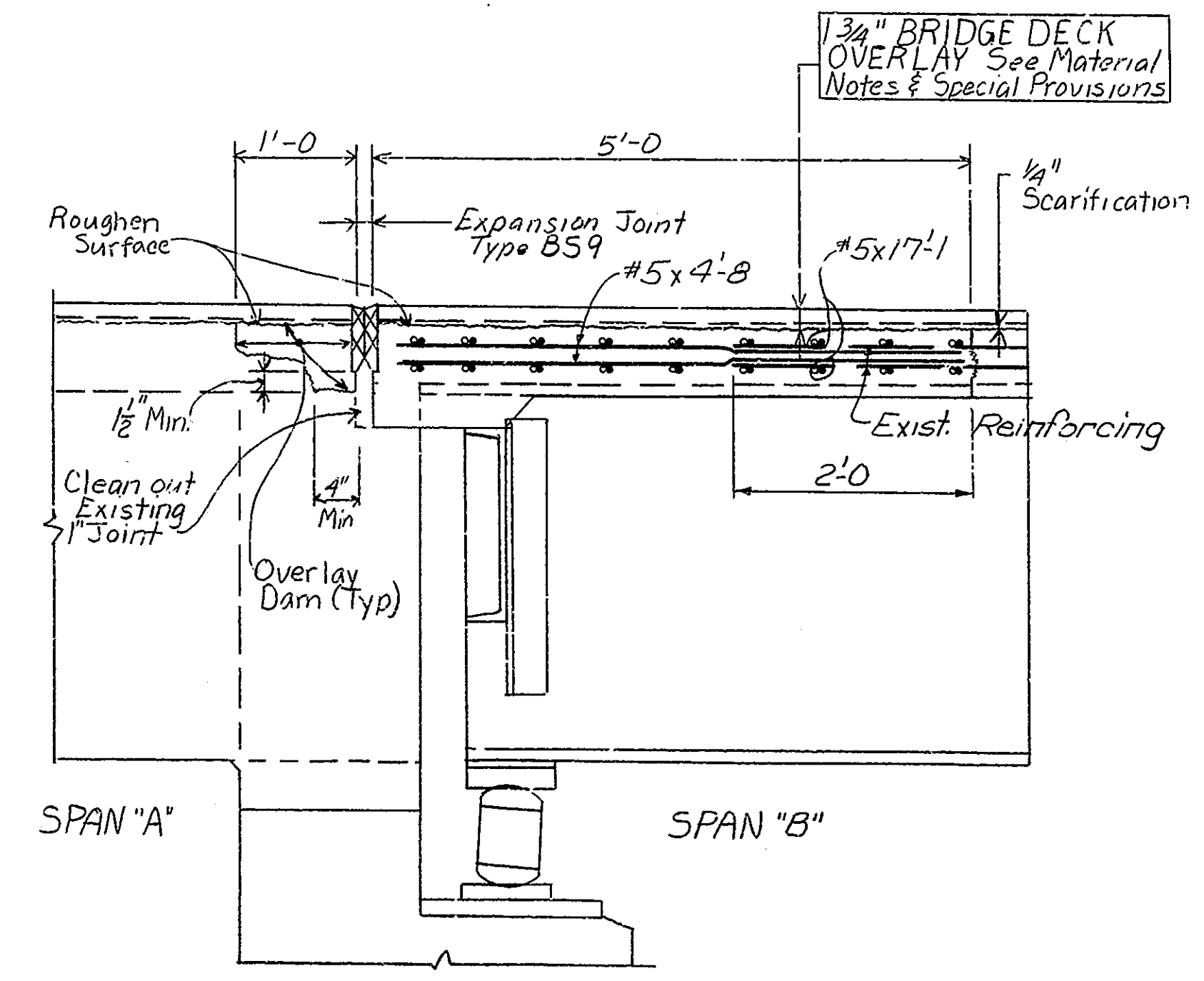


TYPICAL BS JOINT INSTALLATION AT CURBS No Scale

Clean out and rebuild existing curb and walk joints to accommodate joint seal. Such work to be included in cost of Expansion Joint Type BS.



SECTION X-X No Scale



SECTION PIER #2

TRAFFIC PROCEDURE

1. Construct Bituminous Widening and maintain alternate one way traffic with signals.
- PHASE I**
 - A. MAINTAIN TRAFFIC on South Half of Bridge (East End)
 - B. CONSTRUCTION: Complete Construction on East end of North Half of Bridge and Approaches.
- PHASE II**
 - A. MAINTAIN TRAFFIC on North Half of Bridge (East End)
 - B. CONSTRUCTION: Complete Construction on East end of South Half of Bridge and Approaches.
- PHASE III**
 - A. MAINTAIN TRAFFIC on North Half of Bridge (West End)
 - B. CONSTRUCTION: Complete Construction on West end of South Half of Bridge and Approaches.
- PHASE IV**
 - A. MAINTAIN TRAFFIC on South Half of Bridge (West end)
 - B. CONSTRUCTION: Complete Construction on West end of North Half of Bridge and Approaches.

CONSTRUCTION PROCEDURE

1. Remove the existing bituminous overlay. Remove the floor slab full depth and concrete for overlay dams as shown on details.
 2. Scarify the remaining bridge floor and portions of the R.C. Bridge Approach to a depth of 1/4 inch. Scarify additional areas of the bridge floor an additional 1/4 inch as directed by the Engineer. Remove scarified dust.
 3. Remove all existing deck patches and all deteriorated concrete below the level of scarification and remove concrete around reinforcing and along curbs inaccessible to scarifying equipment by handchipping and cleaning in accordance with the Special Provisions.
 4. Repair the full depth slab removal areas and Overlay Dams to level of scarification as shown on plans.
 5. Blast and clean all repaired deck areas and all removal and scarified areas.
 6. Place the Bridge Deck Patching and Bridge Deck Overlay as shown on the Plans and in accordance with the Special Provisions. Install Expansion Joints.
 7. Clean and surface seal the tops of overlay dams on the approach, the curbs, walks, railings, posts, coping and faces of outside concrete grades as shown on plans.
 8. Construct pavement relief joints, bituminous wedges, and all other work shown on the plans including the removal and installation of the guard rail.
- The numbers do not necessarily indicate the sequence of operations.
Pneumatic hammers 30 pounds maximum weight to be used for removal.

MATERIAL NOTES

- BRIDGE DECK OVERLAY**
1 3/4" Modified Portland Cement Concrete Overlay (See Special Provisions)
- * **BITUMINOUS WEDGE & BITUMINOUS LEVELING**
Hot Asphaltic Concrete Surface Type 11B
OR
Hot Asphaltic Concrete Surface Type 11B OVER HAC or HAE Binder
- BITUMINOUS RELIEF JOINT**
110#/SY Hot Asphaltic Concrete Surface Type 11B OVER
1870#/SY Hot Asphaltic Concrete Base OR
1870#/SY Hot Asphaltic Emulsion Base
- BITUMINOUS WIDENING**
990#/SY Hot Asphaltic Concrete Base 5D OR
990#/SY Hot Asphaltic Emulsion Base 5D

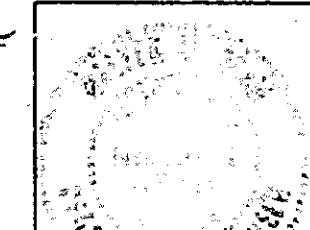
DETAILS

INDIANA STATE HIGHWAY COMMISSION

SCALE: 1/2" = 1'-0" DATE: January 26, 1975

SUBMITTED FOR APPROVAL: *Walter M. ...*

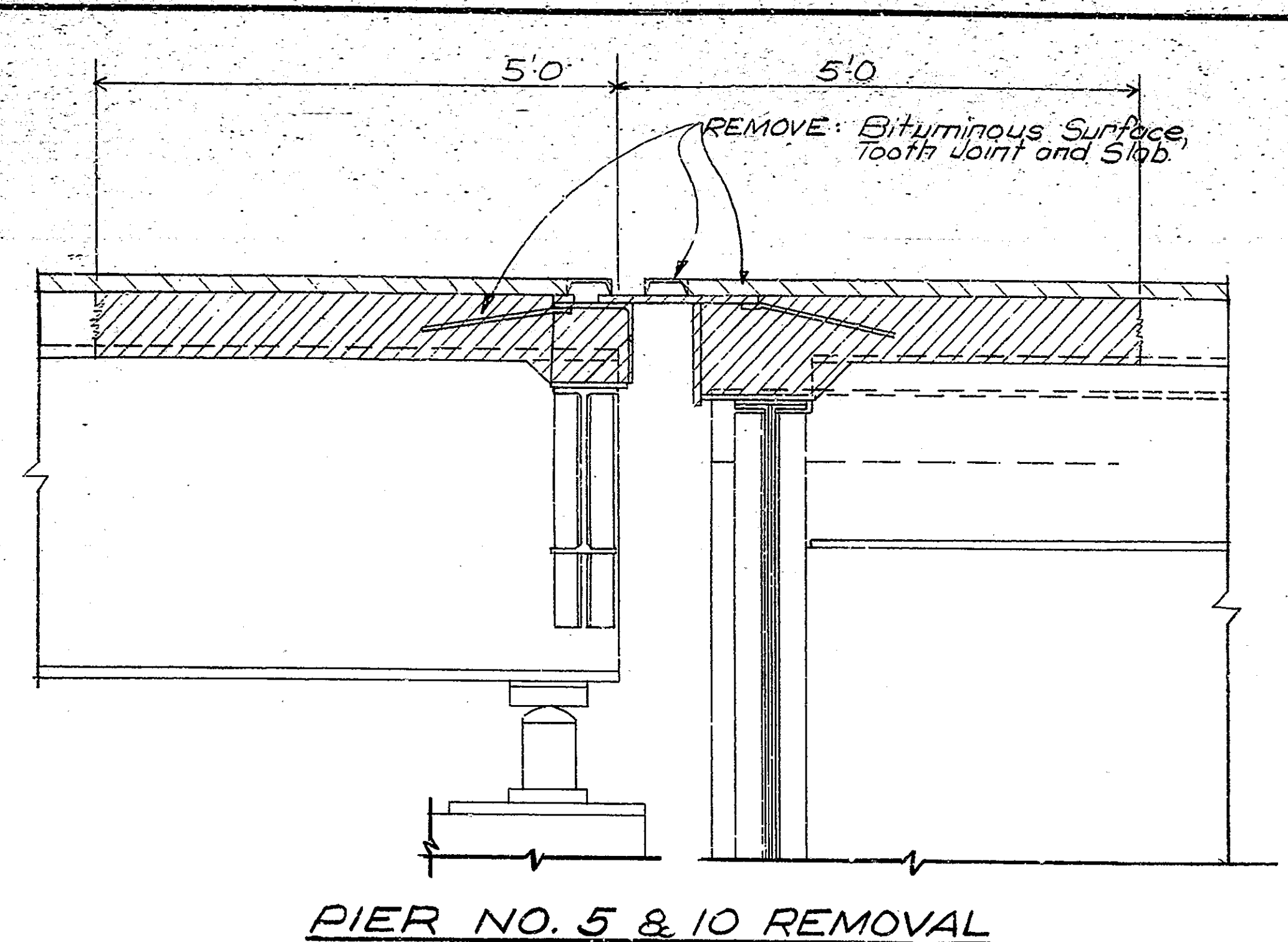
DRAWING: R2 OF 8 SHEET: 7 OF 25
PROJECT: ST-4555 (A)
CONTRACT NO. B-11990



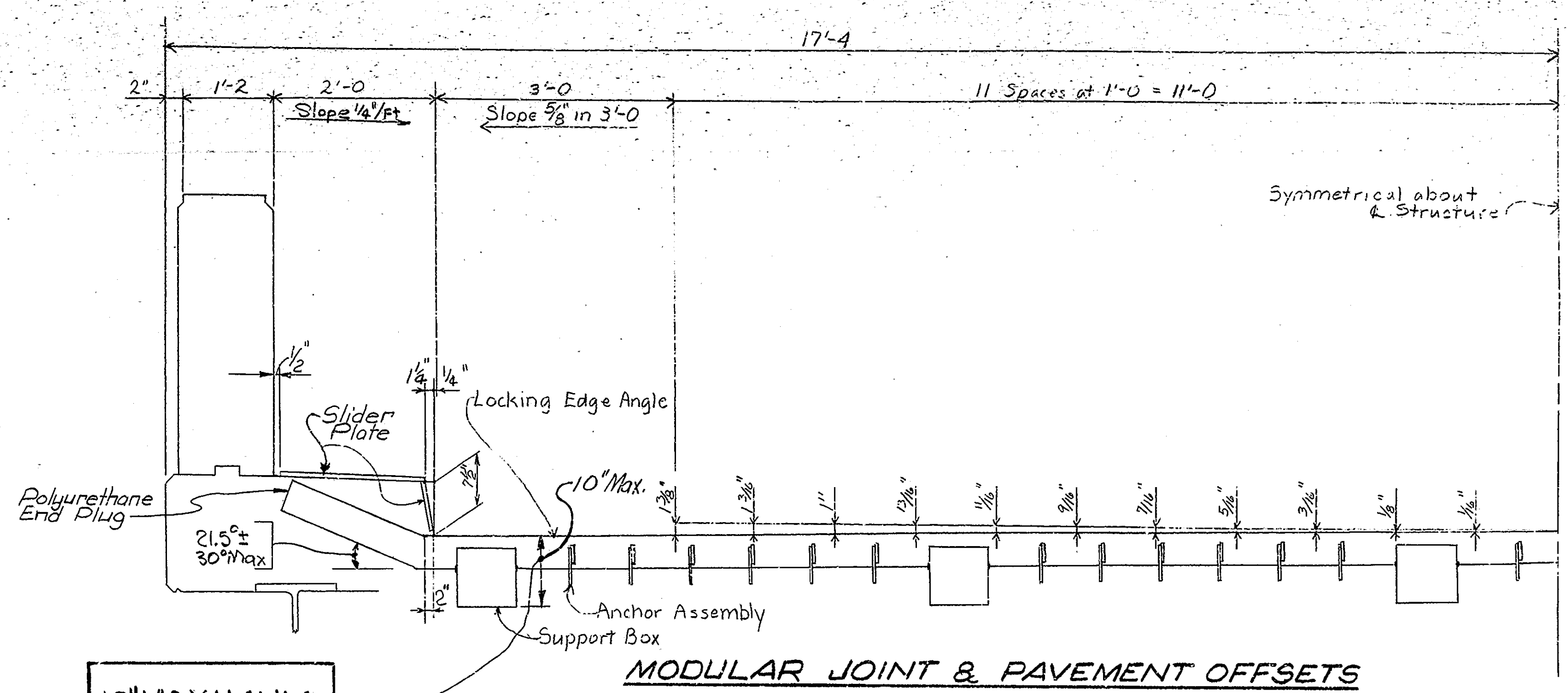
* The maximum depth of Bituminous Surface Type 11B shall not exceed 1 1/2 inches. At all locations where the total wedge thickness will exceed 1 1/2 inches bituminous binder shall be placed as a first course to within one inch of finished grade.

UNING 40-5253 2419-3

DESIGNED: CKD
DRAWN: CKD
TRACED: CKD

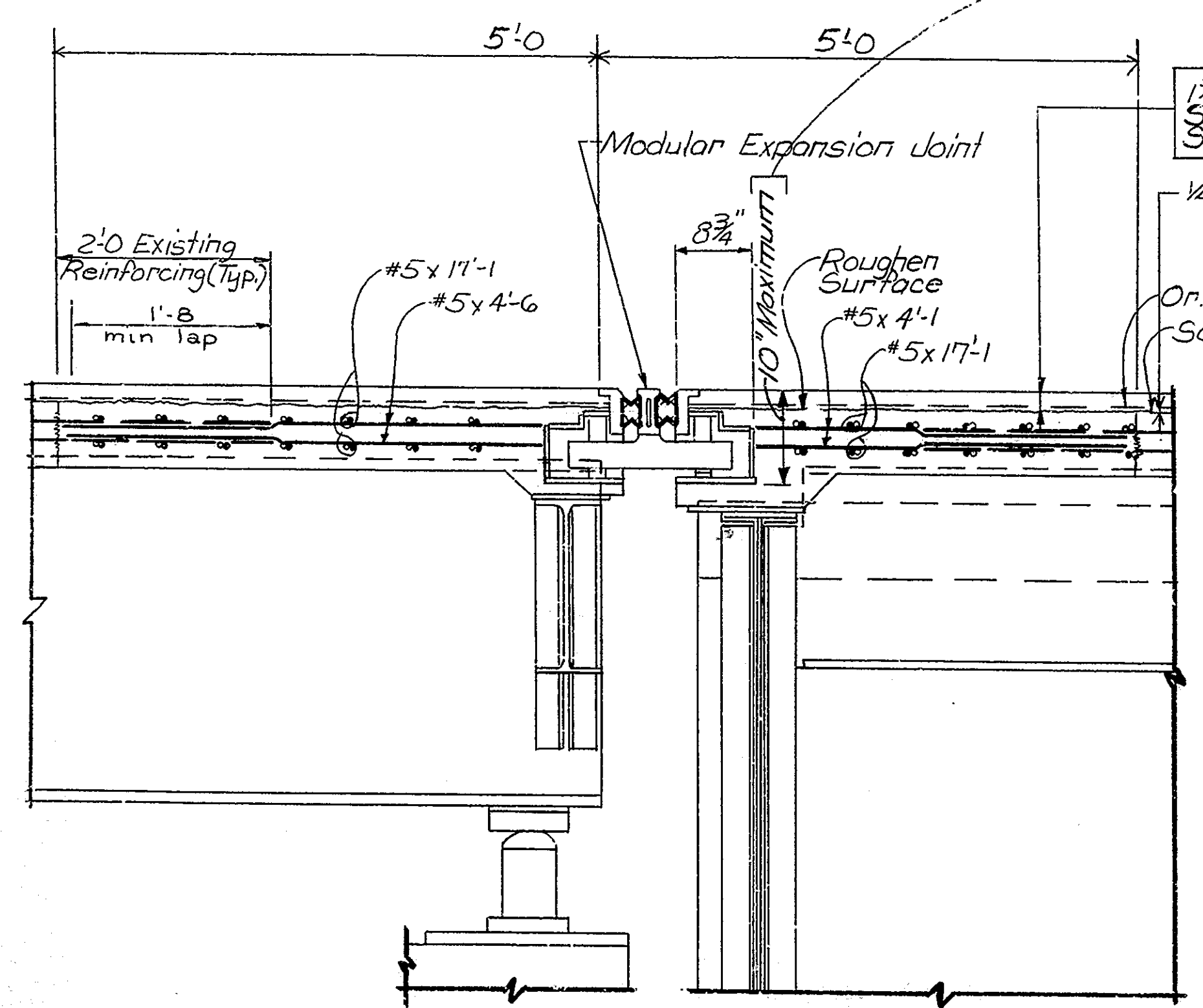


PIER NO. 5 & 10 REMOVAL

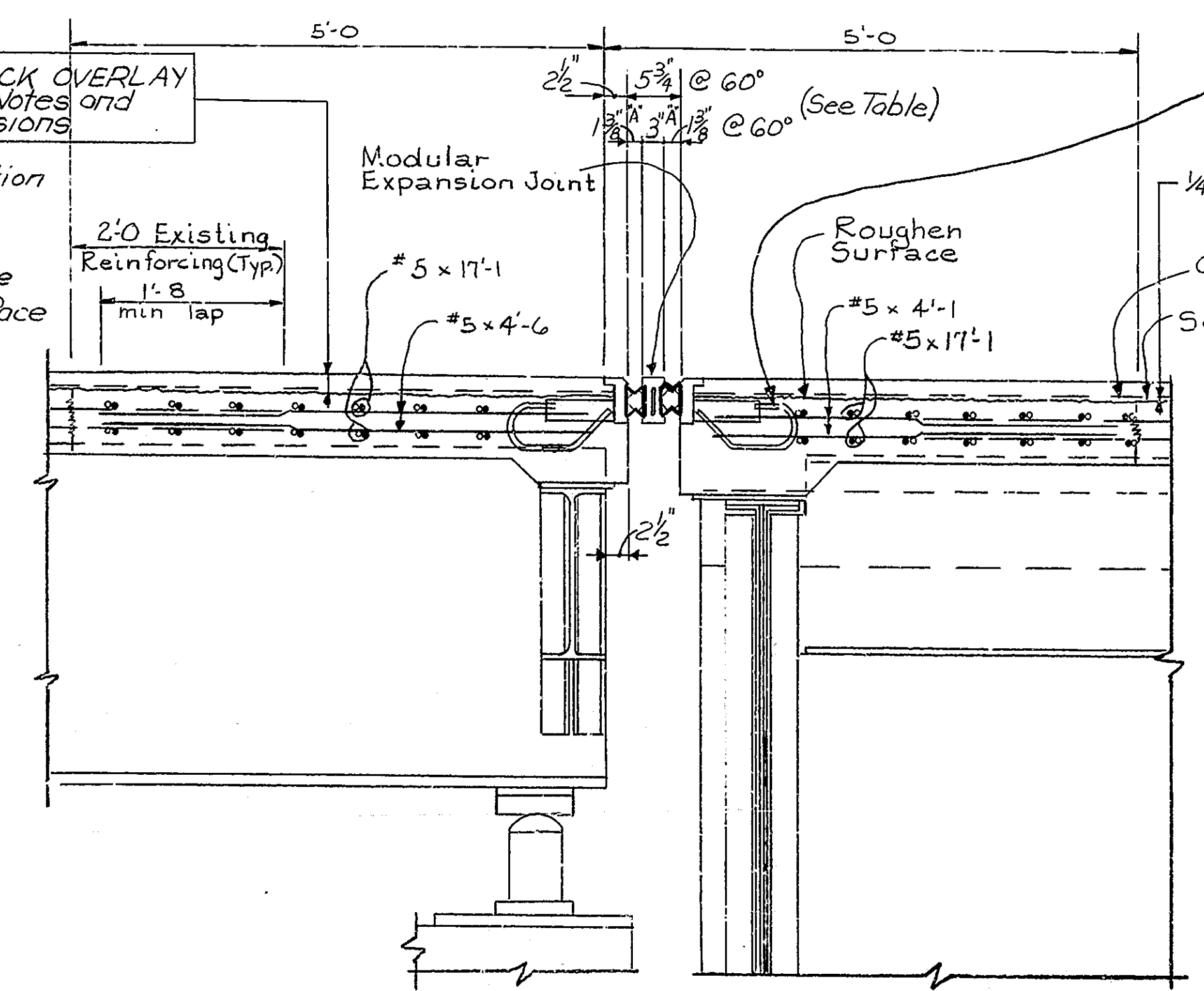


MODULAR JOINT & PAVEMENT OFFSETS

10" MAXIMUM



PIER NO. 4 & 10 AT SUPPORT BOX



PIER NO. 4 & 10 SECTION BETWEEN SUPPORT BOXES

**TABLE
JOINT OPENING "A"**

0°	20°	40°	60°	80°	100°	120°
2 1/8"	1 1/2"	1 3/8"	1 1/8"	1 1/8"	1 1/8"	5/8"

**DETAILS
INDIANA STATE HIGHWAY COMMISSION**

SCALE: 1/2" = 1'-0" DATE: January 26, 1979

SUBMITTED FOR APPROVAL: *M. Allen M. Beaman*

DRAWING: R3 OF 8 SHEET: 8 OF 25

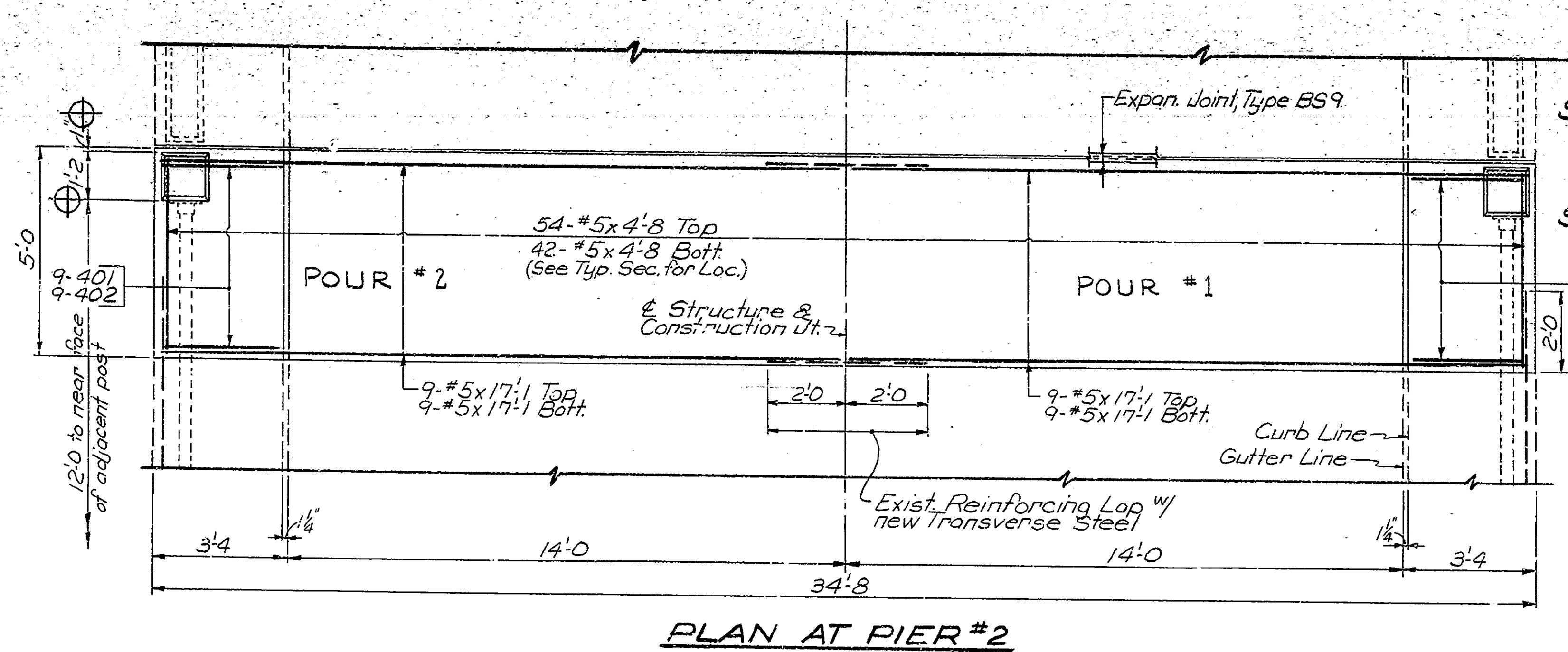
PROJECT: ST 4555 (A)

CONTRACT NO. B-11990

BRIDGE FILE: 39-55-3108E

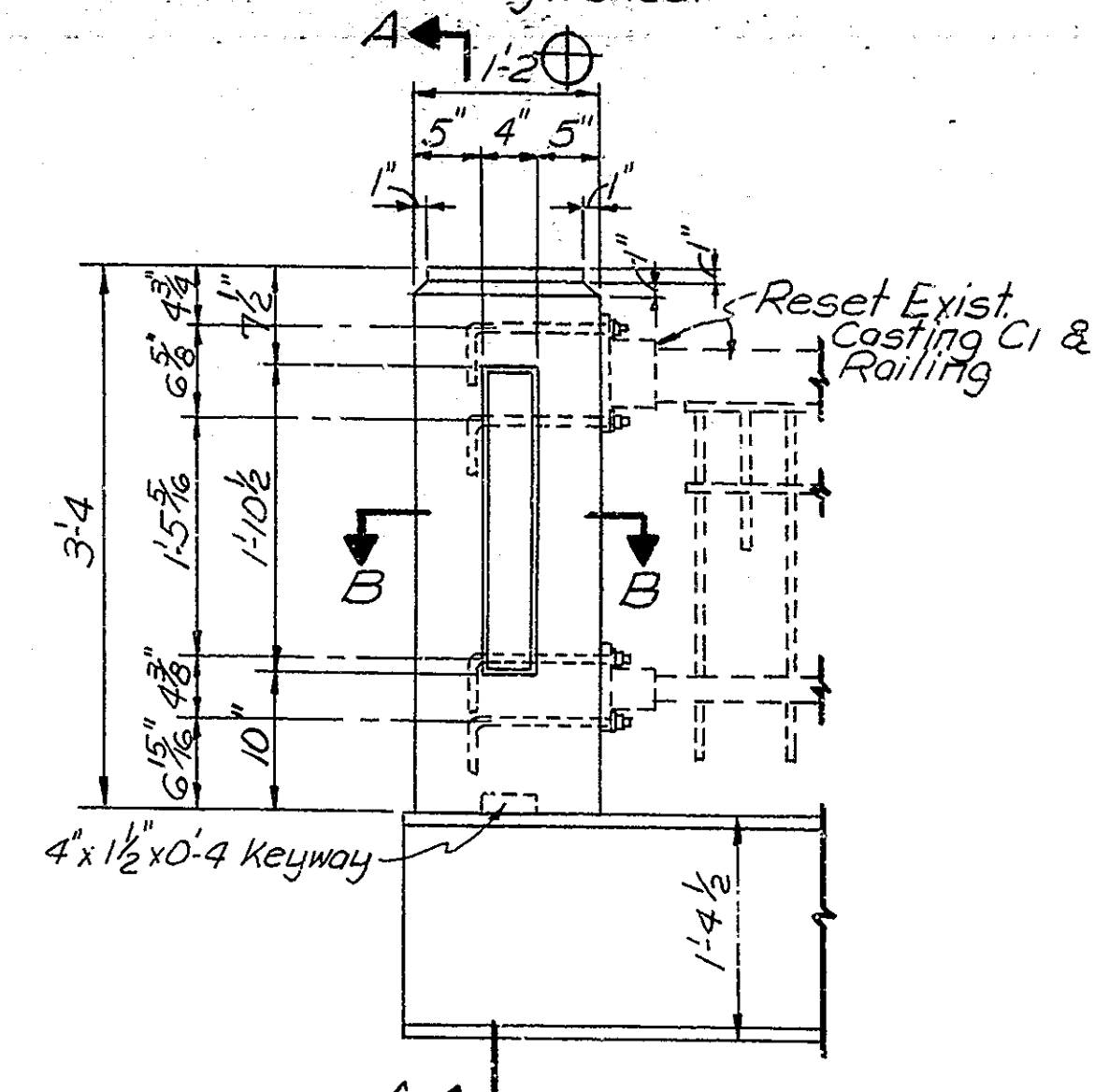
BRUNING 405253 24139-3

DESIGNED	CKD
DRAWN	CKD
TRACED	CKD

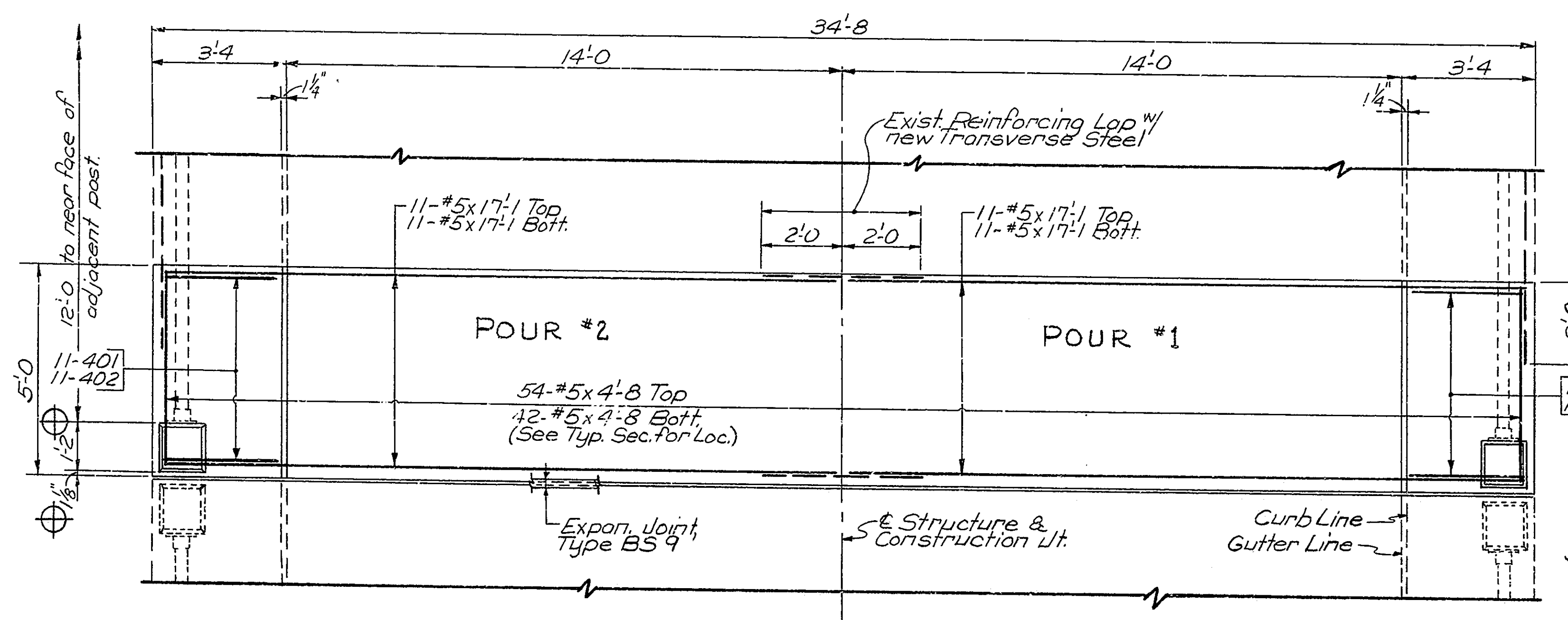


PLAN AT PIER #2

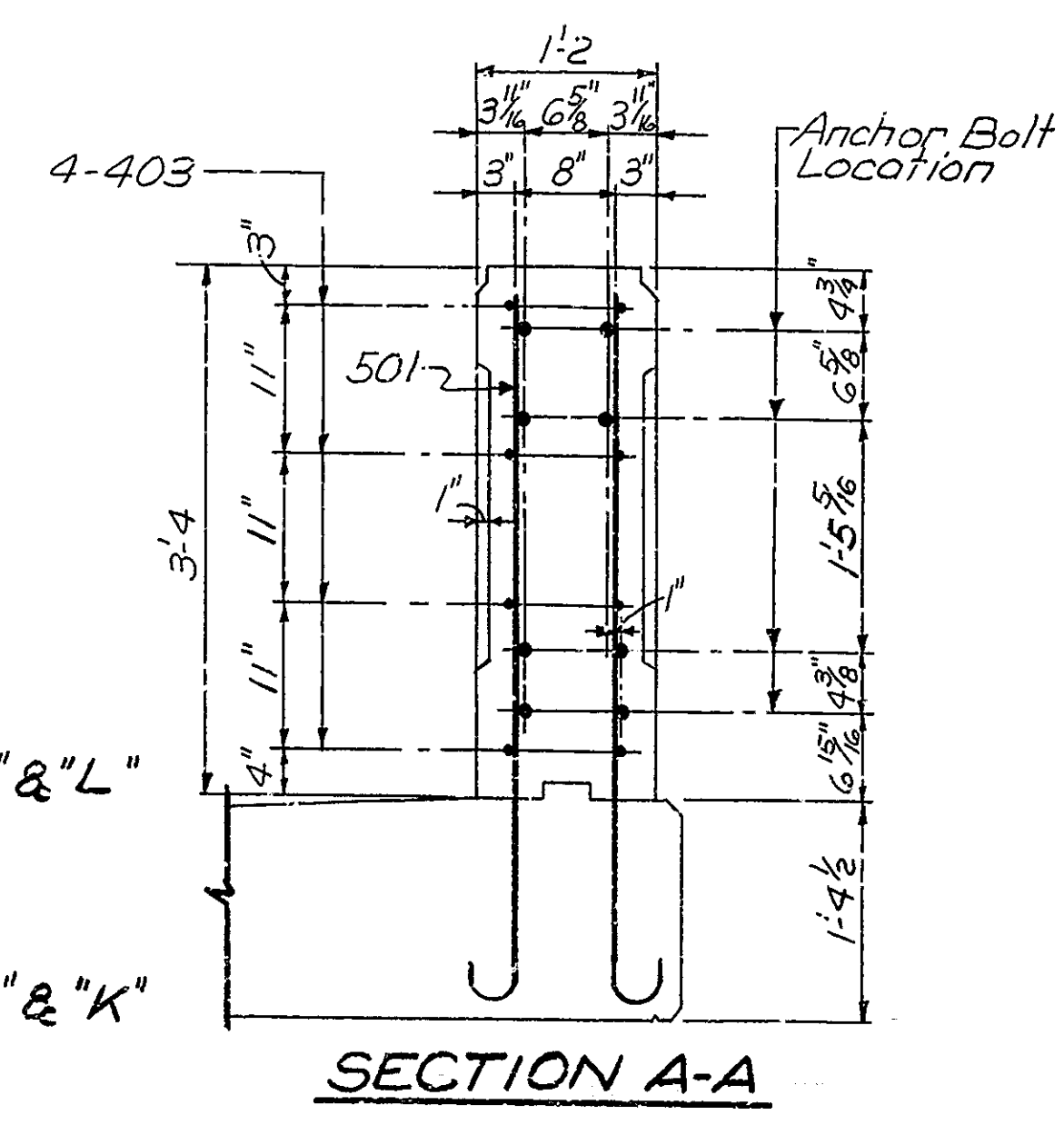
NOTE: Cut off Exist. Reinforcing 2'-0" from Concrete Cut Line to Lap with new Reinforcing. Remaining Exist. Reinforcing to be cleaned and straightened.



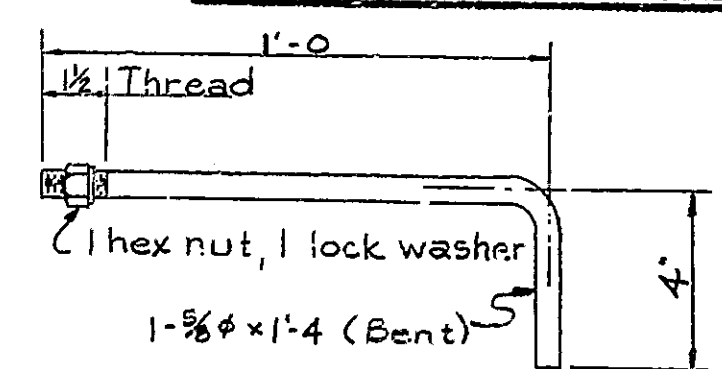
POST ELEVATION



PLAN AT PIER #3 & #11

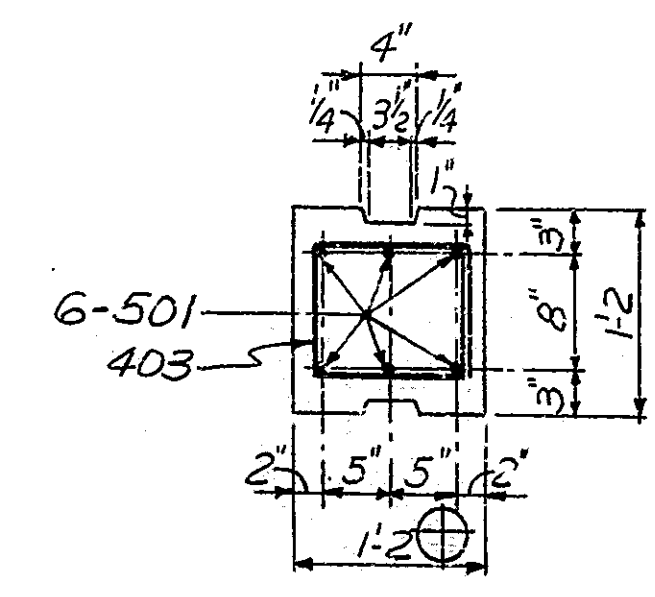


SECTION A-A



Note: Existing Anchor Bolts for railing connections to be reused. New Anchor Bolts, if required, will be supplied by the Contractor with the cost included in the cost of other items.

ANCHOR BOLT DETAIL



SECTION B-B

1'-2" Post width and/or clearance from end of slab to face of post may be reduced, if necessary, to maintain proper joint opening.

BILL OF MATERIALS AT PIER #2			
SUPERSTRUCTURE REINFORCING STEEL			
Size or Mark	Number of Bars	Length (Ft.)	Weight (Lbs)
501	12	4'-11"	
5	36	17'-1"	
5	96	4'-8"	
Total N ^o 5			1170
401	18	3'-9"	
402	18	5'-4"	
403	8	4'-3"	
Total N ^o 4			132
Total Reinforcing Steel			1302
CONCRETE			
Conc. Class "A" in Supstr			CY
Pour N ^o 1			2.4
Pour N ^o 2			2.4
Total Class "A" Concrete in Superstructure			4.8
2-Railing Post @ .15 CY			
Total Class "A" Conc. in Railing			0.3

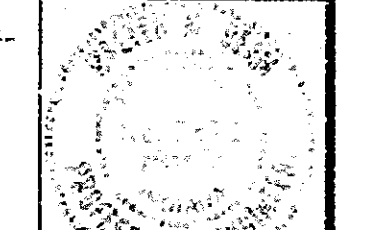
BILL OF MATERIALS AT PIERS #3 & #11			
SUPERSTRUCTURE TOTAL FOR ONE 2- REQUIRED			
REINFORCING STEEL			
Size or Mark	Number of Bars	Length (Ft.)	Weight (Lbs)
501	12	4'-11"	
5	44	17'-1"	
5	96	4'-8"	
Total N ^o 5			1313
401	22	3'-9"	
402	22	5'-4"	
403	8	4'-3"	
Total N ^o 4			156
Total Reinforcing Steel			1469
CONCRETE			
Conc. Class "A" in Supstr			CY
Pour N ^o 1			2.3
Pour N ^o 2			2.3
Total Class "A" Concrete in Superstructure			4.6
2-Railing Posts @ .15 CY			
Total Class "A" Conc. in Railing			0.3

SUPERSTRUCTURE INDIANA STATE HIGHWAY COMMISSION

SCALE: 1/2" = 1'-0" DATE: January 26, 1979

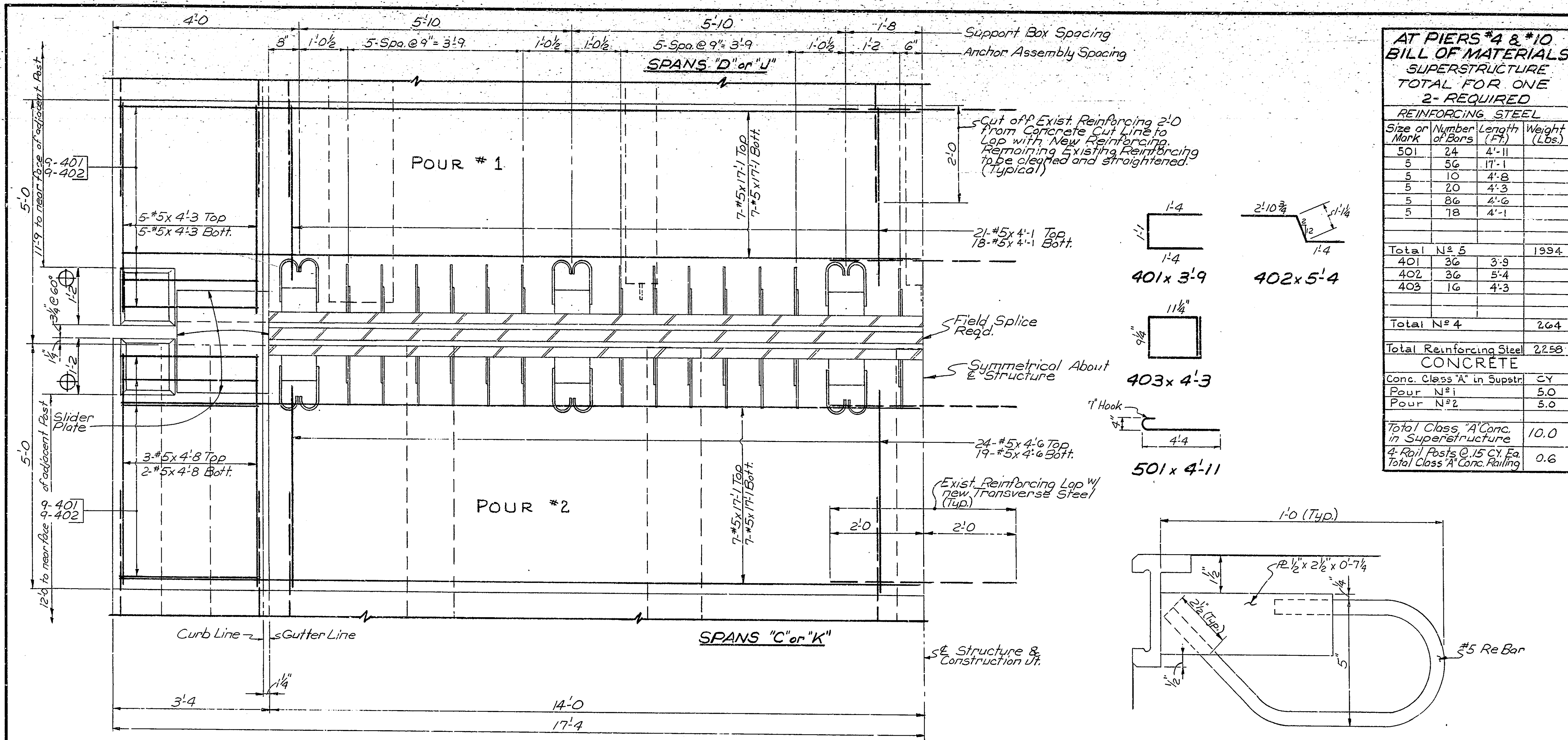
SUBMITTED FOR APPROVAL: *Walter G. Brown*

DRAWING: R5 OF 8 SHEET: 10 OF 25
PROJECT: ST-4555 (A)
CONTRACT NO. B-11990
BRIDGE FILE 20 55 2100 0



BRUNING 405255 241933

DESIGNED	CKD
DRAWN	D.W.H.
TRACED	CKD



**AT PIERS #4 & #10
BILL OF MATERIALS
SUPERSTRUCTURE
TOTAL FOR ONE
2- REQUIRED**

REINFORCING STEEL			
Size or Mark	Number of Bars	Length (Ft)	Weight (Lbs.)
501	24	4'-11"	
5	56	17'-1"	
5	10	4'-8"	
5	20	4'-3"	
5	86	4'-6"	
5	78	4'-1"	
Total N ^o 5			1994
401	36	3'-9"	
402	36	5'-4"	
403	16	4'-3"	
Total N ^o 4			264
Total Reinforcing Steel			2258
CONCRETE			
Conc. Class "A" in Supstr.			CY
Pour N ^o 1			5.0
Pour N ^o 2			5.0
Total Class "A" Conc. in Superstructure			10.0
4 Rail Posts @ .15 CY Ea			
Total Class "A" Conc. Railing			0.6

HALF PLAN AT PIERS #4 & #10

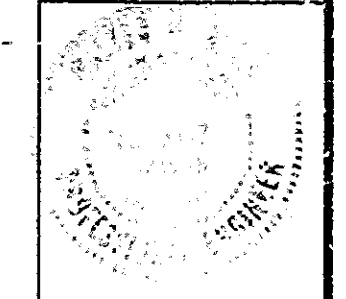
⊕ 1'-2" Post width shown may be reduced, if necessary, to insure proper joint opening.

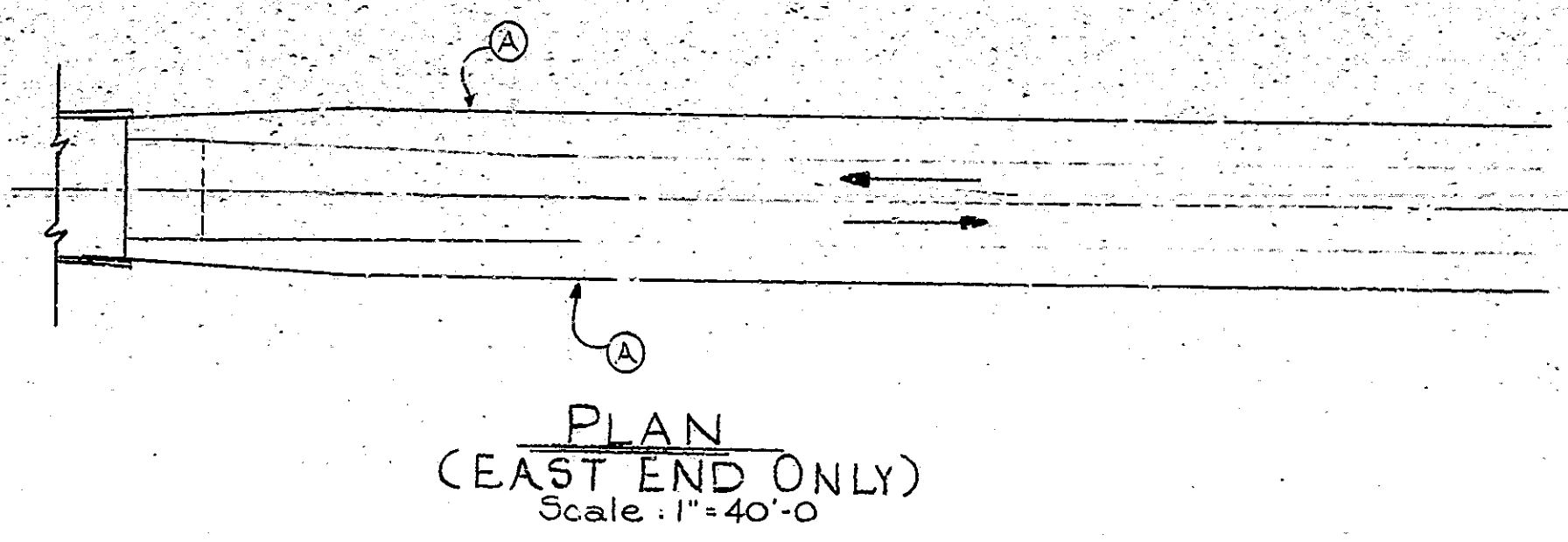
**SUPERSTRUCTURE
INDIANA STATE HIGHWAY COMMISSION**

SCALE: 1/2" = 1'-0"
 DATE: January 26, 1919
 SUBMITTED FOR APPROVAL: *Walter M. Beam*
 DRAWING: R26 OF 8 SHEET: 11 OF 25
 PROJECT: S7-4555 (A)
 CONTRACT NO. B-11990
 BRIDGE FILE: 39-55-3108 B

BRINING 40-9253 24139-3

DESIGNED	C.K.D.
DRAWN	C.K.D.
TRACED	C.K.D.



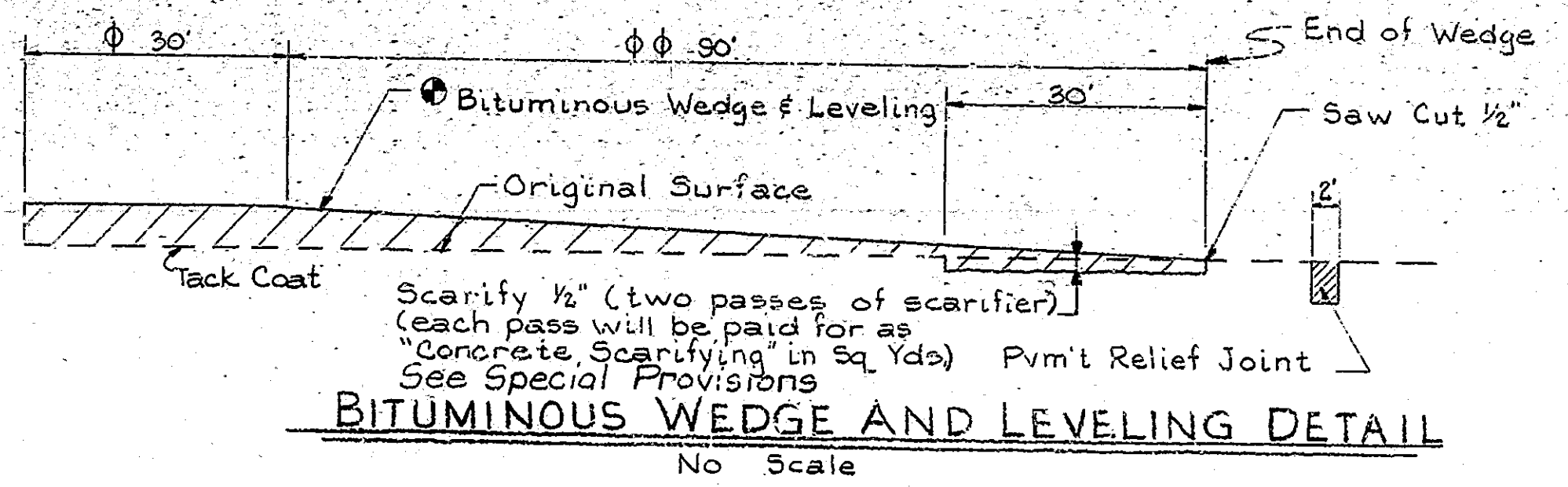


GUARD RAIL

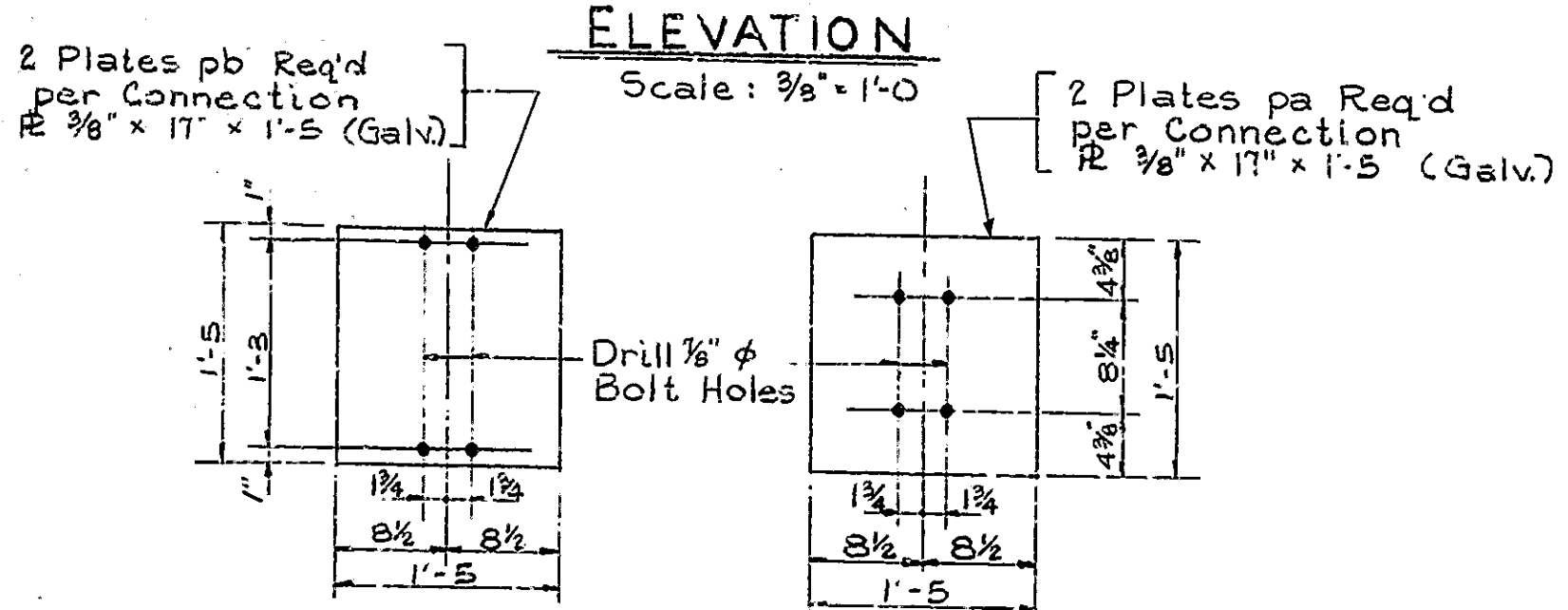
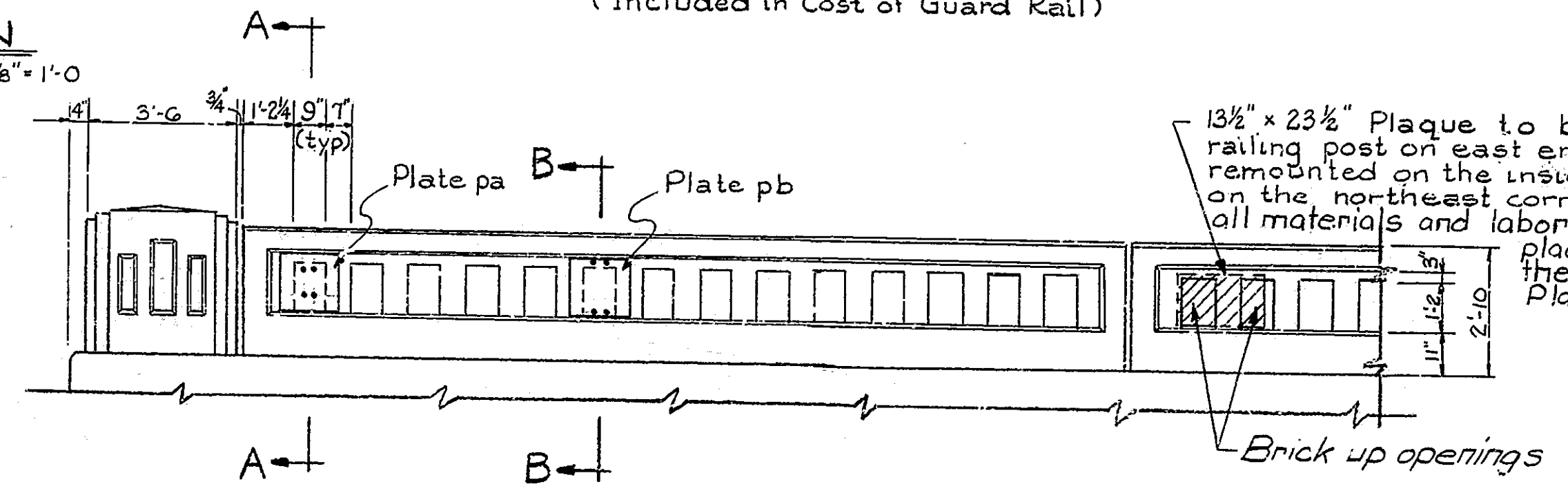
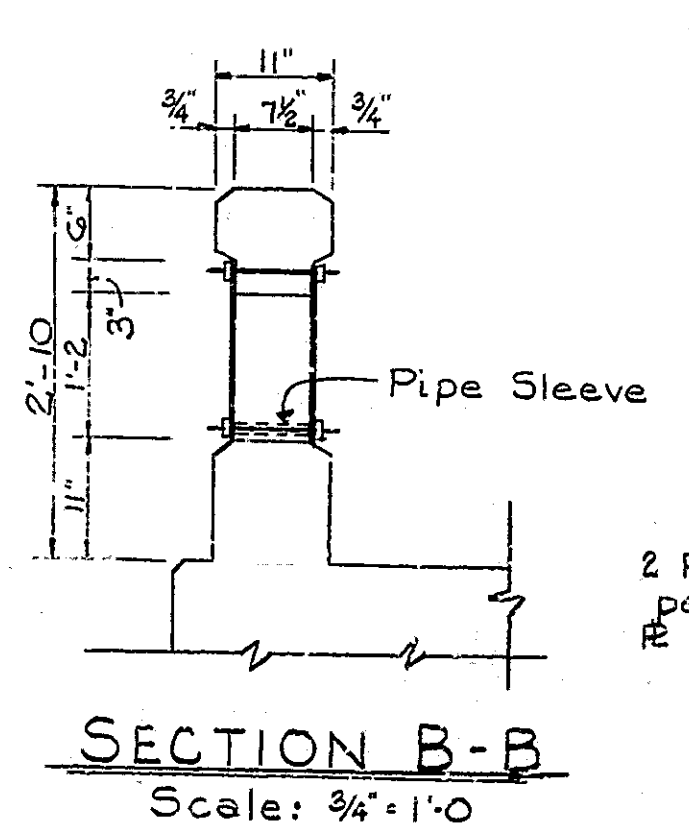
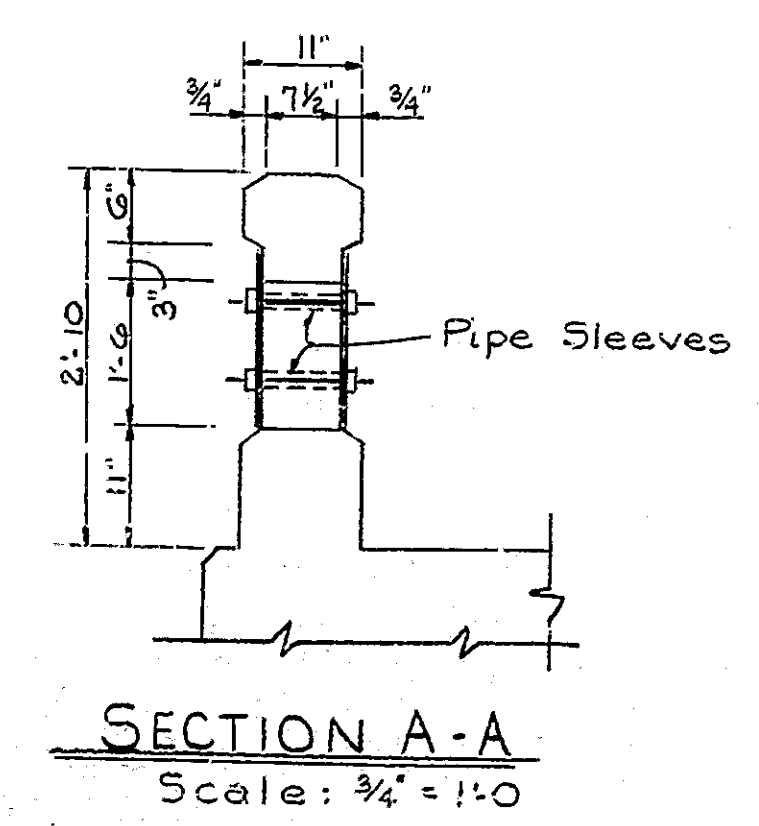
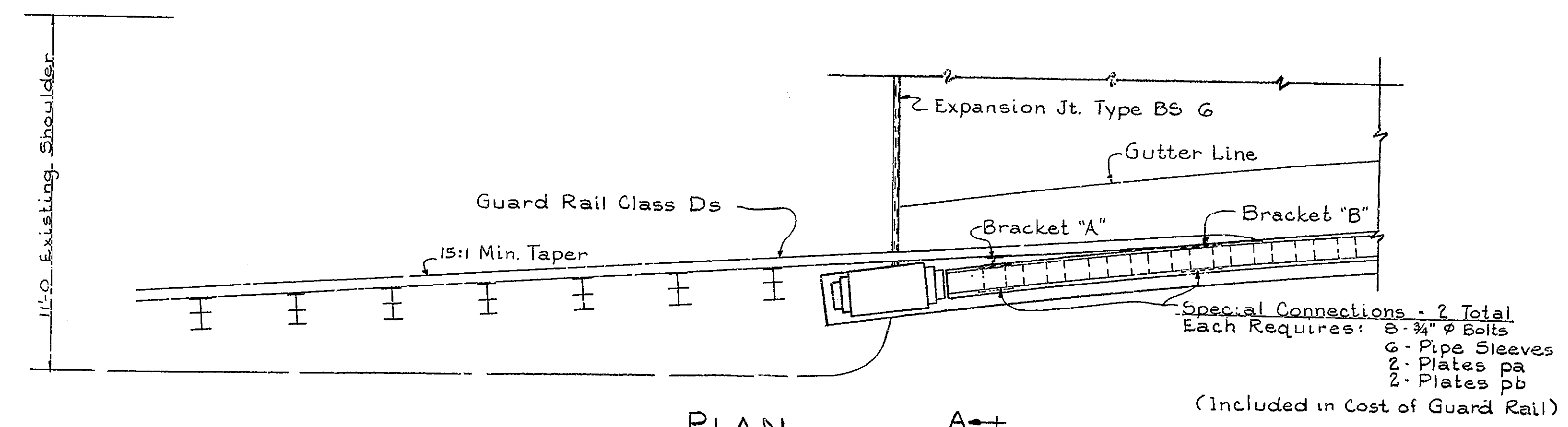
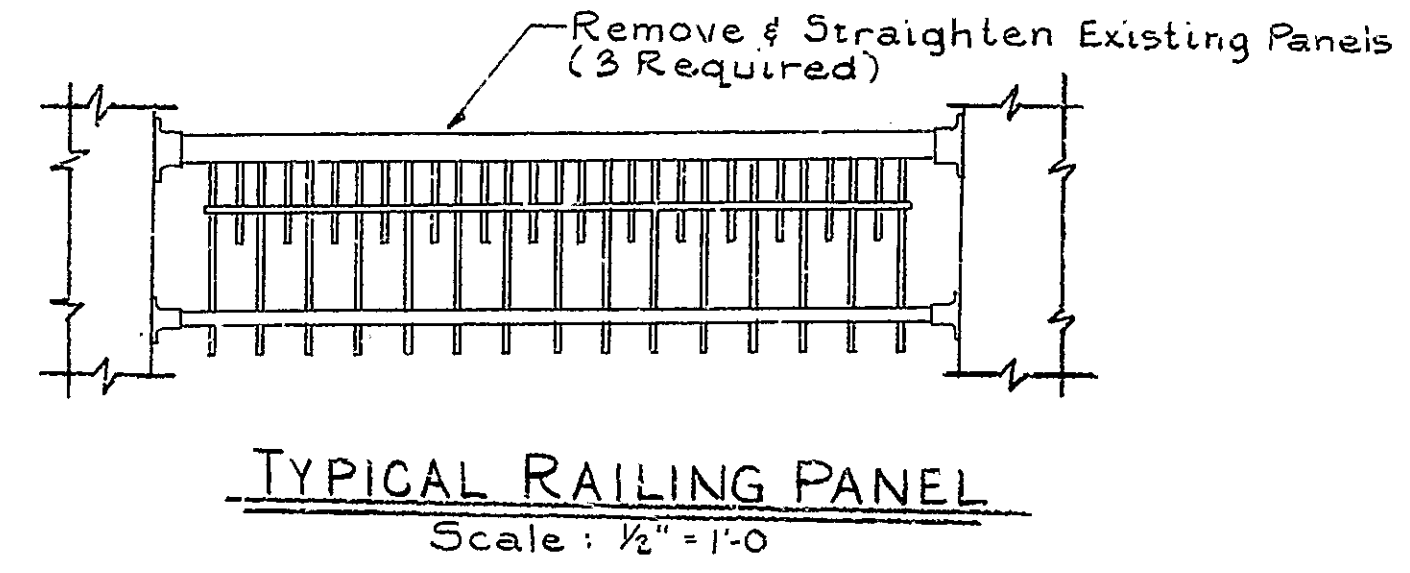
Ⓐ x 2 Remove 490' Present Guard Rail
Install 1025' Guard Rail Class Ds,
350' Guard Rail Class Bs, Plus one Guard Rail
End Treatment

GUARD RAIL SUMMARY

980' - Guard Rail Removal
205' - Guard Rail Class Ds
700' - Guard Rail Class Bs
2 Ea - Guard Rail End Treatment



ϕ Wedge to be a continuation of bridge deck profile
ϕ ϕ Taper wedge uniformly to meet existing roadway surface
Tack Coat to be paid for as "Bituminous Material for Tack Coat" in Sq. Yds.
• The maximum depth of Bituminous Surface Type II B shall not exceed 1 1/2 inches.
At all locations where the total wedge thickness will exceed 1 1/2 inches,
bituminous binder shall be placed as a first course to within one inch
of finished grade



INDIANA STATE HIGHWAY COMMISSION

SCALE: - As Noted DATE: January 26, 1979
SUBMITTED FOR APPROVAL: *H. Allen M. Brown*

DRAWING: R7 of B SHEET: 12 of 25
PROJECT: ST - 4555 (A)
CONTRACT NO. B-11990

BRUNING 405555 241313

DESIGNED	C.K.D.
DRAWN	C.K.D.
TRACED	C.K.D.

- A. Includes 327 SY for Concrete Approach Pavement.
- B. Estimated quantity for patching concrete curbs and walks includes concrete removal, sawcuts, cleaning, reinforcing and epoxy bonding compound.
- C. 48 - Adjusting Frame Type "SQ" for Roadway Drains 48 x 87 = 4176 lbs.
- D. Includes 500 lbs of #5 reinforcing as an undistributed quantity to replace badly corroded deck reinforcing
- E. Includes preparation of curbs and walks
- F. Includes removal of slab @ Piers #2, #3, #4, #10, & #11
- G. All guard rail removal is to remain the property of the Indiana State Highway Commission
- H. Includes:

Bituminous Wedge & Leveling	119.0 Tons
Relief Joints	11.0 Tons
Bituminous Widening	77.0 Tons
	<u>207.0 Tons</u>

SUMMARY			
CODENO	DESCRIPTION	UNIT	QUANTITY
A	51833 Concrete Scarifying	SY	3586
	51840 Additional Concrete Scarifying	SY	652
	51837 Blasting & Clearing	SY	3368
	51843 Bridge Deck Patching	SF	12,124
	51842 Bridge Deck Overlay	SY	3368
	51838 Finishing & Curing	SY	3368
	51874 Overlay Dam	SF	276
B	51875 Special Class A Concrete	SF	100
	51870 Repointing Masonry in Structures	SF	90
	51826 Surface Seal	SF	15,731
	Class "A" Concrete in Railing	CY	21
C	51110 Cast Iron, Grates, Basins and Fittings	LBS	4176
	51001 Concrete Class A in Superstructure	CY	340
D	51030 Reinforcing Steel	LB	9256
E	51835 Expansion Joint Type BS6	LF	84
E	51888 Expansion Joint Type BS9	LF	144
	Modular Expansion Joint	LF	64
	Removal of Existing Bituminous Overlay	SY	3368
F	51328 Removal of Present Structure (Portions)	LS	1
	Reset Diaphragms	EA	8
	Rivets Removed	EA	192
	52515 Guard Rail Type D	LF	205
	52505 Guard Rail Type B	LF	700
G	52535 Removal of Guard Rail	LF	980
	Guard Rail End Treatment	EA	2
	Reset Memorial Plaque	EA	1
	52831 Drilled Holes for Muddacking	EA	12
	52830 Material for Muddacking	CY	6
H	52470 Bituminous Mixture for Approaches	TONS	207
	Bituminous Material for Tack Coat	SY	1031
	Straighten Railing Panels	EA	3
	Removal of Pavement	SY	11
	52640 Maintaining Traffic	LS	1
	52340 Construction Signs Type A	EA	26
	52345 Construction Signs Type B	EA	5
	Signal Ahead Sign, Type W-14A	EA	4
	Temporary Concrete Barrier	LF	870
	52366 Temporary Pavement Marking Tape	LF	2892
	Removal of Line, Solid White 4"	LF	1435
	Removal of Line, Solid Yellow 4"	LF	600
	Line, Solid White 4"	LF	2660
	Line, Solid Yellow 4"	LF	3370

**SUMMARY
INDIANA STATE HIGHWAY COMMISSION**

SCALE:- None

DATE:- January 26, 1979

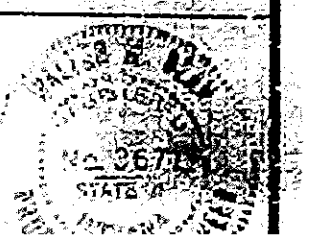
SUBMITTED FOR APPROVAL:-

H. Allen M. [Signature]

DRAWING:- R8 OF 8 SHEET:- 13 OF 25

PROJECT:- ST-4555(A)

CONTRACT NO. B-11990



BRUNING 40-5253 2/1979-3

DESIGNED	CKD
DRAWN	CKD
TRACED	CKD