

CONTRACT NO. B-18966

INDIANA
DEPARTMENT OF
HIGHWAYS

BRIDGE PLANS
FOR SPANS OVER 20 FEET
ON
INTERSTATE ROUTE 70

PROJECT NO. STI-70-2(C)48

REINFORCED CONCRETE APPROACH RECONSTRUCTION
STRUCTURE I-70-48-5175 JB INTERSTATE ROUTE 70 OVER VERMILLION CREEK
IN SECTION 23, T. 13N, R. 3 W IN PUTNAM COUNTY
STRUCTURE I-70-51-5178 B INTERSTATE ROUTE 70 OVER MILLS CREEK
IN SECTION 17, T. 13N, R. 2 W IN PUTNAM COUNTY

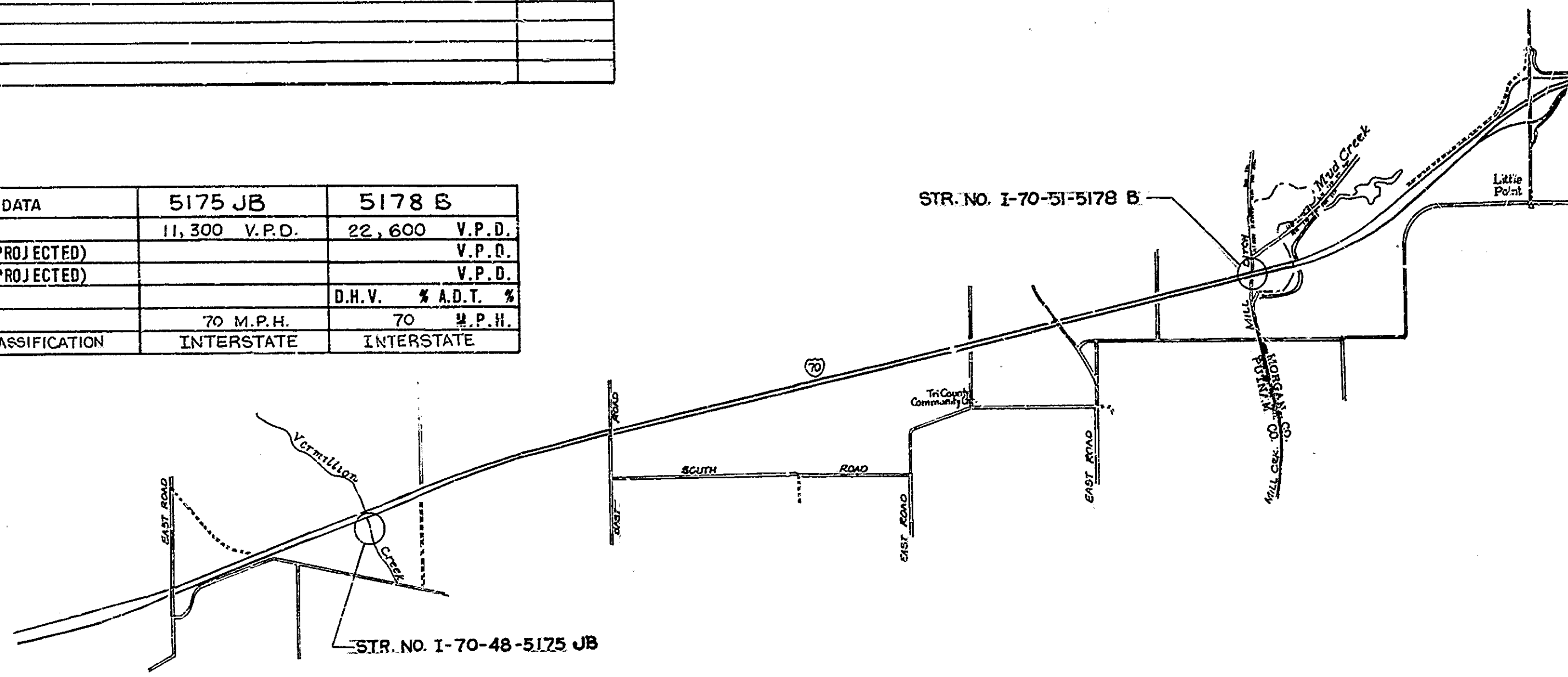
BRIDGES OVER 20' SPAN				
FEDERAL REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO. TOTAL SHEETS
5	IND.	STI-70-2(C)48	198	1 24

INDEX					
PROJECT	STRUCTURE	TYPE	SPAN	OVER	STATION
STI-70-2(C)48	I-70-48-5175 JB	REINFORCED CONC. SLAB	30'-0", 40'-0", 30'-0"	VERMILLION CREEK	
	I-70-51-5178 B	REINFORCED CONC. GIRDER CONT. REINF. CONC. GIRDER	35'-6", 58'-6", 79'-0" 58'-6", 35'-6"	MILLS CREEK	

SHEET NO.	SHEET DESIGNATION	SUBJECT	F.H.W.A. APPROVAL
1	ONE SHEET	TITLE AND INDEX	
2	R1	TRAFFIC MAINTENANCE DETAILS (5175 JB)	
3	R2	TRAFFIC MAINTENANCE DETAILS (5178 B)	
4	D1	GENERAL PLAN (5175 JB)	
5	D2	GENERAL PLAN (5178 B)	
6-9	D3-D6	REMOVAL AND RECONSTRUCTION DETAILS	
10	D7	MISCELLANEOUS DETAILS	
11	ONE SHEET	BRIDGE SUMMARY DELETE	

INDEX CONTINUED				
SHEET NO.	SHEET DESIGNATION	SUBJECT	F.H.W.A. APPROVAL	ADOPTED REVISION
	BRIDGE STD. BR1	ALUMINUM BRIDGE RAILING		
	BRIDGE STD. BR2	ALUMINUM BRIDGE RAILING DETAILS		
	BRIDGE STD. BR3	STEEL BRIDGE RAILING		
	BRIDGE STD. BR4	STEEL BRIDGE RAILING DETAILS		
	BRIDGE STD. BR5	RAILING CONNECTION DETAILS		
	BRIDGE STD. C1	MISCELLANEOUS DETAILS	07-13-88	RO8-01-89
	BRIDGE STD. C2	MISCELLANEOUS DETAILS		
	BRIDGE STD. C3	MISCELLANEOUS DETAILS	01-26-88	R11-02-87
	BRIDGE STD. C4	MISCELLANEOUS DETAILS		
	BRIDGE STD. D	CASTING DETAILS, ROADWAY DRAINS		
	BRIDGE STD. D1	ADJUSTING FRAME DETAILS FOR ROADWAY DRAINS		
	BRIDGE STD. PB	PRESTRESSED CONCRETE TYPE I-BEAMS		
	BRIDGE STD. PB	PRESTRESSED CONCRETE TYPE I-BEAMS		
	BRIDGE STD. PB6	PRESTRESSED BOX BEAMS		
	BRIDGE STD. PB	PRESTRESSED COMPOSITE BOX BEAMS WIDE		
	BRIDGE STD. PB	PRESTRESSED COMPOSITE BOX BEAMS WIDE		
	BRIDGE STD. PB10	TOLERANCES FOR FABRICATION OF PRESTRESSED BEAMS		
	BRIDGE STD. PA11	ELASTOMERIC BEARING PAD DETAILS		
	BRIDGE STD.			
	BRIDGE STD. R2A	BRIDGE LIGHTING DETAILS		
	BRIDGE STD. R2B	BRIDGE LIGHTING DETAILS		
	BRIDGE STD. S1	MISCELLANEOUS DETAILS		
	BRIDGE STD. S11	STEEL SHOE DETAILS		
	BRIDGE STD. T SHEET A	STANDARD TEMPORARY BRIDGE		
	BRIDGE STD. T SHEET B	STANDARD TEMPORARY BRIDGE		
	BRIDGE STD.			
	BRIDGE STD.			
	BRIDGE STD.			
	BRIDGE STD.			
	ROAD STD. SHEET A	STANDARD PAVEMENT JOINTS		
	ROAD STD. SHEET B	STANDARD PAVEMENT JOINTS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET A JOINTS	MISCELLANEOUS STANDARDS	*	RO3-01-90
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET ME	MISCELLANEOUS STANDARDS	05-19-88	RO4-04-88
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET MT3	MISCELLANEOUS STANDARDS	06-05-88	RO8-01-88
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS	04-10-84	RO2-01-84
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET GR	GUARD RAIL CLASS		
	ROAD STD. SHEET GR	GUARD RAIL CLASS		
	ROAD STD. SHEET GR	GUARD RAIL CLASS		
	ROAD STD. SHEET GR	GUARD RAIL CLASS		
	ROAD STD. SHEET GR	GUARD RAIL CLASS		
	ROAD STD. SHEET GR5	ALUMINUM GUARD RAIL DETAILS		
	ROAD STD. SHEET GR6	STEEL TUBE GUARD RAIL DETAILS		
	ROAD STD. SHEET GR7	GUARD RAIL PIER CONNECTION DETAILS		
	ROAD STD. SHEET GR8	STEEL BEAM GUARD RAIL		
	ROAD STD. SHEET GR9	ALUMINUM BEAM GUARD RAIL		
	ROAD STD. SHEET GR10	GUARD RAIL BURIED ENDS		
	ROAD STD. SHEET GR10A	GUARD RAIL BREAKAWAY CABLE TERM.		
	ROAD STD.			
	ROAD STD. SHEET C82	TEMPORARY CONCRETE BARRIER	01-11-89	RO9-01-88
	ROAD STD. SHEET 1 DETOURS	STANDARD DETOUR SIGNS	*	A SEPT 1988
	ROAD STD. SHEET 1A DETOURS	STANDARD DETOUR SIGNS		
	ROAD STD. SHEET 1B DETOURS	STANDARD DETOUR SIGNS		
	ROAD STD. SHEET 2 DETOURS	STANDARD DETOUR SIGNS		
	ROAD STD. SHEET 2A DETOURS	STANDARD DETOUR SIGNS	*	A SEPT 1988
	ROAD STD. SHEET 3 DETOURS	STANDARD DETOUR SIGNS	*	RO9-01-88
	ROAD STD. SHEET 3A DETOURS	STANDARD DETOUR SIGNS	*	RO9-01-88
	ROAD STD. SHEET 4 DETOURS	STANDARD DETOUR SIGNS	01-11-89	RO9-01-88
	ROAD STD. SHEET 5 DETOURS	STANDARD DETOUR SIGNS	*	RO9-01-88
	ROAD STD. SHEET 5A DETOURS	STANDARD DETOUR SIGNS	*	RO9-01-88

TRAFFIC DATA	5175 JB	5178 B
A. D. T. (1988)	11,300 V.P.D.	22,600 V.P.D.
A. D. T. (19 PROJECTED)		V.P.D.
D. H. V. (19 PROJECTED)		V.P.D.
TRUCKS		D. H. V. % A. D. T. %
DESIGN SPEED	70 M.P.H.	70 M.P.H.
FUNCTIONAL CLASSIFICATION	INTERSTATE	INTERSTATE



Scale: 1" = 24,000'

B-18966

INDIANA DEPARTMENT OF HIGHWAYS
STANDARD SPECIFICATIONS DATED 1985
TO BE USED WITH THESE PLANS.

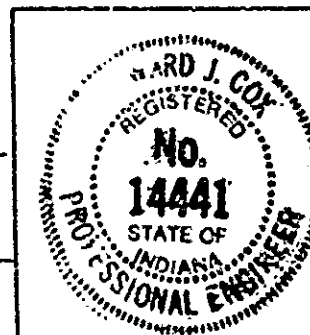
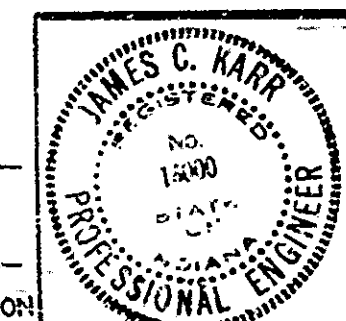
REVISIONS	
DATE	SHEET NO.

REVISIONS	
DATE	SHEET NO.

RECOMMENDED FOR APPROVAL 4-16-90

BRIDGE ENGINEER
INDIANA DEPARTMENT OF TRANSPORTATION

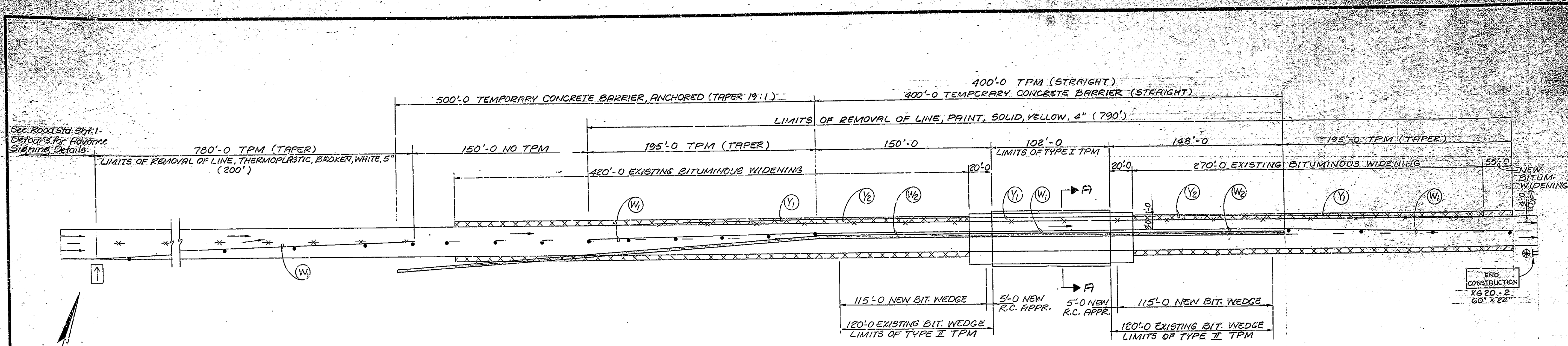
RECOMMENDED FOR APPROVAL 5-9-90
DESIGN CONSULTANT SERVICES MANAGER
INDIANA DEPARTMENT OF TRANSPORTATION



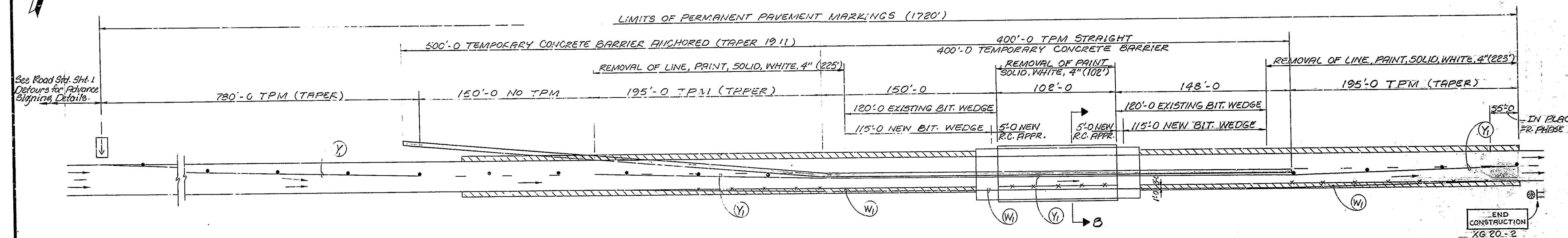
APPROVED 5-9-90
D. J. Hank
CHIEF, DIVISION OF DESIGN
INDIANA DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION
DEPARTMENT OF TRANSPORTATION
APPROVED: _____
DIVISION ADMINISTRATOR DATE

BRIDGE FILE: I-70-48-5175 JB
I-70-51-5178 B

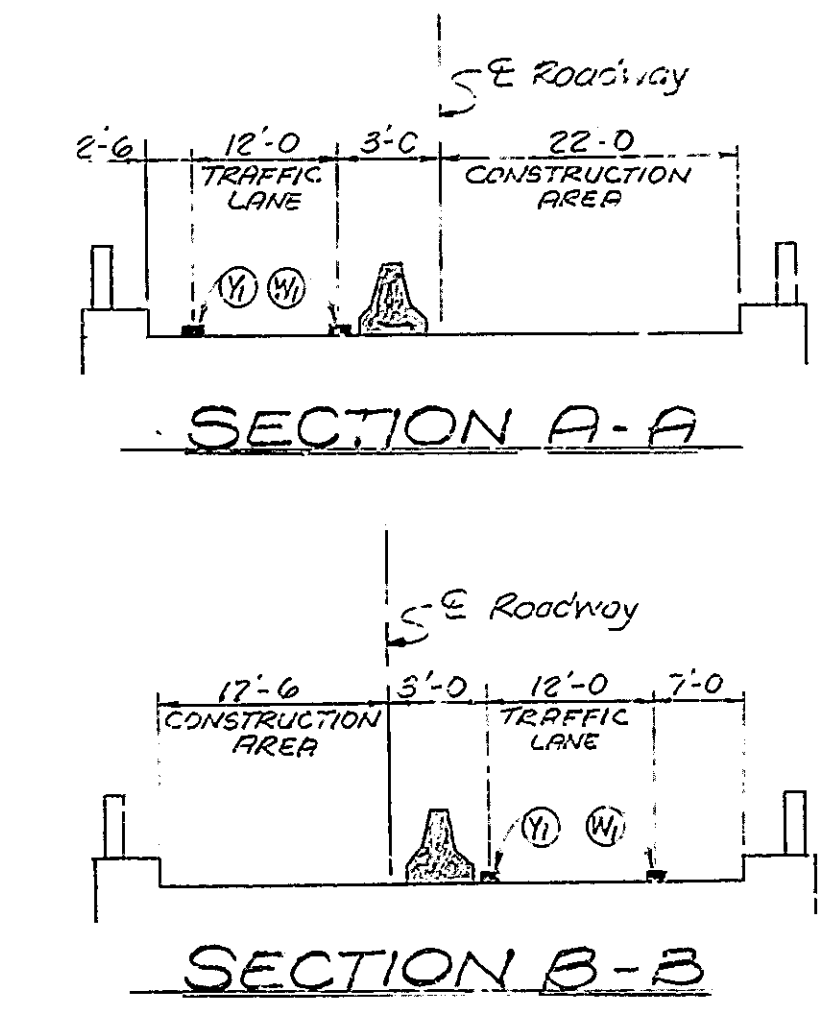


PHASE I



PHASE II

TWO (2) "ROUTE CLOSURE NOTICE" SIGN (XG20-5) REQUIRED.



LEGEND

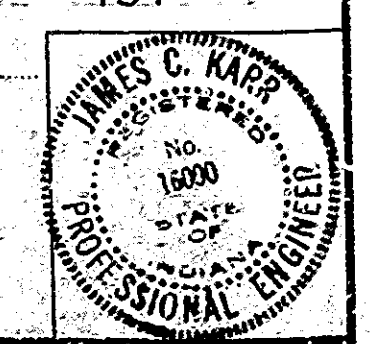
- • • DRUMS OR BARRICADE TYPE II WITH STEADY BURNING CONSTR. WARNING LIGHT TYPE "C"
- ⊥ CONSTRUCTION SIGN TYPE "A"
- ⊕ LOW INTENSITY FLASHING CONSTRUCTION WARNING LIGHT TYPE "C"
- Ⓜ TPM, TYPE I, WHITE, 4" Ⓜ₂ TPM, TYPE II, WHITE, 4"
- Ⓜ₁ TPM, TYPE I, YELLOW, 4" Ⓜ₂₁ TPM, TYPE II, YELLOW, 4"
- ▨ NEW BITUMINOUS WIDENING
- ▨▨▨ EXISTING BITUMINOUS WIDENING (LEVELING IS REQUIRED)
- ▨▨▨ EXISTING BITUMINOUS WIDENING
- FLASHING ARROW SIGN (SEE RD. STD. SHEET 1 DETOURS FOR LOCATION)
- ▬ TEMPORARY CONCRETE BARRIER (SEE RL. STD. 082 FOR DETAILS)
- *** REMOVAL OF EXISTING PERMANENT PAVEMENT MARKINGS.

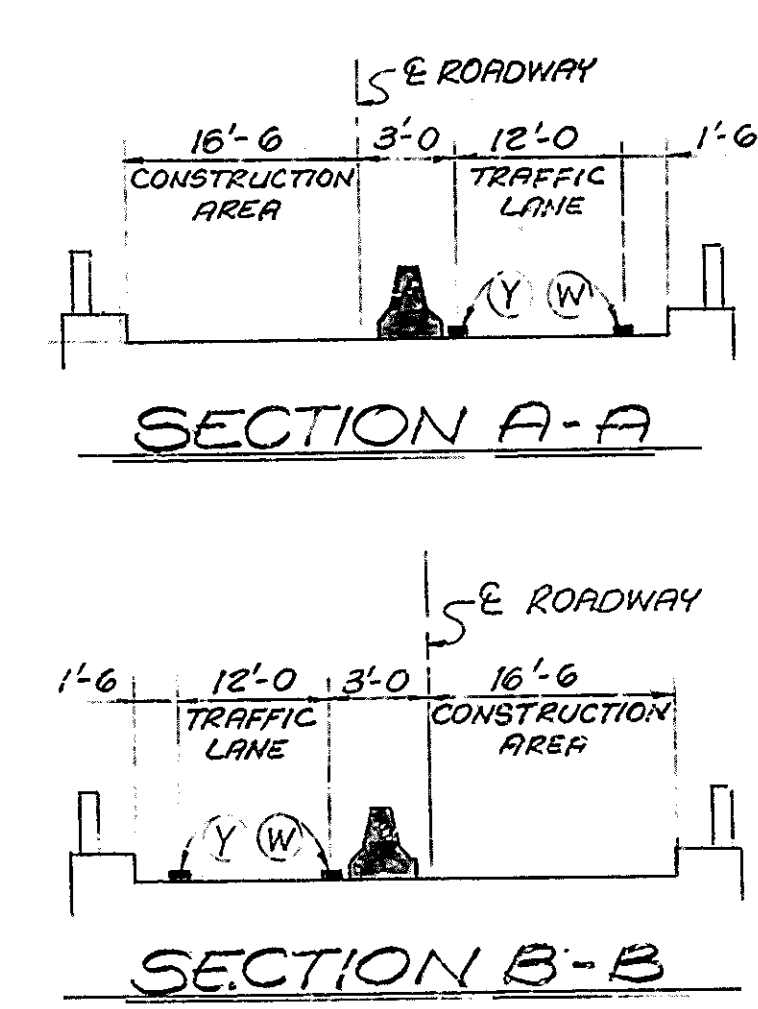
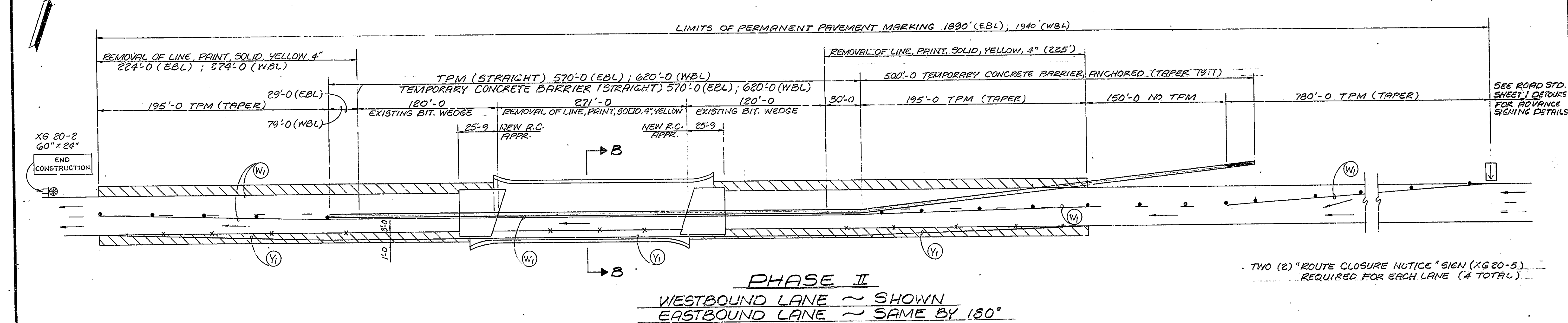
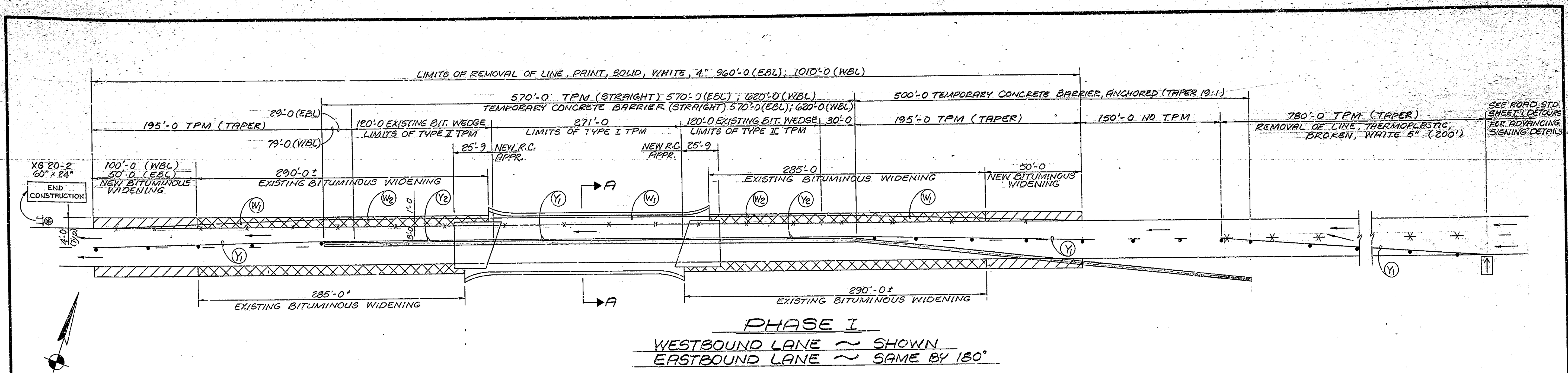
NOTE: See Drwg. D6 for Material Notes.

TRAFFIC MAINTENANCE DETAILS
INDIANA DEPARTMENT OF HIGHWAYS
PUTNAM COUNTY
 SCALE: NONE DATE: Apr 16 1990
 DRAWING: R1 OF R2 SHEET: 2 OF 24
 PROJECT: STI-70-2(C)48 STATION: -
 BRIDGE CONTRACT NO.
 BRIDGE FILE: I-70-98-5175 JB

DESIGNED: B.W.M. C.K.D.
 DRAWN: C.Z.U. B.W.M. C.K.D.
 TRACED: C.K.D.

SF-22317





- LEGEND**
- DRUMS OR BARRICADE TYPE II WITH STEADY BURNING CONSTR. WARNING LIGHT TYPE "C"
 - ⊥ CONSTRUCTION SIGN TYPE A
 - ⊗ LOW INTENSITY FLASHING CONSTRUCTION WARNING LIGHT TYPE "A"
 - Ⓜ₁ TPM TYPE I, WHITE 4" Ⓜ₂ TPM, TYPE II, WHITE, 4"
 - Ⓜ₁ TPM TYPE I, YELLOW 4" Ⓜ₂ TPM, TYPE II, YELLOW, 4"
 - ▨ NEW BITUMINOUS WIDENING
 - ▨ EXISTING BITUMINOUS WIDENING (LEVELING IS REQUIRED)
 - ▨ EXISTING BITUMINOUS WIDENING
 - FLASHING ARROW SIGN (See Road Std. Sheet 1 Detours for Location)
 - ▬ TEMPORARY CONCRETE BARRIER (See Road Std. CB₂ for Details)
 - *** REMOVAL OF EXISTING PERMANENT PAVEMENT MARKINGS.

NOTE:
See Drwg D₆ for Material Notes.

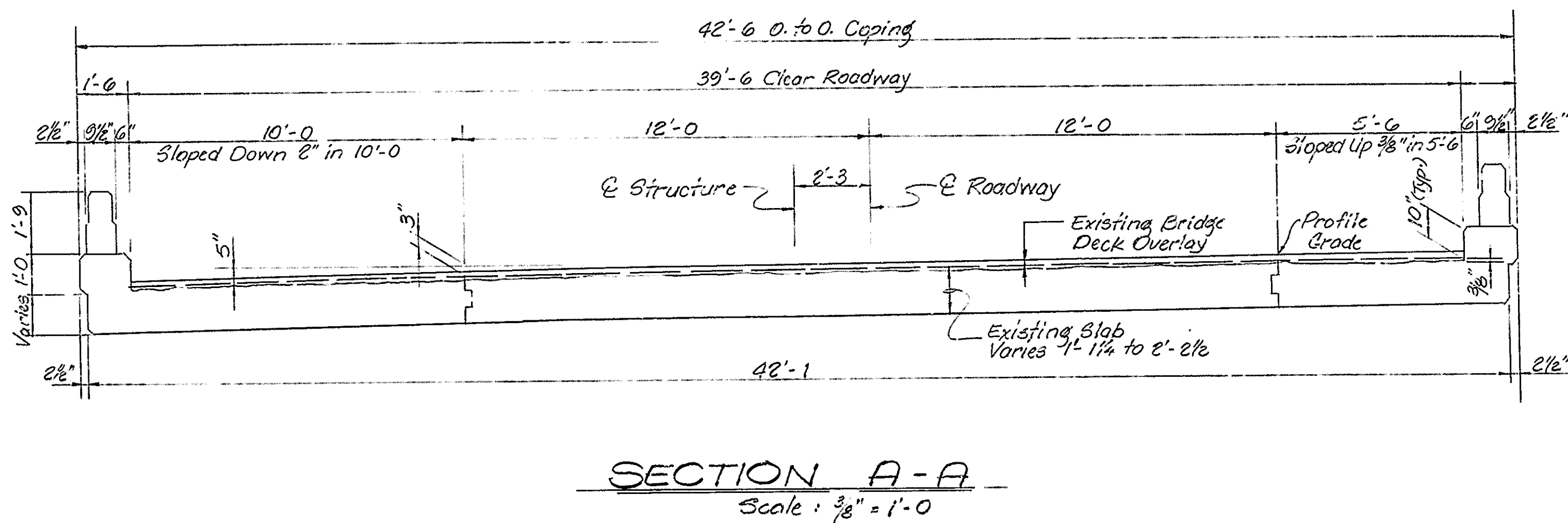
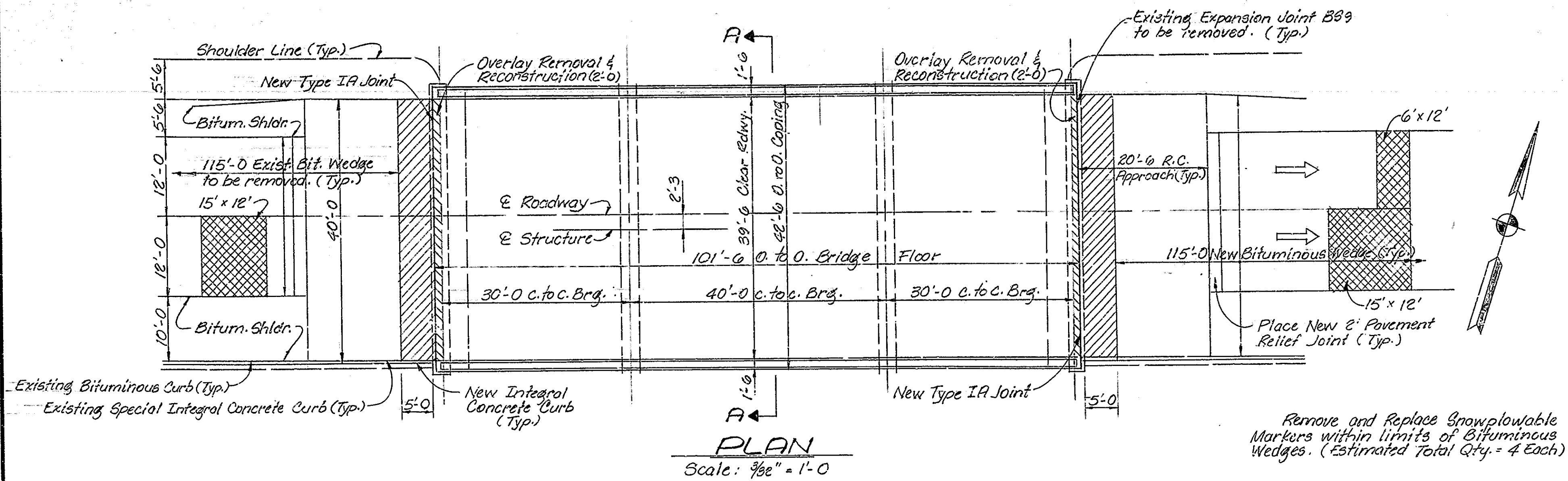
TRAFFIC MAINTENANCE DETAILS
INDIANA DEPARTMENT OF HIGHWAYS
PUTNAM COUNTY

SCALE: - NONE DATE: Apr 16 1990

James C. Karr
Professional Engineer

DRAWING: R2 OF R2 SHEET: 3 OF 24
PROJECT: STI-70-2(C)48 STATION: -
BRIDGE CONTRACT NO.
BRIDGE FILE: I-70-51-5178 B

STRUCTURE BUILT TO A 1000' VERTICAL CURVE



- LEGEND**
- PATCHING, FULL DEPTH REINFORCED CONCRETE PAVEMENT. See Rd. Std. A Joints for Details.
 - R.C. APPROACH REMOVAL and RECONSTRUCTION. See Drwg. D3 for Details.
 - OVERLAY REMOVAL and RECONSTRUCTION. See Drwg. D3 for Details.

STANDARD DRAWINGS		
BRIDGE STD.	ROAD STD.	DESCRIPTION
C1		REINFORCING BAR NOTES
C3		TYPE IA JOINT, JOINT DETAILS
	A JOINTS	CONCRETE PAVEMENT PATCHES
	MT3	CONSTRUCTION SIGN DETAILS
	MQ	FARM FIELD FENCE
SHEET 1 DETOURS		SIGNING DETAILS
SHEET 2A DETOURS		BARRICADE and DRUM DETAILS
SHEET 3 DETOURS		CONSTRUCTION SIGN DETAILS
SHEET 3A DETOURS		CONSTRUCTION SIGN DETAILS
SHEET 4 DETOURS		CONSTRUCTION SIGN DETAILS
SHEET 5A DETOURS		CONSTRUCTION SIGN DETAILS
	CB2	TEMPORARY CONCRETE BARRIER
	ME	INTEGRAL CONCRETE CURB DETAILS

GENERAL NOTES

- Plans for the Structure are on File in the Central Office as Bridge File I-70-48-5175 & J and I-70-48-5175 A & JA and are available upon 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 discrepancies to the Engineer and assume responsibility for their correctness and the fit of the new part to old.
- See Drawing D6 for Material Notes.
- Bridge Deck Overlay Patching Material to be Bridge Deck Patching Concrete.

GENERAL PLAN

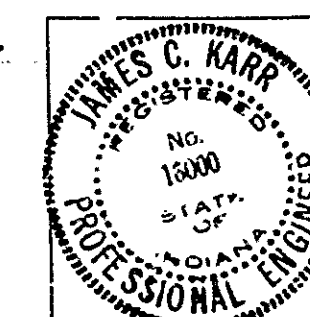
CONTINUOUS REINFORCED CONC. SLAB BRIDGE
3 SPANS: 30'-0", 40'-0", 30'-0" NO SKEW 39'-6" RDWY.
ON INTERSTATE 70 OVER VERMILLION CREEK.

INDIANA DEPARTMENT OF HIGHWAYS
PUTNAM COUNTY

SCALE: - NONE DATE: Apr 16 1990

James C. Karr

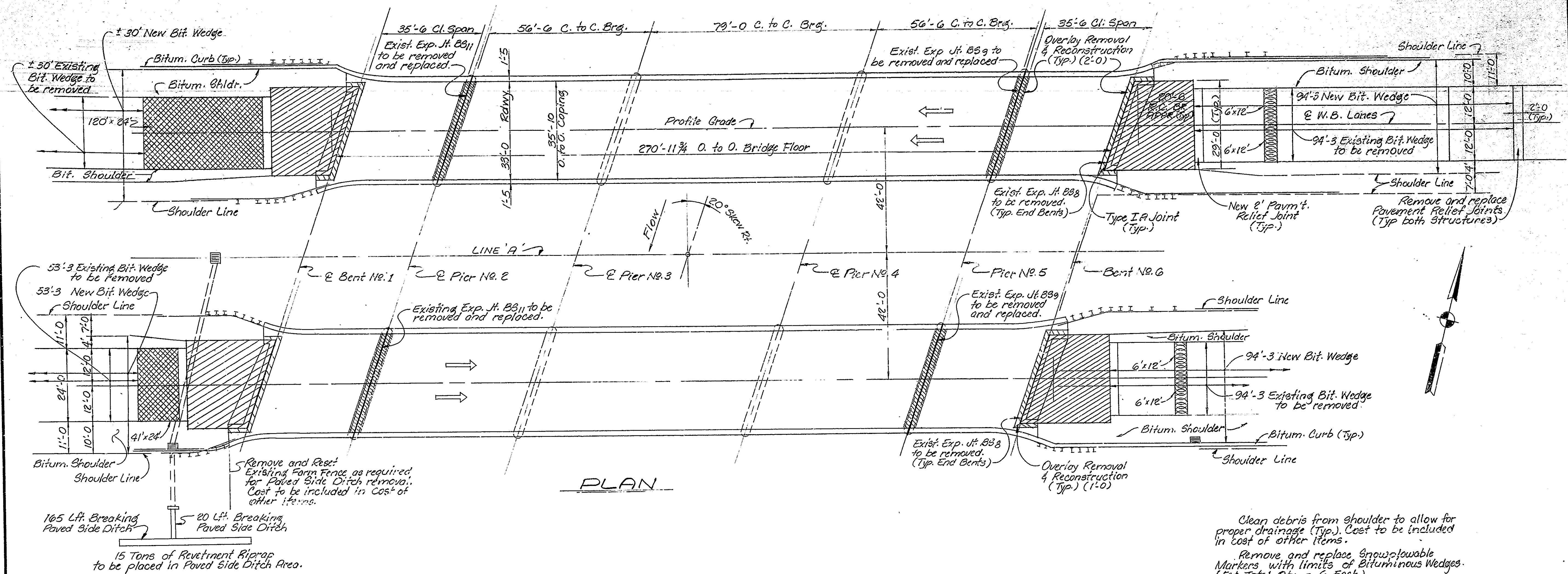
DRAWING: D1 of D7 SHEET: 4 of 24
PROJECT: STI-70-2 (C)48 STATION: -
BRIDGE CONTRACT NO.
BRIDGE FILE: I-70-48-5175 JB



DESIGNED: *BJW* CK'D
DRAWN: *CZU* CK'D *BJW*
TRACED: CK'D

SF-72317

STRUCTURES BUILT TO A - C. 2% GRADE



PLAN

Remove and Reest Existing Form Fence, as required, for Paved Side Ditch removal. Cost to be included in Cost of other items.

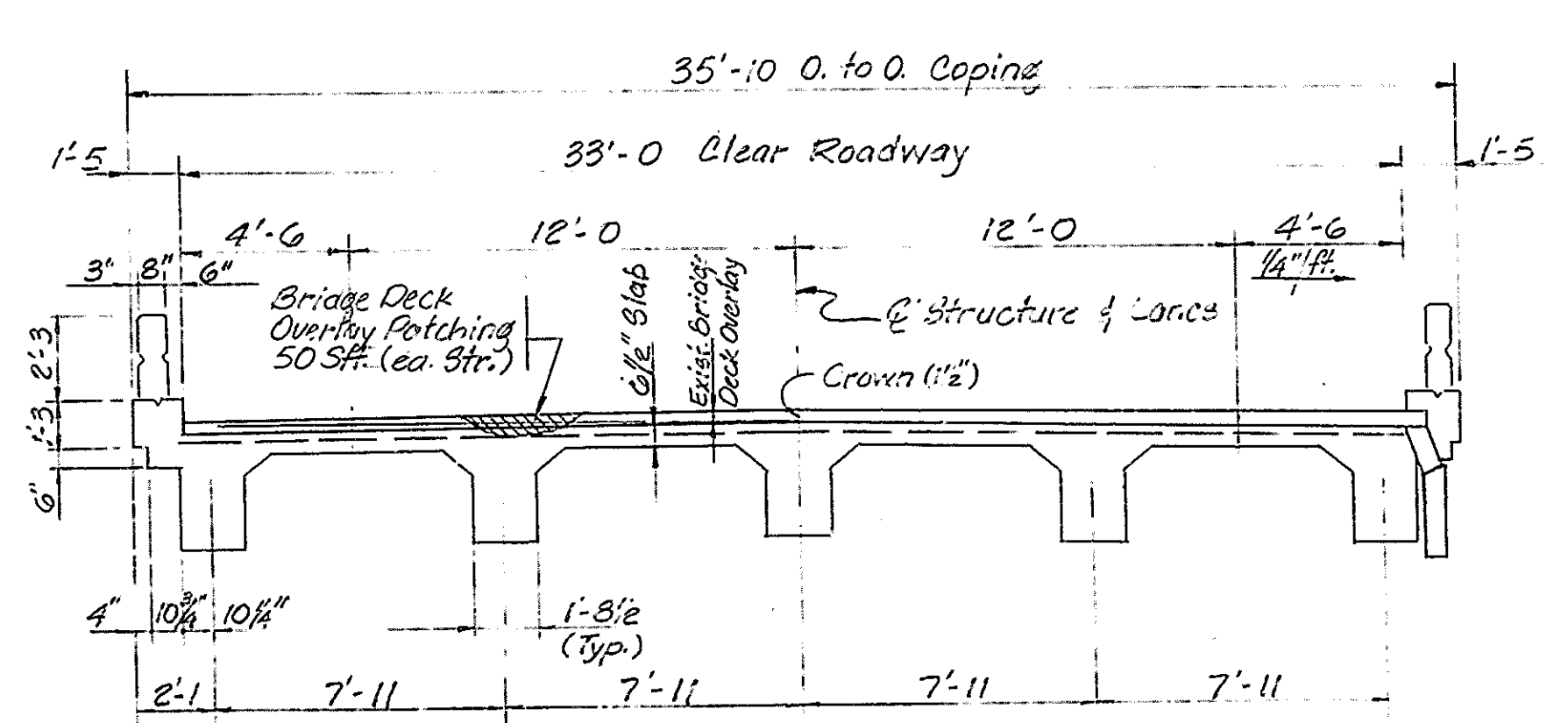
165 Lft. Breaking Paved Side Ditch

20 Lft. Breaking Paved Side Ditch

15 Tons of Retention Riprap to be placed in Paved Side Ditch Area.

Clean debris from shoulder to allow for proper drainage (Typ). Cost to be included in cost of other items.

Remove and replace snowplowable Markers with limits of Bituminous Wedges. (Est. Total Qty. = 6 Each)



TYPICAL SECTION

LEGEND

- R.C. PAVEMENT REMOVAL TO BE REPLACED WITH 12" PLAIN CONCRETE PAVEMENT WITH TYPE D1 CONTRACTION JOINTS SPACED AT 20'. See Rd. Std. A Joints & Drwg. D5 for Details.
- R.C. APPROACH REMOVAL & RECONSTRUCTION. See Drwg. D4 & D5 for Details.
- OVERLAY REMOVAL & RECONSTRUCTION. See Drwg. D4 & D5 for Details.
- PATCHING, FULL DEPTH REINFORCED CONCRETE PAVEMENT. See Rd. Std. A Joints for Details.

GENERAL NOTES

- Plans for the Structure are on file in the Central Office as Bridge File I-70-51-5178 & I-70-51-5178A and are available upon request.
- See Drwg. D1 for additional General Notes.
- The cost of removing Expansion Joints to be included in cost of "Removal for Expansion Joint," Sft.
- The cost of removing the Pavement Relief Joints should be included in the cost of "Bituminous Mixture for Approaches, MV," Ton.

GENERAL PLAN

CONTINUOUS R.C. GIRDER BRIDGES
5 SPANS, 35'-6, 56'-6, 79'-0, 56'-6, 35'-6 TWIN STRS.
TWO 33'-0 ROADWAYS, 6" CURBS, 20° SKEW RT.
OVER MILL CREEK ON INTERSTATE 70

INDIANA DEPARTMENT OF HIGHWAYS
PUTNUM COUNTY

SCALE: NONE DATE: Apr 16 1990

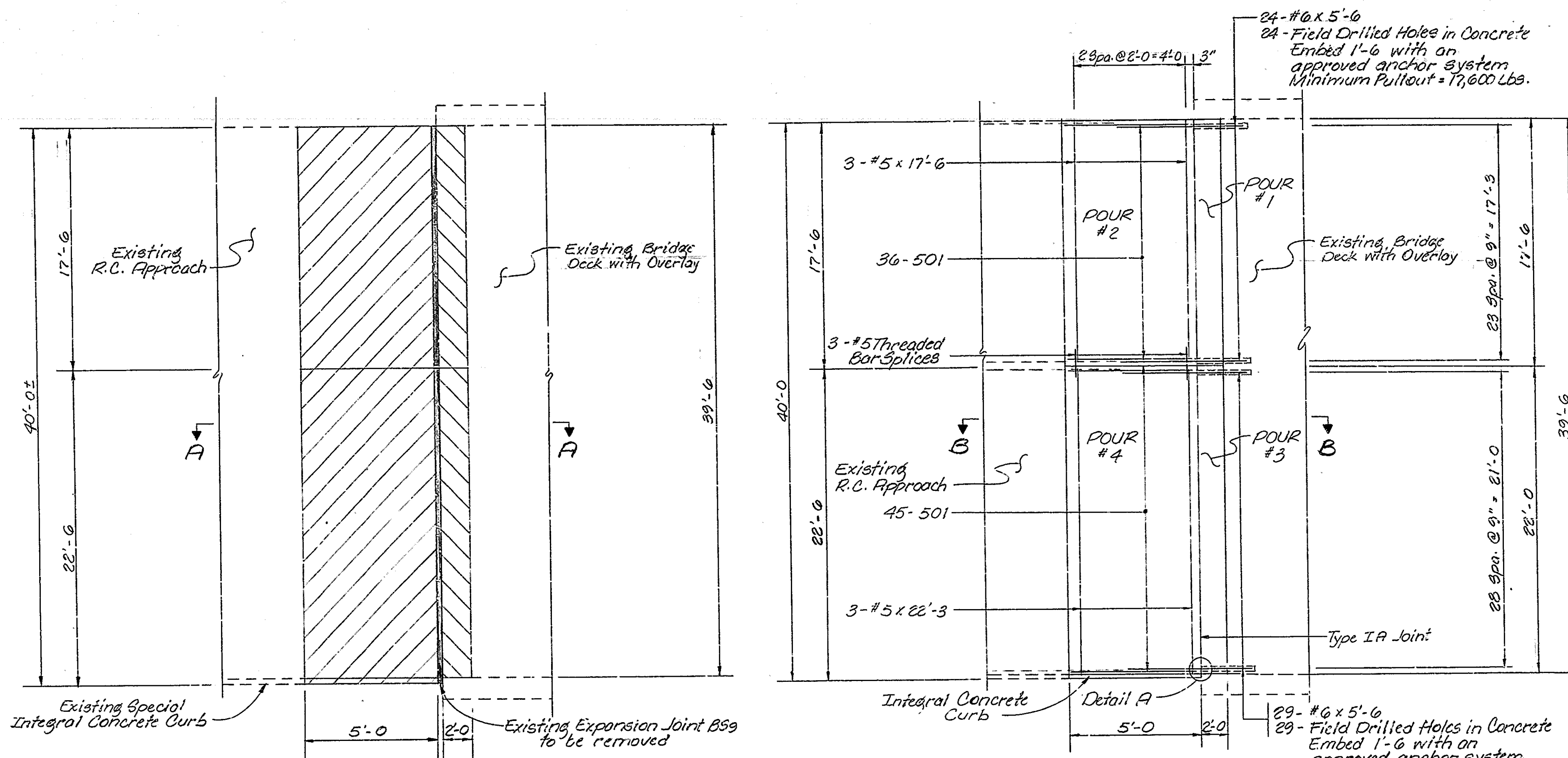
James C. Karr

DRAWING: D2 OF D7 SHEET: 5 OF 24
PROJECT: STI-70-2 (C)48 STATION: -
BRIDGE CONTRACT NO.
BRIDGE FILE: I-70-51-5178 B

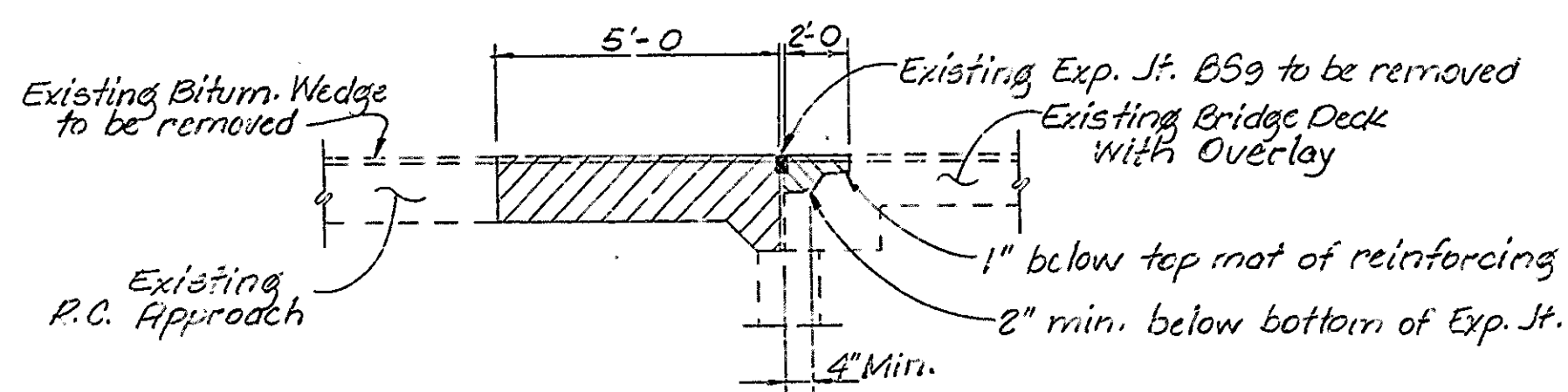


DESIGNED: RJW:02/90
DRAWN: C.ZU:02/90 C.W.D. RJW:02/90
TRACED: C.K.D.

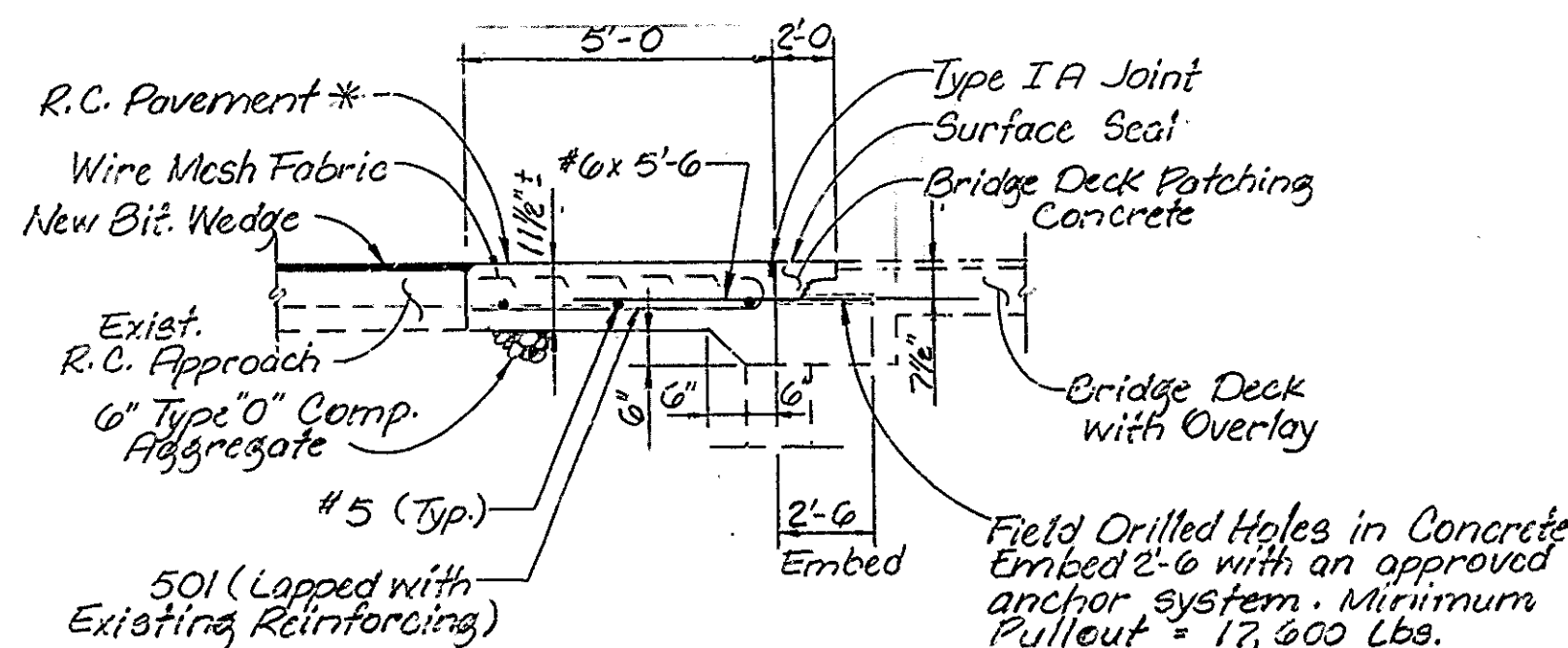
SF-22317



REMOVAL WEST APPROACH ~ (SHOWN)
RECONSTRUCTION EAST APPROACH ~ (SAME BY OPPOSITE HAND)



SECTION A-A



SECTION B-B

* To be paid for as "R.C. Pavement 10 in." Sys.

BILL OF MATERIALS

WEST APPROACH (SHOWN)
 EAST APPROACH (SAME)

MARK	NO. OF	LENGTH	WEIGHT
DESIGN	BAR		(LBS)
REINFORCING STEEL			
#6	53	5'-6"	438
TOTAL #6			438
501	81	5'-4"	
#5	3	22'-3"	
#5	3	17'-6"	
TOTAL #5			575
TOTAL REINF. STEEL			1013

MISCELLANEOUS

#5 Threaded Bar Splice	3 Each
Field Drilled Holes in Conc.	53 Each
Bridge Deck Overlay Patching	
POUR #1	35 Sft.
POUR #3	44 Sft.
TOTAL	79 Sft.
Reinf. Conc. Fumt. 10"	
POUR #2	10 Sys.
POUR #4	13 Sys.
TOTAL	23 Sys.
Type "O" Comp. Aggr.	8 Tons
Integral Concrete Curb	5 Lft.
Removal of Pavement	23 Sys.
Removal for Expansion Joint	79 Sft.
Surface Seal	79 Sft.

∅ Cost to be included in cost of other items.

- Removal of R.C. Approach to be paid for as "Removal of Pavement," Sys.
- Removal of Bridge Deck and Overlay to be paid for as "Removal for Expansion Joint," Sft.

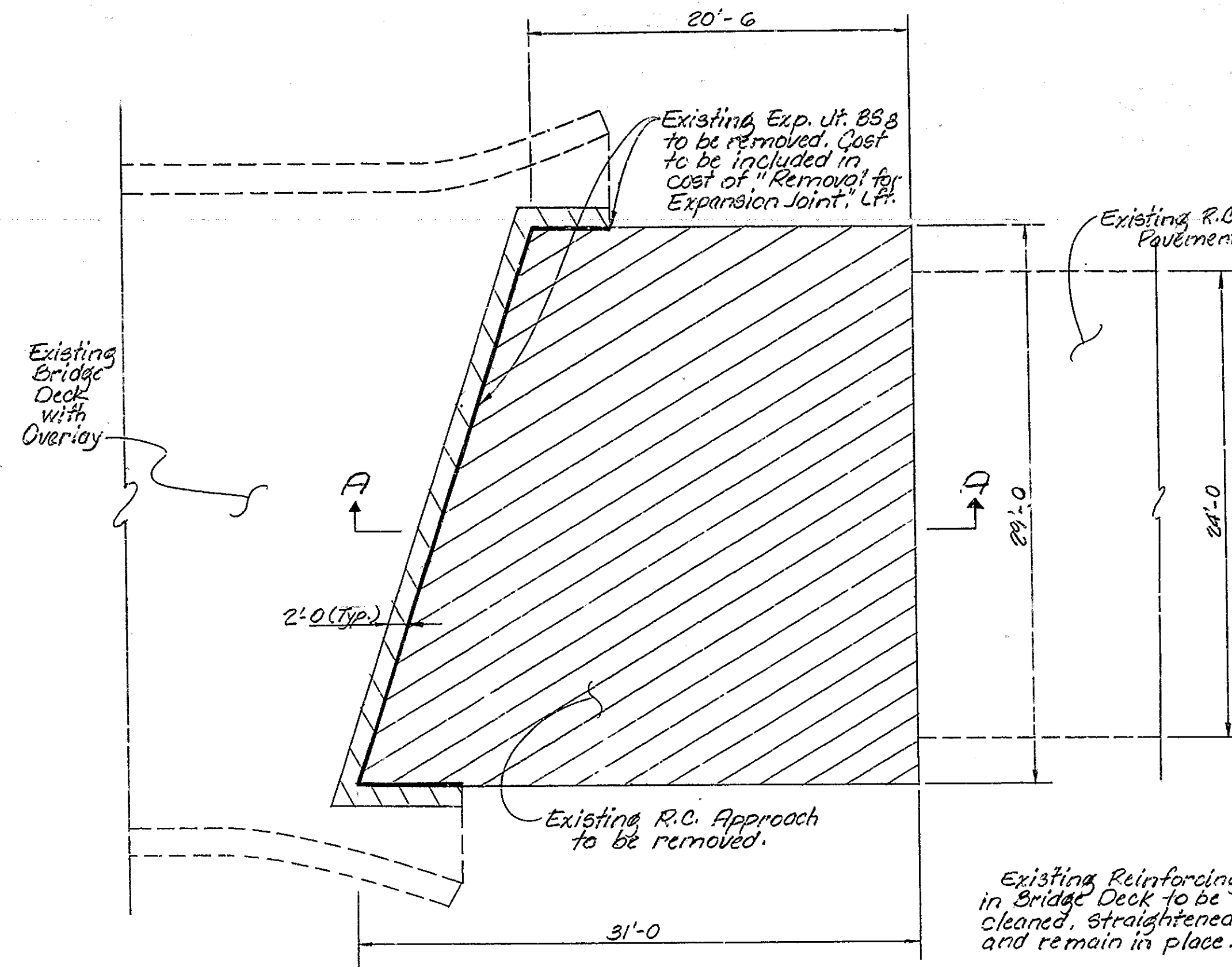
- NOTES:**
- Existing Reinforcing in Bridge Deck to be cleaned, straightened and remain in place.
 - Existing Longitudinal Reinforcing in R.C. Approach to extend a min. 2'-0" into new construction. Clean and straighten.
 - Existing Transverse Reinforcing in R.C. Approach to be removed.
 - See Drwg. D6 for Materials Notes and Detail A.
 - See Bridge Std. C1 for Reinforcing Notes.
 - See Bridge Std. C3 for Type IA Joint Detail.
 - See Road Std. ME for Integral Concrete Curb Details.

REMOVAL & RECONSTRUCTION DETAILS
INDIANA DEPARTMENT OF HIGHWAYS
PUTNAM COUNTY

SCALE: - NONE DATE: Apr 16 1990

JAMES C. KARR
 No. 15800
 STATE OF INDIANA
 PROFESSIONAL ENGINEER

DRAWING: D3 of D7 SHEET: 6 of 24
 PROJECT: STI-70-2 (C)48 STATION: -
 BRIDGE CONTRACT NO.
 BRIDGE FILE: I-70-48-5175 JS



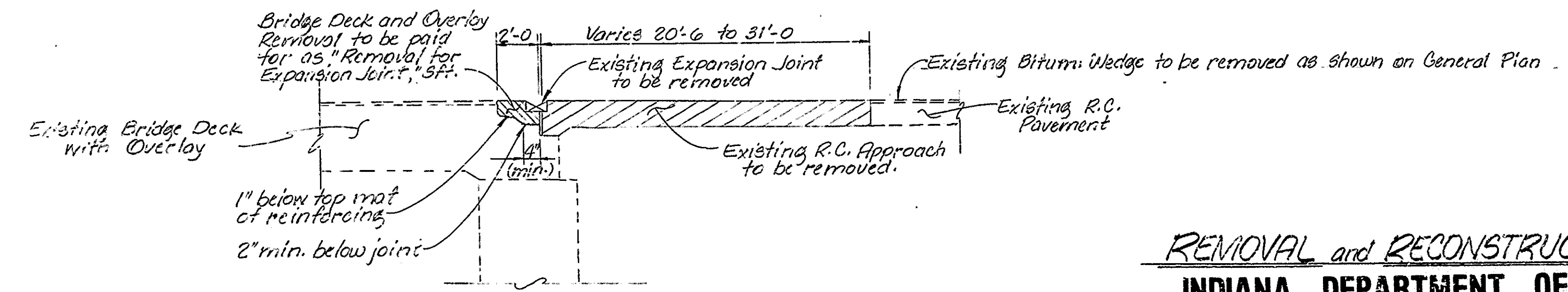
REMOVAL OF EXPANSION JOINT	87 SFT.
REMOVAL OF PAVEMENT	83 SFT.

Note:
Existing Reinforcing in Bridge Deck to be cleaned, straightened and remain in place.

TYPICAL REMOVAL

- Removal of R.C. Approach to be paid for as "Removal of Pavement", Sys.
- Removal of Bridge Deck and Overlay to be paid for as "Removal for Expansion Joint", Sft.

NOTES: See Drawing D6 for Reconstruction Detail.

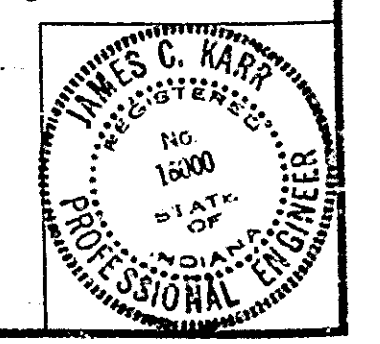


SECTION A-A

REMOVAL and RECONSTRUCTION DETAILS
INDIANA DEPARTMENT OF HIGHWAYS
PUTNAM COUNTY

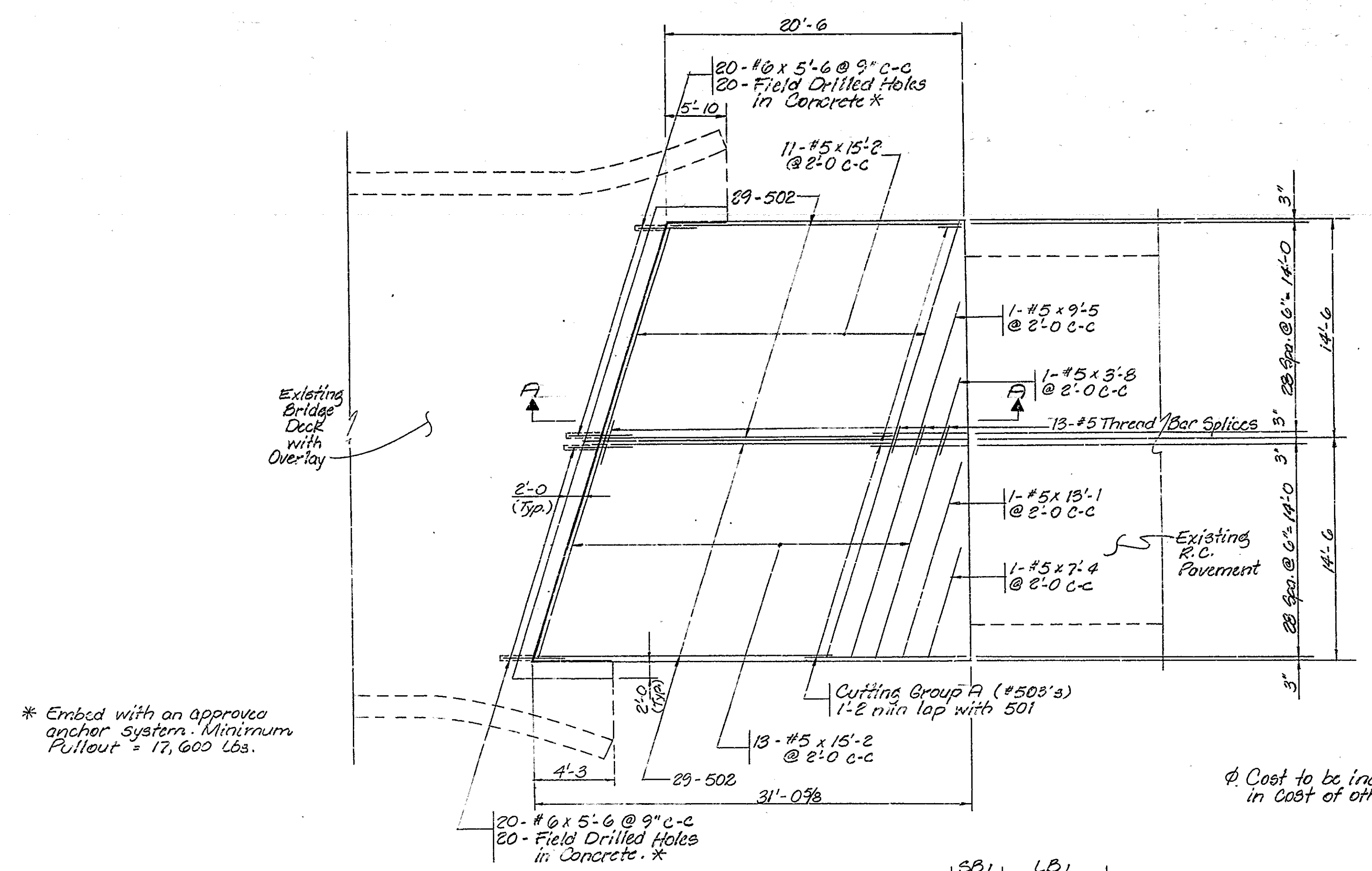
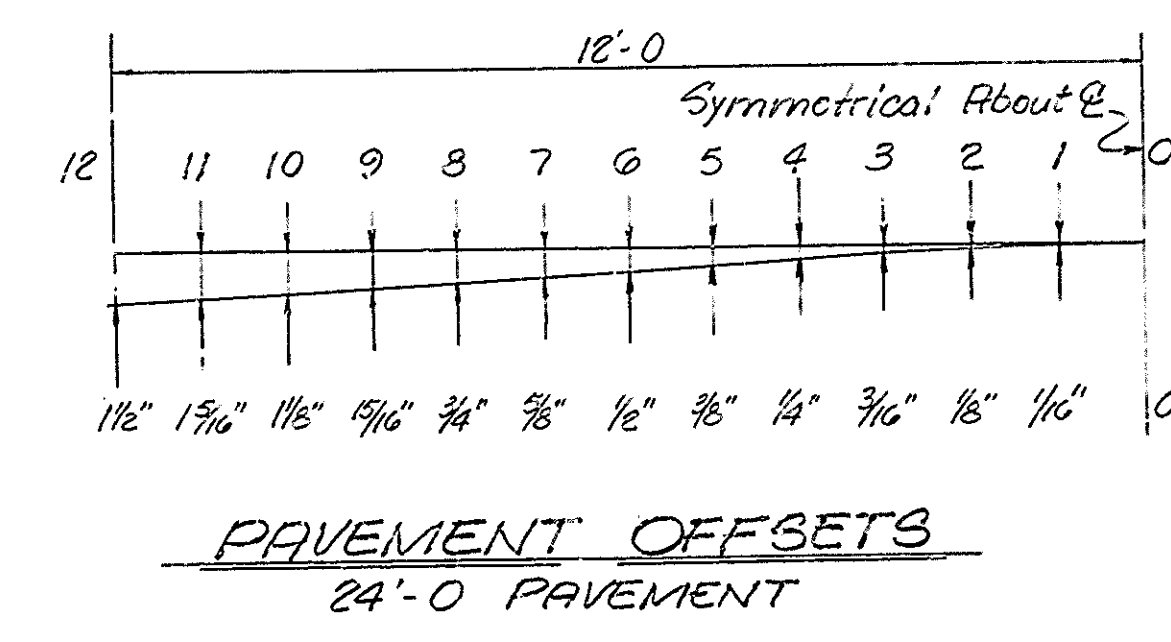
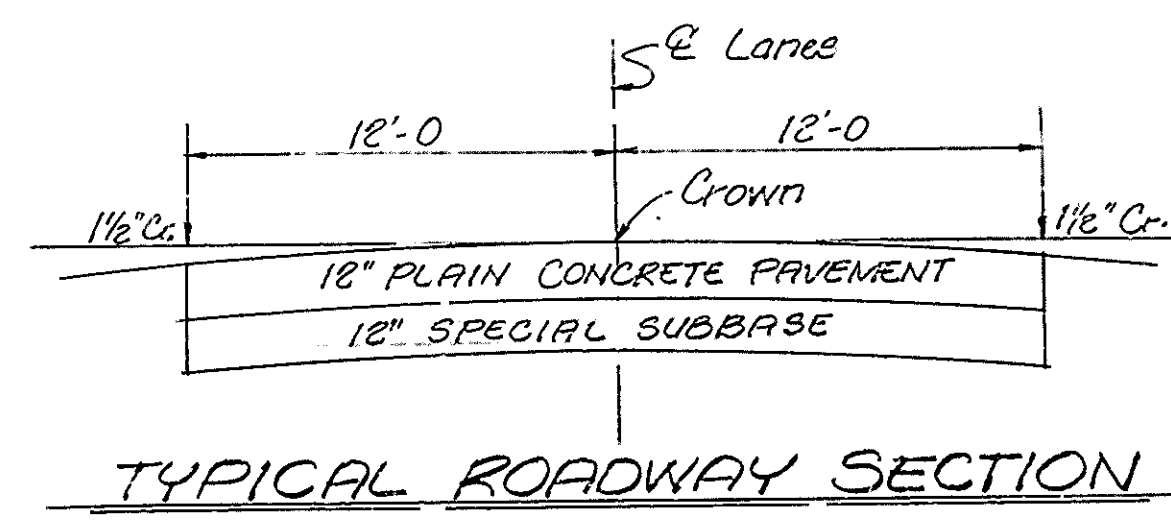
SCALE: - DATE: Apr 16 1990

DRAWING: D4 OF D7 SHEET: 7 OF 24
 PROJECT: STI-70-2(C) STATION: -
 BRIDGE CONTRACT NO.
 BRIDGE FILE: I-70-51-5178 B



DESIGNED: R.W. 1230 CKD
 DRAWN: C.Z. 1237 CKD R.W. 1230
 TRACED: CKD

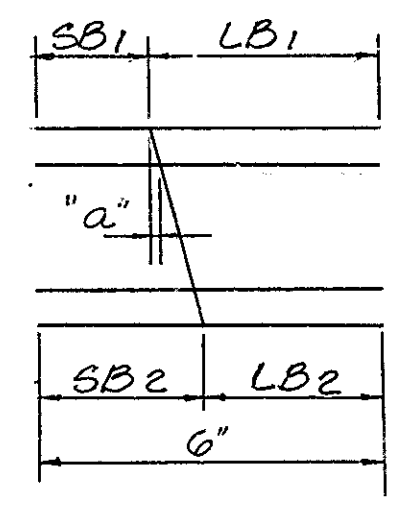
SF-22317



* Embed with an approved anchor system. Minimum Pullout = 17,600 Lbs.

Cost to be included in cost of other items.

TYPICAL RECONSTRUCTION



BAR DES.	CUTTING GROUP	LB1	SB1	LB2	SB2	NO. OF BARS	"a"	LENGTH "C"
503	"A"	11'-8"	1'-3"	6'-7"	6'-4"	29	2 3/8"	12'-11"

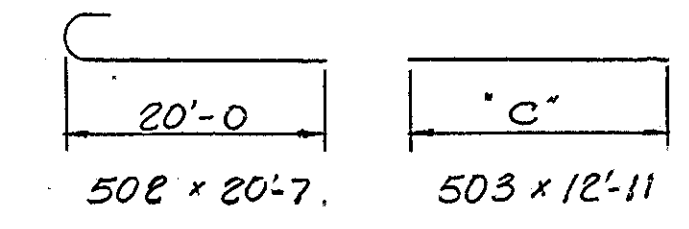
BILL OF MATERIALS
WEST BOUND LANE SHOWN
EAST BOUND LANE SAME

REINFORCING STEEL			
MARKER SIZE	NO. OF BARS	LENGTH	WEIGHT (LBS.)
#6	80	5'-6"	
TOTAL #6			661
502	116	20'-7"	
503	58	12'-11"	
#5	48	15'-2"	
#5	2	13'-1"	
#5	2	9'-5"	
#5	2	7'-4"	
#5	2	3'-8"	
TOTAL #5			3983
TOTAL REINF. STEEL			4644

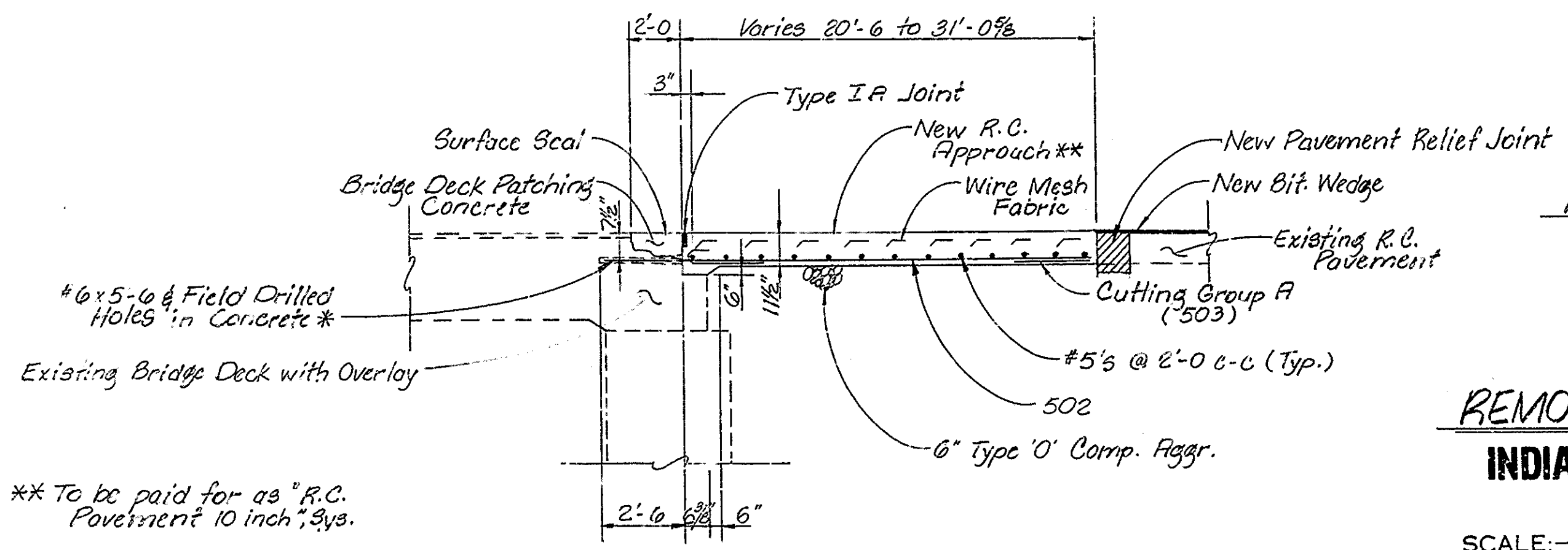
MISCELLANEOUS	
#5 THREADED BAR SPLICES	26 EACH
FIELD DRILLED HOLES IN CONCRETE	80 EACH
BRIDGE DECK OVERLAY PATCHING	174.3 FT.

REINFORCED CONCRETE	
PAVEMENT 10"	166 SYS.
TYPE 'O' COMPACTED AGGREGATE	
	55 TONS
SURFACE SEAL	
	174.3 FT.

BAR DETAILS



NOTES:
See Br. Std. C1 for Reinforcing Bar Notes.
See Br. Std. C3 for Type I A Joint Details.
See Drawg. D6 for Material Notes.



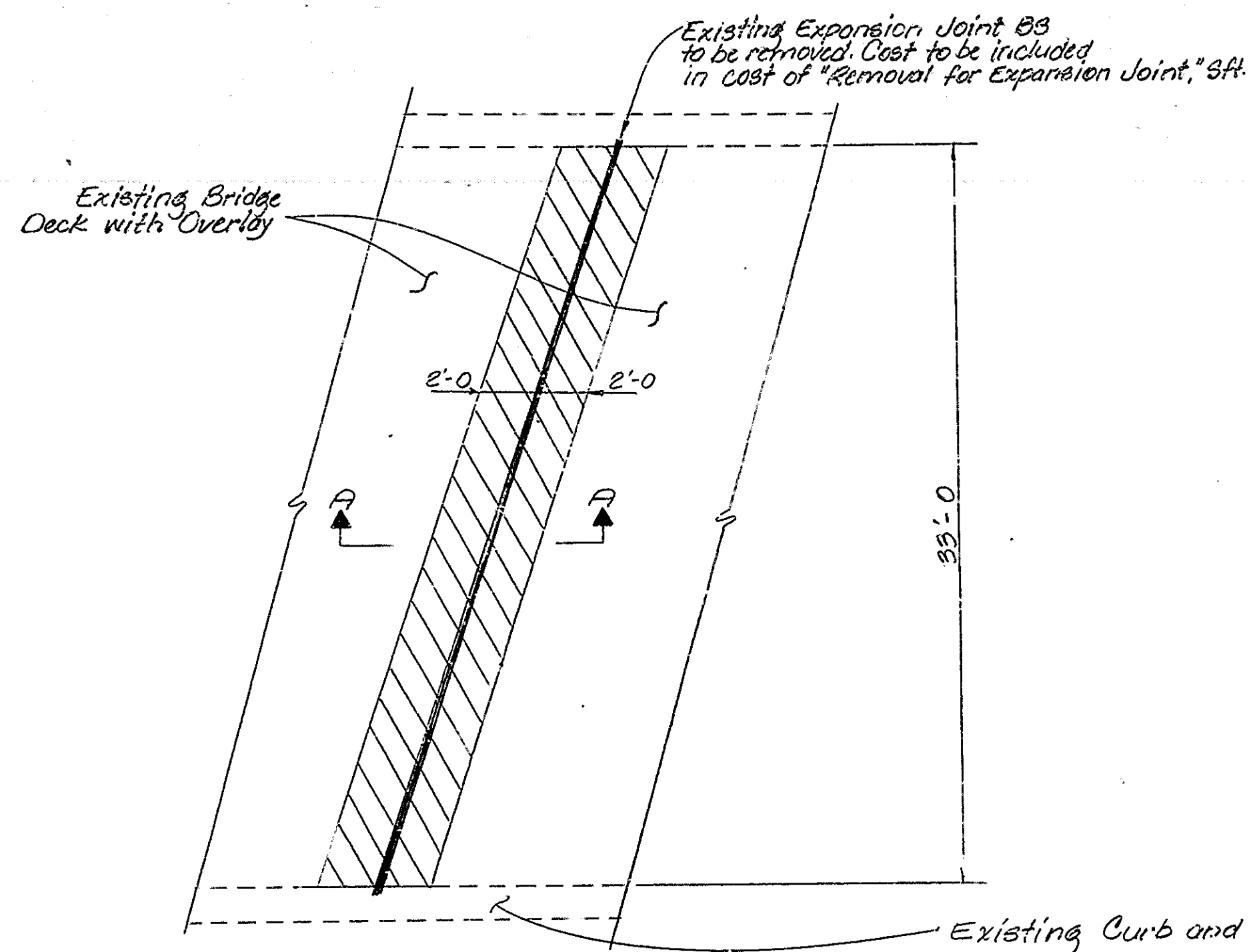
** To be paid for as "R.C. Pavement 10 inch" Sys.

REMOVAL and RECONSTRUCTION DETAILS
INDIANA DEPARTMENT OF HIGHWAYS
POTNAM COUNTY

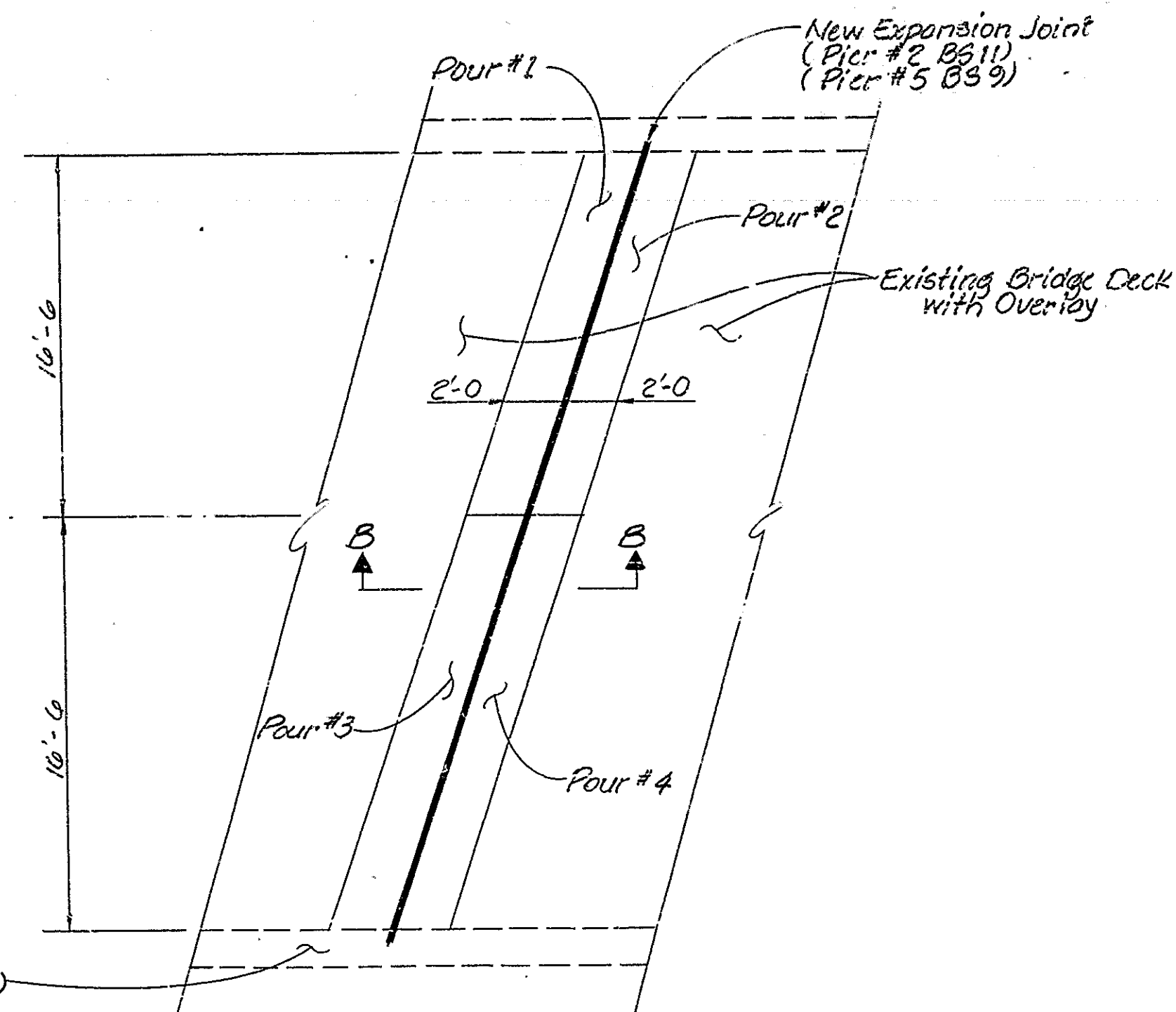
SCALE:-- NONE DATE:-- Apr 16 1990

DRAWING: D5 OF D7 SHEET: 8 OF 24
PROJECT:-- STI-70-2 (C) 48 STATION:--
BRIDGE CONTRACT NO.
BRIDGE FILE:-- I-70-51-5178 B





**PIERS #2 & #5
REMOVAL
WESTBOUND ~ SHOWN
EASTBOUND ~ SAME**

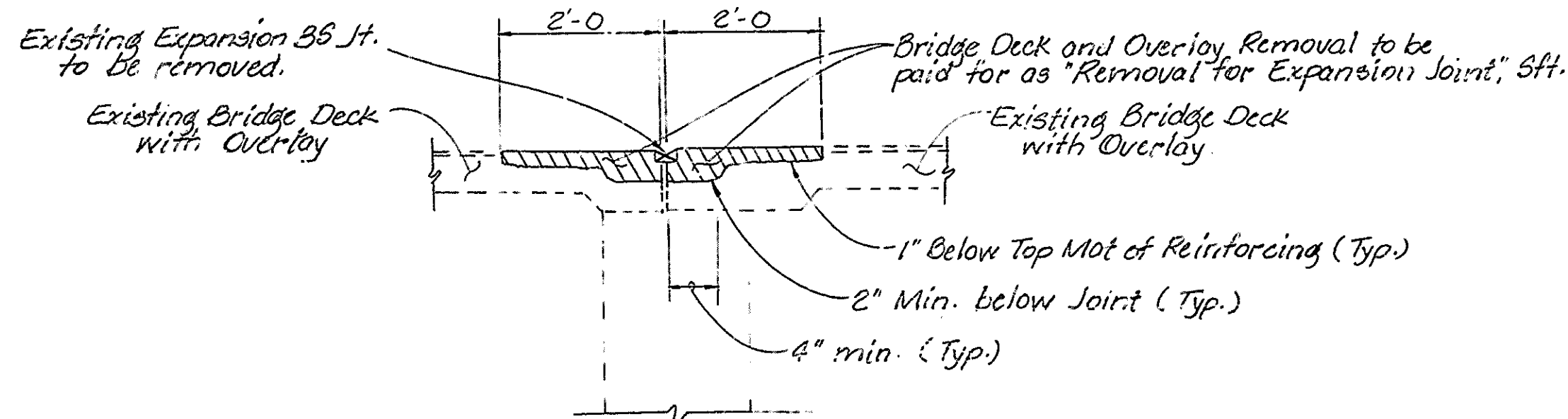


**PIERS #2 & #5
RECONSTRUCTION
WESTBOUND ~ SHOWN
EASTBOUND ~ SAME**

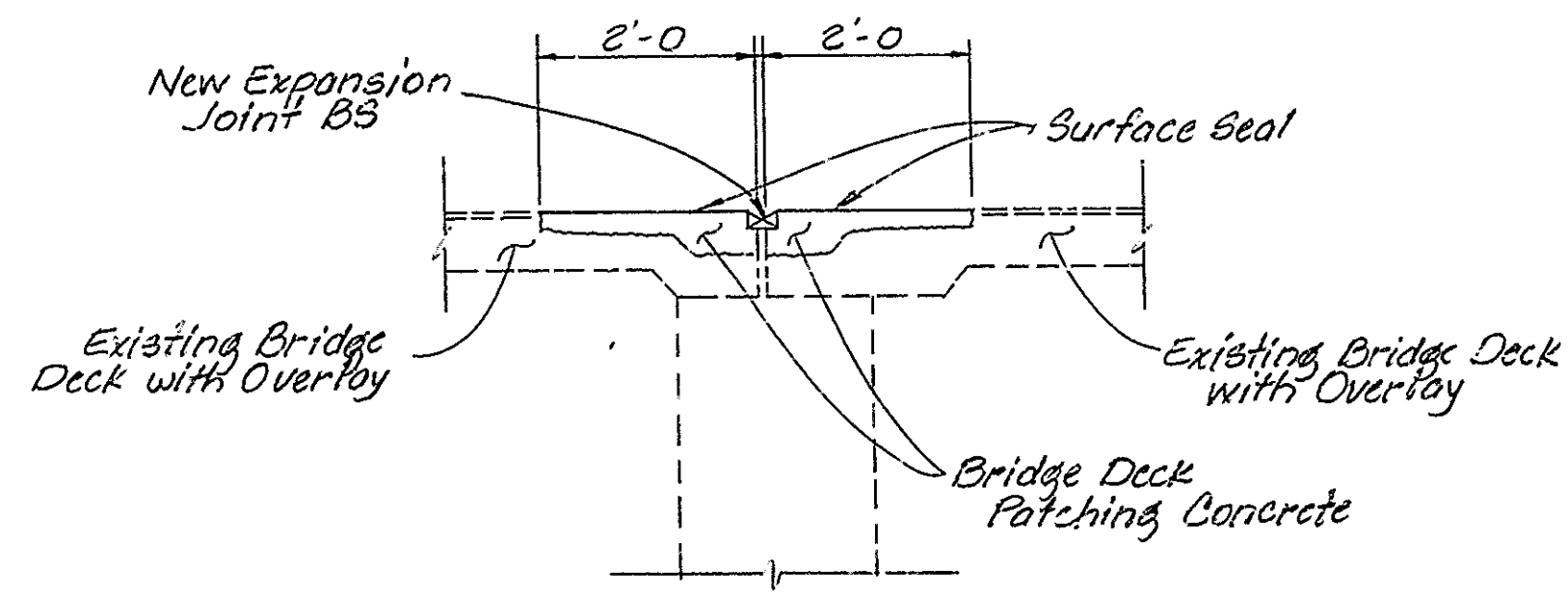
Note: Existing Reinforcing in Bridge Deck to be cleaned, straightened and remain in place.

Note: See Bridge Std. C3 for Joint Details. See Draw. D7 for Joint Detail at Railing.

Removal of Bridge Deck and Overlay to be paid for as "Removal for Expansion Joint," Sft.



SECTION A-A



SECTION B-B

**BILL OF MATERIALS
WESTBOUND ~ SHOWN
EASTBOUND ~ SAME**

PIER # 2	
BRIDGE DECK OVERLAY PATCHING	
POUR # 1	36 SFT.
POUR # 2	36 SFT.
POUR # 3	36 SFT.
POUR # 4	36 SFT.
TOTAL	144 SFT.
EXPANSION JOINT BS 11	37 LF.
φ SURFACE SEAL	144 SFT.
REMOVAL FOR EXP. JT.	144 SFT.
PIER # 5	
BRIDGE DECK OVERLAY PATCHING	
POUR # 1	36 SFT.
POUR # 2	36 SFT.
POUR # 3	36 SFT.
POUR # 4	36 SFT.
TOTAL	144 SFT.
EXPANSION JOINT BS 9	37 LF.
φ SURFACE SEAL	144 SFT.
REMOVAL FOR EXP. JT.	144 SFT.

φ Cost to be included in cost of other items.

REMOVAL and RECONSTRUCTION DETAILS

INDIANA DEPARTMENT OF HIGHWAYS

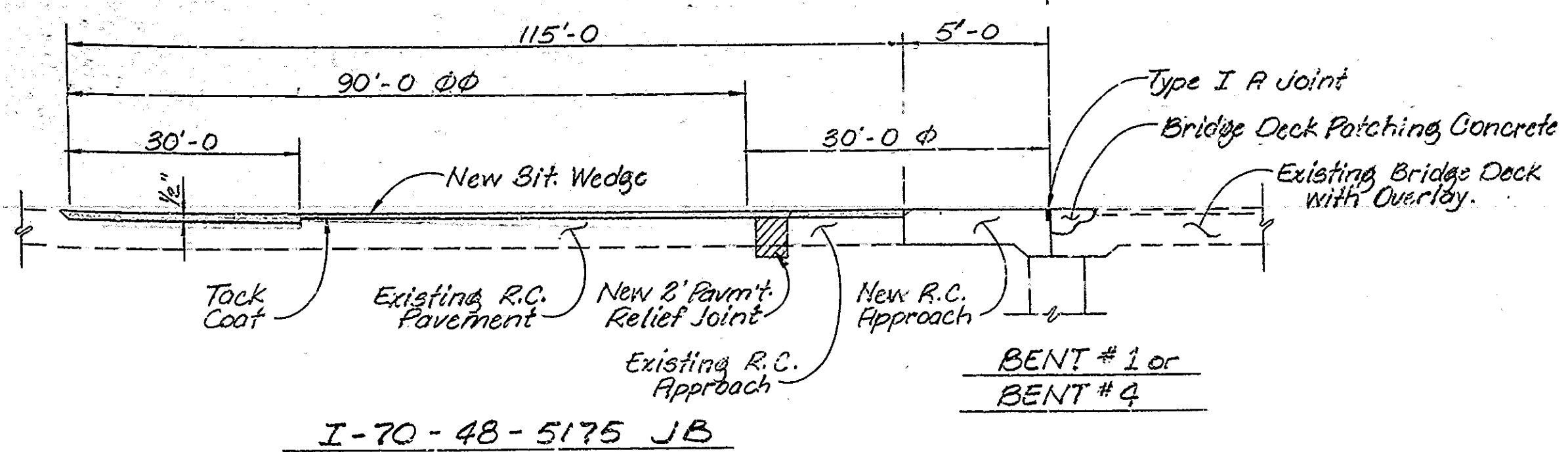
POTNAM COUNTY

SCALE: NONE DATE: Apr 16 1990

James C. Kar

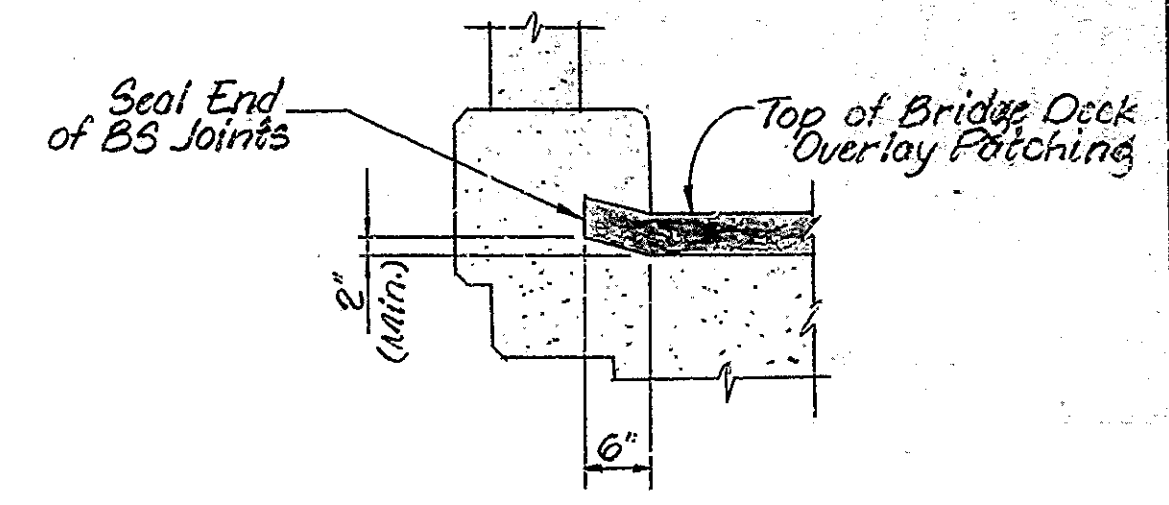
DRAWING: D6 OF D7 SHEET: 9 OF 24
PROJECT: STI-70-2 (C) STATION: -
BRIDGE CONTRACT NO.
BRIDGE FILE: I-70-51-5178 B



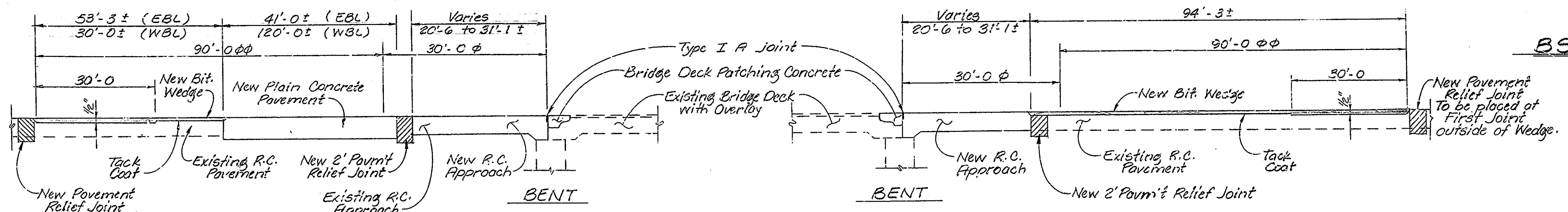


I-70-48-5175 JB

NOTE: Dimensions measured along centerline of Roadway unless varied.
 φ To be a continuation of Bridge Deck Profile.
 φφ Taper uniformly to meet Existing Roadway Surface.
 Tack Coat to be paid for as "Bituminous Material for Tack Coat" in Sys



BS JOINT @ RAILING

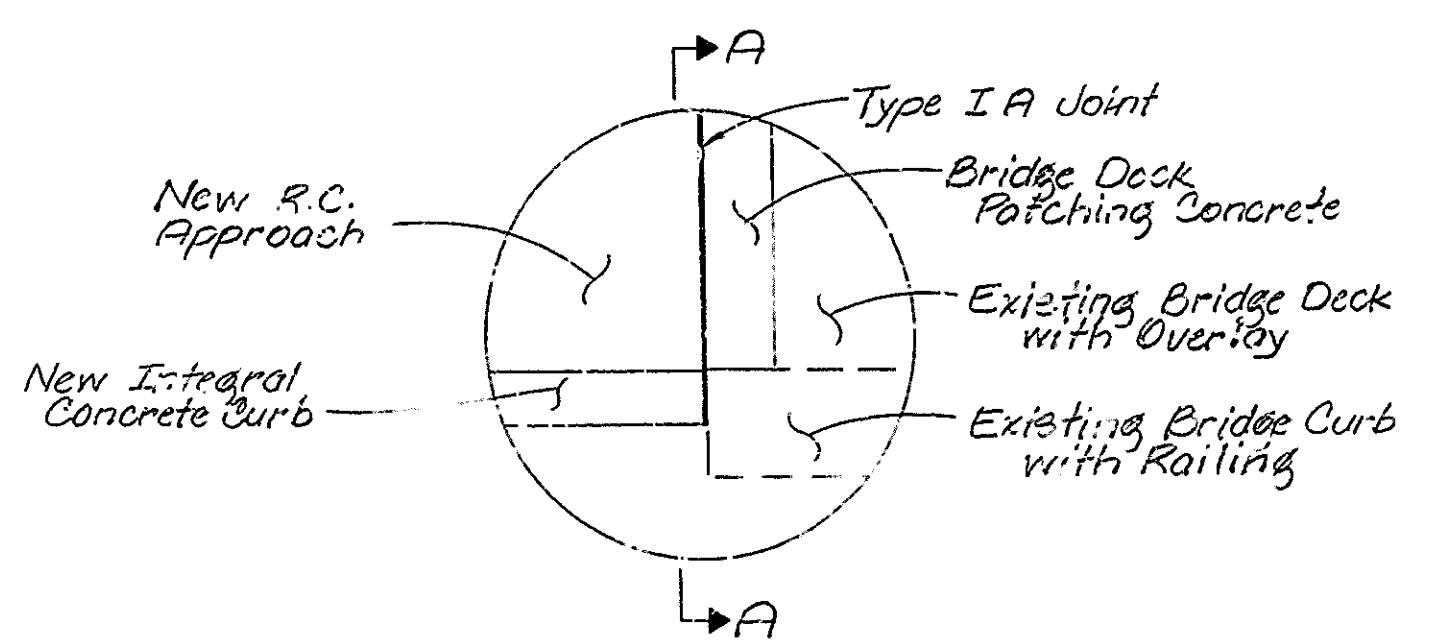


WEST APPROACH

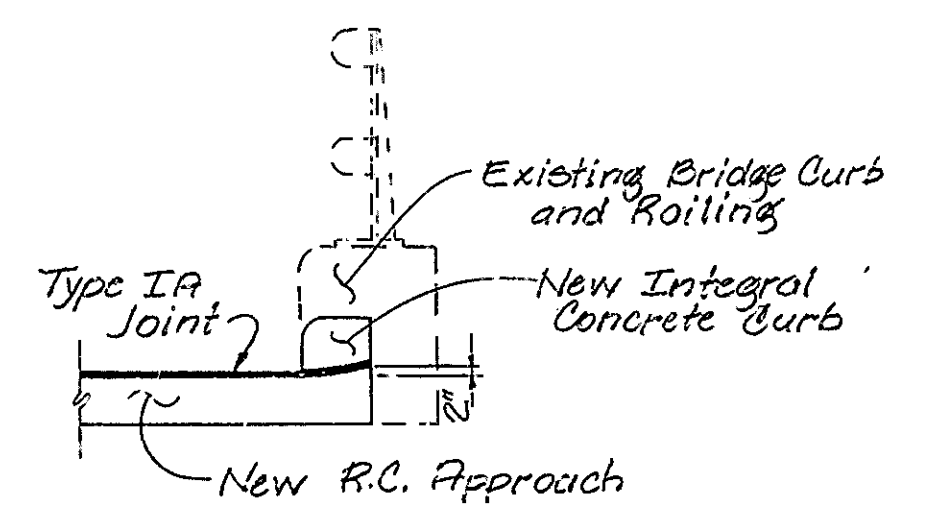
EAST APPROACH

I-70-51-5178 B
 WEST BOUND SHOWN
 EAST BOUND SAME

BITUMINOUS WEDGE DETAILS



DETAIL 'A'



SECTION A-A

MATERIAL NOTES

	5175JB	5178B	TOTAL
BITUMINOUS WEDGE: 110#840. BITUMINOUS SURFACE			
TYPE II-B, MV on VARIABLE DEPTH			
BITUMINOUS BINDER or BASE, MV	56 TONS	63 TONS	119 TONS
BITUMINOUS WIDENING: 890#540. BITUMINOUS BASE			
TYPE 5 D, MV	25 TONS	110 TONS	135 TONS
BITUMINOUS LEVELING: 110#840. BITUMINOUS SURFACE			
TYPE II-B, MV on VARIABLE DEPTH			
BITUMINOUS BINDER or BASE, MV	30 TONS	58 TONS	88 TONS
PAVEMENT RELIEF JOINT: 110#840. H.P.C. SURFACE,			
TYPE II, MV OVER 1870#1340. BITUMINOUS BASE, MV	10 TONS	48 TONS	58 TONS
TOTAL BITUMINOUS MIXTURE FOR APPROACHES, MV	121 TONS	279 TONS	400 TONS
BITUMINOUS MATERIAL FOR TACK COAT	1070 3/4	1148 3/4	2218 3/4

MISCELLANEOUS DETAILS
 INDIANA DEPARTMENT OF HIGHWAYS

PUTNAM COUNTY
 SCALE: NONE DATE: Apr 16 1990

JAMES C. KARR
 DRAWING: D7 of D7 SHEET: 10 of 24
 PROJECT: ST-70-2 (C) 48 STATION: -
 BRIDGE CONTRACT NO.
 BRIDGE FILE: I-70-48-5175 JB & I-70-51-5178 B

