

BRIDGE PLANS

FOR SPANS OVER 6.1 METERS
ON
I-70

BRIDGE DECK PATCHING & JOINT REPLACEMENT TO STRUCTURES: I-70-7-5039C, I-70-8-2341A,
I-70-9-2343A, & I-70-9-5189A & JA IN SECTIONS 2, 3, & 4 IN R 9 W, T 11 N ALL IN VIGO
COUNTY INDIANA

A map of the state of Indiana, divided into its 92 counties. Elkhart County, located in the northwestern corner of the state, is highlighted in black. The surrounding counties are shown in white with black outlines.

PROJECT	DESIGNATION
SEE PLANS	SEE PLANS
CONTRACT	BRIDGE FILE
	SEE INDEX

INDEX				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
I-70-7-5039D	CONT. STEEL BEAM	SEE PLANS	7TH STREET	11 + 903.69
I-70-8-2341B	CONT. STEEL BEAM	SEE PLANS	CONRAIL RAILROAD	12 + 189.01
I-70-9-2343B	COMP. CONT. STEEL BEAM	SEE PLANS	C & EI RAILROAD	13 + 528.243
I-70-9-5189B & JB	CONT. STEEL BEAM	SEE PLANS	25TH STREET	14 + 645.540

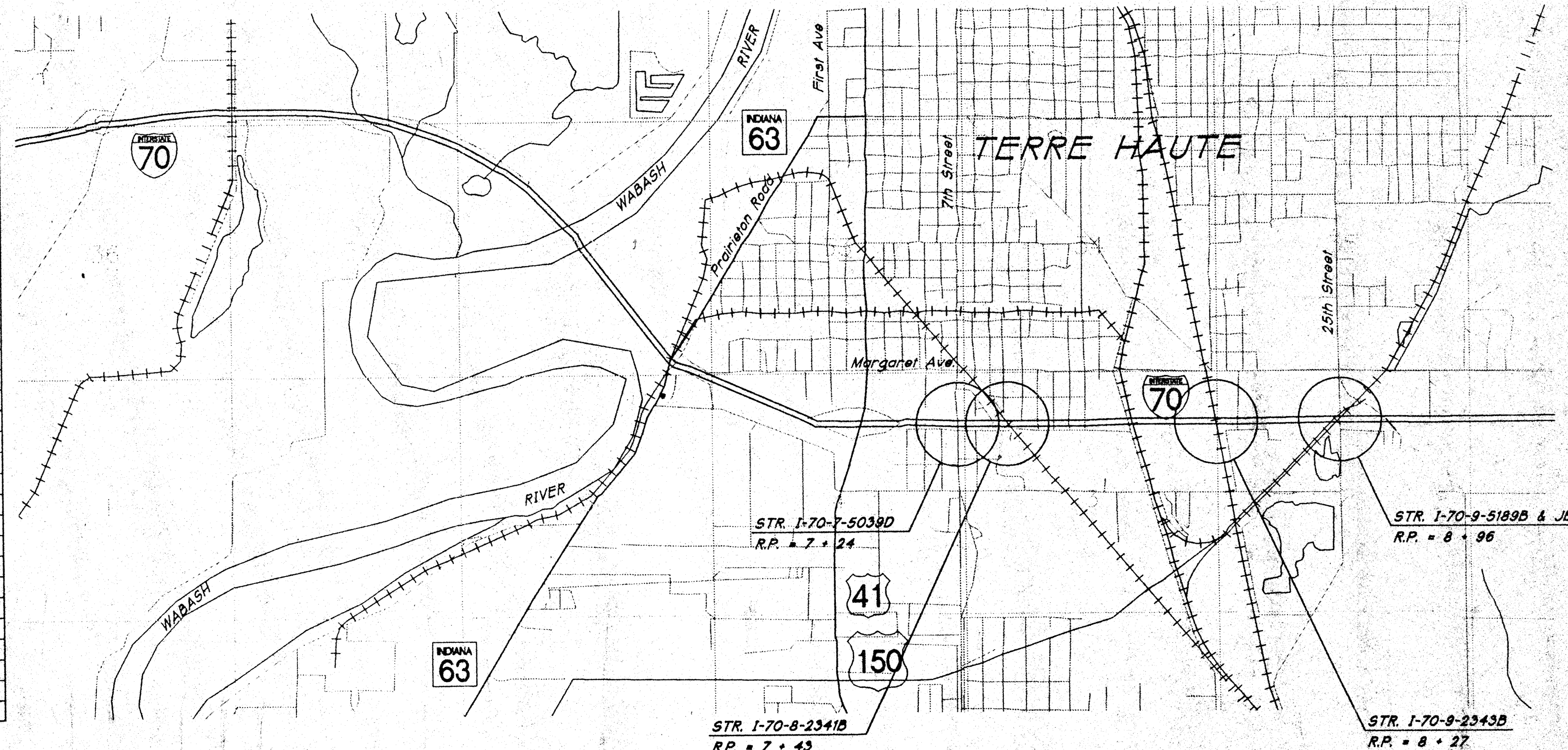
SHEET NO.	SUBJECT
1	TITLE SHEET
2 - 5	TRAFFIC MAINTENANCE DETAILS (PHASE I CONSTRUCTION)
6 - 9	TRAFFIC MAINTENANCE DETAILS (PHASE II CONSTRUCTION)
10 - 13	TRAFFIC MAINTENANCE DETAILS
14	GENERAL PLAN (STR. I-70-7-5039D)
15	RECONSTRUCTION DETAILS (STR. I-70-7-5039D)
16	GENERAL PLAN (STR. I-70-8-2341B)
17	GENERAL PLAN (STR. I-70-9-2343B)
18	RECONSTRUCTION DETAILS (STR. I-70-9-2343B)
19	GENERAL PLAN (STR. I-70-9-5189B & JB)
20	RECONSTRUCTION DETAILS (STR. I-70-9-5189B & JB)

B-23206
PART 1 OF 3

B-23206
A: BUILT PLANS
CONTRACTOR - ATLAS EXCAVATING
SUBT - DON WELDA
PROJ ENG - MARK LACEFIELD
PROJ SUFFY - GERALD BOLD
COMPLETED - 11-8-97

[illegible]

LEGEND	
BRIDGE LENGTH :	KM
ROADWAY LENGTH :	KM
TOTAL LENGTH :	KM
MAX GRADE :	%



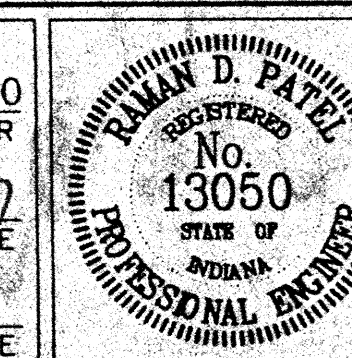
INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 1995
TO BE USED WITH THESE PLANS

[illegible]

FEDERAL HIGHWAY ADMINISTRATION
U.S. DEPT. OF TRANSPORTATION
APPROVED: _____
DATE _____

DIVISION ADMINISTRATOR

PLANS
PREPARED BY: **RQAW Corporation** (317) 255-6060
PHONE NUMBER
CERTIFIED BY: *[Signature]* 4-11-97
DATE
APPROVED
FOR LETTING: *[Signature]* 4/22/97
DATE
CHIEF, DIVISION OF DESIGN

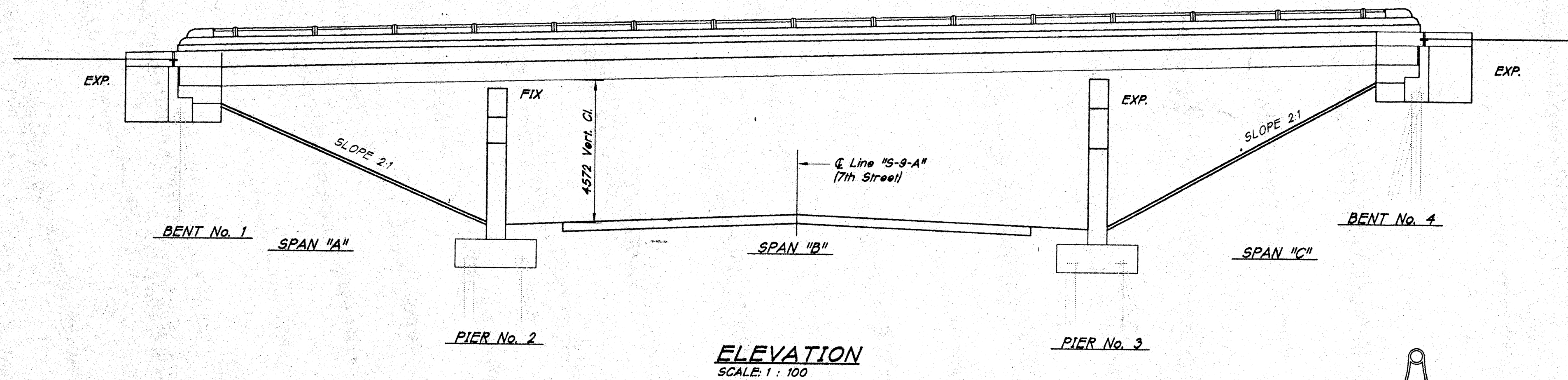


BRIDGE FILE		
SEE INDEX		
DESIGNATION		
SEE PLANS		
SHEETS		
1	of	20
PROJECT		
SEE PLANS		

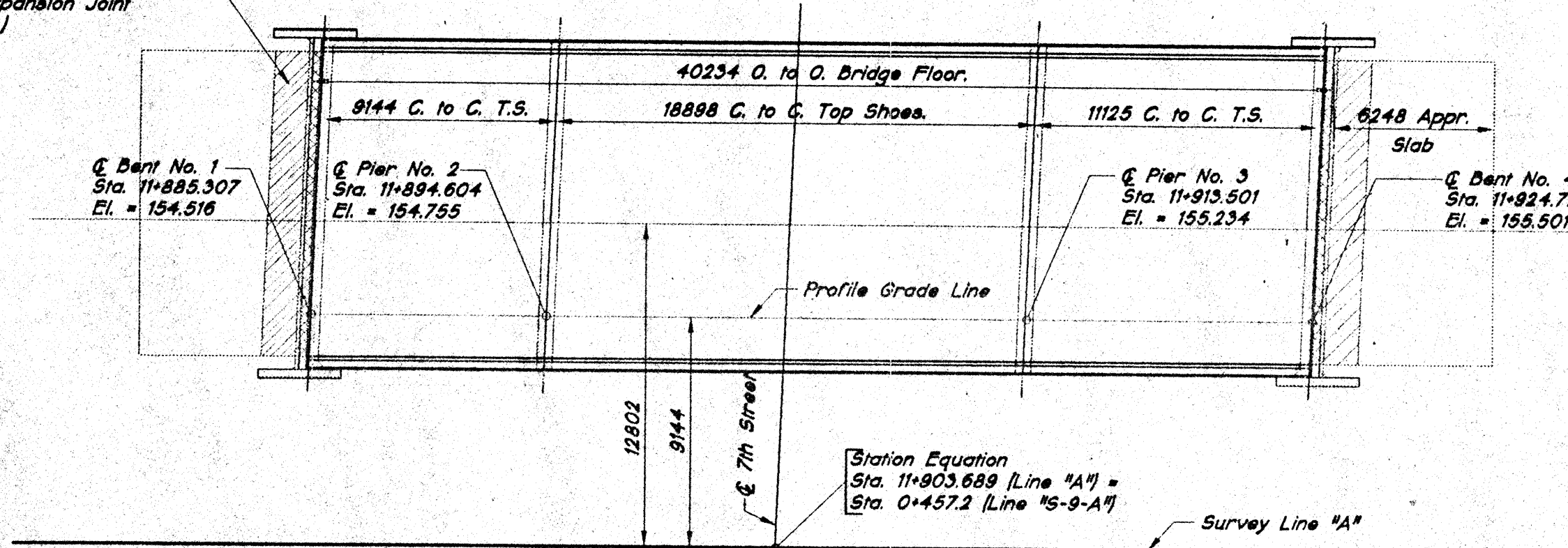
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Date: 4/10/1997
Scale: 1=24000(P5)
Drawing File: 4475\TIL-N-TM\COMB-TTL.DWG (RQAW, RQAW)
User: RQAW
Stamp: RQAW

NOTE CHANGES

STRUCTURE BUILT TO +2.576% GRADE



Remove and Replace 1500 of Existing R.C. Approach Slab. Reconstruct to Accommodate New Expansion Joint Sealing System (Typ.)



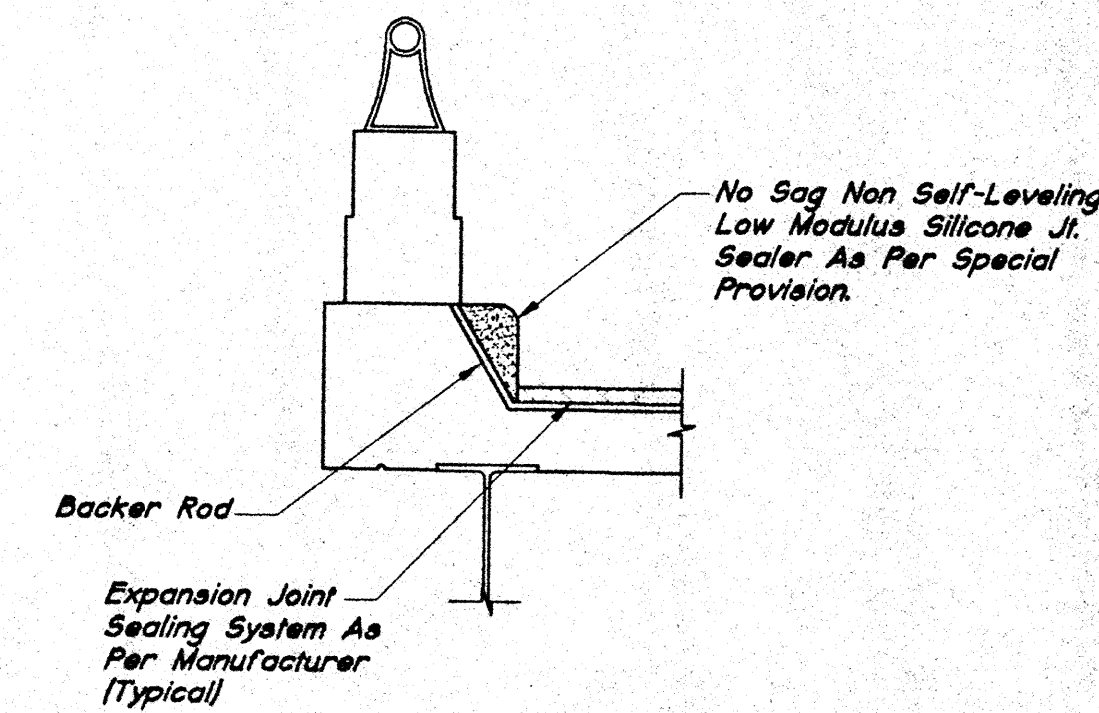
Repaint Portions of Curb Along Shoulders of the Bridge (Typ. UNO.) (Est. Qty. 10 m²) (5 m² Each Structure)

Remove and Replace Portions of Overlay and Bridge Deck That Have Deteriorated or Have Become Unsound. (Est. Qty. 97 m²) (48.5 m² Ea. Str.)

Use Flowable Mortar to Backfill any Undermining of the Slopewall. (Est. Qty. 5 m³) (2.5 m³ Ea. Str.)
Remove and Replace Deteriorated Portions of Slopewall and Paved Side Ditch. (Est. Qty. 10 m²) (Est. 5 m² Ea. Str.)

PLAN
SCALE: 1 : 200

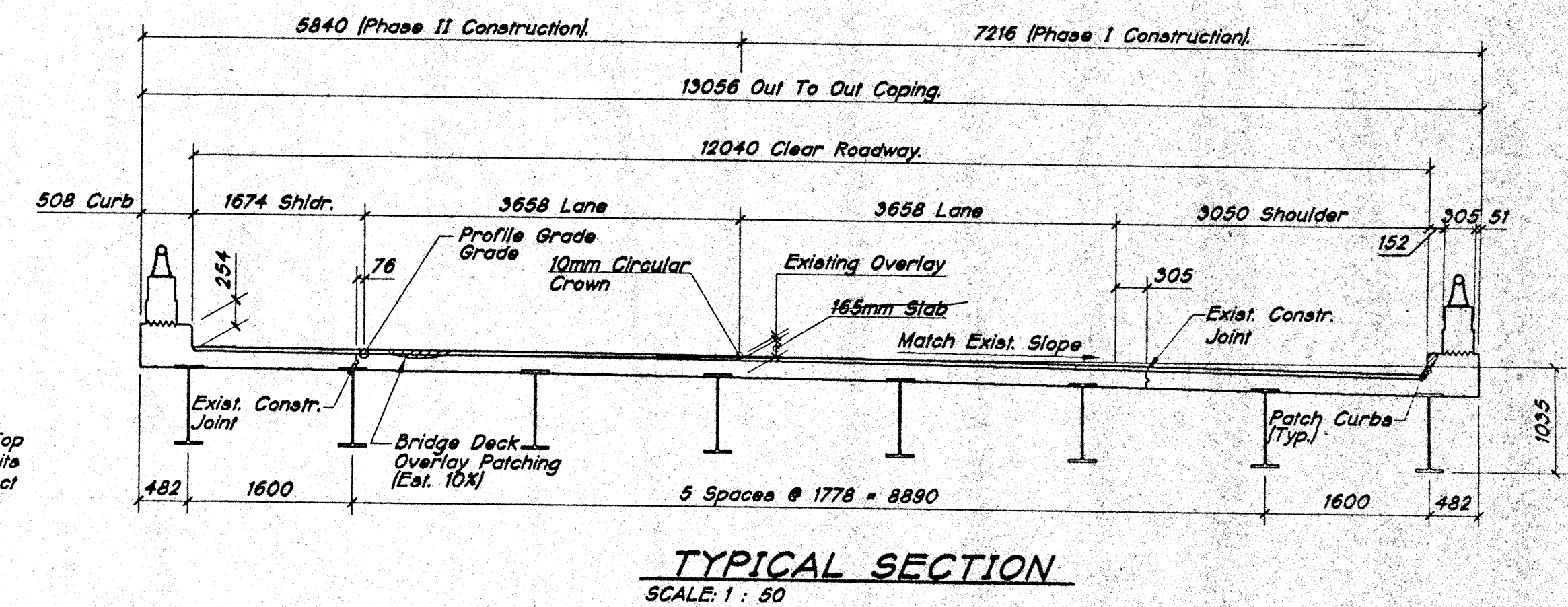
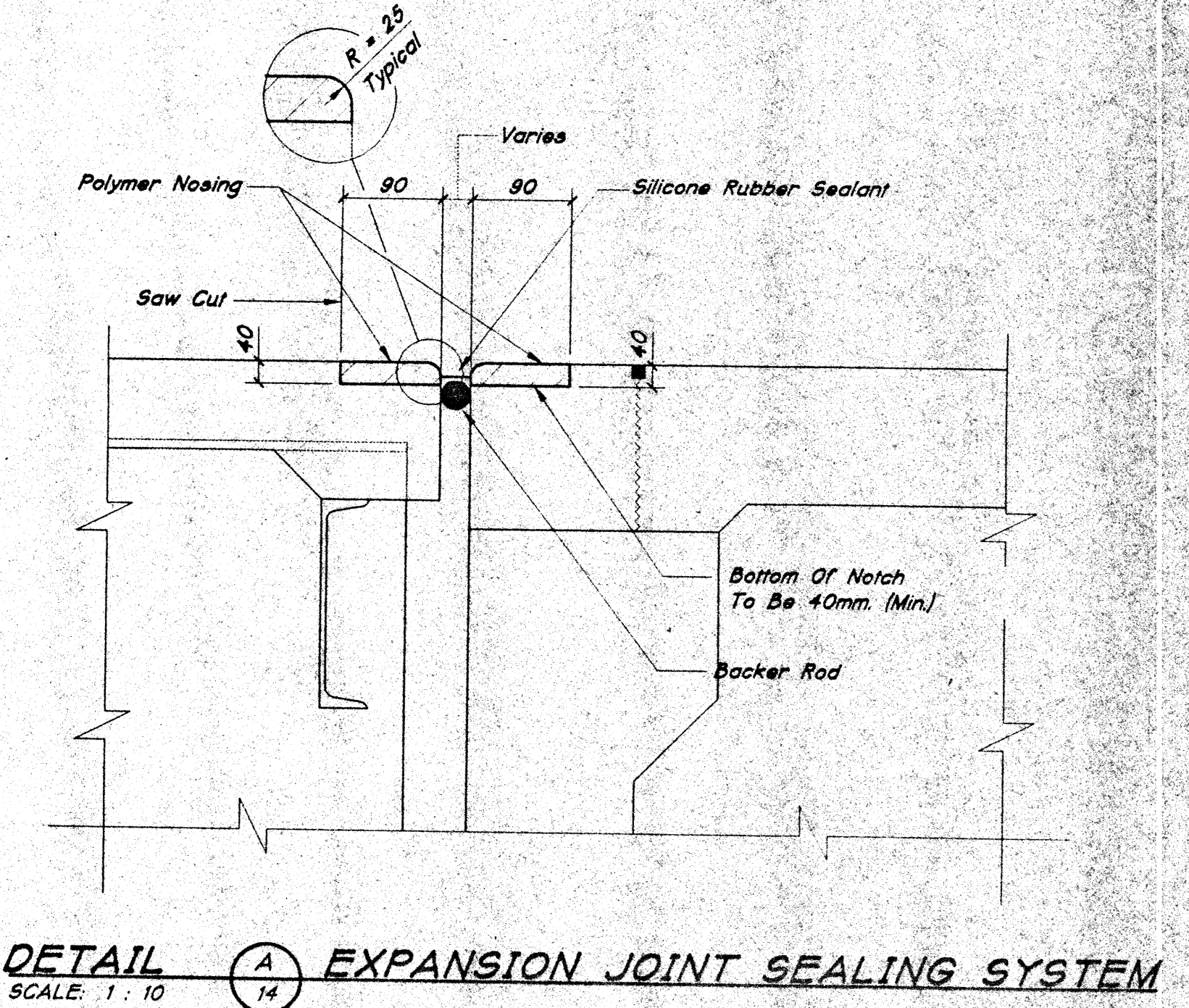
PATCHING USED
FULL DEPTH PATCH ~ 10 m²
PARTIAL DEPTH PATCH ~ 38 m²
OVERLAY PATCH ~ 73 m²



GENERAL NOTES:

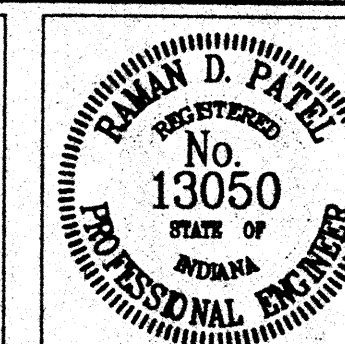
PLANS FOR THE EXISTING STRUCTURE ARE ON FILE IN THE BRIDGE DEPARTMENT OF THE INDIANA DEPARTMENT OF TRANSPORTATION AS BRIDGE FILES: I-70-7-5038, I-70-7-5039A, I-70-7-5039B, & I-70-7-5039C AND ARE AVAILABLE UPON REQUEST.

WHERE NEW WORK IS TO BE FITTED TO OLD WORK, THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND CONDITIONS IN THE FIELD AND REPORT ANY ERRORS OR DISCREPANCIES TO THE ENGINEER AND ASSUME RESPONSIBILITY FOR THEIR CORRECTNESS AND THE FIT OF THE NEW PART TO OLD.



All Dimensions Are In Millimeters (mm) And All Elevations Are In Meters (m), Except As Noted.

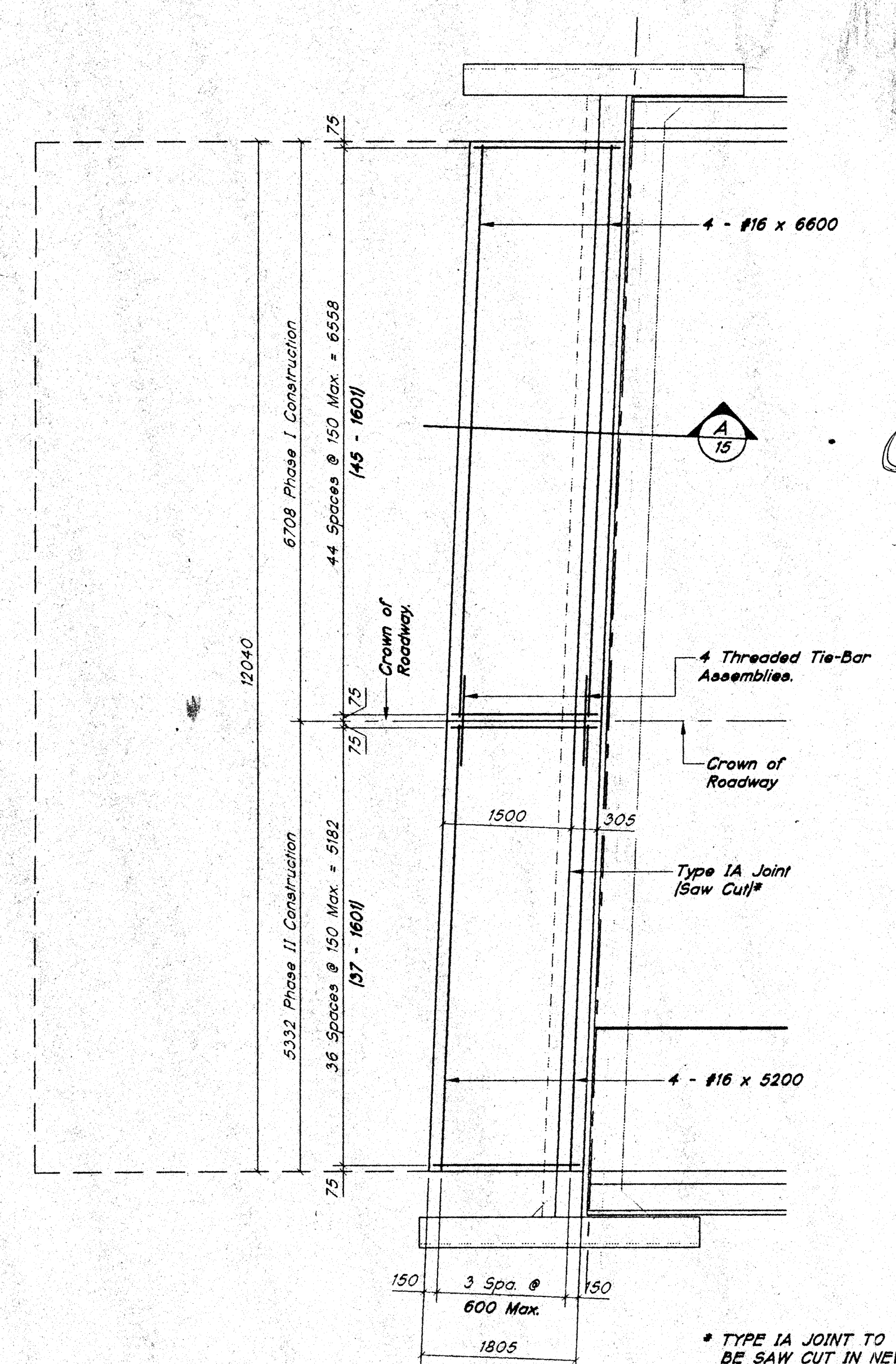
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Scale: 1:200 (S)
XREF: RDS/STAMP, CURB-JT, CLW, MET-SEC, W-SECT, EXP-JT, GP-NOTES, MET-DATA



RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
		4-11-97
DESIGNED:	DRAWN: S.BENGOCHIA	
CHECKED:	CHECKED: S.JONES	

INDIANA DEPARTMENT OF TRANSPORTATION	
GENERAL PLAN (STR. I-70-7-5039D)	
HORIZONTAL SCALE AS NOTED	BRIDGE FILE I-70-7-5039D
VERTICAL SCALE AS NOTED	DESIGNATION 9406600
SURVEY BOOK	SHEETS 14 of 20
CONTRACT B-23206	PROJECT SI/70-1(A)7

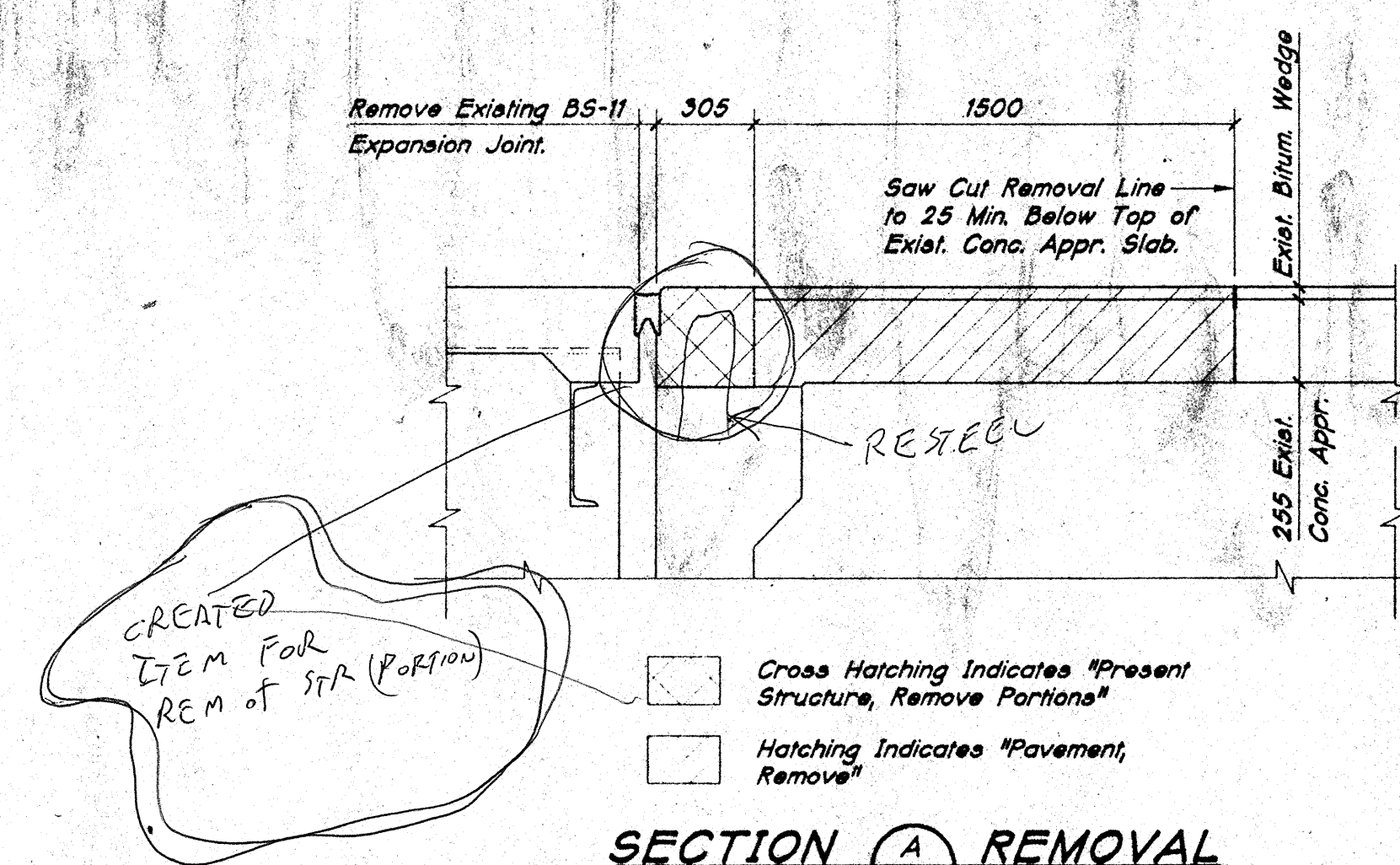
NOTE CHANGES



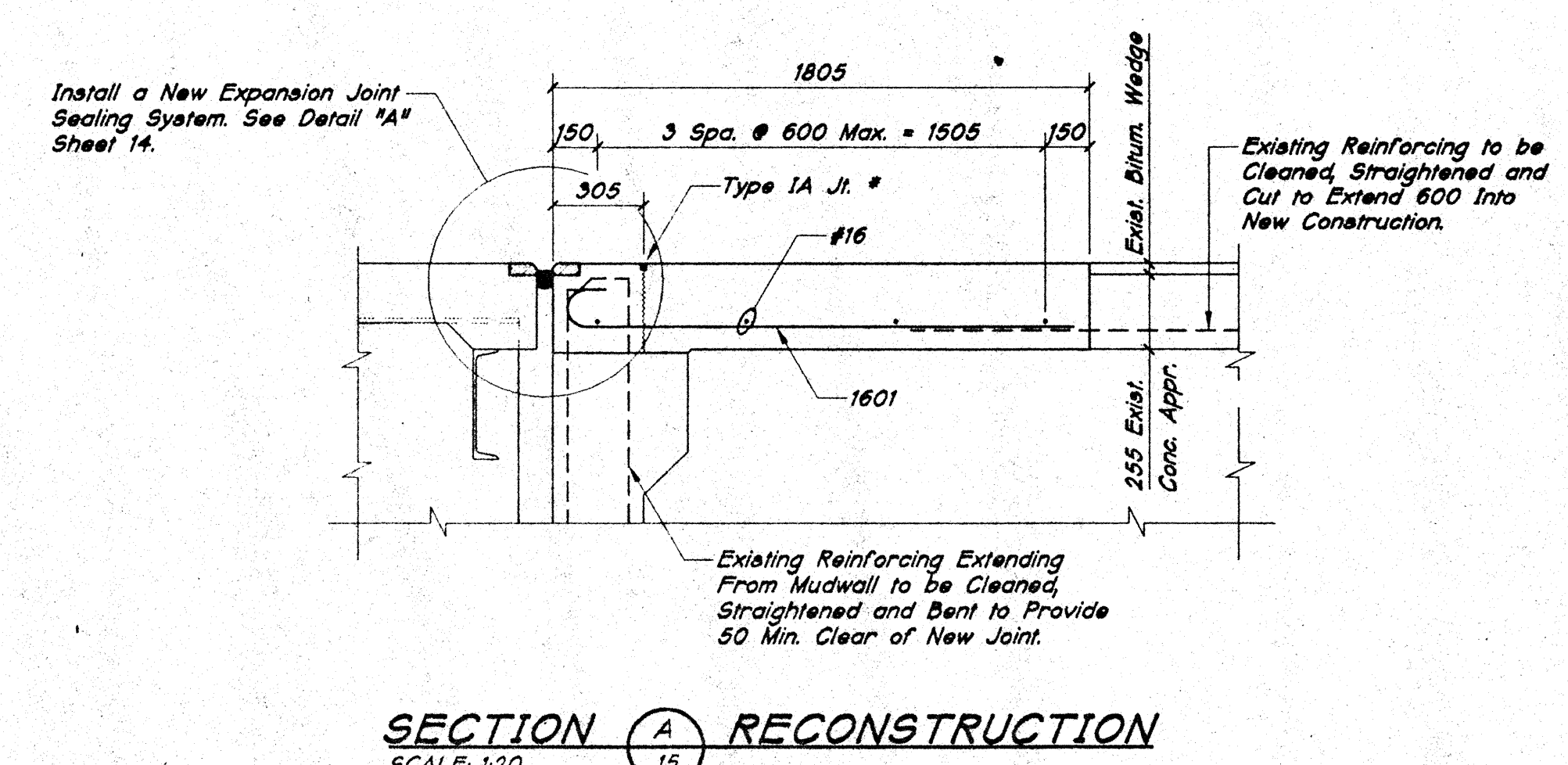
WEST APPROACH PLAN - WBL
SCALE: 1:50

EAST APPROACH WESTBOUND LANE
SAME BY OPPOSITE HAND

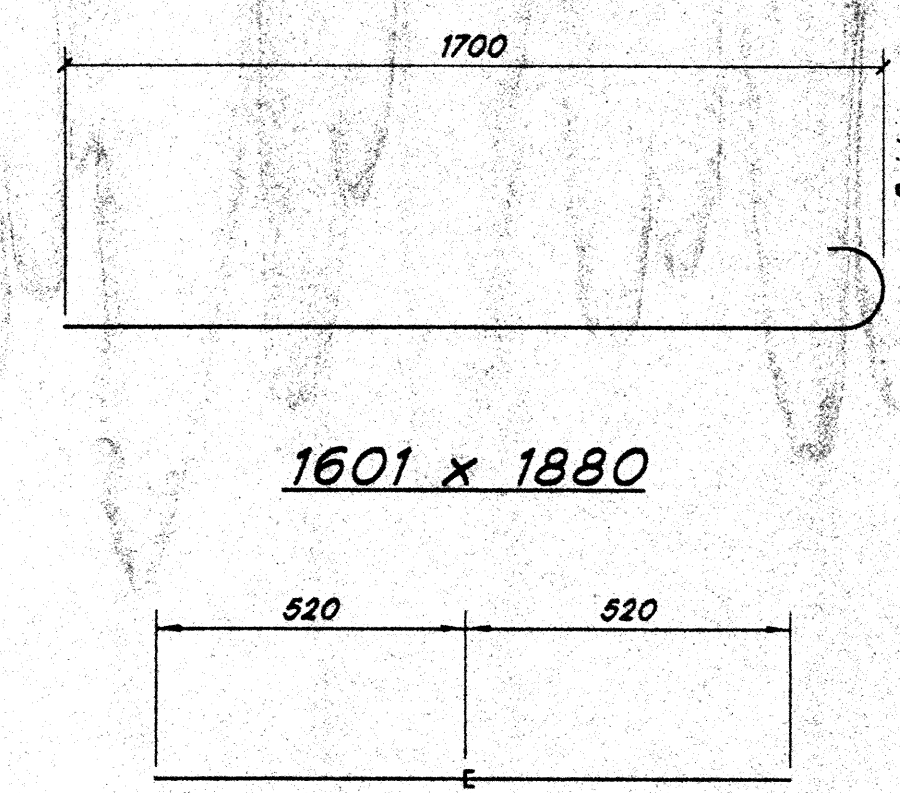
DETAILS SHOWN ARE FOR WESTBOUND LANES
DETAILS FOR EASTBOUND LANES - SAME BY 180°



SECTION A REMOVAL
SCALE: 1:20



SECTION A RECONSTRUCTION
SCALE: 1:20



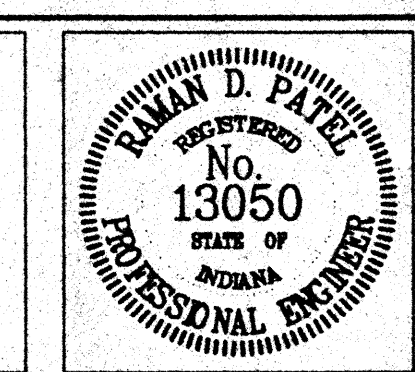
15M THREADED TIE-BAR ASSEMBLIES

**BILL OF MATERIALS
(4 THUS)**

REINFORCING STEEL - PLAIN			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (kg.)
1601	82	1880	
#16	4	6600	
#16	4	5200	
TOTAL #16			313
TOTAL REINFORCING			313
MISCELLANEOUS (QTY.)			
CEMENT CONCRETE PAVEMENT REINFORCED, 250 mm			22 m ²
THREADED TIE-BAR ASSM.			4 EACH
SURFACE SEAL (ESTIMATED)			22 m ²
PAVEMENT, REMOVE			22 m ²

All Dimensions Are In Millimeters (mm), And All Elevations Are In Meters (m), Except As Noted.

Time: 201711
Drawing File: 4475-506.DWG (SBN00006A)
Scale: 1/1/1997
User: RUP51MPL, MET-506A, APPR-SMT, APPR-SL, APPR-SCA, APPR-PL



RECOMMENDED FOR APPROVAL	<i>[Signature]</i> 4-11-97
DESIGNED:	DRAWN: D.DUNCAN
CHECKED:	CHECKED: S. JONES

INDIANA
DEPARTMENT OF TRANSPORTATION

RECONSTRUCTION DETAILS
(STR. I-70-7-5039D)

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-70-7-5039D
VERTICAL SCALE	DESIGNATION
AS NOTED	9408600
SURVEY BOOK	SHEETS
CONTRACT	15 of 20
B-33906	PROJECT
	STI/70-1(6)7

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-70-8-2341B
VERTICAL SCALE	DESIGNATION
AS NOTED	9406610
SURVEY BOOK	SHEETS
	16 of 20
CONTRACT	PROJECT

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-70-8-2341B
VERTICAL SCALE	DESIGNATION
AS NOTED	9406610
SURVEY BOOK	SHEETS
	16 of 20
CONTRACT	PROJECT

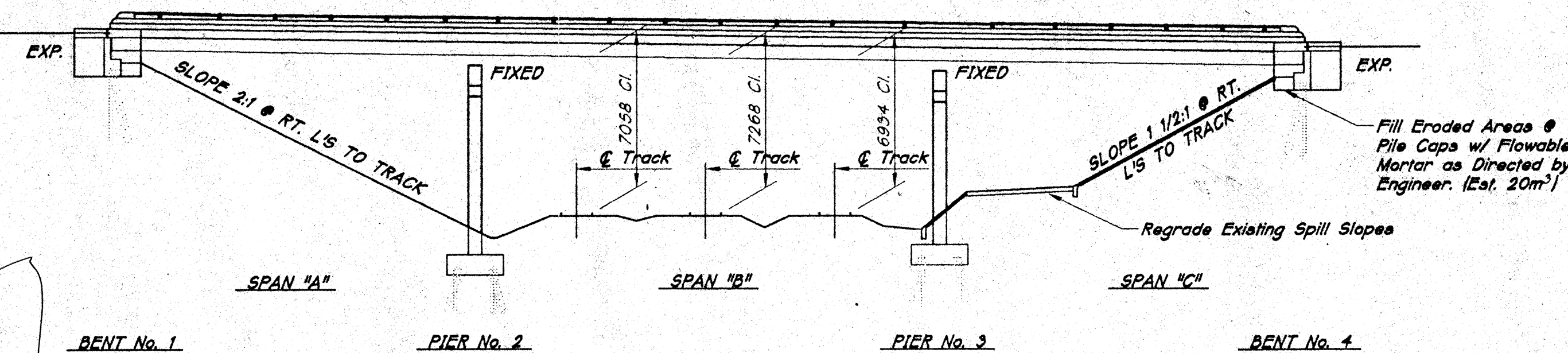
NOTE CHANGES

STRUCTURE BUILT TO -0.6146% GRADE

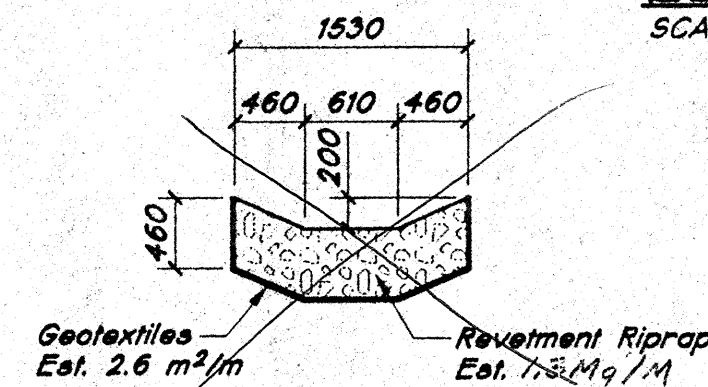
GENERAL NOTES:

PLANS FOR THE EXISTING STRUCTURE ARE ON FILE IN THE BRIDGE DEPARTMENT OF THE INDIANA DEPARTMENT OF TRANSPORTATION AS BRIDGE FILES: I-70-9-2343, I-70-9-2343A AND ARE AVAILABLE UPON REQUEST.

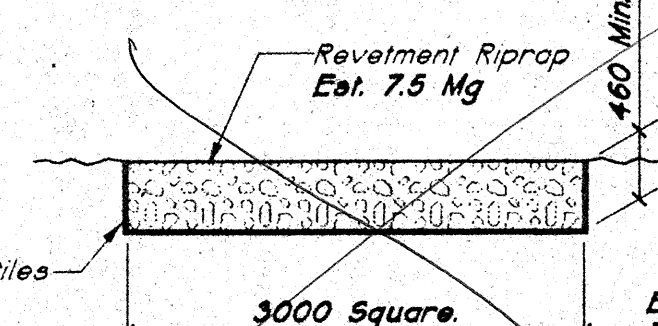
WHERE NEW WORK IS TO BE FITTED TO OLD WORK, THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND CONDITIONS IN THE FIELD AND REPORT ANY ERRORS OR DISCREPANCIES TO THE ENGINEER AND ASSUME RESPONSIBILITY FOR THEIR CORRECTNESS AND THE FIT OF THE NEW PART TO OLD.



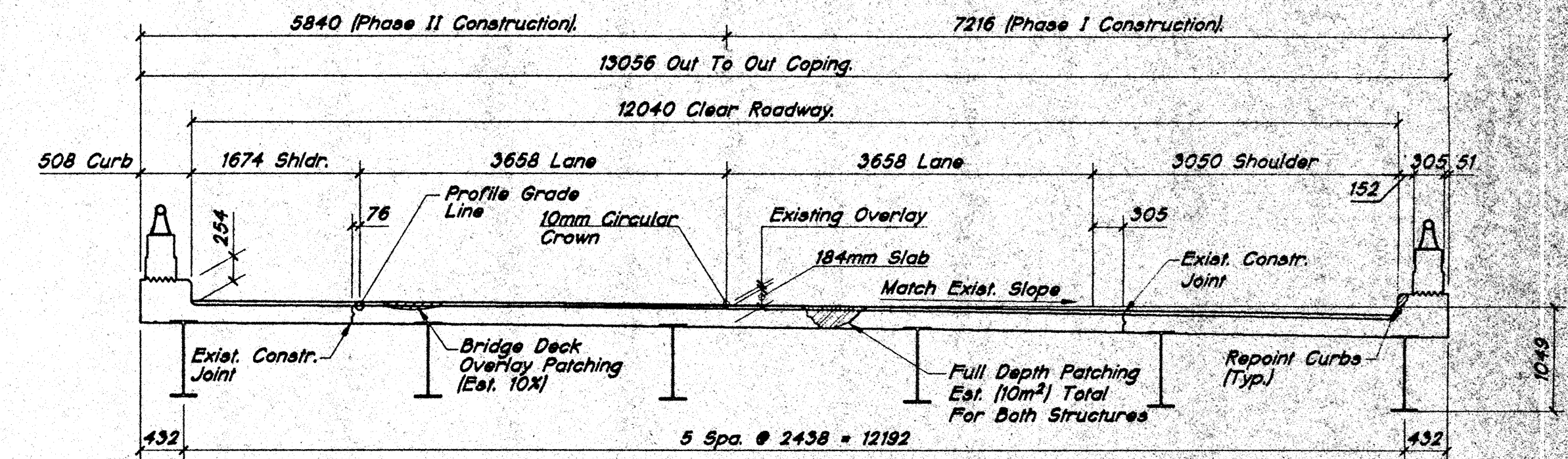
ELEVATION
SCALE: 1 : 200



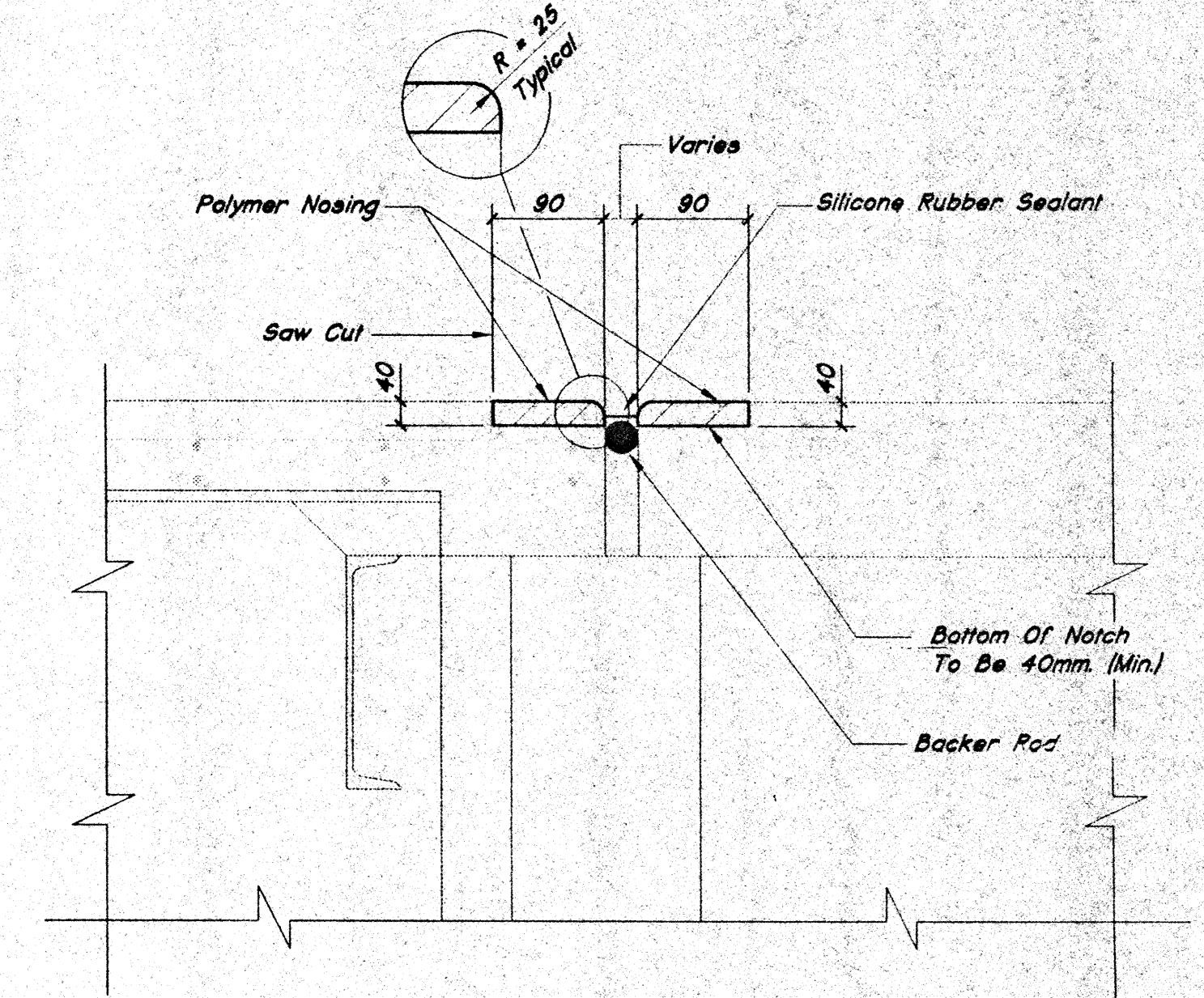
SECTION THRU
RIPRAP DITCH
SCALE: 1:50



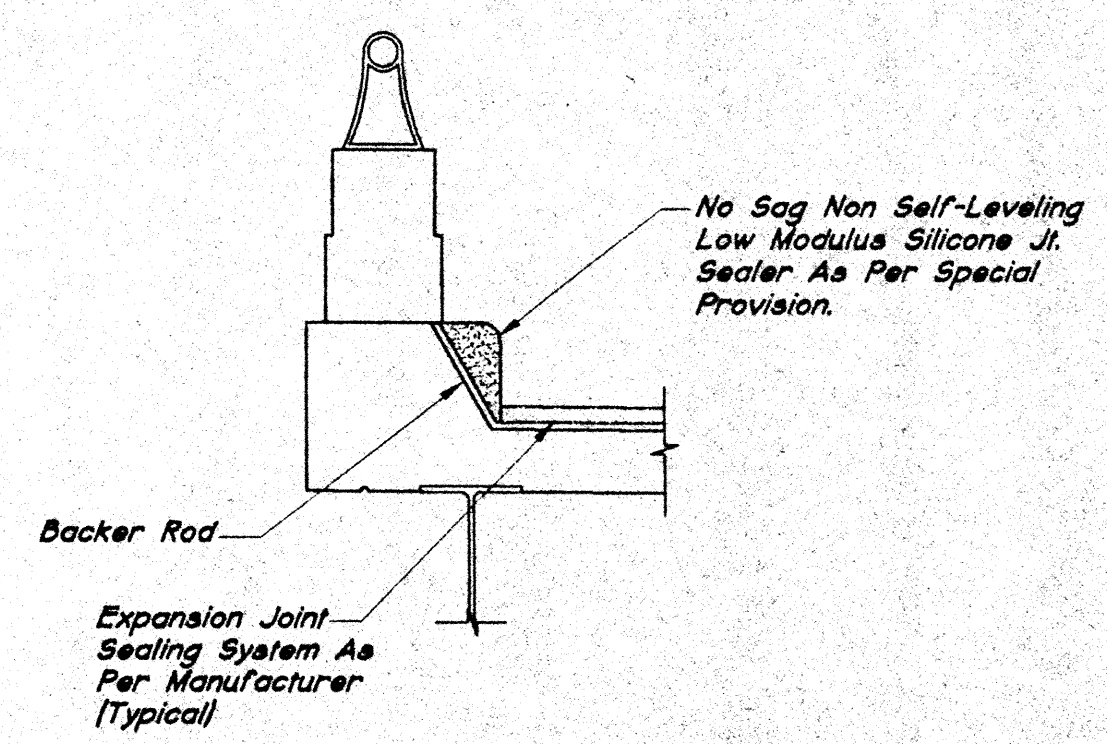
SECTION THRU
RIPRAP BED
SCALE: 1:50



TYPICAL SECTION
SCALE: 1 : 50



DETAIL C EXPANSION JOINT SEALING SYSTEM
SCALE: 1 : 10



CURB DETAIL EXPANSION JOINT
SEALING SYSTEM & RAILING
SCALE: 1 : 20

All Dimensions Are In Millimeters (mm), And All Elevations Are In Meters (m), Except As Noted.

Place 1.5m Riprap Sideslope Ditch At End Of Wing Wall. The Ditch Will Extend Down The Slope And Will Terminate @ 3m Riprap Bed.

Remove and Replace Existing BSJ Joint With Expansion Joint Sealing System (Typ. @ Bents 1 & 4.)

Remove and Replace Portions of Overlay and Bridge Deck That Have Deteriorated or Have Become Unsound. (Est. 66.1m² Patching)

Remove and Replace 1500 of Existing Approach. Reconstruct to Accommodate New Expansion Joint Sealing System. (Typ.)

Station Equation
Sta. 13+528.243 (Line "A") =
Sta. 0+0+0.000 (RRR "A")

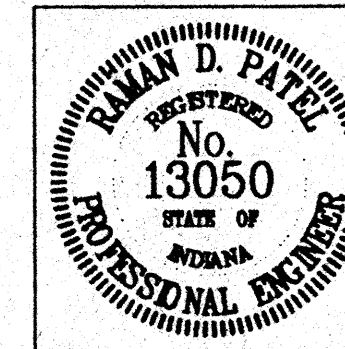
PATCHING USED
FULL DEPTH - 0m²
PARTIAL - 17m²
OVERLAY - 38m²

Remove and Replace Portions of Overlay and Bridge Deck That Have Deteriorated or Have Become Unsound. (Est. 66.1m² Patching)

Place 1.5m Riprap Sideslope Ditch At End Of Wing Wall. The Ditch Will Extend Down The Slope And Will Terminate @ 3m Riprap Bed.

NOT PLACED - COVER NOT
FIND ANY LOCATION NEEDING
RIP RAP @ THIS ST.

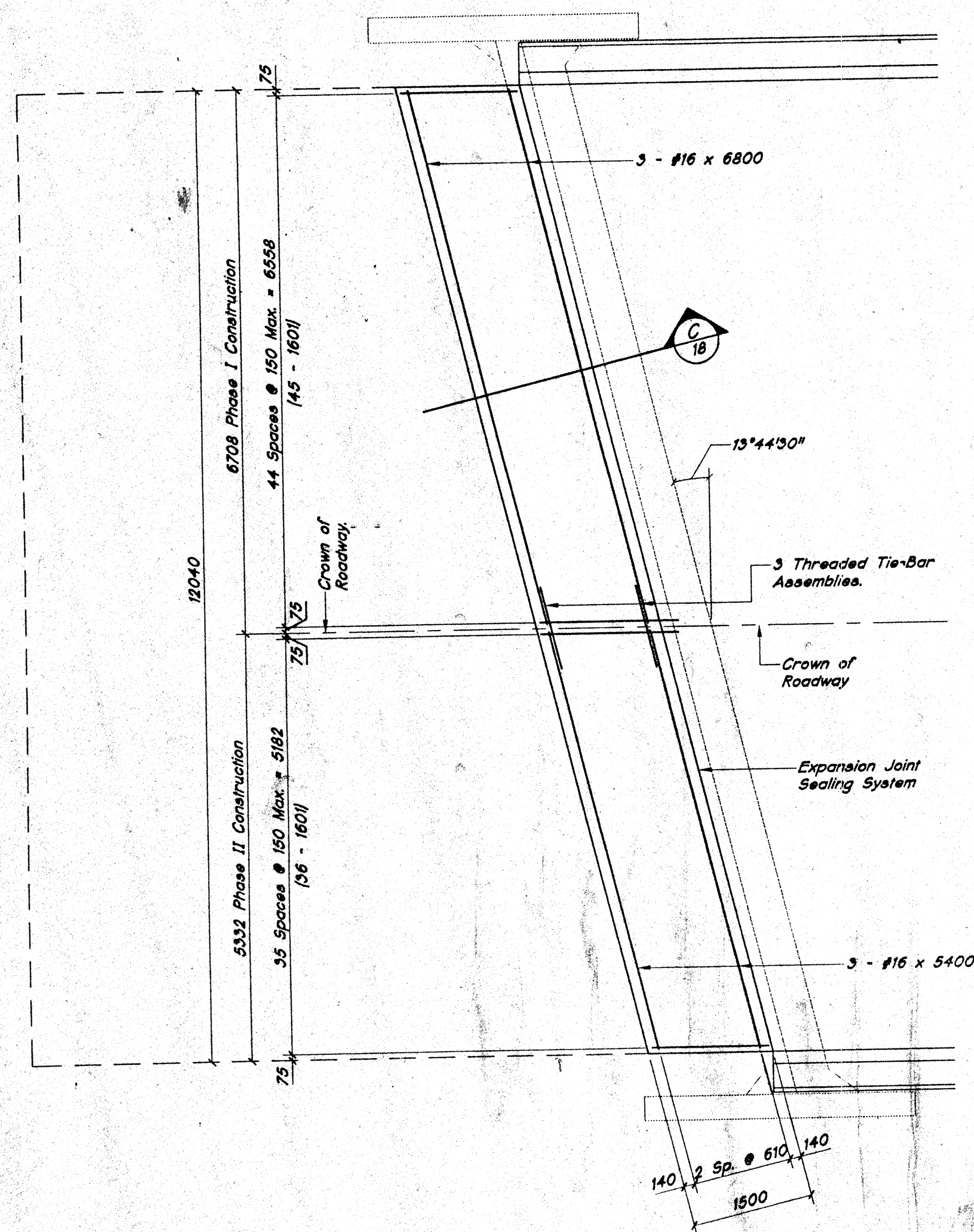
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Xref: AUSTAMP, M-S00CH, CURB-JT, MET-000, SR-EL, M-SECT, EXP-JT, GP-NOTES, MET-DATA



RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
	<i>[Signature]</i>	4-11-97
DESIGNED:	DRAWN: S.BENGOCHEA	
CHECKED:	CHECKED: S. JONES	

INDIANA DEPARTMENT OF TRANSPORTATION
GENERAL PLAN (STR. I-70-9-2343B)

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-70-9-2343B
VERTICAL SCALE	DESIGNATION
AS NOTED	9406620
SURVEY BOOK	SHEETS
CONTRACT	17 of 20
B-23206	PROJECT
	IM/70-1(086)9

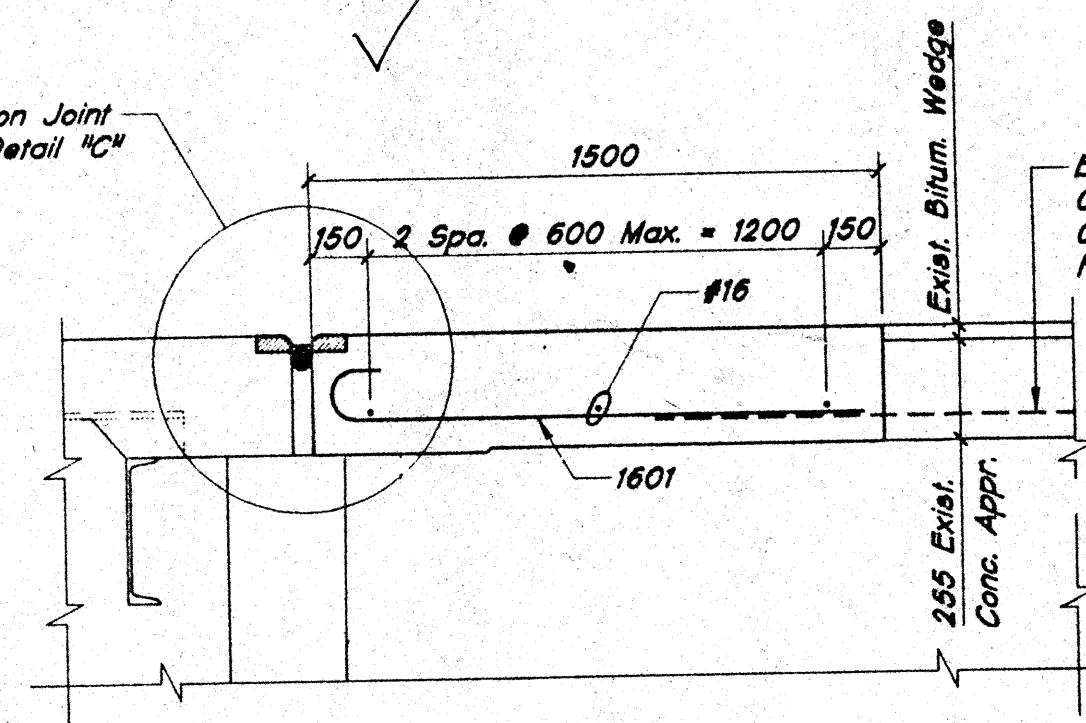


WEST APPROACH PLAN - WBL
SCALE: 1:50

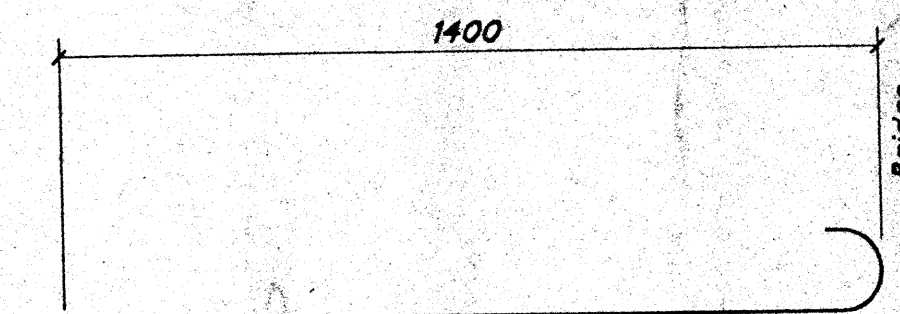
EAST APPROACH WESTBOUND LANE
SAME BY OPPOSITE HAND

DETAILS SHOWN ARE FOR WESTBOUND LANES
DETAILS FOR EASTBOUND LANES - SAME BY 180°

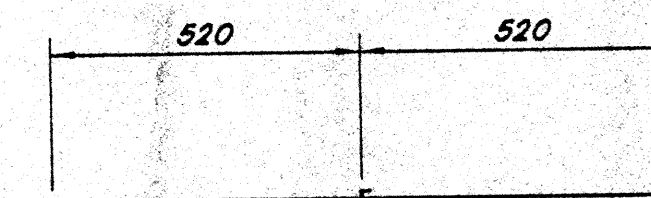
Install a New Expansion Joint
Sealing System. See Detail 4C
Sheet 17.



SECTION G RECONSTRUCTION
SCALE: 1:20



1601 x 1580

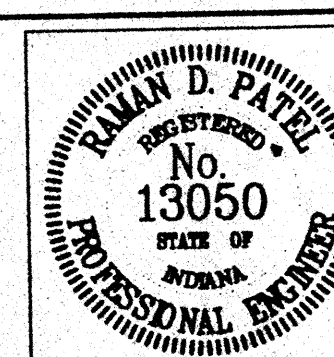


**15M THREADED TIE-BAR
ASSEMBLIES**

**BILL OF MATERIALS
(4 THUS)**

REINFORCING STEEL - PLAIN			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (kg.)
1601	81	1580	
#16	3	6800	
#16	3	5400	
TOTAL #16			255
TOTAL REINFORCING			255
MISCELLANEOUS (QTY.)			
CEMENT CONCRETE PAVEMENT			
REINFORCED, 250 mm			19 m²
THREADED TIE-BAR ASSM			3 EACH
SURFACE SEAL (ESTIMATED)			19 m²
PAVEMENT, REMOVE			19 m²

Time: 2023-59
Date: 4/11/1997
Drawing File: 44774477-308.DWG (S.BENCOCHA)
Xref: AMSTAMP.NET-DATA, APPR-BAR, APPR-BIL, APPR-SEA, APPR-PL



RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
	<i>R. Patel</i>	4-11-97
DESIGNED:	DRAWN: D. DUNCAN	
CHECKED:	CHECKED: S. JONES	

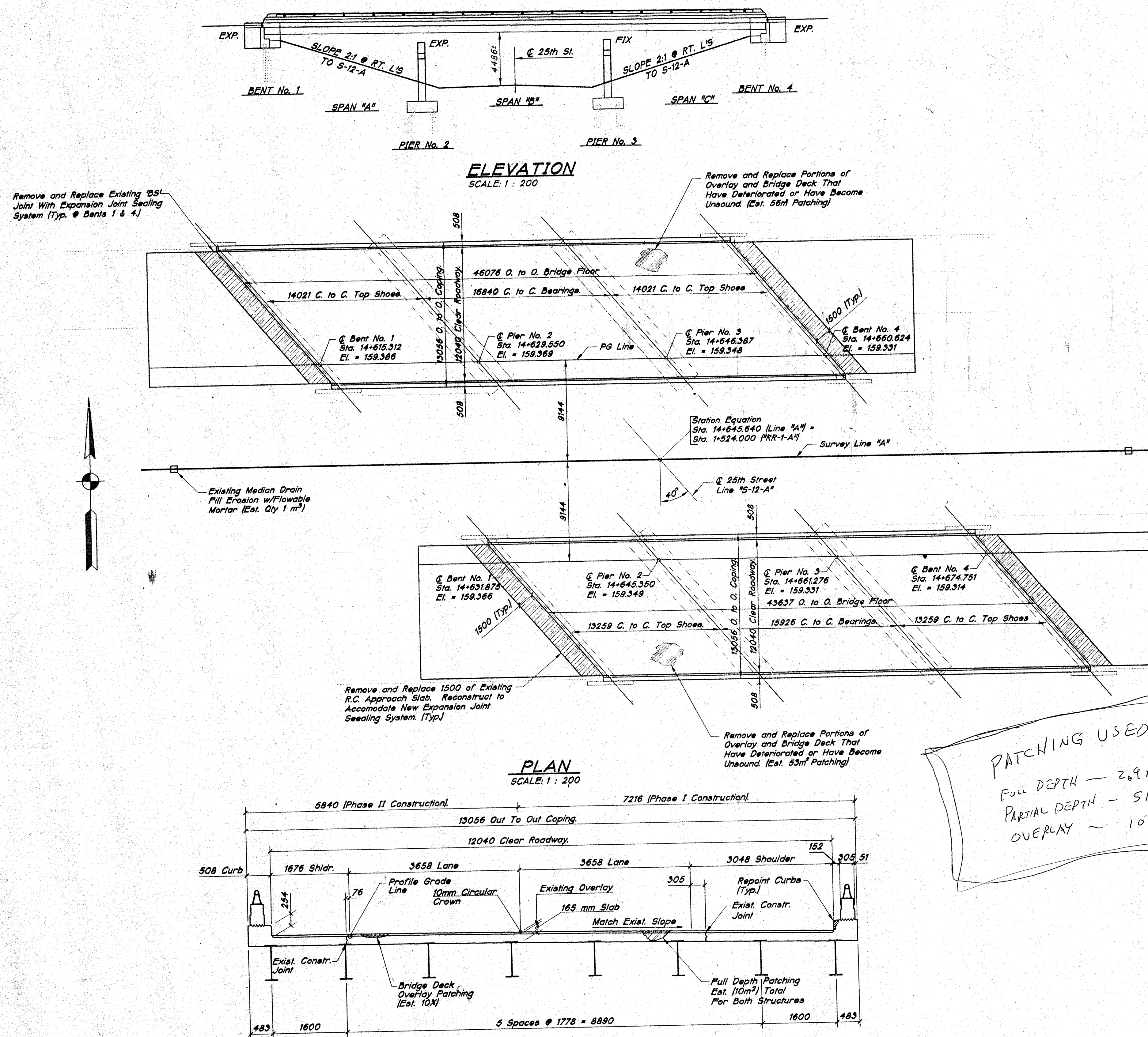
INDIANA DEPARTMENT OF TRANSPORTATION
RECONSTRUCTION DETAILS (STR. I-70-9-2343B)

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-70-9-2343B
VERTICAL SCALE	DESIGNATION
AS NOTED	9406620
SURVEY BOOK	SHEETS
	18 of 20
CONTRACT	PROJECT
B-23204	1W/70-1(086)9

All Dimensions Are In Millimeters (mm), And All Elevations Are In Meters (m), Except As Noted.

NOTE CHANGES

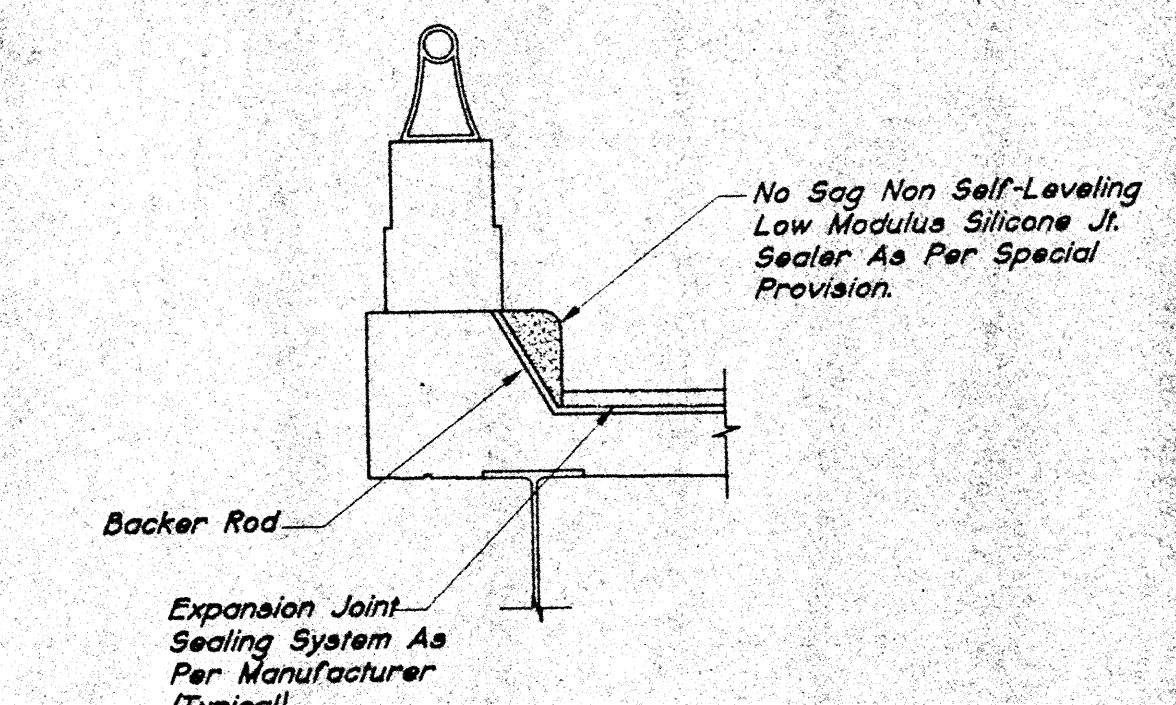
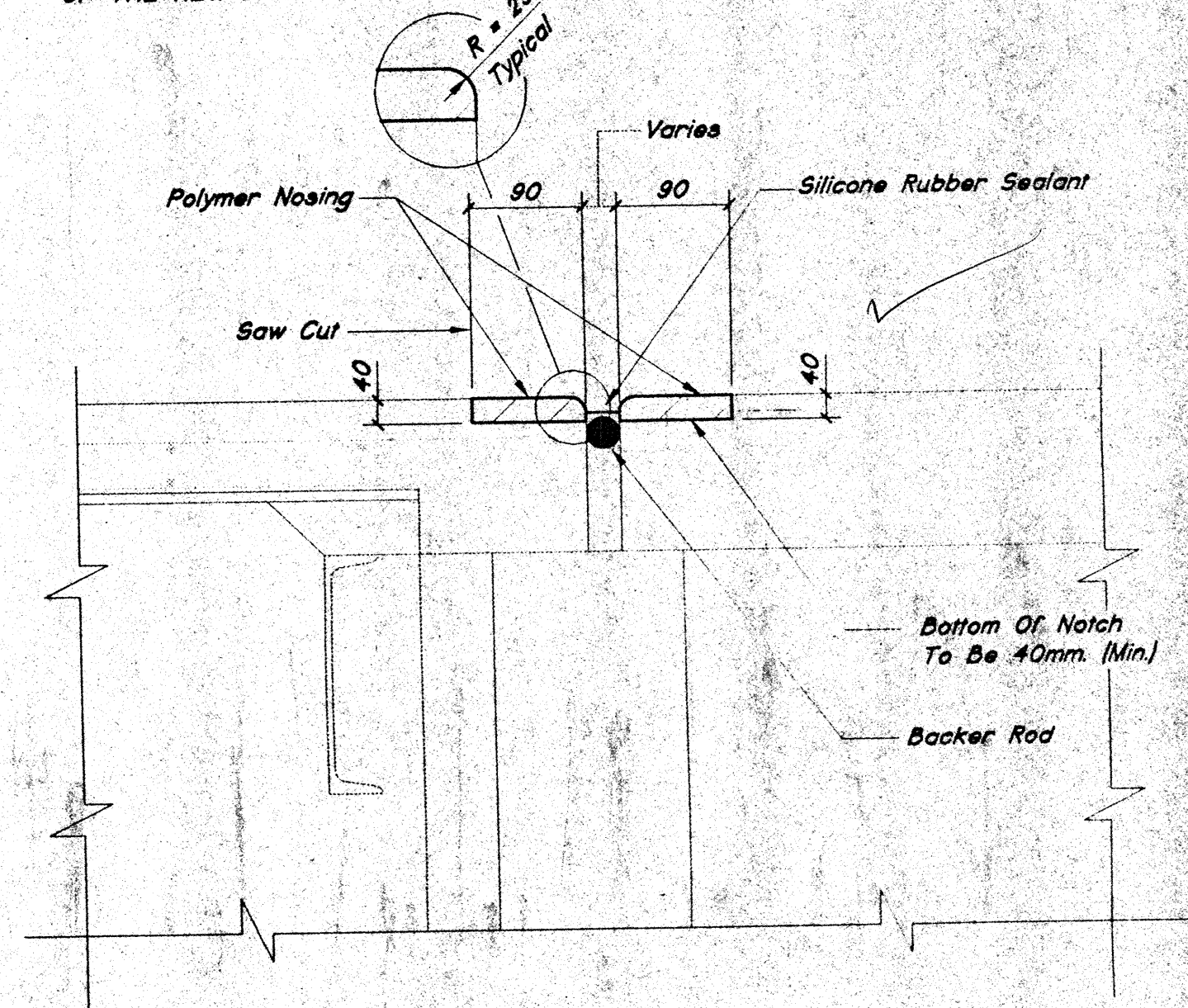
STRUCTURE BUILT TO -0.12% GRADE



GENERAL NOTES:

PLANS FOR THE EXISTING STRUCTURE ARE ON FILE IN THE BRIDGE DEPARTMENT OF THE INDIANA DEPARTMENT OF TRANSPORTATION AS BRIDGE FILES: I-70-9-5189JC, I-70-9-5189J, 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 ERRORS OR DISCREPANCIES TO THE ENGINEER AND ASSUME RESPONSIBILITY FOR THEIR CORRECTNESS AND THE FIT OF THE NEW PART TO OLD.



PATCHING USED
Full DEPTH - 2.9m²
PARTIAL DEPTH - 51m²
OVERLAY - 100m²

All Dimensions Are In Millimeters (mm), And All Elevations Are In Meters (m), Except As Noted.

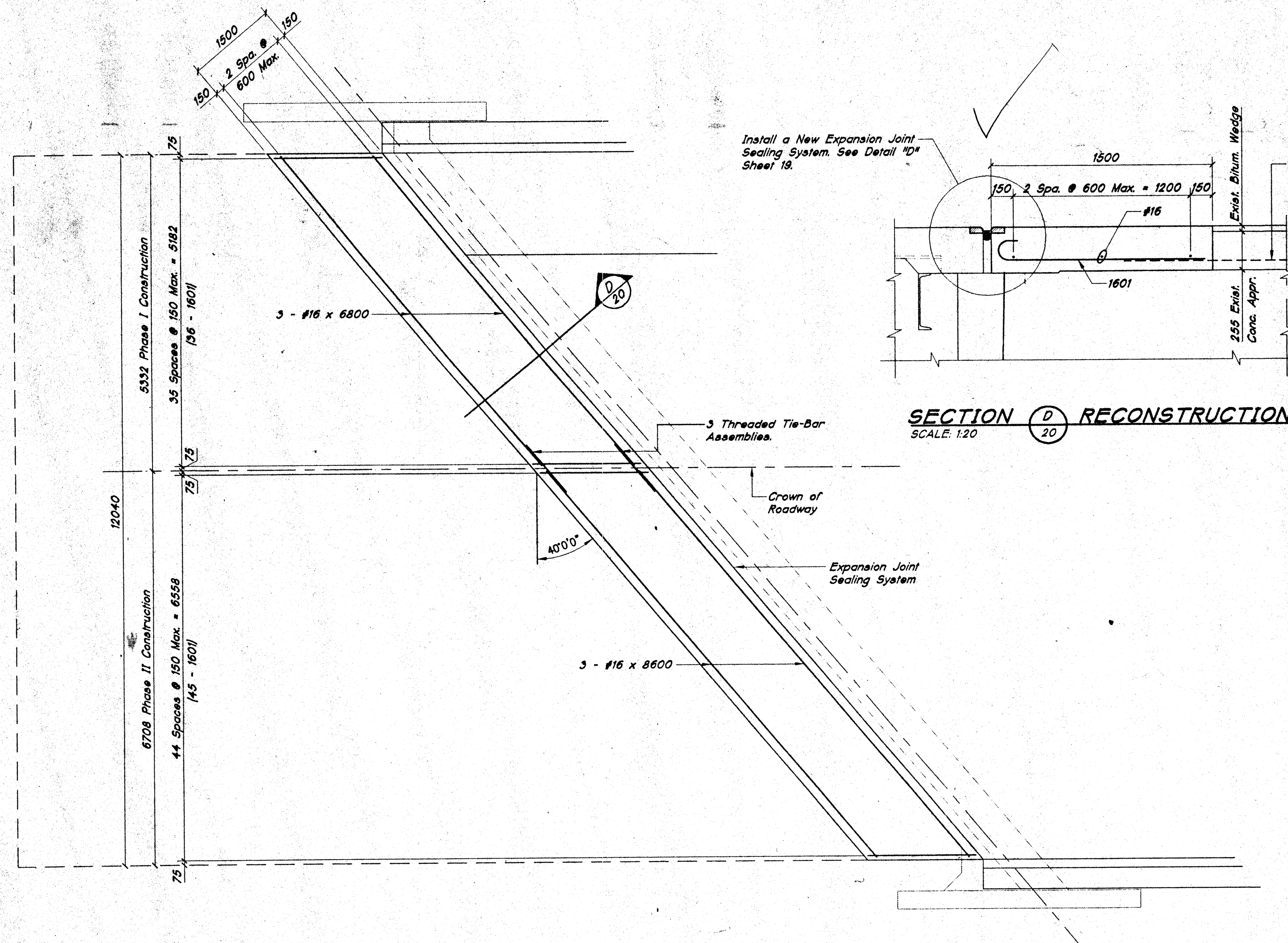
Time: 03:58
Date: 4/11/1997
Scale: 1:200 (Elev)
Drawn: S.BENGOCHEA
Checked: S.JONES
Title: CURB-DT, EXP-JT, OP-NOTES, MET-DATA

SEALMAN D. PATE
REGISTERED
No. 13050
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: *S. Jones* 4-11-97
DESIGN ENGINEER
DATE
DESIGNED: _____ DRAWN: S.BENGOCHEA
CHECKED: _____ CHECKED: S.JONES

INDIANA
DEPARTMENT OF TRANSPORTATION
GENERAL PLAN
(STR. I-70-9-5189B & JB)

HORIZONTAL SCALE AS NOTED	BRIDGE FILE I-70-9-5189B & JB
VERTICAL SCALE AS NOTED	DESIGNATION 9406640
SURVEY BOOK B-23266	SHEETS 19 of 20
CONTRACT	PROJECT IM/70-1(088)9

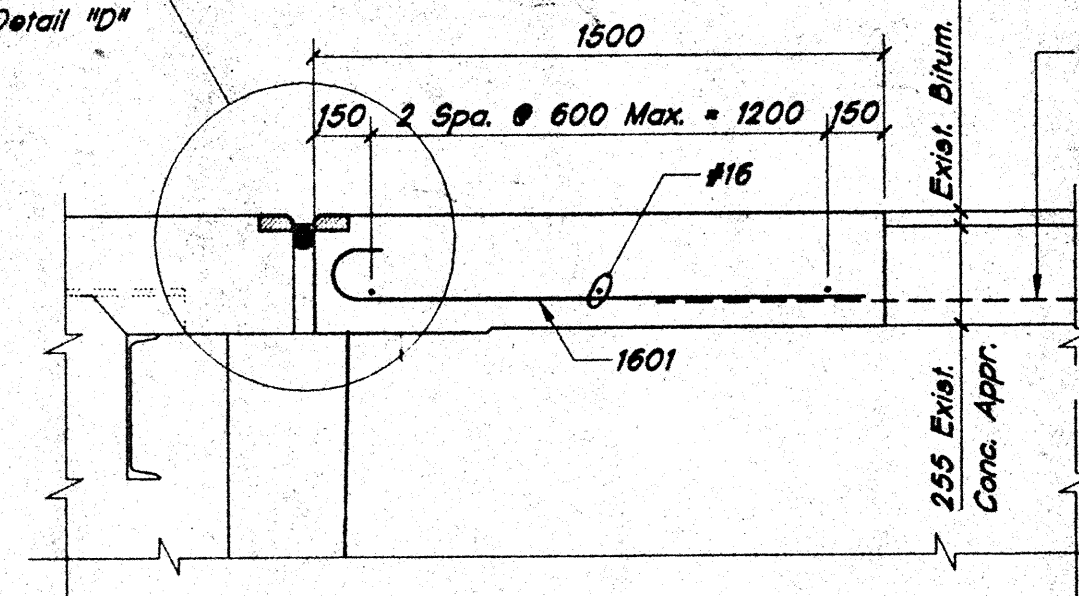


WEST APPROACH PLAN - EBL
SCALE: 1:50

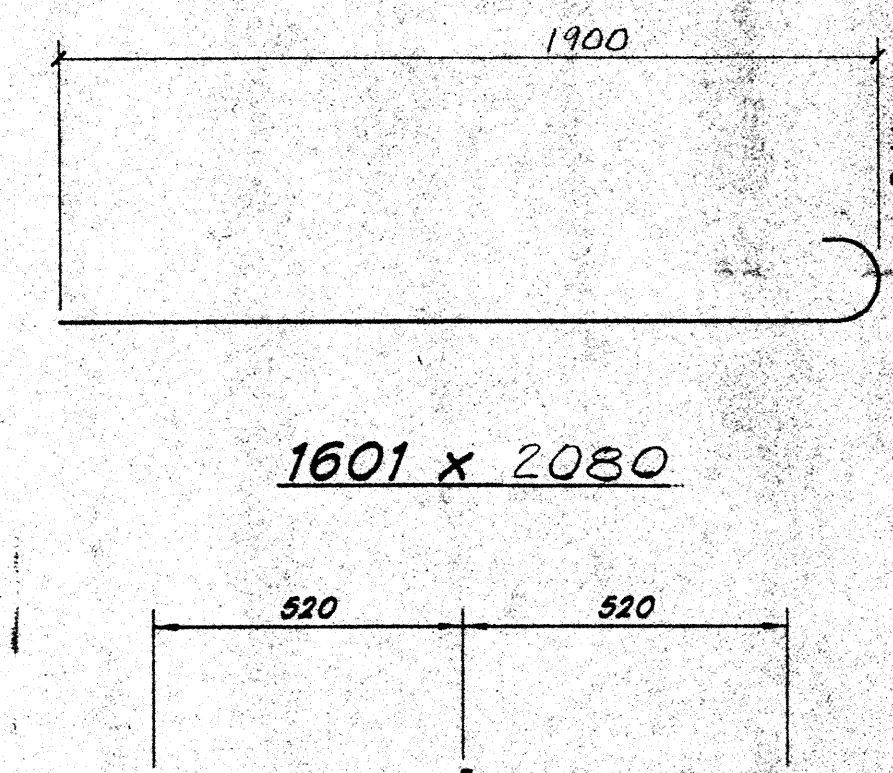
EAST APPROACH EASTBOUND LANE
SAME BY OPPOSITE HAND

DETAILS SHOWN ARE FOR WESTBOUND LANES
DETAILS FOR EASTBOUND LANES - SAME BY 180°

Install a New Expansion Joint
Sealing System. See Detail "D"
Sheet 18.



SECTION D RECONSTRUCTION
SCALE: 1:20

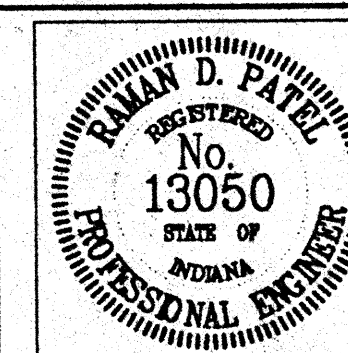


**15M THREADED TIE-BAR
ASSEMBLIES**

**BILL OF MATERIALS
(4-THUS)**

REINFORCING STEEL - PLAIN			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (kg.)
1601	81	2080	
#16	3	8600	
#16	3	6800	
TOTAL #16			353
TOTAL REINFORCING			353
MISCELLANEOUS (QTY)			
CEMENT CONCRETE PAVEMENT			
REINFORCED, 250 mm			
THREADED TIE-BAR ASSM			
SURFACE SEAL (ESTIMATED)			
PAVEMENT, REMOVE			

Time: 20:36:43
Date: 4/11/1997
Scale: 1" = 4430.4479-505 DMC (S.BENGOCHIA)
XREF: ROSTAMP, NET-DATA, APPR-BAR, APPR-BL, APPR-SEA, APPR-PL



RECOMMENDED FOR APPROVAL: *[Signature]* 4-11-97
DESIGN ENGINEER DATE

DESIGNED: _____ DRAWN: S.BENGOCHIA

CHECKED: _____ CHECKED: S. JONES

INDIANA
DEPARTMENT OF TRANSPORTATION

RECONSTRUCTION DETAILS
(STR. I-70-9-5189B & JB)

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-70-9-5189B & JB
VERTICAL SCALE	DESIGNATION
AS NOTED	9406640
SURVEY BOOK	SHEETS
CONTRACT	20 of 20
B-23206	PROJECT
	IM/70-1(086)9

All Dimensions Are In Millimeters (mm), And All Elevations Are In Meters (m), Except As Noted.