

FOR INDEX OF SHEETS, SEE SHEET NO. 2

1. IL. RTE. 53 (N.B.) OVER U.S. RTE. 14 & C.N.W. R.R. SN-016-0374
INCLUDES ONE 7 SPAN CONTINUOUS R.C. SLAB STRUCTURE WITH STEEL GIRDERS ON CONCRETE PIERS AND ABUTMENTS AT STA. 269+54.56 SPANS AT 64'-5 1/2", 82'-6", 65'-2 1/2", 79'-8", 82'-10", AND 61'-5"
2. IL. RTE. 53 (S.B.) OVER U.S. RTE. 14 & C.N.W. R.R. SN-016-1119
INCLUDES ONE 7 SPAN CONTINUOUS R.C. SLAB STRUCTURE WITH STEEL GIRDERS ON CONCRETE PIERS AND ABUTMENTS AT STA. 269+54.56 SPANS AT 64'-5 1/2", 82'-6", 65'-2 1/2", 79'-8", 82'-10", AND 61'-5"
3. IL. RTE. 53 (N.B.) OVER PALATINE RD. SN-016-0373
INCLUDES ONE 4 SPAN CONTINUOUS R.C. SLAB STRUCTURE WITH STEEL GIRDERS ON CONCRETE PIERS AND ABUTMENTS AT STA. 329+18.98 2 SPANS AT 60'-9" AND 2 AT 39'-3"
4. IL. RTE. 53 (S.B.) OVER PALATINE RD. SN-016-0970
INCLUDES ONE 4 SPAN CONTINUOUS R.C. SLAB STRUCTURE WITH STEEL GIRDERS ON CONCRETE PIERS AND ABUTMENTS AT STA. 329+18.98 2 SPANS AT 60'-9" AND 2 AT 39'-3"
5. IL. RTE. 53 OVER ANDERSON DRIVE SN-016-0372
INCLUDES ONE 52'-2" SPAN CONTINUOUS R.C. SLAB STRUCTURE WITH PRESTRESSED CONCRETE BEAMS ON CONCRETE ABUTMENTS AT STA. 351+81.46

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

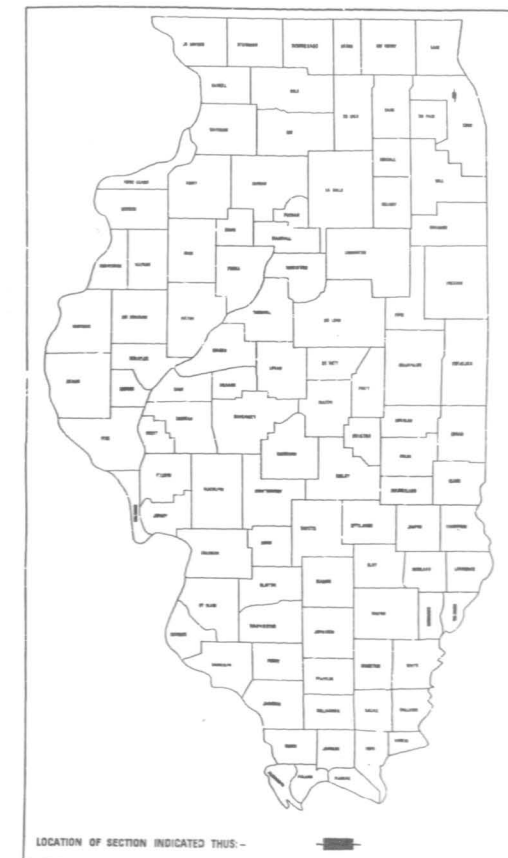
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

F.A.P. 342 (IL. RTE. 53)
SECTION 531(2.1,3,3.1)RS-1(89) & 1990-116BR
U.S. RTE. 14 TO U.S. RTE. 12
RESURFACING AND BRIDGE DECK REHABILITATION
COOK COUNTY
C-91-475-89

SCALES
PLAN
PROFILE HORIZ.
PROFILE VERT.
CROSS SECTIONS

FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	*	COOK	211	1

531(2.1,3,3.1)RS-1(89) & 1990-116BR
D-91-475-89



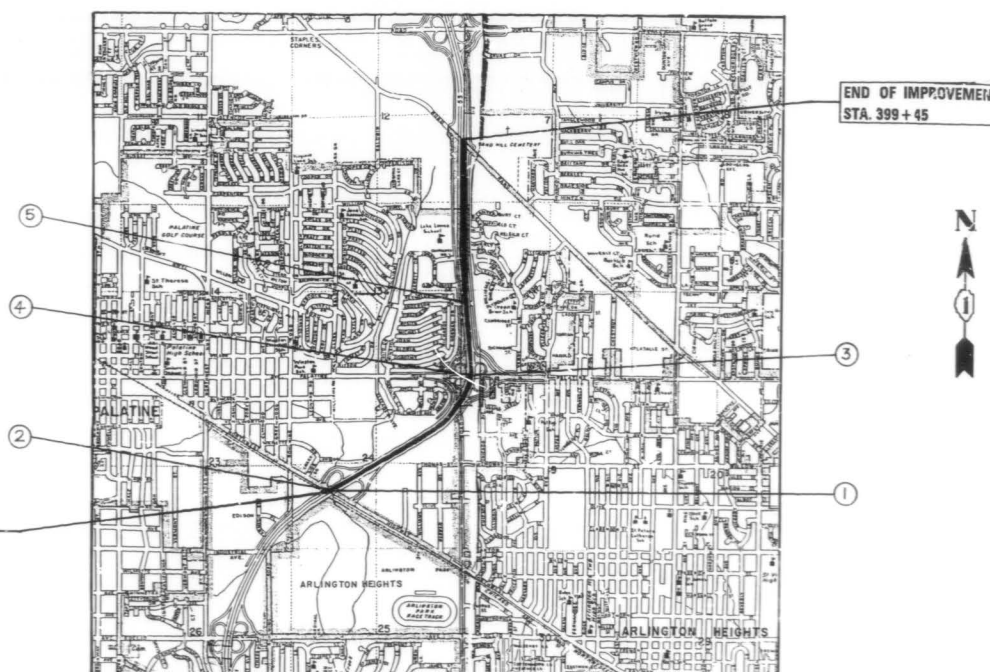
DESIGN DESIGNATION
9630(10) TRUNK 5.2(B-20)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

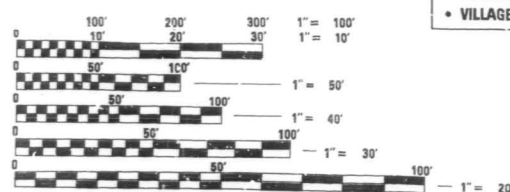
SUBMITTED *[Signature]* 10/91
EXAMINED *[Signature]* 10/91
PASSED *[Signature]* 10/91
APPROVED *[Signature]* 10/91

PRINTED BY AUTHORITY OF THE
STATE OF ILLINOIS

FOR J.U.L.I.E. INFORMATION CALL 1-800-852-0123



PROJECT LOCATED IN:
• VILLAGE OF ARLINGTON HEIGHTS
• VILLAGE OF PALATINE

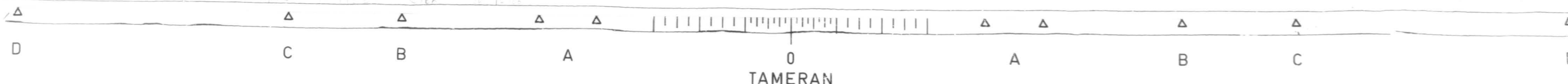


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

CONTRACT NO. 80604

NET LENGTH OF IMPROVEMENT = 13,243 LIN. FT. = 2.508 MI.
GROSS LENGTH OF IMPROVEMENT = 13,243 LIN. FT. = 2.508 MI.

PLAN PREPARATION ENGINEER
L. SORENSON/M. DE YONG, (708) 705-4432



F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	*	COOK	211	2
STA	TO STA			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

* 531(2,1,3,3.1)RS-1(89)E1390-116BR

INDEX OF SHEETS

LIST OF STATE STANDARDS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	INDEX OF SHEETS, STATE STANDARDS AND PLAN NOTES
3-7	SUMMARY OF QUANTITIES
8-11	TYPICAL CROSS SECTIONS
12-21	PLAN - MAINLINE
22-33	PLAN - RAMPS
34-37	BARRIER WALL DETAILS
38-42	BARRIER WALL PROFILE
43-52	DRAINAGE AND UTILITIES - MAINLINE
53-58	DRAINAGE AND UTILITIES - RAMPS
59-60	CATCH BASIN 4x3 AND 4x8
61-64	TYPICAL CROSS SECTIONS - STAGING
65-73	SUGGESTED STAGES OF CONSTRUCTION
74	TEMPORARY INFORMATION SIGNING - FOR STAGING
75	TEMPORARY CONCRETE BARRIER WITH IMPACT ATTENUATOR
76-78	LANE CLOSURES - FREEWAY STANDARDS
79	RAMP CLOSURES - DETAIL
80	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS
81	TRAFFIC CONTROL - SIDEROADS, INTERSECTIONS, AND DRIVEWAYS
82-85	TEMPORARY INFORMATION SIGNING - SIGN TRUSS REMOVAL
100-120	SIGN TRUSS PLAN AND DETAILS
121-123	ELECTRICAL PLAN AND DETAILS
124-145	SURVEILLANCE
146	LUG SYSTEM DETAIL
147-150	APPROACH SLAB DETAILS
151	BRIDGE APPROACH SHOULDER PAVEMENT
152-159	BRIDGE PLANS - U.S. ROUTE 14 & CNW RR (NB)
160-167	BRIDGE PLANS - U.S. ROUTE 14 & CNW RR (SB)
168-173	BRIDGE PLANS - PALATINE ROAD (NB)
174-179	BRIDGE PLANS - PALATINE ROAD (SB)
180-187	BRIDGE PLANS - ANDERSON DRIVE
188	NEOPRENE JOINT DETAIL
189	RETROFIT CONCRETE PARAPET DETAIL
190	BAR SPLICER DETAIL
191-192	CROSS SECTIONS - DITCH REGRADING
193-205	CROSS SECTIONS - CENTERLINE MEDIAN
206-211	DISTRICT DETAILS

STANDARD #	DESCRIPTION
2149-11	DELINEATORS
2213-4	FRAME AND LIDS, TYPE 1
2225-3	REINFORCEMENT FOR CONTINUOUSLY REINFORCED P.C.C. PAVEMENT
2228-4	METAL END SECTION FOR PIPE CULVERTS
2230-16	STEEL PLATE BEAM GUARDRAIL
2233-12	36' CONTINUOUSLY REINFORCED P.C.C. PAVEMENT
2237-11	B.A.M. SHOULDER DETAILS - ADJACENT TO RIGID PAVEMENT
2298-8	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
2299-11	DESIGN OF TRAFFIC CONTROL DEVICES
2300-3	FLAGMAN TRAFFIC CONTROL SIGN
2307-6	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES SHORT-TIME OPERATION, DAY OR NIGHT
2308-5	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES RURAL, DAY OR NIGHT, MOVING OPERATIONS
2314-5	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES MULTILANE DIV. AND UNDIV., RURAL, DAY OR NIGHT
2316-12	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES MULTILANE DIV. AND UNDIV., RURAL, OVER ONE DAY
2323-11	PAVEMENT JOINTS
2324-7	BRIDGE APPROACH SHOULDER PAVEMENT
2326-3	TRAFFIC BARRIER TERMINAL, TYPE 10
2327-11	SUB-SURFACE DRAINS
2333-3	CONCRETE BARRIER
2336-4	TRAFFIC BARRIER TERMINAL, TYPE 1 AND 1A
2337-2	TRAFFIC BARRIER TERMINAL, TYPE 2
2338-2	TRAFFIC BARRIER TERMINAL, TYPE 3 & 3A
2340-4	TRAFFIC BARRIER TERMINAL, TYPE 5 & 5A
2341-3	TRAFFIC BARRIER TERMINAL, TYPE 6
2360-4	BRIDGE APPROACH PAVEMENT (50 FT.)
2362-3	CONCRETE HEADWALL FOR PIPE DRAINS
2381	TEMPORARY EROSION CONTROL SYSTEMS
2383-1	TEMPORARY CONCRETE BARRIER
2385	FRAME AND GRATE, TYPE 20
2386	FRAME AND GRATE, TYPE 21
2409-1	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES TWO LANE, TWO-WAY, RURAL, ONE-LANE CLOSURE ON BRIDGE DECK, DAY OR NIGHT OPERATIONS
2425-1	CLASS A PATCHES
2427-1	CLASS C AND D PATCHES
U-2	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
U-4	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
2419	" " " " " " "
Δ2429	P.C.C. SHOULDER DETAILS

PLAN NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 OR "DIGGER" (CHICAGO UTILITY ALERT NETWORK), (312)774-7000 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOURS NOTIFICATION IS REQUIRED).

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITY OF CHICAGO.

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

THE REMOVAL OF GUARDRAIL TERMINAL SECTIONS SHALL BE INCLUDED IN THE UNIT PRICE PER LINEAL FOOT FOR STEEL PLATE BEAM GUARD RAIL REMOVAL.

BARRICADES: THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SAND BAGS ON EACH TYPE I OR TYPE II BARRICADE USED. (ONE (1) WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL).

WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.

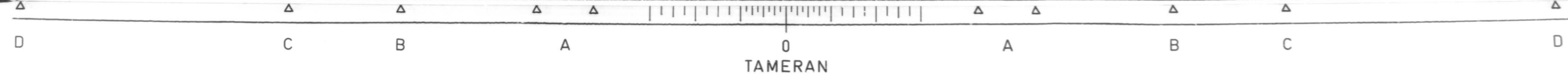
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
INDEX OF SHEETS,
STATE STANDARDS
AND
PLAN NOTES

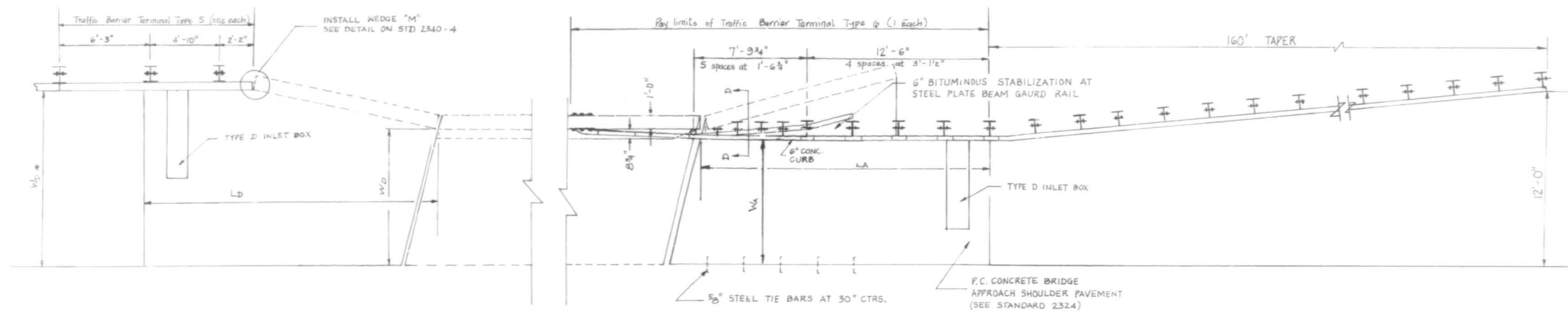
SCALE VERT. _____
HORIZ. _____

DATE _____ DRAWN BY _____
CHECKED BY R.Y.

Δ Rev 2-06-91



SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	COOK	211	151
STA.	TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT
# 531 (21,3,31)		KS-1(89)	1990-116B2

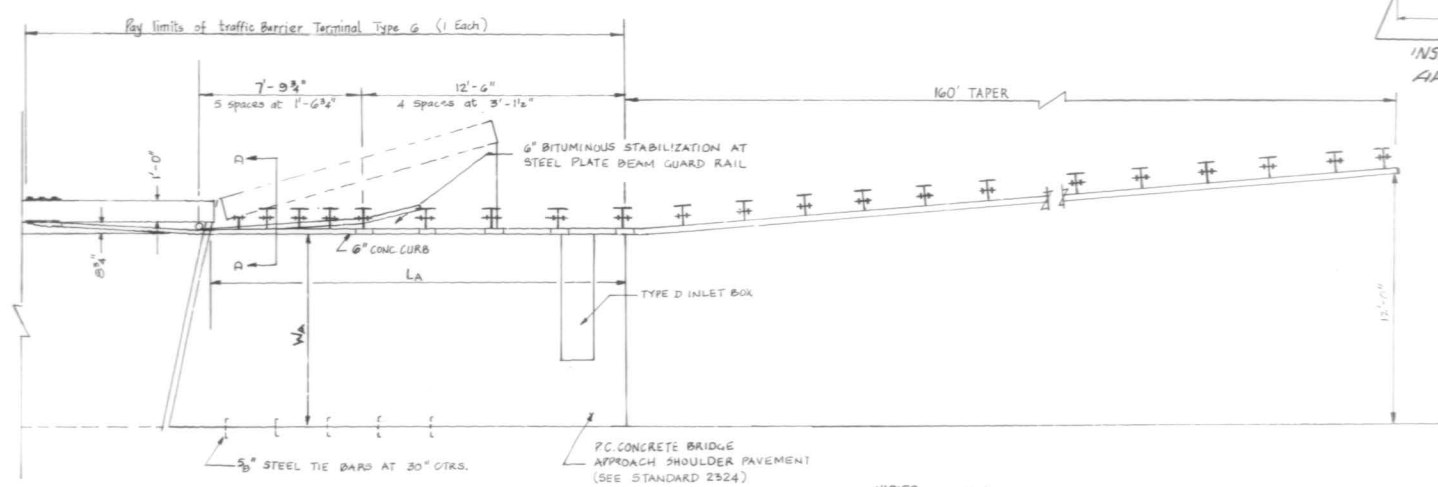
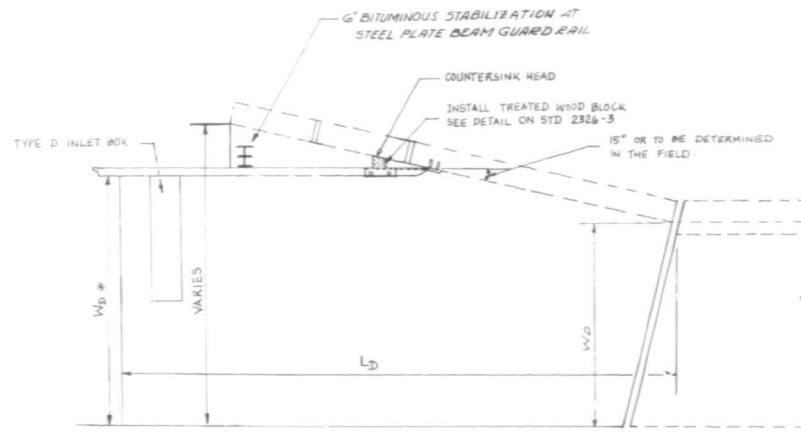
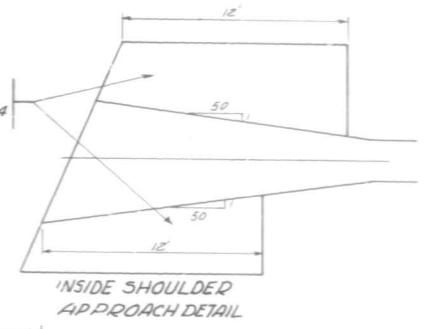


OUTSIDE SHOULDER APPROACH DETAIL (TYPE 5)

ANDERSON NB/SB NORTHWEST SB
 PALATINE SB SALT CREEK NB/SB

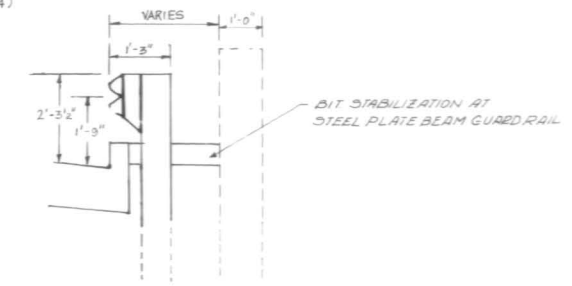
P.C. CONCRETE BRIDGE APPROACH SHOULDER PAVEMENT STANDARD 2324

NOTE:
 TYPE D INLET BOX IS NOT REQUIRED



OUTSIDE SHOULDER APPROACH DETAIL (TYPE 10)

PALATINE NB KIRCHOFF NB/SB
 NORTHWEST NB ALGONQUIN NB/SB
 INDUSTRIAL NB/SB



SECTION D-D

NORTHBOUND

	W _A	W _D	L _A	L _D	W _D #
ALGONQUIN RD.	9.3'	10.4'	10'-0 3/4"	15.0'	120
SALT CREEK	9.3'	9.7'	10'-0 3/4"	12.0'	97
KIRCHOFF RD.	12.0'	12.8'	10'-0 3/4"	14.0'	128
INDUSTRIAL AVE.	9.7'	11.1'	10'-0 3/4"	17.8'	120
NORTHWEST HWY.	9.3'	10.75'	10'-0 3/4"	19.2'	120
PALATINE RD.	8.3'	8.3'	10'-0 3/4"	19.1'	120
ANDERSON	9.3'	10.3'	10'-0 3/4"	10.3'	10.3

SOUTHBOUND

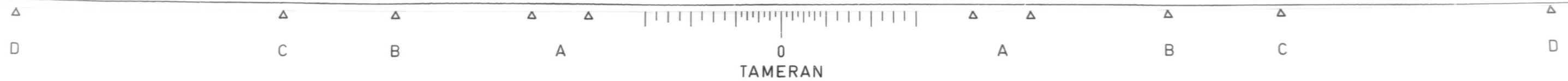
	W _A	W _D	L _A	L _D	W _D #
ALGONQUIN RD.	9.3'	10.4'	10'-6 3/4"	15.2'	120
SALT CREEK	9.3'	9.9'	10'-6 3/4"	12.0'	99
KIRCHOFF RD.	12.0'	12.2'	10'-6 3/4"	14.0'	122
INDUSTRIAL AVE.	9.7'	12.9'	10'-6 3/4"	14.0'	120
NORTHWEST HWY.	9.3'	10.1'	10'-6 3/4"	19.3'	118
PALATINE RD.	5.6'	5.6'	10'-6 3/4"	18.2'	8.5
ANDERSON	9.3'	10.2'	10'-6 3/4"	12.0'	10.2

ILLINOIS DEPARTMENT OF TRANSPORTATION
 ILLINOIS ROUTE-53

P.C. CONCRETE BRIDGE
 APPROACH SHOULDER PAVT (SPECIAL)

REVISIONS	
NAME	DATE

SCALE VERT DRAWN BY
 HORIZ CHECKED BY
 DATE

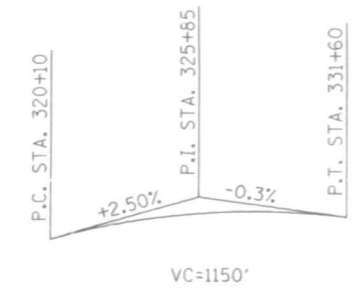
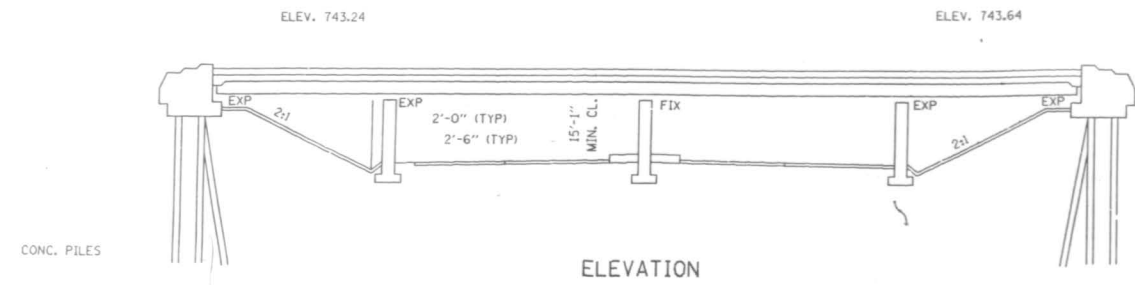


F&B No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	*	COOK	177	174
STA.	TO STA.			
FED. ROAD DIST. NO.	SUBNO.	FED. AID PROJECT		

* 531 (2-1,3,3,1)RS-1189) & 1990-116BP
SHEET 1 OF 6

EXISTING BRIDGE DESCRIPTION

THE BRIDGE CONSISTS OF A 4 SPAN CONTINUOUS WIDE FLANGE BEAM STRUCTURE WITH 2 SPANS AT 60'-9" AND 2 AT 39'-3" ON OPEN R.C. ABUTMENTS AND R.C. PIERS. THE 7" THICK CONC. DECK HAS A 2" THICK BITUMINOUS CONC. OVERLAY.



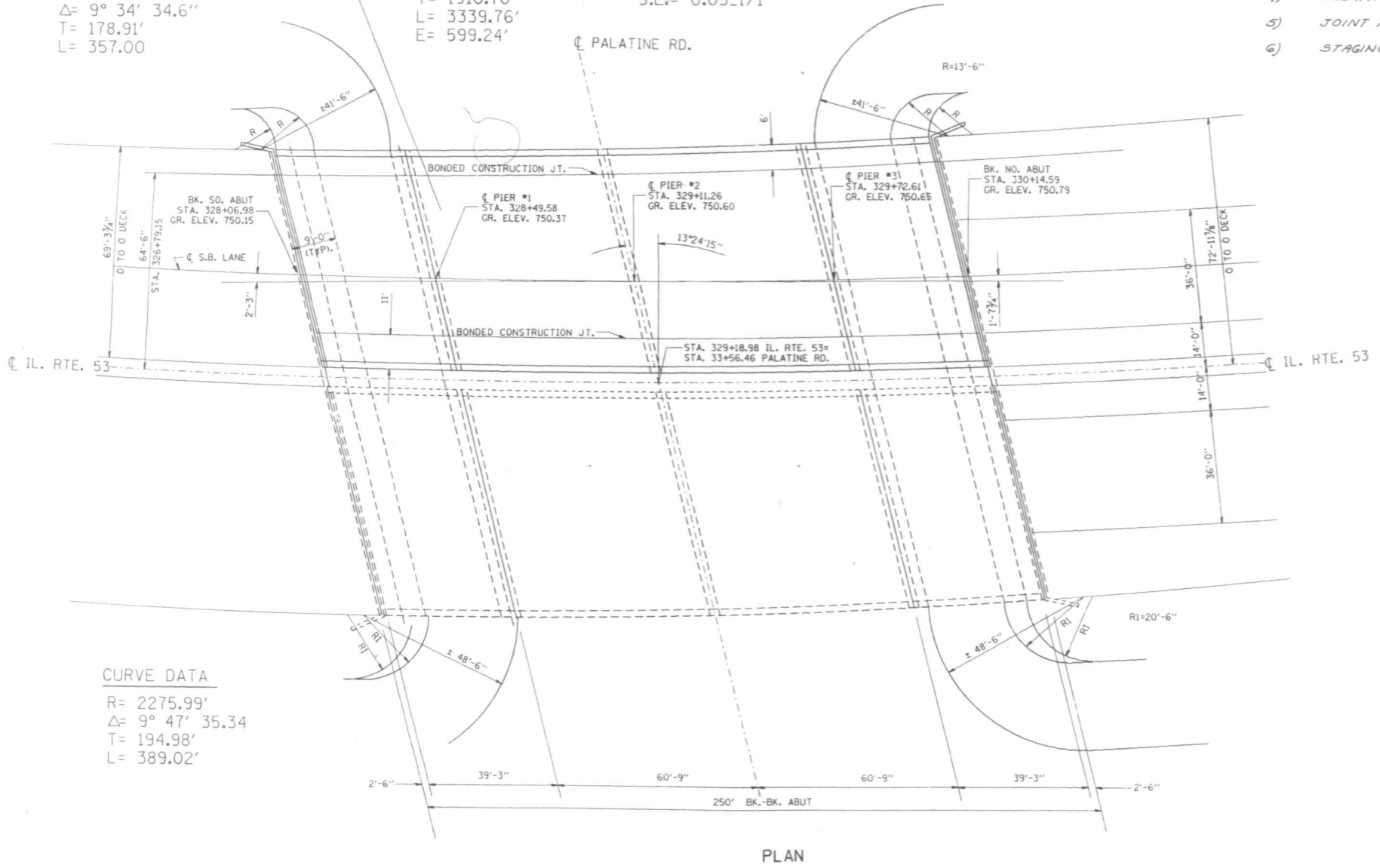
EXIST. PROFILE IL. RTE. 53

STRUCTURE NO. 016-0970
SOUTHBOUND

CURVE DATA
R= 2135.96
Δ= 9° 34' 34.6"
T= 178.91'
L= 357.00

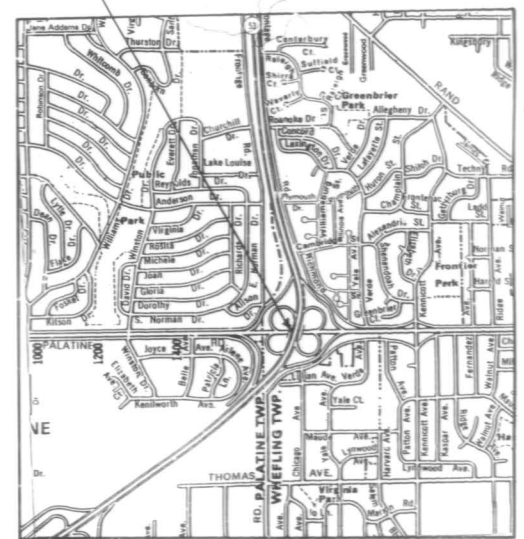
HORIZ. CURVE DATA IL. RT. 53
Δ= 69° 35' P.C. STA= 306+97.03
D= 2° 05' P.I. STA= 326+07.74
R= 2750' T= 1910.70' P.T. STA= 340+36.97
L= 3339.76' S.E.= 0.05_1/1
E= 599.24'

- INDEX OF SHEETS**
- 1) PLAN AND ELEVATION
 - 2) GENERAL NOTES AND SUMMARY OF QUANTITIES
 - 3) DECK DETAILS
 - 4) DELAMTECT AND BOTTOM DECK SURVEY
 - 5) JOINT RECONSTRUCTION DETAILS
 - 6) STAGING CROSS SECTION



CURVE DATA
R= 2275.99'
Δ= 9° 47' 35.34"
T= 194.98'
L= 389.02'

STRUCTURE NO. 016-0973
SOUTHBOUND



LOCATION MAP

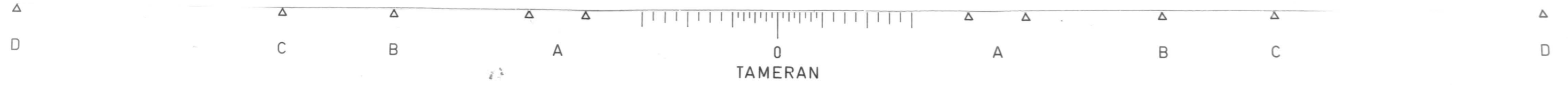
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL. RTE. 53 @ PALATINE ROAD S.B.
BRIDGE REHABILITATION
STRUCTURE NO. 016-0970
PLAN & ELEVATION

SCALE: VERT. NONE DRAWN BY
HORIZ. NONE DATE 10/23/90 CHECKED BY

11/1/90 (HEATED)
 2/2/91 (REVISION)
 10/23/90 (REVISED)
 LEVEL 3.35

VI-899



TAMERAN

NOTES:

1. ~~The Zinc-silicate and vinyl paint system shall be used for shop and field painting of Structural Steel except where otherwise noted. The color of the vinyl finish coat shall be Munsell No. 7.5G 4/8.~~
2. All structural steel shall be AASHTO M 222 except expansion joint plates and attached bars which shall be AASHTO M 183.
- 3A. ~~DECK REPAIR METHOD II SHALL BE USED FOR THIS STRUCTURE (SEE SPECIAL PROVISIONS)~~
3. Expansion joint plates and attached bars shall be shop painted with the zinc-silicate primer.
4. ~~AASHTO M 222 structural steel shall not be painted except, that for a distance of three times the depth of the beams or girders (but not exceeding 10 feet) each way from deck joints, the AASHTO M 222 structural steel shall be cleaned and given one coat of the zinc-silicate primer and a dark maroon vinyl finish coat. The color of the finish coats shall be Munsell No. 2.5 YR 3/4 reddish brown. Both coats may be applied in the shop with spot painting only in the field.~~
5. The structural steel bearing plates of the Elastomeric Bearing Assembly shall conform to the requirements of AASHTO M 223 Grade 50 (AASHTO M 222).
6. Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53 Grade 60.
7. Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
8. ~~All accessible end areas of steel beams, exposed top of steel beams, end diaphragms, and bearings designated by the Engineer for painting shall be cleaned by Method I. The three coat lead and chromate free alkyd paint system shall be applied over all cleaned areas, except the exposed top of steel beams to be embedded in concrete shall receive only one coat of the primer of this system. The color of the final finish coat shall be INTERSTATE GREEN. This work will be paid for in accordance with Article 109.04 of the Standard Specifications.~~

TOTAL BILL OF MATERIALS

ITEM	UNIT	TOTAL
BITUMINOUS CONCRETE SURFACE REMOVAL (DECK)	SQ. YD.	1463
CONCRETE BRIDGE DECK SCARIFICATION	SQ. YD.	1463
DECK SLAB REPAIR (PARTIAL DEPTH)	SQ. YD.	77
DECK SLAB REPAIR (FULL DEPTH)	SQ. YD.	10
CONCRETE REMOVAL, SPECIAL	CU. YD.	18
HANDRAIL REMOVAL	LIN. FT.	404
PREFORMED JOINT SEAL, 4"	LIN. FT.	154
REINFORCEMENT BARS, EPOXY COATED	POUND	2978
CLASS X CONCRETE SUPERSTRUCTURE	CU. YD.	20.2
MICROSILICIA CONCRETE BRIDGE DECK OVERLAY, 2 1/2"	SQ. YD.	1463
PROTECTIVE COAT	SQ. YD.	1673
PROTECTIVE SHIELD	SQ. YD.	951
CONCRETE PARAPET RETROFIT	LIN. FT.	404
FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	5485
SAWING P.C. CONCRETE PAVEMENT, 3/4"	LIN. FT.	304




REVISIONS	
NAME	DATE

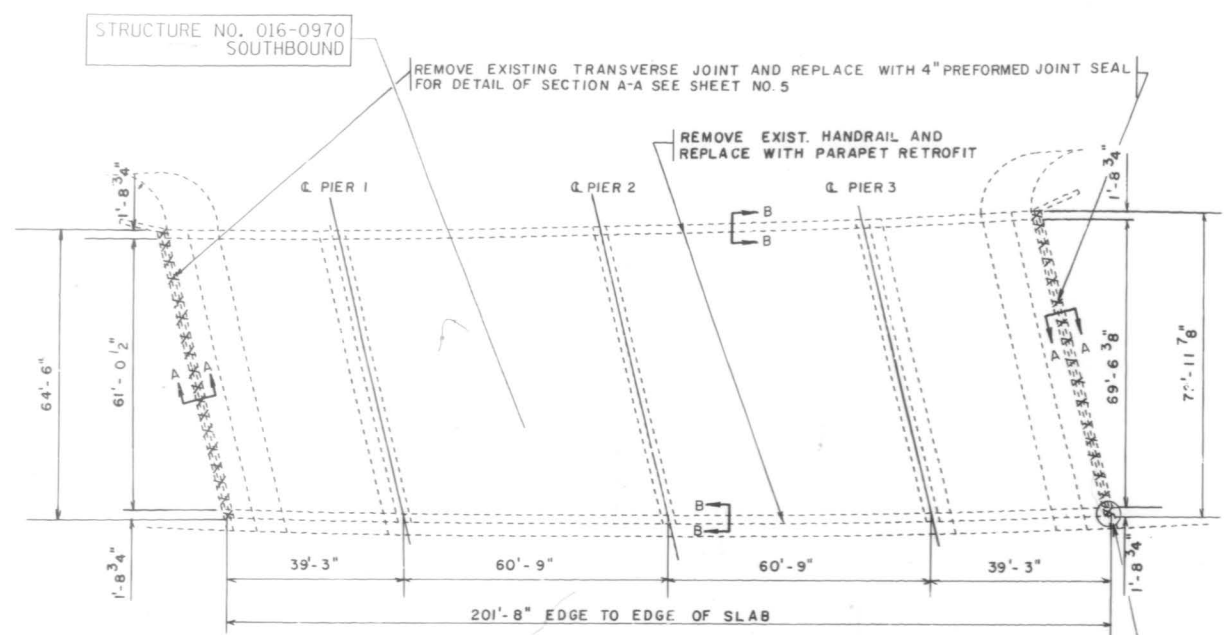
DEPARTMENT OF TRANSPORTATION
 ILL. RTE. 53 @ PALATINE RD.
 (SOUTHBOUND LANES)
 GENERAL NOTES
 AND
 BILL OF MATERIALS
 DATE
 CHECKED BY R.V.



P.A.P. No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342		COOK	211	176
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* 531 (2.1,3,3.1)RS-1(89) & 1590-116BR
SHEET 3 OF 6

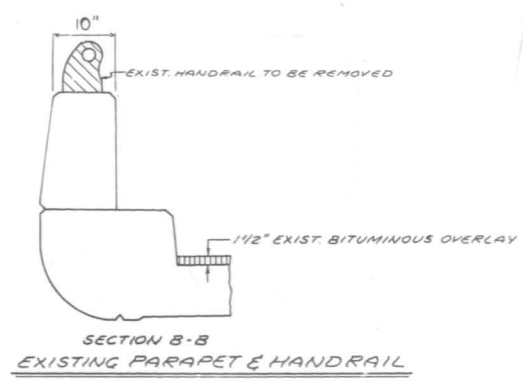
- LEGEND**
-  DECK SLAB REPAIR (PARTIAL DEPTH) SEE DELAMTEC SHEET NO. 4
 -  DECK SLAB REPAIR (FULL DEPTH) SEE BOTTOM DECK SURVEY SHEET NO. 4
 -  CONCRETE TO BE REMOVED



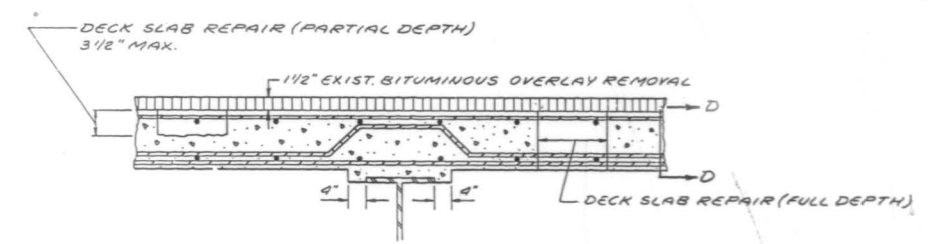
PLAN

Remove 2' of parapet and 2' of wingwall. Typical at all four locations. Details are available in the I.D.O.T. District 1 Bureau of Design and will be provided at the preconstruction meeting. Quantities are included in the plans.

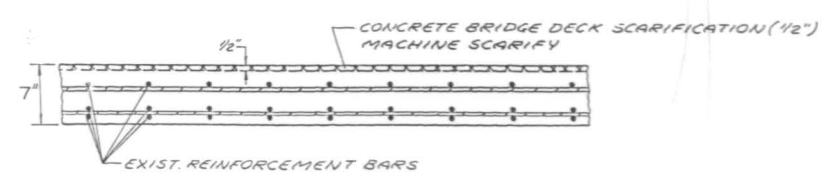
BILL OF MATERIALS		QUANTITIES	
ITEM	UNIT	TOTAL	
BITUMINOUS CONCRETE SURFACE REMOVAL (DECK)	SQ. YD.	1463	
CONCRETE BRIDGE DECK SCARIFICATION, 1/2"	SQ. YD.	1463	
DECK SLAB REPAIR (PARTIAL DEPTH)	SQ. YD.	77	
DECK SLAB REPAIR (FULL DEPTH)	SQ. YD.	10	
MICROSILICIA CONCRETE BRIDGE DECK OVERLAY, 2 1/2"	SQ. YD.	1463	
PROTECTIVE COAT	SQ. YD.	1661	
PROTECTIVE SHIELD	SQ. YD.	939	
PARAPET RETROFIT	LIN. FT.	404	
HANDRAIL REMOVAL	LIN. FT.	404	



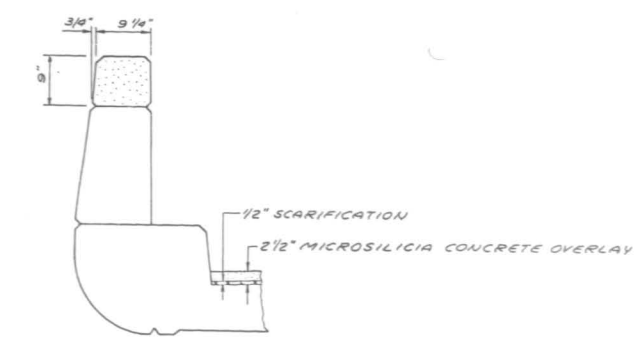
SECTION B-B
EXISTING PARAPET & HANDRAIL



TYPICAL SECTION OF EXISTING DECK



SECTION D-D



PARAPET WITH PROPOSED RETROFIT

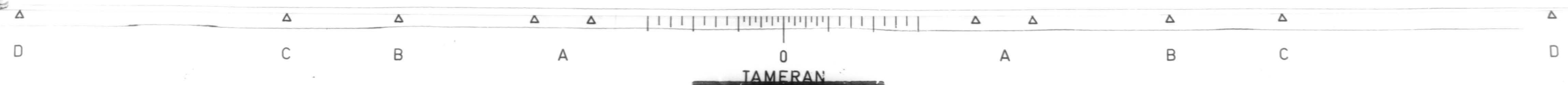
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL. RTE. 53 @ PALATKA ROAD S.B.
BRIDGE REHABILITATION
STRUCTURE NO. 016-0970
DECK DETAILS

VERT. SCALE: HORIZ. DATE 10/23/90

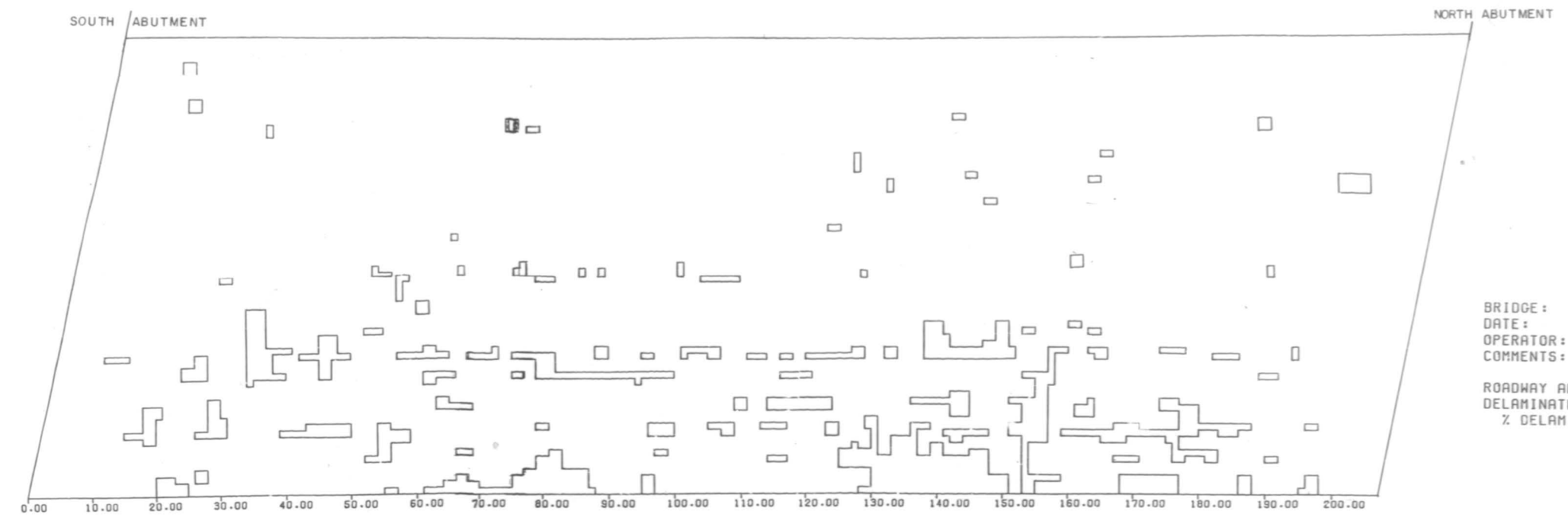
DRAWN BY: CHECKED BY:



TAMERAN

F&P RTE	SECTION	COUNTY	TOTAL S. STS.	SHEET NO.
542	*	COOK	211	177
STA.		TO STA.		
F&P. ROAD DIST. NO. 1		ALLOWED	F&P. DIST. PALATINE	

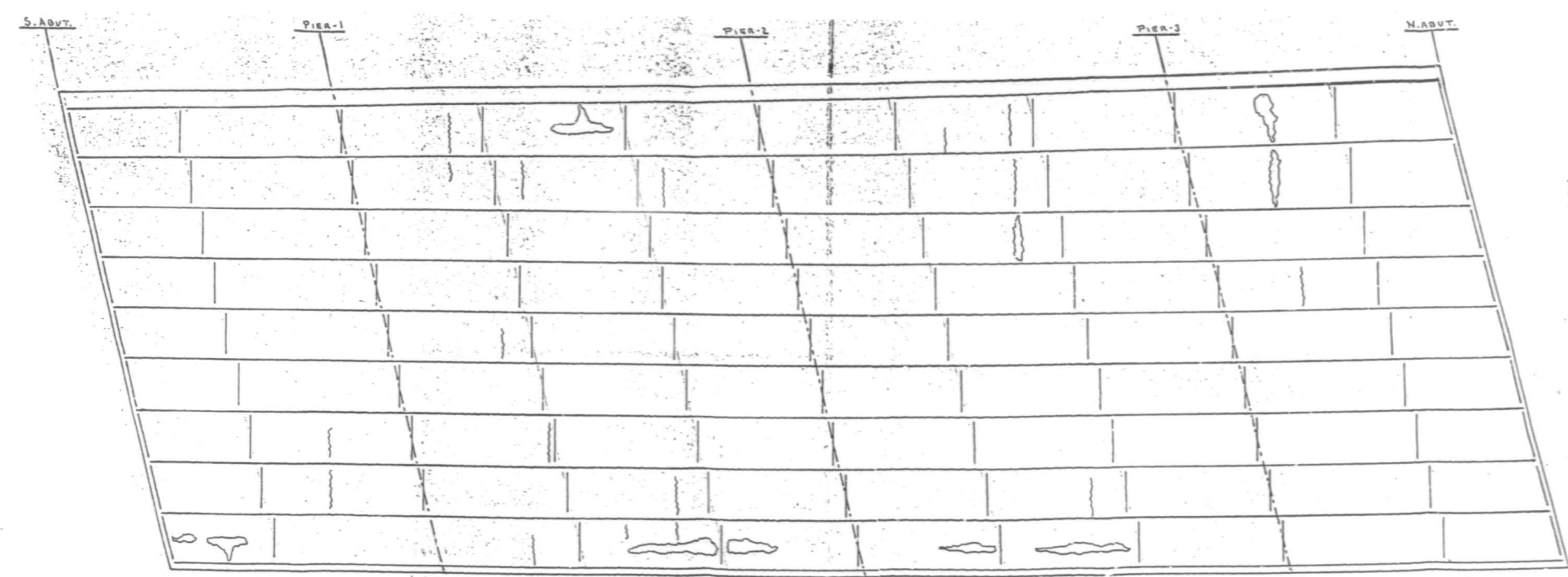
531(21, 3, 31)RS-1(89) 1990-116 BR
SHEET 4 OF 6



BRIDGE: 016A0970
DATE: 6/5/90
OPERATOR: MATECHICK SKEW 76-36'
COMMENTS: 53 SB/PALATINE

ROADWAY AREA: 1463 SY
DELAMINATED AREA: 77 SY
% DELAMINATED: 5 %

SCALE: HORIZONTAL 1" = 10'
VERTICAL 1" = 10'

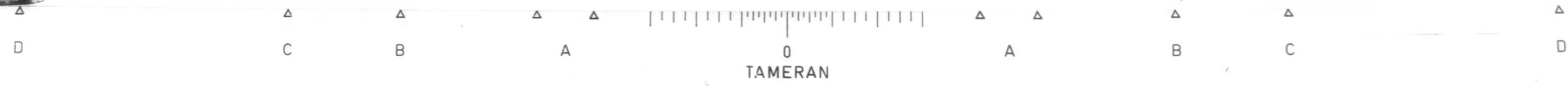


NOTE:
--- LEACHING CRACKS
--- LEACHING AREAS

BRIDGE: ILL 53 SB/PALATINE RD
BRIDGE No. 016-0970 *423
BOTTOM DECK SURVEY
FIELD DATA NM DATE 3/6/90
DRAWN BY NM DATE 3/8/90

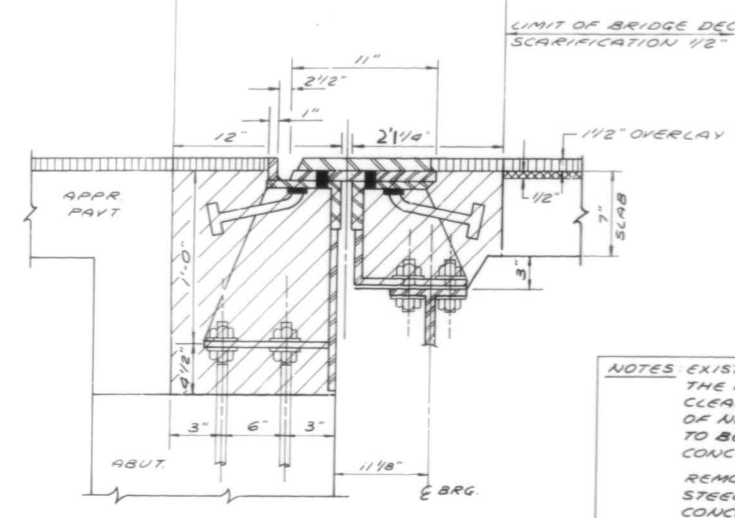
REVISIONS	
NAME	DATE

DEPARTMENT OF TRANSPORTATION
ILL. RTE. 53 @ PALATINE ROAD S.B.
BRIDGE REHABILITATION
STRUCTURE NO. 016-0970
DELAMTECT AND BOTTOM DECK SURVEY
DATE
CHECKED BY



F.A.D. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	*	COOK	211	178
STA.		TO STA.		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT	

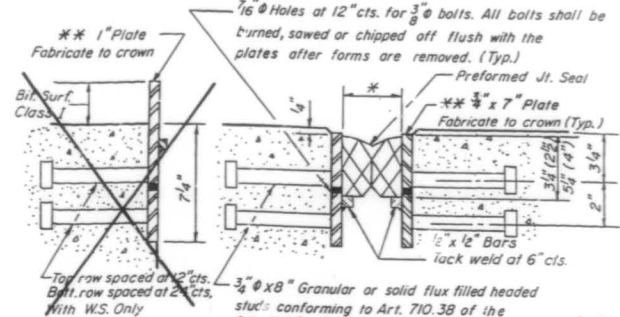
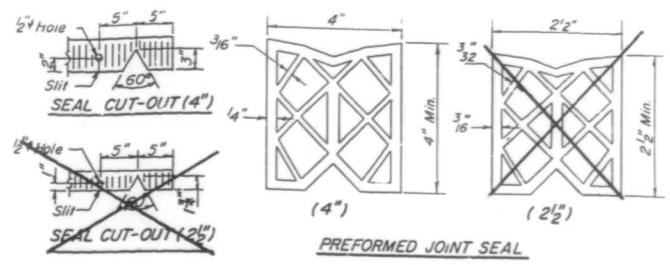
APPROACH PAVEMENT CONCRETE REMOVAL SPECIAL LIMIT OF BITUMINOUS CONCRETE SURFACE REMOVAL (DECK)
 LIMIT OF BRIDGE DECK SCARIFICATION 1/2"



SECTION A-A

SECTION THRU EXISTING JOINT AT N. AND S. ABUTMENT

NOTES: EXIST. REINFORCEMENT BARS IN THE REMOVAL AREAS SHALL BE CLEANED BEFORE PLACEMENT OF NEW CLASS X CONCRETE. (COST TO BE INCIDENTAL TO CLASS X CONCRETE).
 REMOVAL OF EXIST. STRUCTURAL STEEL SHALL BE INCIDENTAL TO CONCRETE REMOVAL SPECIAL.



7/16" Holes at 12" cts. for 3/8" bolts. All bolts shall be turned, sawed or chipped off flush with the plates after forms are removed. (Typ.)
 ** 1" Plate Fabricate to crown
 Bit. Surf. Class. 1
 7/4"
 3/8" x 1/2" Bars laced weld at 6" cts.
 Top row spaced at 12" cts. Bottom row spaced at 2" cts. With W.S. Only
 3/4" x 8" Granular or solid flux filled headed studs conforming to Art. 710.38 of the Std. Spec's. automatically end welded at 12" All cts.
 See End of Seal Cut-Out Detail
 1'-0" 50° (2 1/2") 2 3/4" at 50° F. (4")
 ** Furnish in segments of 20 ft. maximum length. Maximum space between installed segments shall be 7/16". Seal space with Silicone Sealant suitable for Structural Steel.

TYPICAL END OF SEAL TREATMENTS

Note: After fabrication all surfaces of the steel plates shall be given one shop coat of paint specified for Structural Steel.

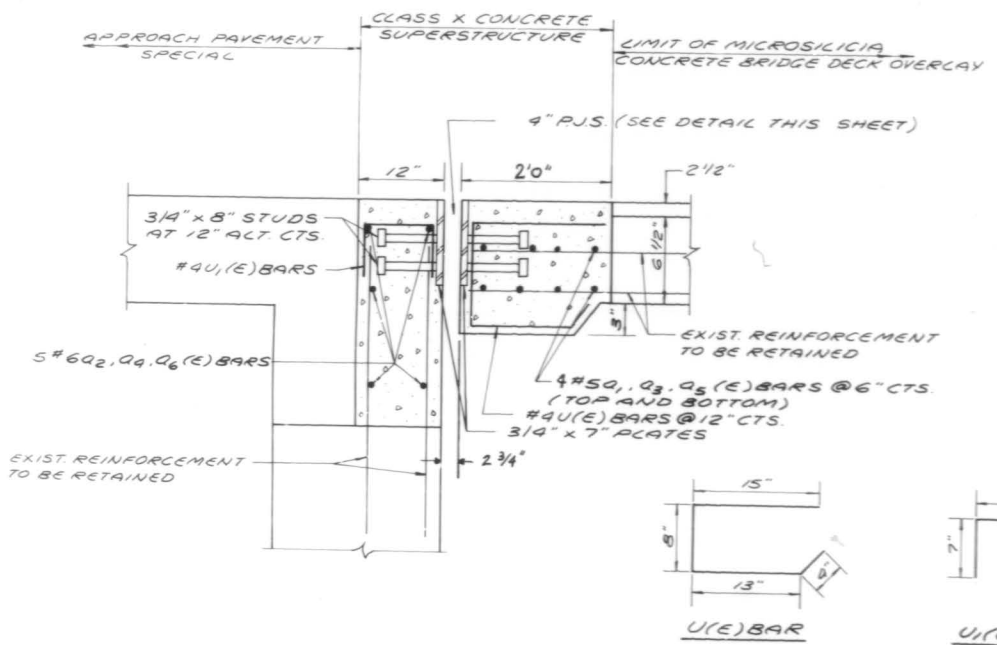
* 531(2,1,3,3,1)RS-1(B9)E/990-116BR SHEET 5 OF 6 BAR LIST (TWO ABUT)

BAR NO.	NO.	SIZE	LENGTH	SHAPE
Q1(E)	16	#5	27'-11"	---
Q2(E)	10	#6	27'-11"	---
Q3(E)	16	#5	22'-6"	---
Q4(E)	10	#6	22'-8"	---
Q5(E)	16	#5	20'-7"	---
Q6(E)	10	#6	20'-9"	---
U(E)	140	#4	3'-4"	□
U1(E)	140	#4	1'-11"	□

(E) DENOTES EPOXY COATED

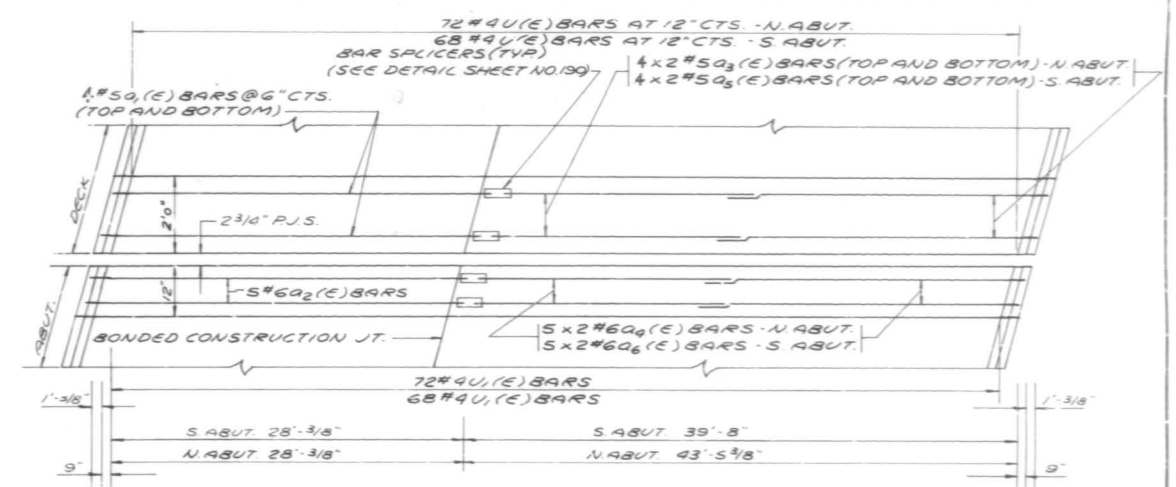
BILL OF MATERIALS (TWO ABUT)

ITEM	UNIT	QUANTITY
CONCRETE REMOVAL, SPECIAL	CU. YD.	18.0
REINFORCEMENT BARS (EPOXY COATED)	POUND	2978.0
CLASS X CONCRETE SUPERSTRUCTURE	CU. YD.	20.2
SAWING P.C. CONCRETE PAVEMENT, 3/4" LIN. FT.		367.0
FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	5485.0
PREFORMED JOINT SEAL, 4"	LIN. FT.	154.0
PROTECTIVE COAT	SQ. YD.	53.0



SECTION A-A

SECTION THRU PROPOSED JOINT AT N. AND S. ABUTMENT



PLAN OF PROPOSED JOINT AT N. AND S. ABUTMENT

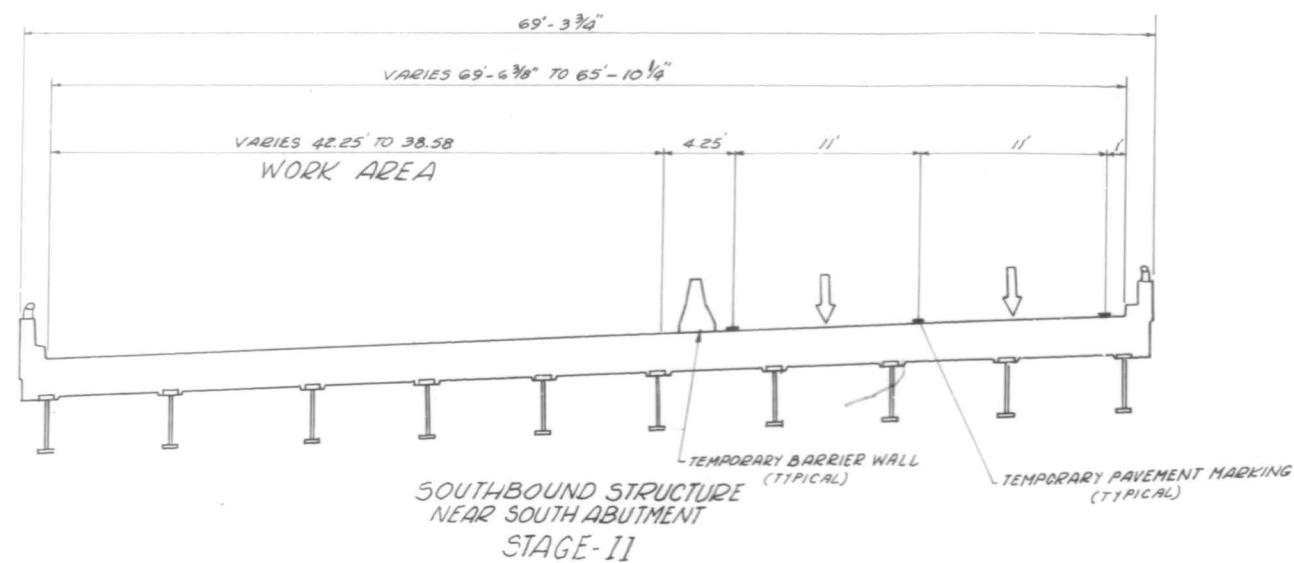
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 IL. RTE. 53 @ PALATINE ROAD
 (SOUTHBOUND LANES)
 STRUCTURE NO. 016-0970
 JOINT RECONSTRUCTION DETAILS
 SCALE: VERT. NONE HORIZ. DRAWN BY J.R.C.
 DATE CHECKED BY R.V.

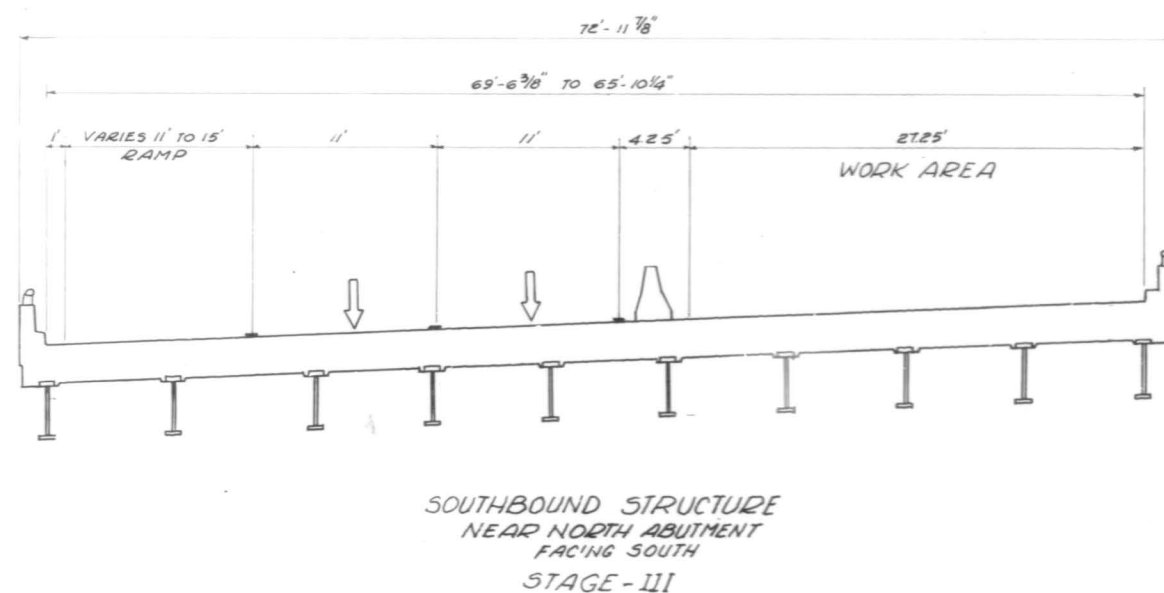


F.P.D. #	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	#	COOK	211	179
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

* 531(2,3,3.1)RS-1(89)§ 1990-116 BR
SHEET 6 OF 6



- STAGE II
- 1.) PLACE ALL TRAFFIC CONTROL AND REROUTE TRAFFIC TO **OUTSIDE LANES**
 - 2.) REMOVE EXISTING BRIDGE DECK BITUMINOUS OVERLAY 1 1/2"
 - 3.) SCARIFY BRIDGE DECK SLAB 1/2"
 - 4.) REMOVE EXISTING HANDRAIL AND REPLACE WITH A CONCRETE PARAPET RETROFIT
 - 5.) CONSTRUCT PARTIAL AND FULL DEPTH DECK SLAB REPAIRS
 - 6.) REMOVE EXISTING TRANSVERSE JOINTS
 - 7.) INSTALL PROPOSED PREFORMED JOINT SEAL OR NEOPRENE JOINTS
 - 8.) PLACE PROPOSED MICROSILICIA CONCRETE BRIDGE DECK OVERLAY 2 1/2"



- STAGE III
- 1.) RELOCATE ALL TRAFFIC CONTROL AND REROUTE TRAFFIC TO **INSIDE LANES**
 - 2.) REMOVE EXISTING BRIDGE DECK BITUMINOUS OVERLAY 1 1/2"
 - 3.) SCARIFY BRIDGE DECK SLAB 1/2"
 - 4.) REMOVE EXISTING HANDRAIL AND REPLACE WITH A CONCRETE PARAPET RETROFIT.
 - 5.) CONSTRUCT PARTIAL AND FULL DEPTH DECK SLAB REPAIRS
 - 6.) REMOVE EXISTING TRANSVERSE JOINTS
 - 7.) INSTALL PROPOSED PREFORMED JOINT SEAL OR NEOPRENE JOINTS
 - 8.) PLACE PROPOSED MICROSILICIA CONCRETE BRIDGE DECK OVERLAY 2 1/2"

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE-53
(SOUTHBOUND)
TYPICAL STAGING CROSS SECTION
STRUCTURE OVER PALATINE RD.
STRUCTURE NO. 016-0970
SCALE: VERT. DRAWN BY: RGM
 HORIZ. CHECKED BY: RY
DATE

