#86833 #95 9-8-98 VARIOUS ROUTES VARIOUS COUNTIES D-3 SCOUR 1998-1 I&R COPY #95

95

100%
5-18-2000

027-0052 & -0053

	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES AND SUMMARY OF QUANTITIES
3	DISTRICT LOCATION MAP
4	TYPICAL SECTIONS
5	QUANTITY SCHEDULES
6-7	FORD COUNTY INDIVIDUAL STRUCTURES
8-9	GRUNDY COUNTY INDIVIDUAL STRUCTURES
10-16	IROQUOIS COUNTY INDIVIDUAL STRUCTURES
17-20	KANKAKEE COUNTY INDIVIDUAL STRUCTURES
21-22	LASALLE COUNTY INDIVIDUAL STRUCTURES
23-27	LIVINGSTON COUNTY INDIVIDUAL STRUCTURES

STANDARDS

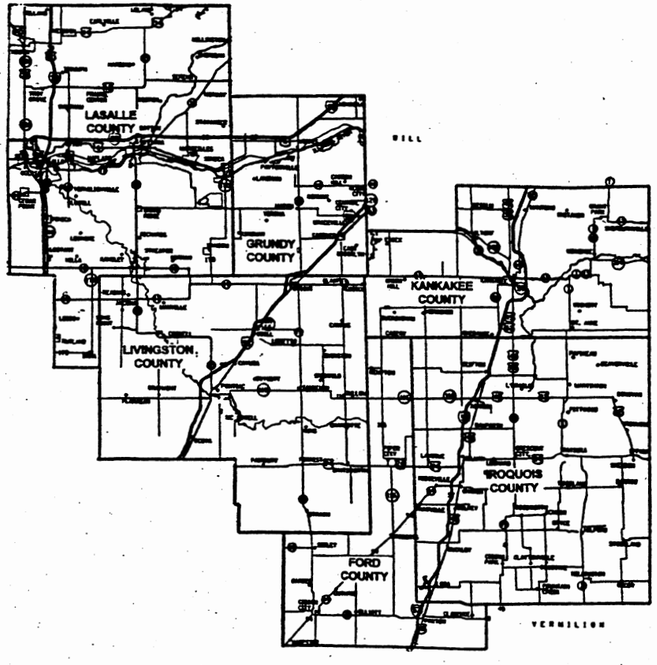
280001	Temporary Erosion Control Systems
664001	Chain Link Fence
701001	Off-Road Operations, 2-L, 2-W, 4.5 m (15') Min. Away, For Speeds ≥ 45 MPH
701006-01	Off-Road Opr., 2-L, 2-W, 4.5 m (15') To 600 mm (24"). Away, Speeds ≥ 45 MPH
701011	Off-Road Moving Operations, 2-L, 2-W, Day Only, For Speeds ≥ 45 MPH
701201	Lane Clos., 2-L, 2-W, Day Only, On-Rd To 600 mm Off-Road, Speeds ≥ 45 MPH
701301	Lane Closure, 2-L, 2-W, Short Time Operations, For Speeds ≥ 45 MPH
701406	Lane Closure, Multilane, Day Operations Only, For Speeds ≥ 45 MPH
702001	Traffic Control Devices

INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

VARIOUS ROUTES
D-3 SCOUR 1998-1
VARIOUS COUNTIES

C-93-058-98

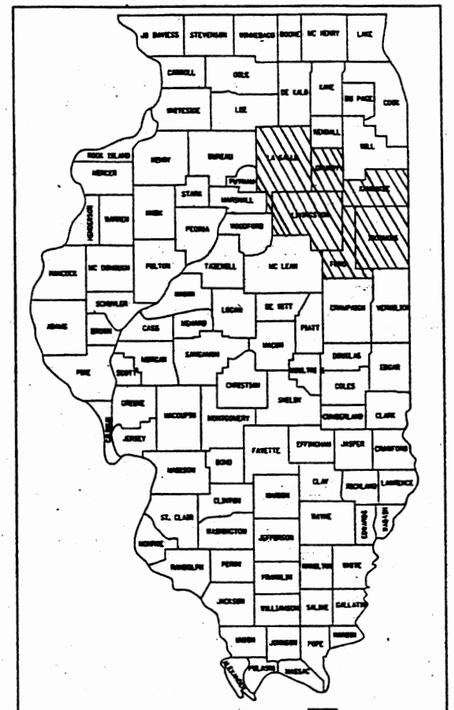


SEE DETAILED LOCATION MAPS ON FOLLOWING SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIOUS	*	VARIOUS	27	1
F.A.S.P. RTE. NO.		ILLINOIS PROJECT		

*D-3 SCOUR 1998-1

D-93-074-97



LOCATION OF SECTION INDICATED THUS:

MICROFILMED _____
REEL NUMBER _____
AWARDED _____
RESIDENT ENGINEER _____
AS BUILT CHANGES WERE MADE
ON THE FOLLOWING SHEETS _____

JULIE 1-800-892-0123

DISTRICT 3 NO. (815) 434-6131

PROJECT ENGINEER: RICK POWELL
UNIT CHIEF: BRAD CRESTO
TOWNSHIP: VARIOUS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED MARCH 24 1998
James J. Zeigler
DISTRICT ENGINEER

PASSED June 19 1998
Bill Junker
ENGINEER OF DESIGN AND ENVIRONMENT

APPROVED June 19 1998
James R. Sigl
DIRECTOR, DIVISION OF HIGHWAYS

CONTRACT NO. 86833 027-0052(SB) 0053(NB)

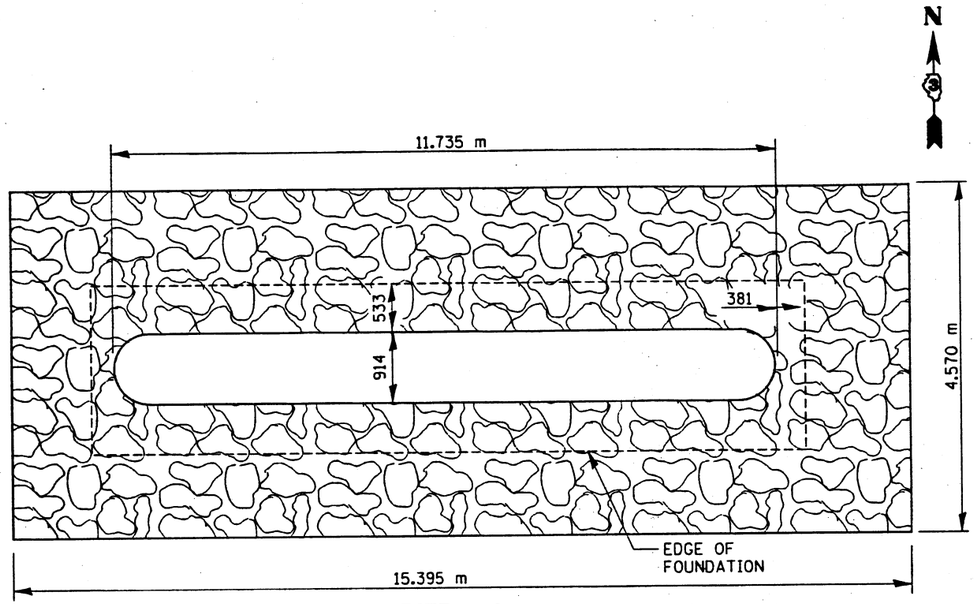
3-206

VARIOUS COUNTY SECTION: D-3 SCOUR 1998-1 ROUTE: VARIOUS

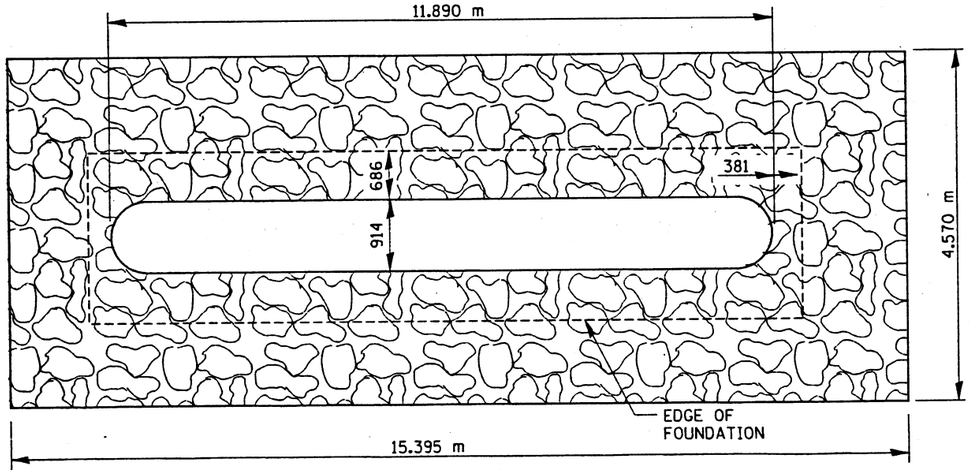
DEC. 12 1998
\MDOT49\DETAILS.DGN

F.A. - RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIOUS	*	VARIOUS	27	7
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

* D-3 SCOUR 1998-1



PIER #2

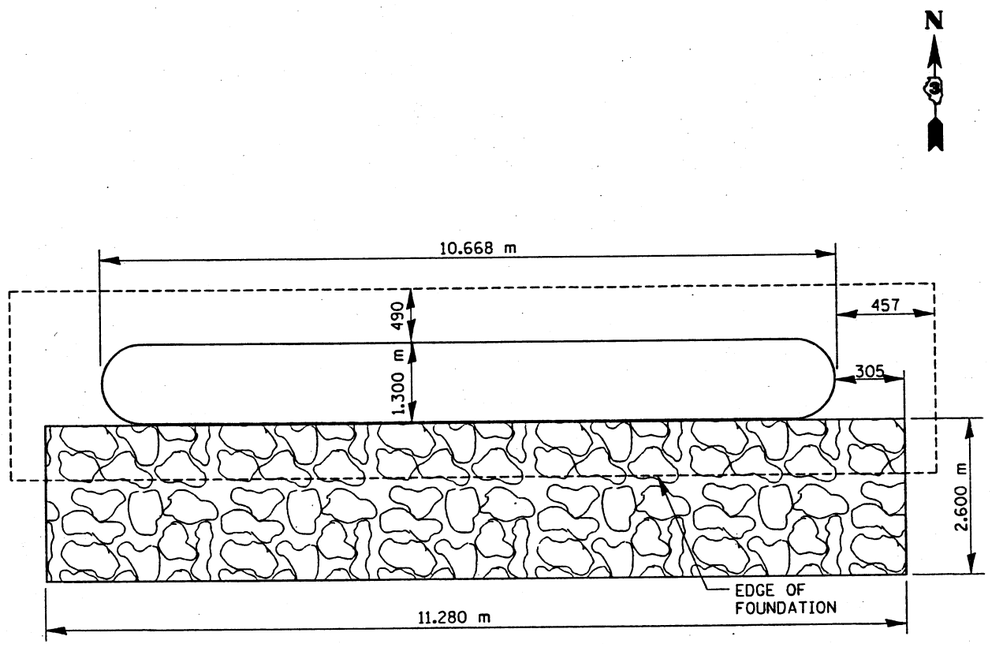


PIER #3

RIPRAP AND FABRIC 1.830 m OFF EACH FACE OF PIER

NOTE: FOR SPREAD FOOTING THICKNESS SEE TABLE ON SHEET 4

STR. # 027-0052 AND
STR. # 027-0053
PIER #2 AND PIER #3



RIPRAP AND FABRIC 2.6 m FROM SOUTH FACE OF PIER

NOTE: FOR SPREAD FOOTING THICKNESS SEE TABLE ON SHEET 4

NOT TO SCALE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

NOTE: SEE SPECIAL PROVISIONS "PRAIRIE REMNANTS - LIMITED ACCESS"

STR. # 027-0012
NORTH PIER

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

FORD COUNTY
STR. #'S 027-0052,
027-0053 AND 027-0012

Mar. 12 1998
\MD07497\DETAILS .DGN

39

99.9%
6-7-1999

INDEX OF SHEETS

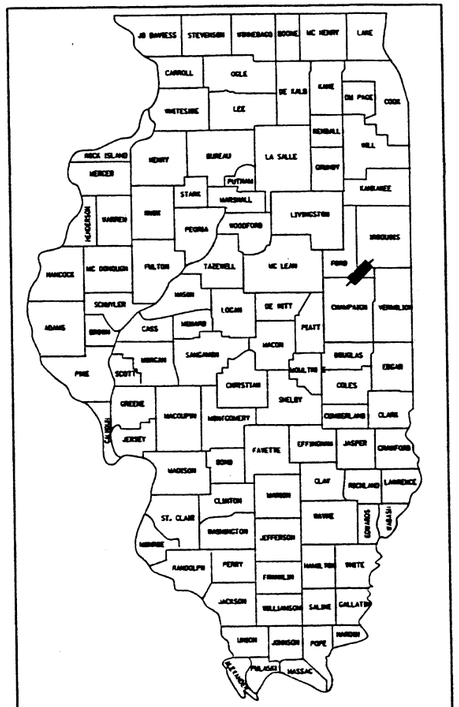
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

F.A.I. 57
SECTION (27–38,27–1)RS
PROJECT ACIM-57-5(176)257
FORD COUNTY

C–93–095–97

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	*	FORD	53A	1
F.A.P.R. REG. NO.		ILLINOIS PROJECT		

*(27-38,27-1)RS
P–93–023–97
D–93–071–97



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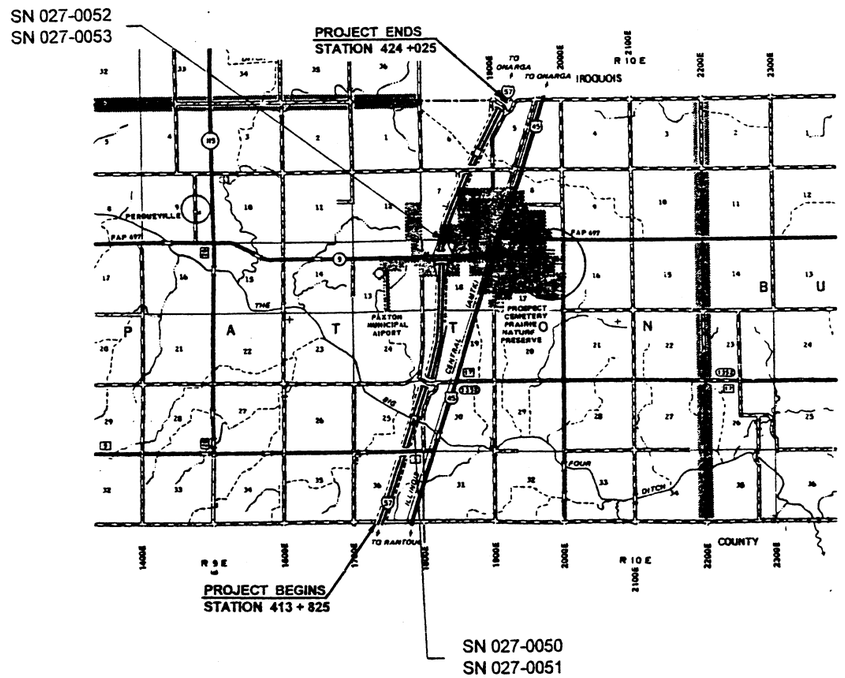
LOCATION OF SECTION INDICATED THUS: -■-



1998 ADT = 17,600
P.C. = 74.1% S.U. = 2.9% M.U. = 23.0%
DESIGN DESIGNATION – INTERSTATE

GROSS & NET LENGTH = 10,200 m = 10.2 km

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED September 4 19 97
DISTRICT ENGINEER
PASSED October 3 19 97
ENGINEER OF DESIGN AND ENVIRONMENT
APPROVED October 3 19 97
DIRECTOR, DIVISION OF HIGHWAYS

MICROFILMED _____
REEL NUMBER _____
AWARDED _____
RESIDENT ENGINEER _____
AS BUILT CHANGES WERE MADE
ON THE FOLLOWING SHEETS _____

JULIE 1-800-892-0123

DISTRICT 3 NO. (815) 434–6131

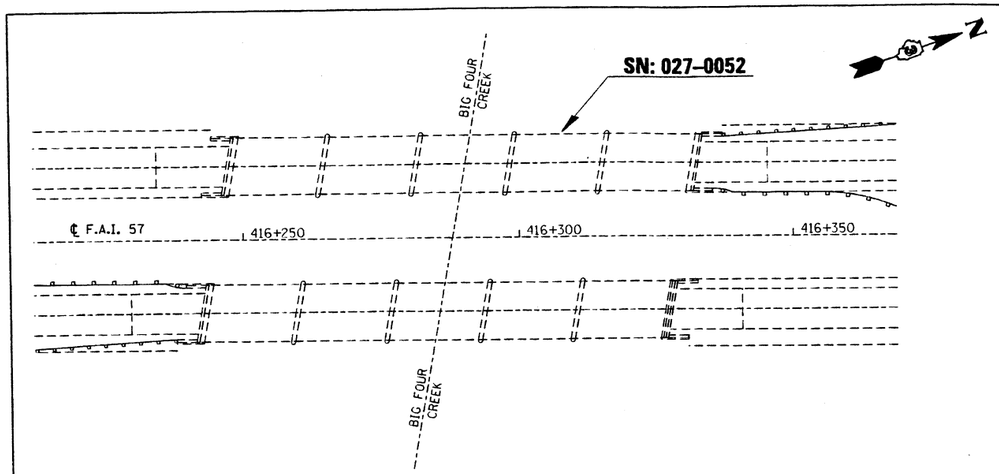
PROJECT ENGINEER: W. ALDRICH
UNIT CHIEF: R. MULHOLLAND
TOWNSHIP: PATTON

CONTRACT NO. 86789 027-0052 & 0053

JULY 7, 1997
ZFB5: (MF02397) DETAILS

3-202

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	(27-38,27-1)RS	FORD	53	36
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

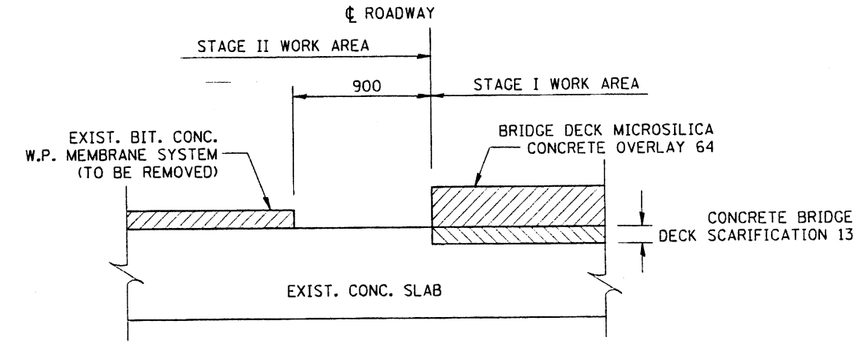


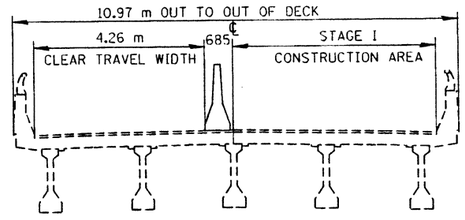
SN 027-0052

BILL OF MATERIALS

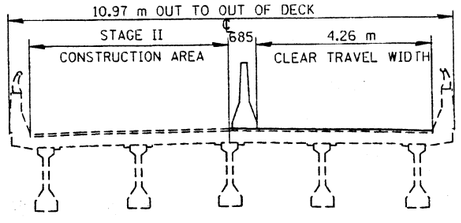
	CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	DECK QUANTITY	N-ABUT QUANTITY	S-ABUT QUANTITY
	M4402110	BITUMINOUS CONCRETE REMOVAL (DECK)	SQ M	893	893		
	M5030710	FORMED CONCRETE REPAIR (DEPTH EQUAL TO LESS THAN 125MM)	SQ M	1.6		1.2	0.4
	M5900100	EPOXY CRACK SEALING	METER	10.6		4.8	5.8
	MZ006110	BRIDGE DECK MICROSILICA CONCRETE OVERLAY	SQ M	893	893		
	MZ006200	BRIDGE DECK SCARIFICATION	SQ M	893	893		
	MZ016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ M	23	23		
	MZ016200	DECK SLAB REPAIR (PARTIAL)	SQ M	25.4	25.4		
*	Z0015595	DECK DRAIN EXTENSIONS	EACH	44	44		

NOTE: 0.5 SQM DECK SLAB REPAIR (PARTIAL) FOR EACH DECK DRAIN
0.5 SQM DECK SLAB REPAIR (FULL DEPTH,TYPE I) FOR EACH DECK DRAIN TO BE PLUGGED
* FOR DETAILS SEE SHEET 53 OF 53



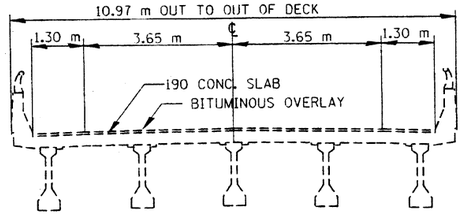


STAGE I

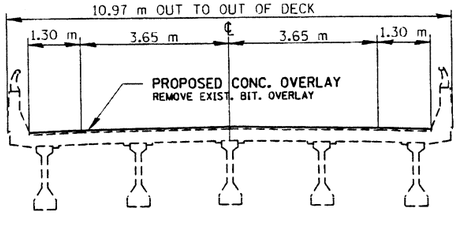


STAGE II

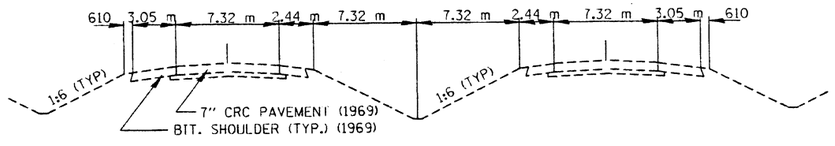
STAGE CONSTRUCTION DIAGRAM



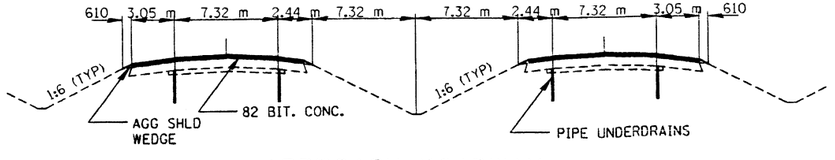
EXISTING TYPICAL SECTION



PROPOSED TYPICAL SECTION



APPROACH ROADWAY
EXISTING TYPICAL SECTION



APPROACH ROADWAY
PROPOSED TYPICAL SECTION

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PLAN VIEW & SUMMARY

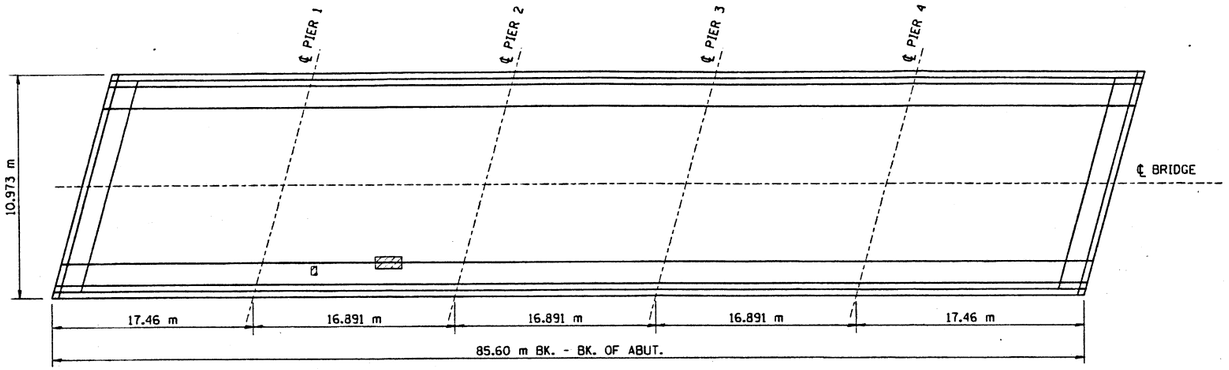
SN: 027-0052

DRAWN BY

DATE CHECKED BY

AUG. 25, 1997
ZFB5: [MPO2397] DETAILS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	(27-38,27-1)RS	FORD	53	37
STA.		TO STA.		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

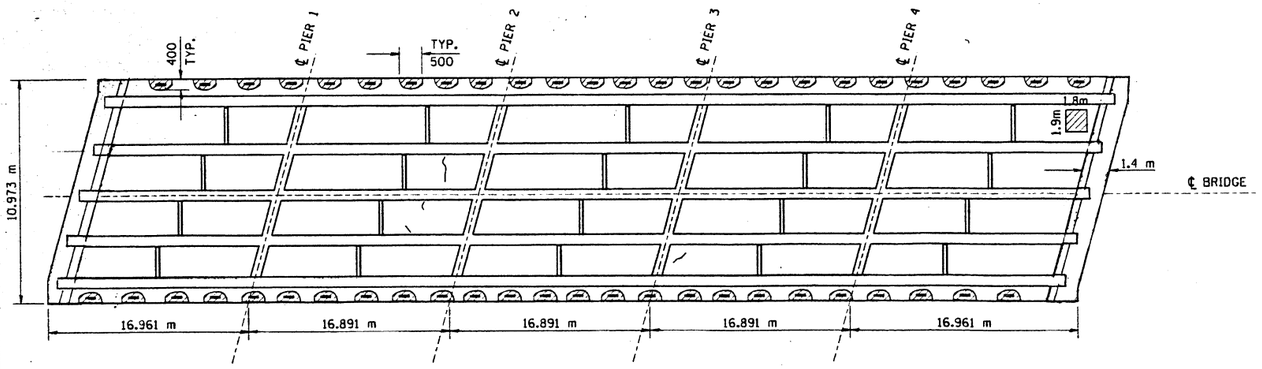


BRIDGE DECK INSPECTION

DELAMINATION

DECK SURVEY DATE: APRIL 15, 1997

NOTE: THE ENGINEER WILL MARK THE LOCATIONS OF THE REPAIRS IN THE AS BUILT PLANS



PARTIAL DEPTH DECK REPAIR

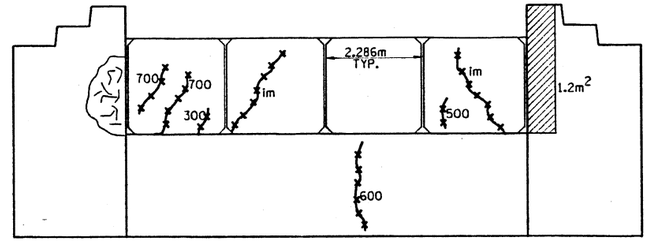
FLOOR DRAIN WITH ADJACENT DELAMINATION OR SPALLING (TYP.)
TO BE REPAIRED USING DECK SLAB REPAIR (SEE SHEET 42 OF 53)

CRACKS WITH EFFLORESCENCE (TYP.)

NOTES:
OTHER MINOR CRACKS AND POPOUTS THROUGHOUT
DISCOLORATION AND/OR SHALLOW DELAMINATION ON PPC BEAMS BELOW DECK DRAINS (FLANGES & WEB)
DISCOLORATION MAY INDICATE LEACHING

UNDERDECK SURVEY

S.N. 027-0052
INTERSTATE 57 (NB)
SECTION 27-IVB
FORD COUNTY



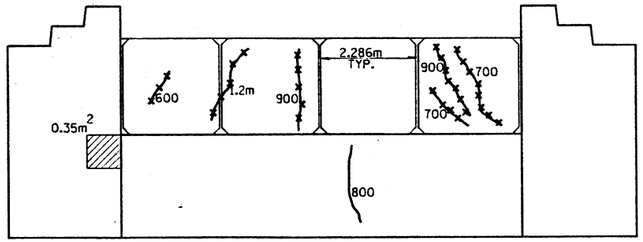
NORTH ABUTMENT ELEVATION

LOOKING NORTH

FORMED CONCRETE REPAIR ≤ 125

MAP CRACKING

CRACK WITH EFFLOURESCENCE



SOUTH ABUTMENT ELEVATION

LOOKING SOUTH

FORMED CONCRETE REPAIR ≤ 125

CRACK WITH EFFLOURESCENCE

EPOXY CRACK REPAIR

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

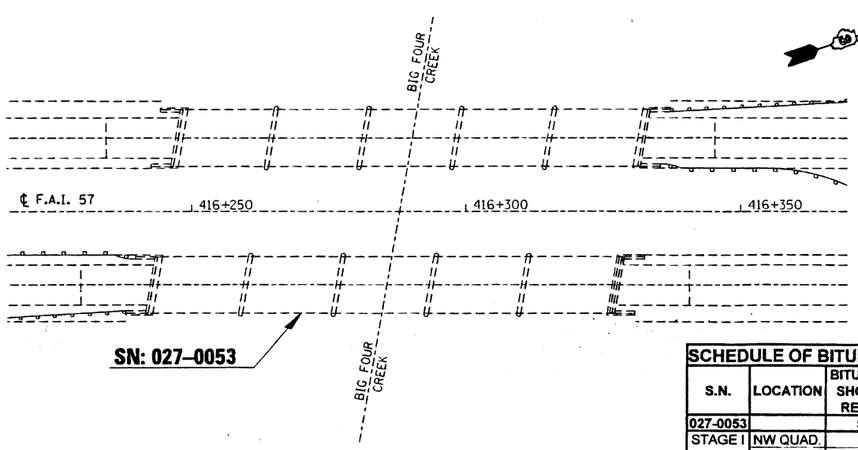
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STRUCTURE NO. 027-0052

JULY 9, 1997
ZFBS:MP02397DETAILS.DGN

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	(27-38,27-1)RS	FORD	53	38
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



SCHEDULE OF BITUMINOUS SHOULDERS

S.N.	LOCATION	BITUMINOUS SHOULDER REMOVAL	BITUMINOUS SHOULDERS 250mm
027-0053		SQ M	SQ M
STAGE I	NW QUAD.	223	223
	SW QUAD.	182	182
STAGE II	NE QUAD.	156	156
	SE QUAD.	115	115
TOTAL		676	676

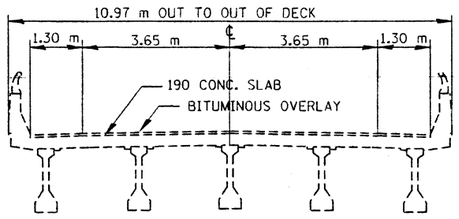
SN 027-0053

BILL OF MATERIALS

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	DECK QUANTITY	N-ABUT QUANTITY	S-ABUT QUANTITY	ROADWAY QUANTITY
M4402110	BITUMINOUS CONCRETE REMOVAL (DECK)	SQ M	928	928			
M4402120	BITUMINOUS CONCRETE SHOULDER REMOVAL	SQ M	676				676
M4820250	BITUMINOUS SHOULDERS 250MM	SQ M	676				676
M5010240	CONCRETE REMOVAL	CU M	7.5	7.5			
M5030030	PREFORMED JOINT SEAL 64MM	METER	22.5	22.5			
M5030360	CONCRETE SUPERSTRUCTURES	CU M	7.5	7.5			
M5030710	FORMED CONCRETE REPAIR (DEPTH EQUAL TO LESS THAN 125MM)	SQ M	4.3		2.1	2.2	
M5050405	FURNISHING AND ERECTING STRUCTURAL STEEL	KG	2030	2030			
M5080205	REINFORCEMENT BAR, EPOXY COATED	KG	2962	2962			
M5900100	EPOXY CRACK SEALING	METER	9.3		5.3	4	
M6610300	BITUMINOUS SHOULDER CURB	METER	296				296
MZ006110	BRIDGE DECK MICROSILICA CONCRETE OVERLAY	SQ M	893	893			
MZ006200	BRIDGE DECK SCARIFICATION	SQ M	893	893			
MZ016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ M	23	23			
MZ016200	DECK SLAB REPAIR (PARTIAL)	SQ M	25.1	25.1			
* Z0015595	DECK DRAIN EXTENSIONS	EACH	44	44			
Z0037400	BAR SPLICERS	EACH	38	38			
MX032196	POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ M	15	15			

NOTE: 0.5 SQM DECK SLAB REPAIR (PARTIAL) FOR EACH DECK DRAIN
0.5 SQM DECK SLAB REPAIR (FULL DEPTH,TYPE I) FOR EACH DECK DRAIN TO BE PLUGGED

* FOR DETAILS SEE SHEET 53 OF 53.



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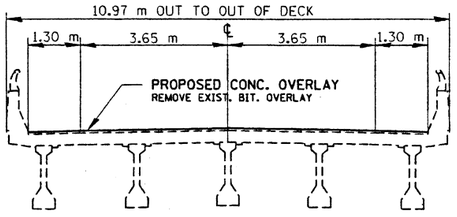

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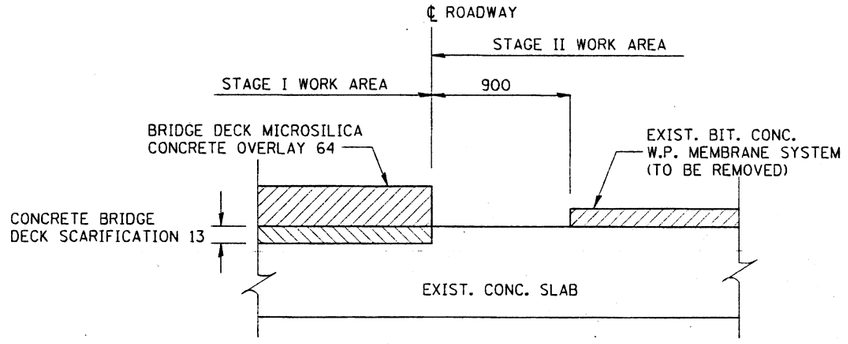
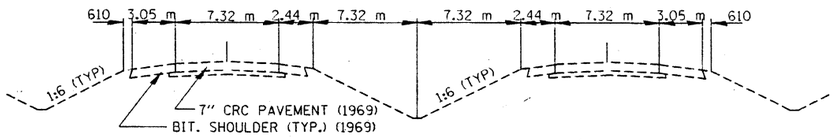
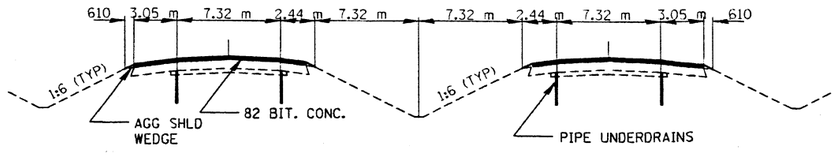
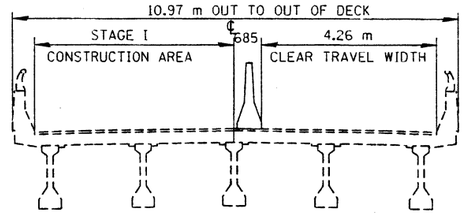




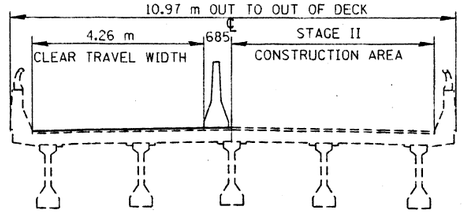
APPROACH ROADWAY
EXISTING TYPICAL SECTION



APPROACH ROADWAY
PROPOSED TYPICAL SECTION



STAGE I



STAGE II

STAGE CONSTRUCTION DIAGRAM

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

REVISIONS NAME	DATE

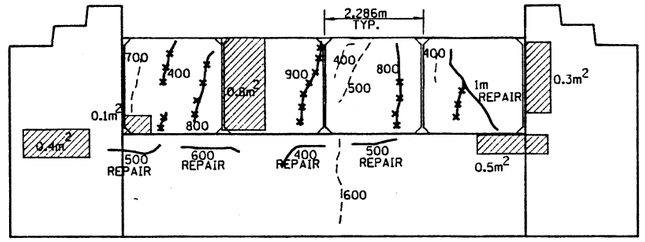
ILLINOIS DEPARTMENT OF TRANSPORTATION

PLAN VIEW & SUMMARY
SN: 027-0053

DRAWN BY
DATE CHECKED BY

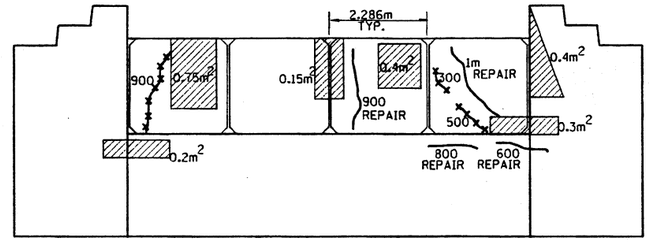
AUG. 25, 1997
ZFB5: [MP02397] DETAILS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	(27-38,27-1)RS	FORD	53	39
STA.		TO STA.		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		



NORTH ABUTMENT ELEVATION

LOOKING NORTH

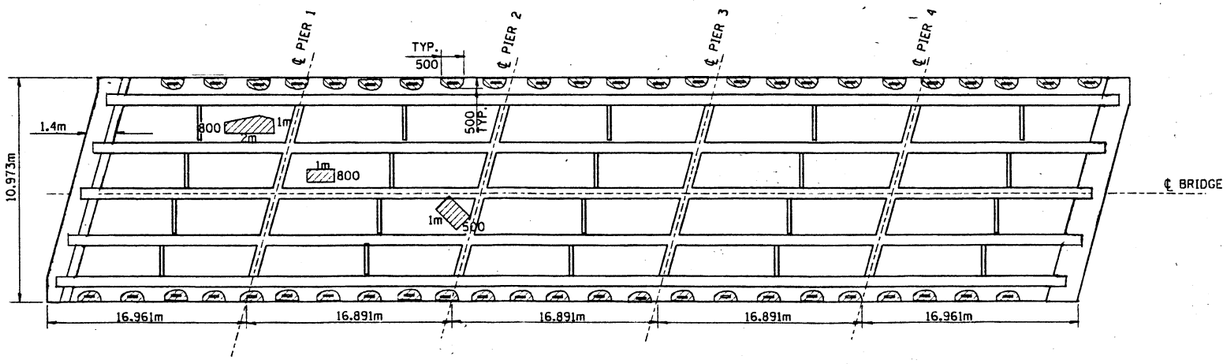


SOUTH ABUTMENT ELEVATION

LOOKING SOUTH

FORMED CONCRETE REPAIR ≤ 125mm 2.1m²
EPOXY CRACK REPAIR 3.0m
CRACK WITH EFFLOURESCENCE
CRACKING

FORMED CONCRETE REPAIR ≤ 125mm 2.2m²
EPOXY CRACK REPAIR 3.3m
CRACK WITH EFFLOURESCENCE



PARTIAL DEPTH DECK REPAIR

FLOOR DRAIN WITH ADJACENT DELAMINATION OR SPALLING (TYP.)
TO BE REPAIRED USING DECK SLAB REPAIR (SEE SHEET 43 OF 53)

CRACKS WITH EFFLORESCENCE (TYP.)

NOTES:
OTHER MINOR CRACKS AND POPOUTS THROUGHOUT
DISCOLORATION AND/OR SHALLOW DELAMINATION ON PPC BEAMS BELOW DECK DRAINS (FLANGES & WEB)
DISCOLORATION MAY INDICATE LEACHING

UNDERDECK SURVEY

S.N. 027-0053
INTERSTATE 57 (NB)
SECTION 27-IVB
FORD COUNTY

NOTE: THE ENGINEER WILL MARK THE LOCATIONS OF THE REPAIRS IN THE AS BUILT PLANS

DECK SURVEY DATE: APRIL 15, 1997

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STRUCTURE NO. 027-0053

JUNE 19, 1997
ZFBS(NP02397)DETAILS.DGN

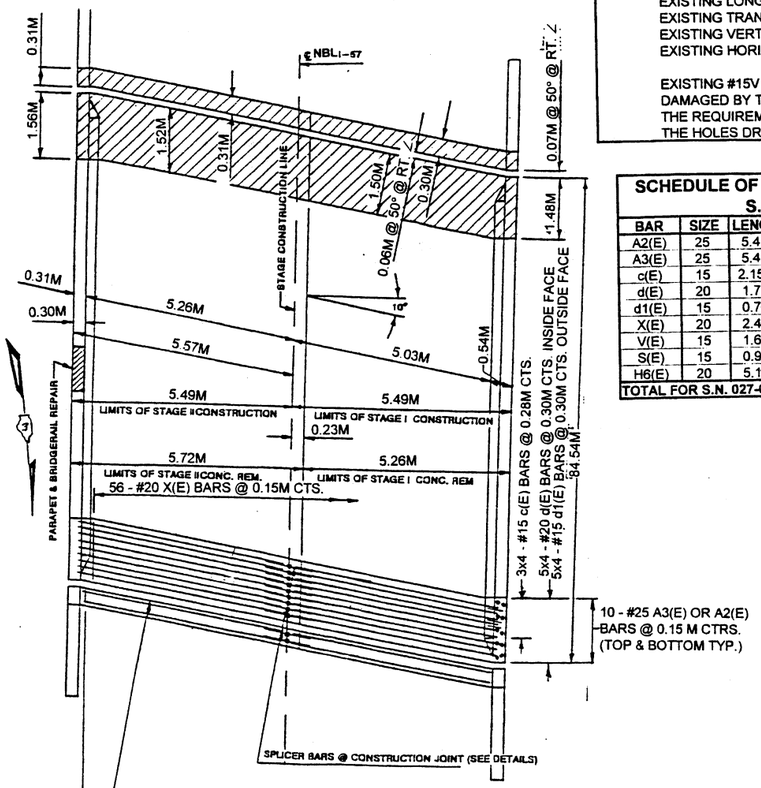
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	(27-38,27-1)RS	FORD	53	40
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

NOTES: EXISTING a, d & d1 BARS IN PARAPETS SHALL BE REPLACED WITH C, D, D1 BARS.
EXISTING LONGITUDINAL b & b1 BARS IN DECK ARE TO BE SALVAGED IN PLACE.
EXISTING TRANSVERSE 20 mm DIA. THREADED RODS AT BEAM ENDS ARE TO BE SALVAGED IN PLACE.
EXISTING VERTICAL v4 BARS IN ABUTMENTS SHALL BE SALVAGED IN PLACE.
EXISTING HORIZONTAL & VERTICAL BARS IN WINGWALLS SHALL BE SALVAGED IN PLACE.

EXISTING #15V BARS AND ANY EXISTING REINFORCEMENT BARS, TO REMAIN IN PLACE, THAT ARE DAMAGED BY THE CONTRACTOR SHALL BE REPLACED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 534 OF THE STANDARD SPECIFICATIONS.
THE HOLES DRILLED SHALL BE 230 mm DEEP.

SCHEDULE OF REINFORCEMENT BARS
S.N. 027-0053

BAR	SIZE	LENGTH	NUMBER	KG	SHAPE
A2(E)	25	5.41M	40	849.37	
A3(E)	25	5.41M	40	849.37	
c(E)	15	2.155M	12	40.60	
d(E)	20	1.75M	20	82.43	
d1(E)	15	0.76M	20	23.86	
X(E)	20	2.41M	112	635.66	
V(E)	15	1.63M	70	179.14	
S(E)	15	0.99M	70	108.80	
H6(E)	20	5.11M	16	192.54	
TOTAL FOR S.N. 027-0053				2961.77	

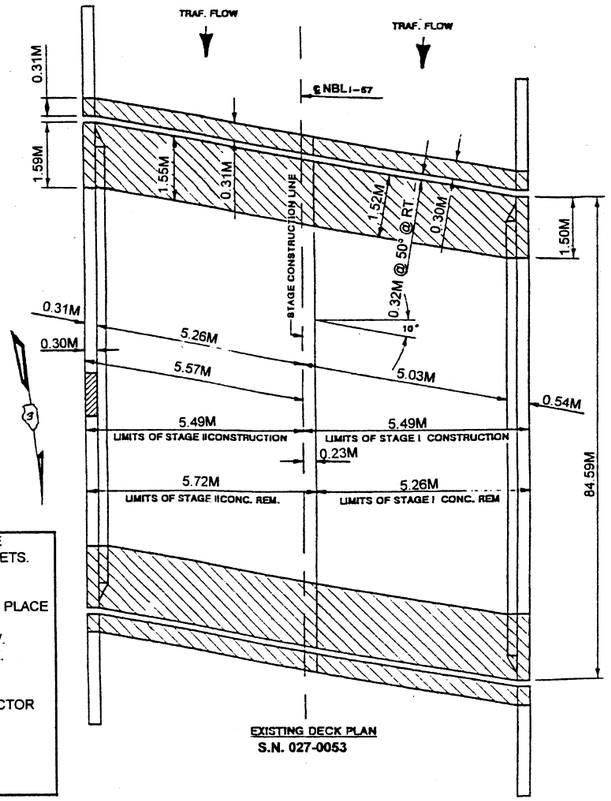


PROPOSED DECK PLAN
S.N. 027-0053

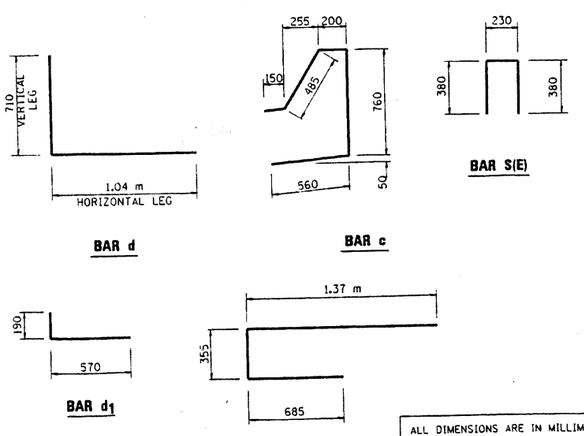
NOTES: THE LIMITS OF ALL CONCRETE REMOVAL SHALL BE SAW CUT 20 mm INTO CONCRETE
THIS SHALL INCLUDE BOTTOM OF DECK AND FACE & SIDES OF WINGWALLS & PARAPETS.

EXIST. LONGITUDINAL b & b1 BARS IN DECK ARE TO BE SALVAGED IN PLACE.
EXIST. TRANS. 20 mm DIA. THREADED RODS AT BEAM ENDS ARE TO BE SALVAGED IN PLACE
EXIST. VERTICAL V-4 BARS IN ABUT. SHALL BE SALVAGED IN PLACE.
EXIST. VERTICAL V BARS IN ABUT. SHALL BE SAWED OFF FLUSH AT BEAM SEAT ELEV.
EXIST. HORIONTAL. & VERTICAL BARS IN WINGWALLS SHALL BE SALVAGED IN PLACE.
EXIST. HORIZONTAL REINFORCEMENT IN PARAPETS SHALL BE SALVAGED IN PLACE.

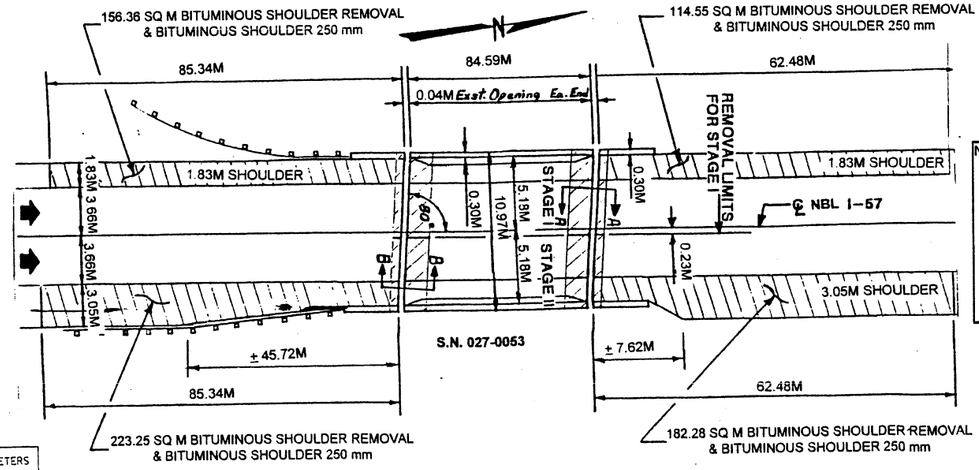
ANY EXISTING REBARS, TO REMAIN IN PLACE, THAT ARE DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 584 OF THE STANDARD SPECIFICATIONS.
THE HOLES DRILLED SHALL BE 23 mm DEEP
THE REPLACEMENT BAR SHALL BE THE SAME DIAMETER AND 23 mm LONGER THAN THE ORIGINAL.



EXISTING DECK PLAN
S.N. 027-0053



ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.



S.N. 027-0053

NOTES: THE LIMITS OF BIT. SHLDR. REMOVAL & REPLACEMENT SHALL BE FULL DEPTH SAW CUT PRIOR TO REMOVAL

LIMITS OF CONCRETE REMOVAL & REPLACEMENT AT DECK SHALL BE SAW CUT 60mm (20 mm MAX INTO CONCRETE)

LIMITS OF CONCRETE REMOVAL & REPLACEMENT AT ABUTMENT SHALL BE SAW CUT 50 mm (20 mm MAX INTO CONCRETE)

LIMITS OF CONCRETE REMOVAL & REPLACEMENT AT PARAPETS SHALL BE SAW CUT 20 mm MAX INTO CONCRETE

REVISIONS	
NAME	DATE
M.W.W.	1-12-95

ILLINOIS DEPARTMENT OF TRANSPORTATION

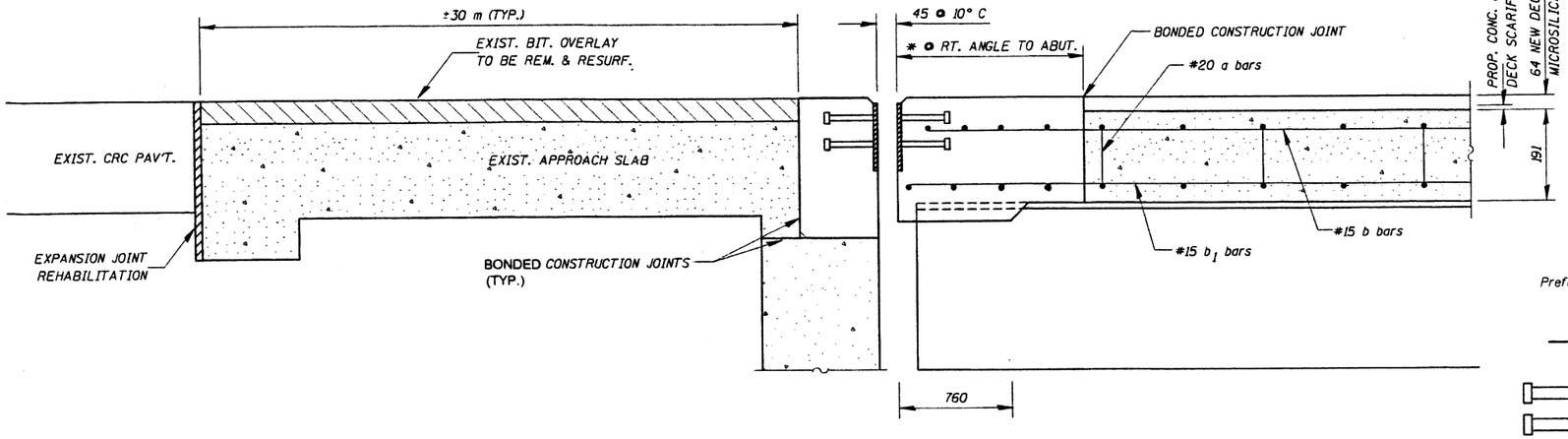
S.N. 027-0053

DRAWN BY
CHECKED BY
DATE

JAN. 11, 1995
I:\DETAILS\M200499.DGN
220-2

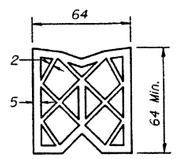
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	(27-38,27-1)RS	FORD	53	42
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

* SEE BRIDGE PLAN SHEET FOR EXACT DIMENSION

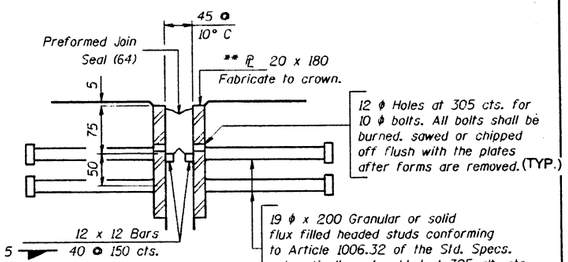


SOUTH ABUTMENT

(DIMENSIONS ARE AT RIGHT ANGLES TO ABUTMENTS UNLESS NOTED)

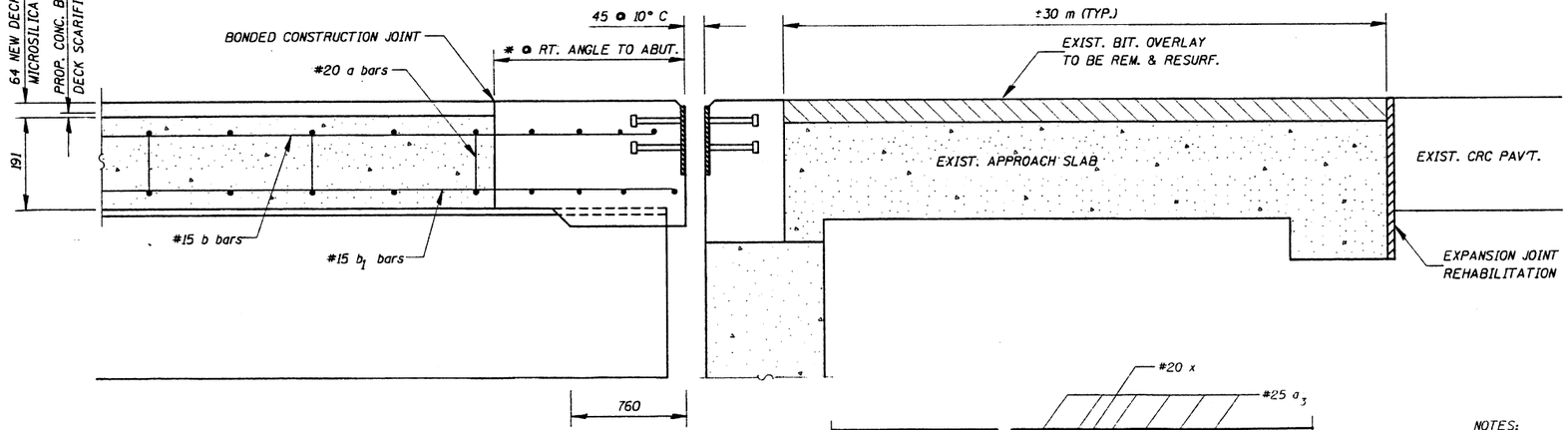


PREFORMED JOINT SEAL (64)



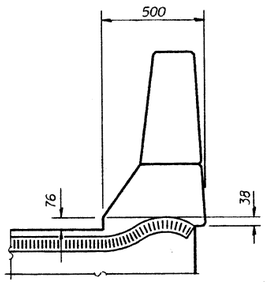
** Furnish in segments of 6 m maximum length. Maximum space between installed segments shall be 5. Seal space with Silicone Sealant suitable for Structural Steel.

* SEE BRIDGE PLAN SHEET FOR EXACT DIMENSION

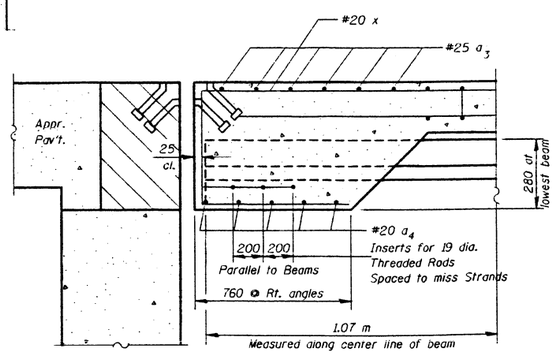


NORTH ABUTMENT

(DIMENSIONS ARE AT RIGHT ANGLES TO ABUTMENTS UNLESS NOTED)



TYPICAL END OF SEAL TREATMENT



EXISTING DECK REINFORCEMENT

PREFORMED JOINT SEAL 64 DETAIL

NOTES:
All dimensions are in millimeters unless otherwise shown.

Existing expansion joints shall be removed and replaced with PREFORMED JOINT SEAL 64

Removal of the existing expansion joint structural steel is incidental to Concrete Removal.

Existing transverse reinforcement bars in repair areas shall be removed and replaced with Epoxy Coated bars. All other reinforcement bars shall be saved, cleaned and incorporated into the new concrete.

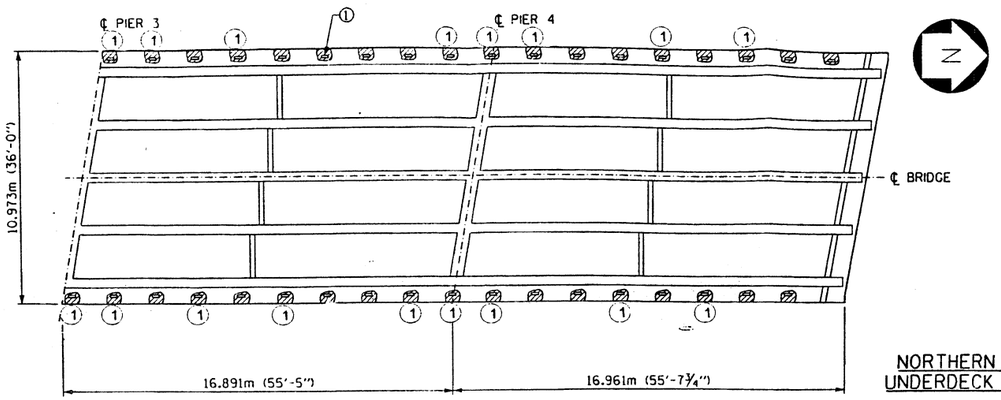
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

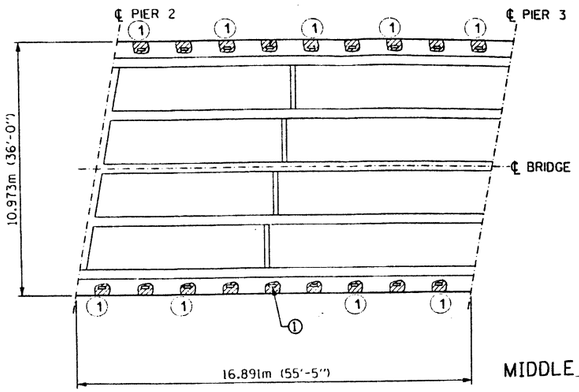
DETAILS FOR SN: 027–0051 SN: 027–0053

AUG. 29, 1997
ZFBS\IMP02397\DETAILS.DGN

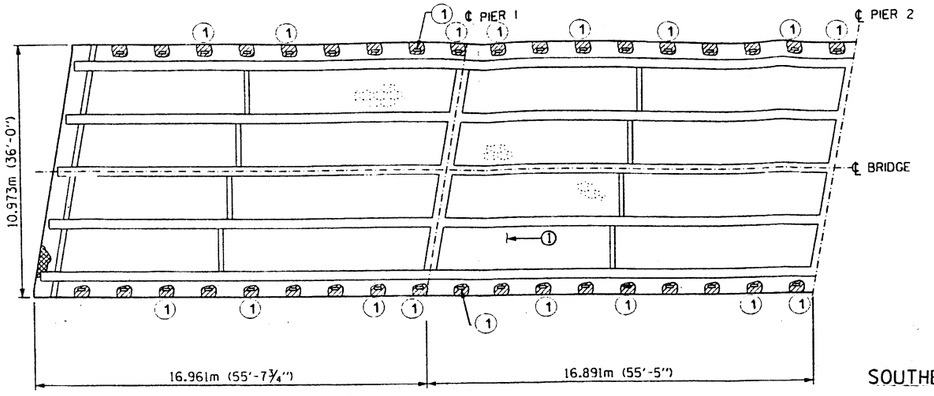
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	(27-38,27-1)RS	FORD	53	43
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



NORTHERN SPANS
UNDERDECK SURVEY



MIDDLE_SPAN



SOUTHERN SPANS

① Floor drains to be removed and plugged using Deck Slab Repair (Full Depth Type 1)
OTHER DRAINS TO BE REPAIRED USING DECK SLAB REPAIR (PARTIAL) (TYP.)

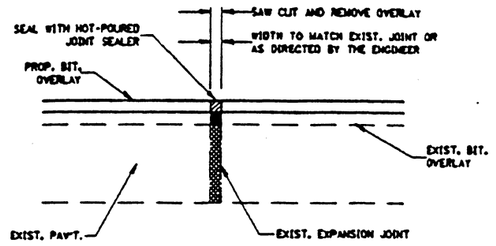
LAYOUT AND REMOVAL OF EXISTING DECK DRAINS IS THE SAME FOR BOTH STRUCTURES

ALL DIMENSIONS ARE IN MILLIMETERS
UNLESS OTHERWISE SHOWN.

JULY 7, 1997
ZFB5LNMP02397DETAILS.DGN

SN: 027-0052 & SN: 027-0053 DECK DRAIN DETAILS

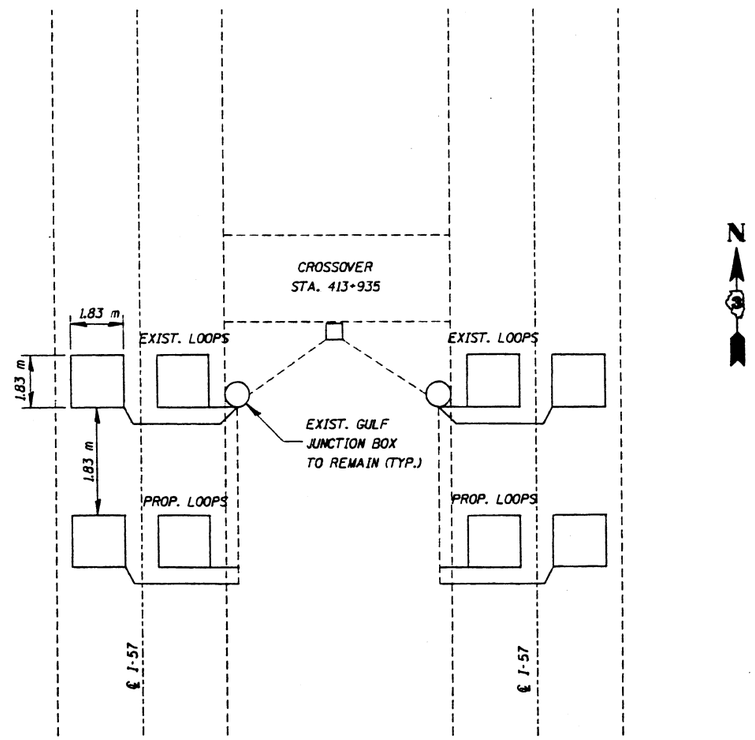
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	(27-38.27-1)RS	FORD	53	53
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXPANSION JOINT REHABILITATION DETAIL

GENERAL NOTES:

1. THE NEW BITUMINOUS OVERLAY SHALL BE SAWED, REMOVED, AND THE JOINT AREA CLEANED, PRIOR TO PLACING THE HOT-POURED JOINT SEALER THE JOINT SHALL BE BLOWN OUT WITH COMPRESSED AIR.
2. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER METER FOR EXPANSION JOINT REHABILITATION.



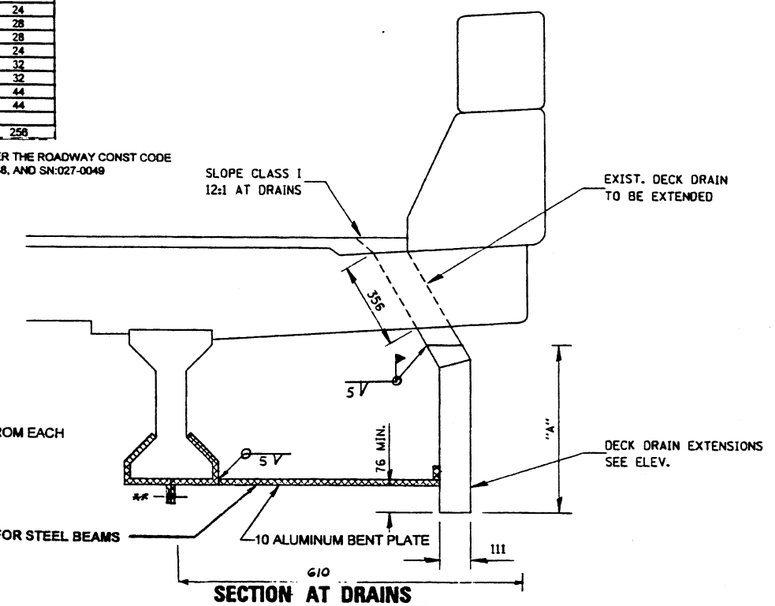
SEASONAL TRAFFIC COUNT STATION #21G

AUG. 20, 1997
ZFB5:(MP02397)DETAILS.DGN

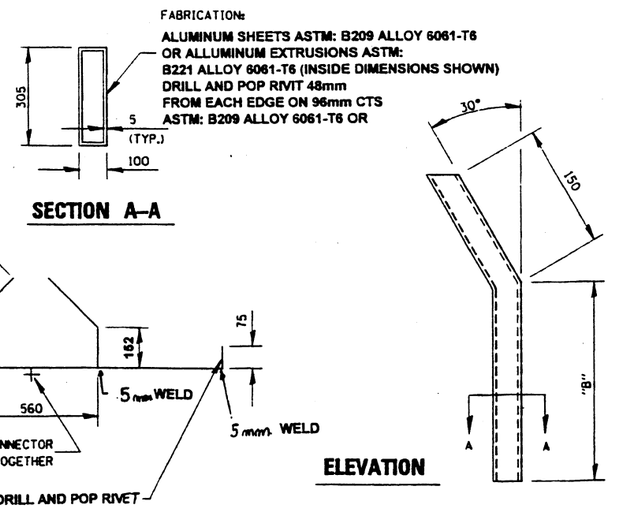
DECK DRAIN EXTENSIONS

STRUCTURE NUMBER	SIZE	DIMENSION A	DIMENSION B	QUANTITY
027 - 0028	102 X 305	998	886	24
027 - 0047	102 X 305	920	790	28
027 - 0048	102 X 305	920	790	28
027 - 0049	102 X 305	920	790	24
027 - 0050	102 X 305	1066	940	32
027 - 0051	102 X 305	1066	940	32
027 - 0052	102 X 305	1066	940	44
027 - 0053	102 X 305	1066	940	44
		GRAND TOTAL		256

NOTE: DRAIN EXTENSIONS ARE INCLUDED UNDER THE ROADWAY CONST CODE FOR SN:027-0028, SN:027-0047, SN:027-0048, AND SN:027-0049



SECTION AT DRAINS TO BE EXTENDED



* **WIND BRACE**
(10 x 50 BAR STOCK)

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

DETAILS

STRUCTURE NO. 027-0053

SECTION 27-38-B

ROUTE FAI 57

STATION

FORD COUNTY

DAY LABOR

180R

Illinois Department of Transportation
Division of Highways/District 3
700 East Norris Drive/Ottawa Illinois/61350-0987

STRUCTURE NO:027-0053 | ROUTE:FAI-57
SECTION NO: 27-3B-B | STATION:1730+30
COUNTY:FORD

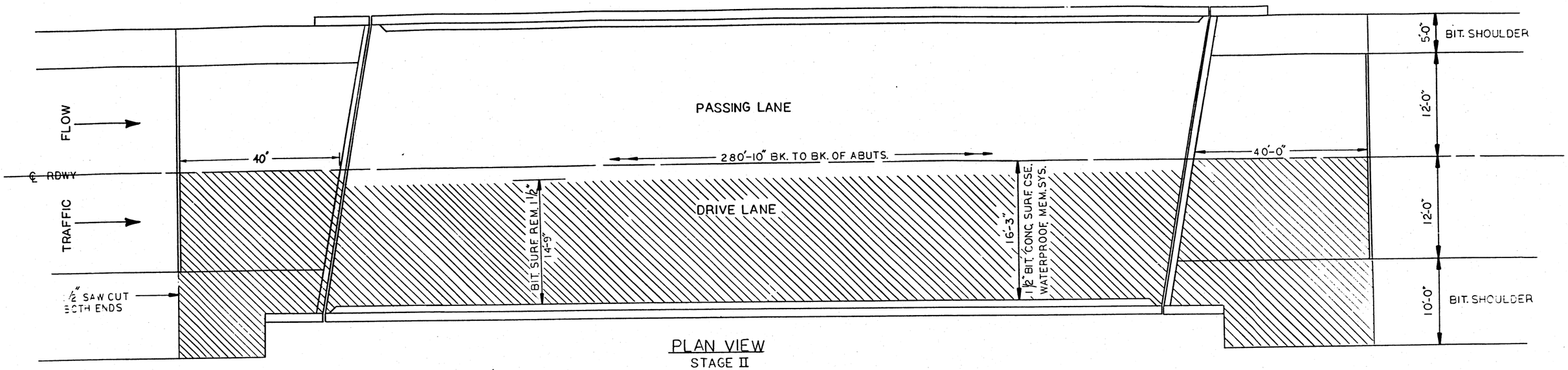
LOCATION
S.N. 027-0053 (NB)

Total Cost = $81,230

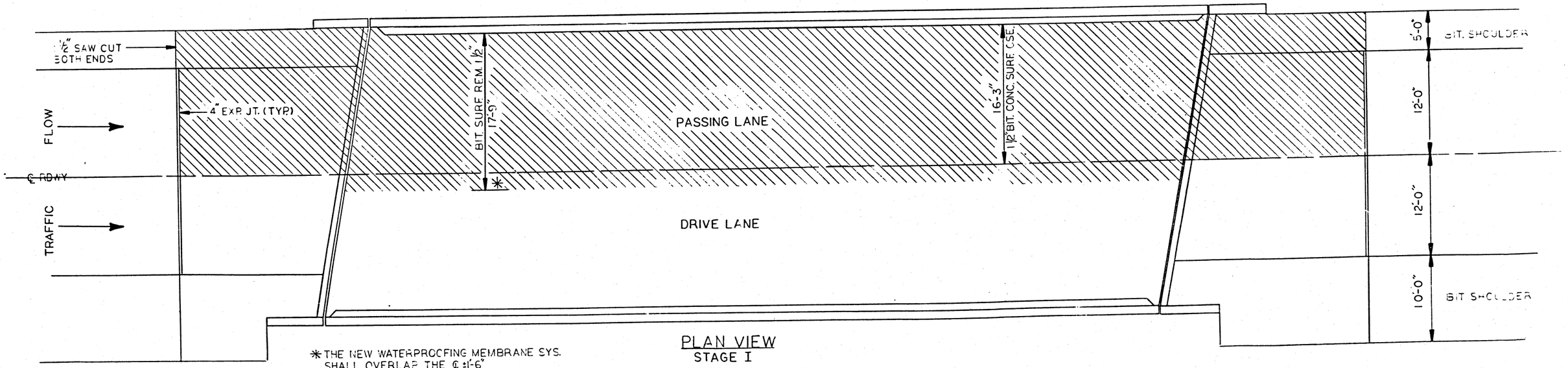
SN 027-0053

FAI 57-8-A

S.N. 027-0053 (NB)
FAI 57
SEC. 27-38-B
STA. 1730+30.00
FORD COUNTY



PLAN VIEW
STAGE II

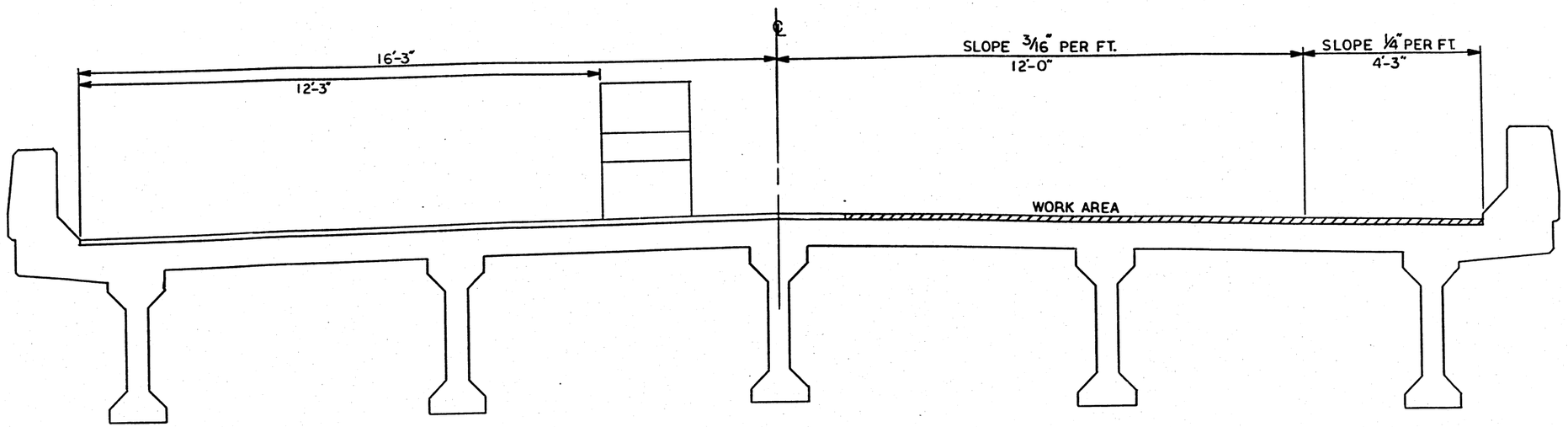


PLAN VIEW
STAGE I

*THE NEW WATERPROOFING MEMBRANE SYS. SHALL OVERLAP THE ℄ 1'-6"

NOTE: HATCHED AREA REPRESENTS WORK LIMITS

S.N. 027-0053 (NB)
FAI 57
SEC. 27-38-B
STA. 1730+30.00
FORD COUNTY

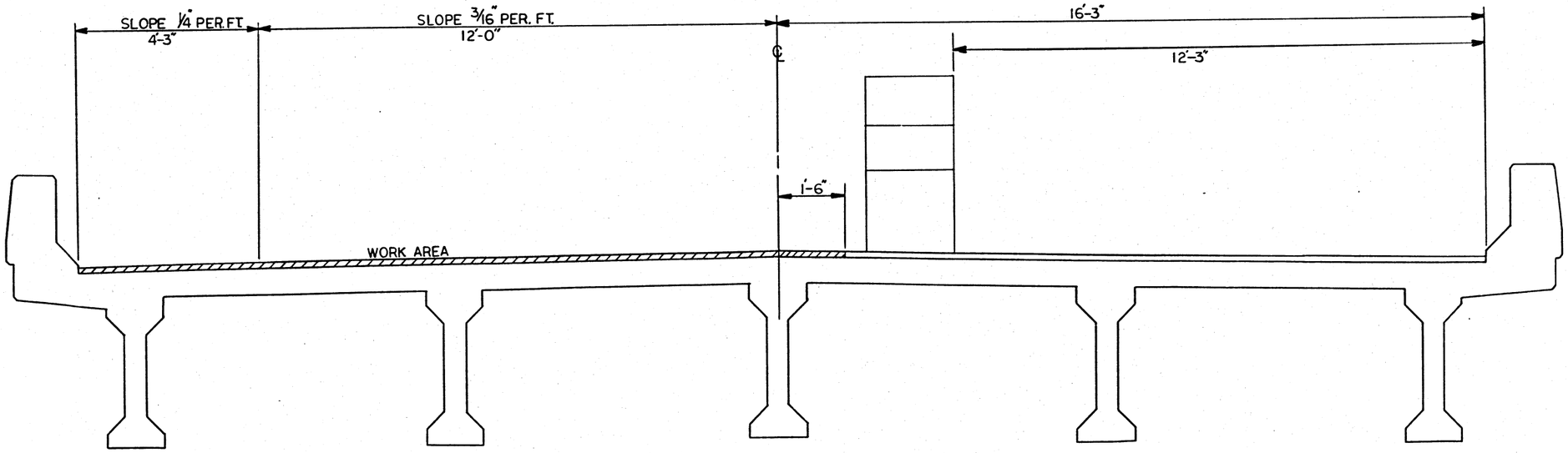


STAGE II

NOTE: WATERPROOFING MEMBRANE SYSTEM APPLIED TO BRIDGE DECK

PASSING LANE

DRIVING LANE



STAGE I

NOTE: WATERPROOFING MEMBRANE SYSTEM APPLIED TO BRIDGE DECK

TRAFFIC CONTROL PLAN
STD. 2316

F.A.I. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
57	*	VARIOUS	8	1
S.P.R. REG. NO. 4		ILLINOIS	PROJECT I-57-5(151)257	

* DISTRICT 3 - BRIDGE WATERPROOFING MEMBRANE SYSTEM 1976-1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID INTERSTATE HIGHWAY

F.A.I. ROUTE 57
DISTRICT 3-BRIDGE WATERPROOFING MEMBRANE SYSTEM 1976-1
PROJECT I-57-5(151)257
KANKAKEE-IROQUOIS-FORD COUNTIES

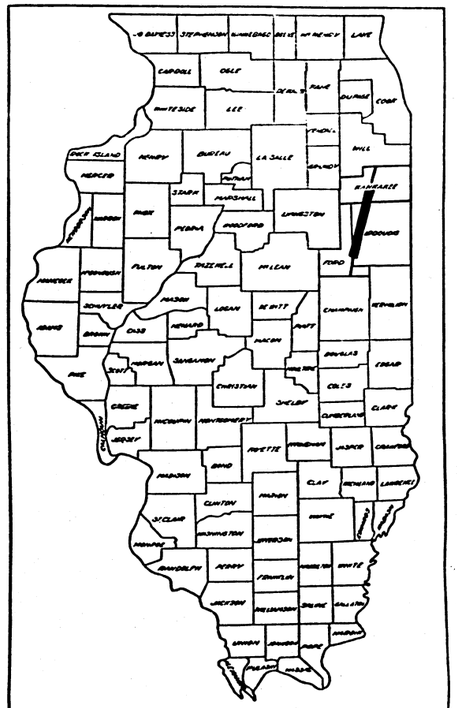
PC-93-004-73
~~PC-93-005-73~~
~~PC-93-008-75~~

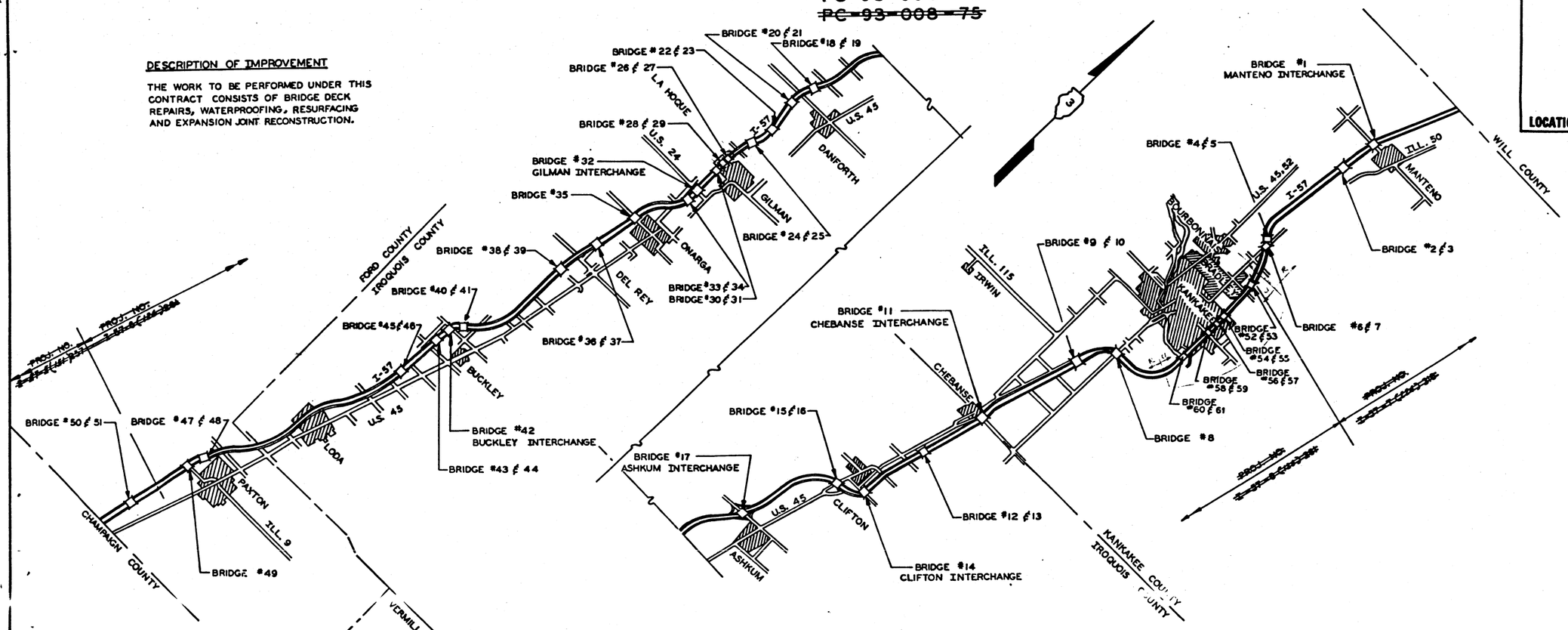
INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1.	COVER SHEET
2	SUMMARY OF QUANTITIES, GENERAL NOTES & BRIDGE NOTES
3	SCHEDULE OF QUANTITIES (F.A.I. ROUTE 57)
4	APPROACH PAVEMENT DETAIL
5,6,6A.	NEOPRENE EXPANSION DAM DETAIL & LONG. JOINT RECONSTR.
7	SCHEDULE OF QUANTITIES & DETAILS
	STANDARDS
STANDARD	2299-6
STANDARD	2300-1
STANDARD	2309-3
STANDARD	2316-4

DESCRIPTION OF IMPROVEMENT

THE WORK TO BE PERFORMED UNDER THIS CONTRACT CONSISTS OF BRIDGE DECK REPAIRS, WATERPROOFING, RESURFACING AND EXPANSION JOINT RECONSTRUCTION.





STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS

SUBMITTED 12/12/75 — DISTRICT ENGINEER
EXAMINED Jan. 29, 1976 — CHIEF ENGINEER OF LAND AND CONTRACTS
PASSED Jan. 27, 1976 — ENGINEER OF DESIGN
APPROVED Jan. 29, 1976 — DIRECTOR OF HIGHWAYS

3-100

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED
DIVISION ADMINISTRATOR — DATE

CONTRACT NO. 32095

COUNTY	SECTION	F.A.I. ROUTE

Rev. for Letting 2-11-76

F.A.I. ROUTE NO.	SEC.	COUNTY		
57	*	VARIOUS	8	2
FHWA REGIONS	ALL SHEET TOTAL			

* DISTRICT 3-BRIDGE WATERPROOFING MEMBRANE SYSTEM 1976-1

BRIDGE NOTES

BR. #1 Remove existing Bituminous Concrete Surface from east and west approach pavements, (estimated at ± 427 sq. yds.). Approach pavement resurfacing shall extend ± 135 feet back of bridge abutments, (far ends of gutter transitions) at which Stations, Expansion Joint Rehabilitation, Type 2 will apply and Concrete Pavement Scarification begins. The Engineer shall field determine the necessity of any additional types of Expansion Joint Rehabilitation required after Bituminous Surface Removal.

Br. #2 Case VII shall apply for repairs to the loose expansion angle, (deck side) in the driving lane over the south abutment and will extend from ℄ of deck to the vertical surface of the west safety walk, (field measured length= ± 23'-4 1/2"). Depth of removal shall not exceed 10". Construct Concrete transition block northeast corner only, (Conc. Rem. - 1.1 cu. yd. / CL-X Conc. - 1.1 cu yd.)

Br. #3 Construct Concrete Transition Block southwest corner only.

BR. #4 Case VII shall apply for repairs to the loose expansion angle (pavement side) in the driving lane over the north, (west) abutment and will extend from ℄ of deck to the vertical surface of the south safety walk, (field measured length= ± 18'-0"). Conc. Rem. 1.0 cu yd, CL-X Conc. - 1.0 cu yd.

Br. #5 The expansion joint over the south (east) abutment has been previously repaired and sealed. Case IV and Case V shall apply for the expansion joints over both abutments.

Br. #10 & 12 Remove existing Bituminous Concrete Surface from deck and 100 feet of north and south approcah pavements, (estimated at 821 sq. yds. Br. # 10 and 916 sq. yds. Br. # 12). Expansion Joint Rehabilitation, Type 2 shall apply at the 100 foot extremities and the Engineer shall field determine the necessity of any additional types of Expansion Joint Rehabilitation required after Bituminous Surface Removal. Concrete Pavement Scarification not required. Adjust approach pavement resurfacing thickness to accommodate 1/2" minimum cover on shoulders. The upper parapet wall of the South Abutment, (Br. #12) shall be repaired as shown in the Detail, Sheet # 4 of the plans.

Br#14, 15, 16 The existing Bituminous Concrete transition blocks shall be removed. This work will be considered incidental to Concrete Transition Blocks.

Br. #17, 32, #34 Case IV and Case V shall apply except that at Br. #17, (a total of ± 10'-0" or ±2'-6" at each deck corner), and at Br. #32 and #34, (a total of ± 8 lin. ft., each bridge or ± 2'-0" each deck corner), will be attached by epoxy grouting (1/2" ℄ x 6" threaded rods in 3/4" ℄ drilled holes on similar centers as the threaded studs. See Special Provisions for epoxy grouting. This work will be considered incidental to Neoprene Expansion Dam.

Br. #49 Case VII shall apply for modification of the expansion joint, (pavement side) over the West Abutment and will extend face to face of wingwalls, including the median, (field measured length = ± 55'-5"). The median and curb shall be saw cut ± 2" at extremity of concrete removal.

Br. #51 Case VII shall apply for replacing the missing expansion angle, (pavement side) over the south abutment and will extend face to face of wingwalls, (field measured length = ± 34'-0") including the ± 4'-6" of expansion angle still in place. Furnishing and welding the studs will be considered incidental to Fabricating and Erecting Structural Steel, (computed weight 435 pounds, Conc. Rem. - 1.7 cu. yd., CL-X conc. - 1.7 cu. yd.

Br. #52 thru Br. #61 Inc. Case I shall apply for sealing the deck expansion joints except that the 1" x 1 1/2" "header bars" will not be required. The 1/4" x 1/2" "stay" bars shall be welded on 6" alternate centers and will be considered incidental to Preformed Joint Sealer 2½".

GENERAL NOTES

It shall be the responsibility of the Contractor to verify all dimensions and conditions existing in the field prior to construction & ordering of materials.

All structural steel shall conform to AASHTO M 183. All structural steel work shall be done in accordance with the applicable Provisions of Section 507 of the Standard Specifications.

Resurfacing areas shall include a minimum of 100 feet of approach pavement and shoulders on either side of each bridge and the full length and width of each bridge deck.

Resurfacing shall be feather edged at all "below grade" drainage facilities, (deck drains, catch basins, inlets, etc.). Gutters, gutter transitions, and similar "at grade" drainage facilities will be resurfaced unless otherwise directed by the Engineer.

Shoulder preparation will be required at interchange structures and shall consist of grading and compacting stone and turf areas between edge of pavement or back of "at grade" drainage facilities and face of S. P. B. G. R. to insure adequate shoulder surface runoff. Shoulder preparation will be considered incidental to the Contract.

Concrete Transition Blocks will be located on the north side of southbound and south side of northbound mainline structures unless otherwise specified.

Preformed Expansion Joint Fillers and Poured Joint Sealers shall conform to Sections 715 and 716 respectively of the Standard Specifications. Asphalt Fillers shall conform to Article 713.08 of the Standard Specifications.

Where Case VII and Case IX are designated, quantities for Concrete Removal, Reinforcement Bars, Class X Concrete and Furnishing and Erecting Structural Steel will be paid for separately. See Sheet 7 for Schedule of Quantities.

The Contractor will be required to work on at least six bridges simultaneously.

Traffic Control Requirements

Standard 2309 Br. # 1, 11, 14, 17, 42.

Standard 2316 Br. # 2 thru #7 inclusive, #9, #10, #12, #13, #15, #16, #18 thru 31 inclusive, #33, #34, #36 thru #41 inclusive, #43 thru #48 inclusive, and #50 thru #61 inclusive.

Standard 2316 Revised (Incidental to Std. 2316) Br. #8, #32, #35 and #49 thru #61 inclusive. Br. #1, #8, #11, #14, #17, #32, #35, #42, #49, #58, and #59 will require additional ramp warning (to be located by the Engineer) which will include "Road Construction Ahead" at all times during construction and "Flagman Ahead" during working hours and will be considered incidental to Standard 2307 and 2308.

The linear foot quantities for Expansion Joint Rehabilitation Type 3 (See Special Provision) as shown in the Schedule of Quantities is for information only. (NON-PARTICIPATING)

F.A.I. ROUTE 57

SUMMARY OF QUANTITIES

Code No.	Item	Unit	KANKAKEE P/U PART.	KANKAKEE P/U N.PART.	IROQUOIS PART.	IROQUOIS N.PART	FORD PART.	FORD N.PART.	RURAL/URBAN Counties Kankakee	Iroquois	Ford	PROJECT E-57-5(151)257 Total
215004	AGGREGATE SHOULDERS, TYPE B	TON							35	105	12	152
406001	BITUMINOUS MATERIALS (PRIME COAT)	GALLON							430	1,548	215	2,193
501022	CONCRETE REMOVAL	CU YD	14.8	8.8	4.1	2.4	2.6	1.5	23.6	6.5	4.1	34.2
504003	CLASS "X" CONCRETE	CU YD	14.8	8.8	4.1	2.4	2.6	1.5	23.6	6.5	4.1	34.2
507001	F. & E. STRUCTURAL STEEL	POUND	0	0	0	0	0	435			435	435
512001	REINFORCEMENT BARS	POUND	3520	0	0	290	0	0	3520	290		3,810
617008	BITUMINOUS CONCRETE SURFACE REMOVAL	SQ YD	0	1248	0	916	0	0	1,248	916		2,164
646001	ENGINEER'S FIELD OFFICE, TYPE A	EACH										1
646003	ENGINEER'S FIELD LABORATORY	EACH										1
X04941	WATERPROOFING MEMBRANE SYSTEM	SQ YD							6,925.6	19,746.0	4,371	31,042.6
X40615	BITUMINOUS CONCRETE SURFACE COURSE MIX D CL-1	TON							① 469 - ② 317	① 2452 - ② 1587	① 520 - ② 265	5,600
XZ1089	TRAFFIC CONTROL AND PROTECTION STANDARD 2316	L SUM							0.1/0.1	0.7	0.1	1.0
XZ1014	TRAFFIC CONTROL AND PROTECTION STANDARD 2309	EACH							1/1	3		5
XZ1224	PRESSURE GROUTING ANGLES	LIN FT	0	272	0	1,077	0	260	272	1,077	260	1,609
Z10188	CONCRETE PAVEMENT SCARIFICATION	SQ YD							1,158	3,820	572	5,550
Z10205	DECK SLAB REPAIR (PARTIAL)	SQ YD	0	229/132	0	307	0	24	229/132	307	24	692
XZ1326	DECK WATERPROOFING MEMBRANE PATCH	SQ FT							0/1,188			1,188
XZ1186	PREFORMED JOINT SEALER 2½"	LIN FT							116/689	234.9	40.3	1,080.2
XZ1182	NEOPRENE EXPANSION DAM	LIN FT							862.7	2,363.6	388.9	3,615.2
XZ1327	EXPANSION JOINT REHABILITATION TYPE I	LIN FT							288/1499	116		1,903
XZ1328	EXPANSION JOINT REHABILITATION TYPE II	LIN FT	0	48	0	8	0	0	48	8		56
XZ1329	CONCRETE TRANSITION BLOCKS	EACH							4	64	8	76
406005	LEVELING BINDER (MACHINE METHOD)	TON							271	240		511.0
X40617	ALTERNATE "A" OPEN-GRADED PLANT MIX SURFACE COURSE (CALCINED SHALE)	TON							96.6	79.6		176.2
X40618	ALTERNATE "B" OPEN-GRADED PLANT MIX SURFACE COURSE (CRUSHED SLAG)	TON							165.8	138.8		304.6
X40619	ALTERNATE "C" OPEN-GRADED PLANT MIX SURFACE COURSE (TRAP ROCK)	TON							193.8	164.8		358.6

① PART ② NON-PART

SUMMARY OF QUANTITIES

PARTICIPATING ITEM	UNIT	TOTAL
CONCRETE REMOVAL	CU. YD.	21.5
CLASS "X" CONCRETE	CU. YD.	21.5
REINFORCEMENT BARS	LBS.	3,520

NON-PARTICIPATING ITEM	UNIT	TOTAL
CONCRETE REMOVAL	CU. YD.	12.7
CLASS X CONCRETE	CU. YD.	12.7
F. & E. STRUCTURAL STEEL	LBS.	435
BIT. CONC. SURFACE REMOVAL	SQ. YD.	2,164
PRESSURE GROUTING ANGLES	LIN. FT.	1,609
DECK SLAB REPAIR	SQ. YD.	692
EXPAN. JT. REHABILITATION TY-II	LIN. FT.	56
REINFORCEMENT BARS	LBS.	290

State of Illinois
Department of Transportation
District Three

Prepared By: Ralph A. Ciardo
District Engineer of Design

Date: 12-12-75

Examined By:
District Engineer of Construction
District Engineer of Maintenance
District Engineer of Materials
District Engineer of Traffic

Rev. 2-10-76

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.-57	*	VARIOUS	8	3
FED. ROAD DIST. NO. 7	ILL.	FED. AID PROJECT		

* DISTRICT 3 - BRIDGE WATERPROOFING MEMBRANE SYSTEM 1976-1

SCHEDULE OF QUANTITIES (F.A.I. ROUTE 57)

COUNTY	BRIDGE NO.	BRIDGE INVENTORY NO.	SECTION	STATION	LOCATION	DECK WIDTH LIN. FT.	DECK LENGTH LIN. FT.	ANGLE OF CROSSING	WATERPROOF MEMBRANE SYSTEM-SQ.YD.	P.J.S. 2½ CASE IV L.F.	NEO. EXP. DAM. CASE V L.F.	NEO. EXP. DAM. CASE VII L.F.	CASE X L.F.	BIT.CONC.SURF.CSE, CLASS 1-TONS MIX D DECK	BIT.CONC.SURF.CSE, CLASS 1-TONS MIX D APPR. PAVEMENT & SHOULDERS	BIT. MAT'L PRIME COAT GALLONS	DECK SLAB REPAIR SQ.YDS.	PRESSURE GROUTING LIN.FT.	AGGREGATE SHOULDERS TYPE B. TONS	CONC. PAV'T. SCARIF. SQ.YD.	EXPANSION JOINT REHABILITATION TYPE 1 LIN. FT.	EXPANSION JOINT REHABILITATION TYPE 2 LIN. FT.	EXPANSION JOINT REHABILITATION TYPE 3 LIN. FT.	CONC TRANS. BLOCKS. TYPE	CONC TRANS. BLOCKS. EA.
					PROJECT NO. 1-57-7(224)316 TOTAL																				
KANKAKEE	1	046-0058	46-1 HBK	641+28.35	MANTENO INTERCHANGE	30.0	245'-0"	69°32'	817.0	12.0	64.0			69	NON-PART 52 80 PART 28	43	3.0	22		107.0		48	176		
	2	046-0018	46-1 B	549+60	S.B. 4.6 MI. N. ILL. 50 INTER.	39.0	98'-10"	70°00'	428.0	14.0	59.6	23.4	98.8	36	50 80 30	43	3.0	32	6	107.0			200	2	1
	3	046-0019	46-1 B	549+60	N.B. 4.6 MI. N. ILL. 50 INTER.	39.0	98'-10"	70°00'	428.0	14.0	83.0		98.8	36	50 80 30	43	2.0	34	6	107.0			200	2	1
	4	046-0016	46-2 VB	325+93.10	S.B. 0.3 MI. N. ILL. 50 OVER ICRR.	31.0 AVG.	176'-9"	84°30'	609.0	14.0	44.0	18.0		**	**	43	3.0		3	118.0	53		126		
	5	046-0017	46-2 VB	325+93.10	N.B. 0.3 MI. N. ILL. 50 OVER ICRR.	37.0 AVG.	176'-9"	84°30'	727.0	14.0	62.0			**	**	43	27.0	55	3	138.0	61		149		
	6	046-0014	46-2 HB	311+37.70	S.B. I-57 & ILL. 50 INTER.	46.0 AVG.	187'-0"	70°38'-53"	956.0	12.0	99.2			**	**	43	37.0	34	3	187.0	85		217		
	7	046-0015	46-2 HB	311+37.70	N.B. I-57 & ILL. 50 INTER.	47.6 AVG.	187'-0"	70°38'-53"	989.0	12.0	101.6			**	**	43	5.0	64	2	178.0	89		222		
	TOTAL (PROJECT NO. 1-57-7(224)316								4954.0	92.0	513.4	41.4	197.6	141	152 240.0 88	301	80.0	241.0	23	942.0	288	48	1290.0	4	2
					PROJECT NO. 1-57-6(186)261																				
	8	046-0052	46-4 HBK	413+74.82	I-57, U.S. 52, 45 INTER.	55.0	222'-9"	90°00'	1361.2	24.0	110.3			114	55 80 25	43	142.0	31		109.0			320		
	9	046-0001	45-4 B	500+43.30	N.B. 4.3 MI. N. CHEBANSE INTER.	42.0	69'-1"	90°00'	322.4					27	55 80 25	43			6	107.0			192	2	2
	10	046-0002	140-B1	500+43.30	S.B. 4.3 MI. N. CHEBANSE INTER.	37.5	69'-1"	90°00'	288.0					24	55 80 25	43	7		6				144		
	TOTAL (KANKAKEE COUNTY)								6925.6	116.0	623.7	41.4	197.6	306	317 480 163	430	223.0	272.0	35	1158.0	288	48	1946.0	6	4
	11	038-0136	38-1 HB	726+94.41	CHEBANSE INTERCHANGE	28.0	198'-7"	84°-40'-03"	617.8	14.7	56.3			78	50 80 30	43	30.0	26		97.0	44		110	1	4
	12	038-0015	141-B	843+70	S.B. 2.3 MI. S. CHEBANSE INTER.	30.0	214'-9"	62°00'	715.8					60	50 80 30	43	7.0		6			8	202		
	13	038-0016	38-1-B	843+70	N.B. 2.3 MI. S. CHEBANSE INTER.	30.0	214'-9"	62°00'	715.8					60	50 80 30	43	15.0		6	107.0			204		
	14	038-0135	38-2 H B-1	995+82.18	CLIFTON INTERCHANGE	30.0	259'-0"	30°-36'-28"	863.0	15.2	70.0			73	50 80 30	43	143.0	14		107.0	24		184	1	4
	15	038-0013	38-2 HVB	1037+61.38	N.B. 0.7 MI. S. CLIFTON INTER.	30.0	369'-10"	48°-21'-15"	1232.8	17.0	80.3			104	47 80 33	43	3.0	66	6	107.0			200	1	2
	16	038-0014	38-2 HVB	1037+61.38	S.B. 0.7 MI. S. CLIFTON INTER.	30.0	369'-10"	48°-21'-15"	1232.8	17.0	80.3			104	47 80 33	43	6.0	46	6	107.0			200	1	2
	17	038-0123	38-3 HB	129+68.72	ASHKUM INTERCHANGE	32.5	262'-2"	57°38'-23"	947.0	12.7	71.2			74	49 80 31	43	2.0	28		107.0	48		112		
	18	038-0011	38-4 B	348+54.5	N.B. 4.1 MI. S. ASHKUM INTER.	40.0	22'-9"	60°-03'	101.0					9	46 80 34	43			6	107.0			150	2	2
	19	038-0012	38-4 B	348+54.5	S.B. 4.1 MI. S. ASHKUM INTER.	40.0	22'-9"	60°-03'	101.0					9	46 80 34	43			6	107.0			150	2	2
	20	038-0158	38-4 B-1	399+21	S.B. 5 MI. S. ASHKUM INTER.	40.0	21'-6"	83°45'	96.0					8	53 80 27	43			6	107.0			144	2	2
	21	038-0159	38-4 B-1	399+21	N.B. 5 MI. S. ASHKUM INTER.	40.0	21'-6"	83°45'	96.0					8	53 80 27	43			6	107.0			144	2	2
	22	038-0009	38-4 B-2	456+03.5	N.B. 6.1 MI. S. ASHKUM INTER.	40.0	110'-0"	82°55'	489.0	5.3	80.5			41	53 80 27	43	2.0	47	6	107.0			168	2	2
	23	038-0010	38-4 B-2	456+03.5	S.B. 6.1 MI. S. ASHKUM INTER.	40.0	110'-0"	82°55'	489.0	4.2	80.8			41	53 80 27	43	2.0	83	6	107.0			156	2	2
	24	038-0167	38-4 B-3	507+51	S.B. 7.1 MI. S. ASHKUM INTER.	40.0	20'-1¾"	54°45'	90.0					8	44 80 36	43			6	107.0			156	2	2
	25	038-0168	38-4 B-3	507+51	N.B. 7.1 MI. S. ASHKUM INTER.	40.0	20'-1¾"	54°45'	90.0					8	44 80 36	43			6	107.0			192	2	2
	26	038-0007	38-5 H B-1	585+10.21	N.B. 8.6 MI. S. ASHKUM INTER.	40.0	103'-5"	88°49'	460.0	4.7	76.8			**	**	43		46	6	107.0			192	2	2
	27	038-0008	38-5 H B-1	585+10.21	S.B. 8.6 MI. S. ASHKUM INTER.	40.0	103'-5"	88°49'	460.0	4.7	79.0			**	**	43	3.0	37	6	107.0			192	2	2
	28	038-0006	38-5 V B	592+63.65	S.B. 8.8 MI. S. ASHKUM INTER.	40.0	170'-9"	90°-00'	759.0	4.7	79.9			**	**	43	1.0	19	5	107.0			192	2	2
	29	038-0005	38-5 V B	592+63.65	N.B. 8.8 MI. S. ASHKUM INTER.	40.0	170'-9"	90°-00'	759.0	4.7	79.9			**	**	43	2.0	43	3	107.0			192	2	2
	30	038-0004	38-5 V B-1	604+54.72	N.B. 9 MI. S. ASHKUM INTER.	40.0	221'-11½"	44°38'-50"	987.0	4.7	113.7			83	40 80 40	43	2.0	83	6	107.0			232		
	31	038-0003	38-5 V B-1	604+54.72	S.B. 9 MI. S. ASHKUM INTER.	40.0	221'-11½"	44°38'-50"	987.0	4.7	113.7			83	40 80 40	43	1.0	25	3	107.0			232		
	32	038-0031	38-5 H B-2	647+34.20	GILMAN INTERCHANGE	35.0	219'-9"	87°55'-30"	855.0	40.3	78.3			72	54 80 26	43	5.0	19		152.0			230		
	33	038-0001	38-5 B	697+75	S.B. 0.96 MI. S. GILMAN INTER.	40.0	87'-4"	68°30'	388.0	6.0	85.8			33	49 80 31	43		16	2	107.0			196	2	2
	34	038-0002	38-5 B	697+75	N.B. 0.96 MI. S. GILMAN INTER.	40.0	87'-4"	68°30'	388.0	6.0	85.8			33	49 80 31	43	1.0	31	2	107.0			196	2	2
	35	038-0048	38-5 HB-4	800+59.81	ONARGA INTERCHANGE	35.0	219'-9"	88°48'	855.0	40.3	78.0			72	54 80 26	43		23		147.0			185		
	36	038-0155	38-6 B	928+50	S.B. 2.4 MI. S. ONARGA INTER.	40.0	124'-3"	90°-00'	552.0	6.0	79.9			46	55 80 25	43	1.0	83		107.0			144	2	2
	37	038-0156	38-6 B	928+50	N.B. 2.4 MI. S. ONARGA INTER.	40.0	124'-3"	90°-00'	552.0	6.0	79.9			46	55 80 25	43	1.0	17		107.0			144	2	2
	38	038-0153	38-6 B-1	963+62.5	S.B. 3.1 MI. S. ONARGA INTER.	40.0	97'-9"	73°-00'	434.0		83.6			37	50 80 30	43	2.0	52		107.0			98	2	2
	39	038-0154	38-6 B-1	963+62.5	N.B. 3.1 MI. S. ONARGA INTER.	40.0	97'-9"	73°-00'	434.0		83.6			37	50 80 30	43	1.0	10		107.0			98	2	2
	40	038-0151	38-7 B	1187+00	S.B. 7.3 MI. S. ONARGA INTER.	40.0	90'-2⅝"	80°-00'	401.0		81.2		90.2	34	52 80 28	43	2.0	56		107.0			98	2	2
	41	038-0152	38-7 B	1187+00	N.B. 7.3 MI. S. ONARGA INTER.	40.0	90'-2⅝"	80°-00'	401.0		81.2		90.2	34	52 80 28	43	2.0	32		107.0			176	2	4
	42	038-0076	38-7 HB-2	1225+75.45	BUCKLEY INTERCHANGE	32.5	290'-5¾"	41°05'-44"	1049.0	4.0	90.5			88	46 80 34	43		41		107.0			102	2	2
	43	038-0149	38-7 B-1	1272+47	S.B. 0.9 MI. S. BUCKLEY INTER.	40.0	27'-5⅛"	65°-00'	122.0				27.5	10	48 80 32	43				107.0			102	2	2
	44	038-0150	38-7 B-1	1272+47	N.B. 0.9 MI. S. BUCKLEY INTER.	40.0	27'-5⅛"	65°-00'	122.0				27.5	10	48 80 32	43				107.0			96	2	2
	45	038-0147	38-8 B	1357+52	S.B. 2.5 MI. S. BUCKLEY INTER.	40.0	101'-9"	90°-00'	452.0	6.0	79.0			38	55 80 25	43	6.0	58		107.0			96	2	2
	46	038-0148	38-8 B	1357+52	N.B. 2.5 MI. S. BUCKLEY INTER.	40.0	101'-9"	90°-00'	452.0	6.0	79.0			38	55 80 25	43	4.0	66		107.0			96	2	2
	TOTAL (IROQUOIS COUNTY)								19,746.0	234.9	2128.2		235.4	1479.0	1587 2560.0 973	1548.0	307.0	1077.0	105	3820.0	116	8	5715.0	54	64
FORD	47	027-0050	27-1 VB	289+70.58	S.B. 0.8 MI. N. ILL. ROUTE 9	40.0	163'-9"	67°00'	728.0	6.0	86.8			61	48 80 32	43	4.0	50		107.0			152		
	48	027-0051	27-1 VB	289+70.58	N.B. 0.8 MI. N. ILL. ROUTE 9	40.0	163'-9"	67°00'	728.0	5.3	86.8			61	48 80 32	43	4.0	66		107.0			152		
	49	027-0010	27-1 HB-2	329+98.30	PAXTON INTERCHANGE	37.5	218'-9"	90°-00'	911.0	20.6	39.0	39.0		77	48 80 32	43	6.0	44		144.0			174	2	4
	TOTAL (PROJECT NO. 1-57-6(126)261								24,084.6	290.8	2451.1	39.0	235.4	1843.0	1903 3040.0 1137	1806.0	470.0	1268.0	117	4,394.0	116	8	6849.0	58	70
					PROJECT NO. 1-57-5(151)257																				
	50	027-0052	27-3 B-B	1730+30	S.B. 2.3 MI. S. ILL. 9	32.5	277'-6½"	80°-00'	1002.0	4.2	69.3			88	52 80 28	43		59	6	107.0			144	2	2
	51	027-0053	27-3 B-B	1730+30	N.B. 2.3 MI. S. ILL. 9	32.5	277'-6½"	80°-00'	1002.0	4.2	34.0	34.0		88	52 80 28	43	10.0	41	6	107.0			144	2	2
	TOTAL (PROJECT NO. 1-57-5(151)257								2004.0	8.4	103.3	34.0		176.0	24 160 56	86	10.0	100	12	214.0			288	4	4
	TOTAL (FORD COUNTY)								4371.0	40.3	315.9	73.0		375.0	255 400 145	215.0	24.0	260	12	572.0			855.0	66	76
	GRAND TOTAL								31,042.6	391.2	3067.8	114.4	433.0	2160.0	2159 3440.0 1281	2193.0	560.0	1609.0	152	5550.0	404	56	8427	66	76

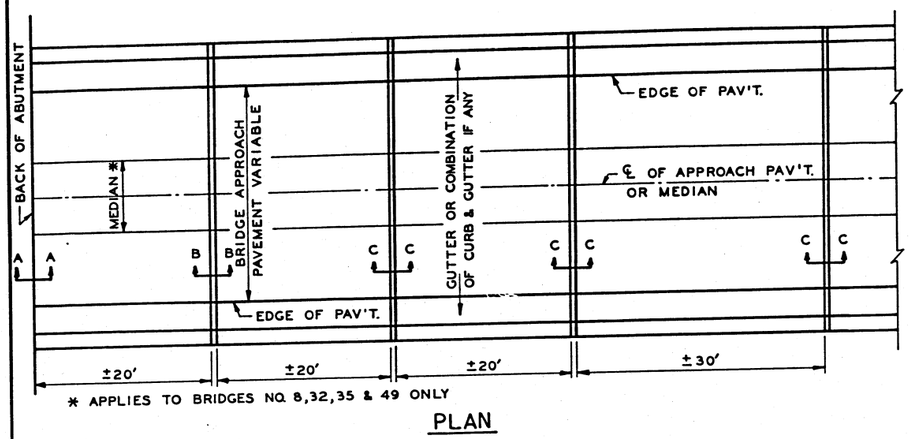
SEE SCHEDULE OF QUANTITIES FOR CASE IX SHEET 7

** FOR SCHEDULE OF QUANTITIES & DETAIL SEE SHEET 8

Added quantity for Part-Non-Part Cl. I 2-18-76 JWJ

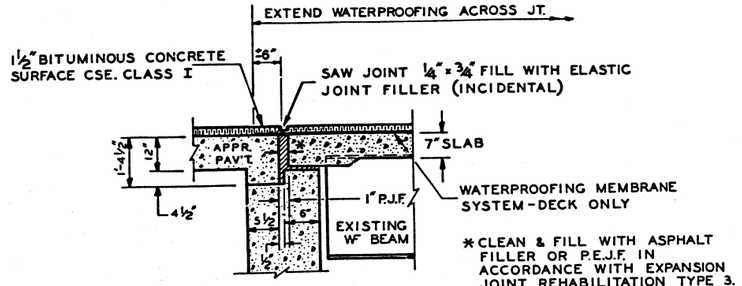
57	*	VARIOUS	8	4

* DISTRICT 3 - BRIDGE WATERPROOFING MEMBRANE SYSTEM 1976-1



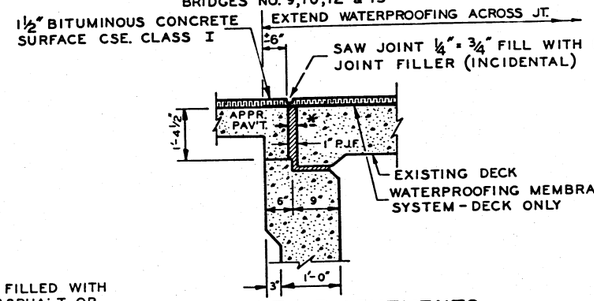
* APPLIES TO BRIDGES NO. 8,32,35 & 49 ONLY

PLAN



TREATMENT AT ABUTMENTS

BRIDGES NO. 9,10,12 & 13



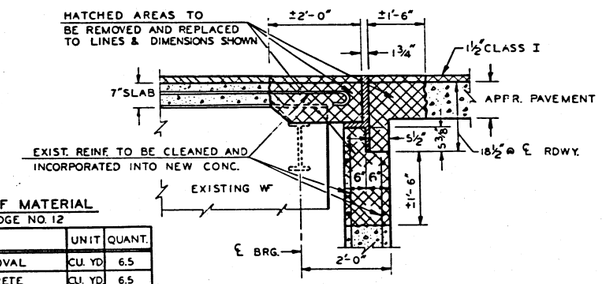
TREATMENT AT ABUTMENTS

BRIDGES NO. 18,19,20,21,24,25,43 & 44

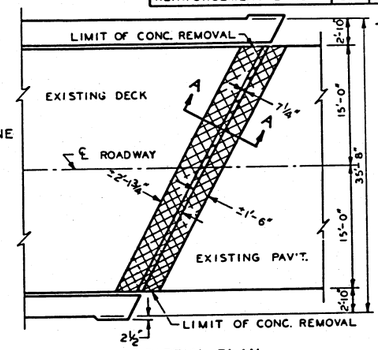
BILL OF MATERIAL

BRIDGE NO. 12

ITEM	UNIT	QUANT.
CONCRETE REMOVAL	CU. YD.	6.5
CLASS "X" CONCRETE	CU. YD.	6.5
REINFORCEMENT BARS	LBS.	290

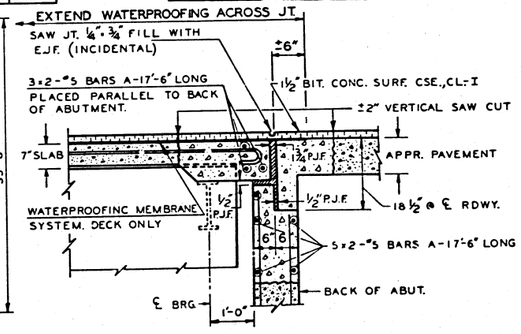


EXISTING SECTION A-A



PARTIAL PLAN SHOWING S. ABUTMENT

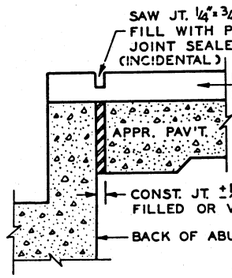
BRIDGE NO. 12



PROPOSED SECTION A-A

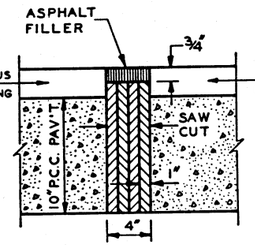
SOUTH ABUTMENT REPAIR DETAIL

BRIDGE NO. 12



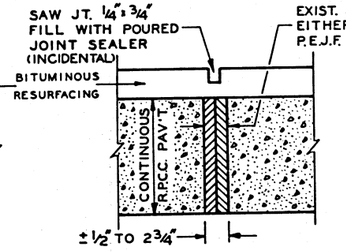
SECTION A-A

TYPE 3



SECTION B-B

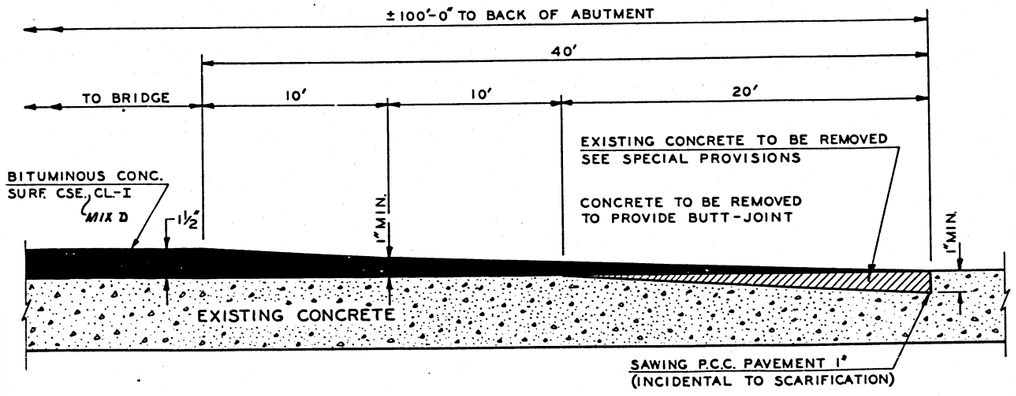
TYPE 1 OR 2



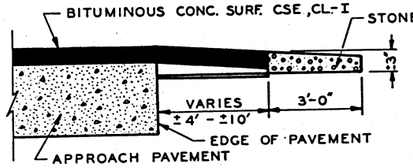
SECTION C-C

TYPE 3

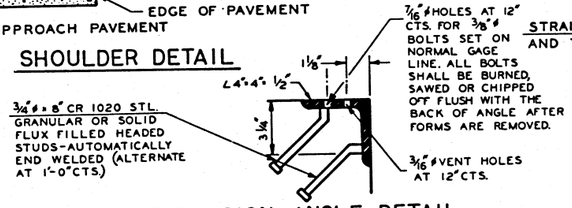
EXPANSION JOINT REHABILITATION



BUTT JOINT

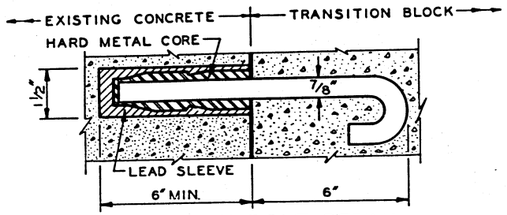


SHOULDER DETAIL

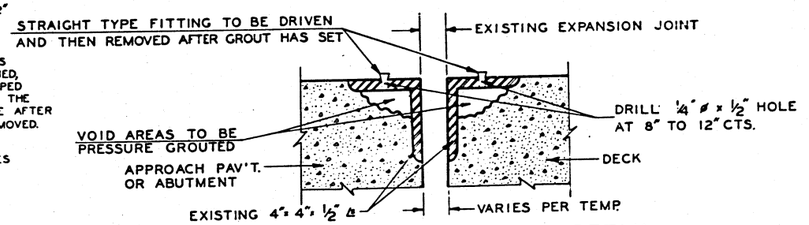


EXPANSION ANGLE DETAIL

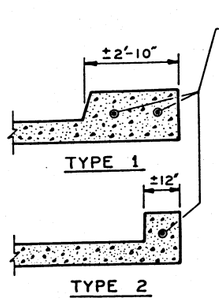
BRIDGE NO. 51



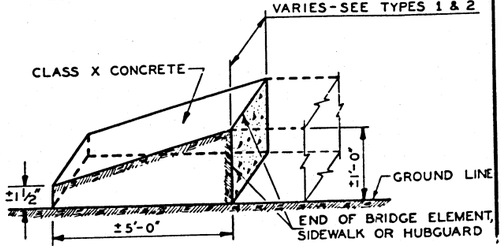
EXPANSION BOLT DETAIL



PRESSURE GROUTING ANGLE DETAIL



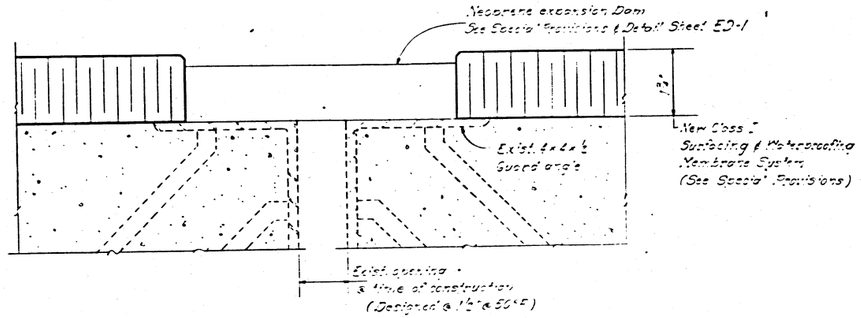
EXP. BOLTS FOR CONC. TRANSITIONS TO BE SET AS DIRECTED BY THE ENGINEER. SEE EXP. BOLT DETAIL



CONCRETE TRANSITION BLOCK DETAIL

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 57	*	VARIOUS	8	5
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

* DISTRICT 3-BRIDGE WATERPROOFING MEMBRANE SYSTEM 1976-I

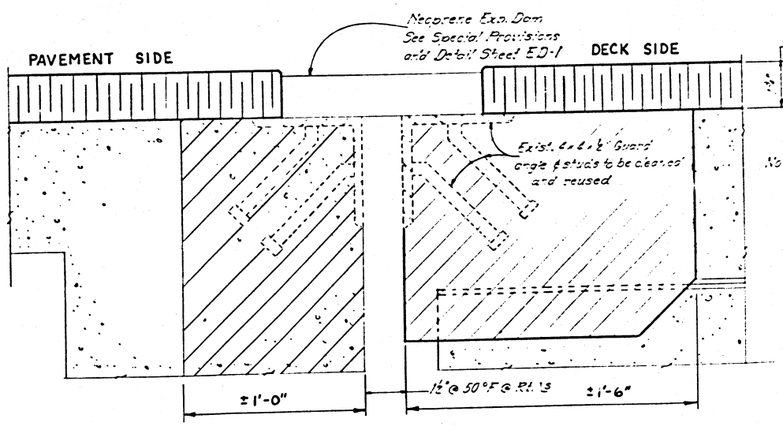


SECTION

JOINT MODIFICATIONS FOR DECK WATERPROOFING

Existing joint joint with adequate capacity for required expansion
Max. Exp. length 200 Ft.

CASE V

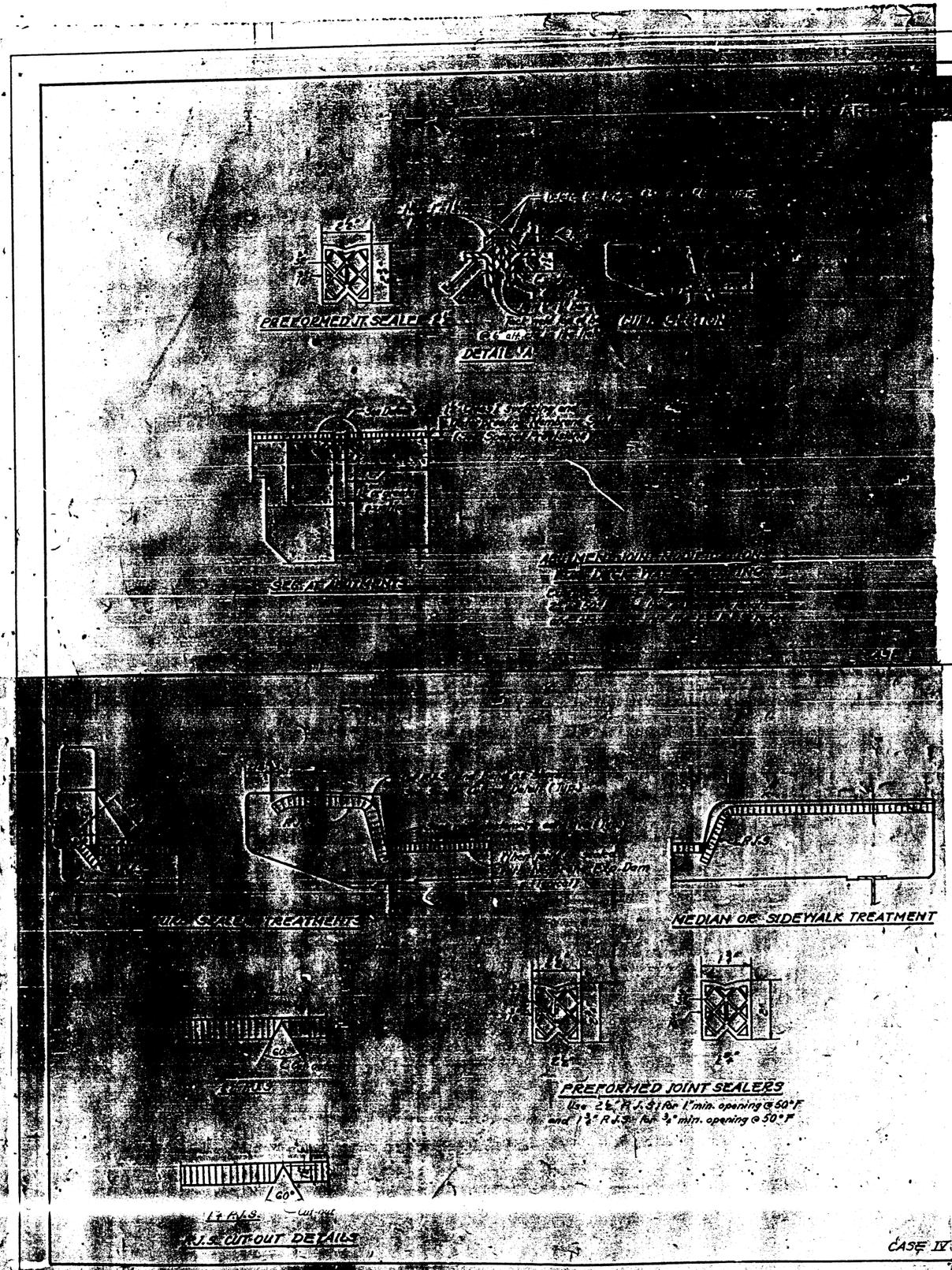


SECTION

JOINT MODIFICATIONS FOR DECK WATERPROOFING

expansion capacity. Maximum Exp. Length = 300 feet

CASE VII

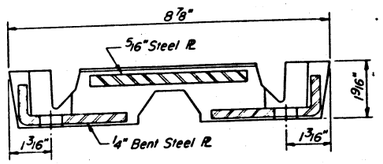


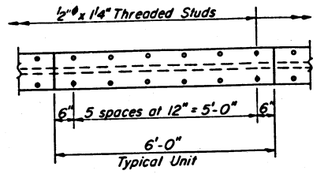
CASE IV

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
.. 57	*	VARIOUS	8	6
FED ROAD DIST NO ?	ILLINOIS	FED AID PROJECT		

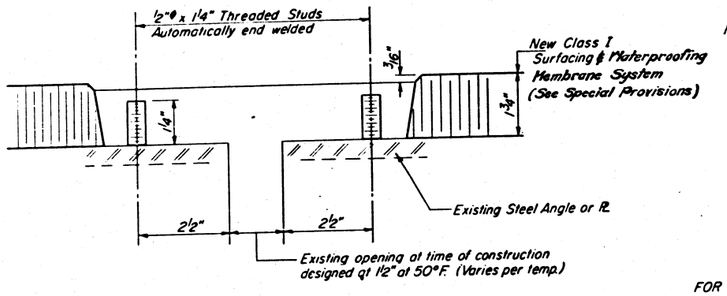
* DISTICT 3-BRIDGE WATERPROOFING MEMBRANE SYSTEM 1976-I





PLAN

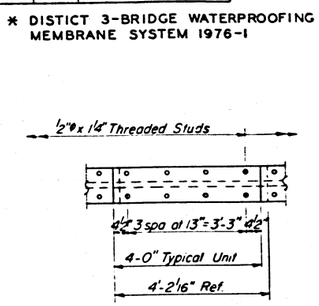
Note: Threaded studs require a clipped washer, lockwasher & hex nut.



CROSS SECTION
Dimensions are at right angles

FOR EXPANSION LENGTH OF DECK = 0 to 160 Ft.

TRANSFLEX MODEL 200A
NARROW GAGE
(Structural Rubber Products Co.)

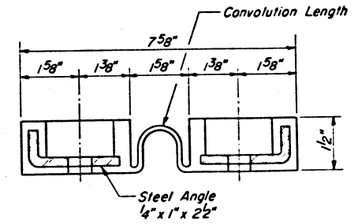


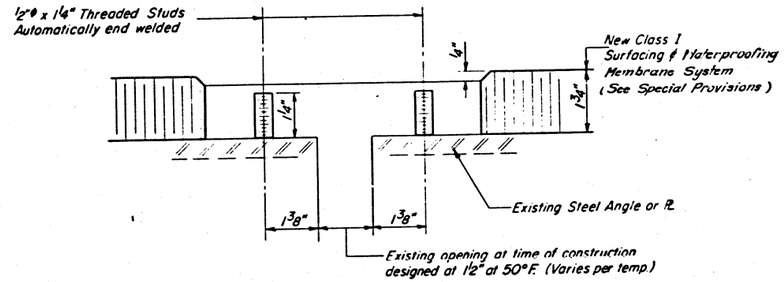
PLAN

Note: Threaded studs require a flat washer & locknut.

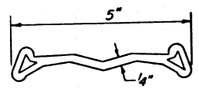
FOR EXPANSION LENGTH OF DECK = 0 to 200 Ft.

FEL-SPAN MODEL T-30-1 1/2-S
(Fel-Pro Building Products Inc.)

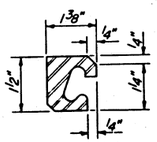




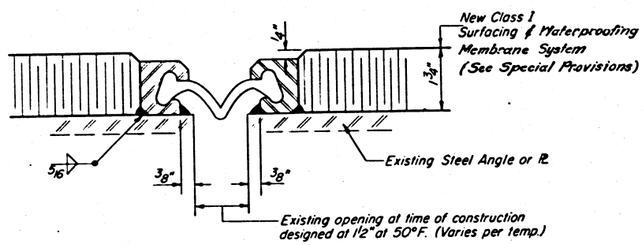
CROSS SECTION
Dimensions are at right angles



NEOPRENE EXTRUSION S-300
A.S.T.M D-2628 Modified



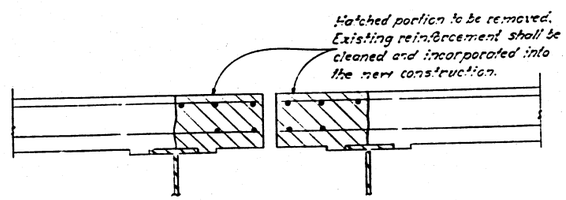
STEEL EXTRUSION-TYPE E
A.S.T.M. A-242



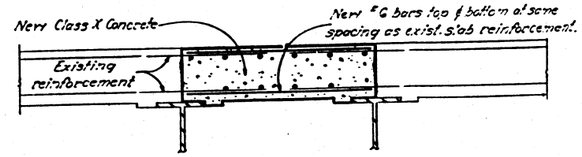
CROSS SECTION
Dimensions are at right angles

FOR EXPANSION LENGTH OF DECK = 0 to 200 Ft.
2" MAX. OPENING AT 50°F.

WABO-MAURER MODEL S-300E
(Watson Bowman Associates Inc.)



EXISTING LONGITUDINAL JT. CROSS SEC.



RECONSTRUCTED LONGITUDINAL JT.

METHOD TO RECONSTRUCT LONGITUDINAL JOINT
When ℄ to ℄ outside beams or girders is 65'-0" or less
CASE II

DESIGNED	EXAMINED 19
CHECKED	PASSED
DRAWN	APPROVED
CHECKED	DIRECTOR OF HIGHWAYS

ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
ENGINEER OF BRIDGES

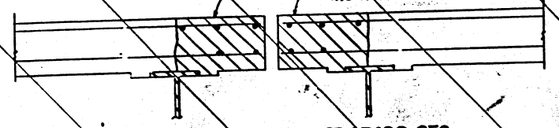
ED-1 6-13-75

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

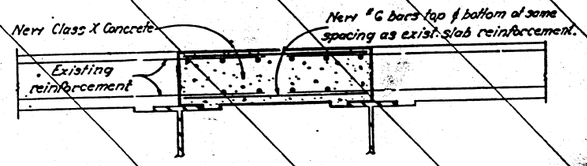
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	*	Various	8	6A
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT.		

SHEET NO.
SHEETS

* District 3-Bridge Waterproofing Membrane System 1976-1

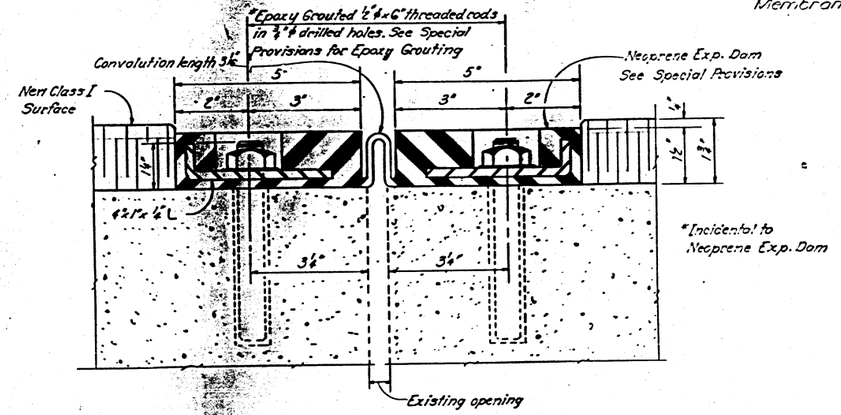


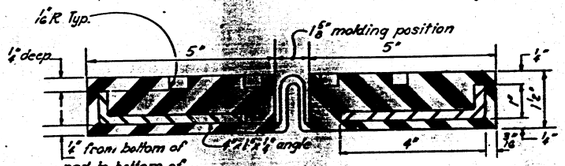
EXISTING LONGITUDINAL JT. CROSS SEC.



RECONSTRUCTED LONGITUDINAL JT.

METHOD TO RECONSTRUCT LONGITUDINAL JOINT
When ℄ to ℄ outside beams or girders is 65'0" or less
CASE IX





NEOPRENE EXP. DAM

METHOD TO RECONSTRUCT LONGITUDINAL JOINT
When ℄ to ℄ outside beams or girders is over 65'0"
CASE X

DESIGNED	
CHECKED	
DRAWN	
CHECKED	

19
EXAMINED
ENGINEER OF BRIDGES AND TRAFFIC ENGINEERING
PASSED
ENGINEER OF DESIGN
APPROVED
DIRECTOR OF HIGHWAYS

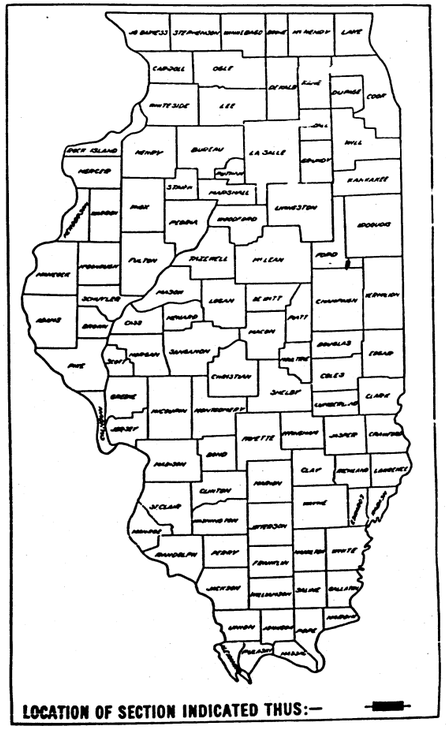
FEDERAL-AID ROUTE NO.	SEC.	COUNTY	TOTAL SHEET	SHEET NO.
F.A.I. 57	27-38B	FORD	28	1
S. P. R. REG NO. 4	ILLINOIS	PROJECT	I-57-5 (99) 259	

P-95-013-00

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

SCALES			
	PLAN	1 INCH	100 FT.
	PROFILE, HOR.	1 INCH	100 FT.
	PROFILE, VERT.	1 INCH	10 FT.
	CROSS-SECTIONS	1 INCH	5 FT. VERT. 10 FT. HOR.

F. A. I. ROUTE 57, SECTION 27-38B, FORD COUNTY
PROJECT I-57-5(99)259
CONSTRUCTION JOB NO. C-95-026-67



FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 3

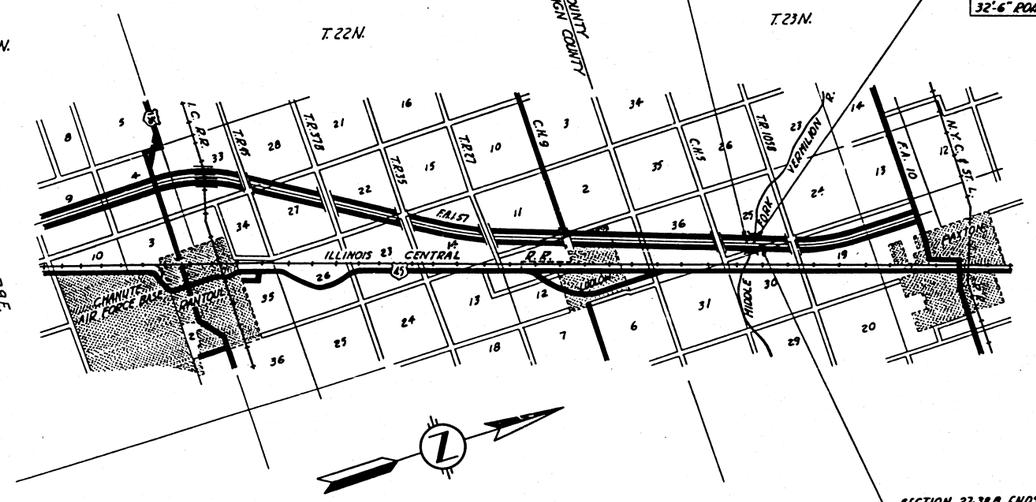
FOR INDEX OF SHEETS, SEE SHEET NO. 3

STRUCTURAL DESIGN TRAFFIC
ADT - 11,793 YEAR 1978
PC = 81 %
SU = 10.5 %
MU = 8.5 %
CLASS I ROAD
CBR = 2
PER CENT OF SDT IN DESIGN LANE
U_2 = 32 %
U_4 = 45 %
U_m = 45 %
TF = 4.51

DESIGN CLASSIFICATION
1825 - T - 70

SECTION 27-38B BEGINS
STATION 1728 + 88.92

PROJECT I-57-5(99)259 BEGINS
STATION 1728 + 98.92



SPECIAL DUAL BRIDGE DESIGN-
REINFORCED CONCRETE DECKS ON PRE-CAST PRESTRESSED CONCRETE I-BEAMS:
5 SPANS @ 54'-7", 55'-5", 55'-5", 55'-5" & 54'-7"
32'-6" ROADWAY 10° SKEW

SECTION 27-38B ENDS
STATION 1731 + 68.75

PROJECT I-57-5(99)259 ENDS
STATION 1731 + 68.75

TOTAL LENGTH OF SECTION = 279.83 F.T. = 0.053 MI.
NET LENGTH OF SECTION = 279.83 F.T. = 0.053 MI.
TOTAL LENGTH OF PROJECT = 279.83 F.T. = 0.053 MI.
NET LENGTH OF PROJECT = 279.83 F.T. = 0.053 MI.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS

SUBMITTED Sept 13, 19 67 — J. C. Mulgrew, DISTRICT ENGINEER
EXAMINED Oct 4, 19 67 — W. VanAmerongen, CHIEF OF BUREAU OF ROAD IN AND DISTRICTS
PASSED Oct 4, 19 67 — H. E. Baumann, ENGINEER OF DESIGN
APPROVED Oct 4, 19 67 — [illegible], CHIEF ENGINEER AND DIRECTOR
APPROVED Oct 4, 19 67 — Francis D. Keresey, DIRECTOR

5-57

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
APPROVED
DIVISION ENGINEER — DATE

1730+30

CONTRACT NO. 25014

FORD COUNTY SECTION 27-38B F.A.I. ROUTE 57 PROJECT I-57-5 ( ) 259

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	27-38B	FORD	28	5
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT: I-57-5(99) 259		

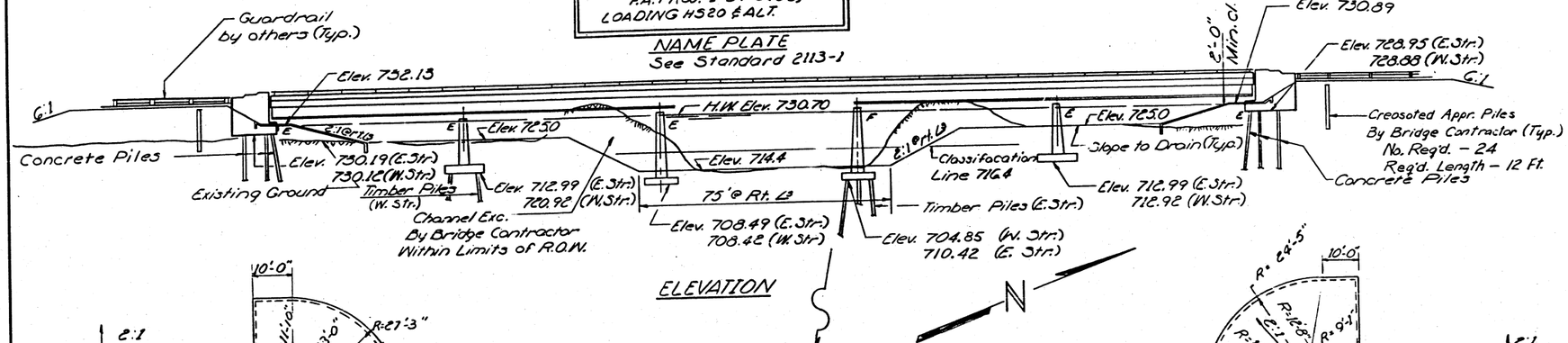
SHEET NO. 1
18 SHEETS

B.M. - 3 Nails in 9" Hackberry
3.5 Lt. Sta. 1730+80.5 Elev. 731.97

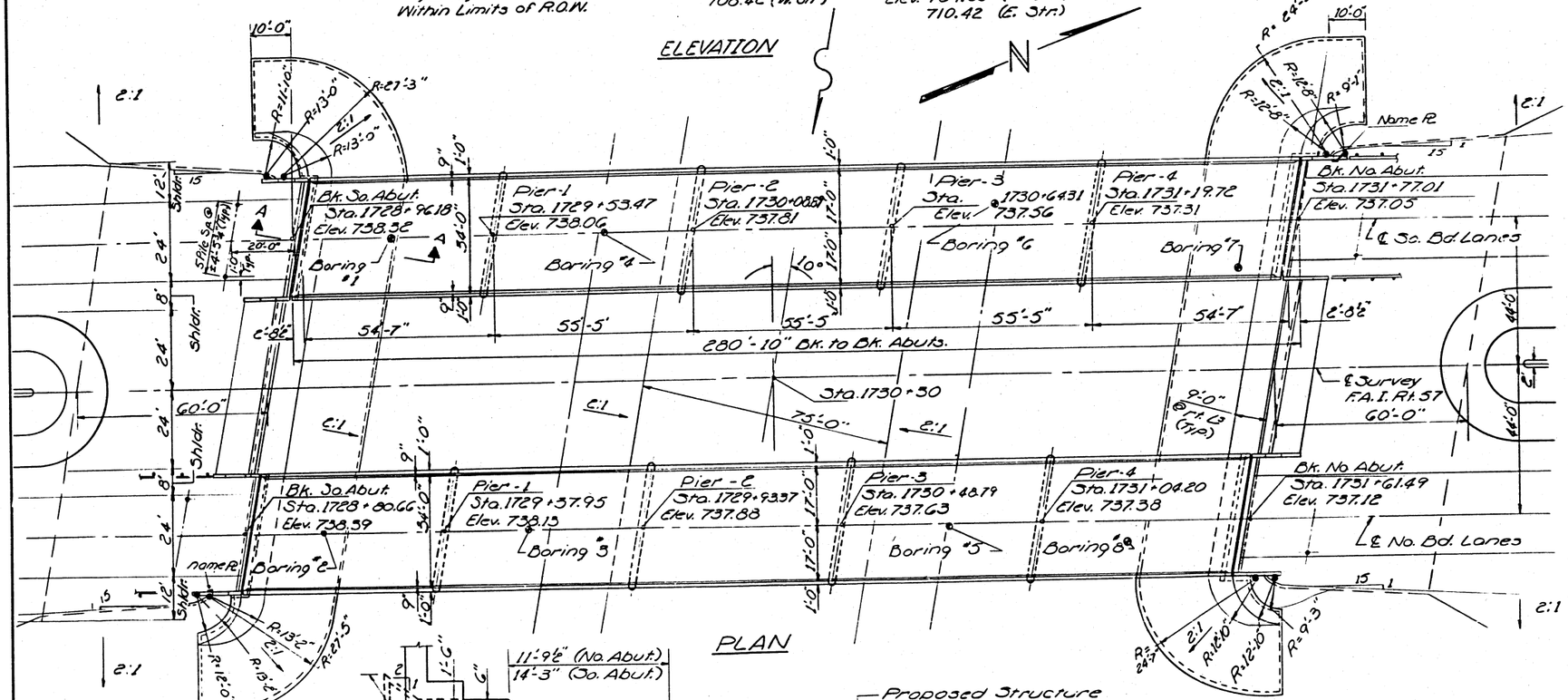
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

STATION 1730+30
BUILT 196 BY
STATE OF ILLINOIS
F.A.I. RT. 57 SEC. 10,27-38B
F.A. PROJ. I-57-5(99)
LOADING H520 & ALT.

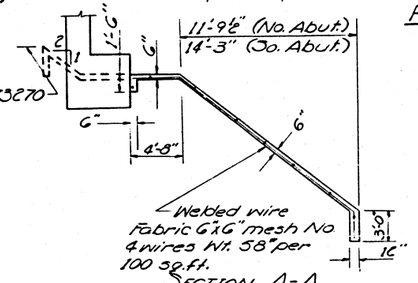
NAME PLATE
See Standard 2113-1



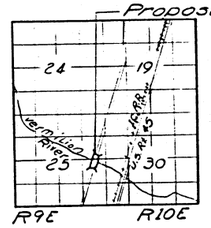
ELEVATION



PLAN



SECTION A-A



PROFILE F.A.I. Rt. 57

LOCATION PLAN

GENERAL NOTES

Coarse aggregate to be used in parapet handrail and end post must be free of chert, flint, limonite, lignite and soft sandstone.

The concrete floor slab will be finished in accordance with Art. 51.19 of the Standard Specifications.

Slope wall shall be reinforced with welded wire fabric 6"x6" mesh #4 wire weighing 58 per 100 sq ft.

Layout of slope walls may be varied to suit ground conditions in the field as directed by the Engineer.

All reinforcement bars should be lapped a min. of 20 diameters unless otherwise shown.

Permanent forms will not be permitted in forming the concrete floor.

All structural steel shall conform to A.S.T.M. Designation A-36

Exposed surfaces of the expansion devices, inaccessible after erection, shall receive two shop coats of red lead paint. All other surfaces shall be given one shop coat of red lead paint.

Anchor studs shall not be painted.

Expansion devices are included in the quantity of structural steel Est. Weight = 3670 Lbs.

Excavation for portions of structures in the embankment shall not be classified.

The contractor shall drive two(2) concrete test piles one at North Abut. E. Structure, one at South Abut. W. Structure, and two(2) timber test piles, one at Pier #1 W. Structure, and one at Pier #3 E. Structure in permanent locations as directed by the Engineer before ordering the remainder of piles.

An alternate prestressing strand pattern using Extra High Strength Strand (270 ksi) is permitted. See Special Provisions.

TOTAL BILL OF MATERIAL

Item		Super.	Sub.	Total
Class "A" Exc. for Struct.	Cu. Yds.		613	613
Class "B" Exc. for Struct.	Cu. Yds.		663	663
Class "A" Concrete	Cu. Yds.	671.5	161.2	832.7
Class "A" Concrete	Cu. Yds.		783.8	783.8
Furnishing & Erecting Precast Prest. I Bm. 42"	Lin. Ft.	2735		2735
Aluminum Handrail	Lin. Ft.	1111		1111
Concrete Piles	Lin. Ft.		1993	1993
Untreated Piles (Up to 30')	Lin. Ft.		971	971
Structural Steel	Lbs.	7490		7490
Reinforcement Bars	Lbs.	162,920	38,690	201,610
Test Pile (Timber)	Ea.		2	2
Test Pile (Concrete)	Ea.		2	2
Name Plates	Ea.			2
Protective Coat	Sq. Yds.	2585		2585
Slope Wall (6")	Sq. Yds.		1109	1109
‡‡ Bridge Seat Sealant	Lump Sum		1	1
Creosoted Piles (Up to 20')	Lin. Ft.		288	288

‡ Includes excavation for slopewall.
‡‡ Applied at abutments.

		19
DESIGNED	L.M. Chou	EXAMINED
CHECKED	M Sponsler	PASSED
	J.P. Zink	APPROVED
CHECKED		

ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
ENGINEER OF DESIGN
CHIEF HIGHWAY ENGINEER

DESIGN STRESSES FIELD UNITS

f_s = 20,000 psi
V_c = 75 psi (Ftgs.)
n = 10

PRECAST PRESTRESSED UNITS

f_{c1} = 4000 psi
f_s = 248,000 psi (Strands)
f_{s1} = 175,600 psi (Strands)

WATERWAY INFORMATION

Drainage Area ---- 105,000 Acres
Character --- rolling, wooded, cultivated
Required Opening --- (50 Yr. Flood) -- 2300 Sq. Ft.
Present Opening ---------- None
Proposed Opening ---------- 2300 Sq. Ft.

LOADING H36 80-44 & ALTERNATE

GENERAL PLAN & ELEVATION
PROJECT I-57-5(99)259
VERMILLION RIVER
F.A.I. RT. 57 SEC. 10,27-38B
FORD COUNTY
STA. 1730+30

Rev. 8-2-67 Structural Steel from 7330 to 7490 lbs. Reinf. Bars from 194200 to 201610 lbs.

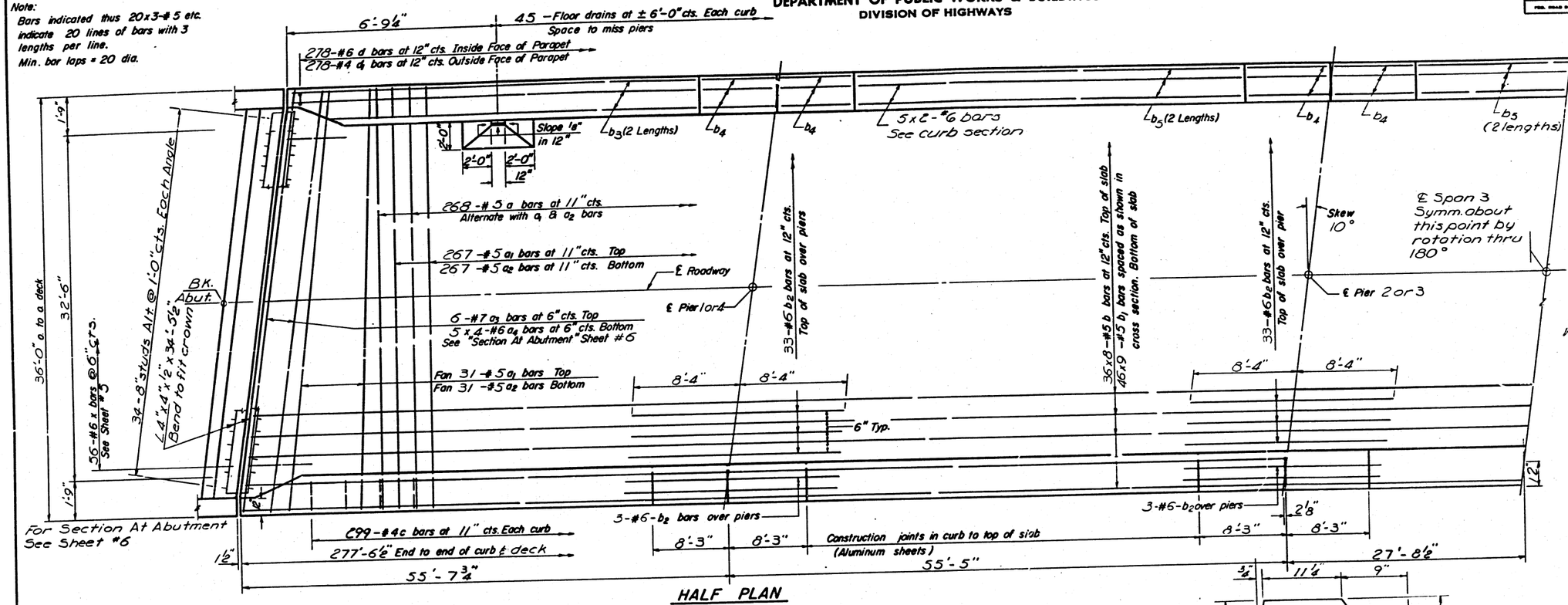
Rev. 9-29-67 Added Creosoted Appr. Piles. DES

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	27-38 B	FORD	28	6

SHEET NO. 2
28 SHEETS

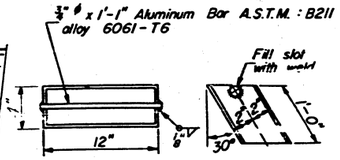
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

Note:
Bars indicated thus 20x3-#5 etc. indicate 20 lines of bars with 3 lengths per line.
Min. bar laps = 20 dia.



For Section At Abutment See Sheet #6

HALF PLAN



FLOOR DRAIN
Cost incidental to Class X Concrete

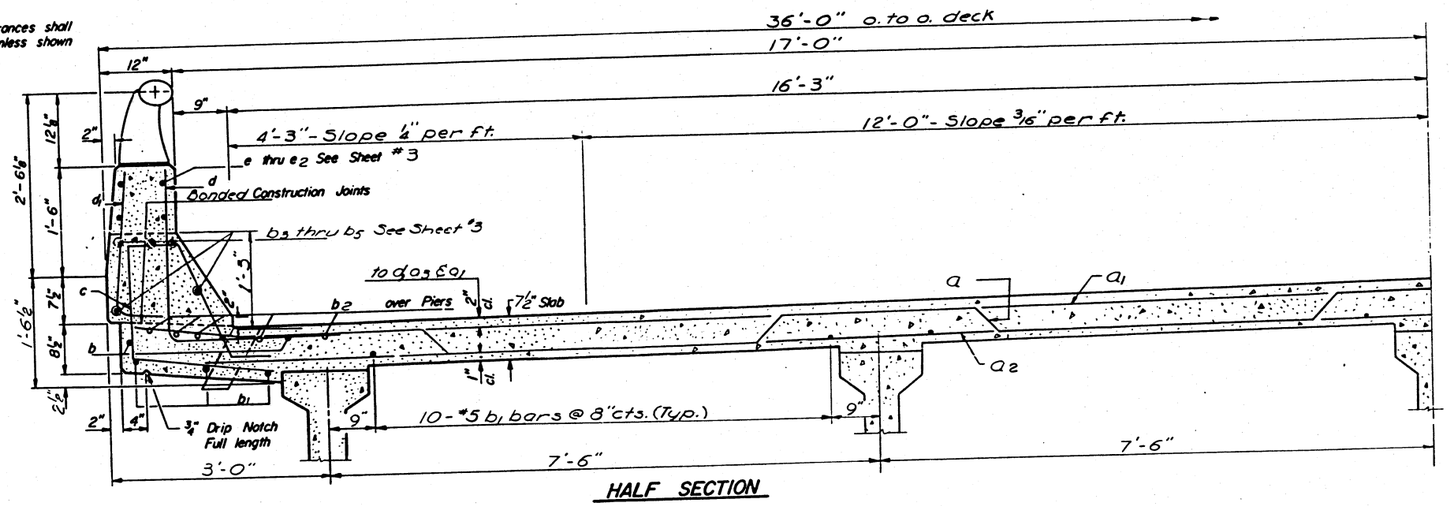
Note:
Work this sheet with sheet #3

TWO SUPERSTRUCTURES
BILL OF MATERIAL

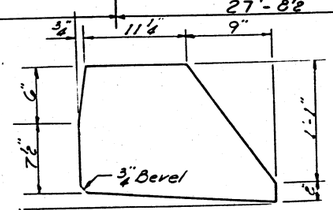
Bar	No.	Size	Length	Shape
a	536	#5	36'-7"	
a1	658	#5	35'-3"	
a2	658	#5	33'-9"	
a3	24	#7	35'-9"	
a4	80	#6	6'-10"	
b	576	#5	35'-8"	
b1	828	#5	31'-10"	
b2	312	#6	16'-8"	
c	1196	#4	6'-1"	
d	1112	#6	5'-9"	
d1	1112	#4	2'-6"	
m	208	#3	6'-10"	
m1	64	#5	5'-7"	
m2	80	#4	5'-6"	
s	160	#4	10'-0"	
s1	200	#4	7'-10"	
x	224	#6	7'-11"	
Reinforcement Bars			lbs.	150,003
Structural Steel			lbs.	7490
Class X Concrete			Cu. Yds.	56.9

For locations and details of bars m, m1, m2, s and s1, see sheets 5 & 6
The quantities of longitudinal reinforcement and concrete in parapets & curbs are billed separately on sheet #3 and are not included above.

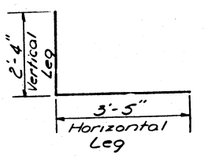
All clearances shall be 1½" unless shown otherwise.



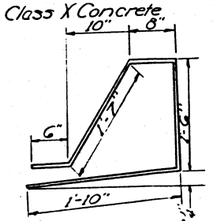
HALF SECTION



DETAIL OF ⅛" ALUMINUM SHEET
A.S.T.M. B209 Alloy 3003 - H14
Cost Incidental to Class X Concrete



BAR d

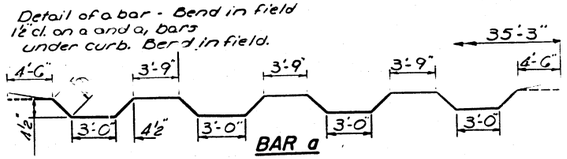


BAR c

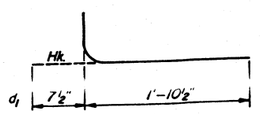
DESIGNED	Li-ming Chen	EXAMINED	Aug. 16 1966
CHECKED	DE Sponsler	PASSED	
DRAWN	James R. Carmain	APPROVED	V. E. Staff
CHECKED	VES		

PI-1-L (≦14°) 1-27-66

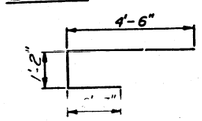
Detail of a bar - Bend in field
12" cl. on a and a1 bars under curb. Bend in field.



BAR a



BARS d & d1



BAR x

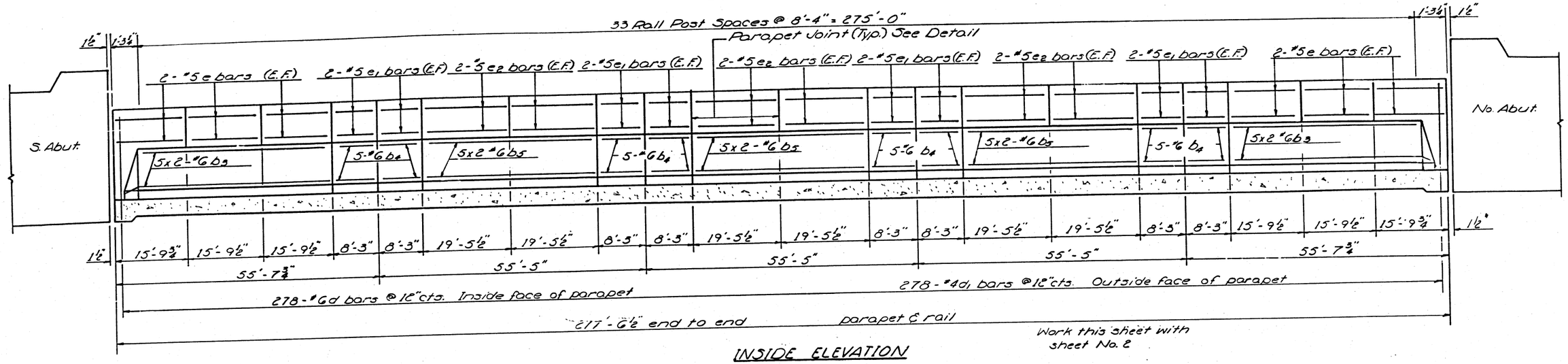
SUPERSTRUCTURE
F.A.I. RT. 57 SEC. 10, 27-38-B
FORD COUNTY
STA. 1730+30

Rev. 8-2-67 Structural Steel from 7330 lbs. to 7490 lbs.

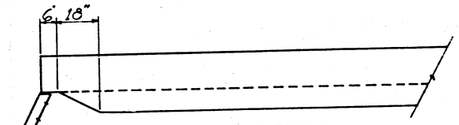
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

DIST. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A.I. 57	27-38B	FORD	28	7
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT:		

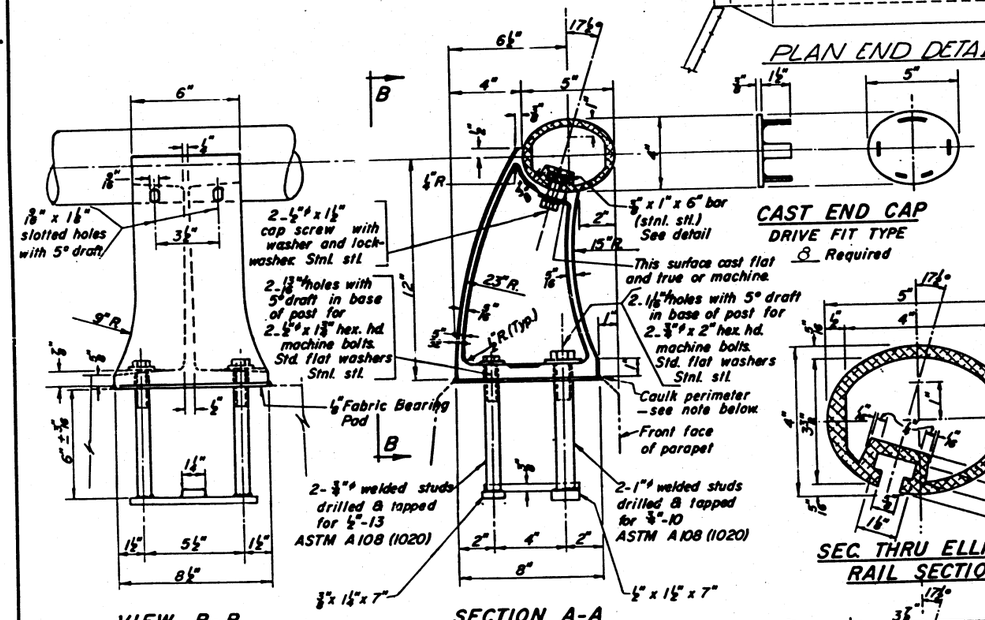
SHEET NO. 3
18 SHEETS



INSIDE ELEVATION

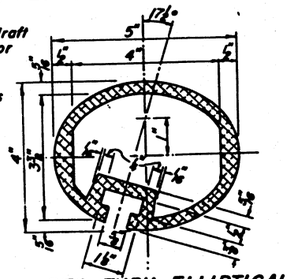


PLAN END DETAIL

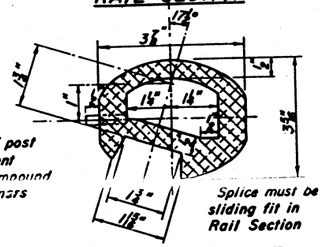


VIEW B-B
SECTION A-A
RAIL POST DETAILS

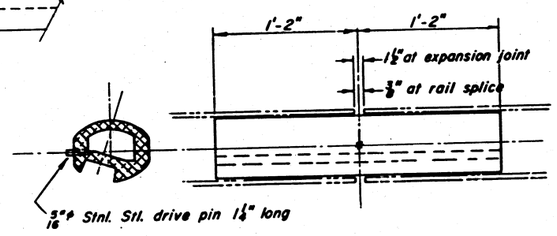
CAST END CAP
DRIVE FIT TYPE
8 Required



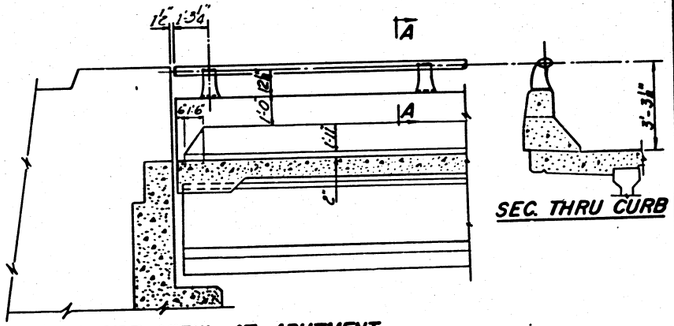
SEC. THRU ELLIPTICAL RAIL SECTION



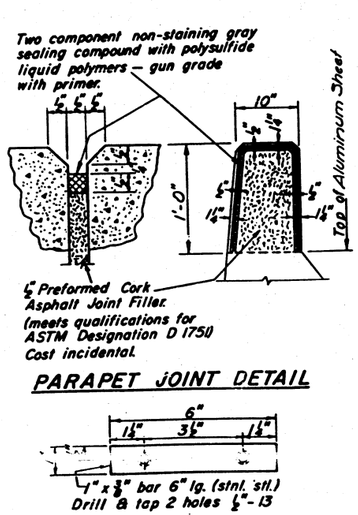
SEC. THRU SPLICE
Splice must be a sliding fit in Rail Section



RAIL SPLICE



SEC. THRU CURB



PARAPET JOINT DETAIL

CLAMP BAR

NOTES:

All Posts shall be normal to parapet.

All Aluminum Alloy Extruded Rail shall conform to ASTM specification B-221 alloy 6061-T6 and shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts. If the rail is on a horizontal curve of 2300 foot radius or less, the modular lengths may be reduced but shall be attached to a minimum of 2 posts.

All joints in rail shall be spliced per detail.

See Special Provisions for following Material Specifications:
Cast Aluminum Alloy Bridge Post — Alloy A344-T4.
Stainless Steel Bars, Cap Screws, Washers and Lockwashers.
Fabric Bearing Pad.

METHOD of MEASUREMENT: Aluminum handrail shall be measured in lineal feet. The length paid for shall be the over all length along the top longitudinal railing member thru all posts and gaps.

BASIS of PAYMENT: Aluminum handrail shall be paid for at the contract unit price per lineal foot for ALUMINUM HANDRAIL, measured as specified, which price shall be payment in full for all materials, fabrication, transportation, and erection.

Cost of rail splice, end caps, and hardware to be incidental to item ALUMINUM HANDRAIL.

Provide 1-⅛" and 2-1/16" Aluminum Shims for 25% of the Posts. Rail element shall be parallel to Grade — high spots shall be ground, and low spots shimmed.

INSIDE VIEW AT ABUTMENT

PARAPETS & RAILS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
b_3	80	#6	24'-2"	
b_4	160	#6	7'-11"	
b_5	120	#6	19'-10"	
e	96	#5	15'-6"	
e_1	128	#5	8'-0"	
e_2	96	#5	19'-2"	
Class X Concrete			Cu. Yds.	104.6
Reinforcement Bars			Lbs	12920
Aluminum Handrail			Lin. Ft	1111

ALUMINUM HANDRAIL
F.A.I. RT. 57 SEC. 10.27-38B
FORD COUNTY
ILLINOIS

DESIGNED	George Al-Jazi
CHECKED	Sumit T. Desai
DRAWN	Wm. M. Best
CHECKED	S.D.

19
EXAMINED
PASSED
APPROVED

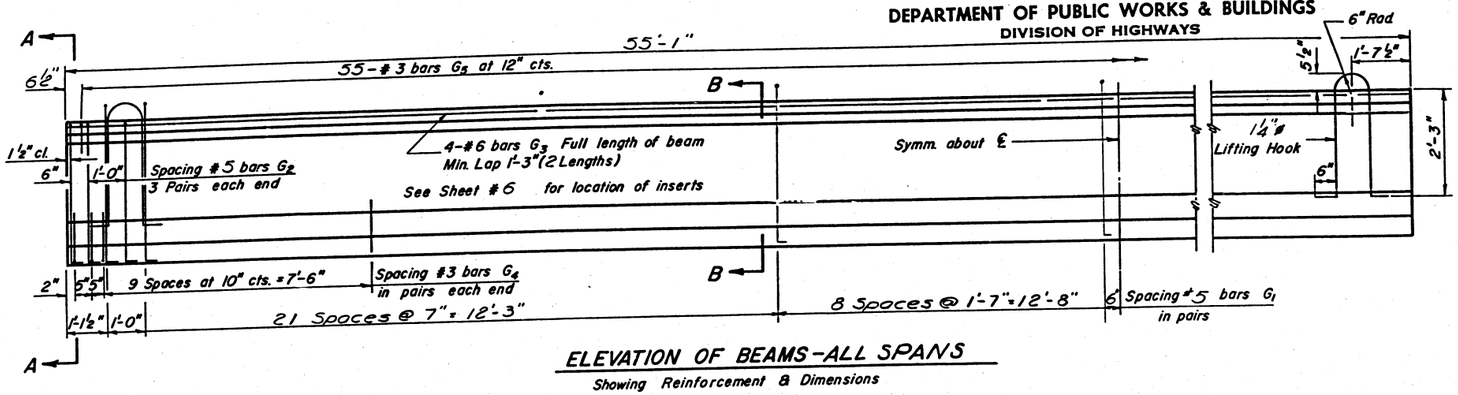
Note:
Seal perimeter of base of post to parapet with two component non-staining gray sealing compound with polysulfide liquid polymers —gun grade with primer.

R-17 11-18-66

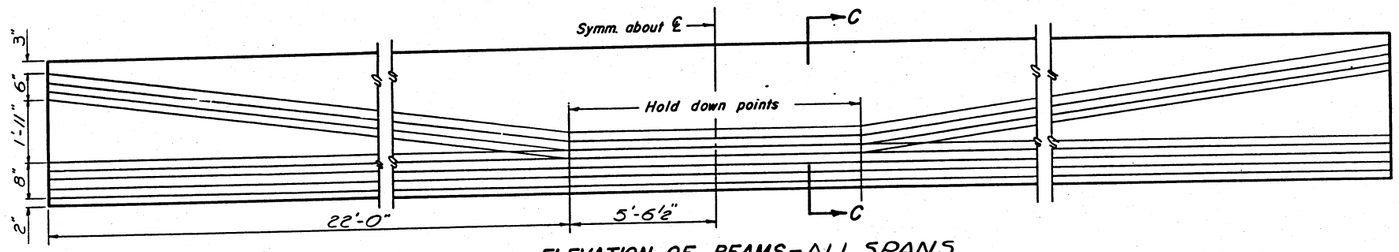
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. R. I. 57 F. A. I. 57	21-38B	FORD	28	8
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

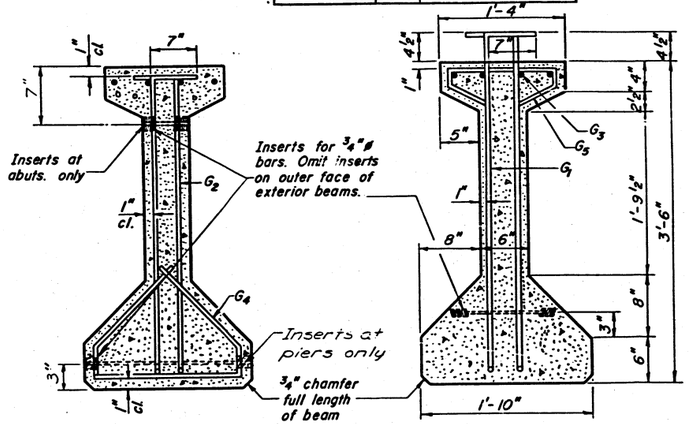
SHEET NO. 4
18 SHEETS



ELEVATION OF BEAMS-ALL SPANS
Showing Reinforcement & Dimensions

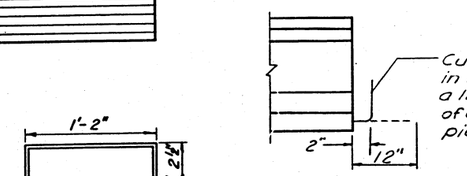


ELEVATION OF BEAMS-ALL SPANS
Showing Prestressing Steel

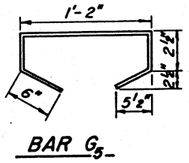


SECTION A-A

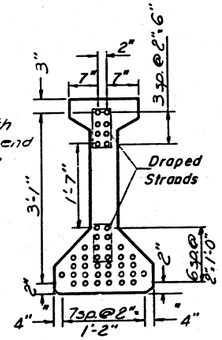
SECTION B-B



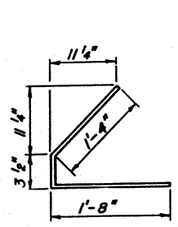
DETAIL AT END OF BEAMS OVER PIERS



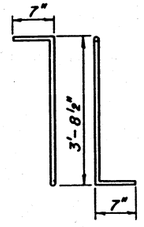
BAR G_5



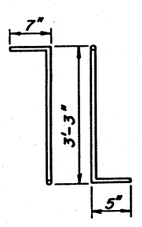
SECTION C-C



BAR G_4



BAR G_1



BAR G_2

*BAR LIST

Bar	No.	Size	Length	Shape
G_1	124	#5	4'-10½"	7L
G_2	12	#5	4'-3"	7L
G_3	8	#6	28'-0"	—
G_4	48	#3	3'-3½"	C
G_5	55	#3	2'-7"	O

*For one beam only.

NOTES

All inserts and threaded rods for inserts, reinforcing and Prestressing Steel, and other items which are cast into the Precast Concrete I-Beams shall be included in the contract unit price per lineal foot of "Furnishing And Erecting Precast Prestressed Concrete I-Beams, 42 In."

See Supplemental Specifications for additional information regarding materials, Prestressing equipment, construction and handling methods and other requirements for Precast Prestressed Concrete I-Beams.

Prestressing Steel shall have a nominal diameter of 7/16".

Inserts for ¾"ø threaded rods are to be two strut, coil type for interior I-Beams and single coil, flared loop type for exterior I-Beams.

Steel for lifting hooks shall be non-deformed bars of structural or intermediate grade billet steel.

Ends of beams to be encased with cast in place Concrete shall not be coated with asphalt paint.

BILL OF MATERIAL

Item	Unit	Total
Furnishing & Erecting Precast Prestressed Concrete I-Beams, 42"	Lin. Ft.	2755

DESIGNED Li-ming Chou
CHECKED R. Lanstein
DRAWN Thomas B. Fuller
J. P. Zink

EXAMINED Aug. 16 1966
PASSED
APPROVED

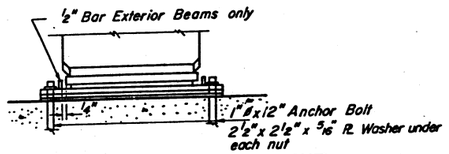
PI-4-42 S 8-1-63 Rev. 1-2-64 Rev. 1-27-66

BEAM DETAILS
F.A.I. RT. 57 SEC. 10,27-38B
FORD COUNTY
STA. 1730+30

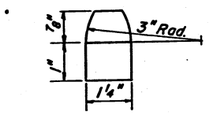
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
E.R.I. F.A.I. 57	27-38B	FORD	28	9
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

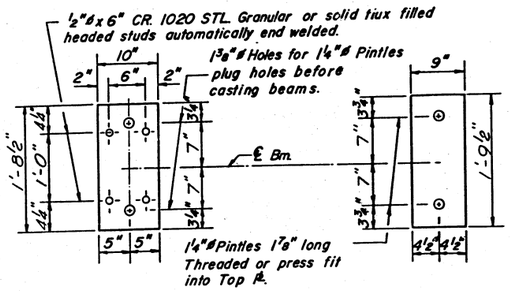
SHEET NO. 5
18 SHEETS



CROSS SECTION AT ABUTMENT

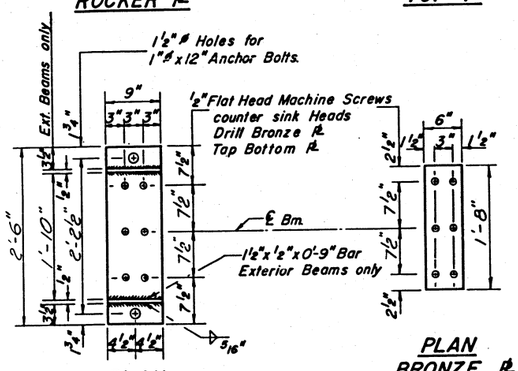


PINTLE DETAIL



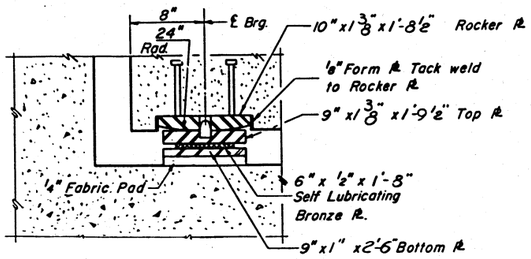
PLAN ROCKER Pl.

PLAN TOP Pl.

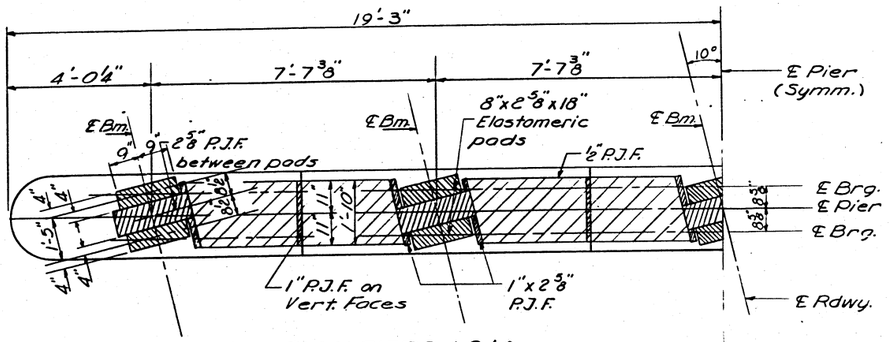


PLAN BOTTOM Pl.

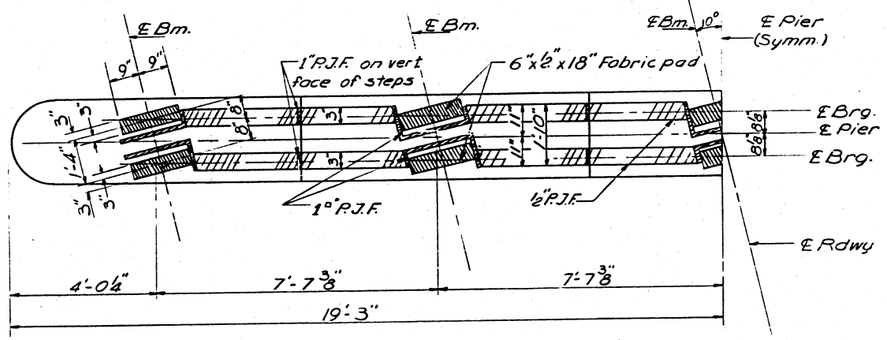
PLAN BRONZE Pl.



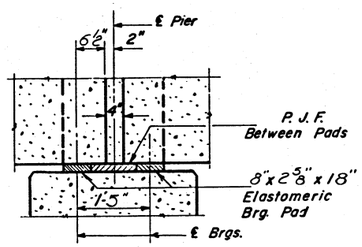
SECTION AT ABUTMENT
(Dimensions Along ℄ of Beam)



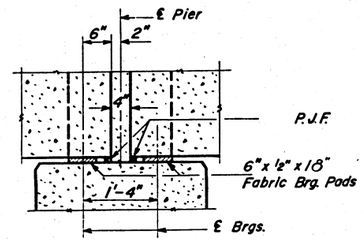
HALF PLAN PIERS 1, 2 & 4
Showing Bearing pads & P.J.F.



HALF PLAN PIER 3
Showing Bearing pads & P.J.F.



PIERS 1, 2 & 4
(Dimensions Along ℄ of Beam)



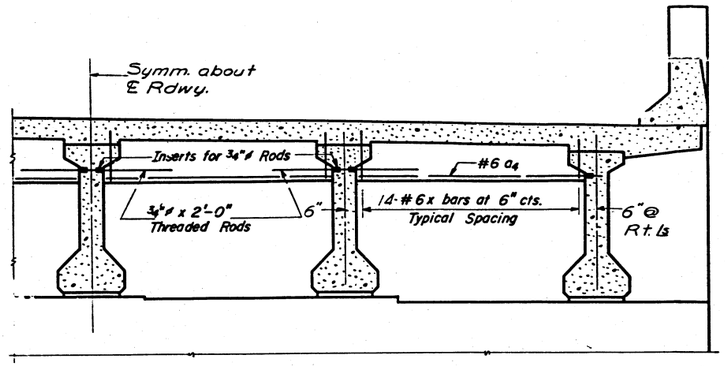
PIER 3
(Dimensions Along ℄ of Beam)

Note:
Weight of Armor Angles and Studs; Top Plates, Bottom Plates, Bronze Plates and Shim Plates of Bearing Assemblies is included in the weight of Structural Steel on Sheet #2.

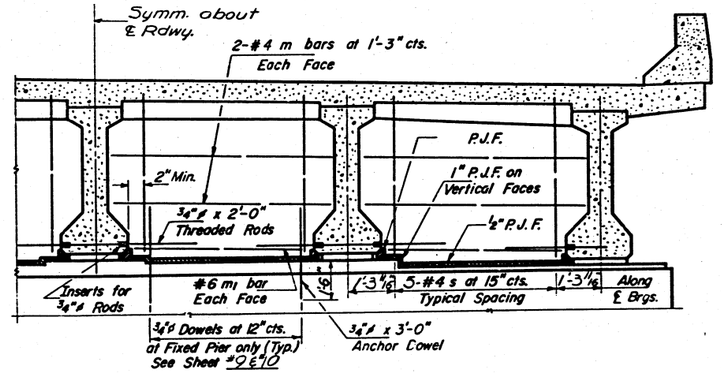
Cost of Rocker Pl. cast into beam is included in the cost of "Furnishing and Erecting Precast Prestressed Concrete I-Beams."

DESIGNED	Li-ming Chen	
CHECKED	W.E. Sponsler	
	J.P. Zink	
DRAWN	T.R. Fuller, D.L. Reamer	
CHECKED	W.S.	
EXAMINED	C.E. Thurmond, BRIDGE, CULVERTS, RETAINING WALLS AND TRAFFIC STRUCTURES	Aug. 16 1966
PASSED	H. J. Alton, ENGINEER OF BRIDGES AND STRUCTURES	
APPROVED	W.E. Staff, CHIEF HIGHWAY ENGINEER	

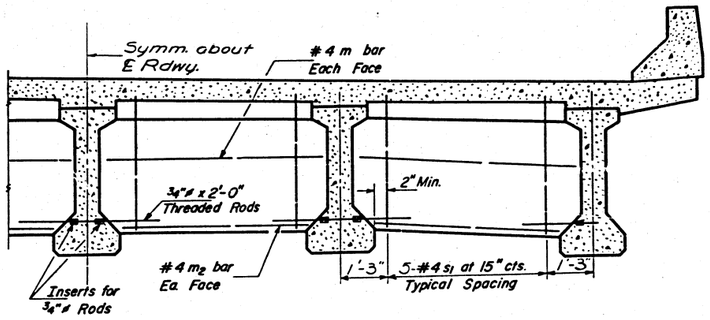
PI-3 8-1-63 Rev. 1-2-64 Rev. 1-27-66



DIAPHRAGM AT ABUTMENTS



DIAPHRAGM AT PIERS



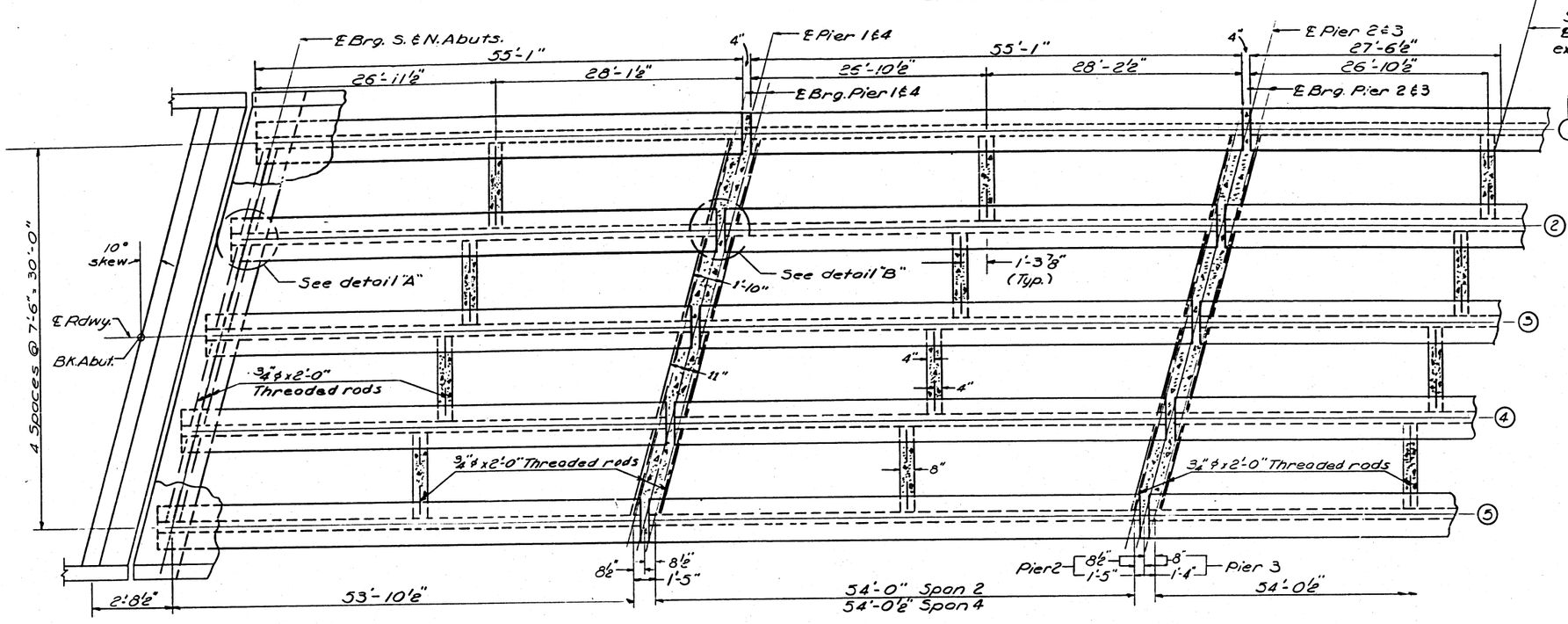
INTERIOR DIAPHRAGMS

BEARING DETAILS
F.A.I. RT. 57 SEC. 1027-38B
FORD COUNTY
STA. 1730+30

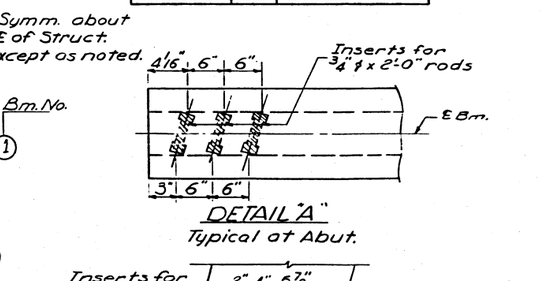
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A.S. 57	27-38B	FORD	28	10
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT:		

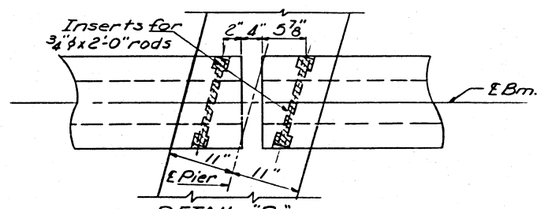
SHEET NO. 6
18 SHEETS



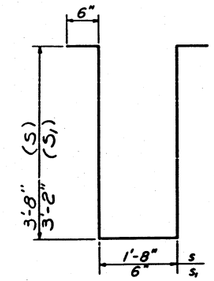
FRAMING PLAN



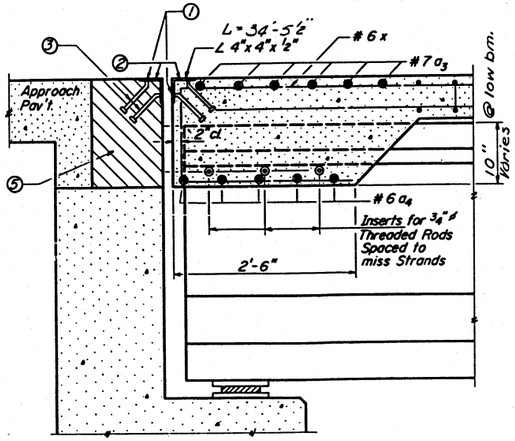
DETAIL "A"
Typical at Abut.



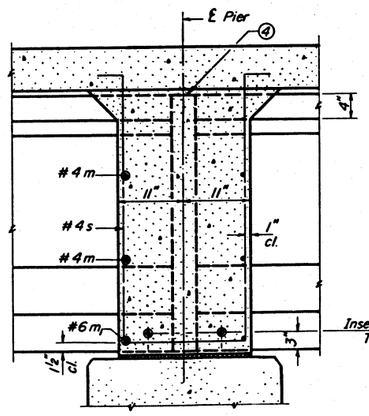
DETAIL "B"
Typical at Piers



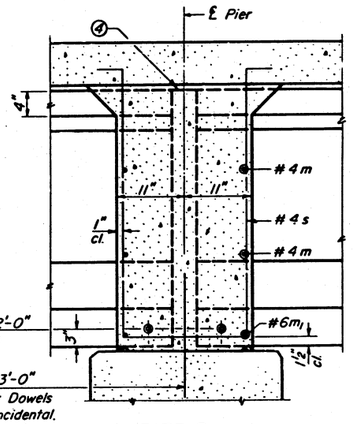
BARS s & s1



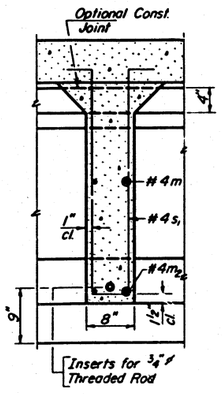
SECTION AT ABUTMENT



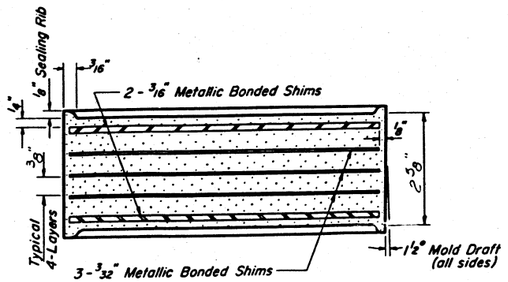
PIERS 1, 2 & 4



PIER 3



SEC. AT INT. DIAPHRAGM



ELASTOMERIC BEARING DETAIL
See Sheet # 5

Bars a_3, a_4; m, m_1, m_2; s & s_1 are included in Bill of Material on Sheet # 2

1. 7/16" ϕ holes at 12" cts. for ⅞" ϕ bolts set on normal gage line. All bolts shall be burned, sawed or chipped off flush with the back of angles after forms are removed.
2. 7/16" ϕ vent holes at 12" cts. set on 1'-8" gage line.
3. ¾" ϕ x 8" CR 1020 STL granular or solid flux filled headed studs-automatically end welded. (alternate at 1'-0" cts.)
4. Pour diaphragm flush with top of beam. Concrete in slab above this line shall be placed not less than 45 minutes nor more than 90 minutes after diaphragm has been poured.
5. Hatched area to be poured after Superstructure forms have been removed. Quantity of Class X Concrete included with Superstructure.

DESIGNED	Li-ming Chou
CHECKED	V.E. Spangler
	J.P. Zink
DRAWN	Wanless
CHECKED	V.E.S.

EXAMINED Aug. 16 1966
PASSED
APPROVED V.E. Staff

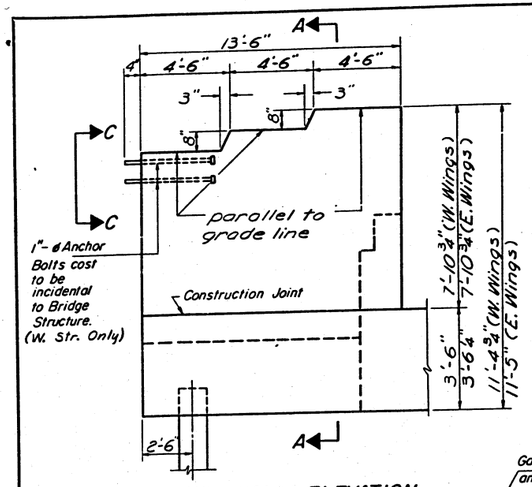
PI-2J 1-27-66

FRAMING DETAILS
FA I OT 57 SEC 1027-3RA
FORD COUNTY
STA. 1730+30

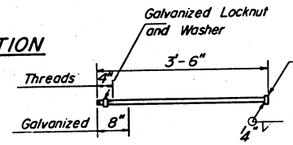
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R.R.L. F.A.I. 57	27-38B	FORD	28	11
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT:		

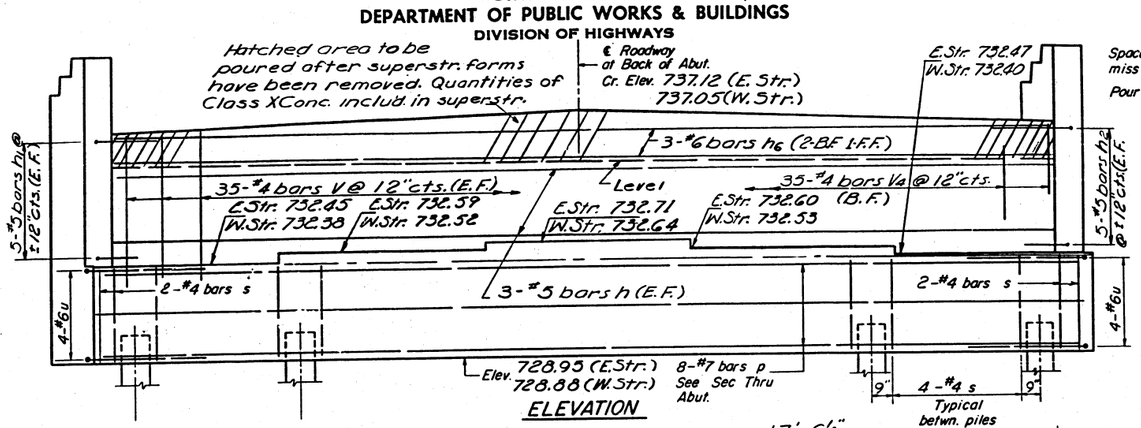
SHEET NO. 7
18 SHEETS



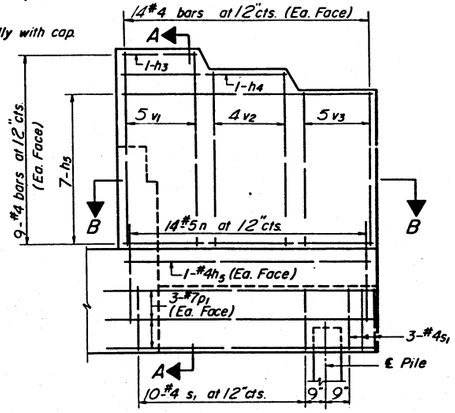
WING WALL ELEVATION



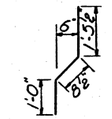
1" ø ANCHOR BOLT



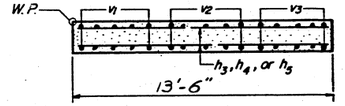
ELEVATION



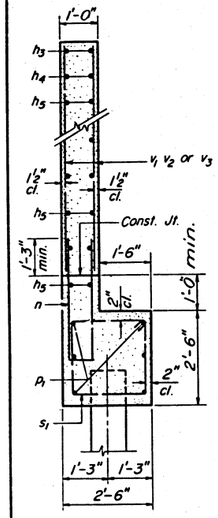
WING WALL ELEVATION
Reinforcement



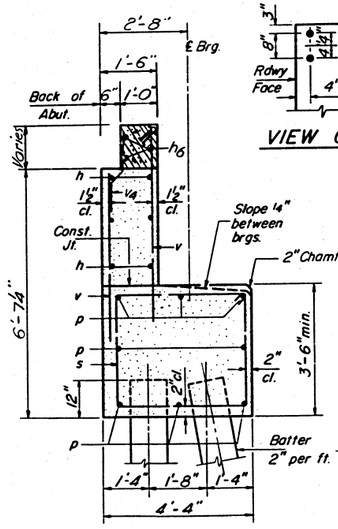
BAR V4



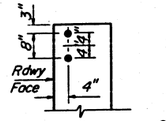
SEC. B-B



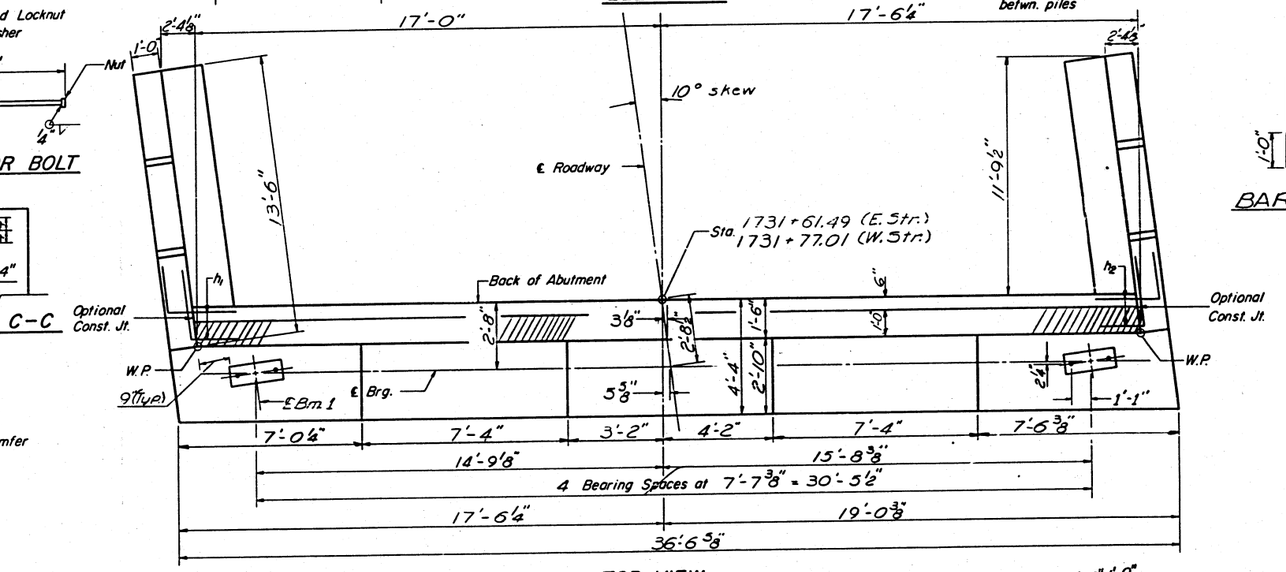
SEC. A-A



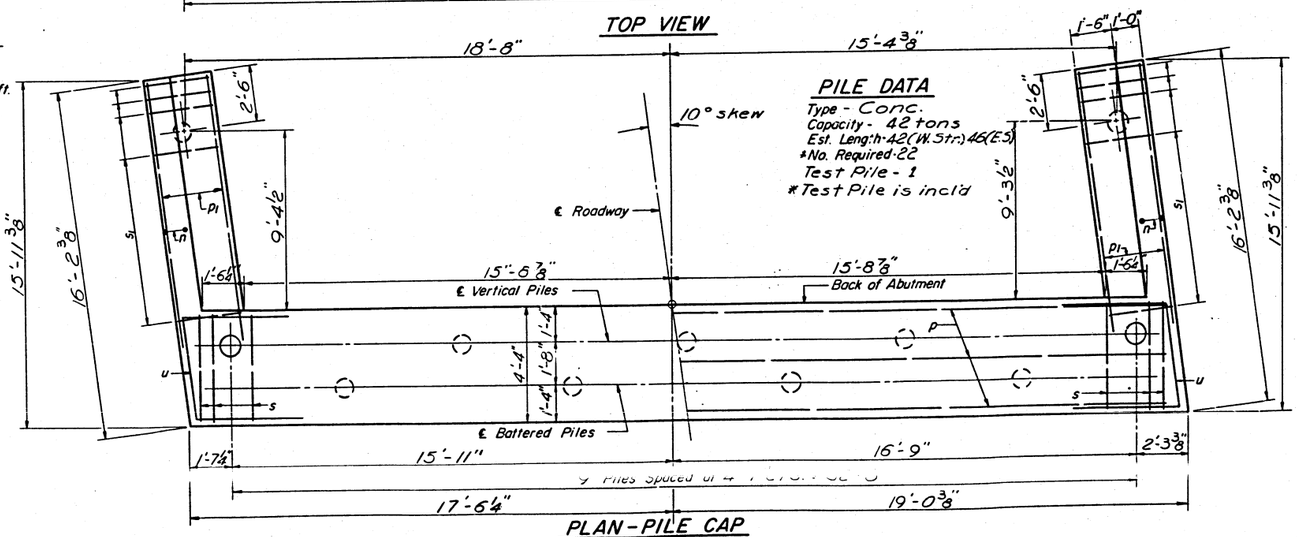
SEC. THRU ABUT.



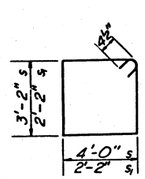
VIEW C-C



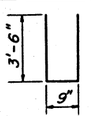
TOP VIEW



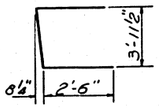
PLAN-PILE CAP



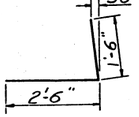
BARS & s1



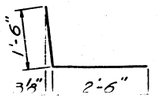
BAR n



BAR u



BAR h2



BAR h1

TWO ABUTMENTS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	12	#5	34'-3"	
h1	20	#5	4'-0"	
h2	20	#5	4'-0"	
h3	8	#4	4'-2"	
h4	8	#4	8'-8"	
h5	64	#4	13'-2"	
h6	6	#6	34'-3"	
n	56	#5	7'-9"	
p	16	#7	36'-0"	
p1	24	#7	13'-3"	
s	72	#4	15'-1"	
s1	32	#4	9'-5"	
u	16	#6	9'-0"	
v	140	#4	5'-6"	
v1	40	#4	7'-9"	
v2	32	#4	7'-1"	
v3	40	#4	6'-5"	
v4	70	#4	3'-2"	
Class X Concrete			Cu. Yds.	80.6
Reinforcement Bars			Lbs.	6280
Concrete Piles			Lin. Ft.	922
Test Piles Concrete			Ea.	1

NORTH ABUTMENT
F.A.I. RT. 57 SEC. 10,27-38B
FORD COUNTY
STA. 1730+30

DESIGNED Li-ming Chen
CHECKED DE Bowsher
SG Ferchow
CHECKED DEB

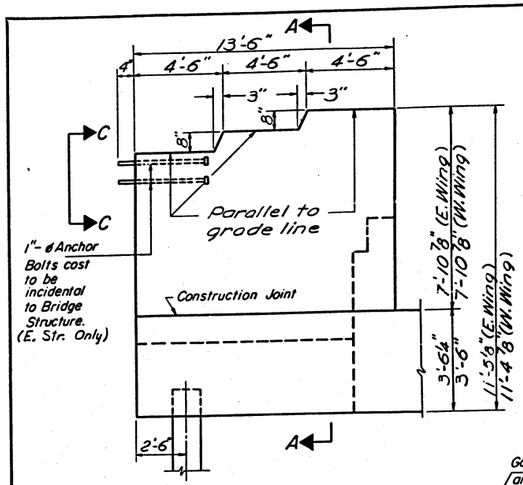
EXAMINED Aug. 16 1966
PASSED H. C. Allaire
APPROVED O.K. Staff

A-9-L (1°-14°) 2-1-66

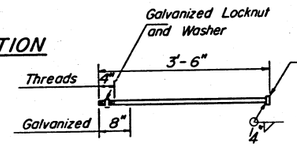
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 57	27-38B	FORD	28	12
FED. ROAD DIST. NO. 9	ILLINOIS	FED. AID PROJECT:		

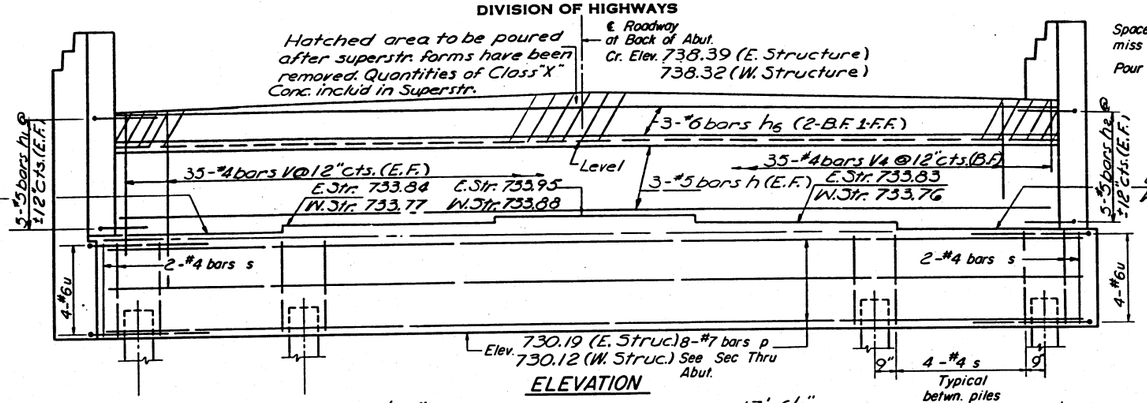
SHEET NO. 8
18 SHEETS



WING WALL ELEVATION

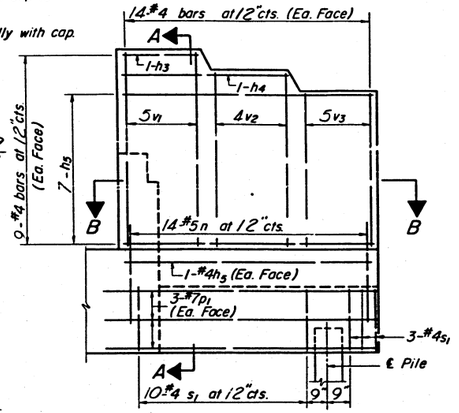


1" ø ANCHOR BOLT

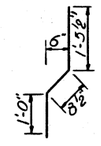


ELEVATION

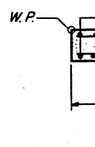
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.



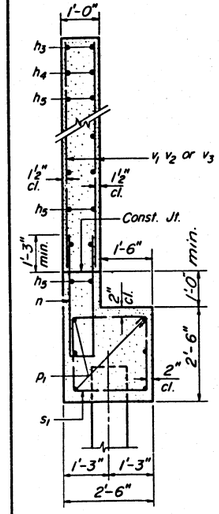
WING WALL ELEVATION
Reinforcement



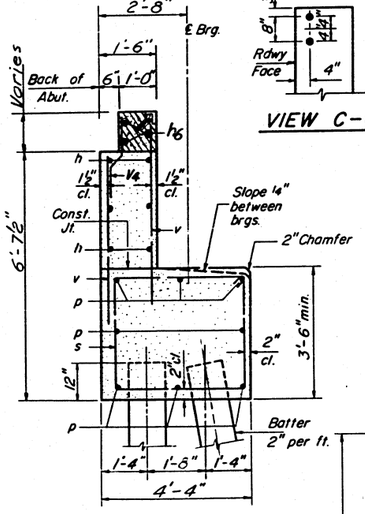
BAR V4



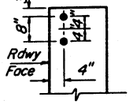
SEC. B-B



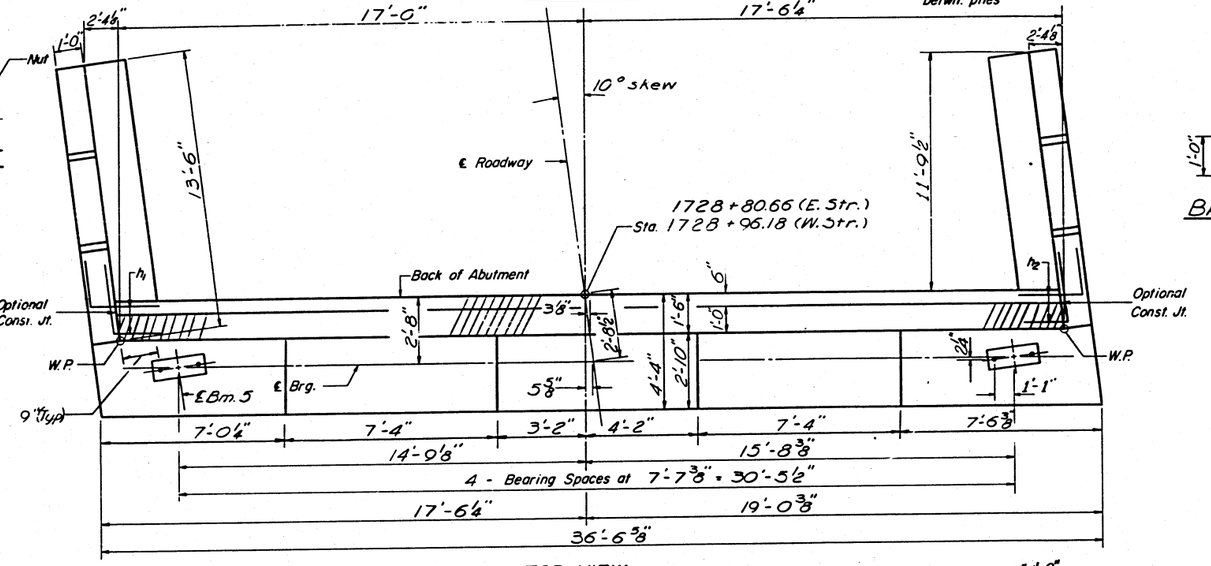
SEC. A-A



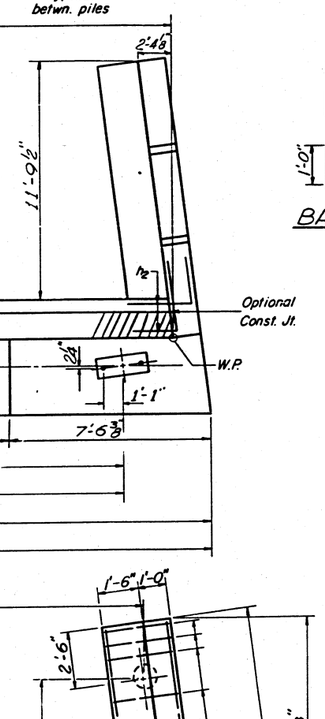
SEC. THRU ABUT.

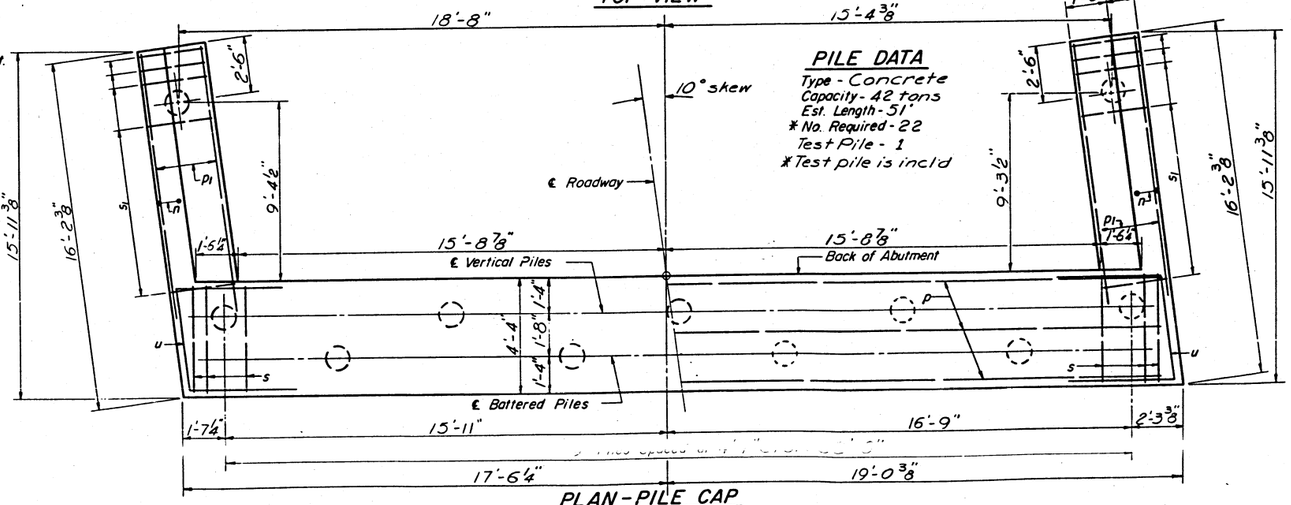


VIEW C-C

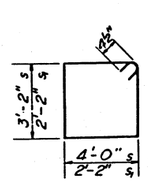


TOP VIEW

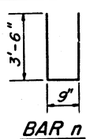




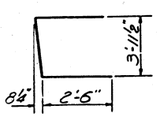
PLAN - PILE CAP



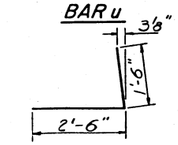
BARS s & s1



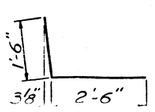
BAR n



BAR u



BAR h2



BAR h1

TWO ABUTMENTS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	12	#5	34'-3"	
h1	20	#5	4'-0"	
h2	20	#5	4'-0"	
h3	8	#4	4'-2"	
h4	8	#4	8'-8"	
h5	64	#4	13'-2"	
h6	6	#6	34'-3"	
n	56	#5	7'-9"	
p	16	#7	36'-0"	
p1	24	#7	13'-3"	
s	72	#4	15'-1"	
s1	32	#4	9'-5"	
u	16	#6	9'-0"	
v	140	#4	5'-6"	
v1	40	#4	7'-9"	
v2	32	#4	7'-1"	
v3	40	#4	6'-5"	
v4	70	#4	3'-2"	
Class X Concrete			Cu. Yds.	806
Reinforcement Bars			Lbs.	6280
Concrete Piles			Lin. Ft.	1071
Test Piles Concrete			Ea.	1

DESIGNED	Li-ming Chen
CHECKED	D.E. Spangler
DRAWN	S.G. Ferchow, L.P. Zink
CHECKED	W.E.

EXAMINED — Apr. 16 1966
PASSED — H. J. Alton
APPROVED — V.E. Staff

A-9-L (1°-14°) 2-1-66

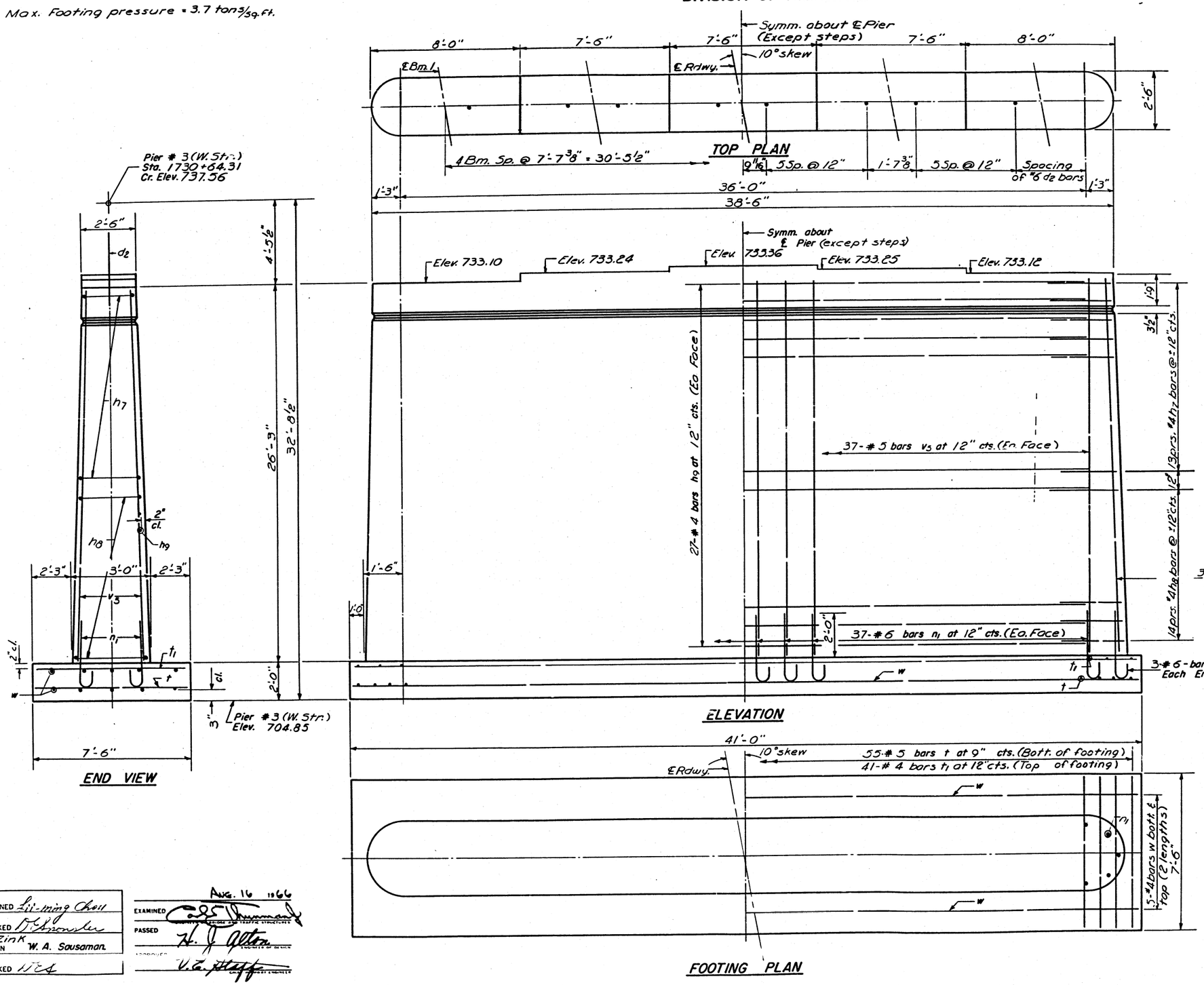
SOUTH ABUTMENT
FAT RT 57 SEC 10.27-38B
FORD COUNTY
STA. 1730+30

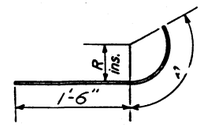
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

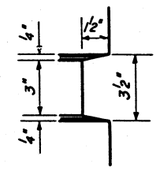
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	27-38B	FORD	28	12A
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT.		

SHEET NO. 9
18 SHEETS

Max. Footing pressure = 3.7 tons/sq.ft.





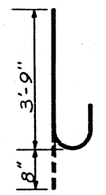


NOTCH DETAIL

Bar	R	A
h_7	1'-0 1/2"	2'-4"
h_8	1'-2"	2'-6"

DETAIL OF BARS h_7 & h_8

Note:
All edges shall have standard 3/4" chamfer except as noted. Pour steps monolithlically with pier stem.



BAR n_1

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d_2	24	#6	3'-0"	—
h_7	52	#4	3'-10"	⊃
h_8	56	#4	4'-0"	⊃
h_9	54	#4	36'-0"	—
n_1	80	#6	4'-5"	⊂
t	55	#5	7'-0"	—
t_1	41	#4	7'-0"	—
v_3	80	#5	26'-1"	—
w	20	#4	20'-9"	—
Class "A" Concrete			Cu. Yds.	125.1
Reinforcement Bars			Lbs.	5270

DESIGNED	Li-ming Chou
CHECKED	D. Stromsten
J.P. Zink DRAWN	W. A. Sousaman
CHECKED	W.E.S.

Aug. 16 1966
EXAMINED
PASSED
APPROVED — Chief Highway Engineer

P-1 Re-drawn 7-21-59 Rev. 11-25-59

PIER 3
WEST STRUCTURE
F.A.I. RT. 57 SEC. 1021-30D
FORD COUNTY
STA. 1730+30

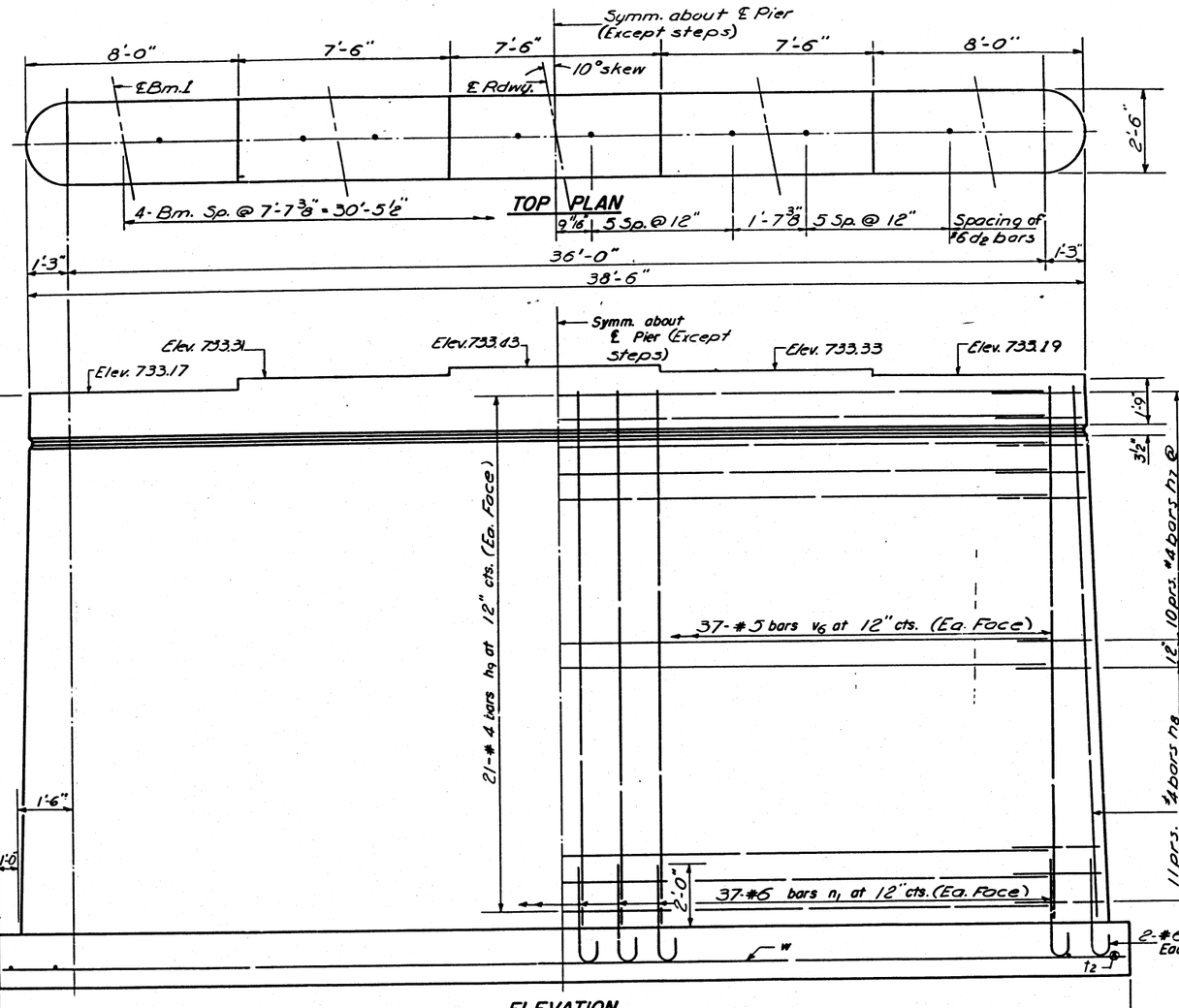
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

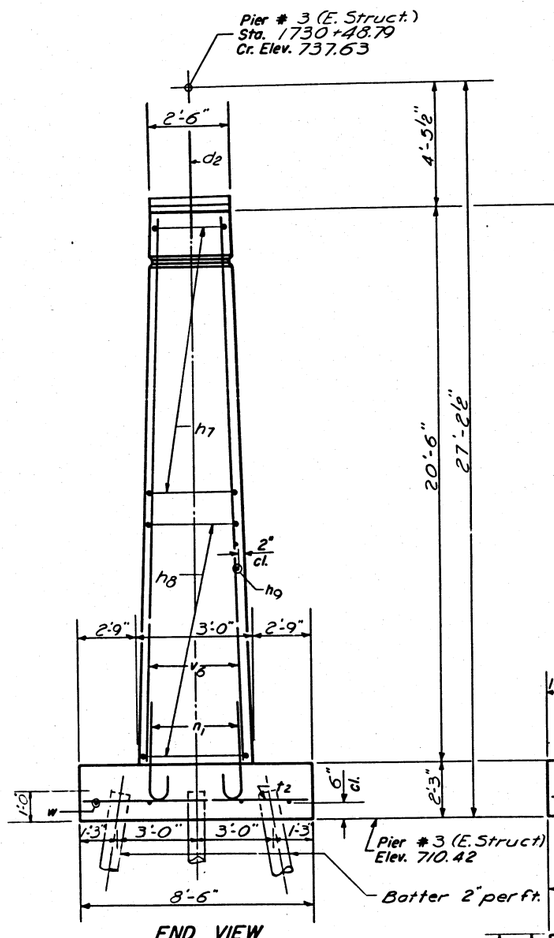
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. R. S. F. A. Σ 57	27-38B	FORD	28	14
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT.		

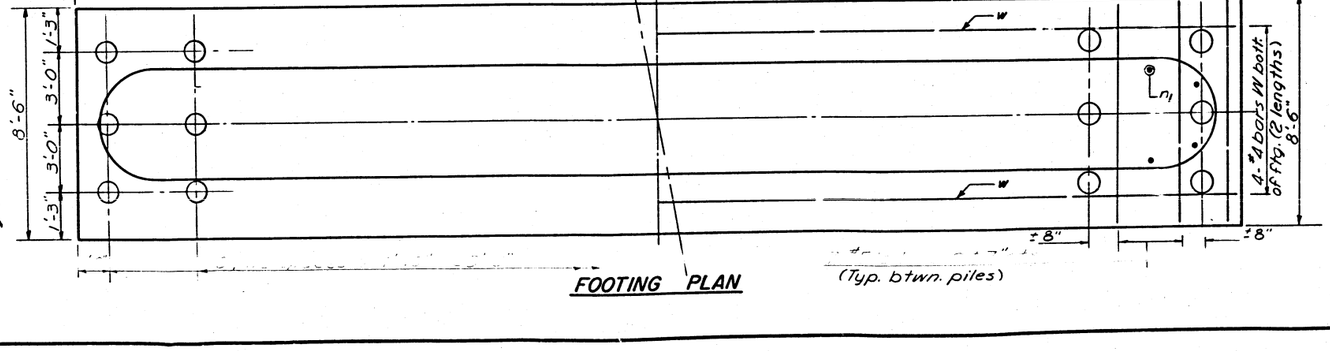
SHEET NO. 10
18 SHEETS

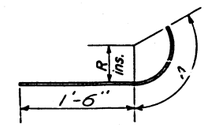
PILE DATA

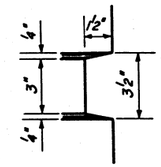
Type - Untreated
Capacity - 23.5 Tons/Pile
Est. Length - 21'-0"
* No. Req'd. - 27
Test pile - 1
*Includes one test pile











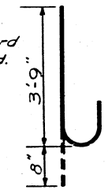
NOTCH DETAIL

Bar	R	A
h7	1'-0 1/2"	2'-4"
h8	1'-2"	2'-6"

DETAIL OF BARS
h7 & h8

Note:

All edges shall have standard 3/4" chamfer except as noted. Pour steps monolithically with pier stem.



BAR n1

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
de	24	#6	3'-0"	—
h7	40	#4	3'-10"	⊃
h8	44	#4	4'-0"	⊃
h9	42	#4	36'-0"	—
n1	78	#6	4'-5"	⊂
t2	38	#5	8'-0"	—
v6	78	#5	20'-4"	—
w	8	#4	20'-9"	—
Class "A" Concrete			Cu. Yds.	108.2
Reinforcement Bars			Lbs.	4110
Untreated Piles			Lin. Ft.	546
Test Pile (Timber)			Each	1

DESIGNED	Li-ming Chen
CHECKED	D. C. Spangler
DRAWN	W. A. Sausaman. J. P. Zink
CHECKED	DCS

EXAMINED Aug. 16 1966
PASSED
APPROVED

PIER 3
EAST STRUCTURE
AT STA 27 SEC 10 27-38B
FORD COUNTY
STA. 1730+30

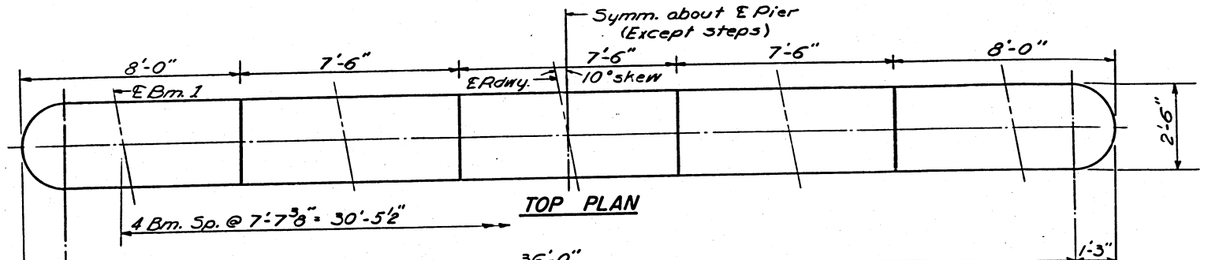
P-1 Re-drawn 7-21-59 Rev. 11-25-59

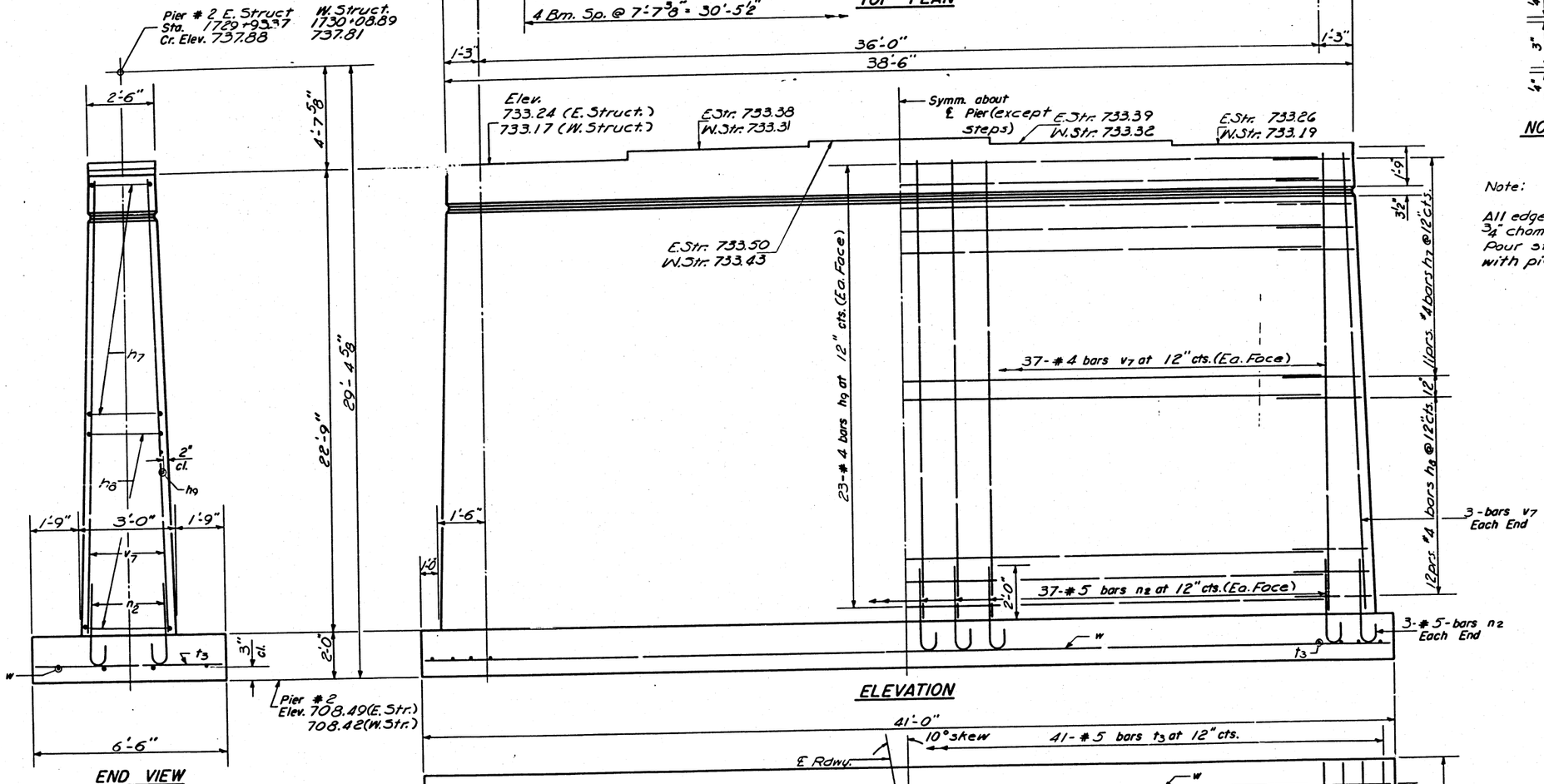
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A.I. 57	27-38B	FORD	28	15
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT.		

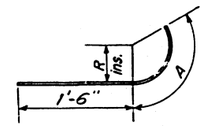
SHEET NO. 11
18 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

Maximum Footing Pressure = 2.1 Tons/Sq.Ft.

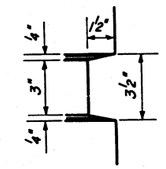






Bar	R	A
h_7	1'-0½"	2'-4"
h_8	1'-2"	2'-6"

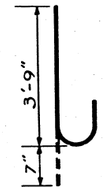
DETAIL OF BARS h_7 & h_8



NOTCH DETAIL

Note:

All edges shall have standard ¾" chamfer except as noted. Pour steps monolithically with pier stem.



BAR n_2

TWO PIERS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_7	88	#4	3'-10"	
h_8	96	#4	4'-0"	
h_9	92	#4	36'-0"	
n_2	160	#5	4'-4"	
t_3	82	#5	6'-0"	
v_7	160	#4	22'-7"	
w	16	#4	20'-9"	
Class "A" Concrete			Cu. Yds.	217.1
Reinforcement Bars			Lbs.	6570

PIER 2
F.A.I. RT. 57 SEC. 10,27-38B
FORD COUNTY
STA. 1730+30

DESIGNED	Li-ming Chen
CHECKED	D.E. Spoonster
DRAWN	J.P. Zink, W.A. Sousaman
	A.P.

EXAMINED Aug. 16 1966
PASSED H. J. Alton
APPROVED

P-1 Re-drawn 7-21-59 Rev. 11-25-59

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A.I. 57	27-38B	FORD	28	16
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT.		

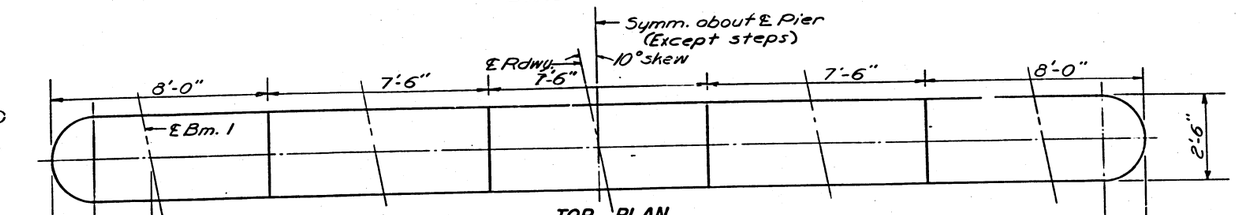
SHEET NO. 12
18 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

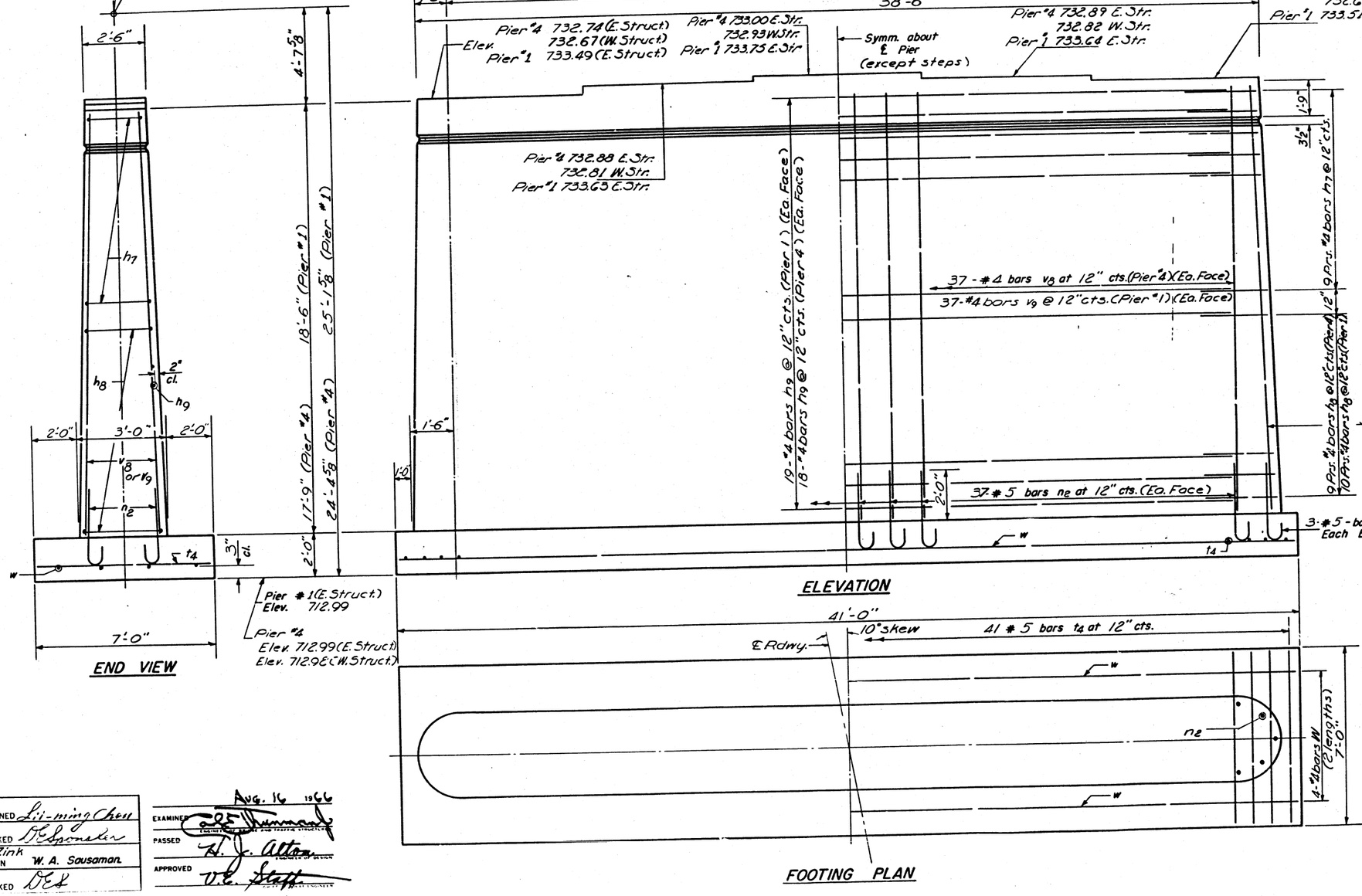
Max. Footing Pressure
2.0 Tons/sq.Ft.

Pier "4 (E. Struct.) (W. Struct.)
Sta. 1731+04.20 — 1731+19.72
Cr. Elev. 737.38 — 737.31

Pier #1 (E. Struct.)
Sta. 1729+37.95
Cr. Elev. 738.13



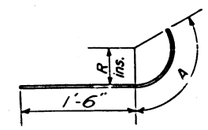
TOP PLAN



ELEVATION

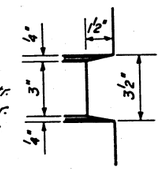
END VIEW

FOOTING PLAN



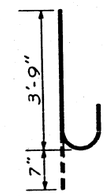
Bar	R	A
h7	1'-0"	2'-4"
h8	1'-2"	2'-6"

DETAIL OF BARS h7 & h8



NOTCH DETAIL

Note:
All edges shall have standard 3/4" chamfer except as noted.
Pour steps monolithically with pier stem.



BAR n2

THREE PIERS

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h7	108	#4	3'-10"	
h8	112	#4	4'-0"	
h9	110	#4	36'-0"	
n2	240	#5	4'-4"	
t4	123	#5	6'-6"	
v8	160	#4	17'-7"	
v9	80	#4	18'-4"	
W	24	#4	20'-9"	
Class "A" Concrete			Cu. Yds.	274.9
Reinforcement Bars			Lbs.	8330

DESIGNED	Li-ming Chen
CHECKED	R. Sponsler
J.P. Zink DRAWN	W. A. Sausaman
CHECKED	DE

EXAMINED — Aug. 16 1966 — C.E. Hummel
PASSED — H. J. Alton
APPROVED — V.E. Statt

P-1 Re-drawn 7-21-59 Rev. 11-25-59

PIER 1 (E. STRU.) & PIERS 4
F.A.I. RT. 57 10.27-38B
FORD COUNTY
STA 1730+30

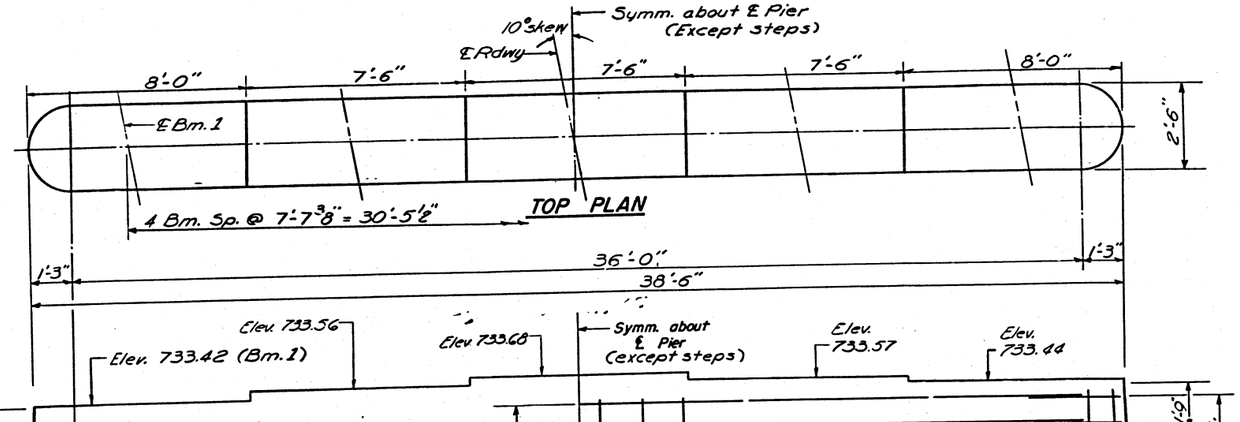
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A.I. 57	27-38B	FORD	28	17
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

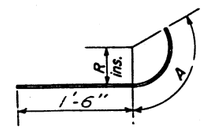
SHEET NO. 13
18 SHEETS

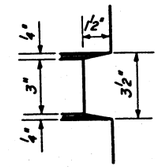
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

PILE DATA

Type - Untreated
Capacity - 23 Tons/pile
Est. Length - 25'
* No. Req'd. - 18
Test Pile - 1
*Includes one test pile







NOTCH DETAIL

Bar	R	A
h7	1'-0 1/2"	2'-4"
h8	1'-2"	2'-6"

DETAIL OF BARS h7 or h8

Note:
All edges shall have standard 3/4" chamfer except as noted.
Pour steps monolithically with pier stem.

BAR n2

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h7	20	#4	3'-10"	⌒
h8	24	#4	4'-0"	⌒
h9	22	#4	36'-0"	—
n2	80	#5	4'-4"	⊂
t5	42	#5	5'-0"	—
V10	80	#4	10'-1"	—
w	6	#4	20'-9"	—
Class "A" Concrete			Cu. Yds.	58.5
Reinforcement Bars			Lbs.	1850
Untreated Piles			Lin. Ft.	425
Test Pile (Timber)			Each	1

PIER 1
W. STRUCTURE
F.A.I. RT. 57 SEC. 10, 27-38B
FORD COUNTY
STA. 1730+30

DESIGNED	Li-ming Chen
CHECKED	O.C. Sponsler
J.P. Zink	
DRAWN	W. A. Sausaman
	1960

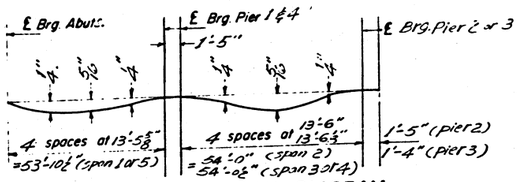
EXAMINED Aug. 16 1960
PASSED H. J. Upton
APPROVED

P-1 Re-drawn 7-21-59 Rev. 11-25-59

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	27-38B	FORD	28	18
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

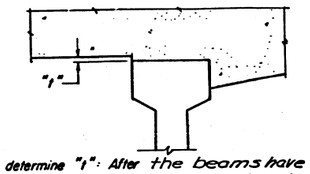
SHEET NO. 14
18 SHEETS



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only)

Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.



To determine "f": After the beams have been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "f" above top flange of beams.

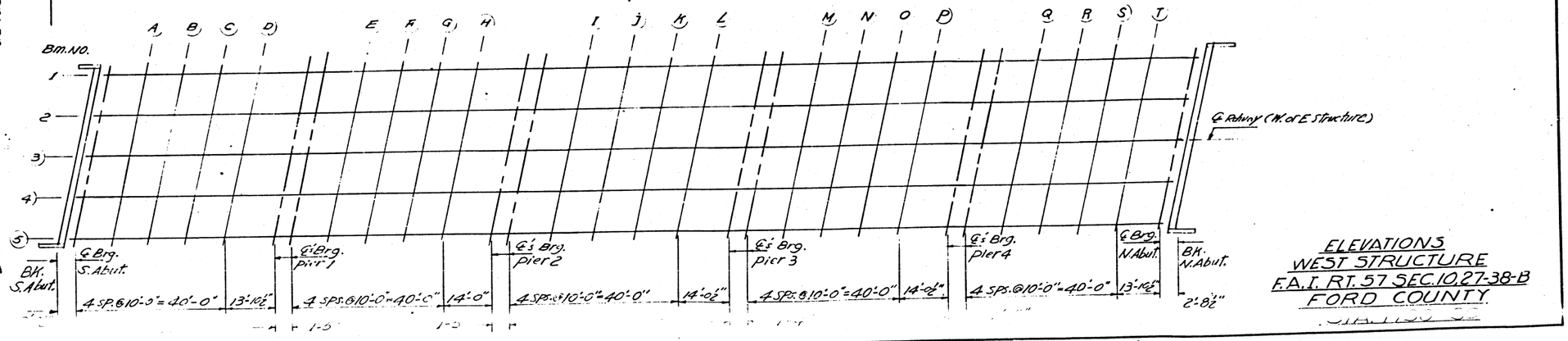
FILLET HEIGHTS

Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.		172893.535		15.000	738.079	738.079
	5	172894.858		7.500	738.206	738.206
	4	172896.180		.000	738.317	738.317
	3	172897.502	-	7.500	738.194	738.194
	2	172898.825	-	15.000	738.055	738.055
℄ Brg. S. Abut.	1					
	5	172896.243		15.000	738.067	738.067
	4	172897.566		7.500	738.194	738.194
	3	172898.888		.000	738.305	738.305
	2	172900.211	-	7.500	738.182	738.182
	1	172901.533	-	15.000	738.043	738.043
A		172906.243		15.000	738.022	738.037
	5	172907.566		7.500	738.149	738.164
	4	172908.888		.000	738.260	738.275
	3	172910.211	-	7.500	738.137	738.152
	2	172911.533	-	15.000	737.998	738.014
B		172916.243		15.000	737.977	738.000
	5	172917.566		7.500	738.104	738.127
	4	172918.888		.000	738.215	738.238
	3	172920.211	-	7.500	738.092	738.115
	2	172921.533	-	15.000	737.953	737.977
C		172926.243		15.000	737.932	737.957
	5	172927.566		7.500	738.059	738.084
	4	172928.888		.000	738.170	738.195
	3	172930.211	-	7.500	738.047	738.072
	2	172931.533	-	15.000	737.908	737.933
D		172936.243		15.000	737.887	737.908
	5	172937.566		7.500	738.014	738.035
	4	172938.888		.000	738.125	738.146
	3	172940.211	-	7.500	738.002	738.023
	2	172941.533	-	15.000	737.863	737.884
℄ Brg. Pier 1	1					
	5	172950.118		15.000	737.825	737.825
	4	172951.441		7.500	737.951	737.951
	3	172952.763		.000	738.063	738.063
	2	172954.086	-	7.500	737.939	737.939
	1	172955.408	-	15.000	737.801	737.801
	5	172951.535		15.000	737.818	737.818
	4	172952.858		7.500	737.945	737.945
	3	172954.180		.000	738.056	738.056
	2	172955.502	-	7.500	737.933	737.933
	1	172956.825	-	15.000	737.794	737.794
E		172961.535		15.000	737.773	737.789
	5	172962.858		7.500	737.900	737.915
	4	172964.180		.000	738.011	738.027
	3	172965.502	-	7.500	737.888	737.903
	2	172966.825	-	15.00	737.749	737.765

Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
F	5	172971.535		15.000	737.728	737.751
	4	172972.858		7.500	737.855	737.878
	3	172974.180		.000	737.966	737.989
	2	172975.502	-	7.500	737.843	737.866
	1	172976.825	-	15.000	737.704	737.728
G	5	172981.35		15.000	737.683	737.708
	4	172982.858		7.500	737.810	737.835
	3	172984.180		.000	737.921	737.946
	2	172985.502	-	7.500	737.798	737.823
	1	172986.825	-	15.000	737.659	737.684
H	5	172991.535		15.000	737.638	737.659
	4	172992.858		7.500	737.765	737.786
	3	172994.180		.000	737.876	737.897
	2	172995.502	-	7.500	737.753	737.774
	1	172996.825	-	15.000	737.614	737.635
℄ Brg. Pier 2	5	173005.535		15.000	737.575	737.575
	4	173006.858		7.500	737.702	737.702
	3	173008.180		.000	737.813	737.813
	2	173009.502	-	7.500	737.690	737.690
	1	173010.825	-	15.000	737.551	737.551
	5	173006.952		15.000	737.569	737.569
	4	173008.274		7.500	737.696	737.696
	3	173009.597		.000	737.807	737.807
	2	173010.919	-	7.500	737.684	737.684
	1	173012.242	-	15.0	737.545	737.545
I	5	173016.952		15.000	737.524	737.539
	4	173018.274		7.500	737.651	737.666
	3	173019.597		.000	737.762	737.777
	2	173020.919	-	7.500	737.639	737.654
	1	173022.242	-	15.000	737.500	737.515
J	5	173026.952		15.000	737.479	737.502
	4	173028.274		7.500	737.606	737.629
	3	173029.597		.000	737.717	737.740
	2	173030.919	-	7.500	737.594	737.617
	1	173032.242	-	15.000	737.455	737.478
K	5	173036.952		15.000	737.434	737.459
	4	173038.274		7.500	737.561	737.585
	3	173039.597		.000	737.672	737.697
	2	173040.919	-	7.500	737.549	737.574
	1	173042.242	-	15.000	737.410	737.435

Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
L	5	173046.952		15.000	737.389	737.410
	4	173048.274		7.500	737.516	737.537
	3	173049.597		.000	737.627	737.648
	2	173050.919	-	7.500	737.504	737.525
	1	173052.242	-	15.000	737.365	737.386
℄ Brg. Pier 3						
	5	173060.993		15.000	737.326	737.326
	4	173062.316		7.500	737.452	737.452
	3	173063.638		.000	737.564	737.564
	2	173064.961	-	7.500	737.440	737.441
	1	173066.283	-	15.000	737.302	737.302
M	5	173062.327		15.000	737.320	737.320
	4	173063.649		7.500	737.446	737.446
	3	173064.972		.000	737.558	737.558
	2	173065.294	-	7.500	737.434	737.434
	1	173067.617	-	15.000	737.296	737.296
N	5	173072.327		15.000	737.275	737.290
	4	173073.649		7.500	737.401	737.417
	3	173074.972		.000	737.513	737.528
	2	173076.294	-	7.500	737.389	737.405
	1	173077.617	-	15.000	737.251	737.266
O	5	173082.327		15.000	737.230	737.253
	4	173083.649		7.500	737.356	737.380
	3	173084.972		.000	737.468	737.491
	2	173086.294	-	7.500	737.344	737.368
	1	173087.617	-	15.000	737.206	737.229
P	5	173092.327		15.000	737.185	737.209
	4	173093.649		7.500	737.311	737.336
	3	173094.972		.000	737.423	737.447
	2	173096.294	-	7.500	737.299	737.324
	1	173097.617	-	15.000	737.161	737.186
	5	173102.327		15.000	737.140	737.161
	4	173103.649		7.500	737.266	737.287
	3	173104.972		.000	737.378	737.399
	2	173106.294	-	7.500	737.254	737.276
	1	173107.617	-	15.000	737.116	737.137

Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ Brg. Pier 4	5	173116.365		15.000	737.076	737.076
	4	173117.688		7.500	737.203	737.203
	3	173119.010		.000	737.314	737.314
	2	173120.332	-	7.500	737.191	737.191
	1	173121.655	-	15.000	737.053	737.053
Q	5	173117.782		15.000	737.070	737.070
	4	173119.104		7.500	737.197	737.197
	3	173120.427		.000	737.308	737.308
	2	173121.749	-	7.500	737.185	737.185
	1	173123.072	-	15.000	737.046	737.046
R	5	173127.792		15.000	737.025	737.041
	4	173129.104		7.500	737.152	737.167
	3	173130.427		.000	737.263	737.279
	2	173131.749	-	7.500	737.140	737.155
	1	173133.072	-	15.000	737.001	737.017
S	5	173137.782		15.000	736.980	737.003
	4	173139.104		7.500	737.107	737.130
	3	173140.427		.000	737.218	737.241
	2	173141.749	-	7.500	737.095	737.118
	1	173143.072	-	15.000	736.956	736.980
T	5	173147.782		15.000	736.935	736.960
	4	173149.104		7.500	737.062	737.087
	3	173150.427		.000	737.173	737.198
	2	173151.749	-	7.500	737.050	737.075
	1	173153.072	-	15.000	736.911	736.936
℄ Brg. N. Abut.	5	173157.782		15.000	736.890	736.911
	4	173159.104		7.500	737.017	737.038
	3	173160.427		.000	737.128	737.149
	2	173161.749	-	7.500	737.005	737.026
	1	173163.072	-	15.000	736.866	736.887
	5	173171.657		15.000	736.828	736.828
	4	173172.979		7.500	736.954	736.954
	3	173174.302		.000	737.066	737.066
	2	173175.624	-	7.500	736.943	736.943
	1	173176.947	-	15.000	736.804	736.804
Bk. N. Abut.	5	173174.365		15.000	736.815	736.815
	4	173175.688		7.500	736.942	736.942
	3	173177.010		.000	737.053	737.053
	2	173178.332	-	7.500	736.930	736.930
	1	173179.655	-	15.000	736.792	736.792



ELEVATIONS WEST STRUCTURE F.A.I. RT. 57 SEC. 10, 27-38-B FORD COUNTY

DESIGNED	Liaison Chief
CHECKED	W. Elsperman
JR. ENGR.	Liaison Chief
DRAWN	P.G. Barnett
CHECKED	A.R.L.

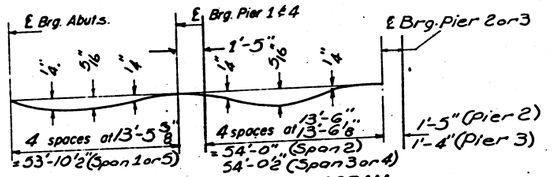
EXAMINED: Aug. 16 1966 — C.S.E. Thompson, Engineer of Bridges and Traffic Structures
PASSED: H. J. Alton, Engineer of Design
APPROVED: W.E. Stutt, Engineer of Highways

E-S

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
... ...E.57	27-38B	FORD	28	19
FED ROAD DIST NO 7	ILLINOIS	FED AID PROJECT		

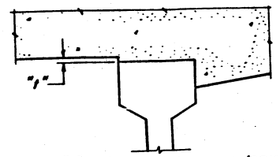
SHEET NO. 15
18 SHEETS



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only)

Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.



To determine "t": After the beams have been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk.S.Abut.	5	172878.015	15.000	738.149	738.149
	4	172879.338	7.500	738.276	738.276
	3	172880.660	.000	738.387	738.387
	2	172881.982 -	7.500	738.264	738.264
	1	172883.305 -	15.000	738.125	738.125
℄ Brg. S. Abut.		172880.723	15.000	738.137	738.137
		172882.046	7.500	738.264	738.264
		172883.368	.000	738.375	738.375
		172884.691 -	7.500	738.252	738.252
		172886.013 -	15.000	738.113	738.113
A		172890.723	15.000	738.092	738.107
		172892.046	7.500	738.219	738.234
		172893.368	.000	738.330	738.345
		172894.691 -	7.500	738.207	738.222
		172896.013 -	15.000	738.068	738.083
B		172900.723	15.000	738.047	738.070
		172902.046	7.500	738.174	738.197
		172903.368	.000	738.285	738.308
		172904.691 -	7.500	738.162	738.185
		172906.013 -	15.000	738.023	738.046
C		172910.723	15.000	738.002	738.027
		172912.046	7.500	738.129	738.153
		172913.368	.000	738.240	738.265
		172914.691 -	7.500	738.117	738.142
		172916.013 -	15.000	737.978	738.003
D		172920.723	15.000	737.957	737.978
		172922.046	7.500	738.084	738.105
		172923.368	.000	738.195	738.216
		172924.691 -	7.500	738.072	738.093
		172926.013 -	15.000	737.933	737.954
℄ Brg. Pier 1		172934.598	15.000	737.894	737.894
		172935.921	7.500	738.021	738.021
		172937.243	.000	738.132	738.132
		172938.566 -	7.500	738.009	738.009
		172939.888 -	15.000	737.871	737.871
		172936.015	15.000	737.888	737.888
		172937.338	7.500	738.015	738.015
		172938.660	.000	738.126	738.126
		172939.982 -	7.500	738.003	738.003
		172941.305 -	15.000	737.864	737.864
E		172946.015	15.000	737.843	737.858
		172947.338	7.500	737.970	737.985
		172948.660	.000	738.081	738.096
		172949.982 -	7.500	737.958	737.973
		172951.305 -	15.000	737.819	737.835

Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
F	5	172956.015	15.000	737.798	737.821
	4	172957.338	7.500	737.925	737.948
	3	172958.660	.000	738.036	738.059
	2	172959.982 -	7.500	737.913	737.936
	1	172961.305 -	15.000	737.774	737.798
G		172966.015	15.000	737.753	737.778
		172967.338	7.500	737.880	737.905
		172968.660	.000	737.991	738.016
		172969.982 -	7.500	737.868	737.893
		172971.305 -	15.000	737.729	737.754
H		172976.015	15.000	737.708	737.729
		172977.338	7.500	737.835	737.856
		172978.660	.000	737.946	737.967
		172979.982 -	7.500	737.823	737.844
		172981.305 -	15.000	737.684	737.705
℄ Brg. Pier 2		172990.015	15.000	737.645	737.645
		172991.338	7.500	737.772	737.772
		172992.60	.000	737.883	737.883
		172993.982 -	7.500	737.760	737.760
		172995.305 -	15.000	737.621	737.621
I		172991.432	15.000	737.639	737.639
		172992.754	7.500	737.765	737.765
		172994.077	.000	737.877	737.877
		172995.399 -	7.500	737.754	737.754
		172996.722 -	15.000	737.615	737.615
J		173001.432	15.000	737.594	737.609
		173002.754	7.500	737.720	737.736
		173004.077	.000	737.832	737.847
		173005.399 -	7.500	737.709	737.724
		173006.722 -	15.000	737.570	737.585
K		173011.432	15.000	737.549	737.572
		173012.754	7.500	737.675	737.699
		173014.077	.000	737.787	737.810
		173015.399 -	7.500	737.664	737.687
		173016.722 -	15.000	737.525	737.548
L		173021.432	15.000	737.504	737.529
		173022.754	7.500	737.630	737.655
		173024.077	.000	737.742	737.767
		173025.399 -	7.500	737.619	737.643
		173026.722 -	15.000	737.480	737.505

Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
L	5	173031.432	15.000	737.459	737.480
	4	173032.754	7.500	737.585	737.606
	3	173034.077	.000	737.697	737.718
	2	173035.399 -	7.500	737.574	737.595
	1	173036.722 -	15.000	737.435	737.456
℄ Brg. Pier 3		173045.473	15.000	737.395	737.396
		173046.796	7.500	737.522	737.522
		173048.118	.000	737.633	737.634
		173049.441 -	7.500	737.510	737.510
		173050.763 -	15.000	737.372	737.372
M		173046.807	15.000	737.389	737.389
		173048.129	7.500	737.516	737.516
		173049.452	.000	737.627	737.627
		173050.774 -	7.500	737.504	737.504
		173052.097 -	15.000	737.366	737.366
N		173056.807	15.000	737.344	737.360
		173058.129	7.500	737.471	737.487
		173059.452	.000	737.582	737.598
		173060.774 -	7.500	737.459	737.475
		173062.097 -	15.000	737.321	737.336
O		173066.807	15.000	737.299	737.323
		173068.129	7.500	737.426	737.450
		173069.452	.000	737.537	737.561
		173070.774 -	7.500	737.414	737.438
		173072.097 -	15.000	737.276	737.299
P		173076.807	15.000	737.254	737.279
		173078.129	7.500	737.381	737.406
		173079.452	.000	737.492	737.517
		173080.774 -	7.500	737.369	737.394
		173082.097 -	15.000	737.231	737.256
℄ Brg. N. Abut.		173086.807	15.000	737.209	737.230
		173088.129	7.500	737.336	737.357
		173089.452	.000	737.447	737.468
		173090.774 -	7.500	737.324	737.345
		173092.097 -	15.000	737.186	737.207
Bk. N. Abut.					

Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ Brg. Pier 4	5	173100.845	15.000	737.146	737.146
	4	173102.168	7.500	737.273	737.273
	3	173103.490	.000	737.384	737.384
	2	173104.812 -	7.500	737.261	737.261
	1	173106.135 -	15.000	737.122	737.122
Q		173102.262	15.000	737.140	737.140
		173103.584	7.500	737.267	737.267
		173104.907	.000	737.378	737.378
		173106.229 -	7.500	737.255	737.255
		173107.552 -	15.000	737.116	737.116
R		173112.252	15.000	737.095	737.110
		173113.584	7.500	737.222	737.237
		173114.907	.000	737.333	737.348
		173116.229 -	7.500	737.210	737.225
		173117.552 -	15.000	737.071	737.087
S		173122.262	15.000	737.050	737.073
		173123.584	7.500	737.177	737.200
		173124.907	.000	737.288	737.311
		173126.229 -	7.500	737.165	737.188
		173127.552 -	15.000	737.026	737.049
T		173132.262	15.000	737.005	737.030
		173133.584	7.500	737.132	737.157
		173134.907	.000	737.243	737.268
		173136.229 -	7.500	737.120	737.145
		173137.552 -	15.000	736.981	737.006
		173142.262	15.000	736.960	736.981
		173143.584	7.500	737.087	737.108
		173144.907	.000	737.198	737.219
		173146.229 -	7.500	737.075	737.096
		173147.552 -	15.000	736.936	736.957
		173156.137	15.000	736.897	736.897
		173157.459	7.500	737.024	737.024
		173158.782	.000	737.135	737.135
		173160.104 -	7.500	737.012	737.012
		173161.427 -	15.000	736.874	736.874
		173158.845	15.000	736.885	736.885
		173160.168	7.500	737.012	737.012
		173161.490	.000	737.123	737.123
		173162.812 -	7.500	737.000	737.000
		173164.135 -	15.000	736.861	736.861

FOR LAYOUT SEE Sh. #14

DESIGNED Living Chen
CHECKED DEsponsler
J.P.Zink
DRAWN P.G. Barnett
CHECKED

EXAMINED Aug. 16 1966
PASSED T. J. Alton
APPROVED V.E. Stadtl

E-S

ELEVATIONS
EAST STRUCTURE
F.A.I. RT. 57 SEC. 10.27-38-B
FORD COUNTY
STA. 1730 + 30

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	27-38B	FORD	28	20
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT.		

SHEET NO. 16
18 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

Boring No. 1
Station 1729+21
Offset 44' LT.
Ground Surface 726.1

Elevation		N	Qu t/s.f.	w
726.1	0			
STIFF DARK BROWN CLAY		13	2.0E	—
722.1				
VERY STIFF BROWN GRAY MOTTLED CLAY	-5	11	S-15 2.5	22
720.1				
STIFF BROWN GRAY MOTTLED CLAY LOAM		5	1.0B	20
716.6	-10	2	0.5E	—
SOFT GRAY SAND LOAM				
FREE WATER 712.1		3	0.5E	—
	-15	4	2.0B	22
MEDIUM TO VERY STIFF GRAY CLAY TILL				
		5	0.8	21
	-20	4	2.3B	24
STIFF GRAY CLAY TILL WITH LENSE OF SAND		5	1.0B	25
702.6				
STIFF GRAY SILT LOAM WITH LENSE OF CLAY	-25	8	1.0B	27
700.6				
LOOSE GRAY COARSE SAND WITH LENSE OF SILT LOAM		8	—	—
697.6				
FREE WATER	-30	13	—	—
MEDIUM COARSE GRAY SAND AND GRAVEL		16	—	—
	-35	20	—	—
688.1				
HARD GRAY BROWN CLAY LOAM TILL	-40	53	S-15 8.7	9
683.8				
VERY DENSE GRAY COARSE SAND AND GRAVEL (MUDDY)		78	—	—
	-45	64	—	—

Surface Water El. —
Groundwater El. at Completion After 72 Hours — WASH BORING 703.6

Boring No. 1 (CONT.)
Station 1729+21
Offset 44' LT.

Elevation		N	Qu t/s.f.	w
	-45			
FREE WATER				
VERY DENSE TO DENSE GRAY COARSE SAND AND GRAVEL (MUDDY)	-50	75	—	—
	-55	86	—	—
LIMIT OF BORING 665.6	-60	43	—	—

Boring No. 2
Station 1729+00
Offset 44' RT.
Ground Surface 727.6

Elevation		N	Qu t/s.f.	w
727.6	0			
STIFF DARK BROWN CLAY LOAM ALLUVIAL		8	1.2E	—
723.1				
VERY STIFF DARK BROWN TO BLACK CLAY	-5	11	S-15 3.6	26
721.1				
STIFF BROWN GRAY MOTTLED CLAY		7	1.7B	23
718.1	-10	2	—	—
VERY LOOSE GRAY BROWN SAND LOAM				
FREE WATER 716.1				
MEDIUM GRAY BROWN COARSE SAND AND GRAVEL		19	—	—
714.1				
HARD TO VERY STIFF GRAY CLAY TILL	-15	20	7.6S	15
		15	3.5B	20
	-20	11	2.9B	21
		7	2.7B	24
VERY STIFF GRAY CLAY TILL				
	-25	8	2.7B	23
701.6				
STIFF GRAY SILT LOAM WITH LENSES OF GRAY FINE SAND		21	S-10 1.7	20
	-30	17	S-10 1.7	22
696.6				
LOOSE GRAY BROWN SAND AND SILT LOAM INTERLAYERED		7	—	—
694.1				
FREE WATER	-35	4	—	—
VERY LOOSE TO LOOSE GRAY COARSE SAND AND GRAVEL (MUDDY)		4	—	—
	-40	7	—	—
686.6				
HARD DARK BROWN CLAY WITH LENSES OF SAND		53	S-15 8.7	18
ORGANIC SILTY CLAY LENSE 683.6				
HARD GRAY SANDY CLAY LOAM TILL	-45	50	S-10 8.4	11

Boring No. 2 (CONT.)
Station 1729+09
Offset 44' RT.

Elevation		N	Qu t/s.f.	w
	-45			
		73	S-5 4.6	9
HARD GRAY SANDY CLAY LOAM TILL	-50	78	S-10 5.7	9
674.1				
DENSE GRAY COARSE SAND AND GRAVEL	-55	35	—	—
LIMIT OF BORING 672.1				

Surface Water El. —
Groundwater El. at Completion After 24 Hours — WASH BORING 717.6

Boring No. 3
Station 1729+62
Offset 44' RT.
Ground Surface 731.7

Elevation		N	Qu t/s.f.	w
731.7	0			
STIFF BROWN MOTTLED CLAY SPOIL BANK				
724.7	-5			
STIFF DARK BROWN CLAY				
721.7	-10			
STIFF BROWN MOTTLED CLAY				
716.7	-15	12	—	—
MEDIUM GRAY COARSE SAND AND GRAVEL (MUDDY) 715.2				
HARD GRAY CLAY TILL		13	6.6B	17
	-20	13	6.0B	17
708.2		14	4.3B	19
VERY STIFF GRAY CLAY TILL	-25	15	3.3B	21
702.7		10	3.1B	23
VERY STIFF TO STIFF GRAY SILT LOAM WITH LENSES OF FINE SAND	-30	12	2.4B	24
		15	S-10 1.7	21
697.7				
MEDIUM GRAY FINE SAND LOAM WITH LENSES OF COARSE GRAY SAND	-35	22	—	—
695.7				
MEDIUM - LOOSE GRAY FINE TO COARSE SAND		12	—	—
	-40	9	—	—
688.7				
VERY STIFF DARK BROWN CLAY LOAM	-45	22	3.0E	—

Boring No. 3 (CONT.)
Station 1729+62
Offset 44' RT.

Elevation		N	Qu t/s.f.	w
	-45			
VERY STIFF DARK BROWN CLAY LOAM		48	S-10 3.1	8
683.2				
	-50	48	S-10 5.7	8
HARD TO VERY STIFF GRAY SANDY CLAY LOAM TILL				
	-55	50	S-5 6.1	8
	-60	41	S-10 7.7	9
LIMIT OF BORING 671.2				

Surface Water El. —
Groundwater El. at Completion After 8 Hours — WASH BORING 698.7

DESIGNED Li-ming Chen	EXAMINED Aug. 16 1966 Cale Trumbauer	
CHECKED DE Sponsler	PASSED	
DRAWN	APPROVED V.E. Staff	
CHECKED DES		

N-Standard Penetration Test Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140# hammer falling 30"

Qu-Unconfined Compressive Strength-t/sf

w-Water Content-percentage

Type failure:
B-Bulge Failure
S-Shear Failure
E-Estimated Vc

BORINGS
F.A.I. RT 57 SEC. 10.27-38B
FORD COUNTY
STA. 1730+30

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
F.A.I. 57	27-38B	FORD	28	21
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 17
18 SHEETS

Boring No. 4 — Station 1729+85 — Offset 45' Lt.

Elevation		N	Qu t/s.f.	w (%)
Ground Surface	730.7			
VERY STIFF BROWN, GRAY AND BLACK CLAY AND CLAY LOAM FILL				
	-5			
	723.7			
VERY STIFF BLACK CLAY				
	721.7			
	-10			
STIFF BROWN MOTTLED CLAY				
	718.7			
MEDIUM - LOOSE COARSE SAND LOAM AND GRAVEL	717.2			
STIFF BROWN AND GRAY CLAY LOAM TILL	716.2			
	-15	7	4.1B	17
HARD GRAY CLAY TILL WITH LENSE OF SILT AT 15°				
		16	6.2B	12
	-20	14	5.2B	19
		13	2.5B	21
VERY STIFF GRAY CLAY TILL				
	-25	9	2.7B	23
		10	2.7B	23
	701.7			
STIFF GRAY CLAY WITH SILT LENSES	700.7			
	-30	12	1.9B	22
GRAY SILTY CLAY TO SILT LOAM WITH WATER				
		12	4.4B	25
HARD TO VERY STIFF GRAY SILT LOAM				
	-35	9	3.5B	12
LENSES OF COARSE SAND LOAM				
	692.2	12	2.8B	12
VERY LOOSE FINE TO MEDIUM GRAY SAND				
	-40	4	—	—
FREE WATER	689.2			
HARD GRAY SANDY CLAY LOAM TILL		44	8.5B	9
	685.7	45	28	W.P. 9.7	9
LIMIT OF BORING				

Surface Water El. —
Groundwater El. at Completion 699.2
After — Hours —

Boring No. 5 — Station 1730+82 — Offset 45' Rt.

Elevation		N	Qu t/s.f.	w (%)
Ground Surface	729.0			
STIFF BROWN GRAY AND BLACK CLAY AND CLAY LOAM SPOIL BANK				
	-5			
	723.0			
STIFF BLACK CLAY TOP SOIL				
	721.0			
	-10			
STIFF - MEDIUM BROWN AND GRAY MOTTLED CLAY LOAM ALLUVIUM				
	715.5			
	-15	21	5.6B	17
HARD TO VERY STIFF GRAY CLAY TILL				
		15	3.7B	20
	-20	10	3.1B	23
		10	2.7B	23
VERY STIFF GRAY CLAY TILL				
	704.0	7	—	—
LOOSE GRAY VERY FINE SAND LOAM	702.5			
	-30	12	—	—
MEDIUM GRAY FINE TO COARSE SAND AND GRAVEL		16	—	—
		11	—	—
FREE WATER	-35	—	—	—
	690.5			
HARD GRAY CLAY LOAM TO SANDY CLAY LOAM TILL	-40	44	HF 10.9+	9
	685.5	44	HF 10.9+	10
HARD LIGHT BROWN MOTELED SANDY CLAY LOAM TILL				
LIMIT OF BORING	683.5	45	51	S-10 7.8	11

Surface Water El. —
Groundwater El. at Completion —
After 24 Hours WASH BORED PLUGGED

Boring No. 6 — Station 1730+98 — Offset 50' Lt.

Elevation		N	Qu t/s.f.	w (%)
Ground Surface	729.30			
HARD TO VERY STIFF BROWN GRAY AND BLACK MOTTLED CLAY AND CLAY LOAM SPOIL BANK				
	-5			
	719.3			
	-10			
LOOSE COARSE SAND AND GRAVEL				
	716.8			
HARD TO VERY STIFF GRAY CLAY TILL	-15	21	8.3B	17
		12	2.7B	23
	-20	13	3.3B	23
	707.3	7	—	—
LOOSE FINE GRAY SAND	704.8			
	-25	35	S-15 9.1	9
HARD GRAY CLAY LOAM TO SANDY CLAY LOAM TILL		70	HF 10+	9
	-30	39	HF 10+	10
	697.8			
HARD GRAY INTERBEDDED CLAY AND SILTY CLAY LOAM	695.3	26	5.0E	17
MEDIUM GRAY SAND WITH WATER	-35	27	—	—
LIMIT OF BORING	693.8			

Surface Water El. —
Groundwater El. at Completion DRY
After 48 Hours PLUGGED 28'

Boring No. 7 — Station 731+51 — Offset 30' Lt.

Elevation		N	Qu t/s.f.	w (%)
Ground Surface	725.9			
STIFF BLACK CLAY TOP SOIL	723.9			
		17	3.0E	14
VERY STIFF BLACK AND BROWN MOTTLED CLAY				
	-5	15	3.0E	15
	719.9			
VERY STIFF RED BROWN AND BLACK MOTTLED SANDY CLAY LOAM		17	3.0E	14
	716.9			
	-10	12	5.0B	20
HARD TO VERY STIFF GRAY CLAY TILL				
		21	7.8B	18
	710.9			
STIFF GRAY SILT LOAM	-15	19	3.3B	23
	710.4			
DENSE LIGHT BROWN COARSE SAND AND GRAVEL		35	—	—
	706.9			
HARD GRAY CLAY LOAM TILL	-20	45	S-10 8.1	9
		41	S-10 8.9	9
	-25	26	6.0B	11
SAND LENSES		27	8.5B	10
HARD GRAY CLAY	696.9			
MEDIUM GRAY SAND WITH WATER	695.7	26	7.4B	19
LIMIT OF BORING	695.4			

Surface Water El. —
Groundwater El. at Completion PLUGGED
After — Hours —

Boring No. 8 — Station 1731+36 — Offset 50' Rt.

Elevation		N	Qu t/s.f.	w (%)
Ground Surface	725.4			
STIFF BLACK CLAY				
	721.9	7	1.0E	—
STIFF BLACK CLAY LOAM ALLUVIAL	-5	6	1.0E	—
	717.9			
MEDIUM GRAY SAND AND GRAVEL		6	1.0E	—
	-10	25	—	—
FREE WATER	714.4			
		14	3.9B	18
VERY STIFF GRAY CLAY TILL	-15	10	2.7B	22
		12	—	—
	705.4			
LOOSE GRAY VARVED SILT LOAM TO LOAM	-20	12	2.0B	32
	702.6	9	—	26
LOOSE LIGHT GRAY BROWN SAND	700.4			
	-25	13	4.7B	11
HARD GRAY CLAY LOAM TILL	696.9	24	6.2B	11
	-30	26	—	—
MEDIUM TO DENSE INTERLENSED SAND, SAND LOAM, AND SANDY CLAY LOAM				
FREE WATER		41	—	—
	690.4			
VERY STIFF TO HARD GRAY LENSED SILTY CLAY LOAM AND SANDY CLAY LOAM	-35	32	—	17
	688.9			
HARD GRAY CLAY LOAM TO SANDY CLAY LOAM TILL		51	9.4B	10
	686.4			
VERY DENSE LIGHT BROWN SAND LOAM TILL	-40	75	—	—
LIMIT OF BORING	684.9			

Surface Water El. —
Groundwater El. at Completion 710.4
After — Hours —

DESIGNED Lin-mi-Chen
CHECKED DE Sponsler
DRAWN J.A. Zink
CHECKED [illegible]

EXAMINED Aug. 16 1966
PASSED W. L. Alton
APPROVED [illegible]

N-Standard Penetration Test Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140# hammer falling 30"

Qu-Unconfined Compressive Strength-t/s.f.

w-Water Content-percentage of oven dry weight-%

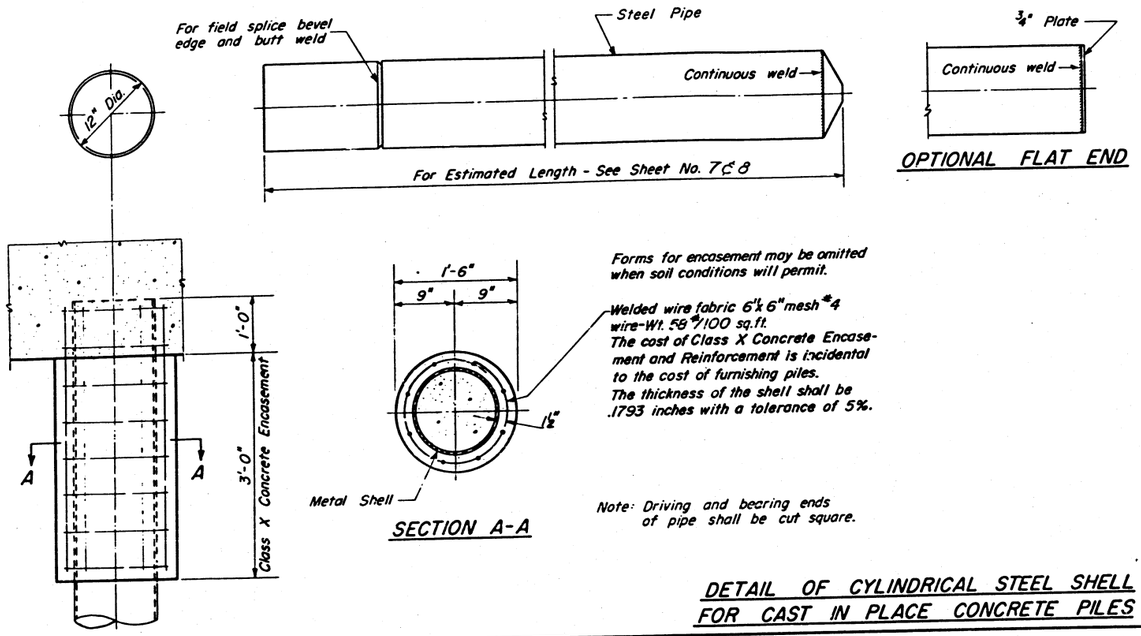
Type failure:
B-Bulge Failure
S-Shear Failure
E-Estimated Value
P-Penetrometer

BORINGS
F.A.I. RT. 57 SEC. 10,27-38B
FORD COUNTY
STA. 1730+30

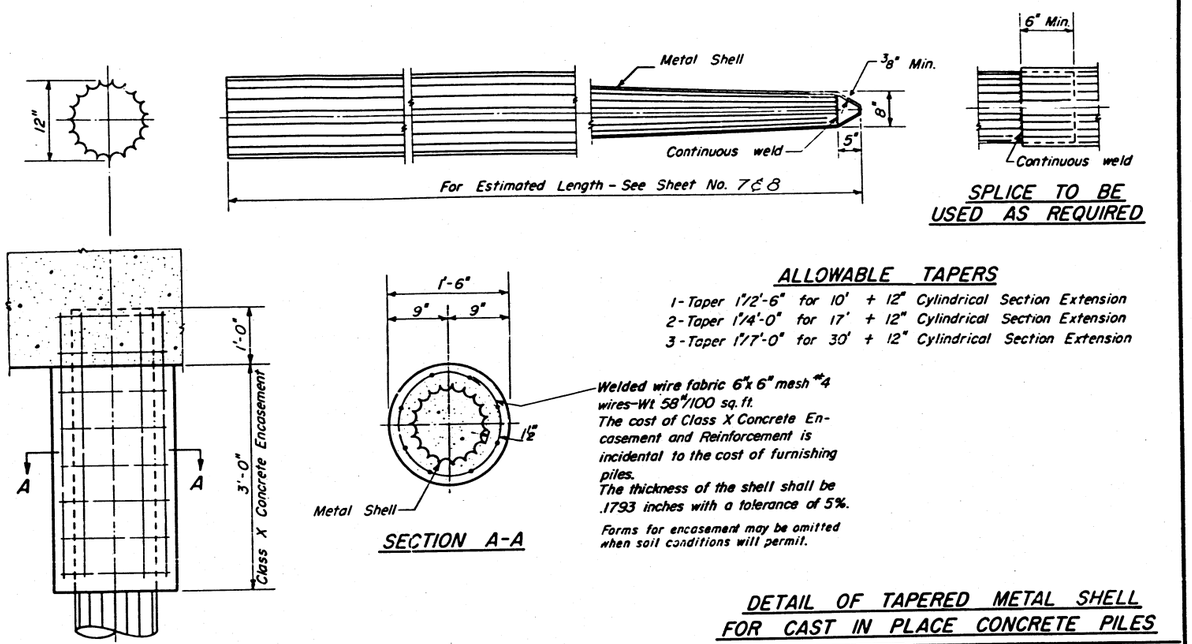
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A.I.-57	27-38B	FORD	28	22
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT.		

SHEET NO. 18
18 SHEETS



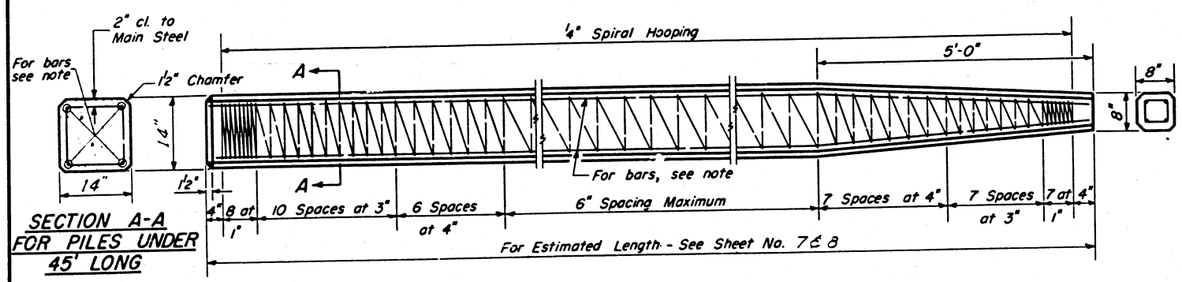
DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES

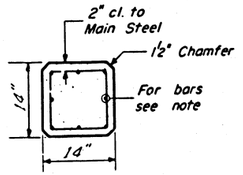


ALLOWABLE TAPERS

1-Taper 1'/2'-6" for 10' + 12" Cylindrical Section Extension
2-Taper 1'/4'-0" for 17' + 12" Cylindrical Section Extension
3-Taper 1'/7'-0" for 30' + 12" Cylindrical Section Extension

DETAIL OF TAPERED METAL SHELL FOR CAST IN PLACE CONCRETE PILES





Note: For 14" Piles 45' long or more use 8-#8 bars 4 for the full length and 4 to the point of bevel.
For 14" Piles under 45' long use 4-#9 bars the full length.

Handling: For Pile lengths up to 45', use two slings placed at a distance of 0.21 L* from each end.
For Piles longer than 45', use three slings placed at a distance of 0.12 L* from each end and at mid-point of pile.

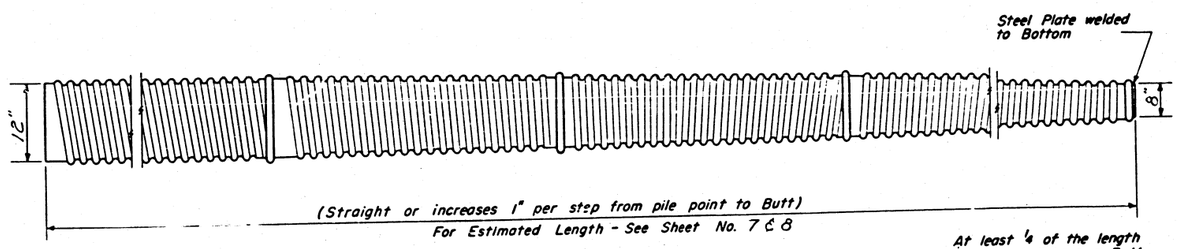
*L = Over all length of pile to be handled.

DESIGNED	George Al-Bazi
CHECKED	Suresh T. Desai
P.G. by knett	J. P. Zink
DRAWN	W. A. Sausaman
CHECKED	

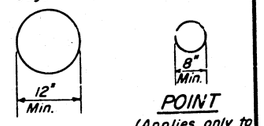
19
EXAMINED
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED
ENGINEER OF DESIGN
APPROVED
CHIEF HIGHWAY ENGINEER

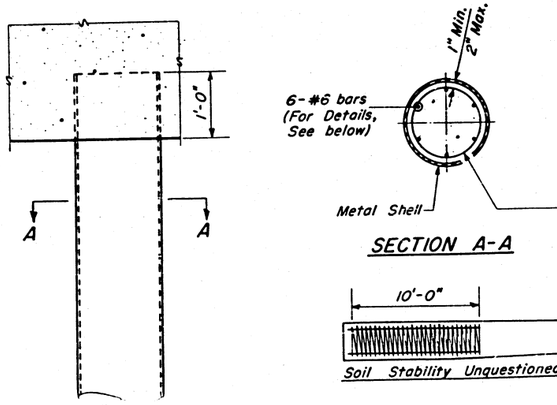
X-1 Rev. 3-24-67

DETAIL OF PRECAST CONCRETE PILES



At least 1/4 of the length of pile shall have a Butt diameter equal to or greater than 12".
Gages are furnished to suit soil conditions (14 Gage Min.)





DETAIL OF MANDREL DRIVEN STRAIGHT OR STEP-TAPER PILES FOR CAST IN PLACE CONCRETE PILES

CONCRETE PILES
F.A.I. RT. 57 SEC. 10,27-38B
FORD COUNTY
STA. 1730+30