

103 97%
3-23-2002

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
HIGHWAY IMPROVEMENT

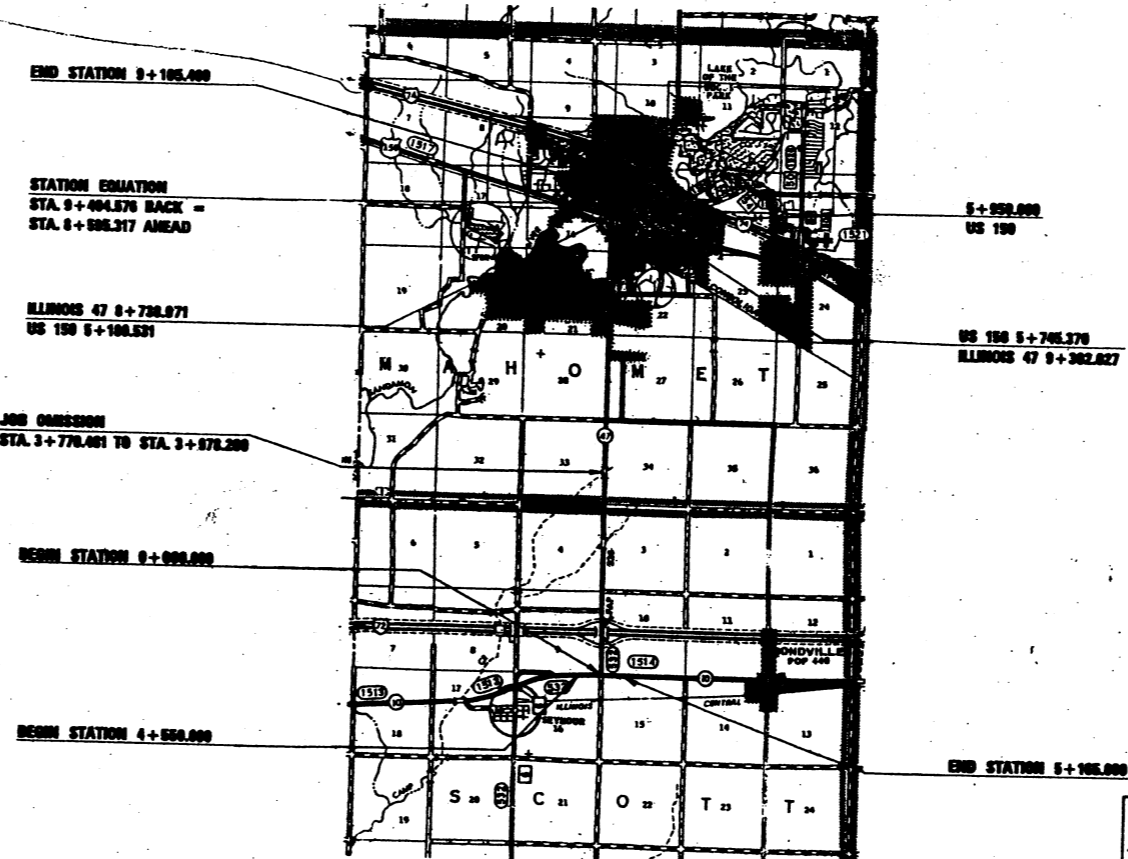
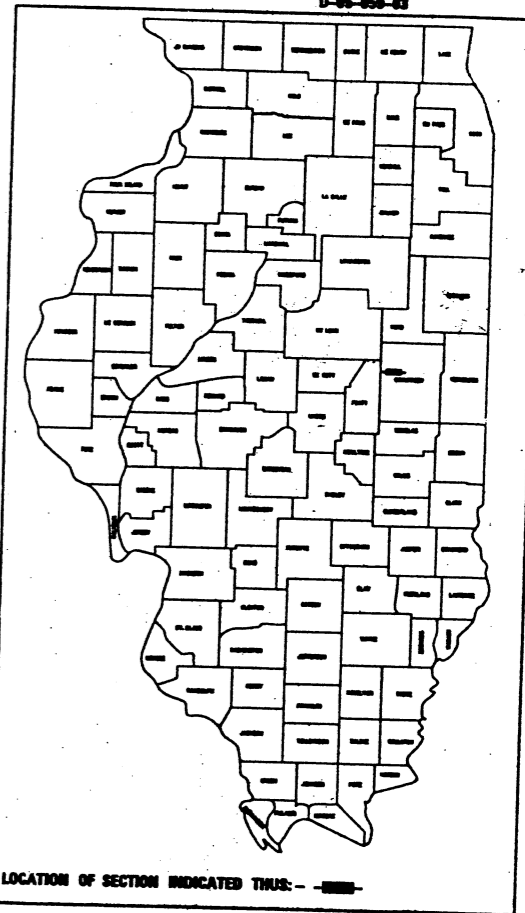
PA. NO.	SECTION	COUNTY	SCALE	SHEET NO.
		CHAMPAIGN	40%	1

* FAP 326 & FAS 532
** 136RS-4, 137RS-1 & 5RS-3
D-95-093-93

FOR INDEX OF SHEETS, SEE SHEET NO. 2-3
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 9-17

F.A.P. ROUTE 326 & F.A.S. ROUTE 532 (ILL 47 / US 150)
SECTION 136RS-4, 137RS-1 & 5RS-3
CHAMPAIGN COUNTY
PROJECT F-RS-000S (218)

C-95-093-93
WIDENING & RESURFACING



CURRENT AQT:

FAP 326 & FAS 532 (IL. 47 & U.S. 150) =	9000
	9200
	4000
	3200
	2950

DESIGN DESIGNATION

URBAN - OTHER PRINCIPAL ARTERIAL	3.10 (COMP. - 20)
RURAL - OTHER PRINCIPAL ARTERIAL	(180 mm PCC BASE - MINIMUM)

PROJECT ENGINEER: JEANNIE BLAND (217)465-4161
 DESIGNER: KENSIL GARNETT, CORY SHEERY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED: Jan 14, 2001
[Signature]

EXAMINED: February 2, 2001
[Signature]

APPROVED: February 3, 2001
[Signature]

FOR UNDERGROUND UTILITY
LOCATIONS CALL
TOLL FREE 1-800-252-1122

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED: _____ DATE: _____
DIVISION ADMINISTRATOR

CONTRACT NO. 90587 010-0056

TOTAL LENGTH OF SECTION & PROJECT = 11,006.00 METERS = 11,006 KILOMETERS
NET LENGTH OF SECTION & PROJECT = 10,858.00 METERS = 10,858 KILOMETERS

5-200

PRINTED BY AUTHORITY OF THE STATE OF ILLINOIS

010-0056

SUMMARY OF QUANTITIES STRUCTURE 010-0056

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	••	CHAMPAIGN	409	126
• FAP 326 & FAS 532 •• 136RS-4, 137RS-1 & 5RS-3				

CODE NO	ITEM	UNIT	QUANTITY
50300320	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	12.0
50500505	STUD SHEAR CONNECTORS	EACH	144.0
50500715	JACK AND REMOVE EXISTING BEARINGS	EACH	12.0
70104005	TRAFFIC CONTROL AND PROTECTION, STANDARD 701316, LOCATION 1	EACH	1.0
M4402110	BITUMINOUS CONCRETE REMOVAL (DECK)	SQ M	635.0
M5010240	CONCRETE REMOVAL	CU M	10.9
M5030360	CONCRETE SUPERSTRUCTURE	CU M	13.6
M5030390	BRIDGE DECK GROOVING	SQ M	38.0
M5030450	PROTECTIVE COAT	SQ M	38.0
M5050405	FURNISHING AND ERECTING STRUCTURAL STEEL	KG	790.0
M5080205	REINFORCEMENT BARS, EPOXY COATED	KG	1,100.0
M5810200	WATERPROOFING MEMBRANE SYSTEM	SQ M	635.0
MX030069	SILICONE JOINT SEALER	METER	20.8
MX406014	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N70	M TON	38.0
MX406900	QC/QA BITUMINOUS	M TON	38.0
MZ016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ M	4.0
MZ016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ M	15.0
MZ016200	DECK SLAB REPAIR (PARTIAL)	SQ M	64.0
MZ047300	PROTECTIVE SHIELD	SQ M	92.0
Z0002600	BAR SPLICERS	EACH	24.0
MX030077	POLYMER CONCRETE	CU M	0.14

Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53 Grade 60.

Prior to pouring the new concrete deck, all loose rust, loose mill scale, and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete. All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04 of the Standard Specifications

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the

The existing structural steel coating contains lead. The Contractor should take appropriate precautions to deal with the presence of lead on this project

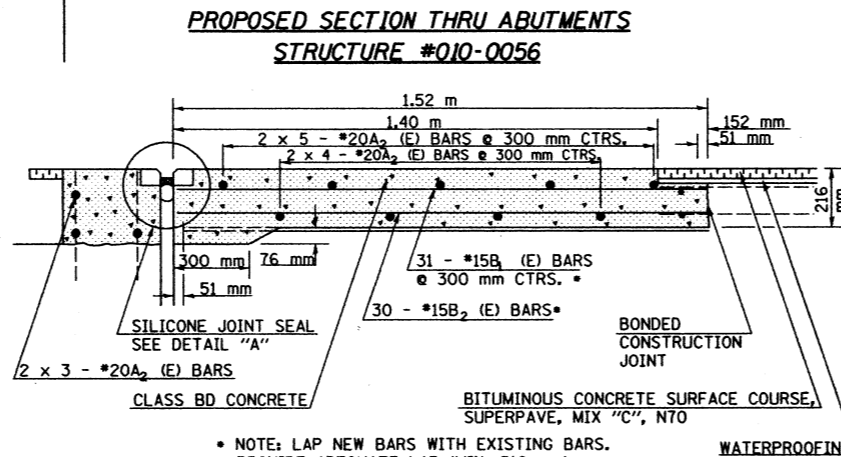
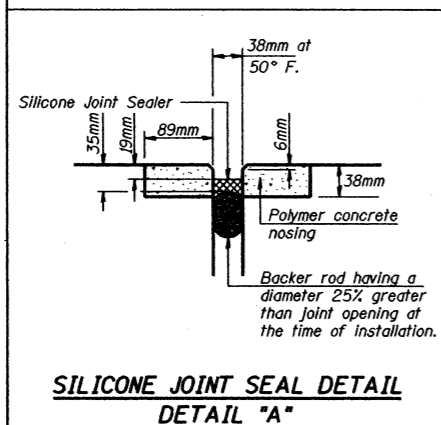
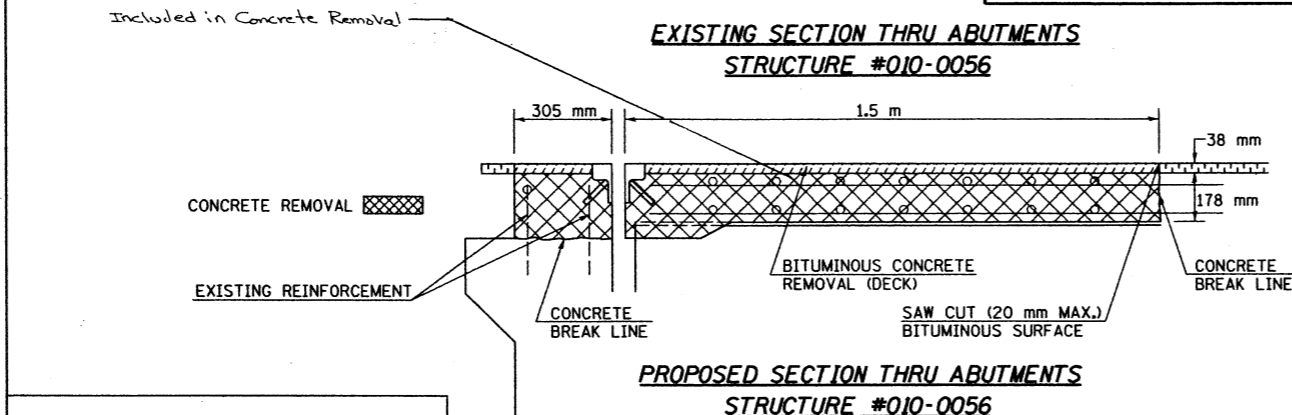
All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M 300, Type 1. Cost included with Furnishing and Erecting Structural Steel.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

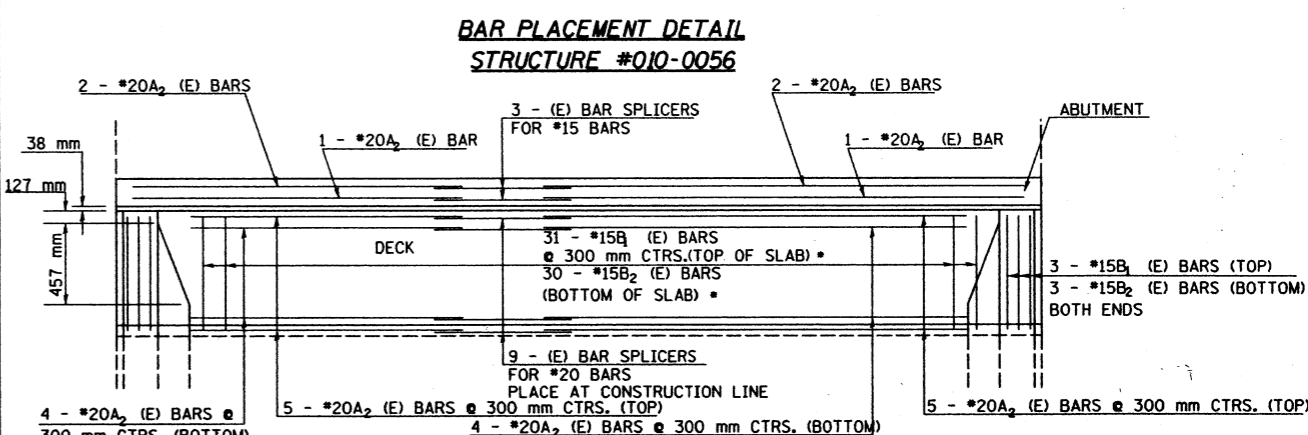
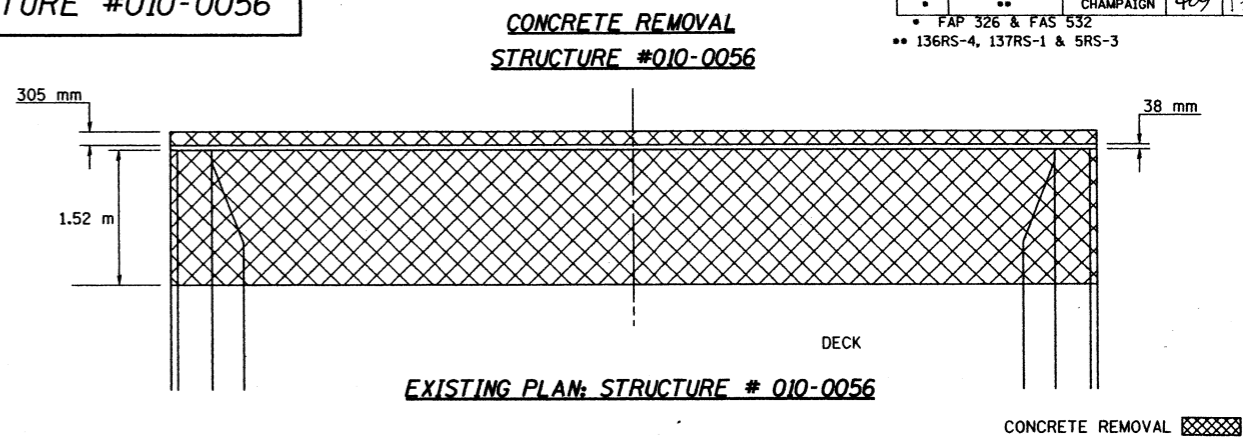
Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation

DETAILS FOR STRUCTURE #010-0056

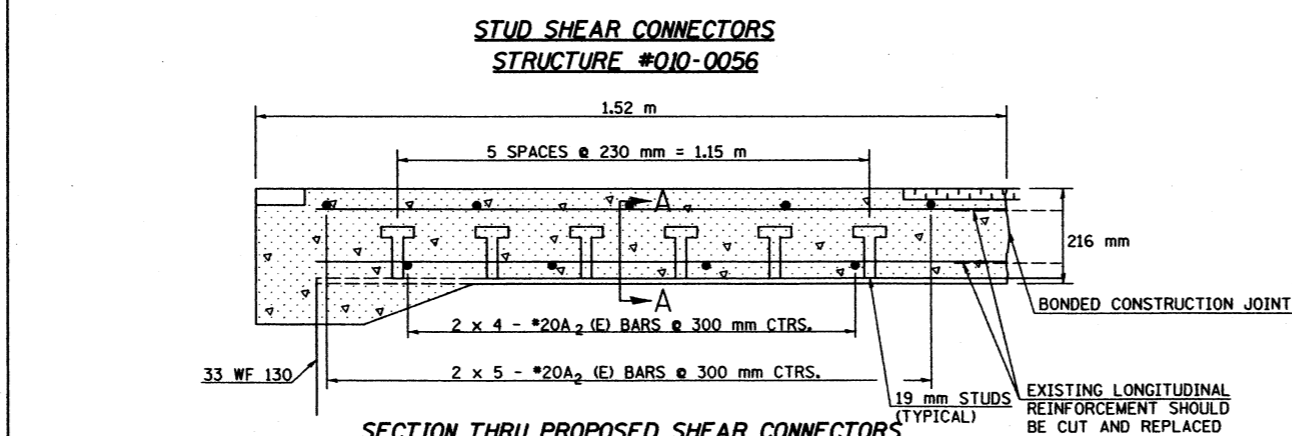
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	**	CHAMPAIGN	409	130
* FAP 326 & FAS 532				
** 136RS-4, 137RS-1 & 5RS-3				



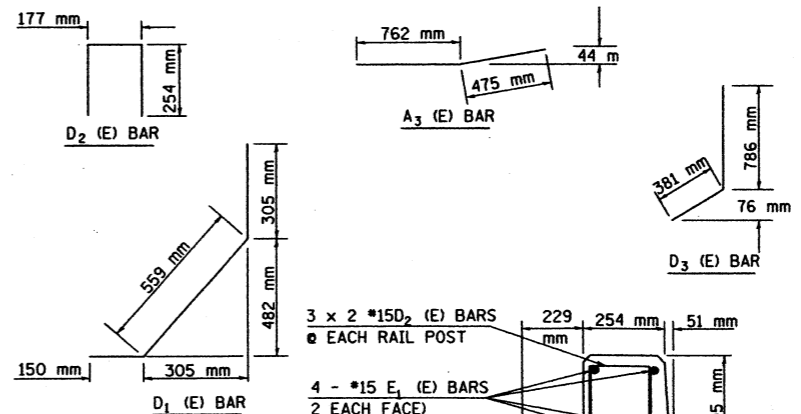
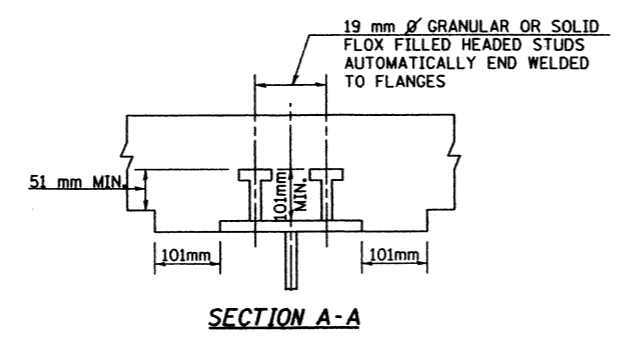
NOTE: LAP NEW BARS WITH EXISTING BARS. PROVIDE ADEQUATE LAP (MIN. 510 mm).



NOTE: LAP NEW BARS WITH EXISTING BARS PROVIDE ADEQUATE LAP (MIN. 510 mm).



NOTE: TO BE USED ON APPROACH END OF STRUCTURES ONLY



BILL OF MATERIALS STRUCTURE # 010-0056

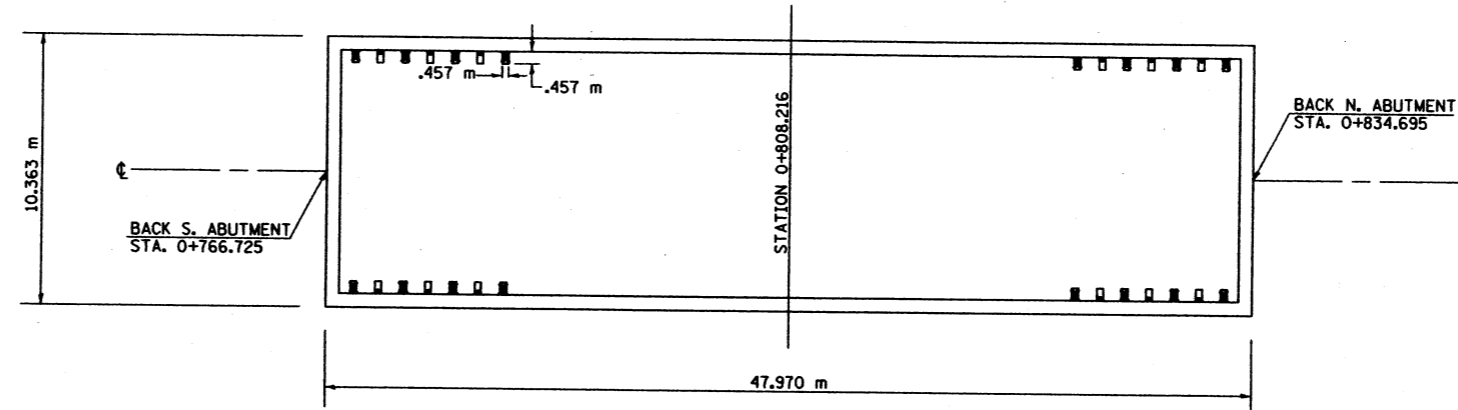
BAR NO.	SIZE	LENGTH	SHAPE
A ₂	48 #20	4.953	
A ₃	12 #20	1.219	
B ₁	74 #15	1.398	
B ₂	72 #15	1.398	
B ₅	8 #30	1.398	
B ₉	8 #15	1.398	
D ₁	12 #15	1.016	
D ₂	24 #15	0.686	
D ₃	12 #15	1.168	
E ₁	16 #15	1.398	
REINFORCEMENT BARS (E)			KG. 1100
CONCRETE SUPERSTRUCTURE C.U.M.			13.6
BAR SPLICERS			EA. 24

STRUCTURE NO. 010-0056 IL 47 SOUTH OF MAHOMET OVER I-72

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	CHAMPAIGN	409	131

• FAP 326 & FAS 532
 ** 136RS-4, 137RS-1 & 5RS-3

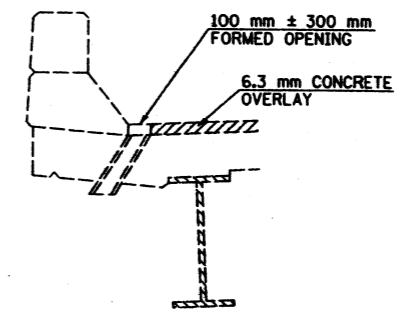
DECK DRAIN REHABILITATION



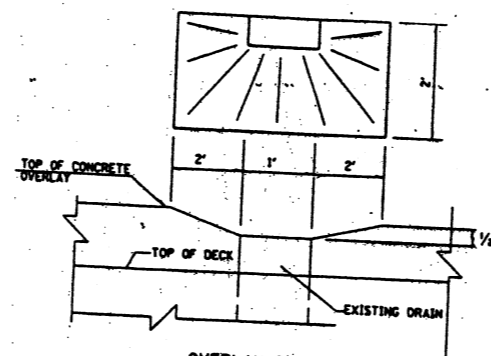
AREAS OF FULL DEPTH PATCHING ARE AT EACH DECK DRAIN AND AS SHOWN ON THE PLAN VIEW OF THE DECK. THE EXACT SIZE AND LOCATION OF THE PATCHES SHALL BE DETERMINED BY THE ENGINEER. THE DECK DRAINS NEAR THE END OF THE DECK ARE TO BE REMOVED, THEN EVERY OTHER DRAIN WORKING TOWARD THE CENTER OF THE BRIDGE IS TO BE REMOVED. THE REMOVAL OF THE EXISTING DRAINS WILL NOT BE PAID FOR SEPERATELY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR FULL DEPTH PATCHING.

PROTECTIVE SHIELD WILL BE USED BETWEEN BEAMS 1 & 2, AND BETWEEN BEAMS 5 & 6. THE PROTECTIVE SHIELD WILL BE USED TO PROTECT I-72 EAST & WESTBOUND LANES.

DRAIN BUILD-UP DETAIL

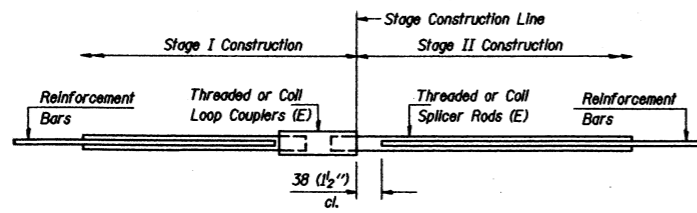


SECTION AT DRAIN



X = DENOTES DECK DRAIN ELIMINATION LOCATIONS
 = 0.209 m² PER FULL DEPTH PATCH

BAR SPLICER ASSEMBLY DETAILS STRUCTURE 010-0056



SPLICER DETAIL

Bar Size	No. Assemblies Required	Location
#13(#4)	43	OVERLAY
#19(#6)	8	BACKWALLS

NOTES

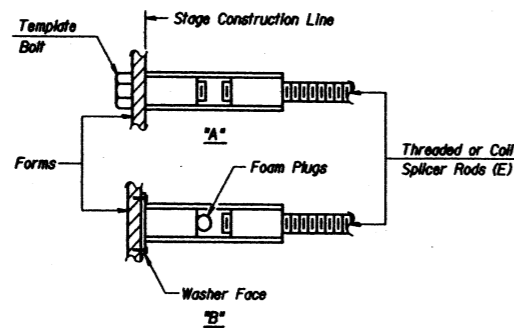
Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars. Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length. All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars. Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity = $1.25 \times f_y \times A_s$
(Tension in kips)
- ② Minimum Pull-out Strength = $1.25 \times f_{s_{allow}} \times A_s$
(Tension in kips)

Where f_y = Yield strength of lapped reinforcement bars in ksi.
 $f_{s_{allow}}$ = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
 A_s = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	5.9
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6

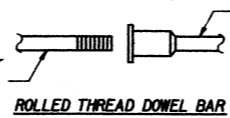
Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."



INSTALLATION AND SETTING METHODS

"A": Set bar splicer assembly by means of a template bolt.
 "B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.

The diameter of this part is the same as the diameter of the bar spliced.



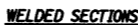
ROLLED THREAD DOWEL BAR



ONE PIECE



Wire Connector



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.

ANCHOR BOLT DETAILS FOR BEARINGS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	••	CHAMPAIGN	409	133

• FAP 326 & FAS 532
 •• 136RS-4, 137RS-1 & 5RS-3

GENERAL NOTES

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or according to the manufacturer's recommendation after beams or girders have been erected and adjusted. Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming. The anchor bolts, furnished and installed and including the epoxy grout or capsules shall not be paid for separately but shall be included in the unit bid price for "Furnishing and Erecting Structural Steel". All dimensions are in millimeters (mm) except as noted.

The Illinois Coil-Lock Anchor Bolt is a proprietary item which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected under Federal copyright laws. The production and the fabrication of this bolt for use on highway projects in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or the fabricator for producing or fabricating this bolt.

D	E	H	K	"d"
24	27	20	44	6
30	33	26	51	10
36	39	32	54	13
48	51	44	73	15
64	67	60	86	25

MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A 519, Grade 1026, CW and supplied with hexagonal nuts and cut washers. The coil wire shall be made of any suitable soft steel wire. The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed. The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C 881, Type I, Grade 1 and of a Class suitable for the temperature at installation.

INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT

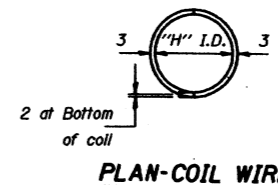
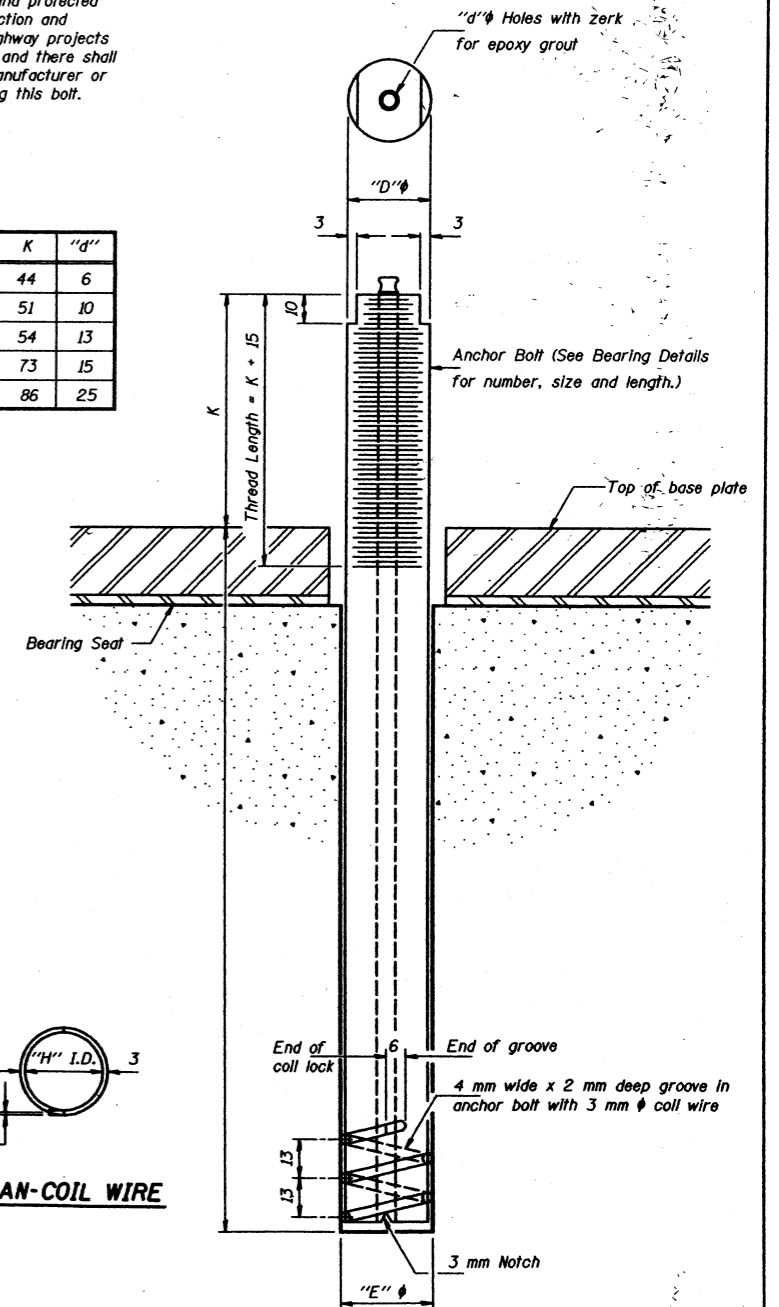
- With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
- Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

ALTERNATE ANCHOR BOLTS

The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures. The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:
 1. A threaded rod stud with nut and washer of the type specified.
 2. A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

Location	Type

ASTM F 1554 (F_y = 724 MPa), ASTM A 449 and AASHTO M 314 (F_y = 724 MPa) anchor bolts may be substituted for the anchor bolts shown above.



PLAN-COIL WIRE

ILLINOIS COIL-LOCK ANCHOR BOLT

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

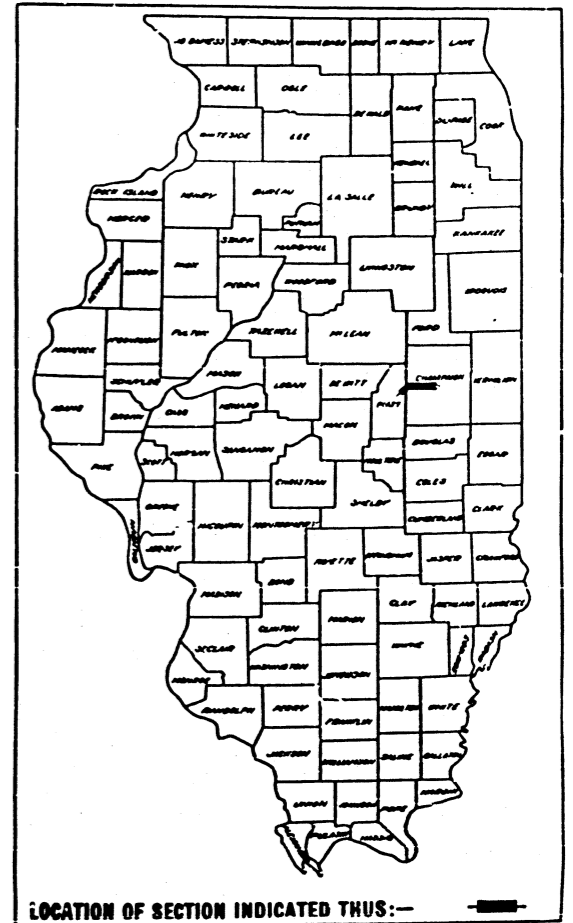
SET NO. 4
 OF 4 SETS

FEDERAL AID ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.-11	10-70HB-2	CHAMPAIGN	45	1

JOB. NO. P-95-075-00

SCALES
 PLAN 1 INCH = 100 FT.
 PROFILE, HOR. 1 INCH = 100 FT.
 PROFILE, VERT. 1 INCH = 10 FT.
 CROSS-SECTION 1 INCH = 8 FT. VERTICAL
 1 INCH = 10 FT. HORIZONTAL

F.A. ROUTE II - SEC. 10-70HB-2
 CHAMPAIGN COUNTY



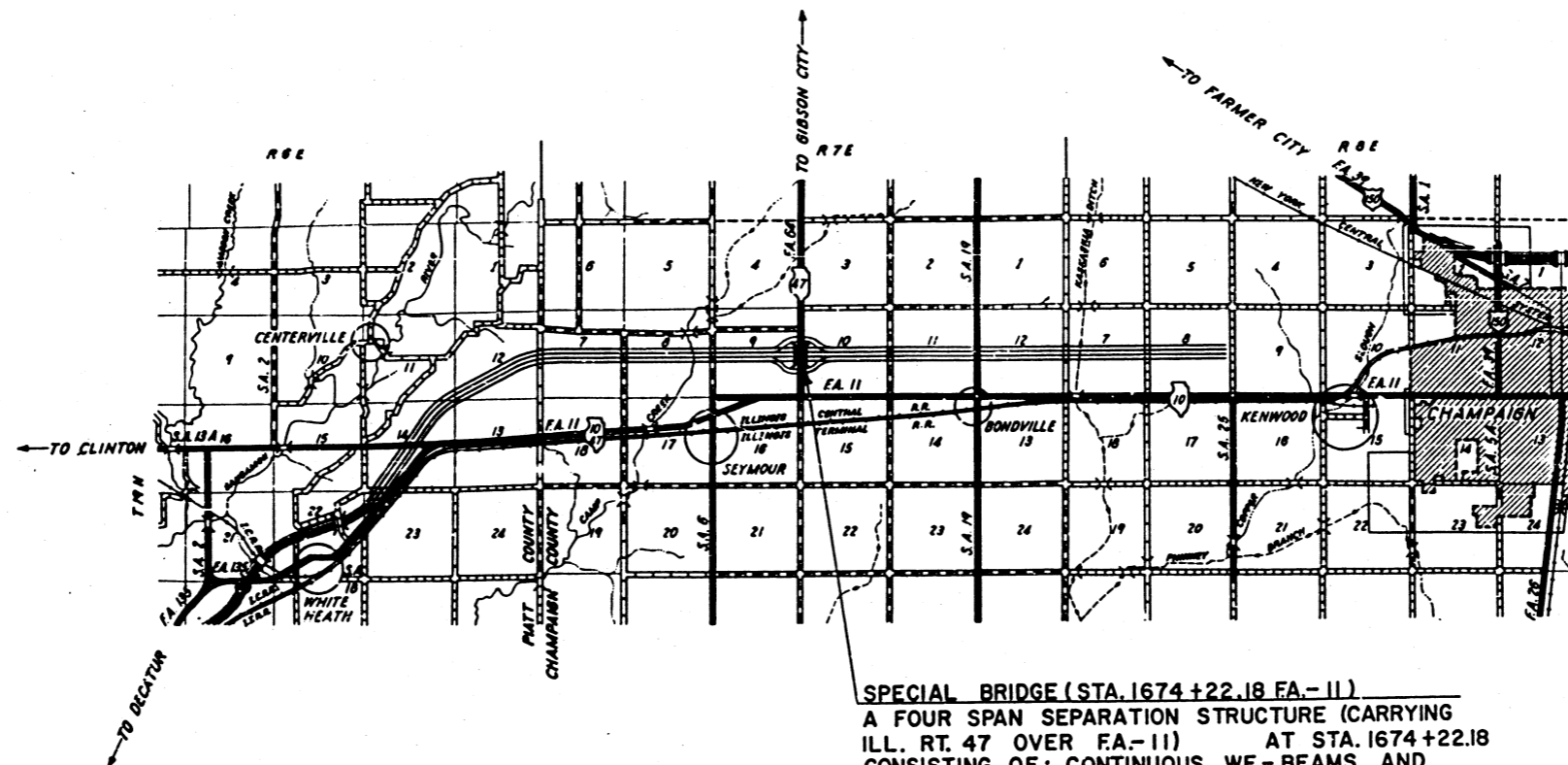
LOCATION OF SECTION INDICATED THUS:—

FOR INDEX OF SHEETS - SEE SHEET NO. 7
 FOR SUMMARY OF QUANTITIES - SEE SHEET NO. 7

DESIGN DESIGNATION
 1030(BB) · B-1 · 2.24 (PCC-20)
 235(BB) · C · 0.43 (PCC-20)

STRUCTURAL DESIGN TRAFFIC F.A. 11
 ADT - 6,800 YEAR - 1978
 PC - 81.5%
 SU - 11%
 MU - 7.5%
 CLASS I ROAD
 CBR - 2
 PER CENT OF SDT IN DESIGN LANE
 U₁ - 32%
 U₂ - 45%
 U₃ - 45%
 T.F. - 2.24

STRUCTURAL DESIGN TRAFFIC - ILL. 47
 ADT - 1450 YEAR - 1978
 PC - 79.7%
 SU - 14.8%
 MU - 5.4%
 CLASS I ROAD
 CBR - 2
 PER CENT OF SDT IN DESIGN LANE
 U₁ - 50%
 U₂ - 50%
 U₃ - 50%
 T.F. - 0.43



SPECIAL BRIDGE (STA. 1674+22.18 FA-11)
 A FOUR SPAN SEPARATION STRUCTURE (CARRYING ILL. RT. 47 OVER FA-11) AT STA. 1674+22.18 CONSISTING OF: CONTINUOUS WF-BEAMS AND REINFORCED CONCRETE DECK ON REINFORCED CONCRETE PIERS AND PILE BENT ABUTMENTS, SPANS ON C.L., 2 AT 67'-3 1/2" AND 2 AT 42'-5", 32'-0" ROADWAY.
 NOTE: PILING FOR BRIDGE APPROACH SLABS TO BE DRIVEN BY CONTRACTOR FOR SECTION 10-70HB-2 (INCLUDED IN SECTION 10-70HB-2).

LAYOUT
 SCALE 1" = 1 MI.

APPROVED
 FOR STRUCTURAL ADEQUACY ONLY
Carl E. Thurman, Jr.
 Engineer of Bridge & Traffic Structures

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
 DIVISION OF HIGHWAYS
 SUBMITTED: MARCH 22, 68
J.C. McGraw
 ENGINEER
 PLANNED: _____
 APPROVED: _____
 DATE: _____

DEPARTMENT OF COMMERCE
 BUREAU OF PUBLIC ROADS
 APPROVED: _____
 DIVISION ENGINEER DATE



HOMER L. CHASTAIN & ASSOCIATES
 CONSULTING ENGINEERS
 DECATUR, ILLINOIS

REEL 5-60

010-0056

010-0056

SUMMARY OF QUANTITIES

CONSTRUCTION TYPE CODE	ITEM	UNIT	TOTAL QUANTITY	BRIDGE		ROAD	
				1674+22.18	1721	STA. 25+00 TO STA. 64+25	7023
C11001	EARTH EXCAVATION	CU YDS	8,859			8,859	
C13001	BORROW EXCAVATION	CU YDS	177,007			177,007	
C20001	TRENCH BACKFILL	CU YDS	35			35	
C26001	GRAVEL OR CRUSHED STONE SHOULDERS, TYPE A	TONS	1,275			1,275	
Z01394	STABILIZED SHOULDERS, (BITUMINOUS AGGREGATE MIXTURE) 6"	SQ YDS	2,443			2,443	
C26016	STABILIZED SUB-BASE, 4"	SQ YDS	8,044			8,044	
C27001	TOPSOIL	CU YDS	4,920			4,920	4920
C36001	GRAVEL OR CRUSHED STONE SURFACE COURSE, TYPE A	TONS	3,800			3,800	
C48004	PORTLAND CEMENT CONCRETE PAVEMENT (8")	SQ YDS	7,170			7,170	
C48011	PORTLAND CEMENT CONCRETE PAVEMENT (16 1/2" x 10 1/2" x 16 1/2")	SQ YDS	214			214	
C48019	PAVEMENT FABRIC	SQ YDS	7,170			7,170	
C50001	CLASS "A" EXCAVATION FOR STRUCTURES	CU YDS	210	210			
C52003	CLASS "X" CONCRETE	CU YDS	678.6	476.2		202.4	
C52016	CLASS "X" CONCRETE HEADWALL	CU YDS	0.4			0.4	
C52021	PROTECTIVE COAT	SQ YDS	8,324	940		7,384	
C54001	FURNISHING & ERECTING STRUCTURAL STEEL	POUNDS	208,100	208,100			
C58109	PIPE CULVERTS, TYPE 1, 15"	LIN FT	308			308	
C58555	REMOVE AND RELAY PIPE CULVERTS, 15"	LIN FT	70			70	
C69001	REINFORCEMENT BARS	POUNDS	118,310	70,770		47,540	
C80004	FURNISHING CROSCOTTED PILES (UP TO 20')	LIN FT	228			228	
C60005	FURNISHING CROSCOTTED PILES (20.1 TO 38')	LIN FT	2,070	2,070			
C60007	TEST PILES (TIMBER)	EACH	1	1			
C60008	DRIVING TIMBER PILES	LIN FT	2,298	2,298			
C60043	DRIVING CONCRETE PILES	LIN FT	1,050	1,050			
C60044	FURNISHING CONCRETE PILES	LIN FT	1,050	1,050			
C60047	TEST PILES (CONCRETE)	EACH	1	1			
C61001	NAME PLATES	EACH	2	2			
C65001	STORM SEWERS, TYPE 1, 8"	LIN FT	100			100	
C65002	STORM SEWERS, TYPE 1, 10"	LIN FT	644			644	
C65024	STORM SEWERS, TYPE 2, 8"	LIN FT	100			100	
C65025	STORM SEWERS, TYPE 2, 10"	LIN FT	100			100	
C65387	STORM SEWERS, TYPE 1, 8"	LIN FT	100			100	
C65392	STORM SEWERS, TYPE 2, 8"	LIN FT	100			100	
C62001	PAVEMENT REMOVAL	SQ YDS	1,760			1,760	
C83002	SLOPE WALL, 4"	SQ YDS	411	411			
C94001	STEEL PLATE BEAM GUARD RAIL	LIN FT	2,100			2,100	
101002	GRAVEL OR CRUSHED STONE	TONS	1,250			1,250	
102001	CALCIUM CHLORIDE APPLIED	TONS	29			29	
104001	FURNISHING & ERECTING RIGHT OF WAY MARKERS	EACH	14			14	
110005	SEEDING, CLASS II	ACRES	11.2			11.2	
110006	SEEDING, CLASS III	ACRES	1.4			1.4	
111002	STRAW FOR ASPHALT COATED MULCH	TONS	25.5			25.5	
111003	EMULSIFIED ASPHALT	GALLONS	2,550			2,550	
112001	SODDING	SQ YDS	30			30	
113014	NITROGEN FERTILIZER NUTRIENTS	POUNDS	680			680	
113015	PHOSPHORUS FERTILIZER NUTRIENTS	POUNDS	2,400			2,400	
113016	POTASSIUM FERTILIZER NUTRIENTS	POUNDS	810			810	
Z00004	ALUMINUM HANDRAIL	LIN FT	442	442			
Z00050	PERMANENT SURVEY MARKERS, TYPE I	EACH	4			4	
Z01072	EXPLORATION TRENCH, 52" DEPTH	LIN FT	3,000			3,000	
Z01079	BRIDGE SEAT COALANT	LUMP SUM	1	1			
Z01376	ENGINEER'S FIELD LABORATORY	EACH	1			1	
Z01398	ENGINEER'S FIELD OFFICE, TYPE A	EACH	1			1	

* CONSTRUCTION TYPE CODE CE-58

GENERAL NOTES

- WHenever reference is made in these plans to the "STANDARD SPECIFICATIONS" adopted JANUARY 2, 1928, it is understood to include the "SUPPLEMENTAL SPECIFICATIONS" adopted JANUARY 3, 1955.
- ELEVATIONS BASED ON 1000 GENERAL ADJUSTMENT DATUM - U.S.C. & G.S.
- WHERE SPOT OR SUB-SECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE TO BE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE CHIEF, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.
- ALL TREES, SHRUBS AND BRUSH WITHIN THE AREAS OF CONSTRUCTION SHALL BE REMOVED AND CULVERTED OR 10' ACCORDANCE WITH THE SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE INCIDENTAL TO EACH EXCAVATION.
- ALL TRENCHES WITHIN THE PROPOSED SUB-SPACE OF WITHIN 2 FEET OF THE STABILIZED SHOULDERS SHALL BE BACKFILLED WITH TRENCH BACKFILL AS DIRECTED BY THE ENGINEER.
ESTIMATED QUANTITY
35 CU YDS TRENCH BACKFILL
- TOPSOIL, 4" THICK COMPACTED SHALL BE PLACED AT LOCATIONS SHOWN ON THE STATION CROSS SECTIONS AND TYPICAL CROSS SECTIONS AS DIRECTED BY THE ENGINEER.
4920 CU YDS TOPSOIL
- STABILIZED SHOULDERS AND GRAVEL OR CRUSHED STONE SHOULDERS, TYPE "A", SHALL BE CONSTRUCTED ALONG ILLINOIS ROUTE 47 IN ACCORDANCE WITH THE SPECIFICATIONS SHOWN ON FIG. 101. STABILIZED SHOULDERS AND AS DIRECTED BY THE ENGINEER. SHOULDERS SHALL BE GRADUALLY LEFT AND RIGHT OF STATION 40+00 TO STATION 40+00 LEFT AND RIGHT OF STATION 54+00 TO STATION 54+00 TO PROVIDE FOR THE FUTURE CONSTRUCTION OF THE INTERCHANGE RAMP TERMINALS. TEMPORARY EARTH SHOULDERS SHALL BE CONSTRUCTED WITHIN THE STATION LIMITS LISTED ABOVE.
ESTIMATED QUANTITIES
1275 TONS GRAVEL OR CRUSHED STONE SHOULDERS, TYPE A
2443 SQ YDS STABILIZED SHOULDERS (B.A.M.)
- STABILIZED SUB-BASE, UNIFORMLY 4" THICK, SHALL BE CONSTRUCTED UNDER THE PROPOSED 6" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT, IN ACCORDANCE WITH THE SPECIFICATIONS SHOWN AND AS DIRECTED BY THE ENGINEER.
ESTIMATED QUANTITIES
8044 SQ YDS STABILIZED SUB-BASE (B.A.M.)
- GRAVEL OR CRUSHED STONE SURFACE COURSE, TYPE A, 6" THICK COMPACTED SHALL BE CONSTRUCTED ON DETOUR ROAD AS DIRECTED BY THE ENGINEER. GRAVEL OR CRUSHED STONE SHALL BE USED FOR MAINTENANCE OF THE DETOUR ROAD AS DIRECTED BY THE ENGINEER.
ESTIMATED QUANTITIES
3800 TONS GRAVEL OR CRUSHED STONE SURFACE COURSE, TYPE A
1250 TONS GRAVEL OR CRUSHED STONE
- PORTLAND CEMENT CONCRETE PAVEMENT, 8" THICK, SHALL BE CONSTRUCTED ON ILLINOIS ROUTE 47 IN ACCORDANCE WITH THE APPLICABLE STANDARDS AS DIRECTED BY THE ENGINEER.
ESTIMATED QUANTITIES
7170 SQ YDS P.C. CONCRETE PAVEMENT (8")
7170 SQ YDS PAVEMENT FABRIC
214 SQ YDS P.C. CONCRETE PAVEMENT, 16 1/2" x 10 1/2" x 16 1/2"
- A PROTECTIVE COAT, IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS" SHALL BE APPLIED AS DIRECTED BY THE ENGINEER TO ALL P.C. CONCRETE PAVEMENT AND GRADE SEPARATION STRUCTURES.
ESTIMATED QUANTITY
8324 SQ YDS PROTECTIVE COAT
- ALL UNSURFACED AREAS WITHIN THE LIMITS OF CONSTRUCTION OF F.A.-II WILL BE SEED, FERTILIZED AND MULCHED AS DIRECTED BY THE ENGINEER.
ESTIMATED QUANTITIES
11.2 ACRES SEEDING, CLASS II
1.4 ACRES SEEDING, CLASS III
25.5 TONS STRAW FOR ASPHALT COATED MULCH
2550 GALLONS EMULSIFIED ASPHALT
680 POUNDS NITROGEN FERTILIZER NUTRIENTS
2400 POUNDS PHOSPHORUS FERTILIZER NUTRIENTS
810 POUNDS POTASSIUM FERTILIZER NUTRIENTS
- A STRIP OF SOD 18" WIDE SHALL BE PLACED ON EACH SIDE OF STRUCTURE SIDEWALLS AND AT OTHER LOCATIONS DESIGNATED BY THE ENGINEER.
ESTIMATED QUANTITY
30 SQ YDS SODDING
- BEFORE ORDERING STORM SEWERS AND PIPE CULVERTS THE CONTRACTOR SHALL CONSULT THE ENGINEER FOR EXACT LENGTH.
- PIPE CULVERTS PLACED UNDER ENTRANCES SHALL BE CONSTRUCTED WITH METHOD III CONSTRUCTION.
- A CALCIUM CHLORIDE SURFACE TREATMENT SHALL BE APPLIED TO THE DETOUR ROAD SURFACE IN ACCORDANCE WITH THE PLANS AND AS DIRECTED BY THE ENGINEER. CALCIUM CHLORIDE SHALL BE USED FOR THE MAINTENANCE OF THE DETOUR ROAD AS DIRECTED BY THE ENGINEER.
ESTIMATED QUANTITY
29 TONS CALCIUM CHLORIDE APPLIED

- INDEX OF SHEETS
- COVER SHEET
 - STANDARD 2035
 - STANDARD 2179
 - STANDARD 2187
 - STANDARD 2254, 2255
 - STANDARD 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 2681, 2682, 2683, 2684, 2685, 2686, 2687, 2688, 2689, 2690, 2691, 2692, 2693, 2694, 2695, 2696, 2697, 2698, 2699, 2700, 2701, 2702, 2703, 2704, 2705, 2706, 2707, 2708, 2709, 2710, 2711, 2712, 2713, 2714, 2715, 2716, 2717, 2718, 2719, 2720, 2721, 2722, 2723, 2724, 2725, 2726, 2727, 2728, 2729, 2730, 2731, 2732, 2733, 2734, 2735, 2736, 2737, 2738, 2739, 2740, 2741, 2742, 2743, 2744, 2745, 2746, 2747, 2748, 2749, 2750, 2751, 2752, 2753, 2754, 2755, 2756, 2757, 2758, 2759, 2760, 2761, 2762, 2763, 2764, 2765, 2766, 2767, 2768, 2769, 2770, 2771, 2772, 2773, 2774, 2775, 2776, 2777, 2778, 2779, 2780, 2781, 2782, 2783, 2784, 2785, 2786, 2787, 2788, 2789, 2790, 2791, 2792, 2793, 2794, 2795, 2796, 2797, 2798, 2799, 2800, 2801, 2802, 2803, 2804, 2805, 2806, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2815, 2816, 2817, 2818, 2819, 2820, 2821, 2822, 2823, 2824, 2825, 2826, 2827, 2828, 2829, 2830, 2831, 2832, 2833, 2834, 2835, 2836, 2837, 2838, 2839, 2840, 2841, 2842, 2843, 2844, 2845, 2846, 2847, 2848, 2849, 2850, 2851, 2852, 2853, 2854, 2855, 2856, 2857, 2858, 2859, 2860, 2861, 2862, 2863, 2864, 2865, 2866, 2867, 2868, 2869, 2870, 2871, 2872, 2873, 2874, 2875, 2876, 2877, 2878, 2879, 2880, 2881, 2882, 2883, 2884, 2885, 2886, 2887, 2888, 2889, 2890, 2891, 2892, 2893, 2894, 2895, 2896, 2897, 2898, 2899, 2900, 2901, 2902, 2903, 2904, 2905, 2906, 2907, 2908, 2909, 2910, 2911, 2912, 2913, 2914, 2915, 2916, 2917, 2918, 2919, 2920, 2921, 2922, 2923, 2924, 2925, 2926, 2927, 2928, 2929, 2930, 2931, 2932, 2933, 2934, 2935, 2936, 2937, 2938, 2939, 2940, 2941, 2942, 2943, 2944, 2945, 2946, 2947, 2948, 2949, 2950, 2951, 2952, 2953, 2954, 2955, 2956, 2957, 2958, 2959, 2960, 2961, 2962, 2963, 2964, 2965, 2966, 2967, 2968, 2969, 2970, 2971, 2972, 2973, 2974, 2975, 2976, 2977, 2978, 2979, 2980, 2981, 2982, 2983, 2984, 2985, 2986, 2987, 2988, 2989, 2990, 2991, 2992, 2993, 2994, 2995, 2996, 2997, 2998, 2999, 3000
 - STANDARD 2203-1

Includes sh. 17A

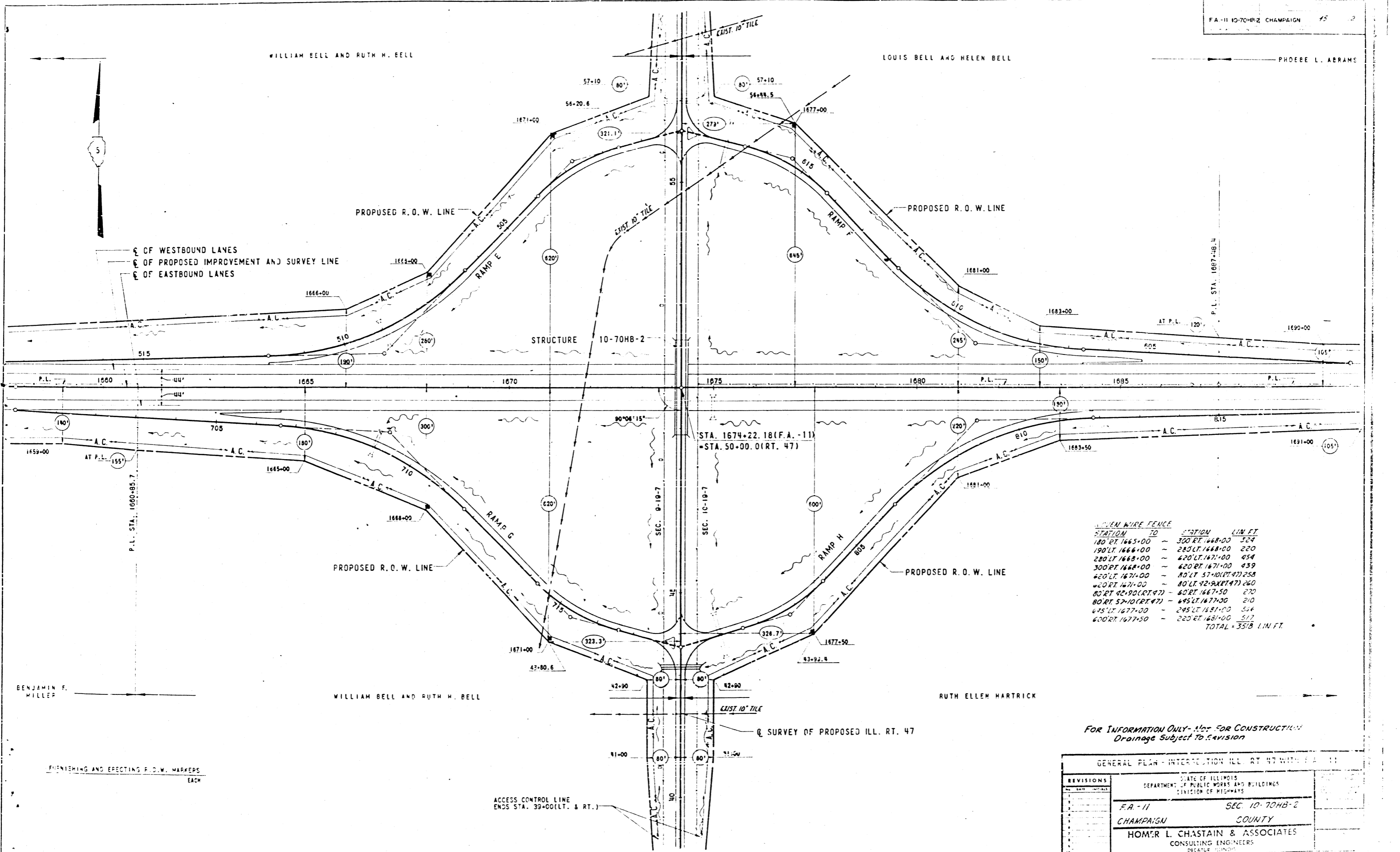
Includes sh. 7B

Includes sh. 17B

To be added after this set

INDEX OF SHEETS, GENERAL NOTES, AND SUMMARY OF QUANTITIES

REVISIONS	STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS AND BUILDINGS OFFICE OF HIGHWAYS
NO.	SECTION
1	CHAMPAIGN COUNTY
HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS CHAMPAIGN, ILLINOIS	



WIRE FENCE

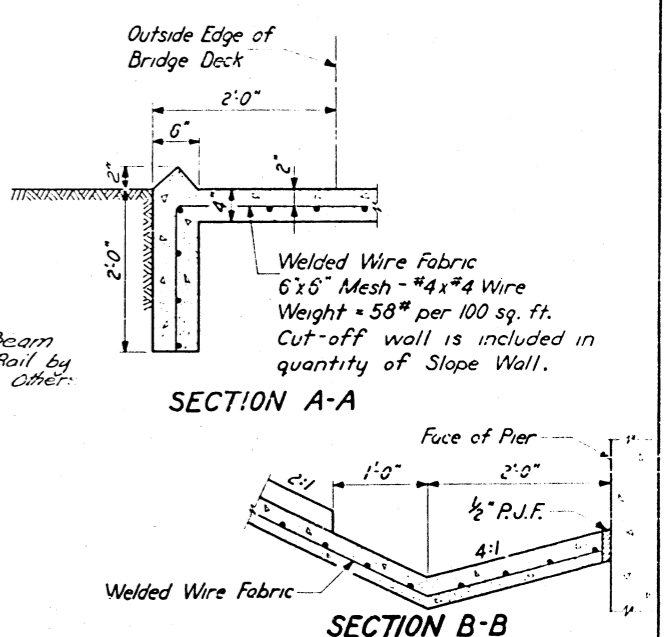
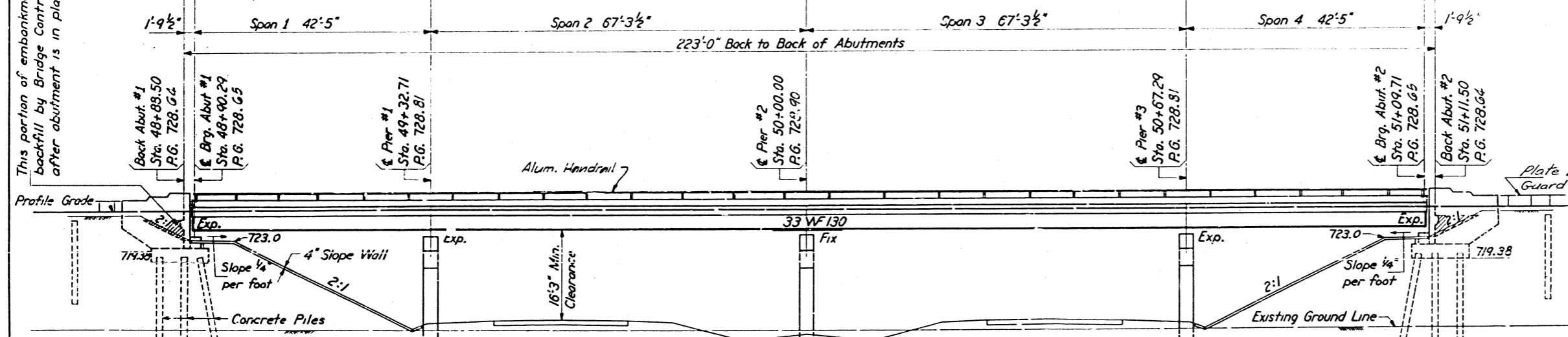
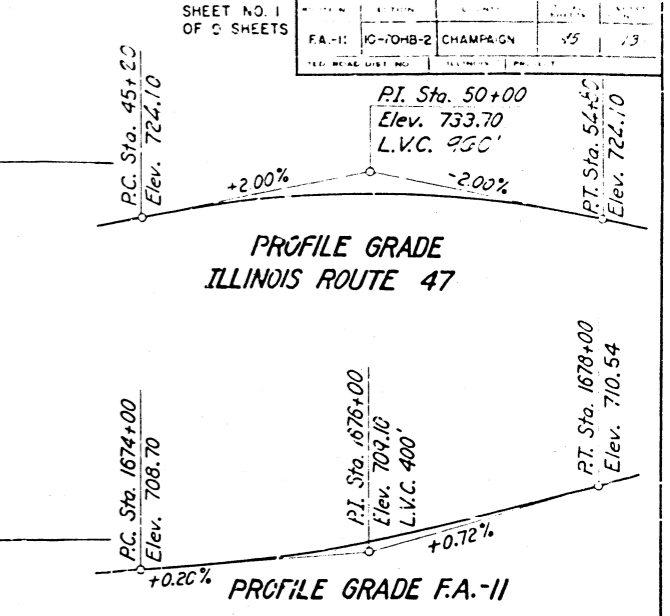
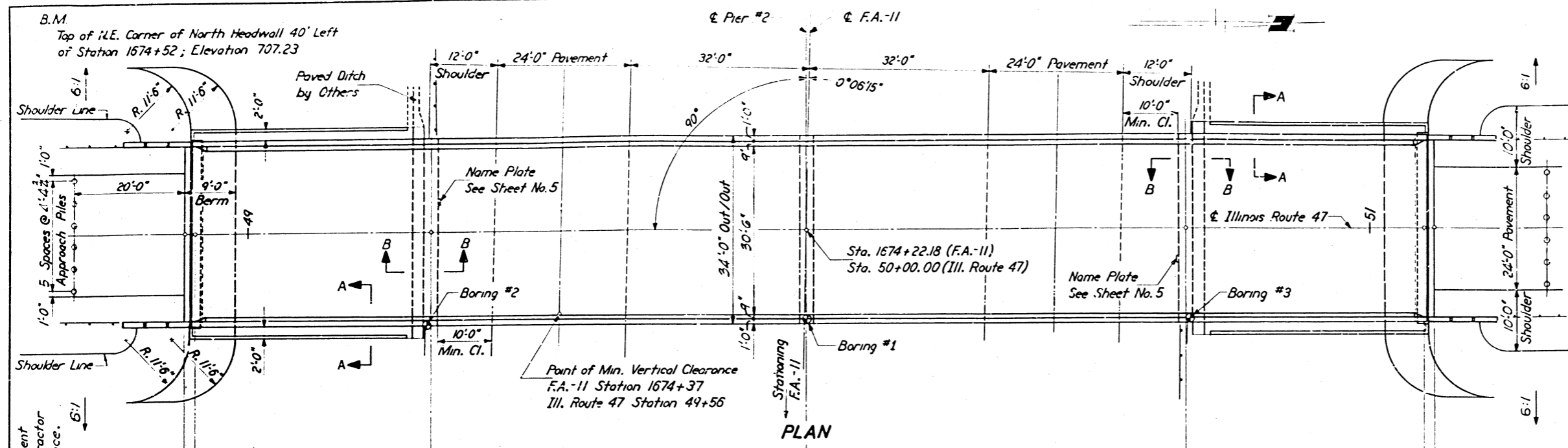
STATION	TO	STATION	LIN. FT.
180 RT 1665+00	~	300 RT 1668+00	324
190 LT 1668+00	~	280 LT 1668+00	220
280 LT 1668+00	~	420 LT 1671+00	454
300 RT 1668+00	~	620 RT 1671+00	439
420 LT 1671+00	~	80 LT 57+10 (RT. 47)	258
420 RT 1671+00	~	80 LT 42+90 (RT. 47)	260
80 RT 42+90 (RT. 47)	~	60 RT 1667+50	220
80 RT 57+10 (RT. 47)	~	495 LT 1677+00	210
495 LT 1677+00	~	295 LT 1681+00	344
600 RT 1677+50	~	220 RT 1681+00	517
			TOTAL = 3518 LIN. FT.

FOR INFORMATION ONLY - NOT FOR CONSTRUCTION
 Drainage Subject To Revision

REVISIONS		STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS AND BUILDINGS DIVISION OF HIGHWAYS	
1		FA-11	SEC. 10-70HB-2
2		CHAMPAIGN	COUNTY
		HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS DECATUR, ILLINOIS	

FURNISHING AND ERECTING P.D.W. MARKERS
EACH

ACCESS CONTROL LINE
ENDS STA. 39+00 (LT. & RT.)



APPROACH PILE DATA
 Creosoted Piles by Bridge Contractor
 Req'd Length = 19'

Location	Station	R.G.
Back Abut. #1	Sta. 48+88.50	R.G. 728.64
Exp. Abut. #1	Sta. 48+90.29	R.G. 728.65
Pier #1	Sta. 49+32.71	R.G. 728.81
Pier #2	Sta. 50+00.00	R.G. 728.90
Pier #3	Sta. 50+67.29	R.G. 728.81
Exp. Abut. #2	Sta. 51+09.71	R.G. 728.65
Back Abut. #2	Sta. 51+11.50	R.G. 728.64

GENERAL NOTES

No. Req'd = 6 (Each Abut.)
 See Special Provisions
 All concrete shall be Class X.

The concrete floor slab shall be finished in accordance with Article 51.19 of the Standard Specifications and shall be poured in one continuous operation between joints in accordance with Article 51.11

All structural steel shall be ASTM A-36

All rockers, bolsters, bearing plates, lead plates, pintles and anchor bolts shall be fabricated and set in accordance with Article 51.15 of the Standard Specifications and are included in the quantity of structural steel. Est. Weight = 8240 lbs

Expansion guards shall be fabricated and erected in accordance with Article 51.13 (d) of the Standard Specifications and are included in the quantity of structural steel. Est. Weight = 1780 lbs

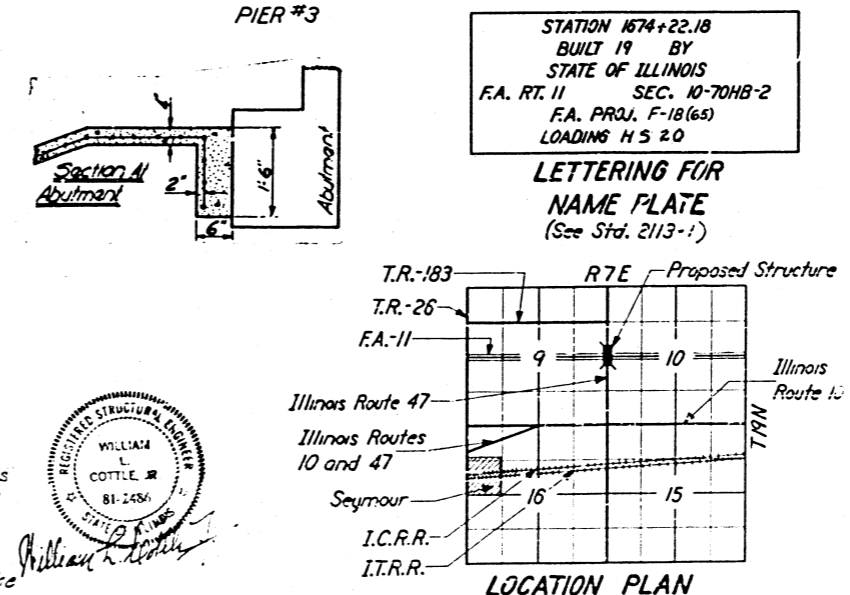
Rivets 3/4" φ, open holes 13/16" φ, unless noted.

DESIGN SPECIFICATIONS
 AASHTO 1965 Specifications
 Live: H S 20-44
 Dead Load includes 19% s.f. of roadway for future wearing surface.

DESIGN STRESSES
 $f_c = 1200$ p.s.i. concrete in superstructure
 $f_c = 1400$ p.s.i. concrete in substructure
 $f_c = 75$ p.s.i. footings
 $f_s = 20,000$ p.s.i. reinforcing steel
 $f_s = 22,000$ p.s.i. structural steel (A-36)
 $n = 10$
 Live Load Deflect $\sim 1/1000$

FIELD WELDING OF CONSTR. ACCESSIBLE TO THE BOTTOM FLANGES OR FOR A DISTANCE OF 1/3 OF THE SPAN EACH WAY FROM PIER SUPPORTS OR THE TOP FLANGES OF BEAMS OR GIRDERS WILL NOT BE PERMITTED. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.

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



TOTAL BILL OF MATERIAL

Item	Unit	Superstr.	Substr.	Total
Reinforcement Bars	Lbs.	51,450	19,320	70,770
Class A Excavation for Structures	Cu. Yd.		210	210
Class X Concrete	Cu. Yd.	723.9	252.3	476.2
Structural Steel	Lb.	208,100		208,100
Aluminum Handrail	Lin. Ft.	442		442
Creosoted Piles (Up to 20')	Lin. Ft.		228	228
Creosoted Piles (20.1' to 38')	Lin. Ft.		2070	2070
Test Piles - Timber	Each		One	One
Concrete Piles	Lin. Ft.		1,050	1,050
Test Piles - Concrete	Each		One	One
Name Plates	Each		2	2
Slope Wall - 4"	Sq. Yd.			
Protective Coat	Sq. Yd.	920		920
Bridge Seal Sealant	Lump Sum			

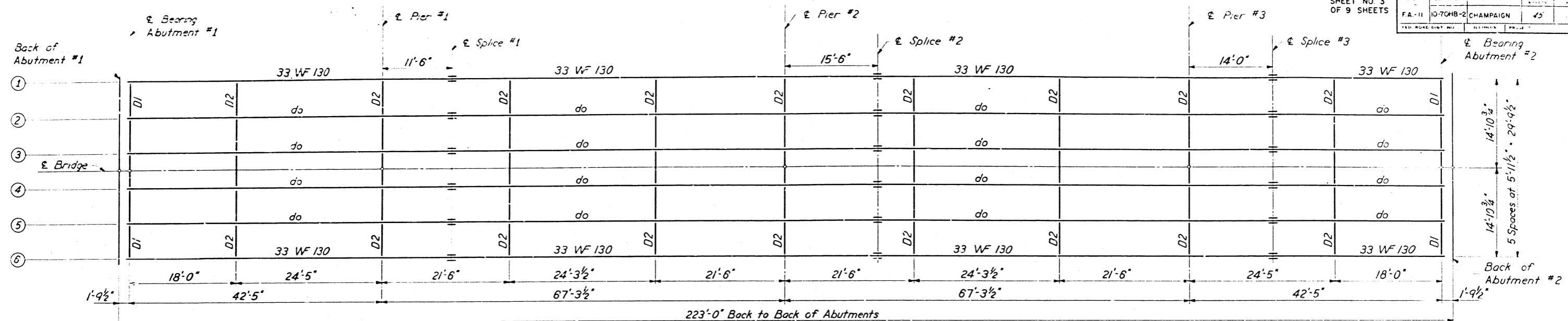
GENERAL PLAN & ELEVATION

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

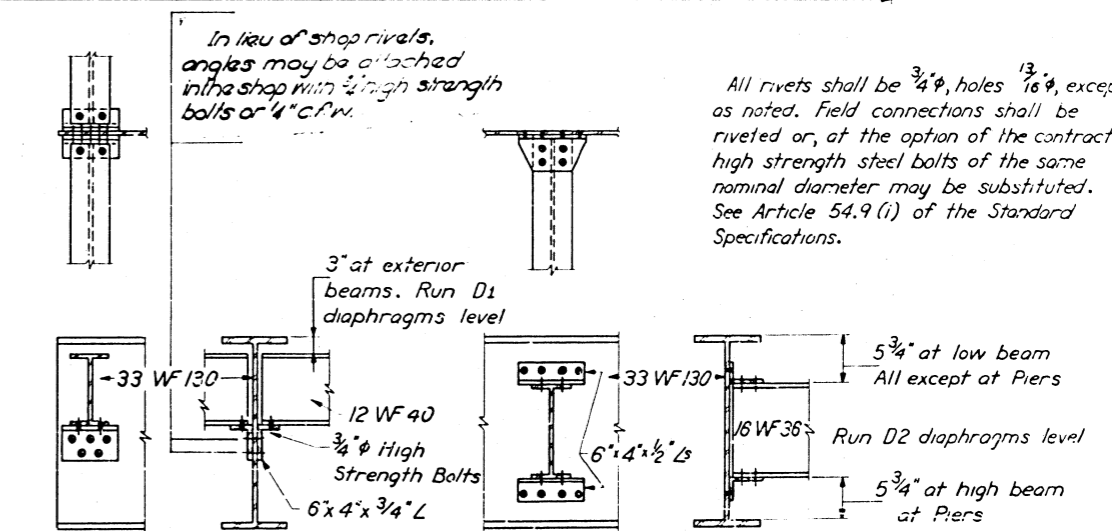
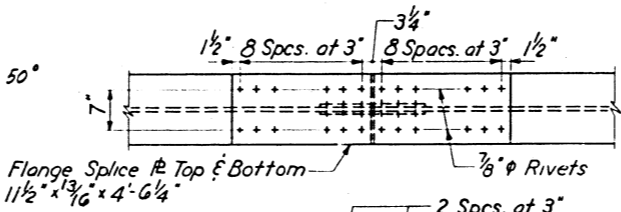
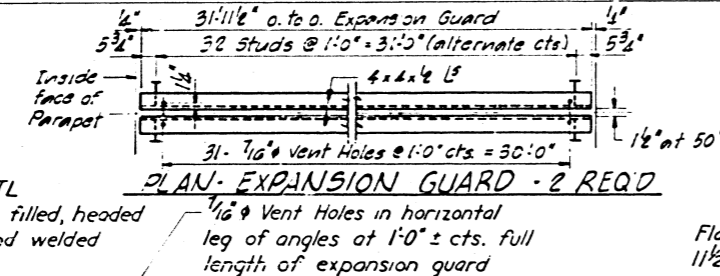
ILLINOIS ROUTE 47 OVER F.A. ROUTE 11
 F.A. ROUTE 11 SECTION 10-70HB-2 PROJECT
 STATION 1674+22.18 (F.A. ROUTE 11) CHAMPAIGN COUNTY

HOMER L. CHASTAIN & ASSOCIATES
 CONSULTING ENGINEERS
 DECATUR, ILLINOIS

4-16-64 J.T.J. added bridge seat sealant Rev. Cl. X. Con. from 212.3 to 232.76 from 415.4 to 485.8 Cu. Yds.
 Reinft. Bars from 40,920 to 45,710 from 64,140 to 149,950 Lbs. Slope Wall from 400 to 411 Sq. Yds. ASA.



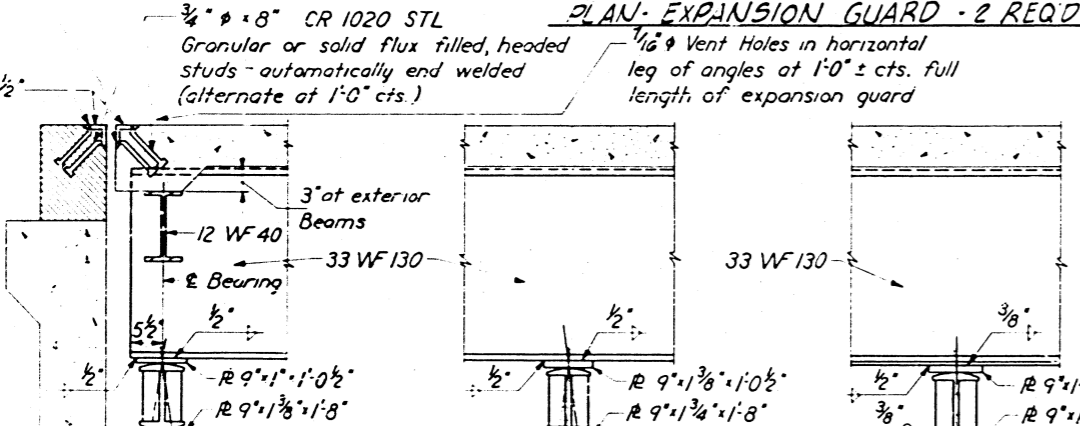
PLAN - STRUCTURAL STEEL LAYOUT



ELEVATION - TOP OF BEAMS *

LOCATION	BEAMS		
	1 & 6	2 & 5	3 & 4
ε Bearing Abut. #1	727.78	727.89	727.98
Pier #1	727.89	728.00	728.09
Splice #1	727.92	728.03	728.12
Pier #2	727.97	728.08	728.17
Splice #2	727.98	728.0	728.18
Pier #3	727.88	727.98	728.08
Splice #3	727.95	727.98	728.05
ε Bearing Abut. #2	727.78	727.89	727.98

*These elevations are theoretical top of WF elevations and are to be used for fabrication of structural steel. They do not include any allowance for deflection.

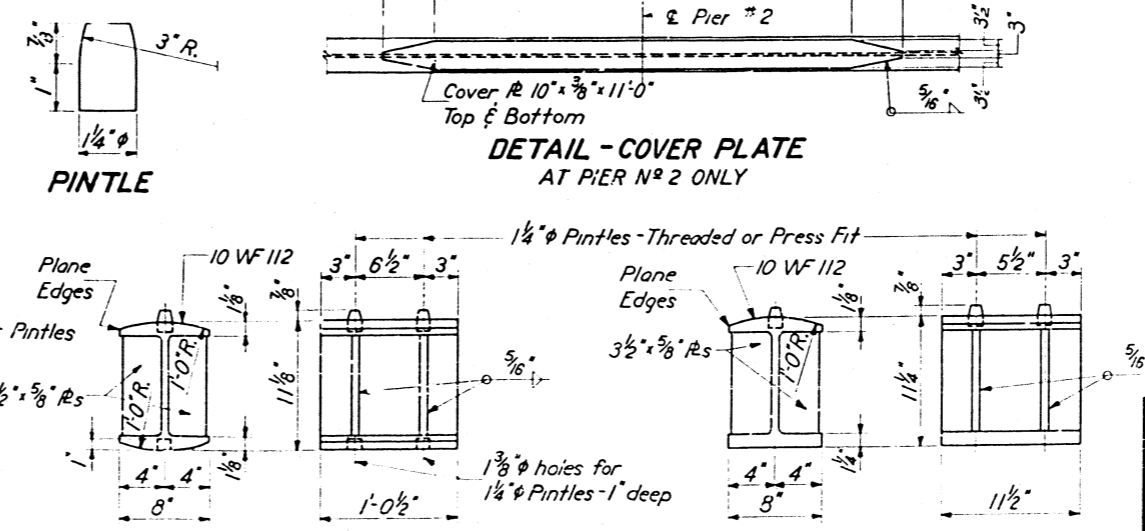


PLAN - BEARING PLATES

ABUTMENT

PIERS N^o 1 & 3

PIER N^o 2



ABUTMENTS AND PIERS N^o 1 & 3

PIER N^o 2

BEARING DETAILS

7/16" holes at 12" cts. for 3/8" bolts. All bolts shall be burned, sawed or clipped off flush with back of angles after forms are removed

3/4" x 8" CR 1020 STL Granular or solid flux filled, headed studs - automatically end welded (alternate at 1'-0" cts.)

Bearings & Anchorages: The location of the anchor bolts and vertical alignment of the expansion bearings shall be adjusted to the temperature at the time of erection. See Art. 54.9(f).

1 1/2" holes for Anchor Bolts
 D = 6" per each 100' of expansion for every 15° fall below norm temp of 50°F
 D = 6" per each 100' of expansion for every 15° rise above the normal temp of 50°F.

1 1/2" holes for Anchor Bolts
 1 3/8" holes in top R for Purlins
 Thread or press fit Purlins into bottom R
 All Anchor Bolts 1" x 1'-0" with 2 1/2" x 5/16" washer under hex. nut

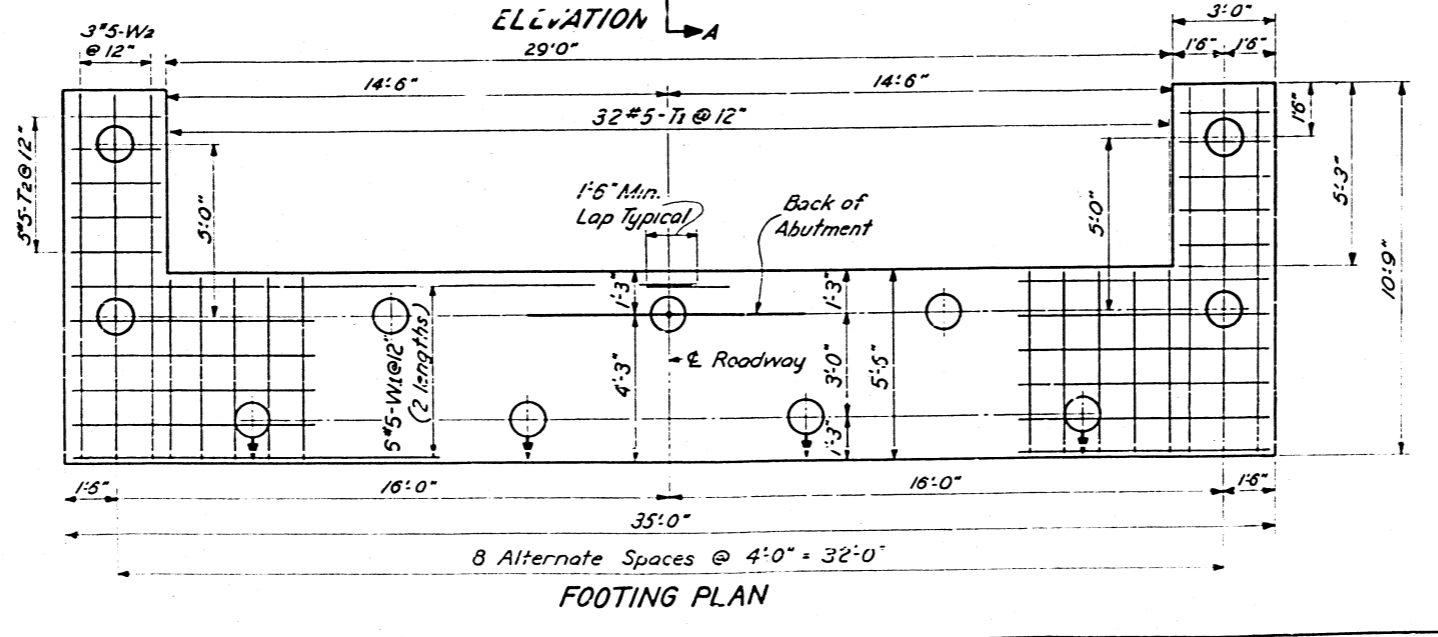
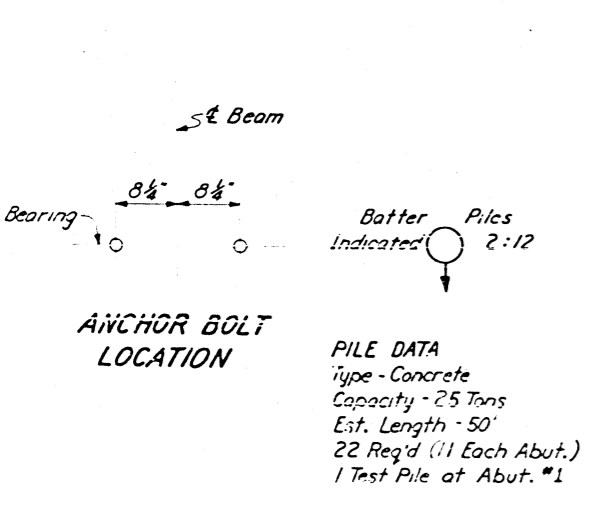
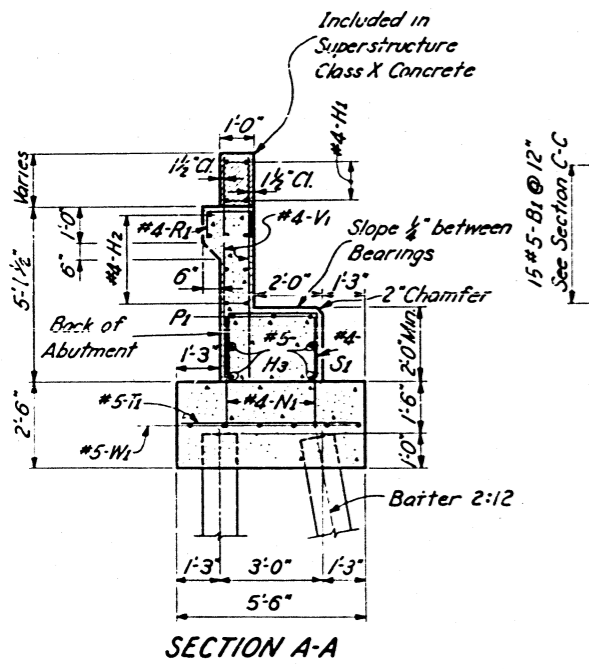
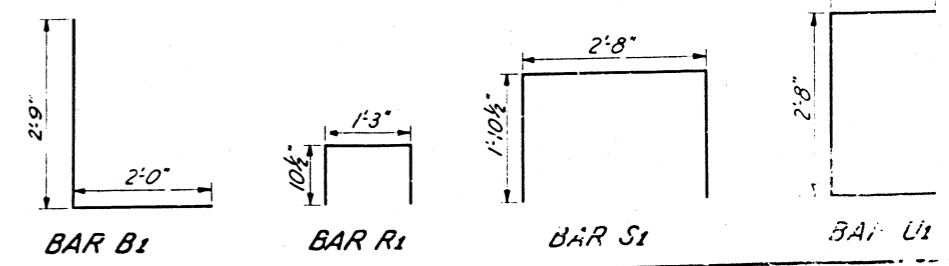
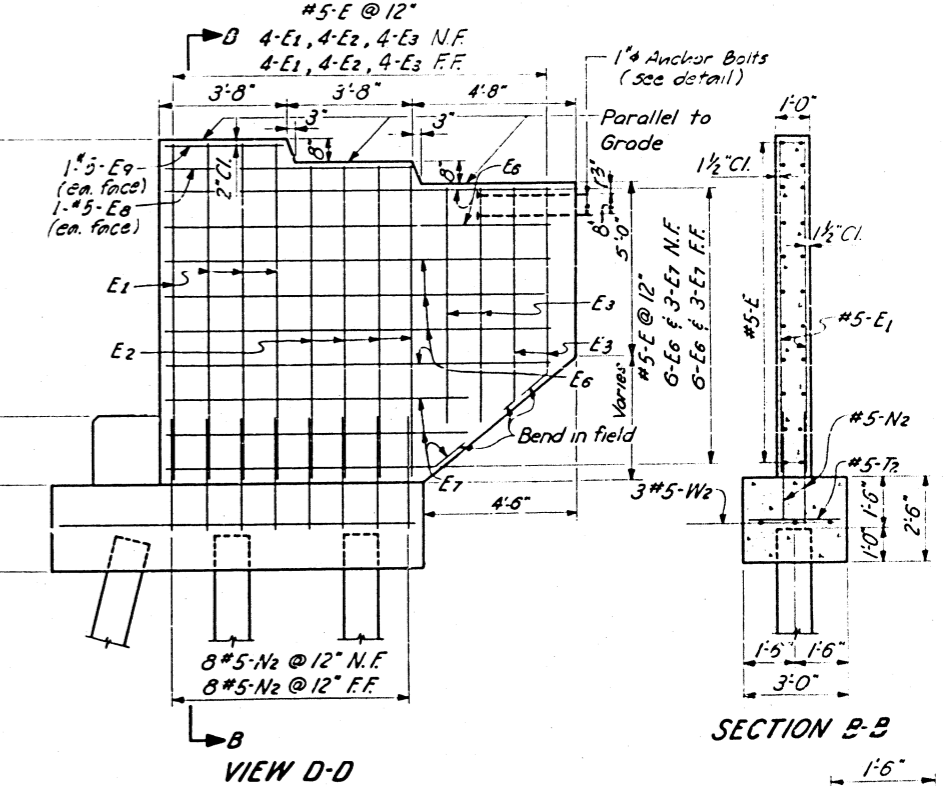
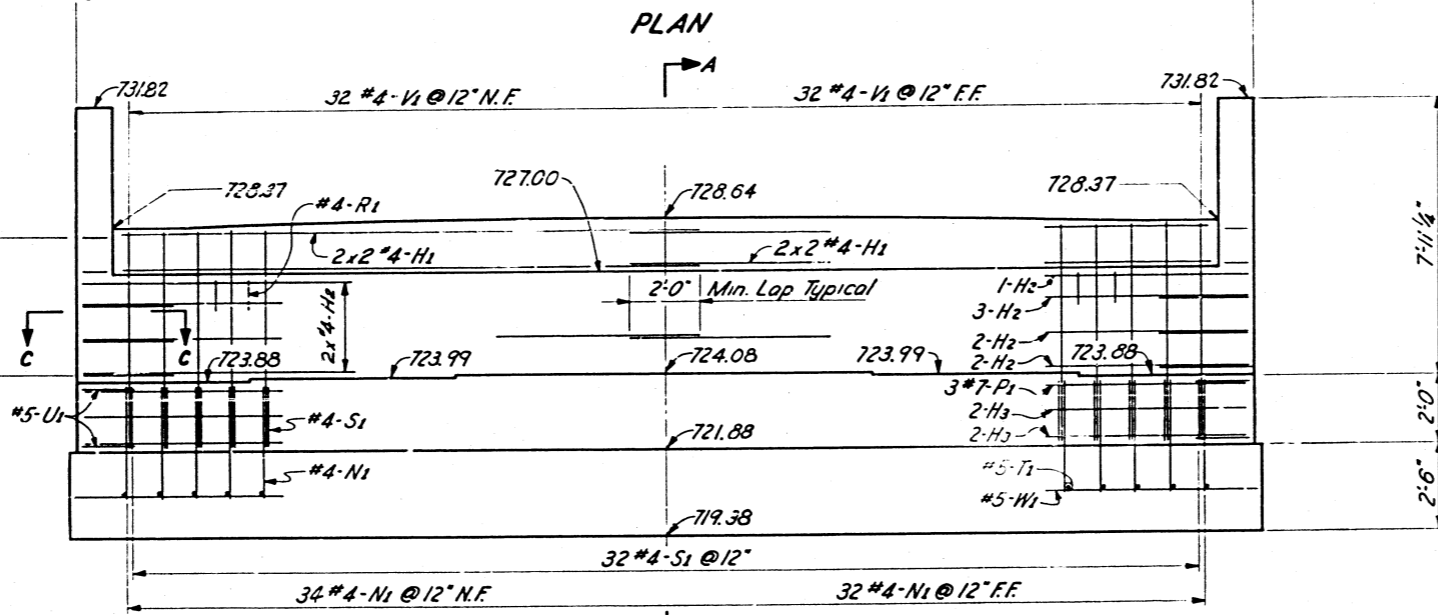
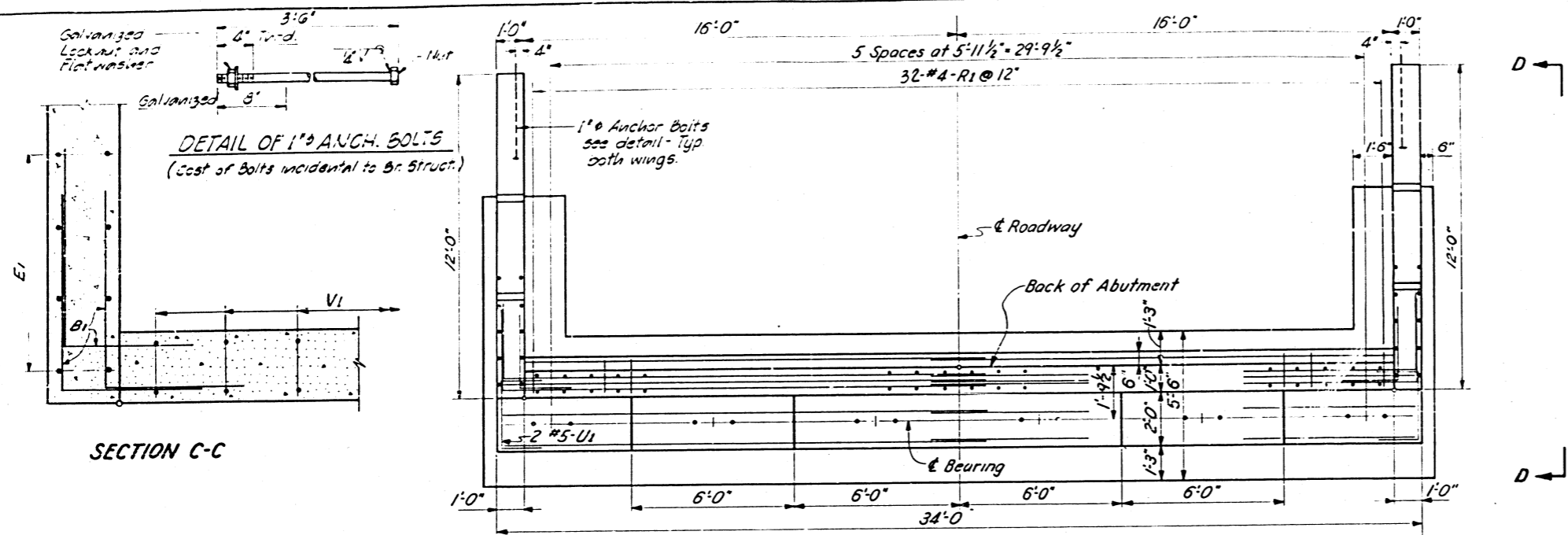
Anchor bolts shall be grouted into drilled holes after beams are in place, or bolts at fixed pier may be built into the masonry.

In lieu of shop rivets, angles may be attached in the shop with high strength bolts or 1/4" C.F.W.
 All rivets shall be 3/4" φ, holes 13/16" φ, except as noted. Field connections shall be riveted or, at the option of the contractor, high strength steel bolts of the same nominal diameter may be substituted. See Article 54.9(i) of the Standard Specifications.

REVISIONS		STRUCTURAL STEEL	
1	DATE	STATE OF ILLINOIS	DESIGNED BY
2	BY	DEPARTMENT OF PUBLIC WORKS AND BUILDINGS	CHECKED BY
3	BY	DIVISION OF HIGHWAYS	DATE
4	BY	ILLINOIS ROUTE 47 OVER FA ROUTE 11	PROJECT
5	BY	FA. ROUTE 11 SECTION 10-70HB-2	STATION 1674+22.18 (FA. ROUTE 11)
6	BY	HOMEPI L CHASTAIN & ASSOCIATES	
7	BY	CONSULTING ENGINEERS	
8	BY	DELAWARE, ILLINOIS	

TWO ABUTMENTS—BILL OF MATERIALS

Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
B1	30	#5	4'-9"	---	P1	64	#4	3'-0"	□
E1	32	#5	7'-9"	---	S1	64	#4	6'-5"	□
E2	32	#5	9'-1"	---	T1	64	#5	5'-0"	---
E3	32	#5	6'-10"	---	T2	20	#5	2'-9"	---
E6	48	#5	11'-6"	---	U1	8	#5	5'-8"	□
E7	24	#5	9'-0"	---	V1	128	#4	6'-0"	---
E8	8	#5	7'-0"	---	W1	24	#5	18'-3"	---
E9	8	#5	3'-5"	---	W2	12	#5	10'-8"	---
H1	16	#4	17'-0"	---	Class X Concrete		Cu. Yd.	80.2	
H2	32	#4	18'-0"	---	Reinforcement Bars		Lbs.	5,790	
H3	16	#5	18'-0"	---	Concrete Piles		Lin. Ft.	1,050	
N1	132	#4	3'-5"	---	Test Piles (Conc.)		Each	one	
N2	64	#5	3'-5"	---					

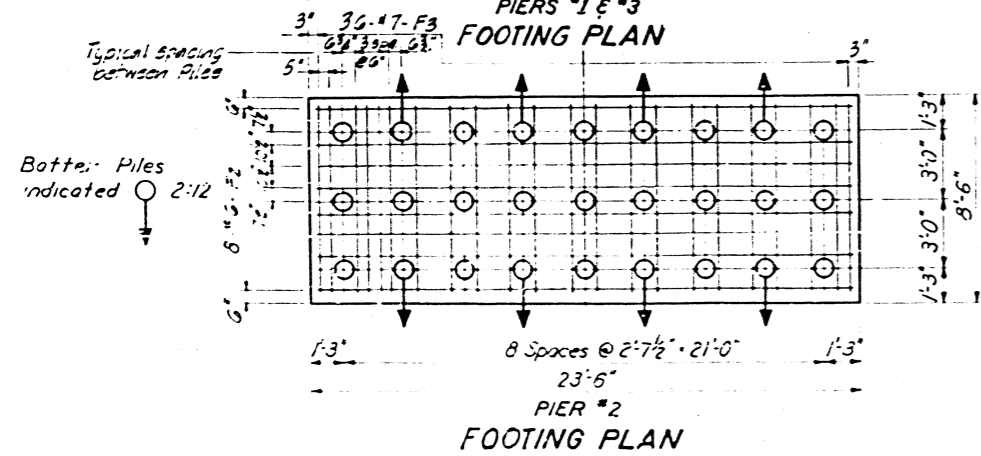
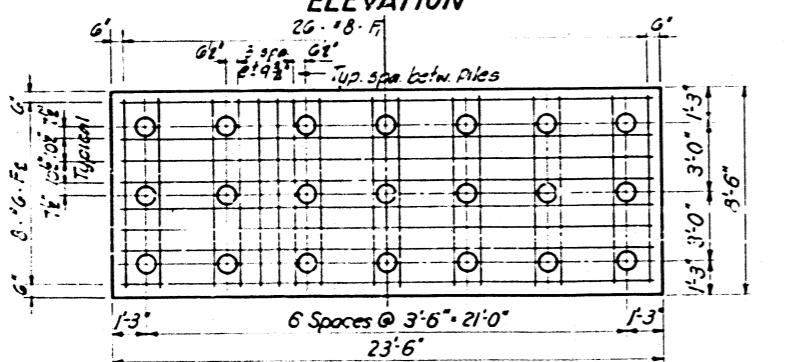
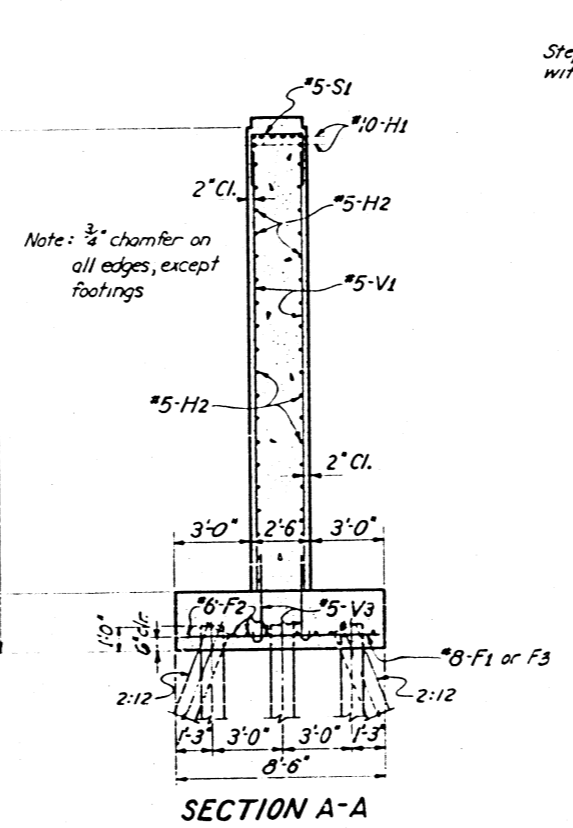
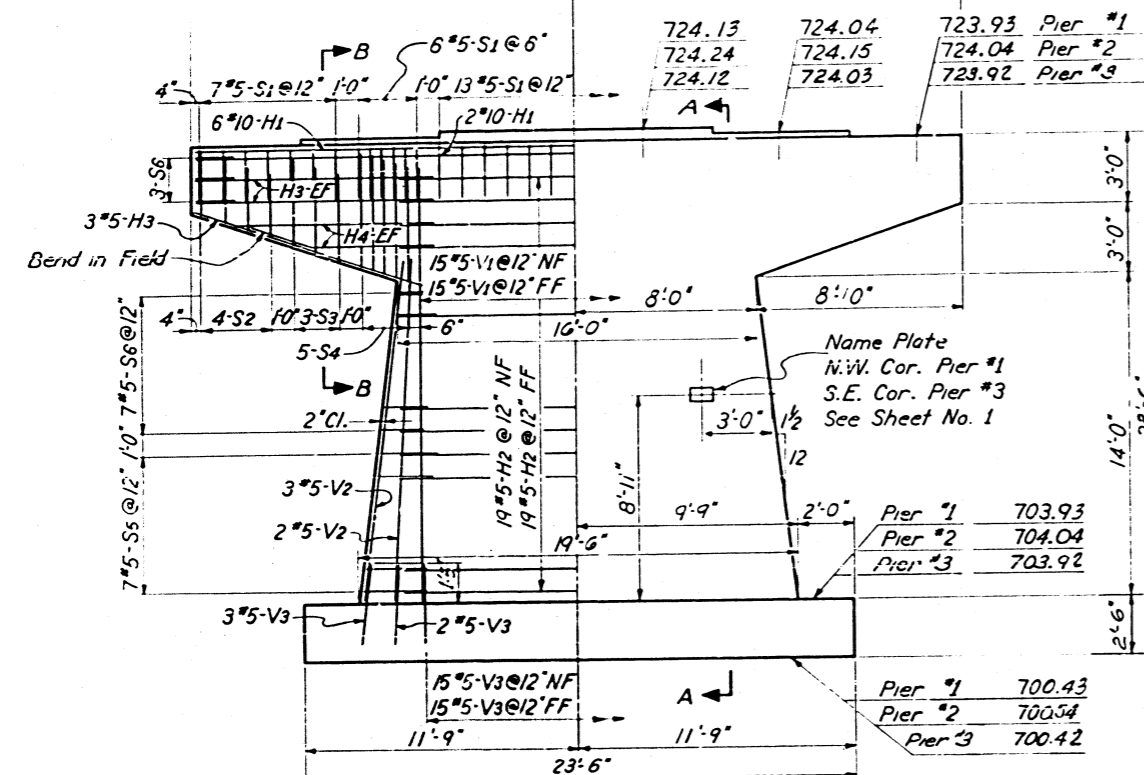
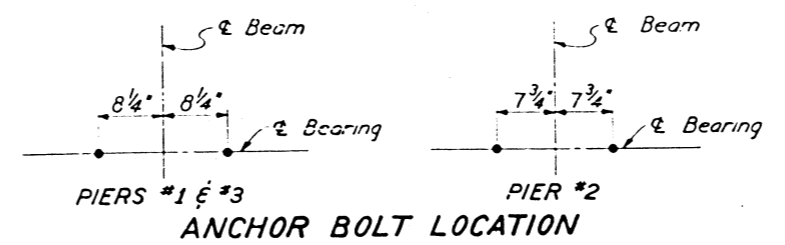
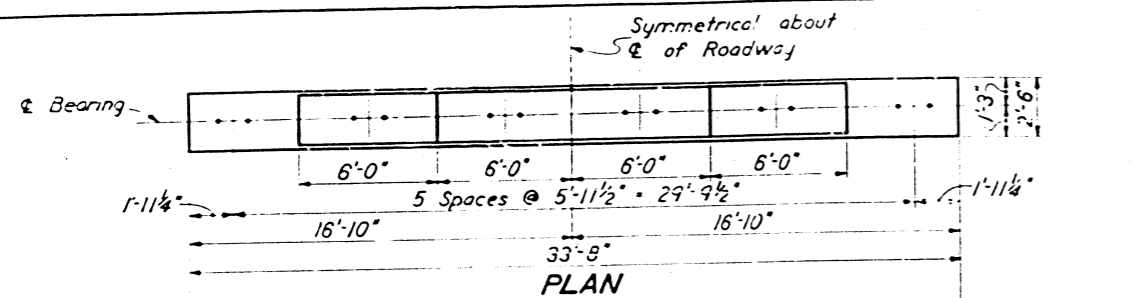


REVISIONS	DATE	BY	DESCRIPTION
1			
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STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS

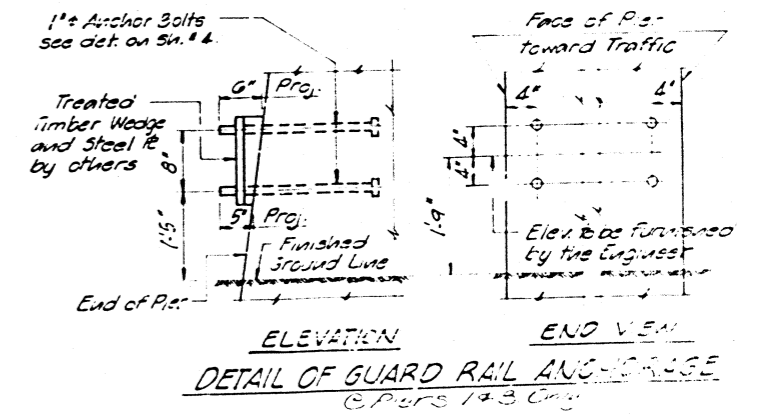
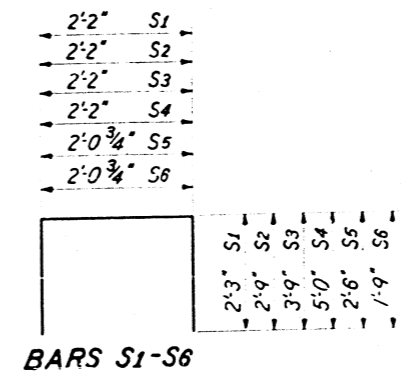
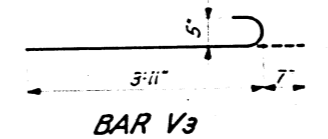
ILLINOIS ROUTE 47 OVER FA ROUTE 11
FA ROUTE 11 SECTION 10-704B-2 PROJECT
STATION 1674+22.18 (FA ROUTE 11) CHAMPAIGN COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS



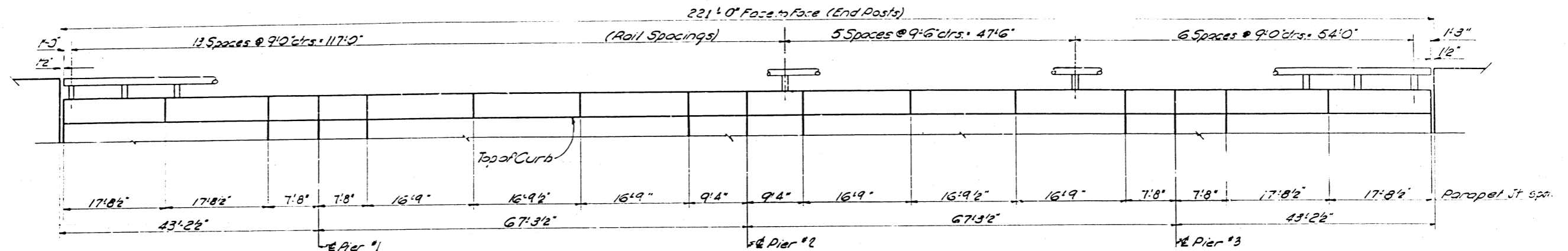
THREE PIERS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
F1	52	#8	8'-2"	
F2	24	#6	23'-2"	
F3	36	#7	8'-2"	
H1	24	#10	33'-3"	
H2	114	#5	15'-3"	
H3	42	#5	10'-6"	
H4	24	#5	8'-6"	
S1	117	#5	6'-8"	
S2	24	#5	7'-8"	
S3	18	#5	9'-8"	
S4	30	#5	12'-2"	
S5	42	#5	7'-1"	
S6	60	#5	5'-7"	
V1	90	#5	19'-0"	
V2	30	#5	15'-0"	
V3	120	#5	4'-6"	
Class X Concrete		Cu. Yd.	172.1	
Reinforcement Bars		Lb.	3,550	
Creosoted Piles		Lin. Ft.	2,070	
Test Piles (Timber)		Each	One	
Name Plates		Each	2	

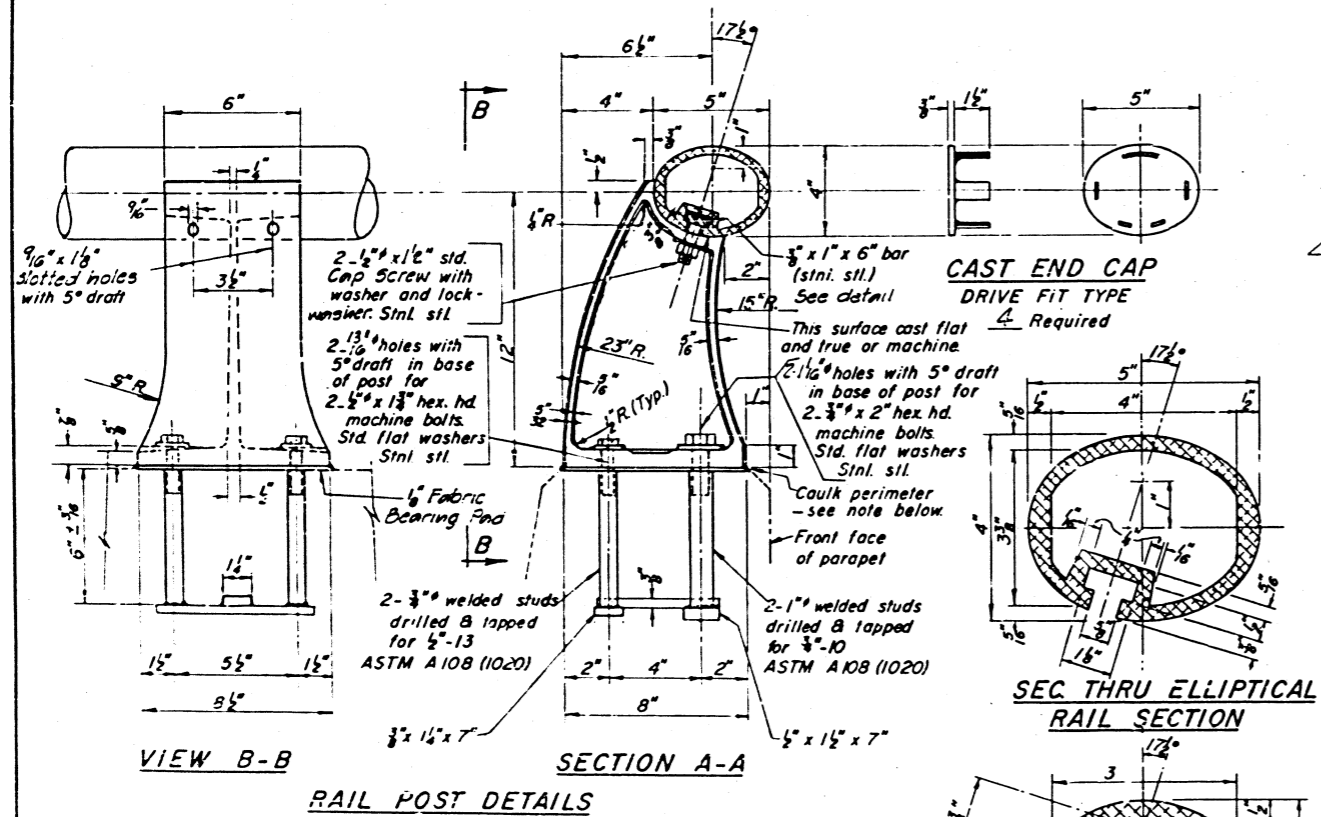


PILE DATA
Type - Creosoted Timber
Capacity - 20 Tons
Est. Length - 30'
42 Req'd at Piers #1 & #3
27 Req'd at Pier #2
1 - Timber Test Pile near Pier #3

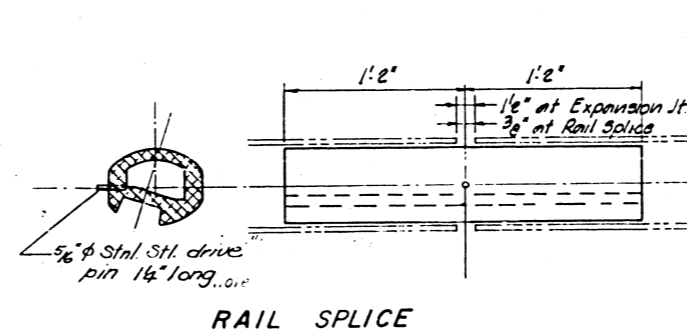
REVISIONS		PIERS	
NO.	DATE	DESCRIPTION	BY
1	10-26-58	AS SHOWN	ELC
STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS AND BUILDINGS DIVISION OF HIGHWAYS		ILLINOIS ROUTE 47 OVER FA ROUTE 11 FA ROUTE 11 SECTION 10-7048-2 PROJECT STATION 1674+22 (FA ROUTE 11) CHAMPAIGN COUNTY	
HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS DECATUR, ILLINOIS			



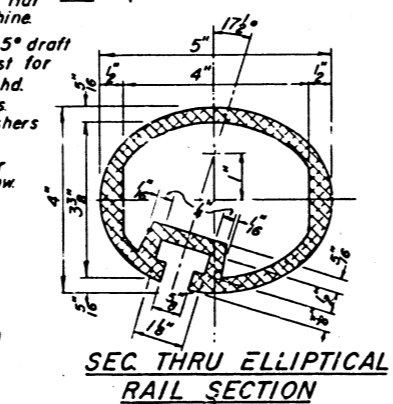
ELEVATION



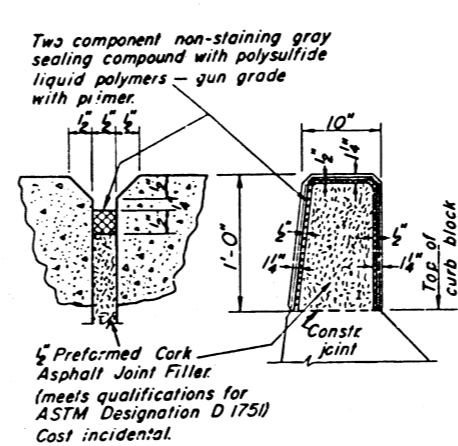
RAIL POST DETAILS



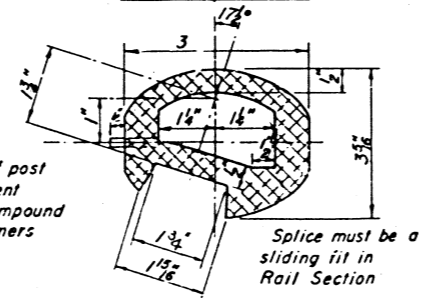
RAIL SPLICE



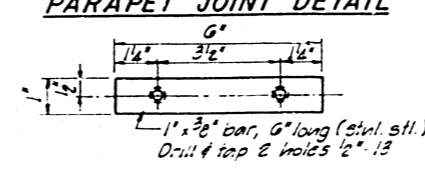
SEC. THRU ELLIPTICAL RAIL SECTION



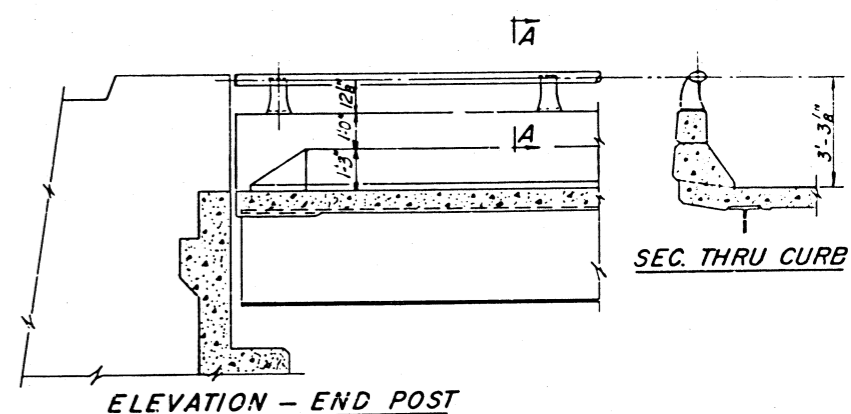
PARAPET JOINT DETAIL



SEC. THRU SPLICE



CLAMP BAR



ELEVATION - END POST

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 extend a minimum of 2 panel lengths (attached to minimum of 3 posts) except at ends or at open joints where a minimum of 1 panel length is required. All joints in railing must be spliced per detail.
See Special Provisions for following Material Specifications:
Cast Aluminum Alloy Bridge Post— Alloy A344-T4
Stainless Steel Bars, Caps, Screws, Washers and Lockwashers.
Fabric Bearing Pad

BILL OF MATERIAL

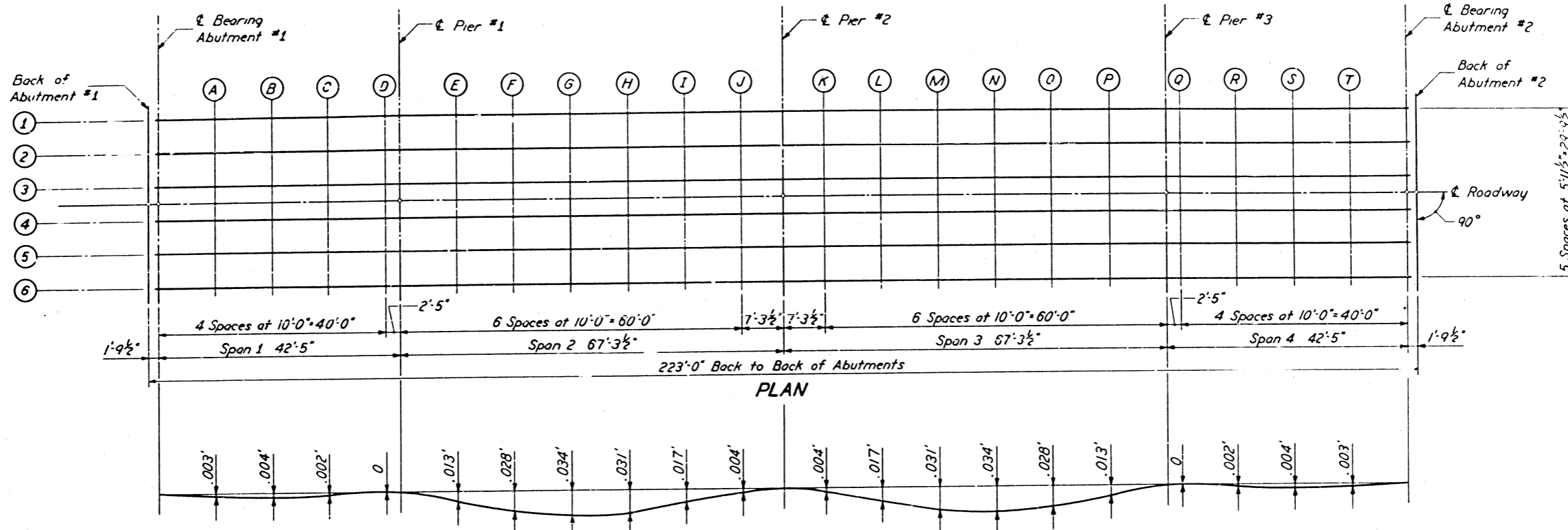
Item	Unit	Quantity
ALUMINUM HAN RAIL	Lin Ft.	412

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 1-1/8" and 2-1/8" Aluminum Shims for 25% of the Posts.
Rail element shall be parallel to Grade— high spots shall be ground, and low spots shimmed.

ALUMINUM HANDRAIL
F.A.R.T.E. 11 SEC. 10-704.8-2
CHAMPAIGN COUNTY
STA. 1674+22.18

DESIGNED	19
CHECKED	
DRAWN Wm M Best	
CHECKED	

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.



DEAD LOAD DEFLECTION
(Excludes Weight of Structural Steel)

The above deflections are not for use in the field if the Engineer is working from the Theoretical Grade Elevations Adjusted for Dead Load Deflection

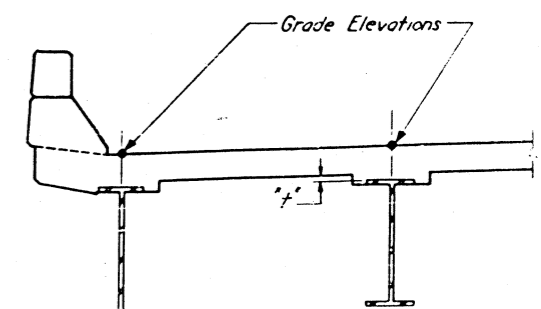
SPAN 1

SPAN 2

SPAN 3

SPAN 4

LOCATION	BEAM	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DEAD LOAD DEFLECTION	LOCATION	BEAM	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DEAD LOAD DEFLECTION	LOCATION	BEAM	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DEAD LOAD DEFLECTION	LOCATION	BEAM	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DEAD LOAD DEFLECTION
BEARING ABUT #1	1	4890.290	14.895	728.402	728.402	LINE E	1	4942.707	14.895	728.584	728.597	LINE K	1	5007.289	14.895	728.655	728.655	LINE Q	1	5069.706	14.895	728.551	728.551
	2	4890.290	8.937	728.510	728.510		2	4942.707	8.937	728.692	728.705		2	5007.289	8.937	728.731	728.731		2	5069.706	8.937	728.659	728.659
	3	4890.290	2.979	728.603	728.603		3	4942.707	2.979	728.785	728.798		3	5007.289	2.979	728.832	728.832		3	5069.706	2.979	728.752	728.752
	4	4890.290	2.979	728.603	728.603		4	4942.707	2.979	728.785	728.798		4	5007.289	2.979	728.832	728.832		4	5069.706	2.979	728.752	728.752
	5	4890.290	8.937	728.510	728.510		5	4942.707	8.937	728.692	728.705		5	5007.289	8.937	728.731	728.731		5	5069.706	8.937	728.659	728.659
LINE A	1	4900.290	14.895	728.445	728.448	LINE F	1	4952.707	14.895	728.606	728.634	LINE L	1	5017.289	14.895	728.646	728.663	LINE R	1	5079.706	14.895	728.520	728.522
	2	4900.290	8.937	728.553	728.556		2	4952.707	8.937	728.714	728.742		2	5017.289	8.937	728.754	728.771		2	5079.706	8.937	728.628	728.630
	3	4900.290	2.979	728.646	728.649		3	4952.707	2.979	728.807	728.835		3	5017.289	2.979	728.847	728.864		3	5079.706	2.979	728.721	728.723
	4	4900.290	2.979	728.646	728.649		4	4952.707	2.979	728.807	728.835		4	5017.289	2.979	728.847	728.864		4	5079.706	8.937	728.721	728.723
	5	4900.290	8.937	728.553	728.556		5	4952.707	8.937	728.714	728.742		5	5017.289	8.937	728.754	728.771		5	5079.706	8.937	728.628	728.630
LINE B	1	4910.290	14.895	728.485	728.489	LINE G	1	4962.707	14.895	728.623	728.657	LINE M	1	5027.289	14.895	728.637	728.668	LINE S	1	5089.706	14.895	728.485	728.489
	2	4910.290	8.937	728.593	728.597		2	4962.707	8.937	728.731	728.765		2	5027.289	8.937	728.745	728.776		2	5089.706	8.937	728.593	728.597
	3	4910.290	2.979	728.686	728.690		3	4962.707	2.979	728.824	728.858		3	5027.289	2.979	728.838	728.869		3	5089.706	2.979	728.686	728.690
	4	4910.290	2.979	728.686	728.690		4	4962.707	2.979	728.824	728.858		4	5027.289	2.979	728.838	728.869		4	5089.706	2.979	728.686	728.690
	5	4910.290	8.937	728.593	728.597		5	4962.707	8.937	728.731	728.765		5	5027.289	8.937	728.745	728.776		5	5089.706	8.937	728.593	728.597
LINE C	1	4920.290	14.895	728.520	728.522	LINE H	1	4972.707	14.895	728.637	728.668	LINE N	1	5037.289	14.895	728.623	728.657	LINE T	1	5099.706	14.895	728.445	728.448
	2	4920.290	8.937	728.628	728.630		2	4972.707	8.937	728.745	728.776		2	5037.289	8.937	728.731	728.765		2	5099.706	8.937	728.553	728.555
	3	4920.290	2.979	728.721	728.723		3	4972.707	2.979	728.838	728.869		3	5037.289	2.979	728.824	728.858		3	5099.706	2.979	728.646	728.649
	4	4920.290	2.979	728.721	728.723		4	4972.707	2.979	728.838	728.869		4	5037.289	2.979	728.824	728.858		4	5099.706	2.979	728.646	728.649
	5	4920.290	8.937	728.628	728.630		5	4972.707	8.937	728.745	728.776		5	5037.289	8.937	728.731	728.765		5	5099.706	8.937	728.553	728.555
LINE D	1	4930.290	14.895	728.551	728.551	LINE I	1	4982.707	14.895	728.646	728.653	LINE O	1	5047.289	14.895	728.606	728.634	BEARING ABUT #2	1	5109.706	14.895	728.402	728.402
	2	4930.290	8.937	728.659	728.660		2	4982.707	8.937	728.754	728.771		2	5047.289	8.937	728.714	728.742		2	5109.706	8.937	728.510	728.510
	3	4930.290	2.979	728.752	728.753		3	4982.707	2.979	728.847	728.864		3	5047.289	2.979	728.807	728.835		3	5109.706	2.979	728.603	728.603
	4	4930.290	2.979	728.752	728.753		4	4982.707	2.979	728.847	728.864		4	5047.289	2.979	728.807	728.835		4	5109.706	8.937	728.510	728.510
	5	4930.290	8.937	728.659	728.660		5	4982.707	8.937	728.754	728.771		5	5047.289	8.937	728.714	728.742		5	5109.706	8.937	728.510	728.510
PIER #1	1	4942.707	14.895	728.558	728.558	LINE J	1	4992.707	14.895	728.651	728.655	LINE P	1	5057.289	14.895	728.584	728.597	PIER #2	1	4992.707	14.895	728.558	728.558
	2	4942.707	8.937	728.666	728.666		2	4992.707	8.937	728.754	728.760		2	5057.289	8.937	728.692	728.705		2	4992.707	8.937	728.666	728.666
	3	4942.707	2.979	728.753	728.753		3	4992.707	2.979	728.852	728.856		3	5057.289	2.979	728.785	728.798		3	4992.707	2.979	728.753	728.753
	4	4942.707	2.979	728.753	728.753		4	4992.707	2.979	728.852	728.856		4	5057.289	2.979	728.785	728.798		4	4992.707	2.979	728.753	728.753
	5	4942.707	8.937	728.666	728.666		5	4992.707	8.937	728.754	728.760		5	5057.289	8.937	728.692	728.705		5	4992.707	8.937	728.666	728.666
PIER #2	1	4992.707	14.895	728.652	728.652	LINE K	1	5042.707	14.895	728.651	728.655	PIER #3	1	5067.289	14.895	728.558	728.558						
	2	4992.707	8.937	728.750	728.750		2	5042.707	8.937	728.754	728.760		2	5067.289	8.937	728.666	728.666						
	3	4992.707	2.979	728.853	728.853		3	5042.707	2.979	728.853	728.853		3	5067.289	2.979	728.759	728.759						
	4	4992.707	2.979	728.853	728.853		4	5042.707	2.979	728.853	728.853		4	5067.289	2.979	728.759	728.759						
	5	4992.707	8.937	728.750	728.750		5	5042.707	8.937	728.652	728.652		5	5067.289	8.937	728.666	728.666						

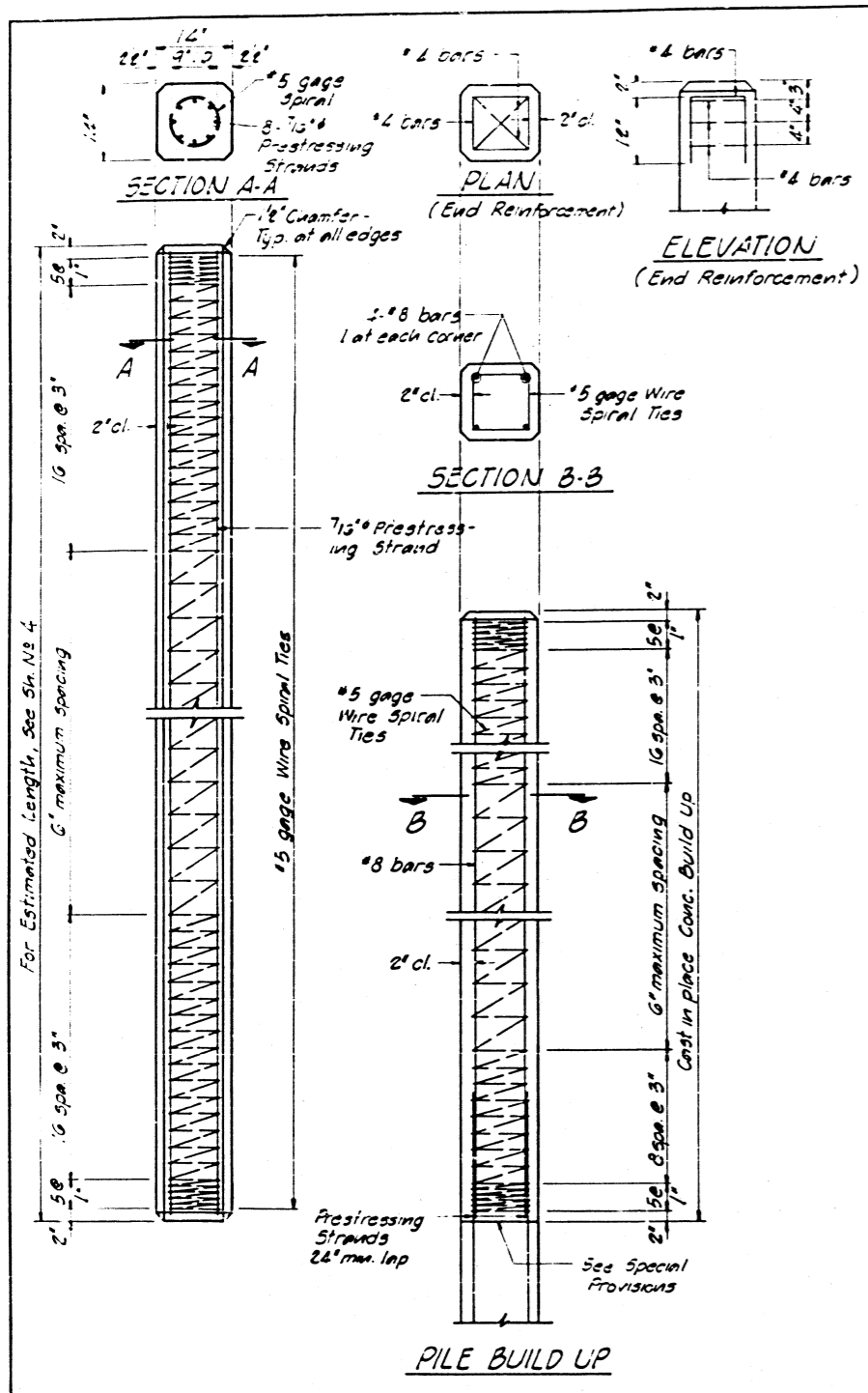


To determine 't': After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown. These elevations subtracted from the 'Theoretical Grade Elevations Adjusted for Dead Load Deflection' shown minus slab thickness equals the flange height 't' above top flange of beams.

REVISIONS		STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS AND BUILDINGS DIVISION OF HIGHWAYS		ILLINOIS ROUTE 47 OVER F.A. ROUTE 11 F.A. ROUTE 11 SECTION 10-70MB-2 PROJECT STATION 674+22.18 (F.A. ROUTE 11) CHAMPAIGN COUNTY	
1	AS SHOWN	DATE	BY	PROJECT	CHAMPAIGN COUNTY
2					
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10					

DECK ELEVATIONS

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS



NOTE: Prestressing steel shall be non-galvanized extra high strength stress-relieved T Wire Strand. The nominal diameter shall be 1/8" and the minimum nominal cross-sectional area shall be 0.1155 square inch.

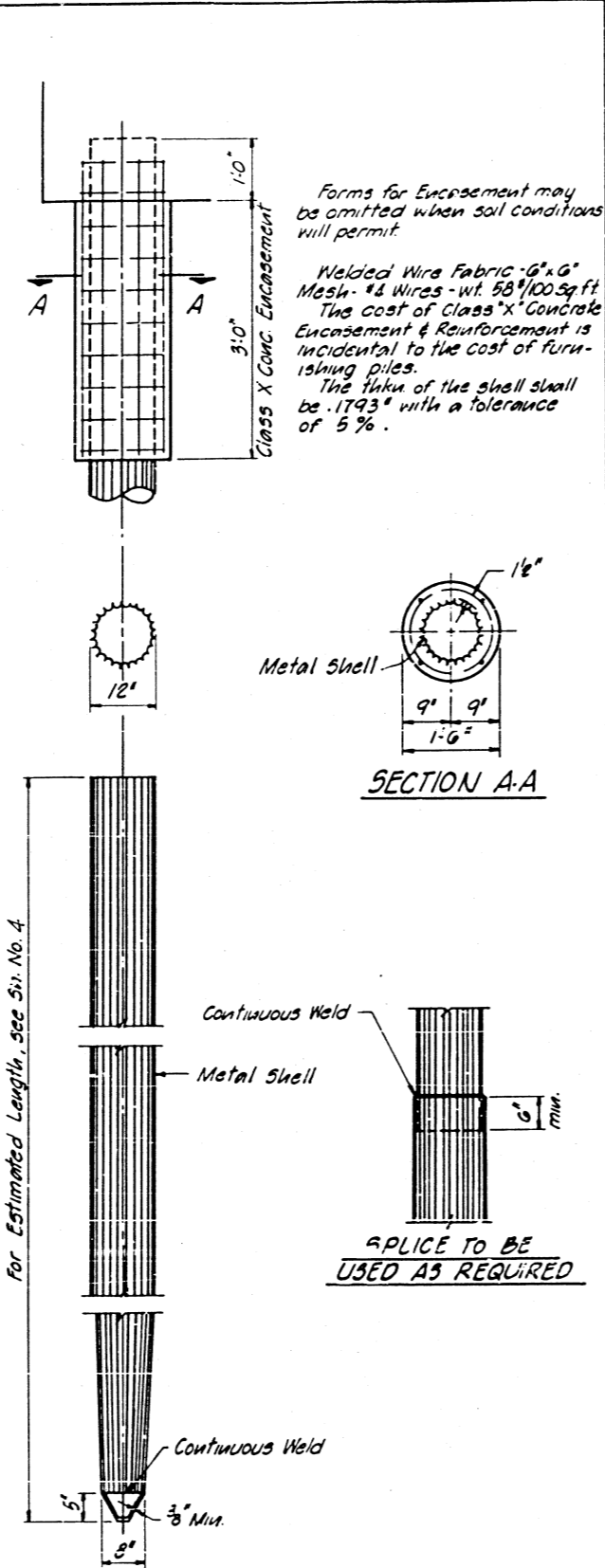
Handling: For pile lengths up to 65', use two slings placed at a distance of 0.21L* from each end. For piles longer than 65', use three slings placed at a distance of 0.12L* from each end and at midpoint of pile.

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

DESIGN STRESSES

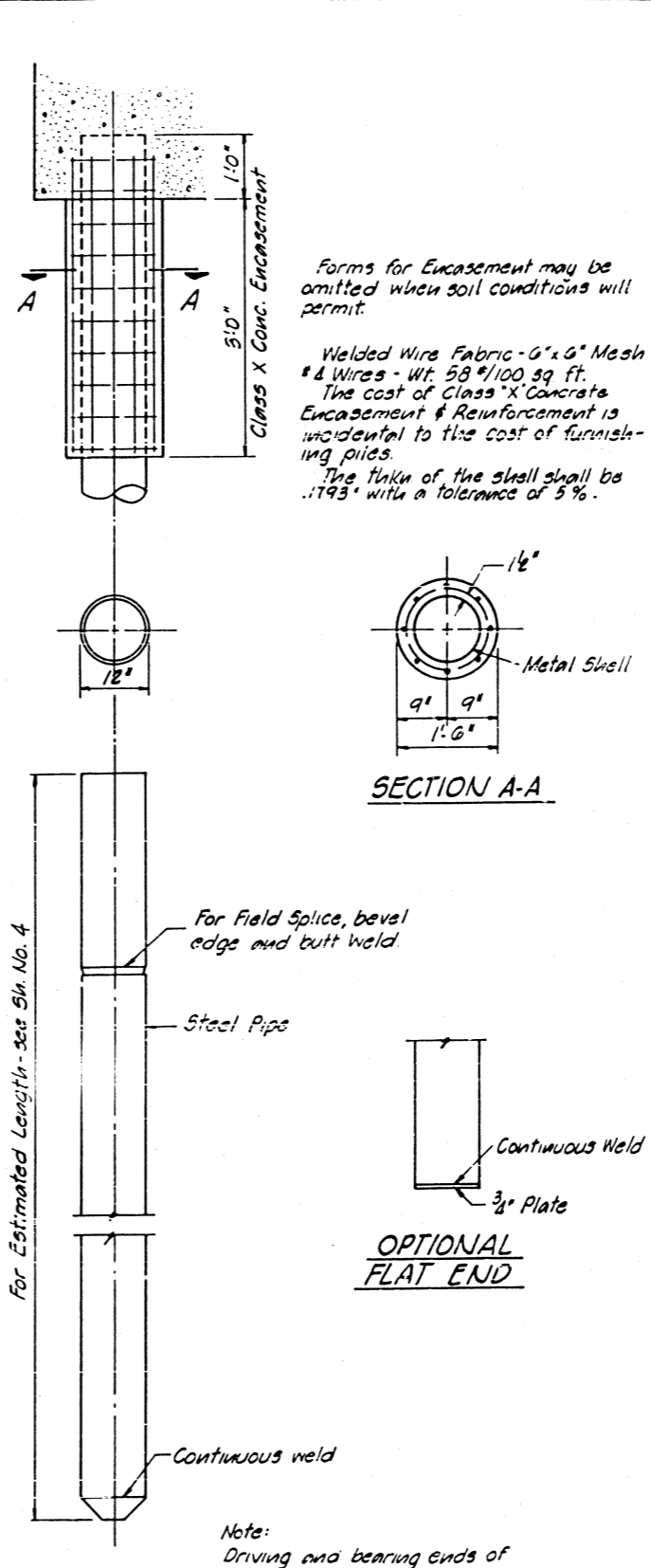
F_c	5000 p.s.i.
F_s	4000 p.s.i.
F'_s	268,000 p.s.i. (31,000 lbs)
F''_s	188,000 p.s.i. (21,700 lbs)

DETAIL OF PRECAST PRESTRESSED CONCRETE PILES



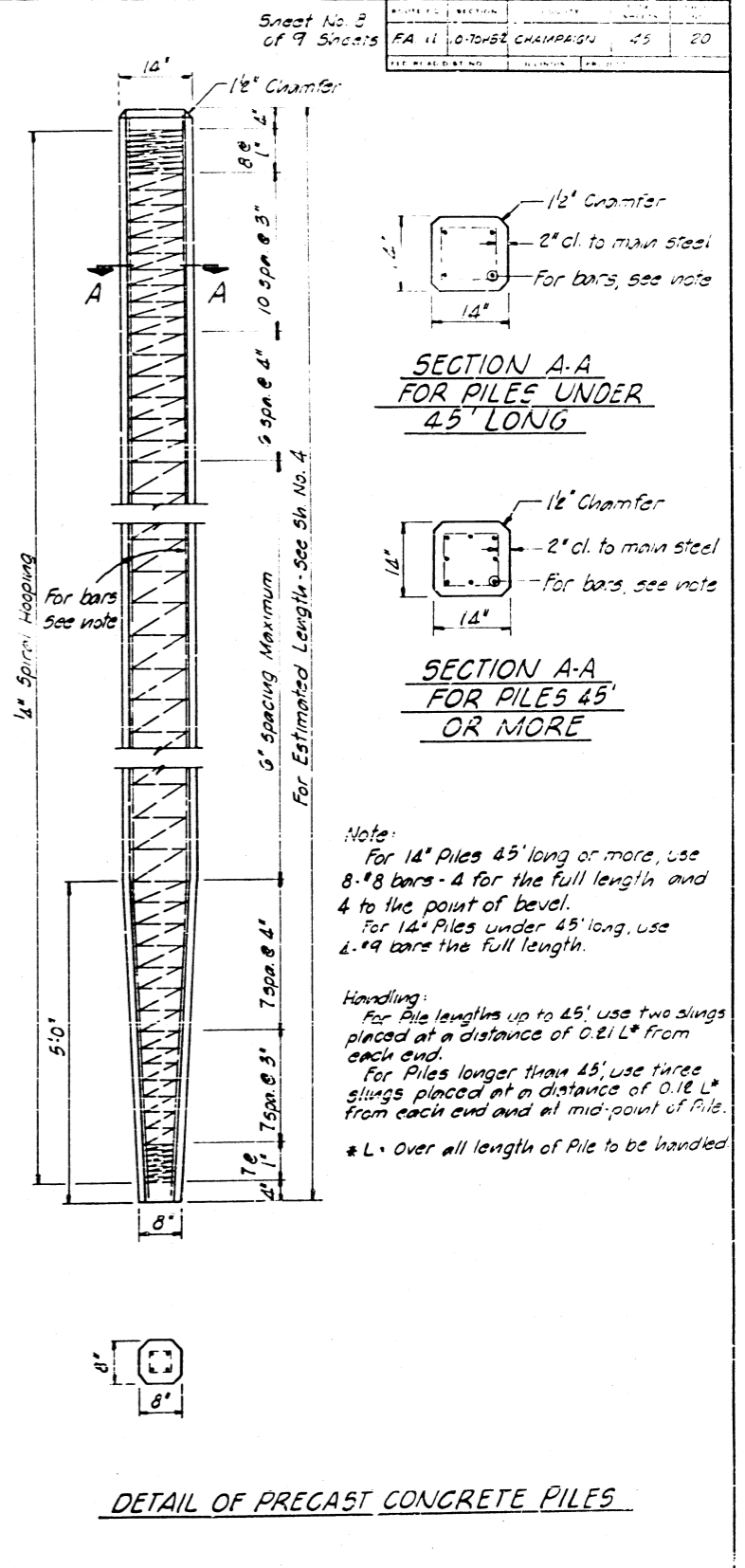
- ALLOWABLE TAPERS**
- 1.- Taper 1 1/2:6" for 10' + 12" Cylindrical Section Extension
 - 2.- Taper 1 1/4:0" for 17' + 12" Cylindrical Section Extension
 - 3.- Taper 1 1/7:0" for 30' + 12" Cylindrical Section Extension

DETAIL OF TAPERED METAL SHELL FOR CAST IN PLACE CONCRETE PILES



Note: Driving and bearing ends of pipe shall be cut square.

DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES



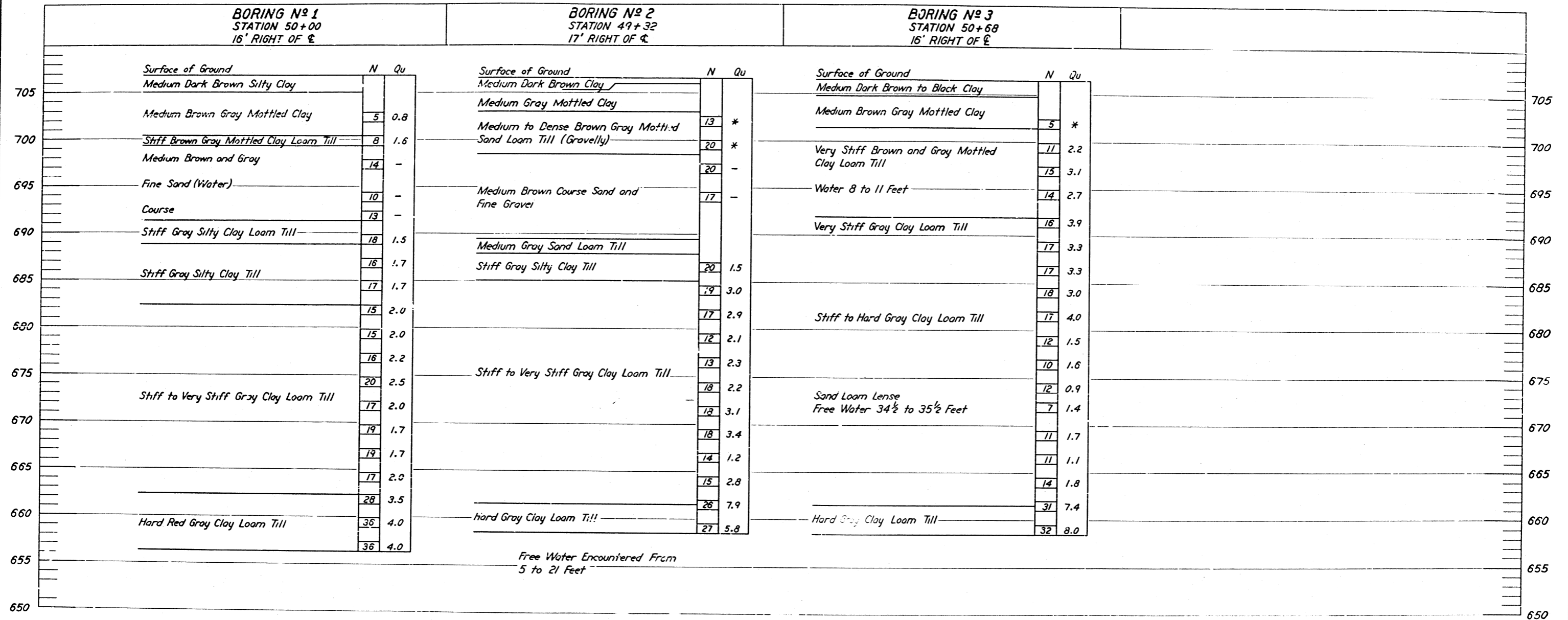
DETAIL OF PRECAST CONCRETE PILES

REVISIONS	STATE OF ILLINOIS	RES 0168
NO.	DATE	INITIALS
1	2/20/68	
2		
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DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS

ILLINOIS ROUTE 47 OVER FA ROUTE 11
FA ROUTE 11 SECTION 10-70HB-2 PROJECT
STATION 1674+22.18 (FA ROUTE 11) CHAMPAIGN COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

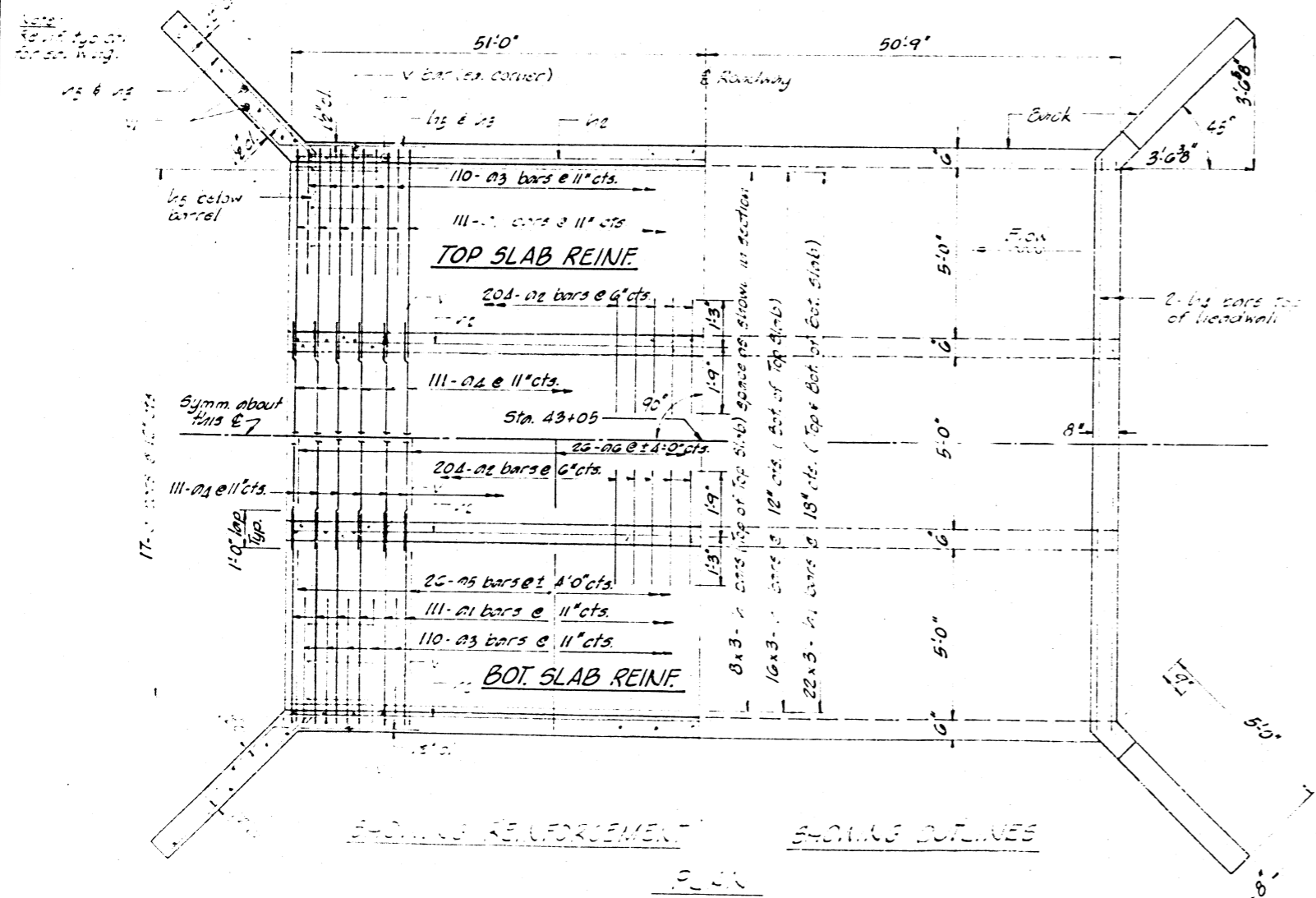
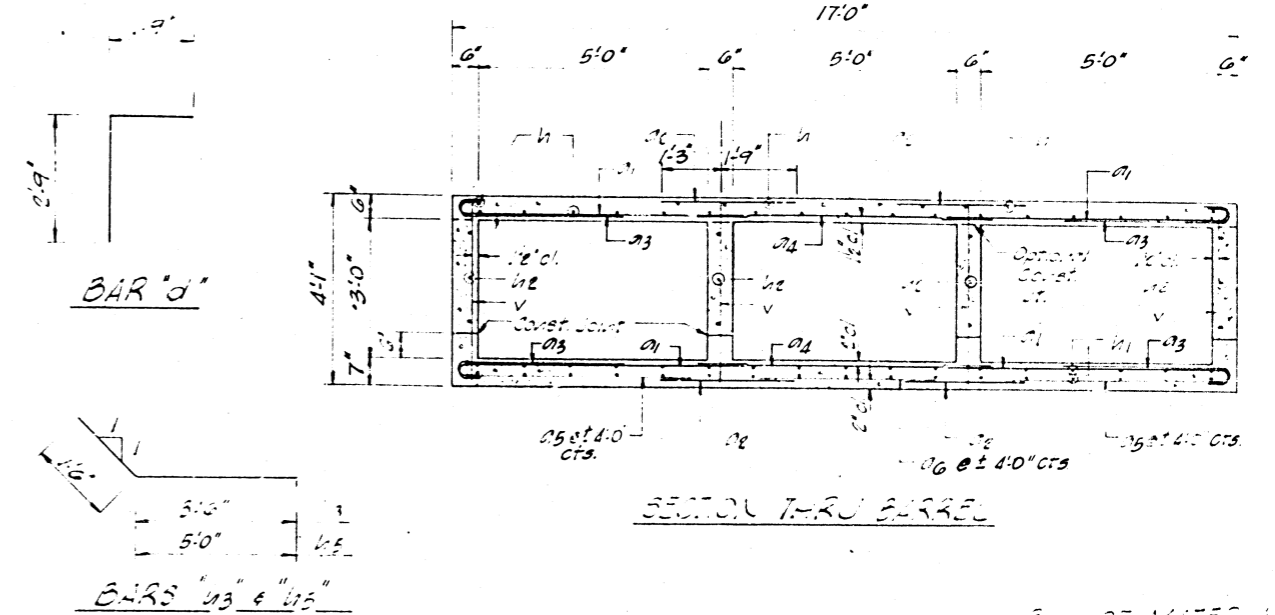
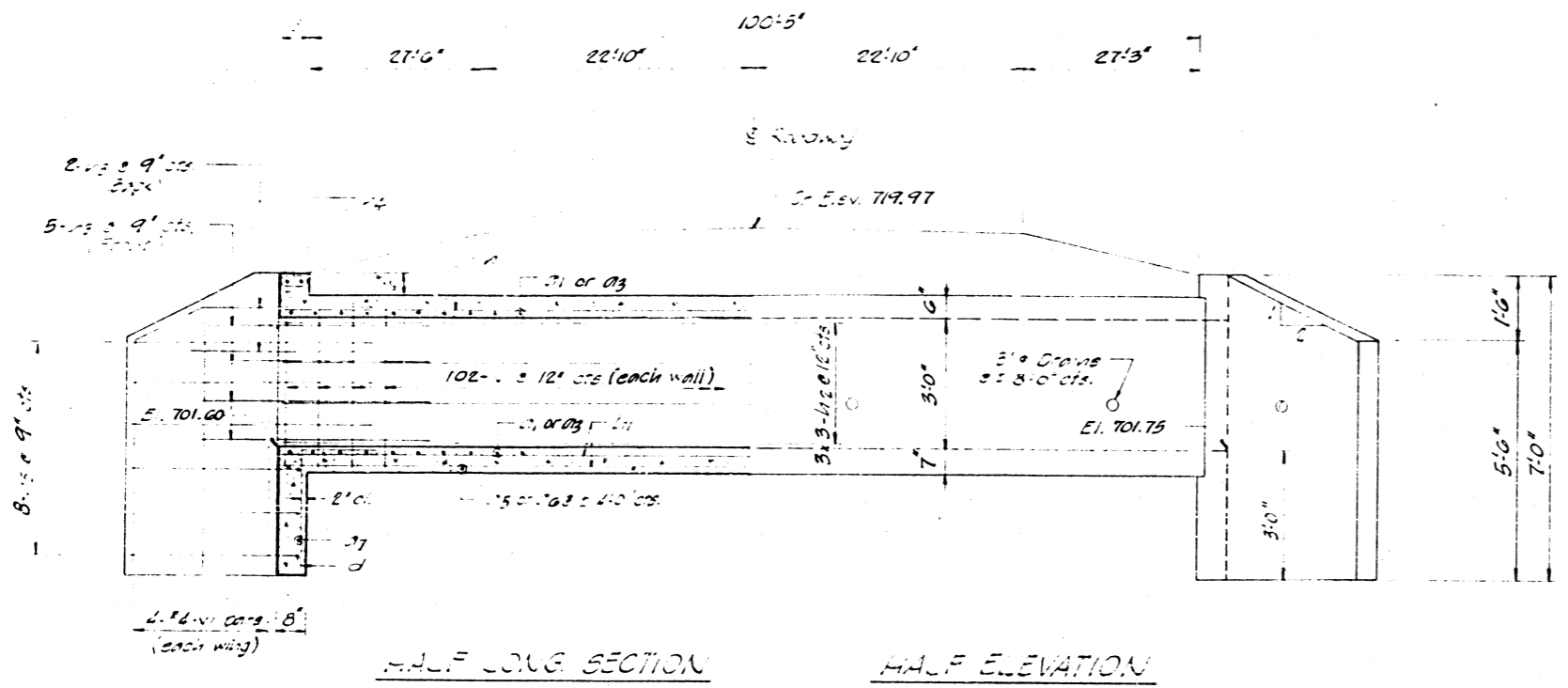


N = Standard Penetration Test -
Blows per foot to drive 2" o.d.
Split Spoon Sampler 12" with
142 Lb. hammer falling 30"

Qu = Unconfined Compressive Strength
in Tons Per Square Foot.

* Sample Ruptured

REVISIONS		BORINGS	
No.	DATE	STATE OF ILLINOIS	DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
1		DIVISION OF HIGHWAYS	
2		ILLINOIS ROUTE 47 OVER FA. ROUTE 11	
3		FA. ROUTE 11 SECTION 10-70HB-2 PROJECT	
4		STATION 1674+22.18 (FA. ROUTE 11) CHAMPAIGN COUNTY	
5		HOMER L. CHASTAIN & ASSOCIATES	
6		CONSULTING ENGINEERS	
7		DECATUR, ILLINOIS	
8			
9			
10			



BILL OF MATERIAL

BY	No.	Size	Length
01	444	#5	3'-0"
02	816	#5	3'-0"
03	140	#4	1'-3"
04	222	#4	6'-6"
05	52	#4	5'-3"
06	26	#4	4'-0"
07	2	#4	16'-3"
08	34	#5	1'-0"
09	72	#5	34'-8"
10	66	#5	34'-8"
11	36	#5	34'-8"
12	28	#4	5'-0"
13	4	#5	16'-6"
14	32	#4	6'-6"
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID INTERSTATE HIGHWAY
FAI ROUTE 72

SEC. DISTRICT 5 BRIDGE DECK
WATERPROOFING 1975-2

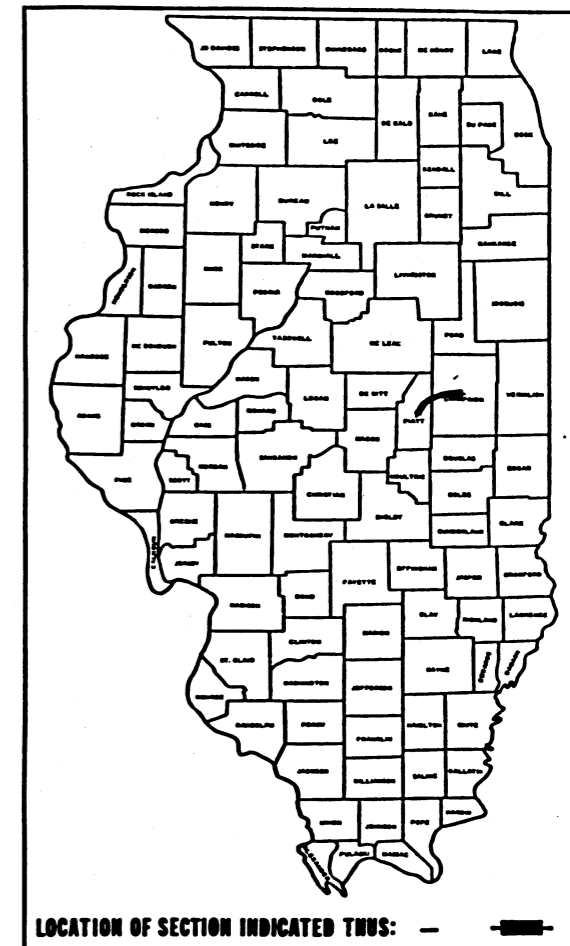
CHAMPAIGN & PIATT COUNTIES

PROJ. I-72-0(2)66

PC 95-018-73

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
72	*	CHAMPAIGN PIATT	7	1

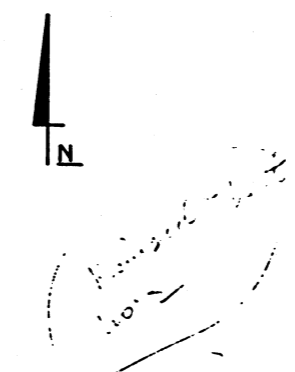
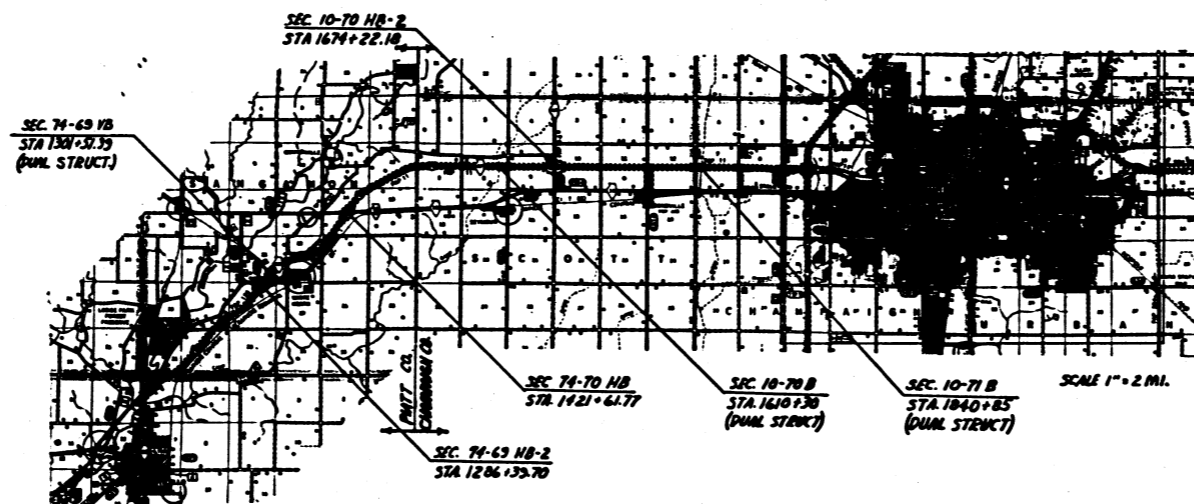
* DISTRICT 5 BRIDGE DECK
WATERPROOFING 1975-2



INDEX OF SHEETS

SHEET NO.	ITEM
1	COVER SHEET
2	SUMMARY OF QUANTITIES, BRIDGE DIMENSION SCHEDULE, GENERAL NOTES
3/4	WATERPROOFING MEMBRANE SYSTEM AND CLASS 3 TYPICALS
5/6	DETAILS OF EXPANSION DEVICES
7	TYPICAL TRAFFIC CONTROL FOR RAMPS

STANDARDS	
2298-4	2308-3
2299-5	2316-3
2300-1	



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED July 3 1974
J. C. Mulgrew DISTRICT ENGINEER

EXAMINED March 27 1975
[Signature] ENGINEER OF PLANS AND CONTRACTS

PASSED March 27 1975
Thomas R. Knight ENGINEER OF DESIGN

APPROVED March 27 1975
J. B. Healy DIRECTOR OF HIGHWAYS

DEPARTMENT OF TRANSPORTATION
FEDERAL AID INTERSTATE HIGHWAY
DIVISION OF HIGHWAYS

5-92

TOTAL LENGTH OF SECTION 55,445.30 ± 10.501 MI.
NET LENGTH OF SECTION 2,599.98 ± 0.492 MI.
LENGTH OF PROJECT 2,599.98 ± 0.492 MI.

JOB NUMBER CONTRACT NO. 30336

PIATT & CHAMPAIGN COUNTIES SECTION 34 F. A. I. ROUTE 72
& DISTRICT 5 BRIDGE DECK WATERPROOFING 1975-2

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
74-1-72	#	PIATT & CHAMPAIGN	7	2
FED. ROAD DIST. NO. 8 ILLINOIS		PROJECT		
# DIST. 5 BRIDGE DECK WATERPROOFING 1975-2				

GENERAL NOTES

THESE SECTIONS CONSIST OF FURNISHING AND PLACING A WATERPROOFING MEMBRANE SYSTEM ON 9 BRIDGE DECKS AT 6 LOCATIONS. THE CONSTRUCTION OF A 1 1/4" BITUMINOUS CONCRETE SURFACE COURSE, CLASS I, AS A WEARING SURFACE OVER THE WATERPROOFING MEMBRANE SYSTEM, SEALING OF BRIDGE EXPANSION JOINTS AND OTHER INCIDENTAL WORK NECESSARY TO COMPLETE THE WORK.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

BRIDGE DIMENSION SCHEDULE

ROUTE	BRIDGE	STATION	NO. STRUC.	DECK SLAB LENGTH	O. TO O. AND ROWY WIDTH	SKEN	NO. JTS. PER STR.	DIMENSIONS ACROSS ONE BRIDGE				CASE
								STEEL BAR LENGTH	PREFORMED JT. SEALER, 2 1/2"	PREFORMED JT. SEALER, 1 3/4"	NEOPRENE EXPANSION DAM	
F.A.I. 72	74-69HB-2	1286+39.7	1	270'-5"	33'-8", 28'-4"	23'-15'-20"	2	-	6'-0"	30'-5"	30'-5"	IV 1/2
F.A.I. 72	74-69VB	1301+51.39	2 H.B. 2 E.B.	199'-4 1/4" 199'-6 1/2"	33'-8", 30'-2 1/2" 33'-8", 30'-6 1/4"	5'-30'-46"	2	-	6'-5"	30'-3"	30'-3"	IV 1/2
F.A.I. 72	74-70HB	1421+61.77	1	266'-2"	34'-0", 30'-6"	33'-58'-58"	2	38'-7"	-	-	-	I & III
F.A.I. 72	10-70B	1610+30.00	2 H.B. 2 E.B.	85'-2 1/4" 85'-3 1/2"	42'-6", 39'-0" 42'-6", 39'-0"	5°	2	-	-	-	-	
F.A.I. 72	10-70HB-2	1674+22.18	1	220'-8"	34'-0", 30'-6"	0°	2	-	2'-0"	32'-0"	32'-0"	IV 1/2
F.A.I. 72	10-71B	1840+85.00	2 H.B. 2 E.B.	80'-10 1/4" 80'-10 1/4"	42'-6", 39'-1 1/4" 42'-6", 39'-0 1/8"	4°-30'	2	-	-	-	-	

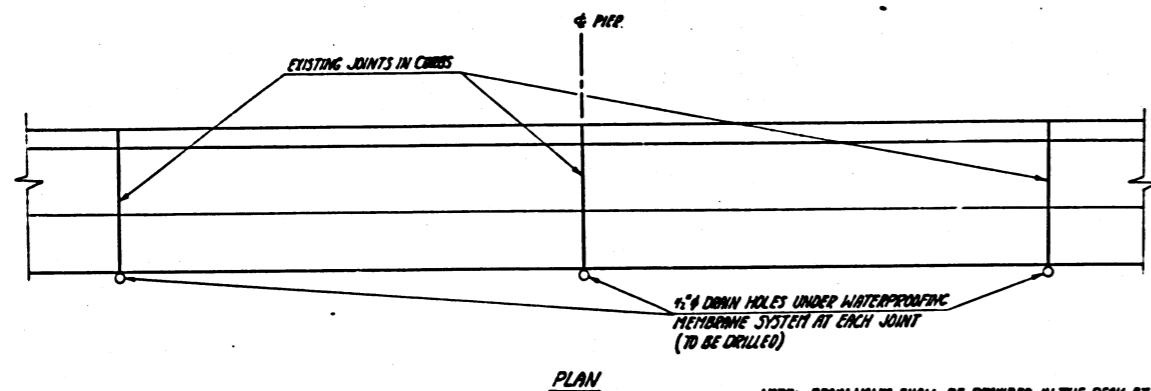
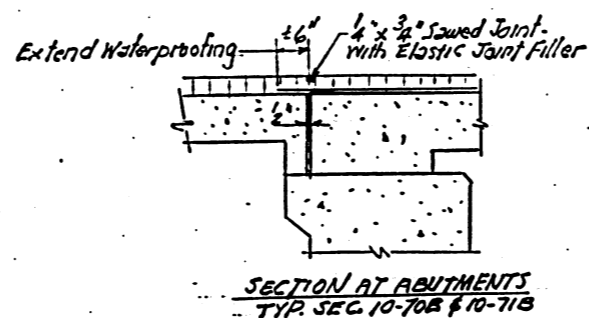
SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL	PIATT COUNTY		CHAMPAIGN COUNTY	
				SECTION	SECTION	SECTION	SECTION
406001	BITUMINOUS MATERIALS (PRIME COAT)	GALLONS	504	88	44	88	44
406005	LEVELLING BINDER (MACHINE METHOD)	TONS	* 10	* 3	* 7	-	-
406008	BITUMINOUS CONCRETE SURFACE COURSE, CLASS I	TONS	1,216	110	172	114	97
507001	FURNISHING & ERECTING STRUCTURAL STEEL	POUNDS	1181	-	-	-	-
646001	ENGINEERS FIELD OFFICE, TYPE A	EACH	1	0.15	0.2	0.2	0.1
X04941	WATERPROOFING MEMBRANE SYSTEM	SQ. YDS.	4978	876	1009	739	749
X64701	PAVEMENT MARKING TAPE	LIN. FT.	140	19	27	28	16
Z10205	DECK SLAB REPAIR (PARTIAL)	SQ. YDS.	88	52*	36*	0	0
XZ1014	TRAFFIC CONTROL AND PROTECTION, STR. 2309	EACH	3	1	-	-	1
XZ1089	TRAFFIC CONTROL AND PROTECTION, STR. 2316	LUMP SUM	1	-	.33	-	.33
XZ1182	NEOPRENE EXPANSION DAM	LIN. FT.	246	61	121	-	64
X05250	PREFORMED JOINT SEALER, 1 1/4"	LIN. FT.	42	12	26	-	4
XZ1186	PREFORMED JOINT SEALER, 2 1/2"	LIN. FT.	81	-	81	-	-

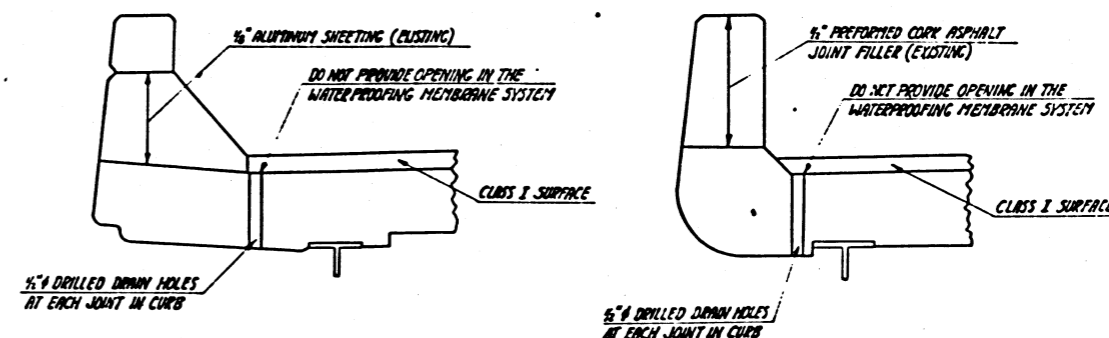
* NON-PARTICIPATING

ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
72	+	CHAMPAIGN PIATT	7	3

* DISTRICT 3 BRIDGE DECK WATERPROOFING 1975-2

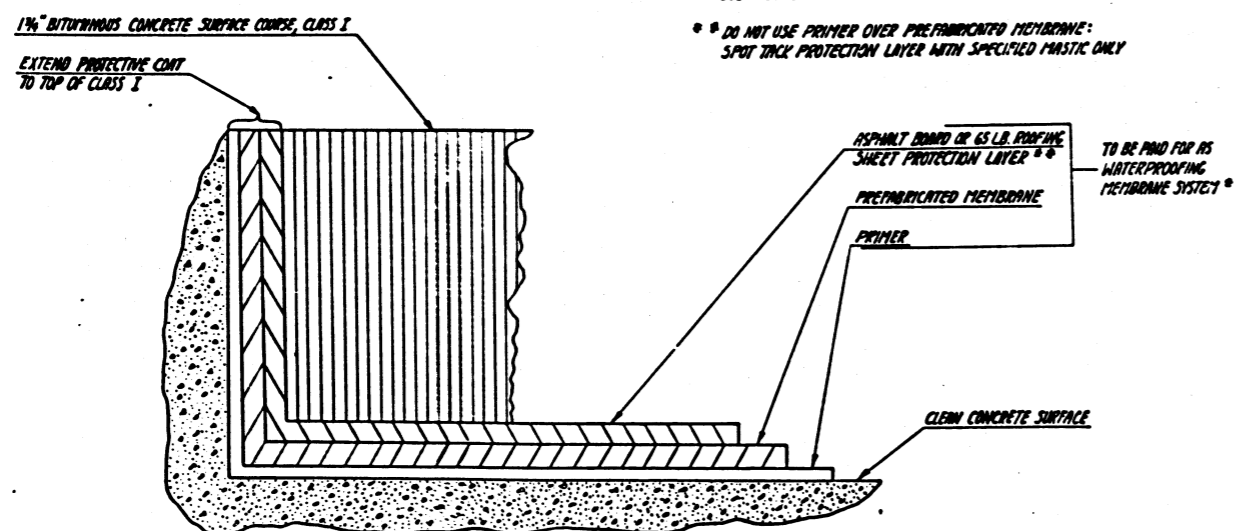


NOTE: DRAIN HOLES SHALL BE PROVIDED IN THE DECK AT THE BASE OF ALL ALUMINUM SHEETED AND CORK JOINTS IN THE CURB OR PARAPET WHEN THE WATERPROOFING MEMBRANE SYSTEM IS SPECIFIED IN THE PLANS.

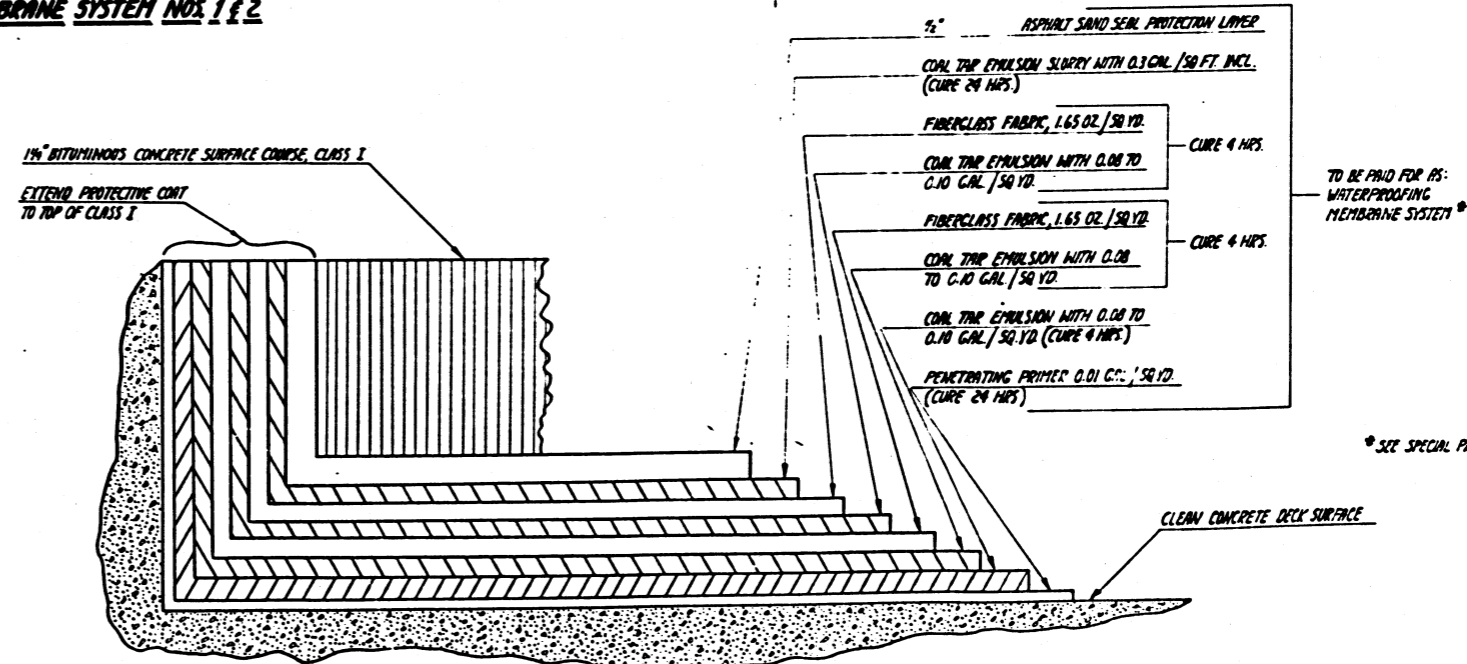


SECTIONS AT CURB JOINTS

WATERPROOFING MEMBRANE SYSTEM NOS. 1 & 2



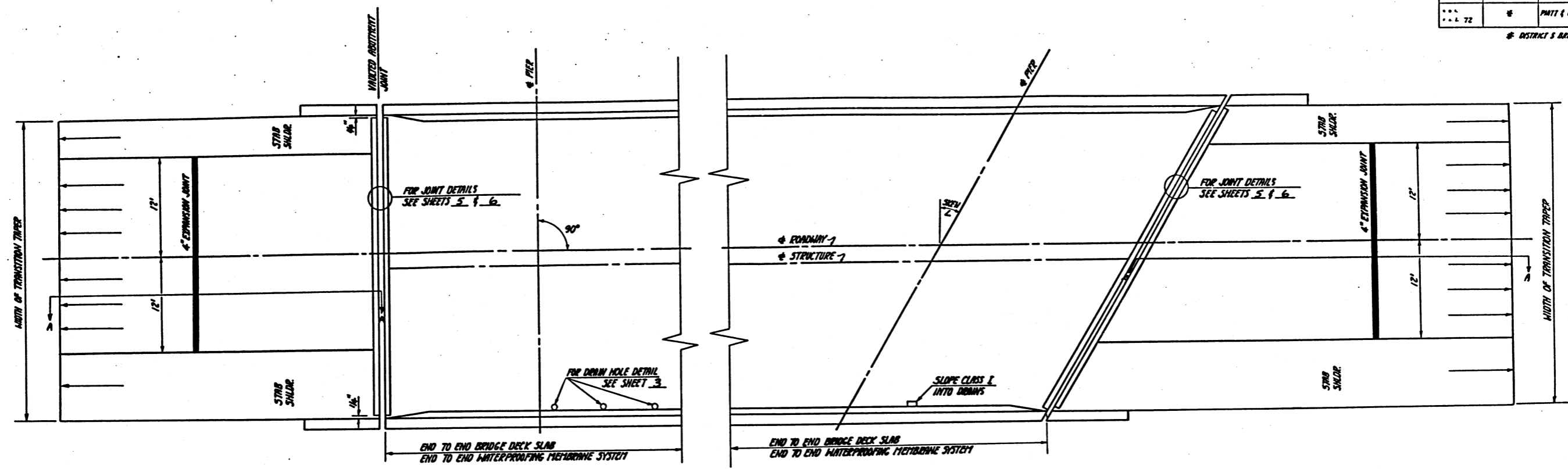
WATERPROOFING MEMBRANE SYSTEM SYSTEM NO. 2



WATERPROOFING MEMBRANE SYSTEM SYSTEM NO. 1

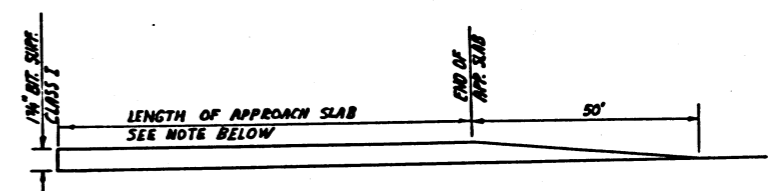
PROJECT NO.	SECTION	LENGTH	TOTAL SHEETS	SHEET NO.
10-72	6	PART 4 CURB/CROWN	7	4

DISTRICT 5 BRIDGE DECK WATERPROOFING 1975-2

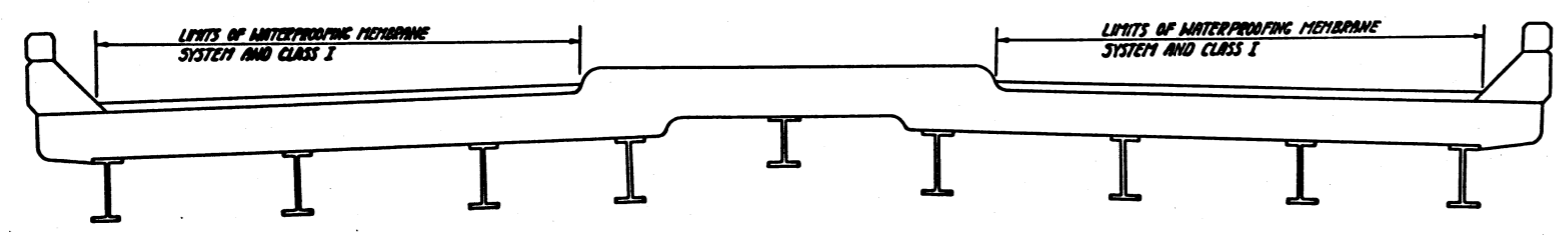


TYPICAL HALF PLAN AT RIGHT ANGLES

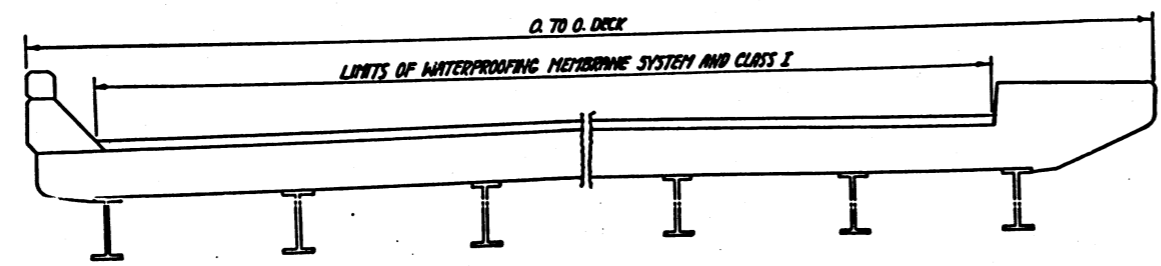
TYPICAL HALF PLAN ON SKEW



SECTION A-A
TYPICAL TRANSITION TAPER



TYPICAL DECK CROSS SECTION WITH MEDIAN



TYPICAL DECK CROSS SECTION

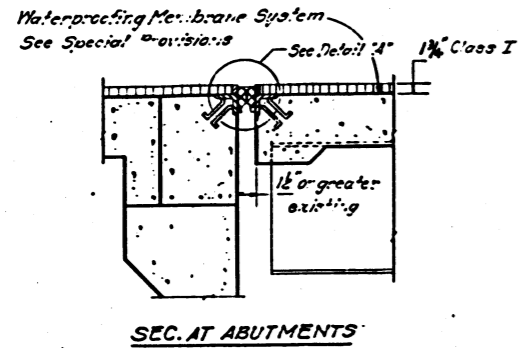
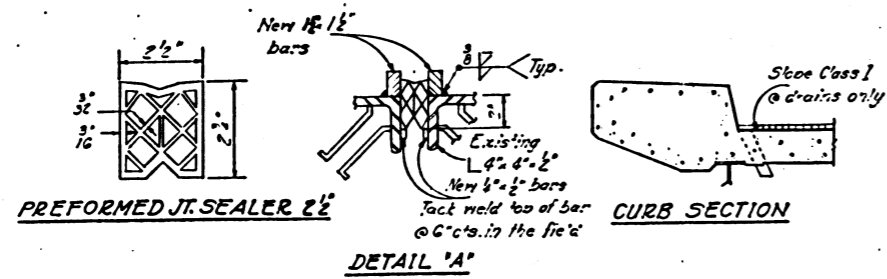
NOTE:
ON THE WESTBOUND BRIDGE OF SECTION 10-TO B
EXTEND THE 1/4\"/>

DESIGNED	
CHECKED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

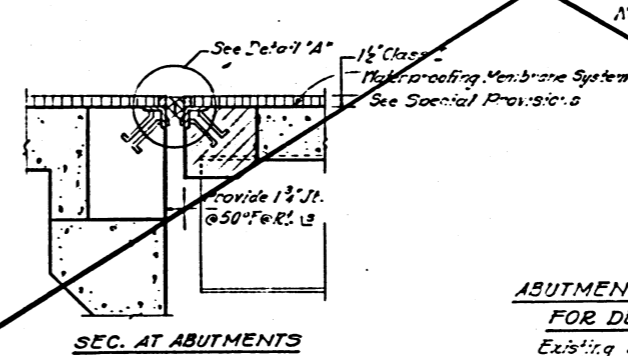
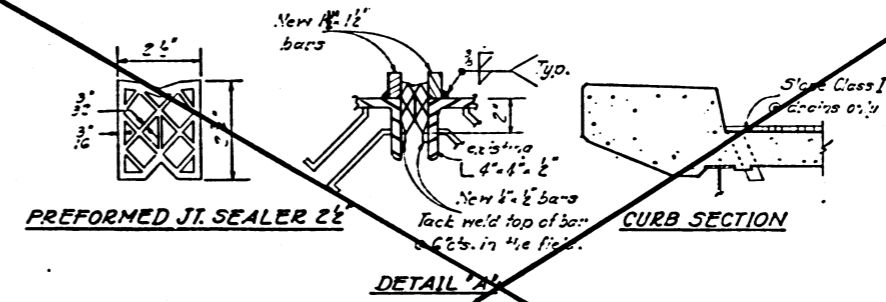
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
R.R.L. R.A.L. 72	#	CHAMPAIGN PIATT	7	5	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

* DISTRICT 5 BRIDGE DECK
WATERPROOFING 1972-2



**ABUTMENT JOINT MODIFICATIONS
FOR DECK WATERPROOFING**
Existing opening is between 1 1/2" and 2" at 50°F and the expansion length and stem falls into the 2 1/2" R.J.S. range.

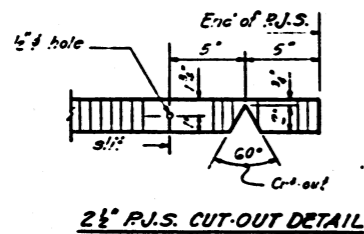
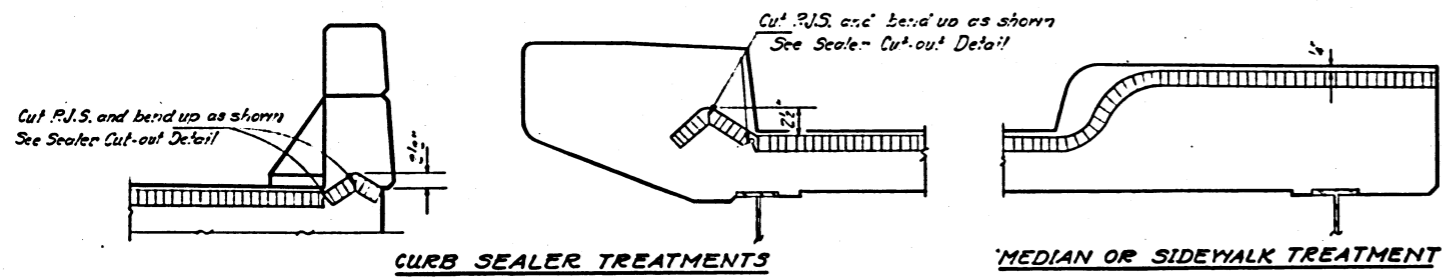
CASE I



Notes:
Hatched area shall be removed and replaced to provide 1/2" right angle joint @ 50°F.
Existing reinforcement shall be cleared and incorporated into the new concrete. The existing #1, #2, #3, #4 steel shall be cleaned and reused. Removal shall be from outside of superstructure.

**ABUTMENT JOINT MODIFICATIONS
FOR DECK WATERPROOFING**
Existing joint is less than 1 1/2" at 50°F and the expansion length and stem falls into the 2 1/2" R.J.S. range, but there is no adequate expansion capacity.

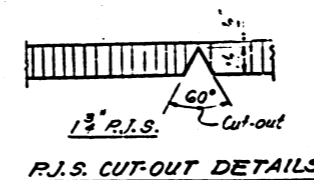
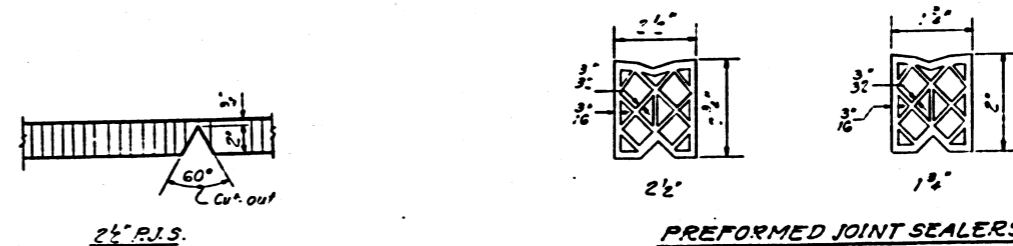
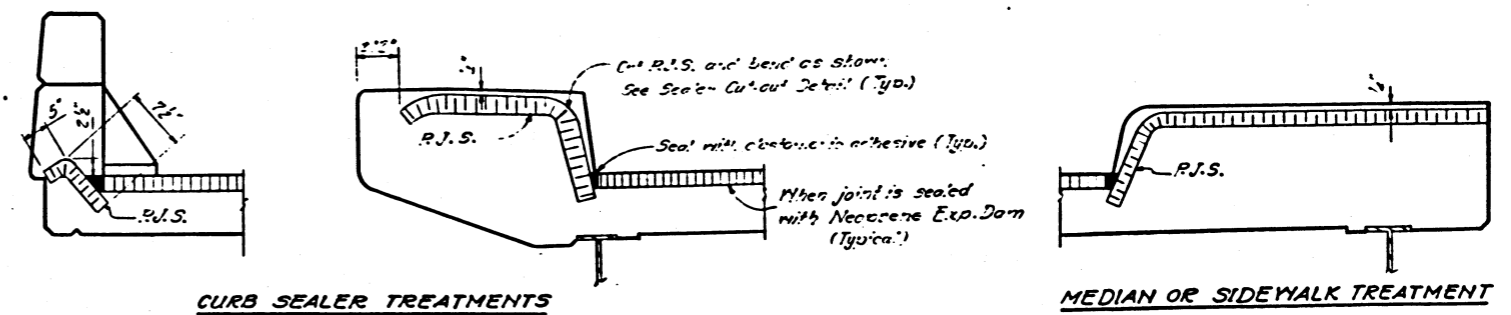
CASE II



DESIGNED	19
CHECKED	EXAMINED
DRAWN	PASSED
CHECKED	APPROVED

DIRECTOR OF HIGHWAYS

CASE III



CASE IV