

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 31	15 B-2	PEORIA AND TAZEWELL	52	1
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

P-94-156- 69

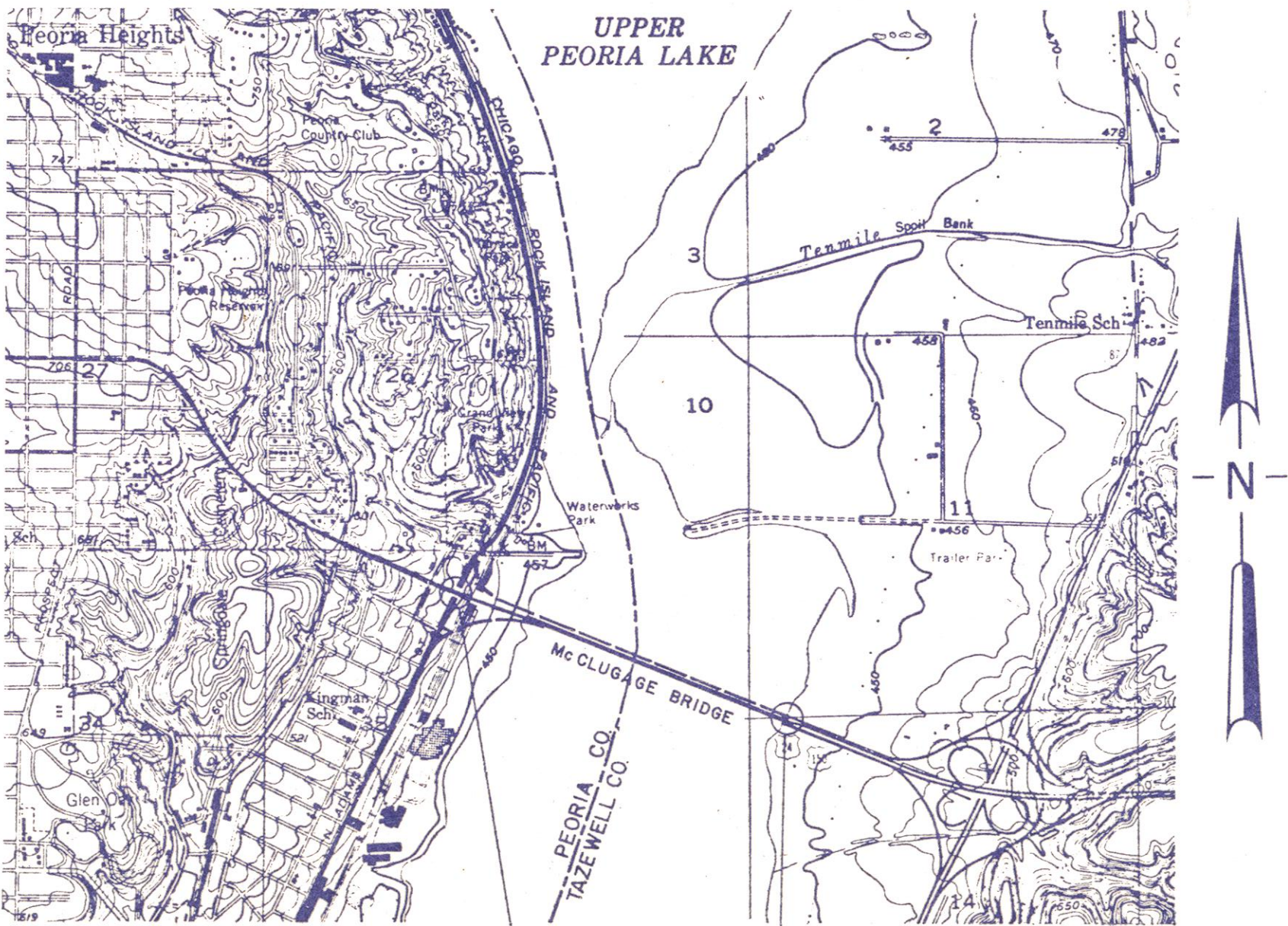
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DESIGN DESIGNATION
3996 (94) MAJOR (PCC-20)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY
F.A. ROUTE 31
SECTION 15 B-2
PROJECT U-609 ()
PEORIA-TAZEWELL COUNTIES

C-94-121-76



PROPOSED PROJECT U-609 ()
BEGINS STA. 199+00.77

PROPOSED PROJECT U-609 ()
ENDS STA. 246+46.02

NET LENGTH OF PROPOSED IMPROVEMENT
4745.25 LIN. FT. = 0.90 MI.

LAYOUT
SCALE = 1" = 2000'

PROPOSED IMPROVEMENT INCLUDES COMPLETE CONSTRUCTION OF PIERS 2 THRU 9 INCLUSIVE, PIER 2F, PIERS 2E THRU 9E INCLUSIVE, WEST ABUTMENT, NORTH ABUTMENT AND SOUTH ABUTMENT. THESE PIERS WILL EVENTUALLY SUPPORT A TWO LANE CANTILEVER TRUSS WITH PLATE GIRDER APPROACHES, AN EXIT RAMP FROM THE NEW STRUCTURE AND AN ENTRANCE RAMP TO THE EXISTING STRUCTURE. THE IMPROVEMENT WILL CARRY F.A. ROUTE 31 (U.S. RT. 24) OVER THE ILLINOIS RIVER AT PEORIA. ALSO INCLUDED ARE PAVEMENT REMOVAL, WIDENING, AND RESURFACING OF RAMPA AND WIDENING ON ADAMS ST.

OFFICE COPY
FINAL DESIGN PRINTS
SUBSTRUCTURE - PHASE II
(1 set sent to Don Fleming)



LOCATION OF SECTION INDICATED THUS →

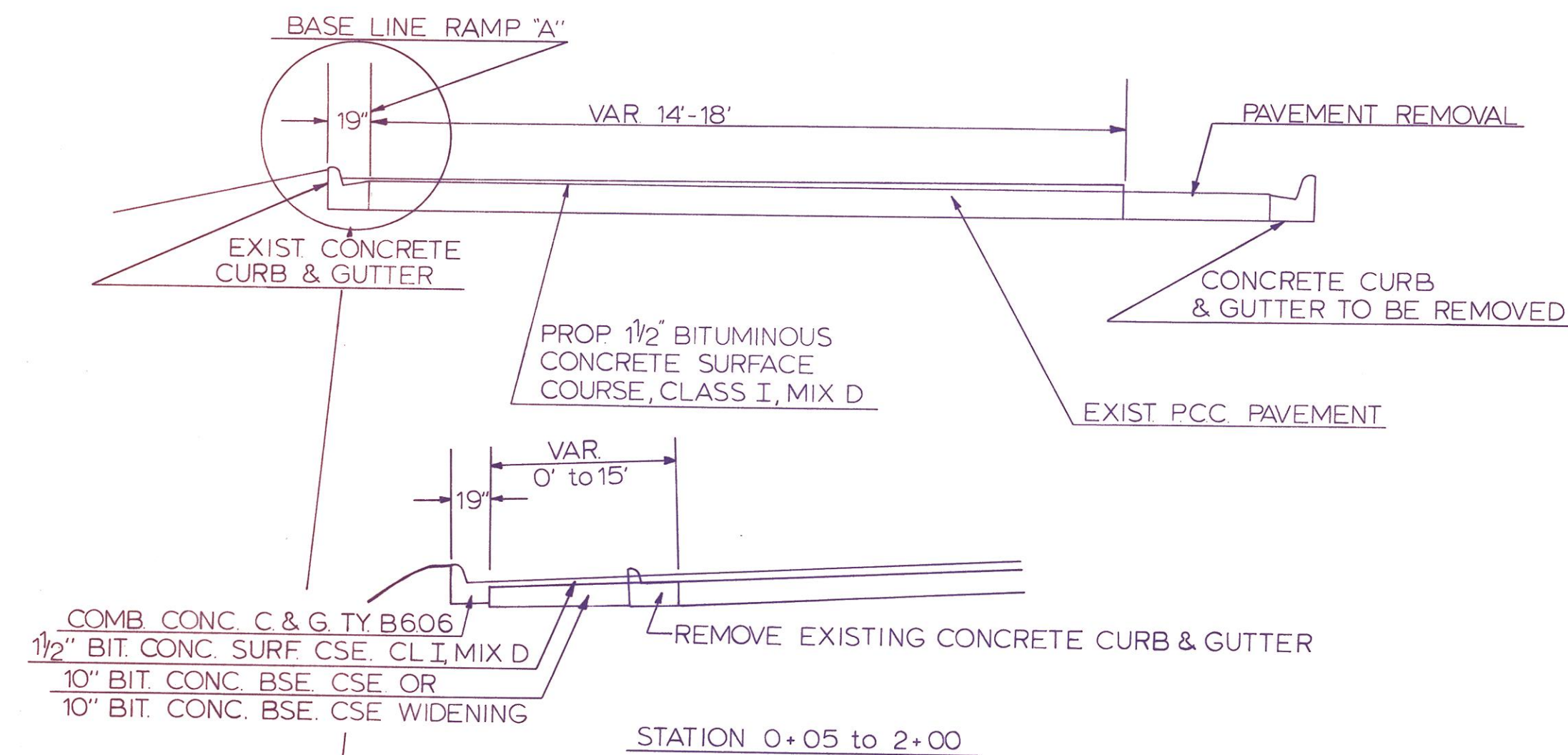
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	
SUBMITTED _____ 19__	DISTRICT ENGINEER
EXAMINED _____ 19__	ENGINEER OF ROAD PLANS AND CONTRACTS
PASSED _____ 19__	ENGINEER OF DESIGN
APPROVED _____ 19__	UNDER SECRETARY-CHIEF TRANSPORTATION ENGINEER
APPROVED _____ 19__	SECRETARY OF THE DEPARTMENT OF TRANSPORTATION

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	
APPROVED _____	DATE _____
DIVISION ENGINEER	

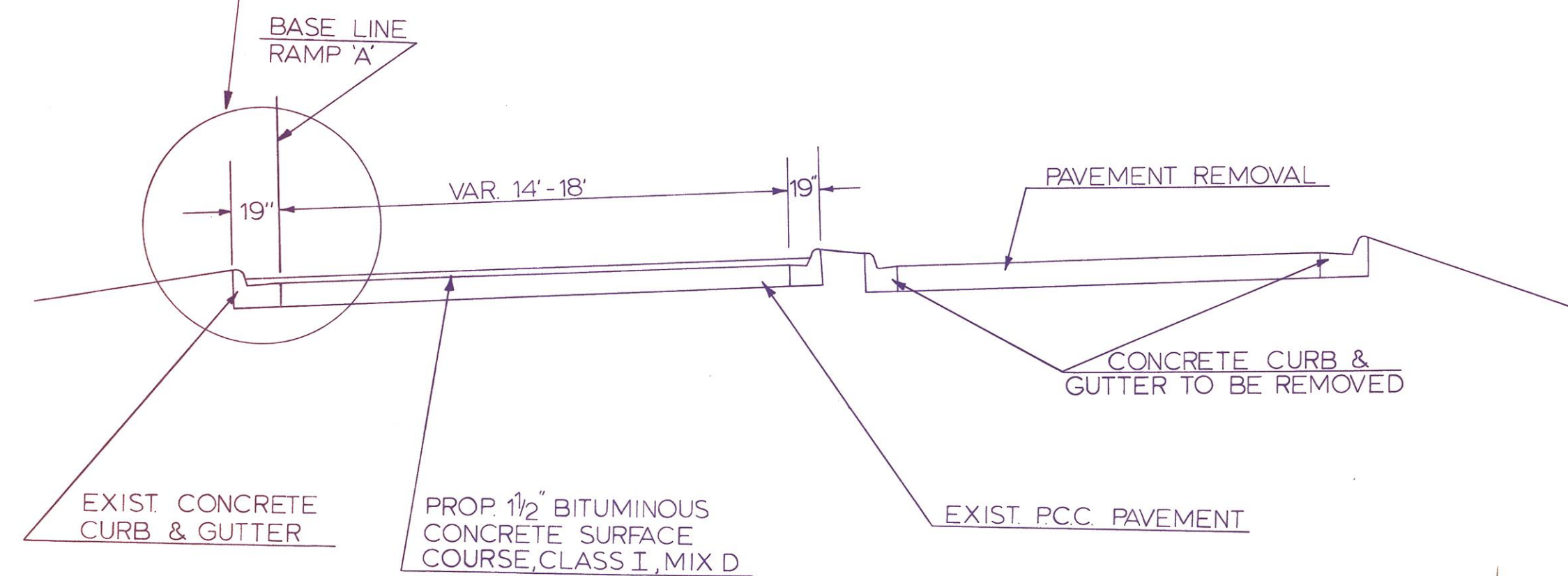
* FOR INFORMATION ONLY

ROAD ISSUE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 31	15B-2	PEORIA	52	5
STA.	TO STA.			
FWHA REG. No. 4	ILLINOIS FED. AID PROJECT			

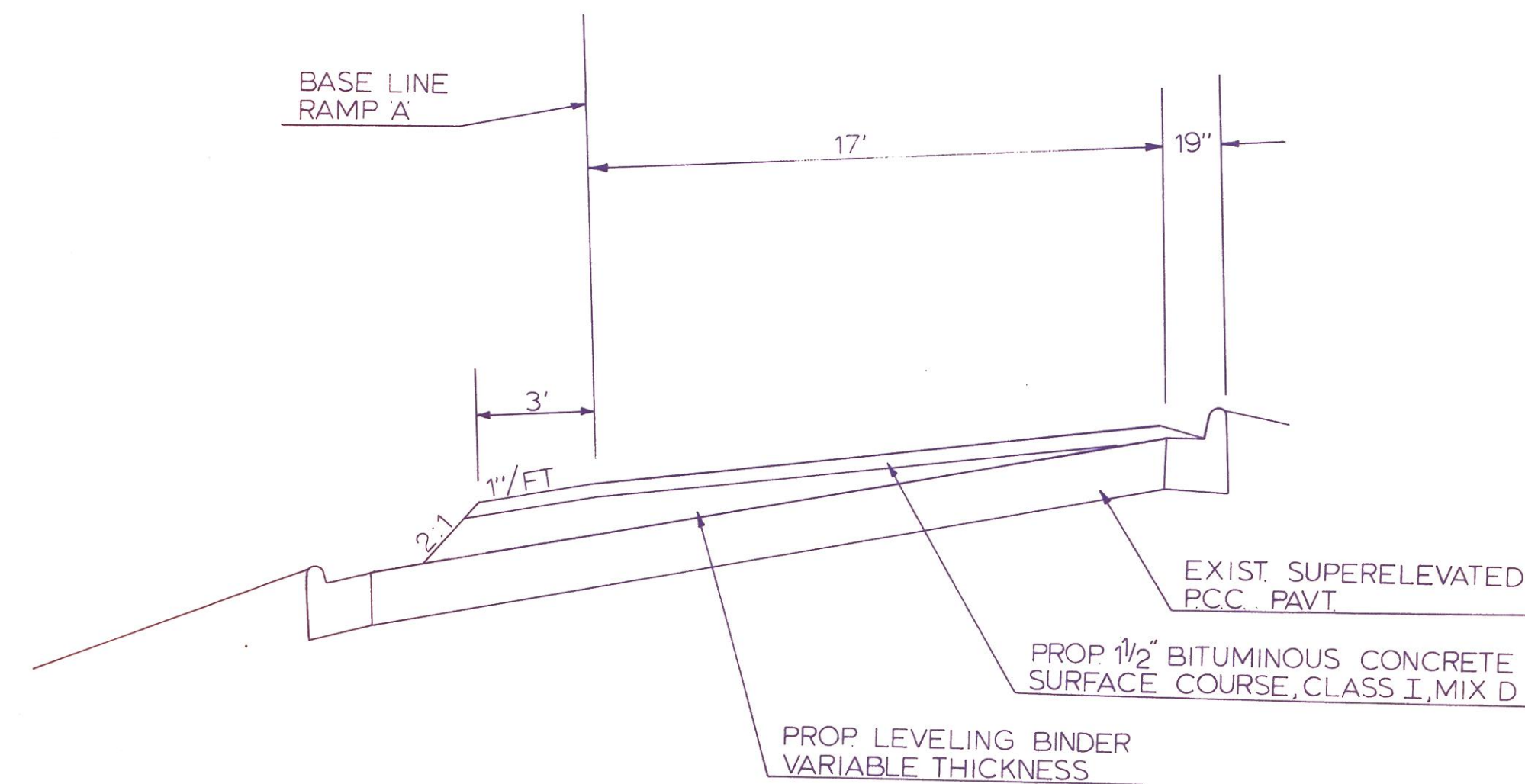
RAMP 'A'
TYPICAL SECTION 0+5000 to 0+964



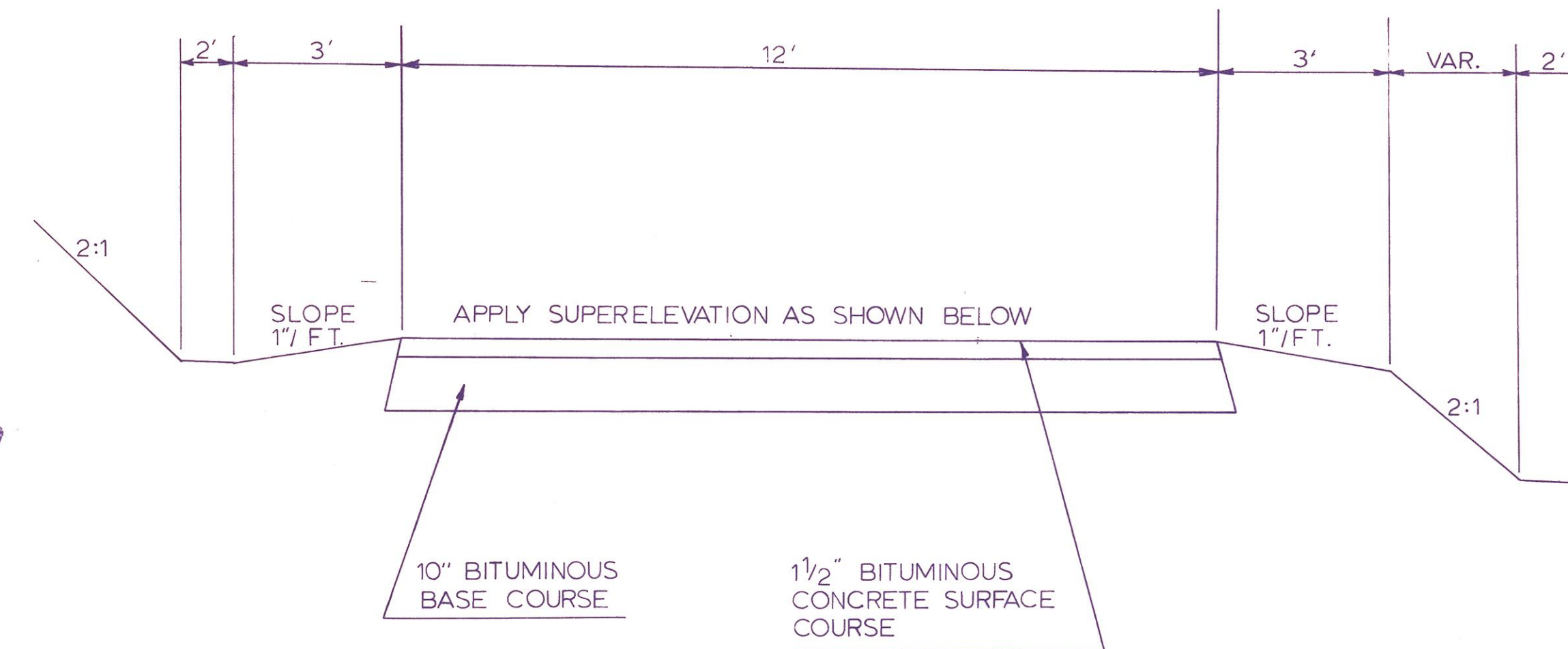
RAMP 'A'
TYPICAL SECTION 0+964 to 3+3256



RAMP 'A'
TYPICAL SECTION 3+3256 to 3+75±

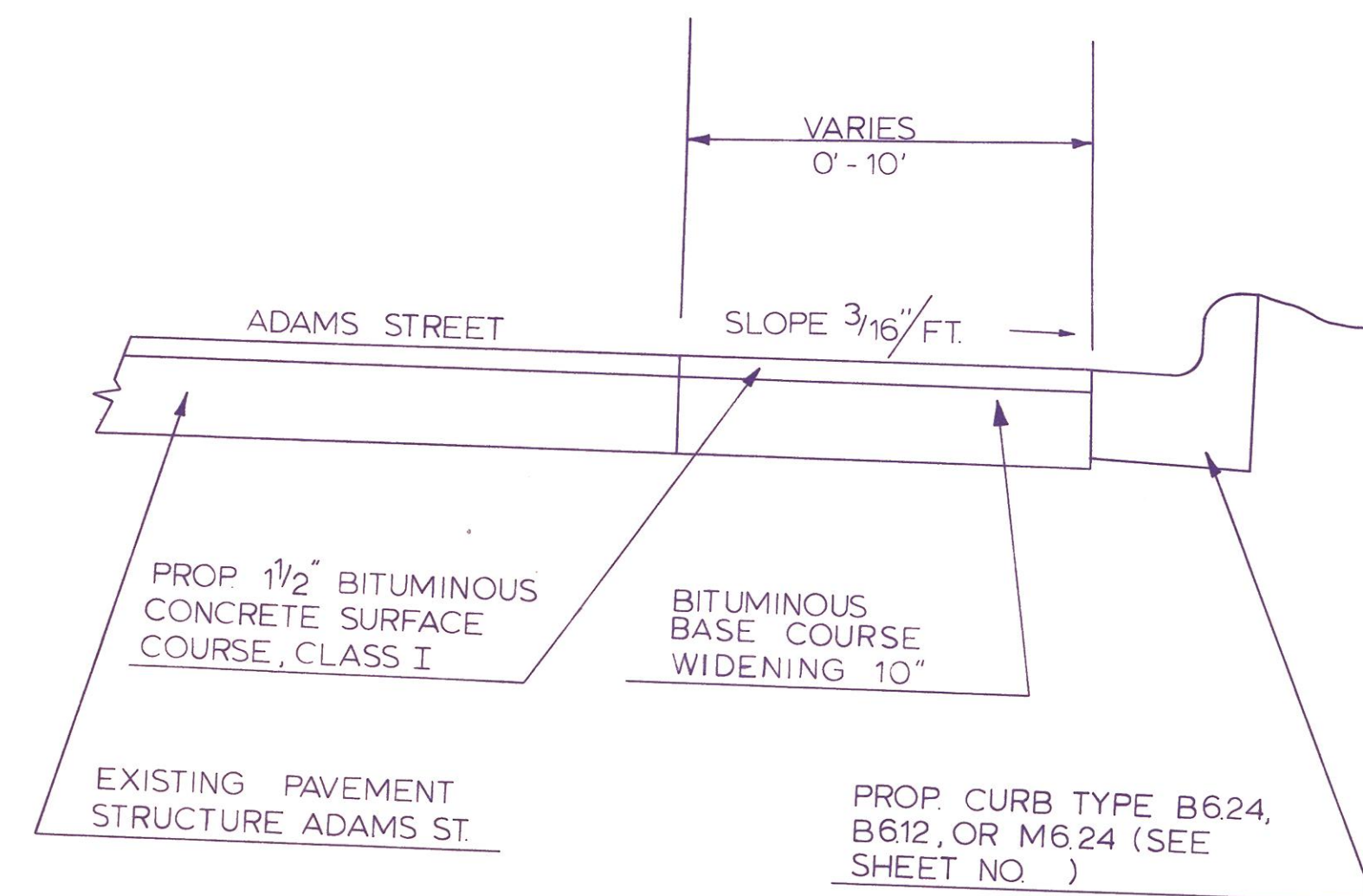


RAMP 'A' EXT.
TEMPORARY RAMP TYPICAL SECTION
STA. 3+75± TO 5+30±

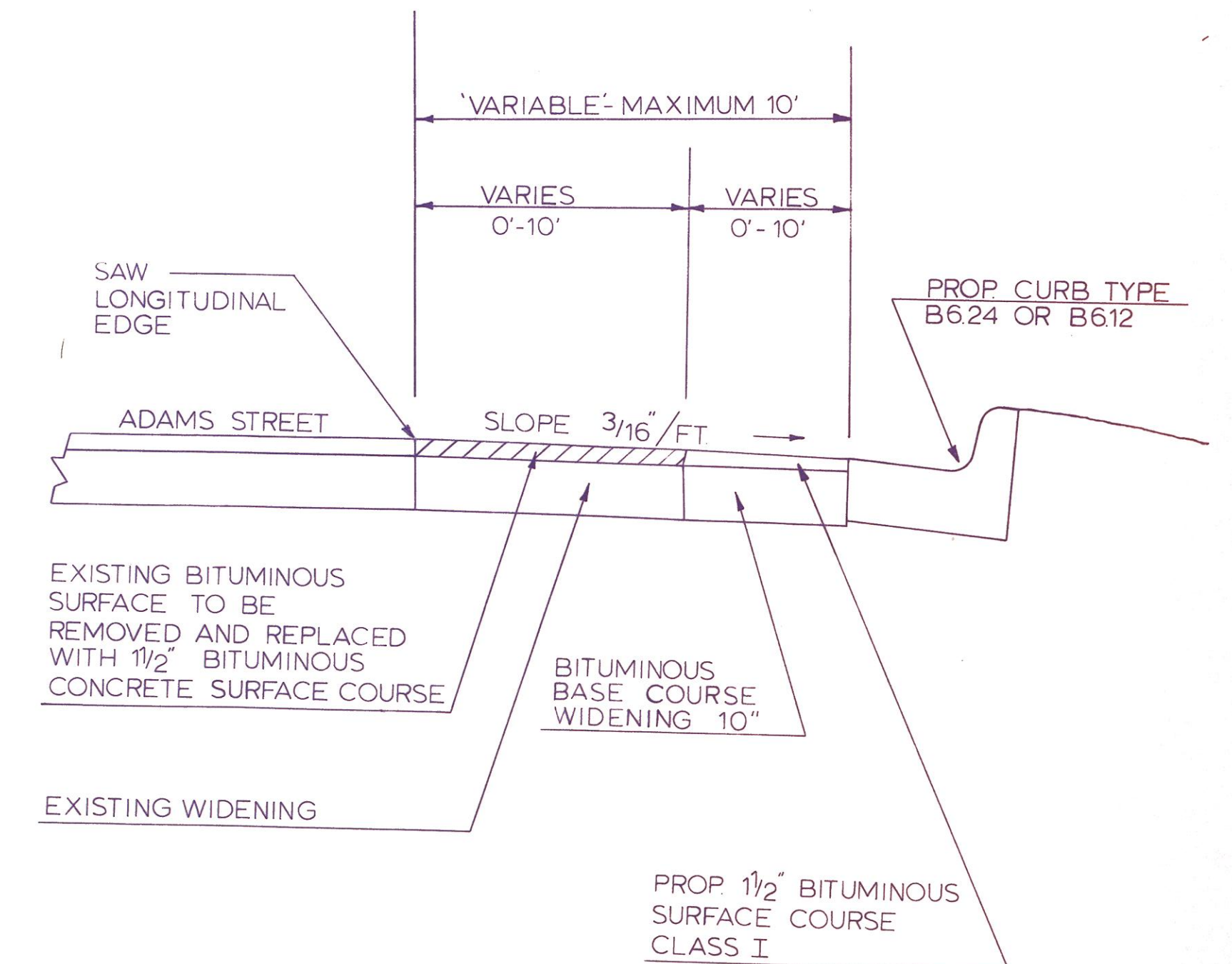


SUPER ATTAINMENT	
CURVE TO THE LEFT	CURVE TO THE RIGHT
STA. 3+00 TO 3+60± - .04' / FT	STA. 4+32 TO 4+80± - .03' / FT
STA. 3+72 TO 4+32± - .04' / FT	STA. 4+80 TO 5+30± - .03' / FT

WIDENING ADJACENT TO EXISTING PAVEMENT
AT ADAMS STREET



WIDENING ADJACENT TO EXISTING PAVEMENT
AT ADAMS STREET



FA 31
15B-2
PEORIA
TEMPORARY RAMP AND
WIDENING TYPICAL SECTIONS
NOT TO SCALE

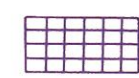
SEEDING, CLASS II THIS SHEET = 0.3 ACRES

CABLE ROAD GUARD REMOVAL

STA. - 0+20 TO STA. 4+20 RT RAMP 'B' = 400 LIN. FT.

BITUMINOUS CONCRETE SURFACE RMOVAL

VARIOUS LOCATIONS = 187.2 SQ. YD.



PAVEMENT REMOVAL AND PORTLAND CEMENT

CONCRETE REPLACEMENT, SPECIAL, 9"

STA. 5+30 - 5+45 RAMP 'A' EXT. @ LORENTZ = 29.1 SQ. YD.
INCLUDES FILLING EXISTING INLET.

MEDIAN REMOVAL

RAMP 'A' 3+19± TO 3+60± = 150 SQ. FT.
DEPTH = 6"
WIDTH = 2'-5'

LIGHT STANDARD AND FOUNDATION REMOVAL

STA. 60+50± = 1 EACH & STA. 3+10, LT RAMP 'A' = 1 EACH
HANDHOLE STA. 61+00±, 34' RT. = 1 EACH

STA. 4+75± RAMP 'A', EXT. 2' RT. B

FILLING EXISTING INLETS - 1 EACH
SALVAGE TYPE 8 GRATE TO BE USED
AT STA. 4+80±

STA. 4+80± RAMP 'A', EXT. 3' LT. B

INLETS, TYPE A, TYPE 8 GRATE = 1 EACH
USE SALVAGED TYPE 8 GRATE FROM 4+75±.
BREAK INTO EXISTING 12" STORM SEWER.
H = 7'

BARRICADES (TYPE III)

EXIST. RAMP 'A' STA. 4+55± = 40 LIN. FT.
EXIST. RAMP 'B' STA. 5+40± = 15 LIN. FT.
EXIST. RAMP 'A' STA. 3+50± = 30 LIN. FT.
TOTAL 85 LIN. FT.

COMBINATION CURB AND GUTTER REMOVAL

STA. 62+29.17 TO 426+72.55 = 230 LIN. FT.
STA. 0+00 TO 0+34 RAMP 'A' = 76 LIN. FT.
STA. 56+15 TO 61+20 = 443 LIN. FT.
STA. 61+75 TO 62+10 = 82 LIN. FT.
STA. 0+05 TO 2+00 = 200 LIN. FT.
STA. 3+28± TO 3+82± RAMP 'A' = 60 LIN. FT.
STA. 5+25± RAMP 'A' EXT. = 14 LIN. FT.
STA. 0+40± TO 5+20 RAMP 'B' RT. = 480 LIN. FT.
STA. 1+60 TO 5+20 RAMP 'B' LT. = 360 LIN. FT.
TOTAL 1945 LIN. FT.

FILLING EXISTING INLETS

STA. 61+10±, 20' RT = 1 EACH
STA. 426+55±, 20' LT = 1 EACH
RAMP A
STA. 0+05± 10' LT. = 1 EACH

INLETS, TYPE A, TYPE 3 FRAME & GRATE

STA. 0+07± 17' LT. = 1 EACH

YELLOW THERMOPLASTIC PAVEMENT MARKING LINE 12" = 93 LIN. FT.

2 - DOUBLE YELLOW THERMOPLASTIC PAVEMENT MARKING LINE 4" = 74800 LIN. FT.

STA. 61+10±, 30' RT. OUTLET
CLASS 'X' (OUTLETS) = 10 CU YD.
1 - INLETS, TYPE A, TYPE 3
FRAME AND GRATE
BREAK INTO EXISTING PIPE
SEE P.

STEEL PLATE BEAM GUARD RAIL, SINGLE RAIL
RAMP 'A' EXT. STA. 3+00 TO 4+20 RT. = 120 L. FT.
RAMP 'A' LT. 0+05 TO 2+00 = 200 L. FT.
TOTAL = 320 L. FT.

TRAFFIC BARRIER TERMINAL TYPE I
RAMP 'A' EXT. STA. 2+625 TO 3+00 = 1 EACH
RAMP 'A' LT. STA. 2+00 TO 2+375 = 1 EACH
TRAFFIC BARRIER TERMINAL TYPE II
RAMP 'A' EXT. STA. 4+20 TO 4+325 = 1 EACH

PAVEMENT REMOVAL = 684.4 SQ. YD.
RAMP 'B' STA. 0+10 TO 5+20

EXISTING WIDENING & BIT. CONC. SURF. REMOVAL

CURVE NO	1	2	3	4	5	6	7
PI	56+9017	57+9645	3+8095	4+8579	1+5390	61+3916	6+3581
Δ	5° 23'	5° 23'	32° 30'	32° 30'	9° 41'	29° 23'	42° 08'
D	3° 35'	8° 33' 58"	31°	31°	6° 56'	10° 08'	22° 04'
T	7517'	3145'	53.87'	53.87'	70.0'	148.45'	100.0'
R	1598.95'	668.91'	184.83'	184.83'	826.45'	566.16'	259.60'
L	150.22'	62.84'	104.84'	104.84'	139.68'	290.46'	190.90'
PC	56+1500	57+6500	3+2708	4+3192	0+8390	59+9071	7+261
PT	57+650	58+2775	4+3192	5+3676	2+2558	62+8117	5+4200

COMBINATION CONCRETE CURB AND GUTTER
TYPE B-624 (ALONG WIDENING ON ADAMS ST. RT.)

STA. 56+150 TO 57+650 = 150 L. FT.
STA. 57+65 TO 58+2775 = 63 L. FT.
STA. 58+2775 TO 59+50 = 123 L. FT.
STA. 59+50 TO 59+70 = 20 L. FT.
TOTAL = 356 L. FT.

COMBINATION CONCRETE CURB AND GUTTER
TYPE B-612 (ALONG WIDENING ON ADAMS ST. RT.)
STA. 59+98 TO 61+35 = 140 L. FT.

COMBINATION CONCRETE CURB & GUTTER
TYPE B-606
LT. STA. 0+05 TO 2+00 = 200 LIN. FT.

THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS

2 LEFT TURN ARROWS = 33.2 SQ. FT.
2 'ONLY' = 44.8 SQ. FT.
TOTAL 78.0 SQ. FT.

COMBINATION CONCRETE CURB AND GUTTER

TYPE M-606 - SMALL ISLAND STA. 62+00± RT. = 27 L. FT.

COMBINATION CONCRETE CURB AND GUTTER

TYPE M-6.24 - LARGE ISLAND 62+30 - 62+82 RT. = 145 LIN. FT.
SMALL ISLAND 62+00± RT. = 15 LIN. FT.
TOTAL 160 LIN. FT.

THERMOPLASTIC PAVEMENT MARKING - LINE 4"

EDGE STRIPING LINES
RAMP 'A' AND RAMP 'A' EXT.
YELLOW - LT. EDGE STA. 0+00 TO 6+60 = 660 LIN. FT.
WHITE - RT. EDGE STA. 0+00 TO 6+60 = 660 LIN. FT.
ADAMS STREET
WHITE - RT. EDGE STA. 56+15 TO 426+73 = 685 LIN. FT.
LANE LINE
WHITE STA 56+15 TO 425+50 = 300 LIN. FT.
(25 FT. SKIP - 15 FT. STRIPE)
TOTAL 2305 LIN. FT.

STA. 61+00, 34' RT

TRENCH AND BACKFILL = 65 LIN. FT.
POLE, METAL, 30 FT. MH 10 FT. MAST ARM = 1 EACH
POLE FOUNDATION = 1 EACH

* ELECTRIC CABLE, UNIT DUCT, 2-600 VXL#6; 1 INCH POLYETHYLENE = 65 LIN. FT.
ELECTRIC CONDUCTOR (BARE ANNEALED COPPER) NO. 6 = 65 LIN. FT.
LAMP, 400 WATTS APS = 1 EACH
LUMINAIRE, SODIUM VAPOR, WITH BUILT-IN REGULATOR BALLAST, 400 WATTS = 1 EACH

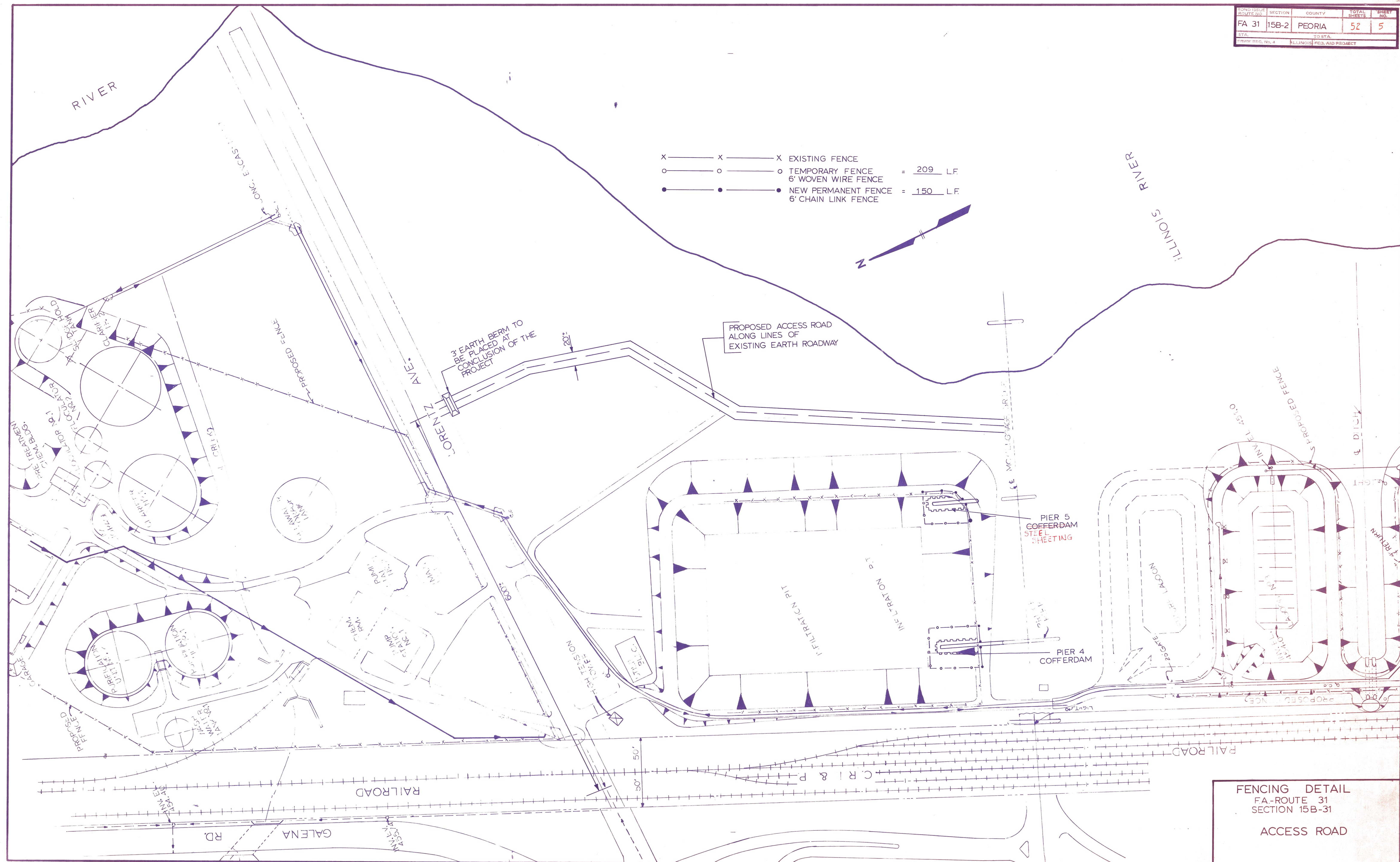
FA 31 15B-2 PEORIA 52 4

FA 31 15B-2

PLAN RAMP 'A'

SCALE 1" = 40'

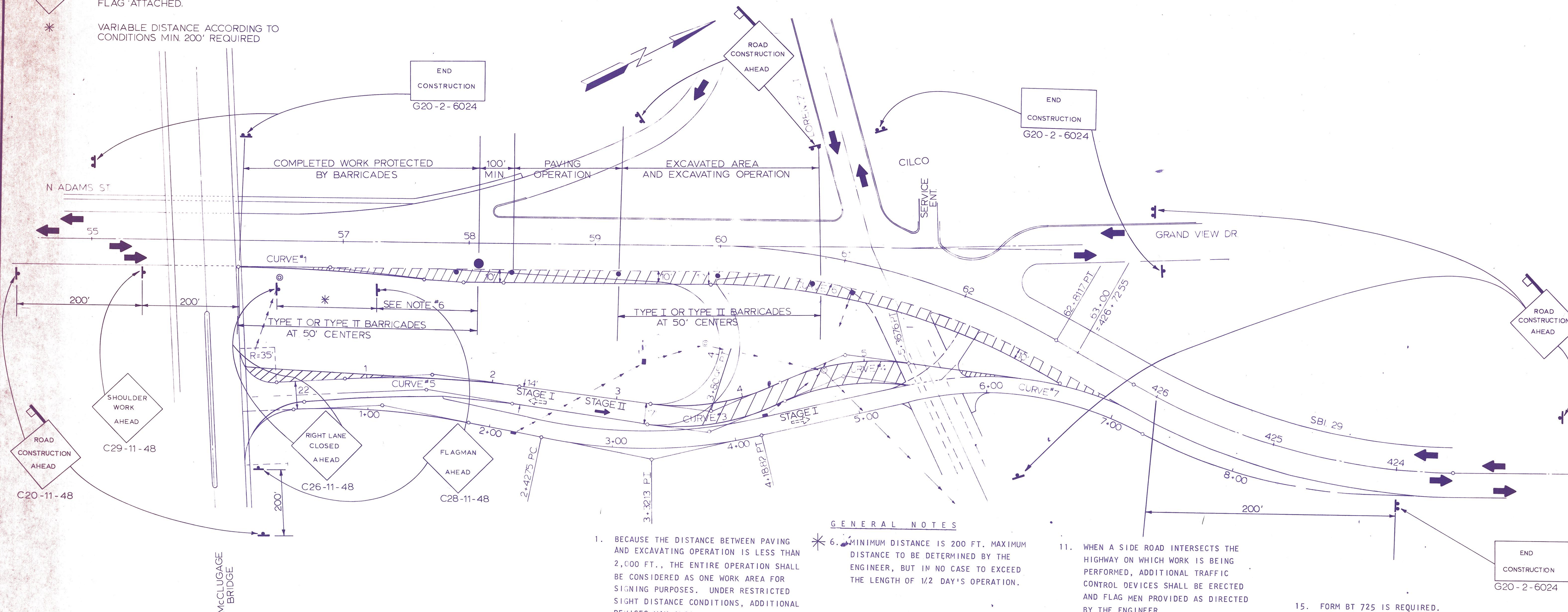
BOND ISSUE ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 31	15B-2	PEORIA	52	5
TO STA.				
FROM REG. No. 4 ILLINOIS FED. AID PROJECT				



SYMBOLS

- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGMAN WITH TRAFFIC CONTROL SIGN
- TYPE I OR TYPE II BARRICADE WITH STEADY (SEE NOTE 8) BURNING LIGHT
- SIGN WITH 18 IN. BY 18 IN. (MINIMUM) RED FLAG ATTACHED.
- VARIABLE DISTANCE ACCORDING TO CONDITIONS MIN. 200' REQUIRED

ROAD ISSUE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 31	15B-2	PEORIA	52	6
STA.	TO STA.			
FHWA REG. NO. 4	ILLINOIS FED. AID PROJECT			



GENERAL NOTES

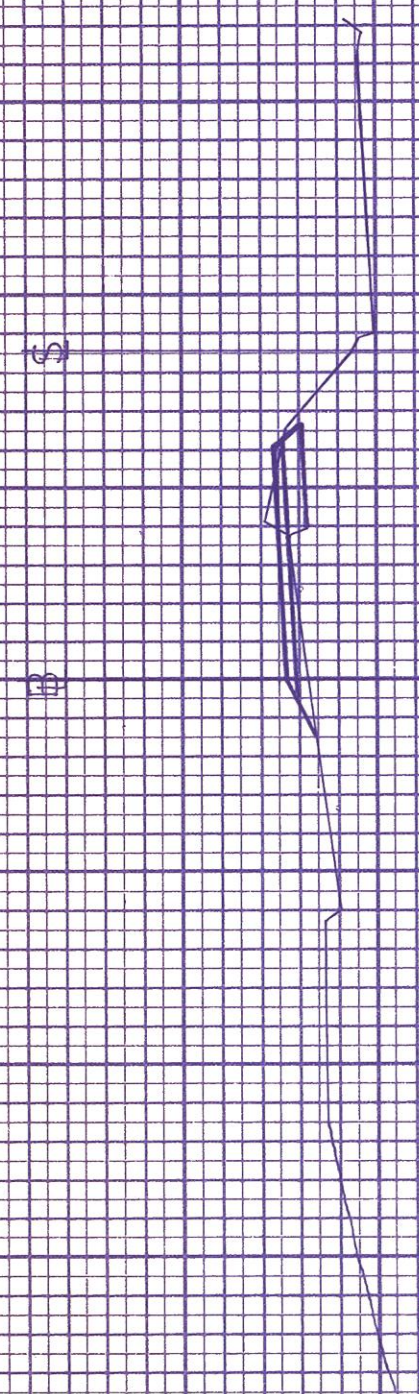
- BECAUSE THE DISTANCE BETWEEN PAVING AND EXCAVATING OPERATION IS LESS THAN 2,000 FT., THE ENTIRE OPERATION SHALL BE CONSIDERED AS ONE WORK AREA FOR SIGNING PURPOSES. UNDER RESTRICTED SIGHT DISTANCE CONDITIONS, ADDITIONAL DEVICES MAY ALSO BE REQUIRED FOR DISTANCES LESS THAN 2,000 FT., AT THE DISCRETION OF THE DISTRICT ENGINEER.
- TWO FLAG MEN SHALL BE REQUIRED FOR EACH SEPARATE CONSTRUCTION OPERATION 1,000 FT. OR LESS IN LENGTH.
- THE FLAG MEN SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES.
- CONSTRUCTION OPERATIONS SHALL BE CONFINED TO ONE TRAFFIC LANE, LEAVING THE OTHER LANE OPEN TO TRAFFIC.
- NO PAVING OR EXCAVATING OPERATIONS SHALL BE PERFORMED AT NIGHT UNLESS AUTHORIZED BY THE ENGINEER.
- MINIMUM DISTANCE IS 200 FT. MAXIMUM DISTANCE TO BE DETERMINED BY THE ENGINEER, BUT IN NO CASE TO EXCEED THE LENGTH OF 1/2 DAY'S OPERATION.
- WHEN A SIDE ROAD INTERSECTS THE HIGHWAY ON WHICH WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROL DEVICES SHALL BE ERECTED AND FLAG MEN PROVIDED AS DIRECTED BY THE ENGINEER.
- LONGITUDINAL DIMENSIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS. THE LATERAL PLACEMENT OF THE FLAG MEN MAY BE VARIED FROM THAT SHOWN.
- ALL WARNING SIGNS SHALL HAVE MINIMUM DIMENSIONS OF 48 IN. BY 48 IN. AND HAVE BLACK LEGEND AND BORDER ON AN ORANGE REFLECTORIZED BACKGROUND. ALL SIGNS OTHER THAN WARNING SIGNS SHALL HAVE AS A MINIMUM THE DIMENSIONS SHOWN AND SHALL HAVE A BLACK LEGEND AND BORDER ON A WHITE REFLECTORIZED BACKGROUND.
- STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON TYPE I OR TYPE II BARRICADES FOR DAY OPERATIONS, BUT SHALL BE REQUIRED FOR NIGHT OPERATION.
- ALL SIGNS SHALL BE POST MOUNTED IF THE WORKING TIME EXCEEDS FOUR DAYS.
- HIGH INTENSITY FLASHING LIGHTS SHALL BE USED ON EACH APPROACH IN ADVANCE OF THE WORK AREA AND INSTALLED ABOVE THE FIRST TWO SIGNS IN EACH SERIES. NO RED FLAG IS NECESSARY ON THESE SIGNS.
- FORM BT 725 IS REQUIRED.

CURVE NO	1	2	3	4	5	6	7
PI	56+90.17	57+96.45	3+80.95	4+85.79	1+53.90	6+39.16	6+35.81
Δ	5° 23'	5° 23'	32° 30'	32° 30'	9° 41'	29° 23'	42° 08'
D	3° 35'	8° 33' 58"	31°	31°	6° 56'	10° 08'	22° 04'
T	7517'	3143'	53.87'	53.87'	70.7'	148.45'	1000'
R	1598.95'	668.91'	194.83'	184.83'	826.45'	566.16'	2596.0'
L	150.22'	62.84'	104.84'	104.84'	139.68'	290.46'	190.90'
PC	56+1500	57+6500	3+2708	4+3192	0+8390	59+9071	7+261
PT	57+650	58+2775	4+3192	5+3676	2+2558	62+8117	5+4200

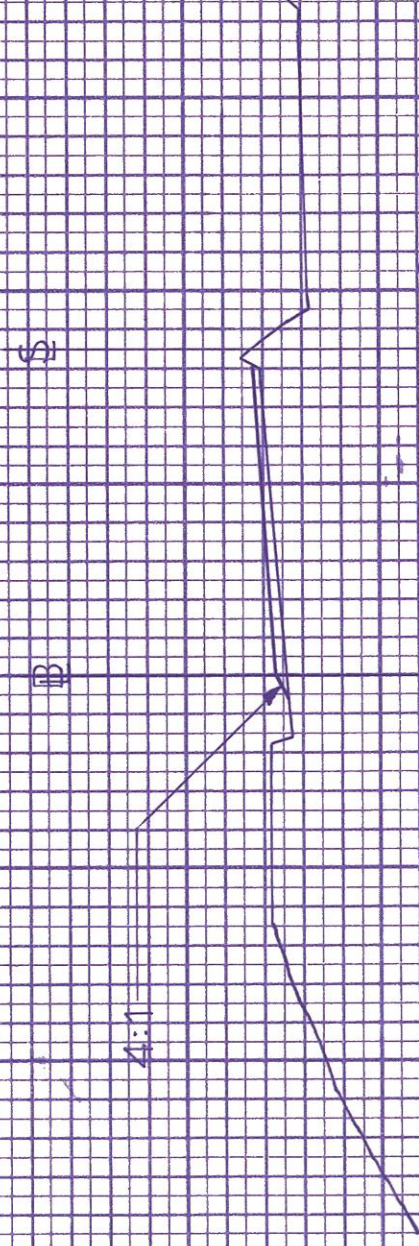
TRAFFIC CONTROL
AND
PROTECTION SPECIAL
NOT TO SCALE

ORIGINAL SURVEY	BY	DATE			
			SURVEYED	PLOTTED	DATE
			NOTE BOOK	TEMPLATE	
NO.		AREAS CHECKED			

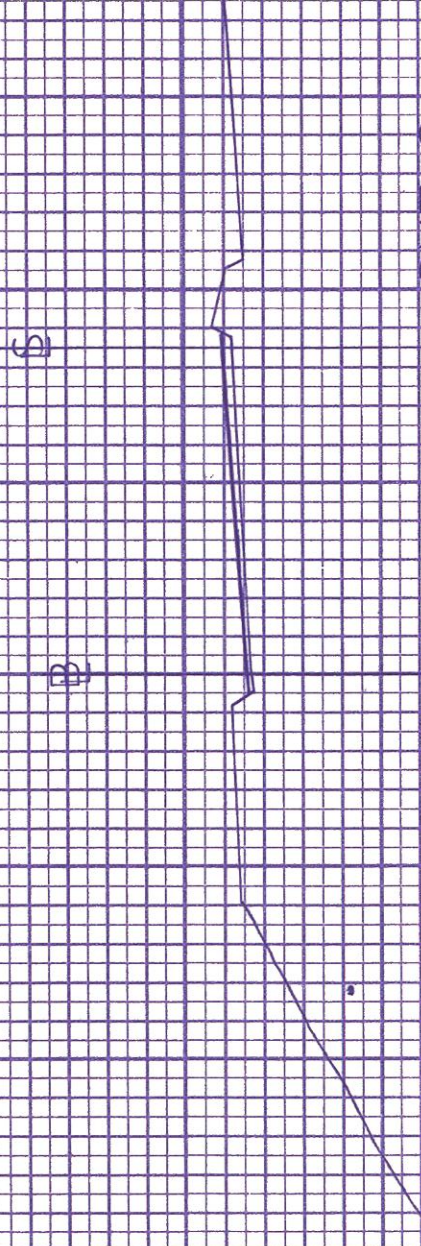
FINAL SURVEY	BY	DATE			
			SURVEYED	PLOTTED	DATE
			NOTE BOOK	TEMPLATE	
NO.		AREAS CHECKED			



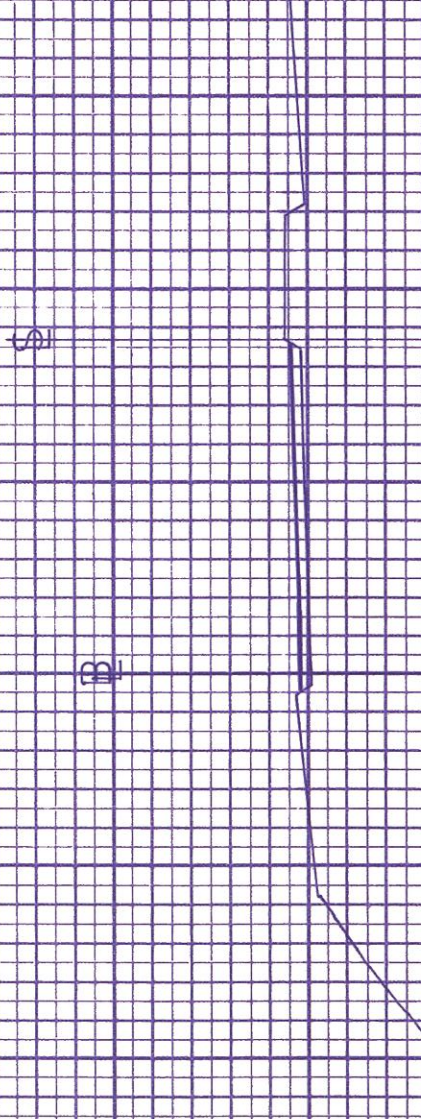
3
+
75
485



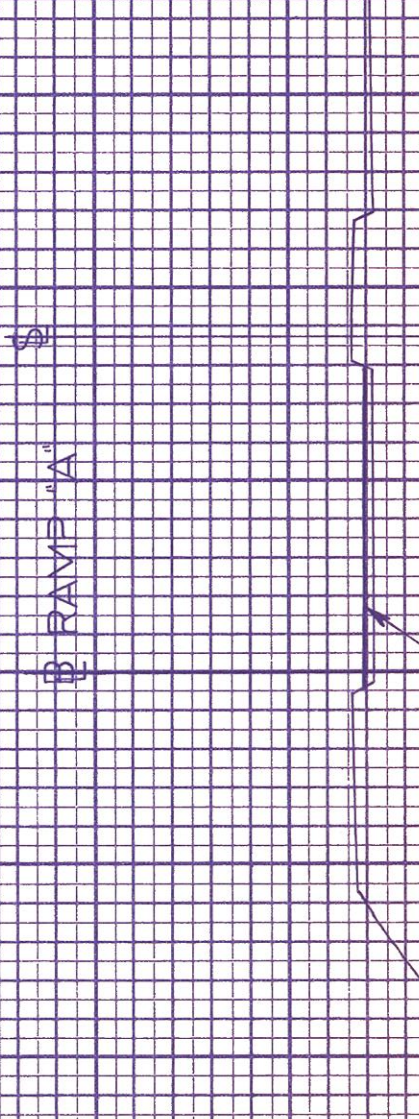
3
+
50
485



3
+
27.08
490



3
+
00
490



2
+
50
490

RAMP "B" (TO BE REMOVED)

BIT. RESURFACING

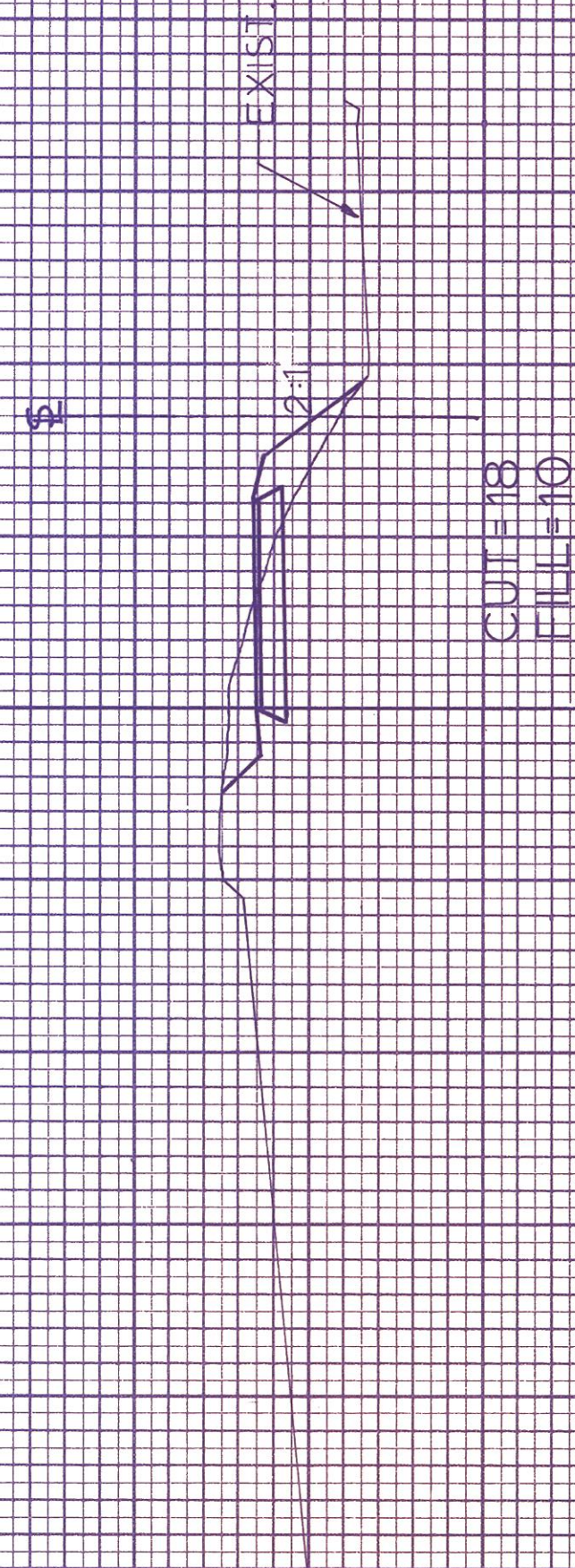
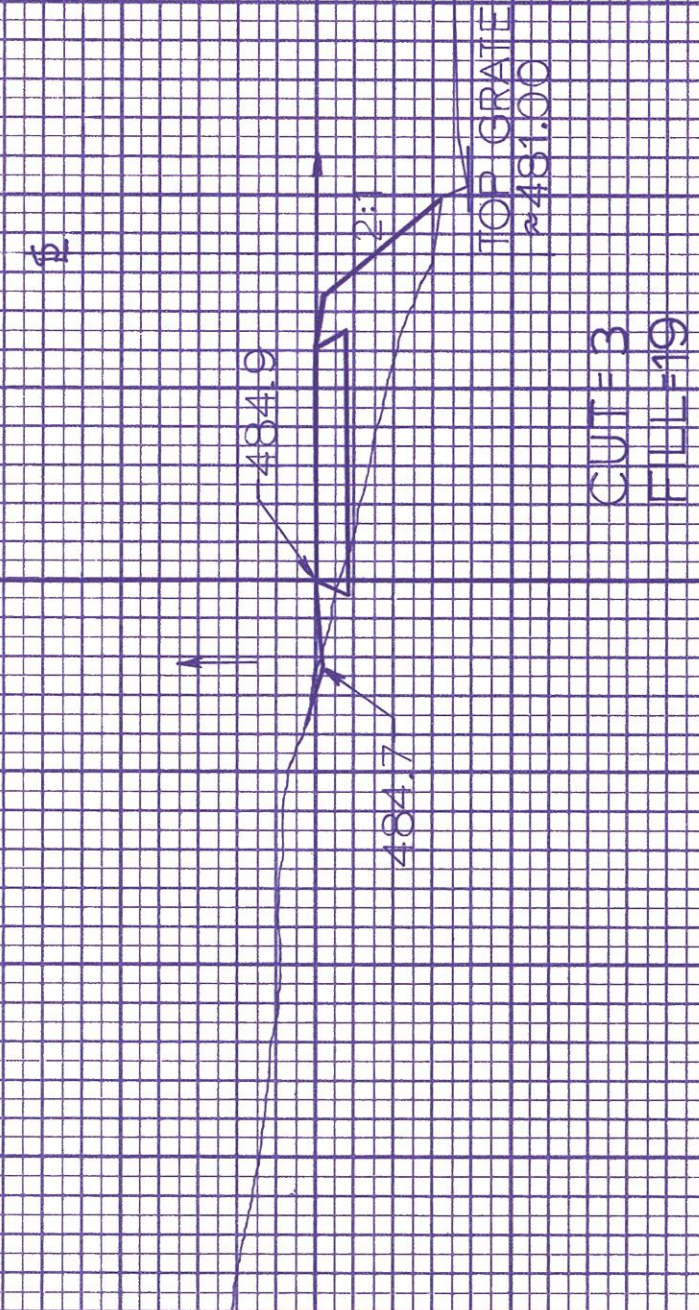
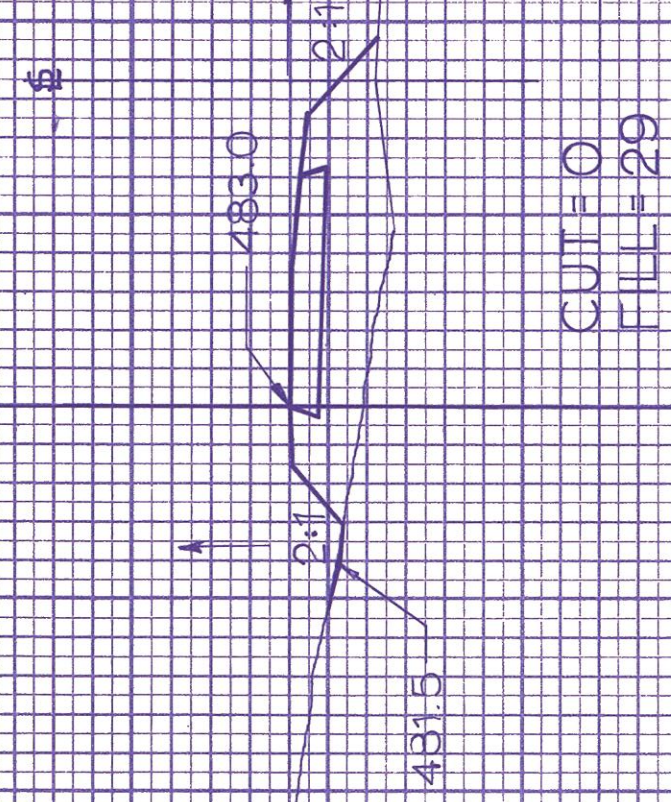
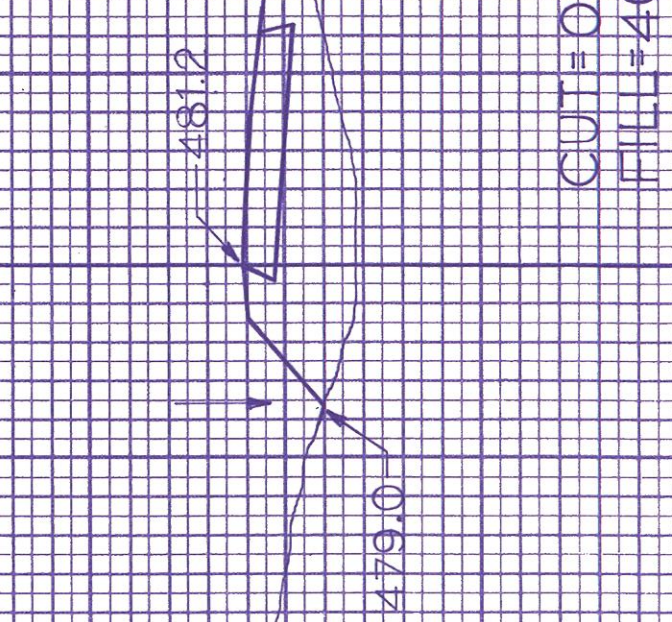
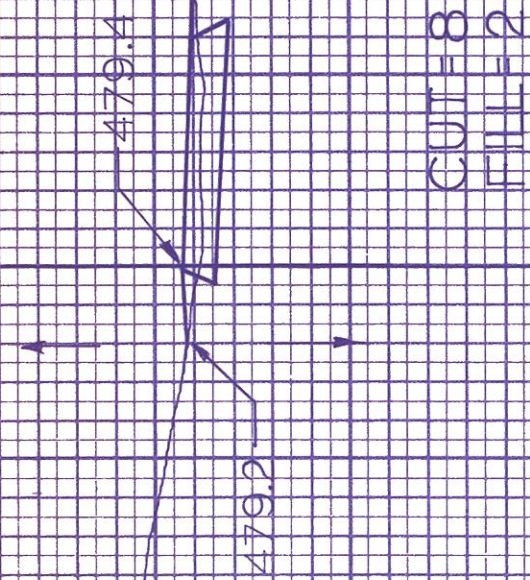
CUT=0
FILL=0

SCALE: HORIZ.
V. 1"=5'

RAMP "A"

ORIGINAL SURVEY	SURVEYED	BY	DATE
	NOTE BOOK		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
	NOTE BOOK		
	AREAS		
	AREAS CHECKED		

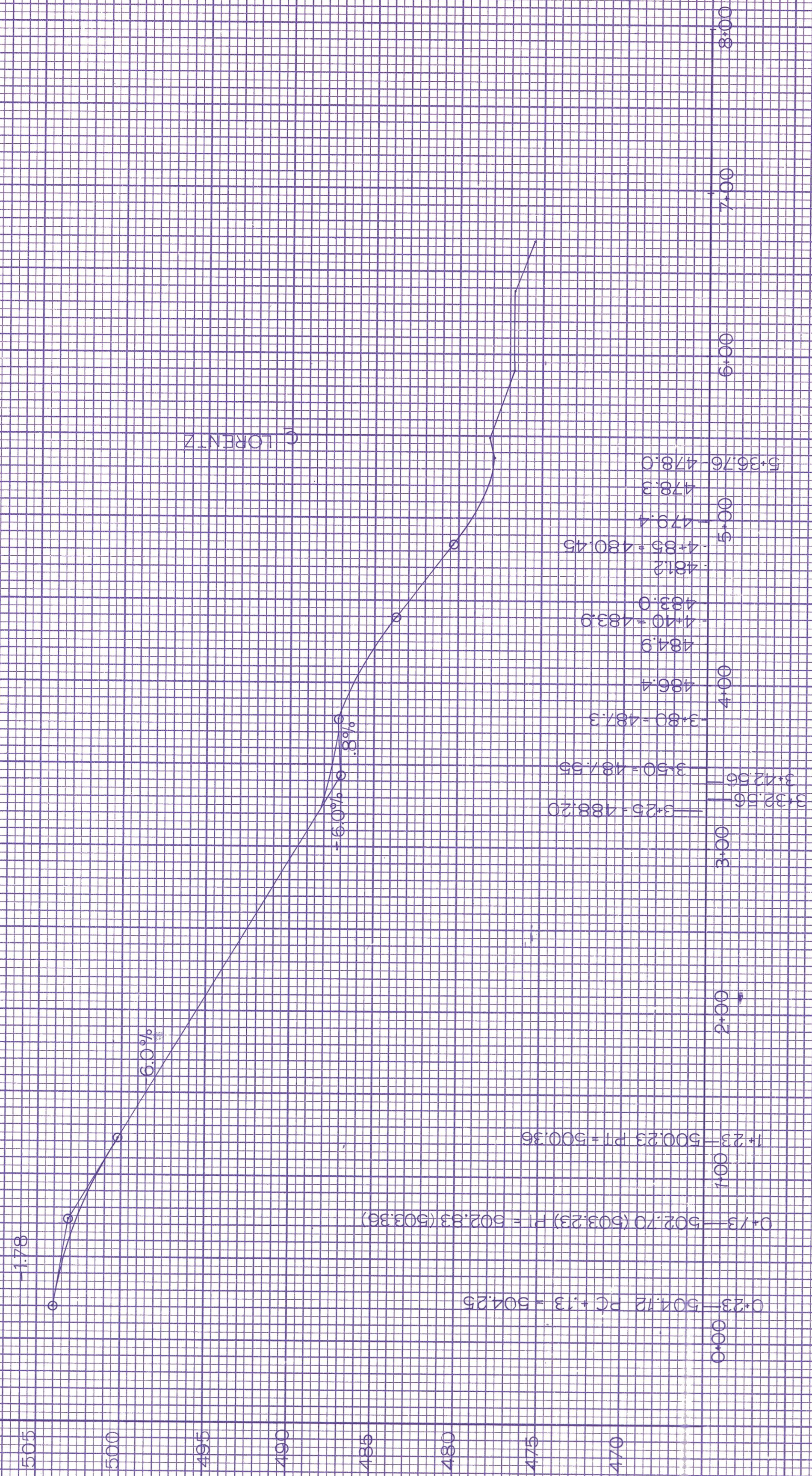


SCALE: H 1"=10'
V 1"=5'

ORIGINAL SURVEY	BY	DATE	SURVEYED	BY	DATE
			PLOTTED		
			NOTE BOOK		
			AREAS CHECKED		

FINAL SURVEY	NO.	AREAS CHECKED	SURVEYED	BY	DATE
			PLOTTED		
			NOTE BOOK		
			AREAS CHECKED		

PROPOSED RAMP "A" PROFILE



INLET TO BE FILLED

TOP OF GRADE = 478.75

478.3

CUT=0
FILL=0

475

SKEMED CROSS SECTION
OF LORENZ AVENUE

5
+
50

480

478.3

CUT=27
FILL=0

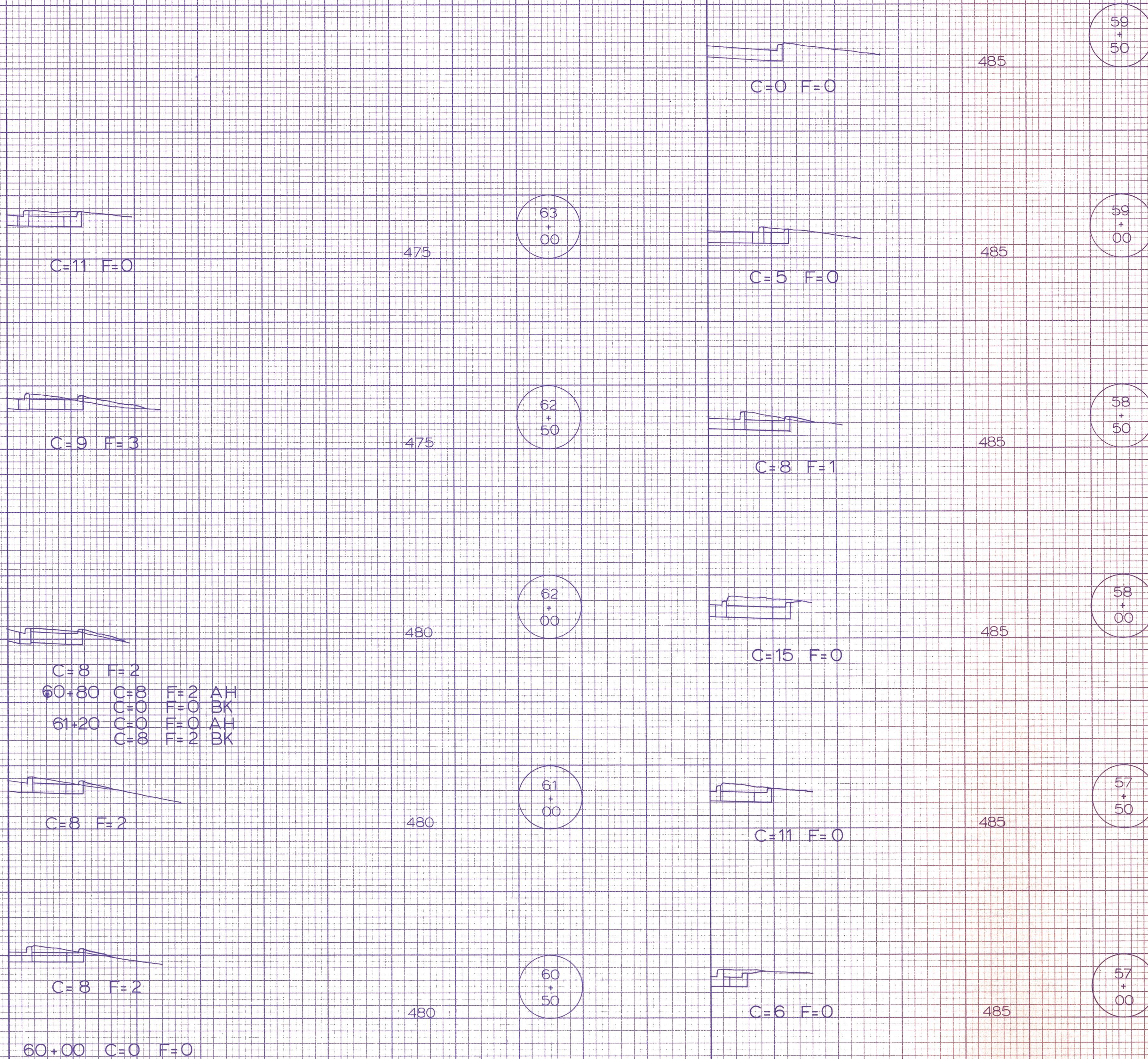
SCALE: H 1"=10'
V 1"=5'

5
+
25

480

ADAMS STREET

TREE REMOVAL							
STA±		IN DIA (6"-15") (OVER 15")		STA±		IN DIA (6"-15") (OVER 15")	
204+19	35' LT.	6"		206+67	49' LT.	13"	
204+34	35' LT.	8"		206+67	51' LT.	13"	
204+44	53' RT.	12"		206+67	61' LT.	14"	
204+45	53' RT.	8"		206+72	75' LT.	10"	
204+45	53' RT.		27"	206+73	59' LT.	10"	
204+50	53' RT.	9"		206+74	69' LT.	12"	
204+51	53' RT.		16"	206+84	49' LT.	11", 13", 11"	
204+54	35' LT.	9"				14", 11", 11"	
204+55	53' RT.	11"				12", 11"	
204+64	57' RT.		25"	206+88	59' LT.	12", 11", 6"	19", 19", 18"
206+07	47' RT.		23"			6", 6"	
206+11	50' RT.		18"	206+89	52' RT.	13"	
206+13	47' RT.		17"	206+89	42' RT.		22", 18"
206+23	42' RT.	13"		206+89	52' RT.		17", 19"
206+23	44' RT.		17"	206+98	59' LT.	10"	
206+35	92' LT.		35"	207+03	109' LT.	10", 13", 15"	16", 16"
206+39	99' LT.		32"			15", 15", 15"	
206+41	37' RT.		24"			9", 10", 6"	
206+41	43' RT.		23"			12", 11", 15"	
206+49	99' LT.	10", 11"		207+14	47' LT.		20"
206+49	37' RT.		18"	207+34	57' LT.	11", 12", 10"	17"
206+51	109' LT.	10", 12"					
206+54	91' LT.	11"	15"		TOTAL	584	580
206+56	101' LT.		34"				
206+57	82' LT.		21"				
206+59	47' LT.	11"					
206+59	49' LT.	13"					
206+59	56' LT.	9", 12"					
206+64	97' LT.		34"				



SCALE: HORZ. 1" = 10'
VERT. 1" = 5'

FINAL SURVEY	BY	DATE
NOTE BOOK		
NO.		

ORIGINAL SURVEY	BY	DATE
NOTE BOOK		
NO.		

GENERAL NOTES

Reinforcement bars designated on the plans as 20 x 2 - #6 shall be interpreted as 20 lines of bars with 2 bars per line of #6 size bars.

Reinforcement bars in pier caps shall be spaced to miss anchor bolt locations.

The bearing seat steps on pier and abutment elements shall be poured monolithically with caps.

All concrete edges shall have a 3/4" chamfer unless otherwise shown on the plans.

Reinforcement bars indicated with \otimes on Bills of Materials shall conform to AASHTO M 31 (ASTM A-615) Grade 60 steel.

See Special Provisions concerning boring data.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch. Adjustment shall be made by grinding the surface.

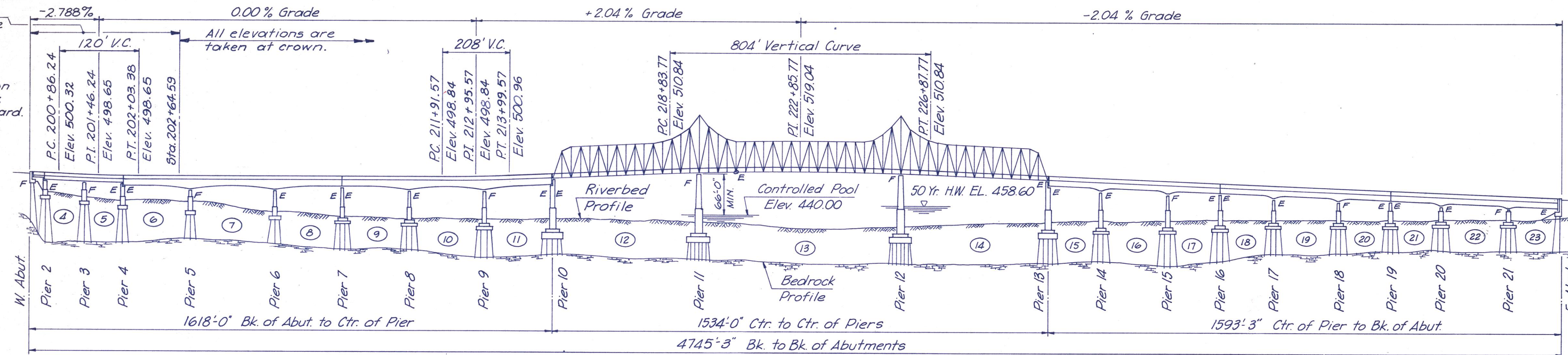
It shall be the responsibility of the Contractor to verify all dimensions and conditions existing in the field prior to construction and ordering of materials.

Expansion Bolts 7/8" ϕ shall be self drilling type with hooked end and embedded in new concrete of minimum depth 1'-4".

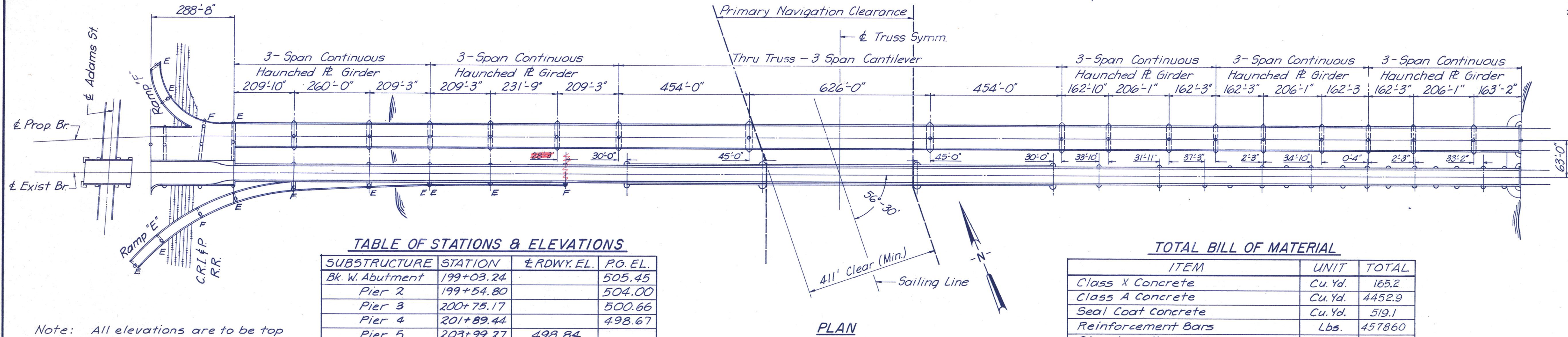
In order to avoid undermining or otherwise damaging the existing piers the Contractor shall take extreme caution in excavating for Piers 6E, 7E, 8E & 9E. No excavation shall be made below the seal coat elevations shown on the plans.

Profile Grade Elevations are taken @ 1/2" edge of median.

Note: Station Equation 201+67.45 Back = 201+64.59 Forward.



ELEVATION



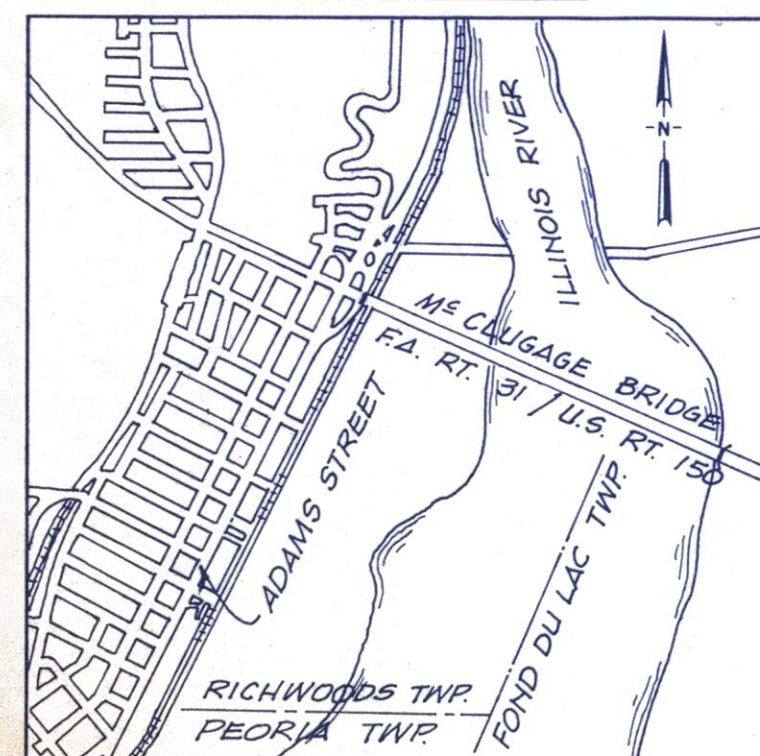
PLAN

TABLE OF STATIONS & ELEVATIONS

SUBSTRUCTURE	STATION	RDWK. EL.	P.G. EL.
Bk. W. Abutment	199+03.24		505.45
Pier 2	199+54.80		504.00
Pier 3	200+75.17		500.66
Pier 4	201+89.44		498.67
Pier 5	203+99.27	498.84	
Pier 6	206+59.27	498.84	
Pier 7	208+68.52	498.84	
Pier 8	210+77.77	498.84	
Pier 9	213+09.52	499.52	
Pier 10	215+18.77	503.39	
Pier 11	219+72.77	512.45	
Pier 12	225+98.77	512.45	
Pier 13	230+52.77	503.39	
Pier 14	232+15.60	500.07	
Pier 15	234+21.69	495.87	
Pier 16	235+83.94	492.56	
Pier 17	237+46.19	489.25	
Pier 18	239+52.27	485.04	
Pier 19	241+14.52	481.73	
Pier 20	242+76.77	478.42	
Pier 21	244+82.85	474.22	
Bk. E. Abutment	246+46.02	470.89	
Bk. S. Abutment	8+58.5	499.59	
Pier 2E	9+93	502.31	
Pier 3E	11+60	501.22	
Pier 4E	12+92.875	498.37	
Pier 5E	14+96.68	497.67	
Pier 6E	17+56.74	498.41	
Pier 7E	19+66.04	498.48	
Pier 8E	21+75.33	498.55	
Pier 9E	24+35.39	498.64	
Bk. N. Abutment	9+65.54	495.71	
Pier 2F	8+55.80	499.81	

Note: All elevations are to be top of Class I. Station equation at Sta. 201+67.45 Back = Sta. 201+64.59 Forward at W.B. Lane.

LOCATION MAP



WATERWAY INFORMATION

Discharge (50 Yr. H.W. Frequency) 77,000 c.f.s.
Opening Provided Below Elev. 458.6 98,300 Sq.Ft.

DESIGN STRESSES

$f_c = 1400$ p.s.i.
 $f_s = 20,000$ p.s.i. Gr. 40 - 24,000 p.s.i. Gr. 60 (Reinf. Bars)
 $V_c = 56$ p.s.i.
 $n = 10$
Loading H5 20-44
Design Specs. (1973) (1974 Interim Specs.) AASHTO

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Class X Concrete	Cu. Yd.	165.2
Class A Concrete	Cu. Yd.	4452.9
Seal Coat Concrete	Cu. Yd.	519.1
Reinforcement Bars	Lbs.	457860
Structure Excavation	Cu. Yd.	2391
Cofferdam Excavation	Cu. Yd.	2046
Earth Excavation	Cu. Yd.	
Concrete Piles 12" Dia.	Lin. Ft.	10213
Test Pile 12" Concrete	Each	11
Steel Piles HP 10 x 42	Lin. Ft.	2538
Steel Piles HP 10 x 57	Lin. Ft.	1568
Steel Piles HP 12 x 53	Lin. Ft.	8047
Steel Piles HP 14 x 73	Lin. Ft.	905
Test Pile - Steel HP 10 x 42	Each	2
Test Pile - Steel HP 10 x 57	Each	One
Test Pile - Steel HP 12 x 53	Each	4
Test Pile - Steel HP 14 x 73	Each	2
Steel Sheet Piling	Sq. Ft.	4017
Temporary Steel Sheet Piling	Sq. Ft.	1128
Cofferdam Pier 4	Each	One
Cofferdam Pier 6	Each	One
Cofferdam Pier 7	Each	One
Cofferdam Pier 8	Each	One
Cofferdam Pier 9	Each	One
Cofferdam Pier 6E	Each	One
Cofferdam Pier 7E	Each	One
Cofferdam Pier 8E	Each	One
Cofferdam Pier 9E	Each	One
Concrete Removal	Cu. Yd.	9.6
Removal of Existing Superstructure	Each	One
Metal Plate Guard Rail Removal	Lin. Ft.	214
Stl. R. Bm. Guard Rail, Single Rail (Special)	Lin. Ft.	299
Expansion Bolts - 7/8" ϕ	Each	347

GENERAL PLAN & ELEVATION

M^C CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15B-2
PEORIA & TAZEWELL COUNTIES

DESIGNED C.R.N.
CHECKED R.A.H.
DRAWN D.A.N.
CHECKED C.R.N.



FILE NO. 74001
DATE 6-22-76

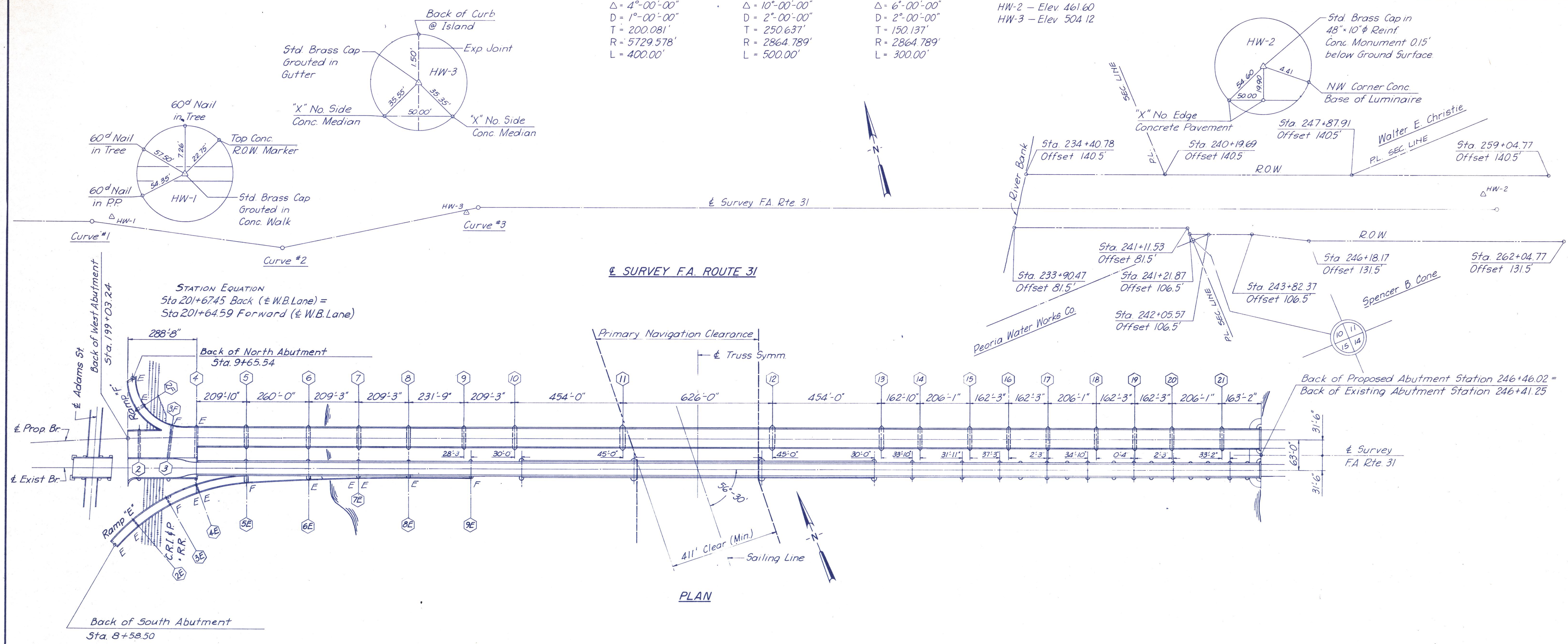
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 31	15B-2	PEORIA AND TAZEWELL	52	12
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	

Curve #1
 PI = 183+00.081
 $\Delta = 4^{\circ}-00'-00''$
 $D = 1^{\circ}-00'-00''$
 $T = 200.081'$
 $R = 5729.578'$
 $L = 400.00'$

Curve #2
 PI = 191+00.637
 $\Delta = 10^{\circ}-00'-00''$
 $D = 2^{\circ}-00'-00''$
 $T = 250.637'$
 $R = 2864.789'$
 $L = 500.00'$

Curve #3
 PI = 199+35.06
 $\Delta = 6^{\circ}-00'-00''$
 $D = 2^{\circ}-00'-00''$
 $T = 150.137'$
 $R = 2864.789'$
 $L = 300.00'$

Bench Mark Data
 HW-1 - Elev 562.11
 HW-2 - Elev 461.60
 HW-3 - Elev 504.12



PLAN

RAMP F
 CURVE DATA
 PI = 8+74.623
 $\Delta = 91^{\circ}-59'-00.68''$
 $D = 27^{\circ}-56'-56.98''$
 $T = 212.223'$
 $R = 205.0'$
 $L = 329.110'$

RAMP E
 CURVE DATA
 PI = 9+3.15
 $\Delta = 53^{\circ}-30'-58.01''$
 $D = 12^{\circ}-00'-00.00''$
 $T = 240.746'$
 $R = 477.465'$
 $L = 445.968'$

RAMP E
 CURVE DATA
 PI = 13+6.99
 $\Delta = 29^{\circ}-08'-50.90''$
 $D = 7^{\circ}-30'-00.0''$
 $T = 198.619'$
 $R = 763.944'$
 $L = 388.633'$

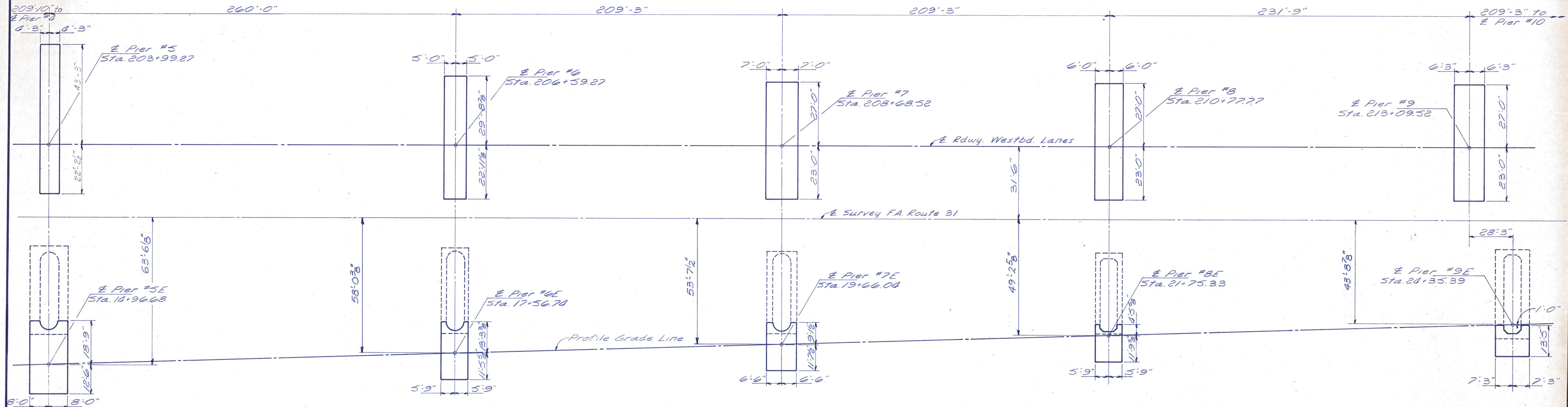
HORIZONTAL CONTROL, BENCH MARKS & R.O.W.

Mc CLUGAGE BRIDGE
 OVER THE ILLINOIS RIVER
 F.A. ROUTE 31 SEC. 15B-2
 PEORIA & TAZEWELL COUNTIES

DESIGNED CRN	 HANSON ENGINEERS INCORPORATED SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS	FILE NO. 74001
CHECKED DLB		DATE 6-22-76
DRAWN RAH		
CHECKED CRN		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 31/15B-2	15B-2	Peoria & Tazewell	52	14
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



FOOTING PLAN - PIERS 5,5E,6,6E,7,7E,8,8E,9,9E

FOOTING LAYOUT

M^cCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15B-2
PEORIA & TAZEWELL COUNTIES

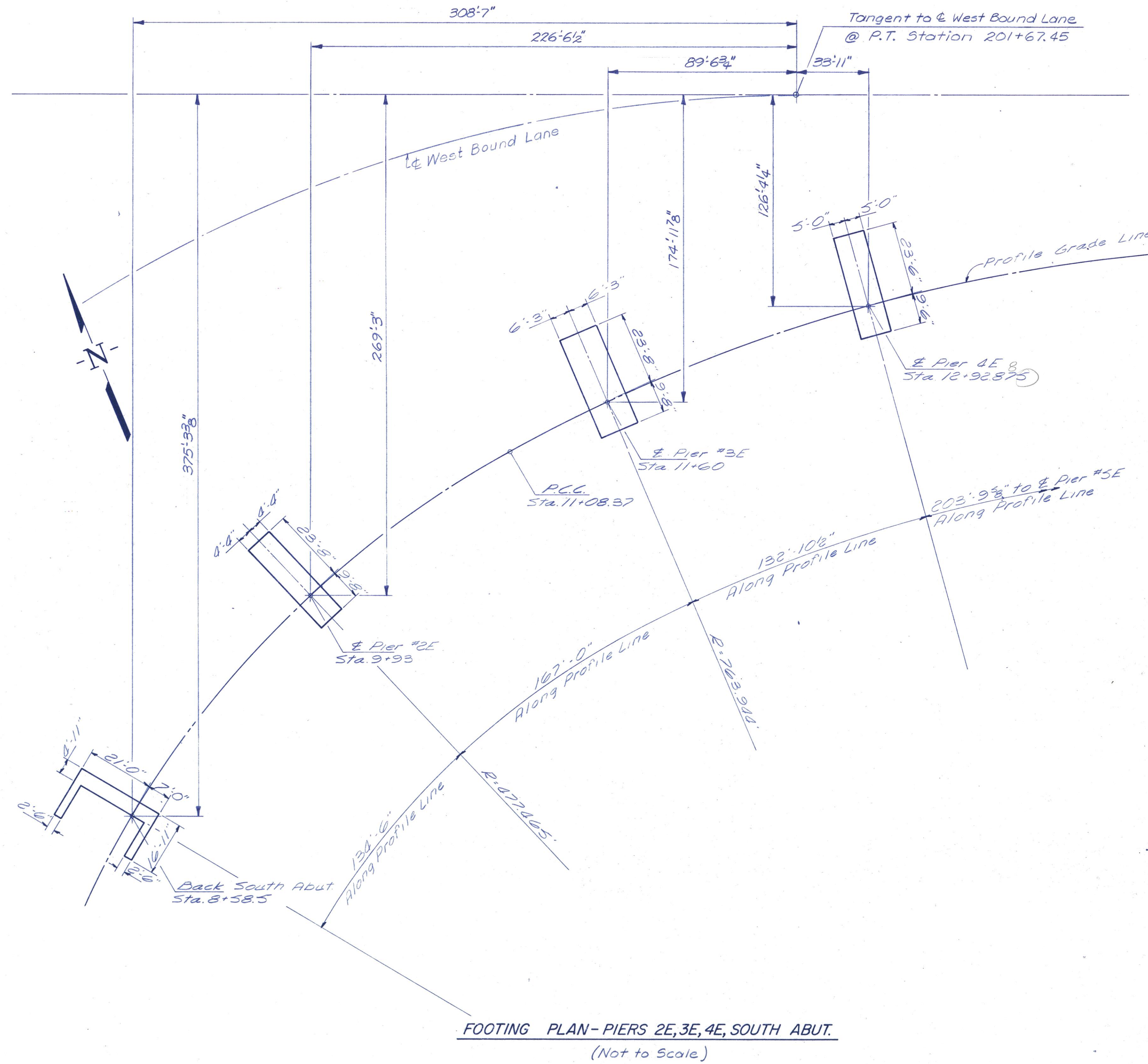
DESIGNED CRN
CHECKED WOL
DRAWN CRL
CHECKED CRN




FILE NO. 74001
DATE 6-22-76
SPRINGFIELD, ILLINOIS
PEORIA, ILLINOIS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

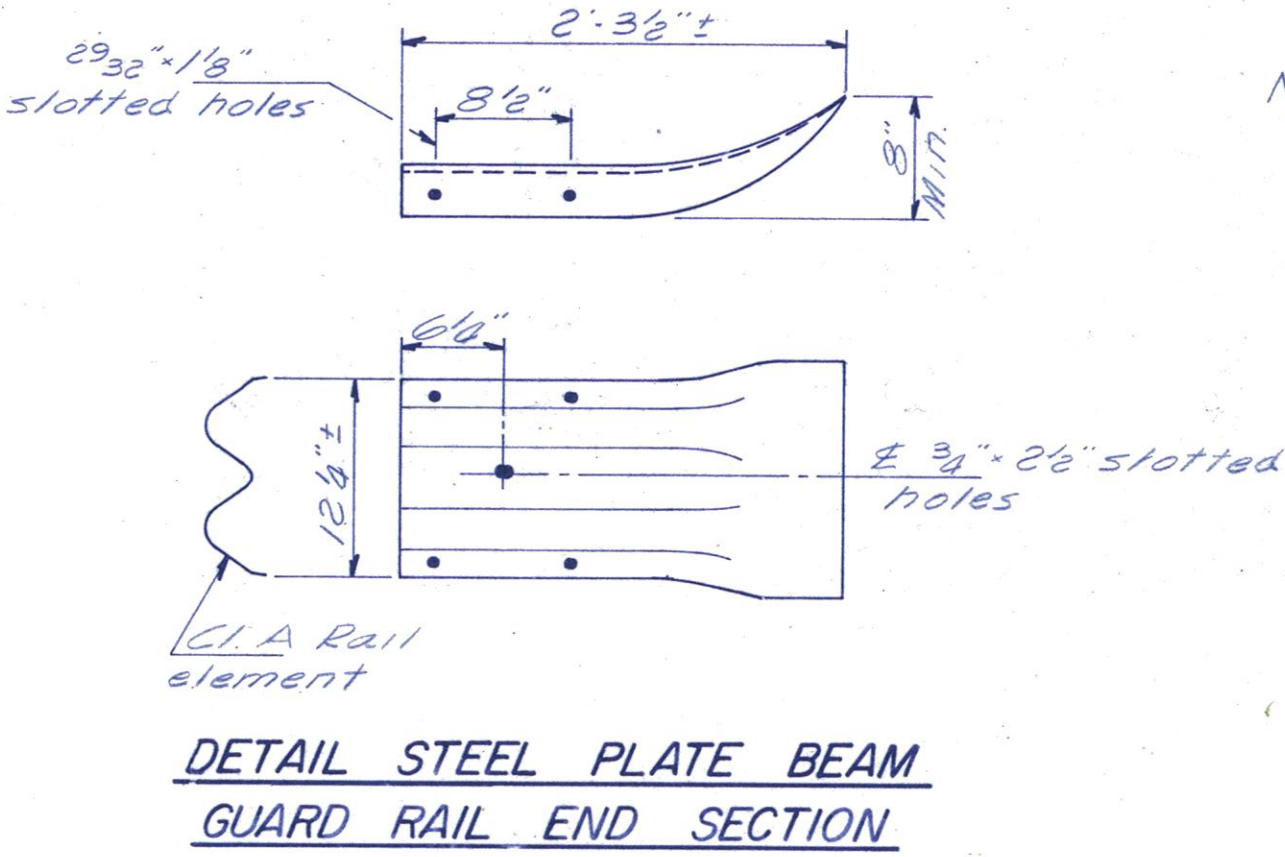
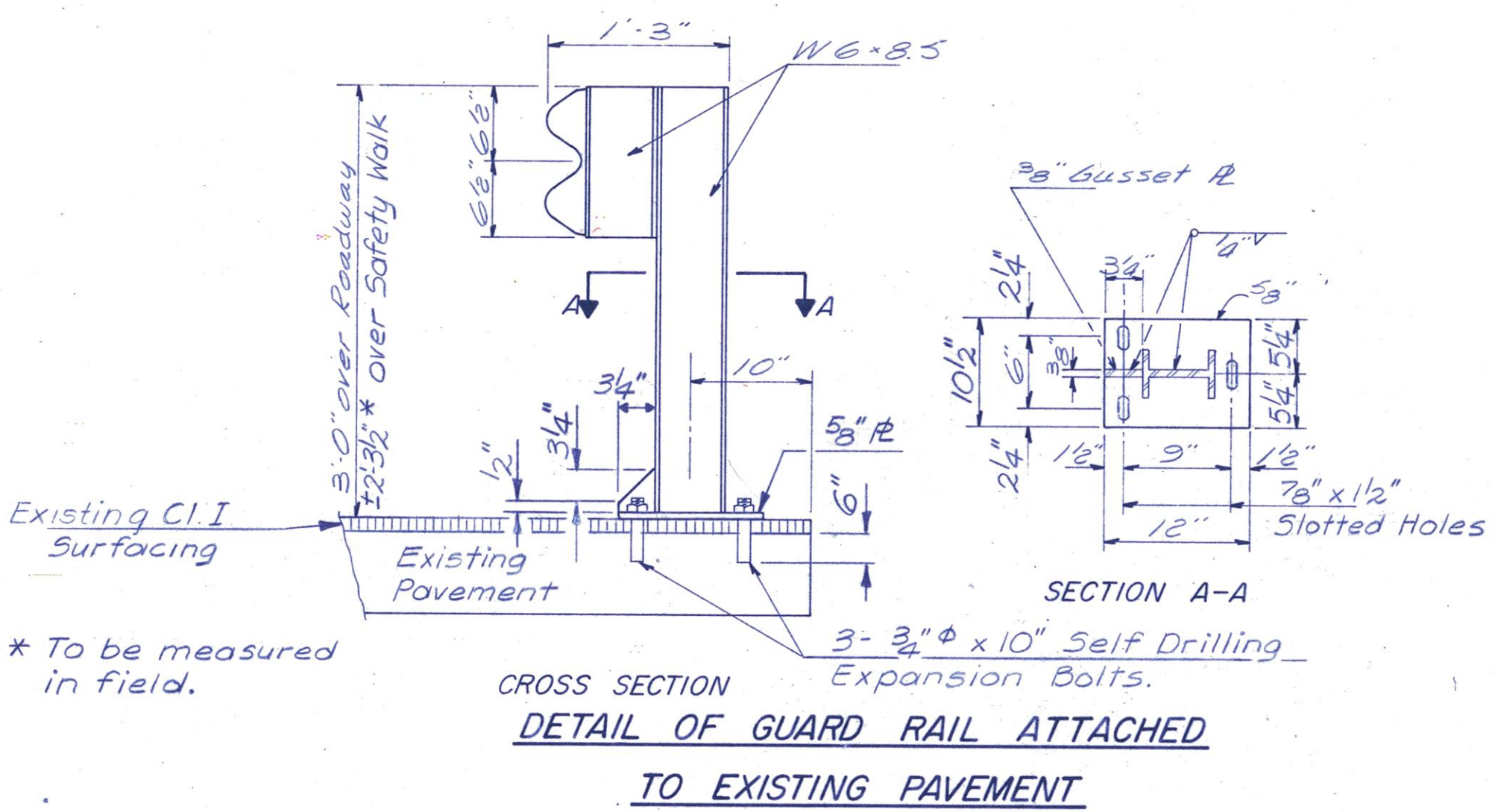
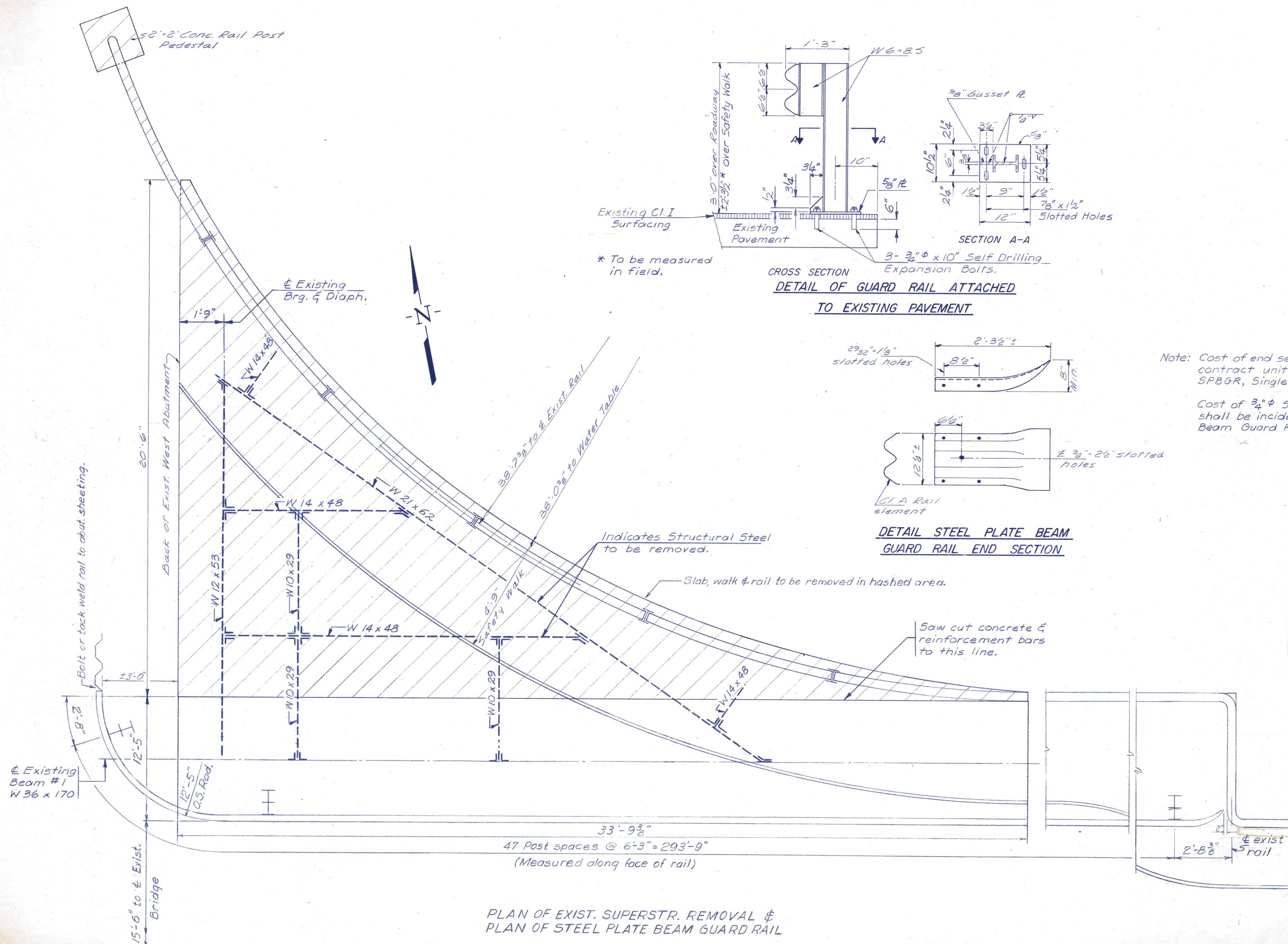
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 31	15B-2	Peoria & Tazewell	52	15
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



FOOTING LAYOUT	
<u>Mc CLUGAGE BRIDGE</u> <u>OVER THE ILLINOIS RIVER</u> <u>F.A. ROUTE 31 SEC. 15B-2</u> <u>PEORIA & TAZEWELL COUNTIES</u>	
DESIGNED S.C.Q. CHECKED CRN DRAWN CRC CHECKED CRN	FILE NO. 74001 DATE 6-22-76  HANSON ENGINEERS INCORPORATED SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 31	15B-2	Peoria & Tazewell	52	16
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



Note: Cost of end section incidental to contract unit price per lin. ft. of SPBGR, Single Rail (Special)-1 req'd.

Cost of 3/4" Self Drilling Expansion Bolts shall be incidental to cost of Steel Plate Beam Guard Rail. 144 req'd.

BILL OF MATERIAL

Item	Unit	Total
Removal Exist Superstructure	Each	One
Steel Plate Beam Guard Rail - Single Rail (Special)	Lin. Ft.	299

STEEL PLATE BEAM GUARD RAIL & REMOVAL LIMITS OF EXIST. SUPERSTRUCTURE

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15B-2
PEORIA & TAZEVELL COUNTIES

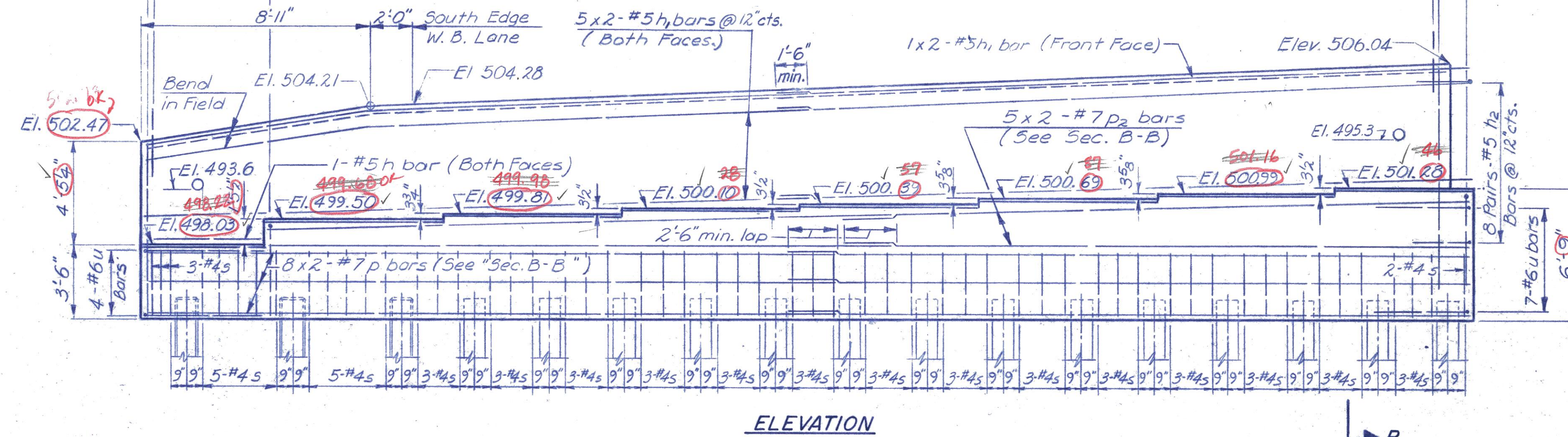
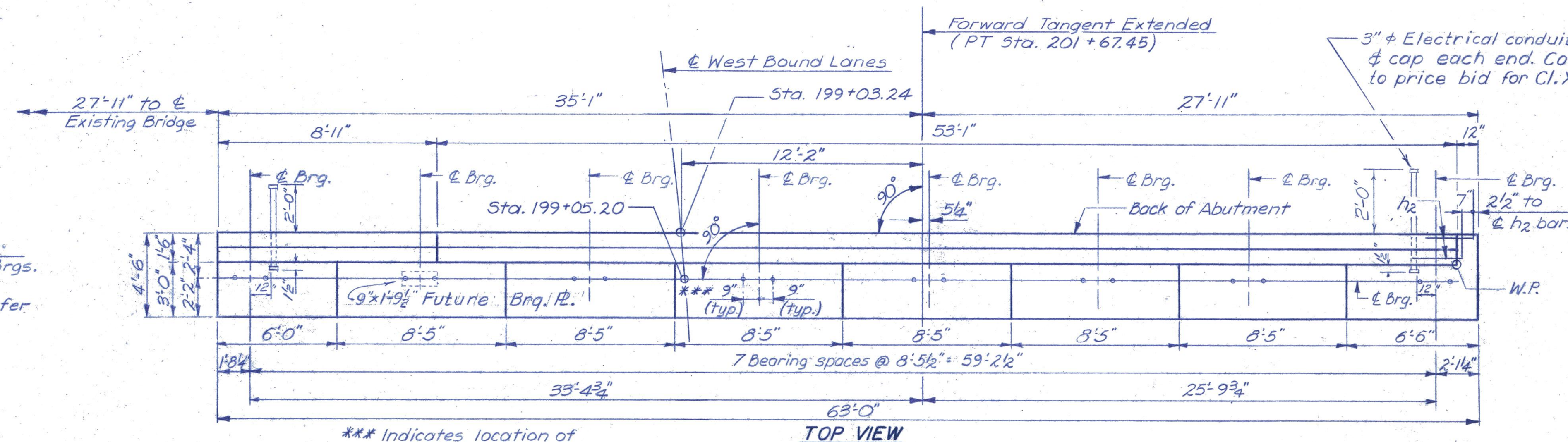
DESIGNED CRN
CHECKED WDL
DRAWN CRN
CHECKED CRN



FILE NO. 74001
DATE 6-22-76

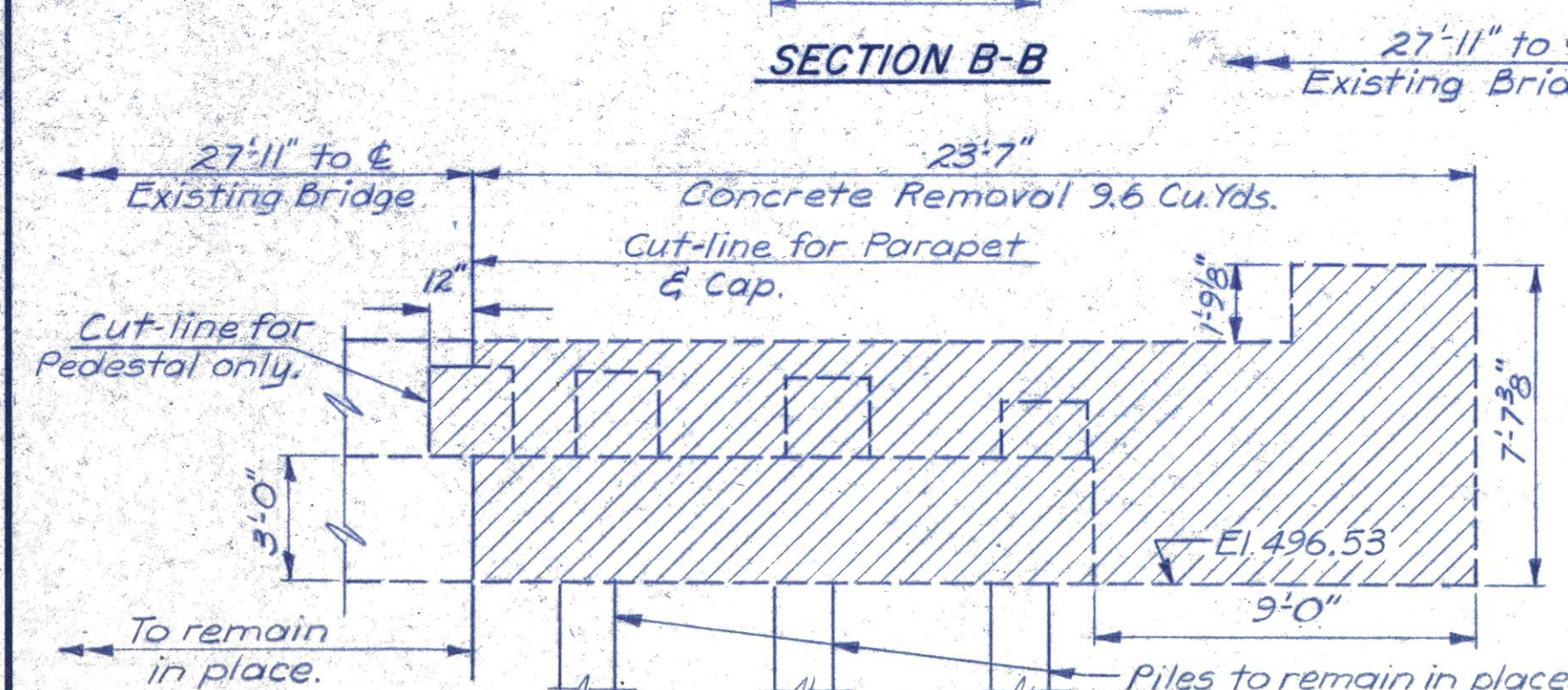
DIVISION OF HIGHWAYS
62-#4 v bars @ 12" cts. (Front & Back of Wall.)
62-#5 V₁ bars @ 12" cts. (Back Wall)
57-#4 s₁ bars @ 12" cts. (See Sec. B-B)

Diagram showing the reinforcement layout for a rectangular slab. The slab has a width of 4'-6" and a depth of 4'-1". The reinforcement bars are labeled BAR u (top) and BAR s (bottom). The spacing between the bars is 0'-0". The diagram also shows a detail of the bar lap, indicating a lap length of 3'-0" and a lap width of 4'-2".

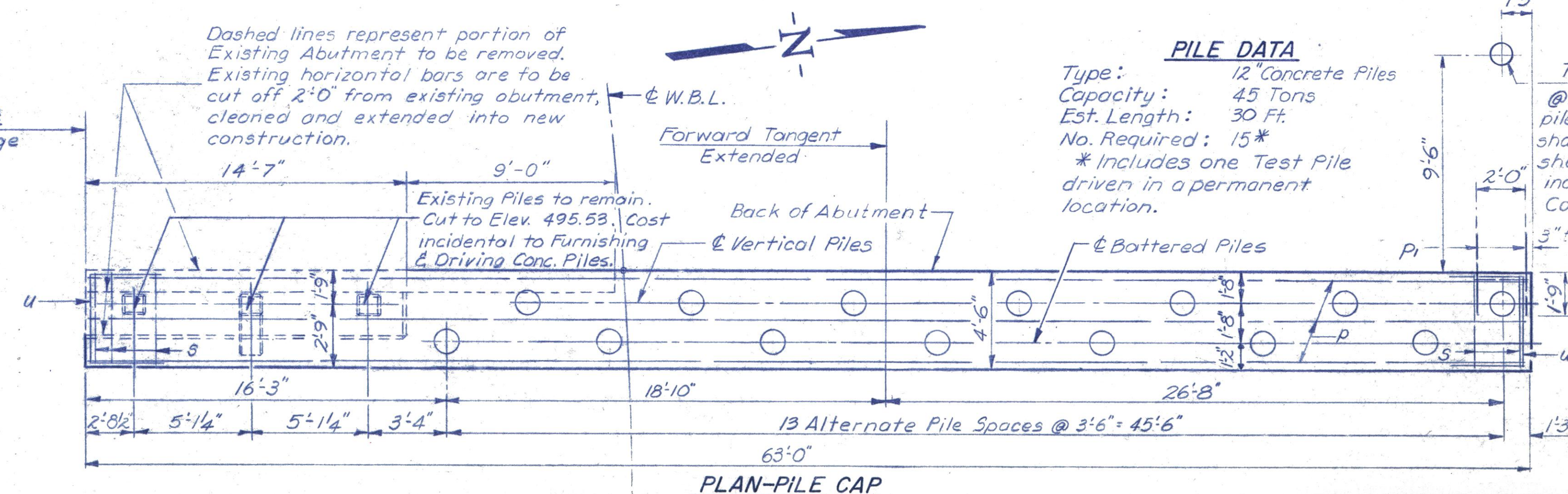
ELEVATION

TOP VIEW

Dashed lines represent portion of Existing Abutment to be removed. Existing horizontal bars are to be cut off 2'-0" from existing abutment, cleaned and extended into new construction.



CONCRETE REMOVAL OF EXISTING
WEST ABUTMENT PARAPET, CAP & WING



PLAN-PILE CAP

PILE DATA

Type: 12" Concrete Piles
Capacity: 45 Tons
Est. Length: 30 Ft.
No. Required: 15*

* Includes one Test Pile
driven in a permanent
location.

Top of pile
@ E1. 495.53 After
pile is in place, Contractor
shall backfill to existing
shoulder elevation. Cost
incidental to Fur. & Driving
Conc. Piles.

WEST ABUTMENT

MC CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15 B-2
PEORIA & TAZEWELL COUNTIES



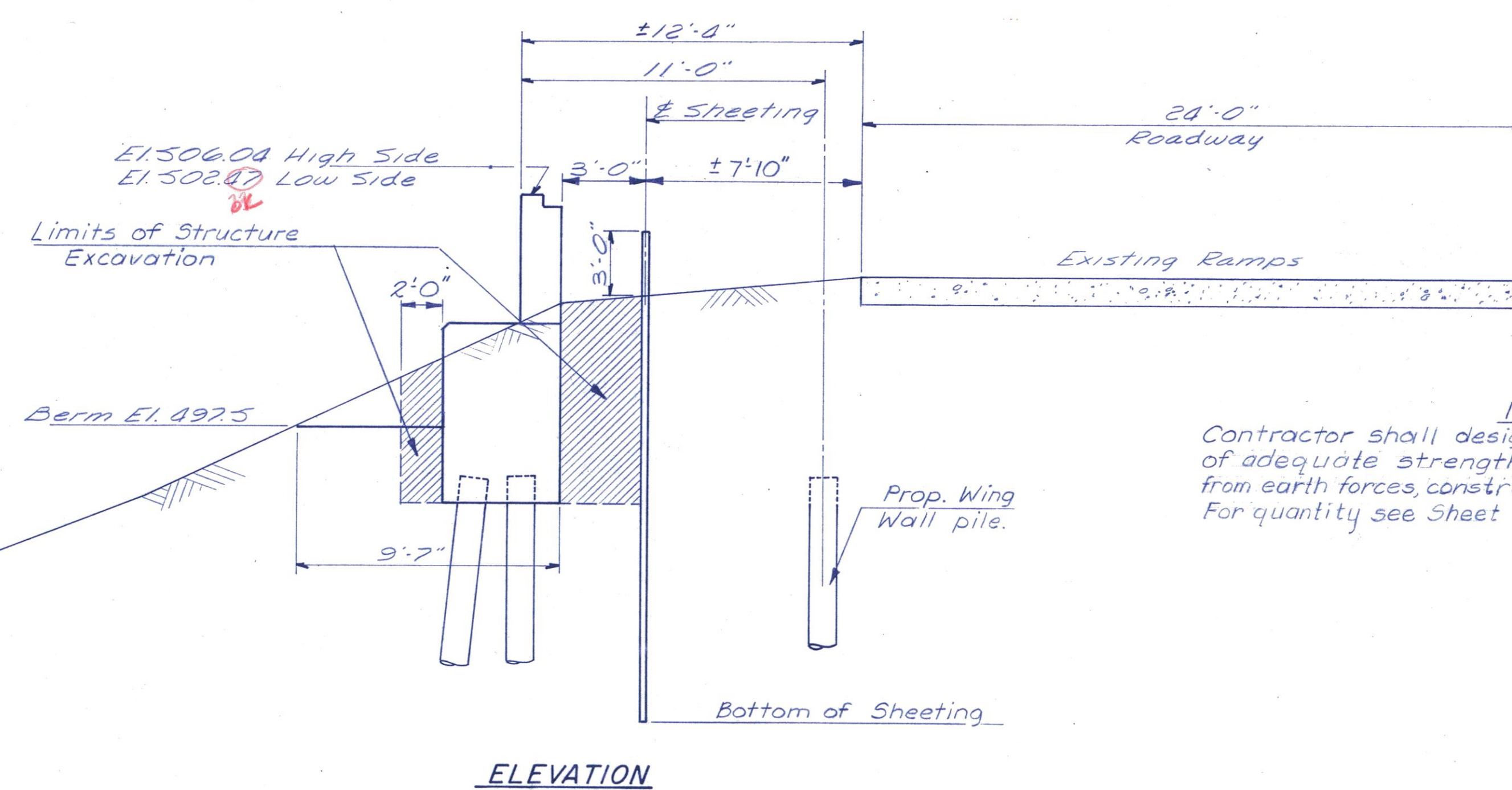
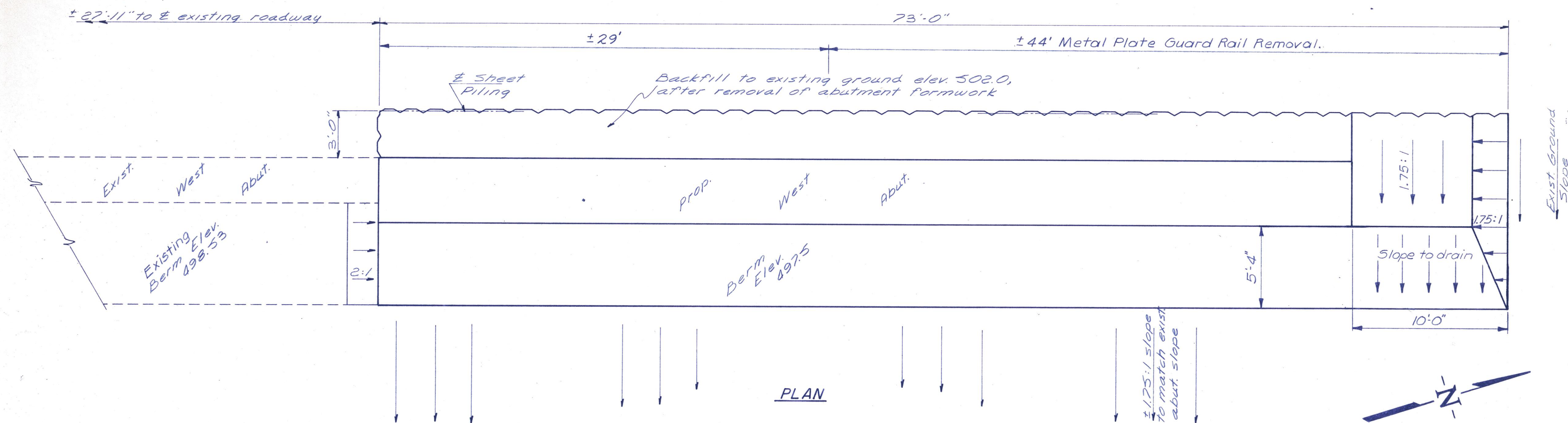
**HANSON
ENGINEERS
INCORPORATED**

74001

DATE
6-22-76

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA-31/15B-2		Peoria & Tazewell	52	18
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



SHEET PILING & EMBANKMENT-WEST ABUT.

M^cCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15B-2
PEORIA & TAZEVELL COUNTIES

DESIGNED S.C.O.
CHECKED C.R.N.
DRAWN C.R.C.
CHECKED W.D.L.

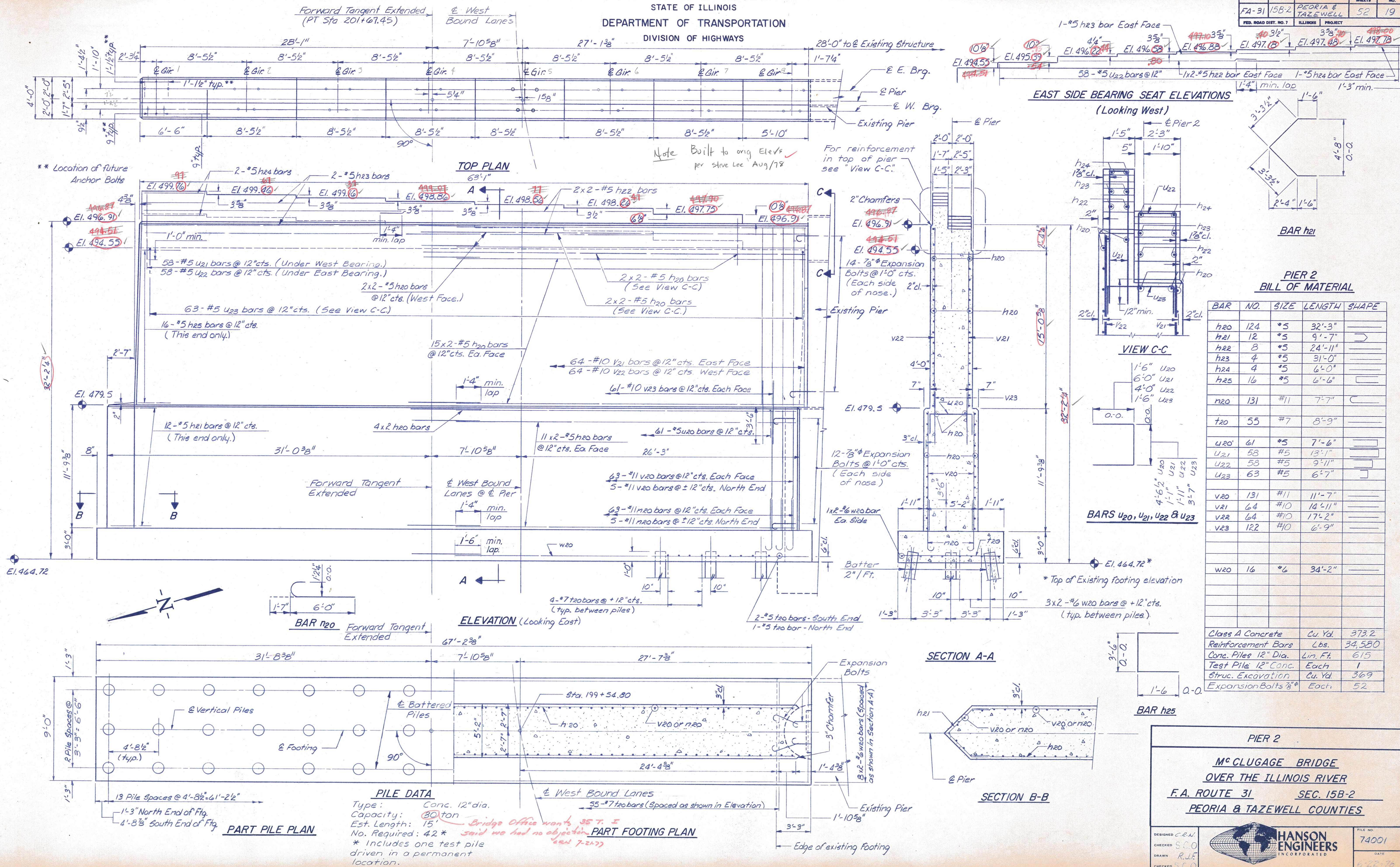


FILE NO. 74-001
DATE 6-22-76
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

Red changes due to removal C.I., shallower slab, & crossover - by H&E 7/12/78

1-29-79 District advised us this pier was built to original elevations. Requires no change in shim plates.

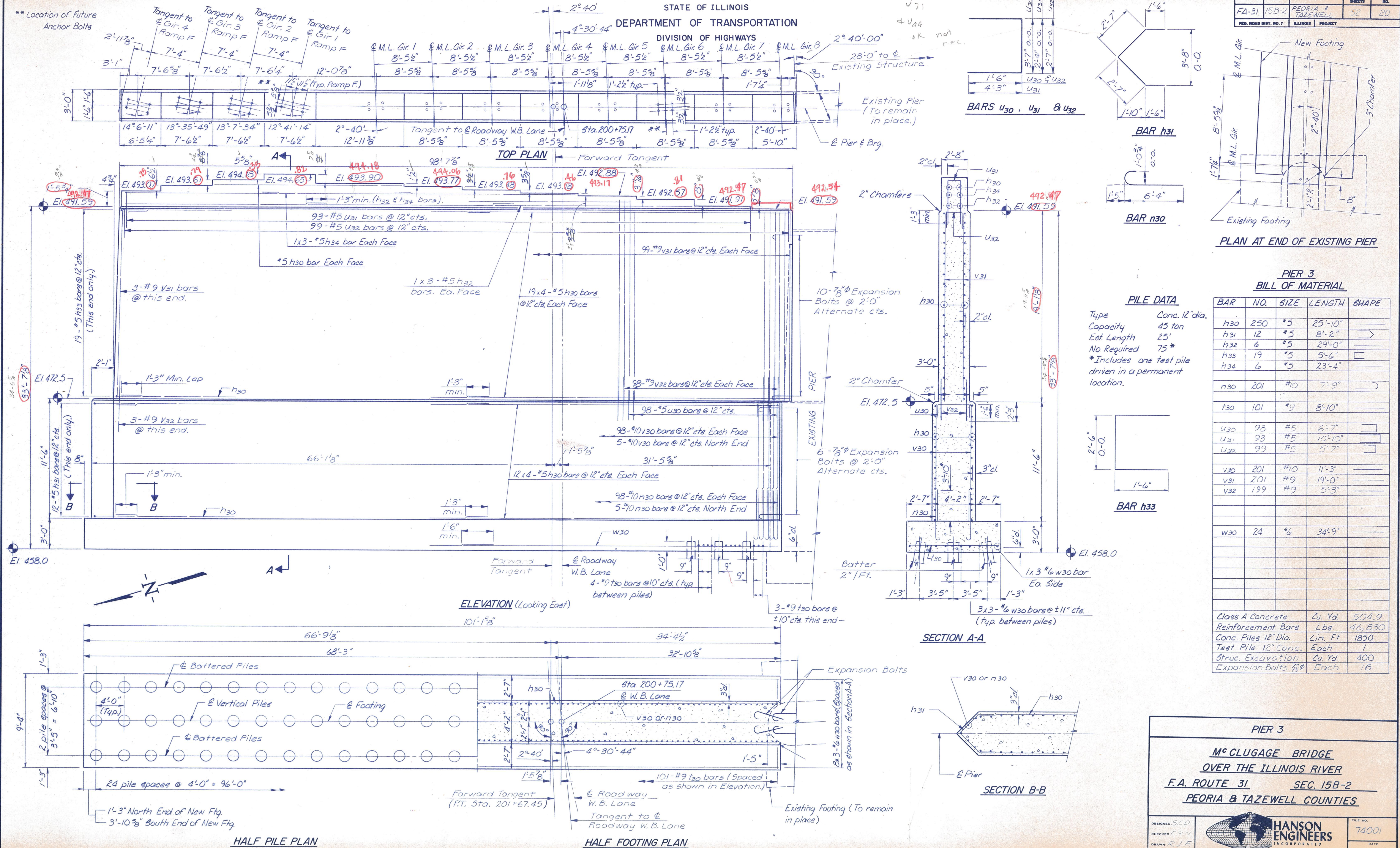
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA-31	15B-2	PEORIA & TAZEWELL	52	19
ILLINOIS PROJECT				



Red changes due to removal of CI I, shallower slab & crossover - by H&I 7-12-78

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA-31	15B-2	PEORIA & TAZEWELL	52	20
FED. ROAD DIST. NO. 7		ILL/NOIS	PROJECT	

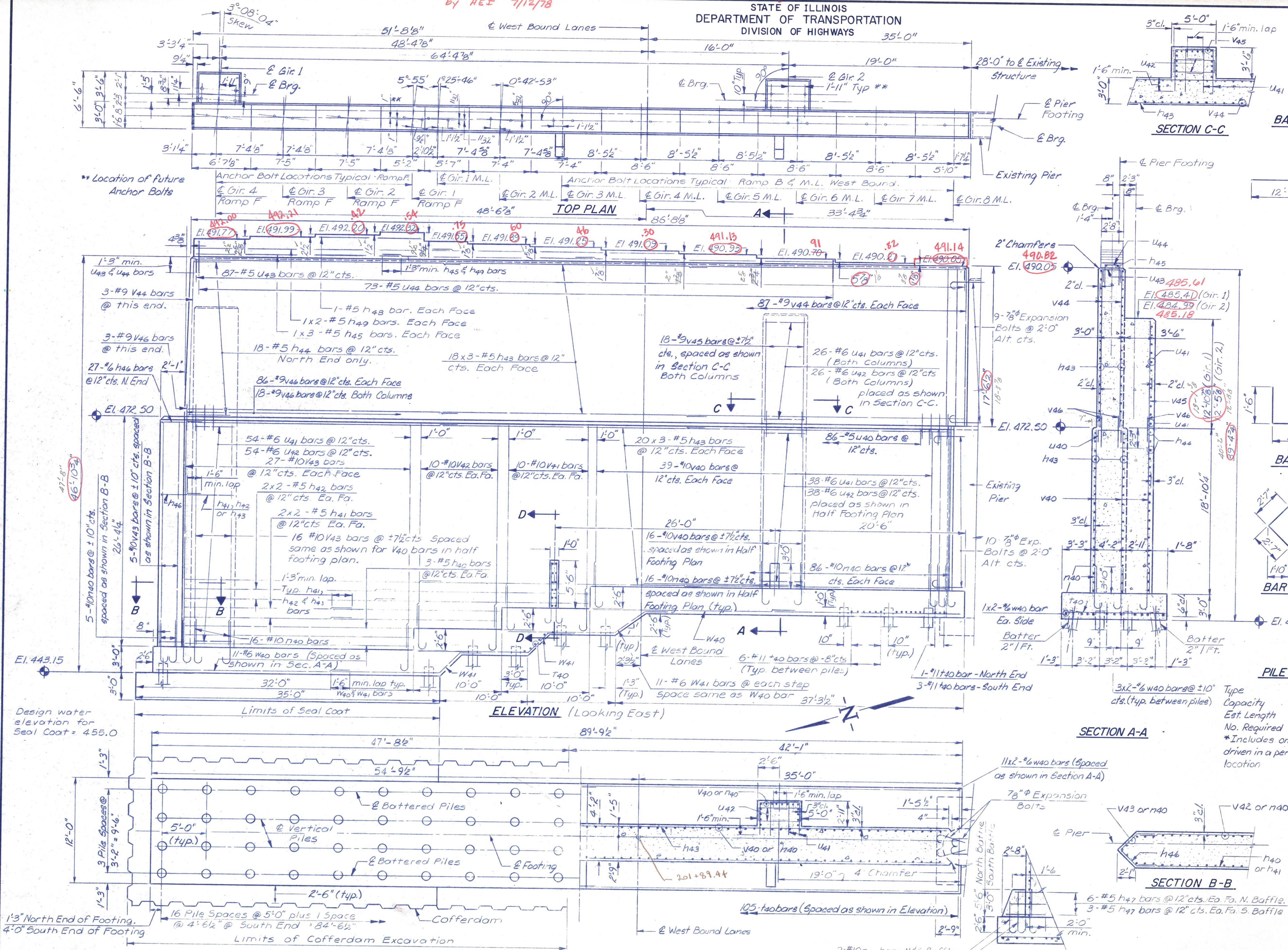
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



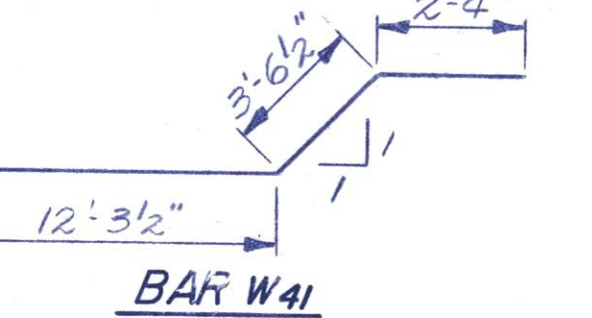
Red-changes due to removal of CL I & resulting shallower slab
by HEE 7/12/78

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA-31	15B-2	PEORIA & TAZEWELL	52	21
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT				



SECTION C-C



BARS n40, n41, n42 & n43

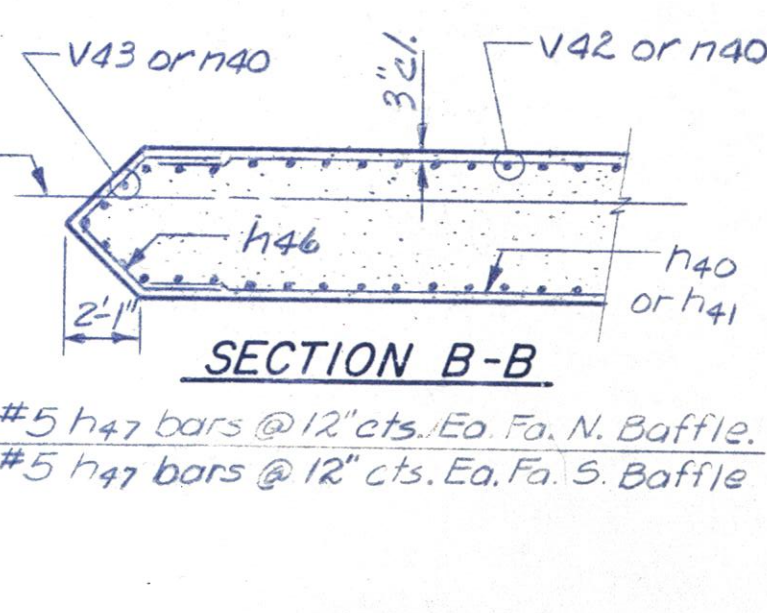
PIER 4
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
n40	6	#5	26'-4"	
n41	8	#5	18'-11"	
n42	8	#5	23'-11"	
n43	228	#5	29'-6"	
n44	18	#5	5'-8"	
n45	6	#5	24'-10"	
n46	27	#6	8'-2"	
n47	18	#5	4'-5"	
n48	2	#5	12'-3"	
n49	4	#5	28'-2"	
n40	209	#10	7'-9"	
n41	4	#10	5'-11"	
n42	2	#10	8'-11"	
n43	2	#10	6'-5"	
n40	106	#11	11'-6"	
u40	86	#5	6'-7"	
u41	144	#6	12'-10"	
u42	144	#6	7'-6"	
u43	87	#5	5'-6"	
u44	73	#5	9'-2"	
v40	94	#10	18'-7"	
v41	20	#10	21'-1"	
v42	20	#10	23'-7"	
v43	75	#10	26'-1"	
v44	177	#9	17'-3"	
v45	36	#9	12'-3"	
v46	211	#9	5'-3"	
w40	33	#6	21'-3"	
w41	33	#6	18'-2"	
Class A Concrete Cu.Yds. 647.1				
Reinforcement Bars Lbs. 65,600				
Seal Coat Concrete Cu.Yds. 66.1				
Seal Piles 12" Dia Lin Ft. 2,485				
Test Pile Conc 12" Dia Each 1				
Struct Excavation Cu.Yds. 202				
Cofferdam Each 1				
Expansion Bolts 3/4" Each 19				
Cofferdam Excav. Cu.Yds. 338				

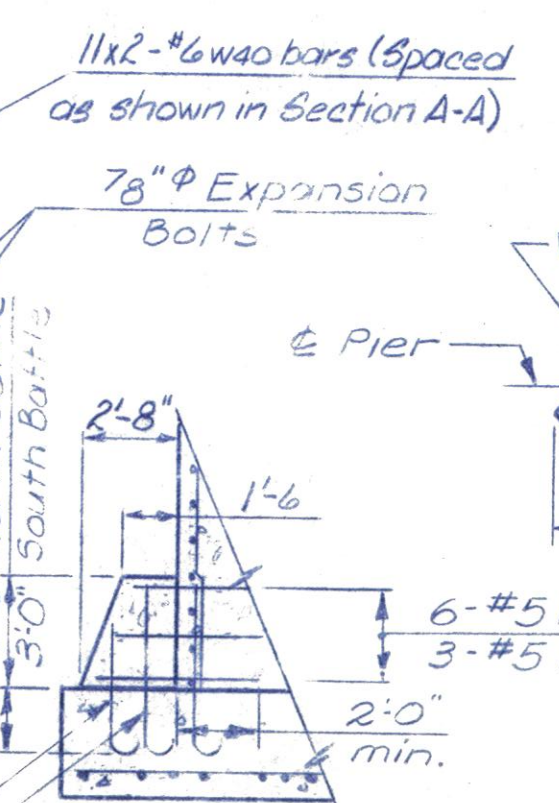
PILE DATA

Type	Conc 12" dia.
Capacity	45 ton
Est. Length	35'
No. Required	72*
*Includes one test pile driven in a permanent location	

SECTION B-B



SECTION D-D



PIER 4
M^c CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15B-2
PEORIA & TAZEWELL COUNTIES

DESIGNED S.C.O.
CHECKED W.E.B.
DRAWN R.J.E.
CHECKED W.E.B.

HANSON ENGINEERS
INCORPORATED
SPRINGFIELD, ILLINOIS
PEORIA, ILLINOIS

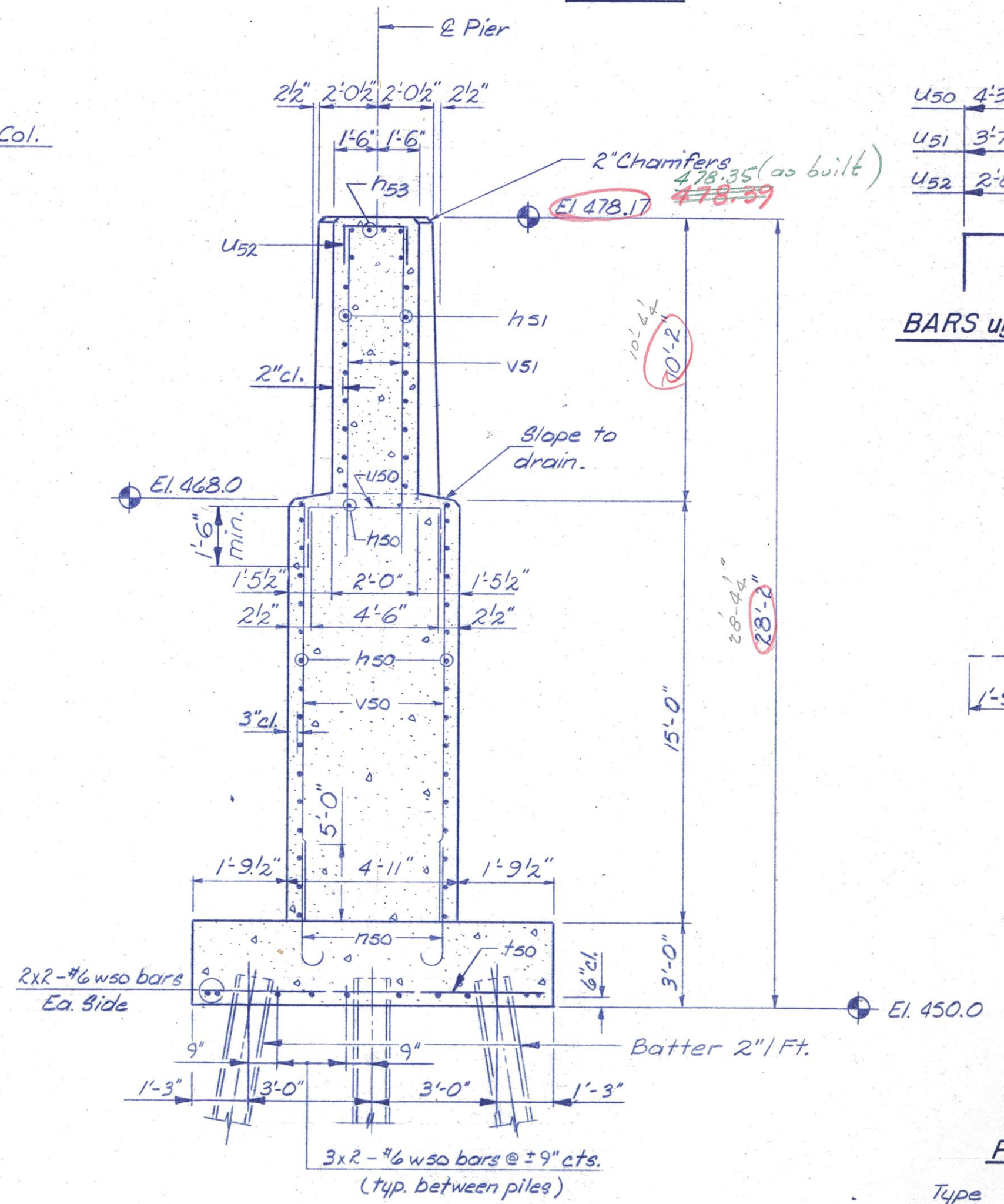
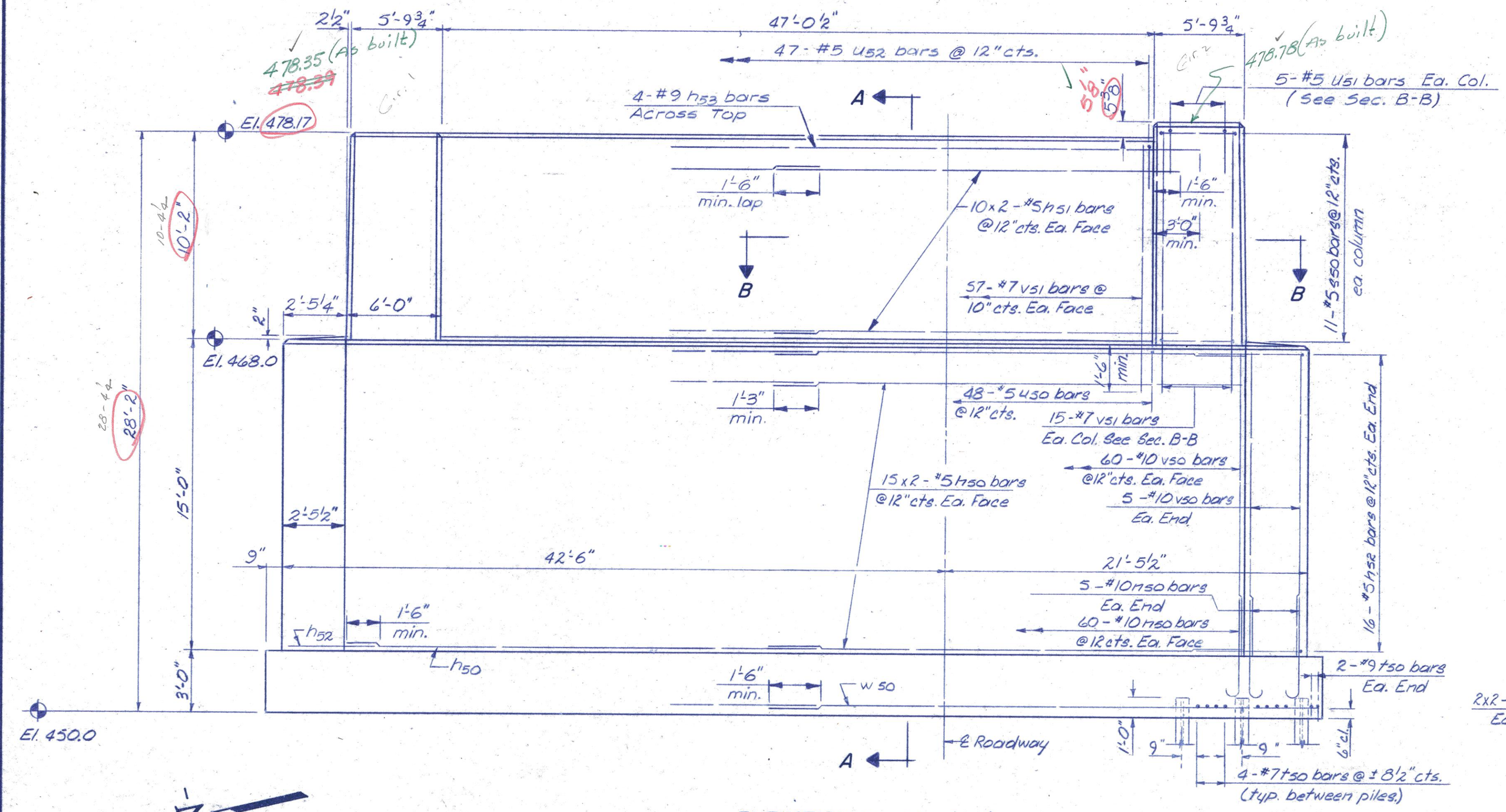
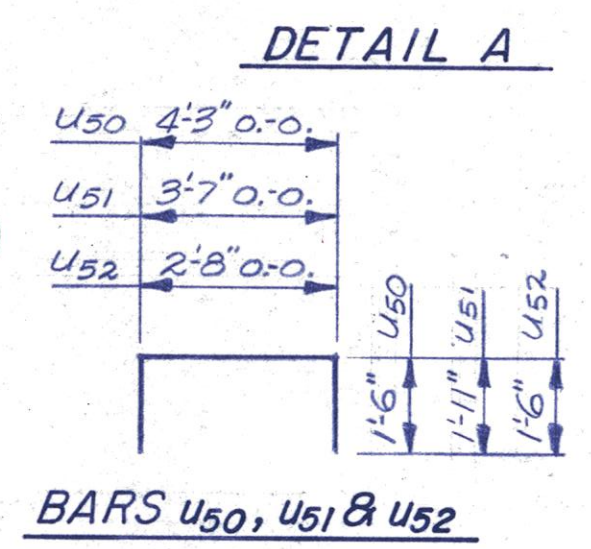
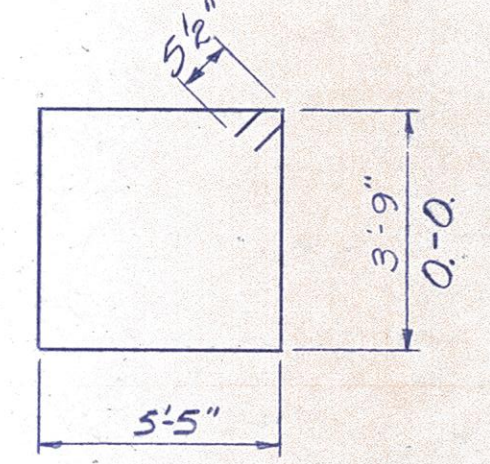
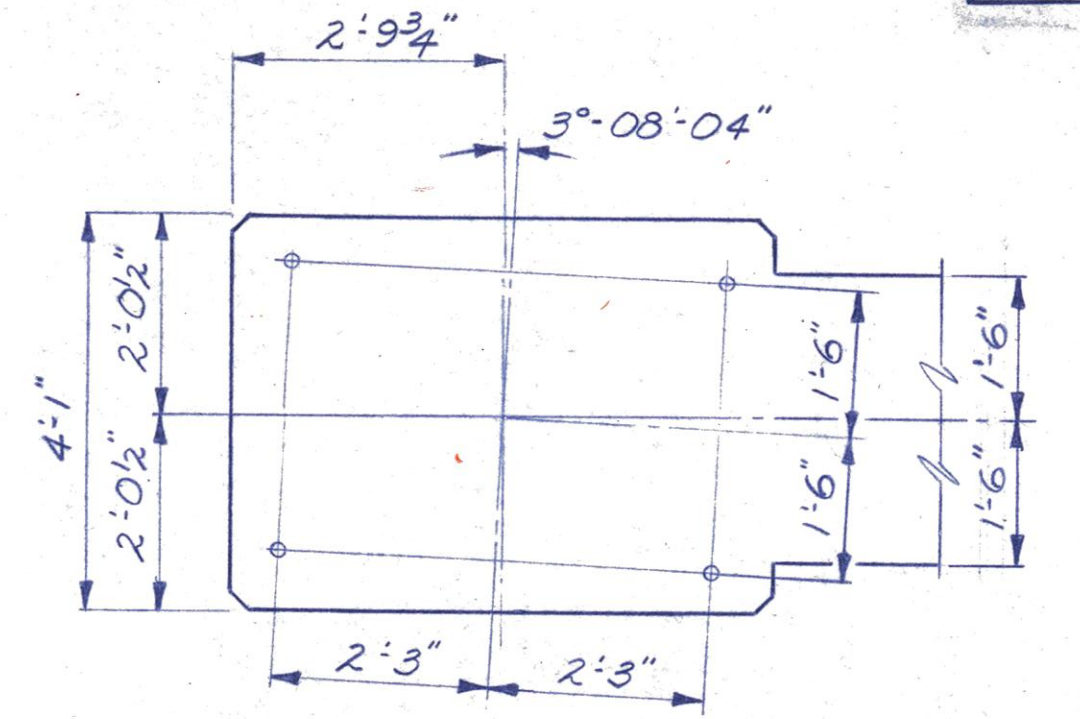
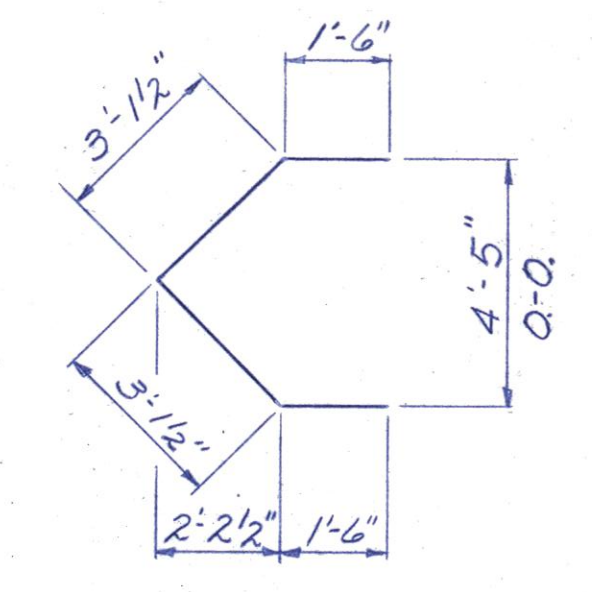
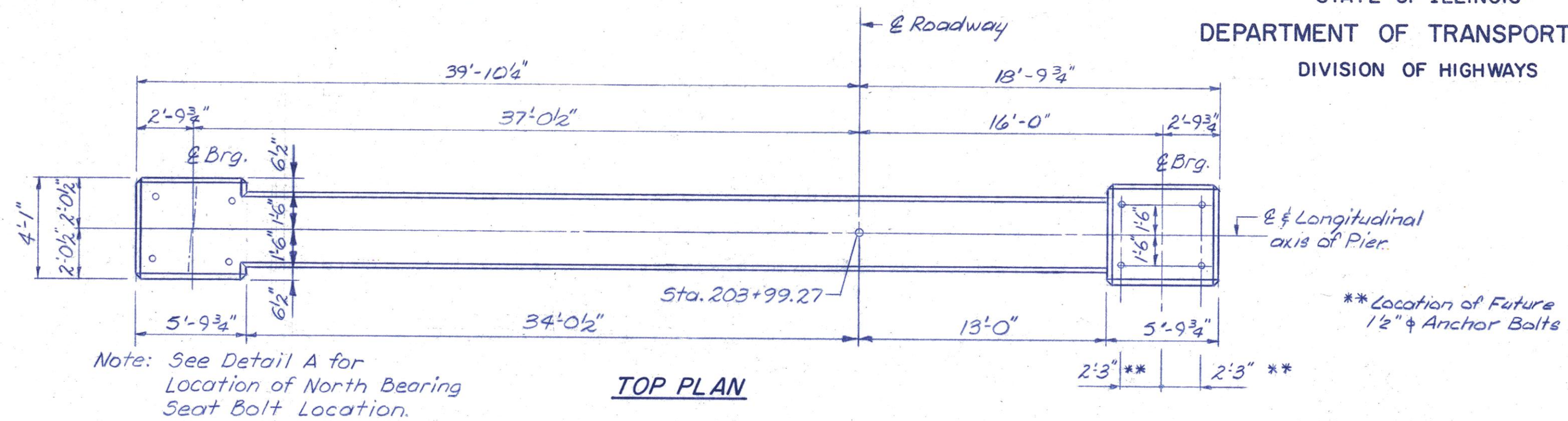
FILE NO. 74001
DATE 6-22-76

Red - changes due to removal of C.I. & resulting shallower slab
by HET 7/12/78

29-79 District advised us that Pier 5 was built 1/2" lower than the elevations we had given them 7-12-78. Increased height of bearing 1/2"

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 31	15B-2	PEORIA & TAZEWELL	52	22
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT		



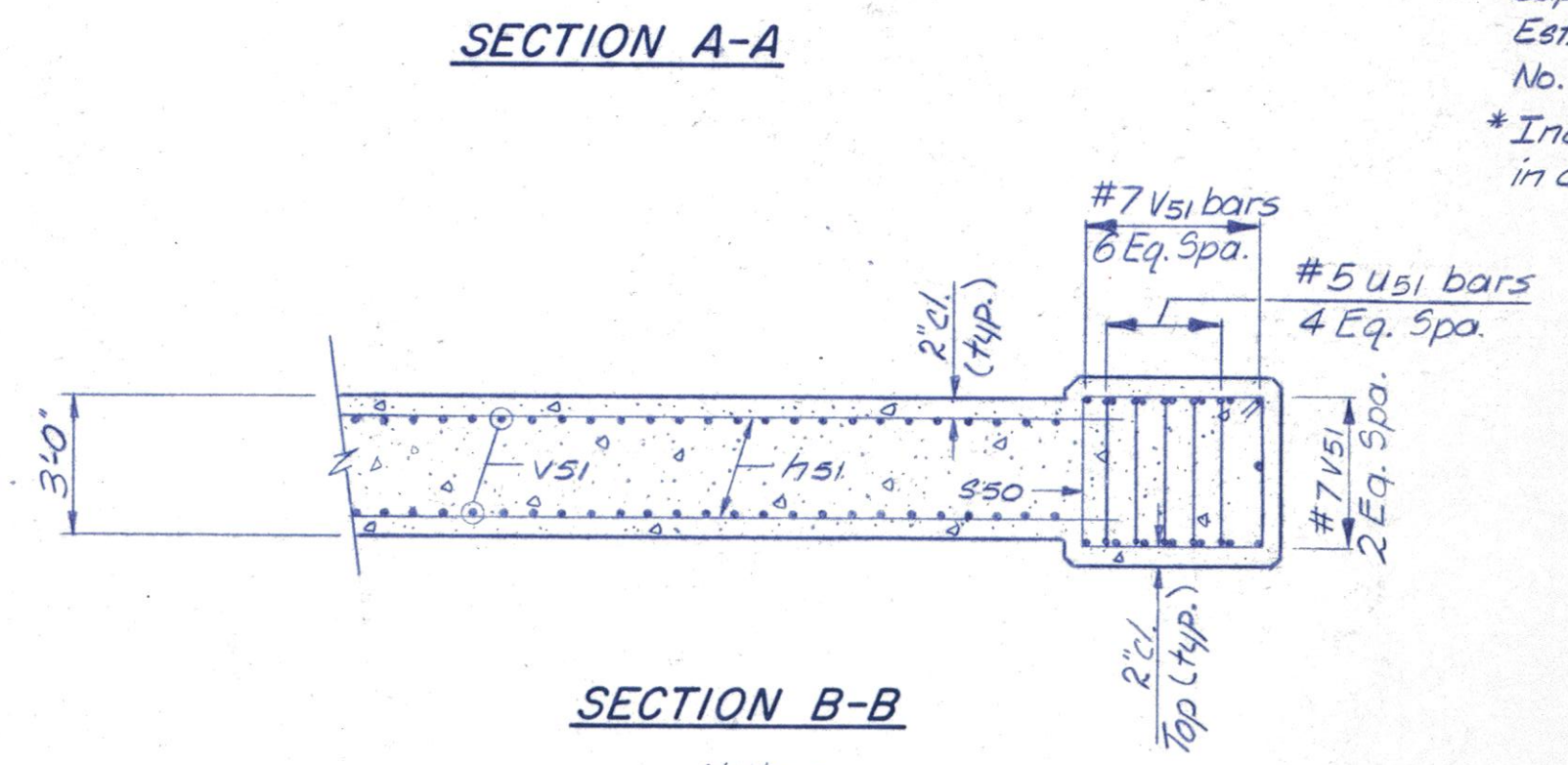
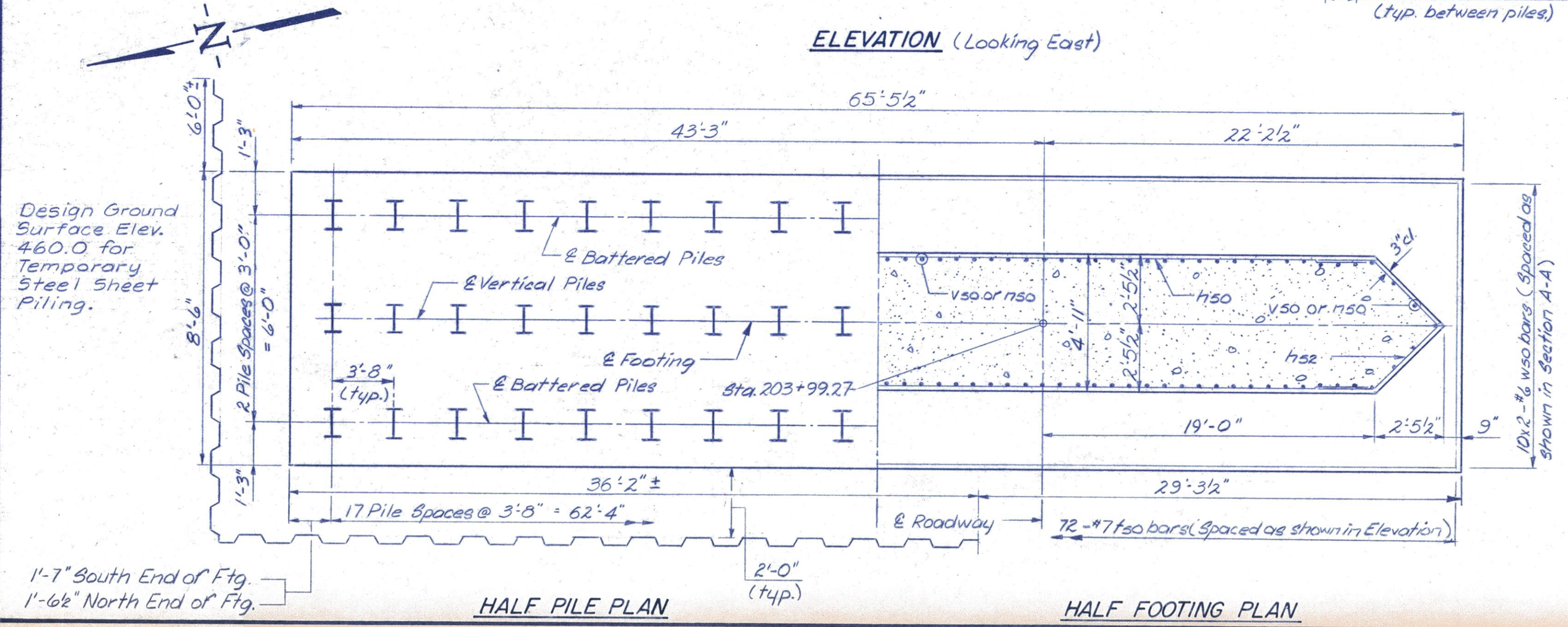
PILE DATA

Type	HP 12 x 53
Capacity	Drive to Refusal
Est. Length	58'
No. Required	54*
* Includes one test pile driven in a permanent location.	

PIER 5
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
h50	68	#5	30'-2"	
h51	40	#5	25'-9"	
h52	32	#5	9'-3"	
h53	4	#9	53'-0"	
n50	130	#10	8'-11"	
s50	22	#5	19'-3"	
t50	72	#7	8'-0"	
u50	48	#5	7'-3"	
u51	10	#5	7'-5"	
u52	47	#5	5'-8"	
v50	130	#10	14'-9"	
v51	144	#7	12'-0"	
w50	20	#6	33'-5"	

Class A Concrete	Cu. Yds.	302.6
Reinforcement Bars	Lbs.	24,360
Steel Piles HP12 x 53	Lin. Ft.	3,074
Test Pile HP12 x 53	Each	1
Struct. Exc.	Cu. Yds.	273
Temporary Steel Sheet Piling	Sq. Ft.	1,120



Note:
Contractor shall design sheet piling to protect infiltration pit from all foreign material present during construction of pier. The sheeting shall be of sufficient strength to protect excavation from construction methods and equipment. See Special Provisions.

PIER 5

M^CCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15B-2
PEORIA & TAZEWELL COUNTIES

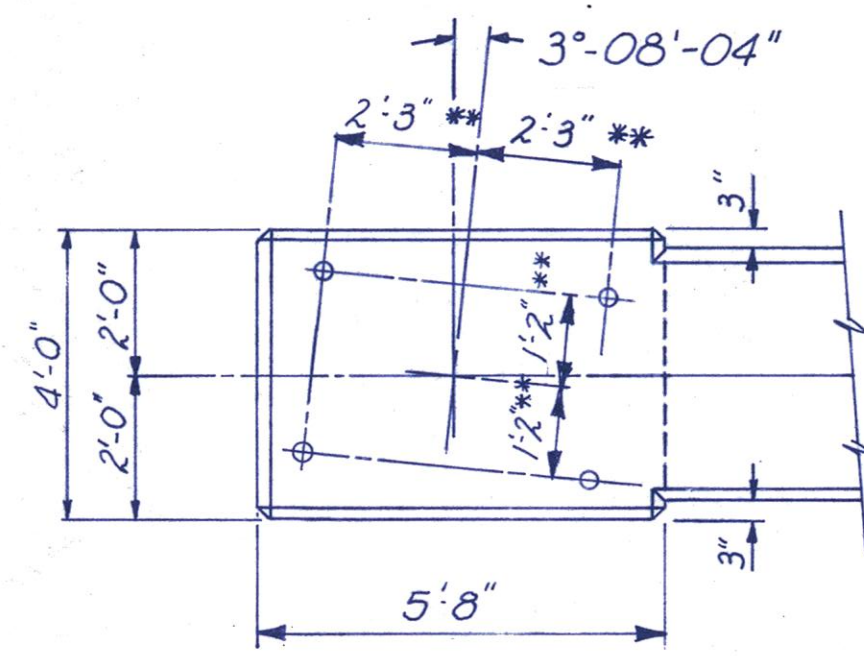
DESIGNED	S.C.D.		FILE NO.
CHECKED	W.E.B.		74001
DRAWN	R.J.F.		DATE
CHECKED	S.C.D.		6-22-76

SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

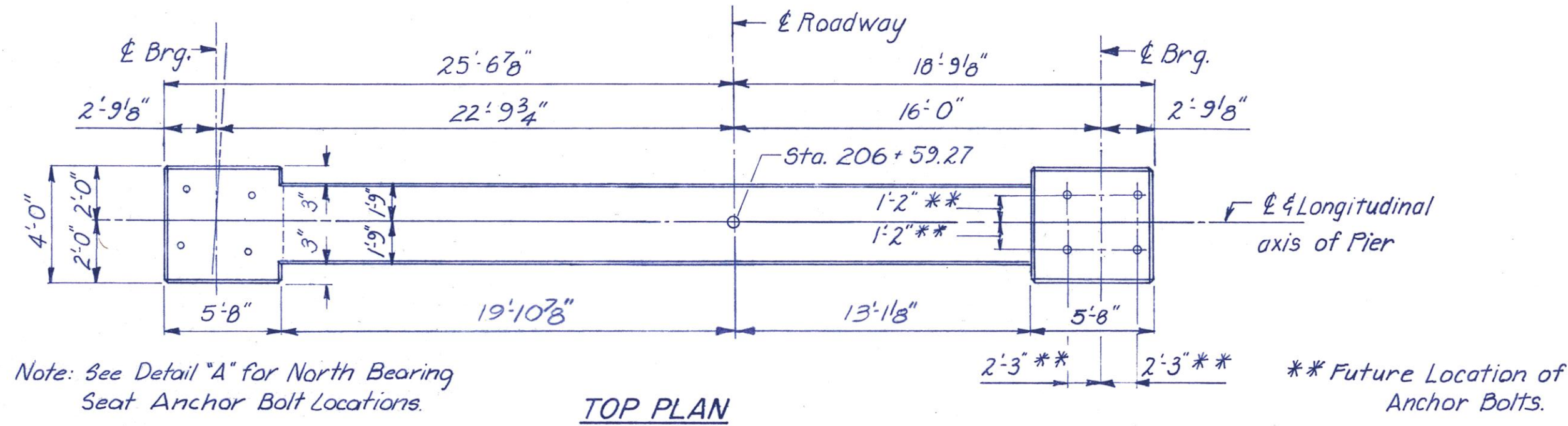
Red-changes due to removal of cl. I & resulting shallower slab
BY HEI 7/12/78

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

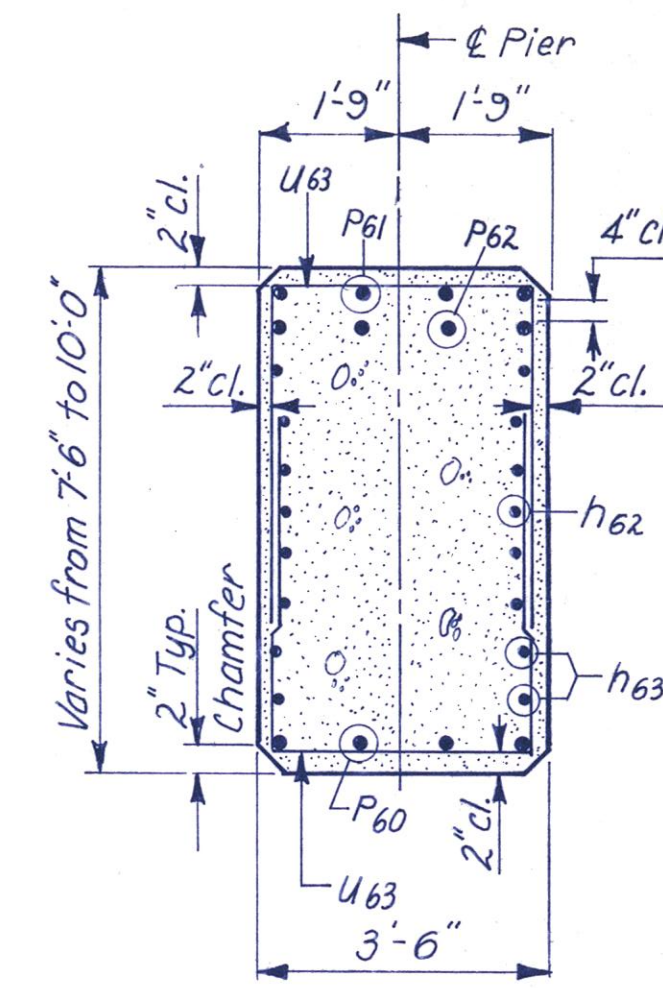
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA.31	15B-2	Peoria & Tazewell	52	23
FED. ROAD DIST. NO. 7			ILLINOIS	PROJECT



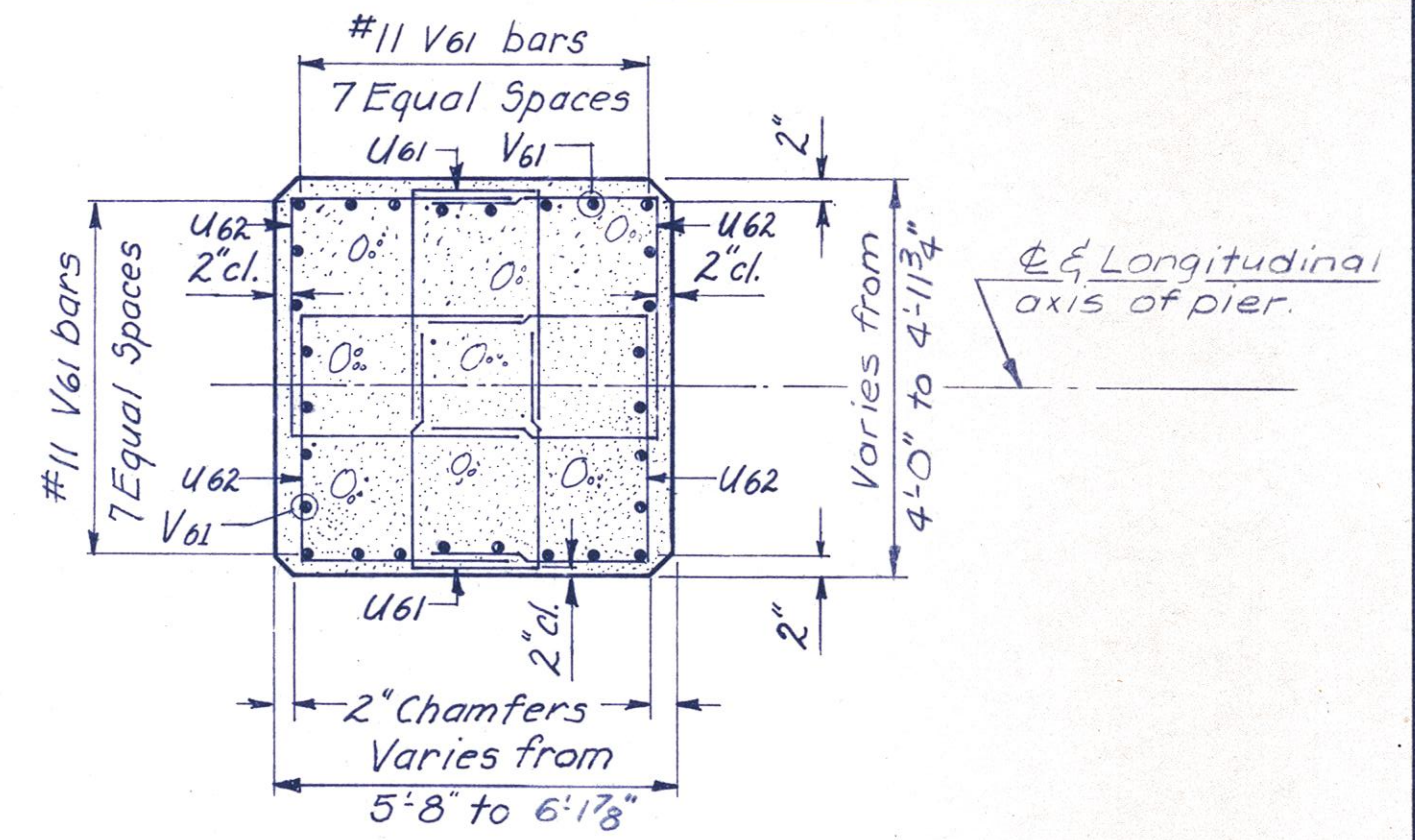
DETAIL "A"



TOP PLAN



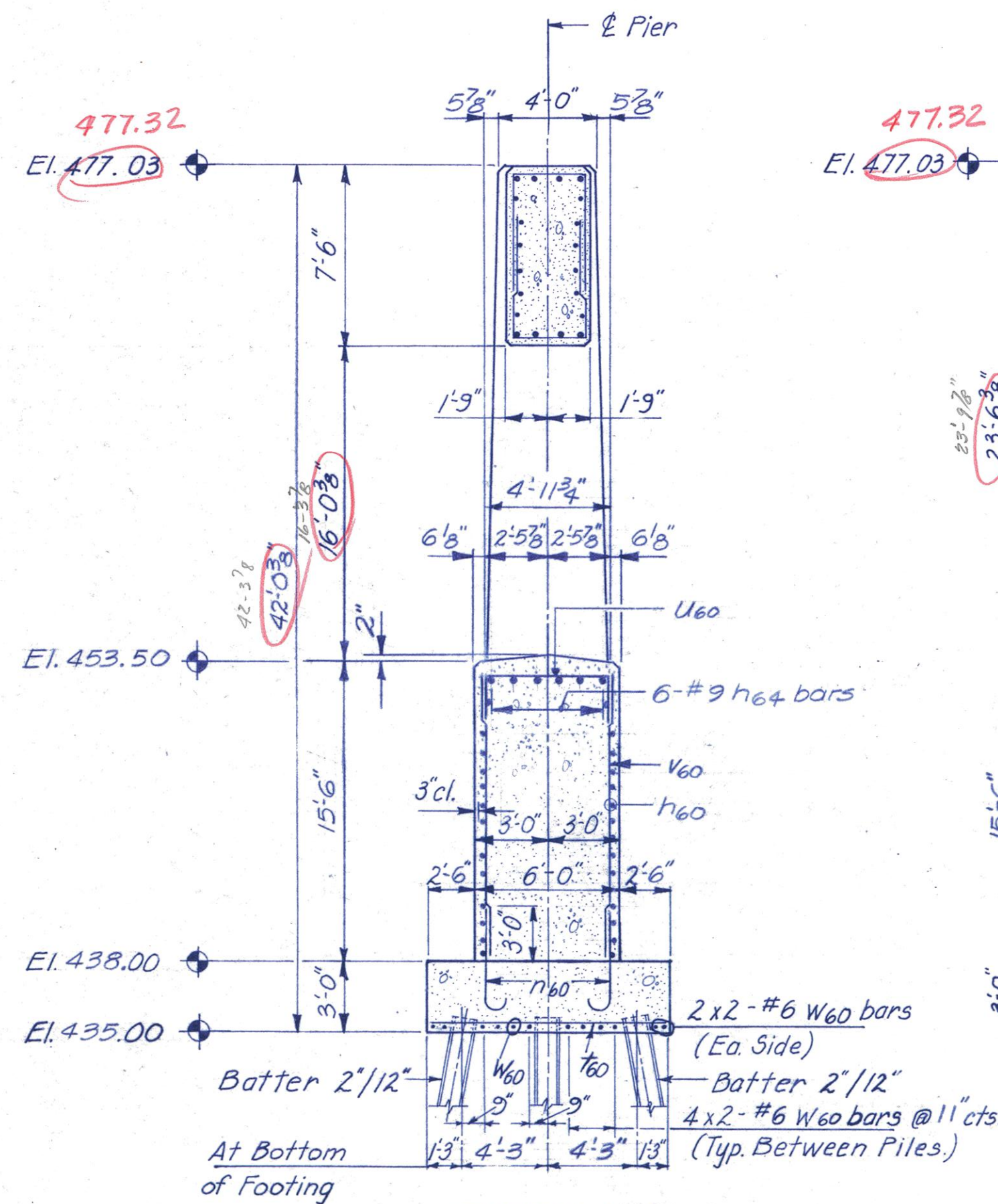
SECTION B-B



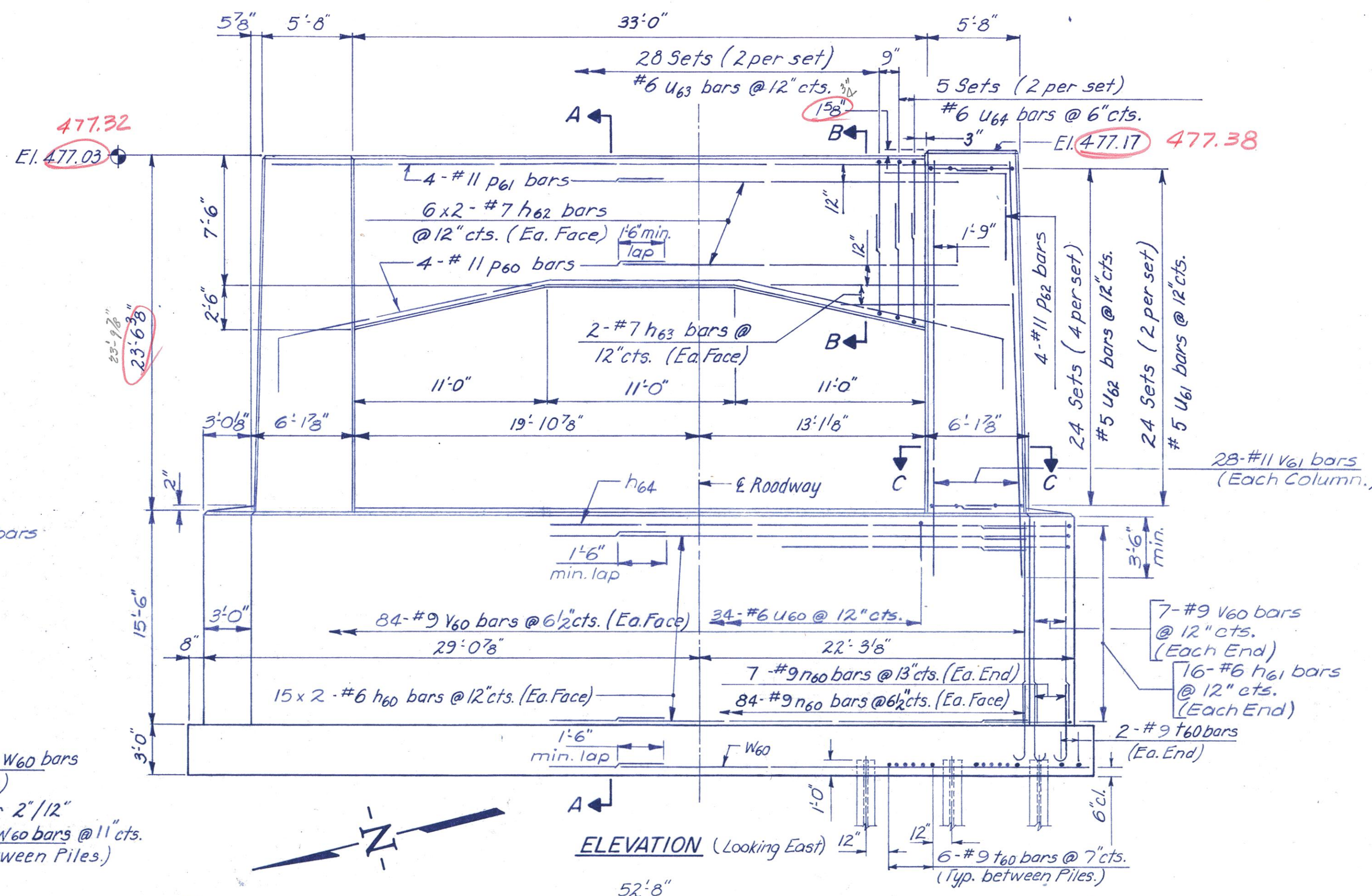
SECTION C-C

PIER 6
BILL OF MATERIAL

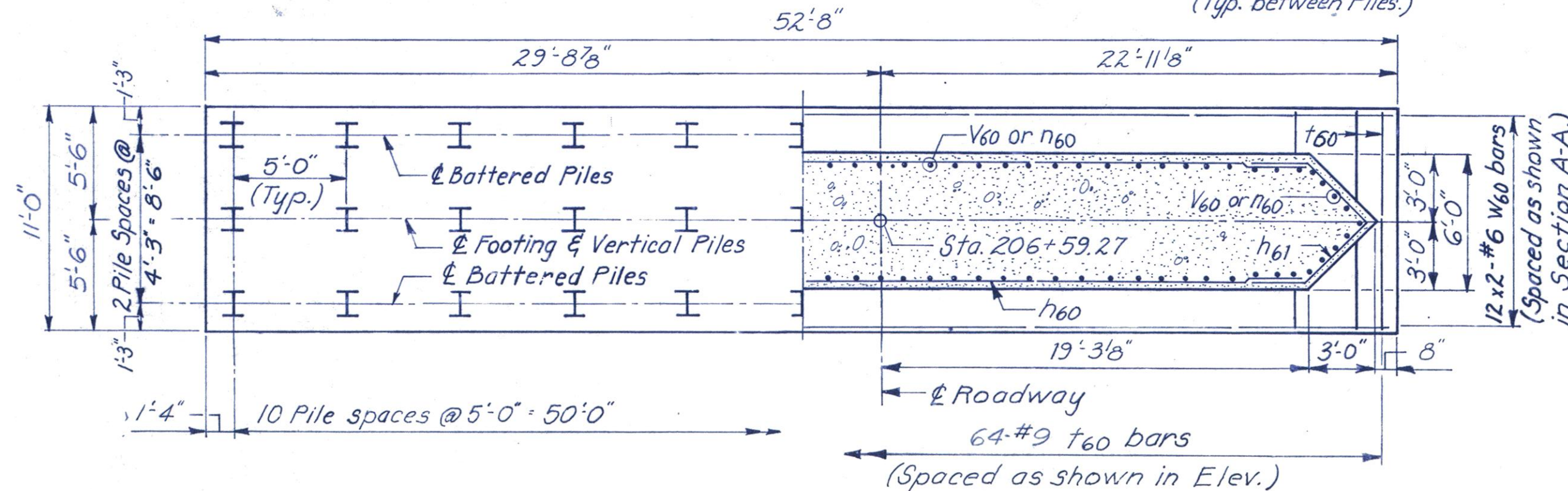
BAR	NO.	SIZE	LENGTH	SHAPE
h60	60	#6	23'-5"	
h61	32	#6	10'-9"	
h62	24	#7	19'-0"	
h63	8	#7	11'-0"	
h64	6	#9	45'-4"	
n60	182	#9	6'-9"	
p60	4	#11	48'-8"	
p61	4	#11	43'-4"	
p62	8	#11	14'-0"	
t60	64	#9	10'-6"	
u60	34	#6	8'-4"	
u61	96	#5	8'-11"	
u62	192	#5	10'-5"	
u63	56	#6	13'-10"	
u64	20	#6	14'-8"	
v60	182	#9	15'-3"	
v61	56	#11	27'-0"	
w60	24	#6	27'-0"	
Class A Concrete			Cu. Yds.	313.1
Reinforcement Bars			Lbs.	37,130
Steel Piles HP 10x57			Lin. Ft.	1,568
Test Pile HP 10x57			Each	1
Cofferdam Excav.			Cu. Yds.	189
Cofferdam			Each	One



SECTION A-A



ELEVATION (Looking East)



HALF PILE PLAN

HALF FOOTING PLAN

PILE DATA

Type Steel HP 10 x 57
Capacity Drive to refusal.
Est. Length 49'-0"
No. Required 33*
*Includes one test pile driven in a permanent position.

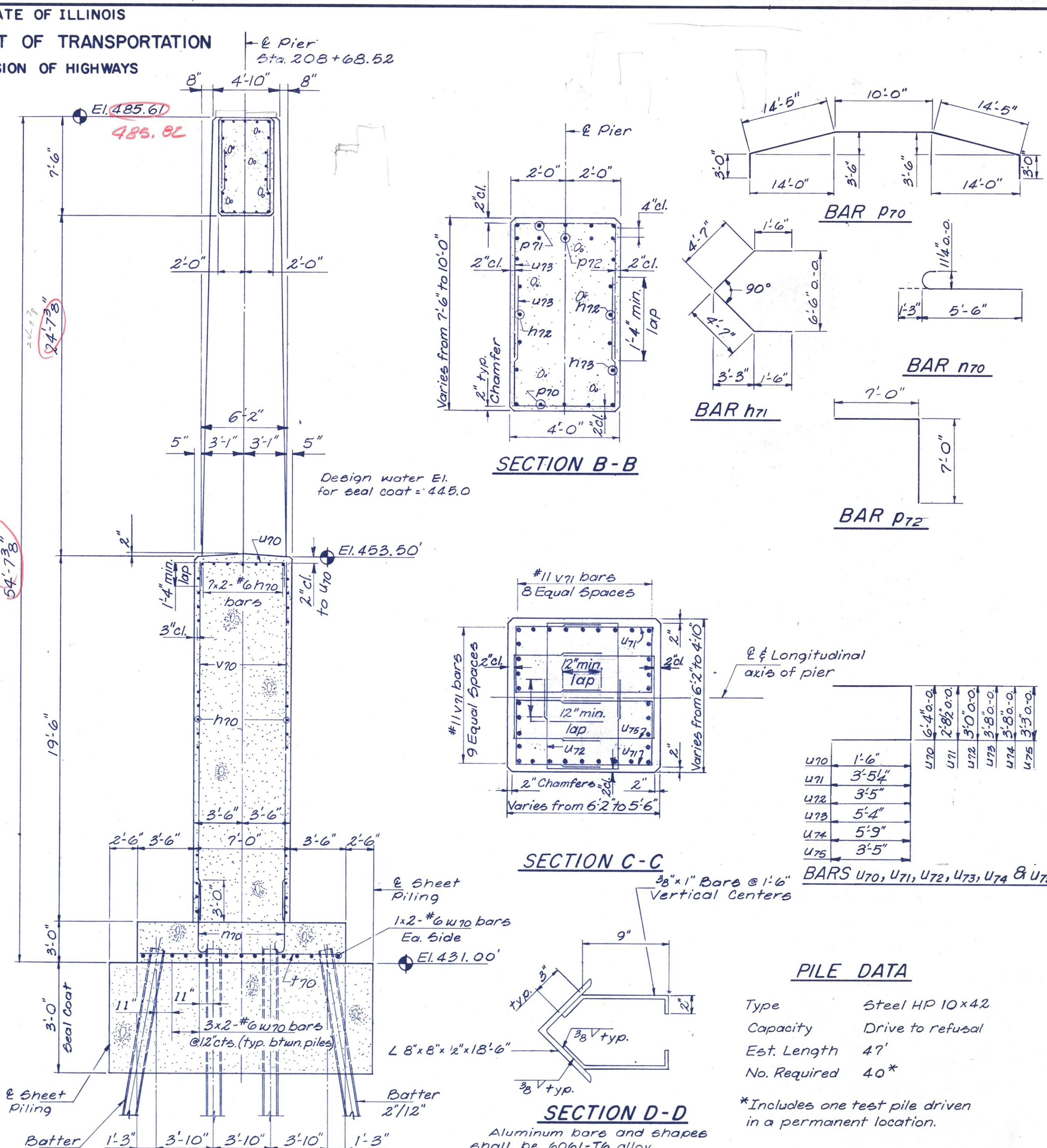
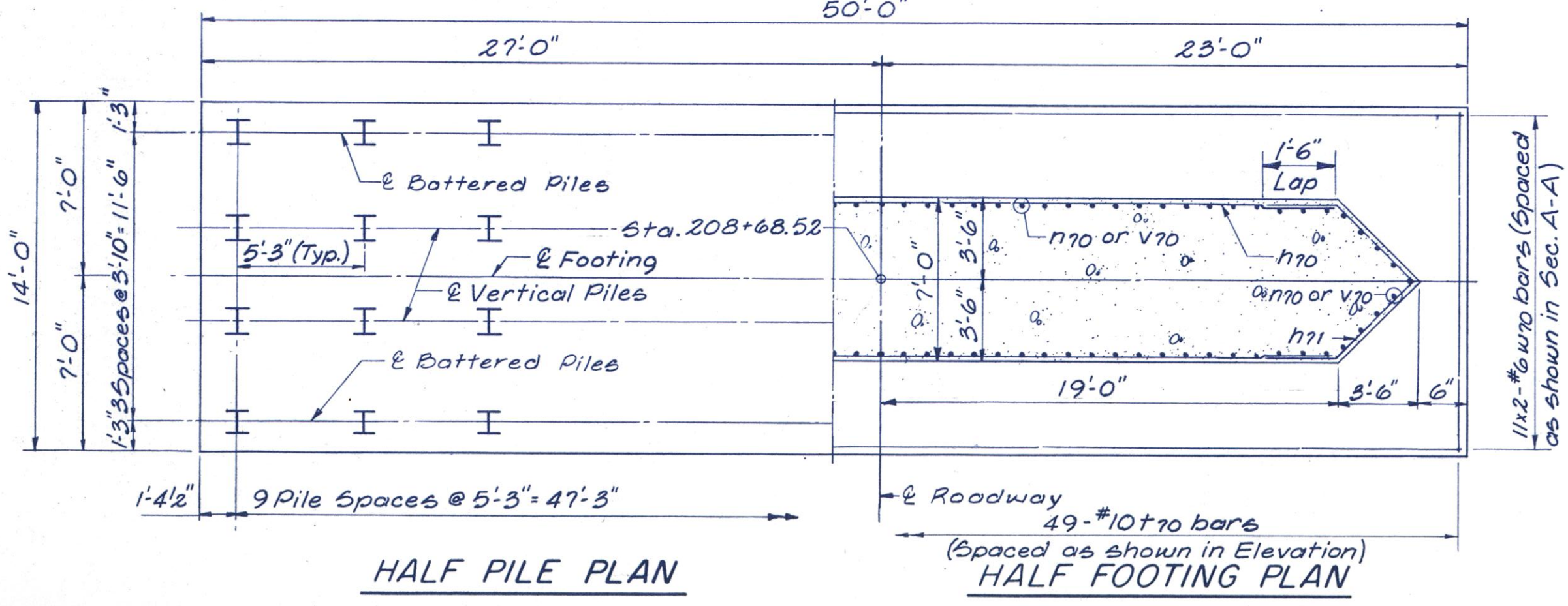
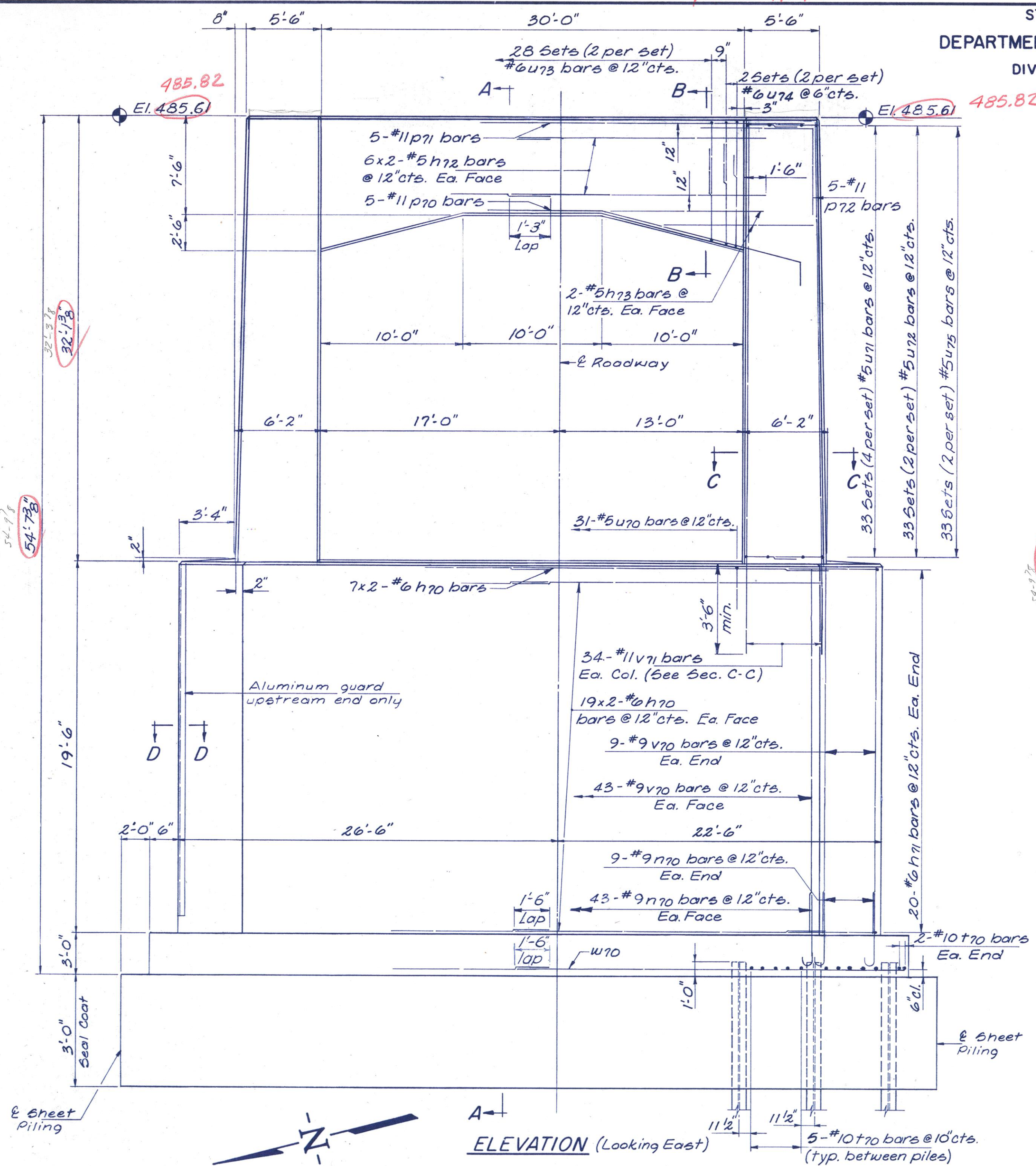
PIER 6

M^cCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15B-2
PEORIA & TAZEWELL COUNTIES

Red- changes due to removal of CL I & resulting shallower slab
by H.E.I. 7/12/78

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 31	15B-2	Peoria & Tazewell	52	24
PUB. ROAD DIST. NO. 7				



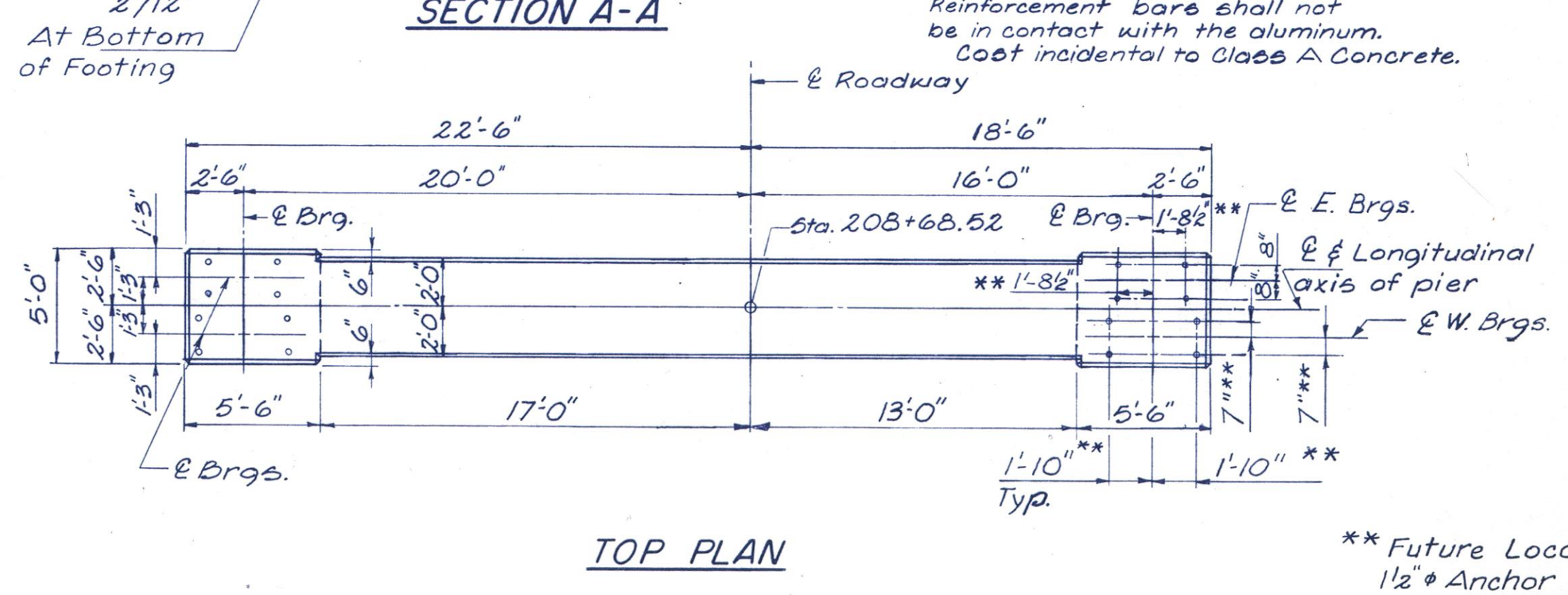
PIER 7
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
h70	90	#6	21'-9"	
h71	40	#6	12'-2"	C
h72	24	#5	17'-2"	
h73	8	#5	10'-0"	
n70	104	#9	6'-9"	C
p70	5	#11	44'-10"	
p71	5	#11	40'-0"	
p72	10	#11	14'-0"	
t70	49	#10	13'-6"	
u70	31	#5	9'-4"	
u71	264	#5	9'-7"	
u72	132	#5	9'-10"	
u73	56	#6	14'-4"	
u74	8	#6	15'-2"	
u75	132	#5	10'-1"	
v70	104	#9	19'-3"	
v71	68	#11	35'-6"	
w70	22	#6	25'-6"	
Class A Concrete			Cu. Yds.	422.6
Reinforcement Bars			Lbs.	36,600 39,760
Seal Coat Concrete			Cu. Yds.	114.0
Steel Piles HP10x42			Lin. Ft.	1833
Test Pile HP10x42			Each	1
Cofferdam Excavation			Cu. Yds.	388
Cofferdam			Each	1

PILE DATA

Type	Steel HP 10x42
Capacity	Drive to refusal
Est. Length	47'
No. Required	40*

*Includes one test pile driven in a permanent location.



PIER 7
M^cCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15 B-2
PEORIA & TAZEWELL COUNTIES

DESIGNED C.R.N.
CHECKED W.E.B.
DRAWN D.A.B.
CHECKED C.R.N.

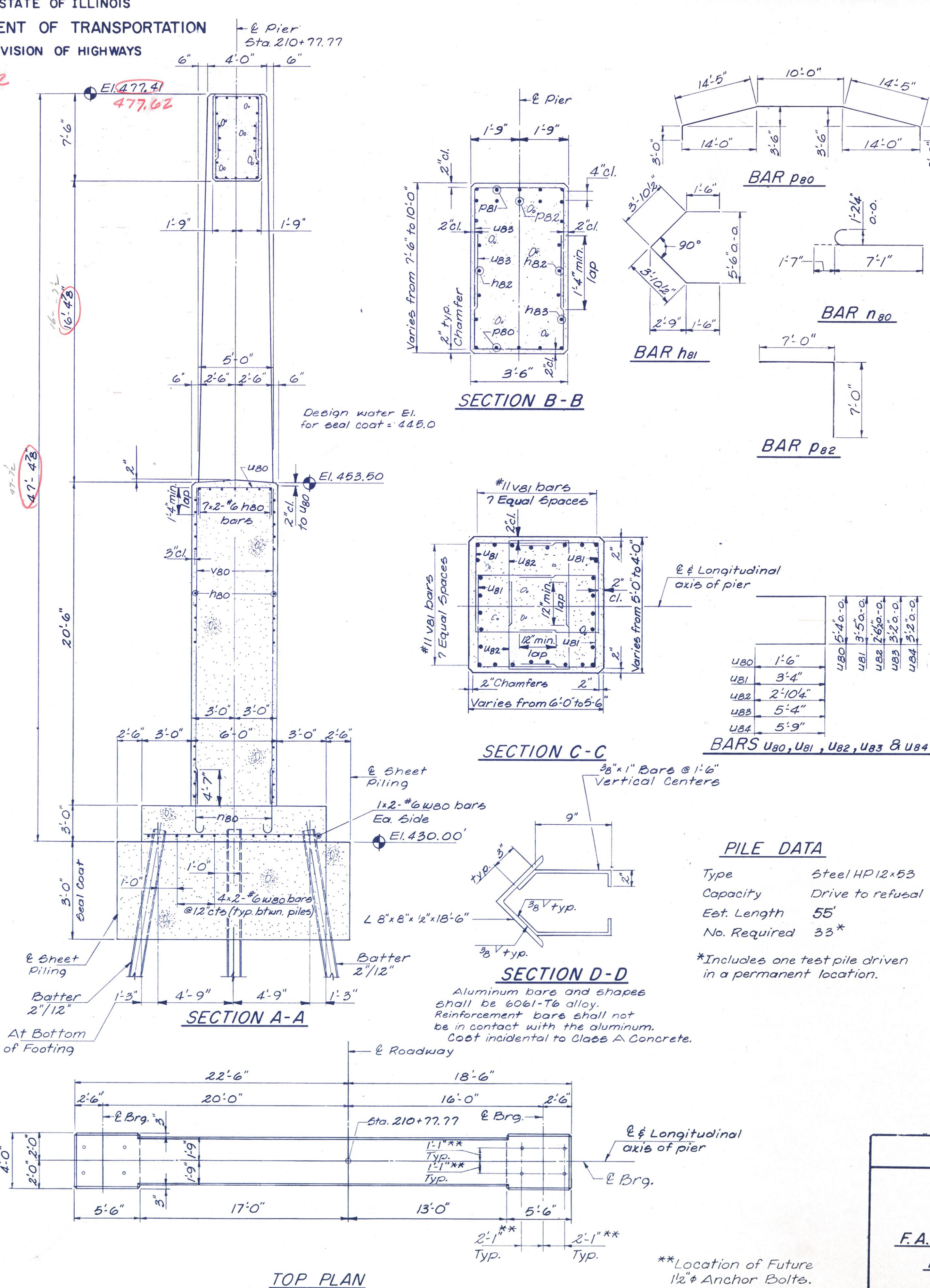
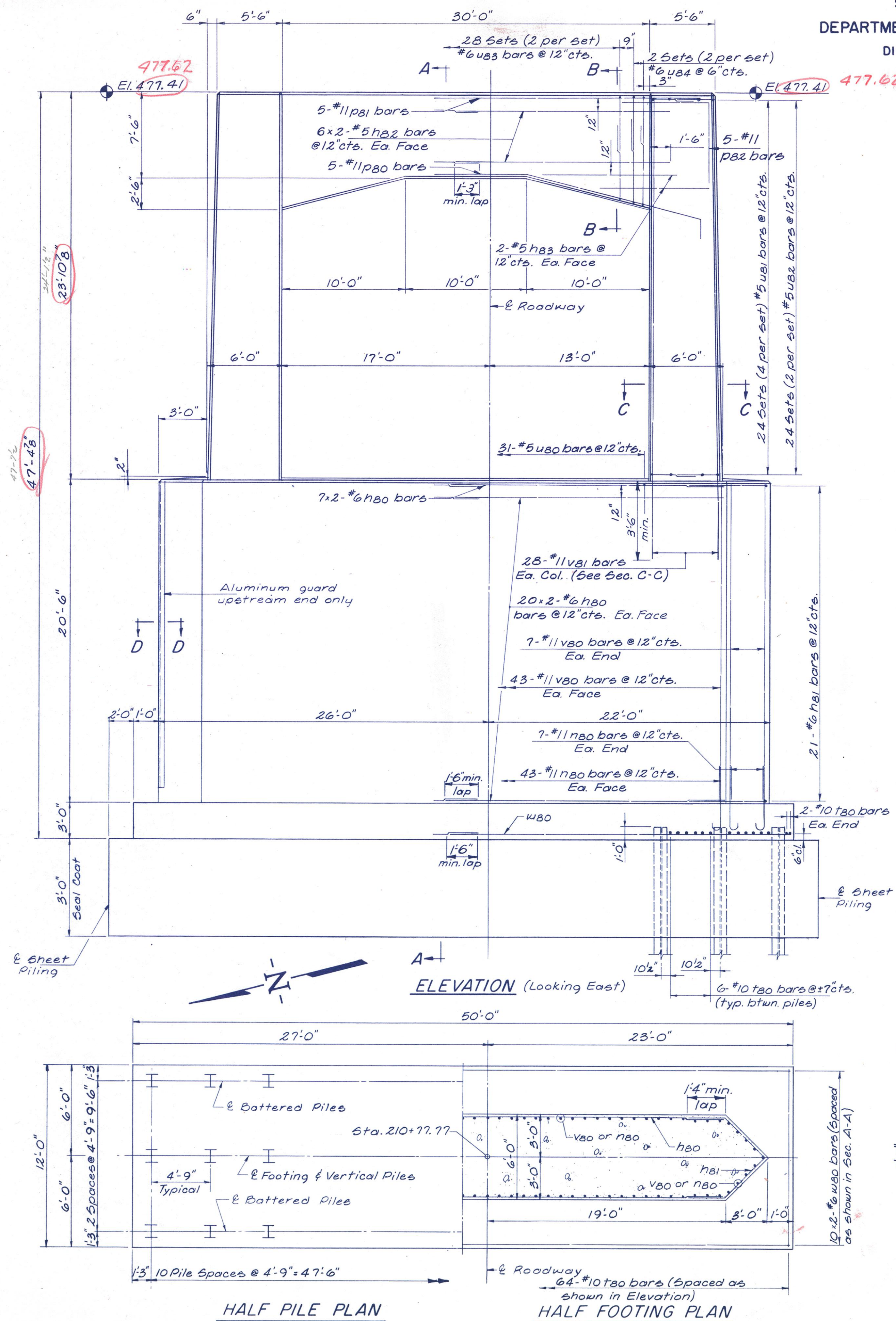
HANSON ENGINEERS
INCORPORATED

FILE NO. 14001
DATE 6-22-76

Red. changes due to removal of cl. I & resulting shallower slab
by HEI 7/12/78

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 31	15B-2	Peoria & Tazewell	52	25
FEED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



PIER 8
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
h80	94	#6	21'-9"	
h81	42	#6	10'-9"	C
h82	24	#5	17'-2"	
h83	8	#5	10'-0"	
n80	100	#11	8'-8"	C
p80	5	#11	44'-10"	
p81	5	#11	40'-0"	
p82	10	#11	14'-0"	7
t80	64	#10	11'-6"	
u80	31	#5	8'-4"	
u81	192	#5	10'-1"	
u82	96	#5	8'-3"	
u83	56	#6	14'-8"	
u84	8	#6	17'-2"	
v80	100	#11	20'-3"	
v81	56	#11	27'-3"	
w80	20	#6	25'-6"	
Class A Concrete		Cu. Yds.	355.7	
Reinforcement Bars		Lbs.	39,220	
Seal Coat Concrete		Cu. Yds.	102.0	
Steel Piles HP12x53		Lin. Ft.	1,760	
Test Pile HP12x53		Each	1	
Cofferdam Excavation		Cu. Yds.	313	
Cofferdam		Each	1	

PILE DATA

Type Steel HP12x53
Capacity Drive to refusal
Est. Length 55'
No. Required 33*

*Includes one test pile driven in a permanent location.

PIER 8

M^C CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15 B-2
PEORIA & TAZEWELL COUNTIES

DESIGNED CRN
CHECKED WEB
DRAWN DAB
CHECKED CRN

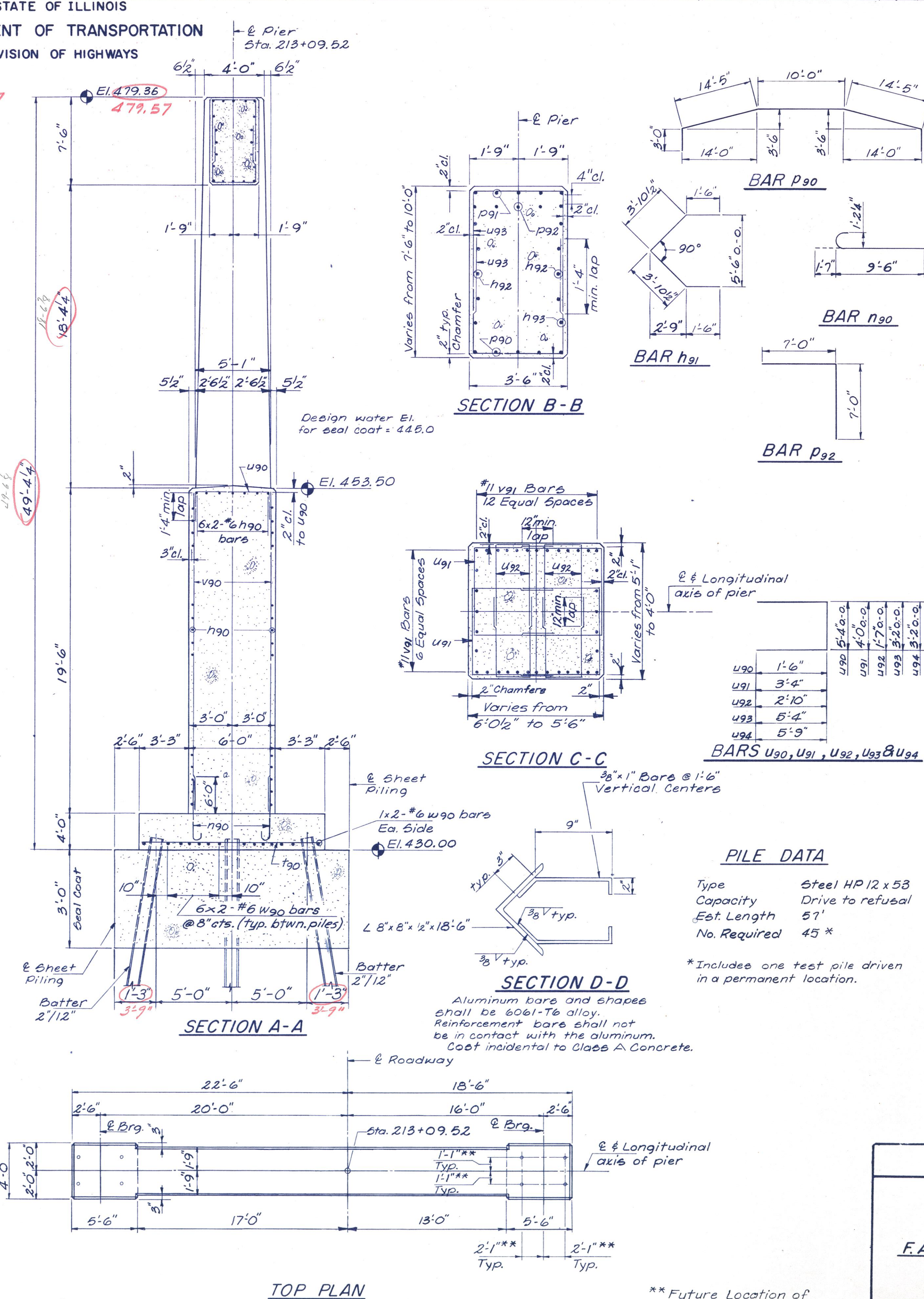
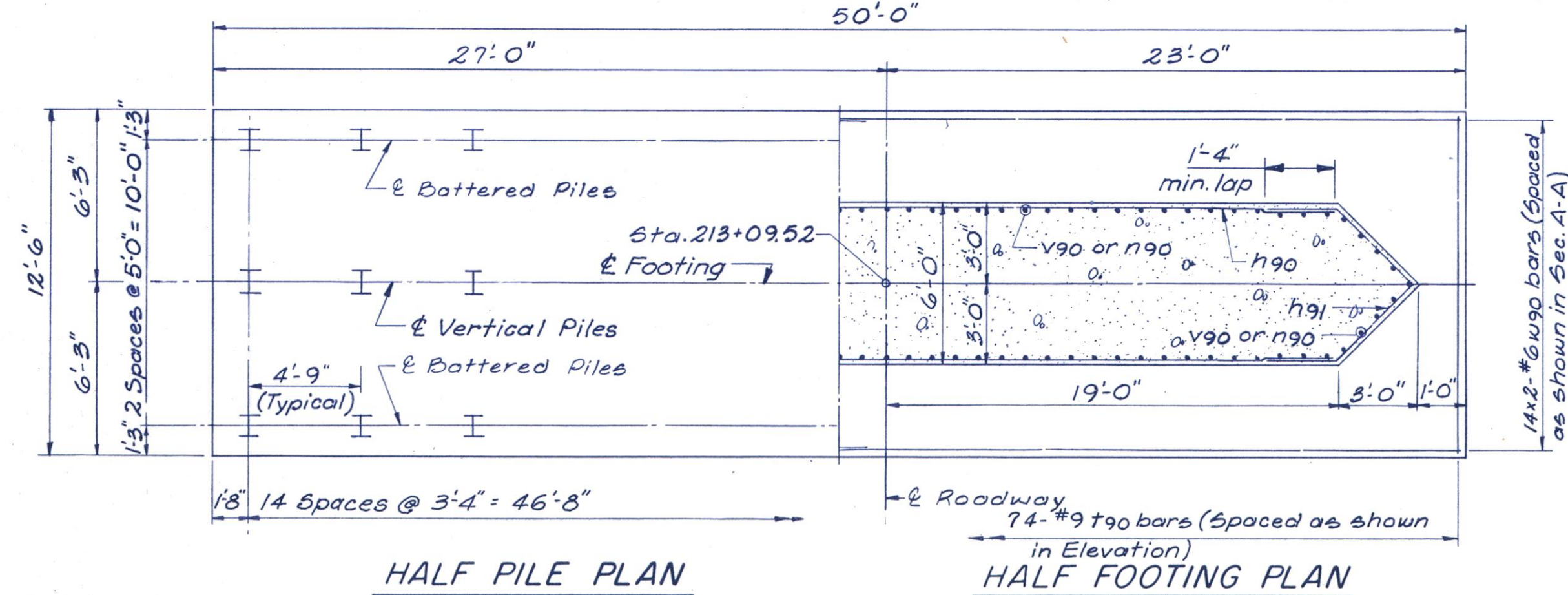
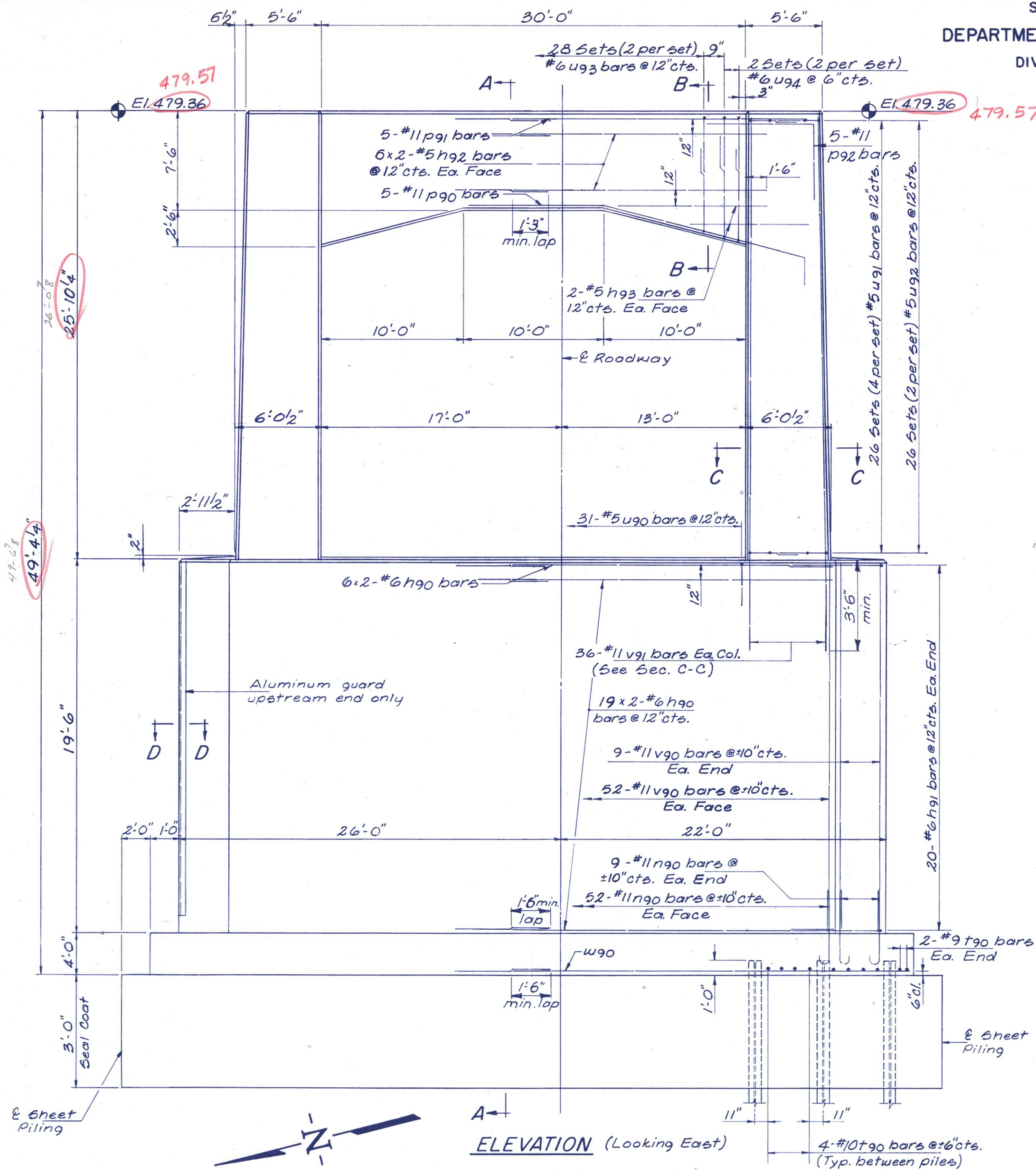


FILE NO. 14001
DATE 6-22-76

Red-Changes due to removal of CL I & resulting shallower slab
by H&E 7/12/78

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 31	15B-2	Peoria & Tazewell	52	26
PIER ROAD DIST. NO. 7 ILLINOIS PROJECT				



PIER 9
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
h90	88	#6	21'-9"	
h91	40	#6	10'-9"	C
h92	24	#5	17'-2"	
h93	8	#5	10'-0"	
h90	122	#11	11'-1"	C
p90	5	#11	44'-10"	
p91	5	#11	40'-0"	
p92	10	#11	14'-0"	
t90	74	#9	12'-0"	
u90	31	#5	8'-4"	
u91	208	#5	10'-8"	
u92	104	#5	7'-3"	
u93	56	#6	13'-10"	
u94	8	#6	14'-8"	
v90	122	#11	19'-2"	
v91	72	#11	29'-3"	
w90	28	#6	25'-6"	
Class A Concrete			Cu. Yds.	370.4
Reinforcement Bars			Lbs.	46,610
Seal Coat Concrete			Cu. Yds.	105.0
Steel Piles HP 12 x 53			Lin. Ft.	2,508
Test Pile HP 12 x 53			Each	1
Cofferdam Excavation			Cu. Yds.	333
Cofferdam			Each	1

PILE DATA

Type	Steel HP 12 x 53
Capacity	Drive to refusal
Est. Length	51'
No. Required	45 *

* Includes one test pile driven in a permanent location.

PIER 9

M^cCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15 B-2
PEORIA & TAZEWELL COUNTIES

DESIGNED C.R.N.
CHECKED W.E.B.
DRAWN D.A.B.
CHECKED C.R.N.

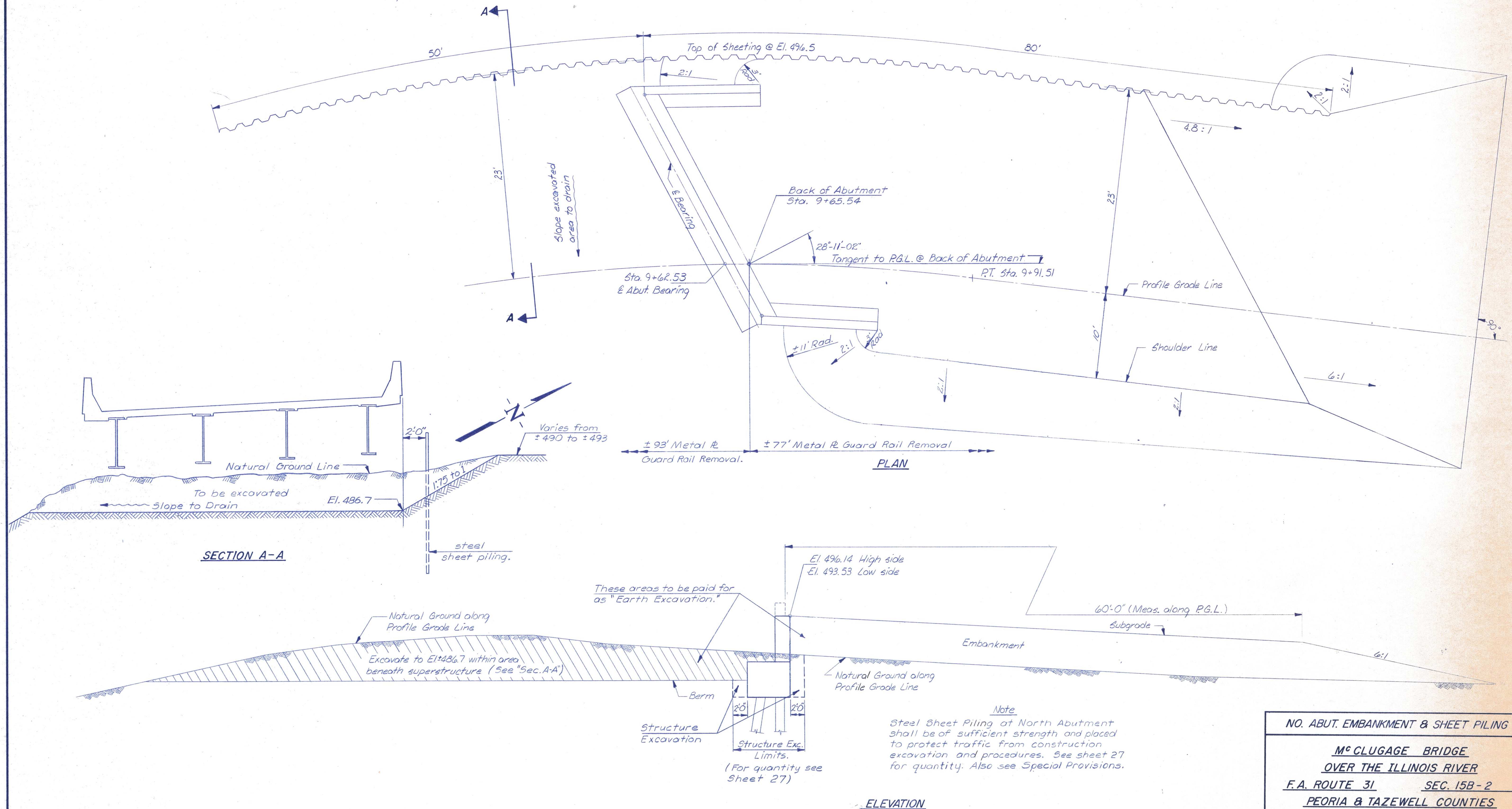


FILE NO.
14001
DATE
6-22-76

** Future Location of
1/2" Anchor Bolts.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 31	15B-2	PEORIA & TAZEWELL	52	28
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



NO. ABUT. EMBANKMENT & SHEET PILING

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15B-2
PEORIA & TAZEWELL COUNTIES

DESIGNED C.R.H.
CHECKED WDL
DRAWN R.H.F.
CHECKED WDL

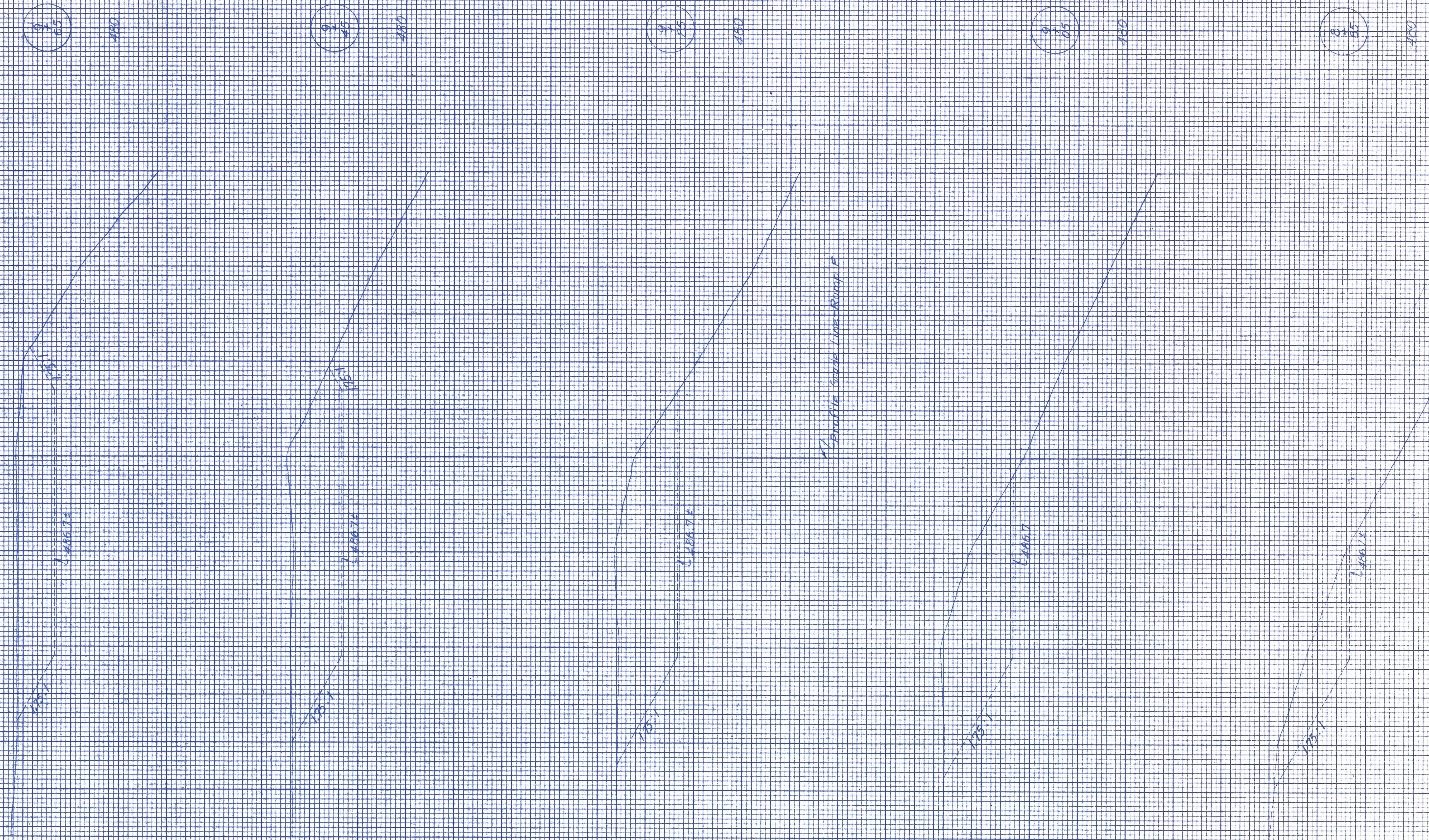


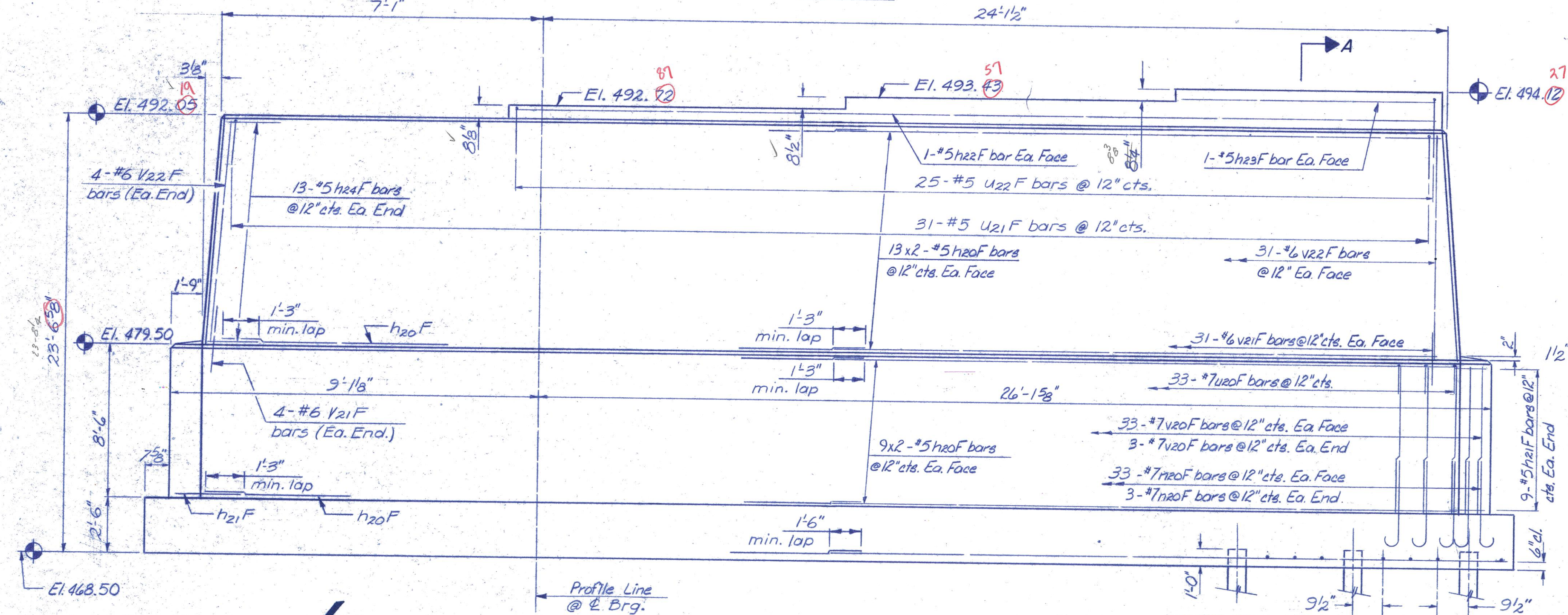
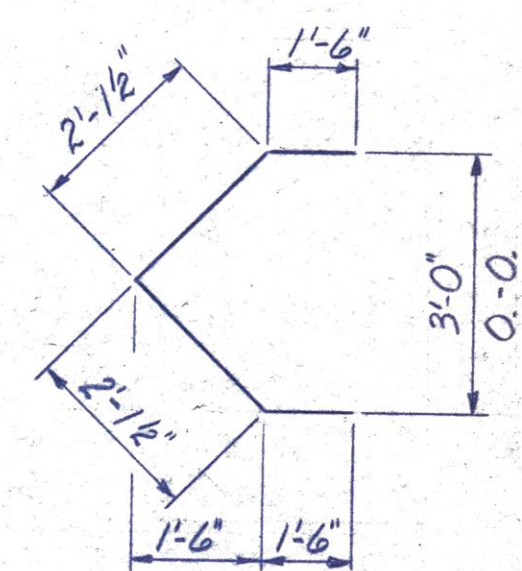
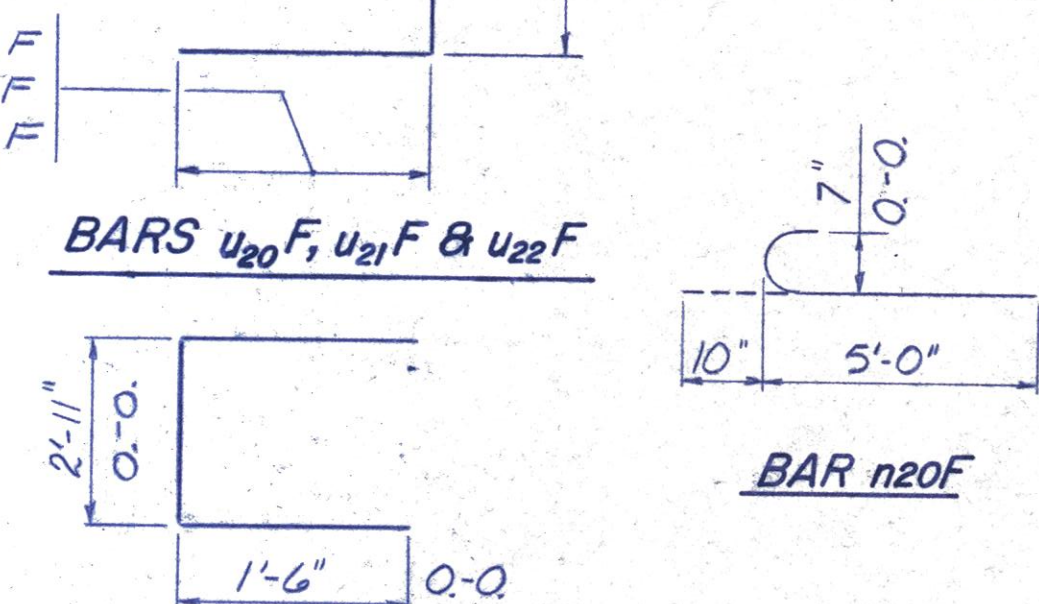
FILE NO. 74001
DATE 6-22-76

ORIGINAL	SURVEYED _____	BY	DATE
SURVEY	PLOTTED _____		
NOTE BOOK	TEMPLATE _____		
NO.	AREAS _____		
	AREAS CHECKED _____		

FOURTH NO:	SERIAL	COUNTRY	LOCAL SERIALS	MARKET NO:
FA 31 15B-2		Peoria Togewell	52	29
<small>PRINTED IN THE U.S.A. ALL RIGHTS RESERVED J</small>				

SCALE
Hory. 1" = 5'
Vert. 1" = 5'



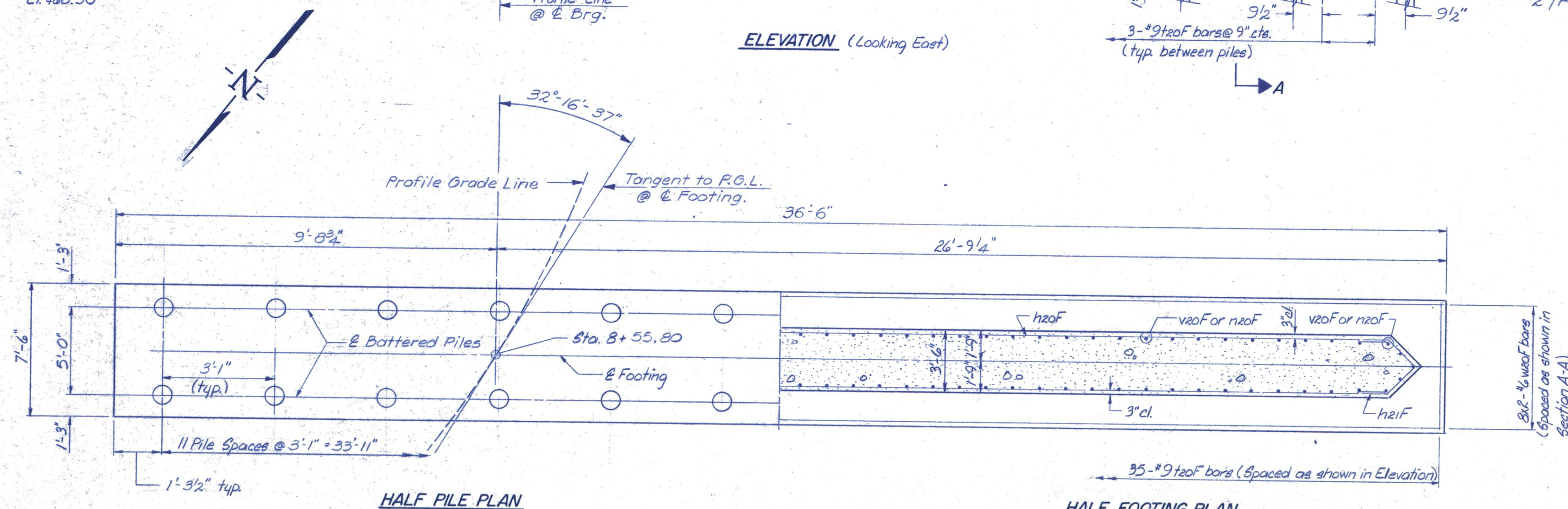


PIER 2F
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
h20F	88	*5	16'-3"	—
h21F	18	*5	7'-3"	→
h22F	2	*5	24'-0"	—
h23F	2	*5	6'-11"	—
h24F	26	*5	5'-11"	—
h20F	72	#7	5'-10"	C
h20F	35	#9	7'-0"	—
U20F	33	#7	5'-10"	—
U21F	31	#5	5'-3"	—
U22F	25	#5	8'-10"	—
V20F	72	#7	8'-3"	—
V21F	70	#6	3'-6"	—
V22F	70	#6	12'-4"	—
W20F	16	#6	18'-10"	—
Class A Concrete			Cu. Yd.	113.3
Reinforcement Bars			Lbs.	7,670
Conc. Piles 12" Dia.			Lin. Ft.	575
Test Pile 12" Dia. Conc.			Each	1
Struct. Exc.			Cu. Yd.	145

Class A Concrete	Cu. Yd.	113.3
Reinforcement Bars	Lbs.	7,670
Conc. Piles 12" Dia.	Lin. Ft.	575
Test Pile 12" Dia. Conc.	Each	1
Struct. Exc.	Cu. Yd.	145

Type	Conc. 12" dia.
Capacity	45 ton
Est. Length	25'
No. Required	24 *
* Includes one test pile driven in a permanent location.	



HALF FOOTING PLAN

PIER 2F

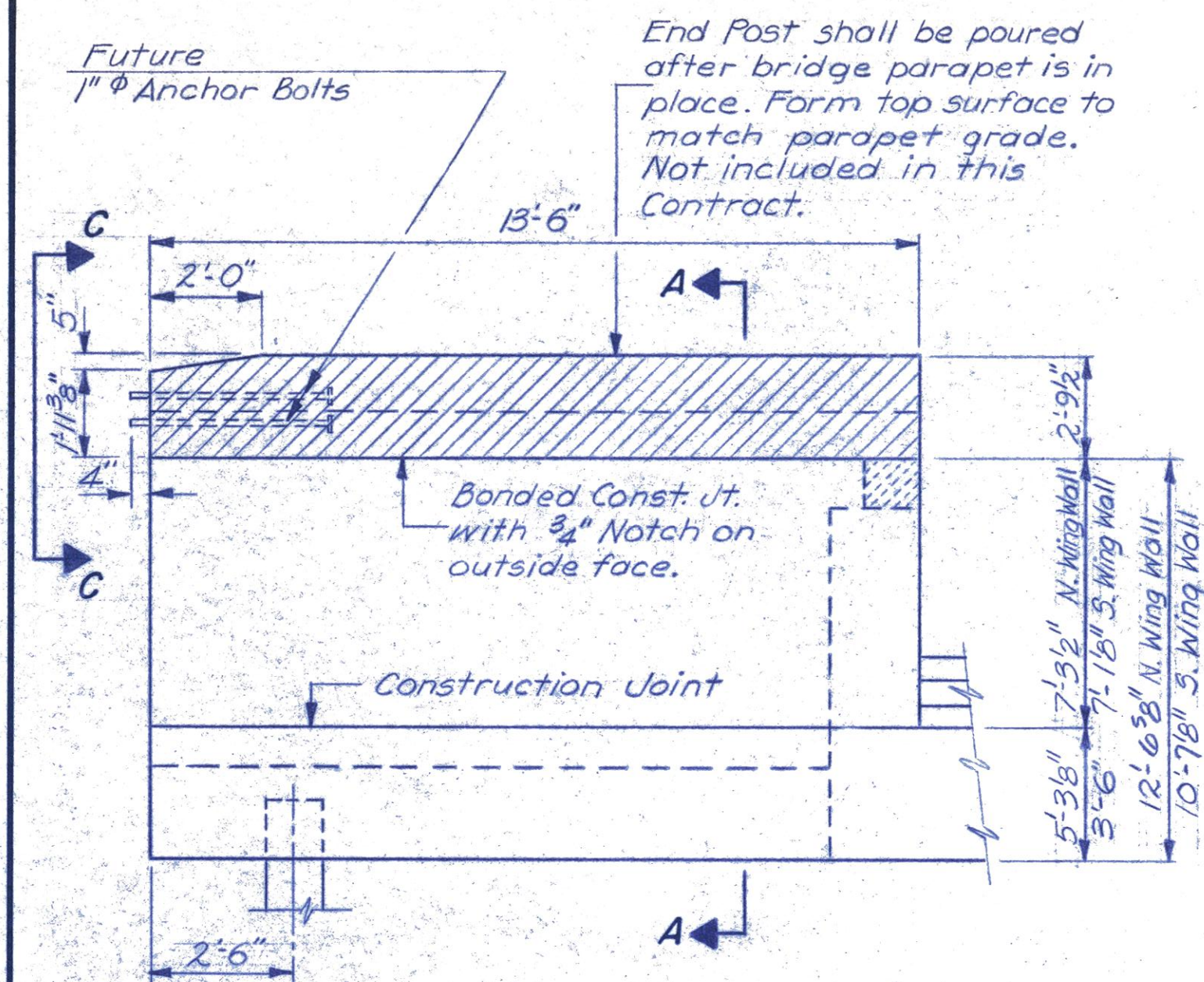
M^cCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15B-2
PEORIA & TAZEWELL COUNTIES



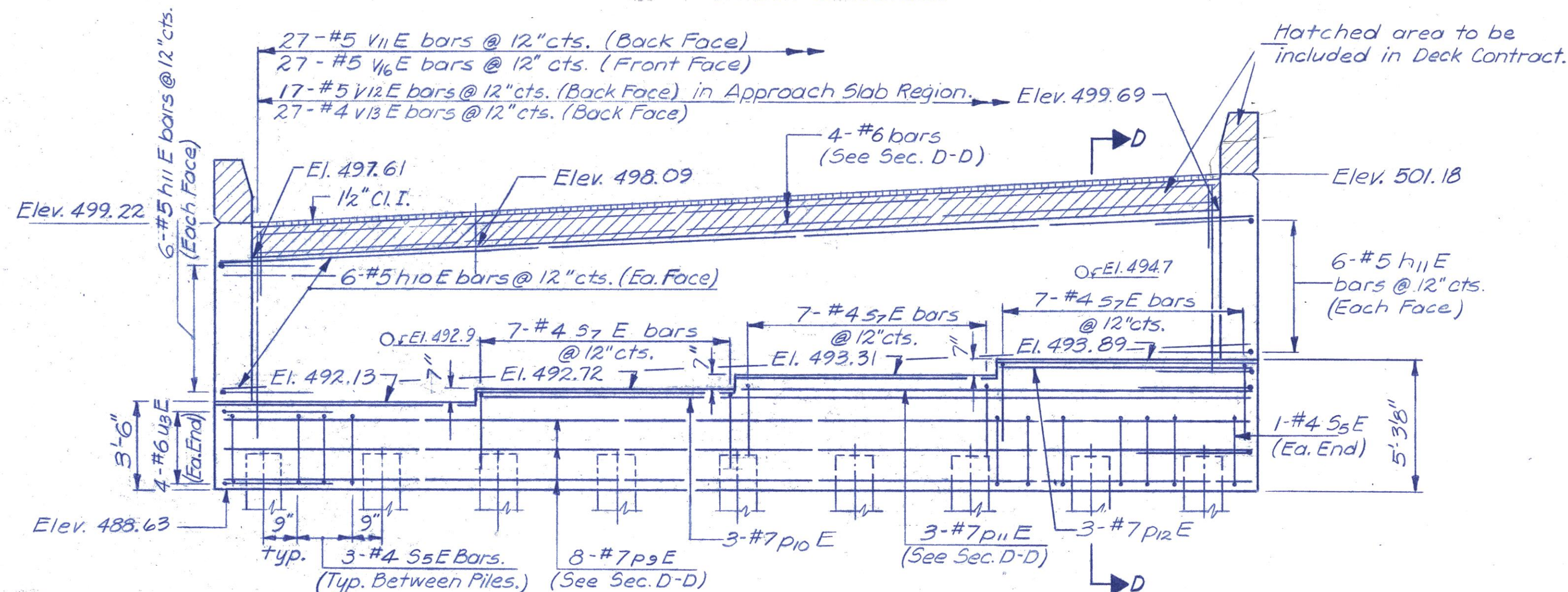
Not affected by changes.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

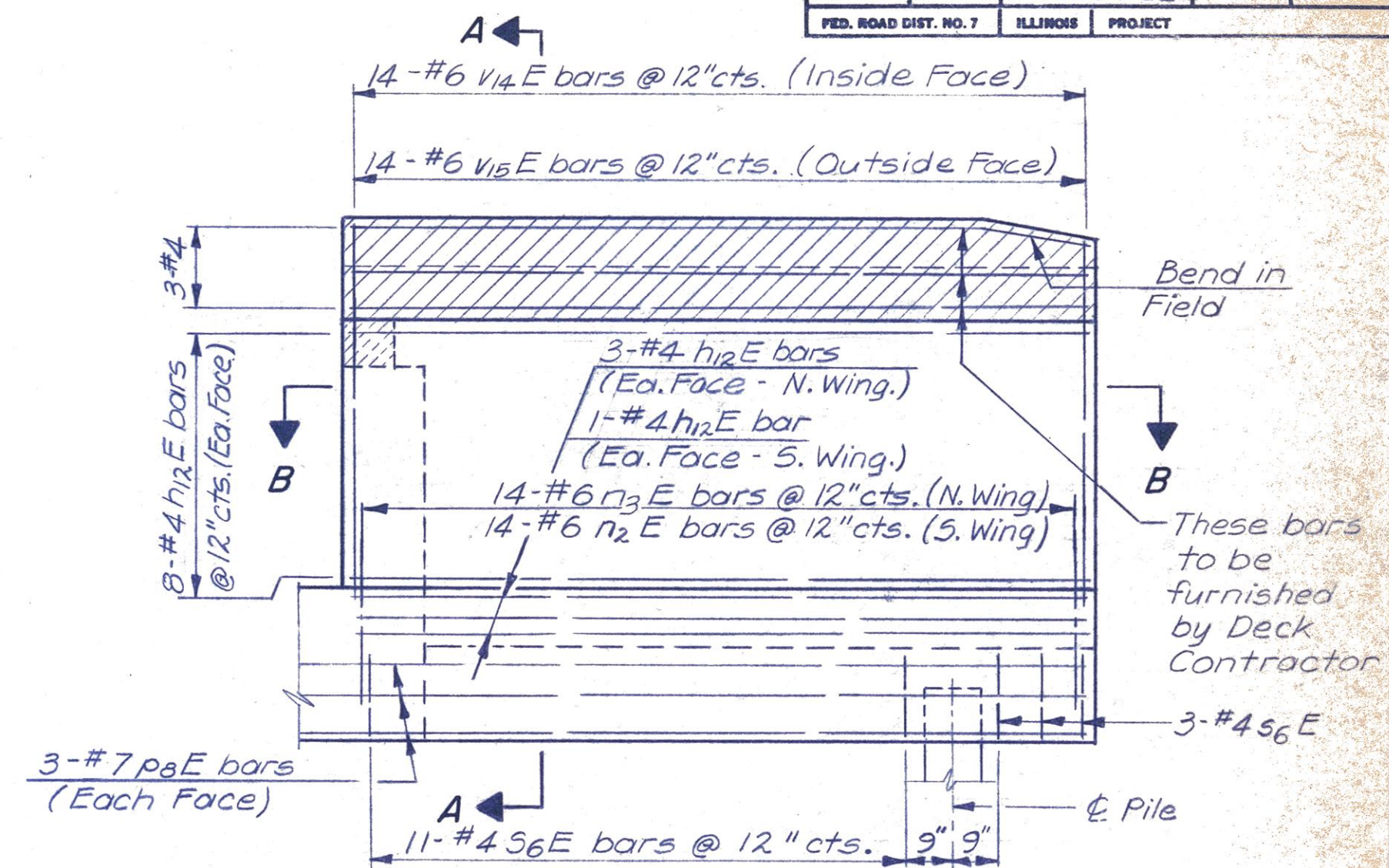
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA.31	15B-2	PEORIA & TAZEWELL	52	31
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	



WING WALL ELEVATION
(S. Wing Wall)



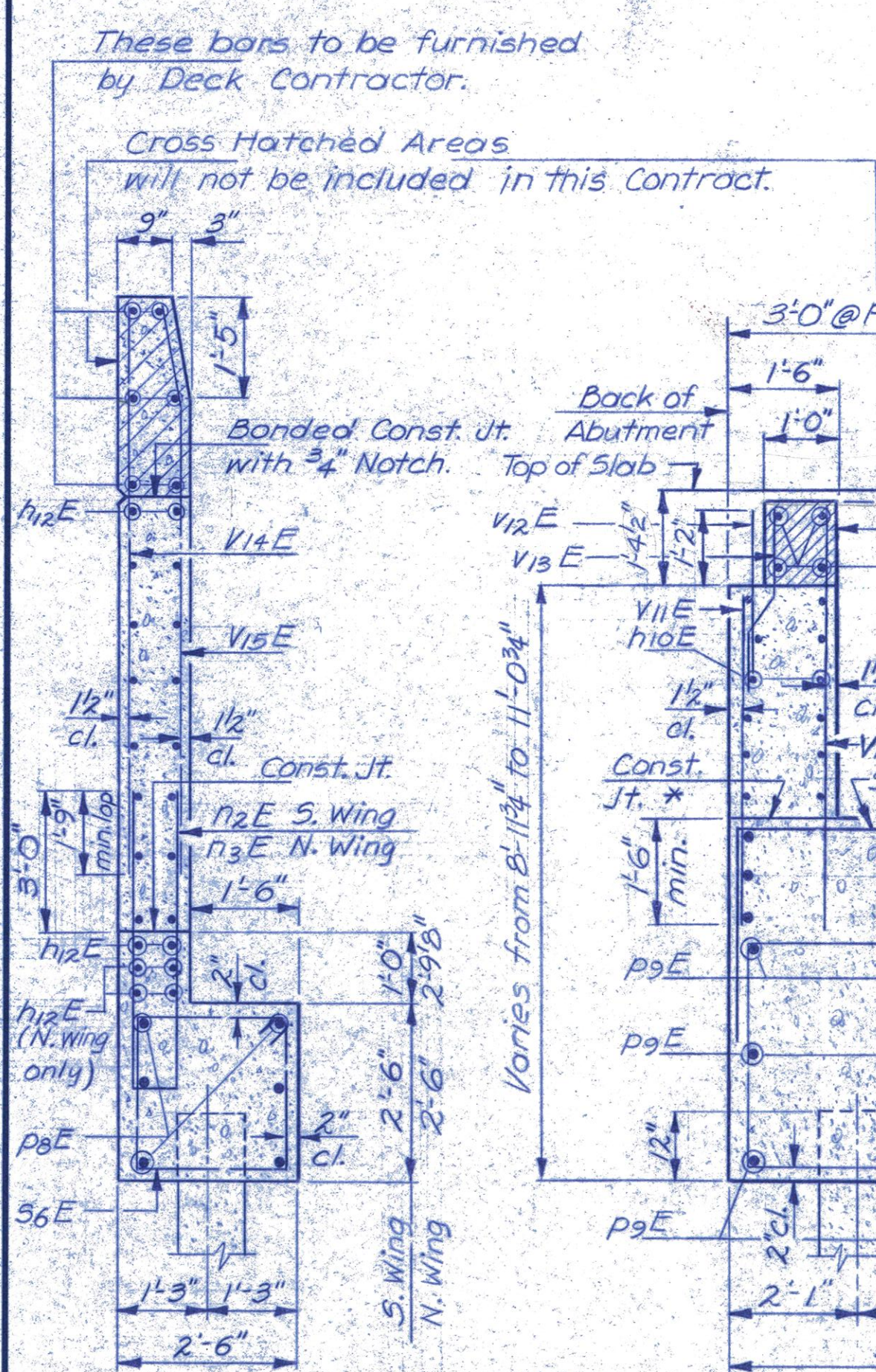
ELEVATION



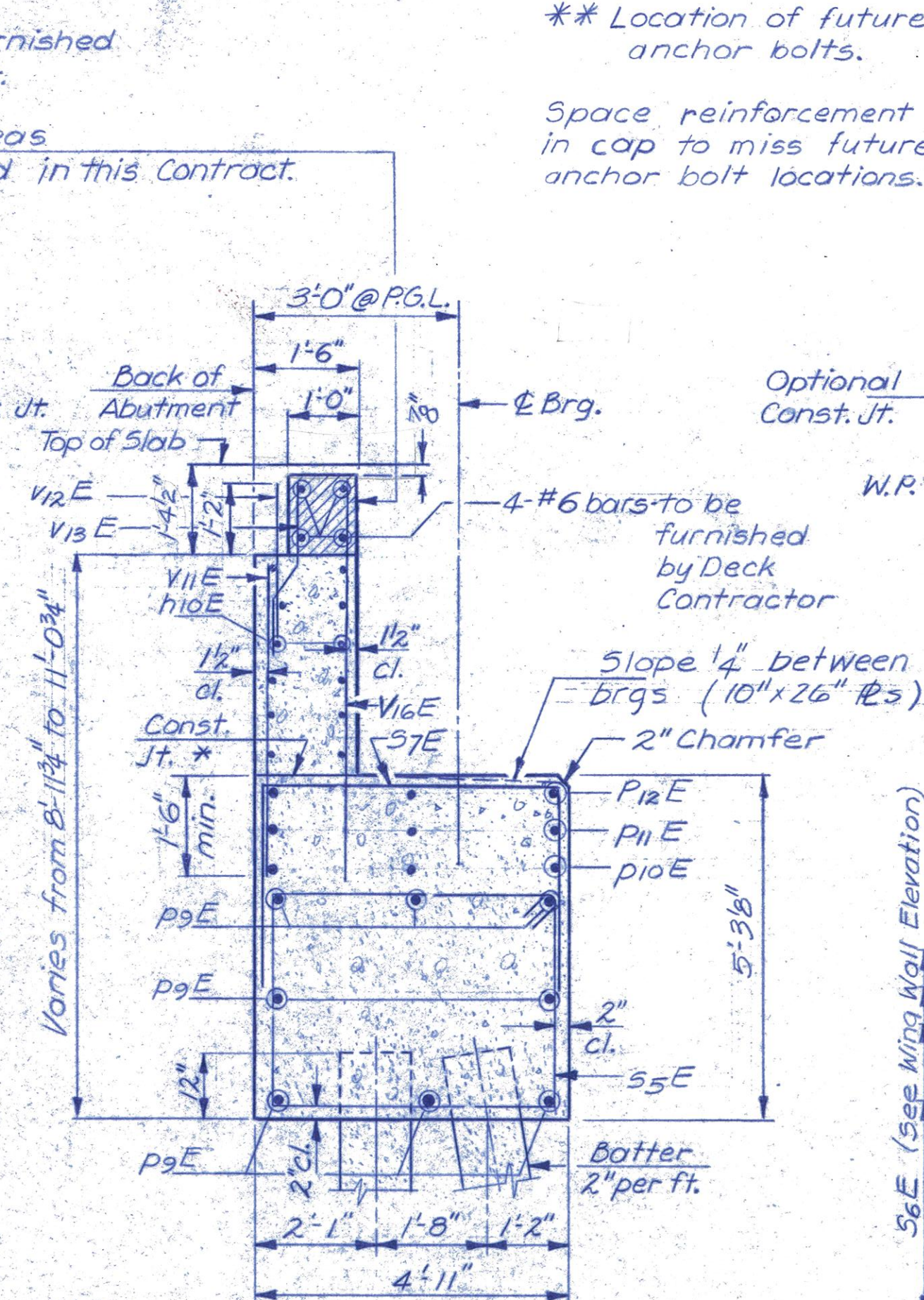
WING WALL ELEVATION
Reinforcement
(N. Wing Shown)

SOUTH ABUTMENT
BILL OF MATERIAL

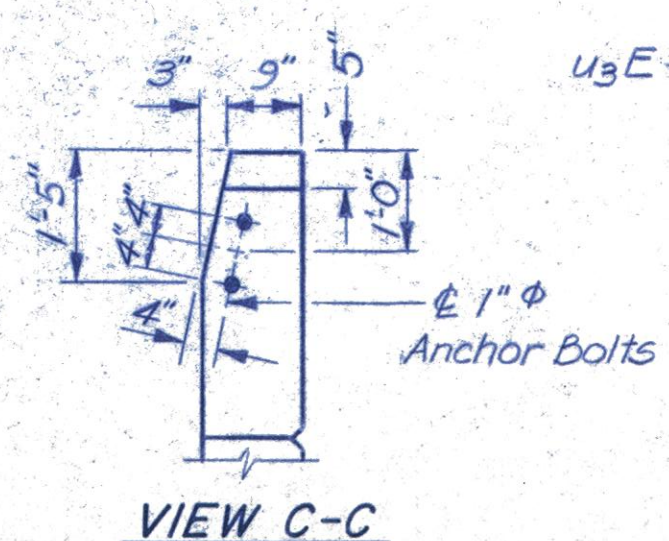
Bar	No.	Size	Length	Shape
h10E	12	#5	27'-6"	
h11E	24	#5	5'-0"	
h12E	40	#4	13'-3"	
h12E	28	#6	11'-3"	
h13E	28	#6	14'-3"	
h12E	12	#7	14'-0"	
h13E	8	#7	27'-6"	
h14E	3	#7	20'-8"	
h15E	3	#7	13'-8"	
h16E	3	#7	6'-8"	
h17E	26	#4	16'-3"	
h18E	28	#4	9'-5"	
h19E	21	#4	10'-5"	
h20E	8	#6	13'-6"	
h21E	27	#4	7'-4"	
h22E	17	#5	2'-7"	
h23E	27	#4	2'-10"	
h24E	28	#6	8'-11"	
h25E	28	#6	8'-11"	
h26E	27	#4	8'-8"	
Class X Concrete				Cu. Yds. 44.6
Reinforcement Bars				Lbs. 4,340
Conc. Piles 12" Dia.				Lin. Ft. 180
Test Piles 12" Conc.				Ea. 1
Struct. Excavation				Cu. Yds. 137



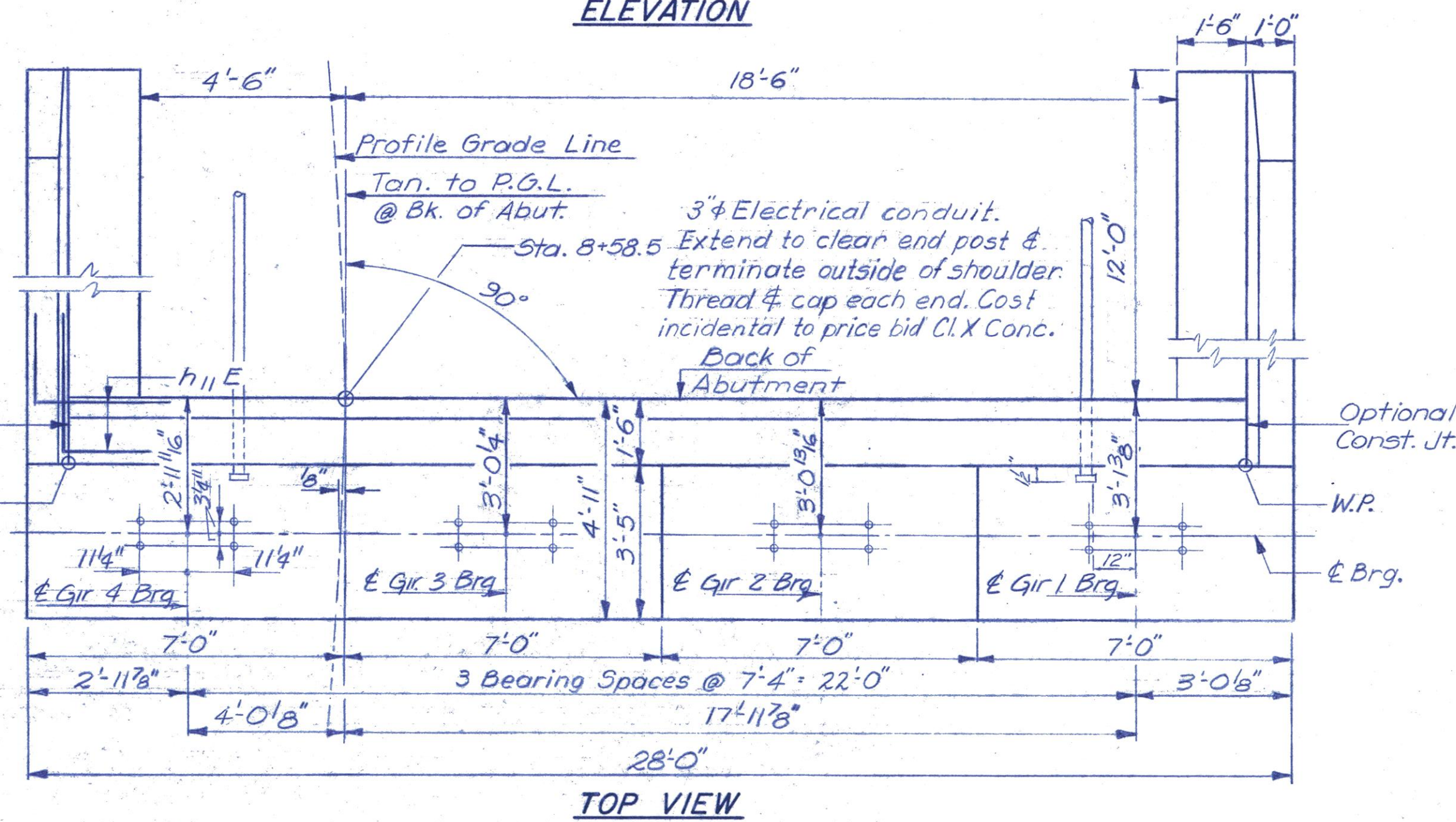
SECTION A-A



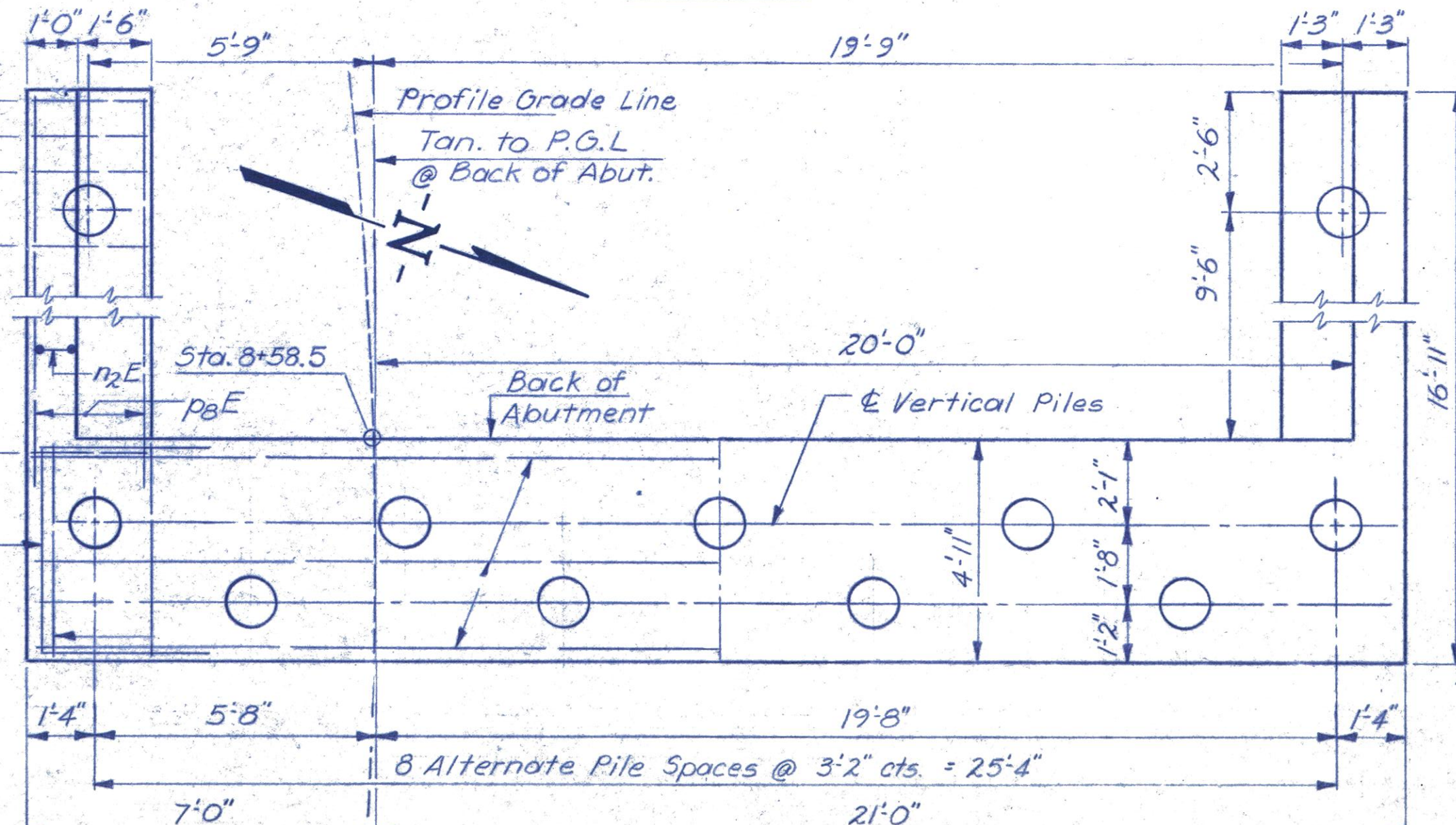
SECTION D-D



VIEW C-C

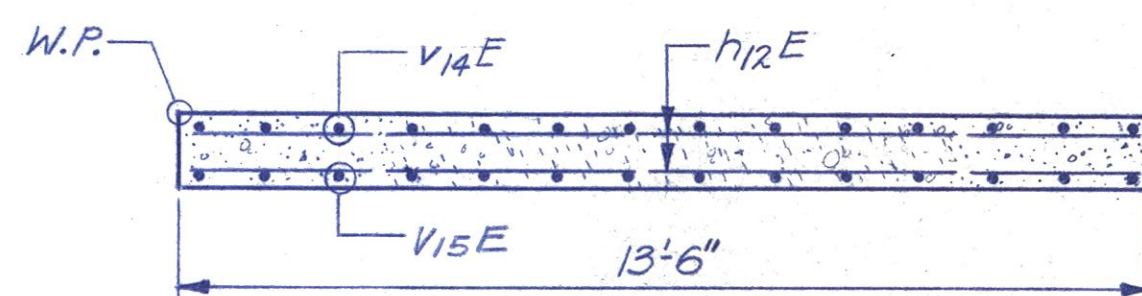


TOP VIEW

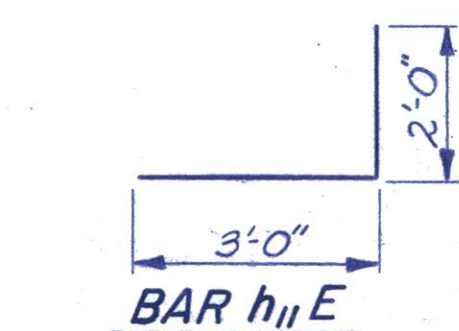


HALF PLAN
Reinforcement

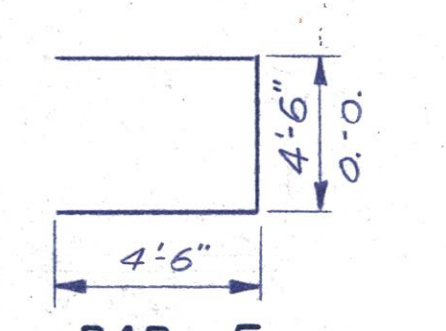
HALF PLAN
Dimensions



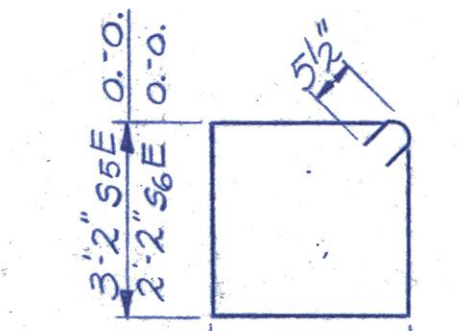
SECTION B-B



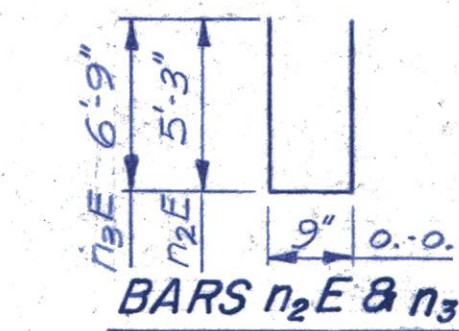
BAR h11E



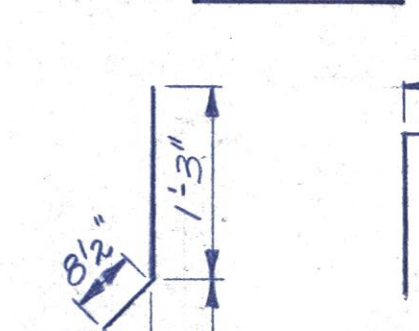
BAR u3E



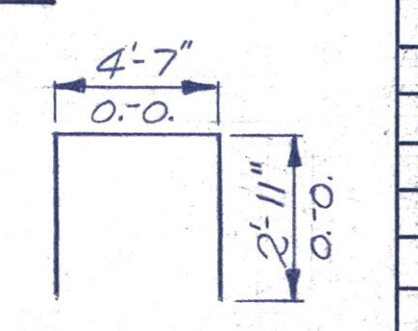
BARS S5E & S6E



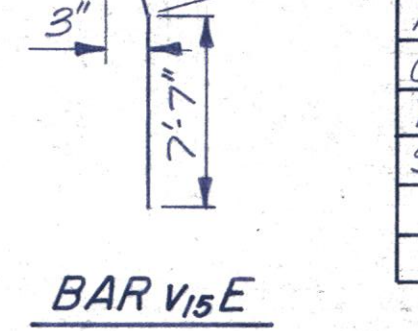
BARS n2E & n3E



BAR V13E



BAR S7E



BAR V15E

PILE DATA

Type: 12" Conc. Piles
Capacity: 45 Ton.
Est. Length: 18'
No. Required: 11***
*** Includes one test pile
driven in a permanent location.

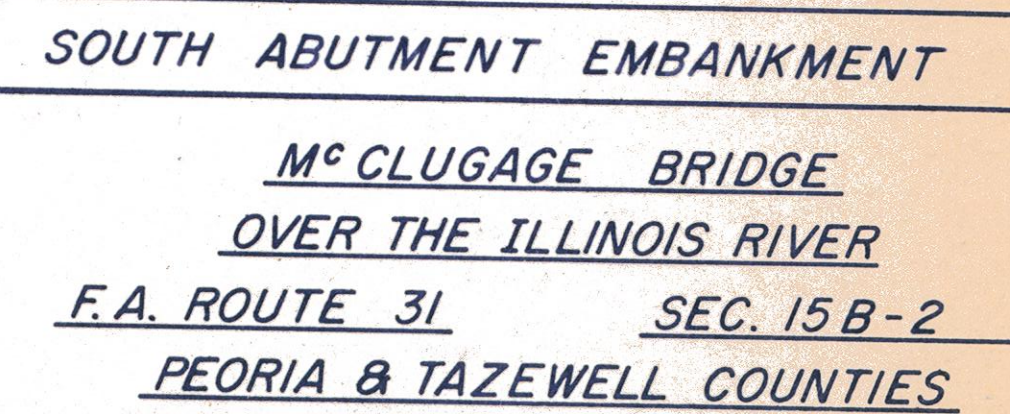
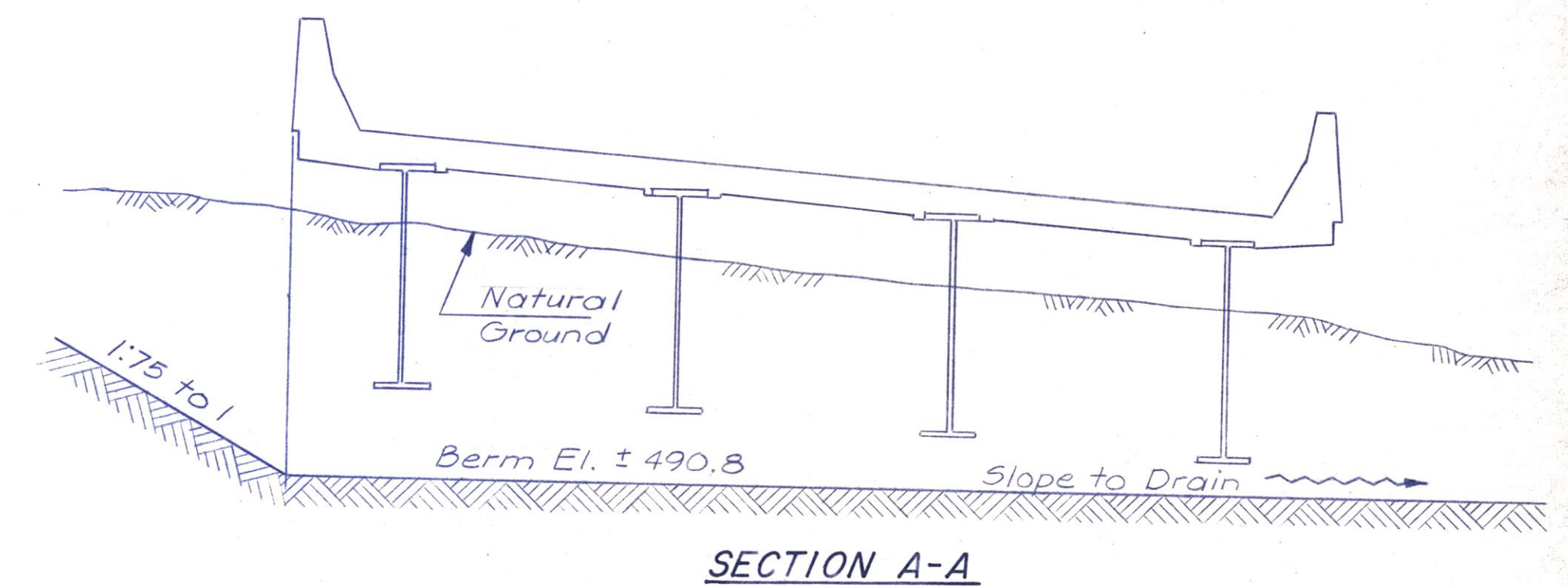
SOUTH ABUTMENT

M^CCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15B-2
PEORIA & TAZEWELL COUNTIES

DESIGNED W.D.L.
CHECKED S.C.O.
DRAWN D.A.N.
CHECKED S.C.O.

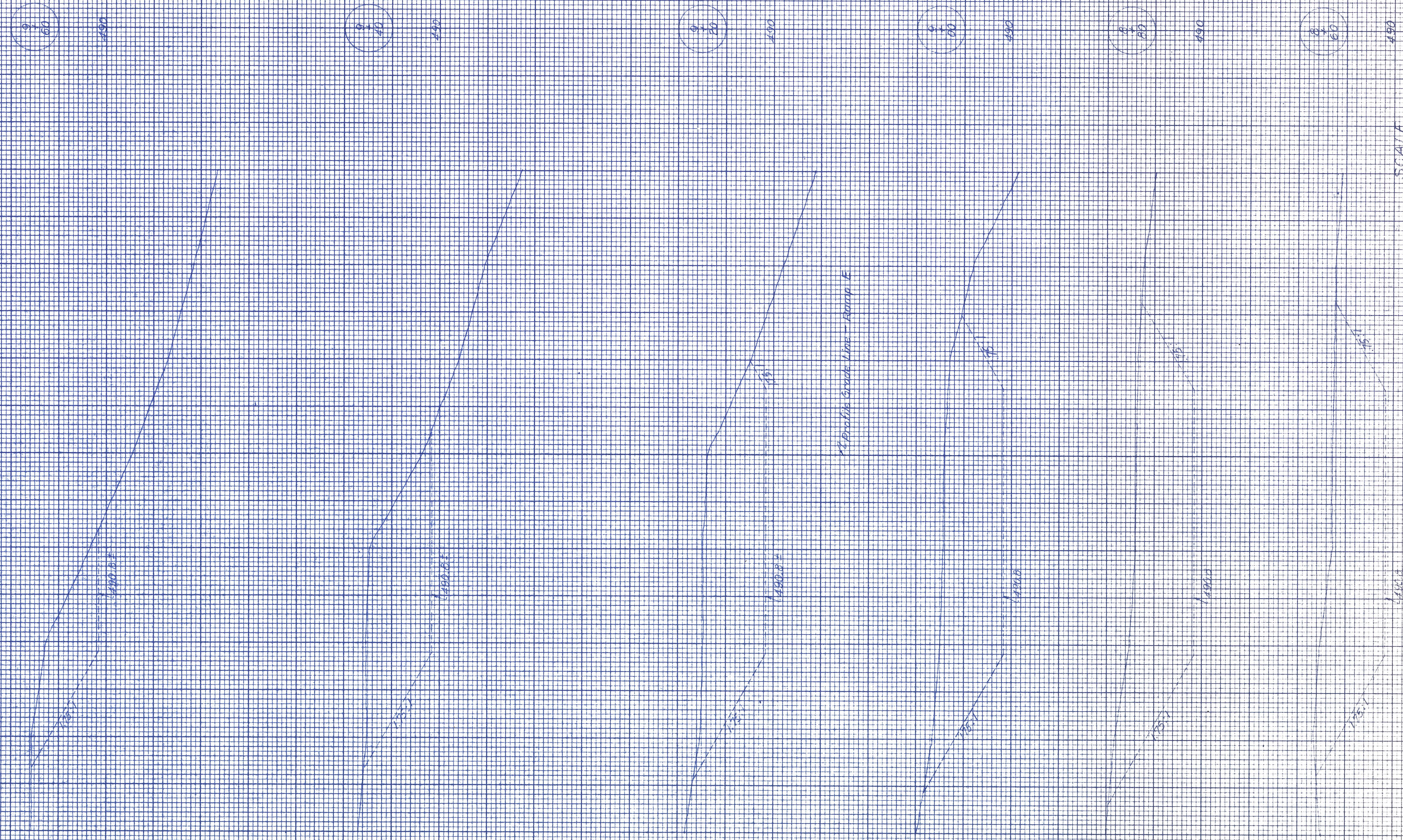


FILE NO. 74001
DATE 6-22-76



ORIGINAL	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
NO.		
AREAS CHECKED		

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 31 15B-2		Tapewell	52	33

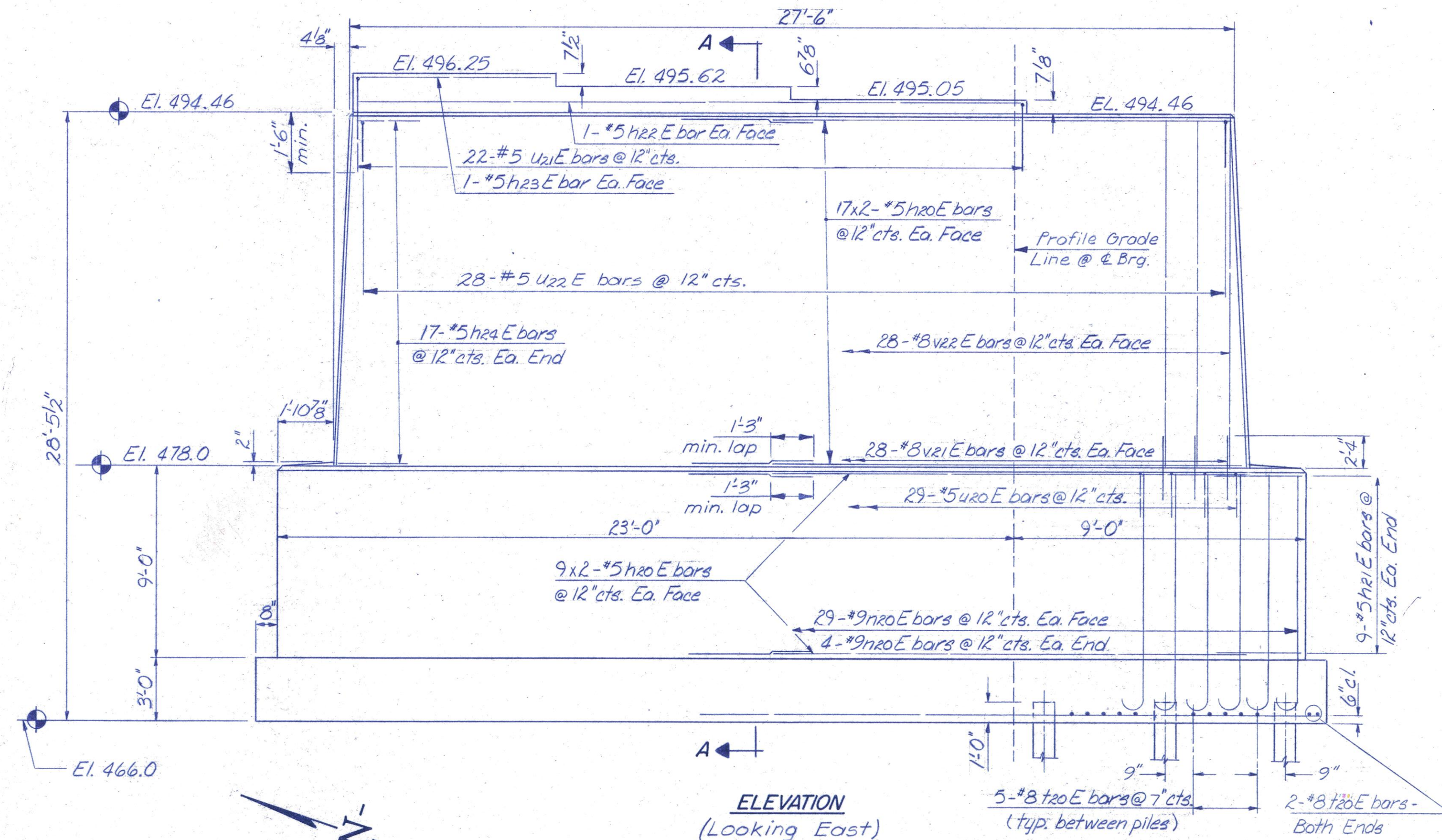


SCALE
Horiz. 1"=5'
Vert. 1"=5'

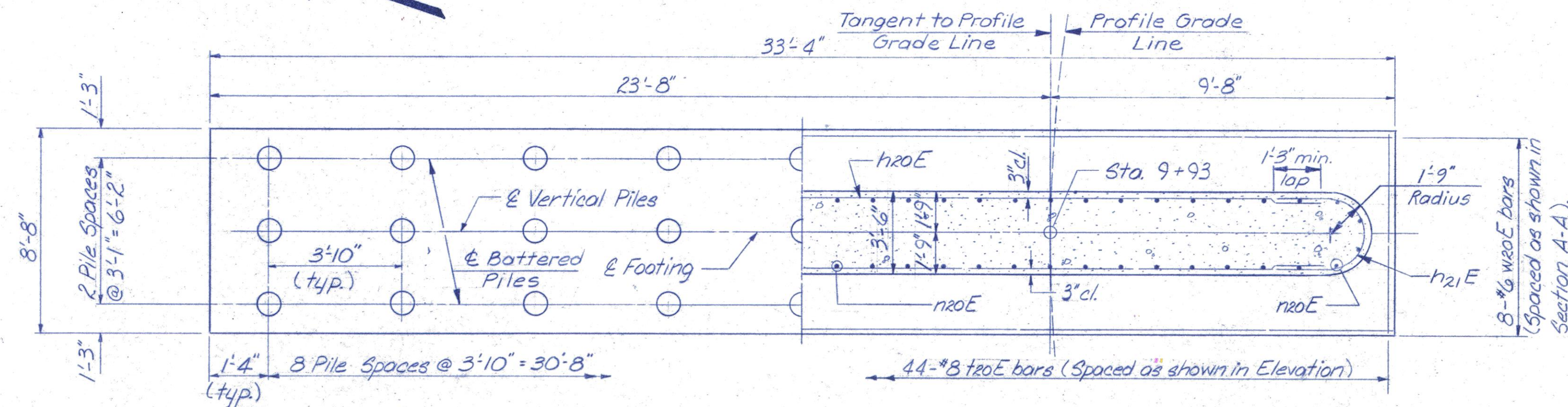
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**** Location of future Anchor Bolts.**

TOP PLAN

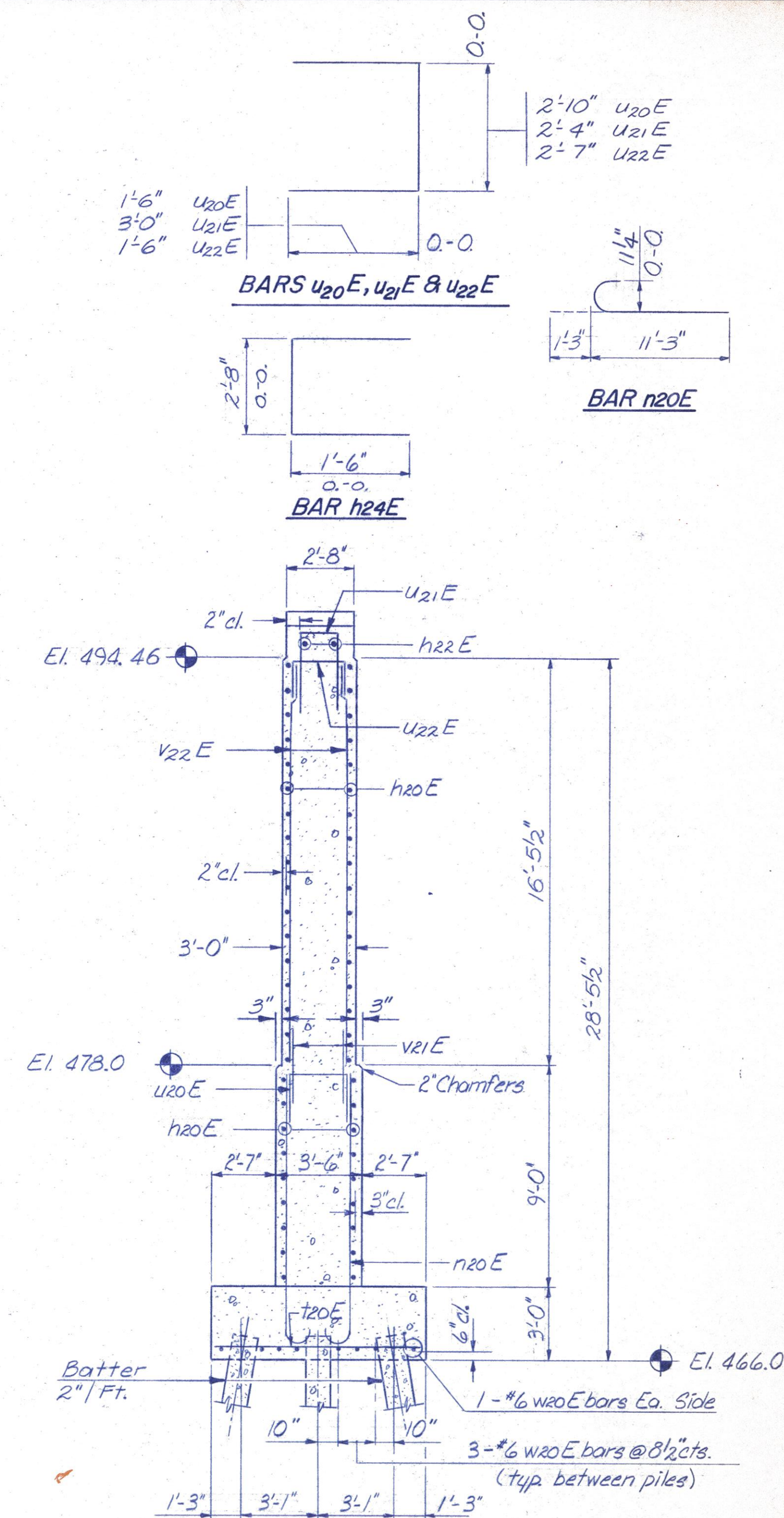


ELEVATION
(Looking East)



HALF PILE PLAN

HALF FOOTING PLAN



SECTION A-A

PIER 2E
BILL OF MATERIAL

[illegible]

PILE DATA

Type	Conc.. 12" dia.
Capacity	45 ton
Est. Length	25'
No. Required	27*
* Includes one test pile driven in a permanent location.	

PIER 2E

M^C CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15 B-2
PEORIA & TAZEVELL COUNTIES

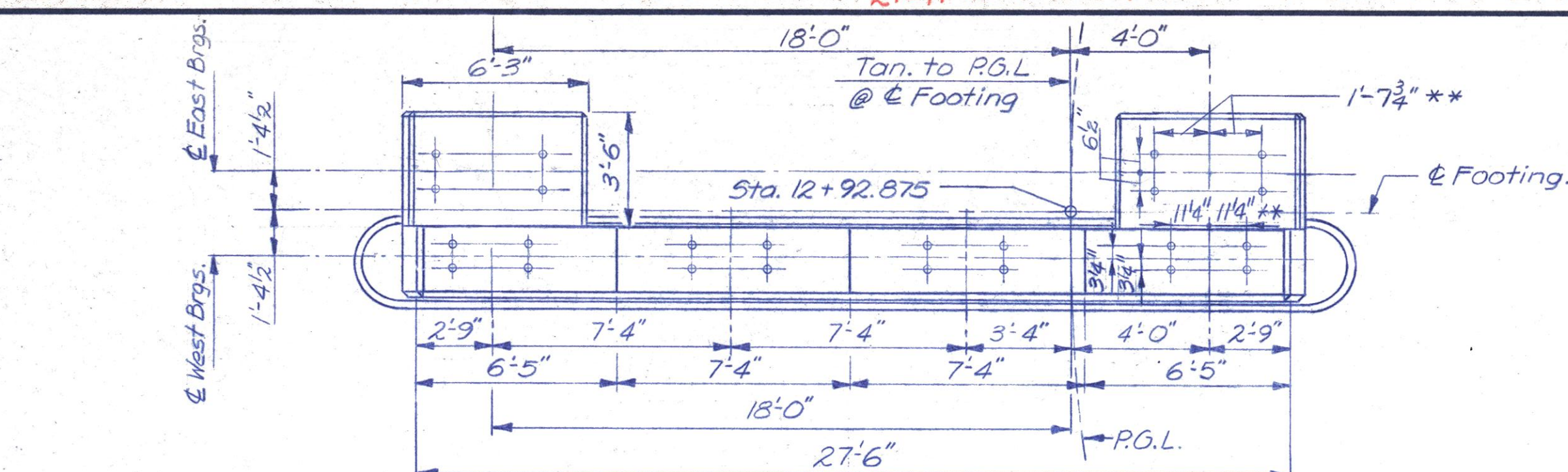
DESIGNED *W.D.L.*
CHECKED *S.C.O.*
DRAWN *R.J.F.*
CHECKED *S.C.O.*



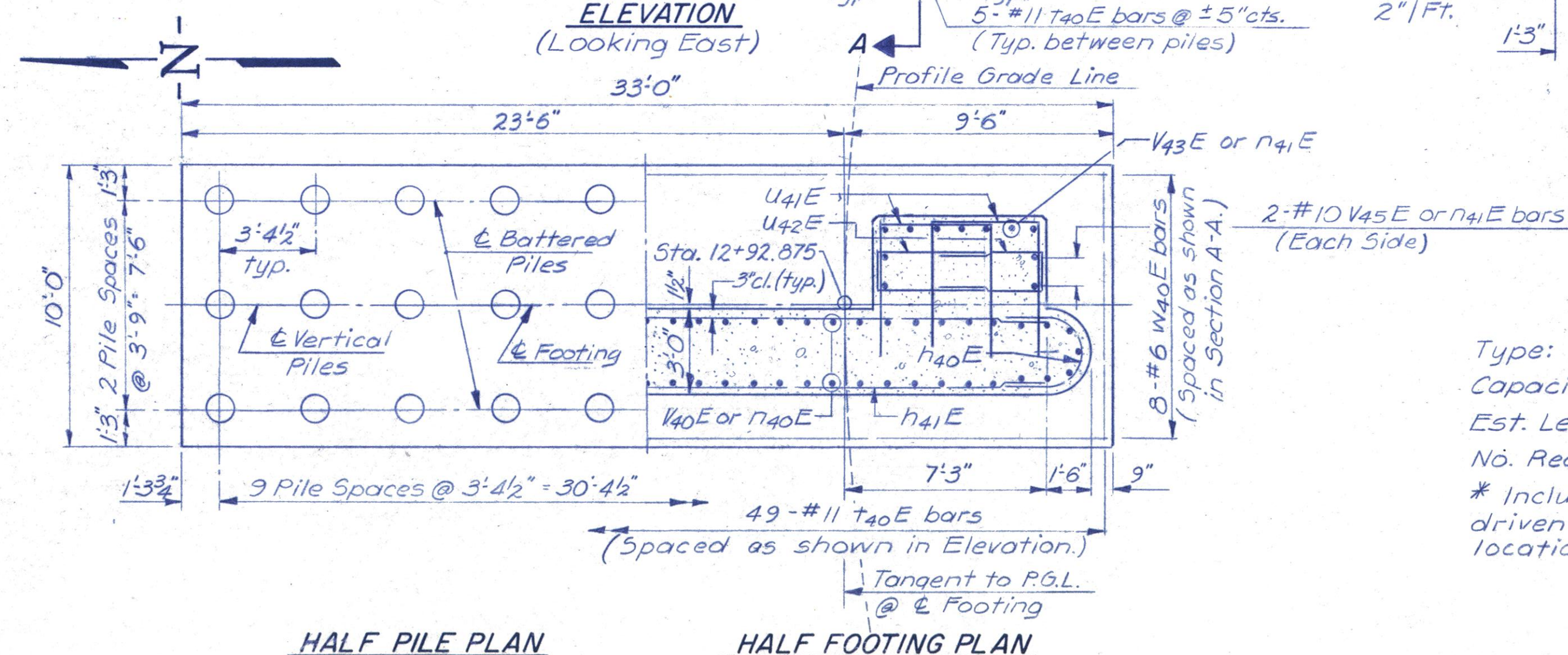
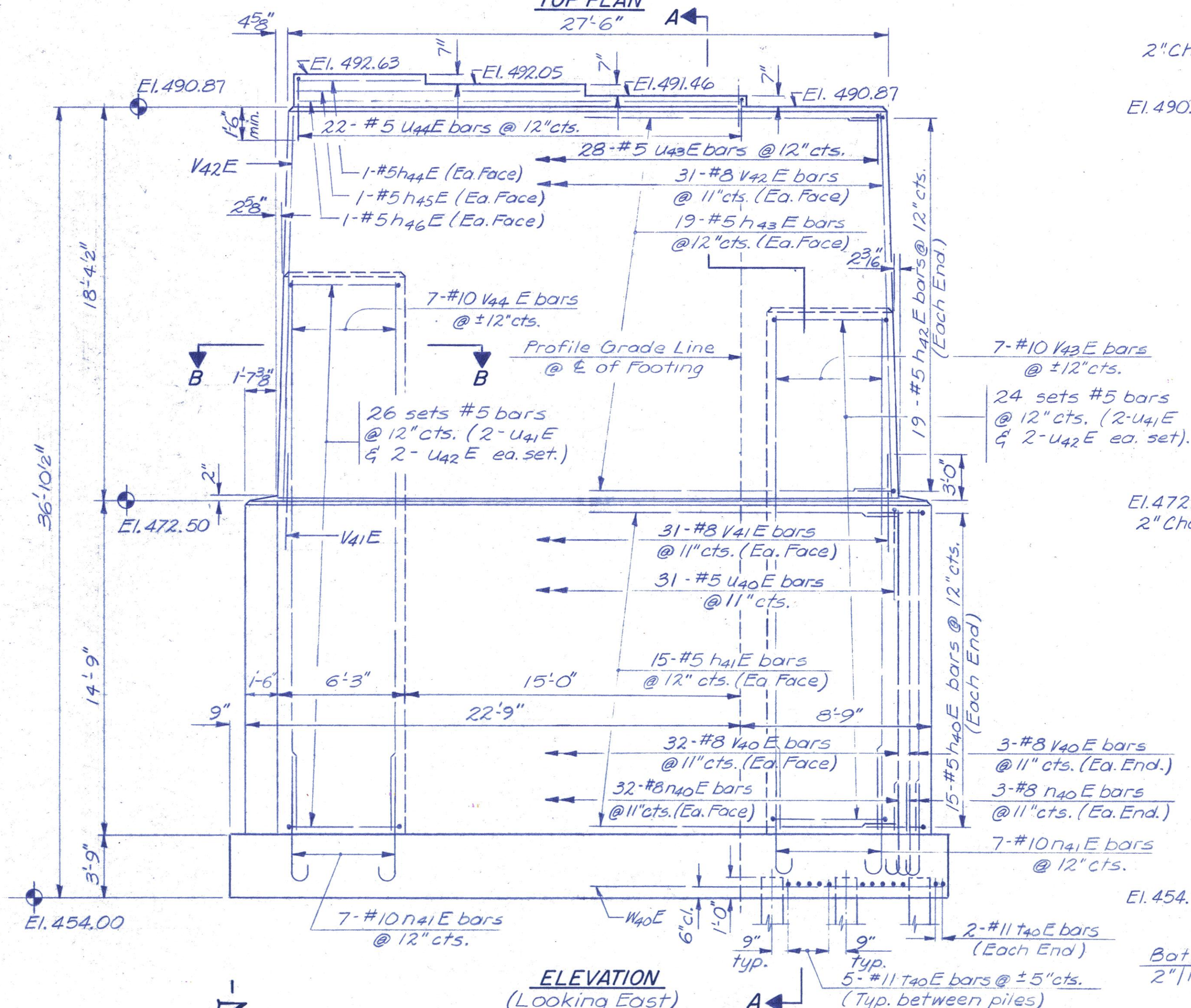
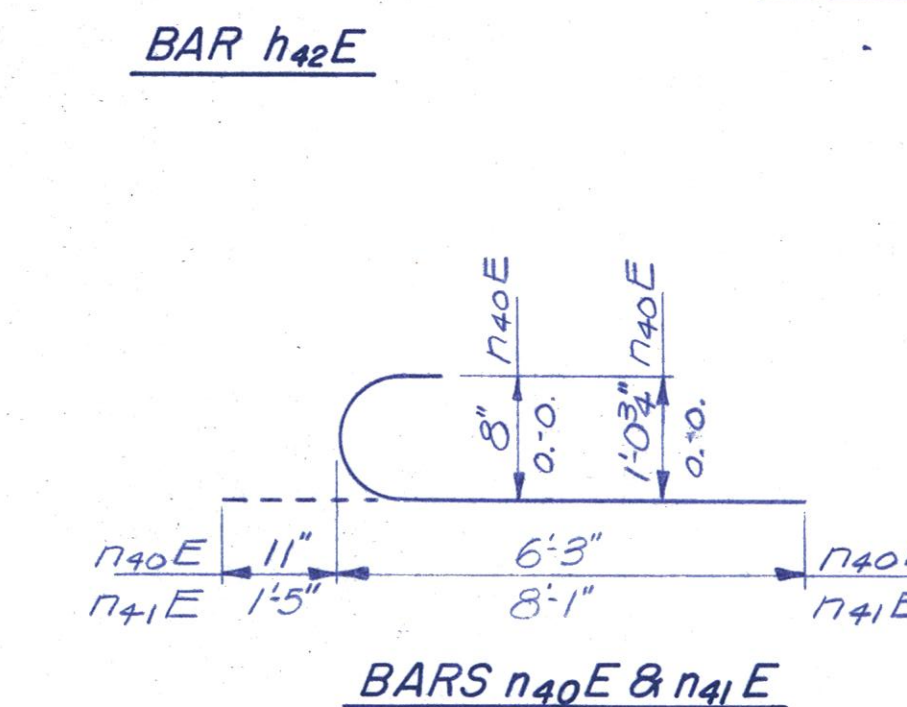
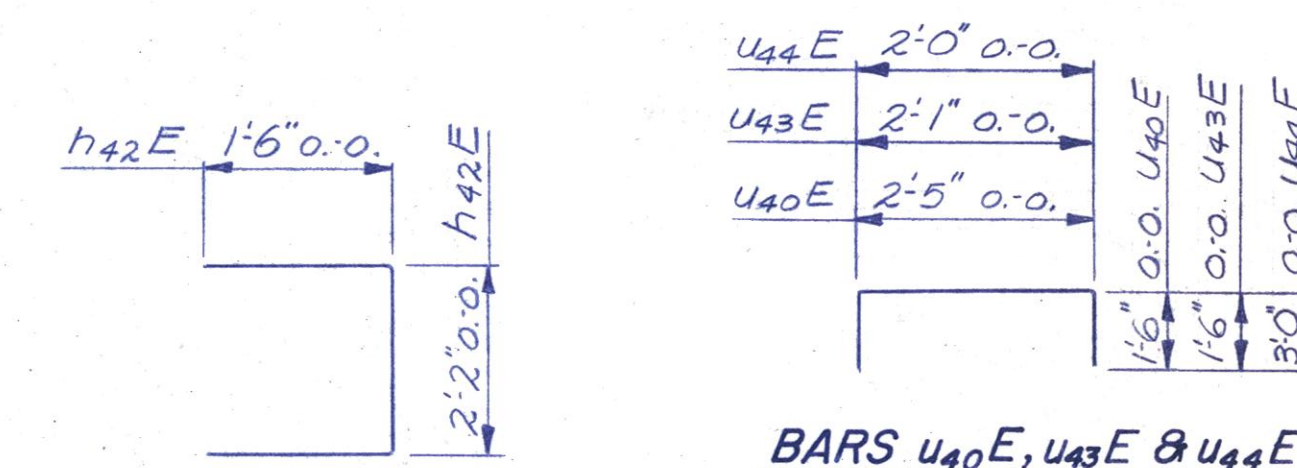
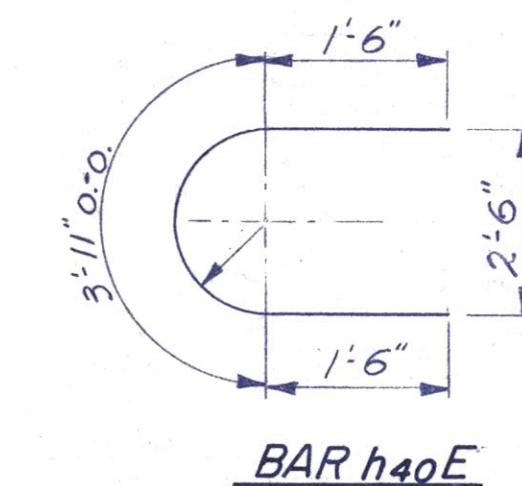
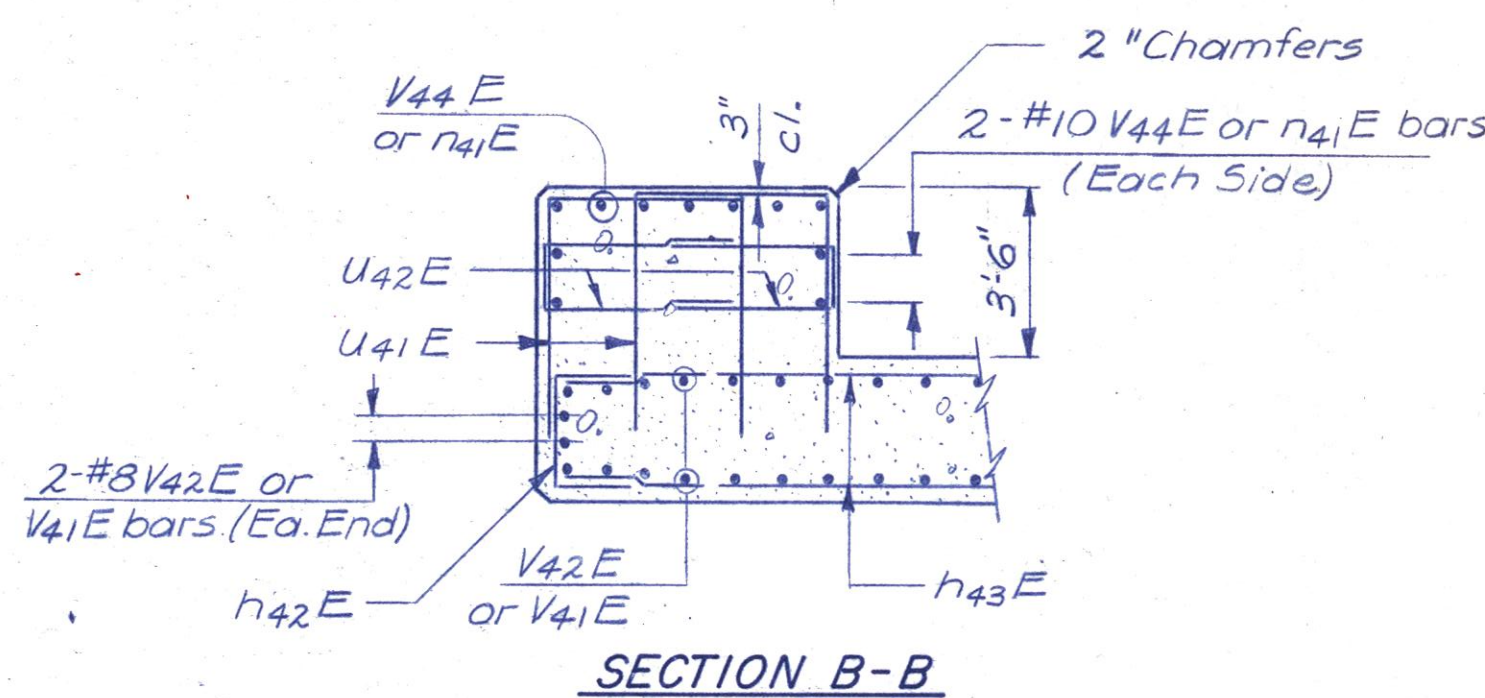
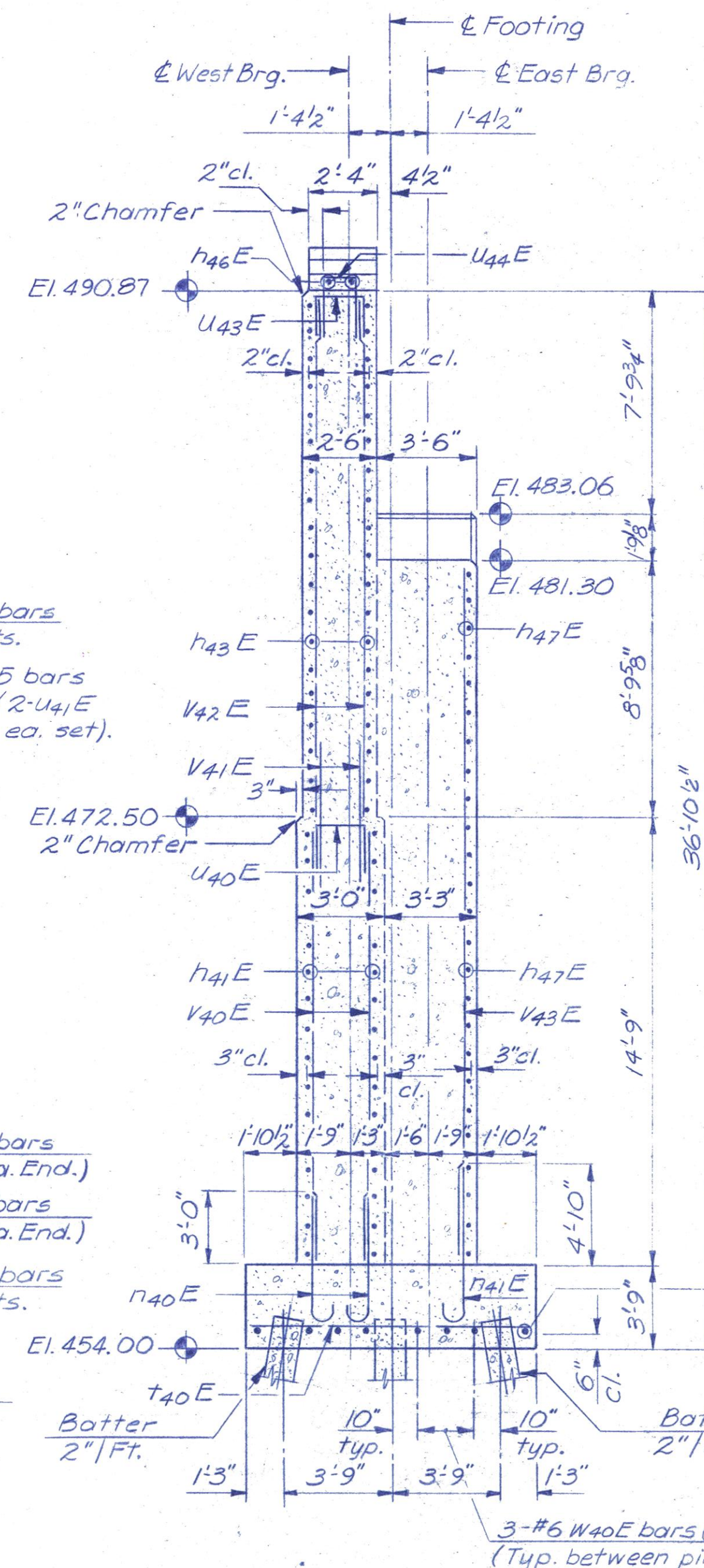
74001

DATE _____

5-22-76



****Location of future Anchor Bolts.**



<u>PIER 4E</u>				
<u>BILL OF MATERIAL</u>				
<u>BAR</u>	<u>NO.</u>	<u>SIZE</u>	<u>LENGTH</u>	<u>SHAPE</u>
h40E	30	#5	6'-11"	C
h41E	30	#5	28'-6"	—
h42E	38	#5	5'-2"	U
h43E	38	#5	27'-2"	—
h44E	2	#5	5'-11"	—
h45E	2	#5	13'-3"	—
h46E	2	#5	20'-7"	—
h40E	70	#8	7'-2"	C
h41E	22	#10	9'-6"	C
T40E	49	#11	9'-6"	—
U40E	31	#5	5'-5"	U
U41E	100	#5	13'-7"	—
U42E	100	#5	8'-7"	U
U43E	28	#5	5'-1"	U
U44E	22	#5	8'-0"	U
V40E	70	#8	14'-6"	—
V41E	66	#8	6'-0"	—
V42E	66	#8	17'-11"	—
V43E	11	#10	23'-3"	—
V44E	11	#10	25'-0"	—
W40E	8	#6	32'-6"	—
Class A Concrete			Cu.Yds.	152.7
Reinforcement Bars			Lbs.	12,600
Conc. Piles 12"Ø			Lin.Ft.	1044
Test Pile 12"Ø Conc.			Each	1
Structure Excavation			Cu.Yds.	96

PILE DATA

Type: Concrete. 12" dia.

Capacity: 45 Ton

Est. Length: 36'

No. Required: 30 *

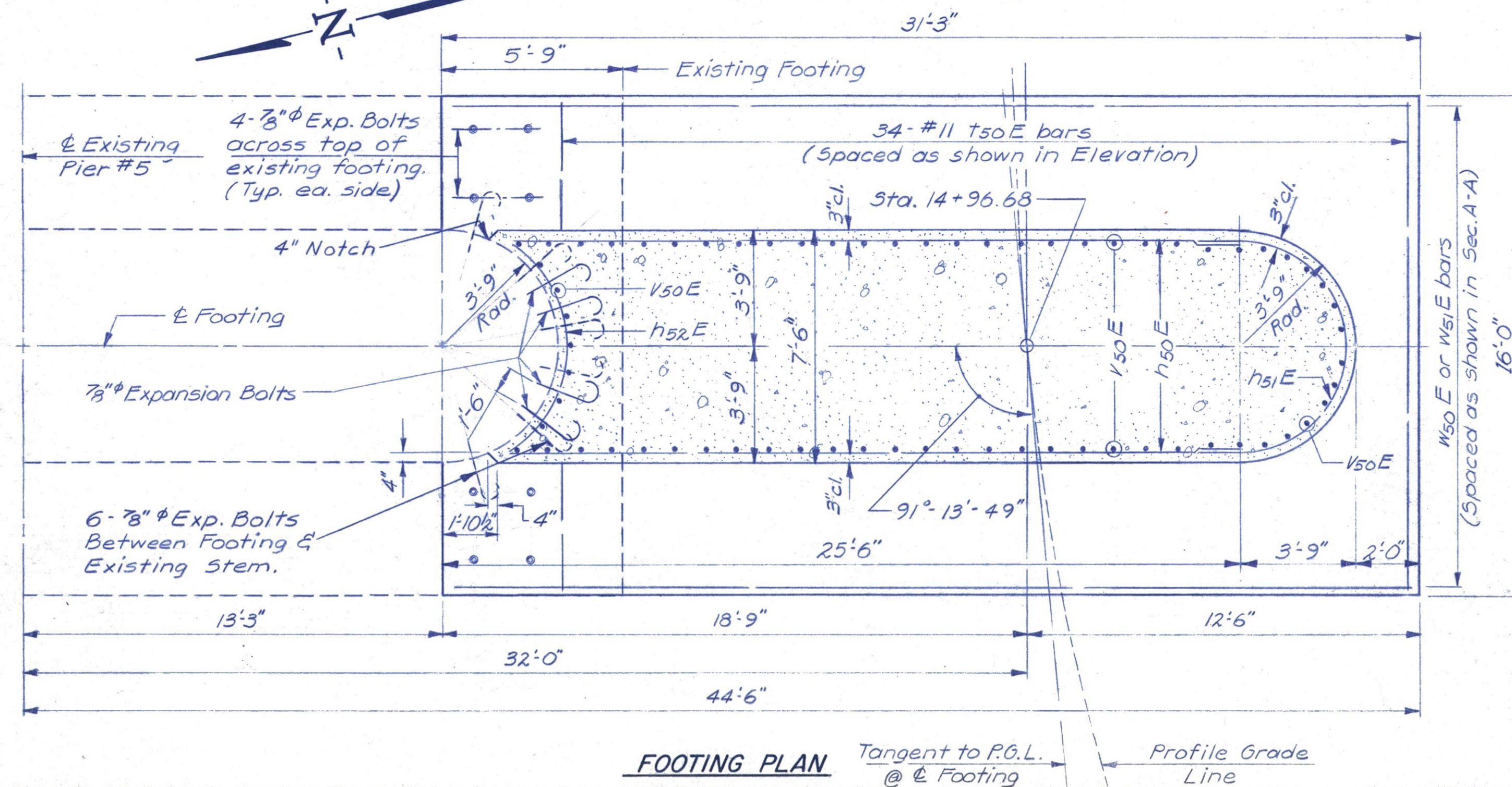
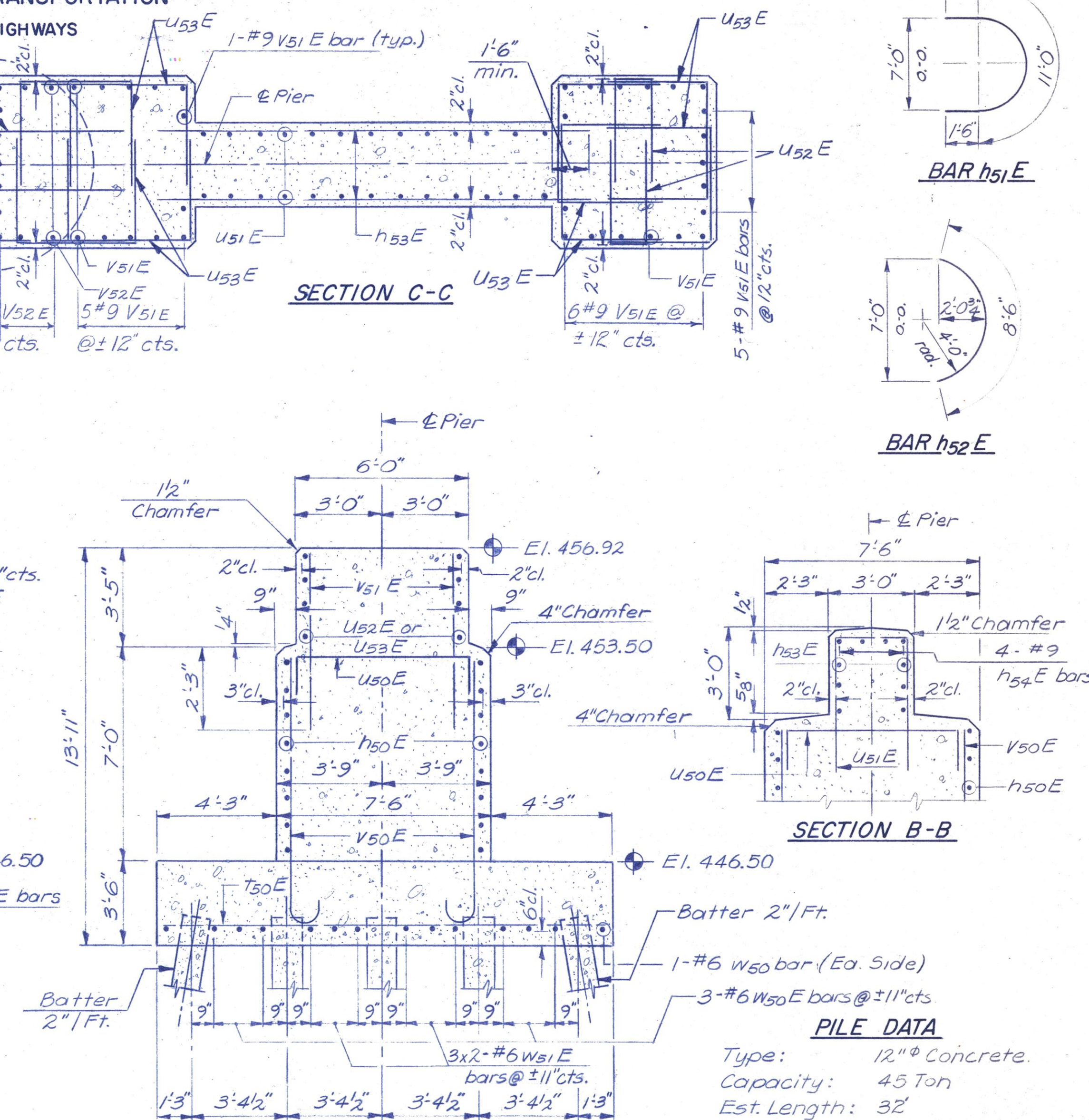
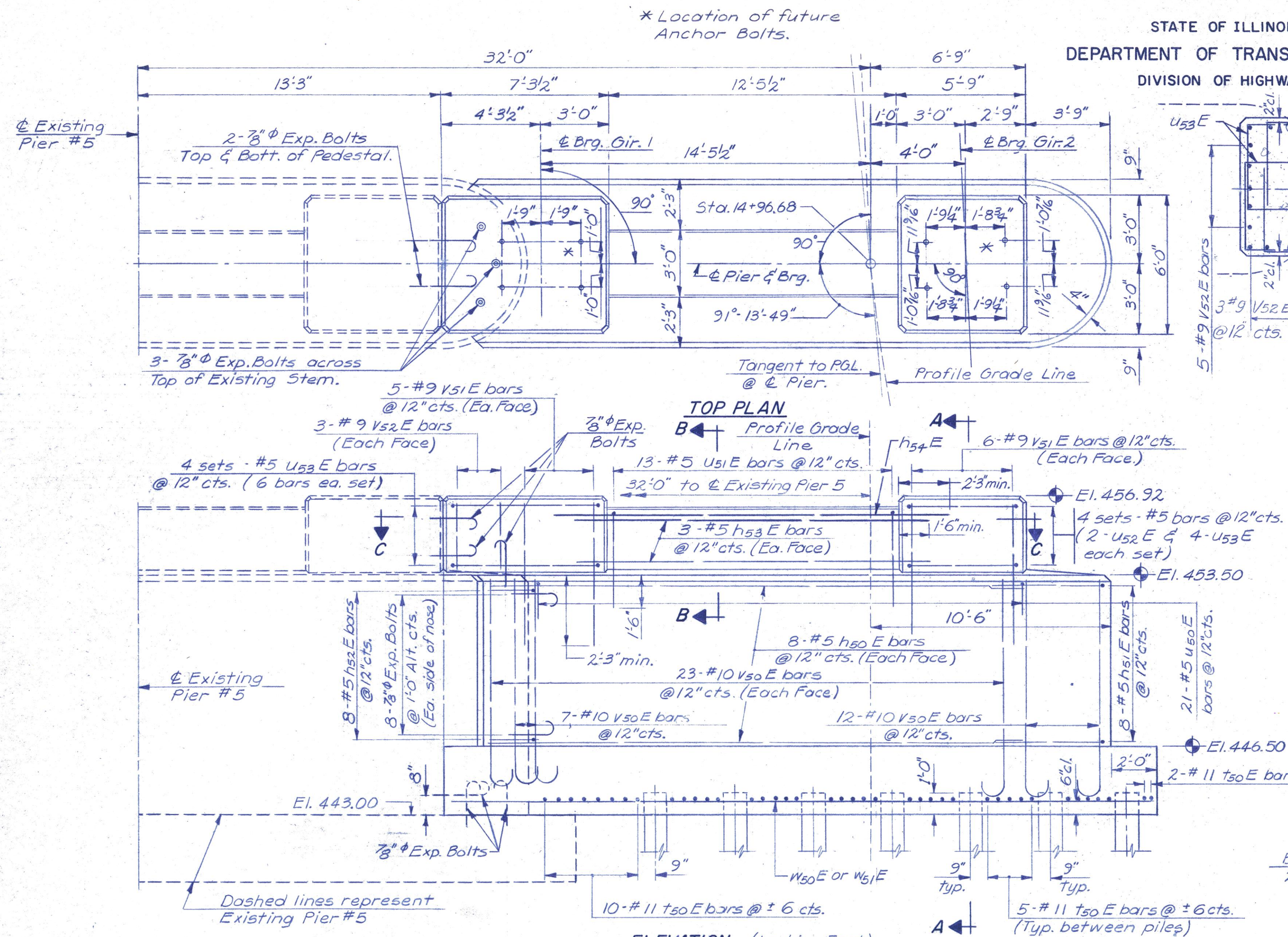
* Includes one Test Pile driven in a permanent location.

PIER 4E

M^C CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15B-2
PEORIA & TAZEWELL COUNTIES

Not affected by changes

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS



<u>PIER 5E</u>				
<u>BILL OF MATERIAL</u>				
BAR	NO.	SIZE	LENGTH	SHAPE
h50E	16	#5	23'3"	—
h51E	8	#5	14'0"	U
h52E	8	#5	8'6")
h53E	6	#5	15'5"	—
h54E	4	#9	17'0"	—
t50E	42	#11	15'6"	—
u50E	21	#5	9'10"	□
u51E	13	#5	11'4"	□
u52E	8	#5	7'11"	□
u53E	40	#5	10'11"	□
v50E	65	#10	11'2"	C
v51E	31	#9	5'6"	—
v52E	11	#9	3'3"	—
W50E	8	#6	30'9"	—
W51E	12	#6	14'11"	—
Class A Concrete			Cu.Yd.	124.5
Reinforcement Bars			Lbs.	9,720
Conc. Piles - 12" φ			Lin.Ft.	1,088
Test Pile 12" Conc.			Each	1
Structure Excavation			Cu.Yd.	173
Expansion Bolts - 3/8"			Each	37

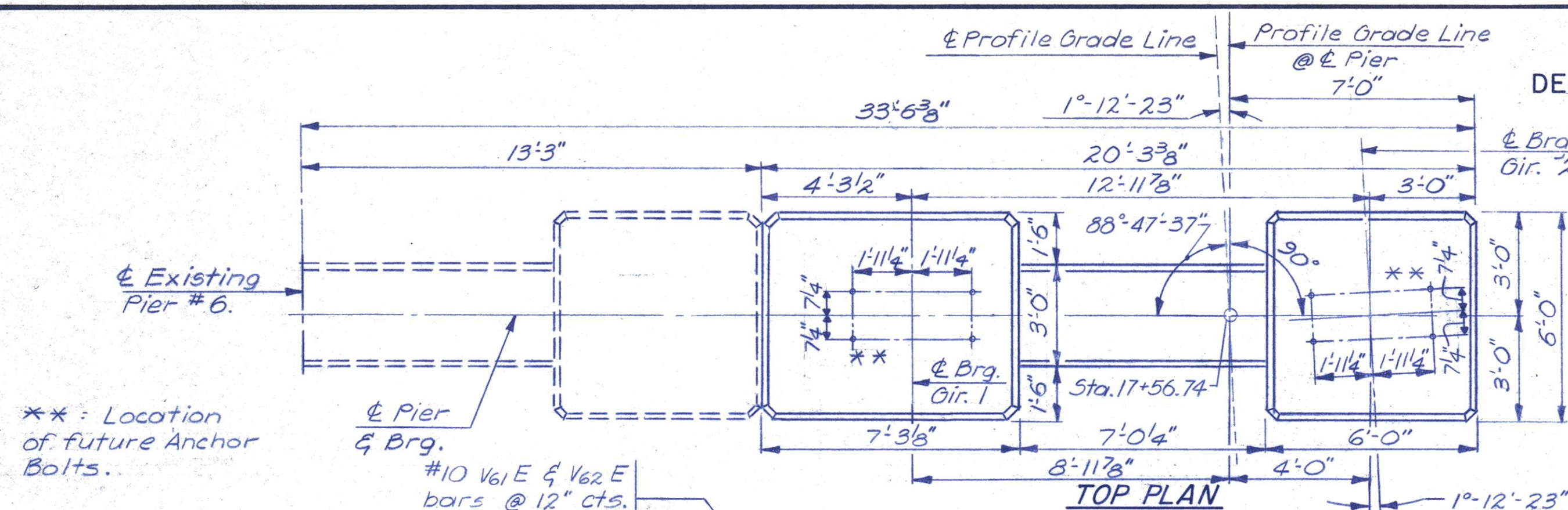
PIER 5E

M^C CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15 B-2
PEORIA & TAZEVELL COUNTIES

Not affected by changes.

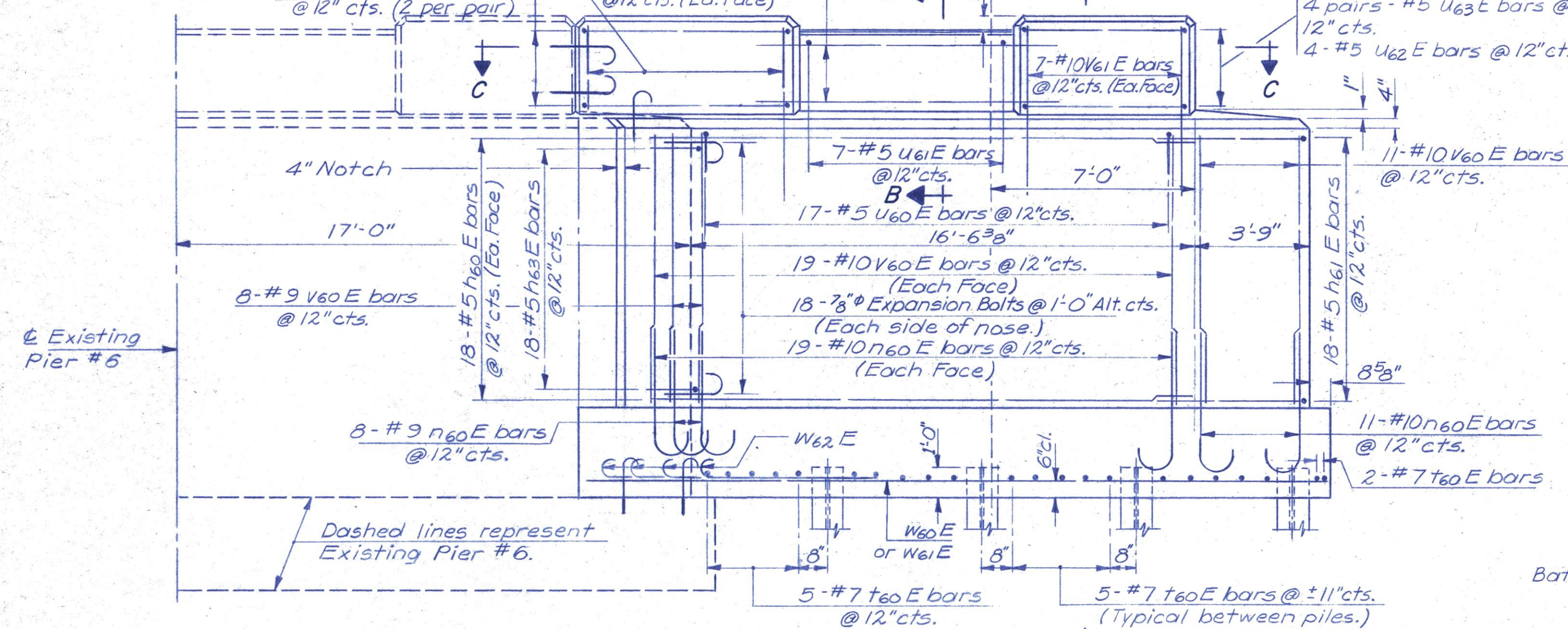
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 31	15B-2	PEORIA & TAZEWELL	52	38
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

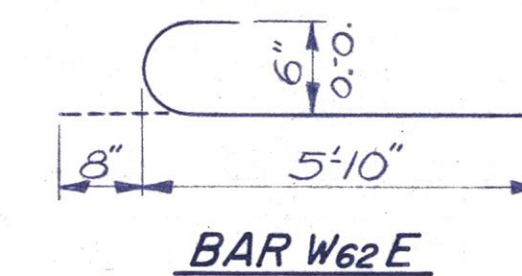
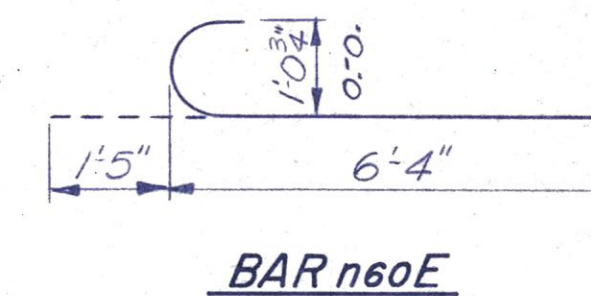
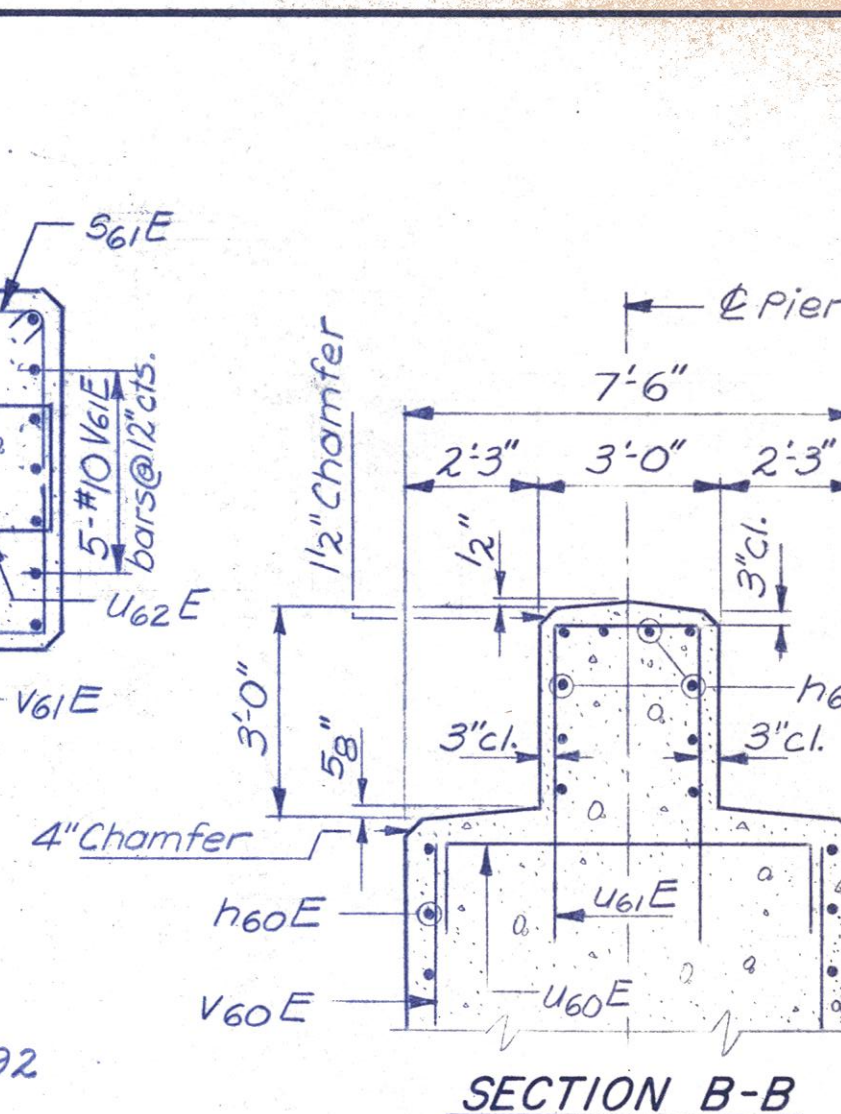
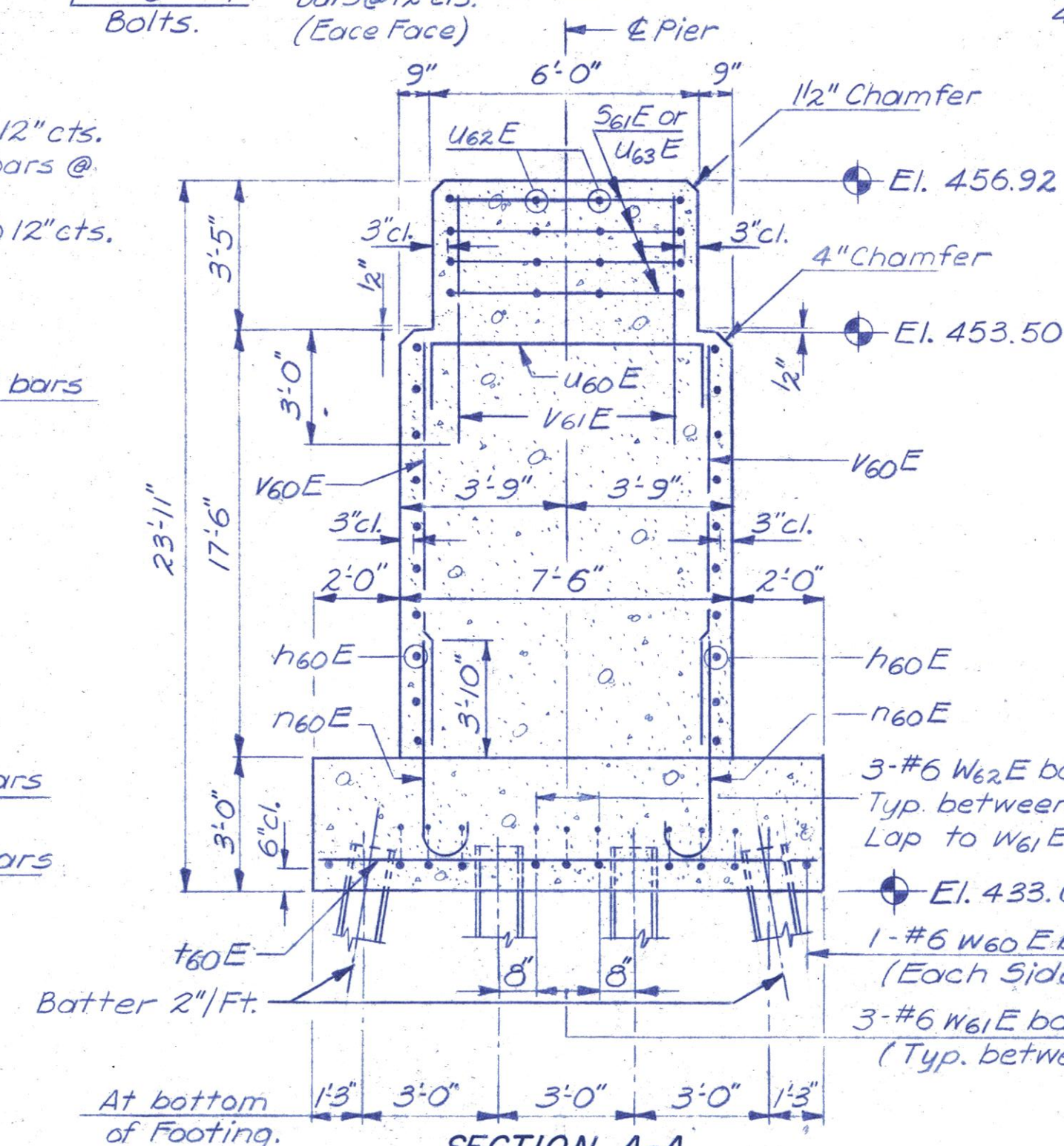
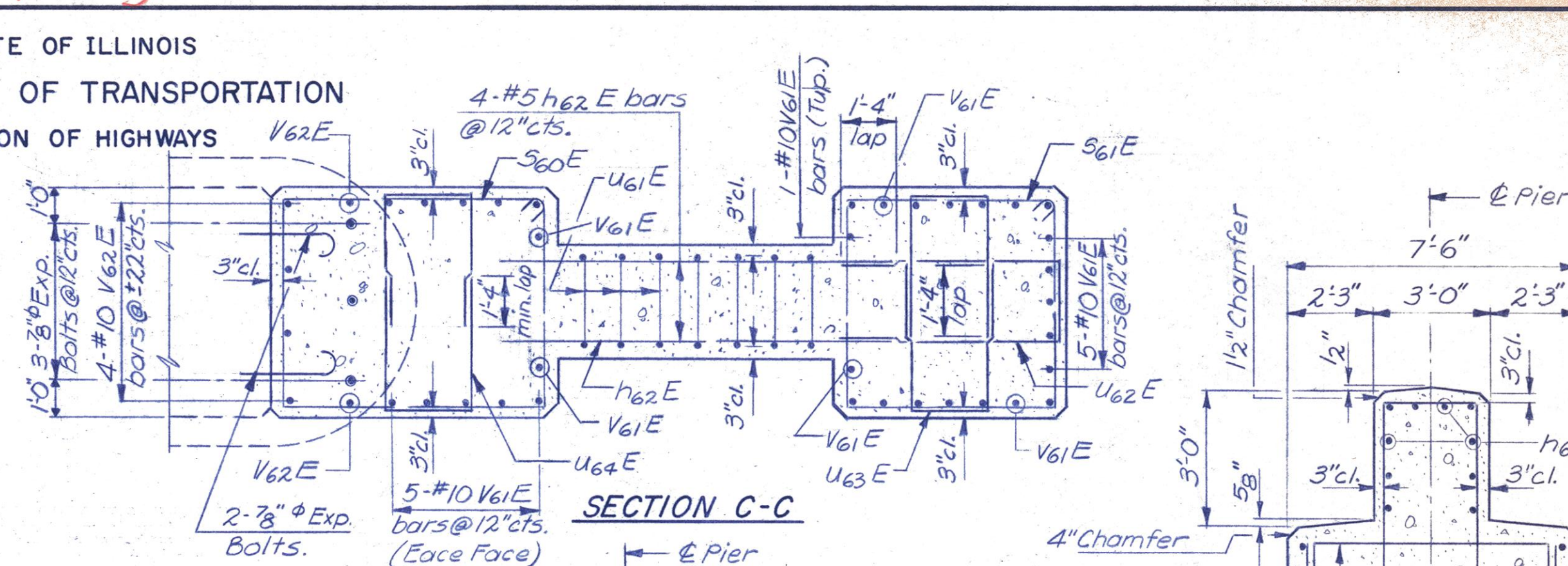
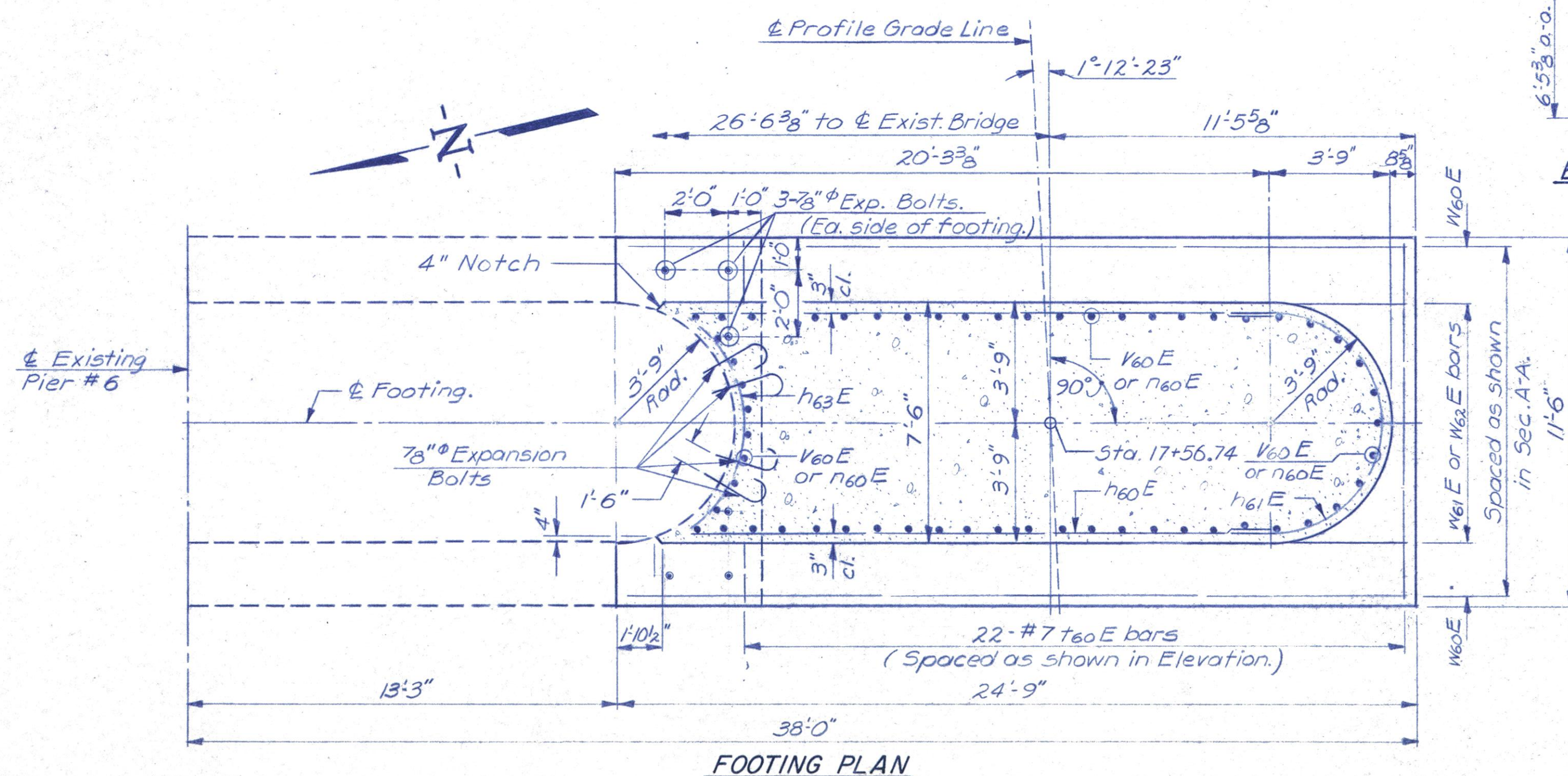


** : Location of future Anchor Bolts.

4-#5 S61E bars @ 12" cts.
4 pairs - #5 U63E bars @ 12" cts.
4-#5 U62E bars @ 12" cts.



ELEVATION (Looking East)

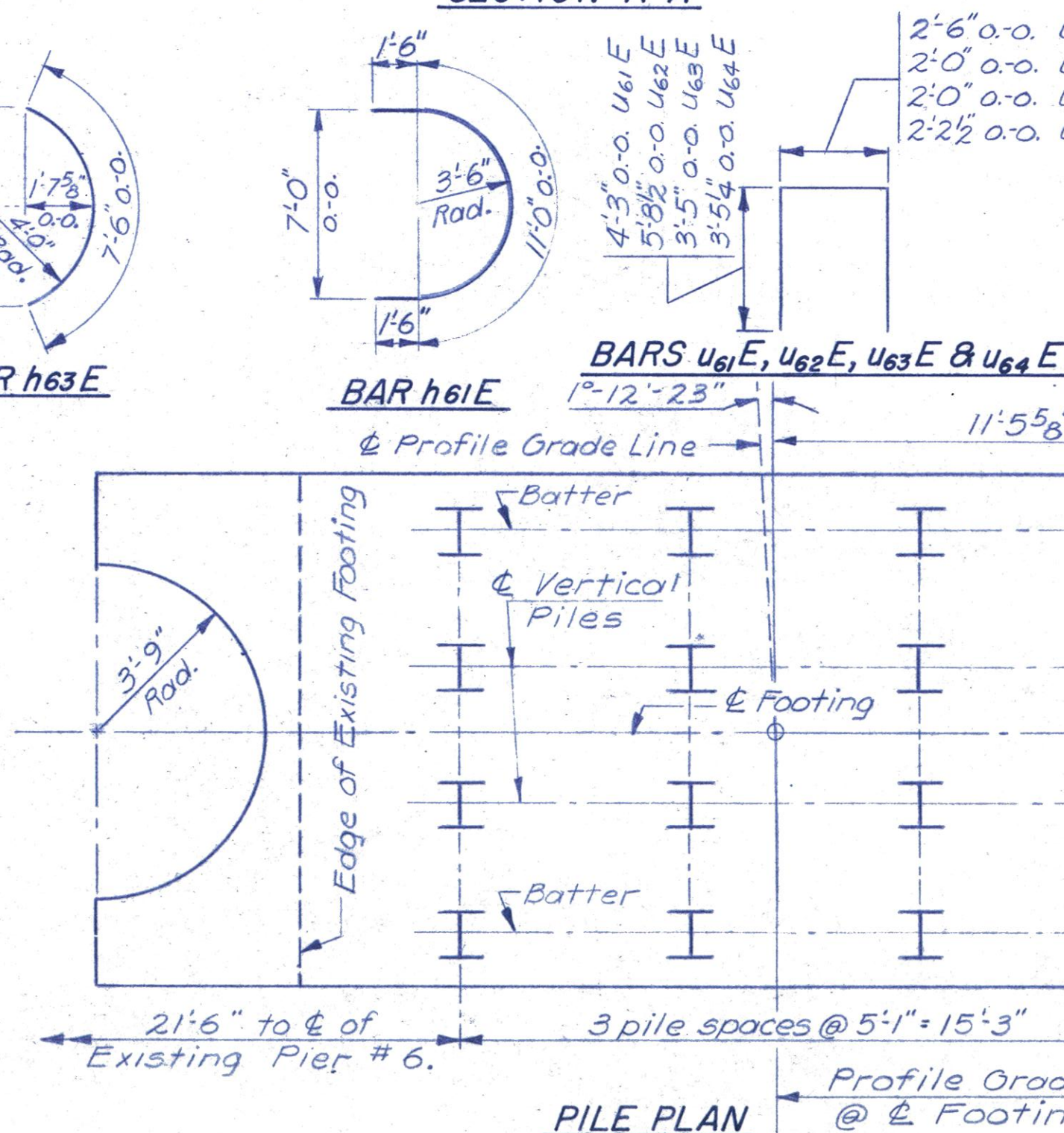


PIER 6E
BILL OF MATERIAL

BAR NO.	NO.	SIZE	LENGTH	SHAPE
h60E	36	#5	18'-0"	—
h61E	18	#5	14'-0"	—
h62E	10	#5	10'-1"	—
h63E	18	#5	7'-6"	—
n60E	57	#10	7'-9"	—
s60E	4	#5	25'-5"	—
s61E	4	#5	22'-11"	—
t60E	22	#7	11'-0"	—
u60E	17	#5	9'-10"	—
u61E	7	#5	11'-0"	—
u62E	4	#5	13'-5"	—
u63E	8	#5	8'-10"	—
u64E	8	#5	9'-1"	—
v60E	57	#10	17'-3"	—
v61E	33	#10	6'-2"	—
v62E	6	#10	3'-3"	—
w60E	2	#6	24'-3"	—
w61E	9	#6	19'-0"	—
w62E	9	#6	6'-6"	—
Class A Concrete				Cu.Yd. 140.2
Reinforcement Bars				Lbs. 9860
Steel Piles HP 12x53				Lin.Ft. 705
Test Pile HP 12x53				Each 1
Cofferdam Excavation				Cu.Yd. 121
Cofferdam				Each 1
Expansion Bolts - 3/8"				Each 49

PILE DATA

Type: HP 12x53
Capacity: Drive to refusal.
Est. Length: 47'
No. Required: 16*
*Includes one test pile driven in a permanent location.



PIER 6E

M^cCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15B-2
PEORIA & TAZEWELL COUNTIES

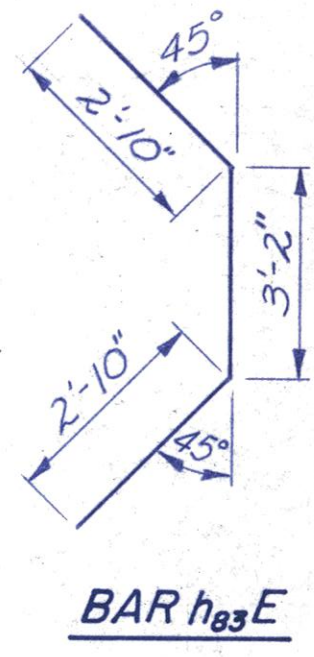
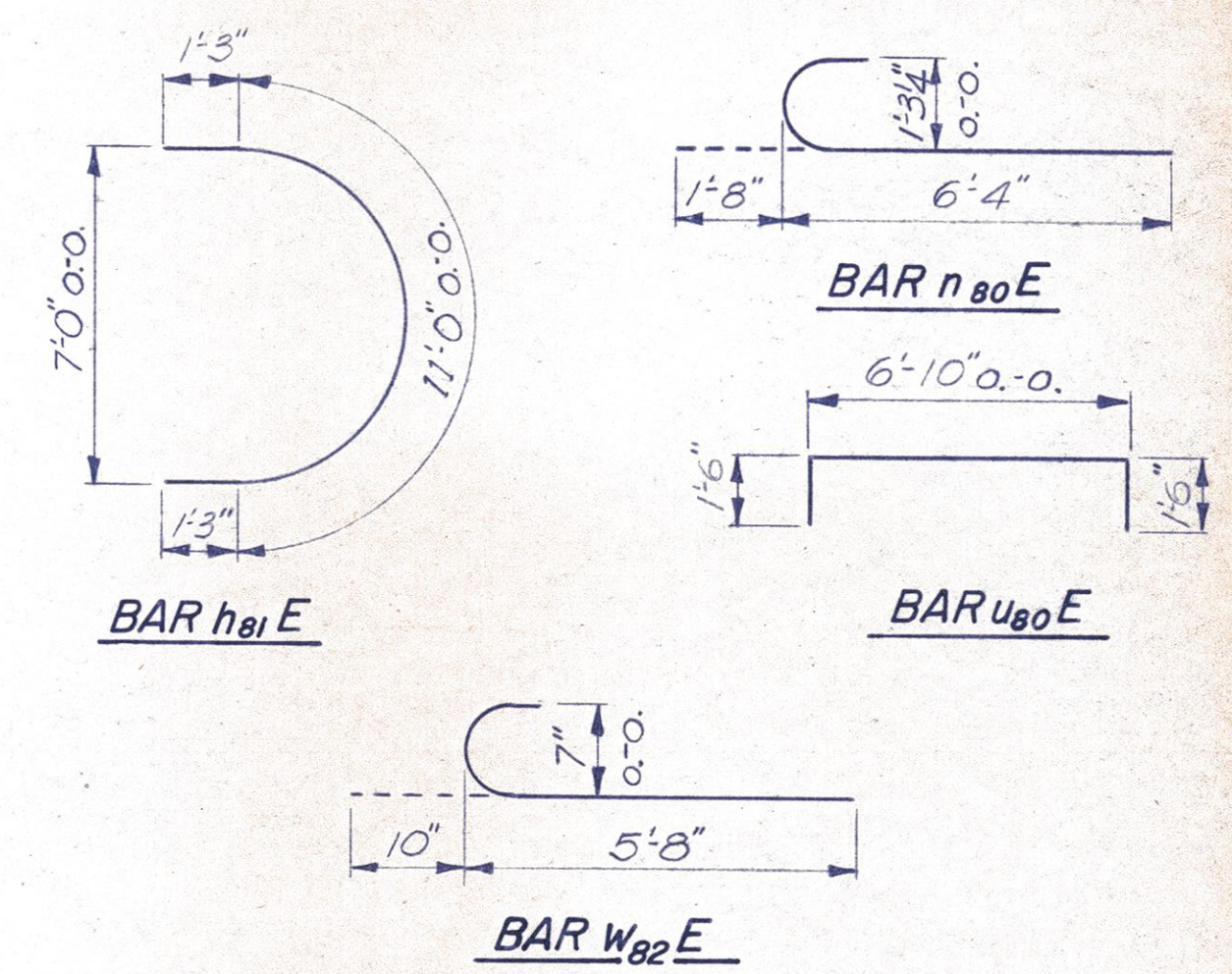
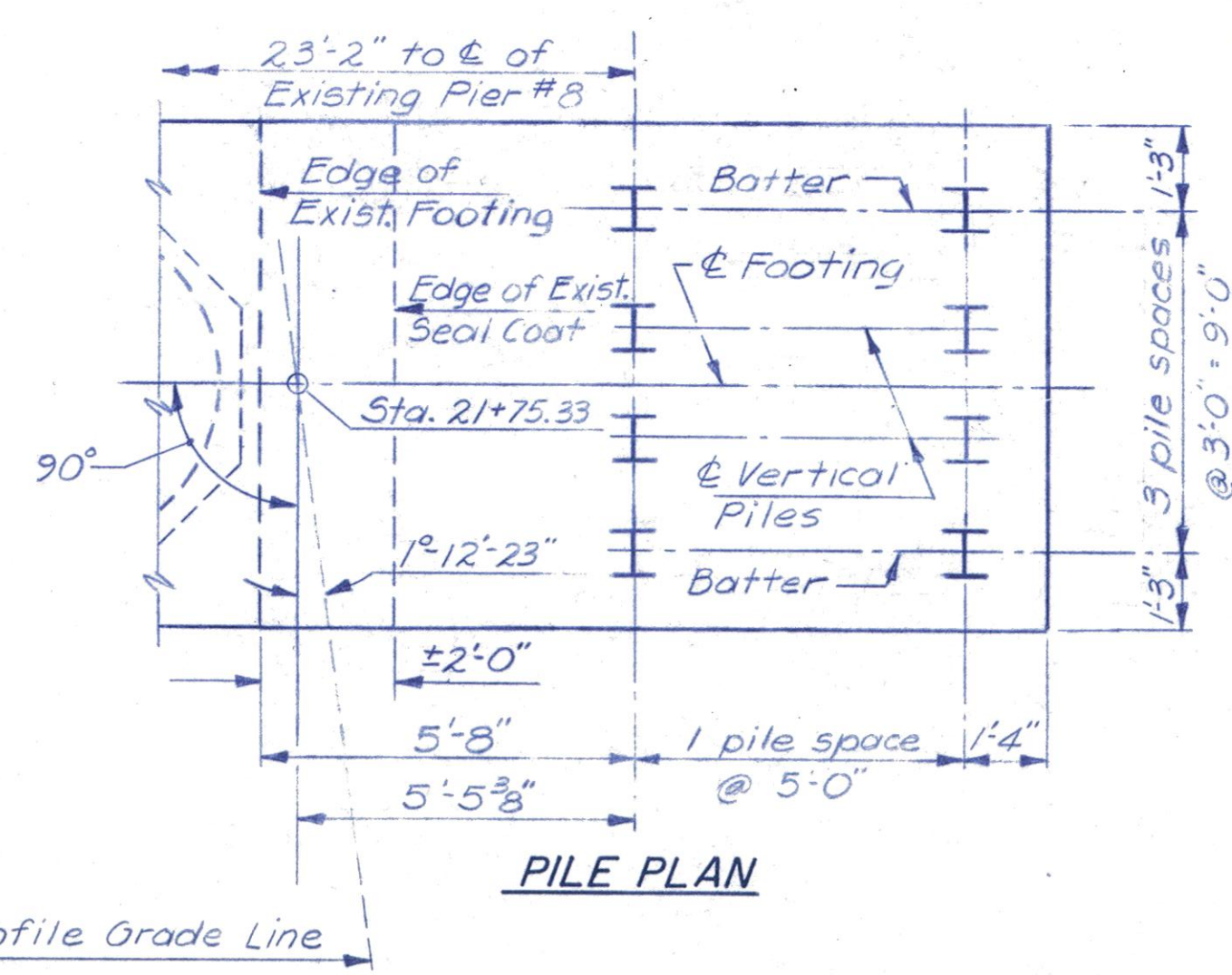
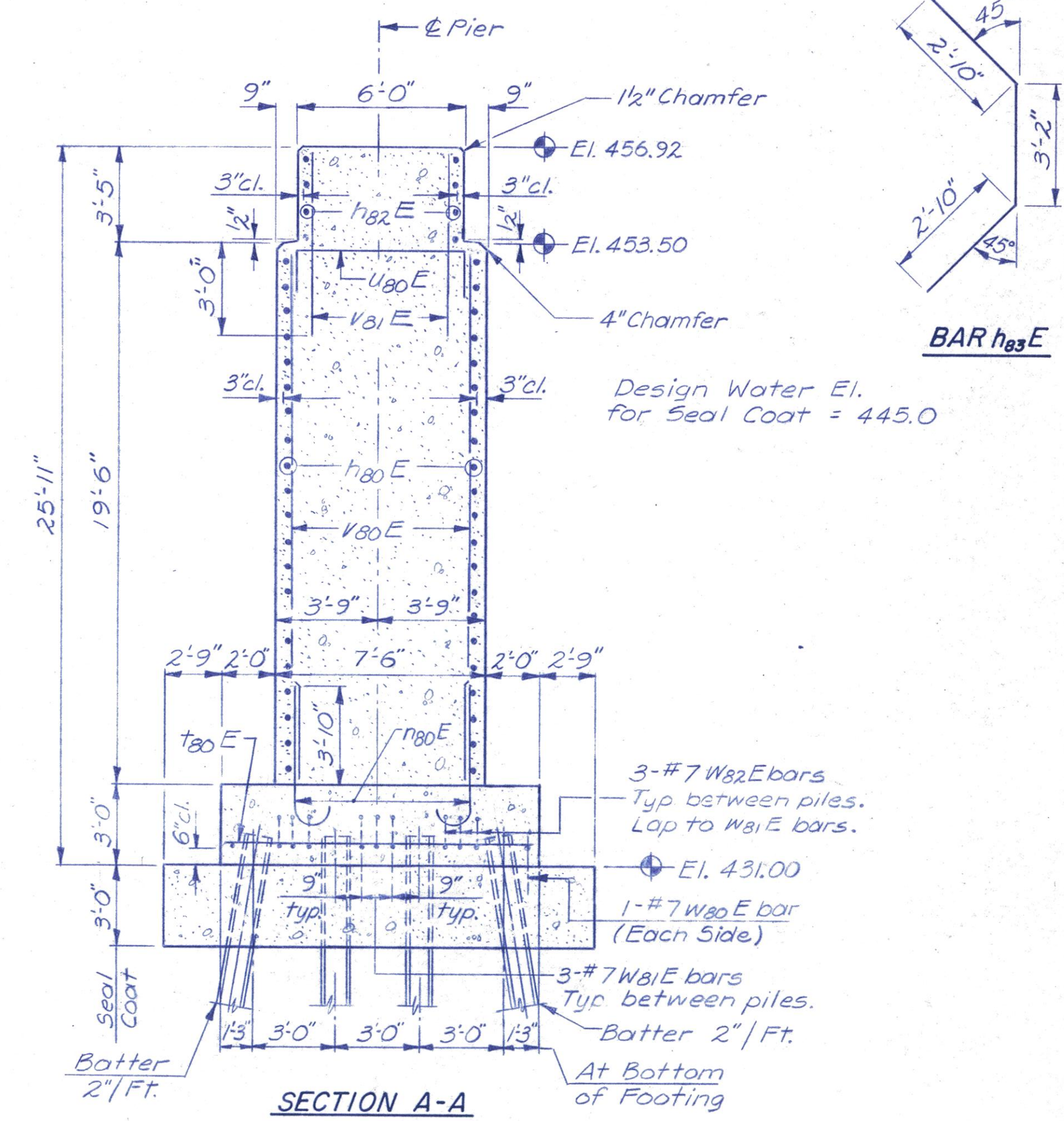
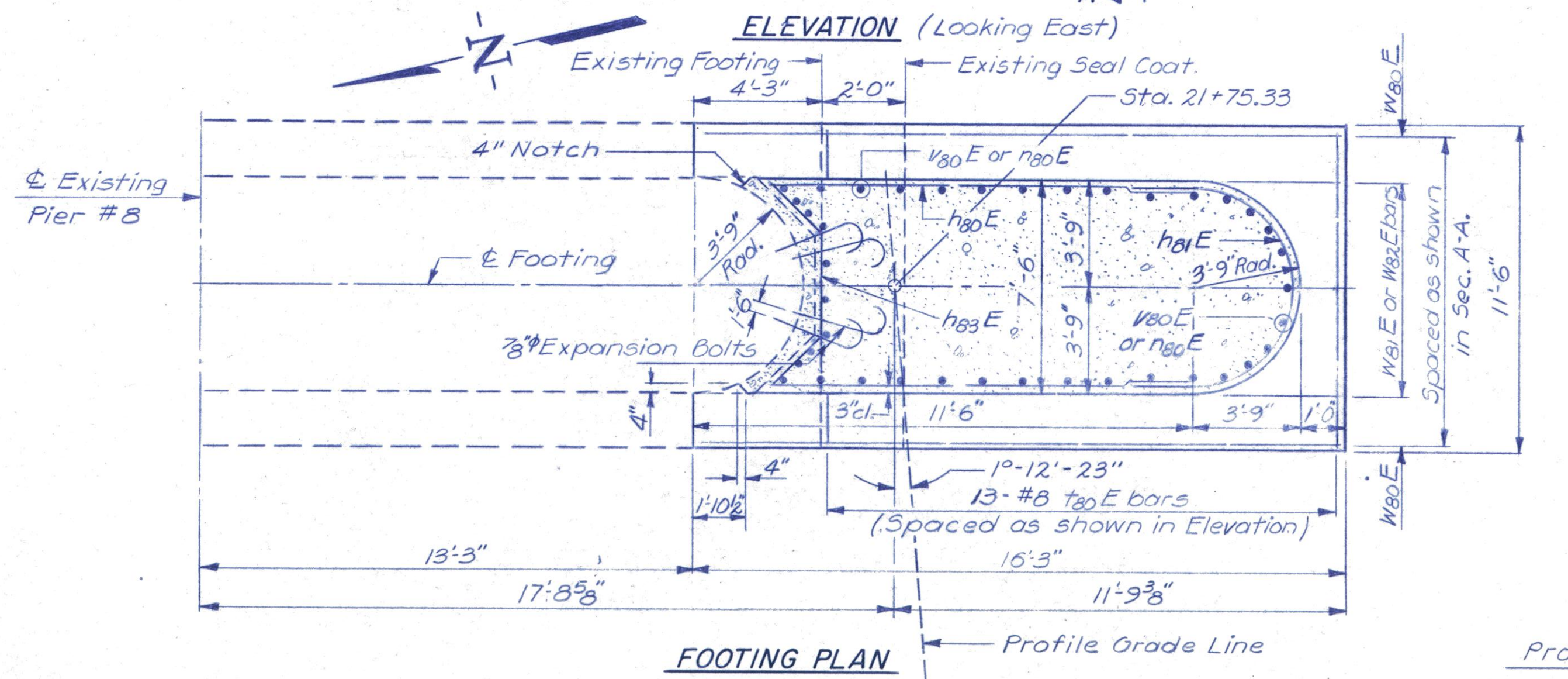
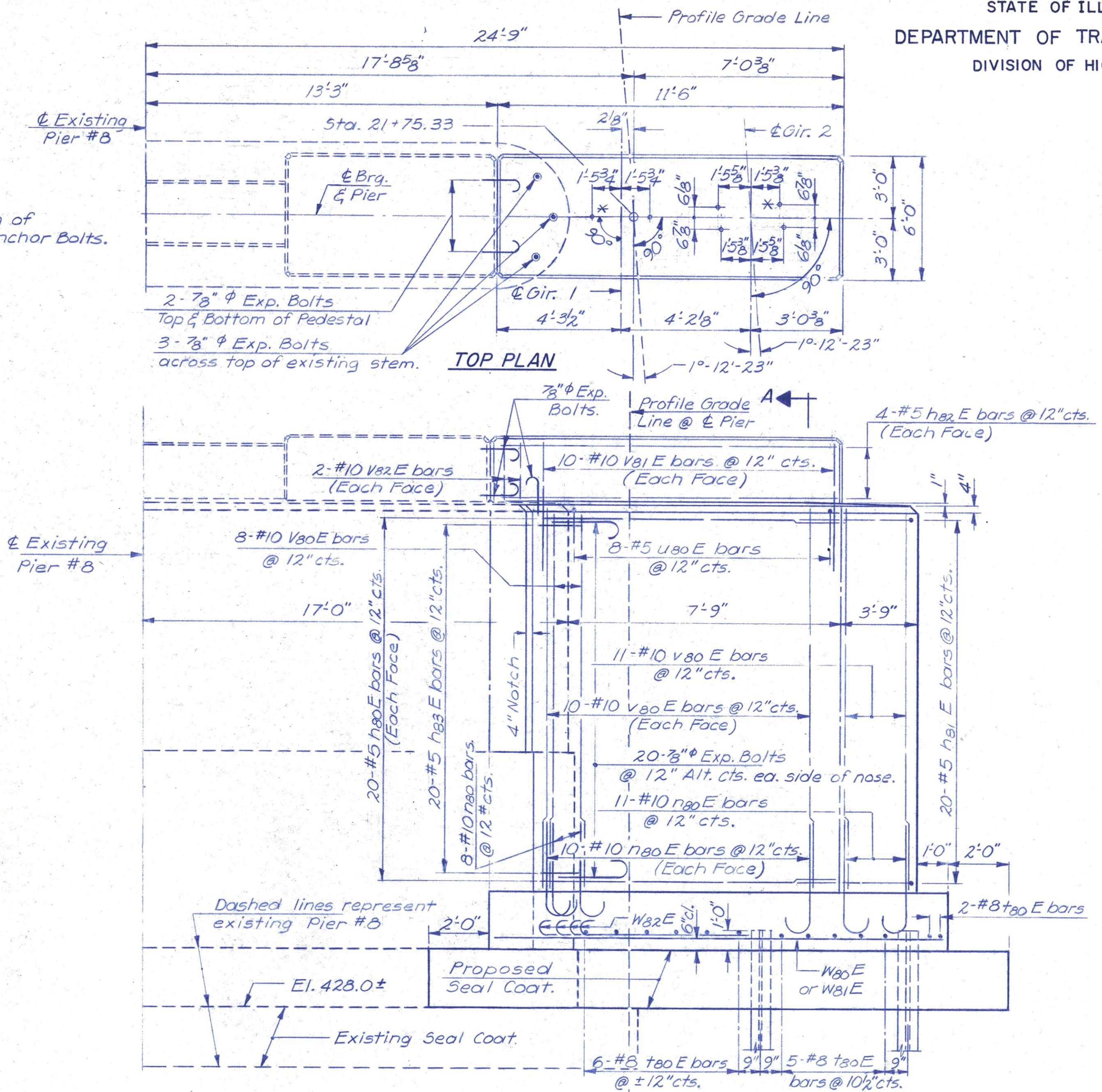
DESIGNED CRN	CHECKED S.C.O.	DRAWN D.A.N.	CHECKED S.C.O.	FILE NO. 74001	DATE 6-22-76
HANSON ENGINEERS INCORPORATED				SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS	

Not affected by changes

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA-31	15B-2	PEORIA & TAZEWELL	52	40
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT				

* Location of future Anchor Bolts.



PIER 8E
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
h80E	40	#5	9'-5"	—
h81E	20	#5	13'-6"	—
h82E	8	#5	11'-3"	—
h83E	20	#5	8'-10"	—
n80E	39	#10	8'-0"	—
t80E	13	#8	11'-0"	—
u80E	8	#5	9'-10"	—
v80E	39	#10	19'-2"	—
v81E	20	#10	6'-4"	—
v82E	4	#10	2'-11"	—
w80E	2	#7	15'-9"	—
w81E	9	#7	10'-0"	—
w82E	9	#7	6'-6"	—
Class A Concrete				Cu. Yds. 88.2
Reinforcement Bars				Lbs. 6,950
Seal Coat Concrete				Cu. Yds. 30.3
Steel Piles HP 14x73				Lin. Ft. 392
Test Pile HP 14x73				Each 1
Cofferdam Excavation				Cu. Yds. 99
Cofferdam				Each 1
Expansion Bolts - 3/8"				Each 47

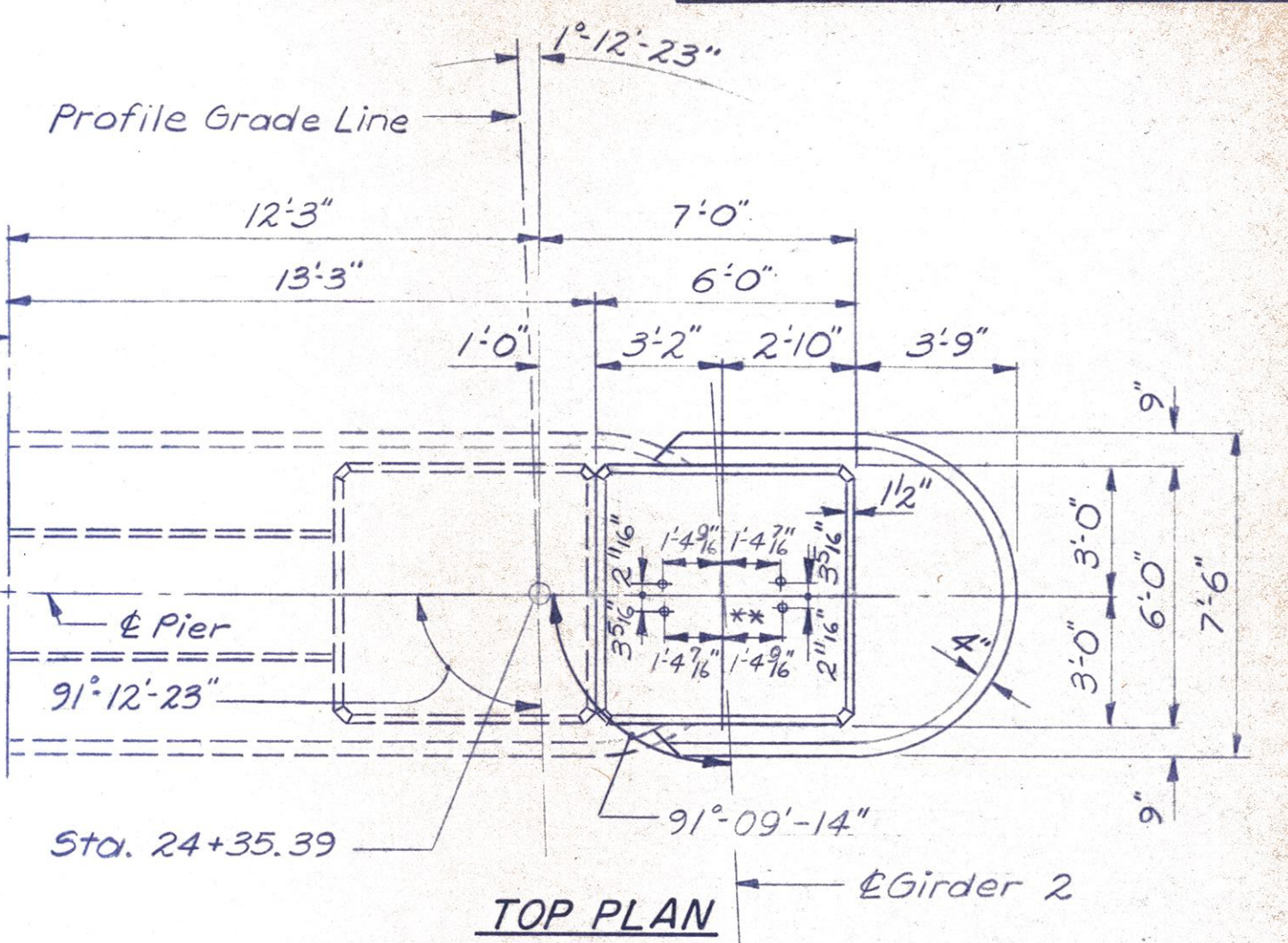
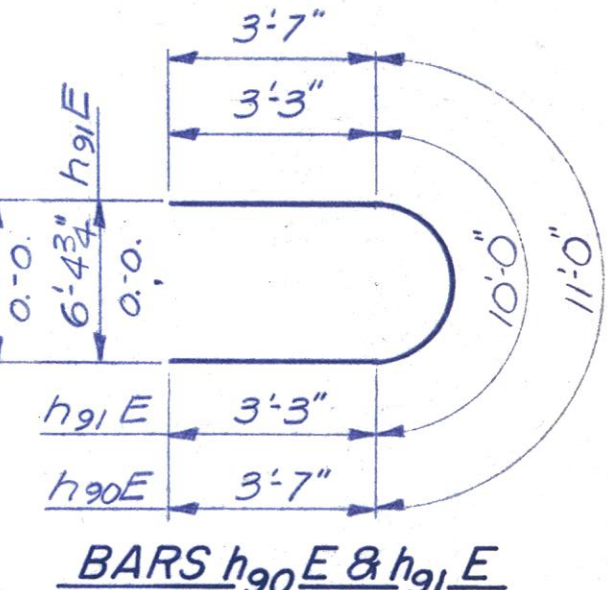
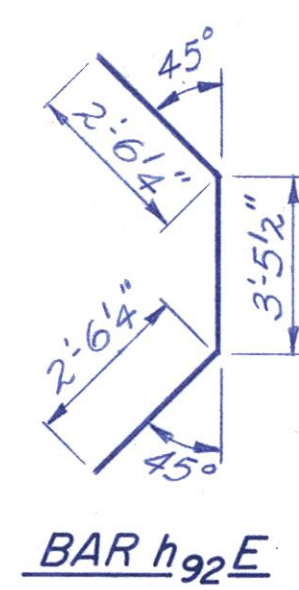
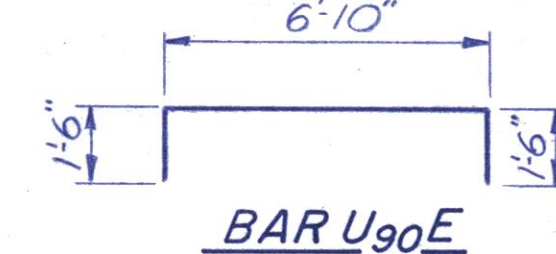
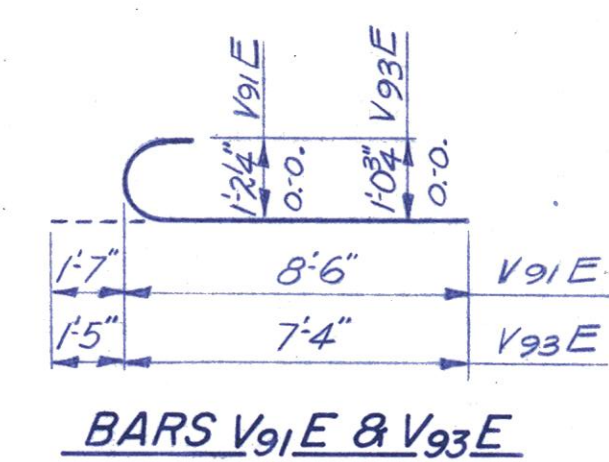
PILE DATA
Type: HP 14 x 73
Capacity: Drive to refusal.
Est. Length: 56'
No. Required: 8**
** Includes one test pile driven in a permanent location.

PIER 8E
M^cCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15B-2
PEORIA & TAZEWELL COUNTIES

Not affected by changes.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

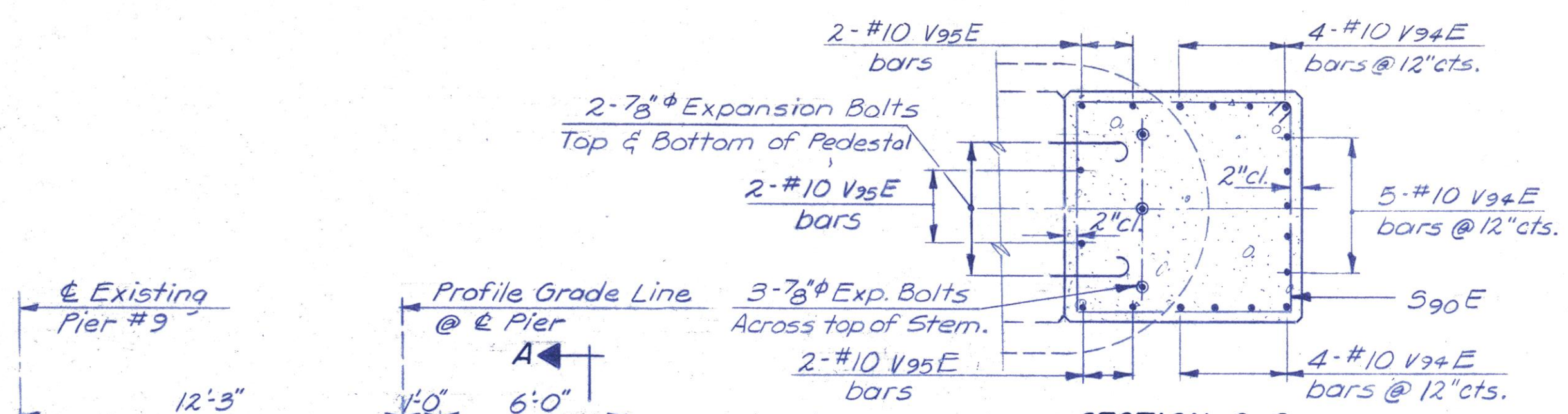
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA:31	15B-2	PEORIA & TAZEWELL	52	41
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



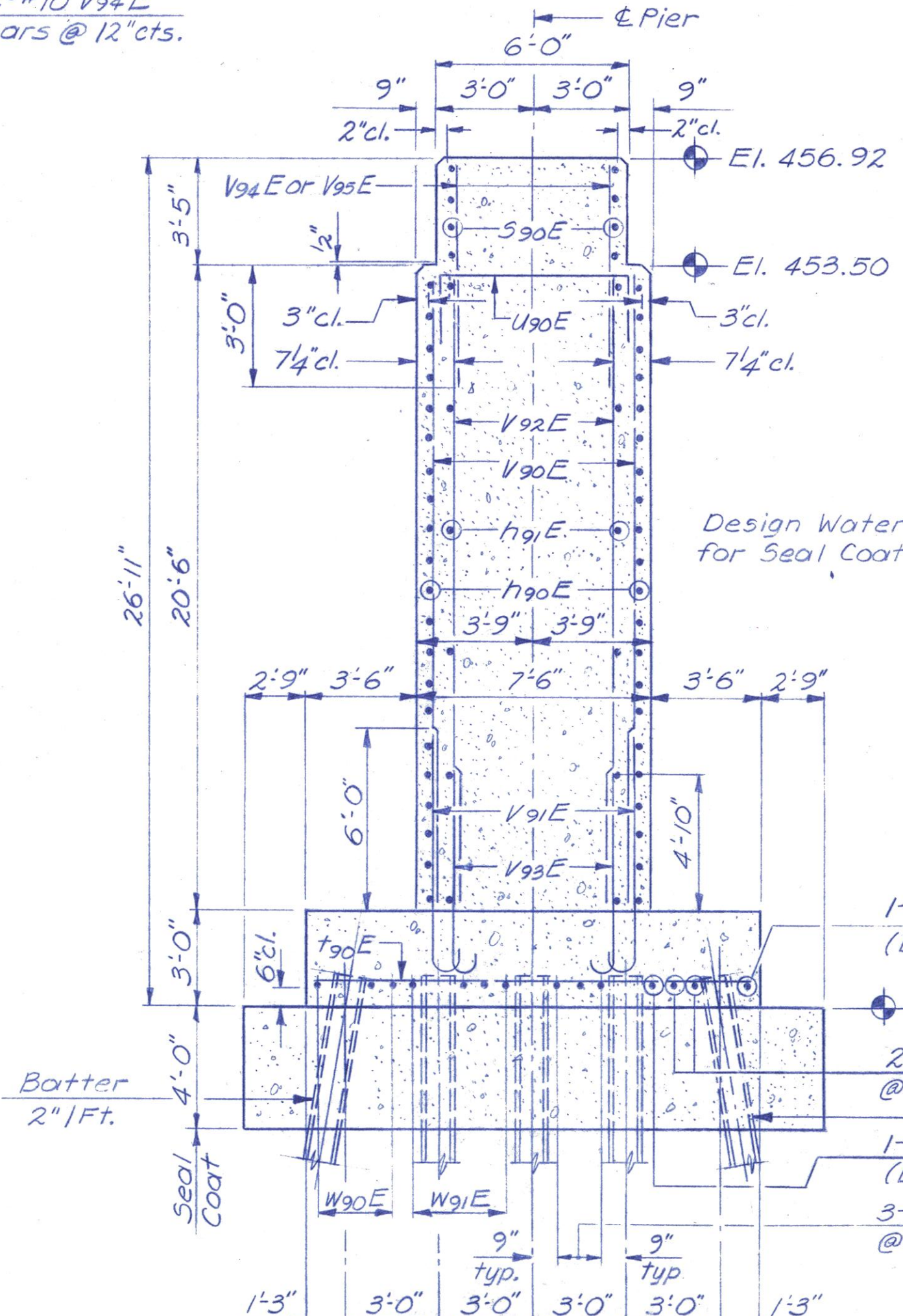
** Location of future Anchor Bolts.

PIER 9E
BILL OF MATERIAL

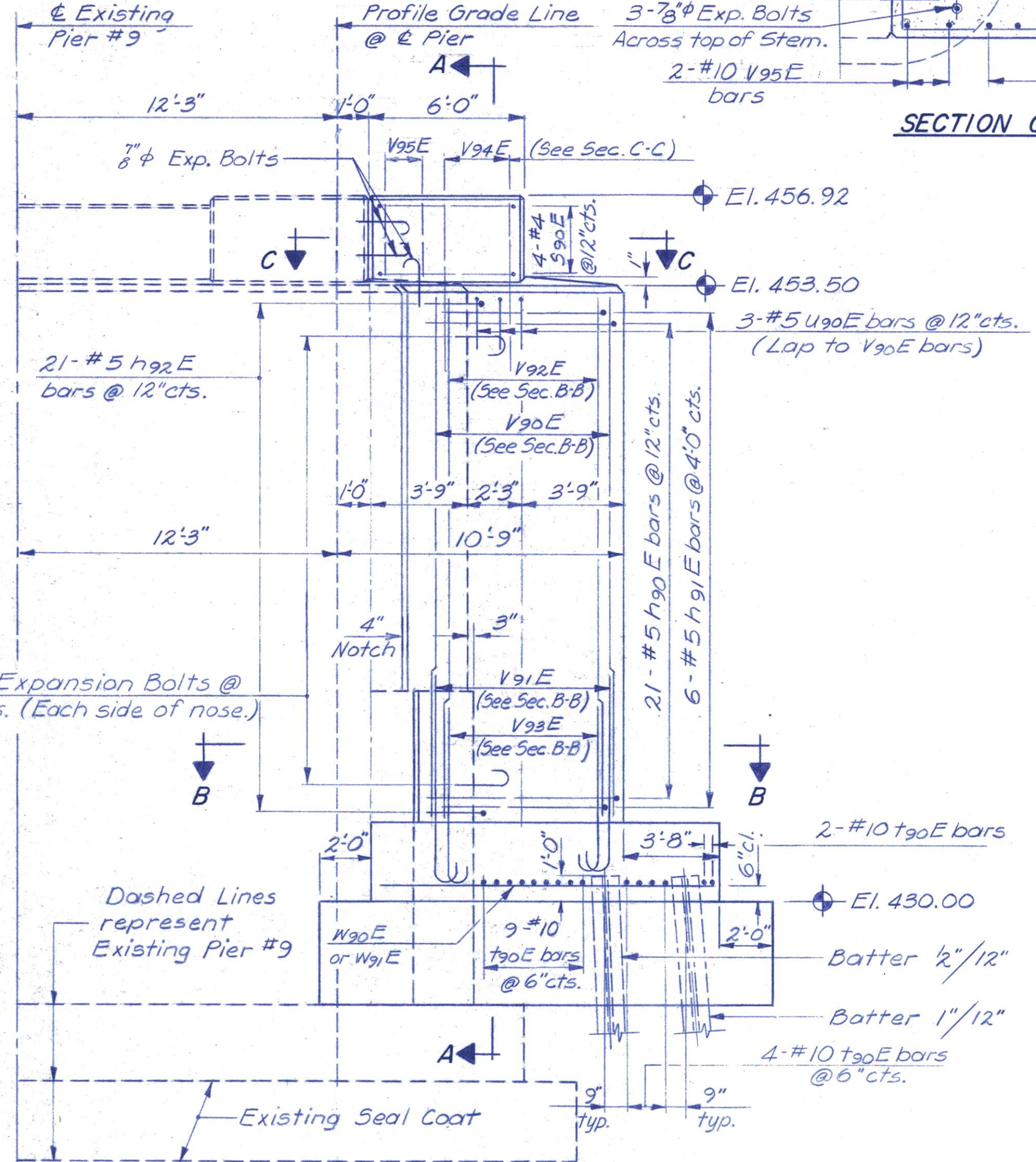
BAR	NO.	SIZE	LENGTH	SHAPE
h90E	21	#5	18'2"	U
h91E	6	#5	16'6"	U
h92E	21	#5	8'6"	U
S90E	4	#4	23'7"	□
T90E	15	#10	14'0"	—
U90E	3	#5	9'10"	□
V90E	53	#11	20'0"	—
V91E	53	#11	10'1"	—
V92E	32	#10	20'0"	—
V93E	32	#10	8'9"	—
V94E	13	#10	6'3"	—
V95E	6	#10	3'3"	—
W90E	6	#9	12'11"	—
W91E	8	#9	8'11"	—
Class A Concrete		Cu.Yd.	56.9	
Reinforcement Bars		Lbs.	15,060	
Seal Coat Concrete		Cu.Yd.	45.7	
Steel Piles HP14x73		Lin.Ft.	513	
Test Pile HP14x73		Each	1	
Cofferdam Excavation		Cu.Yd.	114	
Cofferdam		Each	1	
Expansion Bolts 7/8"		Each	49	



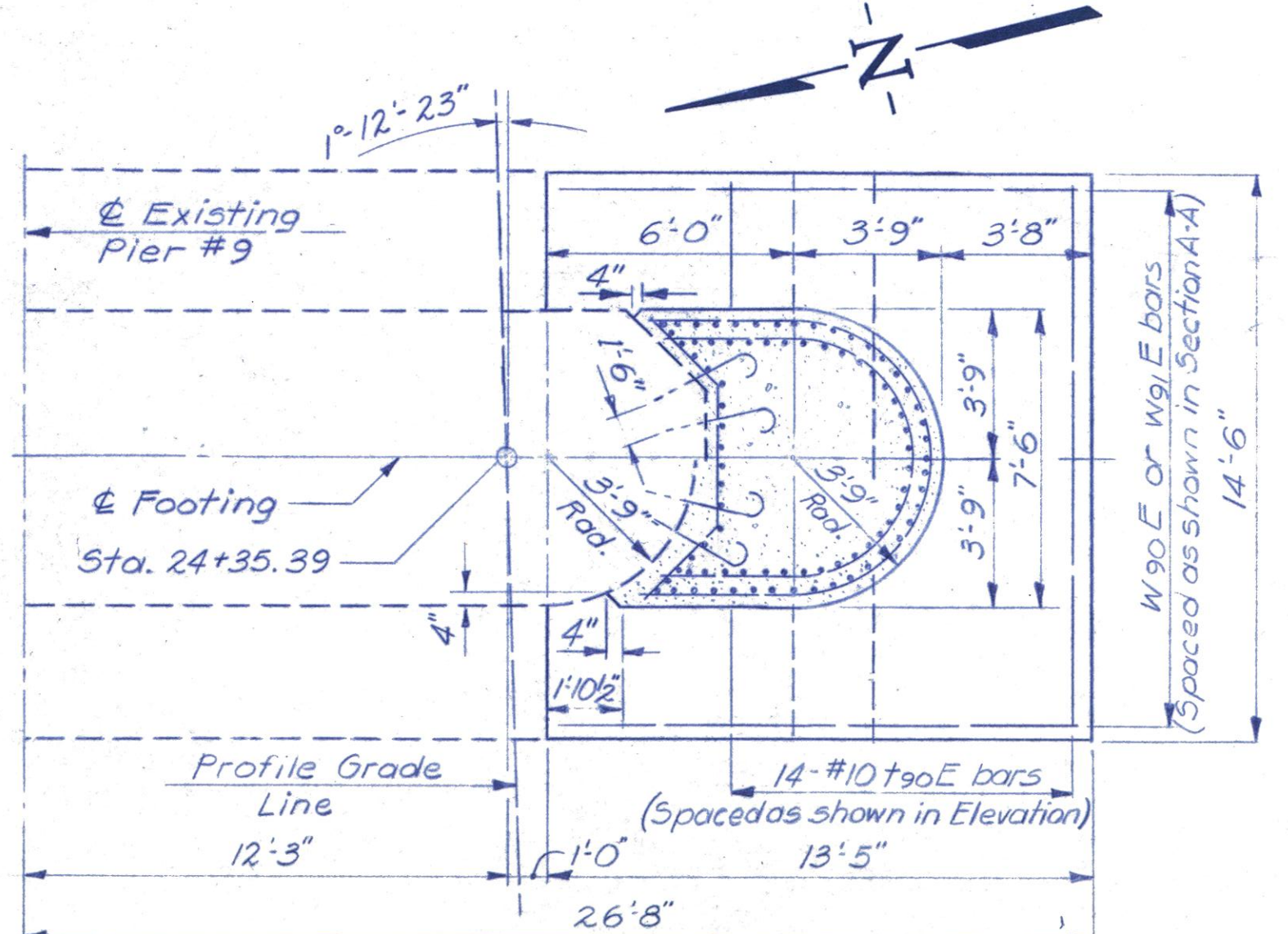
SECTION C-C



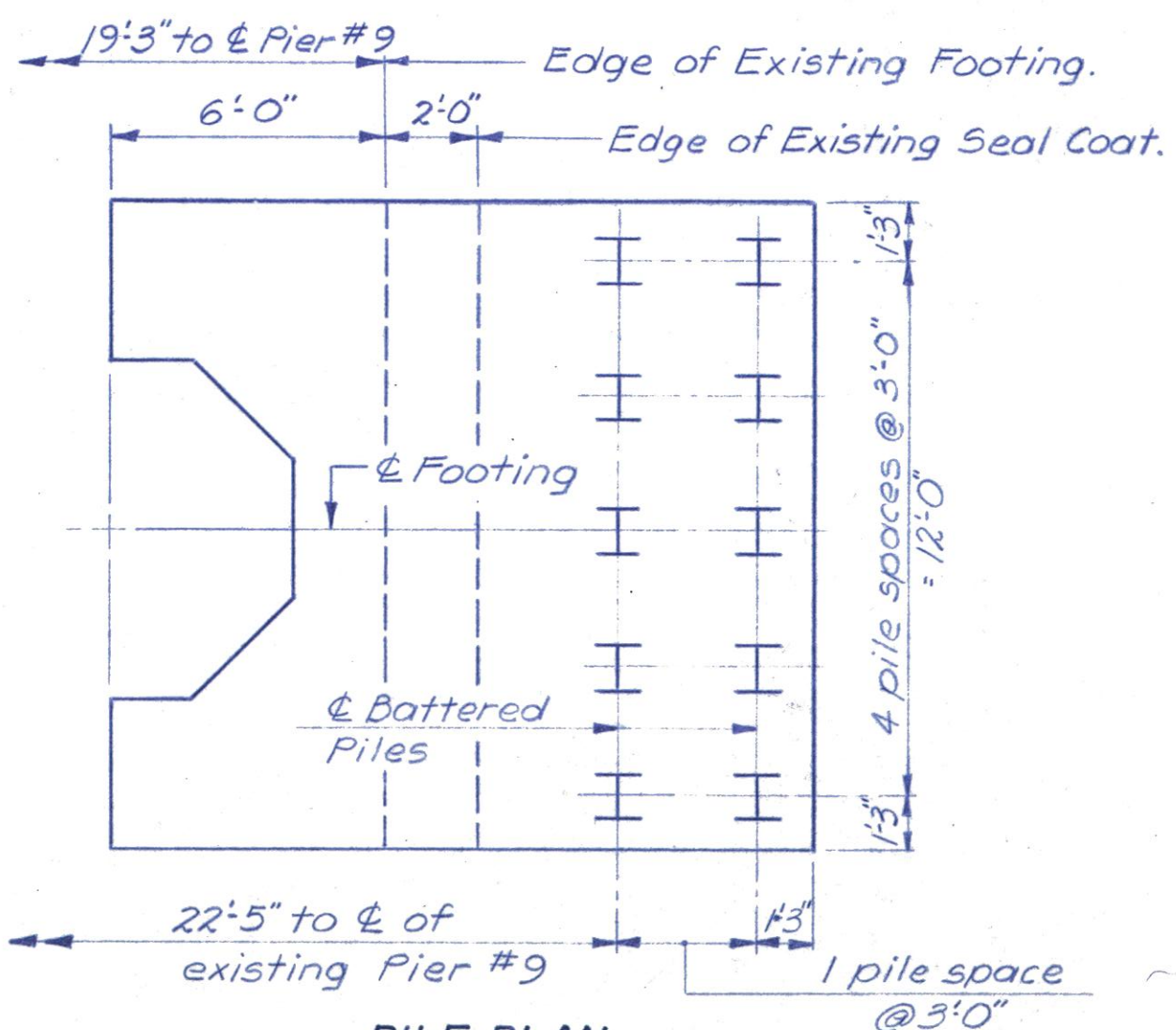
SECTION A-A



ELEVATION (Looking East)

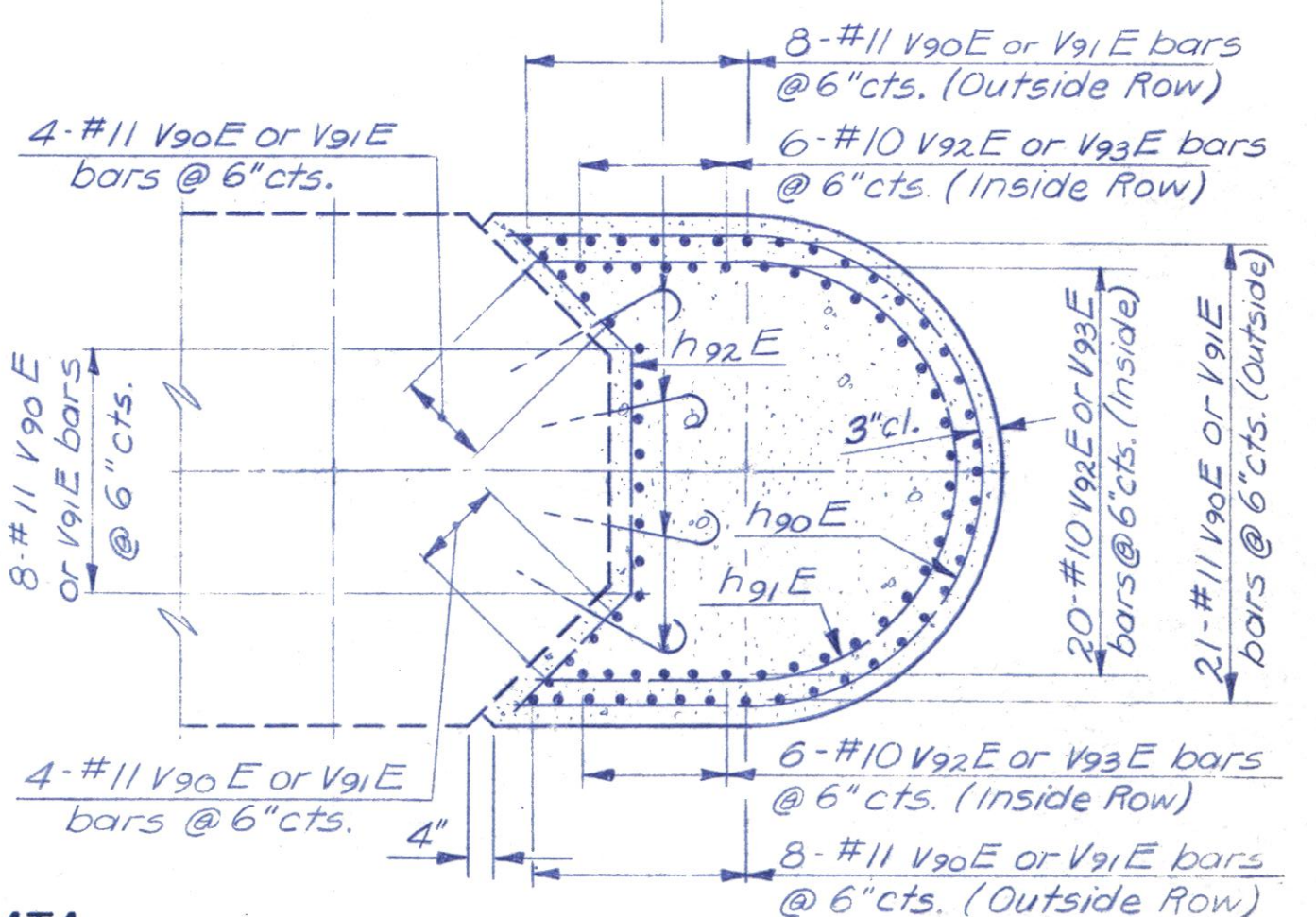


FOOTING PLAN



PILE PLAN

PILE DATA
Type: HP 14 x 73
Capacity: Drive to refusal.
Est. Length: 57'
No. Required: 10*
* Includes one Test Pile driven in a permanent location.



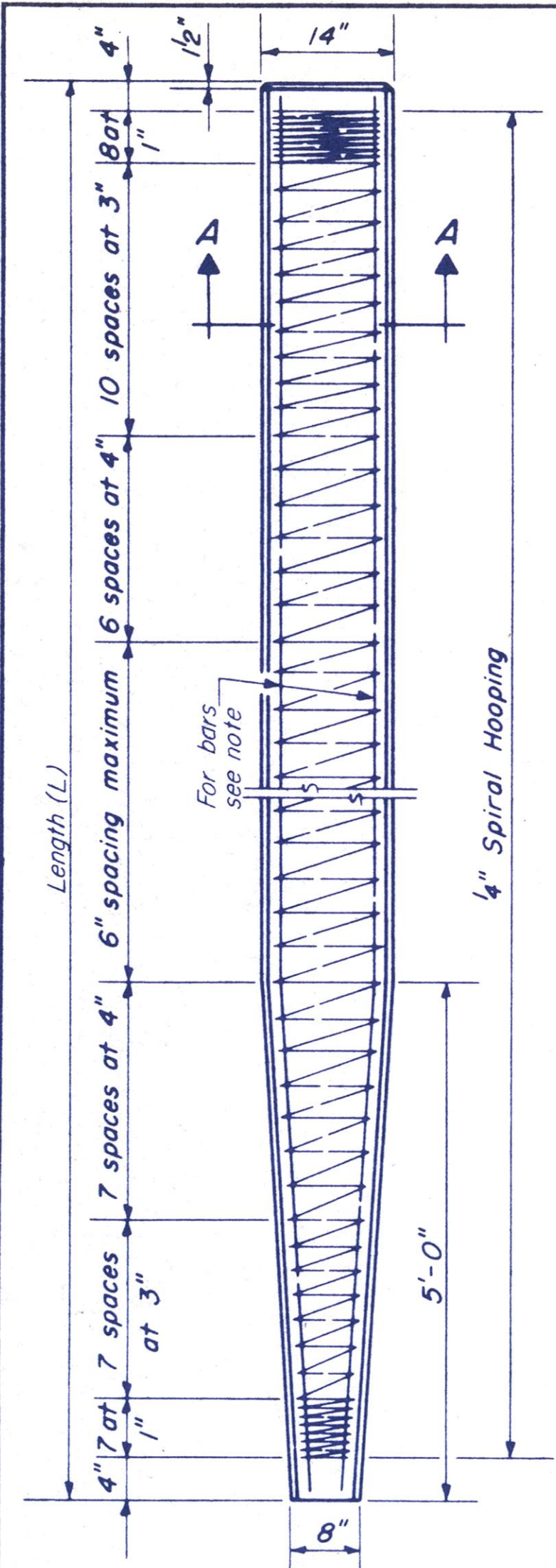
SECTION B-B

* Bars T90E shall be Grade 60 Steel Reinforcement Bars.

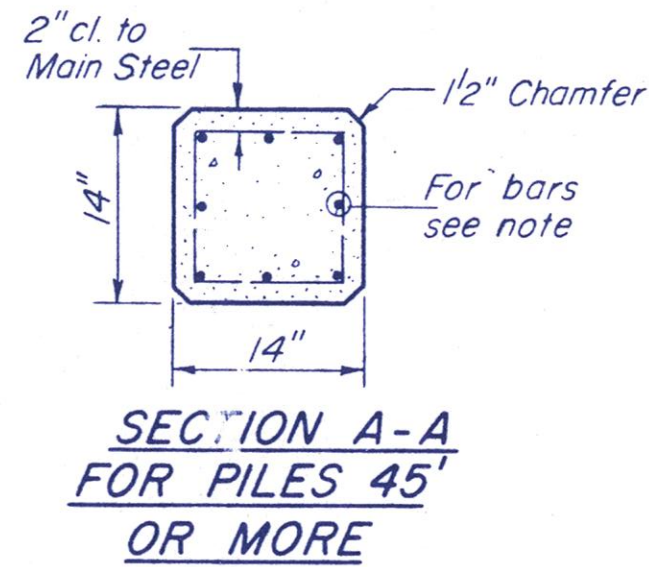
PIER 9E
M^cCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15B-2
PEORIA & TAZEWELL COUNTIES

DESIGNED CRN	CHECKED S.C.O.	DRAWN D.A.M.	CHECKED W.D.L.
HANSON ENGINEERS INCORPORATED			
FILE NO. 74001			
DATE 6-22-76			
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS			

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA-31/15B-2	Peoria & Tazewell	ILLINOIS	52	42
FED. ROAD DIST. NO. 7 PROJECT				



**SECTION A-A
FOR PILES UNDER
45' LONG**

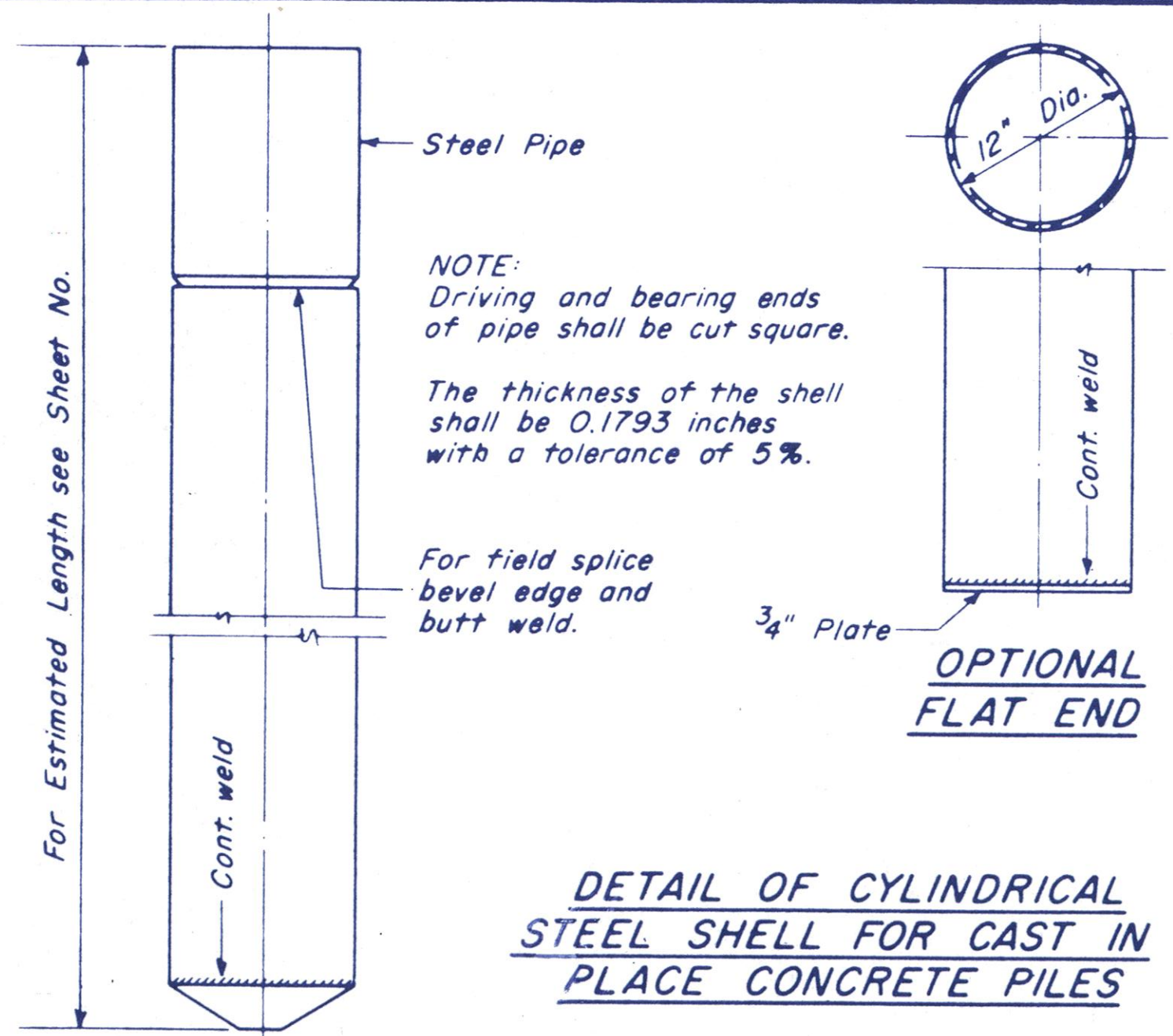


TIP

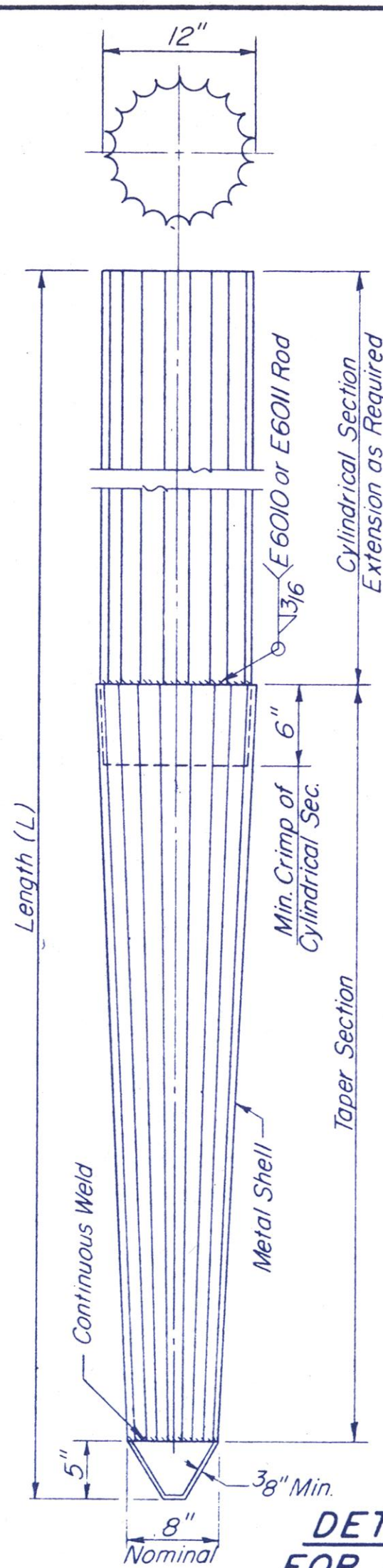
Note: For 14" Piles 45' long or more use 8-#8 bars 4 for the full length and 4 to the point of bevel. For 14" Piles under 45' long use 4-#9 bars full length.

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.

**DETAIL OF PRECAST
CONCRETE PILES**



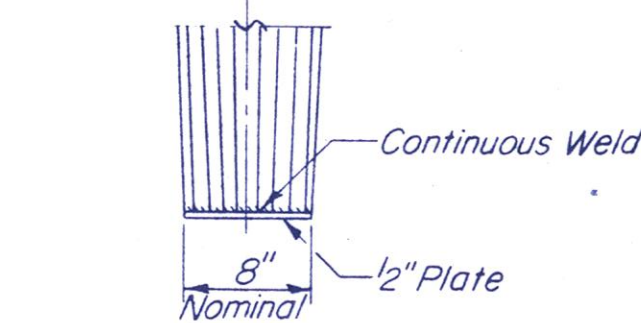
**DETAIL OF CYLINDRICAL
STEEL SHELL FOR CAST IN
PLACE CONCRETE PILES**



**DETAIL OF TAPERED METAL SHELLS
FOR CAST IN PLACE CONCRETE PILES**

FIELD CRIMP DETAIL

Note: 6" Crimp shall either be supplied on the cylindrical section or made in the field as detailed.

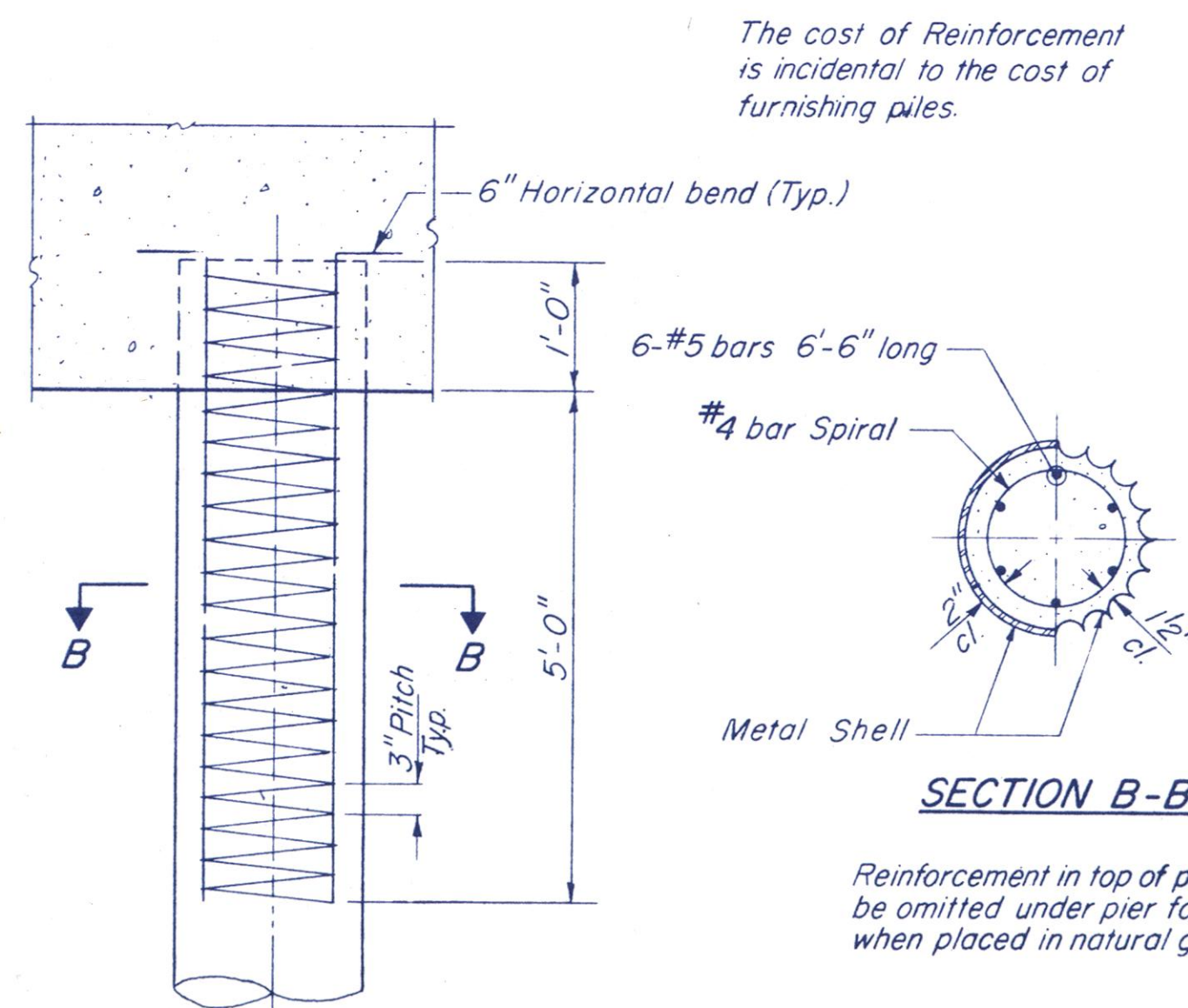


OPTIONAL FLAT END

ALLOWABLE TAPER SECTIONS

- 10' Length - Taper 1" in 2'-6"
- 17' Length - Taper 1" in 4'-0"
- 25' Length - Taper 1" in 7'-0"
- 30' Length - Taper 1" in 7'-0"

NOTE: The thickness of the shell shall be 0.1793 inches with a tolerance of 5%.

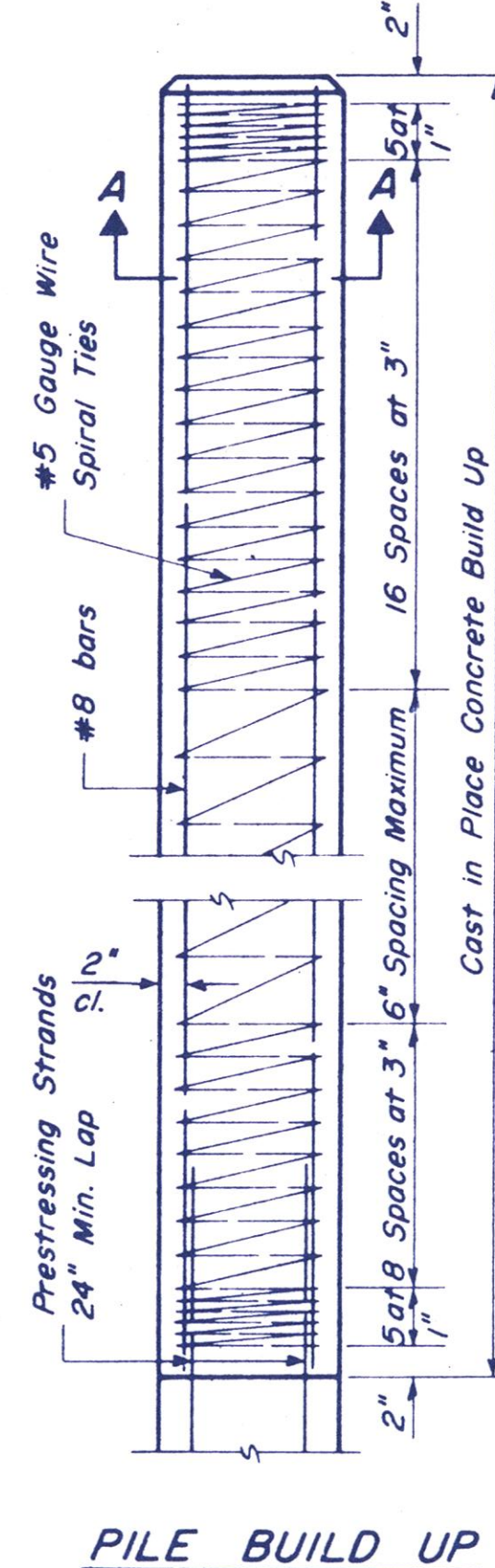


SECTION B-B

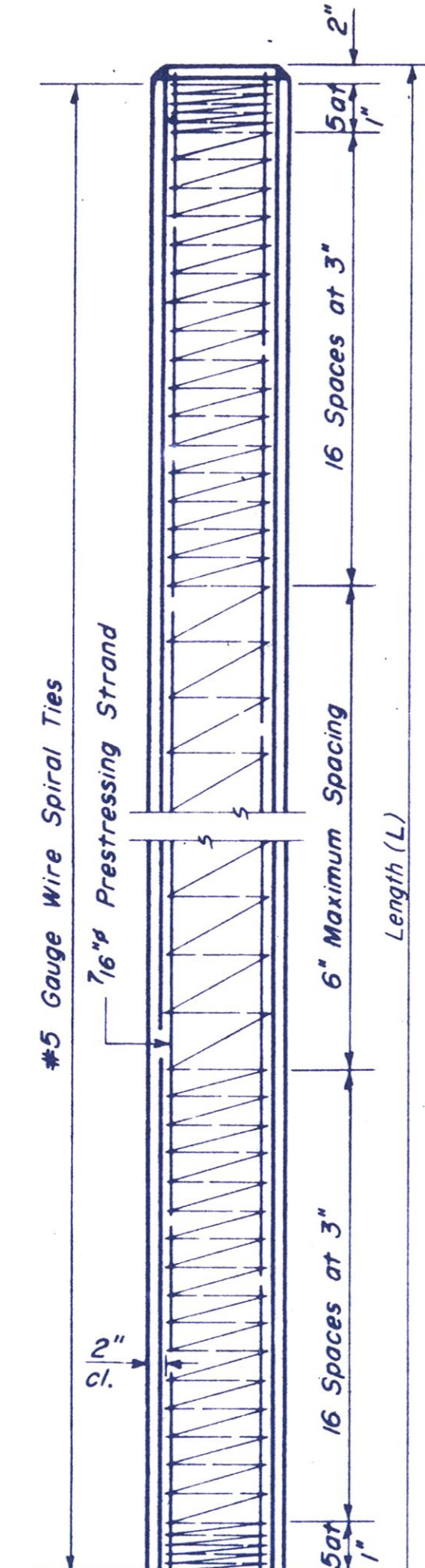
Reinforcement in top of pile shall be omitted under pier footings when placed in natural ground.

**DETAIL OF REINFORCEMENT
FOR METAL SHELLS**

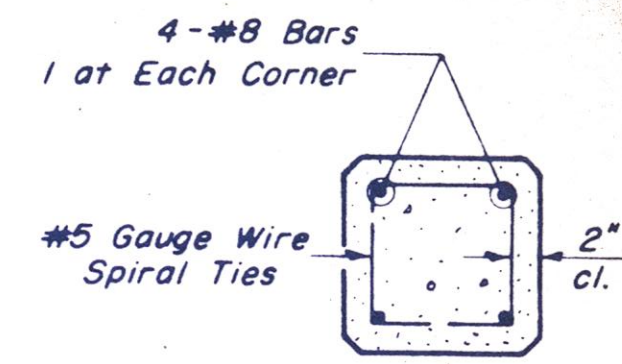
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**



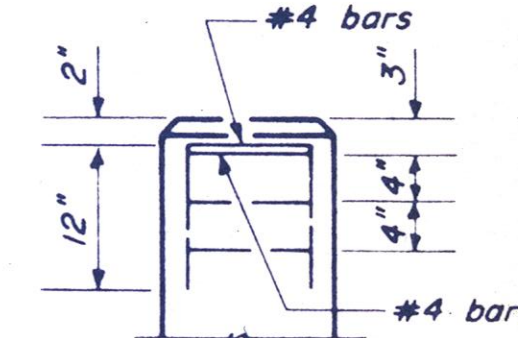
PILE BUILD UP



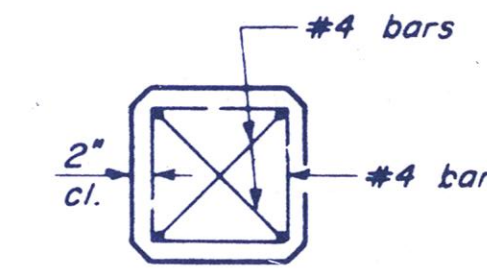
PILE PLAN



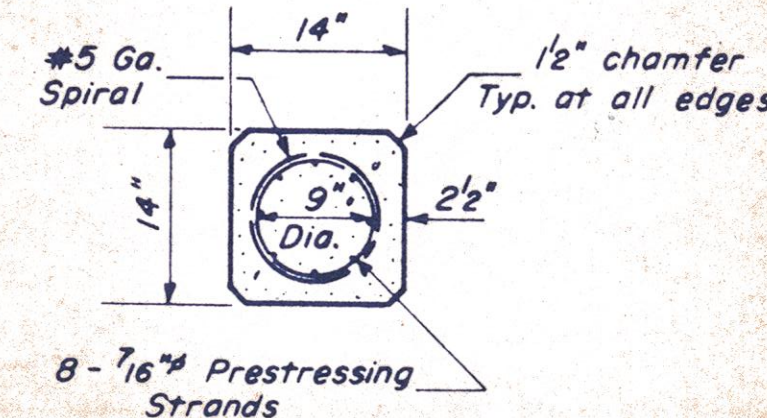
SECTION A-A



**ELEVATION
(End Reinforcement)**



**PLAN
(End Reinforcement)**



**SECTION
THRU PILE**

DESIGN STRESSES

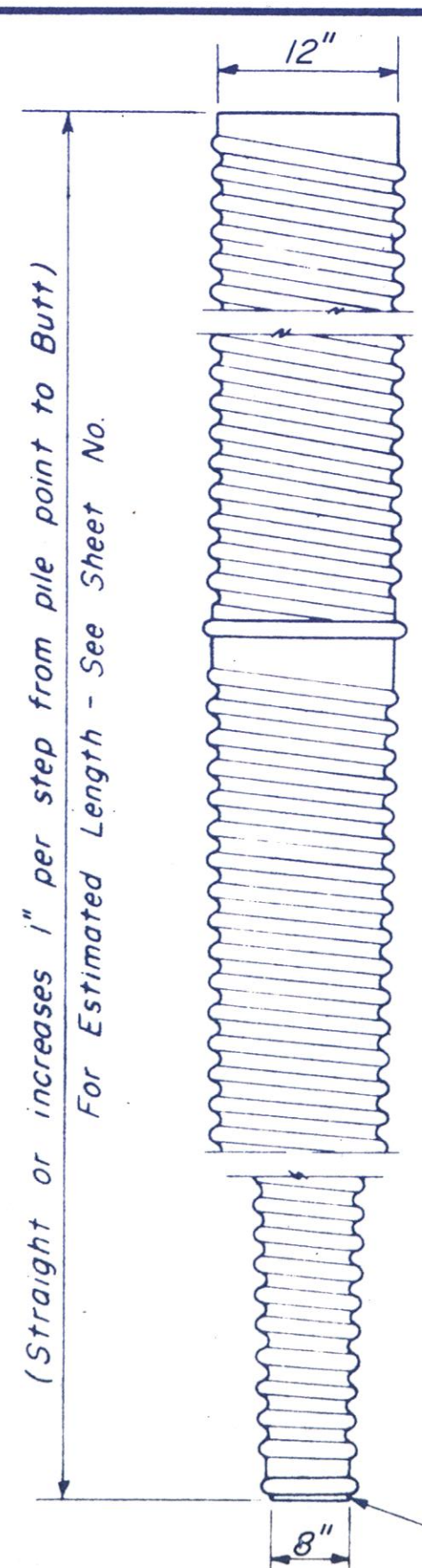
- $f_c' = 5,000$ psi.
- $f_c' = 4,000$ psi.
- $f_s' = 268,000$ psi. (31,000 lbs.)
- $f_s' = 188,000$ psi. (21,700 lbs.)

NOTES

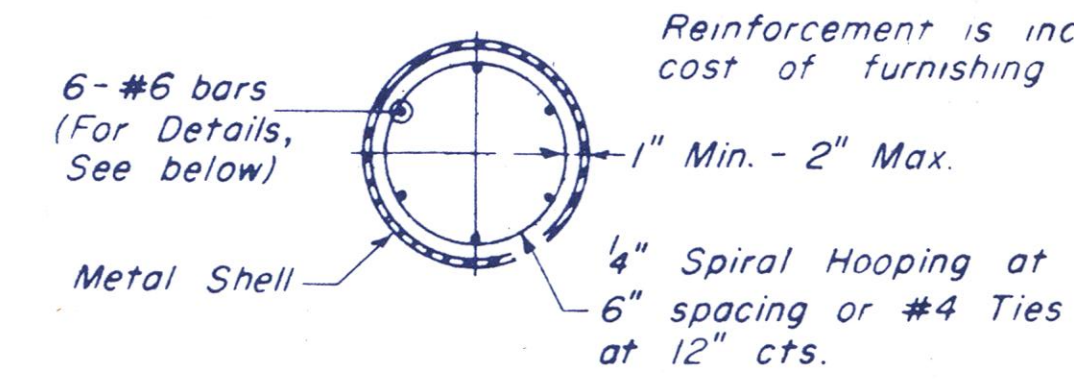
Prestressing steel shall be non-galvanized extra high strength stress-relieved 7-wire strand. The nominal diameter shall be 1/8" and the minimum nominal cross-sectional area shall be 0.1155 square inch.

For Pile lengths up to 65', use two slings placed at a distance of 0.21 L * from each end. For Piles longer than 65', 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.

PRECAST PRESTRESSED CONCRETE PILE



PILE REINFORCEMENT



SECTION A-A

Reinforcement is incidental to the cost of furnishing piles.

At least 10% of the length of pile shall have a Butt diameter equal to or greater than 12" Gauges are furnished to suit soil conditions (1/6 Gauge avg. min.)



BUTT

POINT

(Applies only to Step Taper type pile)

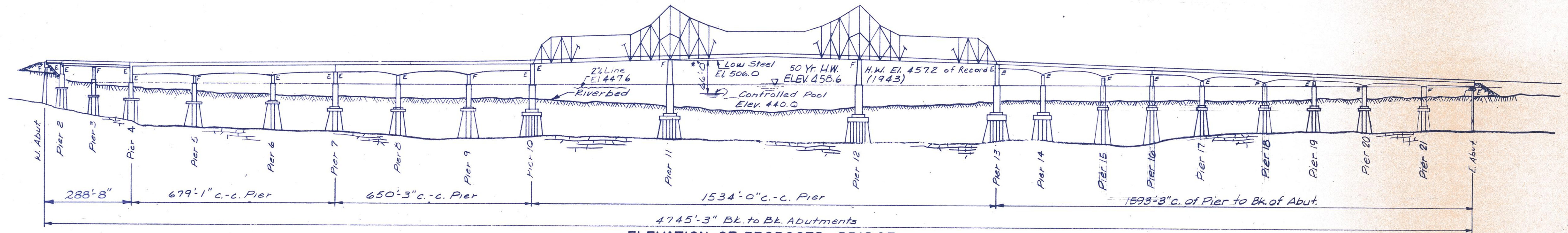
DETAIL OF MANDREL DRIVEN STRAIGHT OR STEP-TAPER PILES FOR CAST IN PLACE CONCRETE PILES

ALTERNATE CONCRETE PILES 12"

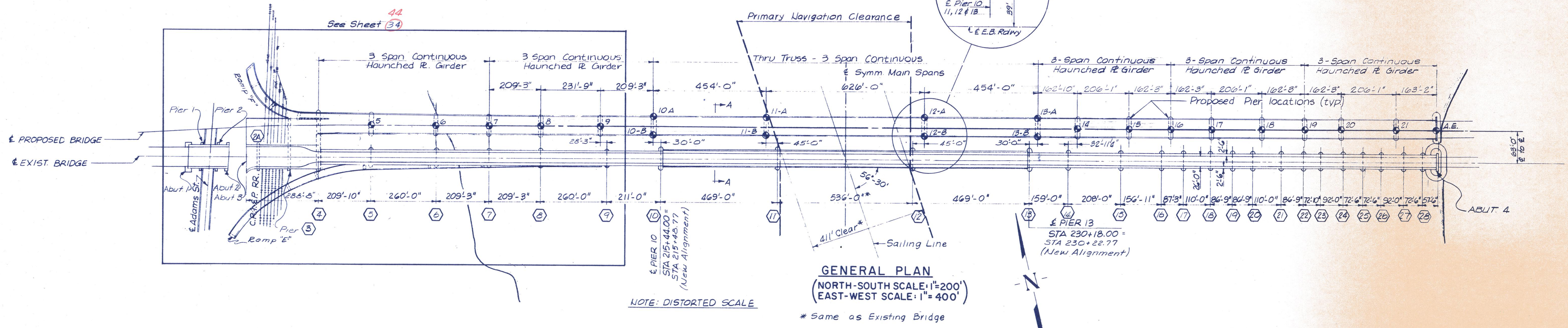
**M^cCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15B-2
PEORIA & TAZEWELL COUNTIES**

DESIGNED	C.R.	HANSON ENGINEERS INCORPORATED	FILE NO. 74001
CHECKED	C.R.		DATE 6-22-76
DRAWN	C.R.		
CHECKED	C.R.		

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 31	15B-2	Peoria	52	43
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

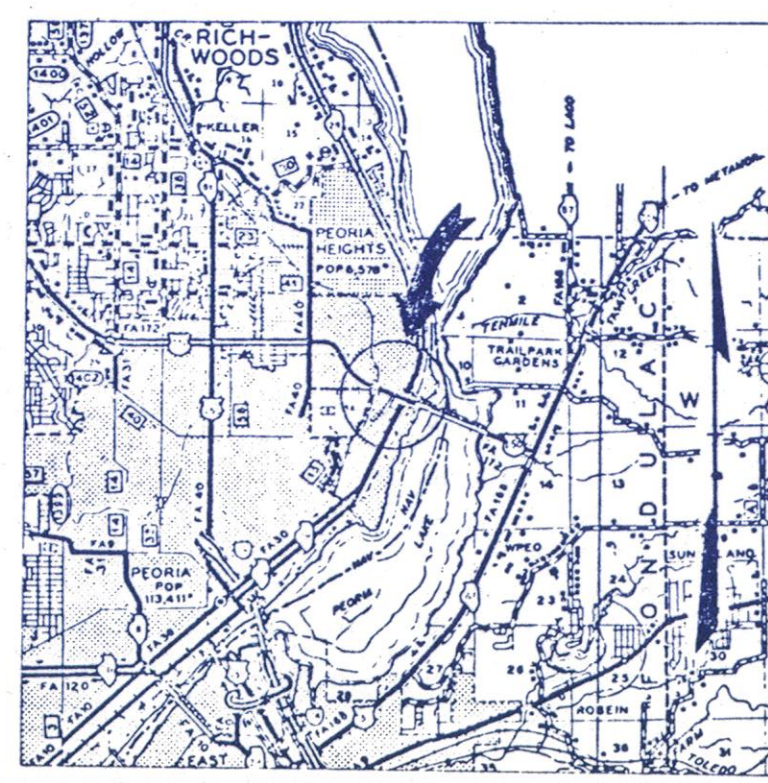


ELEVATION OF PROPOSED BRIDGE
(VERT. SCALE: 1"=200')
(HORIZ. SCALE: 1"=400')



GENERAL PLAN
(NORTH-SOUTH SCALE: 1"=200')
(EAST-WEST SCALE: 1"=400')

LOCATION MAP



(2) Indicates Pier Number of Existing Bridge

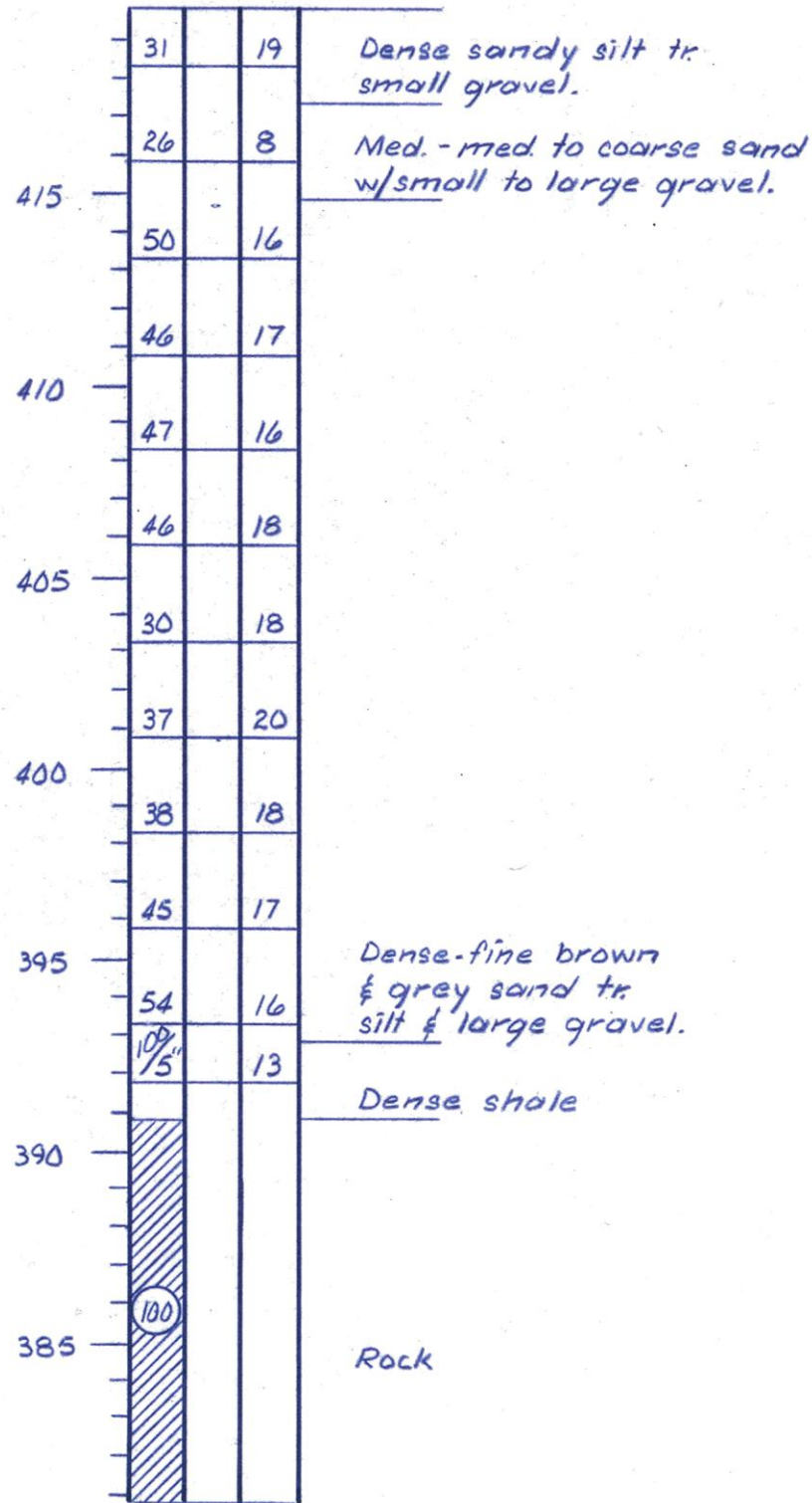
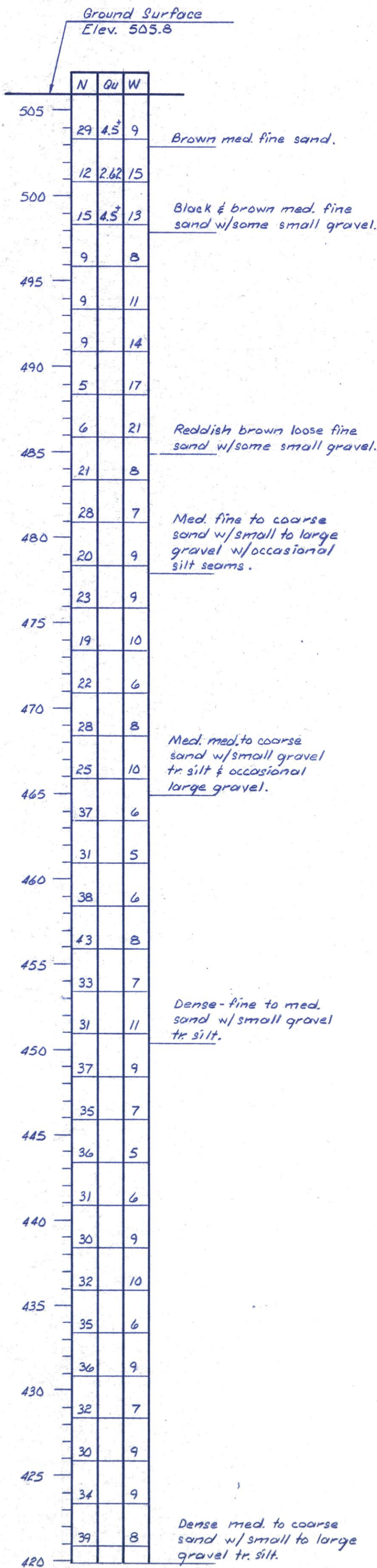
BORING PLAN
Mc CLUGAGE BRIDGE
F.A. ROUTE 31
OVER
ILLINOIS RIVER
SEC 15 B-2

DESIGNED UMH
CHECKED CRN
DRAWN RAH
CHECKED UMH

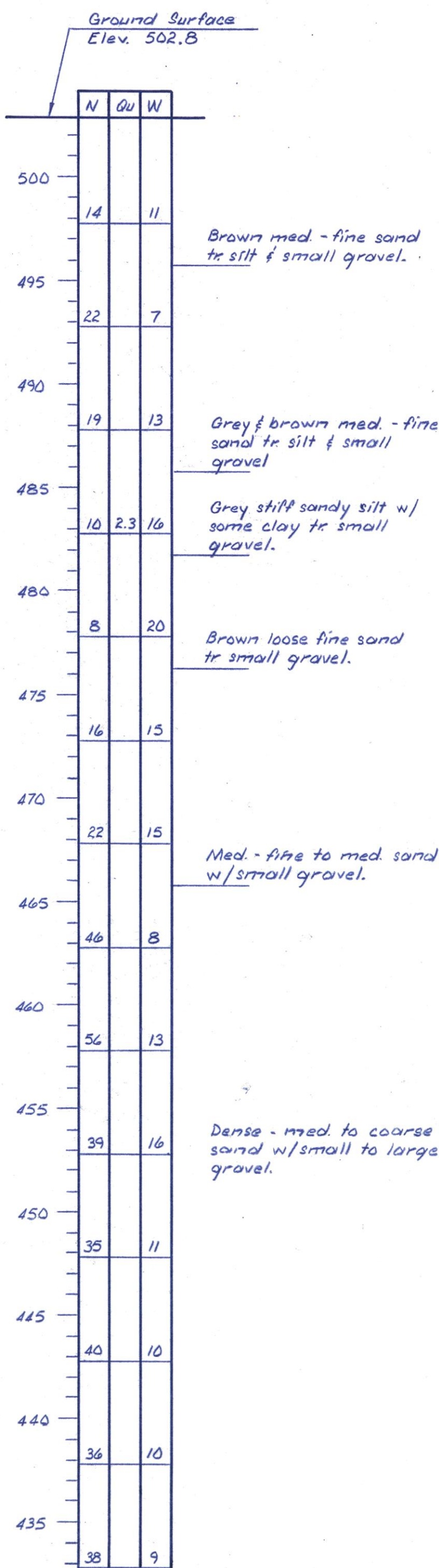


FILE NO.
74001
DATE
12-31-74

BORING # AD1

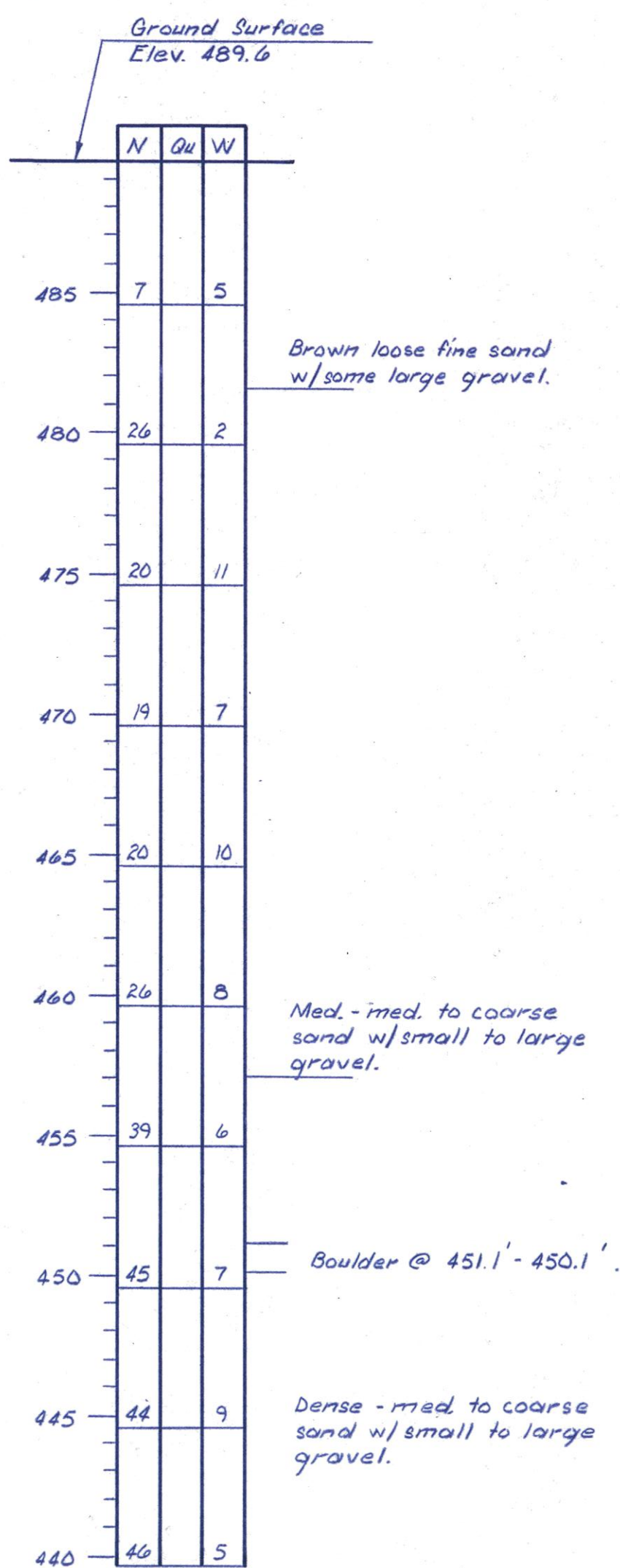


BORING # AD2

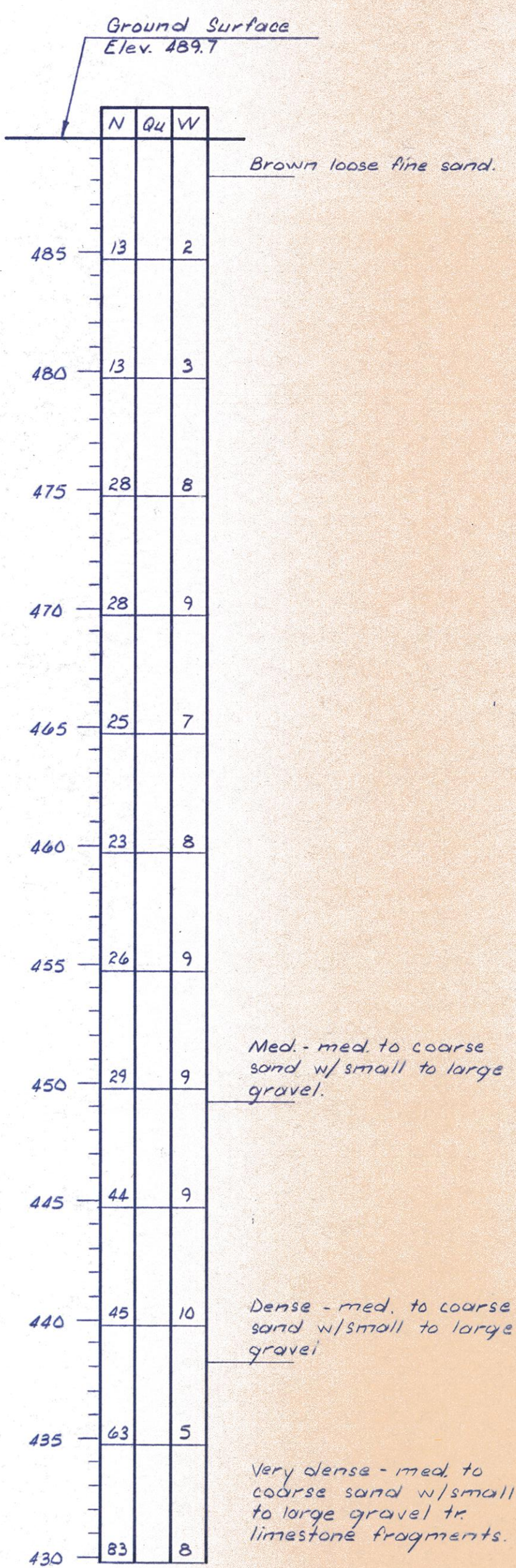


Note: Installed piezometer @ 434.3'; flushed with clear water & fastbreak & packed with clean sand to 472.8'.

BORING # AD3



BORING # AD4



LEGEND:

Indicates Shelby Tube



Indicates Rock Core



A - amount of penetration (in inches).
B - amount recovered (in inches).
C - percent of core recovered.

BORING DATA

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15 B-2
PEORIA & TAZEWELL COUNTIES

DESIGNED
CHECKED
DRAWN RJE
CHECKED GFD

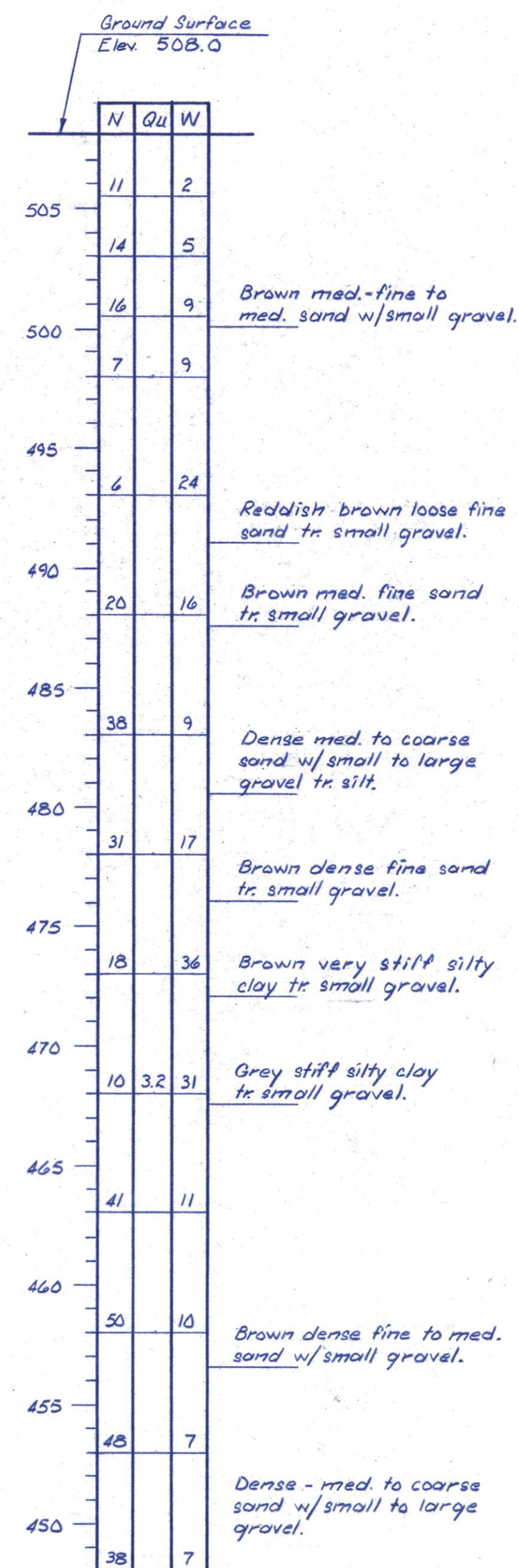


FILE NO.
74001
DATE
12-31-74

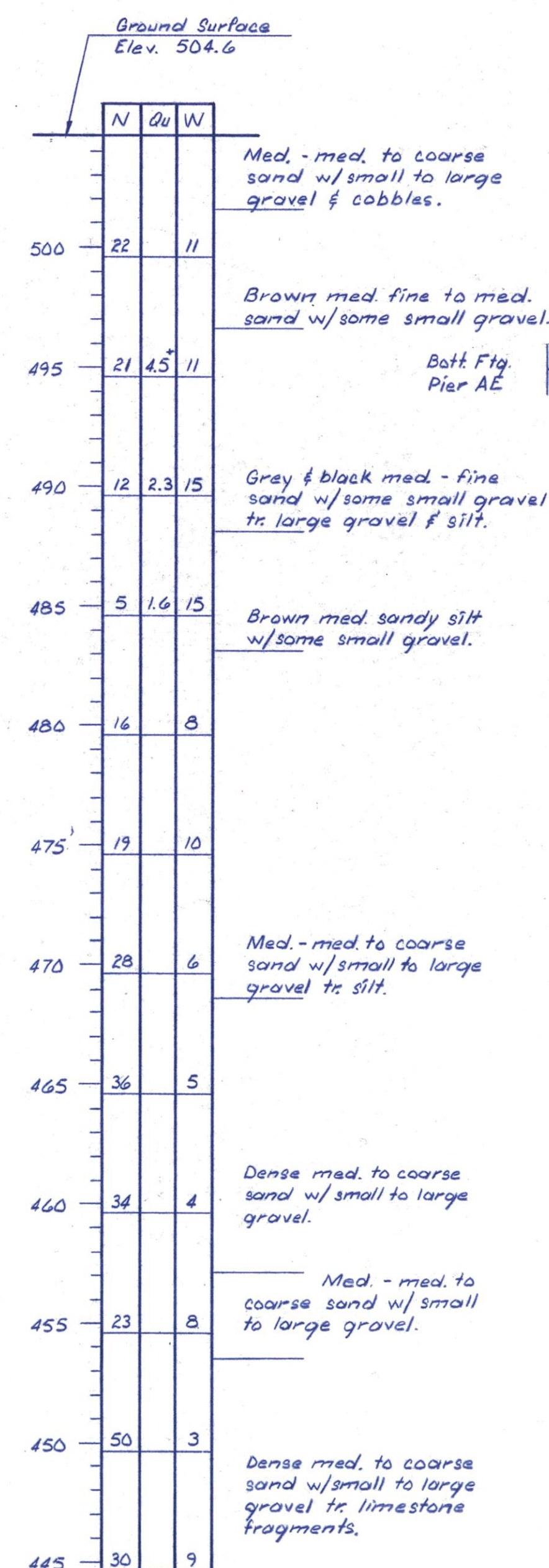
BORING DATA

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 31	15B-2	PEORIA & TAZEWELL	52	46
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

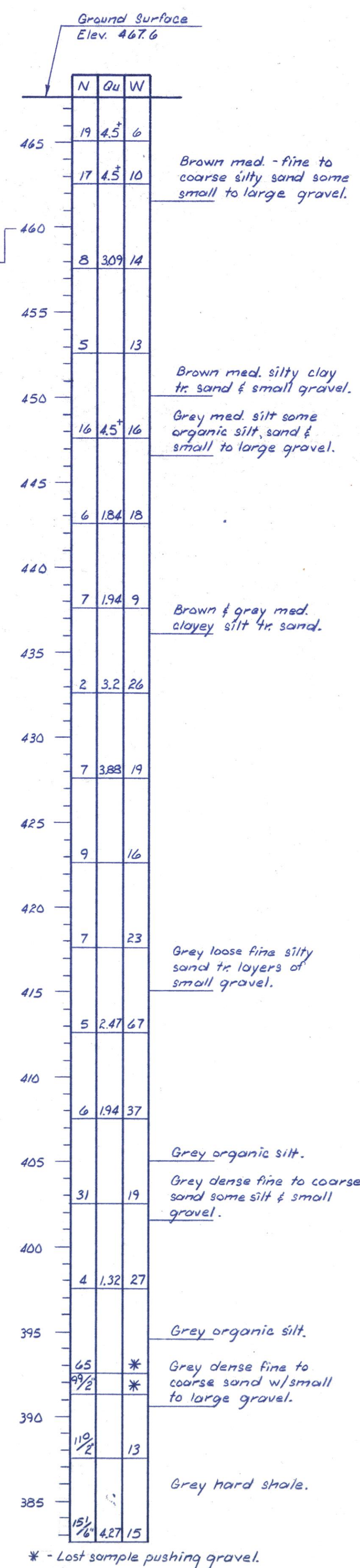
BORING # AD 5



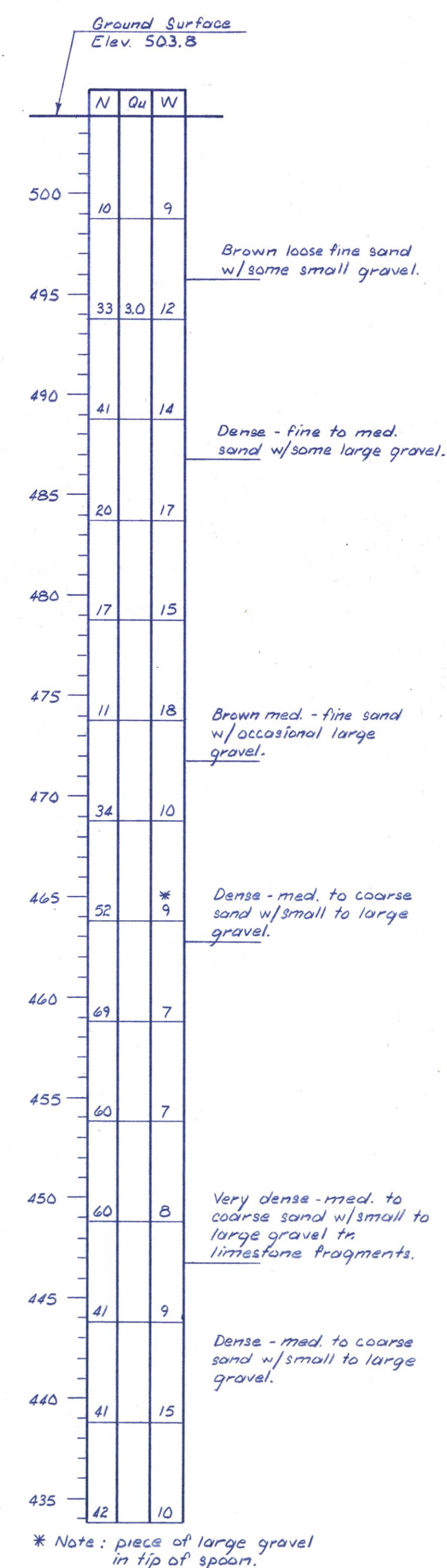
BORING # AD 6



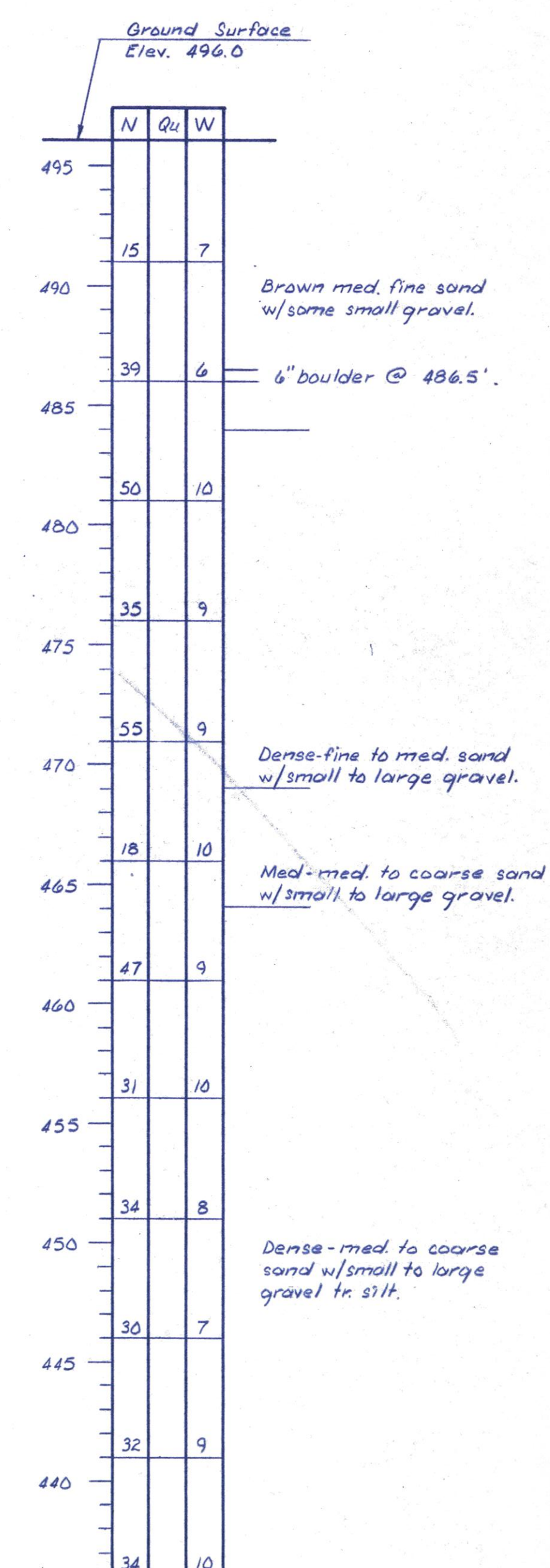
BORING # AE



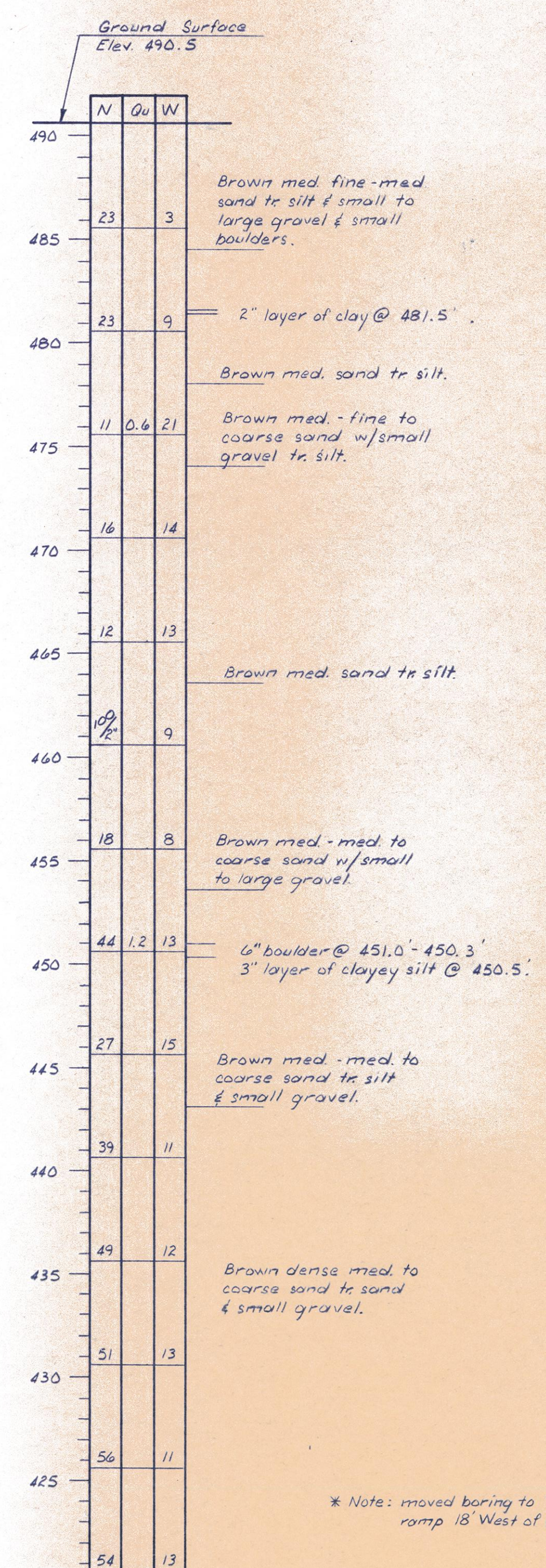
BORING # AW



BORING # EA



BORING # FA



LEGEND:

Indicates Shelby Tube



Indicates Rock Core

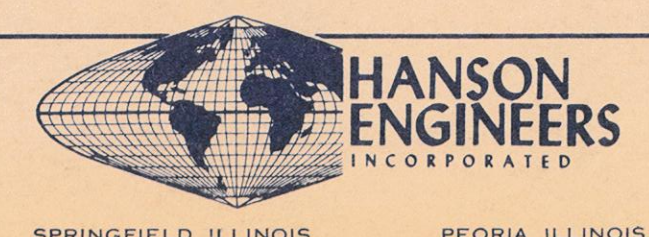


A - amount of penetration (in inches).
B - amount recovered (in inches).
C - percent of core recovered.

BORING DATA

M^cCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15 B-2
PEORIA & TAZEWELL COUNTIES

DESIGNED
CHECKED
DRAWN R.T.F.
CHECKED G.F.H.

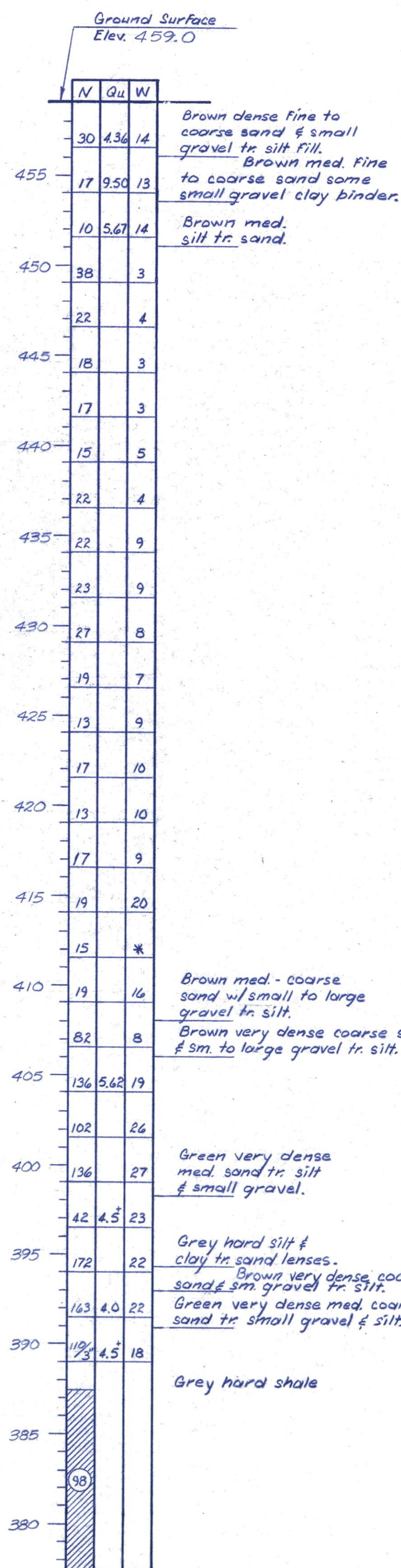


FILE NO.
74001
DATE
12.31.74

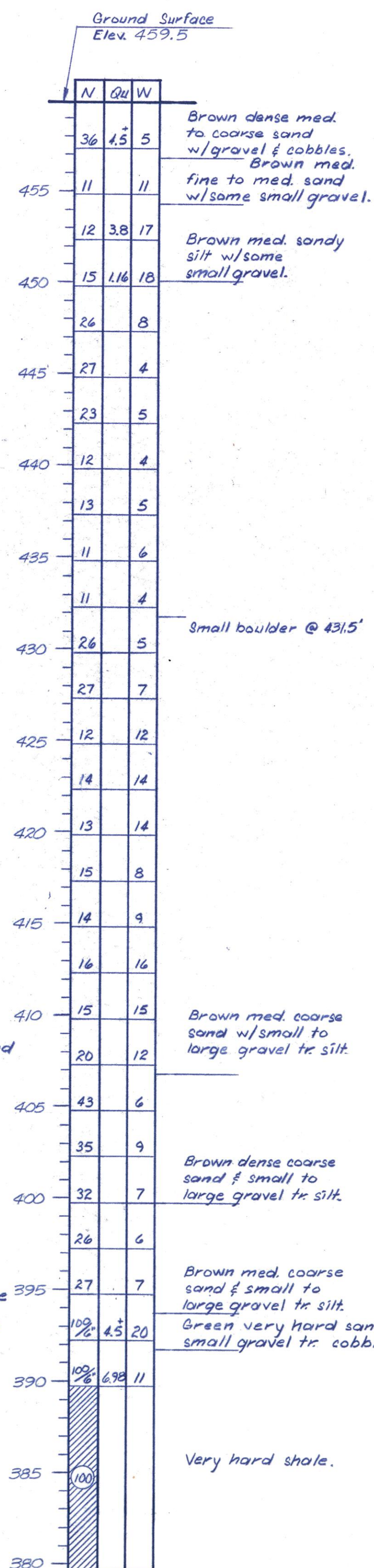
BORING DATA

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FA 21	15B-2	PEORIA & TAZEWELL	52	48
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	

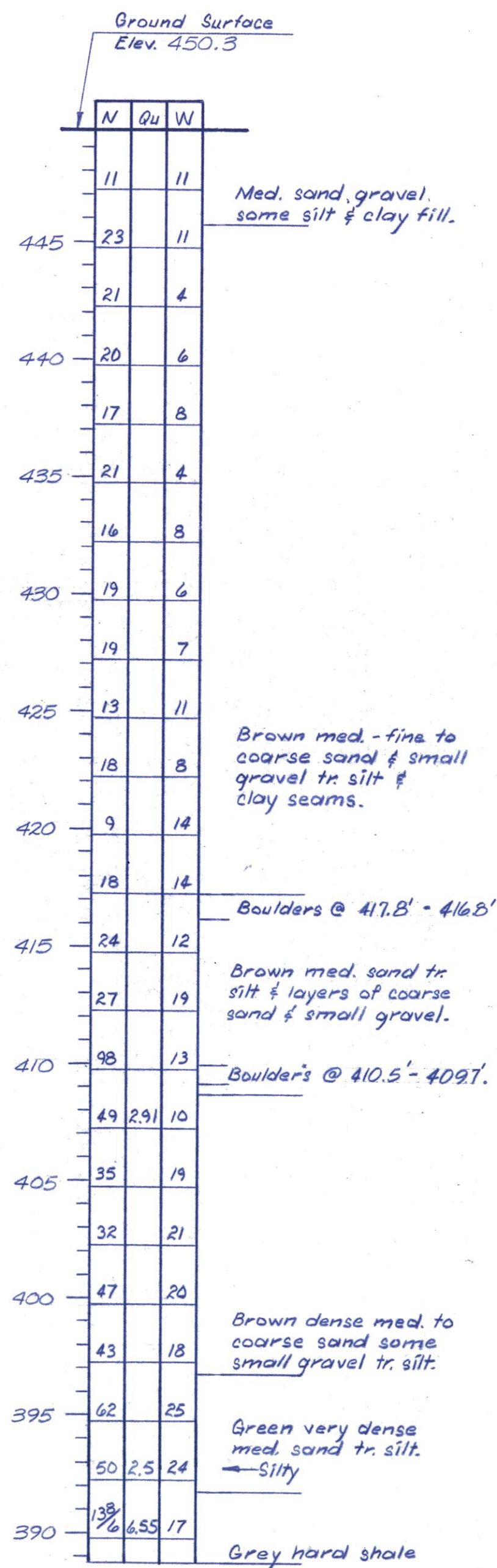
BORING #4E



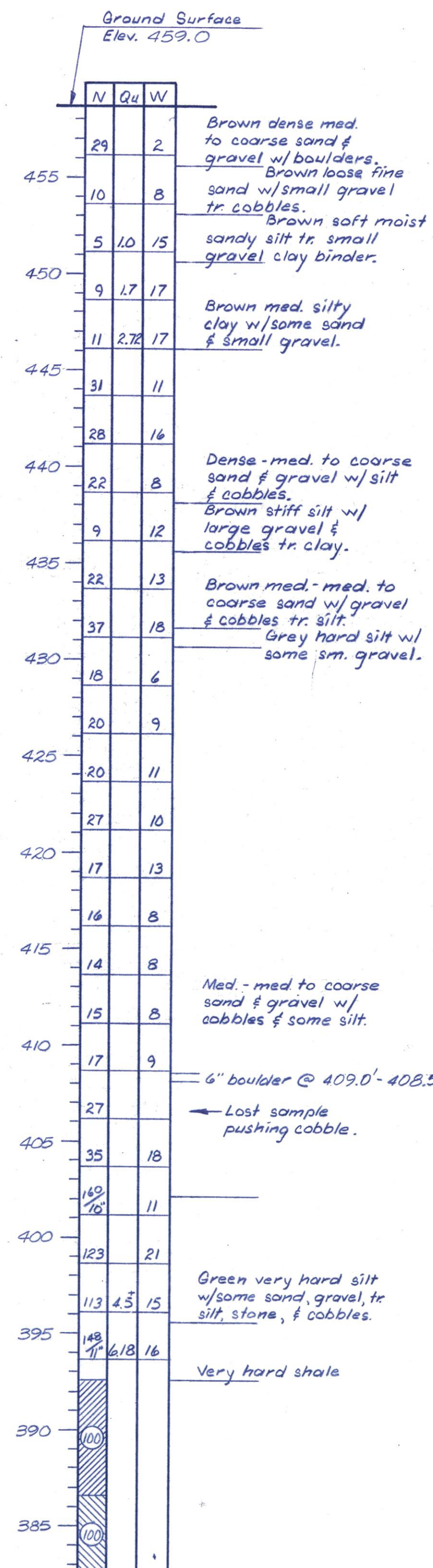
BORING #4



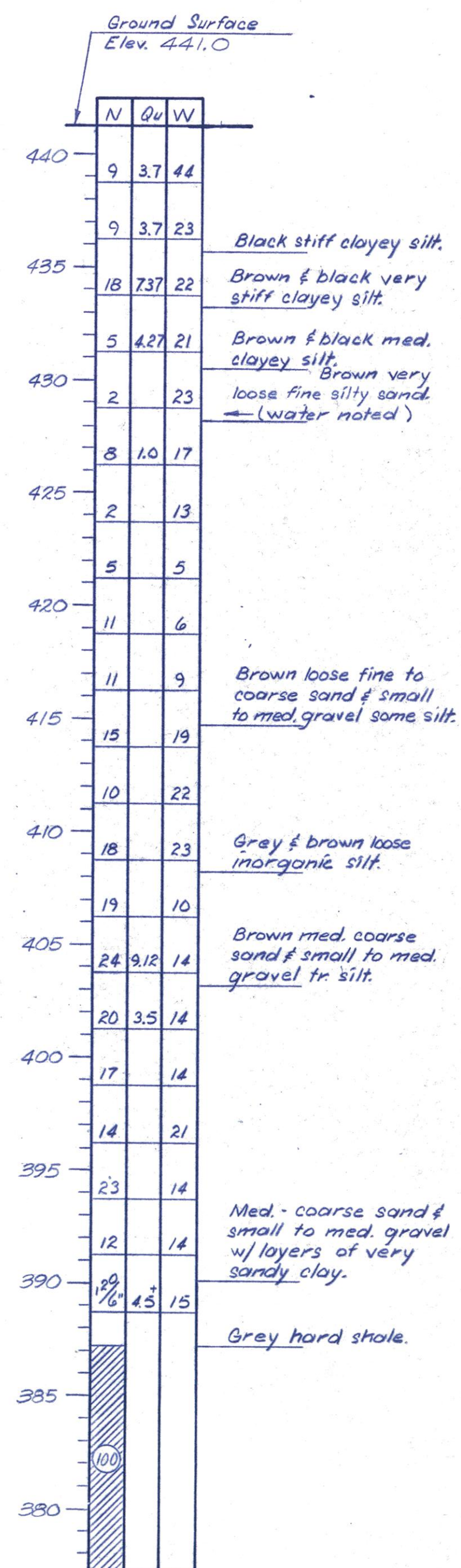
BORING #5E



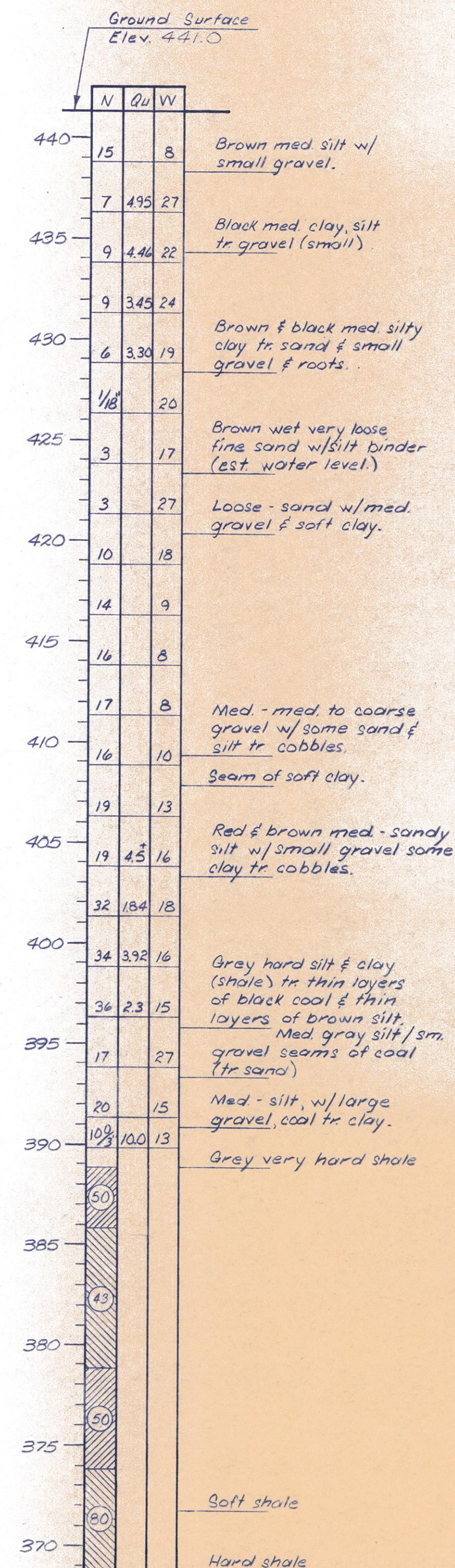
BORING #5



BORING #6E



BORING #6

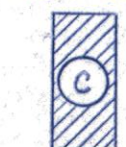


LEGEND:

Indicates Shelby Tube



Indicates Rock Core



A - amount of penetration (in inches).
B - amount recovered (in inches).
C - percent of core recovered.

BORING DATA

MC CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15 B-2
PEORIA & TAZEWELL COUNTIES

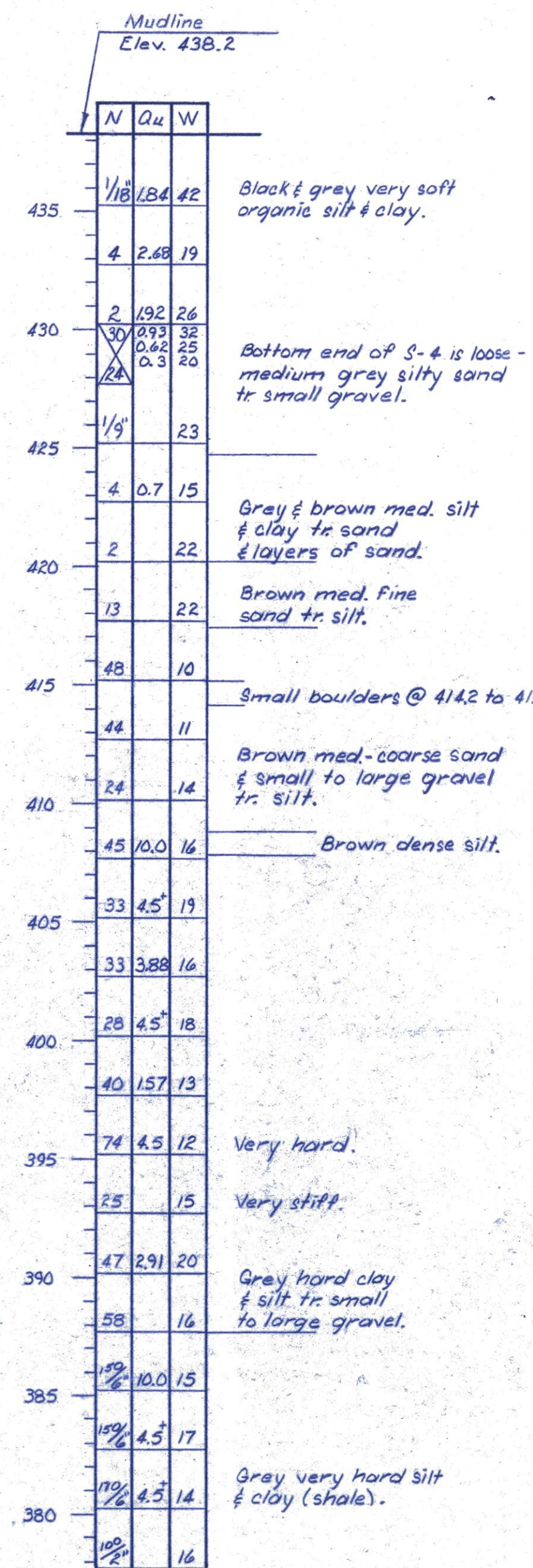
DESIGNED		FILE NO.	74001
CHECKED		DATE	12-21-74
DRAWN	R.J.F.		
CHECKED	G.F.J.		



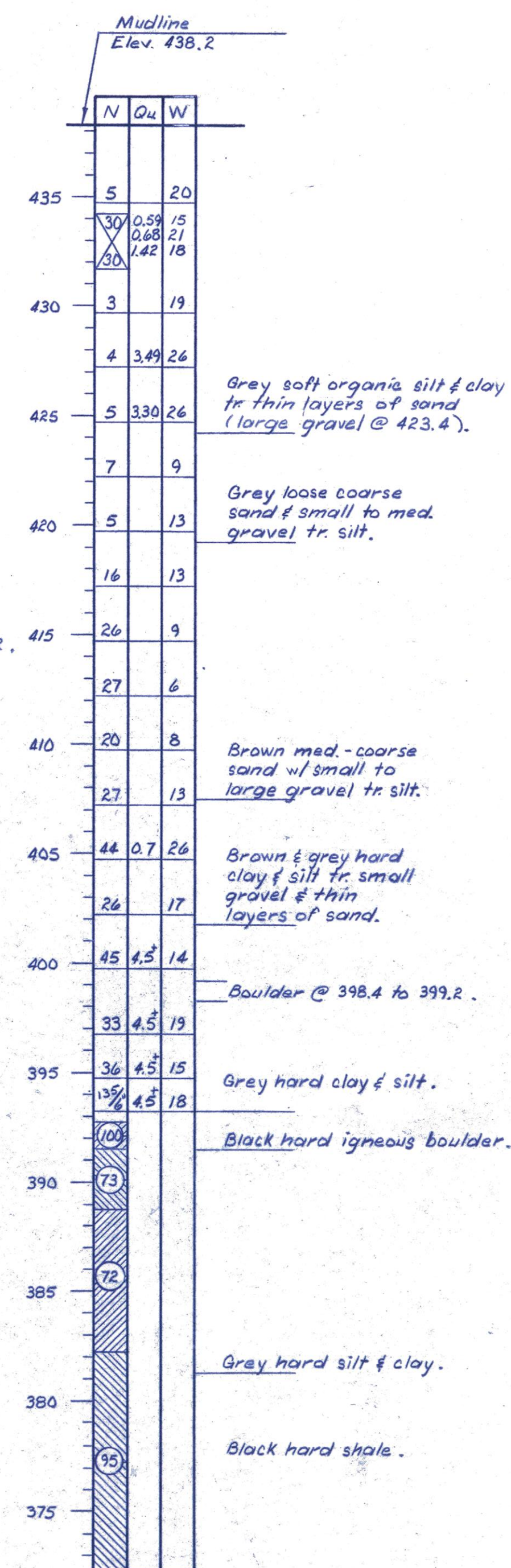
BORING DATA

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 31	10B-2	Peoria & Tazewell	52	49
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

BORING #7E

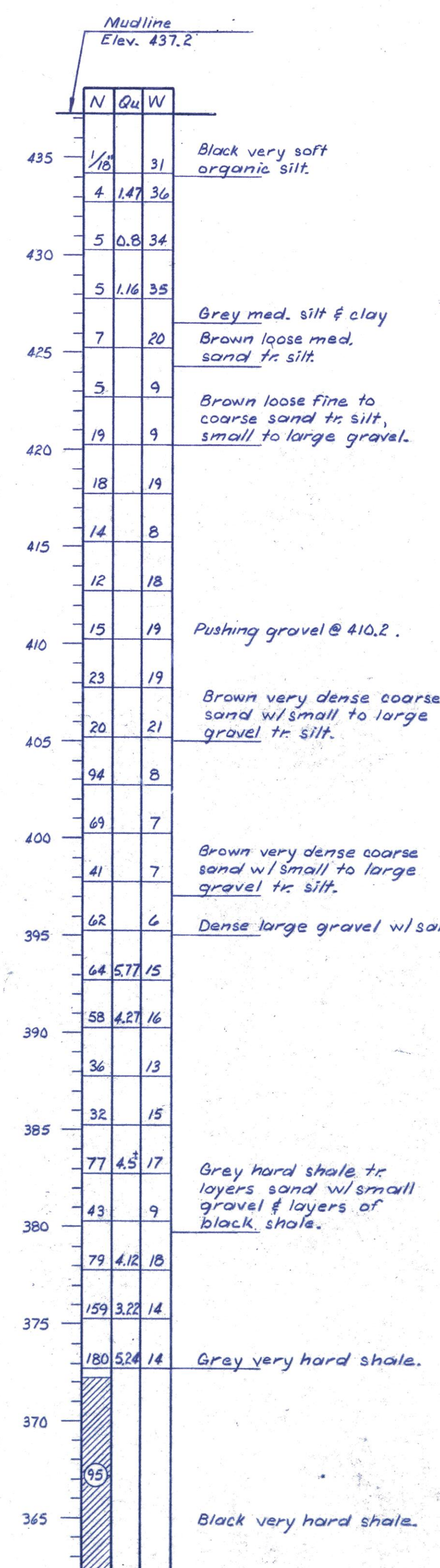


BORING #7



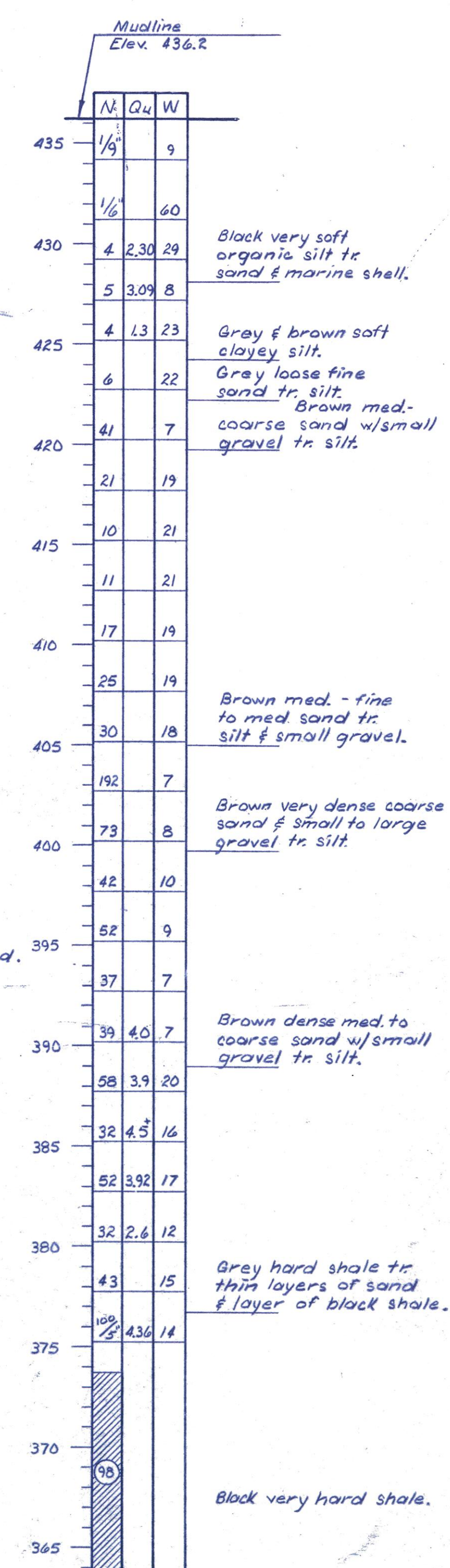
Note: Average rate of coring - 2 min. 50 sec/ft.

BORING #8E

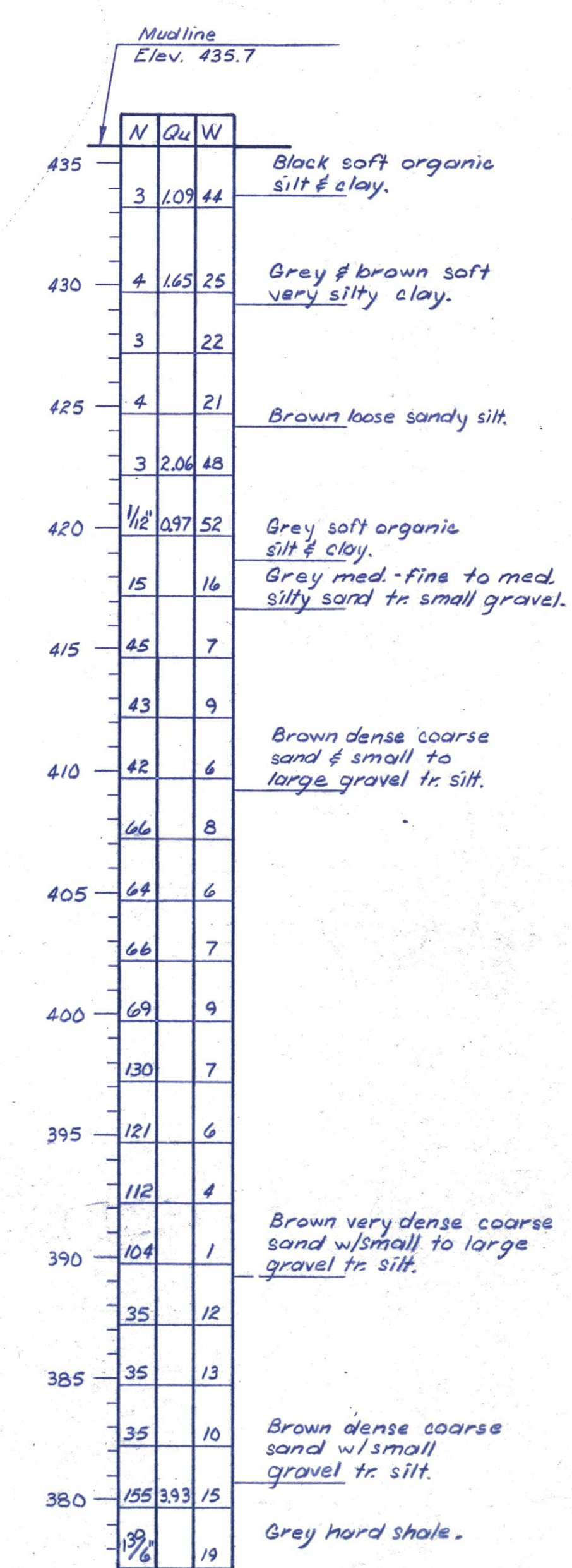


Note: Average rate of coring - 2 min. 45 sec/ft.

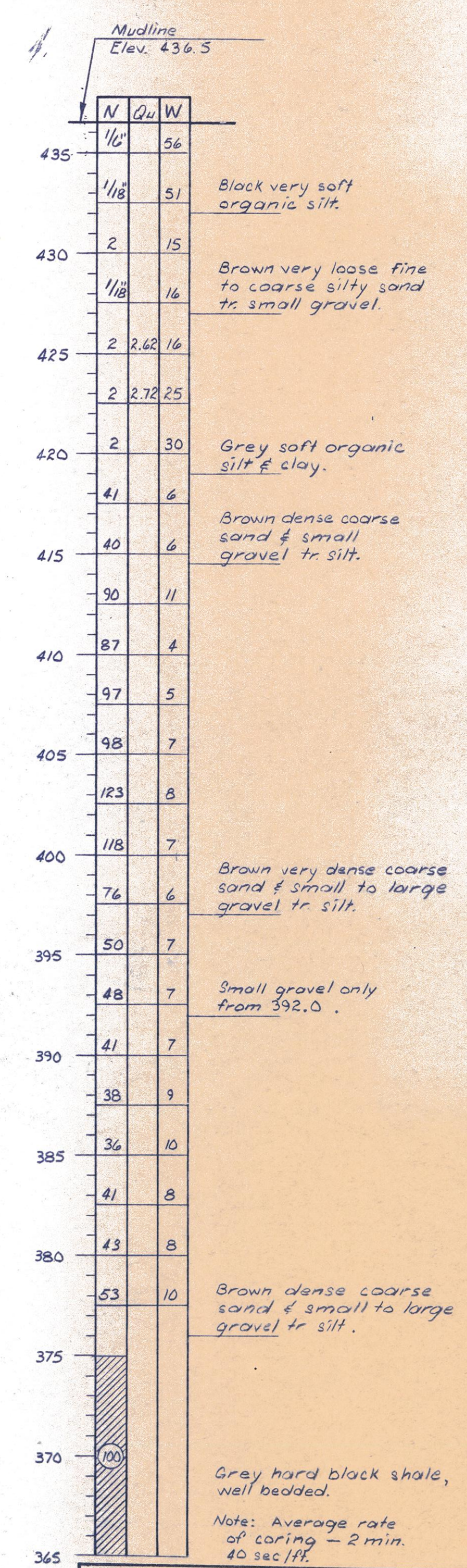
BORING #8



BORING #9E



BORING #9



Note: Average rate of coring - 2 min. 40 sec/ft.

LEGEND:

Indicates Shelby Tube



Indicates Rock Core



A - amount of penetration (in inches).
B - amount recovered (in inches).
C - percent of core recovered.

BORING DATA

M^cCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15 B-2
PEORIA & TAZEVELL COUNTIES

DESIGNED
CHECKED
DRAWN RIF
CHECKED GFL



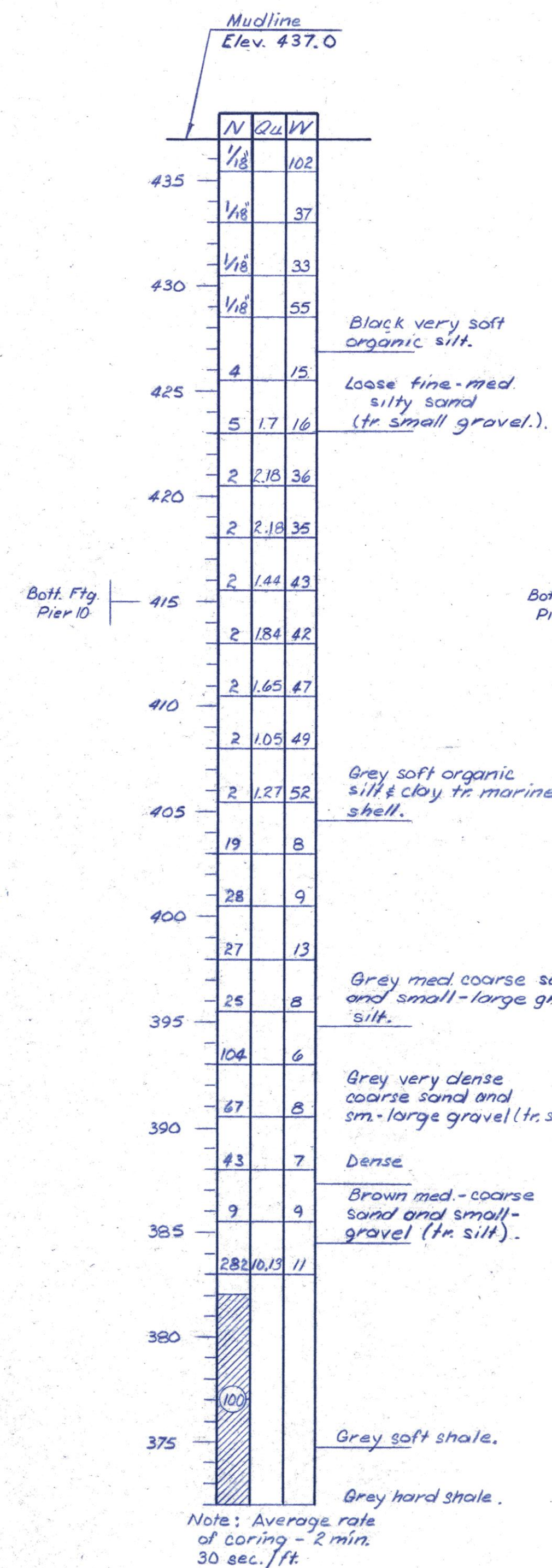
FILE NO.
74001
DATE
12-21-74

SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

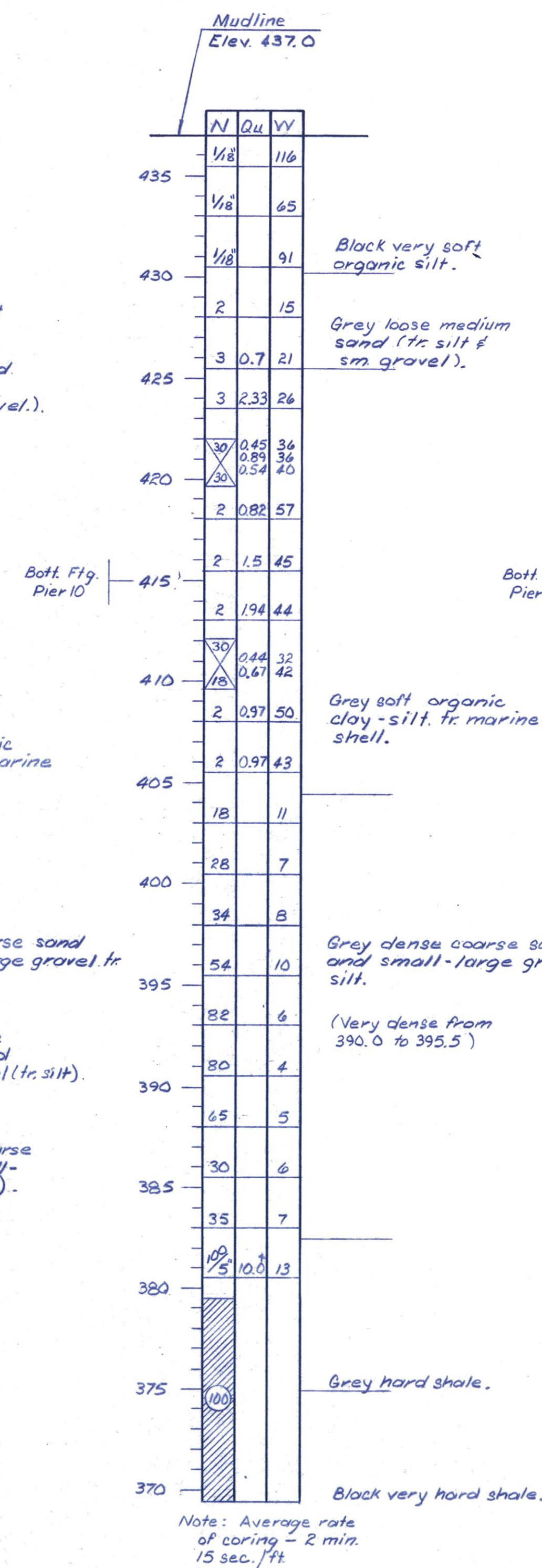
BORING DATA

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 31	15B-2	Peoria & Tazewell	52	50
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

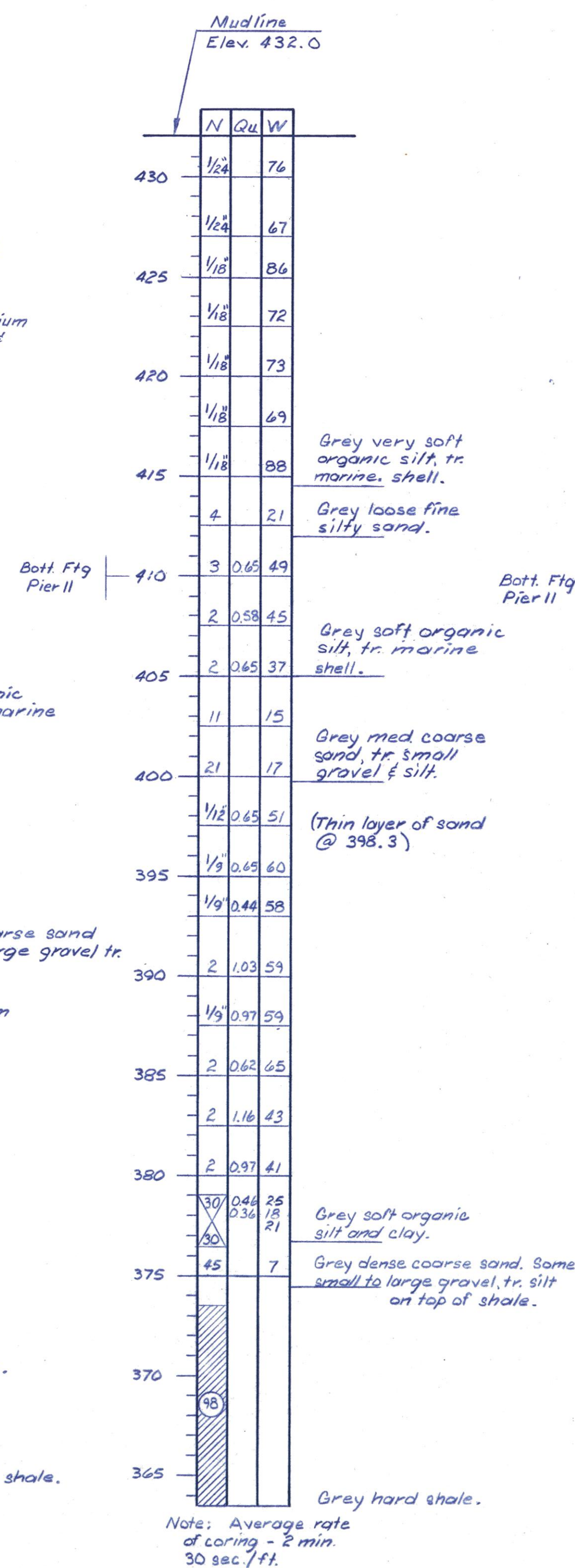
BORING #10A



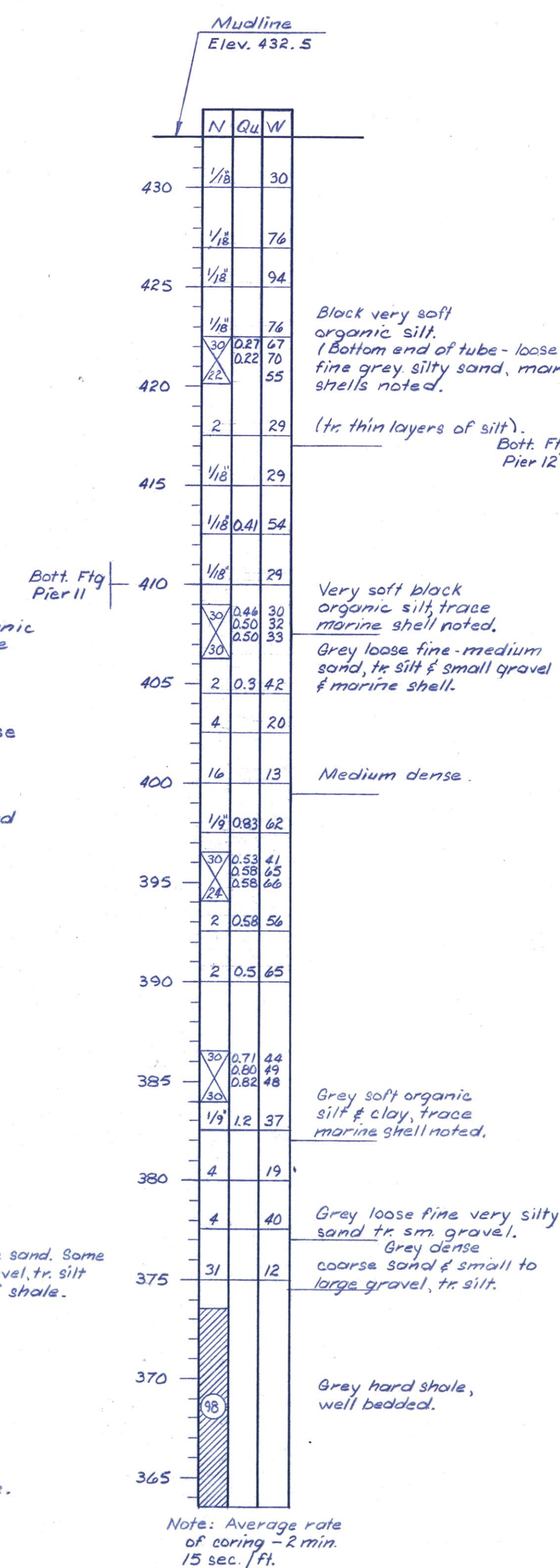
BORING #10B



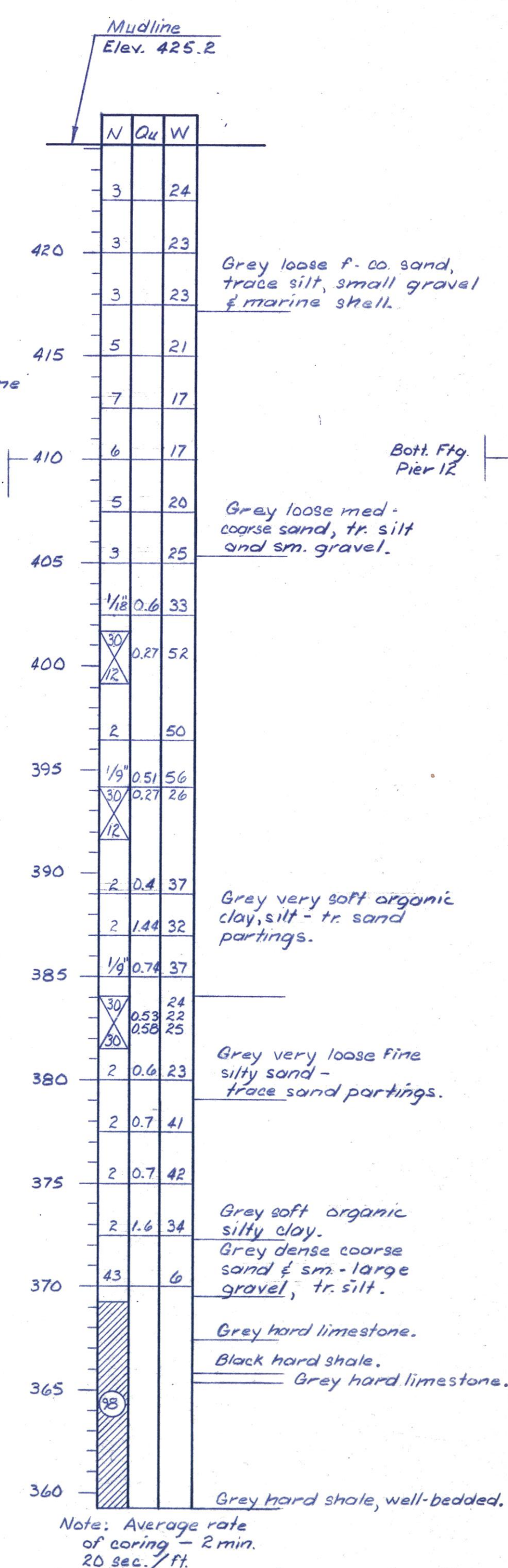
BORING #11A



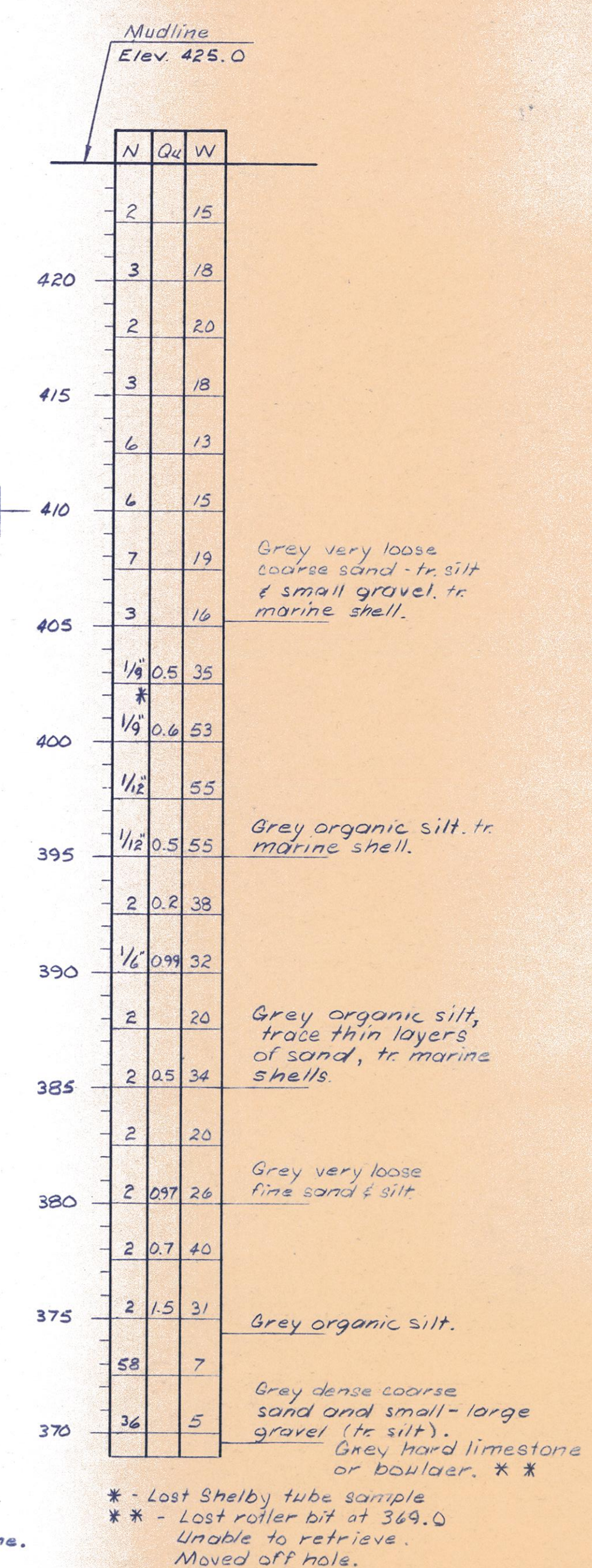
BORING #11B



BORING #12A



BORING #12B



LEGEND:

Indicates Shelby Tube



Indicates Rock Core

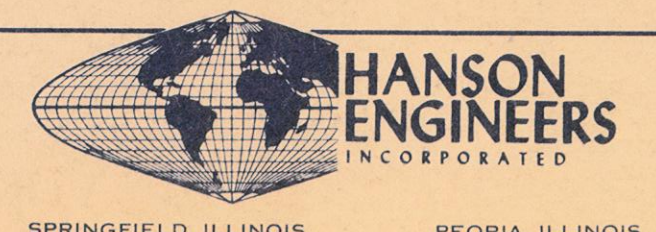


A - amount of penetration (in inches).
B - amount recovered (in inches).
C - percent of core recovered.

BORING DATA

M^c CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15 B-2
PEORIA & TAZEVELL COUNTIES

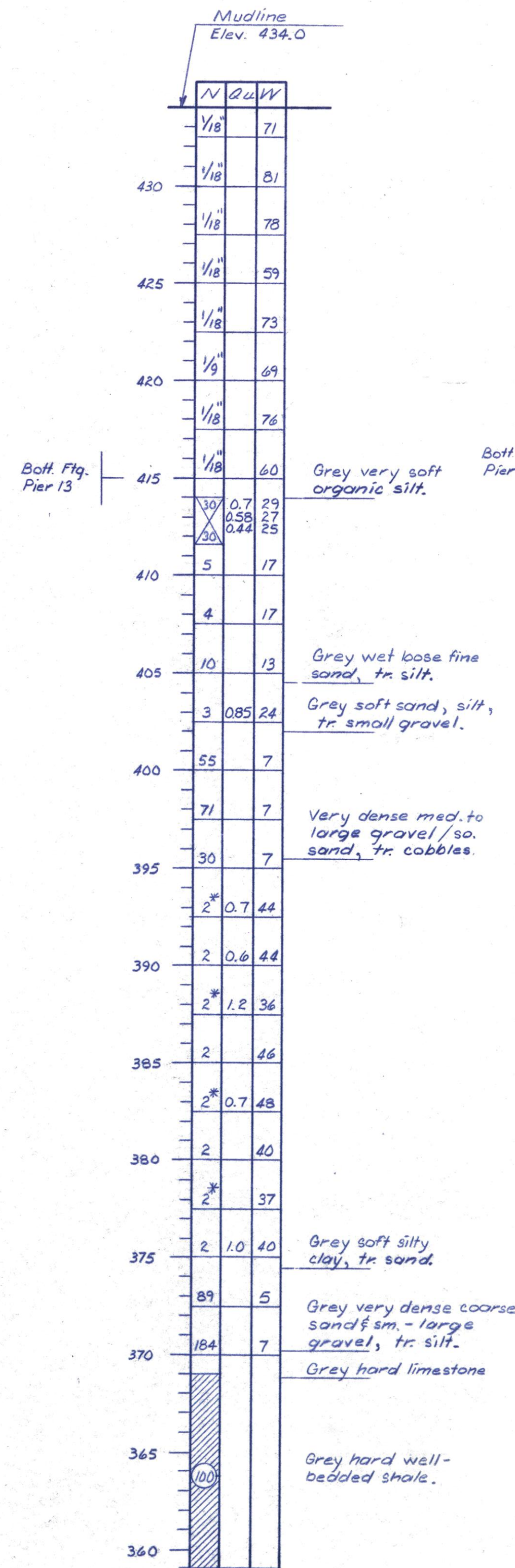
DESIGNED
CHECKED
DRAWN R.I.F.
CHECKED G.F.J.



FILE NO.
78001
DATE
12-21-74

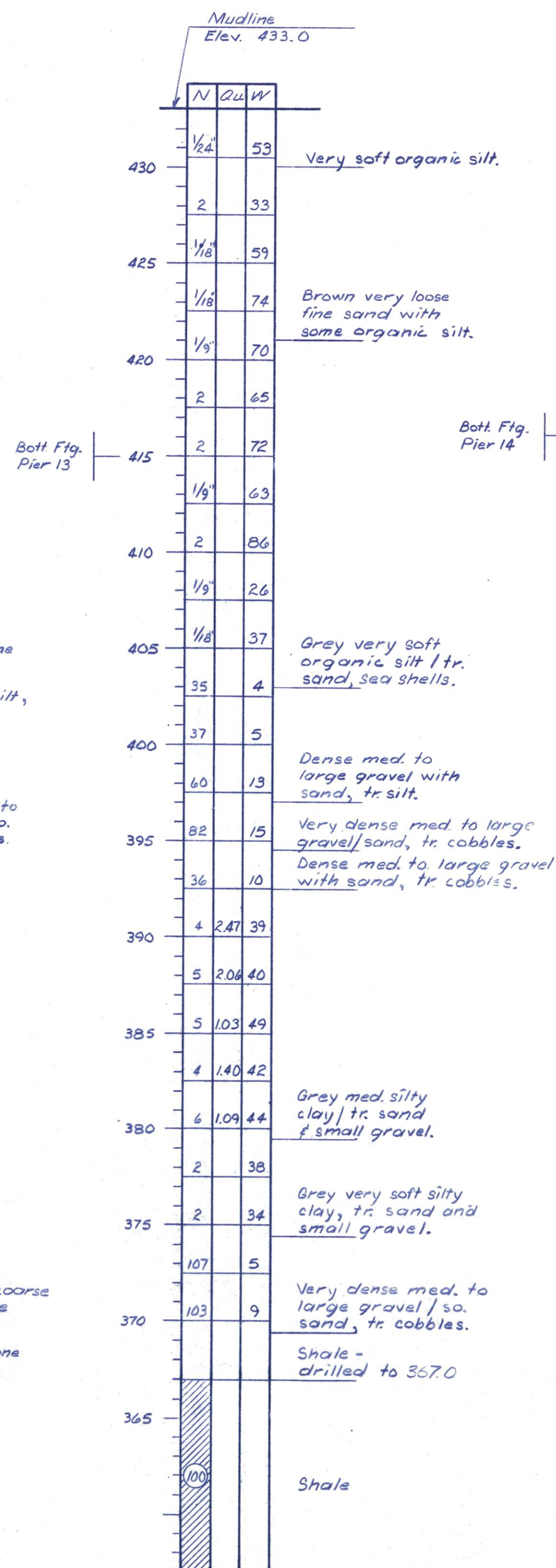
BORING DATA

BORING #13A



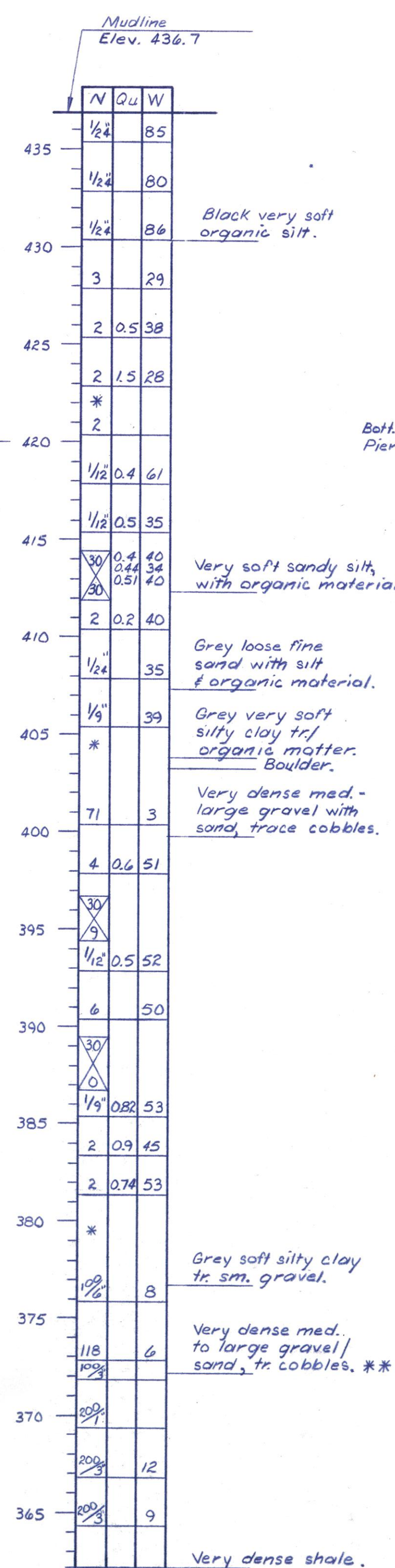
* - Indicates lost Shelby tube sample
Note: Average rate of coring - 2 min. 25 sec./ft.

BORING #13B



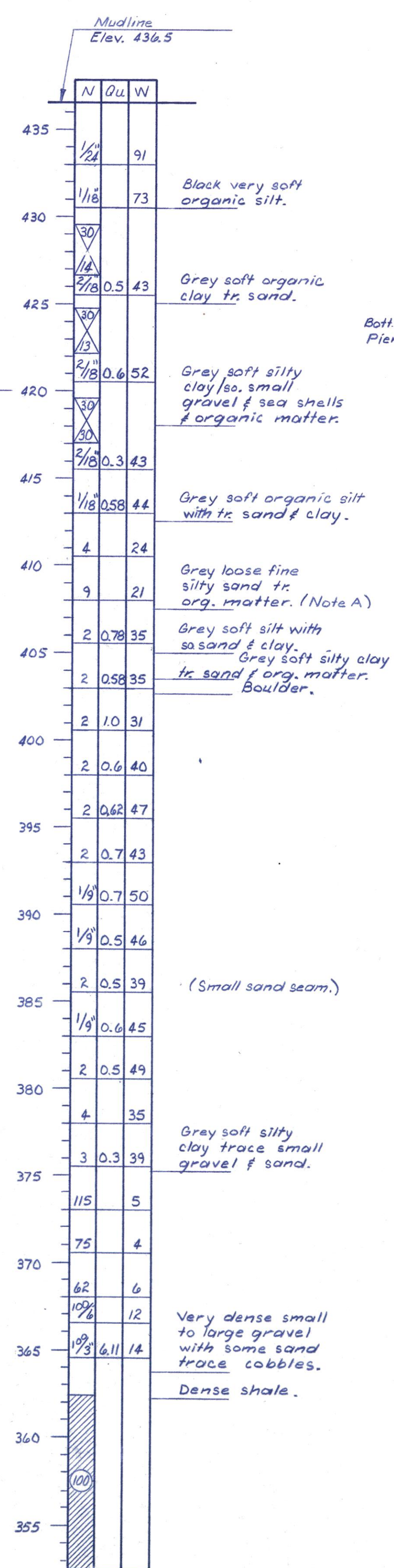
Note: Average rate of coring - 2 min. 30 sec./ft.

BORING #14



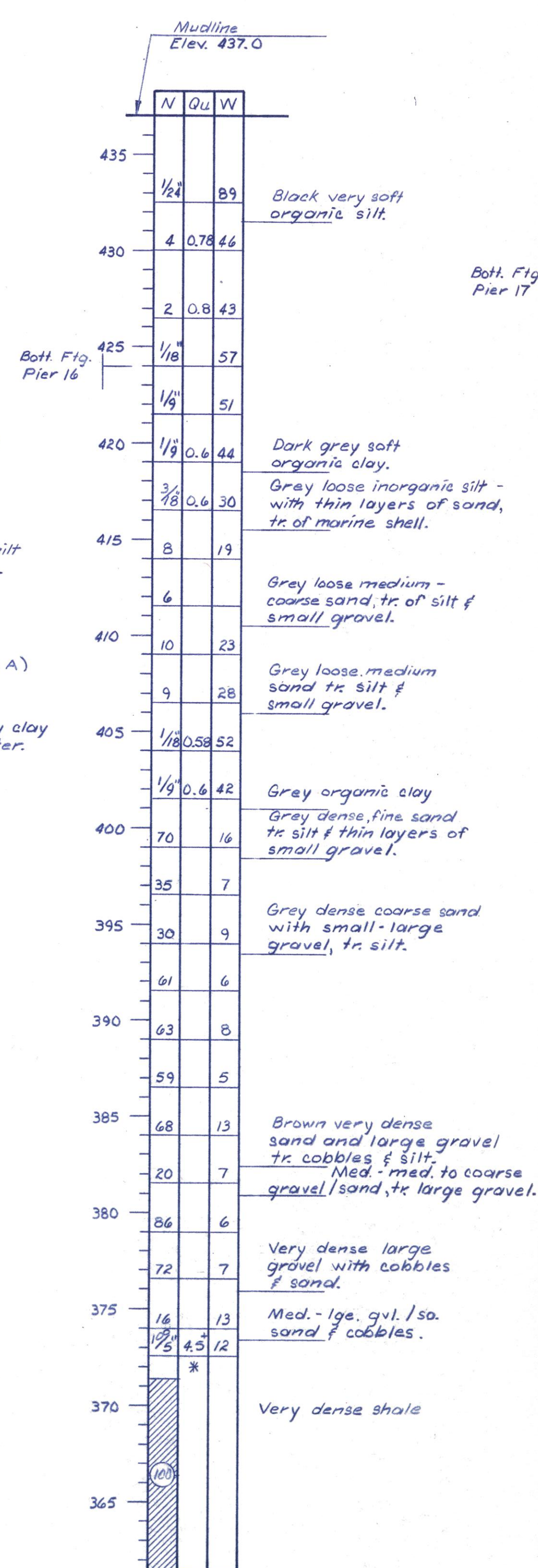
* - Indicates lost Shelby tube sample.
** - Very hard 3" cobble at 375.2. Took 1/2 hr to drill through.

BORING #15



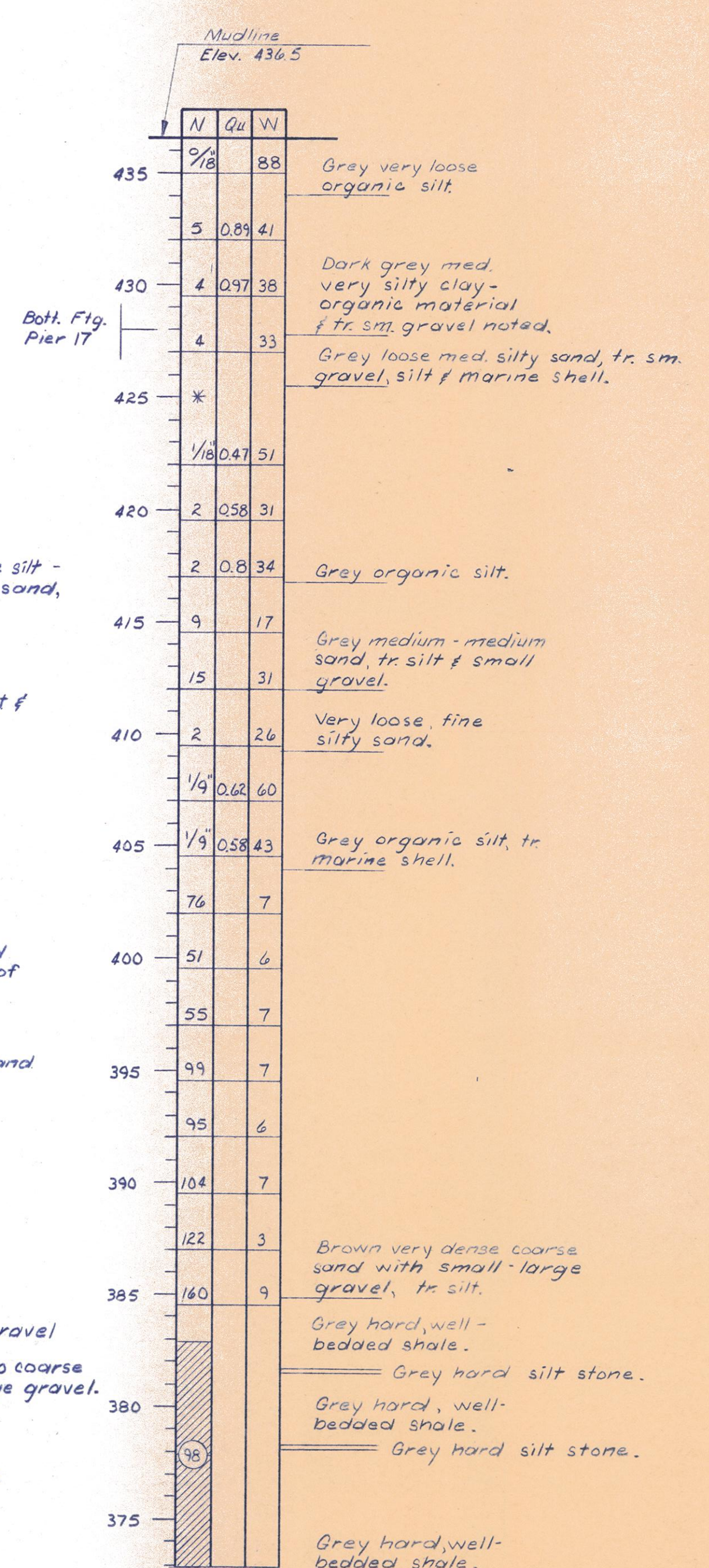
Note A: Lost return water while drilling from 412.0 to 409.5. Average rate of coring - 2 min. 40 sec./ft.

BORING #16



Notes: Losing a tub of bentonite (50 gal/s) every 5' below 396.5.
* - Roller - bitted to 371.5 in shale.
Average rate of coring - 2 min. 30 sec./ft.

BORING #17



* - Indicates lost sample
Average rate of coring - 2 min. 15 sec./ft.

LEGEND:

Indicates Shelby Tube



Indicates Rock Core

A - amount of penetration (in inches).
B - amount recovered (in inches).
C - percent of core recovered.

BORING DATA

M^C CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15 B-2
PEORIA & TAZEWELL COUNTIES

DESIGNED
CHECKED
DRAWN
CHECKED



FILE NO.

74001

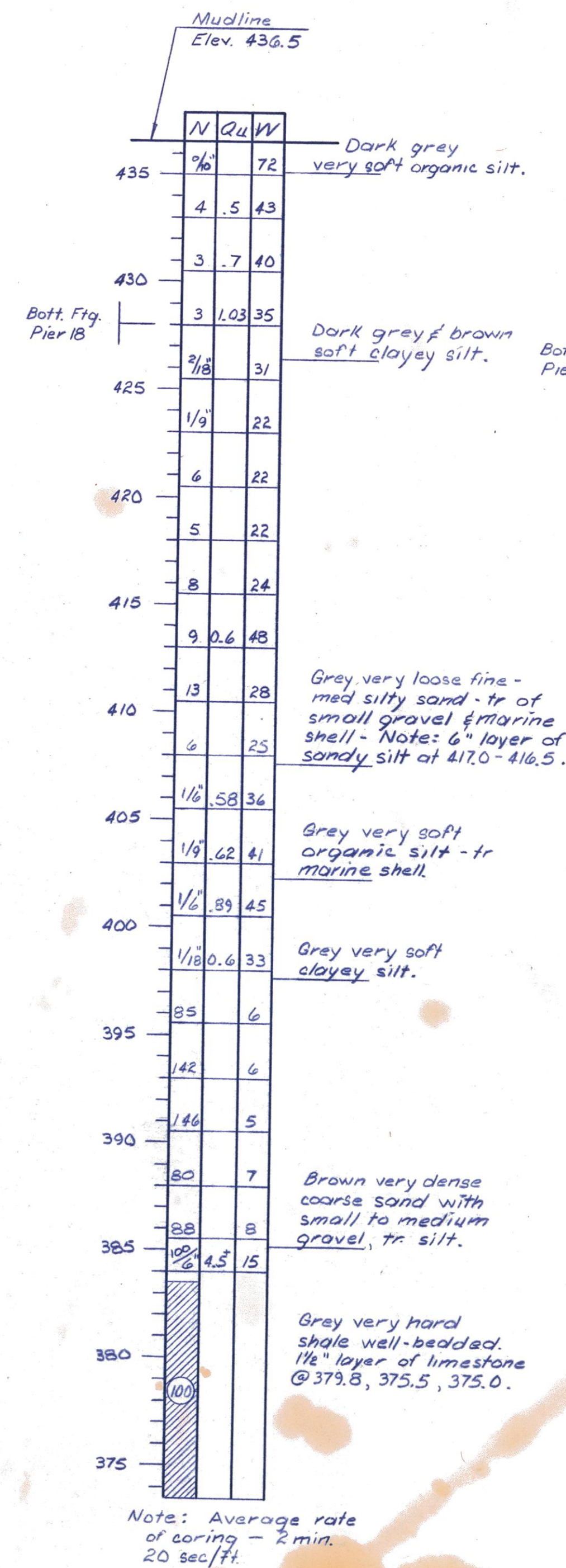
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12-31-74

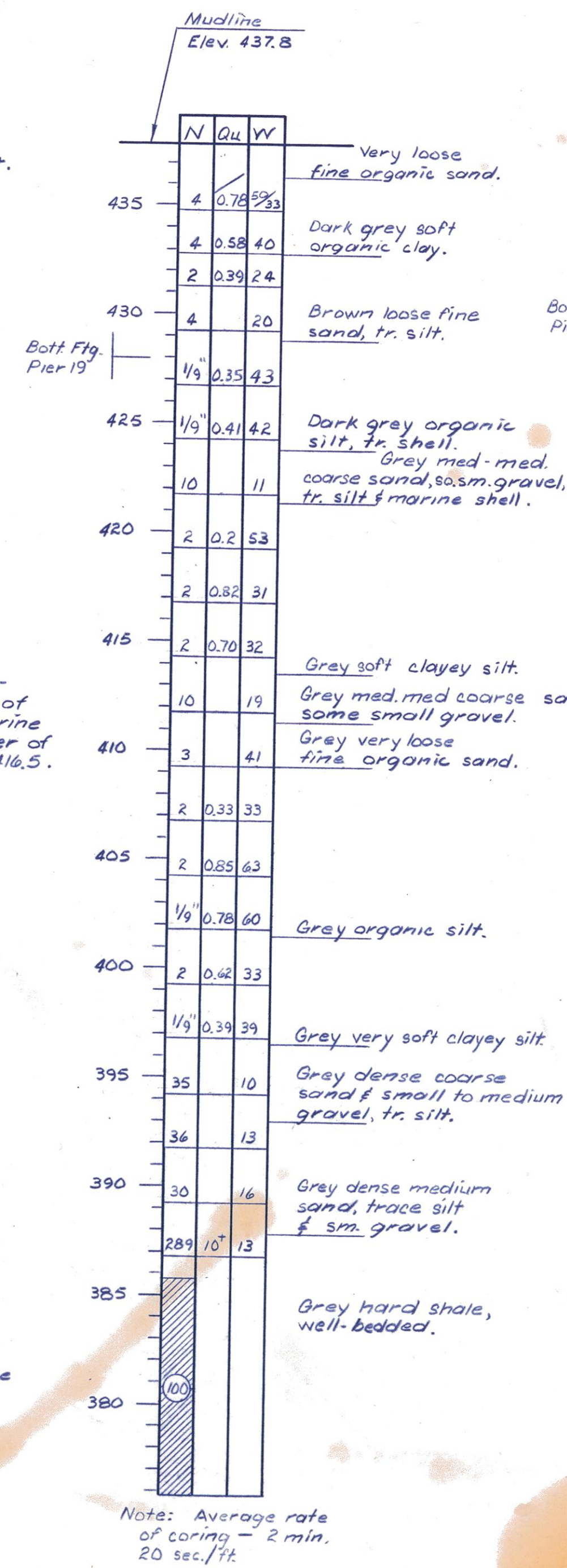
BORING DATA

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 31	15B-2	Peoria & Tazewell	52	52
FED. ROAD DIST. NO. 1		ILLINOIS	PROJECT	

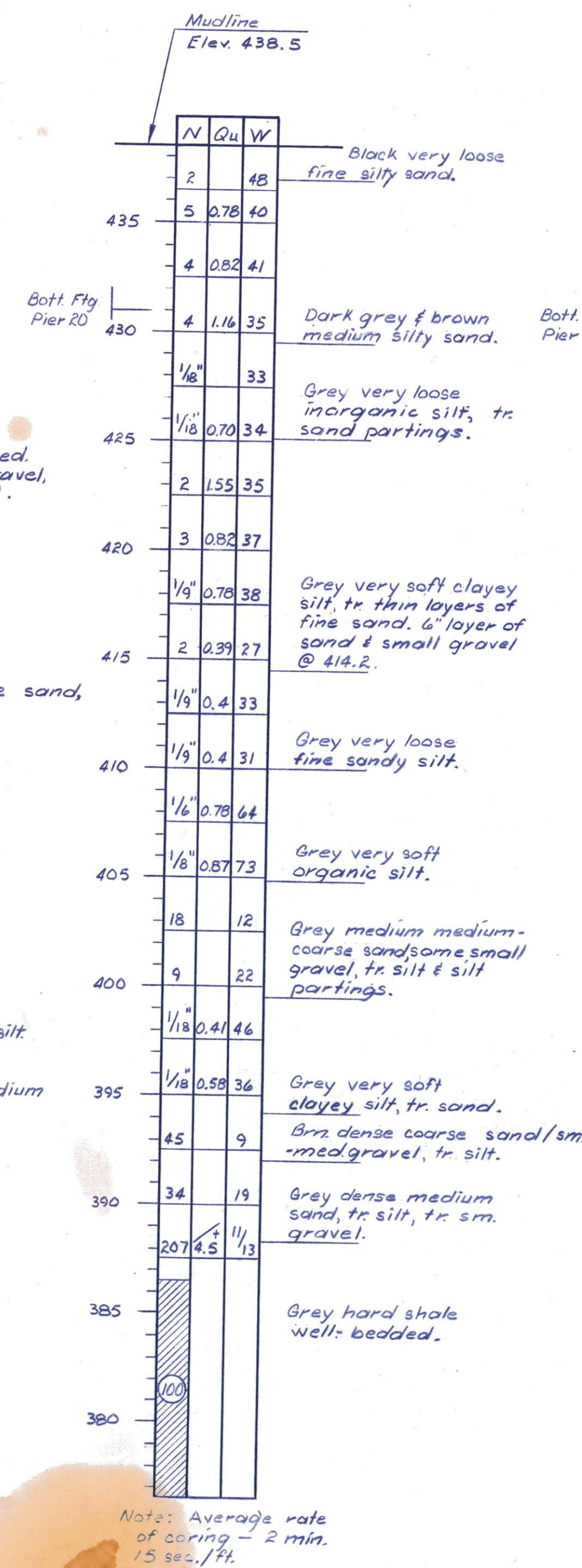
BORING #18



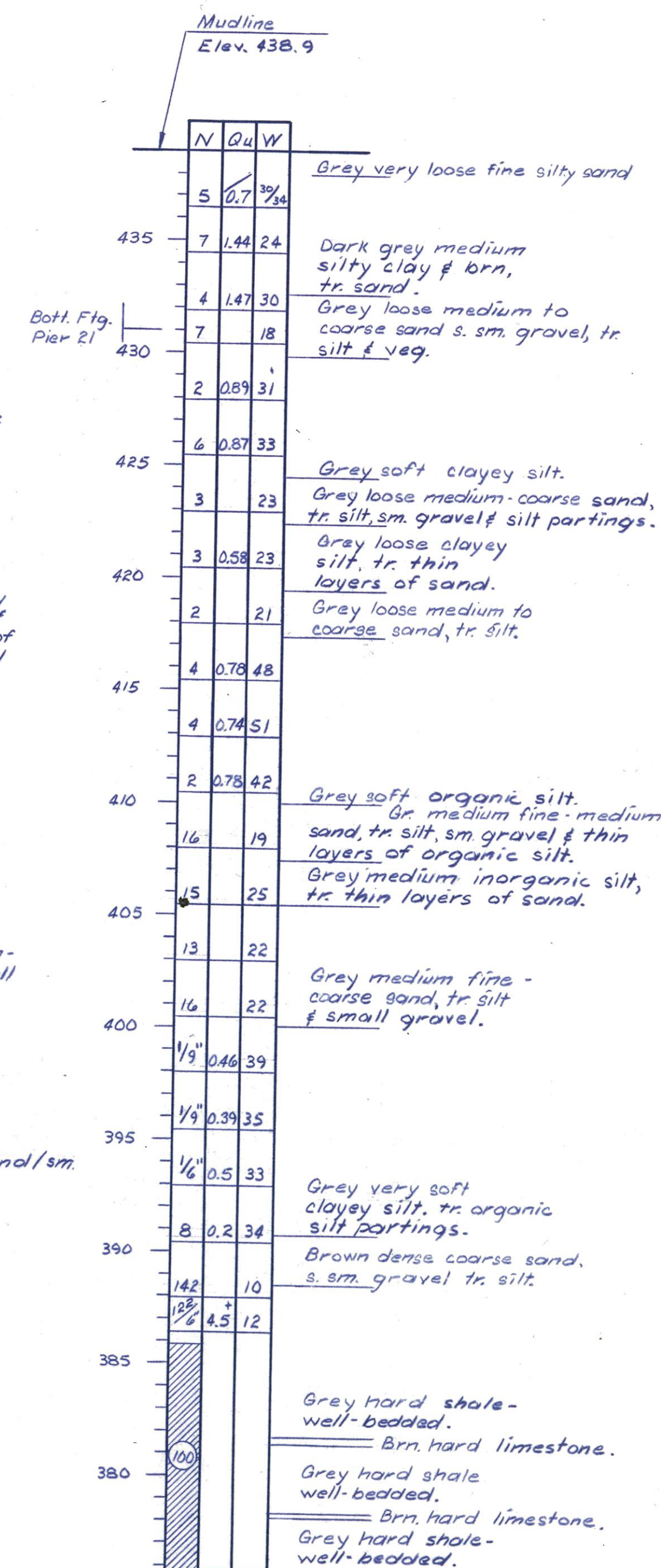
BORING #19



BORING #20



BORING #21



LEGEND:

Indicates Shelby Tube



Indicates Rock Core



A - amount of penetration (in inches).
 B - amount recovered (in inches).
 C - percent of core recovered.

BORING DATA

M^cCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15 B-2
PEORIA & TAZEWELL COUNTIES

DESIGNED
 CHECKED
 DRAWN R.J.F.
 CHECKED G.F.J.



FILE NO.
 74001
 DATE
 12-31-74