Rev. for 6-29-79 letting 6-6-79

F.A. 49	15-1 (F&E)	PEORIA AND TAZEWELL	25	1A
			BR-F-49(34)	

P-94-107-69

INDEX OF SHEETS

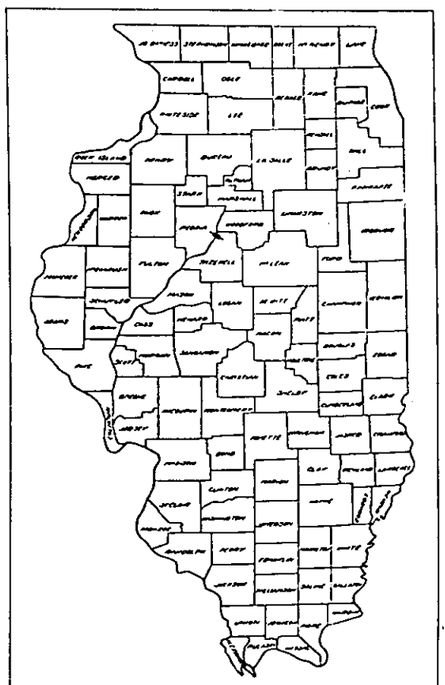
1, 1A COVER SHEET
2. GENERAL PLAN & ELEVATION
3. HORIZONTAL CONTROL, BENCH MARKS & R.O.W.
4. STRUCTURAL STEEL PLAN - SPANS 15 THRU 23
5. STRUCTURAL STEEL GIRDERS - SPANS 15 THRU 23
6. STRUCTURAL STEEL GIRDERS - SPANS 15 THRU 23
7. STRUCTURAL STEEL DETAILS - SPANS 15 THRU 23
8. BEARINGS & CROSS FRAMES - SPANS 15 THRU 23
9. SUPERSTRUCTURE DETAILS
10. DIAGRAMS - D.L. DEF. - CAMBER - SLAB. ELEV. - SPANS 15 THRU 23.
11. TOP OF SLAB ELEVATIONS — SPANS 15,16 & 17
12. TOP OF SLAB ELEVATIONS — SPANS 18,19 & 20
13. TOP OF SLAB ELEVATIONS — SPANS 21,22 & 23
14. SUPERSTRUCTURE - SPANS 15 THRU 17

*15.-25. SUBSTRUCTURE DETAILS

STANDARDS 2298-4 2299-7 2300-1

* Includes Sheet 23A.

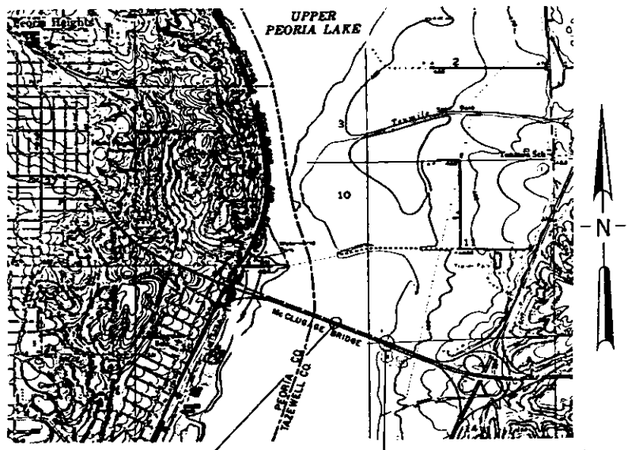
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY
F.A. ROUTE 49
SECTION 15-1(F&E)
PROJECT BR-F-49(34)
PEORIA-TAZEWELL COUNTIES
C-94-107-79



LOCATION OF SECTION INDICATED THUS

SUMMARY OF QUANTITIES

QUANTITY	UNIT	ITEM	CODE NO.
1	L. SUM	FURNISHING & ERECTING STRUCTURAL STEEL	507001
1	L. SUM	MOBILIZATION	X04748
1000	HOURS	TRAINEES	Z10527



PROPOSED PROJECT BEGINS STA. 230+52.77 PIER 13

PROPOSED PROJECT ENDS STA. 246+46.02 EAST ABUTMENT

NET LENGTH OF PROPOSED PROJECT
1593.25 LIN. FT. = 0.30 MI.

LAYOUT
SCALE = 1" = 2000'

THE PROPOSED IMPROVEMENT INCLUDES THE FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR SPANS 15 THRU 23 BEGINNING AT PIER 13 (STA. 230+52.77) THRU THE EAST ABUTMENT (STA. 246+46.02). THE STRUCTURAL STEEL INCLUDES PLATE GIRDERS, CROSS FRAMES, LATERAL BRACING AND BEARINGS.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 4-24 19 79
DISTRICT ENGINEER

EXAMINED May 19 22
ENGINEER OF PLANS AND CONTRACTS

PASSED May 19 22
ENGINEER OF DESIGN

APPROVED May 19 22
DIRECTOR OF HIGHWAYS

SUBMITTED
DIST. DESIGN ENGR.

EXAMINED
DIST. CONST. ENGR.

EXAMINED
DIST. MAINT. ENGR.

EXAMINED Nov 25 1974
DIST. TRAFFIC ENGR.

Entire section inspected and approved as to policy.

DATE 4-24-79
DISTRICT ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED
DIVISION ADMINISTRATOR

DATE

AS REVISED

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

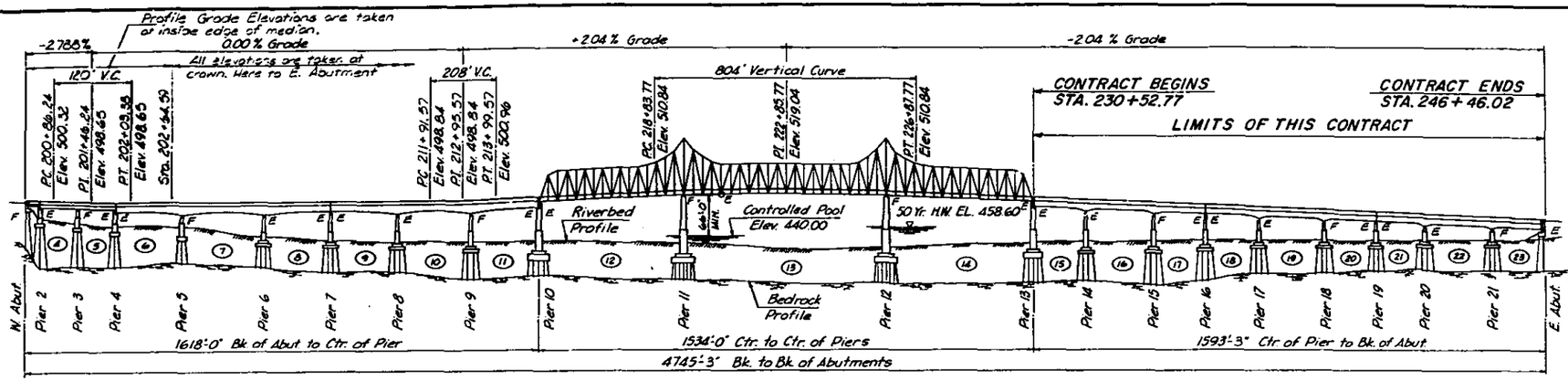
CONTRACT NO. 33671

As Revised 8-24-79 L.W.

1st REEL 4-129

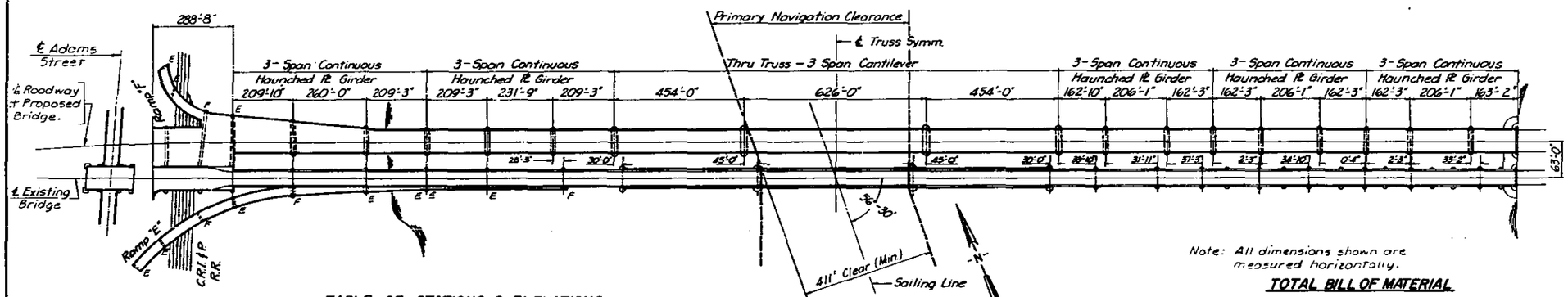
FA 49	15-1 (F&E)	PEORIA AND TAZEWELL	25	2
FED. ROAD DIST. NO. 5	ILLINOIS	PROJECT		

Sheet 1 of 13



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

ELEVATION

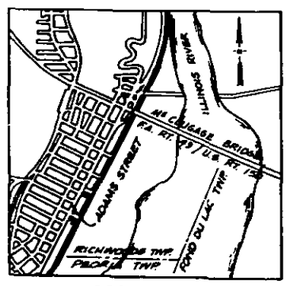


PLAN

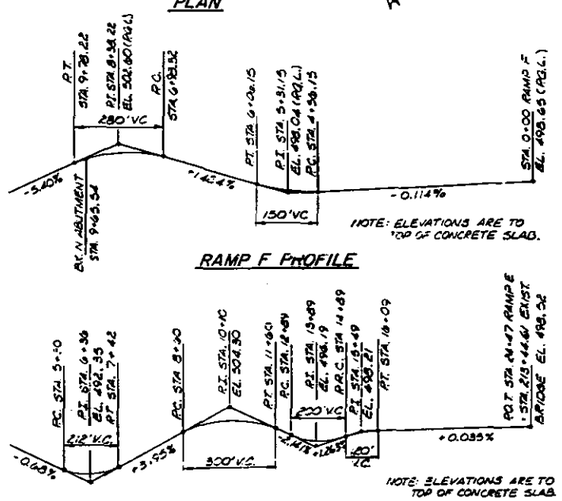
TABLE OF STATIONS & ELEVATIONS

SUBSTRUCTURE	STATION	℄ ROWY EL.	PG EL.
BK. N. ABUTMENT	199+03.24		503.45
PIER 2	199+54.90		504.00
"	200+75.17		500.66
4	201+89.44		458.67
"	203+99.27	498.84	
6	204+59.27	498.84	
7	209+68.52	498.84	
8	210+77.77	498.84	
9	213+09.52	499.52	
10	215+18.77	503.89	
11	219+72.77	512.45	
12	225+98.77	512.45	
13	230+32.77	503.89	
14	232+15.60	500.07	
15	234+21.69	493.87	
16	235+83.94	492.56	
17	237+46.19	489.25	
18	239+52.27	485.04	
19	241+14.52	481.73	
20	242+76.77	478.42	
21	244+82.85	474.28	
EX. E ABUTMENT	246+49.02	470.89	
EX. N ABUTMENT	9+65.54		493.71
PIER 2E	8+53.80		499.81
EX. S. ABUTMENT	8+38.50		499.59
PIER 1E	9+93		502.31
5E	11+40		501.22
4E	12+92.88		498.37
3E	14+96.68		497.67
2E	17+56.74		498.41
1E	19+96.04		498.48
8E	21+75.89		498.55
9E	24+35.89		498.64

THESE ELEVATIONS ARE TO TOP OF CONCRETE SLAB TO PROP OF CLASS 2 SURFACE.



LOCATION MAP



RAMP F PROFILE

RAMP E PROFILE

Note: All dimensions shown are measured horizontally.

TOTAL BILL OF MATERIAL

Structural Steel ** Lump Sum

**Calculated Weight of Structural Steel:

M 183 365,960 Lbs.
M 223 3,105,760 Lbs.
Bearings 89,230 Lbs.

GENERAL NOTES

Fasteners shall be high strength bolts. Bolts ⅞", open holes 15/16" unless otherwise noted.

The basic lead silica chromate paint system shall be used for shop and field painting of structural steel.

Structural steel noted on the plans as M 223 shall be Grade 50.

Field welding of construction accessories will not be permitted to the bottom flange of beams or girders nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.

Anchor bolts shall be set before bolting diaphragms or cross frames over supports.

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.

The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the tension flanges, webs and all splice plate material of the steel girders or wide flange beams.

Bearing seat surfaces shall be adjusted to the designated elevations within a tolerance of ⅛ inch. Adjustment shall be made by shimming the bearing. Two ⅛" adjusting shims of the dimensions of the bottom bearing plate shall be provided for each bearing in addition to all other plates or shims.

DESIGN STRESSES

STRUCTURAL STEEL THICKNESS OF PLATES t/s	M 183 ALL 20,000 PS.I.	M 223 UP TO 2" 27,000 PS.I.	M 222 UP TO 4" 27,000 PS.I.
REINFORCEMENT BARS M 31		f_y = 60,000 PS.I.	
CONCRETE f'_c = 3500 PS.I.			

LOADING HS 20-44 & Future Wearing Surface of 25 lbs./Sq. Ft.
A.A.S.H.T.O. SPECIFICATIONS 1973 & INTERIM 1974.

APPROVED FOR STRUCTURES ONLY
Chief Bureau of Bridges & Structures

DONALD L. BARR 2013 REGISTERED STRUCTURAL ENGINEER OF ILLINOIS

GENERAL PLAN & ELEVATION

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. 15-1 (F&E)
PEORIA & TAZEWELL COUNTIES

C.R.N.
R.A.H.
R.A.H.
C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

PLAN NO. 74001
DATE 4-20-79

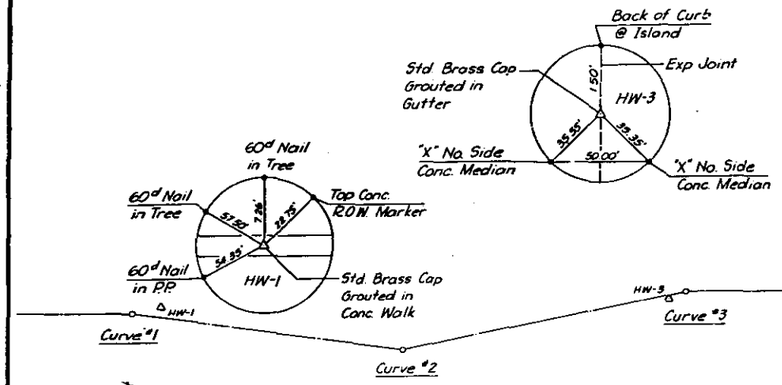
FA 49	15-1 (F&E)	PEORIA AND TAZEWELL	25	3

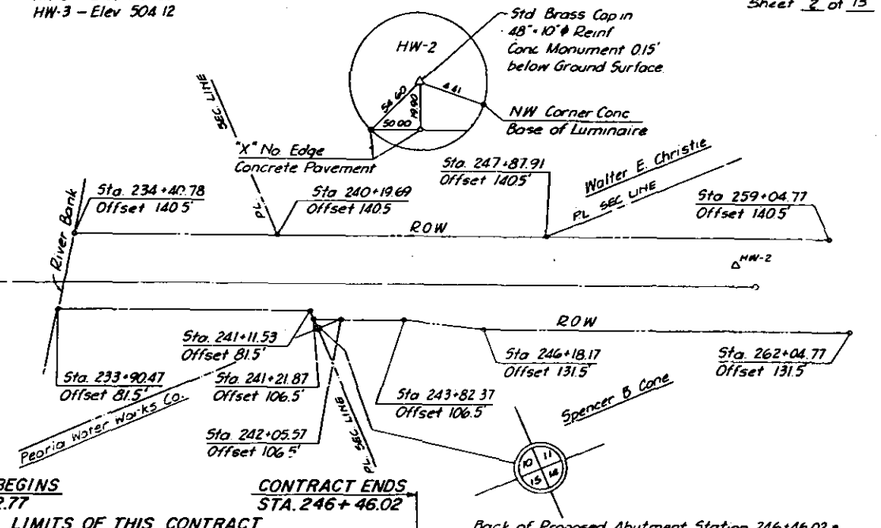
Sheet 2 of 13

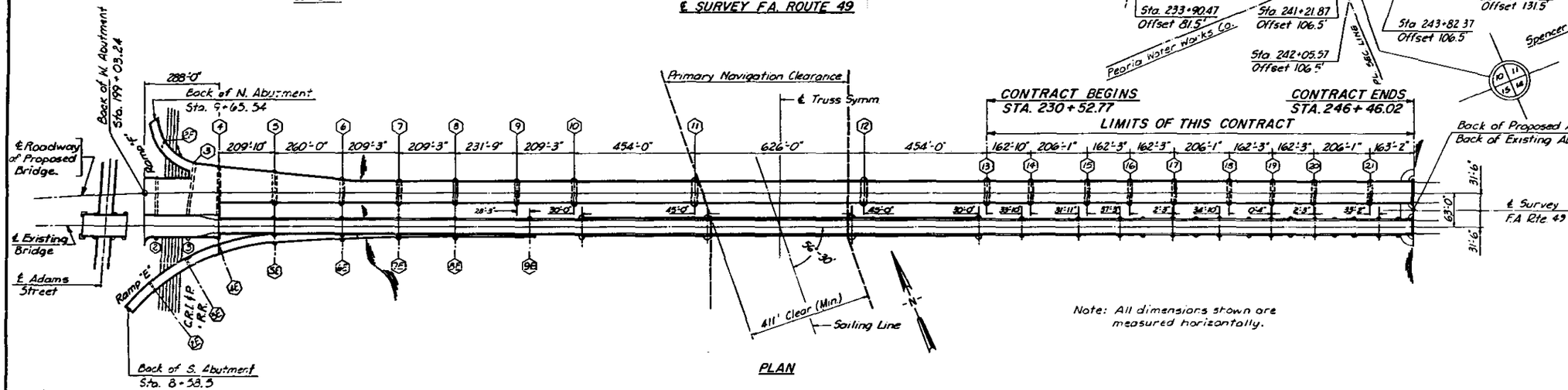
Curve #1	Curve #2	Curve #3
PI - 183+00.081	PI - 191+00.637	PI - 199+35.06
Δ - 4°-00'-00"	Δ - 10°-00'-00"	Δ - 6°-00'-00"
D - 1°-00'-00"	D - 2°-00'-00"	D - 2°-00'-00"
T - 200.081'	T - 250.637'	T - 150.137'
R - 5729.578'	R - 2864.789'	R - 2864.789'
L - 400.00'	L - 500.00'	L - 300.00'

Bench Mark Data

HW-1 – Elev 562.11
HW-2 – Elev 461.60
HW-3 – Elev 504.12







PLAN

Note: All dimensions shown are measured horizontally.

○ Denotes Pier No.

RAMP F CURVE DATA

P.I. -	8+74.623
Δ -	91°-59'-00.68"
D -	27°-56'-56.98"
T -	212.223'
R -	205.0'
L -	329.110'

RAMP E CURVE DATA

P.I. -	9+3.15
Δ -	53°-30'-58.01"
D -	12°-00'-00"
T -	240.746'
R -	477.493'
L -	445.968'

RAMP E CURVE DATA

P.I -	13+6.99
Δ -	29°-08'-50.90"
D -	7°-30'-00"
T -	198.619'
R -	765.944'
L -	388.633'

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

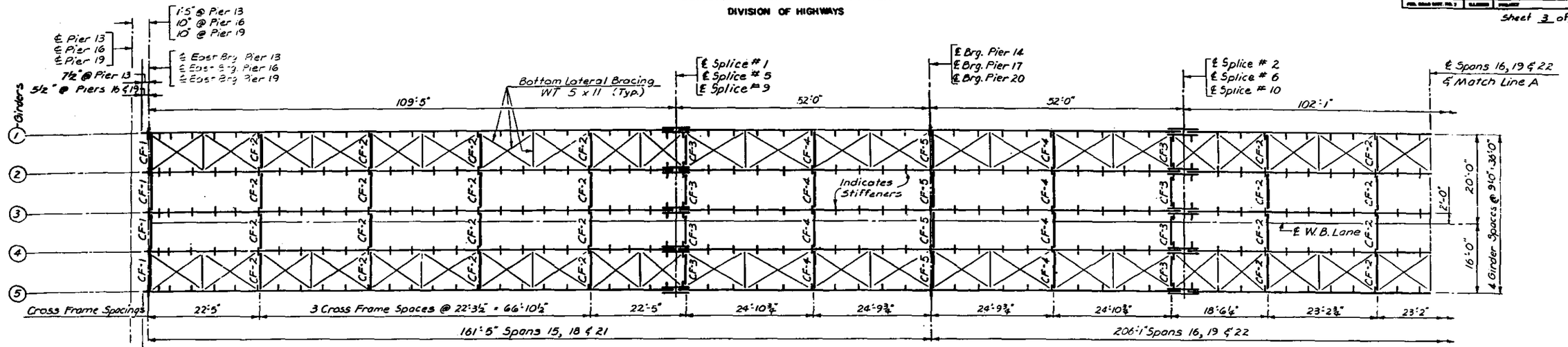
Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. 15-1 (F&E)
PEORIA & TAZEWELL COUNTIES

DESIGNED CRN	HANSON ENGINEERS INCORPORATED	PLAT NO. 74001
CHECKED DLB	SPRINGFIELD ILLINOIS PEORIA ILLINOIS	DATE 4-20-79
DRAWN RAH		
TRACED CRN		

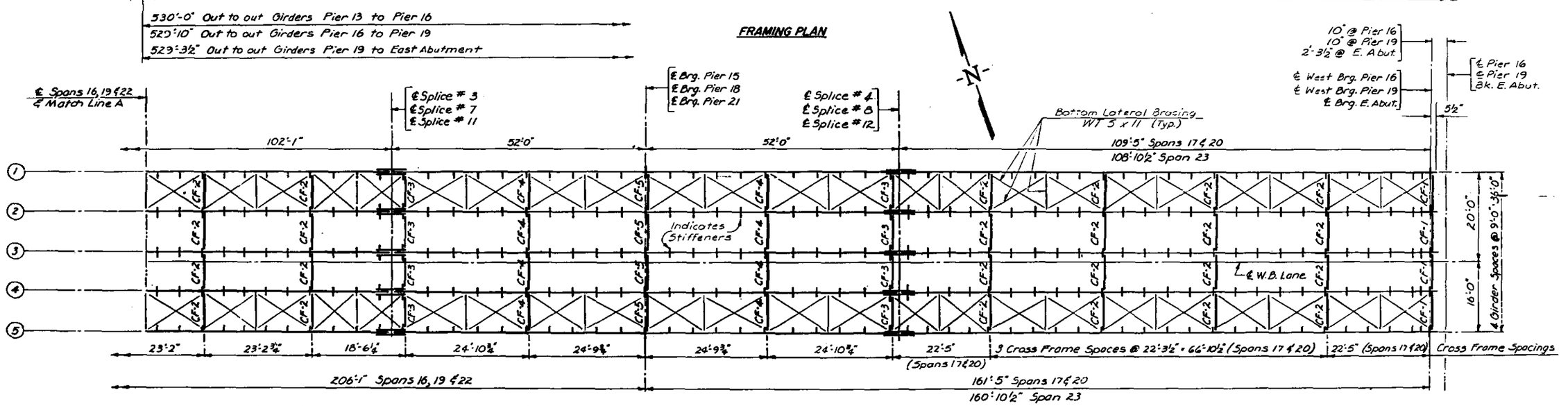
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

F.A.49	15-1 (F&E)	PEORIA & TAZEWELL	25	4

Sheet 3 of 13

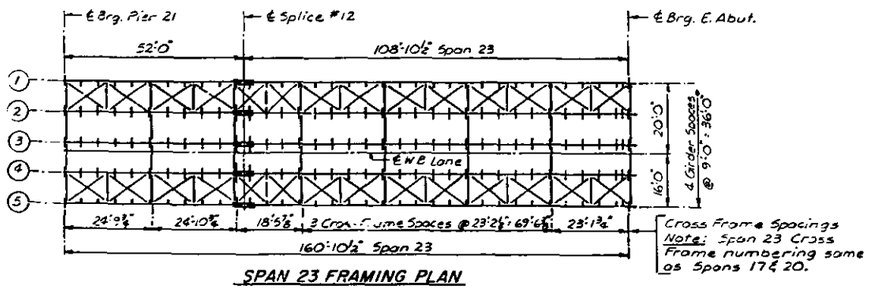


FRAMING PLAN



FRAMING PLAN

Note: All dimensions shown are measured horizontally.



SPAN 23 FRAMING PLAN

STRUCTURAL STEEL PLAN
SPANS 15 THRU 23

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. 15-1(F&E)
PEORIA & TAZEWELL COUNTIES

DLB	HANSON ENGINEERS INCORPORATED	Job No. 74001
RBN	SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS	Date 4-20-79
DAN		
CLN		

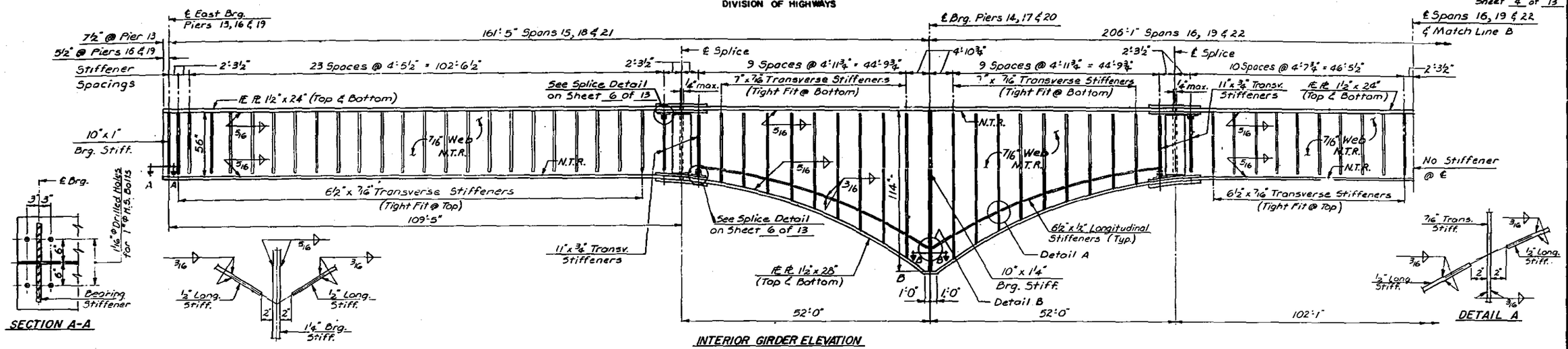
Note A: 1/4 @ 7"x7/16" stiff. @ cross frames.
3/16 @ 7"x7/16" stiff. w/o cross frames.
1/4 @ 11"x3/4" stiff.

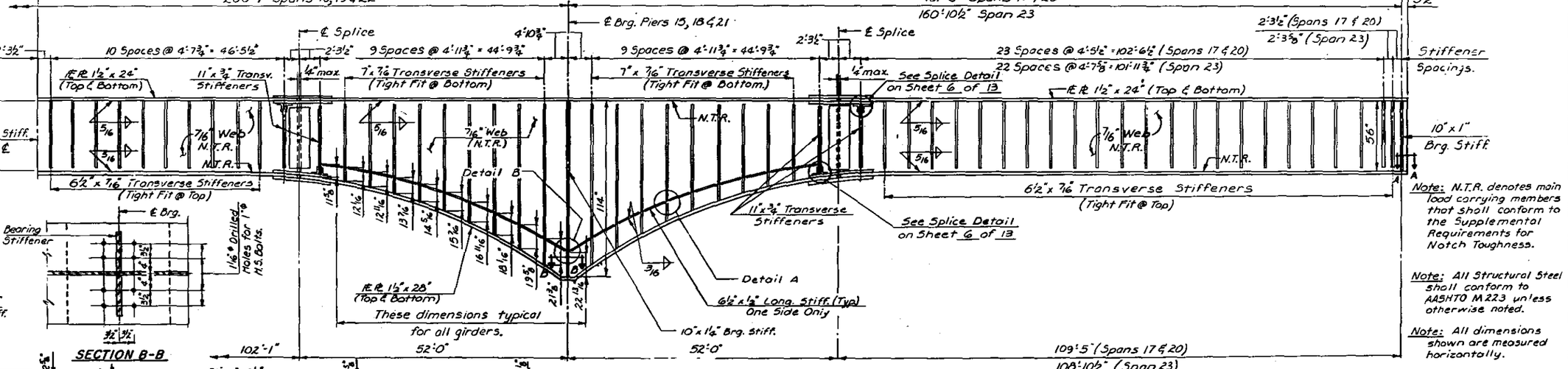
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

Note B: 1/4 @ 6 1/2"x7/16" stiff. @ cross frames.
3/16 @ 6 1/2"x7/16" stiff. w/o cross frames.
1/4 @ 11"x3/4" stiff.

CONTR. NO.	ITEM	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.49	15-1 (F&E)	Peoria & Tazewell	25	5
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 4 of 13





Note: N.T.R. denotes main load carrying members that shall conform to the Supplemental Requirements for Notch Toughness.

Note: All Structural Steel shall conform to AASHTO M 223 unless otherwise noted.

Note: All dimensions shown are measured horizontally.

STRUCTURAL STEEL GIRDERS
SPANS 15 THRU 23

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. 15-1(F&E)
PEORIA & TAZEWELL COUNTIES

DLD
JEH
DAN
CRN

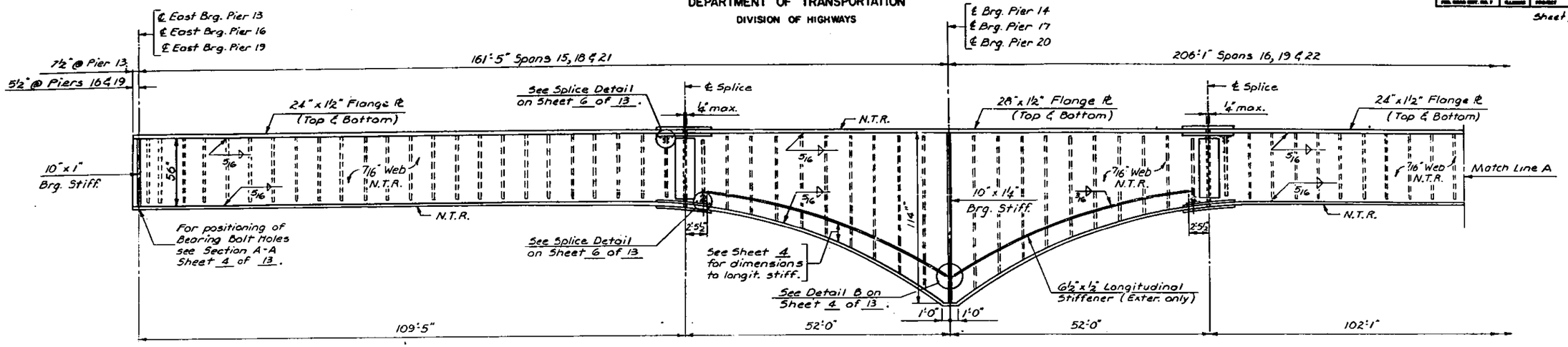
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 4-20-79

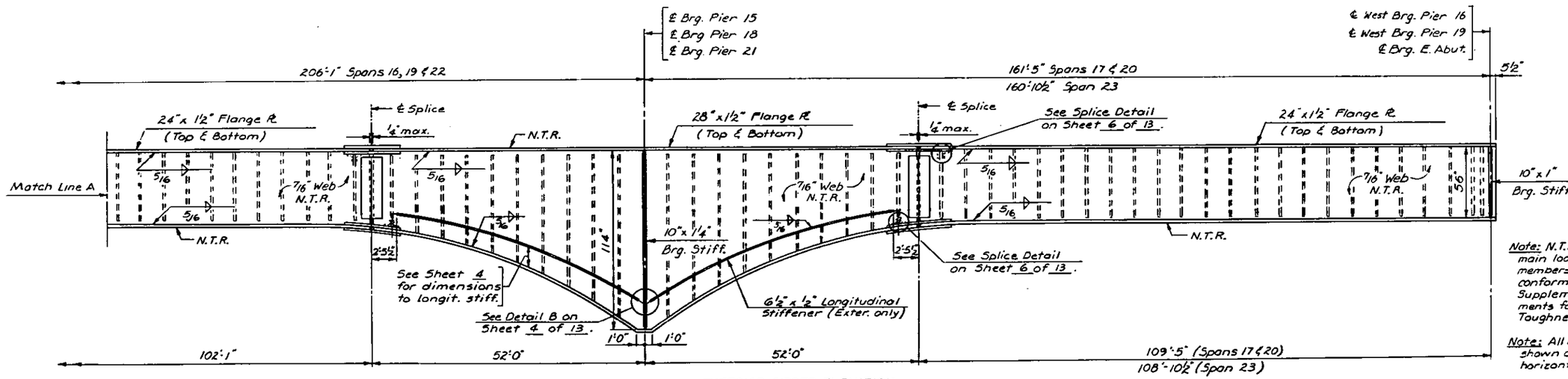
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

F.A.49	15-1 (F&E)	Peoria & Tazewell	25	6

Sheet 5 of 13



EXTERIOR GIRDER ELEVATION

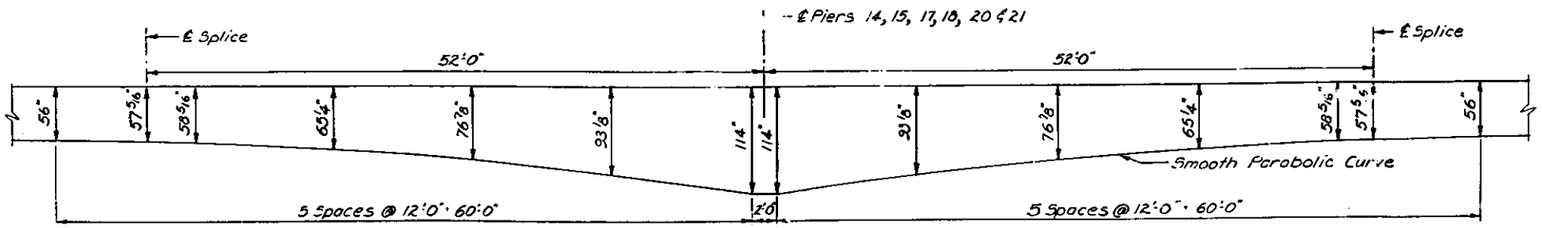


EXTERIOR GIRDER ELEVATION

Note: N.T.R. denotes main load carrying members that shall conform to the Supplemental Requirements for Notch Toughness.

Note: All dimensions shown are measured horizontally.

Note: All Structural Steel shall conform to AASHTO M 223 unless otherwise noted.



WEB HAUNCH ORDINATES

STRUCTURAL STEEL GIRDERS
SPANS 15 THRU 23

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. 15-1(F&E)
PEORIA & TAZEWELL COUNTIES

DLD
JEM
DAN
CRN

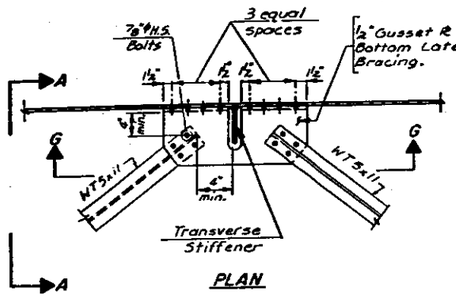
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

File No. 74001
Date 4-20-79

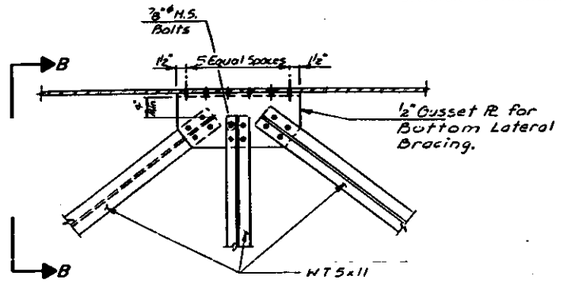
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	15-1 (F&E)	Peoria & Tazewell	25	7

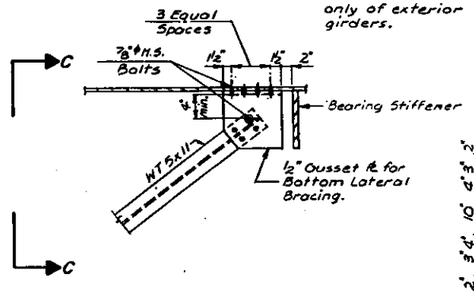
Sheet 6 of 13



PLAN

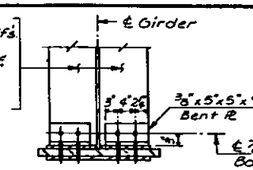


PLAN

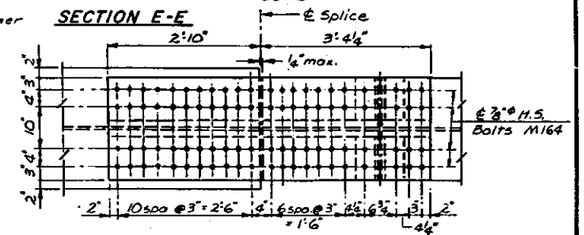


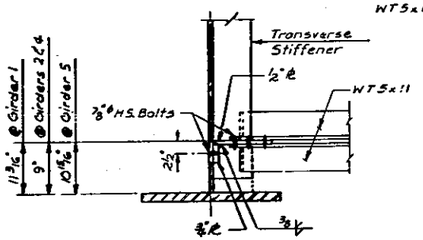
PLAN

11"x 3/8" Transv. Stiffs on both faces of interior girders & on inside face only of exterior girders.

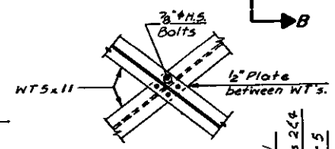


SECTION E-E

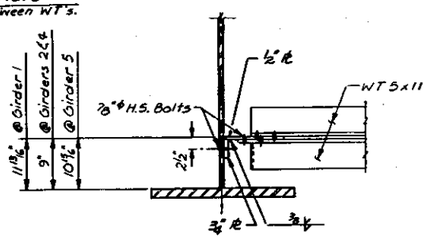




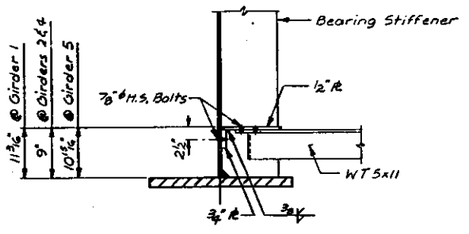
SECTION A-A
(At Transverse Stiffener)



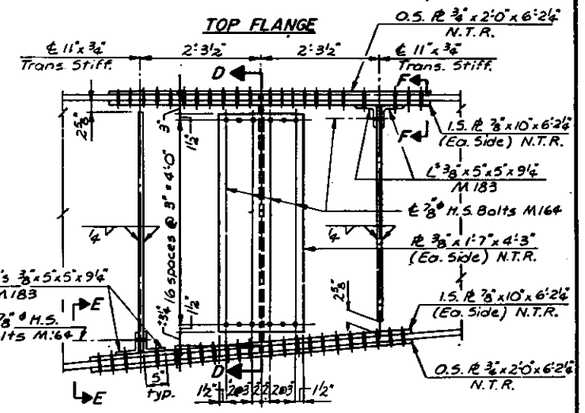
PLAN AT INTERSECTION

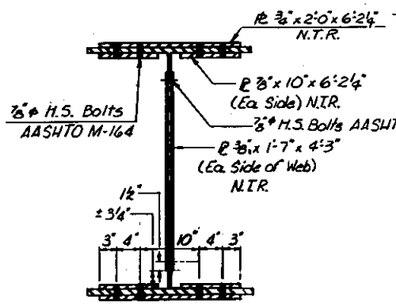


SECTION B-B
(At Girder Between Cross Frames)

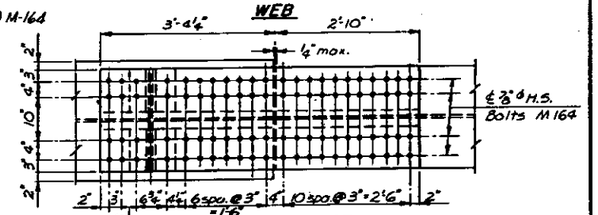


SECTION C-C
(At Bearing Stiffener)

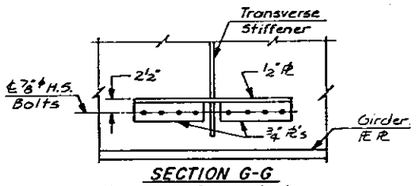




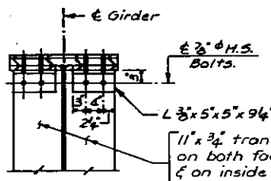
SECTION D-D
(Thru the Splice)



BOTTOM FLANGE
SPLICE DETAIL



SECTION G-G
Note: WT 5x11 not shown for clarity of section.



SECTION F-F

BOTTOM LATERAL BRACING DETAILS

TOP OF WEB ELEVATIONS *					
	Girder 1	Girder 2	Girder 3	Girder 4	Girder 5
℄ Brg. Pier #13	502.133	502.315	502.456	502.378	502.216
℄ Splice #1	500.051	500.233	500.374	500.296	500.134
℄ Brg. Pier #14	498.840	499.022	499.163	499.085	498.923
℄ Splice #2	497.897	498.079	498.220	498.142	497.980
℄ Splice #3	495.815	495.997	496.138	496.060	495.898
℄ Brg. Pier #15	494.636	494.818	494.959	494.881	494.719
℄ Splice #4	493.732	493.914	494.055	493.977	493.815
℄ W. Brg. Pier #16	491.343	491.525	491.666	491.588	491.426
℄ E. Brg. Pier #16	491.309	491.491	491.632	491.554	491.392
℄ Splice #5	489.227	489.409	489.550	489.472	489.310
℄ Brg. Pier #17	488.016	488.198	488.339	488.261	488.099
℄ Splice #6	487.073	487.255	487.396	487.318	487.156
℄ Splice #7	484.991	485.173	485.314	485.236	485.074
℄ Brg. Pier #18	483.812	483.994	484.135	484.057	483.895
℄ Splice #8	482.908	483.090	483.231	483.153	482.991
℄ W. Brg. Pier #19	480.519	480.701	480.842	480.764	480.602
℄ E. Brg. Pier #19	480.485	480.667	480.808	480.730	480.568
℄ Splice #9	478.414	478.596	478.737	478.659	478.497
℄ Brg. Pier #20	477.192	477.374	477.515	477.437	477.275
℄ Splice #10	476.260	476.442	476.583	476.505	476.343
℄ Splice #11	474.178	474.360	474.501	474.423	474.261
℄ Brg. Pier #21	472.288	473.170	473.311	473.233	473.071
℄ Splice #12	472.095	472.277	472.418	472.340	472.178
℄ Brg. E. Abut.	469.706	469.888	470.029	469.951	469.789

* Elevations include camber for dead load deflections and are for fabrication only.

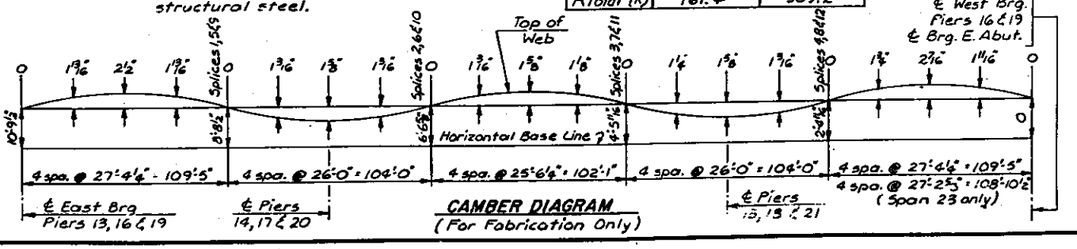
INTERIOR GIRDER MOMENT TABLE			
	0.4 Point Spans 15, 17, 18, 20, 21 & 23	Piers 14, 15, 17, 18, 20 & 21	0.5 Point Spans 16, 19 & 22
I (in⁴)	65,915	334,160	65,915
℘ (K/ft)	1.66	1.66	1.66
M ℘ (1K)	2,517	6,752	2,055
M ℄ (1K)	1,800	3,113	1,775
Imp (1K)	315	504	268
M TOTAL (1K)	4,632	10,369	4,098
f_s (K/in²)	24.9	21.8	22.0

Note: Reaction & Moment tables are based on a Dead Load of 25 #/sq. ft. of future wearing surface & 94 #/sq. ft. of concrete slab, plus the weight of the structural steel.

INTERIOR GIRDER REACTION TABLE		
	End Pier	Int. Pier
R ℘ (K)	91.7	346.6
R ℄ (K)	59.3	139.9
R I (K)	10.4	22.7
R Total (K)	161.4	509.2

N.T.R. denotes material that shall conform to the Supplemental Requirements for Notch Toughness.

Steel Specifications this sheet:
Splice Plates — AASHTO M 223
Lateral Bracing — AASHTO M 183
Bolts — AASHTO M-164



CAMBER DIAGRAM
(For Fabrication Only)

STRUCTURAL STEEL DETAILS
SPANS 15 THRU 23

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. 15-1 (F&E)
PEORIA & TAZEWELL COUNTIES

D.L.B.
C.R.N.
D.A.N.
C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

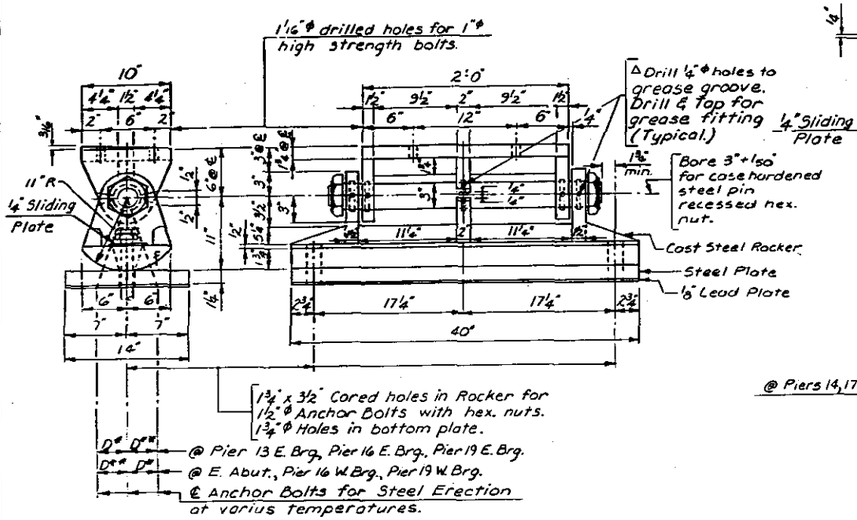
FILE NO. 74001
DATE 4-20-79

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

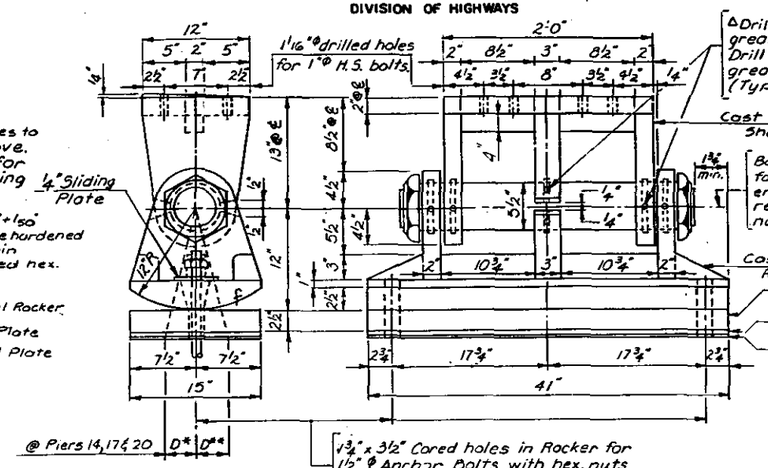
F.A.Rte.	Sec. No.	County	Total Sheets	Sheet No.
F.A.49	15-1 (F&E)	Peoria & Tazewell	25	8

Sheet 7 of 13

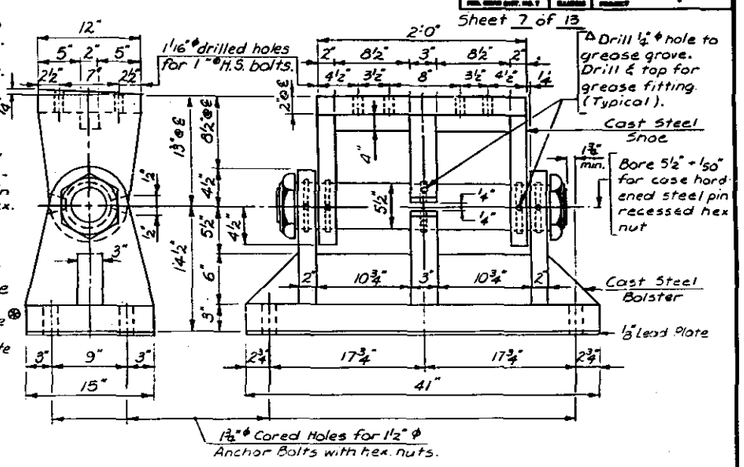
Note: Structural steel weldments of M-223 Gr. 50 or M-222 may be substituted for the castings subject to approval by the Engineer prior to fabrication. No additional compensation will be allowed.



EXPANSION BEARING AT PIERS 13, 16, 19, & EAST ABUTMENT



EXPANSION BEARING AT PIERS 14, 17 & 20



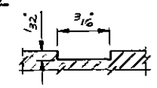
FIXED BEARING AT PIERS 15, 18 & 21

⊛ NOTES ON SHIM PLATES FOR BEARINGS:

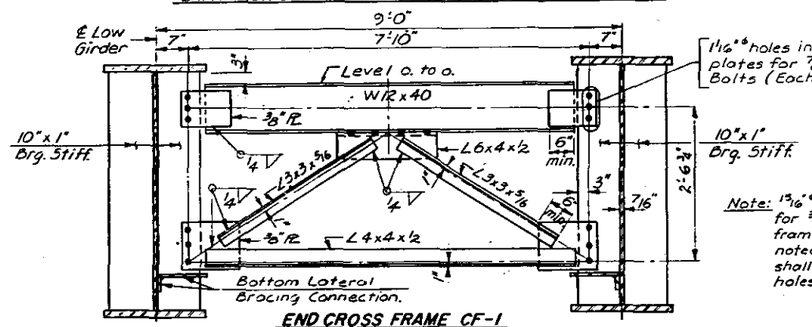
Provide 14"x40"x 3/8" Shim Plates @ Girders 1 thru 5 for the West Bearings of Pier 16. (5 Req'd)

Provide 14"x40"x 3/8" Shim Plates @ Girders 1 thru 5 for the West Bearings of Pier 19. (5 Req'd.)
Provide 15"x41"x 2 1/2" Shim Plates @ Girders 1 thru 5 for Piers 14 & 20. (10 Req'd.)

Provide 15"x41"x 1 3/8" & 15"x41"x1" Shim Plates (total of 2 3/8")
@ Girders 1 thru 5 for Pier 15. (5 Req'd.)
Provide 15"x41"x 1 3/8" & 15"x41"x1" Shim Plates (total of 2 3/8")
@ Girders 1 thru 5 for Pier 17. (5 Req'd)

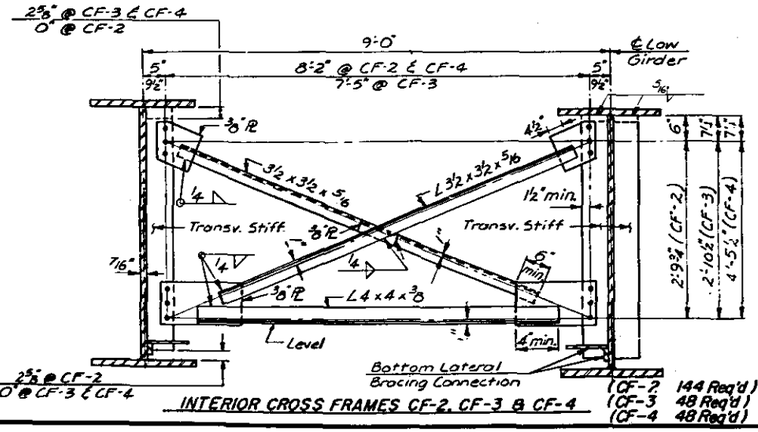


GREASE GROOVE ON SADDLE
Δ Note: Grease bearing assembly with molybdenum grease before installation.

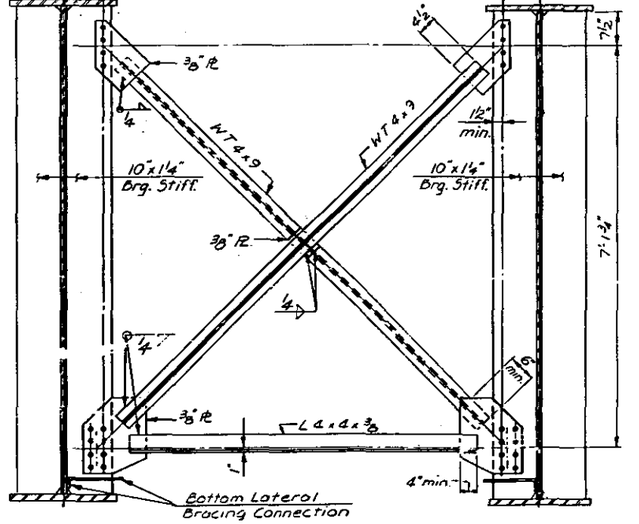


END CROSS FRAME CF-1
(24 Req'd)

Note: 13/16"ϕ holes in gusset plates for 3/4"ϕ bolts at all cross frames, unless otherwise noted. Hardened washers shall be required over holes in gusset plates.



INTERIOR CROSS FRAMES CF-2, CF-3 & CF-4



INTERIOR CROSS FRAME CF-5
(24 Req'd)

NOTES FOR SETTING OF ANCHOR BOLTS AT EXPANSION BEARINGS

a) D* (Side of Bearing away from fixed Bearing.)
D* = 1/8" per each 100° of expansion for every 15° fall below the Normal Temperature of 50°F.
D** (Side of Bearing toward fixed Bearing.)
D** = 1/8" per each 100° of expansion for every 15° rise above the Normal Temperature of 50°F.

b) After Girders have been erected and dimensions D* & D** determined, holes shall be drilled & anchor bolts shall be grouted in place. All fixed anchor bolts may be built into the masonry.

Steel Specifications this sheet:

Bearing Plate Material – AASHTO M-222 or M-223
Cross Frames – AASHTO M-183
Cross Frame Bolts – AASHTO M-164
Cast Steel Bearings – AASHTO M-192 Class 120

BEARINGS & CROSS FRAMES
SPANS 15 THRU 23

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. 15-1(F&E)
PEORIA & TAZEWELL COUNTIES

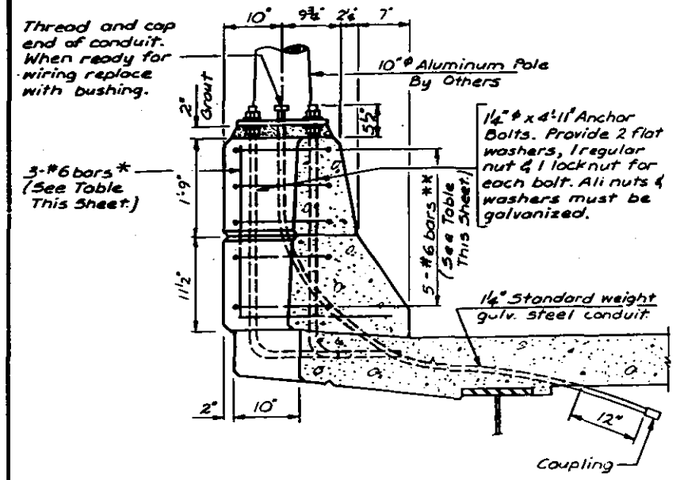
Designed D.L.B.	File No. 74001
Checked C.R.N.	
Drawn D.A.N.	Date 4-20-79
Checked C.R.N.	

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

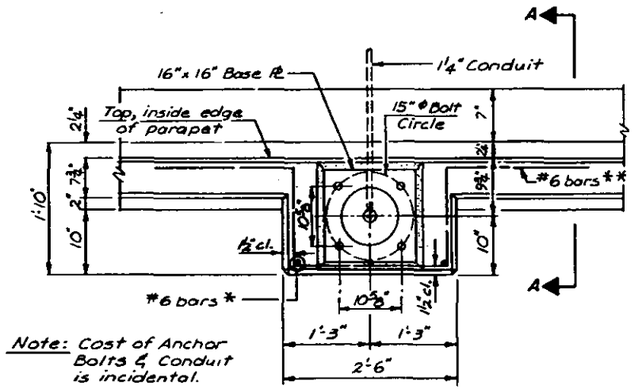
FA-49	15-1 (F&E)	Peoria & Tazewell	23	9

Sheet 8 of 13



SECTION A-A

Note: Grout Mixture shall consist of 1 part sand, 1 part cement & 1 part chips (pea gravel). The grout shall contain water for a 1" slump.

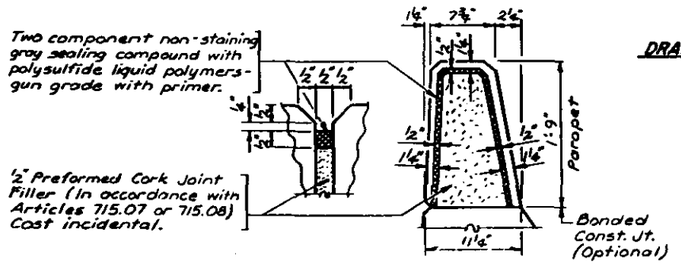


Note: Cost of Anchor Bolts & Conduit is incidental.

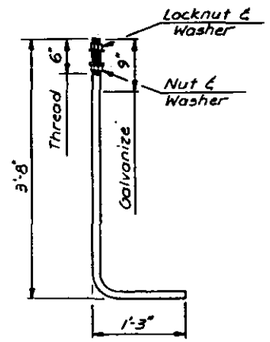
PLAN

LIGHT PEDESTAL DETAILS

See Individual Bill of Materials for d bar designations, quantities & bar details.



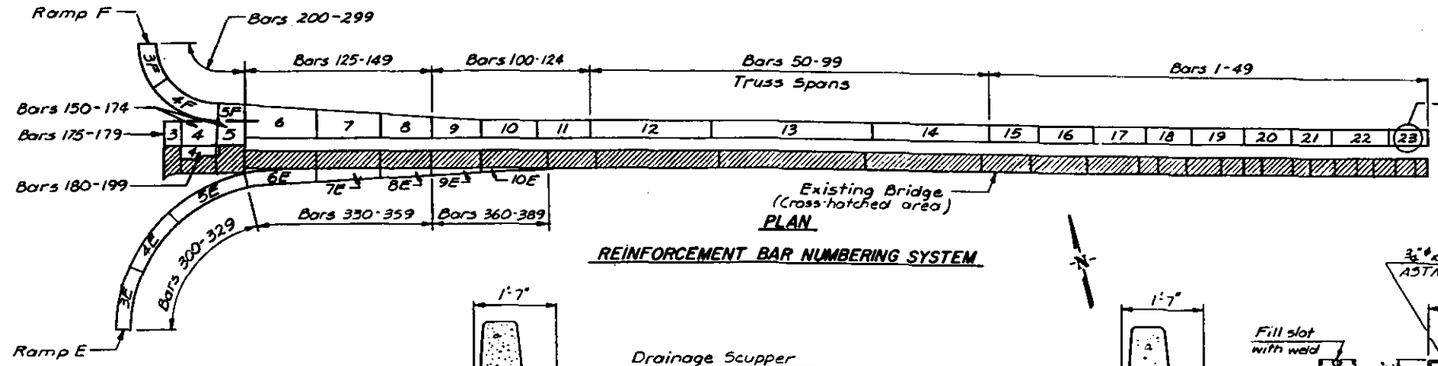
PARAPET JOINT DETAIL



1¼"ϕ ANCHOR BOLT

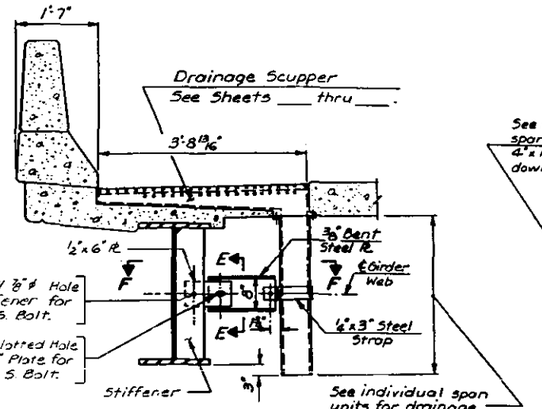
LIGHT PEDESTAL REINFORCEMENT BAR DESIGNATIONS

Spans	*	**
3	d_{177}	d_{178}
6,7&8	d_{127}	d_{128}
9,10&11	d_{102}	d_{103}
15 - 23	d_2	d_3
3E, 4E & 5E	d_{302}	d_{303}
6E, 7E & 8E	d_{352}	d_{353}
9E & 10E	d_{352}	d_{353}
3F, 4F & 5F	d_{202}	d_{203}

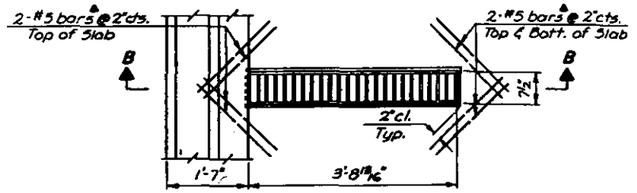


PLAN

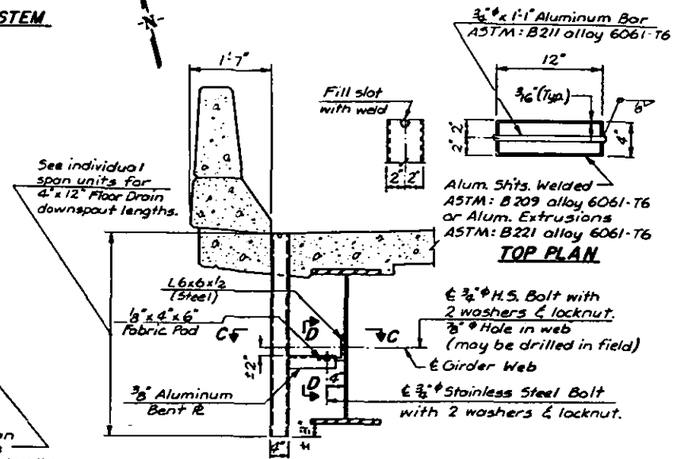
REINFORCEMENT BAR NUMBERING SYSTEM



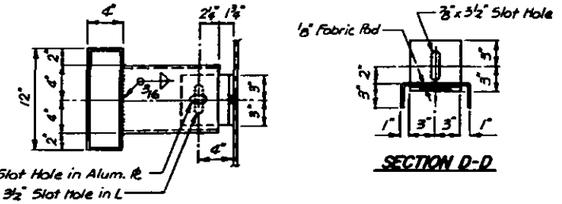
SECTION B-B



PLAN



SECTION THRU PARAPET



SECTION C-C

SECTION D-D

4"x12" FLOOR DRAIN DETAILS

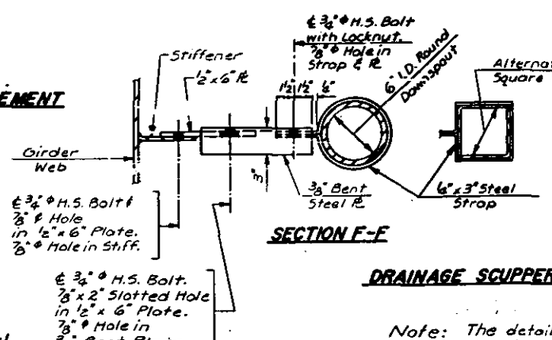
Note: The exterior surfaces of the aluminum drain shall be painted the same color as bridge girder.

No. 4"x12" Floor drains required = ____

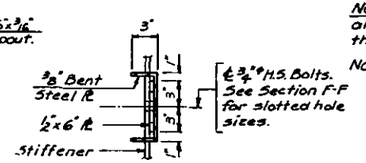
DRAINAGE SCUPPER REINFORCEMENT BAR DESIGNATIONS

Spans	▲
4&5	a_{138}(E)
6,7&8	a_{140}(E)
9,10&11	a_{106} (E)
12,13&14	a_{56}(E)
15 thru 23	a_4(E)
6E, 7E & 8E	a_{348}
9E & 10E	a_{375}
3F, 4F & 5F	a_{211}(E)

See individual Bills of Material for "a" bar designations, quantities & bar details.



SECTION F-F



SECTION E-E

DRAINAGE SCUPPER DETAILS

Note: The details on this sheet are not to be included in this contract.

SUPERSTRUCTURE DETAILS

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. 15-1(F&E)
PEORIA & TAZEWELL COUNTIES

CRN
WDL
DAN
CRN

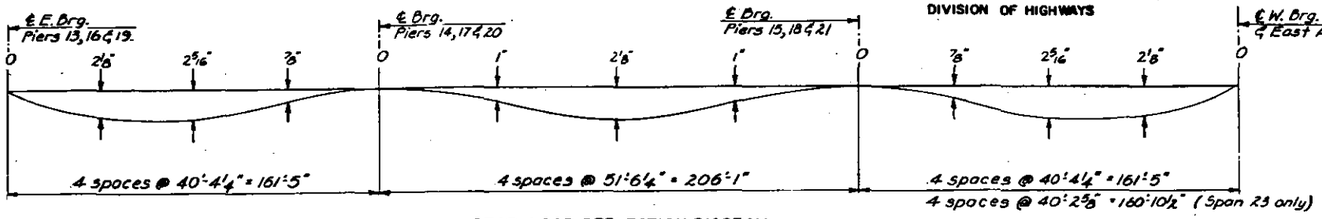
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

File No. 74001
Date 4-20-79

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

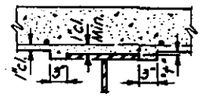
F.A.49	15-1 (FAE)	Peoria & Tazewell	25	10

Sheet 9 of 13

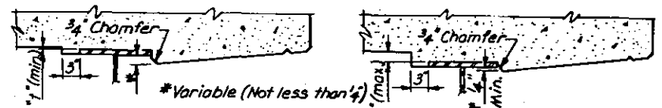


DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete slab.)

Note - The above deflections are not to be used in the field if the Engineer is working from the grade elevations (Elev. D) of the "Top of Concrete" table. (Sheets 10 thru 12)



INTERIOR BEAMS



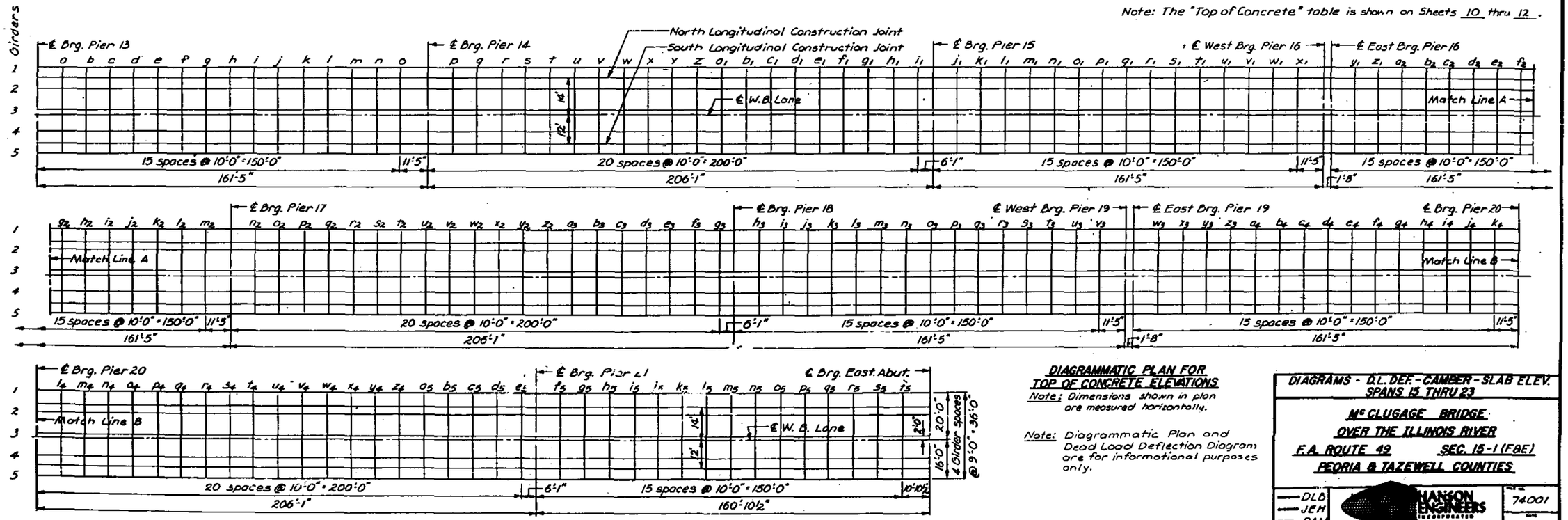
At Minimum Fillet — At Maximum Fillet

EXTERIOR BEAMS

METHOD OF DETERMING FILLET HEIGHTS "t"

After all Structual Steel has been erected, elevations of the top flanges of the beams shall be taken at the stations shown in the "Top of Concrete" table. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown in the "Top of Concrete" table, minus floor thickness equals the fillet heights above top flange of beams.

Note: The "Top of Concrete" table is shown on Sheets 10 thru 12.



DIAGRAMMATIC PLAN FOR TOP OF CONCRETE ELEVATIONS

Note: Dimensions shown in plan are measured horizontally.

Note: Diagrammatic Plan and Dead Load Deflection Diagram are for informational purposes only.

DIAGRAMS - D.L. DEF. - CAMBER - SLAB ELEV.
SPANS 15 THRU 23

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. 15-1 (FAE)
PEORIA & TAZEWELL COUNTIES

DLB
JEM
DAM
CRN

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

74001

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STATE ROUTE NO.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	Peoria & Tazewell	25	11

Sheet 10 of 13

		GIRDER 1		GIRDER 2		GIRDER 3		GIRDER 4		GIRDER 5		NORTH LONGITUDINAL BONDED CONSTRUCTION JOINT		SOUTH LONGITUDINAL BONDED CONSTRUCTION JOINT	
	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B
℄ E. Brg. Pier 13	230+54.190	503.010	503.010	230+54.190	503.192	503.192	230+54.190	503.333	503.333	230+54.190	503.255	503.255	230+54.190	503.093	503.093	230+54.190	503.135	503.135	230+54.190	503.177	503.177
g	230+64.190	502.806	502.850	230+64.190	502.988	503.033	230+64.190	503.129	503.173	230+64.190	503.051	503.095	230+64.190	502.889	502.934	230+64.190	502.931	502.975	230+64.190	503.073	503.017
b	230+74.190	502.602	502.691	230+74.190	502.784	502.873	230+74.190	502.925	503.014	230+74.190	502.847	502.935	230+74.190	502.685	502.774	230+74.190	502.727	502.816	230+74.190	502.769	502.857
c	230+84.190	502.398	502.531	230+84.190	502.580	502.713	230+84.190	502.721	502.854	230+84.190	502.643	502.776	230+84.190	502.481	502.614	230+84.190	502.523	502.656	230+84.190	502.565	502.698
d	230+94.190	502.194	502.371	230+94.190	502.376	502.554	230+94.190	502.517	502.694	230+94.190	502.439	502.616	230+94.190	502.277	502.455	230+94.190	502.319	502.496	230+94.190	502.361	502.538
e	231+04.190	501.990	502.173	231+04.190	502.172	502.355	231+04.190	502.313	502.496	231+04.190	502.235	502.417	231+04.190	502.073	502.256	231+04.190	502.115	502.298	231+04.190	502.157	502.339
f	231+14.190	501.786	501.972	231+14.190	501.968	502.155	231+14.190	502.109	502.295	231+14.190	502.031	502.217	231+14.190	501.869	502.056	231+14.190	501.911	502.097	231+14.190	501.953	502.139
g	231+24.190	501.582	501.772	231+24.190	501.764	501.954	231+24.190	501.905	502.095	231+24.190	501.827	502.017	231+24.190	501.665	501.855	231+24.190	501.707	501.897	231+24.190	501.749	501.939
h	231+34.190	501.378	501.572	231+34.190	501.560	501.756	231+34.190	501.701	501.895	231+34.190	501.623	501.817	231+34.190	501.461	501.655	231+34.190	501.503	501.697	231+34.190	501.545	501.738
i	231+44.190	501.174	501.360	231+44.190	501.356	501.522	231+44.190	501.497	501.663	231+44.190	501.419	501.585	231+44.190	501.257	501.424	231+44.190	501.299	501.465	231+44.190	501.341	501.507
j	231+54.190	500.970	501.106	231+54.190	501.152	501.289	231+54.190	501.293	501.429	231+54.190	501.215	501.351	231+54.190	501.053	501.190	231+54.190	501.095	501.231	231+54.190	501.137	501.273
k	231+64.190	500.766	500.872	231+64.190	500.948	501.055	231+64.190	501.089	501.195	231+64.190	501.011	501.117	231+64.190	500.849	500.956	231+64.190	500.891	500.997	231+64.190	500.933	501.039
l	231+74.190	500.562	500.638	231+74.190	500.744	500.821	231+74.190	500.885	500.961	231+74.190	500.807	500.883	231+74.190	500.645	500.722	231+74.190	500.687	500.763	231+74.190	500.729	500.805
m	231+84.190	500.358	500.415	231+84.190	500.540	500.597	231+84.190	500.681	500.738	231+84.190	500.603	500.660	231+84.190	500.441	500.498	231+84.190	500.483	500.540	231+84.190	500.525	500.582
n	231+94.190	500.154	500.193	231+94.190	500.336	500.375	231+94.190	500.477	500.516	231+94.190	500.399	500.438	231+94.190	500.237	500.276	231+94.190	500.279	500.318	231+94.190	500.321	500.359
o	232+04.190	499.950	499.971	232+04.190	500.132	500.153	232+04.190	500.273	500.294	232+04.190	500.195	500.215	232+04.190	500.033	500.054	232+04.190	500.075	500.096	232+04.190	500.117	500.137
℄ Brg. Pier 14	232+15.600	499.717	499.717	232+15.600	499.899	499.899	232+15.600	500.040	500.040	232+15.600	499.962	499.962	232+15.600	499.800	499.800	232+15.600	499.842	499.842	232+15.600	499.884	499.884
p	232+25.600	499.513	499.529	232+25.600	499.695	499.711	232+25.600	499.836	499.852	232+25.600	499.758	499.774	232+25.600	499.596	499.612	232+25.600	499.638	499.654	232+25.600	499.680	499.696
q	232+35.600	499.309	499.341	232+35.600	499.491	499.523	232+35.600	499.632	499.664	232+35.600	499.554	499.586	232+35.600	499.392	499.424	232+35.600	499.434	499.466	232+35.600	499.476	499.507
r	232+45.600	499.105	499.153	232+45.600	499.287	499.335	232+45.600	499.428	499.476	232+45.600	499.350	499.397	232+45.600	499.188	499.236	232+45.600	499.230	499.278	232+45.600	499.272	499.319
s	232+55.600	498.901	498.965	232+55.600	499.083	499.147	232+55.600	499.224	499.287	232+55.600	499.146	499.209	232+55.600	498.984	499.048	232+55.600	499.026	499.090	232+55.600	499.068	499.131
t	232+65.600	498.697	498.776	232+65.600	498.879	498.959	232+65.600	499.020	499.099	232+65.600	498.942	499.021	232+65.600	498.780	498.860	232+65.600	498.822	498.901	232+65.600	498.864	498.943
u	232+75.600	498.493	498.592	232+75.600	498.675	498.774	232+75.600	498.816	498.915	232+75.600	498.738	498.836	232+75.600	498.574	498.675	232+75.600	498.617	498.717	232+75.600	498.660	498.758
v	232+85.600	498.289	498.408	232+85.600	498.471	498.590	232+85.600	498.612	498.730	232+85.600	498.534	498.652	232+85.600	498.372	498.491	232+85.600	498.414	498.533	232+85.600	498.456	498.574
w	232+95.600	498.085	498.221	232+95.600	498.267	498.406	232+95.600	498.408	498.546	232+95.600	498.330	498.468	232+95.600	498.168	498.307	232+95.600	498.210	498.348	232+95.600	498.252	498.390
x	233+05.600	497.881	498.039	233+05.600	498.063	498.222	233+05.600	498.204	498.362	233+05.600	498.126	498.284	233+05.600	497.964	498.123	233+05.600	498.006	498.164	233+05.600	498.048	498.206
y	233+15.600	497.677	497.855	233+15.600	497.859	498.038	233+15.600	498.000	498.178	233+15.600	497.922	498.100	233+15.600	497.760	497.939	233+15.600	497.802	497.980	233+15.600	497.844	498.022
z	233+25.600	497.473	497.643	233+25.600	497.656	497.826	233+25.600	497.796	497.966	233+25.600	497.718	497.888	233+25.600	497.556	497.727	233+25.600	497.598	497.768	233+25.600	497.640	497.810
aa	233+35.600	497.269	497.420	233+35.600	497.451	497.602	233+35.600	497.592	497.742	233+35.600	497.514	497.664	233+35.600	497.352	497.502	233+35.600	497.394	497.545	233+35.600	497.436	497.587
bb	233+45.600	497.065	497.196	233+45.600	497.247	497.378	233+45.600	497.388	497.519	233+45.600	497.310	497.440	233+45.600	497.148	497.279	233+45.600	497.190	497.321	233+45.600	497.232	497.362
cc	233+55.600	496.861	496.972	233+55.600	497.043	497.156	233+55.600	497.184	497.295	233+55.600	497.106	497.217	233+55.600	496.944	497.055	233+55.600	496.986	497.097	233+55.600	497.028	497.138
dd	233+65.600	496.657	496.748	233+65.600	496.839	496.930	233+65.600	496.980	497.071	233+65.600	496.902	496.993	233+65.600	496.740	496.831	233+65.600	496.782	496.873	233+65.600	496.824	496.915
ee	233+75.600	496.453	496.526	233+75.600	496.635	496.708	233+75.600	496.776	496.849	233+75.600	496.698	496.771	233+75.600	496.536	496.609	233+75.600	496.578	496.631	233+75.600	496.620	496.693
ff	233+85.600	496.249	496.306	233+85.600	496.431	496.489	233+85.600	496.572	496.629	233+85.600	496.494	496.551	233+85.600	496.332	496.390	233+85.600	496.374	496.431	233+85.600	496.416	496.473
gg	233+95.600	496.045	496.086	233+95.600	496.227	496.268	233+95.600	496.409	496.449	233+95.600	496.290	496.331	233+95.600	496.128	496.170	233+95.600	496.170	496.211	233+95.600	496.212	496.253
hh	234+05.600	495.841	495.867	234+05.600	496.023	496.069	234+05.600	496.164	496.190	234+05.600	496.086	496.111	234+05.600	495.924	495.950	234+05.600	495.966	495.992	234+05.600	496.008	496.033
4	234+15.600	495.637	495.647	234+15.600	495.819	495.829	234+15.600	495.960	495.970	234+15.600	495.882	495.892	234+15.600	495.720	495.730	234+15.600	495.762	495.772	234+15.600	495.804	495.813
℄ Brg. Pier 15	234+21.690	495.513	495.513	234+21.690	495.695	495.695	234+21.690	495.836	495.836	234+21.690	495.758	495.758	234+21.690	495.596	495.596	234+21.690	495.638	495.638	234+21.690	495.680	495.680
ii	234+31.690	495.309	495.327	234+31.690	495.491	495.509	234+31.690	495.632	495.650	234+31.690	495.554	495.572	234+31.690	495.392	495.410	234+31.690	495.434	495.452	234+31.690	495.476	495.494
jj	234+41.690	495.105	495.141	234+41.690	495.287	495.324	234+41.690	495.428	495.464	234+41.690	495.350	495.386	234+41.690	495.188	495.225	234+41.690	495.230	495.266	234+41.690	495.272	495.308
kk	234+51.690	494.901	494.955	234+51.690	495.083	495.138	234+51.690	495.224	495.278	234+51.690	495.146	495.200	234+51.690	494.984	495.039	234+51.690	493.026	495.080	234+51.690	495.068	495.122
ll	234+61.690	494.697	494.770	234+61.690	494.879	494.952	234+61.690	495.020	495.092	234+61.690	494.942	495.014	234+61.690	494.780	494.853	234+61.690	494.822	494.895	234+61.690	494.864	494.936
mm	234+71.690	494.493	494.595	234+71.690	494.675	494.777	234+71.690	494.816	494.918	234+71.690	494.738	494.840	234+71.690	494.576	494.678	234+71.690	494.618	494.720	234+71.690	494.660	494.762
nn	234+81.690	494.289	494.421	234+81.690	494.471	494.603	234+81.690	494.612	494.744	234+81.690	494.534	494.666	234+81.690	494.372	494.504	234+81.690	494.414	494.546	234+81.690	494.456	494.588
oo	234+91.690	494.085	494.247	234+91.690	494.267	494.429	234+91.690	494.408	494.570	234+91.690	494.330	494.492	234+91.690	494.168	494.330	234+91.690	494.210	494.372	234+91.690	494.252	494.414
pp	235+01.690	493.881	494.073	235+01.690	494.063	494.255	235+01.690	494.204	494.396	235+01.690	494.126	494.318	235+01.690	493.964	494.156	235+01.690	494.006	494.198	235+01.690	494.048	494.240
qq	235+11.690	493.677	493.868	235+11.690	493.859	494.050	235+11.690	494.000	494.190	235+11.690	493.922	494.112	235+11.690	493.760	493.951	235+11.690	493.802	493.993	235+11.690	493.844	494.034
3	235+21.690	493.473	493.660	235+21.690	493.655	493.842	235+21.690	493.796	493.983	235+21.690	493.718	493.905	235+21.690	493.556	493.743	235+21.690	493.598	493.785	235+21.690	493.640	493.827
4	235+31.690	493.269	493.452	235+31.690	493.634	235+31.690	493.592	493.775	235+31.690	493.514	493.697	235+31.680	493.352	493.535	235+31.690	493.394	493.577	235+31.690	493.436	493.619
4	235+41.690	493.065	493.244	235+41.690	493.247	493.427	235+41.690	493.388	493.567	235+41.690	493.310	493.489	235+41.690	493.148	493.328	235+41.690	493.190	493.369	235+41.690	493.232	493.411
4	235+51.690	492.861	493.008	235+51.690	493.043	493.183	235+51.690	493.184	493.323	235+51.690	493.106	493.245	235+51.690	492.944	493.084	235+51.690	492.986	493.125	235+51.690	493.028	493.167
4	235+61.690	492.657	492.752	235+61.690	492.839	492.934	235+61.690	492.980	493.075	235+61.690	492.902	492.997	235+61.690	492.740	492.835	235+61.690	492.782	492.877	235+61.690	492.824	492.919
4	235+71.690	492.453	492.504	235+71.690	492.635	492.686	235+71.690	492.776	492.826	235+71.690	492.698	492.748	235+71.690	492.536	492.587	235+71.690	492.578	492.629	235+71.690	492.620	492.670
℄ W. Brg. Pier 16	235+83.110	492.220	492.228	235+83.110	492.402	492.402	235+83.110	492.543	492.543	235+83.110	492.465	492.465	235+83.110	492.303	492.303	235+83.110	492.345	492.345	235+83.110	492.387	492.387

ELEVATIONS - TOP OF CONCRETE

ELEV A = THEORETICAL GRADE ELEVATIONS
ELEV B = THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION

Note: Work these Elevations with the Diagrammatic Plan on Sheet 9 of 13.

Note: Top of slab elevations are for informational purposes only.

TOP OF SLAB ELEVATIONS
SPANS 15, 16 & 17

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. 15-1(F&E)
PEORIA & TAZEWELL COUNTIES

DESIGNED D.L.B.
CHECKED J.E.N.
DRAWN D.A.N.
CHECKED C.P.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	15-1 (F&E)	Peoria & Tazewell	25	12
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 11 of 13

		GIRDER 1			GIRDER 2			GIRDER 3			GIRDER 4			GIRDER 5			NORTH LONGITUDINAL BONDED CONSTRUCTION JOINT			SOUTH LONGITUDINAL BONDED CONSTRUCTION JOINT		
		STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B
℄ E. Brg. Pier 16		235+84.770	492.186	492.186	235+84.770	492.368	492.368	235+84.770	492.509	492.509	235+84.770	492.431	492.431	235+84.770	492.269	492.269	235+84.770	492.311	492.311	235+84.770	492.353	492.353
	P1	235+94.770	491.982	492.026	235+94.770	492.164	492.209	235+94.770	492.305	492.349	235+94.770	492.227	492.271	235+94.770	492.065	492.110	235+94.770	492.107	492.151	235+94.770	492.149	492.193
	A1	236+04.770	491.778	491.867	236+04.770	491.960	492.049	236+04.770	492.101	492.190	236+04.770	492.023	492.112	236+04.770	491.861	491.950	236+04.770	491.903	491.992	236+04.770	491.945	492.033
	A2	236+14.770	491.574	491.707	236+14.770	491.756	491.890	236+14.770	491.897	492.030	236+14.770	491.819	491.952	236+14.770	491.657	491.791	236+14.770	491.699	491.832	236+14.770	491.741	491.874
	Q1	236+14.770	491.370	491.548	236+24.770	491.552	491.730	236+24.770	491.693	491.871	236+24.770	491.615	491.792	236+24.770	491.453	491.631	236+24.770	491.291	491.474	236+24.770	491.537	491.714
	Q2	236+24.770	491.166	491.349	236+34.770	491.348	491.531	236+34.770	491.489	491.671	236+34.770	491.411	491.594	236+34.770	491.249	491.432	236+34.770	491.291	491.474	236+34.770	491.333	491.515
	Q3	236+34.770	490.962	491.149	236+44.770	491.144	491.331	236+44.770	491.285	491.471	236+44.770	491.207	491.393	236+44.770	491.045	491.232	236+44.770	491.087	491.274	236+44.770	491.129	491.315
	Q4	236+44.770	490.758	490.948	236+54.770	490.940	491.131	236+54.770	491.081	491.271	236+54.770	491.003	491.193	236+54.770	490.841	491.032	236+54.770	490.883	491.073	236+54.770	490.925	491.115
	P2	236+54.770	490.554	490.748	236+64.770	490.736	490.930	236+64.770	490.877	491.071	236+64.770	490.799	490.993	236+64.770	490.637	490.831	236+64.770	490.679	490.873	236+64.770	490.915	490.958
	P3	236+64.770	490.350	490.516	236+74.770	490.532	490.699	236+74.770	490.673	490.839	236+74.770	490.595	490.761	236+74.770	490.433	490.600	236+74.770	490.475	490.641	236+74.770	490.517	490.683
	Q5	236+74.770	490.146	490.282	236+84.770	490.328	490.466	236+84.770	490.469	490.605	236+84.770	490.391	490.527	236+84.770	490.229	490.366	236+84.770	490.271	490.407	236+84.770	490.313	490.449
	P4	236+84.770	489.942	490.048	236+94.770	490.124	490.231	236+94.770	490.265	490.371	236+94.770	490.187	490.293	236+94.770	490.025	490.132	236+94.770	490.067	490.173	236+94.770	490.109	490.215
	P5	236+94.770	489.738	489.815	237+04.770	489.920	489.997	237+04.770	490.061	490.137	237+04.770	489.983	490.059	237+04.770	489.821	489.898	237+04.770	489.863	489.940	237+04.770	489.905	489.981
	P6	237+04.770	489.534	489.591	237+14.770	489.716	489.773	237+14.770	489.857	489.914	237+14.770	489.779	489.836	237+14.770	489.617	489.674	237+14.770	489.659	489.716	237+14.770	489.701	489.758
	P7	237+14.770	489.330	489.369	237+24.770	489.512	489.551	237+24.770	489.653	489.692	237+24.770	489.575	489.614	237+24.770	489.413	489.452	237+24.770	489.455	489.494	237+24.770	489.497	489.536
	℄	237+24.770	489.126	489.147	237+34.770	489.308	489.329	237+34.770	489.449	489.470	237+34.770	489.371	489.392	237+34.770	489.209	489.230	237+34.770	489.251	489.272	237+34.770	489.293	489.313
	P8	237+34.770																				
℄ Brg. Pier 17		237+46.190	488.893	488.893	237+46.190	489.075	489.075	237+46.190	489.216	489.216	237+46.190	489.138	489.138	237+46.190	488.976	488.976	237+46.190	489.018	489.018	237+46.190	489.060	489.060
	P9	237+56.190	488.689	488.705	237+56.190	488.871	488.887	237+56.190	489.012	489.028	237+56.190	488.934	488.950	237+56.190	488.772	488.788	237+56.190	488.814	488.830	237+56.190	488.856	488.872
	P10	237+66.190	488.485	488.517	237+66.190	488.667	488.699	237+66.190	488.808	488.840	237+66.190	488.730	488.762	237+66.190	488.568	488.600	237+66.190	488.610	488.642	237+66.190	488.652	488.683
	P11	237+76.190	488.281	488.329	237+76.190	488.463	488.511	237+76.190	488.604	488.652	237+76.190	488.526	488.573	237+76.190	488.364	488.412	237+76.190	488.406	488.454	237+76.190	488.448	488.495
	P12	237+86.190	488.077	488.140	237+86.190	488.259	488.323	237+86.190	488.400	488.463	237+86.190	488.322	488.385	237+86.190	488.160	488.224	237+86.190	488.202	488.265	237+86.190	488.244	488.307
	P13	237+96.190	487.873	487.952	237+96.190	488.055	488.135	237+96.190	488.196	488.275	237+96.190	488.118	488.197	237+96.190	487.956	488.036	237+96.190	487.998	488.077	237+96.190	488.040	488.119
	P14	238+06.190	487.669	487.768	238+06.190	487.851	487.950	238+06.190	487.992	488.091	238+06.190	487.914	488.012	238+06.190	487.752	487.851	238+06.190	487.793	487.893	238+06.190	487.836	487.934
	P15	238+16.190	487.465	487.583	238+16.190	487.647	487.766	238+16.190	487.788	487.906	238+16.190	487.710	487.828	238+16.190	487.548	487.667	238+16.190	487.590	487.708	238+16.190	487.632	487.750
	P16	238+26.190	487.261	487.399	238+26.190	487.443	487.582	238+26.190	487.584	487.722	238+26.190	487.506	487.644	238+26.190	487.344	487.483	238+26.190	487.386	487.524	238+26.190	487.428	487.566
	P17	238+36.190	487.057	487.215	238+36.190	487.239	487.398	238+36.190	487.380	487.538	238+36.190	487.302	487.460	238+36.190	487.140	487.299	238+36.190	487.182	487.340	238+36.190	487.224	487.382
	P18	238+46.190	486.853	487.031	238+46.190	487.035	487.213	238+46.190	487.176	487.354	238+46.190	487.098	487.276	238+46.190	486.936	487.115	238+46.190	486.978	487.156	238+46.190	487.020	487.198
	P19	238+56.190	486.649	486.819	238+56.190	486.831	487.002	238+56.190	486.972	487.142	238+56.190	486.894	487.064	238+56.190	486.732	486.903	238+56.190	486.774	486.944	238+56.190	486.816	486.986
	P20	238+66.190	486.445	486.595	238+66.190	486.627	486.778	238+66.190	486.768	486.918	238+66.190	486.690	486.840	238+66.190	486.528	486.679	238+66.190	486.570	486.720	238+66.190	486.762	486.804
	P21	238+76.190	486.241	486.372	238+76.190	486.423	486.554	238+76.190	486.564	486.695	238+76.190	486.486	486.616	238+76.190	486.324	486.455	238+76.190	486.366	486.497	238+76.190	486.538	486.580
	P22	238+86.190	486.037	486.198	238+86.190	486.219	486.330	238+86.190	486.360	486.471	238+86.190	486.282	486.392	238+86.190	486.120	486.231	238+86.190	486.162	486.273	238+86.190	486.204	486.314
	G3	238+85.190	485.833	485.924	238+96.190	486.015	486.106	238+95.190	486.156	486.247	238+96.190	486.078	486.169	238+95.190	485.916	486.007	238+96.190	486.049	486.140	238+96.190	486.090	486.181
	L3	238+96.190	485.629	485.702	239+06.190	485.811	485.884	239+06.190	485.952	486.025	239+06.190	485.874	485.947	239+06.190	485.712	485.785	239+06.190	485.754	485.827	239+06.190	485.796	485.869
	C3	239+06.190	485.429	485.482	239+16.190	485.607	485.665	239+16.190	485.748	485.805	239+16.190	485.670	485.727	239+16.190	485.508	485.566	239+16.190	485.550	485.607	239+16.190	485.649	485.692
	C2	239+16.190	485.425	485.482	239+26.190	485.403	485.445	239+26.190	485.544	485.585	239+26.190	485.466	485.507	239+26.190	485.304	485.346	239+26.190	485.346	485.387	239+26.190	485.388	485.429
	L2	239+25.190	485.221	485.262	239+36.190	485.199	485.225	239+36.190	485.340	485.365	239+36.190	485.262	485.287	239+36.190	485.100	485.126	239+36.190	485.142	485.168	239+36.190	485.184	485.209
	G2	239+36.190	485.017	485.043	239+46.190	484.995	485.005	239+46.190	485.136	485.146	239+46.190	485.058	485.067	239+46.190	484.896	484.906	239+46.190	484.938	484.948	239+46.190	484.980	484.989
	L1	239+46.190	484.813	484.823																		
℄ Brg. Pier 18		239+52.270	484.689	484.689	239+52.270	484.871	484.871	239+52.270	485.012	485.012	239+52.270	484.934	484.934	239+52.270	484.772	484.772	239+52.270	484.814	484.814	239+52.270	484.856	484.856
	A2	239+62.270	484.485	484.503	239+62.270	484.667	484.685	239+62.270	484.826	484.826	239+62.270	484.730	484.748	239+62.270	484.568	484.587	239+62.270	484.610	484.628	239+62.270	484.652	484.670
	L3	239+72.270	484.281	484.317	239+72.270	484.463	484.500	239+72.270	484.604	484.640	239+72.270	484.526	484.562	239+72.270	484.364	484.401	239+72.270	484.406	484.442	239+72.270	484.448	484.484
	J3	239+82.270	484.077	484.132	239+82.270	484.259	484.314	239+82.270	484.400	484.458	239+82.270	484.322	484.376	239+82.270	484.160	484.215	239+82.270	484.202	484.257	239+82.270	484.244	484.298
	K3	239+92.270	483.873	483.946	239+92.270	484.055	484.128	239+92.270	484.196	484.269	239+92.270	484.118	484.191	239+92.270	483.956	484.029	239+92.270	483.998	484.071	239+92.270	484.040	484.112
	I3	240+02.270	483.669	483.771	240+02.270	483.851	483.954	240+02.270	483.992	484.094	240+02.270	483.914	484.016	240+02.270	483.752	483.855	240+02.270	483.794	483.896	240+02.270	483.836	483.938
	H3	240+12.270	483.465	483.597	240+12.270	483.647	483.779	240+12.270	483.788	483.920	240+12.270	483.710	483.842	240+12.270	483.548	483.681	240+12.270	483.590	483.722	240+12.270	483.632	483.764
	G3	240+12.270	483.465	483.597	240+12.270	483.647	483.779	240+12.270	483.788	483.920	240+22.270	483.506	483.668	240+22.270	483.344	483.506	240+22.270	483.386	483.548	240+22.270	483.428	483.590
	N3	240+22.270	483.261	483.423	240+22.270	483.443	483.605	240+22.270	483.584	483.746	240+32.270	483.302	483.494	240+32.270	483.140	483.332	240+32.270	483.182	483.374	240+32.270	483.224	483.416
	O3	240+32.270	483.057	483.249	240+32.270	483.239	483.431	240+32.270	483.380	483.572	240+42.270	483.098	483.289	240+42.270	482.936	483.127	240+42.270	482.978	483.169	240+42.270	483.020	483.210
	M3	240+42.270	482.853	483.044	240+42.270	483.035	483.226	240+42.270	483.176	483.367	240+52.270	482.894	483.081	240+52.270	482.732	482.919	240+52.270	482.774	482.961	240+52.270	482.816	483.003
	Q3	240+52.270	482.649	482.836	240+52.270	482.831	483.018	240+52.270	482.768	482.951	240+62.270	482.690	482.873	240+62.270	482.528	482.712	240+62.270	482.570	482.753	240+62.270	482.612	482.795
	P3	240+62.270	482.445	482.628	240+62.270	482.627	482.811	240+62.270	482.568	482.744	240+72.270	482.486	482.665	240+72.270	482.324	482.504	240+72.270	482.366	482.546	240+72.270	482.408	482.587
	S3	240+72.270	482.241	482.421	240+72.270	482.423	482.603	240+72.270	482.360	482.499	240+82.270	482.282	482.421	240+82.270	482.120	482.260	240+82.270	482.162	482.302	240+82.270	482.204	482.343
	J3	240+82.270	482.037	482.177	240+82.270	482.219	482.359	240+82.270	482.219	482.359	240+92.270	482.078	482.173	240+92.270	481.916	482.011	240+92.270	481.958	482.053	240+92.270	482.000	482.095
	W3	240+92.270	481.833	481.926	240+92.270	482.015	482.110	240+92.270	482.156	482.257	241+02.270	481.874	481.925	241+02.270	481.712	481.763	241+02.270	481.754	481.805	241+02.270	481.795	481.846
	V3	241+02.270	481.629	481.680	241+02.270	481.811	481.862	241+02.270	482.003	482.003												
℄ W. Brg. Pier 19		241+13.690	481.396	481.396	241+13.690	481.578	481.578	241+13.690	481.719	481.719	241+13.690	481.641	481.641	241+13.690	481.479	481.479	241+13.690	481.521	481.521	241+13.690	481.563	481.563

ELEVATIONS - TOP OF CONCRETE

ELEV A = THEORETICAL GRADE ELEVATIONS
ELEV B = THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION

Note: Work these Elevations with the Diagrammatic Plan on Sheet 9 of 13.

Note: Top of slab elevations are for informational purposes only.

TOP OF SLAB ELEVATIONS
SPANS 18, 19 & 20

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. 15-1(F&E)
PEORIA & TAZEWELL COUNTIES

DESIGNED D.L.B.
CHECKED J.E.N.
DRAWN D.A.N.
CHECKED C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	15-1 (F&E)	Peoria & Tazewell	25	13
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 12 of 13

		GIRDER 1			GIRDER 2			GIRDER 3			GIRDER 4			GIRDER 5			NORTH LONGITUDINAL BONDED CONSTRUCTION JOINT			SOUTH LONGITUDINAL BONDED CONSTRUCTION JOINT		
	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B
℄ E. Brg. Pier 19	241+15.350	481.362	481.362	241+15.350	481.544	481.544	241+15.350	481.685	481.685	241+15.350	481.607	481.607	241+15.350	481.446	481.446	241+15.350	481.487	481.487	241+15.350	481.529	481.529
wg	241+25.350	481.158	481.203	241+25.350	481.340	481.385	241+25.350	481.481	481.526	241+25.350	481.403	481.447	241+25.350	481.242	481.286	241+25.350	481.283	481.328	241+25.350	481.325	481.369
xg	241+35.350	480.954	481.043	241+35.350	481.136	481.225	241+35.350	481.277	481.366	241+35.350	481.199	481.288	241+35.350	481.038	481.126	241+35.350	481.079	481.168	241+35.350	481.121	481.210
yg	241+45.350	480.750	480.883	241+45.350	480.932	481.066	241+45.350	481.073	481.206	241+45.350	480.995	481.128	241+45.350	480.834	480.967	241+45.350	480.875	481.008	241+45.350	480.917	481.050
zg	241+55.350	480.546	480.724	241+55.350	480.728	480.906	241+55.350	480.869	481.047	241+55.350	480.791	480.969	241+55.350	480.630	480.807	241+55.350	480.671	480.849	241+55.350	480.713	480.890
ag	241+65.350	480.342	480.525	241+65.350	480.524	480.707	241+65.350	480.665	480.848	241+65.350	480.587	480.770	241+65.350	480.426	480.608	241+65.350	480.467	480.650	241+65.350	480.509	480.492
bg	241+75.350	480.138	480.325	241+75.350	480.320	480.507	241+75.350	480.461	480.648	241+75.350	480.383	480.569	241+75.350	480.222	480.408	241+75.350	480.263	480.450	241+75.350	480.305	480.491
cg	241+85.350	479.934	480.124	241+85.350	480.116	480.307	241+85.350	480.257	480.447	241+85.350	480.179	480.369	241+85.350	480.018	480.208	241+85.350	480.059	480.249	241+85.350	480.101	480.291
dg	241+95.350	479.730	479.924	241+95.350	479.912	480.106	241+95.350	480.053	480.247	241+95.350	479.975	480.169	241+95.350	479.814	480.007	241+95.350	479.855	480.049	241+95.350	479.897	480.091
eg	242+05.350	479.526	479.693	242+05.350	479.708	479.875	242+05.350	479.849	480.015	242+05.350	479.771	479.937	242+05.350	479.610	479.776	242+05.350	479.651	479.818	242+05.350	479.693	479.859
fg	242+15.350	479.322	479.459	242+15.350	479.504	479.641	242+15.350	479.665	479.782	242+15.350	479.567	479.703	242+15.350	479.406	479.542	242+15.350	479.447	479.584	242+15.350	479.489	479.625
gg	242+25.350	479.118	479.225	242+25.350	479.300	479.407	242+25.350	479.441	479.548	242+25.350	479.363	479.469	242+25.350	479.202	479.308	242+25.350	479.243	479.350	242+25.350	479.285	479.391
hg	242+35.350	478.914	478.991	242+35.350	479.096	479.173	242+35.350	479.237	479.314	242+35.350	479.159	479.236	242+35.350	478.998	479.074	242+35.350	479.039	479.116	242+35.350	479.081	479.157
ig	242+45.350	478.710	478.767	242+45.350	478.892	478.950	242+45.350	479.033	479.090	242+45.350	478.955	479.012	242+45.350	478.794	478.851	242+45.350	478.835	478.892	242+45.350	478.877	478.934
jg	242+55.350	478.506	478.563	242+55.350	478.688	478.727	242+55.350	478.829	478.868	242+55.350	478.751	478.790	242+55.350	478.590	478.628	242+55.350	478.631	478.670	242+55.350	478.673	478.712
kg	242+65.350	478.302	478.323	242+65.350	478.484	478.505	242+65.350	478.625	478.646	242+65.350	478.547	478.568	242+65.350	478.386	478.406	242+65.350	478.427	478.448	242+65.350	478.469	478.490
℄ Brg. Pier 20	242+76.770	478.069	478.069	242+76.770	478.252	478.252	242+76.770	478.392	478.392	242+76.770	478.314	478.314	242+76.770	478.153	478.153	242+76.770	478.194	478.194	242+76.770	478.236	478.236
lg	242+86.770	477.865	477.881	242+86.770	478.048	478.063	242+86.770	478.188	478.204	242+86.770	478.110	478.126	242+86.770	477.949	477.964	242+86.770	477.990	478.006	242+86.770	478.032	478.048
mg	242+96.770	477.661	477.693	242+96.770	477.844	477.875	242+96.770	477.984	478.016	242+96.770	477.906	477.938	242+96.770	477.745	477.776	242+96.770	477.786	477.818	242+96.770	477.828	477.860
ng	243+06.770	477.457	477.505	243+06.770	477.640	477.687	243+06.770	477.780	477.828	243+06.770	477.702	477.750	243+06.770	477.541	477.588	243+06.770	477.582	477.630	243+06.770	477.624	477.671
og	243+16.770	477.253	477.317	243+16.770	477.436	477.499	243+16.770	477.576	477.640	243+16.770	477.498	477.561	243+16.770	477.337	477.400	243+16.770	477.374	477.442	243+16.770	477.420	477.483
pg	243+26.770	477.049	477.128	243+26.770	477.232	477.311	243+26.770	477.372	477.451	243+26.770	477.294	477.373	243+26.770	477.133	477.212	243+26.770	477.174	477.253	243+26.770	477.216	477.295
qg	243+36.770	476.845	476.944	243+36.770	477.028	477.126	243+36.770	477.168	477.267	243+36.770	477.090	477.189	243+36.770	476.929	477.027	243+36.770	476.970	477.069	243+36.770	477.012	477.110
rg	243+46.770	476.641	476.740	243+46.770	476.824	476.942	243+46.770	476.964	477.083	243+46.770	476.886	477.004	243+46.770	476.725	476.843	243+46.770	476.766	476.885	243+46.770	476.808	476.926
sg	243+56.770	476.437	476.576	243+56.770	476.620	476.758	243+56.770	476.760	476.898	243+56.770	476.682	476.820	243+56.770	476.521	476.659	243+56.770	476.562	476.701	243+56.770	476.604	476.742
tg	243+66.770	476.233	476.391	243+66.770	476.416	476.574	243+66.770	476.556	476.714	243+66.770	476.478	476.636	243+66.770	476.317	476.475	243+66.770	476.358	476.516	243+66.770	476.400	476.558
ug	243+76.770	476.029	476.207	243+76.770	476.212	476.390	243+76.770	476.352	476.530	243+76.770	476.274	476.452	243+76.770	476.113	476.291	243+76.770	476.154	476.332	243+76.770	476.196	476.374
vg	243+86.770	475.825	475.996	243+86.770	476.008	476.178	243+86.770	476.148	476.318	243+86.770	476.070	476.240	243+86.770	475.909	476.079	243+86.770	475.950	476.121	243+86.770	475.992	476.162
wg	243+96.770	475.621	475.772	243+96.770	475.804	475.954	243+96.770	475.944	476.095	243+96.770	475.866	476.016	243+96.770	475.705	475.853	243+96.770	475.744	475.897	243+96.770	475.788	475.938
xg	244+06.770	475.417	475.548	244+06.770	475.600	475.730	244+06.770	475.740	475.871	244+06.770	475.662	475.793	244+06.770	475.501	475.631	244+06.770	475.542	475.673	244+06.770	475.584	475.714
yg	244+16.770	475.213	475.324	244+16.770	475.396	475.506	244+16.770	475.536	475.647	244+16.770	475.458	475.569	244+16.770	475.297	475.407	244+16.770	475.338	475.449	244+16.770	475.380	475.491
zg	244+26.770	475.009	475.100	244+26.770	475.192	475.282	244+26.770	475.332	475.423	244+26.770	475.254	475.345	244+26.770	475.093	475.183	244+26.770	475.134	475.225	244+26.770	475.176	475.267
ag	244+36.770	474.805	474.858	244+36.770	474.988	475.041	244+36.770	475.128	475.201	244+36.770	475.050	475.123	244+36.770	474.889	474.962	244+36.770	474.930	475.003	244+36.770	474.972	475.045
bg	244+46.770	474.601	474.658	244+46.770	474.784	474.841	244+46.770	474.924	474.981	244+46.770	474.846	474.903	244+46.770	474.685	474.762	244+46.770	474.726	474.783	244+46.770	474.768	474.825
cg	244+56.770	474.397	474.439	244+56.770	474.580	474.621	244+56.770	474.720	474.761	244+56.770	474.662	474.683	244+56.770	474.481	474.522	244+56.770	474.522	474.564	244+56.770	474.564	474.605
dg	244+66.770	474.193	474.219	244+66.770	474.376	474.401	244+66.770	474.516	474.542	244+66.770	474.438	474.464	244+66.770	474.277	474.302	244+66.770	474.318	474.344	244+66.770	474.360	474.385
eg	244+76.770	473.989	473.999	244+76.770	474.172	474.181	244+76.770	474.312	474.322	244+76.770	474.234	474.244	244+76.770	474.073	474.082	244+76.770	474.114	474.124	244+76.770	474.156	474.166
℄ Brg. Pier 21	244+82.850	473.865	473.865	244+82.850	474.047	474.047	244+82.850	474.188	474.188	244+82.850	474.110	474.110	244+82.850	473.969	473.969	244+82.850	473.990	473.990	244+82.850	474.032	474.032
fg	244+92.850	473.661	473.679	244+92.850	473.843	473.862	244+92.850	473.984	474.002	244+92.850	473.906	473.924	244+92.850	473.745	473.763	244+92.850	473.786	473.804	244+92.850	473.828	473.846
gg	245+02.850	473.457	473.496	245+02.850	473.639	473.676	245+02.850	473.780	473.817	245+02.850	473.702	473.738	245+02.850	473.541	473.577	245+02.850	473.582	473.619	245+02.850	473.624	473.660
hg	245+12.850	473.253	473.308	245+12.850	473.435	473.490	245+12.850	473.576	473.631	245+12.850	473.498	473.553	245+12.850	473.337	473.391	245+12.850	473.378	473.433	245+12.850	473.420	473.475
ig	245+22.850	473.049	473.122	245+22.850	473.231	473.304	245+22.850	473.372	473.445	245+22.850	473.294	473.367	245+22.850	473.133	473.205	245+22.850	473.174	473.247	245+22.850	473.216	473.289
jg	245+32.850	472.845	472.948	245+32.850	473.027	473.130	245+32.850	473.168	473.271	245+32.850	473.090	473.193	245+32.850	472.929	473.031	245+32.850	472.970	473.073	245+32.850	473.012	473.115
kg	245+42.850	472.641	472.774	245+42.850	472.823	472.956	245+42.850	472.964	473.097	245+42.850	472.886	473.019	245+42.850	472.725	472.857	245+42.850	472.766	472.899	245+42.850	472.808	472.941
lg	245+52.850	472.437	472.600	245+52.850	472.619	472.782	245+52.850	472.760	472.923	245+52.850	472.682	472.845	245+52.850	472.521	472.625	245+52.850	472.562	472.725	245+52.850	472.604	472.767
mg	245+62.850	472.233	472.426	245+62.850	472.415	472.608	245+62.850	472.556	472.749	245+62.850	472.478	472.671	245+62.850	472.317	472.509	245+62.850	472.358	472.551	245+62.850	472.400	472.593
ng	245+72.850	472.029	472.228	245+72.850	472.211	472.402	245+72.850	472.352	472.543	245+72.850	472.274	472.465	245+72.850	472.113	472.303	245+72.850	472.154	472.345	245+72.850	472.196	472.386
og	245+82.850	471.825	472.012	245+82.850	472.007	472.194	245+82.850	472.148	472.335	245+82.850	472.070	472.257	245+82.850	471.909	472.095	245+82.850	471.950	472.137	245+82.850	471.992	472.179
pg	245+92.850	471.621	471.804	245+92.850	471.803	471.987	245+92.850	471.944	472.127	245+92.850	471.866	472.049	245+92.850	471.705	471.888	245+92.850	471.746	471.929	245+92.850	471.788	471.971
qg	246+02.850	471.417	471.597	246+02.850	471.599	471.779	246+02.850	471.740	471.920	246+02.850	471.662	471.841	246+02.850	471.501	471.680	246+02.850	471.542	471.722	246+02.850	471.584	471.763
rg	246+12.850	471.213	471.351	246+12.850	471.395	471.532	246+12.850	471.536	471.674	246+12.850	471.458	471.596	246+12.850	471.297	471.434	246+12.850	471.338	471.476	246+12.850	471.380	471.517
sg	246+22.850	471.009	471.102	246+22.850	471.191	471.285	246+22.850	471.332	471.425	246+22.850	471.254	471.367	246+22.850	471.093	471.186	246+22.850	471.134	471.227	246+22.850	471.176	471.269
tg	246+32.850	470.805	470.854	246+32.850	470.987	471.036	246+32.850	471.128	471.177	246+32.850	471.050	471.098	246+32.850	470.889	470.937	246+32.850	470.930	470.979	246+32.850	470.972	471.020
℄ Brg. E. Abut.	246+43.730	470.583	470.583	246+43.730	470.766	470.766	246+43.730	470.906	470.906	246+43.730	470.828	470.828	246+43.730	470.667	470.667	246+43.730	470.708	470.708	246+43.730	470.750	470.750

ELEVATIONS - TOP OF CONCRETE

ELEV A = THEORETICAL GRADE ELEVATIONS
ELEV B = THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION

Note: Work these Elevations with the Diagrammatic Plan on Sheet 12 of 13.

Note: Top of slab elevations are for informational purposes only.

TOP OF SLAB ELEVATIONS
SPANS 21, 22 & 23

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. 15-1(F&E)
PEORIA & TAZEWELL COUNTIES

D.L.B.
J.E.H.
D.A.N.
C.R.N.

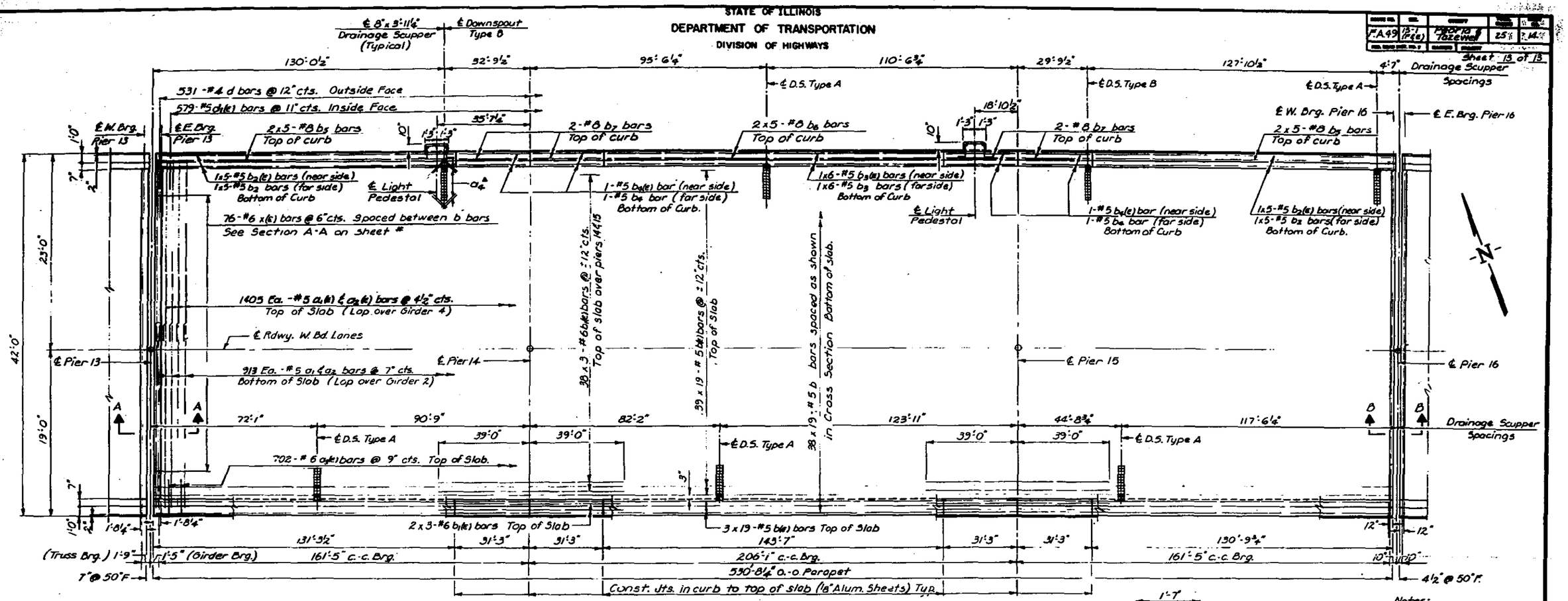
HANSON ENGINEERS incorporated
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

74001

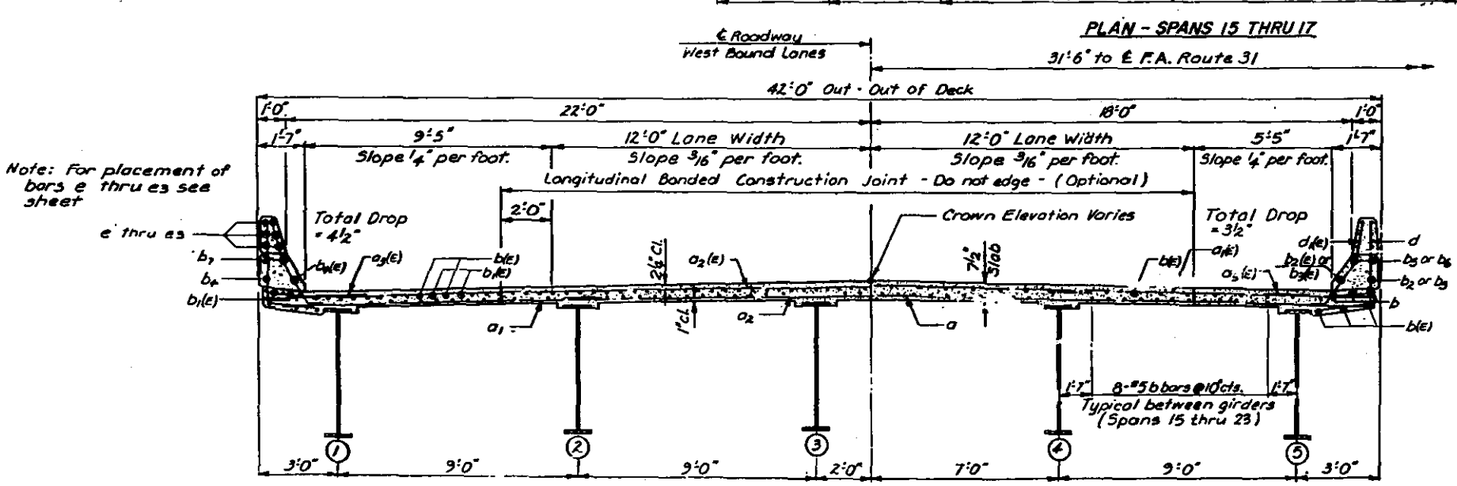
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

F.A.49	15-1 (F&E)	Peoria & Tazewell	25%	2.14%

Sheet 15 of 15

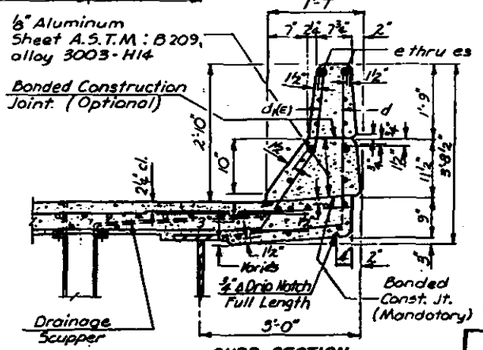


PLAN - SPANS 15 THRU 17



NEAR PIER — CROSS SECTION LOOKING EAST — NEAR MIDSPAN

Note: This sheet included for informational purposes only showing a typical cross section of completed structure.



CURB SECTION

Cost of Aluminum Sheets shall be incidental to Class X Concrete.

Bar Size	Minimum Lap Distance
#4,5,&6	1'-6"
#8	2'-4"

Notes:
Bars indicated thus: 20 x 3 - #5 etc. indicates 20 lines of bars with 3 lengths per line.
See Sheet ___ of ___ for Bill of Material for Spans 15-23 incl.
For Section A-A see Sheet ___ of ___.
For Section B-B see Sheet ___ of ___.
For Light Pedestal Details see Sheet ___ of ___.
For Drainage Scupper Details see Sheets ___ and ___.
*For Reinforcement & configuration of slab @ Scupper see Sheet ___ of ___.
Reinforcement bars designated (E) shall be epoxy coated. See Special Provisions.
D.S. = Downspout.
All dimensions shown are measured horizontally.

SUPERSTRUCTURE
SPANS 15 THRU 17

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. 15-1(F&E)
PEORIA & TAZEWELL COUNTIES

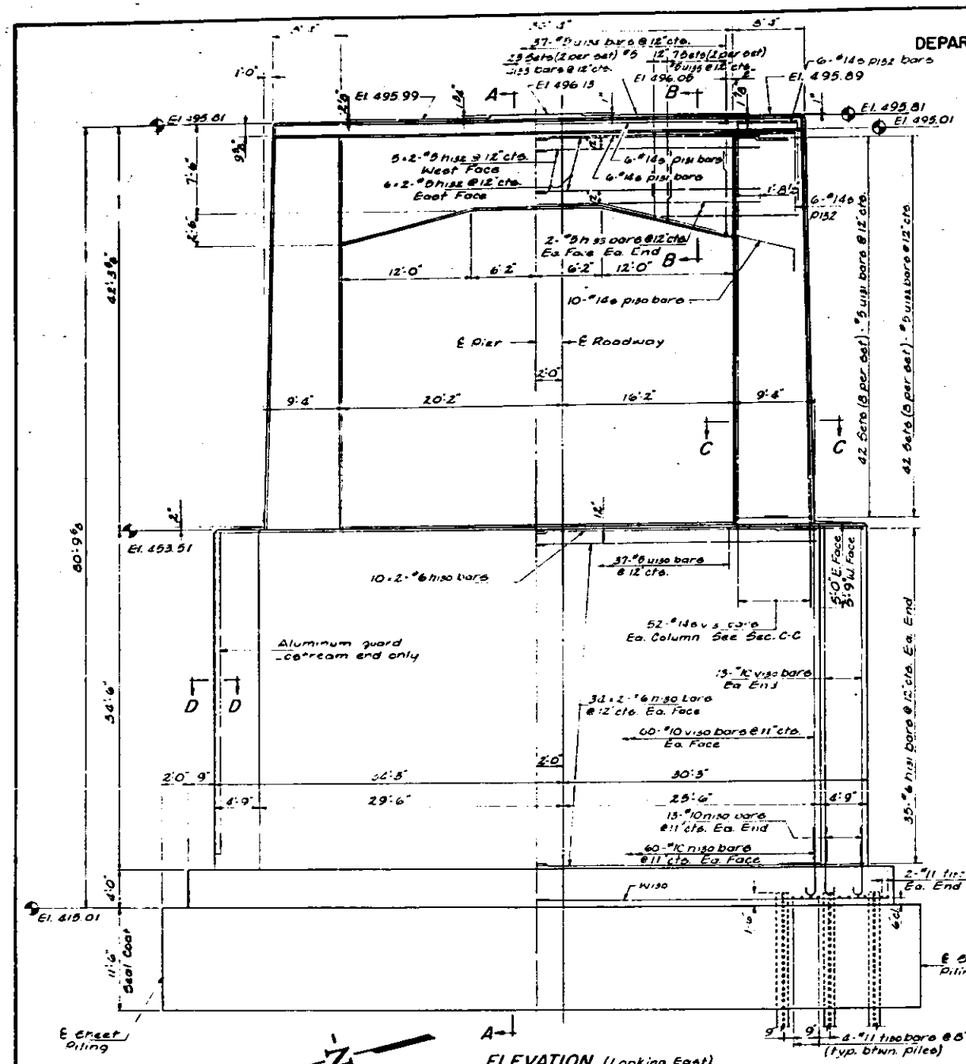
D.A.M.
S.C.O.
D.A.M.
S.C.O.

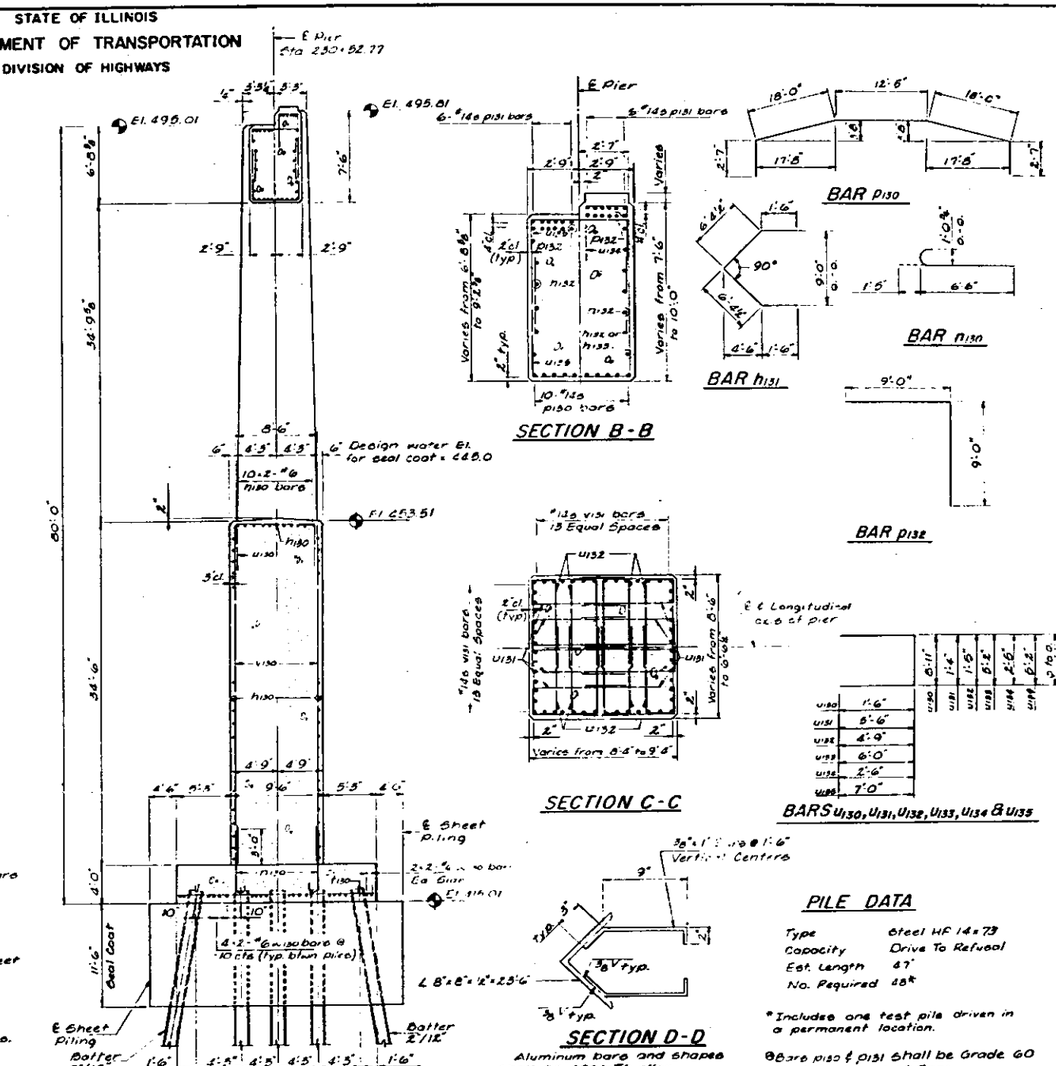
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

74001

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 69	15-1 (2SE)	Peoria & Tazewell	25	15
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	





PIER 13
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
h130	186	#6	28'-0"	
h131	70	#6	18'-9"	
h132	22	#8	20'-6"	
h133	8	#8	12'-0"	
n130	166	#10	7'-11"	
p130@	10	#14a	53'-7"	
p131@	12	#14a	52'-0"	
p132	24	#14a	18'-0"	
t130	76	#11	19'-6"	
U130	37	#8	11'-2"	
U131	672	#8	12'-4"	
U132	672	#8	10'-11"	
U133	46	#8	17'-2"	
U134	37	#8	7'-8"	
U135	28	#8	19'-2"	
W130	146	#10	34'-3"	
W131	104	#14a	47'-0"	
W130	40	#9	33'-2"	

Class A Concrete	Cu. Yds.	1,187.3
Reinforcement Bars	Lbs.	113,170
Seal Coat Concrete	Cu. Yds.	866.6
Steel Piles HP 14x73	Lin. Ft.	2,209
Test Pile HP 14x73	Each	1
Cofferdam Excavation	Cu. Yds.	2,256
Cofferdam	Each	1

PIER 13

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15 B-1
PEORIA & TAZEWELL COUNTIES

DESIGNED D.L.B.
CHECKED C.R.N.
DRAWN D.A.B.
CHECKED D.L.B.

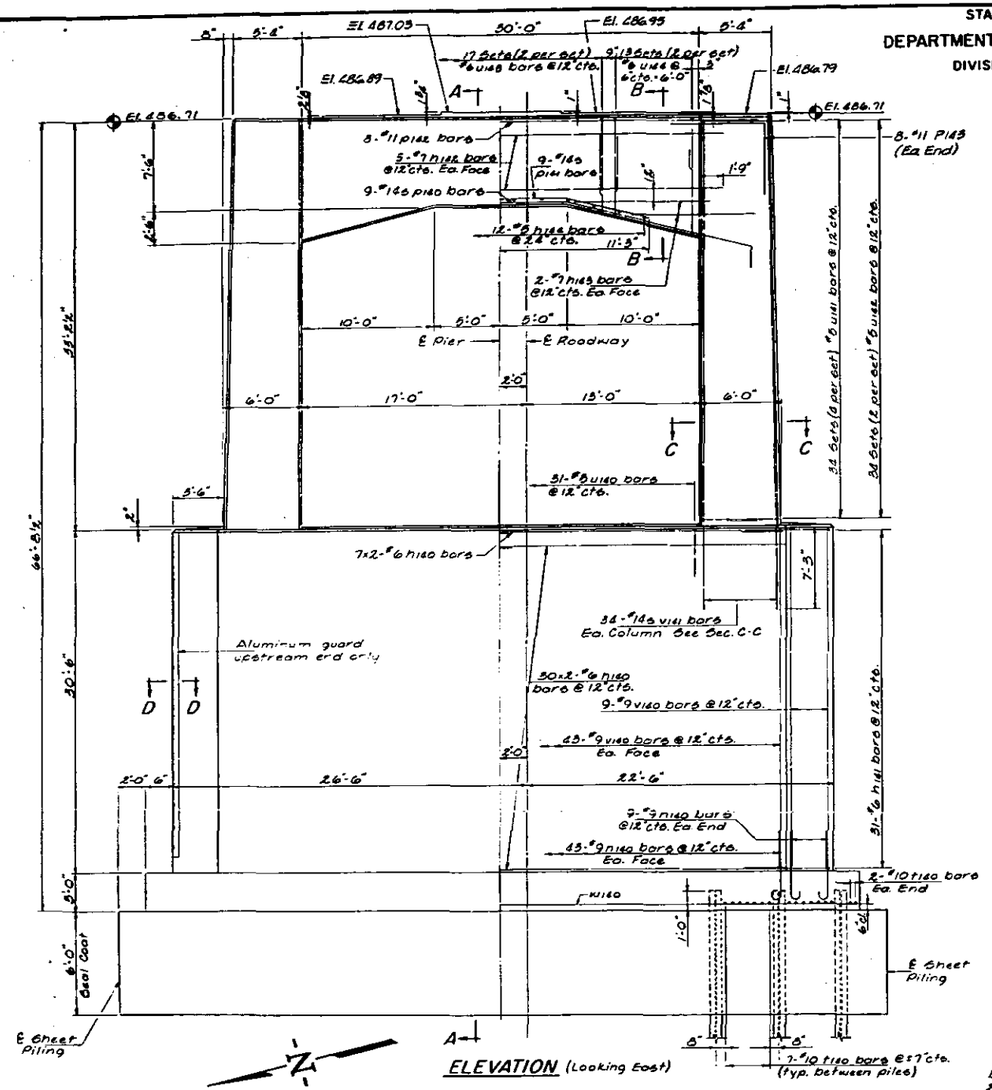
HANSON ENGINEERS INCORPORATED
SPRINGFIELD ILLINOIS PEORIA ILLINOIS

FILE NO. T4001
DATE 12-31-74

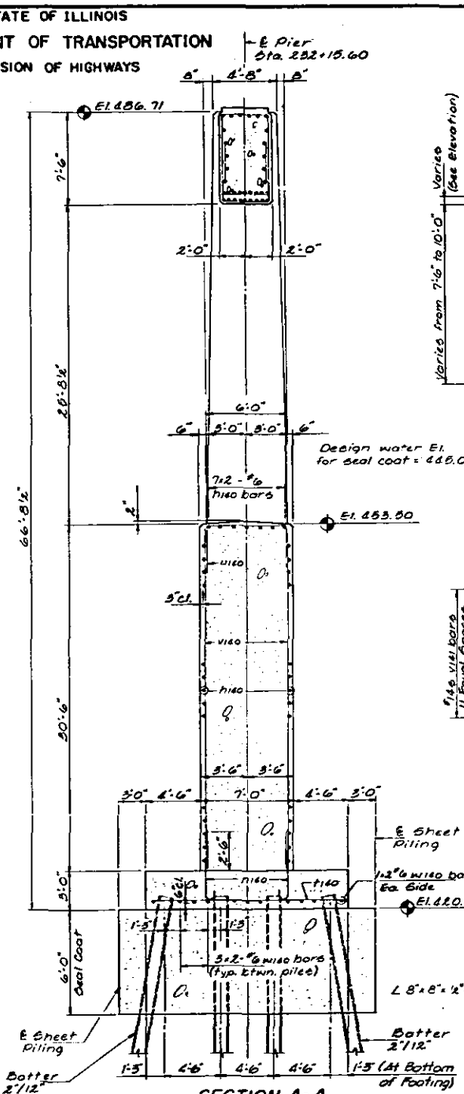
For Informational Purposes Only - Not Included In This Contract.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

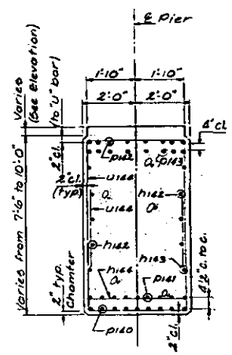
GROUP NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 49	15-1 (FAS)	Peoria & Tazewell	25	10
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



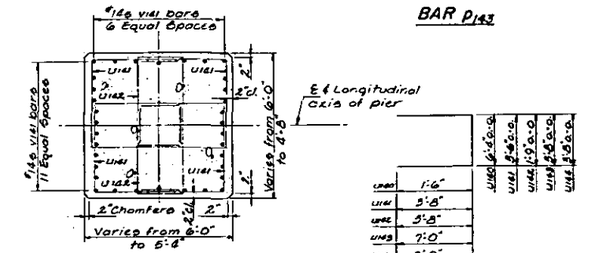
ELEVATION (Looking East)



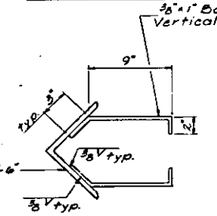
SECTION A-A



SECTION B-B

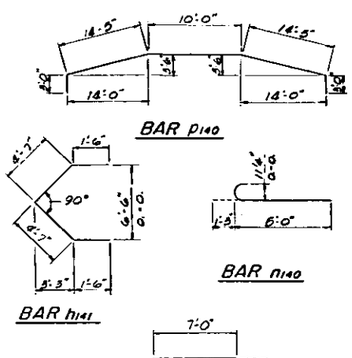


SECTION C-C



SECTION D-D

Aluminum bars and shapes shall be 6061-T6 alloy. Reinforcement bars shall not be in contact with the aluminum. Coat incidental to Class A Concrete.



PIER 14
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
H140	136	#6	21'-9"	
H141	62	#6	18'-2"	
H142	10	#7	33'-6"	
H143	8	#7	10'-0"	
H144	12	#5	5'-8"	
H140	104	#9	6'-3"	
P140 ●	9	#14	66'-10"	
P141 ●	9	#14	22'-11"	
P142	8	#11	40'-0"	
P143	16	#11	14'-0"	
T140	74	#10	15'-6"	
U140	51	#5	9'-4"	
U141	272	#8	10'-10"	
U142	136	#5	9'-1"	
U143	34	#6	17'-8"	
U144	52	#6	19'-8"	
V140	104	#9	30'-3"	
V141 ●	68	#14	40'-3"	
W140	22	#6	25'-6"	

Class A Concrete	Cu. Yds.	561.9
Reinforcement Bars	Lbs.	60690
Seal Coat Concrete	Cu. Yds.	264.0
Steel Piles HP 12x53	Lin. Ft.	2,150
Test Pile HP 12x53	Each	1
Cofferdam Excavation	Cu. Yds.	999
Cofferdam	Each	1

BARS U140, U141, U142, U143 & U144

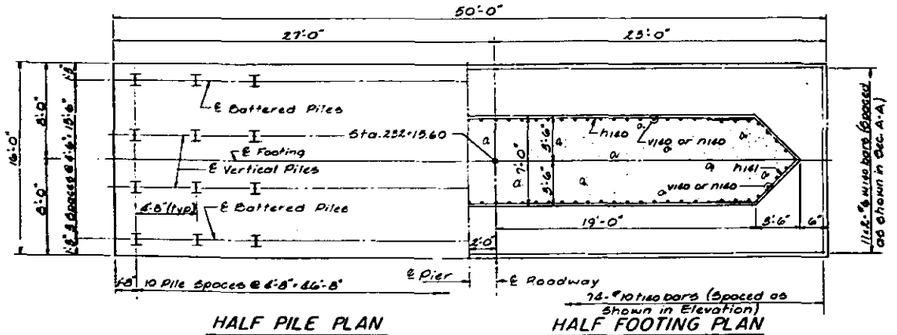
U140	1'-6"	5'-8"	5'-8"	7'-0"
U141	5'-8"	5'-8"	5'-8"	7'-0"
U142	5'-8"	5'-8"	5'-8"	7'-0"
U143	7'-0"	7'-0"	7'-0"	8'-0"
U144	8'-0"	8'-0"	8'-0"	8'-0"

PILE DATA

Type Steel HP 12x53
Capacity Drive to refusal
Est. Length 50'
No. Required 66*

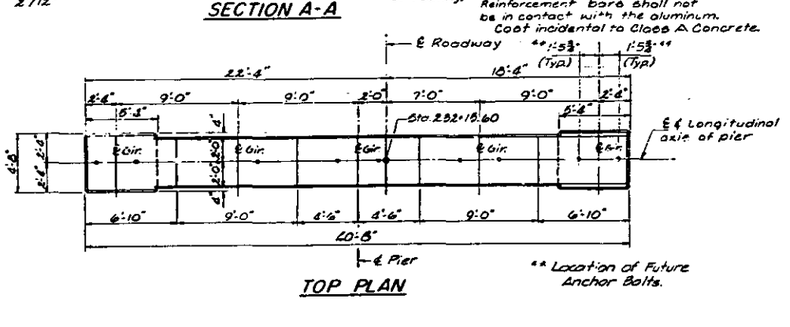
*Includes one test pile driven in a permanent location.

● Bars P140, P141 and V141 shall be Grade 60 Steel Reinforcement Bars.



HALF PILE PLAN

HALF FOOTING PLAN



TOP PLAN

** Location of Future Anchor Bolts.

PIER 14

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15 B-1
PEORIA & TAZEWELL COUNTIES

DESIGNED C.R.N.
CHECKED D.L.B.
DRAWN D.A.B.
CHECKED C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

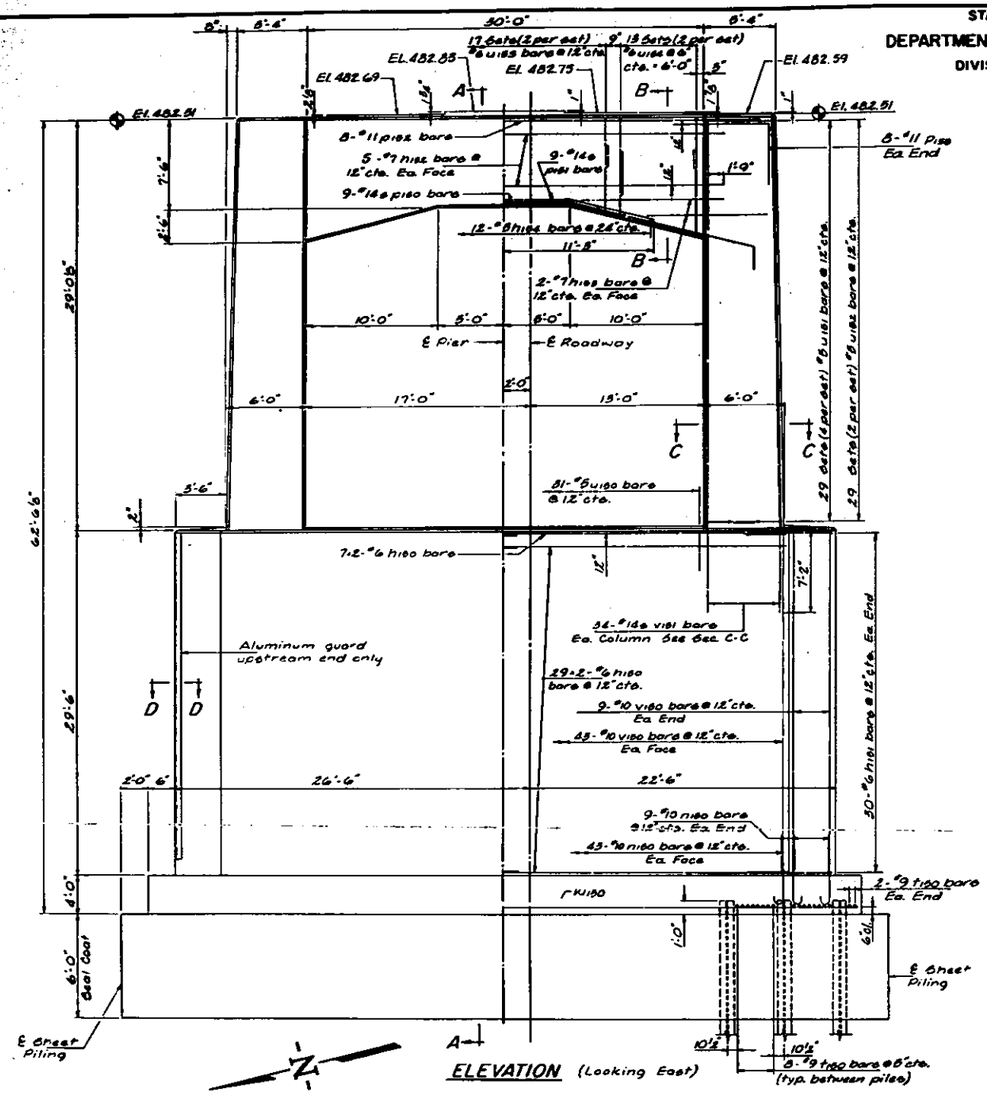
P.E. NO. 14001
DATE 12-31-74

For Informational Purposes Only - Not Included In This Contract

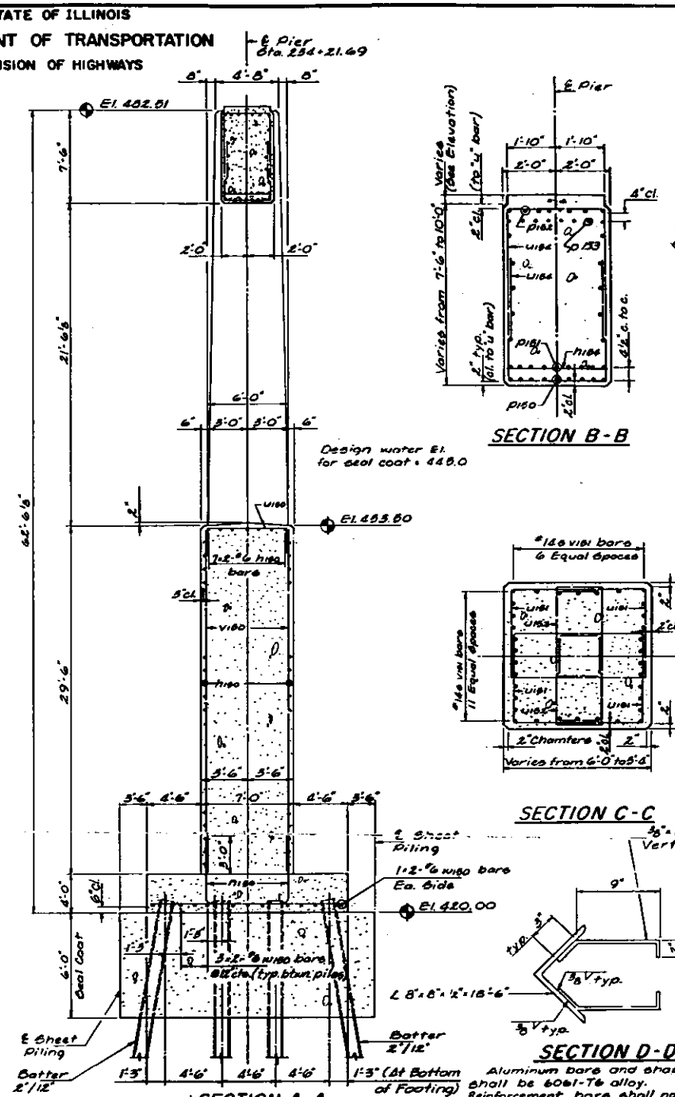
Rev. 1-31-75

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE	SECT.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 49	15-1 (FAS)	Peoria & Tazewell	25	17
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



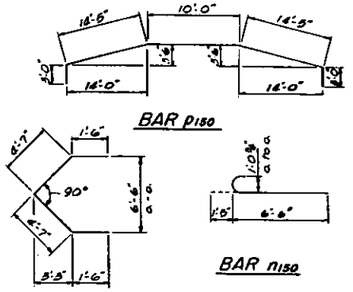
ELEVATION (Looking East)

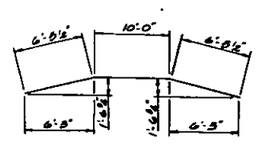


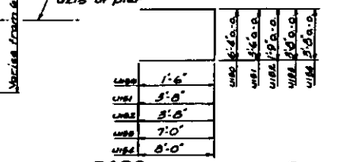
SECTION A-A

SECTION B-B

SECTION C-C







SECTION D-D

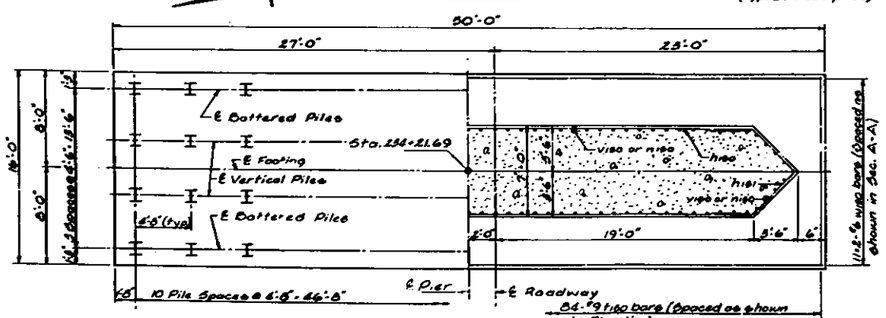
Aluminum bars and shapes shall be 6061-T6 alloy. Reinforcement bars shall not be in contact with the aluminum. Coat incidental to Class A Concrete.

PILE DATA

Type	Steel HP12x53
Capacity	Drive to Refusal
Est. Length	88'
No. Required	44*

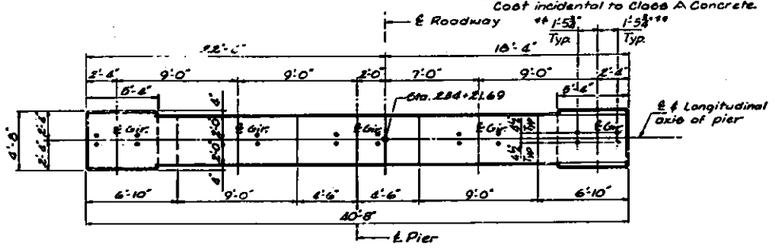
*Includes one test pile driven in a permanent location.

●Bars P180, P181 and V181 shall be Grade 60 Steel Reinforcement Bars.



HALF PILE PLAN

HALF FOOTING PLAN



TOP PLAN

** Location of Future Anchor Bolts

PIER 15
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
H180	130	#6	21'-9"	
H181	60	#6	12'-2"	
H182	10	#7	33'-6"	
H186	8	#9	10'-0"	
H184	12	#8	5'-8"	
H150	104	#10	7'-11"	
P180●	9	#14	44'-10"	
P181●	9	#18	22'-11"	
P182	8	#11	40'-0"	
P153	16	#11	14'-0"	
T180	84	#9	18'-6"	
U180	31	#8	9'-8"	
U181	282	#8	10'-10"	
U182	116	#8	9'-1"	
U183	36	#6	17'-8"	
U184	82	#6	19'-8"	
V180	104	#10	29'-8"	
V181●	68	#14	36'-0"	
K180	22	#6	28'-6"	
Class A Concrete		Cu. Yds.	870.3	
Reinforcement Bars		Lbs.	60,890	
Seal Coat Concrete		Cu. Yds.	276.0	
Steel Piles HP12x53		Lin. Ft.	2892	
Test Pile HP12x53		Each	1	
Cofferdam Excavation		Cu. Yds.	4088	
Cofferdam		Each	1	

PIER 15

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15 B-1
PEORIA & TAZEWELL COUNTIES

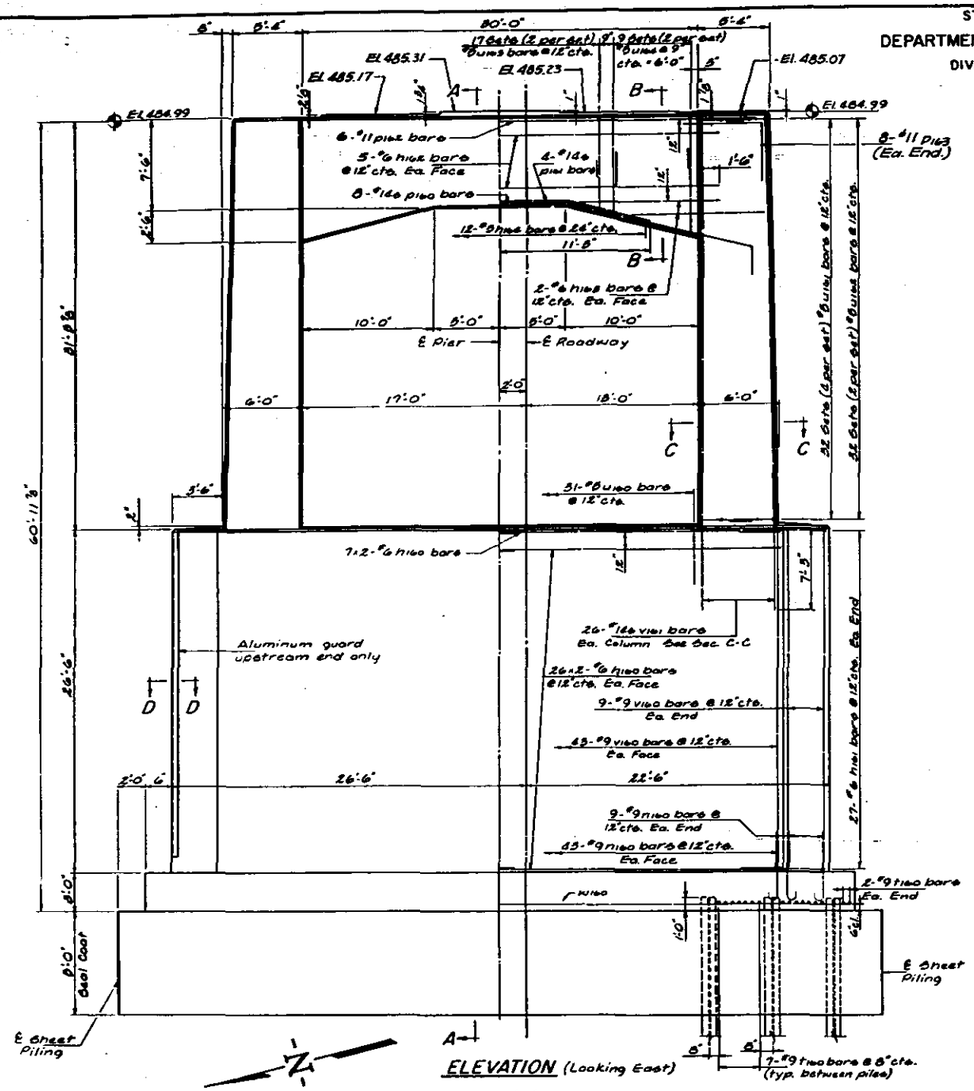
DESIGNED	CRN	HANSON ENGINEERS INCORPORATED	FILE NO. 14001
CHECKED	DLB	SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS	DATE 12-31-74
DRAWN	DAB		
CHECKED	CRN		

For Informational Purposes Only - Not Included In This Contract

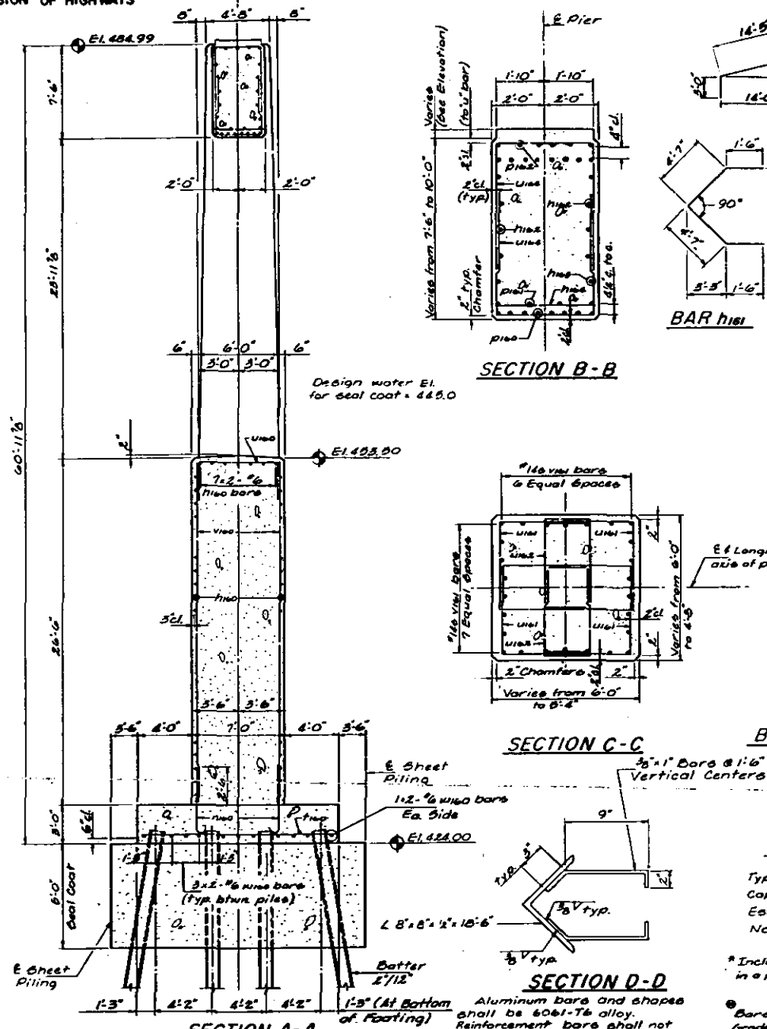
REV. 7-31-75

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SURVEY NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	15B-1 (C-15)	Peoria & Tazewell	25	18
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



ELEVATION (Looking East)

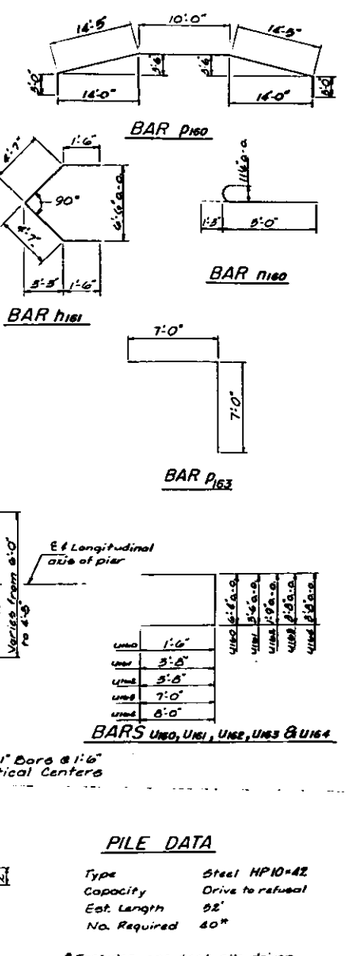


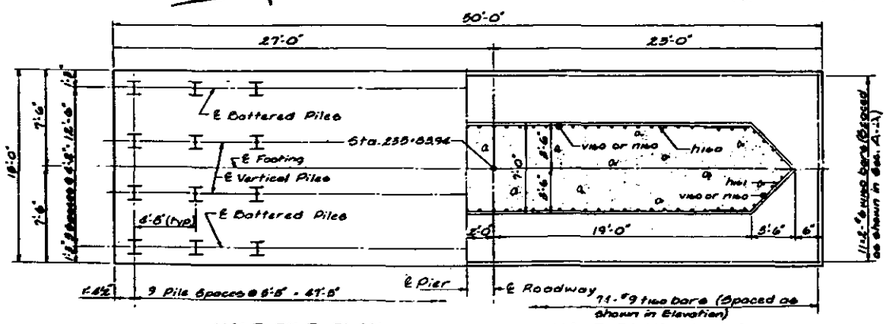
SECTION A-A

SECTION B-B

SECTION C-C

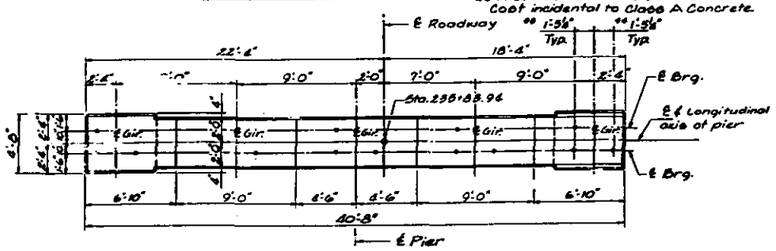
BARS uiso, uisi, uis2, uis3 & uis4





HALF PILE PLAN

HALF FOOTING PLAN



TOP PLAN

** Future location of ½" ϕ Anchor Bolts.

PILE DATA

Type	Steel HP10×42
Capacity	Drive to refusal
Est. Length	82'
No. Required	40*

* Includes one test pile driven in a permanent location.

● Bars plso, plsi and vlsi shall be Grade 60 Steel Reinforcement Bars.

PIER 16
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
hlso	118	#6	21'-9"	
hlsi	54	#6	12'-2"	C
hls2	10	#6	33'-0"	
hls3	8	#6	10'-0"	
hls4	12	#6	5'-8"	
vlso	104	#9	6'-3"	C
plso ●	8	#14a	44'-10"	
plsi ●	4	#14a	22'-11"	
pls2	6	#11	40'-0"	
P163	16	#11	14'-0"	
uiso	74	#9	16'-6"	
uisi	31	#8	9'-6"	
uis2	256	#6	10'-10"	
uis3	128	#9	9'-1"	
uis4	34	#6	17'-8"	
uis4	36	#9	19'-8"	
vlso	104	#9	26'-8"	
vlsi ●	52	#14a	36'-6"	
vlso	22	#6	20'-6"	
Class A Concrete			Cu. Yds.	505.3
Reinforcement Bars			Lbs.	48490
Seal Coat Concrete			Cu. Yds.	230.0
Steel Piles HP10×42			Lin. Ft.	2,028
Test Pile HP10×42			Each	1
Cofferdam Excavation			Cu. Yds.	798
Cofferdam			Each	1

PIER 16

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15 B-1
PEORIA & TAZEWELL COUNTIES

CRN
DLB
DAB
CRN

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

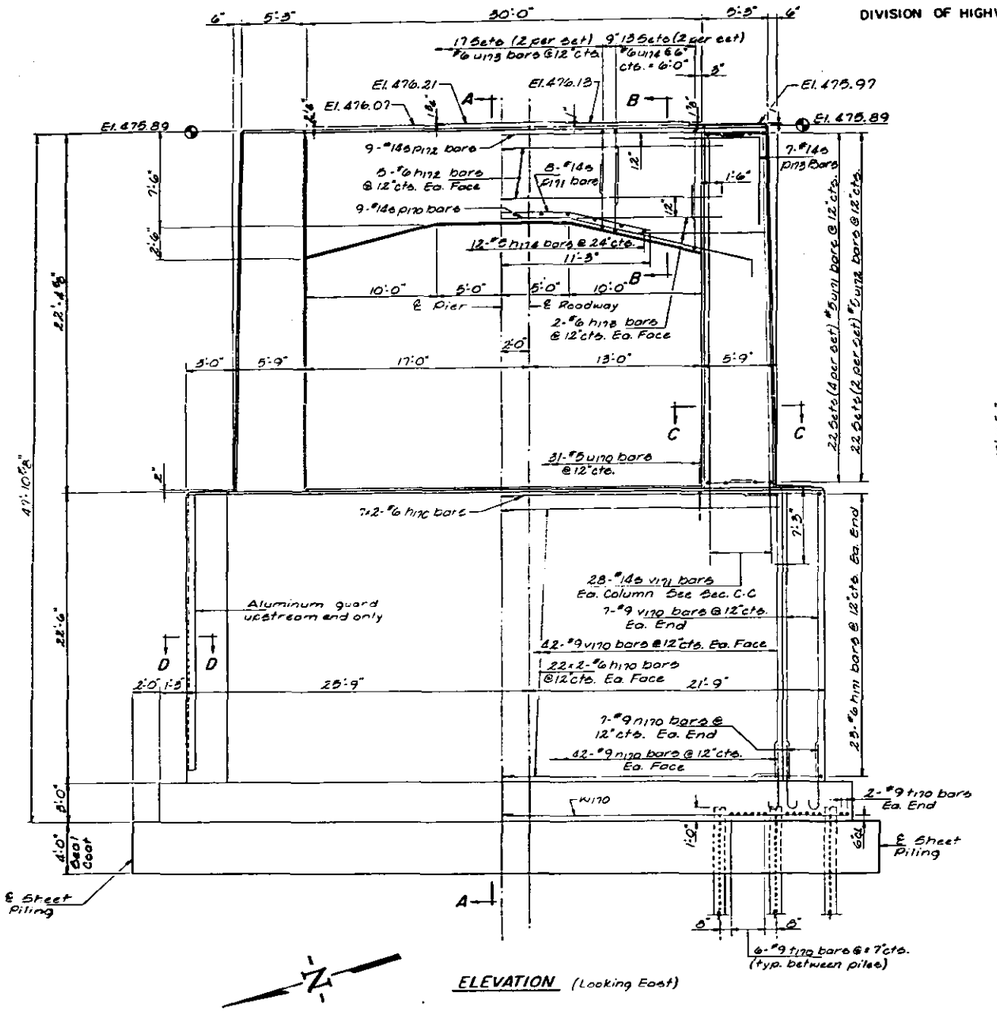
73001
12-31-74

For Informational Purposes Only - Not Included In This Contract.

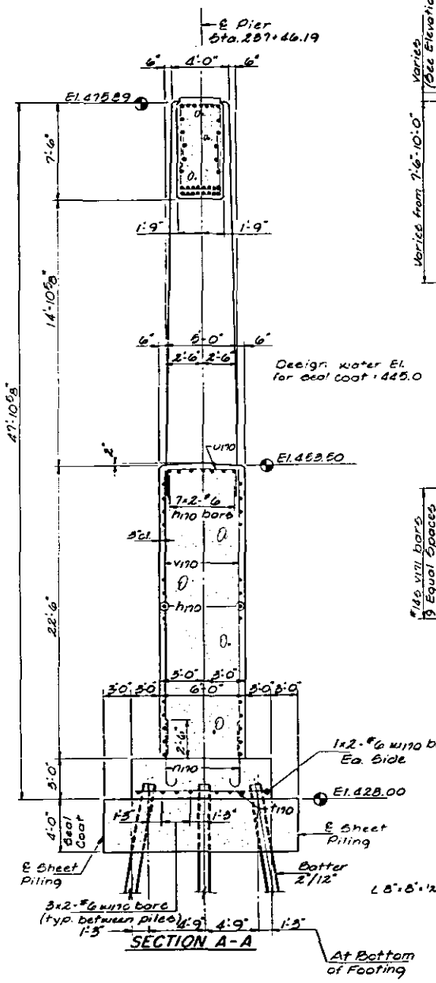
Rev. 7-31-75

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

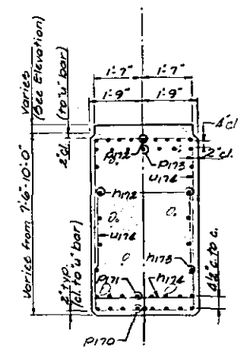
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAA 9	15-1 (FSB)	Peoria & Tazewell	25	18
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



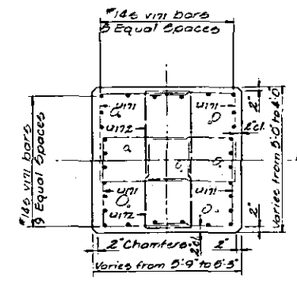
ELEVATION (Looking East)



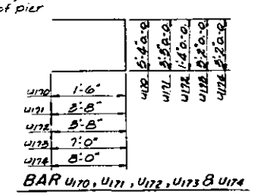
SECTION A-A



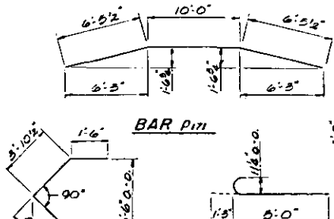
SECTION B-B



SECTION C-C

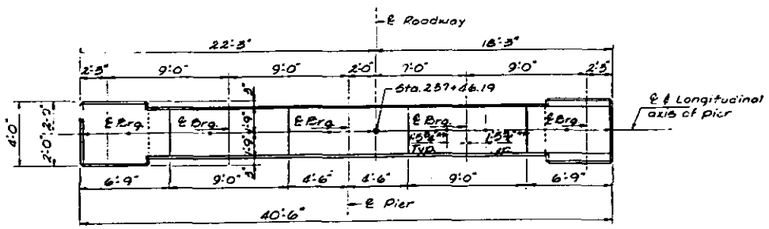


BAR U170, U171, U172, U173 & U174

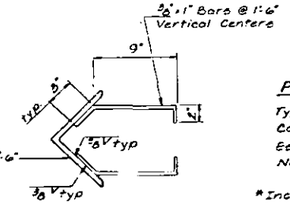


HALF PILE PLAN

HALF FOOTING PLAN



TOP PLAN



SECTION D-D

Aluminum bars and shores shall be 6061-T6 alloy. Reinforcement bars shall not be in contact with the aluminum. Cost incidental to Class A Concrete.

PILE DATA

Type	Steel HP12x53
Capacity	Drive to Refusal
Est. Length	60'
No. Required	56*

*Includes one test pile driven in a permanent location.

Ⓔ Bars P170, P171, P172 & V171 shall be Grade 60 Steel Reinforcement Bars.

PIER 17
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
H170	102	#6	21'-6"	—
H171	46	#6	10'-9"	C
H172	10	#6	33'-0"	—
H178	8	#6	10'-0"	—
H174	12	#5	5'-5"	—
H170	98	#9	6'-5"	C
P170Ⓔ	9	#14S	44'-10"	⌒
P171Ⓔ	8	#14S	22'-11"	—
P172Ⓔ	9	#14S	40'-0"	—
P173	14	#14S	14'-0"	⌐
T170	70	#9	11'-6"	—
U170	31	#5	8'-4"	⌐
U171	176	#5	10'-7"	⌐
U172	88	#5	8'-8"	⌐
U173	34	#6	17'-2"	⌐
U174	52	#6	19'-2"	⌐
V170	98	#9	22'-3"	—
V171Ⓔ	56	#14S	29'-3"	—
W170	16	#6	25'-6"	—

Class A Concrete	Cu. Yds.	364.1
Reinforcement Bars	Lbs.	44,270
Seal Coat Concrete	Cu. Yds.	144.0
Steel Piles HP 12x53	Lin. Ft.	1,678
Test Pile HP 12x53	Each	1
Cofferdam Excavation	Cu. Yds.	450
Cofferdam	Each	1

PIER 17

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15 B-1
PEORIA & TAZEWELL COUNTIES

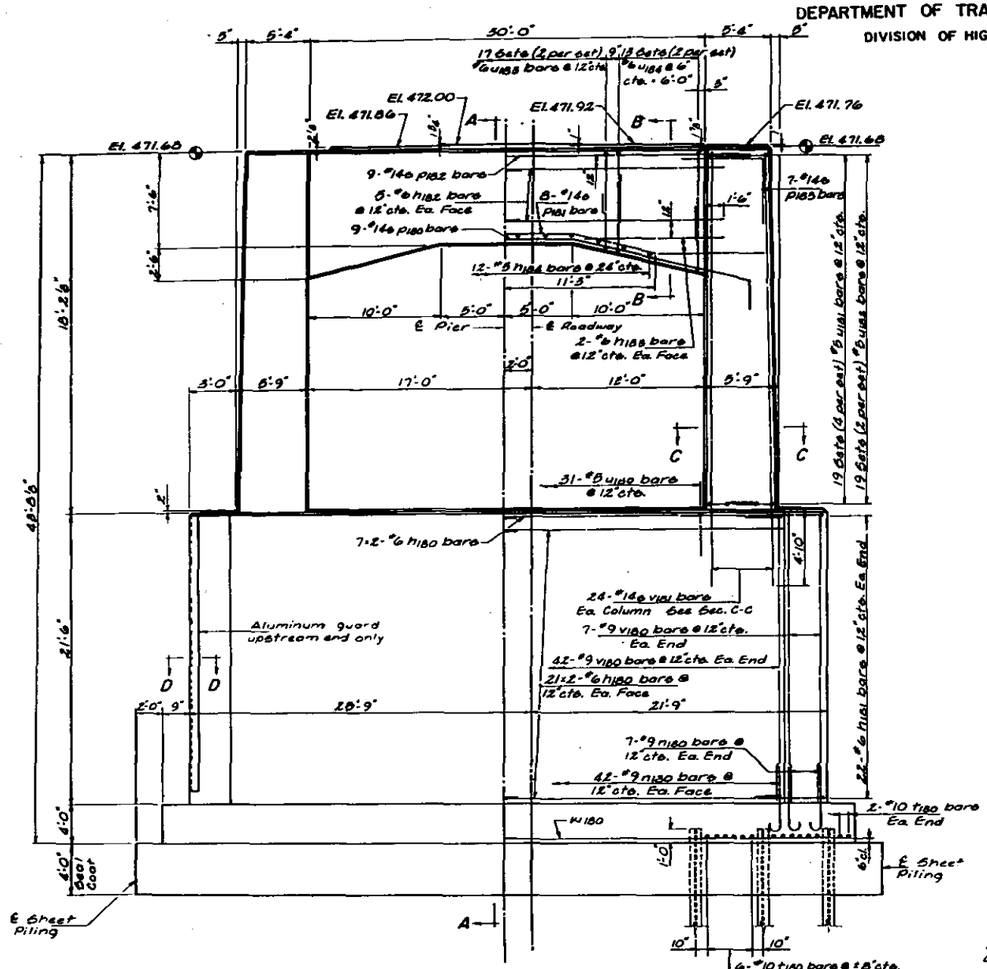
DESIGNED C.R.N.	HANSON ENGINEERS INCORPORATED	FILE NO. 74001
CHECKED D.L.B.	SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS	DATE 12-31-74
DRAWN D.A.B.		
CHECKED C.R.N.		

For Informational Purposes Only - Not Included In This Contract

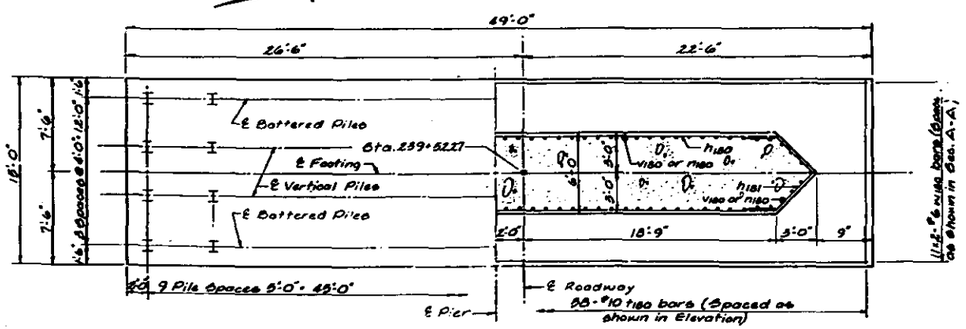
Rev. 7-31-75

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

DIST. NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.49	15-1 (F&T)	Peoria & Tazewell	25	20
FED. ROAD DIST. NO. 8	MARKERS	PROJECT		

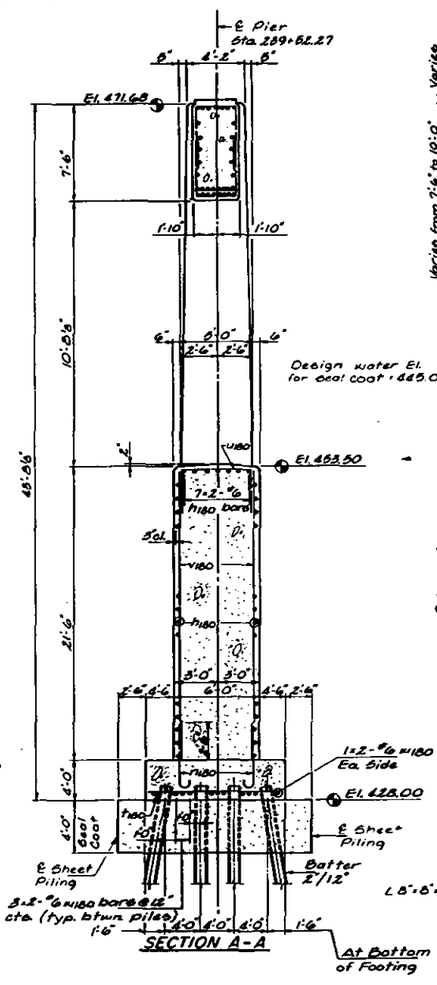


ELEVATION (Looking East)

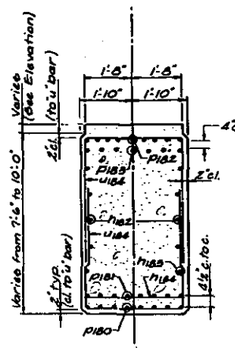


HALF PILE PLAN

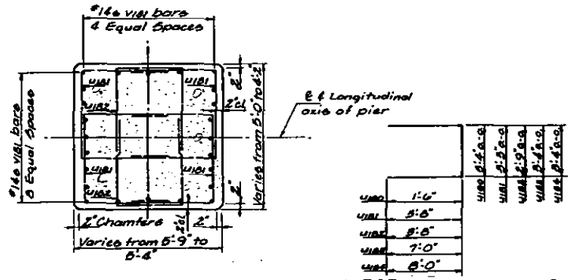
HALF FOOTING PLAN



SECTION A-A



SECTION B-B



SECTION C-C

BAR P181

BAR h181

BAR h180

BAR P183

BAR P180

BAR U180, U181, U182, U183 & U184

SECTION D-D

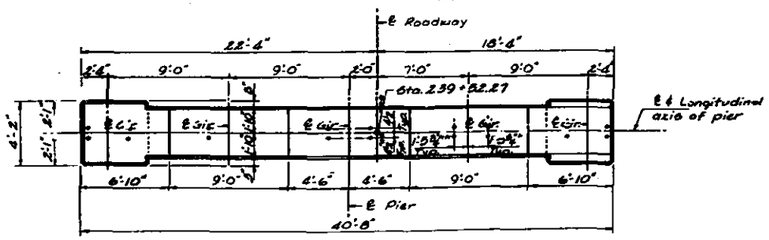
Aluminum bars and shapes shall be 6061-T6 alloy. Reinforcement bars shall not be in contact with the aluminum. Cost incidental to Class A Concrete.

PILE DATA

Type	Steel HP 12x53
Capacity	Drive to refusal
Est. Length	45'
No. Required	40*

* Includes one test pile driven in a permanent location.

● Bars P180, P181 & P182 shall be Grade 60 Steel Reinforcement Bars.



TOP PLAN

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

PIER 18
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
h180	98	#6	21'-6"	
h181	44	#6	10'-9"	C
h182	10	#6	55'-0"	
h188	8	#6	10'-0"	
h184	12	#6	5'-8"	
h180	98	#9	7'-3"	C
P180●	9	#14a	44'-10"	
P181●	8	#14a	22'-11"	
P182●	9	#14a	40'-0"	
P188	14	#14a	18'-0"	
h180	58	#10	14'-9"	
U180	31	#8	8'-4"	
U181	102	#5	5'-7"	
U182	76	#9	10'-1"	
U188	34	#6	17'-6"	
U184	52	#6	19'-4"	
V180	98	#9	21'-8"	
V181	48	#14a	22'-10"	
W180	22	#6	25'-0"	

Class A Concrete	Cu. Yds.	391.2
Reinforcement Bars	Lbs.	39,690
Seal Coat Concrete	Cu. Yds.	187a
Steel Piles HP12x53	Lin. Ft.	4,765
Test Pile HP12x53	Each	1
Cofferdam Excavation	Cu. Yds.	491
Cofferdam	Each	1

PIER 18

McCLUGAGE BRIDGE OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15B-1
PEORIA & TAZEWELL COUNTIES

DESIGNED D.L.B.
CHECKED C.R.N.
DRAWN D.A.B.
CHECKED C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

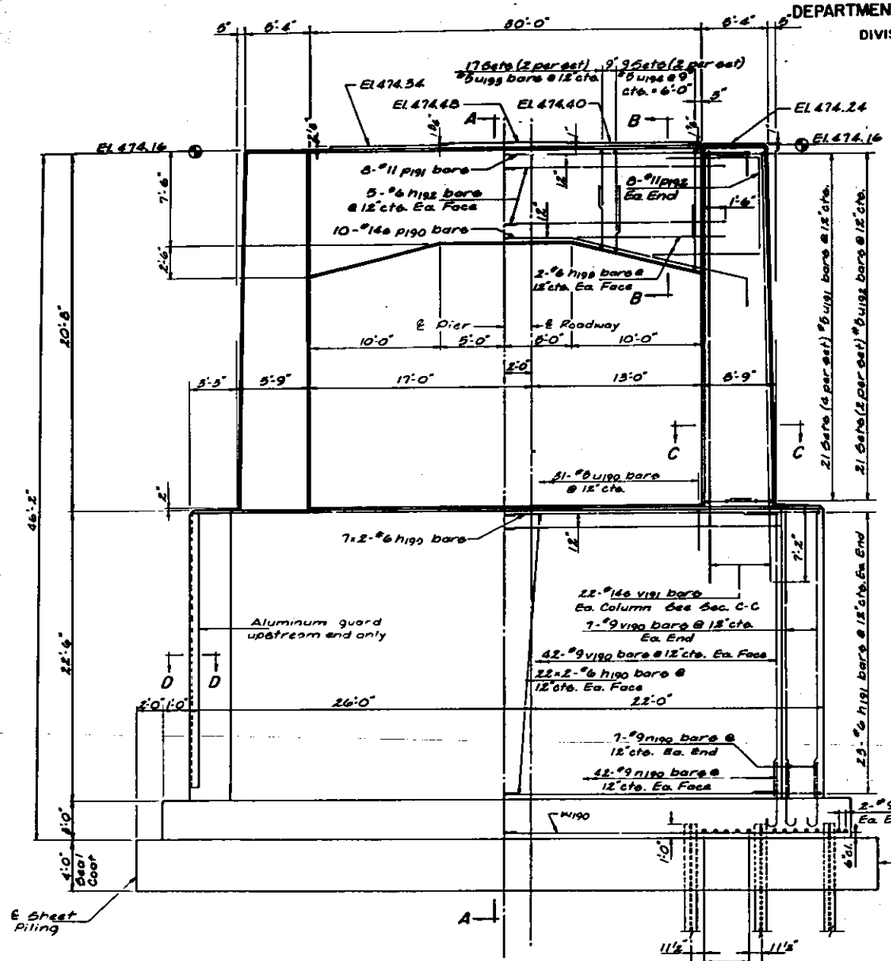
FILE NO. 74001
DATE 12-31-74

For Informational Purposes Only - Not Included In This Contract

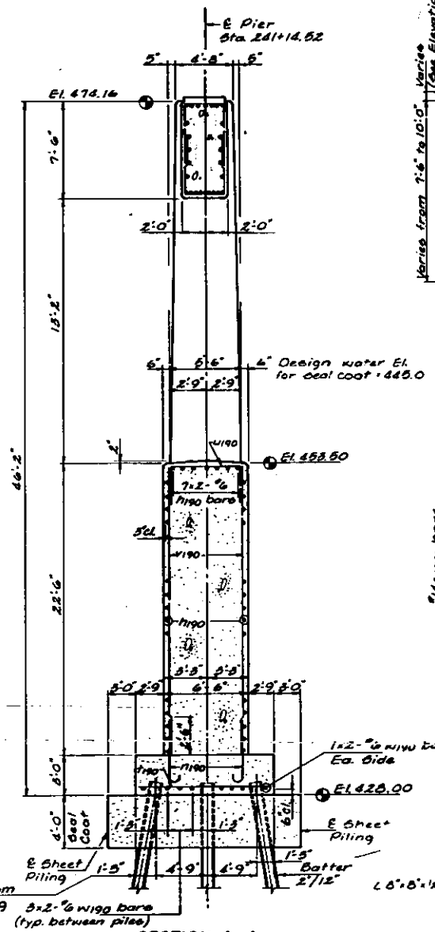
REV: 7-31-75

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

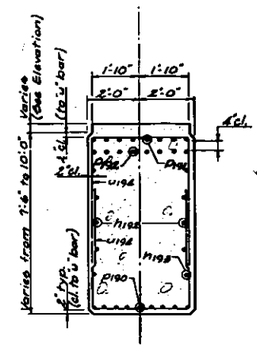
SHEET NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.49	15-7 (31)	Peoria & Tazewell	25	21.
FED. ROAD DIST. NO. 9	ILLINOIS	PROJECT		



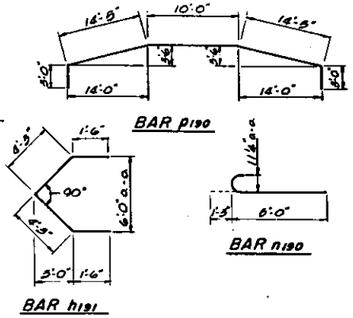
ELEVATION (Looking East)

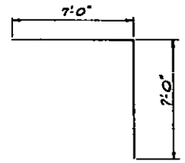


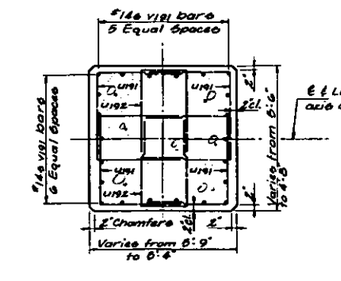
SECTION A-A



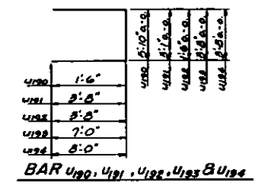
SECTION B-B



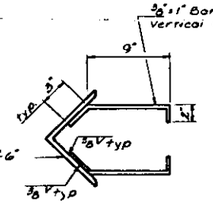




SECTION C-C



BAR U_{190}, U_{191}, U_{192}, U_{193} & U_{194}



SECTION D-D

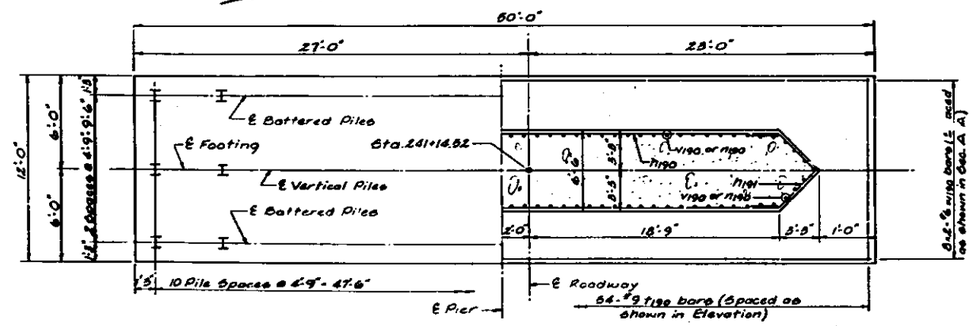
Aluminum bars and shapes shall be 6061-T6 alloy. Reinforcement bars shall not be in contact with the aluminum. Cost incidental to Class A Concrete.

PILE DATA

Type	Steel HP 10 x 42
Capacity	Drive to refusal
Est. Length	42'
No. Required	83*

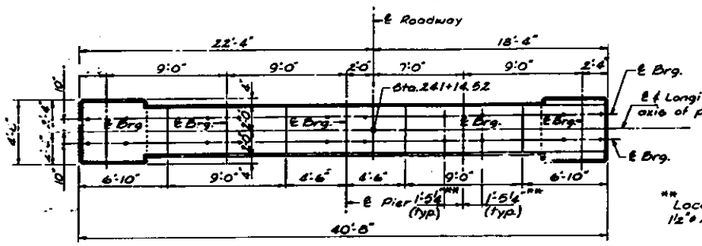
*Includes one test pile driven in a permanent location.

●Bars P190 & V191 shall be Grade 60 Steel Reinforcement Bars.



HALF PILE PLAN

HALF FOOTING PLAN



TOP PLAN

** Location of future 1½" ø Anchor Bolts.

PIER 19
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
H190	102	#6	21'-9"	
H191	46	#6	11'-6"	C
H192	10	#6	55'-0"	
H193	8	#6	10'-0"	
N190	98	#9	6'-3"	C
P190●	10	#14a	44'-10"	
P191	8	#11	40'-0"	
P192	16	#11	14'-0"	
T190	54	#9	11'-6"	
U190	31	#6	8'-10"	
U191	168	#6	10'-8"	
U192	84	#6	8'-10"	
U193	58	#6	17'-8"	
U194	56	#6	19'-8"	
V190	98	#9	22'-0"	
V191●	46	#14a	27'-6"	
W190	16	#6	28'-6"	
Class A Concrete		Cu. Yds.		390.9
Reinforcement Bars		Lbs.		56,790
Seal Coat Concrete		Cu. Yds.		164.0
Steel Piles HP 10x42		Lin. Ft.		1344
Test Pile HP 10x42		Each		1
Cofferdam Excavation		Cu. Yds.		497
Cofferdam		Each		1

PIER 19

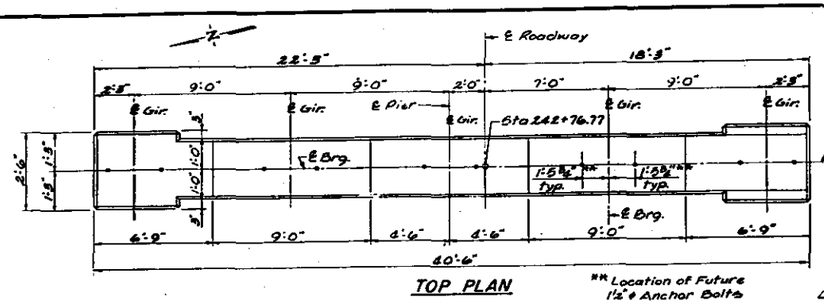
McCLUGAGE BRIDGE OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15 B-1
PEORIA & TAZEWELL COUNTIES

C.R.N.	HANSON ENGINEERS INCORPORATED SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS	FILE NO. 74001
D.L.B.		DATE 12-31-74
D.A.B.		
C.R.N.		

For Informational Purposes Only - Not Included In This Contract

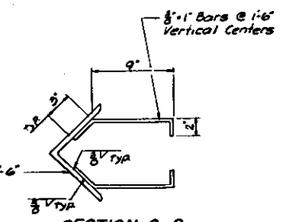
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 49	15-1 (F.A.)	Peoria & Tazewell	25	22
FED. ROAD DIST. NO. 7	PROJECT			



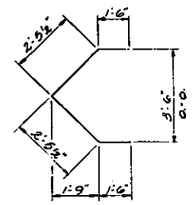
TOP PLAN

** Location of Future 1½" ø Anchor Bolts

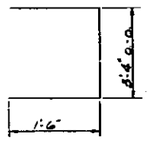


SECTION C-C

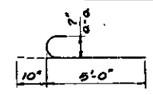
Aluminum bars and shapes shall be 6061-T6 alloy. Reinforcement bars shall not be in contact with the aluminum. Cost incidental to Class A Concrete.



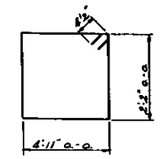
BAR h201



BAR U200



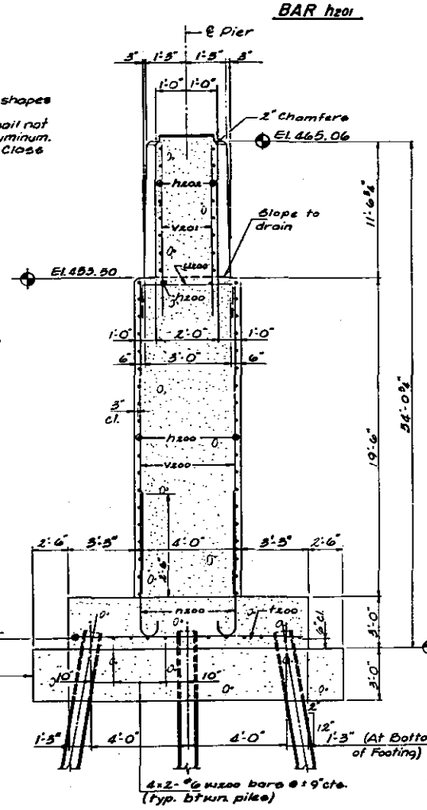
BAR n200



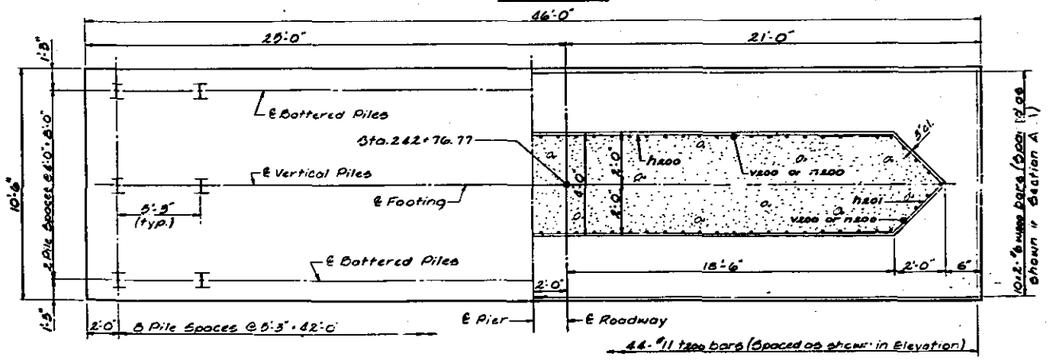
BAR S200

ELEVATION (Looking East)

Design Water El. for Seal Coat = 448.0

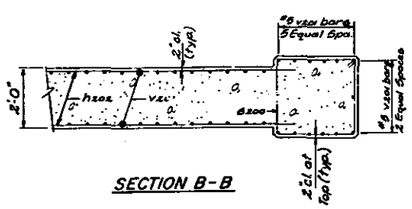


SECTION A-A



HALF PILE PLAN

HALF FOOTING PLAN



SECTION B-B

PIER 20
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
h200	84	#6	21'-3"	
h201	40	#6	7'-11"	
h202	24	#5	53'-0"	
n200	92	#7	5'-10"	
S200	24	#9	16'-11"	
t200	44	#11	10'-0"	
U200	31	#6	6'-4"	
V200	92	#7	19'-4"	
V201	88	#9	15'-6"	
W200	20	#6	23'-6"	
Class A Concrete		Cu. Yds.	216.7	
Reinforcement Bars		Lbs.	12,610	
Seal Coat Concrete		Cu. Yds.	86.1	
Steel Piles HP12x53		Lin. Ft.	1170	
Test Pile HP12x53		Each	1	
Cofferdam Excavation		Cu. Yds.	301	
Cofferdam		Each	1	

PILE DATA

Type HP12x53
Capacity Drive to Refusal
Est. Length 45'
No. Required 27*
*Includes one test pile driven in a permanent location.

PIER 20

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15 B-1
PEORIA & TAZEWELL COUNTIES

DESIGNED D.L.B.
DRAWN D.R.N.
TRACED D.A.B.
CHECKED D.L.B.

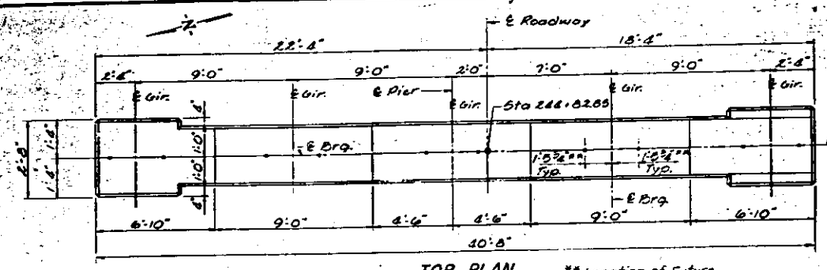
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 12-31-74

For Informational Purposes Only - Not Included In This Contract

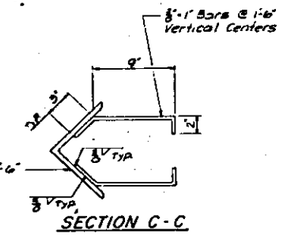
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SHEET NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA.40	15-1 (FAI)	Peoria & Tazewell	25	25A
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



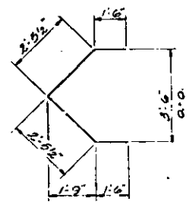
TOP PLAN

** Location of Future 1½"ø Anchor Bolts.

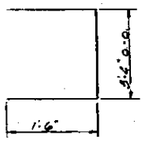


SECTION C-C

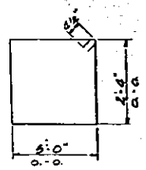
Aluminum bars and shapes shall be 6061-T6 alloy. Reinforcement bars shall not be in contact with the aluminum. Cost incidental to Class A Concrete.



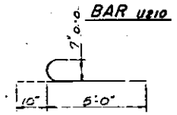
BAR h211



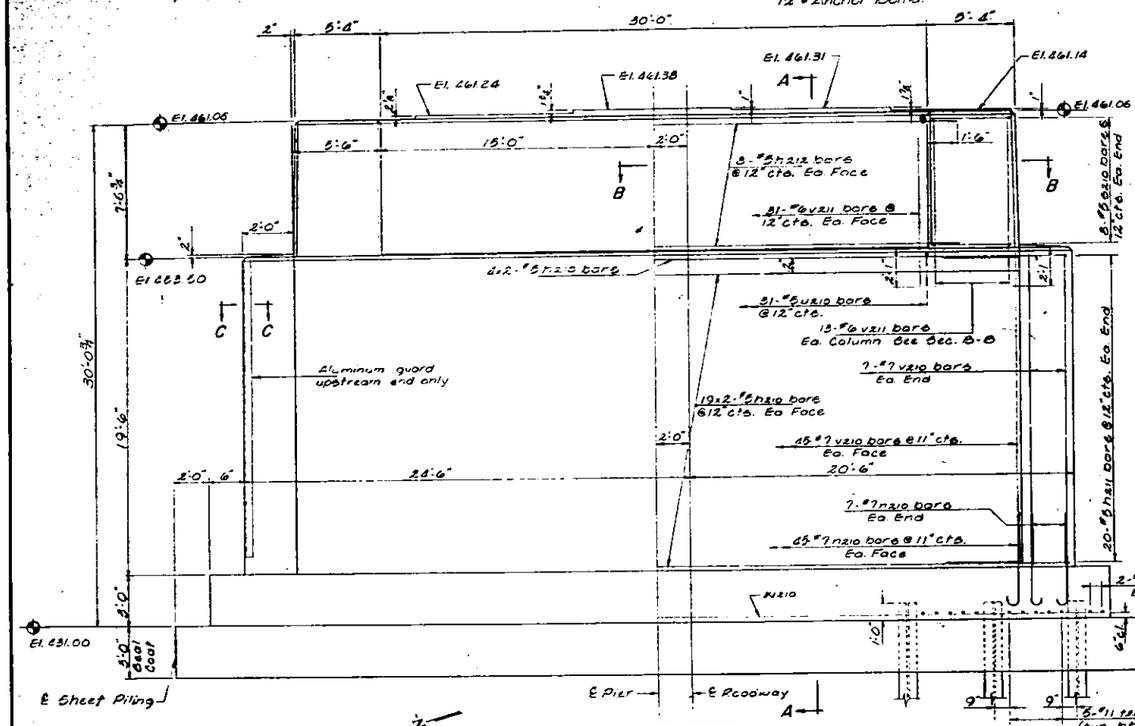
BAR u810



BAR s210



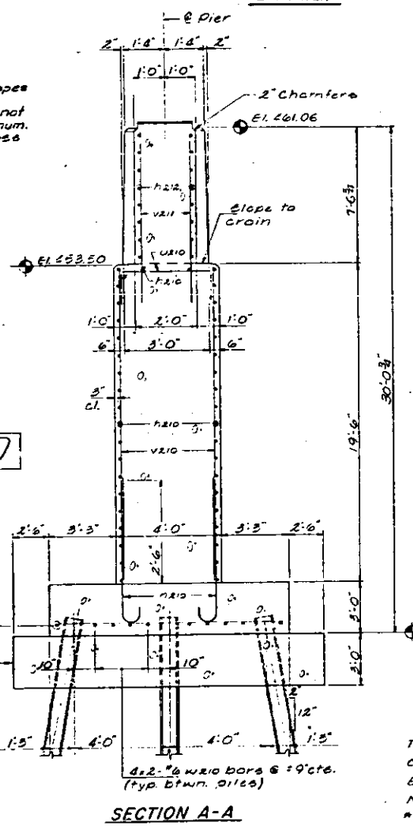
BAR n210



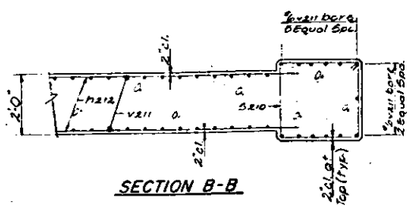
ELEVATION (Looking East)

Design Water El. for Seal Coat = 440.0

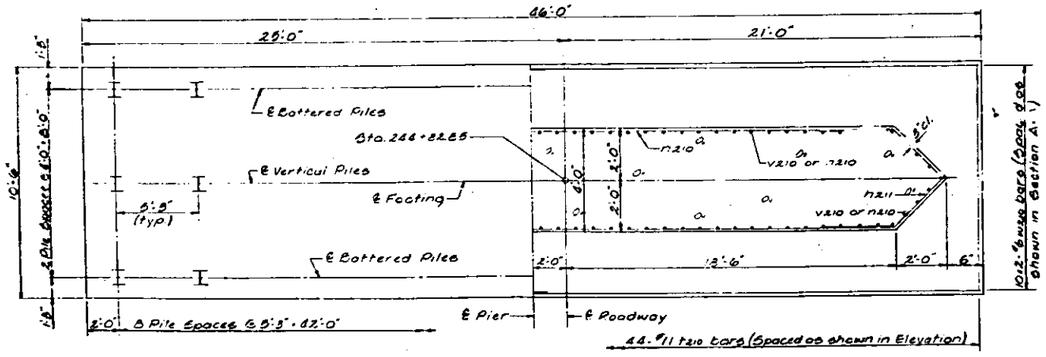
AS REVISED



SECTION A-A



SECTION B-B



HALF PILE PLAN

HALF FOOTING PLAN

PILE DATA

Type	HP 12 x 53
Capacity	Refusal
Est. Length	46'
No. Required	27*

*Includes one test pile driven in a permanent location

PIER 21
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
h210	84	#8	21'-3"	
h211	40	#9	7'-11"	C
h212	16	#5	33'-0"	
n210	104	#7	5'-10"	C
s210	16	#8	15'-9"	D
t210	44	#11	10'-0"	
u810	31	#5	6'-4"	J
v210	104	#7	19'-4"	
v211	88	#6	9'-4"	
w210	20	#6	25'-6"	

Class A Concrete	Cu. Yds.	205.1
Reinforcement Bars	Lbs.	12,850
Seal Coat Concrete	Cu. Yds.	36.1
Steel Piles HP 12x53	Lin. Ft.	1188
Test Pile HP 12x53	Each	1
Cofferdam Excavation	Cu. Yds.	313
Cofferdam	Each	1

PIER 21

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15B-1
PEORIA & TAZEWELL COUNTIES

D.L.E.	
C.R.N.	
O.A.B.	
D.L.S.	

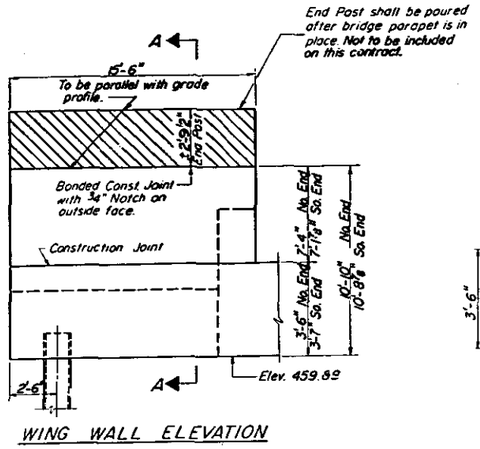
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74021
DATE 12-31-74

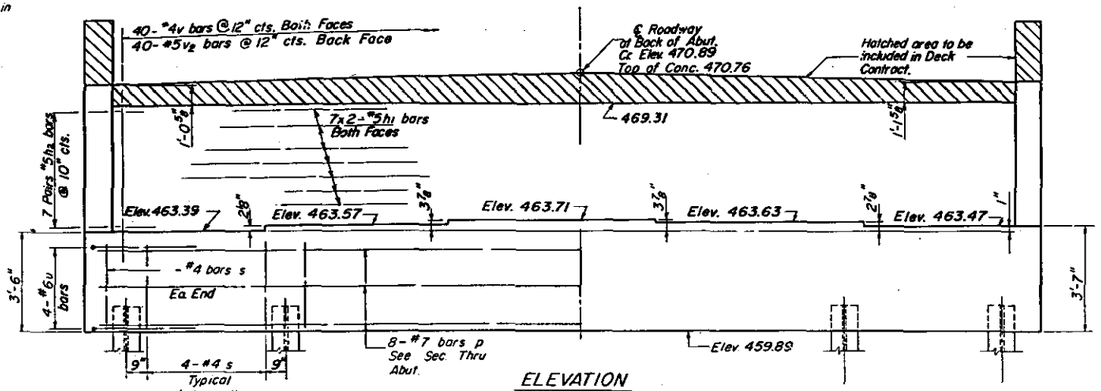
As Revised 8-24-79 L.W.

For Informational Purposes Only - Not Included In This Contract

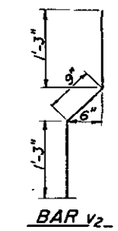
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
... 49	15-1 (F4E)	Peoria & Tazewell	25	24
FED. ROAD DIST. NO.	STATE	FED. AID PROJECT		



WING WALL ELEVATION

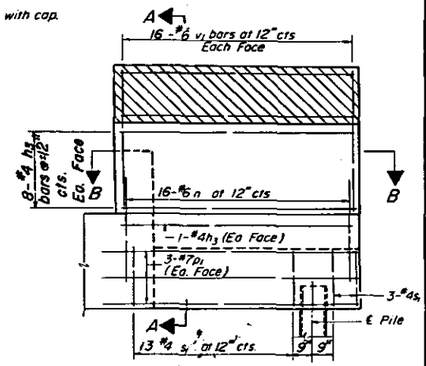


ELEVATION



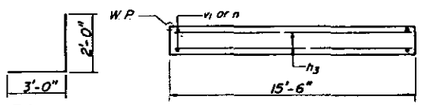
BAR v2

Pour steps monolithically with cap.



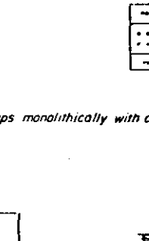
WING WALL ELEVATION

Reinforcement



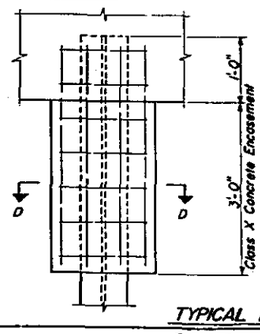
BAR h2

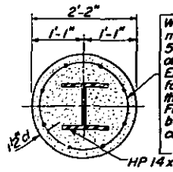
SEC. B-B



SEC. A-A

SEC. THRU ABUT.

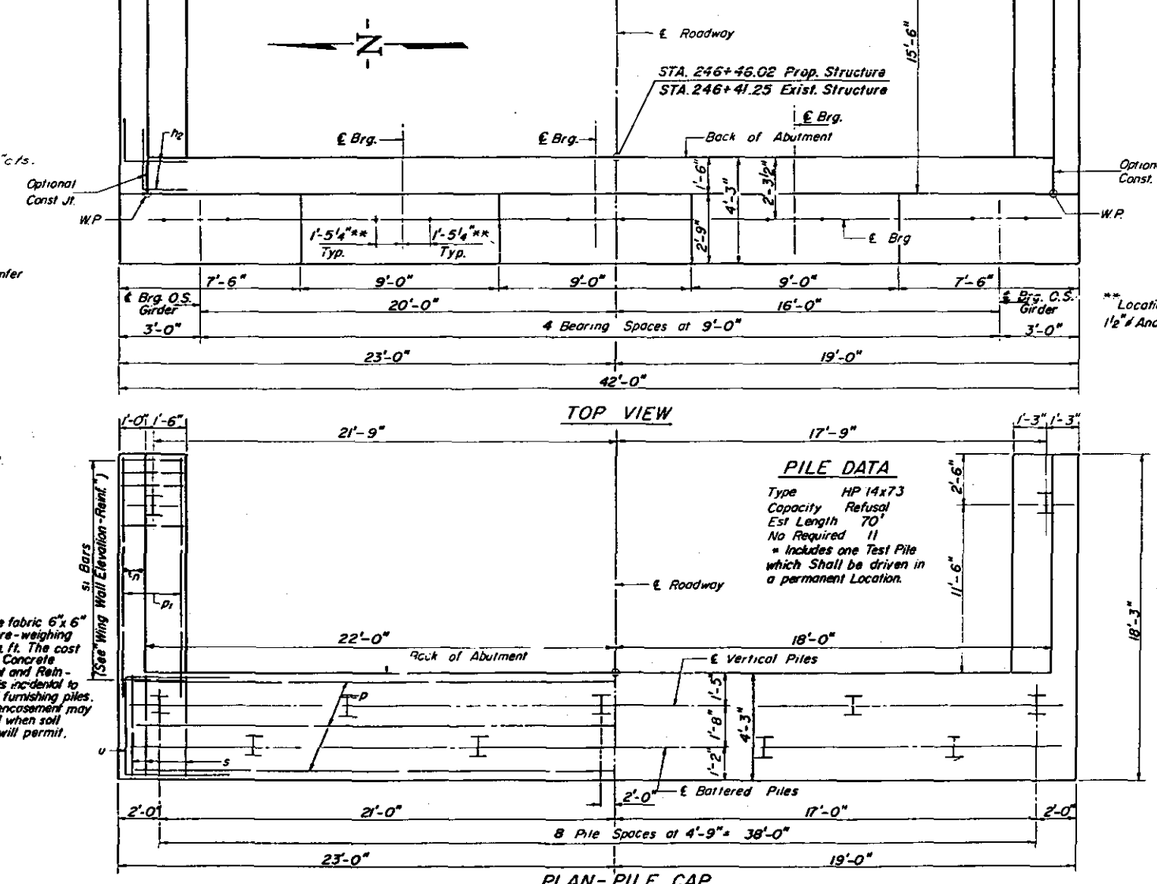




SECTION D-D

Welded wire fabric 6"x 6" mesh 4 wire - weighing 58#/100 sq. ft. The cost of Class X Concrete Encasement and Reinforcement is incidental to the cost of furnishing piles. Forms for encasement may be omitted when soil conditions will permit.

TYPICAL HP PILE ENCASEMENT

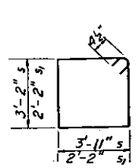


TOP VIEW

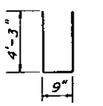
PLAN - PILE CAP

PILE DATA

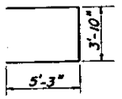
Type HP 14x73
Capacity Refusal
Est Length 70'
No Required 11
* Includes one Test Pile which Shall be driven in a permanent Location.



BAR s & s1



BAR n



BAR u

EAST ABUTMENT
BILL OF MATERIAL

Bar	No	Size	Length	Shape
h1	28	#5	21'-0"	
h2	28	#5	5'-0"	
h3	36	#4	15'-0"	
n	32	#6	9'-3"	
p	8	#7	21'-6"	
p1	12	#7	16'-0"	
s	36	#4	14'-11"	
s1	26	#4	9'-5"	
u	8	#6	14'-4"	
v2	28	#5	3'-0"	
v	80	#4	8'-9"	
v1	64	#6	9'-9"	
v3	40	#4	3'-3"	
Class X Concrete			Cu. Yds.	52.9
Reinforcement Bars			Lbs.	4960
Steel Piles HP 14 x 73			Lin. Ft.	700
Test Piles HP 14 x 73			Ea.	1

EAST ABUTMENT

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15B-1
PEORIA & TAZEWELL COUNTIES

DESIGNED DLB	HANSON ENGINEERS INCORPORATED	JOB NO. 74001
CHECKED CRN	SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS	DATE 12-31-74
DRAWN RJF		
CHECKED CRN DLB		

Rev. Reinf. Bars from 2760# to 4910# 7-31-75 D.D.

Rev. Reinf. Bars from 4910# to 4760# 7-31-75 D.D.

For Informational Purposes Only - Not Included In This Contract

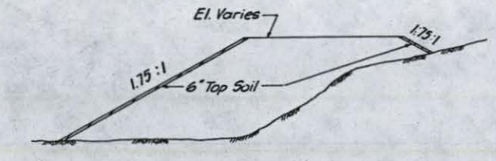
Rev. 7-31-75

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 49	15-1 (E&E)	PEORIA AND TAZEWELL	25	25
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Note:
Class II Seeding shall be applied to all areas which receive Top Soil.
Mulch Method 3 shall be used on all Class II Seeded areas.

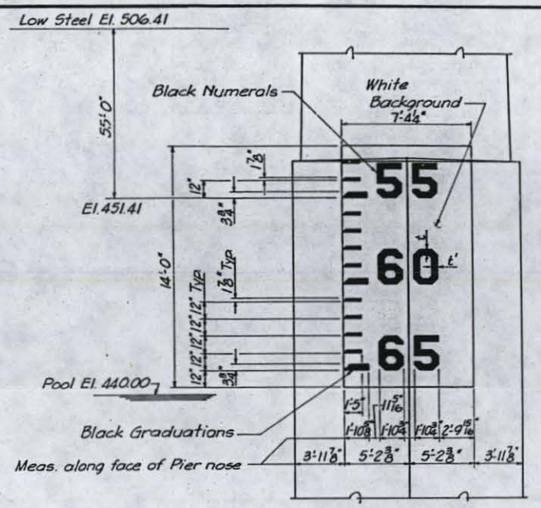
Note: Fertilizer Nutrients to be used as follows.

Type	Class II Seeding
Nitrogen	120 lbs./acre
Phosphorous	72 lbs./acre
Potassium	48 lbs./acre



SECTION A-A

Note: 6" Top Soil shall be provided on the following areas.
1.75:1 side slopes
1.75:1 front slope above slope wall
Berm

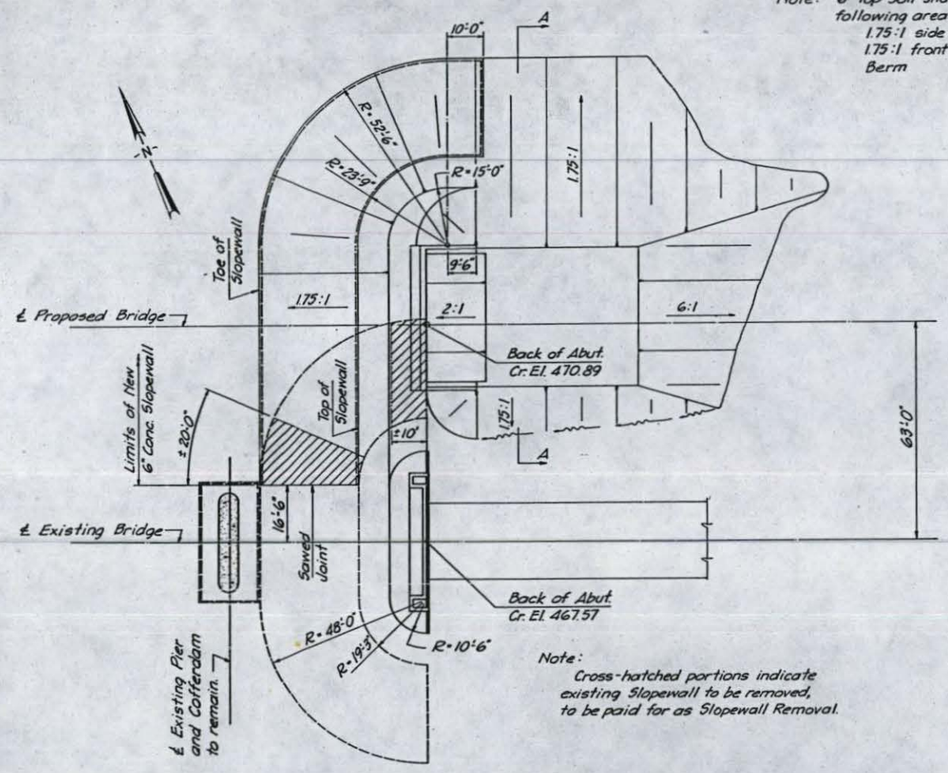


CLEARANCE GUAGE

Note:
Location - Pier II on Upstream Face.
For painting see Special Provisions - Cost Incidental.
Numerals shall conform to the 24" Series D standard numerals as set forth in the Coast Guard publication "Bridge Clearance Guages". The size, type and spacing of the numerals shall conform to the publication "Standard Alphabets for Highway Signs", Bureau of Public Roads, Department of Transportation.

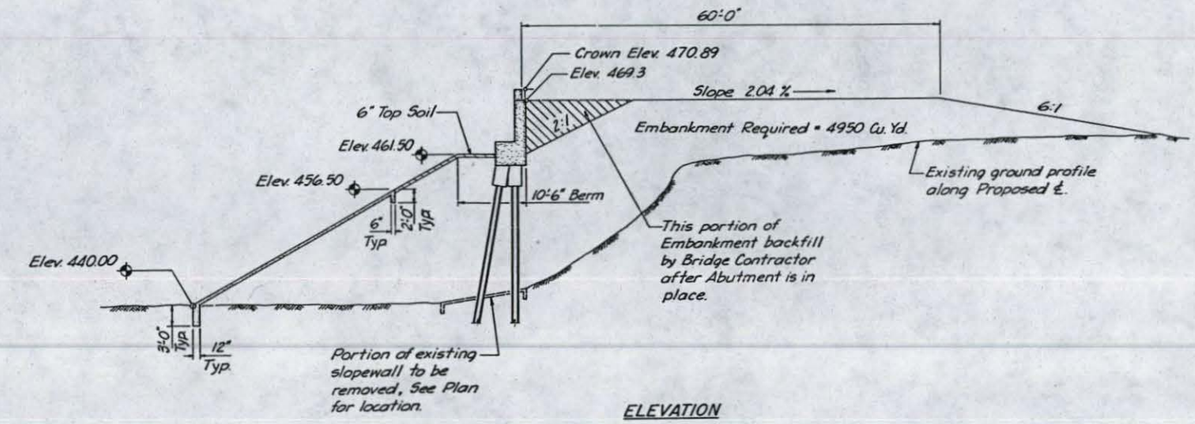
t = 3¾"

t' = 5¼"



Note:
Cross-hatched portions indicate existing Slopewall to be removed, to be paid for as Slopewall Removal.

PLAN



ELEVATION

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Embankment	Cu. Yd.	4950.0
Slopewall Removal	Sq. Yd.	89.5
Slopewall 6 Inch	Sq. Yd.	603.8
Top Soil Placement 6"	Sq. Yd.	811
Seeding Class II	Acre	0.2
Nitrogen Fert. Nutr.	Lbs.	24
Phospherous Fert. Nutr.	Lbs.	14.4
Potassium Fert. Nutr.	Lbs.	9.6
Mulch Method 3	Ton	1

REVISED 8-25-75

CLEARANCE GAUGE AND SLOPEWALL EAST ABUTMENT

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15B-1
PEORIA & TAZEWELL COUNTIES

DESIGNED CRN
CHECKED DLB
DRAWN RAH
CHECKED CRN

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 5-15-75

For Informational Purposes Only - Not Included In This Contract

F.A. 49	15B-2	PEORIA	56
			C-49(22)

P-94-156-69

INDEX OF SHEETS

1 TITLE SHEET
2 SUMMARY OF QUANTITIES
3 TYPICAL SECTIONS
4 PLAN - RAMP A
5 FENCING DETAIL & ACCESS ROAD
6,6A TRAFFIC CONTROL & PROTECTION & CONCRETE FOUNDATION DETAILS
7 CROSS SECTIONS
8 CROSS SECTIONS
9 CROSS SECTIONS
10 CROSS SECTIONS
11 GENERAL PLAN & ELEVATION
12 HORIZONTAL CONTROL, BENCH MARKS & R.O.W.
13 FOOTING LAYOUT - MAIN LINE & RAMP F
14 FOOTING LAYOUT - MAIN LINE
15 FOOTING LAYOUT - RAMP E
16 STEEL PLATE BEAM GUARD RAIL - REMOVAL OF SUPERSTRUCTURE
17 WEST ABUTMENT
18 WEST ABUTMENT EMBANKMENT & SHEETING
19 PIER 2
20 PIER 3
21 PIER 4
22 PIER 5
23 PIER 6
24 PIER 7
25 PIER 8
26 PIER 9
27 NORTH ABUTMENT
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29 RAMP F EARTH EXCAVATION CROSS SECTIONS
30 PIER 2F
31 SOUTH ABUTMENT
32 SOUTH ABUTMENT EMBANKMENT
33 RAMP E EARTH EXCAVATION CROSS SECTIONS
34 PIER 2E
35 PIER 3E
36 PIER 4E
37 PIER 5E
38 PIER 6E
39 PIER 7E
40 PIER 8E
41 PIER 9E
42 CONCRETE PILE STANDARD
43 BORING PLAN
44 BORING PLAN
45-52 BORINGS
53-55 MONITORING SYSTEM
56 UTILITY & RIGHT OF WAYS
56A TRAFFIC BARRIER TERMINAL DETAILS

STANDARDS:

1683-4	2214-4	2302-3
1686-4	2217-3	2303-4
2130-5	2230-11	2305-3
2168-8	2298-4	2323-3
2169-6	2299-7	2337
2176-1	2300-1	

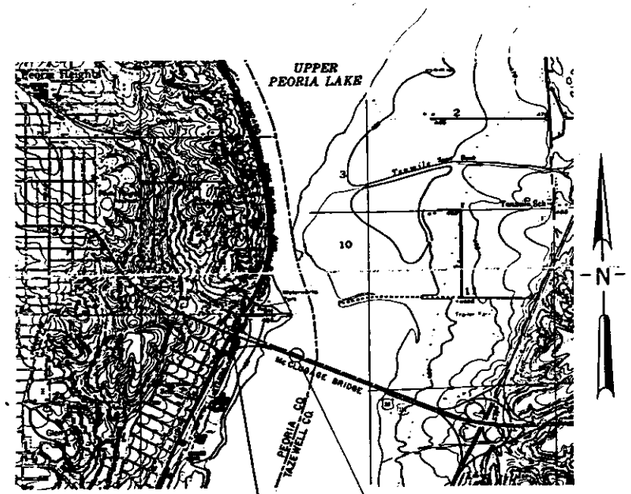
DESIGN DESIGNATION
3996 (94) MAJOR (PCC-20)

CONTRACT NO. 32837

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

F.A. ROUTE 49 (F.A. RTE. 31)
SECTION 15B-2
PROJECT F-49(22)
PEORIA COUNTY

C-94-121-76



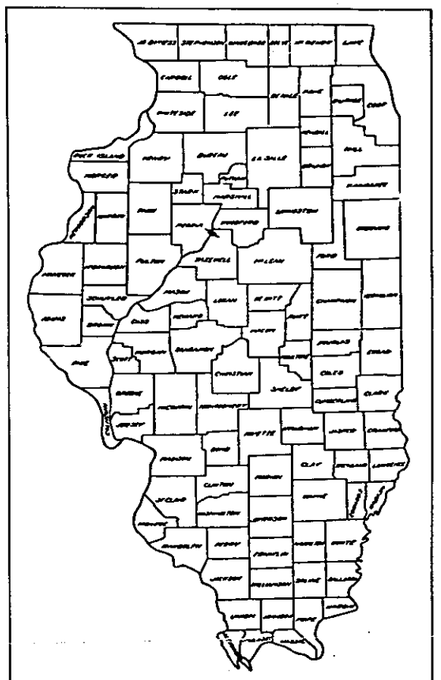
PROPOSED PROJECT BEGINS STA. 199+00.77

PROPOSED PROJECT ENDS STA. 213+3777

NET LENGTH OF PROPOSED IMPROVEMENT & PROJECT
1437 LIN. FT. = 0.272 MI.

LAYOUT
SCALE = 1" = 200'

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 RAMP A AND WIDENING ON ADAMS ST.



LOCATION OF SECTION INDICATED THUS

REVISED SET
12-20-77

SUBMITTED July 27 1977 — DIST. CONSTR. ENGR.
EXAMINED June 30, 1977 — DIST. CONST. ENGR.
EXAMINED June 24, 1977 — DIST. BUDGET ENGR.
EXAMINED July 7, 1977 — DIST. TRAFFIC ENGR.
Entire section inspected and approved as to policy.
DATE 2-27-77 — DISTRICT ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 7-27 19 77 — DISTRICT ENGINEER
EXAMINED 8-6 19 77 — ENGINEER OF PLANS AND CONTRACTS
PASSED 8-6 19 77 — ENGINEER OF DESIGN
APPROVED 8-6 19 77 — DIRECTOR OF HIGHWAYS

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED
DIVISION ADMINISTRATOR — DATE

Revised 10-18-77
Rev 12-20-77
Rev 2-20-77

REEL 4-123

CONTRACT NO. SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 49	158-2	PEORIA	56	2
STA.	TO STA.			
FHWA PROJ. NO. #	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

CONSTR TYPE CODE

CODE NO	ITEM	UNIT	TOTAL QUANTITY
201001	TREE REMOVAL (6 TO 15 INCH DIAMETER)	IN.DIA.	584
201002	TREE REMOVAL (OVER 15 INCH DIAMETER)	IN.DIA.	580
202001	EARTH EXCAVATION	CU.YD.	1508
308007	BITUMINOUS BASE COURSE 10 INCHES	SQ.YD.	424
306005	BITUMINOUS CONCRETE BASE COURSE WIDENING 10 INCHES	SQ.YD.	467
406006	LEVELING BINDER (HAND METHOD)	TON	22
406013	BITUMINOUS CONCRETE SURFACE COURSE, CLASS I, MIX D	TON	156
501015	REMOVAL OF EXISTING SUPERSTRUCTURE	EACH	1
501024	CONCRETE REMOVAL	CU.YD.	9.6
501038	EXPANSION BOLTS 7/8"	EACH	347
502001	STRUCTURE EXCAVATION	CU.YD.	2,391
502003	COFFERDAM EXCAVATION	CU.YD.	2,046
502014	COFFERDAM PIER 9	EACH	1
502013	COFFERDAM PIER 8	EACH	1
502012	COFFERDAM PIER 7	EACH	1
502011	COFFERDAM PIER 6	EACH	1
X06188	COFFERDAM PIER 9 E	EACH	1
X06186	COFFERDAM PIER 8 E	EACH	1
X06184	COFFERDAM PIER 7 E	EACH	1
X06182	COFFERDAM PIER 6 E	EACH	1
502009	COFFERDAM PIER 4	EACH	1
504002	CLASS A CONCRETE	CU.YD.	4452.9
504003	CLASS X CONCRETE	CU.YD.	165.2
504004	SEAL COAT CONCRETE	CU.YD.	519.1
504008	CLASS X CONCRETE (OUTLETS)	CU.YD.	1.0
512001	REINFORCEMENT BARS	LBS.	457,860
513016	FURNISHING STEEL PILES HP 10 X 42	LIN.FT.	2,538
513015	FURNISHING STEEL PILES HP 10 X 57	LIN.FT.	1,326
513016	FURNISHING STEEL PILES HP 12 X 53	LIN.FT.	8,047
513018	FURNISHING STEEL PILES HP 14 X 73	LIN.FT.	909
513022	FURNISHING CONCRETE PILES (12" DIA)	LIN.FT.	10,213
513027	DRIVING STEEL PILES	LIN.FT.	13,058
513028	DRIVING CONCRETE PILES	LIN.FT.	10,213
513034	TEST PILE - STEEL HP 10 X 42	EACH	2
513035	TEST PILE - STEEL HP 10 X 57	EACH	1
513036	TEST PILE - STEEL HP 12 X 53	EACH	4
513038	TEST PILE - STEEL HP 14 X 73	EACH	2
513042	TEST PILE - 12" CONCRETE	EACH	11
513049	STEEL SHEET PILING	SQ.FT.	4,017
513052	TEMPORARY STEEL SHEET PILING	SQ.FT.	1,950
612357	INLETS, TYPE A, TYPE 3 FRAME & GRATE	EACH	2
612362	INLETS, TYPE A, TYPE 8 GRATE	EACH	1
615303	FILLING EXISTING INLETS	EACH	4
616038	COMBINATION CONCRETE CURB & GUTTER, TYPE B-612	LIN.FT.	140
616050	COMBINATION CONCRETE CURB & GUTTER, TYPE B-624	LIN.FT.	356
616586	COMBINATION CONCRETE CURB & GUTTER, TYPE M-606	LIN.FT.	27
616604	COMBINATION CONCRETE CURB & GUTTER, TYPE M-624	LIN.FT.	160
616035	COMBINATION CONCRETE CURB & GUTTER, TYPE B-606	LIN.FT.	200
617001	PAVEMENT REMOVAL	SQ.YD.	702
617005	COMB. CURB & GUTTER REMOVAL	LIN.FT.	1,945
617040	BITUMINOUS CONCRETE SURFACE REMOVAL	SQ.YD.	187
617051	MEDIAN REMOVAL	SQ.FT.	150
620062	PAVEMENT REMOVAL & PORTLAND CEMENT CONCRETE REPLACEMENT SPECIAL 9"	SQ.YD.	29
X62857	STEEL PLATE BEAM GUARD RAIL, TYPE A	LIN.FT.	320
628006	STEEL PLATE BEAM GUARD RAIL, SINGLE RAIL (SPECIAL)	LIN.FT.	299
629003	CHAIN LINK FENCE, 6'	LIN.FT.	150
629119	TEMPORARY FENCE	LIN.FT.	203
633001	METAL PLATE GUARD RAIL REMOVAL	LIN.FT.	214
633004	CABLE ROAD GUARD REMOVAL	LIN.FT.	400
642002	SEEDING, CLASS II	ACRE	0.7
646006	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	20
L03200	* HANDHOLE	EACH	1
L04300	* TRENCH & BACKFILL	LIN.FT.	65
L05679	* POLE, METAL 30 FT. WITH 10 FT. MAST ARM	EACH	1
L02200	* POLE FOUNDATION	EACH	1

SUMMARY OF QUANTITIES

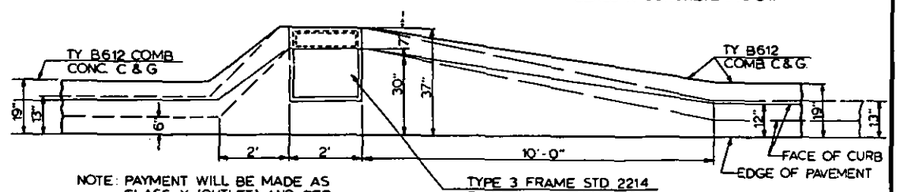
CONSTR TYPE CODE

CODE NO	ITEM	UNIT	TOTAL QUANTITY
L02781	*ELECTRIC CABLE, UNIT DUCT, 2-600 VXLP #6; 1 INCH POLYETHYLENE	LIN.FT.	65
L05180	*ELECTRIC CONDUCTOR (BARE ANNEALED COPPER) NO.6	LIN.FT.	65
L05676	*LAMP, 250 WATT HPS	EACH	1
L05508	*LUMINAIRE, SODIUM VAPOR, W/BUILT IN REGULATOR BALLAST 250 WATT	EACH	1
Z10015	BARRICADES (TYPE III)	LIN.FT.	85
T50101	*THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS	SQ.FT.	78
T50102	*THERMOPLASTIC PAVEMENT MARKING - LINE 4"	LIN.FT.	4,447
T50105	*THERMOPLASTIC PAVEMENT MARKING - LINE 8"	LIN.FT.	155
T50106	*THERMOPLASTIC PAVEMENT MARKING - LINE 12"	LIN.FT.	246
X06258	DISMANTLE MONITORING SYSTEM	L.SUM	1
648018	TRAFFIC CONTROL & PROTECTION SPECIAL	L.SUM	1
628031	TRAFFIC BARRIER TERMINAL, TYPE 1	EACH	2
628032	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1
T50202	PAINT PAVEMENT MARKING - LINE 4"	LIN.FT	1320
X06239	WELLS 6"	LIN.FT	311
X06240	WELLS 12"	LIN.FT	69
X06241	PUMPS	L.SUM	1
X06242	MONITORING EQUIPMENT	L.SUM	1
X06243	SETTLEMENT MONUMENT	LIN.FT	47
Z10527	TRAINEES	HOUR	3,000

* SPECIALTY ITEMS

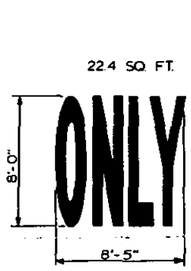
OUTLET - STATION 61+10± 30' RT.

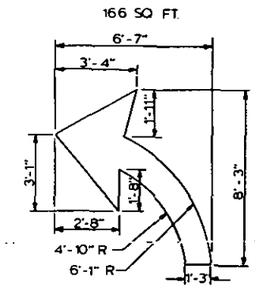
QUANTITIES
CLASS X CONCRETE = 1.0 C.Y.



NOTE: PAYMENT WILL BE MADE AS CLASS X (OUTLET) AND PER EACH INLET TYPE A WITH TYPE 3 FRAME & GRATE SEE STDS. 2214 & 1683-1
USE ½ Φ STEEL TIE BARS @ 2'-6" CTRS. (INCIDENTAL TO CLASS X (OUTLET))

ARROW DETAILS





LEFT ARROW

RESURFACING AND WIDENING QUANTITIES

LOCATION	LENGTH (FT)	WIDTH (FT)	BIT CONC SURF CSE CLASS I MIX D 112 LBS/SQ YD/IN (TONS)	BASE CSE WIDENING 10" SQ YD	BIT BASE CSE 10" SQ YD	PRIME COAT # (GAL) .075 GAL/YD	LEVELING BINDER HAND METHOD 112 LBS/SQ YD/IN (TONS)	AGGREGATE * PRIME COAT 4 LBS/SQ YD (LBS)
ADAMS STREET								
STA. 56+15.00-57+65	150.00	0 TO 7.05	3.20	38.1	-	-	-	-
STA. 57+65-58+27.8	62.80	7.05 TO 10.0	5.31	64.4	-	.66	-	35
STA. 58+27.8-59+90.7	162.90	10	15.21	67.3	-	8.49	-	453
STA. 59+90.7-427+12	349.30	10	30.73	261.4	-	7.83	-	418
RAMP "A"								
STA. 0+00 - 1+00 LT.	100	VAR.	9.66	-	115	86.25	10.0	-
STA. 1+30 - 2+00 LT.	100	VAR.	2.77	33	-	24.25	-	-
STA. 0+00 - 0+35	35.00	10'	13.34	-	18.0	11.90	-	-
STA. 0+35 - 1+54	113.00	19	20.00	-	-	17.85	-	-
STA. 1+54 - 3+27.08	173.08	12	30.69	-	-	27.40	-	-
STA. 3+27.08 - 5+35.8	209.72	VAR.	21.49	-	291.4	-	12.0	-
STA. 5+35.8 - 5+40±	40.0		.99	11.81	-	-	-	-
TOTAL			155.4	466.6	424.4	184.6	22.0	906

FOR INFORMATION ONLY

EARTH EXCAVATION

N. ABUT.	869 CU YD
S. ABUT.	465 CU YD
ADAMS ST.	50 CU YD
RAMP A EXT.	124 CU YD

EARTH EMBANKMENT

	—
	95 CU YD
	17 CU YD

METAL PLATE BEAM GUARD RAIL REMOVAL

W. ABUT.	44 L.F.
N. ABUT.	170 L.F.

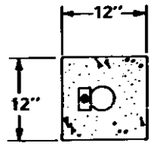
SEEDING CLASS II

W. ABUT.	0 ACRE
N. ABUT.	0 ACRE
S. ABUT.	0 ACRE
RAMP A EXT.	01 ACRE

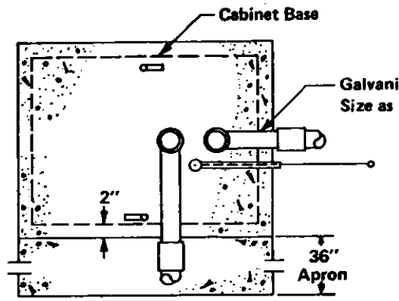
FA 31 - SECTION 158-2
SUMMARY OF QUANTITIES
RESURFACING AND WIDENING QUANTITIES
ARROW DETAILS
OUTLET DETAIL

REVISED 9-20-77

FA 49 156-2 PEORIA Sh 64



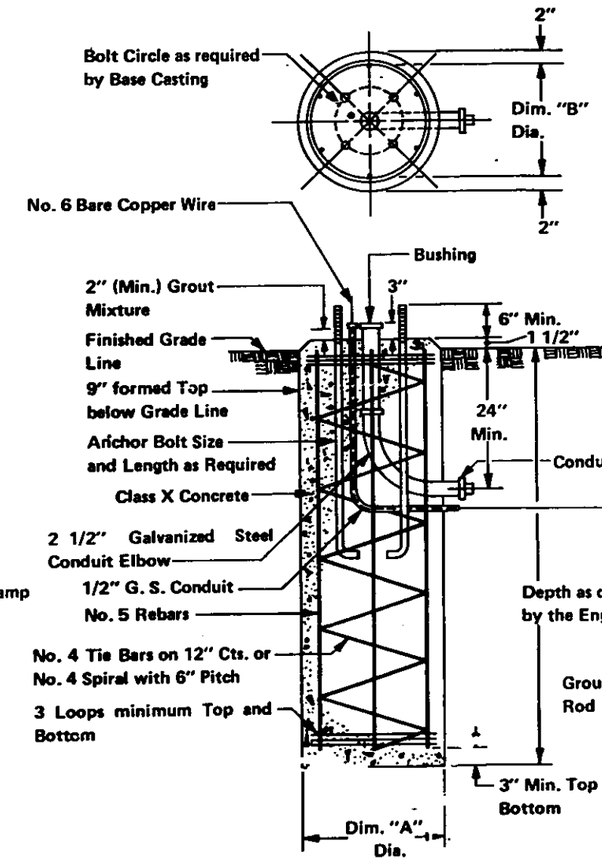
TOP VIEW



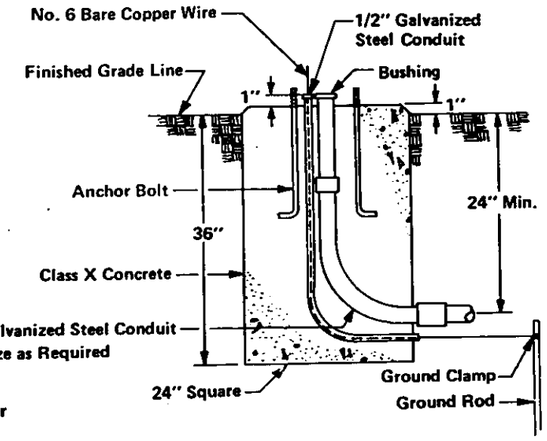
TOP VIEW

Mast Arm Length	Dim. "A"	Dim. "B"	Number of No. 5 Rebars
Less Than 30'	24"	20"	6
30' and Longer	30"	26"	8

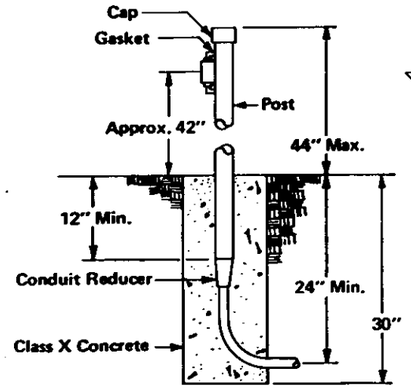
TOP VIEW



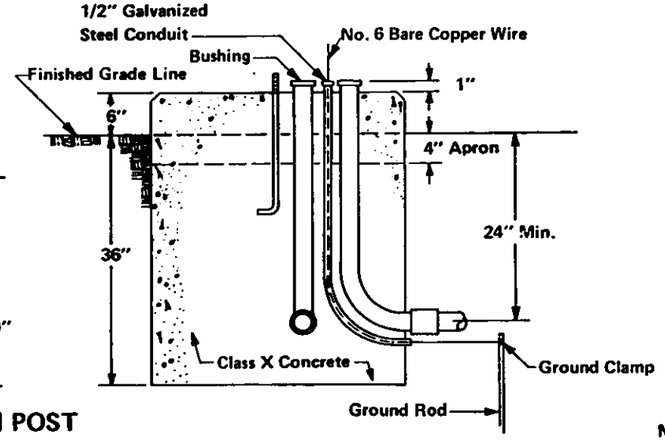
TYPE "E" FOUNDATION



TYPE "A" FOUNDATION



PEDESTRIAN PUSHBUTTON POST INSTALLATION



TYPE "D" FOUNDATION FOR GROUND MOUNTED CONTROLLER CABINET

NOTES

1. The dimensions of the type "D" foundation shall be 4" wider and longer than the base dimensions of the controller cabinet.
2. The ground rod shall be installed in the bottom of conduit trench.

ISSUED 1-1-77
REVISED
BY DATE

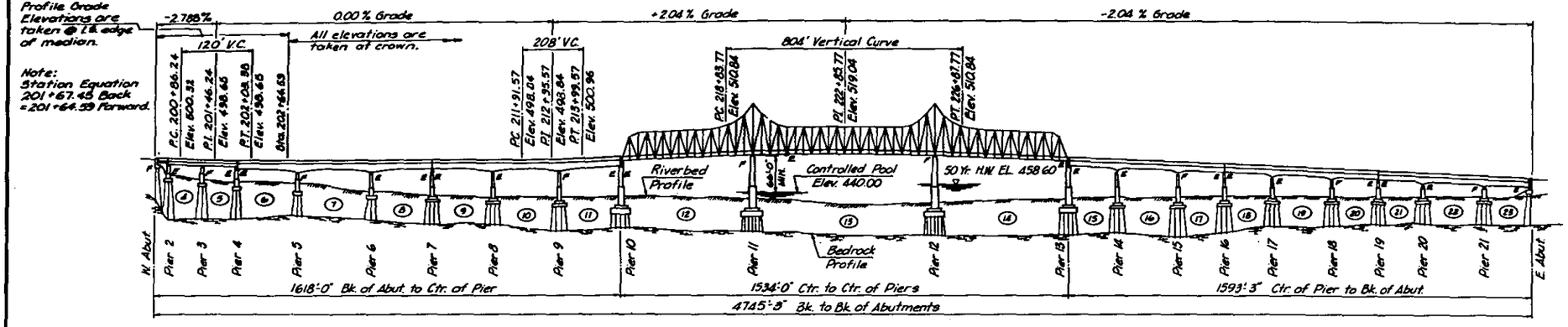
APPROVED 3-16 1977
Engineer of Design and Traffic Structures

APPROVED 3-16 1977
L. E. Moberly
Engineer of Traffic

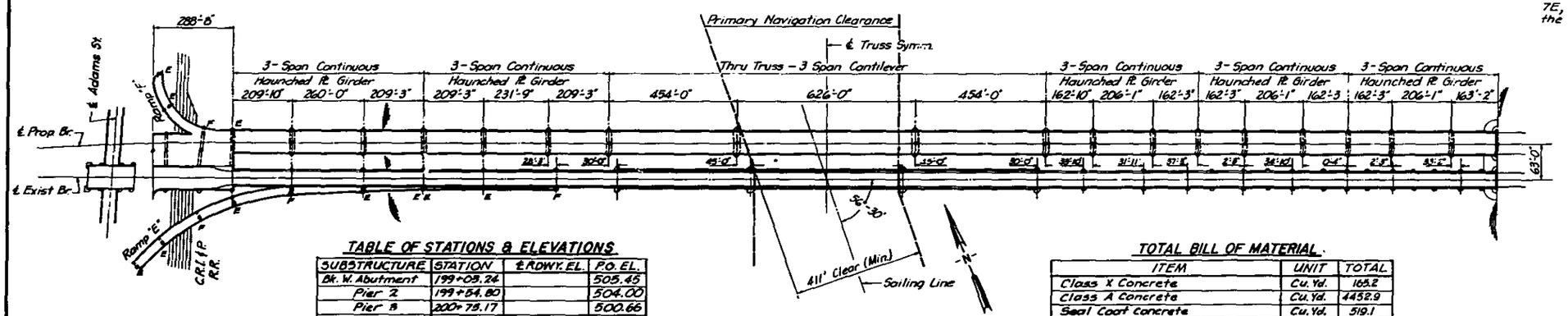
DETAILS OF CONCRETE FOUNDATIONS

Added 9-30-77

FA. 31	158-2	PEORIA AND TAZEWELL	56	11



ELEVATION



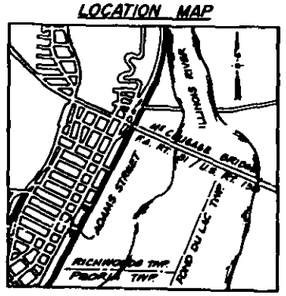
PLAN

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.

TABLE OF STATIONS & ELEVATIONS

SUBSTRUCTURE	STATION	℄ ROWY. EL.	PO. EL.
Bk. W. Abutment	199+09.24		505.45
Pier 2	199+54.80		504.00
Pier 3	200+79.17		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	493.87	
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+58.8		499.59
Pier 2E	9+99		502.31
Pier 3E	11+60		501.22
Pier 4E	12+93.875		498.57
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		498.85
Pier 9E	24+95.99		498.64
Bk. N. Abutment	9+65.54		499.71
Pier 2F	8+58.80		499.81

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 H 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	Lin. Ft.	10213
Test Pile Concrete	Each	11
Steel Piles HP 10 x 42	Lin. Ft.	2539
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.	1950
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.	216
SN 2 Cm. Guard Rail, Single Rail (Special)	Lin. Ft.	209
Expansion Bolts - 7/8" ϕ	Each	347

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 ¾" chamfer unless otherwise shown on the plans.

Reinforcement bars indicated with Ⓜ 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 ½ 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 bolt 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.

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Chief of Bridge & Traffic Structures

EUGENE R. WILKINSON
1981
REGISTERED
STRUCTURAL ENGINEER
OF
ILLINOIS

GENERAL PLAN & ELEVATION

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 158-2
PEORIA & TAZEWELL COUNTIES

C.R.N.
R.A.H.
D.A.N.
C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD ILLINOIS PEORIA ILLINOIS

74001

6-22-76

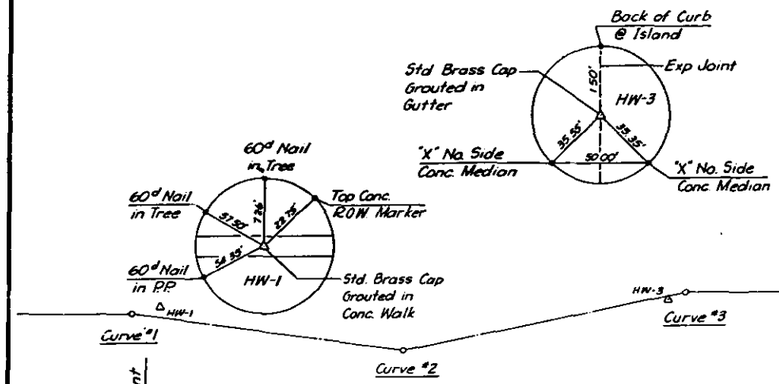
SHEET NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 31	158-2	PEORIA AND TAZEWELL	54	12
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJ. NO.		

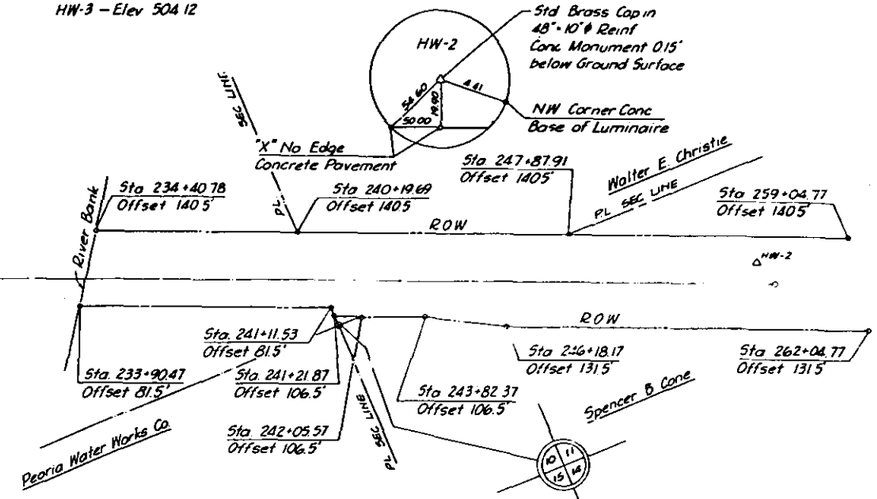
Curve #1
PI = 183+00.081
Δ = 4°-00'-00"
D = 1°-00'-00"
T = 200.081'
R = 5729.578'
L = 400.00'

Curve #2
PI = 191+00.637
Δ = 10°-00'-00"
D = 2°-00'-00"
T = 250.637'
R = 2864.789'
L = 500.00'

Curve #3
PI = 199+35.06
Δ = 6°-00'-00"
D = 2°-00'-00"
T = 150.137'
R = 2864.789'
L = 300.00'

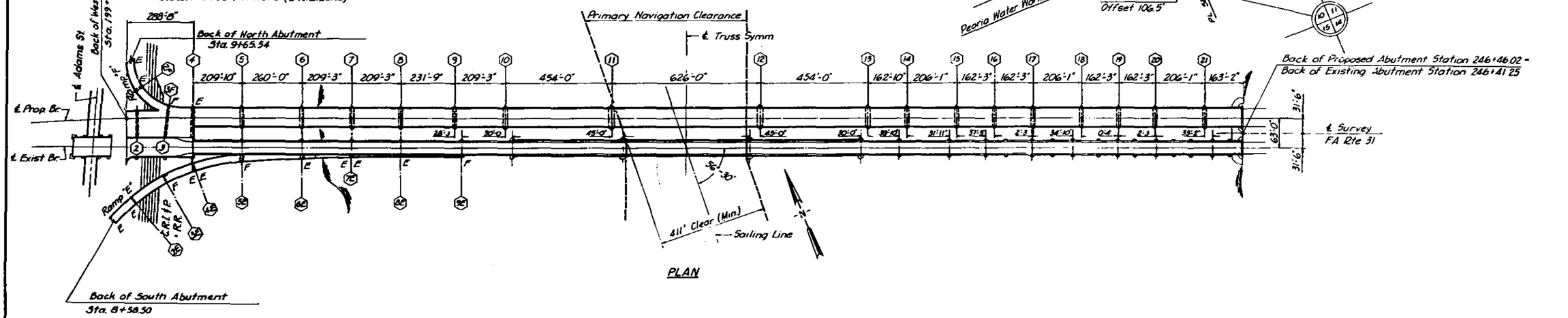
Bench Mark Data
HW-1 – Elev 562.11
HW-2 – Elev 461.60
HW-3 – Elev 504.12





℄ SURVEY F.A. ROUTE 31

STATION EQUATION
Sta 201+67.45 Back (℄ W.B. Lane) =
Sta 201+64.59 Forward (℄ W.B. Lane)



PLAN

RAMP F CURVE DATA
P.I. = 8+74.623
Δ = 91°-59'-00.68"
D = 27°-56'-36.98"
T = 212.223
R = 205.0'
L = 329.10'

RAMP E CURVE DATA
P.I. = 9+43.15
Δ = 53°-30'-58.01"
D = 2°-00'-00.00"
T = 240.746'
R = 477.465'
L = 445.968'

RAMP E CURVE DATA
P.I. = 13+46.99
Δ = 29°-08'-50.90"
D = 7°-30'-00.0"
T = 199.619'
R = 763.944'
L = 388.633'

HORIZONTAL CONTROL, BENCH MARKS & ROW

McCLUGAGE BRIDGE OVER THE ILLINOIS RIVER

F.A. ROUTE 31 SEC. 158-2
PEORIA & TAZEWELL COUNTIES

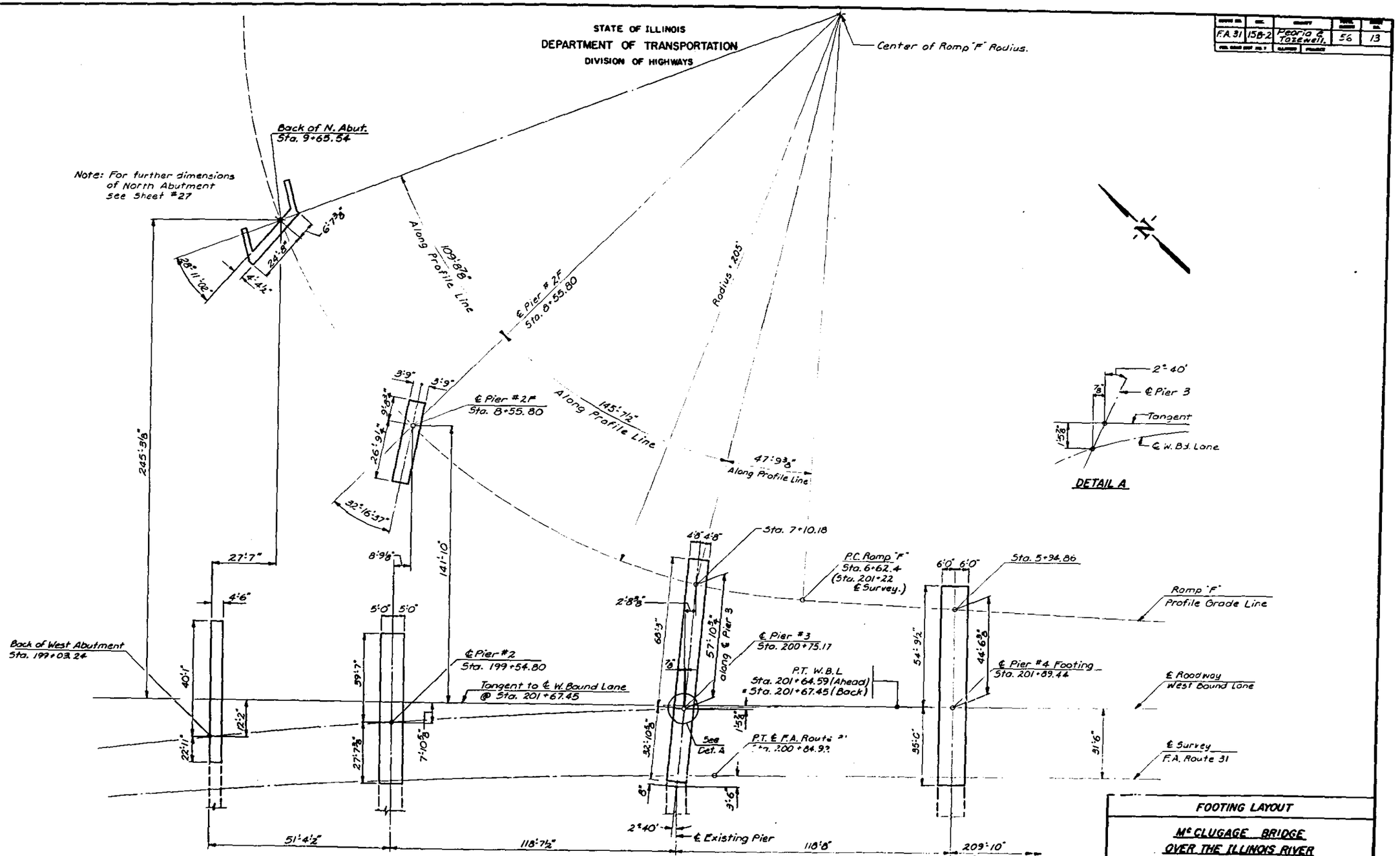
CRM
DLB
RAH
CRM

HANSON ENGINEERS INCORPORATED
SPRINGFIELD ILLINOIS PEORIA ILLINOIS

JOB NO. 74001
DATE 6-22-76

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

F.A. 31	15B-2	Peoria & Tazewell	56	13



FOOTING PLAN - PIERS 2F, 2, 3, 4, N & W. ABUTS

DETAIL A

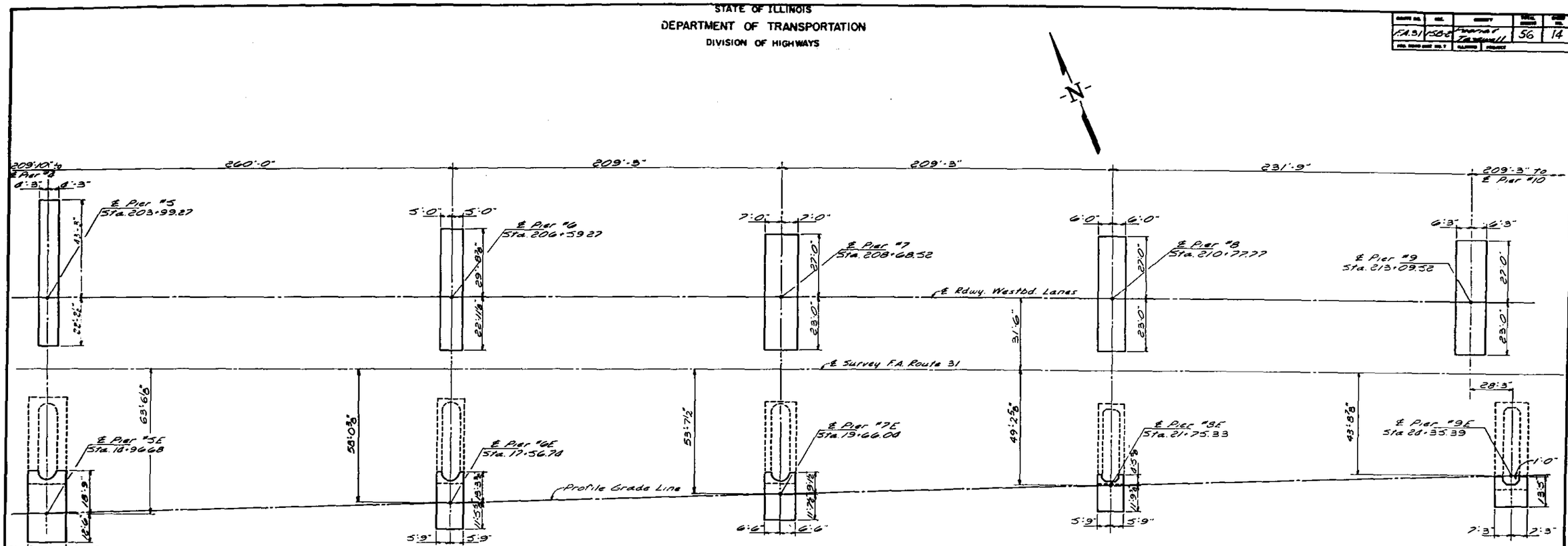
FOOTING LAYOUT

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

SCQ	HANSON ENGINEERS INCORPORATED	File No. 74001
CRN	SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS	Date 6-22-76
DAN		
CRN		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.31	158-2	Tazewell	56	14
FED. ROAD PROJ. NO.		CLASSIFICATION	PROJECT	



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

FOOTING LAYOUT

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 158-2
PEORIA & TAZEWELL COUNTIES

CRN
WDL
CRC
CRN

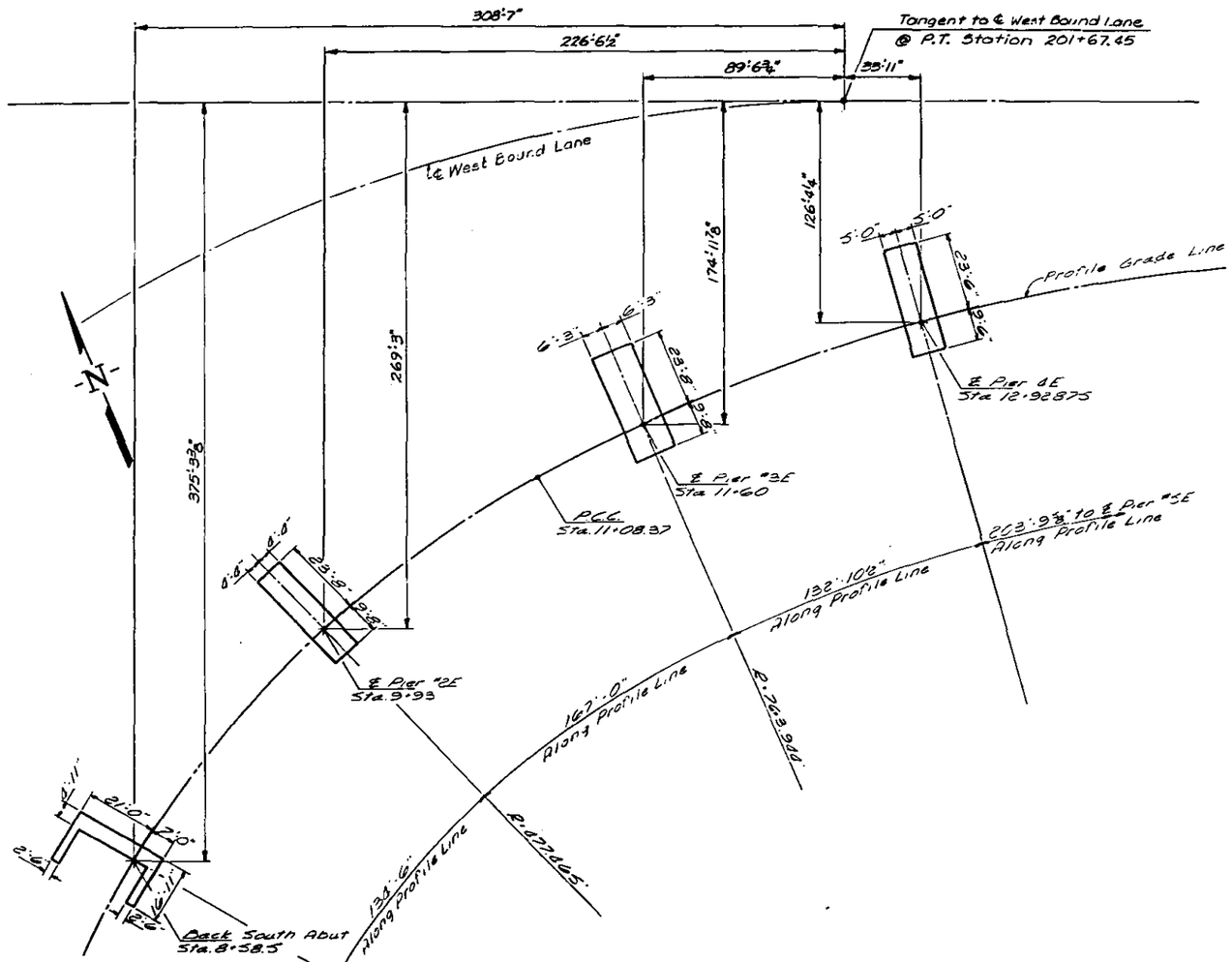
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

74001

6-22-76

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

FA 31	158-2	Peoria & Tazewell	58	15



FOOTING PLAN - PIERS 2E, 3E, 4E, SOUTH ABUT.
(Not to Scale)

FOOTING LAYOUT

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 158-2
PEORIA & TAZEWELL COUNTIES

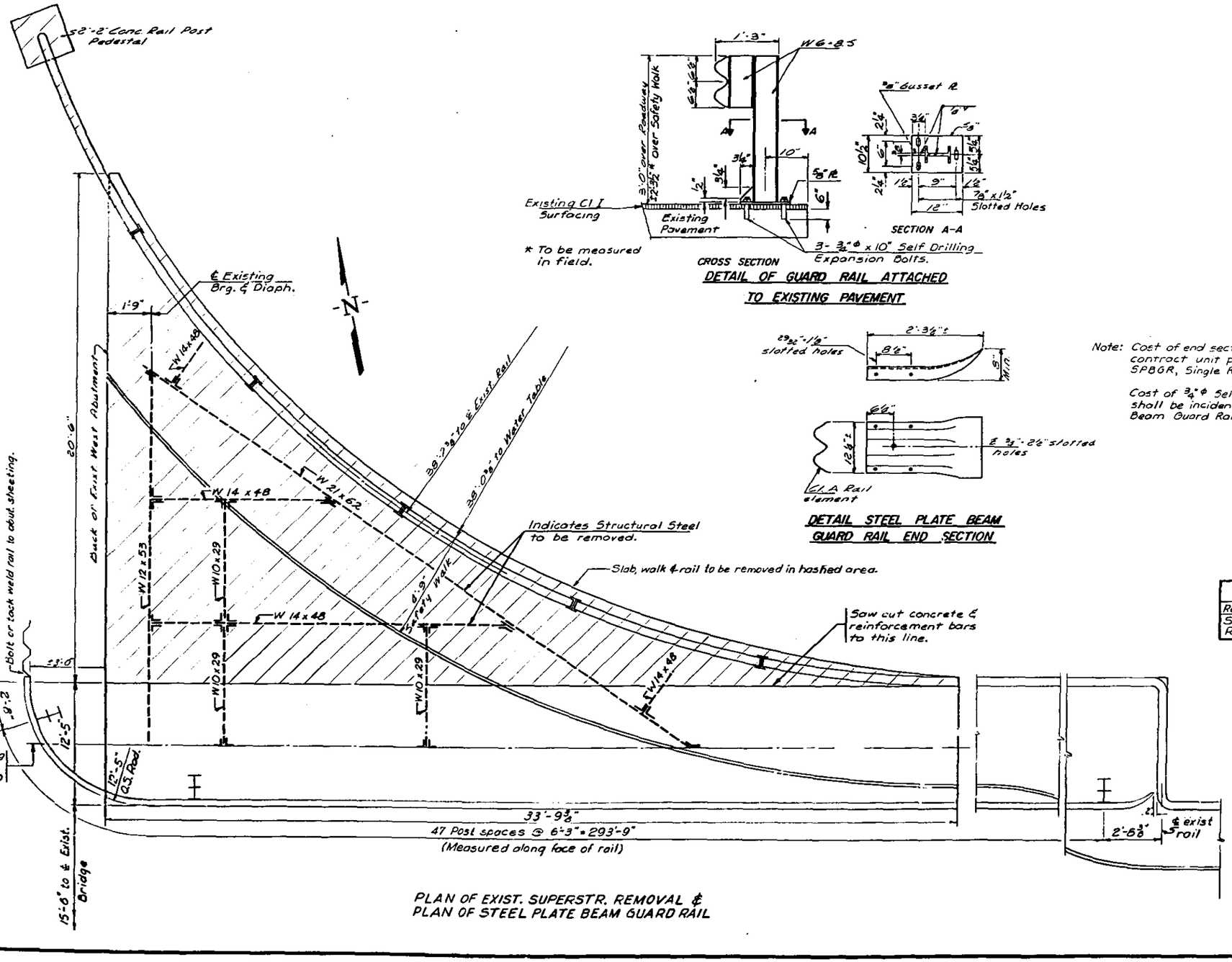
SCH
CRN
CPC
CRN

HANSON ENGINEERS INCORPORATED
SPRINGFIELD ILLINOIS PEORIA ILLINOIS

No. 74001
Date 6-22-76

FA31	158-2	Peoria & Tazewell	56	16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS



PLAN OF EXIST. SUPERSTR. REMOVAL ℄
PLAN OF STEEL PLATE BEAM GUARD RAIL

DETAIL OF GUARD RAIL ATTACHED TO EXISTING PAVEMENT

DETAIL STEEL PLATE BEAM GUARD RAIL END SECTION

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

Cost of ¾"ϕ 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

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 158-2
PEORIA & TAZEWELL COUNTIES

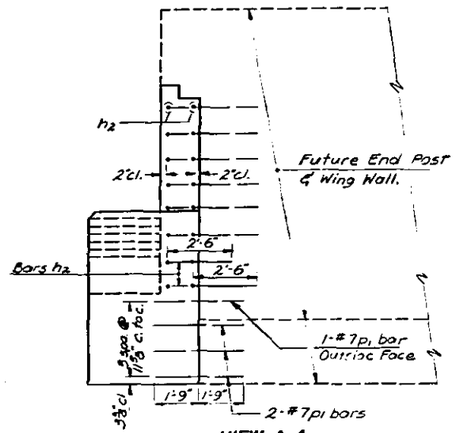
C.R.-
M.L.
C.P.C.
C.R.V.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD ILLINOIS PEORIA ILLINOIS

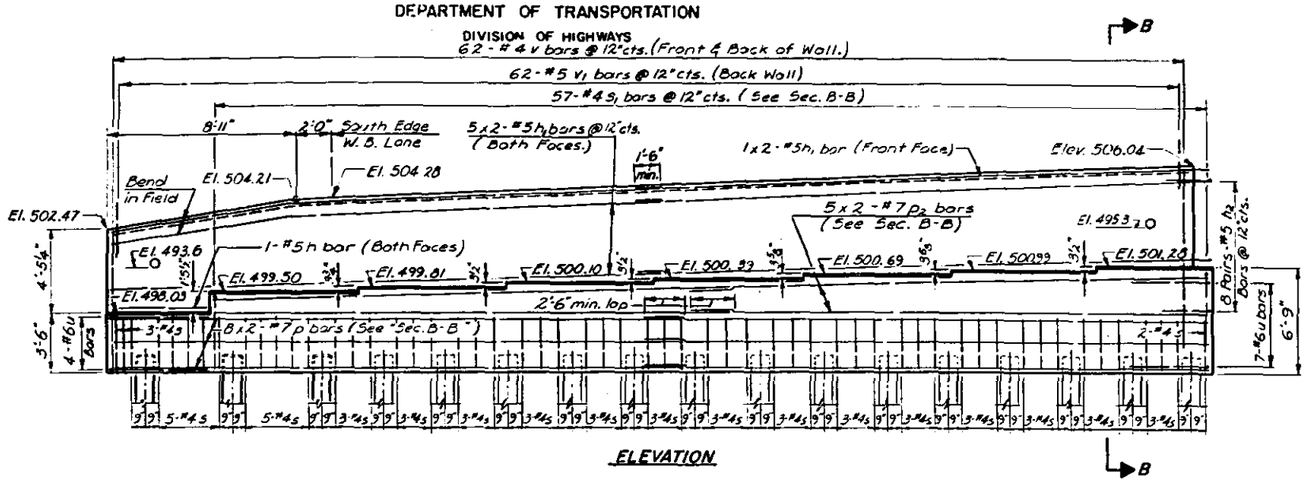
74001
6-22-76

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

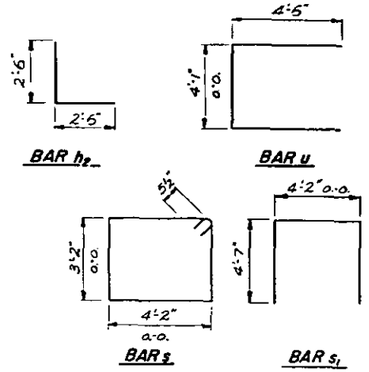
		COUNTY	TOTAL SHEETS	SHEET NO.
FA 31	15B-2	Peoria & Tazewell	56	17
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

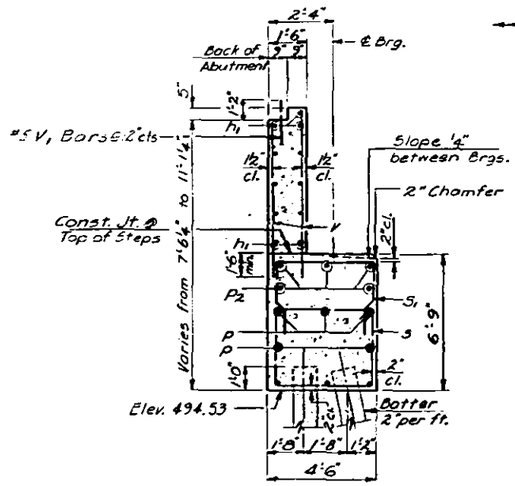


VIEW A-A

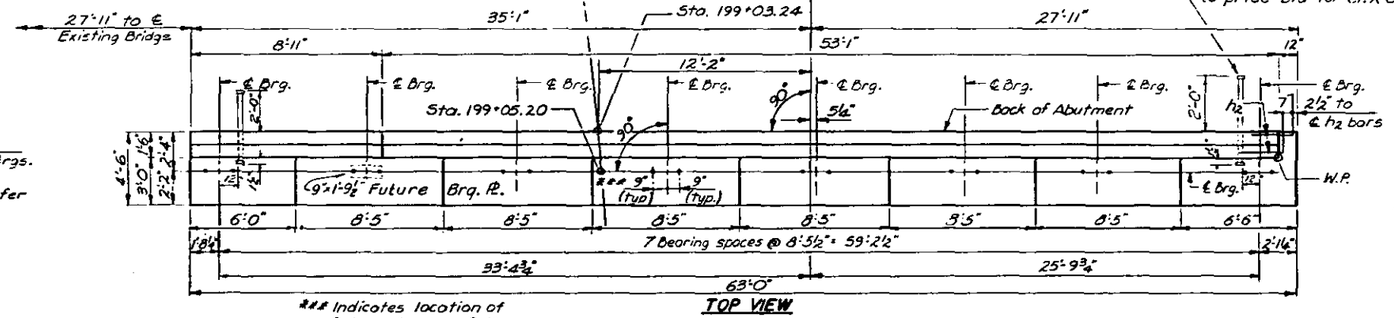


ELEVATION





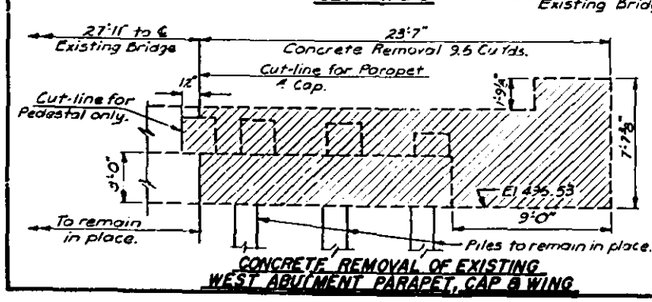
SECTION B-B



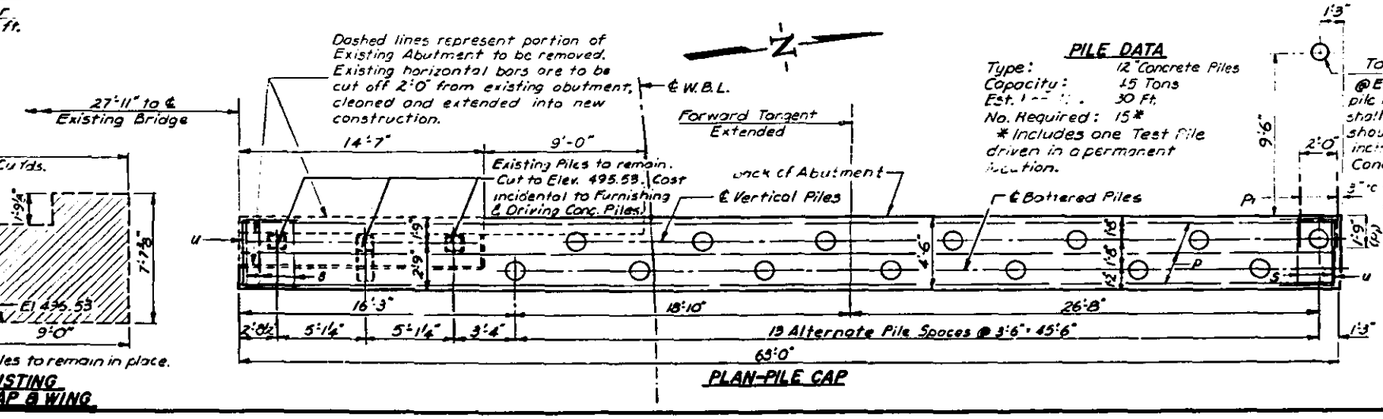
Indicates location of future Anchor Bolts.

TOP VIEW

Note: See Sheet 18 for Steel Sheet Piling.



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 @ El. 495.53 After pile is in place, Contractor shall backfill to existing shoulder elevation. Cost incidental to Furn. & Driving Conc. Piles.

WEST ABUTMENT BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
h	2	#5	5'-6"	
h1	22	#5	32'-0"	
h2	16	#5	5'-0"	L
p	16	#7	32'-6"	
p1	7	#7	3'-6"	
p2	10	#7	29'-6"	
s	57	#4	15'-7"	
s1	57	#4	13'-4"	
u	11	#6	13'-1"	
v	124	#4	6'-3"	
v1	62	#5	2'-8"	
Test Pile 12" Conc.		Each	1	
Class A Concrete		Cu. Yds.	74.4	
Reinforcement Bars		Lbs.	4,530	
Concrete Piles 12"		Lin. Ft.	420	
Structure Excavation		Cu. Yds.	152	
Concrete Removal		Cu. Yds.	9.6	
Steel Sheet Piling		Sq. Ft.	1,482	

WEST ABUTMENT

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

CRM
JCG
DAN
CRM

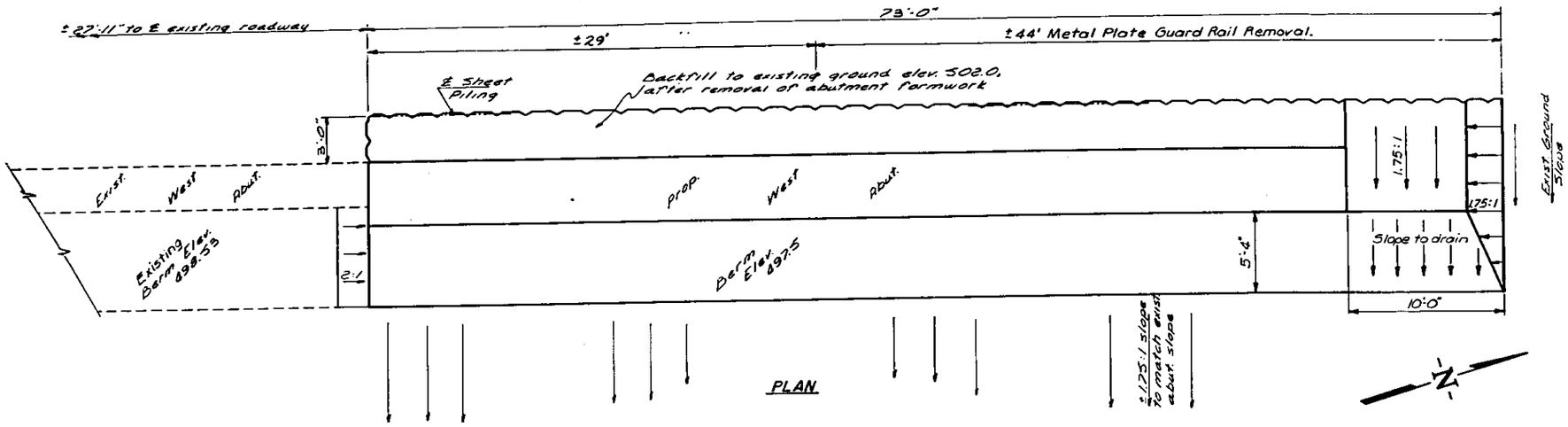
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

74001

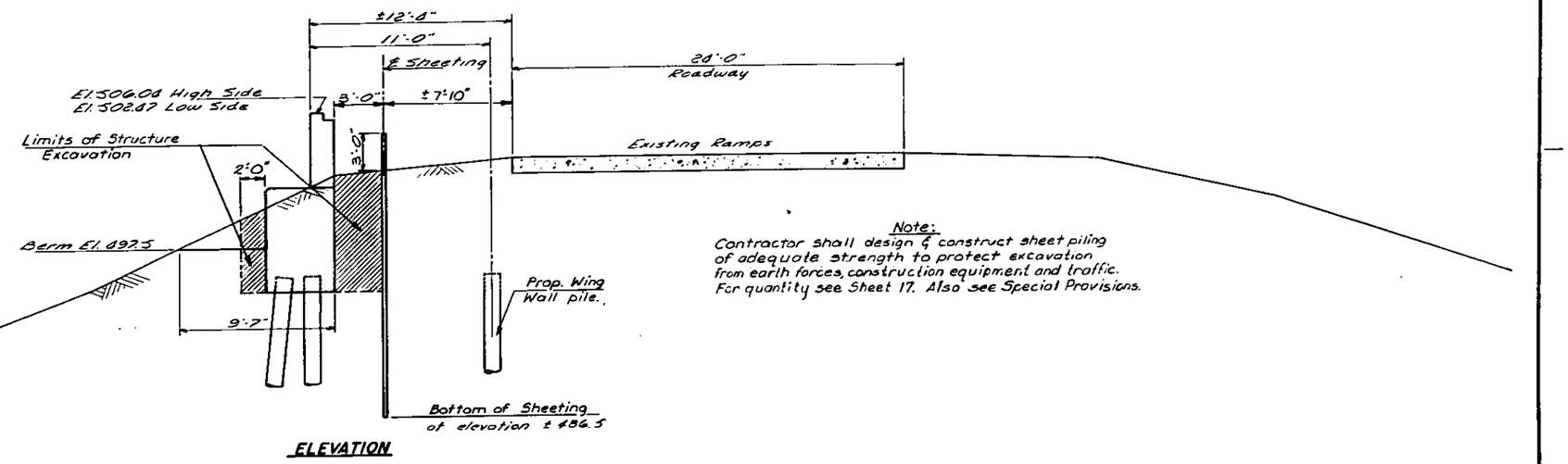
6-22-76

FA 31	158-2	Peoria & Tazewell	56	18

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS



PLAN



ELEVATION

Note:
Contractor shall design & construct sheet piling of adequate strength to protect excavation from earth forces, construction equipment and traffic. For quantity see Sheet 17. Also see Special Provisions.

SHEET PILING & EMBANKMENT-WEST ABUT.

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 158-2
PEORIA & TAZEWELL COUNTIES

JCC	HANSON ENGINEERS INCORPORATED	74001
CRN	SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS	
CRC		6-22-76
WDL		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

COUNTY	SHEET NO.	SHEET NO.
PEORIA & TAZEWELL	56	19

FA-31 | 158-2

TOP PLAN

ELEVATION (Looking East)

EAST SIDE BEARING SEAT ELEVATIONS (Looking West)

BAR h20

BAR h24

BAR h25

BAR U20, U21, U22 & U23

VIEW C-C

SECTION A-A

SECTION B-B

PART PILE PLAN

PART FOOTING PLAN

PILE DATA
Type: Conc. 12" dia.
Capacity: 35 ton
Est. Length: 15'
No. Required: 42 *
* Includes one test pile driven in a permanent location.

PIER 2
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
h20	124	#5	32'-3"	
h21	12	#5	9'-7"	
h22	8	#5	24'-11"	
h23	4	#5	31'-0"	
h24	4	#5	6'-0"	
h25	16	#5	6'-6"	
n20	131	#11	7'-7"	
t20	55	#7	8'-9"	
u20	61	#5	7'-6"	
u21	58	#5	13'-1"	
u22	53	#5	9'-11"	
u23	63	#5	6'-7"	
v20	131	#11	11'-7"	
v21	64	#10	14'-11"	
v22	64	#10	17'-2"	
v23	122	#10	6'-9"	
w20	16	#6	34'-2"	

Class A Concrete	Cu. Yd.	373.2
Reinforcement Bars	Lbs.	34,580
Conc. Piles 12" Dia.	Lin. Ft.	615
Test Pile 12" Conc.	Each	1
Struc. Excavation	Cu. Yd.	369
Expansion Bolts 7/8" ø	Each	52

PIER 2

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 158-2
PEORIA & TAZEWELL COUNTIES

C.R.M.
SCO
R.J.E.
SCO

HANSON ENGINEERS INCORPORATED
SPRINGFIELD ILLINOIS PEORIA ILLINOIS

74001
6-22-76

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA-31	158-2	PEORIA & TAZEWELL	56	20
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

TOP PLAN

ELEVATION (Looking East)

SECTION A-A

SECTION B-B

BARS u_{30}, u_{31} & u_{32}

BAR h31

BAR n30

BAR h33

PLAN AT END OF EXISTING PIER

HALF PILE PLAN

HALF FOOTING PLAN

PILE DATA

Type	Conc. 12" dia.
Capacity	45 ton
Est. Length	25'
No Required	75 *

*Includes one test pile driven in a permanent location.

PIER 3
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
h30	250	#5	25'-10"	
h31	12	#5	8'-2"	
h32	6	#5	29'-0"	
h33	19	#5	5'-6"	
h34	6	#5	23'-6"	
n30	201	#10	7'-9"	
t30	101	#9	8'-10"	
u30	98	#5	6'-7"	
u31	93	#5	10'-10"	
u32	99	#5	5'-7"	
v30	201	#10	11'-3"	
v31	201	#9	19'-0"	
v32	199	#9	5'-3"	
w30	24	⅞	34'-9"	
Class A Concrete		Cu. Yd.	504.9	
Reinforcement Bars		Lbs.	46,830	
Conc. Piles 12" Dia.		Lin. Ft.	1850	
Test Pile 12" Conc.		Each	1	
Struc. Excavation		Cu. Yd.	400	
Expansion Bolts ⅞ø		Each	16	

PIER 3

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 158-2
PEORIA & TAZEWELL COUNTIES

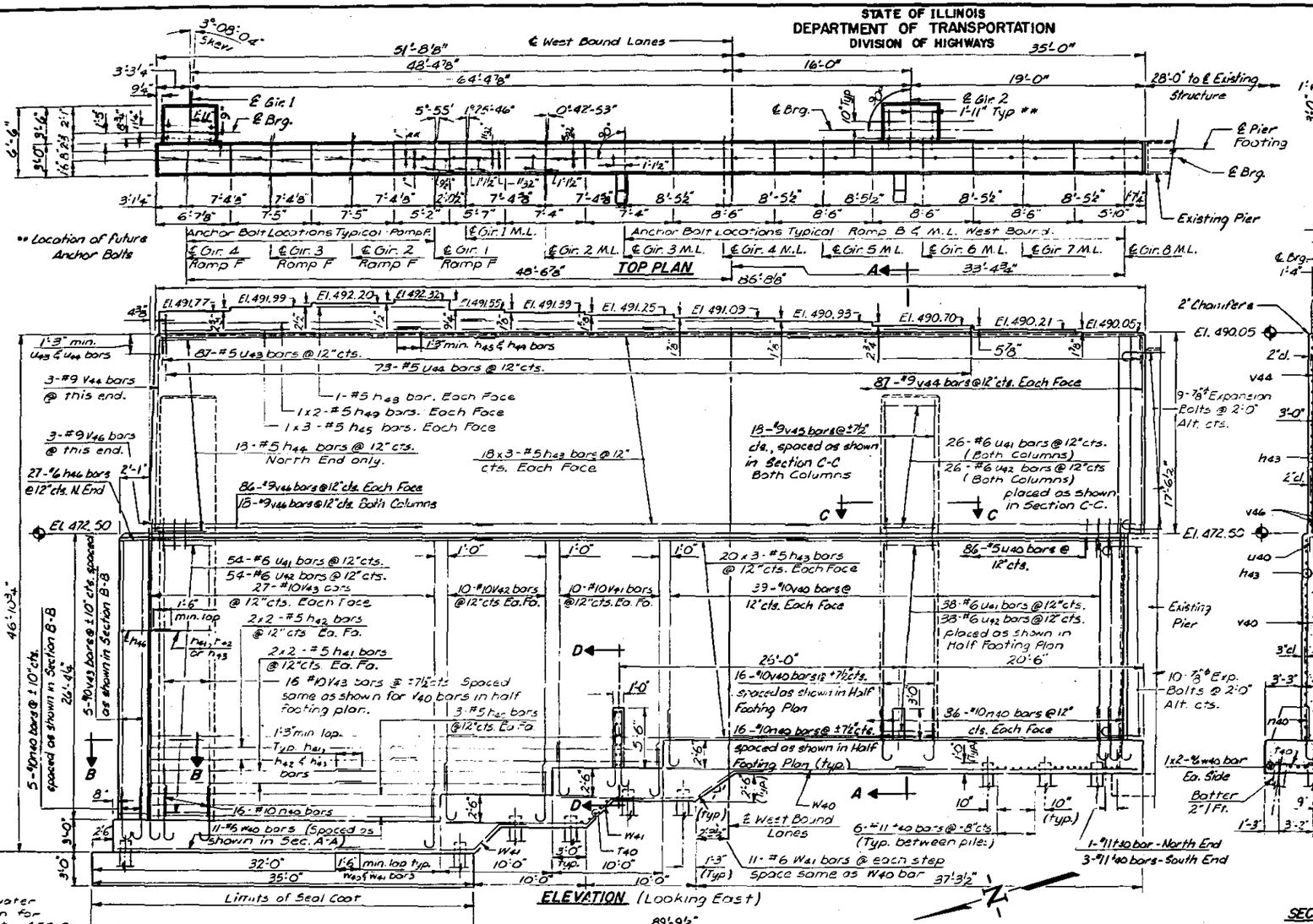
DESIGNED S.C.D.
CHECKED C.R.N.
DRAWN R.J.F.
CHECKED C.R.N.

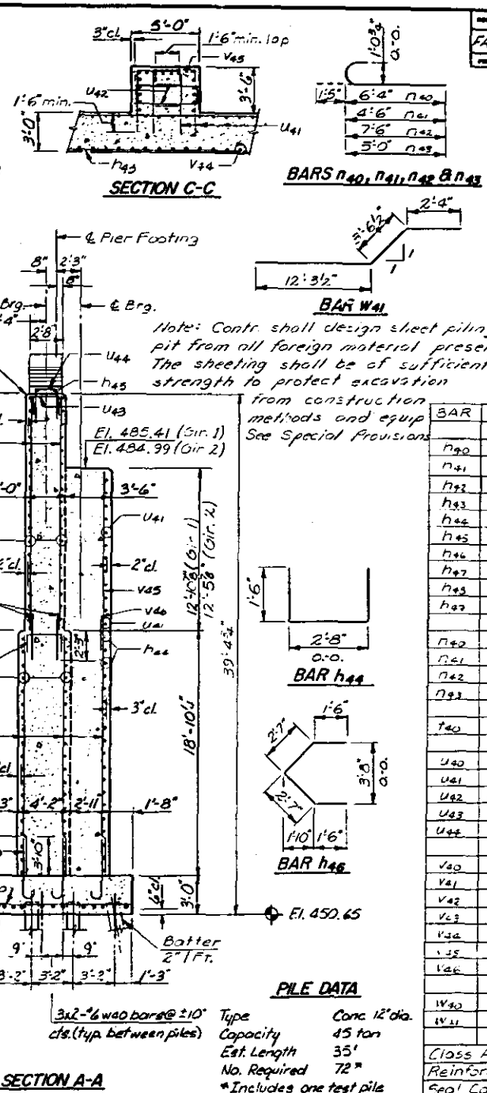
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 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	56	21
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		





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

PIER 4
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
n40	6	#5	26'-4"	
n41	8	#5	8'-11"	
n42	8	#5	25'-11"	
h43	223	#5	29'-6"	
h44	18	#5	5'-8"	
h45	6	#5	24'-10"	
h46	27	#6	8'-3"	
h47	18	#5	4'-5"	
h48	2	#5	12'-3"	
h49	4	#5	28'-2"	
n42	207	#10	7'-9"	
n41	4	#10	5'-11"	
n42	2	#10	8'-11"	
n43	2	#10	6'-5"	
t40	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	3'-7"	
v41	20	#10	21'-1"	
v43	20	#10	23'-7"	
v42	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	16'-2"	
Class A Concrete		Cu Yds	647.1	
Reinforcement Bars		Lbs.	65,600	
Seal Coat Concrete		Cu Yds.	66.1	
Conc. Piles 12" Dia		Lin Ft.	2,455	
Test Pile Conc. (12" Dia)		Each	1	
Struct Excavation		Cu Yds	202	
Cofferdam		Each	1	
Expansion Bolts 7⅛" ⌀		Each	19	
Cofferdam Excav.		Cu Yds	338.	

PIER 4

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

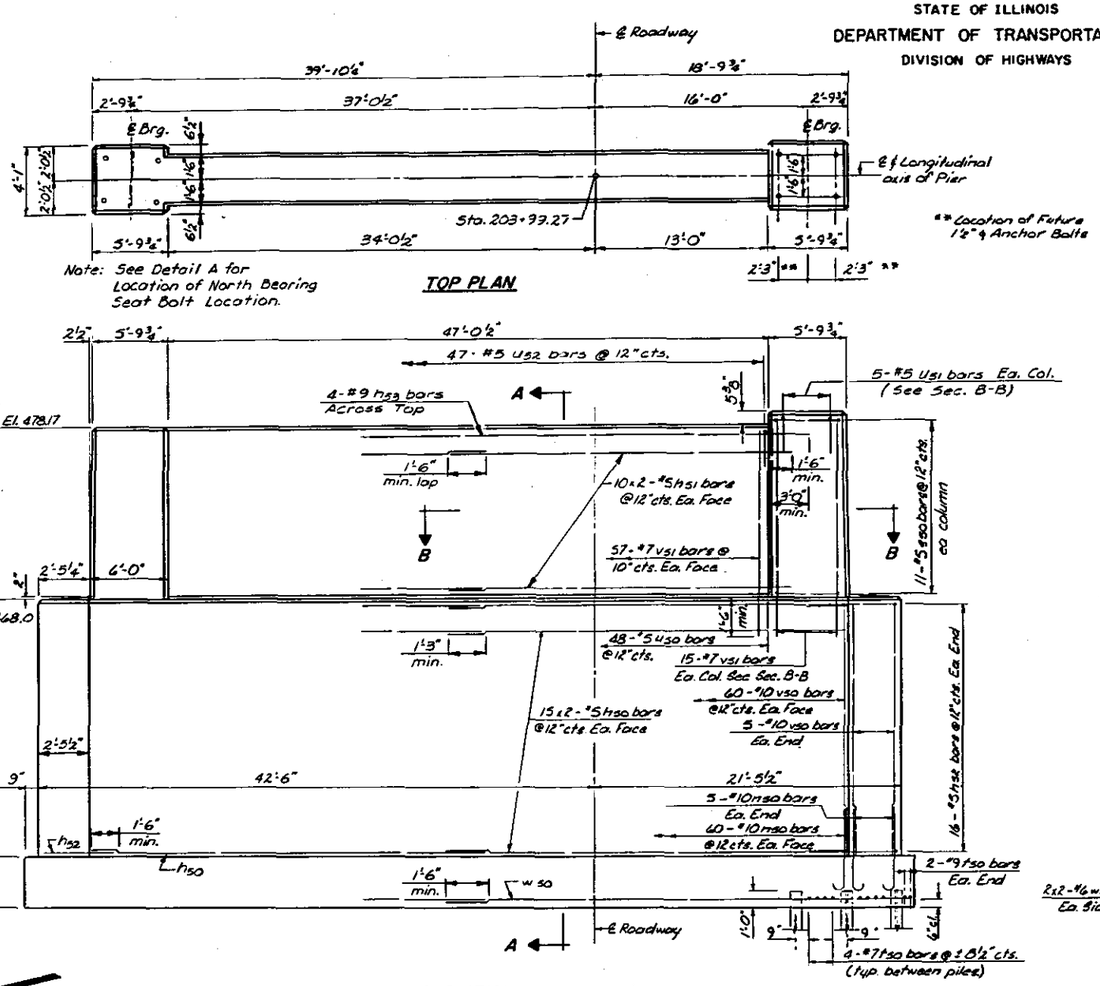
S.C.L. M.E.S. R.I.F. I.H.E.S.

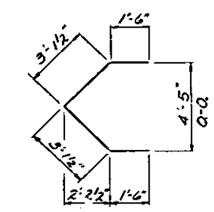
HANSON ENGINEERS INCORPORATED
SPRINGFIELD ILLINOIS PEORIA ILLINOIS

FILE NO. 74001
DATE 6-22-76

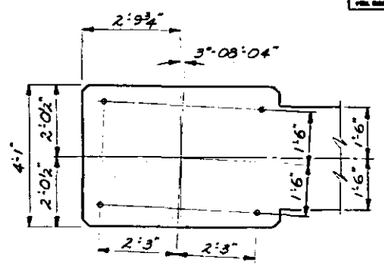
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

DRAWING NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 31	158-2	PEORIA & TAZEWELL	56	22
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

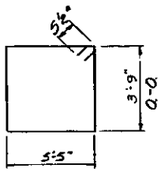




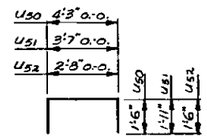
BAR h52



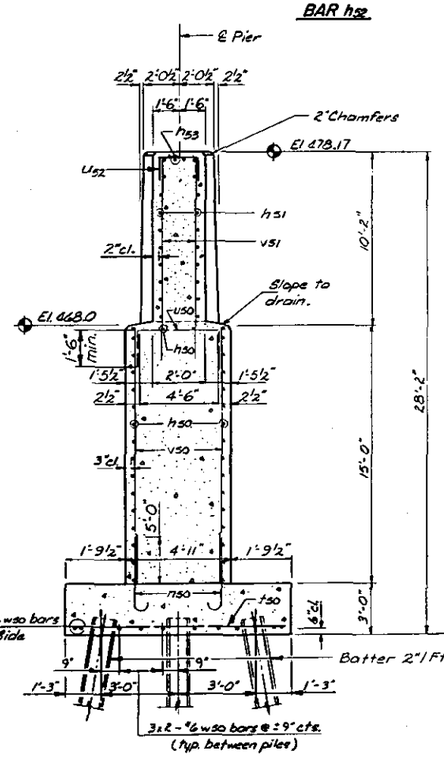
DETAIL A



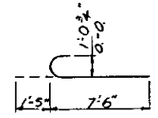
BAR s50



BARS u50, u51 & u52



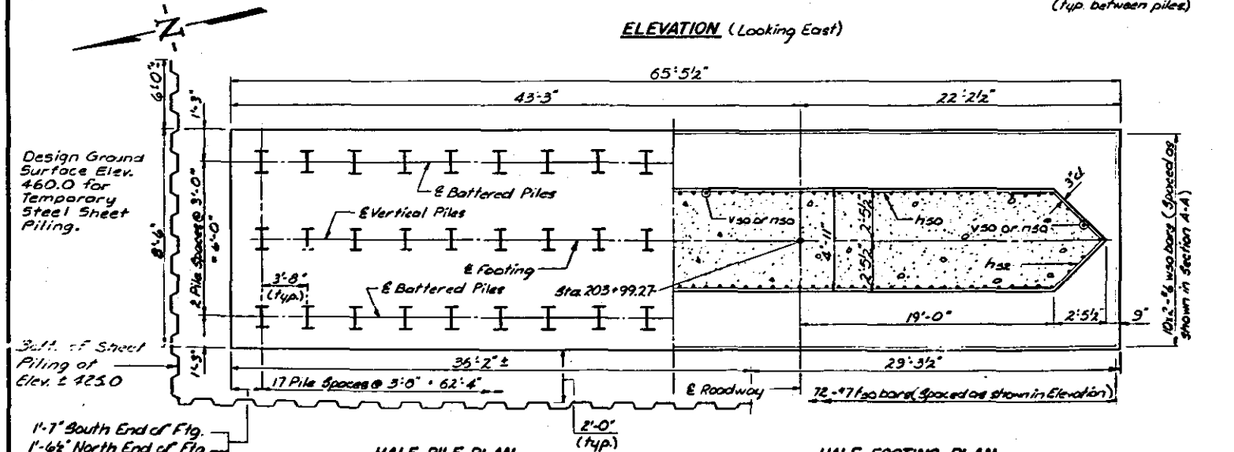
SECTION A-A



BAR n50

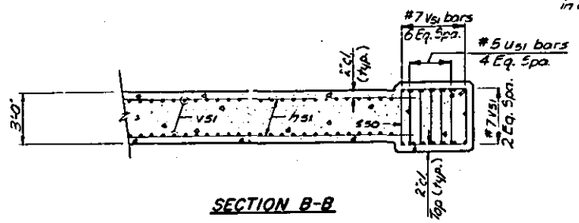
PIER 5
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
h50	48	#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	18'-9"	
v51	144	#7	12'-0"	
w50	20	#6	33'-5"	
Class A Concrete		Cu. Yds.	302.6	
Reinforcement Bars		Lbs.	24,360	
Steel Pile 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.	1,950	



HALF PILE PLAN

HALF FOOTING PLAN



SECTION B-B

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.

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

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

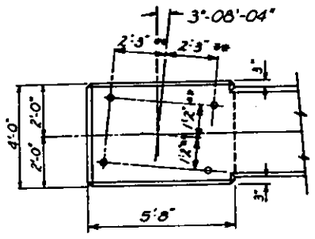
SCD.
WEB.
RJE
ECD.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

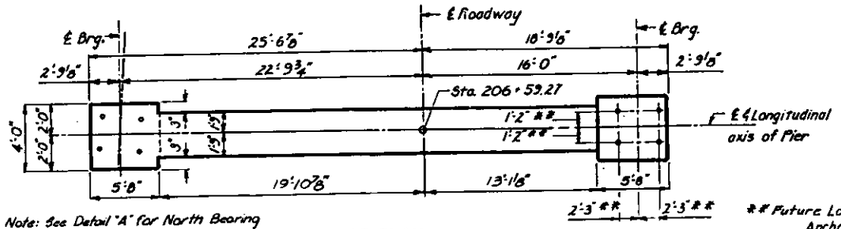
JOB NO.	74001
DATE	6-22-76

F.A.31	158-2	Peoria & Tazewell	56	23

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS



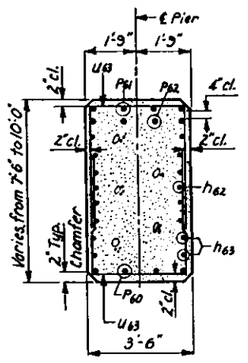
DETAIL "A"



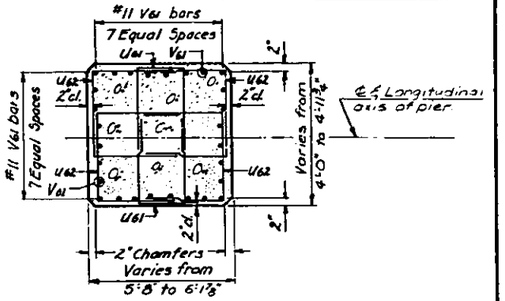
Note: See Detail "A" for North Bearing Seat Anchor Bolt Locations.

TOP PLAN

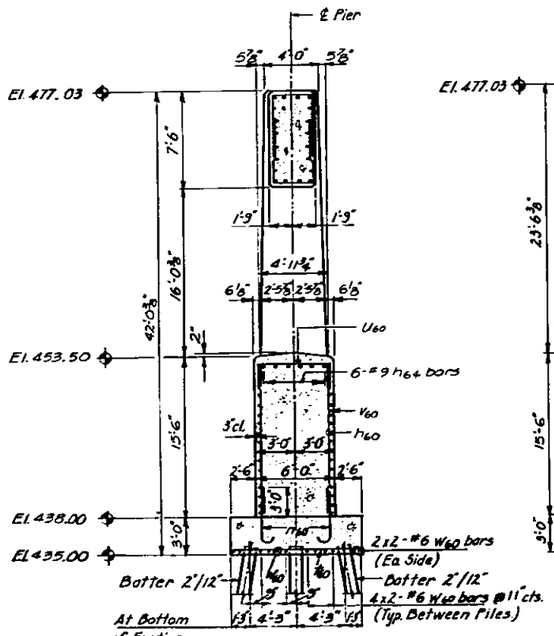
Future Location of Anchor Bolts.



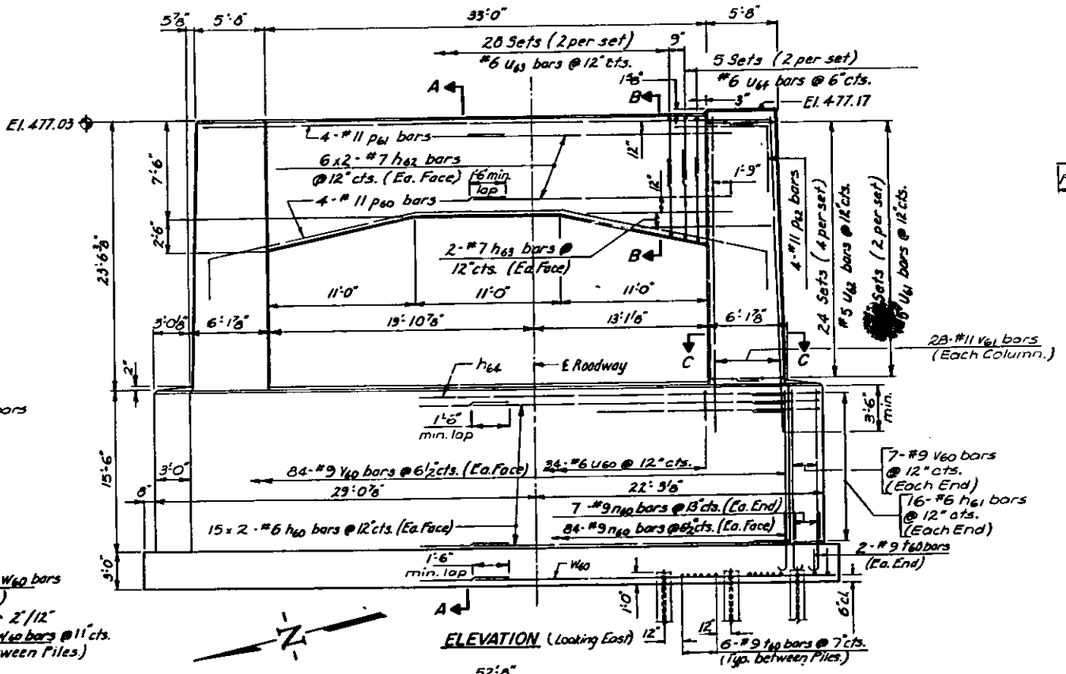
SECTION B-B



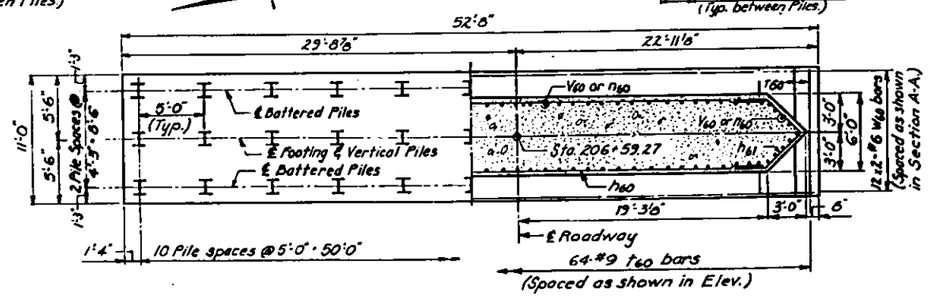
SECTION C-C



SECTION A-A

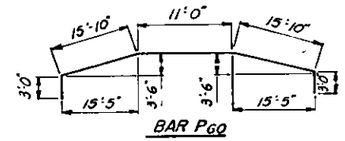


ELEVATION (Looking East)

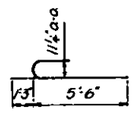


HALF PILE PLAN

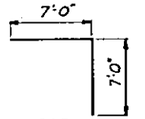
HALF FOOTING PLAN



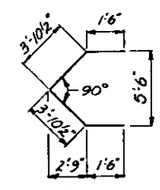
BAR P60



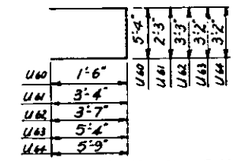
BAR n60



BAR P62



BAR h61



BARS U60, U61, U62, U63 & U64

PIER 6
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
h60	60	#6	25'-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'-0"	
P61	4	#11	45'-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 10×57	Lin. Ft.	1,568
Test Pile HP 10×57	Each	1
Cofferdam Excav.	Cu. Yds.	189
Cofferdam	Each	One

FILE 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

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 158-2
PEORIA & TAZEWELL COUNTIES

SEC
WEB
DAN
CRN

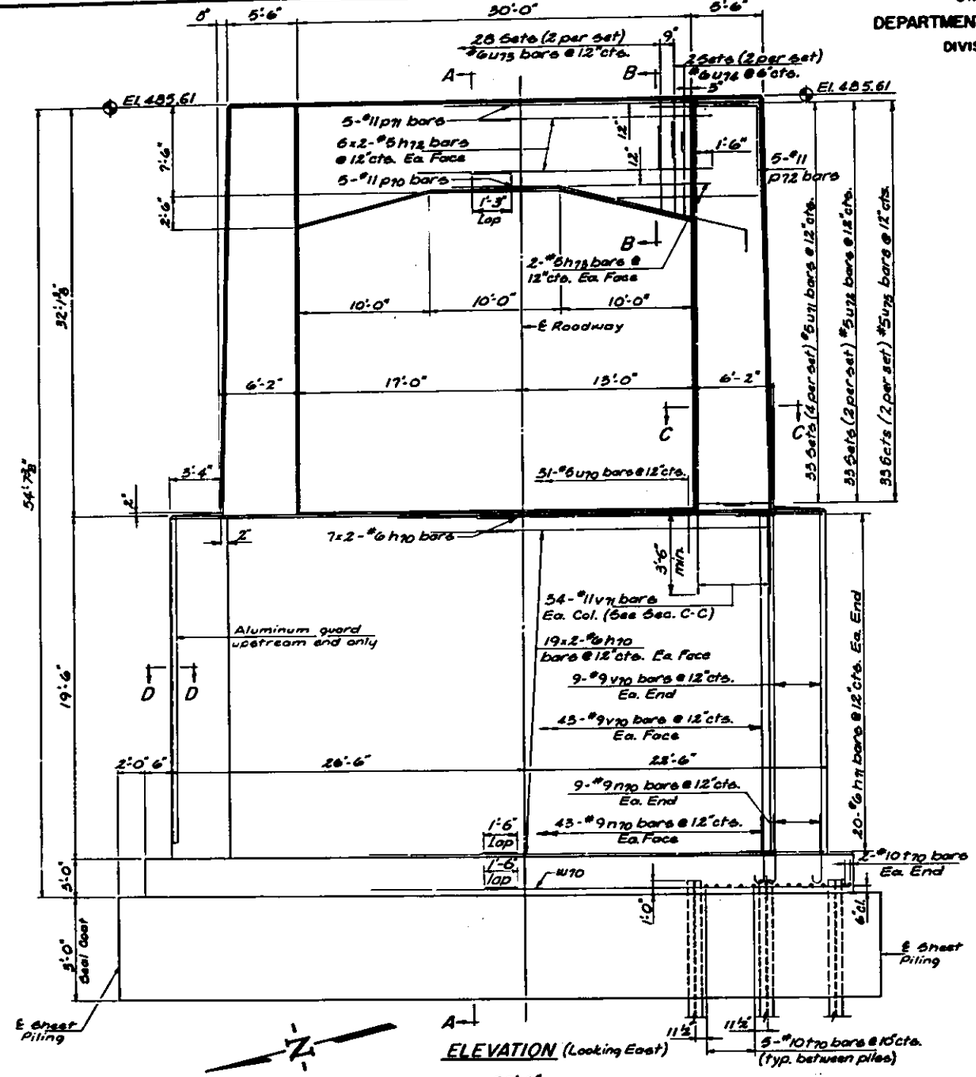
HANSON ENGINEERS INCORPORATED
SPRINGFIELD ILLINOIS PEORIA ILLINOIS

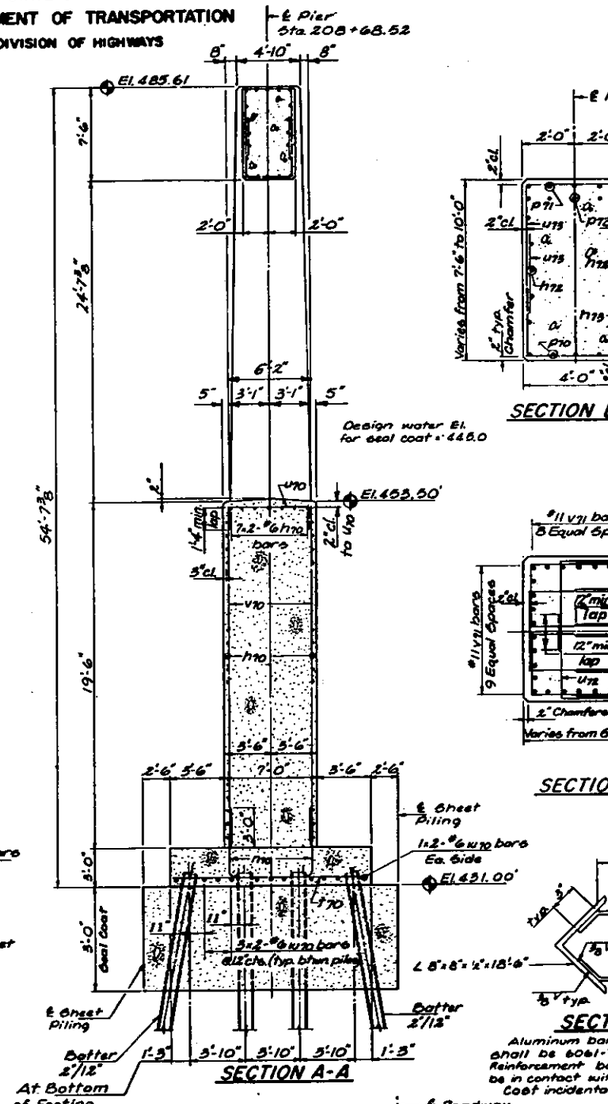
74001

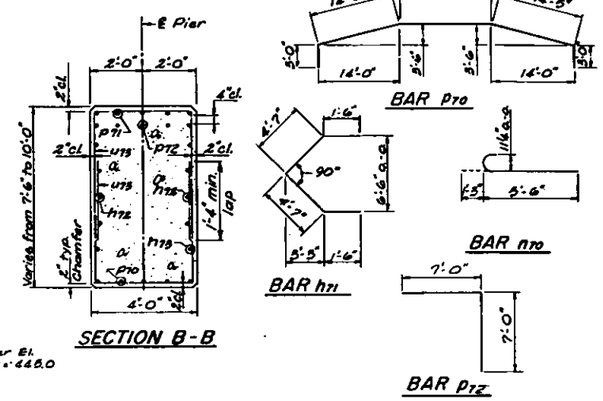
6-22-76

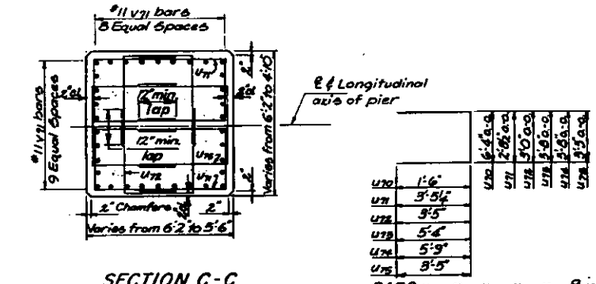
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

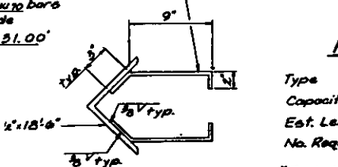
COUNTY NO.	ROUTE	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.31	158-2	Peoria & Tazewell	5	24
FED. ROAD DIST. NO. ?	ILLINOIS	PROJECT		







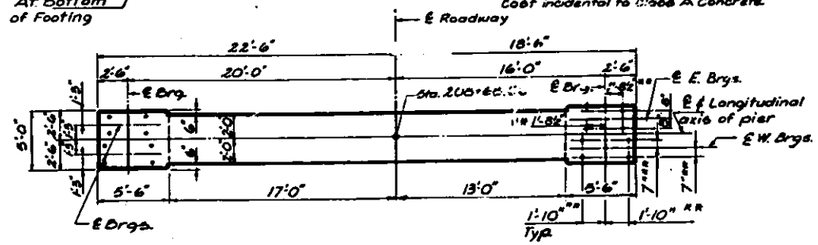


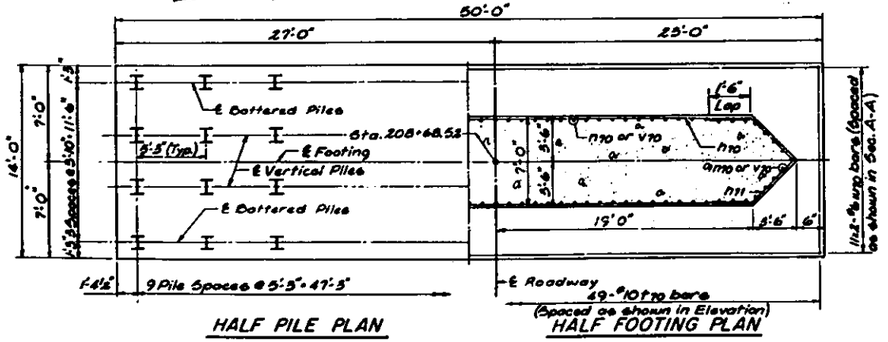


PILE DATA

Type	Steel HP 10 x 42
Capacity	Drive to refusal
Est. Length	47'
No. Required	40*

*Includes one test pile driven in a permanent location.





PIER 7
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
H10	90	#6	21'-9"	
H11	40	#6	12'-2"	C
H12	24	#6	17'-2"	
H13	8	#6	10'-0"	
M10	104	#9	6'-9"	C
P10	5	#11	44'-10"	
P11	5	#11	40'-0"	
P12	10	#11	14'-0"	
T10	49	#10	13'-6"	
U10	31	#5	9'-4"	
U11	264	#6	9'-7"	
U12	182	#6	9'-10"	
U13	56	#6	14'-4"	
U14	8	#6	15'-2"	
U15	132	#5	10'-1"	
V10	104	#9	19'-3"	
V11	68	#11	35'-6"	
W10	22	#6	25'-6"	

Class A Concrete	Cu. Yds.	422.6
Reinforcement Bars	Lbs.	36,600
Seal Coat Concrete	Cu. Yds.	114.0
Steel Piles HP 10x42	Lin. Ft.	1885
Test Pile HP 10x42	Each	1
Cofferdam Excavation	Cu. Yds.	388
Cofferdam	Each	1

PIER 7

McCLUGAGE BRIDGE OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 158-2
PEORIA & TAZEWELL COUNTIES

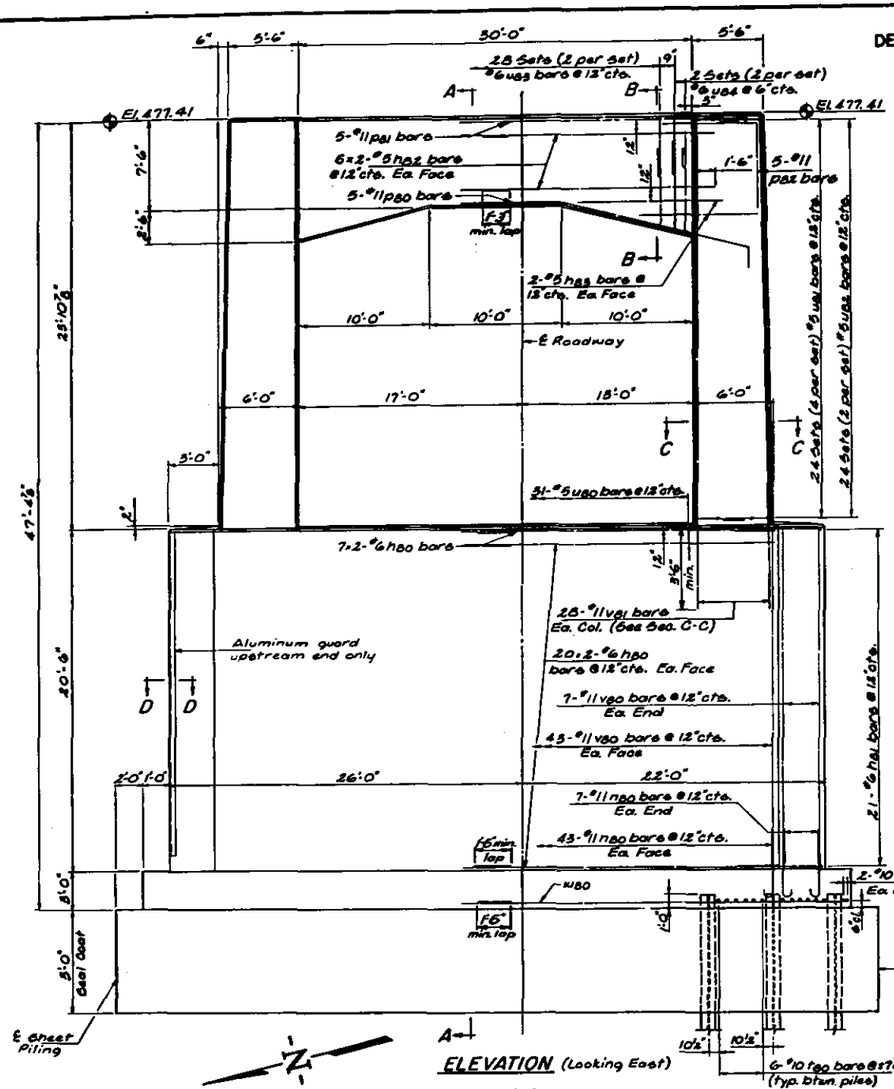
C.R.N.
W.E.B.
D.A.B.
C.R.N.

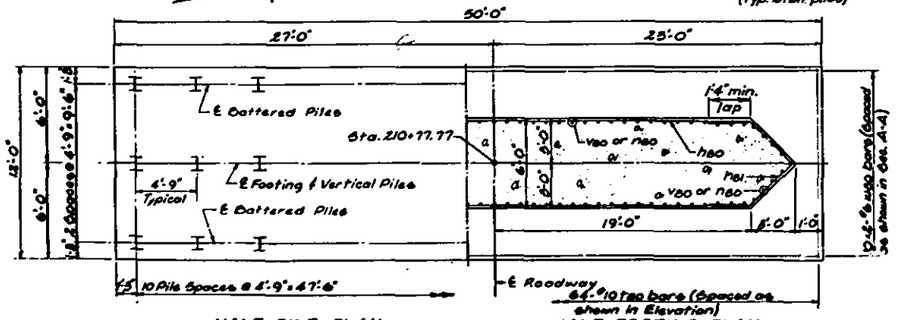
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 14001
DATE 6-22-76

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

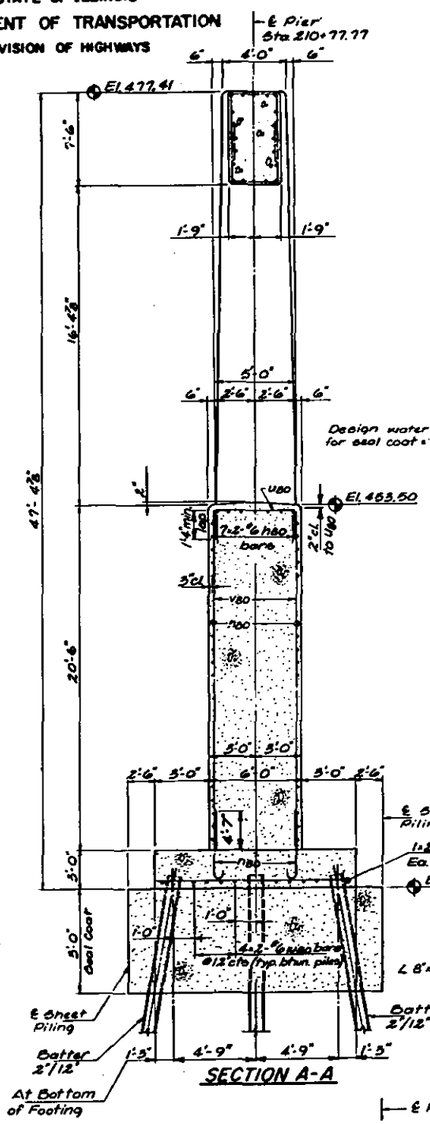
F.A.31	15B-2	Peoria & Tazewell	5	25



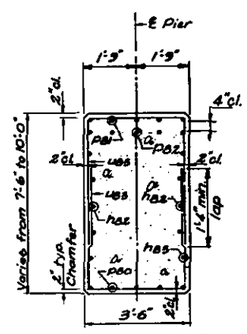


HALF PILE PLAN

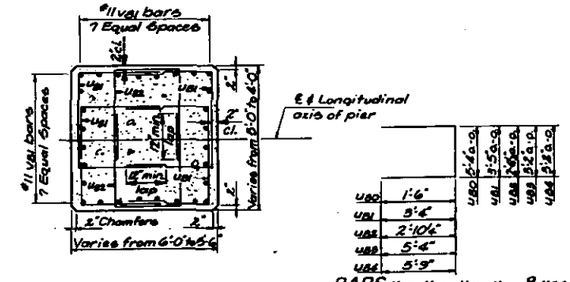
HALF FOOTING PLAN



SECTION A-A

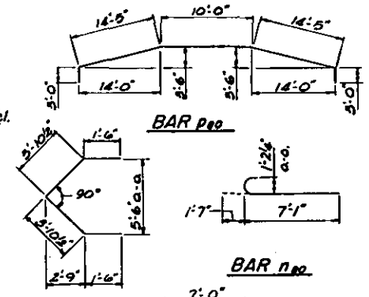


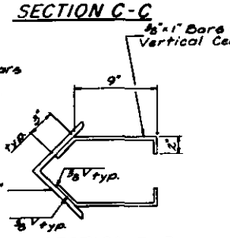
SECTION B-B



SECTION C-C

BARS u80, u81, u82, u83 & u84





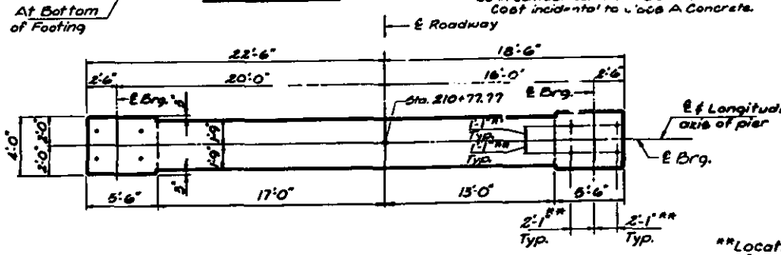
SECTION D-D

Aluminum bars and shapes shall be 6061-T6 alloy. Reinforcement bars shall not be in contact with the aluminum. Cost incidental to Class A Concrete.

PILE DATA

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

*Includes one test pile driven in a permanent location.



TOP PLAN

**Location of Future 1½" ø Anchor Bolts.

PIER 8

BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
ha0	94	#6	21'-9"	
ha1	42	#6	10'-9"	C
ha2	24	#5	17'-2"	
ha3	8	#6	10'-0"	
nb0	100	#11	8'-8"	C
pb0	5	#11	44'-10"	
pb1	5	#11	40'-0"	
pa2	10	#11	14'-0"	
t80	64	#10	11'-6"	
u80	31	#5	8'-4"	
u81	192	#5	10'-1"	
u82	96	#5	8'-3"	
u83	56	#6	14'-6"	
u84	8	#6	17'-2"	
v80	100	#11	20'-3"	
v81	56	#11	27'-3"	
w80	20	#6	28'-6"	

Class A Concrete	Cu. Yds.	383.7
Reinforcement Bars	Lbs.	59,220
Seal Coat Concrete	Cu. Yds.	102.0
Steel Piles HP12x53	Lin. Ft.	1,760
Test Pile HP12x53	Each	1
Cofferdam Excavation	Cu. Yds.	315
Cofferdam	Each	1

PIER 8

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

CRN
WEB
DAB
CRN

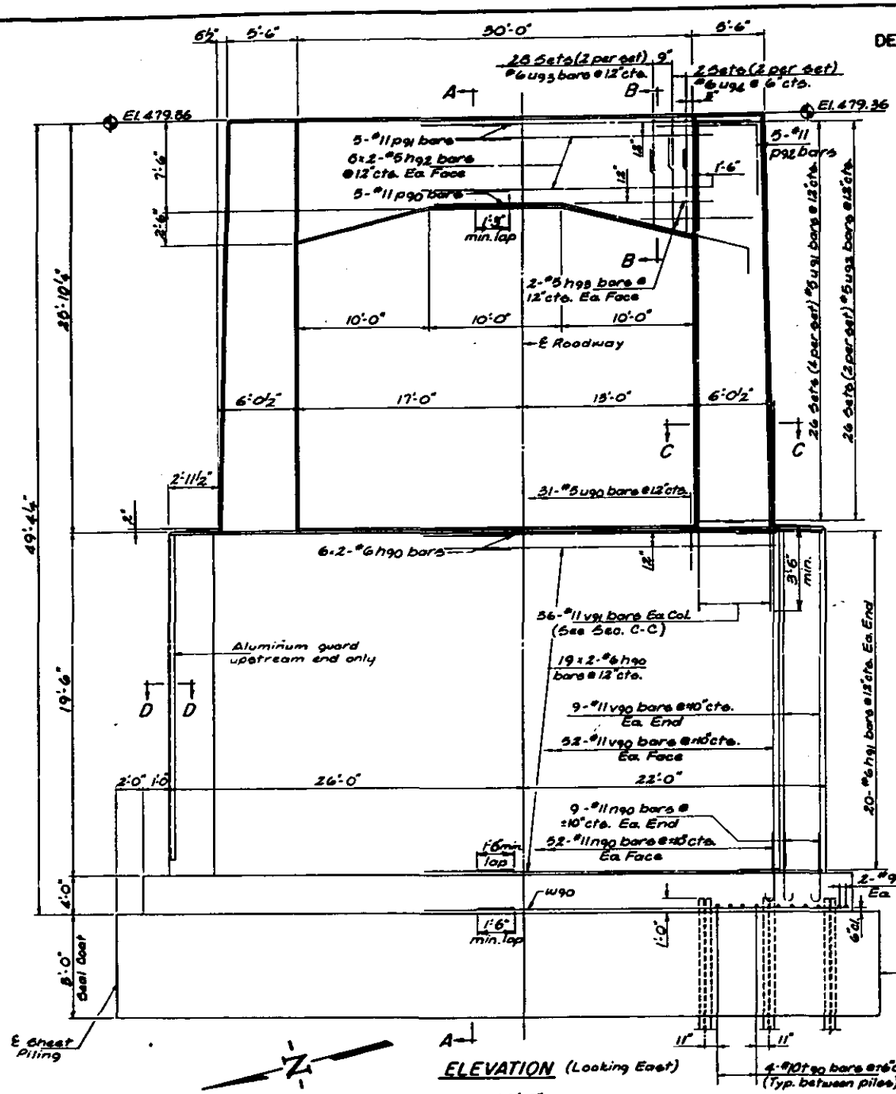
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

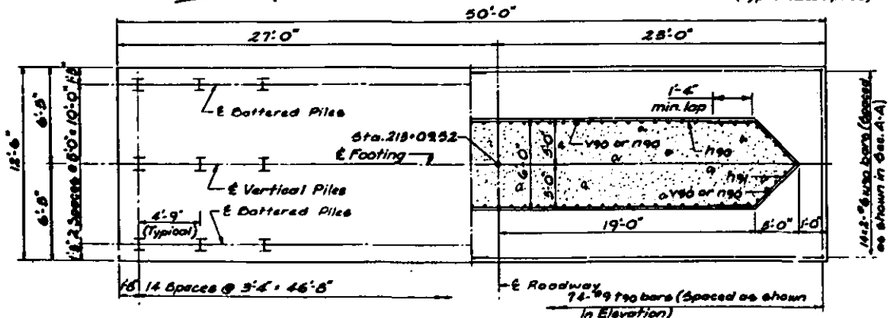
74001

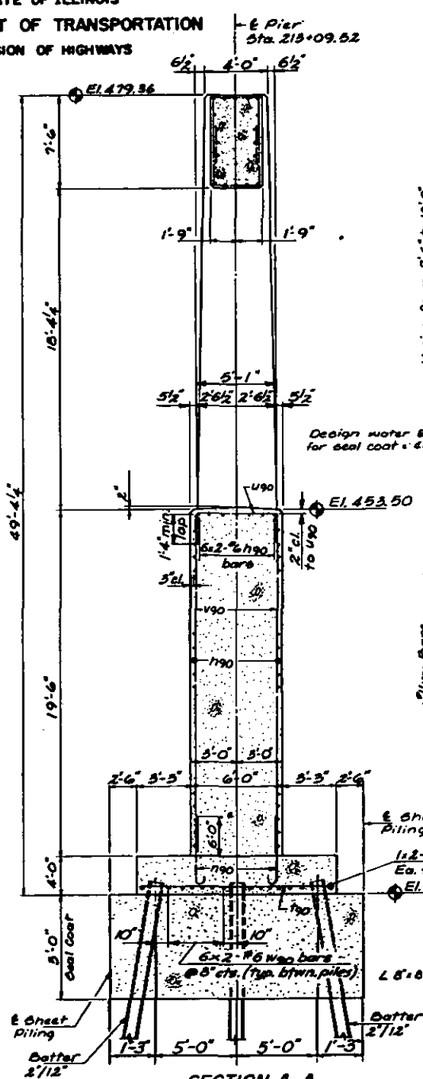
6-22-76

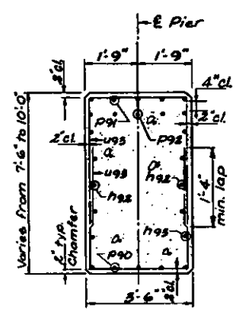
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

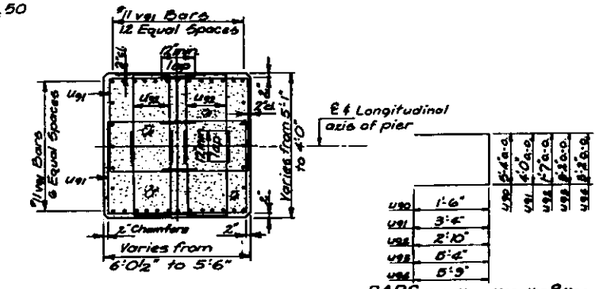
F.A.31	156-2	Peoria & Tazewell	52	26

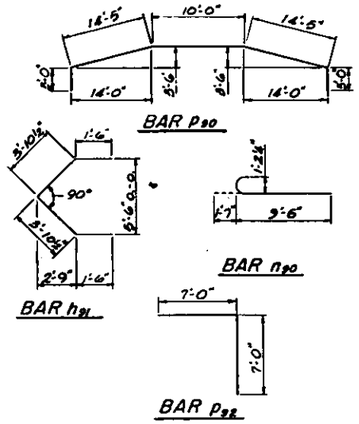


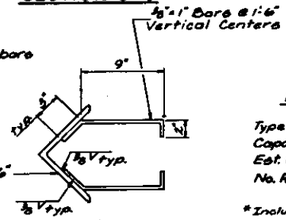


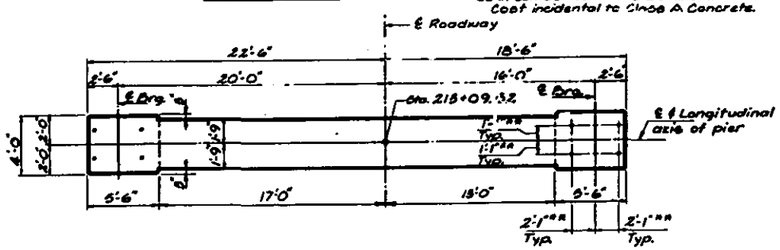












** Future Location of 1½" ø Anchor Bolts.

PIER 9

BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
h90	88	#6	21'-9"	
h91	40	#6	10'-9"	
h92	24	#5	17'-2"	
h93	8	#5	10'-0"	
n90	122	#11	11'-1"	
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	15'-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.	109.0
Steel Piles HP 12 x 53	Lin. Ft.	2,508
Test Pile HP 12 x 53	Each	1
Cofferdam Excavation	Cu. Yds.	335
Cofferdam	Each	1

PILE DATA

Type	Steel HP 12 x 53
Capacity	Drive to refusal
Est. Length	57'
No. Required	45 *

*Includes one test pile driven in a permanent location.

PIER 9

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 156-2
PEORIA & TAZEWELL COUNTIES

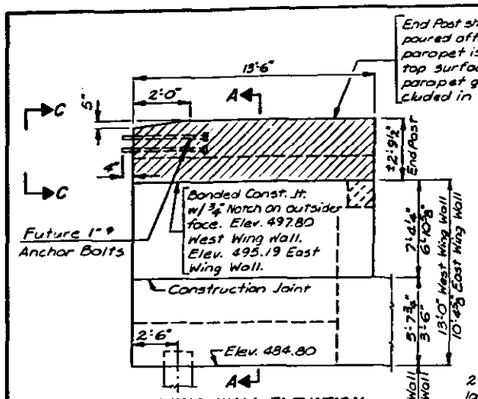
C.R.N.	HANSON ENGINEERS INCORPORATED	14001
M.E.B.	SPRINGFIELD ILLINOIS PEORIA ILLINOIS	
D.A.B.		
C.R.N.		6-22-76

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

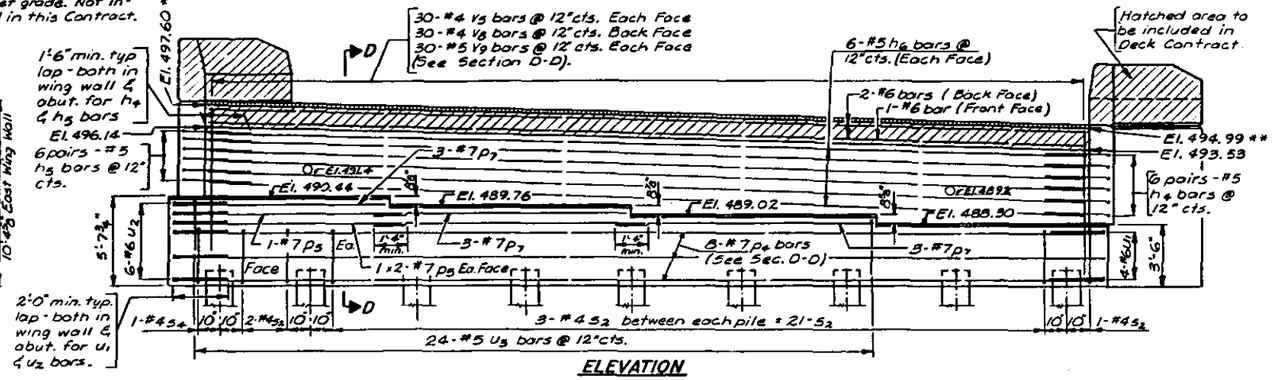
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 31	158-2	PEORIA & TAZEWELL	56	27
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

** Note: Elevations along back of parapet. (See Sec. D-D)

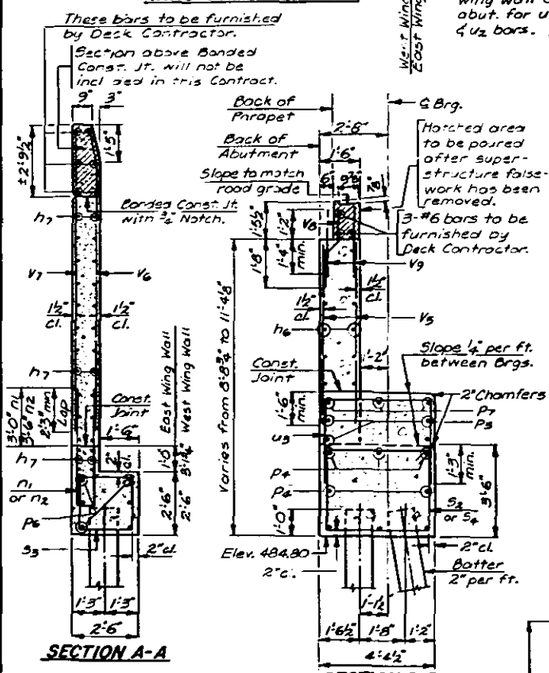
Note: Space reinforcement in cap to miss anchor bolts..



WING WALL ELEVATION

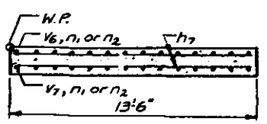


ELEVATION

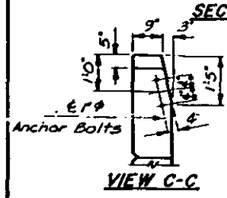


SECTION A-A

SECTION D-D



SECTION B-B

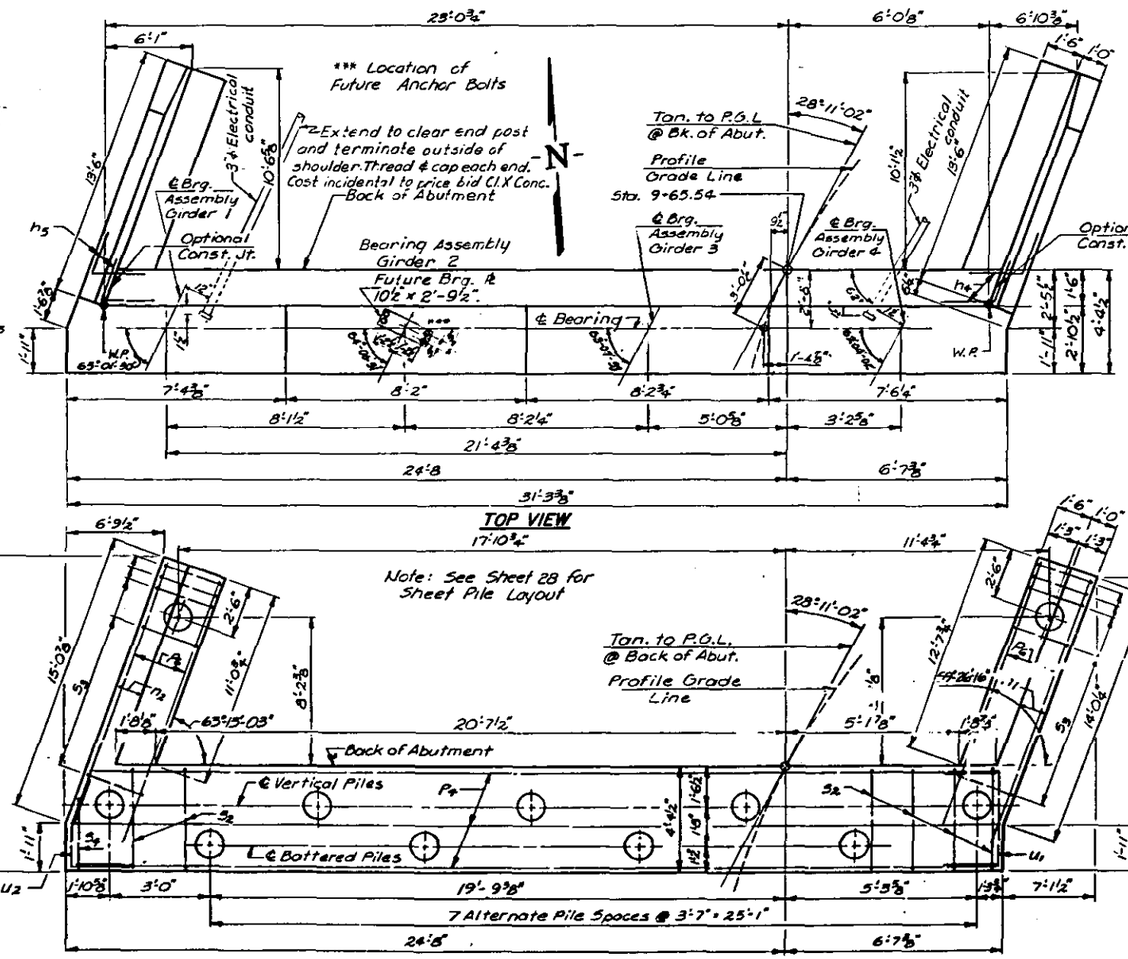


VIEW C-C

PILE DATA

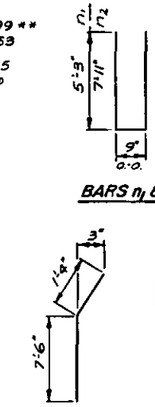
Type:	Conc. 12" dia.
Capacity:	45 Ton
Est. Length:	37'
No. Required:	11 *

* Includes one test pile driven in a permanent location.



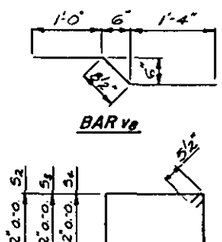
TOP VIEW

PLAN-PILE CAP

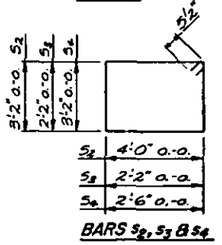


BARS n_1 & n_2

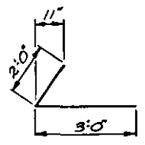
BAR V_6



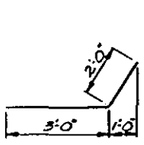
BAR V_8



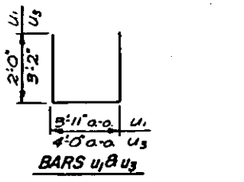
BARS s_2, s_3 & s_4



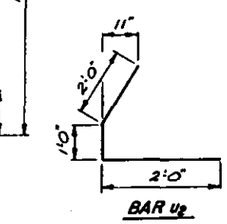
BAR h_5



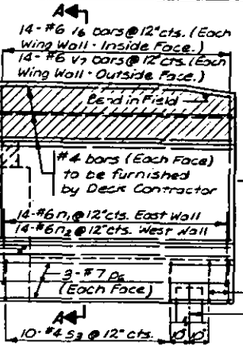
BAR h_4



BARS u_1 & u_3



BAR u_2



WING WALL ELEVATION
REINFORCEMENT

NORTH ABUTMENT
BILL OF MATERIAL

BAR	NO	SIZE	LENGTH	SHAPE
h_4	12	#5	5'-0"	
h_5	12	#5	5'-0"	
h_6	12	#5	28'-11"	
h_7	40	#4	13'-2"	
n_1	14	#6	11'-3"	
n_3	14	#6	16'-7"	
p_4	8	#7	30'-11"	
p_5	6	#7	9'-7"	
p_6	12	#7	14'-10"	
p_7	9	#7	7'-0"	
s_2	24	#4	15'-3"	
s_3	26	#4	9'-7"	
s_4	1	#4	12'-3"	
u_1	4	#6	7'-11"	
u_2	6	#6	5'-0"	
u_3	24	#5	10'-4"	
V_5	60	#4	7'-3"	
V_6	28	#6	8'-10"	
V_7	28	#6	8'-9"	
V_8	30	#4	3'-1"	
V_9	60	#5	2'-6"	

Class X Concrete	Cu.Yds.	46.2
Reinforcement Bars	Lbs.	4,560
Concrete Piles 12" dia.	Lin.Ft.	370
Structure Excavation	Cu.Yds.	90
Steel Sheet Piling	Sq.Ft.	2,535
Test Pile 12" Conc.	Each	1

NORTH ABUTMENT

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

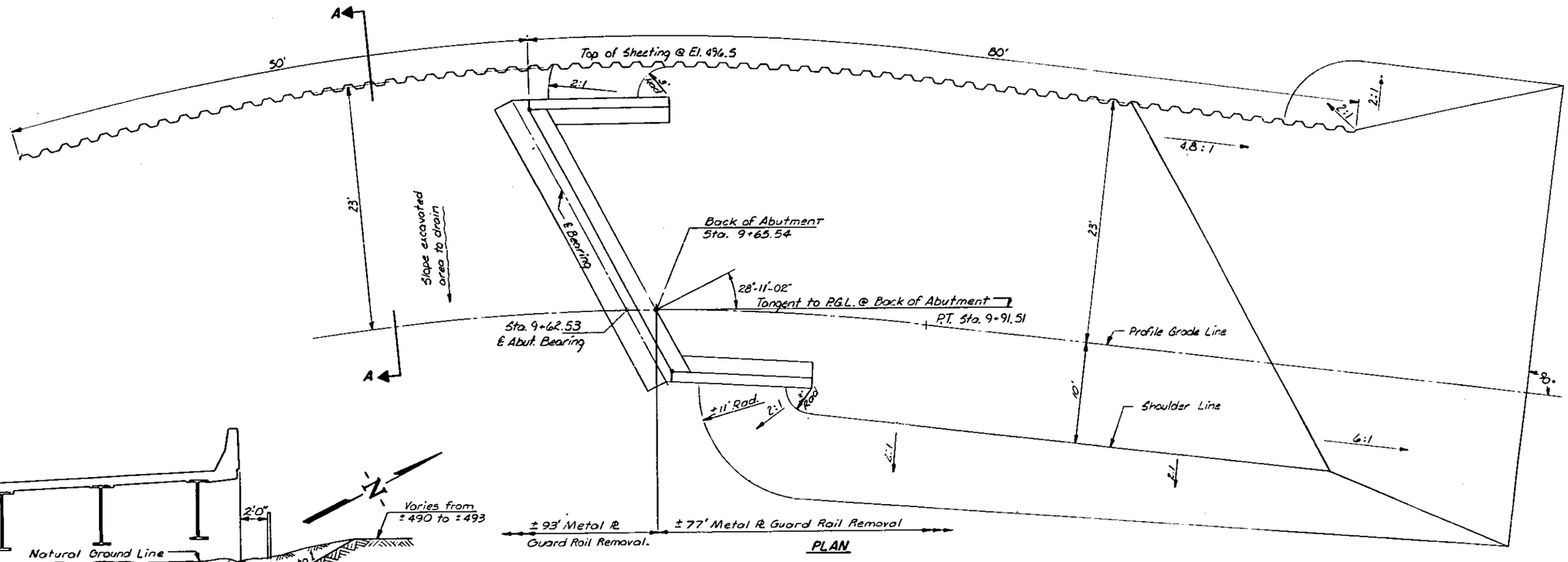
S: 1:2
T.R.G.
D.A.N.
W.E.B.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

JOB NO. 74001
DATE 6-22-76

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 31	158-2	PEORIA & TAZEWELL	56	28
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS



Note

Steel Sheet Piling at North Abutment shall be of sufficient strength and placed to protect traffic from construction excavation and procedures. See sheet 27 for quantity. Also see Special Provisions.

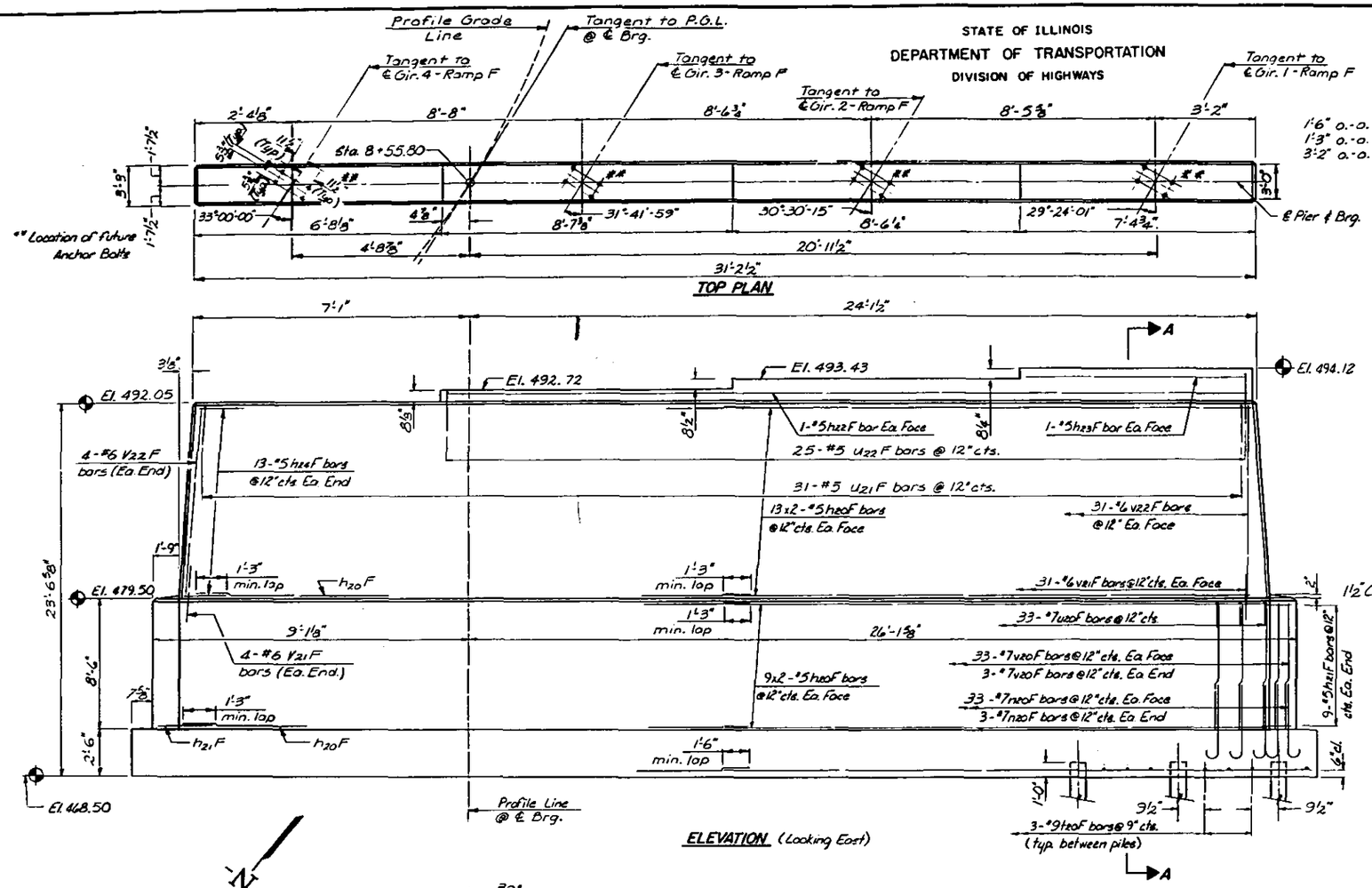
NO. ABUT. EMBANKMENT & SHEET PILING

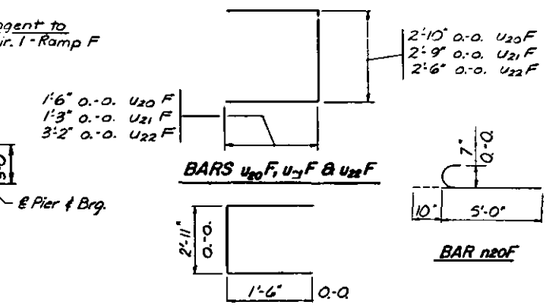
McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 158-2
PEORIA & TAZEWELL COUNTIES

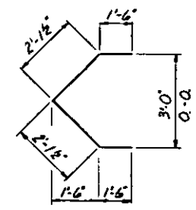
CKH	HANSON ENGINEERS INCORPORATED	JOB NO. 74001
WDL	SPRINGFIELD ILLINOIS PEORIA ILLINOIS	DATE 6-22-76
RJE		
WDL		

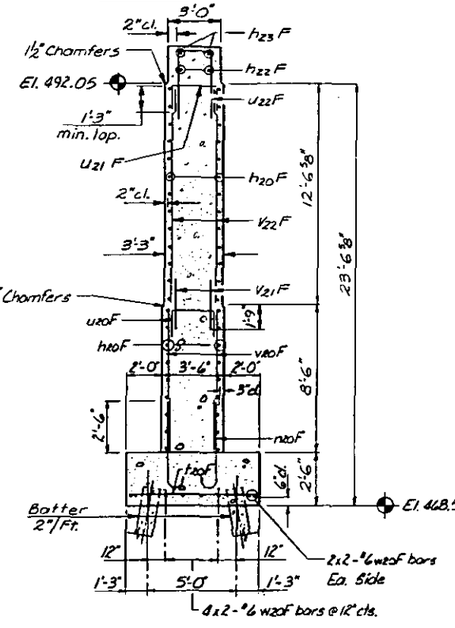
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

FA-31	158-2	PEORIA & TAZEWELL	56	30



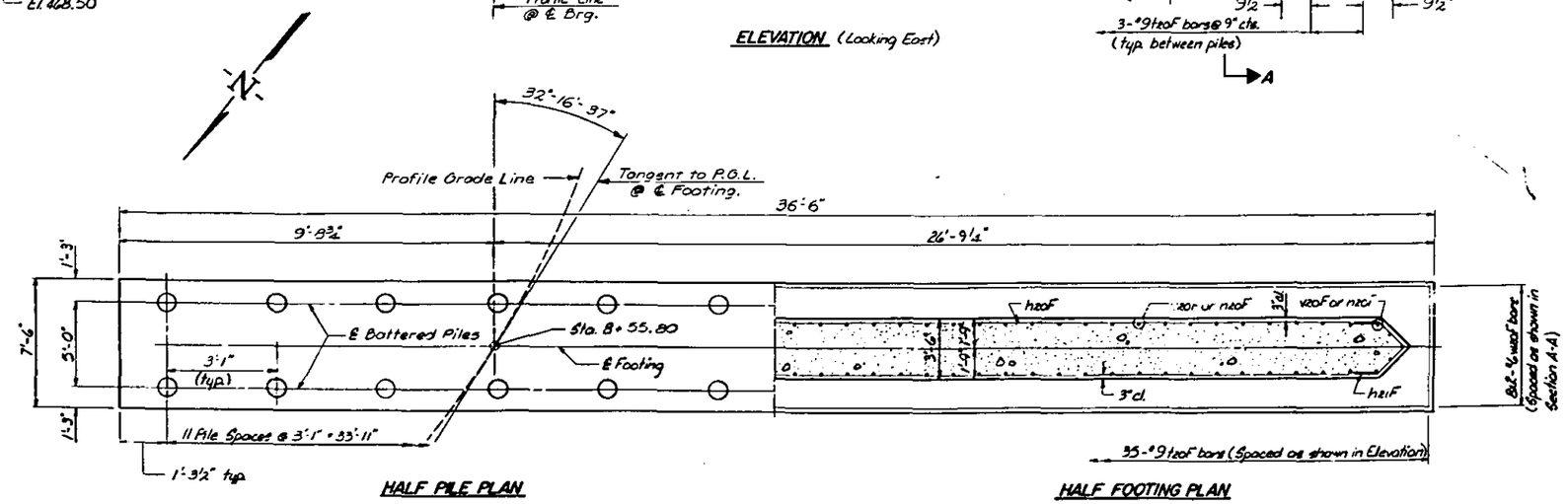






PIER 2F
BILL OF MATERIAL

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"	
n20F	72	#7	5'-10"	
t20F	35	#9	7'-0"	
U20F	33	#7	5'-10"	
U21F	31	#5	5'-3"	
U22F	25	#5	8'-10"	
V22F	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	



PILE DATA

Type	Conc. 12" dia.
Capacity	45 ton
Est. Length	25'
No. Required	24 *

* Includes one test pile driven in a permanent location.

PIER 2F

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 158-2
PEORIA & TAZEWELL COUNTIES

S.C.
WEB
RUF
WEB

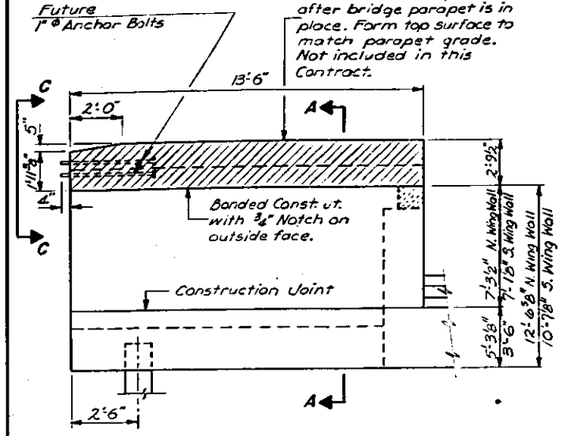
HANSON ENGINEERS INCORPORATED
SPRINGFIELD ILLINOIS PEORIA ILLINOIS

74001

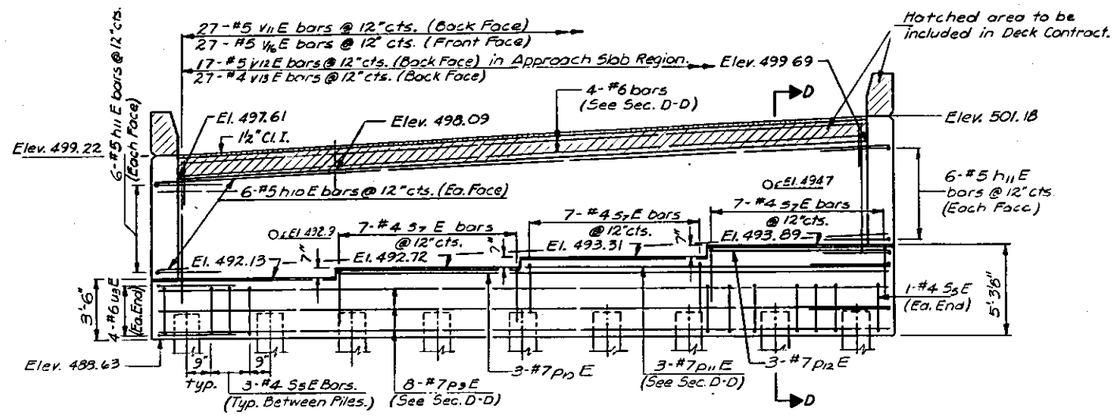
6-22-76

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

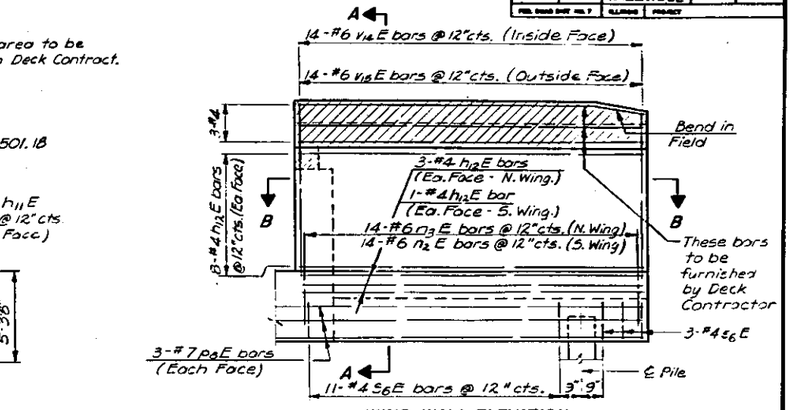
SHEETS NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.31	158-2	PEORIA & TAZEWELL	5/o	31
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



WING WALL ELEVATION
(S. Wing Wall)



ELEVATION

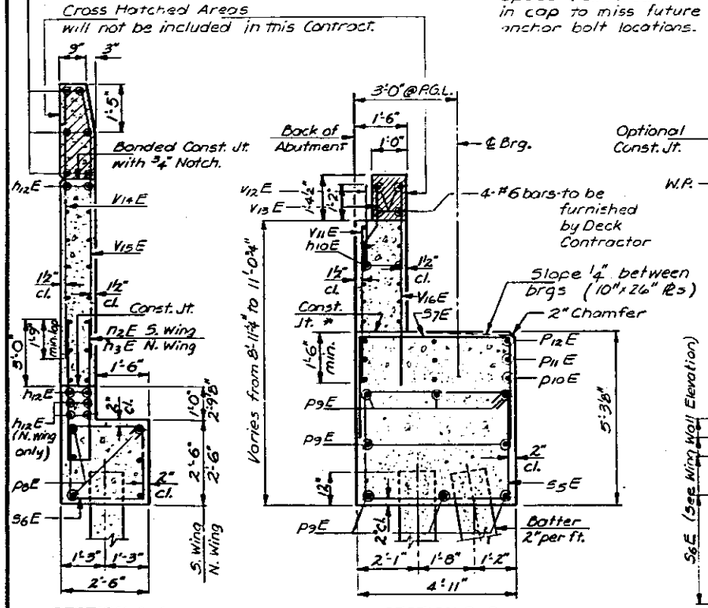


WING WALL ELEVATION
Reinforcement
(N. Wing Shown)

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"	
n2E	28	#6	11'-3"	
n3E	28	#6	14'-3"	
p8E	12	#7	14'-0"	
p9E	8	#7	27'-6"	
p10E	3	#7	20'-8"	
p11E	3	#7	13'-8"	
p12E	3	#7	6'-8"	
s5E	26	#4	16'-3"	
s6E	28	#4	9'-5"	
s7E	21	#4	10'-5"	
u3E	8	#6	13'-6"	
v11E	27	#4	7'-4"	
v12E	17	#5	2'-7"	
v13E	27	#4	2'-10"	
v14E	28	#6	8'-11"	
v15E	28	#6	8'-11"	
v16E	27	#4	8'-8"	
Class X Concrete		Cu. Yds.	44.6	
Reinforcement Bars		Lbs.	4,840	
Conc. Piles 12" Dia.		Lin. Ft.	180	
Test Piles 12" Conc.		Ea.	1	
Struct. Excavation		Cu. Yds.	137	

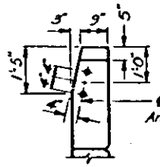
These bars to be furnished by Deck Contractor.
Cross Hatched Areas will not be included in this Contract.



SECTION A-A

SECTION D-D

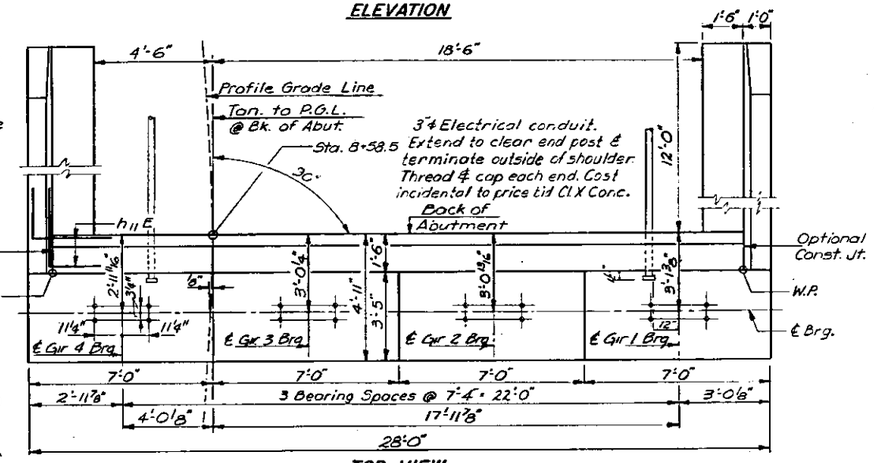
* Construction Joints @ same elevations as top of steps.



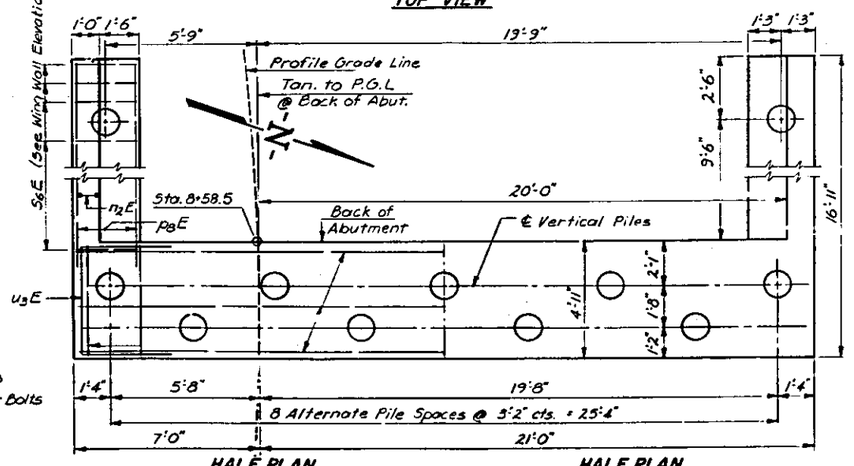
VIEW C-C

** Location of future anchor bolts.

Space reinforcement in cap to miss future anchor bolt locations.

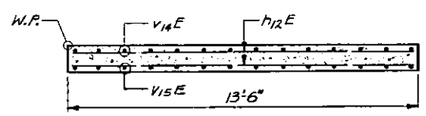


TOP VIEW

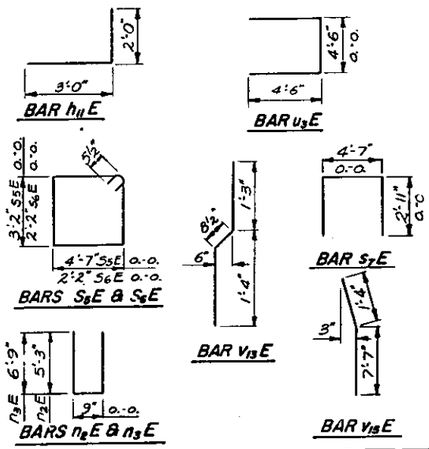


HALF PLAN
Reinforcement

HALF PLAN
Dimensions



SECTION B-B



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

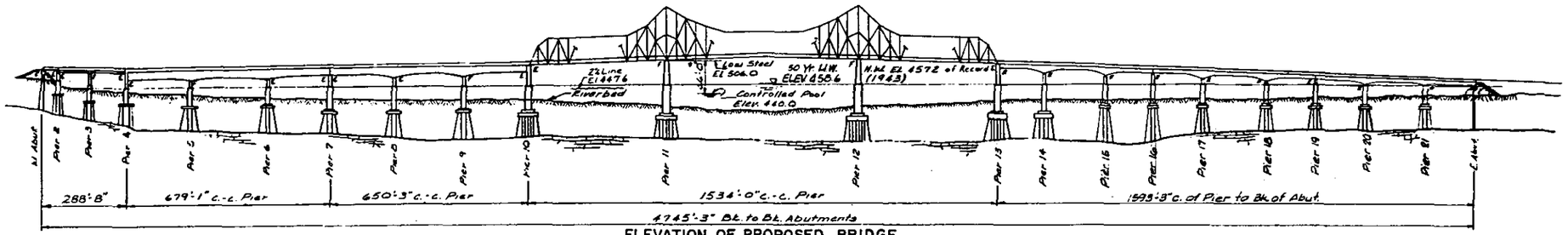
Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 158-2
PEORIA & TAZEWELL COUNTIES

W.D.L.
S.C.Q.
D.A.H.
S.C.Q.

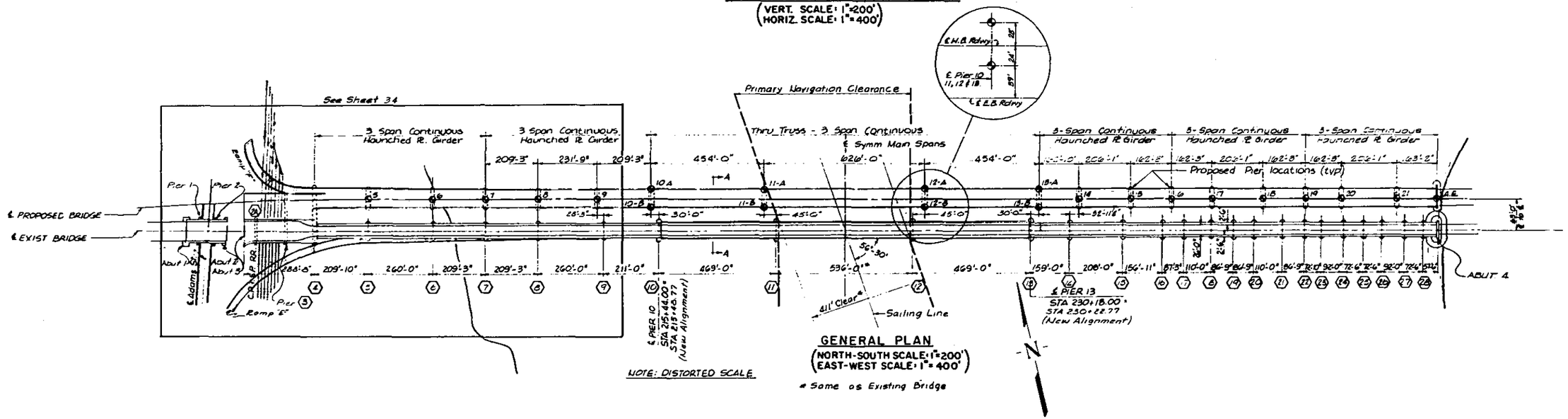
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

PROJ. NO. 74001
DATE 6-22-76

FED. ROAD DIST. NO. 7				
F.A. RTE. 31	SEC. 108-2	COUNTY Peoria & Tazewell	TOTAL SHEETS 56	SHEET NO. 43
		ILLINOIS	PROJECT	



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



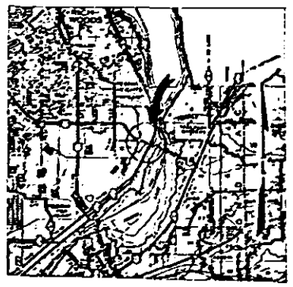
GENERAL PLAN
(NORTH-SOUTH SCALE: 1"=200')
(EAST-WEST SCALE: 1"=400')

NOTE: DISTORTED SCALE

* Same as Existing Bridge

(2) Indicates Pier Number of Existing Bridge

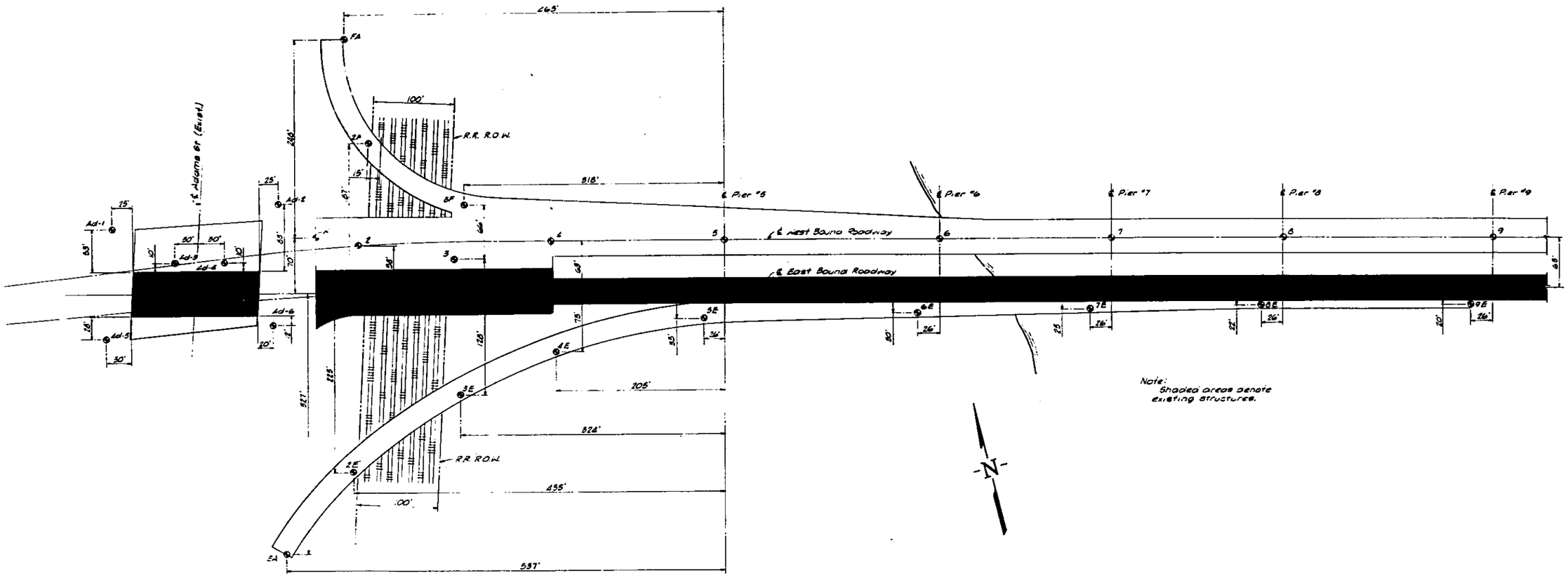
LOCATION MAP

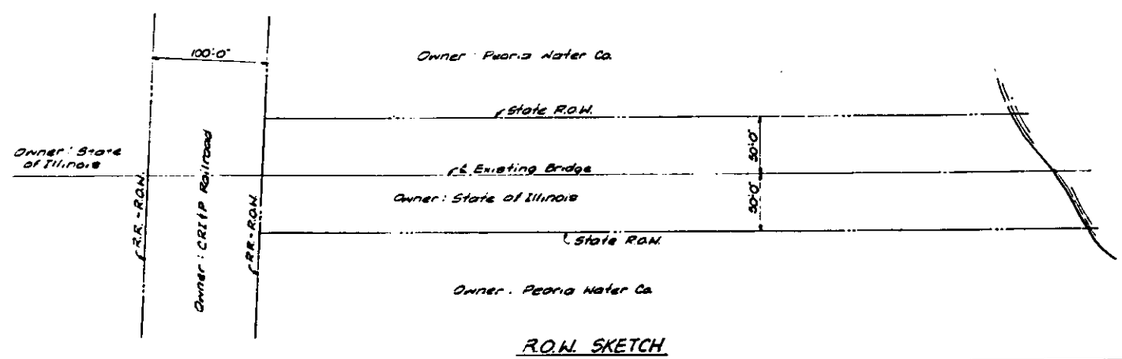


BORING PLAN
Mc CLUGAGE BRIDGE
F.A. ROUTE 31
OVER
ILLINOIS RIVER
SEC 15 B-2

CRN	HANSON ENGINEERS INCORPORATED	74001
RAH	SPRINGFIELD ILLINOIS PEORIA ILLINOIS	12-31-74
UNH		

F.A.S.I	166-2	Peoria & Tazewell	56	57





R.O.W. SKETCH

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

DESIGNED	J.M.H.
DRAWN	C.R.N.
CHECKED	R.A.H.
QUANTITIES	J.N.H.

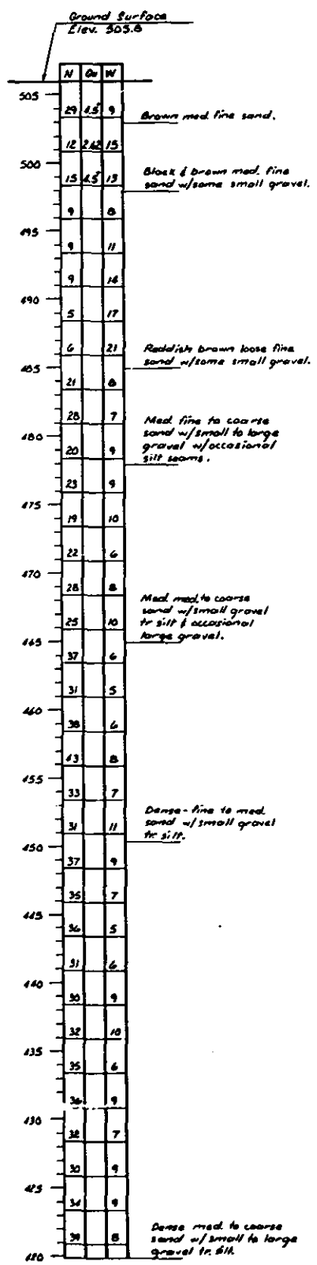
HANSON ENGINEERS INCORPORATED
SPRINGFIELD ILLINOIS PEORIA ILLINOIS

FILE NO.	74001
DATE	12-31-74

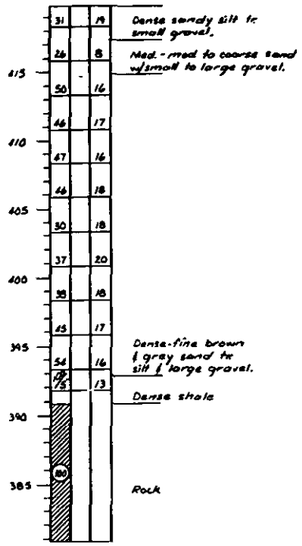
ROUTE SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 31 15B-2	PEORIA & TAZEWELL	56	47
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	

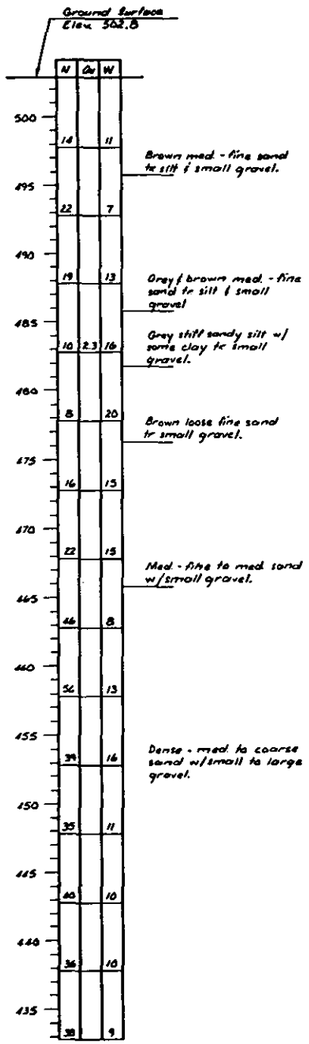
BORING DATA

BORING "AD1



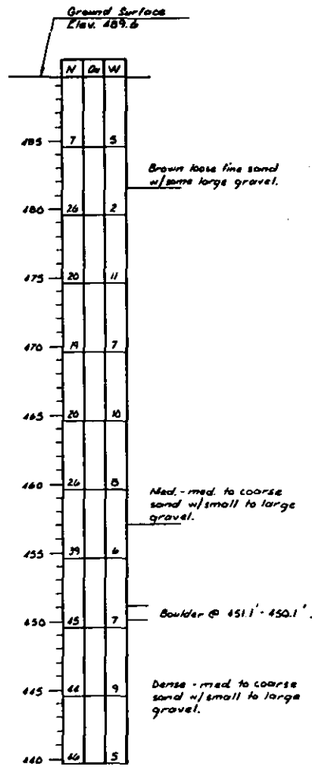
BORING "AD2



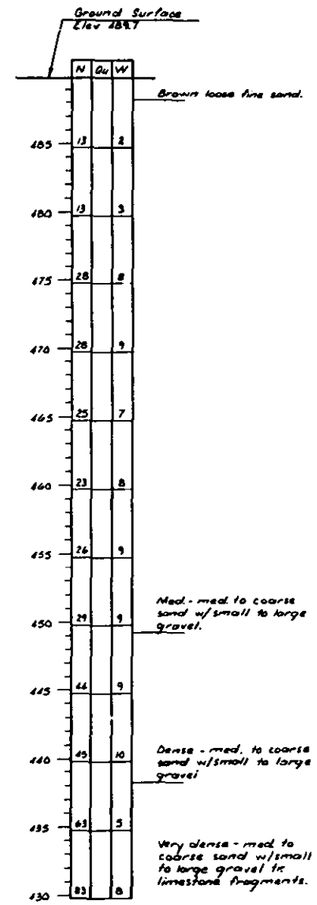


Note: Installed piezometer at 434.5'; Flushed with clear water & backfilled & packed with clean sand to 472.8'.

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

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

DESIGNED	HANSON ENGINEERS INCORPORATED SPRINGFIELD ILLINOIS PEORIA ILLINOIS	JOB NO. 76001
DRAWN RJE		DATE 12-31-76
CHECKED D.F.J.		

FA 31	158-2	Peoria & Tazewell	56	46
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

BORING DATA

BORING # AD 5

Ground Surface Elev. 508.0

Elev.	N	Qu	W	
505	11		2	
	14		5	
500	16		9	Brown med.-fine to med. sand w/small gravel.
	7		9	
495	6		24	Reddish brown loose fine sand tr. small gravel.
490	20		16	Brown med. fine sand tr. small gravel.
485	38		9	Dense med. to coarse sand w/small to large gravel tr silt.
480	31		17	Brown dense fine sand tr. small gravel.
475	18		36	Brown very stiff silty clay tr small gravel.
470	10	3.2	31	Grey stiff silty clay tr small gravel.
465	41		11	
460	30		16	Brown dense fine to med. sand w/small gravel.
455	48		7	
450	38		7	Dense - med. to coarse sand w/small to large gravel.

BORING # AD 6

Ground Surface Elev. 504.6

Elev.	N	Qu	W	
				Med. - med. to coarse sand w/small to large gravel & cobbles.
500	22		11	
				Brown med. fine to med. sand w/some small gravel.
495	21	4.5*	11	
				Bolt Flg. Pier AE
490	12	2.3	15	Grey & black med. - fine sand w/some small gravel tr large gravel & silt.
485	5	1.6	15	Brown med sandy silt w/some small gravel.
480	16		8	
475	19		10	
470	28		6	Med. - med. to coarse sand w/small to large gravel tr silt.
465	36		5	
460	34		4	Dense med. to coarse sand w/small to large gravel.
				Med. - med. to coarse sand w/small to large gravel.
455	23		8	
450	50		3	Dense med. to coarse sand w/small to large gravel tr limestone fragments.
445	30		9	

BORING # AE

Ground Surface Elev. 467.6

Elev.	N	Qu	W	
465	19	4.5*	6	
	17	4.5*	10	Brown med. - fine to coarse silty sand some small to large gravel.
460	8	3.0*	14	
455	5		13	
450	16	4.5*	16	Brown med. silty clay tr sand & small gravel.
				Grey med. silt some organic silt, sand & small to large gravel.
445	6	1.8	18	
440	7	1.9	9	Brown & grey med. clayey silt tr sand.
435	2	3.2	26	
430	7	3.8	19	
425	9		16	
420	7		23	Grey loose fine silty sand tr layers of small gravel.
415	5	2.4	67	
410	6	1.9	37	
405	31		19	Grey organic silt.
				Grey dense fine to coarse sand some silt & small gravel.
400	4	1.3	27	
395	65		*	Grey organic silt.
	5"/2"		*	Grey dense fine to coarse sand w/small to large gravel.
390	15"/2"		13	
385	45"/6"	4.5*	15	Grey hard shale.

* - Lost sample pushing gravel.

BORING # AW

Ground Surface Elev. 503.8

Elev.	N	Qu	W	
500	10		9	
495	33	3.0	12	Brown loose fine sand w/some small gravel.
490	41		14	
485	20		17	Dense - fine to med. sand w/some large gravel.
480	17		15	
475	11		18	Brown med. - fine sand w/occasional large gravel.
470	34		10	
465	52		W 9	Dense - med. to coarse sand w/small to large gravel.
460	69		7	
455	60		7	
450	60		8	Very dense - med. to coarse sand w/small to large gravel tr limestone fragments.
445	41		9	
440	41		15	Dense - med. to coarse sand w/small to large gravel.
435	12		10	

* Note: piece of large gravel in tip of spoon.

BORING # EA

Ground Surface Elev. 496.0

Elev.	N	Qu	W	
495				
	15		7	
490				Brown med. fine sand w/some small gravel.
	39		6	6" boulder @ 486.5'.
485				
480	50		10	
475	35		9	
470	55		9	Dense-fine to med. sand w/small to large gravel.
465	18		10	Med - med. to coarse sand w/small to large gravel.
460	47		9	
455	31		10	
450	34		8	Dense - med to coarse sand w/small to large gravel tr silt.
445	30		7	
440	32		9	
	34		10	

BORING # FA

Ground Surface Elev. 490.5

Elev.	N	Qu	W	
490				
	23		3	Brown med. fine - med sand tr silt & small to large gravel & small boulders.
485				
	23		9	2" layer of clay @ 481.5'.
480				Brown med. sand tr silt.
	11	0.6	21	Brown med. - fine to coarse sand w/small gravel tr silt.
475	16		14	
470	12		13	
465				Brown med. sand tr silt.
	18		8	Brown med. - med to coarse sand w/small to large gravel
460				
455	44	1.2	13	6" boulder @ 451.0' - 450.3'
450				3" layer of clayey silt @ 450.5'.
	27		15	
445				Brown med. - med. to coarse sand tr silt & small gravel.
440	39		11	
435	69		12	Brown dense med. to coarse sand tr sand & small gravel.
430	51		13	
425	56		11	
	54		13	

* Note: moved boring to West side of ramp 15' West of staked location.

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

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 158-2
PEORIA & TAZEWELL COUNTIES

R.F.F.
D.F.J.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

74001

12-31-74

F.A. 31	15B-2	Peoria & Tazewell	Sec.	Sht. 47

BORING DATA

BORING "2E

Ground Surface Elev. 481.1

Elev.	N	Qu	W	
480	12		4	Black med. fine sandy silt - top soil.
	10		9	
475	9		6	
	20		3	
470	21		2	
	23		7	
465	22		10	Brown med. fine - coarse sand w/small to med. gravel fr silt.
	50/4"		6	
460	47		14	
	45		11	Brown dense coarse sand & small to large gravel fr silt.
455	45		7	
	24		9	Brown med. - coarse sand & small to large gravel fr silt.
450	27		10	
	22		10	
445	26		11	
	21		9	
440	23		11	
	21		10	
435	31		7	
	20		9	
430	26		8	
	23		9	
425	21		10	
	36		12	
420	35		9	Brown dense coarse sand & small to large gravel fr silt.
	38		15	
415	17		9	
	49		15	
410	49		16	
	74		16	Brown dense coarse sand fr silt & small gravel.
405	43		16	
	55		16	

BORING "2

Ground Surface Elev. 475.7

Elev.	N	Qu	W	
475	11		2	Brown med. fine - coarse sand.
	10		2	
470				
	28		1	Small boulder @ 465.8.
465				
	39		8	
460				
	27		8	
455				
	26		8	
450				
	23		7	
445				
	28		7	
440				
	43		9	Pushing large gravel.
435				Brown med. - coarse sand & small gravel fr silt.
	36		16	Thin layer of clay @ 431.2.
430				
	34		10	
425				
	52		8	
420				
	79		11	
415				
	33		15	
410				
	18		19	Brown dense coarse sand w/small to large gravel fr silt.
405				
	50/3"		20	Grey dense silt.
400				8" boulder @ 400.9.
	166		21	Grey med. - fine to med. sand w/layers of silty clay.
				Dark green very dense coarse sand & small gravel.

BORING "2F

Ground Surface Elev. 471.8

Elev.	N	Qu	W	
470	10		3	
	11		5	
465				
	13		3	Brown med. fine silty sand fr gravel.
460				
	14		5	
455				
	37		8	
450				
	38		9	
445				
	31		9	
440				
	28		9	
435				
	29		8	
430				
	27		9	
425				Brown med. - coarse sand & small to large gravel fr silt.
	29		11	
420				
	23		9	
415				
	23		9	
410				
	44		7	

BORING "3E

Ground Surface Elev. 465.7

Elev.	N	Qu	W	
465	12		10	
	15	4.5*	13	
460	18	7.42	16	Brown med. - fine to med. very silty sand fr small gravel clay binder.
	26	9.70	16	
455	16		6	Brown med. clayey silt.
	13		3	
450	18		3	
	17		12	
445				
	21		11	
440				Brown med. fine - coarse sand w/small to med. gravel fr silt.
	31		9	
435				
	35		15	
430				
	34		17	
425				
	35		15	
420				
	33	5.42	16	Brown dense coarse sand w/small gravel fr silt.
415				Brown hard silty clay some sand fr small gravel & thin layers of sand & gravel.
	33		22	
410				
	34		15	
405				Brown dense coarse sand & small gravel fr silt.
	30	29	21	
400				
	17	4.57	26	L.g. a " gray fine sand, silt and silty clay.
395				
	44/6"	7.18	14	Grey hard shale.

BORING "3

Ground Surface Elev. 464.6

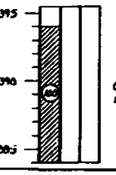
Elev.	N	Qu	W	
	18		6	Brown loose fine to med. sand w/small to large gravel fr cobbles.
460	15	4.5*	8	Brown med. fine to med. sand w/ small gravel fr cobbles & clay.
	30		18	
455	50		3	Dense - med. to coarse sand w/small to large gravel & boulders.
	17		7	
450	15		4	
	16		5	
445	21		4	
	19		6	
440	22		5	
	24		5	
435	18		5	
	23		5	
430	23		6	
	26		8	
425	36		10	
	35		8	
420	35		8	
	24		7	
415	27		10	
	24		9	
410	31		5	
	25		7	
405	31		7	Brown med. fine to coarse sand w/small to large gravel fr silt.
	48		10	Brown dense coarse sand & small to large gravel fr silt.
400	46		12	
	50/6"		15	
	100/6"		26	Pushing gravel.
395	100/6"		17	
				Grey hard shale.
385				

* - Sample lost pushing large gravel.
Note: Average rate of coring - 2 min 25 sec./ft.

BORING "3F

Ground Surface Elev. 467.6

Elev.	N	Qu	W	
465	17	4.5*	2	
	34		5	Brown med. fine - coarse silty sand w/small to large gravel.
460	18	3.0	16	
	24	4.0	4	Brown med silt.
455	25	3.4	6	
	23		10	
450	25		8	
	24		8	
445	23		9	
	22		11	
440	17		8	
	21		9	
435	20		8	
	27		7	
430	11		7	
	17		10	
425	18		7	
	23		7	
420	24		7	
	18		9	
415	19		7	
	20		6	
410	19		6	
	17		9	Brown med. fine - coarse sand & small to large gravel fr silt.
	50/6"		18	
405	50/6"		7	
	50/6"		13	Very dense small to large gravel w/sand fr silt.
400	50/6"		14	



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

	HANSON ENGINEERS INCORPORATED	Job No. 74001
Designed R.J.F.	SPRINGFIELD ILLINOIS PEORIA ILLINOIS	Date 12-BA-74
Checked O.F.J.		

F.A. 31	108-2	Peoria & Tazewell	56	48

BORING DATA

BORING "4E"

Ground Surface Elev. 459.0

	N	Qu	W	
455	30	4.5+	14	Brown dense fine to coarse sand & small gravel fr. silt fill.
	17	4.5+	13	Brown med. fine to coarse sand some small gravel clay binder.
450	10	3.5	14	Brown med. silt fr. sand.
	38		3	
	22		4	
445	16		3	
	17		3	
440	15		5	
	22		4	
435	22		9	
	23		9	
430	27		8	
	19		7	
425	13		9	
	17		16	
420	13		10	
	17		9	
415	19		20	
	15		16	
410	19		16	Brown med. - coarse sand w/small to large gravel fr. silt.
	82		8	Brown very dense coarse sand & sm. to large gravel fr. silt.
405	136	4.5+	19	
	102		26	
400	136		27	Green very dense med. sand fr. silt & small gravel.
	42	4.5	23	
395	172		22	Grey hard silt & clay fr. sand lenses.
	163	4.0	22	Brown very dense coarse sand & sm. gravel fr. silt. Green very dense med. coarse sand fr. small gravel & silt.
390	50/4"	4.5	18	
				Grey hard shale
385				
380				

BORING "4"

Ground Surface Elev. 459.5

	N	Qu	W	
455	36	4.5+	5	Brown dense med. to coarse sand w/gravel & cobbles.
	11		11	Brown med. fine to med. sand w/some small gravel.
	18	3.0	17	
450	15	L.H.	18	Brown med. sandy silt w/some small gravel.
	14		8	
445	27		6	
	23		5	
440	12		6	
	13		5	
435	11		6	
	11		6	
430	26		5	Small boulder @ 431.5'
	27		7	
425	12		12	
	14		14	
420	13		14	
	15		8	
415	16		9	
	16		16	
410	15		15	Brown med. coarse sand w/small to large gravel fr. silt.
	20		12	
405	43		6	
	35		9	
400	32		7	Brown dense coarse sand & small to large gravel fr. silt.
	26		6	
395	27		7	Brown med. coarse sand & small to large gravel fr. silt.
	100/2"	4.5	20	Green very hard sandy silt w/ small gravel fr. cobbles & clay.
390	50/4"	4.5+	11	
				Very hard shale.
385				
380				

BORING "5E"

Ground Surface Elev. 450.5

	N	Qu	W	
445	11		11	Med. sand, gravel, some silt & clay fill.
	23		11	
440	21		6	
	20		6	
435	17		8	
	21		6	
430	16		8	
	19		6	
425	19		7	
	13		11	
420	18		8	Brown med. - fine to coarse sand & small gravel fr. silt & clay seams.
	9		14	
415	18		16	Boulders @ 417.8' - 416.8'
	26		12	
	27		19	Brown med. sand fr. silt & layers of coarse sand & small gravel.
410	98		13	Boulders @ 410.5' - 409.1'.
	69	2.9	10	
405	35		19	
	32		21	
400	47		20	
	43		18	Brown dense med. to coarse sand some small gravel fr. silt.
395	62		25	
	50	2.5	21	Green very dense med. sand fr. silt. —Silty
390	50/3"	4.5+	17	
				Grey hard shale
385				
380				

BORING "5"

Ground Surface Elev. 459.0

	N	Qu	W	
455	29		2	Brown dense med. to coarse sand & gravel w/ boulders.
	10		8	Brown loose fine sand w/small gravel fr. cobbles.
	5	1.0	15	Brown soft moist sandy silt to small gravel clay binder.
450	9	1.7	17	
	11	2.2	17	Brown med. silty clay w/some sand & small gravel.
445	31		11	
	28		16	
440	22		8	Dense - med. to coarse sand & gravel w/ silt & cobbles.
	9		12	Brown stiff silt w/ large gravel & cobbles fr. clay.
435	22		13	
	37		18	Brown med. - med. to coarse sand w/ gravel & cobbles fr. silt.
430	16		6	Grey hard silt w/ some sm. gravel.
	20		9	
425	20		11	
	27		16	
420	17		13	
	16		8	
415	14		8	
	15		8	Med. - med to coarse sand & gravel w/ cobbles & some silt.
410	17		9	
	27			6" boulder @ 409.0' - 408.5'
405	35		18	—Lost sample pushing cobble.
	49/0"		11	
400	123		21	
	113	4.5	15	Green very hard silt w/some sand, gravel, fr. silt, stone, & cobbles.
395	100/2"	6.0	16	
				Very hard shale
390				
385				

BORING "6E"

Ground Surface Elev. 441.0

	N	Qu	W	
440	9	3.7	16	
	9	3.7	23	
435	18	3.7	22	Black stiff clayey silt.
	5	4.0	21	Brown & black very stiff clayey silt.
430	2		23	Brown & black med. clayey silt. Brown very loose fine silty sand —(water noted)
	8	1.0	17	
425	2		13	
	5		5	
420	11		6	
	11		9	Brown loose fine to coarse sand & small to med. gravel some silt.
415	13		19	
	10		22	
410	18		23	Grey & brown loose inorganic silt.
	19		10	
405	24	4.0	14	Brown med. coarse sand & small to med. gravel fr. silt.
	20	3.5	14	
400	17		14	
	14		21	
395	23		14	Med. - coarse sand & small to med. gravel w/ layers of very sandy clay.
	18		14	
390	50/4"	4.5	15	Grey hard shale.
385				
380				

BORING "6"

Ground Surface Elev. 441.0

	N	Qu	W	
440	13		8	Brown med. silt w/ small gravel.
	7	4.5+	27	
435	9	4.0	28	Black med. clay, silt fr gravel (small).
	9	3.5	24	
430	6	3.5	19	Brown & black med. silty clay fr. sand & small gravel & roots.
	1/6"		20	
425	3		17	Brown wet very loose fine sand w/silt binder (est. water level)
	3		27	Loose - sand w/med. gravel & soft clay.
420	10		18	
	14		9	
415	16		8	
	17		5	
410	16		10	Med. - med. to coarse gravel w/ some sand & silt fr. cobbles.
	19		13	Seam of soft clay.
405	19	4.5+	16	Red & brown med. - sandy silt w/ small gravel some clay fr. cobbles.
	32	1.0+	18	
400	36	3.5+	16	Grey hard silt & clay (shale) fr. thin layers of black coal & thin layers of brown silt. Med. gray silt/sm. gravel seams of coal (fr. sand)
	36	2.5	15	
395	17		27	
	20		15	Med. - silt, w/ large gravel, coal fr. clay.
390	100/2"	4.0	13	Grey very hard shale
	50/3"			
385	50/3"			
380	50/3"			
375	50/3"			
370	50/3"			Soft shale
				Hard shale

LEGEND:

Indicates Shelby Tube

Indicates Rock Core

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

© — Indicates test sample.

BORING DATA

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

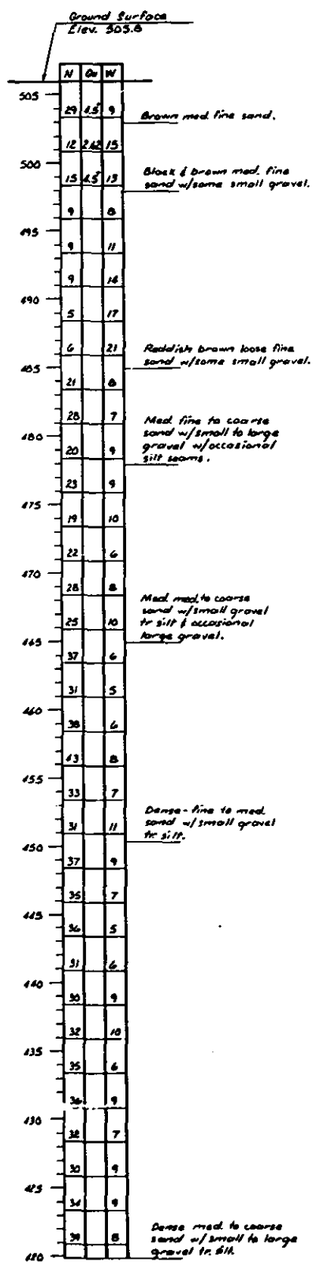
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

Designed	
Drawn	RJE
Checked	G.F.J.
File No.	74001
Date	12-31-74

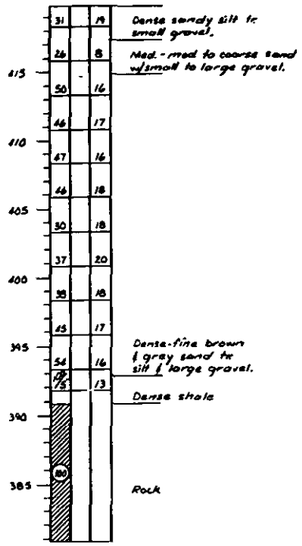
ROUTE SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 31 15B-2	PEORIA & TAZEWELL	56	47
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	

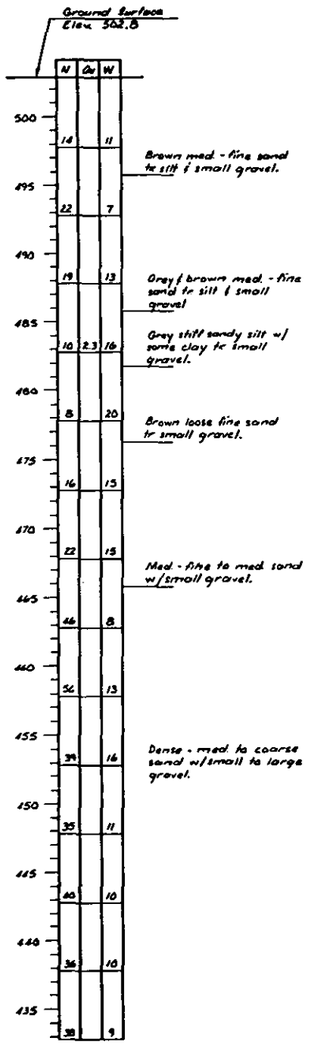
BORING DATA

BORING "AD1



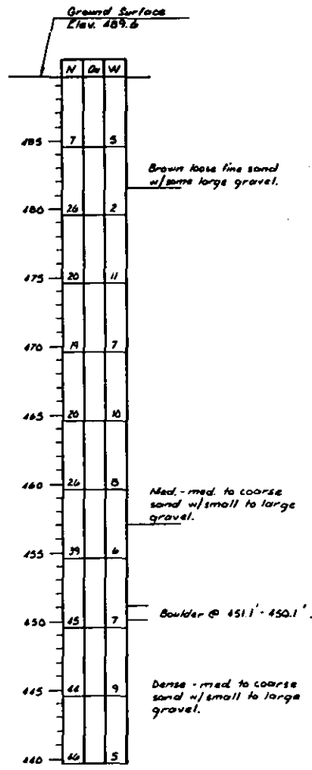
BORING "AD2



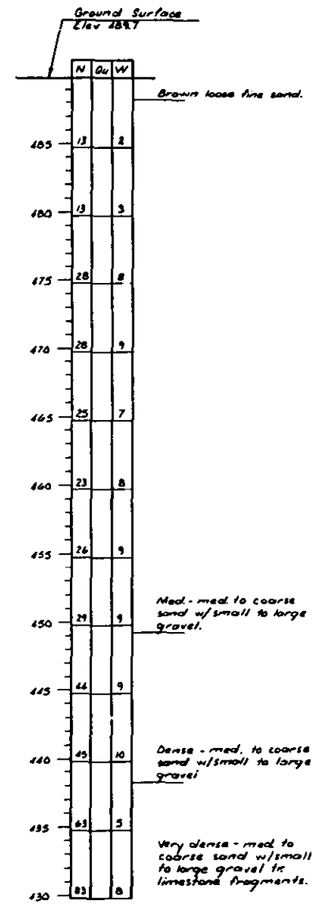


Note: Installed piezometer at 434.5'; Flushed with clear water & backfilled & packed with clean sand to 472.8'.

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

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

DESIGNED	HANSON ENGINEERS INCORPORATED SPRINGFIELD ILLINOIS PEORIA ILLINOIS	JOB NO. 76001
DRAWN RJE		DATE 12-31-76
CHECKED D.F.J.		

FA 31	158-2	Peoria & Tazewell	56	46
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

BORING DATA

BORING # AD 5

Ground Surface Elev. 508.0

Elev.	N	Qu	W	
505	11		2	
	14		5	
500	16		9	Brown med.-fine to med. sand w/small gravel.
	7		9	
495	6		24	Reddish brown loose fine sand tr. small gravel.
490	20		16	Brown med. fine sand tr. small gravel.
485	38		9	Dense med. to coarse sand w/small to large gravel tr silt.
480	31		17	Brown dense fine sand tr. small gravel.
475	18		36	Brown very stiff silty clay tr small gravel.
470	10	3.2	31	Grey stiff silty clay tr small gravel.
465	41		11	
460	30		16	Brown dense fine to med. sand w/small gravel.
455	48		7	
450	38		7	Dense - med. to coarse sand w/small to large gravel.

BORING # AD 6

Ground Surface Elev. 504.6

Elev.	N	Qu	W	
				Med. - med. to coarse sand w/small to large gravel & cobbles.
500	22		11	
				Brown med. fine to med. sand w/some small gravel.
495	21	4.5*	11	
				Bolt Flg. Pier AE
490	12	2.3	15	Grey & black med. - fine sand w/some small gravel tr large gravel & silt.
485	5	1.6	15	Brown med sandy silt w/some small gravel.
480	16		8	
475	19		10	
470	28		6	Med. - med. to coarse sand w/small to large gravel tr silt.
465	36		5	
460	34		4	Dense med. to coarse sand w/small to large gravel.
				Med. - med. to coarse sand w/small to large gravel.
455	23		8	
450	50		3	Dense med. to coarse sand w/small to large gravel tr limestone fragments.
445	30		9	

BORING # AE

Ground Surface Elev. 467.6

Elev.	N	Qu	W	
465	19	4.5*	6	
	17	4.5*	10	Brown med. - fine to coarse silty sand some small to large gravel.
460	8	3.0*	14	
455	5		13	
450	16	4.5*	16	Brown med. silty clay tr sand & small gravel.
				Grey med. silt some organic silt, sand & small to large gravel.
445	6	1.8	18	
440	7	1.9	9	Brown & grey med. clayey silt tr sand.
435	2	3.2	26	
430	7	3.8	19	
425	9		16	
420	7		23	Grey loose fine silty sand tr layers of small gravel.
415	5	2.4	67	
410	6	1.9	37	
405	31		19	Grey organic silt.
				Grey dense fine to coarse sand some silt & small gravel.
400	4	1.3	27	
395	65		*	Grey organic silt.
	5"/2"		*	Grey dense fine to coarse sand w/small to large gravel.
390	15"/2"		13	
385	45"/6"	4.5*	15	Grey hard shale.

* - Lost sample pushing gravel.

BORING # AW

Ground Surface Elev. 503.8

Elev.	N	Qu	W	
500	10		9	
495	33	3.0	12	Brown loose fine sand w/some small gravel.
490	41		14	
485	20		17	Dense - fine to med. sand w/some large gravel.
480	17		15	
475	11		18	Brown med. - fine sand w/occasional large gravel.
470	34		10	
465	52		W 9	Dense - med. to coarse sand w/small to large gravel.
460	69		7	
455	60		7	
450	60		8	Very dense - med. to coarse sand w/small to large gravel tr limestone fragments.
445	41		9	
440	41		15	Dense - med. to coarse sand w/small to large gravel.
435	12		10	

* Note: piece of large gravel in tip of spoon.

BORING # EA

Ground Surface Elev. 496.0

Elev.	N	Qu	W	
495				
	15		7	
490				Brown med. fine sand w/some small gravel.
	39		6	6" boulder @ 486.5'.
485				
480	50		10	
475	35		9	
470	55		9	Dense-fine to med. sand w/small to large gravel.
465	18		10	Med - med. to coarse sand w/small to large gravel.
460	47		9	
455	31		10	
450	34		8	Dense - med to coarse sand w/small to large gravel tr silt.
445	30		7	
440	32		9	
	34		10	

BORING # FA

Ground Surface Elev. 490.5

Elev.	N	Qu	W	
490				
	23		3	Brown med. fine - med sand tr silt & small to large gravel & small boulders.
485				
	23		9	2" layer of clay @ 481.5'.
480				Brown med. sand tr silt.
	11	0.6	21	Brown med. - fine to coarse sand w/small gravel tr silt.
475	16		14	
470	12		13	
465				Brown med. sand tr silt.
	18		8	Brown med. - med to coarse sand w/small to large gravel
460				
455	44	1.2	13	6" boulder @ 451.0' - 450.3'
450				3" layer of clayey silt @ 450.5'.
	27		15	
445				Brown med. - med. to coarse sand tr silt & small gravel.
440	39		11	
435	69		12	Brown dense med. to coarse sand tr sand & small gravel.
430	51		13	
425	56		11	
	54		13	

* Note: moved boring to West side of ramp 15' West of staked location.

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

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 158-2
PEORIA & TAZEWELL COUNTIES

R.F.F.
D.F.J.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

74001

12-31-74

F.A. 31	15B-2	Peoria & Tazewell	Sec.	Sht. 47

BORING DATA

BORING "2E

Ground Surface Elev. 481.1

Elev.	N	Qu	W	
480	12		4	Black med. fine sandy silt - top soil.
	10		9	
475	9		6	
	20		3	
470	21		2	
	23		7	
465	22		10	Brown med. fine - coarse sand w/small to med. gravel fr silt.
	50/4"		6	
460	47		14	
	45		11	Brown dense coarse sand & small to large gravel fr silt.
455	45		7	
	24		9	Brown med. - coarse sand & small to large gravel fr silt.
450	27		10	
	22		10	
445	26		11	
	21		9	
440	23		11	
	21		10	
435	31		7	
	20		9	
430	26		8	
	23		9	
425	21		10	
	36		12	
420	35		9	Brown dense coarse sand & small to large gravel fr silt.
	38		15	
415	17		9	
	49		15	
410	49		16	
	74		16	Brown dense coarse sand fr silt & small gravel.
405	43		16	
	55		16	

BORING "2

Ground Surface Elev. 475.7

Elev.	N	Qu	W	
475	11		2	Brown med. fine - coarse sand.
	10		2	
470				
	28		1	Small boulder @ 465.8.
465				
	39		8	
460				
	27		8	
455				
	26		8	
450				
	23		7	
445				
	28		7	
440				
	43		9	Pushing large gravel.
435				Brown med. - coarse sand & small gravel fr silt.
	36		16	Thin layer of clay @ 431.2.
430				
	34		10	
425				
	52		8	
420				
	79		11	
415				
	33		15	
410				
	18		19	Brown dense coarse sand w/small to large gravel fr silt.
405				
	50/3"		20	Grey dense silt.
400				8" boulder @ 400.9.
	166		21	Grey med. - fine to med. sand w/layers of silty clay.
				Dark green very dense coarse sand & small gravel.

BORING "2F

Ground Surface Elev. 471.8

Elev.	N	Qu	W	
470	10		3	
	11		5	
465				
	13		3	Brown med. fine silty sand fr gravel.
460				
	14		5	
455				
	37		8	
450				
	38		9	
445				
	31		9	
440				
	28		9	
435				
	29		8	
430				
	27		9	
425				Brown med. - coarse sand & small to large gravel fr silt.
	29		11	
420				
	23		9	
415				
	23		9	
410				
	44		7	

BORING "3E

Ground Surface Elev. 465.7

Elev.	N	Qu	W	
465	12		10	
	15	4.5*	13	
460	18	7.42	16	Brown med. - fine to med. very silty sand fr small gravel clay binder.
	26	9.70	16	
455	16		6	Brown med. clayey silt.
	13		3	
450	18		3	
	17		12	
445				
	21		11	
440				Brown med. fine - coarse sand w/small to med. gravel fr silt.
	31		9	
435				
	35		15	
430				
	34		17	
425				
	35		15	
420				
	33	5.42	16	Brown dense coarse sand w/small gravel fr silt.
415				Brown hard silty clay some sand fr small gravel & thin layers of sand & gravel.
	33		22	
410				
	34		15	
405				Brown dense coarse sand & small gravel fr silt.
	30	29	21	
400				
	17	4.57	26	L.g. a " gray fine sand, silt and silty clay.
395				
	44/6"	7.18	14	Grey hard shale.

BORING "3

Ground Surface Elev. 464.6

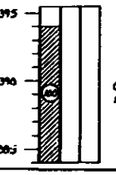
Elev.	N	Qu	W	
	18		6	Brown loose fine to med. sand w/small to large gravel fr cobbles.
460	15	4.5*	8	Brown med. fine to med. sand w/ small gravel fr cobbles & clay.
	30		18	
455	50		3	Dense - med. to coarse sand w/small to large gravel & boulders.
	17		7	
450	15		4	
	16		5	
445	21		4	
	19		6	
440	22		5	
	24		5	
435	18		5	
	23		5	
430	23		6	
	26		8	
425	36		10	
	35		8	
420	35		8	
	24		7	
415	27		10	
	24		9	
410	31		5	
	25		7	
405	31		7	Brown med. fine to coarse sand w/small to large gravel fr silt.
	48		10	Brown dense coarse sand & small to large gravel fr silt.
400	46		12	
	50/6"		15	
	100/6"		26	Pushing gravel.
395	100/6"		17	
				Grey hard shale.
385				

* - Sample lost pushing large gravel.
Note: Average rate of coring - 2 min 25 sec./ft.

BORING "3F

Ground Surface Elev. 467.6

Elev.	N	Qu	W	
465	17	4.5*	2	
	34		5	Brown med. fine - coarse silty sand w/small to large gravel.
460	18	3.0	16	
	24	4.0	4	Brown med silt.
455	25	3.4	6	
	23		10	
450	25		8	
	24		8	
445	23		9	
	22		11	
440	17		8	
	21		9	
435	20		8	
	27		7	
430	11		7	
	17		10	
425	18		7	
	23		7	
420	24		7	
	18		9	
415	19		7	
	20		6	
410	19		6	
	17		9	Brown med. fine - coarse sand & small to large gravel fr silt.
	50/6"		18	
405	50/6"		7	
	50/6"		13	Very dense small to large gravel w/sand fr silt.
400	50/6"		14	



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

	HANSON ENGINEERS INCORPORATED	Job No. 74001
Designed R.J.F.	SPRINGFIELD ILLINOIS PEORIA ILLINOIS	Date 12-BA-74
Checked O.F.J.		

F.A. 31	108-2	Peoria & Tazewell	56	48

BORING DATA

BORING "4E"

Ground Surface Elev. 459.0

	N	Qu	W	
455	30	4.5+	14	Brown dense fine to coarse sand & small gravel fr. silt fill.
	17	4.5+	13	Brown med. fine to coarse sand some small gravel clay binder.
450	10	3.5	14	Brown med. silt fr. sand.
	38		3	
	22		4	
445	16		3	
	17		3	
440	15		5	
	22		4	
435	22		9	
	23		9	
430	27		8	
	19		7	
425	13		9	
	17		16	
420	13		10	
	17		9	
415	19		20	
	15		16	
410	19		16	Brown med. - coarse sand w/small to large gravel fr. silt.
	82		8	Brown very dense coarse sand & sm. to large gravel fr. silt.
405	136	4.5+	19	
	102		26	
400	136		27	Green very dense med. sand fr. silt & small gravel.
	42	4.5	23	
395	172		22	Grey hard silt & clay fr. sand lenses.
	163	4.0	22	Brown very dense coarse sand & sm. gravel fr. silt. Green very dense med. coarse sand fr. small gravel & silt.
390	50/4"	4.5	18	
				Grey hard shale
385				
380				

BORING "4"

Ground Surface Elev. 459.5

	N	Qu	W	
455	36	4.5+	5	Brown dense med. to coarse sand w/gravel & cobbles.
	11		11	Brown med. fine to med. sand w/some small gravel.
	18	3.0	17	
450	15	L.H.	18	Brown med. sandy silt w/some small gravel.
	14		8	
445	27		6	
	23		5	
440	12		6	
	13		5	
435	11		6	
	11		6	
430	26		5	Small boulder @ 431.5'
	27		7	
425	12		12	
	14		14	
420	13		14	
	15		8	
415	16		9	
	16		16	
410	15		15	Brown med. coarse sand w/small to large gravel fr. silt.
	20		12	
405	43		6	
	35		9	
400	32		7	Brown dense coarse sand & small to large gravel fr. silt.
	26		6	
395	27		7	Brown med. coarse sand & small to large gravel fr. silt.
	100/2"	4.5	20	Green very hard sandy silt w/ small gravel fr. cobbles & clay.
390	50/4"	4.5+	11	
				Very hard shale.
385				
380				

BORING "5E"

Ground Surface Elev. 450.5

	N	Qu	W	
445	11		11	Med. sand, gravel, some silt & clay fill.
	23		11	
440	21		6	
	20		6	
435	17		8	
	21		6	
430	16		8	
	19		6	
425	19		7	
	13		11	
420	18		8	Brown med. - fine to coarse sand & small gravel fr. silt & clay seams.
	9		14	
415	18		16	Boulders @ 417.8' - 416.8'
	26		12	
	27		19	Brown med. sand fr. silt & layers of coarse sand & small gravel.
410	98		13	Boulders @ 410.5' - 409.1'.
	69	2.9	10	
405	35		19	
	32		21	
400	47		20	
	43		18	Brown dense med. to coarse sand some small gravel fr. silt.
395	62		25	
	50	2.5	21	Green very dense med. sand fr. silt. —Silty
390	50/3"	4.5+	17	
				Grey hard shale
385				
380				

BORING "5"

Ground Surface Elev. 459.0

	N	Qu	W	
455	29		2	Brown dense med. to coarse sand & gravel w/ boulders.
	10		8	Brown loose fine sand w/small gravel fr. cobbles.
	5	1.0	15	Brown soft moist sandy silt to small gravel clay binder.
450	9	1.7	17	
	11	2.2	17	Brown med. silty clay w/some sand & small gravel.
445	31		11	
	28		16	
440	22		8	Dense - med. to coarse sand & gravel w/ silt & cobbles.
	9		12	Brown stiff silt w/ large gravel & cobbles fr. clay.
435	22		13	
	37		18	Brown med. - med. to coarse sand w/ gravel & cobbles fr. silt.
430	16		6	Grey hard silt w/ some sm. gravel.
	20		9	
425	20		11	
	27		16	
420	17		13	
	16		8	
415	14		8	
	15		8	Med. - med to coarse sand & gravel w/ cobbles & some silt.
410	17		9	
	27			6" boulder @ 409.0' - 408.5'
405	35		18	—Lost sample pushing cobble.
	49/0"		11	
400	123		21	
	113	4.5	15	Green very hard silt w/some sand, gravel, fr. silt, stone, & cobbles.
395	100/2"	6.0	16	
				Very hard shale
390				
385				

BORING "6E"

Ground Surface Elev. 441.0

	N	Qu	W	
440	9	3.7	16	
	9	3.7	23	
435	18	3.7	22	Black stiff clayey silt.
	5	4.0	21	Brown & black very stiff clayey silt.
430	2		23	Brown & black med. clayey silt. Brown very loose fine silty sand —(water noted)
	8	1.0	17	
425	2		13	
	5		5	
420	11		6	
	11		9	Brown loose fine to coarse sand & small to med. gravel some silt.
415	13		19	
	10		22	
410	18		23	Grey & brown loose inorganic silt.
	19		10	
405	24	4.0	14	Brown med. coarse sand & small to med. gravel fr. silt.
	20	3.5	14	
400	17		14	
	14		21	
395	23		14	Med. - coarse sand & small to med. gravel w/ layers of very sandy clay.
	18		14	
390	50/4"	4.5	15	Grey hard shale.
385				
380				

BORING "6"

Ground Surface Elev. 441.0

	N	Qu	W	
440	13		8	Brown med. silt w/ small gravel.
	7	4.5+	27	
435	9	4.0	28	Black med. clay, silt fr gravel (small).
	9	3.5	24	
430	6	3.5	19	Brown & black med. silty clay fr. sand & small gravel & roots.
	1/6"		20	
425	3		17	Brown wet very loose fine sand w/silt binder (est. water level)
	3		27	Loose - sand w/med. gravel & soft clay.
420	10		18	
	14		9	
415	16		8	
	17		5	
410	16		10	Med. - med. to coarse gravel w/ some sand & silt fr. cobbles.
	19		13	Seam of soft clay.
405	19	4.5+	16	Red & brown med. - sandy silt w/ small gravel some clay fr. cobbles.
	32	1.0+	18	
400	36	3.5+	16	Grey hard silt & clay (shale) fr. thin layers of black coal & thin layers of brown silt. Med. gray silt/sm. gravel seams of coal (fr. sand)
	36	2.5	15	
395	17		27	
	20		15	Med. - silt, w/ large gravel, coal fr. clay.
390	100/2"	4.0	13	Grey very hard shale
	50/3"			
385	50/3"			
380	50/3"			
375	50/3"			
370	50/3"			Soft shale
				Hard shale

LEGEND:

Indicates Shelby Tube

Indicates Rock Core

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

© — Indicates test sample.

BORING DATA

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

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

Designed	
Drawn	RJE
Checked	G.F.J.
File No.	74001
Date	12-31-74

STATE ROAD DIST. NO. 7	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 31	15B-2	PEORIA & TAZEWELL	56	49
	ILLINOIS	PROJECT		

BORING DATA

BORING "7E

Mudline
Elev. 438.2

	N	Q_u	W	
	1/18	1.84	42	Black & grey very soft organic silt & clay.
435	4	2.48	19	
	2	1.92	26	
430	S	0.93	32	Bottom end of S-4 is loose - medium grey silty sand & small gravel.
	S-4	0.42	28	
	1/5	0.3	23	
425	4	3.7	15	
	2		22	Grey & brown med. silt & clay to sand & layers of sand.
420	13		22	Brown med. fine sand tr. silt.
	48		10	
415				Small boulders @ 414.2 to 413.2.
	44		11	
	26		14	Brown med.-coarse sand & small to large gravel tr. silt.
410	45	10.0	16	Brown dense silt.
	33	4.5	19	
405	33	3.88	16	
	28	4.5	18	
400	40	1.57	13	
	74	4.5	12	Very hard.
395	25		15	Very stiff.
	47	2.91	20	Grey hard clay & silt tr. small to large gravel.
390	58		16	
	50/4	10.0	15	
385	50/4	4.5	17	
	50/4	4.5	18	Grey very hard silt & clay (shale).
380	50/4		16	

BORING "7

Mudline
Elev. 438.2

	N	Q_u	W	
	5		20	
435	S	0.58	19	
	S-5	0.68	21	
	50/4	1.42	18	
430	3		19	
	4	3.48	26	
425	5	3.30	26	Grey soft organic silt & clay tr thin layers of sand (large gravel @ 423.4').
	7		9	
420	5		13	Grey loose coarse sand & small to med. gravel tr. silt.
	16		13	
415	26		9	
	27		6	
410	20		8	Brown med.-coarse sand w/small to large gravel tr silt.
	27		13	
405	44	0.7	26	Brown & grey hard clay & silt tr. small gravel & thin layers of sand.
	26		17	
400	45	4.5	14	Boulder @ 398.4 to 399.2.
	33	4.5	19	
395	36	4.5	15	Grey hard clay & silt.
	50/4	4.5	18	
	100			Black hard igneous boulder.
390	73			
	72			
385				Grey hard silt & clay.
	95			
380				Black hard shale.
375				

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

BORING "8E

Mudline
Elev. 437.2

	N	Q_u	W	
	1/10		31	Black very soft organic silt.
435	4	1.47	36	
430	5	0.8	34	
	5	1.46	35	
	7		20	Grey med. silt & clay
425	5		9	Brown loose med. sand tr. silt.
	19		9	Brown loose fine to coarse sand tr. silt, small to large gravel.
420	18		19	
	14		8	
415	12		18	
	15		19	Pushing gravel @ 410.2.
410	23		19	
	20		21	Brown very dense coarse sand w/small to large gravel tr. silt.
405	94		8	
	69		7	
400	41		7	Brown very dense coarse sand w/small to large gravel tr. silt.
	62		6	Dense large gravel w/sand.
395	64	5.77	15	
	58	4.23	16	
390	36		13	
	32		15	
385	77	4.5	17	
	43		9	Grey hard shale tr layers sand w/small gravel & layers of black shale.
380	79	4.15	18	
	159	3.72	18	
375	180	5.24	18	Grey very hard shale.
	100/3			
370	75			
				Black very hard shale.
365				

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

BORING "8

Mudline
Elev. 436.2

	N	Q_u	W	
435	1/18		9	
	1/18		60	
430	4	2.36	29	Black very soft organic silt tr sand & marine shell.
	5	3.09	8	
425	4	1.3	23	Grey & brown soft clayey silt.
	6		22	Grey loose fine sand tr. silt.
420	41		7	Brown med.-coarse sand w/small gravel tr silt.
	21		19	
415	10		21	
	11		21	
410	17		19	
	25		19	
405	30		18	Brown med. - fine to med sand tr silt & small gravel.
	152		7	
400	73		8	Brown very dense coarse sand & small to large gravel tr. silt.
	42		10	
395	52		9	
	37		7	
390	39	4.0	7	Brown dense med. to coarse sand w/small gravel tr. silt.
	58	3.9	20	
385	32	4.5	16	
	82	3.92	17	
380	32	2.6	12	
	43		15	Grey hard shale tr thin layers of sand & layer of black shale.
375	50/4	4.36	14	
	50			
370				Black very hard shale.
365				

BORING "9E

Northline
Elev. 435.7

	N	Q_u	W	
435	3	1.09	44	Black soft organic silt & clay.
430	4	1.65	25	Grey & brown soft very silty clay.
	3		22	
425	4		21	Brown loose sandy silt.
	3	2.06	48	
420	11/6	0.97	52	Grey soft organic silt & clay.
	15		16	Grey med.-fine to med. silty sand tr small gravel.
415	46		7	
	43		9	
410	48		6	Brown dense coarse sand & small to large gravel tr silt.
	66		8	
405	64		6	
	66		7	
400	69		9	
	130		7	
395	121		6	
	112		4	
390	104		1	Brown very dense coarse sand w/small to large gravel tr silt.
	35		12	
385	35		13	
	35		10	Brown dense coarse sand w/small gravel tr silt.
380	155	3.93	15	
	50/6		19	Grey hard shale.

BORING "9

Nyaline
Elev. 436.5

	N	Q_u	W	
	1/6		56	
435	1/18		51	Black very soft organic silt.
	2		15	
430	1/18		16	Brown very loose fine to coarse silty sand tr. small gravel.
	2	2.42	16	
425	2	2.76	25	
	2		30	Grey soft organic silt & clay.
420	41		6	
	40		6	Brown dense coarse sand & small gravel tr silt.
415	90		11	
	87		6	
410	97		5	
	98		7	
405	123		8	
	118		7	
400	76		6	Brown very dense coarse sand & small to large gravel tr silt.
	50		7	
395	48		7	Small gravel only from 392.0.
	41		7	
390	38		9	
	34		10	
385	41		8	
	43		8	
380	53		10	Brown dense coarse sand & small to large gravel tr silt.
375	50/4			
370	50			Grey hard black shale, well bedded.
365				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

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

HANSON ENGINEERS INCORPORATED
SPRINGFIELD ILLINOIS PEORIA ILLINOIS

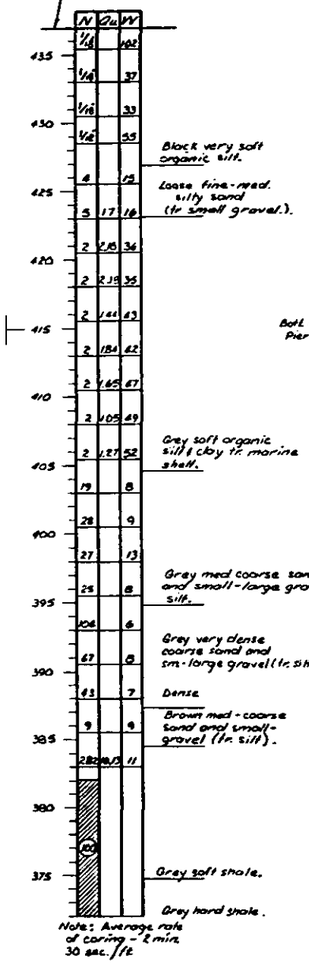
RJT
SFJ

		COUNTY	TOTAL SHEETS	SHEET NO.
FA 31	15B-2	Peoria & Tazewell	56	50
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

BORING DATA

BORING "10A

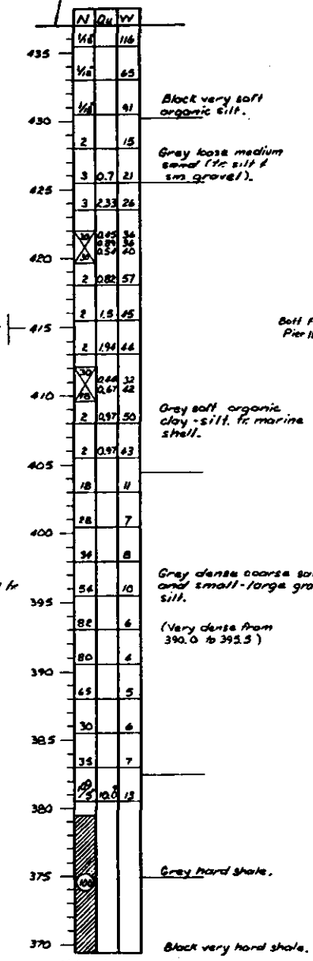
Mudline Elev. 437.0



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

BORING "10B

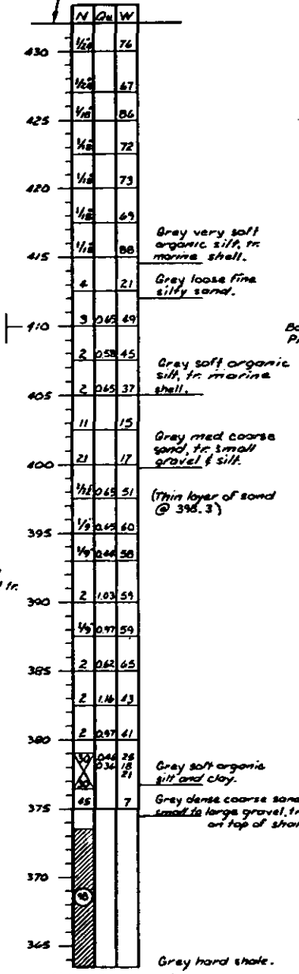
Mudline Elev. 437.0



Note: Average rate of coring - 2 min. 15 sec./ft.

BORING "11A

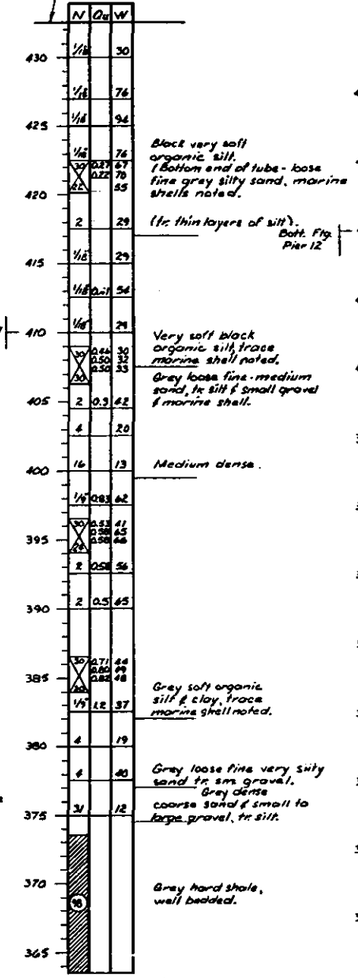
Mudline Elev. 432.0



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

BORING "11B

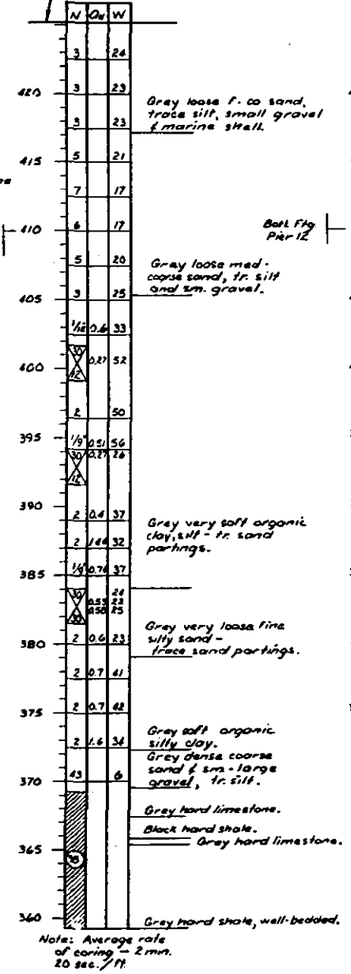
Mudline Elev. 432.5



Note: Average rate of coring - 2 min. 15 sec./ft.

BORING "12A

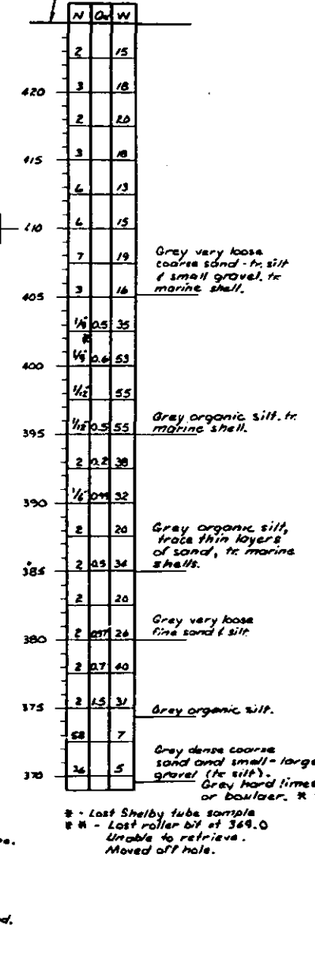
Mudline Elev. 426.2



Note: Average rate of coring - 2 min. 20 sec./ft.

BORING "12B

Mudline Elev. 426.0



* - Lost Shelby tube sample
** - Lost roller bit at 369.0 Unable to retrieve. Moved off hole.

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

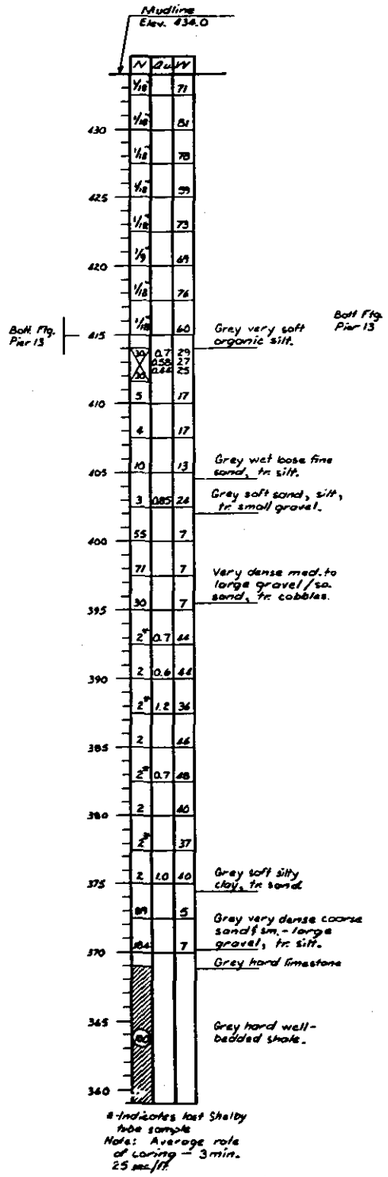
McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 31 SEC. 15 B-2
PEORIA & TAZEWELL COUNTIES

DESIGNED		HANSON ENGINEERS INCORPORATED	JOB NO. 74001
DRAWN	RJE	SPRINGFIELD ILLINOIS PEORIA ILLINOIS	DATE 12-31-74
CHECKED	D.F.J.		

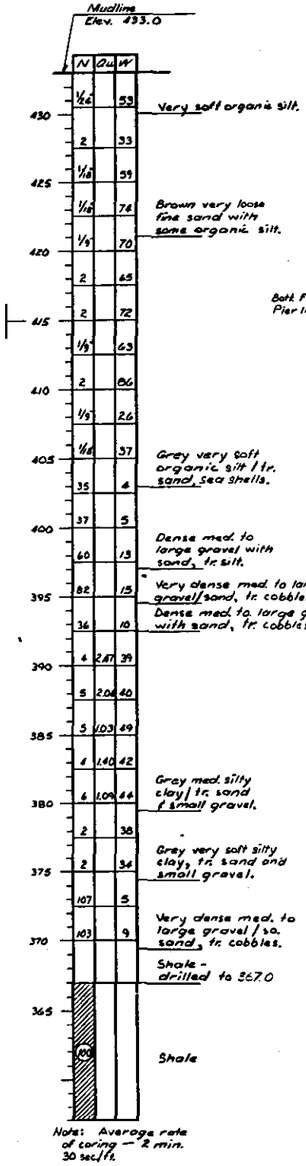
F.A. 31	16B-2	Peoria & Tazewell	54	51

BORING DATA

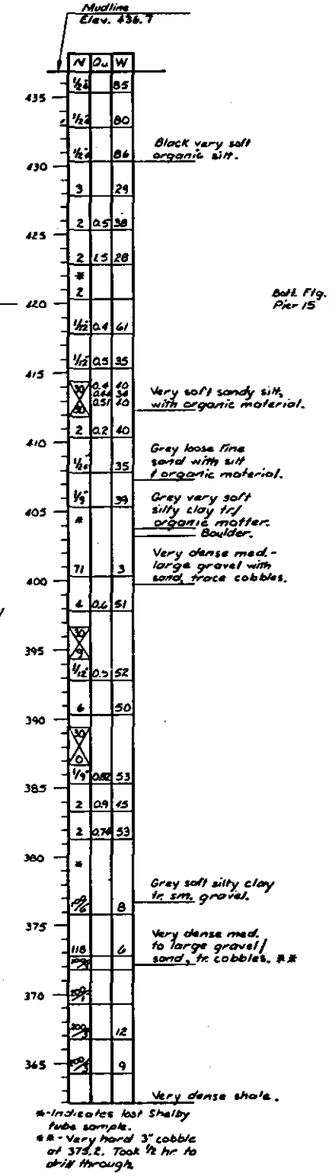
BORING #13A



BORING #13B



BORING #14



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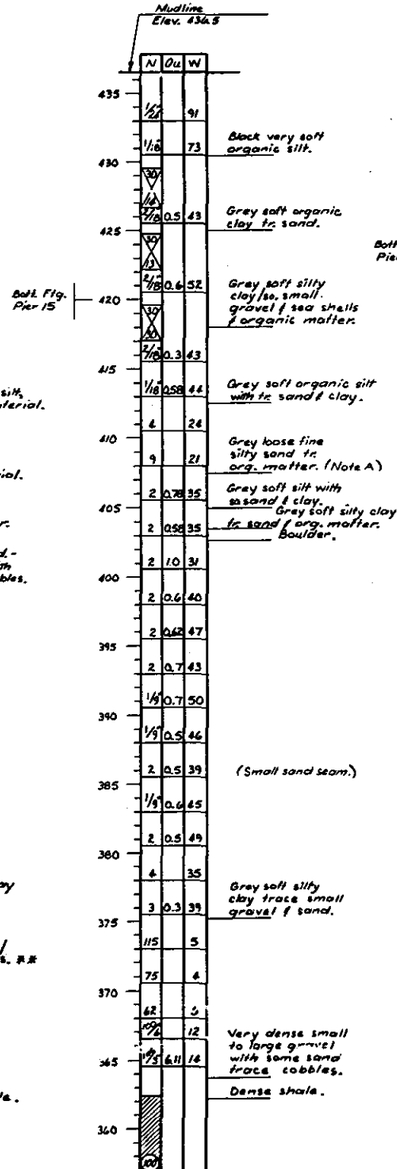
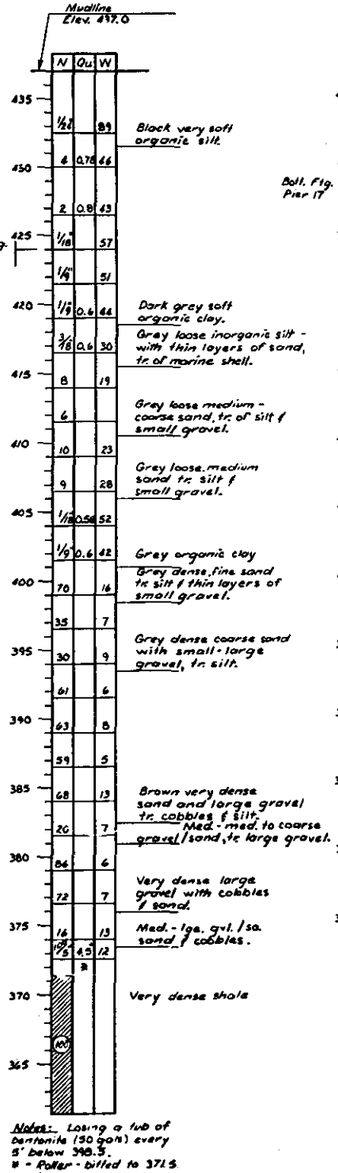
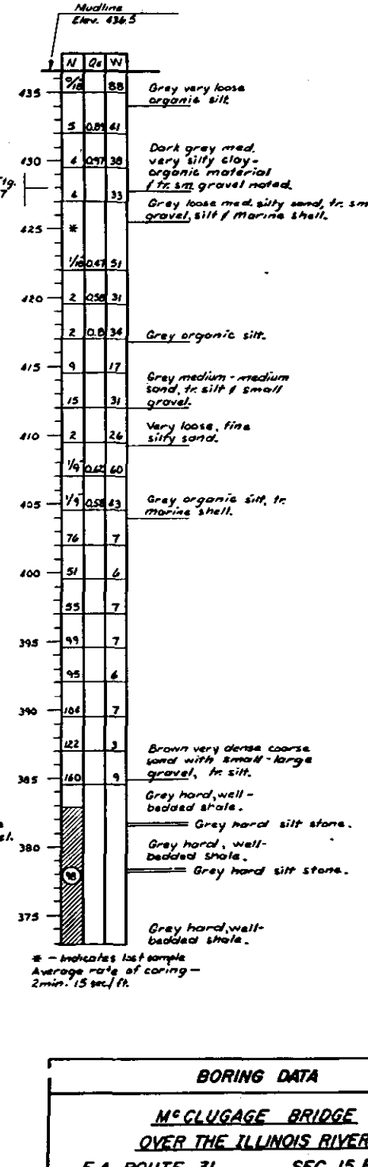


BORING #16



BORING #17



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

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

DESIGNED		
DRAWN	EDE	
CHECKED	A.F.J.	
QUANTITIES		

HANSON ENGINEERS INCORPORATED
SPRINGFIELD ILLINOIS PEORIA ILLINOIS

76001

12-31-76

SHEETS NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.31	15B-2	PEORIA & TAZEWELL	56	52
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

BORING DATA

BORING #18

Mudline Elev. 436.5

	N	Qu	W	
	1/6"		72	Dark grey very soft organic silt.
	4	.5	43	
	3	.7	40	
Bott. Ftg. Pier 18	3	1.03	35	
	3/16"		34	Dark grey & brown soft clayey silt.
	1/9		22	
	6		22	
	5		22	
	8		24	
	9	0.6	48	
	13		28	Grey very loose fine - med silty sand - tr. of small gravel & marine shell - Note: 6" layer of sandy silt at 417.0 - 416.5.
	6		25	
	1½	.58	36	
	1½	.62	41	Grey very soft organic silt - tr marine shell.
	1½	.89	45	
	1/12"	0.6	33	Grey very soft clayey silt.
	85		6	
	42		6	
	146		5	
	80		7	Brown very dense coarse sand with small to medium gravel, tr silt.
	88		8	
	50/6"	4.5	15	Grey very hard shale well-bedded. 1½" layer of limestone @ 379.8, 375.5, 375.0.

Note: Average rate of coring — 2 min. 20 sec./ft

BORING #19

Mudline Elev. 437.8

	N	Qu	W	
	4	0.78	50/3"	Very loose fine organic sand.
	4	0.58	40	Dark grey soft organic clay.
	2	0.39	24	
	4		20	Brown loose fine sand, tr. silt.
Bott. Ftg. Pier 19	1/6	0.35	43	
	1/3"	0.41	42	Dark grey organic silt, tr. shell.
	10		11	Grey med.-med. coarse sand, sa. sm. gravel, tr. silt & marine shell.
	2	0.2	68	
	2	0.82	31	
	2	0.70	32	Grey soft clayey silt.
	10		19	Grey med.-med coarse sand, some small gravel.
	3		61	Grey very loose fine organic sand.
	2	0.33	33	
	2	0.85	63	
	1/9	0.78	60	Grey organic silt.
	2	0.42	33	
	1/3"	0.39	39	Grey very soft clayey silt.
	35		10	Grey dense coarse sand & small to medium gravel, tr. silt.
	34		13	
	30		16	Grey dense medium sand, trace silt & sm. gravel.
	289	10"	13	
				Grey hard shale, well-bedded.

Note: Average rate of coring — 2 min. 20 sec./ft

BORING #20

Mudline Elev. 438.5

	N	Qu	W	
	2		48	Black very loose fine silty sand.
	5	0.78	60	
	4	0.82	41	
Bott. Ftg. Pier 20	4	1.16	35	Dark grey & brown medium silty sand.
	1/16"		33	Grey very loose inorganic silt, tr sand partings.
	1/16"	0.70	34	
	2	1.55	35	
	3	0.82	37	
	1/6"	0.76	38	Grey very soft clayey silt, tr. thin layers of fine sand. 6" layer of sand & small gravel @ 416.2.
	2	0.39	27	
	1/9"	0.4	33	
	1/9"	0.4	31	Grey very loose fine sandy silt.
	1/6"	0.76	66	
	1/8"	0.87	73	Grey very soft organic silt.
	18		12	Grey medium medium-coarse sand some small gravel, tr. silt & silt partings.
	9		22	
	1/10"	0.41	46	
	1/8"	0.58	36	Grey very soft clayey silt, tr. sand.
	45		9	Brn dense coarse sand/sm -med gravel, tr. silt.
	34		18	Grey dense medium sand, tr silt, tr. sm. gravel.
	207	4.5	11/13	
				Grey hard shale well-bedded.

Note: Average rate of coring — 2 min. 15 sec./ft.

BORING #21

Mudline Elev. 438.9

	N	Qu	W	
	5	0.7	50/6"	Grey very loose fine silty sand
	7	1.44	24	Dark grey medium silty clay & brn, fr. sand.
	6	1.47	30	Grey loose medium to coarse sand & sm. gravel, tr. silt & veg.
	7		18	
	2	0.89	31	
	6	0.83	33	
	3		23	Grey soft clayey silt.
	3	0.58	23	Grey loose medium-coarse sand, tr silt, sm gravel & silt partings.
	2		21	Grey loose clayey silt, tr. thin layers of sand.
	4	0.78	48	Grey loose medium to coarse sand, tr. silt.
	4	0.74	51	
	2	0.78	42	Grey soft organic silt.
	16		19	Gr medium fine-medium sand, tr silt, sm gravel & thin layers of organic silt.
	15		25	Grey medium inorganic silt, tr. thin layers of sand.
	13		22	
	16		22	Grey medium fine-coarse sand, tr silt & small gravel.
	1/9"	0.46	39	
	1/8"	0.39	35	
	1/6"	0.5	33	Grey very soft clayey silt, tr organic silt partings.
	8	0.2	34	
	148		10	Brown dense coarse sand, & sm. gravel tr. silt.
	50/6"	6.5	12	
				Grey hard shale - well-bedded.
				Brn. hard limestone.
				Grey hard shale well-bedded.
				Brn. hard limestone.
				Grey hard shale - well-bedded.

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

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

DESIGNED	HANSON ENGINEERS INCORPORATED	JOB NO. 76001
CHECKED	SPRINGFIELD ILLINOIS PEORIA ILLINOIS	DATE 12-31-76
DRAWN R.E.K.		
CHECKED G.F.L.		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO	SEC	COUNTY	TOTAL SHEETS	SHEET NO
FA 31	55-2	PEORIA & TAZEWELL	56	53
FED ROAD DIST NO 7	ILLINOIS	PROJECT		

SHEET 1 OF 3

NOTE:

1. VERIFY THE LOCATION OF UNDERGROUND UTILITIES BEFORE DRILLING WELLS AND REVISE LOCATION OF WELLS AS NECESSARY WITH APPROVAL OF ENGINEER AND PEORIA WATER COMPANY.
2. EXACT WELL LOCATIONS TO BE DETERMINED BY ENGINEER AND PEORIA WATER COMPANY DURING CONSTRUCTION.
3. WELLS "3 & C" ARE 6"ø W/ INSTRUMENT ENCLOSURE.
4. WELL "A" IS 12"ø W/ INSTRUMENT ENCLOSURE.
5. WELL "D" IS 6"ø W/ SUBMERSIBLE PUMP.
6. WELL "E" IS 6"ø, HAS A 8"ø STANDPIPE AND A COMMON INSTRUMENT ENCLOSURE & LADDER.
7. WELL "F" IS 6"ø W/ HAND PUMP.

BORING LOCATIONS

NO.	STATION	OFFSET
1	CENTER OF PIT	
2	204+14	253' LT.
3	202+29	1' LT.
4	203+00	452' LT.
5	200+96	241' LT.

PLAN LAYOUT – MONITORING WELL SYSTEM

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

R.J.E. & G.F.J. & R.W.M. R.J.E. & G.F.J. & R.W.M.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD ILLINOIS PEORIA ILLINOIS

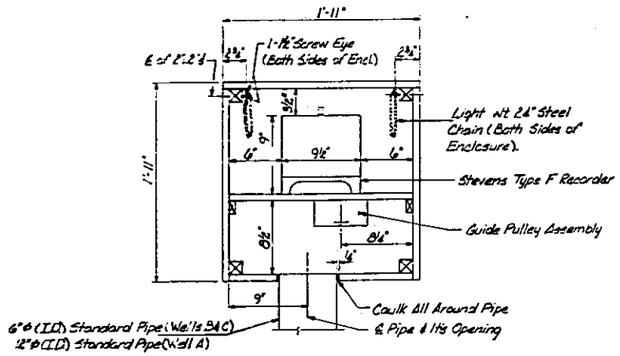
74001

MAY 13, 1977

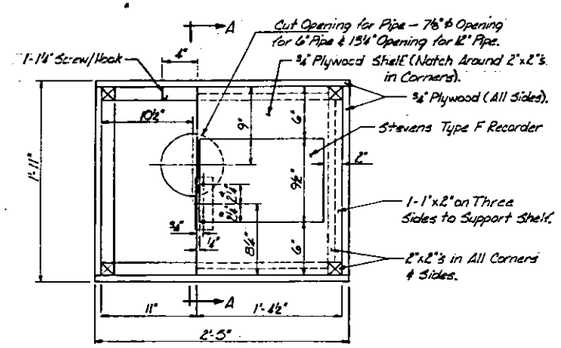
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 43	15B-2	PEORIA & TAZEWELL	59	54
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

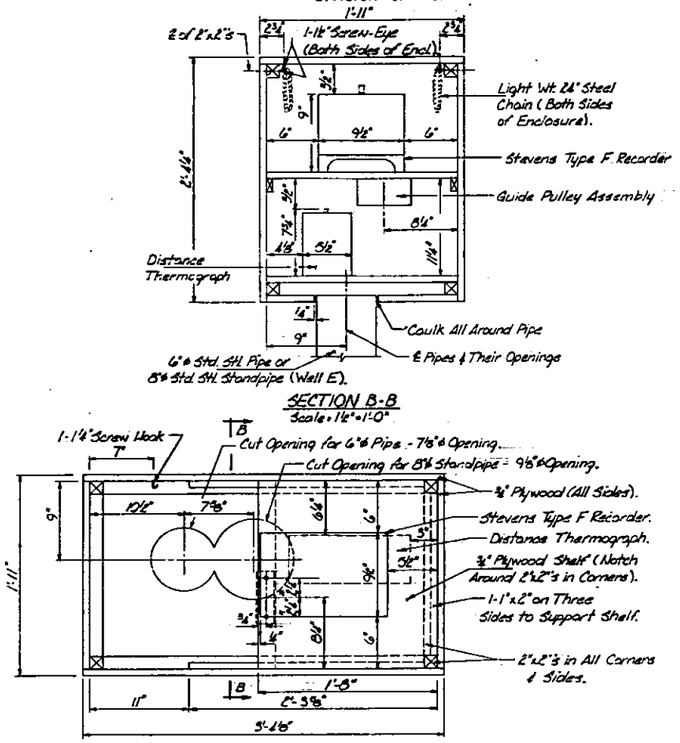
SHEET 2 OF 3.



SECTION A-A
Scale: 1½"=1'-0"

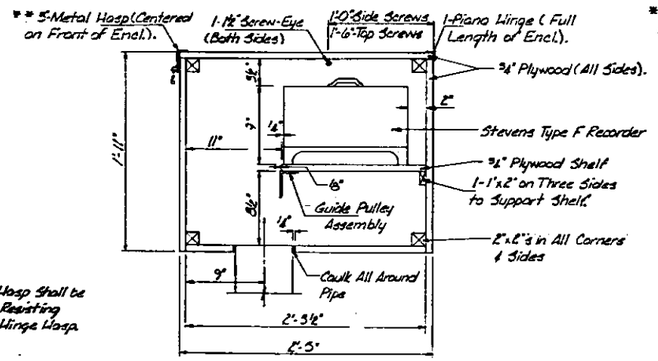


PLAN
Scale: 1½"=1'-0"



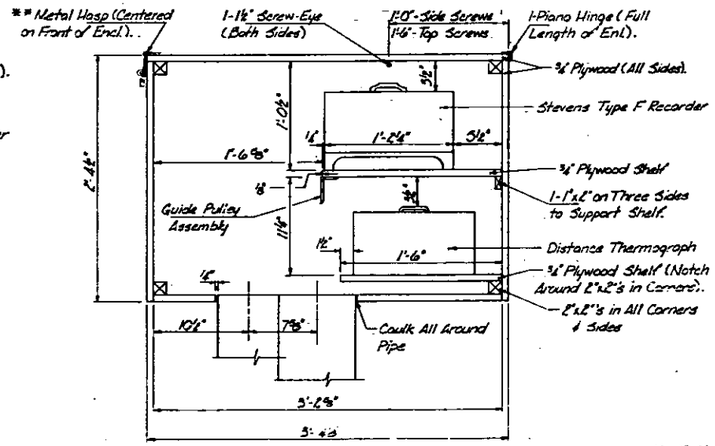
SECTION B-B
Scale: 1½"=1'-0"

PLAN
Scale: 1½"=1'-0"



ELEVATION
Scale: 1½"=1'-0"

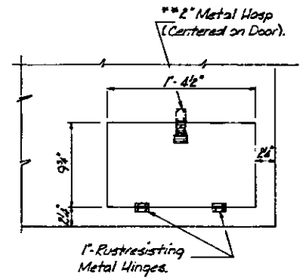
ENCLOSURE FOR WELLS "A" "B" & "C"



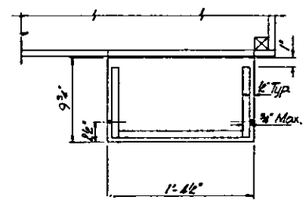
ELEVATION
Scale: 1½"=1'-0"

ENCLOSEURE FOR WELL "E"

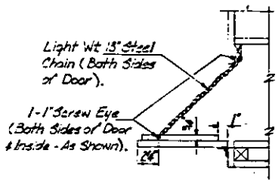
Note for All Enclosures:
1. Plywood is to be an Exterior Grade.
2. All 2"x2"s are to be Fastened with Water-resistant Glue & 2½"-#8 Galvanized Wood Screws.
3. The Shelves Rest Freely on Their Supporting 1"x2"s or 2"x2"s.
4. All 1"x2"s are to be Fastened with 1½"-#8 Galvanized Wood Screws.
5. Provide Keyed Padlock on All Enclosures (Keys Shall be Given to Engineer).
6. All Enclosures Shall be Painted w/ White Exterior Paint & Their Well Letter Stenciled on Each Side w/ Red Exterior Paint.



ELEVATION
Scale: 1½"=1'-0"



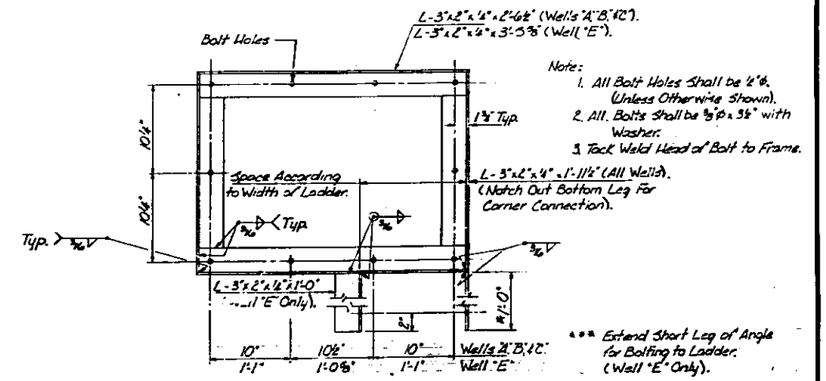
PLAN
Scale: 1½"=1'-0"



SECTION
Scale: 1½"=1'-0"

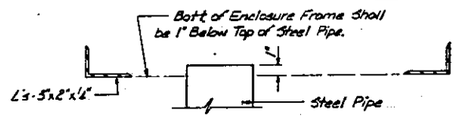
Note:
Door to be on Long Face of Enclosure at Ladder Location.

SIDE ACCESS DOOR
ENCLOSEURE FOR WELL "E"



Note:
1. All Bolt Holes Shall be ¾" ø. (Unless Otherwise Shown).
2. All Bolts Shall be ⅝" ø x 3½" with Washer.
3. Tack Weld Head of Bolt to Frame.

PLAN - ENCL. FRAME
Scale: 1½"=1'-0"
WELLS "A" "B" "C" & "E"



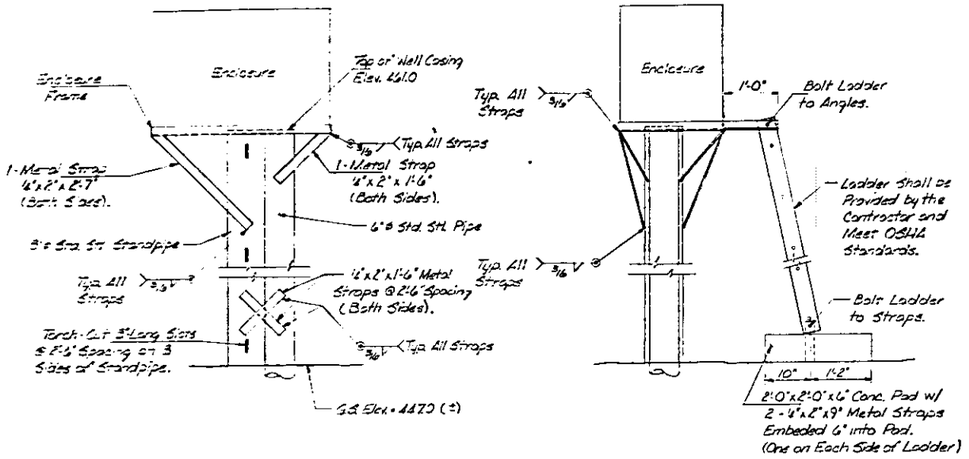
PARTIAL ELEVATION - ENCL. FRAME
No Scale
WELLS "A" "B" "C" & "E"

ENCLOSURES — MONITORING WELL SYSTEM

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

R.I.E. & G.F.I.	HANSON ENGINEERS INCORPORATED	FILE NO.	79001
G.F.I. & R.M.E.	SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS	DATE	MAY 13, 1977
R.I.E. & G.F.I. & R.M.E.			

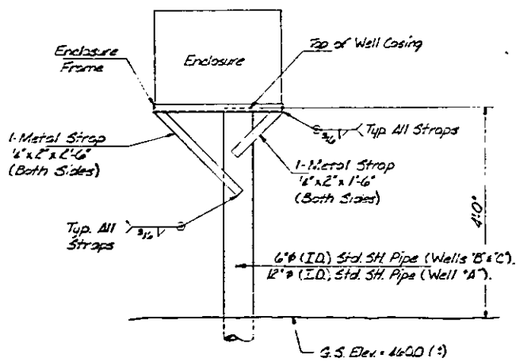
Note:
1. 2" Bolt Holes Shall be 2" ø.
2. 2" Bolts Shall be ⅝" ø x 3½" Long.



SIDE ELEVATION
Scale: ½" = 1'-0"

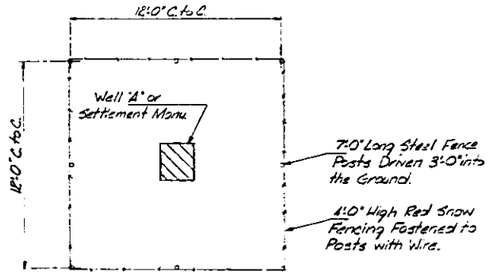
END ELEVATION
Scale: ¾" = 1'-0"

FRAME BRACING - WELL "E"



SIDE ELEVATION
Scale: ¾" = 1'-0"

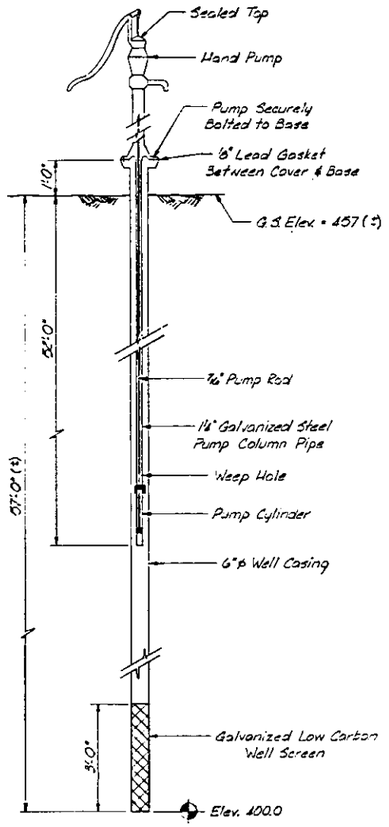
FRAME BRACING - WELLS "A", "B" & "C".



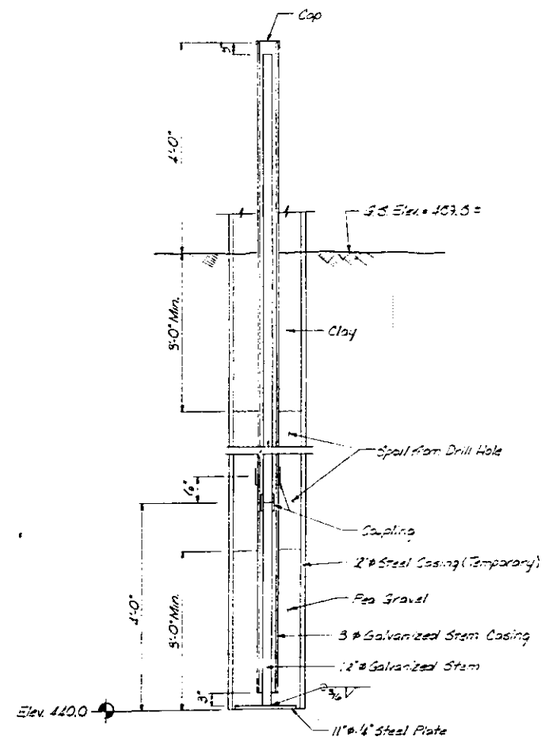
PLAN - PROTECTIVE FENCE (COST INCIDENTAL)
No Scale

WELL "A" & SETTLEMENT MONUMENTS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS



HAND PUMP DETAIL
Scale: ¾" = 1'-0"



SETTLEMENT MONUMENT
No Scale

POINTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 31	15B-2	PEORIA & TAZEWELL	56	55
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

SHEET 3 OF 3.

ENCLOSURES, HAND PUMP & SETTLEMENT MONUMENTS

MONITORING WELL SYSTEM

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

DESIGNED	R.J.E. & G.F.J.
CHECKED	G.F.J. & R.W.M.
DRAWN	R.J.E.
TRACED	G.F.J. & R.W.M.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

JOB NO. 74001
DATE MAY 13, 1977