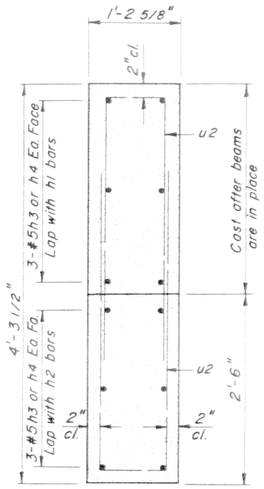
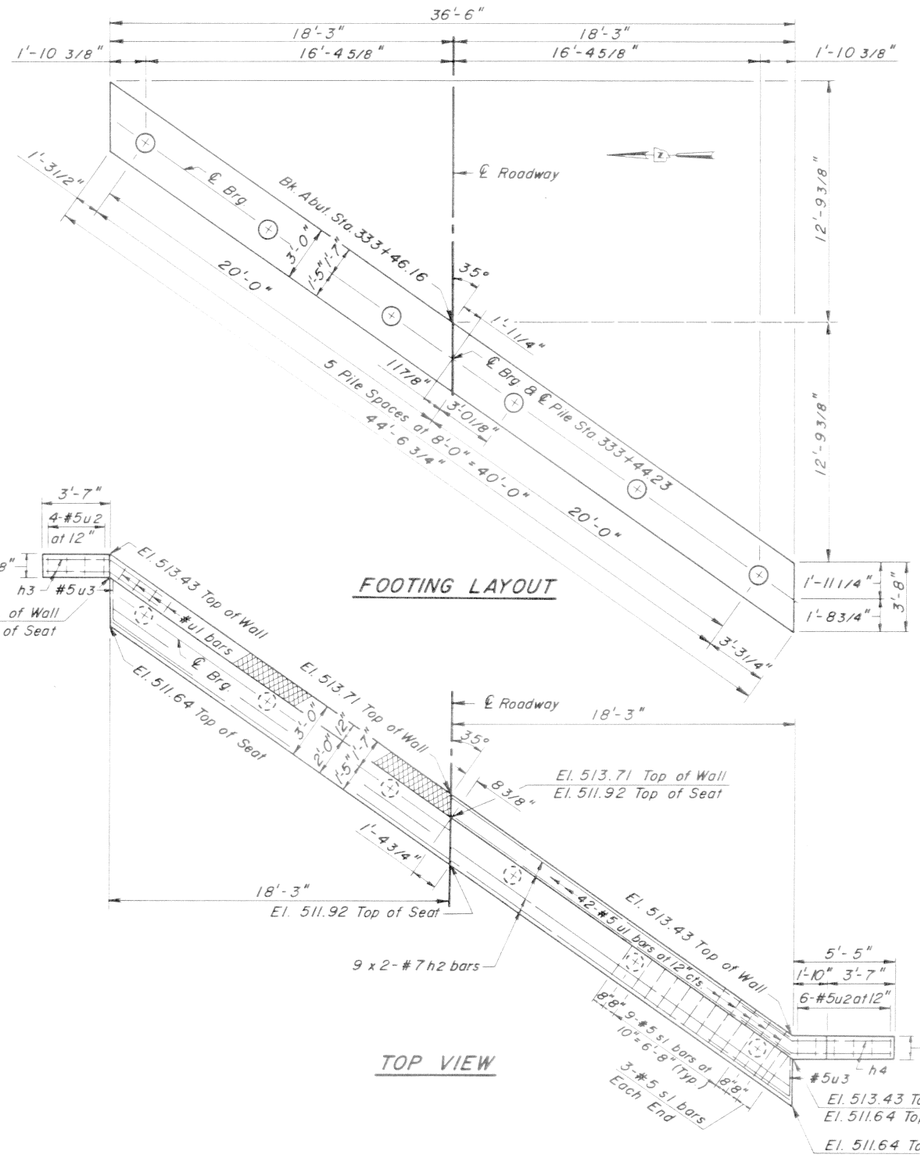
F.A.S. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
	88-00045-00-BR	PEORIA	24	12
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



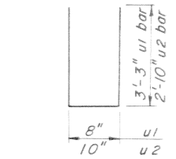
SEC. B-B



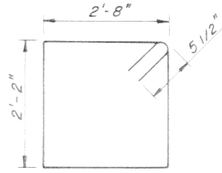
FOOTING LAYOUT

TOP VIEW

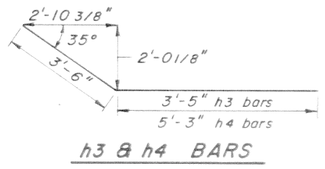
All edges shall have standard 3/4" chamfer except as noted.



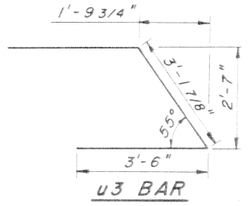
u1 & u2 BARS



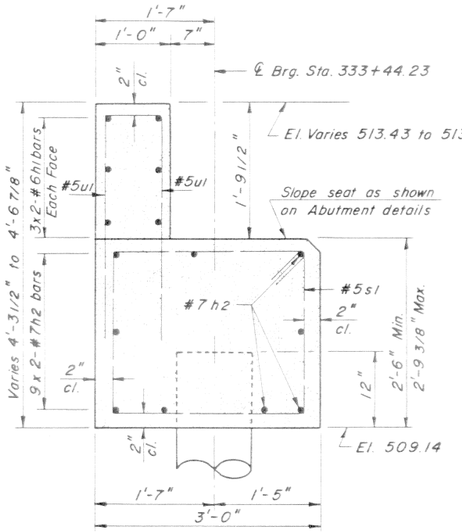
s1 BAR



h3 & h4 BARS



u3 BAR



SEC. A-A

Dimensions are at Rt. angles

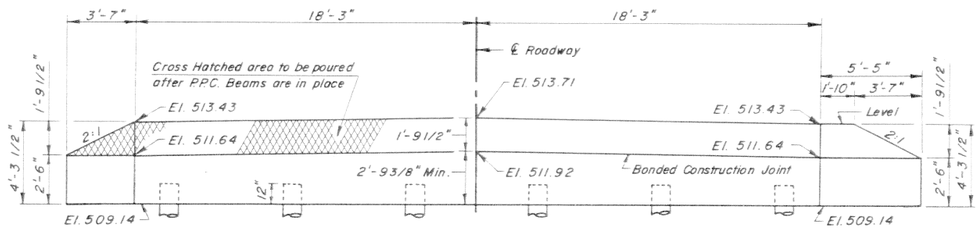
PILE DATA

Type	12" METAL SHELL
Capacity	35 TON
Est. Length	25 Feet
No. Required	5 + 1 Test Pile
Total Length	125 Feet

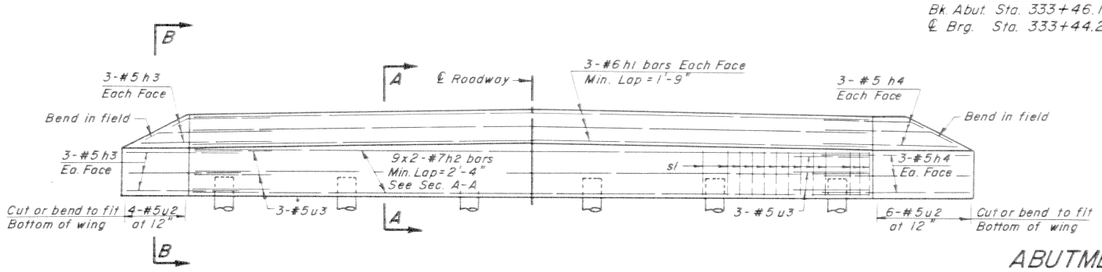
BILL OF MATERIALS

BAR	NO.	SIZE	LENGTH	SHAPE
h1	12	# 6	23'-3"	
h2	18	# 7	23'-6"	
h3	12	# 5	6'-11"	
h4	12	# 5	8'-9"	
u1	42	# 5	7'-2"	
u2	20	# 5	6'-5"	
u3	6	# 5	10'-2"	
s1	51	# 5	10'-7"	
Class X Concrete			Cu. Yd.	17.5
Reinforcement Bars			Pound	2,554
Piles 12" Metal Shell			Lin. Ft.	125
Test Pile Metal Shells			Each	1
Structure Excavation			Cu. Yd.	38

Bk Abut Sta. 333+46.16
℄ Brg. Sta. 333+44.23



ELEVATION



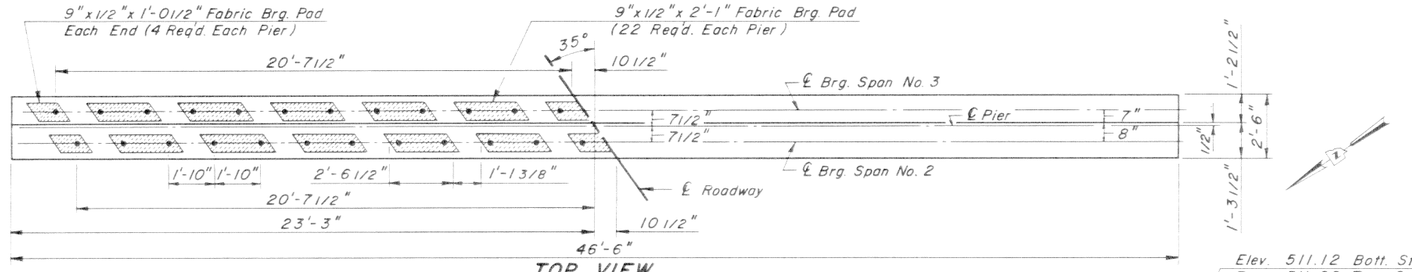
ELEVATION (REINFORCEMENT)

ABUTMENT NO. 2
EAST ABUTMENT

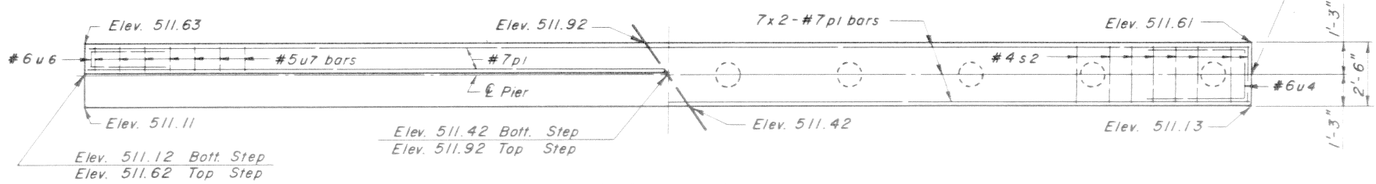
F.A.S. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
	88-00045-00-BR	PEORIA	24	14
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

9"x1 1/2"x 1'-01/2" Fabric Brg. Pad Each End (4 Reqd. Each Pier)

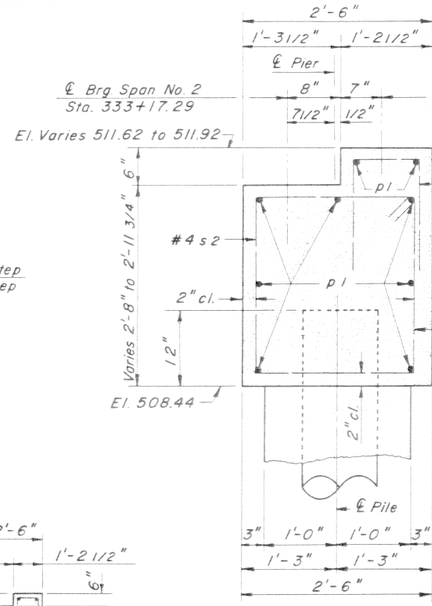
9"x1 1/2"x 2'-1" Fabric Brg. Pad (22 Reqd. Each Pier)



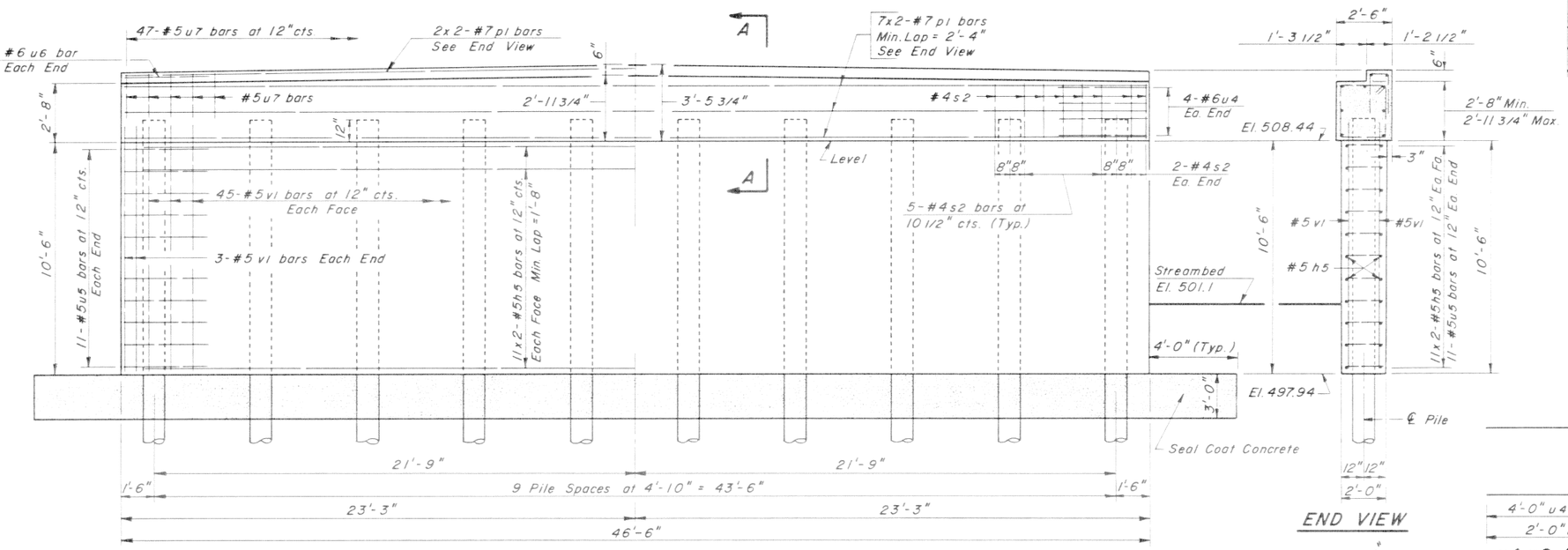
TOP VIEW



PLAN VIEW



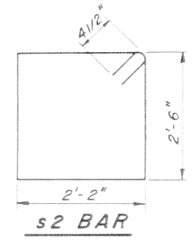
SEC. A-A



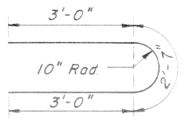
ELEVATION

END VIEW

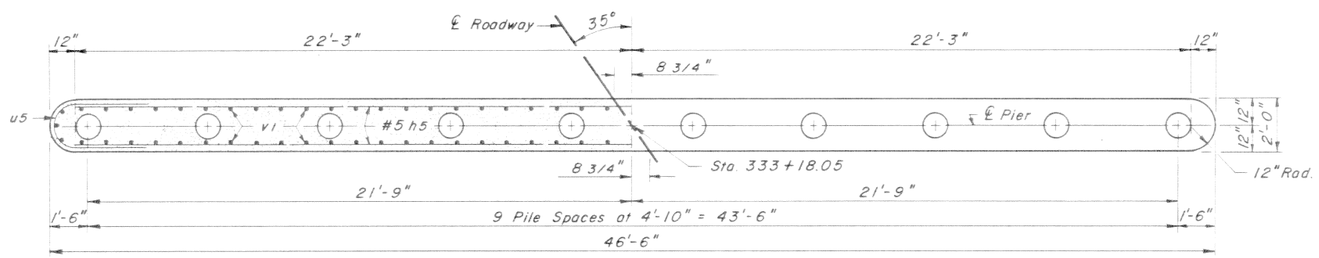
u4, u6, & u7 BARS



s2 BAR



u5 BAR



FOOTING LAYOUT

PILE DATA

Type	12" Metal Shell
Capacity	45 Ton
Est. Length	37 Feet
No. Required	9+1 Test Pile
TOTAL LENGTH	333 Feet

BILL OF MATERIALS

BAR	NO.	SIZE	LENGTH	SHAPE
h5	44	#5	23'-2"	
p1	18	#7	24'-4"	
s2	49	#4	10'-1"	
u4	8	#6	10'-1"	
u5	22	#5	8'-7"	
u6	2	#6	8'-9"	
u7	47	#5	4'-10"	
v1	96	#5	11'-6"	

Reinforcement Bars	Pound	4044
Class X Concrete	Cu. Yd.	49.1
Seal Coat Concrete	Cu. Yd.	60.6
Piles 12" Metal Shell	Lin. Ft.	333
Test Piles Metal Shell	Each	1
Cofferdams	Each	1
Cofferdam Excavation	Cu. Yd.	124

NOTE: All edges shall have standard 3/4" chamfer. Space reinforcement in cap to miss anchor dowels. Dimensions of Cofferdam = 10'-0" x 54'-6".

℄ Pier No. 1 Sta. 333+18.05

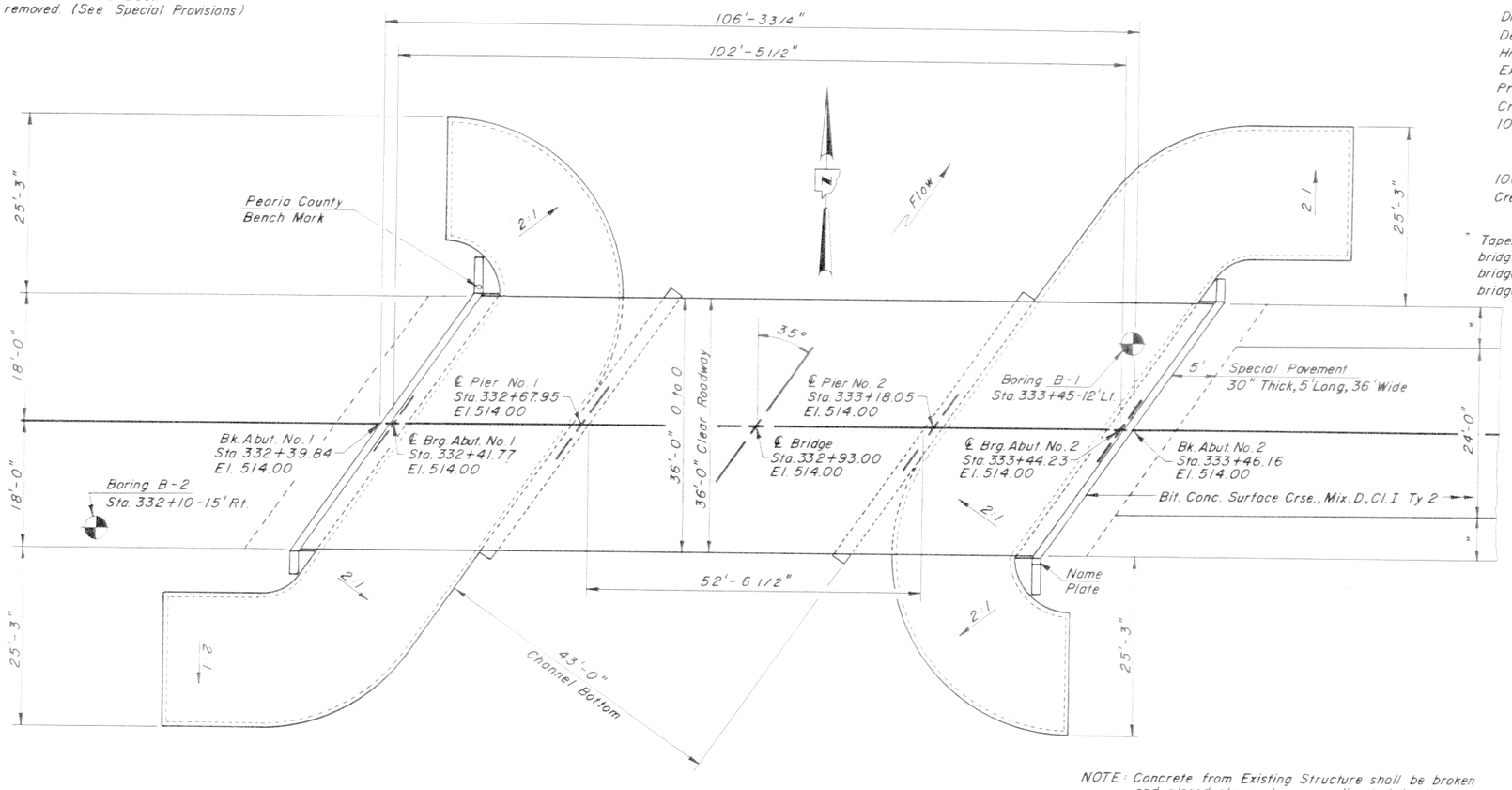
℄ Finished Roadway El. 514.00

NOTE: Seal Coat Concrete to be placed in the cofferdam below Elev. 497.94 a minimum thickness of 3'-0". The thickness may be varied to suit existing conditions as directed by the Engineer.

PIER NO. 2
EAST PIER

Existing Structure No. 072-3033
54'-5 1/2" 2 Span Steel I-Beam Bridge
22' wide with Concrete Deck
To be removed. (See Special Provisions)

TOTAL SHEETS	SHEET NO
24	6



PLAN VIEW

NOTE: Concrete from Existing Structure shall be broken and placed along slopes as directed by the Engineer. (Cost Incidental)

WATERWAY INFORMATION

Drainage Area		9.94	Sq. Mi.
Design Discharge	(30 Yr. Fl. Freq.)	4,047	C.F.S.
High Water Elevation	(Below 30 Yr. Fl. Freq.)	511.7	(U.S.G.S.)
Existing Opening	(Below 30 Yr. H.W.E.)	454	Sq. Ft.
Proposed Opening	(Below 30 Yr. H.W.E.)	679	Sq. Ft.
Created Head For Design Flood		<1.5	Ft.
100 Year Discharge		5,446	C.F.S.
(Thru Bridge = 4,671 C.F.S.)			
(Thru Roadway = 775 C.F.S.)			
100 Year High Water Elevation		512.2	(U.S.G.S.)
Created Head For 100 Year Flood		<1.75	Ft.

* Taper shoulder from 6'-0" at bridge to 8'-0" 50 Ft. from bridge. Typ. each corner of bridge.

DESIGN STRESSES

PRESTRESSED BEAMS

f'c	5,000	PSI
f'ci	4,000	PSI (27" x 36" Beams)
f'ci	4,000	PSI (21" x 36" Beams)
fs	270,000	PSI (1/2"ø Strands)
f'si	189,000	PSI (1/2"ø Strands)

CAST IN PLACE UNITS

f'c	3,500	PSI
fy	60,000	PSI (Reinfor.)

LOADING HS 20-44

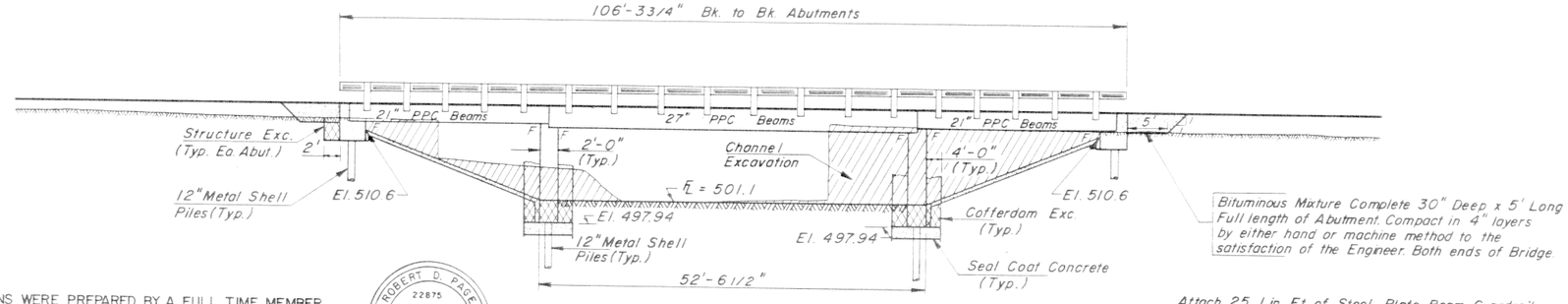
DESIGN SPECIFICATIONS - AASHTO 1989

2" Future Wearing Surface

BRIDGE BILL OF MATERIALS

ITEM	UNIT	SUPER	SUB	TOTAL
Class X Concrete	Cu. Yd.	———	133.2	133.2
Seal Coat Concrete	Cu. Yd.	———	121.2	121.2
Reinforcement Bars	Pound	———	13,196	13,196
P.P. Concrete Deck Beams 21" Deep	Sq. Ft.	1,932		1,932
P.P. Concrete Deck Beams 27" Deep	Sq. Ft.	1,800	———	1,800
Furnishing Piles, 12" Metal Shells	Lin. Ft.	———	851	851
Driving and filling Shells	Lin. Ft.	———	851	851
Test Piles, 12" Metal Shells	Each	———	4	4
Name Plates	Each	———	1	1
Steel Railing Type WT	Lin. Ft.	212.6	———	212.6
P.C. Mortar Fairing Course	Lin. Ft.	1,143	———	1,143
Waterproofing Membrane System	Sq. Yd.	425.3	———	425.3
Fabric Formed Conc. Revetment Mat	Sq. Yd.	———	646.2	646.2
Bit. Conc. Surf. Crse. Mix. D, Cl. I, Ty 2	Ton	71.4	———	71.4
Prismatic Barrier Reflectors	Each	22	———	22
Removal of Existing Structures	Each	———	1	1
Bituminous Mixture Complete	Ton	84	———	84
Cofferdams	Each	———	2	2
Cofferdam Excavation	Cu. Yd.	———	248	248
Channel Excavation	Cu. Yd.	———	975	975
Structure Excavation	Cu. Yd.	———	76	76

NOTE: See next sheet for General Notes.
Limits of Channel Excavation is from 50' either side of ℄ Roadway for a total of 100'.



ELEVATION VIEW

Bituminous Mixture Complete 30" Deep x 5' Long Full length of Abutment. Compact in 4" layers by either hand or machine method to the satisfaction of the Engineer. Both ends of Bridge.

Attach 25 Lin. Ft. of Steel Plate Beam Guardrail Ty. B and Traffic Barrier Terminal Type 1 to Each Corner of Bridge.

NOTE: Peoria County Bench Mark to be set in the Northwest Corner of the structure. See Abutment No. 1 Detail sheet.

THESE PLANS WERE PREPARED BY A FULL TIME MEMBER OF MY STAFF UNDER MY PERSONAL SUPERVISION.

ROBERT D. PAGE 22875 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

PEORIA COUNTY SUPERINTENDENT OF HIGHWAYS 9/28/89

SECTION 88-00045-00-BR
STATION 332+93
PEORIA COUNTY
STRUCTURE NO. 072-3124

F.A.S. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
	88-00045-00-BR	PEORIA	24	4
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

HALLOCK TOWNSHIP
T11N-R8E-4PM

SECTION BEGINS
STATION 329+00

SECTION ENDS
STATION 338+00

EXISTING STRUCTURE NO. 072-3033
54'-5 1/2" 2 SPAN STEEL I-BEAM BRIDGE
22' WIDE WITH CONCRETE DECK
TO BE REMOVED. SEE SPECIAL PROVISIONS

STA. 326+35.02
CENTER SEC. 24
T-11-N, R-8-E, 4 P.M.
FD. R.R. SPIKE
5" DEEP

BLUE RIDGE RD.

85.56'

45.9'

T/E — T/E — T/E — CENTERLINE OF DETOUR ROAD (CONSTRUCTED BY OTHERS) — T/E

REMOVE DETOUR RD. CULVERT (STRUCTURAL PLATE ARCH CONSTRUCTED BY OTHERS)

DETOUR ROAD TO BE REMOVED UNDER THIS CONTRACT AFTER MAIN ROAD IS OPEN TO TRAFFIC.

T/E — TEMP. EASEMENT LINE — T/E

R.O.W. LINE

TELEPHONE PEDESTAL

CONSTRUCTION LIMITS — CONSTRUCTION LIMITS — G.T.E. BURIED CABLE

326 — 327 — 328 — 329 — 330 — 331 — 332 — 333 — 334 — 335 — 336 — 337 — 338 — 339 — 340

GAS MRKR. — GAS MRKR. — GAS MRKR. — GAS MRKR. — GAS MRKR.

BERM — HALLOCK CREEK — BERM

CONSTRUCTION LIMITS

EXIST. 6" WRAPPED STEEL H.P. GAS LINE

PROPOSED R.O.W. MARKERS, SEE SHEET NO. 5 FOR LOCATION.

NOTE:
THE EXISTING DETOUR ROAD ALONG WITH THE STRUCTURAL PLATE ARCH PIPE ARE TO BE REMOVED UNDER THIS CONTRACT. 1450 CU. YDS. OF EARTH EXCAVATION AND APPROX. 1000 LIN. FT., 22 FT. WIDE, 3" THICK BITUMINOUS SURFACE ROAD ARE TO BE REMOVED INCLUDING CONCRETE FOOTINGS. (SEE SPECIAL PROVISIONS)

NOTE: TOPSOIL STOCKPILED BETWEEN LEFT STA 327+50 TO LEFT STA 329+00 BY OTHERS SHALL BE REPLACED AFTER THE DETOUR ROAD IS REMOVED, REPLACEMENT IS BY THIS BRIDGE CONTRACT.

NOTE: ATTACH 25 LIN. FT. OF STEEL PLATE BEAM GUARDRAIL, TYPE B AND ONE TRAFFIC BARRIER TERMINAL, TYPE 1, TO EACH CORNER OF BRIDGE

STA. 332+39.84 TO STA. 333+46.16
106'-3 3/4" 3 SPAN P.P.C. DECK BRIDGE
35° SKEW LT. AHEAD
STRUCTURE NO. 072-3124
SEE BRIDGE PLANS

B.M. # 1
R.R. SPIKE IN P. POLE
STA. 330+76.-32' RT.
ELEV. = 510.48

EARTH EXCAVATION = 825 CU. YD.
EMBANKMENT = 866 CU. YD.
BORROW FROM DETOUR ROAD = 300 CU. YD.

CHANNEL EXC. = 975 CU. YD.

EARTH EXCAVATION = 1011 CU. YD.
EMBANKMENT = 884 CU. YD.
BORROW FROM DETOUR ROAD = 139 CU. YD.

PVI = STA. 331+00
ELEV. = 514.00
V.C. = 200'

PVI = STA. 334+75
ELEV. = 514.00
V.C. = 200'

PVI = STA. 336+75
ELEV. = 512.75
V.C. = 200

106'-3 3/4"

+0.25% — 0.00% — 0.00% — -0.625% — +0.45%

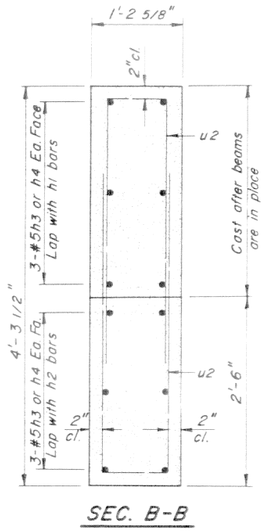
℄ = 501.1

520 / 515 / 510 / 505 / 500

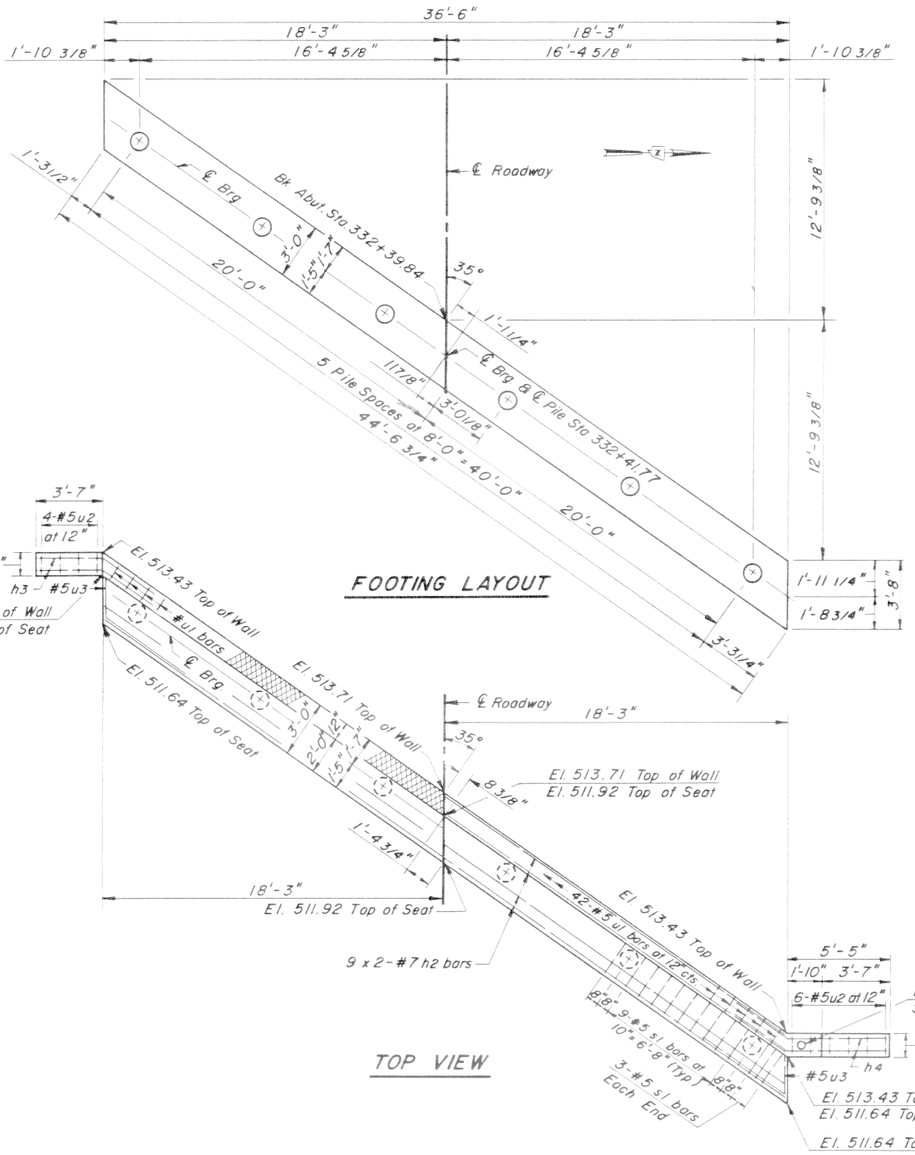
514.27 — 514.27 — 514.31 — 514.15 513.50 — 514.13 513.75 — 513.86 — 514.18 513.94 — 513.98 — 514.28 514.00 — 514.24 514.00 — 514.00 — 514.28 513.99 — 513.91 — 514.18 513.75 — 513.52 — 514.31 513.24 — 513.06 — 514.33 513.96 — 514.12 — 514.24 — 514.42

+35 — 327 — 328 — 329 — 330 — 331 — 332 — 333 — 334 — 335 — 336 — 337 — 338 — 339 — 340

F.A.S. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
	88-00045-00-BR	PEORIA	24	11
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



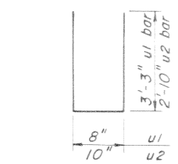
SEC. B-B



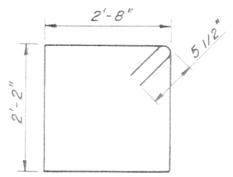
FOOTING LAYOUT

TOP VIEW

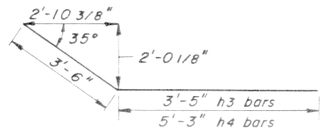
All edges shall have standard 3/4" chamfer except as noted.



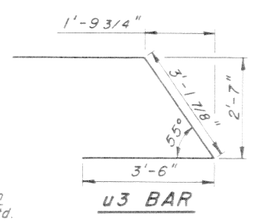
u1 & u2 BARS



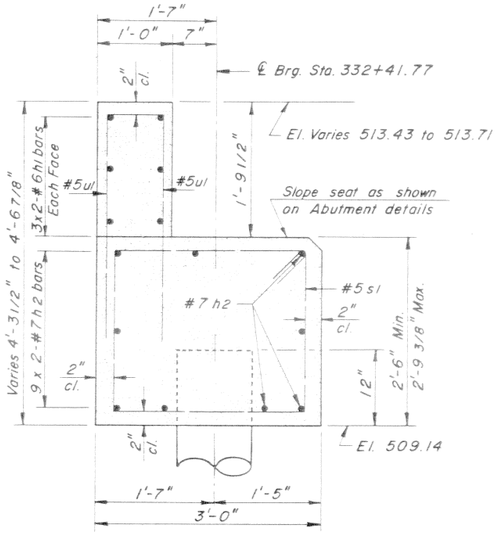
s1 BAR



h3 & h4 BARS



u3 BAR



SEC. A-A

Dimensions are at Rt. angles

PILE DATA

Type	12" METAL SHELL
Capacity	35 TON
Est. Length	21 Feet
No. Required	5 + 1 Test Pile
Total Length	105 Feet

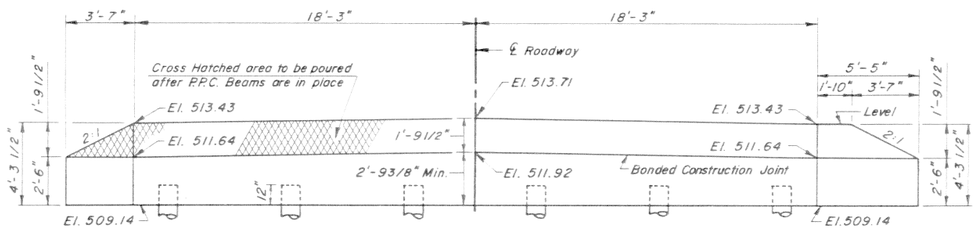
BILL OF MATERIALS

BAR	NO.	SIZE	LENGTH	SHAPE
h1	12	# 6	23'-3"	
h2	18	# 7	23'-6"	
h3	12	# 5	6'-11"	
h4	12	# 5	8'-9"	
u1	42	# 5	7'-2"	
u2	20	# 5	6'-5"	
u3	6	# 5	10'-2"	
s1	51	# 5	10'-7"	

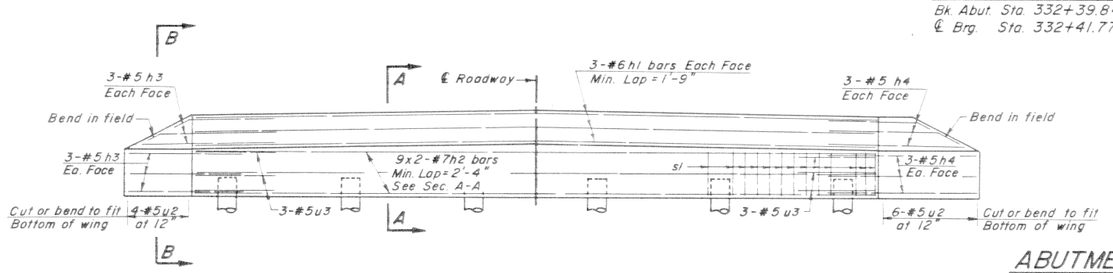
Class X Concrete	Cu. Yd	17.5
Reinforcement Bars	Pound	2,554
Piles 12" Metal Shell	Lin. Ft.	105
Test Pile Metal Shells	Each	1
Structure Excavation	Cu. Yd.	38

Bk. Abut. Sta. 332+39.84
℄ Brg. Sta. 332+41.77

NOTE : Place Bench Mark to miss Bridge Rail.



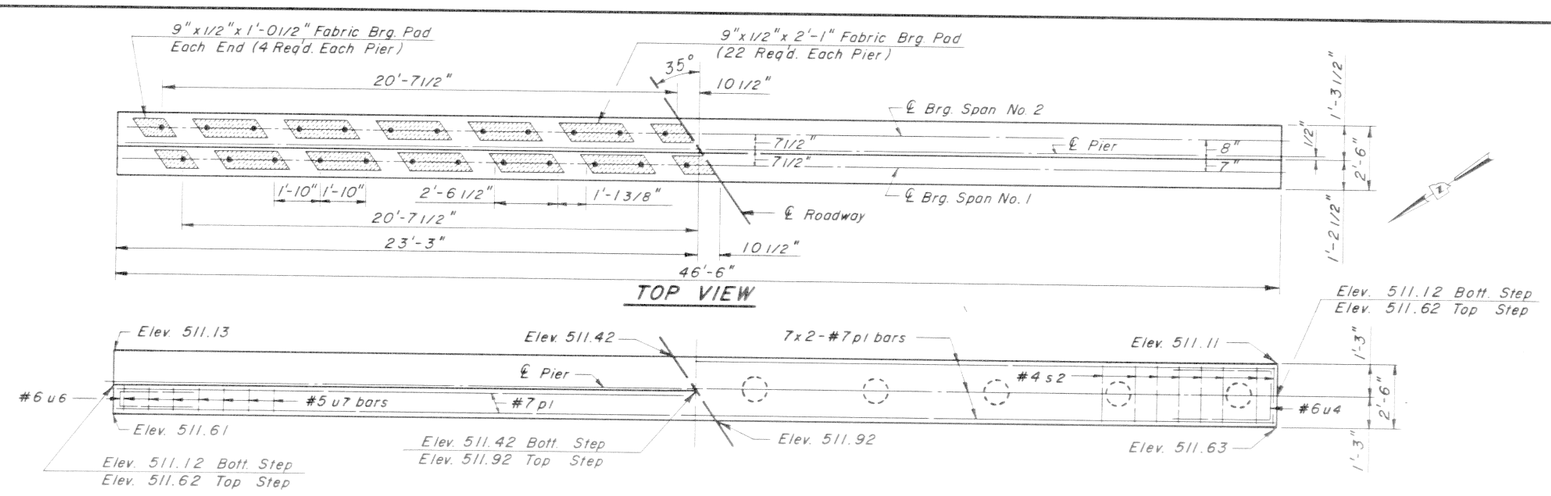
ELEVATION

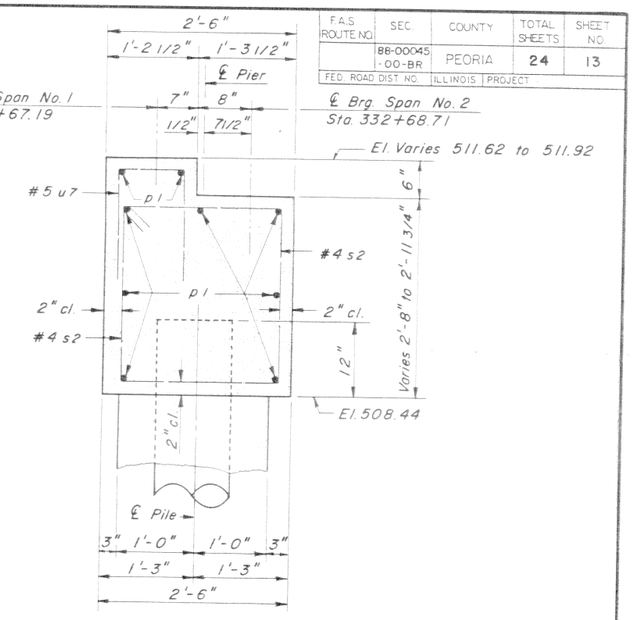


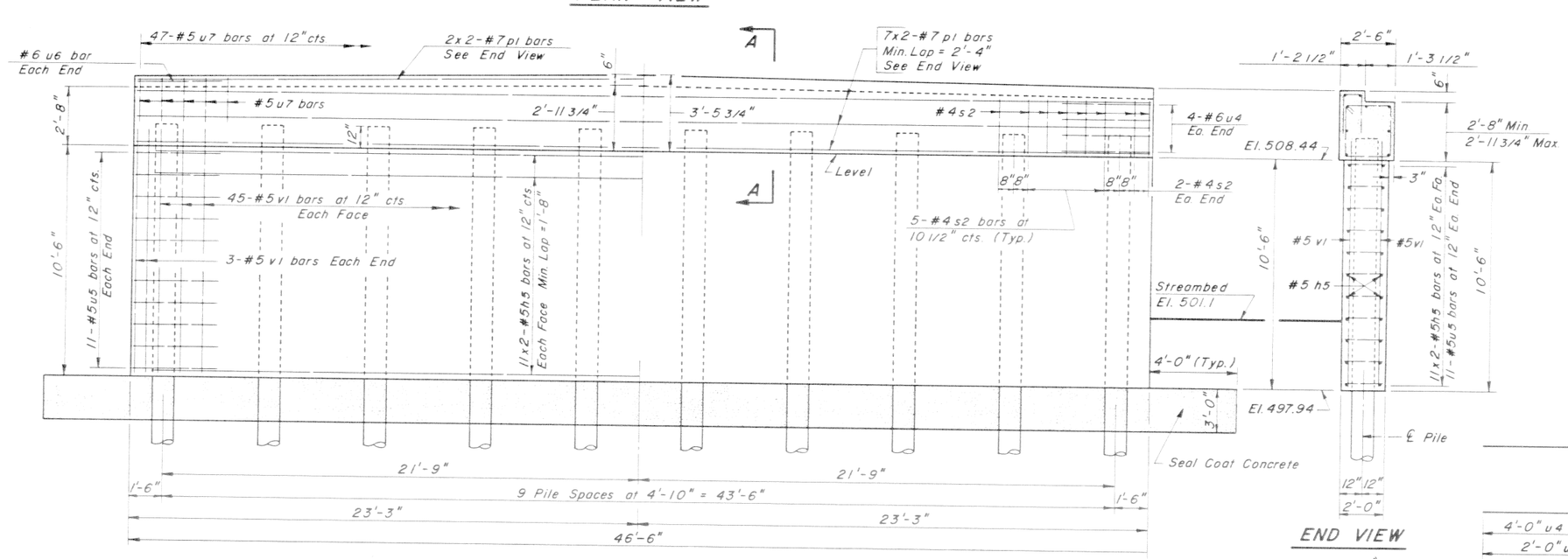
ELEVATION (REINFORCEMENT)

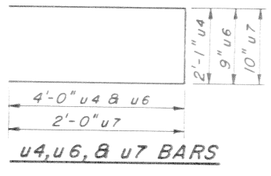
ABUTMENT NO. 1
WEST ABUTMENT

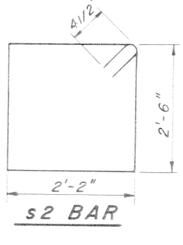
F.A.S. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
	88-00045-00-BR	PEORIA	24	13
FED. ROAD DIST NO.	ILLINOIS	PROJECT		

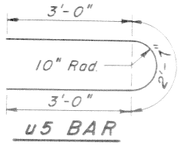


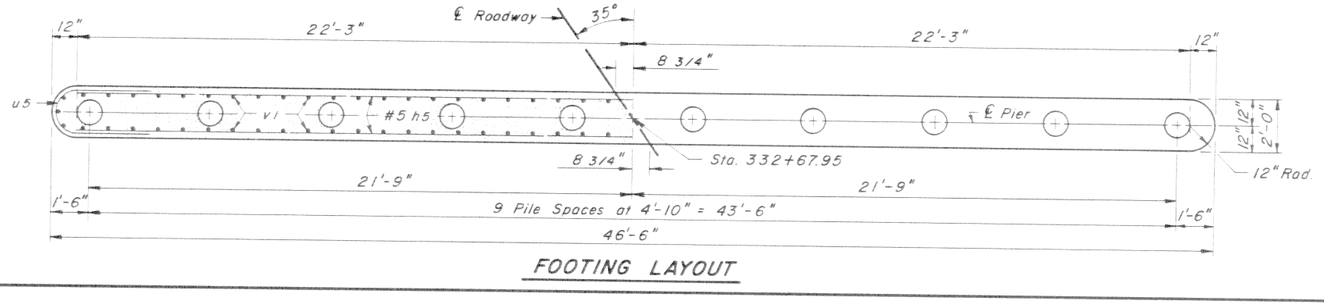












PILE DATA

Type	12" Metal Shell
Capacity	45 Ton
Est. Length	32 Feet
No. Required	9 + 1 Test Pile
TOTAL LENGTH	288 Feet

BILL OF MATERIALS

BAR	NO	SIZE	LENGTH	SHAPE
h5	44	#5	23'-2"	—
p1	18	#7	24'-4"	—
s2	49	#4	10'-1"	□
u4	8	#6	10'-1"	⊓
u5	22	#5	8'-7"	⊓
u6	2	#6	8'-9"	⊓
u7	47	#5	4'-10"	⊓
v1	96	#5	11'-6"	—

Reinforcement Bars	Pound	4044
Class X Concrete	Cu. Yd.	49.1
Seal Coat Concrete	Cu. Yd.	60.6
Piles 12" Metal Shell	Lin. Ft.	288
Test Piles Metal Shell	Each	1
Cofferdams	Each	1
Cofferdam Excavation	Cu. Yd.	124

NOTE: All edges shall have standard 3/4" chamfer.
Space reinforcement in cap to miss anchor dowels.
Dimensions of Cofferdam = 10'-0" x 54'-6".

℄ Pier No. 1 Sta. 332+67.95
℄ Finished Roadway El. 514.00

NOTE: Seal Coat Concrete to be placed in the cofferdam below Elev. 497.94 a minimum thickness of 3'-0". The thickness may be varied to suit existing conditions as directed by the Engineer.

PIER NO. 1
WEST PIER