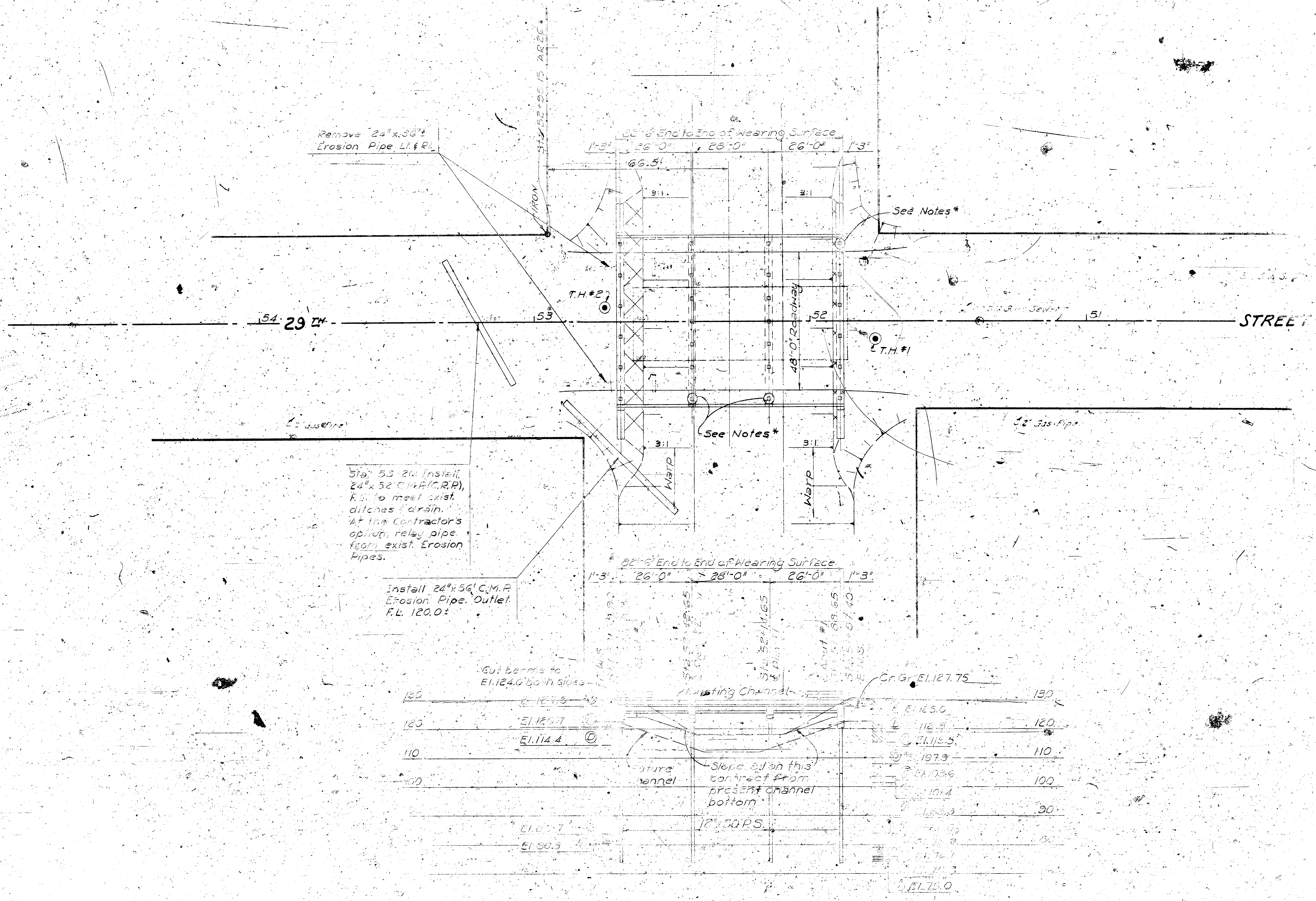
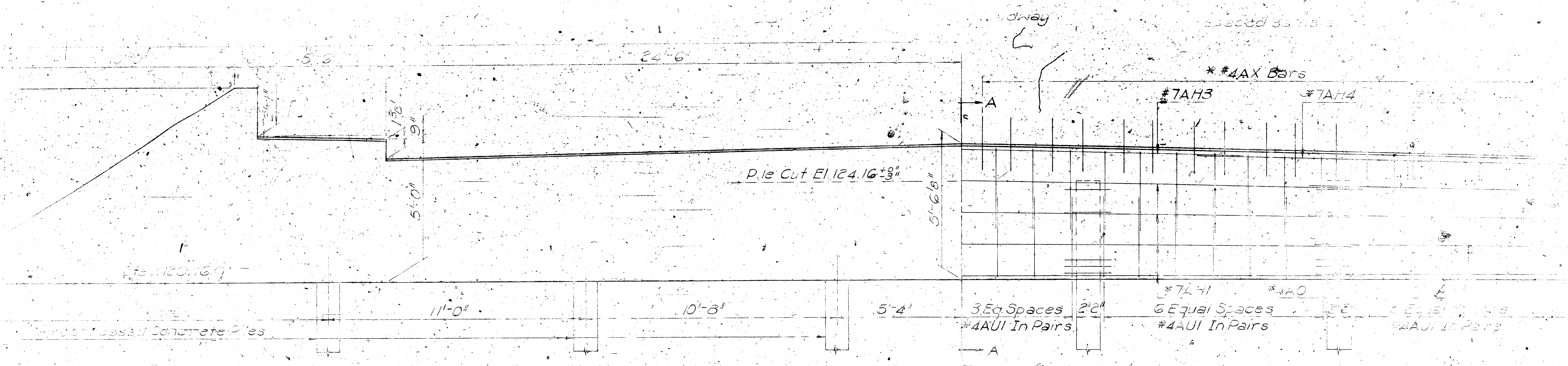
CITY OF WICHITA, KANSAS

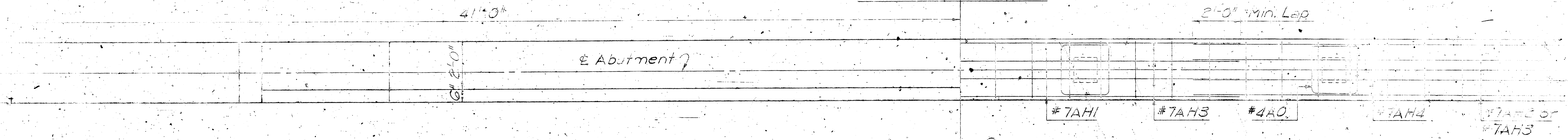
BRIDGE ON 29TH. ST. NORTH ACROSS CHISHOLM CREEK

PROJECT NO. C16-12

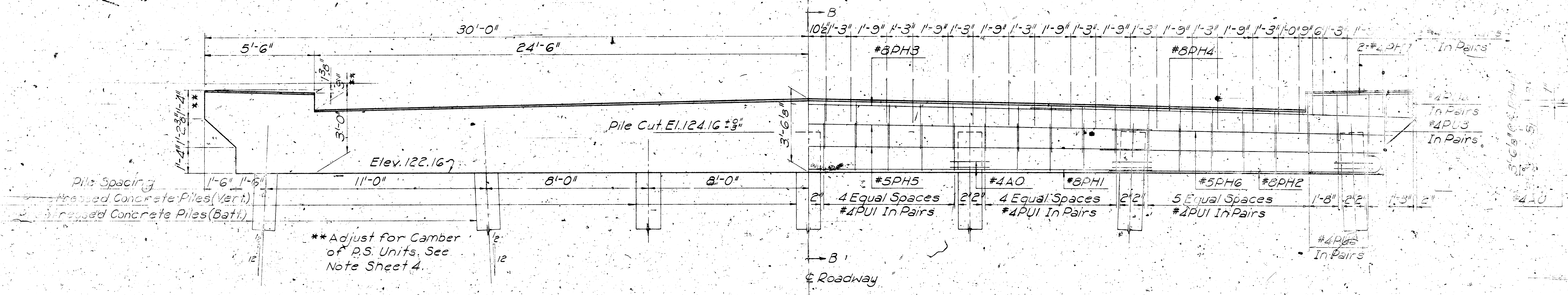

Sta. 52+96.15
IRON
Remove 24"x36'± Erosion Pipe Lt. & Rt.
82'-6" End to End of Wearing Surface
1'-3"
26'-0"
28'-0"
26'-0"
1'-3"
66.5'
3:1
See Notes*
T.H.#2
T.H.#1
54
29TH
53
52
51
STREET
48'-0" Roadway
See Notes*
Warp
Sta. 53+26± Install 24"x52' C.M.P. (C.R.P.), F.L. to meet exist. ditches & drain. At the Contractor's option, relay pipe from exist. Erosion Pipes.
Install 24"x56' C.M.P. Erosion Pipe. Outlet F.L. 120.0±
Cut berms to El.124.0 both sides
Existing Channel
Cr. Gr. El.127.75
130
120
110
100
90
80
El.127.9
El.120.7
El.114.4
El.125.0
El.116.9
El.115.5
El.107.9
El.103.6
El.101.4
El.75.0
El.90.3
Future Channel
Slope 3:1 on this contract from present channel bottom
12"x30' P.S.


Roadway
24'-6"
5'-6"
* #4AX Bars
#7AH3
#7AH4
A
1'-3"
9"
Pile Cut El. 124.16 ±0" -3"
5'-0"
5'-6 8"
#7AH1
#4AO
11'-0"
10'-8"
5'-4"
3 Eq. Spaces
#4AU1 In Pairs
2'2"
6 Equal Spaces
#4AU1 In Pairs
Concrete Piles
A

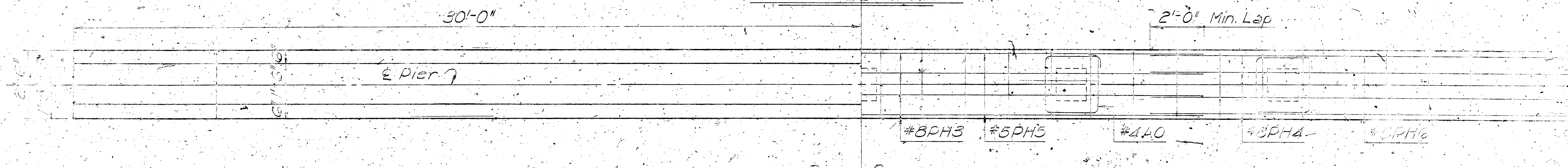
ABUTMENT ELEVATION


41'-0"
2'-0" Min. Lap
℄ Abutment
2'-0"
#7AH1
#7AH3
#4AO
#7AH4
#7AH5

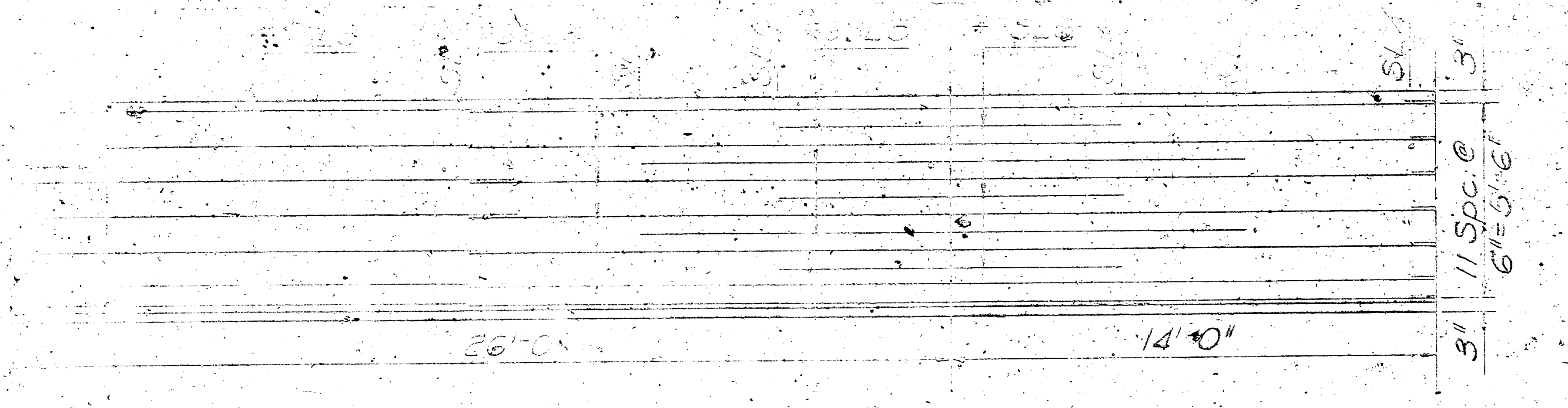
ABUTMENT PLAN


B
30'-0"
5'-6"
24'-6"
10½"
1'-3"
1'-9"
#8PH3
#8PH4
2-#4PH7
In Pairs
1'-3"
**
1'-4"
1'-2⅜"
1'-2"
3'-0"
3'-6 8"
Pile Cut El. 124.16 ±0" -3"
Elev. 122.16
#4PU3
In Pairs
Pile Spacing
Prestressed Concrete Piles (Vert.)
Prestressed Concrete Piles (Batt.)
1'-6"
11'-0"
8'-0"
8'-0"
#5PH5
4 Equal Spaces
#4PU1 In Pairs
#4AO
4 Equal Spaces
#4PU1 In Pairs
#8PH1
#5PH6
#8PH2
5 Equal Spaces
#4PU1 In Pairs
1'-8"
1'-3"
#4AO
#4PU2
In Pairs
12
** Adjust for Camber of P.S. Units. See Note Sheet 4.
B
℄ Roadway

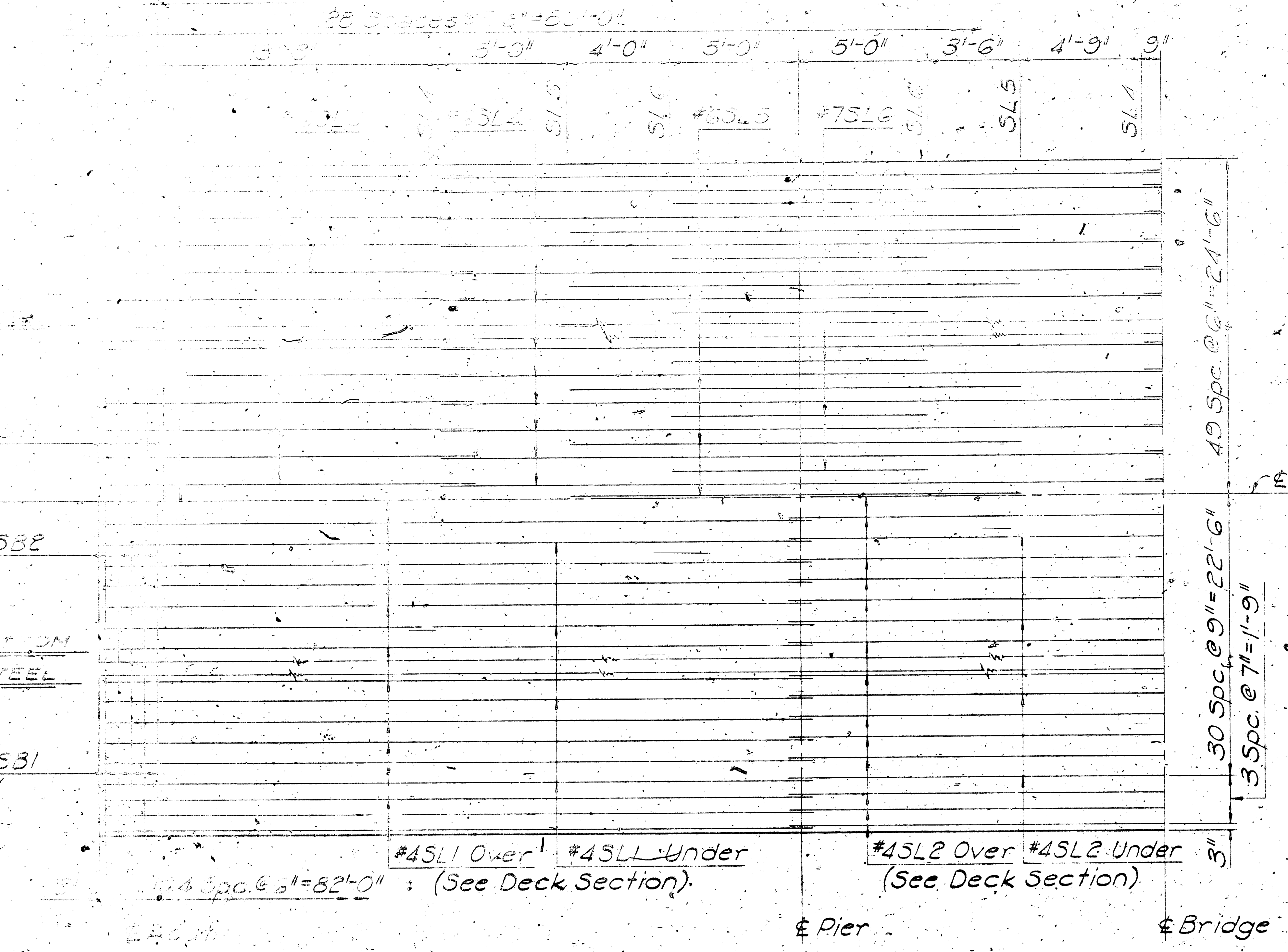
PIER ELEVATION


30'-0"
2'-0" Min. Lap
℄ Pier
2'-0"
#8PH3
#5PH5
#4AO
#8PH4
#5PH6

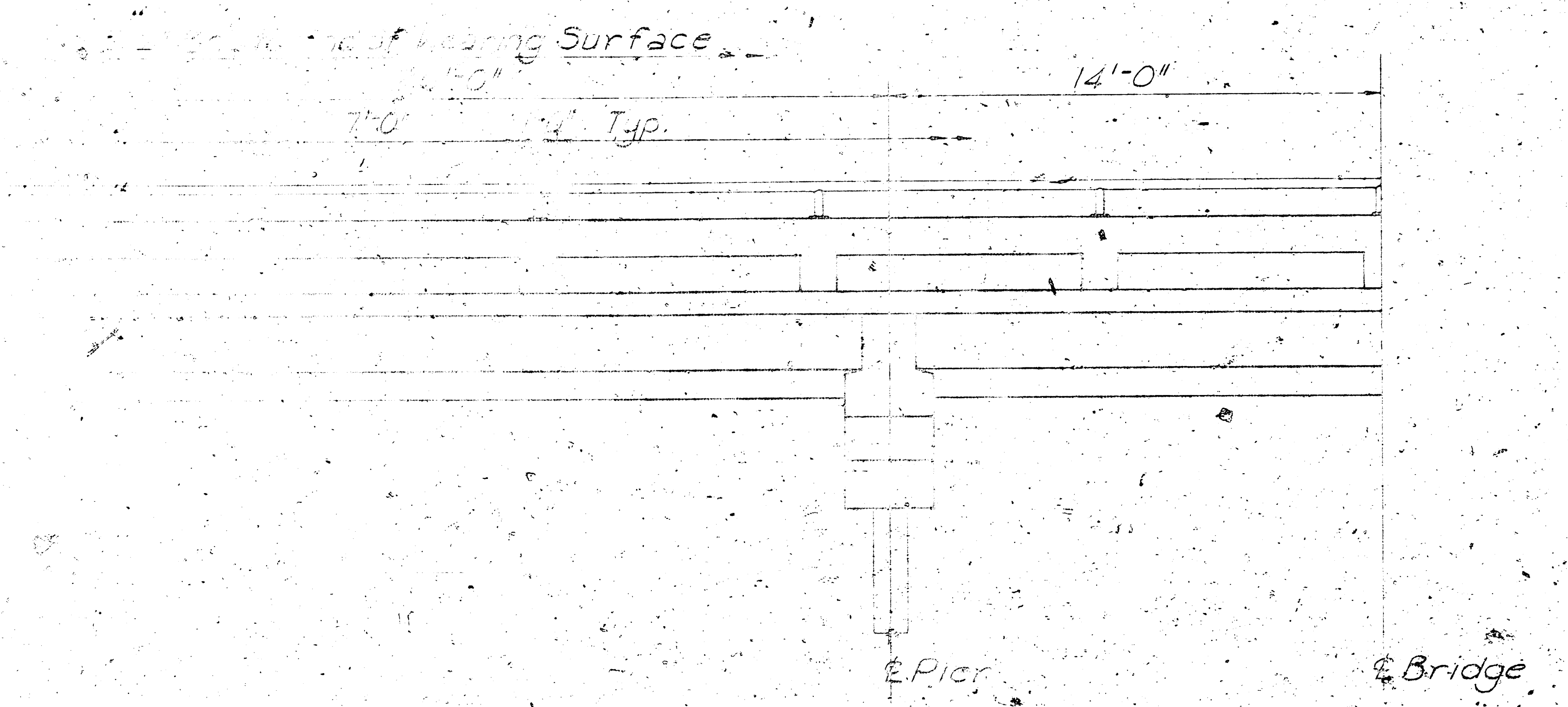
PIER PLAN

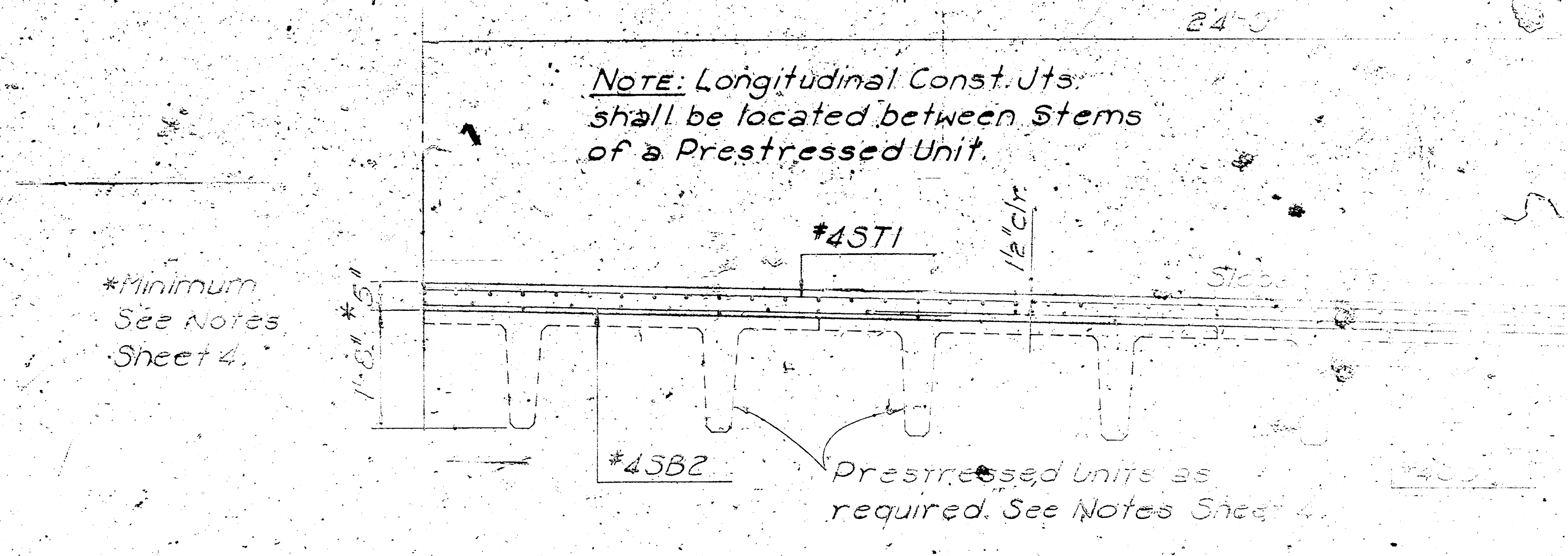

SL1
11 Spa.@ 6"=5'-6"
3"
26'-0"
14'-0"
3"

HALF SIDEWALK PLAN

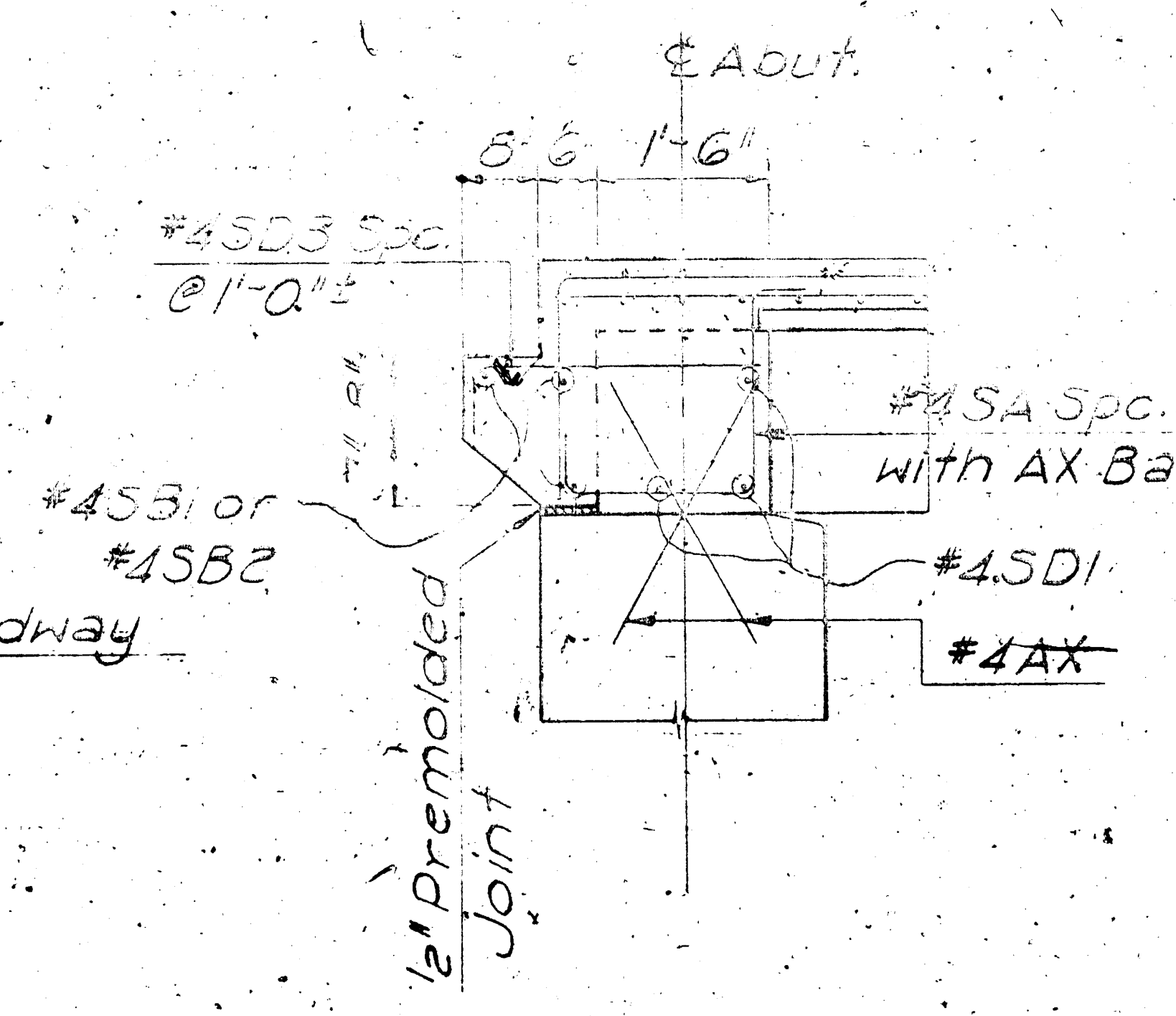

3'-0"
4'-0"
5'-0"
5'-0"
3'-6"
4'-9"
9"
#5SL5
#7SL6
SL5
SL1
49 Spa.@6"=24'-6"
¢ Roadway
30 Spa.@9"=22'-6"
3 Spa.@7"=1'-9"
3"
#4SL1 Over
#4SL1 Under
(See Deck Section)
#4SL2 Over
#4SL2 Under
(See Deck Section)
Spa.@6"=82'-0"
¢ Pier
¢ Bridge
SB2
SB1

HALF SLAB PLAN

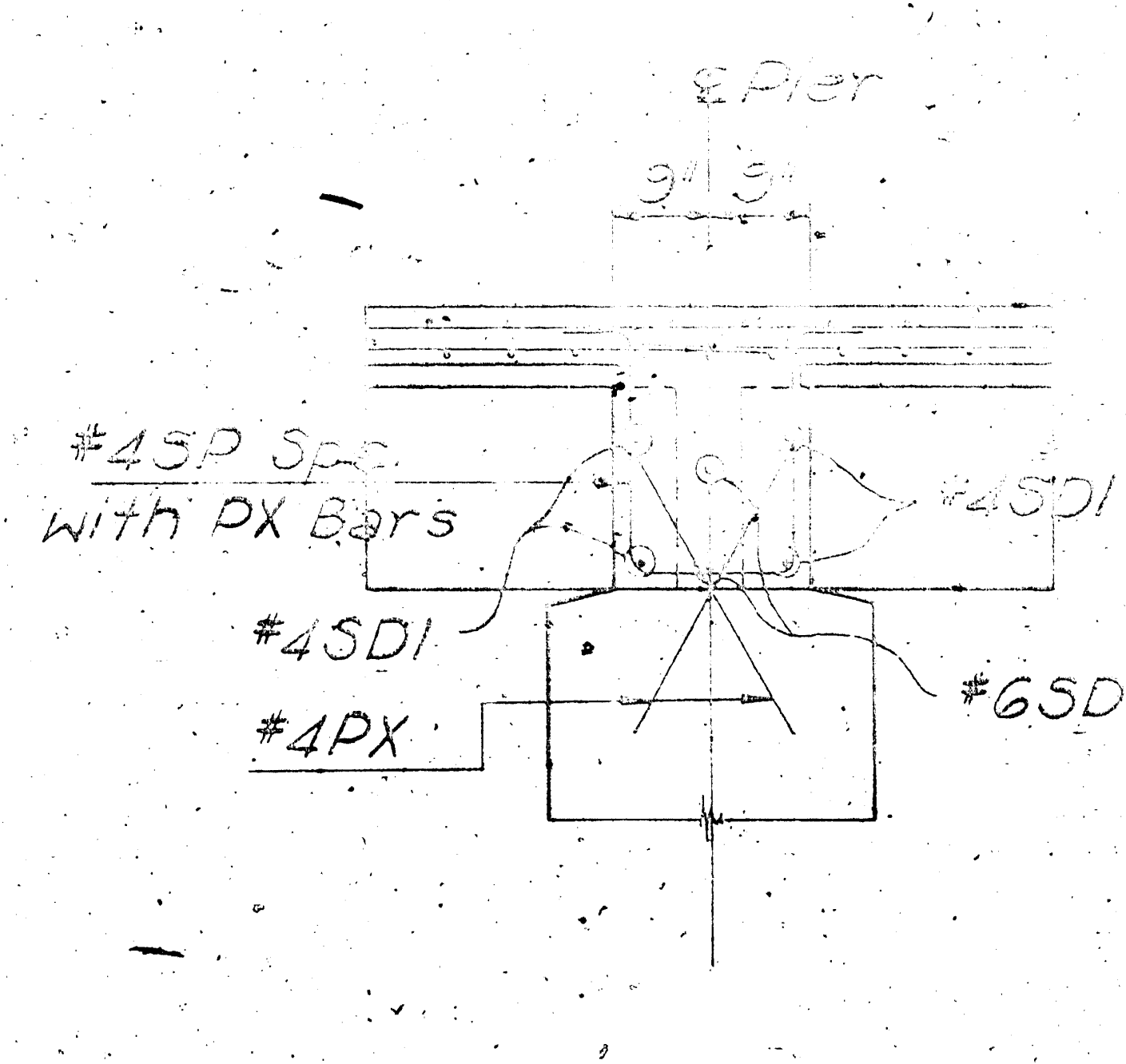

Surface
14'-0"
7'-0"
Typ.
¢ Pier
¢ Bridge


24'-0"
Note: Longitudinal Const. Jts. shall be located between Stems of a Prestressed Unit.
*Minimum See Notes Sheet 4.
#4ST1
1½"clr.
1'-8" *5"
#4SB2
Prestressed Units as required. See Notes Sheet 4.

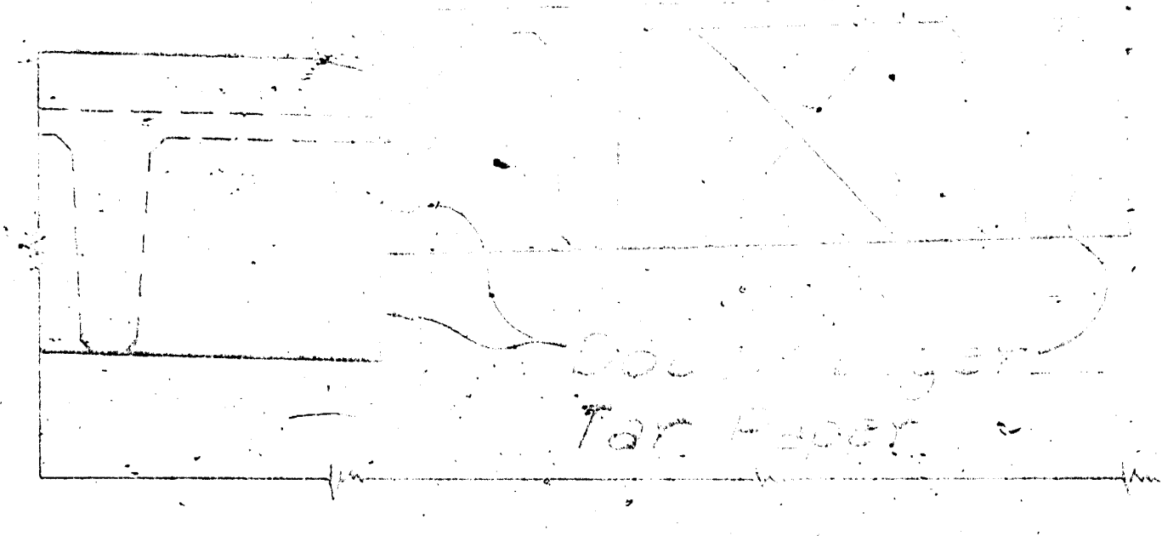
TYPICAL DECK SECTION


¢ Abut.
8"
1'-6"
#4SD3 Spa. @1'-0"
#4SA Spa. with AX Bars
#4SB1 or #4SB2
#4SD1
#4AX
½" Premolded Joint

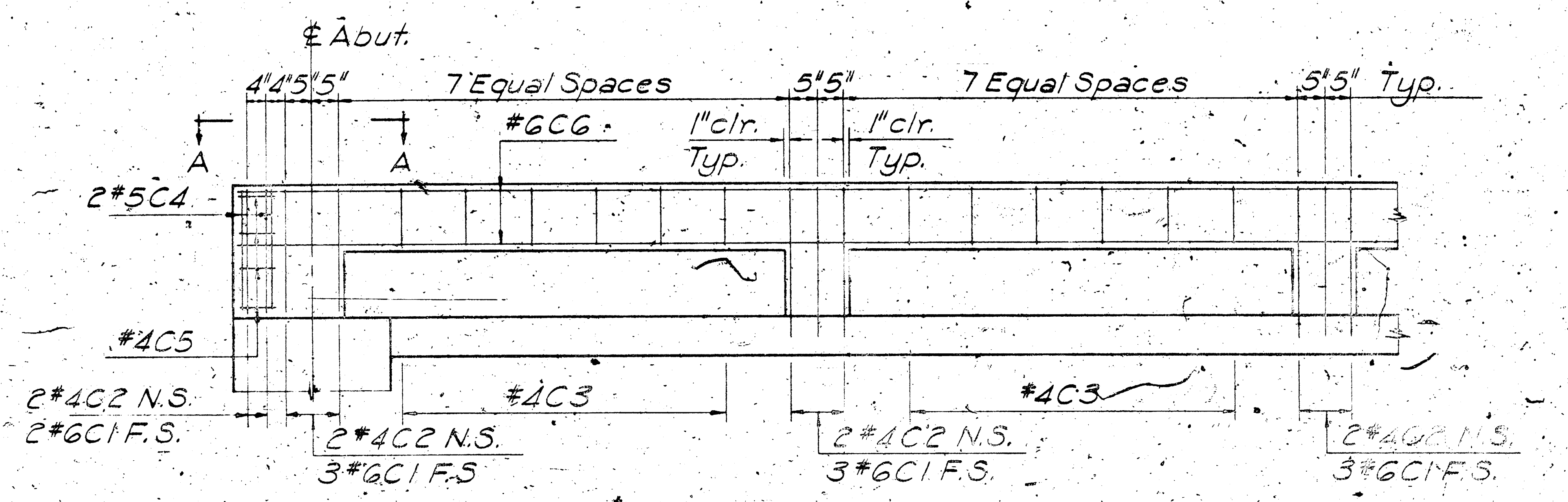
SECTION AT ABUTMENT


¢ Pier
9"
#4SP Spa. with PX Bars
#4SD1
#4SD1
#4PX
#6SD2

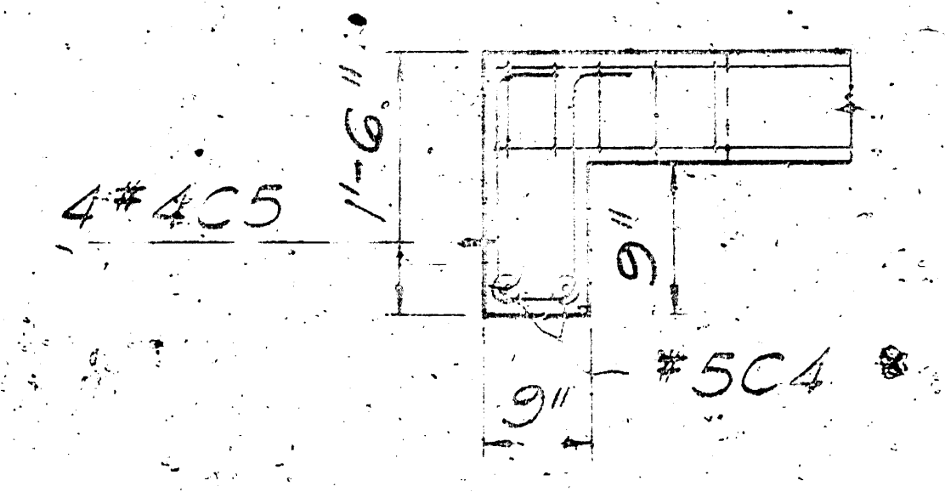
SECTION AT PIER



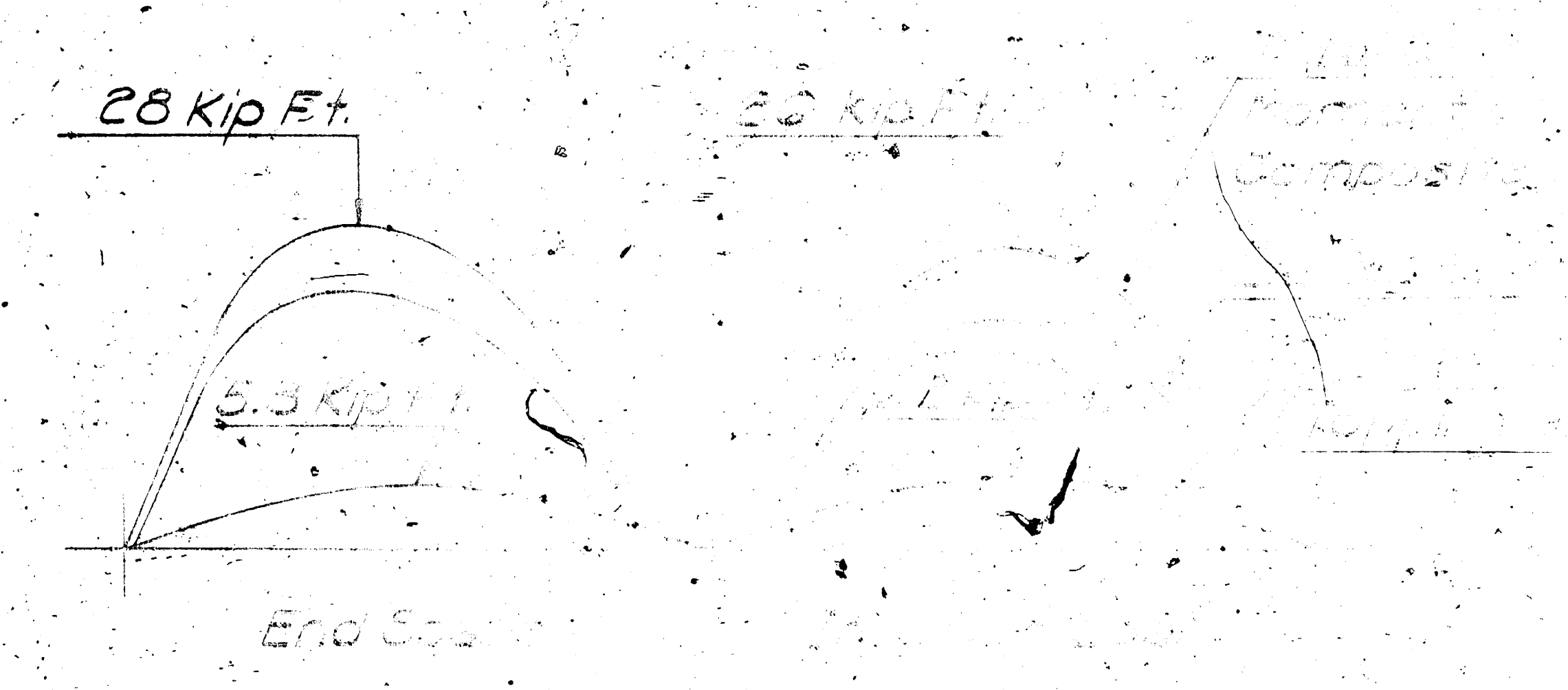
PART SECTION THRU SIDEWALK AT ABUTMENT


¢ Abut.
4"
4"
5"
5"
7 Equal Spaces
5"
5"
7 Equal Spaces
5"
5" Typ.
A
A
#6C6
1"clr. Typ.
1"clr. Typ.
2#5C4
#4C5
2#4C2 N.S.
2#6C1 F.S.
#4C3
#4C3
2#4C2 N.S.
3#6C1 F.S.
2#4C2 N.S.
3#6C1 F.S.
2#4C2 N.S.
3#6C1 F.S.

CURB REINFORCING


4#4C5
1'-6"
9"
9"
#5C4

SECTION A-A

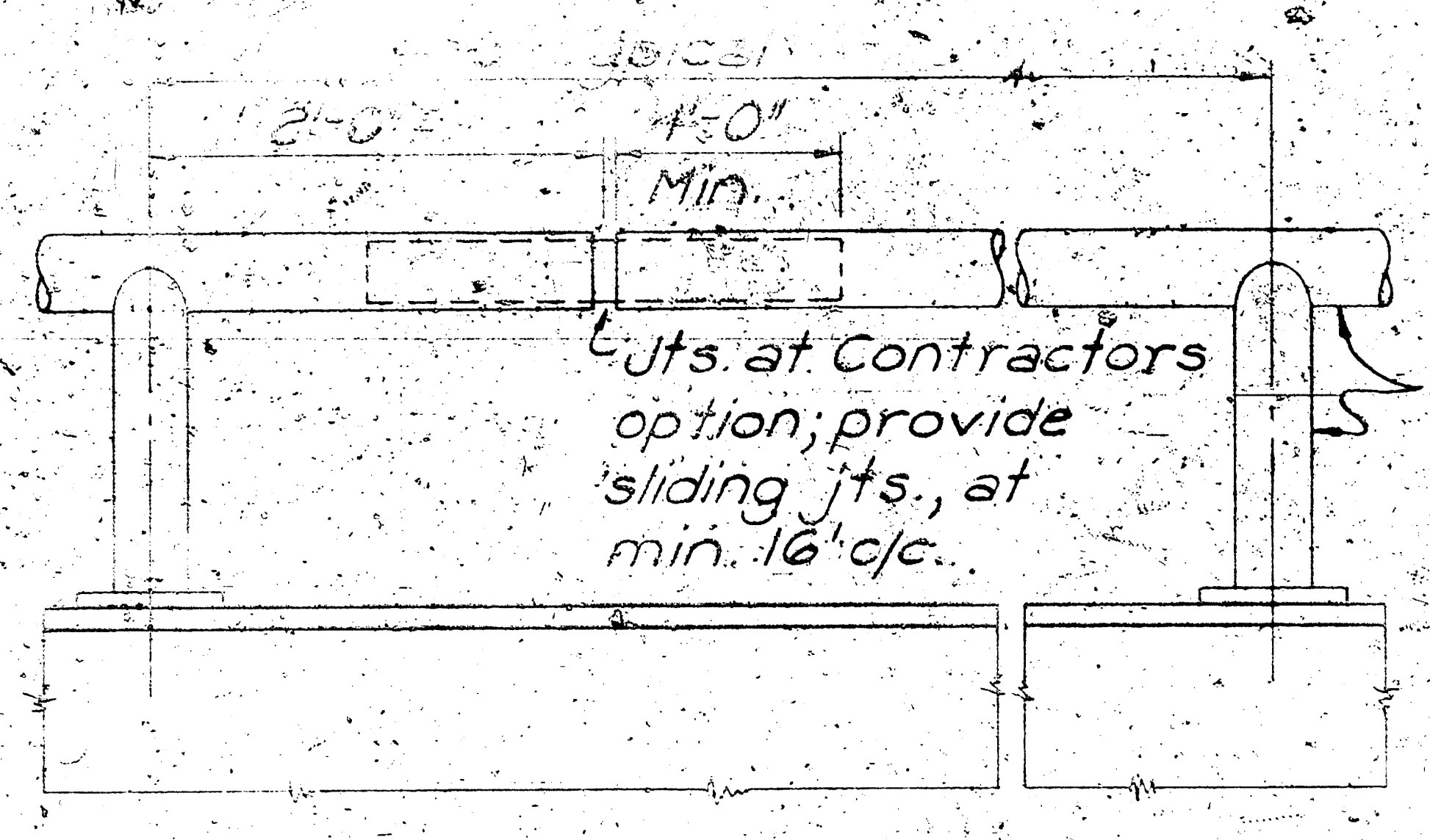


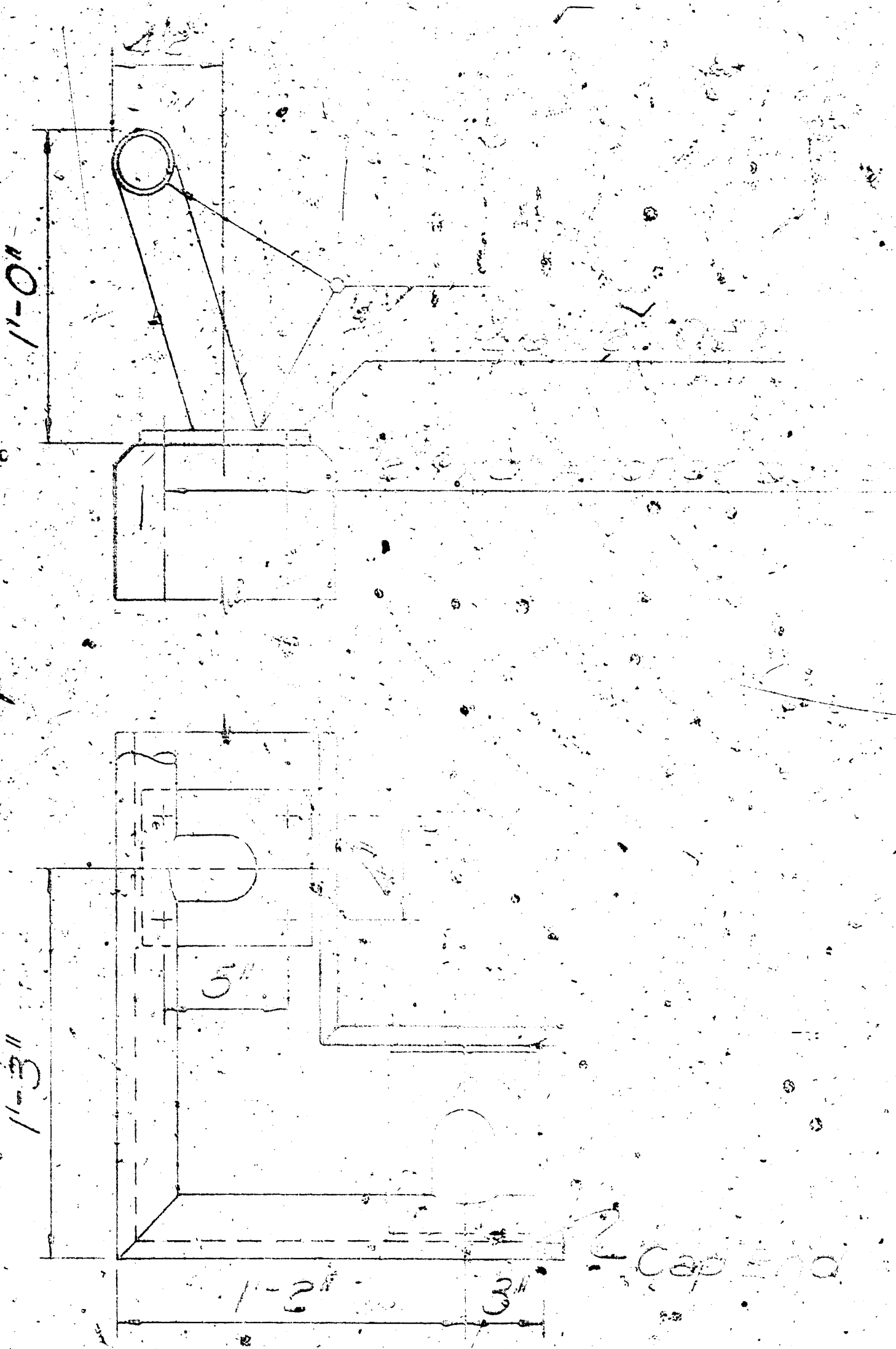
2'-2"
#4AU1 #4AU2 &
#4AU3
2'-3"
#4RU3 & #4RU4
11'-6"
#6AH3
7"
7"
2'-3"
1'-8"

[illegible]							
STRAIGHT BARS				BENT BARS			
Mark	No.Req.	Size	Length	Mark	No.Req.	Size	Length
[illegible]	10	7	34'-0"	AO	30	4	9'-0"
[illegible]	16	7	[illegible]				
[illegible]	8	[illegible]	24'-0"	[illegible]	62	[illegible]	8'-0"
[illegible]	8	[illegible]	[illegible]	[illegible]	16	[illegible]	9'-0"
[illegible]	[illegible]	5	9'-3"	[illegible]	24	4	[illegible]
[illegible]	[illegible]	4	3'-0"	[illegible]	4	6	12'-3"
				* See Bending Diagrams			
[illegible] Excavation						92	Cu. Yds.
[illegible] Concrete						40.3	Cu. Yds.
[illegible] Steel						3430	Lbs.
[illegible] Prestressed Concrete Piles						300	Lin. Ft.

[illegible]							
PH1	4	8	34'-0"	PH2	8	8	14'-7"
PH3	4	8	26'-0"				
PH4	8	8	19'-0"	PU1	60	4	6'-7"
PH5	4	5	34'-0"	PU2	12	4	6'-11"
PH6	8	5	14'-0"	PU3	4	4	5'-7"
PH7	4	4	5'-3"	PU4	4	4	4'-5"
PX	88	4	3'-0"	AO	14	4	[illegible]
Class A Concrete						18.1	Cu. Yds.
Reinforcing Steel						2240	Lbs.
12" Prestressed Concrete Piles						350	Lin. Ft.

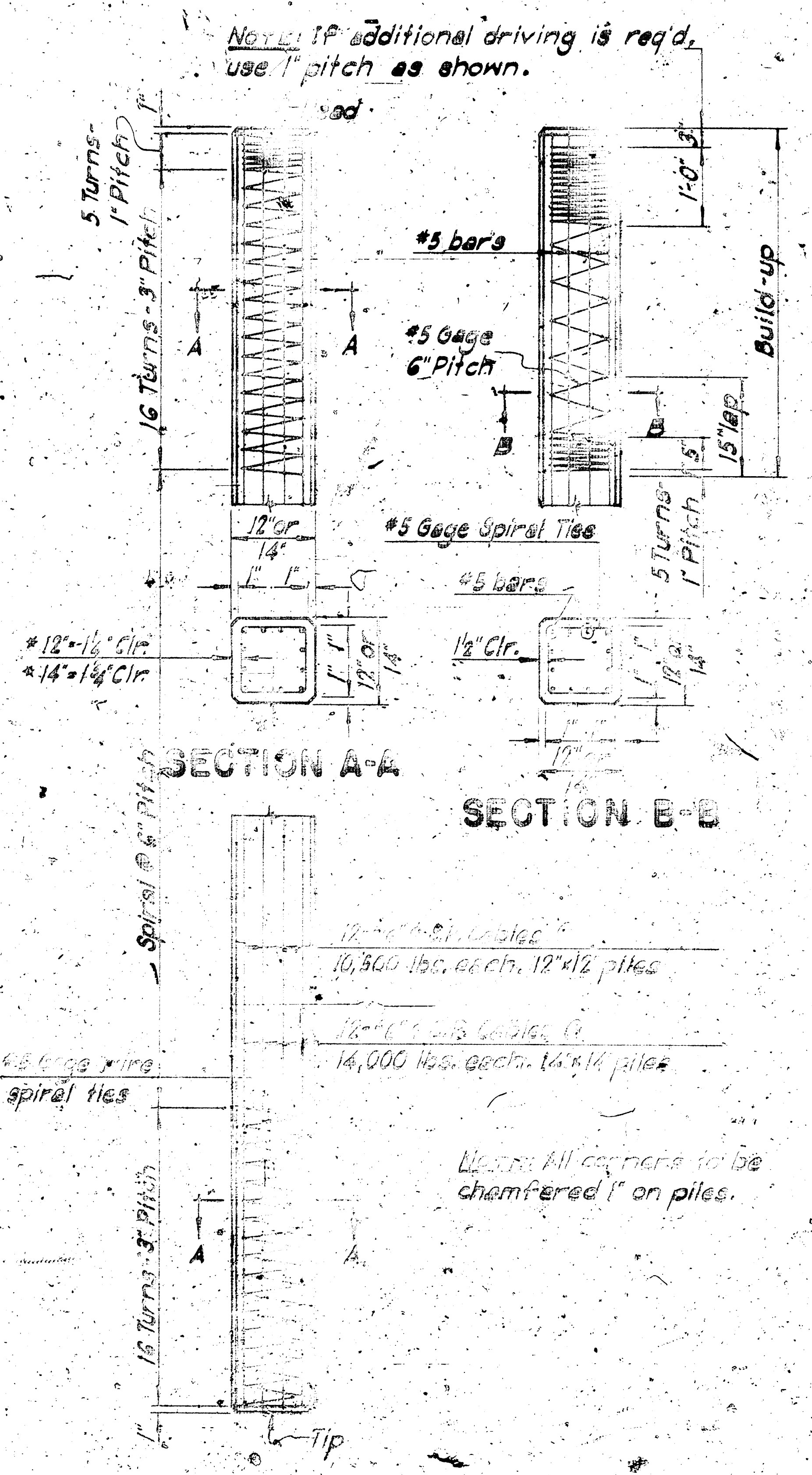
SUPERSTRUCTURE							
SB1	342	4	17'-6"	C1	74	6	4'-6"
SB2	171	4	16'-0"	C2	52	4	3'-0"
				C3	120	4	3'-6"
C4	8	5	1'-9"	C5	16	4	4'-1"
C6	32	6	21'-9"				
				SA	44	4	5'-0"
SD1	210	4	2'-4"	SP	44	4	6'-9"
SD2	12	6	17'-3"	SD3	98	4	3'-0"
				ST1	266	4	25'-6"
[illegible]	134	4	27'-9"	ST2	330	4	6'-3"
[illegible]	67	4	25'-0"				
[illegible]	128	6	28'-5"	SL3	128	6	16'-3"
[illegible]	54	6	17'-6"				
[illegible]	[illegible]	7	10'-0"				
Class AA(AE) Concrete						114.8	Cu. Yds.
Reinforcing Steel						29,980	Lbs.


2'-0"
4'-0"
Min.
Cuts at Contractors option; provide sliding jts., at min. 16' c/c.
2" Std. Pipe

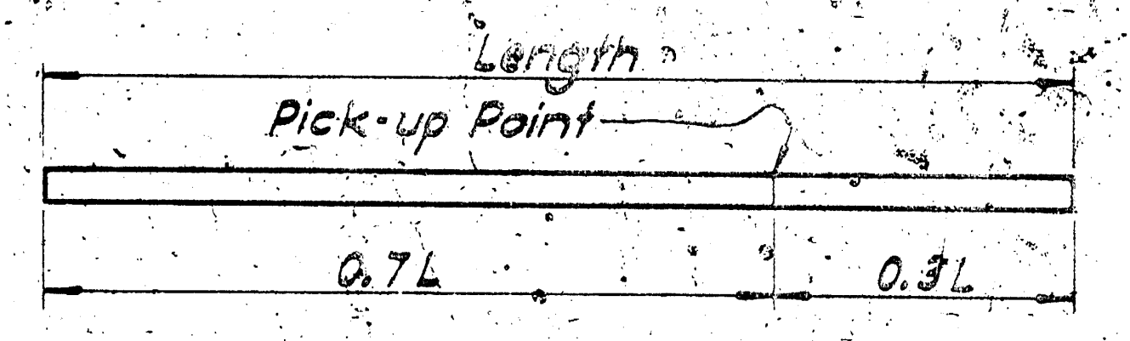

4½"
1'-0"
5"
1'-3"
1'-2"
3"
Cap

PIPE HANDRAIL DETAILS

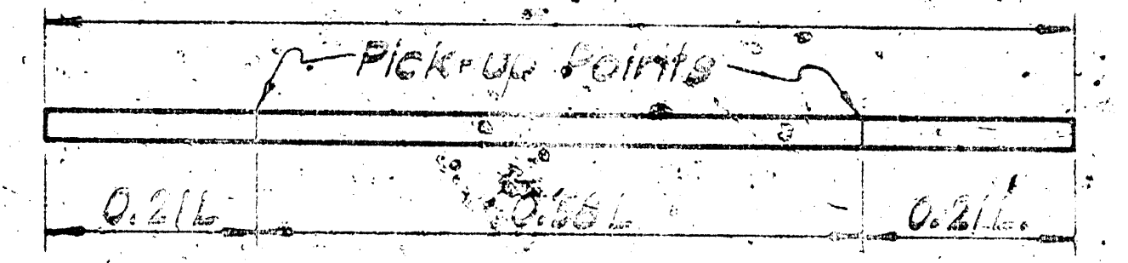
Sections to be galvanized after fabrication.


Note: If additional driving is req'd, use 1" pitch as shown.
5 Turns-1" Pitch
16 Turns-3" Pitch
A
A
#5 bars
#5 Gage 6" Pitch
B
B
1'-0"
Build-up
15" lap
#5 Gage Spiral Ties
5 Turns 1" Pitch
12" or 14"
#12"=1½" Clr.
#14"=1¾" Clr.
#5 bars
1½" Clr.
SECTION A-A
SECTION B-B
Spiral @ 6" Pitch
12-½"ø S.R. Cables @ 10,500 lbs. each. 12"x12" piles
12-½"ø S.R. Cables @ 14,000 lbs. each. 14"x14" piles
#5 Gage wire spiral ties
16 Turns-3" Pitch
1"
Tip

Notes: All corners to be chamfered 1" on piles.


Length
Pick-up Point
0.7L
0.3L

SINGLE POINT PICK-UP


Pick-up Points
0.21L
0.58L
0.21L

DOUBLE POINT PICK-UP

Note: Piles shall be marked at Pick-up Points to indicate proper points for attaching handling lines.

12"x12" Piles:
Max. Length = 50' Single Point Pick-up
= 75' Double

14"x14" Piles:
Max. Length = 60' Single Point Pick-up
= 85' Double

Notes:
All concrete in prestressed piles shall be Class [illegible]. [illegible] Prestressed Piles shall [illegible] with manufacturer's [illegible] subject to approval [illegible].
Price bid per foot [illegible] total cost per foot of the in-place piles including driving, concrete and reinforcing steel.

[illegible] vibrate thoroughly into the diaphragm and particularly between the ends of prestressed units.

Finish sidewalk and deck surfaces with a broom finish.

In lieu of other curing procedures [illegible] surfaces of roadways and [illegible] surfaces of curbs and [illegible] emulsion conforming to USDA, Oilseed Crops Laboratory, Formulation [illegible] as available from Spur-Tex Products, of Wichita, Kansas.

SUMMARY OF [illegible]	
ITEM	QUANTITY
REMOVAL OF [illegible] BRIDGE [illegible]	LUMP
CHANNEL EXCAVATION	LUMP

PRESTRESSED CONCRETE [illegible]