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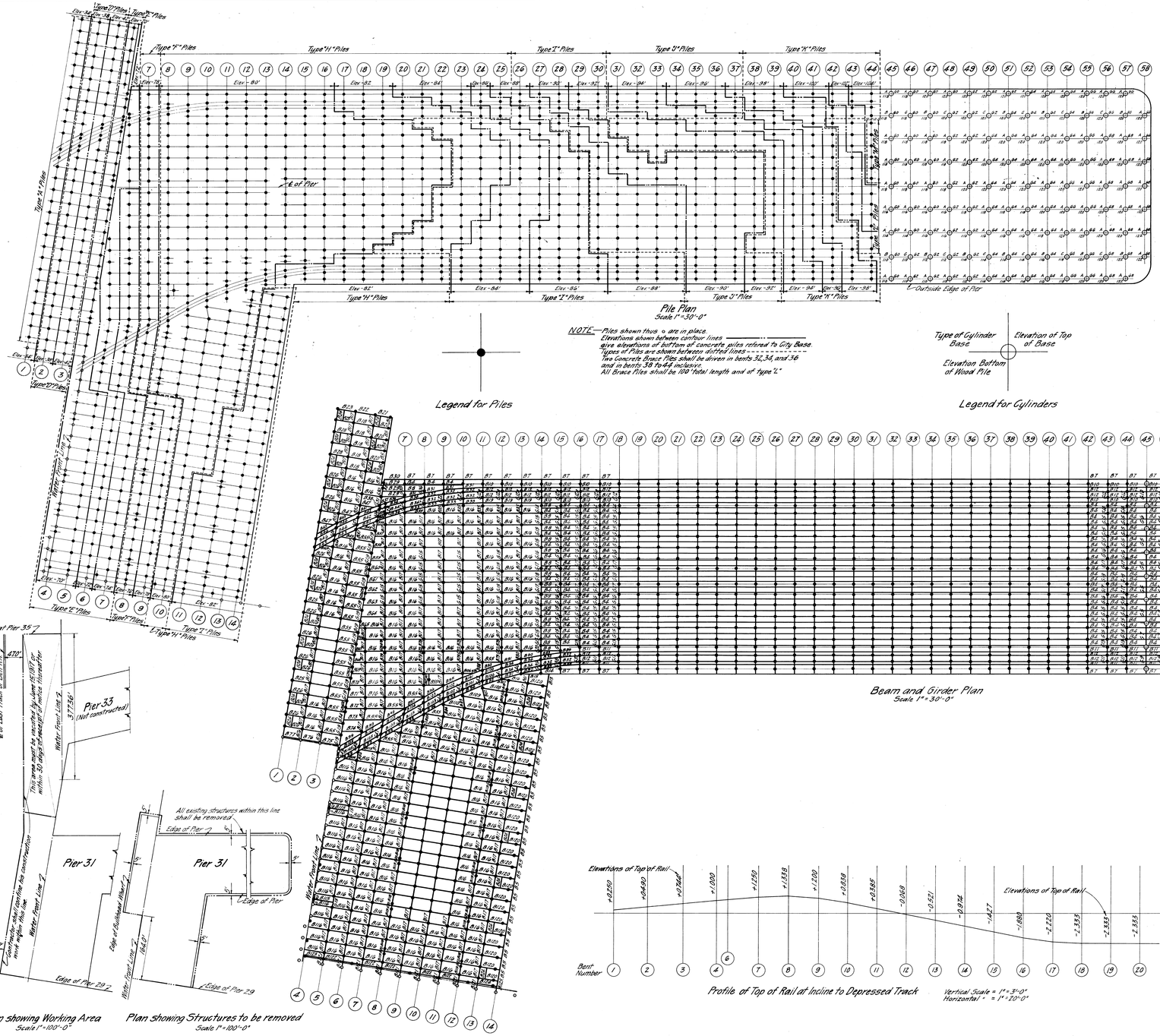

Pile Plan
Scale 1" = 30'-0"

NOTE—Piles shown thus ○ are in place.
Elevations shown between contour lines ——— give elevations of bottom of concrete piles referred to City Base.
Types of Piles are shown between dotted lines - - - - - - -
Two Concrete Brace Piles shall be driven in bents 32, 34, and 36 and in bents 38 to 44 inclusive.
All Brace Piles shall be 100' Total length and of "type L"

Legend for Piles

Type of Cylinder Base | Elevation of Top of Base | Elevation Bottom of Wood Pile

Legend for Cylinders

Plan showing Working Area
Scale 1" = 100'-0"

Plan showing Structures to be removed
Scale 1" = 100'-0"

Beam and Girder Plan
Scale 1" = 30'-0"

Profile of Top of Rail at Incline to Depressed Track

Vertical Scale = 1" = 3'-0"
Horizontal - = 1" = 30'-0"

Girder Schedule

Mark	Width	Depth	Main Reinforcement Bottom	Main Reinforcement Top	Number of Stirrups	Sheet No	See Girder	Remarks
G1	12"	36"	3 - 1"	2 - 1"	37	5		
G2	16"	48"	4 - 1"	2 - 3/4"	20	5		
G3	18"	48"	4 - 1 1/8"	2 - 3/4"	20	5		
G4	18"	Var.	3 - 1"		13	5		See detail
G5	16"	48"	3 - 1"	2 - 1 1/8"	20	5		
G6	18"	48"	5 - 1"	2 - 1 1/8"	20	5		
G7	18"	48"	5 - 1"	2 - 1 1/8"	20	5		
G8	18"	Var.	3 - 1"		13	5		See detail
G9	20"	60"	7 - 1"	2 - 1"	17	5		Stirrups 1/2" bars
G10	20"	72"	7 - 1"	2 - 1"	17	5		Stirrups 1/2" bars
G11	18"	Var.	4 - 1 1/8"	2 - 1"	14	6		
G12	18"	"	4 - 1 1/8"	2 - 1 1/8"	14	6		G12a Similar
G13	20"	33"	2 - 1 3/8"	2 - 1 1/8"	4	6		
G14	10"	Var	2 - 1 1/8"	2 - 1 1/8"	3	6		
G15	10"	30"	3 - 1 1/8"	2 - 1 1/8"	10	6		
G16	10"	33"	1 - 1 3/8"	2 - 1 1/8"	9	6		
G17	10"	30"	3 - 1 3/8"	2 - 1 1/8"	9	6		
G18	14"	41"	1 - 1 3/8"	2 - 1 1/8"	12	6		
G19	10"	33"	1 - 1 3/8"	2 - 1 1/8"	9	6		
G20	24"	36"	3 - 1"	2 - 1 3/8"	6	6		
G21	18"	Var.	4 - 1 1/8"	2 - 1 1/8"	15	6	G12	
G22	18"	"	4 - 1 1/8"	2 - 1 1/8"	15	7	G25	
G23	18"	"	4 - 1 1/8"	2 - 1 1/8"	15	7		
G24	18"	"	4 - 1"	2 - 3/4"	13	7	G48	
G25	18"	"	4 - 1"	2 - 3/4"	13	7	G48	
G26	18"	"	4 - 1"	2 - 3/4"	10	7	G48	
G27	18"	"	4 - 1"	2 - 3/4"	10	7	G49	
G28	18"	"	4 - 1"	2 - 3/4"	10	7	G48	
G29	10"	33"	1 - 1 3/8"	2 - 1 1/8"	4	6	G29	
G30	10"	33"	1 - 1 3/8"	2 - 1 1/8"	7	6	G19	
G31	10"	33"	1 - 1 3/8"	2 - 1 1/8"	6	6	G19	
G32	10"	33"	1 - 1 3/8"	2 - 1 1/8"	8	6	G19	
G33	10"	33"	1 - 1 3/8"	2 - 1 1/8"	6	6	G19	
G34	10"	39"	1 - 1 3/8"	2 - 1 1/8"	8	6	G19	
G35	18"	Var.	2 - 1 1/8"	2 - 1 1/8"	6	7	G36	
G36	18"	"	2 - 1 1/8"	2 - 1 1/8"	5	7		
G37	18"	"	4 - 1 1/8"	2 - 1 1/8"	14	6	G11	
G38	18"	"	4 - 1 1/8"	2 - 1 1/8"	14	6	G11	
G39	18"	"	4 - 1"	2 - 1 1/2"	15	7	G48	
G40	18"	"	4 - 1"	2 - 3/4"	10	7	G48	
G41	18"	"	4 - 1"	2 - 3/4"	11	7	G49	
G42	18"	"	4 - 1"	2 - 3/4"	11	7	G49	
G43	18"	"	4 - 1"	2 - 3/4"	10	7	G49	
G44	18"	"	4 - 1"	2 - 3/4"	13	7	G49	
G45	18"	"	4 - 1"	2 - 3/4"	11	7	G49	
G46	18"	"	4 - 1"	2 - 3/4"	16	7	G48	
G47	18"	"	4 - 1"	2 - 3/4"	13	7	G48	
G48	18"	"	4 - 1"	2 - 3/4"	13	7		
G49	9"	49"	3 - 7/8"	2 - 1 1/2"	15	7		
G50	9"	25"	3 - 7/8"	2 - 1 1/2"	10	7		

NOTE—All stirrups are 5/8" ⌀ bars unless otherwise noted.

Beam Schedule

Mark	Width	Depth	Main Reinforcement Bottom	Main Reinforcement Top	Number of Stirrups	Sheet No	See Beam	Remarks
B1	12"	36"	3 - 3/4"		7	5		
B2	12"	44"	3 - 7/8"	2 - 5/8"	12	5		
B3	12"	32"	3 - 7/8"	2 - 5/8"	13	5		
B4	9"	25"	1 - 7/8 x 2 - 3/4"	2 - 5/8"	11	6		
B5	10"	24"	4 - 5/8"	2 - 5/8"	10	5		B5a similar, except 8 Stirrups
B6	10"	24"	2 - 3/4"	2 - 5/8"	12	5		See detail
B7	10"	24"	4 - 3/4"	2 - 5/8"	12	5		
B8	9"	25"	3 - 7/8"	2 - 5/8"	11	6		
B9	10"	Var	1 - 7/8 x 2 - 3/4"		18	5		See detail
B10	10"	25"	1 - 7/8 x 2 - 3/4"	2 - 5/8"	13	5		
B11	10"	25"	1 - 7/8 x 2 - 3/4"	2 - 5/8"	11	5		
B12	14"	44"	5 - 7/8"	2 - 5/8"	26	6		
B13	10"	24"	4 - 5/8"	2 - 5/8"	13	5	B5	
B14	10"	24"	4 - 3/4"	2 - 1/2"	12	6	B7	
B15	12"	28"	3 - 1"	2 - 5/8"	14	7	B70	
B16	12"	32"	4 - 7/8"	2 - 5/8"	19	6		
B17	7"	20"	3 - 5/8"	2 - 1/2"	12	6		Stirrups 1/4" bars
B18	12"	34"	4 - 7/8"	2 - 5/8"	19	6		
B19	10"	28"	3 - 7/8"	2 - 5/8"	18	6		
B20	14"	36"	2 - 1 3/4"	2 - 5/8"	13	6		
B21	9"	34"	1 - 1 3/4 x 2 - 3/4"	2 - 1/2"	13	6		
B22	9"	32"	3 - 3/4"	2 - 1/2"	19	6		
B23	9"	32"	1 - 1 3/4 x 2 - 3/4"	2 - 1/2"	18	6		
B24	18"	12"	5 - 3/4"	2 - 1/2"	11	6		
B25	12"	32"	2 - 1" & 2 - 7/8"	2 - 5/8"	18	6	B27	
B26	12"	40"	2 - 1" & 2 - 7/8"	2 - 5/8"	18	6	B28	
B27	12"	32"	2 - 1" & 2 - 7/8"	2 - 5/8"	18	6		B27 Omitted
B28	12"	40"	2 - 1" & 2 - 7/8"	2 - 5/8"	18	6		
B29	12"	24"	2 - 1" & 2 - 7/8"	2 - 5/8"	14	6		
B30	10"	24"	4 - 3/4"	2 - 1/2"	13	6	B7	
B31	10"	25"	1 - 1 3/4 x 2 - 3/4"	2 - 5/8"	11	5	B10	
B32	12"	44"	5 - 7/8"	2 - 5/8"	26	6	B12	
B33	10"	28"	3 - 7/8"	2 - 5/8"	18	6	B19	
B34	14"	44"	5 - 7/8"	2 - 5/8"	27	6	B12	
B35	12"	29"	2 - 1" & 2 - 7/8"	2 - 1/2"	8	7	B86	
B36	10"	30"	3 - 1"	2 - 5/8"	20	7	B41	
B37	10"	34"	1 - 1"		5	7	B40	See detail
B38	15"	42"	2 - 7/8"		3	7	B39	See detail
B39	15"	42"	2 - 7/8"		3	7		See detail
B40	10"	34"	1 - 1"		5	7		See detail
B41	10"	32"	3 - 1"	2 - 5/8"	20	7		
B42	18"	45"	3 - 1"	2 - 5/8"	35	7		
B43	10"	32"	3 - 1"	2 - 5/8"	20	7	B41	
B44	18"	48"	3 - 1"	2 - 3/4"	36	7	B42	
B45	10"	32"	3 - 1"	2 - 5/8"	20	7	B41	
B46	15"	48"	3 - 1"	2 - 3/4"	36	7	B42	See note detail B42
B47	12"	28"	3 - 1"	2 - 5/8"	15	7	B70	
B48	12"	28"	3 - 1"	2 - 5/8"	15	7	B70	
B49	12"	28"	3 - 1"	2 - 5/8"	13	7	B70	
B50	12"	28"	3 - 1"	2 - 5/8"	10	7	B70	
B51	7"	20"	2 - 5/8"	2 - 1/2"	7	7	B86	
B52	7"	20"	2 - 5/8"	2 - 1/2"	5	7	B86	
B53	7"	20"	2 - 5/8"	2 - 1/2"	6	7	B85	
B54	7"	20"	2 - 5/8"	2 - 1/2"	5	7	B85	
B55	12"	34"	2 - 1" & 2 - 7/8"	2 - 5/8"	19	7	B73	
B56	8"	22"	3 - 7/8"	2 - 5/8"	6	7	B85	
B57	12"	28"	3 - 1"	2 - 5/8"	11	7	B70	
B58	12"	28"	3 - 1"	2 - 5/8"	12	7	B70	
B59	12"	28"	3 - 1"	2 - 5/8"	14	7	B70	
B60	12"	28"	3 - 1"	2 - 5/8"	18	7	B70	
B61	12"	34"	2 - 1" & 2 - 7/8"	2 - 5/8"	18	7	B73	
B62	12"	34"	2 - 1" & 2 - 7/8"	2 - 5/8"	19	7	B73	
B63	13"	38"	4 - 1"	2 - 5/8"	21	7	B64	
B64	13"	38"	4 - 1"	2 - 5/8"	23	7		
B65	8"	22"	3 - 7/8"	2 - 5/8"	5	7	B85	
B66	8"	22"	3 - 7/8"	2 - 5/8"	6	7		
B67	12"	28"	3 - 1"	2 - 5/8"	11	7	B70	
B68	12"	28"	3 - 1"	2 - 5/8"	12	7	B70	
B69	12"	28"	3 - 1"	2 - 5/8"	13	7	B70	
B70	12"	28"	3 - 1"	2 - 5/8"	15	7		
B71	12"	34"	2 - 1" & 2 - 7/8"	2 - 5/8"	19	7	B73	
B72	12"	34"	2 - 1" & 2 - 7/8"	2 - 5/8"	19	7	B73	
B73	12"	34"	2 - 1" & 2 - 7/8"	2 - 5/8"	19	7	B73	
B74	12"	34"	2 - 1" & 2 - 7/8"	2 - 5/8"	19	7	B73	
B75	9"	32"	1 - 1 3/4 x 2 - 3/4"	2 - 1/2"	18	6	B23	
B76	9"	32"	3 - 3/4"	2 - 1/2"	19	6	B22	
B77	9"	32"	1 - 1 3/4 x 2 - 3/4"	2 - 1/2"	18	6	B13	
B78	7"	20"	2 - 5/8"	2 - 1/2"	5	7	B86	
B79	7"	20"	2 - 5/8"	2 - 1/2"	6	7	B87	
B80	7"	20"	2 - 5/8"	2 - 1/2"	5	7	B86	
B81	7"	20"	3 - 5/8"	2 - 1/2"	11	6	B17	
B82	7"	20"	3 - 5/8"	2 - 1/2"	12	6	B17	
B83	7"	20"	3 - 5/8"	2 - 1/2"	12	6	B17	
B84	7"	20"	3 - 5/8"	2 - 1/2"	12	6	B17	
B85	7"	20"	2 - 5/8"	2 - 1/2"	5	7	B86	
B86	7"	20"	2 - 5/8"	2 - 1/2"	6	7		Stirrups 5/8" bars
B87	7"	20"	2 - 5/8"	2 - 1/2"	5	7	B36	
B88	7"	20"	2 - 5/8"	2 - 1/2"	5	7	B86	
B89	10"	25"	1 - 1 3/4 x 2 - 3/4"	2 - 5/8"	11	5	B11	
B90	10"	25"	1 - 1 3/4 x 2 - 3/4"	2 - 5/8"	11	5	B11	
B91	10"	25"	1 - 1 3/4 x 2 - 3/4"	2 - 5/8"	12	5	B11	
B92	10"	32"	3 - 1"	2 - 5/8"	20	7	B41	
B93	10"	34"	3 - 1"	2 - 5/8"	20	7	B41	
B94	10"	32"	3 - 1"	2 - 5/8"	20	7	B41	
B95	10"	34"	3 - 1"	2 - 5/8"	20	7	B41	
B96	10"	34"	3 - 1"	2 - 5/8"	20	7	B41	
B97	10"	32"	3 - 1"	2 - 5/8"	20	7	B41	
B98	10"	34"	3 - 1"	2 - 5/8"	20	7	B41	
B99	10"	32"	3 - 1"	2 - 5/8"	20	7	B41	
B100	15"	46"	5 - 1"	2 - 3/4"	33	7	B42	
B101	15"	46"	5 - 1"	2 - 3/4"	33	7	B42	
B102	15"	46"	5 - 1"	2 - 3/4"	34	7	B42	
B103	15"	46"	5 - 1"	2 - 3/4"	33	7	B42	
B104	15"	46"	5 - 1"	2 - 3/4"	36	7	B42	
B105	16"	48"	5 - 1"	2 - 7/8"	41	7		
B106	8"	22"	3 - 7/8"	2 - 5/8"	7	7	B86	
B107	8"	22"	3 - 7/8"	2 - 5/8"	5	7	B86	
B108	13"	38"	4 - 1"	2 - 5/8"	23	7	B64	
B109	13"	38"	4 - 1"	2 - 5/8"	22	7	B64	
B110	13"	38"	4 - 1"	2 - 5/8"	21	7	B64	
B111	8"	22"	3 - 7/8"	2 - 5/8"	5	7	B86	
B112	12"	28"	3 - 1"	2 - 5/8"	12	7	B70	
B113	12"	28"	3 - 1"	2 - 5/8"	15	7	B70	
B114	12"	28"	3 - 1"	2 - 5/8"	11	7	B70	
B115	9"	32"	3 - 7/8"	2 - 5/8"	11	6	B8	
B116	12"	34"	4 - 7/8"	2 - 5/8"	19	6		
B118	7"	20"	3 - 5/8"	2 - 1/2"	10	6	B17	
B119	7"	20"	3 - 5/8"	2 - 1/2"	10	6	B17	
B120	14"	34"	2 - 1" & 2 - 7/8"	2 - 5/8"	13	6	B20	See note detail B20
B121	7"	20"	2 - 5/8"	2 - 1/2"	5	7	B86	
B122	9"	24"	1 - 1" & 2 - 7/8"	2 - 5/8"	15	7		
B123	9"	24"	1 - 1" & 2 - 7/8"	2 - 5/8"	10	7	B122	
B124	9"	24"	1 - 1" & 2 - 7/8"	2 - 5/8"	13	7		
B125	10"	24"	4 - 5/8"	4 - 5/8"	3	5	B5	

Cantilever Beam Schedule

Mark	Width	Depth	Main Reinforcement Bottom	Main Reinforcement Top	Number of Sheet Stirrups	Sheet No
C1	16"	Varies	2 - 7/8"	2 - 7/8"	8	5
C2	16"	"	2 - 7/8"	2 - 7/8"	5	5
C3	10"	85"	4 - 7/8"	4 - 7/8"		5
C4	10"	22"	2 - 5/8"	2 - 5/8"		5

Concrete Pile Schedule

Type	Size of Pile	Reinforcing Bars Number	Reinforcing Bars Size		Dist. 2'-
A	15" x 15"	4	3/4"		
D	18" x 18"	4	3/4"		
E	18" x 18"	4	3/4"	5/8"	15"
F	18" x 18"	6	3/4"	5/8"	14"
H	20" x 20"	4	7/8"	5/8"	17"
I	20" x 20"	4	7/8"	3/4"	18"
J	20" x 20"	4	1"	3/4"	20"
K	20" x 20"	4	1"	7/8"	13"
L	20" x 20"	6	1"		18"
M	20" x 20"	4	1"	1"	21"

for distance "D" see Sheet 7

Respectfully Submitted
Frank E. White
Chief Engineer

Approved Feb 1, 1917.

Thomas S. Williams
John McGaan
Commissioners

PLANS FOR PIER 31 SUBSTRUCTURE

Approved Feb 1, 1917
Indicated
2962-36 of 2 0

2962-31-1

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3281-35

North Elevation

West Elevation of Bulkhead Wharf Bldg.

Windows in intermediate monitors same as at end monitors
Intermediate windows in walls same as at ends of wall.

South Elevation of Pier 31 Shed
(North Elevation similar.)

Pier 31 Shed.

26 Spaces @ 30'-0" = 780'-0"

4" Concrete wall

4" Concrete Wall

Bulkhead Wharf Building

Connecting Wharf Building

Edge of Connecting Wharf

Door groove angles

Bulkhead Wh. Bldg.

Intermediate windows same as at ends of roof.
Upper surface of roof.

East Elevation of Connecting Wharf Bldg.

Pier 29 Shed

Remove existing partition

Building Face

Gate

South Elevation

East Elev.

Legend

- Indicates the location of downspouts and hole for the 5" W.I. pipe to be made in the floor slab.
- in place. Hole and pipe only in place.
- Heavy circle indicates wheel guards to be built by this contract. See detail of type 2 below.
  Light circle - - - - - - in place.
- ○ or ▫ = Indicates columns and their location.
- ■ or ● - - - having anchor bolts in place.
- ▯ - - - footing of Type 1. See detail below.
- ◎ - - - - - - - 2. - - - - - -
- ◇ or ◈ - - - - - - 3. - - - - - -
- ⊗ - 30" ventilators. See detail on sheet "20
- • - the location of downspouts or 5" W.I. pipe, the hole in the floor, for which, is in place.
- S.D. - sash doors. All other doors are steel rolling doors and are in a separate contract.

Note.

All columns are 10"x16", except those in the three rows in the connecting wharf building and are otherwise noted.
- existing work is indicated by light line, thus
Holes are to be made in the concrete floor, for the anchor bolts of footings of type "1 and for type "2 where the wheel guard is to be anchored to the floor.
The north and south walls of the Bulkhead Wh. Bldg. are to have 2"x12" studs and framed similar to the framing of the typical 30'-6" panel as shown on sheet "2.
See sheet "2 for column location. Also supplementary sheet " 3077-36.
Area indicated thus ▩ is covered by existing shed of Pier 29.
The sheathing marked ⅞ is to be 1" material S.I.S.
All door groove angles on the floor are in place, except those at the two doors of the connecting wharf bldg. and which are included in this contract.

General Plan and Elevations

Scale. 1" - 30'-1".

Omit where not indicated on general plan.
El = 2.542'
¼" Steel plate
Stirrups in place
El = 1.209' for all, except the two indicated on the general plan as El = 0.833'
Sec. aa

5" W.I. pipe & elbow
Where stirrups are not in place anchor wheel guard to girder with 4-1" expansion bolts, 18" long.
Slab
Sec. bb
Anchor bolts 1'-10", with 4"x4"x¼" plate washers, hexagonal nut and 3" thread.

El = 1.209' for columns along Pier 31 Shed Walls.
El = 1.103' East wall of Con. Wh. Bldg.
El = 0.666' S. Wh. Bldg.
El = 0.167' West
6'-1" Cor.
6-1 4"x ⅞" x 1'-10" bolts.
Beam
1" Anchor Bolts

2-6"x4"x⅜" L's x 10"
1" Bolts, 12" long (Expansion Bolts 1'x26")
Slab Cor.
El = 0.167'
10'x16'x18'-0" Slab

Fill with concrete
6-4"x3½"x10" L's
6-4"x3½"x11" for East Column
⅞" Bolts, 4" c. to c.
2'-10"
Scale. ½" = 1 Ft.

4'-5"
1'-9½"
x
The value of x is given on the general plan at the location of the columns concerned.
Scale ⅜" = 1 Ft.

On Pier 31 the anchor bolts and angles are on the 10" face of column.
Scale ⅜" = 1 Ft.

Type. 1
Type. 2
Type. 3

Column Footings.

Warp roof to get drainage shown
At these two panels the wall bends inward
Parapet
Ridge
Roof of Pier 31 Shed
Valley
Roof of Bulkhead Wharf Bldg.
Roof of Connecting Wharf Bldg.
Gutter
Existing Pier 29 Shed

At all roof peaks, where the roof sheathing butts end to end, cut the sheathing as shown above to make a close fit.

Note.

The trusses are so constructed as to give the drainage at the roof as indicated on the plan, except the 2 places indicated above.

Counter flash
Wire Screen
Rivet and Solder
Downspout

Connection of Downspout to Gutter

Paint gutter with 1 coat of red lead and 1 coat of graphite.
Roofing
Lead Washer
22 gage Gal. Roofing
"8 Gal. wire spaced 12" c. c.
Slope 1" in 10'
1¼" S.I.S.
Galv. iron, sheets 30" wide, "24 gauge
End joints to be riveted and soldered.
Support gutter with 1½"x¼"x30" Straps, spaced 2'-6" c. c., riveted to the channel and spiked to purlin.

Gutter Detail

Scale ½" - 1'-0"

Roof Plan

Scale. 1" = 30 Ft.

Respectfully Submitted
Frank B. S. White
Chief Engineer

Approved Feb. 7, 1918.
Thomas O. Williams
John F. Gaynor
Commissioners.

PLANS FOR PIER 31 SHED & BUILDING BETWEEN PIERS 29 & 31.

Oliver M. Jones
D.W.J. Indicated.

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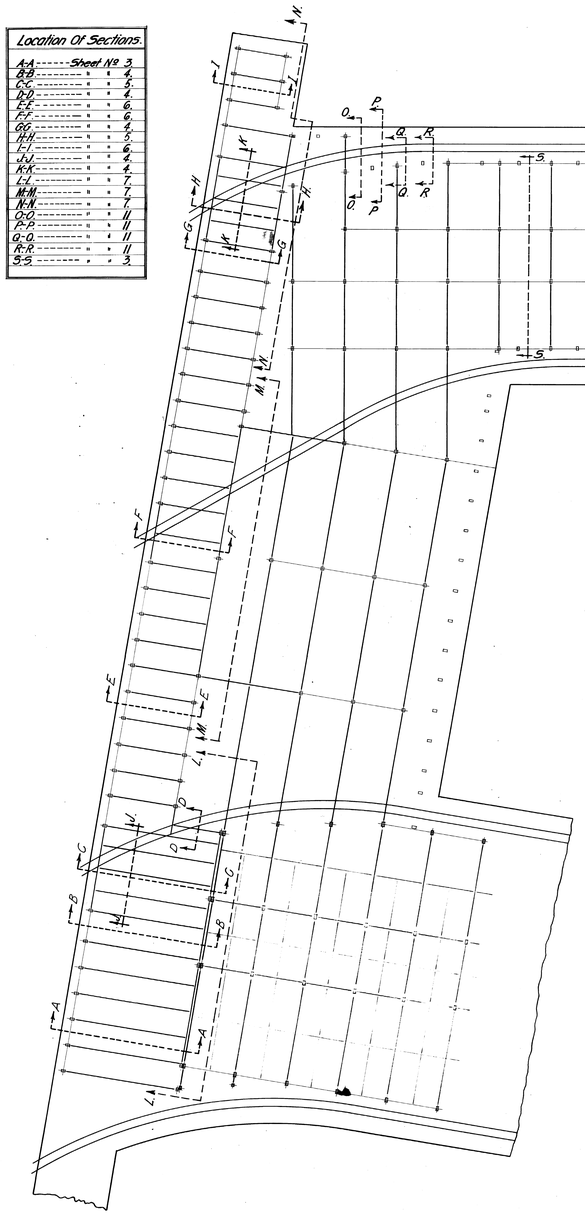
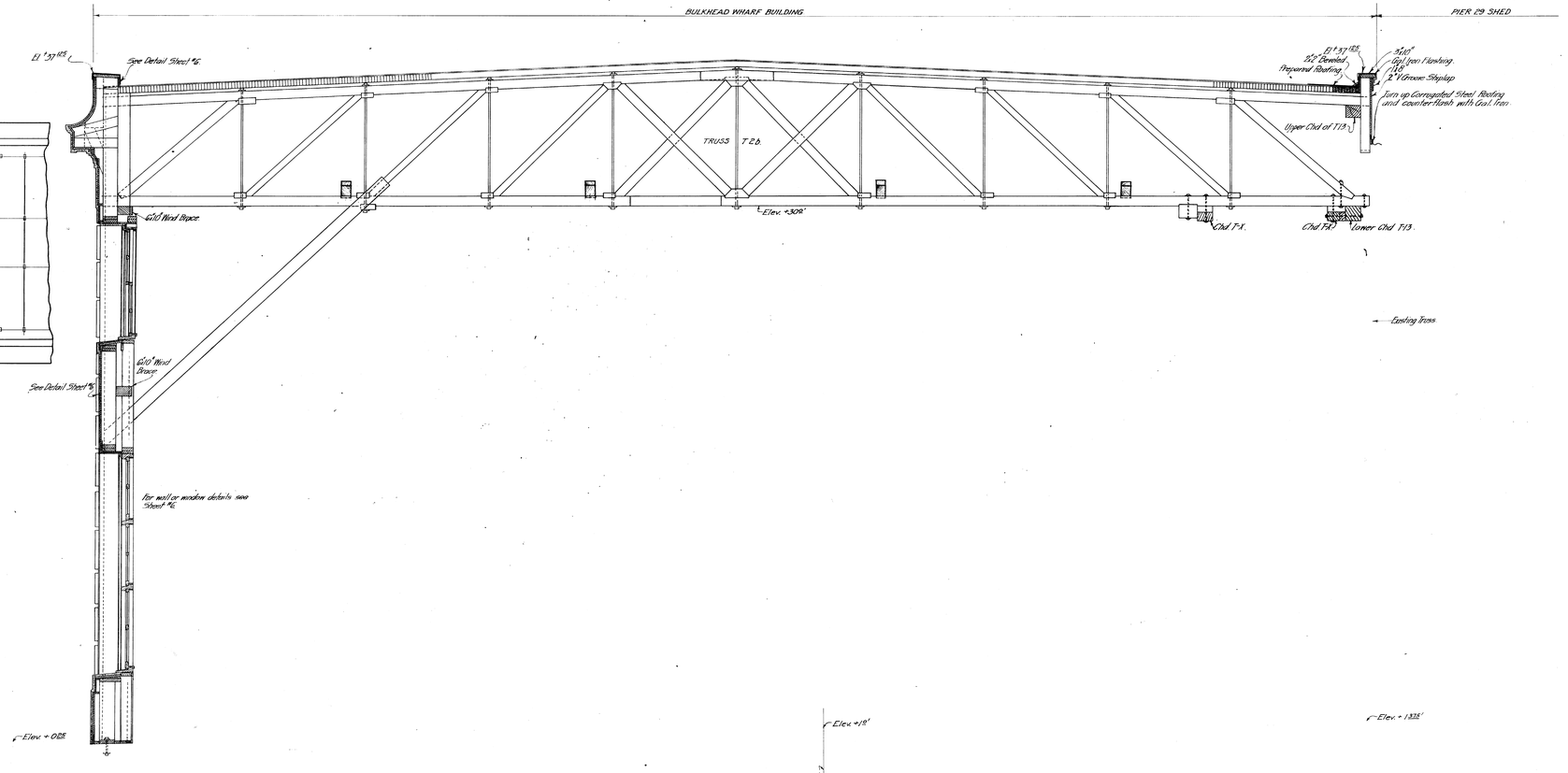
3283-35

Location Of Sections.	
A-A	Sheet No 3.
B-B	" " 4.
C-C	" " 5.
D-D	" " 4.
E-E	" " 6.
F-F	" " 6.
G-G	" " 4.
H-H	" " 5.
I-I	" " 6.
J-J	" " 4.
K-K	" " 4.
L-L	" " 7.
M-M	" " 7.
N-N	" " 7.
O-O	" " 11.
P-P	" " 11.
Q-Q	" " 11.
R-R	" " 11.
S-S	" " 3.



Plan Locating Sections



Note: The Fire Baffles are composed of 2" shiplap and extends the full width of "Shed" and between the dotted line as shown above and the rest. For location of Fire Baffles see "Roof Framing Plan" Sheet #2.

Respectfully Submitted
Frank E. White
Chief Engineer

Approved: Feb. 7, 1918.

Thomas S. Williams
James Tatem
Commissioners.

PLANS FOR PIER 31 SHED & BUILDING BETWEEN PIERS 29 & 31.

Indicated

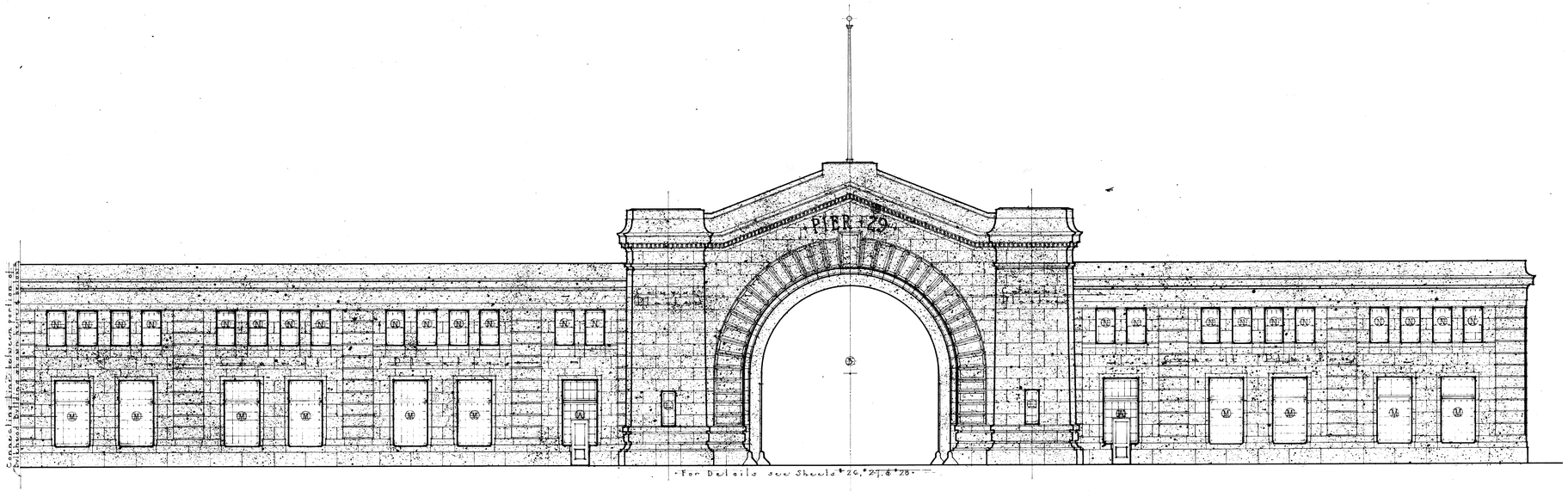
3283-35

3 of 29

3283-31-1

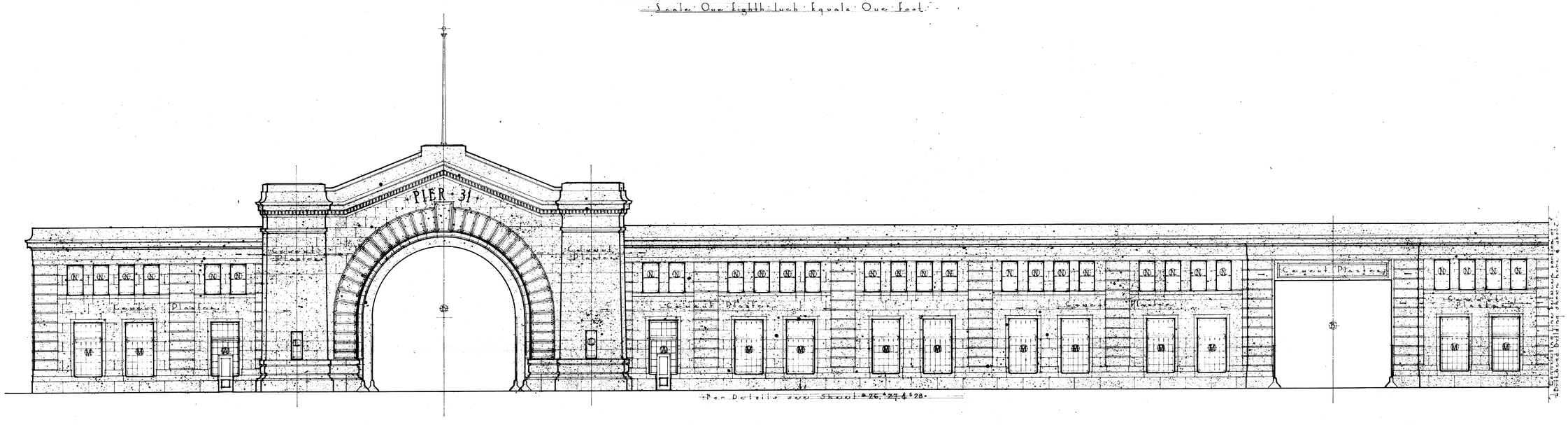
3283-31-1

3305-35



ELEVATION

Scale One Eighth Inch Equals One Foot



ELEVATION

Scale One Eighth Inch Equals One Foot

Respectfully Submitted:
Frank G. White
Chief Engineer

Approved Feb 7, 1918

Thomas S. Williams
J. H. McCann
Commissioners

Plans for Pier #31 Shed and Building between Pier #29 & #31

A. Pyle
R. Morgan A. Pyle
Calif.

Feb. 7, 1918
1/8" = 1'-0"

3305-35

3305-31-1

3305-31-1