

EMERGENCY OPERATIONS FLOODWALL STRUCTURES

Updated 4 February 2000

These instructions do not apply to this .pdf - For Table of Contents only.

INSTRUCTIONS: If stated (in RED), please load the correct DVD or CD disk in the internal DVD/CD drive of the NOTEBOOK or load the correct JAZ disk in the external 2GB JAZ drive before clicking the related [hypertexted \(BLUE\)](#) file name **TWICE. Otherwise, the data set resides on an internal 25GB disk drive of the NOTEBOOK.**

INNER HARBOR NAVIGATIONAL CANAL EAST LEVEE

Hayne Blvd to Dwyer Road (Station 33+95 to Station 83+00)

PLANS FOR LEVEE AND FLOODWALL CAPPING

Orleans Parish, Louisiana

File Number H-4-24530; Spec Number DACW29-68-B-0148

Structures Branch Stick File Number 10

SHEET #	DRAWING TITLE
0	Title Sheet
File:	H-4-24530-00
1	Location Plan, Vicinity Map and Index to Drawings
File:	H-4-24530-01
2	Plan and Profile - Stations 33+95 to 43+80
File:	H-4-24530-02
3	Plan and Profile - Stations 43+80 to 58+00
File:	H-4-24530-03
4	Plan and Profile - Stations 58+00 to 64+00
File:	H-4-24530-04
5	Plan and Profile - Stations 64+00 to 76+00
File:	H-4-24530-05
6	Plan and Profile - Stations 76+00 to 85+79.48
File:	H-4-24530-06
7	Log of Borings
File:	H-4-24530-07
8	Typical Sections
File:	H-4-24530-08
9	Typical Wall Sections
File:	H-4-24530-09
10	Reference Bolt and Piezometer Schedules - AS CONSTRUCTED
File:	H-4-24530-10
11	Relief Wells - AS CONSTRUCTED
File:	H-4-24530-11
12	Collector Pipe Details - AS CONSTRUCTED
File:	H-4-24530-12
13	Additional Borrow Area Location
File:	H-4-24350-13

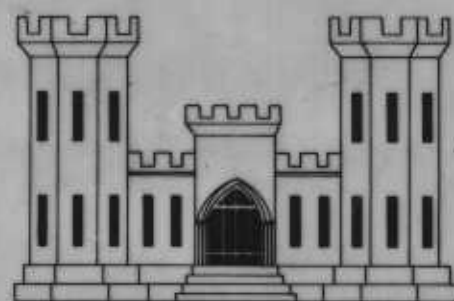
LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN
ORLEANS PARISH, LA.

INNER HARBOR NAVIGATION CANAL EAST LEVEE

HAYNE BLVD. TO DWYER ROAD (STA. 33+95 TO STA. 83+00)

PLANS FOR

LEVEE AND FLOODWALL CAPPING

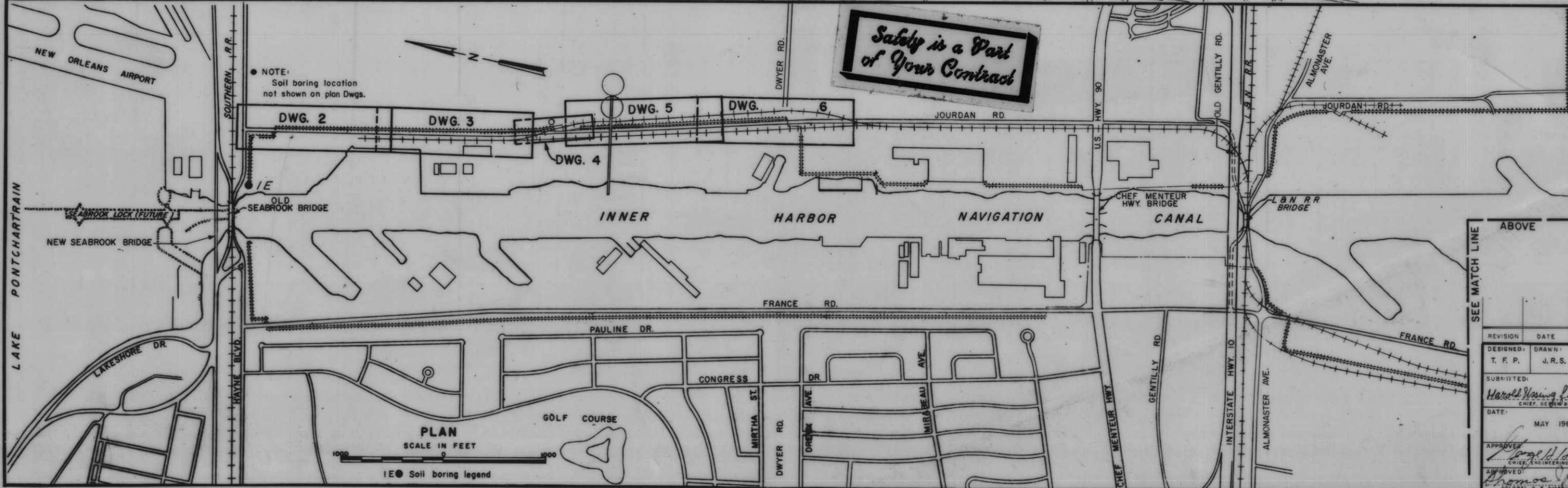
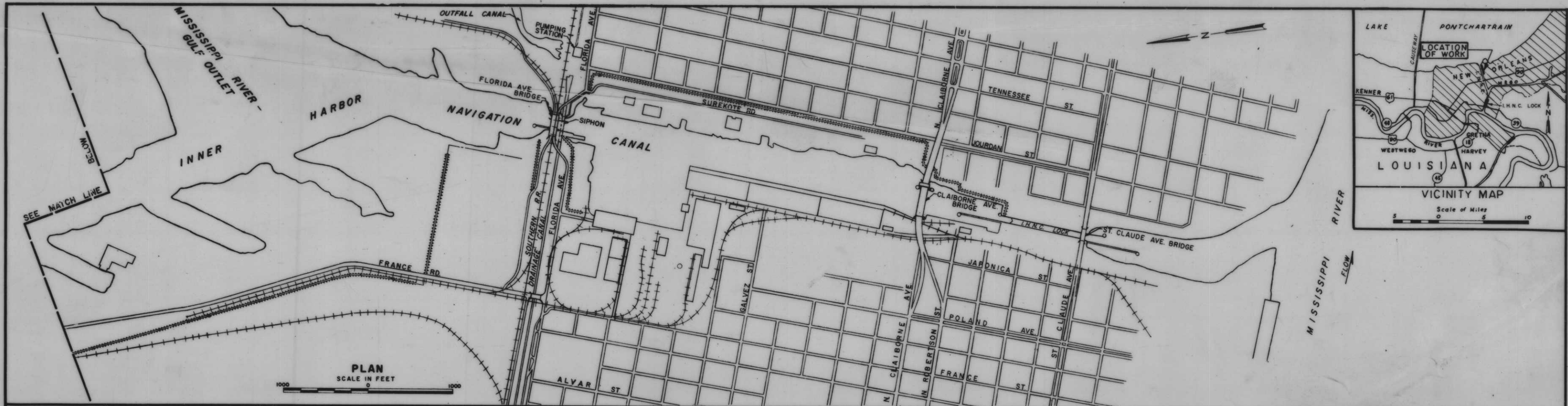


DRAWINGS IN THIS FOLIO
HAVE BEEN REDUCED ONE
HALF THE ORIGINAL SCALE

U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS, LA.
CORPS OF ENGINEERS

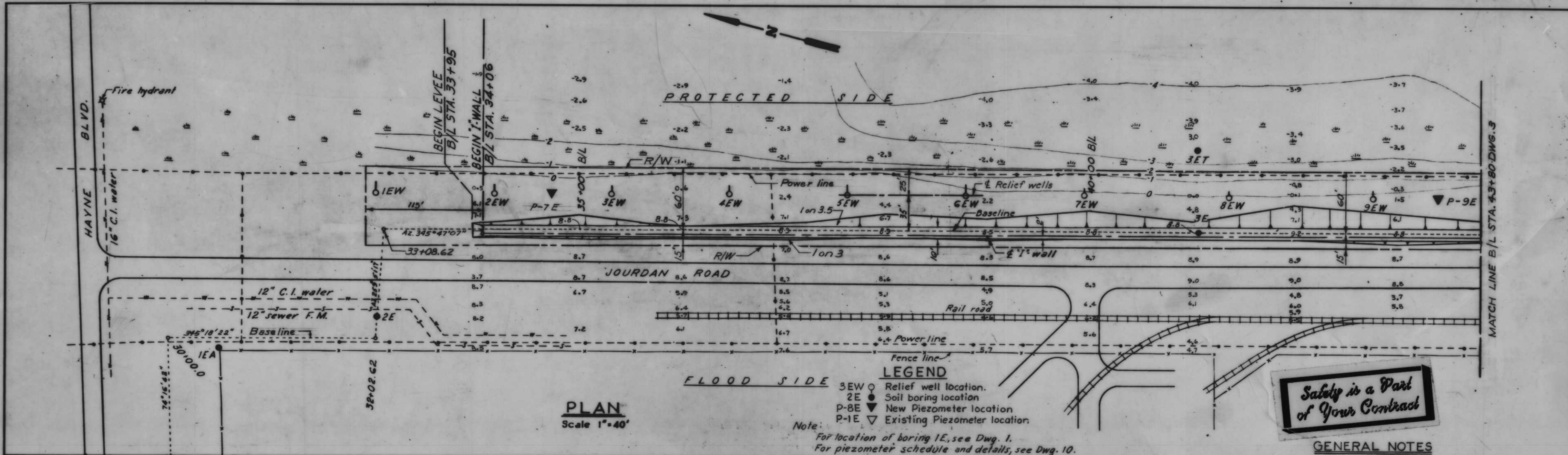
1968

*Safety is a Part
of Your Contract*



INDEX TO DRAWINGS	
DWG.	TITLE
1	LOCATION PLAN, VICINITY MAP AND INDEX
2	PLAN AND PROFILE
3	PLAN AND PROFILE
4	PLAN AND PROFILE
5	PLAN AND PROFILE
6	PLAN AND PROFILE
7	LOG OF BORINGS
8	TYPICAL SECTIONS
9	TYPICAL WALL SECTIONS
10	REFERENCE BOLT AND PIEZOMETER SCHEDULES
11	RELIEF WELLS
12	COLLECTOR PIPE DETAILS
13	ADDITIONAL BORROW AREA LOCATION

REVISION	DATE	DESCRIPTION	BY
DESIGNED BY	T. F. P.	CHECKED BY	H. L. B.
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LA.			
SUBMITTED BY: <i>Harold King</i> CHIEF, SCHEMATIC BRANCH			
DATE: MAY 1968			
APPROVED BY: <i>Joseph W. Hedden</i> CHIEF, ENGINEERING DIVISION			
APPROVED BY: <i>Thomas J. Brown</i> COLONEL, S. E. DISTRICT ENGINEER			
CODE IDENT. NO.	SIZE	FILE NO.	
H-4-24530			
SCALE SHOWN	SPEC. NO. DACW29-68-B-0148	DWG. NO. 1 OF 13	



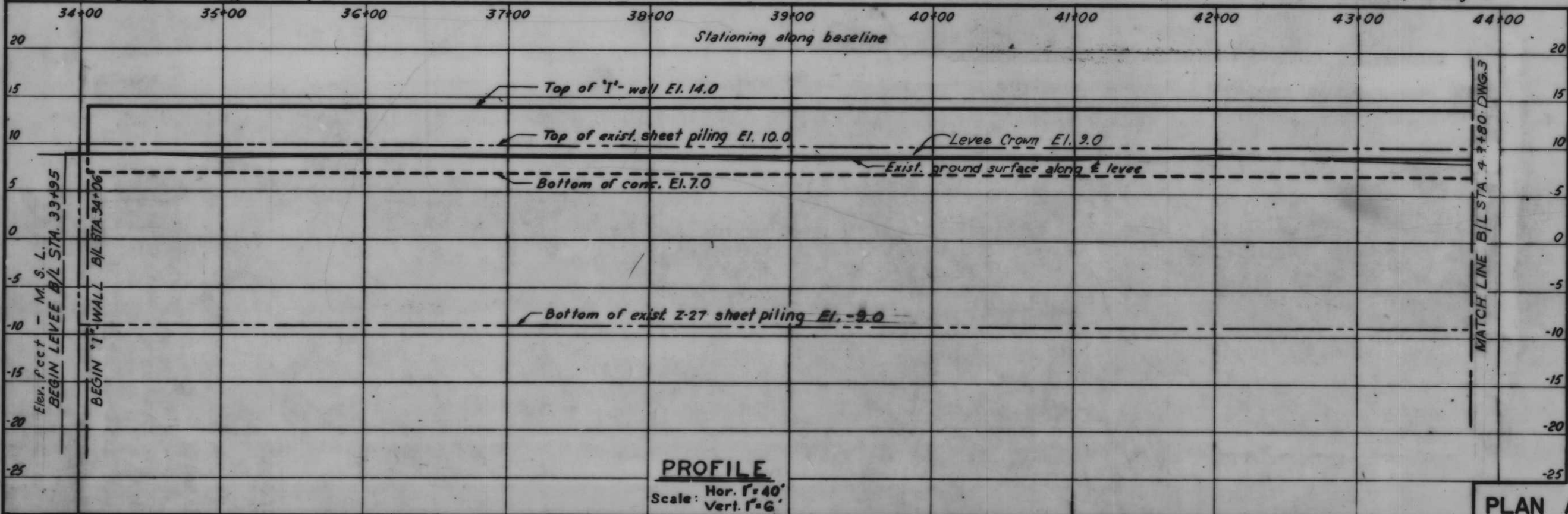
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GENERAL NOTES

Elevations are expressed in feet and refer to mean sea level.
 All unformed surfaces shall be given a wood float finish.
 Unless otherwise indicated, all exterior formed surfaces not to be covered by backfill shall be class "A" finish. All exterior formed surfaces to be covered by backfill shall be class "D" finish.
 All exposed corners of concrete shall be chamfered 3/4 inch unless otherwise indicated. All horiz. joints to have 3/4 inch chamfer Sack rub finish on flood side only.
 All primary reinforcement shall have a minimum cover of 2 1/2 inches with a tolerance of +/- 1/4" unless otherwise indicated.
 Reinforcing bar designation numbers conform to the current numbering system of the Concrete Reinforcing Steel Institute.
 All reinforcement splices shall be lapped according to the following table.

TENSION LAP SPLICE		
Bar size No.	Minimum lap length, in.	
	Top bars	Other bars
4	14	14
5	18	18

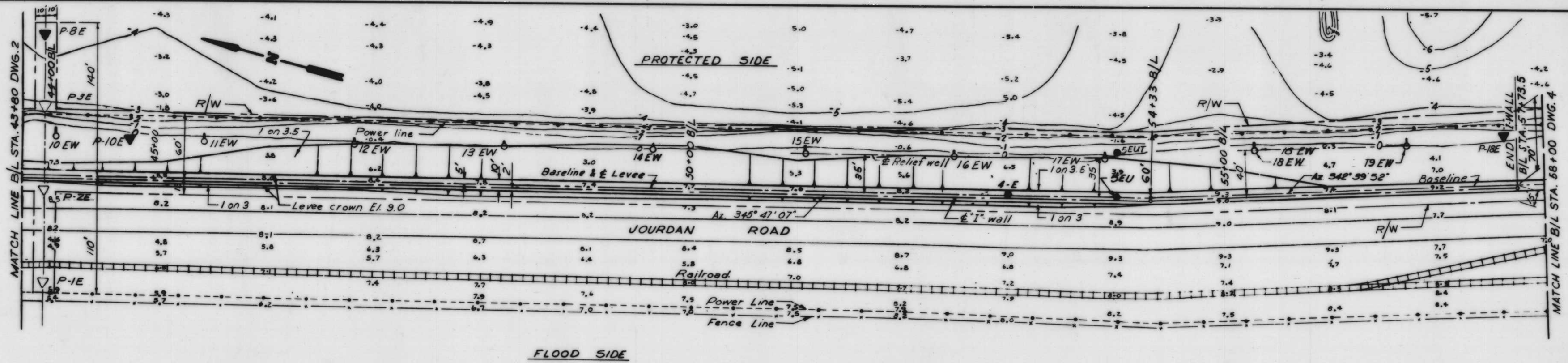
All relief wells shall carry an identification number corresponding to numbers shown on plan. See dwg. 11 for location. Well numbers to be fin. to clearly stamped on a 1/2" X 3" X 10 ga. corrosion resistant steel tag.
 For sizes of collector pipes see Dwg. 12.
 All I wall monoliths shall be 30'±. Each monolith shall begin and end at sheet pile interlocks.



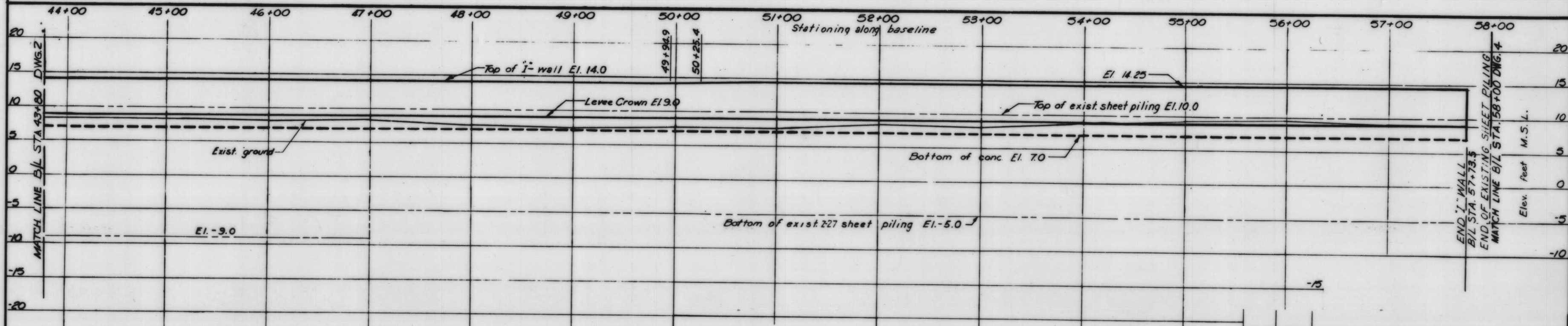
PLAN AND PROFILE

REVISION	DATE	DESCRIPTION	BY
DESIGNED BY	DRAWN BY	CHECKED BY	CODE IDENT NO.
T.F.P.	D.J.H.	H.L.B.	SIZE
DATE MAY 1968			SCALE SHOWN
SPEC. NO. DACW29-68-B-0148			DWG. NO. 2 OF 13

H-4-24530



PLAN
Scale: 1" = 40'

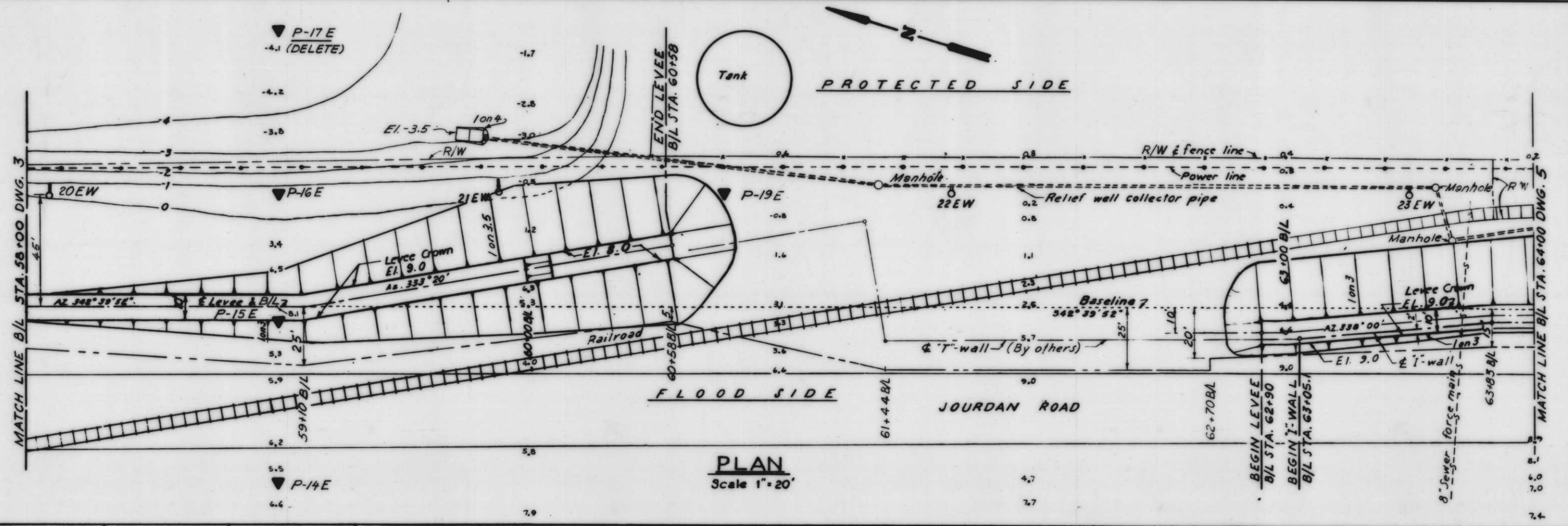


PROFILE
Scale: Hor. 1" = 40'
Vert. 1" = 6'

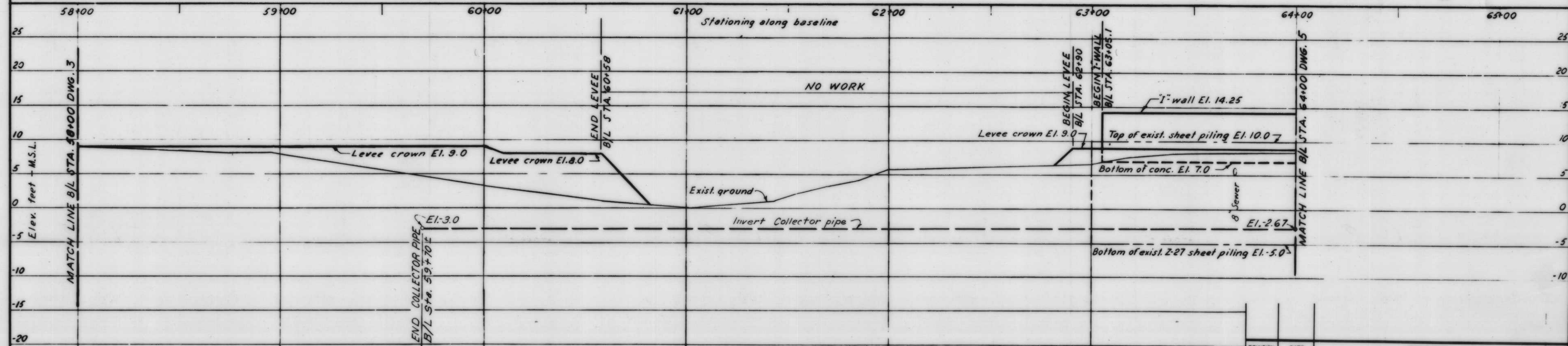
PLAN AND PROFILE

REVISION	DATE	DESCRIPTION	BY
DESIGNED BY	DRAWN BY	CHECKED BY	CODE DEN. NO.
T.F.P.	D.J.H.	H.L.B.	1
DATE	MAY 1968	SCALE SHOWN	SPEC NO. DACW29-68-B-048 DWG. NO. 3 OF 13

H-4-24530



PLAN
Scale 1" = 20'

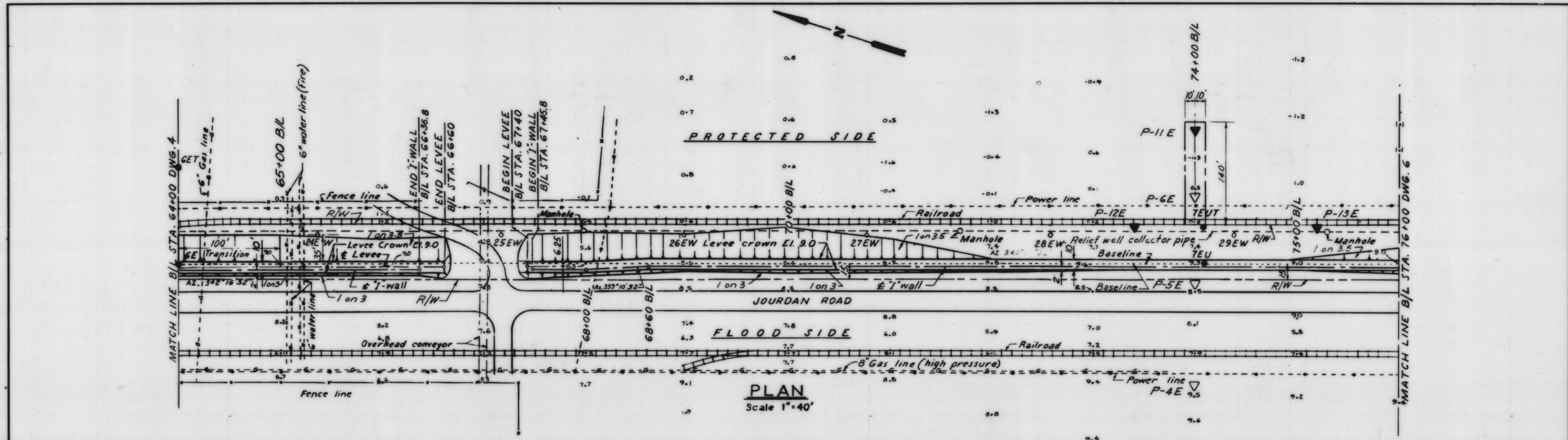


PROFILE
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Vert. 1" = 5'

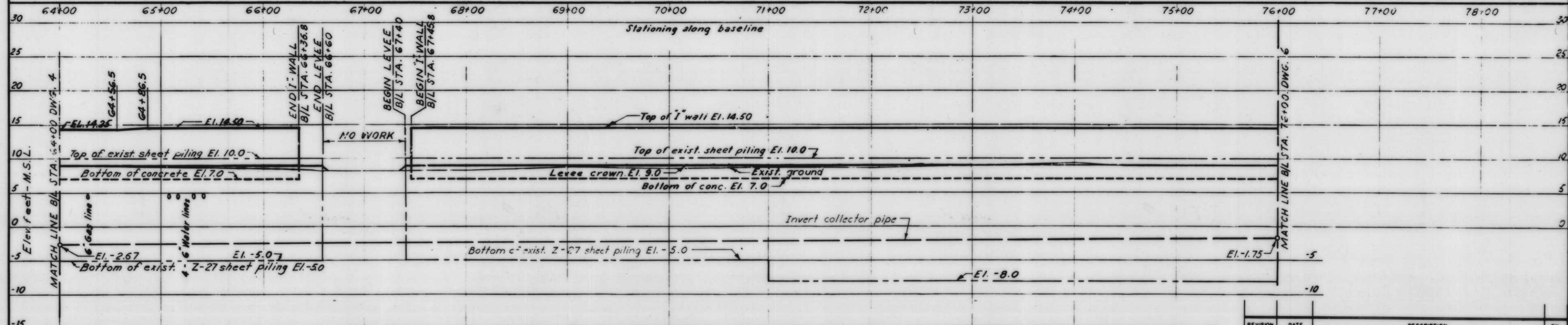
PLAN AND PROFILE

REVISION	DATE	BY	DESCRIPTION
DESIGNED BY	DRAWN BY	CHECKED BY	CODE IDENT. NO. SIZE FILE NO.
T. F. P.	R. J. C.	H. L. B.	
DATE	MAY 1968	SCALE SHOWN	SPEC. NO. DACW29-68-B-0148 DWG NO. 4 OF 13

H-4-24530



PLAN
Scale 1"=40'

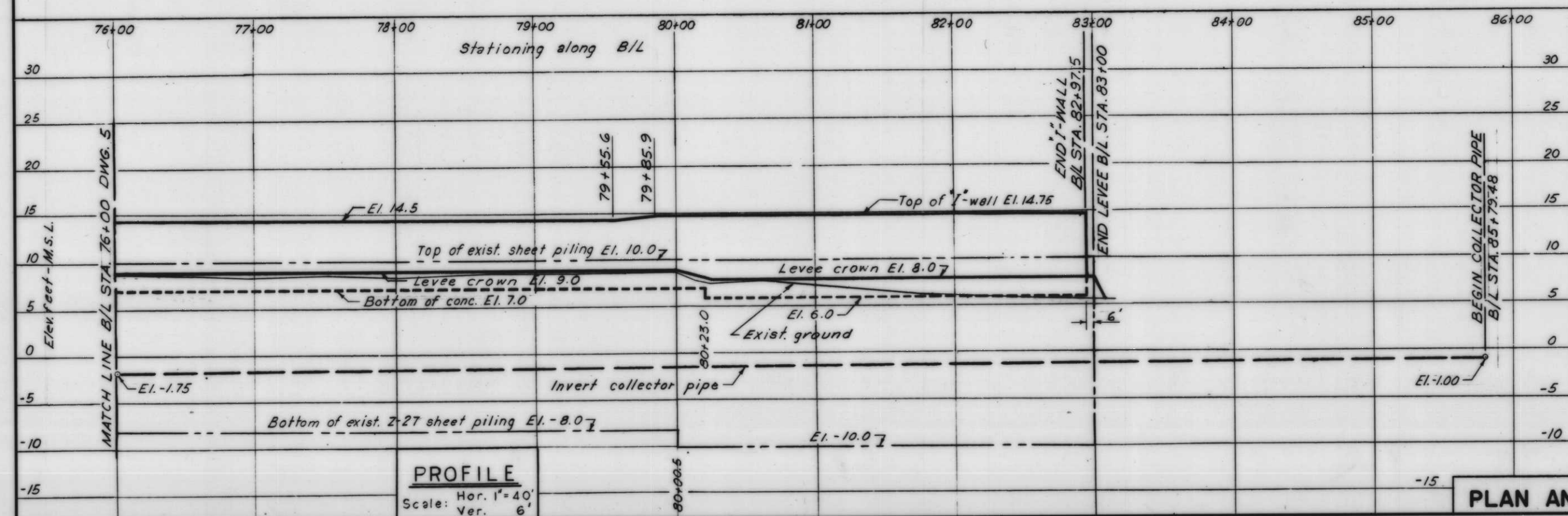
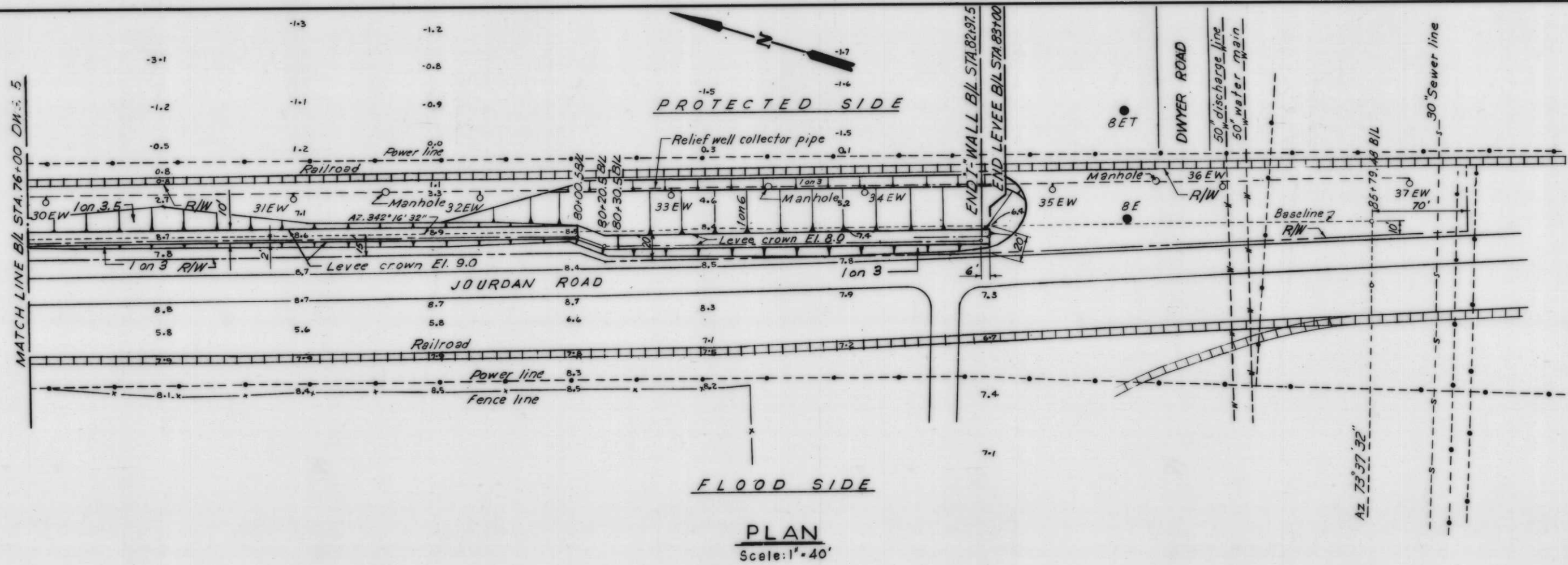


PROFILE
Scale Hor. 1"=40'
Vert. 1"=6'

PLAN AND PROFILE

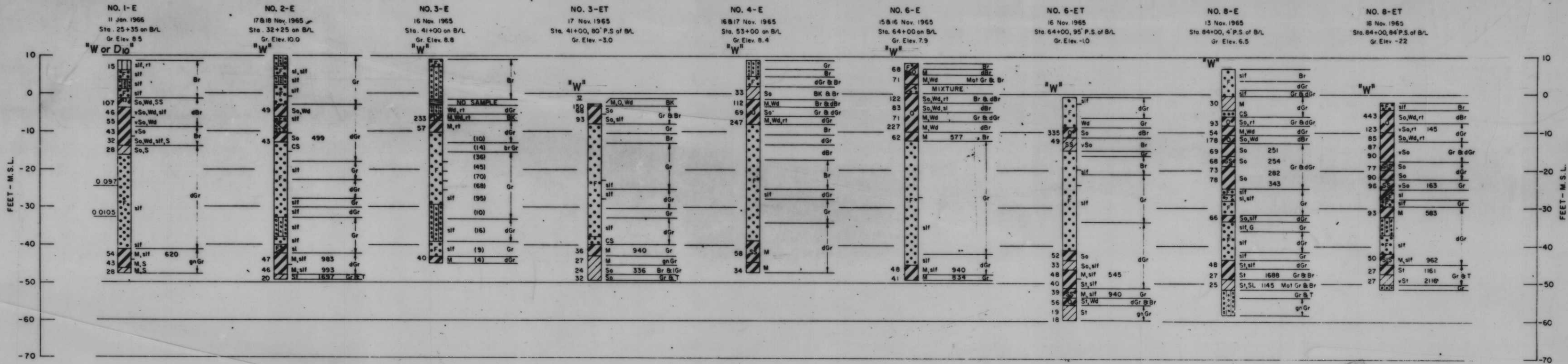
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T.F.R.	D.J.H.	H.L.B.	
DATE	MAY 1968	SCALE SHOWN	SPEC NO. DACW29-68-8-0148 DWG NO. 5 OF 13

H-4-24530

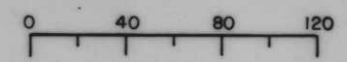


PLAN AND PROFILE

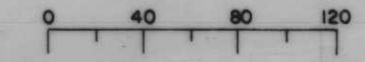
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DESIGNED: T.F.R.	DRAWN: E.M.C.	CHECKED: H.L.B.				H-4-24530	
DATE: MAY 1968		SCALE: SHOWN		SPEC. NO. DACW29-68-B-0148		DWG. NO. 6 OF 13	



WATER CONTENT, "W"
(Percent dry weight)



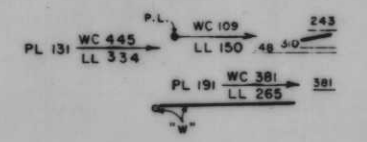
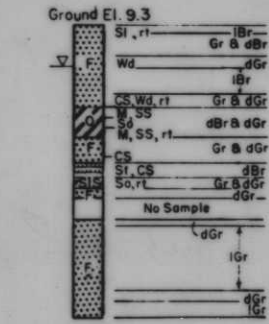
WATER CONTENT, "W"
(Percent dry weight)



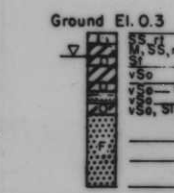
WATER CONTENT, "W"
(Percent dry weight)



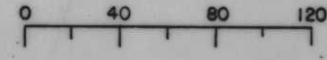
5-EU
STA. 54+00
ON B/L
30 March 1966



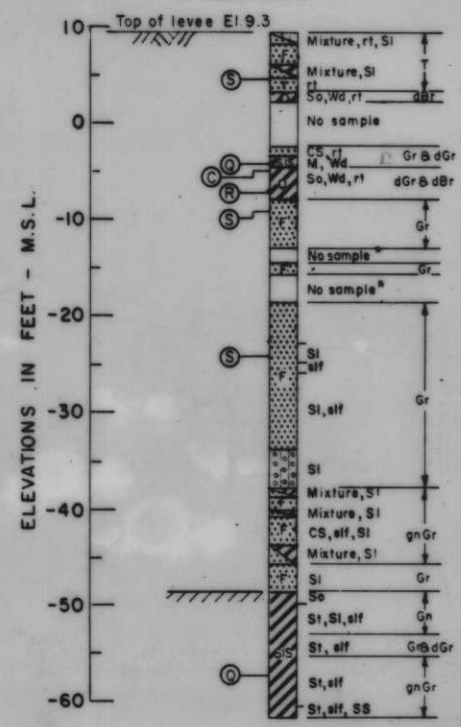
5-EUT
STA. 54+00
42' P.S. B/L
29 March 1966



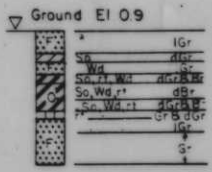
WATER CONTENT, "W"
(Percent dry weight)



7-EU
STA. 74+00
ON B/L
9-10 Nov. 1965



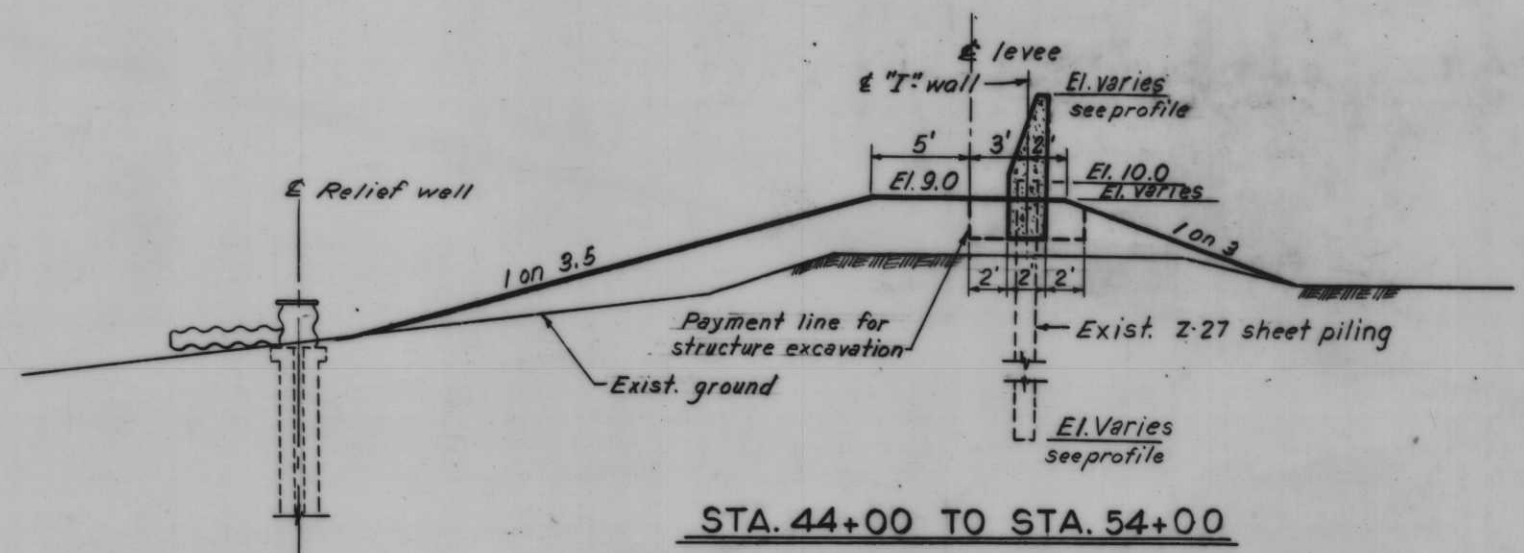
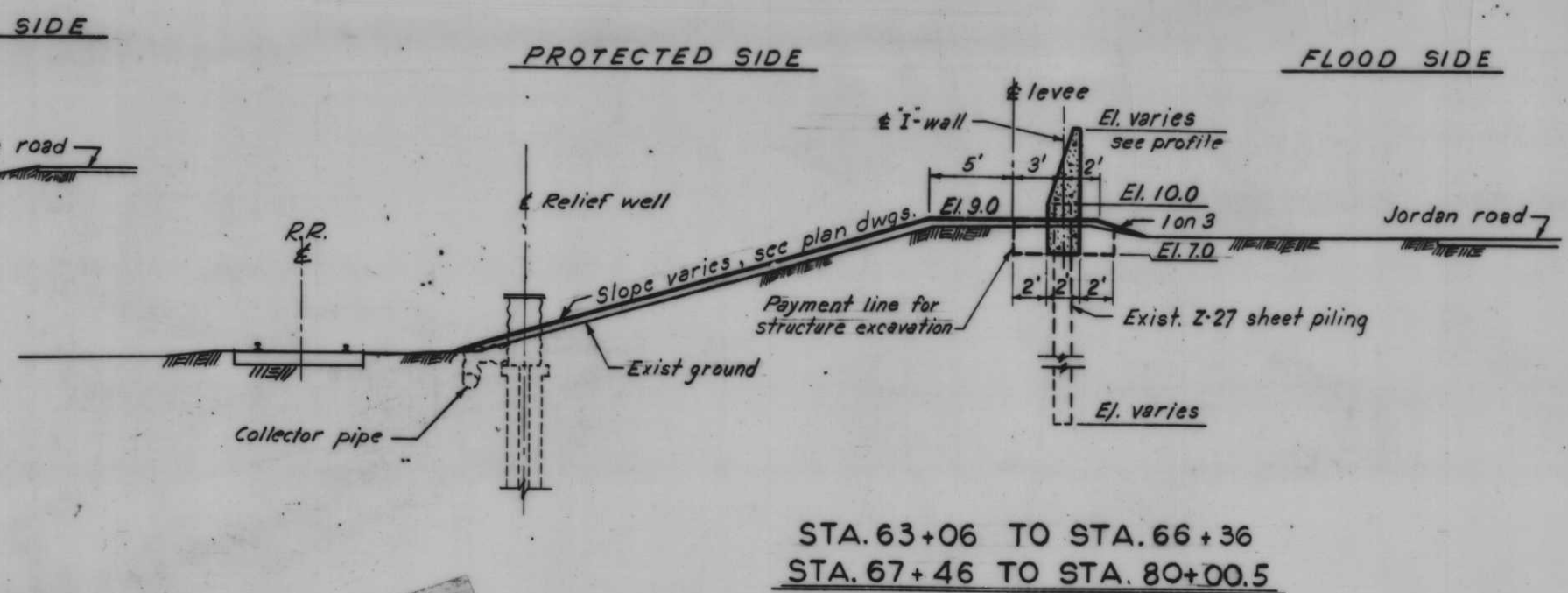
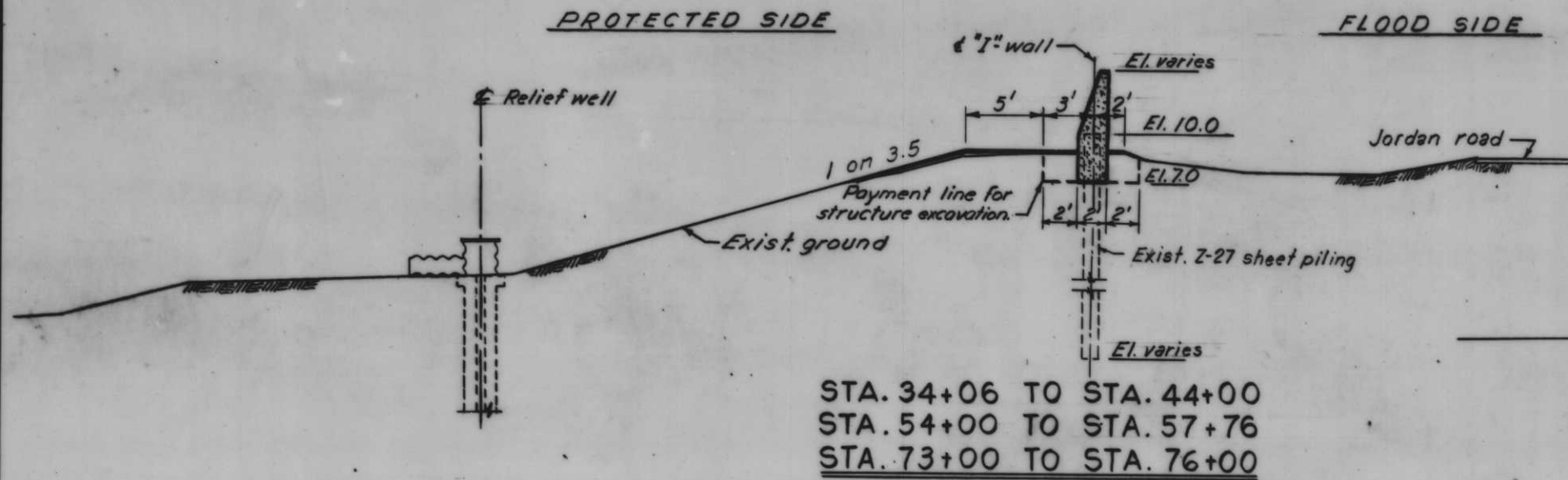
7-EUT
STA. 74+00
38' P.S. B/L
29 March 1966



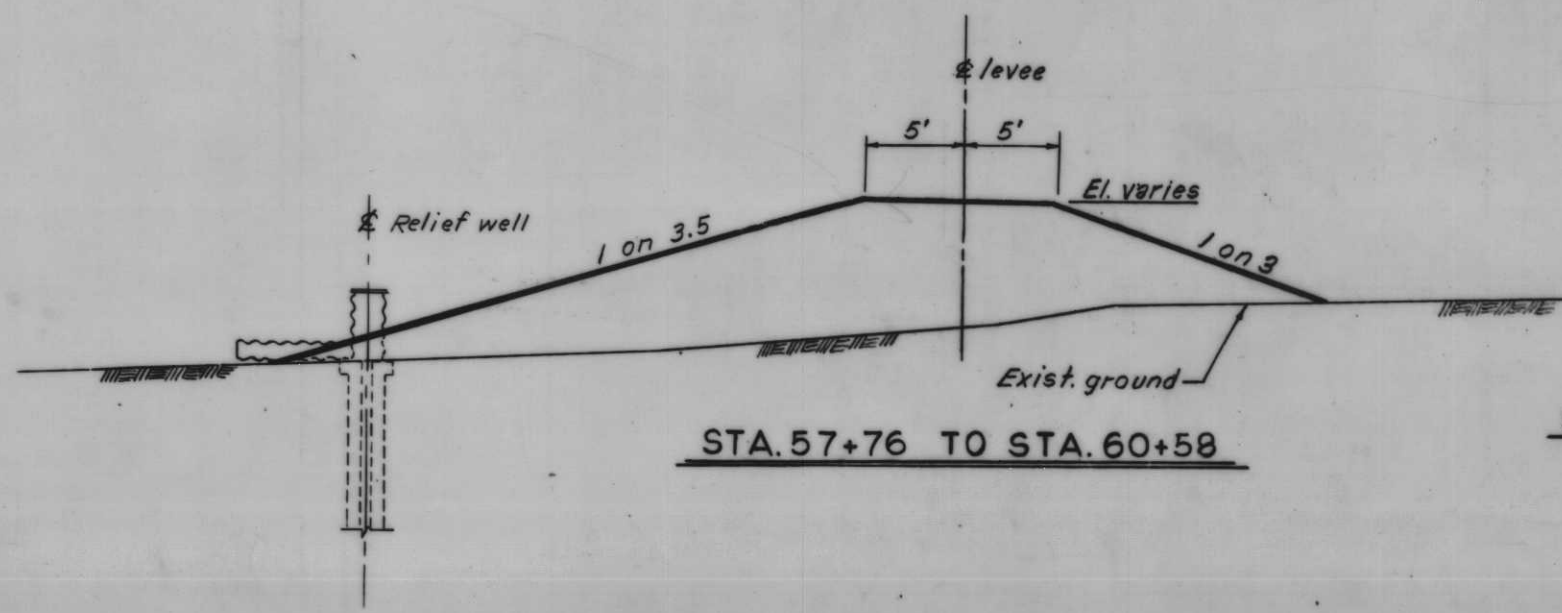
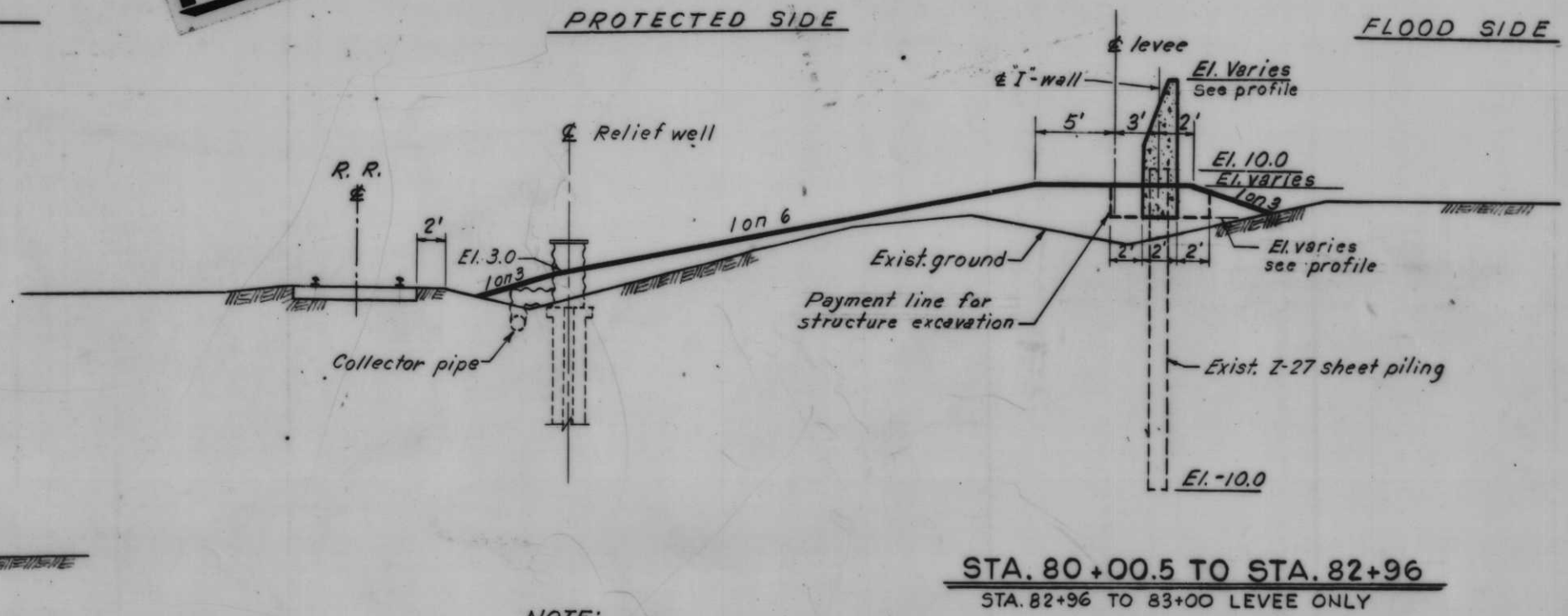
NOTE:
General type borings were taken with a 1 7/8" I.D. core barrel sampler.
Where driving resistances are shown, samples were taken with a 1 7/8" I.D., 2' O.D. split spoon sampler using a 140 lb. hammer and a 30" drop.
* For soil boring legend see dwg. File No. H-2-21800.
For location of borings 1-E see Dwg. 1.
Undisturbed soil borings were taken with a 5" dia. steel tube piston type sampler.

REVISION	DATE	DESCRIPTION
DESIGNED	DRAWN	CHECKED
K. J. C.	B. H. D.	H. L. B.
DATE MAY 1968	SCALE SHOWN	SPEC NO DACW89 68-B-0148
<p style="text-align: right;">H-4-24530</p>		DWG NO 7 OF 13

LOG OF BORINGS



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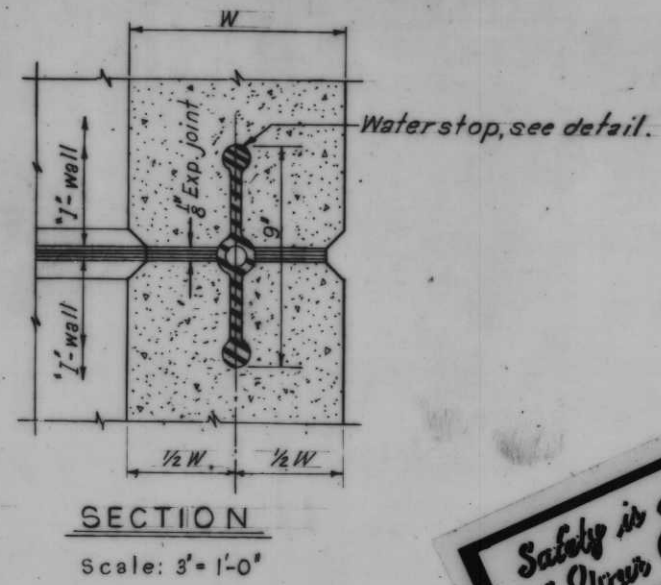
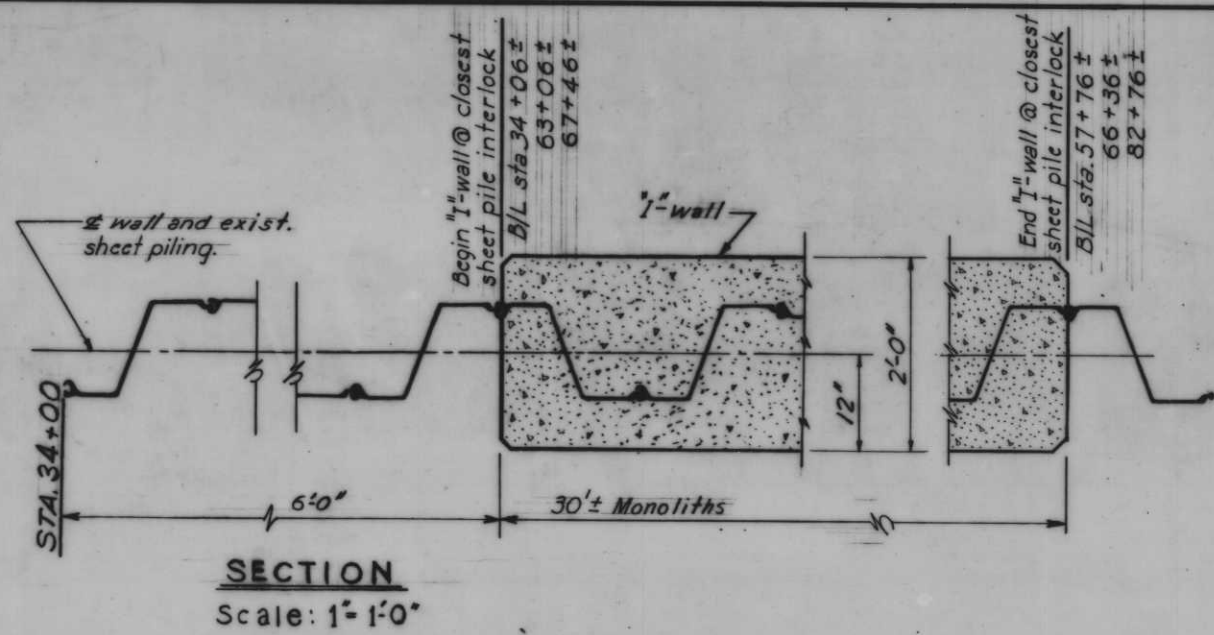


Scale: 1" = 5'

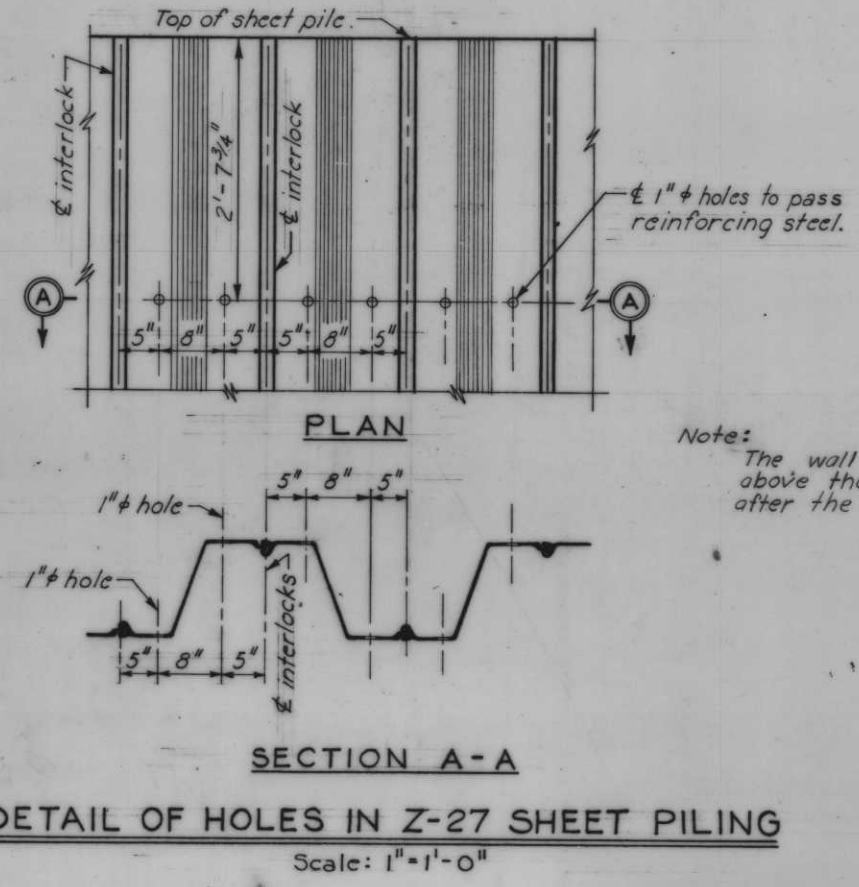
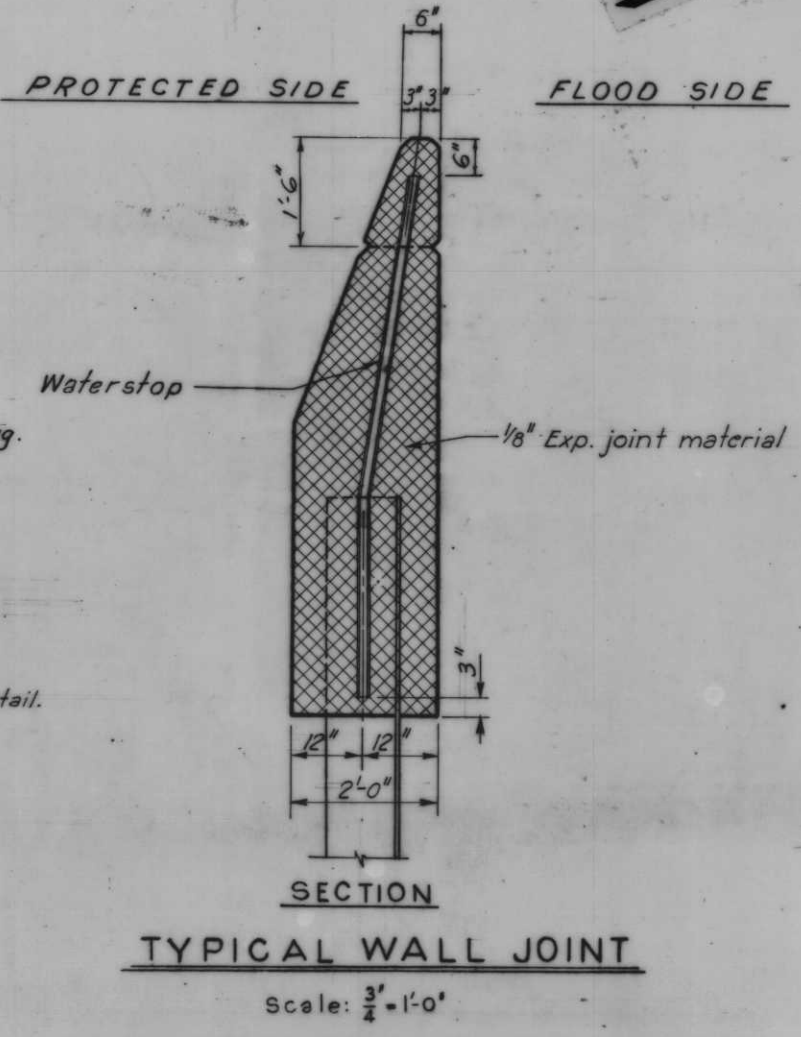
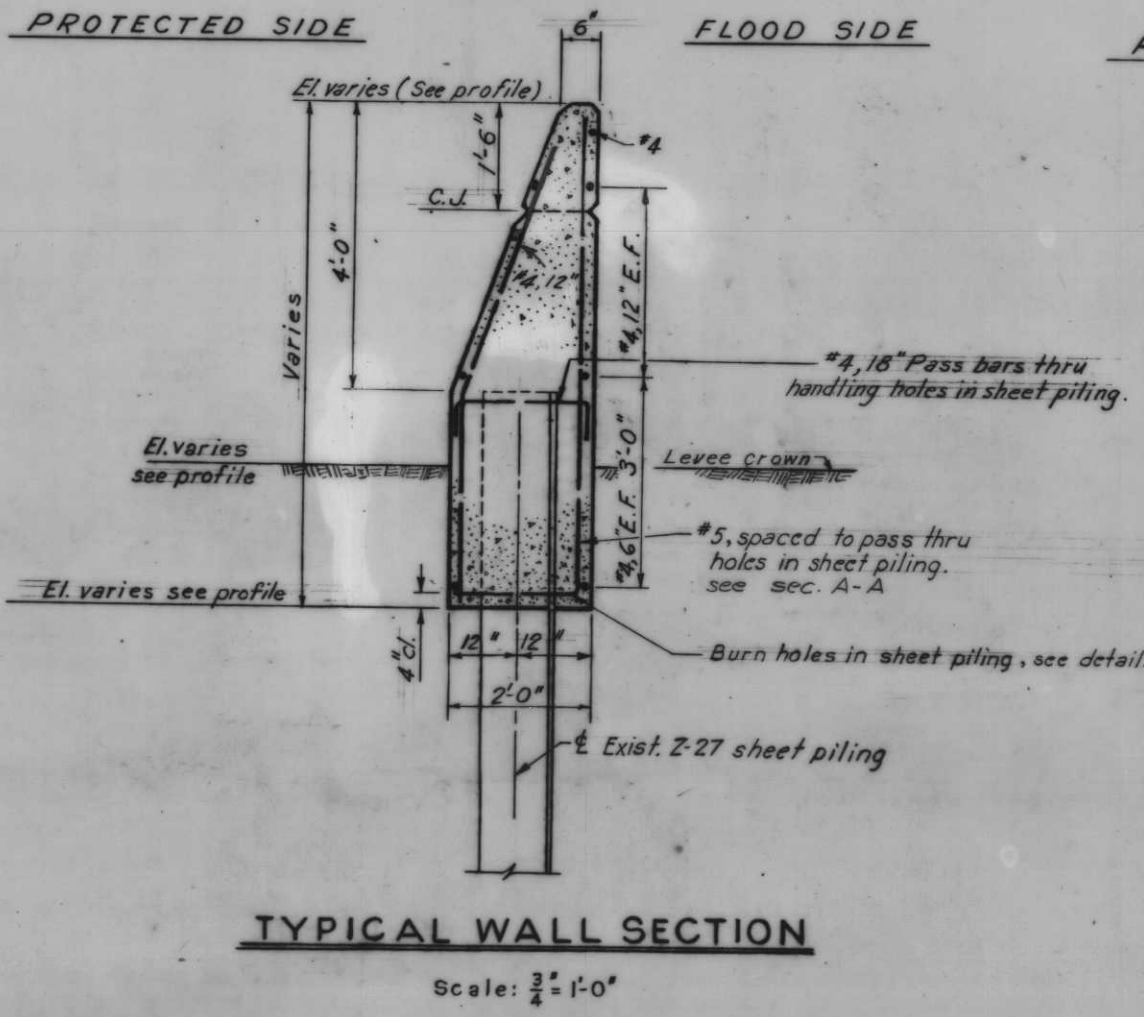
NOTE:
For location of additional borrow area location see Dwg. 13.

TYPICAL SECTIONS

REVISION	DATE	DESCRIPTION	BY
DESIGNED:	DRAWN:	CHECKED:	CODE IDENT. NO. SIZE FILE NO.
T. R. R.	J. J. P.	H. L. B.	H-4-24530
DATE: MAY 1968	SCALE: SHOWN	SPEC. NO. DACW89-68-B-0148	DWG. NO. 8 OF 13

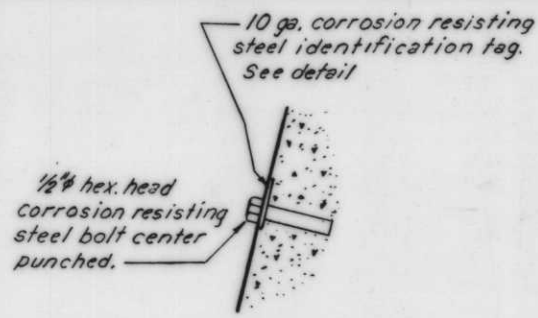


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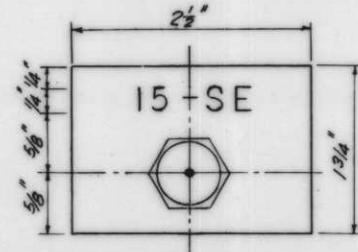


TYPICAL WALL SECTIONS

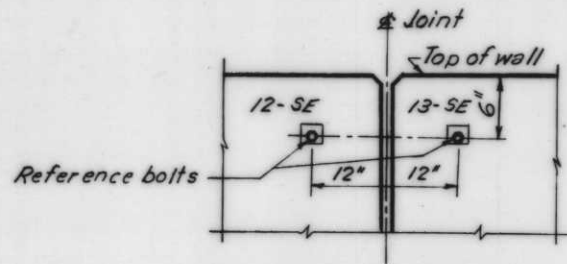
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DESIGNED:	DRAWN:	CHECKED:	CODE IDENT. NO. SIZE FILE NO.
T.F.P.	J.J.P.	H.L.B.	H-4-24530
DATE: MAY 1968	SCALE: SHOWN	SPEC. NO. DACW28-68-B-0148	DWG. NO. 9 OF 13



REFERENCE BOLT



REFERENCE BOLT IDENTIFICATION TAG



ELEVATION TYPICAL REFERENCE BOLT

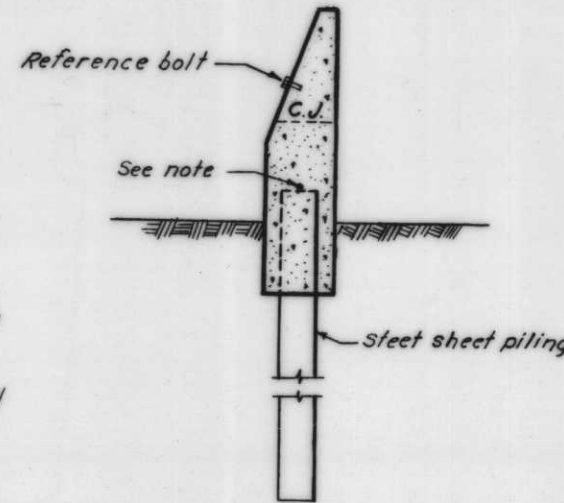
Scale: 3/4" = 1'-0"

Note:

No. 6 reinf. rod welded to the top of each sheet pile. Install flexible jumpers at all monolith joints. Jumpers shall be insulated No. 10 AWG copper, formed in a 8" dia. loop. Jumper shall be welded or brazed to adjacent sheet piles 3 inches below the bottom of the concrete cap. Welded or brazed joints shall be coated with splicing epoxy to obtain a moisture proof joint.

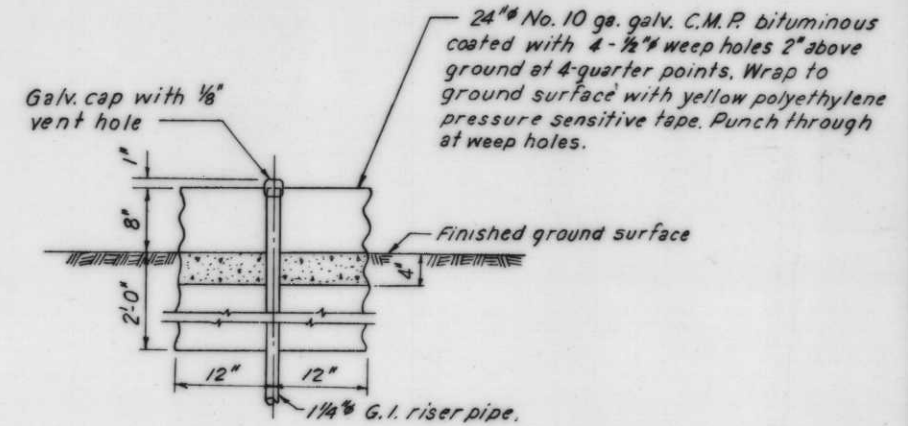
PROTECTED SIDE

FLOOD SIDE



CORROSION PROTECTION

Scale 3/8" = 1'-0"



DETAIL "A"

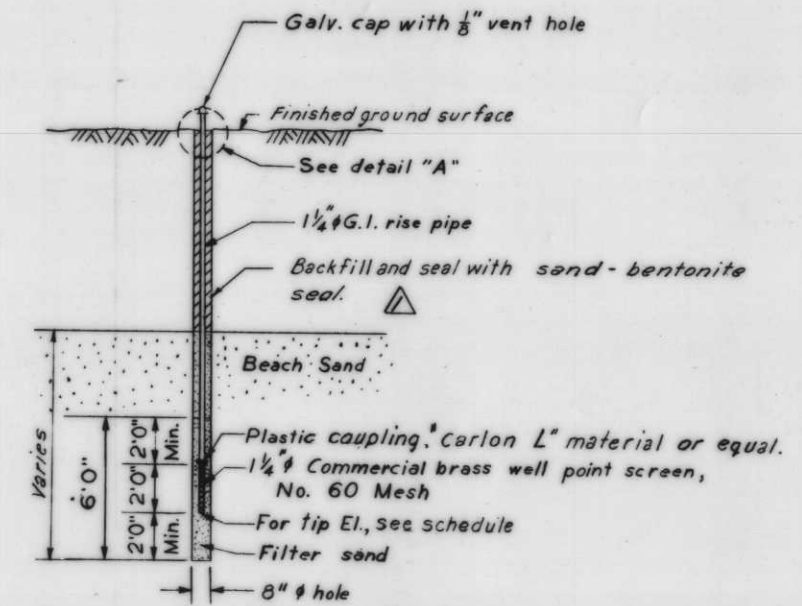
Scale: 1" = 1'-0"

BOLT ELEV. M.S.L.	SETTLEMENT REFERENCE BOLT SCHEDULE LAKE PONT. TO JOURDAN RD. RAMP						BOLT ELEV. M.S.L.	
	REFERENCE BOLT	DISTANCE BELOW TOP OF WALL	B/L STATION	REFERENCE BOLT	DISTANCE BELOW TOP OF WALL	B/L STATION		
13.61	1-SE	0.5'	34+06	*	0.5	71+06	14.03	
13.61	2-SE		37+05			71+08	14.04	
13.56	3-SE		37+07			74+09	14.06	
13.59	4-SE		40+09			74+11	14.01	
13.57	5-SE		40+11			77+12	14.17	
13.58	6-SE		43+07			77+14	14.09	
13.57	7-SE		43+09			80+15	14.49	
13.69	8-SE		46+95			80+17	14.46	
13.71	9-SE		46+97		0.5	82+96	14.43	
13.69	10-SE		49+04	* Installed w/blank tags				
13.67	11-SE		49+06					
13.85	12-SE		52+03					
13.82	13-SE		52+05					
13.82	14-SE		55+01					
13.82	15-SE		55+03					
13.88	16-SE		57+71					
	17-SE		58+06					
	18-SE		60+59					
	19-SE		60+61					
	20-SE		63+04					
13.91	28-SE		63+05					
14.08	29-SE		66+36					
	23-SE	OMIT	66+36					
	24-SE		67+44					
14.14		0.5'	67+45					

Due to monolith joints falling at sheet pile interlocks B/L stations are approximate. Locate reference bolts at nearest B/L station to those shown.

INSTALLED LENGTH	PIEZOMETER SCHEDULE				
	NUMBER	B/L STATION	LOCATION	TIP ELEV. (M.S.L.)	
EXISTING	NEW				
	P-1E		100' Rt. B/L	-14.82	
	P-2E	44+00	14' Rt. B/L	-14.68	
	P-3E		65' Lft. B/L	-15.07	
	P-4E		120' Rt. B/L	-14.9	
	P-5E	74+00	20' Rt. B/L	-11.4	
	P-6E		65' Lft. B/L	-13.00	
16.5	P-7E	34+72.5	35' Lft. B/L	-15.00	
11.6	P-8E	44+00	130' Lft. B/L	-15.00	
17.0	P-9E	43+40	35' Lft. B/L	-15.00	
16.9	P-10E	44+80	35' Lft. B/L	-15.00	
13.1	P-11E	74+00	130' Lft. B/L	-13.00	
17.2	P-12E	73+40	35' Lft. B/L	-13.00	
18.3	P-13E	75+20	35' Lft. B/L	-13.00	
20.7	P-14E		70' Rt. B/L	-15.00	
23.8	P-15E	59+00	6' Rt. B/L	-15.00	
15.7	P-16E		45' Lft. B/L	-15.00	
15.8	P-18E	57+60	45' Lft. B/L	-15.00	
15.7	P-19E	60+80	45' Lft. B/L	-15.00	
Total		202.3			

Note: * See piezometer detail
New and existing piezometers to be preserved and protected from damage at all times.
Place extension with cap on existing piezometers pipe (P-5E and P-6E)



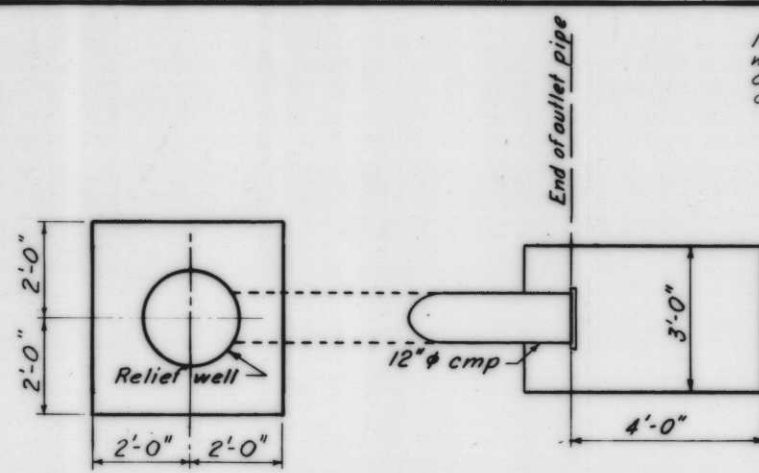
PIEZOMETER DETAIL

Scale: 1/4" = 1'-0"

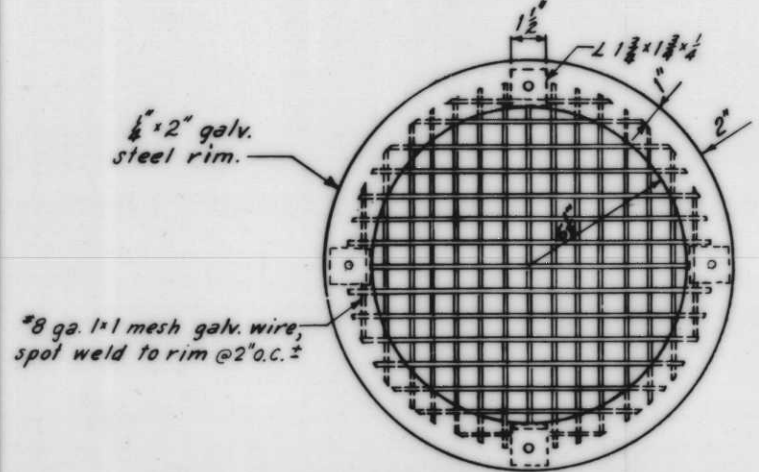
THIS PLAN ACCOMPANIES MODIFICATION P005 TO CONTRACT NO. DACW29-68-C-0251

2-27-69	Deleted P17E (Mod.#5)	A.M.			
9/18/68	Changed clay pellets to sand-bentonite seal Mod. P002	CT			
REVISION	DATE	DESCRIPTION	BY		
DESIGNED:	DRAWN:	CHECKED:	CODE IDENT. NO.	SIZE	FILE NO.
T.F.P.	E.J.C.	H.L.B.			H-4-24530
DATE: MAY 1968	SCALE: SHOWN	SPEC. NO. DACW29-68-B-0148	DWG. NO. 10 OF 13		

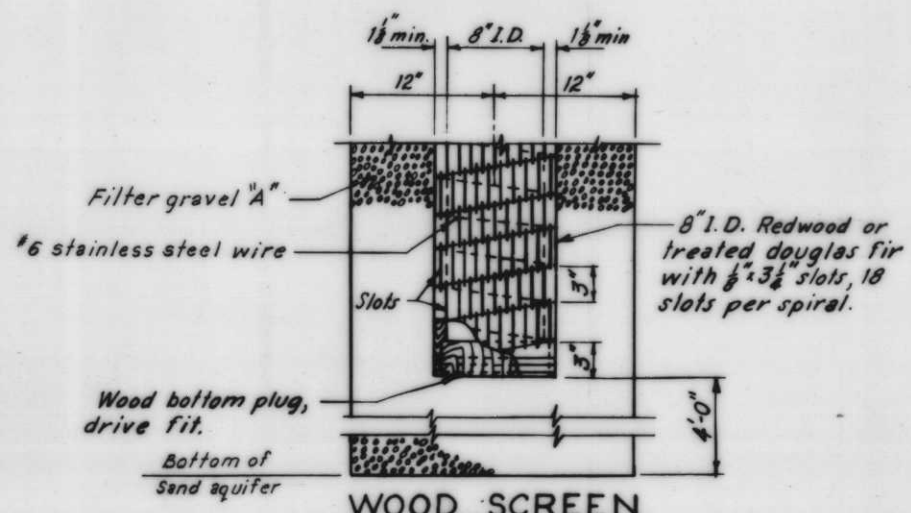
REFERENCE BOLT AND PIEZOMETER SCHEDULES



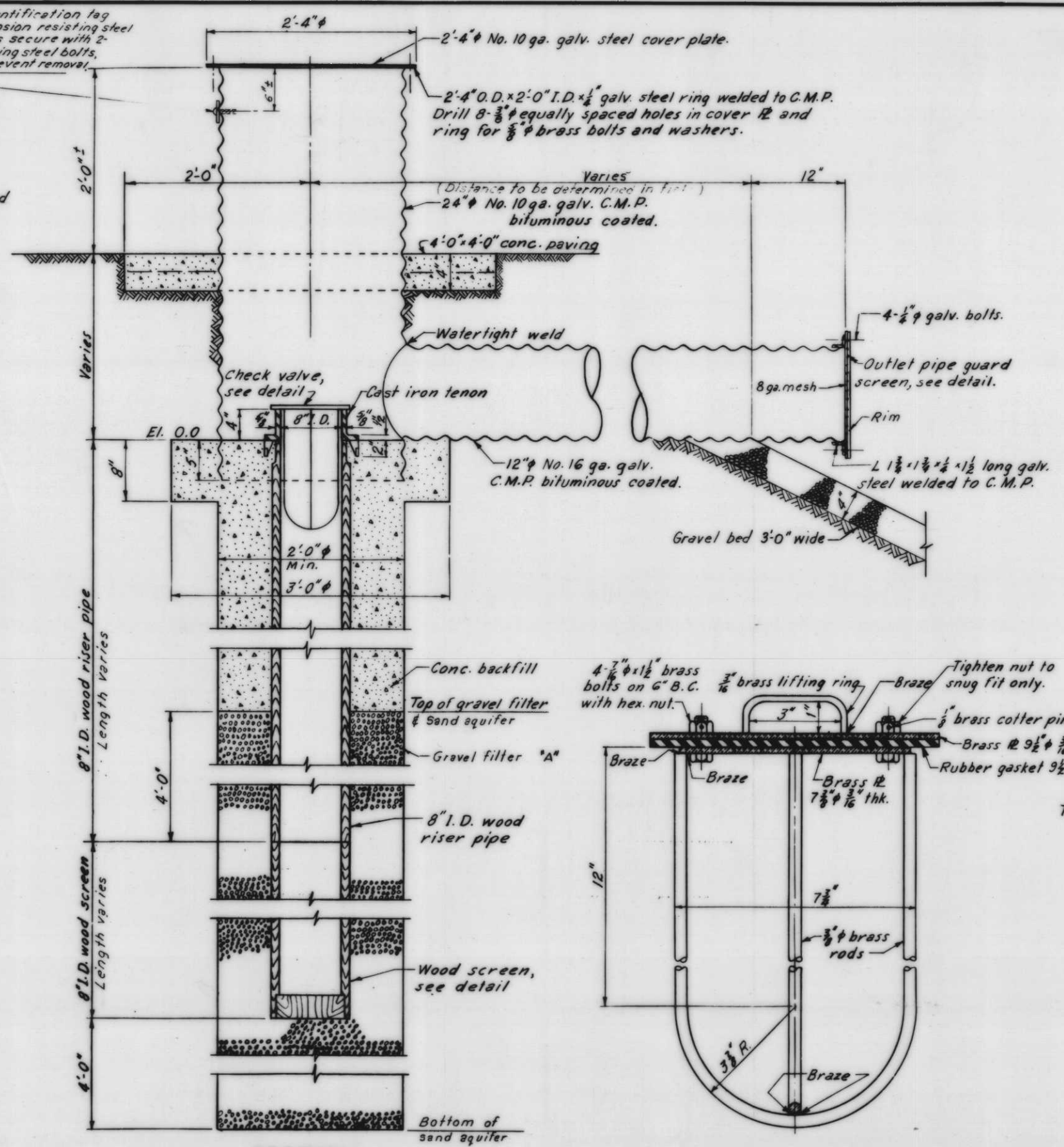
PLAN
Scale 1/2" = 1'-0"



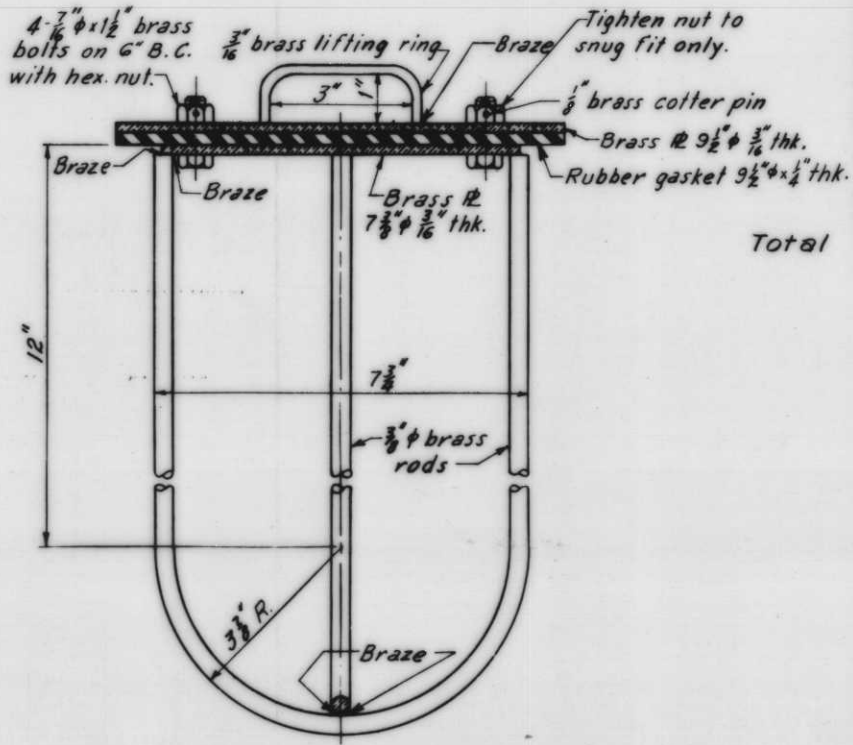
OUTLET PIPE GUARD SCREEN
Scale 3/4" = 1'-0"



WOOD SCREEN
Scale 1 1/2" = 1'-0"



SECTION
Scale 1 1/2" = 1'-0"



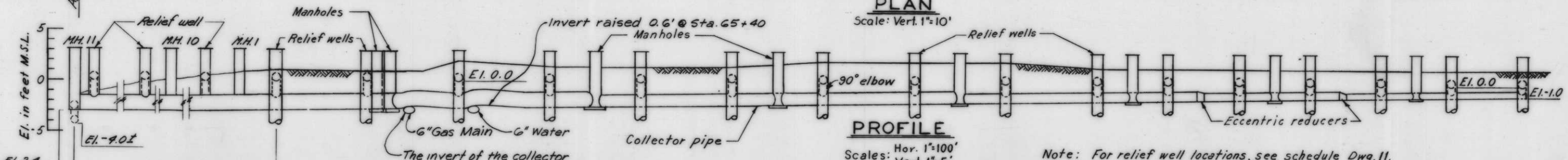
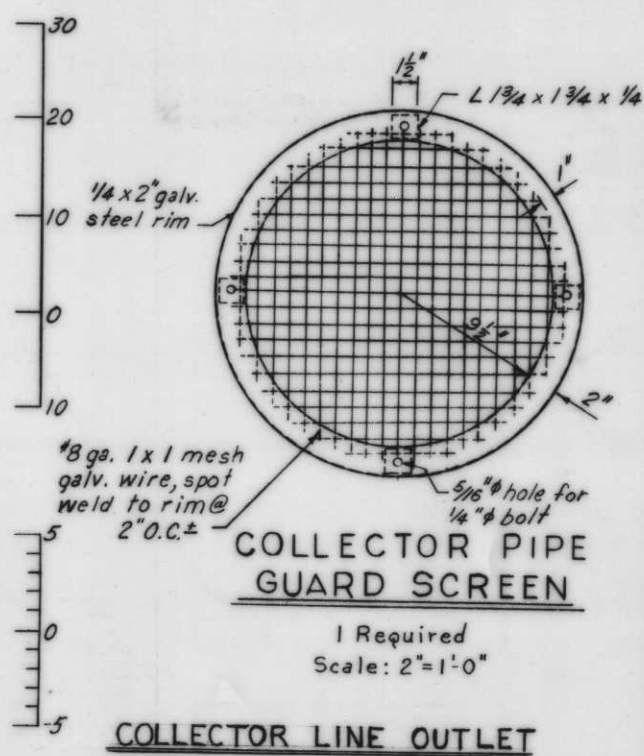
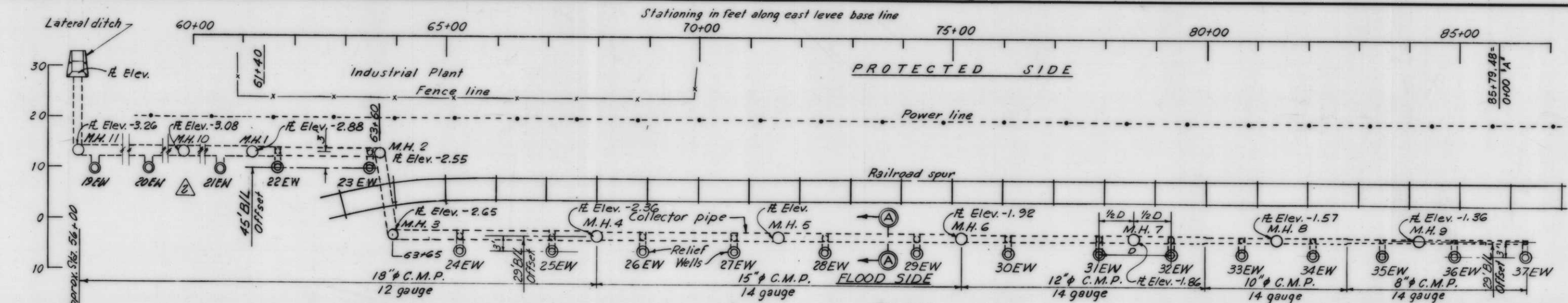
CHECK VALVE
Scale 6" = 1'-0"

INSTALLED LENGTH		RELIEF WELL SCHEDULE								
SCREEN	RISER	WELL			LENGTHS IN FEET					
		NO	B/L STATION	B/L OFFSET	GRAVEL FILTER	WOOD PIPE SCREEN	RISER	CONC. B/FILL	CORR. W/PIPE 24"φ	12"φ
22.0	17.0	1EW	33+05	35'	31'	23'	16'	12'	5'	
21.3	17.3	2EW	34+15	35'	31'	23'	16'	12'	3'	
21.4	15.5	3EW	35+30	35'	31'	23'	16'	12'	3'	
21.6	16.6	4EW	36+45	35'	31'	23'	16'	12'	3'	
21.3	14.6	5EW	37+60	35'	32'	24'	15'	11'	2'	
19.2	17.9	6EW	38+75	35'	32'	24'	15'	11'	2'	
21.3	17.6	7EW	39+90	35'	32'	24'	15'	11'	2'	
21.3	15.8	8EW	41+30	35'	32'	24'	14'	10'	2'	
23.3	13.9	9EW	42+70	35'	32'	24'	14'	10'	3'	
17.3	15.9	10EW	44+10	35'	32'	24'	14'	10'	4'	
19.3	17.9	11EW	45+50	35'	31'	23'	13'	9'	3'	
21.3	14.5	12EW	46+90	35'	31'	23'	13'	9'	3'	
19.3	15.8	13EW	48+30	35'	31'	23'	13'	9'	3'	
19.3	15.8	14EW	49+70	35'	30'	22'	12'	8'	3'	
23.5	14.5	15EW	51+10	35'	30'	22'	12'	8'	3'	
19.3	15.7	16EW	52+50	35'	30'	22'	12'	8'	3'	
21.4	15.8	17EW	53+90	35'	30'	22'	12'	8'	3'	
23.2	11.9	18EW	55+30	40'	31'	23'	13'	9'	2'	
23.3	11.9	19EW	56+70	40'	32'	24'	13'	9'	2'	
23.2	11.9	20EW	58+10	45'	31'	23'	15'	11'	2'	
23.2	11.9	21EW	59+90	45'	32'	24'	15'	11'	2'	
25.3	11.9	22EW	61+70	45'	32'	24'	16'	12'	3'	
15.7	19.9	23EW	63+50	45'	33'	25'	16'	12'	3'	
23.2	11.9	24EW	65+30	29'	36'	28'	15'	11'	3'	
22.9	11.9	25EW	67+10	29'	36'	28'	15'	11'	3'	
22.9	11.9	26EW	68+90	29'	38'	30'	14'	10'	3'	
24.7	9.9	27EW	70+70	29'	38'	30'	14'	10'	3'	
24.7	10.9	28EW	72+50	29'	40'	32'	12'	8'	3'	
26.9	9.8	29EW	74+30	29'	40'	32'	12'	8'	3'	
23.0	9.9	30EW	76+10	29'	36'	28'	15'	11'	3'	
24.9	9.9	31EW	77+90	29'	35'	27'	15'	11'	3'	
22.9	9.9	32EW	79+30	29'	28'	20'	19'	15'	3'	
27.1	7.9	33EW	80+70	29'	28'	20'	19'	15'	3'	
19.3	15.9	34EW	82+10	29'	27'	19'	19'	15'	3'	
19.3	15.8	35EW	83+50	29'	27'	19'	19'	15'	3'	
19.3	15.6	36EW	84+65	29'	27'	19'	19'	15'	3'	
17.3	17.4	37EW	0+30 A	29'	27'	19'	19'	15'	3'	
Total	805.7	520.1	Note: The above chart indicates approximate lengths only and should not be used for determining the well depths. The actual lengths shall be determined as stated in the specifications.							

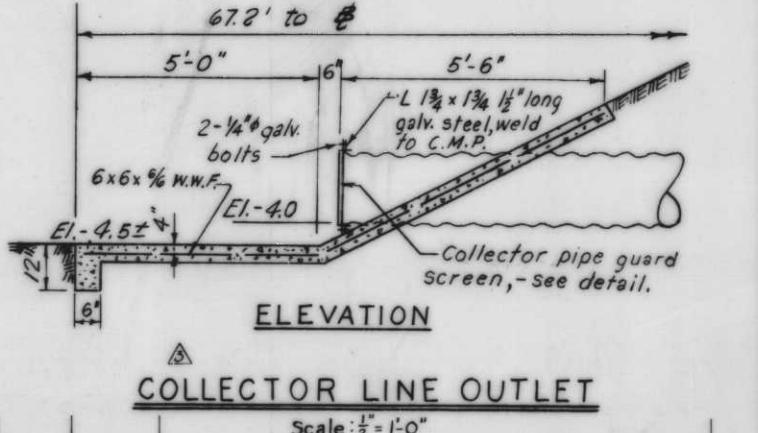
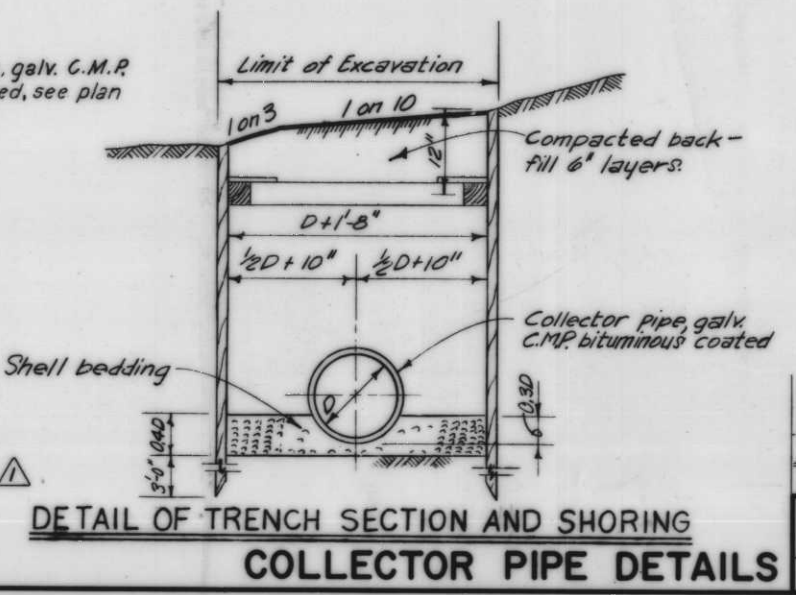
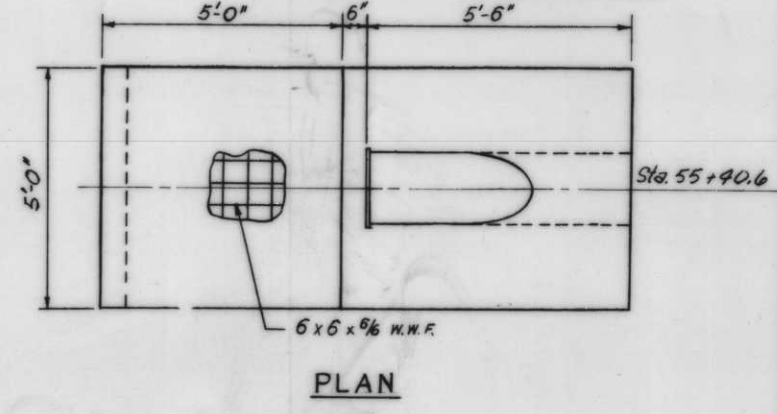
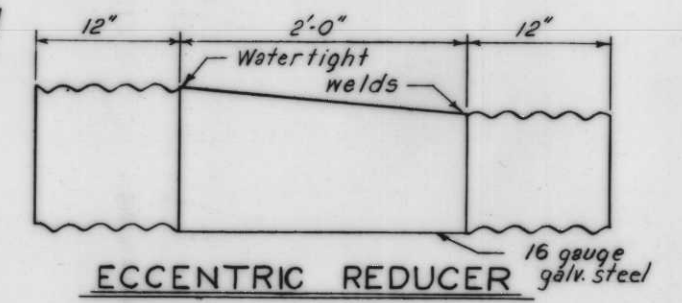
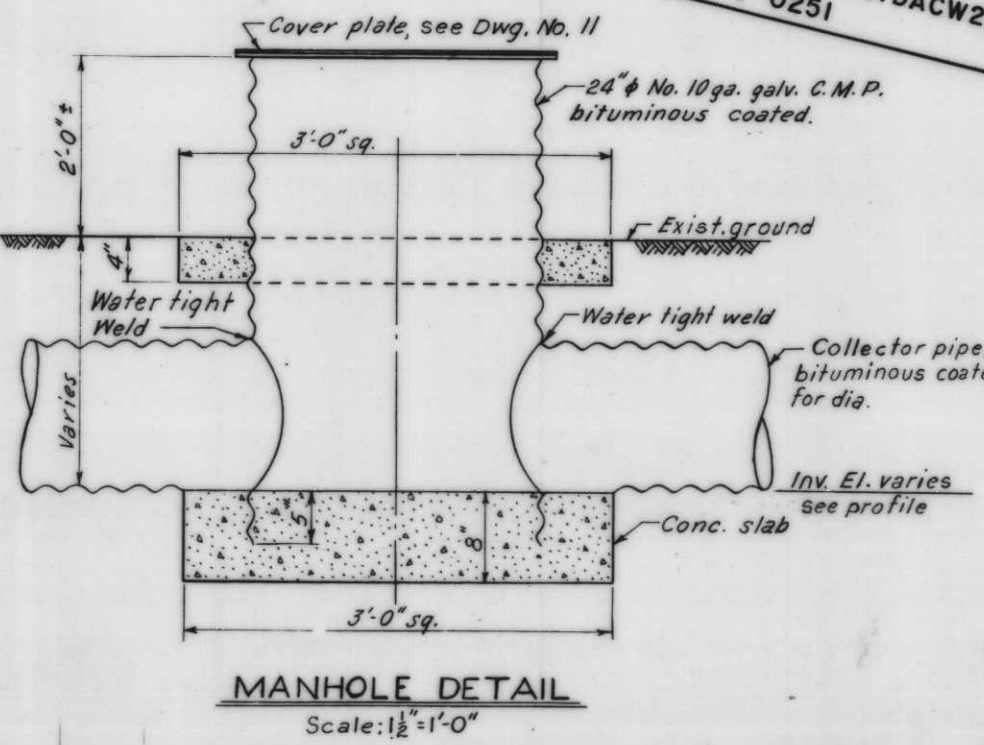
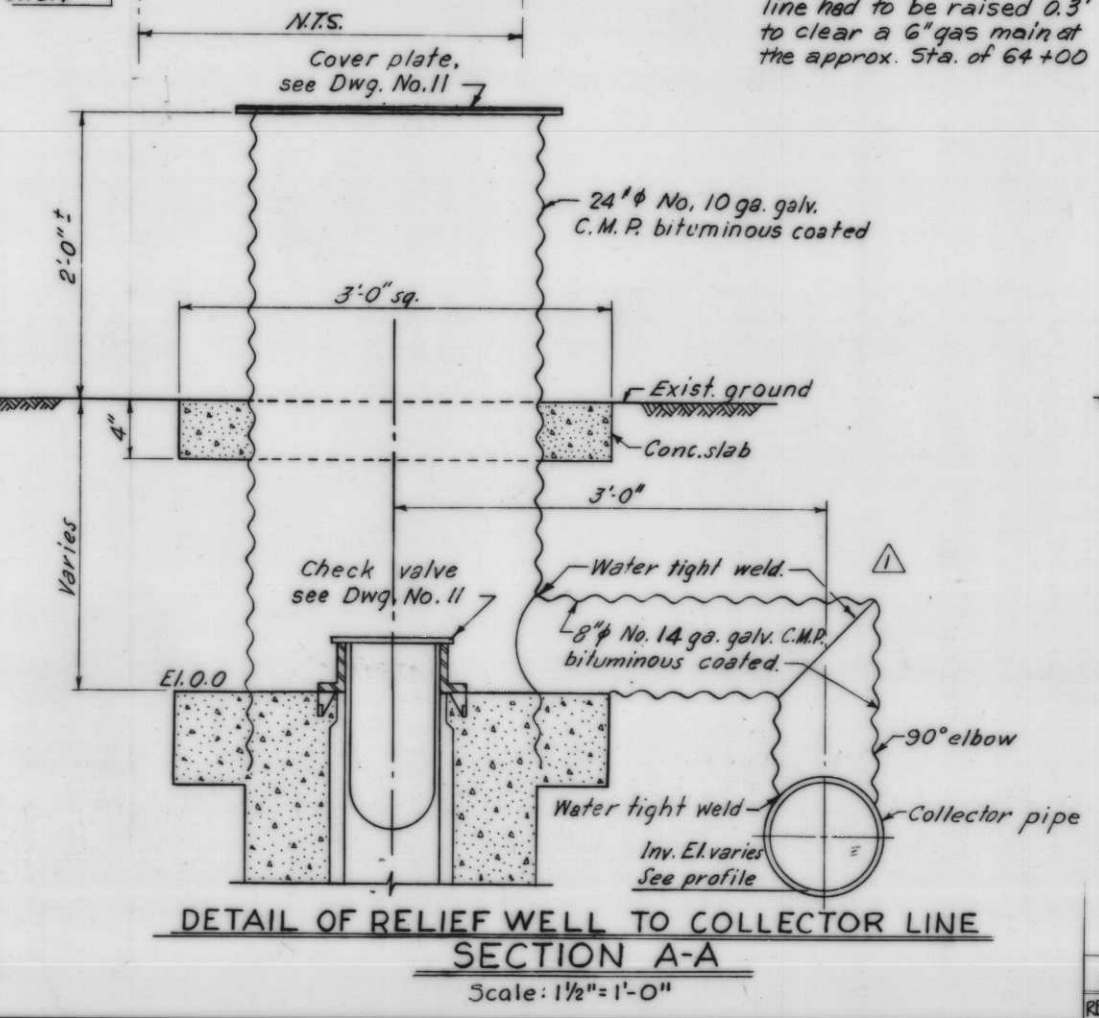
REVISION	DATE	DESCRIPTION	BY
DESIGNED:	DRAWN:	CHECKED:	CODE IDENT. NO.
T.F.P.	D.J.H.	H.L.B.	
DATE: MAY 1968	SCALE: SHOWN	SPEC. NO. DACW58-68-B-0141	DWG. NO. 11 OF 13

RELIEF WELLS

H-4-24530



THIS PLAN ACCOMPANIES MODIFICATION P005 TO CONTRACT NO. DACW29-68-C-0251

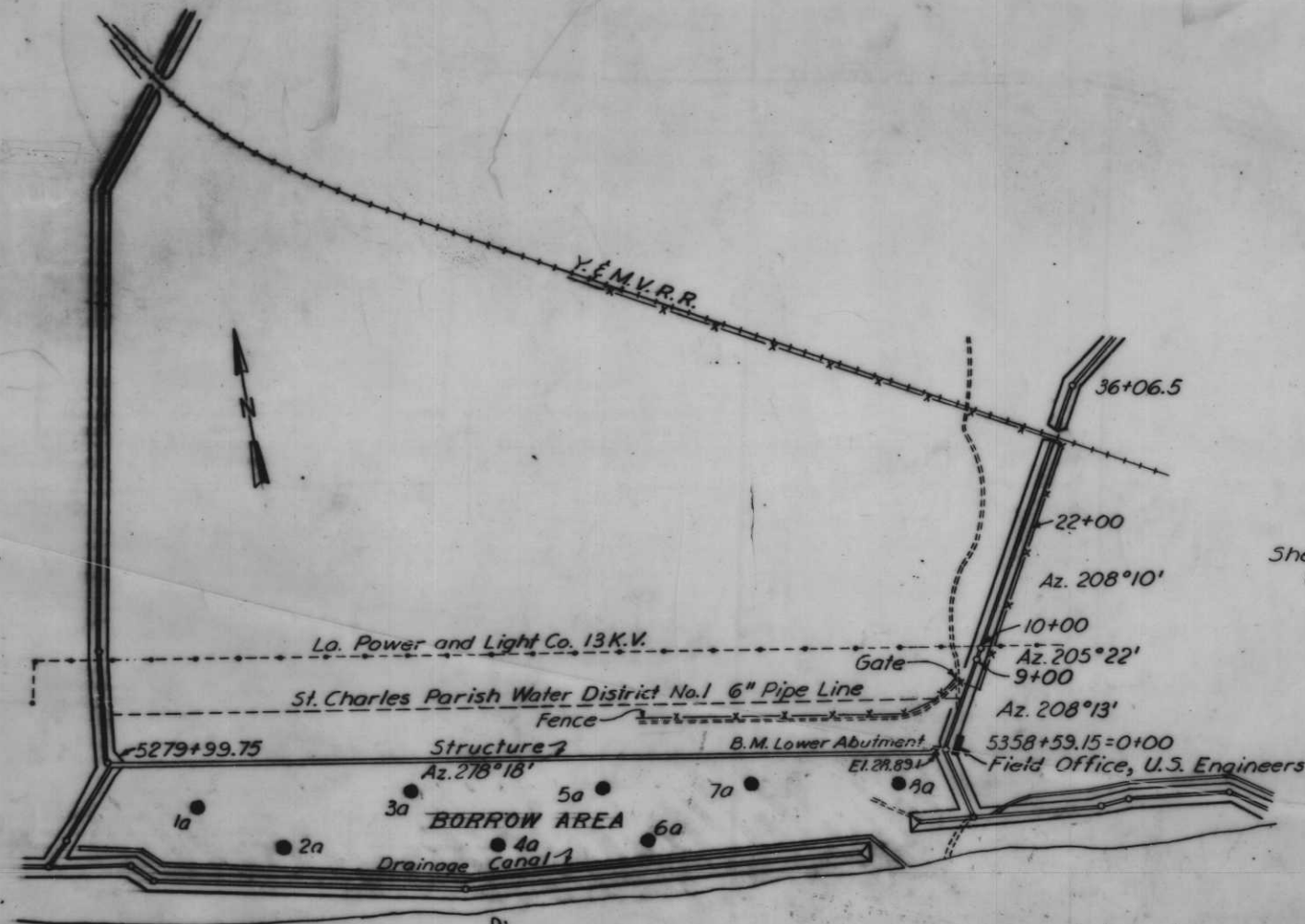


REVISION	DATE	DESCRIPTION	BY
2-27-69		Added sta. & diam. in collector line outlet (Mod. #5)	A.M.

REVISION	DATE	DESCRIPTION	BY
12-12-68		Revised collector line Mod. #3	AL
7-8-68		Added trench and shoring see and revisions Mod. #1	G.P.M.

DESIGNED: T. F. P. DRAWN: D. J. H. CHECKED: H. L. B. CODE IDENT. NO. SIZE FILE NO. H-4-24530

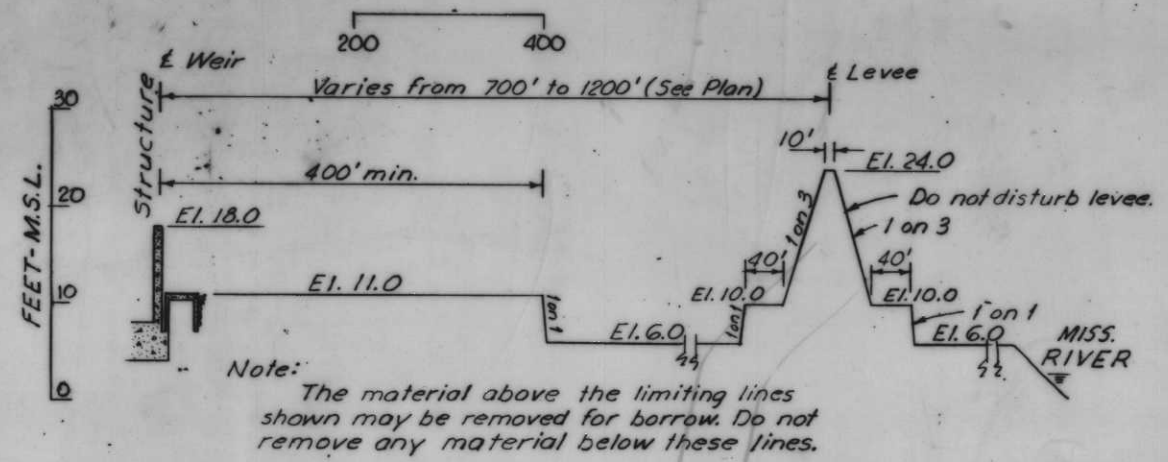
DATE: MAY 1968 SCALE: SHOWN SPEC. NO. DACW29-68-B-0148 DWG. NO. 12 OF 13



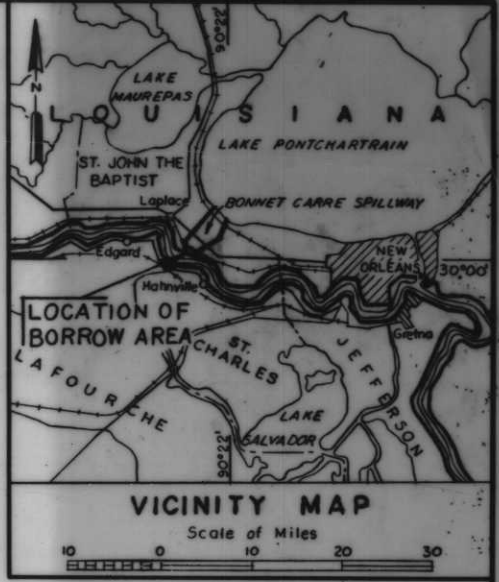
PLAN
SCALE: 1:10,000

Shell Chemical Co.
Norco, La.

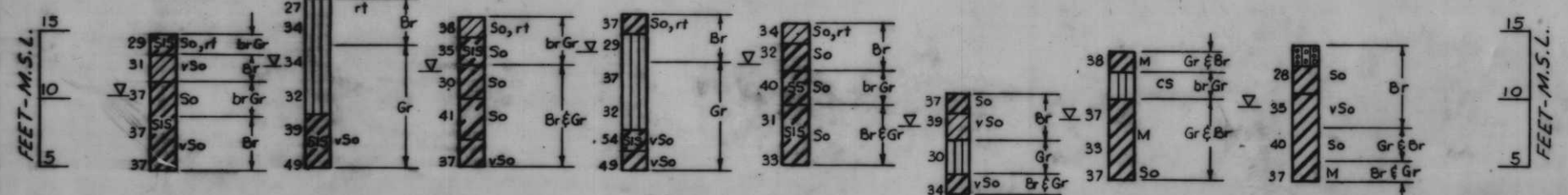
*Safety is a Part
of Your Contract*



TYPICAL SECTION FOR BORROW



1a Sta. 5288+00 400' R.S. E (weir) 20 Nov. '61	2a Sta. 5296+00 800' R.S. E (weir) 20 Nov. '61	3a Sta. 5308+00 300' R.S. E (weir) 20 Nov. '61	4a Sta. 5316+00 800' R.S. E (weir) 20 Nov. '61	5a Sta. 5326+00 300' R.S. E (weir) 17 Nov. '61	6a Sta. 5330+00 800' R.S. E (weir) 17 Nov. '61	7a Sta. 5340+00 300' R.S. E (weir) 17 Nov. '61	8a Sta. 5354+00 300' R.S. E (weir) 17 Nov. '61
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BORINGS
VERT. SCALE: 1"=6'

Note: Borings 1a to 8a incl.: Soil samples were taken with a 4" dia. Post Hole Auger.
For Soil Boring Legend see Dwg. File No. H-2-21800.

ADDITIONAL BORROW AREA LOCATION

REVISION	DATE	DESCRIPTION	BY
DESIGNED: T.F.P.	DRAWN: C.E.M.	CHECKED: H.L.B.	FILE NO. H-4-24530
DATE: MAY 1968		SCALE: SHOWN	SPEC. NO. DACW88-68-B-0148 DWD: NO. 13 OF 13