

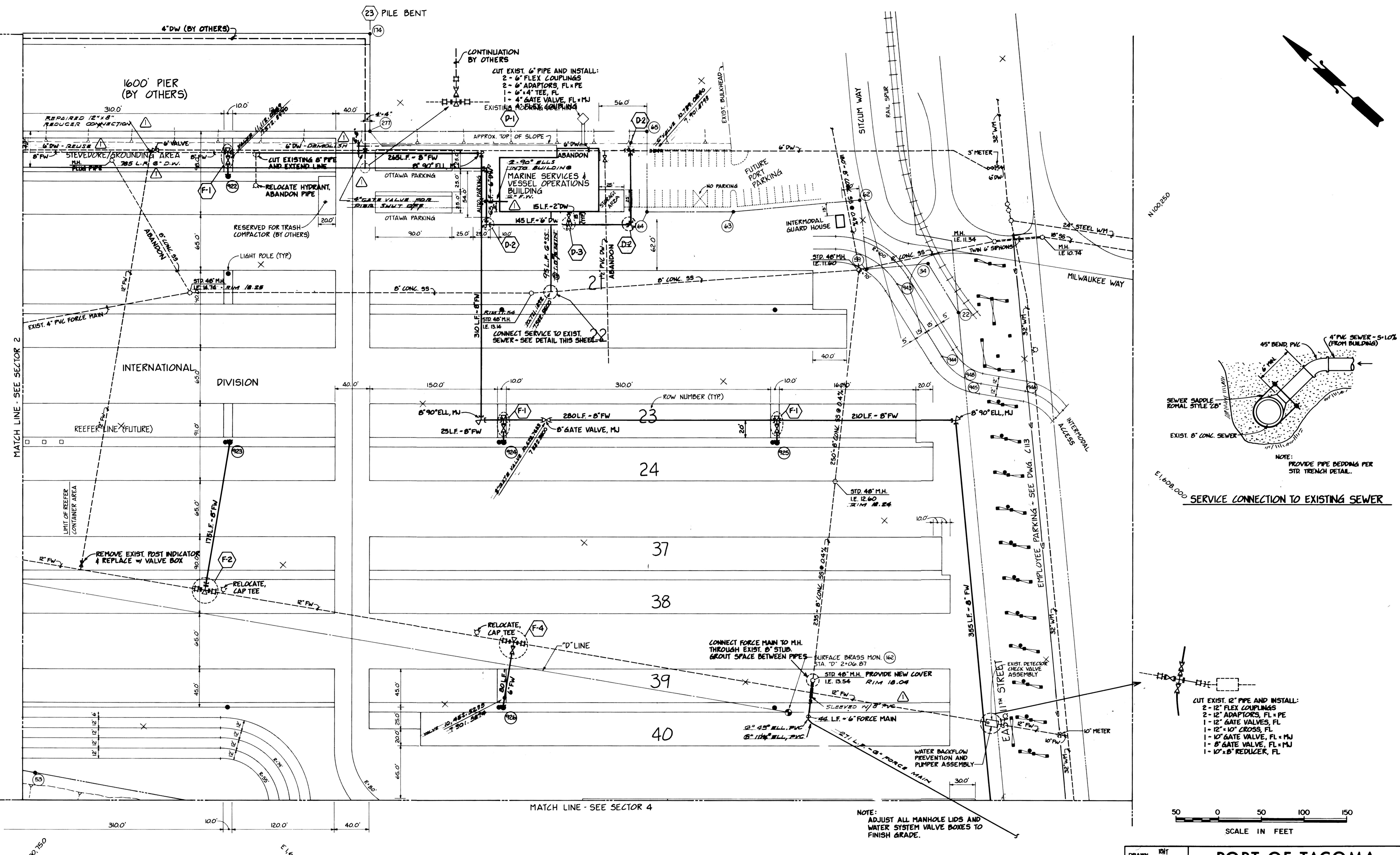
Whitacre Engineers, Inc.

Consulting Engineering & Land Planning
2124 SO. K' STREET P.O. BOX 5677
TACOMA, WASHINGTON 98405 (206) 272-5144

FIELD BOOK (S)					SCALE AS NOTED
					DRAWING NO.
	REVISED TO AS BUILT	R. J.S.	11-14-89	APPROVED <i>John T. Taylor</i>	5/31/89
MARK	REVISION	BY	APP.	DATE	PROJECT MANAGER <i>R. MacLeod</i>
				CIVIL ENGINEER	DATE 5/31/89
					SHEET 37 OF 88

PORT OF TACOMA

TACOMA TERMINALS, INC.



Whitacre Engineers, Inc.

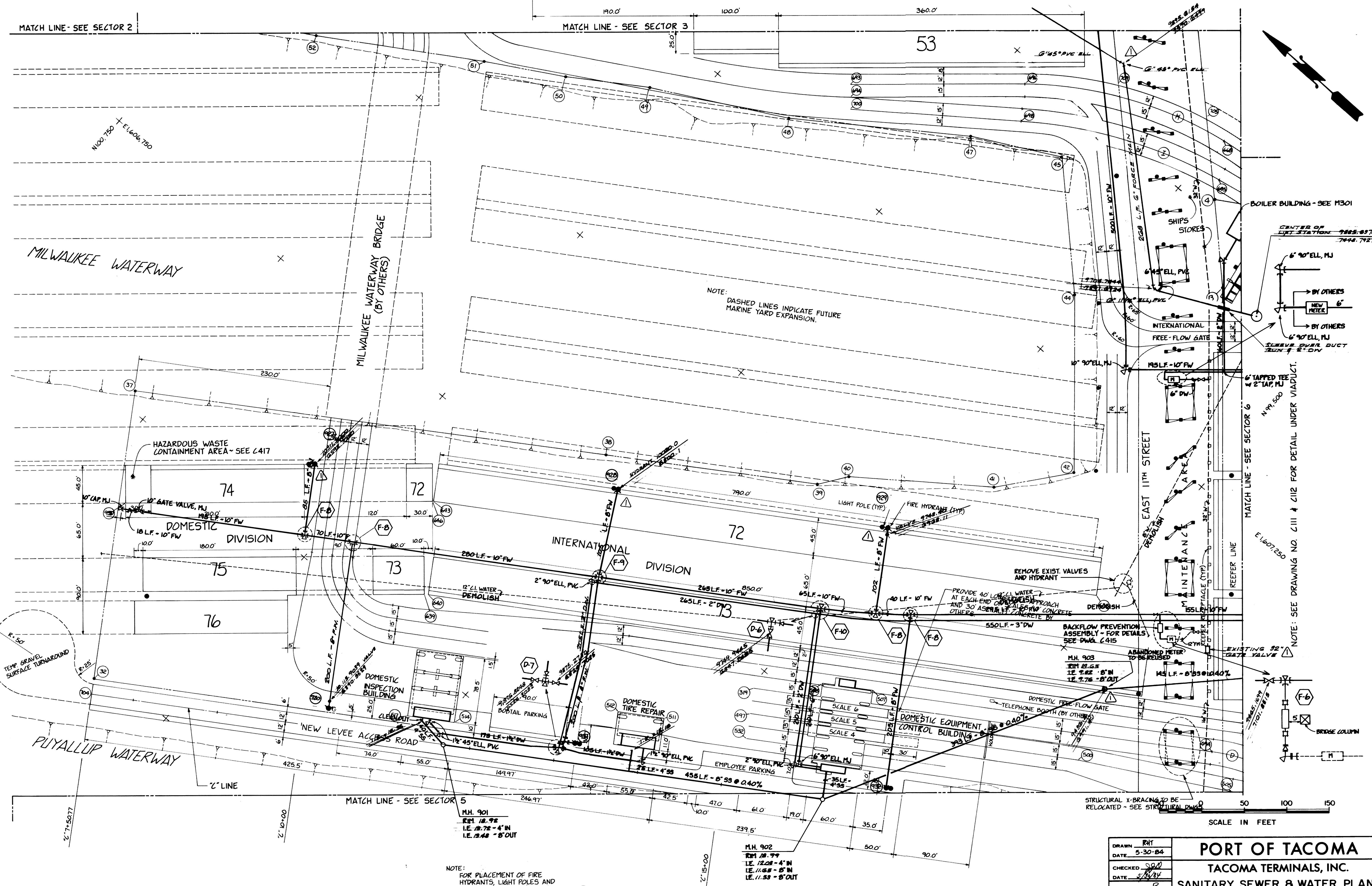
Consulting Engineering & Land Planning
2124 SO. 'K' STREET P.O. BOX 5677
TACOMA, WASHINGTON 98405 (206) 272-5144

					FIELD BOOK (S)	SCALE AS NOTED
						DRAWING NO.
 REVISED TO AS BUILT	R.J.S	11/15/85	APPROVED		5/31/84	EP-3880-23-C 403
MARK	REVISION	BY APP. DATE	PROJECT MANAGER		DATE	
				CHIEF ENGINEER	5/31/84	
					DATE	
						SHEET 38 OF 88

PORT OF TACOMA

TACOMA TERMINALS, INC.

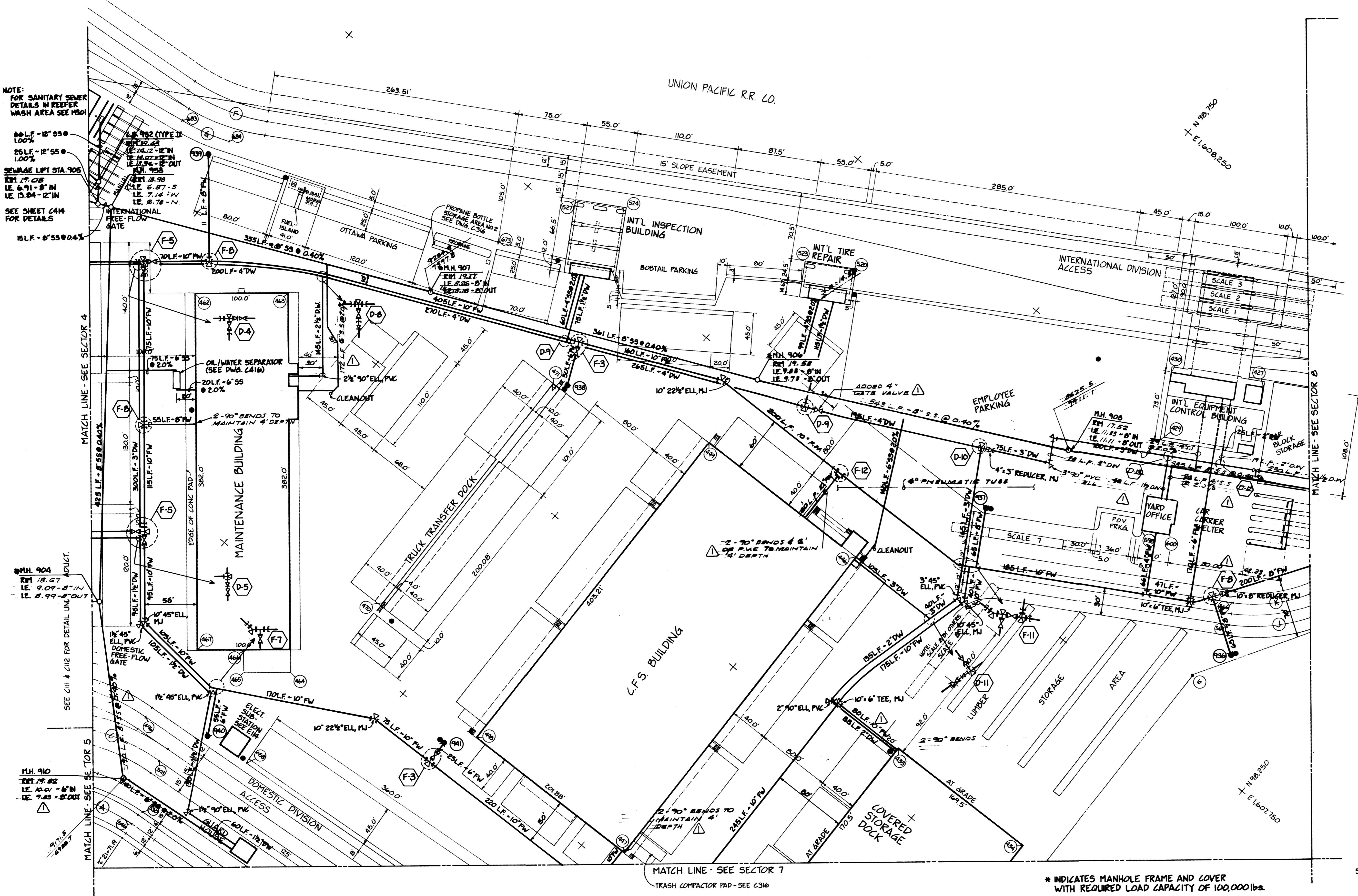
SANITARY SEWER & WATER PLAN



DRAWN BY	R.H.T.
DATE	5-30-84
CHECKED BY	S.O.B.
DATE	5/31/84
CHECKED BY	P
DATE	5/31/84
CONT. NO.	560
FIELD BOOK(S)	
APPROVED	S. H. T. (Signature)
REVISION	10-658
BY APP.	R. M. (Signature)
DATE	5/31/84
PROJECT MANAGER	R. M. (Signature)
CHIEF ENGINEER	R. M. (Signature)

DRAWING NO. EP-3880-23-C404
DATE 5/31/84
SHEET 39 OF 88





* INDICATES MANHOLE FRAME AND COVER
WITH REQUIRED LOAD CAPACITY OF 100,000 lbs.

DRAWN	RHT	PORT OF TACOMA	
DATE	5-30-84		
CHECKED	<i>JH</i>	TACOMA TERMINALS, INC.	
DATE	5-30-84		
CHECKED	<i>JP</i>	SANITARY SEWER & WATER PLAN	
DATE	5-30-84		
CONT. NO.	560		
FIELD BOOK (S)		SCALE AS NOTED	
APPROVED		DRAWING NO.	
<i>John Tempot</i>		5/31/84	
PROJECT MANAGER		DATE	
<i>R. MacIsaac</i>		5/31/84	
CHIEF ENGINEER		DATE	
		EP-3880-23-C406	
		40 OF 88	
		SHEET	

MATCH LINE - SEE SECTOR 5

PUYALLUP RIVER

MATCH LINE - SEE SECTOR 6

F-8

85'

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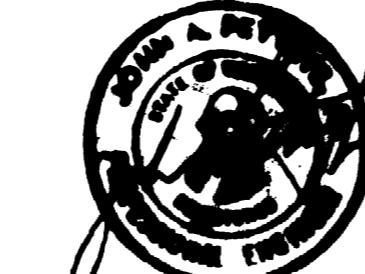
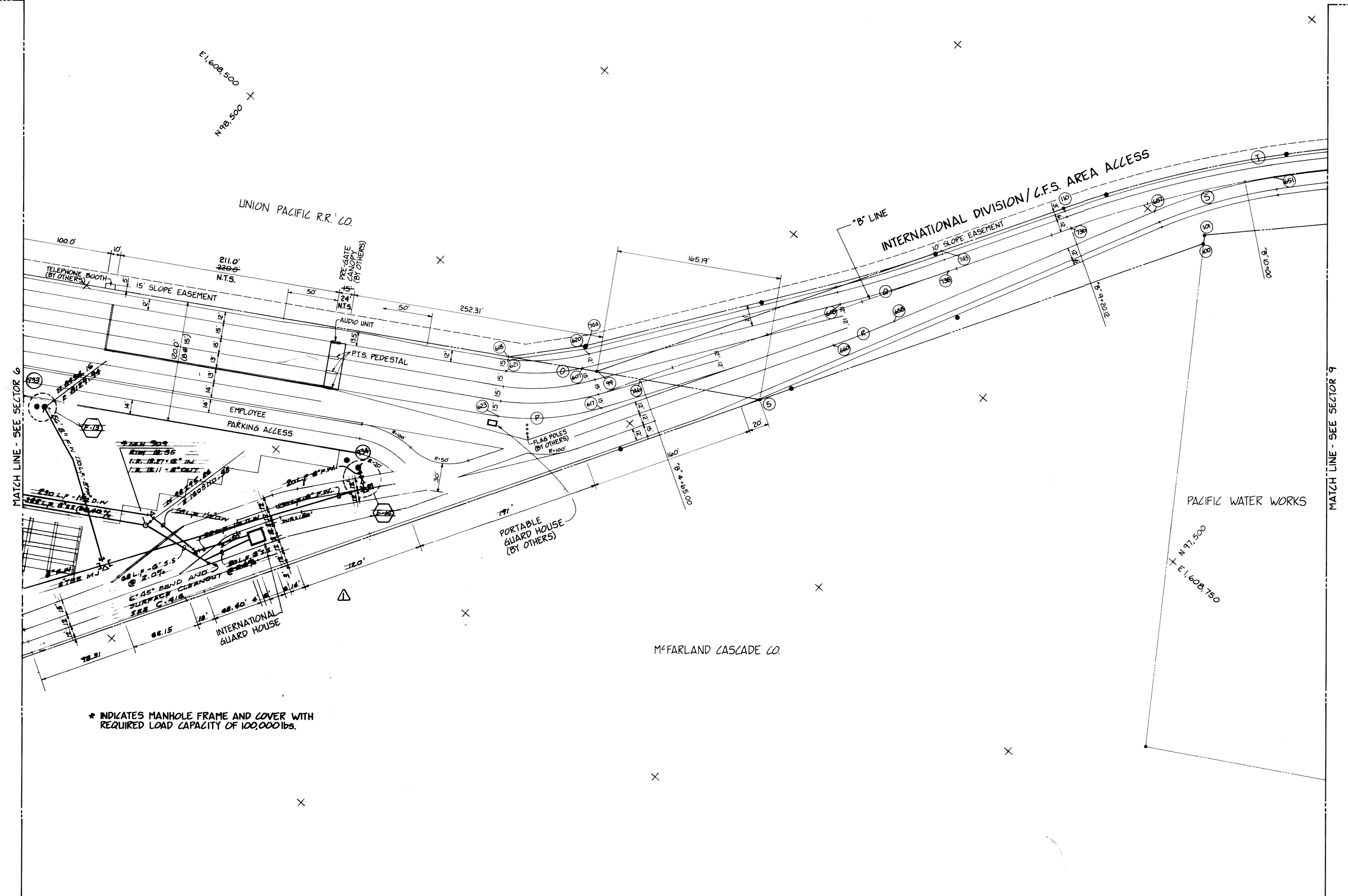
75'

75'

75'

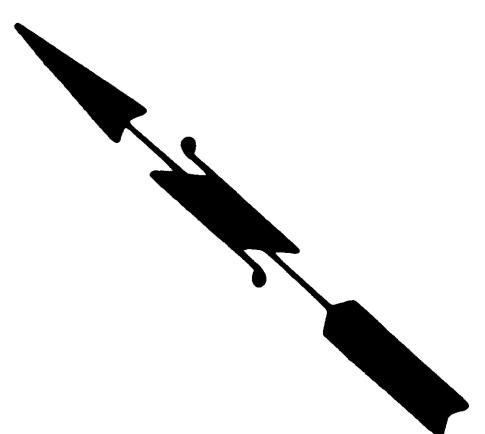
75'

75'



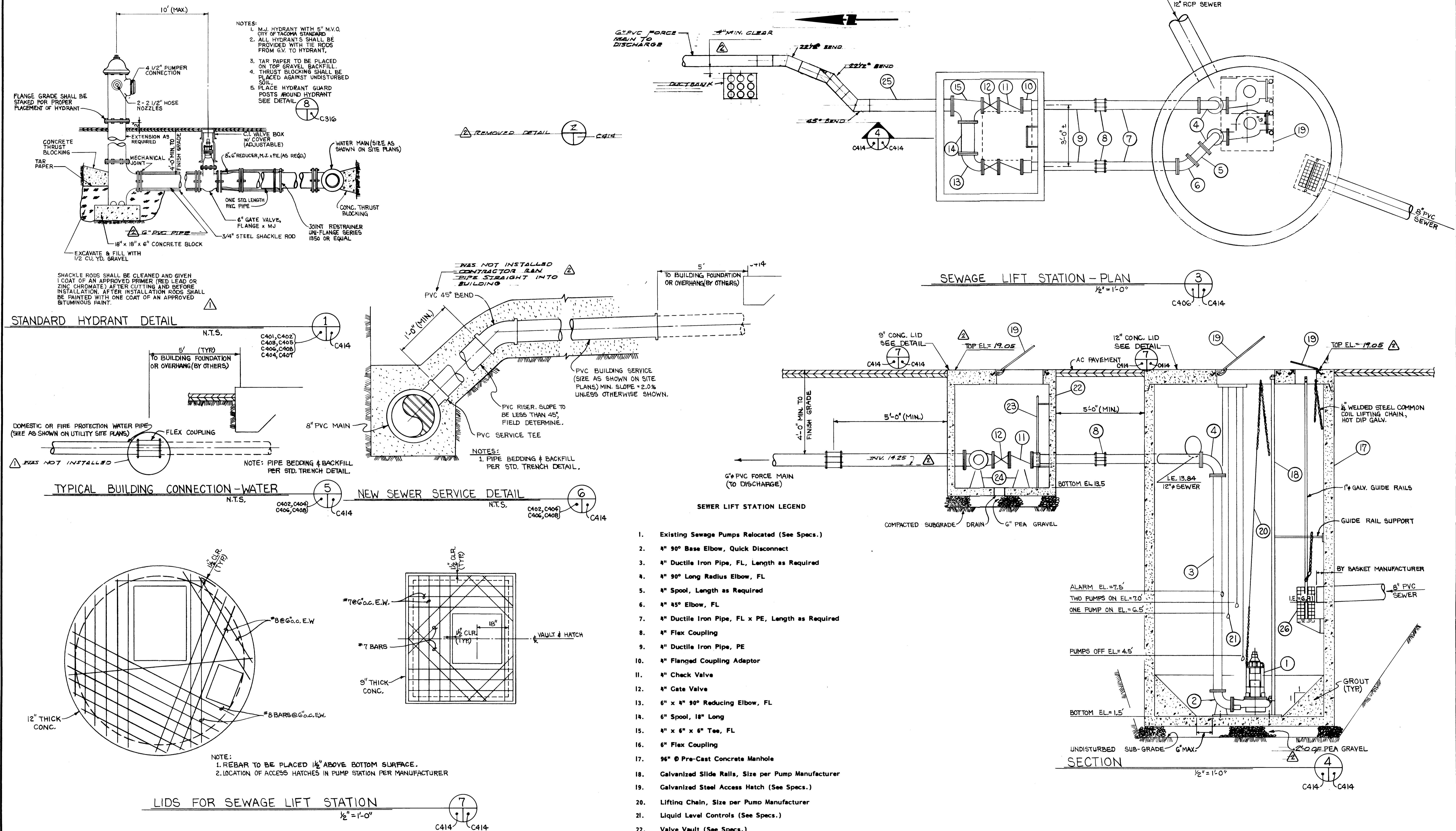
Whitacre Engineers, Inc.
Consulting Engineering & Land Planning
2124 SO. "K" STREET P.O. BOX 5677
TACOMA, WASHINGTON 98405 (206) 272-5144

FIELD BOOK (S)		SCALE AS NOTED
APPROVED	REvised to As-Built	DRAWING NO.
5/31/84	R.J.S.	EP-3880-23-C408
CHEMIST	MANAGER	DATE
5/31/84	J. M. Head	5/31/84
CHECKED	REVISION	BY APP. DATE
5/31/84		
CONT. NO. 560		

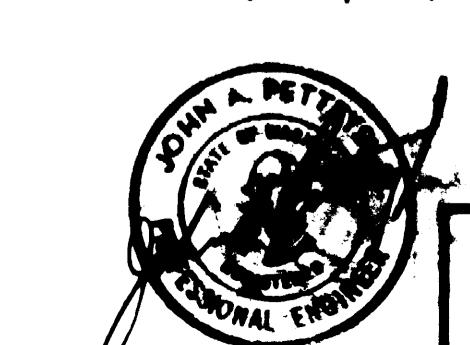


PORT OF TACOMA
TACOMA TERMINALS, INC.
SANITARY SEWER & WATER PLAN

42 OF 88

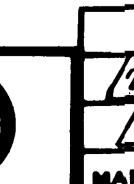


DRAWN B.C.	PORT OF TACOMA		
DATE 3-8-84			
CHECKED 3/18/84			
DATE 3/18/84			
CHECKED JP			
DATE 5-30-84			
CONT. NO. 560			
FIELD BOOK (S)		SCALE AS NOTED	
APPROVED	5/3/84		DRAWING NO. EP-3880-23-C414
PROJECT MANAGER	John Tengay		DATE 5/3/84
CHIEF ENGINEER	R. Price Lead		DATE 5/3/84
43 OF 88		Sheet	

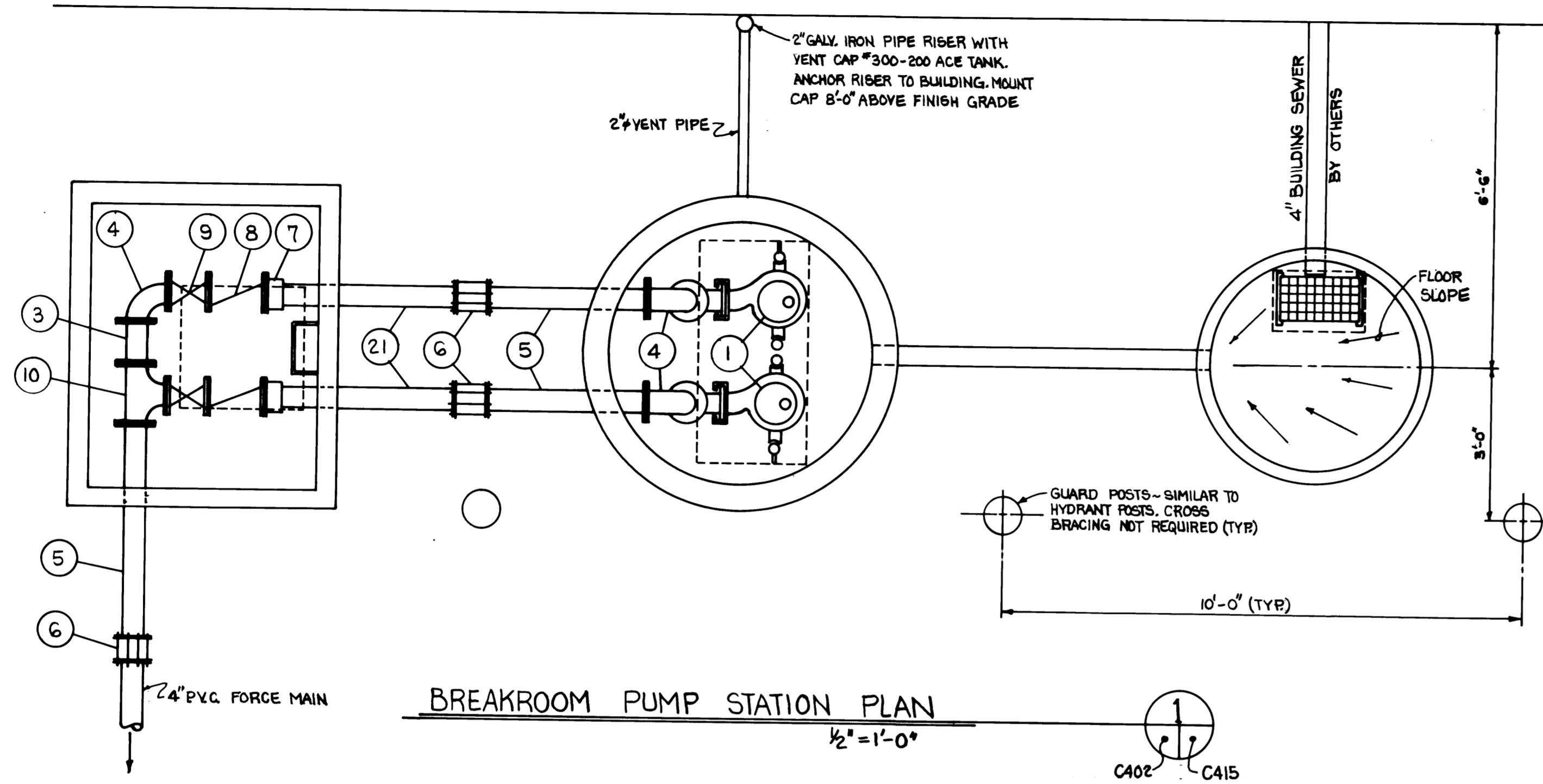


Whitacre Engineers, Inc.
Consulting Engineering & Land Planning
2124 SO. 11TH STREET P.O. BOX 5677
TACOMA, WASHINGTON 98409 (206) 272-5144

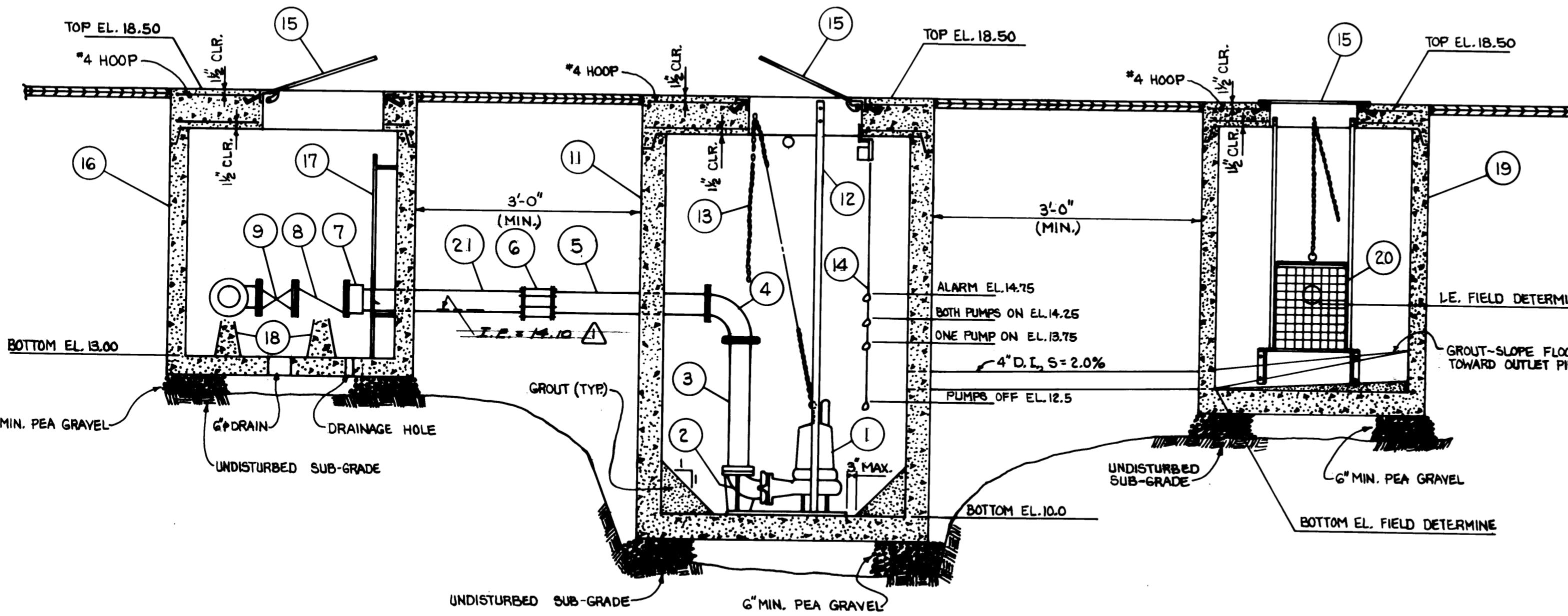
REvised to as built	A.J.S.	4/18/84
CHANGED FIRE HYDRANT DETAIL	B.C.	7-1-84



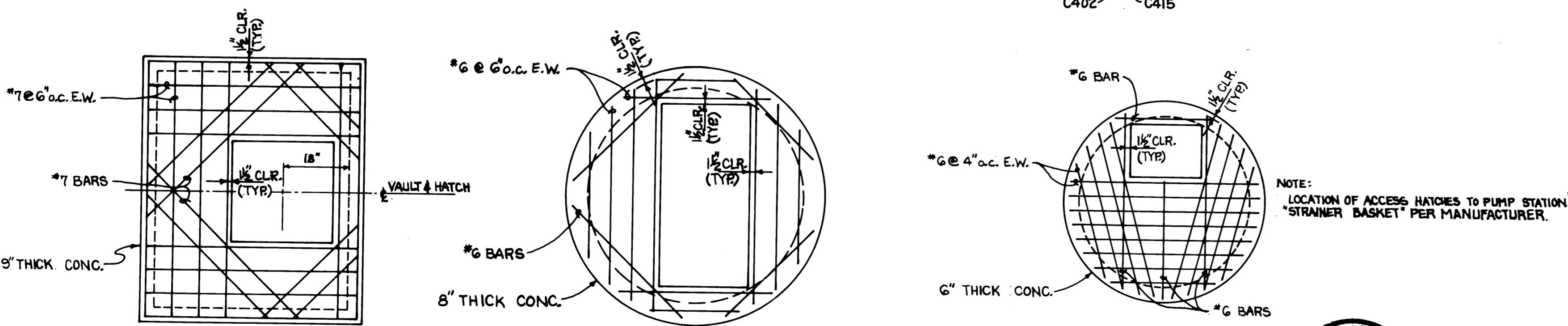
MARINE BREAKROOM



BREAKROOM PUMP STATION PLAN



BREAKROOM PUMP STATION ELEVATION

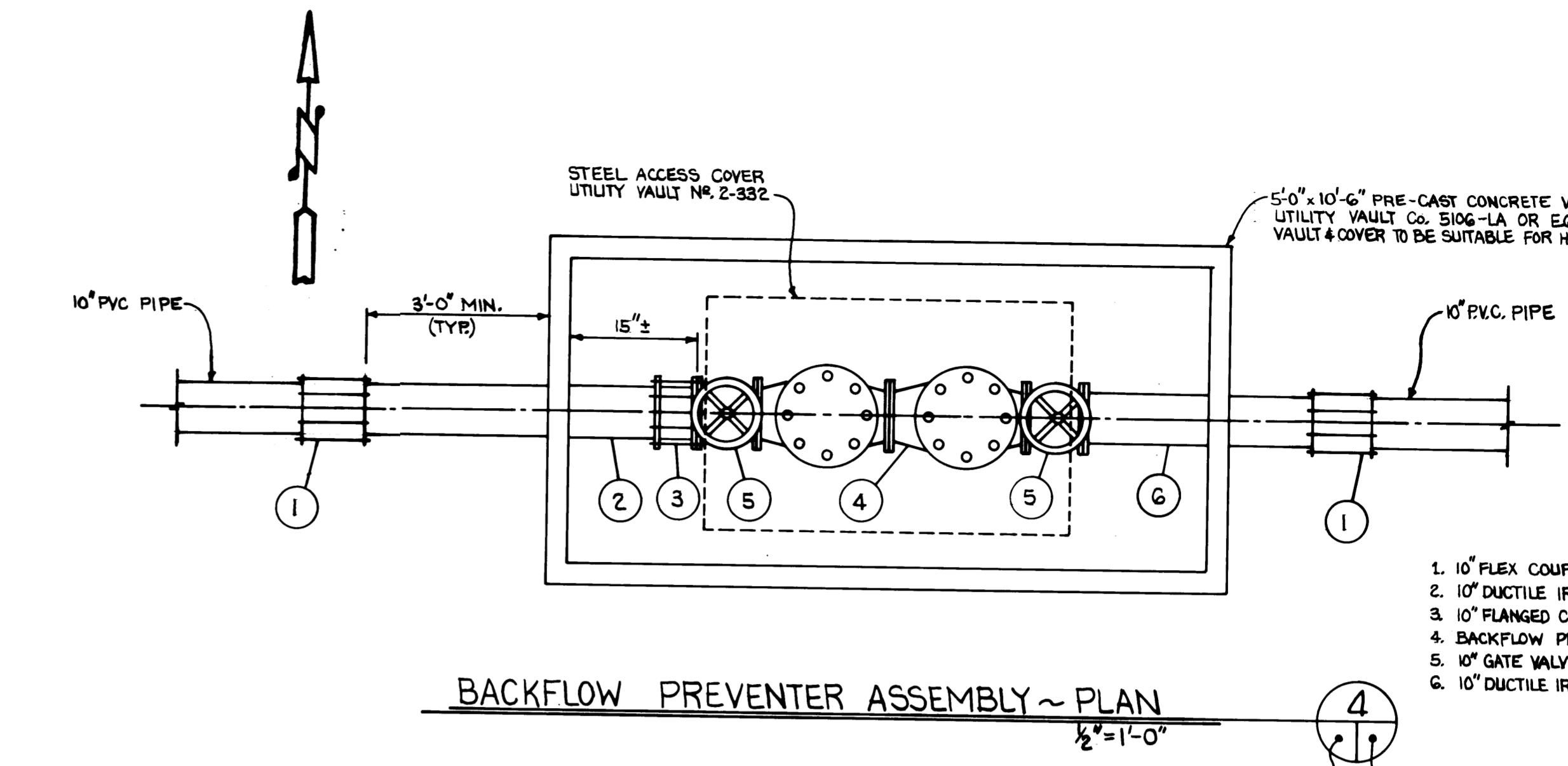


LIDS FOR BREAKROOM PUMP STATION

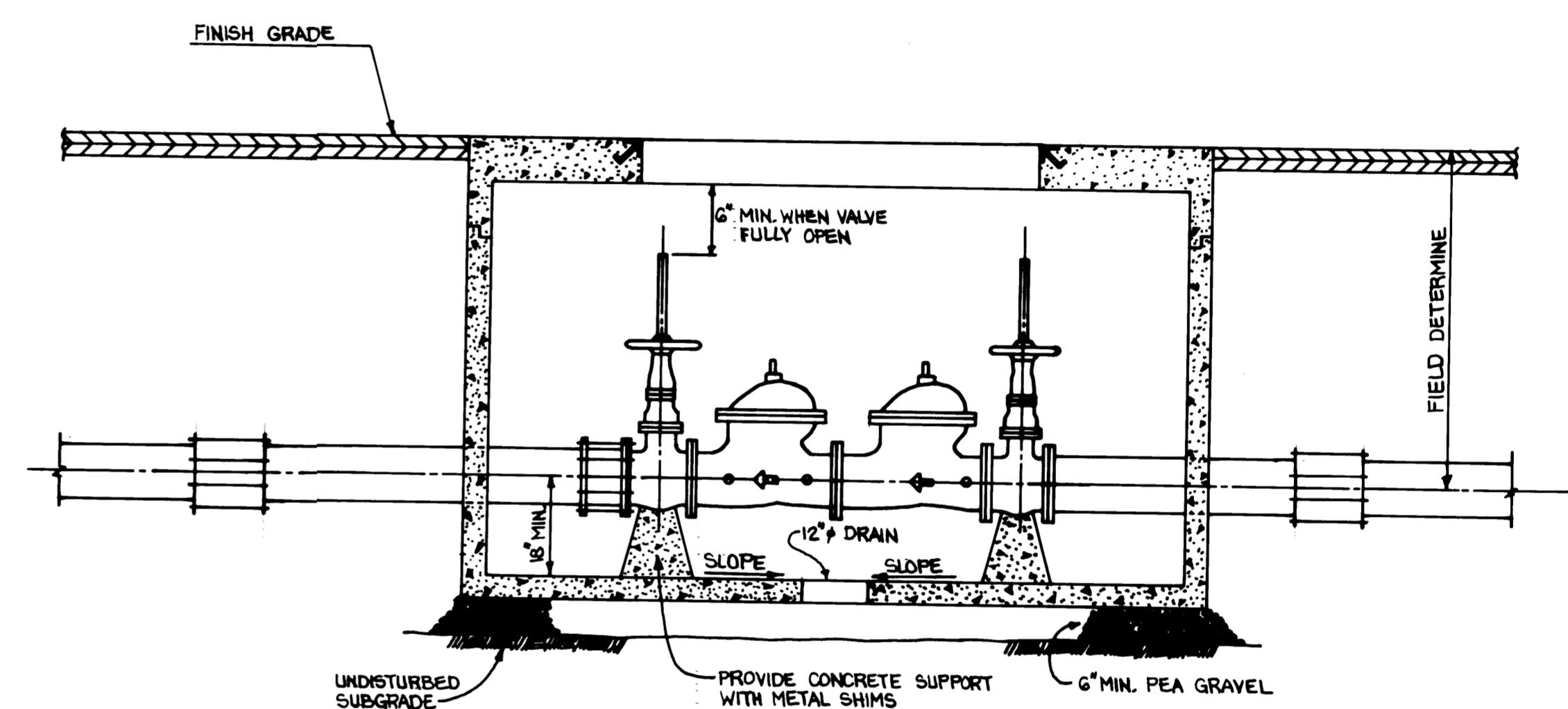


Whitacre Engineers, Inc.
Contract Engineering & Land Planning
2215 30TH STREET, P.O. BOX 857
TACOMA, WASHINGTON 98401-0857 206-272-0444

STEEL ACCESS COVER
UTILITY VAULT NR. 2-332
5'0" x 10'6" PRE-CAST CONCRETE VAULT
UTILITY VAULT CO. 510G-LA OR EQUAL
VAULT & COVER TO BE SUITABLE FOR H2O LOADING.



BACKFLOW PREVENTER ASSEMBLY ~ PLAN



BREAKROOM LIFT STATION LEGEND

1. Submersible Sewage Pumps (See Specs)
2. 4" 90° Base Elbow, Quick Disconnect
3. 4" Spool, Length as Required
4. 4" 90° Long Radius Elbow, FL
5. 4" Ductile Iron Pipe, FL x PE, Length as Required
6. 4" Flex Coupling
7. 4" Flanged Coupling Adaptor
8. 4" Check Valve, FL
9. 4" Plug Valve, FL
10. 4" Tee, FL
11. 60" x 6' Pre-Cast Concrete Manhole
12. Galvanized Slide Rails, Size per Manufacturer
13. Lifting Chain, Size per Manufacturer
14. Liquid Level Controls (See Specs)
15. Galvanized Steel Access Hatch (See Specs)
16. Valve Vault (See Specs)
17. Galvanized IR Access Ladder (APWA Standard Plan 41)
18. Concrete Supports with Steel Shim and Grout
19. 48" x 6' Pre-Cast Concrete Manhole
20. Strainer Basket (See Specs)
21. 4" Ductile Iron Pipe, PE, Length as Required

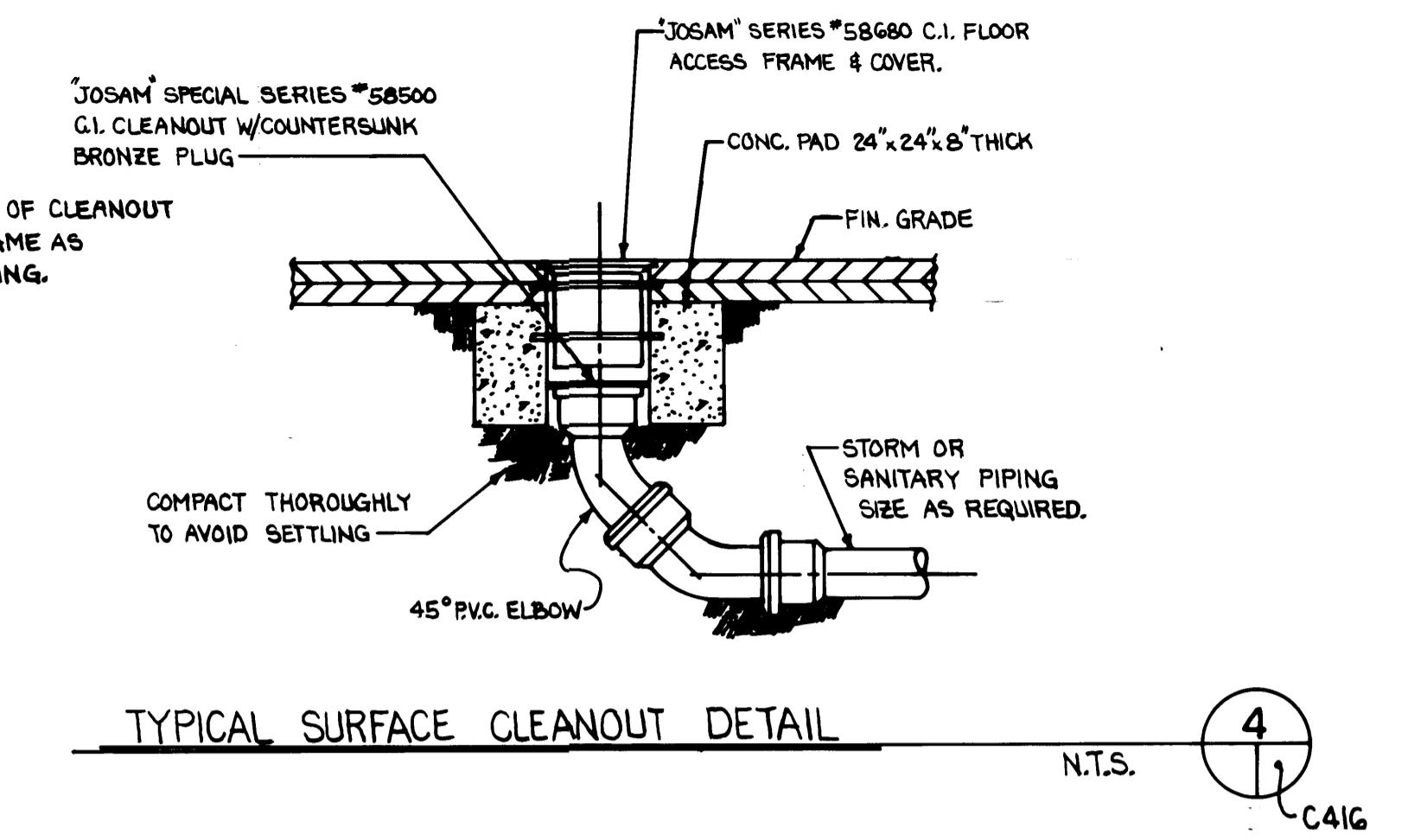
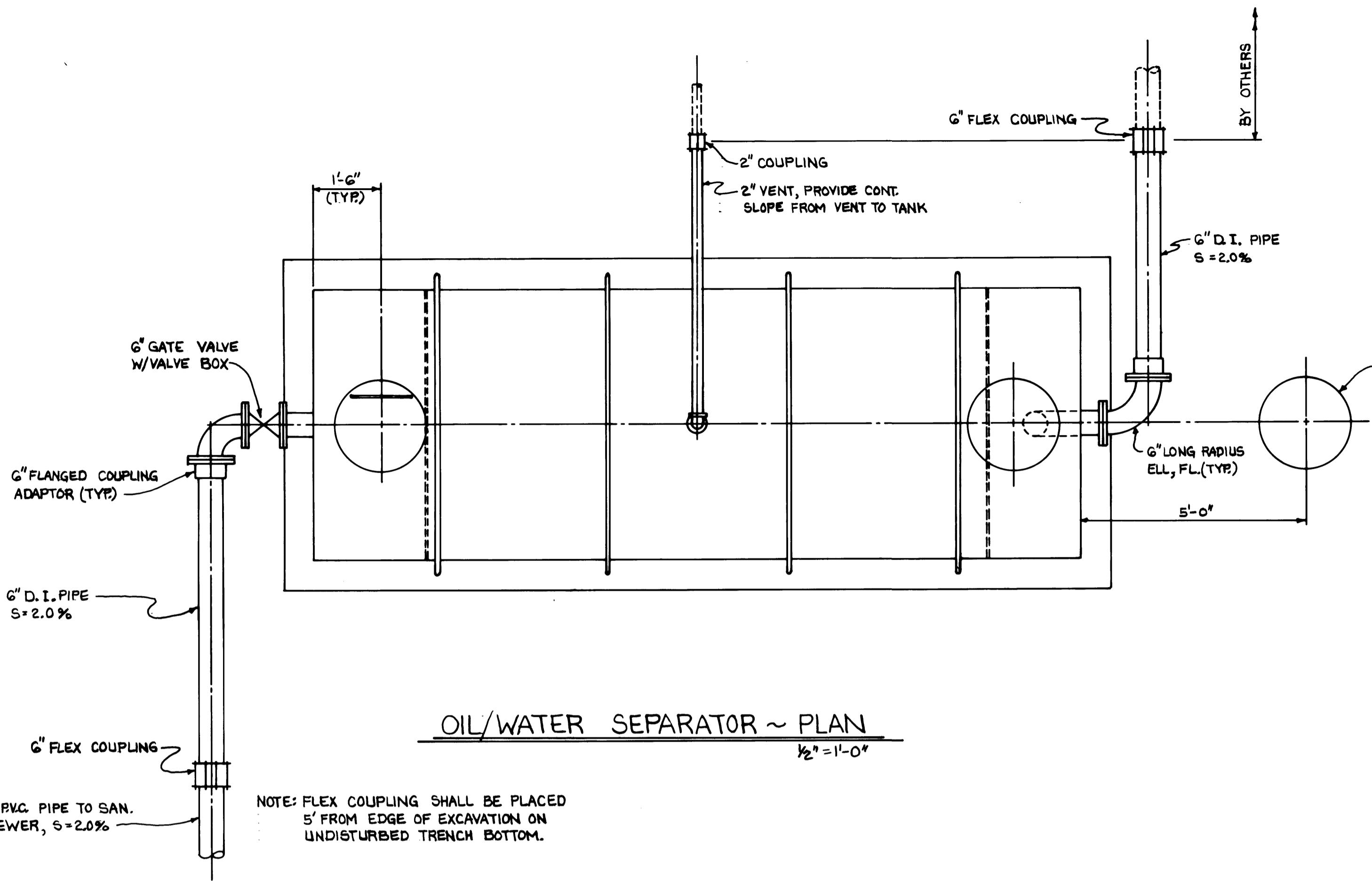
BACKFLOW PREVENTER ELEVATION



PORT OF TACOMA
TACOMA TERMINALS, INC.
SANITARY SEWER & WATER DETAILS

DRAWN B.C.
DATE
CHECKED *SO*
DATE *11/14/04*
CHECKED *JP*
DATE *5-30-04*
CONT. NO. 560

FIELD BOOK IS:		SCALE AS NOTED
APPROVED	<i>Janet Tempf</i>	5/3/04
REvised To As-Built	R.J.S.	EP-3860-23-C415
Mark	Revision	DATE 5/30/04
By	App.	DATE 5/30/04
Cont. Engineer		SHEET 44 OF 88



TYPICAL SURFACE CLEANOUT DETAIL

NOTE : SIZE OF CLEAN
SHALL BE SAME AS
SEWER PIPING.

A technical diagram showing a 45° PVC elbow fitting connected to a horizontal pipe. The elbow is secured with two metal bands. A note above the elbow reads: "COMPACT THOROUGHLY TO AVOID SETTLING". Another note to the right of the connection reads: "SANITARY FITTING SIZE AS REQUIRED".

TYPICAL SURFACE CLEANOUT DETAIL

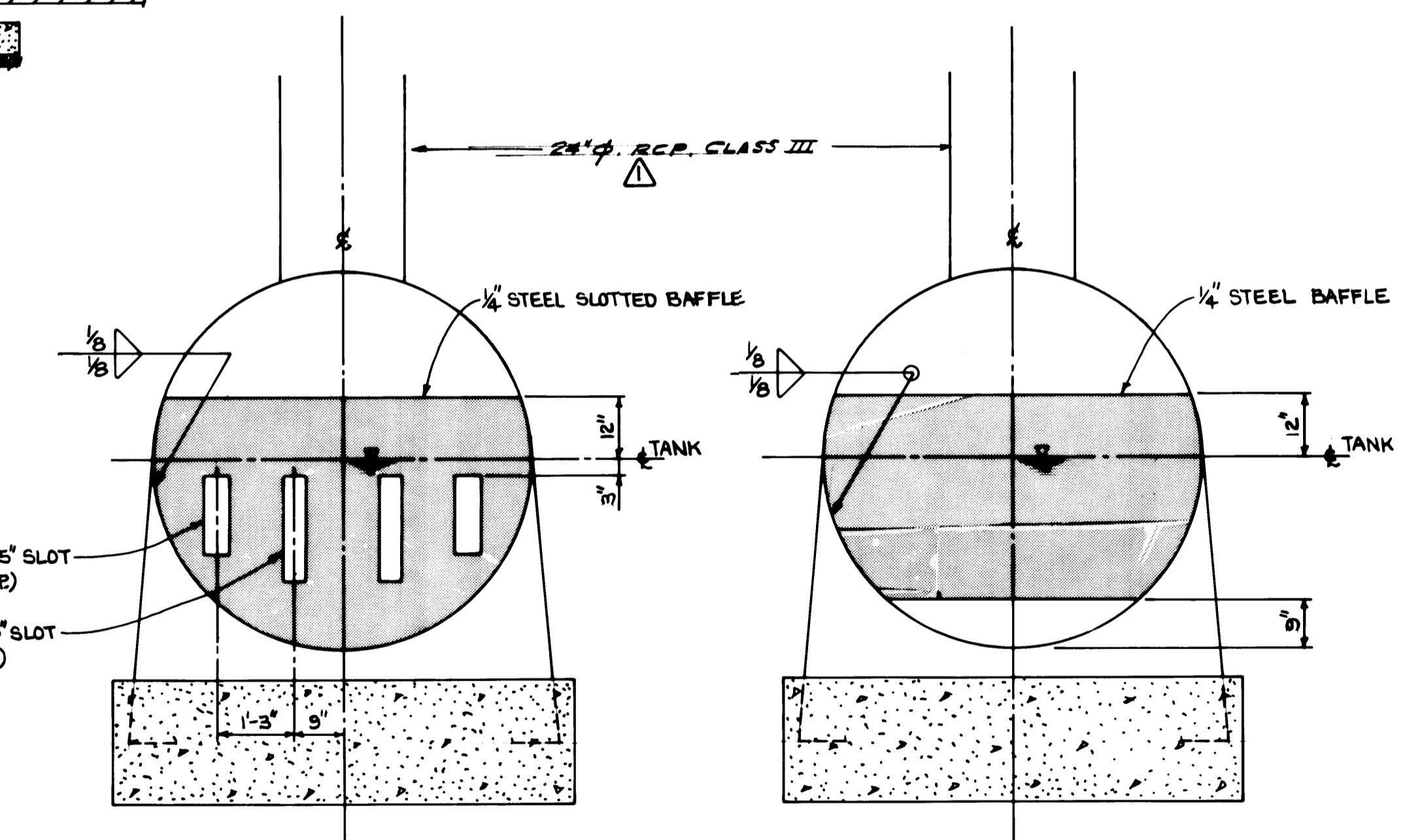
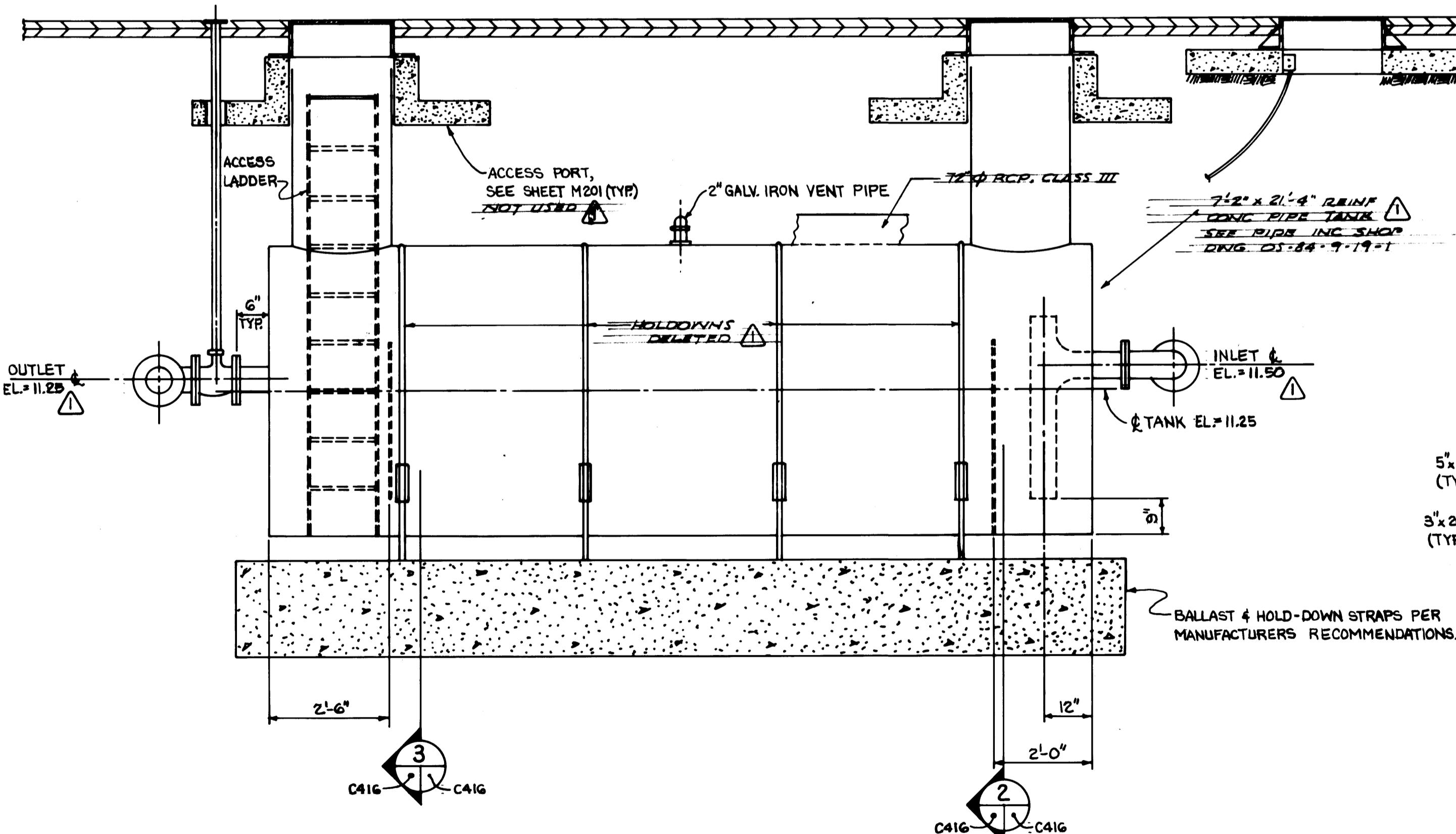
N

C410

OIL/WATER SEPARATOR ~ PLAN

$y_2'' = 1^{\circ} - 0$

6" P.V.C. PIPE TO SAN.
SEWER, S=2.0% ——————
NOTE: FLEX COUPLING SHALL BE PLACED
5' FROM EDGE OF EXCAVATION ON
UNDISTURBED TRENCH BOTTOM.



SECTIO

$$\frac{1}{2}'' = 1'-0''$$

SECTION

OIL/WATER SEPARATOR ~ ELEVATION

$\frac{1}{2}'' \equiv 1^{\circ}0''$

OIL/WATER SEPARATOR ~ MAINTENANCE BUILDING

Whitacre Engineers, Inc.
Consulting Engineering & Land Planning
2124 SO. "K" STREET P.O. BOX 3677
TACOMA, WASHINGTON 98445 (206) 272-5144

1

1

12

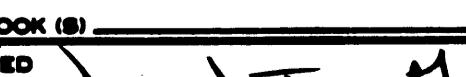
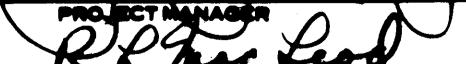
113AD 7

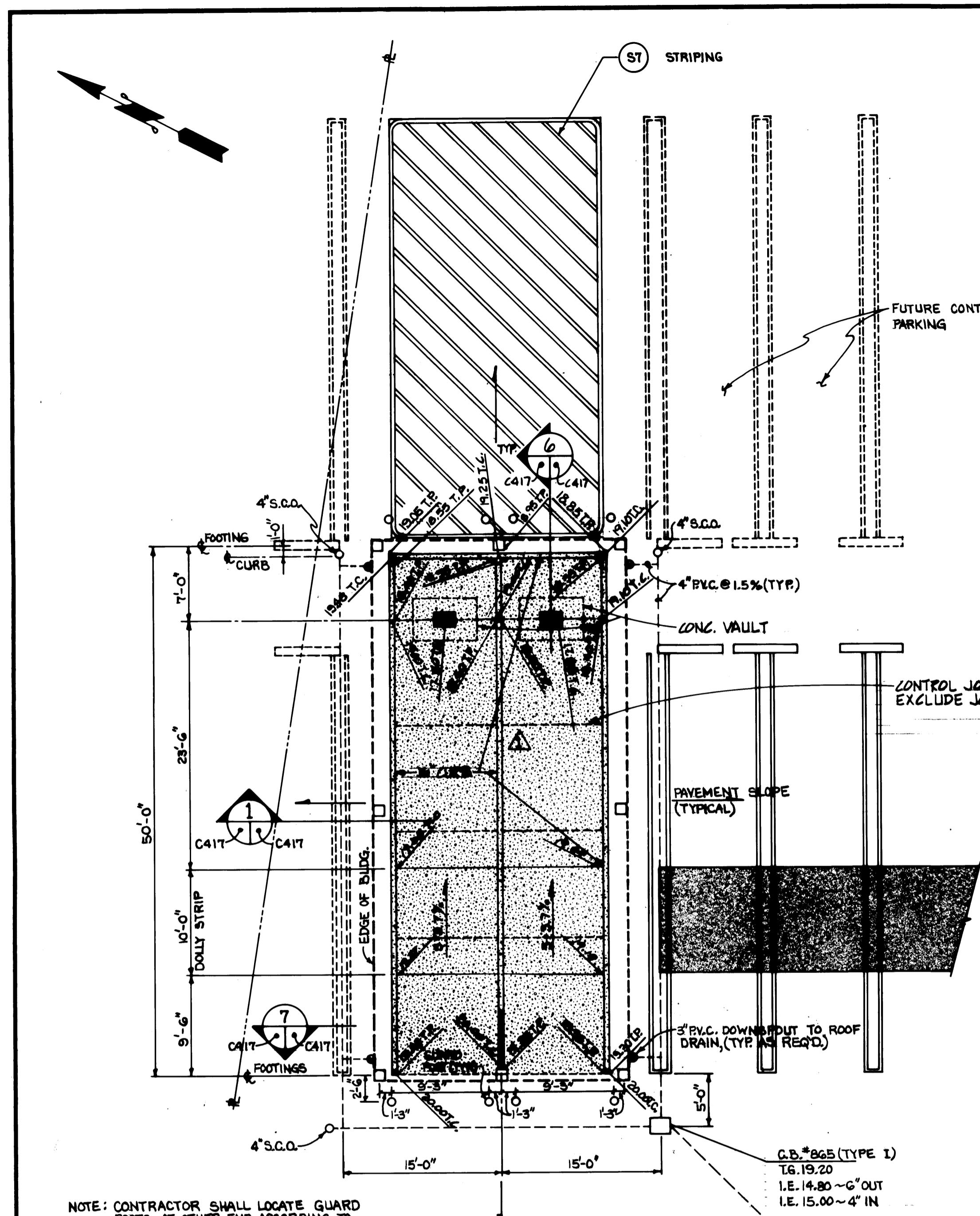
70 AS • A

WILT

12

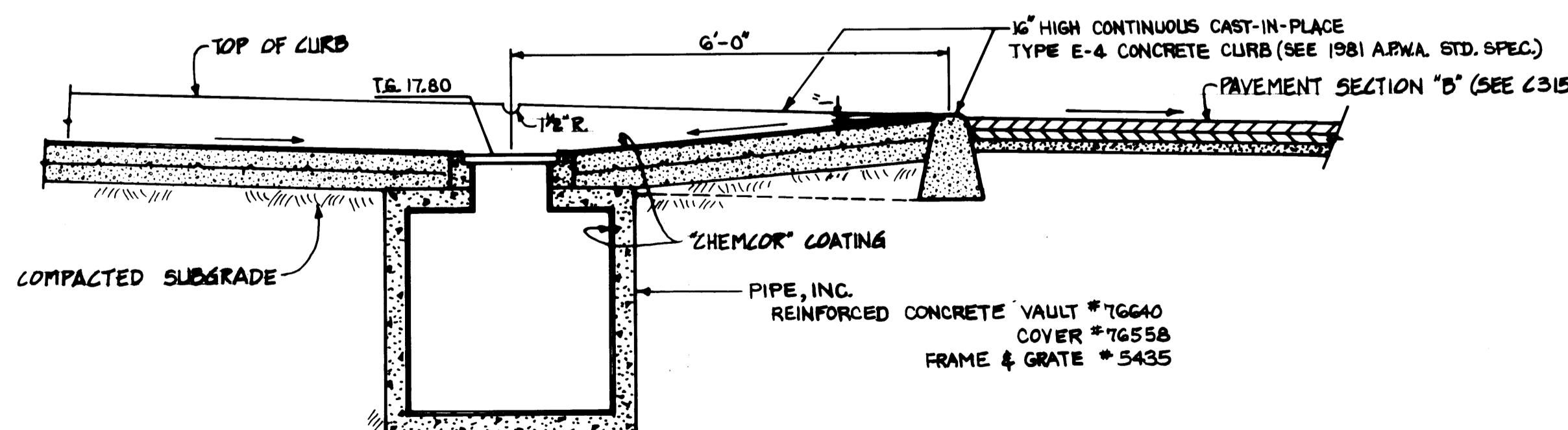
1.5.

DRAWN <u>B.C.</u>	PORT OF TACOMA	
DATE _____		
CHECKED <u>900</u>	TACOMA TERMINALS, INC.	
DATE <u>5-30-84</u>		
CHECKED <u>P</u>	SANITARY SEWER & WATER DETAILS	
DATE <u>5-30-84</u>		
CONT. NO. <u>560</u>		
FIELD BOOK (S) _____	SCALE <u>AS NOTED</u>	
APPROVED 	DRAWING NO. <u>EP-3880-23-C416</u>	
<u>11-18-84</u>	DATE <u>5/31/84</u>	DATE <u>5/31/84</u>
PROJECT MANAGER 	DATE <u>5/31/84</u>	
DATE <u>5/31/84</u>	SHEET <u>45</u> OF <u>88</u>	
CHIEF ENGINEER 		



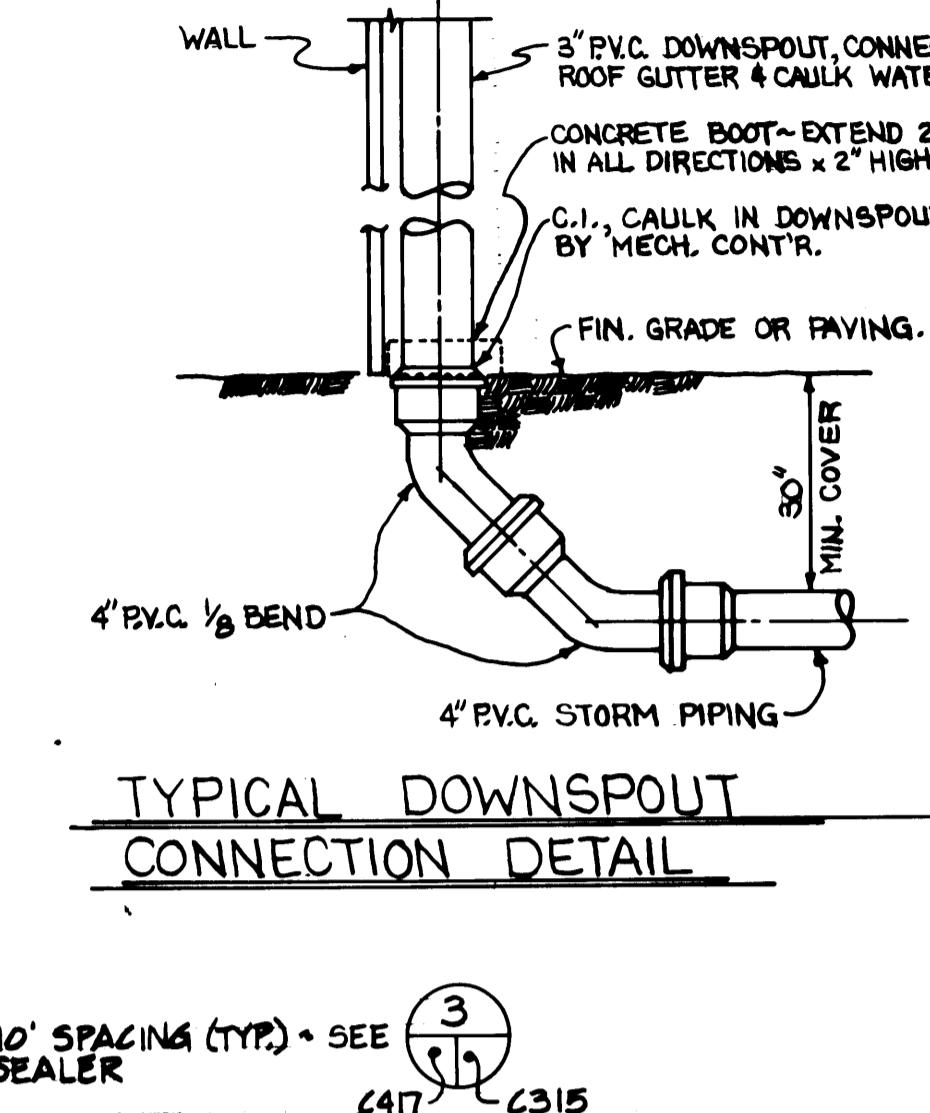
NOTE: CONTRACTOR SHALL LOCATE GUARD
POSTS AT OTHER END ACCORDING TO
DIMENSIONS SHOWN.

1 Spray "CHEMCOR", a chemical resistant coating produced by the Coralon Company to a minimum of 40 mils thick over the entire concrete surface, including interior sides of curbs and tanks. An abrasive grit shall be applied while the coating is setting up and is still tacky. The concrete shall be semi-coarse finished (not broomed) for maximum adhesion and shall be minimum of 30 days old prior to "CHEMCOR" application.

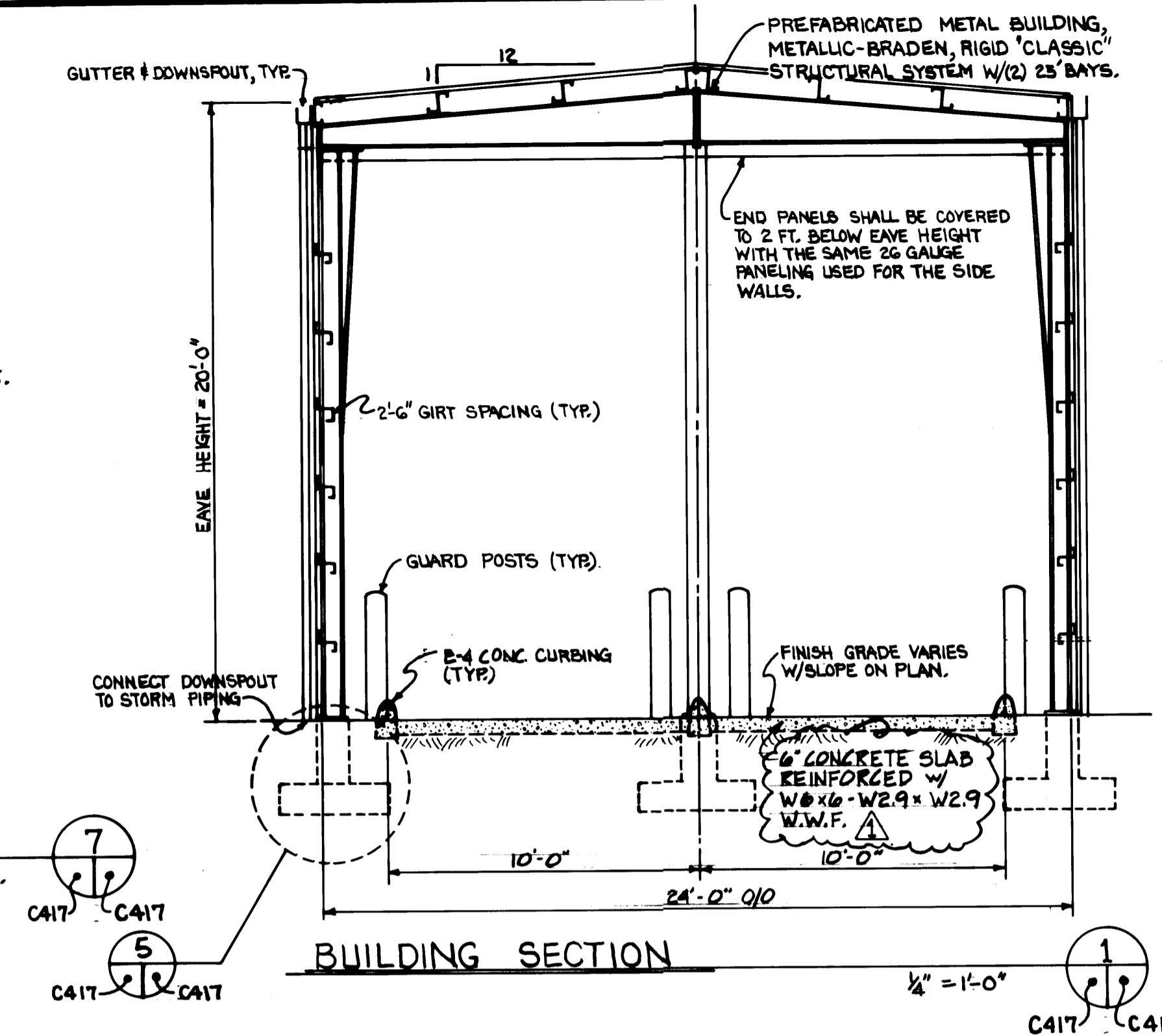


SECTION

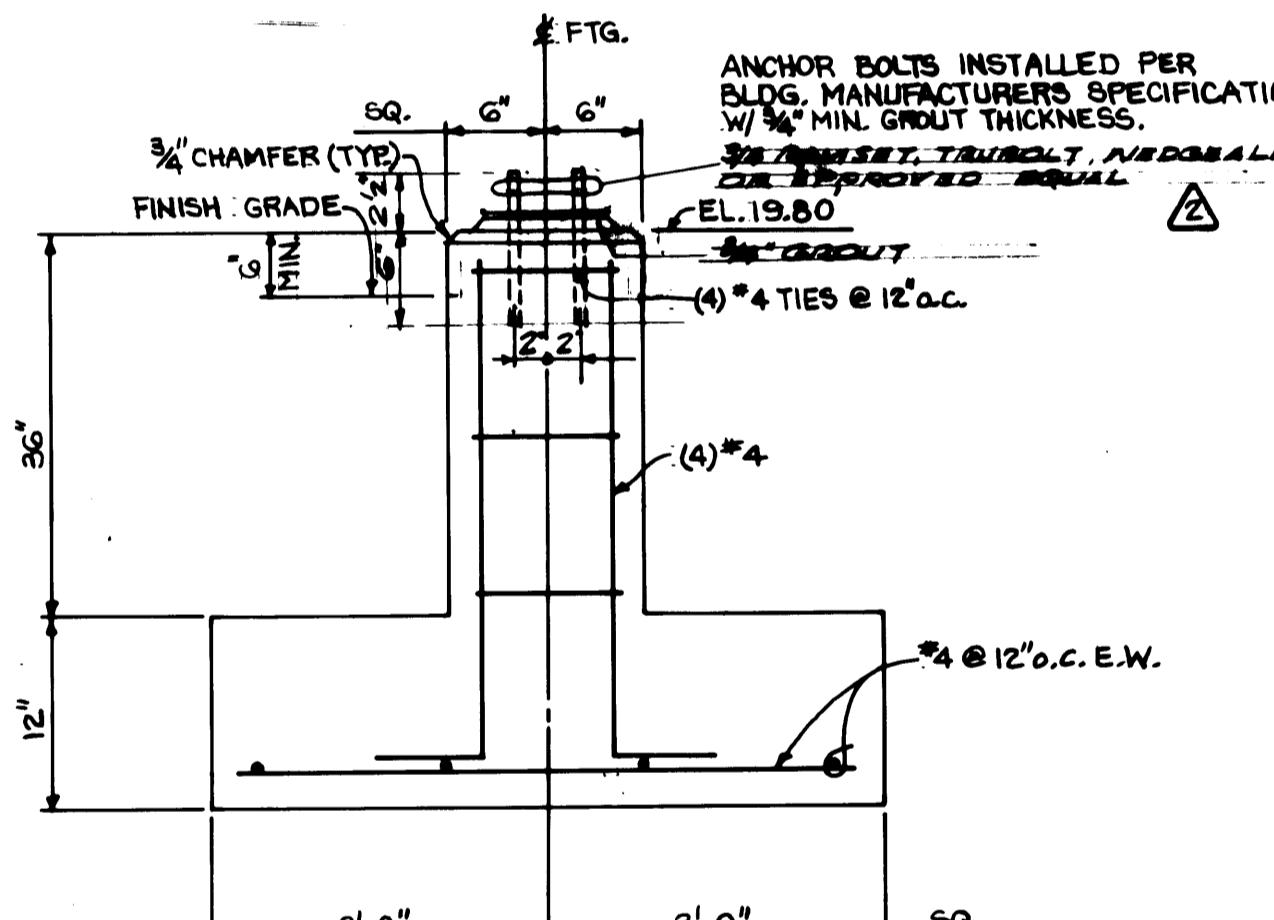
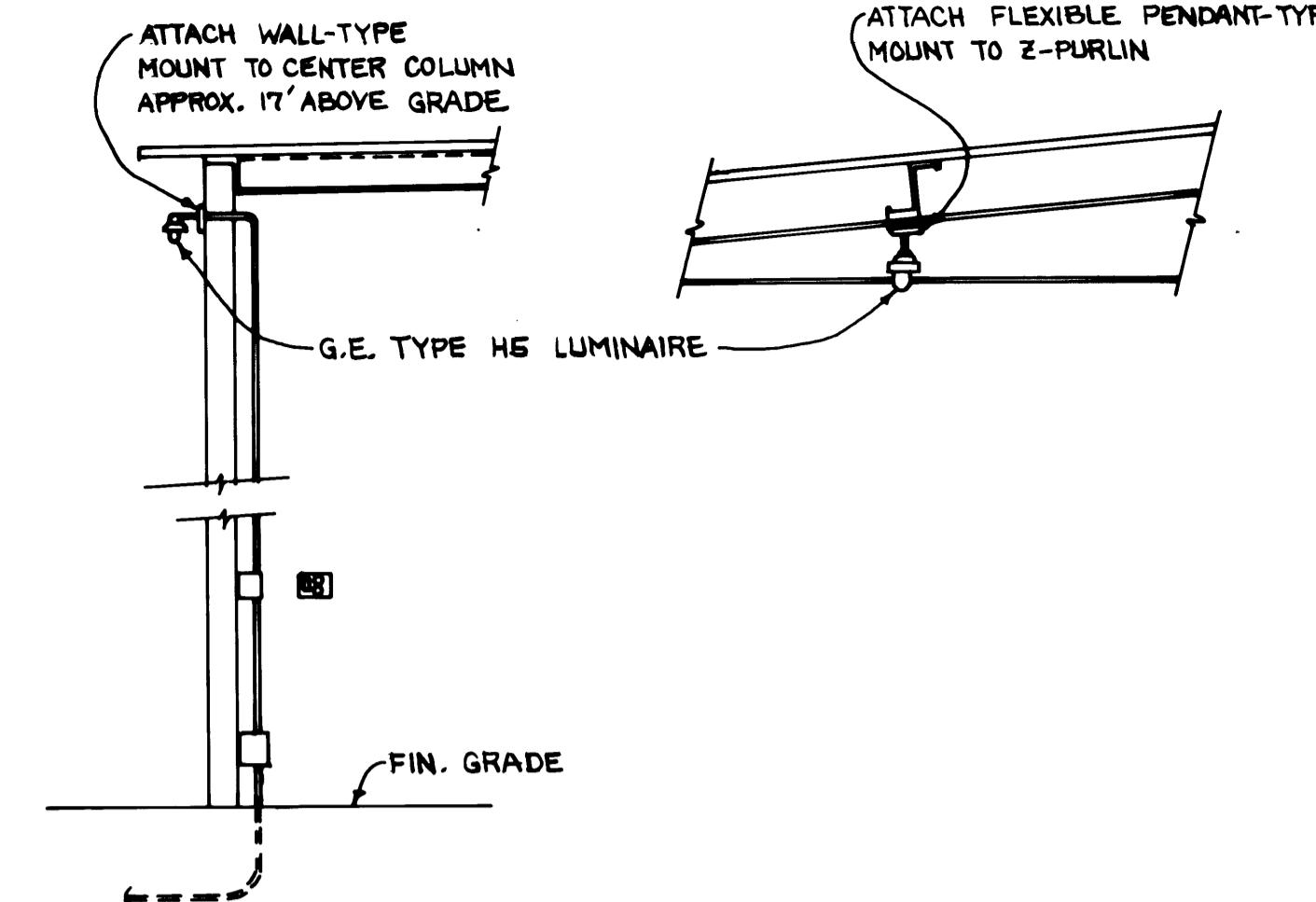
N.T.S.
C417 C



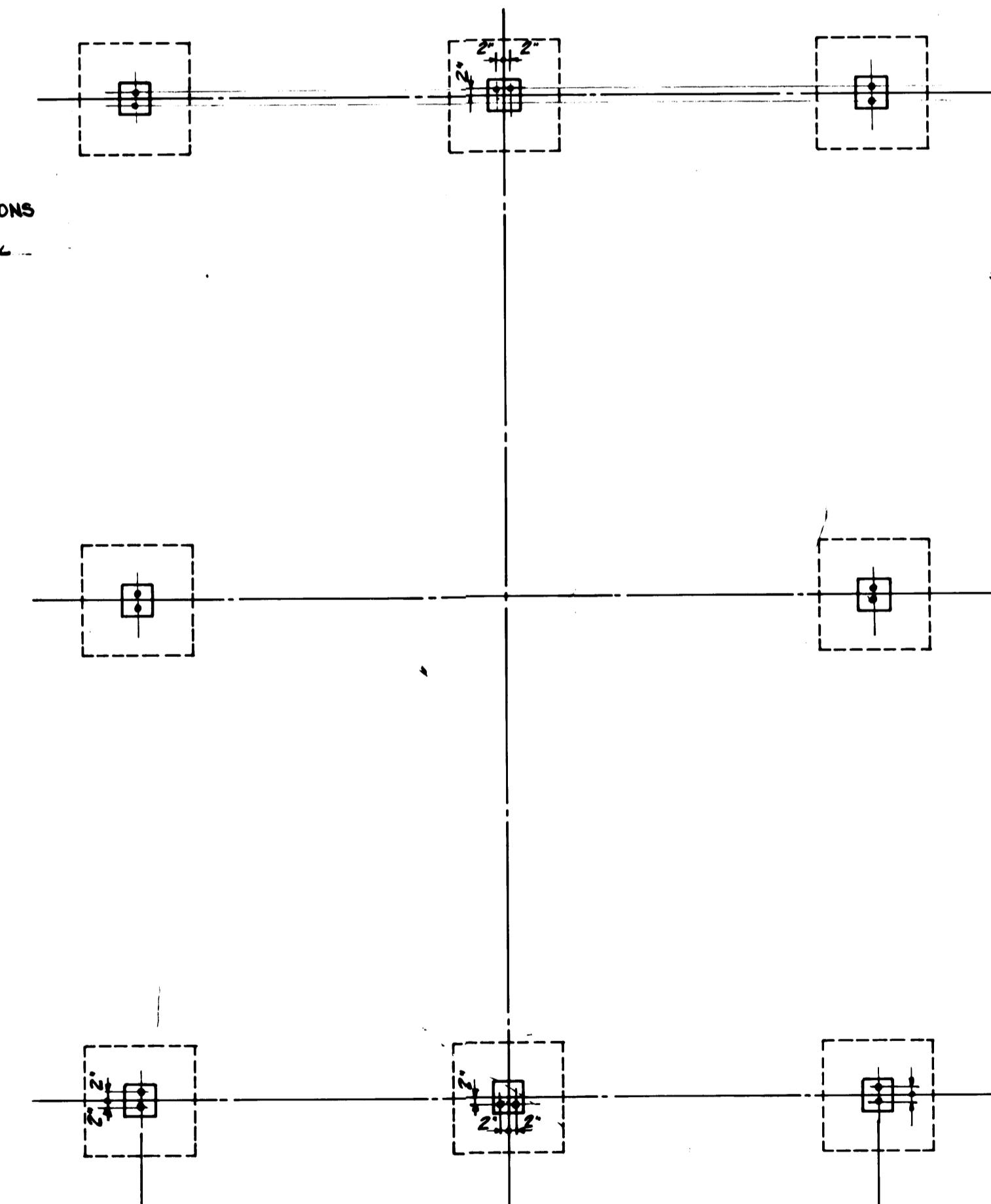
TYPICAL DOWNSPOU CONNECTION DETAIL



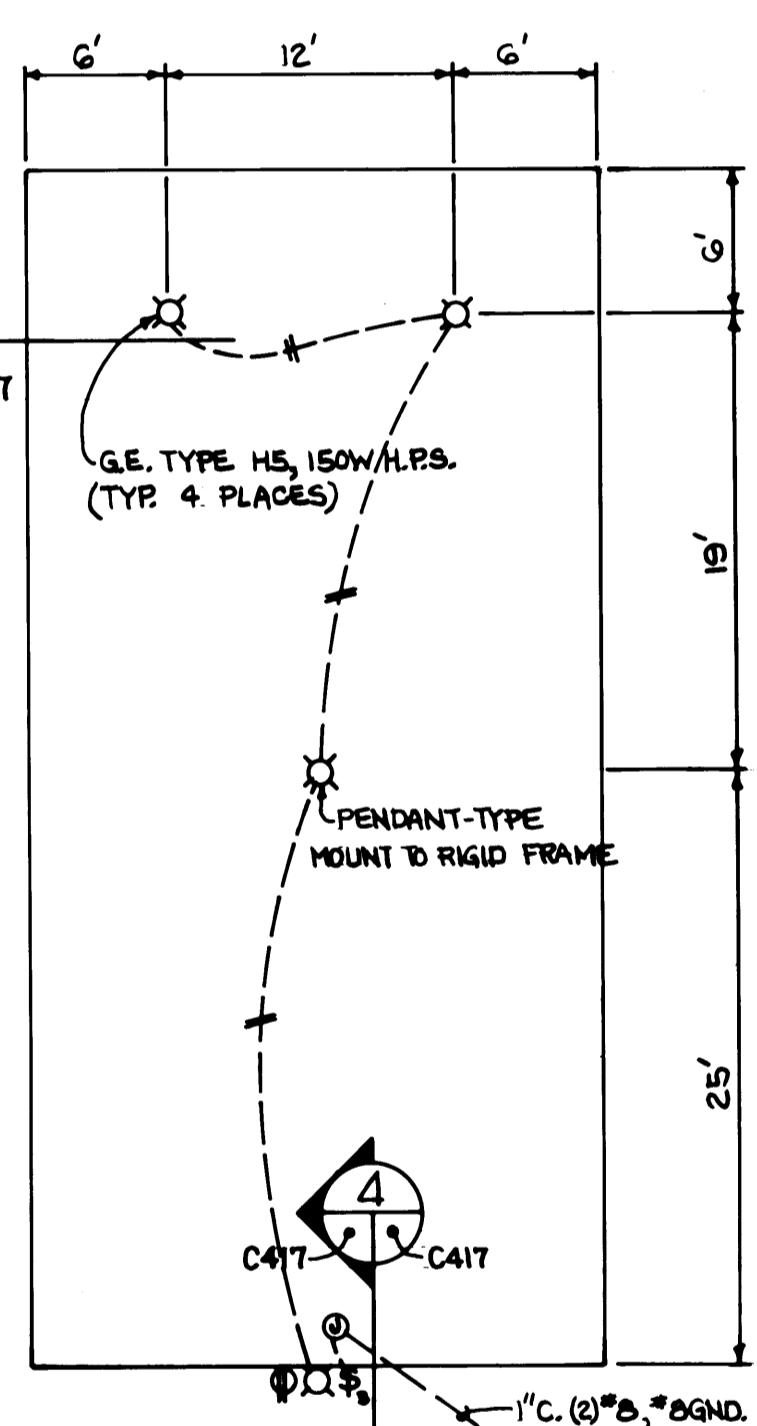
LIGHT FIXTURE MOUNTING DETAILS



FOOTING DETAIL

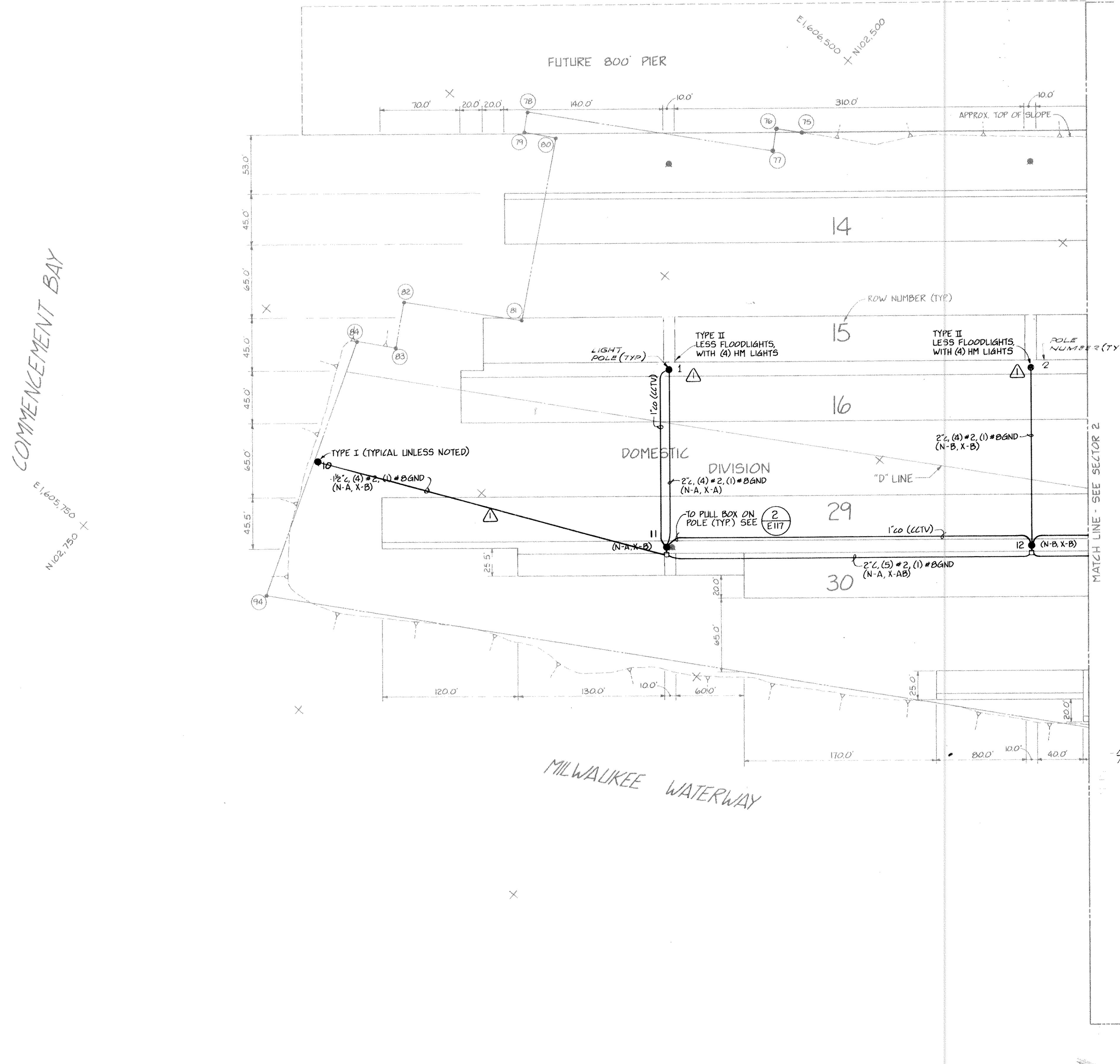


FOUNDATION PLAN



ELECTRICAL PLAN

DRAWN <u>B.C.</u>	PORT OF TACOMA	
DATE <u>5-30-84</u>		
CHECKED <u>A.T.P.</u>	TACOMA TERMINALS, INC.	
DATE <u>5-30-84</u>		
CHECKED <u>P</u>	HAZARDOUS WASTE CONTAINMENT	
DATE <u>5-30-84</u>		
CONT. NO. <u>560</u>		
FIELD BOOK <u>(1)</u>	SCALE <u>AS NOTED</u>	DRAWING NO. <u></u>
APPROVED <u>John Farnsworth</u>	<u>5/31/84</u>	<u>EP-3880-23-C417</u>
PROJECT MANAGER <u>John Farnsworth</u>	DATE <u>5/31/84</u>	SHEET <u>46</u> OF <u>88</u>
CONTRACTOR <u>John Farnsworth</u>	DATE <u>5/31/84</u>	



LEGEND

AREA LIGHTING CIRCUIT CODE:

- N - NORTH AREA
- S - SOUTH AREA
- P - PIER AREA
- V - VIADUCT AREA
- N-AB - NORTH AREA, PHASES A+B
- X - SECURITY ALL AREAS
- #BND - 8 AWG GROUND WIRE
- #10NEUT - 10 AWG NEUTRAL WIRE
- 2" - 2" SCHEDULE 80 PVC CONDUIT
- 2"CO - SAME, CONDUIT ONLY
- 2"RGS - 2" PVC COATED RIGID GALVANIZED STEEL CONDUIT

EAST AREA

W - WEST AREA

I - INT'L ACCESS ROAD

L - LEVEE ACCESS ROAD

FIRE ALARM WIRING CODE:
12/3 SH ~ (3) CONDUCTOR 12 AWG SHIELDED

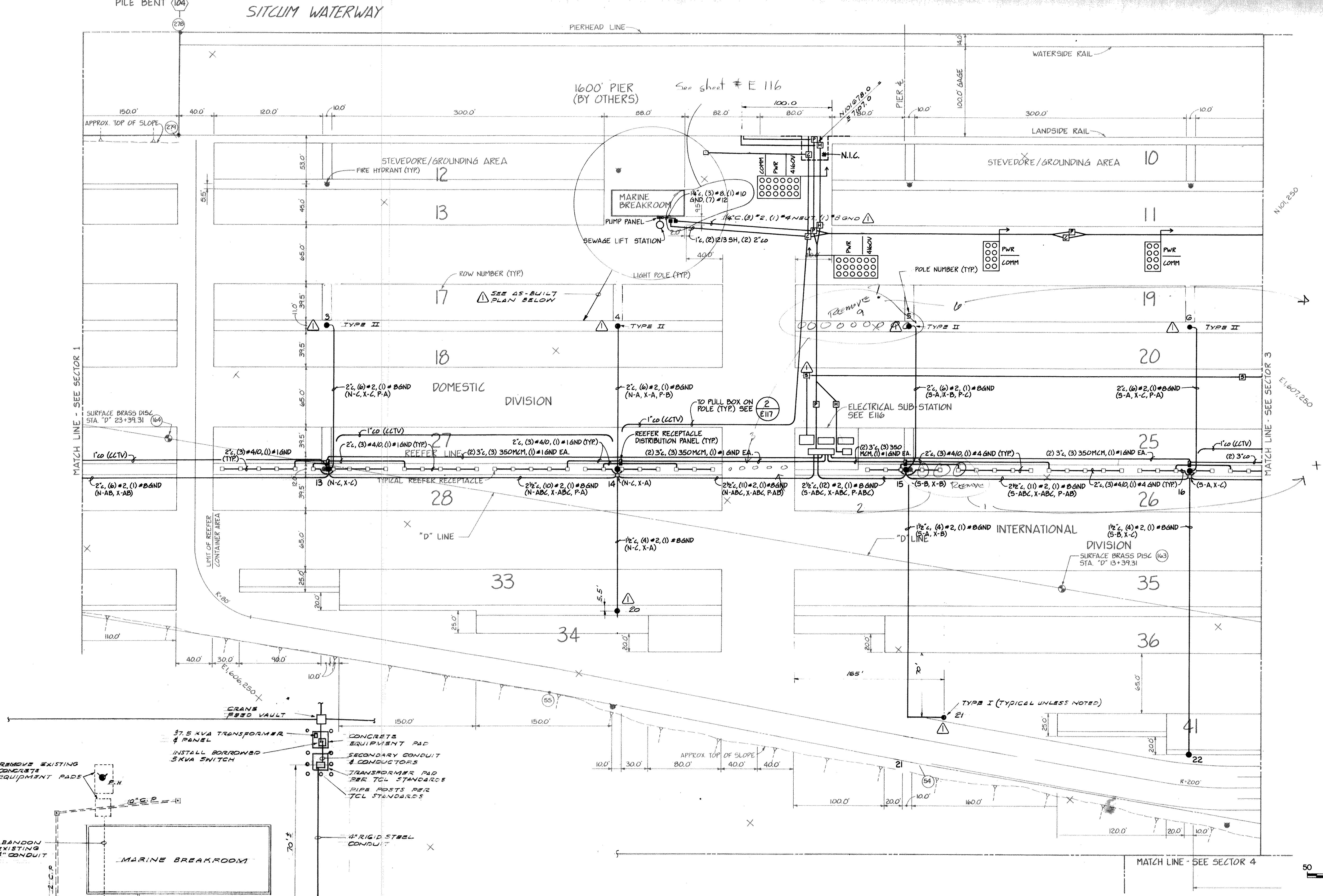
GENERAL CODE:

- HANDBHOLE, AS NOTED, OR BY BUILDING CONTRACTOR
- [] BURIED ENCASED DUCT SYSTEM, HS-20 LOADING
- BURIED SCHEDULE 80 PVC CONDUIT
- HANDBHOLE, 3030LA, AT LIGHT POLES REQUIRING SPLICING
- [*] MANHOLE REQUIRING 100 KIP LOAD CAPACITY
- CCTV CLOSED CIRCUIT TELEVISION
- FLOODLIGHT, UNLESS NOTED
- STREET LIGHT

NOTE:
POWER & COMMUNICATIONS MANHOLE SIZES:
UTILITY VAULT NUMBERS 557-1A WITH OVER
4 DUCTS ENTERING ANYSIDE, COVERS TO BE 30"
ROUND CAST IRON. UTILITY VAULT NUMBERS
447-1A WITH 4 DUCTS OR LESS ENTERING
ANYSIDE, COVERS TO BE 24" ROUND CAST IRON

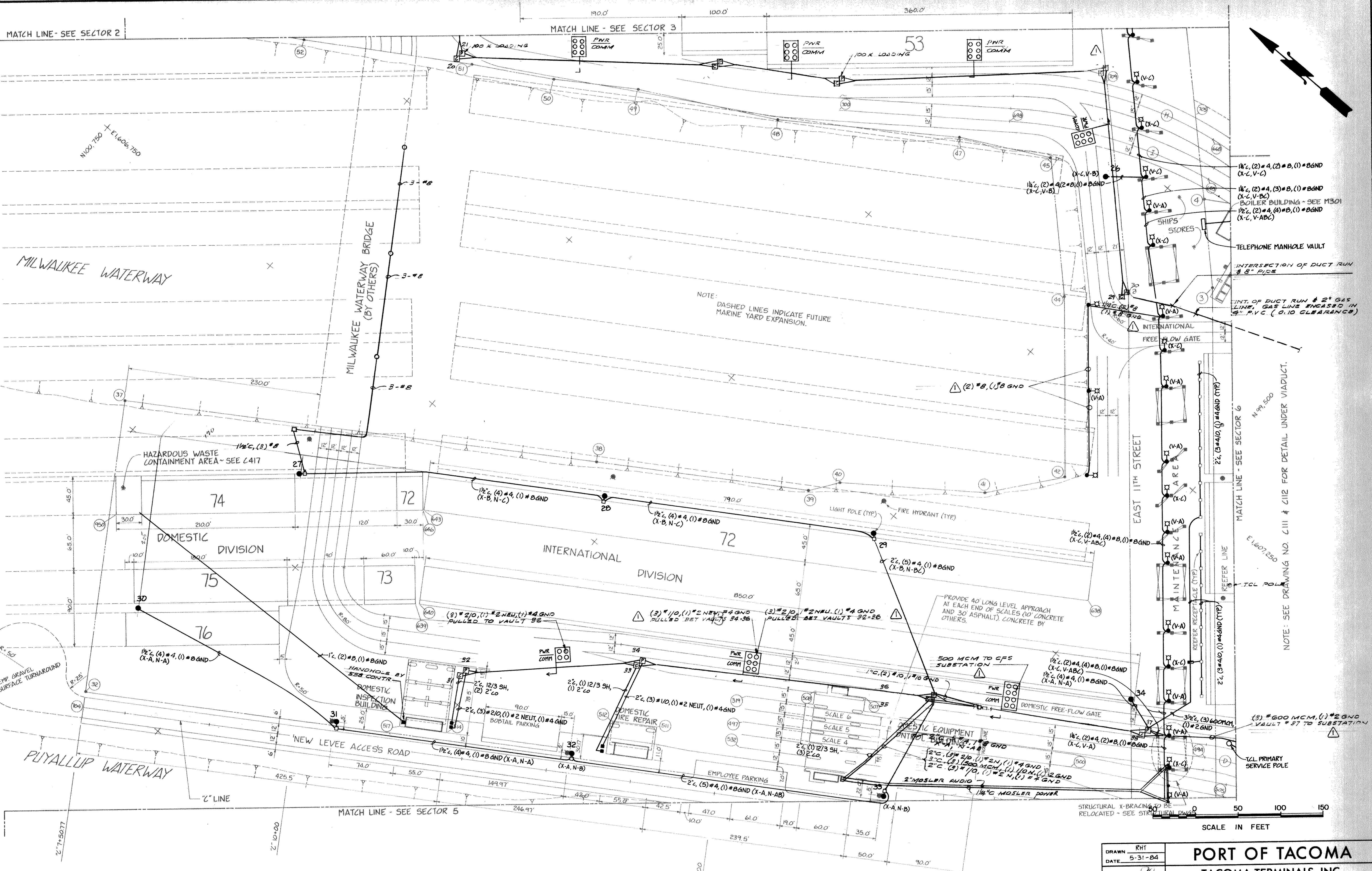
DRAWN	RHT
DATE	5-31-84
CHECKED	JJC
DATE	5-31-84
CHECKED	J
DATE	5-31-84
CONT. NO.	560
FIELD BOOK (S)	
APPROVED	5/31/84
PROJECT MANAGER	John L. Smith
CHIEF ENGINEER	John L. Smith
SCALE	AS NOTED
DRAWING NO.	EP-3880-23-E101
DATE	5/31/84
APP. DATE	5/31/84
SHEET	47 OF 88

SITCLIM WATERWAY



DRAWN	RHT
DATE	5-31-84
CHECKED	JRC
DATE	5-31-84
CHECKED	JP
DATE	5-31-84
CONT. NO.	560

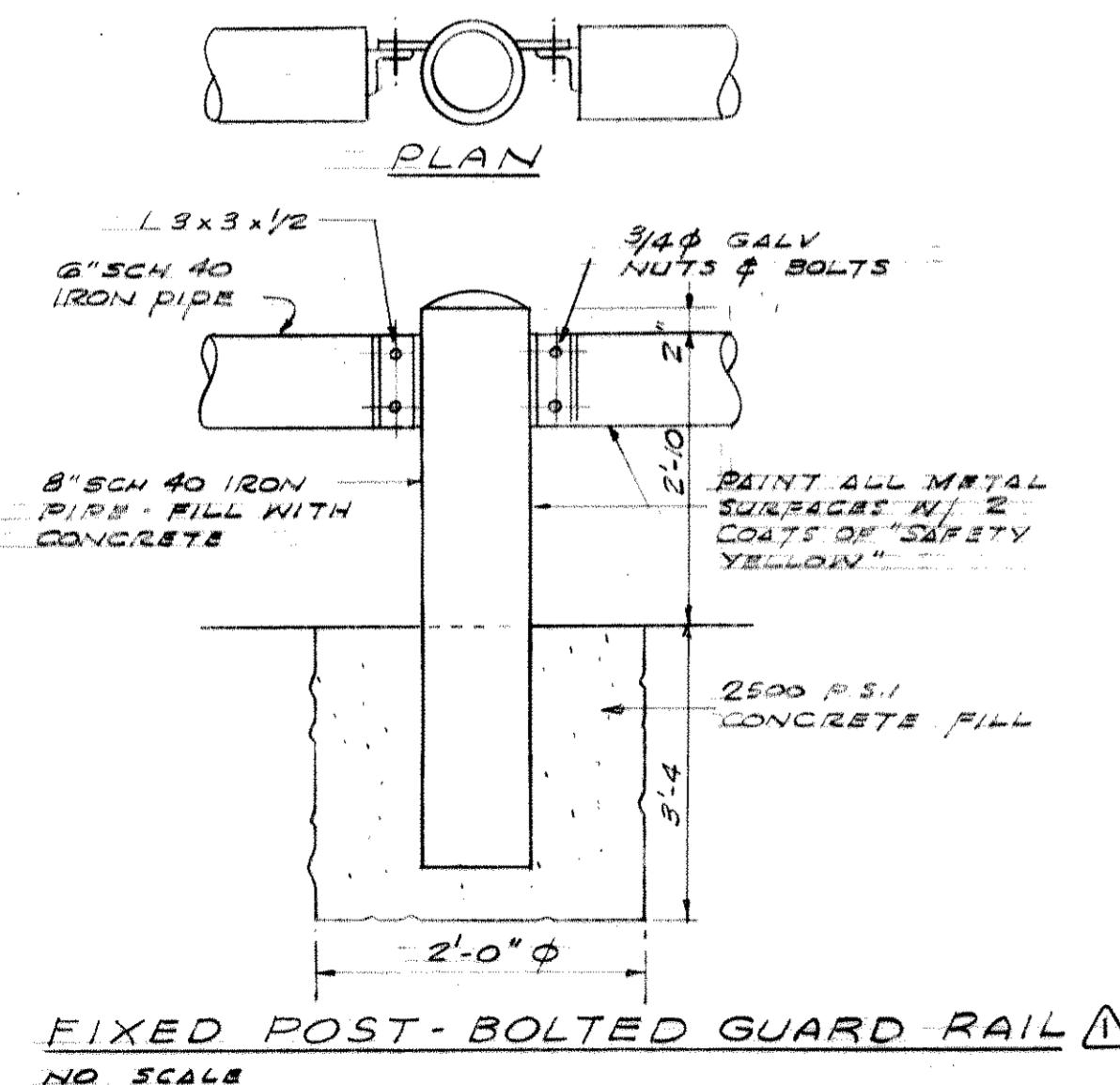
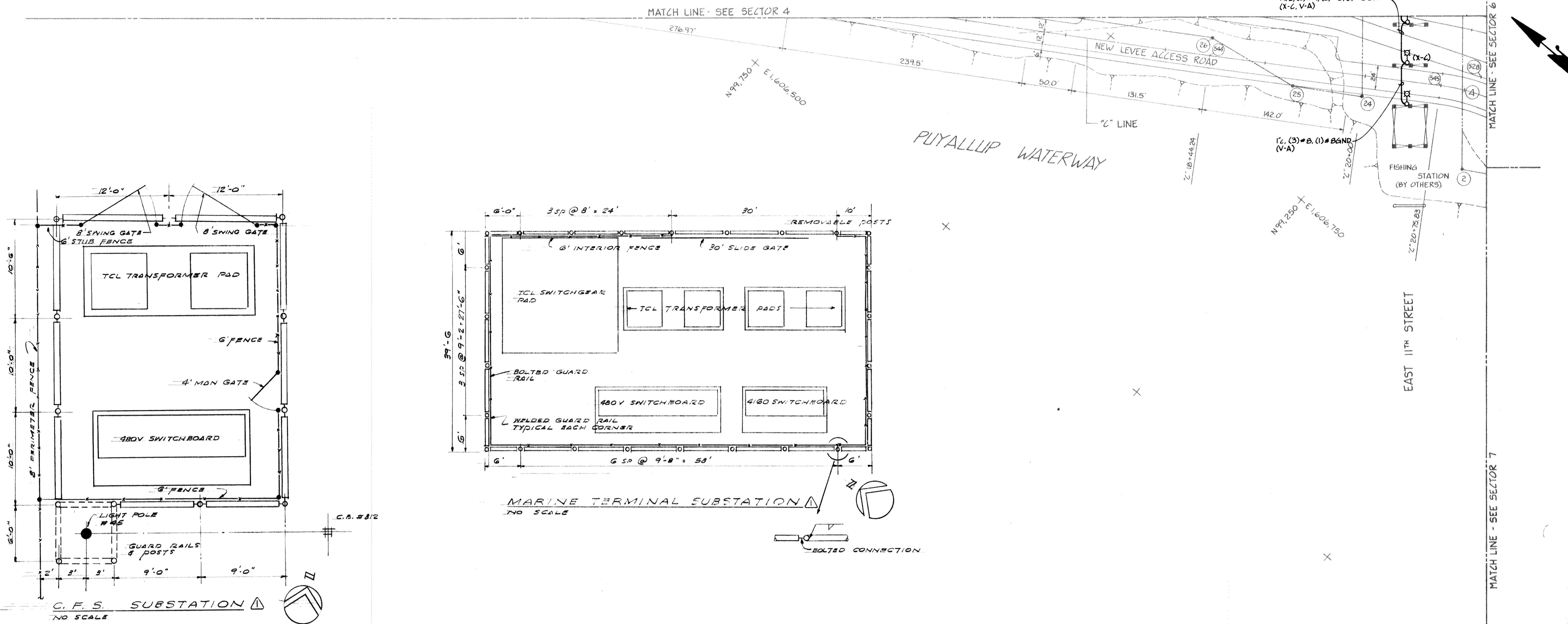
PORT OF TACOMA
TACOMA TERMINALS, INC.
POWER, LIGHTING &
COMMUNICATIONS PLAN



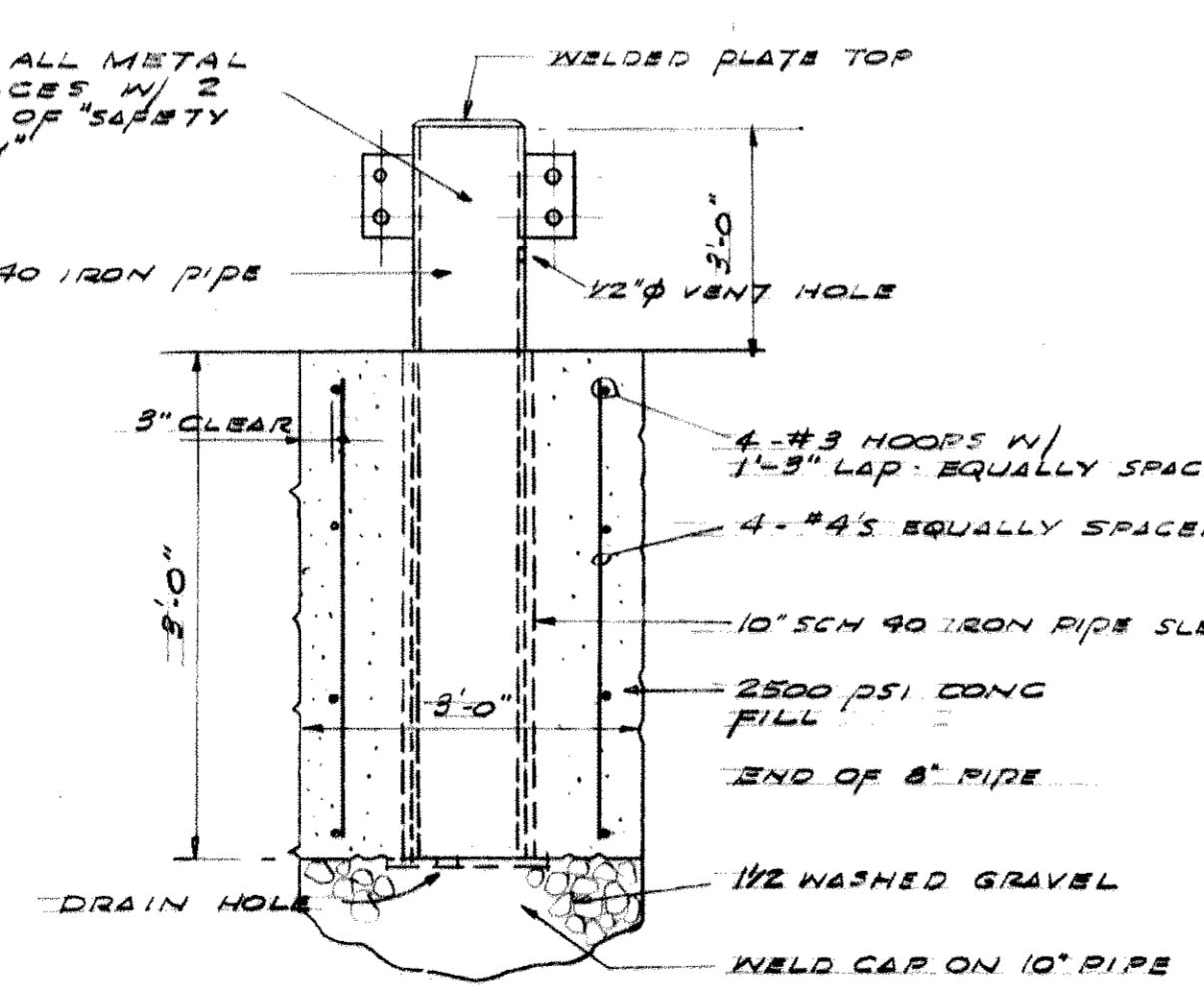
NOTE:
FOR PLACEMENT OF FIRE
HYDRANTS, LIGHT POLES AND
GUARD POSTS (TYPICAL (3))
LOCATIONS ON THIS SHEET) SEE

NOTE:
THE NUMBERING SYSTEM FOR SCALES
4, 5 & 6 IS FOR CONTRACT PURPOSES
ONLY.

DRAWN <u>RHT</u>	PORT OF TACOMA		
DATE <u>5-31-84</u>			
CHECKED <u>JL</u>	TACOMA TERMINALS, INC.		
DATE <u>5-31-84</u>			
CHECKED <u>P</u>	POWER, LIGHTING &		
DATE <u>5-31-84</u>	COMMUNICATIONS PLAN		
CONT. NO. <u>560</u>			
FIELD BOOK (S) _____	SCALE <u>AS NOTED</u>		
APPROVED 	DRAWING NO. <u>EP-3880-23-E104</u>		
PROJECT MANAGER 	<u>5/31/84</u>	DATE <u>5/31/84</u>	SHEET <u>50</u> OF <u>88</u>
CHIEF ENGINEER 	DATE <u>5/31/84</u>		



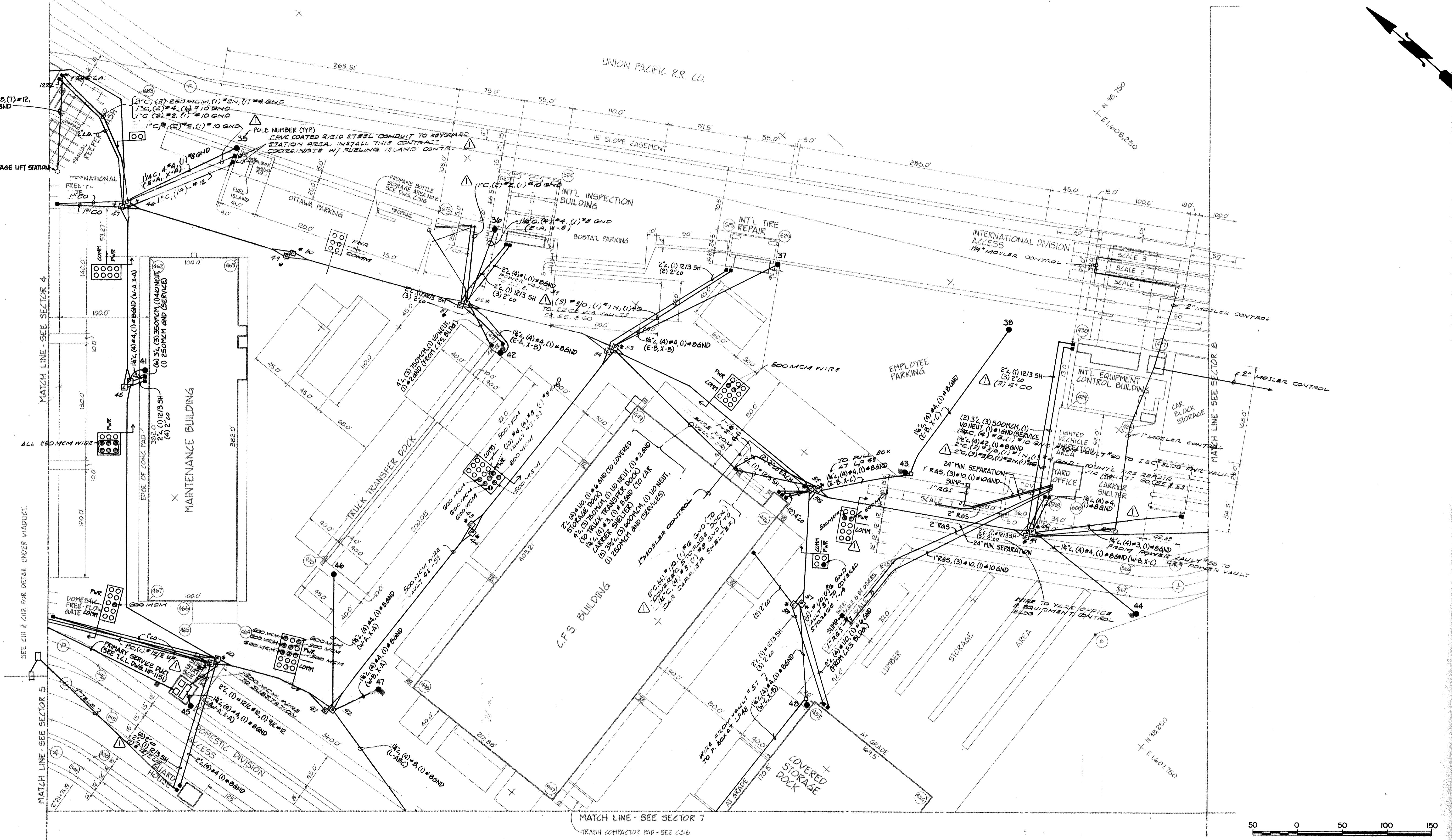
FIXED POST - BOLTED GUARD RAIL ▲
NO SCALE



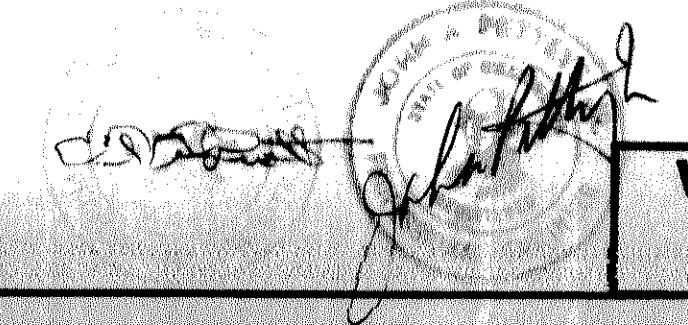
REMOVABLE GUARD POST ▲
NO SCALE

DRAWN	RHT	PORT OF TACOMA		
DATE	5-31-84			
CHECKED	PC	TACOMA TERMINALS, INC.		
DATE	5-31-84	POWER, LIGHTING &		
CHECKED	P	COMMUNICATIONS PLAN		
DATE	5-31-84			
CONT. NO.	560			
FIELD BOOK (S)			SCALE	AS NOTED
APPROVED			DRAWING NO.	
<i>John T. ...</i>			5/31/84	
PROJECT MANAGER			DATE	EP-3880-23 E105
<i>John T. ...</i>			DATE	51 88
CHIEF ENGINEER			SHEET	OF

Whitacre Engineers, Inc.
Consulting Engineering & Land Planning
3004 5th Avenue, P.O. Box 5077
TACOMA, WASHINGTON 98405 (206) 272-5144



DRAWN	RHT
DATE	5-31-84
CHECKED	JAC
DATE	5-31-84
CHECKED	P
DATE	5-31-84
CONT. NO.	560
FIELD BOOK (S)	
APPROVED	5/31/84
PROJECT MANAGER	John T. Whitacre
CHIEF ENGINEER	John T. Whitacre
SCALE	AS NOTED
DRAWING NO.	EP-3880-23-E106
DATE	5/31/84
SHEET	52 OF 88



REVISION	BY APP.	DATE
A	REVISOR TO AS BUILT	5-15 11/2055

MATCH LINE - SEE SECTOR 5

PUYALLUP RIVER

MATCH LINE - SEE SECTOR 6

DOMESTIC DIVISION ACCESS

PROPANE BOTTLE
STORAGE AREA NO. 1
SEE DWG. E116

350.0

X

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X

X

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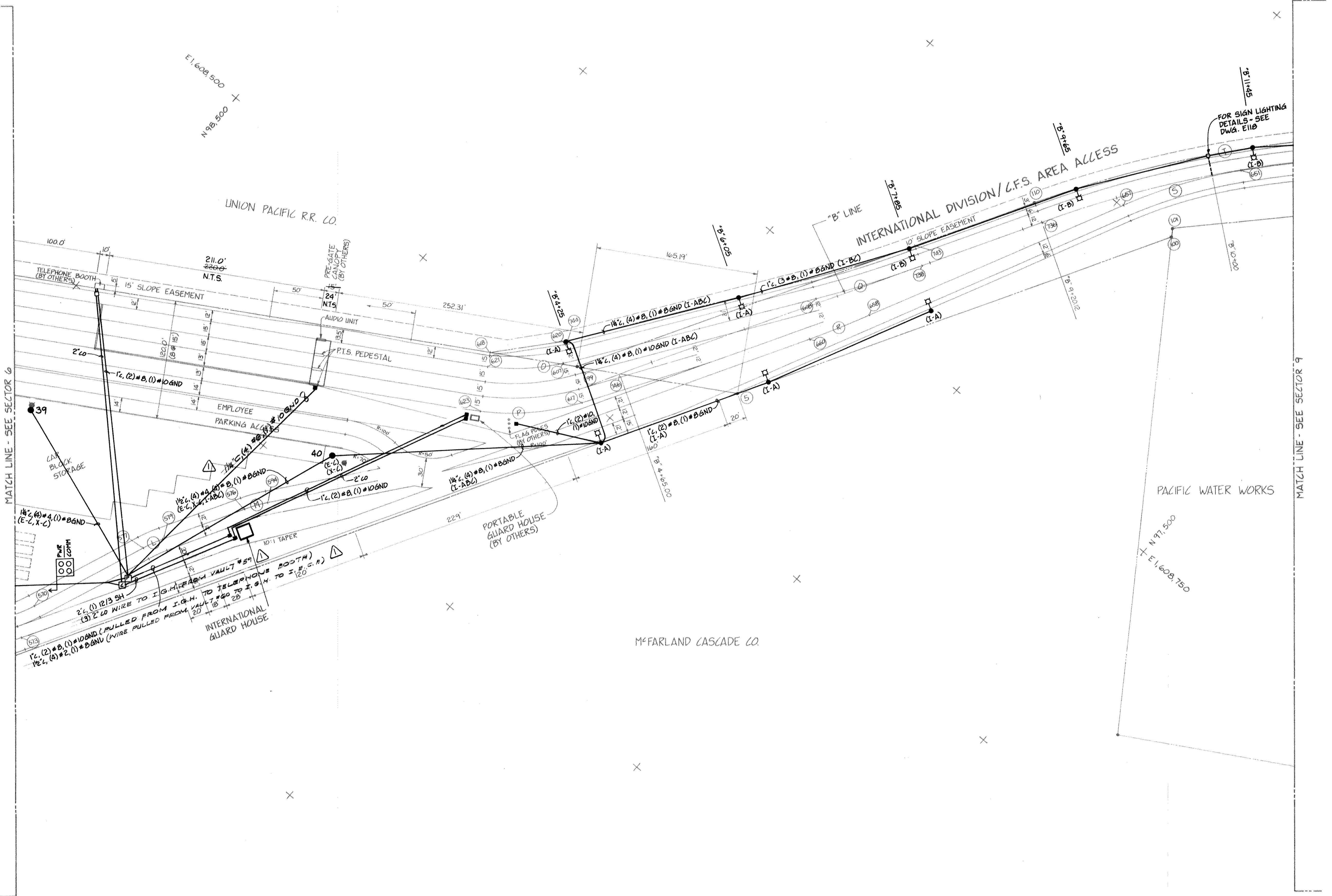
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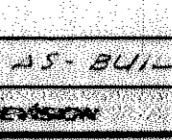
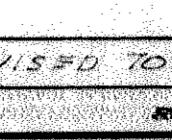
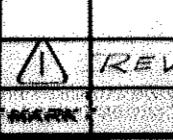
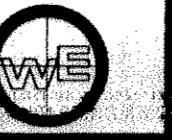
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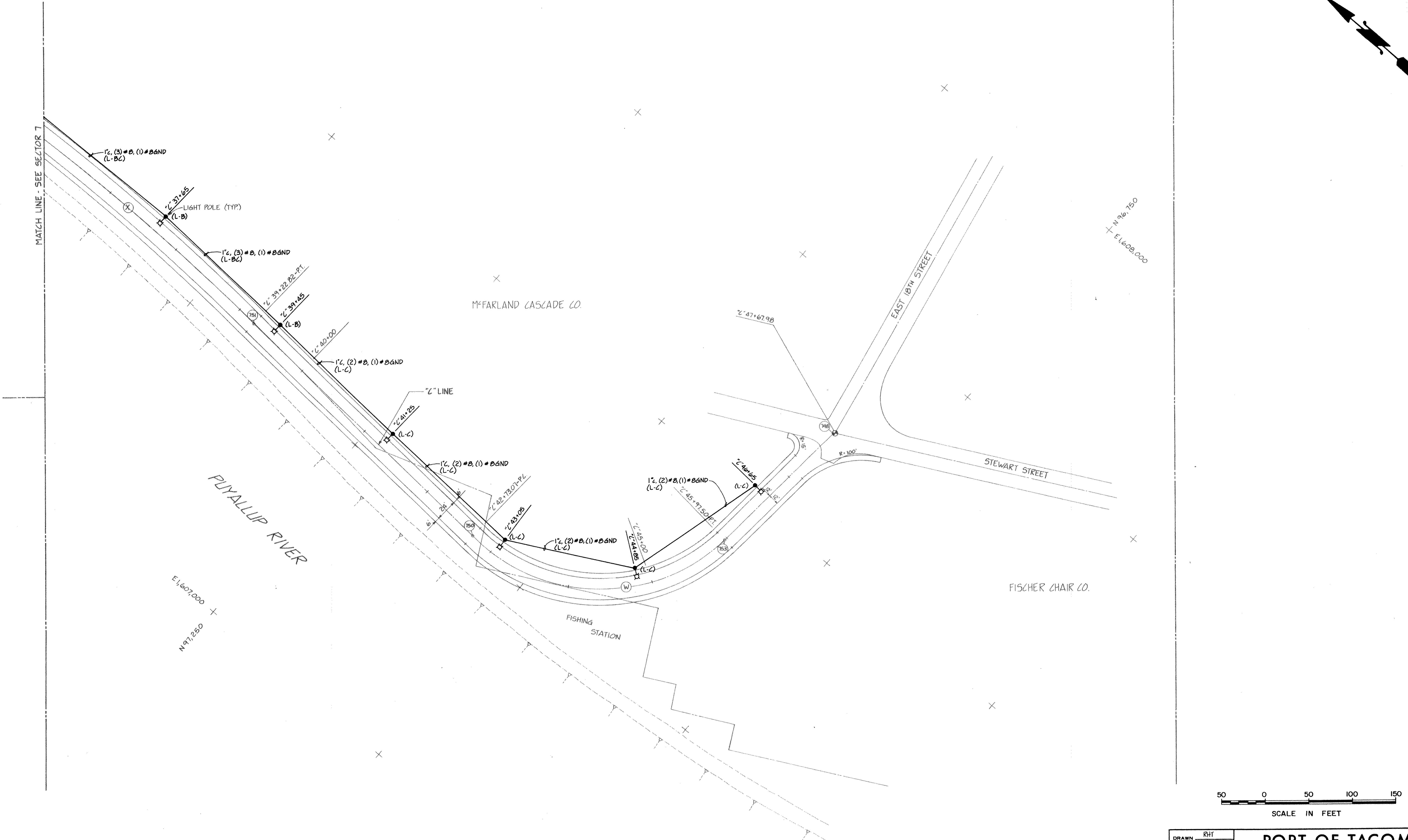
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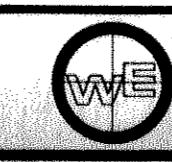


RHT		PORT OF TACOMA	
DRAWN	5-31-84	TACOMA TERMINALS, INC.	
CHECKED	JC	POWER, LIGHTING &	
DATE	5-31-84	COMMUNICATIONS PLAN	
CHECKED	JP		
DATE	5-31-84		
CONT. NO.	560		
FIELD BOOK (S)		SCALE AS NOTED	
APPROVED	R.H. Thompson	DRAWING NO.	
PROJECT MANAGER	J. H. Head	EP-3880-23-E108	
DATE	5/31/84	54 88	
CHIEF ENGINEER		DATE	

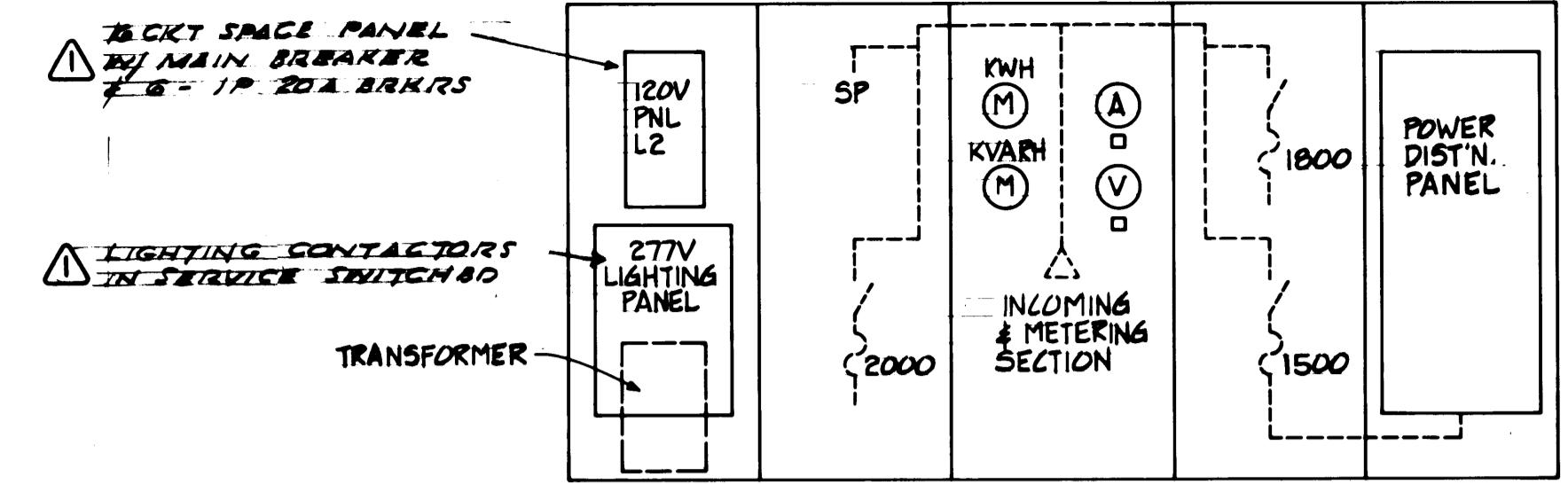
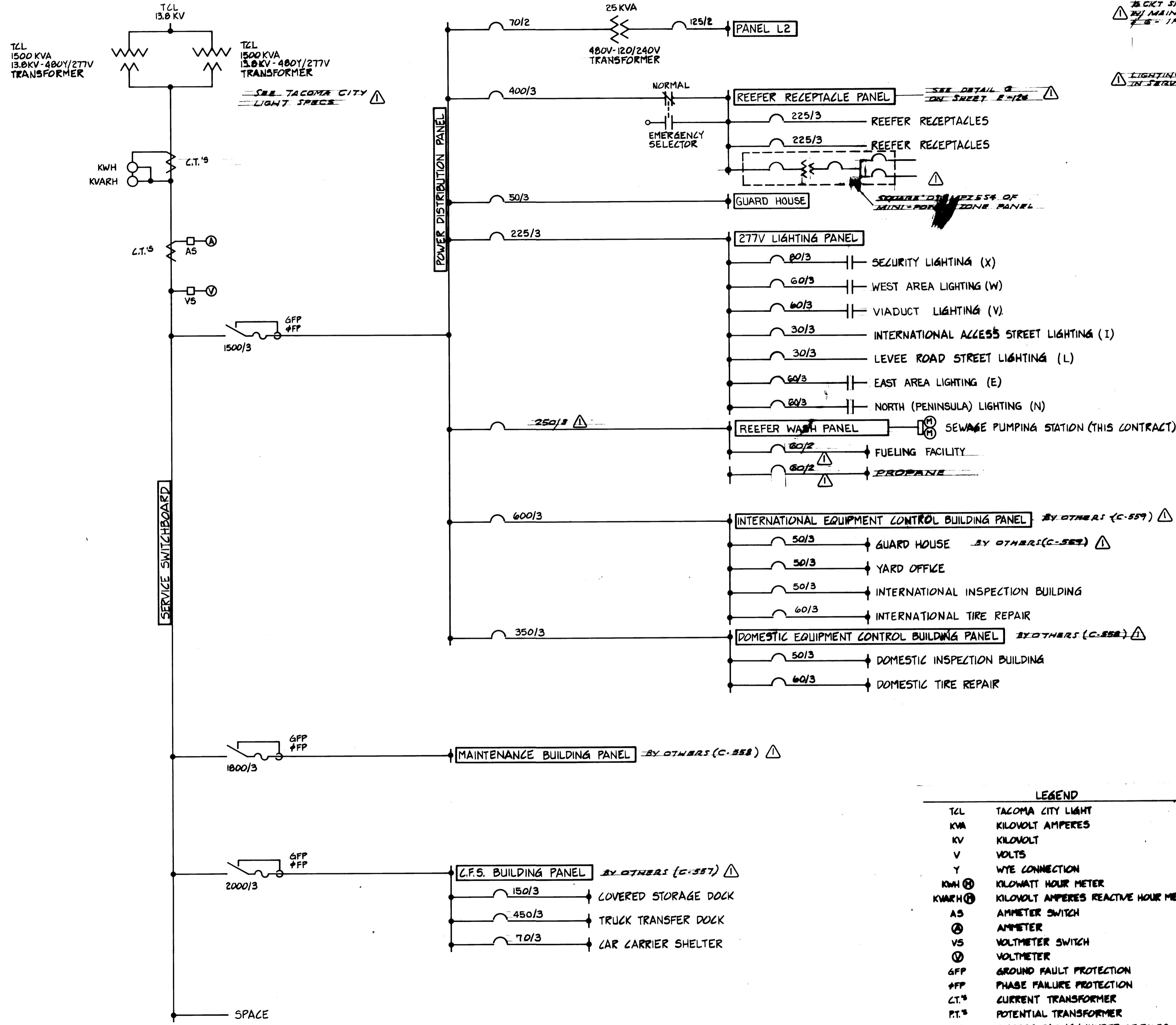




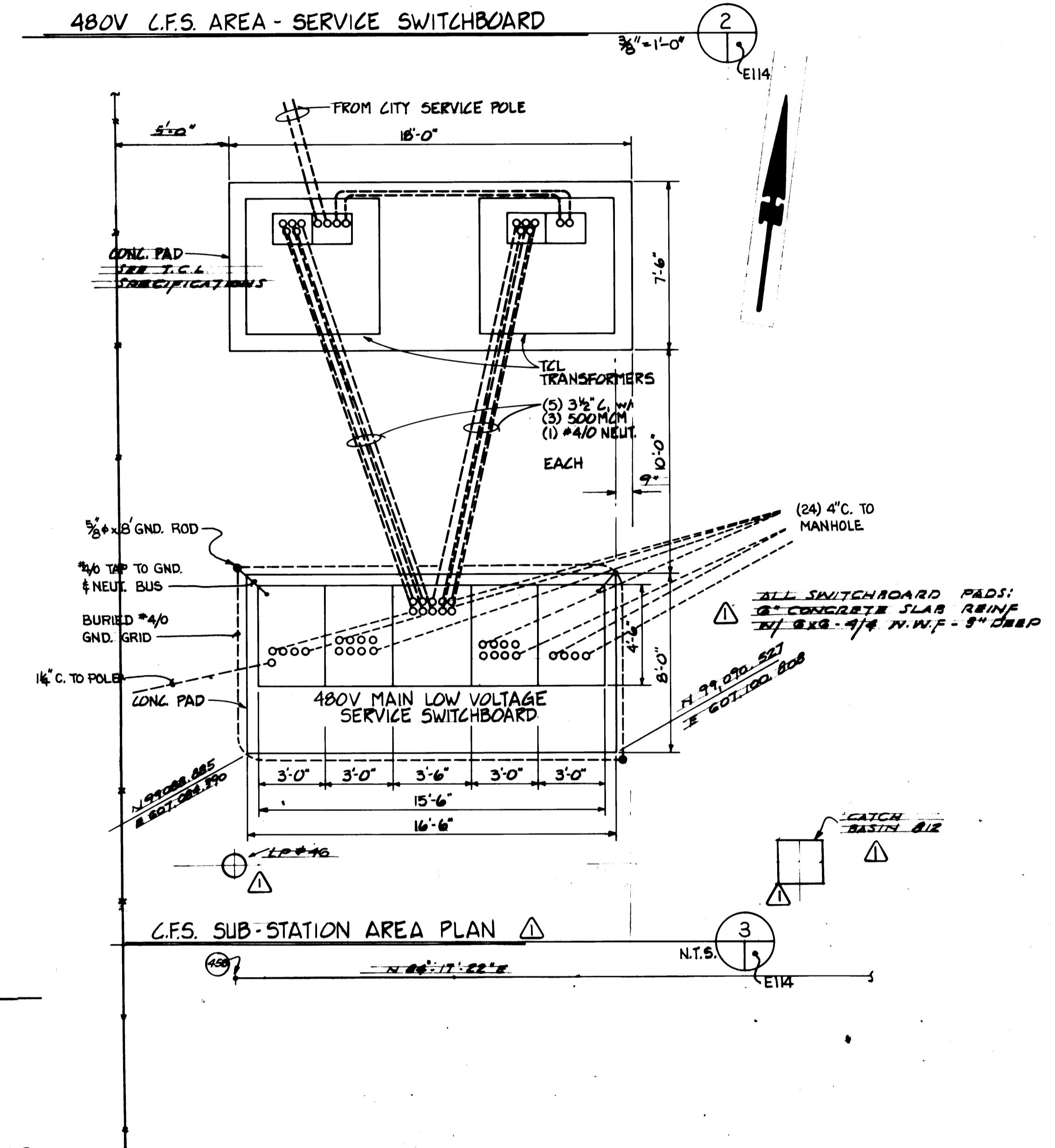
DRAWN	R.H.
DATE	5-31-84
CHECKED	J.C.
DATE	5-31-84
CHECKED	P.
DATE	5-31-84
CONT. NO.	560
FIELD BOOK (S)	AS NOTED
APPROVED	Jean Teng
PROJECT MANAGER	Richard L.
CHIEF ENGINEER	
DRAWING NO.	
EP-3880-23 E110	
SHEET 56 OF 88	



NO 45-BUILT'S REVISIONS	R.I.S.
MARK	REVISION BY APP. DATE



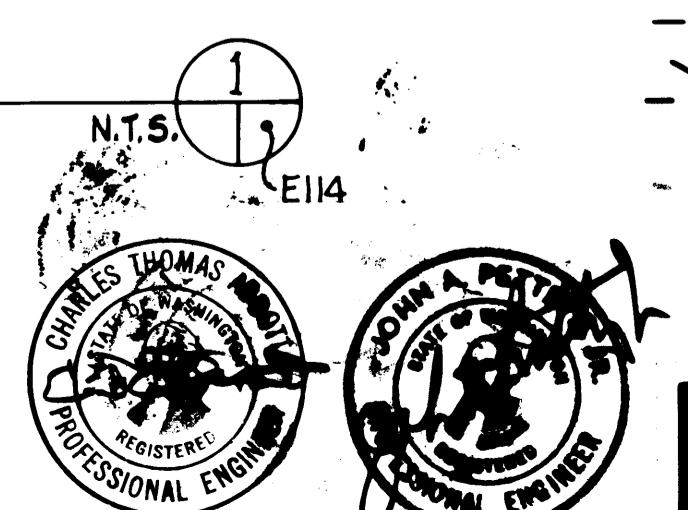
480V C.F.S. AREA - SERVICE SWITCHBOARD



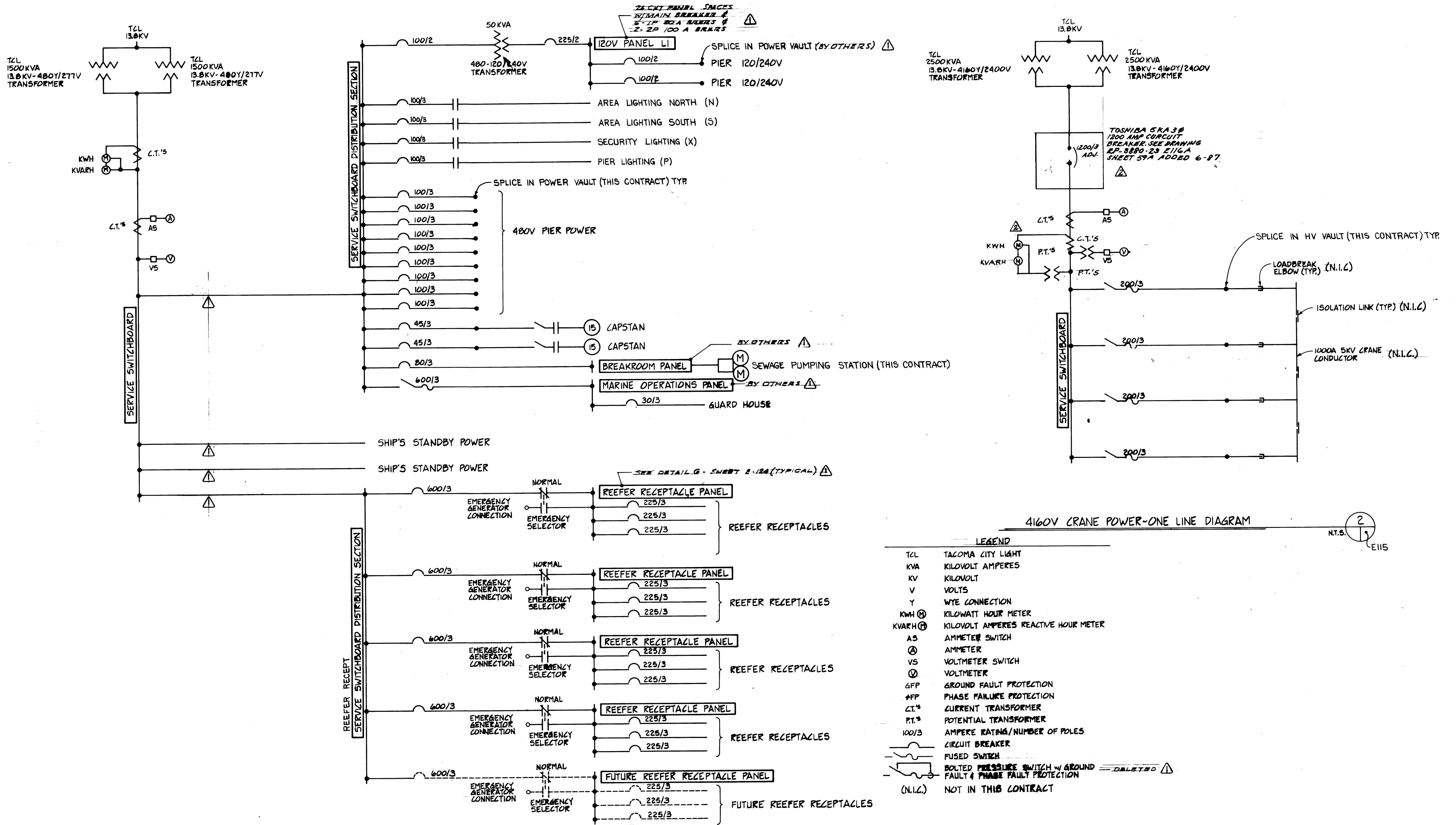
LEGEND

TCL	TACOMA CITY LIGHT
KVA	KILOVOLT AMPERES
KV	KILOVOLT
V	VOLTS
Y	WYE CONNECTION
KWH	KILOWATT HOUR METER
KVARH	KILOWATT AMPERES REACTIVE HOUR METER
AS	AMMETER SWITCH
Ⓐ	AMMETER
VS	VOLTMETER SWITCH
ⓧ	VOLTMETER
GFP	GROUND FAULT PROTECTION
PPF	PHASE FAILURE PROTECTION
CT's	CURRENT TRANSFORMER
PT's	POTENTIAL TRANSFORMER
100/3	AMPERE RATING/NUMBER OF POLES
CB	CIRCUIT BREAKER
-/-	FUSED SWITCH
-/-	BOLTED PRESSURE SWITCH w/GROUND FAULT & PHASE FAULT PROTECTION
(N.I.C.)	NOT IN THIS CONTRACT

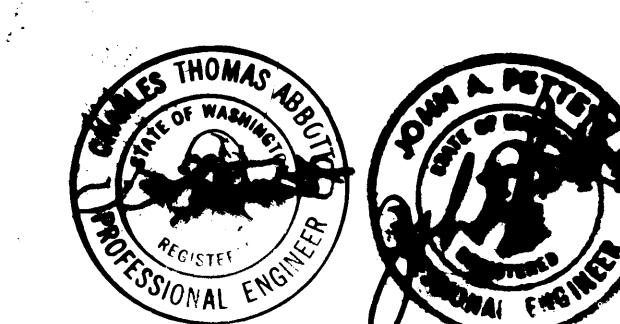
DRAWN	REVIS	PORT OF TACOMA
DATE	3/23/04	TACOMA TERMINALS, INC.
CHECKED	TC	CONTAINER FREIGHT SERVICE AREA
DATE	3/23/04	ONE LINE DIAGRAM
CHECKED	P	
DATE	5-31-04	
CONT. NO.	560	
FIELD BOOK (S)		SCALE AS NOTED
APPROVED	John T. Tugay	DRAWING NO.
DATE	5/3/04	EP-3880-23-E114
PROJECT MANAGER	R. Price Deak	DATE
CHIEF ENGINEER		5/3/04
		SHEET 57 of 88



REVISED TO 480V	4/1/04	1/25/04
MARK	REVISION	BY APP. DATE



480V MARINE TERMINAL ~ ONE LINE DIAGRAM



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Consulting Engineering & Land Planning
2124 SO. 'K' STREET P.O. BOX 5677
TACOMA, WASHINGTON 98405 (206) 772-5144

	REVISED 1200 AMP CIRCUIT	D.W.	3-31-88	APPROVED <i>John Teyor</i>	5/31/84	DRAWING NO. EP-3600-23-E115
	REVISED TO AS BUILT	R.T.S.	4/25/88	PROJECT MANAGER <i>R.R. MacLean</i>	DATE 5/31/84	SHEET 58 OF 88
MARK	REVISION	BY	APP.	DATE	DATE	

PORT OF TACOMA

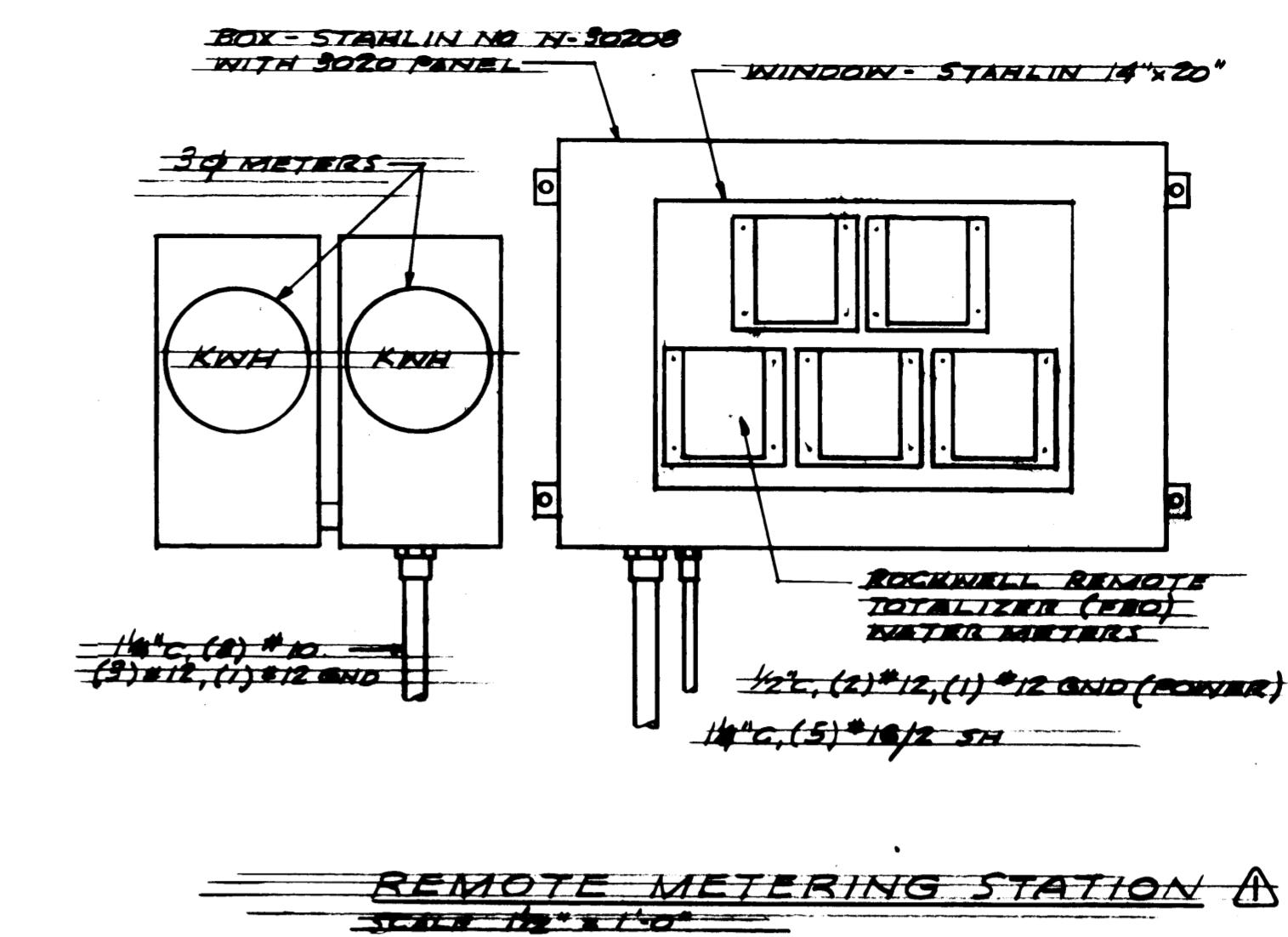
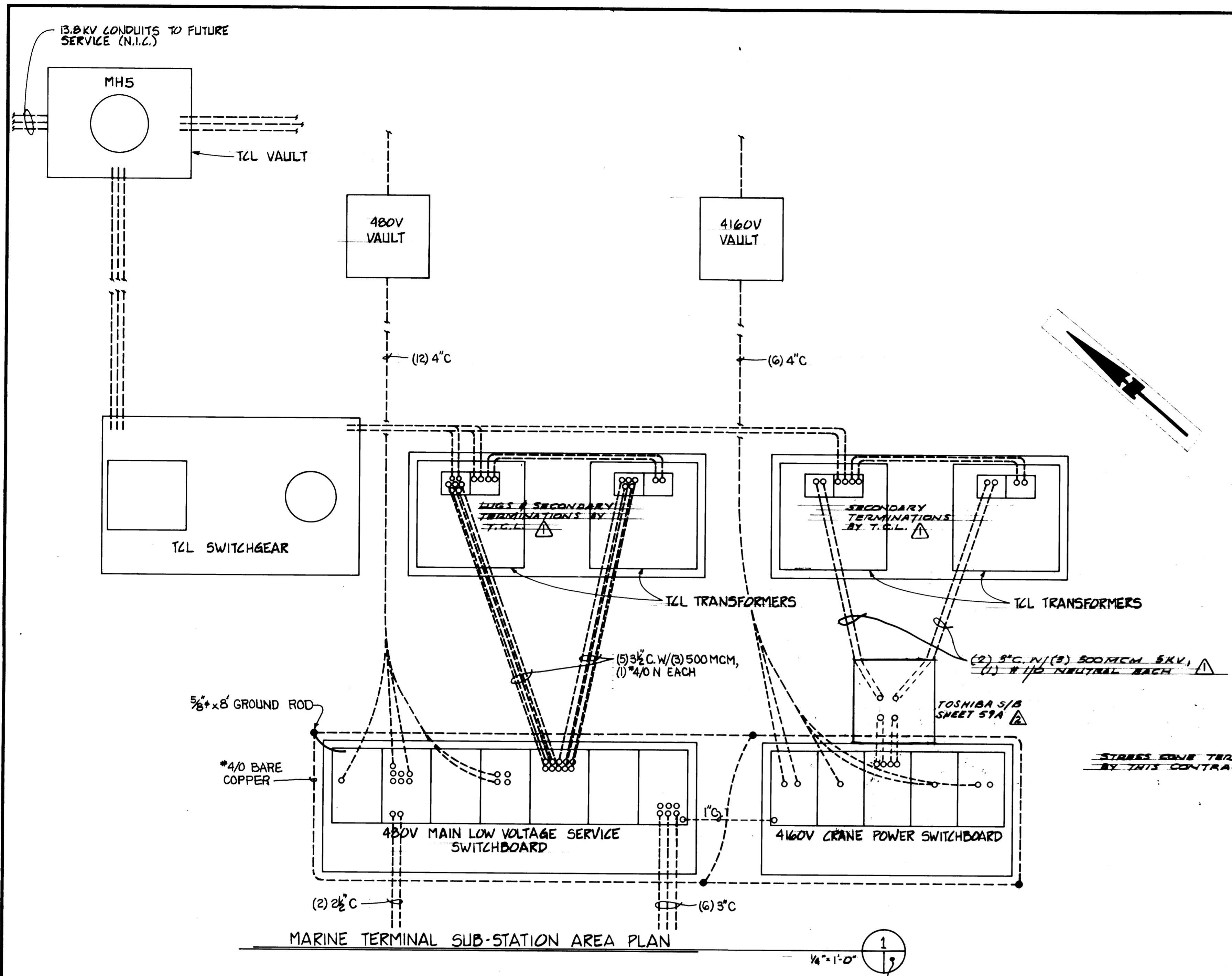
TACOMA TERMINALS, INC.

MARINE TERMINAL AREA AND

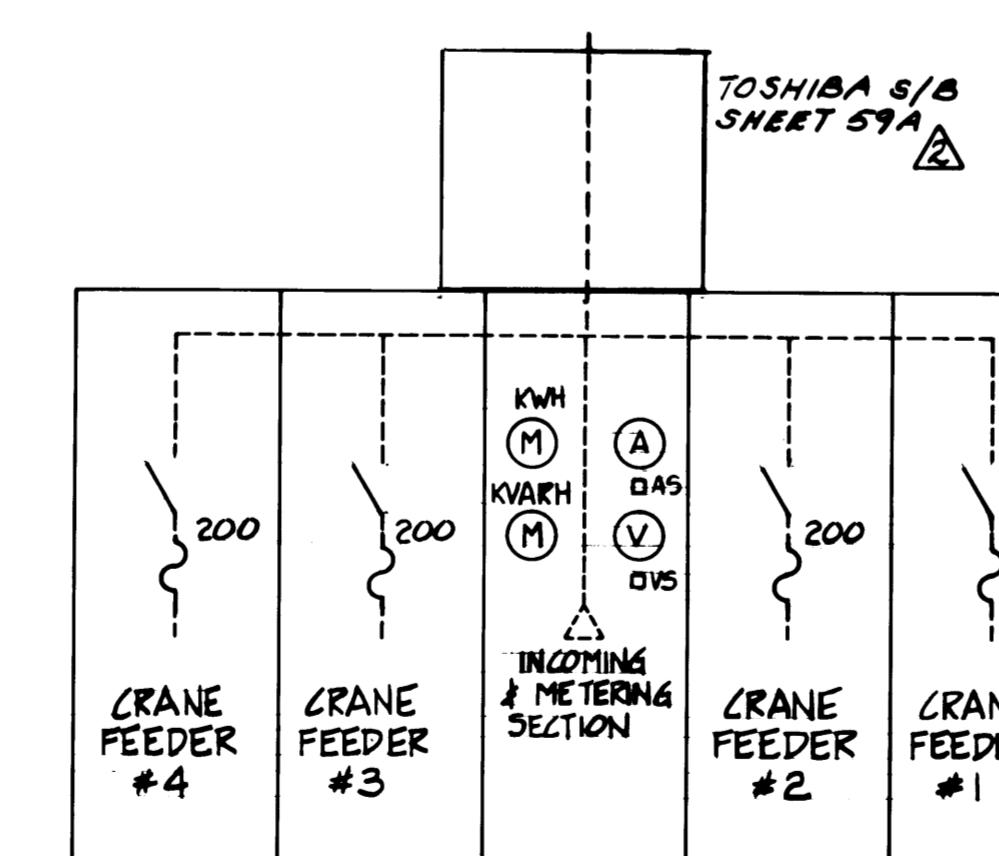
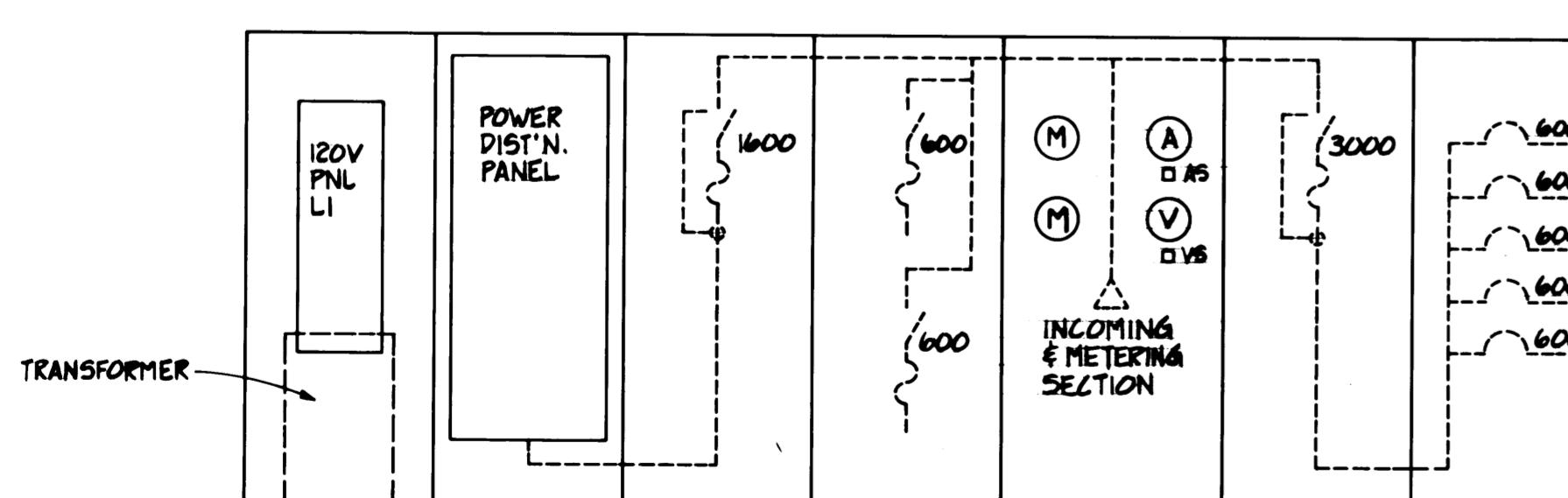
CRANE POWER

ONE LINE DIAGRAM

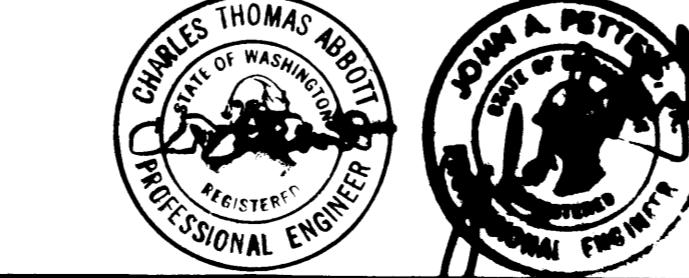
DRAWN	<u>5-17</u>
DATE	<u>3/23/84</u>
CHECKED	<u>GC</u>
DATE	<u>3/23/84</u>
CHECKED	<u>P</u>
DATE	<u>5-31-84</u>
CONT. NO.	<u>560</u>



LEGEND	
TCL	TACOMA CITY LIGHT
KVA	KILOWATT AMPERES
KV	KILOWOLT
V	VOLTS
Y	Y CONNECTION
KWH	KILOWATT HOUR METER
KVARH	KILOWOLT AMPERES REACTIVE HOUR METER
AS	AMMETER SWITCH
A	AMMETER
VS	VOLTMETER SWITCH
V	VOLTMETER
GFP	GROUND FAULT PROTECTION
SFP	PHASE FAILURE PROTECTION
CT	CURRENT TRANSFORMER
PT	POTENTIAL TRANSFORMER
100/3	AMPERE RATING/NUMBER OF POLES
CIRCUIT BREAKER	CIRCUIT BREAKER
FUSED SWITCH	FUSED SWITCH
(N.L.C.)	BOLTED PRESSURE SWITCH w/ GROUND FAULT & PHASE FAULT PROTECTION (N.L.C.) NOT IN THIS CONTRACT

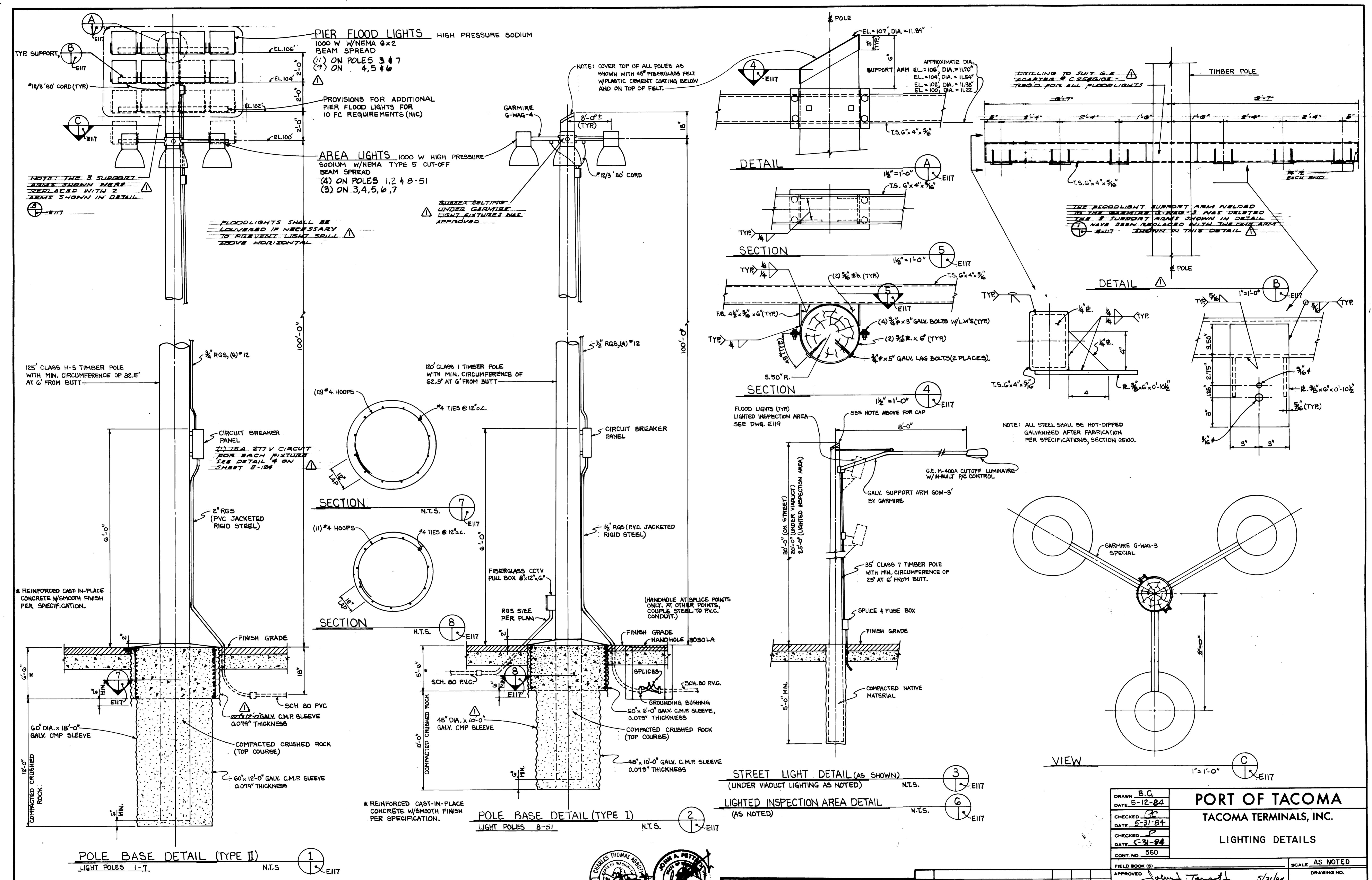


DRAWN	3/23/84
CHECKED	3/23/84
DATE	3/23/84
CHECKED	3/23/84
DATE	3/23/84
CONT. NO.	560
FIELD BOOK (S)	AS NOTED
APPROVED	John A. Pease
DATE	3/23/84
SCALE	1:34-84
DRAWING NO.	EP-3800-23-E116
PROJECT MANAGER	John A. Pease
DATE	3/23/84
CHIEF ENGINEER	John A. Pease
DATE	3/23/84
SHEET	59 of 88



Whitacre Engineers, Inc.
 Consulting Engineering & Land Planning
 204 SO. "K" STREET, P.O. BOX 5877
 TACOMA, WASHINGTON 98445 253-272-2444

REVISED TOSHIBA S/B	O.W.	1:34-84
REVISED TO AS-BUILT	O.W.	1:34-84
MARK	REVISION	BY APP. DATE



Whitacre Engineers, Inc.
Consulting Engineering & Land Planning
2124 SO. 'K' STREET P.O. BOX 5077
TACOMA, WASHINGTON 98405 (206) 272-5144

PORT OF TACOMA

TACOMA TERMINALS, INC.

LIGHTING DETAILS

DRAWN	B.C.
DATE	5-12-84
CHECKED	G.C.
DATE	5-31-84
CHECKED	S.P.
DATE	5-31-84
CONT. NO.	560

LIGHTING DETAILS

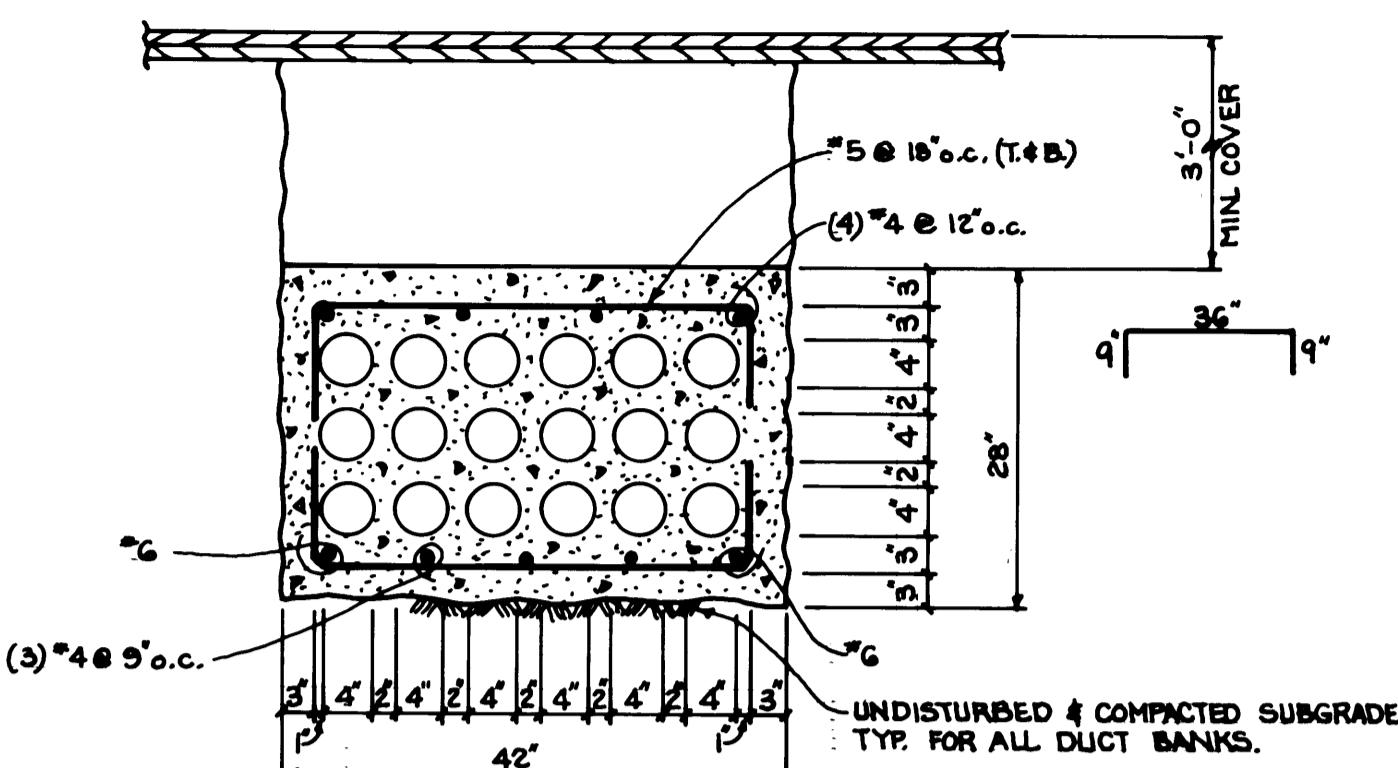
DRAWING NO.

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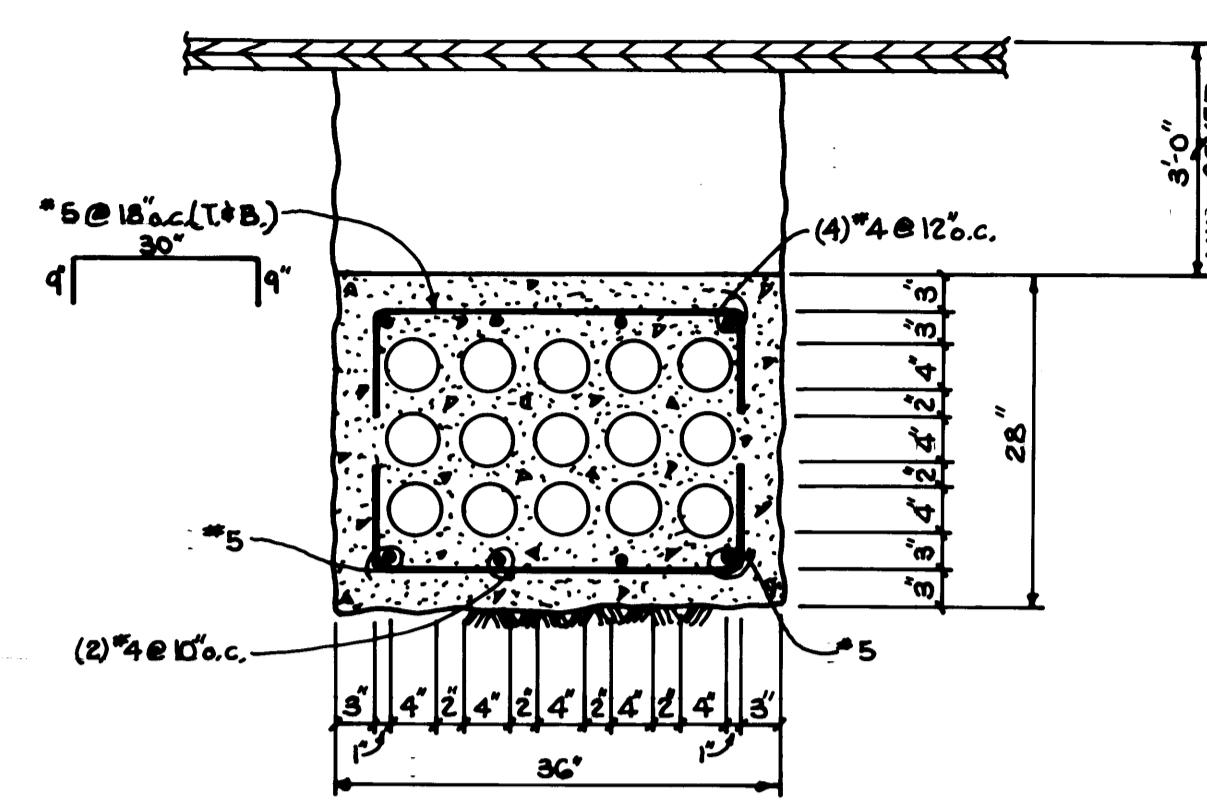
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— 60 —

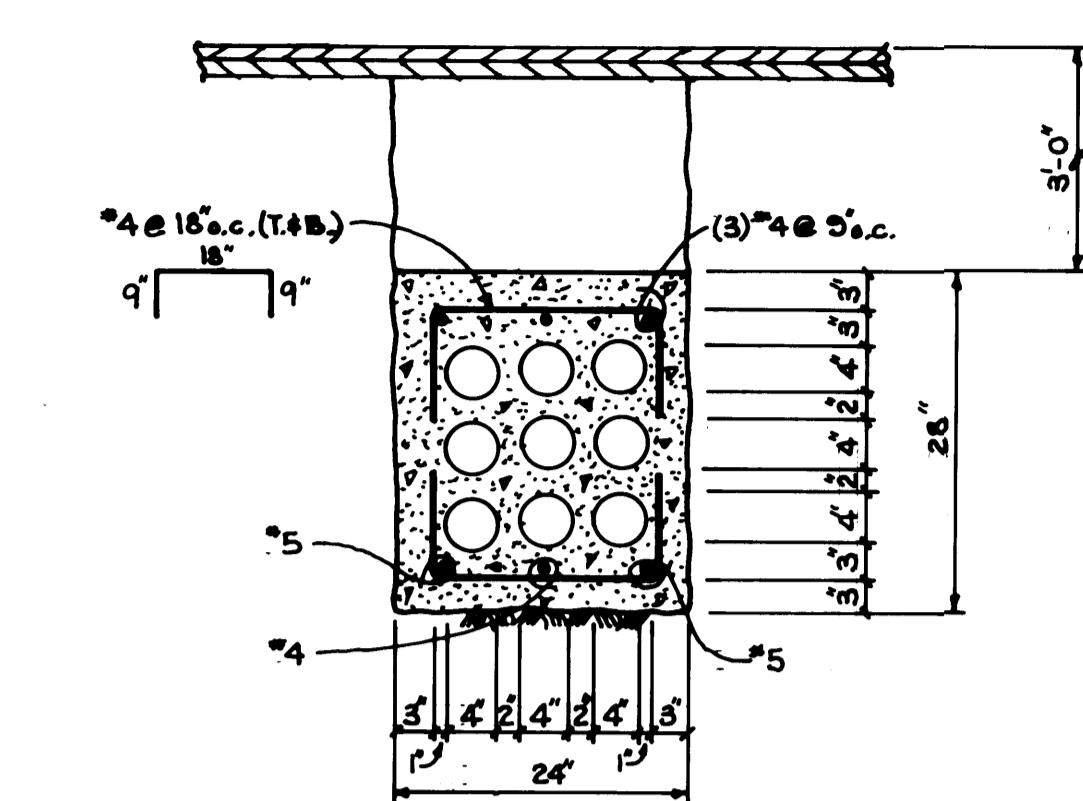
EET — — — **OF** —



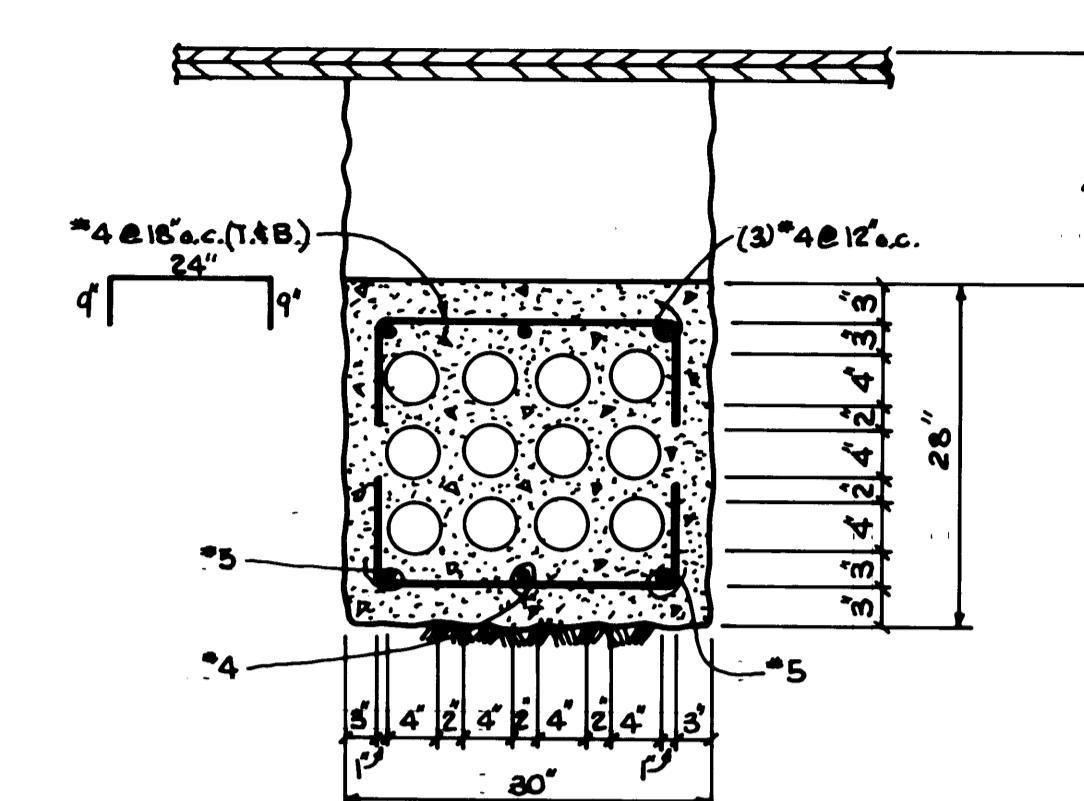
SECTION 1
3/4" = 1'-0"
E118



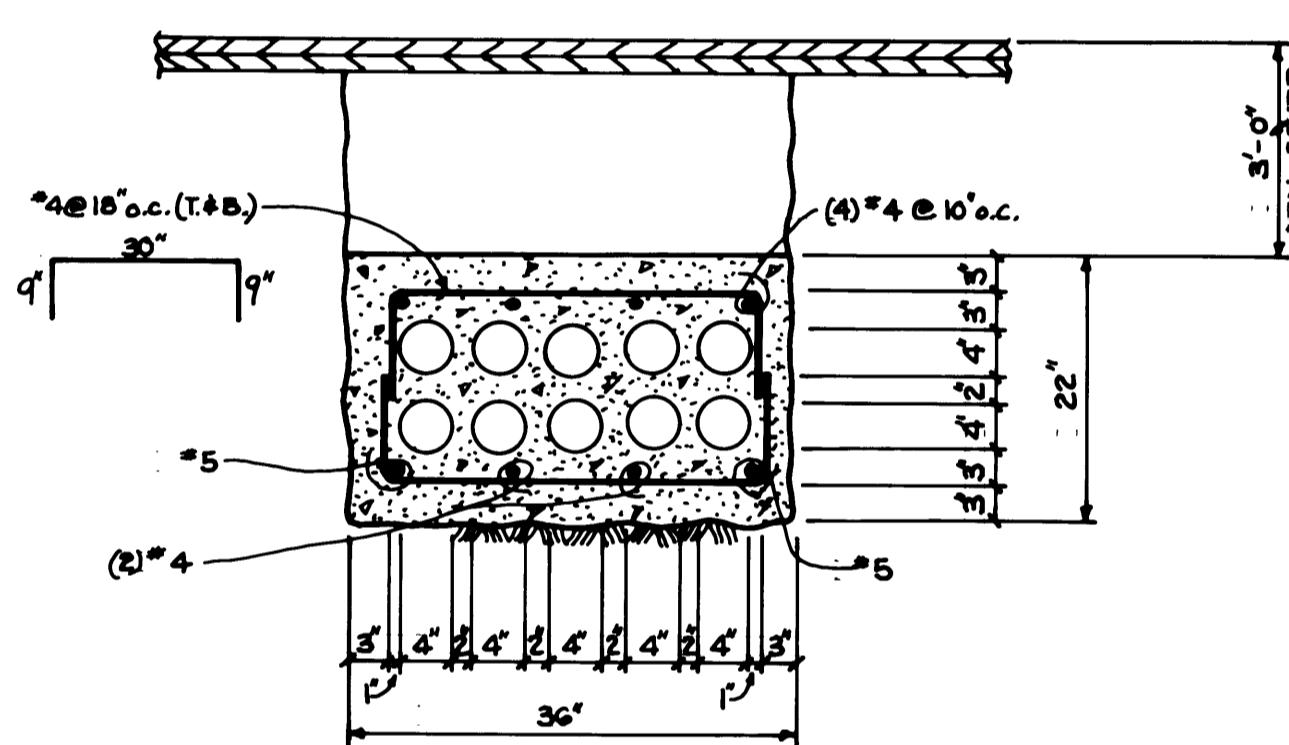
SECTION 2
3/4" = 1'-0"
E118



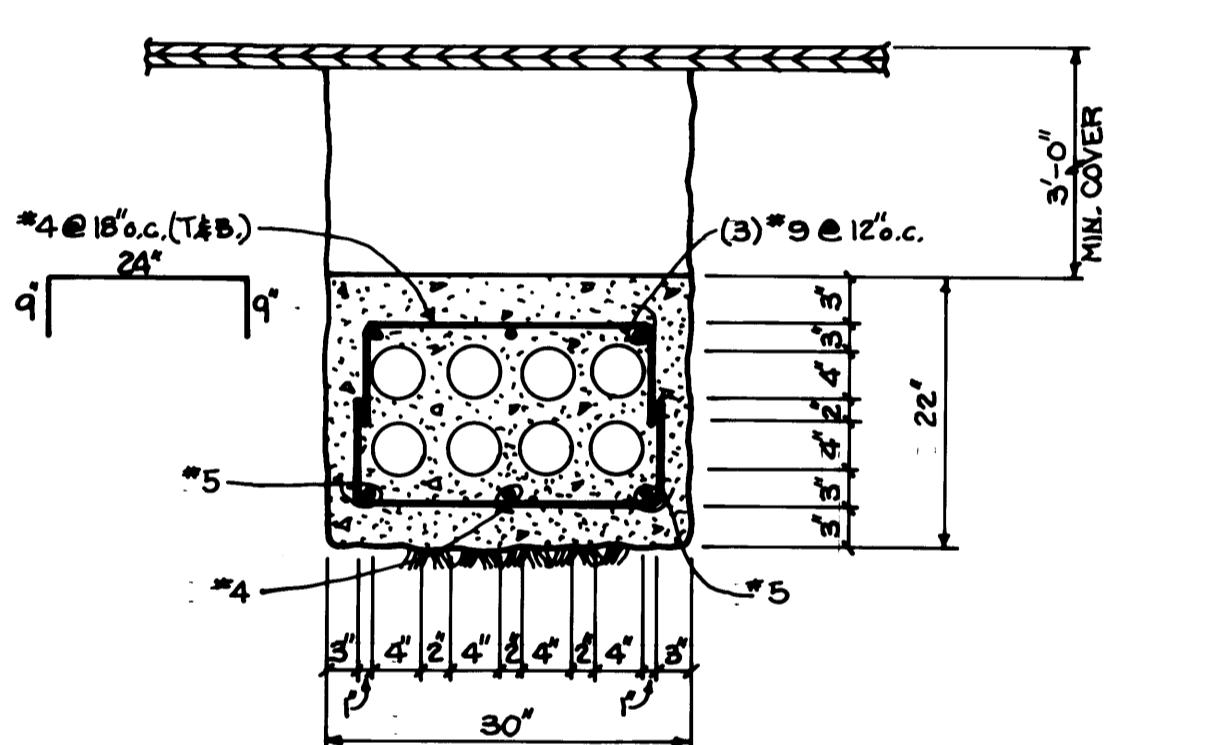
SECTION 3
3/4" = 1'-0"
E118



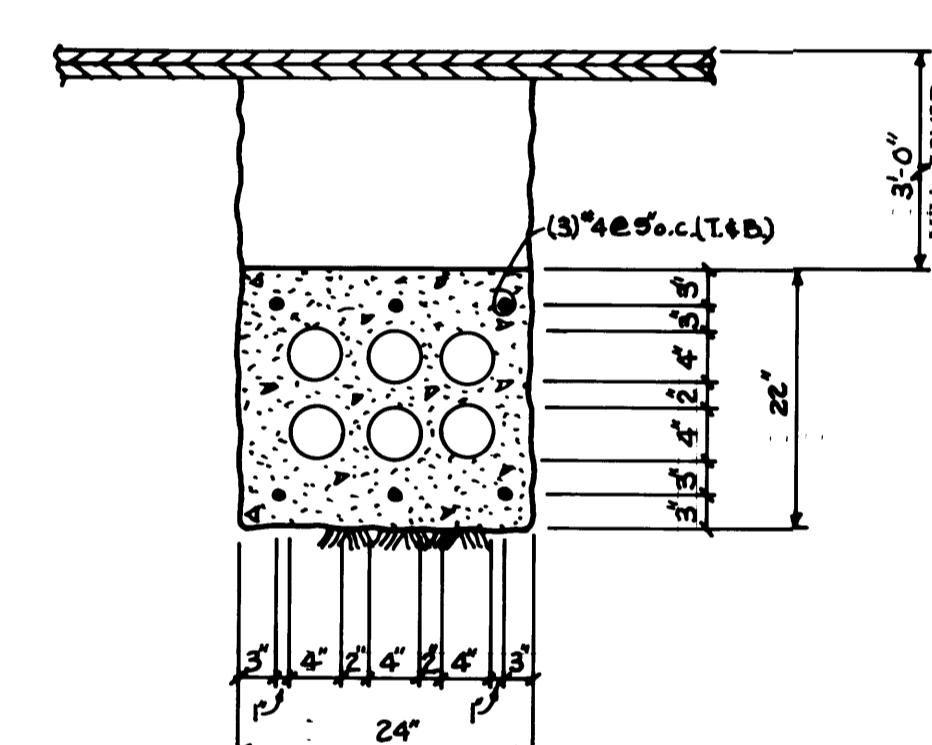
SECTION 4
3/4" = 1'-0"
E118



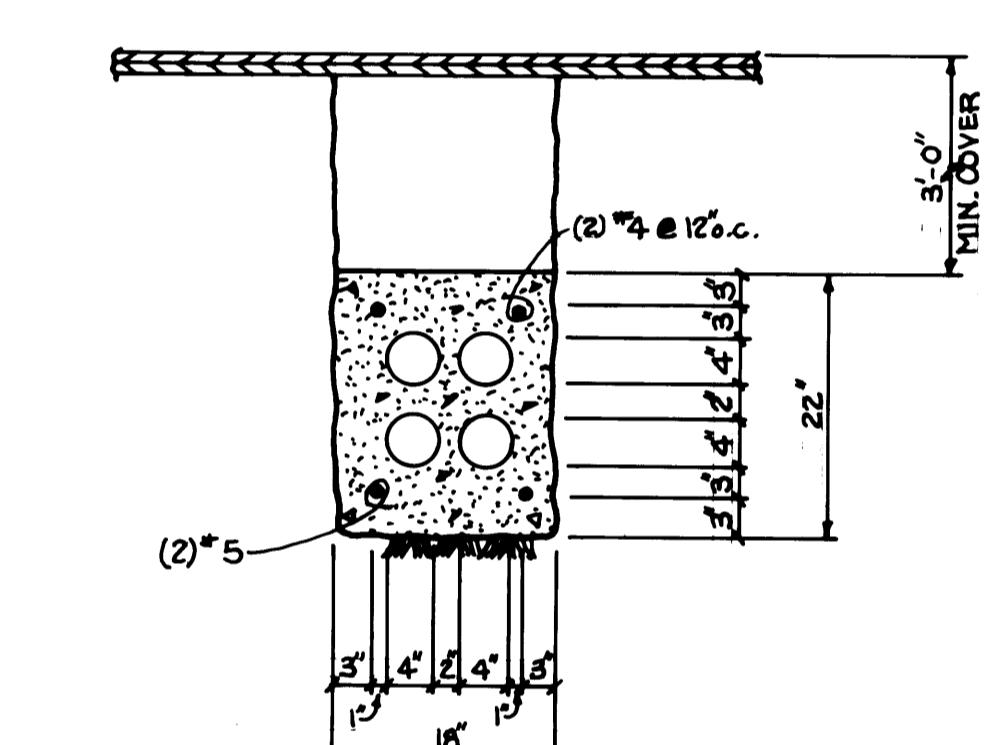
SECTION 5
3/4" = 1'-0"
E118



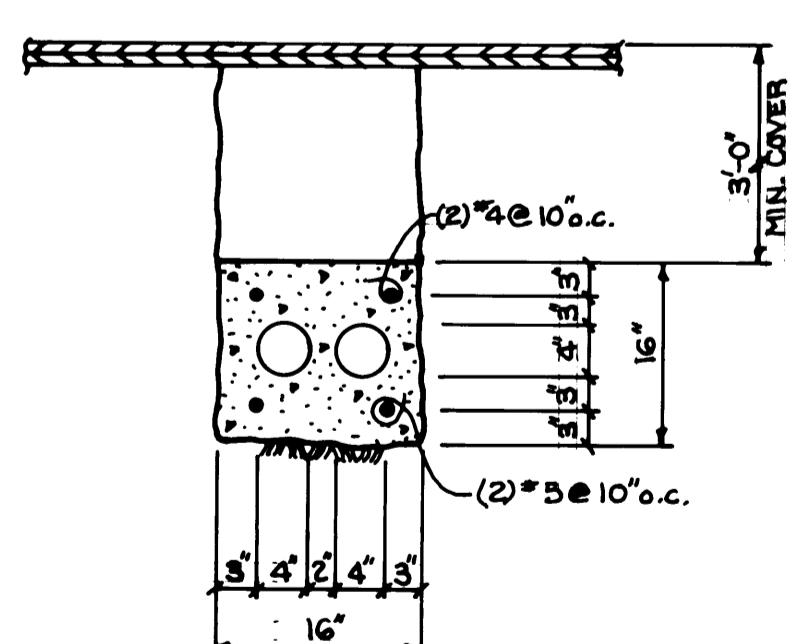
SECTION 6
3/4" = 1'-0"
E118



SECTION 7
3/4" = 1'-0"
E118



SECTION 8
3/4" = 1'-0"
E118

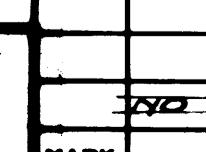


SECTION 9
3/4" = 1'-0"
E118

- NOTES:
- 1) THE TRENCH BEDDING AND BACKFILL SHALL BE MECHANICALLY COMPAKTED TO 90% DENSITY PER SPECIFICATIONS, SECTION 02200.
 - 2) CONCRETE SHALL BE 3000 PSI PER SPECIFICATIONS, SECTION 03300.
 - 3) ALL REINFORCING SHALL BE GRADE 60.
 - 4) ALL CONDUIT SHALL BE 4" TYPE "EB" PVC PER SPECIFICATIONS, DIVISION 16.
 - 5) ADD ONE GALLON OF RED DYE PER CUBIC YARD MIXED IN THE TRUCK.



Whitacre Engineers, Inc.
Consulting Engineering & Land Planning
2004 30th Street, P.O. Box 5677
TACOMA, WASHINGTON 98449-5677 277-2444

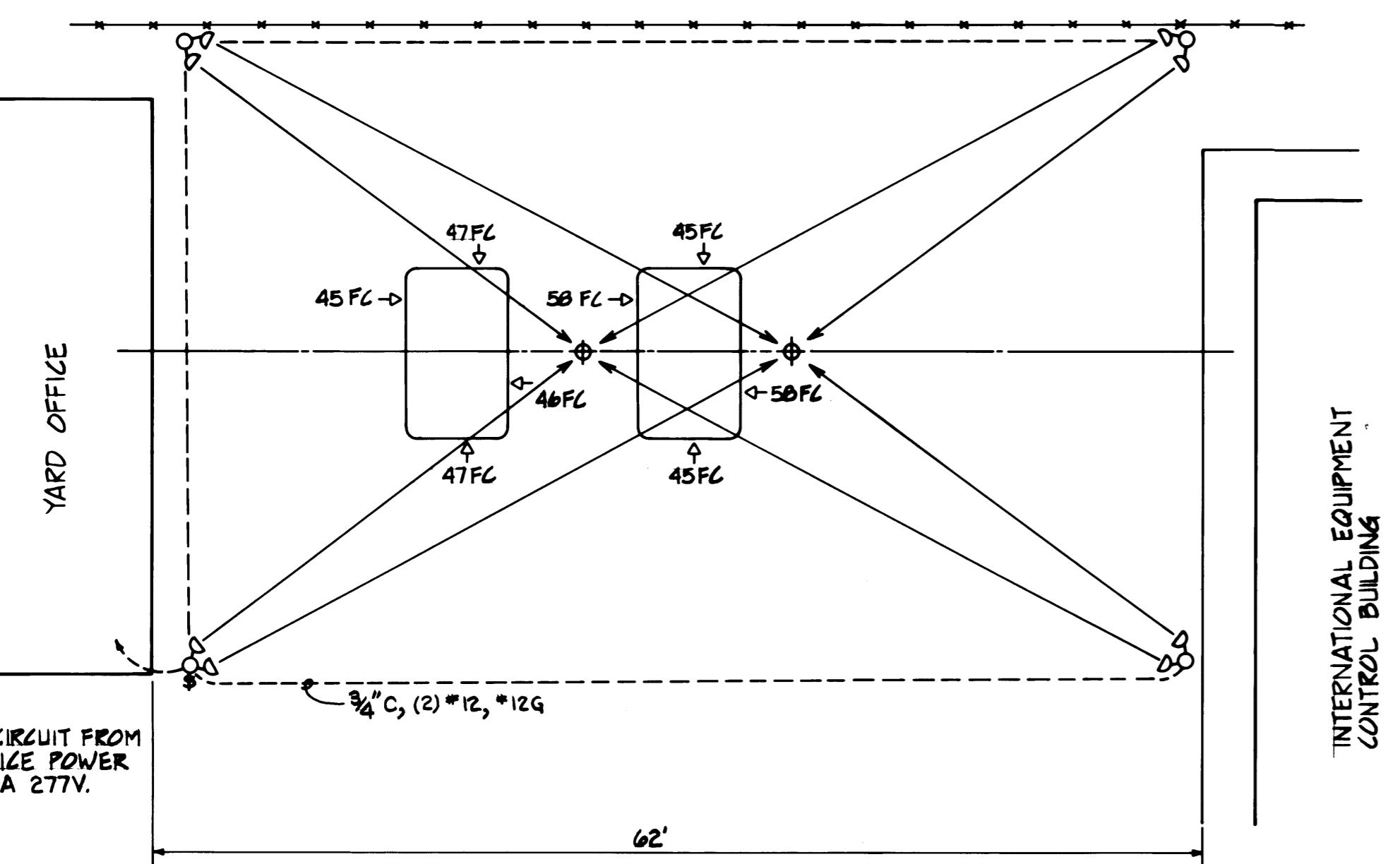


AS-BUILT SURVEYOR		DATE	REVISION	BY APP.	DATE
John Foytak	EPP	5/31/84		John Foytak	5/31/84

DRAWN BY	B.C.
DATE	5/31/84
CHECKED BY	AC
DATE	5-31-84
CHECKED BY	P
DATE	5-31-84
CONT. NO.	560
FIELD BOOK (S)	AS NOTED
APPROVED	John Foytak
DATE	5/31/84
RELEASER	EP-3880-24-E118
DATE	5/31/84
CHIEF ENGINEER	John Foytak
DATE	5/31/84
SHEET	61
OF	88

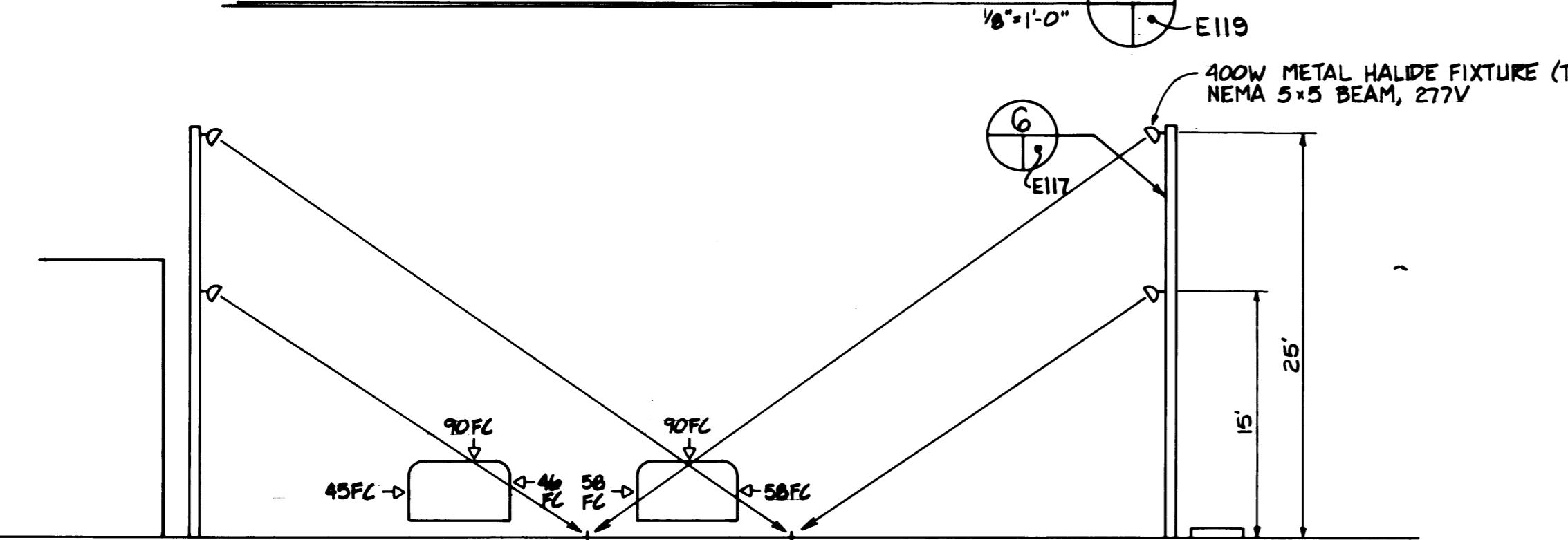
PORT OF TACOMA
TACOMA TERMINALS, INC.

DUCT BANK DETAILS

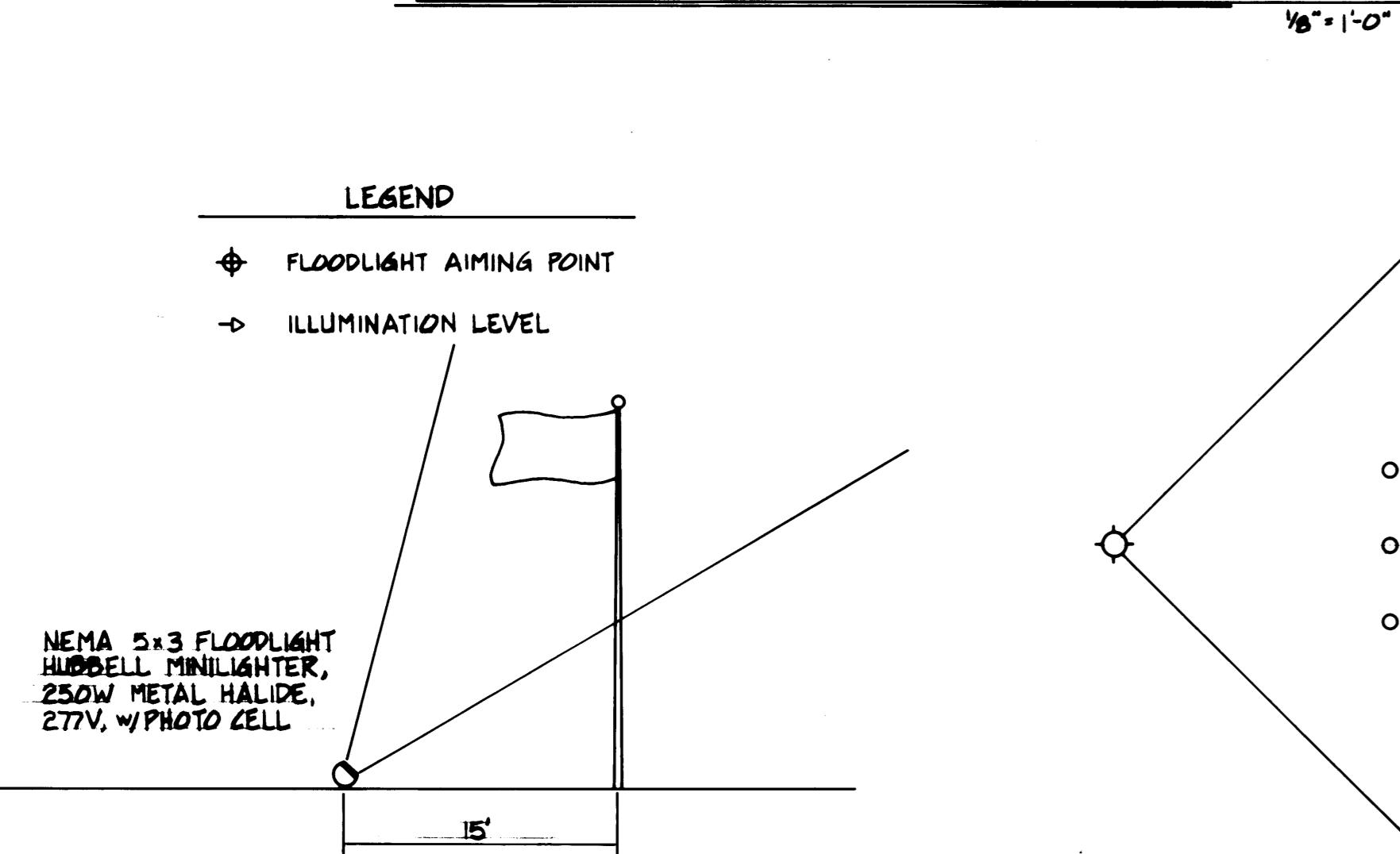


OTE:
LIGHTING CIRCUIT FROM
YARD OFFICE POWER
PANEL, 20A 277V.

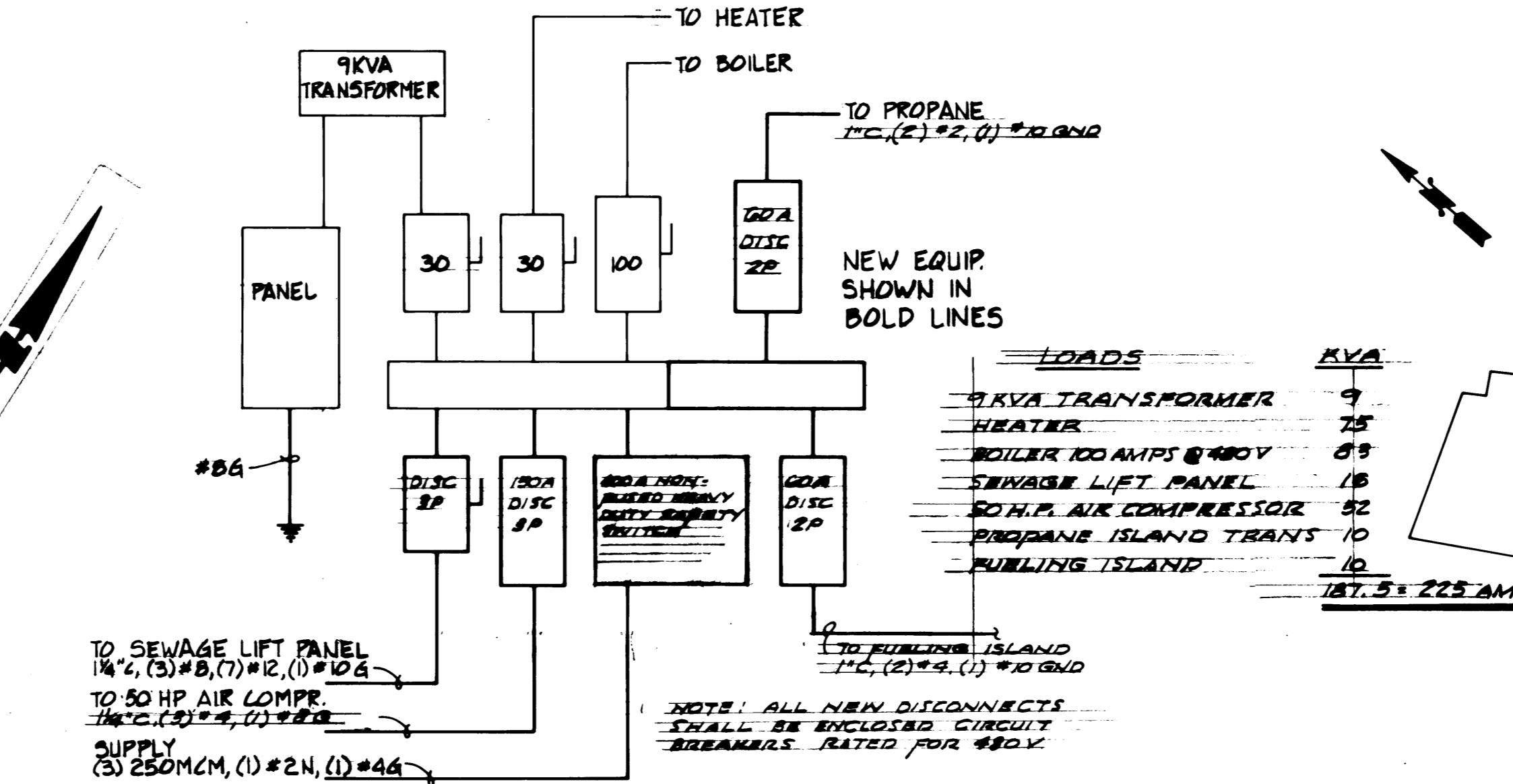
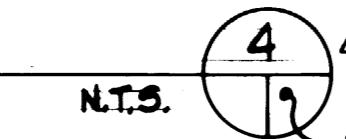
PLAN ~ LIGHTED INSPECTION AREA



ELEVATION ~ LIGHTED INSPECTION AREA

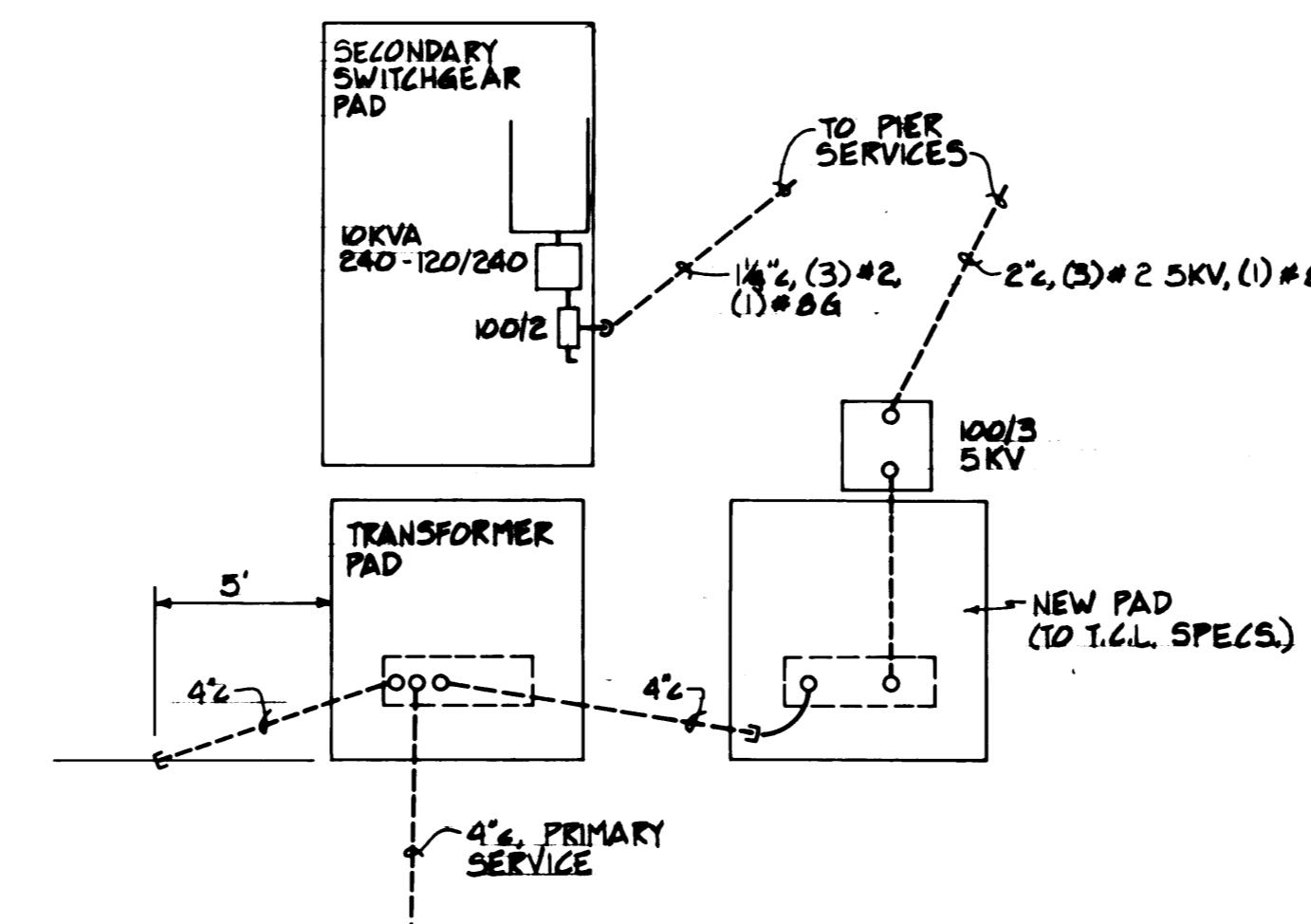


FLAGPOLE FLOODLIGHTING



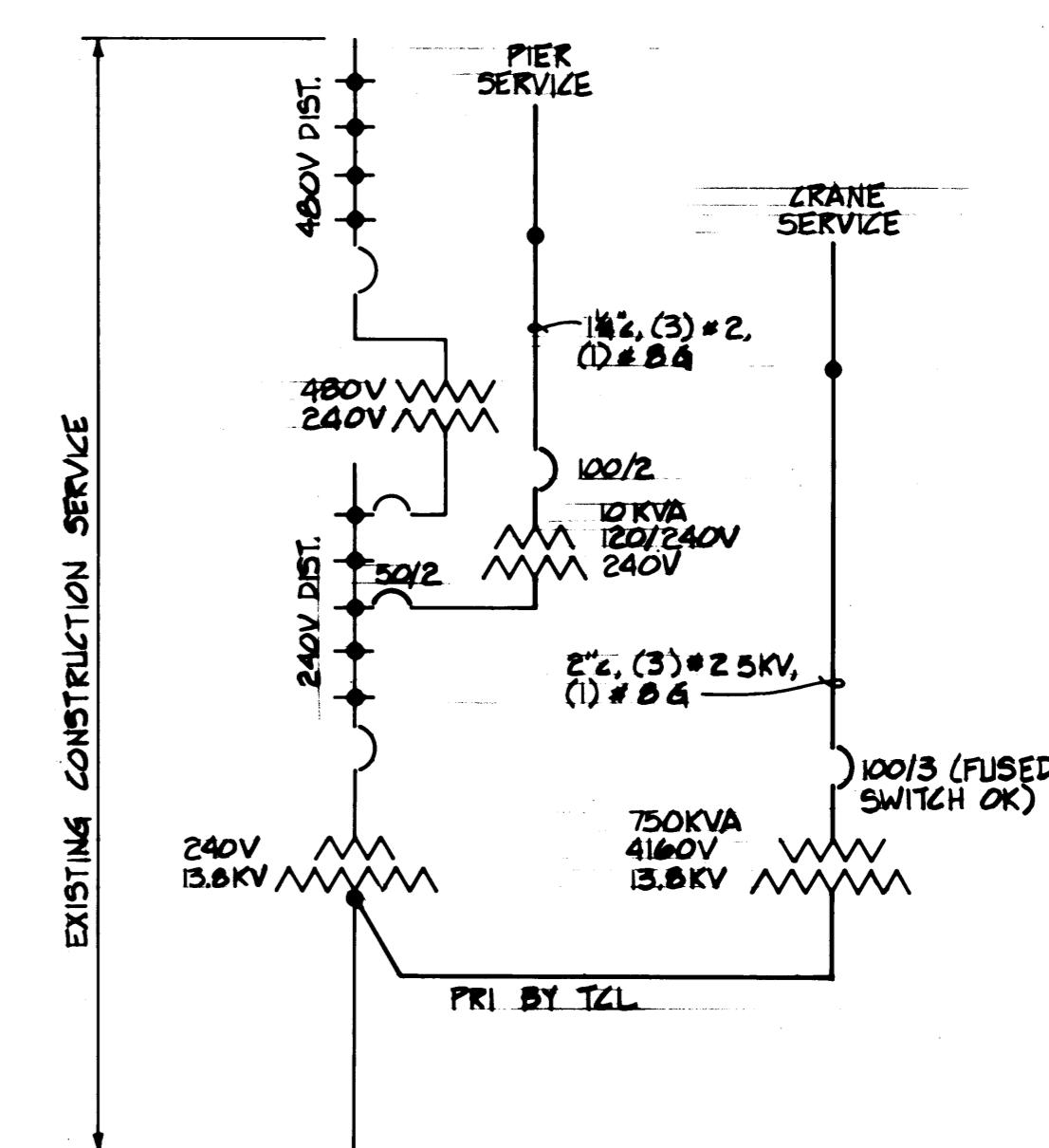
BOILER HOUSE ELECTRICAL SERVICE DETAIL

N.T.S.



CONSTRUCTION SERVICE

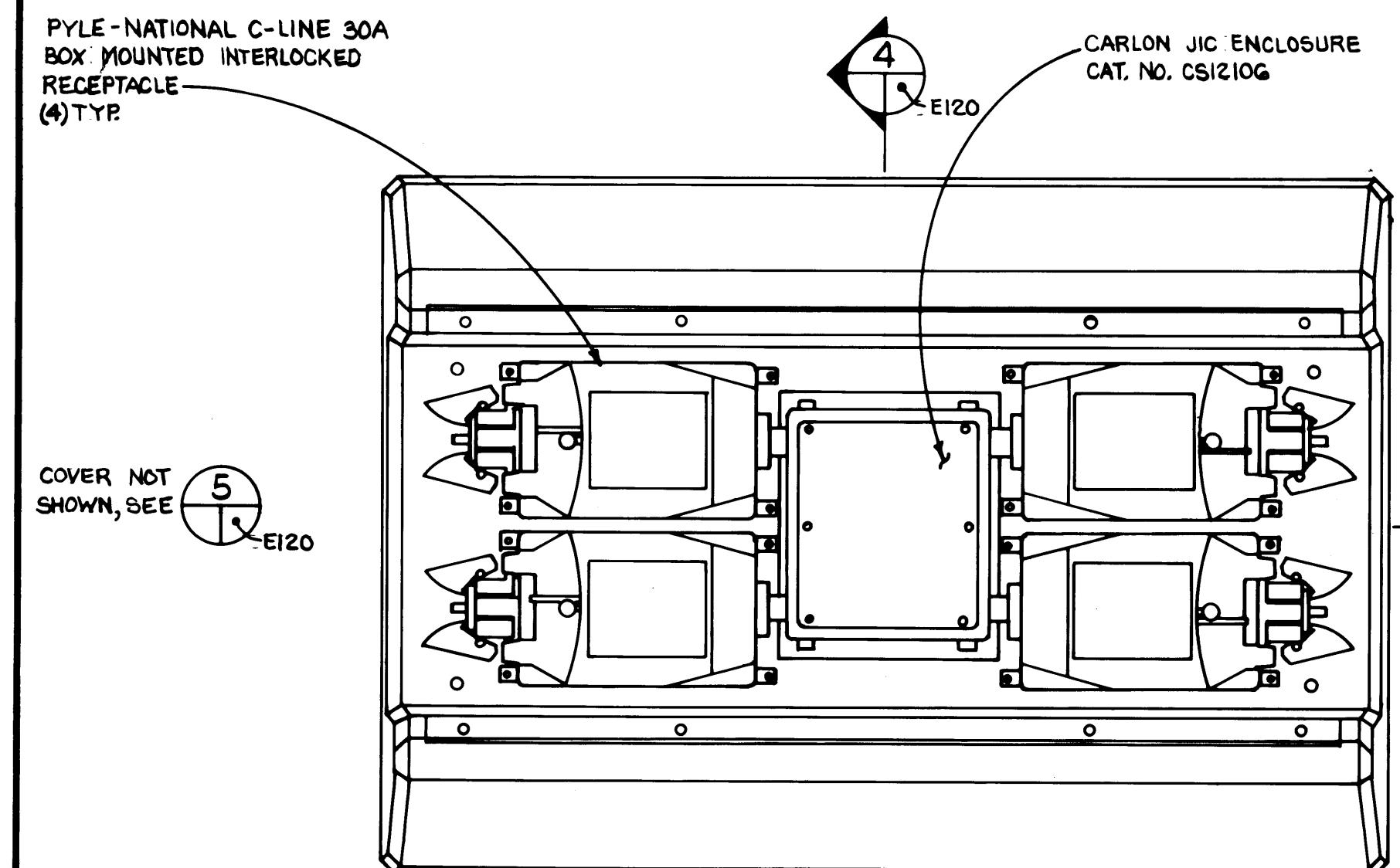
N.T.S.



ONE LINE DIAGRAM ~ TEMPORARY CRANE POWER

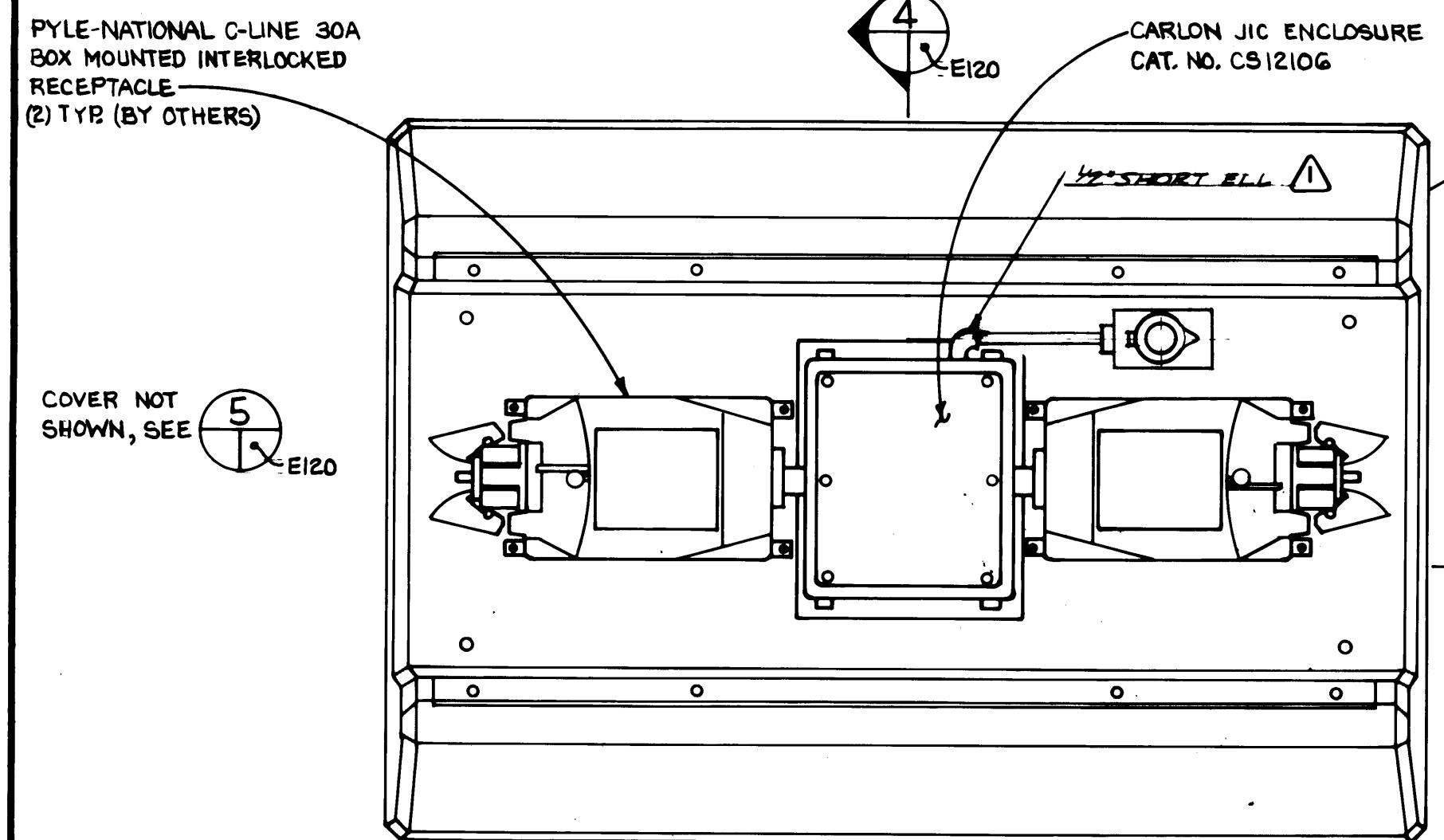
N.T.S.  E119

DRAWN DATE	PORT OF TACOMA	
CHECKED DATE	TACOMA TERMINALS, INC.	
CHECKED DATE	LIGHTING DETAILS	
CONT. NO.	560	
FIELD BOOK (S)	SCALE AS NOTED	
APPROVED	DRAWING NO.	
<i>John Targett</i>	573184	EP-3880-23-E119
PROJECT MANAGER	DATE	573184
CHIEF ENGINEER	DATE	573184
TE	SHEET	62 OF 88



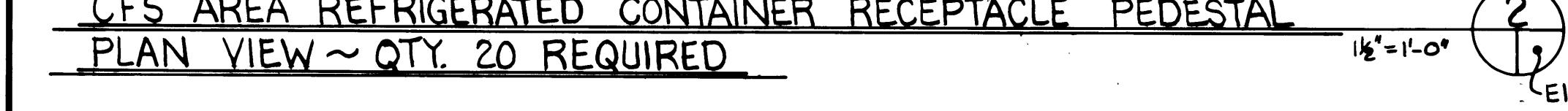
NOTE: EXISTING - REMOVE FROM SEATTLE YARD & REINSTALL AT T.I.-TACOM

MARINE YARD REFRIGERATED CONTAINER RECEPTACLE PEDESTAL
PLAN VIEW ~ QTY. 50 REQUIRED

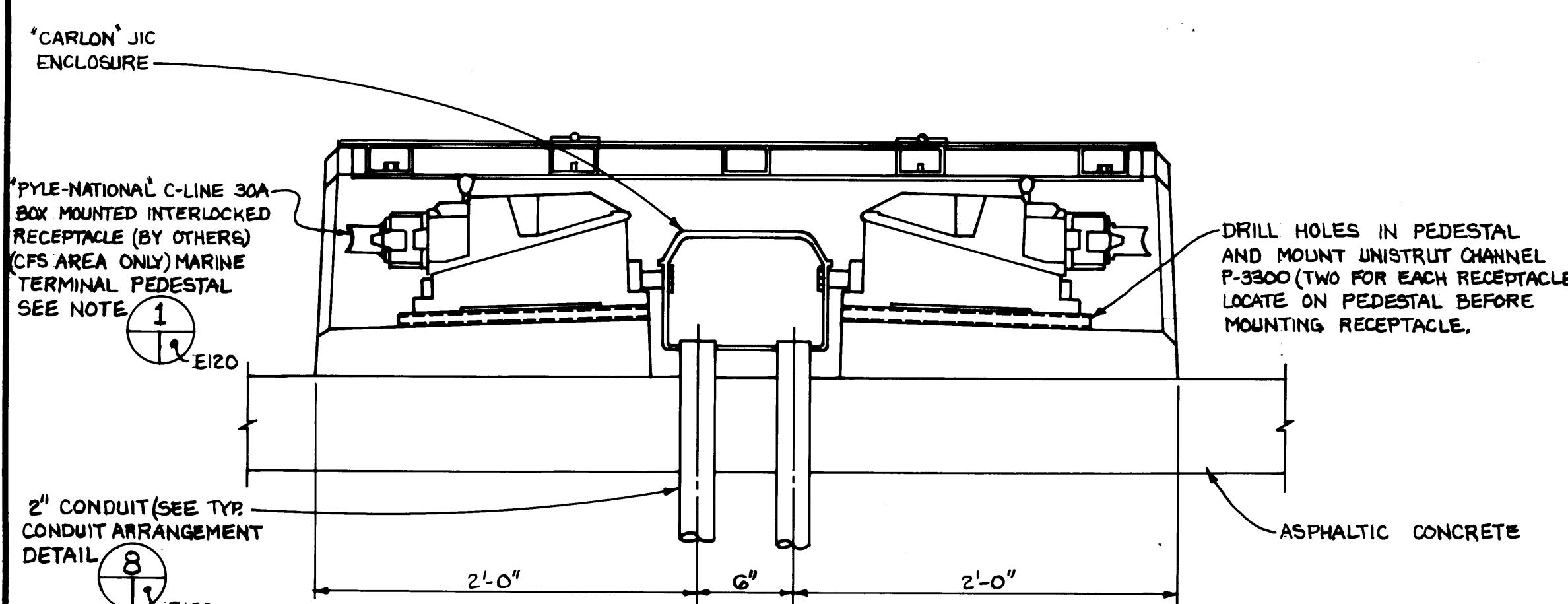


CONTRACTOR TO PROVIDE - NEW FABRICATION - RECEPTS BY OTHER

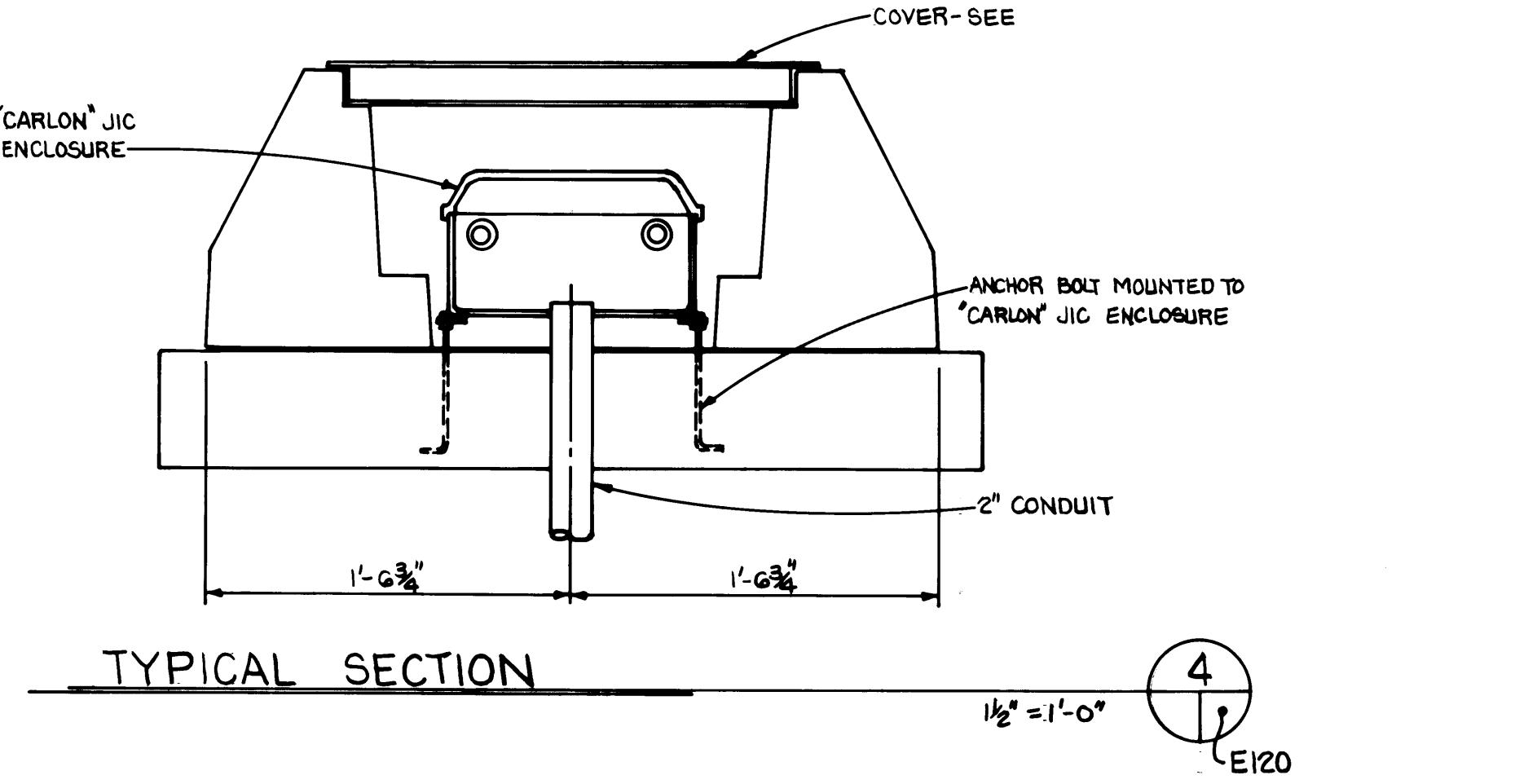
CFS AREA REFRIGERATED CONTAINER RECEPTACLE PEDESTAL
PLAN VIEW ~ QTY 20 REQUIRED



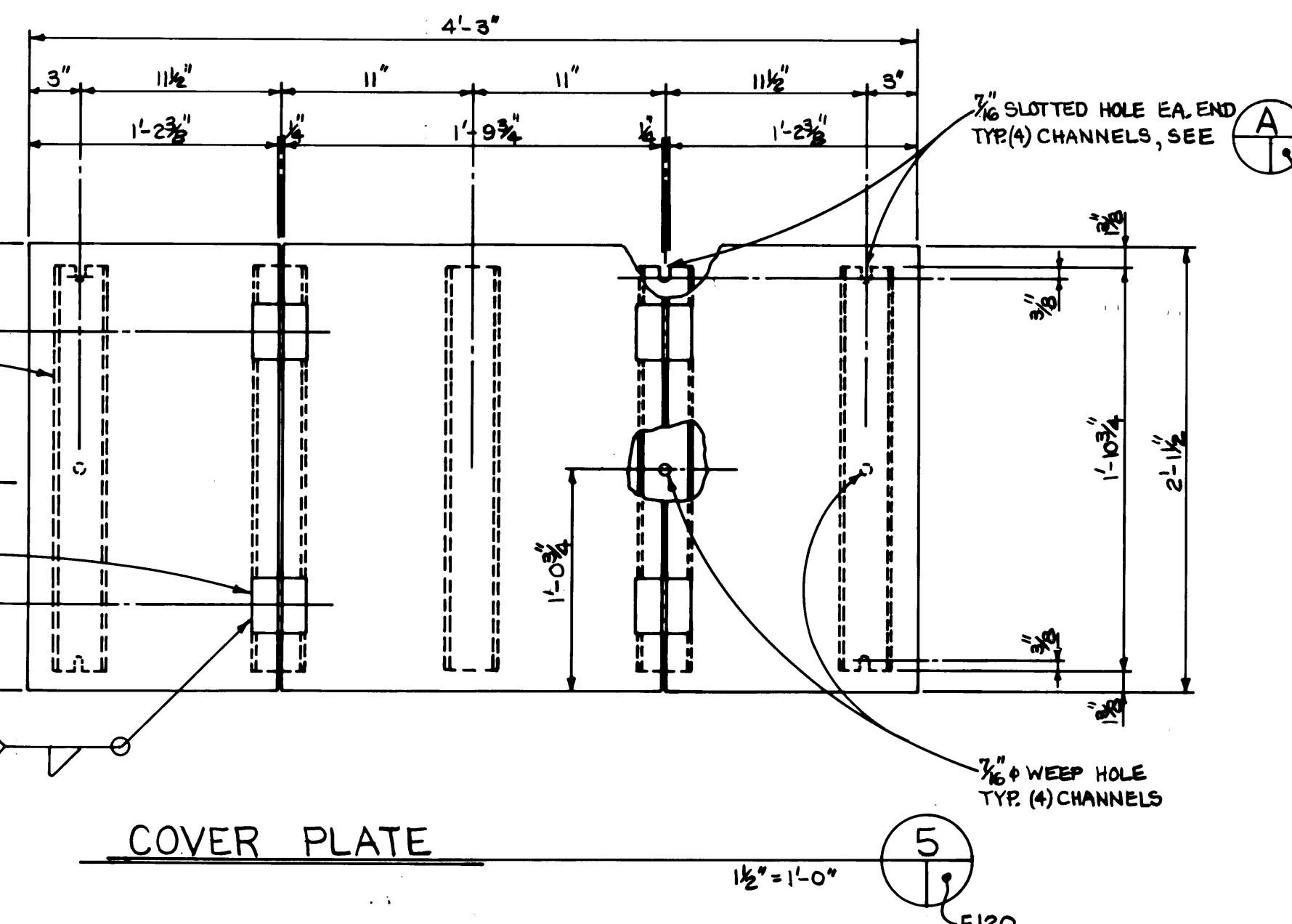
**NOTE: GALVANIZE AFTER FABRICATION
ALL HARDWARE STAINLESS STEEL**



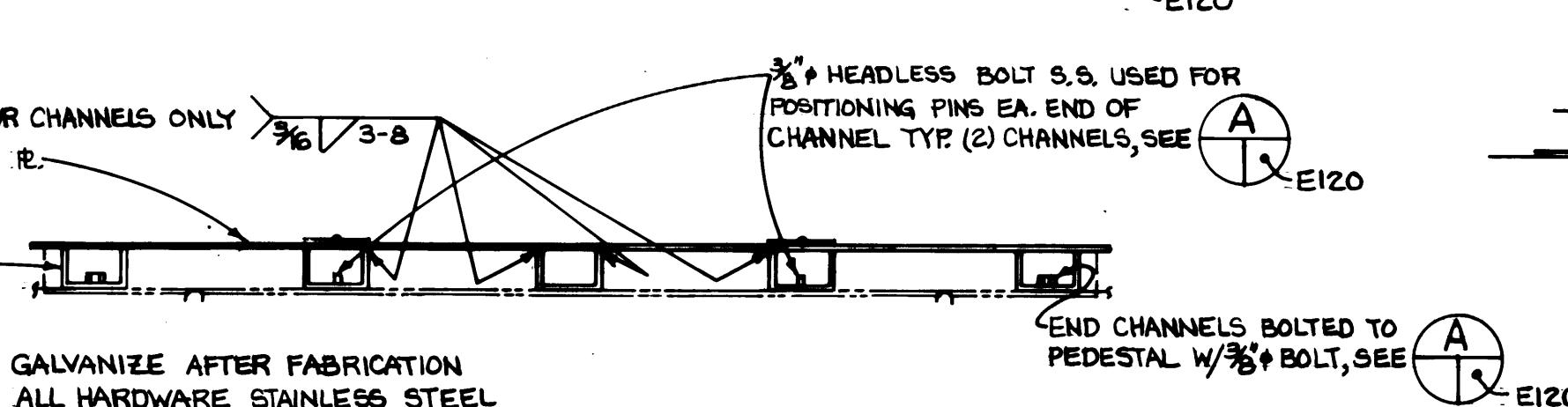
TYPICAL CROSS SECTION



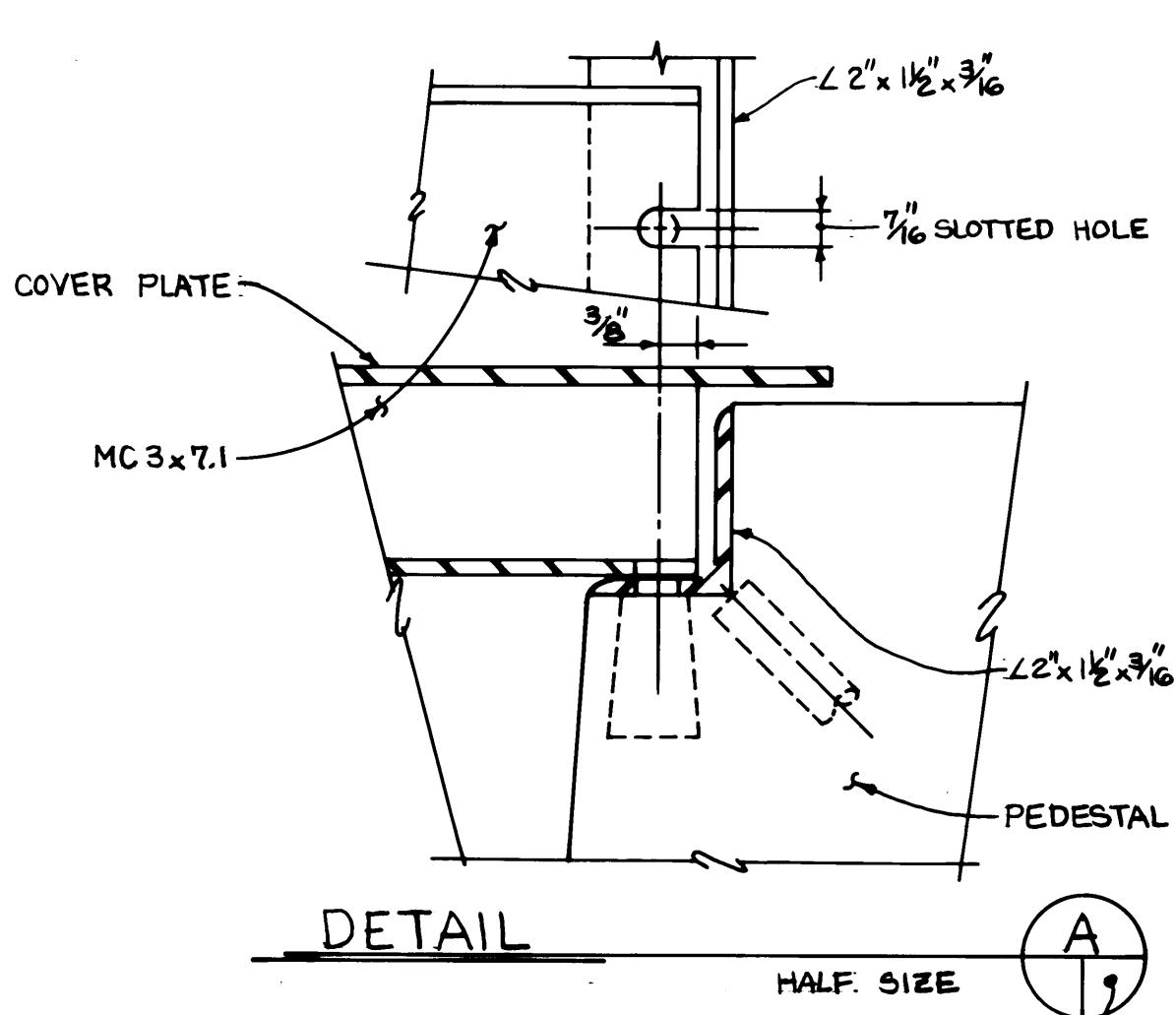
TYPICAL SECTION



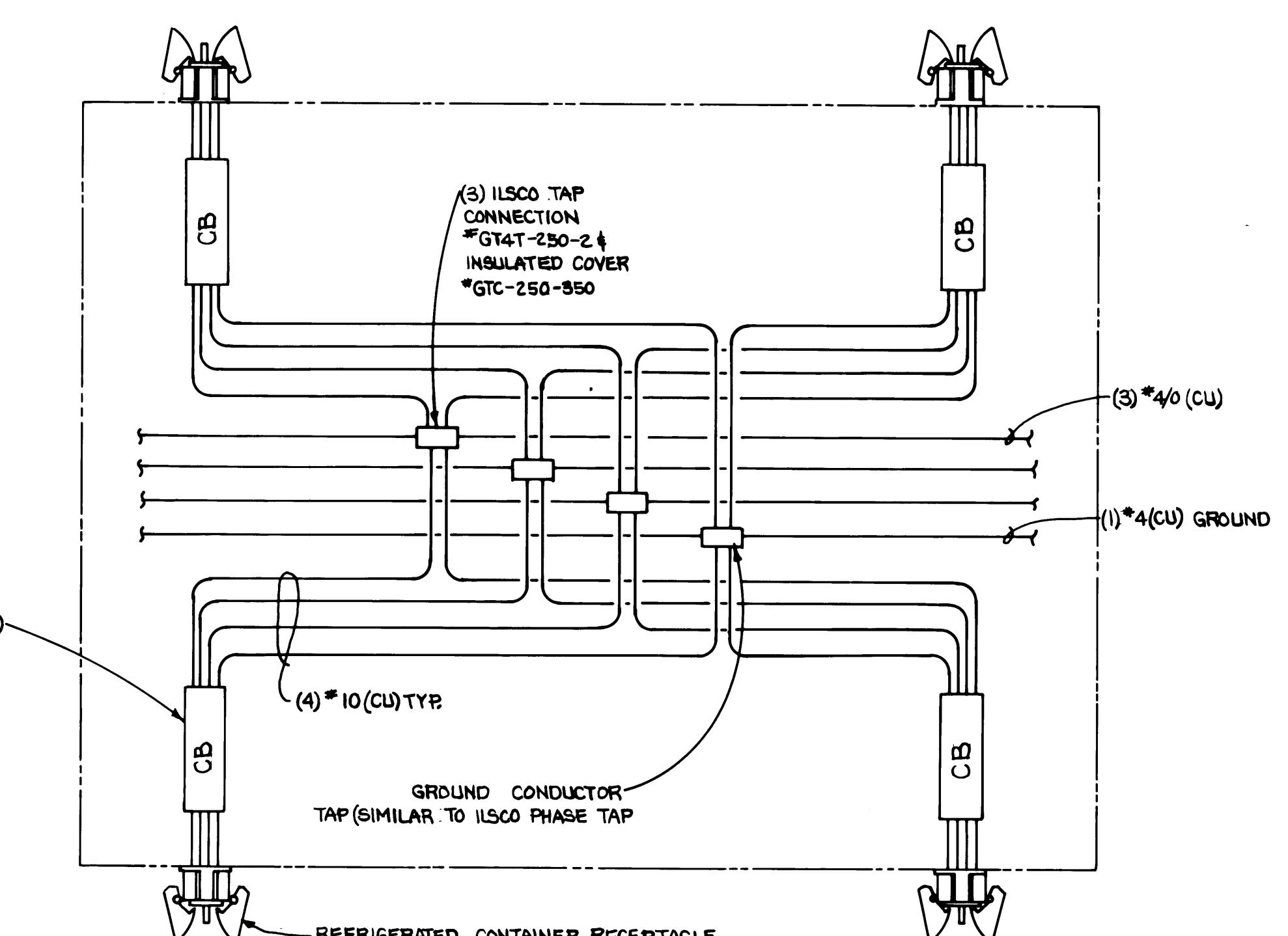
COVER PLATE



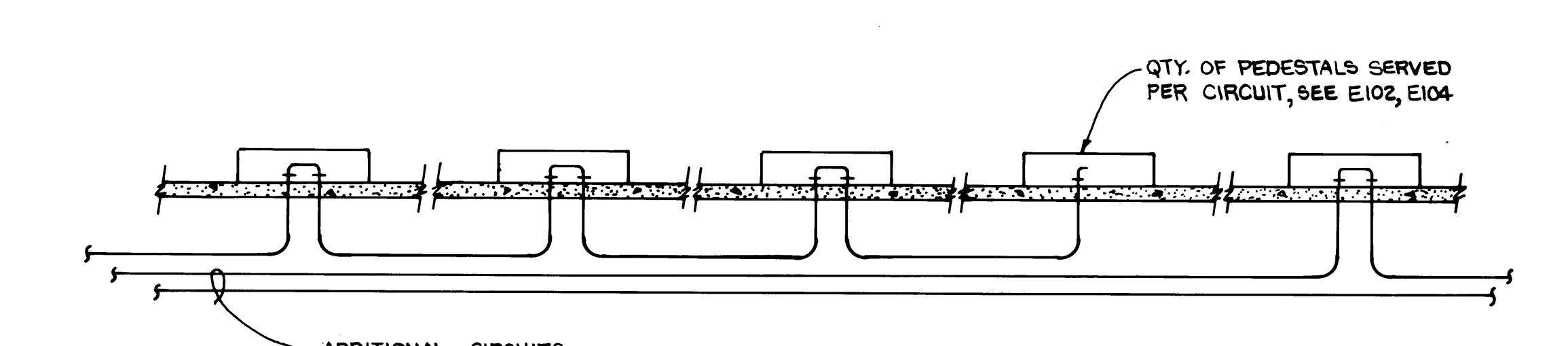
SECTION



DETAIL



TYPICAL REFRIGERATED CONTAINER PEDESTAL WIRING DIAGRAM



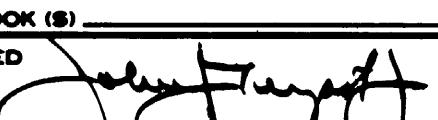
TYPICAL REFRIGERATED CONTAINER CONDUIT ARRANGEMENT

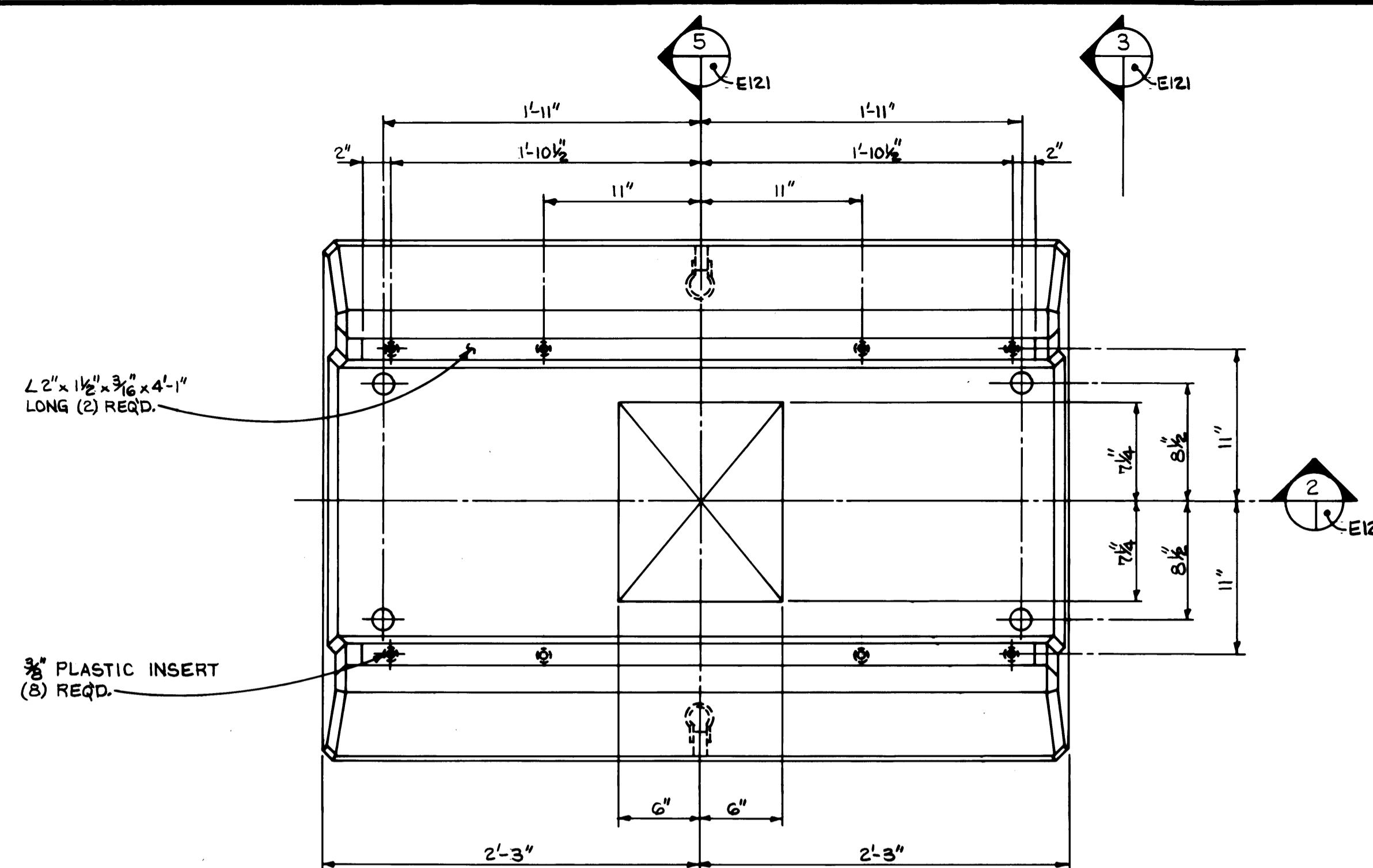
NOTE: (MARINE TERMINAL AREA)

- NOTE: (MARINE TERMINAL AREA)

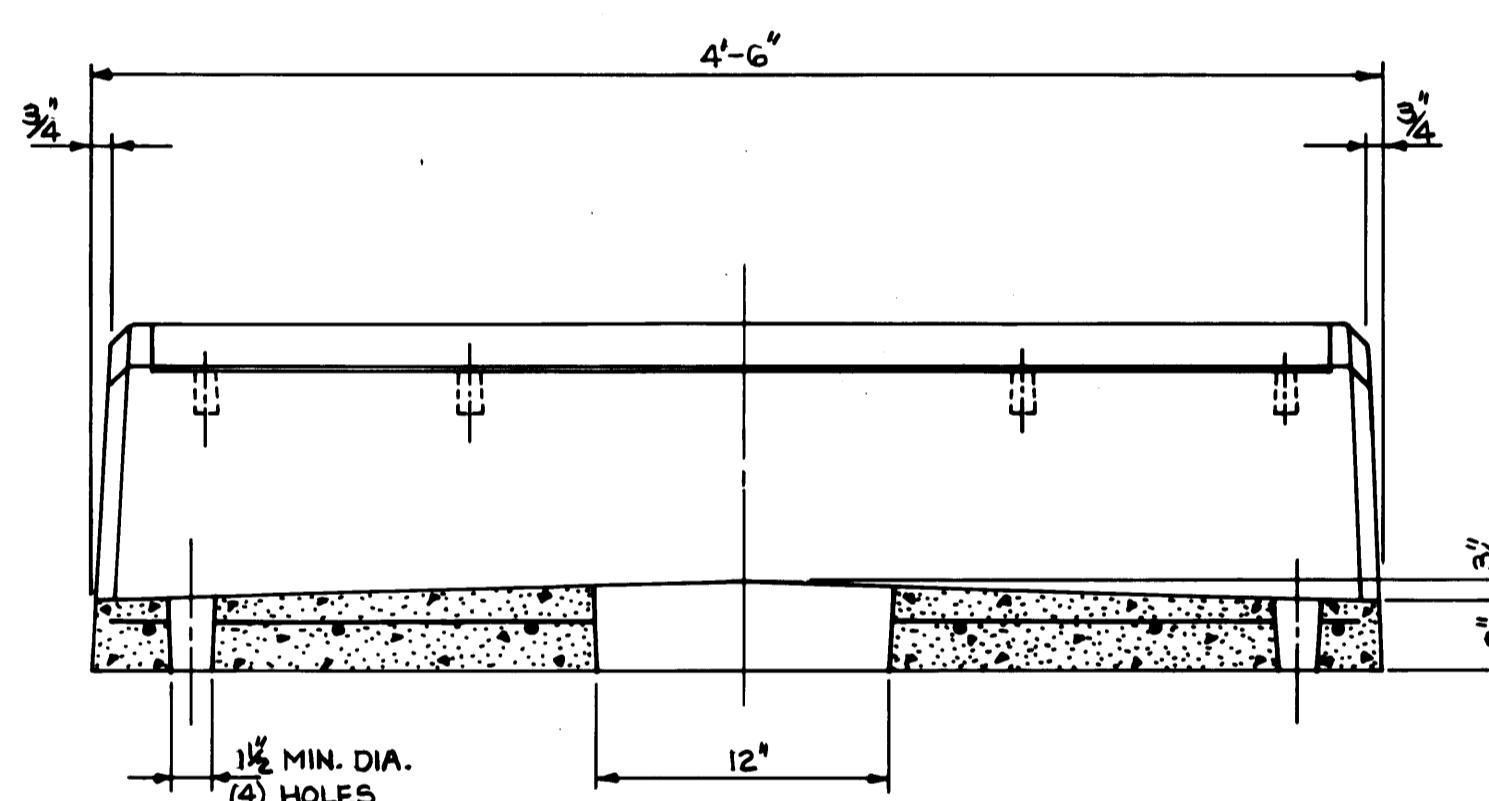
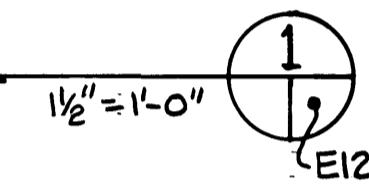
 1. ELECTRICAL CONTRACTOR TO REMOVE PEDESTALS IN SEATTLE
SEALAND YARD AND REINSTALL COMPLETE IN TACOMA TERMINALS YARD.

(CFS AREA)
 2. ELECTRICAL CONTRACTOR TO ASSEMBLE AND INSTALL OWNER FURNISHED
RECEPTACLES, CARLON BOX, WIRING CONNECTIONS AND INSTALL
RECEPTACLE PEDESTALS COMPLETE AS INDICATED.

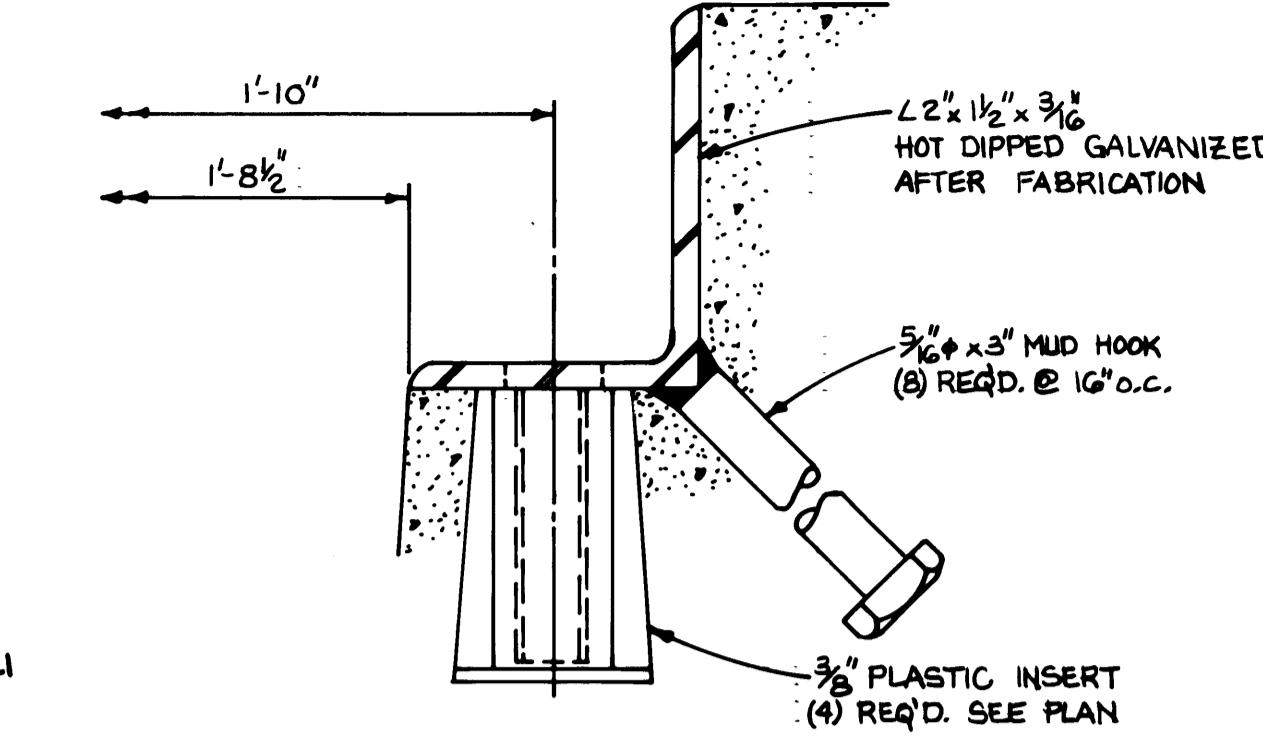
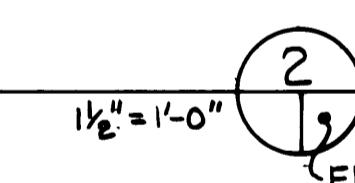
DRAWN <u>B.C.</u>	PORT OF TACOMA	
DATE <u>5/31/84</u>		
CHECKED <u>RC</u>	TACOMA TERMINALS, INC.	
DATE <u>5-31-84</u>		
CHECKED <u>P</u>	ELECTRICAL DETAILS	
DATE <u>5-31-84</u>		
CONT. NO. <u>560</u>		
FIELD BOOK (S) _____		SCALE <u>AS NOTED</u>
APPROVED 		DRAWING NO. <u>EP-3880-23-E12</u>
PROJECT MANAGER 		DATE <u>5/31/84</u>
CHIEF ENGINEER 		DATE <u>5/31/84</u>
		SHEET <u>63</u> OF <u>88</u>



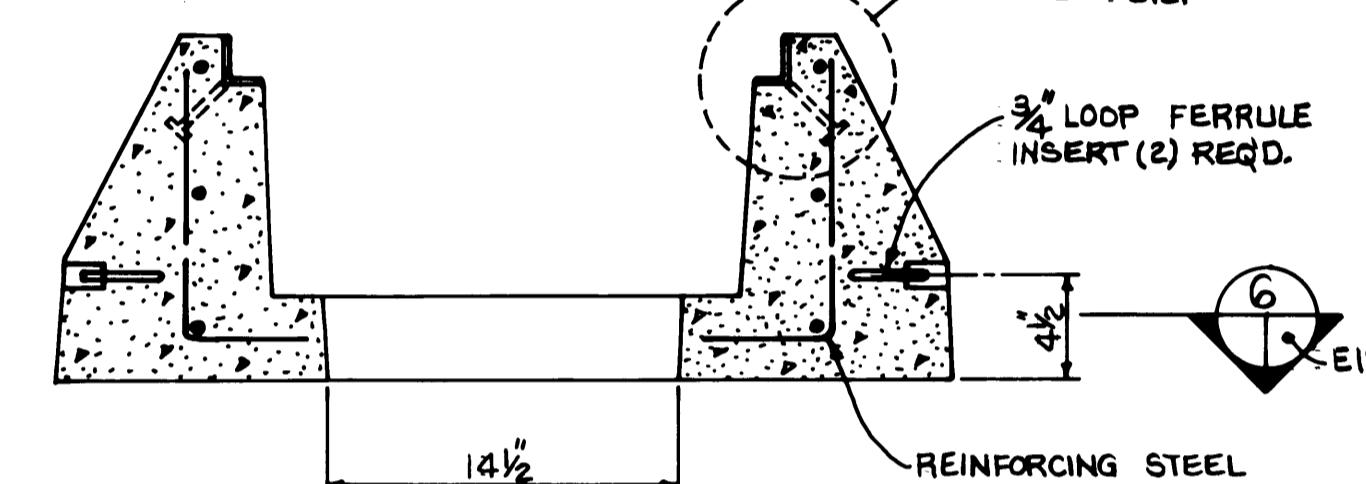
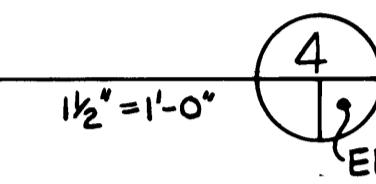
CONCRETE PEDESTAL FOR REFRIGERATED CONTAINER RECEPTACLE



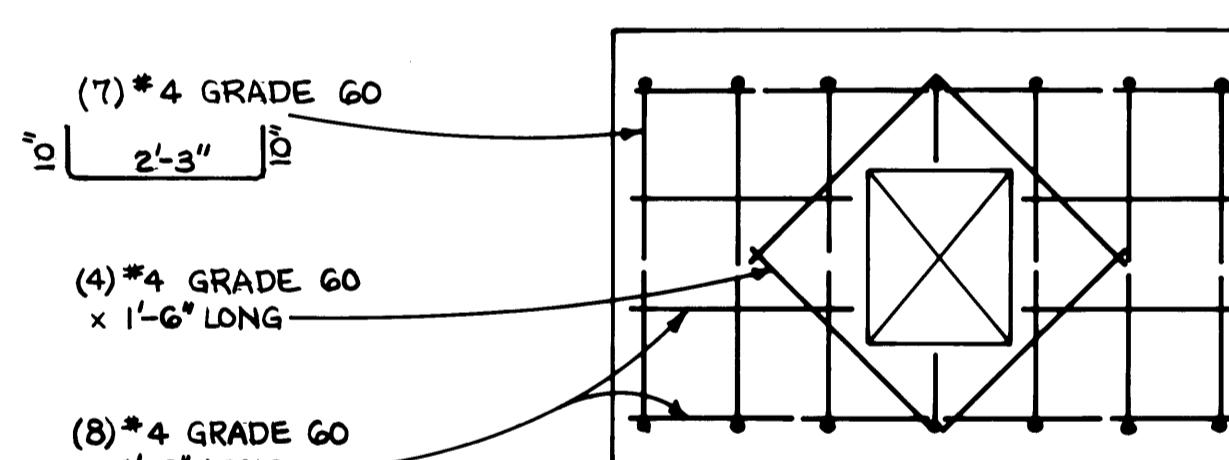
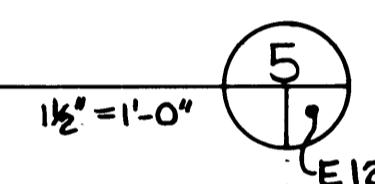
SECTION



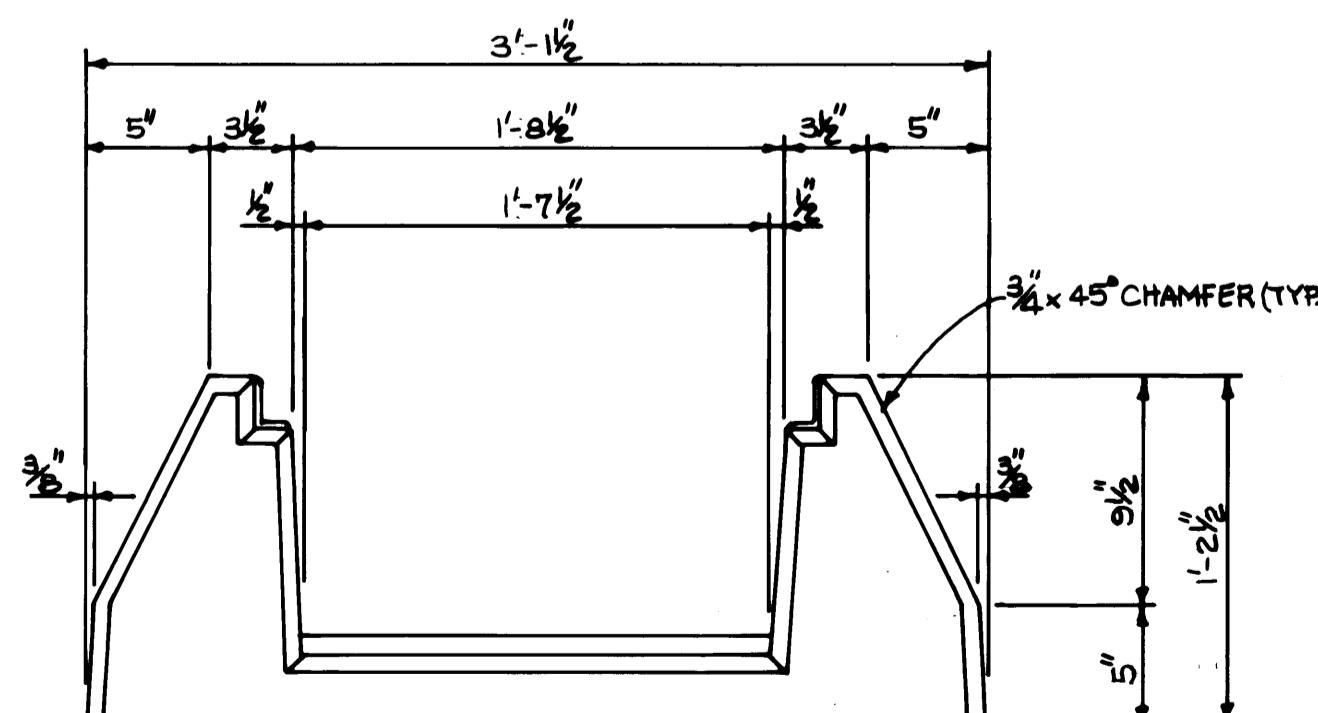
DETAIL



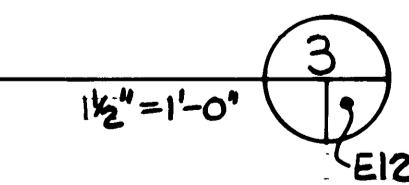
SECTION



REINFORCING PLAN

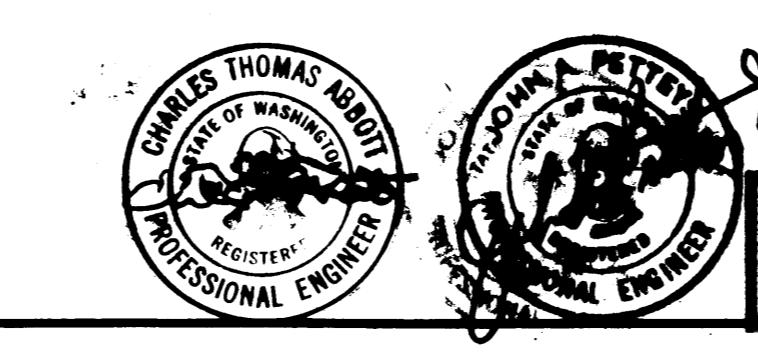
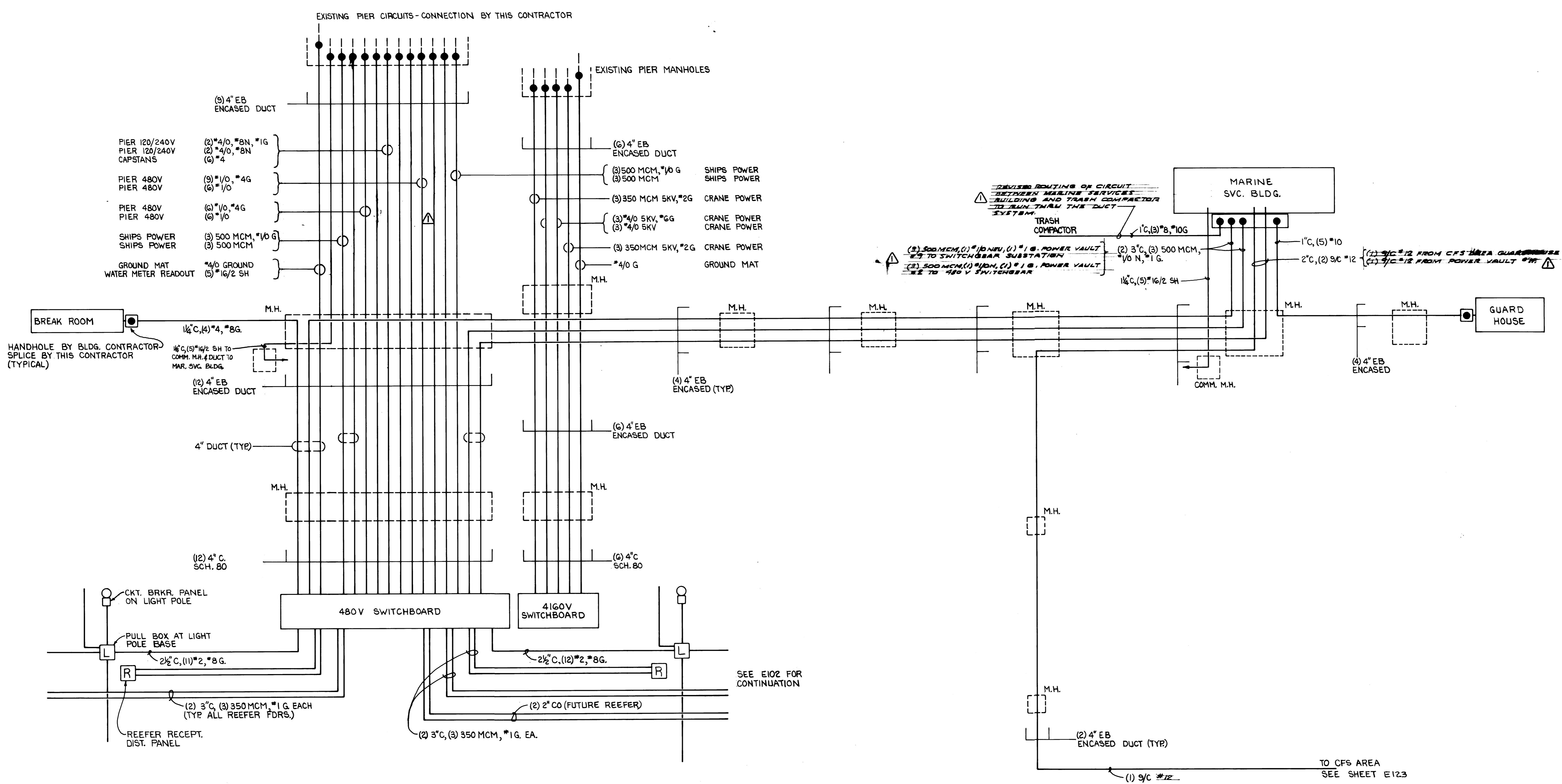


VIEW



Whitacre Engineers, Inc.
Consulting Engineering & Land Planning
2124 SO. 'K' STREET P.O. BOX 2077
TACOMA, WASHINGTON 98401 206-752-2444

DRAWN <u>B.C.</u>	PORT OF TACOMA	
DATE <u>5/31/84</u>		
CHECKED <u>JL</u>	TACOMA TERMINALS, INC.	
DATE <u>5-31-84</u>		
CHECKED <u>P</u>	ELECTRICAL DETAILS	
DATE <u>5-31-84</u>		
CONT. NO. <u>560</u>		
FIELD BOOK (S) _____		SCALE <u>AS NOTED</u>
APPROVED <u>John Targett</u>		DRAWING NO. <u>EP-3880-23-E121</u>
PROJECT MANAGER <u>John MacLeod</u>		DATE <u>5/31/84</u>
CIVIL ENGINEER <u>John MacLeod</u>		SHEET <u>64</u> OF <u>88</u>



Whitacre Engineers, Inc.
Consulting Engineering & Land Planning
2220 50th ST. NW, SUITE 700, P.O. BOX 3877
TACOMA, WASHINGTON 98403 206-276-6144

					APPROVED	<i>John Tempoff</i>	5/3/84	DRAWING NO.
	REVISED TO AS BUILT	A.S.	11-25-84		PROJECT MANAGER	<i>R.D. Muschler</i>	DATE	EP-3880-23-E122
MARK	REVISION	BY	APP.	DATE	CHIEF ENGINEER		5/3/84	SHEET 65 OF 88

PORT OF TACOMA

TACOMA TERMINALS, INC.

POWER DISTRIBUTION DIAGRAM

TERMINAL AREA

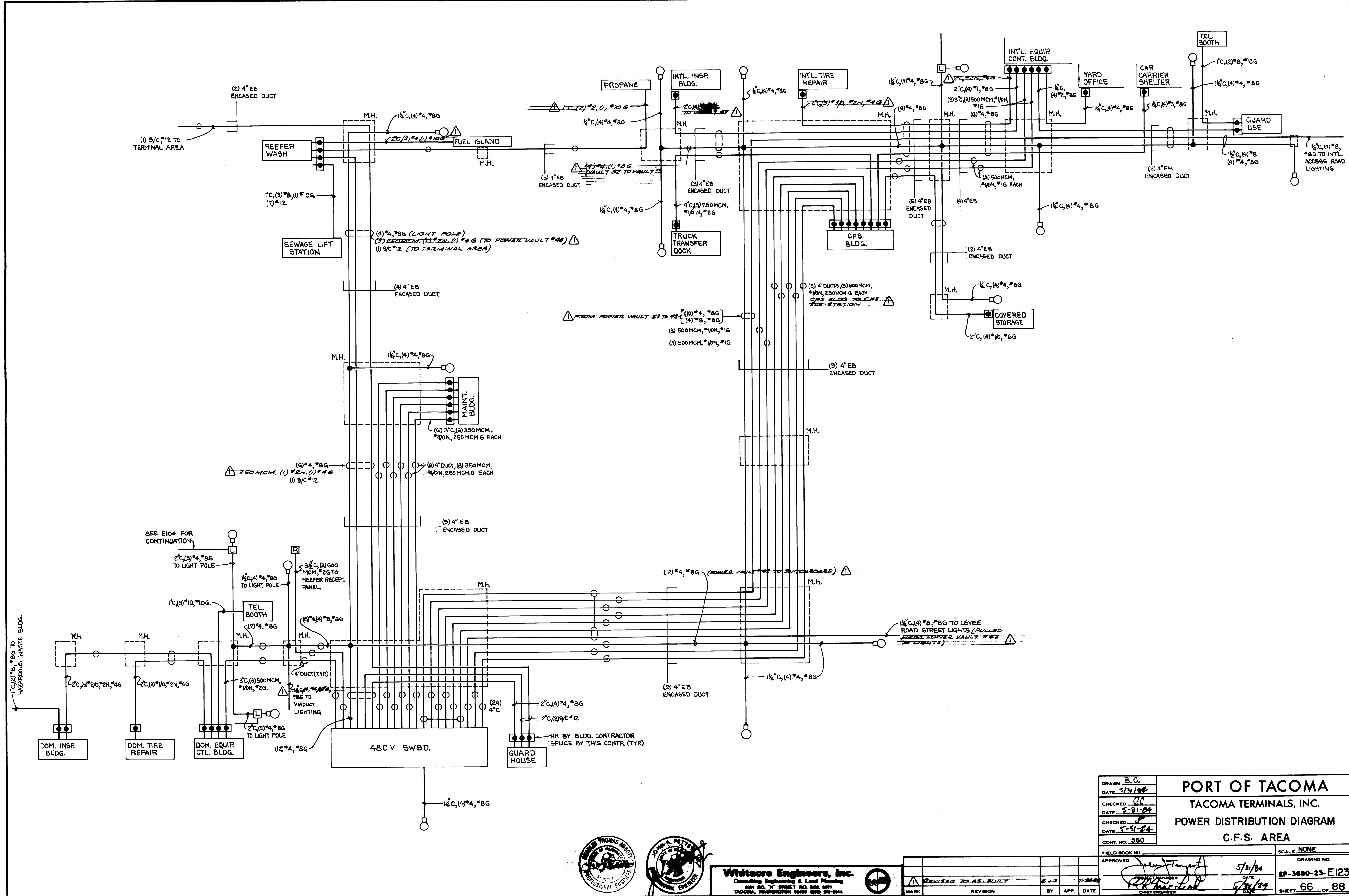
SCALE NONE

DRAWING NO.

EP-3000-23-E

SHEET 65 OF 8

15



NP SCHEDULE

N1 MARINE TERMINAL SECURITY LIGHTING
 N2 MARINE TERMINAL NORTH END LIGHTING
 N3 MARINE TERMINAL SOUTH END LIGHTING
 N4 MARINE TERMINAL PIER LIGHTING
 N5 CFS AREA SECURITY LIGHTING
 N6 CFS AREA NORTH END LIGHTING
 N7 CFS AREA VIADUCT LIGHTING
 N8 CFS AREA EAST SIDE LIGHTING
 N9 CFS AREA WEST SIDE LIGHTING

MARINE SVC. BLDG. STA.

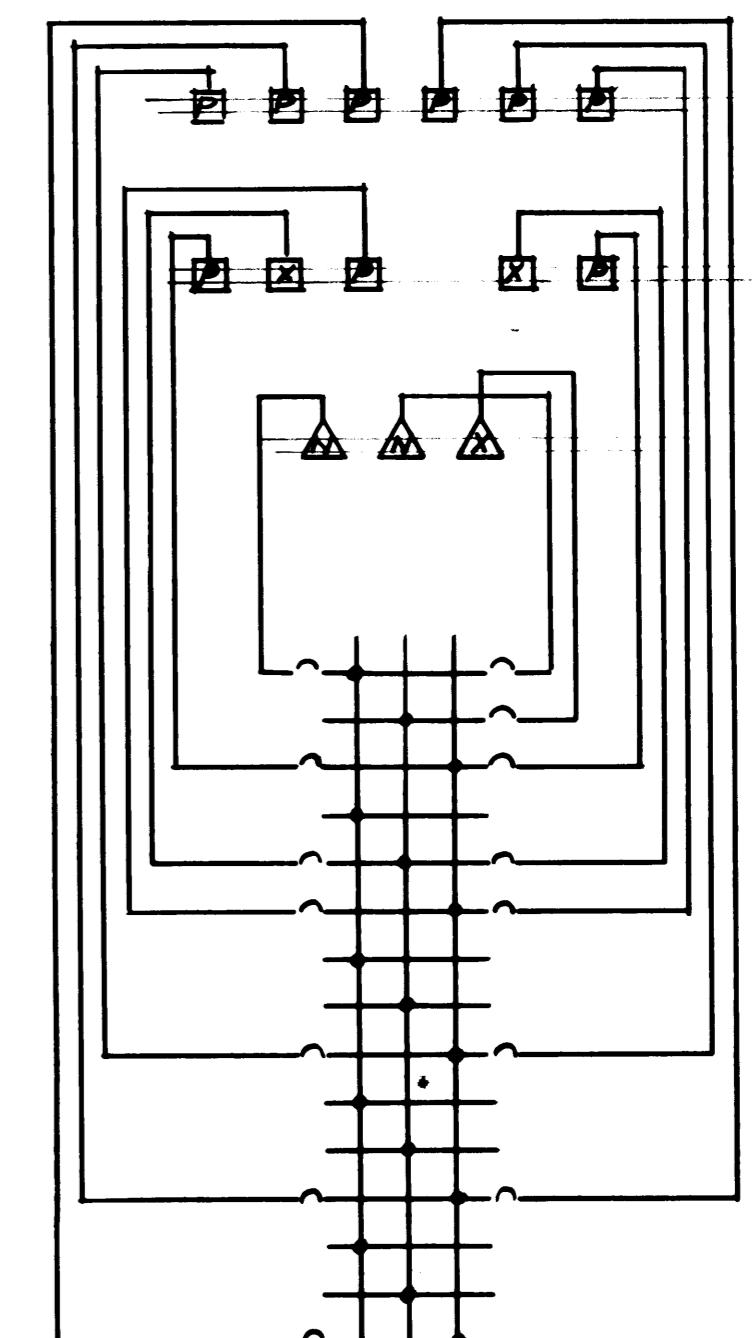
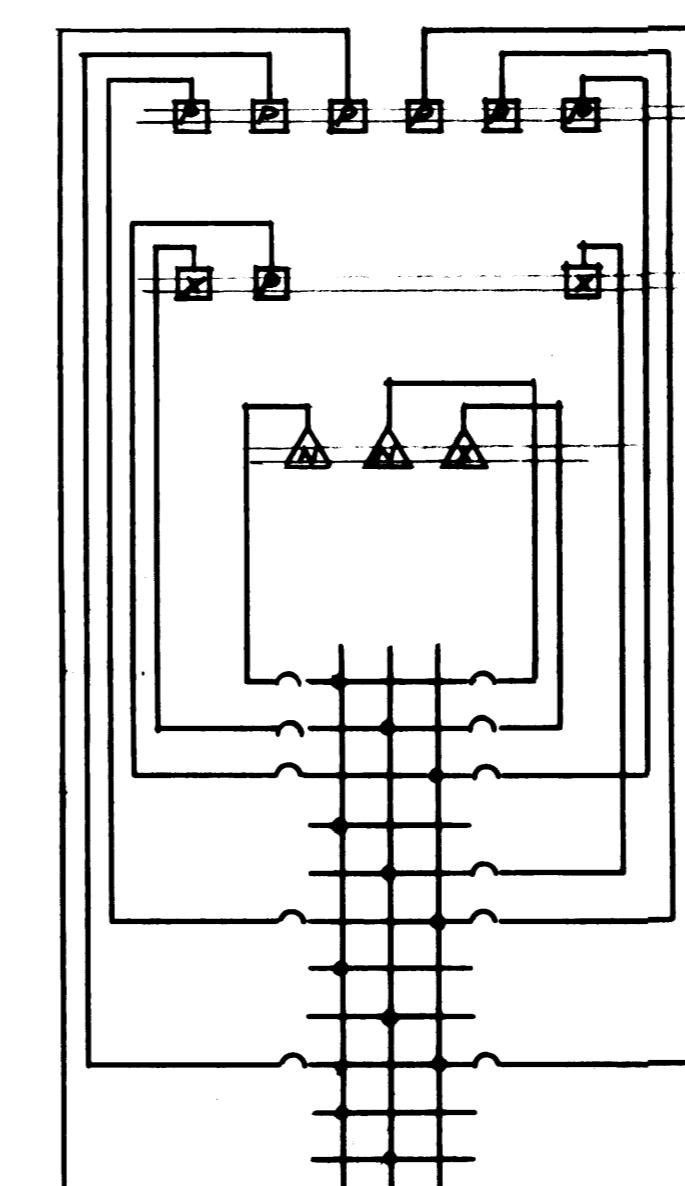
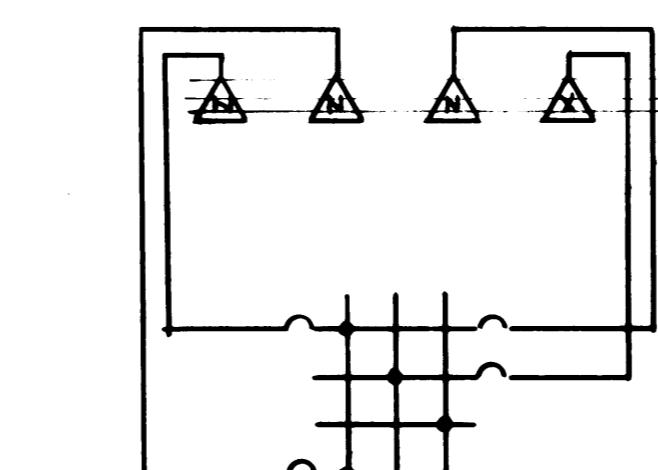
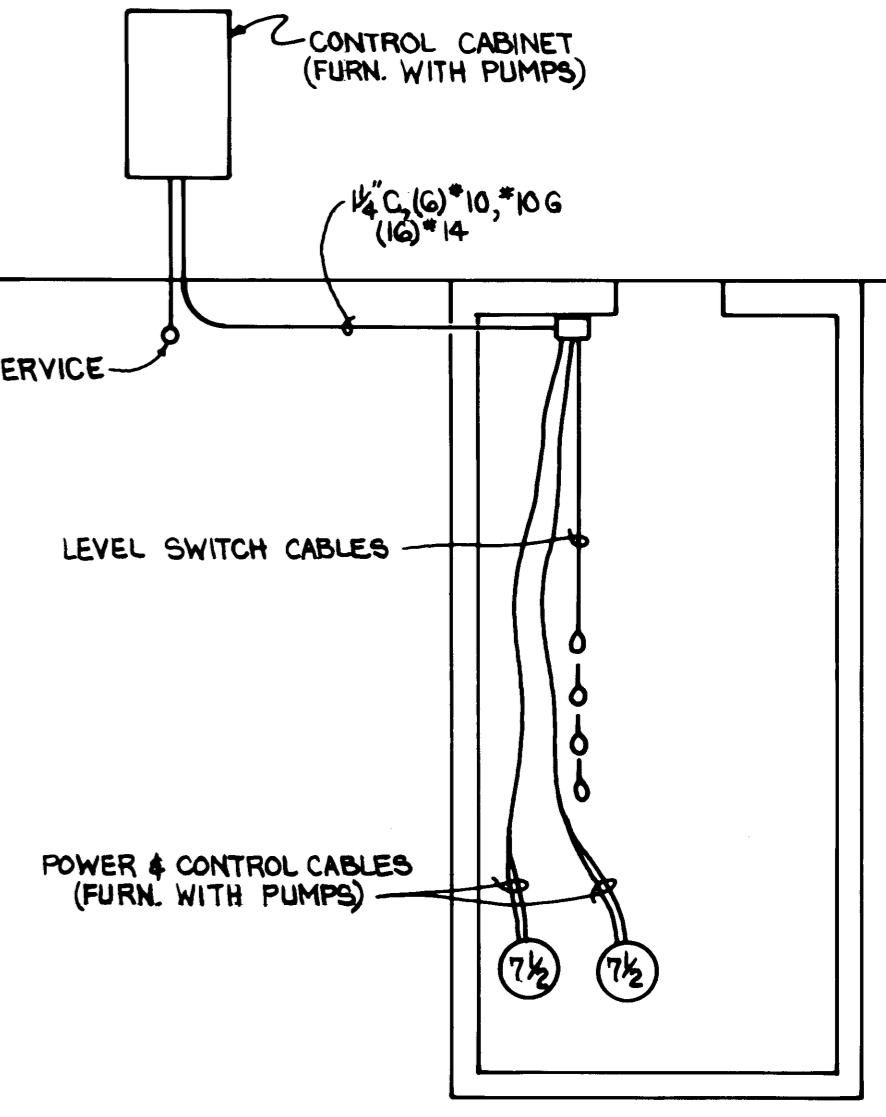
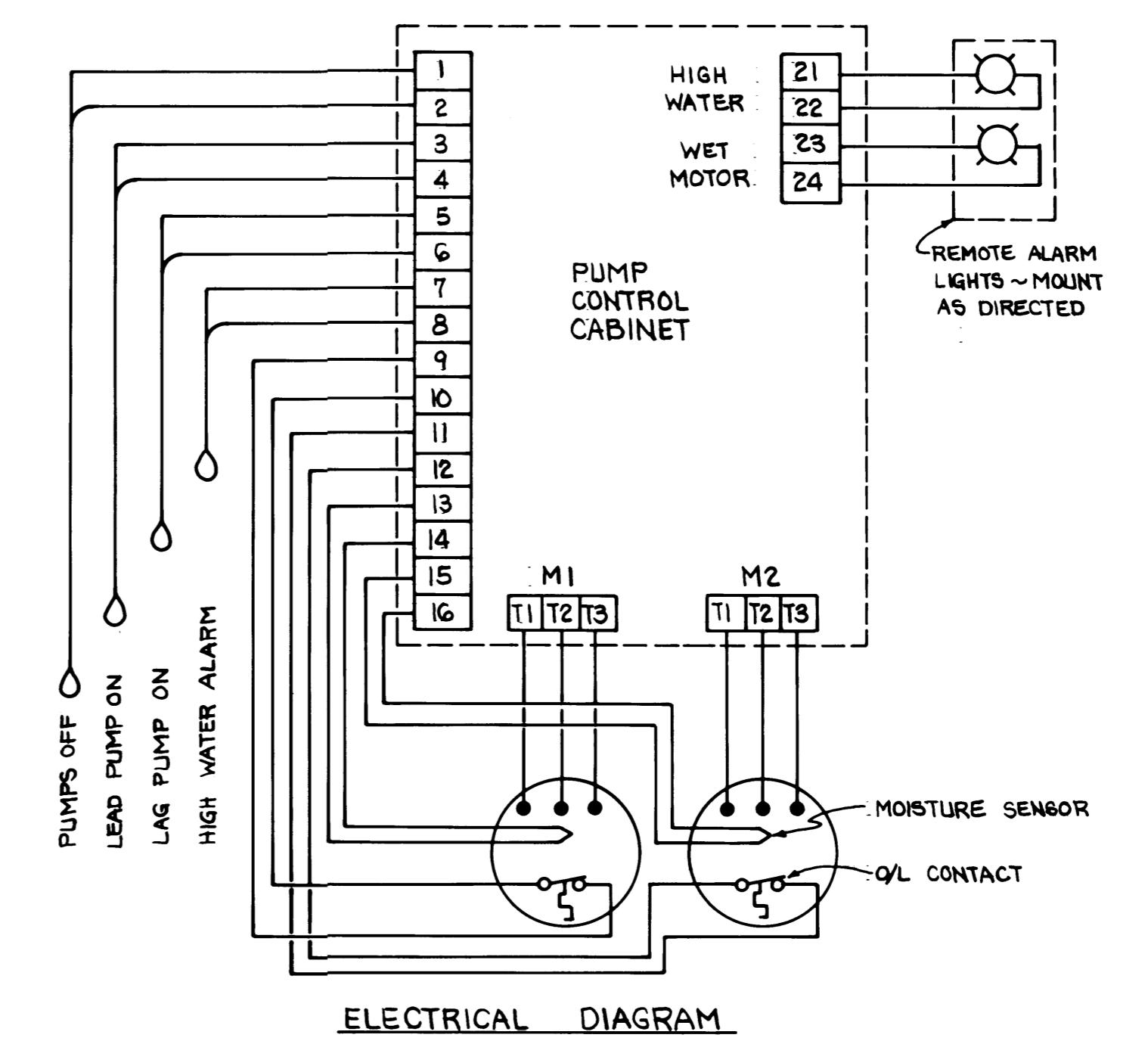
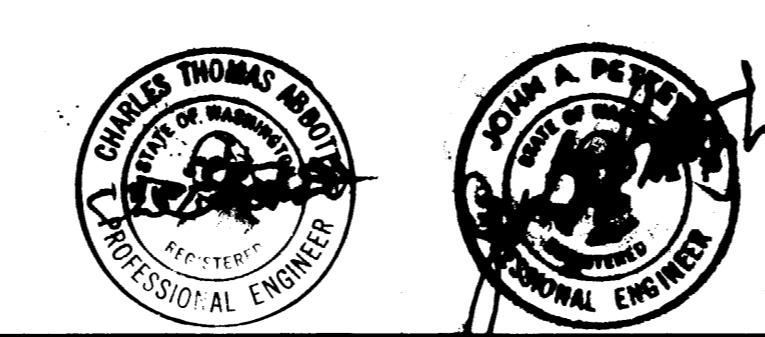
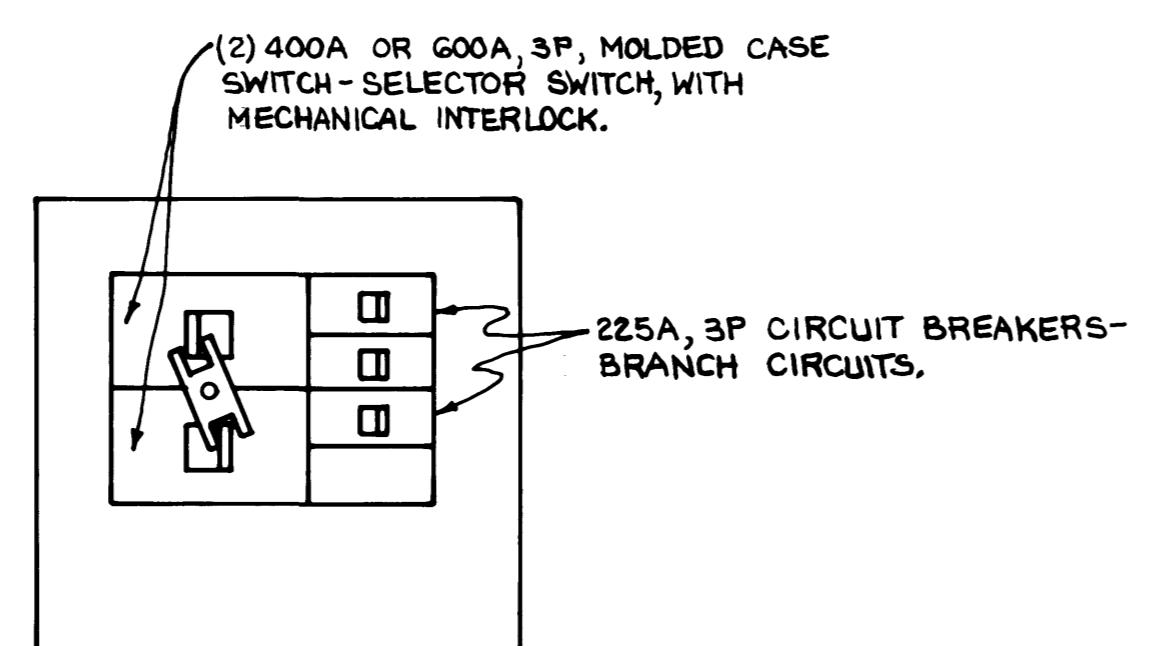
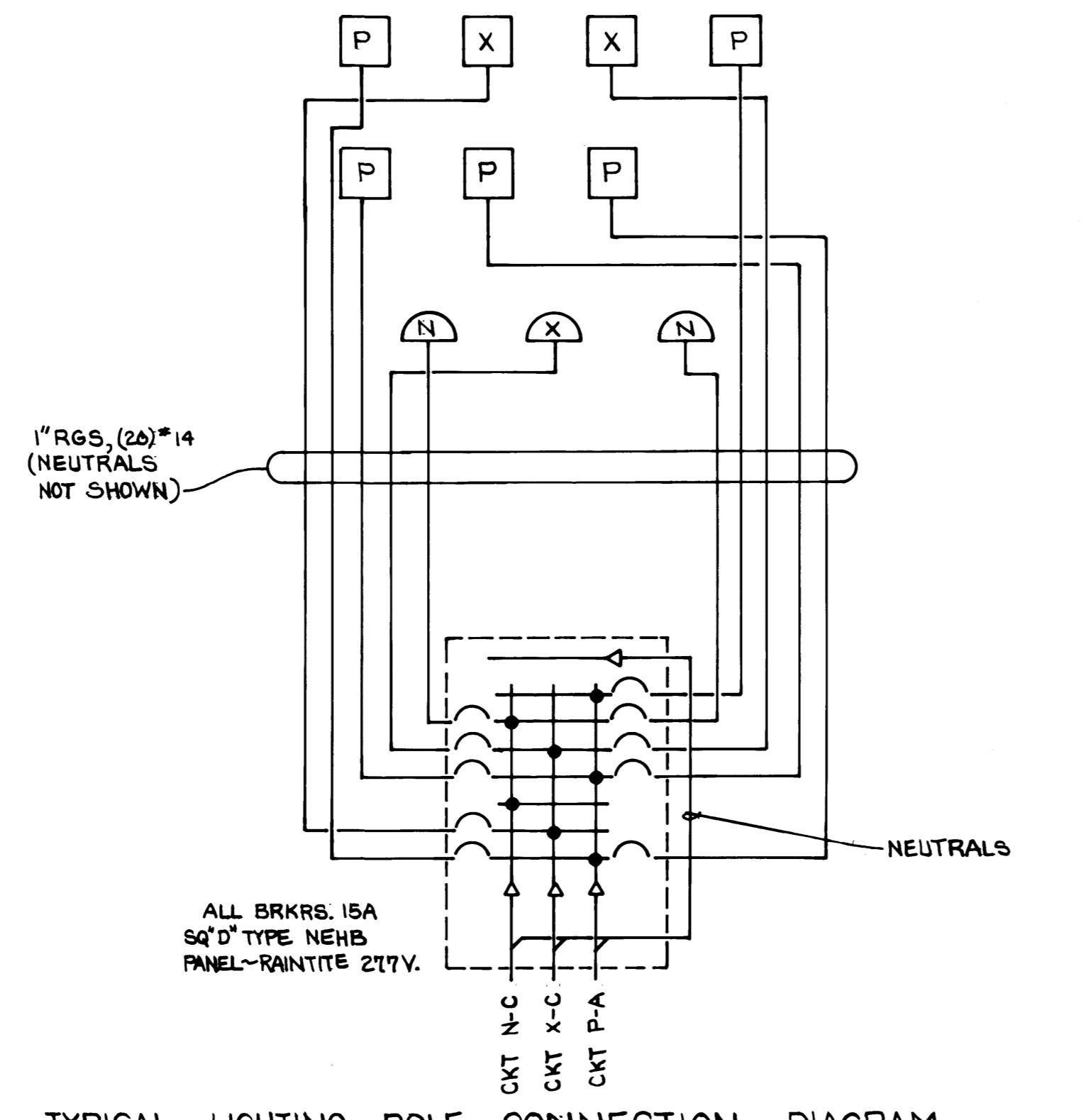
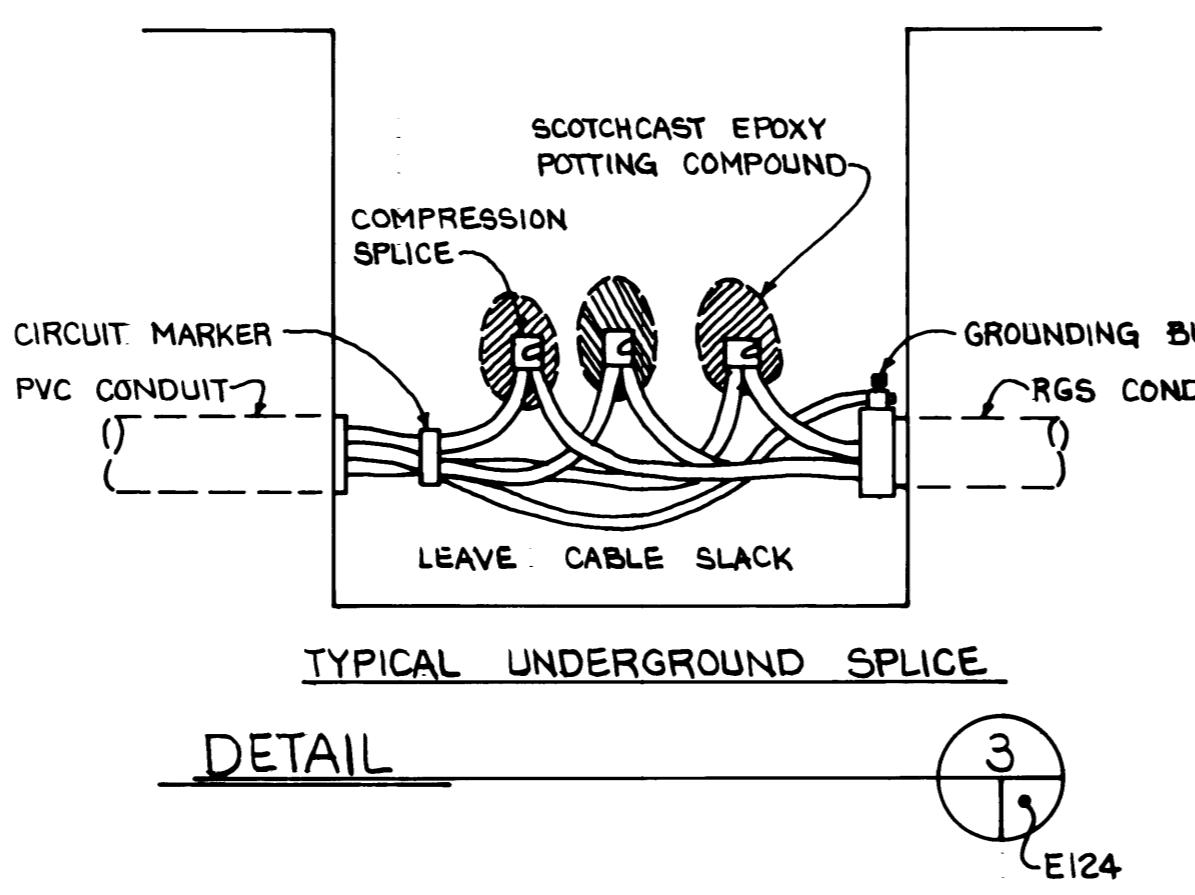
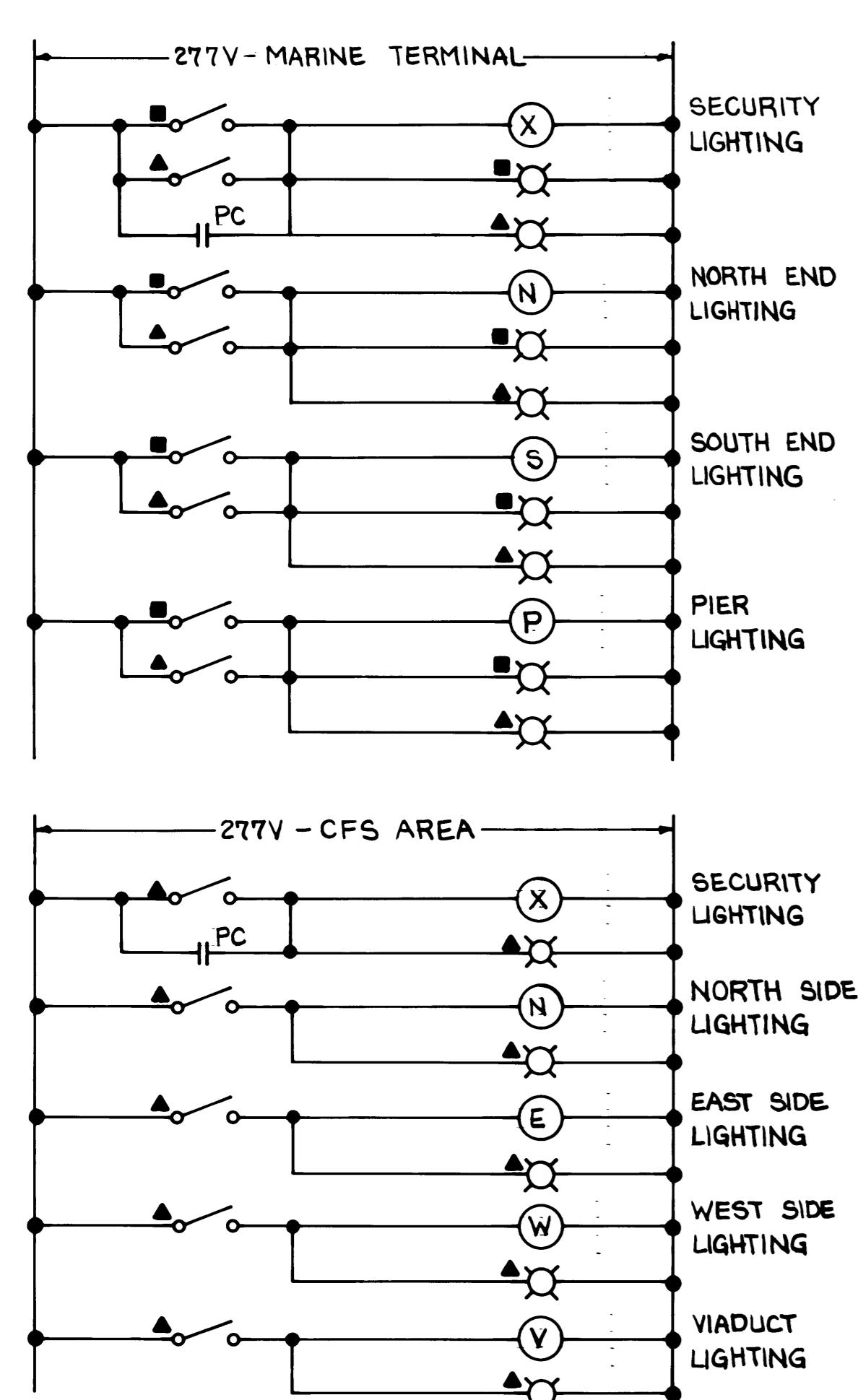
8" x 8" x 4" NEMA 12 BOX

DOMESTIC GUARD HOUSE STA.

CONTROL UNIT, LIGHTED,
 SQ.D" 9001-LR-3GB LABAW3

AREA LIGHTING CONTROL STATIONS

12" x 12" x 6" NEMA 12 BOX



DRAWN BY	B.C.	PORT OF TACOMA		
DATE 5/31/88		TACOMA TERMINALS, INC.		
CHECKED	QC	LIGHTING DISTRIBUTION DIAGRAM		
DATE 5-31-88				
CHECKED	P			
DATE 5-31-88				
CONT. NO.	560			
FIELD BOOK (S)				
APPROVED	Signature		5/31/88	
DATE 5/31/88		DRAWING NO.		EP-3880-23-E124
REVISION		BY APP. DATE	SCALE NONE	
MARK				

Whitacre Engineers, Inc.
 Consulting Engineering & Land Planning
 2104 5th Street, P.O. Box 5677
 TACOMA, WASHINGTON 98431-5677

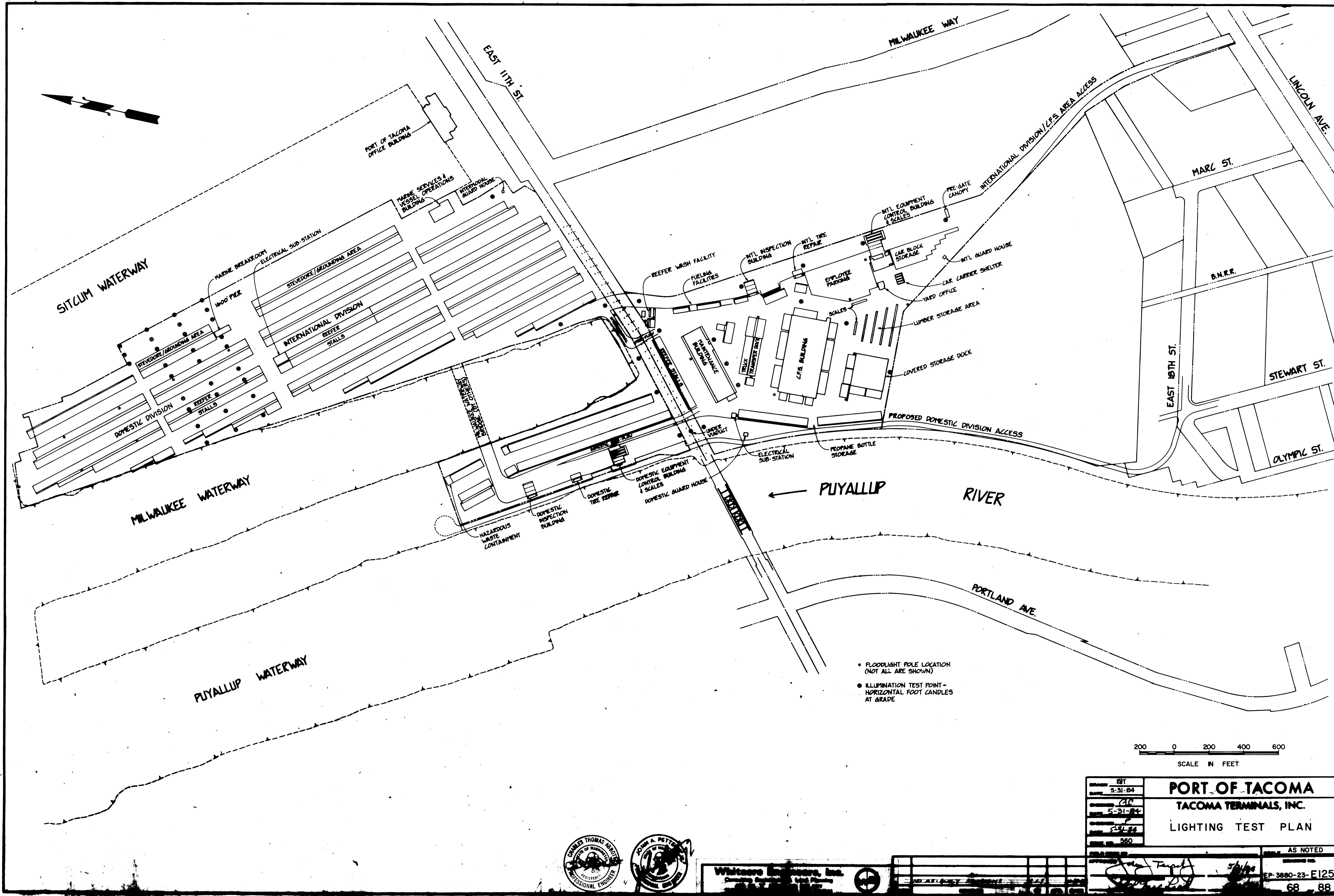
REVISED TO AS-BUILT R.J.S. 11-27-88

REVISION BY APP. DATE

PROJ. MANAGER R. L. Green, PE
 CHIEF ENGINEER R. L. Green, PE

DATE 5/31/88

SHEET 67 OF 88



MATCH LINE - SEE SECTOR 2

MATCH LINE - SEE SECTOR 3

53

NEO. 70
EL. 60.700

MILWAUKEE WATERWAY

MILWAUKEE WATERWAY BRIDGE
(BY OTHERS)

NOTE:
DASHED LINES INDICATE FUTURE
MARINE YARD EXPANSION.

1" COMPRESSED AIR LINE,
SEE DRAWING M301
FOR CONTINUATION.

DOMESTIC
DIVISION

75

76

72

73

INTERNATIONAL
DIVISION

72

73

HAZARDOUS WASTE
CONTAINMENT AREA

TOP GRAV.
SURFACE TERRAIN

PUTYALLUP WATERWAY

NEW LEVEE ACCESS ROAD

NOTE: P.T.S. SUB-CONTRACTOR MUST COORDINATE
CONDUIT LOCATIONS WITH OTHER UTILITIES AND
STRUCTURES, INCLUDING:
STORM SEWER
SANITARY SEWER & WATER
POWER & COMMUNICATIONS
SCALES

LIGHT POLE (TYPE) X FIRE HYDRANT (TYPE)

PROVIDE 4" LOW LEVEL ATTACHMENT
AT EACH END OF BASES OF CONCRETE
POLES. CONCRETE BY
OWNER.

1 1/2" COMPRESSED AIR LINE
CONNECT BOTH ENDS TO COMPRESSED
AIR PIPING FOR BUILDINGS, SEE BUILDING
DRAWINGS.

MATCH LINE - SEE SECTION 1

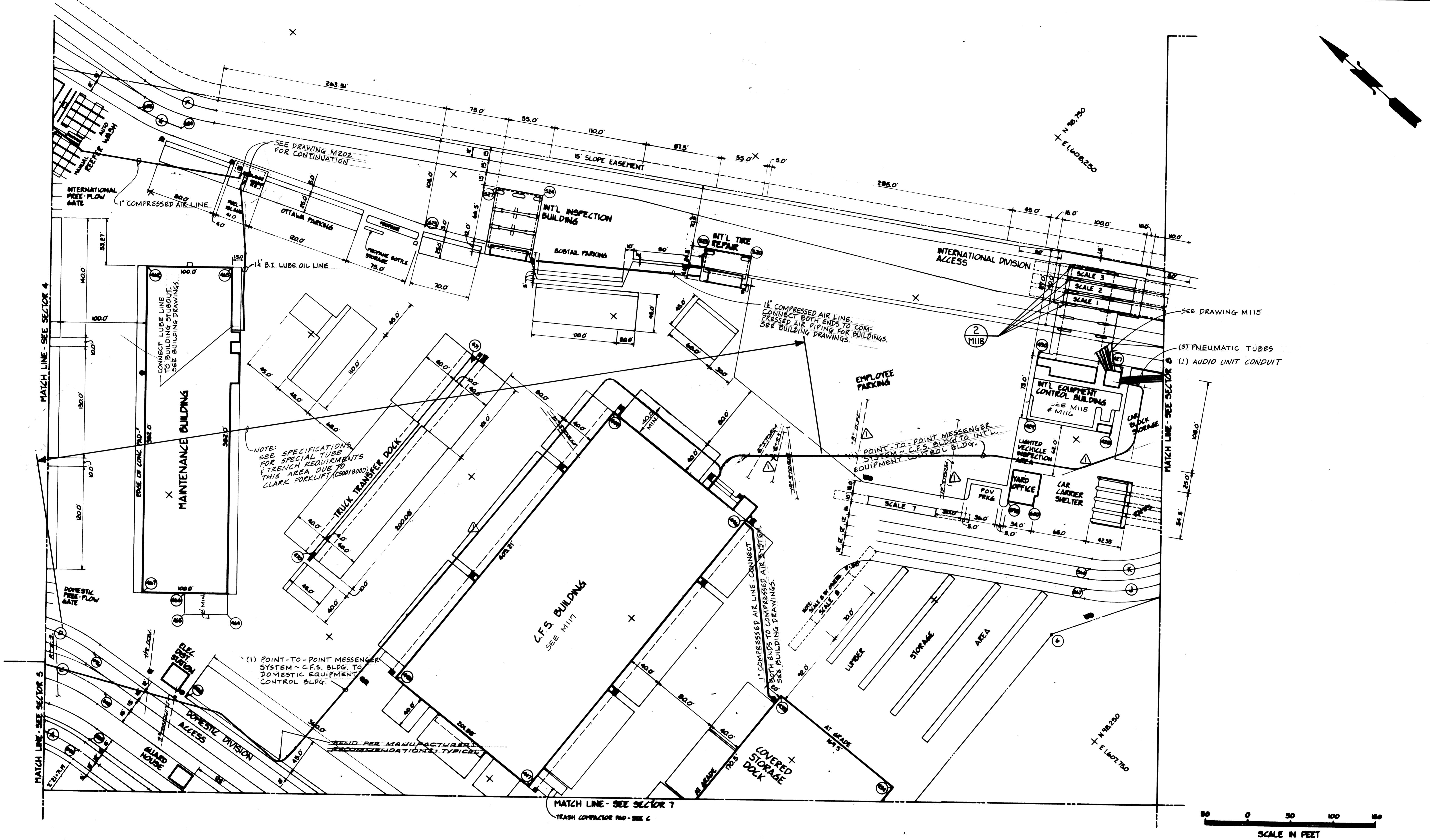
(3) PNEUMATIC TUBES - DOMESTIC EQUIPMENT
CONTROL BLDG. TO FIRE-GATE UNDER 11th ST. E.
(1) AUDIO UNIT CONDUIT
(1) POINT-TO-POINT MESSENGER
SYSTEM TO G.F.S. BLDG.

SEARCH	DATE
1	1/1/74
2	1/1/74
3	1/1/74
4	1/1/74

PORT OF TACOMA
TACOMA TERMINALS, INC.
P.T.S., AIR, & LUBE OIL LINES

AS NOTED





Whitacre Engineers, Inc.
Consulting Engineering & Land Planning
2004 30. 1/2 STREET P.O. BOX 807
MOSSY, WASHINGTON 98041 206-266-2100

DRAWN _____	PORT OF TACOMA		
DATE _____			
CHECKED <u>J.T.P.</u>	TACOMA TERMINALS, INC.		
DATE <u>5-30-84</u>			
CHECKED <u>P</u>	P.T.S., AIR, & LUBE. OIL LINES		
DATE <u>5-30-84</u>			
CONT. NO. <u>560</u>			
FIELD BOOK NO. _____	SCALE <u>AS NOTED</u>		
APPROVED <u>John T. Taylor</u>	DRAWING NO. <u>EP-3000-23-M106</u>		
REVISER <u>John T. Taylor</u>	DATE <u>5/31/84</u>		
INSPECTOR <u>John T. Taylor</u>	DATE <u>5/31/84</u>	SHEET <u>70</u>	of <u>88</u>
DATE <u>5/31/84</u>			