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April 27, 2016

TO: PLANHOLDERS

SUBJECT: PIER 4 PHASE 2 RECONFIGURATION
PROJECT NO. 091251
CONTRACT NO. 070136

ADDENDUM NUMBER TWO

This addendum is issued to amend the following:

SPECIFICATIONS

A. 26 56 36 FLOOD LIGHTING FIXTURES

1. **REVISE** the first sentence of paragraph 1.02.A to read as follows:

A. Remove and relocate ~~seven~~ six (6) existing 110' steel, flood light poles.

B. 31 62 00 DRIVEN PILES

1. **REVISE** paragraph 3.02.A to read as follows:

A. ~~Sheet pile installation shall occur after stone column installation is complete. The Contractor shall not install sheet piling until all stone columns within 200 feet of the sheet piling have been installed. If excessive movement of the sheet piles occurs at this offset distance, then the Engineer may direct the Contractor to stop sheet pile installation until a remedy is determined.~~

C. 31 66 13 STONE COLUMNS

1. **REVISE** paragraph 3.01.C to read as follows:

A. ~~Stone column installation shall be completed prior to installation of the sheet pile wall. See Section 31 62 00 – Driven Piles for requirements regarding sequencing of stone column installation with installation of steel sheet piling.~~

D. 34 11 13 – TRACK RAILS

1. **REVISE** paragraph 2.01.B and 2.01.C to read as follows:

E. Rail shall be 175 pounds per yard rail, conforming to ASTM A 759-2010 and meeting the supplementary chemistry and mechanical requirements listed below for Advanced Head Hardened steel rail.

1. Carbon 0.84 to 0.92 percent
 2. Manganese ~~0.70~~ 0.65 to ~~1.30~~ 1.25 percent
 3. Phosphorus ~~0.04~~ 0.03 percent maximum
 4. Sulfur ~~0.05~~ 0.025 percent maximum
 5. Silicon 0.10 to 0.70 percent
- C. Rail mechanical properties shall be within the following ranges.
1. Brinell Harness Number = 370 to 390 (per ASTM D 10 and E 140)
 2. Yield Strength = 120,000 to ~~135,000~~ 140,000 psi
 3. Tensile Strength = 180,000 to 195,000 psi

DRAWINGS

A. DRAWING E8.2 CONDUIT AND CONDUCTOR SCHEDULE

1. **REVISE** Conduit and Conductor Schedule as denoted. (See revised Drawing E8.2 attached)

B. DRAWING S40.1 CRANE RAIL DETAILS – SHEET 1

1. **REVISE** Detail 2 – Section – Soft Mount Rail (See revised Drawing S40.1 attached.)

Receipt for this addendum shall be indicated in the space provided in Section 00 41 00, Bid Form.

END OF SECTION

ATTACHMENTS:

Attachment A - Revised Drawing E8.2

Attachment B - Revised Drawing S40.1

CONDUIT AND CONDUCTOR SCHEDULE										
CONDUIT NUMBER	CONDUIT			CONDUCTOR			FROM	TO	REMARKS	
	NO.	SIZE	TYPE	NO.	SIZE	TYPE				
CBP1	1	2"	(2)(3)	2/1	10/10	XHHW-2	VAULT CPPV1	CHASIS LIGHT PEDESTAL #1		(8)
CBP2	1	2"	(2)(3)	2/1	10/10	XHHW-2	VAULT CPPV1	CHASIS CAMERA SUPPORT #1		
CBP3	1	2"	(2)(3)	2/1	10/10	XHHW-2	VAULT CPPV1	VIT #1		
CBP4	1	2"	(2)(3)	2/1	10/10	XHHW-2	VAULT CPPV2	CHASIS LIGHT PEDESTAL #2		
CBP5	1	2"	(2)(3)	2/1	10/10	XHHW-2	VAULT CPPV2	CHASIS CAMERA SUPPORT #2		
CBP6	1	2"	(2)(3)	2/1	10/10	XHHW-2	VAULT CPPV2	VIT #2		
CBP7	1	2"	(2)(3)	2/1	10/10	XHHW-2	VAULT CPPV3	CHASIS LIGHT PEDESTAL #3		
CBP8	1	2"	(2)(3)	2/1	10/10	XHHW-2	VAULT CPPV3	CHASIS CAMERA SUPPORT #3		
CBP9	1	2"	(2)(3)	2/1	10/10	XHHW-2	VAULT CPPV3	VIT #3		
CBP10	1	2"	(2)(3)	2/1	10/10	XHHW-2	VAULT CPPV4	CHASIS LIGHT PEDESTAL #4		
CBP11	1	2"	(2)(3)	2/1	10/10	XHHW-2	VAULT CPPV4	CHASIS CAMERA SUPPORT #4		
CBP12	1	2"	(2)(3)	2/1	10/10	XHHW-2	VAULT CPPV4	VIT #4		
CBP13	1	2"	(2)(3)	4/1	10/10	XHHW-2	VAULT CPPV4	VAULT CPV3		
CBP14	1	2"	(2)(3)	4/1	10/10	XHHW-2	VAULT CPPV2	VAULT CPV2		
CBP15	2	2"	(2)(3)	4/1	10/10	XHHW-2	VAULT CPPV2	VAULT CPV1		
CBP16	2	2"	(2)(3)	4/1	10/10	XHHW-2	VAULT CPPV1	PANEL 2GA		
CPC1	-	-	-	-	-	-	-	-	NOT USED	
CPC2	2	2"	(2)(3)	-	-	-	VAULT ICV2	CHASIS CAMERA PEDESTAL #1		(8)
CPC3	2	2"	(2)(3)	-	-	-	VAULT ICV2	CHASIS CAMERA PEDESTAL #2		
CPC4	1	2"	(2)(3)	-	-	-	VAULT ICV2	TRUCK SCALE		
CPC5	4	2"	(2)(3)	-	-	-	VAULT ICV2	OUTGATE COMMUNICATIONS ROOM		
FOB1 THRU FOB3										(9)
FOB4	1	2"	(2)	-	-	-	HH #WCV1	FOV4	FIBER	
FOB5	1	2"	(2)	-	-	-	FOV5	CPV5	FIBER	
FOB6	1	2"	(2)	-	-	-	FOV5	CPV4	FIBER	
FOB7	1	2"	(2)	-	-	-	HH #WCV1	FOV5	FIBER	
FOB8	1	2"	(2)(10)	-	(10)	-	SV223	POLE WYL05	FIBER	
FOB9	4	4"	(2)	-	(24)	-	SV222	SV223	FIBER	
FOB10	4	4"	(2)	-	(24)	-	SV220	SV222	FIBER	
FOB11	1	2"	(2)(10)	-	(10)	-	SV221	POLE WYL04	FIBER	
FOB12	1	2"	(2)	-	(10)	-	SV220	SV221	FIBER	
FOB13	4	4"	(2)	-	(24)	-	SV219	SV220	FIBER	
FOB14	2	2"	(2)(10)	-	(10)(24)	-	SV219	POLE WYL03	FIBER	(7)
FOB15	4	4"	(2)	-	(24)	-	SV218	SV219	FIBER	
FOB16	4	4"	(2)	-	(10)	-	SV112	SV212	FIBER	
FOB17	4	4"	(2)	-	(24)	-	SV216	SV218	FIBER	
FOB18	1	2"	(2)	-	-	-	SV216	FOV6	FIBER	
FOB19	1	2"	(2)	-	(10)	-	SV216	SV217	FIBER	
FOB20	1	2"	(2)(10)	-	(10)	-	SV217	POLE WYL02	FIBER	
FOB21	4	4"	(2)	-	(24)	-	SV214	SV216	FIBER	
FOB22	1	2"	(2)	-	(10)	-	SV214	SV215	FIBER	
FOB23	1	2"	(2)(10)	-	(10)	-	SV215	POLE WYL01	FIBER	
FOB24	4	4"	(2)	-	(20)	-	SV213	SV214	FIBER	
FOB25	1	2"	(2)	-	-	-	FOV7	CPV7	FIBER	
FOB26	1	2"	(2)	-	-	-	FOV7	CPV6	FIBER	
FOB27	1	2"	(2)	-	-	-	SV213	FOV7	FIBER	
FOB28	4	4"	(2)	-	(20)	-	SV212	SV213	FIBER	
FOB29	4	4"	(2)	-	(10)	-	SV210	SV212	FIBER	
FOB30	1	2"	(2)	-	-	-	SV210	FOV8	FIBER	
FOB31	1	2"	(2)	-	(10)	-	SV210	SV211	FIBER	
FOB32	1	2"	(2)(10)	-	(10)	-	SV211	POLE YL05	FIBER	
FOB33	1	2"	(2)(10)	-	(20)	-	IT ROOM	J-BOX	FIBER	
FOB34	4	4"	(2)	-	(17)	-	SV210	SV224	FIBER	
FOB35	4	4"	(2)	-	(20)	-	SV223	SV132	FIBER	
FOB36	4	4"	(2)	-	(10)	-	SV110	SV224	FIBER-COPPER	
FOB37	4	4"	(2)	-	(10)	-	SV224	SV225	FIBER-COPPER	
FOB38	4	4"	(2)(10)	-	(10)	-	IT ROOM	SV225	FIBER-COPPER	
FOB39	1	2"	(2)(10)	-	(14)	-	SV225	SUB #8410	FIBER	
FOB40	1	2"	(2)	-	-	-	FOV4	SHORE PWR VAULT SSB3	FIBER	
FOB41	2	2"	(2)	-	-	-	HH #WCV1	SV218	FIBER	
FOB42	1	2"	(2)	-	-	-	FOV6	SHORE PWR VAULT SSB4	FIBER	
FOB43	1	2"	(2)	-	-	-	FOV8	SHORE PWR VAULT SSB5	FIBER	
FOB44	1	2"	(10)	-	(20)	-	J-BOX	COMM CAB TO POLE YL01	FIBER	
GC1	1	-	-	-	-	-	GCV1	GCV2		(8)
GC2	1	1"	(2)	-	-	-	GCV2	GCV3		
GC3	1	1"	(2)	-	-	-	GCV3	GCV4		
GC4	1	1"	(2)	-	-	-	GCV4	GATE INTERCOM/CARD READER		
GP1	1	1"	(2)	3/1	8/10	XHHW-2	GPV1	GPV2		(8)
GP2	1	1"	(2)	3/1	8/10	XHHW-2	GPV2	GPV3		
GP3	1	1"	(2)	3/1	8/10	XHHW-2	GPV3	GPV4		
GP4	1	1"	(2)	3/1	8/10	XHHW-2	GPV4	GATE CONTROLLER		
P50	1	2-1/2"	(2)	4/1	000/2	XHHW-2	PANEL H1	SUBSTATION 8431, SWBD #1		(12)
P51	1	2-1/2"	(2)	4/1	000/2	XHHW-2	PANEL H1	SUBSTATION 8431, SWBD #1		(12)
P52	1	2-1/2"	(2)	4/1	000/2	XHHW-2	PANEL H1	SUBSTATION 8431, SWBD #1		(12)

GENERAL NOTES

1. SEE DRAWING E8.1 FOR LEGEND AND GENERAL NOTES.

SCHEDULE KEY NOTES

- (1) SEE SEPARATE HUSKY TERMINAL WIFI SYSTEM PROJECT DRAWINGS FOR COMMUNICATIONS CONDUCTORS AND SITE PLANS. PORT OF TACOMA JOB #6323-04.
- (2) PVC SHCHEDULE 80.
- (3) GRS CONDUIT.

SCHEDULE KEY NOTES

- (4) CONDUIT(S) CUT. ABANDONED IN PLACE.
- (5) COORDINATE WORK WITH TACOMA POWER.
- (6) PROVIDE LIQUID TIGHT FLEXIBLE METAL CONDUIT AT ALL LIGHT POLE LOCATIONS.
- (7) LIQUID TIGHT FLEXIBLE METAL CONDUIT.
- (8) CIRCUIT (CONDUIT) NUMBER FROM TERMINAL 3 & 4 REDEVELOPMENT PROJECT, CONTRACT NO. 998203.

SCHEDULE KEY NOTES

- (9) CIRCUIT (CONDUIT) NUMBER FROM PIER 3 UPGRADE PROJECT, CONTRACT NO. 069458.
- (10) PVC COATED GRS CONDUIT.
- (11) EXTEND DUCTBANK TO VAULT SV212.
- (12) EXTEND CONDUITS TO MARINE OPS BUILDING.

CONDUIT AND CONDUCTOR SCHEDULE

CONDUIT NUMBER	CONDUIT			CONDUCTOR			FROM	TO	REMARKS	
	NO.	SIZE	TYPE	NO.	SIZE	TYPE				
PD1	6	5"	(2)	-	-	-	TPUPV1	TPUPV2		(8)
PD2	6	5"	(2)	-	-	-	TPUPV2	TPUPV3		
PD3	6	5"	(2)	-	-	-	TPUPV3	TPUPV4		
PD4	6	5"	(2)	-	-	-	TPUPV4	STUB AT WHARF		
PD5	-	-	-	-	-	-	-	-	NOT USED	
PD6	-	-	-	-	-	-	-	-	NOT USED	
PD7	2	5"	(2)(3)	-	-	-	EXISTING TOL SWITCH	TOL METERING SECTION		(8)
PD8	-	-	-	-	-	-	-	-	NOT USED	
PD9	4	5"	(2)	-	-	-	TPUPV6	TPUPV7		(8)
PD10	4	5"	(2)	-	-	-	TPUPV7	TPUPV8		
PD11	4	5"	(2)	-	-	-	TPUPV8	VAULT 2127V		
PD12	4	5"	(2)	-	-	-	TPUPV4	TPUPV9		
PD13	2	5"	(2)(3)	-	-	-	TOL METERING SECTION	TRANSFORMER WIT		(5)
PD14	4	5"	(2)(3)	-	-	-	TPUPV4	NEW WHARF		
PD15	2	5"	(2)	-	-	-	EXISTING TPU XFMR	TPUPV10		
PD16	2	5"	(2)	-	-	-	TPUPV10	1500KVA XFMR (SUBSTATION #8411)		
PD1 THRU PD11										(9)
PD17	1	4"	(2)	3/1	2/2	15KV/600V	PDV12	13.8KV-480V XFMR	13.8KV-480V SITE XFMR	
PD18	1	4"	(2)	3/1	2/2	15KV/600V	PDV11	PDV12	13.8KV-480V SITE XFMR	
PD19	1	4"	(2)	3/1	2/2	15KV/600V	PDV10	PDV11	13.8KV-480V SITE XFMR	
PD20	1	4"	(2)	3/1	2/2	15KV/600V	PDV15	PDV10	13.8KV-480V SITE XFMR	
PD21	1	4"	(2)	-	-	-	PDV13	PDV14	REEFER 13.8KV XFMR	
PD22	1	4"	(2)	-	-	-	PDV16	PDV13	REEFER 13.8KV XFMR	
PD23	1	4"	(2)(10)	-	-	-	SWITCH F3	PDV16	REEFER 13.8KV XFMR	
PD24	1	4"	(2)(10)	3/1	2/2	15KV/600V	SWITCH F10	PDV15	13.8KV-480V SITE XFMR	
TPUC1	1	4"	(2)	-	-	-	TPUCV1	TPUCV2		(8)
TPUC2	1	4"	(2)	-	-	-	TPUCV2	TPUCV3		
TPUC3	1	4"	(2)	-	-	-	TPUCV3	TPUCV4		
TPUC4	1	4"	(2)	-	-	-	TPUCV4	TPUCV9		
TPUC5	1	4"	(2)	-	-	-	TPUCV5	TPUPV6		
TPUC6	1	4"	(2)	-	-	-	TPUPV6	TPUPV7		
TPUC7	1	4"	(2)	-	-	-	TPUPV7	TPUPV8		
TPUC8	1	4"	(2)	-	-	-	TPUPV8	STUBBED AT TPU DUCTBANK		(4)
TPUC9	1	4"	(2)	-	-	-	STUB AT EXISTING TPU XFMR	TPUCV10		
TPUC10	1	4"	(2)	-	-	-	TPUCV10	SWITCHBOARD (SUBSTATION #8411)		
TPUC11	1	4"	(2)(3)	-	-	-	TPUCV5	TOL METERING SECTION		(8)
TPUC12	1	4"	(2)(3)	-	-	-	TPUCV5	CT BANK		(8)
TPUC1 THRU TPUC5										(9)
TPUC15	4	5"	(2)	-	-	-	1419MH, PVP27	TPUPV11	TPU SERVICE CONDUITS	
TPUC16	4	5"	(2)	-	-	-	TPUPV11	TPUMV3	TPU SERVICE CONDUITS	
TPUC17	4	5"	(2)(10)	3	350	15KV	TPUMV3	SUBSTATION #8410 15KV SWITCH	TPU SERVICE CONDUITS	
TPUC18	4	5"	(2)	-	-	-	TPUPV11	TPUMV4	TPU SERVICE CONDUITS	
TPUC19	4	5"	(2)	-	-	-	TPUMV4	VTM5	TPU SERVICE CONDUITS	

SCHEDULE KEY NOTES

- (13) PROVIDE (1) 12-PR COPPER CABLE, (2) 144-FIBER SM FO CABLES, (1) 12-FIBER SM FO CABLE, (7) 6-FIBER SM FO CABLES. PROVIDE (2) 3-CELL FABRIC INNERDUCTS IN EACH 4" DUCT.
- (14) PROVIDE (1) 6-FIBER SM FO CABLE. PROVIDE (1) 3-CELL FABRIC INNERDUCT.
- (15) PROVIDE (1) 12-PR COPPER CABLE, (2) 144-FIBER SM FO CABLES, (1) 12-FIBER SM FO CABLE, (8) 6-FIBER SM FO CABLES. PROVIDE (2) 3-CELL FABRIC INNERDUCTS IN EACH 4" DUCT.
- (16) PROVIDE (1) 12-PR COPPER CABLE, (1) 144-FIBER SM FO CABLE, (1) 6-FIBER SM FO CABLE. PROVIDE (2) 3-CELL FABRIC INNERDUCTS IN EACH 4" DUCT.
- (17) PROVIDE (1) 144-FIBER SM FO CABLE, (1) 12-FIBER SM FO CABLE, (7) 6-FIBER SM FO CABLES. PROVIDE (2) 3-CELL FABRIC INNERDUCTS IN EACH 4" DUCT.
- (18) PROVIDE (1) 6-FIBER SM FO CABLE. PROVIDE 3-CELL FABRIC INNERDUCT IN 2" CONDUIT.
- (19) PROVIDE (1) 144-FIBER SM FO CABLE, (1) 12-FIBER SM FO CABLE, (6) 6-FIBER SM FO CABLES. PROVIDE (2) 3-CELL FABRIC INNERDUCTS IN EACH 4" DUCT.
- (20) PROVIDE (1) 144-FIBER SM FO CABLE, (1) 12-FIBER SM FO CABLE, (5) 6-FIBER SM FO CABLES. PROVIDE (2) 3-CELL FABRIC INNERDUCTS IN EACH 4" DUCT.

SCHEDULE KEY NOTES

- (21) PROVIDE (1) 144-FIBER SM FO CABLE, (1) 12-FIBER SM FO CABLE, (4) 6-FIBER SM FO CABLES. PROVIDE (2) 3-CELL FABRIC INNERDUCTS IN EACH 4" DUCT.
- (22) PROVIDE (1) 144-FIBER SM FO CABLE, (1) 12-FIBER SM FO CABLE, (3) 6-FIBER SM FO CABLES. PROVIDE (2) 3-CELL FABRIC INNERDUCTS IN EACH 4" DUCT.
- (23) PROVIDE (1) 144-FIBER SM FO CABLE, (2) 6-FIBER SM FO CABLES. PROVIDE (2) 3-CELL FABRIC INNERDUCTS IN EACH 4" DUCT.
- (24) PROVIDE (1) 144-FIBER SM FO CABLE, (1) 6-FIBER SM FO CABLES. PROVIDE (2) 3-CELL FABRIC INNERDUCTS IN EACH 4" DUCT.
- (25) PROVIDE (1) 144-FIBER SM FO CABLE. PROVIDE (2) 3-CELL FABRIC INNERDUCTS IN EACH 4" DUCT.
- (26) PROVIDE (1) 12-FIBER SM FO CABLE. PROVIDE 3-CELL FABRIC INNERDUCT IN 2" CONDUIT.
- (27) ONE CONDUIT TO EACH COMM CAB ON THE POLE.

ELCON ASSOCIATES, INC.
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SEATTLE, WA 98108
TEL (206) 245-5022
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Part of Tacoma

P.O. BOX 887 TACOMA, WA 98404-0887

MARK: 1

REVISION: #2

BY: HAS

DATE: 4/25/16

APPR: DKS

6552

E8.2

SH 166 OF 499

CONT/CONS: 070136

M. ID: 091251

PHASE: BID

PIER 4 PHASE 2

RECONFIGURATION

CONDUIT AND CONDUCTOR SCHEDULE

APPROVED: *[Signature]*

4-26-16

DIRECTOR ENG. DATE: Curtis Apr 25, 2016

PRINTED BY: CURTIS

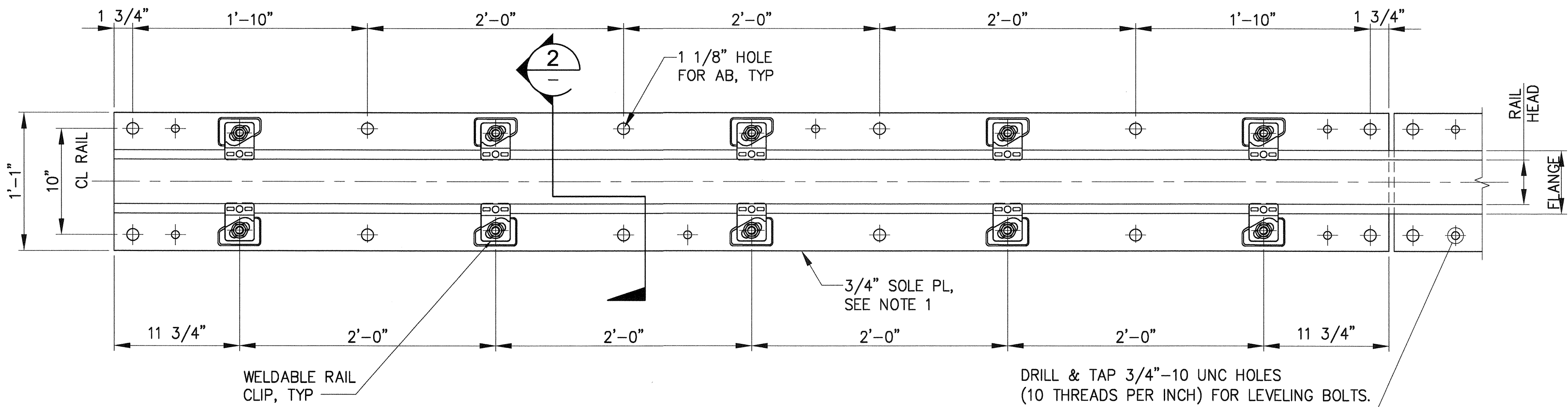
PORT ADDRESS: ONE SITCUM PLAZA

TACOMA, WA 98401-1837

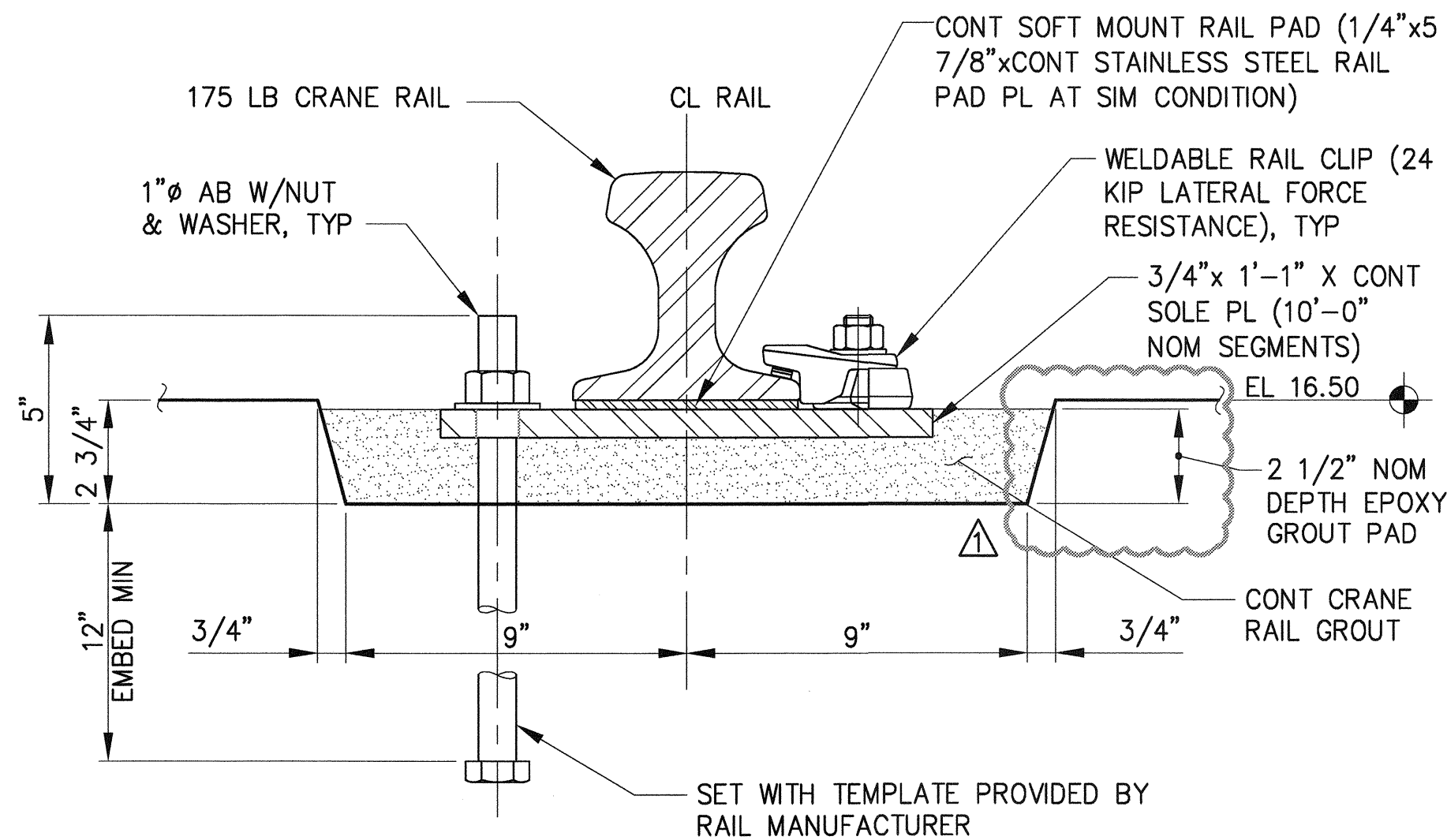
CHECKED BY: DATE

PROJ. ENGR DATE

SECTION: MLW 19.39' @ Tide



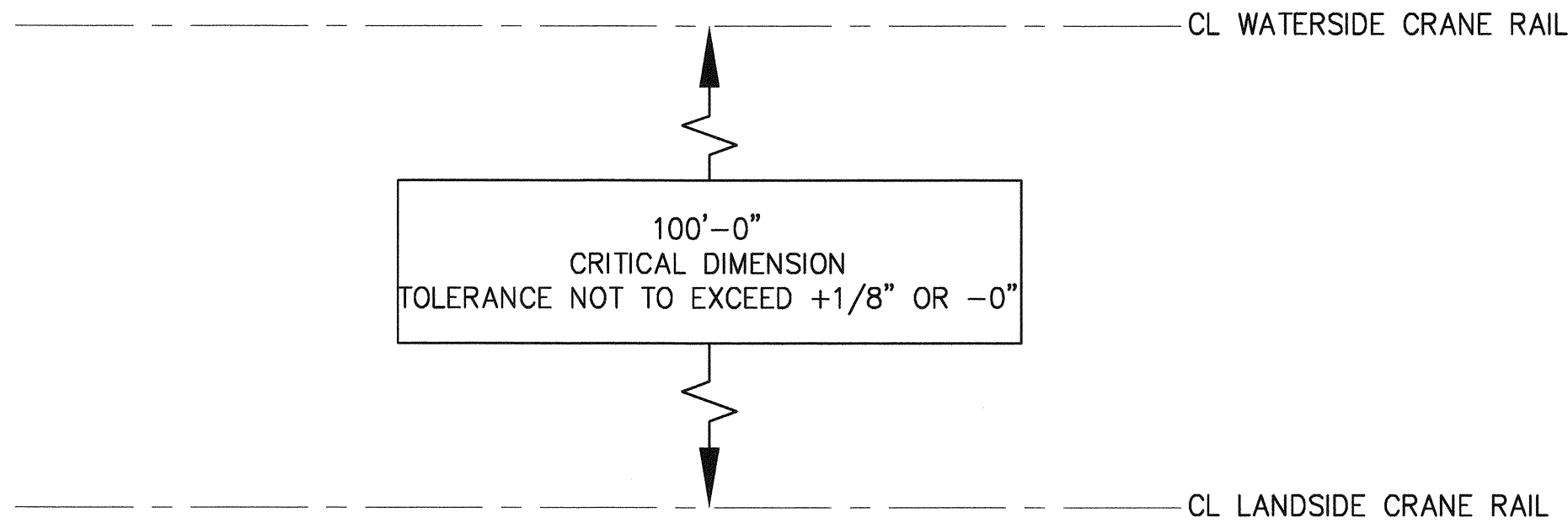
**PLAN -
SOFT MOUNT RAIL**
S28.1, S40.2
1 1/2"=1'-0"



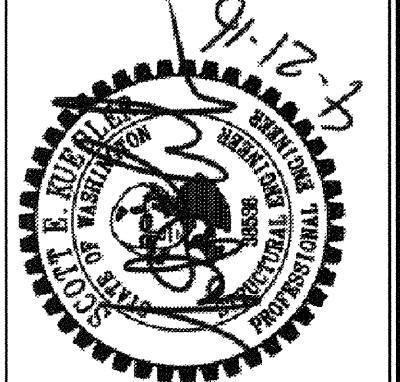
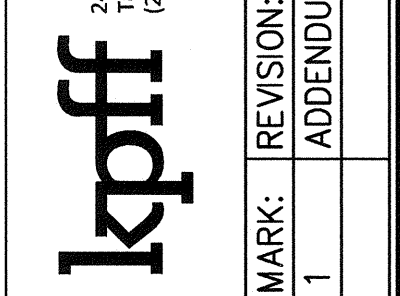
**SECTION -
SOFT MOUNT RAIL**
S15.1, S15.2, S40.2
3"=1'-0"

NOTES:

1. SOLE PLATES AND RAIL CLIP ASSEMBLIES SHALL BE HOT DIP GALVANIZED
2. SEE CIVIL DRAWINGS FOR PAVING DETAILS ADJACENT TO CRANE RAILS.
3. REPAIR DAMAGED GALVANIZING AT FIELD WELDS ACCORDING TO THE SPECIFICATION.



**CRANE RAIL
TOLERANCES**
NTS

6552 S40.1 SH 377 OF 499	PIER 4 PHASE 2 RECONFIGURATION CRANE RAIL DETAILS - SHEET 1	APPROVED: <i>[Signature]</i> 4-25-16	SEK CHECKED BY: <i>[Signature]</i> DATE: 4-25-16			2407 North 31st Street, Suite 100 Tacoma, Washington 98407 (253) 996-0150 Fax (253) 996-0162	P.O. BOX 1837 TACOMA, WA 98401	Port of Tacoma		
		DIRECTOR ENG. DATE: 4-25-16	TAH						REVISION: #1	DATE:
		PRINTED BY: tlemans	PROJ. ENGR DATE: Apr 22, 2016						BY:	APPR:
		PORT ADDRESS: ONE SITCUM PLAZA	TACOMA, WA 98401-1837						ADDENDUM	
CONT/CONS: 070136	TOWNSHIP: 21N	RANGE: 3E	SECTION: 27							
M. ID: 091251	DAT-HRZ: WA83-SF	VERT: MLLW 19.39' @ Tide 22 1933								
PHASE: BID	PARCEL:	DRAWING SCALE: AS NOTED								

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