

**STATTER HARBOR IMPROVEMENTS PHASE III (B)  
TOUR VESSEL MOORAGE AND MSE WALL**

**CBJ CONTRACT NO. DH20-021**

**Volume 2 of 2**

**PLANS**



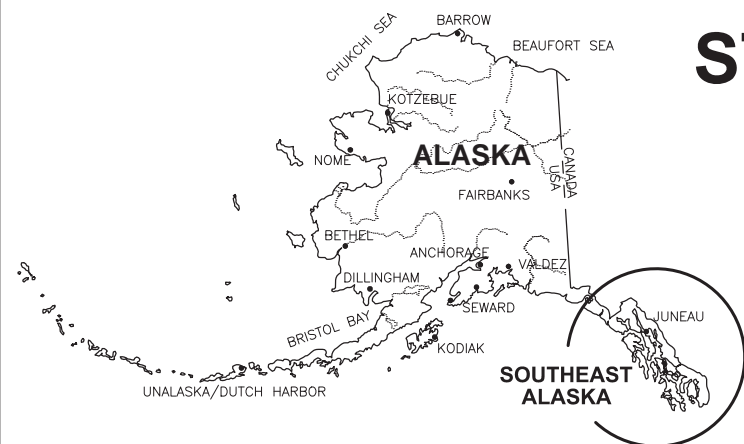
**JANUARY 2020**

# CITY & BOROUGH OF JUNEAU - DOCKS & HARBORS

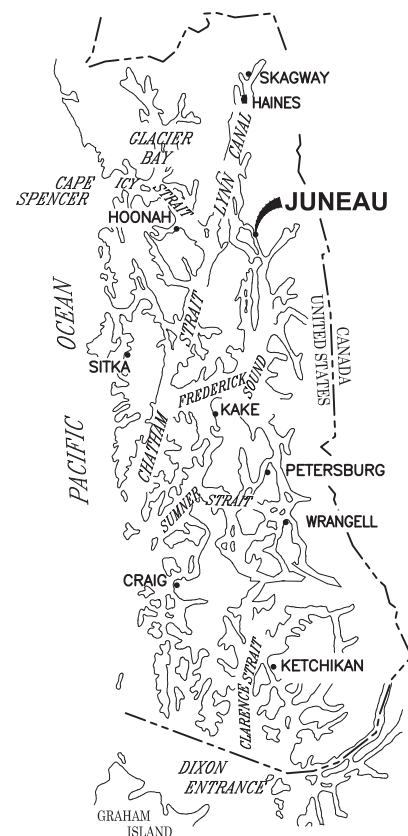
## STATTER HARBOR IMPROVEMENTS PHASE III (B)

### TOUR VESSEL MOORAGE AND MSE WALL

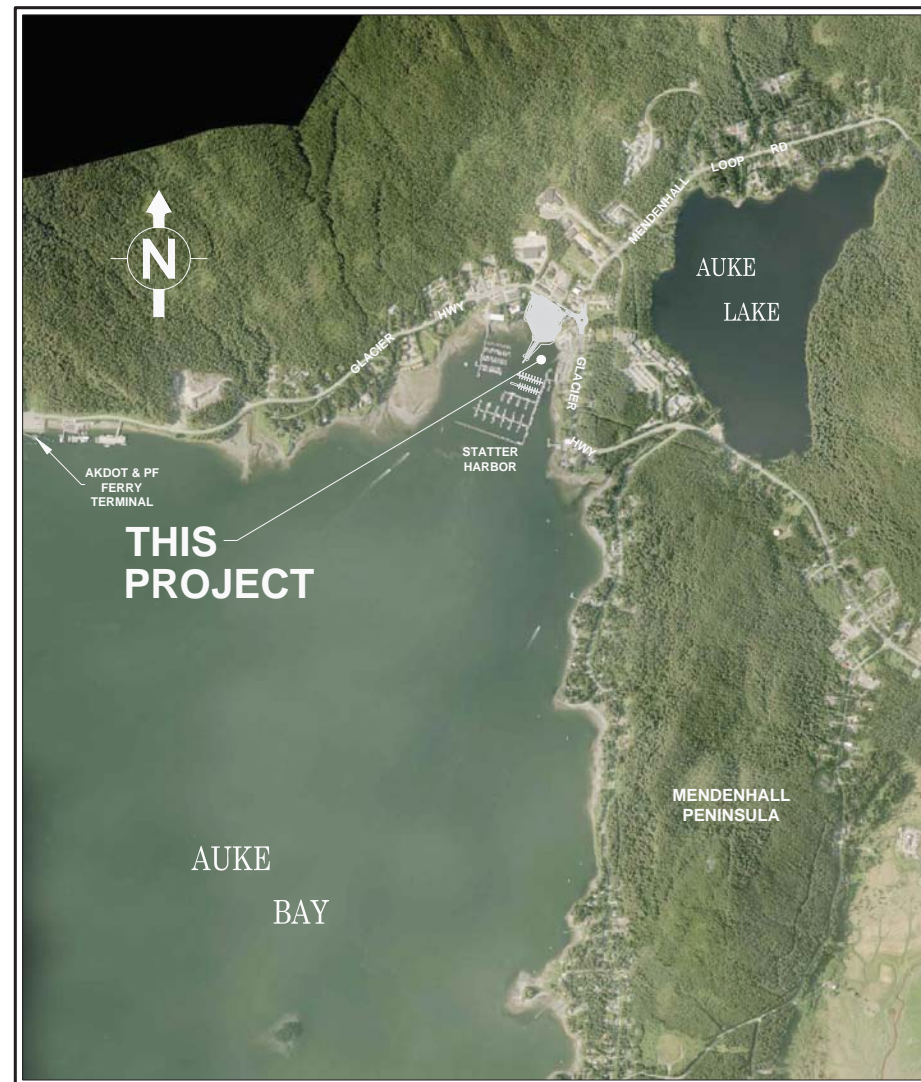
#### CBJ CONTRACT - DH20-021



**VICINITY**



**SOUTHEAST ALASKA**



AERIAL PHOTO FROM:  
CITY AND BOROUGH OF JUNEAU, 2016

**VICINITY MAP**

TIDAL DATA	
SOURCE: NOAA NOS/CO-OPS STATION ID: 9452210 JUNEAU, ALASKA 2/6/18	
DESCRIPTION	ELEV. (FT.)
HIGHEST OBSERVED WATER LEVEL	+24.58
MEAN HIGHER HIGH WATER (MHHW)	+16.30
MEAN HIGH WATER (MHW)	+15.34
MEAN SEA LEVEL (MSL)	+8.58
MEAN TIDE LEVEL (MTL)	+8.47
MEAN LOW WATER (MLW)	+1.60
MEAN LOWER LOW WATER (MLLW)	0.00
LOWEST OBSERVED WATER LEVEL	-6.12

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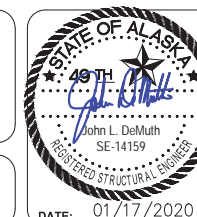
REVISIONS					
REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.



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DESIGN: MS      CHECKED: JLD  
DRAWN: WRB      APPROVED: JLD

SCALE:  
AS SHOWN



**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
**CBJ CONTRACT NO. DH20-021**

SHEET TITLE:  
**TITLE SHEET AND VICINITY MAP**

**1.01**

PND PROJECT NO.: 182066      C.A.N. NO.: AECC250

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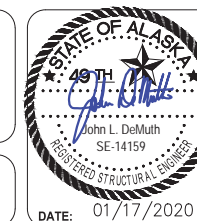
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**STATTER HARBOR IMPROVEMENTS PH III(B)**  
**CBJ CONTRACT NO. DH20-021**

SHEET TITLE:

**DRAWING INDEX**

**1.02**

PND PROJECT NO.: 182066

C.A.N. NO.: AECC250

DATE: 01/17/2020

DESIGN: MS CHECKED: JLD  
DRAWN: WRB APPROVED: JLD

SCALE:  
AS SHOWN

# GENERAL NOTES

- PROPERTY DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ITS PRE-CONSTRUCTION CONDITION OR BETTER AT NO ADDITIONAL COST.
- CBJ ENGINEERING STANDARD DETAILS BOOK DATED AUGUST, 2011 IS MADE A PART OF THIS CONTRACT, WITH CURRENT REVISIONS AS APPLICABLE. STANDARD DETAILS SHALL ONLY BE UTILIZED AS SPECIFICALLY REFERENCED IN THE DRAWINGS WITH MODIFICATIONS SPECIFIED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADHERING TO ALL APPLICABLE, LOCAL, STATE AND FEDERAL CODES, PERMITS AND SAFETY REQUIREMENTS.
- THE LOCATIONS OF EXISTING FEATURES AND UTILITIES SHOWN ON THE DRAWINGS ARE APPROXIMATE. ADDITIONAL UTILITIES NOT SHOWN IN THESE DRAWINGS MAY BE PRESENT. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS IN THE FIELD AS NECESSARY, PRIOR TO BEGINNING WORK. THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED IN THE FIELD SHALL BE RECORDED ON THE CONTRACTOR'S RECORD DRAWINGS. CONTACT LOCAL UTILITY COMPANIES PRIOR TO ANY/ ALL EXCAVATIONS AT THE FOLLOWING TELEPHONE NUMBERS:

**DIAL BEFORE YOU DIG!**  
**586-1333**  
 UNDERGROUND POWER, TELEPHONE, T.V.,  
 COMMUNICATIONS, WATER AND WASTEWATER LINES  
 ARE IN THE AREA. UTILITIES SHOWN HERE DO NOT  
 SUBSTITUTE FOR FIELD LOCATES.

- GRADING AND FINAL ALIGNMENT OF UTILITIES & PIPING ARE SUBJECT TO MINOR REVISIONS BY THE ENGINEER TO FIT SITE CONDITIONS, AT NO ADDITIONAL COST.
- CONTRACTOR SHALL COORDINATE WITH ALL AFFECTED BOROUGH DEPARTMENTS AND LOCAL UTILITY COMPANIES DURING CONSTRUCTION.
- THE CONTRACTOR SHALL NOT DISRUPT UTILITY SERVICES EXCEPT AS REQUIRED TO COMPLETE THE RECONFIGURATION OF THOSE SERVICES AS SHOWN IN THE PLANS. COORDINATE ANY DISRUPTIONS WITH OWNER A MINIMUM OF 48 HOURS IN ADVANCE.

# LEGEND

EXISTING	THIS PROJECT	
☐		TELEPHONE PEDESTAL
☑		TELEVISION PEDESTAL
☒		ELECTRICAL PEDESTAL
—x—x—		FENCE
—FU <sub>A</sub> —		FUEL LINE (ABANDONED)
—FO <sub>X</sub> —		FUEL LINE
—E <sub>A</sub> —		ELECTRICAL (ABANDONED)
—Eux—		ELECTRICAL (UNDERGROUND)
—OHE <sub>x</sub> —		ELECTRICAL (OVERHEAD)
—W <sub>x</sub> —		WATER
—SS <sub>x</sub> —		SANITARY SEWER
—ROW—		RIGHT-OF-WAY
—Cu <sub>x</sub> —		COMMUNICATION (CABLE/TEL)
—SD <sub>x</sub> —		STORM DRAIN
—FM <sub>x</sub> —		FORCE MAIN
—FD <sub>x</sub> —		FOUNDATION DRAIN PIPE
— — — — —		PROPERTY LINE
←		GUY WIRE ANCHOR
—o—o—o—o—o—		GUARDRAIL
○		BOLLARD
▭		CURB & GUTTER
△		ELECTRICAL TRANSFORMER
EMH		ELECTRICAL VAULT
H		ELECTRICAL HANDHOLE
☒		FIRE HYDRANT
○	⑤	LAYOUT POINT
○		LIGHT POLE
SSMH		SANITARY SEWER MANHOLE
SDMH		STORM DRAIN MANHOLE
▭		STORM DRAIN INLET
▭		STORM DRAIN STRUCTURE
—		SIGN
● ● ●		SURVEY CONTROL
⊗		WATER VALVE
→		DRAINAGE/ SWALE
□, O <sub>UP</sub>		UTILITY POLE
A 1.02		SECTION OR DETAIL CALLOUT
△		LOCATION OF DETAIL OR REFERENCE DRAWING
△		RADIUS IN FEET

# ABBREVIATIONS

<b>A</b>	AT	<b>H</b>	HUB & TACK	<b>R</b>	RADIUS
@	ASBESTOS CEMENT PIPE	HD	HEAVY DUTY	RE	RIM ELEVATION
AC	ASPHALT CONCRETE PAVEMENT	HOG	HOT-DIPPED GALVANIZED	REF	REFERENCE
ACP	ADDITIVE	HDPE	HIGH DENSITY POLYETHYLENE	REINF	REINFORCEMENT
ADD	ADJUSTABLE	HORIZ	HORIZONTAL	REQD	REQUIRED
ADJ	ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES	HSE	HOUSE	RET	RETAINING
AKDOT&PF	ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES	HT	HEIGHT	RO	ROUGH OPENING
ALT	ALTERNATE	HWY.	HIGHWAY	ROW	RIGHT OF WAY
APPROX.	APPROXIMATE	<b>I</b>		<b>S</b>	
ATS	ALASKA TIDELANDS SURVEY	IAW	IN ACCORDANCE WITH	S	SOUTH
AWS	AMERICAN WELDING SOCIETY	ID	INSIDE DIAMETER	SCHED	SCHEDULE
<b>B</b>		IE	INVERT ELEVATION	SD	STORM DRAIN
BLDG	BUILDING	IN	INCH	SDI	STORM DRAIN INLET STRUCTURE
BTM, BOT	BOTTOM	IP	IRON PIPE	SDO	STORM DRAIN OUTLET STRUCTURE
<b>C</b>		INV	INVERT	SDR	STANDARD DIMENSION RATIO
C&G	CURB & GUTTER	<b>J</b>		SF	SQUARE FOOT
CB	CATCH BASIN	JB	JUNCTION BOX	SHLDR	SHOULDER
CBJ	CITY AND BOROUGH OF JUNEAU	<b>L</b>		SI	STREET INTERSECTION
CIP	CAST-IN-PLACE	LBS	POUNDS	SPEC	SPECIFICATION (S)
CJ	CONTROL JOINT	LF	LINEAR FEET	SQ	SQUARE
☒	CENTER LINE	LL	LIVE LOAD	SRB	SHOT ROCK BORROW
CLR	CLEAR	LOC	LOCATION	SSC	SANITARY SEWER CONNECTION
CMP	CORRUGATED METAL PIPE	LS	LUMP SUM	SS	STAINLESS STEEL, SANITARY SEWER
CONC.	CONCRETE	<b>M</b>		SDMH	STORM DRAIN MANHOLE
CP	COMPLETE PENETRATION	MAX	MAXIMUM	SSMH	SANITARY SEWER MANHOLE
CPP	CORRUGATED POLYETHYLENE PIPE	ME	MATCH EXISTING	STA	STATION
COR	CORNER	MECH	MECHANICAL	STD	STANDARD
CSC	COUNTERSINK	MFR	MANUFACTURE (R)	STL	STEEL
CY	CUBIC YARD	MH	MANHOLE	STRG	STRONG
<b>D</b>		MJ	MECHANICAL JOINT	SW	SIDEWALK
D/DIA	DIAMETER	MIN	MINIMUM	SWR	SEWER
DBL	DOUBLE	MLLW	MEAN LOWER LOW WATER	SY	SQUARE YARD
DIP	DUCTILE IRON PIPE	MSE	MECHANICALLY STABILIZED EARTH	SYM	SYMMETRICAL
DIM	DIMENSION	MTL	MATERIAL (S)	<b>T</b>	
DN	DOWN	<b>N</b>		t.	THICK
DTL	DETAIL	N	NORTH	T&B	TOP AND BOTTOM
<b>E</b>		NFS	NON FROST SUSCEPTIBLE	T&G	TONGUE AND GROOVE
E	EAST	NO	NUMBER	TBC	TOP BACK OF CURB
EA.	EACH	NTS	NOT TO SCALE	TBD	TO BE DETERMINED
EG	EXISTING GROUND	<b>O</b>		TD	TRENCH DRAIN
EJ	EXPANSION JOINT	OC	ON CENTER	TEL	TELEPHONE
EL/ELEV	ELEVATION	OD	OUTSIDE DIAMETER	TEMP	TEMPERATURE, TEMPORARY
EQ	EQUAL	OHE	OVERHEAD ELECTRICAL	TYP	TYPICAL
EQUIP	EQUIPMENT	OWS	OIL-WATER SEPARATOR	<b>U</b>	
EXIST	EXISTING	<b>P</b>		UON	UNLESS OTHERWISE NOTED
<b>F</b>		P	PIPE	UPC	UNIFORM PLUMBING CODE
FC	FACE OF CURB	PC	POINT OF CURVATURE, PIECE	USCG	UNITED STATES COAST GUARD
FD	FLOOR DRAIN	PCC	PRECAST CONCRETE	<b>V</b>	
FG	FINISH GRADE	PED	PEDESTAL	VB	VALVE BOX
FH	FIRE HYDRANT, FLAT HEAD	PI	POINT OF INTERSECTION	VERT	VERTICAL
FIN	FINISH (ED)	PL	PROPERTY LINE, PLATE	<b>W</b>	
FM	FORCE MAIN SEWER	PRV	PRESSURE REDUCING VALVE	W	WEST
FT	FOOT	PSI	POUND PER SQUARE INCH	w/	WITH
FTG	FOOTING	PT	POINT, PRESSURE TREATED, POINT OF TANGENCY	WD	WOOD
FL	FLOWLINE	PVC	POLY VINYL CHLORIDE	WL	WATERLINE
<b>G</b>		Q		WV	WATER VALVE
GAL	GALLON	QTY	QUANTITY	W/O	WITHOUT
GALV	GALVANIZED			<PT	ANGLE POINT
GB	GRADE BREAK				
GV	GATE VALVE				

# REVISIONS

REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

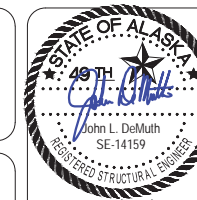


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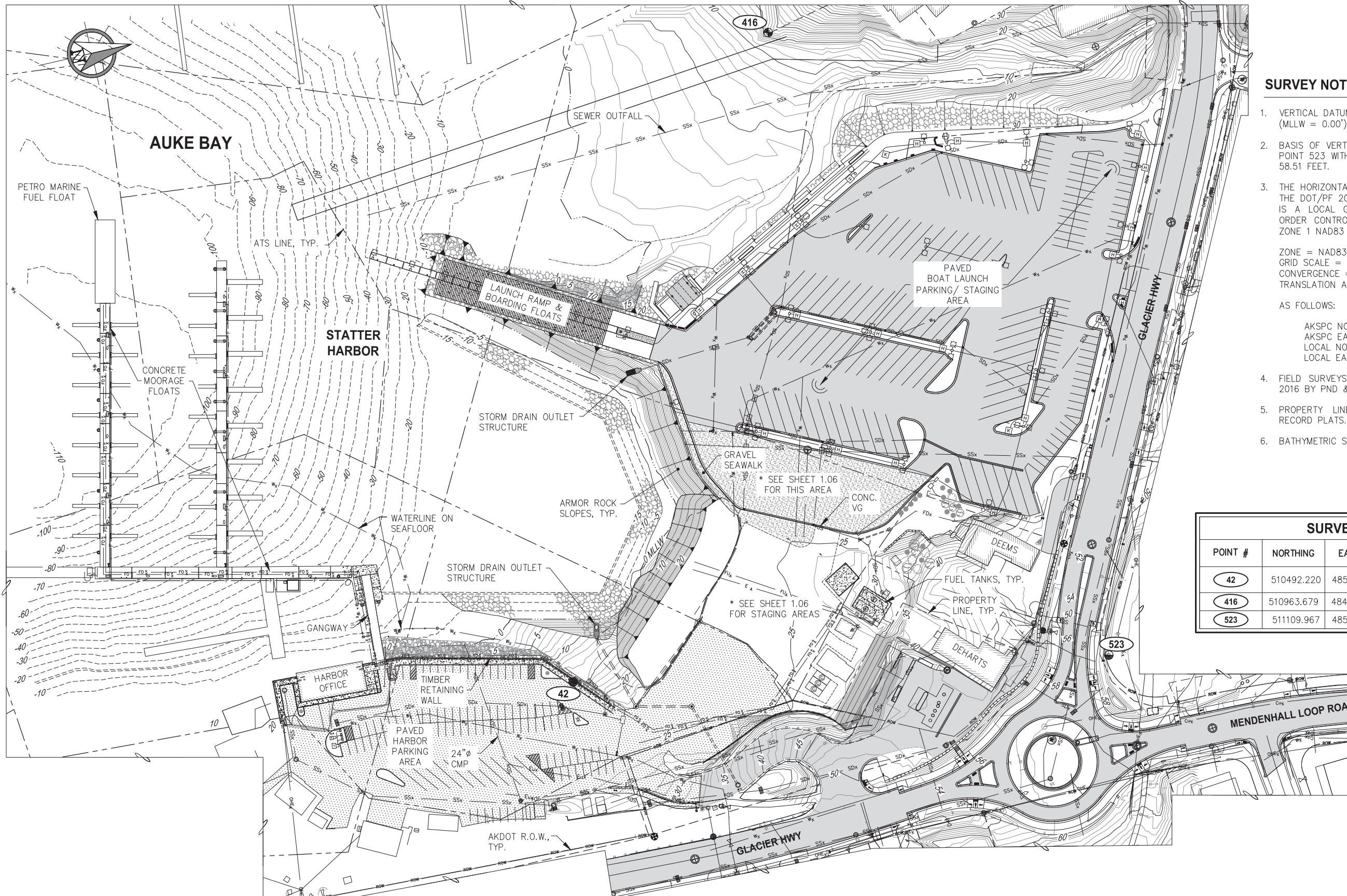
**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
**CBJ CONTRACT NO. DH20-021**

SHEET TITLE:  
**LEGEND, ABBREVIATIONS AND GENERAL NOTES**

PND PROJECT NO.: 182066      C.A.N. NO.: AECC250

**1.03**





**SURVEY NOTES**

1. VERTICAL DATUM IS MEAN LOWER LOW WATER (MLLW = 0.00').
2. BASIS OF VERTICAL DATUM FOR THIS PROJECT IS CONTROL POINT 523 WITH A MEAN LOWER LOW WATER ELEVATION OF 58.51 FEET.
3. THE HORIZONTAL CONTROL FOR THIS PROJECT IS BASED ON THE DOT/PF 2000 JUNEAU GRID. THE DOT/PF JUNEAU GRID IS A LOCAL GROUND SYSTEM BASED AT USC&GS FIRST ORDER CONTROL STATION "EDDIE". IT RELATES TO AKSPC ZONE 1 NAD83 THROUGH THE FOLLOWING PARAMETERS:  
 ZONE = NAD83 AKSPC ZONE 1  
 GRID SCALE = 0.999928875  
 CONVERGENCE = -0°45'27.26"  
 TRANSLATION ABOUT USC&GS POINT  
 AS FOLLOWS:  
 AKSPC NORTHING = 2383469.17310 FT US  
 AKSPC EASTING = 2512570.06318 FT US  
 LOCAL NORTHING = 500000.0000 FT US  
 LOCAL EASTING = 500000.0000 FT US
4. FIELD SURVEYS PERFORMED 2010, 2011, 2012, 2014 AND 2016 BY PND & OTHERS.
5. PROPERTY LINES AND EASEMENTS ARE DERIVED FROM RECORD PLATS.
6. BATHYMETRIC SURVEY PERFORMED BY PND 2010 AND 2016.

**SURVEY CONTROL**

POINT #	NORTHING	EASTING	ELEV. (FT)	DESCRIPTION
42	510492.220	485365.881	24.67	PK NAIL W/FLASHER
416	510963.679	484704.175	—	B.C. MONUMENT
523	511109.967	485541.616	58.51	AKDOT AL. CAP

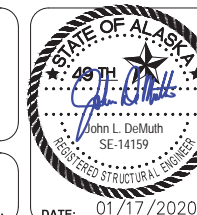
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DESIGN: PJD CHECKED: JLD SCALE: SCALE IN FEET  
 DRAWN: PJD APPROVED: JLD 0 60 120 FT.

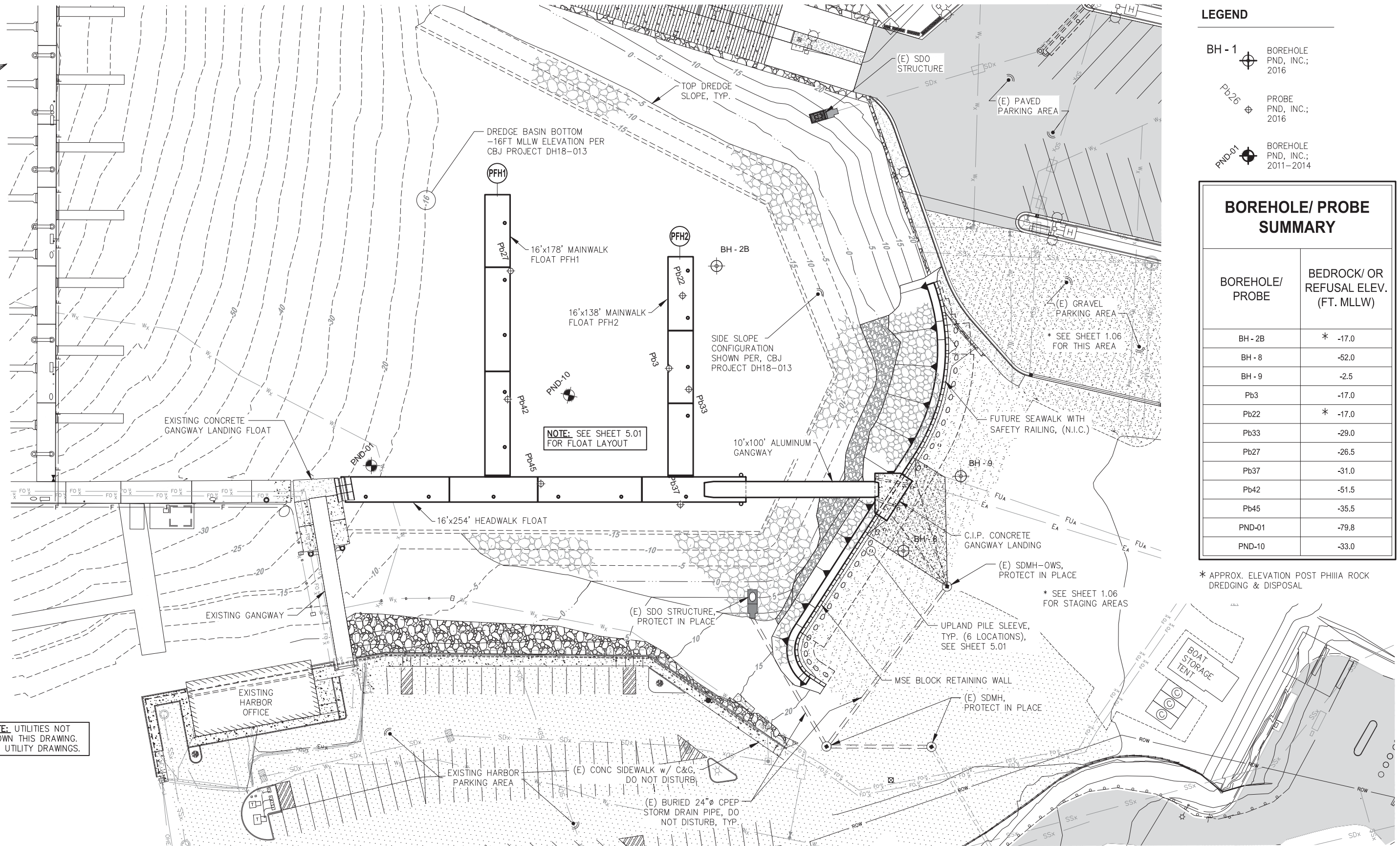


**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
**CBJ CONTRACT NO. DH20-021**

SHEET TITLE:  
**EXISTING CONDITIONS AND SURVEY CONTROL**

PND PROJECT NO.: 182066 C.A.N. NO.: AECC250





**LEGEND**

BH - 1	BOREHOLE PND, INC.; 2016
Pb26	PROBE PND, INC.; 2016
PND-01	BOREHOLE PND, INC.; 2011-2014

**BOREHOLE/ PROBE SUMMARY**

BOREHOLE/ PROBE	BEDROCK/ OR REFUSAL ELEV. (FT. MLLW)
BH - 2B	* -17.0
BH - 8	-52.0
BH - 9	-2.5
Pb3	-17.0
Pb22	* -17.0
Pb33	-29.0
Pb27	-26.5
Pb37	-31.0
Pb42	-51.5
Pb45	-35.5
PND-01	-79.8
PND-10	-33.0

\* APPROX. ELEVATION POST PHIIIA ROCK DREDGING & DISPOSAL

NOTE: UTILITIES NOT SHOWN THIS DRAWING. SEE UTILITY DRAWINGS.



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REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

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DESIGN: MS/BMI    CHECKED: JLD    SCALE: SCALE IN FEET  
DRAWN: PJD    APPROVED: JLD    0    30    60 FT.

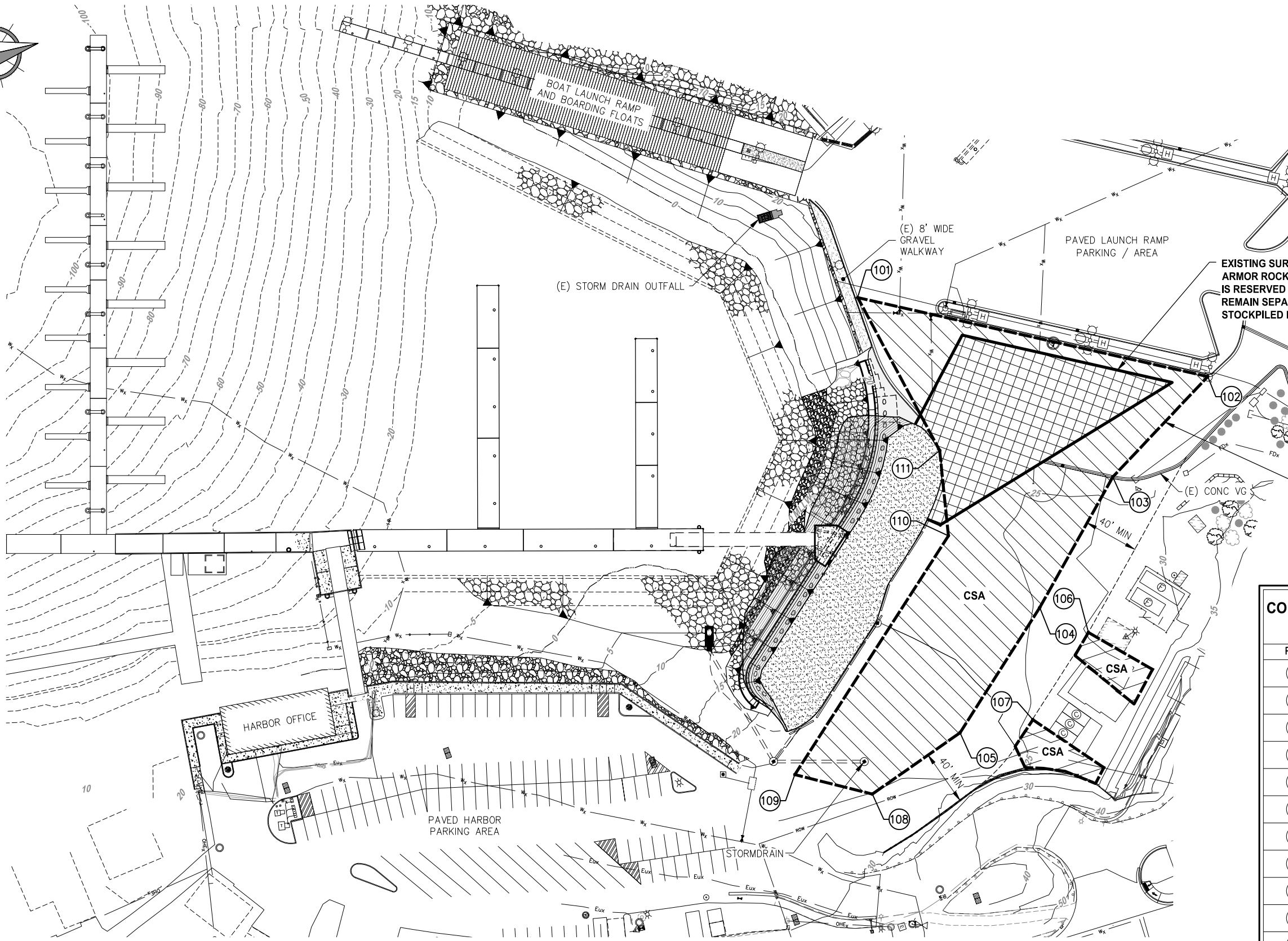
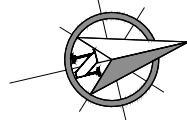


**CITY & BOROUGH OF JUNEAU, ALASKA  
STATTER HARBOR IMPROVEMENTS PH III(B)  
CBJ CONTRACT NO. DH20-021**

SHEET TITLE:  
**OVERALL SITE PLAN**

PND PROJECT NO.: 182066    C.A.N. NO.: AECC250

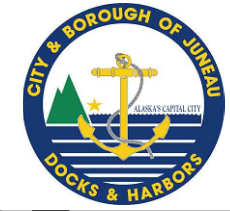
DATE: 01/17/2020



EXISTING SURPLUS USEABLE EXCAVATION AND ARMOR ROCK STOCKPILE LIMITS. THIS MATERIAL IS RESERVED FOR FUTURE PROJECT AND SHALL REMAIN SEPARATE FROM ANY MATERIAL STOCKPILED FOR THIS PROJECT.

AVAILABLE CONTRACTOR STAGING AREA (CSA) BOUNDARY, TYP. ADDITIONAL AREA MAY BE AVAILABLE UPON COORDINATION w/ CBJ

CONTRACTOR STAGING AREA LAYOUT CONTROL		
PT #	NORTHING	EASTING
101	510722.32	485114.64
102	510947.30	485252.37
103	510857.46	485299.81
104	510775.73	485373.43
105	510690.64	485441.71
106	510803.71	485402.25
107	510744.41	485449.84
108	510615.09	485463.64
109	510565.77	485431.79
110	510729.11	485301.91
111	510743.21	485240.43

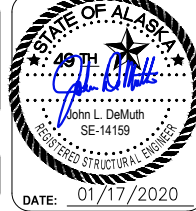


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DESIGN: MS    CHECKED: JLD    SCALE: SCALE IN FEET  
DRAWN: WRB    APPROVED: JLD    0    40    80 FT.



**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
**CBJ CONTRACT NO. DH20-021**

SHEET TITLE:  
**CONTRACTOR STAGING AREA**

PND PROJECT NO.: 182066    C.A.N. NO.: AECC250

**1.06**

**TOP OF MSE WALL LAYOUT POINT SUMMARY**

POINT	STATIONING	NORTHING	EASTING	ELEV. (FT MLLW)	DESCRIPTION					
1	0+00.00	510712.76	485160.18	24.00	BEGIN WALL					
2	0+01.56	510712.78	485162.18	24.00	PC					
3	1+14.18	510589.58	485163.35	24.00	PT					
4	2+48.00	510666.02	485259.97	24.00	PC					
5	2+80.99	510561.33	485343.33	24.00 </tr <tr> <td>6</td> <td>2+92.00</td> <td>510574.41</td> <td>485359.75</td> <td>24.00</td> <td>END WALL</td> </tr>	6	2+92.00	510574.41	485359.75	24.00	END WALL
6	2+92.00	510574.41	485359.75	24.00	END WALL					

**MSE WALL COURSE STATION AND ELEVATION LAYOUT**

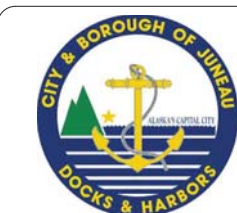
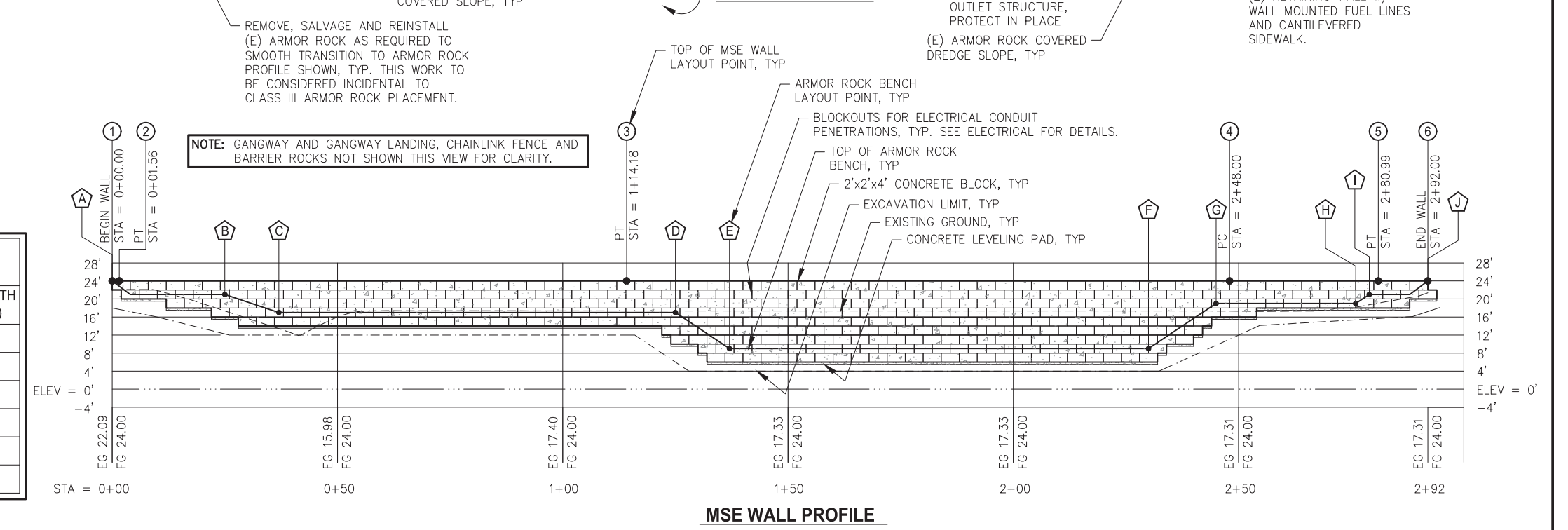
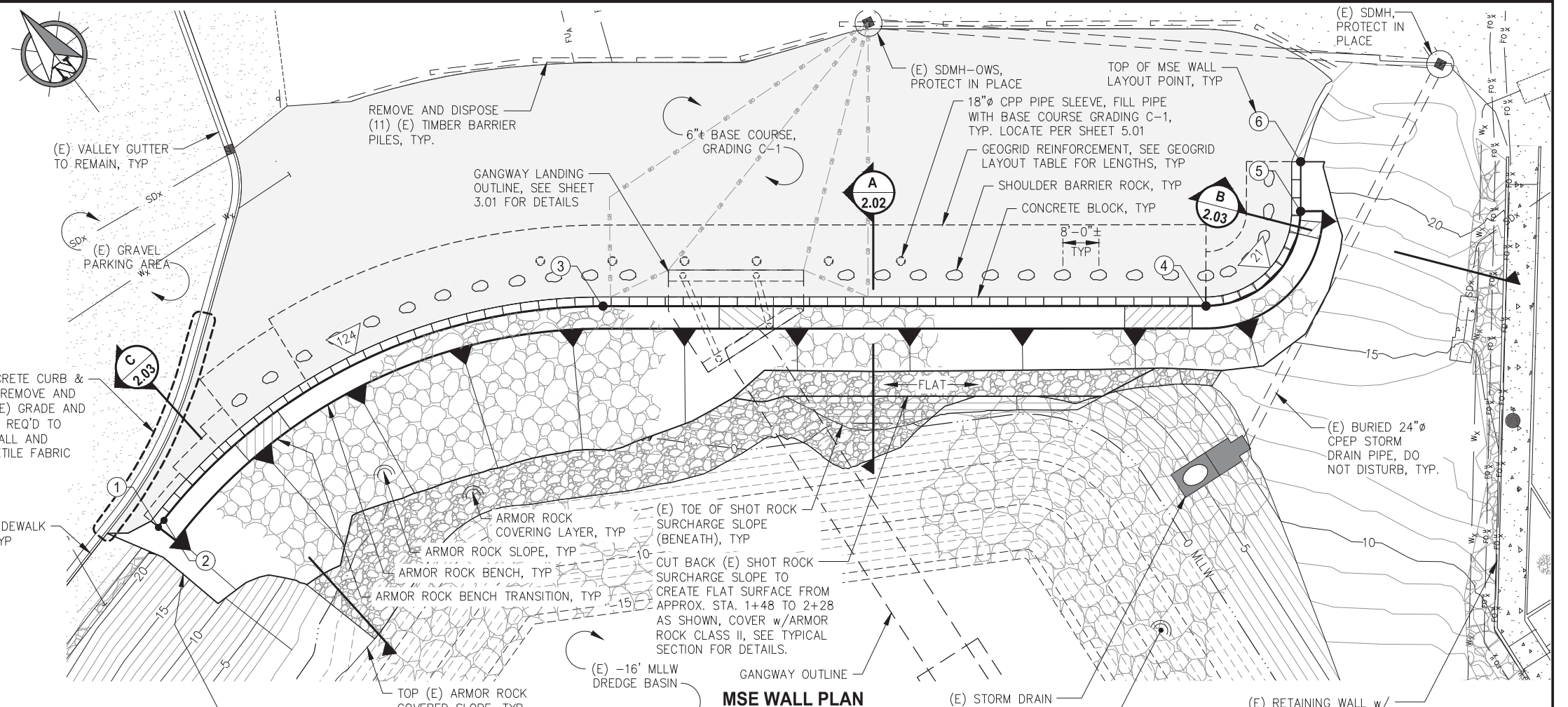
STATION	ELEV. (FT)	DESCRIPTION
0+0.00	22	BOTTOM OF BLOCK, BEGIN COURSE 1
0+2.00	20	BOTTOM OF BLOCK, BEGIN COURSE 2
0+12.00	18	BOTTOM OF BLOCK, BEGIN COURSE 3
0+22.00	16	BOTTOM OF BLOCK, BEGIN COURSE 4
0+28.00	14	BOTTOM OF BLOCK, BEGIN COURSE 5
1+22.00	12	BOTTOM OF BLOCK, BEGIN COURSE 6
1+24.00	10	BOTTOM OF BLOCK, BEGIN COURSE 7
1+30.00	8	BOTTOM OF BLOCK, BEGIN COURSE 8
1+32.00	6	BOTTOM OF BLOCK, BEGIN COURSE 9
2+32.00	6	BOTTOM OF BLOCK, END COURSE 9
2+34.00	8	BOTTOM OF BLOCK, END COURSE 8
2+40.00	10	BOTTOM OF BLOCK, END COURSE 7
2+42.00	12	BOTTOM OF BLOCK, END COURSE 6
2+44.00	14	BOTTOM OF BLOCK, END COURSE 5
2+54.00	16	BOTTOM OF BLOCK, END COURSE 4
2+88.00	18	BOTTOM OF BLOCK, END COURSE 3
2+94.00	20	BOTTOM OF BLOCK, END COURSE 2
2+92.00	22	BOTTOM OF BLOCK, END COURSE 1

**MSE WALL ARMOR ROCK BENCH LAYOUT**

POINT	STA.	ELEV. (FT MLLW)	DESCRIPTION
A	0+0.00	24.00	GRADE BREAK
B	0+25.00	21.00	GRADE BREAK
C	0+37.00	17.00	GRADE BREAK
D	1+25.00	17.00	GRADE BREAK
E	1+37.00	9.00	GRADE BREAK
F	2+30.00	9.00	GRADE BREAK
G	2+45.00	19.00	GRADE BREAK
H	2+76.00	19.00	GRADE BREAK
I	2+79.00	21.00	GRADE BREAK
J	2+92.00	24.00	GRADE BREAK

**MSE WALL GEOGRID LAYOUT**

STATIONING	LENGTH (FT)
0+00.00 TO 0+12.00	4
0+12.00 TO 0+22.00	6
0+22.00 TO 0+28.00	8
0+28.00 TO 0+46.00	16
0+46.00 TO 2+48.00	18
2+48.00 TO END WALL	12



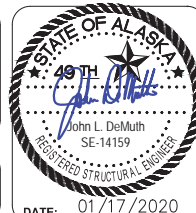
**REVISIONS**

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DESIGN: PND CHECKED: JLD SCALE: SCALE IN FEET  
DRAWN: PJD APPROVED: JLD 0 15 30 FT



**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
**CBJ CONTRACT NO. DH20-021**

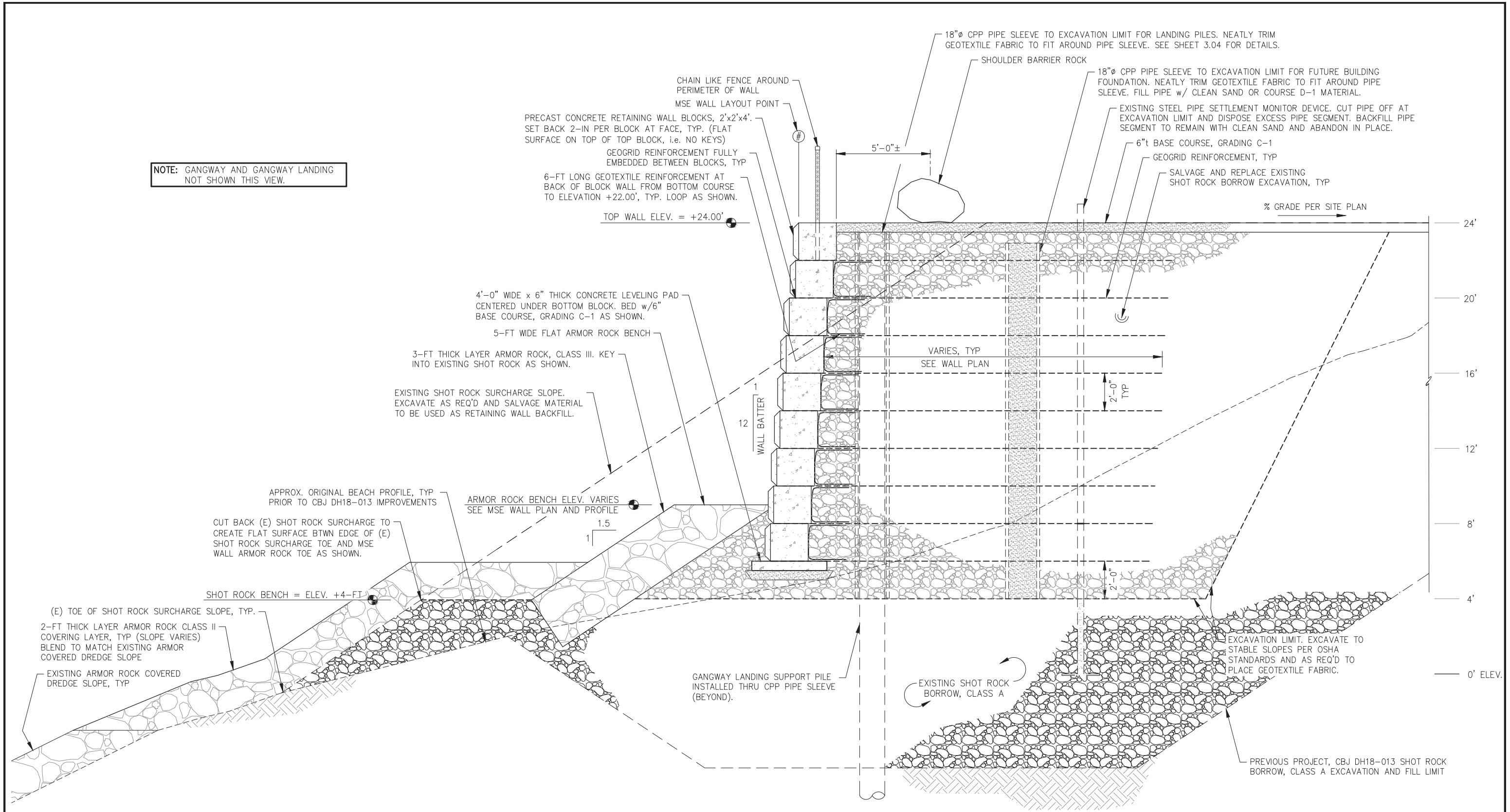
SHEET TITLE: **RETAINING WALL PLAN AND PROFILE**

PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

**2.01**



**NOTE:** GANGWAY AND GANGWAY LANDING NOT SHOWN THIS VIEW.



**A**  
**2.01** **RETAINING WALL - TYPICAL SECTION**



REVISIONS					
REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

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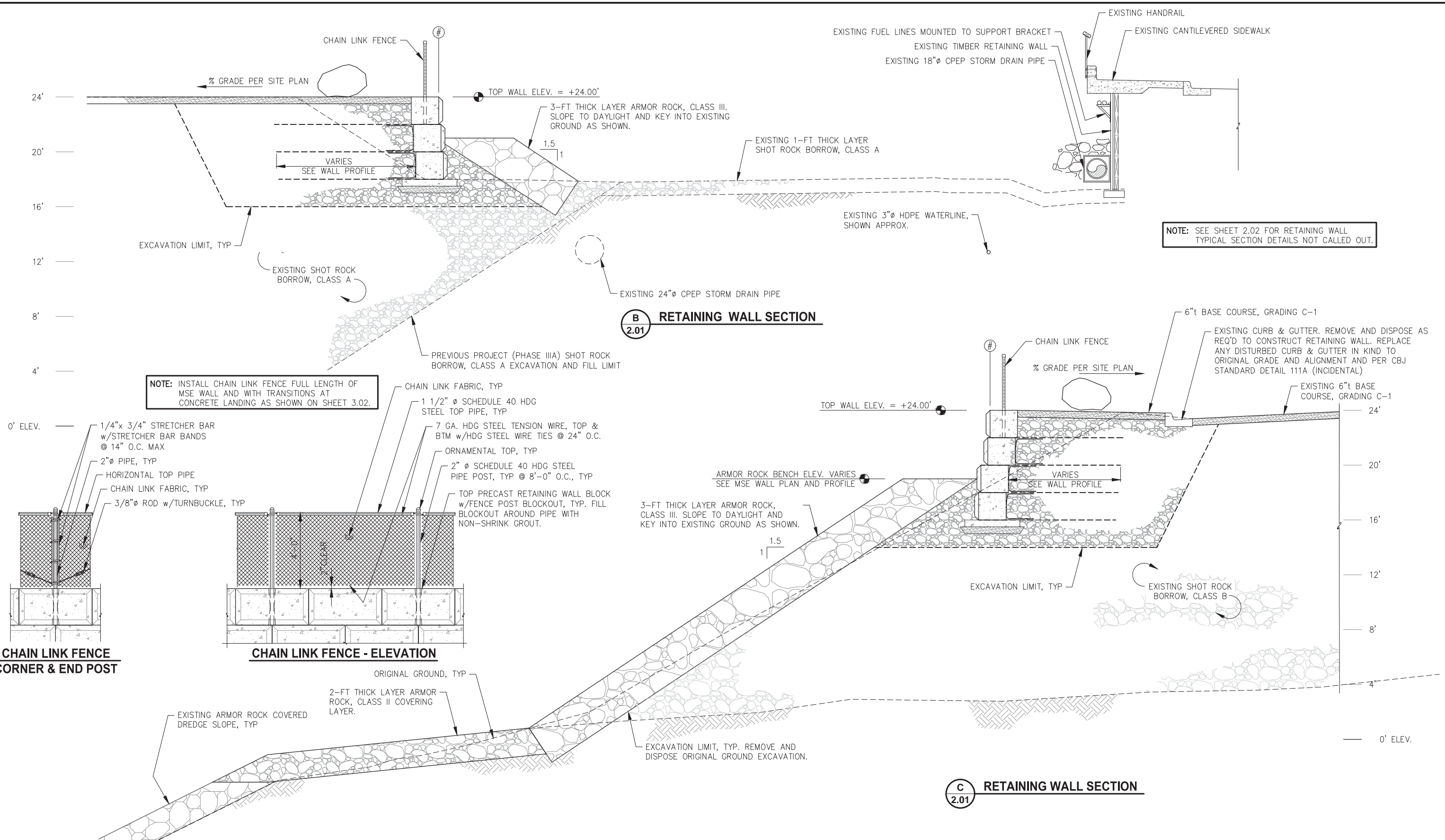


**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
**CBJ CONTRACT NO. DH20-021**

SHEET TITLE: **RETAINING WALL SECTIONS**

PND PROJECT NO.: 182066    C.A.N. NO.: AECC250

**2.02**



NOTE: INSTALL CHAIN LINK FENCE FULL LENGTH OF MSE WALL AND WITH TRANSITIONS AT CONCRETE LANDING AS SHOWN ON SHEET 3.02.

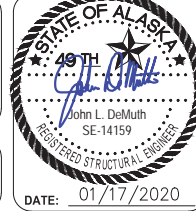
NOTE: SEE SHEET 2.02 FOR RETAINING WALL TYPICAL SECTION DETAILS NOT CALLED OUT.



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DRAWN: BMI APPROVED: JLD



**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
CBJ CONTRACT NO. DH20-021

SHEET TITLE: **RETAINING WALL SECTIONS**

PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

DATE: 01/17/2020

**2.03**



**LAYOUT POINT SUMMARY**

POINT	NORTHING	EASTING	ELEV. (FT MLLW)	DESCRIPTION
301	510751.88	485236.35	22.44	ME @ TC, GRATE
302	510748.51	485250.99	24.0±	ME
303	510738.12	485260.52	24.1±	ME
304	510715.08	485288.62	24.2±	ME, HIGH PT.
305	510699.66	485302.22	23.8±	ME
306	510675.00	485321.83	23.5±	ME
307	510600.79	485390.47	23.5±	ME
308	510570.53	485399.84	22.8±	ME

**NOTE:** SEE SHEET 5.01 FOR LANDING SUPPORT PILE AND CPP SLEEVE LAYOUT TABLE.

**NOTE:** SEE SHEET 2.01 FOR MSE RETAINING WALL DETAILS AND CALLOUTS NOT SHOWN.



**REVISIONS**

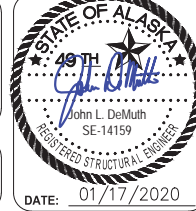
REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

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DESIGN: MS      CHECKED: JLD  
DRAWN: WRB      APPROVED: JLD

SCALE: SCALE IN FEET  
0      6      12 FT.

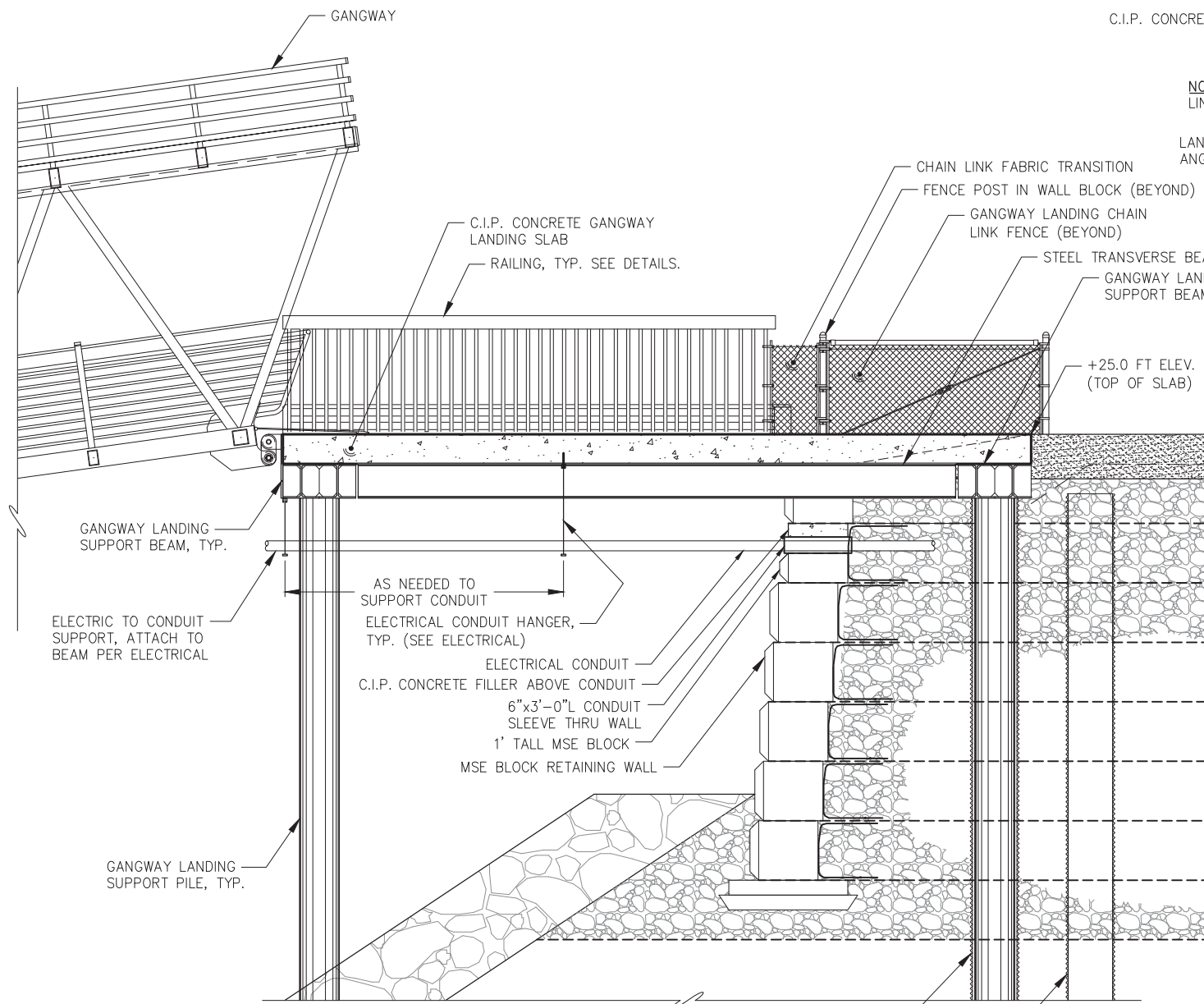


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STATTER HARBOR IMPROVEMENTS PH III(B)  
CBJ CONTRACT NO. DH20-021**

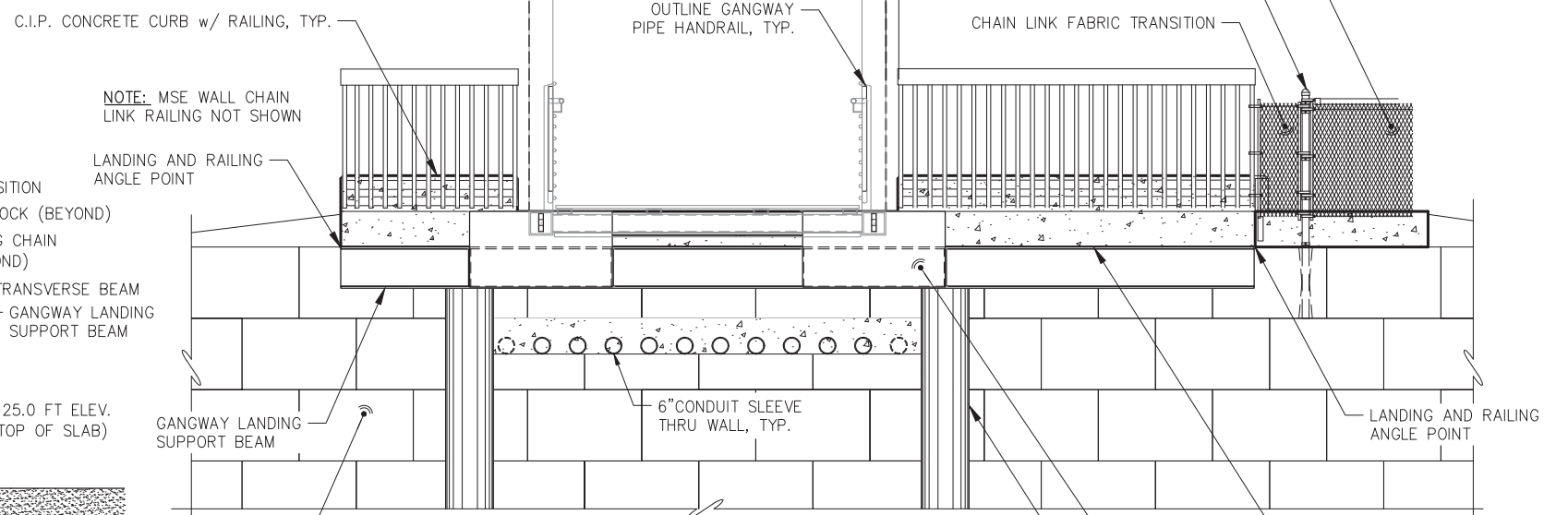
SHEET TITLE:  
**UPLANDS AND GANGWAY  
LANDING SITE PLAN**

PND PROJECT NO.: 182066      C.A.N. NO.: AECC250

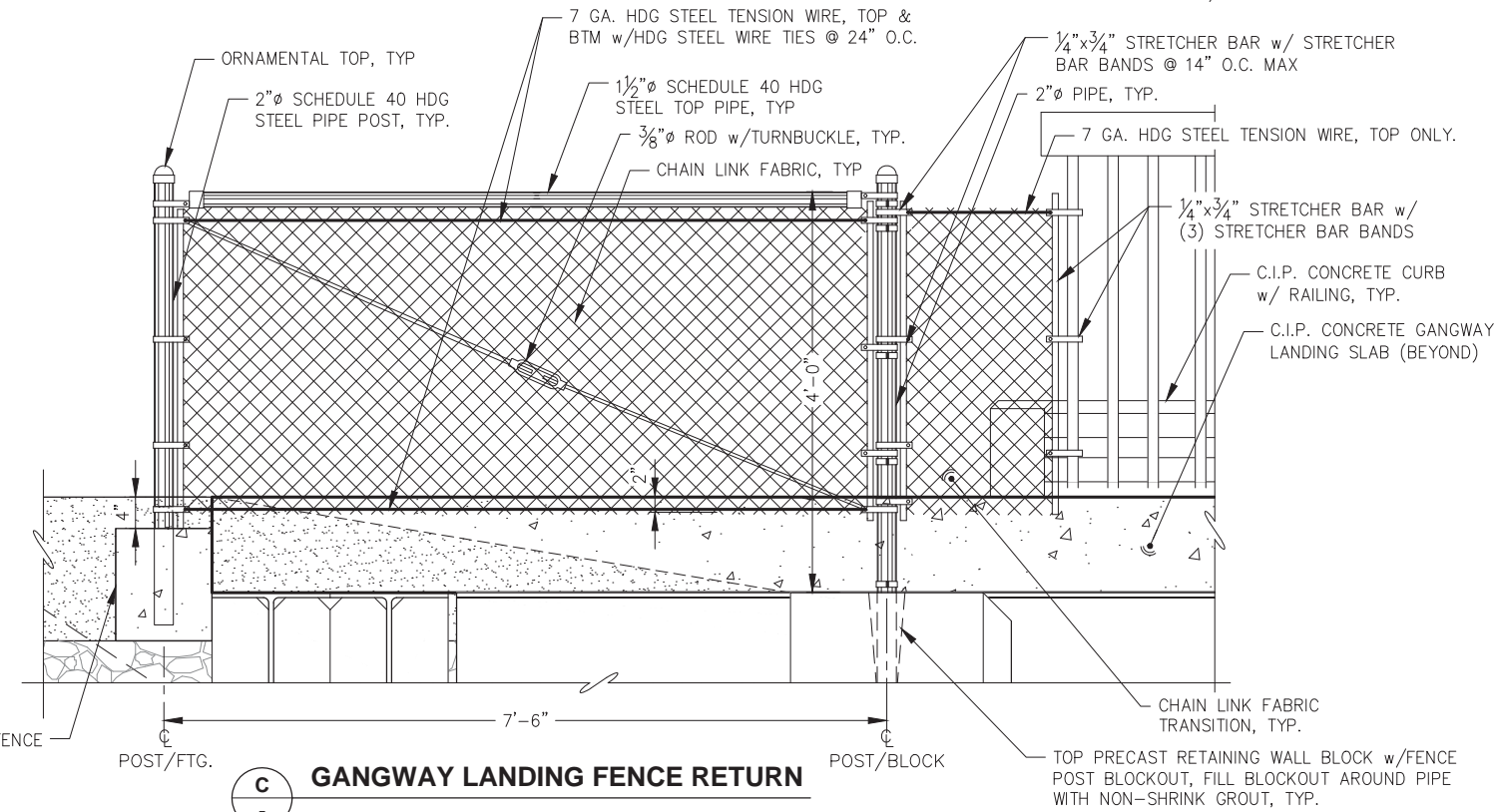
**3.01**



**NOTE:**  
ELECTRICAL CONDUIT SLEEVES AND GANGWAY LANDING BEAMS PASS THRU RETAINING WALL AS SHOWN. CONTRACTOR SHALL UTILIZE PARTIAL BLOCKS AND CAST IN PLACE CONCRETE TO FILL IN RETAINING WALL AT THESE LOCATIONS. C.I.P. CONCRETE FILLER SECTION SHALL MATCH ADJACENT BLOCK WIDTH AND OVERALL HEIGHT.



**NOTE:** MSE WALL CHAIN LINK RAILING NOT SHOWN

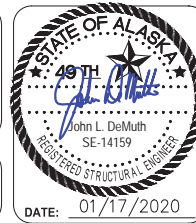


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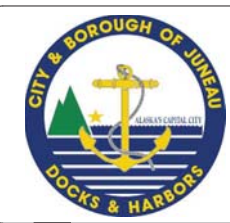


**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
**CBJ CONTRACT NO. DH20-021**

SHEET TITLE:  
**GANGWAY LANDING SECTION AND ELEVATION**

PND PROJECT NO.: 182066    C.A.N. NO.: AECC250

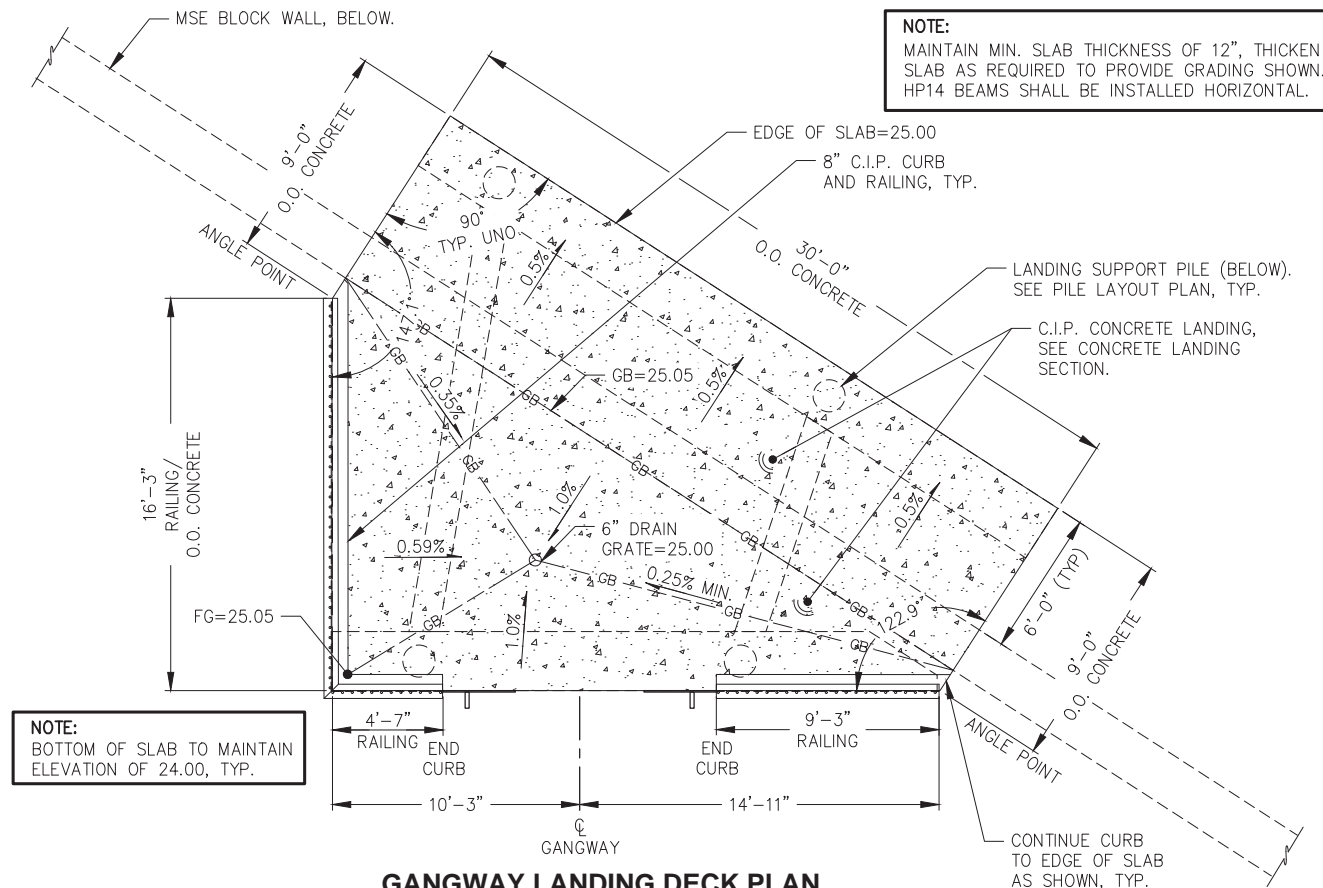
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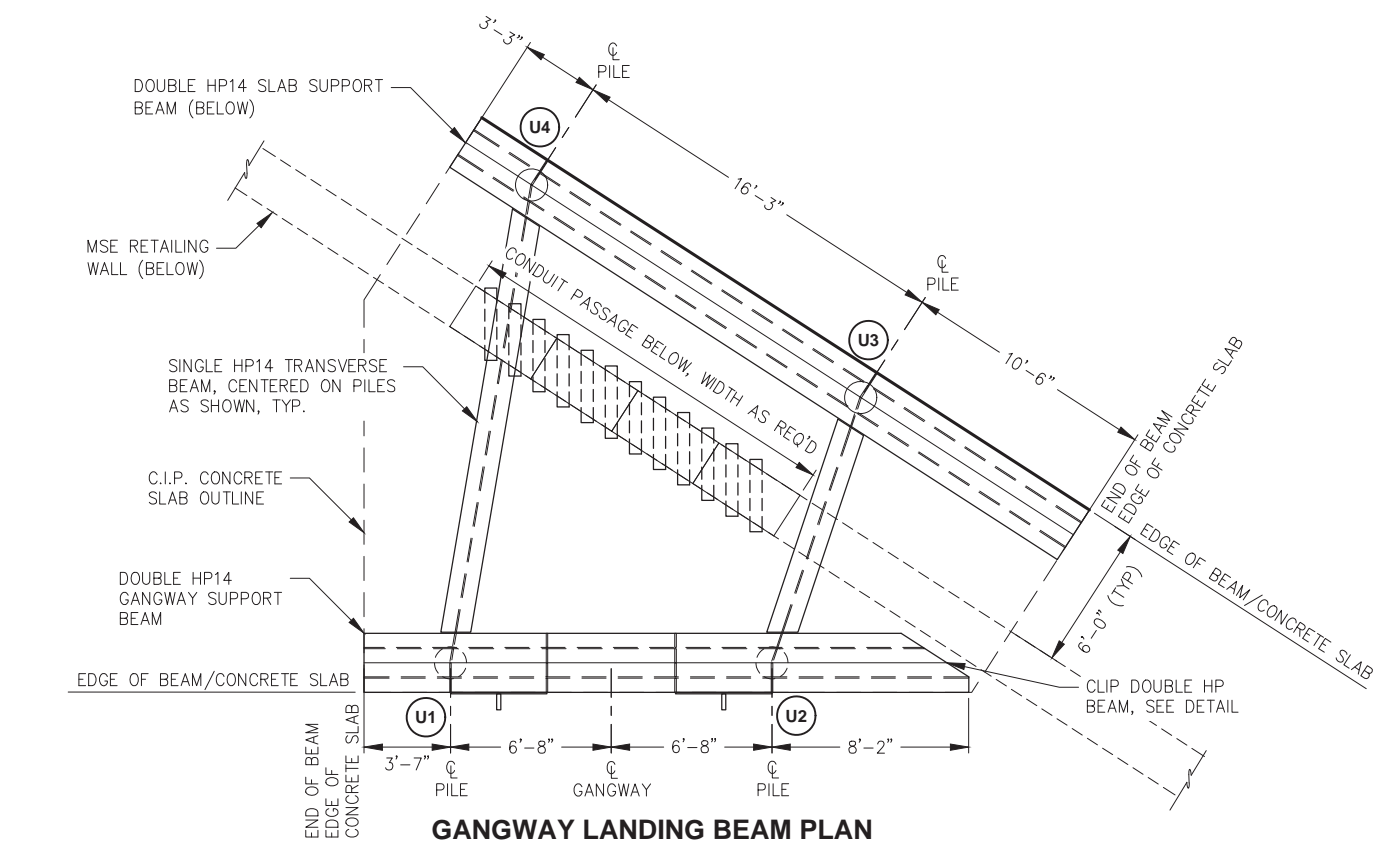
**NOTE:**  
 MAINTAIN MIN. SLAB THICKNESS OF 12", THICKEN  
 SLAB AS REQUIRED TO PROVIDE GRADING SHOWN.  
 HP14 BEAMS SHALL BE INSTALLED HORIZONTAL.

**NOTE:**  
 ROUTE ELECTRICAL CONDUITS THROUGH MSE BLOCK WALL  
 CONDUIT PASSAGE BEFORE INSTALLING  
 GANGWAY LANDING. REPLACE STANDARD HEIGHT  
 BLOCKS WITH HALF HEIGHT BLOCKS AS SHOWN,  
 QUANTITY AS NEEDED TO INSTALL ELECTRICAL  
 CONDUITS. CENTER OPENING IN MSE WALL ON  
 GANGWAY.

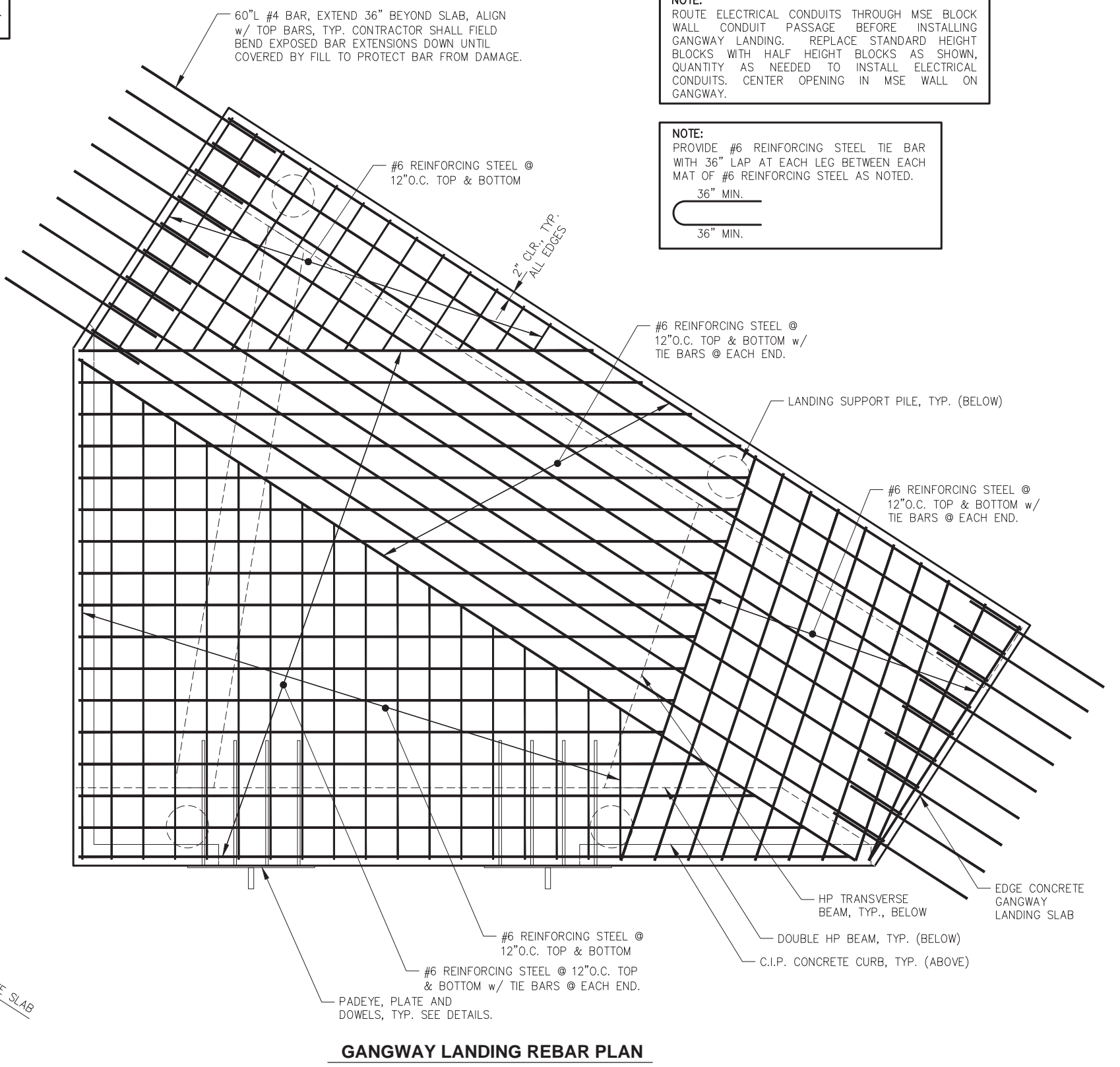
**NOTE:**  
 PROVIDE #6 REINFORCING STEEL TIE BAR  
 WITH 36" LAP AT EACH LEG BETWEEN EACH  
 MAT OF #6 REINFORCING STEEL AS NOTED.  
 36" MIN.  
 36" MIN.



**GANGWAY LANDING DECK PLAN**



**GANGWAY LANDING BEAM PLAN**

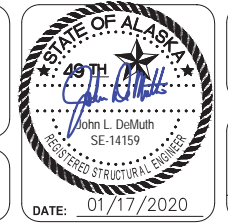


**GANGWAY LANDING REBAR PLAN**

**REVISIONS**

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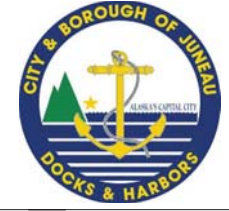


**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
**CBJ CONTRACT NO. DH20-021**

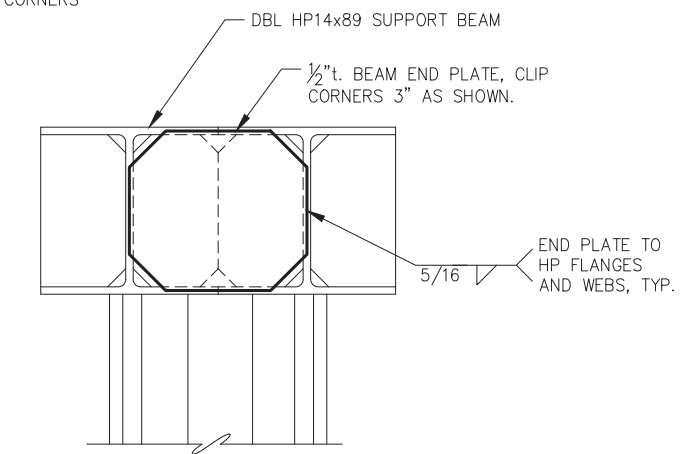
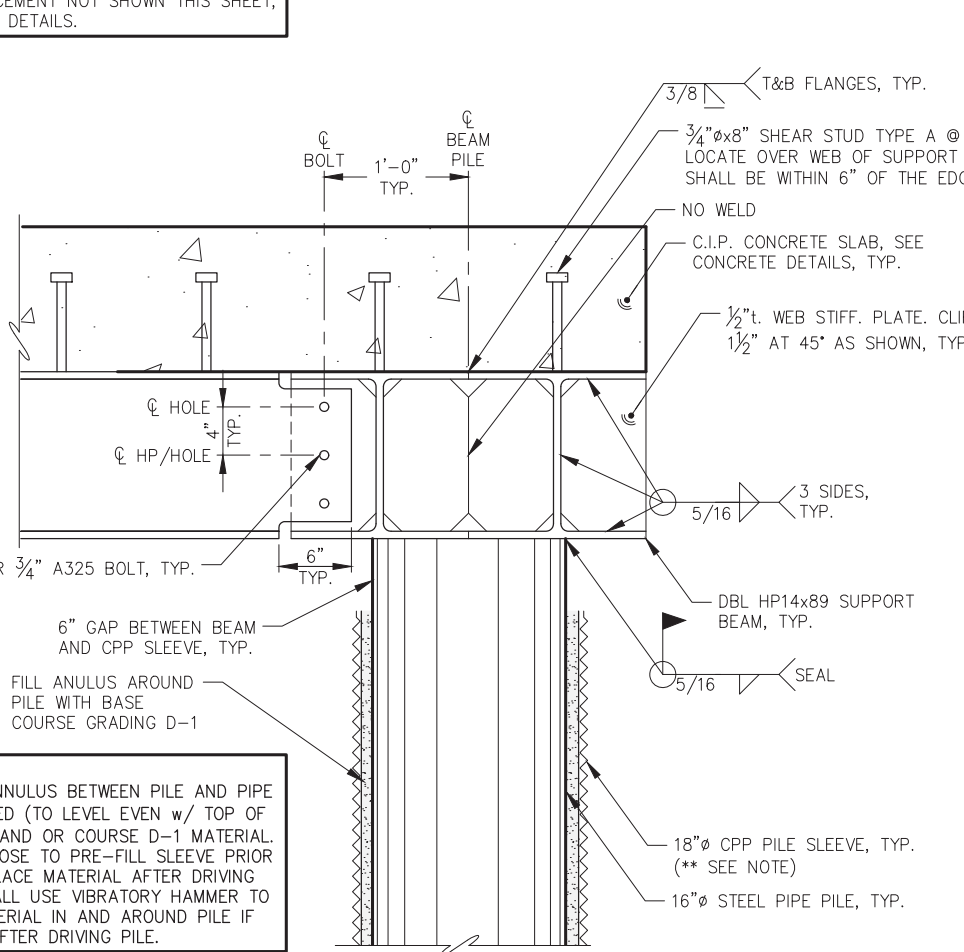
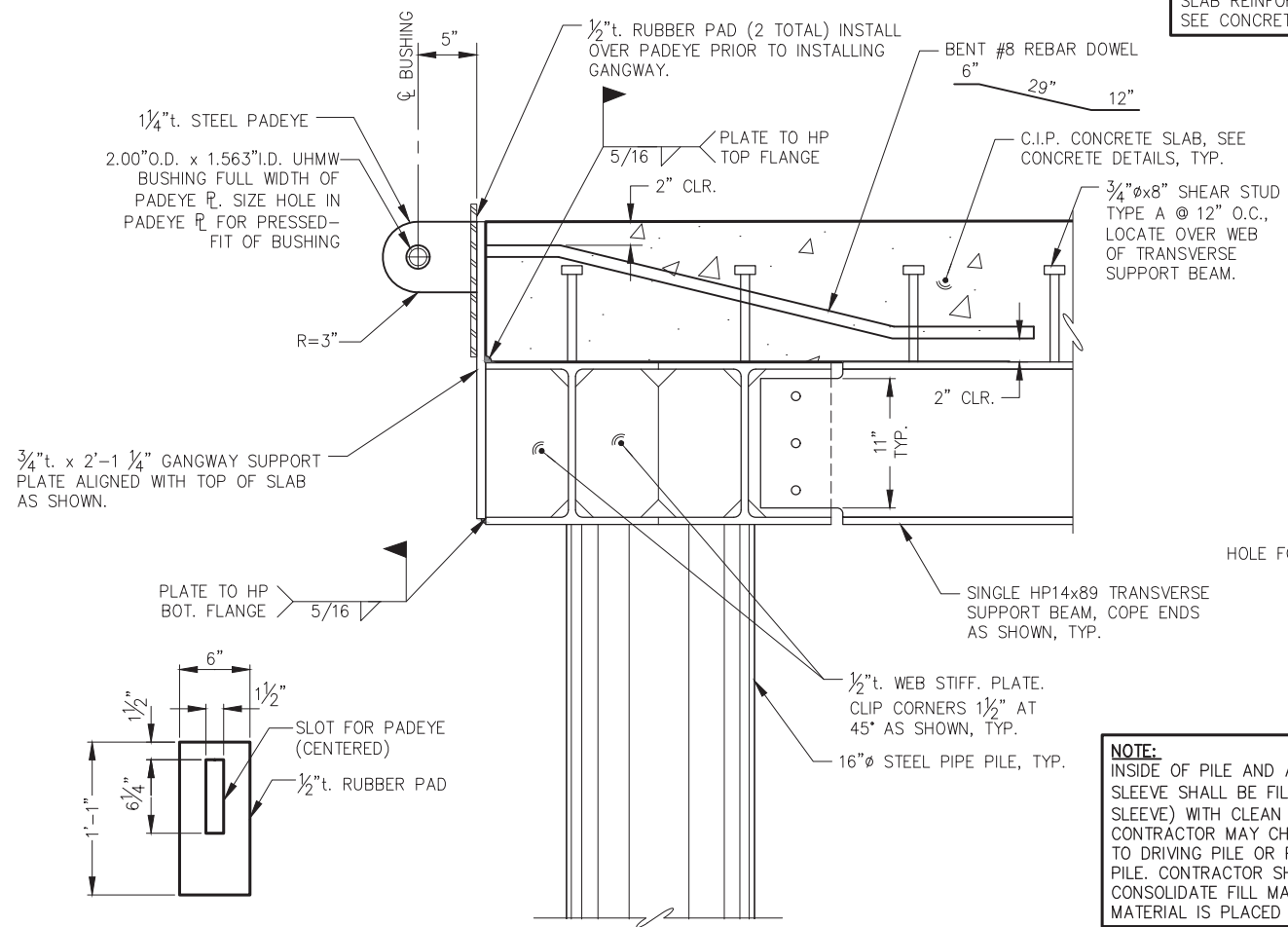
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 DRAWN: WRB      APPROVED: JLD

SHEET TITLE:  
**GANGWAY LANDING DETAILS**  
 PND PROJECT NO.: 182066      C.A.N. NO.: AECC250

**3.03**



**NOTE:**  
SLAB REINFORCEMENT NOT SHOWN THIS SHEET,  
SEE CONCRETE DETAILS.



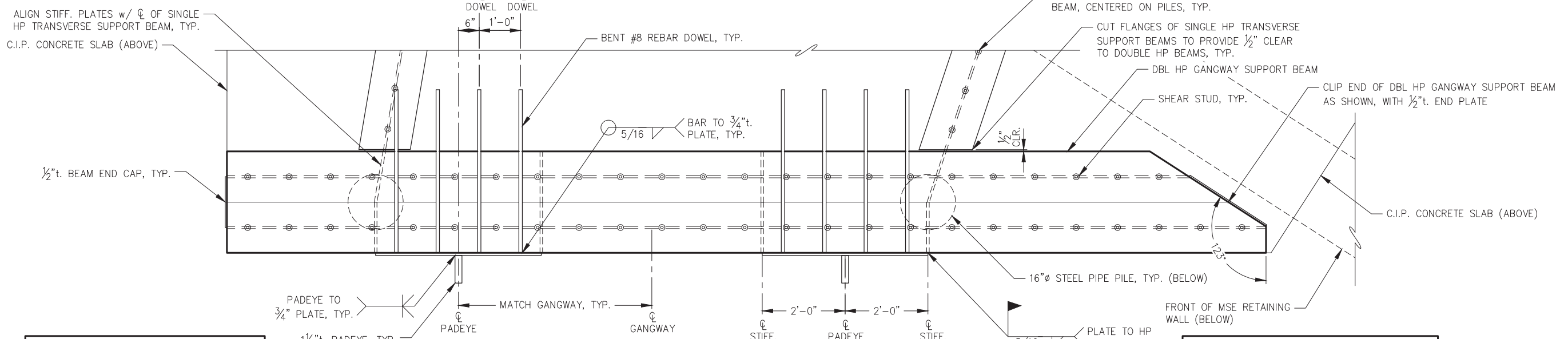
**RUBBER PAD DETAIL**

**GANGWAY SUPPORT BEAM & PILES U1 AND U2**

**SLAB SUPPORT BEAM & PILES U3 AND U4**

**BEAM END PLATE DETAIL**

**NOTE:**  
INSIDE OF PILE AND ANNULUS BETWEEN PILE AND PIPE SLEEVE SHALL BE FILLED (TO LEVEL EVEN w/ TOP OF SLEEVE) WITH CLEAN SAND OR COURSE D-1 MATERIAL. CONTRACTOR MAY CHOOSE TO PRE-FILL SLEEVE PRIOR TO DRIVING PILE OR PLACE MATERIAL AFTER DRIVING PILE. CONTRACTOR SHALL USE VIBRATORY HAMMER TO CONSOLIDATE FILL MATERIAL IN AND AROUND PILE IF MATERIAL IS PLACED AFTER DRIVING PILE.



**U1-U2 SUPPORT BEAM DETAIL**  
(U3-U4 SUPPORT BEAM DETAILS SIMILAR)

**NOTE:**  
SHEAR STUDS SHALL BE SECURED TO BEAM TO ACHIEVE FULL STRENGTH OF STUD. SUBMIT ATTACHMENT PROCEDURE TO ENGINEER.

**NOTE:**  
PROVIDE 1/2"t. WEB STIFF AT PILES AS SHOWN. U3-U4 SUPPORT BEAM SIMILAR.

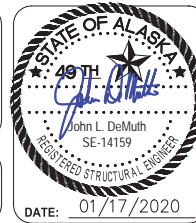


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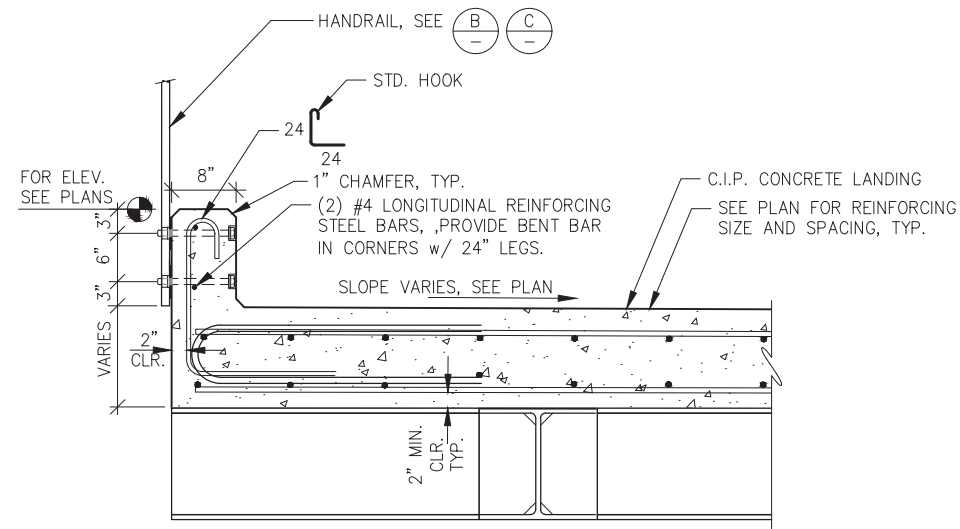
**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
CBJ CONTRACT NO. DH20-021

SHEET TITLE:  
**GANGWAY LANDING DETAILS**

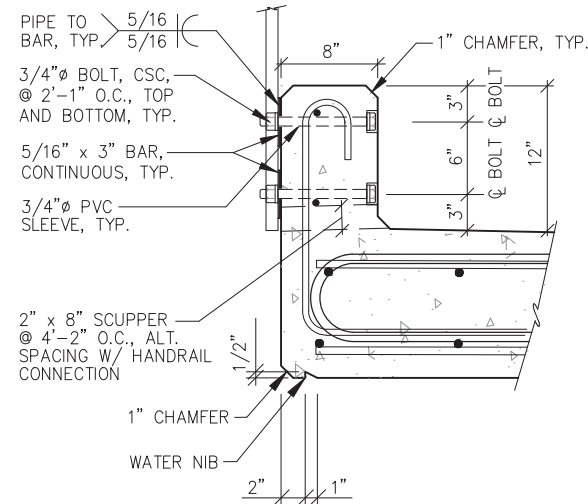
PND PROJECT NO.: 182066      C.A.N. NO.: AECC250

DATE: 01/17/2020

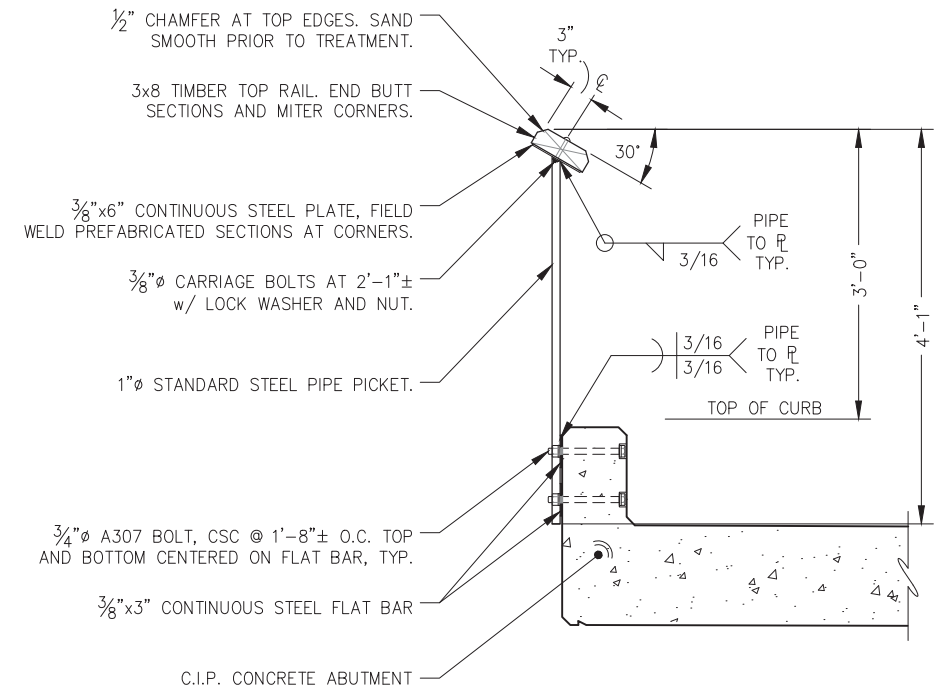
**3.04**



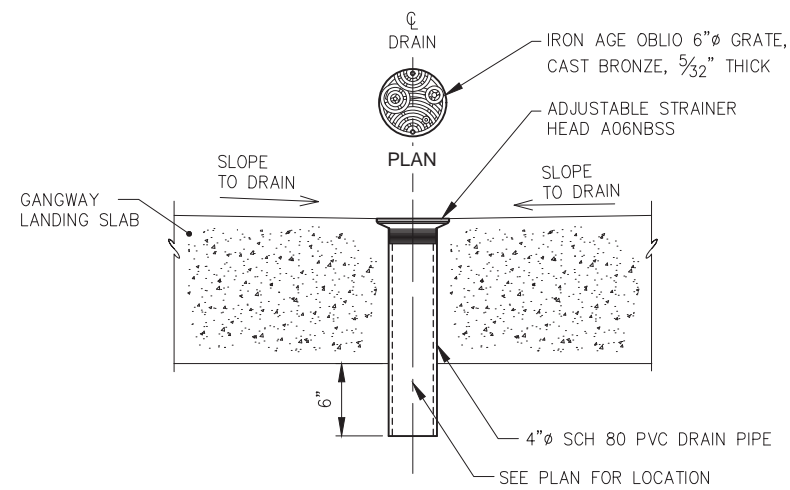
**CONCRETE LANDING SECTION AT CURB**



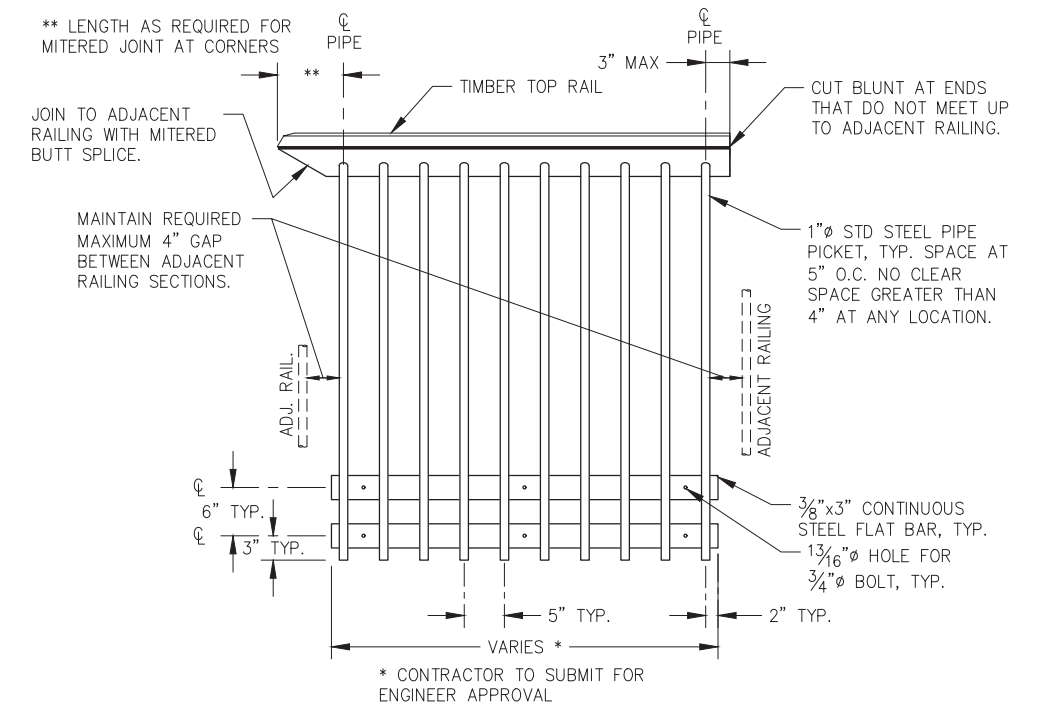
**TYPICAL HANDRAIL CONNECTION**



**TYPICAL ABUTMENT RAILING SECTION**



**6 INCH DECK DRAIN DETAIL**



**TYPICAL ABUTMENT RAILING DETAILS**



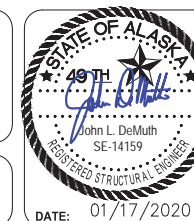
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REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.



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SCALE:



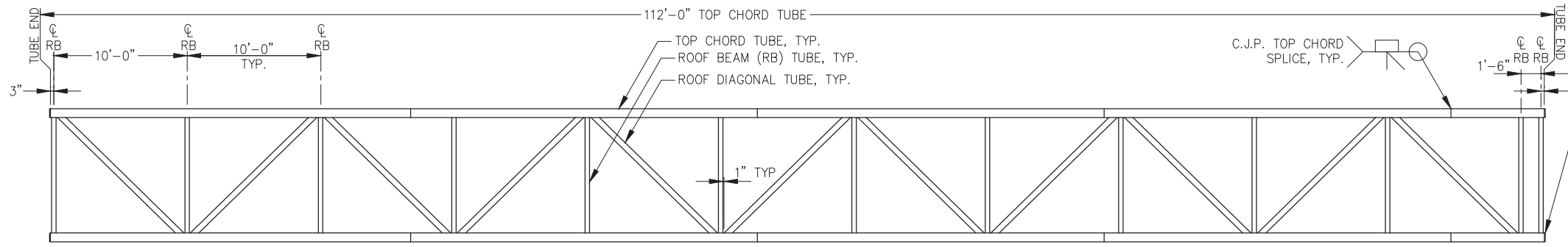
**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
**CBJ CONTRACT NO. DH20-021**

SHEET TITLE:  
**GANGWAY LANDING RAILING**  
**AND DECK DETAILS**

**3.05**

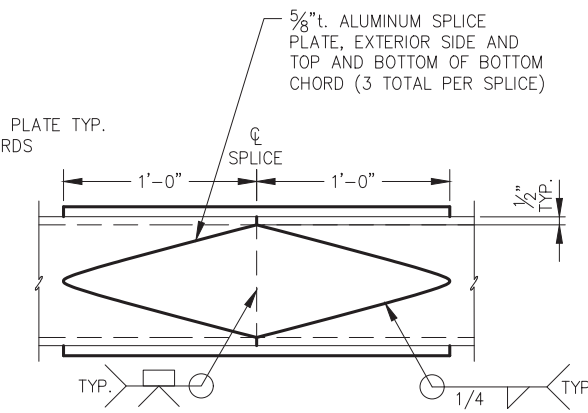
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C.A.N. NO.: AECC250

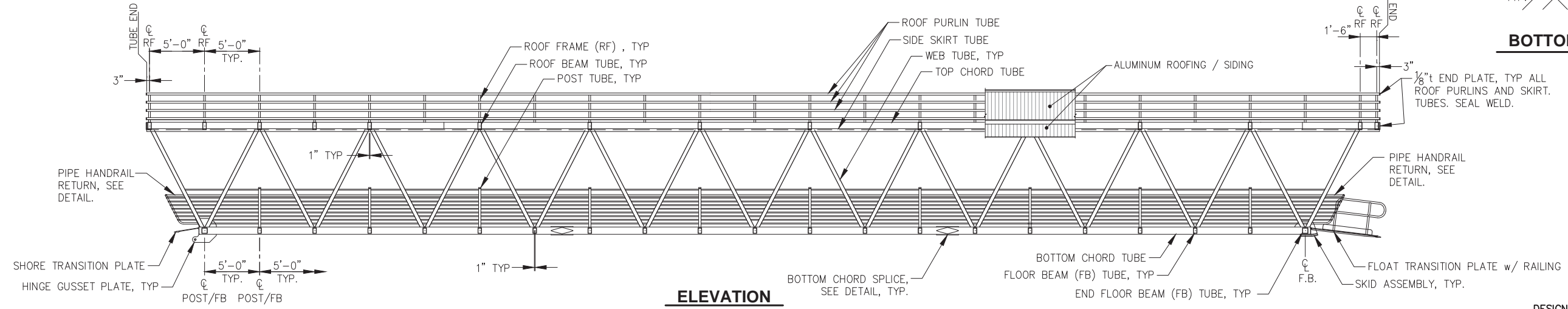


**ROOF PLAN**

NOTE: ROOF PURLIN TUBES, ROOF FRAME TUBES AND ROOF POSTS, NOT SHOWN FOR CLARITY.



**BOTTOM CHORD SPLICE**



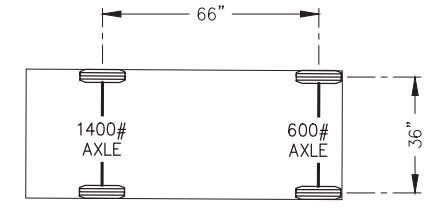
**ELEVATION**

**DESIGN PARAMETERS:**

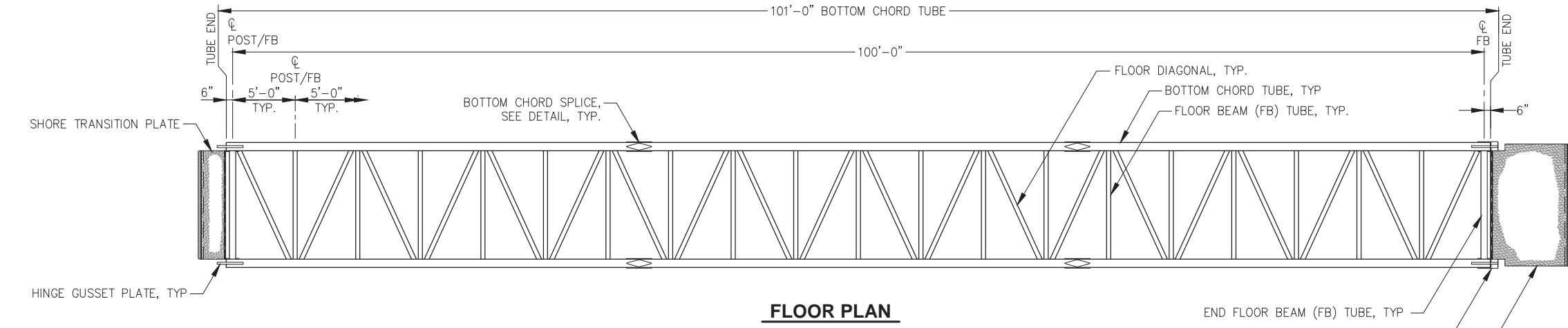
- ALL DEAD LOADS
- 75 PSF LIVE LOAD
- 50 PSF SNOW LOAD
- 105 MPH WIND PERPENDICULAR TO GANGWAY
- 44 PLF ELECTRICAL LOAD



- VILLAGER 4 ELECTRIC VEHICLE
- GVW = 2000#



**DESIGN VEHICLE**

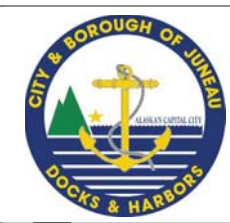


**FLOOR PLAN**

**GENERAL NOTES:**

1. NO BOTTOM CHORD SPLICES IN MIDDLE THIRD OF GANGWAY.
2. CHORD SPLICE LOCATIONS SHOWN FOR ILLUSTRATION ONLY. ACTUAL LOCATIONS SHALL BE SUBMITTED BY FABRICATOR FOR ENGINEER APPROVAL.
3. TOP AND BOTTOM CHORD SPLICES SHALL BE STAGGERED 5-FT MIN.
4. PROVIDE CAMBER OF 3" MIN. AT MID-SPAN.
5. PROVIDE WEEP HOLES AT DOWNHILL END OF ALL CHORD TUBES, DECK BEAM TUBES, ROOF BRACES, AND SKIRT TUBES. FABRICATOR SHALL SUBMIT HOLE LOCATIONS TO ENGINEER FOR APPROVAL.
6. TOP SIDE SKIRT TUBE NOT SHOWN IN ELEVATION FOR CLARITY.
7. FOR BOTTOM CHORD, PROVIDE 1/4" t. END PLATE WITH 1/4" ALL AROUND FILLET WELD. FOR ALL OTHER OPEN ENDED MEMBERS PROVIDE END PLATE OF EQUAL WALL THICKNESS AND SEAL WELD.
8. CONTRACTOR MAY SUBMIT FOR ENGINEER'S APPROVAL VARIATIONS IN PRESENTED MEMBER SIZES AND CONFIGURATION. OVERALL DIMENSIONS SHALL REMAIN AS DEPICTED IN THESE DRAWINGS. CONTRACTOR SHALL SUBMIT A SIGNED AND STAMPED SET OF DRAWINGS AND CALCULATIONS BY A LICENSED P.E. FOR APPROVAL.

**\* NOTE:** ADDITIONAL FLOOR TRANSITION PLATE TO BE FABRICATED AND INSTALLED ONTO EXISTING GANGWAY.

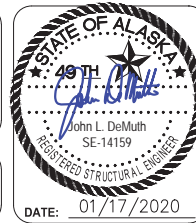


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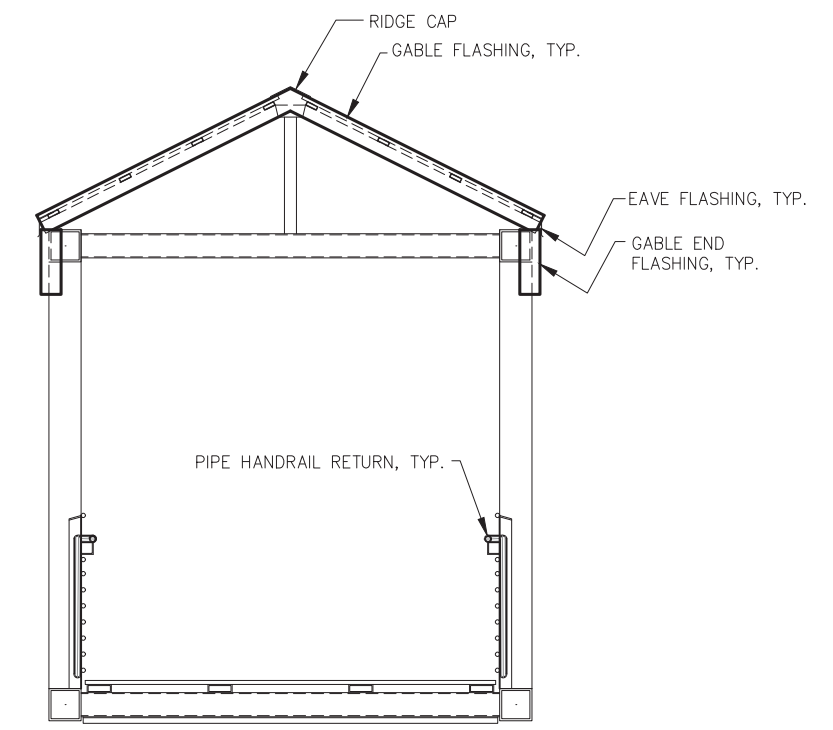
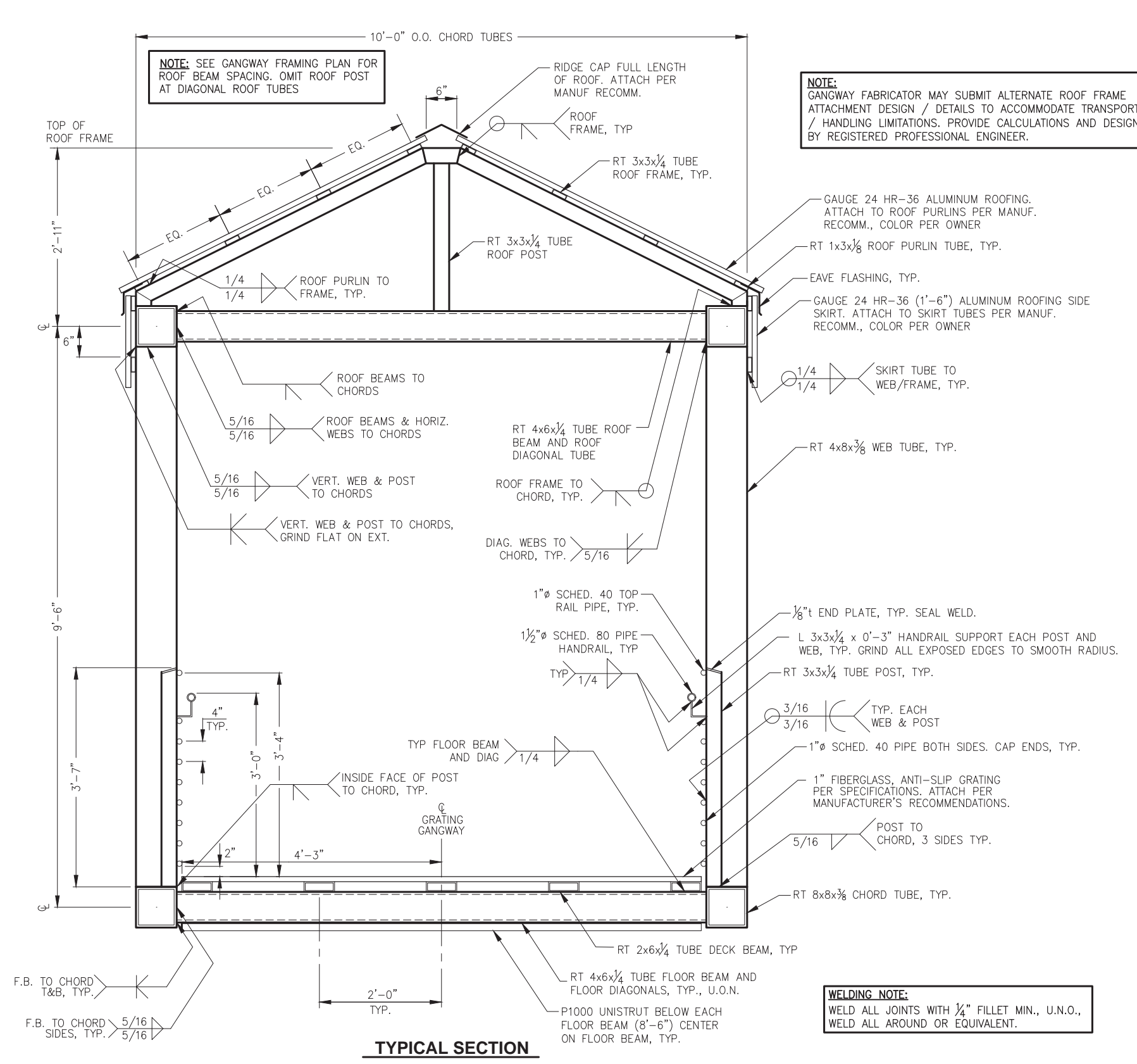
**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
CBJ CONTRACT NO. DH20-021

SHEET TITLE:  
**GANGWAY FRAMING PLAN AND ELEVATION**

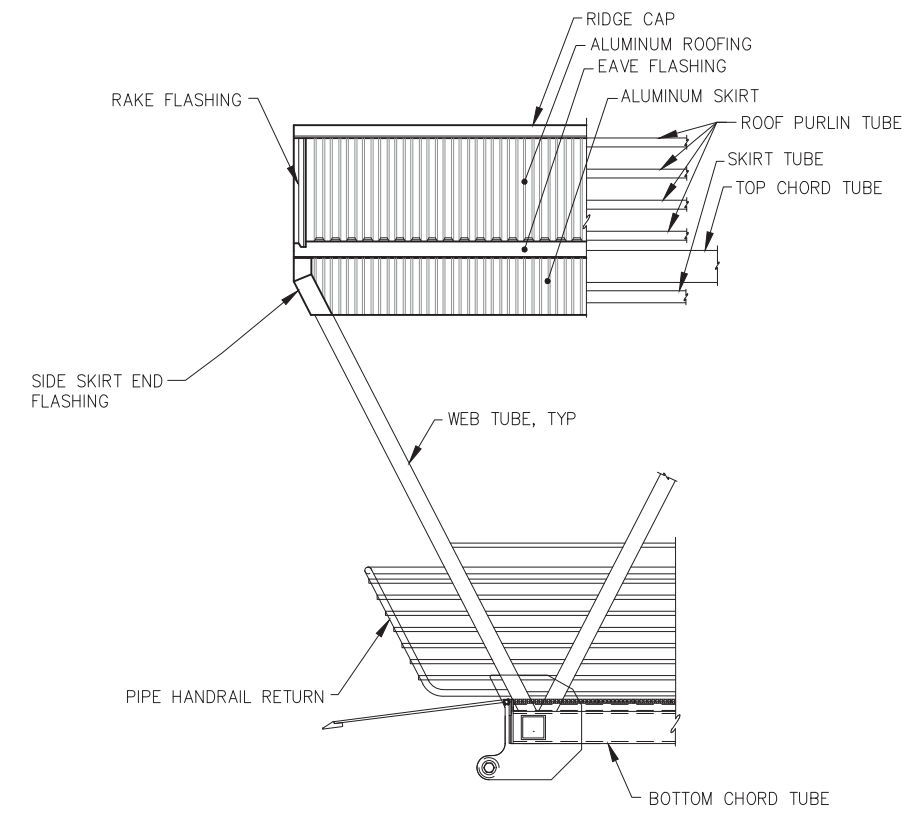
PND PROJECT NO.: 182066    C.A.N. NO.: AECC250

**4.01**

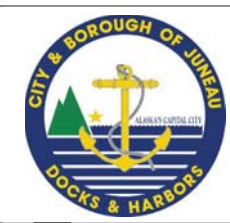




**TYPICAL END VIEW**



**TYPICAL END ELEVATION**  
(NOTE: SHORE END SHOWN; FLOAT END SIMILAR.)



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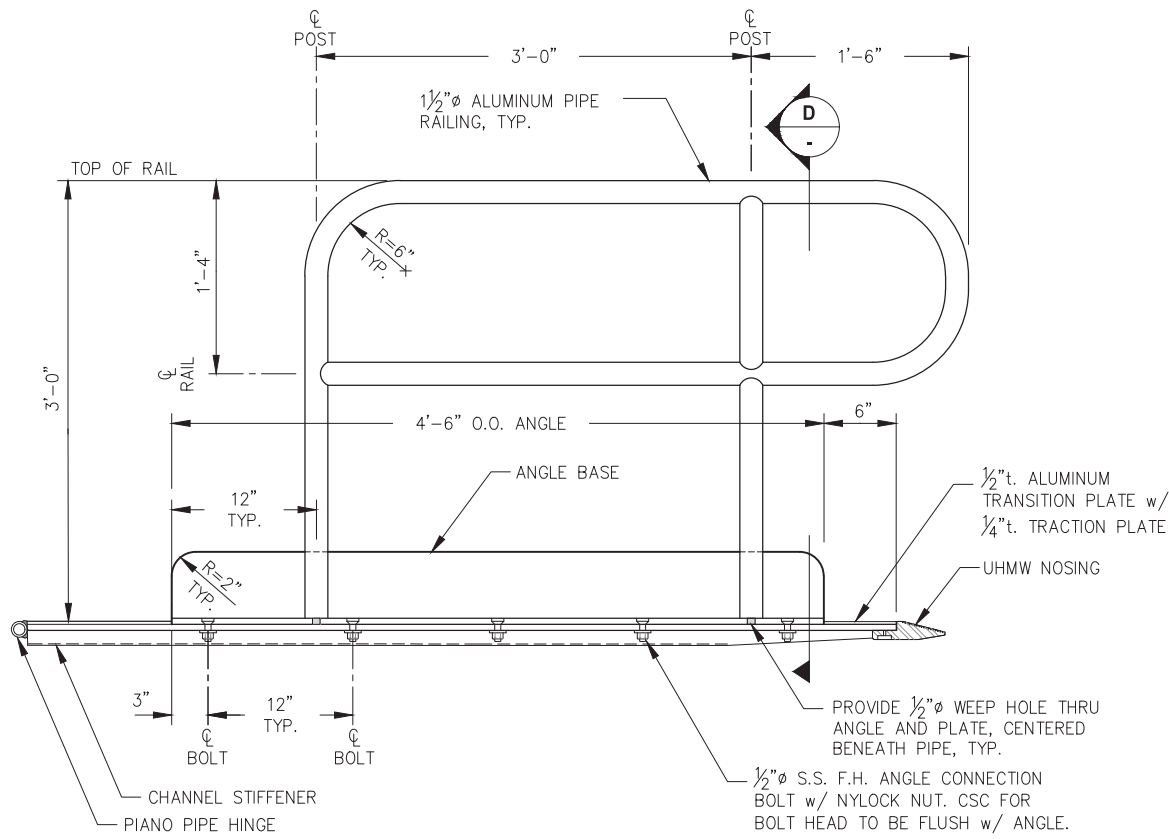


**CITY & BOROUGH OF JUNEAU, ALASKA**  
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CBJ CONTRACT NO. DH20-021

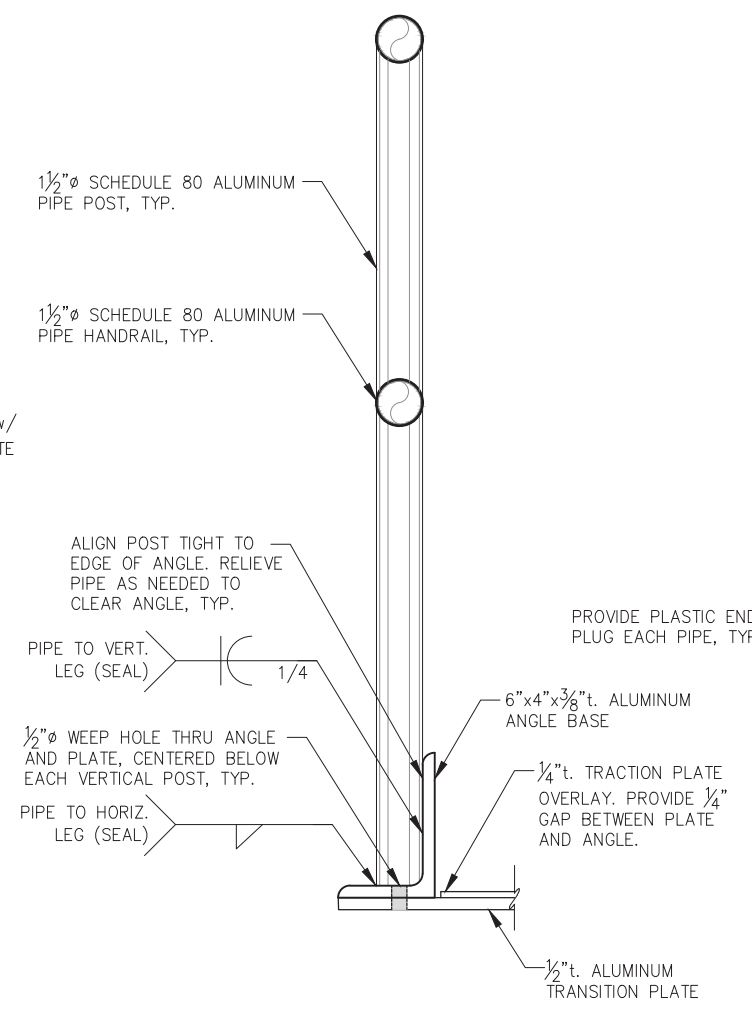
SHEET TITLE:  
**GANGWAY TYPICAL SECTION**

PND PROJECT NO.: 182066    C.A.N. NO.: AECC250

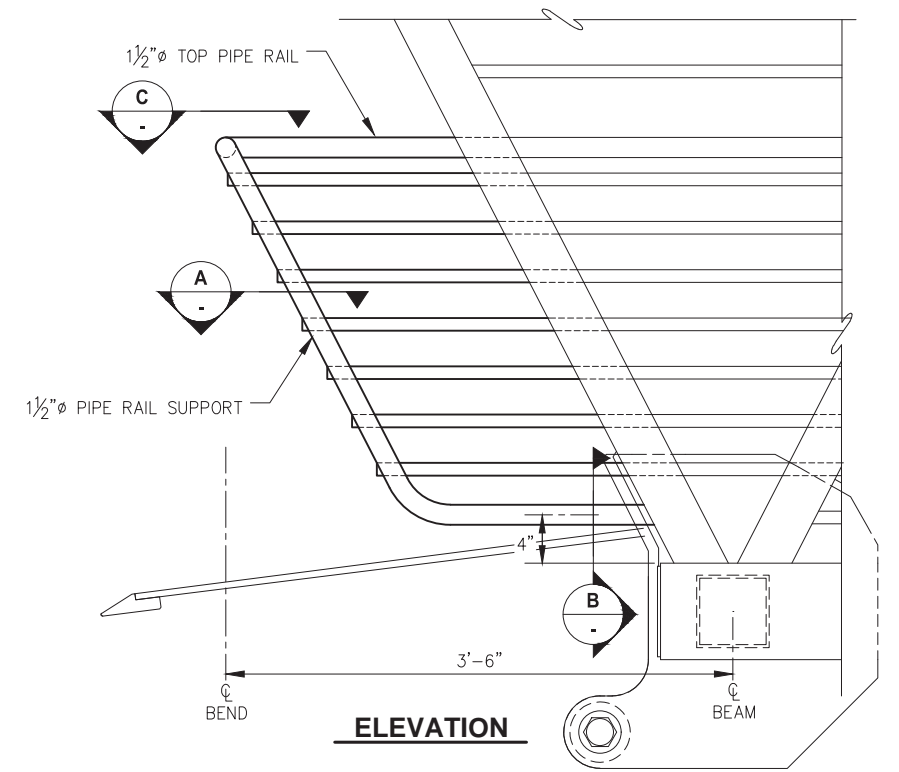
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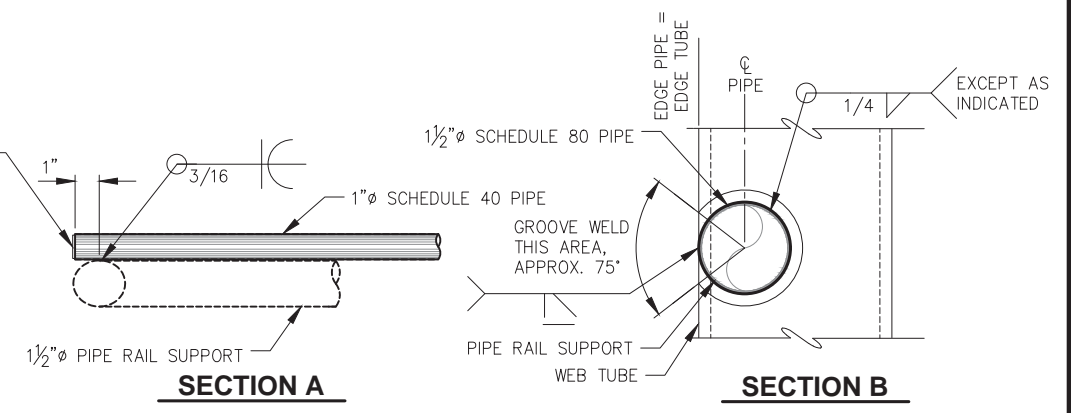
**KEEPER ANGLE HANDRAIL ELEVATION**



**SECTION D**

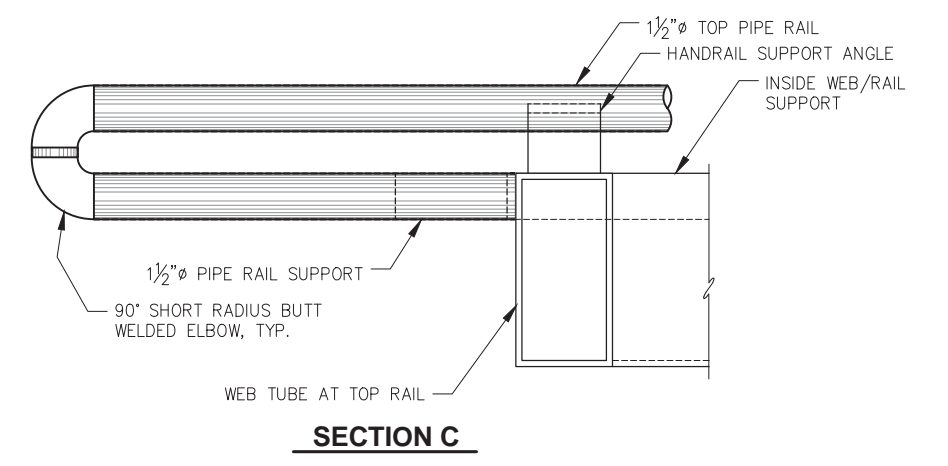


**ELEVATION**



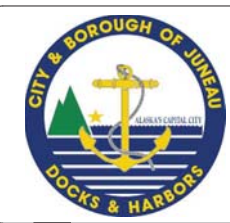
**SECTION A**

**SECTION B**



**SECTION C**

**PIPE HANDRAIL RETURN DETAILS**



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DRAWN: WRB    APPROVED: JLD

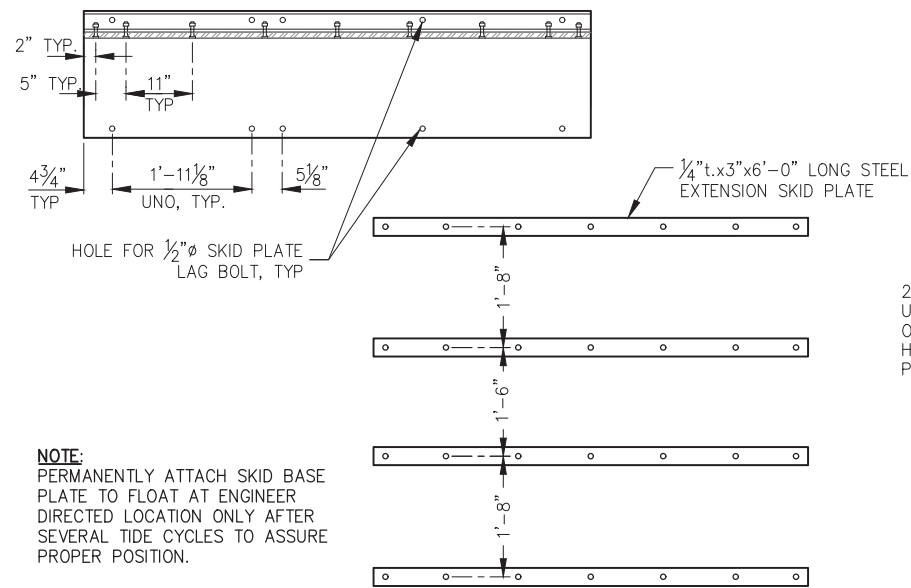


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CBJ CONTRACT NO. DH20-021

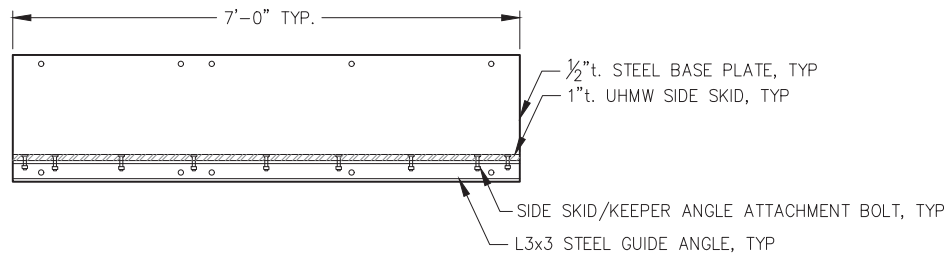
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**GANGWAY DETAILS**

PND PROJECT NO.: 182066    C.A.N. NO.: AECC250

**4.03**

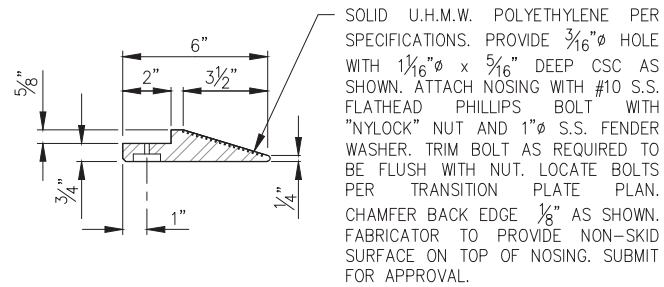


**NOTE:**  
PERMANENTLY ATTACH SKID BASE PLATE TO FLOAT AT ENGINEER DIRECTED LOCATION ONLY AFTER SEVERAL TIDE CYCLES TO ASSURE PROPER POSITION.

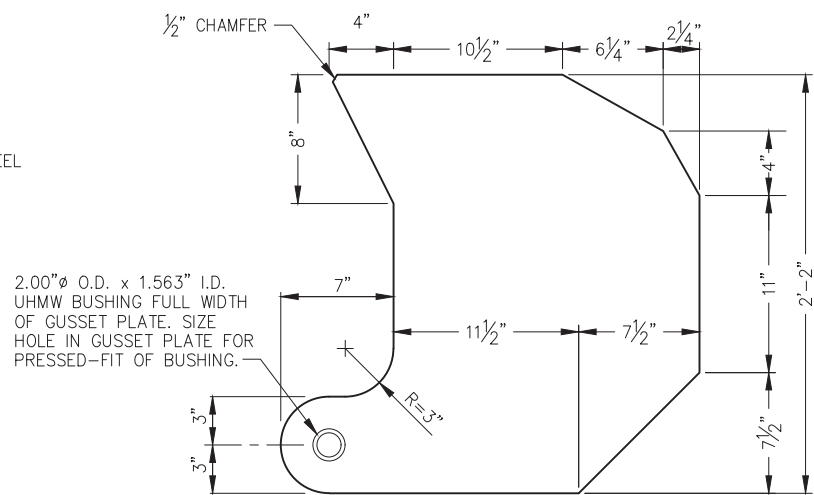


**SKID BASE PLATE / GUIDE ANGLE ASSEMBLY - PLAN**

**WELDING NOTE:**  
WELD ALL JOINTS WITH 1/4" FILLET U.N.O.  
WELD ALL AROUND OR EQUIVALENT.

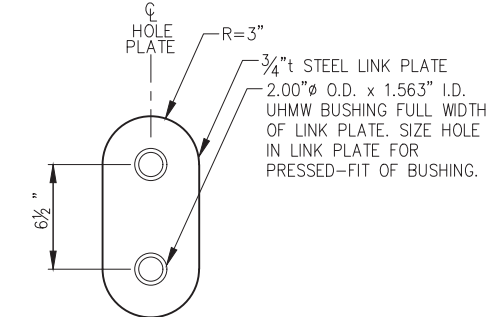


**UHMW NOSING - TYPE A**



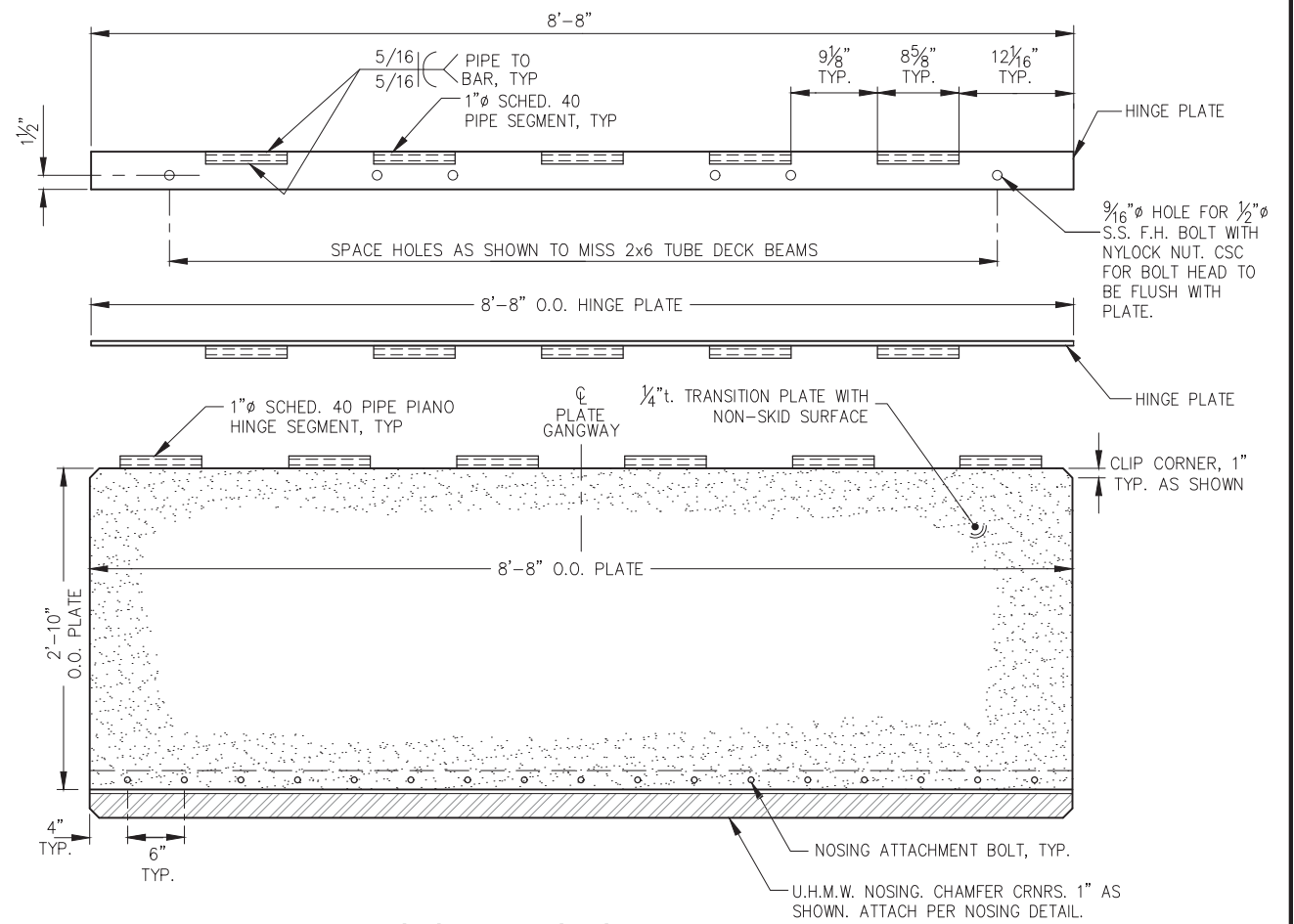
**HINGE GUSSET PLATE**

1/4" TYP. ALUMINUM PLATE

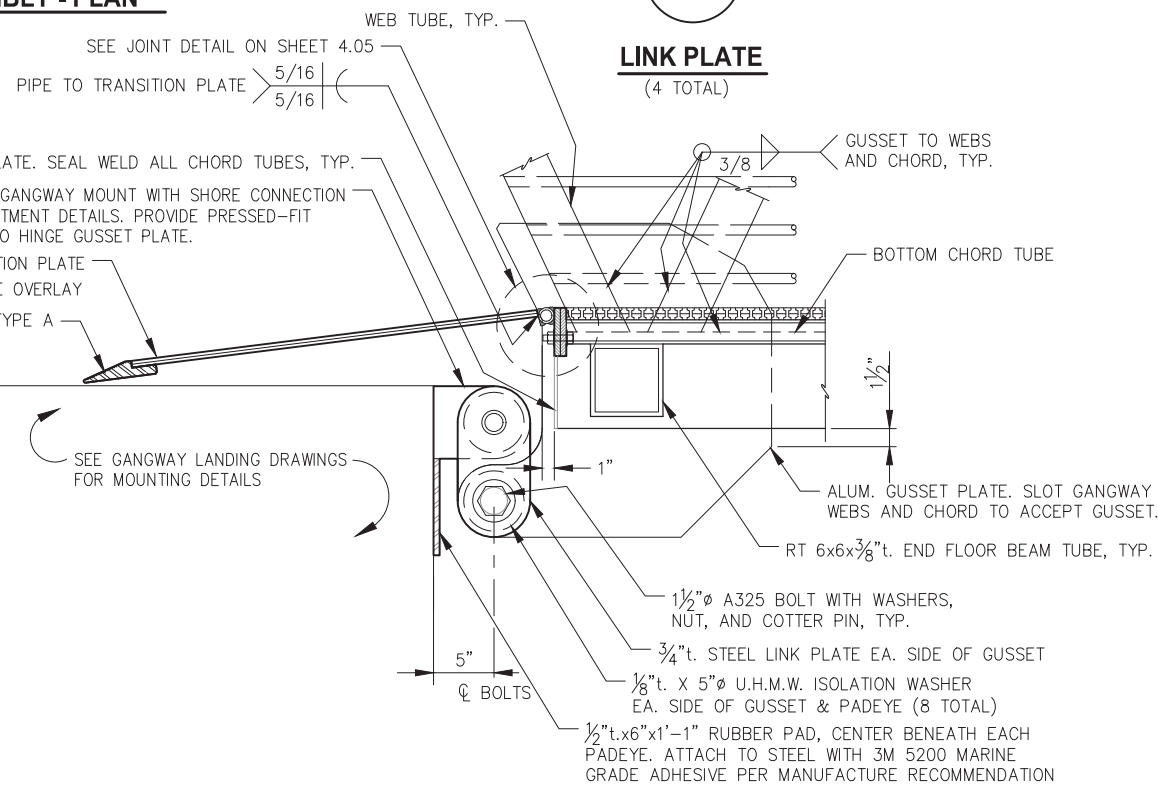


**LINK PLATE**

(4 TOTAL)



**SHORE TRANSITION PLATE**



**GANGWAY HINGE SECTION**

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SCALE: AS SHOWN



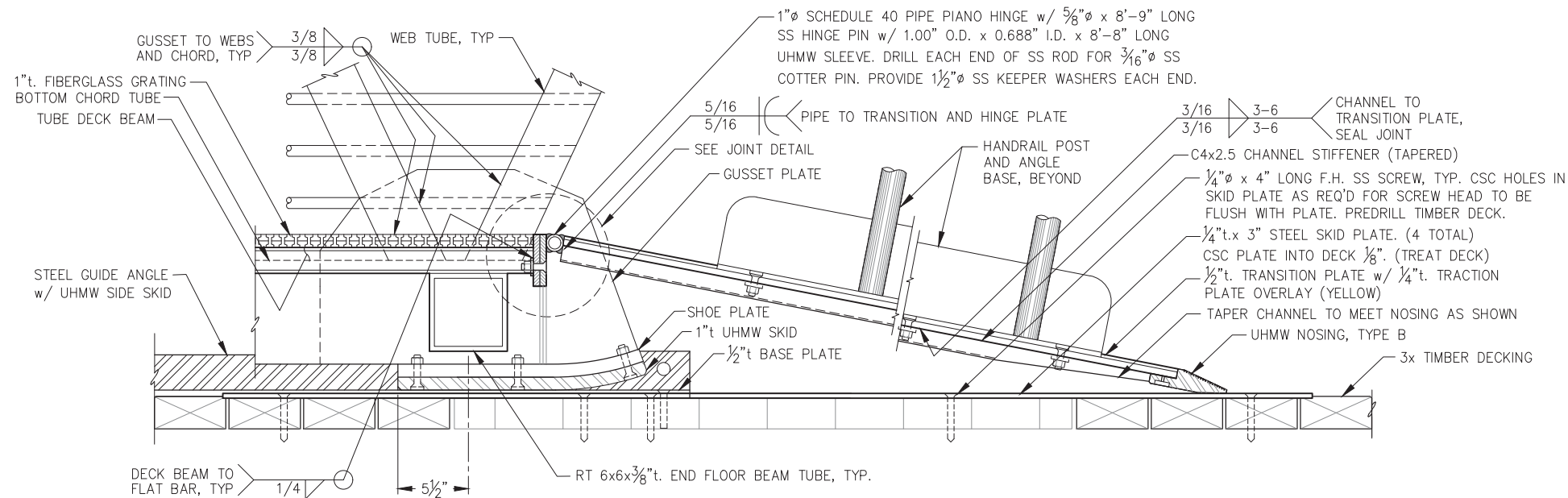
**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
**CBJ CONTRACT NO. DH20-021**

SHEET TITLE:  
**GANGWAY DETAILS**

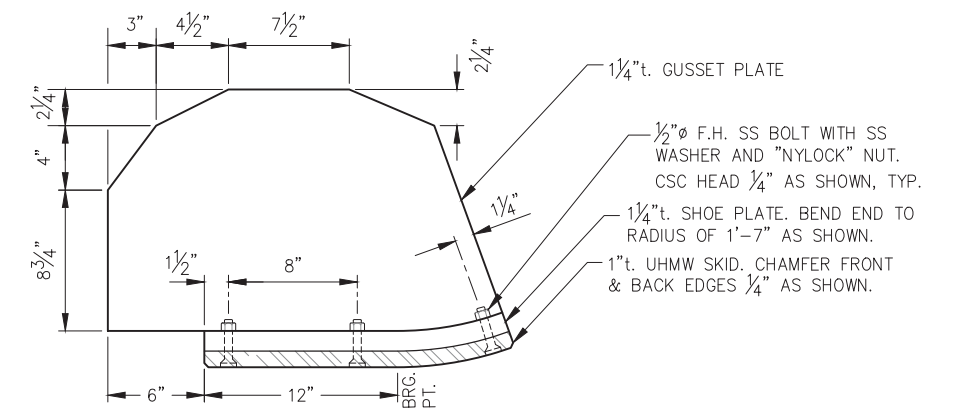
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PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

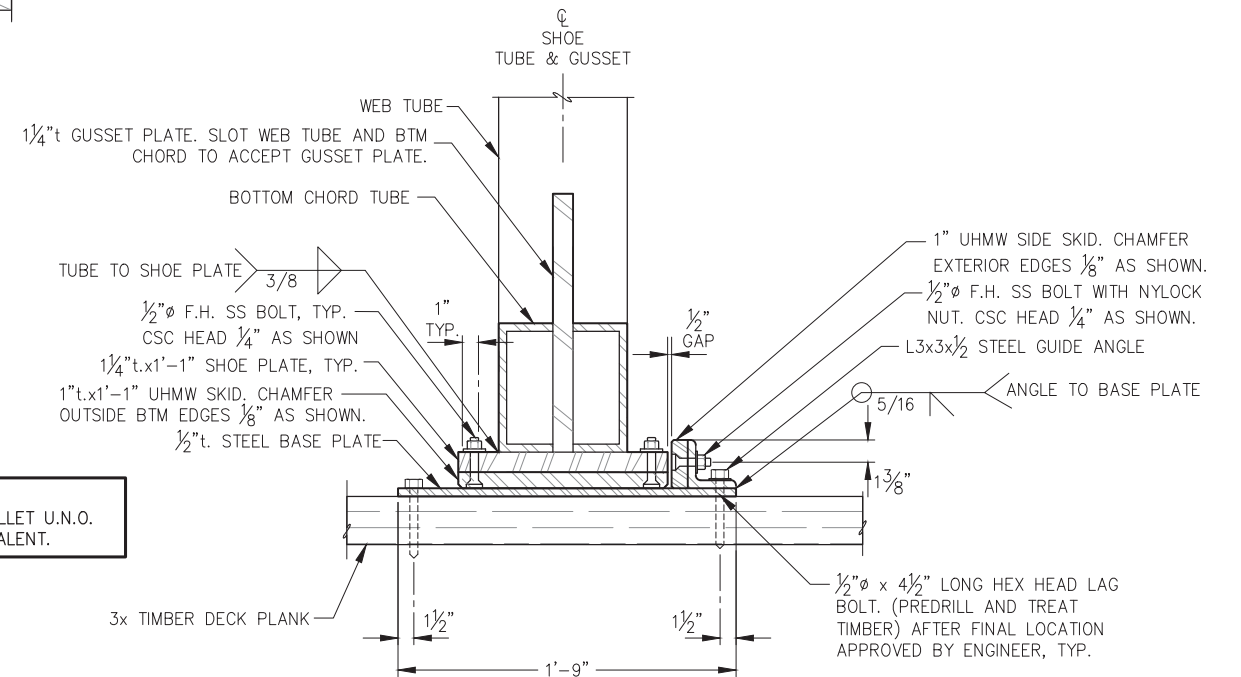
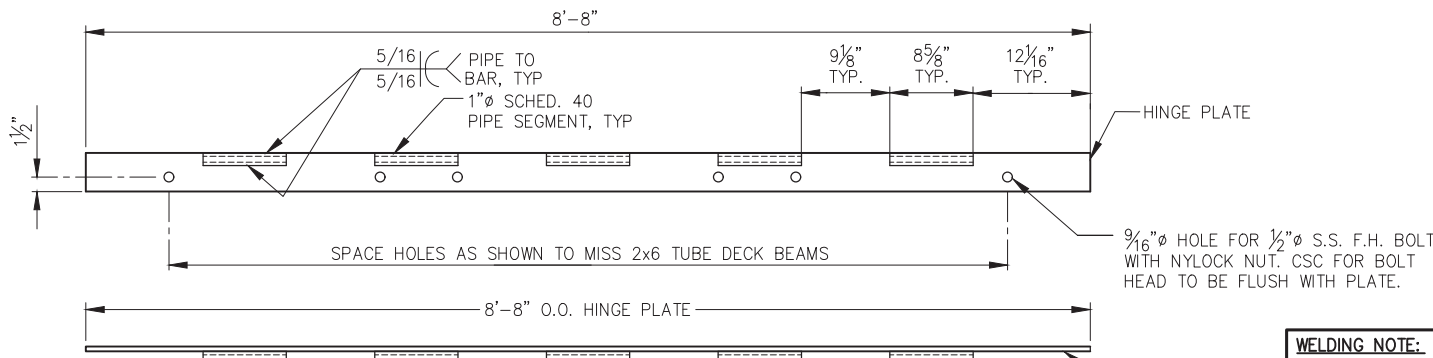




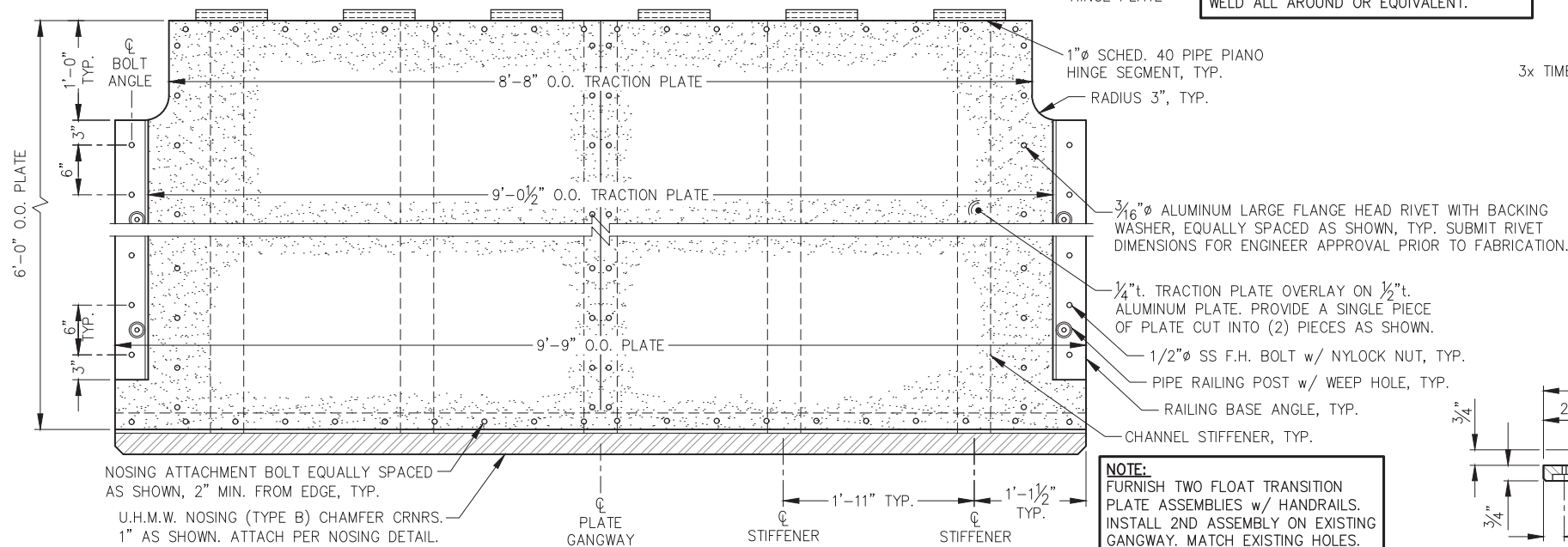
**SKID ASSEMBLY/TRANSITION PLATE**



**GUSSET/SKID PLATE - (2 TOTAL)**



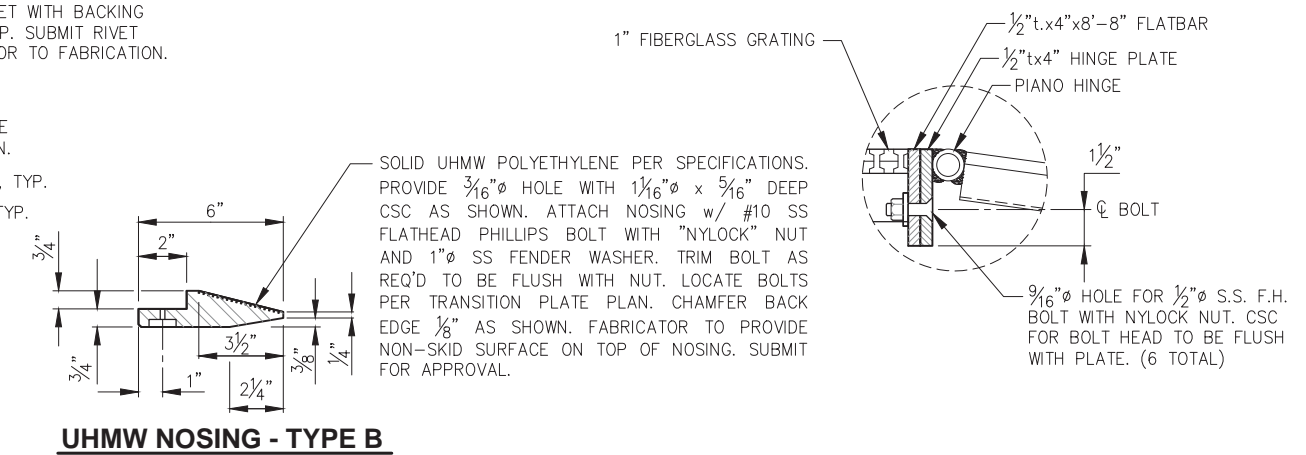
**SKID ASSEMBLY SECTION**



**FLOAT TRANSITION PLATE**

**WELDING NOTE:**  
WELD ALL JOINTS WITH 1/4" FILLET U.N.O.  
WELD ALL AROUND OR EQUIVALENT.

**NOTE:**  
FURNISH TWO FLOAT TRANSITION PLATE ASSEMBLIES w/ HANDRAILS. INSTALL 2ND ASSEMBLY ON EXISTING GANGWAY. MATCH EXISTING HOLES. DELIVER SALVAGED FLOAT TRANSITION PLATE TO OWNER.



**UHMW NOSING - TYPE B**

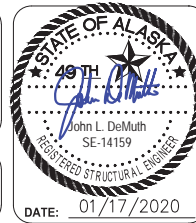
**REVISIONS**

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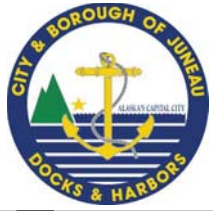
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DESIGN: MS CHECKED: JLD SCALE: AS SHOWN  
DRAWN: MS APPROVED: JLD



**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
**CBJ CONTRACT NO. DH20-021**

SHEET TITLE: **GANGWAY DETAILS**  
PND PROJECT NO.: 182066 C.A.N. NO.: AECC250  
**4.05**



**FLOAT DESIGN CRITERIA**

**DEAD LOAD:**

- WEIGHT OF ALL MATERIALS OF CONSTRUCTION

**LIVE LOAD:**

- FLOATS: 40 PSF
- GANGWAY: 75 PSF
- WHEEL LOAD: 250 LB

**SNOW LOAD:**

- GROUND SNOW LOAD = 50 PSF UNIFORM

**WIND LOAD:**

- FULL OCCUPANCY: 75 MPH, 3 SEC.
- FLOATS ONLY: 105 MPH, 3 SEC.

**FREEBOARD:**

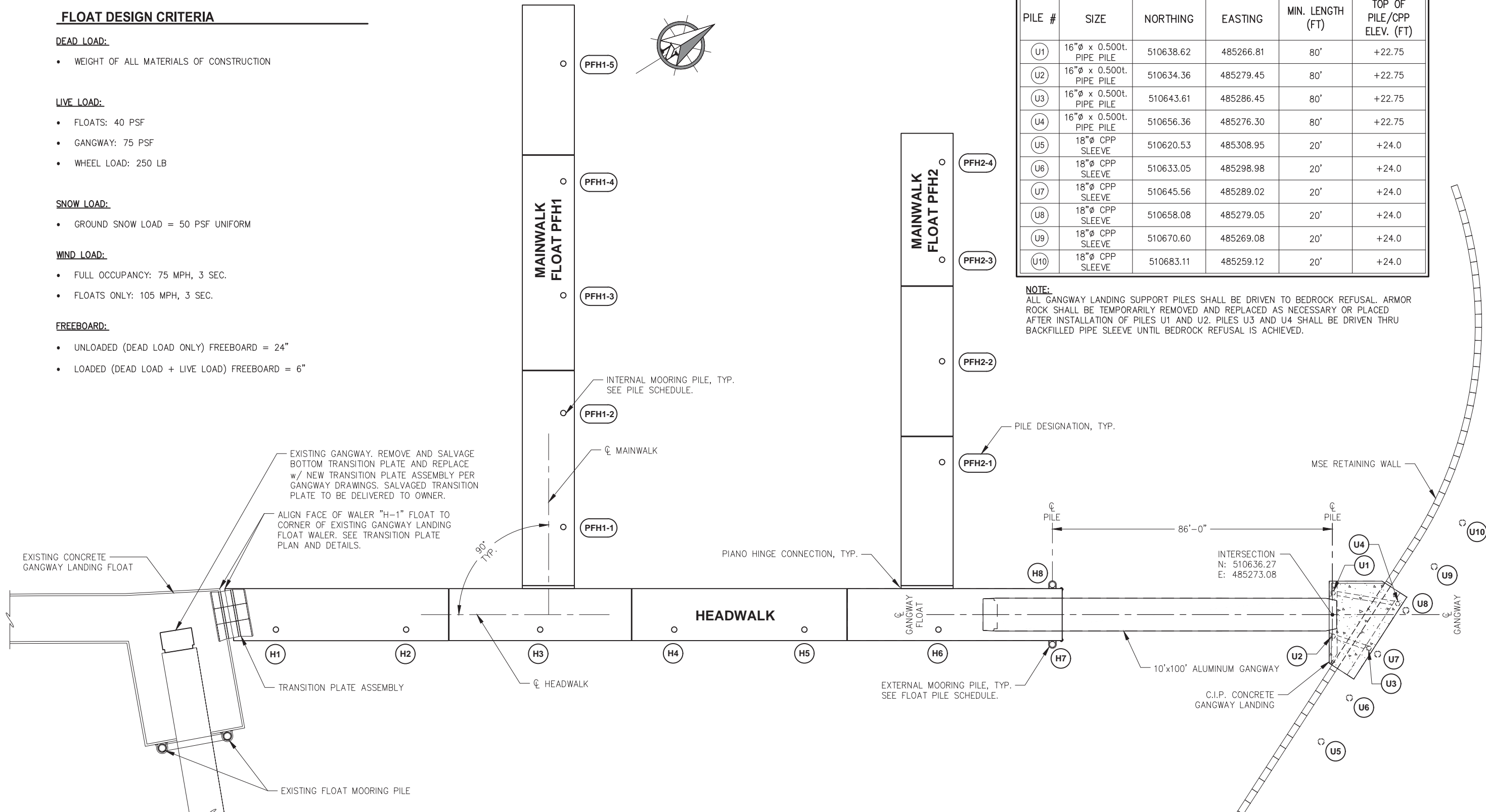
- UNLOADED (DEAD LOAD ONLY) FREEBOARD = 24"
- LOADED (DEAD LOAD + LIVE LOAD) FREEBOARD = 6"



UPLAND PILE LOCATION SUMMARY					
PILE #	SIZE	NORTHING	EASTING	MIN. LENGTH (FT)	TOP OF PILE/CPP ELEV. (FT)
U1	16"Ø x 0.500t. PIPE PILE	510638.62	485266.81	80'	+22.75
U2	16"Ø x 0.500t. PIPE PILE	510634.36	485279.45	80'	+22.75
U3	16"Ø x 0.500t. PIPE PILE	510643.61	485286.45	80'	+22.75
U4	16"Ø x 0.500t. PIPE PILE	510656.36	485276.30	80'	+22.75
U5	18"Ø CPP SLEEVE	510620.53	485308.95	20'	+24.0
U6	18"Ø CPP SLEEVE	510633.05	485298.98	20'	+24.0
U7	18"Ø CPP SLEEVE	510645.56	485289.02	20'	+24.0
U8	18"Ø CPP SLEEVE	510658.08	485279.05	20'	+24.0
U9	18"Ø CPP SLEEVE	510670.60	485269.08	20'	+24.0
U10	18"Ø CPP SLEEVE	510683.11	485259.12	20'	+24.0

**NOTE:**

ALL GANGWAY LANDING SUPPORT PILES SHALL BE DRIVEN TO BEDROCK REFUSAL. ARMOR ROCK SHALL BE TEMPORARILY REMOVED AND REPLACED AS NECESSARY OR PLACED AFTER INSTALLATION OF PILES U1 AND U2. PILES U3 AND U4 SHALL BE DRIVEN THRU BACKFILLED PIPE SLEEVE UNTIL BEDROCK REFUSAL IS ACHIEVED.

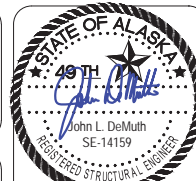


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**STATTER HARBOR IMPROVEMENTS PH III(B)**  
**CBJ CONTRACT NO. DH20-021**

DESIGN: MS CHECKED: JLD SCALE: SCALE IN FEET  
DRAWN: WRB APPROVED: JLD 0 15 30 FT.

SHEET TITLE:  
**OVERALL FLOAT AND PILE LAYOUT PLAN**  
PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

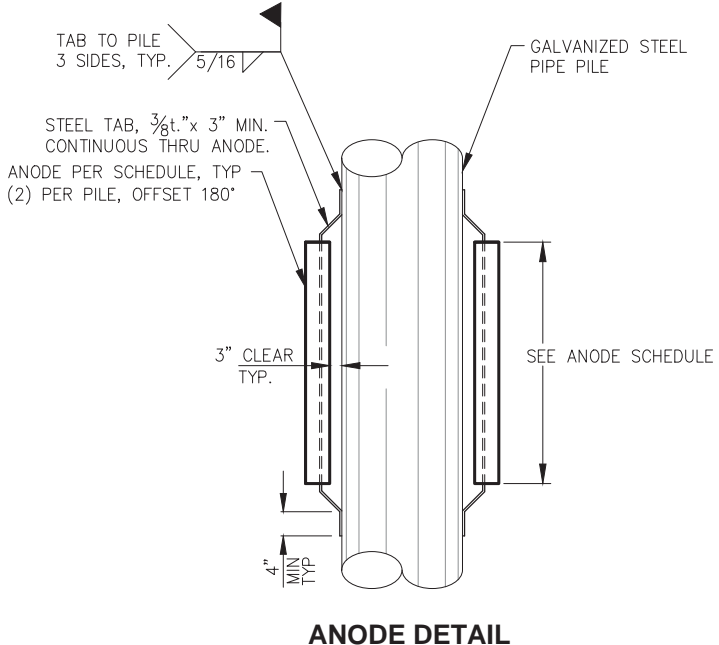
**5.01**



DATE: 01/17/2020

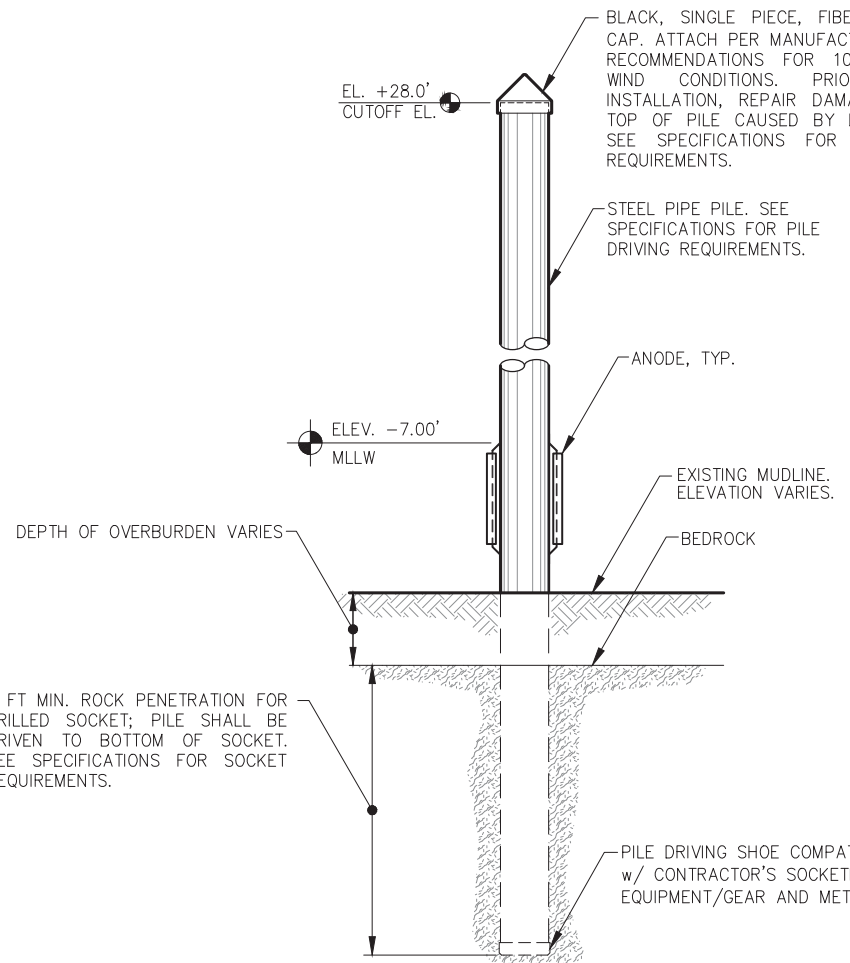
FLOAT PILE SCHEDULE			
PILE #	LOCATION	MIN. PILE LENGTH (FT)	PILE SIZE
1	H1	100'	16"Ø x 0.500t.
2	H2	100'	16"Ø x 0.500t.
3	H3	80'	16"Ø x 0.500t.
4	H4	80'	16"Ø x 0.500t.
5	H5	80'	16"Ø x 0.500t.
6	H6	80'	16"Ø x 0.500t.
7	H7	80'	16"Ø x 0.500t.
8	H8	80'	16"Ø x 0.500t.
9	PFH1-1	100'	16"Ø x 0.500t.
10	PFH1-2	100'	16"Ø x 0.500t.
11	PFH1-3	100'	16"Ø x 0.500t.
12	PFH1-4	80'	16"Ø x 0.500t.
13	PFH1-5	80'	16"Ø x 0.500t.
14	PFH2-1	80'	16"Ø x 0.500t.
15	PFH2-2	80'	16"Ø x 0.500t.
16	PFH2-3	60'	16"Ø x 0.500t.
17	PFH2-4	60'	16"Ø x 0.500t.

**NOTE:**  
SEE "OVERALL FLOAT PLAN AND PILE LAYOUT" FOR LOCATION OF PILES WITHIN PROJECT FLOAT SYSTEM.

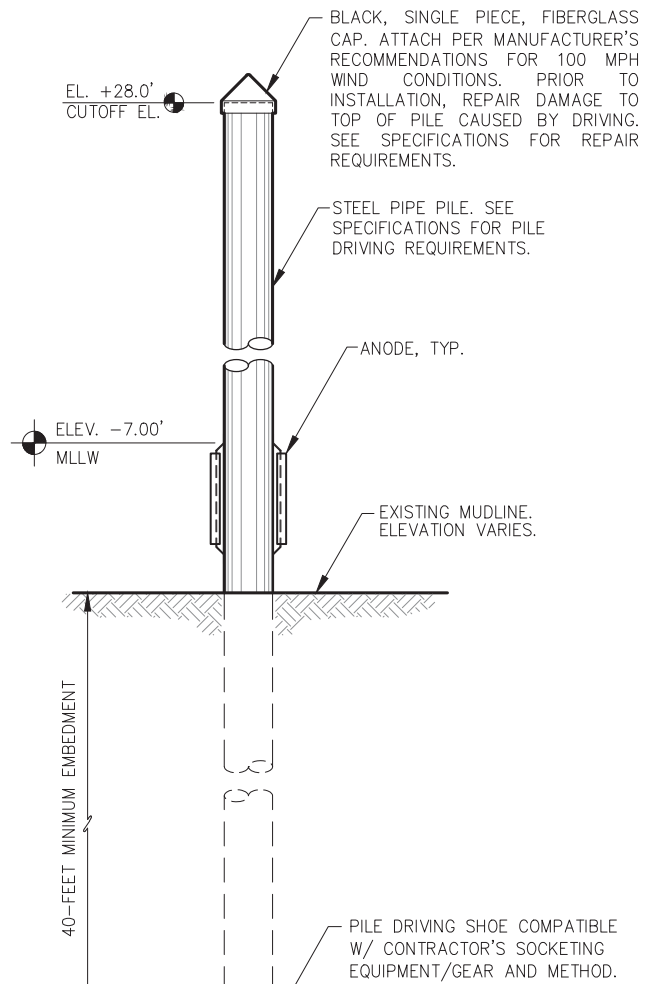


ANODE SCHEDULE			
PILE DIAMETER	DIMENSIONS	NOMINAL WT.	QUANTITY
16"Ø	6"x6"x72"	260 LBS.	34

**NOTE:**  
SEE SPECIFICATIONS FOR INSTALLATION REQUIREMENTS. ORIENTATION OF ANODES RELATIVE TO PILE AND FLOAT SHALL BE CONFIRMED w/ ENGINEER PRIOR TO INSTALLATION.

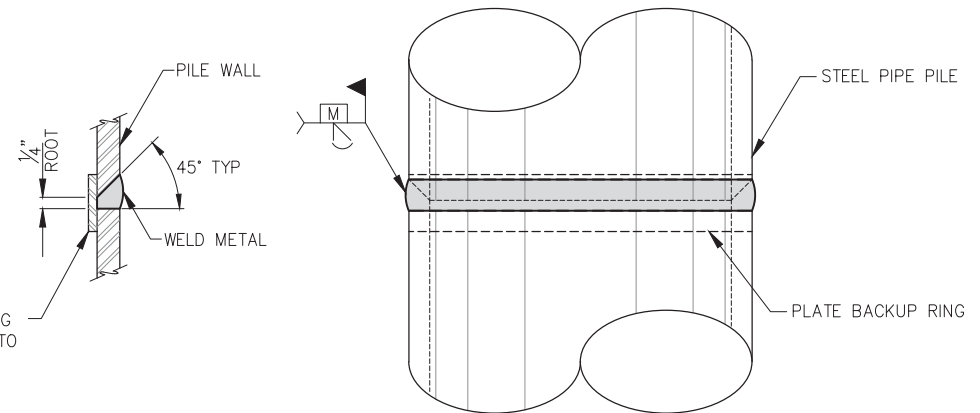


**TYPICAL FLOAT MOORING PILE**  
(BEDROCK CONDITIONS)



**TYPICAL FLOAT MOORING PILE**  
(SOIL CONDITIONS)

**NOTE:**  
BASED ON GEOTECHNICAL INFORMATION IT IS ANTICIPATED THAT FLOAT MOORING PILES WILL NEED TO BE SOCKETED IN BEDROCK. IF 40 FOOT MIN. EMBEDMENT IS ACHIEVED, SOCKET WILL NOT BE REQUIRED AND SOCKET PAY ITEM WILL NOT BE PAID FOR THE PILE.



**TYPICAL SECTION**  
**TYPICAL PILE SPLICE WELD**  
(TYPICAL FOR ALL PIPE PILE SPLICES)

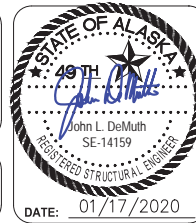


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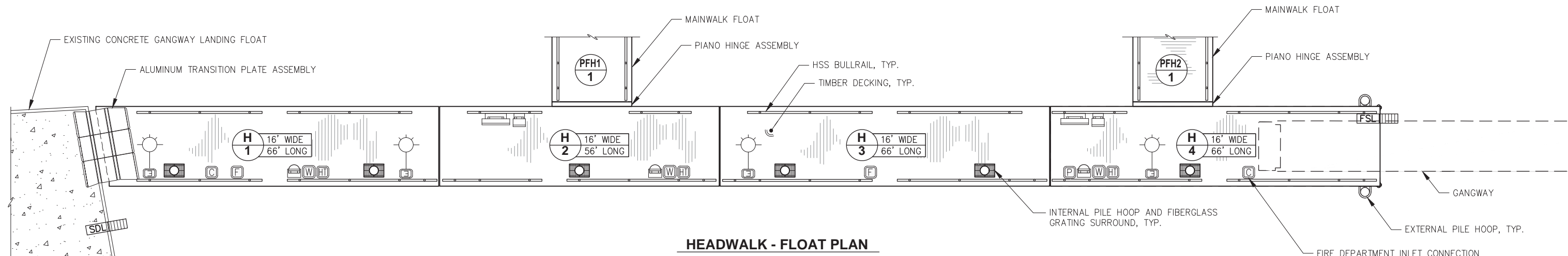


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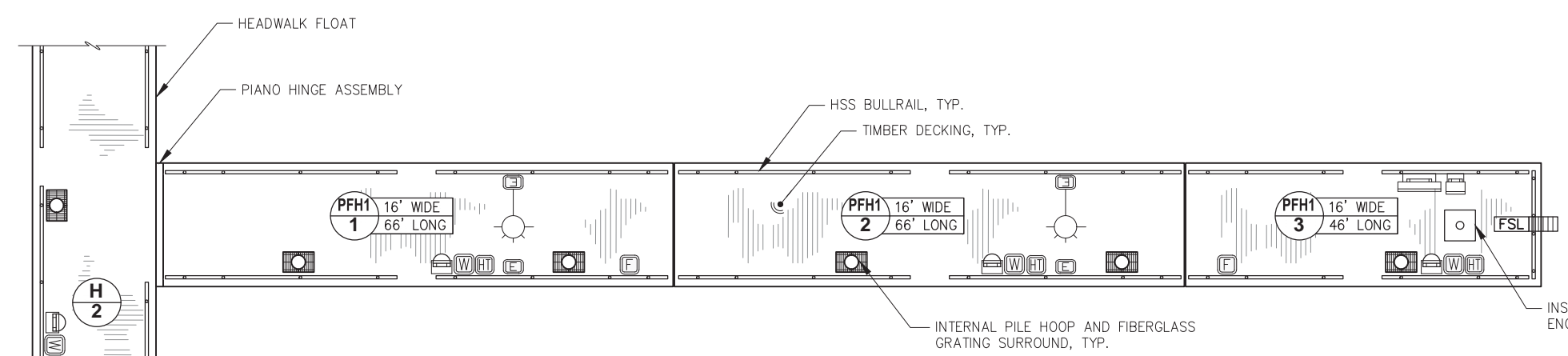
SHEET TITLE:  
**PILE SCHEDULE AND DETAILS**

PND PROJECT NO.: 182066    C.A.N. NO.: AECC250

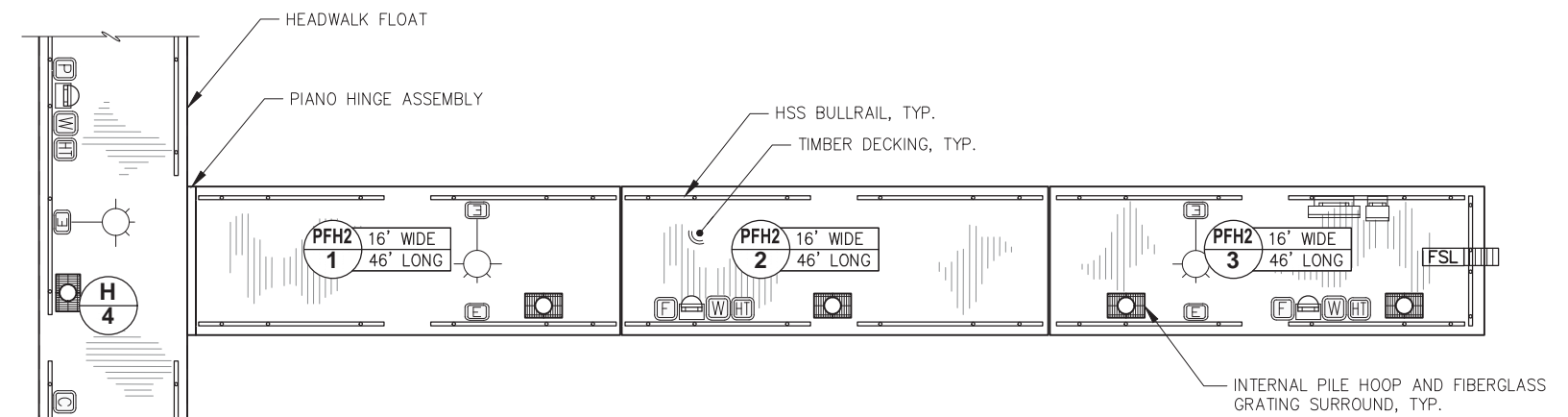
**5.02**



**HEADWALK - FLOAT PLAN**



**MAINWALK PFH1 - FLOAT PLAN**



**MAINWALK PFH2 - FLOAT PLAN**

- LEGEND:**
- = LIGHT POLE w/ ELECTRICAL PEDESTAL
  - = ELECTRICAL PEDESTAL (EPED)
  - = HOSE MOUNT
  - = FIRE EXTINGUISHER AND LIFE RING
  - = FIRE EXTINGUISHER
  - = FIRE HOSE CONNECTION
  - = FIRE LINE PUMPOUT
  - = FIRE DEPARTMENT INLET CONNECTION
  - = WATER PEDESTAL
  - = HEAT TRACE
  - = FIXED SAFETY LADDER
  - = SELF-DEPLOYABLE SAFETY LADDER

**NOTE:** PORTIONS OF DECKING MAY NEED TO BE INSTALLED AFTER ELECTRICAL CABLES AND/OR PEDESTALS. FABRICATOR SHALL COORDINATE w/ GENERAL CONTRACTOR AND ELECTRICAL CONTRACTOR AS REQUIRED.

**NOTE:** HOSE MOUNT, LIFE RING AND FIRE EXTINGUISHER CABINET LOCATIONS SHOWN ARE APPROXIMATE. FIELD LOCATE PER OWNER/ENGINEER DIRECTION.



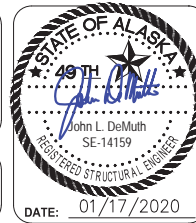
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SCALE: SCALE IN FEET  
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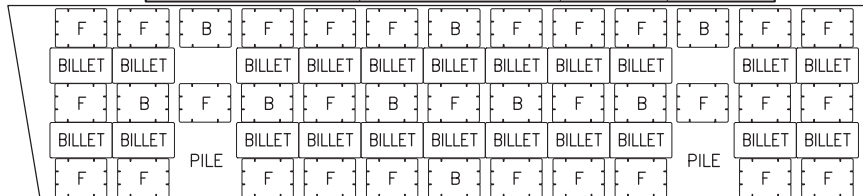
**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
**CBJ CONTRACT NO. DH20-021**

SHEET TITLE:  
**DETAILED FLOAT PLAN**

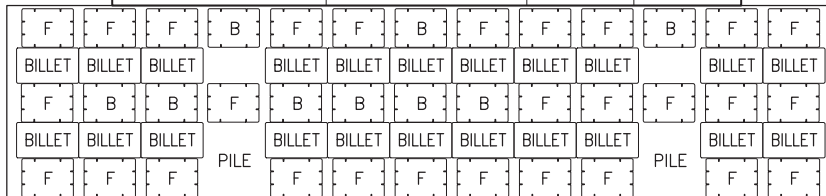
PND PROJECT NO.: 182066    C.A.N. NO.: AECC250

**5.03**

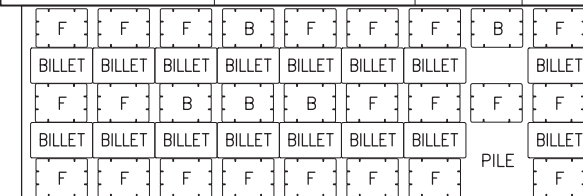
MODULE: H-1	LENGTH	WIDTH	HEIGHT (**NOTE 1)	QUANTITY
ITEM DESCRIPTION				
FLOTATION TUB	48	36	32	28
BALLAST TANK	48	36	32	9
POLYSTYRENE BILLET	SEE DETAILS		8	22



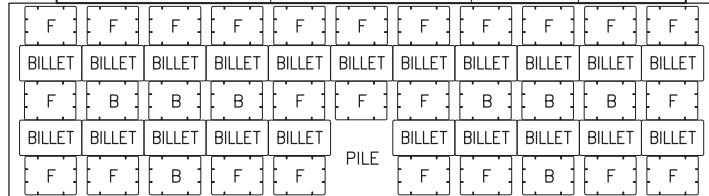
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ITEM DESCRIPTION				
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BALLAST TANK	48	36	32	9
POLYSTYRENE BILLET	SEE DETAILS		9	22



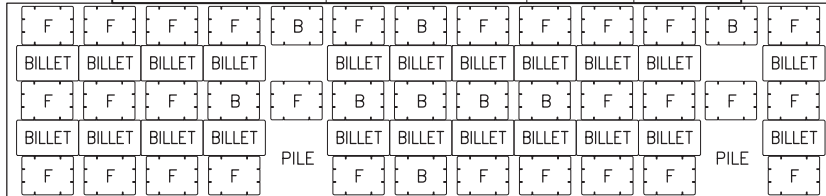
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ITEM DESCRIPTION				
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BALLAST TANK	48	36	32	5
POLYSTYRENE BILLET	SEE DETAILS		9	16



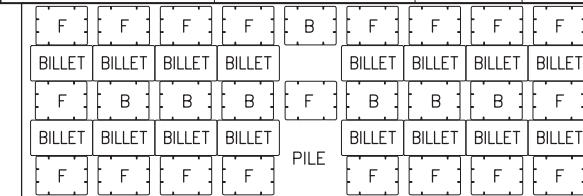
MODULE: H-2	LENGTH	WIDTH	HEIGHT (**NOTE 1)	QUANTITY
ITEM DESCRIPTION				
FLOTATION TUB	48	36	32	24
BALLAST TANK	48	36	32	8
POLYSTYRENE BILLET	SEE DETAILS		9	21



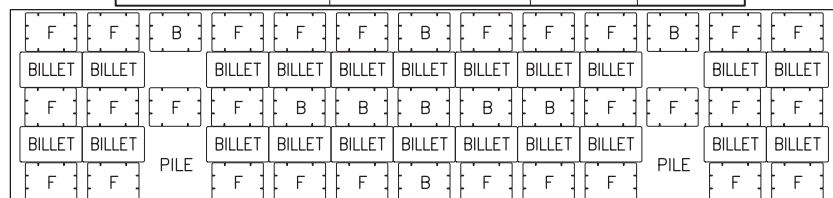
MODULE: PFH1-2	LENGTH	WIDTH	HEIGHT (**NOTE 1)	QUANTITY
ITEM DESCRIPTION				
FLOTATION TUB	48	36	32	28
BALLAST TANK	48	36	32	9
POLYSTYRENE BILLET	SEE DETAILS		9	22



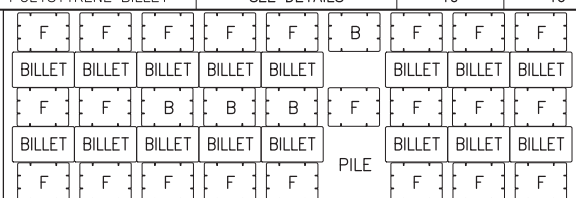
MODULE: PFH2-2	LENGTH	WIDTH	HEIGHT (**NOTE 1)	QUANTITY
ITEM DESCRIPTION				
FLOTATION TUB	48	36	32	19
BALLAST TANK	48	36	32	7
POLYSTYRENE BILLET	SEE DETAILS		10	16



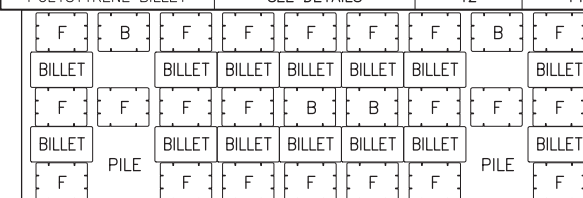
MODULE: H-3	LENGTH	WIDTH	HEIGHT (**NOTE 1)	QUANTITY
ITEM DESCRIPTION				
FLOTATION TUB	48	36	32	28
BALLAST TANK	48	36	32	9
POLYSTYRENE BILLET	SEE DETAILS		9	22



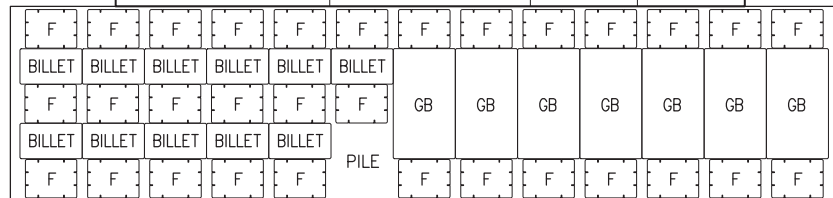
MODULE: PFH1-3	LENGTH	WIDTH	HEIGHT (**NOTE 1)	QUANTITY
ITEM DESCRIPTION				
FLOTATION TUB	48	36	32	22
BALLAST TANK	48	36	32	4
POLYSTYRENE BILLET	SEE DETAILS		10	16



MODULE: PFH2-3	LENGTH	WIDTH	HEIGHT (**NOTE 1)	QUANTITY
ITEM DESCRIPTION				
FLOTATION TUB	48	36	32	21
BALLAST TANK	48	36	32	4
POLYSTYRENE BILLET	SEE DETAILS		12	14



MODULE: H-4	LENGTH	WIDTH	HEIGHT (**NOTE 1)	QUANTITY
ITEM DESCRIPTION				
FLOTATION TUB	48	36	32	31
POLYSTYRENE BILLET	SEE DETAILS		12	11
POLYSTYRENE BILLET	SEE DETAILS		21	7



**NOTES:**

- HEIGHT SHOWN IN TABLE REFERS TO DISTANCE FROM BOTTOM OF SILL TO BOTTOM OF BILLET, NOT OVERALL HEIGHT OF BILLET. SEE FLOTATION BILLET DETAILS SHEET FOR BILLET DIMENSIONS AND DETAILS.
- BALLAST TANK WALL THICKNESS TO BE 0.375".
- FLOTATION TUB WALL THICKNESS TO BE 0.175"
- F= FLOTATION TUB  
B= BALLAST TANK  
BILLET= POLYSTYRENE BILLET  
GB= GANGWAY POLYSTYRENE BILLET
- ORIENTATION OF FLOATS ON THIS SHEET MATCHES ORIENTATION SHOWN ON DETAILED FLOAT PLANS.

REVISIONS

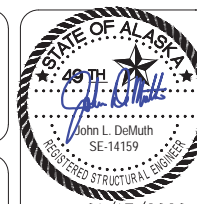
REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.



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SCALE:



DATE: 01/17/2020

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STATTER HARBOR IMPROVEMENTS PH III(B)  
CBJ CONTRACT NO. DH20-021

SHEET TITLE:

FLOTATION SCHEDULES

5.04

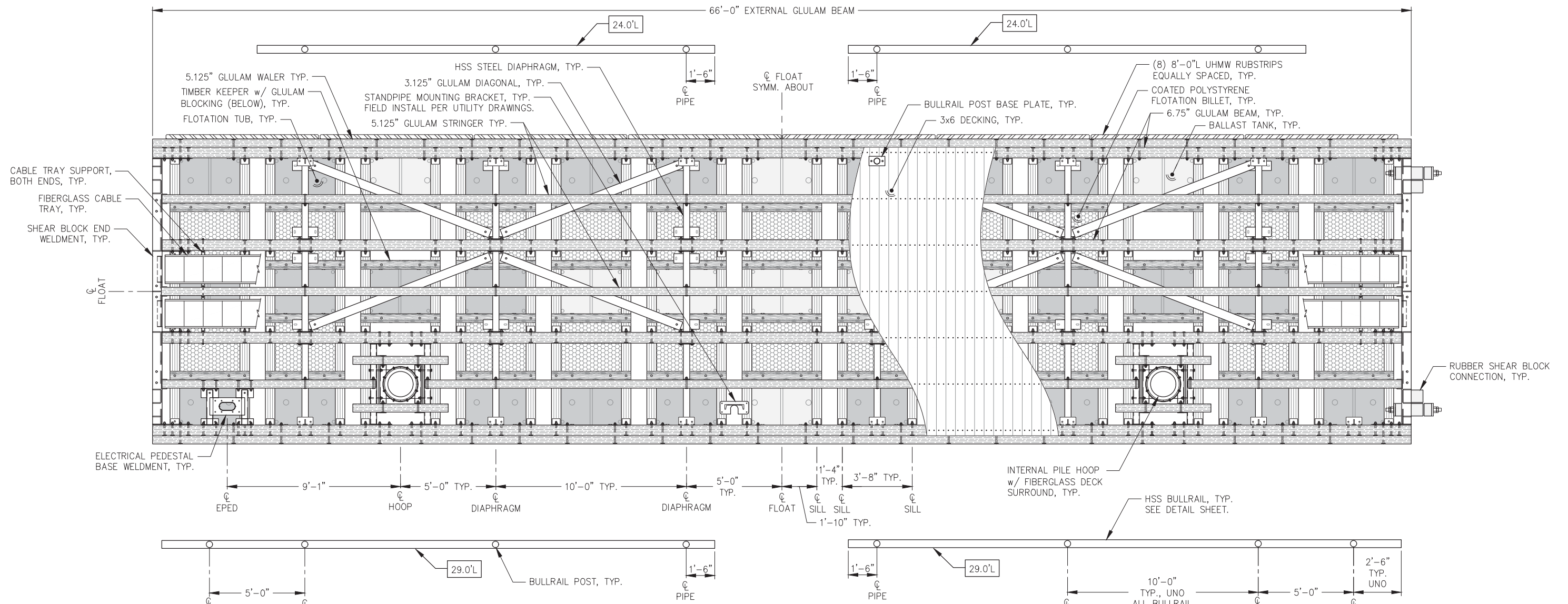
PND PROJECT NO.: 182066

C.A.N. NO.: AECC250

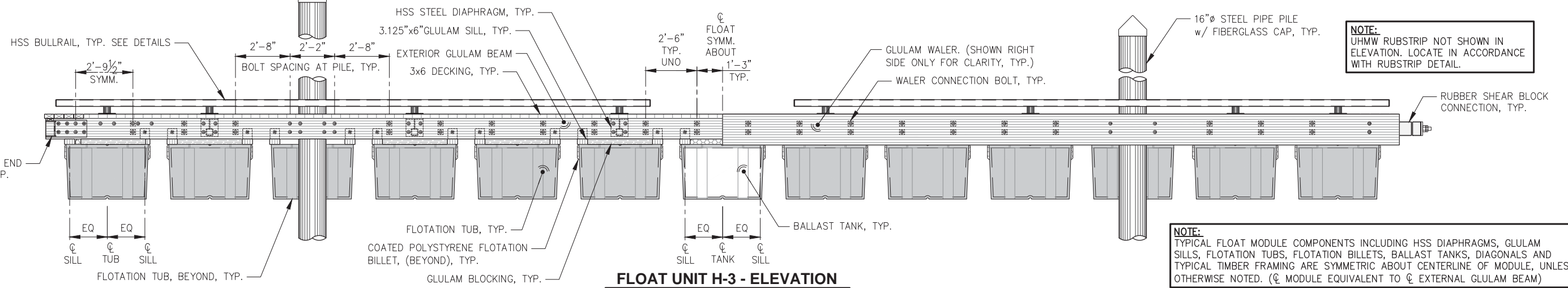








**FLOAT UNIT H-3 - PLAN**



**FLOAT UNIT H-3 - ELEVATION**

**NOTE:**  
UHMW RUBSTRIP NOT SHOWN IN ELEVATION. LOCATE IN ACCORDANCE WITH RUBSTRIP DETAIL.

**NOTE:**  
TYPICAL FLOAT MODULE COMPONENTS INCLUDING HSS DIAPHRAGMS, GLULAM SILLS, FLOTATION TUBS, FLOTATION BILLETS, BALLAST TANKS, DIAGONALS AND TYPICAL TIMBER FRAMING ARE SYMMETRIC ABOUT CENTERLINE OF MODULE, UNLESS OTHERWISE NOTED. (CL MODULE EQUIVALENT TO CL EXTERNAL GLULAM BEAM)

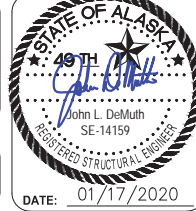


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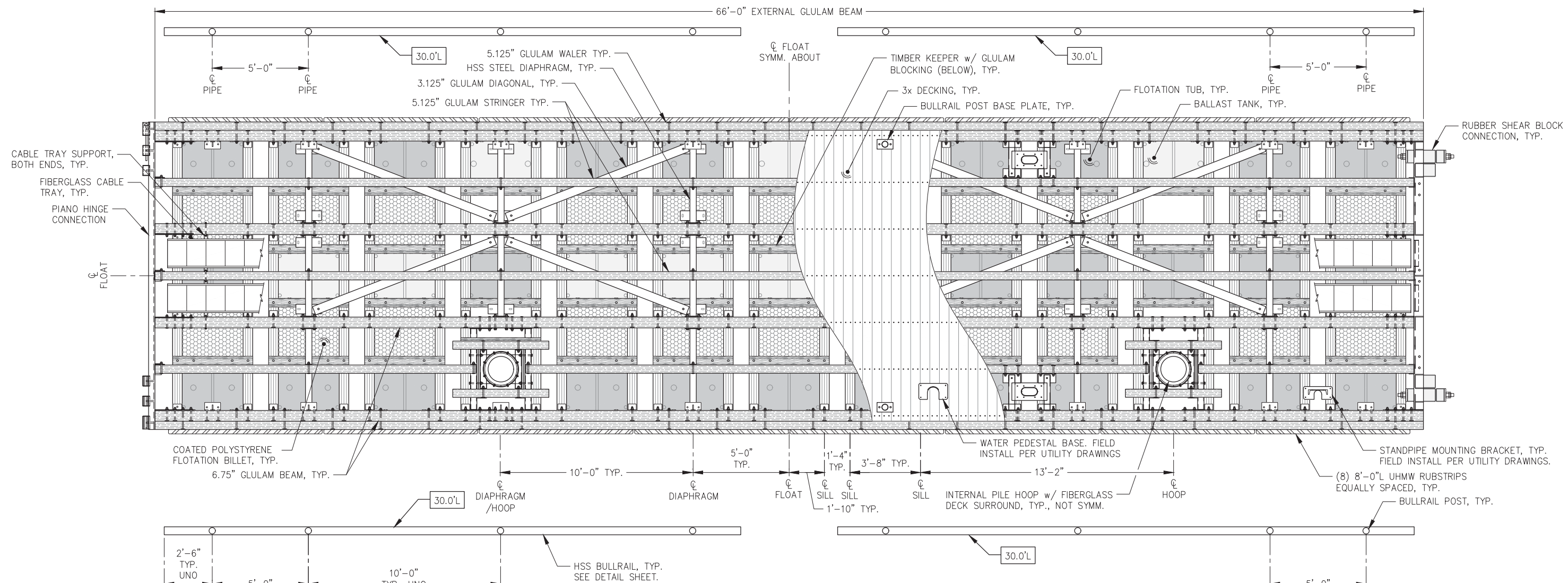
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**HEADWALK FLOTATION MODULE H-3**  
**PLAN AND ELEVATION**

DATE: 01/17/2020

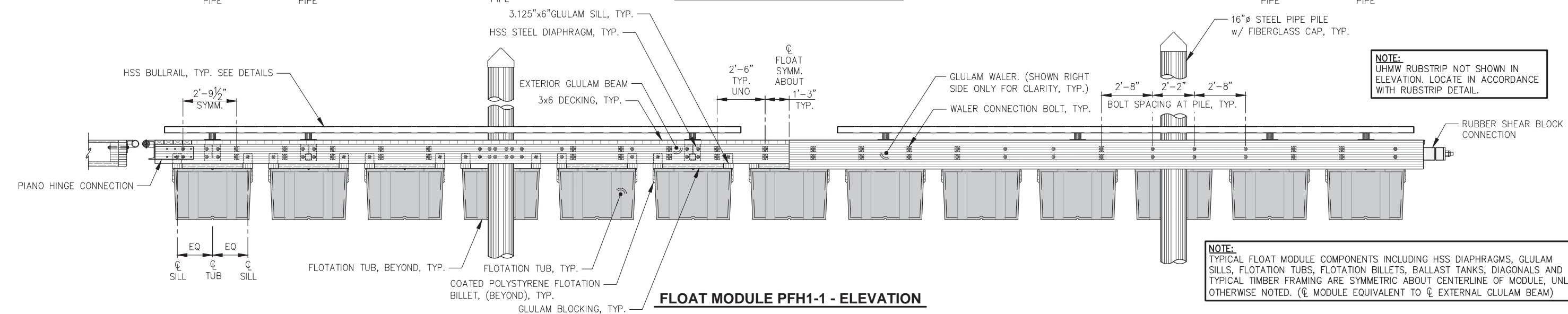
PND PROJECT NO.: 182066    C.A.N. NO.: AECC250

**5.07**





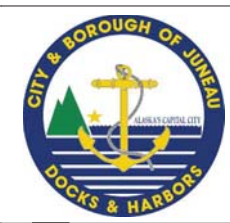
**FLOAT MODULE PFH1-1 - PLAN**



**FLOAT MODULE PFH1-1 - ELEVATION**

**NOTE:**  
UHMW RUBSTRIP NOT SHOWN IN ELEVATION. LOCATE IN ACCORDANCE WITH RUBSTRIP DETAIL.

**NOTE:**  
TYPICAL FLOAT MODULE COMPONENTS INCLUDING HSS DIAPHRAGMS, GLULAM SILLS, FLOTATION TUBS, FLOTATION BILGEE KEELS, BALLAST TANKS, DIAGONALS AND TYPICAL TIMBER FRAMING ARE SYMMETRIC ABOUT CENTERLINE OF MODULE, UNLESS OTHERWISE NOTED. (C = MODULE EQUIVALENT TO C = EXTERNAL GLULAM BEAM)

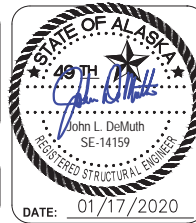


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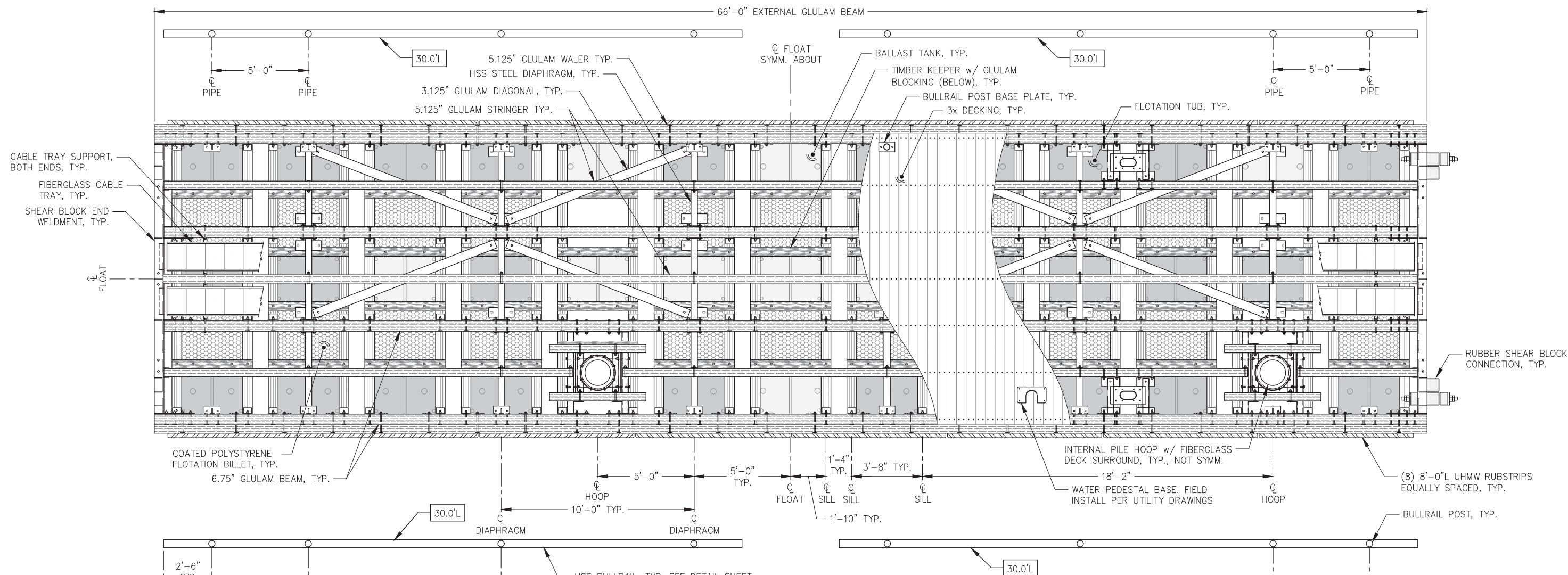


**CITY & BOROUGH OF JUNEAU, ALASKA**  
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CBJ CONTRACT NO. DH20-021

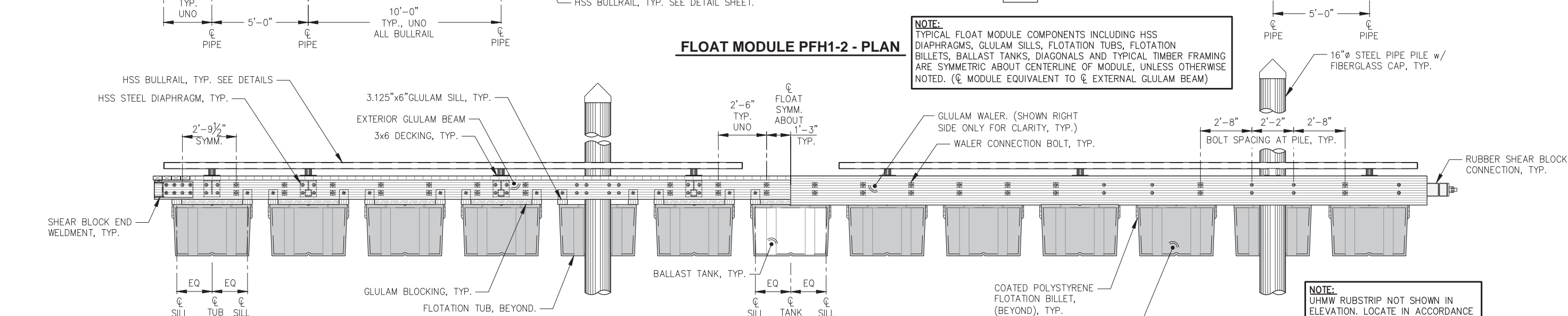
SHEET TITLE:  
**MAINWALK FLOAT MODULE PFH1-1**  
PLAN AND ELEVATION

PND PROJECT NO.: 182066    C.A.N. NO.: AECC250

**5.09**



**Float Module PFH1-2 - PLAN**



**Float Module PFH1-2 - ELEVATION**

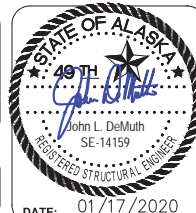


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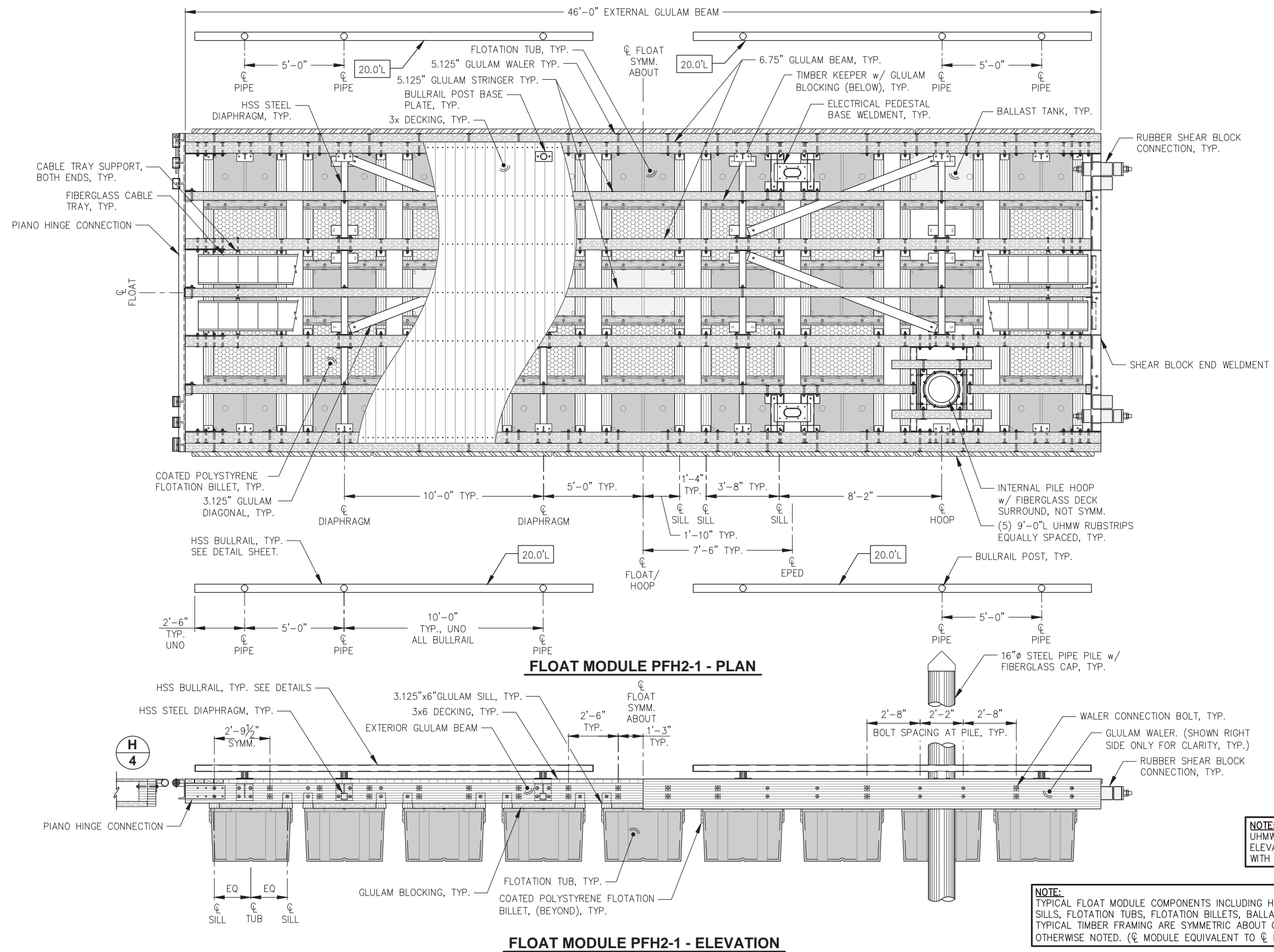
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**STATTER HARBOR IMPROVEMENTS PH III(B)**  
CBJ CONTRACT NO. DH20-021

SHEET TITLE:  
**MAINWALK FLOAT MODULE PFH1-2**  
**PLAN AND ELEVATION**

PND PROJECT NO.: 182066    C.A.N. NO.: AECC250

**5.10**





**NOTE:**  
UHMW RUBSTRIP NOT SHOWN IN ELEVATION. LOCATE IN ACCORDANCE WITH RUBSTRIP DETAIL.

**NOTE:**  
TYPICAL FLOAT MODULE COMPONENTS INCLUDING HSS DIAPHRAGMS, GLULAM SILLS, FLOTATION TUBS, FLOTATION BILLETS, BALLAST TANKS, DIAGONALS AND TYPICAL TIMBER FRAMING ARE SYMMETRIC ABOUT CENTERLINE OF MODULE, UNLESS OTHERWISE NOTED. (C MODULE EQUIVALENT TO C EXTERNAL GLULAM BEAM)

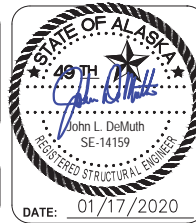


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**CBJ CONTRACT NO. DH20-021**

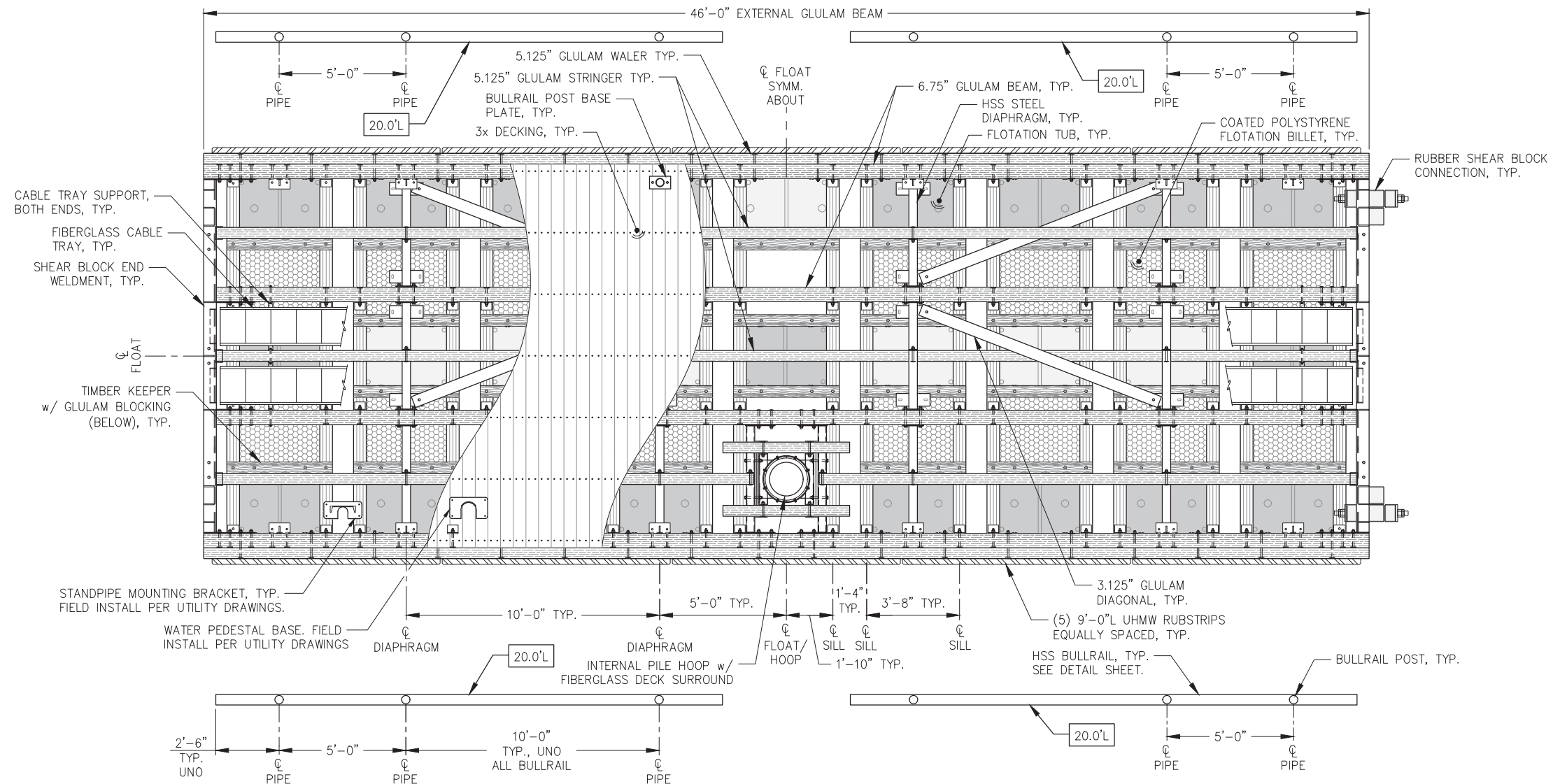
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**PLAN AND ELEVATION**

DATE: 01/17/2020

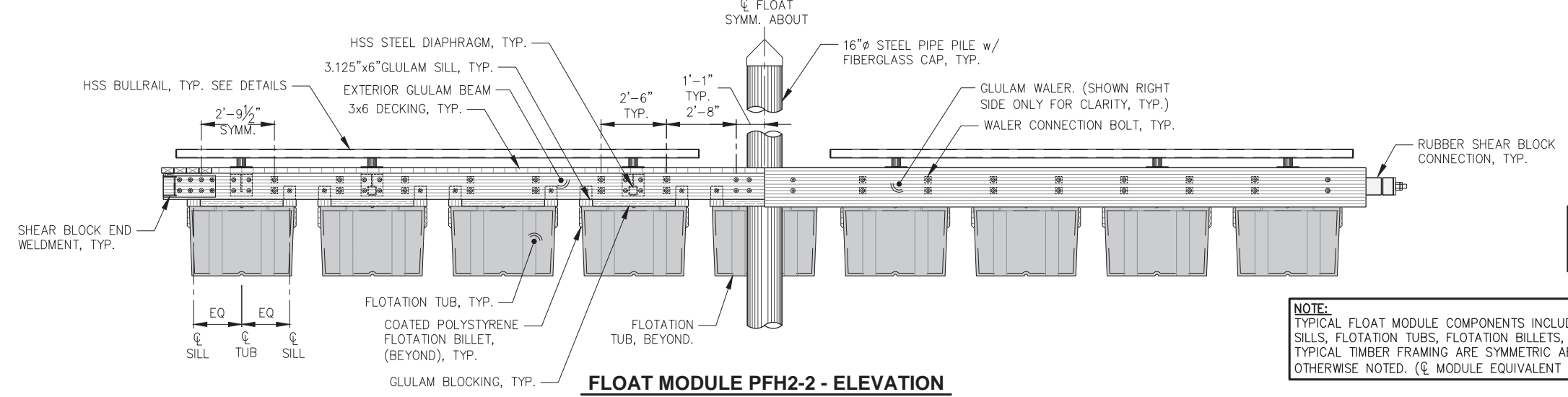
PND PROJECT NO.: 182066    C.A.N. NO.: AECC250

**5.12**





**FLOAT MODULE PFH2-2 - PLAN**



**FLOAT MODULE PFH2-2 - ELEVATION**

**NOTE:**  
UHMW RUBSTRIP NOT SHOWN IN ELEVATION. LOCATE IN ACCORDANCE WITH RUBSTRIP DETAIL.

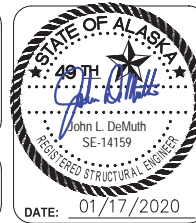
**NOTE:**  
TYPICAL FLOAT MODULE COMPONENTS INCLUDING HSS DIAPHRAGMS, GLULAM SILLS, FLOTATION TUBS, FLOTATION BILLETS, BALLAST TANKS, DIAGONALS AND TYPICAL TIMBER FRAMING ARE SYMMETRIC ABOUT CENTERLINE OF MODULE, UNLESS OTHERWISE NOTED. (CL MODULE EQUIVALENT TO CL EXTERNAL GLULAM BEAM)



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**CBJ CONTRACT NO. DH20-021**

SHEET TITLE:  
**MAINWALK FLOAT MODULE PFH2-2**  
**PLAN AND ELEVATION**

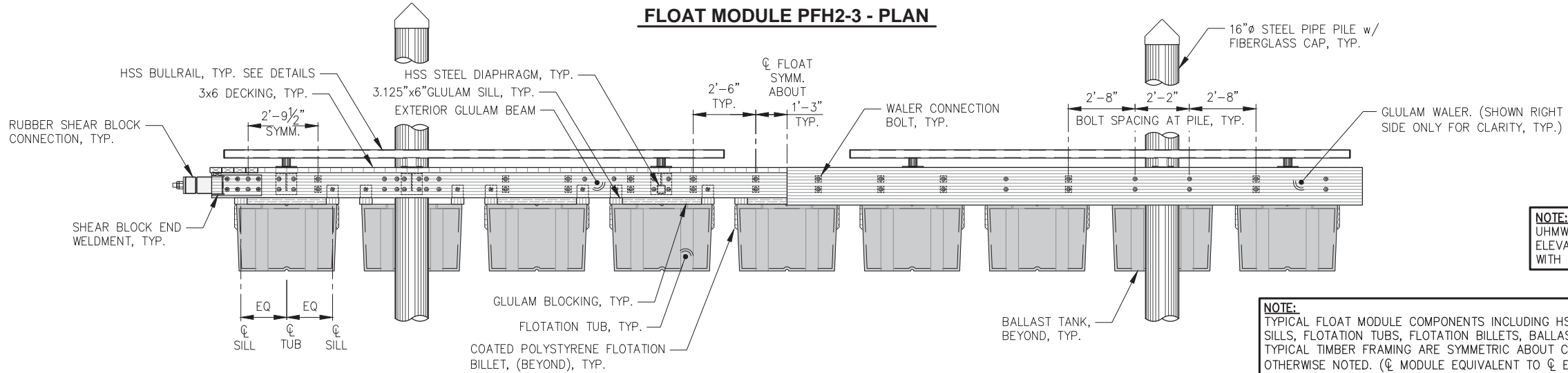
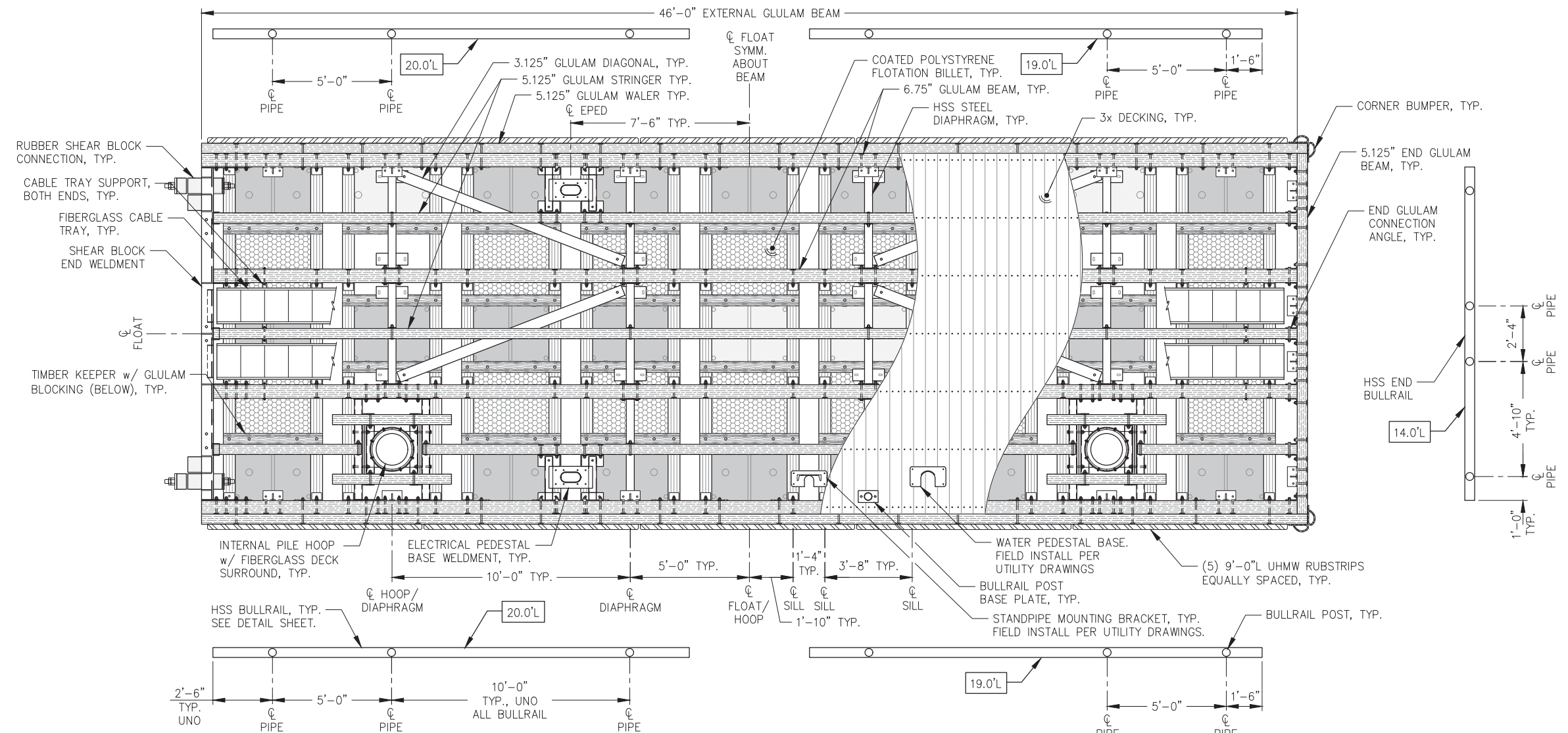
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PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

DESIGN: MS CHECKED: JLD  
DRAWN: WRB APPROVED: JLD

SCALE:

DATE: 01/17/2020



**NOTE:**  
UHMW RUBSTRIP NOT SHOWN IN ELEVATION. LOCATE IN ACCORDANCE WITH RUBSTRIP DETAIL.

**NOTE:**  
TYPICAL FLOAT MODULE COMPONENTS INCLUDING HSS DIAPHRAGMS, GLULAM SILLS, FLOTATION TUBS, FLOTATION BILLETS, BALLAST TANKS, DIAGONALS AND TYPICAL TIMBER FRAMING ARE SYMMETRIC ABOUT CENTERLINE OF MODULE, UNLESS OTHERWISE NOTED. (CL MODULE EQUIVALENT TO CL EXTERNAL GLULAM BEAM)



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**CBJ CONTRACT NO. DH20-021**

SHEET TITLE:  
**MAINWALK FLOAT MODULE PFH2-3**  
**PLAN AND ELEVATION**

**5.14**

PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

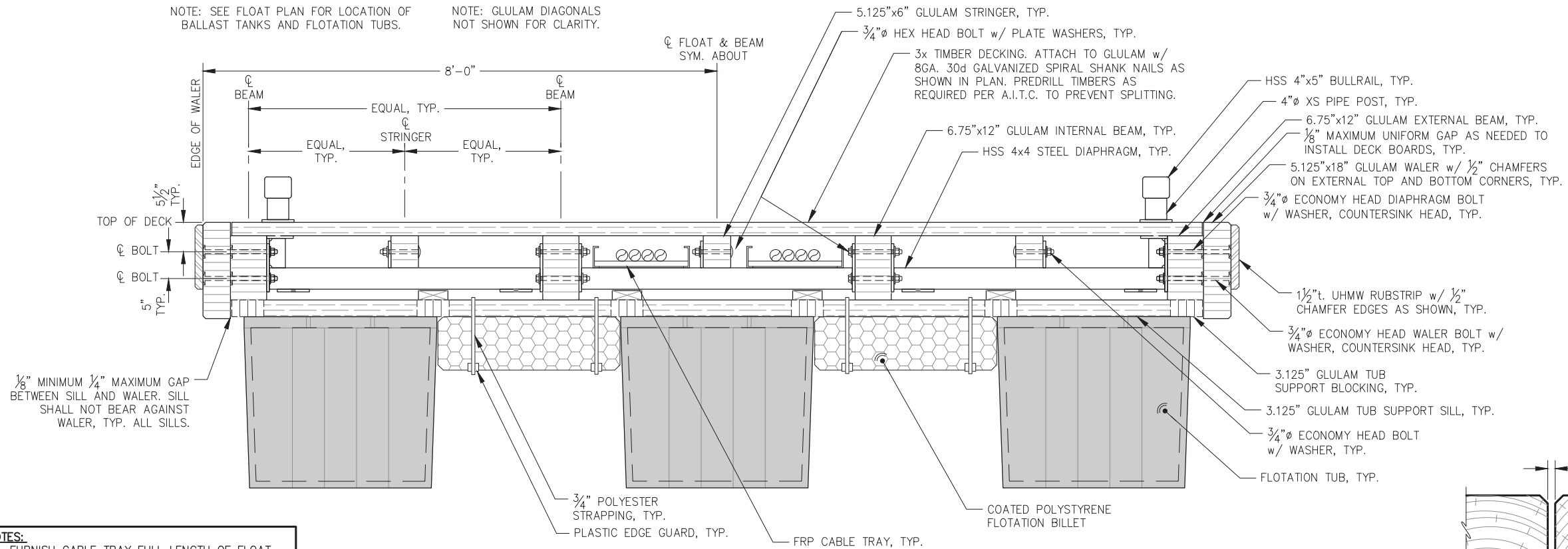
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SCALE:

DATE: 01/17/2020

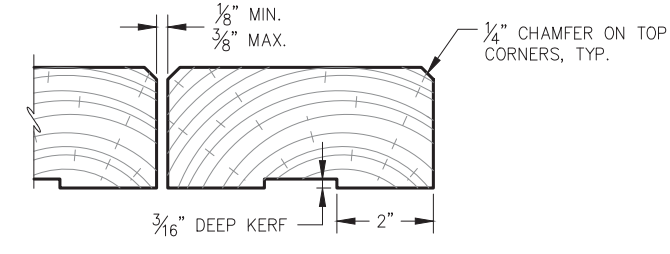
NOTE: SEE FLOAT PLAN FOR LOCATION OF BALLAST TANKS AND FLOTATION TUBS.

NOTE: GLULAM DIAGONALS NOT SHOWN FOR CLARITY.



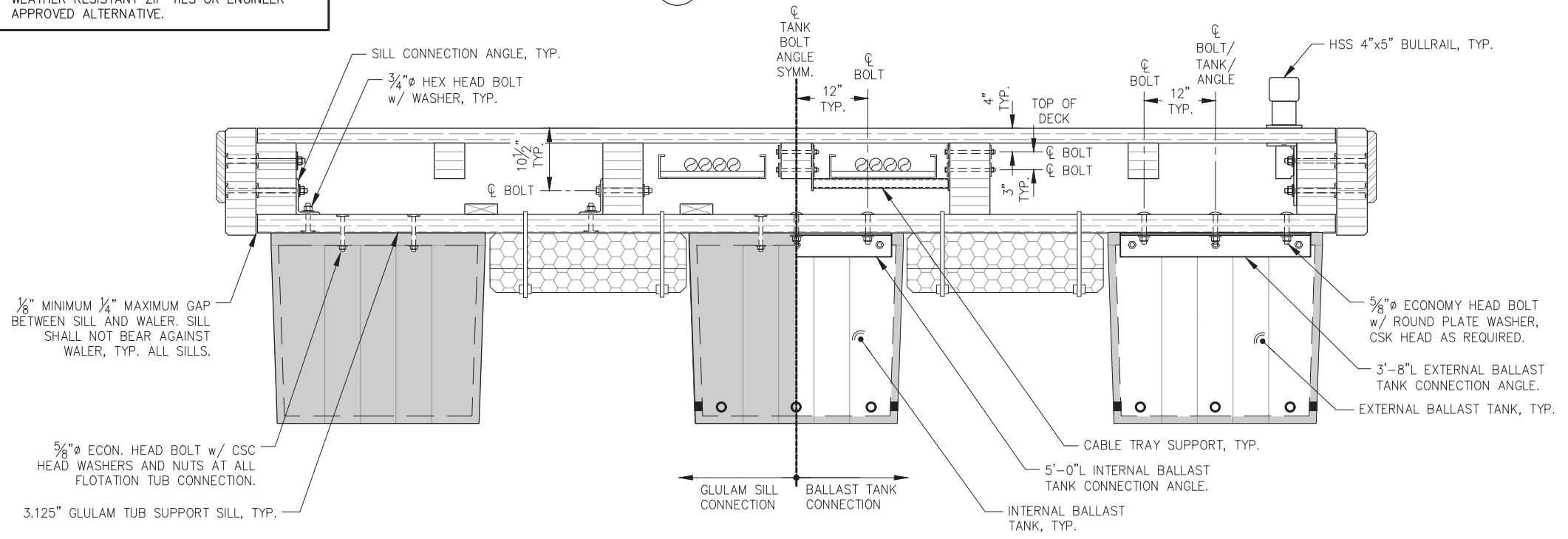
- NOTES:**
- FURNISH CABLE TRAY FULL LENGTH OF FLOAT, FULL STRENGTH SPLICE CABLE TRAY PER MANUFACTURER RECOMMENDATIONS.
  - SECURE FIBERGLASS CABLE TRAYS WITH UV AND WEATHER RESISTANT ZIP TIES OR ENGINEER APPROVED ALTERNATIVE.

**A** TYPICAL FLOAT SECTION



**DECKING PROFILE**

- NOTES:**
- SEE SPECIFICATIONS FOR COMPLETE DECKING REQUIREMENTS.
  - NO DECKING SHALL BE INCORPORATED INTO THE WORK THAT FALLS OUTSIDE OF THE SPECIFIED GRADING.
  - NO DECKING WITH WANE ON THE TOP OF SURFACE SHALL BE INCORPORATED IN THE WORK.
  - FASTEN DECKING TO GLULAM w/ 8 GAUGE 40d HOT DIP GALVANIZED SPIRAL SHANK NAILS AS SHOWN IN PLAN.
  - PRE-DRILL ALL DECKING. SIZE HOLE AS REQUIRED PER AITC TO PREVENT SPLITTING.
  - NO DECKING SHALL BE INCORPORATED INTO THE WORK THAT HAS BEEN RIPPED TO WIDTH AFTER PRESSURE TREATMENT.



**B** TYPICAL SILL CONNECTION AND BALLAST TANK DETAILS  
 NOTE: DETAILS/CALLOUTS NOT SHOWN SIMILAR TO TYPICAL FLOAT SECTION.

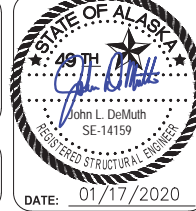


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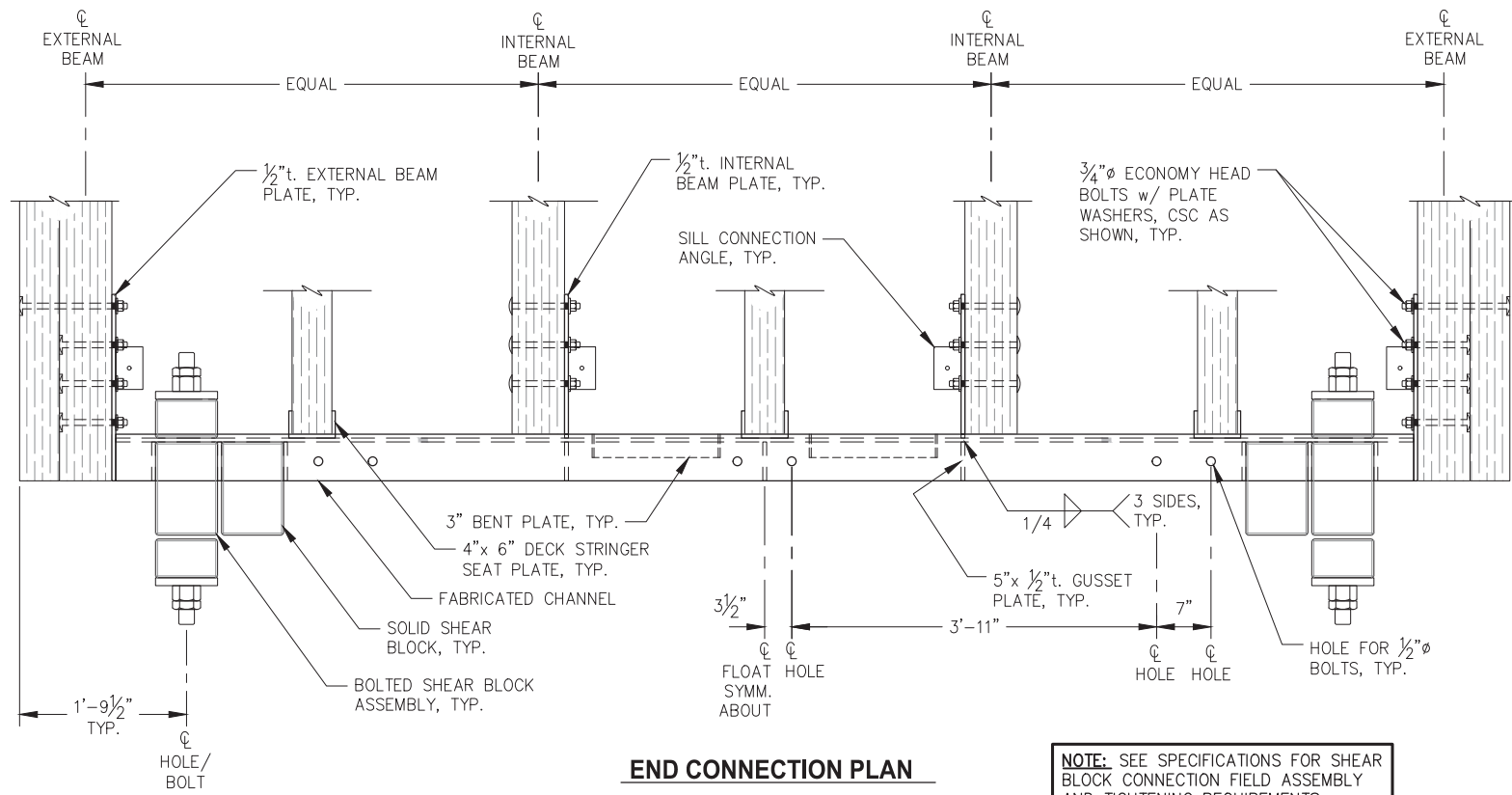
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 CBJ CONTRACT NO. DH20-021

SHEET TITLE:  
**TYPICAL FLOAT SECTIONS**

DATE: 01/17/2020

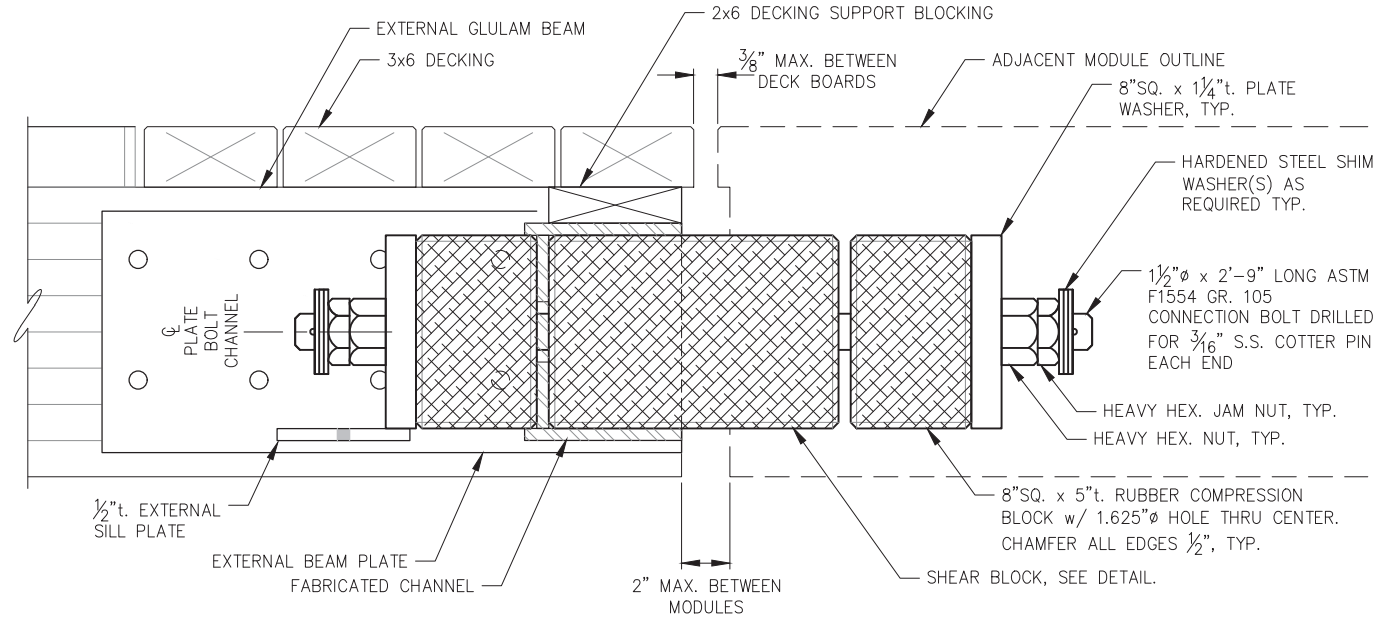
PND PROJECT NO.: 182066    C.A.N. NO.: AECC250

**6.01**

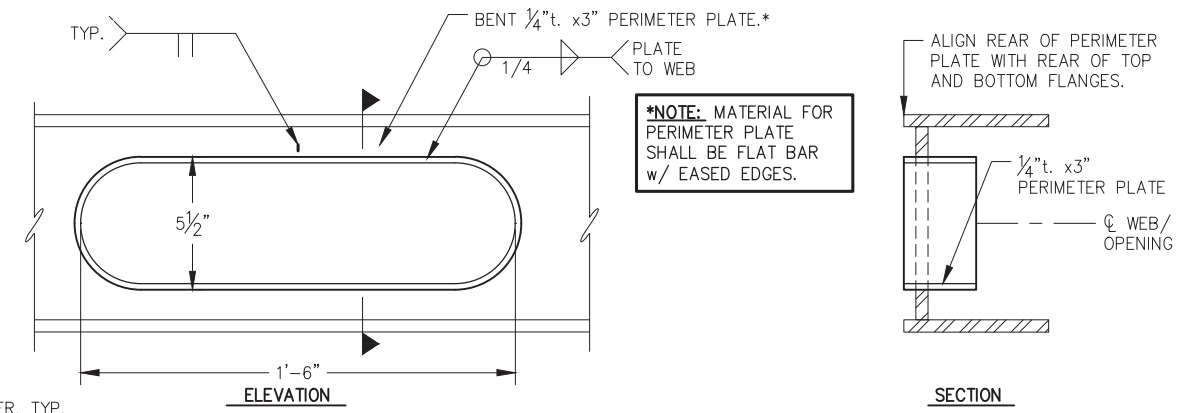


**END CONNECTION PLAN**

**NOTE:** SEE SPECIFICATIONS FOR SHEAR BLOCK CONNECTION FIELD ASSEMBLY AND TIGHTENING REQUIREMENTS.

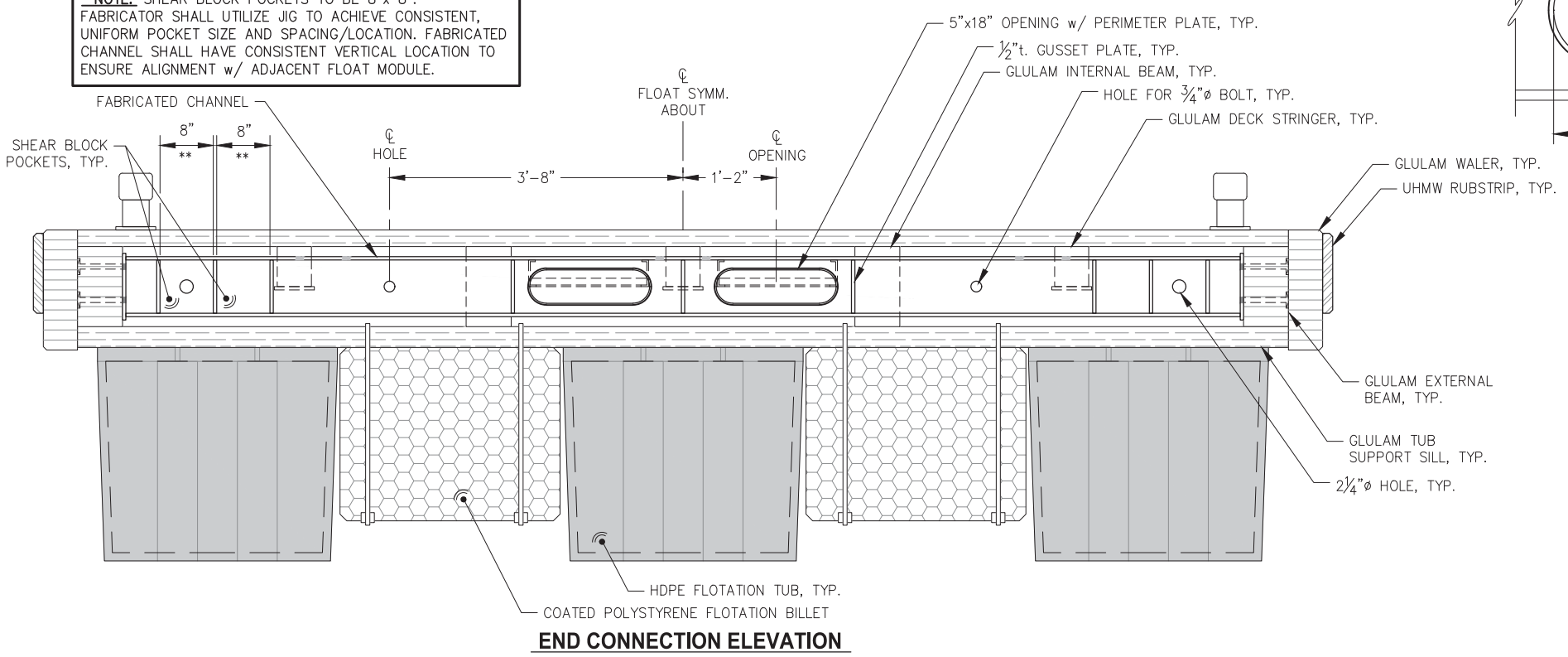


**BOLTED SHEAR BLOCK ASSEMBLY**

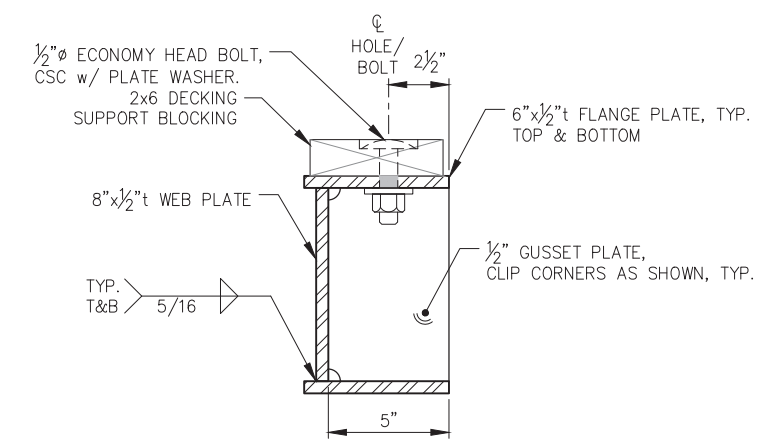


**END CONNECTION OPENING w/ PERIMETER PLATE**

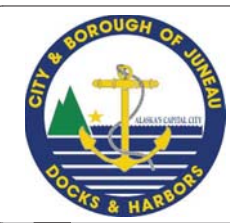
**\*\*NOTE:** SHEAR BLOCK POCKETS TO BE 8"x 8". FABRICATOR SHALL UTILIZE JIG TO ACHIEVE CONSISTENT, UNIFORM POCKET SIZE AND SPACING/LOCATION. FABRICATED CHANNEL SHALL HAVE CONSISTENT VERTICAL LOCATION TO ENSURE ALIGNMENT w/ ADJACENT FLOAT MODULE.



**END CONNECTION ELEVATION**



**FABRICATED CHANNEL SECTION**



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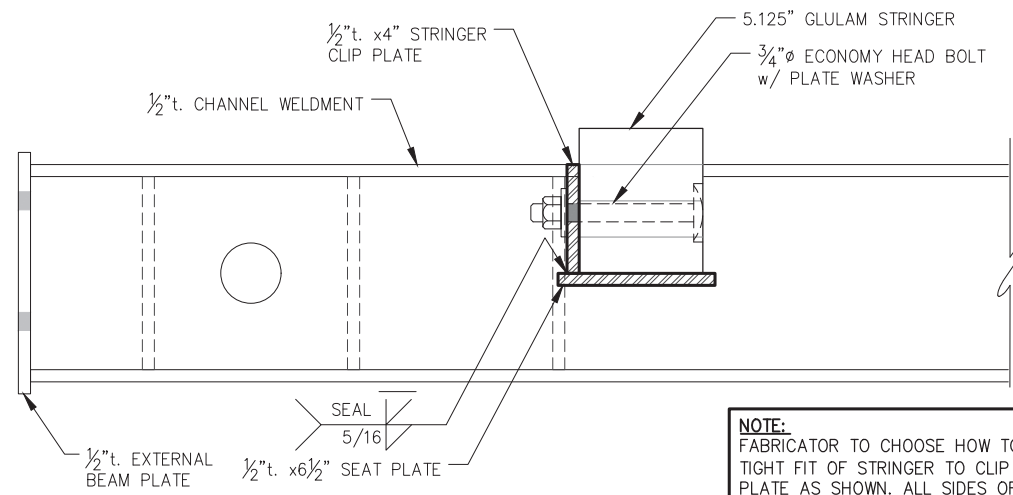


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CBJ CONTRACT NO. DH20-021

SHEET TITLE:  
**MODULE END CONNECTION DETAILS**

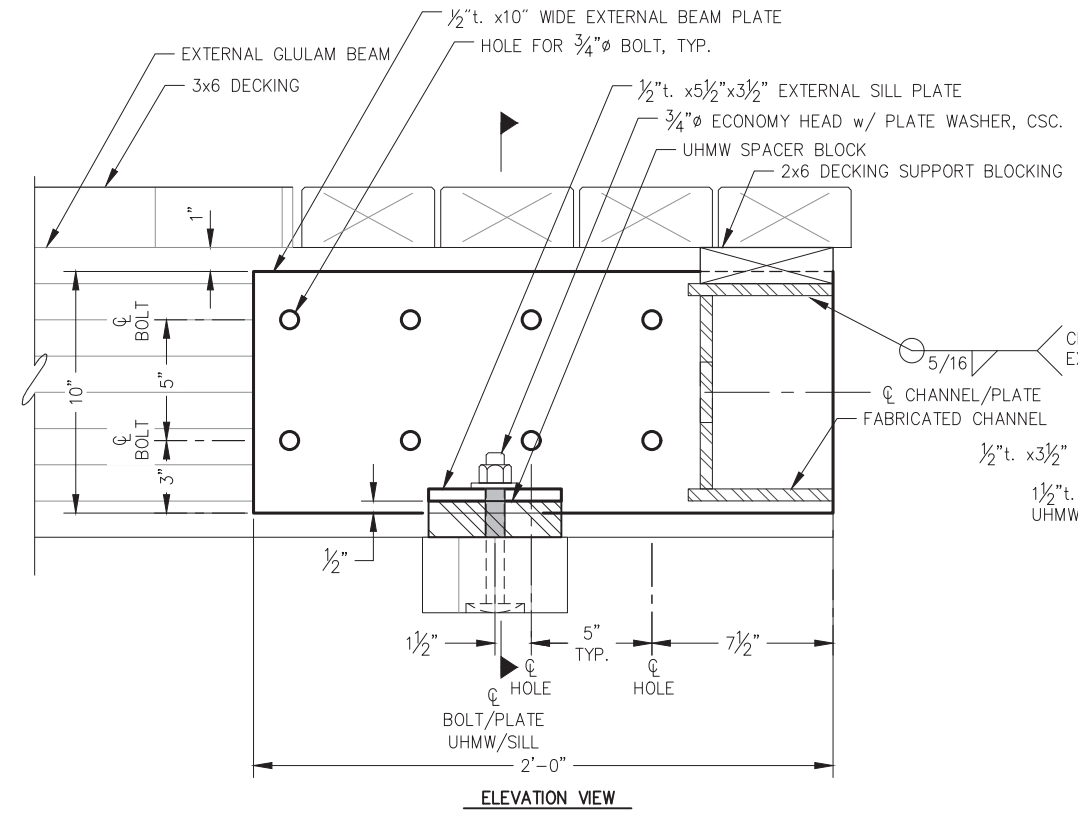
PND PROJECT NO.: 182066      C.A.N. NO.: AECC250

**6.02**

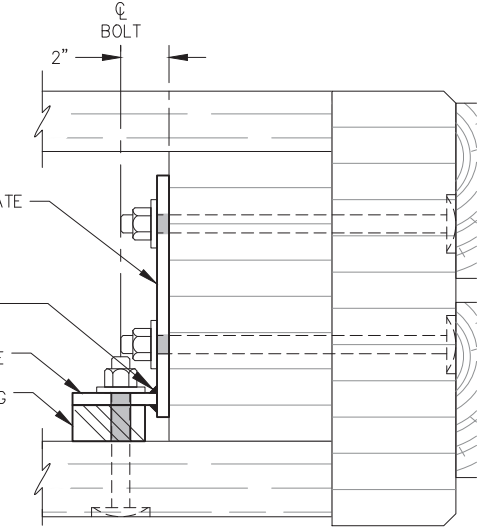


**STRINGER SEAT PLATE SECTION**

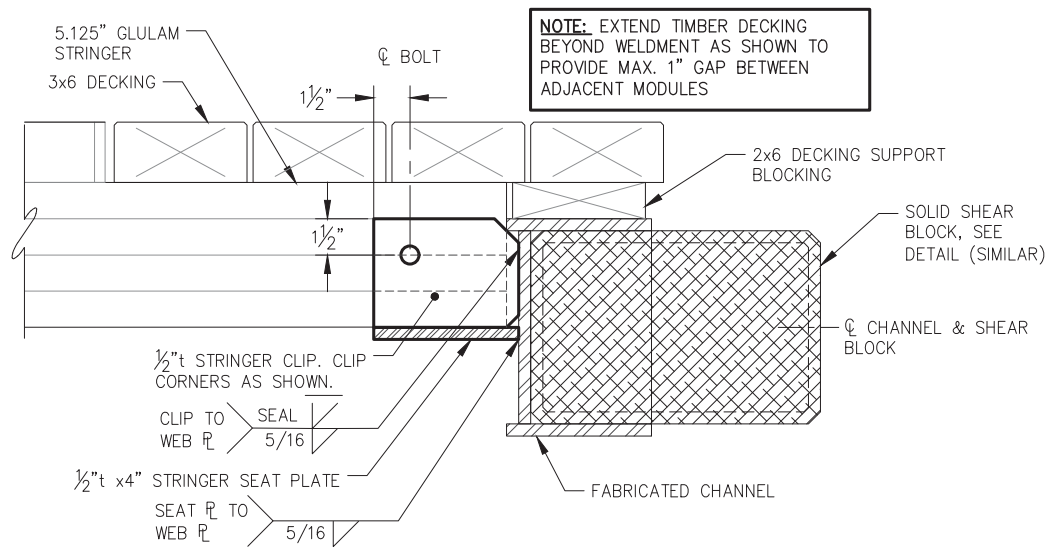
**NOTE:**  
FABRICATOR TO CHOOSE HOW TO ACHIEVE TIGHT FIT OF STRINGER TO CLIP PLATE/SEAT PLATE AS SHOWN. ALL SIDES OF PLATE TO BE SEALED. GRIND INSIDE EDGE FLUSH OR CHAMFER STRINGERS AS REQUIRED.



**EXTERNAL BEAM PLATE**

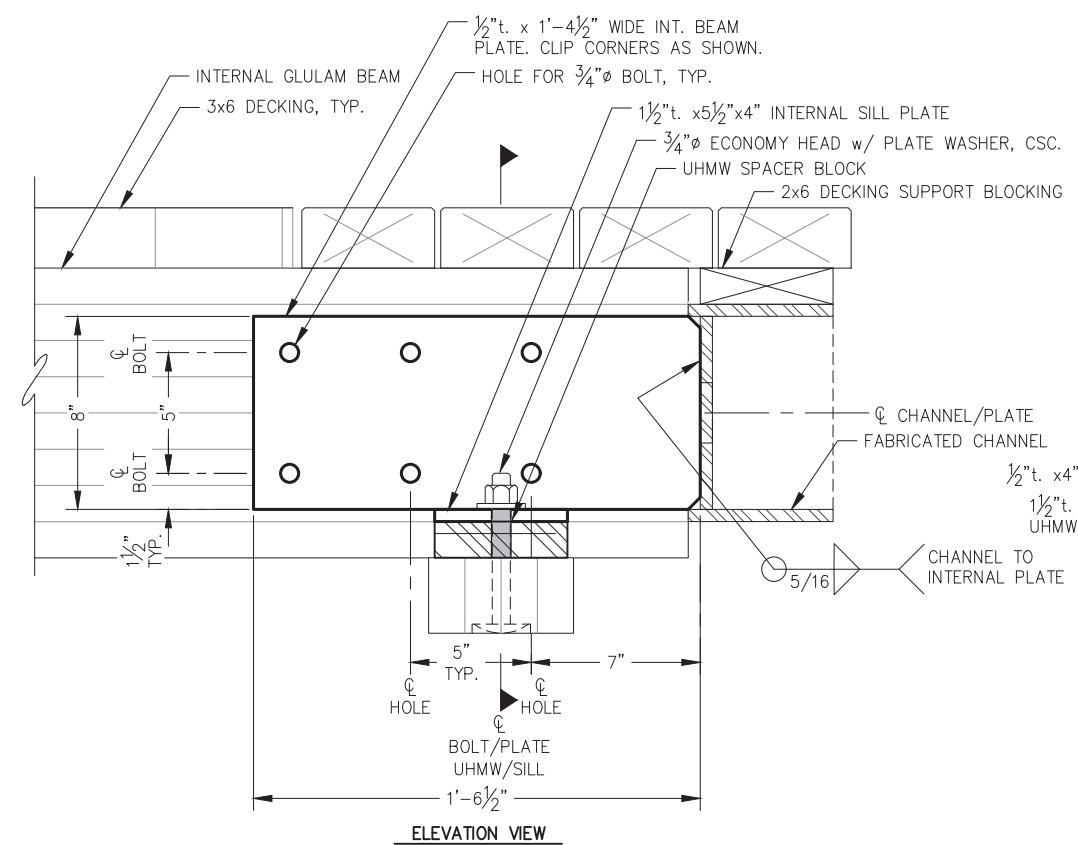


**SECTION VIEW**

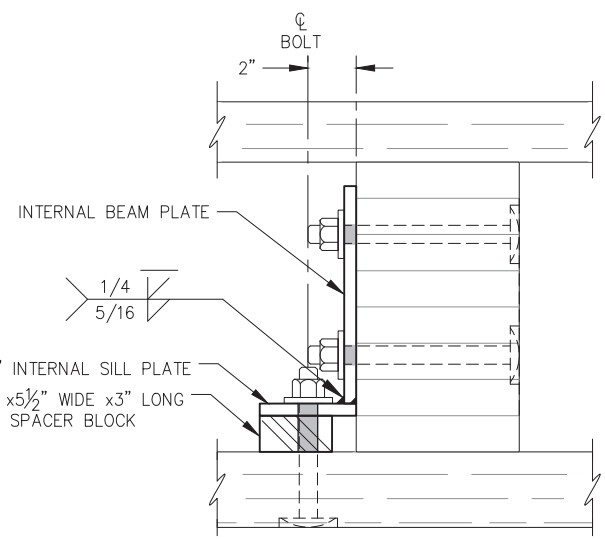


**SECTION AT SHEAR BLOCK**

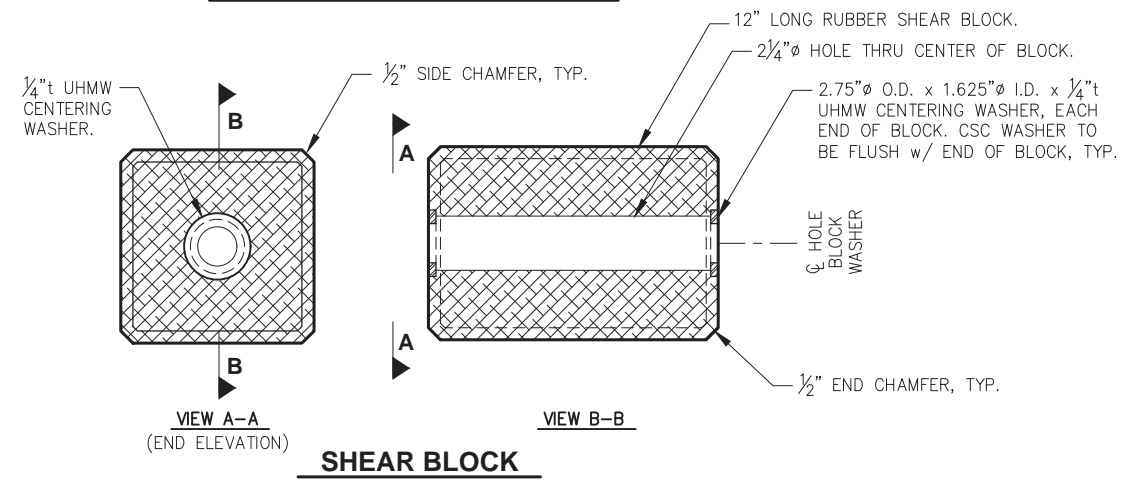
**NOTE:** EXTEND TIMBER DECKING BEYOND WELDMENT AS SHOWN TO PROVIDE MAX. 1" GAP BETWEEN ADJACENT MODULES



**INTERNAL BEAM PLATE**



**SECTION VIEW**



**SHEAR BLOCK**

**NOTE:** SEE SPECIFICATIONS FOR SHEAR BLOCK FABRICATION AND FIT-UP REQUIREMENTS.

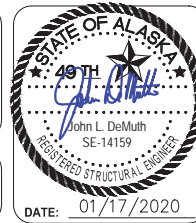


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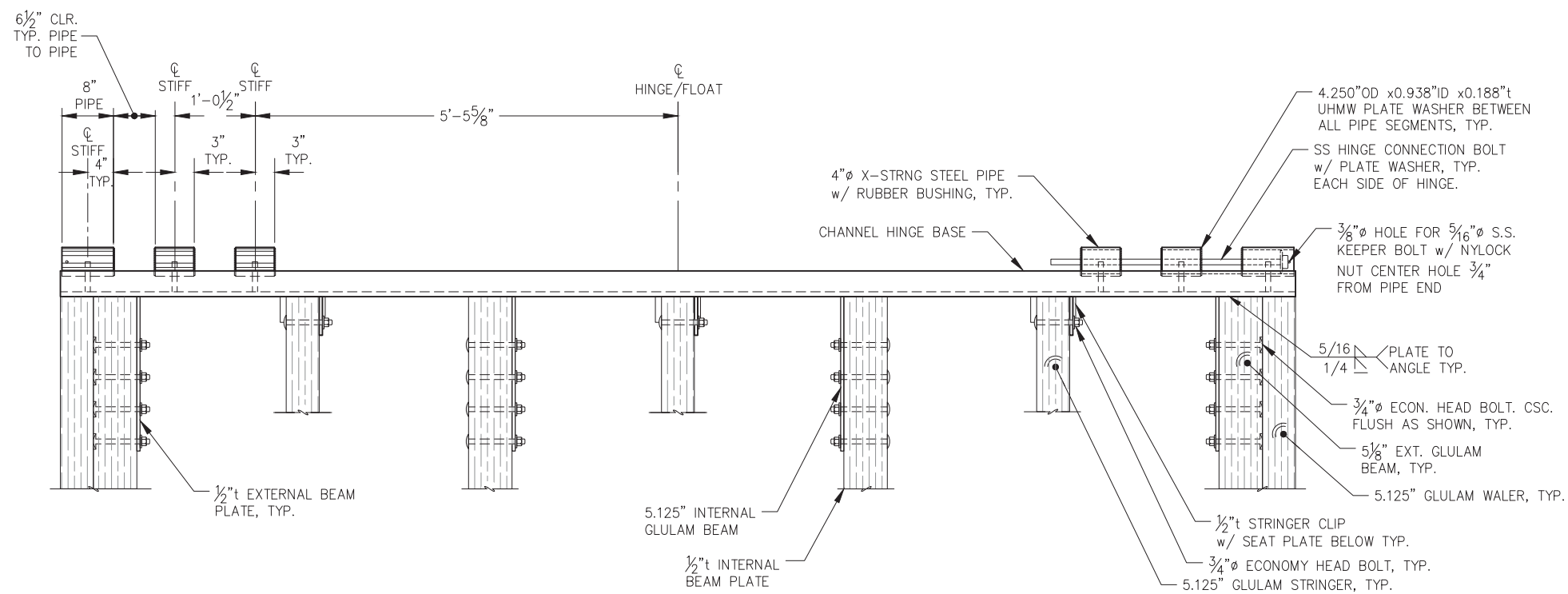
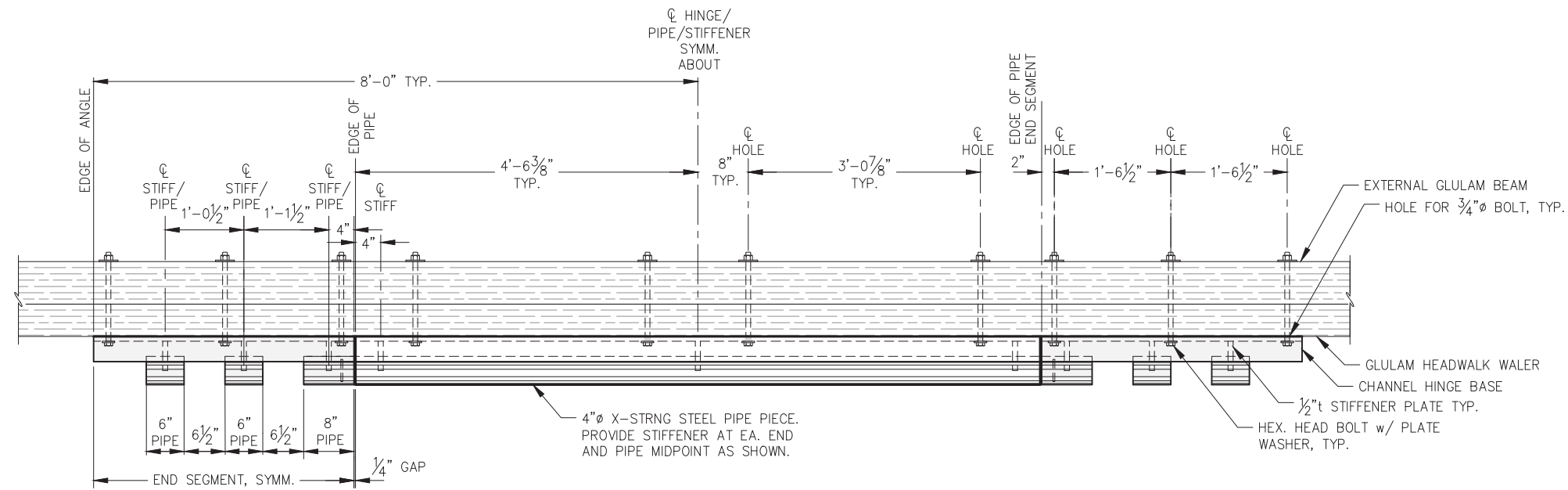


**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
CBJ CONTRACT NO. DH20-021

SHEET TITLE:  
**MODULE END CONNECTION DETAILS**

PND PROJECT NO.: 182066      C.A.N. NO.: AECC250

**6.03**



**16' PIANO HINGE**

**NOTE:** APPLY NON-SKID TO ALL HINGE SURFACES EXPOSED TO FOOT TRAFFIC, INCLUDING BASE ANGLES AND PIPE SEGMENTS

**REVISIONS**

REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

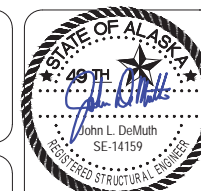


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**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
**CBJ CONTRACT NO. DH20-021**

SHEET TITLE:

**PIANO HINGE DETAILS**

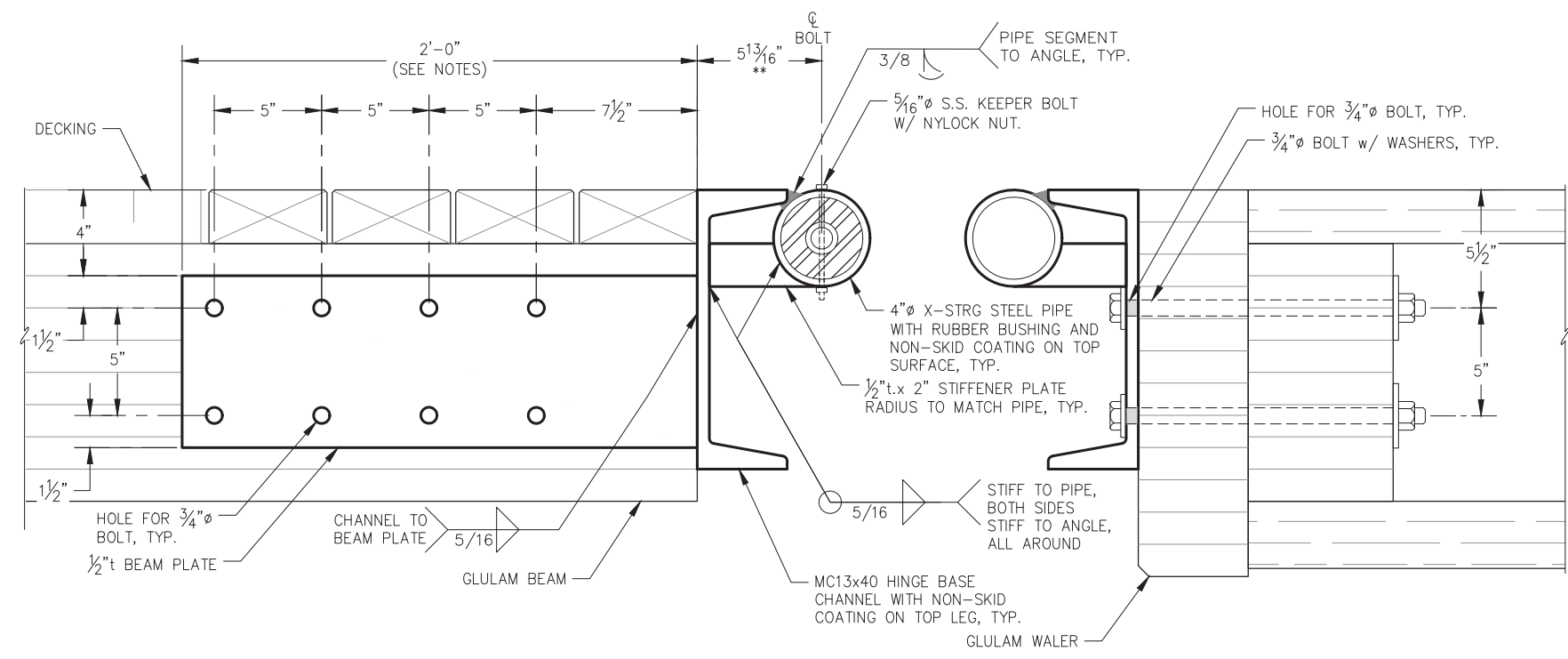
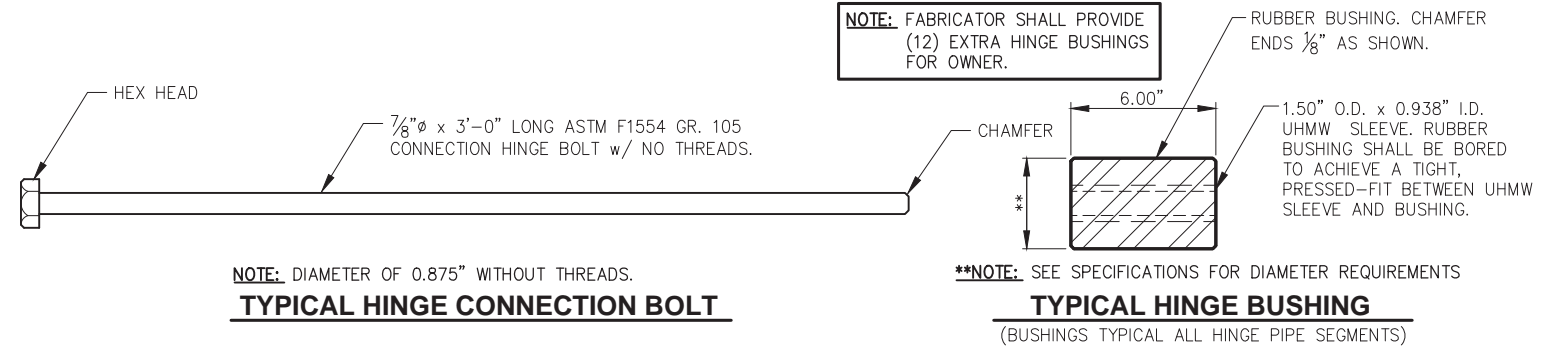
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PND PROJECT NO.: 182066

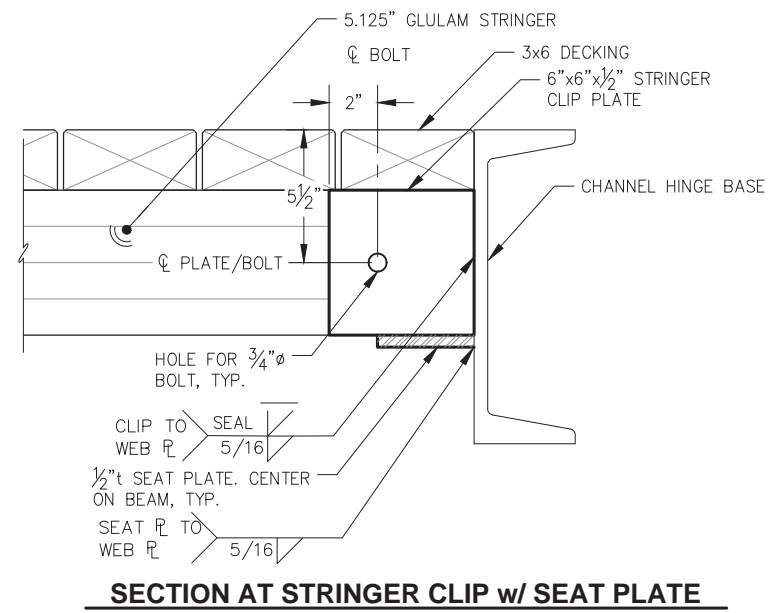
C.A.N. NO.: AECC250



**NOTES:**  
 FABRICATOR TO DRY-FIT HINGE ASSEMBLIES PRIOR TO APPLICATION OF COATINGS TO ENSURE HINGE MOVES FREELY, DOES NOT BIND AND HAS ADEQUATE GAPS BETWEEN PIPE SEGMENTS OF EQUAL SIZE.  
 \*\* DIMENSION ASSUMED TO BE MINIMUM OF 5 13/16". FABRICATOR SHALL VERIFY DIMENSION REQUIRED FOR TOP OF PIPE SEGMENT TO BE FLUSH WITH TOP OF ANGLE, AND WELDED AS SHOWN. ALSO, PIPE SEGMENT SHALL HAVE ADEQUATE CLEARANCE BETWEEN IT AND THE CHANNEL TOP LEG SUCH THAT WHEN ASSEMBLED, HINGE PIPE SEGMENTS DO NOT RUB AGAINST EDGE OF CHANNEL TOP LEG. (AVOID NON-SKID COATING BEING WORN OFF AFTER INSTALLATION.)



**NOTE:**  
 OMIT WALER BOLTS WITHIN LIMITS OF PIANO HINGE CONNECTION, TYP.

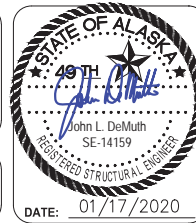


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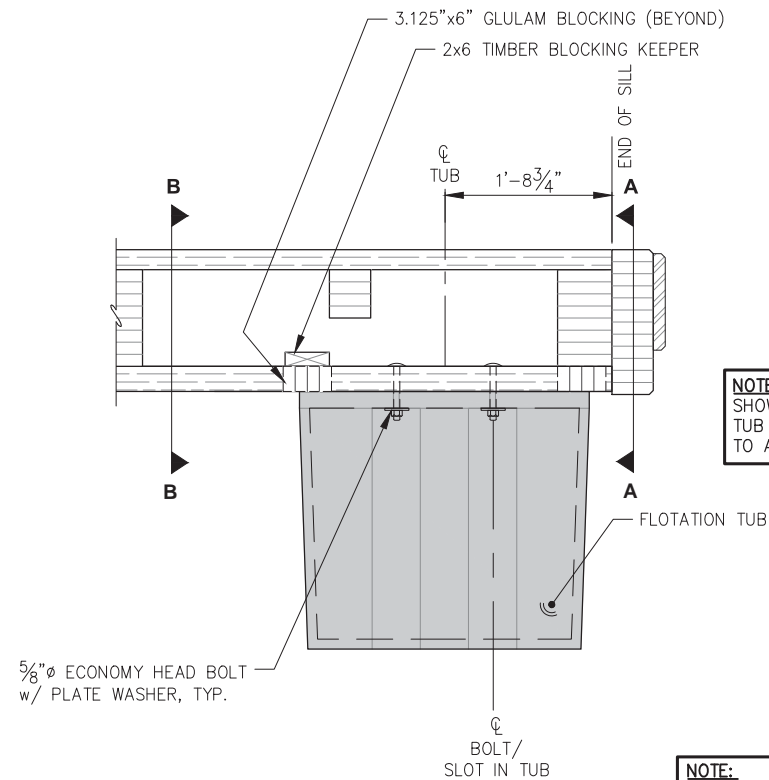


**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
 CBJ CONTRACT NO. DH20-021

SHEET TITLE:  
**PIANO HINGE DETAILS**

PND PROJECT NO.: 182066      C.A.N. NO.: AECC250

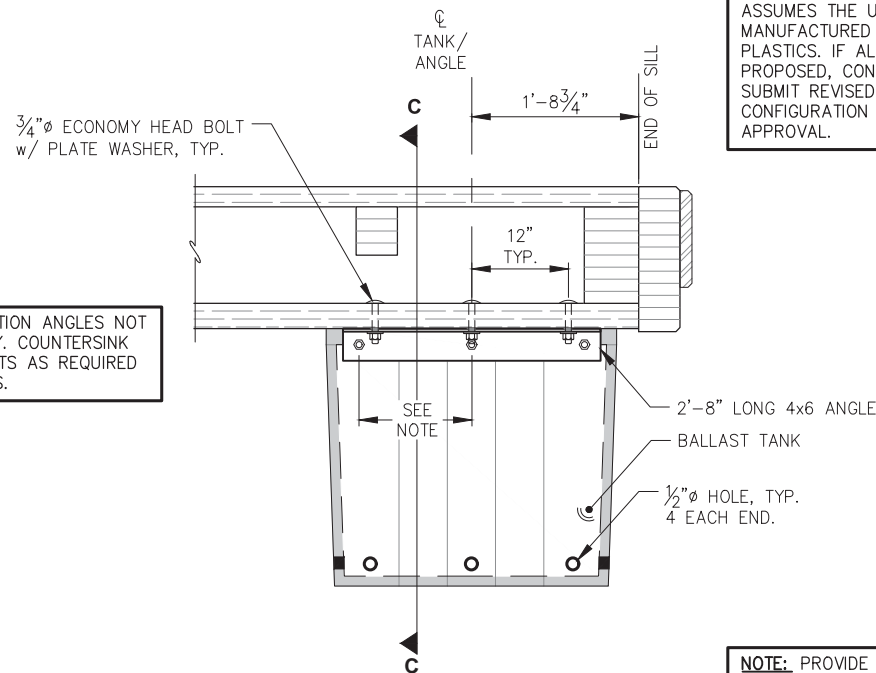
**6.05**



**4x3 FLOTATION TUB**  
(MODULE SECTION VIEW)

**NOTE:** SILL CONNECTION ANGLES NOT SHOWN FOR CLARITY. COUNTERSINK TUB AND TANK BOLTS AS REQUIRED TO AVOID CONFLICTS.

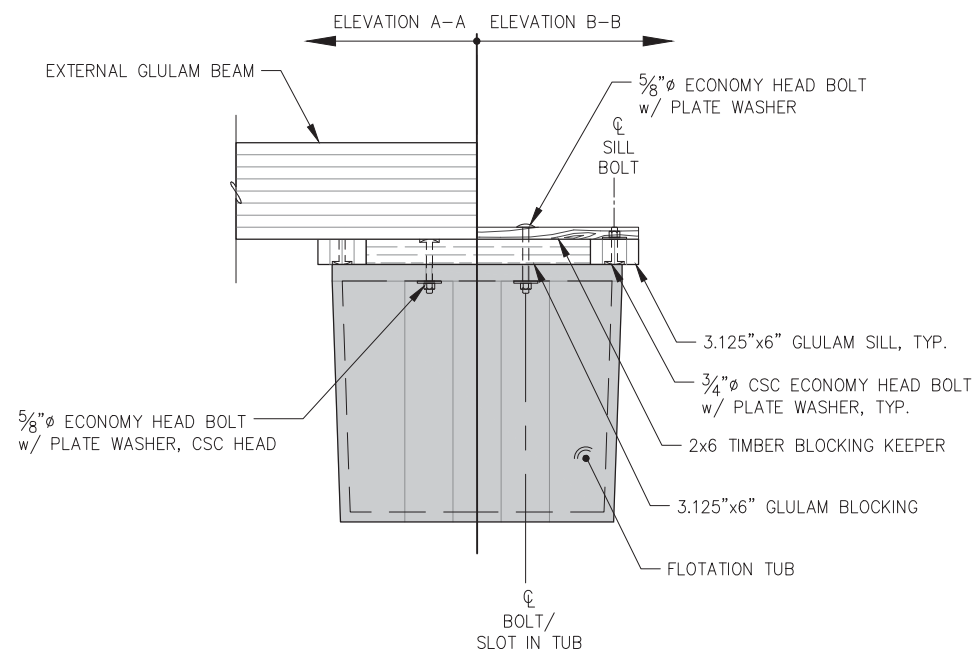
**NOTE:**  
• BALLAST TANK WALL THICKNESS SHALL BE 0.375"  
• FLOTATION TANK WALL THICKNESS SHALL BE 0.175"



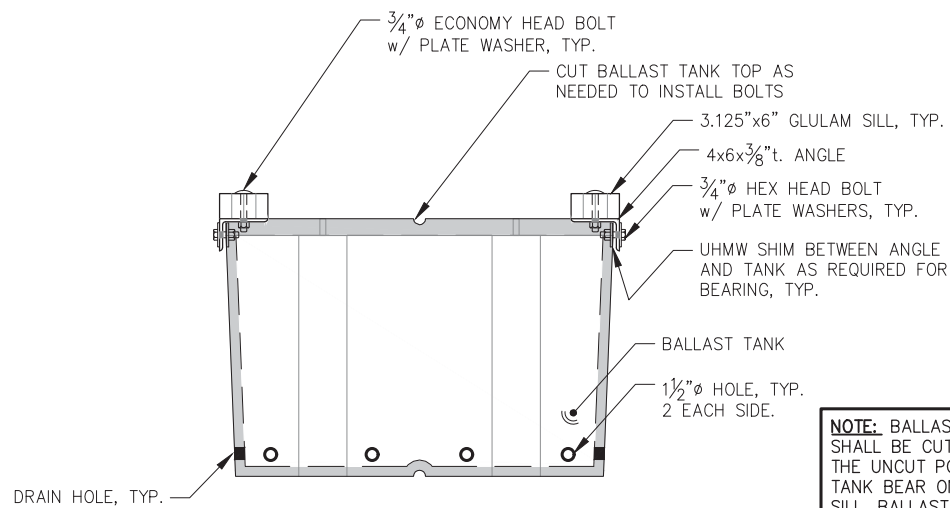
**4x3 BALLAST TANK**  
(MODULE SECTION VIEW)

**NOTE:** BALLAST TANK CONFIGURATION ASSUMES THE USE OF EAGLE FLOATS MANUFACTURED BY HENDREN PLASTICS. IF ALTERNATE UNITS ARE PROPOSED, CONTRACTOR SHALL SUBMIT REVISED TANK AND HARDWARE CONFIGURATION FOR ENGINEER APPROVAL.

**NOTE:** PROVIDE BALLAST TANK BOLTS IN THE QUANTITY SHOWN, LAYOUT BOLT HOLE LOCATIONS TO AVOID REINFORCING RIBS IN THE BALLAST TANK, BOLTS SHOULD BE EQUALLY SPACED UNLESS LOCATION OF REINFORCING RIBS PREVENTS AN EQUAL LAYOUT.



**4x3 FLOTATION TUB**  
(MODULE ELEVATION VIEW)



**4x3 BALLAST TANK**  
(SECTION C-C VIEW)

**NOTE:** BALLAST TANK TOPS SHALL BE CUT OUT SUCH THAT THE UNCUT PORTIONS OF THE TANK BEAR ON THE GLULAM SILL. BALLAST TANK BOLT HOLES SHALL BE DRILLED USING A TEMPLATE OR THE CONNECTION ANGLE TO ENSURE ACCURATE FIT UP.



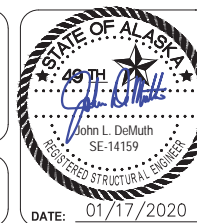
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CBJ CONTRACT NO. DH20-021

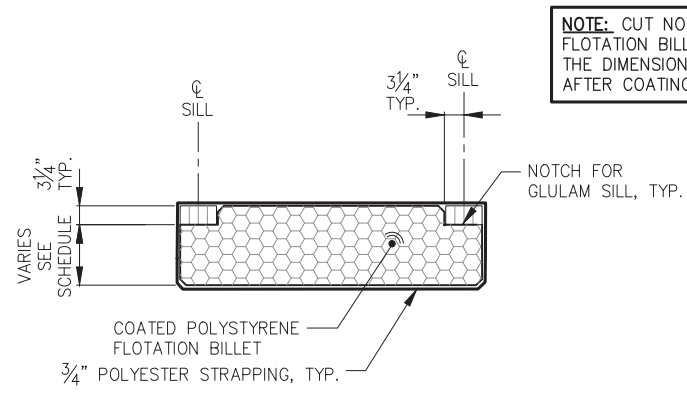
SHEET TITLE:  
**FLOTATION TUB AND BALLAST TANK DETAILS**

**6.06**

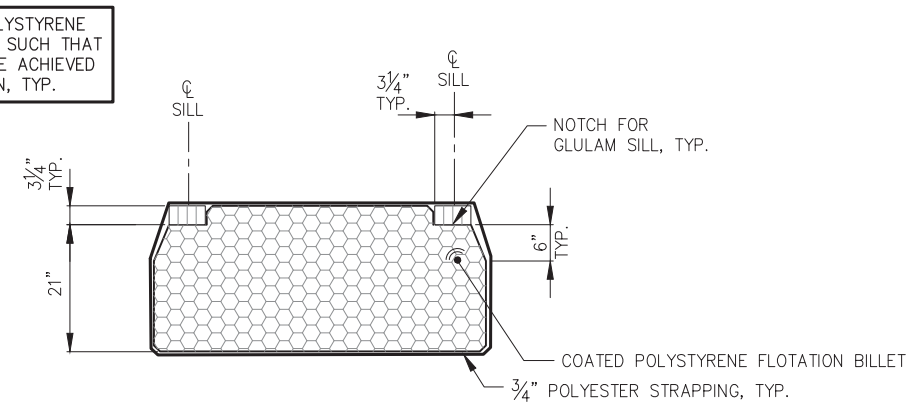
PNP PROJECT NO.: 182066 C.A.N. NO.: AECC250

DATE: 01/17/2020

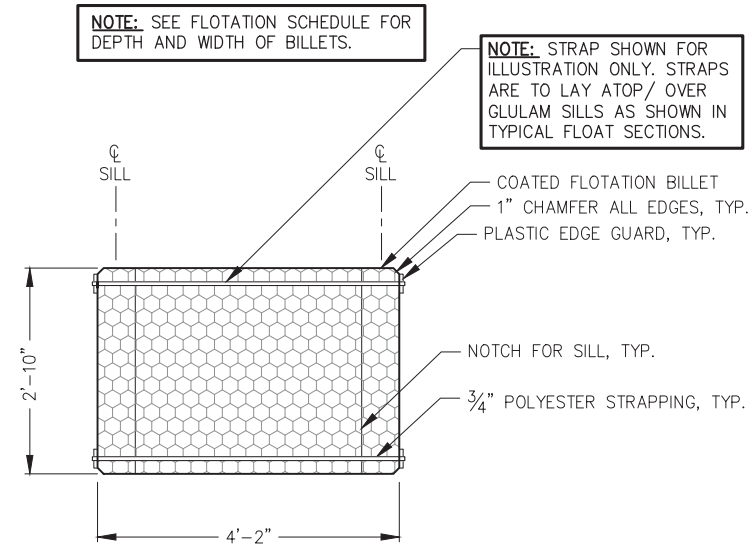




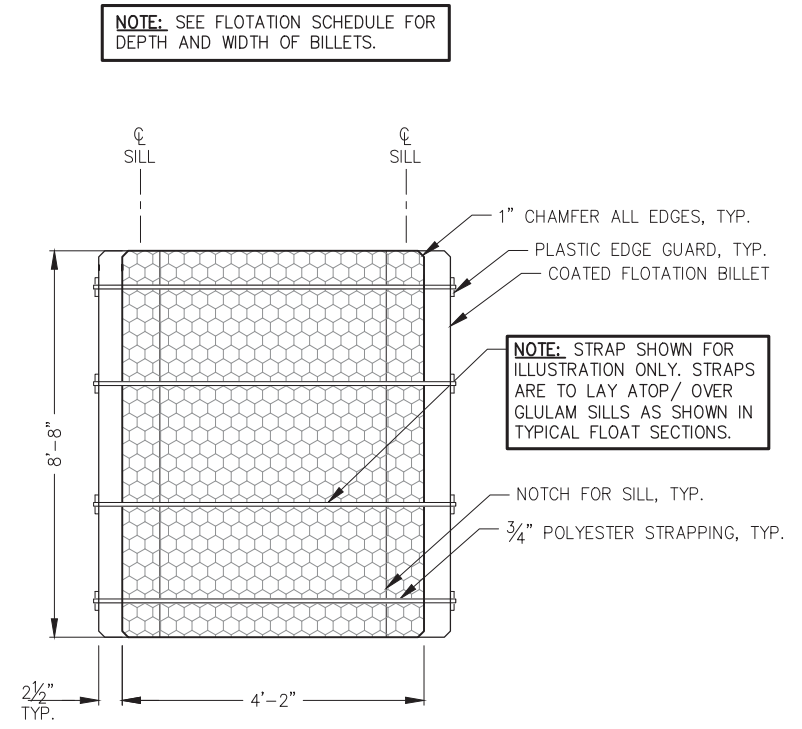
**FLOTATION BILLET - TYPICAL SIDE ELEVATION**



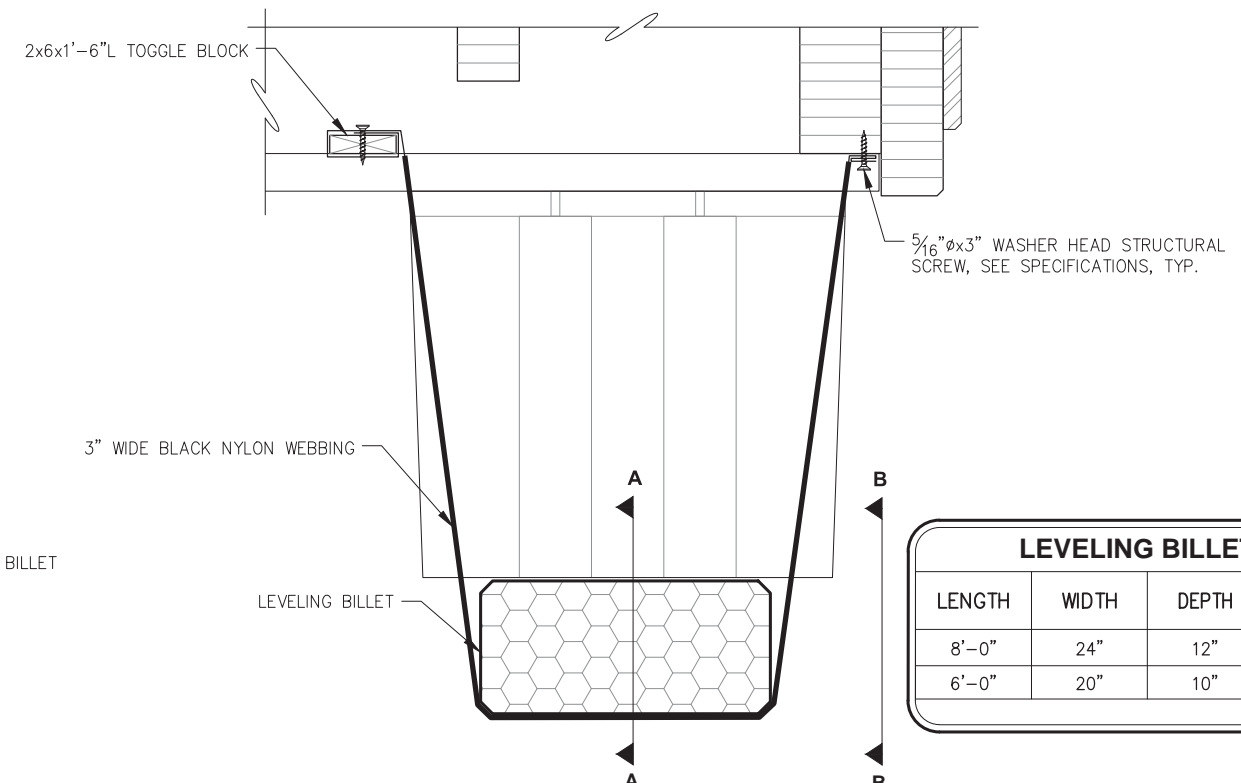
**GANGWAY BILLET - SIDE ELEVATION**



**FLOTATION BILLET - PLAN**

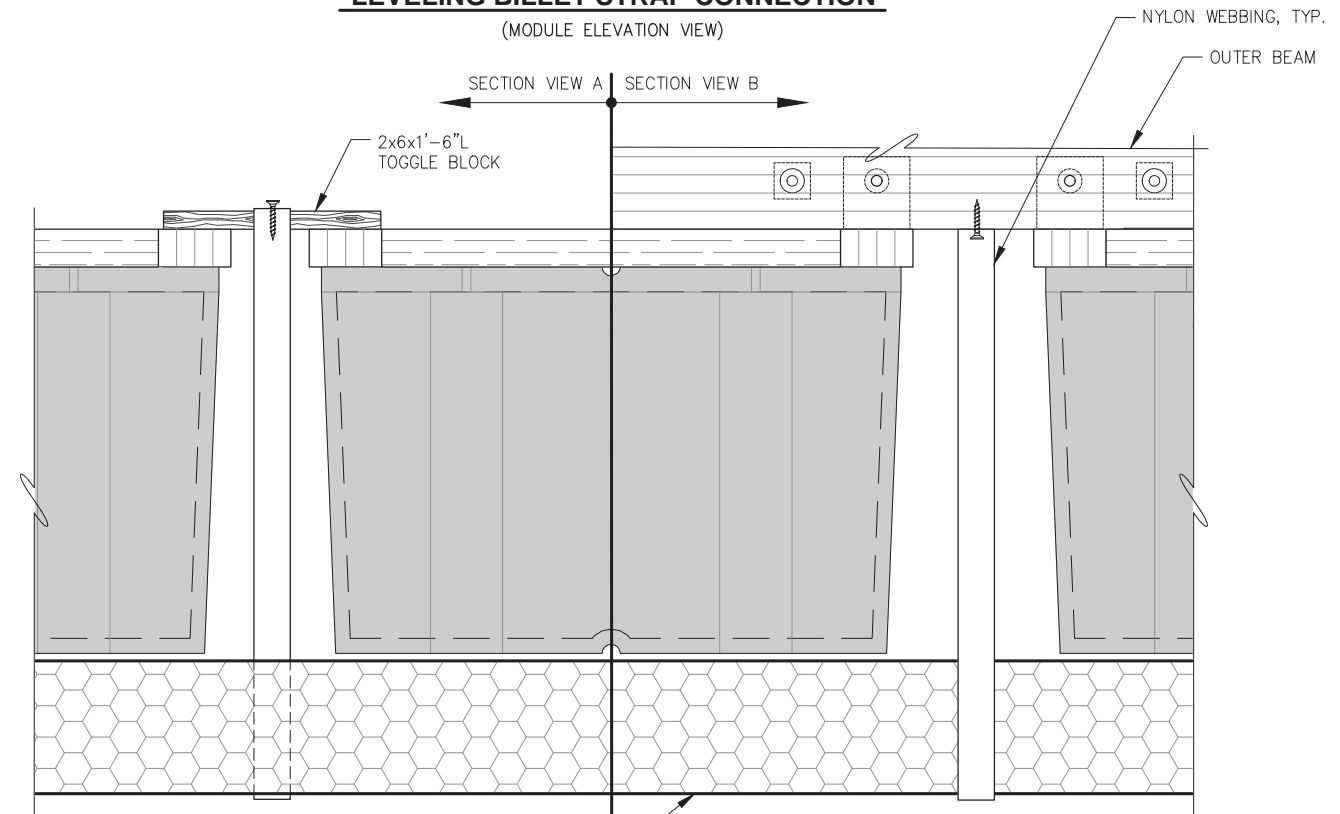


**GANGWAY BILLET - PLAN**



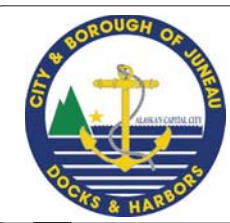
**LEVELING BILLET STRAP CONNECTION**  
(MODULE ELEVATION VIEW)

LEVELING BILLETS			
LENGTH	WIDTH	DEPTH	QUANTITY
8'-0"	24"	12"	20 EACH
6'-0"	20"	10"	10 EACH



**LEVELING BILLET INNER STRAP CONNECTION**  
(SECTION VIEW A)

**LEVELING BILLET OUTER STRAP CONNECTION**  
(SECTION VIEW B)

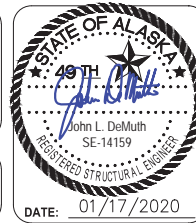


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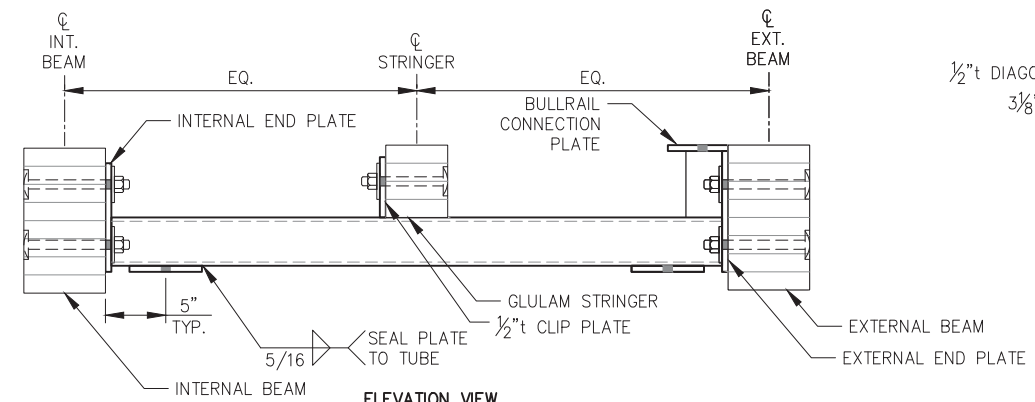


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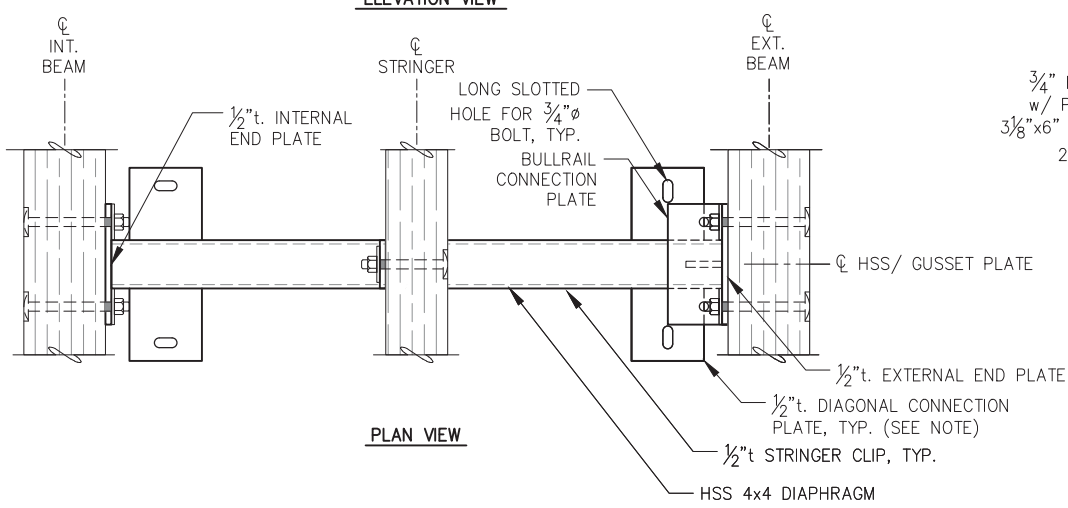
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**FLOTATION BILLET DETAILS**

PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

**6.07**



ELEVATION VIEW

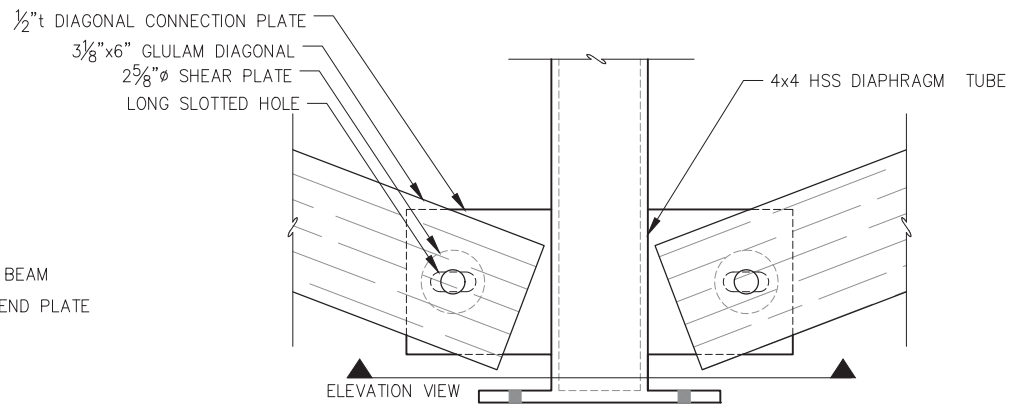


PLAN VIEW

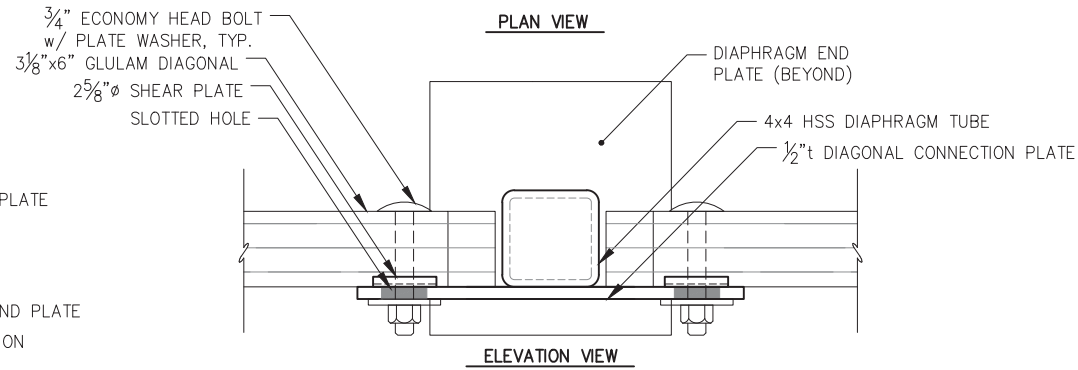
**HSS DIAPHRAGM**

(SEE FLOAT SECTION FOR DIMENSIONS NOT SHOWN.)

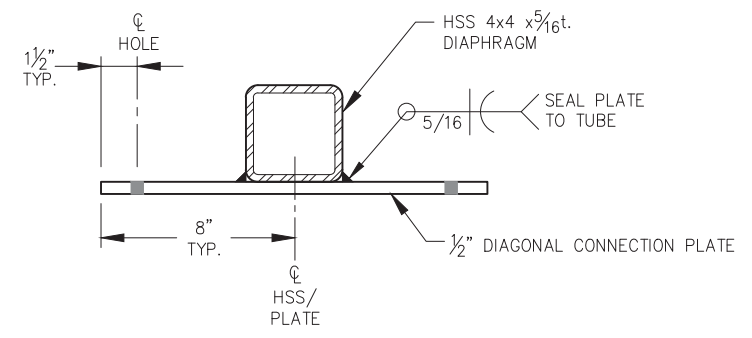
**NOTE:**  
OMIT DIAGONAL AND BULLRAIL CONNECTION PLATES ON UTILITY FLOAT AND INTERIOR DIAPHRAGMS IN TRANSIENT FLOAT, AS SHOWN ON PLAN.



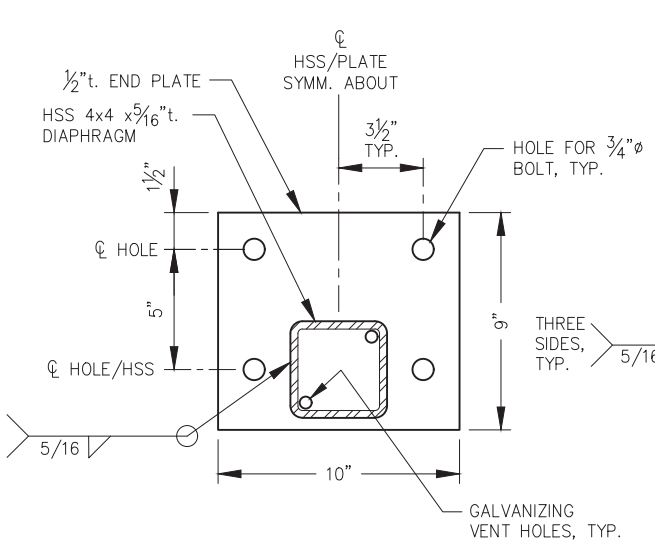
ELEVATION VIEW



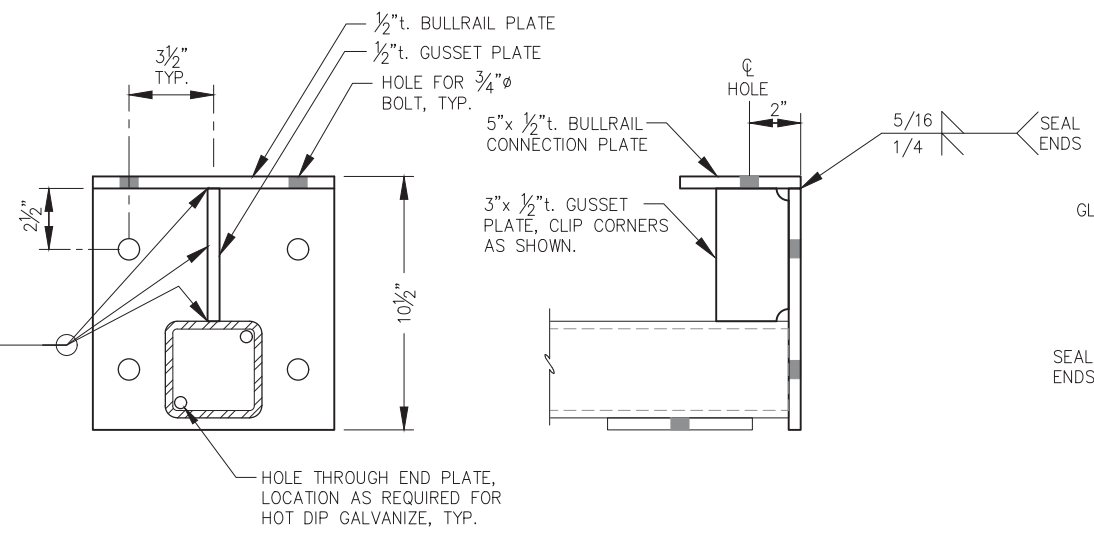
**DIAPHRAGM - DIAGONAL BRACING CONNECTION DETAIL**



**DIAPHRAGM SECTION AT DIAG. CONN. PLATE**

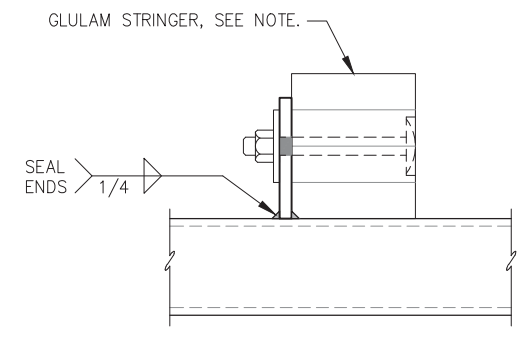


**INTERNAL END PLATE**

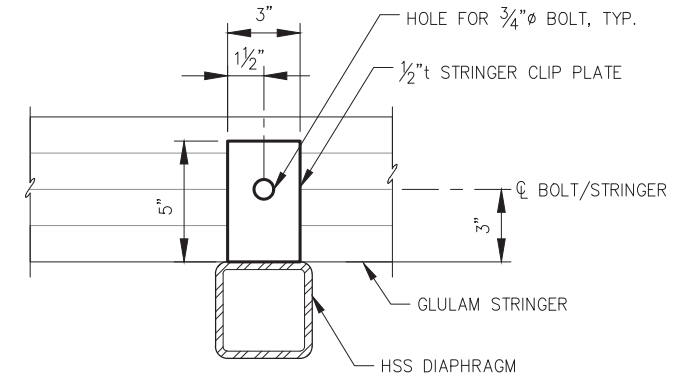


**EXTERNAL END PLATE**

**NOTE:**  
CHAMFER GLULAM STRINGER AT CLIP PLATE WELD SUCH THAT GLULAM SITS FLUSH AGAINST CLIP PLATE AND HSS DIAPHRAGM.



ELEVATION VIEW



SECTION VIEW

**STRINGER CLIP PLATE**



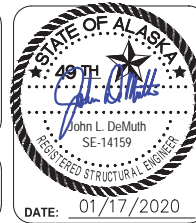
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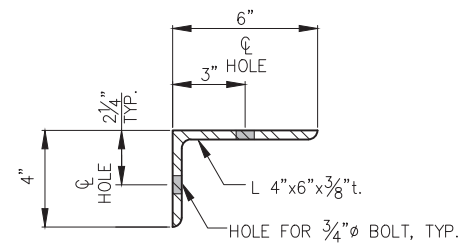
**CITY & BOROUGH OF JUNEAU, ALASKA**  
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**CBJ CONTRACT NO. DH20-021**

SHEET TITLE:  
**MISCELLANEOUS FLOAT DETAILS**

**6.08**

PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

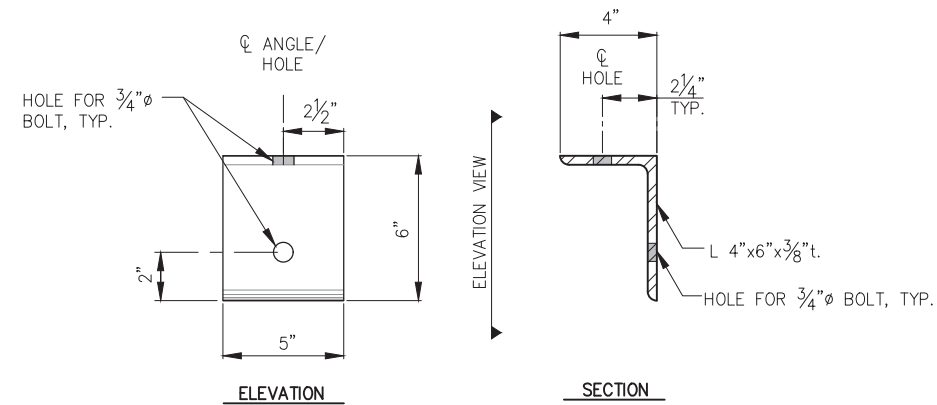
DATE: 01/17/2020



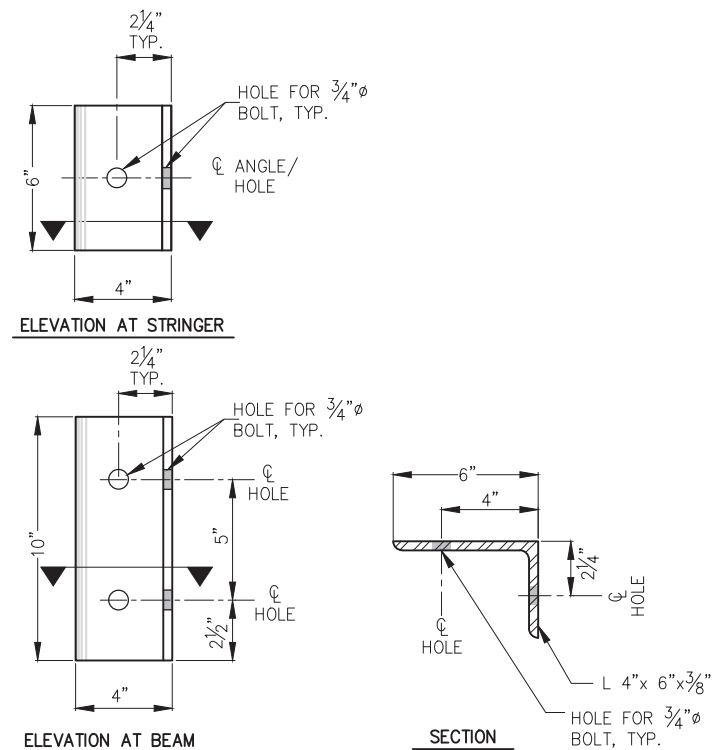
SECTION

**BALLAST TANK CONNECTION ANGLE**

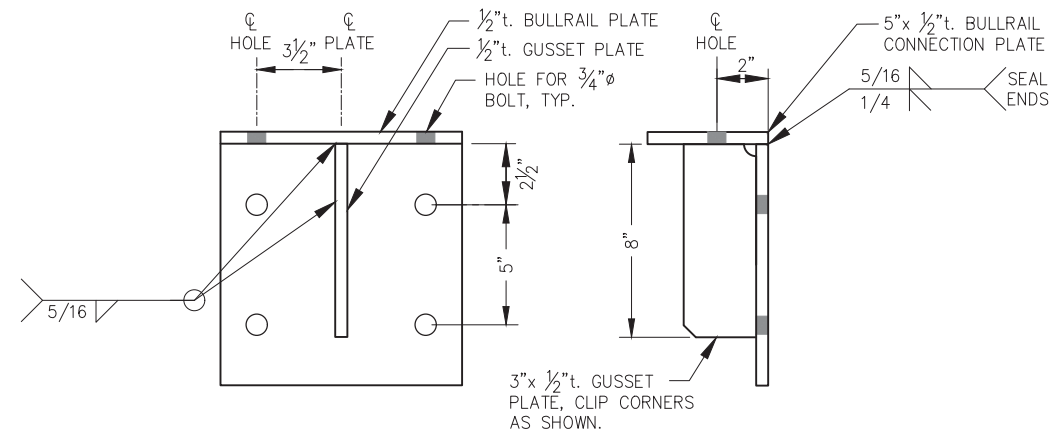
(LENGTH VARIES. SEE BALLAST TANK DETAILS)



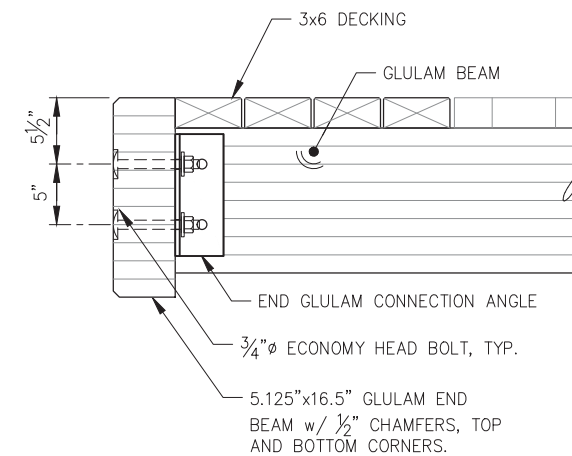
**SILL CONNECTION ANGLE**



**END GLULAM CONNECTION ANGLE**



**BULLRAIL BRACKET**



**FLOAT END GLULAM SECTION**

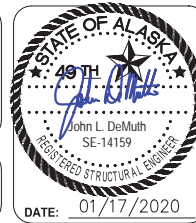


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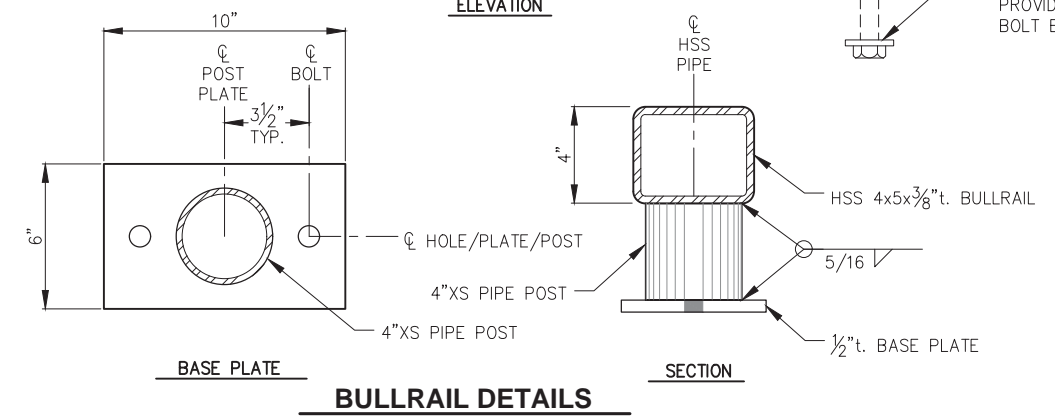
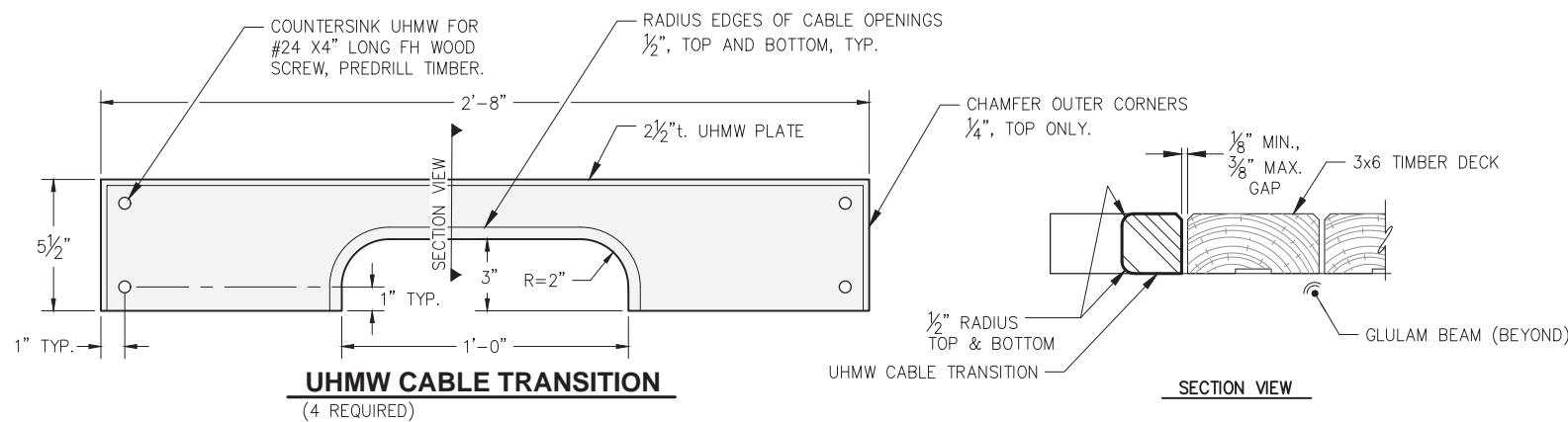
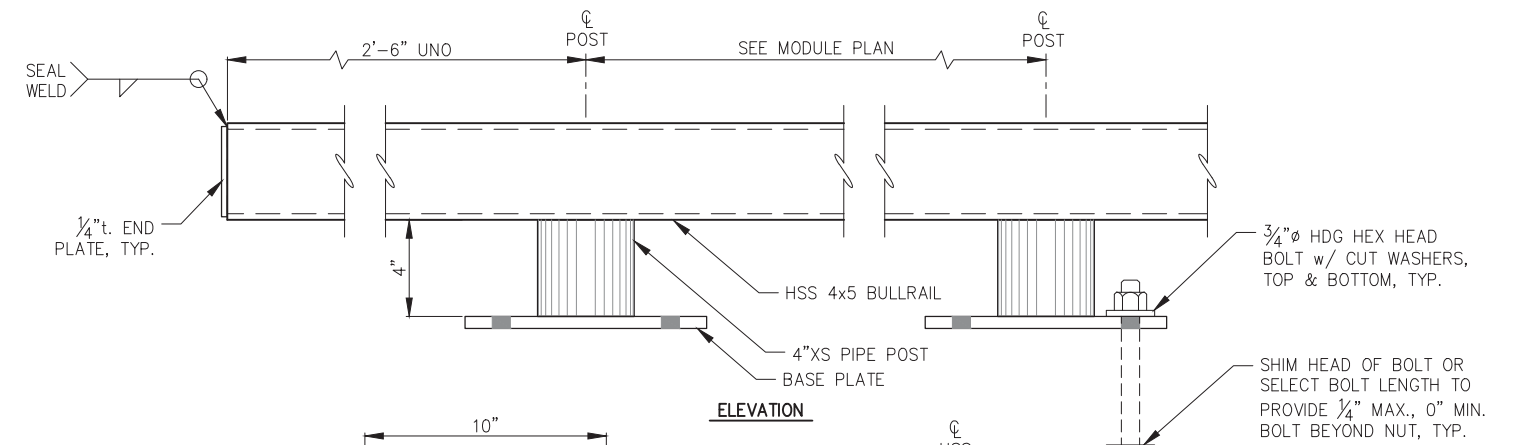
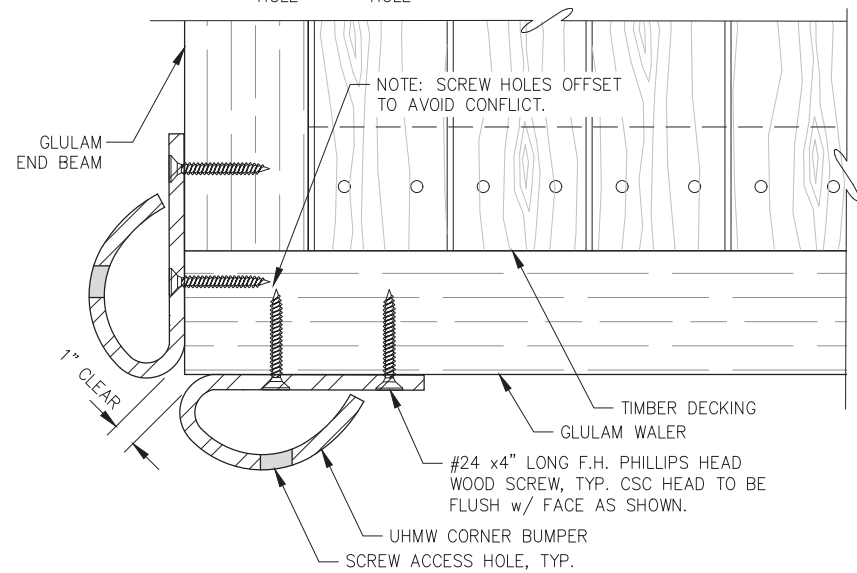
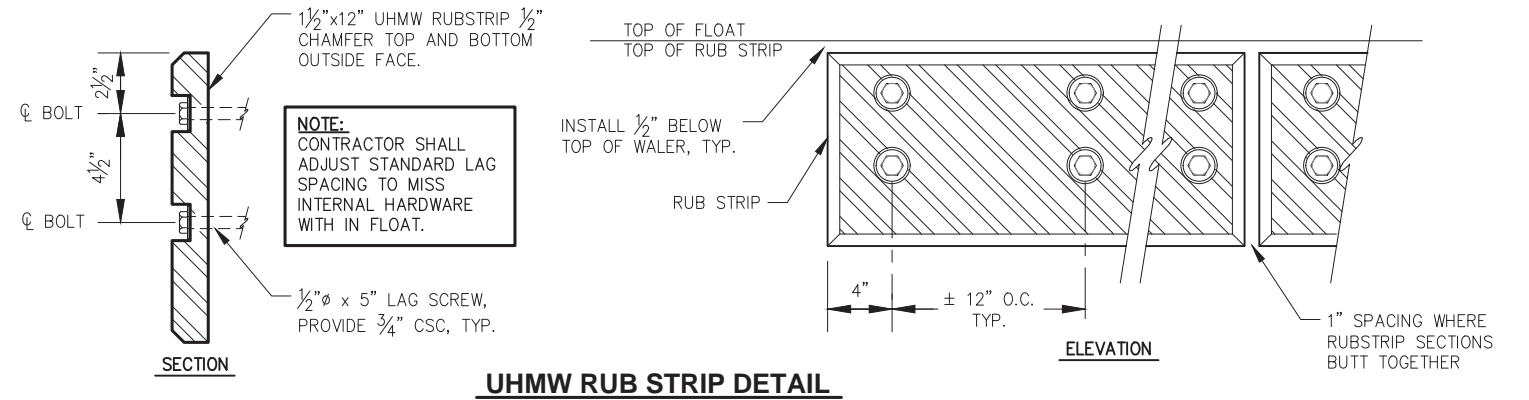
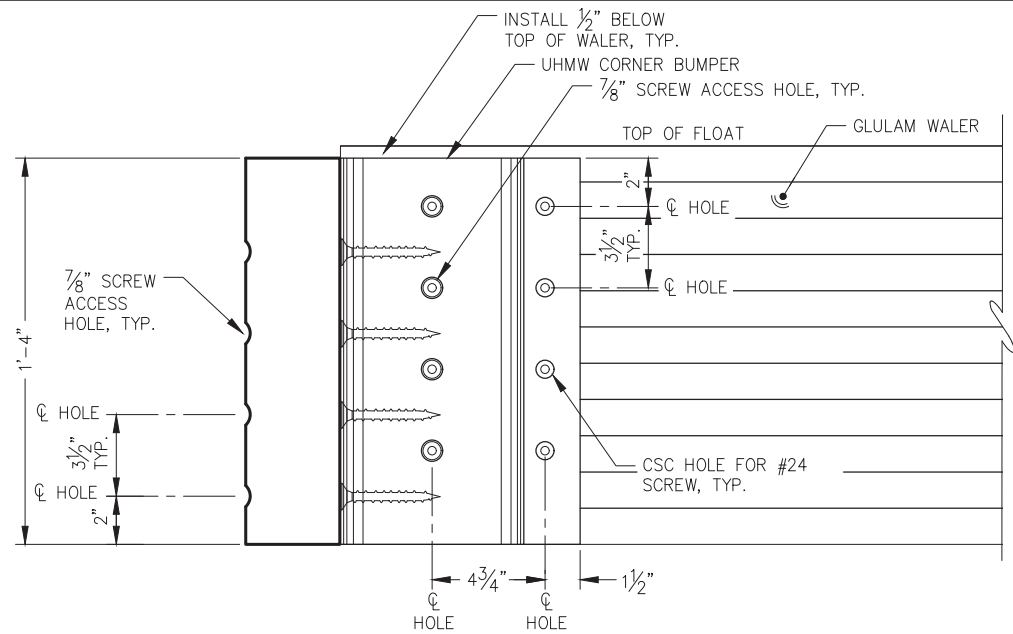


**CITY & BOROUGH OF JUNEAU, ALASKA**  
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CBJ CONTRACT NO. DH20-021

SHEET TITLE:  
**MISCELLANEOUS FLOAT DETAILS**

PND PROJECT NO.: 182066      C.A.N. NO.: AECC250

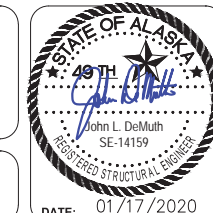
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SHEET TITLE:  
**MISCELLANEOUS FLOAT DETAILS**  
PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

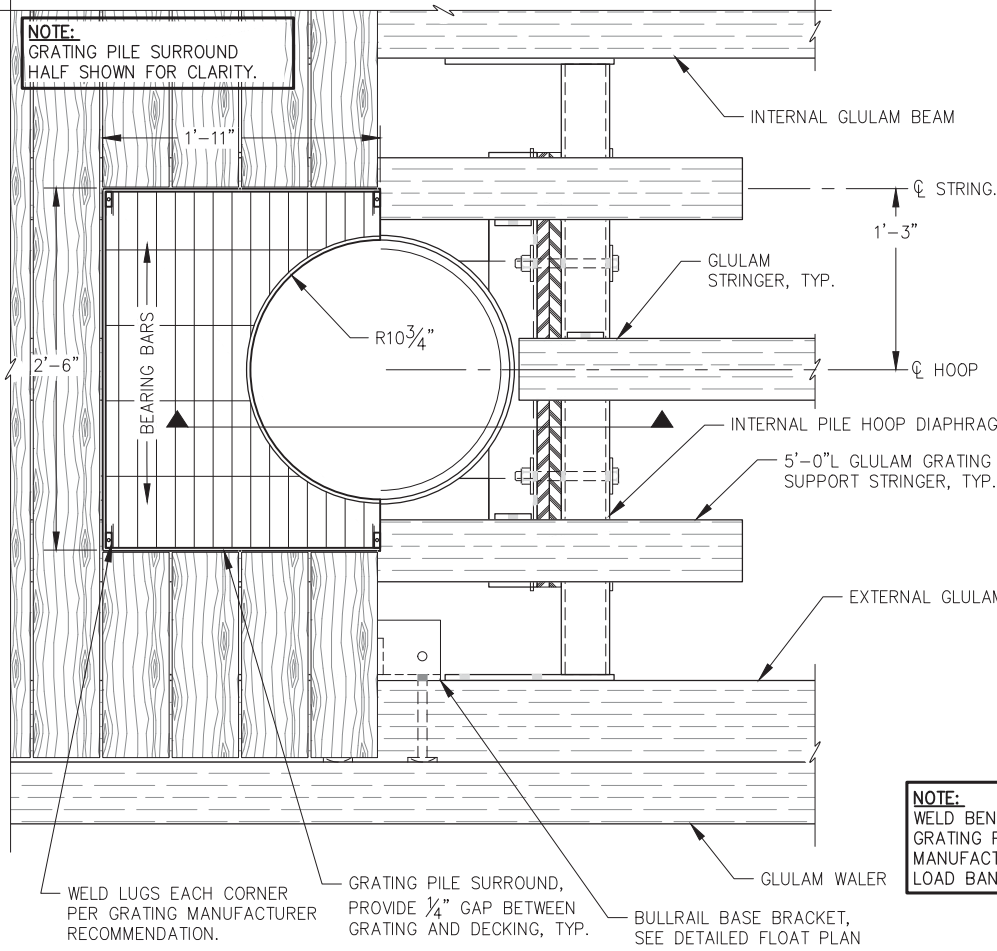
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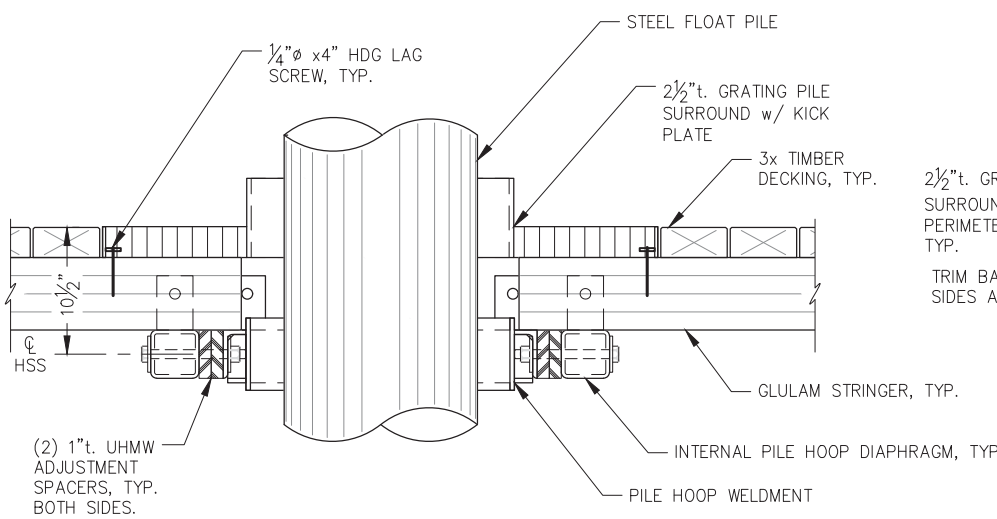
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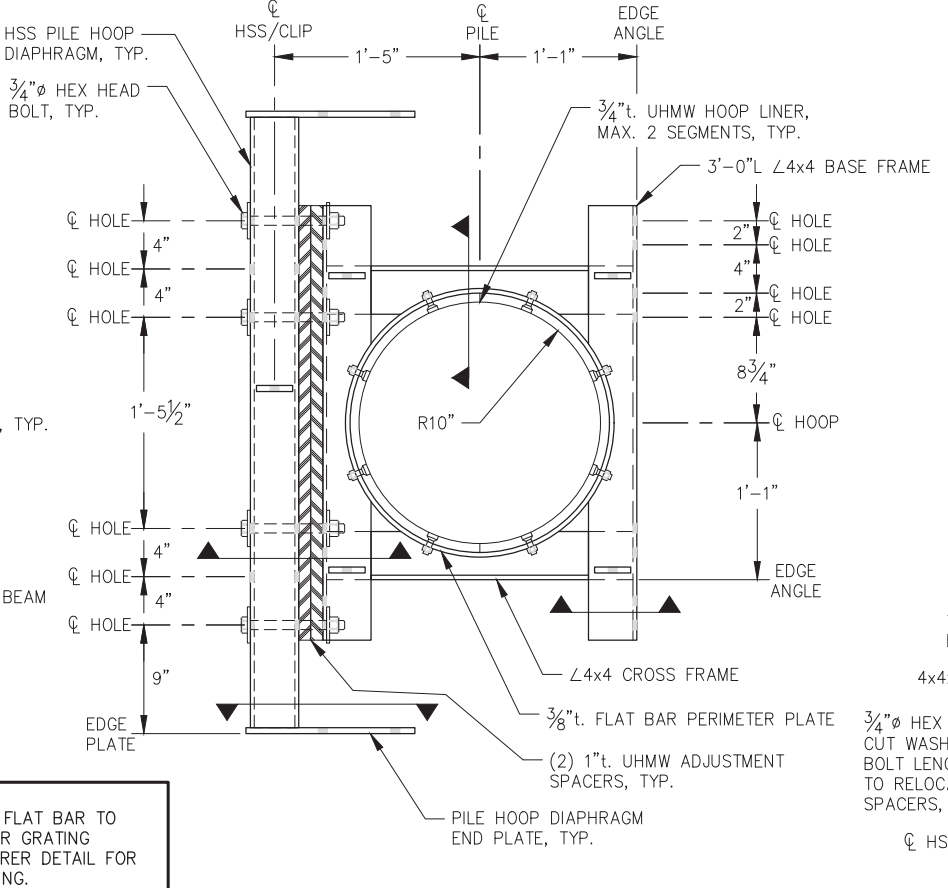
DATE: 01/17/2020



**INTERNAL PILE HOOP - FLOAT PLAN**



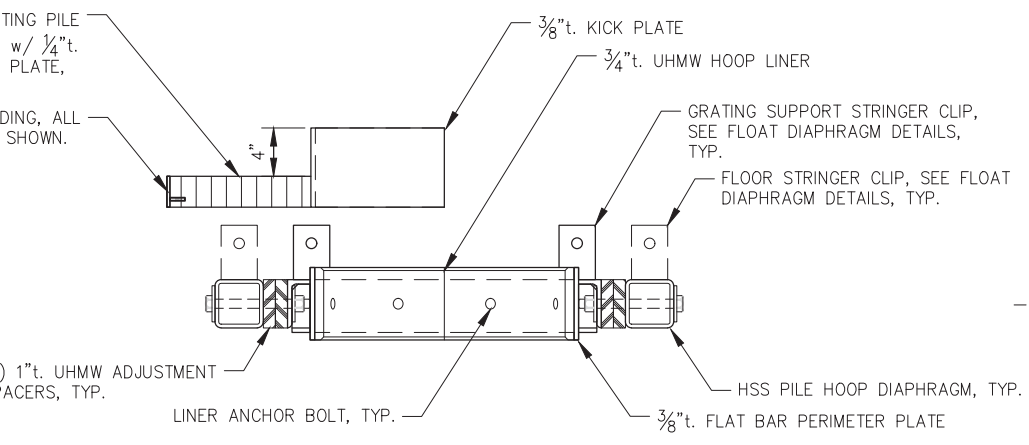
**INTERNAL PILE HOOP - FLOAT SECTION**



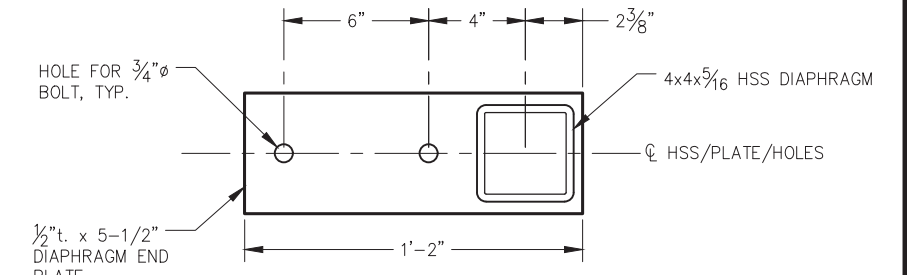
**INTERNAL PILE HOOP - ASSEMBLY PLAN VIEW**

**NOTE:**  
WELD BENT FLAT BAR TO GRATING PER GRATING MANUFACTURER DETAIL FOR LOAD BANDING.

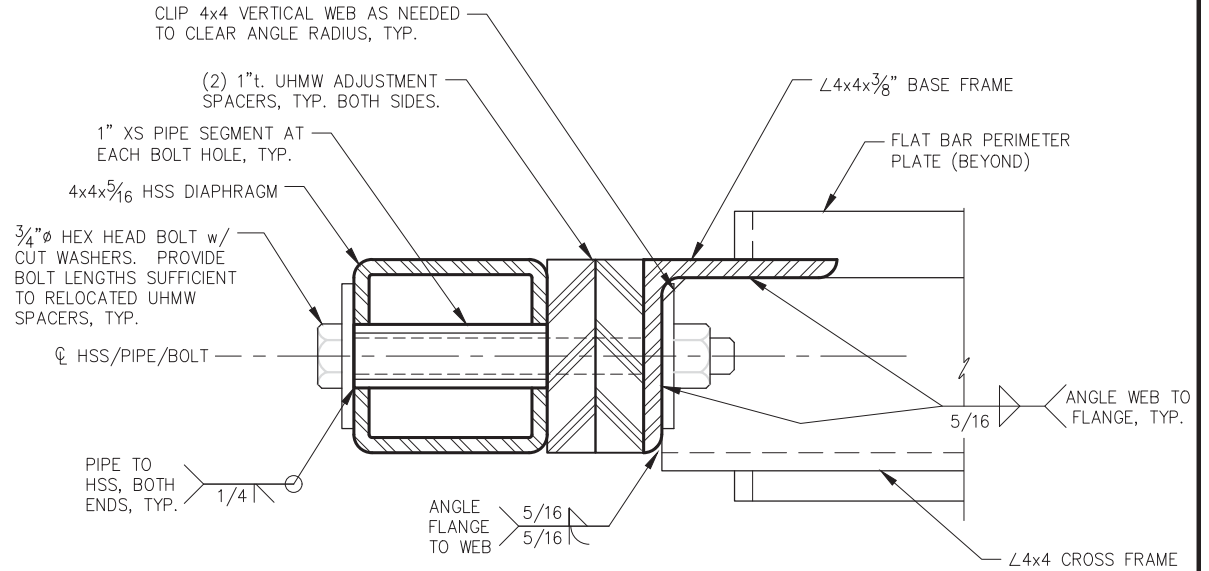
**NOTE:**  
PILE HOOP PROVIDES 2" OF ADJUSTMENT IN EACH DIRECTION TO ACCOUNT FOR PILE MISS-ALIGNMENT IN DRILLED SOCKETS. CONTRACTOR SHALL INSTALL GRATING PILE SURROUND CENTERED ON PILE HOOP BELOW.



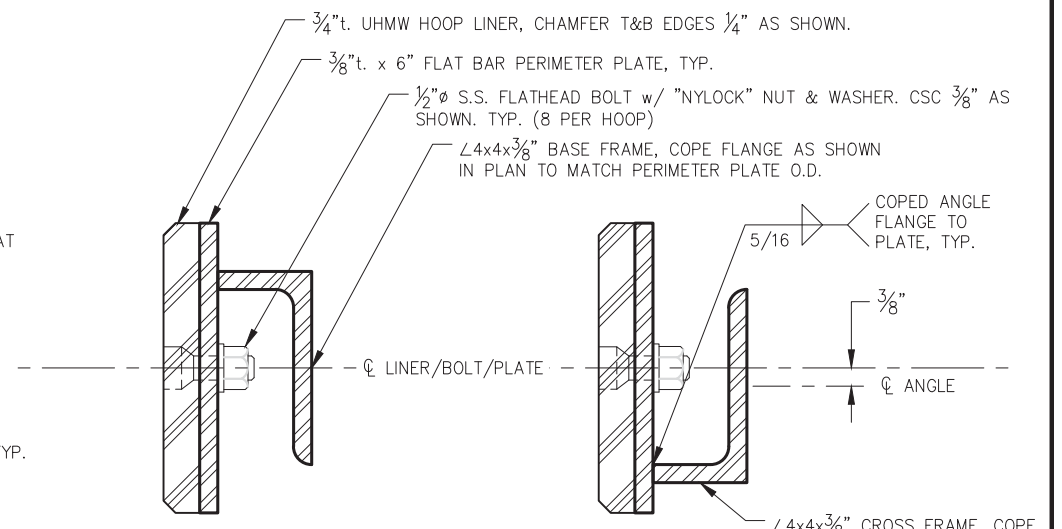
**INTERNAL PILE HOOP - ASSEMBLY SECTION VIEW**



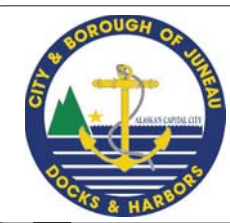
**DIAPHRAGM END PLATE**



**HSS TO ANGLE CONN.**



**HOOP TO ANGLE CONN.**



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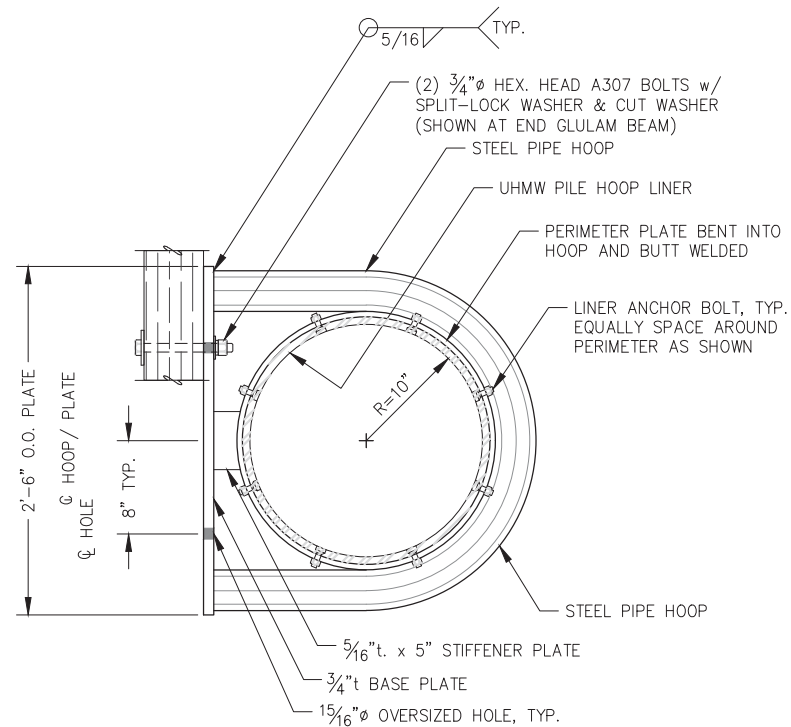


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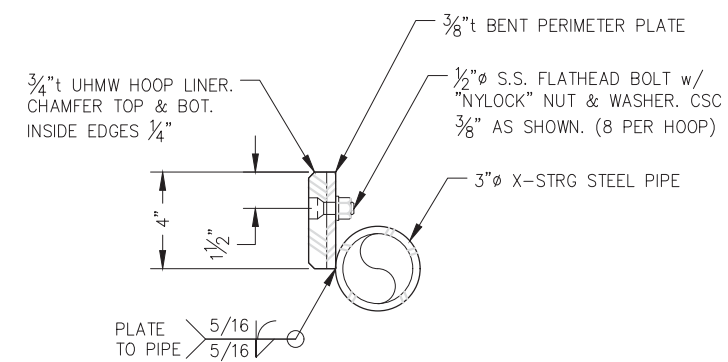
SHEET TITLE:  
**INTERNAL PILE HOOP DETAILS**

PND PROJECT NO.: 182066      C.A.N. NO.: AECC250

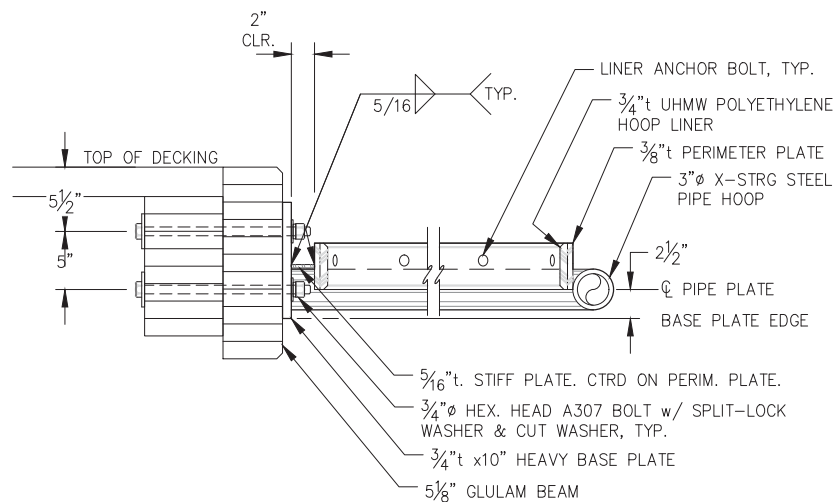
**6.11**



**EXTERNAL 16" DIA. PILE HOOP PLAN**



**TYPICAL HOOP SECTION**



**EXTERNAL PILE HOOP ELEVATION**

**REVISIONS**

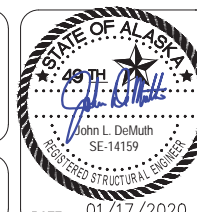
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SCALE:



DATE: 01/17/2020

**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
CBJ CONTRACT NO. DH20-021

SHEET TITLE:

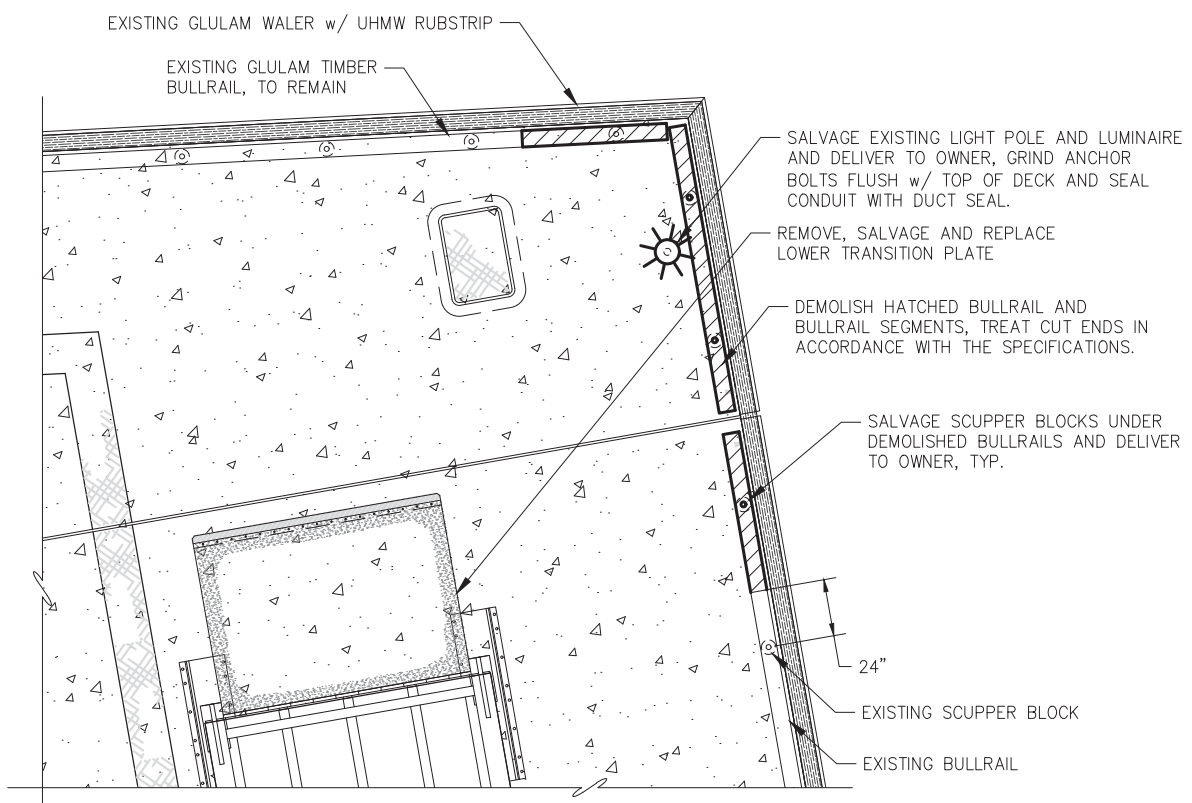
**EXTERNAL PILE HOOP DETAILS**

**6.12**

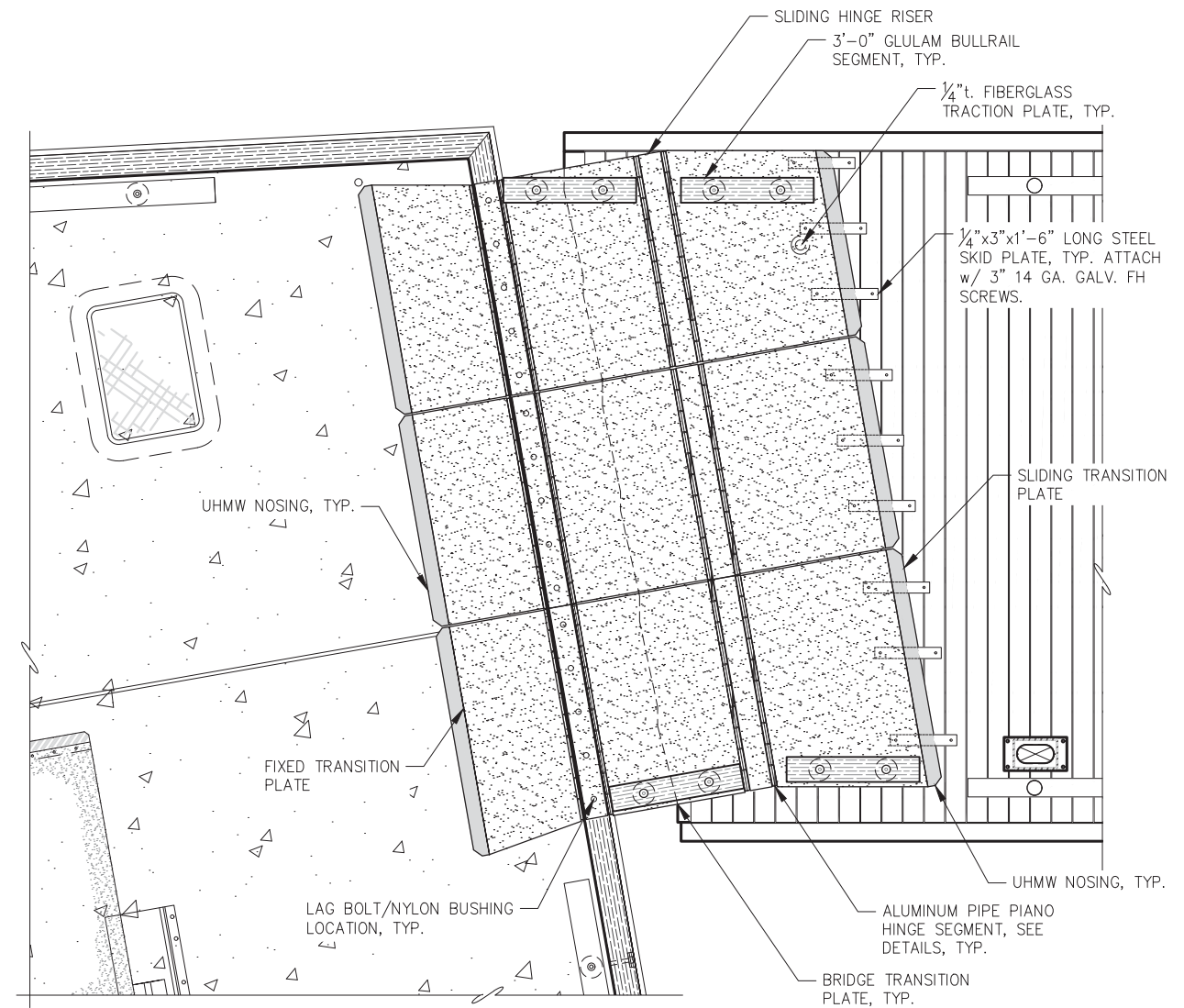
PND PROJECT NO.: 182066

C.A.N. NO.: AECC250

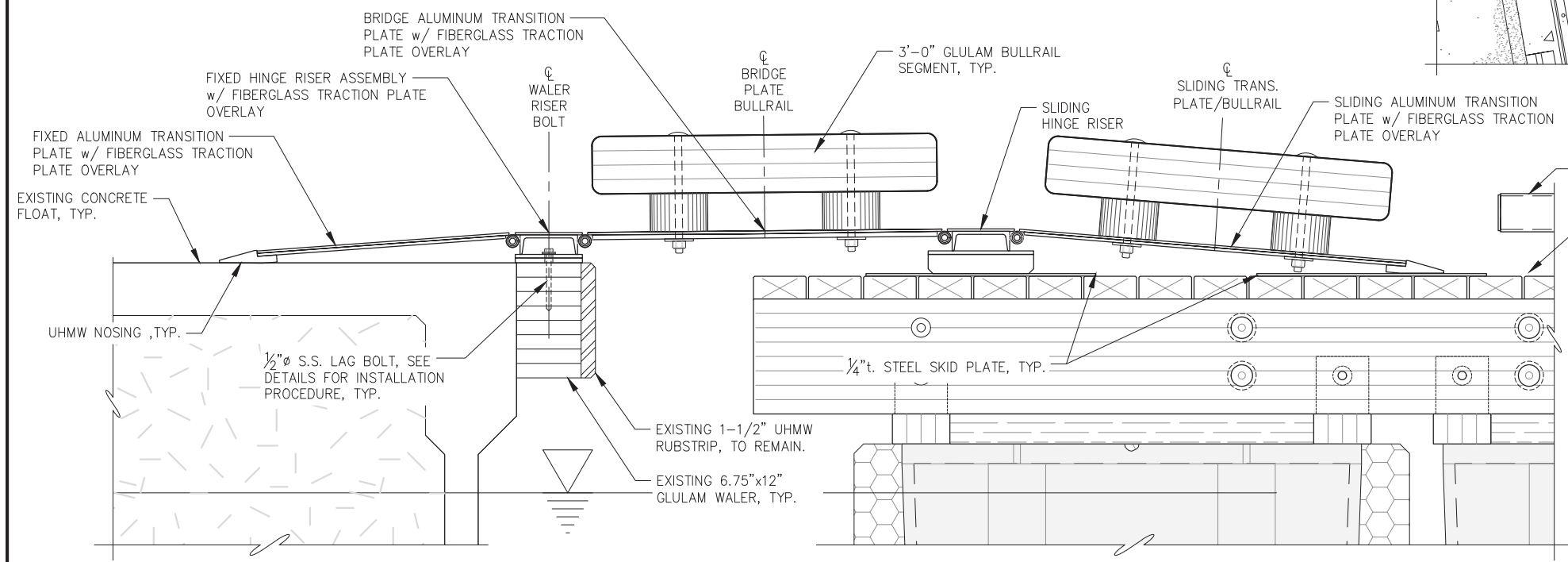




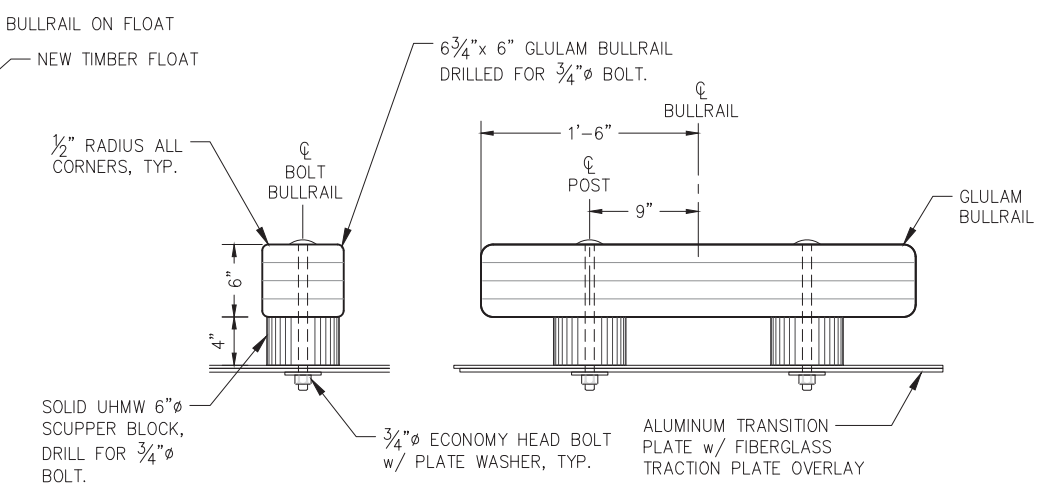
**DEMOLITION FOR TRANSITION PLATE INSTALLATION**



**TRANSITION PLATE LOCATION PLAN**  
(FIELD LOCATE PER ENGINEER DIRECTION)



**TRANSITION PLATE ASSEMBLY SECTION**



**SECTION**

**ELEVATION**

**SHORT BULLRAIL SEGMENT**



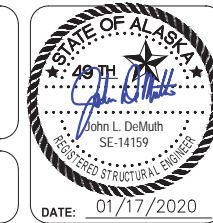
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REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.



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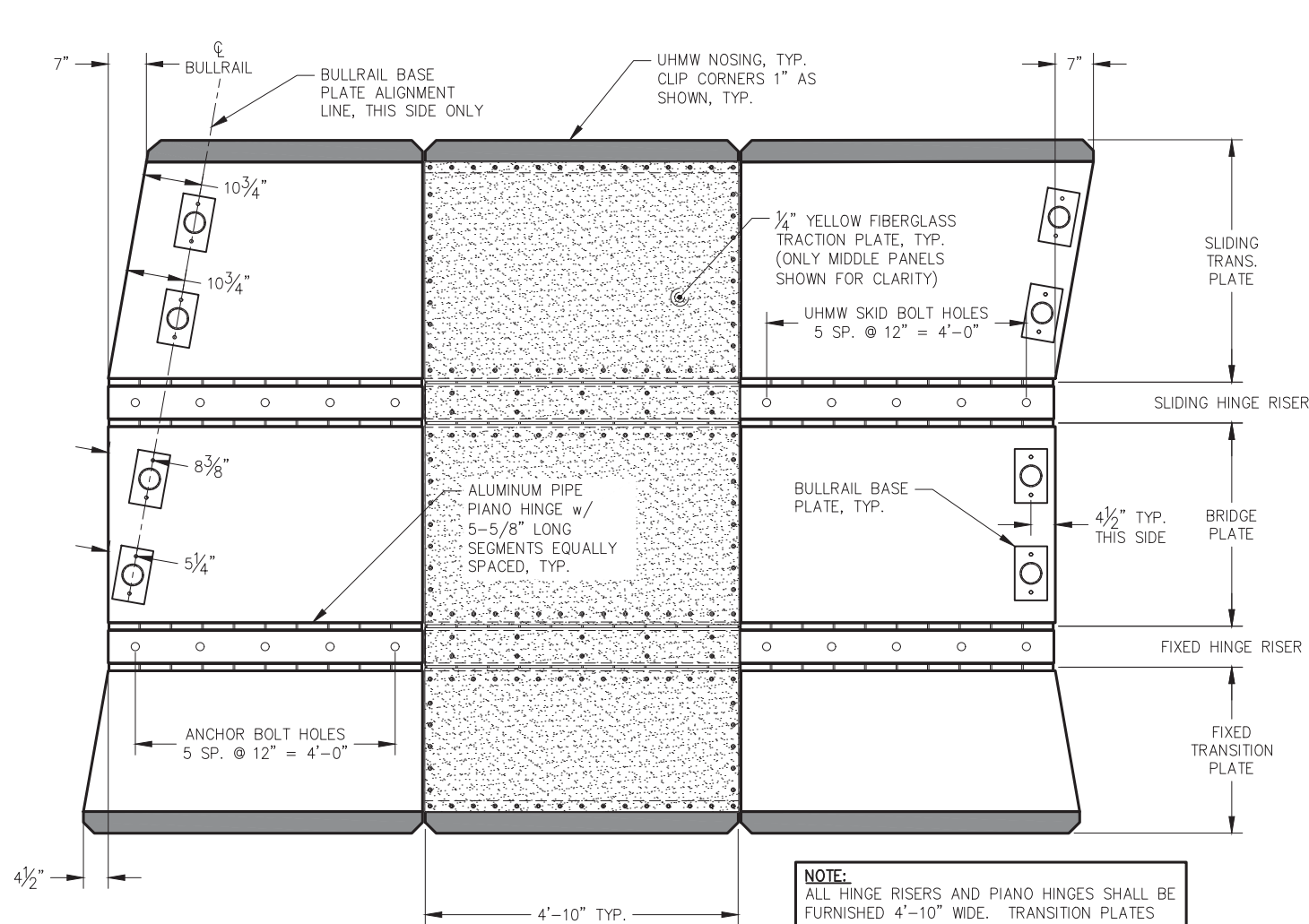


**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
**CBJ CONTRACT NO. DH20-021**

SHEET TITLE:  
**TRANSITION PLATE ASSEMBLY**  
**DEMOLITION AND PLAN**

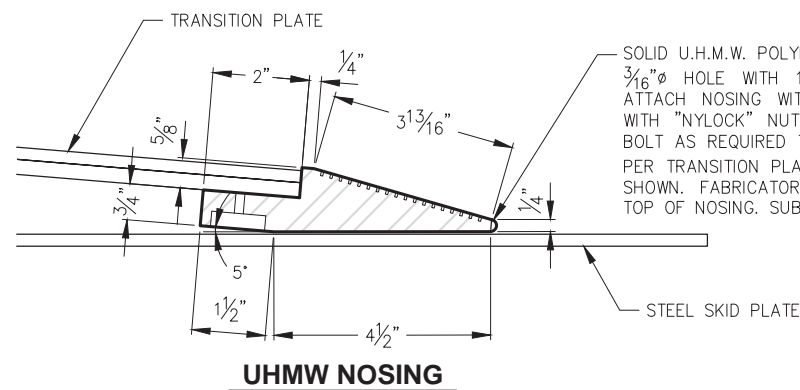
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PND PROJECT NO.: 182066 C.A.N. NO.: AECC250



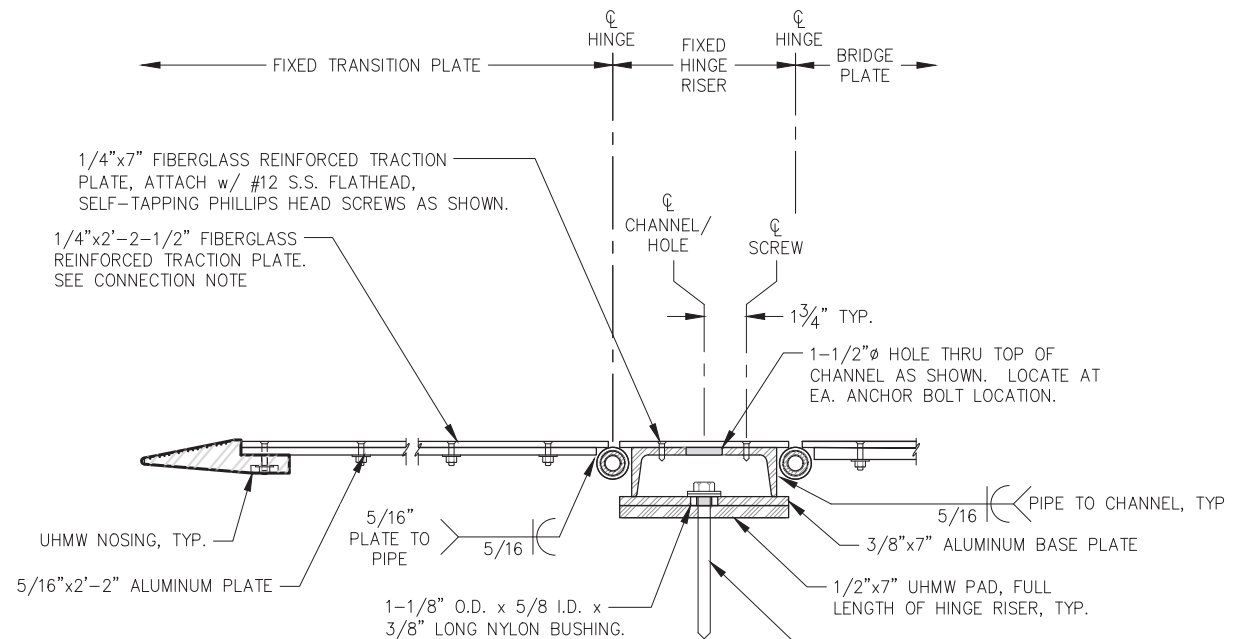
**TRANSITION PLATE ASSEMBLY LAYOUT PLAN**

**NOTE:**  
ALL HINGE RISERS AND PIANO HINGES SHALL BE FURNISHED 4'-10" WIDE. TRANSITION PLATES SHALL BE 4'-10" WIDE AT PIANO HINGE, INCREASE OR DECREASE WIDTH OF TRANSITION PLATE ON NOSING END AS INDICATED.

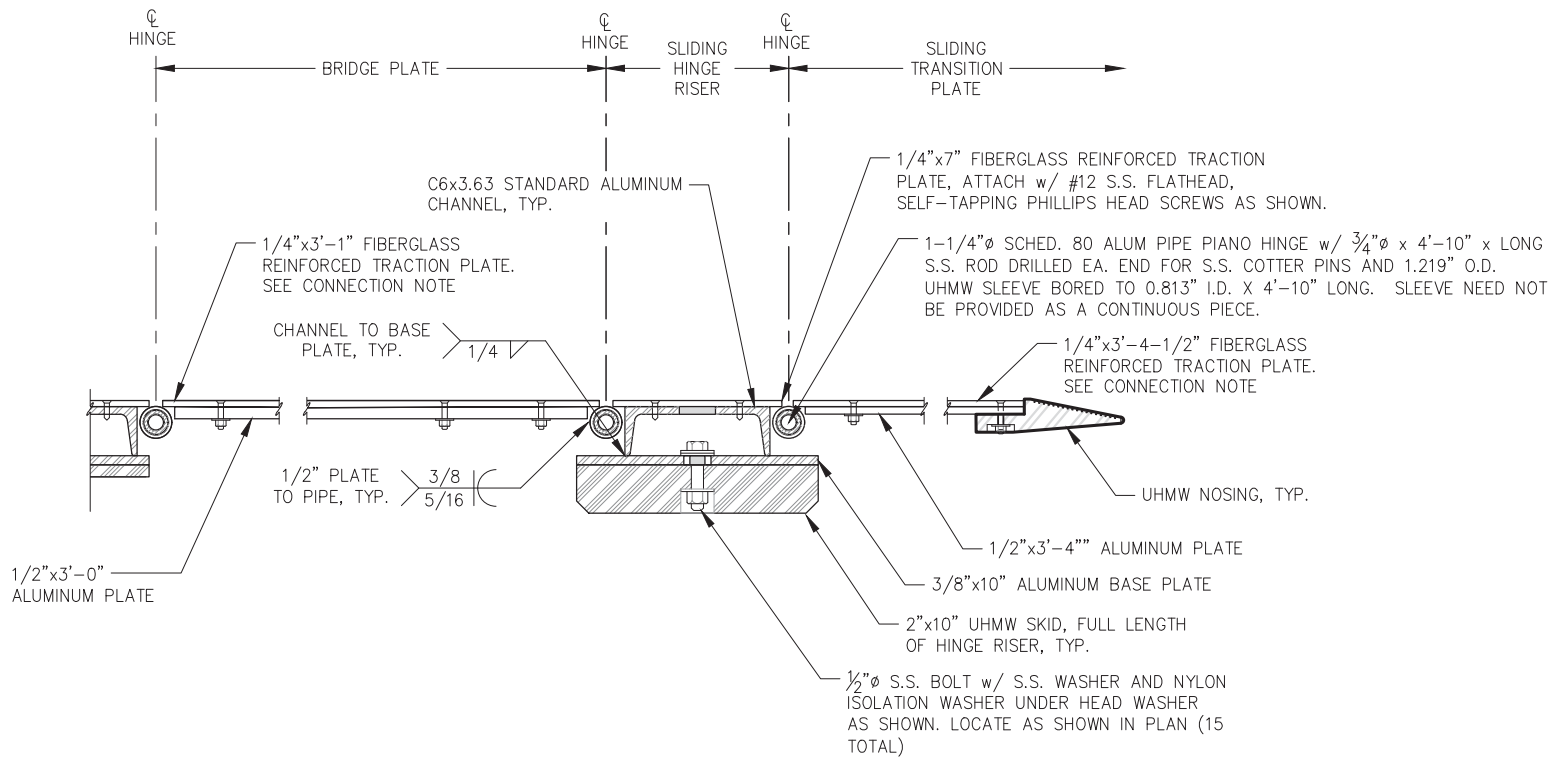


**UHMW NOSING**

SOLID U.H.M.W. POLYETHYLENE PER SPECIFICATIONS. PROVIDE 3/16" Ø HOLE WITH 1 1/16" Ø x 5/16" DEEP CSC AS SHOWN. ATTACH NOSING WITH #10 S.S. FLATHEAD PHILLIPS BOLT WITH "NYLOCK" NUT AND 1" Ø S.S. FENDER WASHER. TRIM BOLT AS REQUIRED TO BE FLUSH WITH NUT. LOCATE BOLTS PER TRANSITION PLATE PLAN. CHAMFER BACK EDGE 1/8" AS SHOWN. FABRICATOR TO PROVIDE NON-SKID SURFACE ON TOP OF NOSING. SUBMIT FOR APPROVAL.



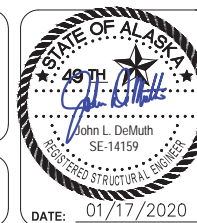
**NOTE:**  
ATTACH FIBERGLASS REINFORCED TRACTION PLATE w/ #10 S.S. FLATHEAD PHILLIPS BOLTS w/ "NYLOCK" NUTS AND WASHERS AS SHOWN. PROVIDE BOLTS AT 4" O.C. MAX. AND 2" MAX. FROM EDGES, AS SHOWN, ALL EDGES OF PLATE.



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**STATTER HARBOR IMPROVEMENTS PH III(B)**  
**CBJ CONTRACT NO. DH20-021**

SHEET TITLE:  
**TRANSITION PLATE ASSEMBLY**  
**DETAILS**

**6.14**

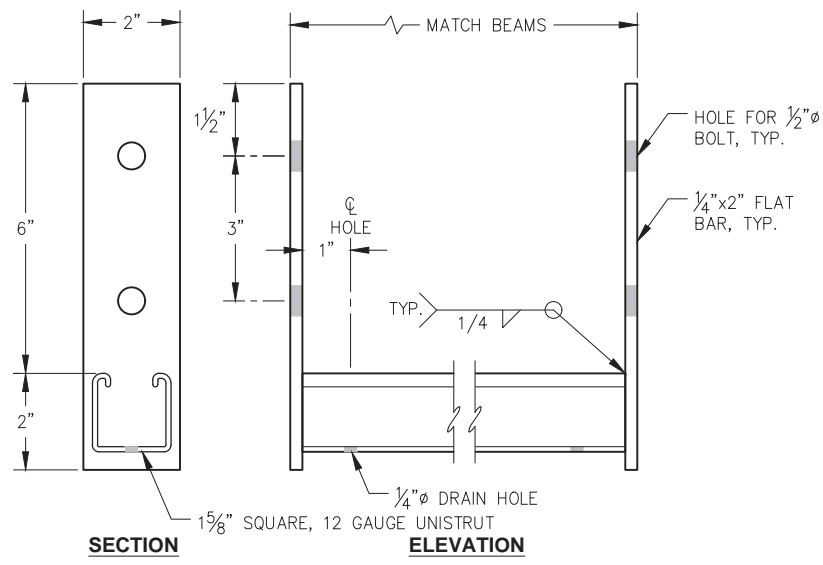
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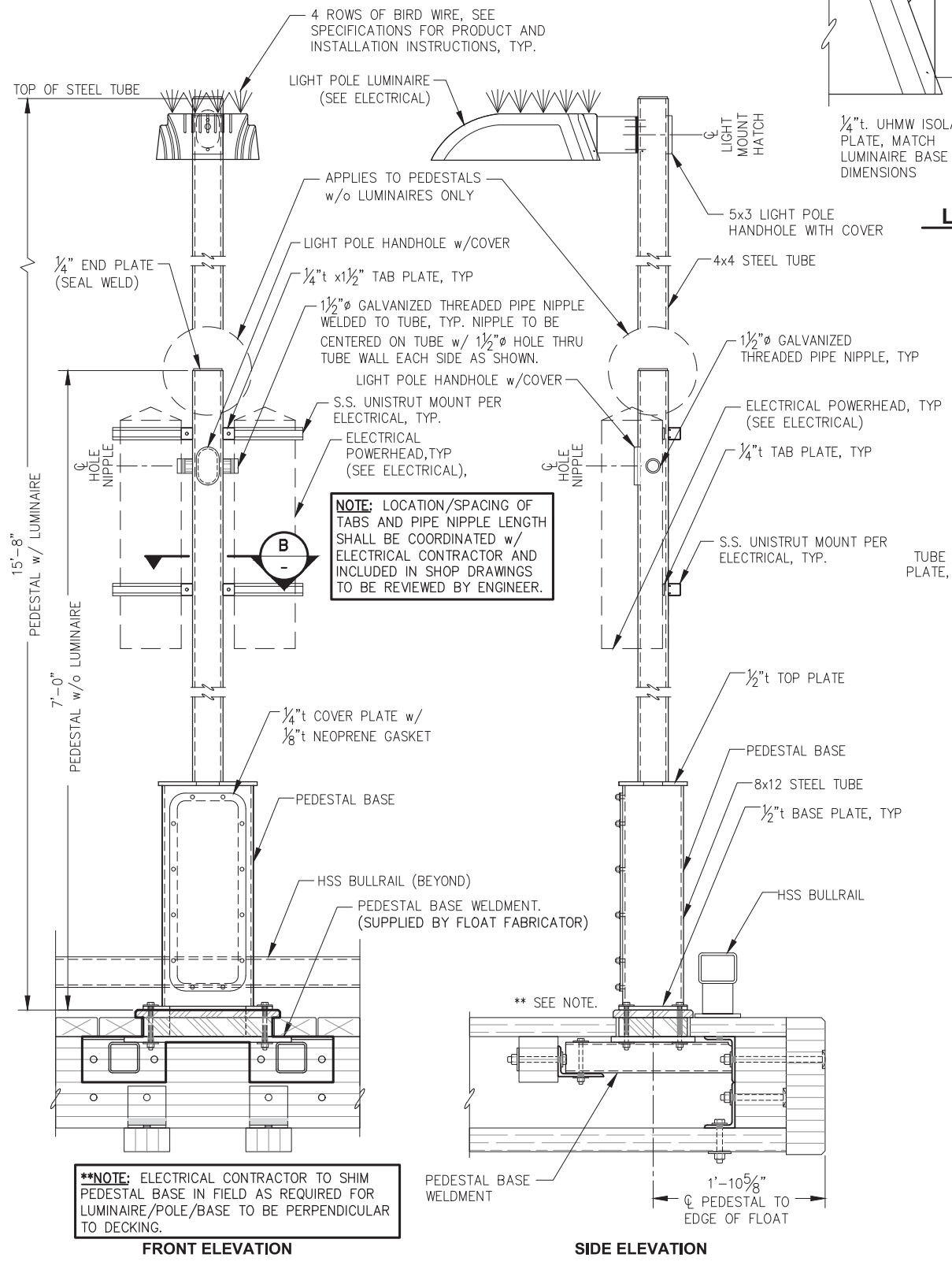
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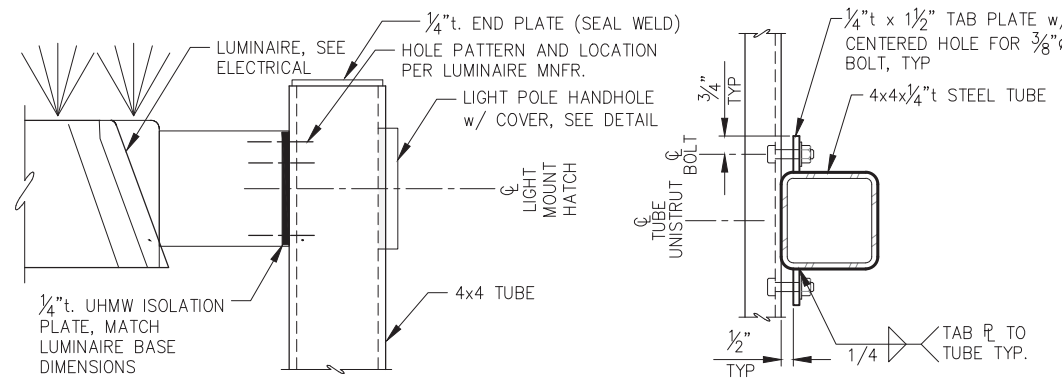


**CABLE TRAY SUPPORT**  
(LOCATE 2'-6" FROM THE END OF EACH MODULE UNLESS OTHERWISE NOTED.)

**NOTE:**  
UTILIZE CUT WASHERS AGAINST STEEL SURFACES AND PLATE WASHERS AGAINST TIMBER SURFACES, UNLESS OTHERWISE NOTED.

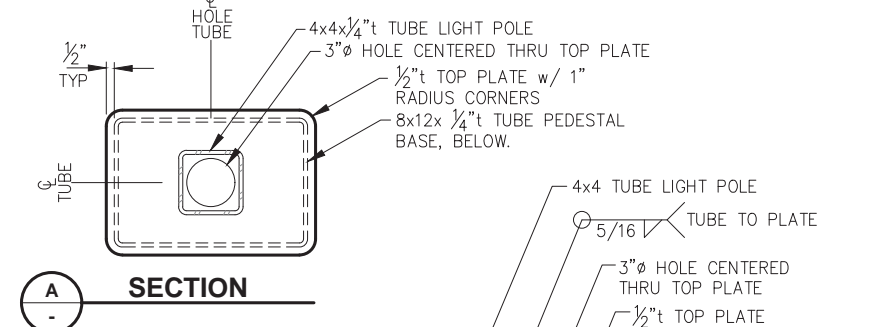


**\*\*NOTE:** ELECTRICAL CONTRACTOR TO SHIM PEDESTAL BASE IN FIELD AS REQUIRED FOR LUMINAIRE/POLE/BASE TO BE PERPENDICULAR TO DECKING.

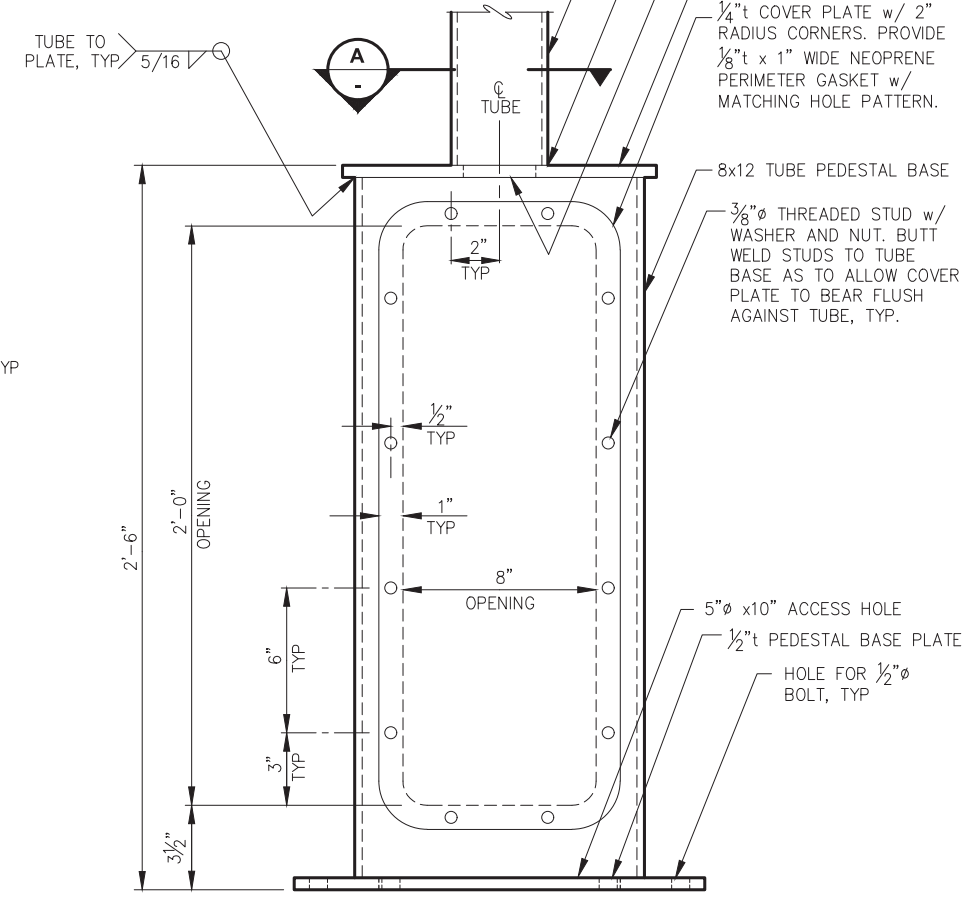


**LIGHT POLE TOP DETAIL**

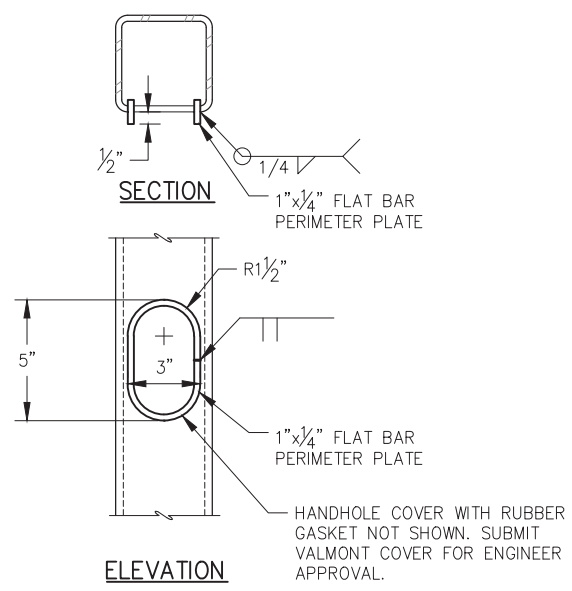
**SECTION B**



**SECTION A**



**PEDESTAL DETAIL**



**LIGHT POLE HANDHOLE**

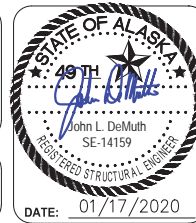
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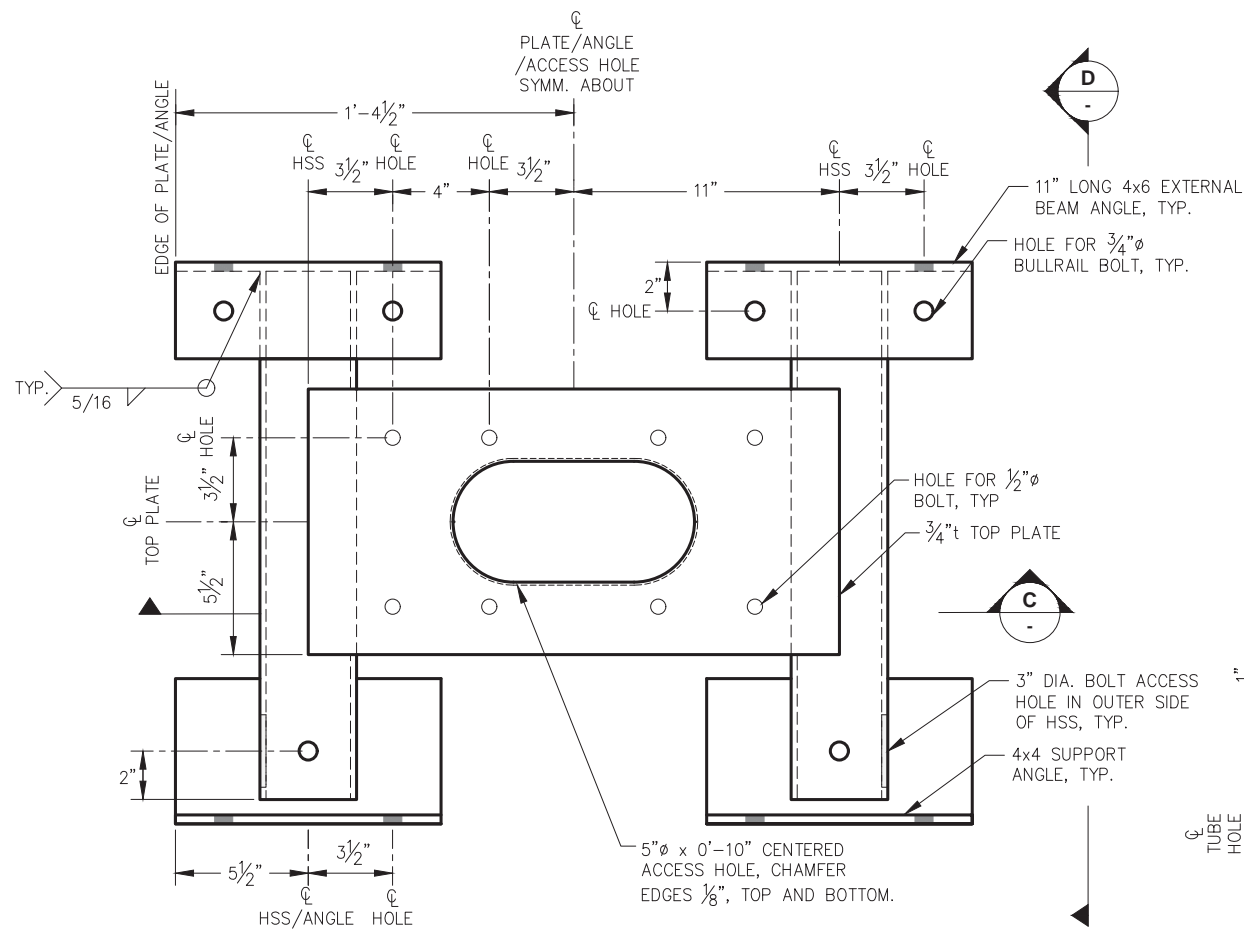
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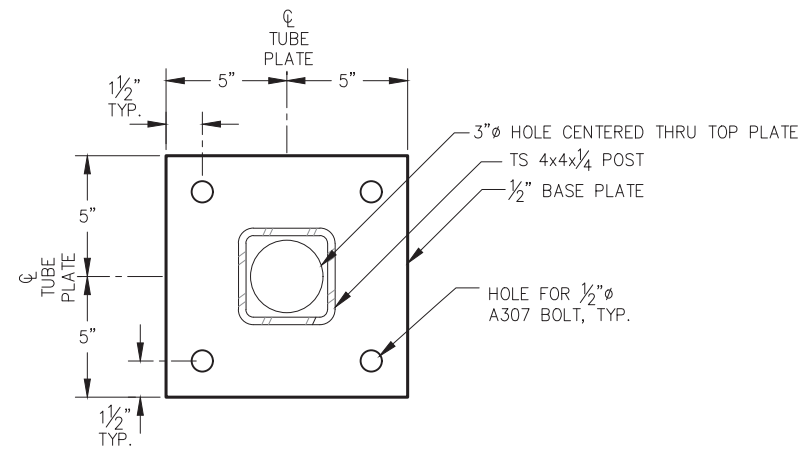


**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
CBJ CONTRACT NO. DH20-021

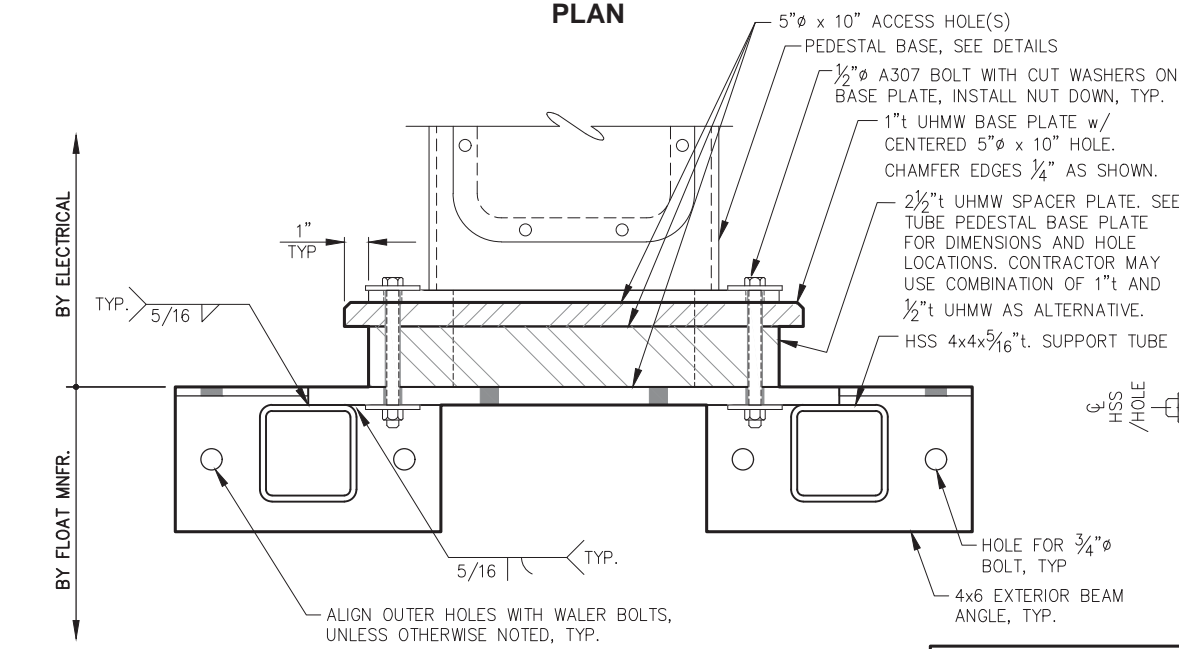
SHEET TITLE:  
**ELECTRICAL EQUIPMENT SUPPORT DETAILS**  
PND PROJECT NO.: 182066 C.A.N. NO.: AECC250



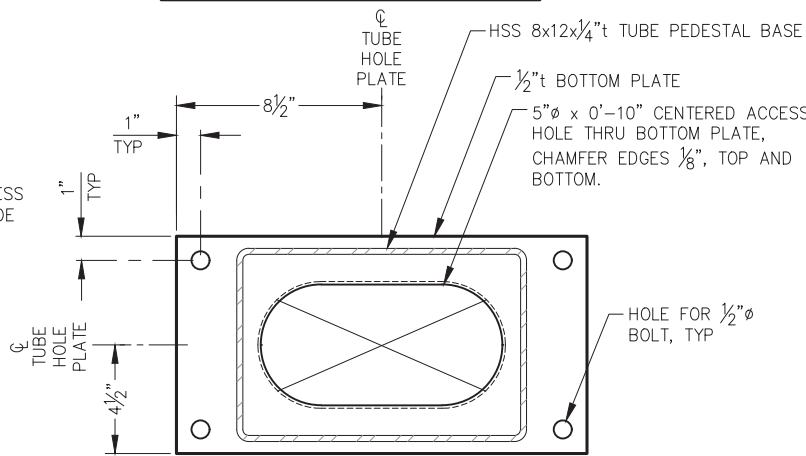
**ELECTRICAL PEDESTAL BASE WELDMENT PLAN**



**POST BASE PLATE DETAIL**

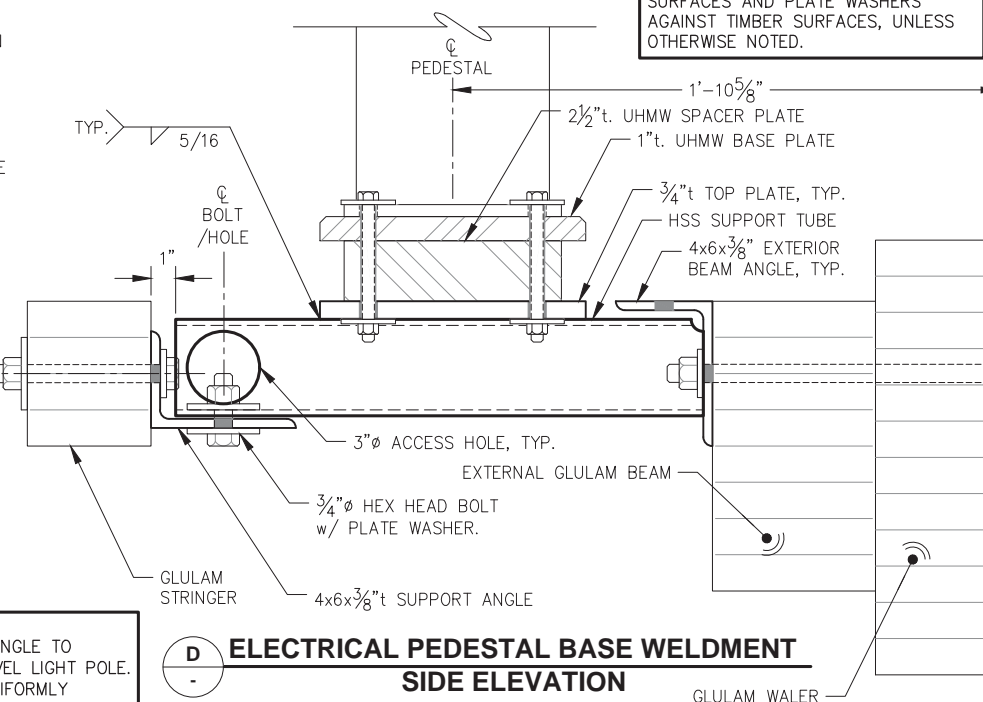


**ELECTRICAL PEDESTAL BASE WELDMENT FRONT ELEVATION**

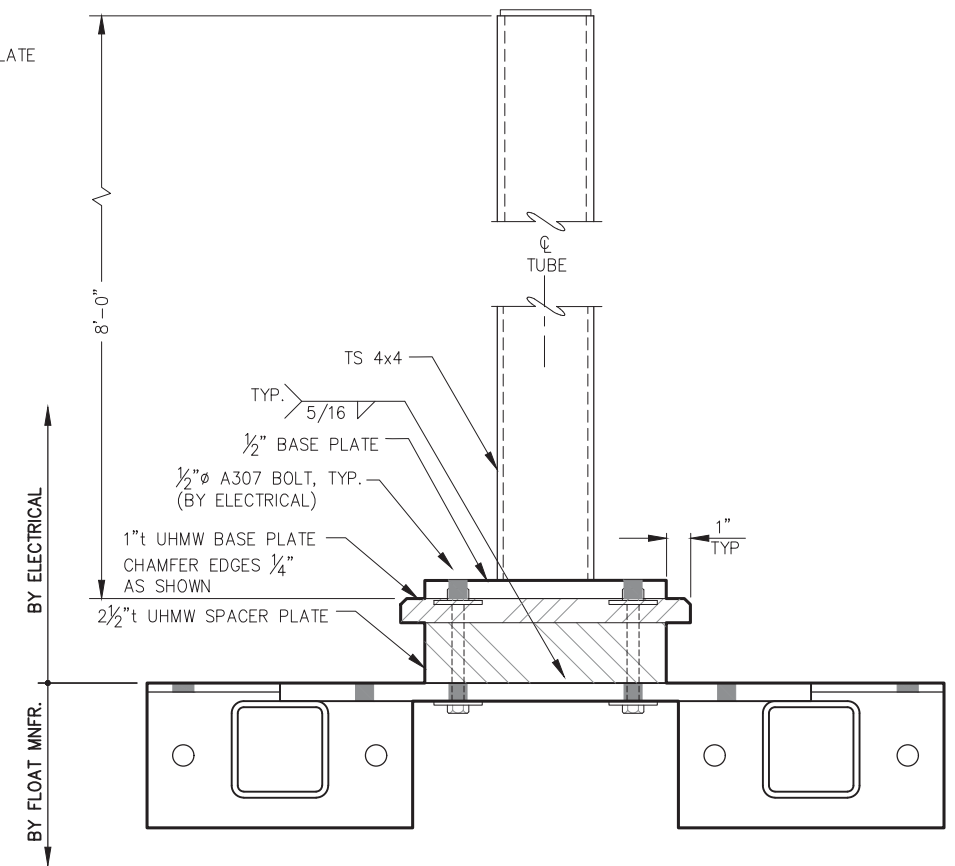


**TUBE PEDESTAL BASE PLATE**

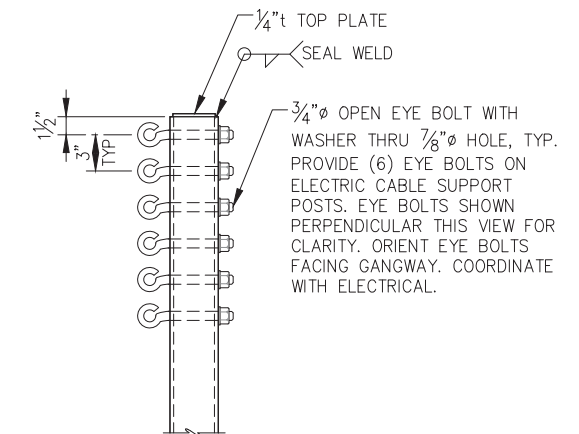
**NOTE:**  
UTILIZE CUT WASHERS AGAINST STEEL SURFACES AND PLATE WASHERS AGAINST TIMBER SURFACES, UNLESS OTHERWISE NOTED.



**ELECTRICAL PEDESTAL BASE WELDMENT SIDE ELEVATION**



**ELECTRICAL SUPPORT POST FRONT ELEVATION**



**ELECT. CABLE SUPPORT POST**

**NOTE:**  
SHIM BETWEEN TUBE AND ANGLE TO ELIMINATE GAP AND/OR LEVEL LIGHT POLE. TOP PLATE SHALL BEAR UNIFORMLY AGAINST BOTTOM OF DECKING.



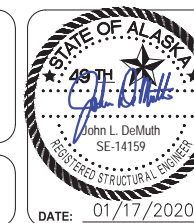
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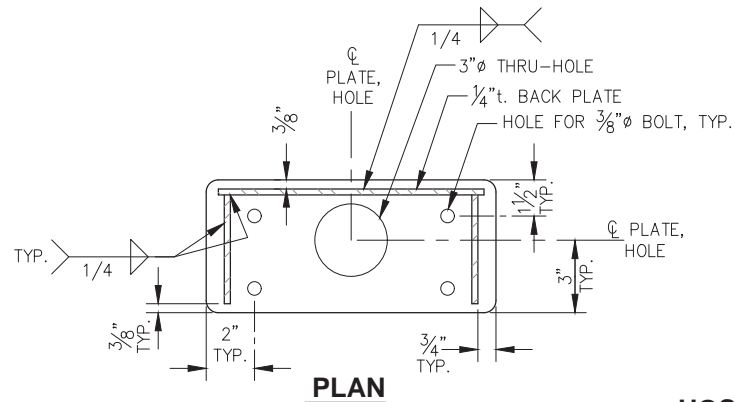
**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
**CBJ CONTRACT NO. DH20-021**

SHEET TITLE:  
**ELECTRICAL EQUIPMENT**  
**SUPPORT DETAILS**

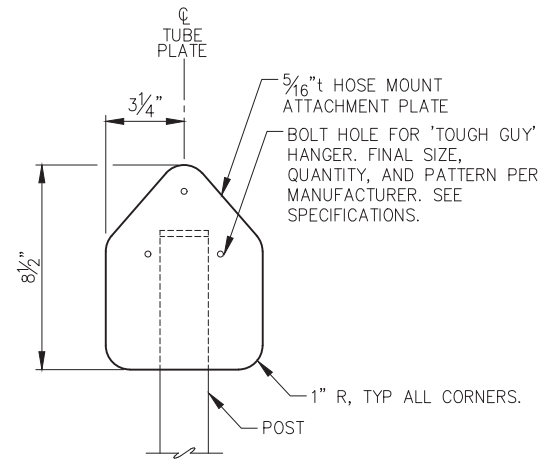
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PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

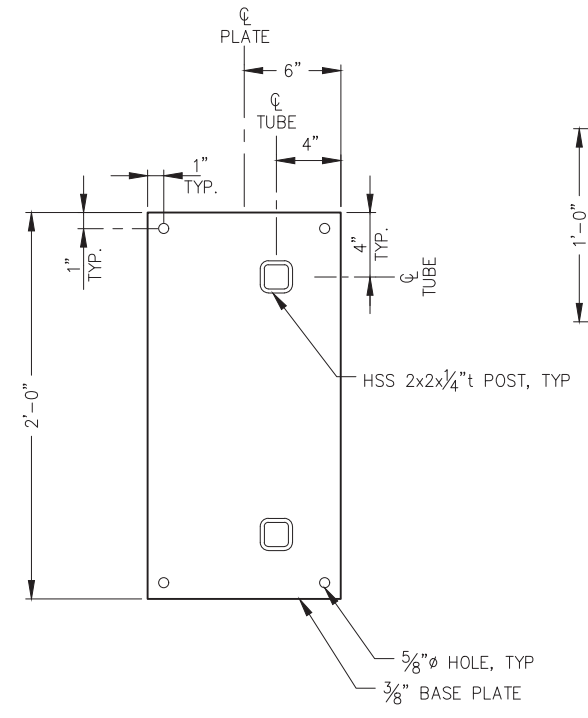
**NOTE:**  
 1. COORDINATE w/ J-BOX MFR AS REQ'D  
 2. EASE ALL EDGES



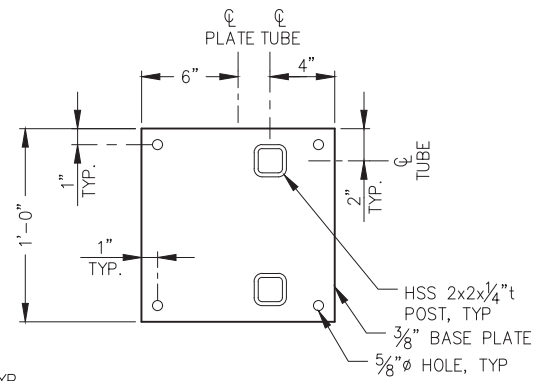
**PLAN**



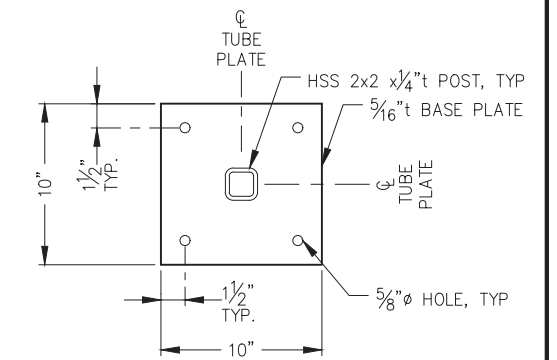
**HOSE MOUNT ATTACHMENT PLATE - ELEVATION**



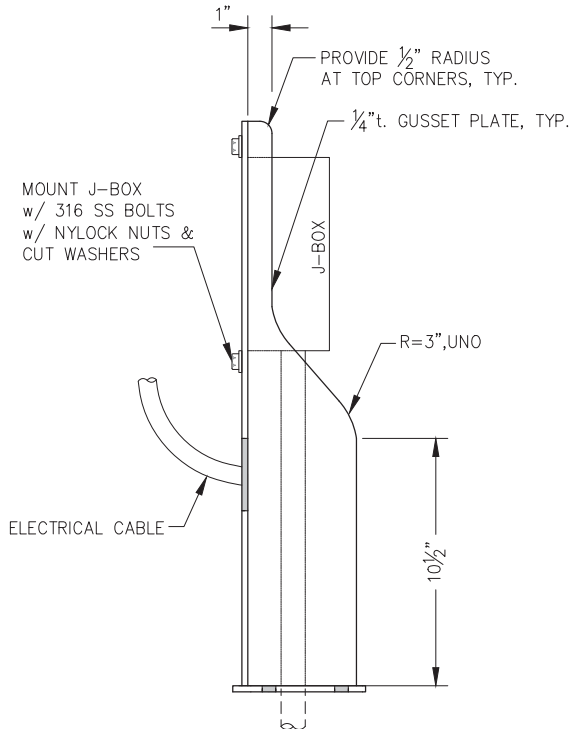
**LIFE RING BASE - PLAN**



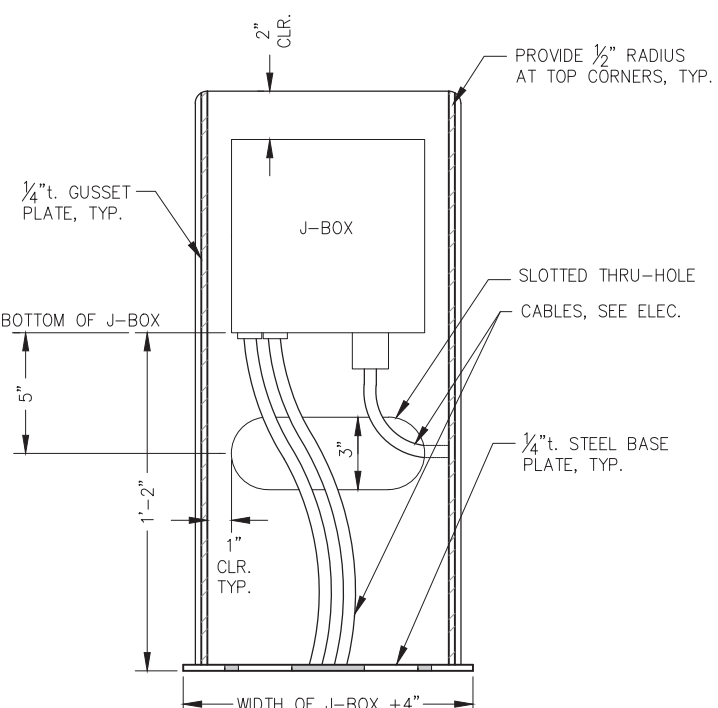
**FIRE EXTING. BASE - PLAN**



**HOSE MOUNT BASE PLATE - PLAN**

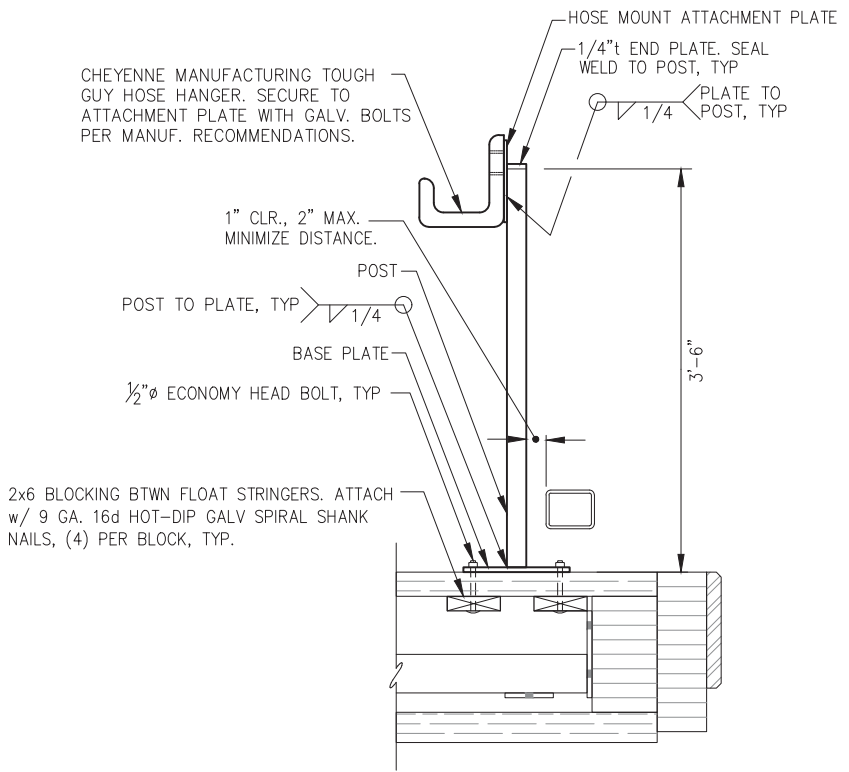


**SIDE ELEVATION**



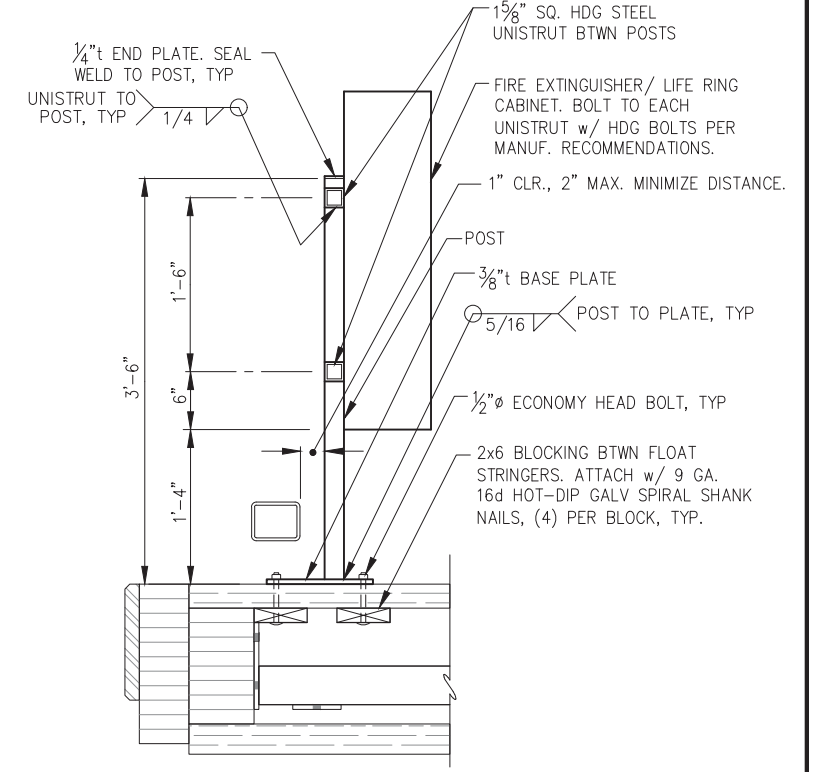
**FRONT ELEVATION**

**HEAT TRACE J-BOX STAND DETAIL**



**HOSE MOUNT - ELEVATION**

NOTE: FINAL LOCATION PER FLOAT PLANS AND ENGINEER DIRECTION.



**FIRE EXTINGUISHER/ LIFE RING CABINET - ELEVATION**

NOTE: FINAL LOCATION PER FLOAT PLANS AND ENGINEER DIRECTION.

**REVISIONS**

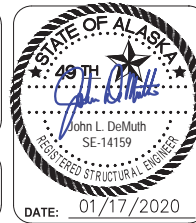
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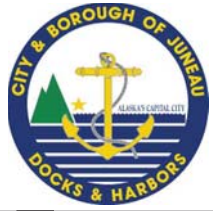
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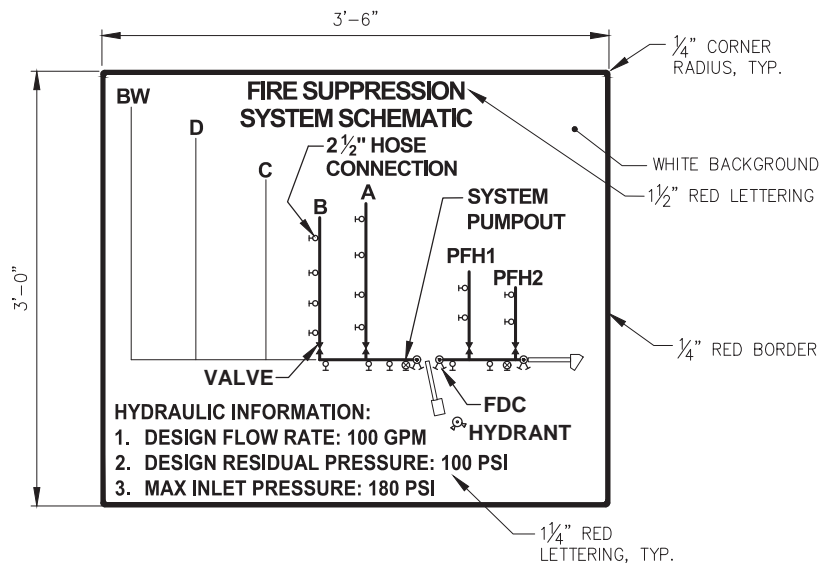
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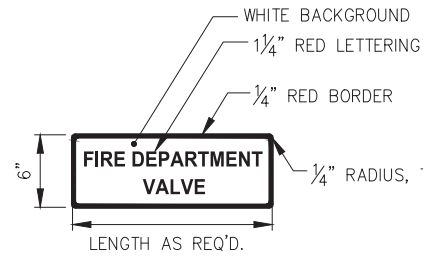
**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
**CBJ CONTRACT NO. DH20-021**

SHEET TITLE:  
**SAFETY EQUIPMENT**  
**SUPPORT DETAILS**  
 PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

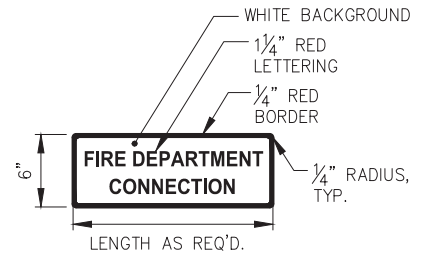




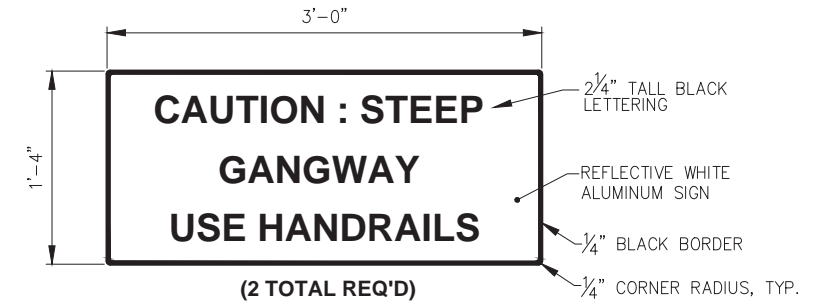
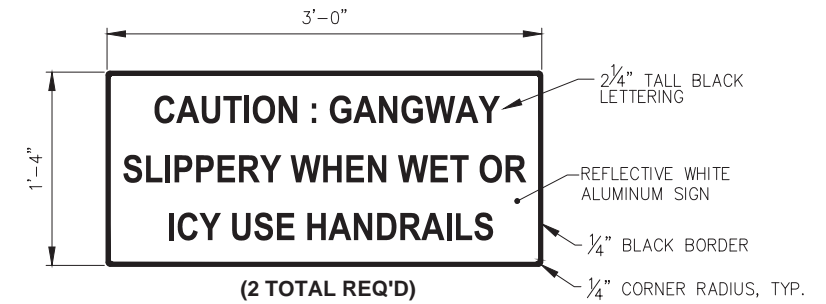
**NOTE:** PROVIDE (2) TO BE MOUNTED NEAR EACH GANGWAY, FINAL LOCATION PER OWNER DIRECTION. REMOVE EXISTING SCHEMATIC SIGN AT EXISTING GANGWAY.



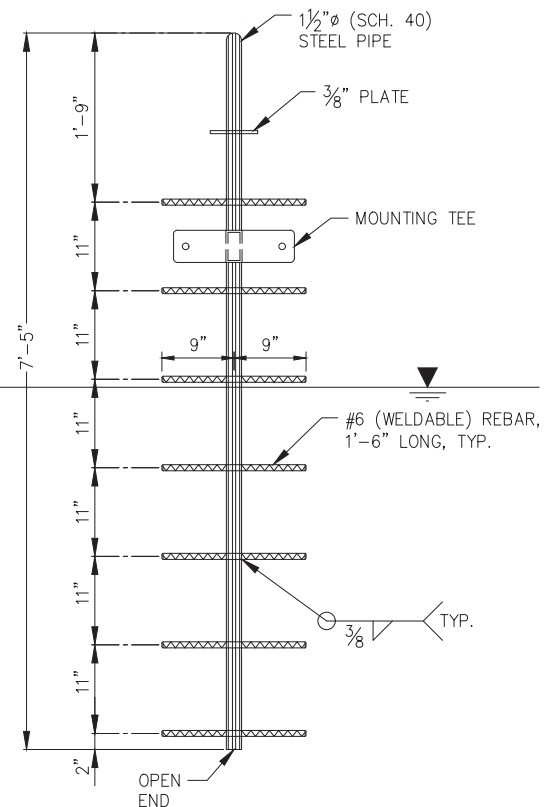
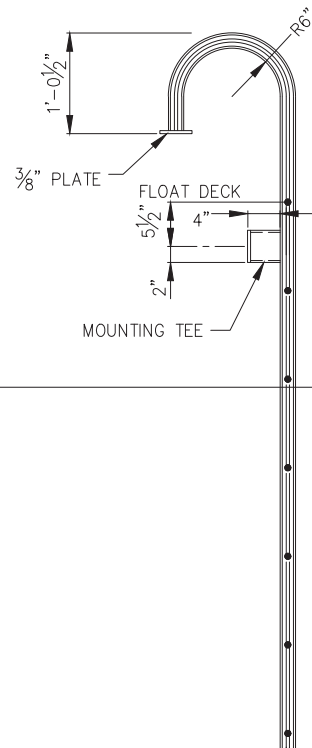
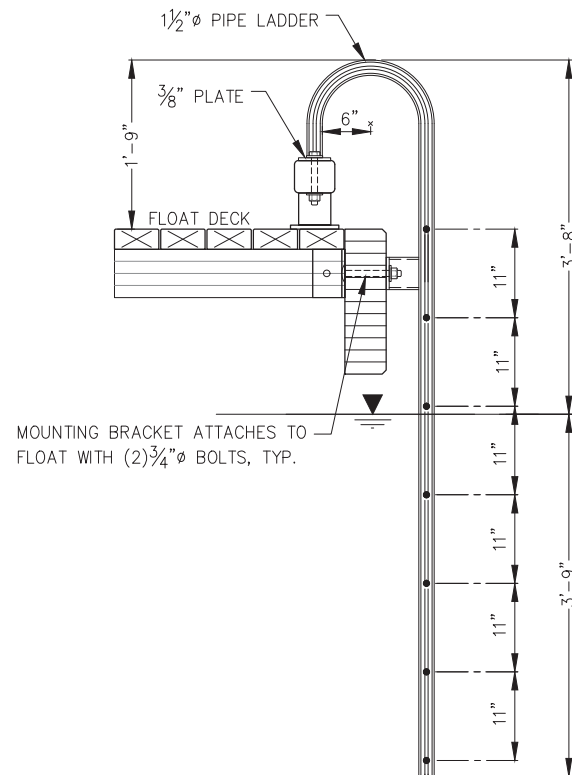
**NOTE:** TYP. OF (4), MOUNT ON BULLRAIL ADJACENT TO MAINWALK DRY FIRE LINE VALVES w/ 1/4"x3" S.S. SCREWS w/WASHERS. FINAL LOCATION PER ENGINEER DIRECTION.



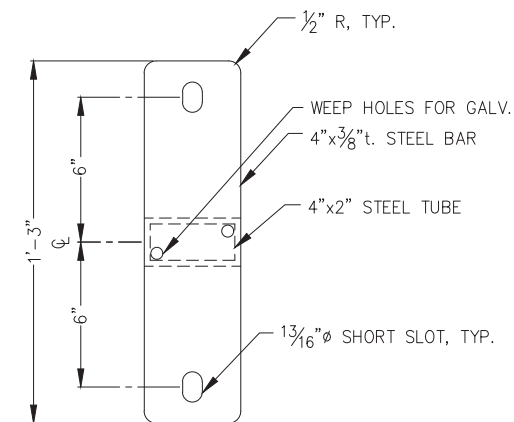
**NOTE:** TYP. OF (2), MOUNT ON BULLRAIL ADJACENT TO DRY FIRE LINE INLET w/ 1/4"x3" S.S. SCREWS w/WASHERS. FINAL LOCATION PER ENGINEER DIRECTION.



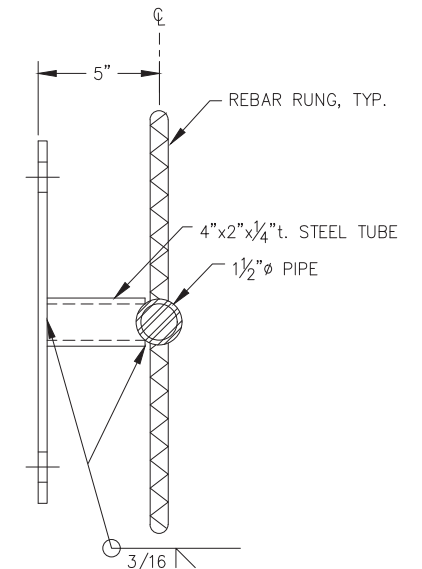
**NOTE:** MOUNT GANGWAY CAUTION SIGNS TO APPROACH DOCK SAFETY RAILS w/(3) HDG U-BOLTS, OR SIMILAR. FINAL LOCATION PER OWNER/ENGINEER



**FIXED SAFETY LADDER**



**LADDER MOUNTING TEE**



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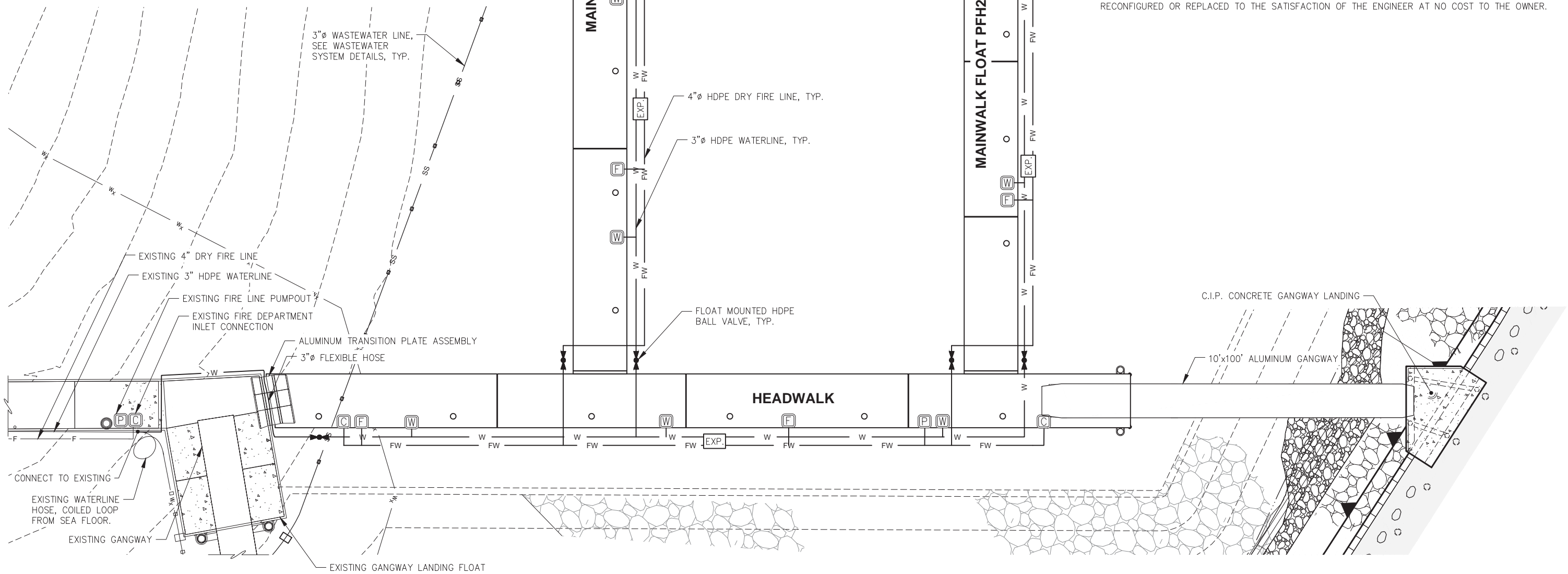


**CITY & BOROUGH OF JUNEAU, ALASKA  
STATTER HARBOR IMPROVEMENTS PH III(B)  
CBJ CONTRACT NO. DH20-021**

SHEET TITLE:  
**SIGNAGE AND LADDER  
DETAILS**  
PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

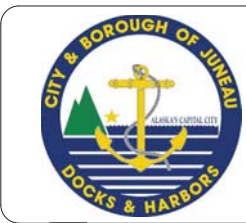
LEGEND		
SYMBOL	DESCRIPTION	QUANTITY
	HDPE BALL VALVE	5
	WATER PEDESTAL	8
	FIRE STANDPIPE	6
	FIRE DEPARTMENT INLET CONNECTION	2
	FIRE LINE PUMPOUT	1
	4" FIRE LINE	500
	3" WATERLINE	700
	3" WASTEWATER LINE	SEE WASTEWATER PLAN
	EXISTING WATER MAIN	—
	EXPANSION LOOP	3

SEE DETAILED FLOAT PLAN FOR FIRE EXTINGUISHER, LIFE RING AND HOSE MOUNT LOCATIONS.



**GENERAL UTILITY NOTES:**

1. QUANTITIES ESTIMATED FOR REFERENCE PURPOSES ONLY, CONTRACTOR SHALL CONFIRM ALL QUANTITIES PRIOR TO MATERIAL ORDER.
2. ADDITIONAL QUANTITIES SHALL BE PROVIDED FOR SPARE PARTS AS LISTED IN THE TECHNICAL SPECIFICATIONS.
3. UTILITY LINES AND APPURTENANCES SHOWN APPROXIMATE, LOCATE SERVICES ACCORDING TO FLOAT PLAN AND DETAILS AND PER ENGINEER DIRECTION.
4. EXISTING SERVICES ARE SHOWN APPROXIMATE, CONTRACTOR SHALL FIELD VERIFY.
5. ALL BENDS IN THE PIPE THAT EXCEED THE PIPE MANUFACTURER'S RECOMMENDED BENDING RADII SHALL BE COMPLETED WITH ELBOW FITTINGS AS REQUIRED.
6. PRIOR TO MAKING FINAL CONNECTIONS TO THE EXISTING WATER SYSTEM DESIGNATED TO REMAIN THE CONTRACTOR SHALL CONSTRUCT, FLUSH, DISINFECT, AND PRESSURE TEST THE NEW WATERLINE AND FLEXIBLE HOSE ASSEMBLIES. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY BLIND FLANGES, TAPS, FITTINGS AND VALVES AS REQUIRED TO COMPLETE THE WORK IN ACCORDANCE WITH SPECIFICATIONS. FINAL CONNECTION SHALL BE COORDINATED WITH THE ENGINEER, OWNER AND CBJ WATER DEPT. SUCH THAT SYSTEM DOWN TIME IS LIMITED TO 4 HOURS MAXIMUM. FINAL CONNECTIONS SHALL BE DISINFECTED IAW AWWA C651.
7. MINOR FITTINGS AND VARIOUS SYSTEM APPURTENANCES NOT SHOWN IN UTILITY SHEETS MAY BE REQUIRED TO CONSTRUCT UTILITY SYSTEMS. CONTRACTOR SHALL USE INDUSTRY STANDARD PRACTICES TO ACHIEVE ALL CONNECTIONS NOT DETAILED IN ACCORDANCE WITH THE SPECIFICATIONS AND CONSISTENT WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS PER ENGINEER DIRECTION.
8. HOSES SHALL BE MONITORED THROUGH MULTIPLE TIDAL CYCLES TO ENSURE NO BINDING, STRETCHING OR OTHERWISE DAMAGING HOSE CONDITIONS OCCUR. UNSATISFACTORY HOSE INSTALLATION SHALL BE RECONFIGURED OR REPLACED TO THE SATISFACTION OF THE ENGINEER AT NO COST TO THE OWNER.

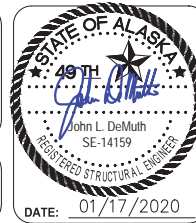


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ENGINEERS, INC.

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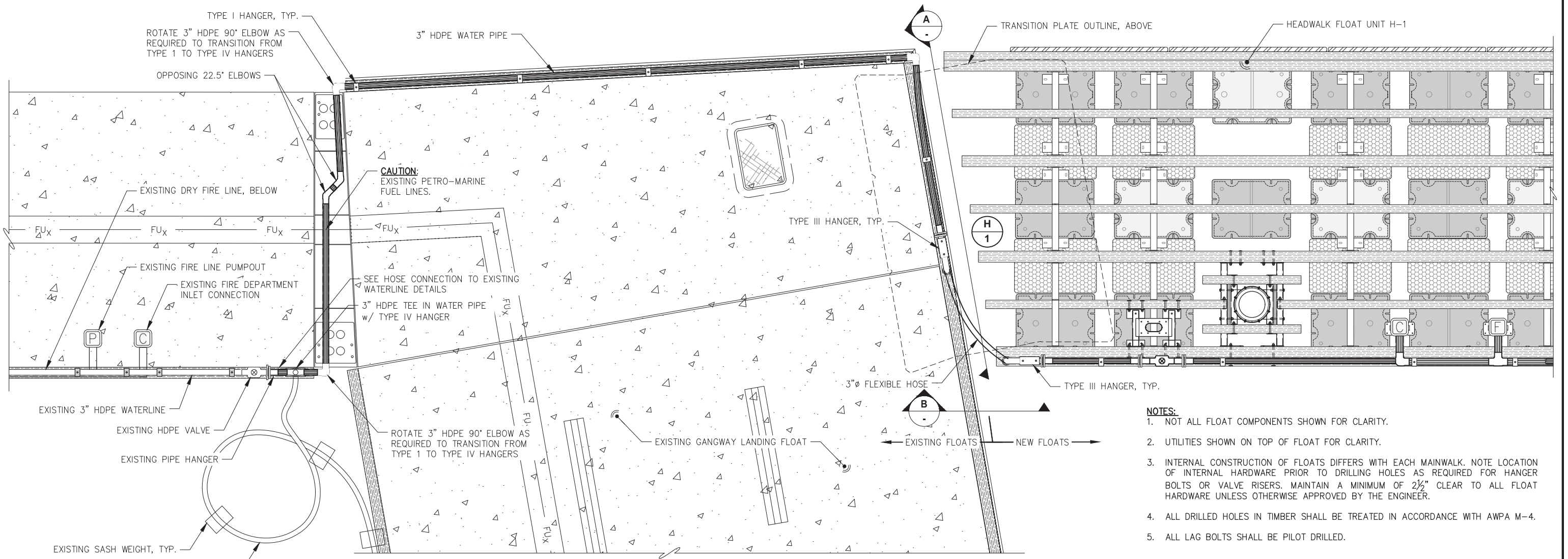


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**STATTER HARBOR IMPROVEMENTS PH III(B)**  
CBJ CONTRACT NO. DH20-021

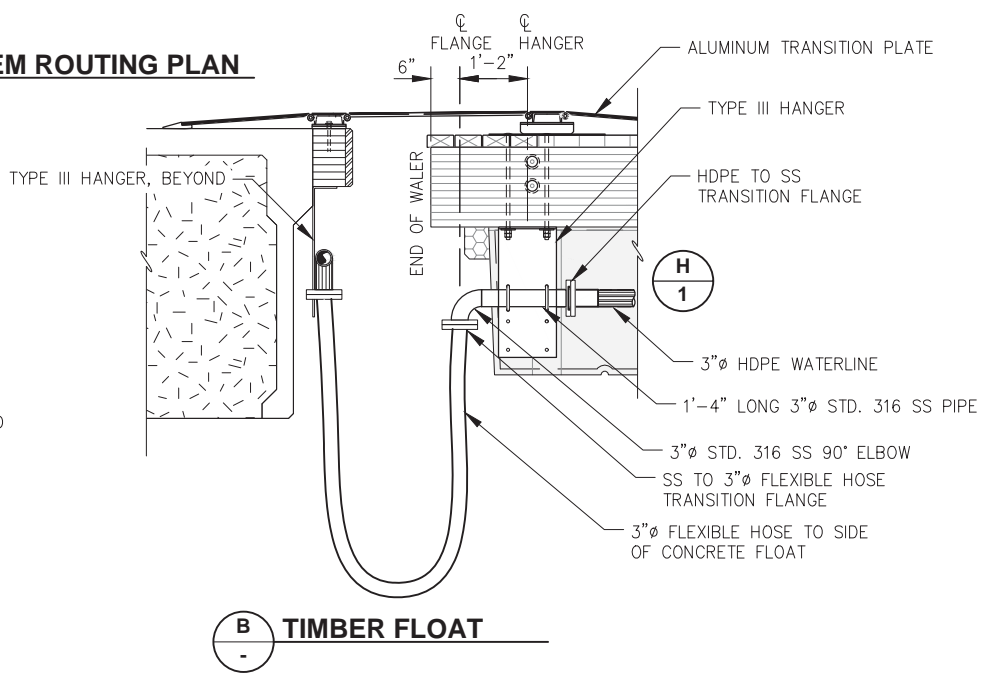
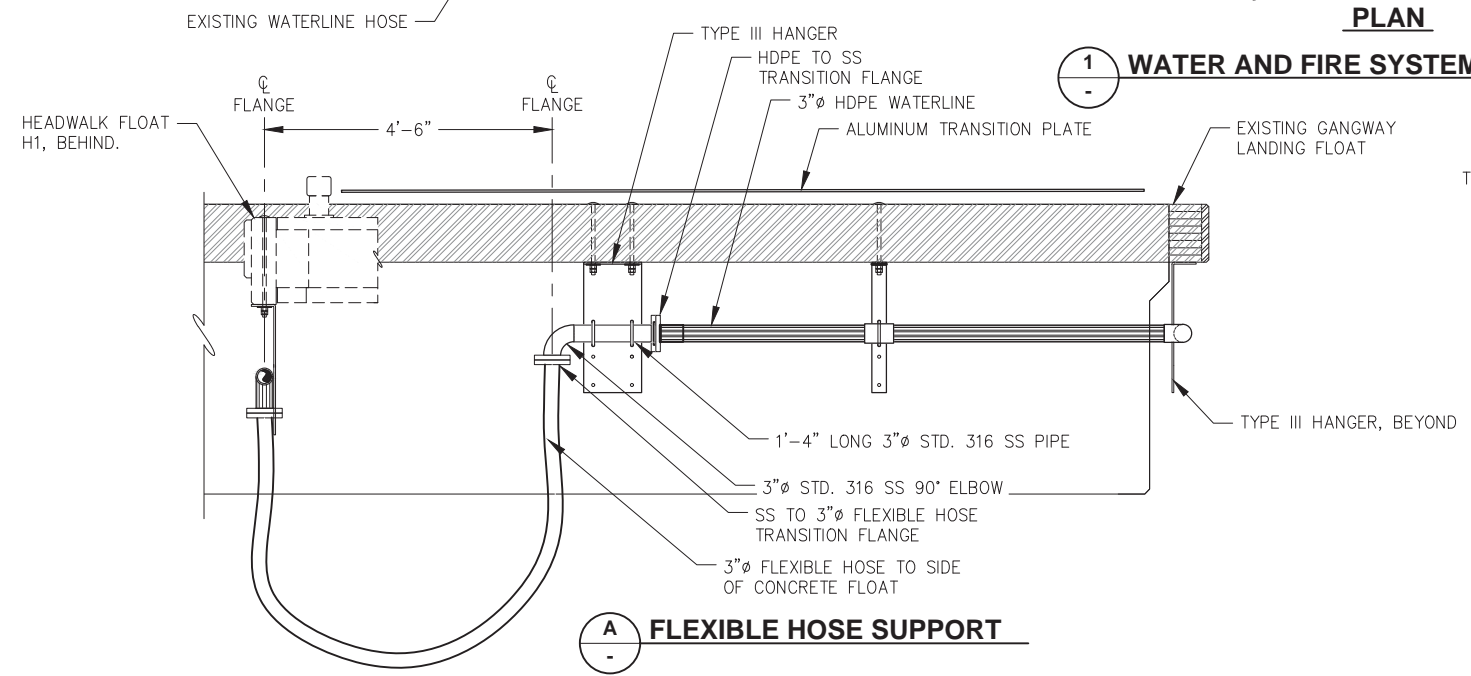
SHEET TITLE:  
**DOMESTIC WATER AND DRY FIRE**  
**SYSTEM SCHEMATIC PLAN**

PND PROJECT NO.: 182066    C.A.N. NO.: AECC250

**7.01**



- NOTES:**
1. NOT ALL FLOAT COMPONENTS SHOWN FOR CLARITY.
  2. UTILITIES SHOWN ON TOP OF FLOAT FOR CLARITY.
  3. INTERNAL CONSTRUCTION OF FLOATS DIFFERS WITH EACH MAINWALK. NOTE LOCATION OF INTERNAL HARDWARE PRIOR TO DRILLING HOLES AS REQUIRED FOR HANGER BOLTS OR VALVE RISERS. MAINTAIN A MINIMUM OF 2 1/2" CLEAR TO ALL FLOAT HARDWARE UNLESS OTHERWISE APPROVED BY THE ENGINEER.
  4. ALL DRILLED HOLES IN TIMBER SHALL BE TREATED IN ACCORDANCE WITH AWP M-4.
  5. ALL LAG BOLTS SHALL BE PILOT DRILLED.



**1 WATER AND FIRE SYSTEM ROUTING PLAN**

**A FLEXIBLE HOSE SUPPORT**

**B TIMBER FLOAT**

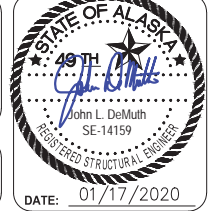


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DESIGN: BMI    CHECKED: JLD    SCALE: N.T.S.  
DRAWN: WRB    APPROVED: JLD

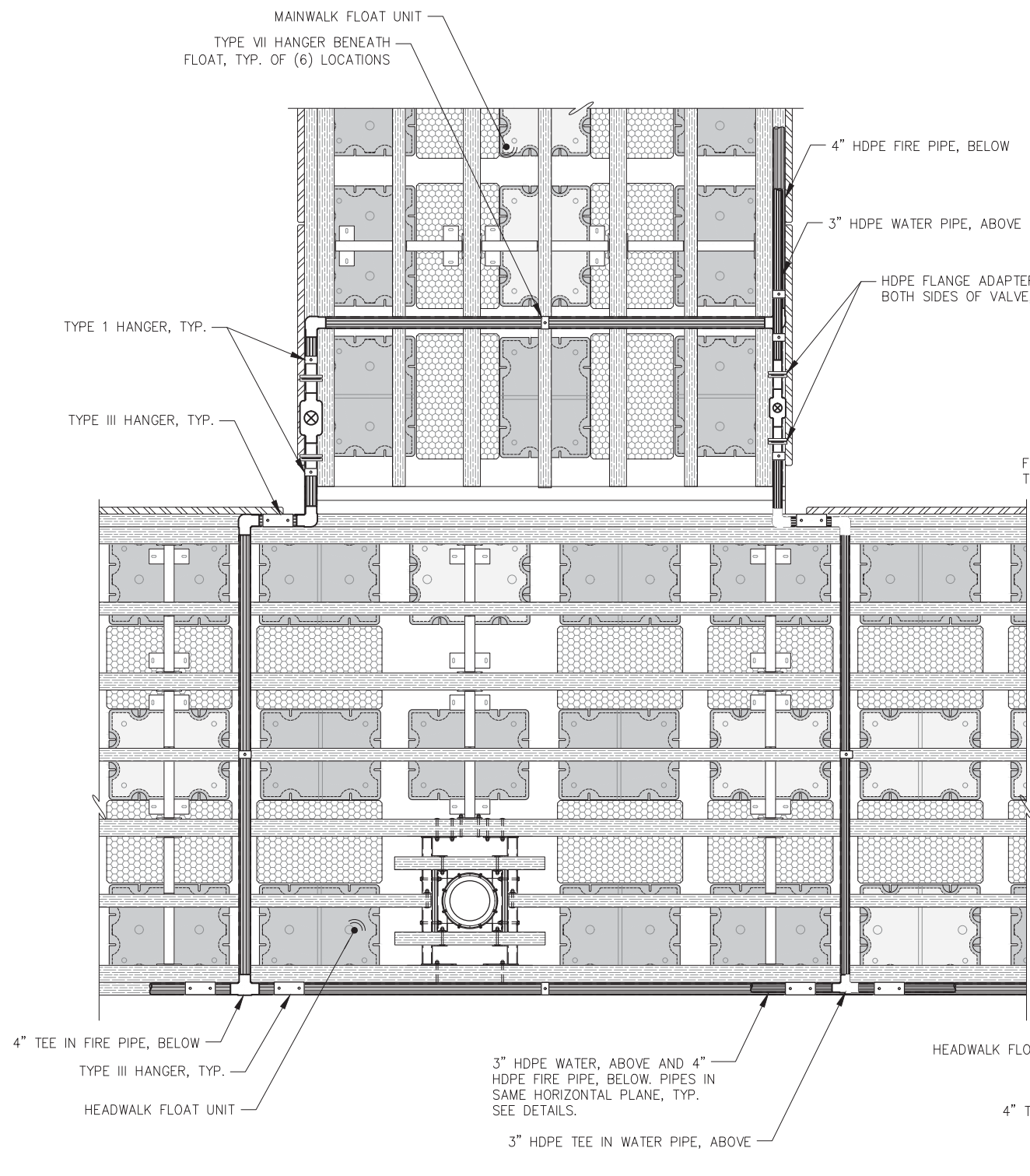


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**STATTER HARBOR IMPROVEMENTS PH III(B)**  
CBJ CONTRACT NO. DH20-021

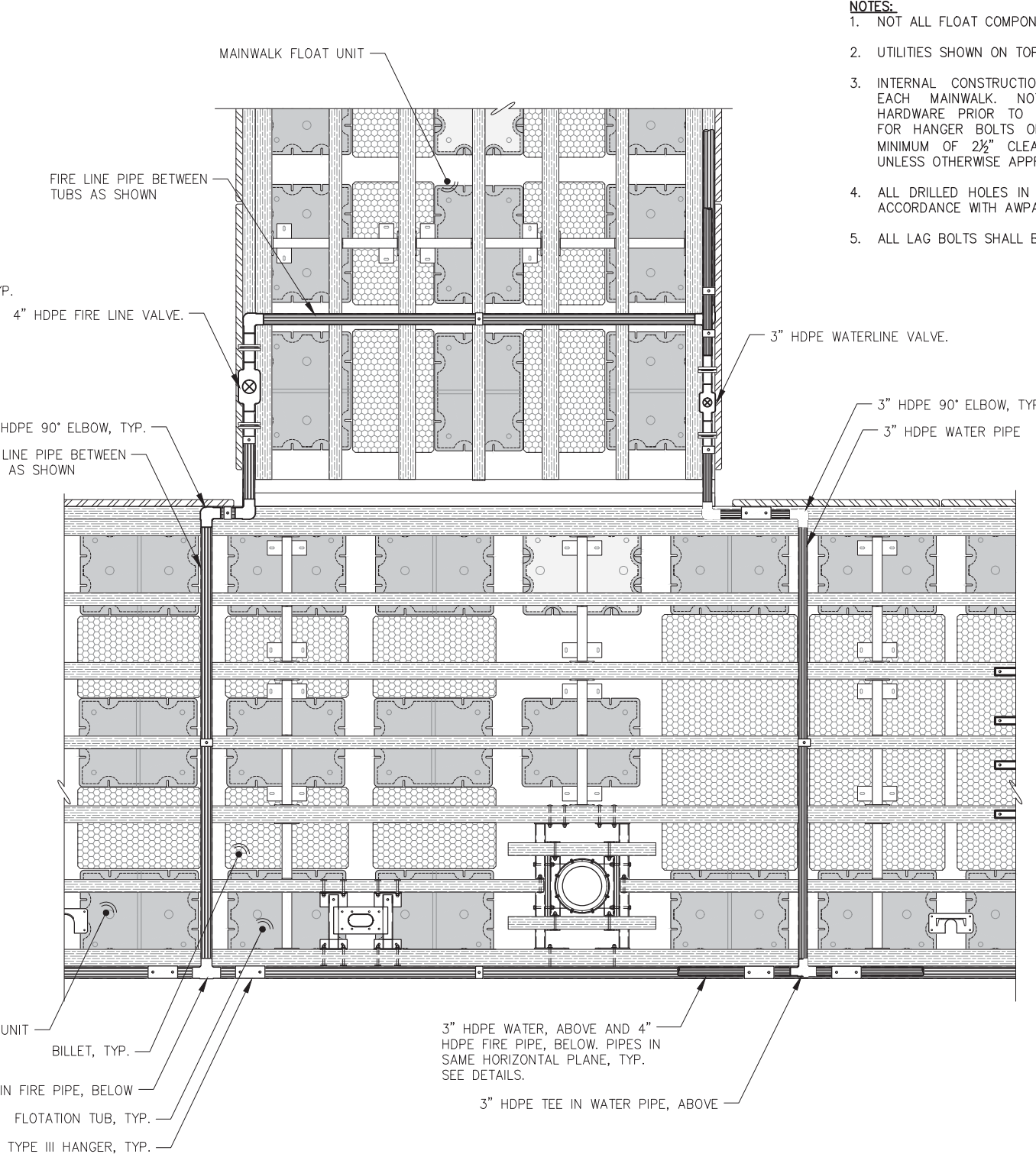
SHEET TITLE:  
**WATER AND FIRE SYSTEMS ROUTING PLAN**

PND PROJECT NO.: 182066    C.A.N. NO.: AECC250

**7.02**

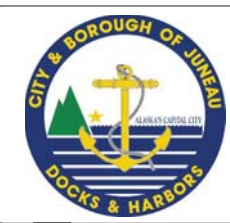


**MAINWALK PFH1 INTERSECTION UTILITY ROUTING PLAN**



**MAINWALK PFH2 INTERSECTION UTILITY ROUTING PLAN**

- NOTES:**
1. NOT ALL FLOAT COMPONENTS SHOWN FOR CLARITY.
  2. UTILITIES SHOWN ON TOP OF FLOAT FOR CLARITY.
  3. INTERNAL CONSTRUCTION OF FLOATS DIFFERS WITH EACH MAINWALK. NOTE LOCATION OF INTERNAL HARDWARE PRIOR TO DRILLING HOLES AS REQUIRED FOR HANGER BOLTS OR VALVE RISERS. MAINTAIN A MINIMUM OF 2 1/2" CLEAR TO ALL FLOAT HARDWARE UNLESS OTHERWISE APPROVED BY THE ENGINEER.
  4. ALL DRILLED HOLES IN TIMBER SHALL BE TREATED IN ACCORDANCE WITH AWPA M-4.
  5. ALL LAG BOLTS SHALL BE PILOT DRILLED.



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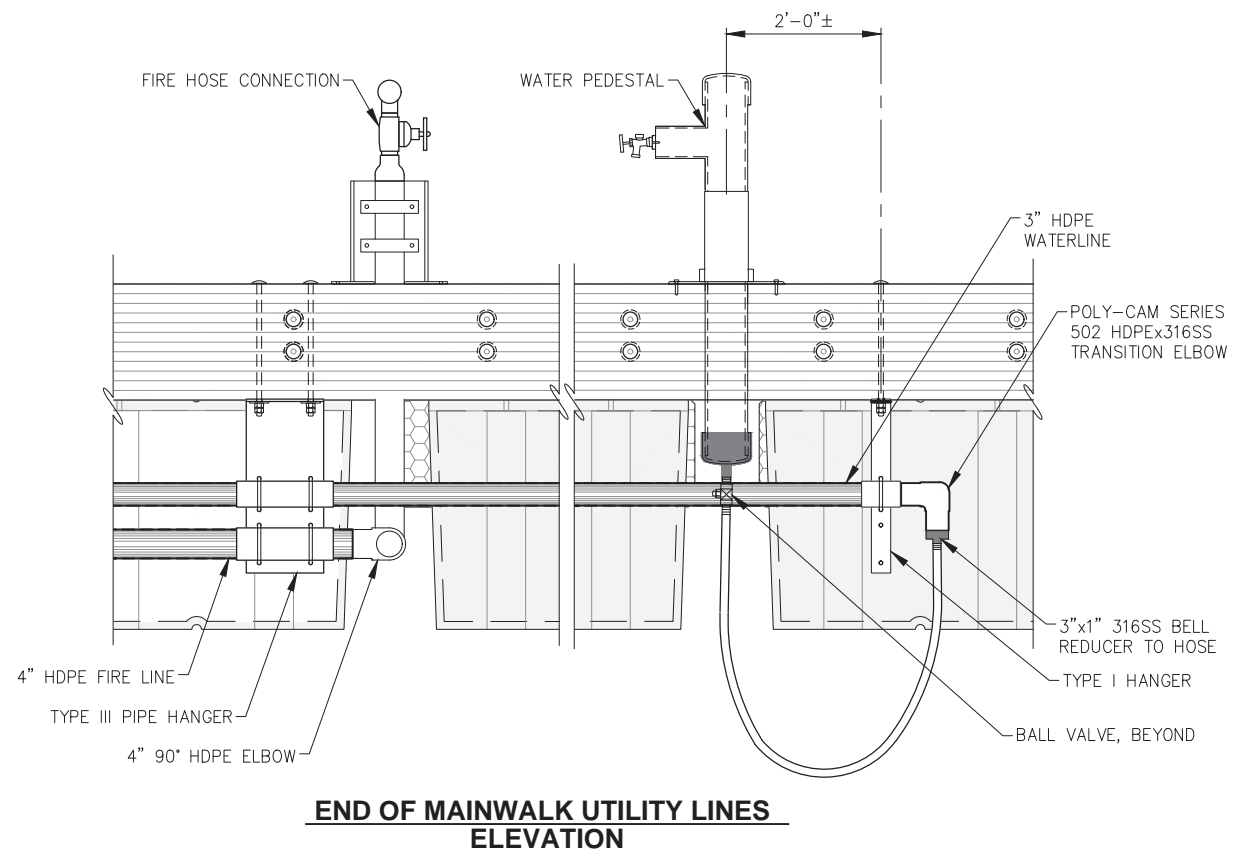


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CBJ CONTRACT NO. DH20-021

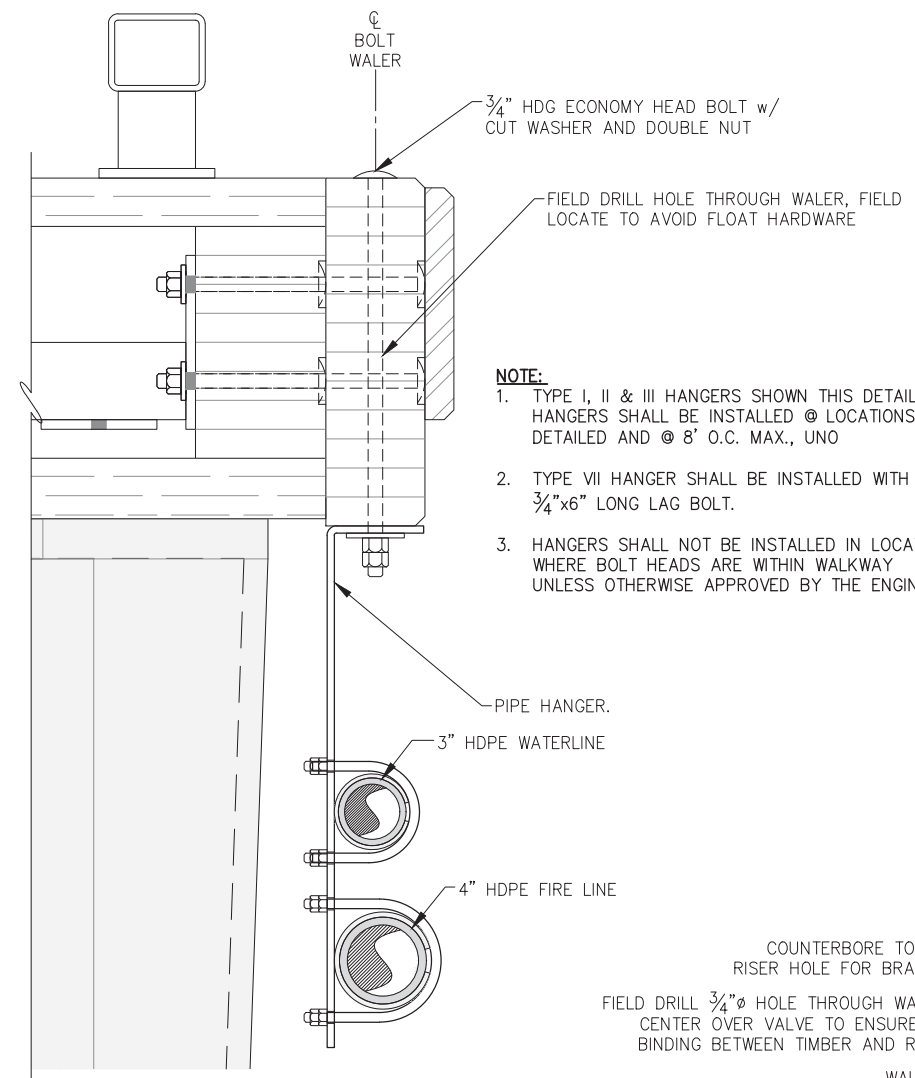
SHEET TITLE:  
**WATER AND FIRE SYSTEMS ROUTING PLAN**

PND PROJECT NO.: 182066    C.A.N. NO.: AECC250

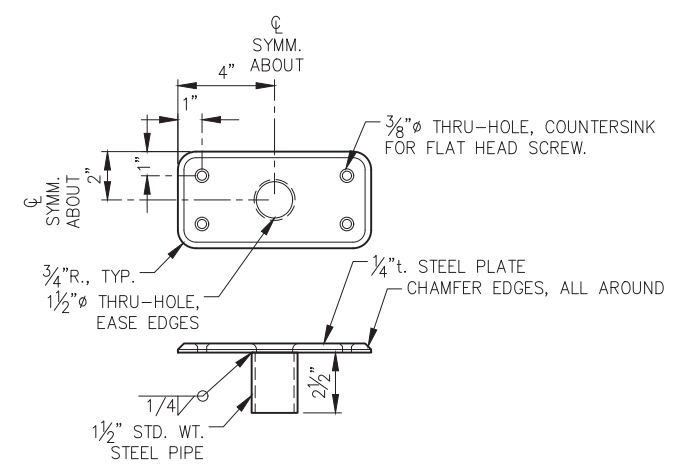
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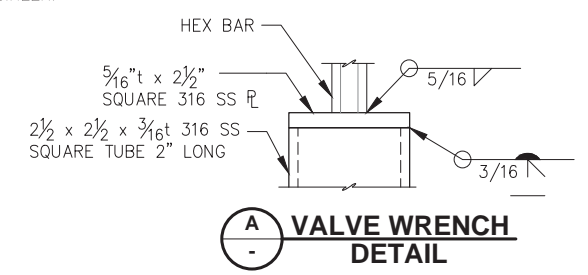
**END OF MAINWALK UTILITY LINES ELEVATION**



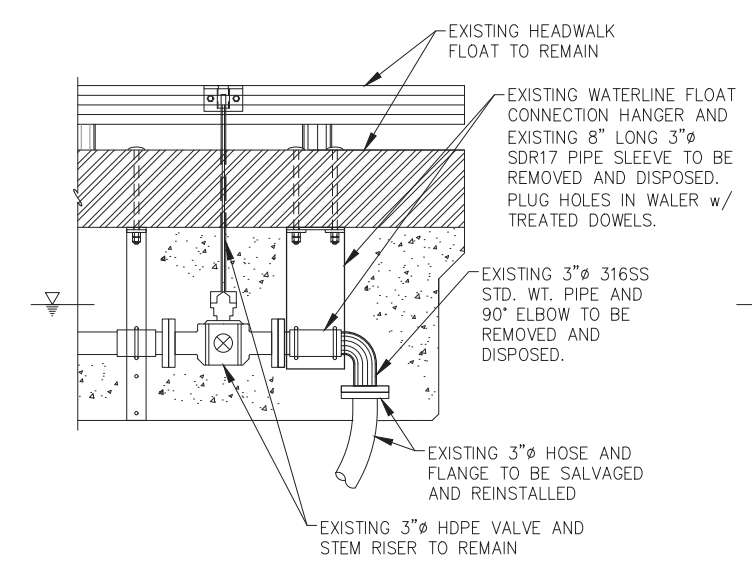
**PIPE HANGER MOUNTING DETAIL**



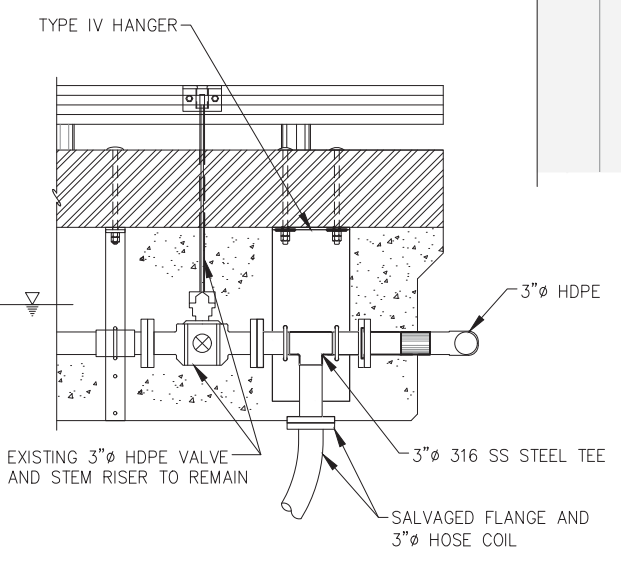
**VALVE RISER BRACKET DETAIL**



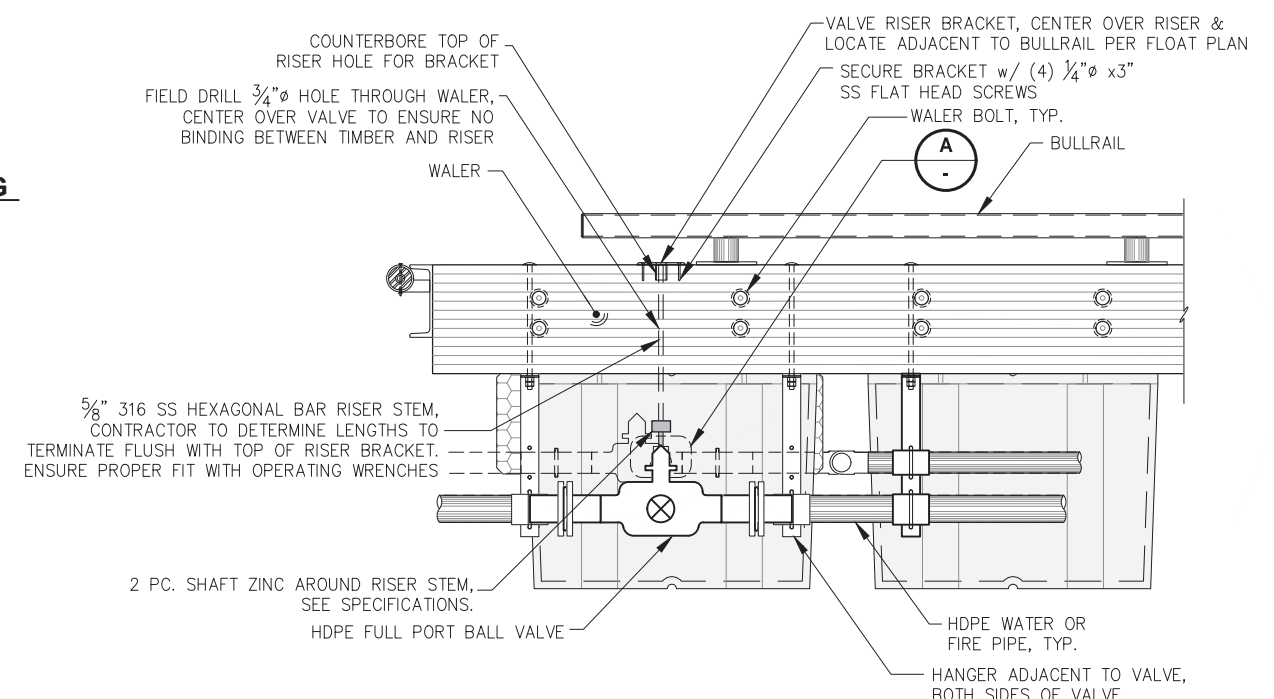
**VALVE WRENCH DETAIL**



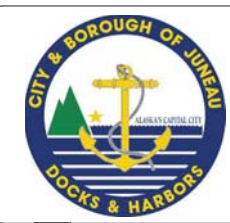
**EXISTING HOSE CONNECTION TO HEADWALK / VALVE DETAILS**



**WATER SYSTEM CONNECTION TO EXISTING HOSE**



**VALVE AND OPERATION RISER ASSY. DETAIL**



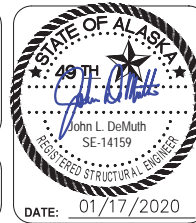
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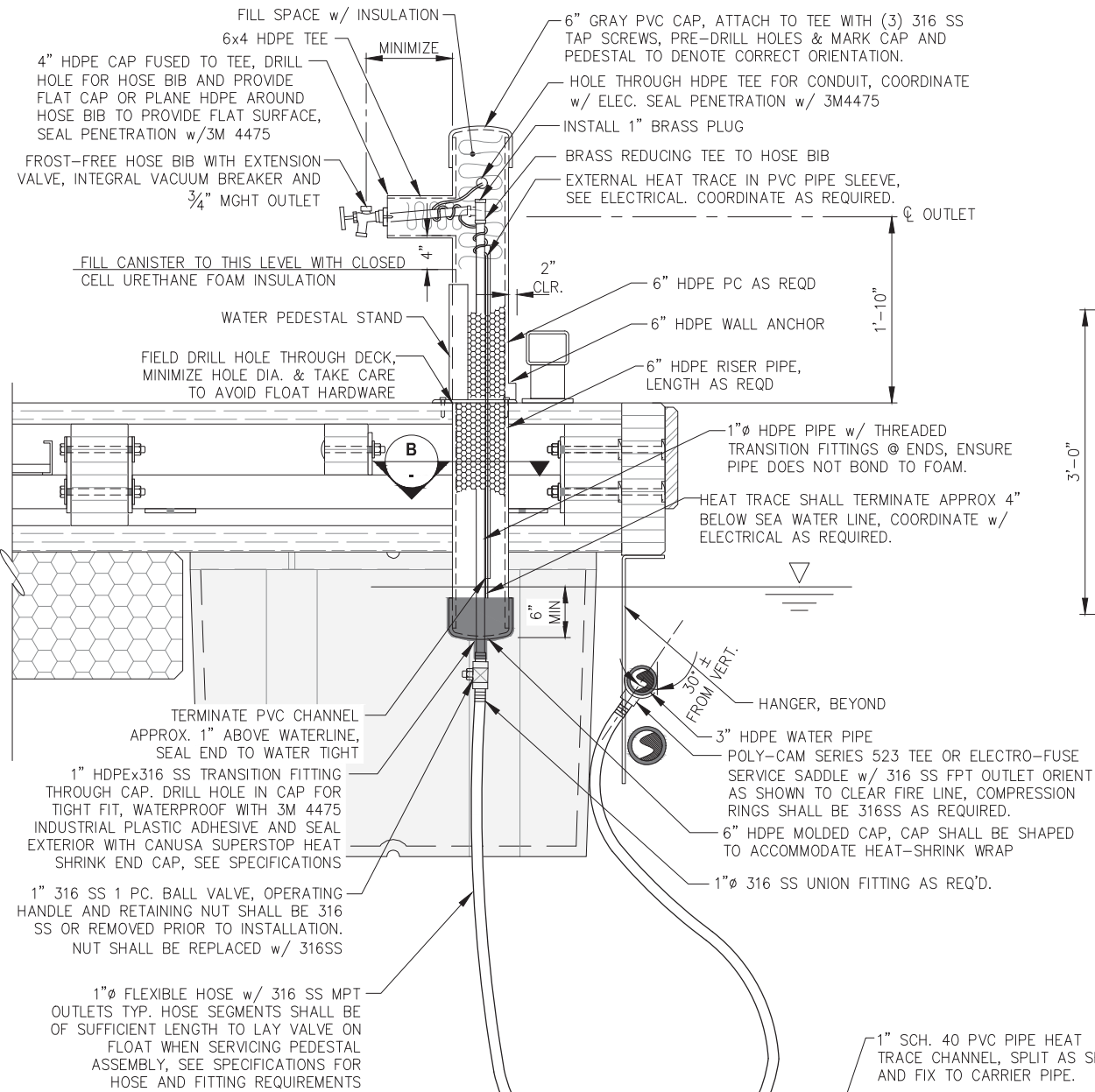
**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
CBJ CONTRACT NO. DH20-021

SHEET TITLE: **FLOAT MOUNTED UTILITY DETAILS**

PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

**7.04**

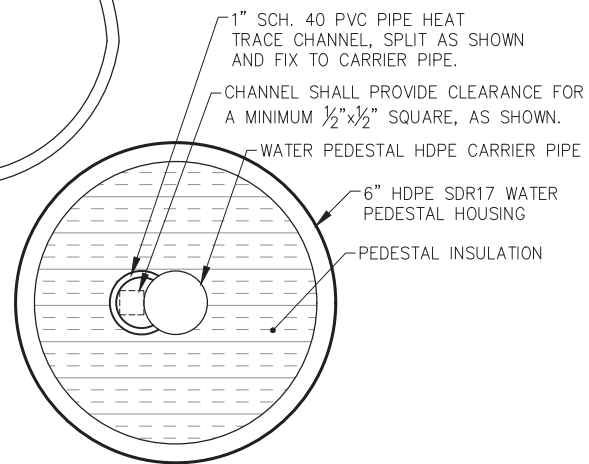




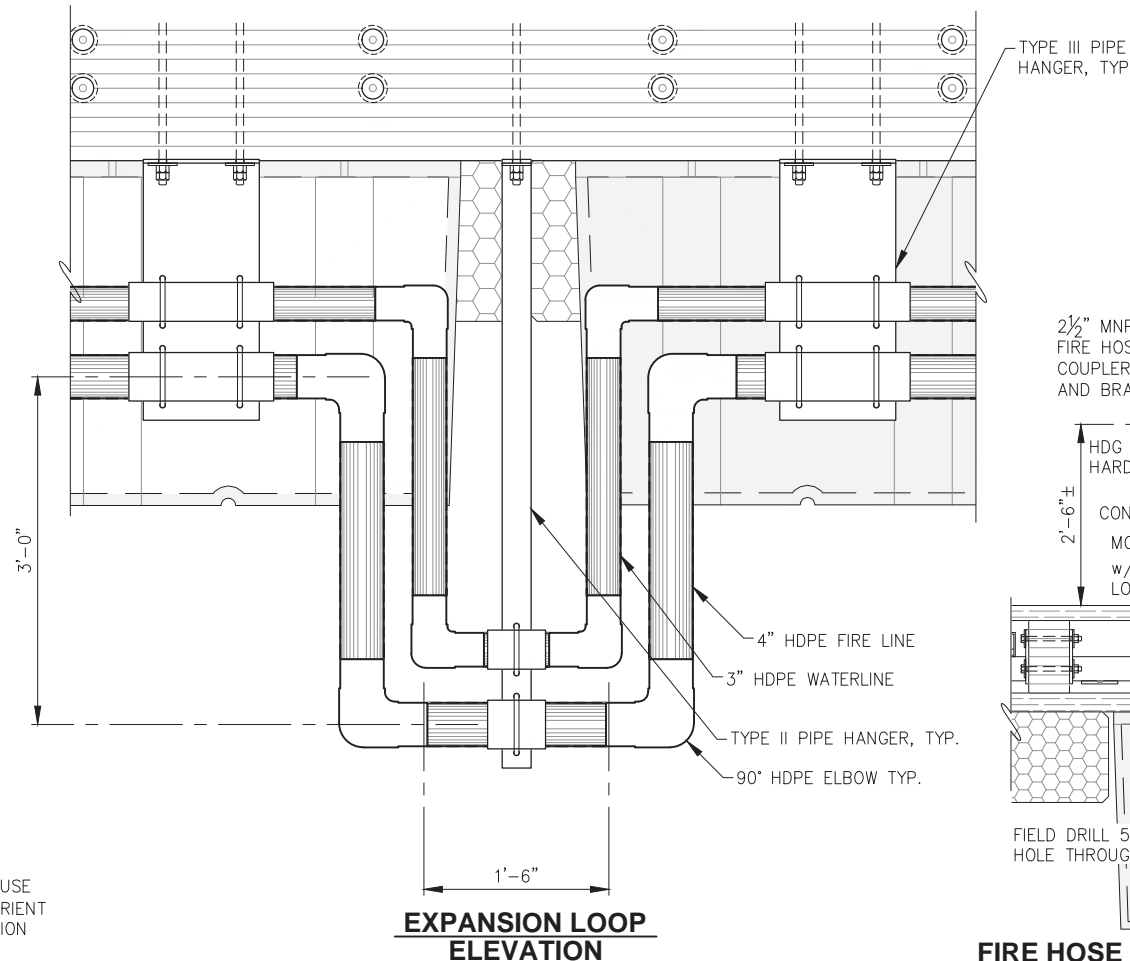
**WATER PEDESTAL  
TYPICAL DETAIL**

**WATER PEDESTAL NOTES:**

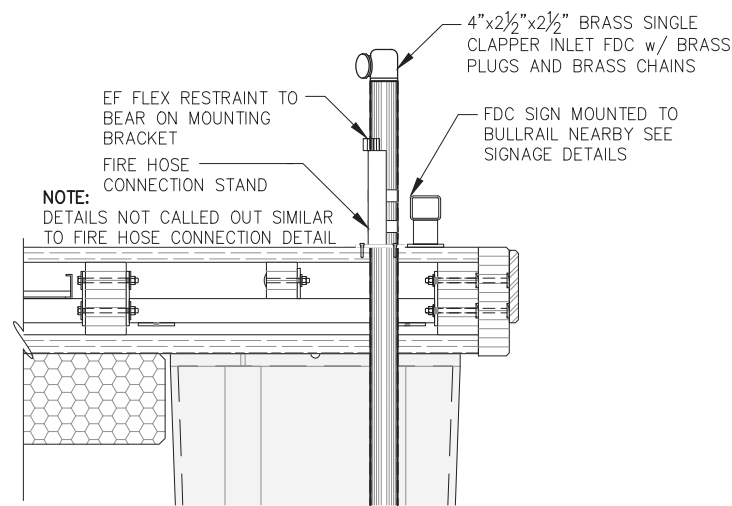
- HOSE BIB SHOWN IN PROFILE FOR ILLUSTRATIVE PURPOSES ONLY, ORIENT HOSE BIB PARALLEL WITH BULLRAIL.
- HANGER AND CONNECTION HARDWARE NOT SHOWN FOR CLARITY.
- ALL SUBMERGED STEEL SHALL BE CONSTRUCTED OF 316 SS, UNO.
- LOCATE PEDESTALS PER FLOAT PLAN, FINAL LAYOUT AND ORIENTATION OF PEDESTAL SHALL BE FIELD DETERMINED BY ENGINEER.



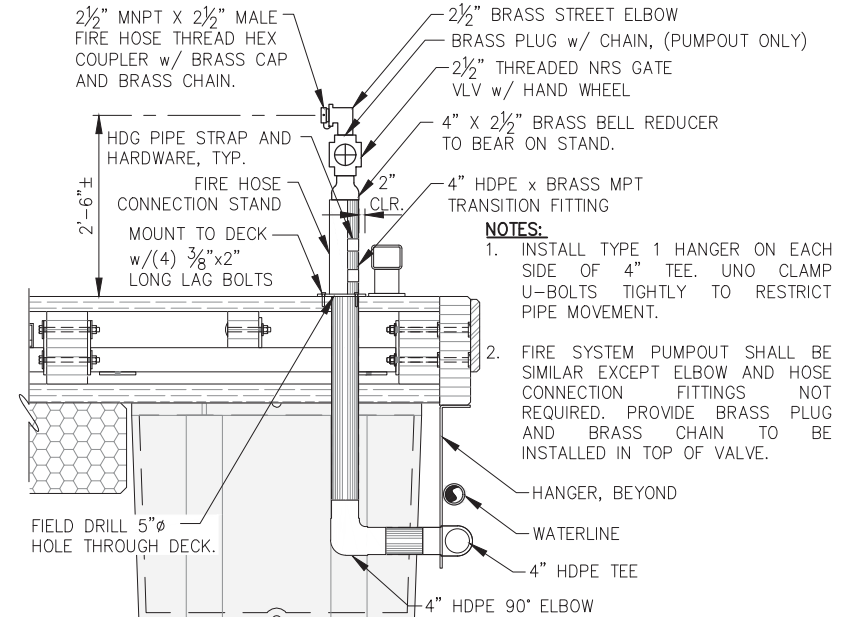
**WATER PEDESTAL  
SECTION**



**EXPANSION LOOP  
ELEVATION**



**FIRE DEPARTMENT CONNECTION  
TYPICAL DETAIL**



**FIRE HOSE CONNECTION & FIRE SYSTEM PUMPOUT  
TYPICAL DETAIL**

**NOTES:**

- VALVES SHALL BE OPERATED WITH A TEE-HANDLE SOCKET WRENCH OF ADEQUATE LENGTH TO TURN THE HANDLE ABOVE THE BULLRAIL, PROVIDE (1) SNAP-ON, OR EQUAL TEE HANDLE SOCKET WRENCHES TO OWNER AND (1) TO THE CBJ FIRE DEPARTMENT, (2) TOTAL REQ'D. VERIFY FIT UP W/ 5/8" HEXAGONAL BAR & CLEARANCE TO TRANSITION BRIDGE.
- HANGER ASSEMBLIES SHALL BE CLAMPED TO RESTRICT PIPE MOVEMENT.
- HOLES THROUGH TIMBER FOR HANGER BOLTS AND RISER BRACKETS TO BE FIELD DRILLED, TAKE CARE TO AVOID FLOAT HARDWARE, TREAT ALL TIMBER CUTS & PENETRATIONS PER SPECIFICATIONS.
- WRENCH AND RISER NOT REQUIRED AT FIRE VALVE LOCATIONS ON HEADWALK.

**REVISIONS**

REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

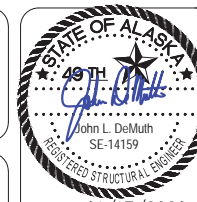


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NTS



DATE: 01/17/2020

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STATTER HARBOR IMPROVEMENTS PH III(B)  
CBJ CONTRACT NO. DH20-021**

SHEET TITLE:

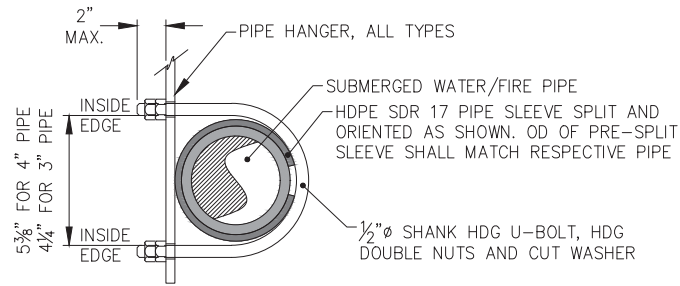
**FLOAT MOUNTED  
UTILITY DETAILS**

**7.05**

PND PROJECT NO.: 182066

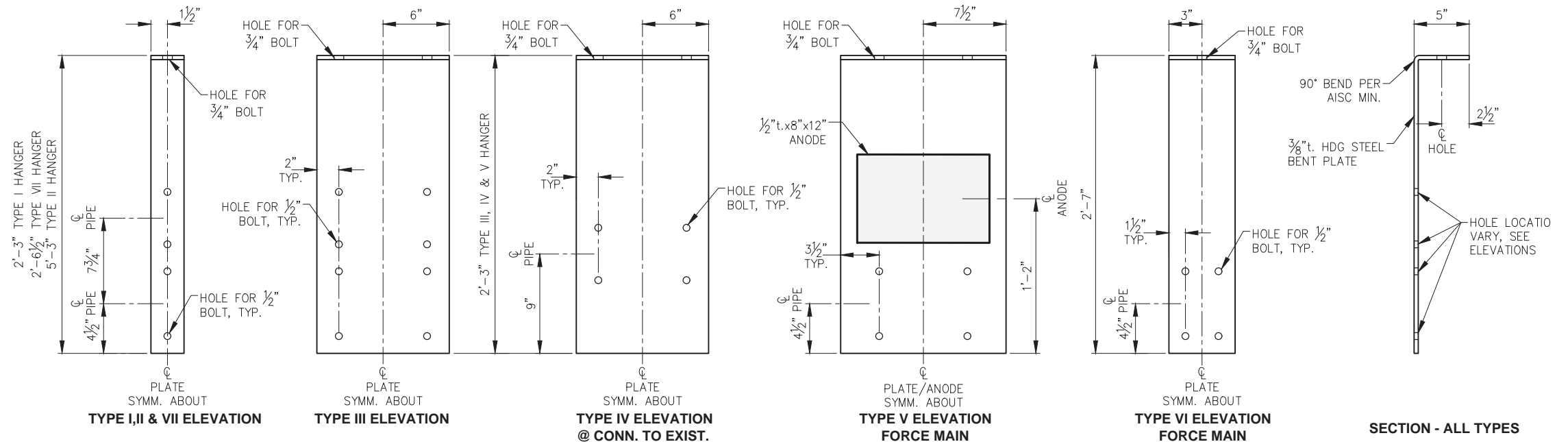
C.A.N. NO.: AECC250



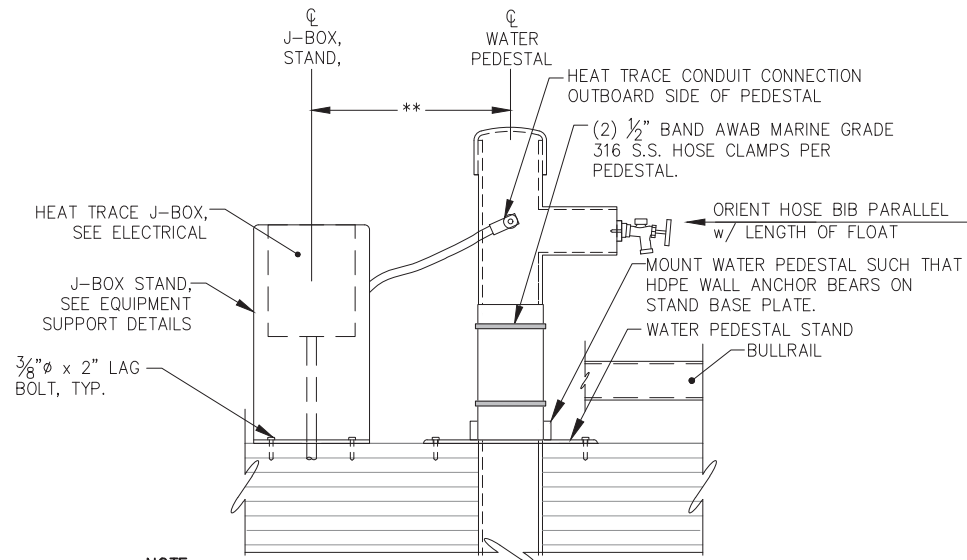


- NOTES:**
1. PIPE SHALL BE CLAMPED SUCH THAT SLEEVE IS SECURED, BUT PIPE IS ALLOWED TO SLIDE LONGITUDINALLY EXCEPT WHERE NOTED.
  2. HDPE PIPE SLEEVE SHALL BE 13" LONG FOR TYPE III HANGERS AND 6" LONG FOR ALL OTHER HANGERS.
  3. PROVIDE 4" MINIMUM CLEARANCE BETWEEN SLEEVE AND PIPE WELDS, UNO.

**PIPE MOUNTING DETAIL**

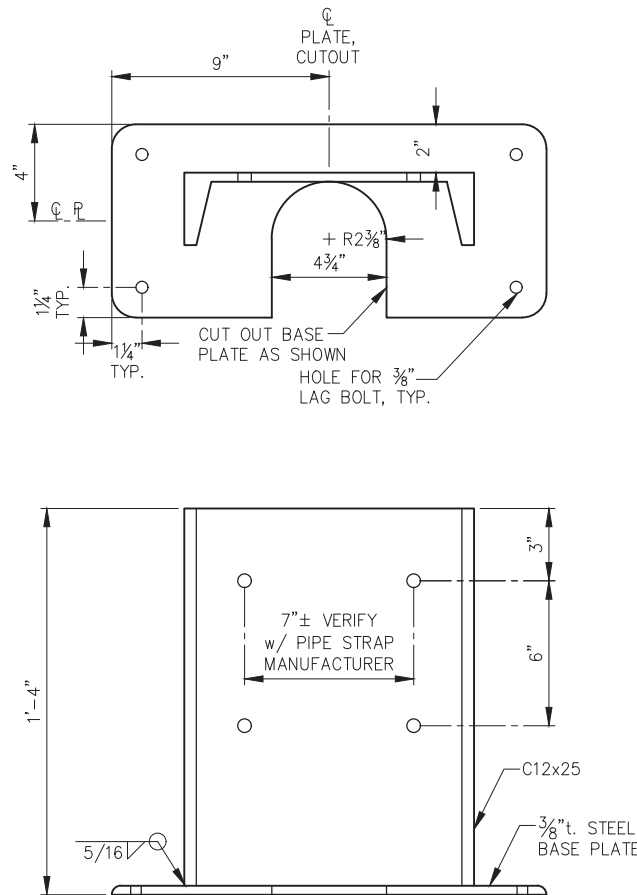


**PIPE HANGER DETAILS**

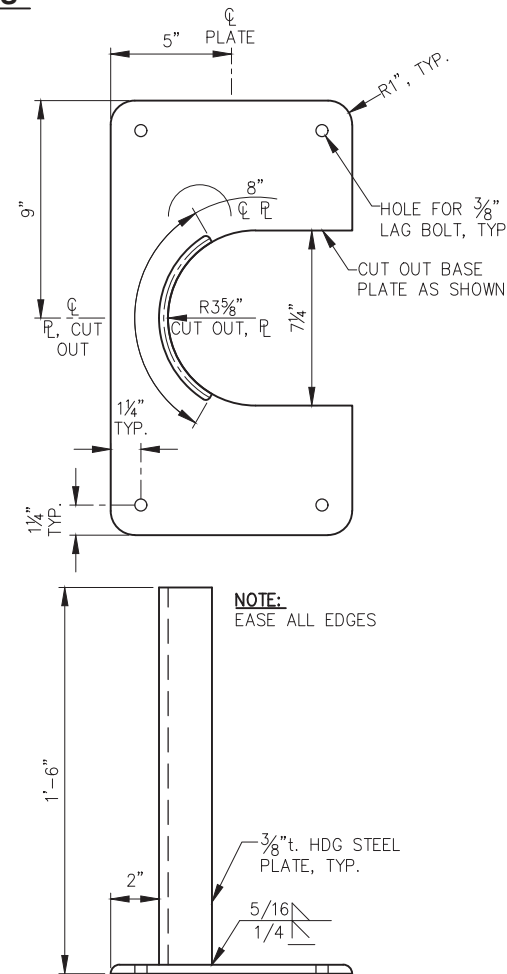


- NOTE:**
1. TRIM WALL ANCHOR BEARING RING TO FLUSH WITH PIPE AROUND MOUNTING BRACKET VERTICAL PLATE.
  2. \*\* 1'-6" MINIMUM 5'-0" MAX, LOCATE PER ENGINEER DIRECTION.

**WATER PEDESTAL MOUNTING TYPICAL DETAIL**



**FIRE HOSE CONNECTION STAND DETAIL**



**WATER PEDESTAL STAND DETAIL**

- GENERAL STEEL FABRICATION NOTES:**
1. ALL FABRICATED STEEL AND HARDWARE, SHOWN THIS SHEET, SHALL BE HOT DIP GALVANIZED.
  2. ALL STEEL DESIGNATED AS STAINLESS STEEL SHALL BE 316L STAINLESS STEEL.
  3. EASE ALL EDGES OF FABRICATED STEEL PIECES.
  4. ALL HOT DIP GALVANIZED PARTS SHALL BE GALVANIZED AFTER FABRICATION.



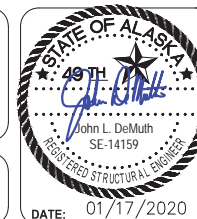
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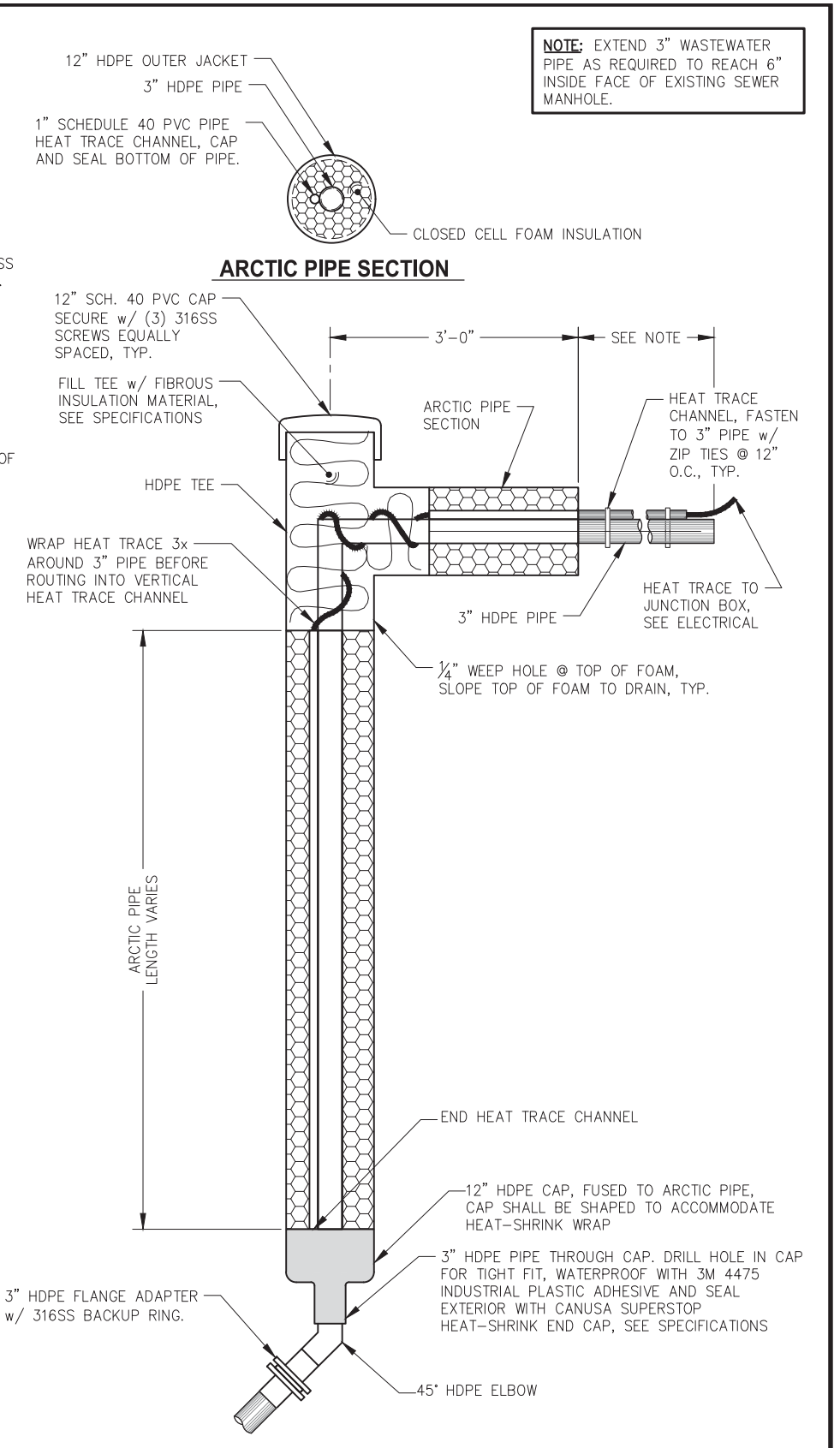
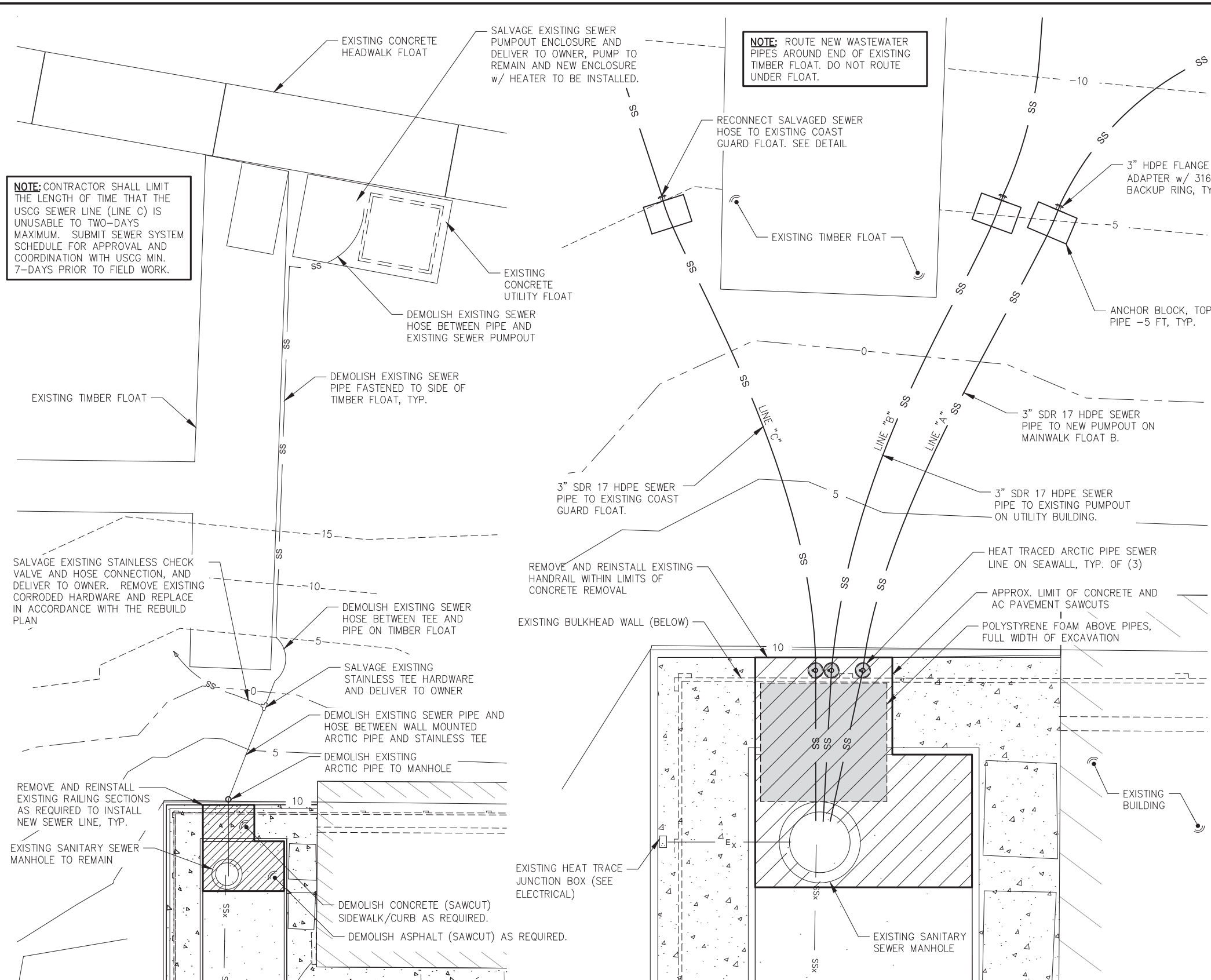


**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
CBJ CONTRACT NO. DH20-021

SHEET TITLE:  
**FLOAT MOUNTED UTILITY DETAILS**

**7.06**

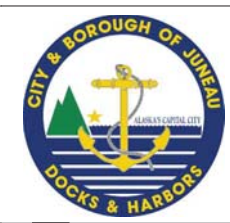
PND PROJECT NO.: 182066 C.A.N. NO.: AECC250



**EXISTING WASTEWATER SYSTEM AND DEMOLITION PLAN**

**SEWER SYSTEM COLLECTION REBUILD PLAN**

**TYPICAL ARCTIC PIPE RISER DETAILS**

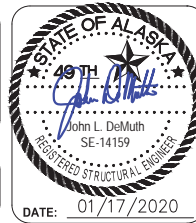


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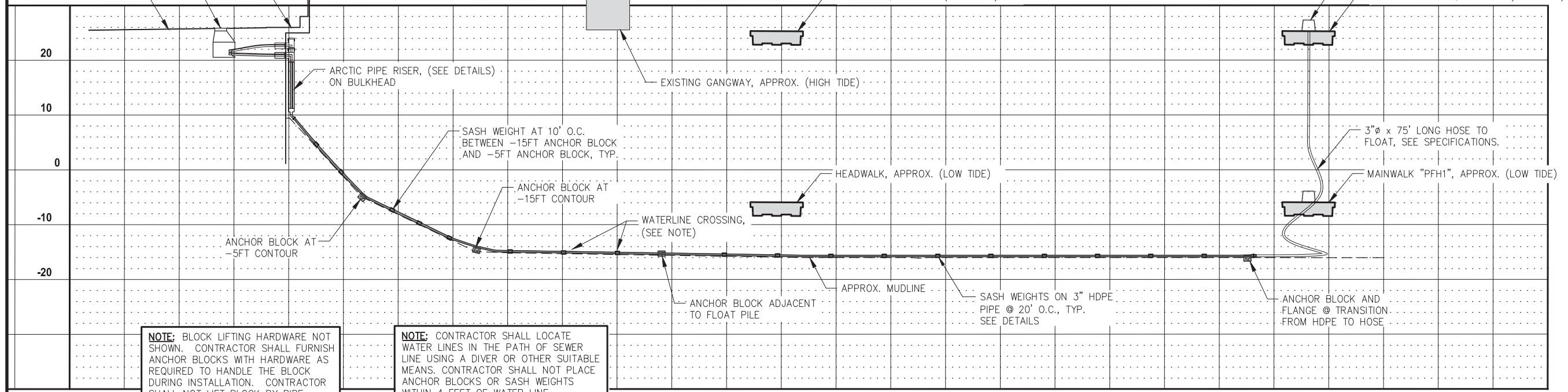
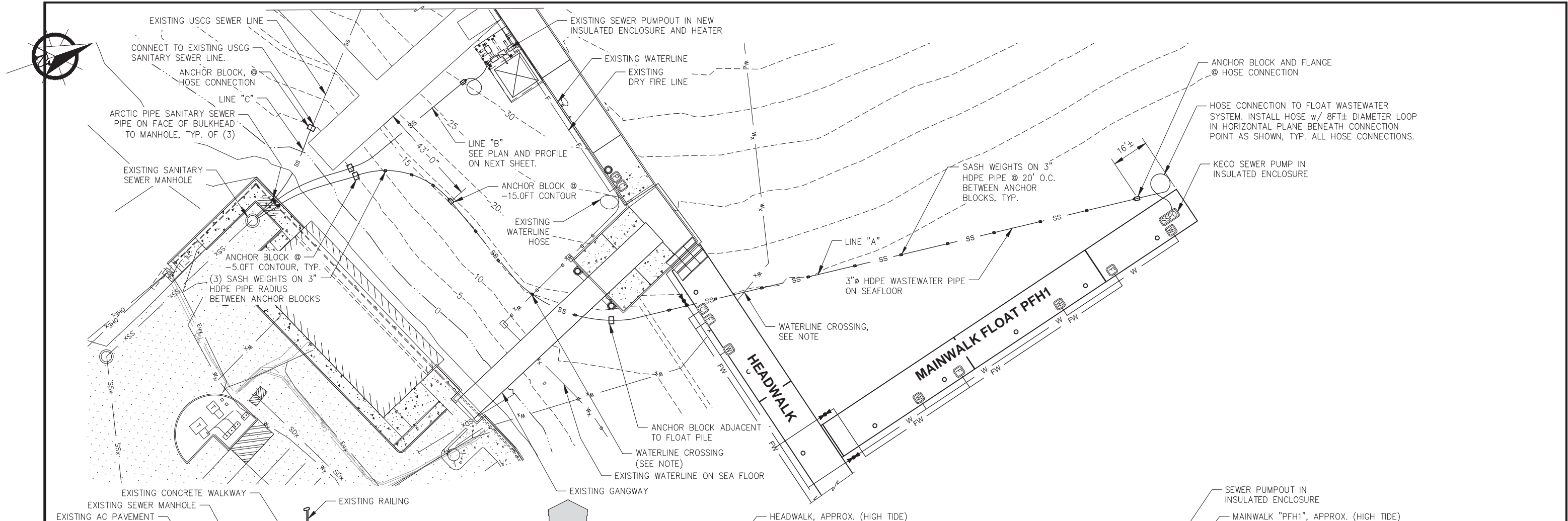
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**CBJ CONTRACT NO. DH20-021**

SHEET TITLE:  
**WASTEWATER SYSTEM DETAILS**      **7.07**

PND PROJECT NO.: 182066      C.A.N. NO.: AECC250



**NOTE:** BLOCK LIFTING HARDWARE NOT SHOWN. CONTRACTOR SHALL FURNISH ANCHOR BLOCKS WITH HARDWARE AS REQUIRED TO HANDLE THE BLOCK DURING INSTALLATION. CONTRACTOR SHALL NOT LIFT BLOCK BY PIPE.

**NOTE:** CONTRACTOR SHALL LOCATE WATER LINES IN THE PATH OF SEWER LINE USING A DIVER OR OTHER SUITABLE MEANS. CONTRACTOR SHALL NOT PLACE ANCHOR BLOCKS OR SASH WEIGHTS WITHIN 4 FEET OF WATER LINE.

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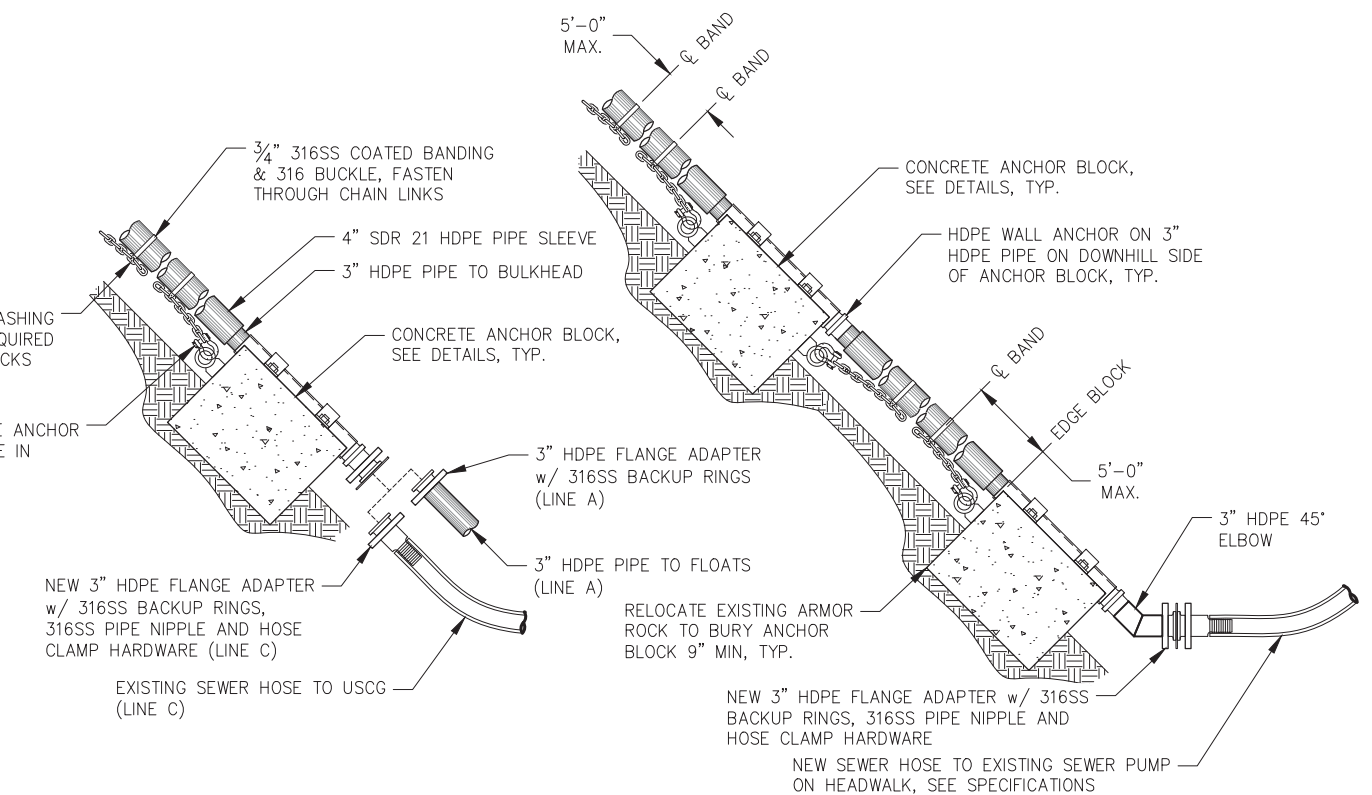
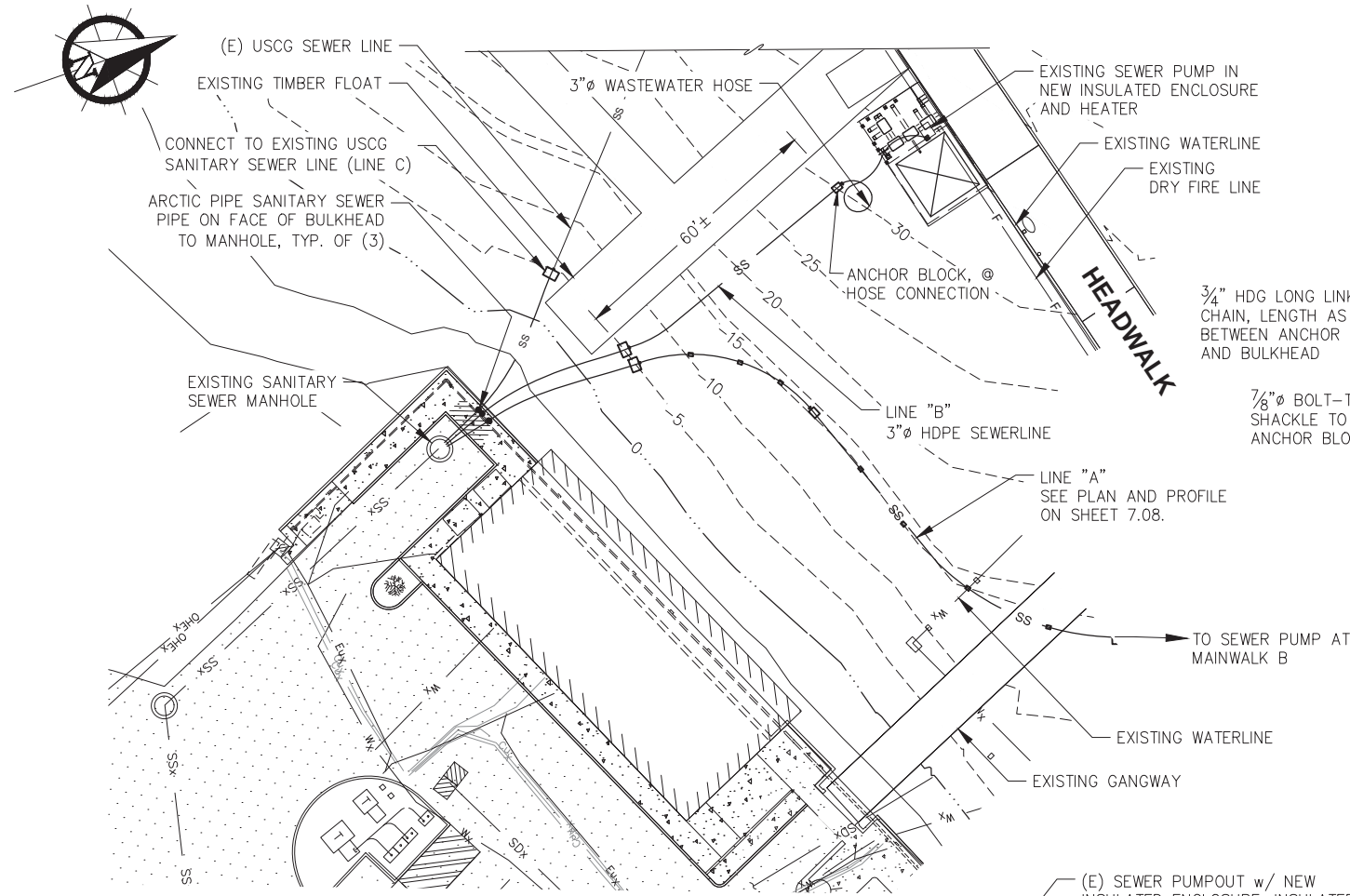
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**CBJ CONTRACT NO. DH20-021**

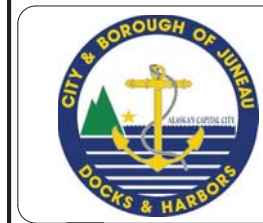
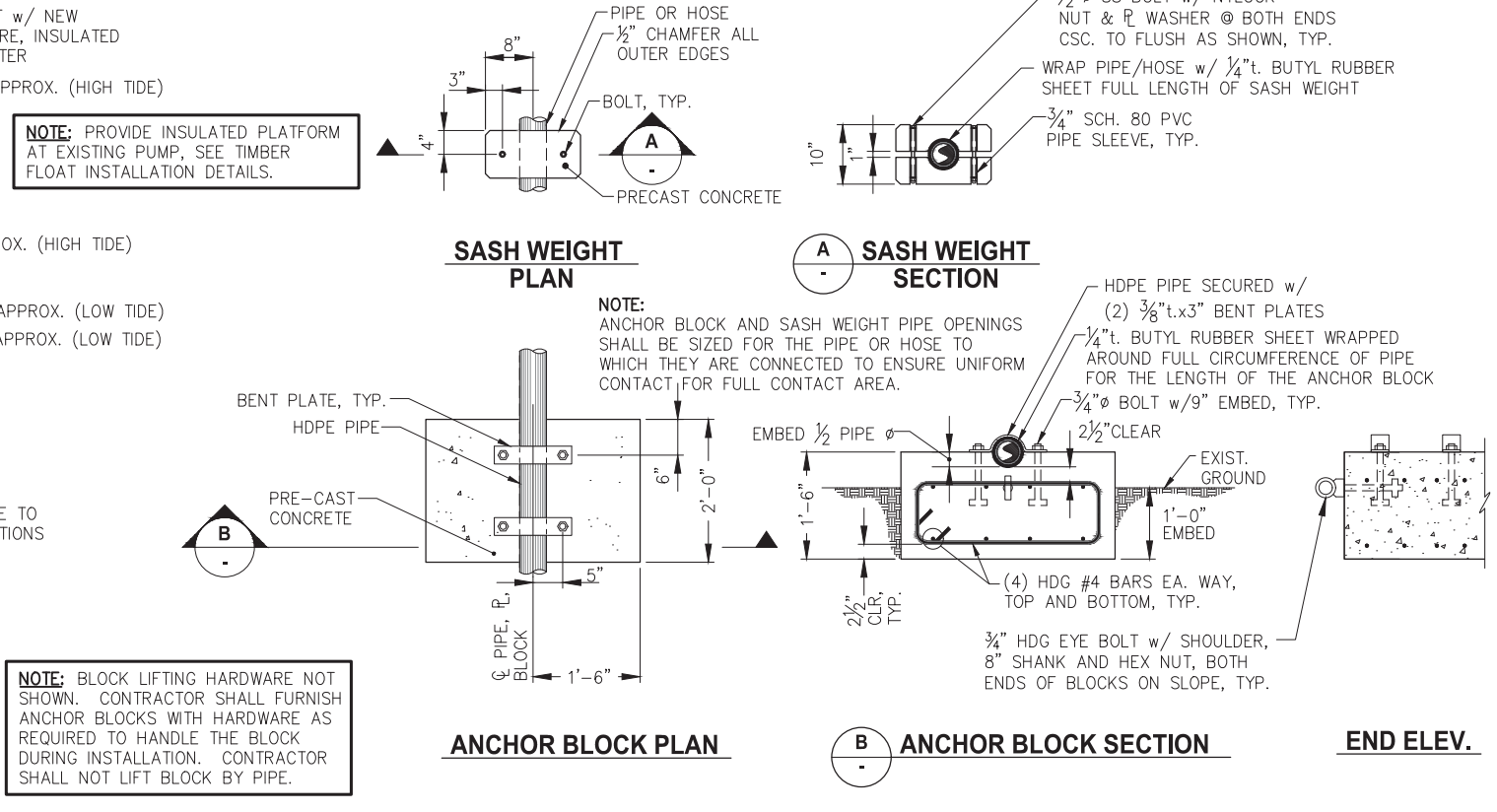
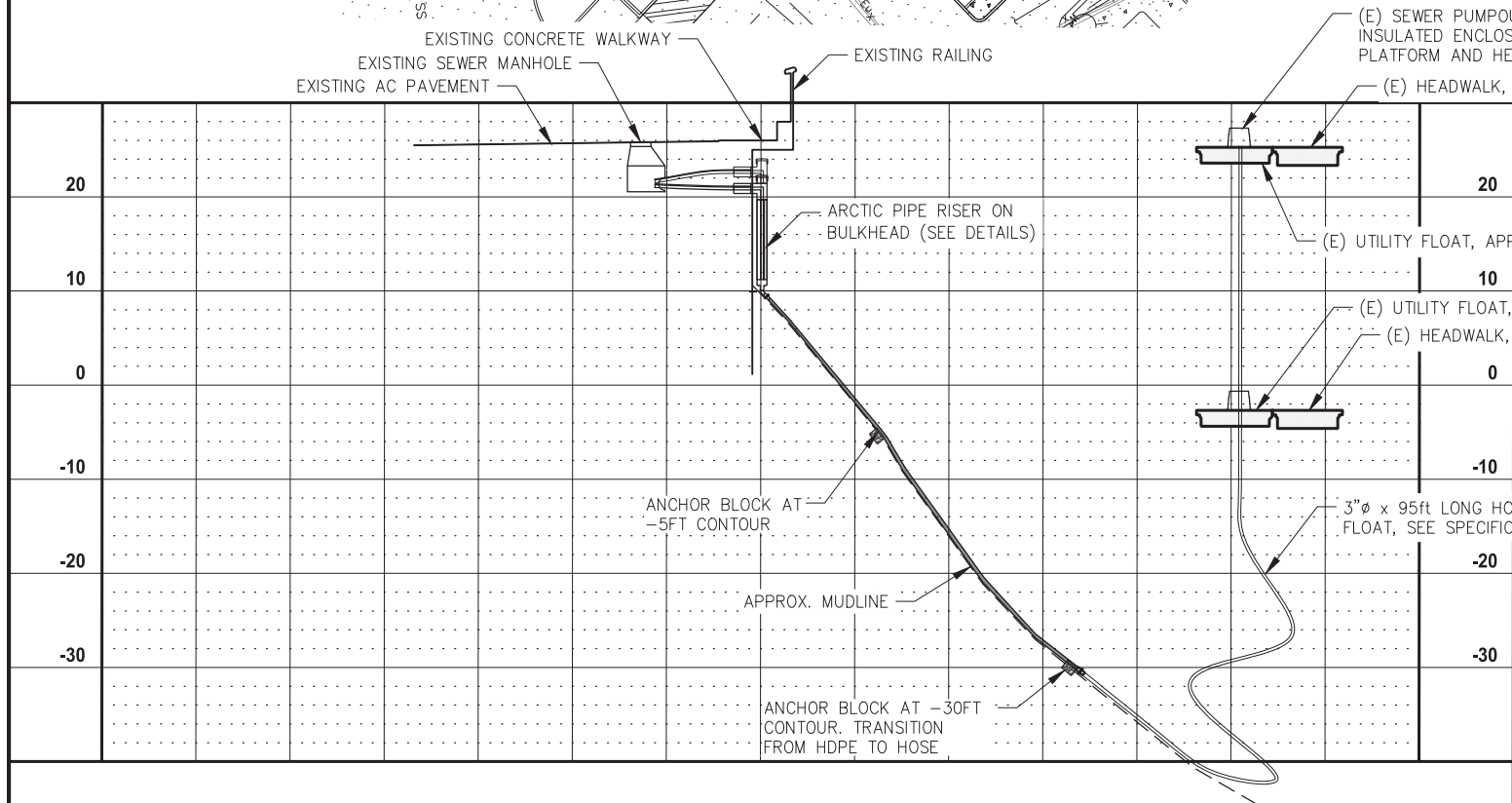
SHEET TITLE:  
**WASTEWATER SYSTEM LINE "A"**  
**PLAN AND PROFILE**

PND PROJECT NO.: 182066    C.A.N. NO.: AECC250



**ANCHOR BLOCK CONNECTION**  
(TYPICAL FOR LINE A & C BLOCKS INSTALLED AT -5 FT ELEV. UNO)

**ANCHOR BLOCK CONNECTION**  
(LINE B BLOCKS ONLY, DETAILS NOT SHOWN SIMILAR A & C)

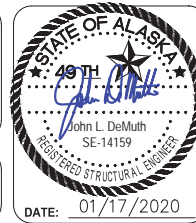


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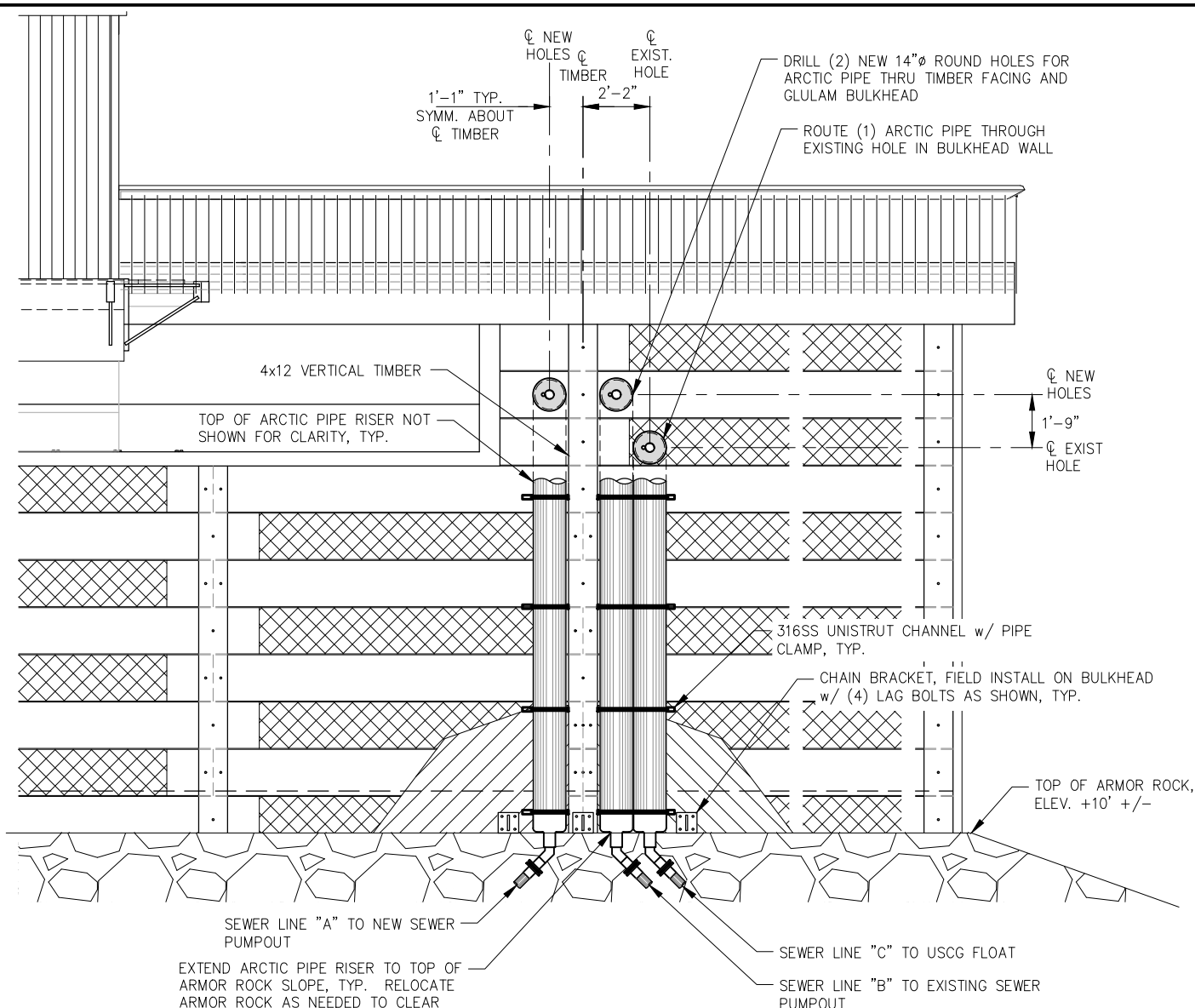
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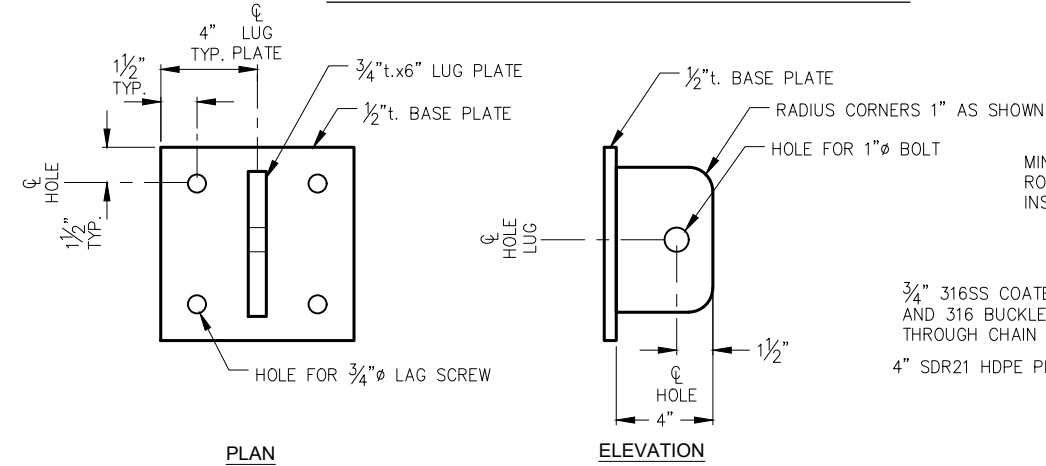
**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
CBJ CONTRACT NO. DH20-021

SHEET TITLE:  
**WASTEWATER SYSTEM LINE "B"**  
PLAN, PROFILE / ELEVATION **7.09**

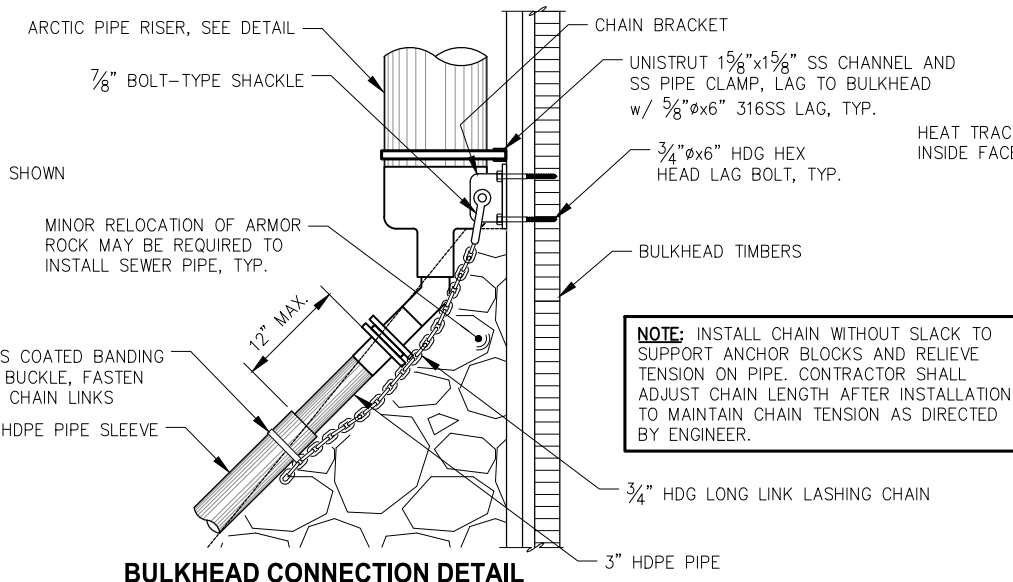
PND PROJECT NO.: 182066 C.A.N. NO.: AECC250



**WASTEWATER PIPE ELEVATION AT BULKHEAD**



**CHAIN BRACKET DETAIL**

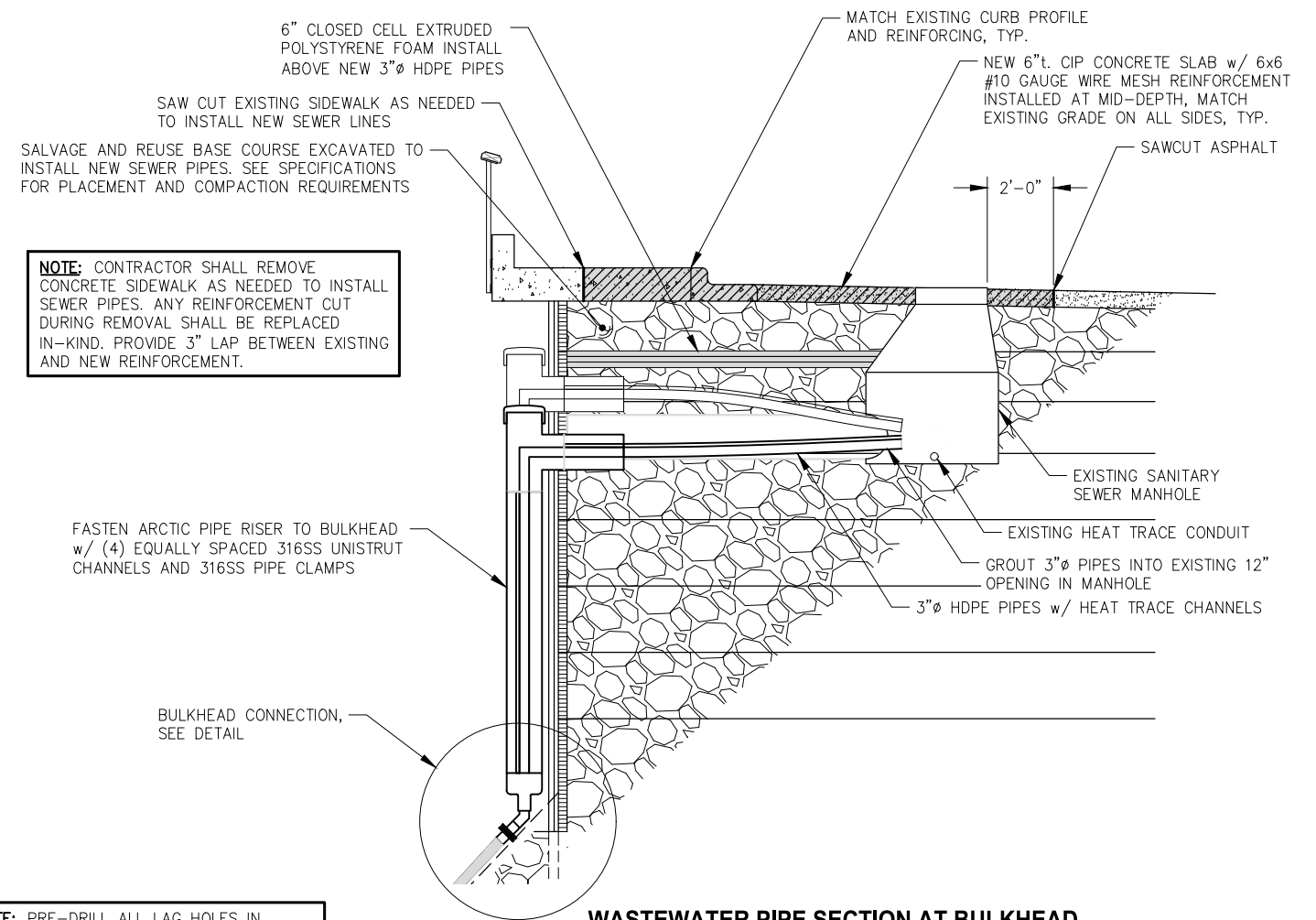


**BULKHEAD CONNECTION DETAIL**

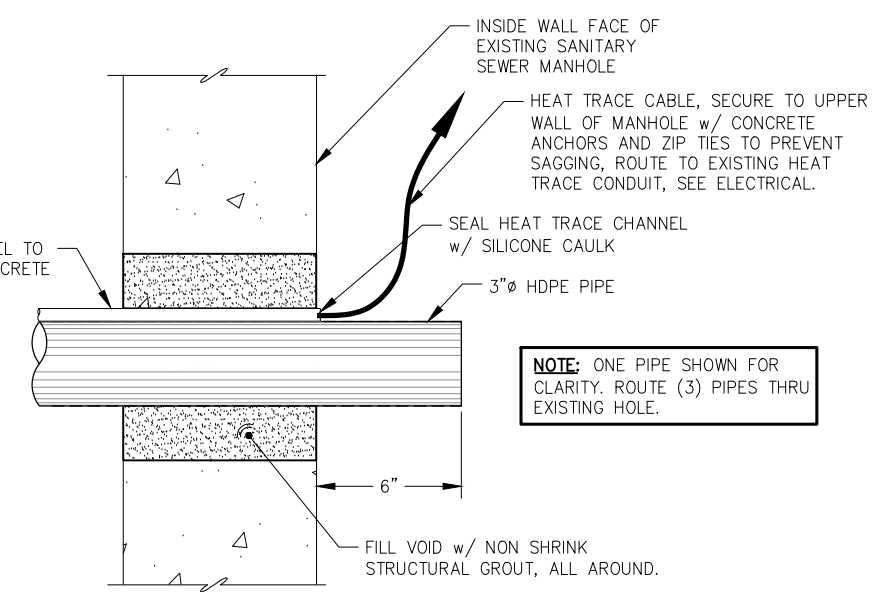
**NOTE:** CONTRACTOR SHALL REMOVE CONCRETE SIDEWALK AS NEEDED TO INSTALL SEWER PIPES. ANY REINFORCEMENT CUT DURING REMOVAL SHALL BE REPLACED IN-KIND. PROVIDE 3" LAP BETWEEN EXISTING AND NEW REINFORCEMENT.

**NOTE:** PRE-DRILL ALL LAG HOLES IN EXISTING BULKHEAD. TREAT ALL CUTS AND HOLES IN TIMBER w/ WOOD PRESERVATIVE IN ACCORDANCE w/ SPECIFICATIONS.

**NOTE:** INSTALL CHAIN WITHOUT SLACK TO SUPPORT ANCHOR BLOCKS AND RELIEVE TENSION ON PIPE. CONTRACTOR SHALL ADJUST CHAIN LENGTH AFTER INSTALLATION TO MAINTAIN CHAIN TENSION AS DIRECTED BY ENGINEER.



**WASTEWATER PIPE SECTION AT BULKHEAD**



**SEWER PIPE MANHOLE PENETRATION**

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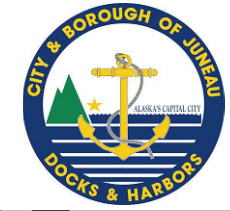
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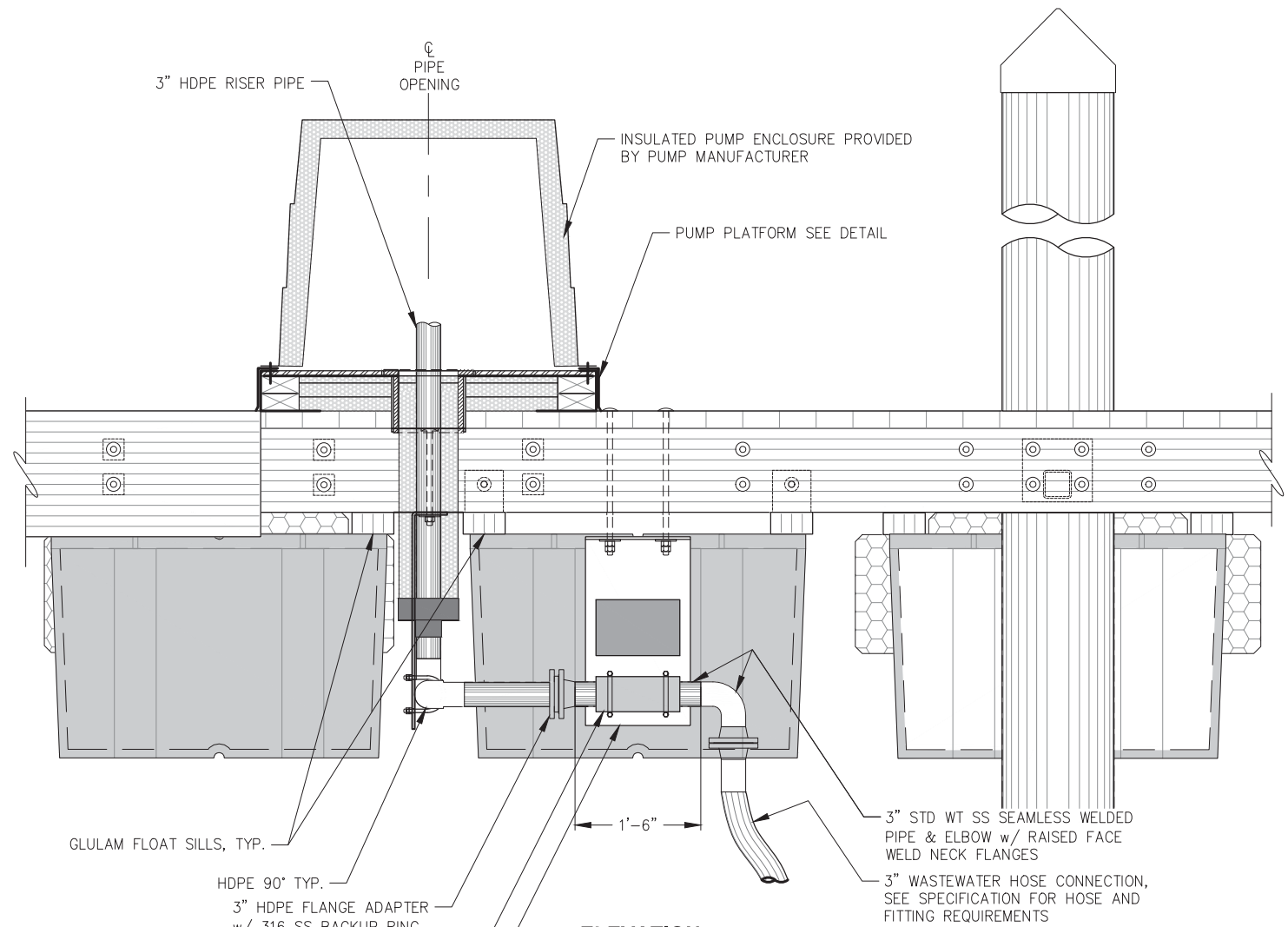


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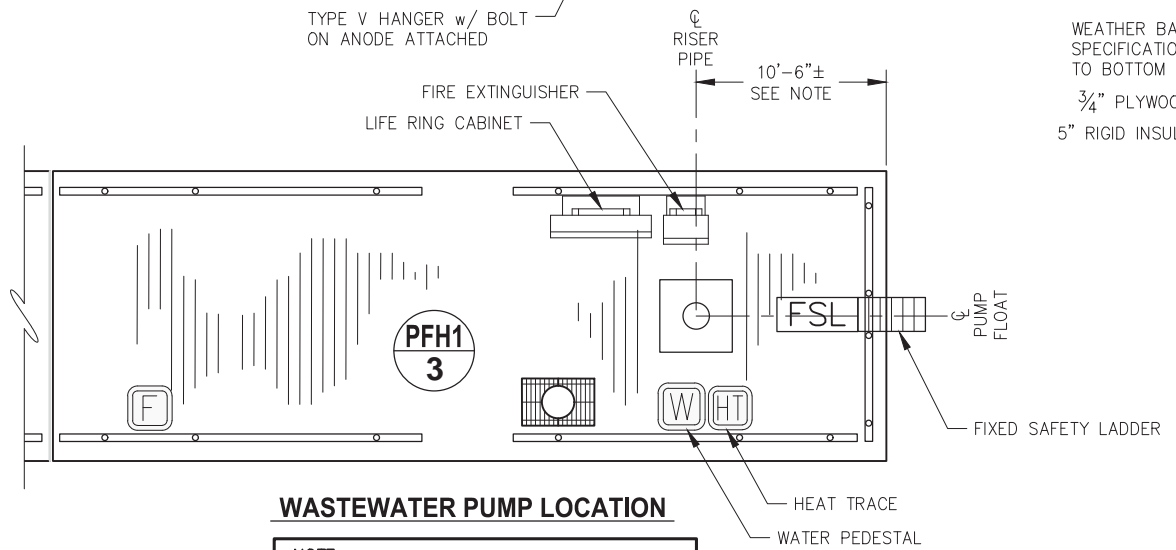
SHEET TITLE:  
**WASTEWATER SYSTEM DETAILS**    **7.10**

PND PROJECT NO.: 182066    C.A.N. NO.: AECC250



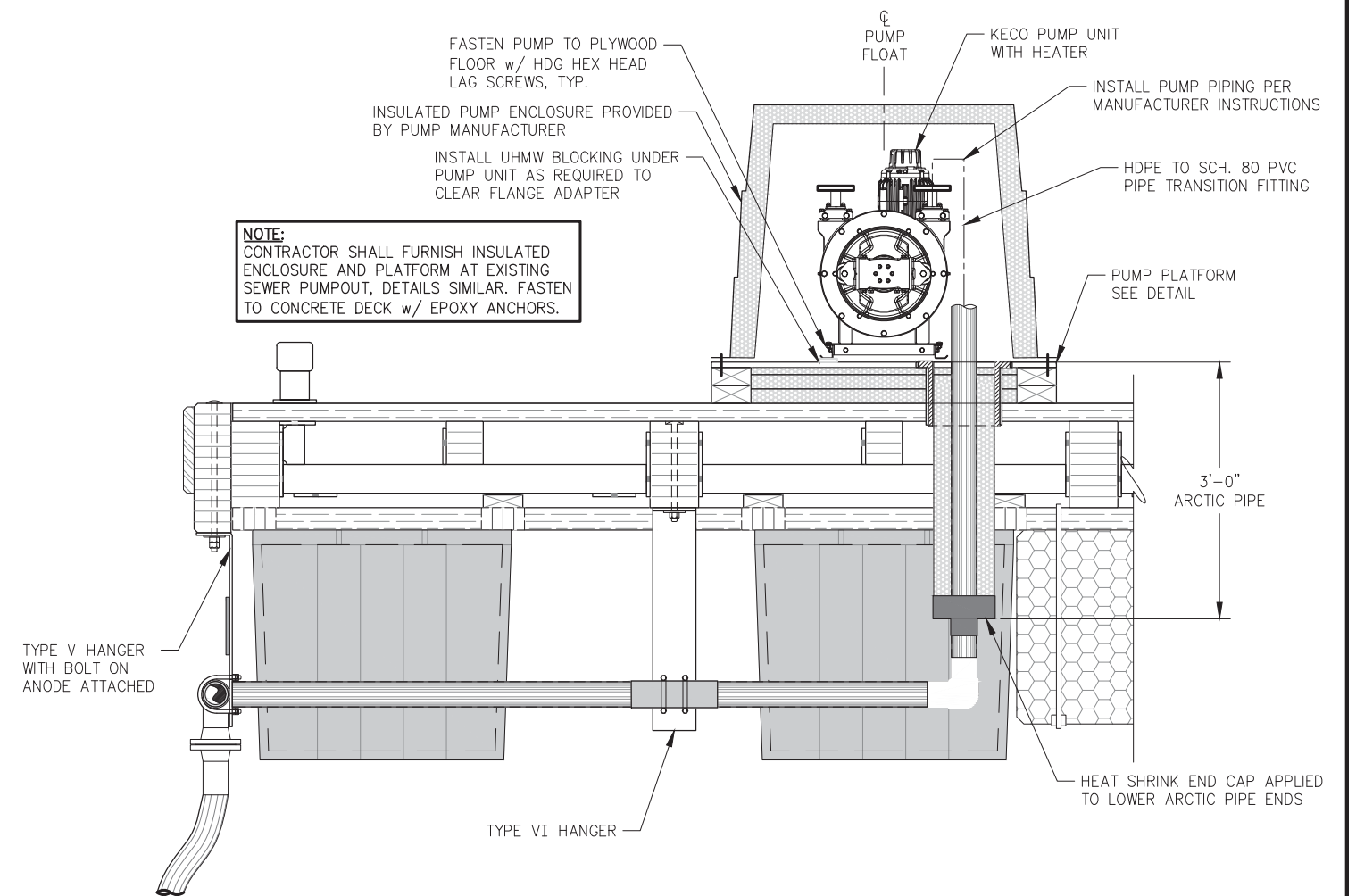


**ELEVATION**



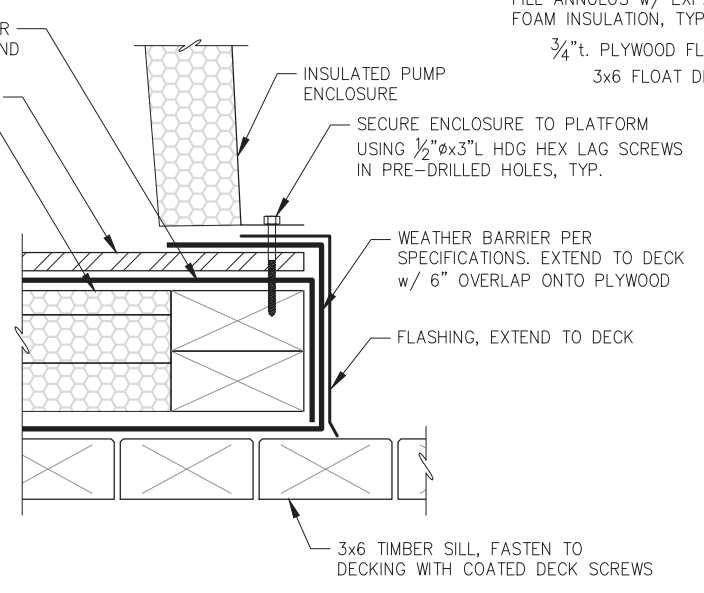
**WASTEWATER PUMP LOCATION**

**NOTE:**  
CENTER SEWER RISER PIPE BETWEEN FLOAT SILLS, MINOR ADJUSTMENTS TO PUMP LOCATION MAY BE REQUIRED TO CENTER PIPE.

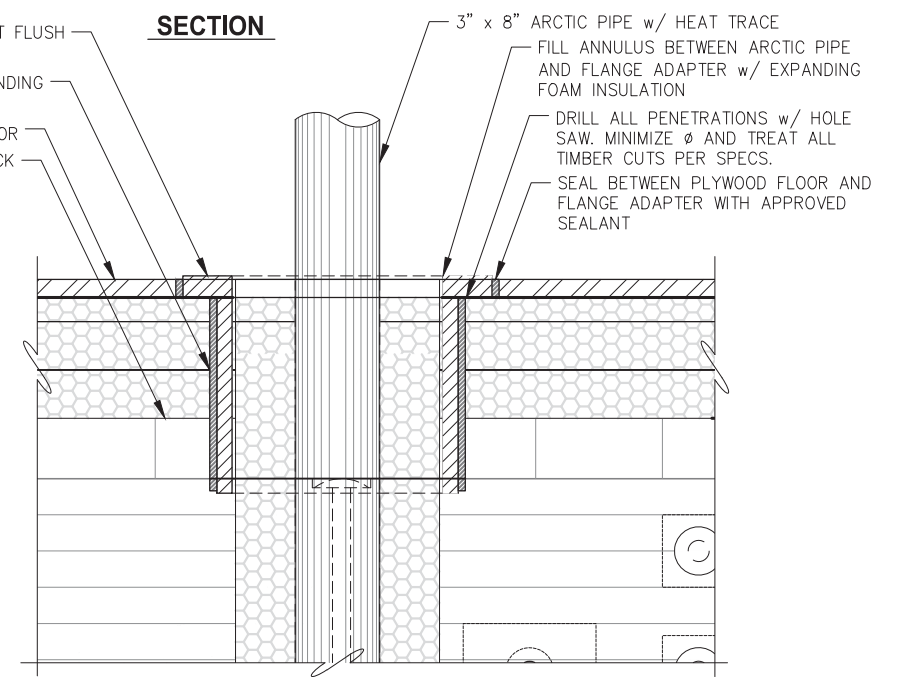


**NOTE:**  
CONTRACTOR SHALL FURNISH INSULATED ENCLOSURE AND PLATFORM AT EXISTING SEWER PUMPOUT, DETAILS SIMILAR. FASTEN TO CONCRETE DECK w/ EPOXY ANCHORS.

**SECTION**



**INSULATED PLATFORM DETAIL**



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REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

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ENGINEERS, INC.

9360 Glacier Highway Ste 100  
Juneau, Alaska 99801  
Phone: 907-586-2093  
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www.pndengineers.com

DESIGN: MS    CHECKED: JLD    SCALE:  
DRAWN: MS    APPROVED: JLD



**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
CBJ CONTRACT NO. DH20-021

SHEET TITLE:  
**WASTEWATER SYSTEM DETAILS**    7.11

PND PROJECT NO.: 182066    C.A.N. NO.: AECC250

DATE: 01/17/2020

**LEGEND**

**ABBREVIATIONS:**

AFG	ABOVE FINISHED GRADE
HDG	HOT-DIPPED GALVANIZED
OHE	OVERHEAD ELECTRICAL
PEC	PHOTOELECTRIC CELL
PVC	POLYVINYL CHLORIDE CONDUIT
RSC	RIGID STEEL CONDUIT
UGE	UNDERGROUND ELECTRICAL
UON	UNLESS OTHERWISE NOTED
WP	WEATHERPROOF
XFMR	TRANSFORMER

**SERVICE EQUIPMENT:**

	TRANSFORMER
	UTILITY POLE

**POWER:**

	DUPLEX RECEPTACLE
	DUPLEX 30A/50A SHORE-TIE PEDESTAL
	DUPLEX 30A/50A SHORE-TIE PEDESTAL W/ LUMINAIRE
	DUPLEX 30A/50A SHORE-TIE PEDESTAL, ONE POWER HEAD WITH 100A SHORE-TIE
	EQUIPMENT CONNECTION
	JUNCTION BOX
	CONDULET OR CONDUIT BODY
	MOTOR CONNECTION
	COMBINATION STARTER/DISCONNECT

**LIGHTING:**

	SURFACE LINEAR LUMINAIRE
	EXTERIOR PEDESTAL MOUNTED LUMINAIRE

**LIGHTING CONTROLS:**

S	SINGLE POLE SWITCH
PEC	PHOTOELECTRIC CELL

**DIAGRAM SYMBOLS:**

	CIRCUIT BREAKER
	CONTACT
	DISCONNECT OR SWITCH
	FUSED DISCONNECT
	GROUND BUS
	GROUND ROD
	METER
	TERMINAL BLOCK
	SHUNT TRIP
	CURRENT TRANSFORMER
	TRANSFORMER

**SHEET NOTE SYMBOLS:**

	EXISTING TO REMAIN
	NEW
	RELOCATE EXISTING
	REMOVE EXISTING
	DETAIL/SHEET CALLOUT
	SECTION/SHEET CALLOUT

**PROJECT NOTE**  
 MAINTAIN ALL TERMINALS AND SPLICES ABOVE THE ELEVATIONS IDENTIFIED IN THE NATIONAL ELECTRICAL CODE 555.2.

**NOTES:**

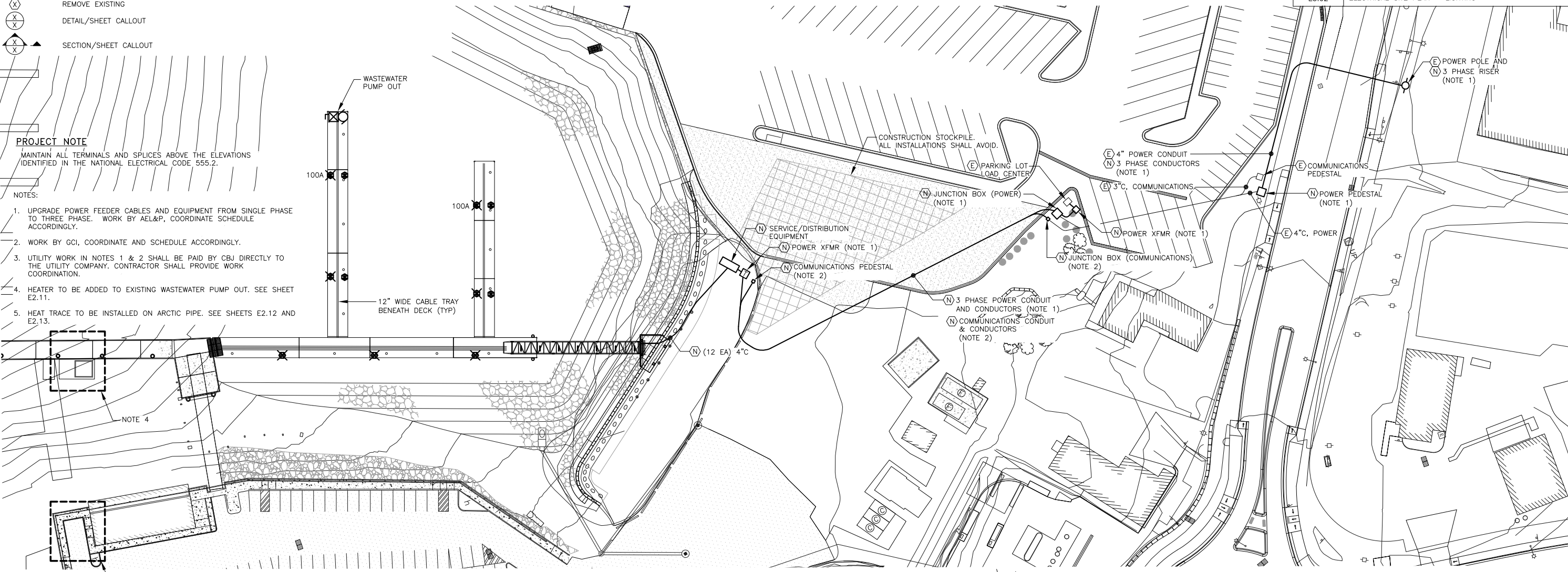
- UPGRADE POWER FEEDER CABLES AND EQUIPMENT FROM SINGLE PHASE TO THREE PHASE. WORK BY AEL&P, COORDINATE SCHEDULE ACCORDINGLY.
- WORK BY GCI, COORDINATE AND SCHEDULE ACCORDINGLY.
- UTILITY WORK IN NOTES 1 & 2 SHALL BE PAID BY CBJ DIRECTLY TO THE UTILITY COMPANY. CONTRACTOR SHALL PROVIDE WORK COORDINATION.
- HEATER TO BE ADDED TO EXISTING WASTEWATER PUMP OUT. SEE SHEET E2.11.
- HEAT TRACE TO BE INSTALLED ON ARCTIC PIPE. SEE SHEETS E2.12 AND E2.13.

**ELECTRICAL DATUM PLANE**  
 SHORE: 25.0 FEET ABOVE MLLW  
 FLOATING DOCKS: 12 INCHES ABOVE DECK  
 NATIONAL ELECTRICAL CODE (2017): 555.2

**2 PLACARD - SERVICE DISCONNECT**  
 NO SCALE

**ELECTRICAL SHEET LIST**

SHEET NUMBER	SHEET TITLE
E1.00	ELECTRICAL SITE PLAN, LEGEND, PLACARD, SHEET LIST
E2.01	ENLARGED ELECTRICAL SITE PLAN - UPLANDS
E2.02	ENLARGED ELECTRICAL SITE PLAN - FLOATS
E2.03	ENLARGED ELECTRICAL SITE PLAN, PLACARD - GANGWAY LANDING
E2.04	SINGLE LINE DIAGRAM
E2.05	WIRING DIAGRAMS, SCHEMATIC DIAGRAMS - PEDESTALS, LIGHTING, HEAT TRACE
E2.06	DETAILS, ELEVATIONS - HEAT TRACE, ELECTRODE, MDP
E2.07	DETAILS, ELEVATIONS - GANGWAY LANDING
E2.08	DETAILS, ELEVATIONS - GANGWAY
E2.09	DETAILS, ELEVATIONS - PEDESTALS, LIGHTING
E2.10	DETAILS - FLOATS
E2.11	ENLARGED ELECTRICAL SITE PLAN, SCHEDULE - EXISTING UTILITY FLOATS
E2.12	ENLARGED ELECTRICAL SITE PLAN - WASTEWATER VAULT
E2.13	SCHEMATIC DIAGRAM, DETAILS - WASTEWATER VAULT
E3.02	ELECTRICAL SITE PLAN - LIGHTING



**1 ELECTRICAL SITE PLAN**

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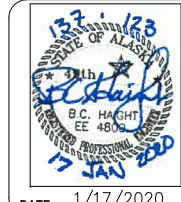
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 DRAWN: REJ/PEL APPROVED: \_\_\_\_\_

SCALE: SCALE IN FEET  
 0 40 80 FT.

DATE: 1/17/2020



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**STATTER HARBOR IMPROVEMENTS PH III(B)**  
**CBJ CONTRACT NO. DH20-021**

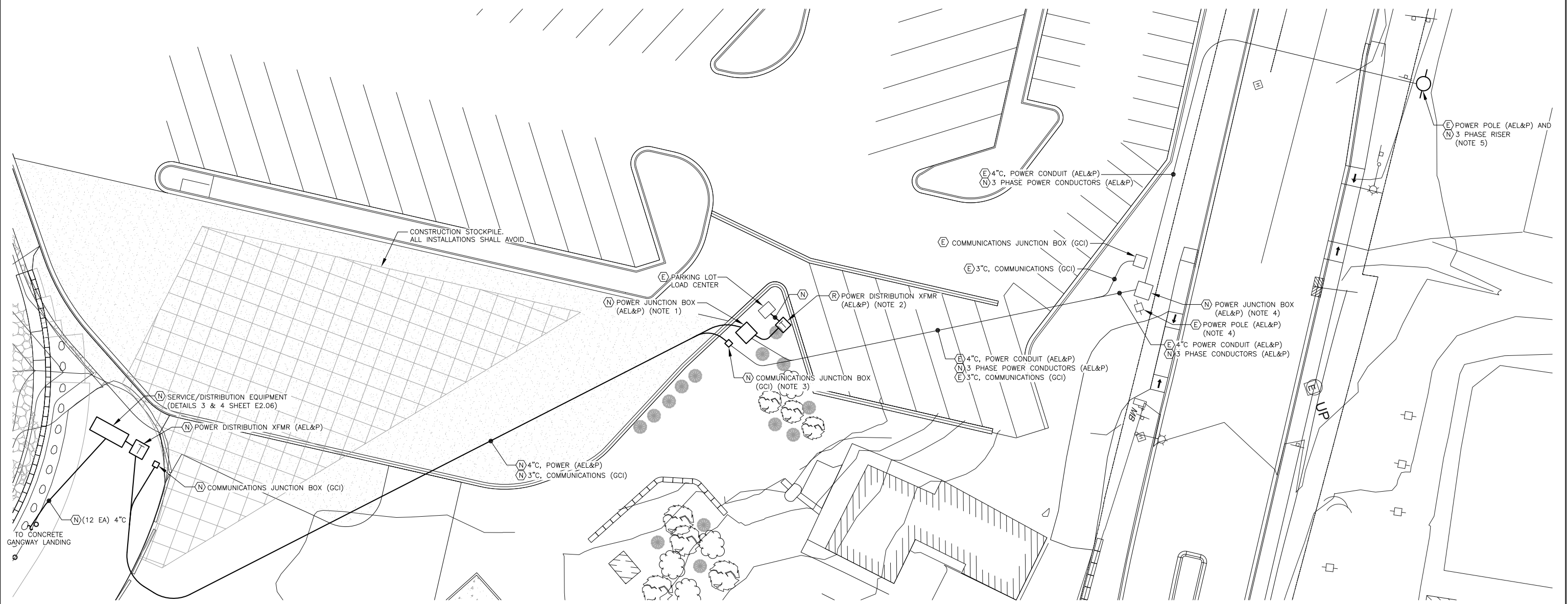
SHEET TITLE:  
**ELECTRICAL SITE PLAN, LEGEND, PLACARD, SHEET LIST**

PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

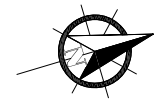
**E1.00**



- NOTES:
1. A NEW THREE PHASE JUNCTION BOX SHALL BE PLACED IN THE LOCATION OF THE EXISTING TRANSFORMER.
  2. THE EXISTING (SINGLE PHASE, 25 KVA) TRANSFORMER POWERING THE PARKING LOT LOAD CENTER SHALL BE MOVED TO A NEARBY LOCATION AND POWERED THROUGH A NEW SINGLE PHASE FEEDER ROUTED FROM THE NEW 3 PHASE JUNCTION BOX.
  3. A NEW COMMUNICATIONS JUNCTION BOX SHALL BE INSTALLED IN THE LOCATION OF THE EXISTING CONDUIT STUB.
  4. A NEW THREE PHASE JUNCTION BOX SHALL BE INSTALLED IN THE LOCATION OF THE EXISTING SINGLE PHASE JUNCTION BOX. THE SINGLE PHASE FEEDER THAT IS ROUTED TO THE POWER POLE TO THE EAST OF THE JUNCTION BOX SHALL BE POWERED THROUGH THE NEW JUNCTION BOX AND WILL UTILIZE EXISTING CONDUCTORS.
  5. A NEW RISER SHALL BE INSTALLED ON THE POWER POLE THAT WILL PROVIDE THREE PHASE POWER TO THE NEW INSTALLATION.



1 ELECTRICAL SITE PLAN - UPLANDS



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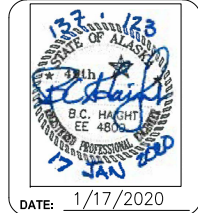
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REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

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DRAWN: REJ/PEL APPROVED: \_\_\_\_\_

SCALE: SCALE IN FEET  
0 20 40 FT.

DATE: 1/17/2020



**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
CBJ CONTRACT NO. DH20-021

SHEET TITLE:  
**ENLARGED ELECTRICAL SITE PLAN - UPLANDS**

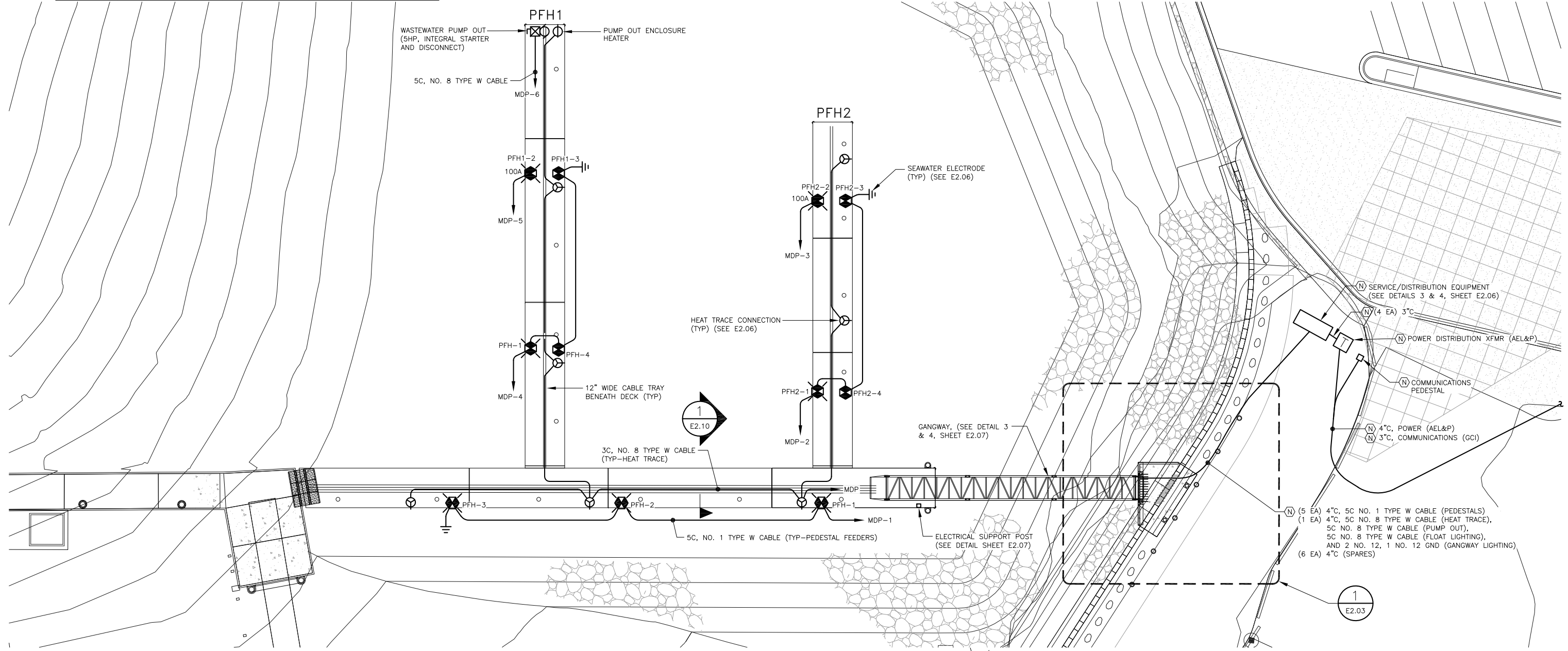
PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

**E2.01**

# FLOAT SHORE-TIE SCHEDULE

PEDESTAL DESIGNATION	RECEPTACLE			CONNECTION PHASE	LIGHT
	AMPS (LEFT/RIGHT)	VOLTS	PHASE		
PFH-1	30,50/30,50	208Y/120V	3	A, AB / B, BC	YES
PFH-2	30,50/30,50	208Y/120V	3	B, BC / C, AC	YES
PFH-3	30,50/30,50	208Y/120V	3	C, AC / A, AB	YES
PFH2-1	30,50/30,50	208Y/120V	3	A, AB / B, BC	YES
PFH2-2	30,50/30,50,100	208Y/120V	3	B, BC / C, AC, ABC	YES
PFH2-3	30,50/30,50	208Y/120V	3	C, AC / A, AB	NO
PFH2-4	30,50/30,50	208Y/120V	3	B, BC / C, AC	NO
PFH1-1	30,50/30,50	208Y/120V	3	A, AB / B, BC	YES
PFH1-2	30,50/30,50,100	208Y/120V	3	A, AB / B, BC, ABC	YES
PFH1-3	30,50/30,50	208Y/120V	3	C, AC / A, AB	NO
PFH1-4	30,50/30,50	208Y/120V	3	B, BC / C, AC	NO

NOTE: SEE E2.05 FOR PEDESTAL WIRING DIAGRAM.



1 ELECTRICAL SITE PLAN - FLOATS

Jan 17, 2020 - 12:57pm F:\Projects\131 PH&D\123 Statter Harbor PH III\Drawings\Working\E2.02.dwg (E2.02 tab)



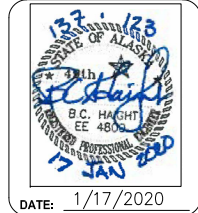
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REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.

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DESIGN: QAJ CHECKED: BCH  
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SCALE: SCALE IN FEET  
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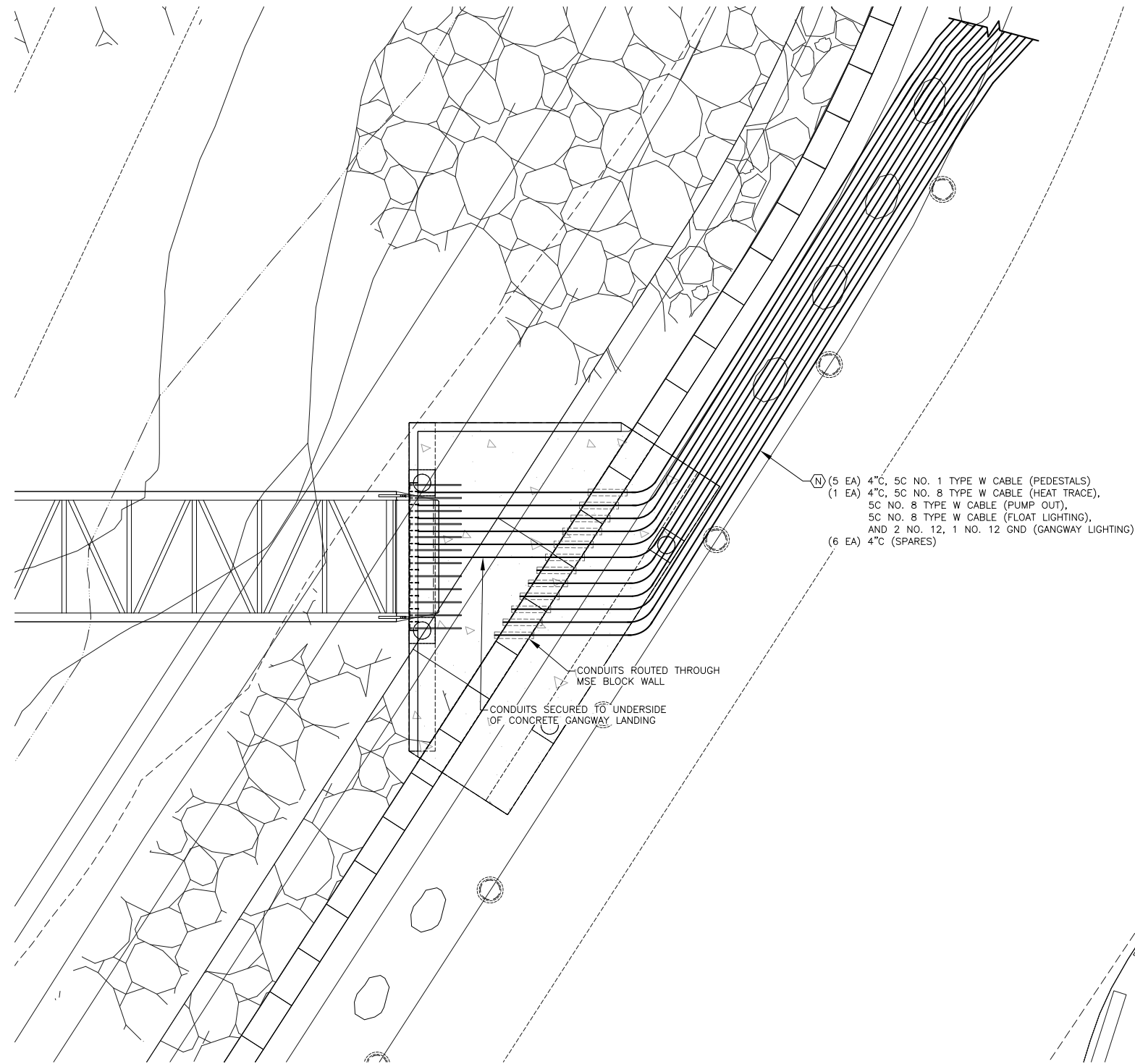


**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
**CBJ CONTRACT NO. DH20-021**

SHEET TITLE:  
**ENLARGED ELECTRICAL SITE PLAN - FLOATS**

PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

**E2.02**



(N) (5 EA) 4" C, 5C NO. 1 TYPE W CABLE (PEDESTALS)  
 (1 EA) 4" C, 5C NO. 8 TYPE W CABLE (HEAT TRACE),  
 5C NO. 8 TYPE W CABLE (PUMP OUT),  
 5C NO. 8 TYPE W CABLE (FLOAT LIGHTING),  
 AND 2 NO. 12, 1 NO. 12 GND (GANGWAY LIGHTING)  
 (6 EA) 4" C (SPARES)

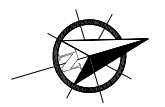
CONDUITS ROUTED THROUGH  
 MSE BLOCK WALL  
 CONDUITS SECURED TO UNDERSIDE  
 OF CONCRETE GANGWAY LANDING

**WARNING**  
 POTENTIAL SHOCK HAZARD - ELECTRICAL  
 CURRENTS MAY BE PRESENT IN THE WATER

**2** PLACARD - SAFETY SIGN NO SCALE

NOTE: SAFETY SIGN SHALL BE INSTALLED IN CONSPICUOUS  
 LOCATION NEAR GANGWAY LANDING AND SHALL FOLLOW THE  
 GUIDELINES STIPULATED IN ANSI Z535.4-2011, PRODUCT SAFETY  
 SIGNS AND LABELS FOR FONT TYPE AND SIZES AND COLORS.

**1** ELECTRICAL SITE PLAN - GANGWAY LANDING



Jan 17, 2020 12:56pm F:\Projects\137 PND\123 Statter Harbor Ph III\Drawings\Working\E2.03.dwg (E2.03 tab)



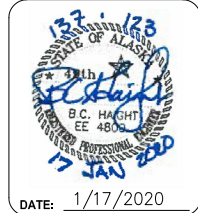
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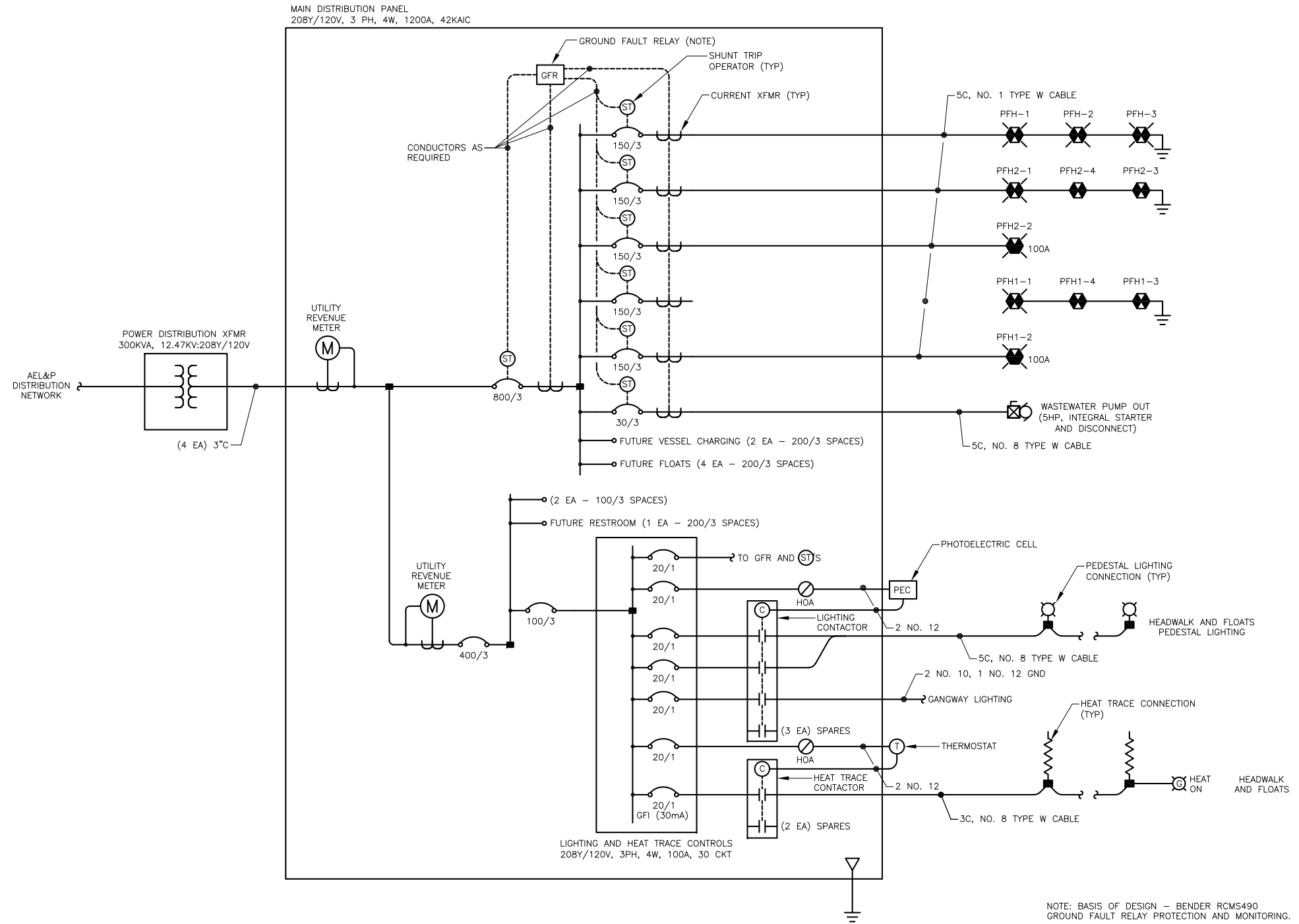


**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
 CBJ CONTRACT NO. DH20-021

SHEET TITLE:  
**ENLARGED ELECTRICAL SITE PLAN,  
 PLACARD - GANGWAY LANDING**

PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

**E2.03**



NOTE: BASIS OF DESIGN - BENDER RCMS490  
GROUND FAULT RELAY PROTECTION AND MONITORING.

① SINGLE LINE DIAGRAM - MAIN DISTRIBUTION PANEL (MDP)

Jan 17, 2020 12:59pm F:\Projects\1317\_PND\123 Statter Harbor Ph III\Drawings\Working\E2.04.dwg (E2.04 tab)



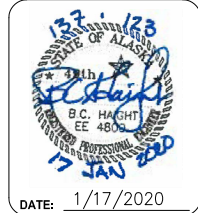
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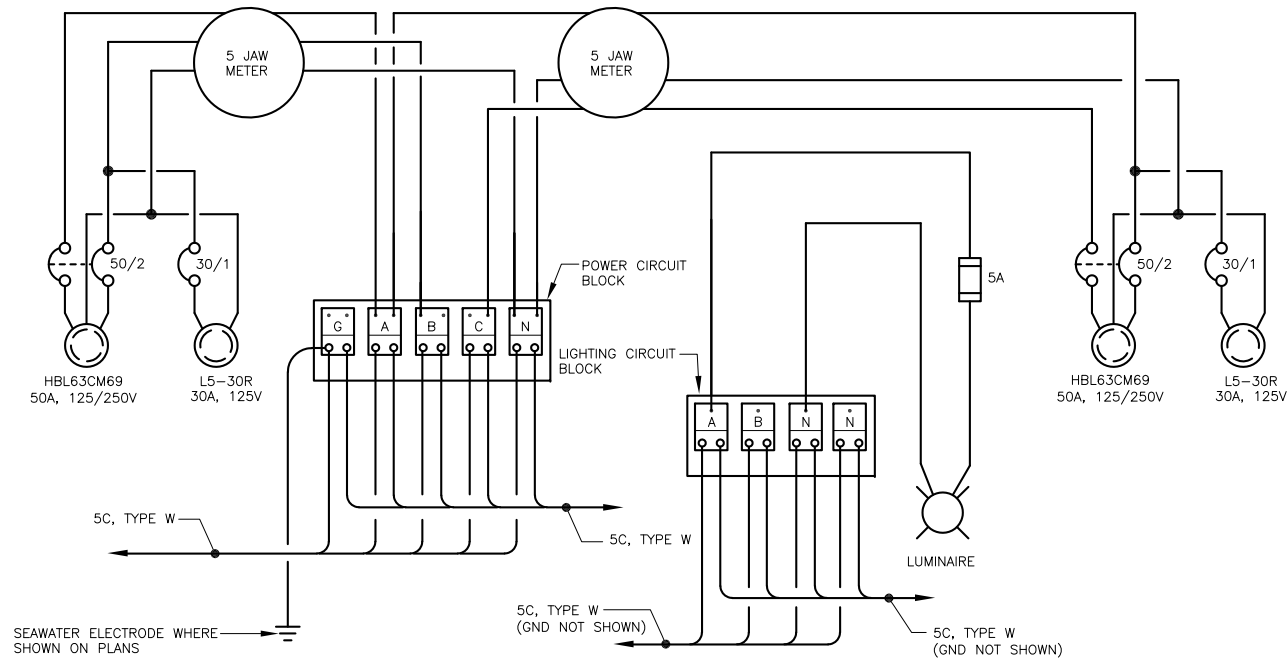


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CBJ CONTRACT NO. DH20-021

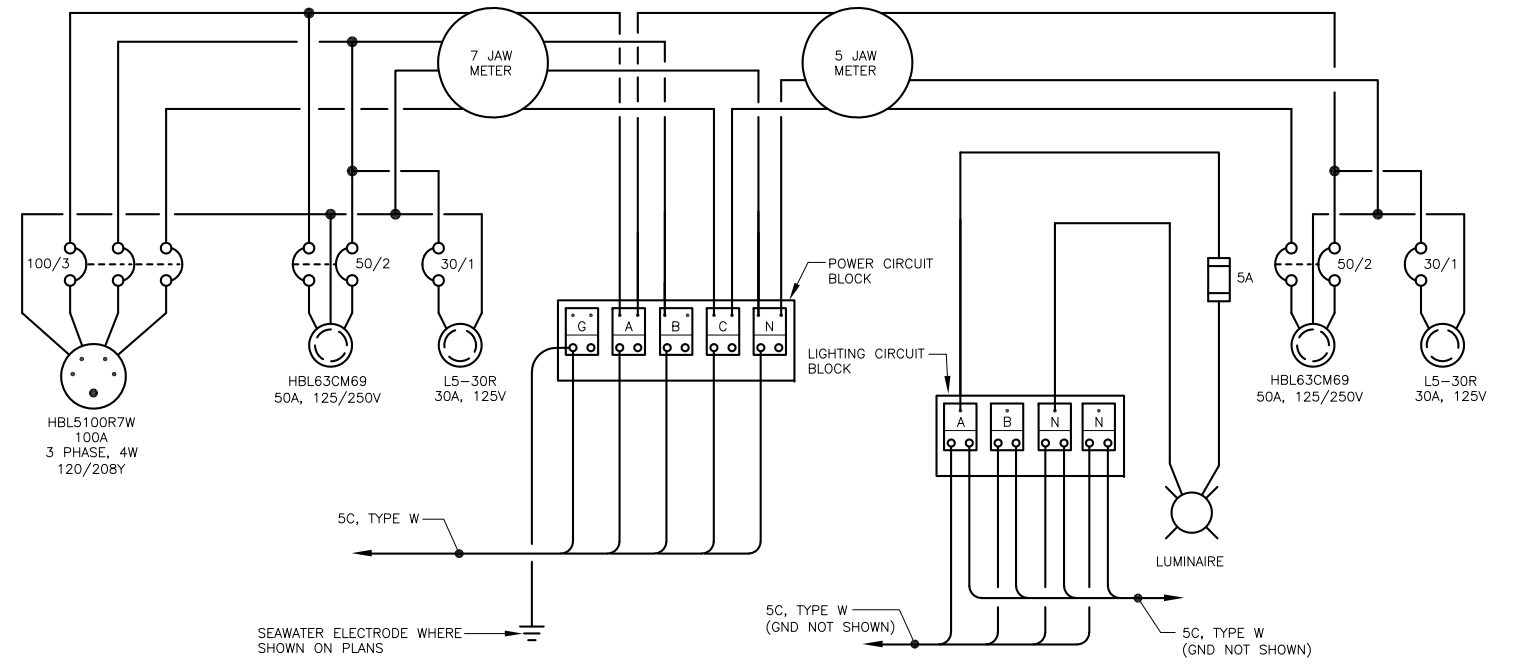
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**SINGLE LINE DIAGRAM**

PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

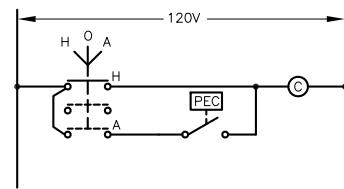
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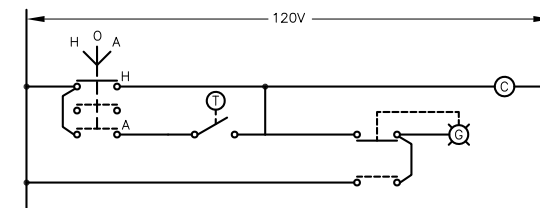
1 WIRING DIAGRAM - TYPICAL 50A/30A PEDESTAL WITH LUMINAIRE NO SCALE



2 WIRING DIAGRAM - TYPICAL 100A/50A/30A PEDESTAL NO SCALE



3 SCHEMATIC DIAGRAM - LIGHTING NO SCALE



4 SCHEMATIC DIAGRAM - HEAT TRACE NO SCALE

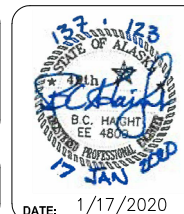
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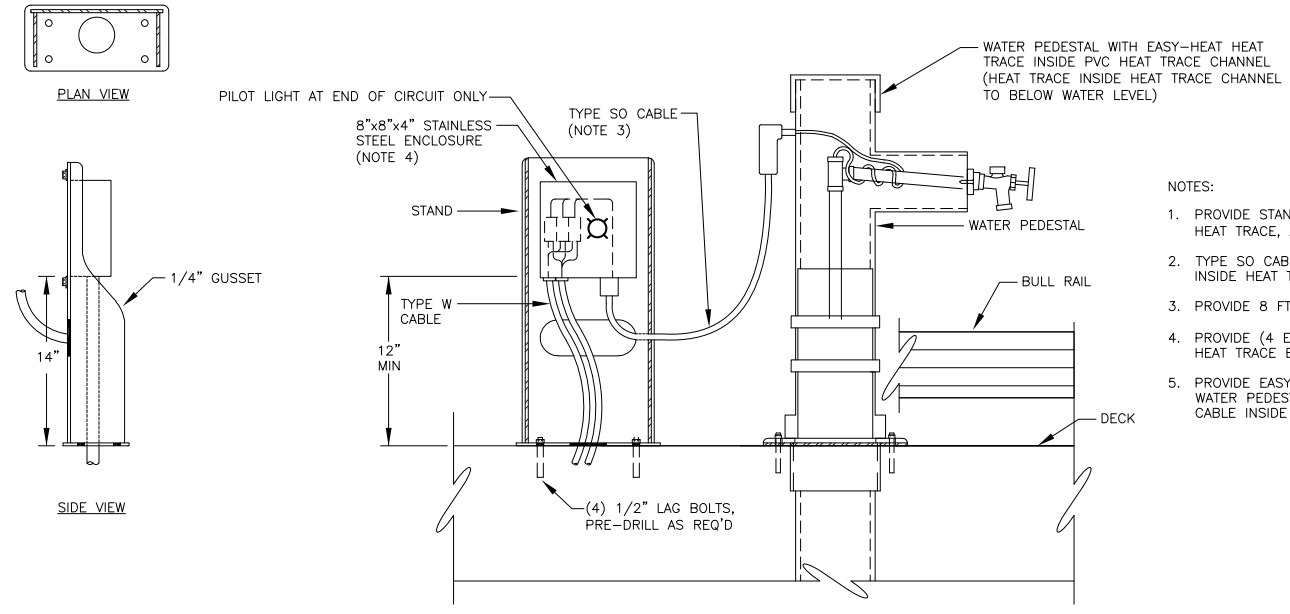
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 CBJ CONTRACT NO. DH20-021

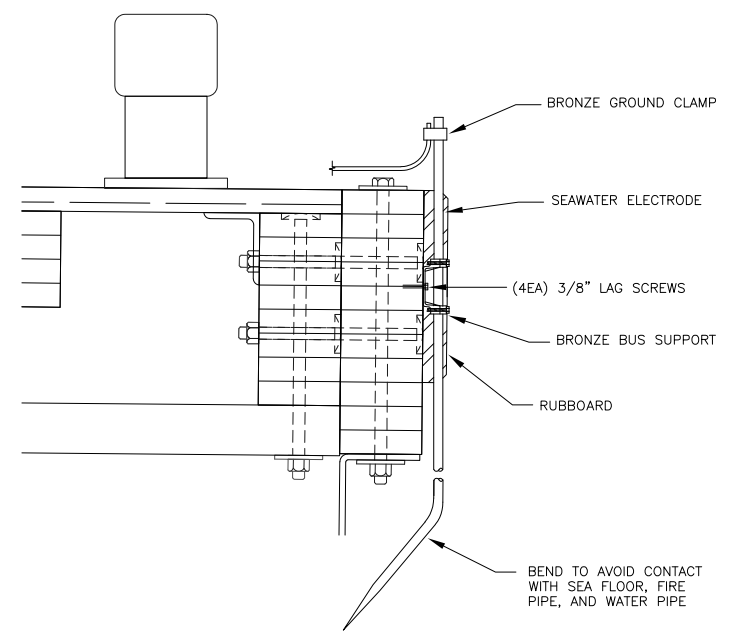
SHEET TITLE:  
**WIRING DIAGRAMS, SCHEMATIC DIAGRAMS - PEDESTALS, LIGHTING, HEAT TRACE**  
 PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

**E2.05**

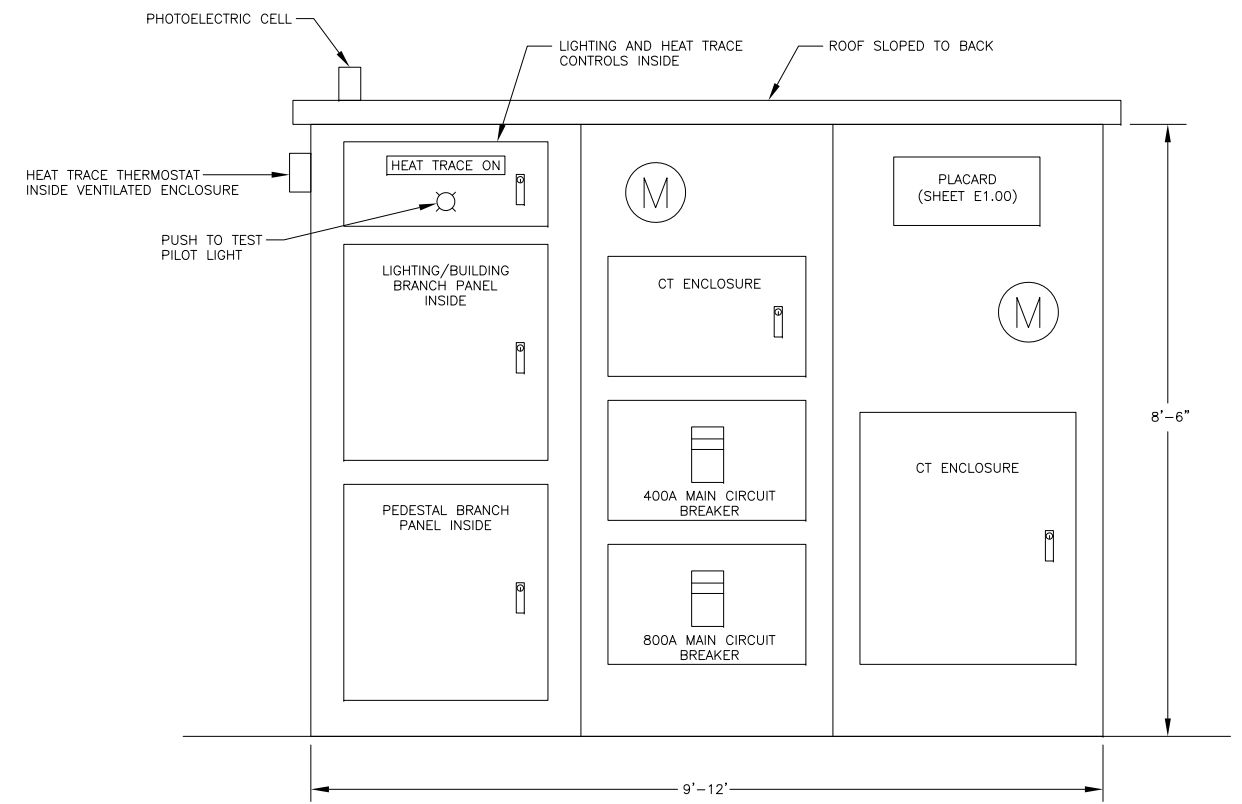


1 DETAIL - HEAT TRACE J-BOX STAND (TYP) NO SCALE

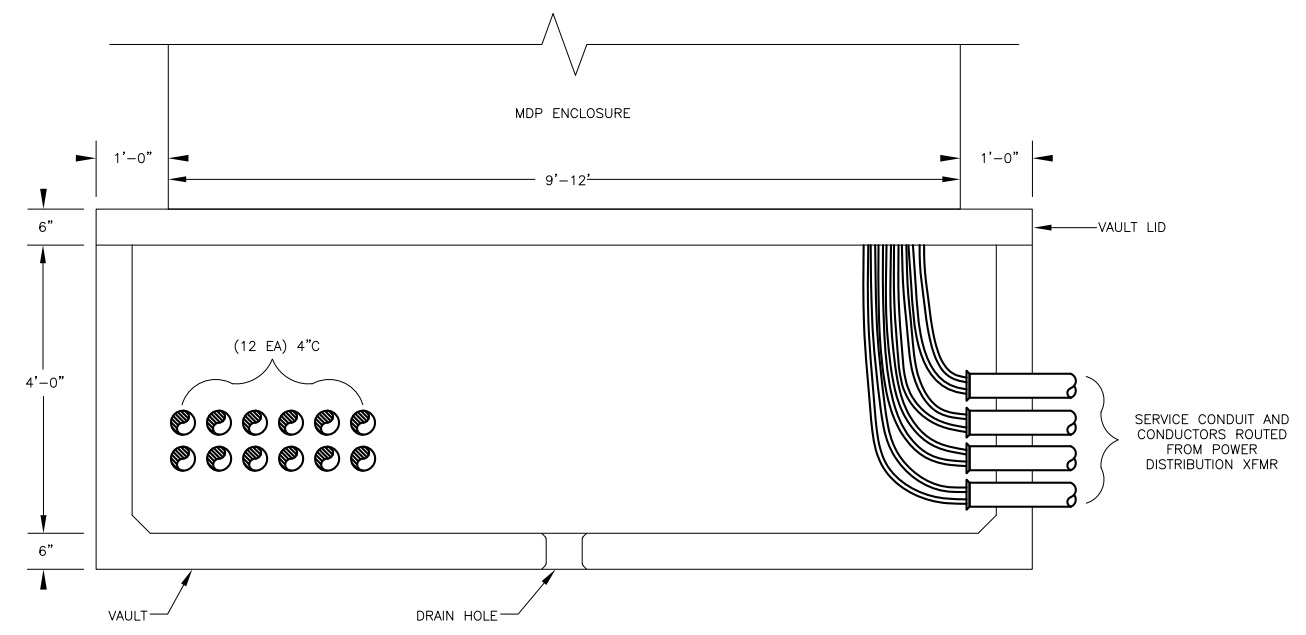
- NOTES:
1. PROVIDE STAND, ENCLOSURE WITH COMPONENTS, CABLE, HEAT TRACE, AND GLAND/SEAL AS ONE PACKAGE.
  2. TYPE SO CABLE SHALL BE HARDWIRED TO TERMINALS INSIDE HEAT TRACE STAND ENCLOSURE.
  3. PROVIDE 8 FT MIN, LONG CABLE.
  4. PROVIDE (4 EA) 1/4" DRAIN HOLES IN BOTTOM OF HEAT TRACE ENCLOSURE.
  5. PROVIDE EASY-HEAT CONNECTOR KIT 10802 INSIDE WATER PEDESTAL. PROVIDE CONNECTOR ON TYPE SO CABLE INSIDE TOP OF PEDESTAL.



2 DETAIL - FLOAT MOUNTED SEAWATER ELECTRODE (TYP) NO SCALE



3 ELEVATION - SWITCHBOARD NO SCALE



4 ELEVATION - MDP VAULT NO SCALE

Jan 17, 2020 - 1:01pm F:\Projects\1317 P&ID\123 Statter Harbor Ph III\Drawings\Working\E2.06.dwg (E2.06 tab)

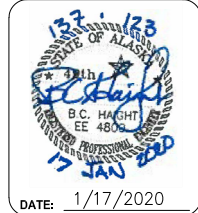


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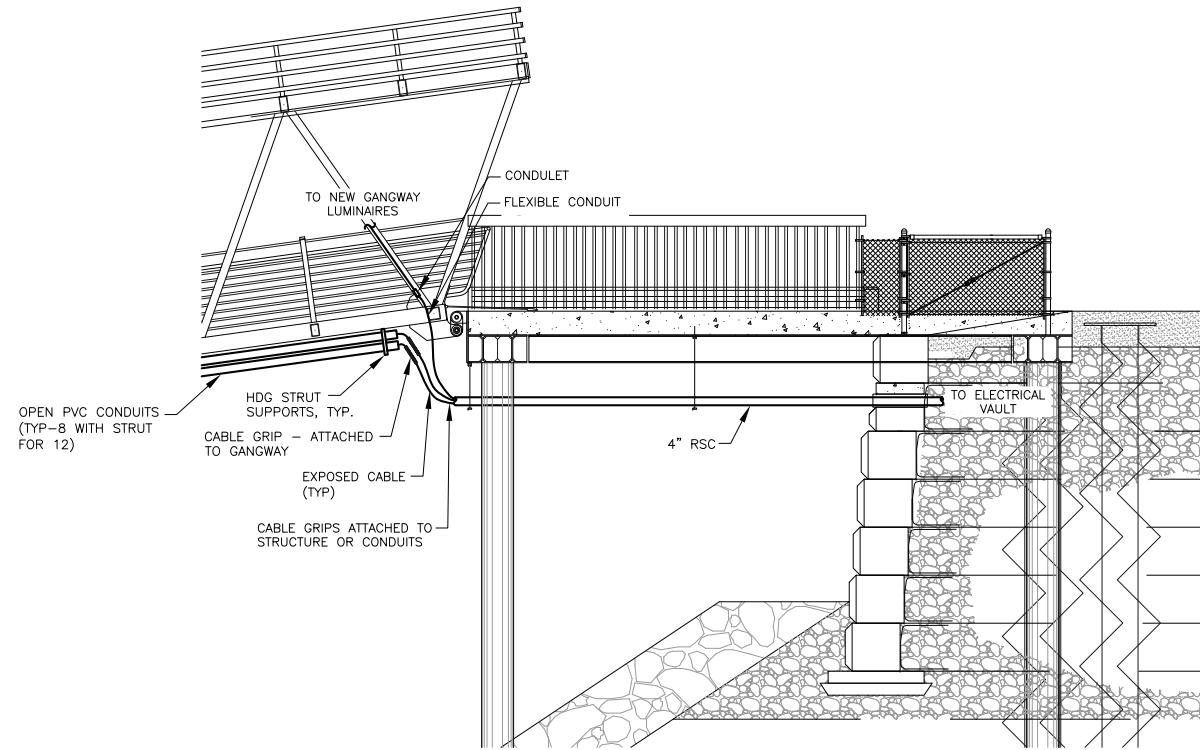


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**CBJ CONTRACT NO. DH20-021**

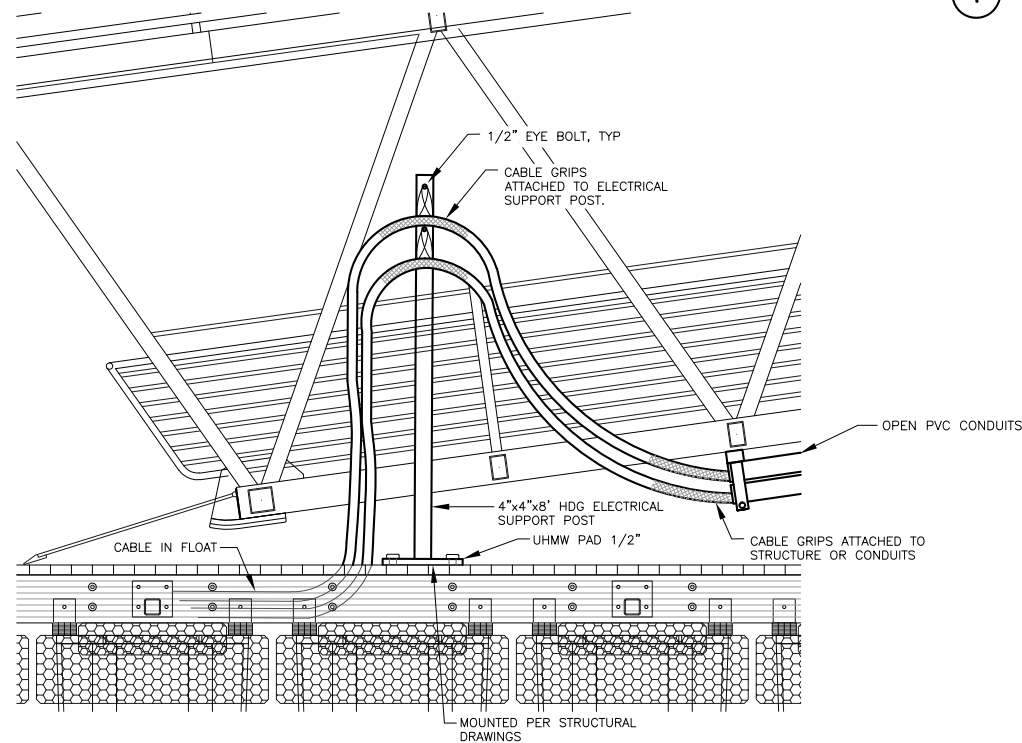
SHEET TITLE:  
**DETAILS, ELEVATIONS -  
HEAT TRACE, ELECTRODE, MDP**

PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

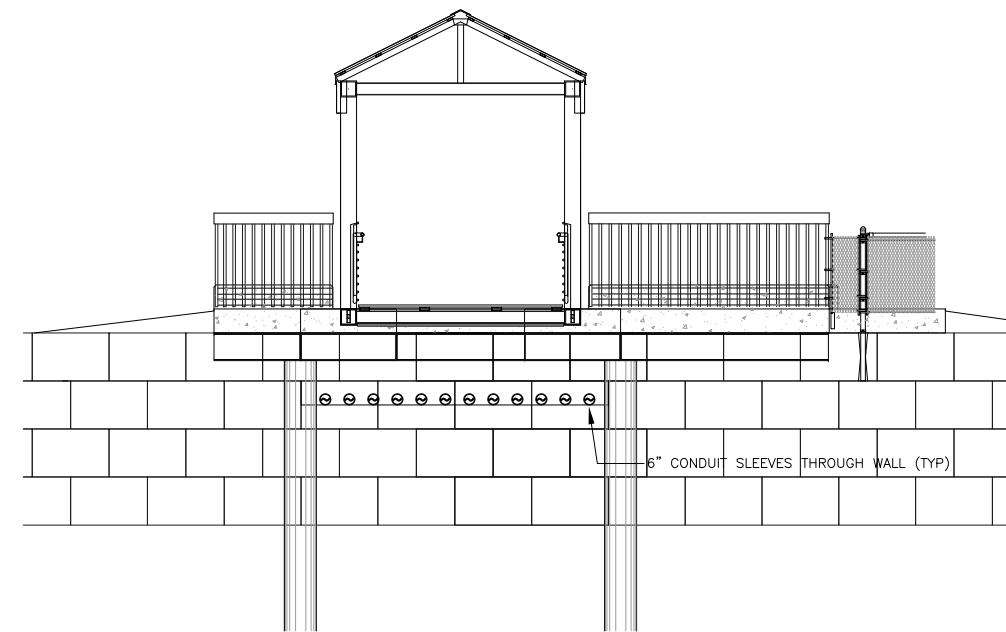
**E2.06**



1 DETAIL - APPROACH GANGWAY NO SCALE



2 DETAIL - APPROACH GANGWAY CABLE SUPPORT POST NO SCALE

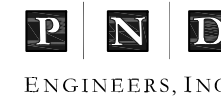


3 ELEVATION - BLOCK WALL CONDUIT PENETRATIONS NO SCALE

Jan 17, 2020 1:02pm F:\Projects\137 P&ID\123 Statter Harbor Ph III\Drawings\Working\E2.07.dwg (E2.07 tab)



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SCALE:

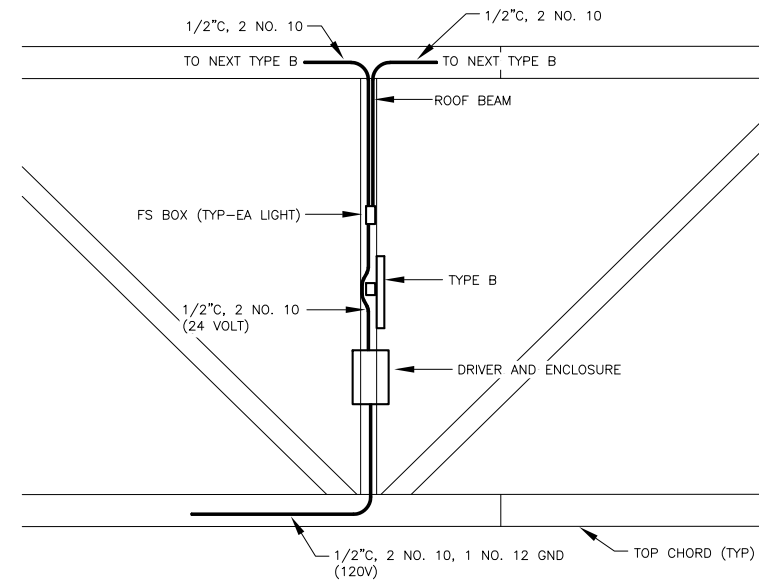


**CITY & BOROUGH OF JUNEAU, ALASKA**  
**STATTER HARBOR IMPROVEMENTS PH III(B)**  
**CBJ CONTRACT NO. DH20-021**

SHEET TITLE:  
**DETAILS, ELEVATIONS - GANGWAY LANDING**

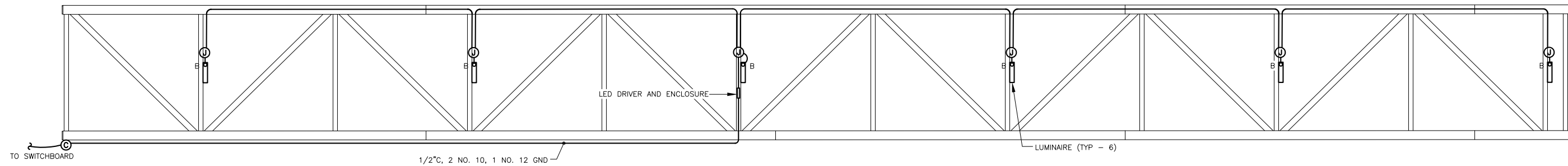
**E2.07**

PND PROJECT NO.: 182066 C.A.N. NO.: AECC250



PLAN VIEW - ROOF STRUCTURE

1 **DETAIL - GANGWAY LUMINAIRE INSTALLATION** NO SCALE



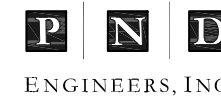
2 **GANGWAY LIGHTING - PLAN VIEW** NO SCALE

Jan 17, 2020 1:02pm F:\Projects\131 P&ID\123 Statter Harbor Ph III\Drawings\Working\E2.08.dwg (E2.08 tab)



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**STATTER HARBOR IMPROVEMENTS PH III(B)**  
CBJ CONTRACT NO. DH20-021

SHEET TITLE:  
**DETAILS, ELEVATIONS - GANGWAY**

**E2.08**

PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

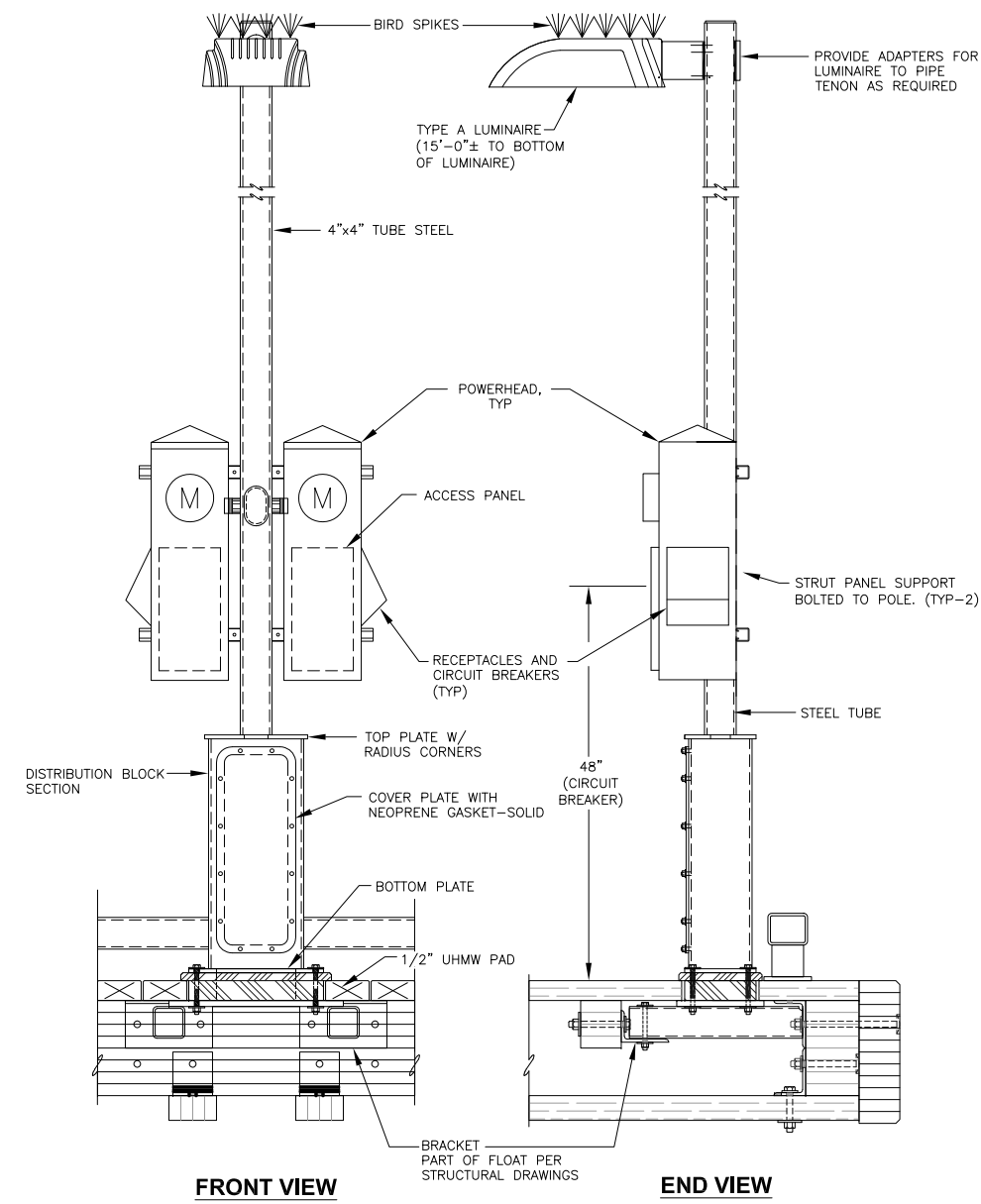
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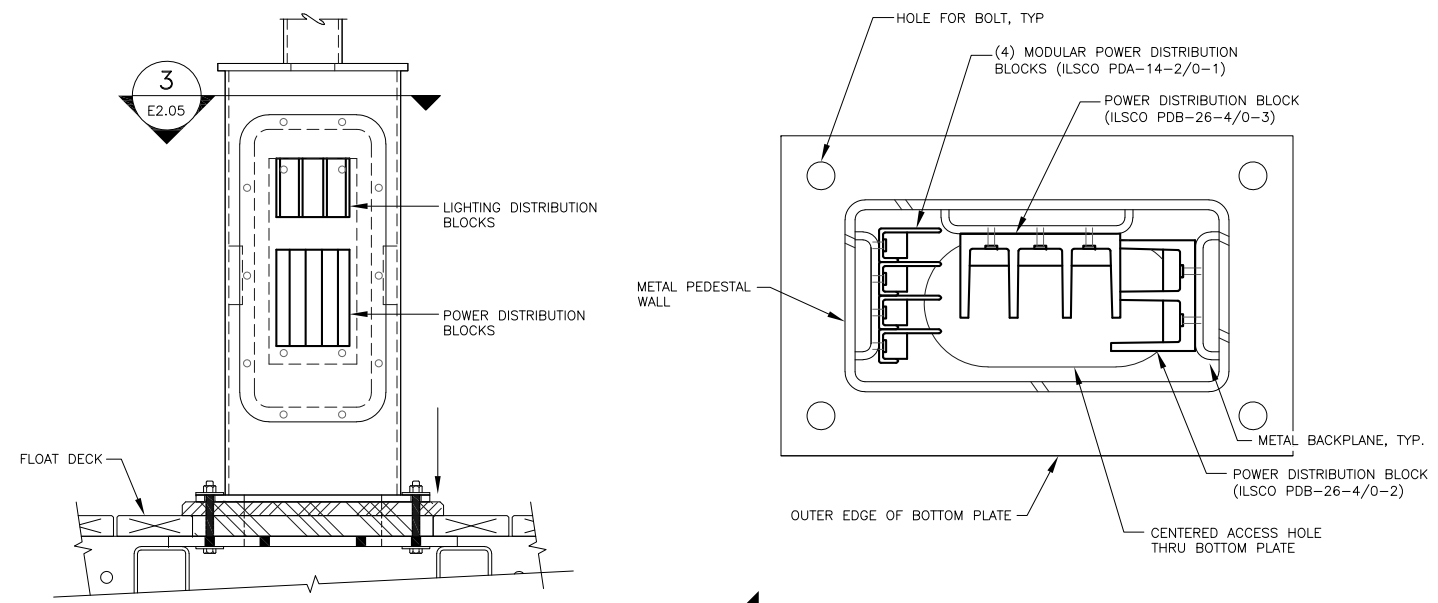
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Jan 17, 2020 1:12pm  
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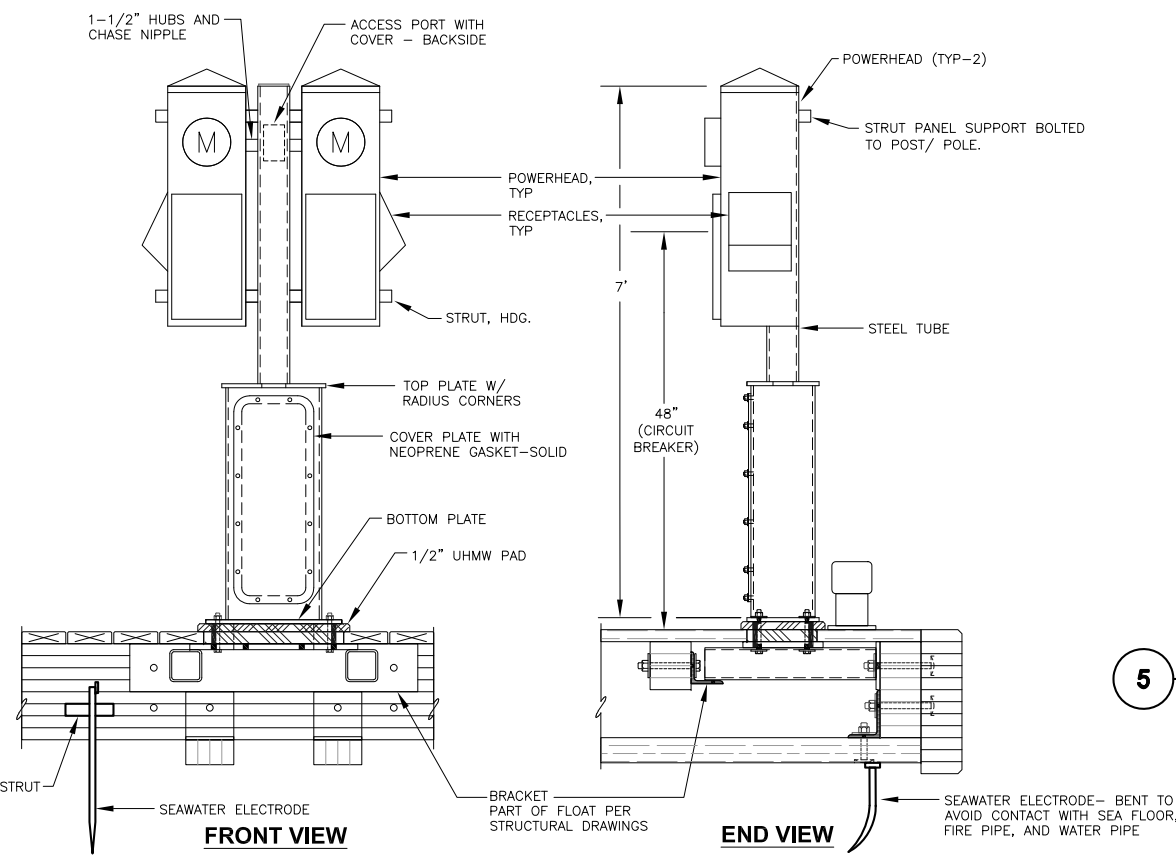


**1 ELEVATION - PEDESTALS WITH LUMINAIRES** NO SCALE

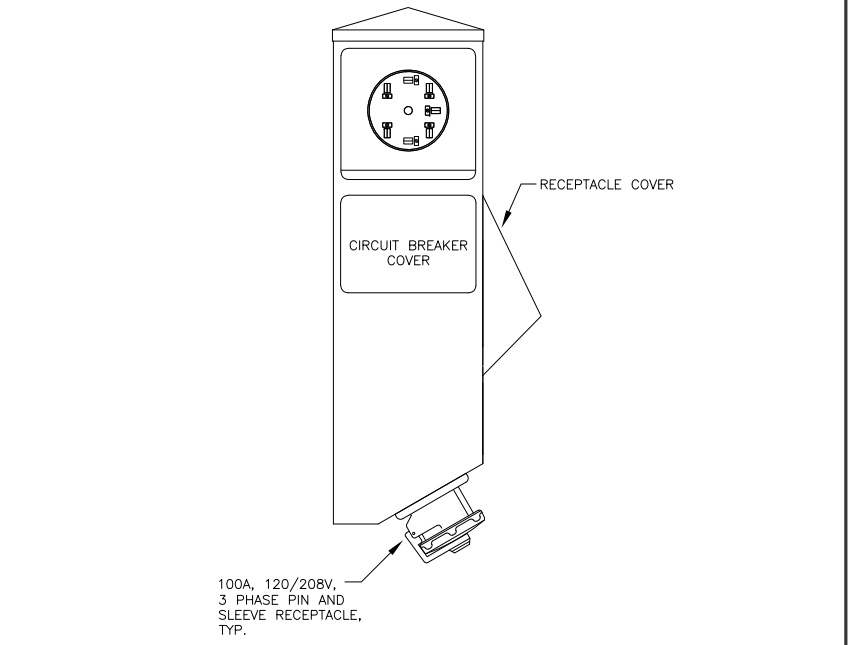


**3 DETAIL - PEDESTAL BASE** NO SCALE  
**4 DETAIL - PEDESTAL BASE - TOP VIEW** NO SCALE

- SHEET NOTES:**
- SEE STRUCTURAL FOR PEDESTAL MOUNTING AND FABRICATION DETAILS.
  - PROVIDE POLES WITH THE ELECTRICAL AND LIGHTING EQUIPMENT AS A COMPLETE PACKAGE.
  - MOUNT POWER DISTRIBUTION BLOCK TO BACKPLANES PROVIDED IN PEDESTAL. CHASE THREADS AS REQUIRED DURING FIELD INSTALLATION. WATERPROOF GREASE SHALL BE APPLIED TO ALL CHASED THREADS.
  - ELEVATION FOR LIGHT ONLY POLES TO BE SIMILAR TO ELEVATION 1 EXCEPT WITH NO POWERHEADS, OR STRUT PANEL SUPPORTS, OR PEDESTAL BASE SECTION. PROVIDE HANDHOLE ACCESS NEAR BASE OF LIGHT ONLY POLES.



**2 ELEVATION - PEDESTAL BASE AND POWER HEADS** NO SCALE



**5 DETAIL - 30/50/100 POWERHEAD CONFIGURATION** NO SCALE

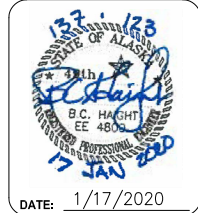


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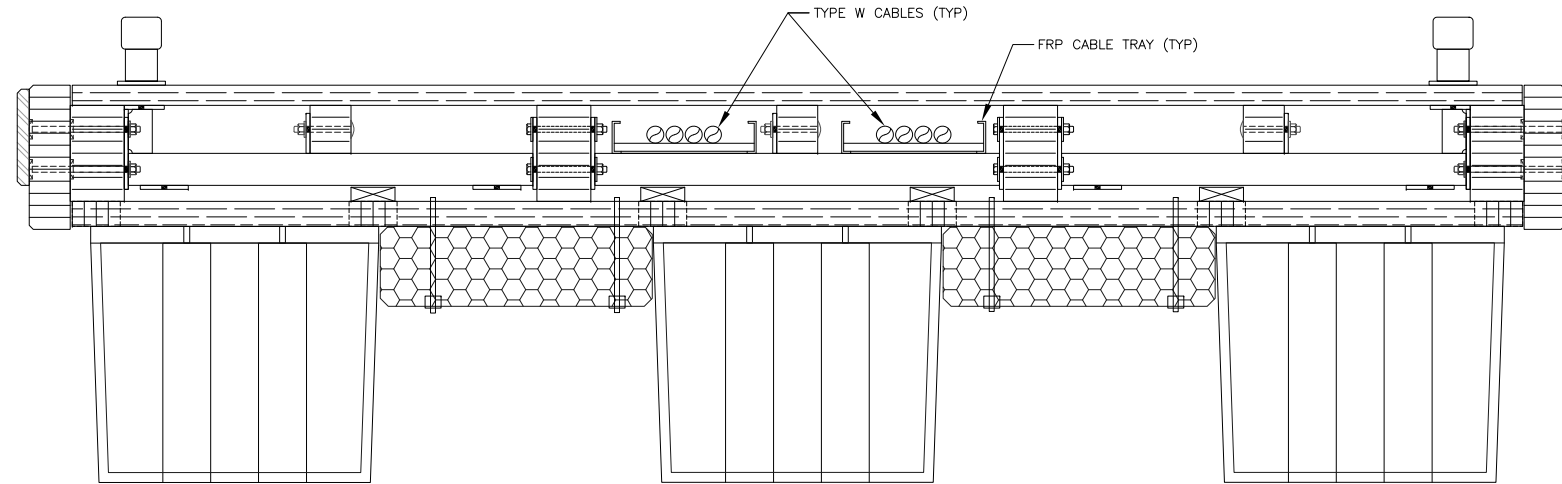


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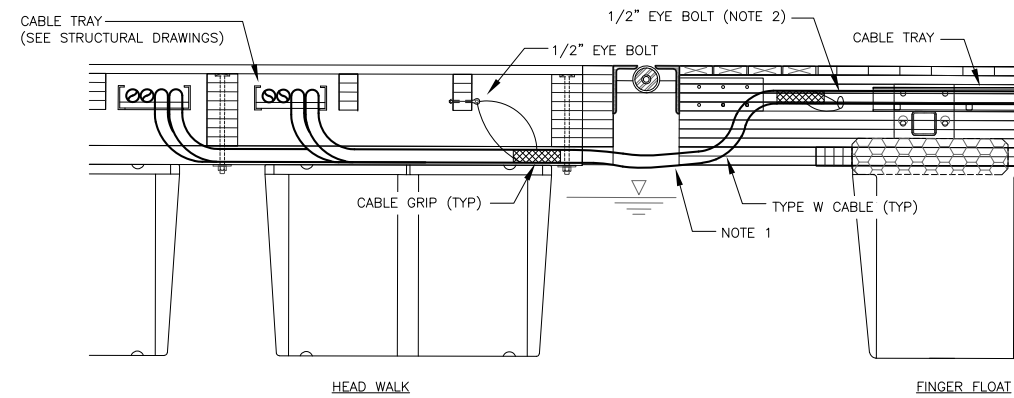
SHEET TITLE:  
**DETAILS, ELEVATIONS - PEDESTALS, LIGHTING**

PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

**E2.09**



1 DETAIL - TYPICAL FLOAT SECTION  
NO SCALE



NOTES

1. ANTI-CHAFFING SLEEVES SHALL BE WRAPPED AROUND ELECTRICAL CABLES AT CHAFFING-PRONE AREAS.
2. CABLE GRIP SHALL BE STRAPPED TO EYE BOLT AT NEAREST STRINGER.

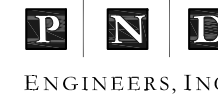
2 DETAIL - FLOAT TO FLOAT CABLE TRANSITION  
NO SCALE

Jan 17, 2020 1:13pm F:\Projects\137 PND\123 Statter Harbor Ph III\Drawings\Working\E2.10.dwg (E2.10 tab)



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CBJ CONTRACT NO. DH20-021

SHEET TITLE:  
**DETAILS - FLOATS**

**E2.10**

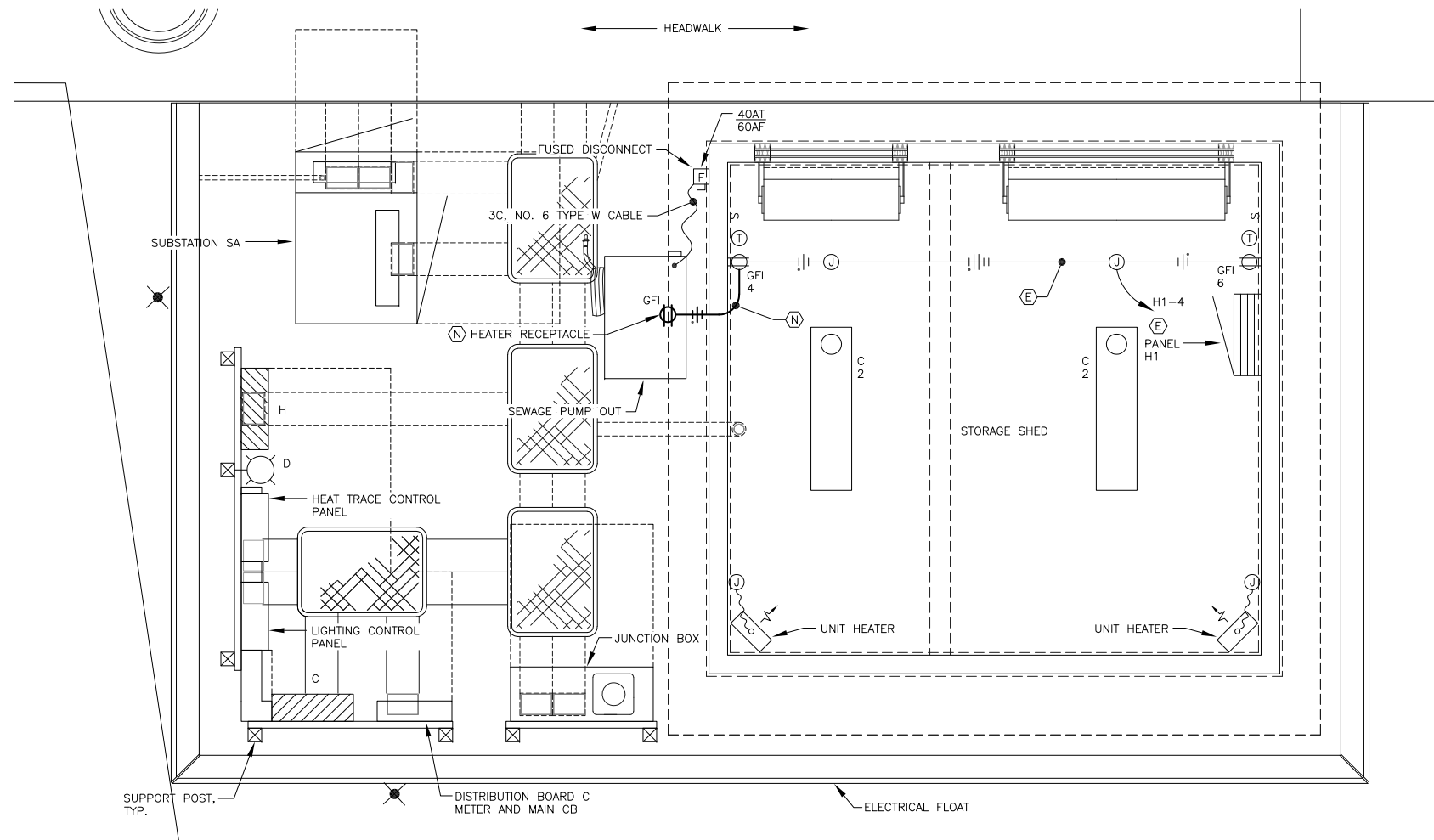
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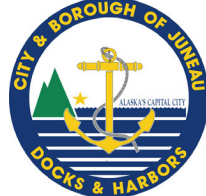
DATE: 1/17/2020

PANEL H1		SIZE	VOLTS/PHASE			MAIN		LOCATION	MOUNT
		100 AMPS	208Y/120V, 3 PH			MLO		STORAGE SHED	SURFACE
C K T NO	DESCRIPTION	BREAKER AMP/ POLE	KVA			BREAKER AMP/ POLE	DESCRIPTION	C K T NO	
			CKT	AØ	BØ				CØ
1	UNIT HEATER - HARBOR STORAGE	20/2	1.5	1.7		0.2	20/1	STORAGE SHED LIGHTS	2
3	----	--	1.5		2.0	0.5	20/1	FIRE DEPT. STORAGE SHED, PUMP HEATER	4
5	UNIT HEATER - FIRE DEPT. STORAGE	20/2	1.5			1.7	20/1	HARBOR STORAGE SHED	6
7	----	--	1.5	1.5		0.0	20/1	SPARE	8
9	SEWAGE PUMP STATION	40/2	3.4		3.4	0.0	20/1	SPARE	10
11	----	--	3.4			0.0	20/1	SPARE	12
13									14
15									16
17									18
BALANCED CONNECTED LOAD: 13.7 KVA / 38.1 AMPS				3.2	5.4	5.1			
MAXIMUM CONNECTED LOAD: 13.7 KVA / 26.7 AMPS									



1 ELECTRICAL SITE PLAN - EXISTING UTILITY FLOAT

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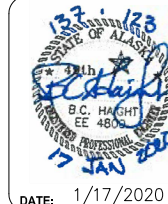
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DATE: 1/17/2020

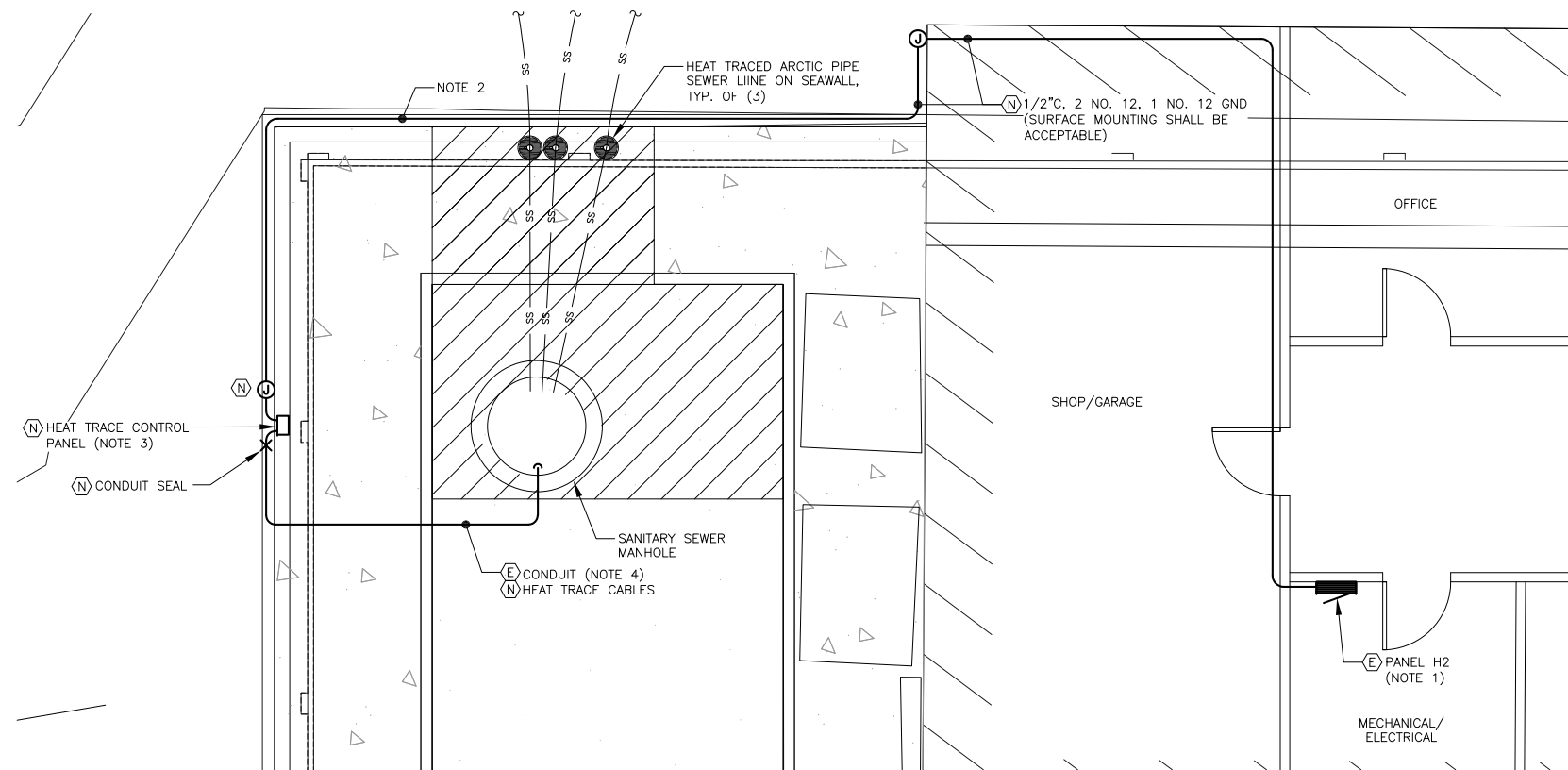
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CBJ CONTRACT NO. DH20-021

SHEET TITLE:  
**ENLARGED ELECTRICAL SITE PLAN,  
SCHEDULE - EXISTING UTILITY FLOATS**

**E2.11**

PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

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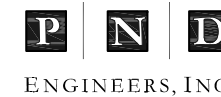
- NOTES:
1. UTILIZE A SPARE 20/1 CIRCUIT BREAKER IN PANEL H2 TO PROVIDE POWER TO (N) HEAT TRACE CONTROL PANEL.
  2. ROUTE CONDUIT TO AVOID PLUMBING ON BULKHEAD WALL.
  3. INSTALL NEW HEAT TRACE CONTROL PANEL IN LOCATION OF EXISTING JUNCTION BOX. REMOVE EXISTING JUNCTION BOX.
  4. RE-USE EXISTING CONDUIT ROUTED BETWEEN REMOVED JUNCTION BOX AND WASTEWATER VAULT. EXISTING CONDUIT INCLUDES A CONDUIT SEAL THAT SHALL BE REMOVED AND REPLACED WITH NEW.

**1 ELECTRICAL SITE PLAN - WASTE WATER VAULT**  
NO SCALE

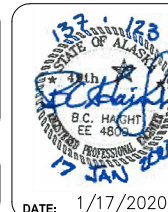


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SHEET TITLE:  
**ENLARGED ELECTRICAL SITE PLAN - WASTEWATER VAULT**

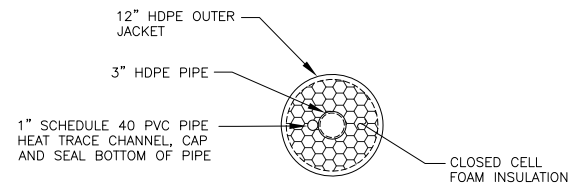
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PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

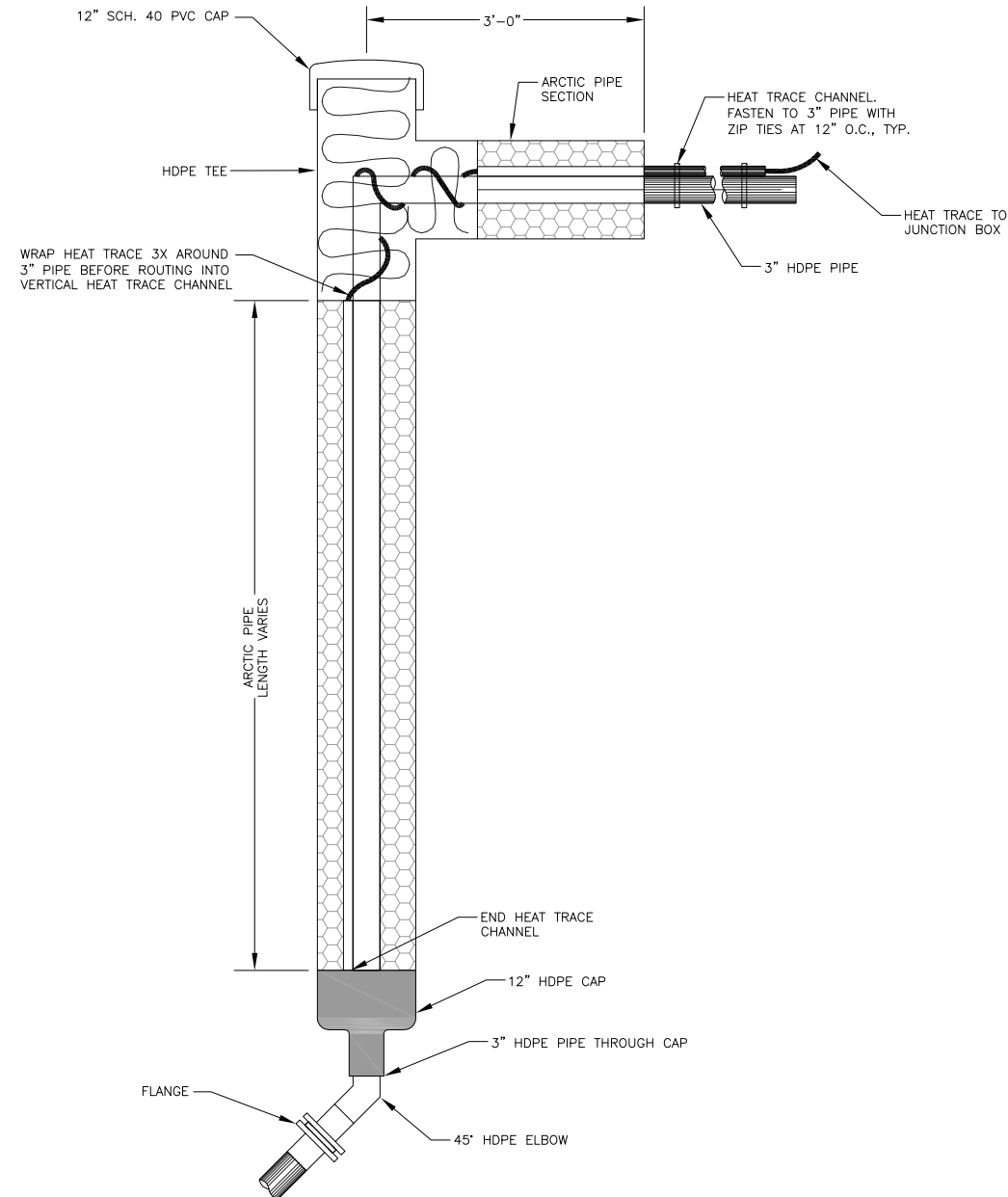
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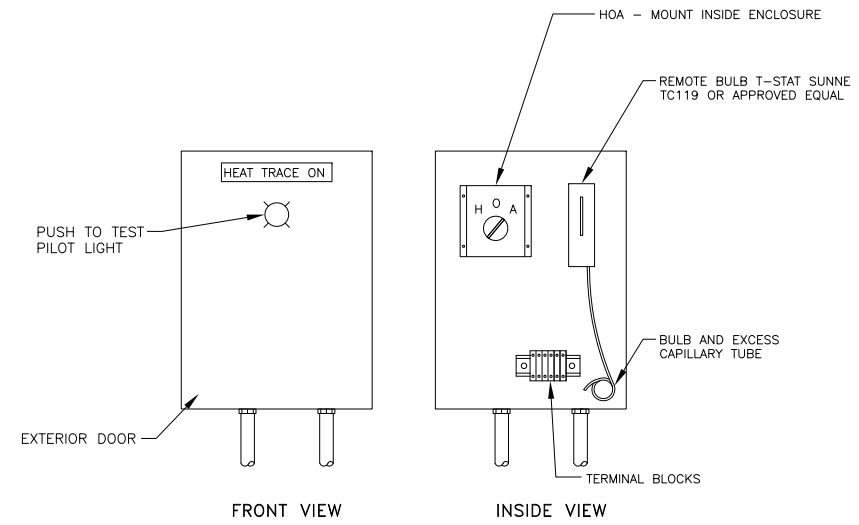
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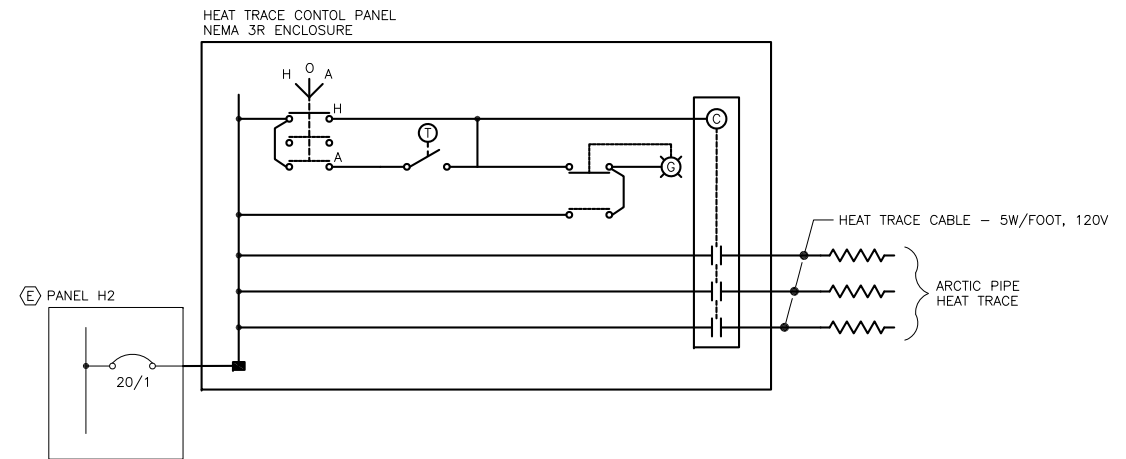
**2 DETAIL ARCTIC PIPE SECTION**  
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**1 DETAIL - TYPICAL ARCTIC PIPE RISER DETAILS**  
NO SCALE



**4 DETAIL HEAT TRACE CONTROL PANEL**  
NO SCALE

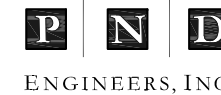


**3 SCHEMATIC DIAGRAM - HEAT TRACE**  
NO SCALE

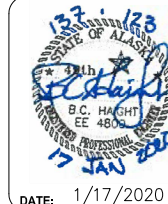
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**CBJ CONTRACT NO. DH20-021**

SHEET TITLE:  
**SCHEMATIC DIAGRAM, DETAILS - WASTEWATER VAULT**

**E2.13**

PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

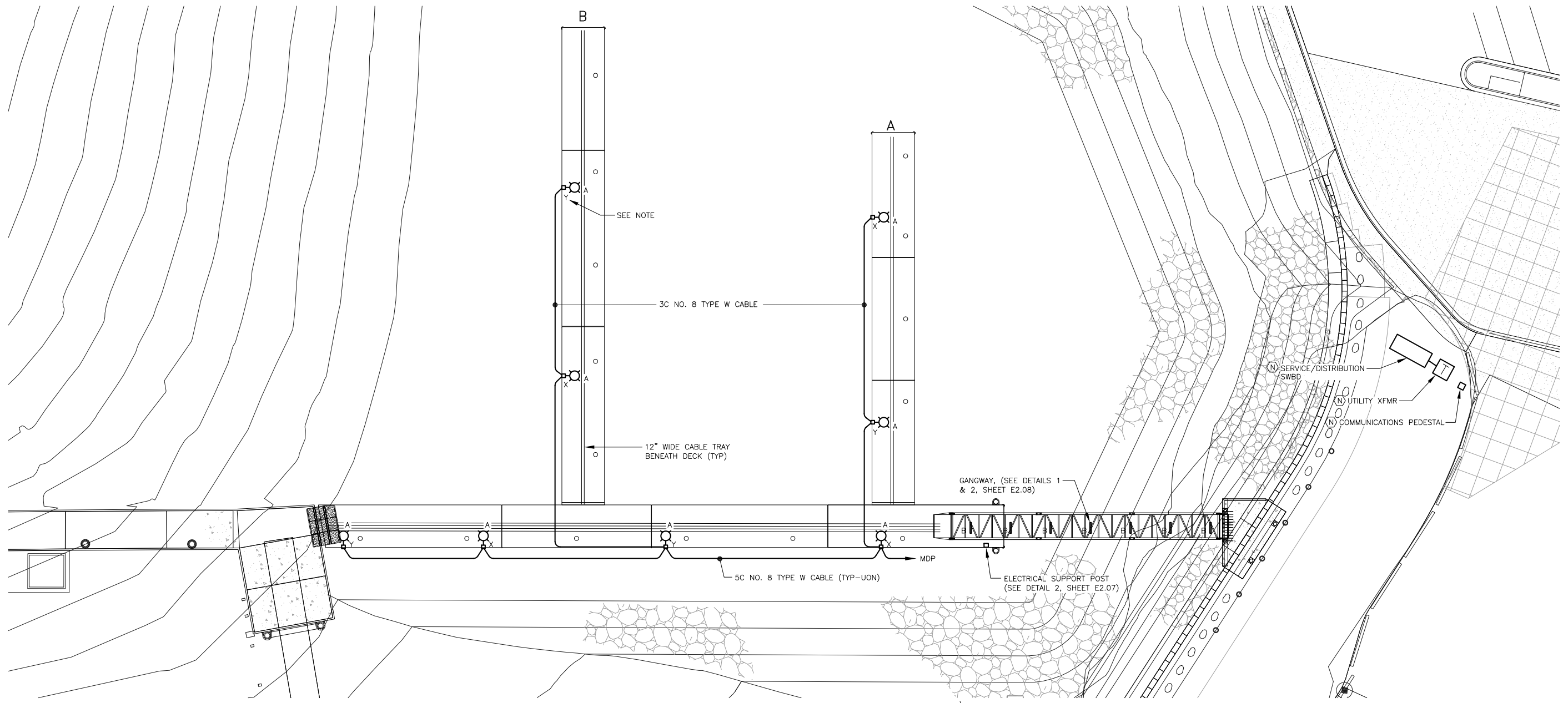
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SCALE:

DATE: 1/17/2020

1	LUMINAIRE SCHEDULE				
2	TYPE	DESCRIPTION	MANUFACTURER	LAMPS	REMARKS
3	A	POLE MOUNTED HID AREA CUTOFF, WITH MARINE GRADE DIE-CAST ALUMINUM HOUSING, TYPE III DISTRIBUTION REFLECTOR, LENS IS LED BOARD INTEGRATED ACRYLIC OVER-OPTICS EACH SEALED INDIVIDUALLY, LIGHT BAR COVER PLATE TO MATCH HOUSING FINISH, ELECTRONIC DRIVER, CUSTOM FLAT BLACK FINISH, 16" SQUARE STEEL HINGED POLE, PAINT TO MATCH OVER HOT DIPPED GALV.	INVUE VXS-E01-LED-E1-T3-FLAT BLACK-LCF  GARMIRE IRON WORKS GSQ416	(1) BAR, 25W WHITE LED 4000K	INSTALL ANTI-PERCH STRIP ON LUMINAIRE AND POLE.
4	B	18" SURFACE MOUNT LINEAR LED LENSED STRIP, EXTERIOR RATED, ALUMINUM HOUSING, ACRYLIC LENS, 60" BEAM, REMOTE ELECTRONIC DRIVER, 120V, 466 LMS/FT, CUSTOM BLACK FINISH	I/O LIGHTING 0.05.E.3K.60.100.2.18.1 96ND-2.0-11x4x4	5.09W/FT WHITE LED 3000K, CRI 85	SEE DETAILS 3 & 4, SHEET E2.07.

NOTE: ALTERNATE THE CIRCUIT CONNECTED TO THE LUMINAIRE (X & Y).



1 LIGHTING SITE PLAN - FLOATS

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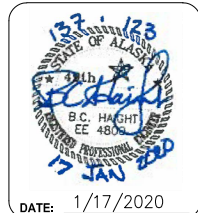
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SCALE: SCALE IN FEET  
0 20 40 FT.



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**STATTER HARBOR IMPROVEMENTS PH III(B)**  
**CBJ CONTRACT NO. DH20-021**

SHEET TITLE:  
**ELECTRICAL SITE PLAN - LIGHTING**

PND PROJECT NO.: 182066 C.A.N. NO.: AECC250

**E3.02**