

PROPOSED ACTIVITY:  
REPLACE EXISTING DEFICIENT  
SMALL BOAT FLOAT SYSTEM

DATUM: 0.0' MLLW

PROJECT LOCATION:  
SEC. 20, T7S, R11W, S.M.

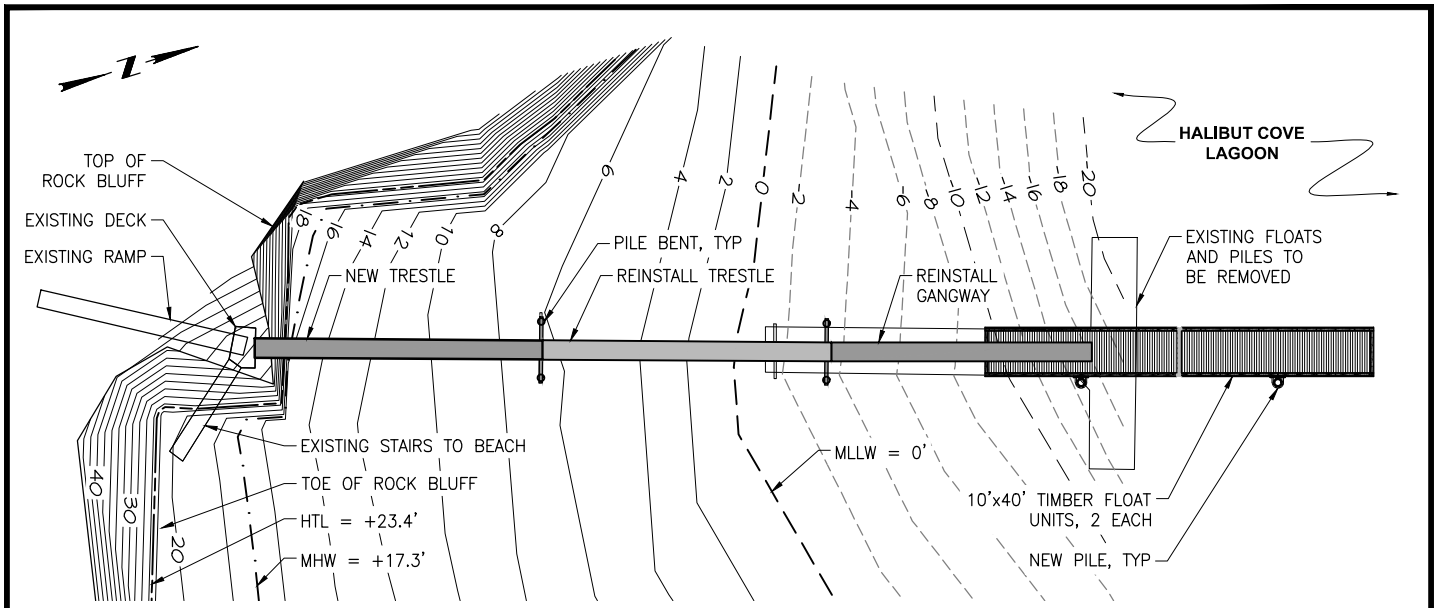
**VICINITY MAP AND  
PROJECT LOCATION**

ALASKA DEPARTMENT OF  
NATURAL RESOURCES

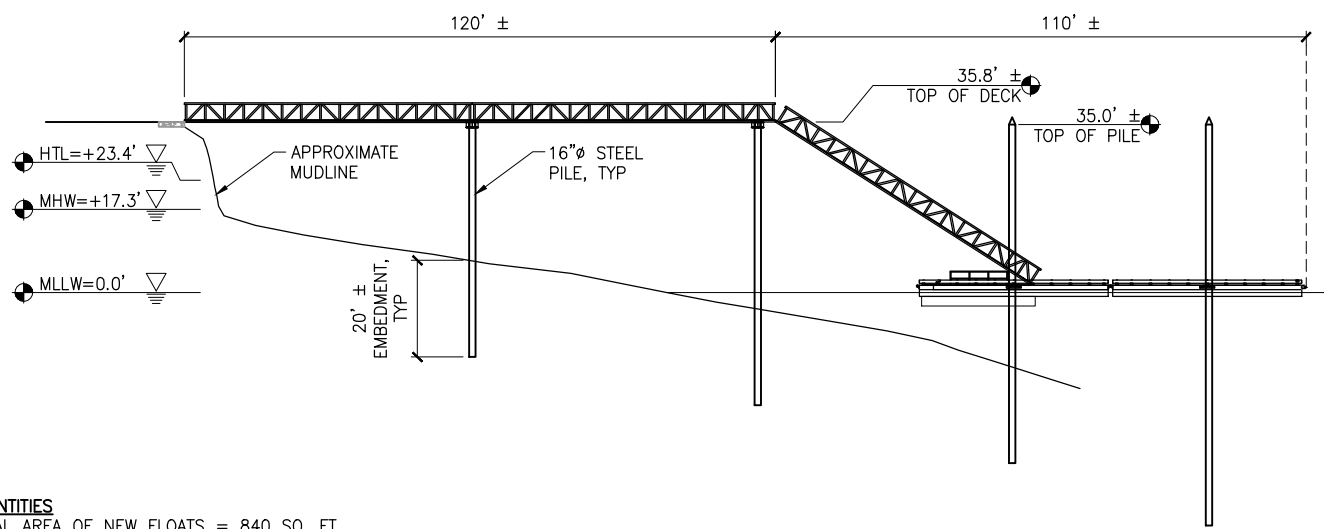
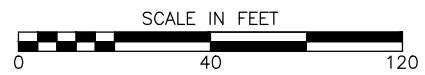
**HALIBUT COVE  
FLOAT REPLACEMENT**

AT: HALIBUT COVE, AK  
IN: HALIBUT COVE LAGOON

6/23/15 SHEET **1 of 2**



**NEW FLOAT PLAN**



**NEW FLOAT ELEVATION**

- QUANTITIES**
- TOTAL AREA OF NEW FLOATS = 840 SQ. FT.
  - TOTAL AREA OF REMOVED FLOATS = 1110 SQ. FT.
  - TOTAL NEW PILES = 6 EA.
  - TOTAL REMOVED PILES = 7 EA.

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 REPLACE EXISTING DEFICIENT  
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DATUM: 0.0' MLLW

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 SEC. 20, T7S, R11W, S.M.

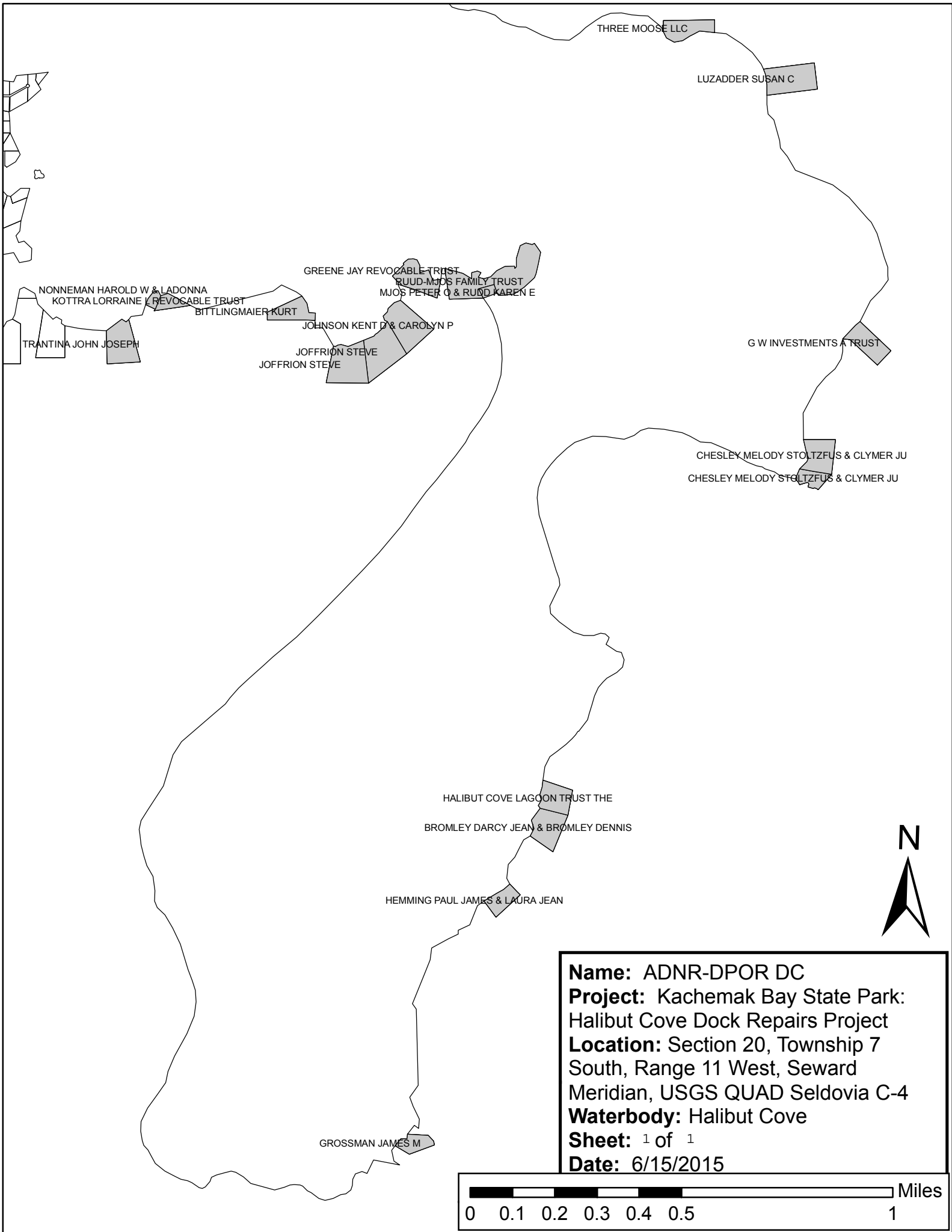
**FLOAT  
 PLAN AND PROFILE**

ALASKA DEPARTMENT OF  
 NATURAL RESOURCES

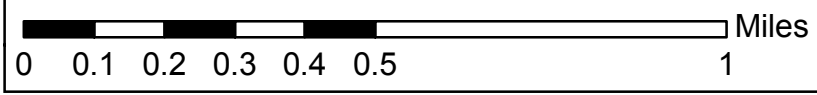
**HALIBUT COVE  
 FLOAT REPLACEMENT**

AT: HALIBUT COVE, AK  
 IN: HALIBUT COVE LAGOON

6/23/15 SHEET **2 of 2**



**Name:** ADNR-DPOR DC  
**Project:** Kachemak Bay State Park:  
Halibut Cove Dock Repairs Project  
**Location:** Section 20, Township 7  
South, Range 11 West, Seward  
Meridian, USGS QUAD Seldovia C-4  
**Waterbody:** Halibut Cove  
**Sheet:** 1 of 1  
**Date:** 6/15/2015

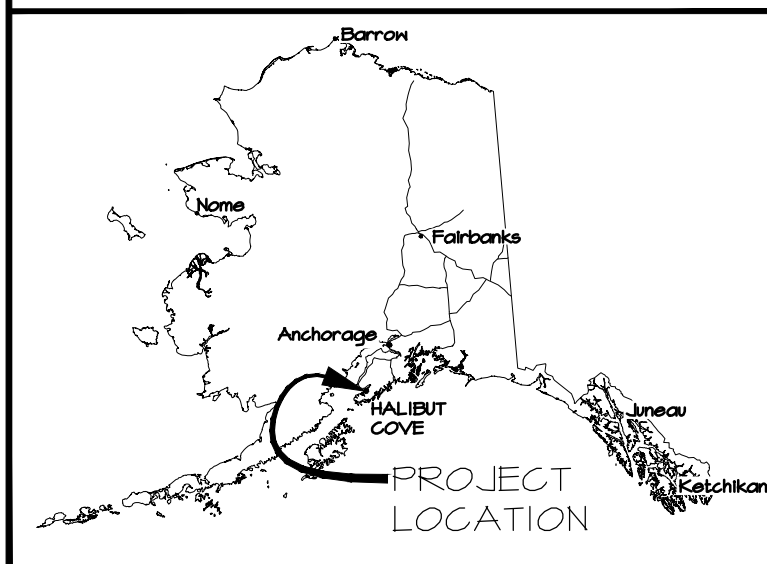


STATE OF ALASKA  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF PARKS  
AND  
OUTDOOR RECREATION

HALIBUT COVE  
FLOAT REPLACEMENT

PROJECT NO.  
XXXXX-X

LOCATION MAP



FOR REVIEW

6/02/2015

INDEX

- 1 COVER SHEET
- 2 EXISTING CONDITIONS
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- 7 FLOAT UNIT MODIFICATION DETAILS
- 8 TRESTLE DETAILS
- 9 GENERAL NOTES

STATE OF ALASKA  
Department of Natural Resources  
Division of Mining, Land & Water

Approved:

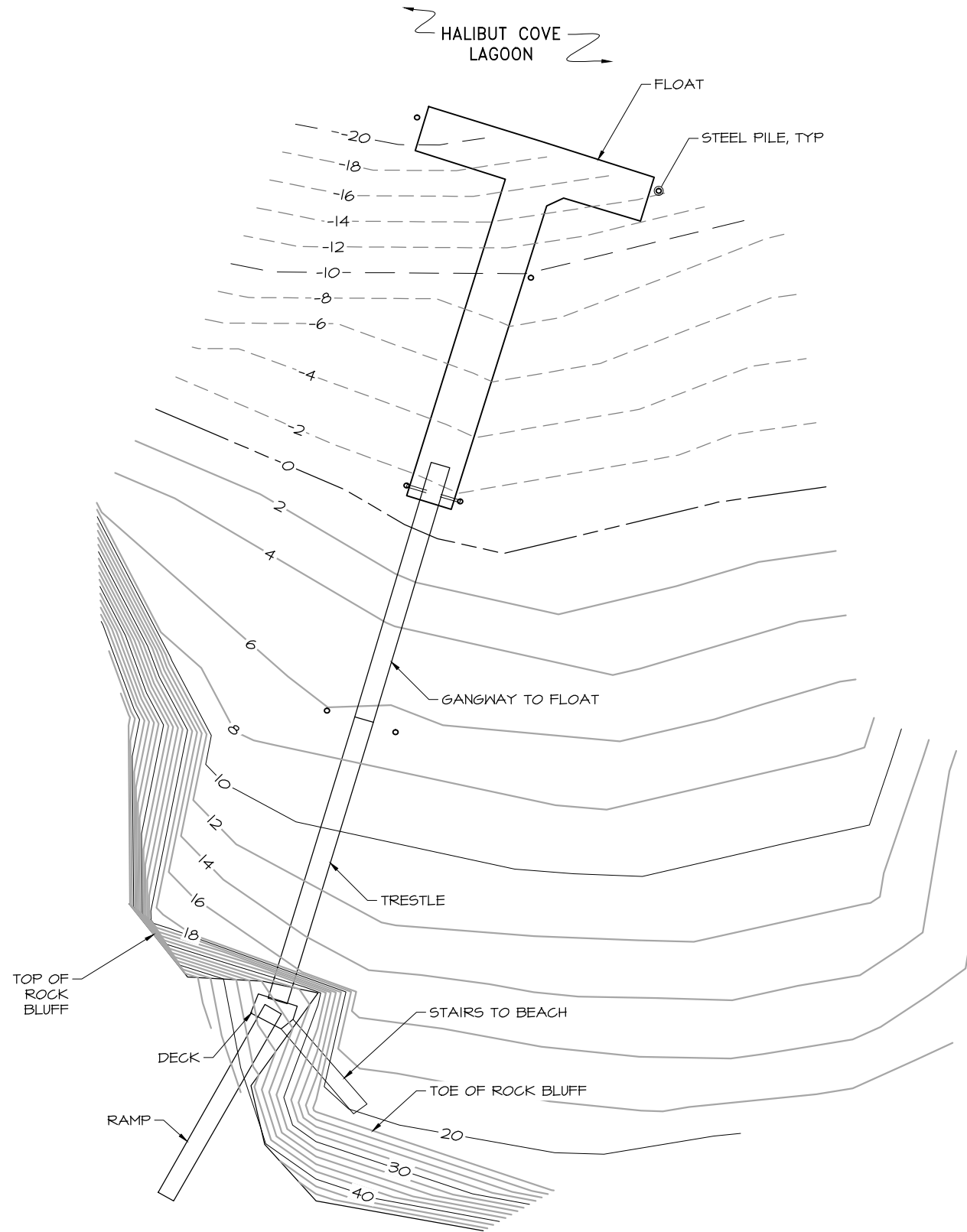
Brent Goodrum  
Director, Division of Mining, Land & Water

Date

GPS BASE 1  
 10" SPIKE IN STUMP  
 N= 2,033,677.2396  
 E= 1,418,516.7107  
 EL= 44.45

CP-1  
 2" ALCAP ON 5/8" REBAR  
 N= 2,033,613.4326  
 E= 1,418,620.95381  
 EL= 46.57

CP-2  
 2" ALCAP ON 5/8" REBAR  
 N= 2,033,608.4892  
 E= 1,418,408.8791  
 EL= 49.50



**SITE PLAN**

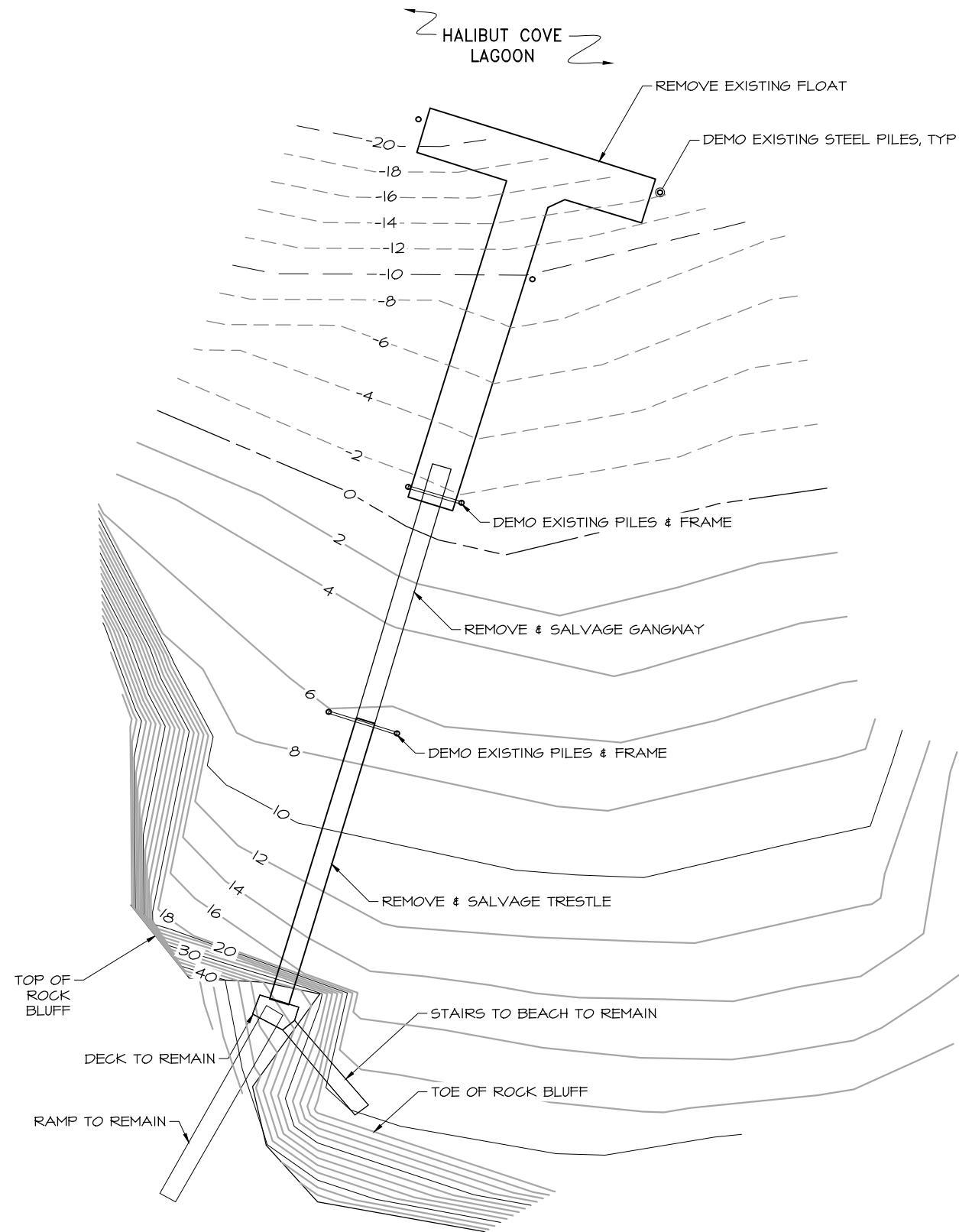
**NOTES:**

1. THIS SURVEY OF EXISTING GROUND AND EXISTING IMPROVEMENTS WAS CONDUCTED BY GEOVERA, LLC ON DECEMBER 12, 2014.
2. COORDINATES ARE NAD83 ALASKA STATE PLANE ZONE 4 IN US SURVEY FEET.
3. VERTICAL DATUM IS MEAN LOWER LOW WATER BASED ON NOAA BENCHMARK "HOMER EAST BASE 2 RM 1" (PID TT0171) WITH A PUBLISHED NAVD88 ELEVATION OF 26.08 FEET. THE ELEVATION WAS TRANSFERRED TO THE PROJECT BY GPS STATIC OBSERVATIONS AND PROCESSED WITH MAGNET TOOLS SOFTWARE VERSION 1.2.1. SOFTWARE USING ALASKA GEOID 12A. AS PER THE ELEVATION INFORMATION SHEET FOR "HOMER EAST BASE 2 RM 1", A CORRECTION OF +4.97 FEET FROM NAVD88 TO MLLW WAS APPLIED.
4. AT THE TIME OF THE SURVEY THE RAMP TO THE FLOAT WAS LIFTED BY A PULLEY SYSTEM AND WAS NOT OPERATIONAL.

FOR REVIEW

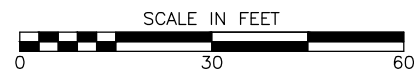


PREPARED: GDC  
 DRAWN: JRH  
 REVIEWED: DST  
 DATE: 6/02/15



DEMO NOTES:  
1. XXX

**SITE PLAN**

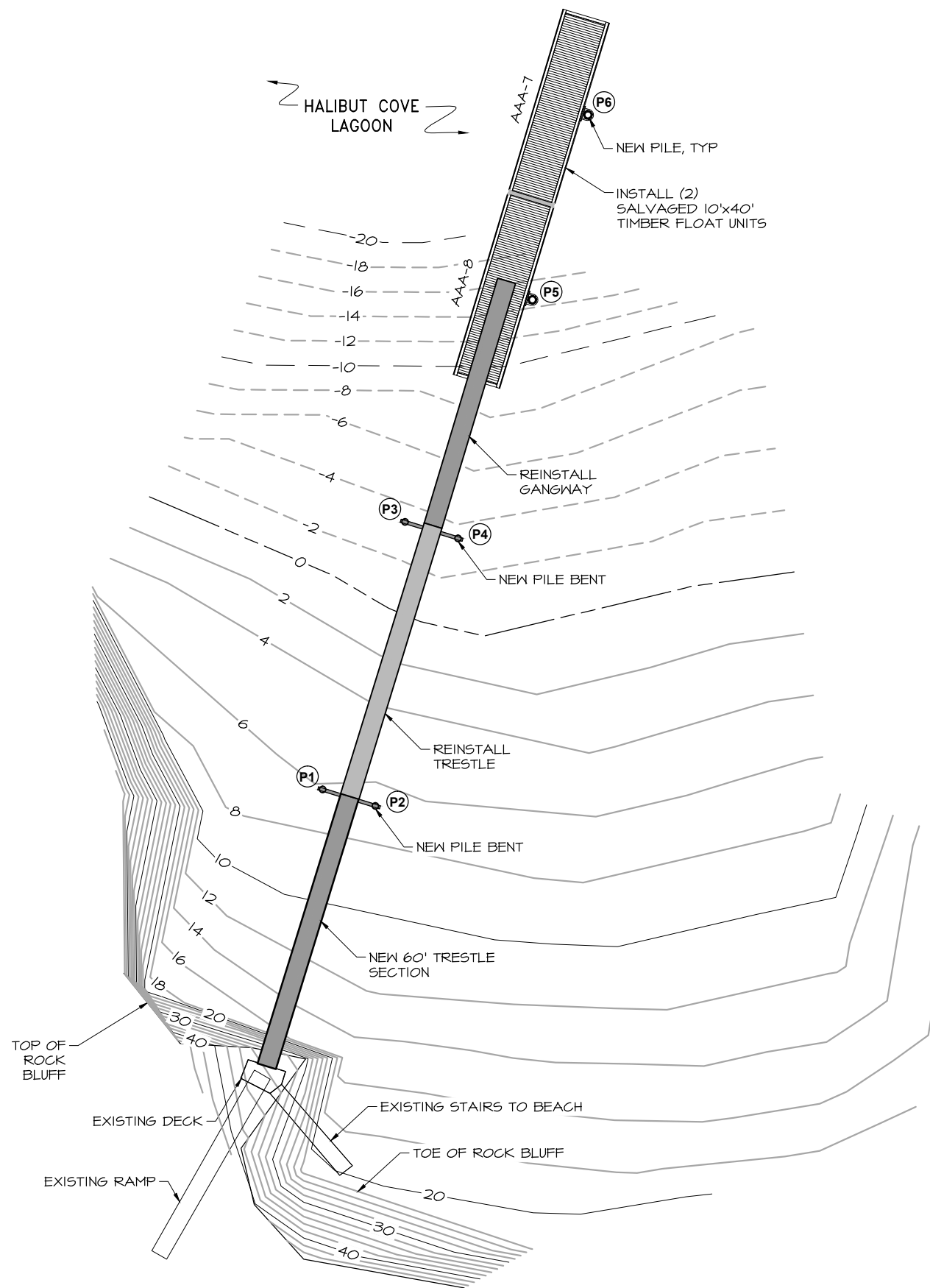


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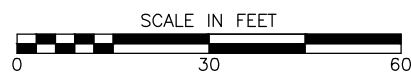
SHEET

3  
OF 9 SHEETS

FOR REVIEW



COORDINATE TABLE		
ID	NORTHING	EASTING
P1	2033567.84	1418747.93
P2	2033564.38	1418759.16
P3	2033624.65	1418765.47
P4	2033621.18	1418776.70
P5	2033671.82	1418792.52
P6	2033711.04	1418804.30

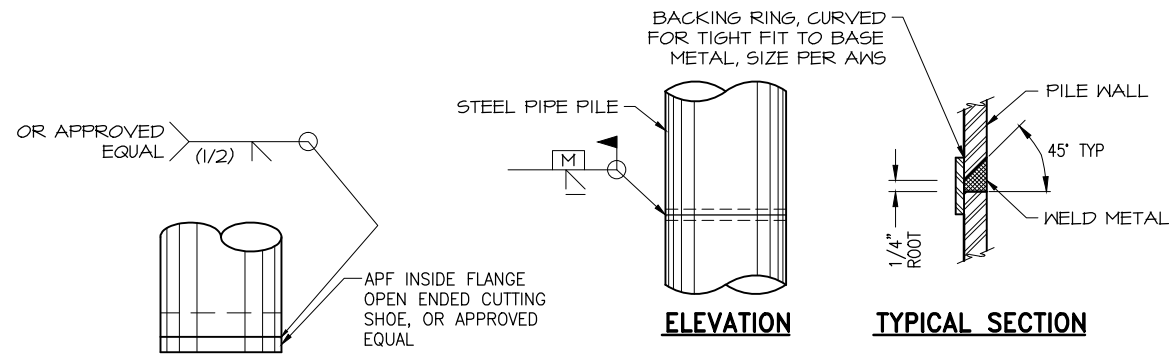


**NEW FLOAT PLAN**

FOR REVIEW



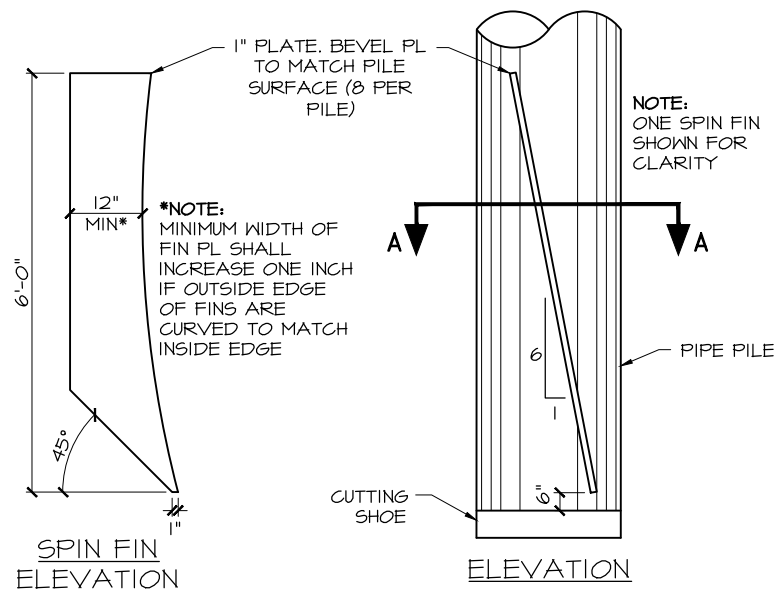
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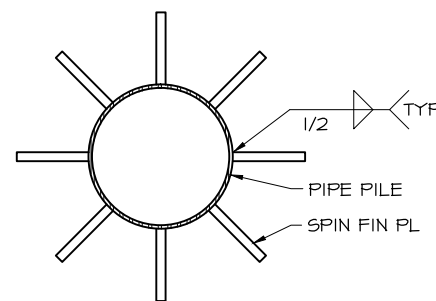
**OPEN SHOE DETAIL**  
NTS

**TYPICAL PILE SPLICE WELD**  
NTS TYPICAL FOR ALL SHOP & FIELD PIPE PILE SPLICES

PILE SCHEDULE				
TYPE	SIZE	QTY	SUPPLY LENGTH (FT)	SERVICE AXIAL LOAD (KIPS)
VERTICAL OPEN END PILE	16"φx0.5"	2	80	NA
VERTICAL SPIN FIN PILE	16"φx0.5"	4	80	20



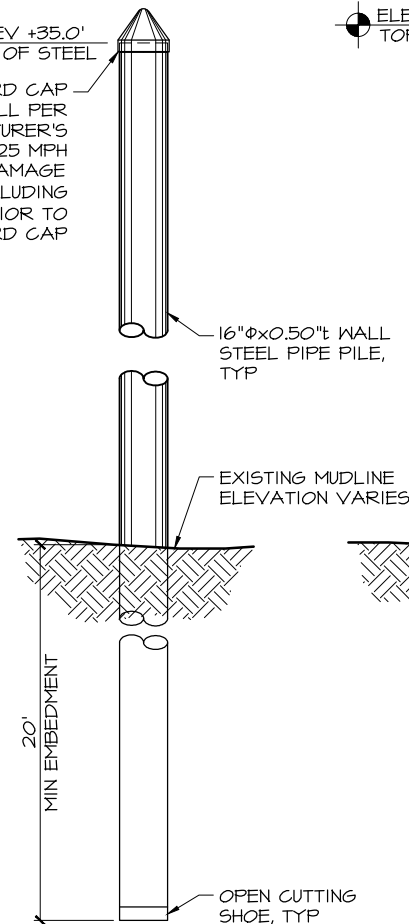
**SPIN FIN PILE TIP DETAIL**  
NTS



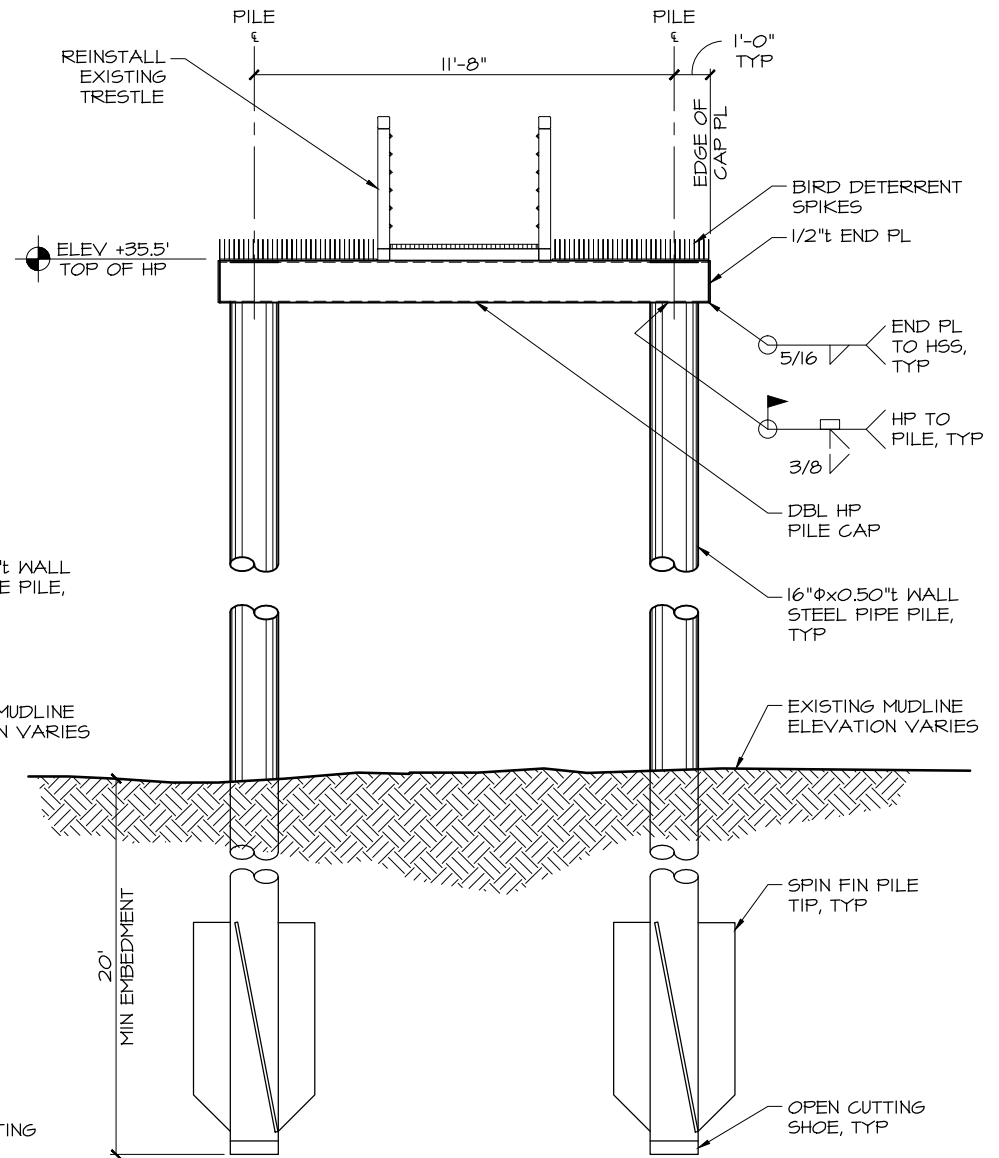
**SECTION A-A**  
NTS

ELEV +35.0'  
TOP OF STEEL

SINGLE P<sub>6</sub> FIBERGLASS BIRD CAP w/ MIN 1:1 PITCH. INSTALL PER MANUFACTURER'S RECOMMENDATIONS FOR 125 MPH GUST. REPAIR ANY DAMAGE CAUSED BY DRIVING (INCLUDING HAMMER JAW MARKS) PRIOR TO INSTALLATION OF BIRD CAP



**FLOAT PILE**  
NTS



**FLOAT TRESTLE PILE FRAME**  
NTS

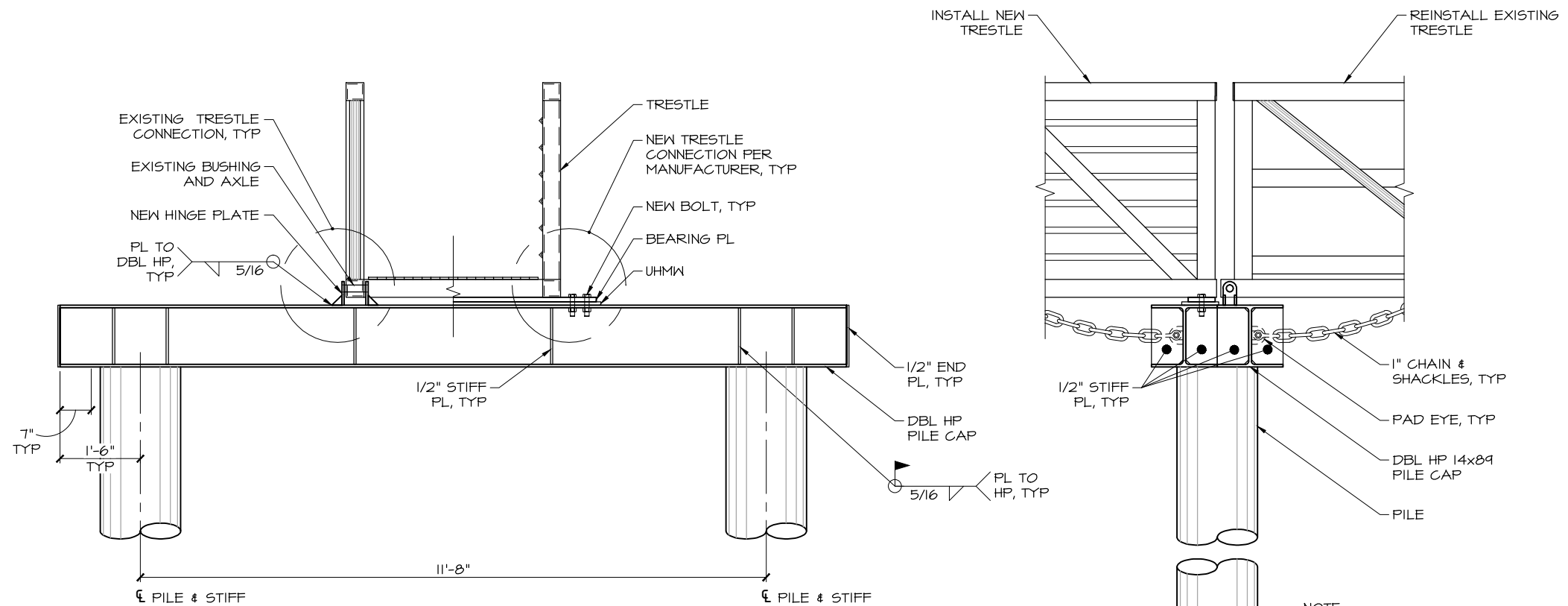


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SHEET  
5  
OF 9 SHEETS

FOR REVIEW



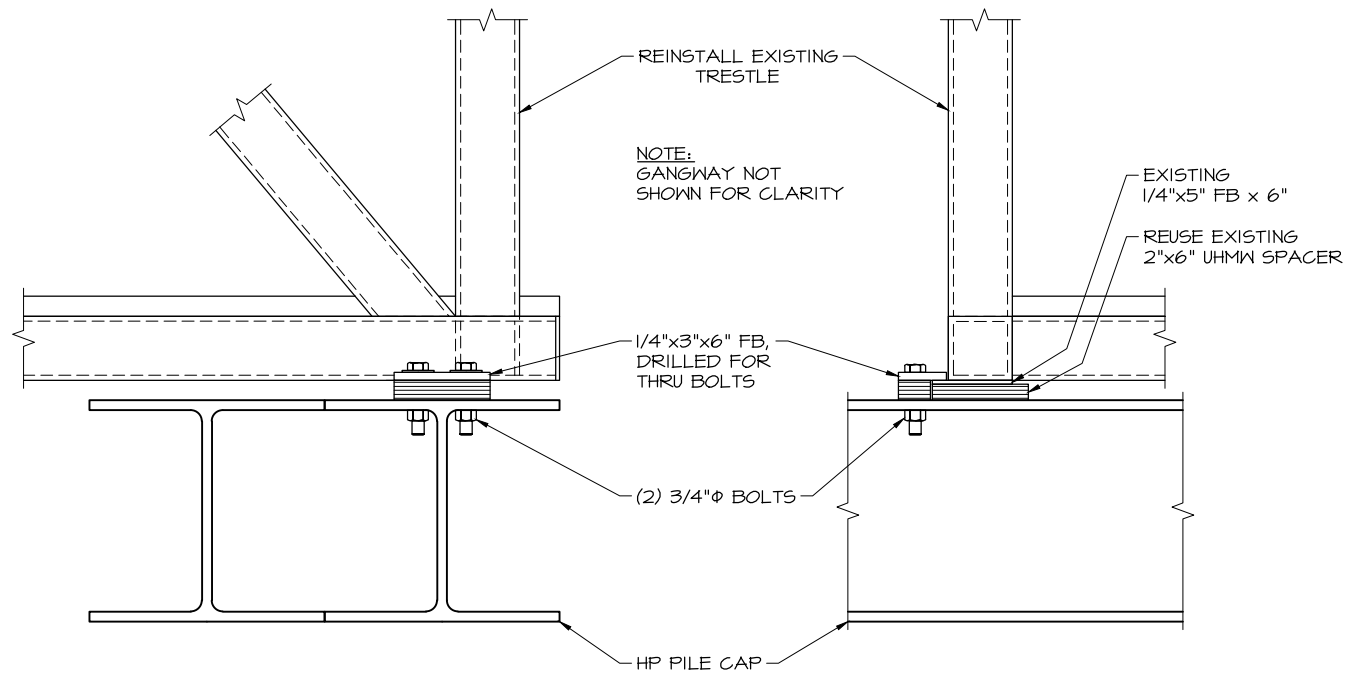


ELEVATION

SIDE VIEW

**TRESTLE SUPPORT AT SOUTH BENT**

NTS



**TRESTLE ELEVATIONS AT NORTH BENT**

NTS

STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES

HALIBUT COVE, ALASKA

HALIBUT COVE FLOAT REPLACEMENT

PROJECT No. XXXXX-X

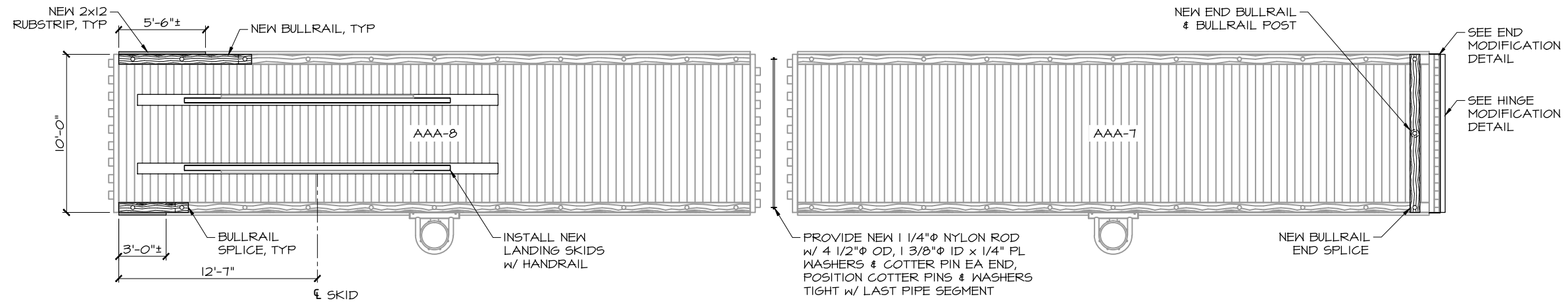


PREPARED: GDC  
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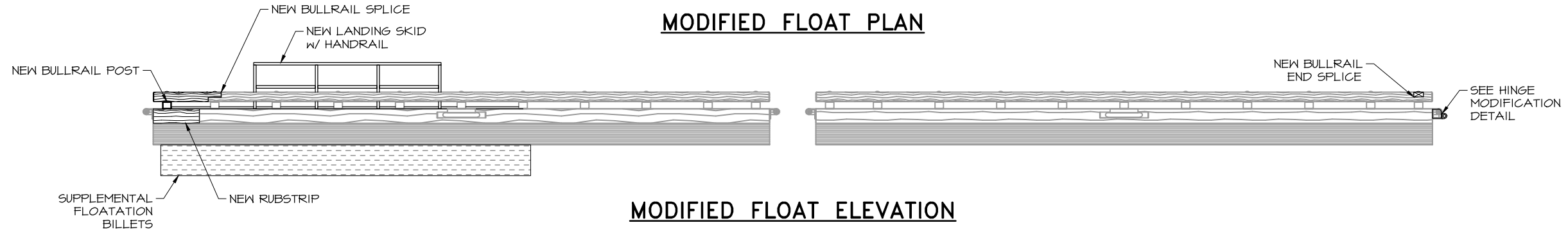
SHEET

6  
 OF 9 SHEETS

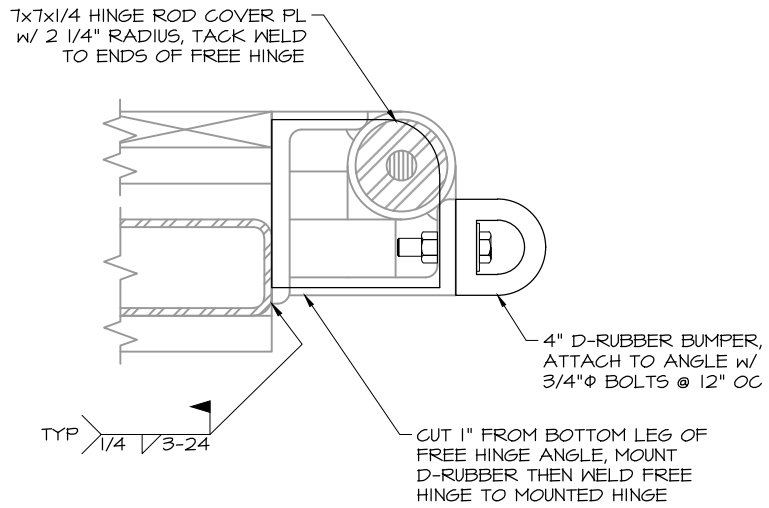
FOR REVIEW



**MODIFIED FLOAT PLAN**

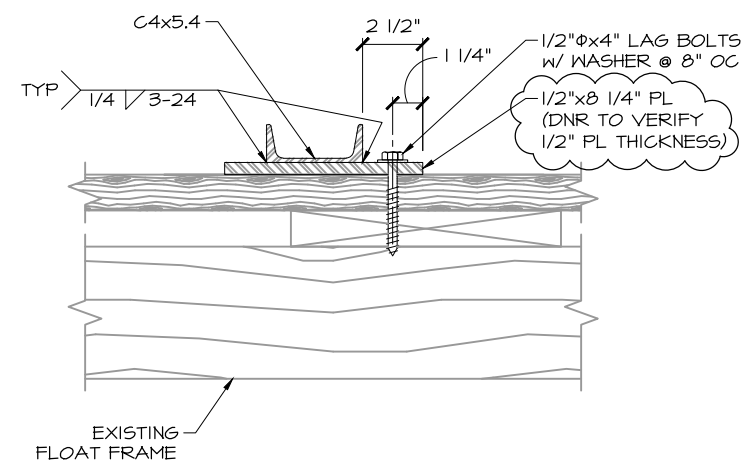


**MODIFIED FLOAT ELEVATION**



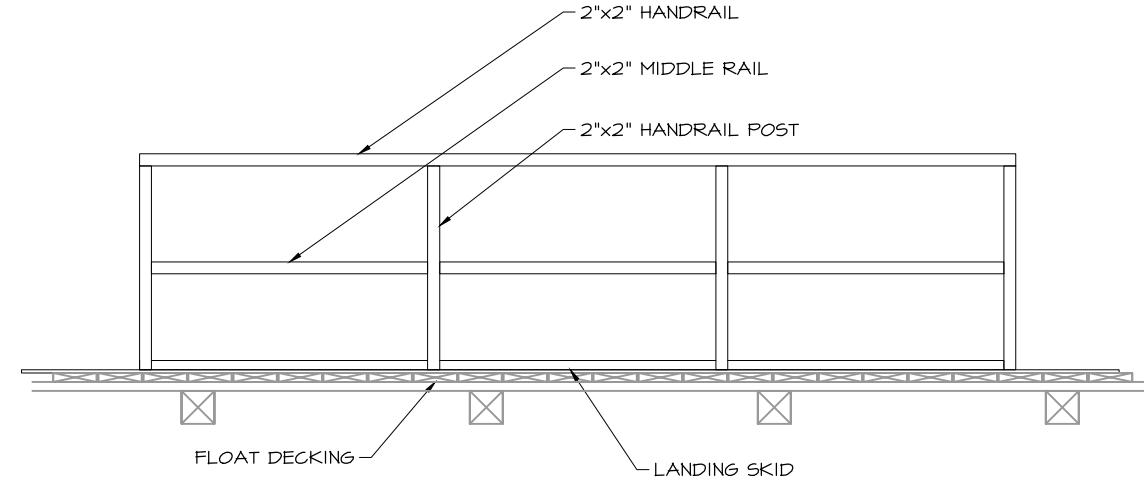
**END HINGE MODIFICATION**

NTS



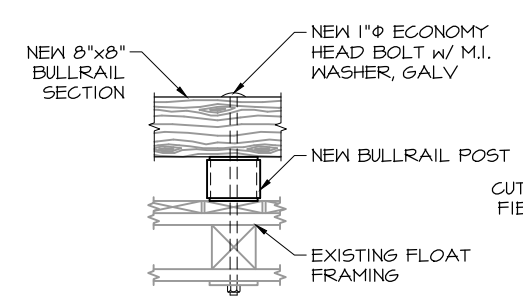
**LANDING SKID**

NTS



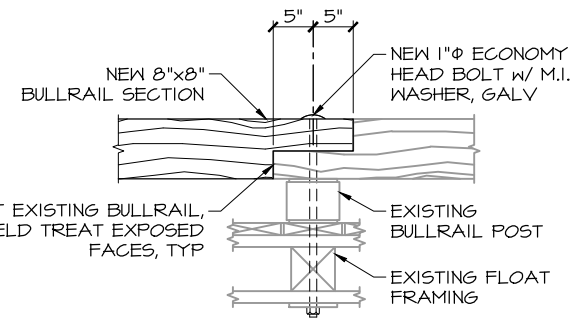
**HANDRAIL ELEVATION**

NTS



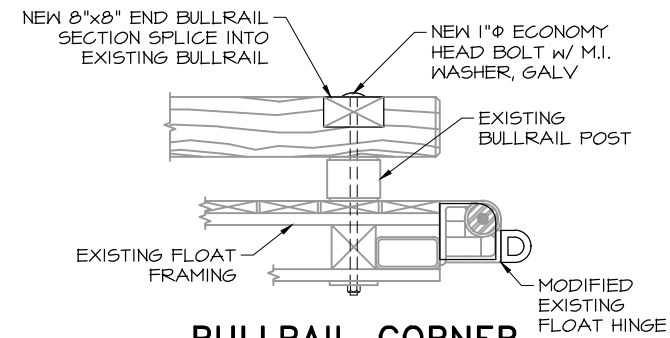
**TYPICAL BULLRAIL ELEVATION**

NTS



**BULLRAIL SPLICE ELEVATION**

NTS



**BULLRAIL CORNER SPLICE ELEVATION**

NTS

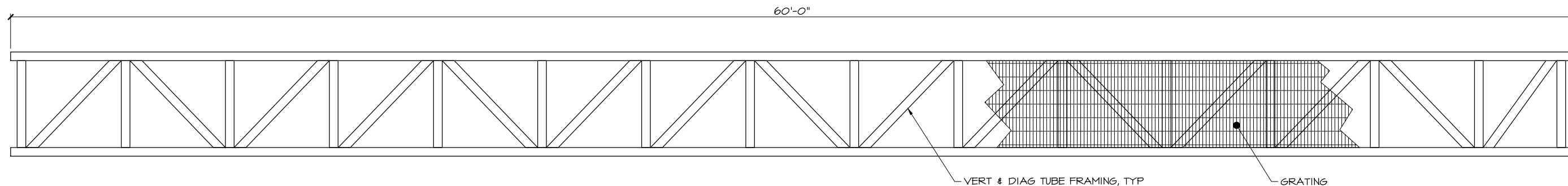
FOR REVIEW

STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES  
 HALIBUT COVE, ALASKA  
 HALIBUT COVE FLOAT REPLACEMENT  
 PROJECT No. XXXXX-X  
 HALIBUT COVE  
 FLOAT UNIT MODIFICATION DETAILS

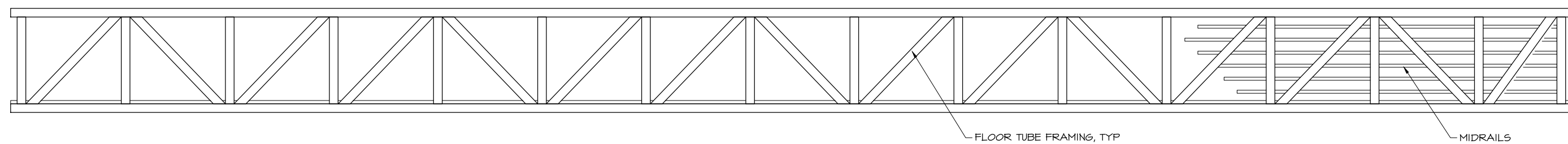


PREPARED: GDC  
 DRAWN: JRH  
 REVIEWED: DST  
 DATE: 6/02/15

SHEET  
 7  
 OF 9 SHEETS



**PLAN**



**ELEVATION**

**60' TRESTLE**  
NTS

**ALUMINUM TRESTLE NOTES:**

**GENERAL**

TRESTLES ARE SHOWN SCHEMATICALLY. DESIGN OF TRESTLES SHALL BE THE RESPONSIBILITY OF THE MANUFACTURER. ALTERNATIVES TO THE GENERAL FEATURES AND MATERIALS NOTED MAY BE PROPOSED FOR APPROVAL BY THE OWNER'S REPRESENTATIVE/ENGINEER. SUPPORTING DOCUMENTATION SHALL BE PERFORMED BY A REGISTERED ENGINEER IN THE STATE OF ALASKA. DETAILED SHOP DRAWINGS AND PRODUCT DATA SHALL BE PROVIDED FOR REVIEW PRIOR TO FABRICATION.

**DESIGN CRITERIA**

ALL DESIGN AND FABRICATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING CODES:

1. CONTRACT DOCUMENTS AND TECHNICAL SPECIFICATIONS
2. INTERNATIONAL BUILDING CODE, 2006 EDITION
3. ALUMINUM DESIGN MANUAL, CURRENT EDITION
4. AASHTO GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES, CURRENT EDITION
5. AISC STEEL CONSTRUCTION MANUAL, CURRENT EDITION
6. AWS D1.1 & D1.2 STRUCTURAL WELDING CODE, CURRENT EDITION
7. ASCE 7-05
8. APPLICABLE ASTM STANDARDS

**LOADS**

DEAD LOADS - ALL  
 LIVE LOADS - UNIFORM, 60 PSF  
 WIND LOAD = 100 MPH, EXPOSURE D, I=1.0 PER ASCE 7-05  
 SEISMIC -  $S_{ps} = 1.190g$ ,  $S_{ol} = .725g$ , I = 1.0, ZONE 4  
 HANDRAILS - 50 LBS/LINEAR FOOT  
 LIMIT DEFLECTION TO L/360 FOR DEAD LOAD PLUS LIVE LOAD

**MATERIALS**

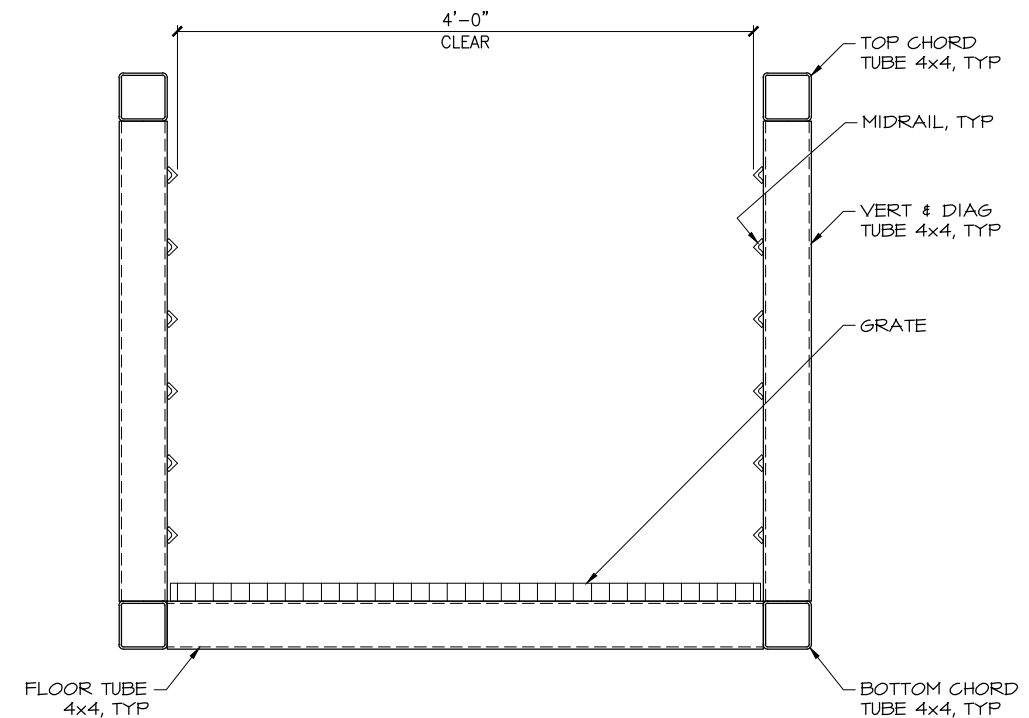
ALUMINUM - ASTM 6061-T6 SQUARE AND RECTANGULAR TUBE UNLESS OTHERWISE NOTED  
 STRUCTURAL STEEL - PLATE AND SHAPES SHALL BE ASTM A36  
 PIPE SHALL BE ASTM A53, GRADE B  
 HARDWARE - ALL BOLTS AND HARDWARE SHALL BE ASTM F543 316L STAINLESS STEEL  
 DECK GRATING - ADA COMPLIANT FRP DECK GRATING SHALL BE INSTALLED ACROSS THE WIDTH OF THE TRESTLE AS NOTED ON THE DRAWINGS  
 SAFE-T-SPAN T2510 OR APPROVED EQUAL WITH A SLIP RESISTANT GRIT SURFACE  
 TRANSITION PLATES - TRANSITION PLATES SHALL BE FULL SIZE ALUMINUM SHEET STOCK WITH A "SLIP-NOT" TRACTION FINISH OR APPROVED EQUAL

**SUBMITTALS**

1. TRESTLE SHOP DRAWINGS, CALCULATIONS, AND MATERIAL SPECIFICATIONS.
2. FLOORING AND ATTACHMENT ACCESSORIES INCLUDING ONE SAMPLE OF THE FLOORING MATERIAL.

**INSTALLATION NOTES**

LIFT AND INSTALL THE TRESTLE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.  
 WELD MOUNTING LUGS TO ALUMINUM IN ACCORDANCE WITH MANUFACTURER'S WELD DESIGN.



**TRESTLE SECTION**  
NTS

STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES

HALIBUT COVE, ALASKA  
 HALIBUT COVE FLOAT REPLACEMENT  
 PROJECT No. XXXXX-X



PREPARED: GDC  
 DRAWN: JRH  
 REVIEWED: DST  
 DATE: 6/02/15

SHEET  
 8  
 OF 9 SHEETS

FOR REVIEW

## GENERAL NOTES

### SCOPE OF WORK

THE SCOPE OF WORK SHALL INCLUDE THE DEMOLITION OF EXISTING PILES, FRAMES AND FLOATS, THE WORK ALSO INCLUDES THE REMOVAL AND SALVAGE OF THE EXISTING TRESTLE, GANGWAY, AND GANGWAY LANDING SKID FOR REUSE. WORK ALSO INCLUDES NEW TRESTLE PILES AND FRAMES, INSTALLATION OF FLOAT PILES, AND INSTALLATION AND MINOR MODIFICATION OF SALVAGED TIMBER FLOATS. WORK TO INCLUDE THE REINSTALLATION OF EXISTING TRESTLE, GANGWAY, AND GANGWAY LANDING SKID, WITH THE SUPPLY AND INSTALLATION OF A NEW TRESTLE SECTION. SCOPE OF WORK INCLUDES ALL INDIRECTS AND INCIDENTALS REQUIRED TO COMPLETE THE WORK.

### APPLICABLE CODES AND STANDARDS

ALL LOCAL CODES PLUS THE FOLLOWING SPECIFICATIONS, STANDARDS AND CODES ARE PART OF THESE GENERAL NOTES:

1. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) STANDARDS, CURRENT EDITION.
2. AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS LRFD BRIDGE DESIGN SPECIFICATIONS, CURRENT EDITION.
3. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), "STEEL CONSTRUCTION MANUAL, CURRENT EDITION".
4. ALUMINUM ASSOCIATION "ALUMINUM DESIGN MANUAL, CURRENT EDITION"
5. AMERICAN WELDING SOCIETY (AWS), "D1.1 STRUCTURAL WELDING CODE - STEEL, CURRENT EDITION".
6. AMERICAN WELDING SOCIETY (AWS), "D1.5 BRIDGE WELDING CODE - STEEL, CURRENT EDITION".
7. AMERICAN WELDING SOCIETY (AWS), "D1.2 STRUCTURAL WELDING CODE - ALUMINUM, CURRENT EDITION".
8. AMERICAN CONCRETE INSTITUTE, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE - ACI 301-CURRENT EDITION.
9. AISC CODE OF STANDARD PRACTICE.
10. AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) STANDARD - MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES - ASCE/SEI 7 - CURRENT EDITION
11. INTERNATIONAL BUILDING CODE (IBC), CURRENT EDITION.
12. ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES (DOT&PF) STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, CURRENT EDITION

THE INFORMATION CONTAINED IN THESE GENERAL NOTES IS IN ADDITION TO THE DETAILS AND NOTES PROVIDED ON THE INDIVIDUAL PLAN SHEETS. IN CASE OF CONFLICT BETWEEN NOTATION IN THE ABOVE REFERENCES, THESE GENERAL NOTES, AND NOTES AND DETAILS ON INDIVIDUAL SHEETS, THE FOLLOWING PRIORITY SHALL BE FOLLOWED:

1. ALL PROJECT PERMIT REQUIREMENTS.
2. NOTES ON INDIVIDUAL PLAN SHEETS.
3. DETAILS AND CALL OUTS ON INDIVIDUAL PLAN SHEETS.
4. THESE GENERAL NOTES.
5. LOCAL CODES.
6. THE SPECIFICATIONS AND STANDARDS LISTED ABOVE IN ORDER OF APPEARANCE.

## FACILITY DESIGN PARAMETERS

DESIGN LIFE 30 YEARS

### FLOATS

FLOATS WILL BE SALVAGED WITH AN ESTIMATED REMAINING LIFE OF 20 YEARS.  
DEAD LOADS - ALL  
LIVE LOAD - UNIFORM 40 PSF OR 1000 POUND CONCENTRATED ON A 1 SF AREA  
SNOW LOAD - UNIFORM 40 PSF  
VESSEL SIZE - MAXIMUM LENGTH 34 FT

### TRESTLE

SEE TRESTLE DETAILS PLAN SHEET.

### EARTHQUAKE

DESIGN PEAK ROCK HORIZONTAL ACCELERATION (CONTINGENCY) =0.45g.  
(475 YEAR, 10% EXCEDENCE IN 50 YEARS)

### TIDE LEVELS (NOAA)

HIGHEST OBSERVED WATER LEVEL:	+26.1 FT
MEAN HIGHER HIGH WATER (MHHW):	+18.3 FT
MEAN HIGH WATER (MHW):	+17.5 FT
MEAN TIDE LEVEL (MTL):	+9.6 FT
MEAN LOW WATER (MLW):	+1.7 FT
MEAN LOWER LOW WATER (MLLW):	+0.0 FT
LOWEST OBSERVED WATER LEVEL:	-5.2 FT

## MATERIALS

### GENERAL

THE FOLLOWING SECTION COVERS ALL PHASES OF CONSTRUCTION FOR THIS PROJECT. ADDITIONAL SPECIFIC REQUIREMENTS ARE COVERED IN THE PLANS. REQUIREMENTS COVERED ON THE PLANS SUPERSEDE THOSE IN THIS SECTION IN CASE OF CONFLICT.

MATERIALS NOT SPECIFICALLY NOTED IN THESE GENERAL NOTES OR ELSEWHERE ON THE DRAWINGS SHALL BE SUBMITTED BY THE SUPPLIER FOR APPROVAL. APPROVAL WILL BE BASED ON CONFORMANCE TO CURRENT STANDARDS UTILIZED BY THE OWNER. ALL MATERIALS MUST CONFORM TO GOOD WORKMANSHIP, ACCEPTABLE INDUSTRY STANDARDS AND MANUFACTURERS RECOMMENDATIONS.

CONSTRUCTION NOT MENTIONED IN THESE GENERAL NOTES SHALL BE PERFORMED USING REASONABLE CARE AND GOOD CONSTRUCTION PRACTICES. FINAL INSPECTION AND ACCEPTANCE OF ALL WORK NOT SPECIFICALLY INCLUDED IN THESE GENERAL NOTES OR ON THE DRAWINGS SHALL BE MADE BY THE ENGINEER. APPROVAL OF ALL METHODS AND PRODUCTS SHALL BE BASED UPON CONFORMANCE TO THE GENERAL NOTES, DRAWINGS, QUALITY OF WORKMANSHIP, APPLICABLE INDUSTRY STANDARDS, AND PERTINENT MANUFACTURERS RECOMMENDATIONS.

### SURVEYS

ALL CONSTRUCTION SURVEYS SHALL BE PERFORMED BY OR UNDER THE SUPERVISION OF A SURVEYOR LICENSED IN THE STATE OF ALASKA.

AN ACCURATE METHOD OF HORIZONTAL CONTROL SHALL BE ESTABLISHED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER BEFORE CONSTRUCTION BEGINS. THE CONTRACTOR SHALL MAINTAIN THE CONTROL SYSTEM THROUGHOUT THE PROJECT. IF AT ANY TIME THE METHODS UTILIZED FAIL TO PROVIDE ACCURATE LOCATION THE CONTRACTOR MAY BE REQUIRED TO SUSPEND WORK. THE CONTRACTOR SHALL LAY OUT THE WORK FROM OWNER ESTABLISHED VERTICAL CONTROL POINTS AND CONTRACTOR ESTABLISHED HORIZONTAL CONTROL POINTS AND SHALL BE RESPONSIBLE FOR ALL REQUIRED MEASUREMENTS TAKEN FROM THESE POINTS.

THE CONTRACTOR SHALL FURNISH AT ITS OWN EXPENSE ALL STAKES, TEMPLATES, PLATFORMS, EQUIPMENT, RANGE MARKERS, AND LABOR AS MAY BE REQUIRED TO LAY OUT THE WORK FROM THE CONTROL POINTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN THE CONTROL POINTS UNTIL AUTHORIZED TO REMOVE THEM. IF SUCH POINTS ARE DESTROYED OR DISTURBED THEY SHALL BE REESTABLISHED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

### STRUCTURAL STEEL

ALL MISCELLANEOUS STEEL PLATES AND SHAPES, SHALL BE ASTM A572 GRADE 50, UNLESS NOTED OTHERWISE ON PLANS.

ALL PIPE SHALL BE ASTM A53 GRADE B, TYPE E OR S.

ALL HSS MATERIAL SHALL BE ASTM A500 GRADE B.

ALL PLATES, 1-1/2 INCHES THICK OR GREATER, SHALL BE 100% STRAIGHT BEAM ULTRASONICALLY TESTED FOR LAMINATIONS. ANY DISCONTINUITY FOUND SHALL REQUIRE REPLACEMENT OF THE PLATE.

STEEL FABRICATION & ERECTION SHALL CONFORM TO AISC STANDARDS AND THE CODE OF STANDARD PRACTICE.

### ALUMINUM

ALL MISCELLANEOUS ALUMINUM PLATES AND SHAPES, SHALL BE ASTM B308 ALLOY 6061-T6, UNLESS NOTED OTHERWISE ON PLANS.

ALL ALUMINUM TUBE SHALL BE ASTM B429 ALLOY 6061-T6, UNLESS NOTED OTHERWISE ON PLANS.

ALUMINUM FABRICATION & ERECTION SHALL CONFORM TO ALUMINUM ASSOCIATION STANDARDS AND THE CODE OF STANDARD PRACTICE.

ALL ALUMINUM SHALL BE SEPARATED FROM STEEL USING UHMW PADS. ALUMINUM SHALL NOT AT ANY TIME COME IN CONTACT CARBON STEEL.

### STEEL WELDING

ALL STEEL SHOP AND FIELD WELDS SHALL CONFORM TO AWS D1.1. ALL WELDS SHALL BE PERFORMED BY WELDERS QUALIFIED PER AWS D1.1, FOR THE TYPE AND POSITION OF THE WELDS. ALL FILLER METAL SHALL MEET CHARPY IMPACT CRITERIA OF 20 FT-LBS AT -20 DEGREES FAHRENHEIT AND SHALL HAVE A MAXIMUM SPECIFIED CARBON CONTENT OF 0.20%. ALL SMAW ELECTRODES SHALL BE PROPERLY CONDITIONED LOW HYDROGEN. SUBMIT WELDER QUALIFICATIONS AND WELDING PROCEDURE SPECIFICATIONS TO OWNER FOR DESIGN ENGINEER REVIEW.

ALL SHOP WELDS SHALL BE 100% VISUALLY INSPECTED BY A CERTIFIED WELD INSPECTOR PROVIDED BY THE CONTRACTOR. WHERE INDICATED ON DRAWINGS OR REQUIRED BY AWS D1.1, WELDS SHALL ALSO BE NDE INSPECTED BY ASNT LEVEL II OR GREATER INDIVIDUALS PROVIDED BY THE CONTRACTOR. A MINIMUM OF 20% OF ALL SHOP WELDS SHALL BE TESTED. ALL D1.1 WELDS SHALL CONFORM FOR ACCEPTANCE CRITERIA FOR DYNAMICALLY LOADED CONNECTIONS.

ALL FIELD WELDS SHALL BE 100% INSPECTED BY THE CONTRACTOR. THE INSPECTOR SHALL BE AN INDIVIDUAL, WHO BY TRAINING AND/OR EXPERIENCE IN METALS FABRICATION, INSPECTION, AND TESTING, AND IS COMPETENT TO PERFORM INSPECTION OF THE WORK.

THE OWNER RESERVES THE RIGHT TO PERFORM ADDITIONAL VISUAL INSPECTION AND NDE TESTING, OF ANY FIELD OR SHOP WELDS, AT THE OWNER'S DISCRETION AND EXPENSE. ANY WELD FAILING INSPECTION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, WHICH WILL INCLUDE THE COST FOR RE-TESTING.

### ALUMINUM WELDING

ALL ALUMINUM SHOP AND FIELD WELDS SHALL CONFORM TO AWS D1.2. ALL WELDS SHALL BE PERFORMED BY WELDERS QUALIFIED PER AWS D1.2, FOR THE TYPE AND POSITION OF THE WELDS. ALL FILLER METAL SHALL BE AWS NO. 5356. SUBMIT WELDER QUALIFICATIONS AND WELDING PROCEDURE SPECIFICATIONS TO OWNER FOR DESIGN ENGINEER REVIEW.

ALL SHOP WELDS SHALL BE 100% VISUALLY INSPECTED BY A CERTIFIED WELD INSPECTOR PROVIDED BY THE CONTRACTOR. WHERE INDICATED ON DRAWINGS OR REQUIRED BY AWS D1.2, WELDS SHALL ALSO BE NDE INSPECTED BY ASNT LEVEL II OR GREATER INDIVIDUALS PROVIDED BY THE CONTRACTOR. A MINIMUM OF 20% OF ALL SHOP WELDS SHALL BE TESTED. ALL D1.2 WELDS SHALL CONFORM FOR ACCEPTANCE CRITERIA FOR DYNAMICALLY LOADED CONNECTIONS.

ALL FIELD WELDS SHALL BE 100% INSPECTED BY THE CONTRACTOR. THE INSPECTOR SHALL BE AN INDIVIDUAL, WHO BY TRAINING AND/OR EXPERIENCE IN METALS FABRICATION, INSPECTION, AND TESTING, AND IS COMPETENT TO PERFORM INSPECTION OF THE WORK.

THE OWNER RESERVES THE RIGHT TO PERFORM ADDITIONAL VISUAL INSPECTION AND NDE TESTING, OF ANY FIELD OR SHOP WELDS, AT THE OWNER'S DISCRETION AND EXPENSE. ANY WELD FAILING INSPECTION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, WHICH WILL INCLUDE THE COST FOR RE-TESTING.

### STEEL PIPE PILES

ALL PILES SHALL BE ASTM A252 GRADE 3, WITH CARBON EQUIVALENCY NOT TO EXCEED 0.45. GALVANIZING AS SPECIFIED IN THE PLANS. SPIRAL WELD PIPE SHALL NOT BE USED.

PILE SPLICES SHALL BE FULL-STRENGTH BUTT-WELDED WITH BACKING RINGS PER AWS SPECIFICATIONS. CARE SHALL BE TAKEN THAT PILE REMAINS IN STRAIGHT ALIGNMENT THROUGH SPLICES. NO PIECE OF PILE LESS THAN 5 FT. LONG SHALL BE SPLICED ONTO A PILE.

### GALVANIZING

ALL STEEL, PILE, CONCRETE REINFORCING, HARDWARE, FASTENERS, AND OTHER ITEMS AS IDENTIFIED ON PLANS SHALL BE HOT-DIPPED GALVANIZED PER ASTM A123, A153 OR A767 AFTER FABRICATION UNLESS NOTED OTHERWISE. DAMAGED GALVANIZING, INCLUDING THAT REMOVED FOR WELDING SHALL BE REPAIRED BY SPRAY METALLIZING. CONTRACTOR SHALL SUBMIT REPAIR MATERIAL AND METHODS OF REPAIR FOR REVIEW AND APPROVAL. BOX GIRDERS, CURBING, AND WHEEL STOPS MAY BE SPRAY METALIZED IN LIEU OF GALVANIZING AT THE CONTRACTOR'S OPTION.

### SPRAY METALLIZING

SPRAY METALLIZING SHALL BE WITH 85/15 ZINC/ALUMINUM PER AWS C2.23-2003. MINIMUM DRY COATING FILM THICKNESS OF 10 MILS IS REQUIRED. METALLIZING AND/OR GALVANIZING DAMAGED FROM SHIPPING, HANDLING, WELDING, CUTTING, OR BY OTHER MEANS SHALL BE REPAIRED BY SPRAY METALLIZING PER AWS C2.18-1993 TO A MINIMUM DRY COATING FILM THICKNESS OF 8 MILS. CONTRACTOR SHALL SUBMIT REPAIR MATERIAL AND METHOD OF REPAIR FOR ENGINEER REVIEW AND APPROVAL.

### BOLTS

ALL BOLTS CONNECTING STEEL TO STEEL OR STEEL TO CONCRETE SHALL BE ASTM A325, GALVANIZED, UNLESS NOTED OTHERWISE. ALL A325 BOLTS SHALL BE INSTALLED PER AISC TURN-OF-THE-NUT TIGHTENING, OR OTHER ENGINEER APPROVED METHODS, UNLESS NOTED OTHERWISE. ALL OTHER BOLTS SHALL BE ASTM A307, GALVANIZED, UNLESS NOTED OTHERWISE. GALVANIZED WASHERS SHALL BE USED IN ALL AREAS WHERE THE BOLT HEAD OR NUT SHALL BEAR AGAINST CONCRETE OR AGAINST OVERSIZED HOLES IN STEEL (I.E. MORE THAN 1/16 IN. LARGER THAN BOLT DIAMETER). GALVANIZED NUTS AND WASHERS SHALL CONFORM TO THE SPECIFICATION FOR THE CORRESPONDING BOLT.

ALL BOLTS FOR ANY ALUMINUM CONNECTIONS SHALL BE F593 STAINLESS STEEL 316L WITH F594 STAINLESS STEEL 316L NUTS.

### SIGNS

ALL SIGNS, SHALL BE ALUMINUM SHEET WITH A THICKNESS OF 0.080 INCHES. ALL SIGNS SHALL HAVE BLACK LETTERING AS DETAILED. SIGNS SHALL BE LETTERED WITH BLOCK STYLE LETTERING AS SHOWN ON THE PLANS. BACKGROUND FOR SIGNS A & B SHALL BE WHITE. BACKGROUND FOR SIGNS C, D, E, & F SHALL BE YELLOW. ALL BACKGROUND, AND LETTERING SHALL BE REFLECTIVE. SIGNS SHALL BE MOUNTED AS SHOWN ON THE PLANS WITH STAINLESS STEEL SCREWS, UNLESS NOTED OTHERWISE.

STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES

HALIBUT COVE  
GENERAL NOTES

HALIBUT COVE, ALASKA  
HALIBUT COVE FLOAT REPLACEMENT  
PROJECT No. XXXX-X



PREPARED: GDC

DRAWN: JRH

REVIEWED: DST

DATE: 6/02/15

SHEET

9  
OF 9 SHEETS

FOR REVIEW