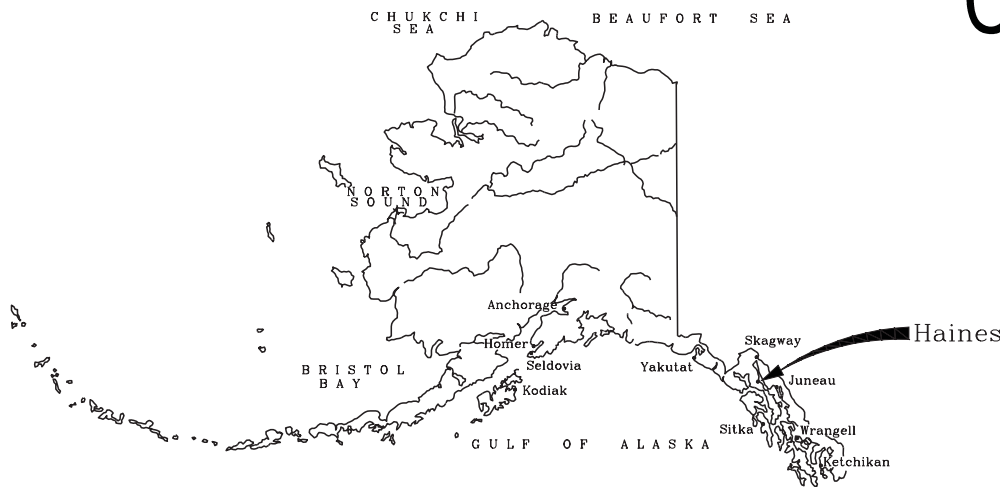


LUTAK DOCK REHABILITATION PROJECT  
CITY OF HAINES, ALASKA  
EDA PROJECT NO. 07-79-4967



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IN ASSOCIATION WITH:

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STRUCTURAL ABBREVIATIONS

& ⊗ ⌒	And At Center Line	DB DBL DEMO DIAG DICA DIM DIMA DL DN DO DTL DWG	Diaphragm Boundary Double Demolition Diagonal Drilled-in-Concrete Anchor Dimension Drilled-in-Masonry Anchor Dead Load Down Ditto Detail Drawing	GA. GALV GLB GR GWB	GA. Galvanized Glue-Laminated Beam Grade Gypsum Wallboard	(N) NFS NIC NO NOM NS NTS	New Non-Frost Susceptible Not in Contract Number Nominal Near Side Not to Scale	SOG SPCG SPEC SQ SSH STT STD STFNR STL STOR STRUCT SYM	Slab-on-Grade Spacing Specification Square Short Slotted Hole Stainless Steel Standard Stiffener Steel Storage Structural Symmetrical
AB ADJ AGGR ALT ALUM ANCH APPROX ARCH ASTM	Anchor Bolt Adjustable, Adjacent Aggregate Alternate Aluminum Anchor, Anchorage Approximate Architectural, Architect American Society for Testing and Materials All Weather Wood	(E) EA EC EF EJ ELEC ELEV ENG EQ EQUIP EXP EXST EXT EW	Existing Each Epoxy Coat Each Face Expansion Joint Electrical Elevation Engineer Equal, Earthquake Equipment Expansion Existing Exterior Each Way	ID IN OR " INCL INSUL INT INTMD	Inside Diameter Inch Include Insulation Interior Intermediate.	OPNG OPP OSB	Opening Opposite Oriented Strand Board	T TEMP T&B T&G THK or t THRU TO TOB TOC TOS TOW TRANS TS TYP	Top Temporary Top & Bottom Tongue & Groove Thick Through Top of Top of Beam Top Of Concrete Top of Steel Top of Wall Transverse Tube Steel Typical
C CIP CJ CLG CLR CMU COL CON JT CONC CONN CONSTR CONT CONTR COORD CP CTJ CTR CTS	Channel Section Cast-in-Place Control Joint Ceiling Clear Concrete Masonry Unit Column Construction Joint Concrete Connection Construction Continuous Contractor Coordinate Complete Penetration Control Joint, Contraction Joint Center Countersunk	FB FD FDN FF FIN FLR FO FOBM FOC FOS FRMG FS FTG FV	Flat Bar Floor Drain Foundation Finished Floor Finish Floor Face of Face of Beam Face of Concrete Face of Steel Framing Far Side Foot or Feet Footing Field Verify	L LKD LLH LLV LOC LONG	Long, Length, Angle Development Length Long Leg Horizontal Long Leg Vertical Location Longitudinal	PT QTY	Point Pressure - Treated Quantity	UBC UNO	Uniform Building Code Unless Noted Otherwise
BLDG BLK BLKG BM BOT BO BRG BSMT BTWN	Building Block Blocking Beam Bottom Bottom of Bearing Basement Between	EQ ENG EQ EQUIP EXP EXST EXT EW	Equal, Earthquake Equipment Expansion Existing Exterior Each Way	K KSI	Long, Length, Angle Development Length	PAR PC PERIM PLF PLYWD PMJ PSF PSI PT PT	Plate Parallel Pre-Cast Perimeter Pounds Per Linear Feet Plywood Pre-molded Joint Pounds Per Square Foot Pounds Per Square Inch Point Pressure - Treated	VER VERT VEST VSL	Verify Vertical Vestibule Vertical Slotted Hole
W	Weather	W	Weather	W	Weather	W	Weather	W	Weather

LIST OF DRAWINGS

G1	COVER SHEET
G2	GENERAL NOTES
G3	CONTRACTOR WORK AND STAGING AREAS
C1	EXISTING SITE PLAN
C2	SITE GRADING PLAN
C3	CIVIL DETAILS
D1	DEMOLITION PLAN
D2	DREDGING PLAN
D3	DREDGE DISPOSAL SITE PLAN AND SECTIONS
S1	FENDER LAYOUT PLAN AND DETAILS
S2	FENDER DETAILS
S3	CLOSURE ARC MODIFICATIONS
S4	MISCELLANEOUS DETAILS
S5	RO-RO TRANSFER BRIDGE
CP1	CATHODE PROTECTION DETAILS
CP2	CATHODE PROTECTION NOTES AND DETAILS

NOV 2003  
RECORD DRAWINGS  
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LUTAK DOCK REHABILITATION PROJECT  
CITY OF HAINES - EDA PROJECT NO. 07-79-04967

COVER SHEET

DWG	SHEET NO.
DES.	G1
DR.	
CH.	
F.B.	OF 16 SHEETS
DATE	
NO.	40-02-010

GENERAL NOTES

GENERAL

THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS AMONG THE DRAWINGS BEFORE STARTING ANY WORK OR FABRICATION. ANY DISCREPANCIES FOUND AMONG THE DRAWINGS, SITE CONDITIONS, SPECIFICATIONS, AND THESE NOTES SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE.

ALL CONSTRUCTION SHALL COMPLY WITH THE STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES STANDARD SPECIFICATIONS.

SAFETY – THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL O.S.H.A. SAFETY STANDARDS. THE CONTRACTOR IS IN CHARGE OF ALL SAFETY MATTERS ON AND AROUND THE JOB SITE.

DEMOLITION

CONTRACTOR SHALL SUBMIT A DEMOLITION PLAN PRIOR TO BEGINNING WORK. PLAN SHALL CLEARLY DESCRIBE MEANS AND METHODS OF DEMOLITION AND IDENTIFY TO WHERE THE MATERIALS ARE TO BE TRANSPORTED AND BY WHAT MEANS.

THE EXISTING TIMBER FENDERS TO BE DEMOLISHED SHALL BE DISPOSED OF AT A LANDFILL AUTHORIZED TO RECEIVED CREOSOTE TREATED MATERIAL OR SHALL BE SALVAGED FOR REUSE BY THE CONTRACTOR. ALL OF THE TIMBER AND TIMBER PILES OF THE FENDERING SYSTEM ARE BELIEVED TO BE CREOSOTE TREATED.

THE NEW H–PILES, SHEET PILES AND CAP BEAM MODIFICATIONS SHALL BE COMPLETE BEFORE REMOVAL OF THE UPPER SECTION OF THE (E) CLOSURE ARCS AND THE FILL BEHIND THEM.

METHOD OF REMOVAL OF THE FILL BEHIND THE DEMOLISHED PORTION OF THE CLOSURE ARCS SHALL BE SUCH THAT THE CONDITIONS OF THE US ARMY CORPS OF ENGINEERS PERMIT FOR THIS PROJECT ARE NOT VIOLATED.

STRUCTURE DESIGN DATA

STRUCTURE MODIFICATIONS HAVE BEEN DESIGNED FOR THE FOLLOWING OPERATIONAL LOADS ON THE COMPLETED STRUCTURES. ADEQUACY OF EXISTING STRUCTURES TO SUPPORT THESE LOADS HAS NOT BEEN VERIFIED.

LIVE LOADS:

RO–RO BRIDGE MODIFICATIONS:	130 KIP AXLE WEIGHT
CLOSURE ARC MODIFICATIONS:	1000PSF UNIFORM LOAD OR CRANE TRACK PRESSURE OF 3500 PSF OVER AREA 4'X23'
FENDER SYSTEM:	VESSEL IMPACT ENERGY OF 230,000 FT – LBS @ 0 DEGREES

SPECIAL INSPECTION

THE FOLLOWING WORK SHALL BE INSPECTED BY A SPECIAL INSPECTOR:

- CONCRETE. DURING THE TAKING OF TEST SPECIMENS AND PLACING OF REINFORCED CONCRETE.
- BOLTS INSTALLED IN CONCRETE. PRIOR TO AND DURING THE PLACEMENT OF CONCRETE AROUND BOLTS.
- REINFORCING STEEL. DURING PLACING OF REINFORCING STEEL. THE SPECIAL INSPECTOR NEED NOT BE PRESENT CONTINUOUSLY DURING PLACING OF REINFORCING STEEL PROVIDED THE SPECIAL INSPECTOR HAS INSPECTED FOR CONFORMANCE TO THE APPROVED PLANS PRIOR TO THE CLOSING OF FORMS OR THE DELIVERY OF CONCRETE TO THE JOBSITE.
- STRUCTURAL WELDING. DURING THE WELDING OF ANY MEMBER, EXCEPT FOR WELDING DONE IN AN AISC APPROVED FABRICATOR'S SHOP. THE SPECIAL INSPECTOR NEED NOT BE CONTINUOUSLY PRESENT DURING WELDING OF SINGLE-PASS FILLET WELDS NOT EXCEEDING 5/16 INCH (7.9 MM) IN SIZE, PROVIDED THE MATERIALS, QUALIFICATIONS OF WELDING PROCEDURES AND WELDERS ARE VERIFIED PRIOR TO THE START OF WORK; PERIODIC INSPECTIONS ARE MADE OF WORK IN PROGRESS; AND A VISUAL INSPECTION OF ALL WELDS IS MADE PRIOR TO COMPLETION OR PRIOR TO SHIPMENT OF SHOP WELDING:
- PILES. DURING DRIVING OF PILES

FOUNDATION NOTES

ALLOWABLE SOIL BEARING PRESSURE:	3000 PSF
CAP SUPPORT H–PILE CAPACITY REQ'D:	400 KIPS

REFER TO SOILS REPORT FOR PILE INSTALLATION, SUB-GRADE PREPARATION, AND LATERAL EARTH PRESSURES.

STRUCTURAL CONCRETE NOTES

ALL CONCRETE SHALL HAVE A WATER REDUCING ADMIXTURE MEETING ASTM C 494, TYPE A (TYPE E FOR COLD WEATHER CONCRETING) AND NOT MORE THAN 0.1 PERCENT CHLORIDE IONS. MAXIMUM WATER/CEMENT RATIO SHALL BE 0.40. MAXIMUM SLUMP BEFORE ADDING THE RANGE WATER REDUCING ADMIXTURE SHALL BE THREE INCHES. MAXIMUM AGGREGATE SIZE SHALL BE ¾". COLD WEATHER CONCRETING SHALL CONFORM TO ACI SPECIFICATION 306.1 AND ACI 306R. CALCIUM CHLORIDE SHALL NOT BE USED. MINIMUM CEMENT CONTENT SHALL BE 5–½ SACKS.

CAST–IN–PLACE CONCRETE:	f'c = 4,000 PSI.
AIR ENTRAINING ADMIXTURE:	ASTM C260
AGGREGATE:	ASTM C33
EPOXY ADHESIVE:	ASTM C881
REINFORCING BARS:	ASTM A 615, GRADE 60.
WATER:	ASTM C94, SECTION 4.1.3
CEMENT:	ASTM C150

THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT FOR CAST–IN–PLACE CONCRETE:

A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3 INCHES
B. ALL OTHER CONCRETE	2 INCHES

ALL WELDED WIRE FABRIC (WWF): ASTM A 185 OR ASTM A 497. CONTRACTOR SHALL TAKE SPECIAL CARE TO MAKE SURE WWF IN SLABS–ON–GRADE IS SUPPORTED IN ITS PROPER LOCATION.

WHERE REQUIRED, DOWELS SHALL MATCH SIZE AND QUANTITY OF MAIN REINFORCING.

NO WELDING OF REBAR IS ALLOWED WITHOUT ENGINEER'S APPROVAL.

DRILLED IN ADHESIVE ANCHORING

DRILLED IN ADHESIVE ANCHORING FOR BOTH ANCHOR BOLTS AND REBAR SHALL BE DONE WITH HILTI HVA 2421 EPOXY ADHESIVE OR AN APPROVED EQUAL. UNLESS OTHERWISE NOTED MINIMUM EMBEDMENT INTO CONCRETE SHALL BE 8 DIAMETERS. ALL INSTALLATION SHALL CONFORM TO THE MANUFACTURER'S INSTRUCTIONS.

STRUCTURAL STEEL NOTES

STRUCTURAL STEEL:	ASTM A 36, UNLESS OTHERWISE NOTED.
STRUCTURAL STEEL TUBES (HSS):	ASTM A 500, GRADE B.
STRUCTURAL STEEL PIPES:	ASTM A 53, GRADE B.
BOLTS:	ASTM A 325 EXCEPT WHERE NOTED A307
HARDENED WASHERS:	ASTM F 436
NUTS:	AS RECOMMENDED BY ASTM IN THE BOLT SPECIFICATION
WELDED HEADED STUDS:	ASTM A 108
THREADED RODS:	ASTM A 36 OR A307
NON–SHRINK GROUT:	ASTM C 1107
WELDING ELECTRODES :	E70, LOW–HYDROGEN

GALVANIZING: ALL STEEL FABRICATION AND PILING (EXCEPT SHEET PILES) SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 123, UNLESS OTHERWISE NOTED.

STEEL SHEET PILES

SHEET PILES SHALL BE "Z" – SHAPED, SHALL HAVE A 50 KSI MINIMUM YIELD STRENGTH, AND SHALL, AS A MINIMUM, HAVE THE FOLLOWING SECTION PROPERTIES PER LINEAL FOOT OF WALL:

AREA IN <sup>2</sup>	SECTION MODULUS IN <sup>3</sup>	MOMENT OF INERTIA IN <sup>4</sup>	WEIGHT PSF
11.2	46.8	281	38

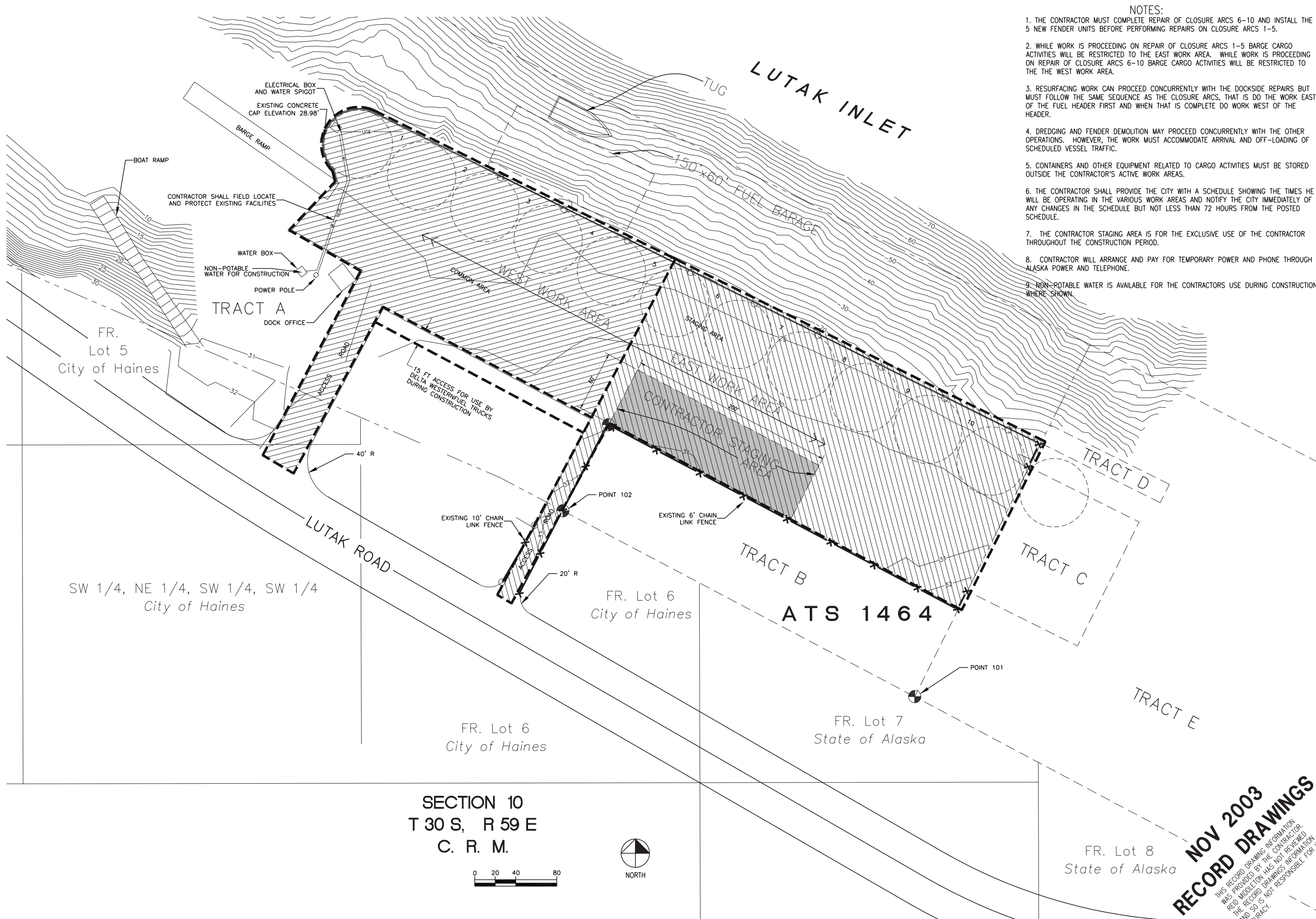
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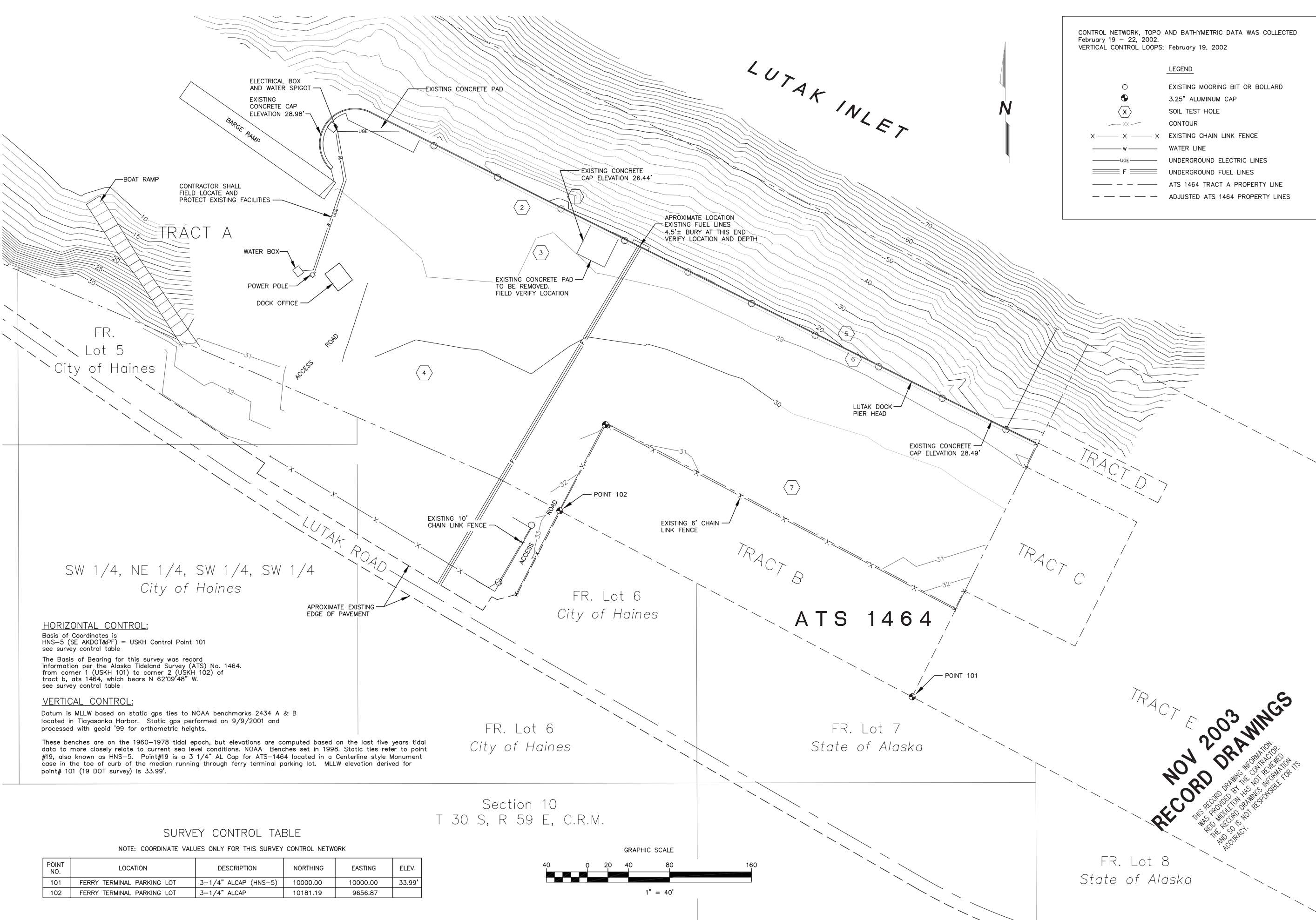
LUTAK DOCK REHABILITATION PROJECT  
CITY OF HAINES – EDA PROJECT NO. 07–79–04967

GENERAL NOTES

DWG	SHEET NO.
DES.	G2
DR.	
CH.	
F.B.	
DATE	OF 16 SHEETS
NO.	40–02–010







CONTROL NETWORK, TOPO AND BATHYMETRIC DATA WAS COLLECTED  
February 19 - 22, 2002.  
VERTICAL CONTROL LOOPS: February 19, 2002

LEGEND

- EXISTING MOORING BIT OR BOLLARD
- 3.25" ALUMINUM CAP
- ⊗ SOIL TEST HOLE
- CONTOUR
- X --- X EXISTING CHAIN LINK FENCE
- W --- WATER LINE
- UGE --- UNDERGROUND ELECTRIC LINES
- === F === UNDERGROUND FUEL LINES
- - - - - ATS 1464 TRACT A PROPERTY LINE
- - - - - ADJUSTED ATS 1464 PROPERTY LINES

**HORIZONTAL CONTROL:**

Basis of Coordinates is  
HNS-5 (SE AKDOT&PF) = USKH Control Point 101  
see survey control table

The Basis of Bearing for this survey was record  
information per the Alaska Tideland Survey (ATS) No. 1464,  
from corner 1 (USKH 101) to corner 2 (USKH 102) of  
tract b, ats 1464, which bears N 62°09'48" W.  
see survey control table

**VERTICAL CONTROL:**

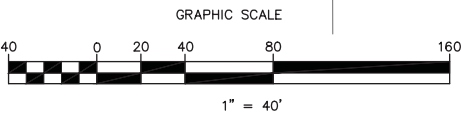
Datum is MLLW based on static gps ties to NOAA benchmarks 2434 A & B  
located in Tiayasanka Harbor. Static gps performed on 9/9/2001 and  
processed with geoid '99 for orthometric heights.

These benches are on the 1960-1978 tidal epoch, but elevations are computed based on the last five years tidal  
data to more closely relate to current sea level conditions. NOAA Benches set in 1998. Static ties refer to point  
#19, also known as HNS-5. Point#19 is a 3 1/4" AL Cap for ATS-1464 located in a Centerline style Monument  
case in the toe of the median running through ferry terminal parking lot. MLLW elevation derived for  
point# 101 (19 DOT survey) is 33.99'.

**SURVEY CONTROL TABLE**

NOTE: COORDINATE VALUES ONLY FOR THIS SURVEY CONTROL NETWORK

POINT NO.	LOCATION	DESCRIPTION	NORTHING	EASTING	ELEV.
101	FERRY TERMINAL PARKING LOT	3-1/4" ALCAP (HNS-5)	10000.00	10000.00	33.99'
102	FERRY TERMINAL PARKING LOT	3-1/4" ALCAP	10181.19	9656.87	



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LUTAK DOCK REHABILITATION  
CITY OF HAINES - EDA PROJECT NO. 07-79-04967

EXISTING SITE PLAN

DWG 695600MAST  
DES. MJ  
DR. CB  
CH. RH  
F.B. RH

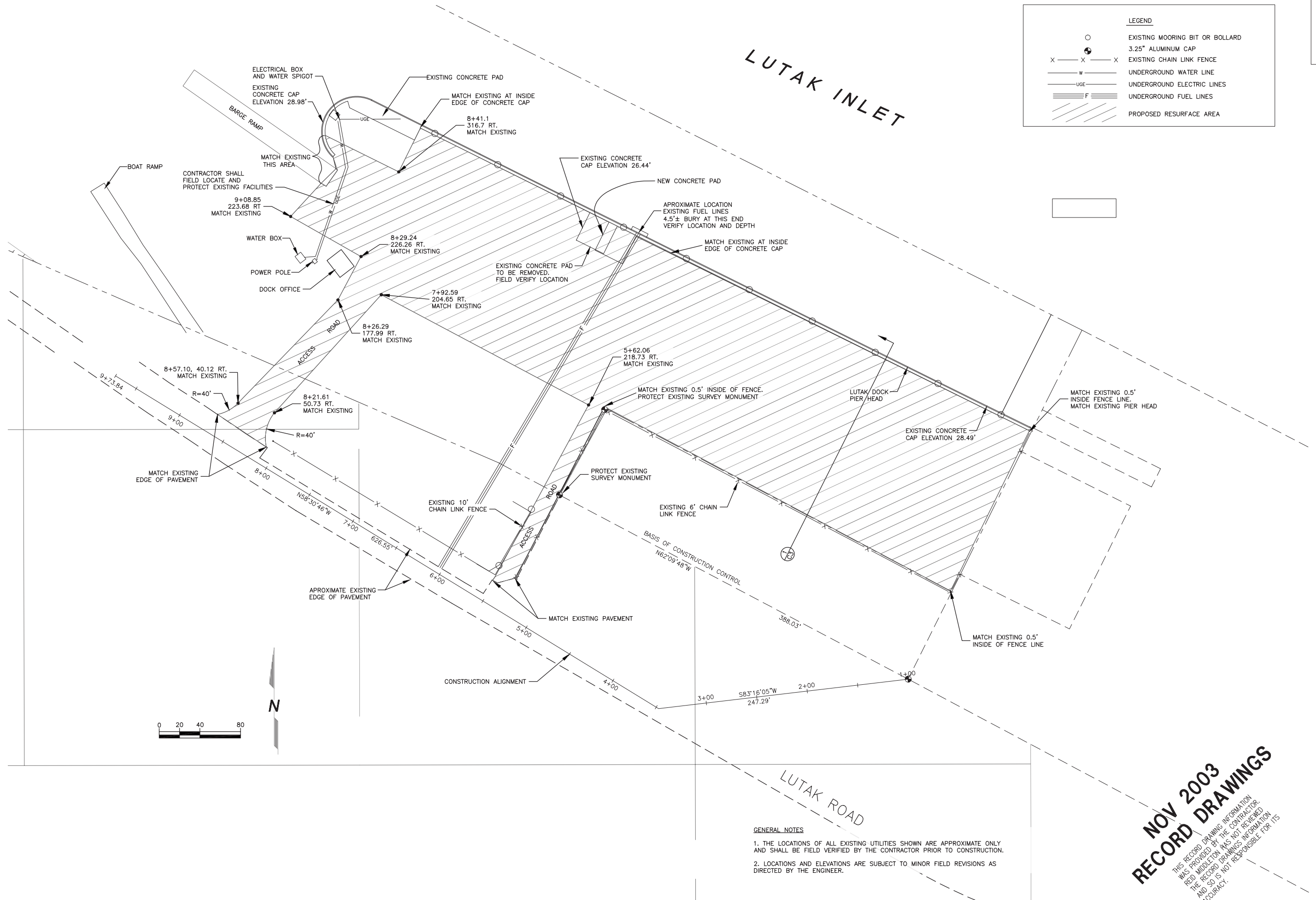
SHEET NO.  
C1  
OF 15 SHEETS

JOB NO. 40-02-010

DATE

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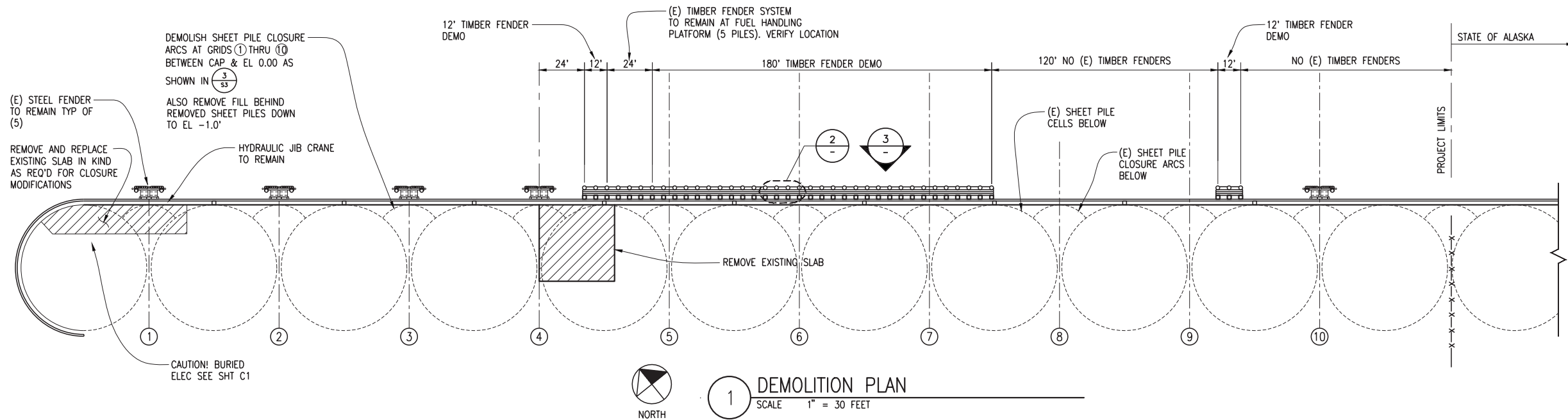
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LUTAK DOCK REHABILITATION  
CITY OF HAINES — EDA PROJECT NO. 07-79-04967

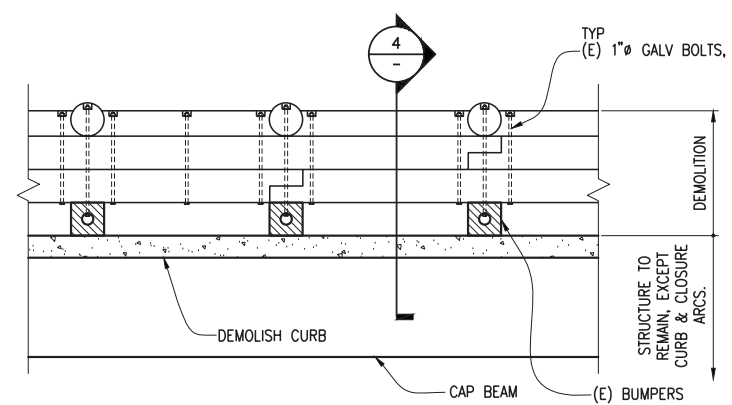
SITE GRADING PLAN

DWG	695600MAST	SHEET NO.
DES.	CB	C2
DR.	CB	
CH.	LM	
F.B.		OF 15 SHEETS
DATE		
NO.	40-01-010	

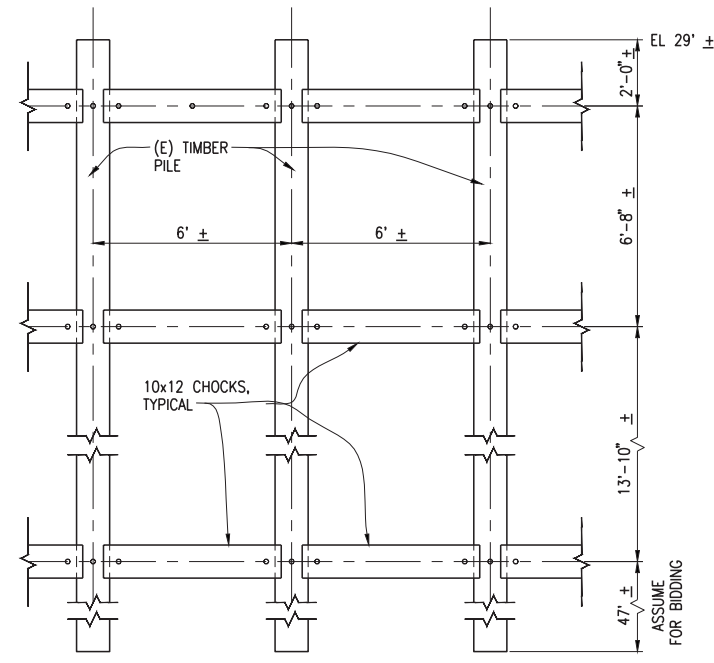




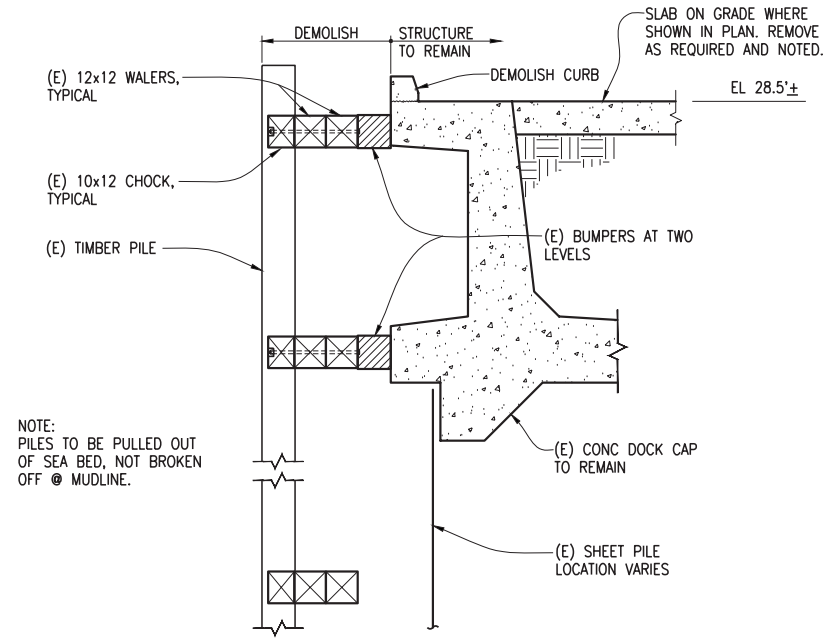
1 DEMOLITION PLAN  
SCALE 1" = 30 FEET



2 (E) TIMBER FENDER PARTIAL PLAN  
SCALE 3/8" = 1'-0"



3 (E) TIMBER FENDER ELEVATION  
SCALE 3/8" = 1'-0"



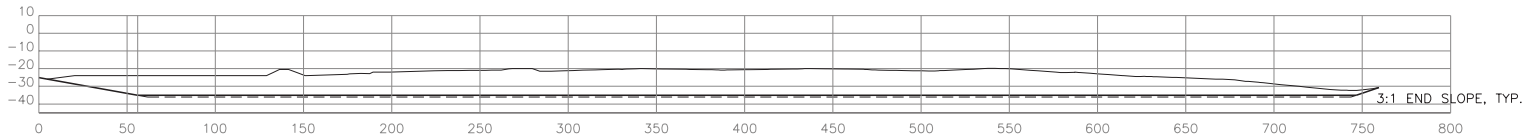
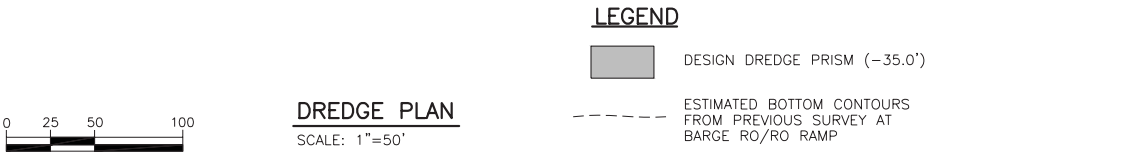
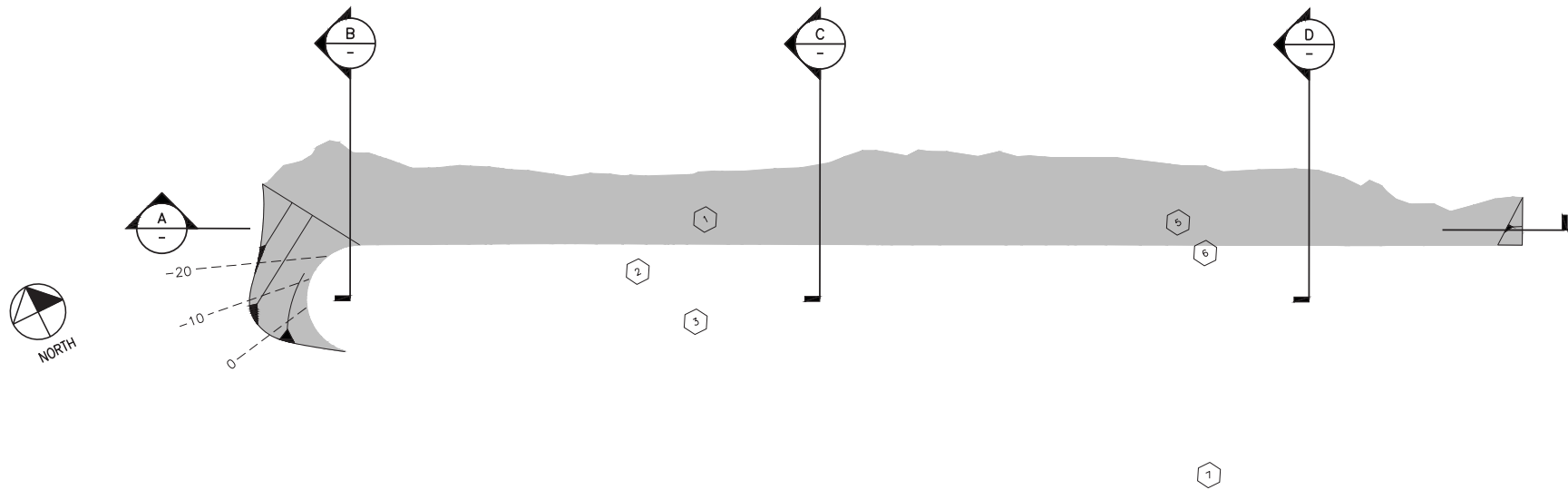
4 (E) TIMBER FENDER SECTION  
SCALE 3/8" = 1'-0"

**NOV 2003  
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<b>Red Middleton</b> 4300 B ST., Suite 403 Anchorage, AK 99503 Phone: 907 562-3439 Email: cfraser@redmidd.com	
LUTAK DOCK REHABILITATION PROJECT CITY OF HAINES - EDA PROJECT NO. 07-79-04967	DEMOLITION PLAN
DWG DES. DR. CH. F.B. DATE JOB NO. 40-02-010	SHEET NO. <b>D1</b> OF 16 SHEETS





**A SECTION**  
SCALE 1" = 50'

#### HORIZONTAL CONTROL:

BASIS OF COORDINATES IS  
HNS-5 (SE AKDOT&PF) = USKH CONTROL PT 101  
SEE SURVEY CONTROL TABLE

THE BASIS OF BEARING FOR THIS SURVEY WAS RECORD  
INFORMATION PER THE ALASKA TIDELAND SURVEY (ATS) No. 1464.  
FROM CORNER 1 (USKH 101) TO CORNER 2 (USKH 102) OF  
TRACT B, ATS 1464, WHICH BEARS N 62°09'48" W.  
SEE SURVEY CONTROL TABLE

#### VERTICAL CONTROL:

SOURCE OF ELEVATION - SE AKDOT&PF

BENCH MARK (HNS-5)

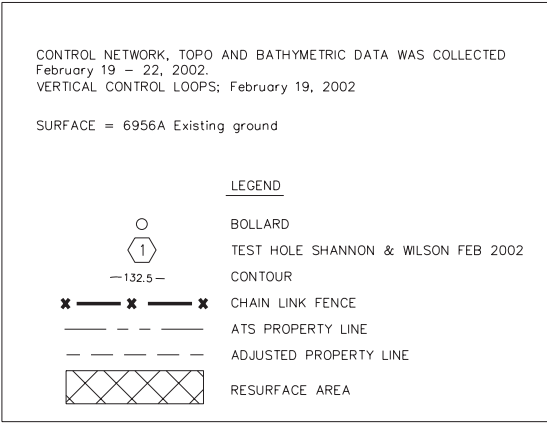
ELEV. = 33.99 ft. (MLLW)

DESC. = ALUMINUM CAP IN A MONUMENT CASE ALONG THE  
OF A CURB OF THE MEDIAN RUNNING THROUGH FERRY TERMINAL  
PARKING LOT.

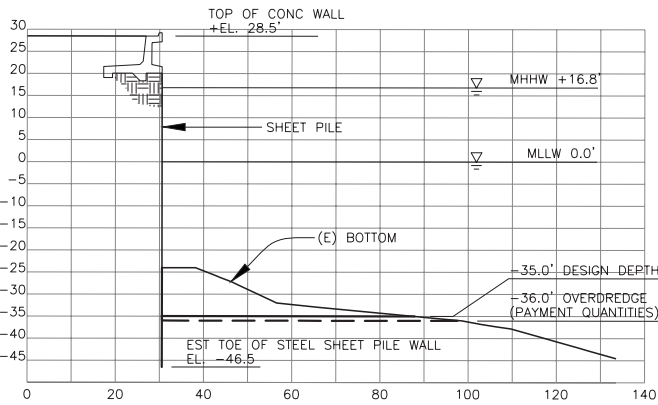
#### SURVEY CONTROL TABLE

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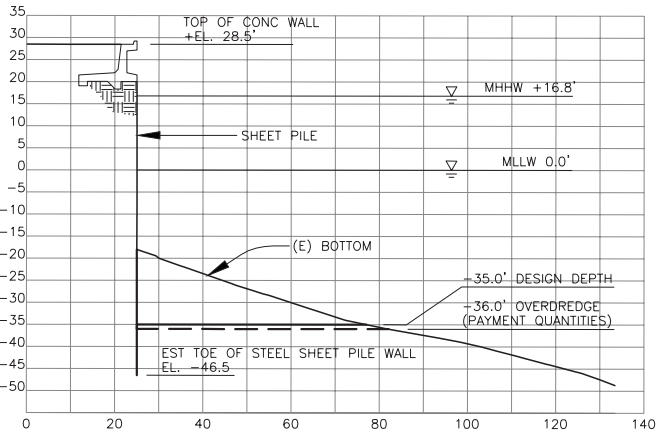
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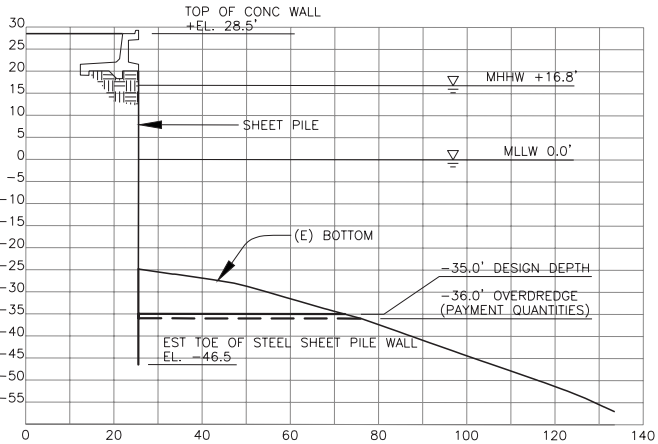
TIDAL DATUM
HAINES, CHILKOOT INLET, LYNN CANAL LAT. 59°13.8' LONG. 135°26.0'
ESTIMATED EXTREME HIGH WATER (EHW) +22.5'
MEAN HIGHER HIGH WATER (MHHW) +16.8'
MEAN HIGH WATER (MHW) +15.8'
MEAN TIDE LEVEL (MTL) +6.7'
MEAN LOW WATER (MLW) +1.6'
MEAN LOWER LOW WATER (MLLW) 0.0'
ESTIMATED EXTREME LOW WATER (ELW) -6.0'



**B SECTION**  
SCALE 1" = 20'



**C SECTION**  
SCALE 1" = 20'



**D SECTION**  
SCALE 1" = 20'

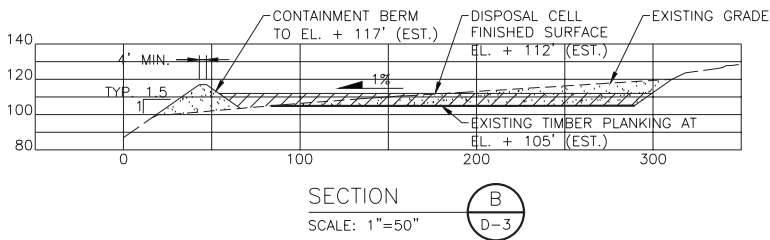
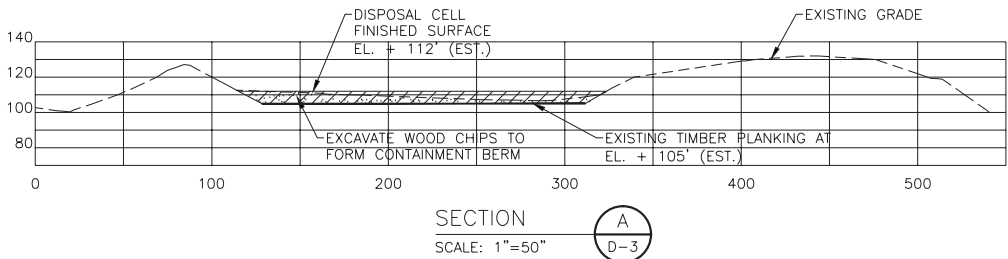
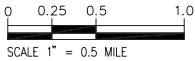
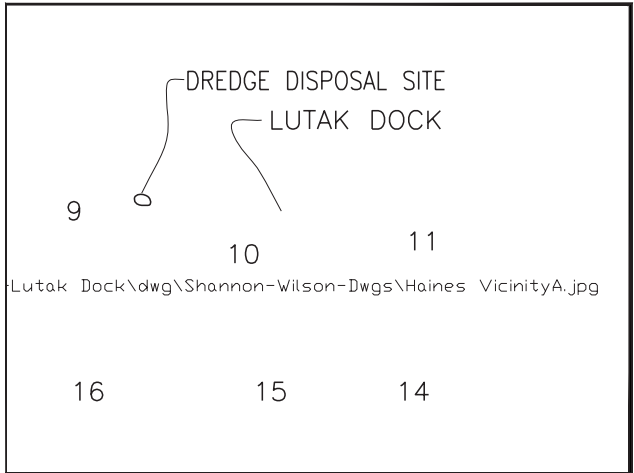
ESTIMATED DREDGE QUANTITIES		
	VOLUME (CY)	AREA (SF)
DESIGN EL. -35.0'	9,620	39,545
1 FT OVERDREDGE	1,380	3,765
TOTAL (EL. -36.0')	11,000	43,310

**NOV 2003  
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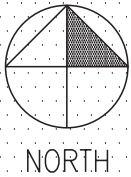
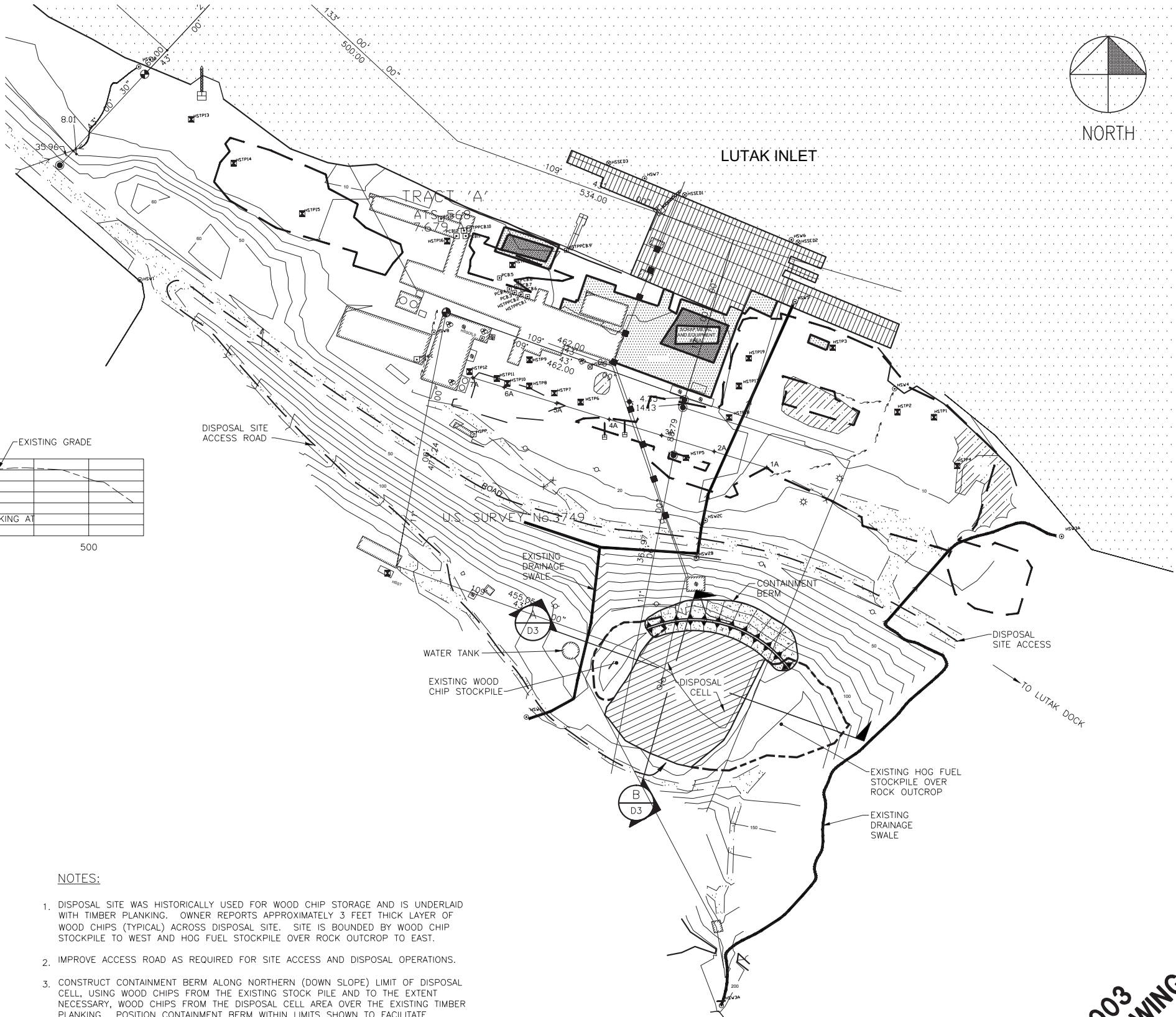
REID MIDDLETON		4300 B ST., Suite 403 Anchorage, AK 99503 Phone: 907-562-3439 Email: dms@reidmiddleton.com	
LUTAK DOCK REHABILITATION PROJECT		CITY OF HAINES - EDA PROJECT NO. 07-79-04967	
DREDGING PLAN AND SECTIONS			
DWG	DES.	DR.	CH.
DATE	JOB NO.	SHEET NO.	OF 16 SHEETS
	40-02-010	D2	





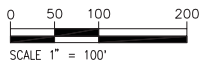
LEGEND

- EXISTING DRAINAGE SWALES (INDICATING DIRECTION OF FLOW)  
WOOD CHIPS  
DREDGE MATERIAL DISPOSAL



NOTES:

- DISPOSAL SITE WAS HISTORICALLY USED FOR WOOD CHIP STORAGE AND IS UNDERLAID WITH TIMBER PLANKING. OWNER REPORTS APPROXIMATELY 3 FEET THICK LAYER OF WOOD CHIPS (TYPICAL) ACROSS DISPOSAL SITE. SITE IS BOUNDED BY WOOD CHIP STOCKPILE TO WEST AND HOG FUEL STOCKPILE OVER ROCK OUTCROP TO EAST.
- IMPROVE ACCESS ROAD AS REQUIRED FOR SITE ACCESS AND DISPOSAL OPERATIONS.
- CONSTRUCT CONTAINMENT BERM ALONG NORTHERN (DOWN SLOPE) LIMIT OF DISPOSAL CELL, USING WOOD CHIPS FROM THE EXISTING STOCK PILE AND TO THE EXTENT NECESSARY, WOOD CHIPS FROM THE DISPOSAL CELL AREA OVER THE EXISTING TIMBER PLANKING. POSITION CONTAINMENT BERM WITHIN LIMITS SHOWN TO FACILITATE CONSTRUCTION.
- SPREAD DREDGE MATERIAL EVENLY THROUGHOUT DISPOSAL CELL TO CREATE A CONSISTENT 1% DOWN SLOPE GRADE.
- MAINTAIN CONTAINMENT BERM MINIMUM 5 FEET ABOVE FINISHED GRADE OF DISPOSAL MATERIAL CELL. BORROW FROM WOOD CHIP STOCKPILE AS NEEDED TO INCREASE CONTAINMENT DURING CONSTRUCTION.
- INTENT OF CELL CONTAINMENT IS TO PREVENT FREE DRAINAGE OF DISPOSAL MATERIAL INTO EXISTING DRAINAGE SWALES. MODIFY AND MAINTAIN CONTAINMENT THROUGHOUT CONSTRUCTION AS REQUIRED.



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RECORD DRAWINGS

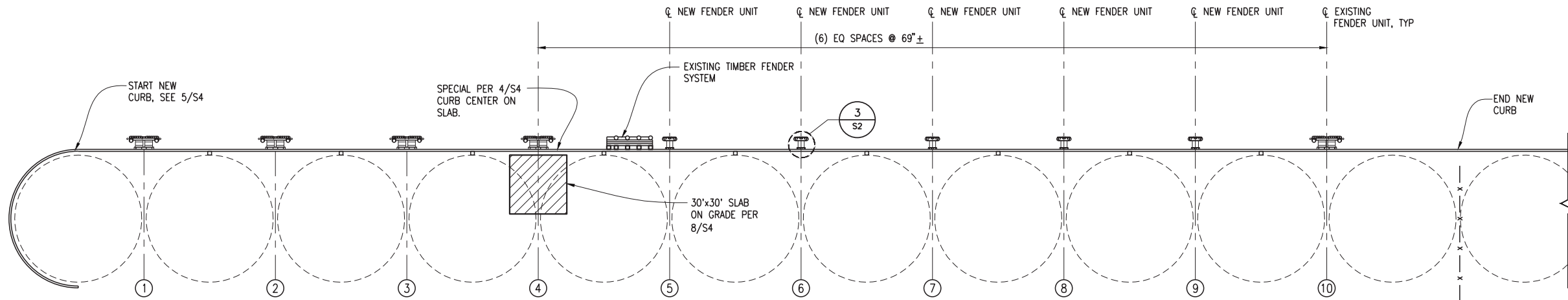
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Phone: 907.562.3439  
Email: cros@reidmiddle.com

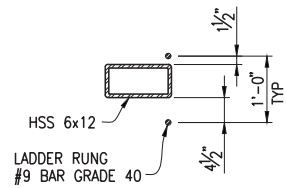
CITY OF HAINES - EDA PROJECT NO. 07-79-04967  
LUTAK DOCK REHABILITATION PROJECT

DREDGE DISPOSAL SITE - PLAN AND SECTIONS

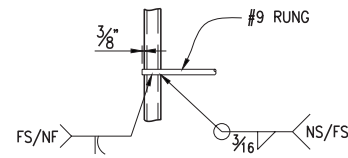
DWG	SHEET NO.
DES.	
DR.	
CH.	
F.B.	D3
DATE	16
NO.	40-02-010



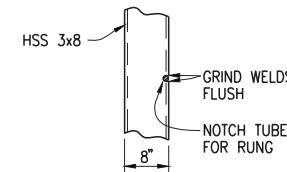
**1 FENDER PLAN**  
SCALE 1" = 30 FEET



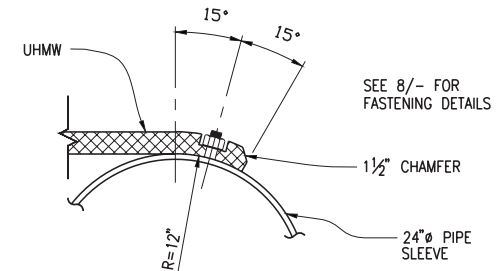
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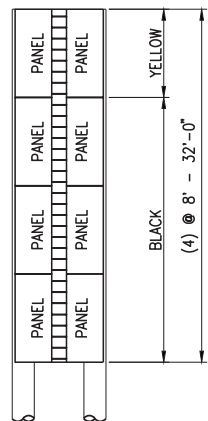
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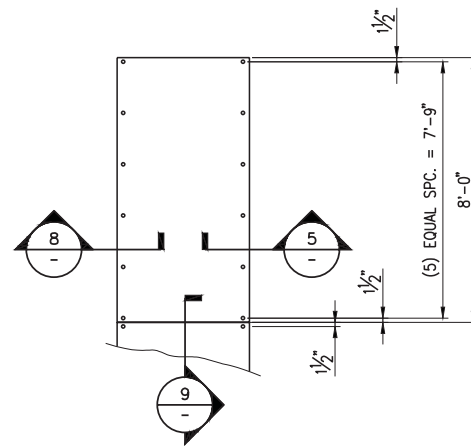
**4 DETAIL**  
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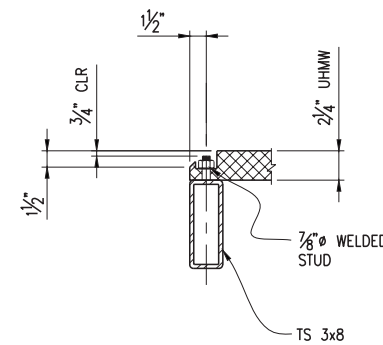
**5 DETAIL**  
SCALE 1 1/2" = 1'-0"



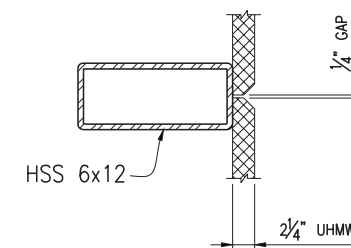
**6 DETAIL-UHMW PANEL LAYOUT**  
SCALE 1/8" = 1'-0"



**7 DETAIL-BOLT PATTERN**  
SCALE 3/8" = 1'-0"



**8 SECTION**  
SCALE 1 1/2" = 1'-0"



**9 SECTION**  
SCALE 1 1/2" = 1'-0"

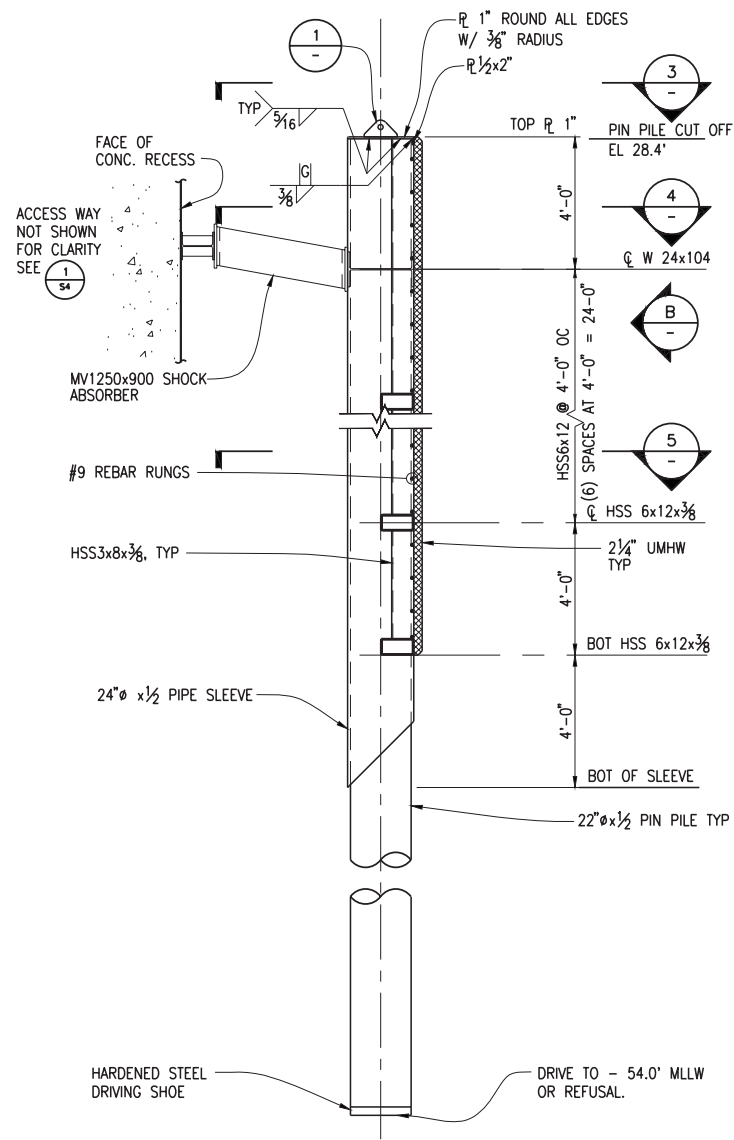
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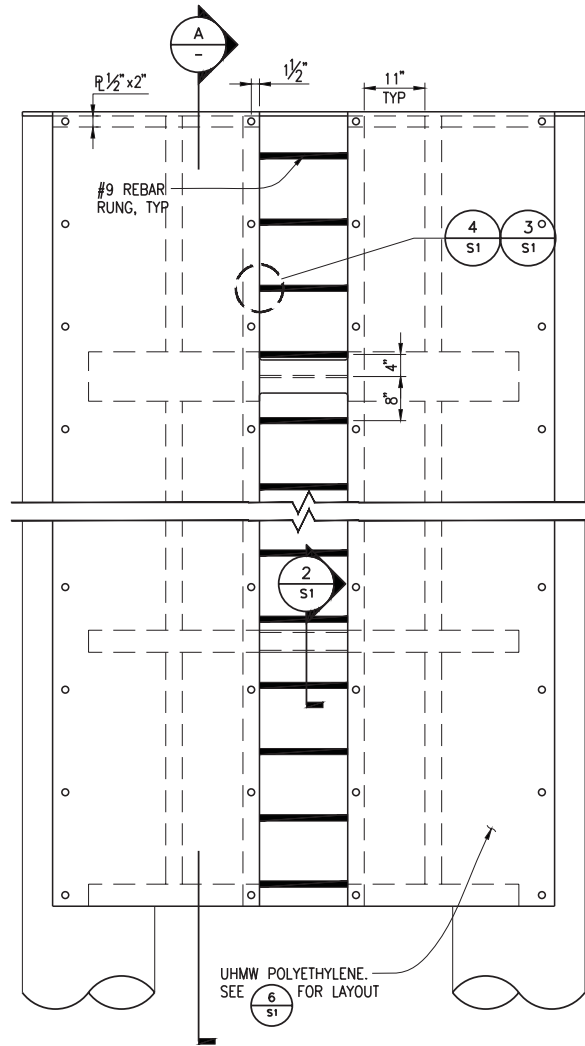
**LUTAK DOCK REHABILITATION PROJECT**  
CITY OF HAINES - EDA PROJECT NO. 07-79-04967

**FENDER LAYOUT PLAN  
AND DETAILS**

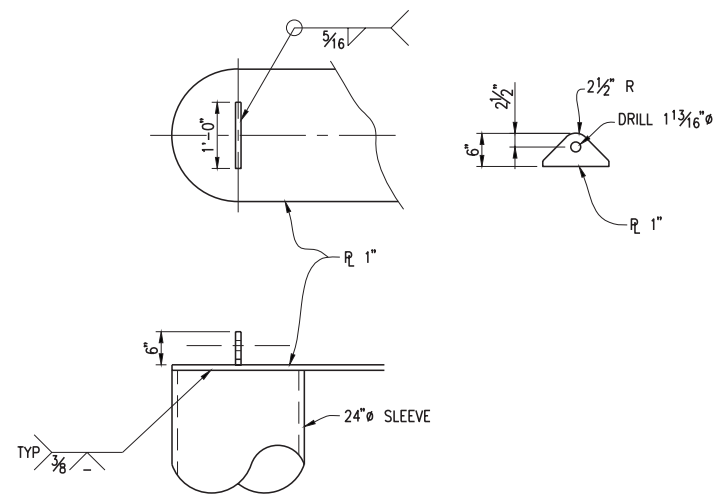
DWG.	SHEET NO.
DES.	S1
DR.	
CH.	
F.B.	OF 16 SHEETS
DATE	
JOB NO.	40-02-010



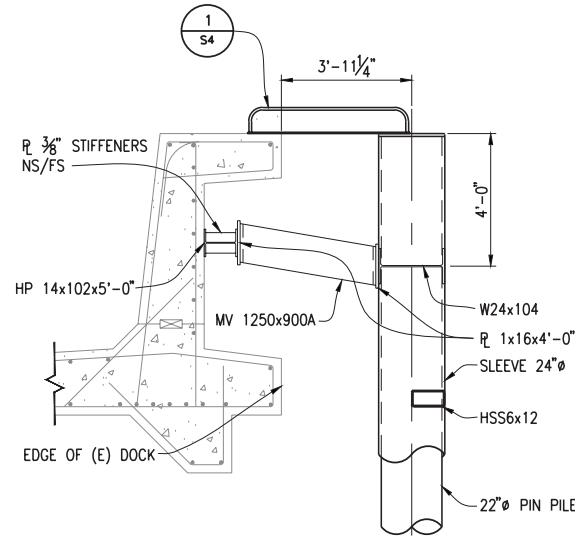
**A SECTION**  
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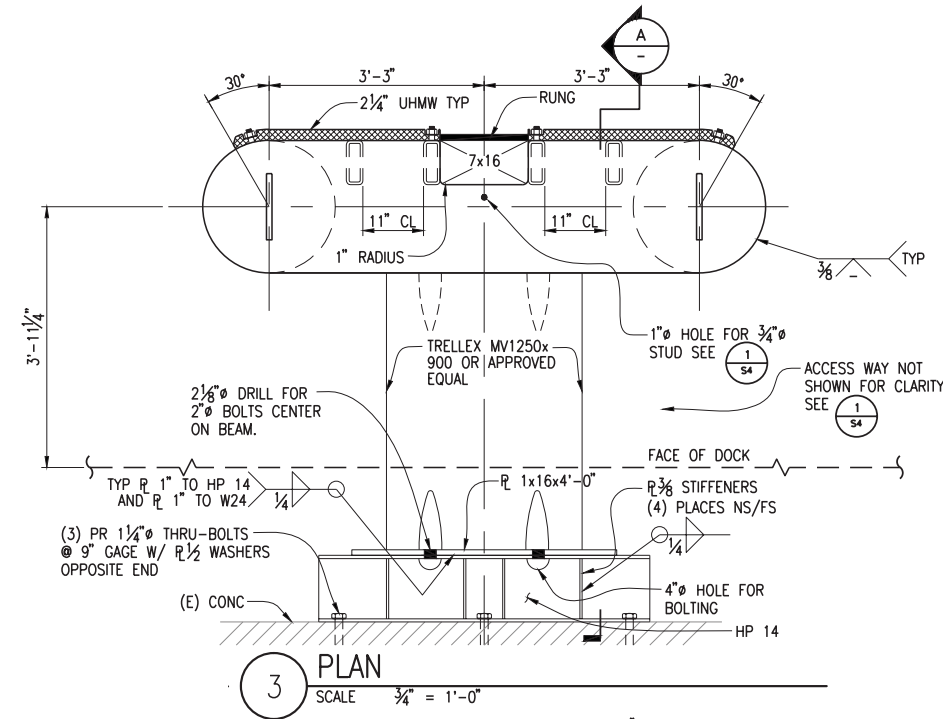
**B FACE ELEVATION**  
SCALE 3/4" = 1'-0"



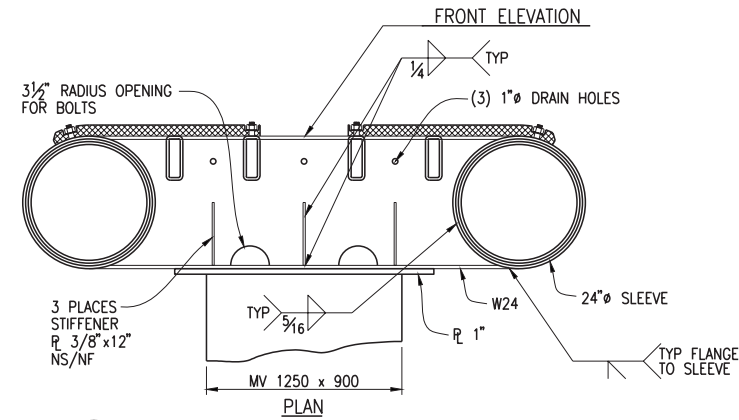
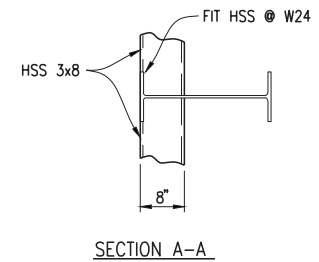
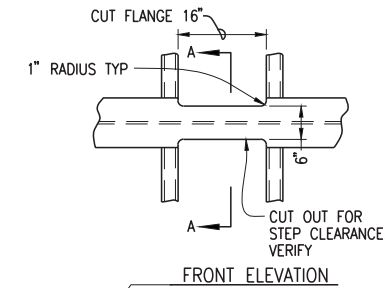
**1 DETAIL-LIFTING PAD EYE**  
SCALE 3/4" = 1'-0"



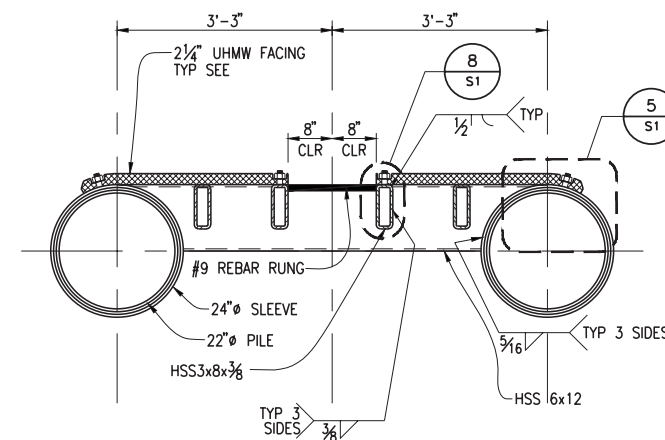
**2 SECTION**  
SCALE 3/8" = 1'-0"



**3 PLAN**  
SCALE 3/4" = 1'-0"



**4 SECTION**  
SCALE 3/4" = 1'-0"

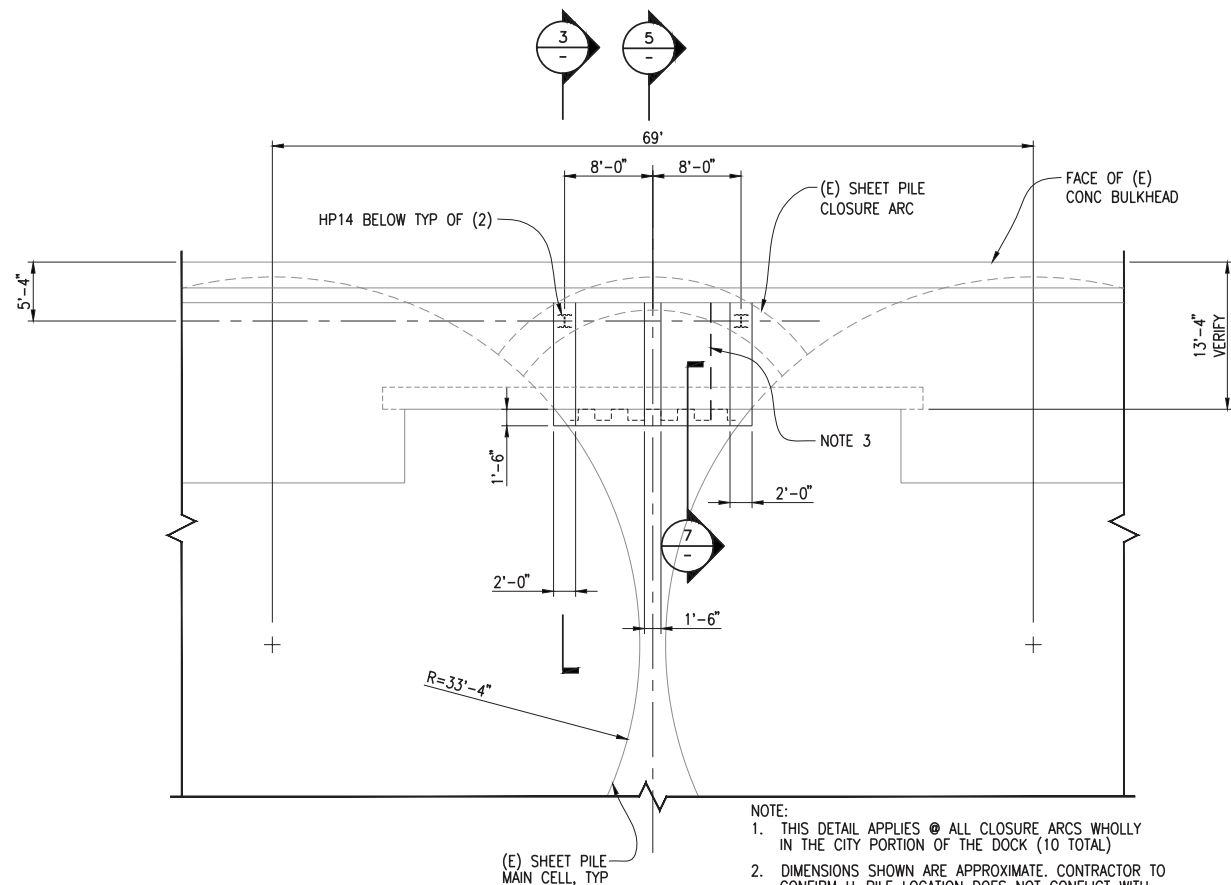


**5 PLAN SECTION**  
SCALE 3/4" = 1'-0"

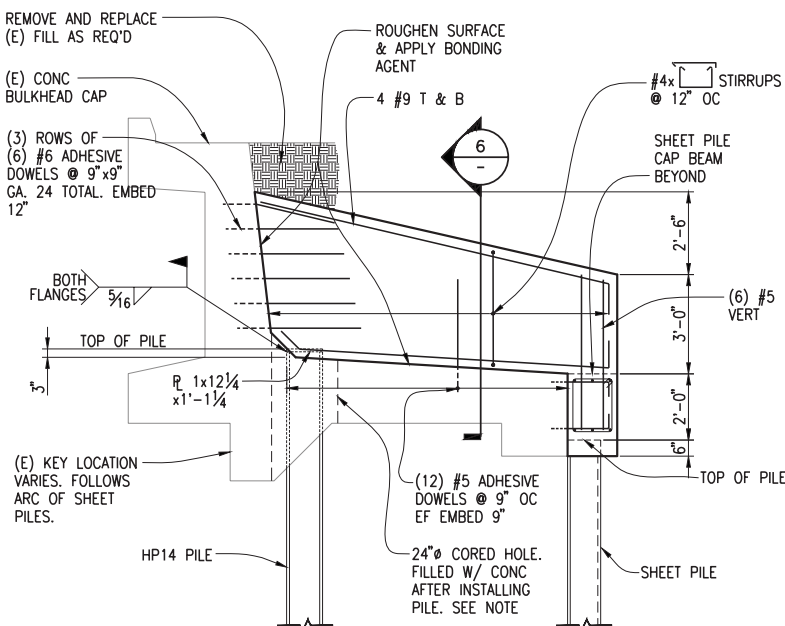
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DWG.		SHEET NO.	
DES.		S2	
DR.		OF 16 SHEETS	
CH.		FENDER DETAILS	
F.B.		DATE	
JOB NO.		40-02-010	

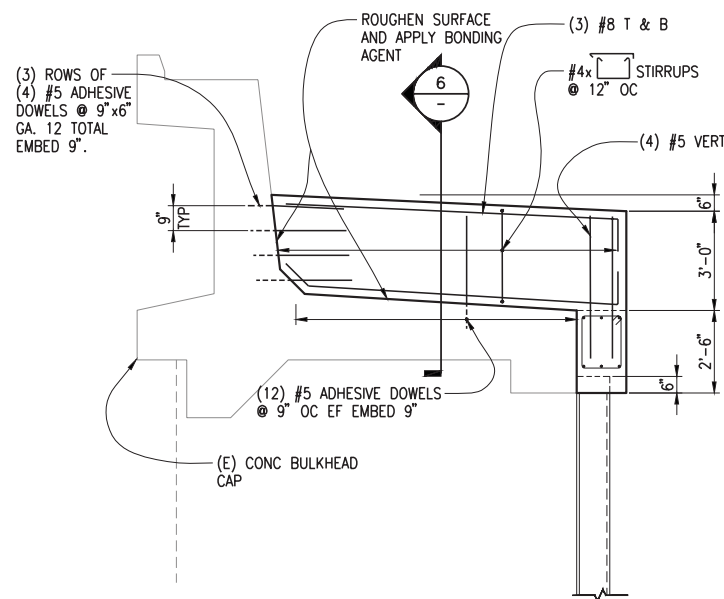


1 PARTIAL PLAN @ EL 26' +/-  
TYP CLOSURE ARC MODIFICATIONS  
SCALE  $\frac{1}{8}" = 1'-0"$

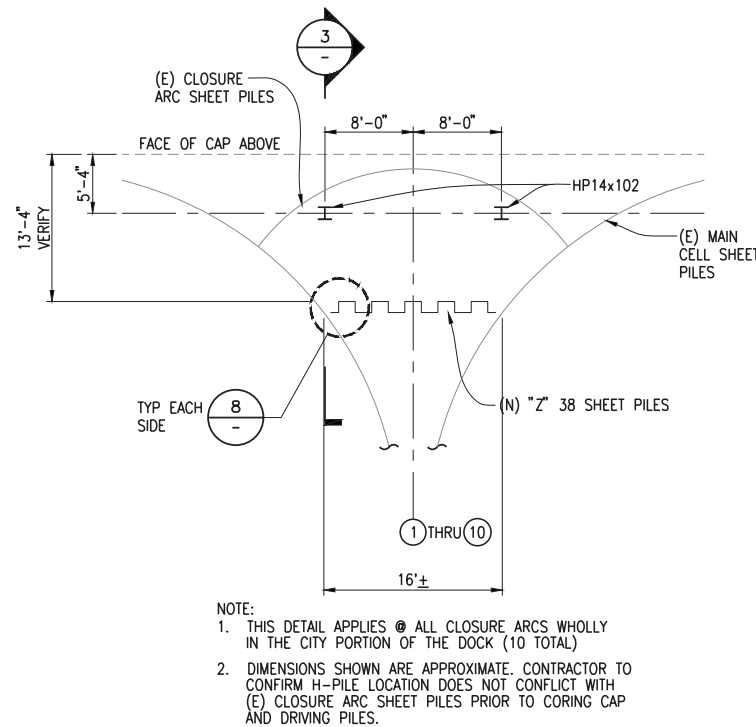


NOTE:  
ALTERNATIVELY, HOLES FOR PILES MAY BE SAW-CUT 18" SQUARE. NO OVER CUTTING IS PERMITTED.

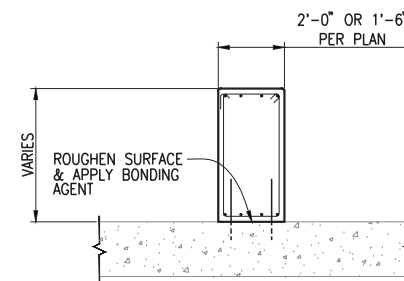
4 DETAIL  
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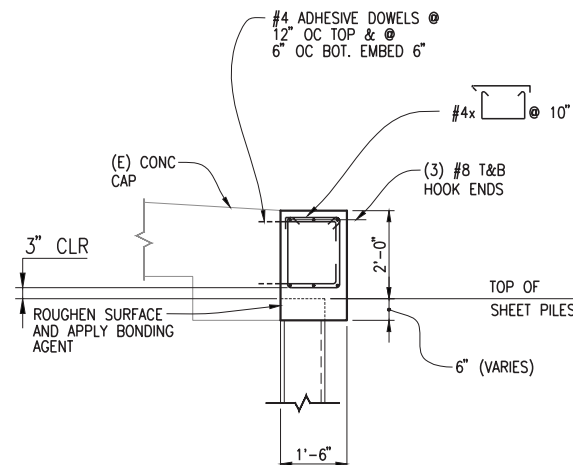
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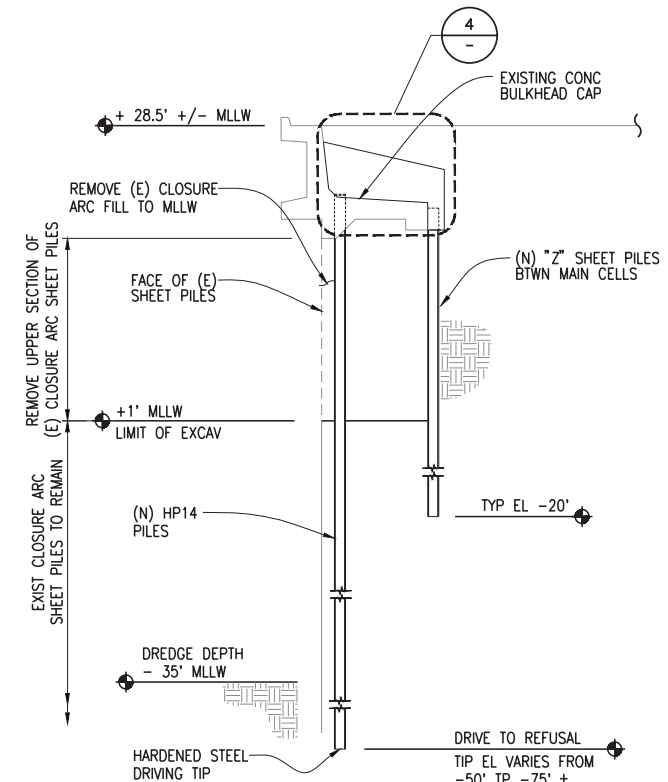
2 PARTIAL PLAN @ EL 0.00'  
SCALE  $\frac{1}{8}" = 1'-0"$



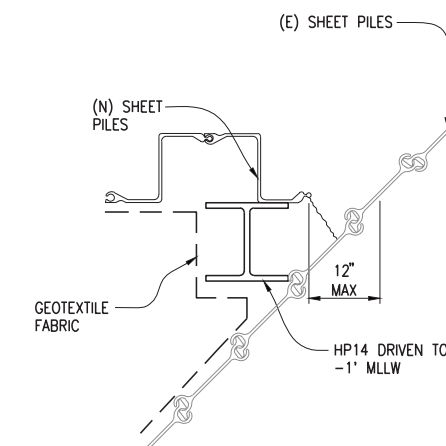
6 SECTION  
SCALE  $\frac{3}{8}" = 1'-0"$



7 DETAIL  
SCALE  $\frac{1}{2}" = 1'-0"$



3 SECTION  
SCALE  $\frac{1}{8}" = 1'-0"$



8 SHEET PILE CLOSURE  
SCALE  $\frac{3}{4}" = 1'-0"$

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9 NOT USED  
SCALE

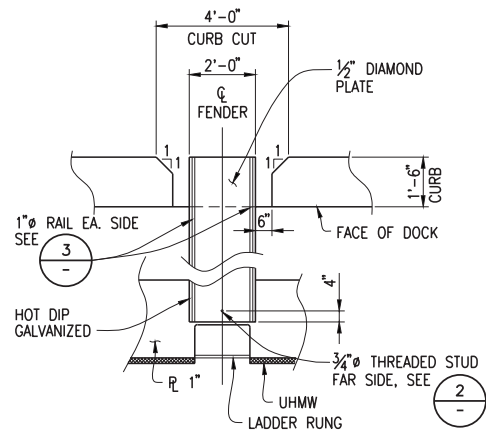
**ReidMiddleton**  
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LUTAK DOCK REHABILITATION PROJECT  
CITY OF HAINES - EDA PROJECT NO. 07-79-04967

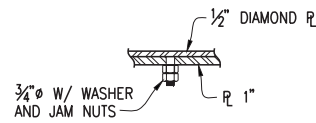
CLOSURE ARC MODIFICATIONS

DWG	SHEET NO.
DES.	S3
DR.	
CH.	
F.B.	OF 16 SHEETS
DATE	
NO.	40-02-010

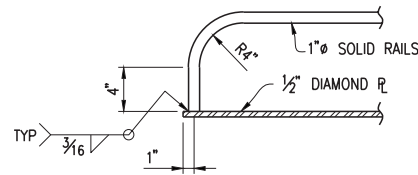




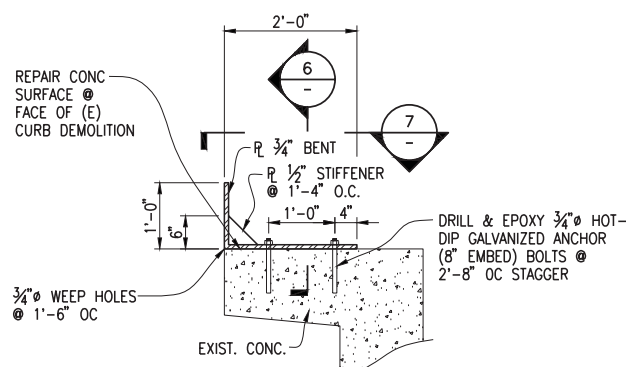
1 ACCESS WAY PLAN  
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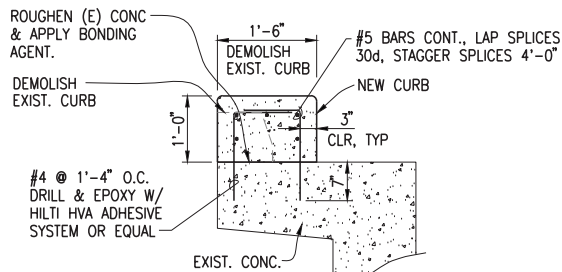
2 THREADED STUD  
SCALE  $1\frac{1}{2}" = 1'-0"$

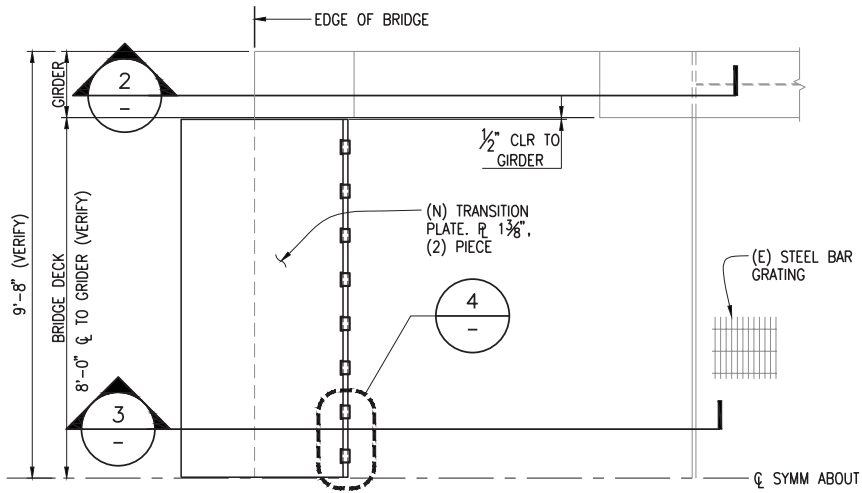


3 RAIL DETAIL  
SCALE  $1\frac{1}{2}" = 1'-0"$

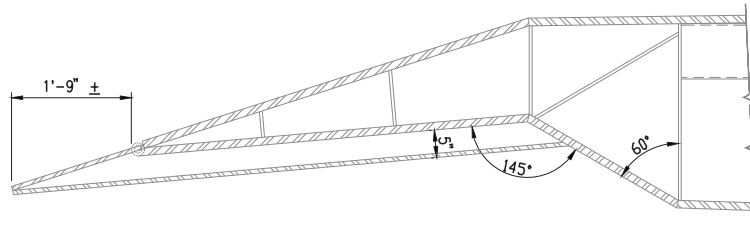


4 SPECIAL CURB  
SCALE  $\frac{3}{4}" = 1'-0"$

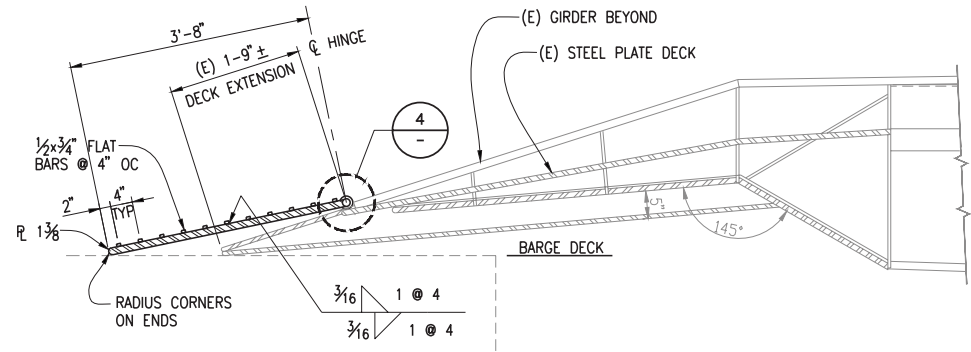




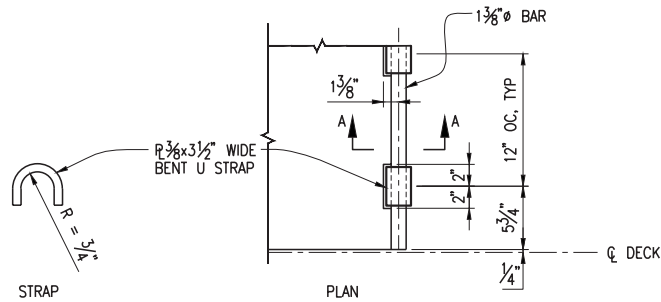
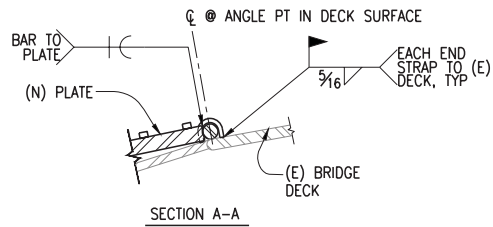
1 END PLAN  
SCALE  $\frac{1}{2}" = 1'-0"$



2 (E) SECTION @ GIRDER  
SCALE  $\frac{3}{4}" = 1'-0"$



3 SECTION @ DECK  
SCALE  $\frac{3}{4}" = 1'-0"$



4 HINGE DETAIL  
SCALE  $1\frac{1}{2}" = 1'-0"$

NOTE:  
SEE SHEET C1 FOR TRANSFER BRIDGE (BARGE RAMP) LOCATION

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RECORD DRAWINGS

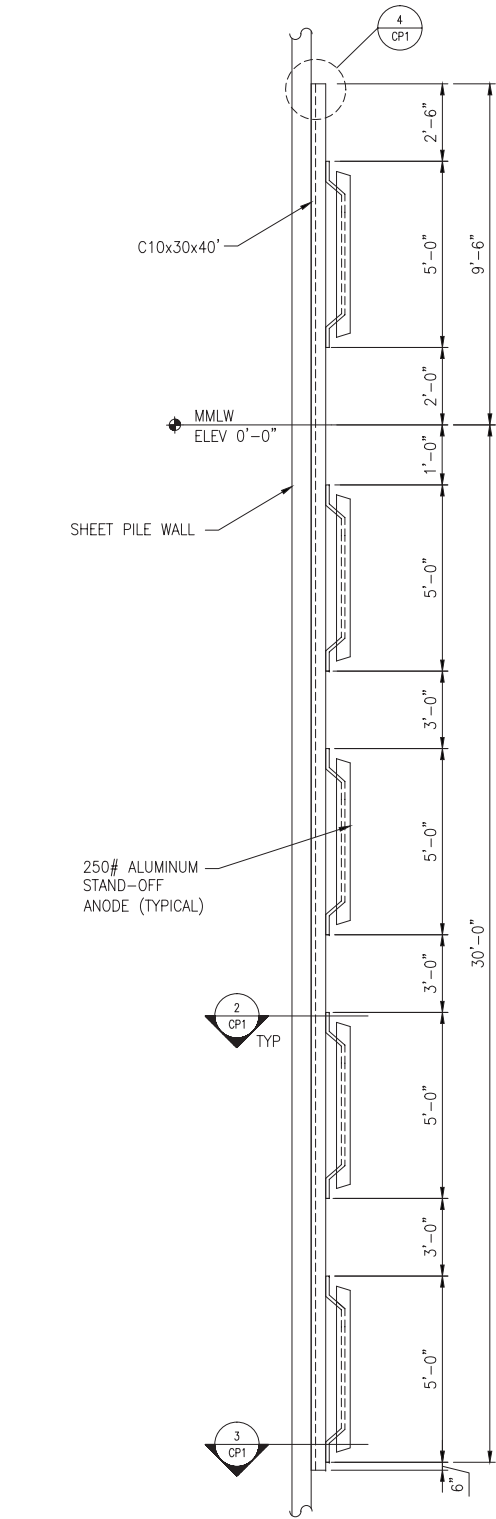
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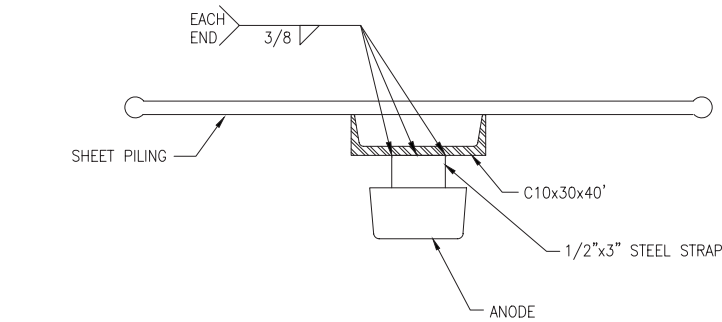
LUTAK DOCK REHABILITATION PROJECT  
CITY OF HAINES - EDA PROJECT NO. 07-79-04967

RO-RO TRANSFER BRIDGE

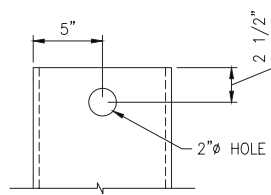
DWG	SHEET NO.
DES.	S5
DR.	
CH.	
F.B.	OF 16 SHEETS
DATE	
NO	40-02-010



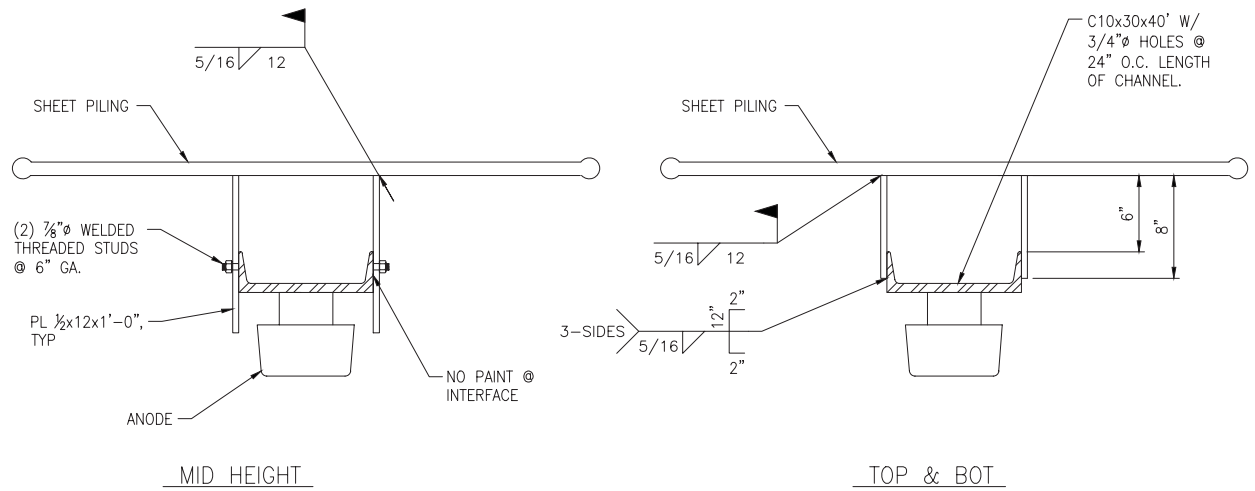
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CP1 N.T.S.



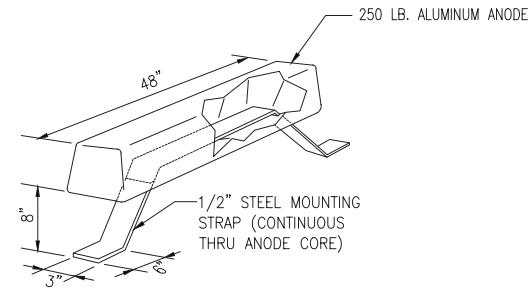
**2 ANODE ASSEMBLY MOUNTING DETAIL**  
CP1 N.T.S.



**4 ANODE CHANNEL LIFT LUG**  
CP1 N.T.S.



**3 CHANNEL MOUNTING DETAIL**  
CP1 N.T.S.



**5 STAND-OFF ANODE DETAIL**  
CP1 N.T.S.

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**COFFMAN  
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907-276-6664 Fax 907-276-5042

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LUTAK DOCK REHABILITATION PROJECT  
CITY OF HAINES - EDA PROJECT NO. 07-79-04967  
CATHODIC PROTECTION DETAILS

DWG	SHEET NO.
DES: CDS	CP1
DR: LAI	OF SHEETS
CH: TB	
F.B.	
DATE	
JOB NO. 40-02-010	

