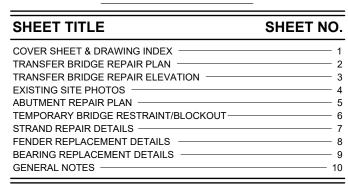
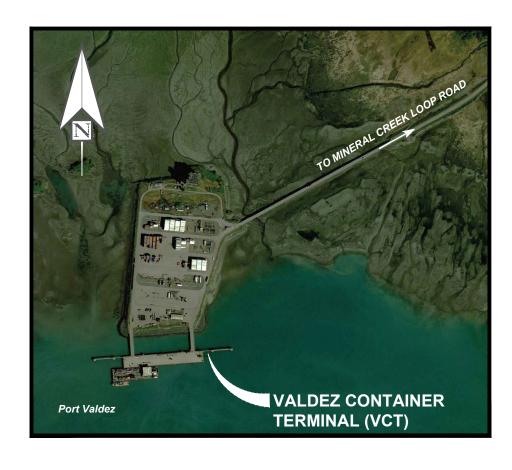
CITY OF VALDEZ VCT TRANSFER BRIDGE REPAIRS

VALDEZ, ALASKA MARCH 2021

DRAWING INDEX





STATE OF ALASKA

VICINITY MAP



100% DESIGN

PROJECT LOCATION

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49 TH Countright CE-12820 PROFESSIONA

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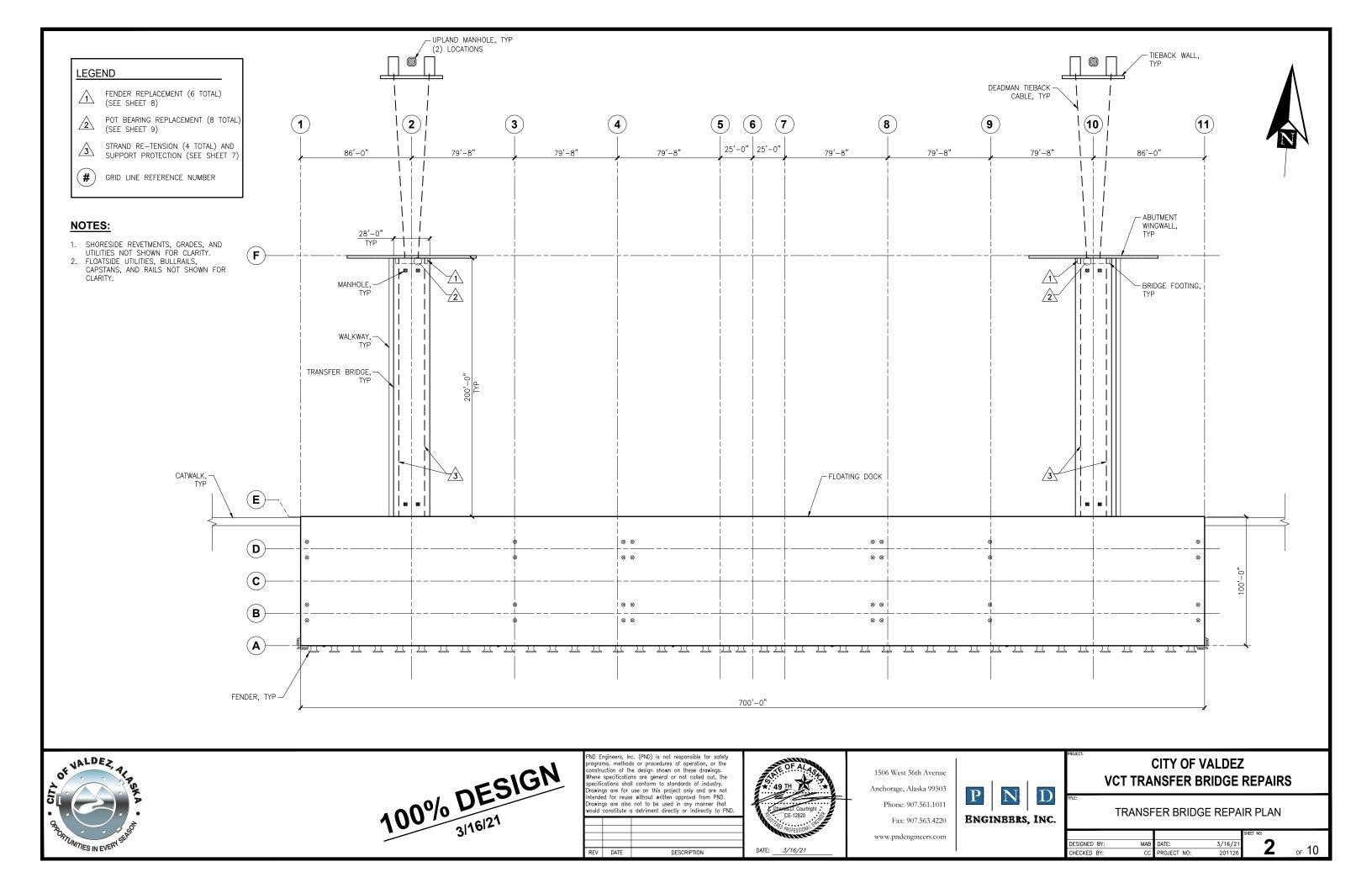


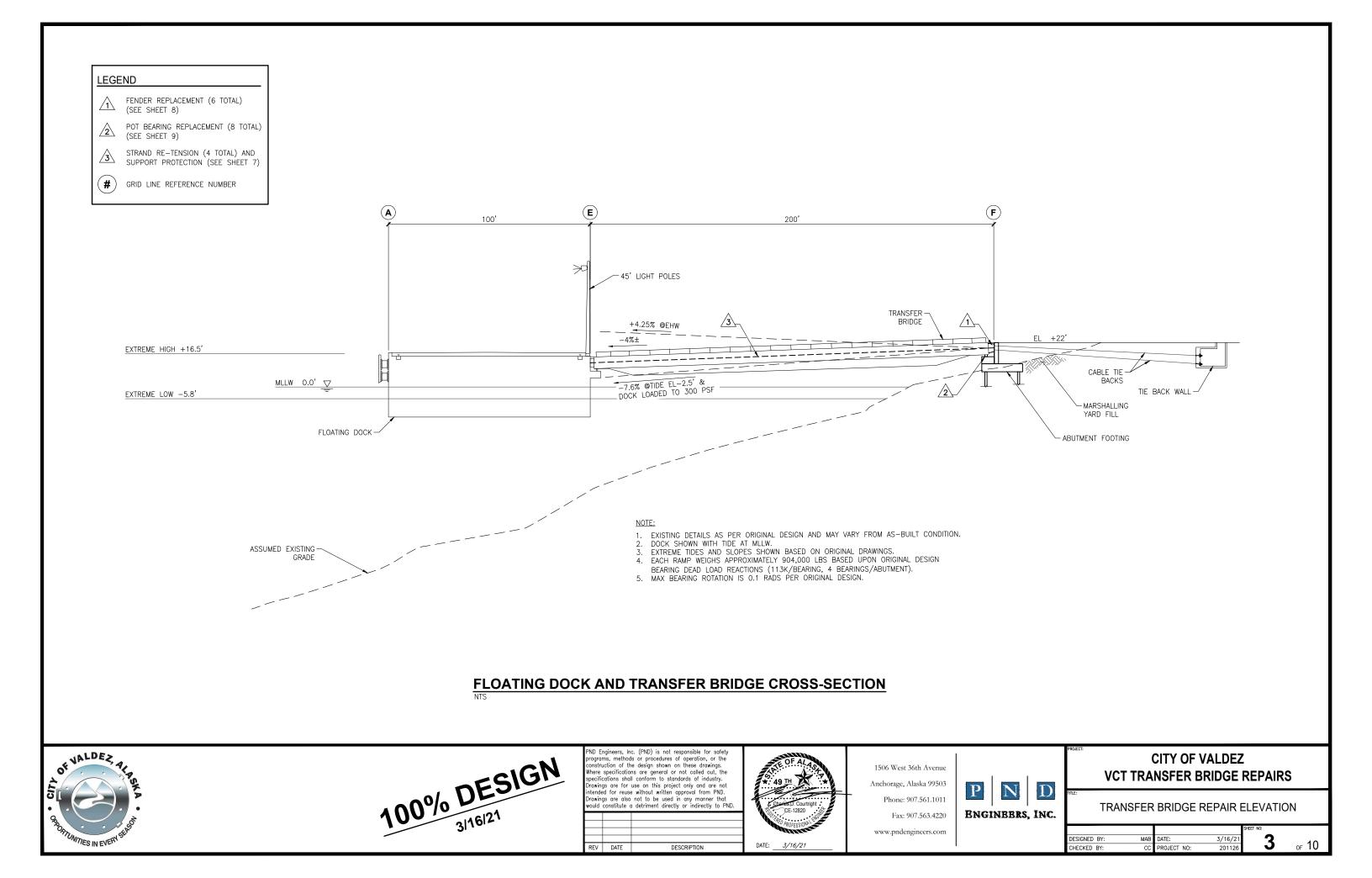
CITY OF VALDEZ VCT TRANSFER BRIDGE REPAIRS

COVER SHEET & DRAWING INDEX

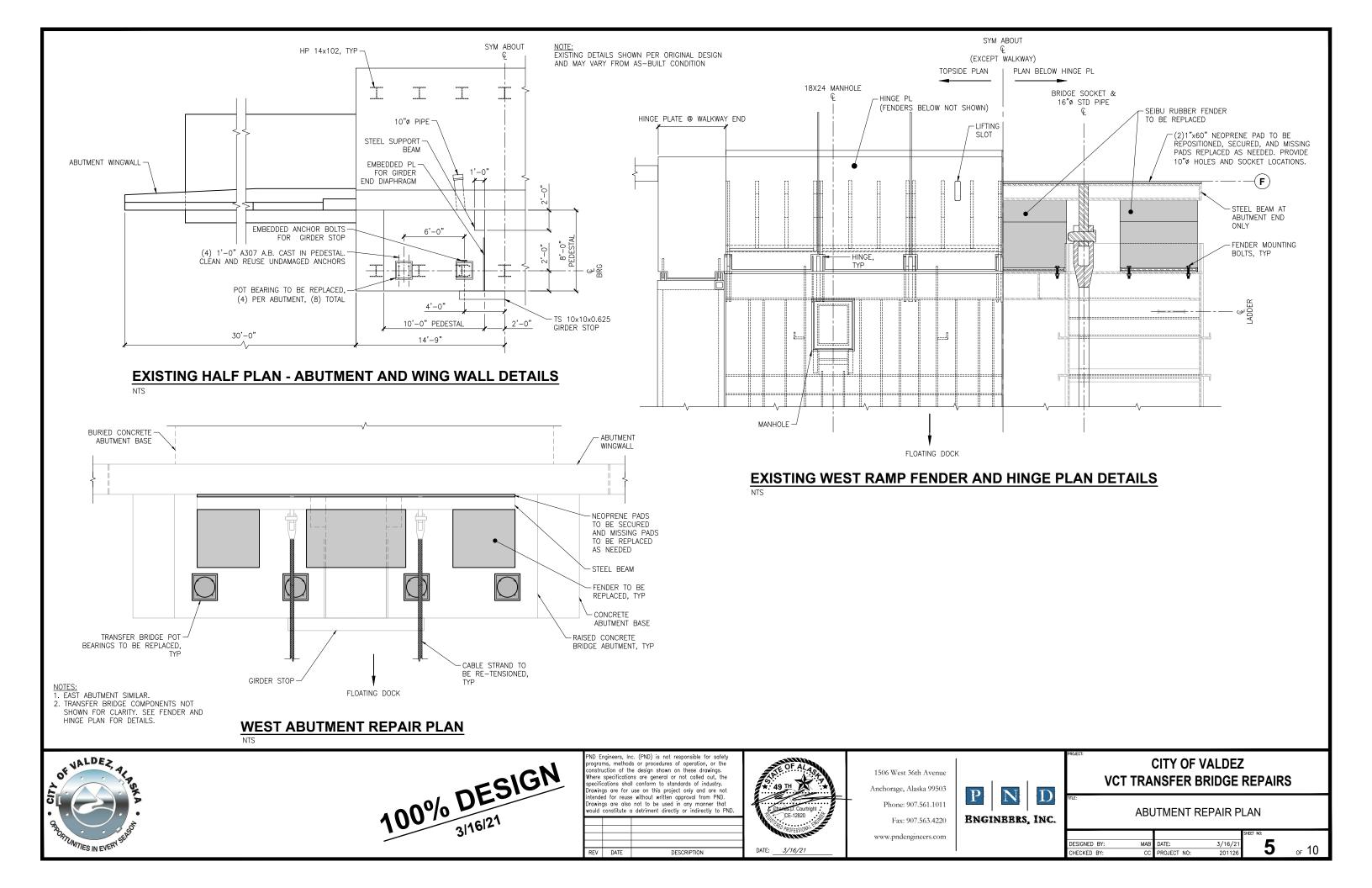
ESIGNED BY: MAB DATE: 3/16/21
HECKED BY: CC PROJECT NO: 201126

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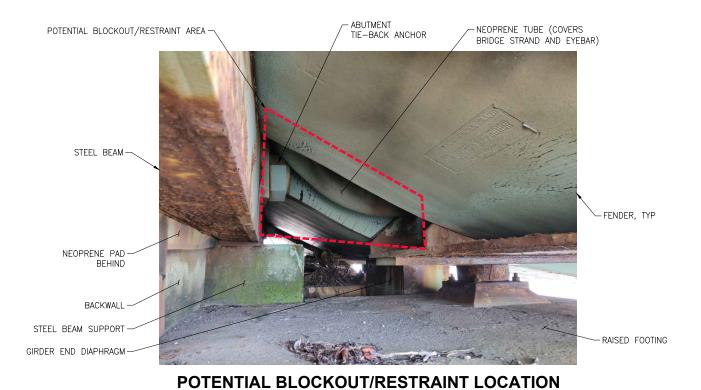








POTENTIAL JACKING LOCATION



DIAPHRAGM -RAISED FOOTING LONGITUDINAL GIRDER STOP -POTENTIAL BLOCKOUT/RESTRAINT AREA

POTENTIAL BLOCKOUT/RESTRAINT LOCATION

POTENTIAL CONSTRUCTION SEQUENCE:

- TEMPORARILY DE-TENSION BRIDGE STRANDS ENOUGH TO DECOMPRESS FENDERS.
- INSTALL BLOCKOUTS/RESTRAINTS AROUND FENDERS AS NEEDED SO STRANDS CAN BE RE-TENSIONED TO SECURE THE BRIDGE AND ALLOW FOR FENDER/BEARING REPLACEMENT.
- INSTALL SECONDARY BLOCKOUTS/RESTRAINTS AROUND GIRDER STOP TO ASSIST IN LONGITUDINAL MOVEMENT CONTROL WHILE STRANDS ARE DE-TENSIONED.
- JACK BRIDGE AS NEEDED FOR BEARING REPLACEMENT WHILE STRANDS ARE DE-TENSIONED AND FENDERS DECOMPRESSED.
- RE-TENSION STRANDS TO MITIGATE BRIDGE MOVEMENT.
- REPLACE BEARINGS. REPLACE FENDERS.
- DE-TENSION STRANDS, REMOVE FENDER BLOCKOUTS, REMOVE JACKS.
- RE-TENSION STRANDS TO SPECIFIED LOAD.

THE ABOVE SEQUENCE IS A GENERALIZED CONCEPT AND NOT A REQUIRED METHOD OF CONSTRUCTION.
CONTRACTOR SHALL DETERMINE THE MOST APPROPRIATE METHODS FOR THEIR CREW AND EQUIPMENT TO
COMPLETE THE WORK, PROPOSED WORK PLANS SHALL ADDRESS ALL SEQUENCING, CONTROL METHODS, AND OTHER ITEMS AS IDENTIFIED IN THE PROJECT SPECIFICATIONS.



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DESCRIPTION



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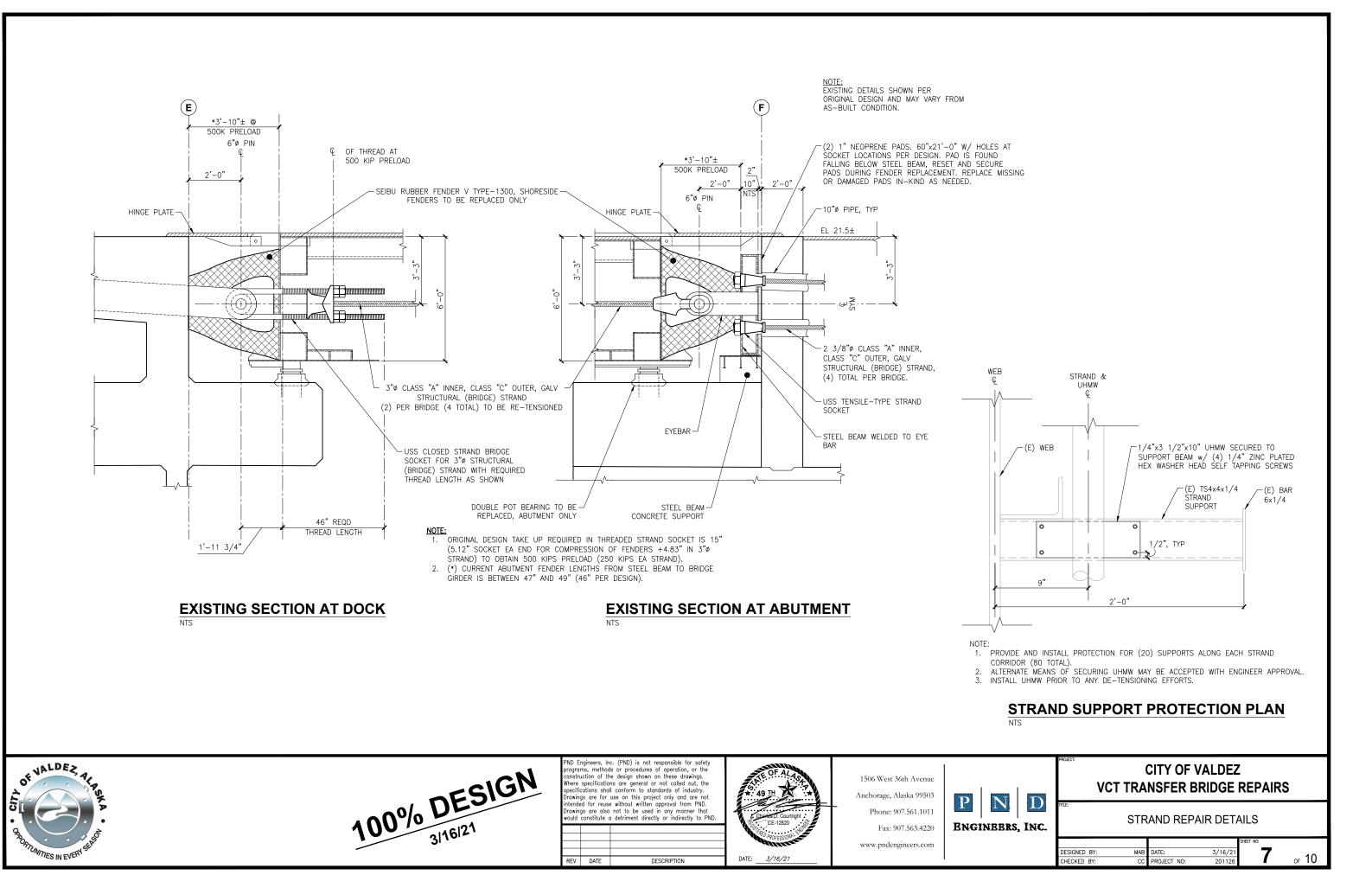
Fax: 907.563.4220

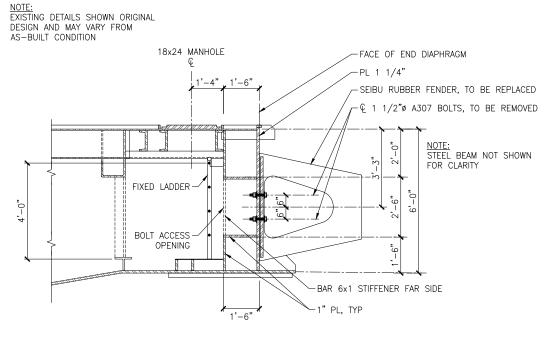


CITY OF VALDEZ VCT TRANSFER BRIDGE REPAIRS

TEMPORARY BRIDGE RESTRAINT/BLOCKOUT

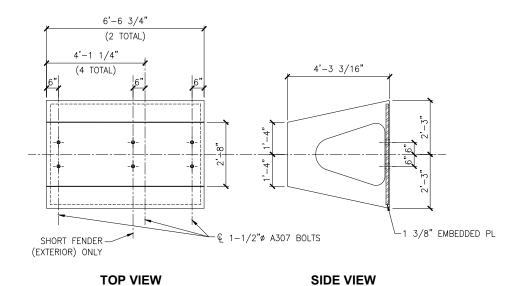
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HECKED BY: CC	PROJECT NO: 201126	U





EXISTING SECTION AT ABUTMENT

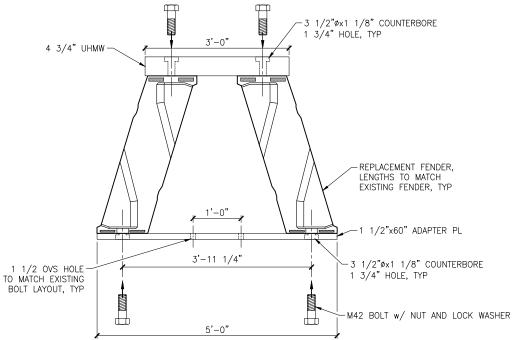
NTS



NOTE: RUBBER-DUROMETER 50 **EXISTING SEIBU RUBBER FENDER V1300H**

RE-TENSION FENDER PRELOAD TO ORIGINAL 500 KIPS -3'-10"± COMPRESSED DESIGN (250 KIPS EA STRAND) AND APPROXIMATE 4 1/2" DEFORMATION (4.1" EA END FOR COMPRESSION OF -3'-9 5/8" UNCOMPRESSED-FENDERS +1" GAP CLOSURE) GAP BETWEEN SPACER AND UHMW 1"± PRIOR TO PRE-LOAD -(E) FENDER OUTLINE ←(E) STEEL BEAM -STEEL SPACER, SEE DETAIL REPLACE EXISTING 1 1/2" BOLTS, NUTS, AND WASHERS. DOUBLE OR LOCK NUT. -NEOPRENE PAD KEEPER, RESET DISPLACED PADS, REPLACE MISSING OR DAMAGED PADS AS NEEDED HILTI 5/8"x5 1/2" SCREW ANCHOR, OR APPROVED EQUAL, @ 12"OC - REPLACEMENT FENDER, TYP L4x4x3/8 PAD KEEPER, SET ±1/2" BELOW STEEL BEAM - ADAPTER PL (E) BACKWALL

REPLACEMENT SECTION AT ABUTMENT



FENDER REPLACEMENT SECTION

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ENGINEERS, INC.

HSS 10x4x1/2, TYP-

5/16 4-12 5/16 4-12

1/2" PL

LENGTH AND PLACEMENT TO MATCH
 REPLACEMENT FENDER BEARING AREA.
 FENDER COMPONENTS NOT SHOWN

STEEL SPACER DETAIL

2'-1"

1'-0 1/8"

6 3/8"

APPROXIMATE IMPERIAL UNITS
SHOWN FROM METRIC

2. REPLACEMENT FENDERS PER

SHIBATAFENDERTEAM INC.

CONVERSION

FOR CLARITY.

REPLACEMENT FENDER DETAIL - FE1000 (G2.5)



100% DESIGN

NTS

CITY OF VALDEZ VCT TRANSFER BRIDGE REPAIRS

(E) STEEL

ÈΈΑΜ

FENDER REPLACEMENT DETAILS

8 3/16/2

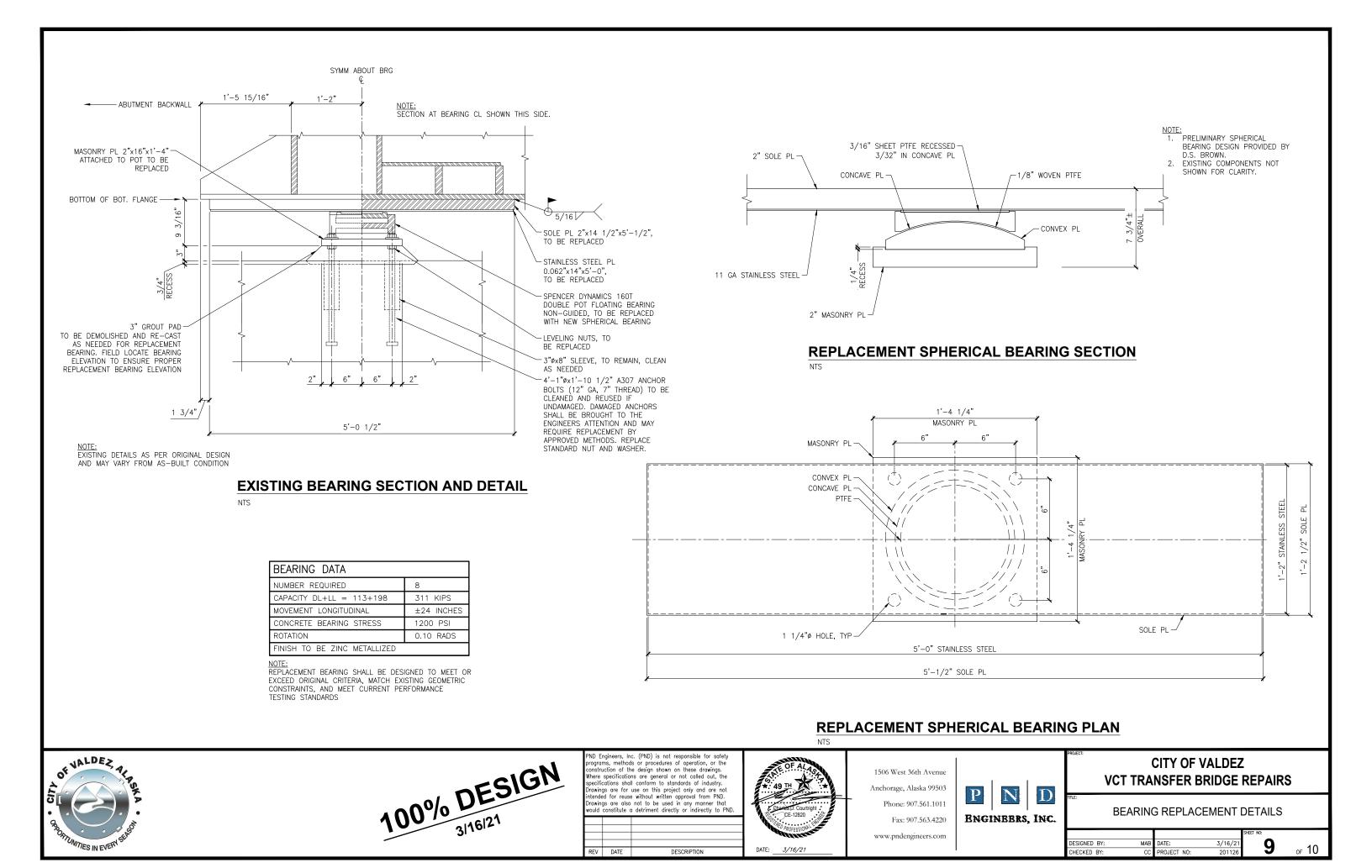
Drawings are also not to be used in any manner that would constitute a detriment directly or indirectly to PND DESCRIPTION

Phone: 907.561.1011

DESIGNED BY

6 3/8"

1'-0 5/8"



GENERAL NOTES:

OWNER: CITY OF VALDEZ

ENGINEER: PND ENGINEERS, INC.

NOTICE TO CONTRACTOR:

THE DESIGN DRAWINGS AND SPECIFICATIONS SHALL BE POSTED PROMINENTLY AT THE CONTRACTOR'S ONSITE PROJECT OFFICE. ANY DISCREPANCIES FOUND AMONG THE DRAWINGS, SPECIFICATIONS, SITE CONDITIONS, AND THESE GENERAL NOTES SHALL BE REPORTED TO THE OWNER/ENGINEER AT ONCE. ANY FURTHER WORK PERFORMED BY THE CONTRACTOR AFTER FINDING SUCH DISCREPANCIES SHALL BE DONE AT THEIR OWN

THE CONTRACTOR IS ADVISED TO INSPECT THE SITE TO VERIFY SCOPE OF WORK AND ACCESSIBILITY PRIOR TO BIDDING.

DESCRIPTION OF WORK

THE WORK INCLUDES REPAIR OF NOTED TRANSFER BRIDGE AREAS. ALL LABOR, ACCESS, MATERIALS, TRANSPORTATION AND EQUIPMENT NECESSARY TO COMPLETE WORK SHALL BE FURNISHED BY THE CONTRACTOR. SHOULD ADDITIONAL DEFICIENCIES OR DISCREPANCIES NOT REPRESENTED IN THE PLANS BE IDENTIFIED, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.

ANY DAMAGE CAUSED BY THE CONTRACTOR OR SUBCONTRACTORS TO THE EXISTING STRUCTURE (OUTSIDE OF THE DETAILED SCOPE OF WORK) OR ADJOINING PROPERTY SHALL BE REPAIRED IMMEDIATELY AT THE EXPENSE OF THE CONTRACTOR.

ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS, AND PERMITS.

APPLICABLE CODES AND STANDARDS

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

- CVSS. CURRENT EDITION
- ADOT&PF STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2020 EDITION
- AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS, 4TH EDITION
- ASTM SPECIFICATIONS, CURRENT EDITION
- AWS D1.1 STRUCTURAL WELDING CODE, 2020 EDITION
- AISC MANUAL OF STEEL CONSTRUCTION, 14TH EDITION
- 7. IBC. CURRENT EDITION

IN THE EVENT THAT THERE IS A CONFLICT BETWEEN THE ABOVE REFERENCES AND THESE GENERAL NOTES THE FOLLOWING PRIORITY WILL TAKE PLACE:

- ALL PROJECT PERMIT REQUIREMENTS
- THESE GENERAL NOTES AND PLANS
- LOCAL CODES
- 4. THE SPECIFICATIONS, STANDARDS AND CODES LISTED ABOVE IN ORDER OF PRECEDENCE

VERTICAL DATUM

VERTICAL DATUM IS MEAN LOWER LOW WATER (MLLW).

TIDAL DATUMS

EVALDEZ,

NOAA TIDAL DATUMS FOR 1983-2001 EPOCH AT VALDEZ, PRINCE WILLIAM SOUND (STATION #9454240):

	EST. EXTREME HIGH WATER (EHW)	EL.	+17.1 F
	MEAN HIGHER HIGH WATER (MHHW)	EL.	+12.2
MEAN HIGH WATER (MHW)		EL.	+11.2
MEAN SEA LEVEL (MSL)		EL.	+6.5
MEAN TIDE LEVEL (MTL)		EL.	+6.4
	MEAN LOW WATER (MLW)	EL.	+1.5
	MEAN LOWER LOW WATER (MLLW)	EL.	+0.0
EST. EXTREME LOW WATER (ELW)		EL.	-5.4

PERFORMANCE CRITERIA

REPAIRS IDENTIFIED WITHIN THE PLANS ARE INTENDED TO RESTORE THE STRUCTURAL COMPONENTS TO THE ORIGINALLY DESIGNED SERVICEABILITY. REPAIRS ARE NOT INTENDED TO STRENGTHEN OR IMPROVE THE FUNCTIONALITY OF THE COMPONENTS

BEARING AND FENDER REPLACEMENT ARE PROPOSED TO MITIGATE STRUCTURAL DETERIORATION BY REPLACING FAILING COMPONENTS WITH NEW COMPONENTS DESIGNED TO MODERN STANDARDS. NEW COMPONENTS ARE DESIGNED TO MATCH THE ORIGINAL LOAD CRITERIA AND MODIFIED AS NEEDED TO MEET EXISTING DIMENSIONAL REQUIREMENTS.

STRAND RE-TENSIONING IS INTENDED TO MEET THE PREVIOUS FENDER PRELOAD AT SIMILAR DEFORMATION. JACKING FORCES AND ELONGATION SHALL BE MONITORED AS NEEDED TO VERIFY PRELOAD. STRAND RE-TENSIONING SHALL BE DONE IN A CONTROLLED MANOR TO PREVENT HARM TO STRUCTURAL COMPONENTS. TIDAL FLUCTUATIONS AND MOVEMENT SHALL BE CONSIDERED IN THE WORK PLAN AND

PROJECT PERMIT REQUIREMENTS

CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF ALL PROJECT PERMITS. CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS.

THIS PROJECT HAS SOME REQUIREMENTS TO FULFILL STATE AND FEDERAL PERMIT STIPULATIONS. THE CONTRACTOR WILL BE RESPONSIBLE FOR KNOWING, UNDERSTANDING, AND IMPLEMENTING ALL OF THE THESE REQUIREMENTS DURING ALL STAGES OF PROJECT CONSTRUCTION. THE CONTRACTOR MUST UNDERSTAND THAT SOME OF THESE REQUIREMENTS WILL ADD TIME AND/OR COST TO THE EXECUTION OF VARIOUS TASKS ASSOCIATED WITH PROJECT COMPLETION

SUBMITTAL REQUIREMENTS

SHOP DRAWINGS FOR ALL FABRICATED MATERIALS SHALL BE SUBMITTED TO THE ENGINEER FOR WRITTEN APPROVAL PRIOR TO FABRICATION OR SHIPPING OF ANY ITEM. CERTIFICATIONS, MANUFACTURER'S DATA, AND OTHER INFORMATION FOR ALL MATERIALS, INCLUDING THOSE NOT SPECIFICALLY NOTED IN THE GENERAL NOTES OR SHOWN ON INDIVIDUAL DRAWINGS, SHALL BE SUBMITTED TO THE ENGINEER FOR WRITTEN APPROVAL. ALL METHODS AND MATERIALS SHALL CONFORM TO THE CONTRACT DOCUMENTS, GENERAL NOTES, THE PLANS, GOOD WORKMANSHIP, GENERALLY ACCEPTED INDUSTRY STANDARDS, AND MANUFACTURER'S

ELECTRONIC SUBMITTALS ARE PREFERRED. FOR HARD COPY SUBMITTALS, A MINIMUM OF THREE (3) SETS SHALL BE PROVIDED WITH EACH SUBMITTAL REVIEWED COPIES WILL BE RETURNED TO THE CONTRACTOR AND MARKED AS REQUIRED FOR ACCEPTANCE OR NON-ACCEPTANCE. THE ENGINEER'S REVIEW OF SUBMITTALS WILL BE FOR GENERAL CONFORMANCE ONLY, AND IT SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. ANY INTENDED DEVIATION FROM THE PLANS AND SPECIFICATIONS MUST BE SPECIFICALLY IDENTIFIED BY THE CONTRACTOR AND SPECIFICALLY APPROVED BY THE ENGINEER TO BE ACCEPTABLE. WORK PERFORMED BY THE CONTRACTOR PRIOR TO RECEIVING ENGINEER'S OR OWNER'S WRITTEN APPROVAL SHALL BE AT THE CONTRACTOR'S OWN RISK. ANY SUCH WORK REQUIRED BY THE ENGINEER OR OWNER TO BE REMOVED AND/OR REPLACED SHALL BE AT THE EXPENSE OF THE CONTRACTOR.

LIST OF SUBMITTALS

THE FOLLOWING IS A LIST OF REQUIRED SUBMITTALS FOR THIS PROJECT (ADDITIONAL SUBMITTALS MAY BE REQUIRED BY THE ENGINEER OR CONTAINED WITHIN THE PROJECT SPECIFICATIONS):

- CONSTRUCTION SCHEDULE
- 2 TRAFFIC CONTROL PLAN
- 3. REPAIR PLANS (INCLUDING JACKING, STRAND RE-TENSIONING, FENDER AND BEARING REPLACEMENT)
- 4. CERTIFICATIONS FOR ALL STEEL USED INCLUDING CHEMISTRY, YIELD, AND MILL NUMBERS
- 5. CERTIFICATIONS FOR FENDERS INCLUDING MATERIAL AND STANDARD PERFORMANCE TESTING
- CERTIFICATIONS FOR BEARINGS INCLUDING MATERIAL AND STANDARD PERFORMANCE TESTING
- SHOP DRAWINGS
- 8. BOLT MATERIALS & CERTIFICATIONS
- 9. GALVANIZING CERTIFICATIONS FOR STEEL COMPONENTS (INCLUDING BOLTS)
- 10. AWS WELDER QUALIFICATIONS/CERTIFICATIONS
- 11. RED-LINED AS-BUILT DRAWINGS

THE CONTRACTOR SHALL MAINTAIN A SET OF AS-BUILT PLANS IN THE ON-SITE PROJECT OFFICE. THE AS-BUILT PLANS SHALL BE KEPT UP TO DATE THROUGHOUT THE PROJECT WITH THE LATEST AS-BUILT DIMENSIONS AND DETAILS AS APPROVED BY THE ENGINEER AND SHALL BE SUBMITTED TO THE OWNER WITHIN 30 DAYS AFTER THE END OF THE PROJECT.

ABBREVIATIONS

ACI - AMERICAN CONCRETE INSTITUTE

ADOT&PF - ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

- AMERICAN INSTITUTE OF STEEL CONSTRUCTION ALT - ALTERNATE

APPROX - APPROXIMATELY

ASTM - AMERICAN SOCIETY OF TESTING AND MATERIALS

AWS - AMERICAN WELDING SOCIETY

BO - BOTTOM OF BTM - BOTTOM

C - CHANNEL

CVSS - CITY OF VALDEZ STANDARD SPECIFICATIONS AND

STANDARD DETAILS CIP - CAST IN PLACE

CLR - CLEAR

↓ - CENTERLINE

CL - CLASS CONC - CONCRETE

CONT - CONTINUOUS

CY - CUBIC YARD

FA - FACH

EL/ELEV - ELEVATION

EOP - END OF PROJECT EW - EACH WAY

E/EXIST - EXISTING

FT/SEC - FFFT PER SECOND

GALV - GALVANIZED

HDG - HOT-DIP GALVANIZED

HORZ - HORIZONTAL HP - H-PILE SECTION

HSS - HOLLOW STRUCTURAL SECTION

HTL - HIGH TIDE LINE

ID - INSIDE DIAMETER K/KIP - ONE THOUSAND POUNDS

L - STEEL ANGLE

LF - LINEAR FEET MAX - MAXIMUM

ME - MATCH EXISTING

MH - MANHOLE

MHW - MEAN HIGH WATER MIN - MINIMIM

MLLW - MEAN LOWER LOW WATER

NA - NOT APPLICABLE

NO - NUMBER

NTS - NOT TO SCALE

OC - ON CENTER

OD _ OUTSIDE DIAMETER

OVS - OVERSIZED

PL - PLATE

PSF - POUNDS PER SQUARE FOOT PSI -POUNDS PER SQUARE INCH

QTY - QUANTITY

R - RADIUS REF - REFERENCE

SS - STAINLESS STEEL

- SQUARE FEET

SHT

SIM - SIMILAR

ST - SHORT TON STA - STATION

STD - STANDARD SYMM - SYMMETRIC

t - THICKNESS

T&B - TOP AND BOTTOM

TBD - TO BE DETERMINED

TO - TOP OF TYP - TYPICAL

UNO - UNLESS NOTED OTHERWISE

UT - ULTRASONIC TESTING

- VALDEZ CONTAINER TERMINAL

VFRT - VFRTICAL

VT - VISUAL INSPECTION

W/ - WITH

W - WIDE FLANGE BEAM XX - DOUBLE EXTRA STRONG PIPE

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CITY OF VALDEZ VCT TRANSFER BRIDGE REPAIRS

GENERAL NOTES

ESIGNED BY 3/16/2

100% DESIGN

DATE: DESCRIPTION