ADDENDUM TO THE CONTRACT

for the

OUTER DRIVE FORCE MAIN CATHODIC PROTECTION
Contract No. BE20-082

ADDENDUM NO.:   **TWO**   **CURRENT DEADLINE FOR BIDS:**
                                                        September 26, 2019

PREVIOUS ADDENDA: ONE

ISSUED BY: City and Borough of Juneau
                        ENGINEERING DEPARTMENT
                        155 South Seward Street
                        Juneau, Alaska 99801

DATE ADDENDUM ISSUED: **September 17, 2019**

The following items of the contract are modified as herein indicated. All other items remain the same. This addendum has been issued and is posted online. Please refer to the CBJ Engineering Contracts Division webpage at: http://www.juneau.org/engineering_ftp/contracts/Contracts.php

CLARIFICATIONS:

Question: *"The drawings indicate double nuts on the flange stud at the anode connection. Are double nuts installed on all the replaced flange studs? Or just for the attachment of the anode bracket?"*

Response: The replacement studs should be just single nuts. The double nut is only necessary on the stud securing the anode bracket.

Question: *"Is a washer required with the second nut to secure the attachment bracket?"*

Response: A washer is not necessary but the contractor may add one if they prefer.

Question: *"On Drawing 2 of 4 Note 2 indicates the hardware for the anode connection. There is not a washer or double nut detailed at the anode to bracket connection is a washer or double nut required here?"*

Response: A washer is not necessary but the contractor may add one if they prefer. The detail does show a double nut with the anode bracket between the two nuts.

Question: *"The drawings specify A53 Steel used for the Anode bracket, as this is not a structural connection but a bonding connection can A36 steel be utilized?"*

Response: Yes, A36 Steel can be used.

Question: *"The anode specified (Farwest Corrosion 94FM) is a 94 lb anode. Page 2 of 4 of the plans Note 1 specifies a 37 lb. anode. Further the anode dimensions detailed are for a 94 lb anode.   Can you provide clarification on the required anode weight intended?"*

Response: The anode should be a 94 lb. The drawing has been modified to reflect that change.

Question: *"Drawings show the anodes having a flush end. Is a standard anode with tabs on both ends acceptable?"*

Response: The standard anodes typically come with tabs on each end. The design assumes that the contractor will purchase standard anodes and trim off the tab on the far end.

Question: *"In Regards to Anode Dimensions / The dimensions provided in the drawings for length and profile provide for a anode with calculating the volume of 23 lbs and do not align with the indicated weight requirements in the drawings notes or the referenced 94FM. Can you provide specific clarification on the required weight of the anode required and expected dimensions?"*

Response: The anode should be a 94 lb. The drawing has been modified to reflect that change.

DRAWINGS:

Item No. 1   ***Replace*** SHEET 2 of 4 – FLANGE CONNECTION DETAILS
              with the attached SHEET 2 of 4 – FLANGE CONNECTION DETAILS
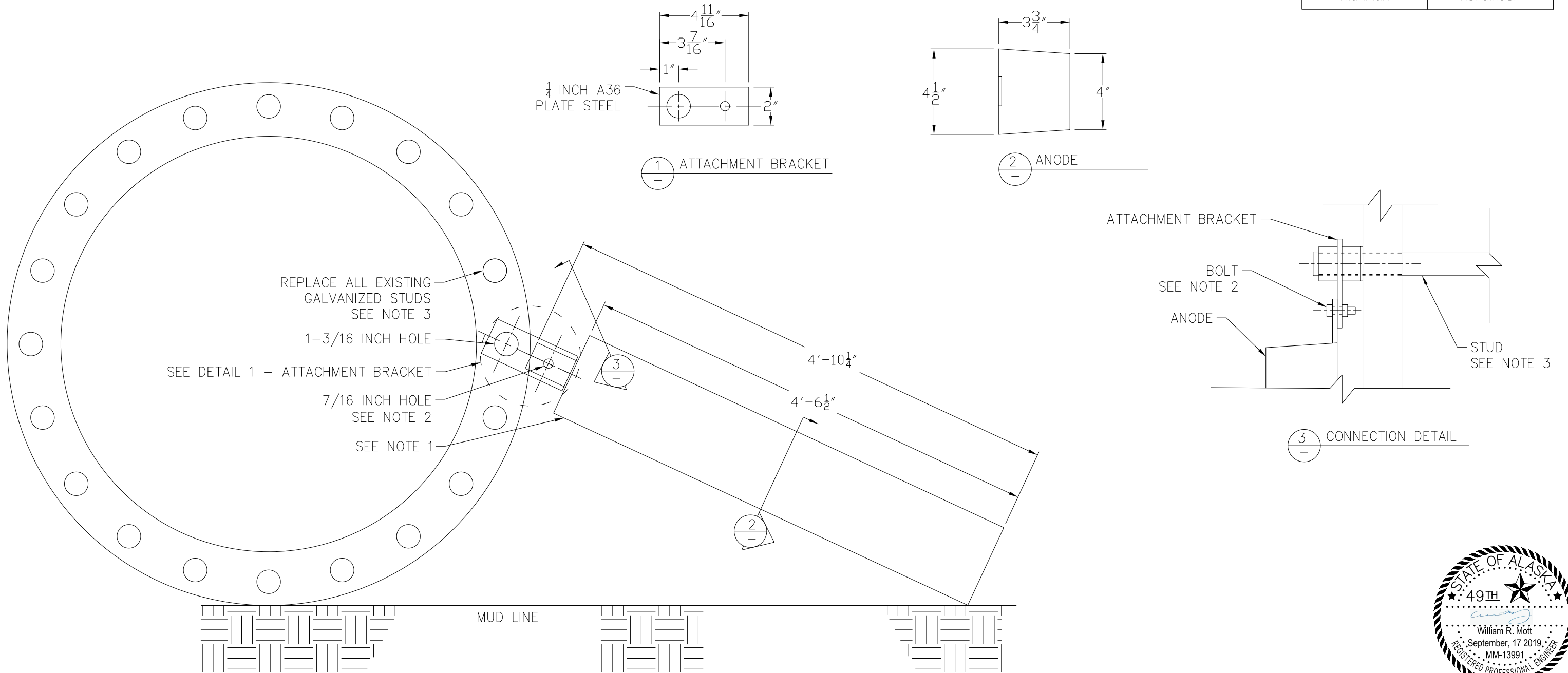

By: _____
              Greg Smith,
              Contract Administrator

Total number of pages contained within this Addendum: 3

NOTES:

1. ANODE WILL BE 94 LB. ALUMINUM FLUSH MOUNT ANODE (FARWEST CORROSION 94FM CORE OR EQUIVALENT).

2. BOLTS WILL BE WRENCH TIGHT, 1-1/2 INCH X 3/8 INCH A193 GR B7. NUTS WILL BE A194 GR 2H.

3. STUDS WILL BE 18 INCH X 1-1/8 INCH STAINLESS STEEL A320 GR B8M. NUTS WILL BE A194 GR 8M. WASHER WILL BE 316L. TORQUE to 424 FT-LBS.

4. CONTRACTOR TO PROVIDE CLEAR VIDEO DOCUMENTATION OF ANODE INSTALLATIONS AND FLANGE CONDITIONS

5. THE BOTTOM OF THE FLANGE MAY BE PARTIALLY BURIED IN SILT WHICH WILL NEED TO BE REMOVED TO CHANGE THE STUDS OUT.

6. FLANGE LOCATIONS:
   -58.2968047°, -134.4060941°
   -58.2941755°, -134.4023500°
   -58.2916186°, -134.3985354°
   DEPTH: 100-110' FROM MLLW 0.0'

7. BOLTS SHALL BE CHANGED OUT ONE AT A TIME

Anode Composition	
Element:	Percentage:
Indium (In)	0.016 to 0.02%
Zinc (Zn)	4.75 to 5.75%
Silicon (Si)	0.08 to 0.12%
Copper (Cu)	0.003% Max
Iron (Fe)	0.12% Max
Cadmium (Cd)	0.002% Max
Others, each	0.02% Max
Others, total	0.05% Max
Aluminum	Remainder

$4\frac{11}{16}"$

$3\frac{7}{16}"$

1"

$\frac{1}{4}$ INCH A36 PLATE STEEL

2"

(1) ATTACHMENT BRACKET

$3\frac{3}{4}"$

$4\frac{1}{2}"$

4"

(2) ANODE

REPLACE ALL EXISTING GALVANIZED STUDS SEE NOTE 3

1-3/16 INCH HOLE

SEE DETAIL 1 - ATTACHMENT BRACKET

7/16 INCH HOLE SEE NOTE 2

SEE NOTE 1

(3)

$4'-10\frac{1}{4}"$

$4'-6\frac{1}{2}"$

(2)

MUD LINE

ATTACHMENT BRACKET

BOLT SEE NOTE 2

ANODE

STUD SEE NOTE 3

(3) CONNECTION DETAIL

STATE OF ALASKA
49TH
William R. Mott
September, 17 2019
MM-13991
REGISTERED PROFESSIONAL ENGINEER

OUTER DRIVE FORCE MAIN
CATHODIC PROTECTION
Contract No. BE20-082

FLANGE CONNECTION DETAILS

PAGE:
2 of 4

DESIGNED BY: MDM
DATE: 7/12/19
CHECKED BY:
DRAWN BY: MDM
FILE:
SCALE: As Shown