From: Nagel, Peter C.

To: Spco Records

Cc: Delgado-Plikat, Jodi L (DNR); Brown, Stanley C (DNR)

Subject: TAPS, Emergency Flood Response at Milepost 785.2

 Date:
 Tuesday, November 3, 2020 5:49:30 PM

 Attachments:
 MP785LoweRemergencyFloodResponseNarr20.pdf

785R0720-MC-PRELIM 200908 AERIAL.pdf

### APSC Letter No. 45942

Anthony Strupulis, P.E., State Pipeline Coordinator Alaska Department of Natural Resources State Pipeline Coordinator's Section 550 West 7<sup>th</sup> Avenue, Suite 1100 Anchorage, Alaska 99501

RE: Trans-Alaska Pipeline System, Pipeline Milepost 785.2

Land Description Modification for Right-of-Way Lease, ADL 63574

Bank Stabilization at Lowe River

Dear Mr. Strupulis:

Alyeska Pipeline Service Company, agent for the Trans Alaska Pipeline System lessees, hereby applies to modify the description of the TAPS facilities attached to the referenced lease to include lands needed to accommodate the subject new construction which was conducted under emergency conditions. Alyeska notified you of the situation on June 5th as crews mobilized to stop further erosion of lands in the right-of-way. A fish habitat protection permit, FH 20-SPO-0032, was issued October 22, 2020 to cover this same work.

The lands subject to this application are generally described as:

T. 9 S., R. 4 W. (Copper River Meridian)

Section 33, those lands lying below the line of Ordinary High Water, adjacent to the TAPS right-of-way and Alaska State Cadastral Survey no. 98-30, comprising approximately 0.82 acres

Attached as part of this application are a permit narrative and an as-built drawing showing the proposed right-of-way addition. ADNR Survey is copied to begin the As-built/Record of Survey review. The drawing also depicts the stabilization improvements on the uplands owned by the City of Valdez, and it is being submitted to the City also.

Please contact me at 787-8170 if we can provide additional information.

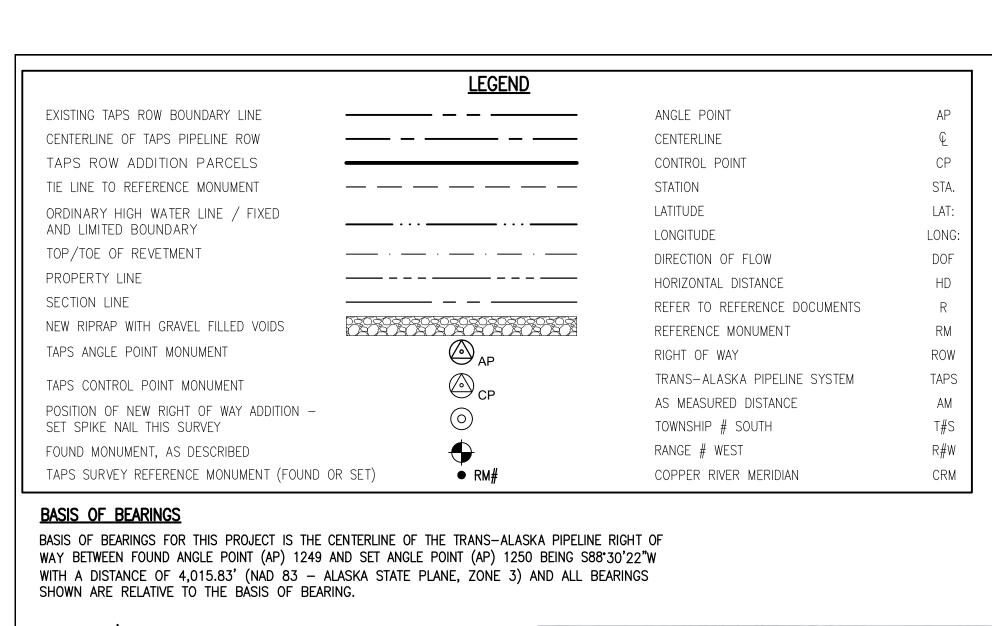
Sincerely, Pete Nagel Lands Manager, Alyeska Pipeline Service Company 3700 Centerpoint Drive (P.O. Box 196660) Anchorage, Alaska 99519 Phone: 907.787.8170 (FORWARDED) Fax: 907.787.8337 E-mail: <a href="mailto:peter.nagel@alyeska-pipeline.com">peter.nagel@alyeska-pipeline.com</a>

# **Emergency Response at Pipeline Milepost 785.2, Lowe River Bank Erosion** (November 2020)

On the night of June 4<sup>th</sup>, the river eroded the remaining buffer, about fifty feet wide, between the pipeline workpad and river. TAPS engineers and civil maintenance personnel had been monitoring the situation since last Fall and had recently started to mobilize equipment to place large Rip Rap along the northerly (riverside) edge of the pipeline workpad. The sudden buffer loss was due to the river braid adjacent very recently changing its trajectory resulting in 100' of buffer lost in two days. Prior to that, seasonal inundation of the workpad by high, but non-erosive, river water was occurring. The pipeline is buried approximately 10 feet deep on the side of the workpad opposite from the river.

On June 5<sup>th</sup>, to mitigate further erosion and the potential exposure of the buried pipe, TAPS crews accelerated the mobilization to place up to 2,000 cubic yards of riprap along the eroded bank. Approximately 300 feet of bank was armored and an upstream key-in installed on grade in the non-wetland uplands. Subsequently, the work included building short spur dike/groins to provide protection to the mainline pipe and right-of-way. In addition, the workpad elevation was built up and sills were constructed. Access to the site was via existing TAPS access road 4 PL-1 and the pipeline workpad including the Browns Creek ford.

Only the excavator bucket was in contact with water of the Lowe River. Other equipment included front-end loaders, backhoes, bulldozers, compactors, and trucks. Existing vegetation on the bank was left undisturbed as much as possible, and changes to the slope were graded so that fish entrapment was not likely to result. Fish passage was continuously maintained for the duration of the work. Seeding and fertilizing was done in accordance with MR-48 guidelines. No fueling of equipment occurred on the active floodplain. Equipment was cleaned of all excess grease and oil prior to the start of the work and inspected regularly to prevent potential spills. Appropriate spill response equipment was maintained on site during construction. The work is complete.



# TRUE NORTH NOT TO SCALE SHOWN FOR REFERENCE GRAPHIC SCALE

1 inch = 60 ft.

### RIGHT OF WAY ADDITION DESCRIPTION A PARCEL OF LAND LOCATED IN SECTION 33, TOWNSHIP 9 SOUTH, RANGE 4 WEST OF THE COPPER RIVER MERIDIAN, STATE OF ALASKA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT ANGLE POINT 1250 OF THE TRANS-ALASKA PIPELINE RIGHT OF WAY, WHENCE ANGLE POINT 1249 BEARS S88°31'45"W A DISTANCE OF 4,015.22 FEET; THENCE S88°31'45"W ALONG THE CENTERLINE OF SAID TRANS-ALASKA

PIPELINE A DISTANCE OF 910.22 FEET; THENCE S01°28'15"E A DISTANCE OF 75.00 FEET TO THE POINT OF

THENCE NO1'28'15"W ALONG THE EASTERLY RIGHT OF WAY LINE OF SAID TRANS-ALASKA PIPELINE A DISTANCE OF 125.00 FEET; THENCE N88'31'45"E ALONG A LINE ONE HUNDRED TWENTY-FIVE (125.0) FEET NORTHERLY OF AND PARALLEL WITH THE NORTHERLY RIGHT OF WAY LINE OF SAID TRANS-ALASKA PIPELINE A DISTANCE OF 560.00 FEET; THENCE S01°28'15"E ALONG A LINE FIVE HUNDRED SIXTY (560.0) FEET EASTERLY OF AND PARALLEL WITH SAID EASTERLY RIGHT OF WAY LINE OF THE TRANS-ALASKA PIPELINE A DISTANCE OF 125.00 FEET; THENCE S88°31'45"W ALONG SAID NORTHERLY RIGHT OF WAY LINE OF THE

TRANS-ALASKA PIPELINE A DISTANCE OF 560.00 FEET TO THE POINT OF

CONTAINING 70,000 SQUARE FEET (1.61 ACRES), MORE OR LESS.

CORBIN GLACIER 41117+37 REMOTE VALVE 5-APL/AMS-2 GLACIER 121A (G) 5-AMS-3 41171+98 CHECK VALVE 41400+45 122 (W) REMOTE VALVE 123 (G) 41649+28 REMOTE VALVE 28-APL-1 124 (G) 4-AMS-1B I OCATION OF SURVEY SECTION 33/4-APL-1A

TAPS ATLAS, Sept. 1993, Page #25 ORIGIN OF LAND GRID SHOWN IS COPPER RIVER MERIDIAN

R.M.-1

1249

DETAIL OF STAMPING ON

3" DIA. ALUM. CAP

ON 5/8" DIA. ALUM. ROD

(TYPICAL ON ALL RM'S)

EDM ASBUILT STA. 41430+97.1 (R3)

FOUND 8" STEEL SPIKE

ROW 214 G-100 A/S 141

N 2574379.91

511507.41

N 2574150.52

E 1651566.24

FIELD SURVEYED (R4):

(TAPS LINE WIDE NAD83)

N 2574148.50

E 1651561.37

LAT: N061°02'44.8115"

LONG: W145\*56'13.6406"

NAD 83 PER CORPSCON

(VERSION 6.0.1) CONVERSION:

NAD27 (R2):

## SURVEYOR'S CERTIFICATE

. VERNEN KALANI LEE, HEREBY CERTIFY THAT I AM PROPERLY REGISTERED AND LICENSED TO PRACTICE LAND SURVEYING IN THE STATE OF ALASKA. THAT THIS PLAT REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION, THAT THE MONUMENTS SHOWN HEREON ACTUALLY EXIST AS DESCRIBED, AND THAT ALL DIMENSIONS AND OTHER DETAILS SHOWN ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND

VERNEN KALANI LEE, PLS 13318, CFedS 1441 Date: August XXth, 2020 Job No.: 65320474-P0

REFERENCE DOCUMENTS USED

PIPELINE SERVICE COMPANY.

XXX-XXX AT PAGES XX-XX.

BY ALYESKA PIPELINE SERVICE COMPANY.

LOWE RIVER" DATED AUGUST 30, 2019.

For and on behalf of Merrick & Company

Telephone No. (907) 450-7617 Email: vern.lee@merrick.com

- CP 230-906-35 SET 8" STEEL SPIKE FIFLD SURVEYED (R4): (TAPS LINE WIDE NAD83) 2574060.24 1647432.71 LAT: N061°02'43.9741' LONG: W145°57'37.4986" S82°39'06"E 115.71' (HD) 230-906-35 POINT OF COMMENCEMENT AP 1250 EDM ASBUILT STA. 41471+28.7 (R3)

SET 8" STEEL SPIKE ROW 214 G-100 A/S 141 NAD27 (R2): N 2574275.21 E 507492.95 NAD 83 PER CORPSCON (VERSION 6.0.1) CONVERSION:

N 2574045.96

E 1647551.59

N 2574045.44

E 1647547.47

LAT: N061°02'43.8277'

LONG: W145°57'35.1680"

R2. TRANS-ALASKA PIPELINE RIGHT OF WAY 214 BOUNDARY REPORT, VOLUME 12, A/S 131 TO A/S 143,

R3. TRANS-ALASKA PIPELINE MAINLINE AS-BUILT SURVEY DATA (EDM) WITH A RUN DATE OF APRIL 19, 2018

DOCUMENTED ON 7/10/2020 THRU 7/12/2020 IN FIELD BOOK 230-906 AT PAGES 35-38 ON

R5. TRANS-ALASKA PIPELINE MILEPOST 779.3 "RECORD OF SURVEY, BANK EROSION CONTROL STRUCTURE AT

DEPARTMENT OF NATURAL RESOURCES, DIVISION OF MINING AND LAND AND WATER, STATE OF ALASKA

"ALASKA STATE CADASTRAL SURVEY NO. 98-30" FILE NUMBER ASC5980030, DATED AUGUST 25, 2016,

8/03/2020 IN FIELD BOOK 230-906 AT PAGE 49 ON X/XX/2020 THRU X/XX/2020 IN FIELD BOOK

R4. FIELD SURVEY PERFORMED BY MERRICK & COMPANY WITH GPS RTK TECHNOLOGY:

RECORDED IN THE VALDEZ RECORDING DISTRICT AT PLAT 2016-7.

TAPS R.O.W. 910.22' (HD) AM 435.32' (435.31' R2) 25' PIPELINE R.O.W. **¬** R.M.−1 FIELD SURVEYED (R4): (TAPS LINE WIDE NAD83)

(TAPS LINE WIDE NAD83) N 2574234.61 E 1648781.19 SECTION 33, T9S, R4W, LAT: N061°02'45.6825" C.R.M., ALASKA LONG: W145°57'10.1074" UPLANDS OWNER: CITY OF VALDEZ NCLUSION OF PROPOSED PARCELS 1&2` APPROXIMATE EDGE OF -WATER JULY 2018 N88'31'45"E 560.00' (HD) ADL 63574 SUBMERGED PARCEL  $35,917 SQ FT \pm (0.82 ACRES \pm)$ -N01°28'15"W 125.00' (HD) UPLANDS PARCEL 2 UPLANDS PARCEL CITY OF VALDEZ CITY OF VALDEZ 32,549 SQ FT  $\pm$  (0.75 ACRES  $\pm$ ) 1,534 SQ FT  $\pm$  (0.04 ACRES  $\pm$ ) 75' PIPELINE R.O.W. S88'31'45"W 560.00' (HD) ADL 63574 TRACT G (R6) TAPS R.O.W.: STATE OF ALASKA STATE OF ALASKA © OF 48" PIPELINE - BELOW GROUND

AERIAL IMAGE PROVIDED BY MERRICK & CO. IMAGE DATE: JULY 202

CP 230-609-37-

SET 8" STEEL SPIKE

FIELD SURVEYED (R4):

BASIS OF BEARINGS BEING THE CENTERLINE OF TAPS ALIGNMENT—
AS MEASURED BETWEEN AP 1249 AND AP 1250 BEING
S88'31'45"W 4,015.22 (HD) GRID [4,015.62 (HD) GROUND].

(PER ROW 214 G-100 A/S 141 RECORD GRID BEARING &
DISTANCE BEING S88'30'22"W 4,015.83' & RECORD TRUE MEAN BEARING & DISTANCE BEING S88'33'11"E 4,016.23' (HD) (R2))

N88°31'45"E 4,015.22' (HD)

TRACT D AND TRACT C CORNER-FOUND 8" STEEL SPIK FOUND 2" DIA. ALUMINUM PIPE WITH A 3-1/4" DIA. UMINUM CAP, STAMPED "ASCS 9830, T9S R4W SPIKE NAIL & REFERENCE MONUMENTS TO BE SET 633, ROW, TR D C1 C4 TR C, 8136S, 2010", ROJECTING 0.2' ABOVE THE GROUND SURFACE LAT: N061'02'44.2891' LONG: W145°56'55.8589"

CENTER 1/4 OF SECTION 33, T9S, R4W-FOUND 2" DIA. ALUMINUM PIPE WITH A 3-1/4" DIA. ALUMINUM CAP, STAMPED "ASCS 9830, T9S R4W C 1/4 S33, TR D TR C, 8136S, 2010", PROJECTING

TRACT E AND TRACT B CORNER

ound 2" dia. Aluminum pipe with a 3—1/4" dia. ALUMINUM CAP, STAMPED "ASCS 9830, T9S R4W S33, TR E C2 C4 TR B, ROW, 8136S, 2010",

PROJECTING 0.2' ABOVE THE GROUND SURFACE

0.4' ABOVE THE GROUND SURFACE FIELD SURVEYED (R4): (TAPS LINE WIDE NAD83) N 2573732.26

TRACT E AND TRACT B CORNER -

INE OF SURVEY, EDGE OF LOWE RIVER-

LOCATED IN THE FIELD BY POINT #4000 FIELD BOOK 230-906 AT PAGE 49

ARCHED FOR. NOTHING FOUND. LOST CORNER

DATE OF SURVEY: 1649621.95 BEGINNING: 07/10/2020 LAT: N061°02'40.7290" NDING: XX/XX/20XX LONG: W145°56'53.0387"

S88°29'18"W

2,079.28' (HD)

1,941.63' (HD)

MERRICK & COMPANY CALAIS OFFICE CENTER I, 3201 C STREET, SUITE 105, ANCHORAGE, AK 99503 STATE OF ALASKA

SURVEYOR:

ANCHORAGE, ALASKA ALYESKA PIPELINE SERVICE COMPANY

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF LAND AND WATER MANAGEMENT

RECORD OF SURVEY

DOC. TITLE: RS-TAPS LOWE RIVER

1. ADL 63574 ADDITION

- 2. TAPS ADDITION PARCELS
- 3. PLMP 785.2 LOWE RIVER
- 4. BANK STABILIZATION REPAIRS 5. AS-BUILT SURVEY
- LOCATED WITHIN SECTION 33. TOWNSHIP 9 SOUTH, RANGE 4 WEST, COPPER RIVER MERIDIAN, ALASKA

ANCHORAGE RECORDING DISTRICT DRAWN BY: ELZ DNR APPROVAL DATE: 07/16/2020 SHEET 1 OF 1 STATEWIDE PLATTING SUPERVISOR EPF NO. 2020XXXX CHECKED: JAW/VKL

# PRINT DATE: 09/08/2020

TRACT E (R6: 2016-7`

DETAIL OF STAMPING ON

3" DIA. ALUM. CAP

ON %" DIA. ALUM. ROD

(TYPICAL ON ALL RM'S)

R1. TRANS-ALASKA PIPELINE MONUMENTATION SURVEY, ALSO KNOWN AS "TAPS AL-00-G101" SHEET 141 OF NGS OPUS SOLUTION NAD83 COORDINATE RESULTS: 143, PREPARED AND PUBLISHED BY OCEAN TECHNOLOGY LTD IN DECEMBER, 1978. RECORDED IN PLAT BOOK 81-1 IN THE ANCHORAGE RECORDING DISTRICT.

G-100 ALIGNMENT SHEET 141. ALSO KNOWN AS "ROW-214-141". COPYRIGHT 1997, 2004 BY ALYESKA WELD "12182"

OWNER:

STATE OF ALASKA

ANGLE POINT (AP 1249) N= 2574149.08 E= 1651561.15

LAT: N61°02'43.83328" LONG: W145°57'35.17238"

NEW R.O.W. POSITION FOR R.O.W. ADDITION N= XXXX E= XXXX

WELD "12182" WAS OCCUPIED FOR THIS OPUS SOLUTION PROCESS ON JULY 11TH, 2020.

N= 2574094.22 E= 1649482.59 LAT: N61°02'44.29475" LONG: XXXX

LAT: N61°02'44.81715" LONG: W145°56'13.64499"

ANGLE POINT (AP 1250) N= 2574046.01 E= 1647547.25

LAT: XXXX LONG: XXXX

1. HISTORY: THIS AS-BUILT RECORD OF SURVEY REPRESENTS A POST-CONSTRUCTION SURVEY OF A RIGHT OF WAY LEASE AMENDMENT TO ADL 63574 PARCEL ADDITION, A RIGHT OF WAY LEASE FOR THE TRANS-ALASKA PIPELINE SYSTEM. THE RIGHT OF WAY AMENDMENT WAS INITIATED IN 2020 FOR THE INSTALLATION OF TAPS APPURTENANCES OUTSIDE THE PRIOR RIGHT OF WAY BOUNDARIES ON STATE LANDS.

AERIAL IMAGE PROVIDED BY QUANTUM, IMAGE DATE: JULY 201

- 2. POST-CONSTRUCTION STATEMENT: THIS AS-BUILT IS INTENDED TO DEPICT THAT PORTION OF THE AMENDED RIGHT OF WAY LEASE AS IT PERTAINS TO STATE LAND AND IS NOT TO BE PRESUMED TO PLAT OR DEDICATE THOSE PORTIONS PERTAINING TO NON-STATE LANDS. THIS AS-BUILT IS NOT INTENDED TO BE USED TO RE-ESTABLISH PROPERTY BOUNDARIES. EXCEPT AS INDICATED, NO ENCROACHMENTS EXIST WITHIN LEASED AREA.
- 3. RECORD OF SURVEY NOTE: THIS SURVEY DOES NOT CONSTITUTE A SUBDIVISION AS DEFINED BY A.S. 40.15.900 (5) (A).
- 4. THE BASIS OF COORDINATES IS WELD 12182 AS SHOWN HEREON. WELD 12182 POSITIONAL DATA WAS DERIVED FROM HIGH PRECISION TRIMBLE SURVEY EQUIPMENT. ALL COORDINATES SHOWN HEREON IS ALASKA STATE PLANE NAD 83, ZONE 3 FROM GPS STATIC PROCEDURES IN THE FIELD. 5. BASIS OF BEARING IS A GRID BEARING BASED BETWEEN THE FOUND ANGLE POINT 1249 AND SET ANGLE POINT 1250. FOR GRID BEARING, GRID DISTANCE AND GROUND DISTANCE SEE BASIS OF BEARING NOTE AND INFORMATION GTE
- ON DRAWING. ALL MEASURED BEARINGS SHOWN ARE GRID, ASP ZONE 3, BEARINGS AND DISTANCES UNLESS OTHERWISE SPECIFIED. 6. ALL DISTANCES ARE ALASKA STATE PLANE ZONE 3, NAD 83 DISTANCES UNLESS OTHERWISE NOTED. TO ADJUST ALL DISTANCES TO HORIZONTAL GROUND DISTANCES, MULTIPLY ALL DISTANCES WITH A COMBINED SCALE FACTOR OF 1.00009961
- 7. CONVENTIONAL CLOSURE: THE ERROR OF CLOSURE FOR THIS SURVEY IS NOT GREATER THAN 1:5000.
- 8. INFORMATION SHOWN HEREON WAS COMPILED FROM PROVIDED RECORD AND PROVIDED FIELD MEASUREMENT DATA AT MILE POST 785.16 TO 785.27 (STA. 41456+50.0 TO STA. 41462+00.0).
- 9. FIELD SURVEY PERFORMED BY MERRICK & COMPANY ON JUNE 10TH, 2020 THRU JUNE 12TH, 2020 WITH GPS RTK TECHNOLOGY. FIELD SURVEY INFORMATION DOCUMENTED IN FIELD BOOK 230-906 AT PAGES 35 THRU 38 AND IN FIELD BOOK 230-906 AT PAGE 49 AND IN FIELD BOOK XXX-XXX AT PAGES XX THRU XX.
- 10. THE ANGLE POINT RECORD BEARING AND DISTANCE SHOWN WERE PROVIDED IN THE TRANS-ALASKA PIPELINE MONUMENTATION SURVEY (AL-00-G-101, SHEET 141 OF 143, NAD27) RECORDED ON PLAT BOOK 81-1 IN THE ANCHORAGE RECORDING DISTRICT.
- 11. THE POSITION OF THE ANGLE POINTS SHOWN HEREON WERE FOUND BY USING ORIGINAL REFERENCE MONUMENT LOCATIONS. ANGLE POINT STATIONING SHOWN HEREON IS FROM EDM MAINLINE AS—BUILT SURVEY DATA RECORDS.