

# STATE OF ALASKA

## DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES

### KTN RECONSTRUCT ROAD TO AIRPORT BOUNDARY (RP-AK022) 0952019~SFHWY00156

NO.	DATE	REVISIONS	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL 'A' SHEETS
	11/17/20	Asbuilts	ALASKA	SFHWY00156	2019	A1	5
						PLAN SET TOTAL	26



The undersigned hereby certifies that this duplicated document is an exact and true copy of the original.

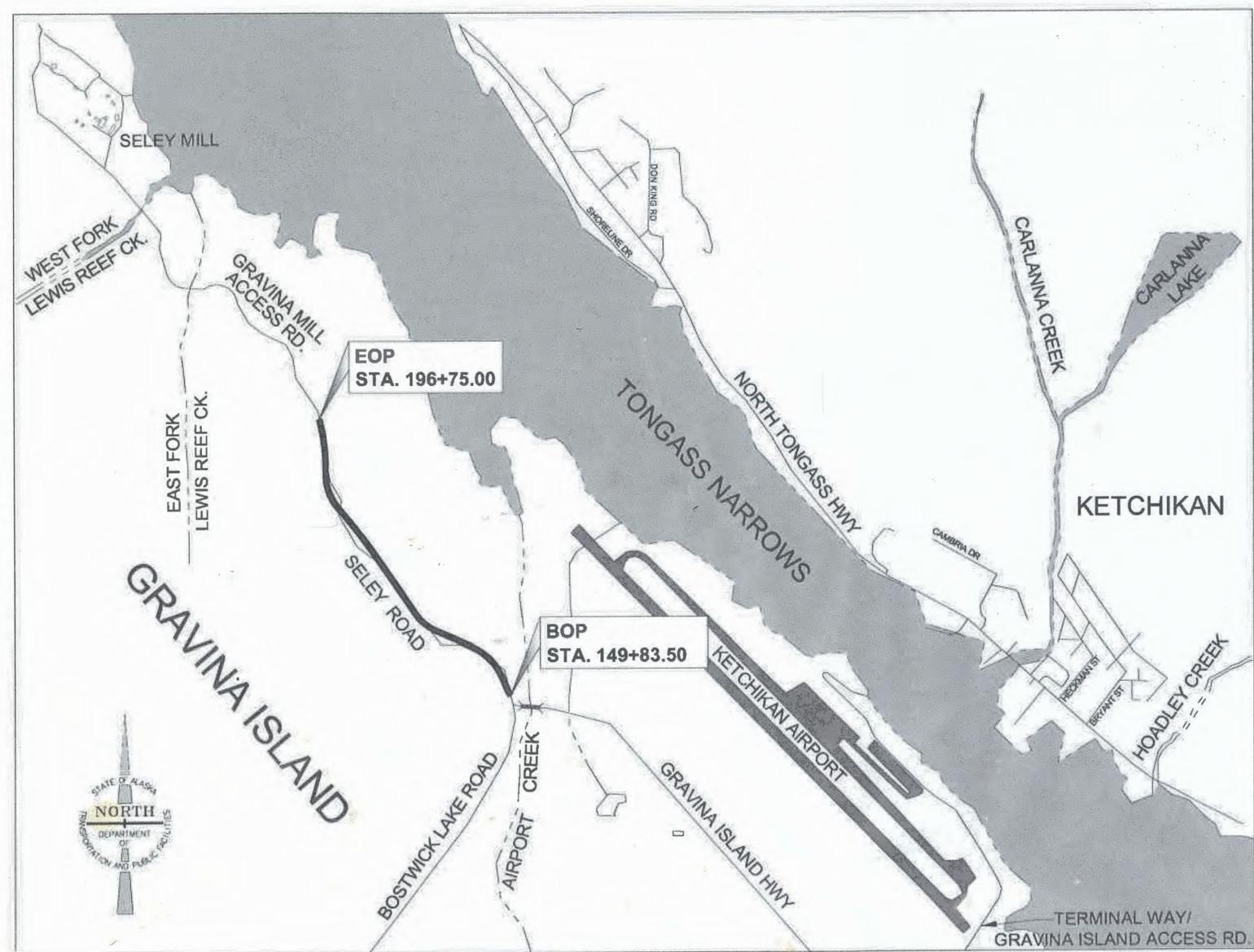
*Jessica Dukale*

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.  
Date 1/20/21

October 24, 2019

PROJECT SUMMARY	
LENGTH OF PROJECT	0.88 MILES
WIDTH OF SINGLE LANE ROAD	14' UNPAVED SURFACE
WIDTH OF WIDENED ROAD	27' UNPAVED SURFACE

DESIGN DESIGNATION	
PROJECT TYPE	NEW CONSTRUCTION-RECONSTRUCTION
DESIGN YEAR (2038)	20 YEAR PROJECT DESIGN LIFE
PRESENT ADT (2018)	60
DESIGN YEAR ADT (2038)	63
PERCENT COMMERCIAL TRUCKS	14.6%
DIRECTIONAL DISTRIBUTION	50/50
DESIGN SPEED (V)	40 MPH
DESIGN VEHICLE	WB-67
FUNCTIONAL CLASSIFICATION	LOW-VOLUME LOCAL ROAD (GDVLR)



VICINITY MAP

Asbuilts

11/17/2020 <sup>MLS</sup>  
10/17/2020

USE THESE PLANS IN CONJUNCTION WITH THE STATE OF ALASKA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2017 EDITION AND THE PROJECT SPECIAL PROVISIONS.

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
6860 GLACIER HIGHWAY, JUNEAU, AK 99811  
(907) 465-1763

APPROVED: *Pat Carroll* 2-28-19  
REGIONAL PRECONSTRUCTION ENGINEER DATE  
L. PAT CARROLL, P.E.

CONCUR: *D. Lance Meurig* 28 Feb 2019  
DIRECTOR, SOUTHCOAST REGION DATE  
D. LANCE MEURIG, P.E.

DRAFTED D.S. CHECKED D.L. DESIGNED D.S. LAYOUT A1 DATE 2/19/2019 13:05 FILE Q:\Ktn\SFHwy00156\PlanSet\00156\_A1\_Tent.dwg

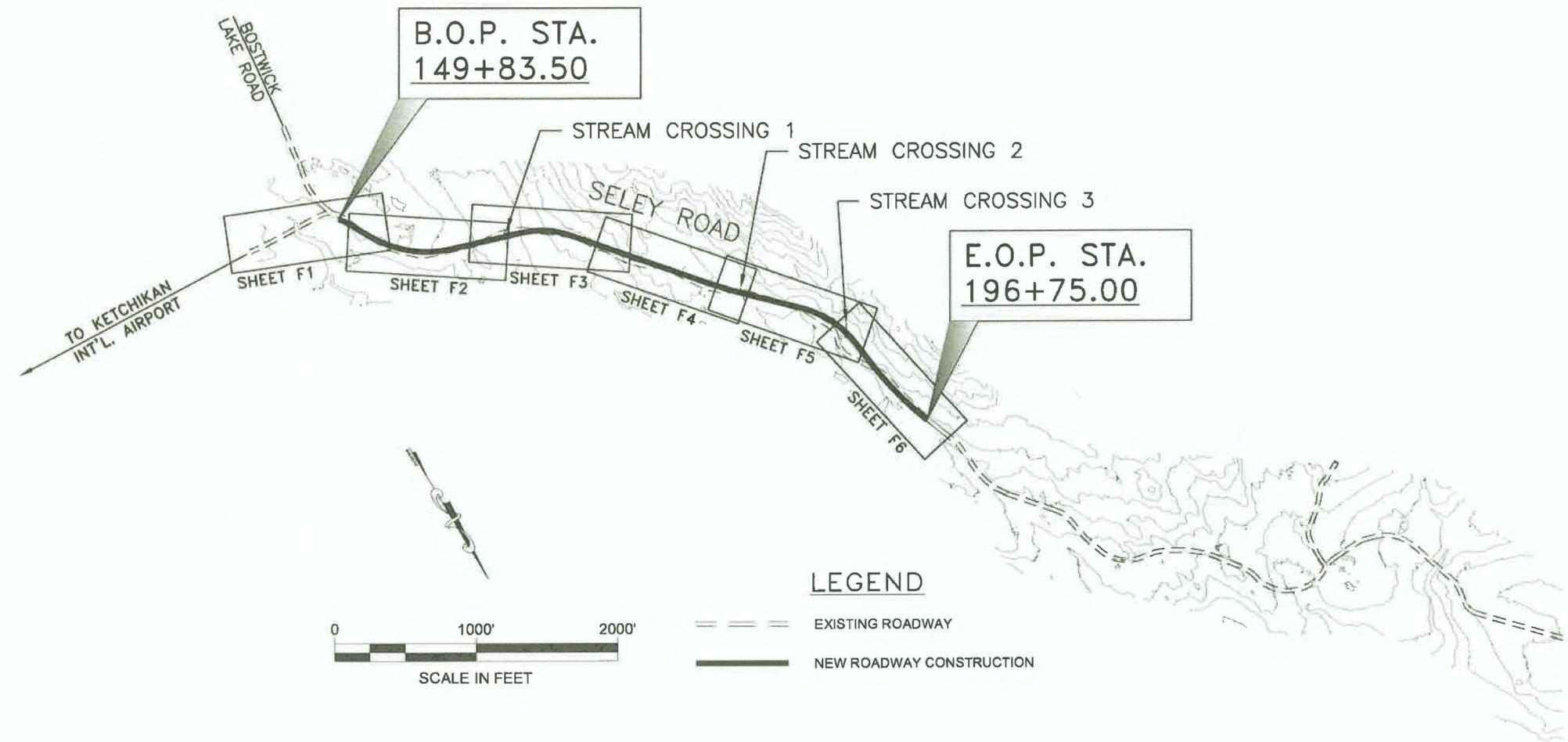
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 CHECKED D. L.  
 DRAFTED D. S.

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00156	2019	A2	26

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 PE *Patty Shull* Date *1/20/21*

### SYMBOLS

	NEW	EXISTING
SIGN		
PIPE CULVERT		
ROADWAY EDGE		
CONSTRUCTION CENTERLINE		
PROPOSED CUT SLOPE LIMIT		
PROPOSED FILL SLOPE LIMIT		
ORDINARY HIGH WATER		
WATER BOUNDARY		
CENTERLINE		
PLUNGE POOL BOUNDARY		
VISIBLE CORDUROY		
CULVERT FLOW		
FISH STREAM		
RIPRAP		
SEDIMENT BARRIER		
TEMPORARY ROCK CHECK DAM		
SURFACE FLOW DIRECTION		
WETLANDS		



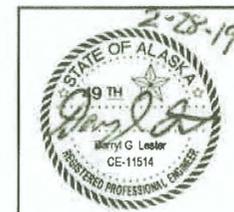
### LEGEND

	EXISTING ROADWAY
	NEW ROADWAY CONSTRUCTION

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
A1	TITLE SHEET
A2	LAYOUT & INDEX OF SHEETS
A3-A5	SURVEY CONTROL
B1-B2	TYPICAL SECTIONS
C1	ESTIMATE OF QUANTITIES
D1	SUMMARY TABLES
E1	MISCELLANEOUS DETAILS
F1-F6	PLAN & PROFILE
G1-G2	SUPERELEVATION PROFILE
J1-J3	CULVERT PLAN & PROFILE
Q1-Q3	ESCP PLAN & PROFILE
T1-T2	TRAFFIC CONTROL PLAN

### THE FOLLOWING STANDARD PLANS APPLY TO THIS PROJECT:

D-01.02	S-00.11
D-04.21	S-01.01
D-07.00	S-05.01
	S-20.10
	S-30.04



STATE OF ALASKA DEPARTMENT OF  
 TRANSPORTATION  
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 6660 GLACIER HIGHWAY, JUNEAU, AK 99811  
 (907) 465-1763  
 KTN RECONSTRUCT ROAD TO  
 AIRPORT BOUNDARY (RP-AK022)

LAYOUT

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWHY00156	2019	A3	26

Project At-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.  
*Patryk Swell* Date: 1/20/21

Point #	Northing	Easting	Elevation	Description	Station	Offset
101	1292686.02	3088333.66	151.92	ALCAP2" DOT_SET	157+03.00	21.73R
102	1292802.35	3087955.51	132.88	ALCAP2" DOT_SET	160+95.20	7.70L
103	1292858.43	3087702.59	141.34	ALCAP2" DOT_SET	163+52.37	38.97L
104	1294110.02	3086574.50	193.77	ALCAP2" DOT_SET	180+35.32	23.40L
106	1294793.77	3086257.50	179.13	ALCAP2" DOT_SET	188+39.69	135.05R
107	1295114.38	3086072.04	194.03	ALCAP2" DOT_SET	191+92.48	15.00L
108	1296209.16	3085852.71	144.02	ALCAP2" DOT_SET	203+09.21	23.72R
554	1291889.89	3088773.43	170.92	ALCAP2" WSI_VBAK01	148+84.35	183.17L
603	1291300.59	3088664.73	193.91	ALCAP3" _USFS	148+52.78	776.40L

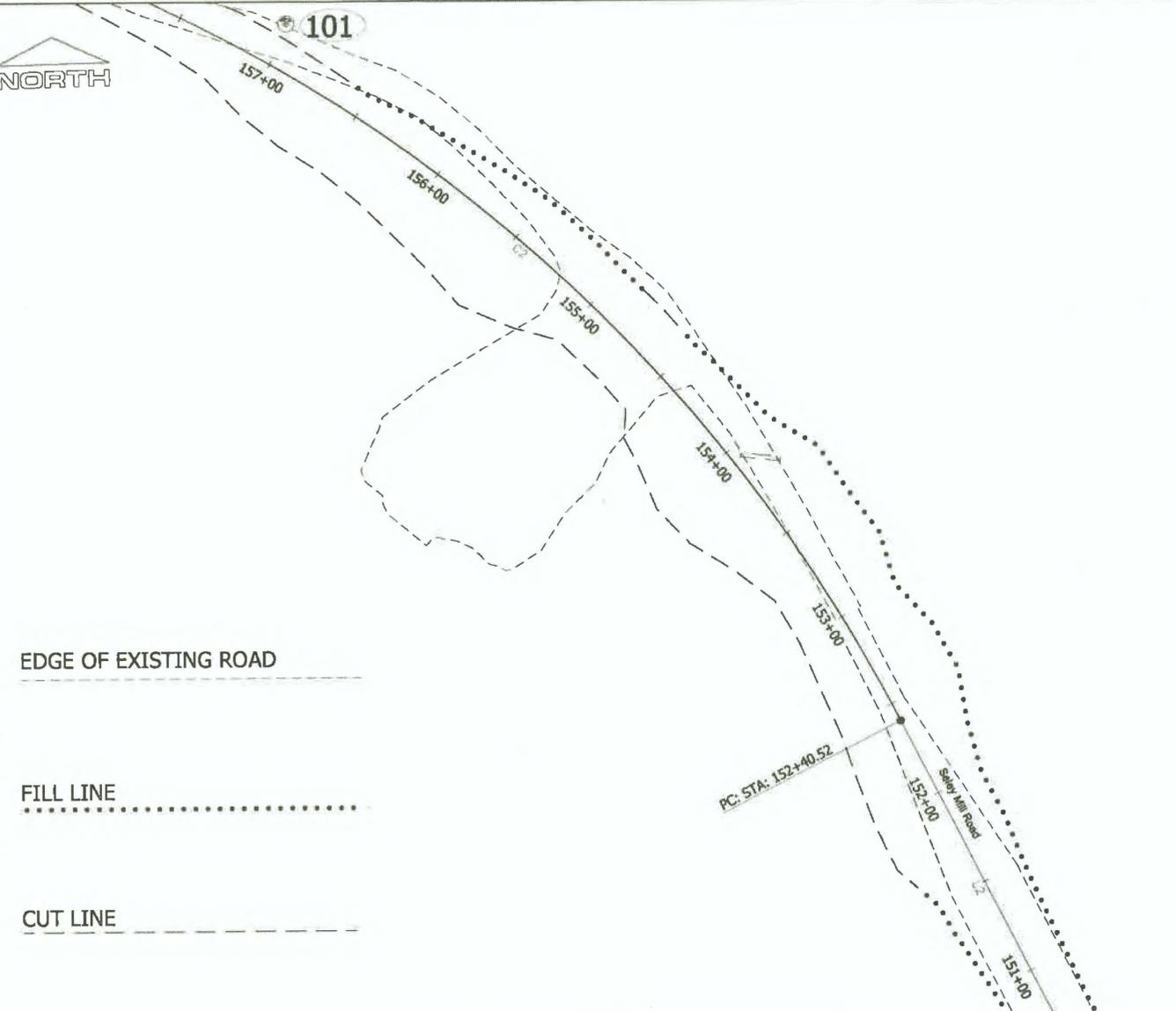
**MONUMENT NOTES:**  
 1. IF ANY PAIR OF CONTROL POINTS DISAGREES FROM PUBLISHED VALUE BY MORE THAN 1:10,000 HORIZONTALLY OR VERTICALLY THEN A THIRD NETWORK POINT MUST BE TIED TO ASCERTAIN WHICH POINT IS IN ERROR OR HAS BEEN DISTURBED AND REPORTED TO THE DOT&PF PROJECT MANAGER.

ALL SURVEY CONTROL MONUMENTS IN THIS TABLE ARE PROVIDED STRICTLY FOR SURVEY CONTROL. SHOULD ANY OF THEM BE DESTROYED DURING CONSTRUCTION THEY **SHALL NOT** BE REPLACED.

**HORIZONTAL AND VERTICAL CONTROL STATEMENT**

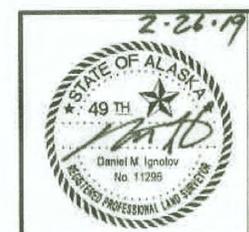
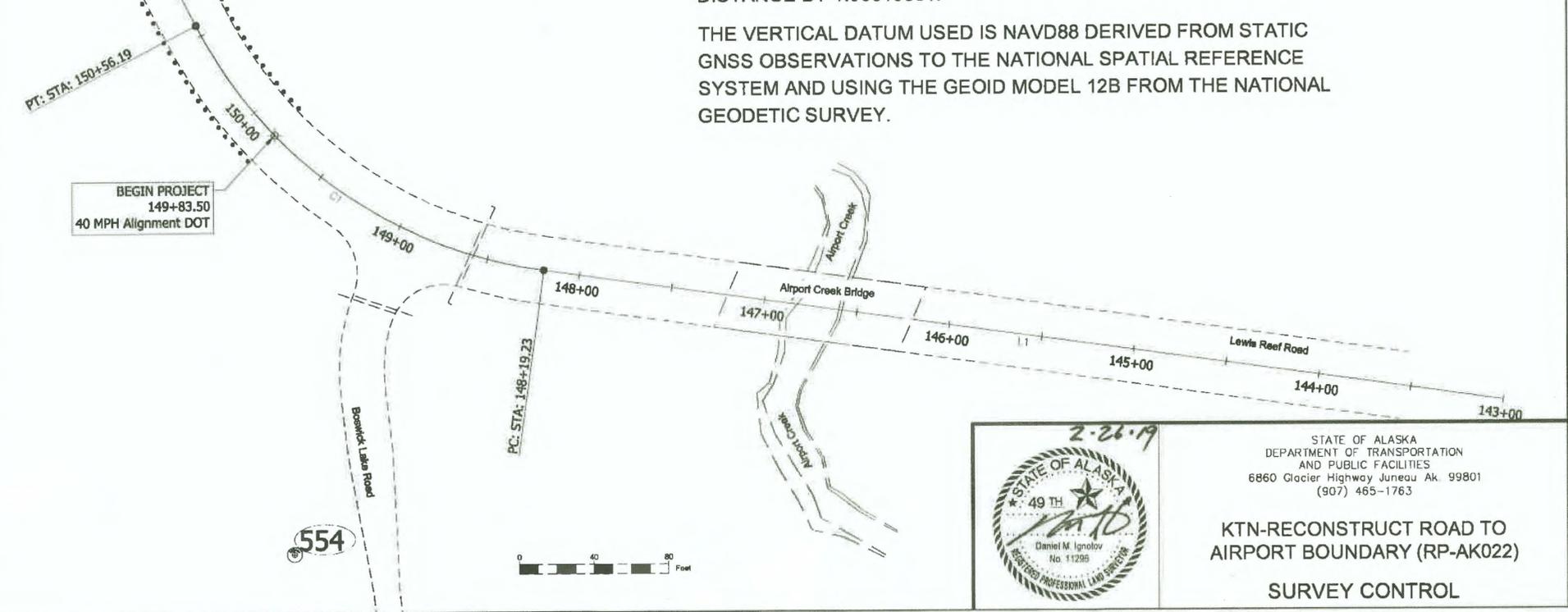
THE HORIZONTAL DATUM USED FOR THE SURVEY CONTROL IS NAD83(2011) 2010.00 ALASKA STATE PLANE ZONE 1. ALL COORDINATES, DISTANCES, AND BEARINGS LISTED ARE GRID. THE COMBINED SCALE FACTOR FOR THIS PROJECT IS 0.99989450. TO CONVERT GRID DISTANCE TO GROUND DISTANCE MULTIPLY GRID DISTANCE BY 1.00010551.

THE VERTICAL DATUM USED IS NAVD88 DERIVED FROM STATIC GNSS OBSERVATIONS TO THE NATIONAL SPATIAL REFERENCE SYSTEM AND USING THE GEOID MODEL 12B FROM THE NATIONAL GEODETIC SURVEY.



Segment	Station	Northing	Easting	Station	Radius	Length	Delta
L1	143+00.00	1291969.61	3089421.93	148+19.23			
C1	148+19.23	1292041.15	3088907.65	150+56.19	247.00	236.96	54°58'00"
L2	150+56.19	1292173.22	3088721.83	152+40.52			
C2	152+40.52	1292337.30	3088637.82	158+47.25	800.00	606.72	43°27'12"
L3	158+47.25	1292727.12	3088191.90	163+68.61			
C3	163+68.61	1292900.58	3087700.24	167+03.81	600.00	335.20	32°00'33"
L4	167+03.81	1293092.42	3087430.67	177+26.57			
C4	177+26.57	1293892.20	3086793.18	180+88.38	4000.00	361.81	5°10'57"
L5	180+88.38	1294164.55	3086555.18	184+50.91			
C5	184+50.91	1294426.47	3086304.54	189+25.20	700.00	474.29	38°49'15"
L6	189+25.20	1294850.41	3086112.85	190+69.17			
C6	190+69.17	1294993.86	3086100.51	196+58.61	2500.00	589.44	13°30'33"
L7	196+58.61	1295569.77	3085981.51	197+82.95			

COORDINATES LISTED ABOVE HOLD OVER DISTANCE AND BEARING



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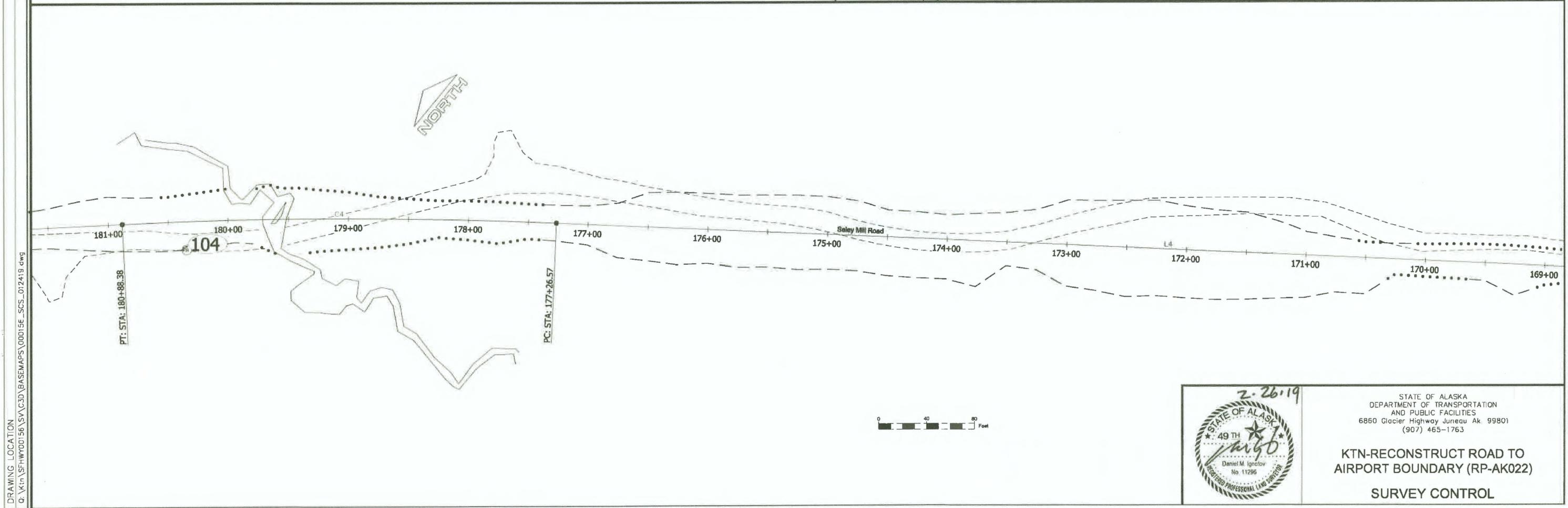
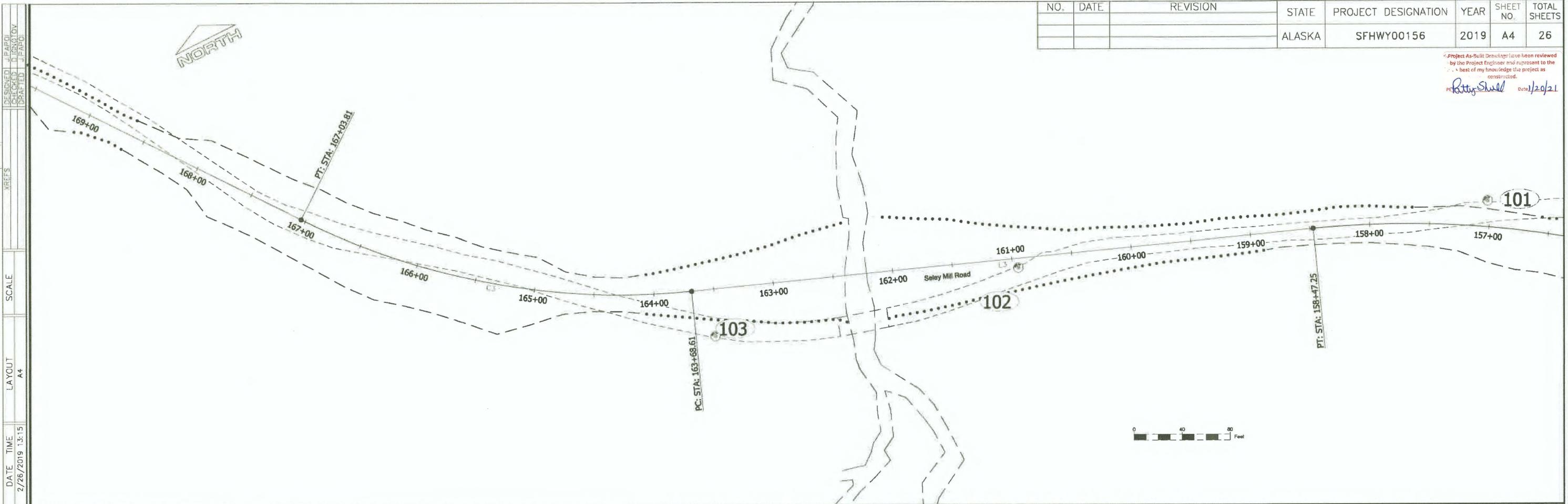
**KTN-RECONSTRUCT ROAD TO AIRPORT BOUNDARY (RP-AK022)**

**SURVEY CONTROL**

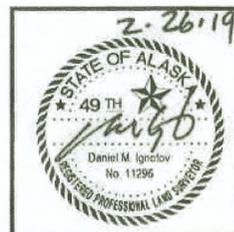
DESIGNER: D. BARON, D. LINDTVOY, D. LINDTVOY, D. LINDTVOY  
 CHECKED: D. LINDTVOY, D. LINDTVOY, D. LINDTVOY  
 DRAFTER: D. LINDTVOY, D. LINDTVOY, D. LINDTVOY  
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 SCALE: A3  
 LAYOUT: A3  
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 TIME: 13:15  
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWHY00156	2019	A4	26

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.  
*Robby Shull* Date: 1/20/21



DESIGNED: JIPAPOI  
 CHECKED: D. LONATOV  
 DRAFTED: JIPAPOI  
 METERS  
 SCALE  
 LAYOUT: A4  
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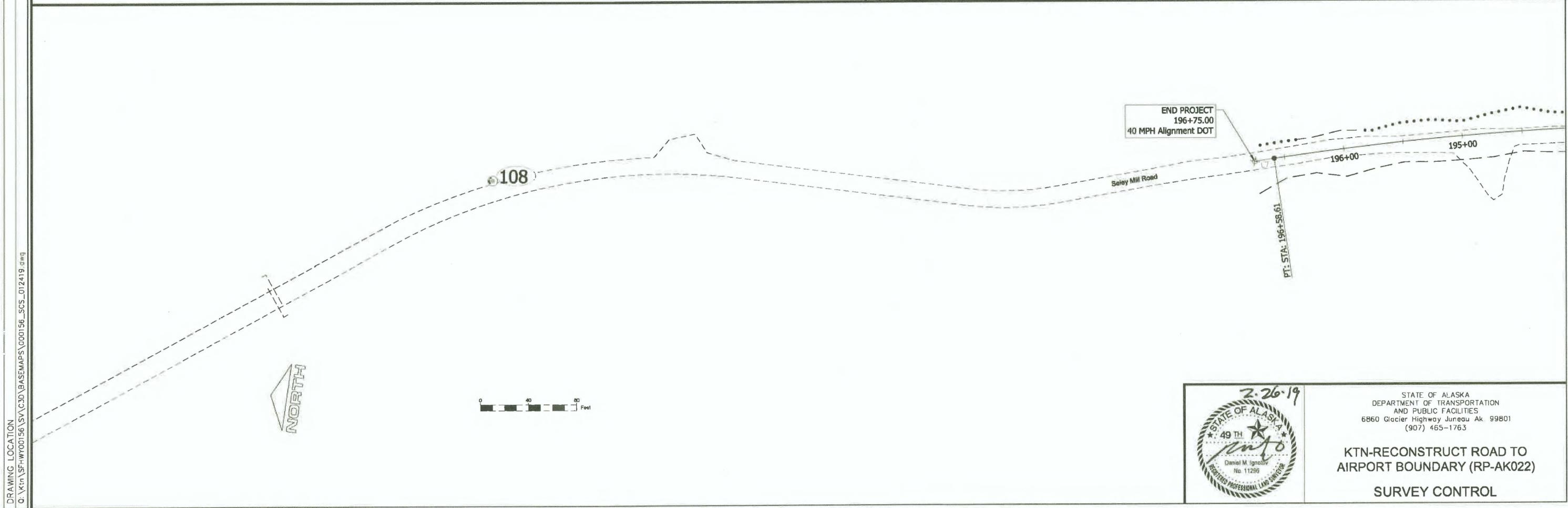
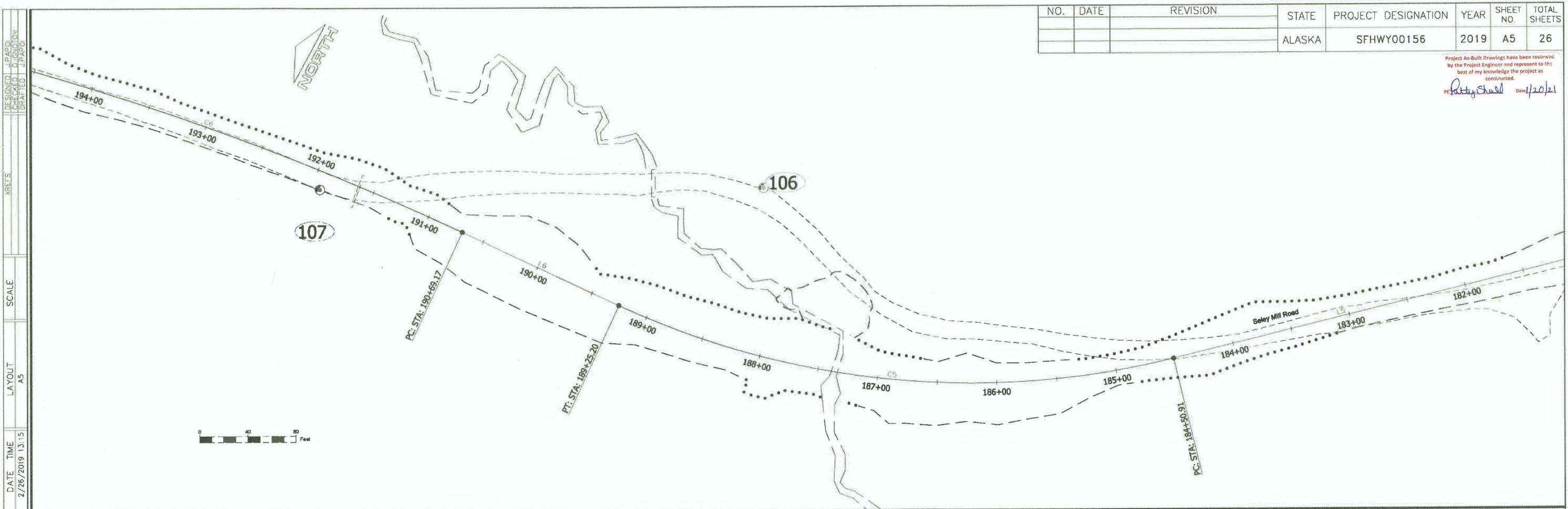


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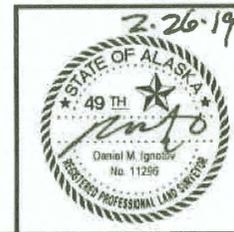
KTN-RECONSTRUCT ROAD TO  
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 SURVEY CONTROL

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO	TOTAL SHEETS
			ALASKA	SFHWHY00156	2019	A5	26

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.  
 PE: *Patty Shull* Date: 1/20/21



DESIGNED: J.P.A.R.O.  
 CHECKED: D.L.GONDOV.  
 DRAFTED: J.P.A.R.O.  
 AREAS:  
 SCALE: A5  
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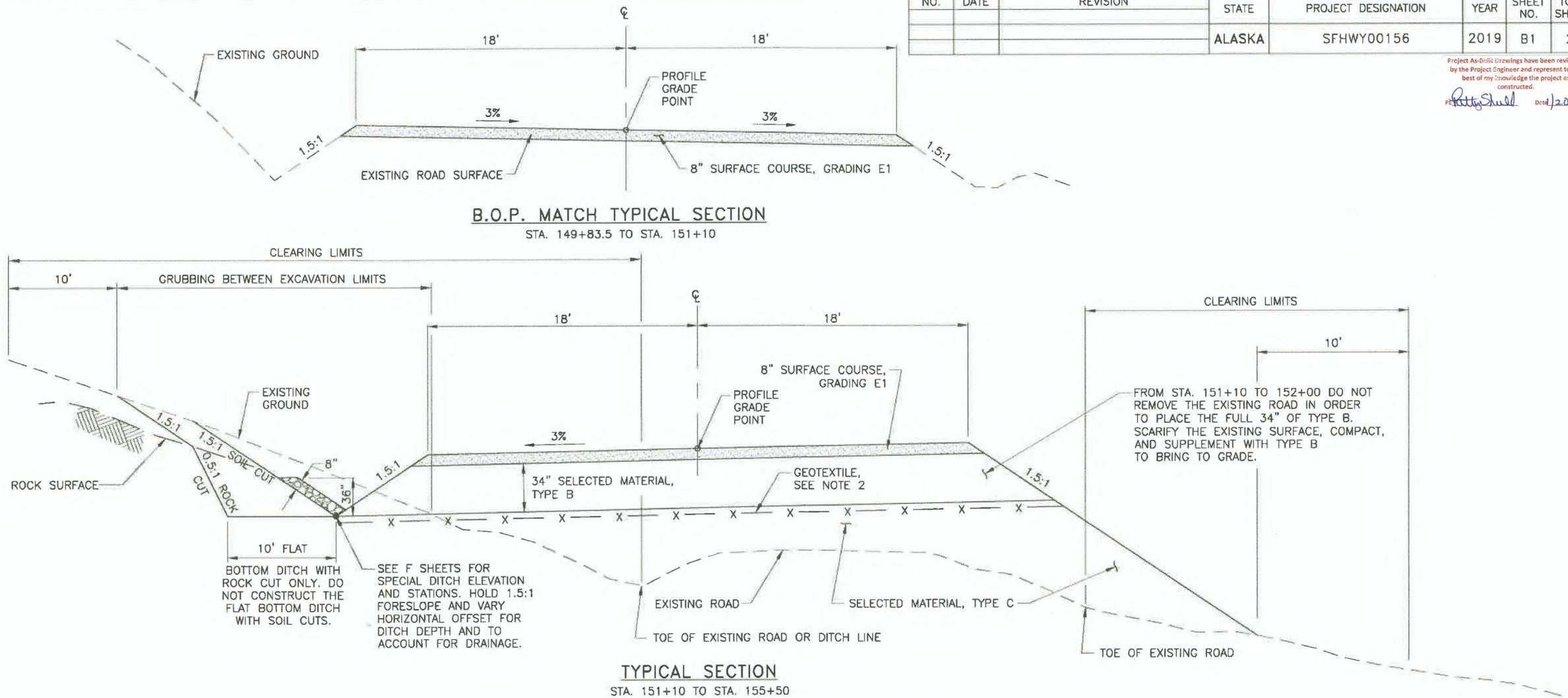
**KTN-RECONSTRUCT ROAD TO  
 AIRPORT BOUNDARY (RP-AK022)**

**SURVEY CONTROL**

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 CHECKED D. L.  
 DRAFTED D. S.

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00156	2019	B1	26

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*Patty Shull* Dec 12/2021

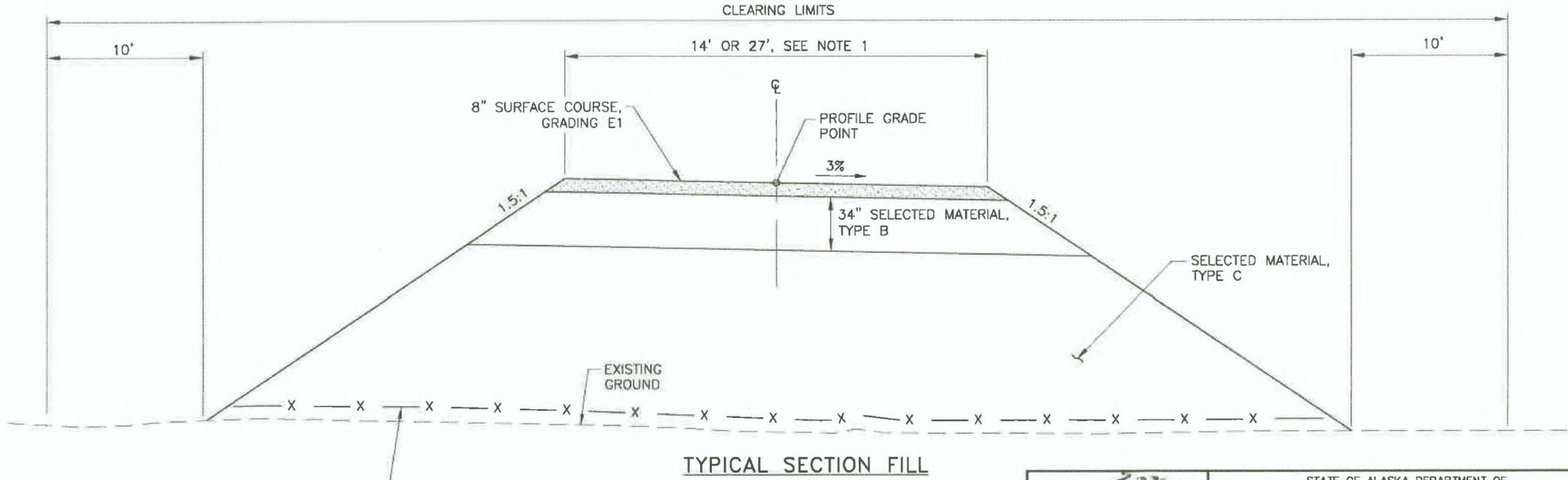


FROM STA. 151+10 TO 152+00 DO NOT REMOVE THE EXISTING ROAD IN ORDER TO PLACE THE FULL 34" OF TYPE B. SCARIFY THE EXISTING SURFACE, COMPACT, AND SUPPLEMENT WITH TYPE B TO BRING TO GRADE.

SEE F SHEETS FOR SPECIAL DITCH ELEVATION AND STATIONS. HOLD 1.5:1 FORESLOPE AND VARY HORIZONTAL OFFSET FOR DITCH DEPTH AND TO ACCOUNT FOR DRAINAGE.  
 BOTTOM DITCH WITH ROCK CUT ONLY. DO NOT CONSTRUCT THE FLAT BOTTOM DITCH WITH SOIL CUTS.

**NOTES:**

- SEE THE F SHEETS FOR THE LOCATION CHANGES BETWEEN THE 14' SINGLE LANE TOP SURFACE AND THE 27' TWO LANE TOP SURFACE WIDTH.
- PLACE GEOTEXTILE ON SUBGRADE AS SHOWN ON TYPICAL SECTIONS. GEOTEXTILE SHALL EXTEND FROM AREAS OVER ORGANIC OR SOFT (CANNOT BE COMPACTED) SUBGRADE TO OVER FIRM SUBGRADE (COMPACTABLE MINERAL SOIL, EXISTING FILL OR BEDROCK) A MINIMUM OF 10 FEET. DO NOT PUNCTURE OR TEAR THE GEOTEXTILE. PLACE TYPE C FILL TO LEVEL IRREGULARITIES AND INSTALL THE GEOTEXTILE AS HORIZONTAL AS POSSIBLE.
- THE SELECTED MATERIALS ARE GENERATED FROM CUTS AND BY UTILIZING THE AGGREGATE MATERIAL REMOVED FROM THE EXISTING ROAD INTO THE LOWER LIFTS OF THE SELECTED MATERIAL, TYPE C. SEE THE "F" SHEETS FOR AVAILABLE SOURCE LOCATIONS SHOULD ADDITIONAL EMBANKMENT BE REQUIRED.
- STABILIZE FILL AND SOIL CUT SLOPES WITH SEEDING, BFM, AND MATTING.
- THE ROAD DOES NOT UTILIZE A NORMAL CROWN BUT CONSISTENTLY USES A UNIFORM 3% CROSS-SLOPE AND ROTATES AROUND CENTERLINE. THE DOWNWARD SLOPE IS TO THE INSIDE OF HORIZONTAL CURVES. SEE SHEETS G1 AND G2.



GEOTEXTILE, WHEN THE COMBINED DEPTH OF THE TYPE C PLUS THE TYPE B MATERIAL IS GREATER THAN FOUR FEET ACROSS THE ENTIRE ROAD PRISM, OMIT THE GEOTEXTILE.  
 OMIT GEOTEXTILE BETWEEN:  
 STA. 159+75 TO 163+75  
 STA. 177+50 TO 180+00  
 STA. 183+50 TO 184+50  
 STA. 187+25 TO 188+00



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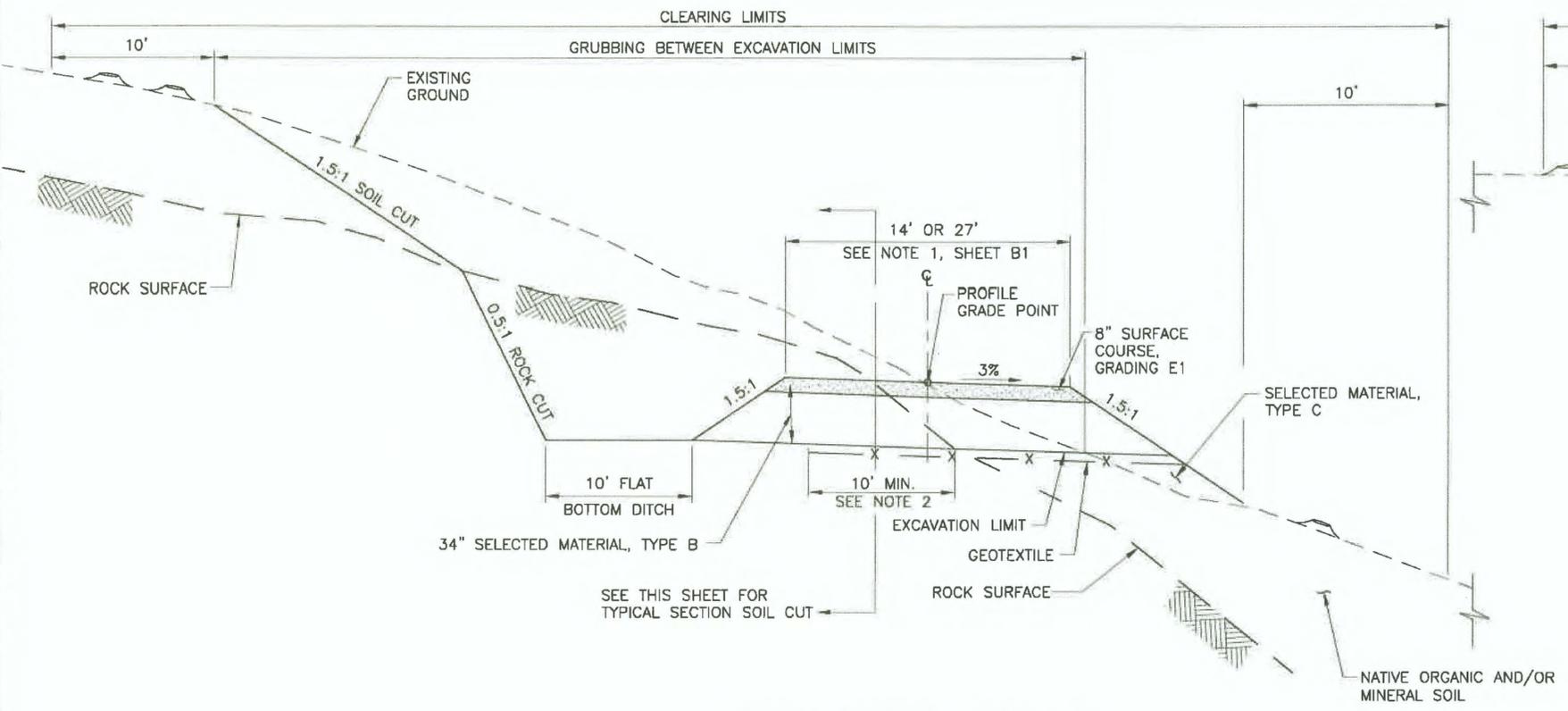
KTN RECONSTRUCT ROAD TO AIRPORT BOUNDARY (RP-AK022)

TYPICAL SECTIONS

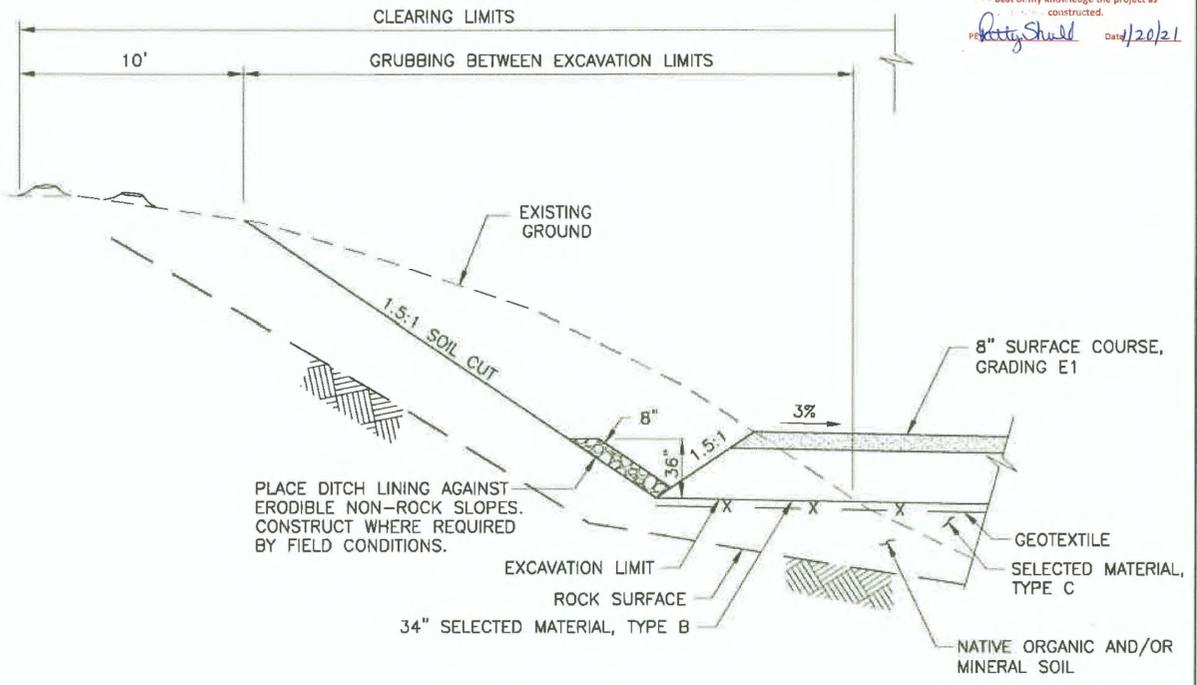
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWHY00156	2019	B2	26

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.  
*Patricia Shull* Date: 1/20/21

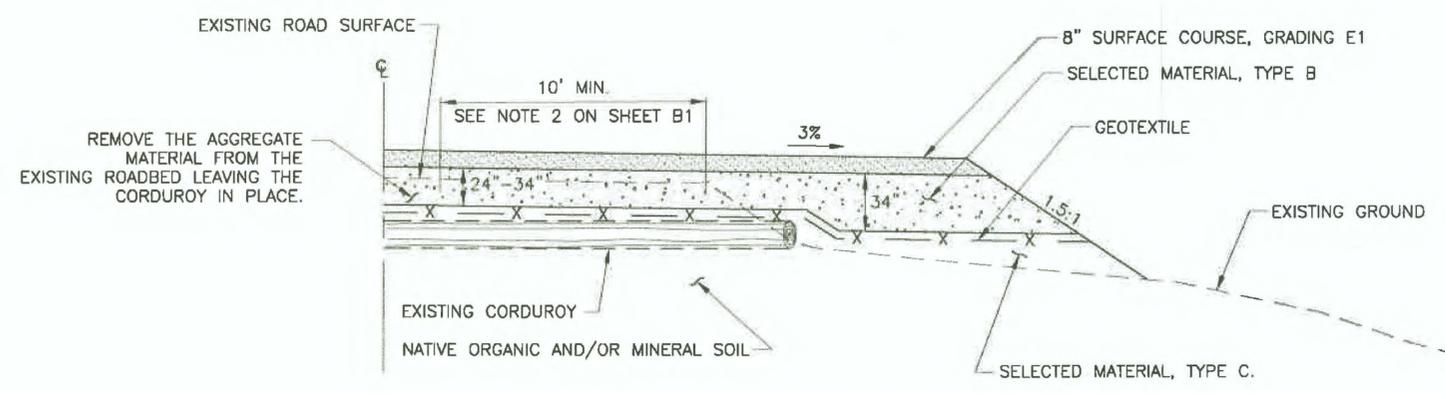
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 DATE: 2/22/2019 11:17 LAYOUT: B2 DESIGNED: D. S. CHECKED: D. L. DRAFTED: D. S.



**TYPICAL SECTION ROCK CUT**  
N.T.S.

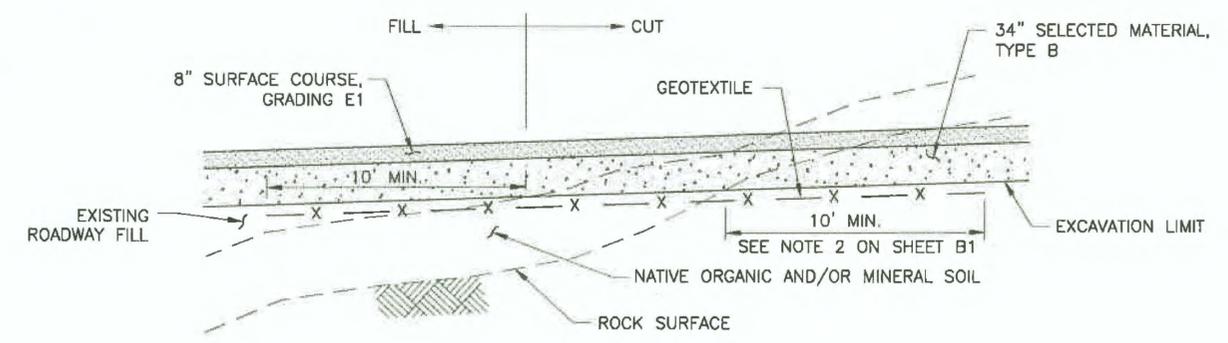


**TYPICAL SECTION SOIL CUT**  
N.T.S.



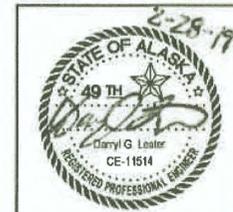
**TYPICAL SECTION - EXISTING CORDUROY**  
N.T.S.

**CORDUROY NOTE:**  
 IN THE EVENT THE FULL 34" SELECTED MATERIAL, TYPE B CANNOT BE PLACED WITHOUT REMOVING THE EXISTING CORDUROY, REDUCE THE THICKNESS TO A MINIMUM OF 24". INCREASE THE THICKNESS AGAIN TO 34" WHEN BEYOND THE CORDUROY LIMITS AND PLACE THE GEOTEXTILE AS HORIZONTAL AS POSSIBLE. DO NOT REMOVE THE CORDUROY UNLESS THE FINISHED PROFILE GRADE DOES NOT ALLOW FOR PLACEMENT OF 24". STATIONS 157+25 TO 159+50 IS AN EXCEPTION. SEE SHEET F2.



**PROFILE STRUCTURAL SECTION**  
N.T.S.

PROFILE TRANSITION AREAS AT APPROXIMATE STATIONS:  
 164+60  
 168+20  
 170+55  
 177+10  
 189+30  
 190+80



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**KTN RECONSTRUCT ROAD TO AIRPORT BOUNDARY (RP-AK022)**

TYPICAL SECTIONS

FILE O:\ktn\SFHWY00156\PlanSet\00156\_C1.dwg  
 DATE 7/18/2019 10:40 LAYOUT C1  
 DESIGNED D.S.  
 CHECKED D.L.  
 DRAFTED D.S.

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SSHXY00156	2019	C1	26

See back of this sheet for additional information.

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 PE *Patty Shull* Date 1/20/21

ESTIMATE OF QUANTITIES				
ITEM NO	2017 SSHC ITEM NO	ITEM DESCRIPTION	PAY UNIT	QUANTITY
201 0001 0000	201(1A)	CLEARING	AC	5.4
201 0002 0000	201(2A)	GRUBBING	AC	2.0
201 2001 0000		INVASIVE PLANT SPECIES CONTROL, REMOVAL, AND DISPOSAL	SY	3
202 0001 0000	202(1)	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	ALL REQUIRED
202 0004 0000	202(4)	REMOVAL OF CULVERT PIPE	LF	71
203 0002 0000	203(2)	ROCK EXCAVATION	CY	19,000
203 0003 0000	203(3)	UNCLASSIFIED EXCAVATION	CY	11,300
203 0006 000B	203(6)	BORROW, TYPE B	TON	5,610
203 0009 0000	203(9)	OBLITERATION OF ROADWAY	SY	3,000
301 0003 00E1	301(3)	AGGREGATE SURFACE COURSE, GRADING E-1	TON	4,850
603 0009 0060	603(9-60)	CORRUGATED ALUMINUM PIPE 60 INCH	LF	65.6
603 0009 0072	603(9-72)	CORRUGATED ALUMINUM PIPE 72 INCH	LF	83.0
603 0021 0024	603(21-24)	CORRUGATED POLYETHYLENE PIPE 24 INCH	LF	149.0
603 2021 0000	603(10)	CORRUGATED ALUMINUM PIPE ARCH, 179" SPAN X 118" RISE	LF	104.0
610 0003 0000	610(3)	DITCH LINING	STA	8.7
611 0001 0001	611(1-1)	RIPRAP, CLASS I	CY	230
611 0001 0002	611(1-2)	RIPRAP, CLASS II	CY	200
615 0001 0000	615(1)	STANDARD SIGN	SF	33.0
618 0002 0000	618(2)	SEEDING	LB	166
619 0002 0000	619(2)	MATTING	SY	12,450
619 2013 0000		BONDED FIBER MATRIX (BFM)	LB	10,300
630 0002 0001	630(2)	GEOTEXTILE, STABILIZATION, CLASS 1	SY	5,800
640 0001 0000	640(1)	MOBILIZATION AND DEMOBILIZATION	LS	ALL REQUIRED
640 0004 0000	640(4)	WORKER MEALS AND LODGING, OR PER DIEM	LS	ALL REQUIRED
641 0001 0000	641(1)	EROSION, SEDIMENT AND POLLUTION CONTROL ADMINISTRATION	LS	ALL REQUIRED
641 0003 0000	641(3)	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL	LS	ALL REQUIRED
641 0005 0000	641(5)	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL BY DIRECTIVE	CS	ALL REQUIRED
641 0006 0000	641(6)	WITHHOLDING	CS	ALL REQUIRED
641 0007 0000	641(7)	SWPPP MANAGER	LS	ALL REQUIRED
642 0001 0000	642(1)	CONSTRUCTION SURVEYING	LS	ALL REQUIRED
642 0003 0000	642(3)	THREE PERSON SURVEY PARTY	HR	10
643 0002 0000	643(2)	TRAFFIC MAINTENANCE	LS	ALL REQUIRED
643 0003 0000	643(3)	PERMANENT CONSTRUCTION SIGNS	LS	ALL REQUIRED
643 0023 0000	643(23)	TRAFFIC PRICE ADJUSTMENT	CS	ALL REQUIRED
643 0025 0000	643(25)	TRAFFIC CONTROL	CS	ALL REQUIRED
643 0032 0000	643(15)	FLAGGING	CS	ALL REQUIRED
644 0001 0000	644(1)	FIELD OFFICE	LS	ALL REQUIRED
644 0002 0000	644(2)	FIELD LABORATORY	LS	ALL REQUIRED
644 0006 0000	644(6)	VEHICLE	LS	ALL REQUIRED
644 0015 0000	644(15)	NUCLEAR TESTING EQUIPMENT STORAGE SHED	EACH	1
644 2004 0000		ENGINEERING COMMUNICATIONS	CS	ALL REQUIRED

BASIS OF ESTIMATE			
ITEM NO.	2017 SSHC ITEM NO	DESCRIPTION	ESTIMATING FACTOR
203 0006 000B	203(6)	BORROW, TYPE B	1.81 TONS/CY
301 0003 00E1	301(3)	AGGREGATE SURFACE COURSE, GRADING E1	1.95 TONS/CY
610 0003 0000	610(3)	DITCH LINING	0.2 CY/ FOOT LENGTH OF DITCH
619 2013 0000	619(3)	BONDED FIBER MATRIX (BFM)	4000 LBS/ACRE



STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
 6860 GLACIER HIGHWAY, JUNEAU, AK 99811  
 (907) 465-1763

KTN RECONSTRUCT ROAD TO AIRPORT BOUNDARY (RP-AK022)

ESTIMATE OF QUANTITIES

TOTAL SHEETS	23	YEAR	2019	PROJECT DESIGNATION	22HW 01122	STATE	ALASKA
NO. SHEETS	23	DATE					

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.  
 PE: *Patty Skud* Date: 1/20/20

KTN: Reconstruct Road to Airport Boundary  
 SFHWY00156/0952019

Matting

		LEFT		Remarks
Start Station	End Station	Area (SY)		
160+90	162+00	110	*** P1 Area Covered Up	
162+50	164+40	190	*** P1 Area Covered Up	
174+00	174+50	336		
181+30	181+75	205		
191+50	195+50	267	** Oblit	
194+60	195+00	83		

Excess Rock Piles

		RIGHT		Remarks
Start Station	End Station	Area (SY)		
160+50	160+78	148		
176+25	177+50	123		
177+20	178+62	334		
186+50	188+00	596		
188+00	189+00	347		
189+25	190+25	761		
190+25	191+25	317		

KTN: Reconstruct Road to Airport Boundary  
 SFHWY00156/0952019

Seeding and BFM

		LEFT		Remarks
Start Station	End Station	Area (SY)		
153+27	153+50	22		
153+50	154+00	139		
154+00	154+20	84		
154+20	154+50	153		
154+50	155+50	617		
155+50	156+00	31		
156+50	156+90	20		
157+00	157+50	50		
160+90	162+00	183	** Rock Waste Pile Covered	
162+50	164+40	391	** Rock Waste Pile Covered	
173+70	175+00	361		
174+00	174+50	336		
179+67	181+75	391	** 179+67 - 181+50 Covered With Ditch Lining	
186+50	188+00	596		
191+50	195+50	267		
194+60	195+00	83		

		RIGHT		Remarks
Start Station	End Station	Area (SY)		
154+20	157+50	782		
160+50	160+78	148		
176+25	177+50	123		
177+20	178+62	334		
186+50	188+00	596		
188+00	189+00	347		
189+25	190+25	761		
190+25	191+25	317		

ALL REQUIRED	CS	ENGINEERING COMMUNICATIONS	844 3004 0000
ALL REQUIRED	CS	WELD BAR TESTING EQUIPMENT STORAGE SHED	844 0016 0000
ALL REQUIRED	VEHICLE	VEHICLE	844 0108 0000
ALL REQUIRED	CS	FIELD LABORATORY	844 0002 0000
ALL REQUIRED	CS	FIELD OFFICE	844 0001 0000
ALL REQUIRED	CS	FLAGGING	845 0015 0000
ALL REQUIRED	CS	TRAFFIC CONTROL	845 0016 0000
ALL REQUIRED	CS	TRAFFIC PRICE ADJUSTMENT	843 0023 0000
ALL REQUIRED	CS	PERMANENT CONSTRUCTION SIGNS	843 0018 0000
ALL REQUIRED	CS	TRAFFIC MAINTENANCE	843 0025 0000
ALL REQUIRED	CS	THREE PERSON SURVEY PARTY	843 0003 0000
ALL REQUIRED	CS	CONSTRUCTION SURVEYING	843 0001 0000
ALL REQUIRED	CS	SWEEP MANAGER	843 0002 0000
ALL REQUIRED	CS	WITHOLDING	843 0004 0000
ALL REQUIRED	CS	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL BY DIRECTIVE	843 0005 0000
ALL REQUIRED	CS	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL	843 0006 0000
ALL REQUIRED	CS	EROSION, SEDIMENT AND POLLUTION CONTROL ADMINISTRATION	843 0007 0000
ALL REQUIRED	CS	WORKER MEALS AND LODGING, ON PER DIEM	843 0008 0000
ALL REQUIRED	CS	MOBILIZATION AND DEMOBILIZATION	843 0009 0000

BASIS OF ESTIMATE

ITEM NO.	2017 S2HC ITEM NO.	DESCRIPTION	ESTIMATING FACTOR
318 2017 0108	6183	BONDED FIBER MATT (BPM)	400 LBS/ACRE
615 0033 0009	6103	DITCH LINING	0.5 CY/ FOOT LENGTH OF DITCH
301 0013 0011	3013	AGGREGATE SURFACE COURSE, GRADING ET	1.38 TONS/CY
303 0019 0005	3033	BORROW, TYPE B	1.81 TONS/CY

ESTIMATE OF QUANTITIES

KTN RECONSTRUCT ROAD TO AIRPORT BOUNDARY (RP-AK022)

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION  
 BRIDGE ENGINEER  
 1200 EAST PALM BLVD.  
 ANCHORAGE, ALASKA 99501

DATE: 1/20/20 10:40 AM DRAWN BY: [Name] CHECKED BY: [Name] DESIGNED BY: [Name]

FILE Q:\ktn\SFH-WY00156\Plonset\00156\_D1.dwg DATE 7/16/2019 10:10 LAYOUT D1 DESIGNED D. S. CHECKED D. L. DRAFTED D. S.

NO	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWHY00156	2019	D1	26

### 202.00010000 REMOVAL OF STRUCTURES AND OBSTRUCTIONS

STATION	OFFSET	DESCRIPTION	REMARKS
162+30	40' LT	35-FOOT STEEL RAIL CAR BRIDGE	
179+62	19' LT	25-FOOT LONG LOG STRINGER BRIDGE	
189+41	104' RT	BULL RAIL LOGS USED TO CONTAIN EXISTING FILL	

### 202.0004.0000 REMOVAL OF CULVERT PIPE (LF)

STATION	OFFSET	DIAMETER (IN)	LENGTH (FT)	REMARKS
153+88	12' RT	24	20	
189+41	104' RT	36	23	
191+83	6' LT	18	28	Did Not Locate
156+15	5' RT	24	33	Not Shown in Original Plans

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.  
*Patryk J. Shull* Date: 1/20/21

### CULVERT INSTALLATION SUMMARY

PIPE	REMARKS
P-1	ITEM 603.2021.0000, FISH PASSAGE
P-2	ITEM 603.0021.0024, INVERT ELEVATIONS ARE APPROXIMATE, MATCH NATURAL DRAINAGE CHANNEL OR DITCH BOTTOM.
P-3	ITEM 603.0009.0072, FISH PASSAGE
P-4	ITEM 603.0021.0024, INVERT ELEVATIONS ARE APPROXIMATE, MATCH NATURAL DRAINAGE CHANNEL OR DITCH BOTTOM.
P-5	ITEM 603.0009.0060. SEE SHEET J8 FOR PLUNGE POOL.
P-6	ITEM 603.0021.0024, INVERT ELEVATIONS ARE APPROXIMATE, MATCH NATURAL DRAINAGE CHANNEL OR DITCH BOTTOM.
P-7	ITEM 603.0021.0024, INVERT ELEVATIONS ARE APPROXIMATE, MATCH NATURAL DRAINAGE CHANNEL OR DITCH BOTTOM.

KTN: Reconstruct Road to Airport Boundary  
SFHWY00156/0952019

**Culverts**

Designation #	Inlet Station	Outlet Station	Length (FT)	Type	Date Installed	Remarks
P-1	162+25 LT	162+25 RT	104.6	14.5' SPP	8/4/2020	
P-2	168+81 LT	168+54 RT	48	24" CPP	9/26/2020	
P-3	179+46 LT	179+95 RT	83.83	72" CAP	7/1/2020	
P-4	184+30 LT	183+85 RT	76.2	24" CPP	9/25/2020	Longer than Original Plans
P-5	187+35.3 LT	187+35.5 RT	66.5	60" CAP	7/19/2020	
P-6	196+68 LT	196+73 RT	32.7	24" CPP	9/22/2020	
P-7	182+19.33 LT	182+20.5 RT	31.1	24" CPP	9/22/2020	
P-8	188+01 LT	187+75 RT	73.6	24" CPP	7/17/2020	CO #2

NOTE: CULVERT LOCATIONS, GRADES AND LENGTHS ARE APPROXIMATE AND MAY REQUIRE ADJUSTMENTS IN THE FIELD.  
P-8

KTN: Reconstruct Road to Airport Boundary  
SFHWY00156/0952019

**Obliteration of Roadway**

Start Station	End Station	Area (SY)	Remarks
160+75	163+50	465	** Excess rock waste Piles
166+15	166+50	171	** Type-B Rock Covered
181+50	181+87	99	Seed/Matt/BFM
191+50	195+50	267	Seed/Matt/BFM
194+60	195+00	83	Seed/Matt/BFM

Start Station	End Station	Area (SY)	Remarks
154+20	157+50	782	Seed/Matt/BFM
160+50	160+75	106	Seed/Matt/BFM
168+60	172+25	617	** Type-B Rock Covered
176+25	177+50	123	Seed/Matt/BFM
177+13	178+55	334	Seed/Matt/BFM
186+50	188+00	417	Seed/Matt/BFM
188+00	189+00	347	Seed/Matt/BFM
189+25	191+25	556	Seed/Matt/BFM

### 610.0003.0000 DITCH LINING (STA)

Applied Locations

KTN: Reconstruct Road to Airport Boundary  
SFHWY00156/0952019

**Ditch Lining**

LEFT				RIGHT			
Start Station	End Station	Length (FT)	Date Installed	Start Station	End Station	Length (FT)	Date Installed
151+48	153+00	152	9/25/2020	154+12	157+50	338	10/26/2020
153+00	153+50	50	10/26/2020	173+40	174+15	75	10/29/2020
157+48	158+98	150	10/26/2020	176+59.5	178+74.5	215	10/29/2020
164+37	165+07	70	10/26/2020	181+13	181+73	60	10/19/2020
167+70	169+03	133	10/26/2020	190+85.5	191+39.5	54	10/18/2020
169+50	170+09	59	10/26/2020	196+26	196+65	39	10/29/2020
173+10	173+72	62	10/29/2020				
176+83	177+43	60	10/29/2020				
179+61	182+15	254	10/19/2020				
182+15	182+50	35	10/6/2020				
182+50	182+58	8	10/19/2020				
184+19	185+65	146	10/19/2020				
187+50	189+23	173	10/18/2020				
191+11	195+71	460	10/18/2020				
196+40	196+75	35	10/19/2020				

### 201.20010000 INVASIVE PLANT SPECIES CONTROL, REMOVAL, AND DISPOSAL

STATION	OFFSET	SPECIES	INFESTATION	AREA	REMARKS
154+62	45.7' RT	REED CANARY GRASS	3 PLANTS	4' X 5'	
171+71	48.3' RT	REED CANARY GRASS	1 PLANT	1' X 1'	
185+53	19.0' RT	OXEYE DAISY	1 PLANT	1' X 1'	
190+56	48.1' RT	REED CANARY GRASS	1 PLANT	0.5' X 0.5'	

### 630.0002.0001 GEOTEXTILE, STABILIZATION (SY)

KTN: Reconstruct Road to Airport Boundary  
SFHWY00156/0952019

**Geotextile Stabilization**

Start Station	End Station	Area (SY)	Date Installed
180+00	180+50	200	6/23/2020
187+35	N/A	33	7/19/2020
188+00	189+25	674	7/10/2020
184+50	185+50	281	7/30/2020
186+59.7	187+15	238	7/29/2020
181+00	183+50	410	8/3/2020
159+50	159+75	75	8/12/2020
163+75	164+69	327	8/14/2020
180+90	181+53	49	8/15/2020
177+00	177+50	139	8/18/2020
191+50	192+20	179	9/16/2020
192+20	193+50	332	9/17/2020
193+50	194+25	217	9/18/2020
180+50	181+25	96	9/19/2020
195+00	196+00	289	9/19/2020
196+00	196+70	179	9/21/2020
173+50	174+50	256	10/18/2020

\*\* P5 Culvert Inlet

### 615.0001.0000 STANDARD SIGN SUMMARY

SIGN #	LEGEND	STA.	OFFSET	ASDS CODE	WIDTH (IN)	HEIGHT (IN)	AREA (SQ FT)	POST	EMBED. DEPTH	SIGN FACING
1	SIDE ROAD (PERPENDICULAR)	150+75	LT	W2-2R	36	36	9.00	2.5 PST	4" - 6"	N
2	SPEED LIMIT 25	151+90	RT	R2-1	30	36	7.50	2.5 PST	4" - 6"	S
3	ROAD NARROWS	154+00	RT	W5-1	36	36	9.00	2.5 PST	4" - 6"	S
4	SPEED LIMIT 25	195+46	LT	R2-1	30	36	7.50	2.5 PST	4" - 6"	N

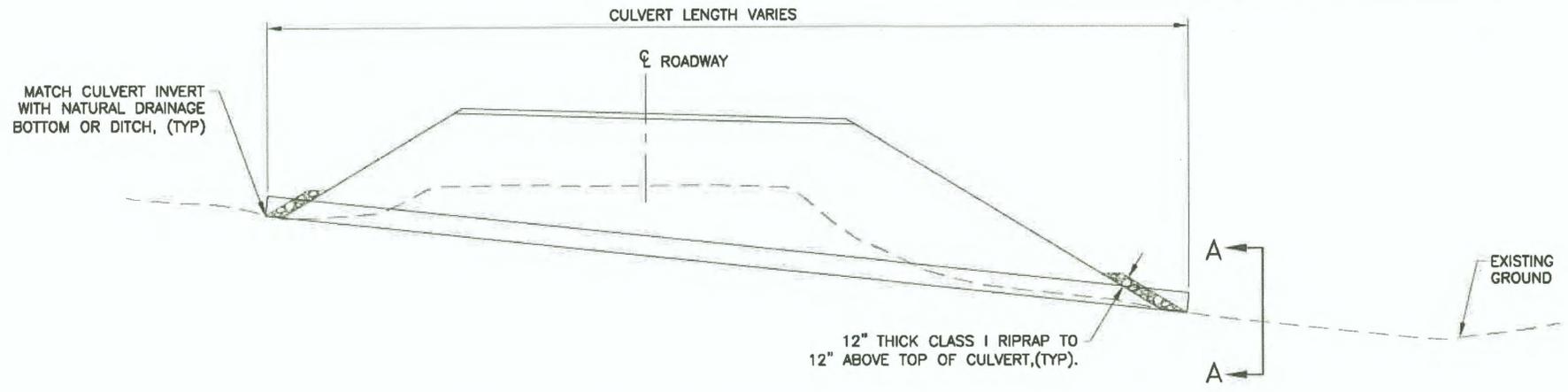
NOTE: INSTALL SIGN POSTS WITH SLEEVE TYPE SOIL EMBEDMENT PER STANDARD PLAN S-30.04, EXCEPT IN ROCK INSTALLATION LOCATIONS. (2x 2.5 PST) left in place from previous project - Faces East



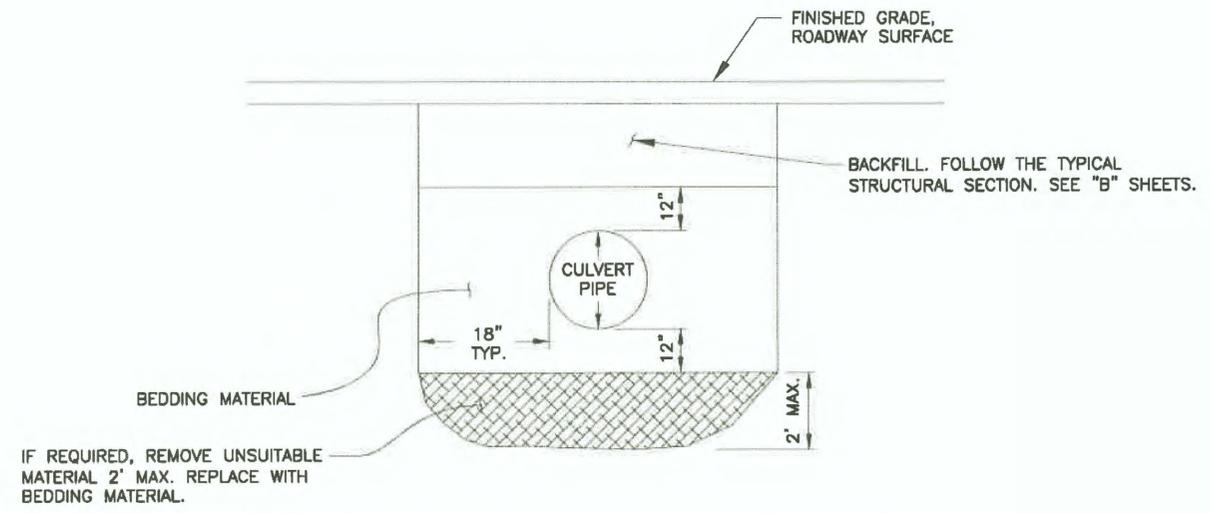
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
 8860 GLACIER HIGHWAY, JUNEAU, AK 99811  
 (907) 465-1763  
**KTN RECONSTRUCT ROAD TO AIRPORT BOUNDARY (RP-AK022)**

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWHY00156	2019	E1	26

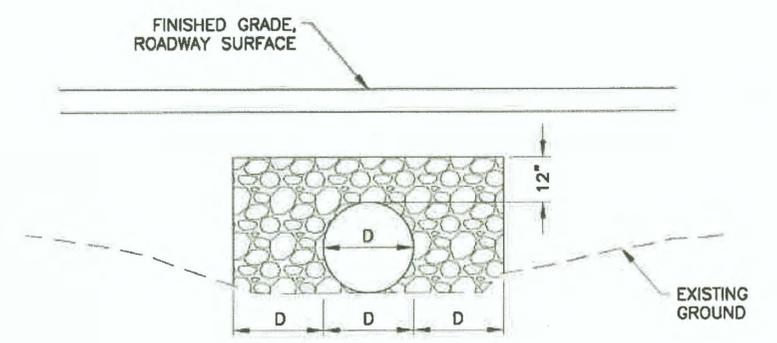
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.  
*Emily G. Lester* Date: 1/20/21  
 PE-11514



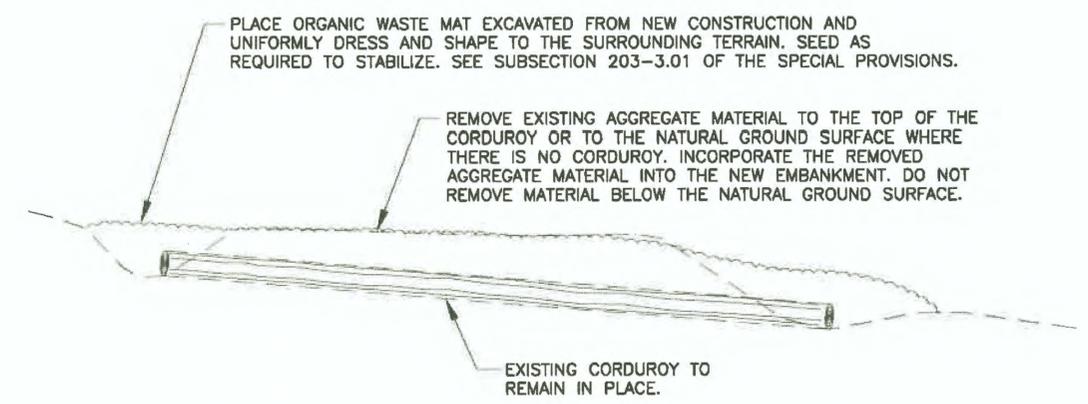
**TYPICAL CROSS DRAINAGE CULVERT**  
 SEE J SHEETS FOR DETAILS AT SPECIFIC STREAM CROSSINGS



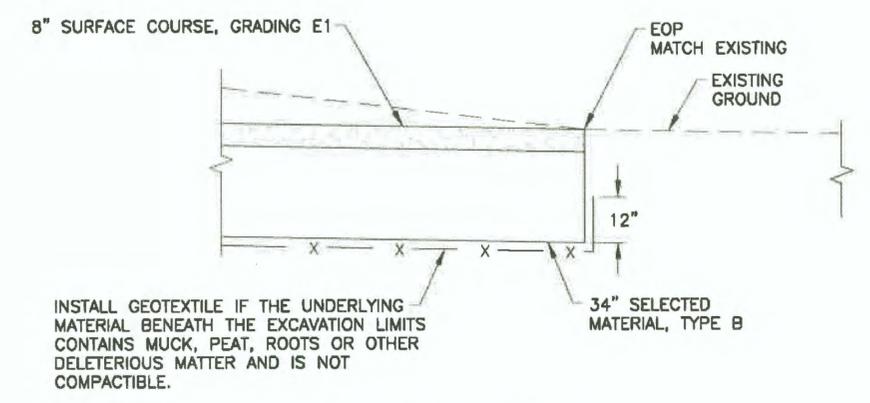
**TYPICAL CULVERT EMBEDMENT DETAIL**  
 N.T.S.



**SECTION A-A**  
 N.T.S.



**OBLITERATION OF ROADWAY DETAIL**  
 N.T.S.



**EOP MATCH DETAIL**  
 N.T.S.



STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
 6860 GLACIER HIGHWAY, JUNEAU, AK 99811  
 (907) 465-1763

**KTN RECONSTRUCT ROAD TO AIRPORT BOUNDARY (RP-AK022)**

MISCELLANEOUS DETAILS

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 CHECKED D. L.  
 DRAFTED D. S.

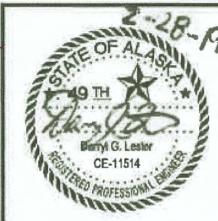
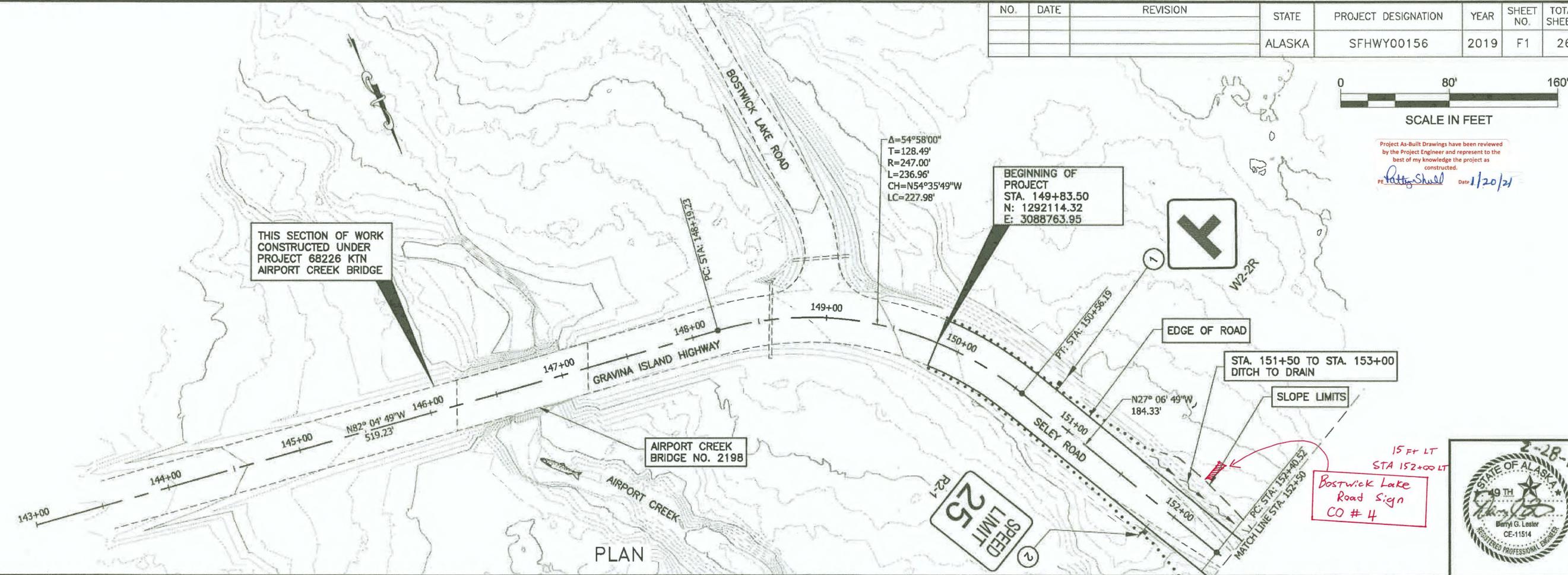
FIRM STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
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ADDRESS 6860 GLACIER HWY, JUNEAU, AK 99811  
 PHONE (907) 485-1763  
 DESIGNED D.S.  
 CHECKED D.L.  
 DRAFTED D.S., R.G.  
 DATE 1/29/2019 13:20 LAYOUT F1

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00156	2019	F1	26

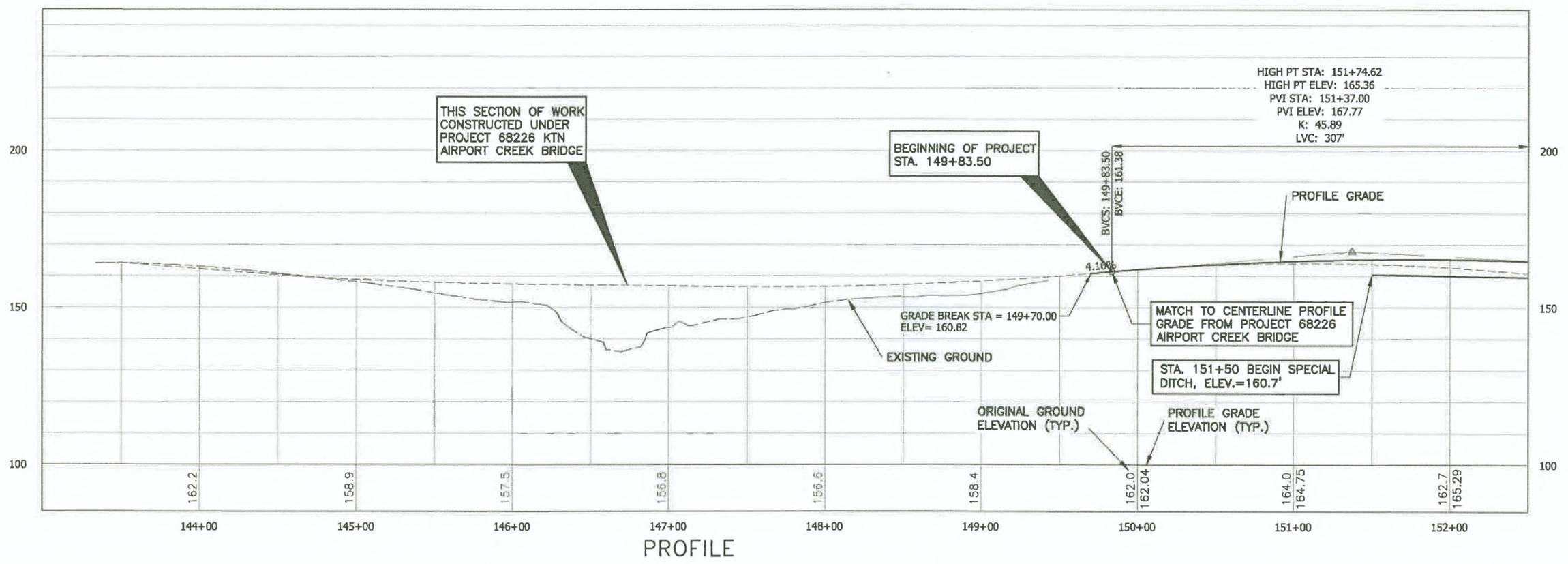


Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.  
 PE *Patty Shul* Date 1/20/21



15 FT LT  
 STA 152+00 LT  
 Bostwick Lake Road Sign  
 CO # 4

PLAN & PROFILE

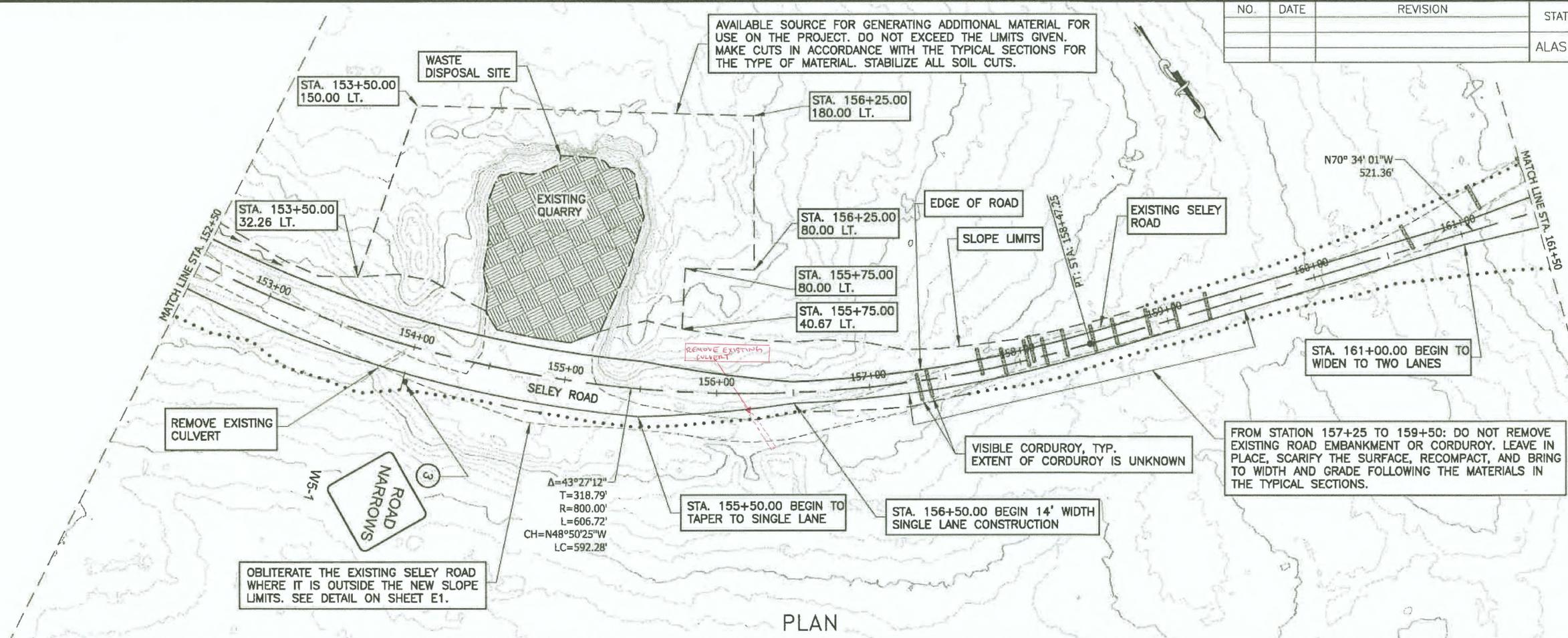
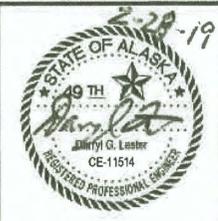


PROFILE

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			ALASKA	SFWY00156	2019	F2	26

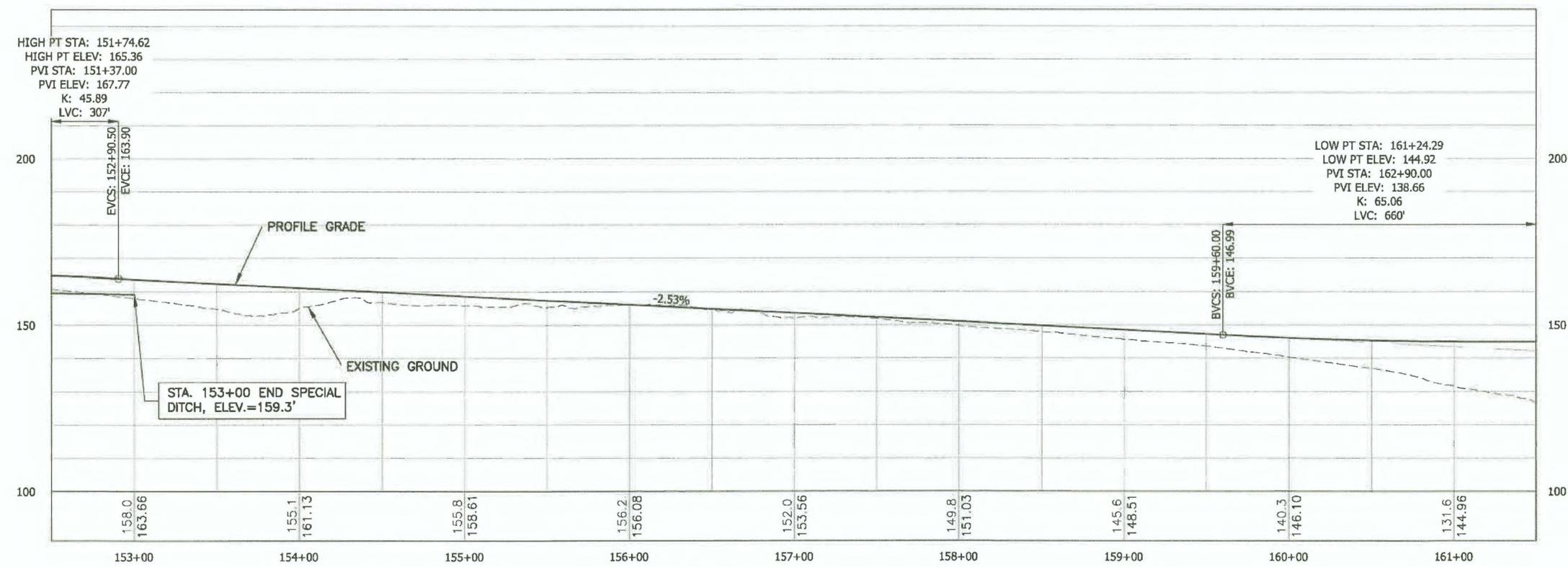


Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.  
 P. [Signature] Date: 1/22/21



PLAN

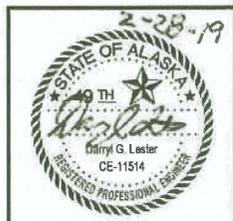
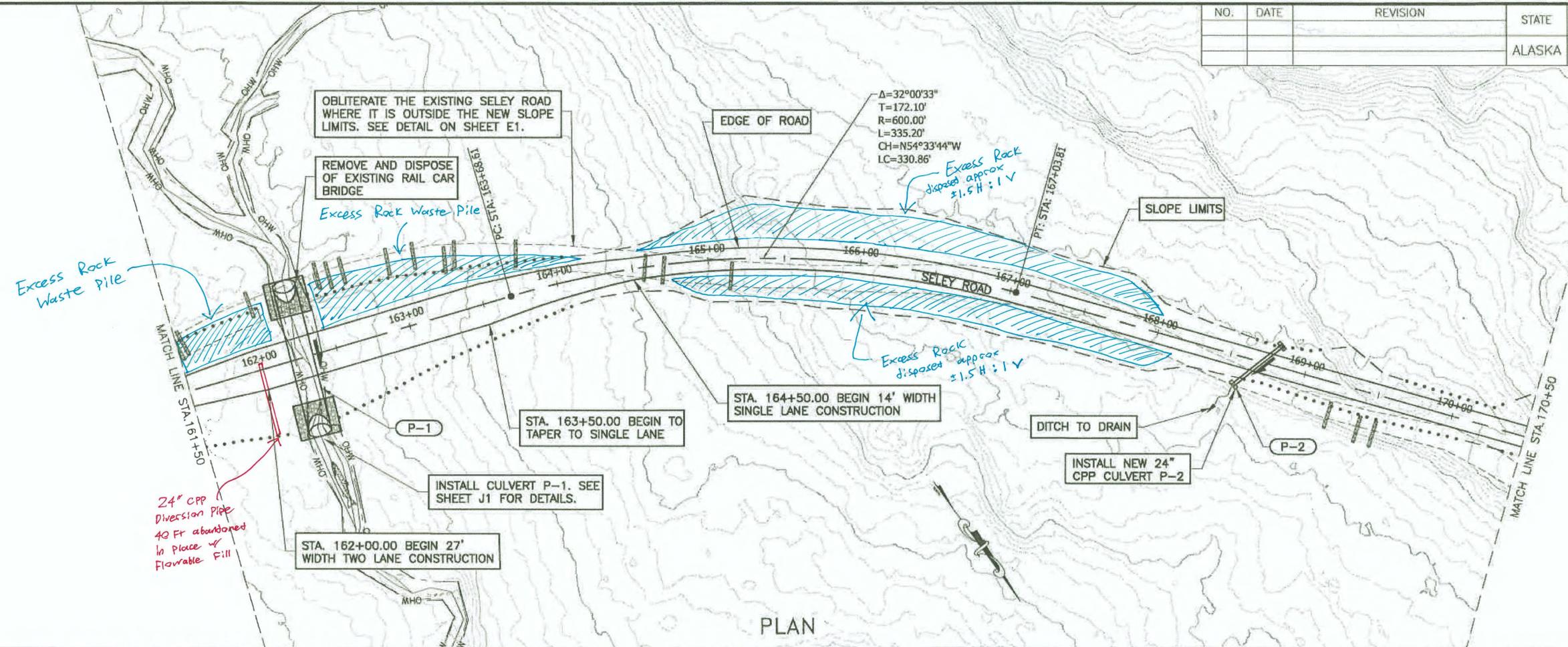
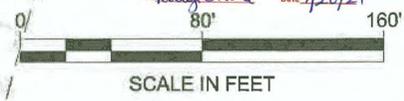
PLAN & PROFILE



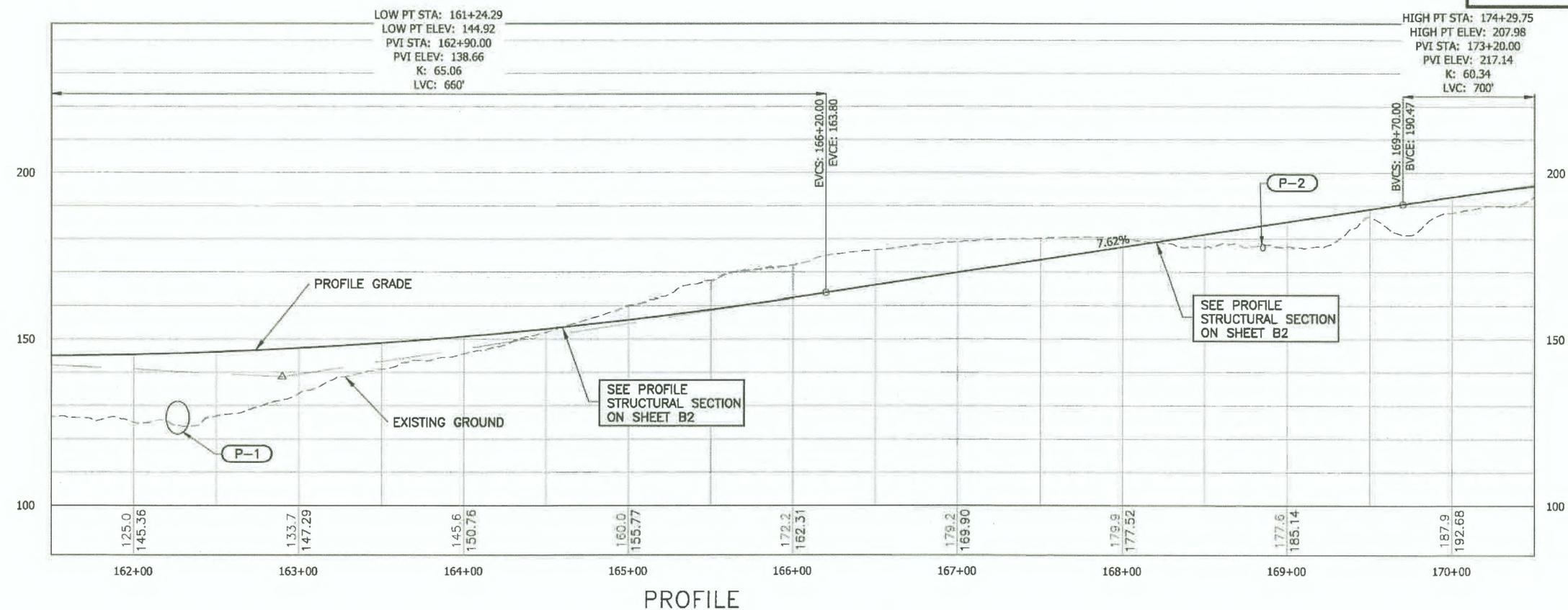
PROFILE

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHwy00156	2019	F3	26

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.  
 P. Shul Date 1/20/21



PLAN & PROFILE

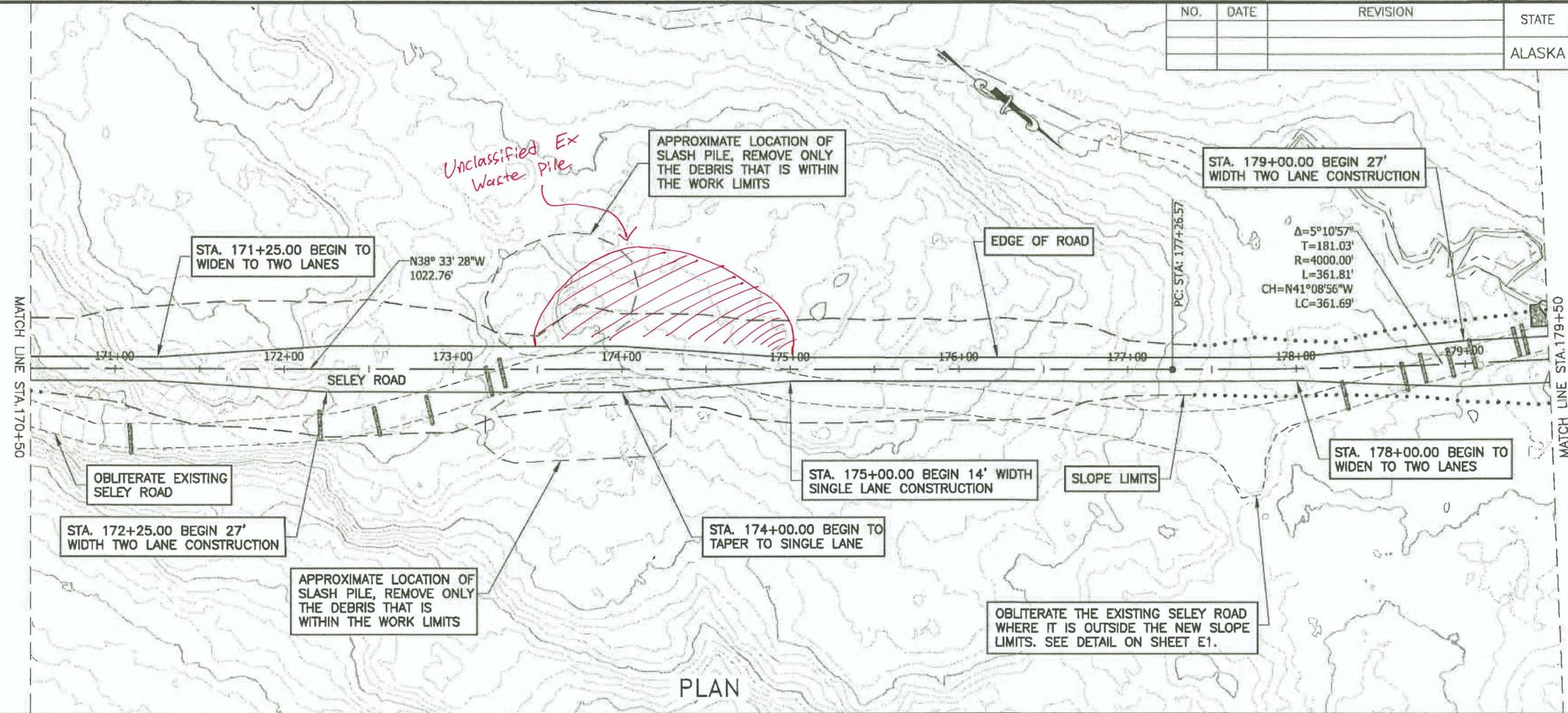


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 ADDRESS 6860 GLACIER HWY, JUNEAU, AK 99811  
 PHONE (907) 465-1763  
 DESIGNED D.S.  
 CHECKED D.L.  
 DRAFTED D.S., R.G.  
 CERTIFICATE OF AUTH #

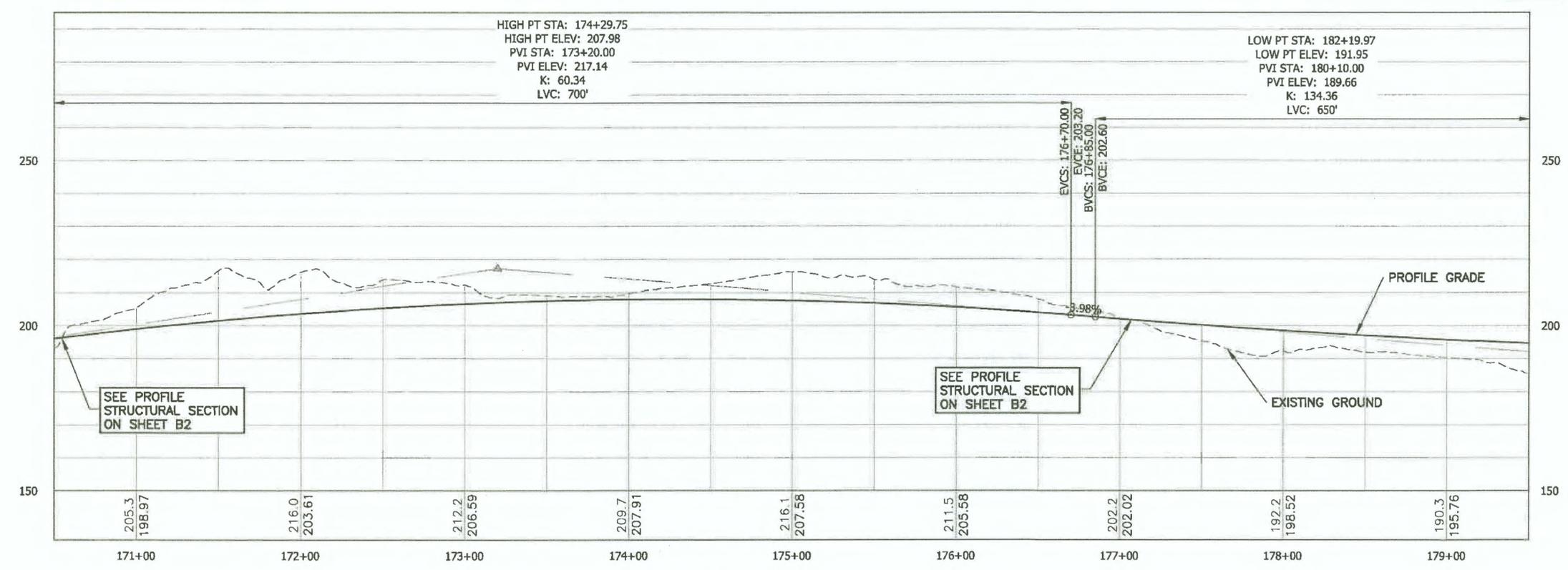
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFH\WY00156	2019	F4	26



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.  
 P. Kelly Shull Date 1/20/21

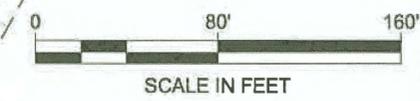
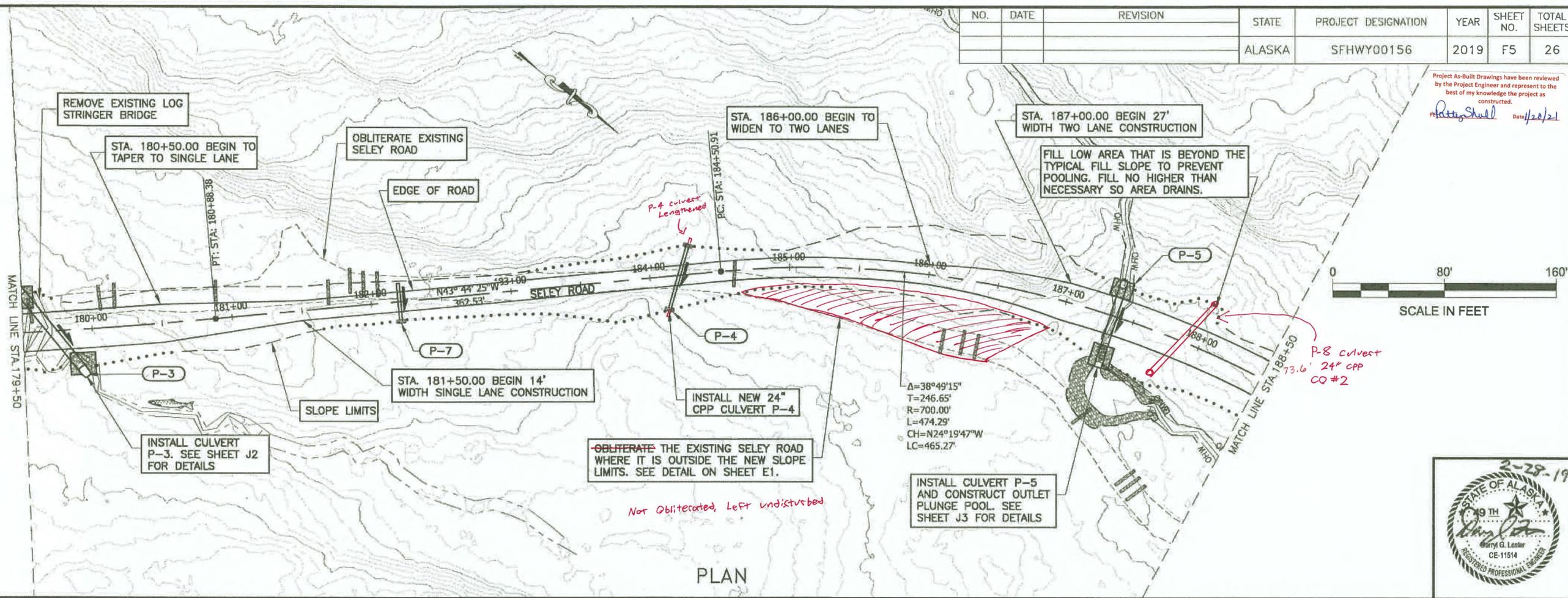


PLAN & PROFILE

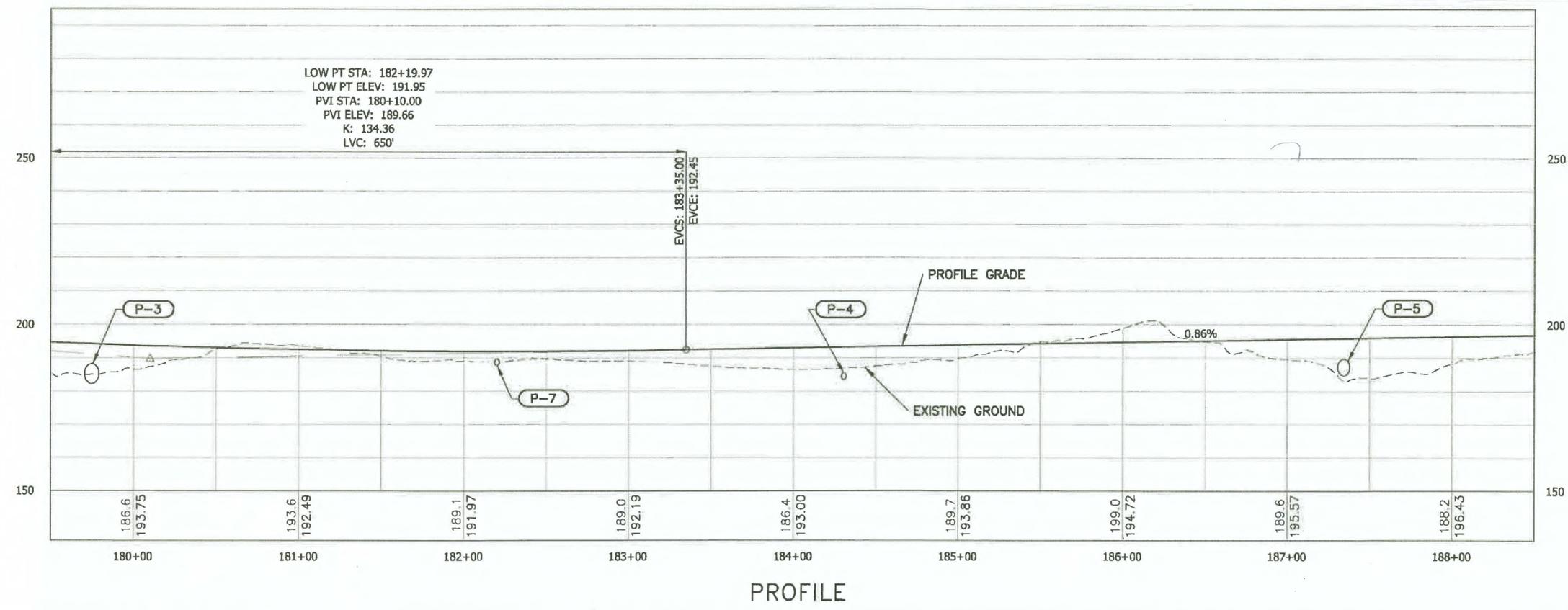


PROFILE

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.  
 Date 1/20/21

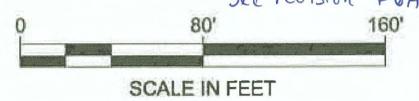


PLAN & PROFILE

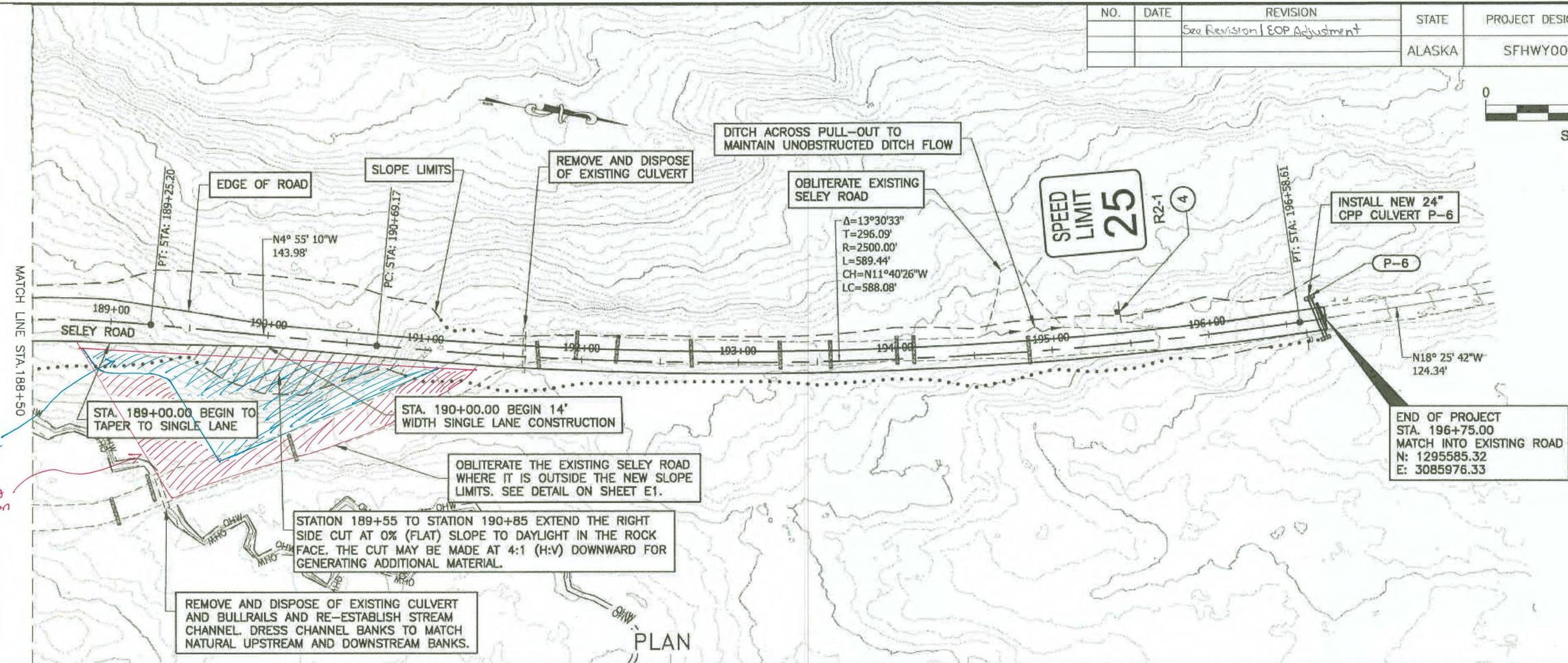


FIRM STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
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 PHONE (907) 465-1763  
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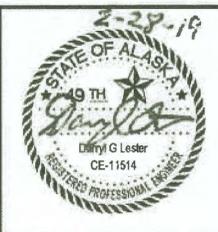
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
		See Revision EOP Adjustment	ALASKA	SFH\00156	2019	F8	26



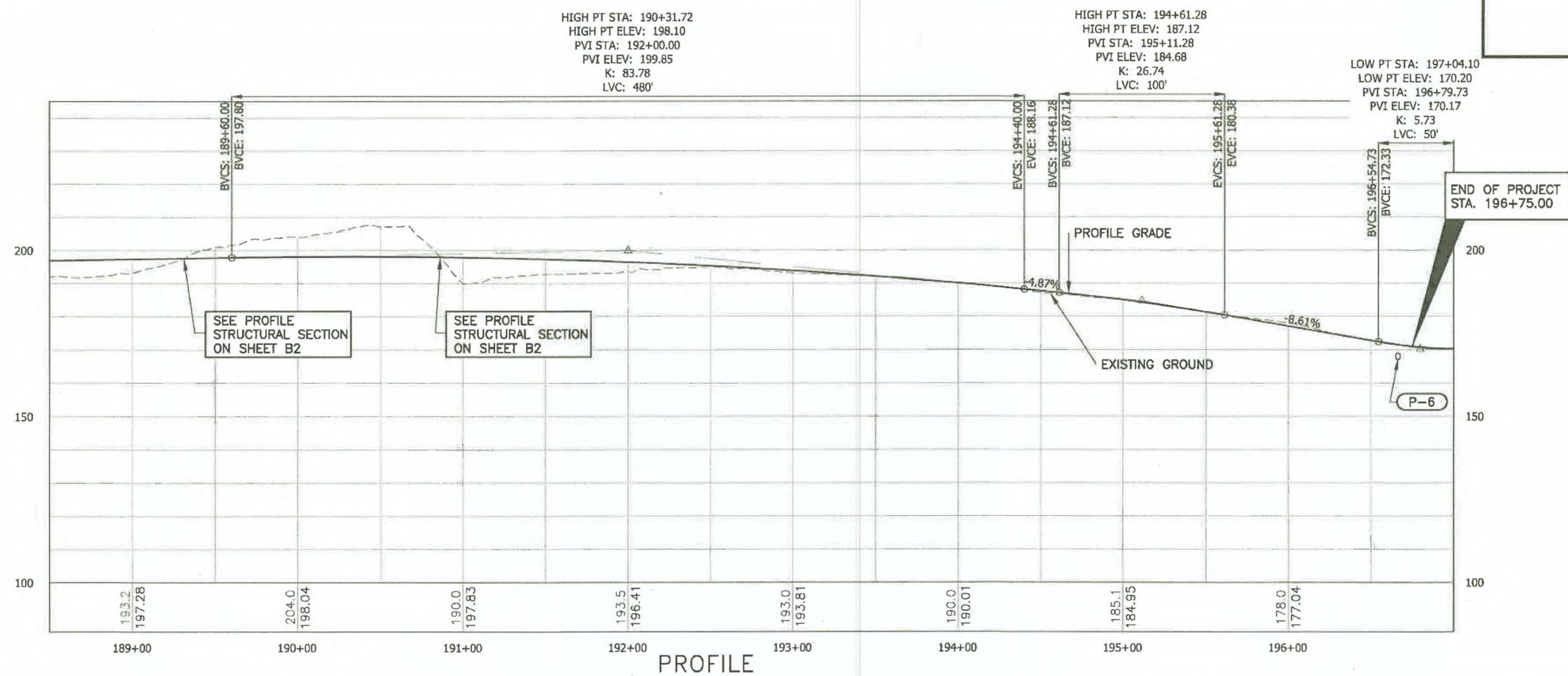
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.  
 P. Kelly Shull Date: 1/20/21



Overlap of Piles  
 Excess Rock sits on Top  
 OF Unclassified Ex Waste  
 Excess Rock  
 Waste Pile  
 Unclassified  
 Excavation  
 Waste  
 Pile



PLAN & PROFILE

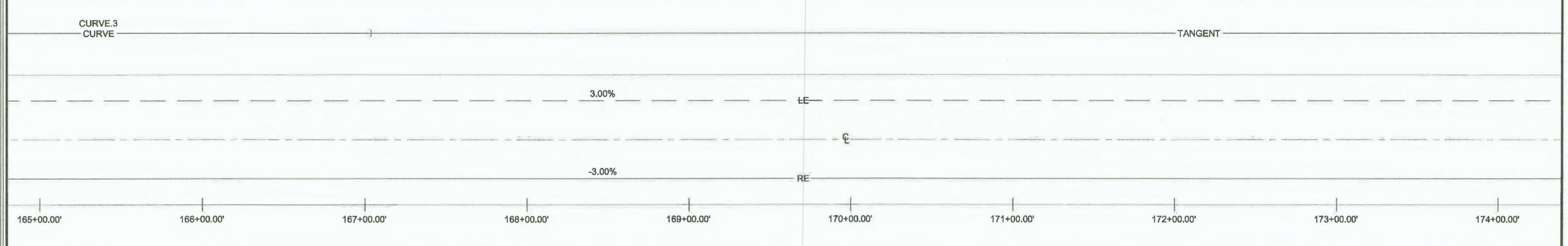
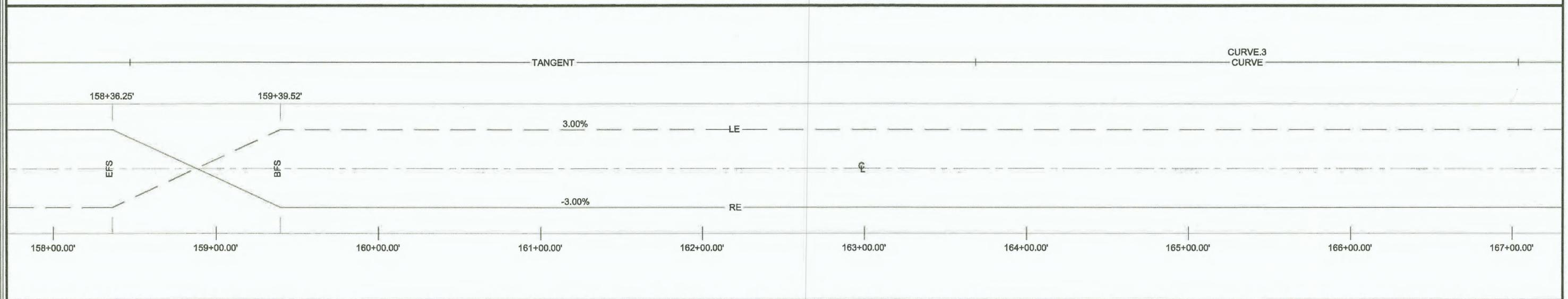
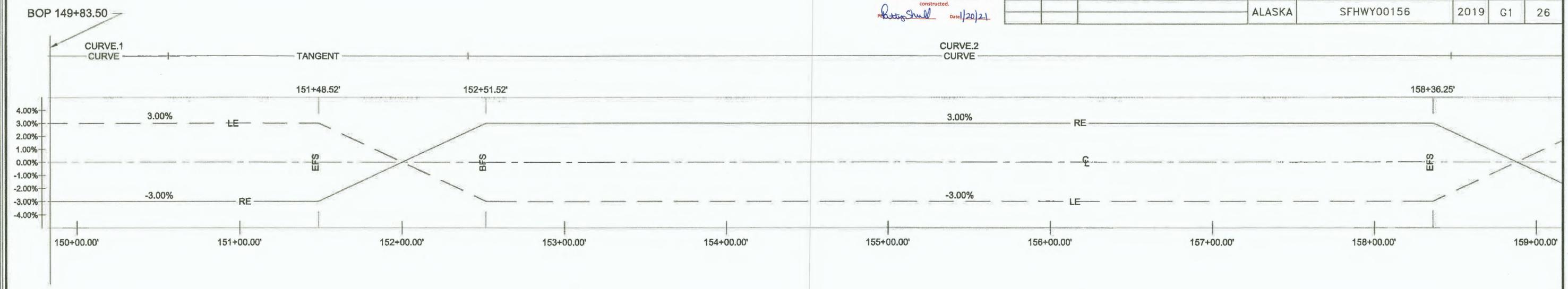




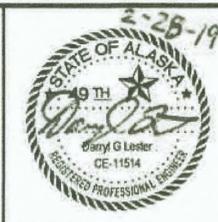
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 DATE: 1/30/2019 12:57  
 LAYOUT: G1  
 DESIGNED: D. S.  
 CHECKED: D. L.  
 DRAFTED: D. S.

Project As-Built Drawings have been reviewed  
 by the Project Engineer and represent to the  
 best of my knowledge the project as  
 constructed.  
*Robert Small* Date: 1/20/21

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFH\00156	2019	G1	26



LEGEND	
BFS:	BEGIN FULL SUPERELEVATION
EFS:	END FULL SUPERELEVATION
--- LE ---	LEFT EDGE
--- RE ---	RIGHT EDGE
--- CL ---	CENTERLINE

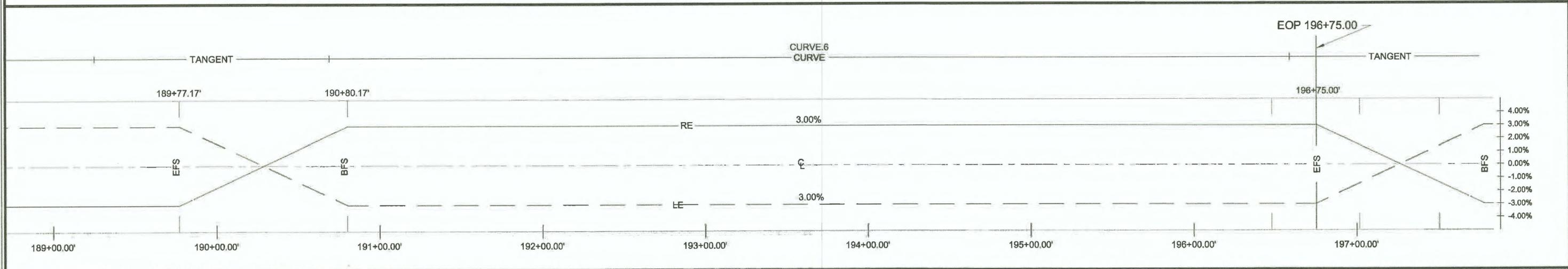
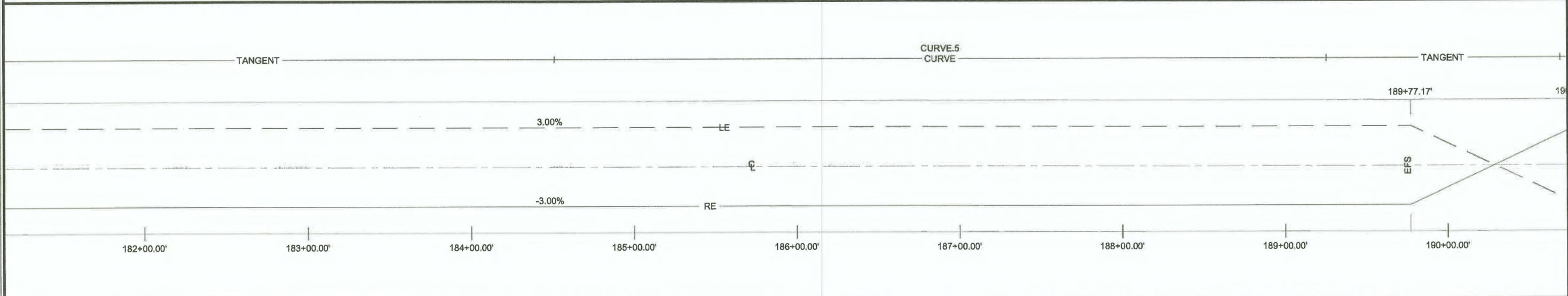
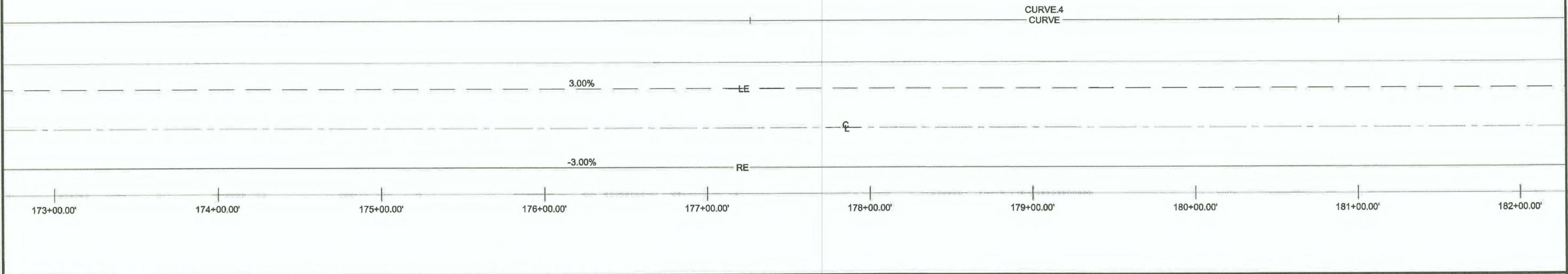


STATE OF ALASKA DEPARTMENT OF  
 TRANSPORTATION  
 AND PUBLIC FACILITIES  
 6860 GLACIER HIGHWAY, JUNEAU, AK 99811  
 (907) 465-1763  
**KTN RECONSTRUCT ROAD TO  
 AIRPORT BOUNDARY (RP-AK022)**  
 SUPERELEVATION PROFILE

FILE Q:\Wta\SFH\WY00156\Planes\00156\_G1-G2.dwg DATE 2/20/2019 11:35 LAYOUT G2 DESIGNED D. S. CHECKED D. L. DRAFTED D. S.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.  
*Darryl G Lester* Date 12/20/20

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFH\WY00156	2019	G2	26



LEGEND	
BFS:	BEGIN FULL SUPERELEVATION
EFS:	END FULL SUPERELEVATION
--- LE ---	LEFT EDGE
--- RE ---	RIGHT EDGE
--- CL ---	CENTERLINE



STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
 6860 GLACIER HIGHWAY, JUNEAU, AK 99811  
 (907) 465-1753

**KTN RECONSTRUCT ROAD TO AIRPORT BOUNDARY (RP-AK022)**

**SUPERELEVATION PROFILE**

FIRM STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 FILE G:\Ktn\SFWY00156\Planset\00156\_J1-03.dwg  
 ADDRESS 8860 GLACIER HWY, JUNEAU, AK 99811  
 DATE 2/28/2019 7:58 LAYOUT J1  
 PHONE (907) 465-1763 DESIGNED D.S.  
 CHECKED M.S.  
 DRAFTED D.S., R.G.  
 CERTIFICATE OF AUTH #

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFWY00156	2019	J1	26

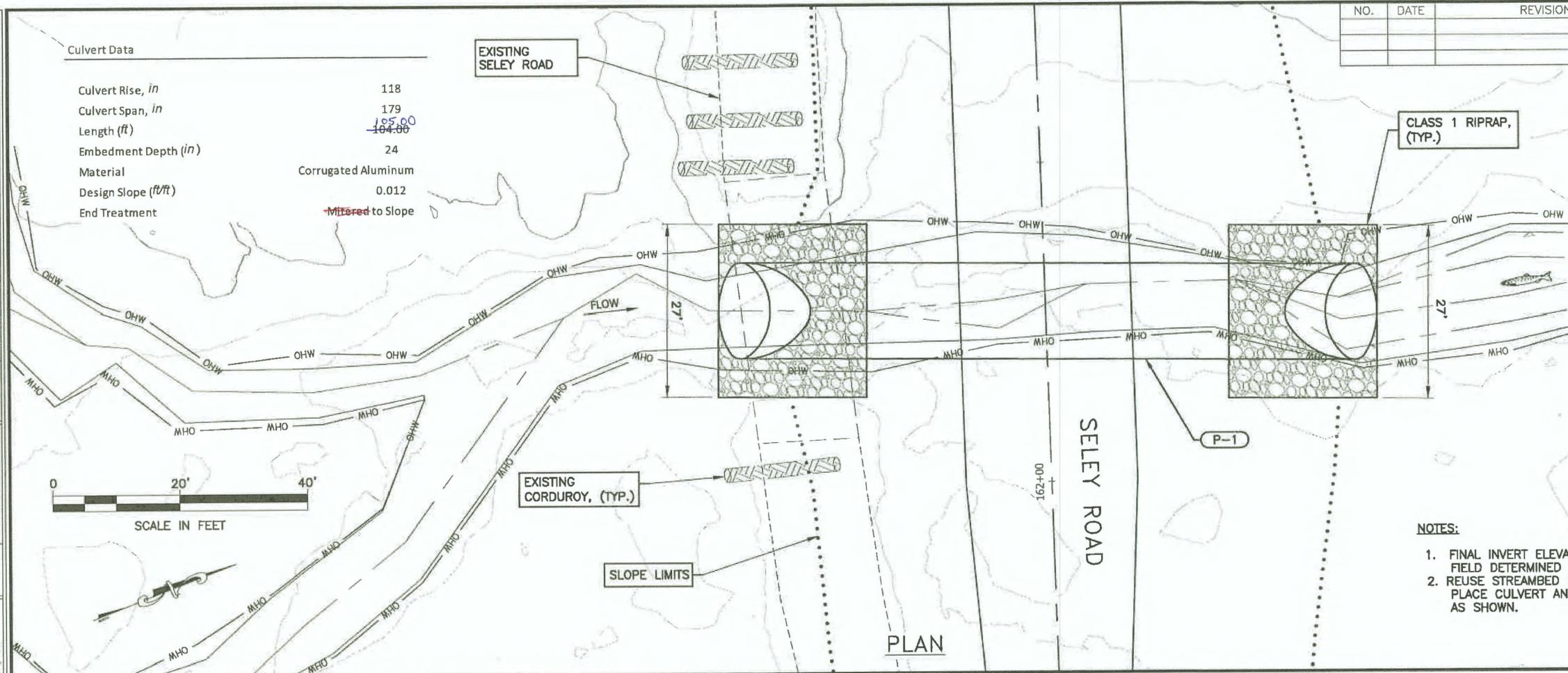
**Culvert Data**

Culvert Rise, in	118
Culvert Span, in	179
Length (ft)	167.00
Embedment Depth (in)	24
Material	Corrugated Aluminum
Design Slope (ft/ft)	0.012
End Treatment	Mitered to Slope

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.  
 P. H. Shull  
 Date: 12/20/20

**Hydraulic Summary**

Design Storm Events	Discharge cfs	Head ft
Q <sub>50%</sub>	142.50	2.63
Q <sub>20%</sub>	189.19	3.16
Q <sub>10%</sub>	226.59	3.55
Q <sub>4%</sub>	278.52	4.05
Q <sub>2%</sub>	318.10	4.40
Q <sub>1%</sub>	360.80	4.80
Q <sub>0.2%</sub>	467.93	5.75
Pipe Full (HW/D=1)	706.62	7.87
Overtopping Discharge (Estimated)	2303.84	22.03
Roadway Overtopping Discharge Annual Exceedance Probability, %		0.0007%



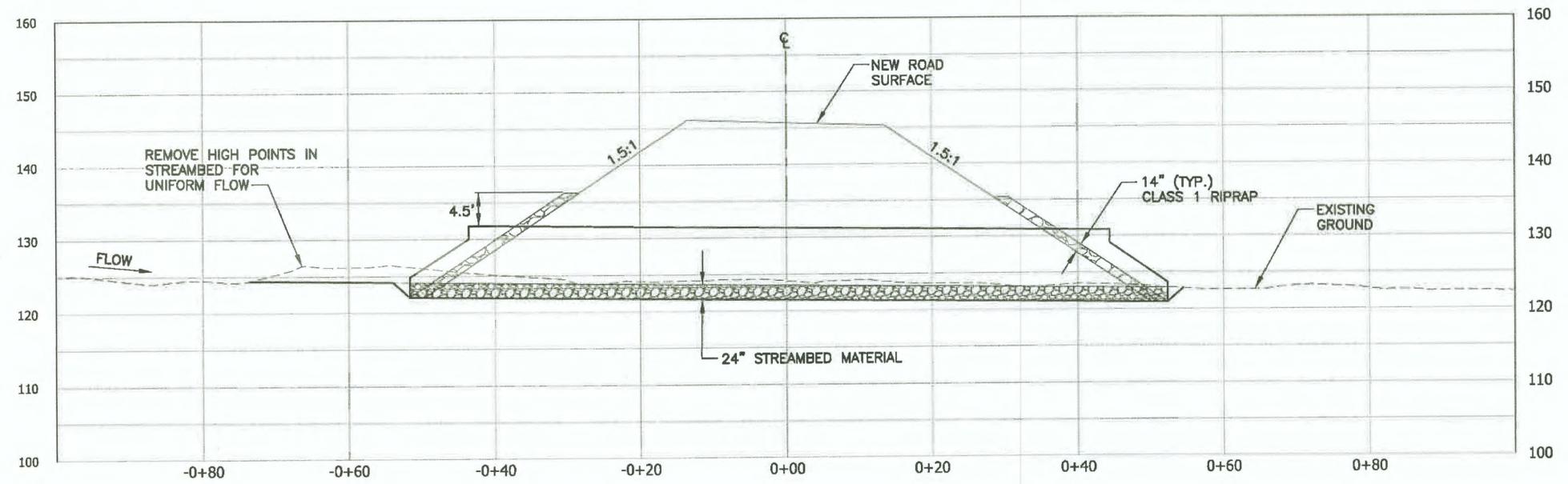
PLAN

**NOTES:**

1. FINAL INVERT ELEVATIONS SHALL BE FIELD DETERMINED BY THE ENGINEER.
2. REUSE STREAMBED MATERIAL EXCAVATED TO PLACE CULVERT AND PLACE INSIDE CULVERT AS SHOWN.



CULVERT PLAN & PROFILE  
 STA. 162+27



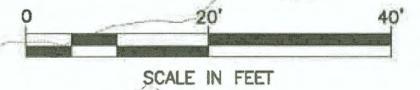
PROFILE

FIRM STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 ADDRESS 6880 GLACIER HWY. JUNEAU, AK 99811  
 PHONE (907) 465-1763  
 CERTIFICATE OF AUTH. # DRAFTED D.S., R.G.  
 DESIGNED D.S. CHECKED M.S.  
 DATE 2/25/2019 7:58 LAYOUT J2  
 FILE C:\k1\SFHWY00156\PlanSet\00156\_u3-43.dwg

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWHY00156	2019	J2	26

**Culvert Data**

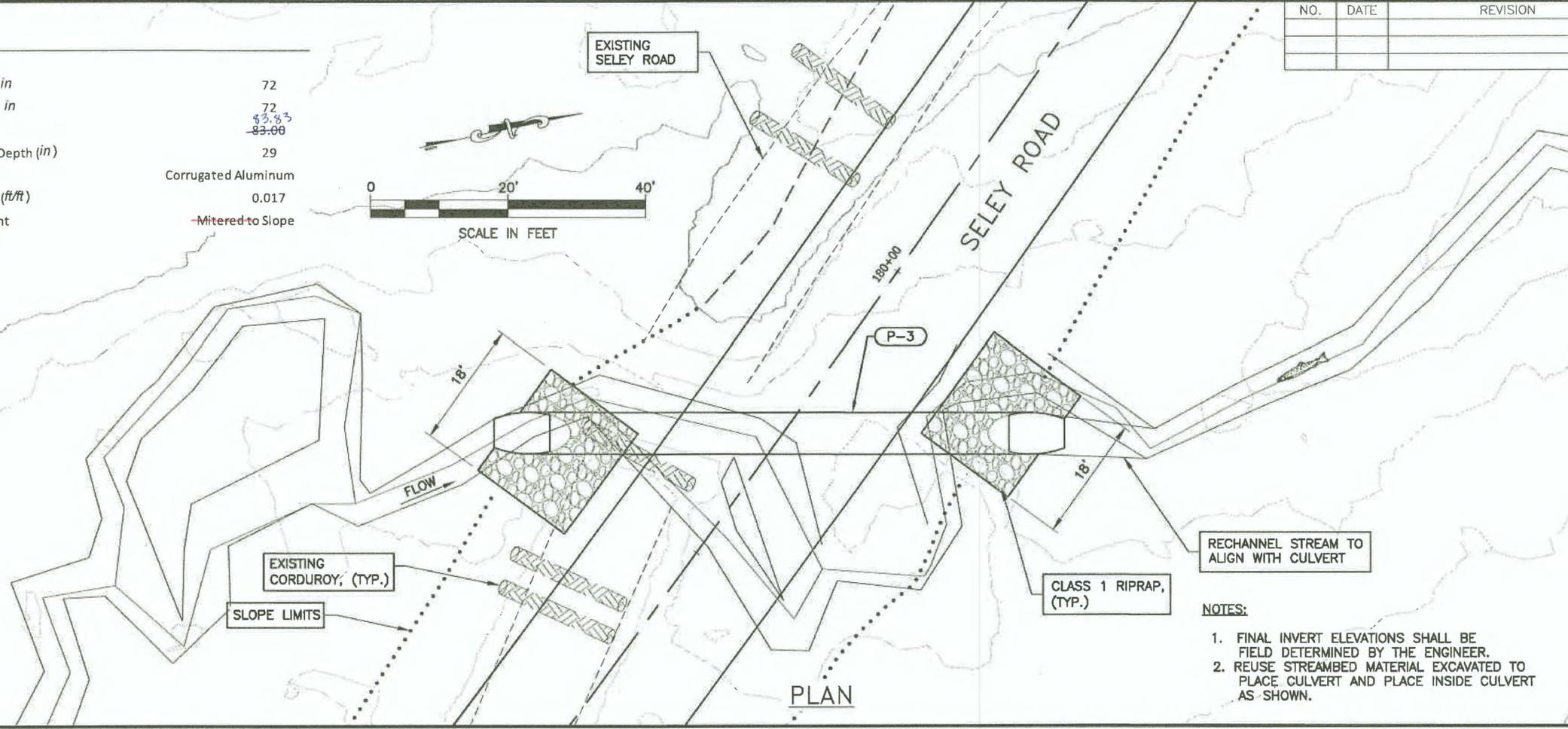
Culvert Rise, in	72
Culvert Span, in	72
Length (ft)	83.83 <del>83.06</del>
Embedment Depth (in)	29
Material	Corrugated Aluminum
Design Slope (ft/ft)	0.017
End Treatment	Mitered to Slope



**Hydraulic Summary**

Design Storm Events	Discharge cfs	Head ft
Q <sub>50%</sub>	35.66	1.99
Q <sub>20%</sub>	47.39	2.40
Q <sub>10%</sub>	56.81	2.71
Q <sub>4%</sub>	69.87	3.13
Q <sub>2%</sub>	79.83	3.44
Q <sub>1%</sub>	90.59	3.77
Q <sub>0.2%</sub>	117.54	4.66
Pipe Full (HW / D = 1)	84.97	3.60
Overtopping Discharge (Estimated)	281.97	10.09
Roadway Overtopping Discharge Annual Exceedance Probability, %		0.0116%

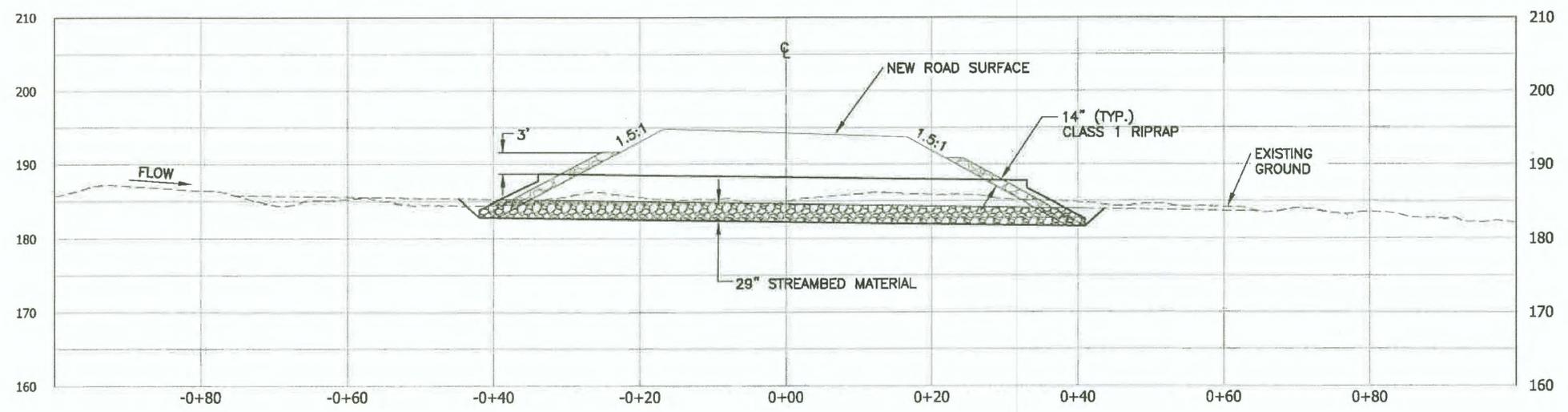
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.  
 Date: 1/20/21  
 [Signature]



- NOTES:**
1. FINAL INVERT ELEVATIONS SHALL BE FIELD DETERMINED BY THE ENGINEER.
  2. REUSE STREAMBED MATERIAL EXCAVATED TO PLACE CULVERT AND PLACE INSIDE CULVERT AS SHOWN.



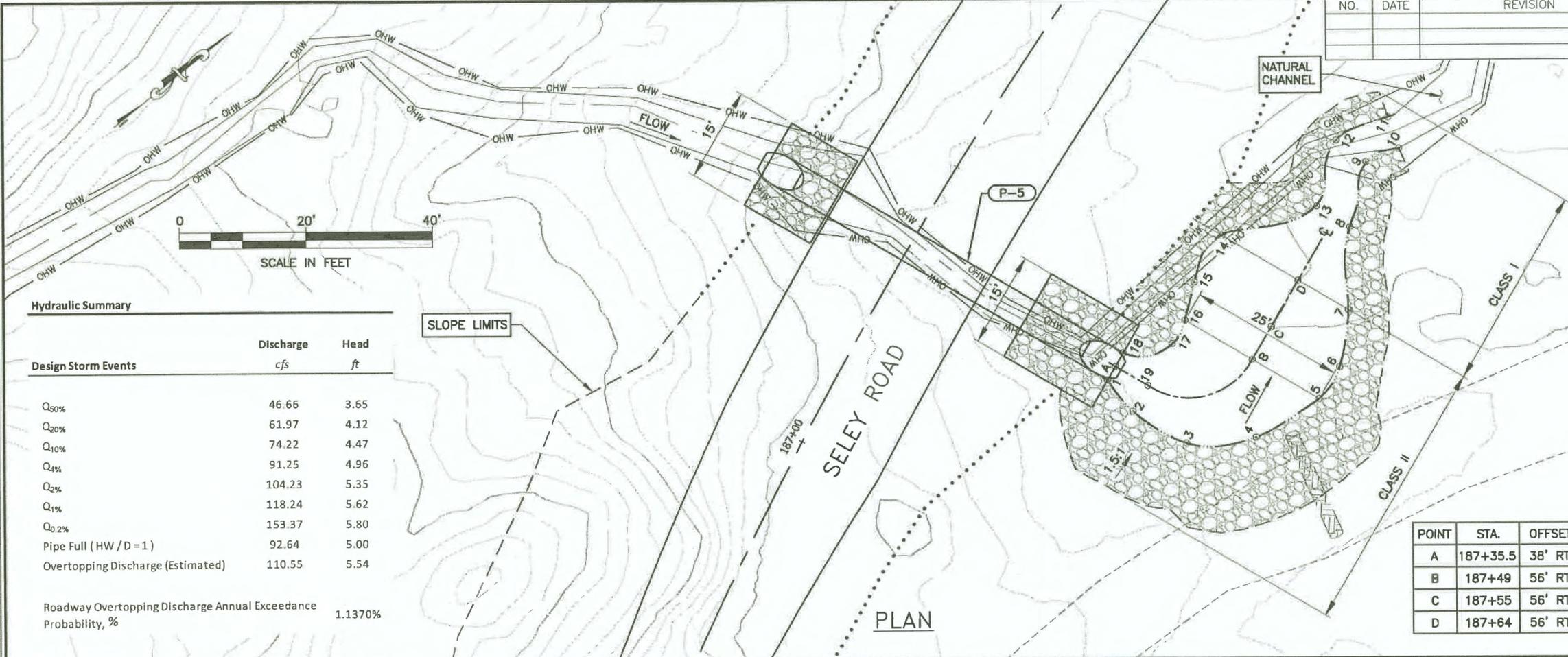
**CULVERT PLAN & PROFILE  
 STA. 179+72**



FIRM STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
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 ADDRESS 6860 GLACIER HWY, JUNEAU, AK 99811  
 PHONE (907) 465-1763  
 CERTIFICATE OF AUTH # DRAFTED D.S., R.G.  
 CHECKED M.S.  
 DESIGNED D.S.  
 LAYOUT J3  
 DATE 2/27/2019 14:56

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHwy00156	2019	J3	26

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.  
 PE *Patricia J. Stull* Date 1/20/21



**Culvert Data**

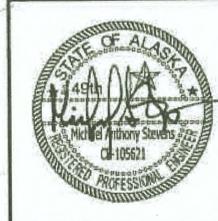
Culvert Rise, in	60
Culvert Span, in	60
Length (ft)	78.00 <i>66.5</i>
Embedment Depth (in)	0
Material	Corrugated Aluminum
Design Slope (ft/ft)	0.156
End Treatment	Mitered to Slope

**Hydraulic Summary**

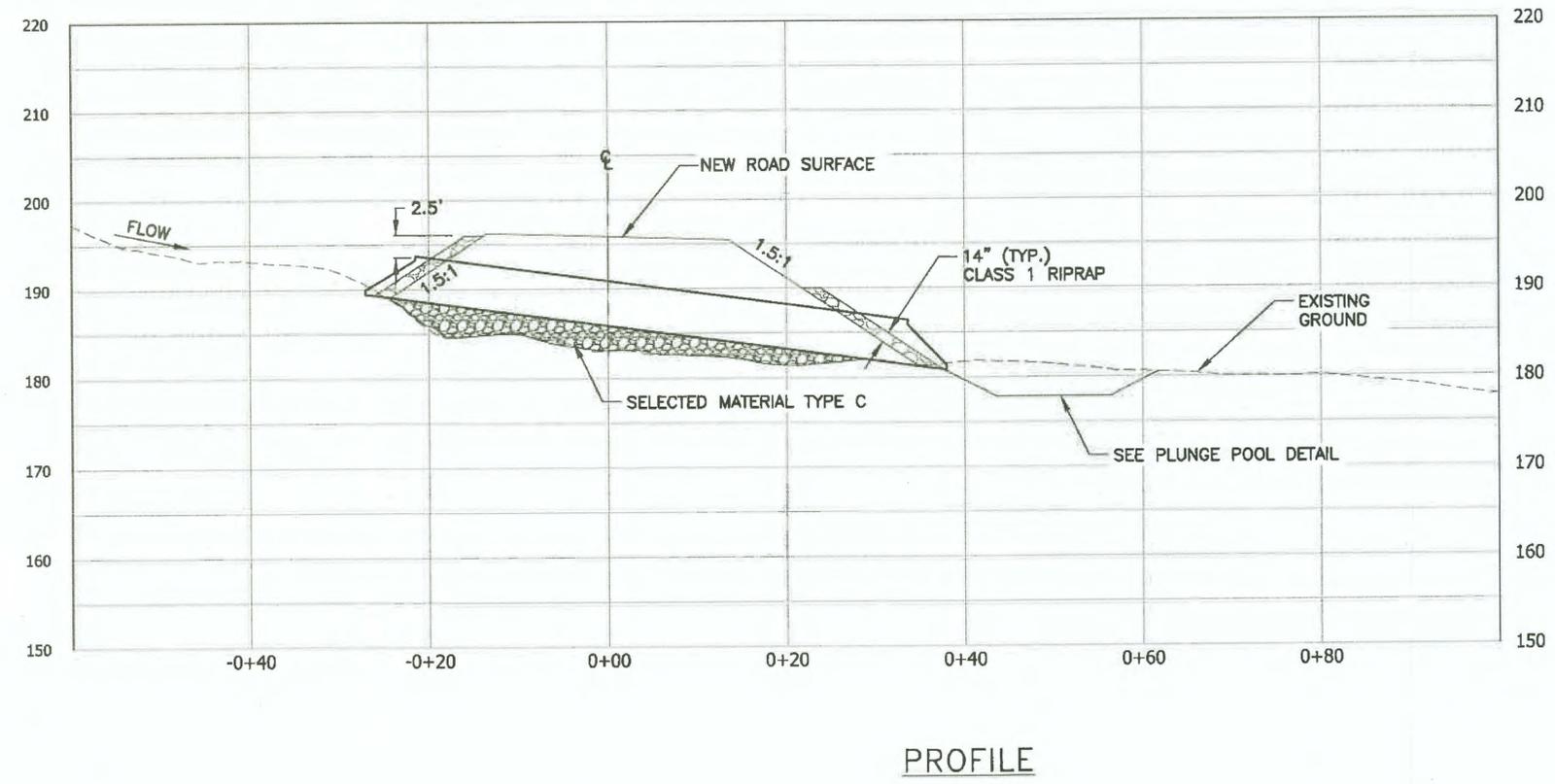
Design Storm Events	Discharge cfs	Head ft
Q <sub>50%</sub>	46.66	3.65
Q <sub>20%</sub>	61.97	4.12
Q <sub>10%</sub>	74.22	4.47
Q <sub>4%</sub>	91.25	4.96
Q <sub>2%</sub>	104.23	5.35
Q <sub>1%</sub>	118.24	5.62
Q <sub>0.2%</sub>	153.37	5.80
Pipe Full (HW/D = 1)	92.64	5.00
Overtopping Discharge (Estimated)	110.55	5.54

Roadway Overtopping Discharge Annual Exceedance Probability, % 1.1370%

POINT	STA.	OFFSET	ELEV.
A	187+35.5	38' RT.	180.8'
B	187+49	56' RT.	177.8'
C	187+55	56' RT.	179.0'
D	187+64	56' RT.	178.3'



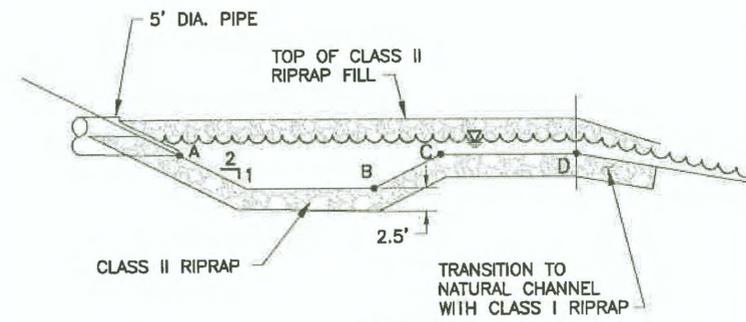
CULVERT PLAN & PROFILE  
 STA. 187+35



**PLUNGE POOL LAYOUT POINTS**

PNT NO.	STATION	OFFSET	ELEVATION
1	187+32.9	38.0	180.8
2	187+30.5	44.0	177.8
3	187+30.4	53.9	177.8
4	187+37.4	62.9	177.8
5	187+48.9	68.3	177.8
6	187+55.6	68.4	179.0
7	187+64.8	64.8	178.3
8	187+76.9	57.8	177.7
9	187+87.7	54.1	177.2
10	187+92.9	57.1	176.9
11	187+96.3	52.8	177.3
12	187+87.9	48.2	177.6
13	187+76.7	51.6	177.9
14	187+63.7	41.5	178.3
15	187+54.6	41.8	179.0
16	187+48.3	43.7	177.8
17	187+43.7	43.9	177.8
18	187+38.2	37.9	180.8
19	187+35.6	44.0	177.8

ELEVATIONS ARE TO BOTTOM OF PLUNGE POOL, TOP OF RIPRAP BED



**PROFILE**  
**PLUNGE POOL DETAIL**  
 N.T.S.  
 EXCAVATE THE POOL TO THE DEPTHS SHOWN OR TO BEDROCK, WHICHEVER IS ENCOUNTERED FIRST.

**PROFILE**

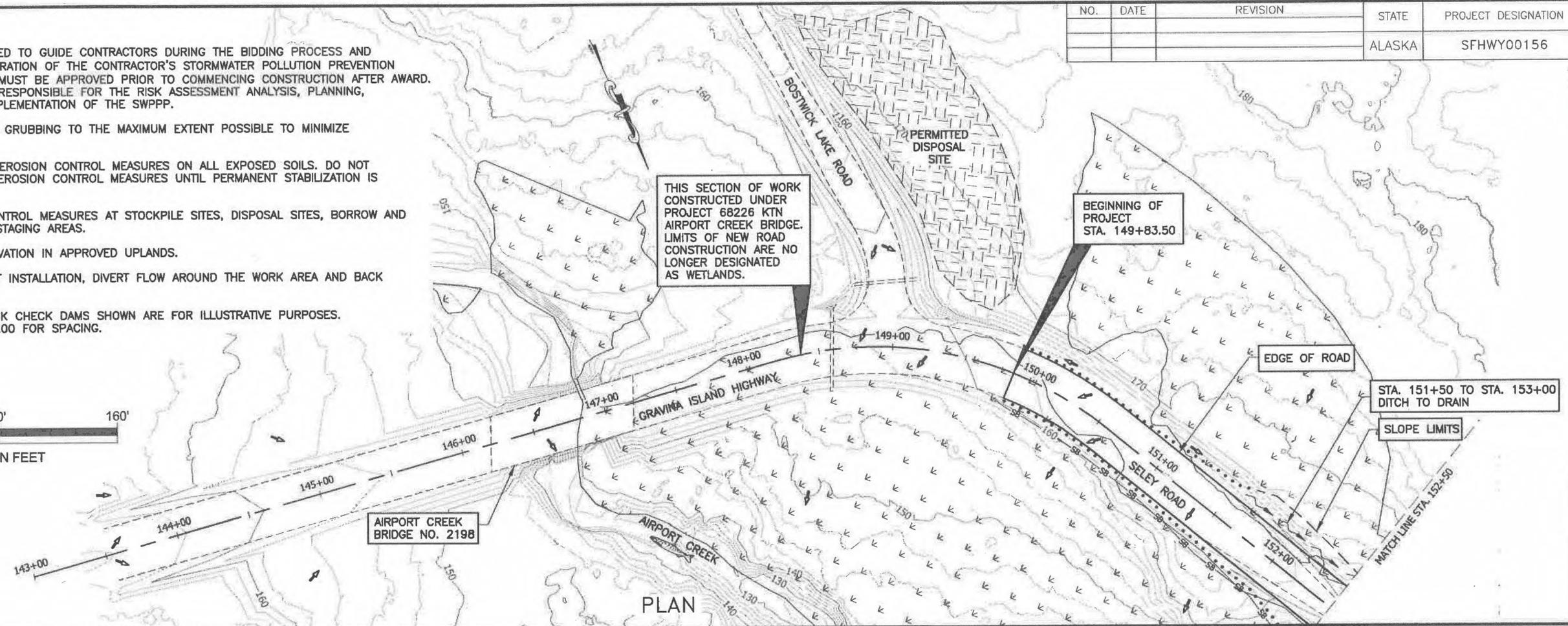
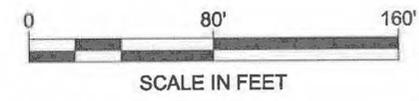
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 ADDRESS 6860 GLACIER HWY, JUNEAU, AK 99811  
 PHONE (907) 465-1763  
 CERTIFICATE OF AUTH # DRAFTED D.S., R.G.  
 DESIGNED D.S.  
 CHECKED D.L.  
 DATE 7/15/2019 14:36 LAYOUT 01

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWD0156	2019	Q1	26

**ESCP NOTES:**

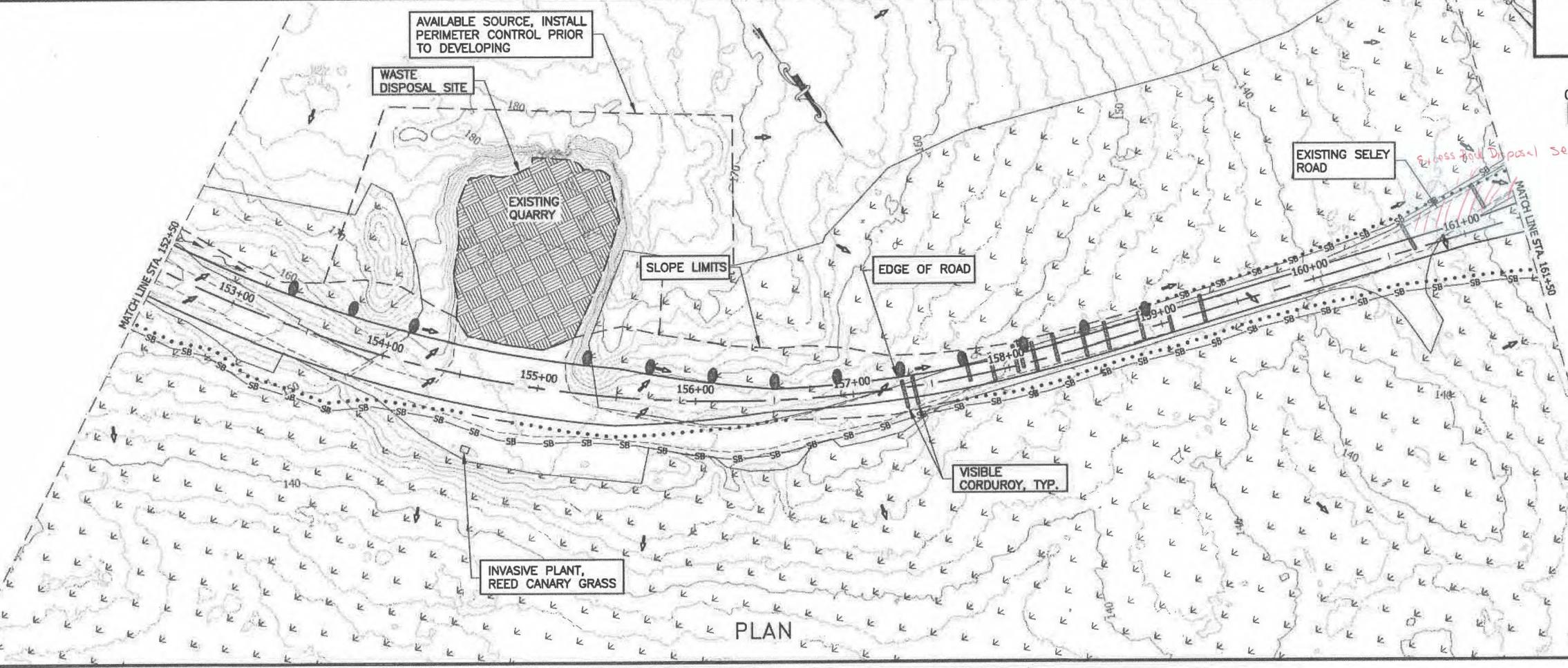
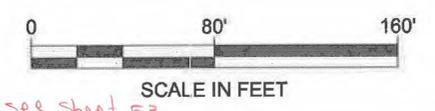
1. THIS ESCP IS INTENDED TO GUIDE CONTRACTORS DURING THE BIDDING PROCESS AND ASSIST IN THE PREPARATION OF THE CONTRACTOR'S STORMWATER POLLUTION PREVENTION PLAN (SWPPP) THAT MUST BE APPROVED PRIOR TO COMMENCING CONSTRUCTION AFTER AWARD. THE CONTRACTOR IS RESPONSIBLE FOR THE RISK ASSESSMENT ANALYSIS, PLANNING, PREPARATION AND IMPLEMENTATION OF THE SWPPP.
2. PHASE CLEARING AND GRUBBING TO THE MAXIMUM EXTENT POSSIBLE TO MINIMIZE EXPOSED SOILS.
3. PROVIDE PERMANENT EROSION CONTROL MEASURES ON ALL EXPOSED SOILS. DO NOT REMOVE TEMPORARY EROSION CONTROL MEASURES UNTIL PERMANENT STABILIZATION IS ESTABLISHED.
4. PROVIDE EROSION CONTROL MEASURES AT STOCKPILE SITES, DISPOSAL SITES, BORROW AND QUARRY SITES, AND STAGING AREAS.
5. DISPOSE WASTE EXCAVATION IN APPROVED UPLANDS.
6. DURING FISH CULVERT INSTALLATION, DIVERT FLOW AROUND THE WORK AREA AND BACK INTO THE STREAM.
7. THE TEMPORARY ROCK CHECK DAMS SHOWN ARE FOR ILLUSTRATIVE PURPOSES. SEE BMP 31.00-33.00 FOR SPACING.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.  
 Patty Shuell Date 1/20/21



ESCP NOT SEALED IN ACCORDANCE WITH ALASKA HIGHWAY PRECONSTRUCTION MANUAL SECTION 1120.7.3 DATED NOVEMBER 15, 2013

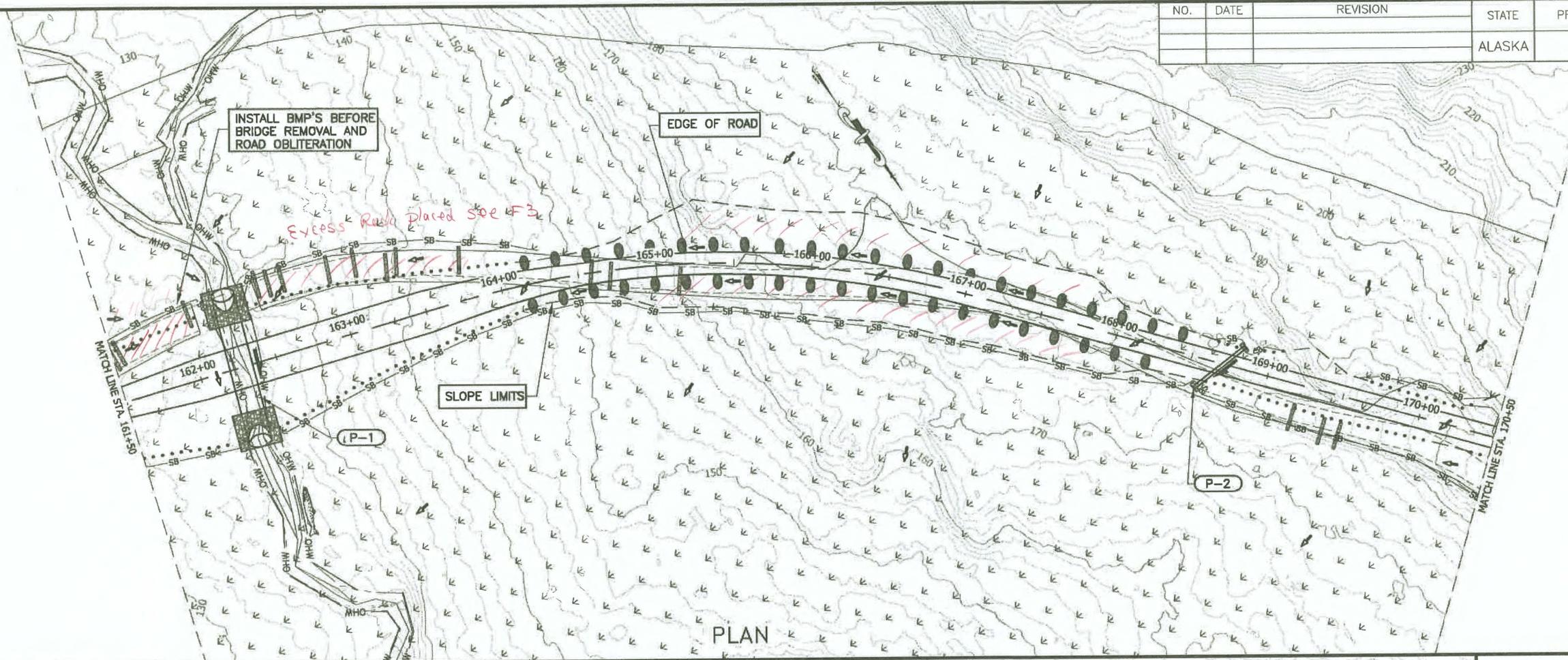
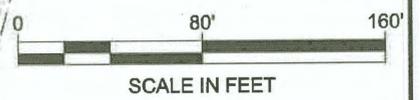
**ESCP PLAN & PROFILE**



FIRM STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
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 ADDRESS 6860 GLACIER HWY, JUNEAU, AK 99811  
 PHONE (907) 465-1763  
 CERTIFICATE OF AUTH # DRAFTED D.S., R.G.  
 DESIGNED D.S. CHECKED D.L. DATE 7/15/2019 14:36 LAYOUT 02

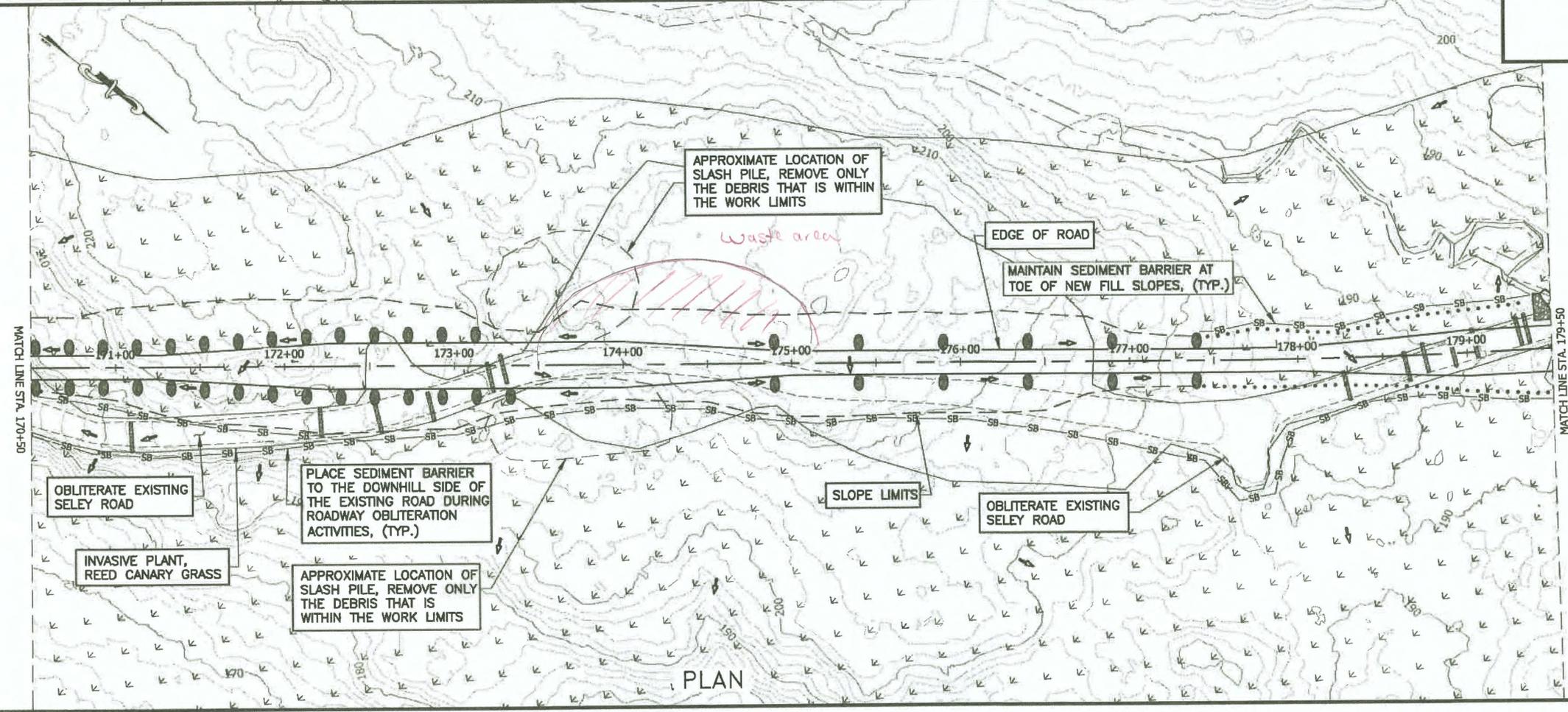
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00156	2019	Q2	26

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.  
*Patty Shell* Date 1/20/21



ESCP NOT SEALED IN ACCORDANCE WITH ALASKA HIGHWAY PRECONSTRUCTION MANUAL SECTION 11207.3 DATED NOVEMBER 15, 2013

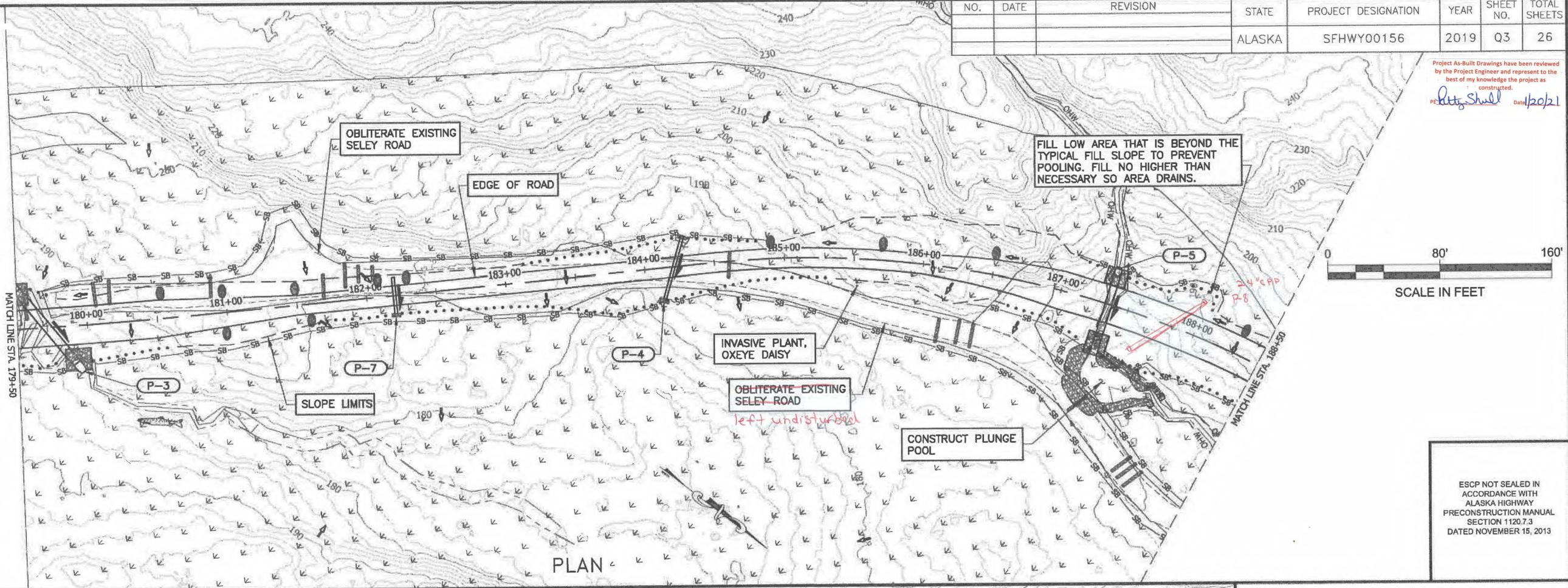
ESCP PLAN & PROFILE



FIRM STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 ADDRESS 6860 GLACIER HWY. JUNEAU, AK 99811  
 PHONE (907) 465-1763  
 CERTIFICATE OF AUTH. # DRAFTED D.S., R.G.  
 DESIGNED D.S. CHECKED D.L.  
 DATE 7/15/2019 14:36 LAYOUT Q3

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00156	2019	Q3	26

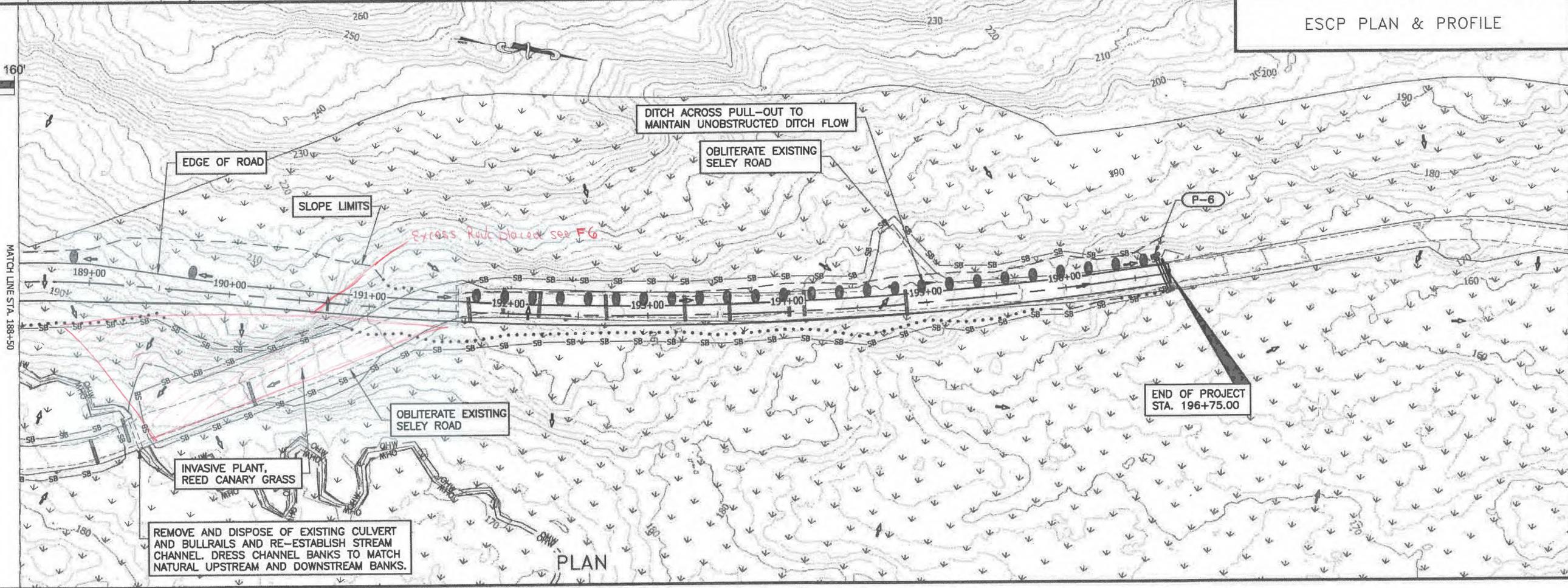
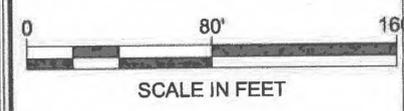
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.  
 PE: *Att. Shull* Date: *12/21*



PLAN

ESCP NOT SEALED IN ACCORDANCE WITH ALASKA HIGHWAY PRECONSTRUCTION MANUAL SECTION 1120.7.3 DATED NOVEMBER 15, 2013

ESCP PLAN & PROFILE



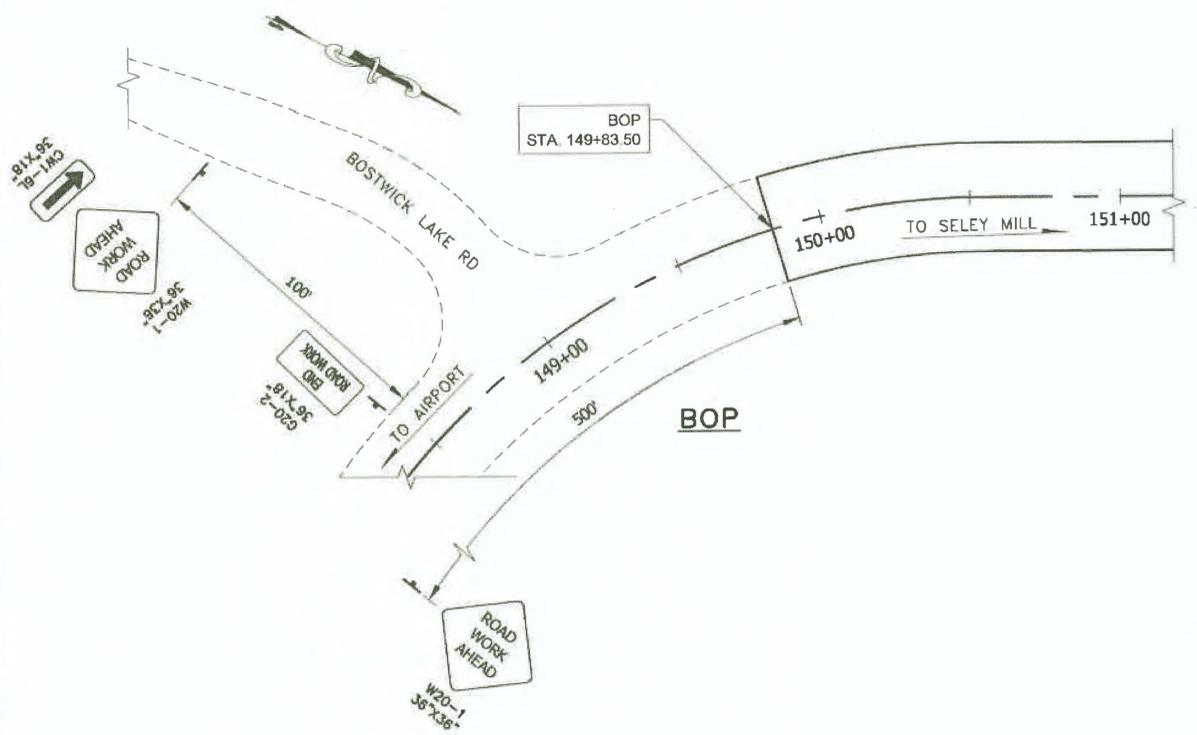
PLAN

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 CHECKED D. L.  
 DRAFTED D. S.

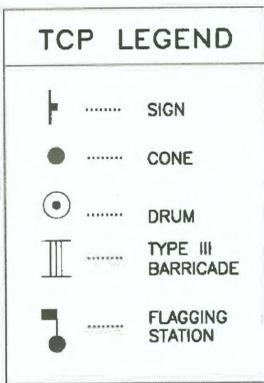
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFWY00156	2019	T1	26



**PERMANENT CONSTRUCTION SIGNING**



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.  
*[Signature]* Date: 1/20/21

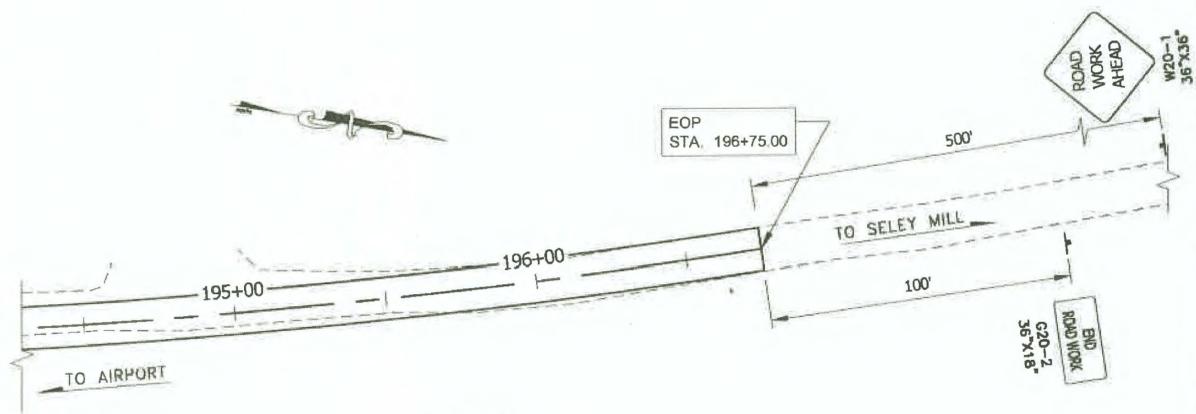


**TCP SETUP TABLE**

SPEED (MPH)	MIN MERGING TAPER LENGTH (L) IN FEET WIDTH OF OFFSET (W) IN FEET			MIN NUMBER OF DEVICES WIDTH OF OFFSET (W) IN FEET			MAX DEVICE SPACING IN FEET		BUFFER SPACE (FT)
	10'	11'	12'	10'	11'	12'	ALONG TAPER	ALONG TANGENT	
20 OR BELOW	70	75	80	5	5	5	25	50	115
25	105	115	125	6	6	6	25	50	155
30	150	165	180	6	7	7	30	60	200
35	205	225	245	7	8	8	35	70	250

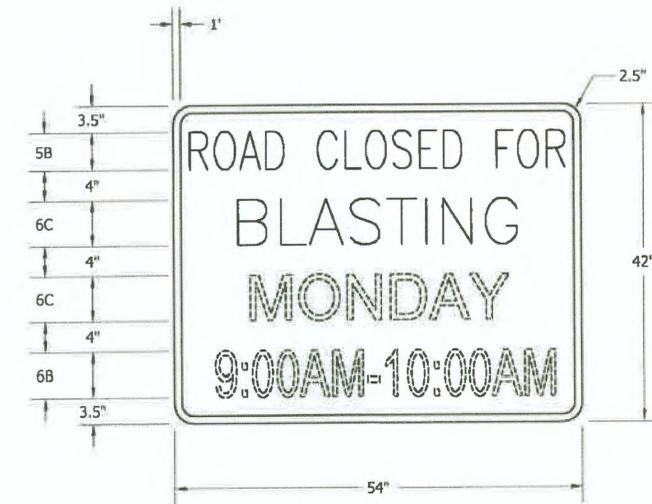
**NOTES:**

- IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME BUT NOT ALL OF THE TRAFFIC CONTROL CONFIGURATIONS THAT WILL BE REQUIRED BY THIS PROJECT. TRAFFIC CONTROL PLANS FOR CONFIGURATIONS NOT COVERED BY THIS TCP SHALL BE DEVELOPED BY THE CONTRACTOR. ALL TCP'S MUST BE SUBMITTED FOR APPROVAL BY THE ENGINEER PRIOR TO USE.
- TEMPORARY TRAFFIC LANES SHALL BE A MINIMUM OF 10 FEET WIDE.
- CONSTRUCTION SIGNING SHALL BE IN PLACE ONLY WHEN THE CONDITIONS EXIST FOR WHICH THE SIGNS ARE INTENDED. CONSTRUCTION SIGNS SHALL BE PLACED SUCH THAT THEY DO NOT OBSCURE EXISTING TRAFFIC SIGNS.
- TYPE C WARNING LIGHTS SHALL BE USED ON ALL CHANNELIZING DEVICES USED AT NIGHT PLACED ALONG OR AROUND ROADWAY HAZARDS.
- KEEP THE PUBLIC INFORMED OF CONSTRUCTION ACTIVITIES. SEE SECTION 643-3.03 OF THE SPECIAL PROVISIONS.
- ALL TRAFFIC CONTROL PLANS SUBMITTED BY THE CONTRACTOR SHALL BE NUMBERED. ALL TRAFFIC CONTROL PLANS THAT USE A TYPICAL APPLICATION AS DESCRIBED IN THE MUTCD SHALL REFERENCE THE TYPICAL APPLICATION. EXAMPLE: TCP 3, MUTCD TA-10.



**EOP**

**PLAN VIEW**



**SIGN FOR 48 HOUR ADVANCED NOTICE OF BLASTING**

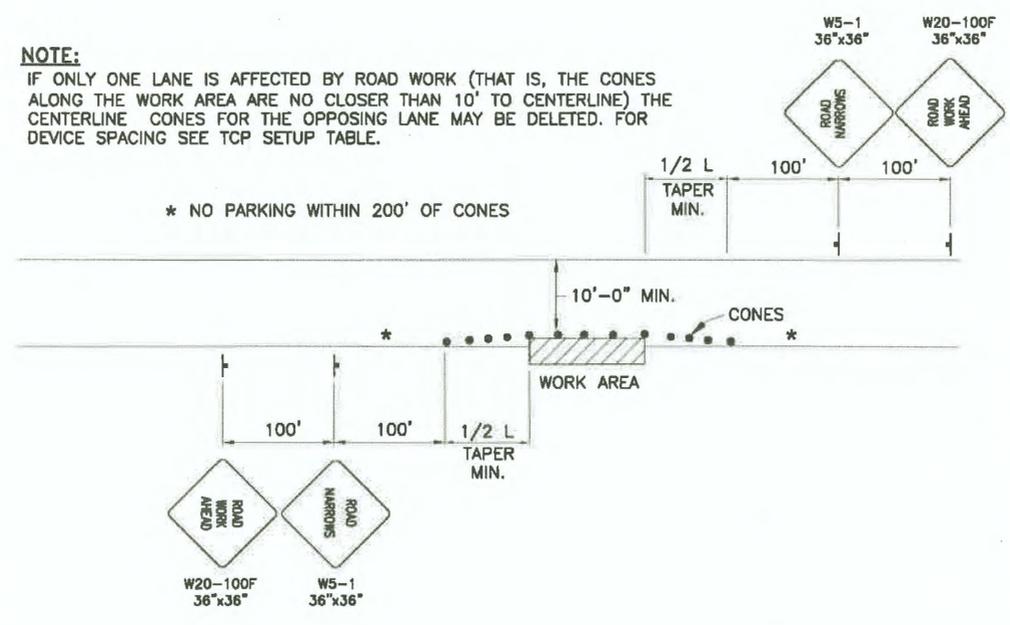
SIGNS SHALL BE ORANGE BACKGROUND WITH BLACK BORDER AND TEXT. SIGNS SHALL INCLUDE THE DAY OF CLOSURE, BEGINNING TIME OF CLOSURE, AND EXPECTED TIME THE ROAD WILL REOPEN. SIGNS SHALL BE IN PLACE A MINIMUM OF 48 HOURS PRIOR TO ROAD CLOSURE. REMOVABLE PANELS MAY BE USED TO CHANGE THE DAY AND TIME. SIGN LETTERING IS DESIGNATED BY SIZE AND FHWA "SERIES 2000" LETTER SERIES. (EG "6C" MEANS A LETTER HEIGHT OF 6 INCHES WITH A SERIES C WIDTH). FOR USE, SEE SUBSECTION 643-3.02 OF THE SPECIFICATIONS.

<p>TCP NOT SEALED          IN ACCORDANCE WITH          ALASKA HIGHWAY          PRE-CONSTRUCTION          MANUAL          SECTION 1400.3.5          DATED JANUARY 30, 2012</p>	<p>STATE OF ALASKA DEPARTMENT OF          TRANSPORTATION          AND PUBLIC FACILITIES          6860 GLACIER HIGHWAY, JUNEAU, AK 99811          (907) 465-1763</p> <p><b>KTN RECONSTRUCT ROAD TO          AIRPORT BOUNDARY (RP-AK022)</b></p> <p>TRAFFIC CONTROL PLAN</p>
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FILE | O:\Mtn\SFHWY00156\Plan\00156\_T1-T2.dwg | DATE | 1/30/2019 10:40 | LAYOUT | T2 | DESIGNED | D. S. | CHECKED | D. L. | DRAFTED | D. S.

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHUY00156	2019	T2	26

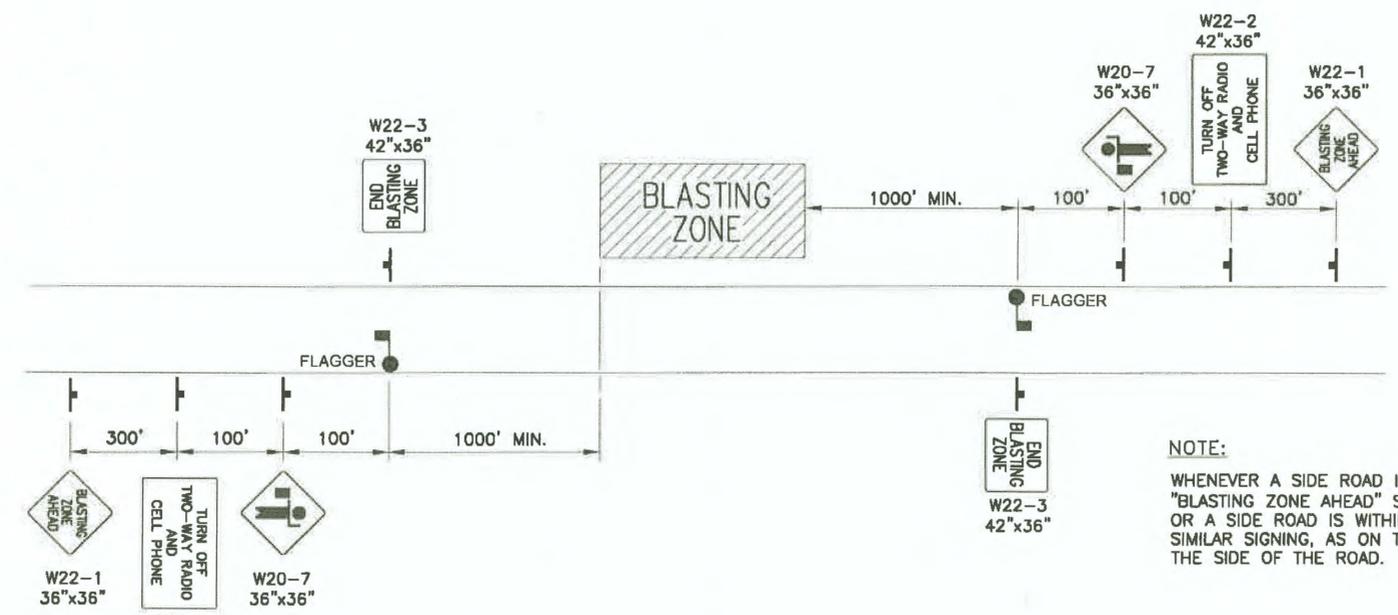
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.  
*Patricia Skid* Date: 1/20/21



**TCP LEGEND**

	SIGN
	CONE
	DRUM
	TYPE III BARRICADE
	FLAGGING STATION

**ROADWAY ENCROACHMENT**



**NOTE:**  
 WHENEVER A SIDE ROAD INTERSECTS THE ROADWAY BETWEEN THE "BLASTING ZONE AHEAD" SIGN AND THE "END BLASTING ZONE" SIGN, OR A SIDE ROAD IS WITHIN 1,000 FEET OF ANY BLASTING CAP, SIMILAR SIGNING, AS ON THE MAINLINE, SHALL BE INSTALLED ON THE SIDE OF THE ROAD.

**TYPICAL BLASTING ZONE PLAN**

TCP NOT SEALED IN ACCORDANCE WITH ALASKA HIGHWAY PRE-CONSTRUCTION MANUAL SECTION 1400.3.5 DATED JANUARY 30, 2012	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES 6860 GLACIER HIGHWAY, JUNEAU, AK 99811 (907) 465-1763 <b>KTN RECONSTRUCT ROAD TO          AIRPORT BOUNDARY (RP-AK022)</b>  TRAFFIC CONTROL PLAN
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