STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL 'A' SHEETS
ALASKA	0311032/Z53610000	2019	A1	A4
			PLAN SET TOTAL	###

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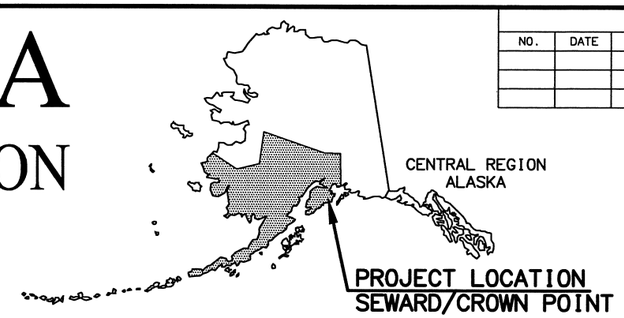
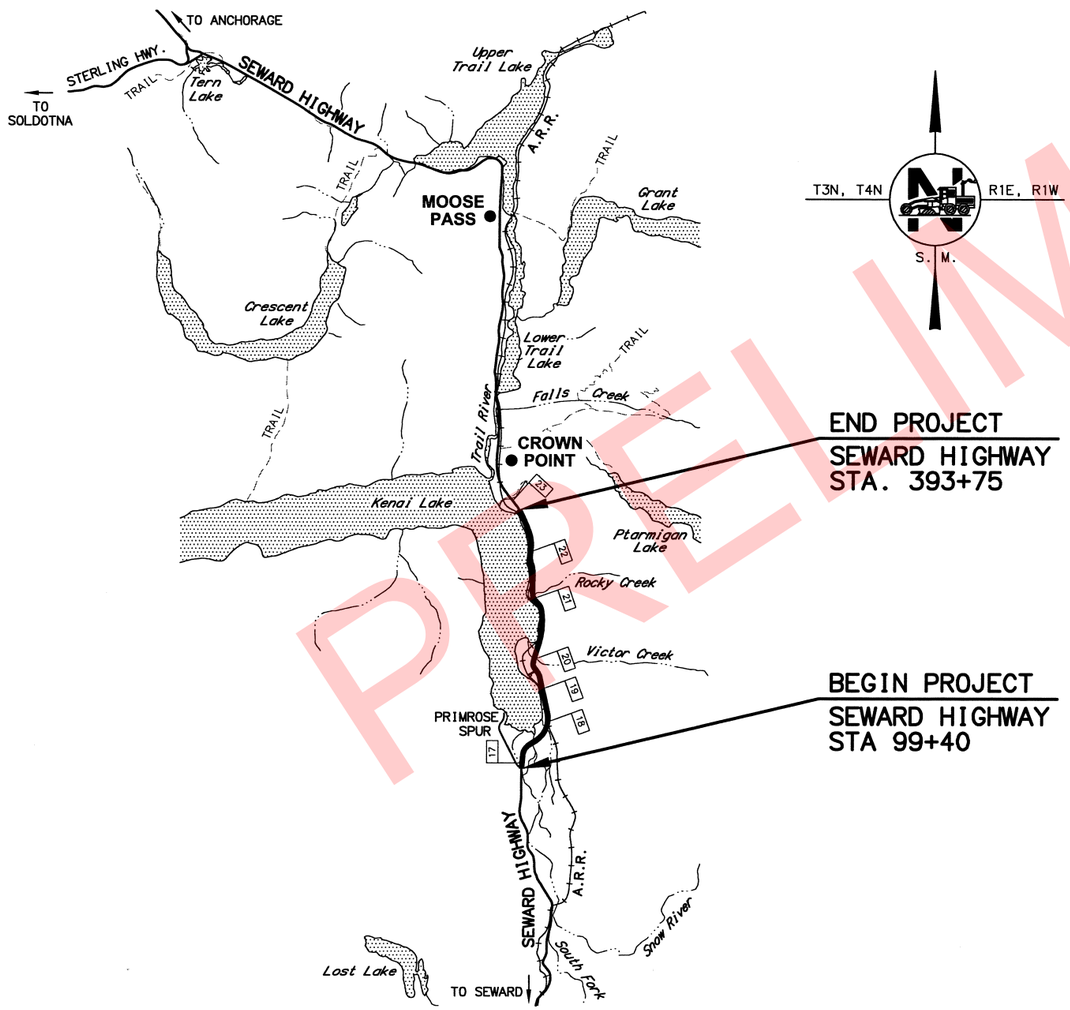


PROPOSED HIGHWAY PROJECT

SEWARD HWY: MP 17-22.5 REHABILITATION

0311032/Z53610000

GRADING, DRAINAGE, PAVING, BRIDGE, SIGNING, AND STRIPING



PROJECT SUMMARY		
ROADWAY SECTION	WIDTH	LENGTH
SEWARD HIGHWAY	37'	5.57 MILES
SNOW RIVER WEST CHANNEL 603	35'-2"	188'-6"
SNOW RIVER CENTER CHANNEL 605	35'-2"	648'-6"
VICTOR CREEK BRIDGE 607	40'-4"	240'-0"

DESIGN DESIGNATIONS	
	SEWARD HIGHWAY
FUNCTIONAL CLASS	RURAL ARTERIAL
AADT (2013)	1,870
AADT (2023)	2,070
DESIGN SPEED (V) (MPH)	55
DHV (2013)	375
DHV (2023)	415
T-PERCENT COMMERCIAL TRUCKS (%)	16.4
D-DIRECTIONAL DISTRIBUTION (%)	60/40
ESALS	421,303

PRELIMINARY

PS&E REVIEW
APRIL 2018

VOL 1 of 2

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES

APPROVED:

REGIONAL PRE-CONSTRUCTION ENGINEER DATE

CONCUR:

DIRECTOR, DESIGN & CONSTRUCTION DATE

CERTIFIED TRUE & CORRECT AS-BUILT OF ACTUAL FIELD CONDITION:

CONSTRUCTION PROJECT MANAGER DATE

DESIGNED BY CML/KDS
CHECKED BY KEK
DRAFTED BY VJS

XREFS NONE

SCALE

LAYOUT A01

DATE TIME 3/6/2018 11:43 AM

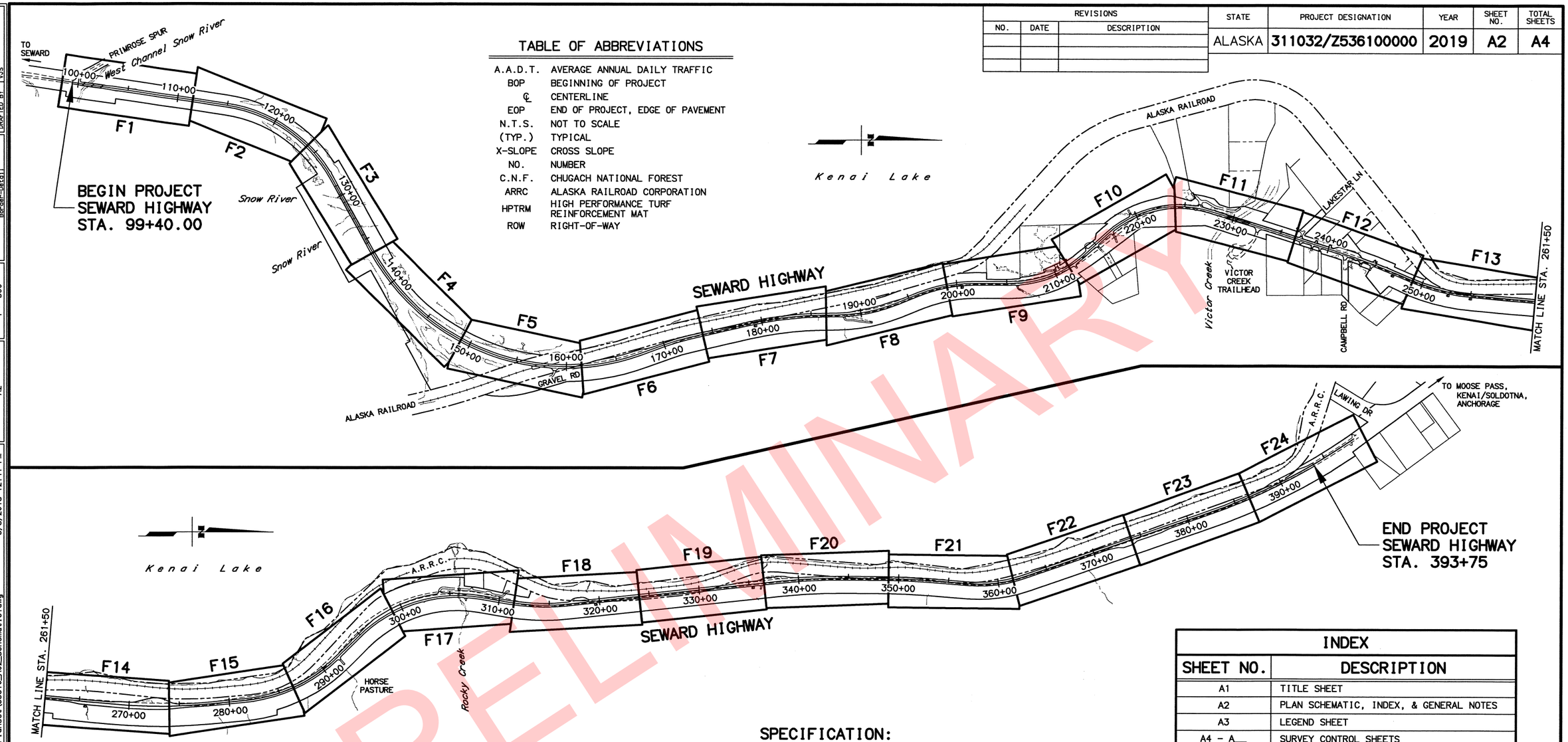
DRAWING LOCATION
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_A01_Title.dwg

REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	A2	A4

TABLE OF ABBREVIATIONS

A.A.D.T.	AVERAGE ANNUAL DAILY TRAFFIC
BOP	BEGINNING OF PROJECT
℄	CENTERLINE
EOP	END OF PROJECT, EDGE OF PAVEMENT
N.T.S.	NOT TO SCALE
(TYP.)	TYPICAL
X-SLOPE	CROSS SLOPE
NO.	NUMBER
C.N.F.	CHUGACH NATIONAL FOREST
ARRC	ALASKA RAILROAD CORPORATION
HPTRM	HIGH PERFORMANCE TURF REINFORCEMENT MAT
ROW	RIGHT-OF-WAY



PRELIMINARY

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE CONTAINED WITHIN THE ROW, TEMPORARY CONSTRUCTION EASEMENTS, AND TEMPORARY CONSTRUCTION PERMITS. NO EXCESS MATERIAL SHALL BE DISPOSED OF WITHIN THE ROW UNLESS SPECIFICALLY CALLED FOR IN THE PLANS OR DIRECTED BY THE ENGINEER.
2. THE ROW LINES SHOWN WERE DRAWN ON THE PLANS USING INFORMATION FROM DOT&PF, PLATTED SUBDIVISIONS, AND SURVEYED MONUMENTS ON THE GROUND. THE ROW LINES WERE INSERTED USING A COMMON COORDINATE SYSTEM.
3. ALL PAVEMENT CUTS SHALL BE MADE WITH A SAW OR ALTERNATE METHOD APPROVED BY THE ENGINEER.
4. CLEARING LIMITS SHALL BE 10 FEET BEYOND CATCH POINTS OR TO THE ROW LINE, WHICHEVER IS LESS.
5. PLACE 4" OF TOPSOIL AND SEED ANY AREAS DISTURBED BY CONSTRUCTION, AND AS DIRECTED BY THE ENGINEER. IN ROCK CUT SECTIONS, TOPSOIL AND SEED ARE UNNECESSARY FOR ROCK DITCH BOTTOMS. IN LOCATIONS WITH 2:1 SLOPES, USE MULCH-HECP BFM IN CONJUNCTION WITH TOPSOIL AND SEED.
6. PLACE REMOVED TREES IN ACCORDANCE WITH MEMORANDUMS OF AGREEMENT.
7. THE EXISTING INFORMATION SHOWN IN THE PLANS IS FROM SURVEY AND AS-BUILTS AND HAS BEEN PARTIALLY FIELD VERIFIED. FIELD CONDITIONS MAY NOT BE ACCURATELY REPRESENTED AND/OR MAY HAVE CHANGED. ADJUST INSTALLATIONS AS DIRECTED BY THE ENGINEER.
8. ADJUST ALL PAVEMENT PENETRATIONS TO FINAL GRADE PRIOR TO TOP LIFT OF PAVING. IF ANY PAVEMENT PENETRATION REQUIRES GRADE ADJUSTMENT AFTER FINAL LIFT PAVING, AS DETERMINED BY THE ENGINEER, SAW CUT A NEAT LINE ALONG THE PAVEMENT TO BE REMOVED. USE AN INFRARED HEATER TO HEAT THE EXISTING PAVEMENT; EQUIPMENT AND MAXIMUM TEMPERATURE SHALL BE APPROVED BY THE ENGINEER. REPLACE THE REMOVED ASPHALT WITH NEW HOT MIX ASPHALT AND THOROUGHLY COMPACT. SEAL JOINTS, AT LEAST 12 INCHES WIDE CENTERED ON JOINT, USING ASPHALT SYSTEMS GSB-88, OR APPROVED EQUAL, WHILE THE HOT MIX ASPHALT IS CLEAN, FREE OF MOISTURE AND PRIOR TO STRIPING.
9. FOR PARALLEL GUARDRAIL TERMINALS, USE AN END OFFSET OF 2 FEET.
10. FIELD ADJUST PIPE INLETS AS NECESSARY TO ACCOMMODATE ANY CHANGES ENCOUNTERED DURING BLASTING. MAINTAIN EXISTING DRAINAGE COURSE AT OUTLET.

SPECIFICATION:

CONSTRUCT THE IMPROVEMENTS COVERED BY THESE PLANS IN ACCORDANCE WITH THE ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES 2017 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND THE PROJECT SPECIAL PROVISIONS.

THE FOLLOWING REGIONAL DRAWINGS APPLY TO THIS PROJECT:

CR-T-01.10, CR-T-04.03, CR-T-25.10

IN THE EVENT OF A CONFLICT, REGIONAL DRAWINGS SUPERSEDE STANDARD DRAWINGS.

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

C-04.12, C-05.20
D-01.02, D-04.21, D-06.10, D-07.00, D-30.11, D-31.01
G-00.04, G-05.00S, G-05.00W, G-10.10, G-11.00, G-14.00, G-20.11, G-26.00, G-29.00
M-20.14, M-23.12
S-00.11*, S-05.01, S-30.04, S-31.01, S-32.00
T-20.03, T-21.03, T-22.03

* AS MODIFIED HEREIN

INDEX

SHEET NO.	DESCRIPTION
A1	TITLE SHEET
A2	PLAN SCHEMATIC, INDEX, & GENERAL NOTES
A3	LEGEND SHEET
A4 - A__	SURVEY CONTROL SHEETS
B1 - B5	TYPICAL SECTIONS
C1 - C2	ESTIMATE OF QUANTITIES
D1 - D14	SUMMARY SHEETS
E1 - E27	DETAIL SHEETS
F1 - F38	PLANS AND PROFILES
G1 - G17	GRADING SHEETS
H1 - H38	SIGN SUMMARY AND DETAILS
N1 - N40	BRIDGE SHEETS

STATE OF ALASKA
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

PLAN SCHEMATIC, INDEX, & GENERAL NOTES

DESIGNED BY	CML/KGS
CHECKED BY	KEK
DRAFTED BY	VJS

XREFS: XR-53610-Border-Detail, BaseSeward18-25, X_ROW_18-22, Border-Detail

SCALE	LAYOUT	DATE TIME
1" = 500'	A2	3/8/2018 12:41 PM

DRAWING LOCATION
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STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	A3	A4

REVISIONS

NO.	DATE	DESCRIPTION

UTILITIES

	EXISTING	PROPOSED
PIPELINES:		
STORM DRAIN STRUCTURE AND PIPE NUMBERS, APPLICABLE IF SHOWN	S1–1, S1–2, P1–1, P1–2	
STORM DRAIN	SD	
MANHOLE STORM DRAIN	SD	SD
CURB INLET CATCH BASIN		
FIELD INLET CATCH BASIN	FI	FI
PIPE CULVERT w/ END SECTION		
CLEANOUT	CO	CO
SANITARY SEWER	SS	SS
MANHOLE SANITARY SEWER	SS	SS
SEPTIC VENTS		
WATER	W	W
FIRE HYDRANT		
WELL	W	
VALVE OR RISER		
NATURAL GAS	G	G
OIL OR GASOLINE PIPELINE	O	O
ELECTRIC (OVERHEAD)	OE	
ELECTRIC (DIRECT BURY)	UE	
ELECTRIC (OVERHEAD)	OE&OT	
UTILITY POLE		
UTILITY POLE WITH LUMINAIRE		
GUY POLE	GP	
GUY WIRE ANCHOR		
TRANSMISSION TOWER [WOOD]		
TRANSMISSION TOWER [STEEL]		
ELECTRICAL PEDESTAL	E	
ELECTRICAL TRANSFORMER	E	
ELECTRIC METER		
ELECTRICAL OUTLET		
ELECTRIC MANHOLE	E	
TELEPHONE (OVERHEAD)	OT	
TELEPHONE (DIRECT BURY)	UT	
TELEPHONE (DIRECT BURY)	UT&TV	
TELEPHONE PEDESTAL	T	
TELEPHONE MANHOLE	T	
FIBER OPTIC	FO	
OVERHEAD FIBER OPTIC	OFO	
FIBER OPTIC MANHOLE	FO	
CABLE TV (OVERHEAD)	OTV	
CABLE TV (DIRECT BURY)	UTV	
CABLE T.V. PEDESTAL		
SATELLITE DISH		
U.G. DUCT (E, T, FO)		

UTILITIES

	EXISTING	PROPOSED
ELECTROLIER		
HIGHTOWER		
SIGNAL POLE WITH MAST		
PEDESTRIAN PUSH BUTTON		
RURAL BEACON		
SCHOOL ZONE BEACON		

RIGHT OF WAY

	EXISTING	TO BE SET THIS PROJECT
PRIMARY CENTERLINE MONUMENT		
SECONDARY CENTERLINE MONUMENT		
PROJECT RIGHT–OF–WAY LINES		ROW
CONTROLLED ACCESS LINE		C/A
TEMPORARY CONSTRUCTION EASEMENT/PERMIT		
PROJECT CENTERLINE	27+00	
RAILROAD CENTERLINE		

EXISTING TOPOGRAPHY

CONIFER TREE OR TREES	
DECIDUOUS TREE OR TREES	
SHRUB OR SHRUBS	
WETLANDS	
CREEK	
RIVER	
LAKE / POND	LAKE, POND

EXISTING/PROPOSED

DRAINAGE FLOW	
CONTOURS – MAJOR	515
CONTOURS – MINOR	

MISCELLANEOUS

	EXISTING	PROPOSED
BUILDING		
TANKS		
ABOVE GROUND		
UNDERGROUND	U	
PRIVATE SIGN		
POST/BOLLARDS		
MAILBOX	MB	MB
TRAFFIC SIGN		
TRAFFIC SIGN POST #		##
VENT		

ROADWAY

	EXISTING	PROPOSED
ROADWAY OBLITERATION		
LIMIT OF CUT SLOPE		
LIMIT OF FILL SLOPE		
EDGE OF PAVEMENT		
CONCRETE CURB		
CONCRETE CURB & GUTTER		
CONCRETE CURB CUT		
SIDEWALK		
CURB RAMPS		
PARALLEL CURB RAMP		
PERPENDICULAR CURB RAMP		
MID–BLOCK CURB RAMP		
UNIDIRECTIONAL CURB RAMP		
DETECTABLE WARNING TILES		
DRIVEWAY APPROACH		
GRAVEL EDGE		
PATH / TRAIL		
BRIDGE		
TUNNEL		
NOISE BARRIER	X	X
FENCE	X	X
RETAINING WALL		
HEAD & WINGWALLS		
GUARDRAIL		
END SECTION		
PARALLEL GUARDRAIL SECTION		
SPECIAL DITCH		
BOTTOM OF DITCH		
RIPRAP		
BOULDER OR BOULDERS		

MISCELLANEOUS

ALASKA RAILROAD CORPORATION RIGHT–OF–WAY LINES	ARRC ROW
PLASTIC FLUME DOWNDRAIN w/ END SECTION	

PRELIMINARY

PS&E REVIEW

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17–22.5 REHABILITATION

LEGEND SHEET

DESIGNED BY ---
CHECKED BY ---
DRAFTED BY ---

XREFS: XR-53610-Border-Detail
N/A
N/A

SCALE N/A

LAYOUT A3

DATE TIME 3/1/2018 3:12 PM

DRAWING LOCATION
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REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	A4	A4

PRELIMINARY

SURVEY CONTROL PLACE HOLDER SHEET

DRAWING LOCATION	DATE TIME	LAYOUT	SCALE	XREFS: XR-53610-Border-Detail	DESIGNED BY ---
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

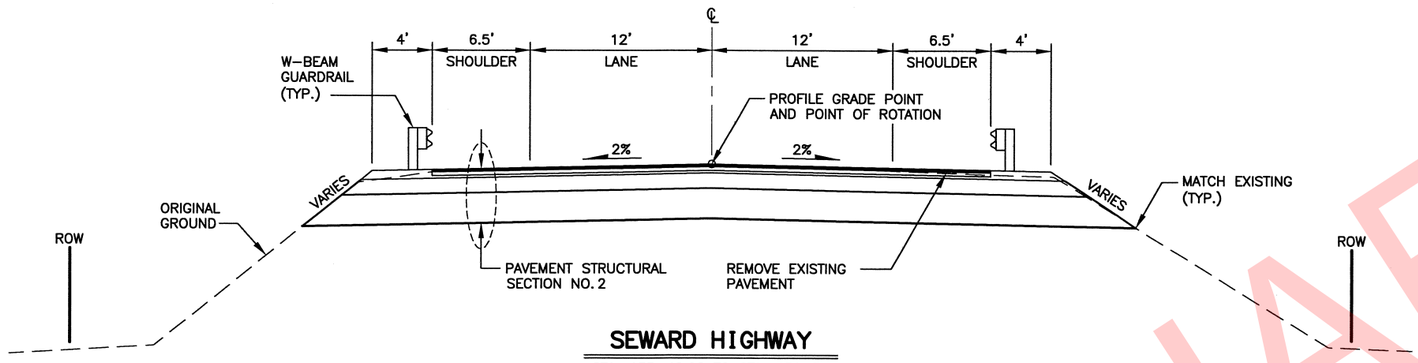
SURVEY CONTROL SHEET

REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	B1	B5

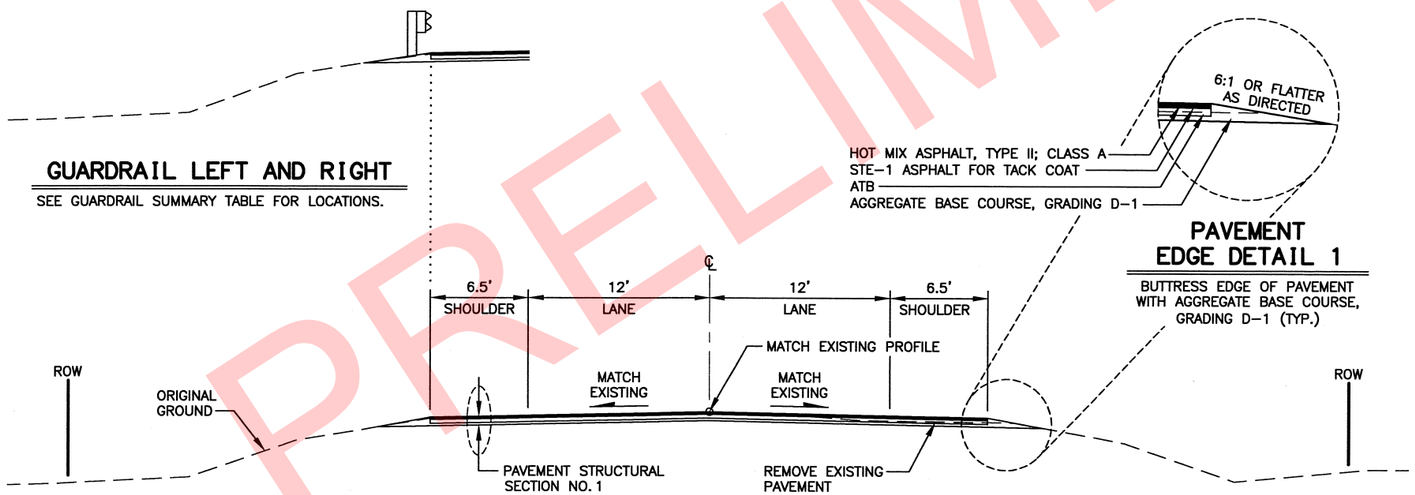
NOTES:

1. SHAPE AGGREGATE BASE COURSE, GRADING D-1 AT THE EDGE OF PAVEMENT WITHIN 48 HOURS OF PAVING TO ENSURE THERE IS NO DROP AT THE EDGE OF PAVEMENT. FIELD DENSITIES WILL NOT BE REQUIRED ON SHOULDER MATERIAL SHAPED AT THE EDGE OF PAVEMENT.



SEWARD HIGHWAY

STA. 135+40.92 TO STA. 158+70



GUARDRAIL LEFT AND RIGHT

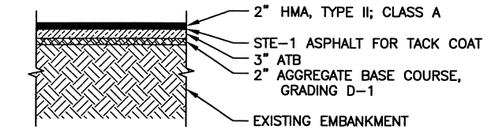
SEE GUARDRAIL SUMMARY TABLE FOR LOCATIONS.

PAVEMENT EDGE DETAIL 1

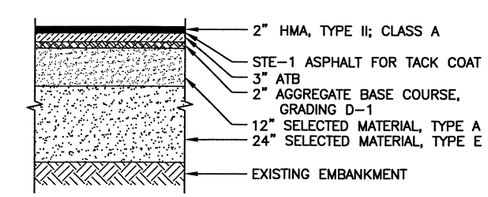
BUTTRESS EDGE OF PAVEMENT WITH AGGREGATE BASE COURSE, GRADING D-1 (TYP.)

SEWARD HIGHWAY

STA. 99+40.00 TO STA. 100+53.15
STA. 102+41.65 TO STA. 128+92.42



PAVEMENT STRUCTURAL SECTION NO. 1



PAVEMENT STRUCTURAL SECTION NO. 2

PRELIMINARY

STATE OF ALASKA
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

TYPICAL SECTIONS

DRAWING LOCATION
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DATE TIME 3/8/2018 9:47 AM
LAYOUT B1
SCALE 1" = 5'
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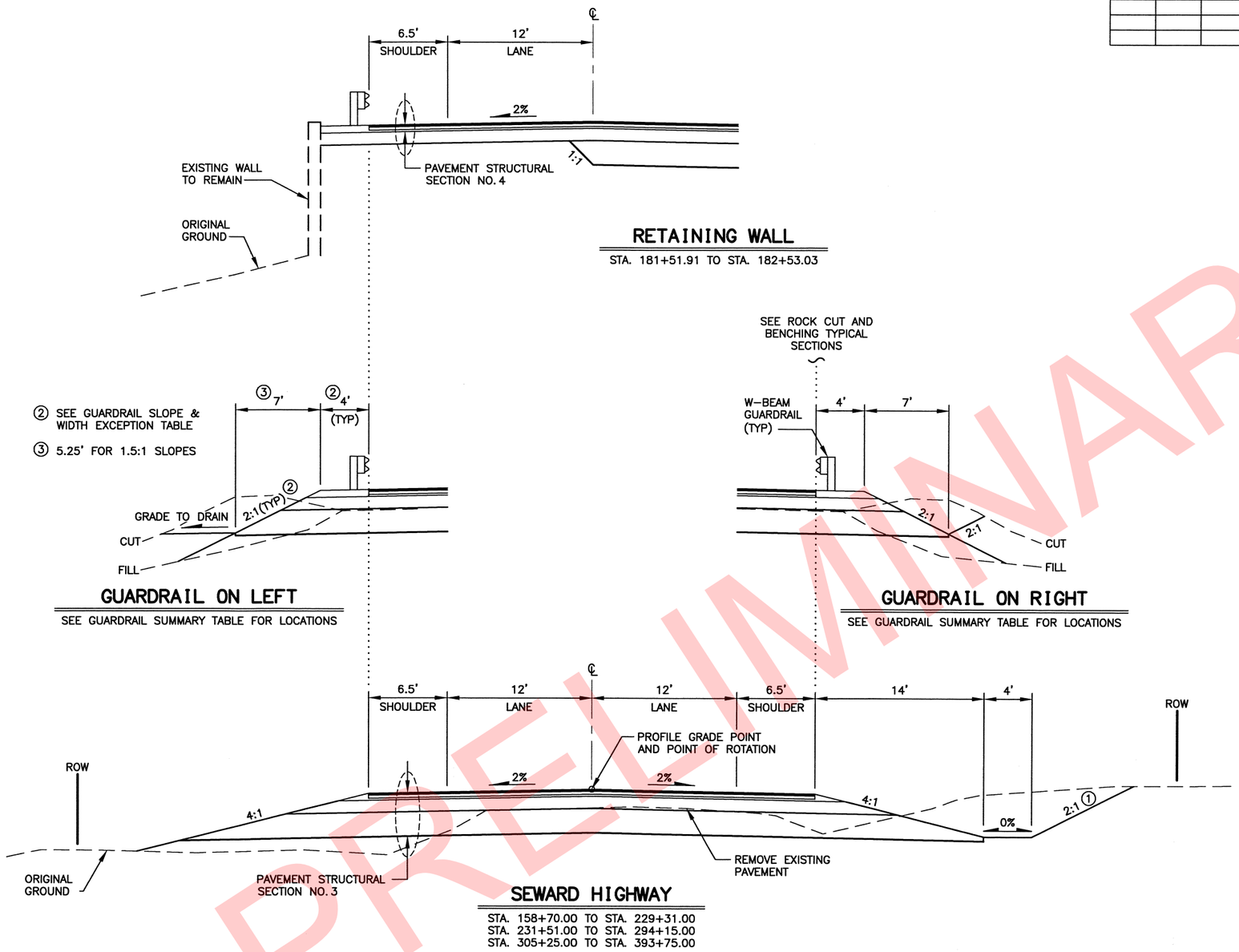
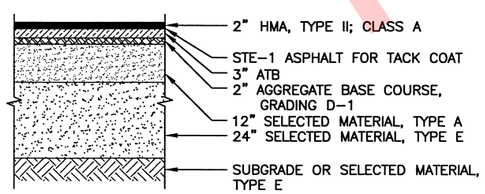
DESIGNED BY CML\VGS\ZDK
CHECKED BY KEK
DRAFTED BY CML\ZDK\VJS

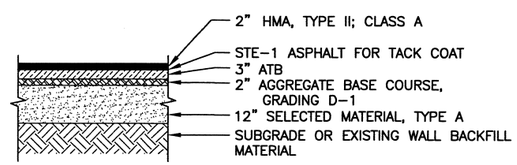
REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	B2	B5





PAVEMENT STRUCTURAL SECTION NO. 3



PAVEMENT STRUCTURAL SECTION NO. 4

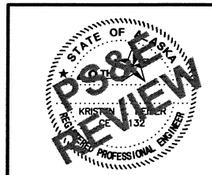
② **GUARDRAIL SLOPE & WIDTH EXCEPTION TABLE**

STATION TO STATION	OFFSET	WIDTH (FT)	SLOPE
158+70 TO 163+05	LT	2	2:1
167+10 TO 167+60	LT	2	2:1
169+05 TO 170+95	LT	2	1.5:1
170+95 TO 171+75	LT	2	2:1
173+95 TO 174+12	LT	2	1.5:1
175+25 TO 178+15	LT	2	1.5:1
181+25 TO 181+51.91	LT	2	2:1
185+60 TO 189+25	LT	2	2:1
189+25 TO 190+25	LT	2	1.5:1
194+00 TO 194+50	LT	2	1.5:1
195+75 TO 202+30	LT	2	2:1
198+15 TO 198+45	LT	2	1.5:1
202+30 TO 203+55	LT	2	1.5:1
248+25 TO 250+40	LT	2	2:1
255+00 TO 255+30	LT	2	2:1
269+20 TO 269+80	LT	2	2:1
272+25 TO 272+55	LT	2	2:1
277+10 TO 277+60	LT	2	2:1
311+75 TO 315+25	LT	2	1.5:1
322+60 TO 324+05	LT	2	2:1
326+25 TO 332+20	LT	2	2:1
336+60 TO 338+10	LT	4	4:1
338+20 TO 338+55	LT	2	2:1
338+55 TO 338+70	LT	2	1.5:1
340+75 TO 342+25	LT	2	2:1
345+40 TO 348+25	LT	2	2:1
349+45 TO 350+40	LT	2	1.5:1
352+70 TO 353+25	LT	2	2:1
355+25 TO 356+15	LT	2	2:1
356+15 TO 356+65	LT	2	1.5:1
358+25 TO 358+75	LT	2	1.25:1
363+55 TO 363+95	LT	2	2:1
365+25 TO 366+25	LT	2	1.5:1
367+70 TO 368+15	LT	2	1.5:1
368+15 TO 369+25	LT	2	2:1
369+25 TO 371+45	LT	2	1.5:1
371+45 TO 375+30	LT	2	2:1
380+10 TO 380+45	LT	2	2:1
383+25 TO 384+90	LT	2	2:1
384+90 TO 386+45	LT	2	1.5:1
393+25 TO 393+75	LT	2	1.5:1

① **BACKSLOPE EXCEPTION TABLE**

STATION TO STATION	SLOPE
242+73 TO 243+30	6:1
323+25 TO 324+50	1:1
371+35 TO 371+50	1.5:1

PRELIMINARY



STATE OF ALASKA DOT&PF
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

TYPICAL SECTIONS

DRAWING LOCATION: W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_B01_Typicals.dwg

DATE TIME: 3/7/2018 9:53 AM | LAYOUT: B2 | SCALE: 1"= 5'

XREFS: XR-53610-Border-Detail, Border-Detail.dwg

DESIGNED BY: CML\CDS\ZDK | CHECKED BY: KEK | DRAFTED BY: CML\ZDK\VJS

REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	B3	B5

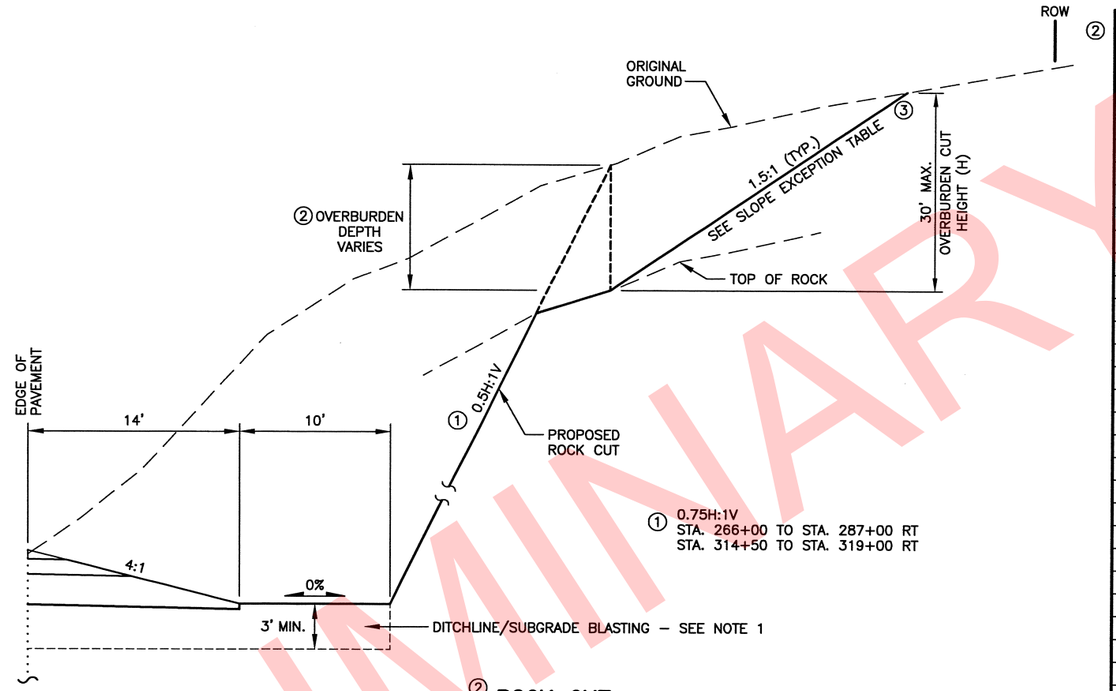
③

OVERBURDEN SLOPE CRITERIA TABLE

OVERBURDEN CUT HEIGHT (H)	SLOPE	COMMENTS
<30'	1.5:1	SEE NOTE 3
IF H >30' AT 1.5:1	1:1	SEE NOTE 4
IF H >30' AT 1:1	0.75:1	SEE NOTE 4

OVERBURDEN SLOPE EXCEPTION TABLE

STATION TO STATION	COMMENTS
162+00 TO 162+50	SEE NOTE 4
166+00 TO 178+50	SEE NOTE 4
180+00 TO 181+75	SEE NOTE 6
183+00 TO 183+50	SEE NOTE 4
185+75 TO 187+00	SEE NOTE 4
191+50 TO 194+00	SEE NOTE 6
194+50 TO 195+25	SEE NOTE 6
197+00 TO 202+50	SEE NOTE 6
247+00 TO 250+50	SEE NOTE 6
252+00 TO 253+50	SEE NOTE 4
259+00 TO 259+50	SEE NOTE 4
262+50 TO 265+50	SEE NOTE 6
266+50 TO 268+00	SEE NOTE 6
271+00 TO 274+50	SEE NOTE 6
274+75 TO 278+00	SEE NOTE 4
279+00 TO 281+50	SEE NOTE 6
282+00 TO 284+00	SEE NOTE 6
284+65 TO 287+00	SEE NOTE 4
315+50 TO 318+00	SEE NOTE 6
319+25 TO 321+25	SEE NOTE 6
321+50 TO 325+25	SEE NOTE 4
326+00 TO 327+50	SEE NOTE 6
328+00 TO 333+00	SEE NOTE 4
334+50 TO 335+25	SEE NOTE 6
338+00 TO 340+00	SEE NOTE 6
345+50 TO 353+00	SEE NOTE 6
360+00 TO 362+50	SEE NOTE 4
363+50 TO 366+00	SEE NOTE 6
368+75 TO 371+25	SEE NOTE 4
376+50 TO 377+75	SEE NOTE 6
380+20 TO 381+15	SEE NOTE 4
382+00 TO 383+00	SEE NOTE 6
383+15 TO 385+00	SEE NOTE 4
386+50 TO 393+75	SEE NOTE 6



② **ROCK CUT**

SEE ROCK CUT LOCATION TABLE.
SEE NOTE 2.

ROCK CUT LOCATIONS AND OVERBURDEN DEPTH

STATION TO STATION	OFFSET	DEPTH (FT)
160+00 TO 180+00	RT	3 TO 5
180+00 TO 185+00	RT	3
185+00 TO 191+00	RT	8
191+00 TO 196+50	RT	6
196+50 TO 199+00	RT	3
199+00 TO 202+00	RT	7
202+00 TO 206+00	RT	3
220+00 TO 225+00	RT	-
245+00 TO 247+00	RT	-
247+00 TO 250+00	RT	5
250+00 TO 263+00	RT	5
263+00 TO 266+00	RT	10
266+00 TO 270+00	RT	5
270+00 TO 278+50	RT	12
279+00 TO 284+00	RT	6
284+00 TO 287+00	RT	4
314+00 TO 317+00	RT	> 5
317+00 TO 319+00	RT	2
319+00 TO 323+00	RT	3
323+00 TO 324+75	RT	12
324+75 TO 328+00	RT	11
328+00 TO 331+00	RT	6
331+50 TO 336+50	RT	7
336+50 TO 353+00	RT	5
353+00 TO 360+25	RT	9
360+25 TO 366+00	RT	6
366+00 TO 368+50	RT	9
368+50 TO 371+00	RT	5
374+00 TO 378+00	RT	4
378+00 TO 382+00	RT	9
382+00 TO 393+50	RT	5

NOTES:

1. WIDTH OF DITCHLINE/SUBGRADE BLASTING MEASURED FROM THE BACK OF DITCH TOWARDS THE CENTERLINE.
2. ROCK CUT LOCATIONS AND OVERBURDEN DEPTHS ARE ESTIMATED AND SHALL BE FIELD VERIFIED.
3. ON 1.5:1 SLOPES, INSTALL HIGH PERFORMANCE TURF REINFORCEMENT MAT (HPTRM).
4. ON 1:1 AND 0.75:1 SLOPES, INSTALL HPTRM AND WIRE MESH.
5. SEE ROCKFALL MITIGATION–WIRE MESH SUMMARY TABLE FOR LOCATIONS.
6. NO OVERBURDEN SLOPE PROTECTION REQUIRED IN AREAS WITH 2:1 SLOPES.
7. AS APPROVED BY THE ENGINEER, IF ROCK IS ENCOUNTERED DURING CONSTRUCTION ROCK SHALL BE EXCAVATED TO FINISHED GRADE AND NO SLOPE STABILIZATION SHALL BE REQUIRED.

PRELIMINARY

STATE OF ALASKA
REGISTERED PROFESSIONAL ENGINEER
KRISTEN [illegible]
CE 132
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

TYPICAL SECTIONS

DRAWING LOCATION
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DATE	TIME	LAYOUT	SCALE
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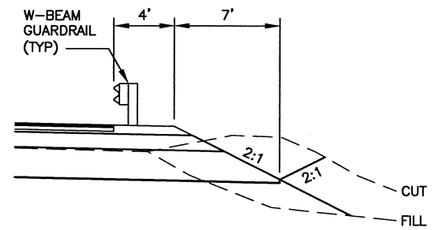
XREFS: XR-53610-Border-Detail
Border-Detail.dwg

DESIGNED BY	CML\KDS\ZDK
CHECKED BY	KEK
DRAFTED BY	CML\ZDK\VJS

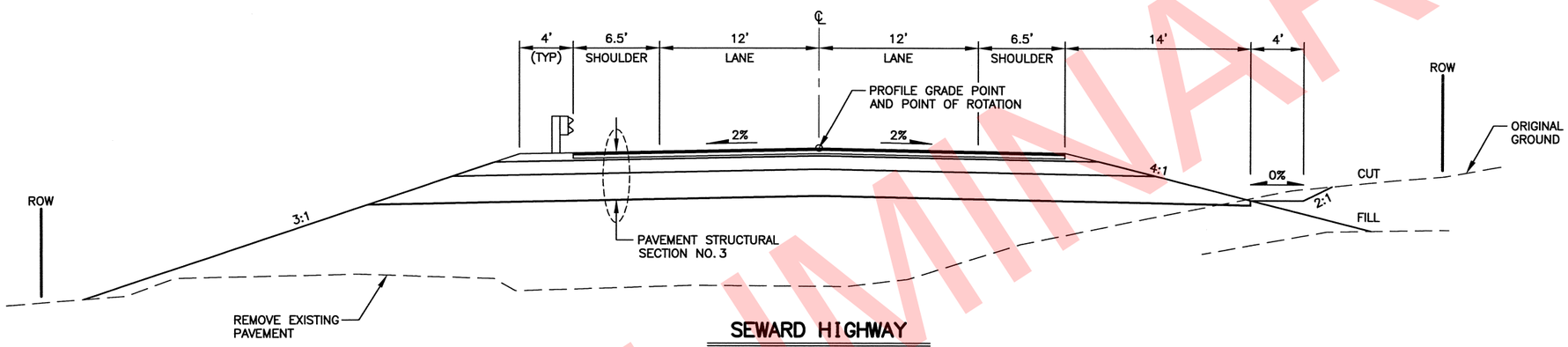
REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	B4	B5



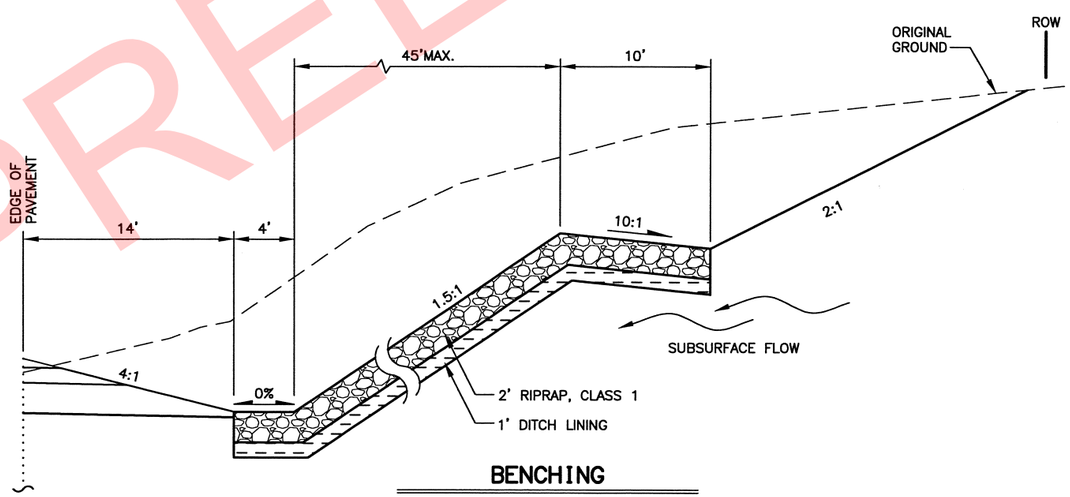
GUARDRAIL WIDENING

SEE GUARDRAIL SUMMARY TABLE FOR LOCATIONS



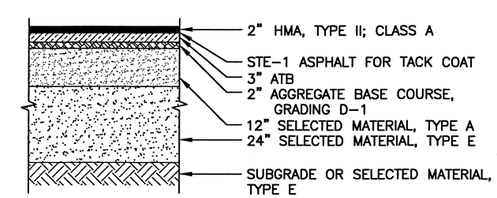
SEWARD HIGHWAY

STA. 294+15 TO STA. 305+25



BENCHING

STA. 221+00 RT. TO STA. 224+50 RT.
SEE NOTE 7.



PAVEMENT STRUCTURAL SECTION NO. 3

PRELIMINARY

STATE OF ALASKA PS&E REVIEW KRISTOFER J. FISHER 12132 REGISTERED PROFESSIONAL ENGINEER

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

TYPICAL SECTIONS

DRAWING LOCATION	DATE TIME	LAYOUT	SCALE	XREFS: XR-53610-Border-Detail	DESIGNED BY	CHECKED BY	DRAFTED BY
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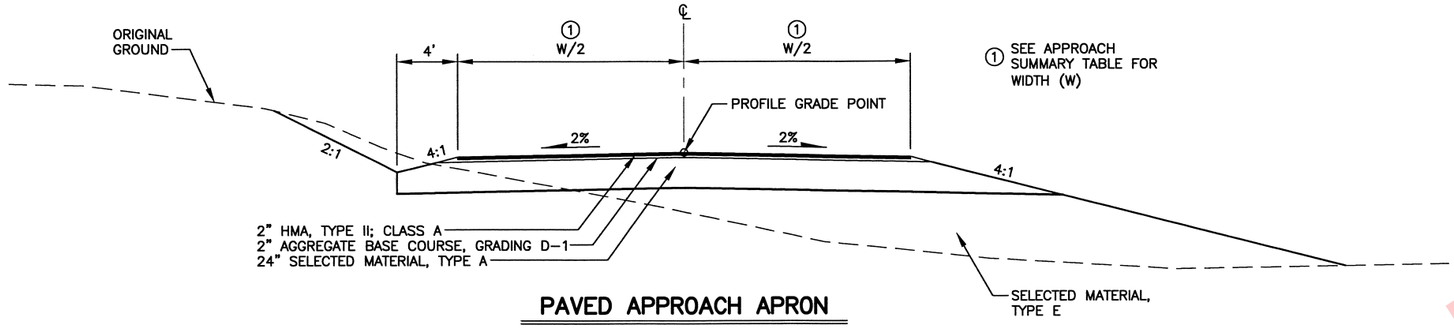
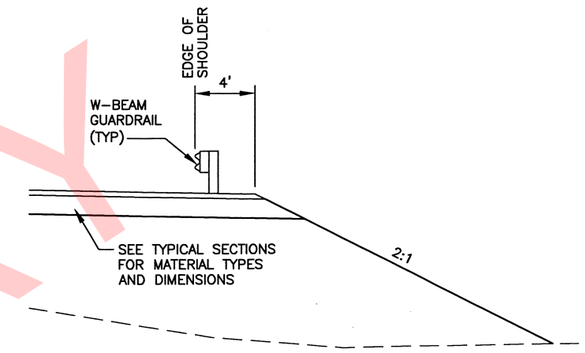
REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	B5	B5

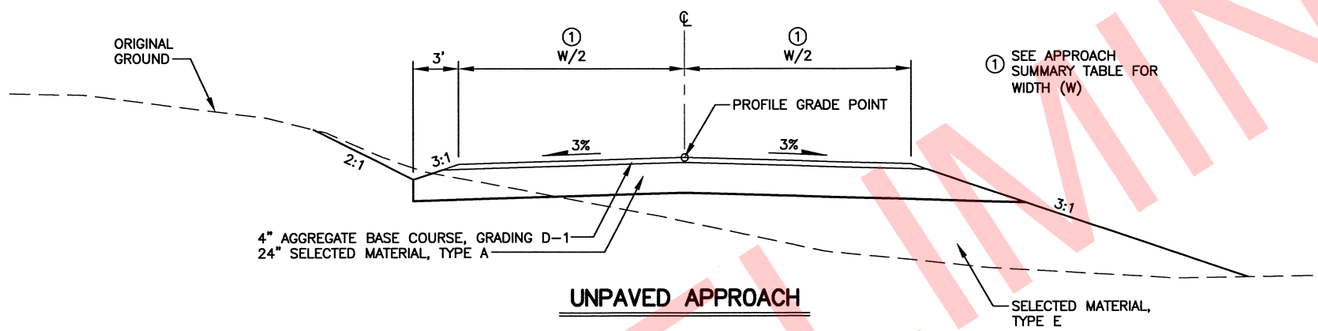


PAVED APPROACH APRON

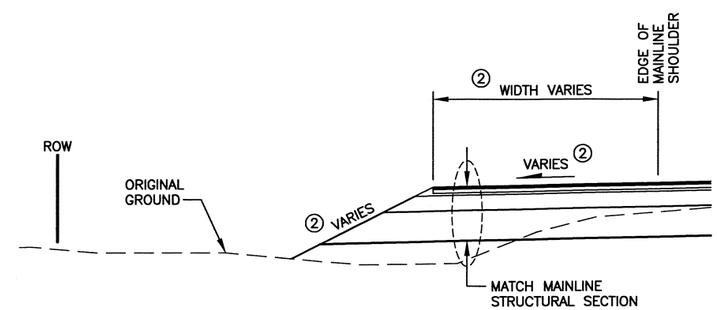
NOTE: USE FOR PAVED RADIUS RETURNS



WIDENING FOR APPROACH GUARDRAIL

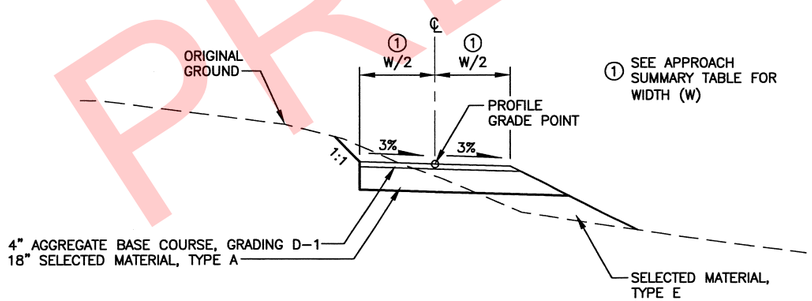


UNPAVED APPROACH



PULLOUTS

② MATCH MAINLINE SUPERELEVATION AND SLOPES UNLESS INDICATED OTHERWISE. SEE TURNOUT LAYOUT PLANS FOR MORE INFORMATION.



POWERLINE ACCESS TRAIL

NOTE: SEE WATER BAR DETAILS IN E SHEETS

PRELIMINARY

STATE OF ALASKA
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

TYPICAL SECTIONS

DRAWING LOCATION
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DATE TIME 3/7/2018 9:53 AM

LAYOUT B5

SCALE 1" = 5'

XREFS: XR-53610-Border-Detail Border-Detail.dwg

DESIGNED BY OML\KDS\VZDK
CHECKED BY KEK
DRAFTED BY OML\VZDK\VJS

REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	C1	C2

ESTIMATE OF QUANTITIES

ITEM NO.	SSHC 2017 NO.	ITEM	UNIT	TOTAL QUANTITY
201.0003.0000	201(3A)	CLEARING AND GRUBBING	ACRE	76
202.0001.0000	202(1)	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	ALL REQ'D
202.0002.0000	202(2)	REMOVAL OF PAVEMENT	SY	98,000
202.0004.0000	202(4)	REMOVAL OF CULVERT PIPE	LF	4,515
202.0010.0000	202(10)	SINGLE MAIL BOX INSTALLATION	EA	2
202.0011.0000	202(11)	MULTIPLE MAIL BOX INSTALLATION	EA	2
202.0012.0000	202(12)	DOUBLE MAIL BOX INSTALLATION	EA	2
202.0023.0000		REMOVAL OF EXISITING BRIDGE NO. 607	LS	ALL REQ'D
203.0003.0000	203(3)	UNCLASSIFED EXCAVATION	CY	794,000
203.0006.0000	203(6)	BORROW	TON	110,000
203.0009.0000	203(9)	OBLITERATION OF ROADWAY	SY	1,550
203.0011.0000	203(11)	DITCHLINE/SUBGRADE BLASTING	SY	96,000
203.0013.0000	203(13)	STABILIZATION - ROCK BOLT	EA	162
203.0017.0000	203(17)	ROCKFALL MITIGATION - WIRE MESH	SY	17,000
203.2020.0000		DEBRIS REMOVAL/EXCAVATION	LS	ALL REQ'D
205.0006.0000	205(6)	STRUCTURAL FILL	CY	1,112
301.0001.00D1	301(1)	AGGREGATE BASE COURSE, GRADING D-1	TON	22,320
306.0001.0000	306(1)	ATB	TON	21,800
306.0002.5228	306(2)	ASPHALT BINDER, GRADE 52-28	TON	1,200
306.2002.0000		ASPHALT MATERIAL PRICE ADJUSTMENT	CS	ALL REQ'D
401.0001.002A	401(1A)	HMA, TYPE II; CLASS A	TON	15,100
401.0004.5228	401(4A)	ASPHALT BINDER, GRADE 52-28	TON	920
401.0008.002A	401(8A)	HMA PRICE ADJUSTMENT, TYPE II, CLASS A	CS	ALL REQ'D
401.0014.0000	401(14)	JOINT ADHESIVE	LF	38,700
402.0001.STE1	402(1)	STE-1 ASPHALT FOR TACK COAT	TON	41
406.0002.0000	406(2)	RUMBLE STRIPS	STA	520
501.0001.0000	501(1)	CLASS A CONCRETE	LS	ALL REQ'D
501.0007.0000	501(7)	PRECAST CONCRETE MEMBER (110'-0" BULB-TEE GIRDER)	EA	12
501.0007.0000	501(7)	PRECAST CONCRETE MEMBER (HEADWALL)	EA	13
503.0001.0000	503(1)	REINFORCING STEEL	LS	ALL REQ'D
503.0002.0000	503(2)	EPOXY-COATED REINFORCING STEEL	LS	ALL REQ'D
503.0003.0000	503(3)	DRILL AND BOND DOWLS	EA	1,030
504.2002.0000		GUN MOUNT BASE		ALL REQ'D
505.0005.0000	505(5)	FURNISH STRUCTURAL STEEL PILES (2'-0" PIPE)	LF	1,121
505.0005.0000	505(5)	FURNISH STRUCTURAL STEEL PILES (4'-0" PIPE)	LF	645
505.0006.0000	505(6)	DRIVE STRUCTUAL STEEL PILES (2'-0" PIPE)	EA	12
505.0006.0000	505(6)	DRIVE STRUCTUAL STEEL PILES (4'-0" PIPE)	EA	4
505.0014.0000	505(14)	SPECIAL PILE EXCAVATION	CS	ALL REQ'D
507.0001.0000	507(1)	STEEL BRIDGE RAILING	LF	528
507.2000.0000		STEEL BRIDGE RAILING REPLACEMENT	LF	1,750
508.2000.0000	508(1)	WATERPROOFING MEMBRANE, SPRAY-ON	LS	ALL REQ'D
510.2000.0000		BRIDGE DECK REPAIR	SF	5,125
510.2001.0000		BRIDGE DECK REPAIR, REINFORCING STEEL	CS	ALL REQ'D

ESTIMATE OF QUANTITIES (CON'T)

ITEM NO.	SSHC 2017 NO.	ITEM	UNIT	TOTAL QUANTITY
513.0001.0000	513(1)	FIELD PAINTING OF STEEL STRUCTURES	LS	ALL REQ'D
516.0001.0000	516(1)	EXPANSION JOINT (COMPRESSION SEAL)	LF	376
520.0001.0000	520(1)	TEMPORARY CROSSINGS	LS	ALL REQ'D
525.2001.0000		POLYESTER CONCRETE OVERLAY	CF	2,305
601.0001.0000	601(1)	METAL FLUME DOWNDRAIN	LF	47
601.2000.0000		PLASTIC FLUME DOWNDRAIN	LF	869
602.0002.0000	606(2)	STRUCTURAL PLATE PIPE-ARCH 6'-5" SPAN, 4'-4" RISE, 10 GAGE	LF	340
602.2002.0000		PRECAST REINFORCED CONCRETE BOX CULVERT 10'-0" SPAN, 8'-0" RISE	LF	133
603.0017.0018	603(17-18)	PIPE 18 INCH	LF	179
603.0017.0024	603(17-24)	PIPE 24 INCH	LF	70
603.0017.0036	603(17-36)	PIPE 36 INCH	LF	3,640
603.0017.0042	603(17-42)	PIPE 42 INCH	LF	143
603.0017.0060	603(17-60)	PIPE 60 INCH	LF	96
603.0017.0066	603(17-66)	PIPE 66 INCH	LF	144
603.0020.0018	603(20-18)	END SECITON FOR PIPE 18 INCH	EA	10
603.0020.0024	603(20-24)	END SECITON FOR PIPE 24 INCH	EA	4
603.0020.0036	603(20-36)	END SECTION FOR PIPE 36 INCH	EA	52
603.0020.0042	603(20-42)	END SECTION FOR PIPE 42 INCH	EA	2
606.0001.0000	606(1)	W-BEAM GUARDRAIL	LF	26,013
606.0006.0000	606(6)	REMOVING AND DISPOSING OF GUARDRAIL	LF	25,300
606.0009.0000	606(9)	SHORT RADIUS GUARDRAIL	EA	6
606.0013.0000	606(13)	PARALLEL GUARDRAIL TERMINAL	EA	13
606.0016.0000	606(16)	TRANSITION RAIL	EA	12
606.2005.0000		ESSENTIAL REPLACEMENT PARTS	LS	ALL REQ'D
606.2006.0000		ESSENTIAL REPLACEMENT PARTS - INTALLATION	CS	ALL REQ'D
606.2012.0000		BATTER BOARD	LF	1,400
610.0002.0000	610(2)	DITCH LINING	TON	3,500
611.0002.0001	611(2)	RIPRAP, CLASS I	TON	5,900
611.0002.0002	611(2)	RIPRAP, CLASS II	TON	4,200
611.0002.0003	611(2)	RIPRAP, CLASS III	TON	16,500
615.0001.0000	615(1)	STANDARD SIGN	SF	980
615.0006.0000	615(6)	SALVAGE SIGN	EA	43
616.0003.0000	616(3)	THAW WIRE INSTALLATION	LF	3,783

PRELIMINARY

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

ESTIMATE OF QUANTITIES

DRAWING LOCATION
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DATE TIME 3/8/2018 8:12 AM
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SCALE 1"= 1'
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DESIGNED BY CML
CHECKED BY KEK
DRAFTED BY VJS

REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	C2	C2

ESTIMATE OF QUANTITIES (CON'T)

ITEM NO.	SSHC 2017 NO.	ITEM	UNIT	TOTAL QUANTITY
618.0002.0000	618(2)	SEEDING	LB	2,750
618.0003.0000	618(3)	WATER FOR SEEDING	M-GAL	1,850
619.2001.00BE		MULCH - HECP BFM	SY	82,000
619.2014.0000		HIGH PERFORMANCE TURF REINFORCEMENT MAT	SY	42,000
620.0001.0000	620(1)	TOPSOIL	SY	169,000
622.2002.0000		BEARPROOF GARBAGE CAN	EA	2
622.2026.0000		DOUBLE CONCRETE VAULTED TOILET	EA	1
622.2028.0000		INTERPRETIVE KIOSK AND SIGNS	LS	ALL REQ'D
622.2034.0000		WOOD PARKING BUMPER	EA	12
631.0002.0001	631(2)	GEOTEXTILE, EROSION CONTROL, CLASS 1	SY	2,700
639.2001.0000		APPROACH	EA	28
640.0001.0000	640(1)	MOBILIZATION AND DEMOBILIZATION	LS	ALL REQ'D
640.0004.0000	640(4)	WORKER MEALS AND LODGING, OR PER DIEM	LS	ALL REQ'D
641.0001.0000	641(1)	EROSION, SEDIMENT, AND POLLUTION CONTROL ADMINISTRATION	LS	ALL REQ'D
641.0002.0000	641(2)	TEMPORARY EROSION, SEDIMENT, AND POLLUTION CONTROL	CS	ALL REQ'D
641.0006.0000	641(6)	WITHHOLDING	CS	ALL REQ'D
641.0007.0000	641(7)	SWPPP MANAGER	LS	ALL REQ'D
642.0001.0000	642(1)	CONSTRUCTION SURVEYING	LS	ALL REQ'D
642.0003.0000	642(3)	THREE PERSON SURVEY PARTY	HR	450
642.2008.0000		PASSING SIGHT DISTANCE MEASUREMENT	STA	280
643.0002.0000	643(2)	TRAFFIC MAINTENANCE	LS	ALL REQ'D
643.0003.0000	643(3)	PERMANENT CONSTRUCTION SIGNS	LS	ALL REQ'D
643.0023.0000	643(23)	TRAFFIC PRICE ADJUSTMENT	CS	ALL REQ'D
643.0025.0000	643(25)	TRAFFIC CONTROL	CS	ALL REQ'D
643.0032.0000		FLAGGING	CS	ALL REQ'D
643.0033.0000		DETOUR (ROCKY CREEK)	LS	ALL REQ'D
644.0001.0000	644(1)	FIELD OFFICE	LS	ALL REQ'D
644.0002.0000	644(2)	FIELD LABORATORY	LS	ALL REQ'D
644.0015.0000	644(15)	NUCLEAR TESTING EQUIPMENT STORAGE SHED	EA	1
644.0016.0000	644(16)	STORAGE CONTAINER	EA	1
644.2004.0000		ENGINEERING COMMUNICATIONS	CS	ALL REQ'D
645.0001.0000		TRAINING PROGRAM, 1 TRAINEE/APPRENTICE	HR	1,500
646.0001.0000	646(1)	CPM SCHEDULING	LS	ALL REQ'D
647.2002.0000		BACKHOE, 4WD, 1CY BUCKET, 75 HP MIN., 15 FT DEPTH	CS	ALL REQ'D
648.2002.0000		EAGLE MONITORING	CS	ALL REQ'D
661.0003.0000	661(3)	LOAD CENTER, TYPE 2	EA	1
669.2011.0000		RWIS ESS	LS	ALL REQ'D
670.2000.0000	670(10)	MMA PAVEMENT MARKINGS	LS	ALL REQ'D
682.2000.0000		VAC-TRUCK POTHOLE	CS	ALL REQ'D

TABLE OF ESTIMATING FACTORS

ITEM NO.	SSHC 2017 NO.	ITEM DESCRIPTION	ESTIMATING FACTOR
203.0006.000A	203(6A)	BORROW, TYPE A	145 LB./FT.^{3}
301.0001.00D1	301(1)	AGGREGATE BASE COURSE, GRADING D-1	148 LB./FT.^{3}
306.0001.0000	306(1)	ATB	150 LB./FT.^{3}
306.0002.5228	306(2)	ASPHALT CEMENT, GRADE PG 52-28	5.5% WT. OF TOTAL WEIGHT OF 306(1)
401.0001.002A	401(1A)	HOT MIX ASPHALT, TYPE II; CLASS A	153 LB./FT.^{3}
401.0004.5228	401(2)	ASPHALT CEMENT, GRADE PG 52-28	5.5% WT. OF TOTAL WEIGHT OF 401(1A)
402.0001.STE1	402(1)	STE-1 ASPHALT FOR TACK COAT	0.000316 TON/YD^2
610.0002.0000	610(2)	DITCH LINING	110 LB./FT.^{3}
611.0002.0001	611(2A)	RIPRAP, CLASS I	108 LB./FT.^{3}
611.0002.0002	611(2B)	RIPRAP, CLASS II	108 LB./FT.^{3}
611.0002.0003	611(2C)	RIPRAP, CLASS III	108 LB./FT.^{3}
618.0002.0000	618(2)	SEEDING	1.5 LB./1000 FT.^{2}
618.0003.0000	618(3)	WATER FOR SEEDING	1 GAL./FT.^{2}

PRELIMINARY

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

ESTIMATE OF QUANTITIES

DRAWING LOCATION
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DATE TIME 3/8/2018 8:12 AM
LAYOUT C2
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DESIGNED BY DML
CHECKED BY KEK
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FOR REVIEW ONLY.

REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	D0	D14

EARTHWORK SUMMARY - 203.0003.0000, 203.0006.0000

SHEET	STATION		EXCAVATION					EMBANKMENT				
			UNCLASSIFIED EXCAVATION MAINLINE	UNCLASSIFIED EXCAVATION MISCELLANEOUS	WASTE EST. @ 15% MAINLINE	UNCLASSIFIED EXCAVATION: USABLE	*SHRUNK UNCL. EX. USABLE AS SELECTED MATERIAL, TYPE E	SELECTED MATERIAL, TYPE A MAINLINE	SELECTED MATERIAL, TYPE A MISCELLANEOUS	SELECTED MATERIAL, TYPE E MAINLINE	SELECTED MATERIAL, TYPE E MISCELLANEOUS	TOTAL EMBANKMENT
	TO	FROM	(CY)	(CY)	(CY)	(CY)	(CY)	(CY)	(CY)	(CY)	(CY)	(CY)
F1	99+40	111+50	-	51.7	-	-	-	-	-	-	-	-
F2	111+50	124+00	-	-	-	-	-	-	-	-	-	-
F3	124+00	136+50	497.2	-	74.6	422.6	359.2	129.2	-	283.6	-	412.8
F4	136+50	149+00	8,410.6	-	1,261.6	7,149.0	6,076.7	2,231.7	-	4,882.2	-	7,113.9
F5	149+00	161+50	8,687.3	308.5	1,303.1	7,384.2	6,276.6	2,214.8	265.5	4,921.3	63.3	7,464.9
F6	161+50	174+00	27,469.6	-	4,120.4	23,349.2	19,846.8	2,616.9	-	6,060.7	-	8,677.6
F7	174+00	186+50	58,316.1	-	8,747.4	49,568.7	42,133.4	2,274.1	-	5,051.3	-	7,325.4
F8	186+50	199+00	46,477.7	2,405.0	6,971.7	39,506.0	33,580.1	2,273.5	99.8	5,492.8	47.6	7,913.7
F9	199+00	211+50	26,579.5	363.3	3,986.9	22,592.6	19,203.7	2,202.8	398.8	5,707.4	108.0	8,416.9
F10	211+50	224+00	20,955.2	518.2	3,143.3	17,811.9	15,140.1	2,135.9	606.6	11,979.2	213.1	14,934.7
F11	224+00	236+50	10,858.9	3,102.9	1,628.8	9,230.1	7,845.6	1,837.0	3,202.5	5,882.5	3,741.0	14,663.0
F12	236+50	249+00	17,594.2	1,283.6	2,639.1	14,955.0	12,711.8	2,480.5	1,365.0	6,852.9	105.5	10,803.9
F13	249+00	261+50	43,046.5	-	6,457.0	36,589.5	31,101.1	2,193.8	-	5,215.8	-	7,409.6
F14	261+50	274+00	97,167.1	-	14,575.1	82,592.0	70,203.2	3,328.1	-	7,520.9	-	10,849.0
F15	274+00	286+50	88,414.7	-	13,262.2	75,152.5	63,879.6	2,275.7	-	5,351.3	-	7,627.0
F16	286+50	299+00	6,244.7	39.2	936.7	5,308.0	4,511.8	2,345.5	81.3	36,135.3	60.6	38,622.7
F17	299+00	311+50	9,954.6	2,063.0	1,493.2	8,461.4	7,192.2	2,548.4	1,306.6	34,327.5	5,926.6	44,109.1
F18	311+50	324+00	46,155.2	-	6,923.3	39,231.9	33,347.2	2,293.0	-	7,078.4	-	9,371.4
F19	324+00	336+50	49,789.4	10.4	7,468.4	42,321.0	35,972.8	2,356.7	36.0	5,626.9	60.3	8,079.9
F20	336+50	349+00	50,905.4	-	7,635.8	43,269.6	36,779.2	2,471.9	-	6,061.4	-	8,533.3
F21	349+00	361+50	58,093.2	-	8,714.0	49,379.3	41,972.4	2,185.7	-	5,188.0	-	7,373.6
F22	361+50	374+00	35,857.9	-	5,378.7	30,479.2	25,907.3	2,352.5	-	6,553.8	-	8,906.3
F23	374+00	386+50	48,129.6	-	7,219.4	40,910.1	34,773.6	2,360.7	-	6,220.5	-	8,581.2
F24	386+50	393+75	24,132.7	-	3,619.9	20,512.8	17,435.9	1,521.3	-	3,674.2	-	5,195.5
TOTAL			793,883		117,561	666,177	566,250	55,992		196,393		252,385
ROUNDED TOTAL			794,000		118,000	667,000	567,000	56,000		197,000		253,000
TOTAL PAY ITEM QUANTITY (ROUNDED)			794,000					110,000				
UNIT			(CY)					(TON)				

NOTES: MISCELLANEOUS QUANTITIES INCLUDE APPROACHES, DETOURS, AND VICTOR CREEK TRAILHEAD.

PRELIMINARY

THIS SHEET WILL BE REMOVED FOR ADVERTISEMENT UNLESS THE CONSTRUCTION PROJECT MANAGER REQUIRES IT. IF IT'S REQUIRED, THE SHEET NUMBER WILL BECOME **D1**.

STATE OF ALASKA
KRISTEN L. FELDER
CE 132
REGISTERED PROFESSIONAL ENGINEER
P&E REVIEW

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

SUMMARY SHEETS

DRAWING LOCATION
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_D01_Summaries.dwg

DATE TIME 3/6/2018 11:54 AM
LAYOUT D0
SCALE N/A
XREFS: XR-53610-Border-Detail BORDER
DESIGNED BY CML
CHECKED BY KEK
DRAFTED BY VJS/KEC

REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	D1	D14

REMOVAL OF PAVEMENT - 202.0002.0000

SHEET	STATION FROM	STATION TO	REMOVAL AREA (S.Y.)	REMARKS
F1	99+40	100+66	771	INCLUDES PRIMROSE SPUR
F1	102+29	111+50	3,547	
F2	111+50	124+00	4,914	
F3	124+00	128+93	1,933	
F3	135+40	136+50	425	
F4	136+50	149+00	5,306	
F5	149+00	161+50	5,305	
F6	161+50	174+00	5,059	
F7	174+00	186+50	3,979	
F8	186+50	199+00	3,947	
F9	199+00	211+50	4,083	INCLUDES APPROACH
F10	211+50	224+00	4,003	INCLUDES APPROACHES
F11	224+00	229+59	1,829	INCLUDES APPROACH
F11	231+31	236+50	1,587	
F12	236+50	249+00	4,118	INCLUDES PULLOUT/APPROACH
F13	249+00	261+50	3,911	
F14	261+50	274+00	3,937	
F15	274+00	286+50	3,895	
F16	286+50	299+00	4,018	
F17	299+00	311+50	4,055	INCLUDES APPROACHES
F18	311+50	324+00	3,958	
F19	324+00	336+50	3,949	
F20	336+50	349+00	4,262	INCLUDES PULLOUT
F21	349+00	361+50	3,893	
F22	361+50	374+00	3,981	INCLUDES PULLOUT
F23	374+00	386+50	3,942	
F24	386+50	393+75	3,189	INCLUDES PULLOUT
ROUNDED TOTAL			98,000	

REMOVAL OF STRUCTURES AND OBSTRUCTIONS - 202.0001.0000

SHEET	STATION	OFFSET	REMARKS
F11	224+75	121 RT	STRUCTURE
F11	225+16	91 RT	STRUCTURE
F11	225+97	113 RT	STRUCTURE
F11	227+14	45 RT	GATE
F11	228+76	55 RT	CONCRETE SLAB
F12	239+58	17 RT	MAILBOX
F12	242+58	37 RT	KNIFE SIGN
F12	242+60	49 RT	FRENCH DRAIN
F12	243+31	44 RT	CAMPBELL'S KNIFE SIGN
F12	243+76	18 RT	MAILBOX
F12	243+87	44 RT	CONCRETE SLAB
F12	248+61	36 RT	STRUCTURE - RUIN
F17	305+90	38 LT	CONCRETE BOX CULVERT AND HEADWALLS AT ROCKY CREEK

CLEARING AND GRUBBING - 201.0003.0000

SHEET	STATION FROM	STATION TO	AREA (ACRES)	REMARKS
F3-F6	135+40	162+00	2.8	
F6-F9	162+00	208+00	13.9	
F9-F12	208+00	244+75	11.7	
F12-F24	244+75	393+75	47.4	
ROUNDED TOTAL			75.8	

PRELIMINARY

STATE OF ALASKA
KRISTIN KEMPER
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

SUMMARY SHEETS

DRAWING LOCATION
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_D01_Summaries.dwg
DATE TIME 3/6/2018 11:54 AM
LAYOUT D1
SCALE N/A
XREFS: XR-53610-Border-Detail BORDER
DESIGNED BY CML
CHECKED BY KEK
DRAFTED BY VJS/KEC

REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	D2	D14

REMOVAL OF CULVERT PIPE - 202.0004.0000

SHEET	STATION	OFFSET	CULVERT LENGTH (FT)	DOWNDRAIN LENGTH (FT)	REMARKS
F5	155+07	CL	162.5	0.0	ABANDON IN PLACE
F6	166+13	CL	65.5	95.5	REMOVE THAW WIRE
F6	168+61	CL	75.0	0.0	REMOVE THAW WIRE
F6	170+03	CL	61.0	0.0	REMOVE THAW WIRE
F6	172+34	CL	52.5	60.0	REMOVE THAW WIRE
F7	174+08	CL	48.0	38.5	REMOVE THAW WIRE
F7	177+87	CL	44.5	53.5	
F7	178+33	CL	50.0	0.0	
F7	179+49	CL	56.0	0.0	
F7	182+48	CL	5.0	0.0	REMOVE PIPE WITHIN STRUCTURAL SECTION. ABANDON REST IN PLACE THROUGH RETAINING WALL.
F7	183+39	CL	61.5	0.0	
F7	185+76	CL	53.0	0.0	
F8	187+96	CL	47.0	0.0	
F8	192+46	CL	49.0	0.0	
F8	193+07	CL	48.5	0.0	
F8	194+25	CL	47.0	0.0	
F8	196+46	CL	51.0	0.0	
F8	194+34	CL	51.0	0.0	
F9	200+71	CL	50.5	0.0	
F9	203+39	CL	47.0	0.0	
F9	209+72	CL	54.0	0.0	
F9	209+74	43.0 LT	16.5	0.0	
F10	215+77	47.0 RT	59.5	0.0	
F10	216+96	80.5 RT	32.5	0.0	
F12	244+10	CL	62.0	0.0	
F12	247+10	CL	48.0	0.0	REMOVE THAW WIRE
F13	249+09	CL	47.0	0.0	REMOVE THAW WIRE
F13	252+94	CL	44.0	0.0	
F13	255+14	CL	47.5	0.0	
F13	259+29	CL	47.0	0.0	
F13	260+81	CL	51.5	0.0	
F14	262+08	CL	48.5	0.0	
F14	263+46	CL	55.5	0.0	
F14	265+79	CL	52.5	63.5	
F14	270+23	CL	61.0	73.0	
F15	274+31	CL	62.0	0.0	
F15	275+13	CL	49.5	0.0	
F15	277+17	CL	51.0	0.0	
F15	278+68	CL	98.5	0.0	
F15	281+83	CL	45.5	0.0	
F15	282+78	CL	48.5	99.0	
F16	287+67	CL	67.0	0.0	
F16	291+30	37.0 LT	73.5	0.0	
F16	295+10	57.0 LT	78.0	0.0	
F16	296+72	50.0 LT	51.5	0.0	
F17	302+14	42.5 LT	67.5	0.0	

REMOVAL OF CULVERT PIPE (CON'T) - 202.0004.0000

SHEET	STATION	OFFSET	CULVERT LENGTH (FT)	DOWNDRAIN LENGTH (FT)	REMARKS
F18	313+23	CL	86.5	0.0	
F18	314+74	CL	69.5	0.0	
F18	319+01	CL	58.5	48.0	
F18	323+79	CL	43.0	0.0	
F19	326+83	CL	43.0	0.0	
F19	335+65	CL	55.0	0.0	
F19-20	336+50	15.0 RT	34.0	0.0	
F20	343+38	CL	55.0	0.0	
F20	345+41	CL	47.5	0.0	
F20	348+06	CL	60.5	0.0	
F20	348+25	CL	47.5	0.0	
F21	350+37	CL	45.0	0.0	
F21	353+24	CL	51.0	0.0	
F21	358+62	CL	47.5	0.0	
F22	363+64	CL	48.0	0.0	
F22	366+28	CL	47.0	0.0	
F22	368+10	CL	148.5	0.0	ABANDON IN PLACE
F22	368+15	CL	94.5	47.0	
F22	371+39	13.5 RT	40.0	0.0	
F23	374+14	13.0 RT	39.0	0.0	
F23	374+91	CL	51.0	0.0	
F23	380+35	CL	50.5	0.0	
F23	385+93	CL	86.0	0.0	
SUBTOTAL			3,893	578	
ROUNDED TOTAL			4,471		

PRELIMINARY

STATE OF ALASKA
KRISTY L. CROCKETT
CE 13211
REGISTERED PROFESSIONAL ENGINEER
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

SUMMARY SHEETS

DRAWING LOCATION
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_D01_Summaries.dwg

DATE TIME 3/6/2018 11:54 AM
LAYOUT D2
SCALE N/A
XREFS: XR-53610-Border-Detail BORDER
DESIGNED BY CML
CHECKED BY KEK
DRAFTED BY VJS/KEC

REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	D3	D14

DITCHLINE/SUBGRADE BLASTING - 203.0011.0000

SHEET	STATION	WIDTH (FT)	AREA (SY)	REMARKS
F5	161+00	18.00	-	START ROCK CUT. BLAST DITCHLINE AND SHOULDER ONLY.
F6	162+00	24.00	233.3	
F6	162+00	70.00	-	ROCK IS WITHIN BLASTING DEPTH.
F6	163+00	77.00	816.7	
F6	164+00	103.50	1,002.8	
F6	165+00	112.75	1,201.4	
F6	166+00	101.50	1,190.3	
F6	167+00	90.00	1,063.9	
F6	168+00	73.75	909.7	
F6	169+00	62.75	758.3	
F6	169+00	24.00	-	ROCK IS NOT WITHIN BLASTING DEPTH. BLAST DITCHLINE AND SHOULDER ONLY.
F6	170+00	18.00	233.3	
F6	171+00	24.00	233.3	
F6	172+00	30.50	302.8	
F6	173+00	30.50	338.9	
F7	174+00	30.50	338.9	
F7	175+00	30.50	338.9	
F7	176+00	30.50	338.9	
F7	177+00	30.50	338.9	
F7	178+00	30.50	338.9	
F7	178+00	65.00	-	ROCK IS WITHIN BLASTING DEPTH.
F7	179+00	69.00	744.4	
F7	180+00	70.25	773.6	
F7	181+00	69.00	773.6	
F7	181+00	39.00	-	BLAST DITCHLINE TO CENTERLINE ONLY. TO AVOID STRUCTURAL RETAINING WALL PROJECT LT.
F7	182+00	39.00	433.3	
F7	183+00	39.00	433.3	
F7	183+00	74.50	-	CLEAR OF STRUCTURAL RETAINING WALL.
F7	184+00	73.50	822.2	
F7	184+00	30.50	-	ROCK IS NOT WITHIN BLASTING DEPTH. BLAST DITCHLINE AND SHOULDER ONLY.
F7	185+00	30.50	338.9	
F7	186+00	30.50	338.9	
F8	187+00	30.50	338.9	
F8	188+00	30.50	338.9	
F8	188+00	64.75	-	ROCK IS WITHIN BLASTING DEPTH.
F8	189+00	74.75	775.0	
F8	190+00	83.00	876.4	
F8	191+00	93.00	977.8	
F8	192+00	99.25	1,068.1	
F8	193+00	92.25	1,063.9	
F8	194+00	70.50	904.2	
F8	195+00	67.00	763.9	
F8	196+00	65.75	737.5	
F8	197+00	69.00	748.6	
F8	198+00	65.75	748.6	
F8	198+00	30.50	-	ROCK IS NOT WITHIN BLASTING DEPTH. BLAST DITCHLINE AND SHOULDER ONLY.
F8	199+00	30.50	338.9	

DITCHLINE/SUBGRADE BLASTING (CON'T) - 203.0011.0000

SHEET	STATION	WIDTH (FT)	AREA (SY)	REMARKS
F9	200+00	30.50	338.9	
F9	201+00	30.50	338.9	
F9	202+00	30.50	338.9	
F9	203+00	30.50	338.9	
F9	204+00	30.50	338.9	
F9	205+00	30.50	338.9	
F9	206+00	30.50	338.9	END ROCK CUT. NO BLASTING.
F12	247+00	30.50	-	START ROCK CUT. BLAST DITCHLINE AND SHOULDER ONLY.
F12	248+00	30.50	338.9	
F13	249+00	30.50	338.9	
F13	250+00	30.50	338.9	
F13	251+00	30.50	338.9	
F13	252+00	30.50	338.9	
F13	253+00	30.50	338.9	
F13	254+00	30.50	338.9	
F13	255+00	30.50	338.9	
F13	256+00	30.50	338.9	
F13	257+00	30.50	338.9	
F13	258+00	30.50	338.9	
F13	259+00	30.50	338.9	
F13	260+00	30.50	338.9	
F13	261+00	30.50	338.9	
F14	262+00	30.50	338.9	
F14	263+00	30.50	338.9	
F14	264+00	30.50	338.9	
F14	265+50	42.50	608.3	BLAST DITCHLINE TO EDGE OF TRAVELED WAY DUE TO PULLOUT.
F14	266+00	24.50	186.1	
F14	266+50	42.50	186.1	
F14	268+00	42.50	708.3	
F14	268+00	79.00	-	ROCK IS WITHIN BLASTING DEPTH.
F14	269+00	86.50	919.4	
F14	270+00	86.50	961.1	
F14	271+00	117.00	1,130.6	
F14	272+00	141.50	1,436.1	
F14	273+00	114.50	1,422.2	
F14	274+00	107.75	1,234.7	

PRELIMINARY

STATE OF ALASKA PSSE REVIEW KRISTEN LEER CE 132 REGISTERED PROFESSIONAL ENGINEER

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

SUMMARY SHEETS

DRAWING LOCATION
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DATE TIME 3/6/2018 11:54 AM
LAYOUT D3
SCALE N/A
XREFS: XR-53610-Border-Detail BORDER
DESIGNED BY CML
CHECKED BY KEK
DRAFTED BY VJS/KEC

REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	D4	D14

DITCHLINE/SUBGRADE BLASTING (CON'T) - 203.0011.0000

SHEET	STATION	WIDTH (FT)	AREA (SY)	REMARKS
F15	275+00	81.25	1,050.0	
F15	276+00	75.75	872.2	
F15	277+00	75.00	837.5	
F15	278+00	69.50	802.8	
F15	279+00	62.00	730.6	
F15	280+00	73.50	752.8	
F15	281+00	78.75	845.8	
F15	282+00	88.00	926.4	
F15	283+00	86.00	966.7	
F15	284+00	85.50	952.8	
F15	285+00	77.25	904.2	
F15	285+00	42.50	-	ROCK IS NOT WITHIN BLASTING DEPTH. BLAST DITCHLINE TO CENTERLINE ONLY.
F15	286+00	42.50	472.2	
F16	287+50	42.50	708.3	END ROCK CUT. NO BLASTING.
F18	314+50	42.50	-	START ROCK CUT. BLAST DITCHLINE TO CENTERLINE ONLY.
F18	315+00	42.50	236.1	
F18	316+00	42.50	472.2	
F18	316+00	70.25	-	ROCK IS WITHIN BLASTING DEPTH.
F18	317+00	69.75	777.8	
F18	318+00	95.00	915.3	
F18	319+50	79.50	1,454.2	
F18	319+50	30.50	-	ROCK IS NOT WITHIN BLASTING DEPTH. BLAST DITCHLINE AND SHOULDER ONLY.
F18	321+00	30.50	508.3	
F18	322+00	30.50	338.9	
F18	323+00	30.50	338.9	
F19	324+00	24.50	305.6	
F19	325+00	30.50	305.6	
F19	326+00	30.50	338.9	
F19	327+00	30.50	338.9	
F19	328+00	30.50	338.9	
F19	329+00	30.50	338.9	
F19	330+00	30.50	338.9	
F19	331+00	30.50	338.9	
F19	332+00	30.50	338.9	
F19	333+00	30.50	338.9	
F19	334+00	30.50	338.9	
F19	334+00	77.50	-	ROCK IS WITHIN BLASTING DEPTH.
F19	335+00	73.50	838.9	
F19	336+00	76.75	834.7	
F20	337+00	113.00	1,054.2	
F20	338+00	106.75	1,220.8	
F20	339+00	74.00	1,004.2	
F20	340+00	70.75	804.2	
F20	340+00	42.50	-	ROCK IS NOT WITHIN BLASTING DEPTH. BLAST DITCHLINE TO CENTERLINE ONLY.
F20	341+00	42.50	472.2	
F20	342+00	42.50	472.2	
F20	343+00	42.50	472.2	
F20	344+00	42.50	472.2	
F20	345+00	42.50	472.2	

DITCHLINE/SUBGRADE BLASTING (CON'T) - 203.0011.0000

SHEET	STATION	WIDTH (FT)	AREA (SY)	REMARKS
F20	346+00	42.50	472.2	
F20	347+00	42.50	472.2	
F20	348+00	42.50	472.2	
F20	349+00	42.50	472.2	
F20	349+00	70.00	-	ROCK IS WITHIN BLASTING DEPTH.
F21	350+00	66.00	755.6	
F21	351+00	68.75	748.6	
F21	352+00	69.25	766.7	
F21	353+00	68.50	765.3	
F21	354+00	73.50	788.9	
F21	355+00	68.25	787.5	
F21	356+00	68.75	761.1	
F21	357+00	76.75	808.3	
F21	358+00	76.00	848.6	
F21	359+00	83.00	883.3	
F21	360+00	83.75	926.4	
F21	361+00	82.50	923.6	
F21	362+00	73.25	865.3	
F22	362+00	42.50	-	ROCK IS NOT WITHIN BLASTING DEPTH. BLAST DITCHLINE TO CENTERLINE ONLY.
F22	363+00	42.50	472.2	
F22	364+00	42.50	472.2	
F22	365+00	42.50	472.2	
F22	366+00	42.50	472.2	
F22	367+50	42.50	708.3	END ROCK CUT. NO BLASTING. CALHOUN CREEK.
F22	369+00	36.50	658.3	START ROCK CUT. BLAST DITCHLINE AND SHOULDER ONLY.
F22	370+00	36.50	405.6	
F22	371+50	36.50	608.3	END ROCK CUT. NO BLASTING.
F22	374+00	18.50	-	START ROCK CUT. BLAST DITCHLINE AND SHOULDER ONLY.
F23	375+00	45.50	355.6	BLAST DITCHLINE TO EDGE OF TRAVELED WAY DUE TO PULLOUT.
F23	376+00	45.50	505.6	
F23	377+00	45.50	505.6	
F23	377+00	84.00	-	ROCK IS WITHIN BLASTING DEPTH.
F23	378+00	69.75	854.2	
F23	379+00	67.50	762.5	
F23	380+00	69.50	761.1	
F23	381+00	69.00	769.4	
F23	382+00	90.00	883.3	
F23	383+00	72.50	902.8	

PRELIMINARY

PS&E REVIEW
STATE OF ALASKA
KRISTEN K. CARTER
CE 13232
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

SUMMARY SHEETS

DRAWING LOCATION
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_D01_Summaries.dwg

DATE TIME
3/6/2018 11:54 AM

LAYOUT
D4

SCALE
N/A

XREFS: XR-53610-Border-Detail
BORDER

DESIGNED BY CML
CHECKED BY KEK
DRAFTED BY VJS/KEC

REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	D5	D14

DITCHLINE/SUBGRADE BLASTING (CON'T) - 203.0011.0000

SHEET	STATION	WIDTH (FT)	AREA (SY)	REMARKS
F23	384+00	65.50	766.7	
F23	384+00	30.50	-	BLAST DITCHLINE AND SHOULDER ONLY.
F23	385+25	30.50	423.6	END IN ROCK CUT. DRAINAGE CHANNEL. NO BLASTING.
F23	386+25	30.50	-	BLAST DITCHLINE AND SHOULDER ONLY.
F24	387+00	30.50	254.2	
F24	388+00	30.50	338.9	
F24	389+00	30.50	338.9	
F24	390+00	30.50	338.9	
F24	391+00	30.50	338.9	
F24	392+00	30.50	338.9	
F24	393+50	30.50	508.3	END ROCK CUT. NO BLASTING.
		ROUNDED TOTAL	96,000	

STABILIZATION - ROCK BOLT - 203.0013.0000

SHEET	STATION FROM	STATION TO	LENGTH (FT)	BOLTS (EACH)	REMARKS
					ASSUME ONE BOLT PER STATION
F6-F9	164+00	206+00	4200	42	
F13-F15	247+00	287+00	4000	40	
F18-F24	314+00	394+00	8000	80	
ROUNDED TOTAL				162	EACH

MAILBOX INSTALLATION - 202.0010.0000, 202.0011.0000, 202.0012.0000

SHEET	EXISTING STATION	EXISTING OFFSET	PROPOSED STATION	PROPOSED OFFSET	SINGLE MAILBOX INSTALLATION	MULTIPLE MAILBOX INSTALLATION	DOUBLE MAILBOX INSTALLATION	REMARKS
F9	210+27	57.0' LT	210+20	54.5' LT			X	
F10	212+20	37.5' RT	212+17	38.0' RT	X			
F11	228+11	42.5' LT	226+46.5	85.0' LT		X		6 BOXES
F12	236+38	48.0' LT	236+98	48.0' LT	X			
F12	237+50	14.5' RT	237+26	38.5' RT			X	
F12	242+50	54.0' LT	242+50	51.0' LT		X		CLUSTER
TOTAL (EACH)					2	2	2	

OBLITERATION OF ROADWAY - 203.0009.0000

SHEET	FROM STATION	FROM OFFSET	TO STATION	TO OFFSET	AREA (SY)	REMARKS
F10	214+17	RT	219+83	RT	657.2	
F11 & G8	229+35	RT	231+50	RT	875.6	
ROUNDED TOTAL					1550	

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STATE OF ALASKA
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AND PUBLIC FACILITIES

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
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PS&E REVIEW

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

SUMMARY SHEETS

DESIGNED BY CML
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XREFS: XR-53610-Border-Detail BORDER

SCALE N/A

LAYOUT D5

DATE TIME 3/6/2018 11:54 AM

DRAWING LOCATION
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REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	D6	D14

ROCKFALL MITIGATION - WIRE MESH & HPTRM - 203.0017.0000, 619.2014.0000

SHEET	STATION FROM	STATION TO	OFFSET	SLOPE (H:V)	WIRE MESH AREA (SY)	HPTRM AREA (SY)	REMARKS
F3-F5	135+50	158+45	RT	1.5:1	-	2,124.5	
F3-F6	135+50	158+75	LT	1.5:1	-	2,084.0	
F6	161+85	162+70	RT	1:1	301.2	301.2	
F6	162+70	166+10	RT	1.5:1	-	1,449.1	
F6	166+30	168+30	RT	1:1	588.9	588.9	
F6	168+85	169+95	RT	1:1	332.9	332.9	
F6	169+05	170+95	LT	1.5:1	-	172.3	
F6-F7	170+15	178+80	RT	1:1	3,027.9	3,027.9	
F6-F7	173+90	174+20	LT	1.5:1	-	31.0	
F7	175+25	178+15	LT	1.5:1	-	265.6	
F7	178+80	179+80	RT	1.5:1	-	432.1	
F7	181+25	181+55	LT	2:1	-	31.8	
F7	181+85	182+80	RT	1.5:1	-	408.4	
F7	182+50	182+80	LT	2:1	-	40.0	
F7	182+80	183+80	RT	1:1	205.3	205.3	
F7	183+80	185+70	RT	1.5:1	-	932.7	
F7-F8	185+70	187+30	RT	1:1	712.0	712.0	
F8	187+30	187+90	RT	1.5:1	-	247.9	
F8	188+10	190+95	RT	1:1	1,048.5	1,048.5	ELEC TRAIL BACKSLOPE
F8	189+25	190+25	LT	1.5:1	-	69.4	
F8	189+30	191+25	RT	1.5:1	-	771.2	BETWEEN MAINLINE & ELEC TRAIL
F8	194+00	194+50	LT	1.5:1	-	52.4	
F8	195+40	197+00	RT	1.5:1	-	593.6	
F8	198+15	198+45	LT	1.5:1	-	256.5	
F9	202+30	203+55	LT	1.5:1	-	101.4	
F9	202+50	205+90	RT	1.5:1	-	1,375.2	
F9	205+90	206+50	RT	1:1	156.0	156.0	ELEC TRAIL BACKSLOPE
F13	250+65	251+75	RT	1.5:1	-	288.4	
F13	251+75	253+75	RT	1:1	608.5	608.5	
F13	253+75	258+75	RT	1.5:1	-	1,672.5	
F13	258+75	259+65	RT	1:1	258.8	258.8	
F13-F14	259+65	262+25	RT	1.5:1	-	856.7	
F14	268+05	271+10	RT	1.5:1	-	1,418.9	

PRELIMINARY

STATE OF ALASKA
K. KRISTOVICH
CE 13211
REGISTERED PROFESSIONAL ENGINEER
PSSE REVIEW

STATE OF ALASKA DOT&PF
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

SUMMARY SHEETS

DESIGNED BY CML
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XREFS: XR-53610-Border-Detail
BORDER

SCALE N/A

LAYOUT D6

DATE TIME 3/7/2018 12:32 PM

DRAWING LOCATION
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REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	D7	D14

ROCKFALL MITIGATION (CON'T) - WIRE MESH & HPTRM - 203.0017.0000, 619.2014.0000

SHEET	STATION FROM	STATION TO	OFFSET	SLOPE (H:V)	WIRE MESH AREA (SY)	HPTRM AREA (SY)	REMARKS
F15	274+60	278+25	RT	1:1	1,839.4	1,839.4	
F15-F16	284+25	287+25	RT	1:1	914.7	914.7	
F18	311+75	315+25	LT	1.5:1	-	286.6	
F18	314+35	315+25	RT	1.5:1	-	348.2	
F18	318+10	319+15	RT	1.5:1	-	381.2	
F18-F19	321+35	325+40	RT	1:1	1,370.2	1,370.2	
F19	325+40	326+00	RT	1.5:1	-	237.7	
F19	327+80	333+20	RT	0.75:1	1,683.1	1,683.1	
F19	333+20	334+40	RT	1.5:1	-	411.2	
F19-F20	336+30	337+90	RT	1.5:1	-	587.9	
F20	338+55	338+70	LT	1.5:1	-	18.9	
F20	340+15	345+30	RT	1.5:1	-	1,977.2	
F21	349+45	350+40	LT	1.5:1	-	67.2	
F21	353+60	359+75	RT	1.5:1	-	2,437.0	
F21	356+15	356+65	LT	1.5:1	-	39.2	
F21	358+25	358+75	LT	1.5:1	-	34.9	
F21-F22	359+75	362+75	RT	1:1	1,134.4	1,134.4	
F22	362+75	363+25	RT	1.5:1	-	166.7	
F22	365+25	366+25	LT	1.5:1	-	71.0	
F22	366+25	367+75	RT	1.5:1	-	575.7	
F22	367+70	368+15	LT	1.5:1	-	36.3	
F22	369+00	371+25	RT	1:1	741.3	741.3	
F22	369+25	371+45	LT	1.5:1	-	155.9	
F22-F23	374+50	376+25	RT	1.5:1	-	251.8	
F23	377+65	380+10	RT	1.5:1	-	1,216.8	
F23	380+10	381+25	RT	1:1	400.7	400.7	
F23	381+25	382+00	RT	1.5:1	-	222.2	
F23	383+10	385+00	RT	1:1	879.0	879.0	
F23	384+90	386+50	LT	1.5:1	-	161.2	
F24	393+20	393+80	LT	1.5:1	-	78.5	
ROUNDED TOTAL					17,000	42,000	

PRELIMINARY

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XREFS: XR-53610-Border-Detail
BORDER

SCALE N/A

LAYOUT D7

DATE TIME 3/7/2018 12:32 PM

DRAWING LOCATION
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

SUMMARY SHEETS

STATE OF ALASKA
KRISTEN E. CARTER
PE 132
PROFESSIONAL ENGINEER
PS&E REVIEW

STATE OF ALASKA DOT&PF
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ANCHORAGE, AK 99502
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REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	D8	D14

RUMBLE STRIPS - 406.0002.0000

SHEET	STATION FROM	STATION TO	OFFSET	LENGTH (STA)	REMARKS
F1-F3	103+60	125+40	LT	23.9	
F1-F3	103+95	127+95	RT	23.9	
F3-F5	136+40	161+24	LT	24.7	
F3-F5	136+40	158+01	RT	21.7	
F5-F8	159+46	187+94	RT	28.5	
F6	163+00	167+50	LT	4.5	
F6-F8	169+21	188+14	LT	19.0	
F8-F9	188+68	205+70	RT	17.0	
F8	189+80	193+30	LT	3.5	
F8-F9	194+92	209+60	LT	14.7	
F9-10	206+40	211+72	RT	5.4	
F9-10	211+20	213+63	LT	2.4	
F10	212+46	214+66	RT	2.2	
F10	214+37	219+13	LT	4.8	
F10	215+40	216+63	RT	1.2	
F10-F11	217+37	231+90	RT	14.4	
F10-F11	219+87	225+77	LT	6.0	
F11	227+20	233+64	LT	6.5	
F11-F12	233+44	236+81	RT	3.4	
F11-F12	234+40	236+69	LT	2.3	
F12	237+45	238+29	LT	0.8	
F12	237+55	238+02	RT	0.5	
F12	239+03	239+71	LT	0.7	
F12	238+58	241+11	RT	1.5	
F12	240+45	244+40	LT	4.0	
F12	242+51	243+10	RT	0.6	
F12	243+90	244+27	RT	0.4	
F12-14	245+02	263+50	RT	18.5	
F12-14	245+16	267+88	LT	22.7	
F14	265+00	273+75	RT	8.8	
F14	269+00	273+75	LT	4.7	
F15-F16	275+05	294+50	LT	19.4	
F15-F16	276+25	294+62	RT	18.5	
F16-17	295+45	306+25	RT	10.7	
F16-17	296+00	305+00	LT	9.1	
F17-19	306+57	332+38	LT	25.8	
F17-19	306+95	335+84	RT	28.9	
F19-20	334+00	338+50	LT	4.5	
F20-22	336+54	371+00	RT	34.5	
F20-24	340+60	387+31	LT	46.7	
F22-23	372+50	377+00	RT	4.5	
F23-24	378+50	393+75	RT	15.3	
F24	389+00	392+00	LT	3.0	
ROUNDED TOTAL				520	

REMOVAL OF GUARDRAIL SUMMARY - 606.0006.0000

SHEET	STATION FROM	STATION TO	OFFSET	LENGTH (FT)	REMARKS
F1	99+57.5	100+27.5	RT	70.0	
F1	100+23.5	100+60.5	LT	71.0	
F1	102+34.5	103+93.0	RT	158.5	
F1	102+67.5	104+75.5	LT	209.0	
F3	126+62.0	128+84.0	RT	220.5	
F3	127+15.0	128+84.0	LT	170.0	
F3-F5	135+40.5	160+70.0	RT	2,552.0	
F3-F9	135+40.5	209+93.0	LT	7,421.5	
F10-F11	218+31.5	226+04.0	RT/LT	777.0	
F11	228+59.0	229+34.0	RT	75.5	
F11	229+10.0	229+59.0	LT	49.5	
F11	231+30.5	231+82.0	RT	51.5	
F11	231+55.5	232+32.0	LT	77.0	
F12-14	247+85.5	270+88.5	LT	2,295.0	
F14-F16	273+64.5	289+44.5	LT	1,563.5	
F16-F17	294+49.0	307+02.0	LT	1,300.0	
F17	305+21.0	306+21.0	LT	101.0	
F17-F18	311+40.5	317+22.5	LT	576.5	
F18-F19	318+75.0	333+89.0	LT	1,513.0	
F20-F24	338+65.5	394+15.0	LT	5,968.0	
ROUNDED TOTAL				25,300	

PRELIMINARY

PSAE REVIEW

STATE OF ALASKA DOT&PF
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

SUMMARY SHEETS

DRAWING LOCATION
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LAYOUT D8

SCALE N/A

XREFS: XR-53610-Border-Detail BORDER

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REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	D9	D14

GUARDRAIL SUMMARY - 606.0001.0000, 606.0009.0000, 606.0013.0000, 606.0016.0000

SHEET	STATION		OFFSET	W-BEAM GUARDRAIL (LF)	SHORT RADIUS GUARDRAIL (SRG)			PARALLEL GUARDRAIL TERMINAL (EACH)	TRANSITION RAIL (EACH)	REMARKS
	FROM	TO			(EACH)	CURVE RADIUS (FT)	CURVE LENGTH (FT)			
F1	99+57.5	100+27.5	RT	50.0	-	-	-	-	1.0	
F1	100+18.0	100+59.5	LT	-	1.0	10.0	18.8	-	1.0	
F1	102+35.0	103+79.5	RT	75.0	-	-	-	1.0	1.0	
F1	102+68.0	105+62.0	LT	225.0	-	-	-	1.0	1.0	
F3	125+77.0	128+83.5	RT	237.5	-	-	-	1.0	1.0	
F3	127+55.5	128+83.5	LT	62.5	-	-	-	1.0	1.0	
F3-F5	135+50.0	158+62.0	RT	2,262.5	1.0	36.0	75.4	-	1.0	
F3-F9	135+50.0	210+00.0	LT	7,350.0	-	-	-	1.0	1.0	
F11	226+14.0	229+11.0	RT	225.0	-	-	-	1.0	1.0	
F11	228+00.0	229+32.0	LT	62.5	-	-	-	1.0	1.0	
F11	231+71.0	232+51.0	RT	12.5	1.0	36.0	56.6	-	1.0	
F11	231+92.0	234+86.0	LT	225.0	-	-	-	1.0	1.0	
F12-16	246+14.5	290+56.0	LT	4,337.5	-	-	-	2.0	-	
F16-F17	294+15.0	306+64.5	LT	1,200.0	1.0	20.0	28.9	1.0	-	INTALL STANDARD W-BEAM END SECTION PER STD. DWG. G-00.04
F17	302+39.5	306+61.0	RT	325.0	1.0	20.0	24.4	1.0	-	INSTALL LONG SPAN AT ROCKY CREEK AS NECESSARY PER STD. DWG. G-28.00
F17-F24	304+31.0	394+15.0	LT	9,100.0	-	-	-	2.0	-	INSTALL LONG SPAN AT ROCKY CREEK AS NECESSARY PER STD. DWG. G-28.00
TOTAL				25,750	5			14	12	

NOTE: SEE SPECIFICATIONS AND STANDARD DRAWINGS FOR POST LENGTHS.

BATTER BOARD - 606.2012.0000

SHEET	STATION		OFFSET	LENGTH (LF)
	FROM	TO		
F4-F5	147+00	150+00	LT	300.0
F5	150+00	161+00	LT	1,100.0
TOTAL				1,400

NOTE: EXTEND AND SEAL PAVEMENT TO THE FACE OF BATTER BOARD. SEE BATTER BOARD DETAILS.

PRELIMINARY

STATE OF ALASKA
KRISTOPHER KELLER
CE 132
REGISTERED PROFESSIONAL ENGINEER
PS&E REVIEW

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

SUMMARY SHEETS

DESIGNED BY OML
CHECKED BY KEK
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XREFS: XR-53610-Border-Detail
BORDER

SCALE N/A

LAYOUT D9

DATE TIME 3/6/2018 11:54 AM

DRAWING LOCATION
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REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	D10	D14

RIPRAP, DITCH LINING, & GEOTEXTILE SUMMARY

SHEET	PIPE LOCATIONS			END TREATMENT	LENGTH (FT)	RIPRAP CLASS	RIPRAP (TON)	DITCH LINING (TON)	REMARKS
	PIPE/PLASTIC FLUME ID	INLET/OUTLET	OFFSET						
F4	P4-1	INLET	RT	SEE E SHEETS		I	29.2	19.5	SEE LARGE DIAMETER CULVERT DETAIL SHEETS
F4	P4-1	OUTLET	LT	SEE E SHEETS		II	123.8	41.3	SEE LARGE DIAMETER CULVERT DETAIL SHEETS
F4	FD4-1	OUTLET	LT	IV	12.0	II	35.0	-	
F5	FD5-1	OUTLET	LT	IV	12.0	II	35.0	-	
F6	P6-1	INLET	RT	I	12.0	II	29.2	-	
F6	FD6-1	OUTLET	LT	IV	12.0	III	46.7	-	
F6	F6-2	INLET	RT	I	12.0	II	29.2	-	
F6	FD6-2	OUTLET	LT	IV	12.0	III	46.7	-	
F6	F6-3	INLET	RT	I	12.0	II	29.2	-	
F6	FD6-3	OUTLET	LT	IV	12.0	III	46.7	-	
F6	F6-4	INLET	RT	I	18.0	II	43.7	-	
F6	FD6-4	OUTLET	LT	IV	14.0	III	54.4	-	
F7	P7-1	INLET	RT	I	18.0	II	43.7	-	
F7	P7-2	INLET	RT	I	18.0	II	43.7	-	
F7	FD7-2	OUTLET	LT	IV	12.0	III	46.7	-	
F7	P7-4	INLET	RT	I	19.0	II	46.2	-	
F7	P7-4	OUTLET	LT	III	7.0	II	11.3	-	
F7	P7-6	INLET	RT	I	18.0	II	43.7	-	
F7	P7-6	OUTLET	LT	III	13.0	II	21.1	-	
F7	P7-7	INLET	RT	I	18.0	II	43.7	-	
F7	P7-7	OUTLET	LT	III	19.0	III	41.0	-	
F8	P8-1	INLET	RT	I	18.0	II	43.7	-	
F8	P8-1	OUTLET	LT	III	12.0	II	19.4	-	
F8	P8-1A	INLET	RT	II	13.0	II	21.1	-	
F8	P8-1A	OUTLET	RT	II	9.5	II	15.4	-	
F8	P8-2	INLET	RT	I	18.0	II	43.7	-	
F8	P8-2	OUTLET	LT	III	17.0	II	27.5	-	
F8	P8-3	INLET	RT	I	18.0	II	43.7	-	
F8	P8-3	OUTLET	LT	III	12.0	II	19.4	-	
F8	P8-4	INLET	RT	I	18.0	II	43.7	-	
F8	P8-4	OUTLET	LT	III	7.0	II	11.3	-	
F8	P8-5	INLET	RT	I	18.0	II	43.7	-	
F8	P8-5	OUTLET	LT	III	7.0	II	11.3	-	
F8	P8-6	INLET	RT	I	18.0	II	43.7	-	
F8	P8-6	OUTLET	LT	III	7.0	II	11.3	-	
F9	P9-1	INLET	RT	I	18.0	II	43.7	-	
F9	P9-1	OUTLET	LT	III	7.0	II	11.3	-	
F9	P9-2	INLET	RT	I	18.0	II	43.7	-	
F9	P9-2	OUTLET	LT	III	7.0	II	11.3	-	
F9	P9-4	INLET	RT	I	12.0	II	29.2	-	
F9	P9-4	OUTLET	LT	III	7.0	II	11.3	-	
F10	P10-3	INLET	RT	SEE E SHEETS		II	268.5	-	SEE SPECIAL DITCH DETIALS
F10	P10-3	OUTLET	LT	III	7.0	II	11.3	-	

PRELIMINARY

STATE OF ALASKA
KRISTIN KEK
CE 132
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

SUMMARY SHEETS

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SCALE N/A

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NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	D11	D14

RIPRAP, DITCH LINING, & GEOTEXTILE SUMMARY (CON'T)

SHEET	PIPE LOCATIONS			END TREATMENT	LENGTH (FT)	RIPRAP CLASS	RIPRAP (TON)	DITCH LINING (TON)	REMARKS
	PIPE/PLASTIC FLUME ID	INLET/OUTLET	OFFSET						
F12	P12-8	INLET	RT	I	12.7	II	30.9	-	
F12	P12-8	OUTLET	LT	III	7.0	II	11.3	-	
F12	P12-10	INLET	RT	I	18.0	II	43.7	-	
F12	P12-10	OUTLET	LT	III	7.0	II	11.3	-	
F13	P13-1	INLET	RT	I	18.0	II	43.7	-	
F13	P13-2	INLET	RT	I	18.0	II	43.7	-	
F13	P13-3	INLET	RT	I	18.0	II	43.7	-	
F13	FD13-3	OUTLET	LT	IV	9.0	II	26.2	-	
F13	P13-4	INLET	RT	I	18.0	II	43.7	-	
F13	FD13-4	OUTLET	LT	VI	7.0	II	11.3	-	
F13	P13-5	INLET	RT	I	18.0	II	43.7	-	
F13	FD13-5	OUTLET	LT	IV	12.0	II	35.0	-	
F14	P14-1	INLET	RT	I	18.0	II	43.7	-	
F14	P14-1	OUTLET	LT	III	7.0	II	11.3	-	
F14	P14-2	INLET	RT	I	18.0	II	43.7	-	
F14	P14-2	OUTLET	LT	III	7.0	II	11.3	-	
F14	P14-3	INLET	RT	I	18.0	II	43.7	-	
F14	P14-4	INLET	RT	I	18.0	II	43.7	-	
F15	P15-1	INLET	RT	I	18.0	II	43.7	-	
F15	FD15-1	OUTLET	LT	IV	14.0	III	54.4	-	
F15	P15-2	INLET	RT	I	18.0	II	43.7	-	
F15	P15-2	OUTLET	LT	III	12.0	II	19.4	-	
F15	P15-3	INLET	RT	I	18.0	II	43.7	-	
F15	FD15-3	OUTLET	LT	IV	12.0	II	35.0	-	
F15	P15-4	INLET	RT	I	12.0	II	29.2	-	
F15	P15-5	INLET	RT	I	18.0	II	43.7	-	
F15	P15-5	OUTLET	LT	III	22.0	III	47.5	-	
F15	P15-6	INLET	RT	I	18.0	II	43.7	-	
F15	P15-6	OUTLET	LT	III	20.0	III	43.2	-	
F16	P16-1	INLET	RT	I	12.0	II	29.2	-	
F16	P16-1	OUTLET	LT	V	44.5	II	108.1	36.7	
F16	P16-2	INLET	RT	SEE E SHEETS		II	94.6	31.5	SEE LARGE DIAMETER CULVERT DETAIL SHEETS
F16	P16-2	OUTLET	LT	SEE E SHEETS		III	298.3	74.6	SEE LARGE DIAMETER CULVERT DETAIL SHEETS
F16	P16-4	INLET	RT	I	12.0	II	29.2	-	
F16	P16-4	OUTLET	LT	V	52.0	II	126.4	42.9	
F16	P16-5	INLET	RT	I	12.0	II	29.2	-	
F16	P16-5	OUTLET	LT	V	85.0	II	206.6	70.1	
F17	P17-1	INLET	RT	I	12.0	II	29.2	-	
F17	P17-1	OUTLET	LT	V	76.0	II	184.7	62.7	
F17	P17-2	INLET	RT	SEE E SHEETS		II	77.3	25.8	SEE LARGE DIAMETER CULVERT DETAIL SHEETS
F17	P17-2	OUTLET	LT	SEE E SHEETS		III	332.1	83.0	SEE LARGE DIAMETER CULVERT DETAIL SHEETS
F18	P18-1	INLET	RT	I	12.0	II	29.2	-	
F18	P18-1	OUTLET	LT	V	26.0	II	63.2	21.5	
F18	P18-3	INLET	RT	I	18.0	II	43.7	-	
F18	FD18-3	OUTLET	LT	IV	12.0	II	35.0	-	

PRELIMINARY

PS&E REVIEW

STATE OF ALASKA DOT&PF
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

SUMMARY SHEETS

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NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	D12	D14

RIPRAP, DITCH LINING, & GEOTEXTILE SUMMARY (CON'T)

SHEET	PIPE LOCATIONS			END TREATMENT	LENGTH (FT)	RIPRAP CLASS	RIPRAP (TON)	DITCH LINING (TON)	REMARKS
	PIPE/PLASTIC FLUME ID	INLET/OUTLET	OFFSET						
F18	P18-4	INLET	RT	SEE E SHEETS		II	77.9	26.0	SEE LARGE DIAMETER CULVERT DETAIL SHEETS
F18	P18-4	OUTLET	LT	SEE E SHEETS		III	329.2	82.3	SEE LARGE DIAMETER CULVERT DETAIL SHEETS
F18	P18-6	INLET	RT	I	18.0	II	43.7	-	
F18	P18-6	OUTLET	LT	VI	7.0	II	11.3	-	
F19	P19-1	INLET	RT	I	18.0	II	43.7	-	
F19	FD19-1	OUTLET	LT	IV	12.0	II	35.0	-	
F19	P19-3	INLET	RT	SEE E SHEETS		I	39.1	26.0	SEE LARGE DIAMETER CULVERT DETAIL SHEETS
F19	P19-3	OUTLET	LT	SEE E SHEETS		III	250.8	62.7	SEE LARGE DIAMETER CULVERT DETAIL SHEETS
F19	P19-4	INLET	RT	II	9.5	I	10.3	-	
F19	P19-4	OUTLET	RT	II	9.5	I	10.3	-	
F20	P20-1	INLET	RT	I	18.0	II	43.7	-	
F20	P20-1	OUTLET	LT	III	7.0	II	11.3	-	
F20	P20-2	INLET	RT	I	18.0	II	43.7	-	
F20	P20-2	OUTLET	LT	III	7.0	II	11.3	-	
F20	P20-3	INLET	RT	I	17.0	I	27.5	-	
F20	P20-3	OUTLET	LT	III	7.0	I	7.6	-	
F21	P21-1	INLET	RT	I	17.0	I	27.5	-	
F21	P21-1	OUTLET	LT	III	7.0	I	7.6	-	
F21	P21-2	INLET	RT	I	18.0	II	43.7	-	
F21	P21-3	INLET	RT	I	19.0	II	46.2	-	
F21	P21-3	OUTLET	LT	III	17.0	III	36.7	-	
F22	P22-1	INLET	RT	I	18.0	II	43.7	-	
F22	P22-2	INLET	RT	I	17.0	I	27.5	-	
F22	P22-2	OUTLET	LT	III	7.0	I	7.6	-	
F22	P22-3	INLET	RT	SEE E SHEETS		II	122.2	40.7	SEE LARGE DIAMETER CULVERT DETAIL SHEETS
F23	P23-1	INLET	RT	I	23.3	II	56.6	-	
F23	P23-1	OUTLET	LT	III	7.0	II	11.3	-	
F23	P23-2	INLET	RT	SEE E SHEETS		I	39.1	26.0	SEE LARGE DIAMETER CULVERT DETAIL SHEETS
F23	P23-2	OUTLET	LT	SEE E SHEETS		III	263.3	65.8	SEE LARGE DIAMETER CULVERT DETAIL SHEETS
F23	P23-3	INLET	RT	I	25.5	II	132.2	-	32' WIDE RIPRAP INTET

SHEET	DITCH DIKE LOCATIONS			DESCRIPTION	RIPRAP CLASS	RIPRAP (TON)	DITCH LINING (TON)	REMARKS
	PIPE ID	INLET/OUTLET	OFFSET					
F7	P7-4	INLET	RT	SEE DETIAL SHEET	I	23.0	-	
F9	P9-1	INLET	RT	SEE DETIAL SHEET	I	23.0	-	
F12	P12-10	INLET	RT	SEE DETIAL SHEET	I	23.0	-	
F13	P13-2	INLET	RT	SEE DETIAL SHEET	I	23.0	-	
F13	P13-3	INLET	RT	SEE DETIAL SHEET	I	23.0	-	
F14	P14-3	INLET	RT	SEE DETIAL SHEET	I	23.0	-	
F18	P18-4	INLET	RT	SEE DETIAL SHEET	I	23.0	-	SEE LARGE DIAMETER CULVERT DETAIL SHEETS
F19	P19-3	INLET	RT	SEE DETIAL SHEET	I	23.0	-	SEE LARGE DIAMETER CULVERT DETAIL SHEETS

PRELIMINARY

STATE OF ALASKA
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

SUMMARY SHEETS

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STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	D13	D14

RIPRAP, DITCH LINING, & GEOTEXTILE SUMMARY (CON'T)

SHEET	GROTTO LOCATIONS				GEOTEXTILE EROSION CONTROL, CLASS I (SY)	LENGTH (FT)	RIPRAP CLASS	RIPRAP (TON)	DITCH LINING (TON)	REMARKS
	STATION	OFFSET	STATION	OFFSET						
F7	174+02	78.0' RT	174+27	78.0' RT	135.1	38.0	I	110.8	-	
F8	192+92	142.5' RT	193+15	141.6' RT	318.2	89.5	I	261.0	-	
F8	194+28	118.3' RT	194+52	113.4' RT	277.3	78.0	I	227.4	-	
F12	247+15	68.3' RT	247+40	68.3' RT	80.0	22.5	I	65.6	-	
F13	255+09	80.4' RT	255+34	77.9' RT	106.7	30.0	I	87.5	-	
F14	261+99	110.3' RT	262+24	108.0' RT	213.3	60.0	I	175.0	-	
F14	270+07	124.6' RT	270+32	124.6' RT	170.7	48.0	I	140.0	-	
F14	270+92	131.6' RT	271+16	130.8' RT	149.3	42.0	I	122.5	-	
F14	273+63	172.8' RT	273+88	172.8' RT	259.6	73.0	I	212.9	-	
F15	274+37	152.3' RT	274+61	152.3' RT	179.6	50.5	I	147.3	-	
F18	319+35	94.8' RT	319+57	83.0' RT	138.7	39.0	I	113.7	-	
F21	353+23	105.3' RT	353+48	103.4' RT	252.4	71.0	I	207.0	-	
F21	358+97	98.7' RT	359+20	97.7' RT	149.3	42.0	I	122.5	-	
F22	363+47	82.0' RT	363+72	82.0' RT	119.1	33.5	I	97.7	-	
F23	380+29	85.6' RT	380+54	85.6' RT	126.2	35.5	I	103.5	-	

SHEET	MISCELLANEOUS LOCATIONS				DESCRIPTION	RIPRAP CLASS	RIPRAP (TON)	DITCH LINING (TON)	REMARKS
	STATION	OFFSET	STATION	OFFSET					
E21	135+89	RT	148+38	RT	SNOW RIVER EMBANKMENT	III	11,347.1	1,315.4	SEE E SHEETS
F10-F11	221+00	RT	224+35	RT	SLOPE PROTECTION	I	2,570.4	1,309.0	SEE B SHEETS
N26-N29	229+00	RT	231+90	LT	VICTOR CREEK BRIDGE	III	3,120.1	-	SEE N SHEETS
N26-N29	229+00	RT	231+90	LT	VICTOR CREEK BRIDGE	I	685.3	-	SEE N SHEETS

RIPRAP, DITCH LINING, & GEOTEXTILE SUMMARY TOTALS

	611.0002.0001 RIPRAP CLASS, I (TON)	611.0002.0002 RIPRAP CLASS, II (TON)	611.0002.0003 RIPRAP CLASS, III (TON)	610.0002.0000 DITCH LINING (TON)	631.0002.0001 GEOTEXTILE DRAINAGE, CLASS I (SY)
ROUNDED TOTAL	5,900	4,200	16,500	3,500	2,700

PRELIMINARY

STATE OF ALASKA
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STATE OF ALASKA
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SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

SUMMARY SHEETS

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NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	D14	D14

APPROACH SUMMARY - 639.2001.0000

SHEET	STATION	OFFSET	SKEW ANGLE (90° TYP)	APPROACH TYPICAL SECTION	TYPE				WIDTH (FT)	LENGTH (FT)	REMARKS
					PUB.	RES.	COM./FARM	ACCESS TRAIL			
F1, F25	99+82	LT		MATCH MAINLINE	X				VARIES	100	PRIMROSE SPUR - SEE APPROACH PLAN AND PROFILE
F5, F25	158+95	RT	77°	UNPAVED			X		16	130	SEE APPROACH PLAN AND PROFILE
F8, F26	188+25	RT	75°	TRAIL				X	14	320	SEE APPROACH PLAN AND PROFILE
F9, F27	205+95	RT	75°	TRAIL				X	10	115	SEE APPROACH PLAN AND PROFILE
F9, F28	210+40	LT		UNPAVED			X		24	90	FORKED DRIVEWAY - SEE APPROACH PLAN AND PROFILE
F9, F28	0+33	LT	76°	UNPAVED		X			14	125	FORKED DRIVEWAY - SEE APPROACH PLAN AND PROFILE
F10, F37	212+09	RT		UNPAVED		X			14	55	SEE APPROACH PROFILE
F10, F29	214+00	LT		UNPAVED		X			14	125	SEE APPROACH PLAN AND PROFILE
F10, F37	215+03	RT		UNPAVED		X			14	75	SEE APPROACH PROFILE
F10, F29	217+00	RT		UNPAVED		X			14	130	SEE APPROACH PLAN AND PROFILE
F10, F37	219+50	LT		UNPAVED		X			14	85	SEE APPROACH PROFILE
F11, F30	226+50	LT		UNPAVED			X		24	190	FORKED DRIVEWAY - SEE APPROACH PLAN AND PROFILE
F11, F31	0+65	RT		UNPAVED		X			20	430	FORKED DRIVEWAY - SEE APPROACH PLAN AND PROFILE
F11, G8-G16	232+67	RT		UNPAVED			X		24	655	SEE VICTOR CREEK TRAILHEAD GRADING DETAILS
F12, F32	237+07	LT		UNPAVED		X			16	100	FORKED DRIVEWAY - SEE APPROACH PLAN AND PROFILE
F12, F32	0+70	LT	80°	UNPAVED		X			14	80	FORKED DRIVEWAY - SEE APPROACH PLAN AND PROFILE
F12, F37	237+18	RT		UNPAVED		X			14	70	SEE APPROACH PROFILE
F12, F37	238+39	RT		UNPAVED		X			14	70	SEE APPROACH PROFILE
F12, F33	238+66	LT		UNPAVED		X			14	120	SEE APPROACH PLAN AND PROFILE
F12, F37	239+21	RT		UNPAVED		X			14	50	SEE APPROACH PROFILE
F12, F38	240+08	LT	85°	UNPAVED		X			14	50	SEE APPROACH PROFILE
F12. G17	241+71	RT	71°	UNPAVED			X		24	155	SEE KNIFE SHOP GRADING
F12, F38	243+55	RT		UNPAVED			X		20	60	SEE APPROACH PROFILE
F12, F38	244+68	RT	85°	UNPAVED		X			14	70	SEE APPROACH PROFILE
F12, F38	244+68	LT	75°	UNPAVED		X			14	50	SEE APPROACH PROFILE
F16, F38	291+90	RT	87°	TRAIL				X	10	100	SEE APPROACH PROFILE
F17, F18, F34, F35	304+00	LT		UNPAVED		X			14	800	SEE APPROACH PLAN AND PROFILE
F17, F36	306+60	RT		TRAIL				X	10	50	SEE APPROACH PLAN AND PROFILE
F19, F36	336+23	RT	85°	TRAIL				X	10	60	SEE APPROACH PLAN AND PROFILE

PRELIMINARY

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DEPARTMENT OF TRANSPORTATION
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SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

SUMMARY SHEETS

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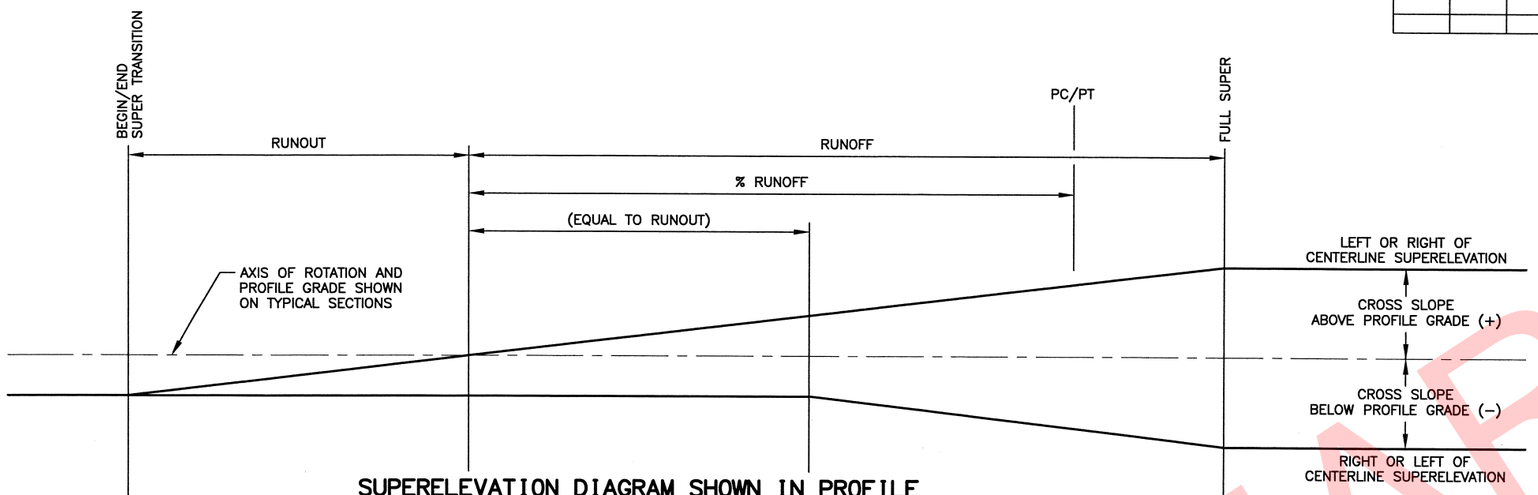
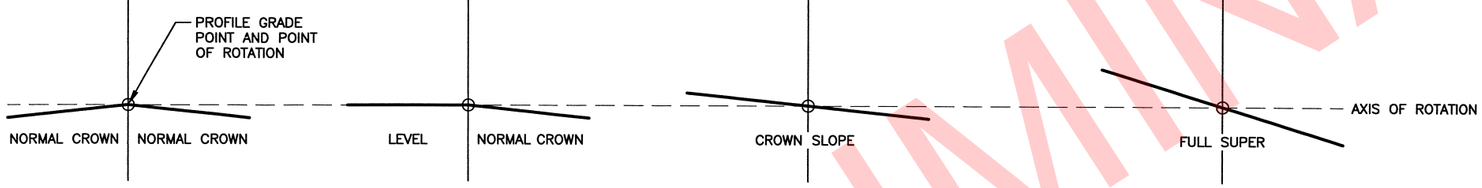
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	E1	E27



SUPERELEVATION DIAGRAM SHOWN IN PROFILE



SUPERELEVATION TRANSITION

SUPERELEVATION NOTES:

1. REFER TO PLAN AND PROFILE SHEETS FOR SUPERELEVATION VALUES AND SPECIAL CASES.
2. BUILD SUPERELEVATION INTO SUBGRADE AND CARRY THROUGH SHOULDERS.
3. % RUNOFF = PORTION OF RUNOFF ON TANGENT.
4. WIDENING FOR GUARDRAIL OR CURVATURE DOES NOT CHANGE THE LOCATION OF THE AXIS OF ROTATION.

PRELIMINARY

STATE OF ALASKA
KRISTOPHER J. ... CE 13...
PROFESSIONAL ENGINEER
PSSE REVIEW

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

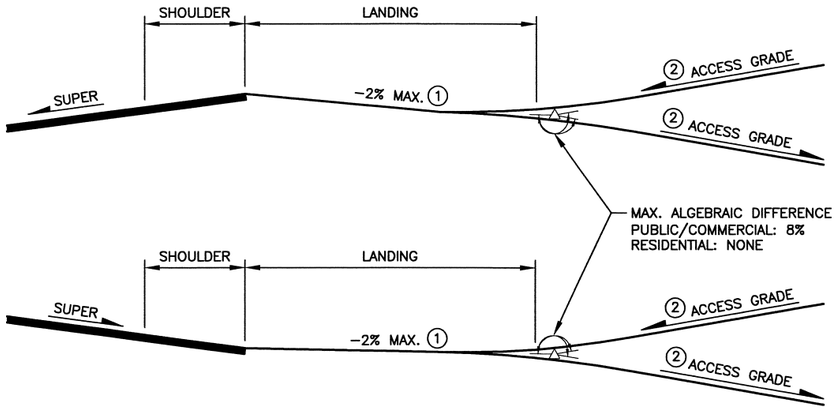
SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

SUPERELEVATION TRANSITION
AND CUT-FILL TRANSITION
DETAILS

DESIGNED BY	GJH/KDS
CHECKED BY	KEK
DRAFTED BY	VJS
XREFS:	XR-53610-Border-Detail, XR-53610-Border_Detail.dwg
SCALE	1"=10'
LAYOUT	E1
DATE TIME	3/8/2018 7:35 AM
DRAWING LOCATION	W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_E01_Superelevations.dwg

REVISIONS		
NO.	DATE	DESCRIPTION

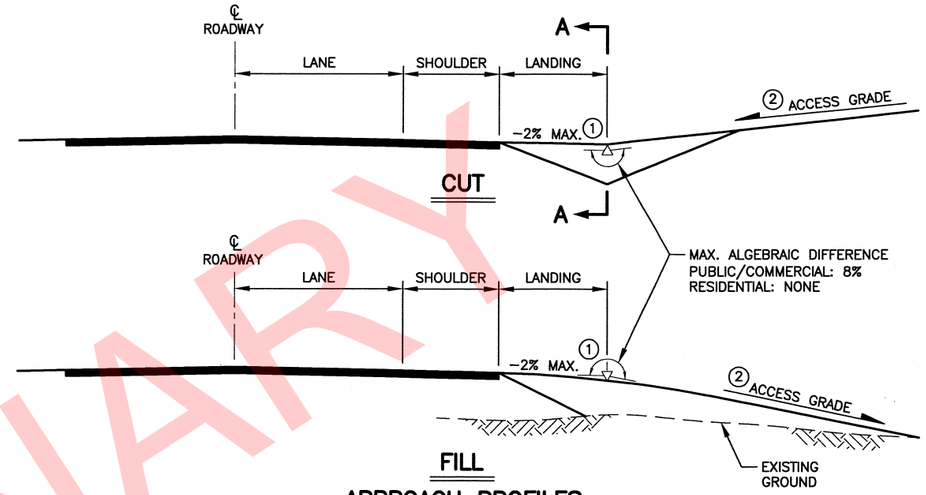
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	E2	E27



APPROACH PROFILES ON SUPER ELEVATED ROADWAY

① WHEN PATHWAY IS PRESENT, MAXIMUM LANDING GRADE IS TO BE −1.5%.

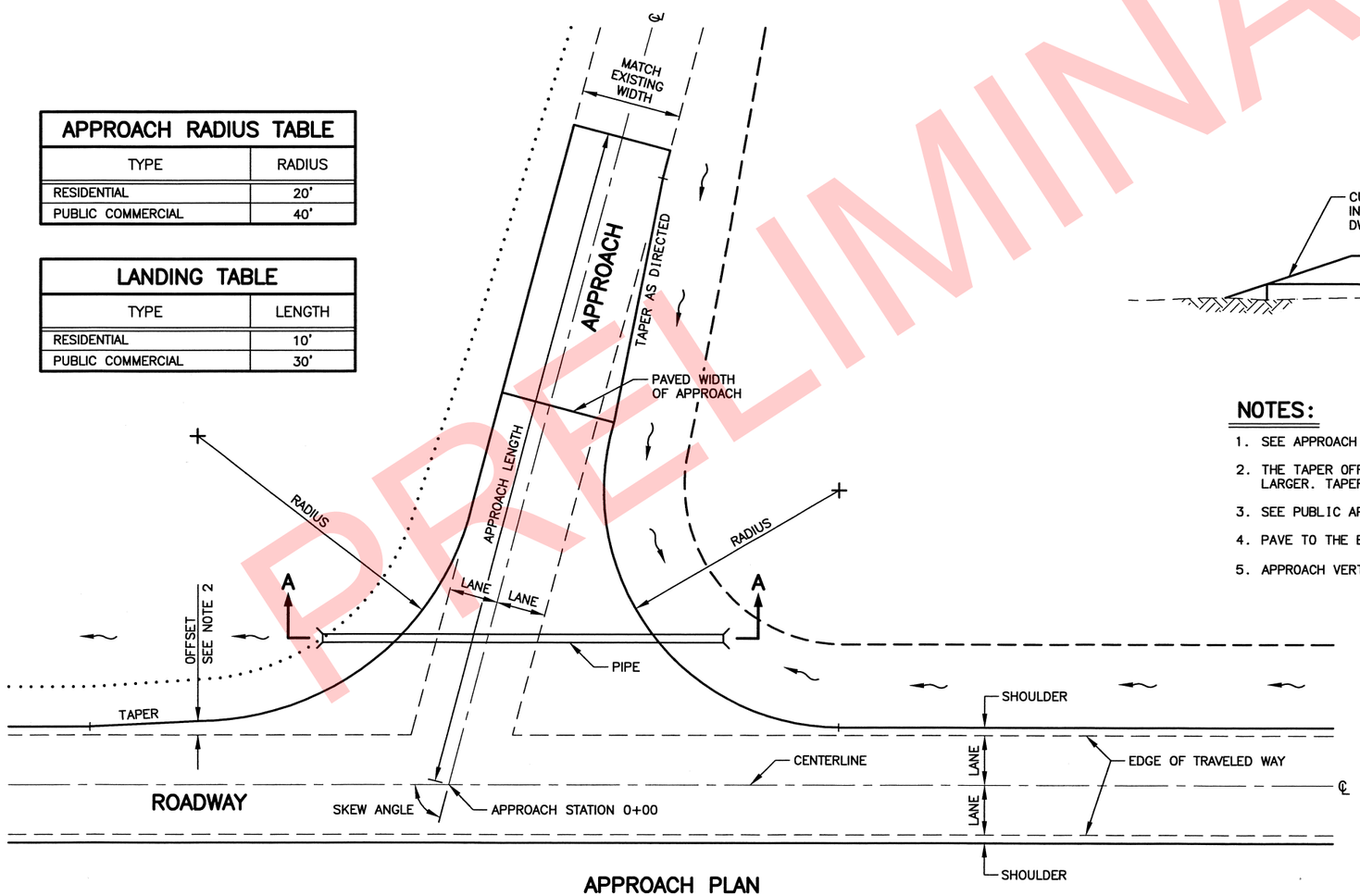
② ACCESS GRADE MAX. 15%



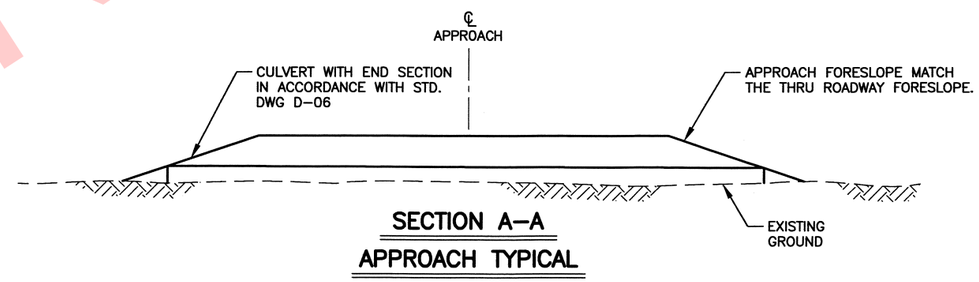
APPROACH PROFILES

APPROACH RADIUS TABLE	
TYPE	RADIUS
RESIDENTIAL	20'
PUBLIC COMMERCIAL	40'

LANDING TABLE	
TYPE	LENGTH
RESIDENTIAL	10'
PUBLIC COMMERCIAL	30'



APPROACH PLAN



SECTION A−A
APPROACH TYPICAL

NOTES:

1. SEE APPROACH SUMMARY FOR APPROACH STATION, LENGTH, WIDTH, SKEW ANGLE, AND TYPE.
2. THE TAPER OFFSET FROM TRAVELED WAY = ASSIGNED VALUE OR SHOULDER WIDTH WHICHEVER IS LARGER. TAPER WILL BE 10 FEET IN LENGTH FOR EACH FOOT OF OFFSET.
3. SEE PUBLIC APPROACH AND DRIVEWAY TYPICAL SECTIONS.
4. PAVE TO THE END OF THE RADIUS RETURN UNLESS OTHERWISE INDICATED.
5. APPROACH VERTICAL CURVE REQUIREMENTS: CREST − 2 1/2 INCH MAXIMUM IN A 10−FOOT CHORD
   SAG − 2 INCH MAXIMUM IN A 10−FOOT CHORD

PRELIMINARY

STATE OF ALASKA
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

UNCURBED APPROACH
DETAILS

DESIGNED BY	CAC/CML
CHECKED BY	CLP/KEK
DRAFTED BY	CAJ/VJS
XREFS:	XR-53610-Border-Detail, 55627_Border-Detail
SCALE	NONE
LAYOUT	E2
DATE TIME	3/6/2018 5:26 PM
DRAWING LOCATION	W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_E02_Uncurbed Approach.dwg

REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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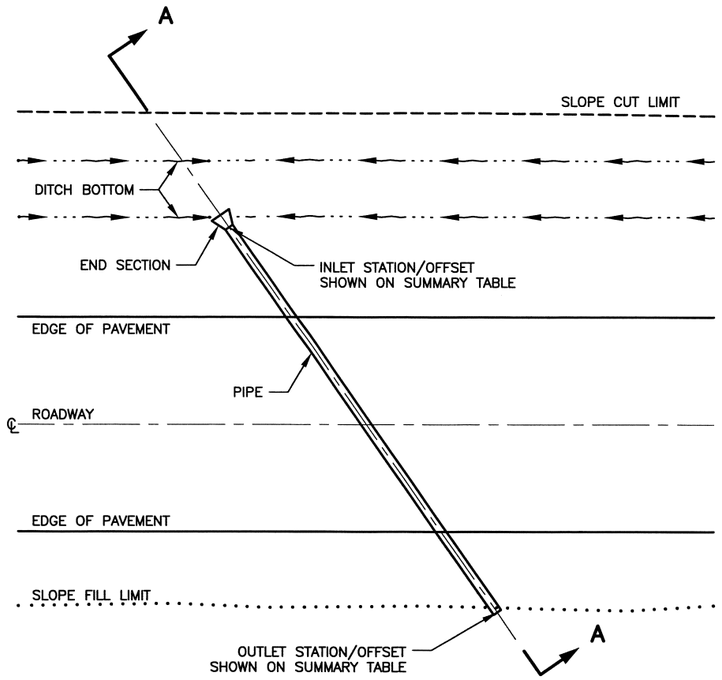
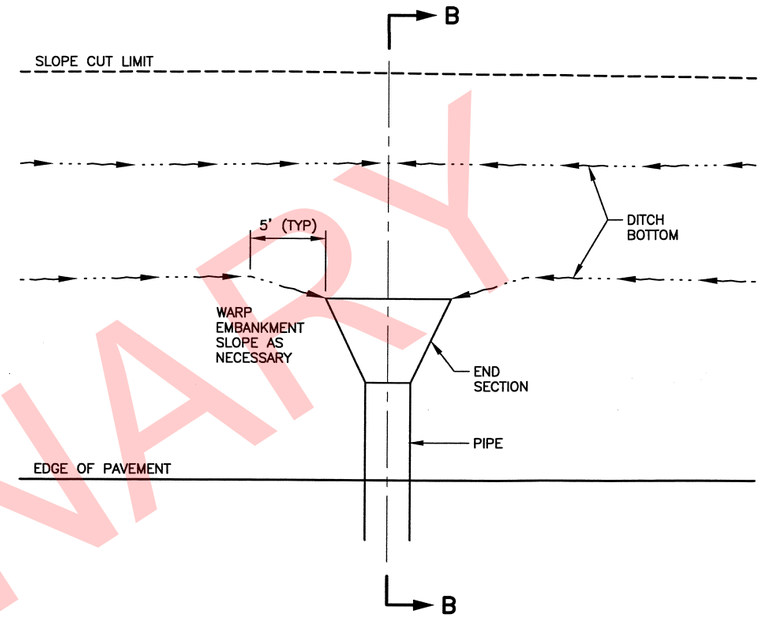
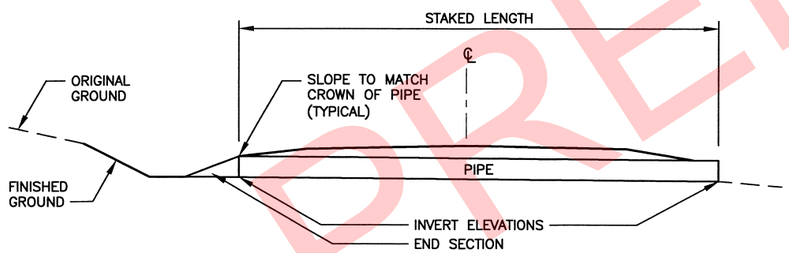


PLAN VIEW



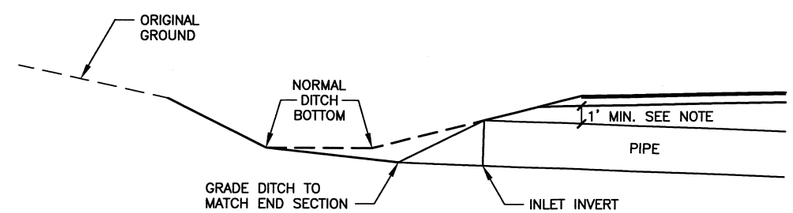
PLAN VIEW



SECTION A-A

PIPE INSTALLATION DETAIL

INSTALL END SECTION AT OUTLET WHERE INDICATED ON SUMMARY TABLE.



SECTION B-B

PIPE INLET DEPRESSION DETAIL

DEPRESS PIPE INLET AS REQUIRED TO ENSURE 1 FOOT MINIMUM COVER PER STD. DWG. D-04.21, NOTE 6.

PRELIMINARY

STATE OF ALASKA
KRISTIN M. COLE
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

CULVERT INSTALLATION
DETAILS

DESIGNED BY	KDS/ZDK
CHECKED BY	KEK
DRAFTED BY	ZDK/VJS
XREFS:	XR-53610-Border-Detail, XR-53610-Border_Detail.dwg
SCALE	NONE
LAYOUT	E3
DATE TIME	3/6/2018 6:05 PM
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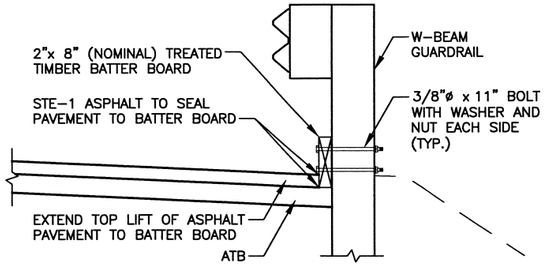
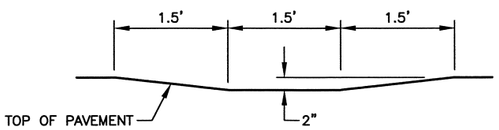
REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	E4	E27

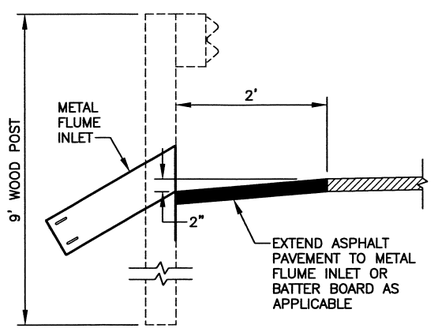


TREATED TIMBER BATTER BOARD DETAIL

INSTALL BATTER BOARD PRIOR TO PLACING TOP LIFT OF PAVEMENT.

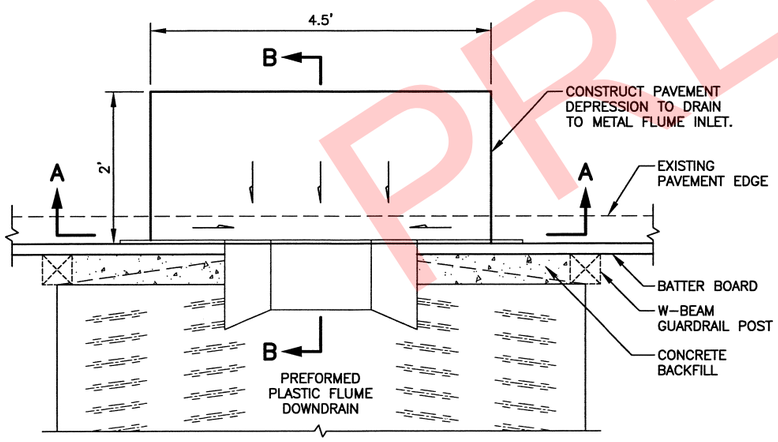


SECTION A-A



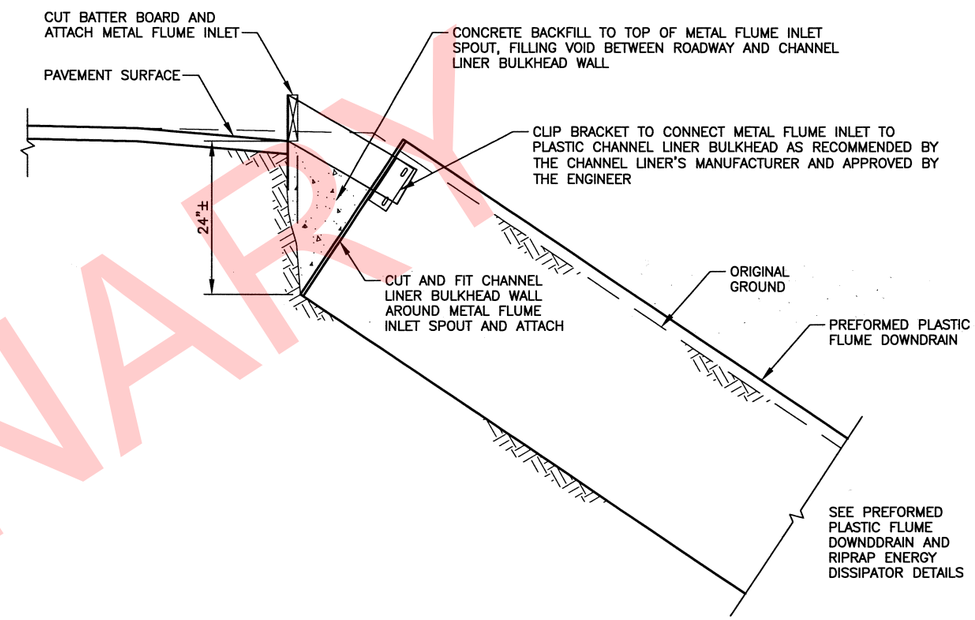
SECTION B-B

NOTE: PLACE 9' POST AT A MINIMUM OF 25' ON BOTH SIDES OF THE FLUME ATTACHMENT NOT TO OVERRIDE THE STANDARD DETAIL



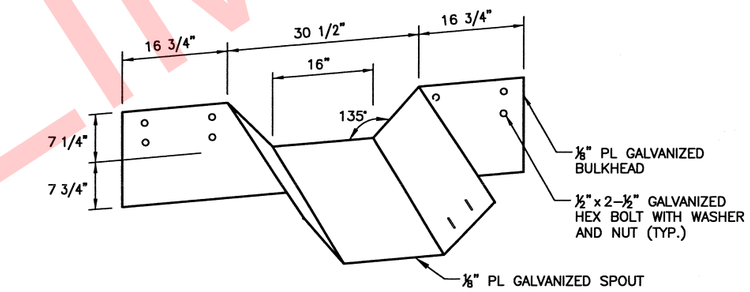
PLAN

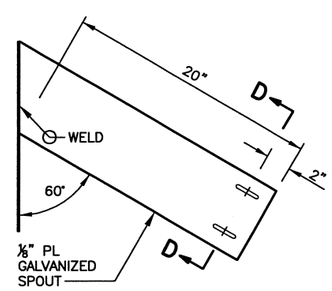
PAVEMENT DEPRESSION AT METAL FLUME INLET



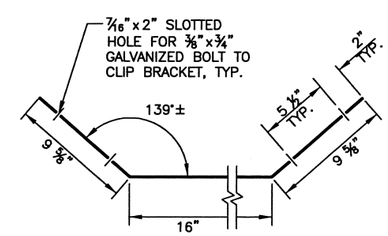
PREFORMED PLASTIC FLUME DOWNDRAIN WITH BATTERBOARD

NOTE: LOCATE CENTER OF PREFORMED PLASTIC FLUME DOWNDRAIN AT MIDPOINT BETWEEN W-BEAM GUARDRAIL POSTS.





ELEVATION



SECTION D-D

METAL FLUME INLET

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

PREFORMED PLASTIC FLUME DOWNDRAIN
AND BATTER BOARD DETAILS

PRELIMINARY
PS&E REVIEW

DRAWING LOCATION
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_E03_Drainage Details.DWG

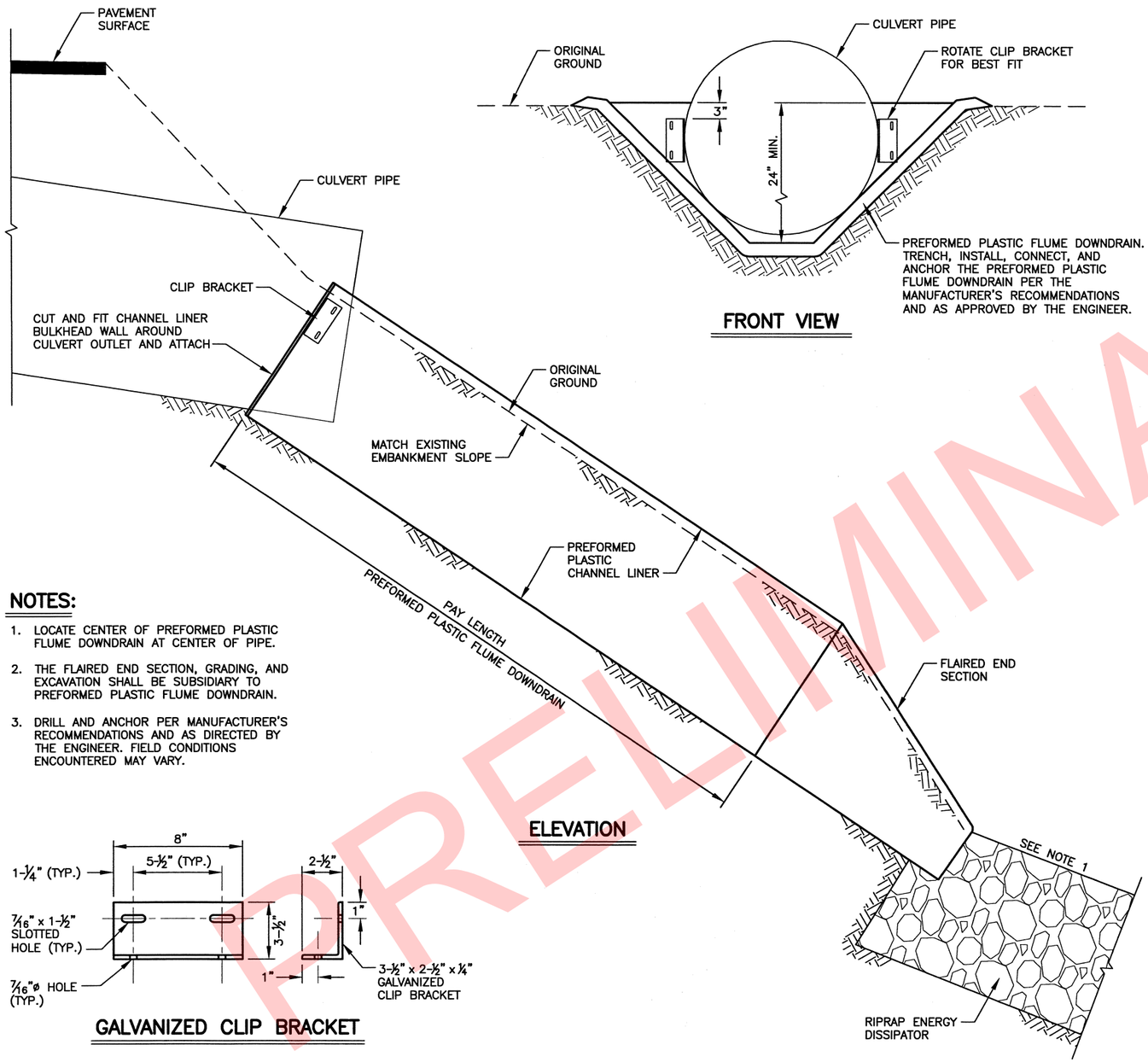
DATE TIME 3/6/2018 6:05 PM
LAYOUT E4
SCALE 1"= 5'

XREFS: XR-53610-Border-Detail
XR-53610-Border_Detail.dwg

DESIGNED BY KDS/ZDK
CHECKED BY KEK
DRAFTED BY ZDK/VJS

REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	E5	E27



ELEVATION

FRONT VIEW

NOTES:

1. LOCATE CENTER OF PREFORMED PLASTIC FLUME DOWNDRAIN AT CENTER OF PIPE.
2. THE FLAIRED END SECTION, GRADING, AND EXCAVATION SHALL BE SUBSIDIARY TO PREFORMED PLASTIC FLUME DOWNDRAIN.
3. DRILL AND ANCHOR PER MANUFACTURER'S RECOMMENDATIONS AND AS DIRECTED BY THE ENGINEER. FIELD CONDITIONS ENCOUNTERED MAY VARY.

GALVANIZED CLIP BRACKET

PREFORMED PLASTIC FLUME DOWNDRAIN WITH CULVERT PIPE

PRELIMINARY

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DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

PREFORMED PLASTIC FLUME DOWNDRAIN DETAILS

DRAWING LOCATION	DATE TIME	LAYOUT	SCALE	XREFS: XR-53610-Border-Detail	DESIGNED BY KDS/ZDK
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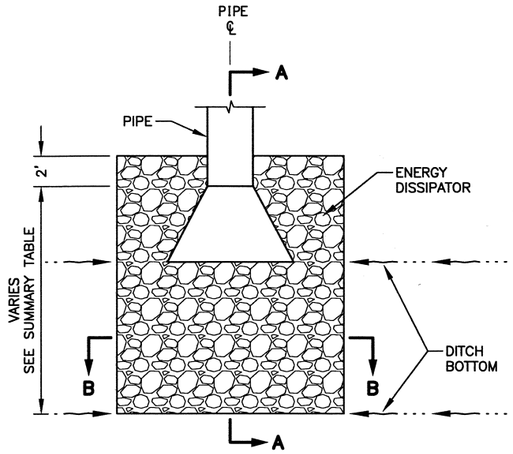
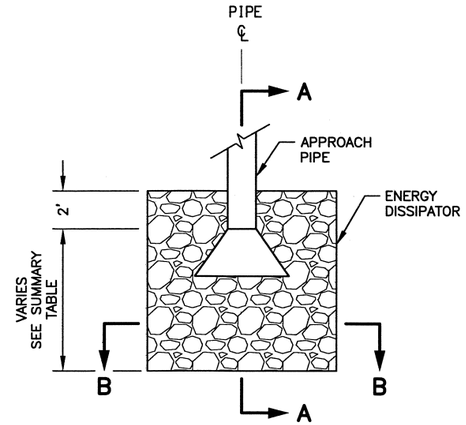
REVISIONS		
NO.	DATE	DESCRIPTION

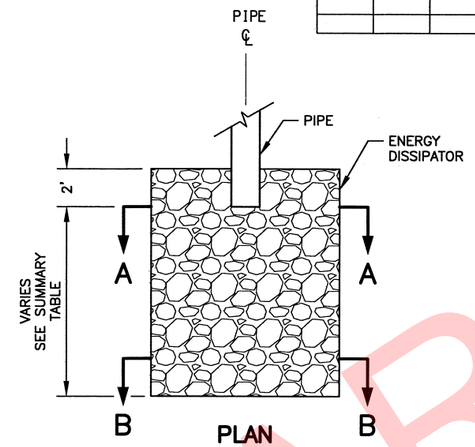
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	E6	E27



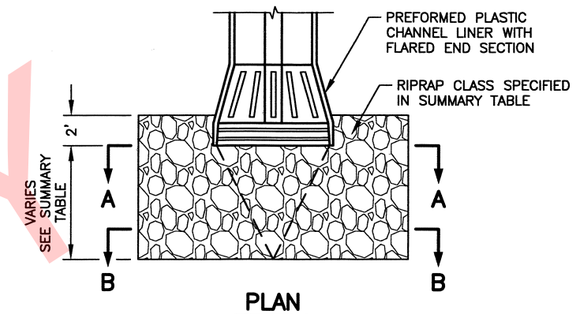
PLAN



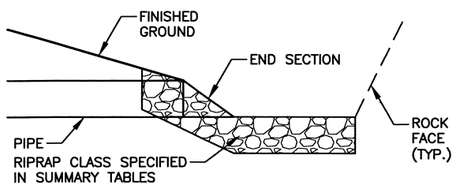
PLAN



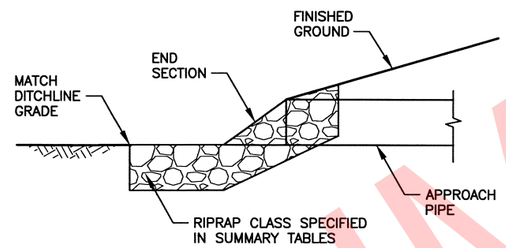
PLAN



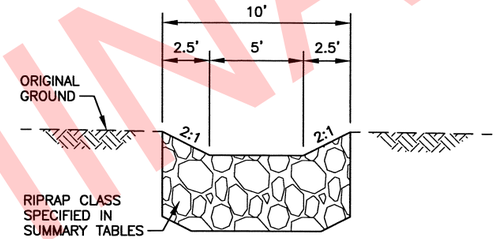
PLAN



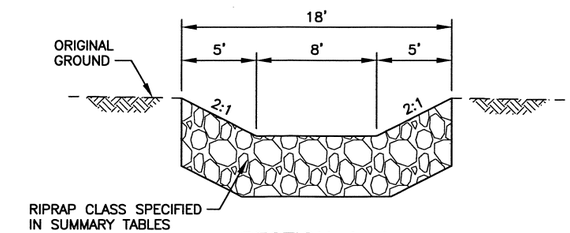
SECTION A–A



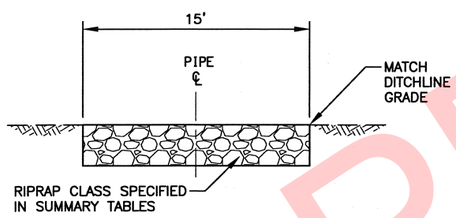
SECTION A–A



SECTION A–A

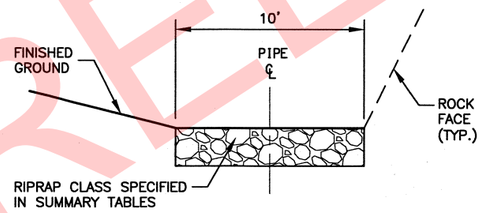


SECTION A–A



SECTION B–B

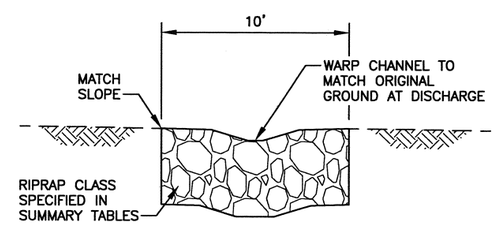
END TREATMENT TYPE I
ENERGY DISSIPATOR
WITH SPLASH PROTECTION



SECTION B–B

END TREATMENT TYPE II
APPROACH ENERGY DISSIPATOR

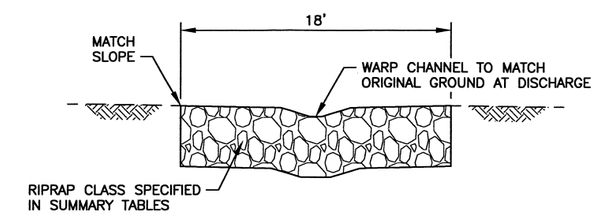
INSTALL APPROACH ENERGY DISSIPATORS AT PIPE INLETS AND OUTLETS WHERE INDICATED.



SECTION B–B

END TREATMENT TYPE III
ENERGY DISSIPATOR

INSTALL ENERGY DISSIPATORS WHERE SHOWN IN PLANS. ENERGY DISSIPATORS ARE PERMANENT FEATURES AND SHALL BE LEFT IN PLACE. ENERGY DISSIPATORS SHALL BE INSTALLED IN CONJUNCTION WITH THE CULVERT INSTALLATION.



SECTION B–B

END TREATMENT TYPE IV
FLUME RIPRAP ENERGY DISSIPATOR

NOTES:

1. RIPRAP SLOPE SHALL BE 1.5:1 OR FLATTER.
2. INSTALL AN ENERGY DISSIPATOR IN CONJUNCTION WITH FLUME DOWNDRAIN INSTALLATIONS WHERE SHOWN ON PLANS. ENERGY DISSIPATORS ARE PERMANENT FEATURES AND SHALL BE LEFT IN PLACE.

PRELIMINARY

STATE OF ALASKA PROFESSIONAL ENGINEER KRISTOPHER J. KEICHER 132 PSE REVIEW

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

CULVERT INSTALLATION DETAILS
ENERGY DISSIPATORS

DRAWING LOCATION	DATE TIME	LAYOUT	SCALE	XREFS: XR-53610-Border-Detail XR-53610-Border_Detail1.dwg	DESIGNED BY KOS/ZDK	CHECKED BY KEK	DRAFTED BY ZDK/VJS
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REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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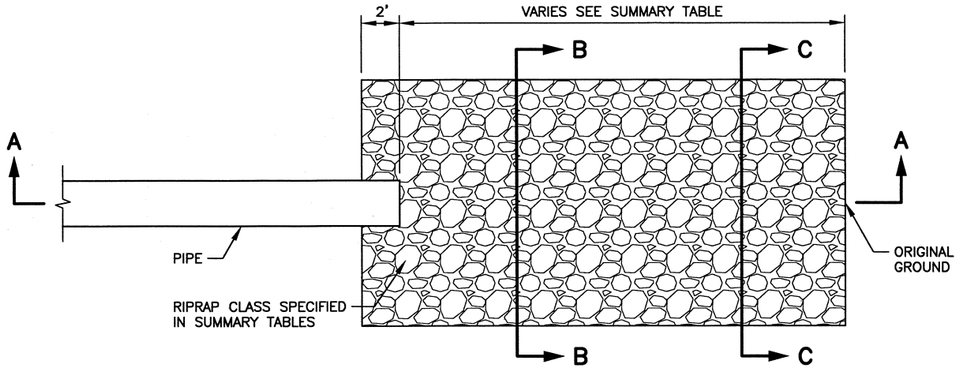
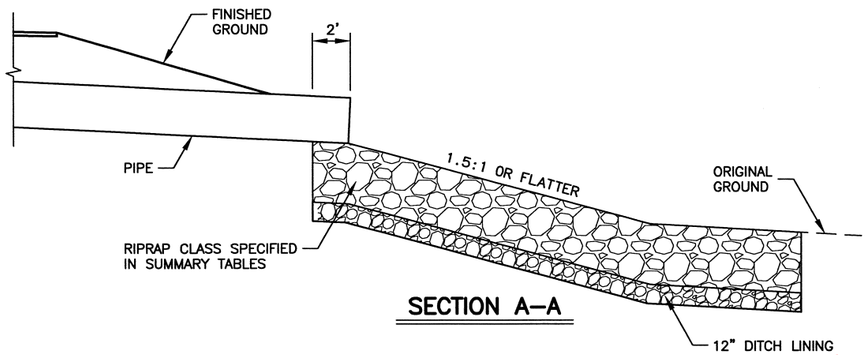
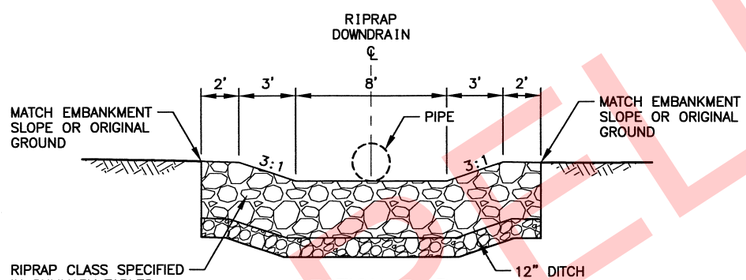


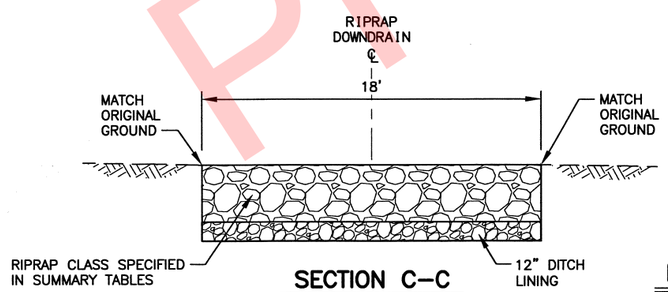
PLAN



SECTION A–A



SECTION B–B

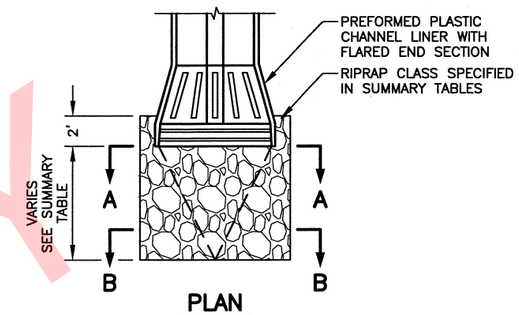


SECTION C–C

END TREATMENT TYPE V
ROCK FLUME DOWNDRAIN

NOTE:

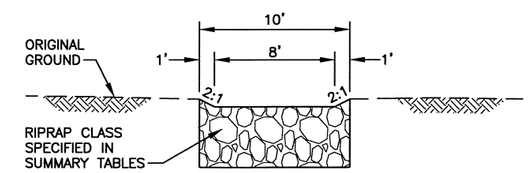
INSTALL A RIPRAP FLUME DOWNDRAIN WHERE SHOWN IN PLANS. RIPRAP FLUME DOWNDRAINS SHALL BE INSTALLED IN CONJUNCTION WITH THE CULVERT INSTALLATION.



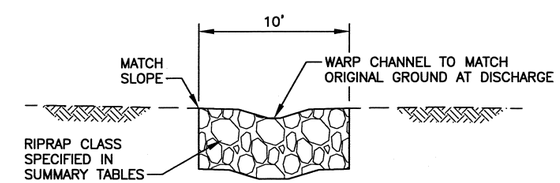
PLAN

NOTES:

1. RIPRAP SLOPE SHALL BE 1.5:1 OR FLATTER.
2. INSTALL AN ENERGY DISSIPATOR IN CONJUNCTION FLUME DOWNDRAIN INSTALLATIONS WHERE SHOWN ON PLANS. ENERGY DISSIPATORS ARE PERMANENT FEATURES AND SHALL BE LEFT IN PLACE.



SECTION A–A



SECTION B–B

END TREATMENT TYPE VI
FLUME RIPRAP ENERGY DISSIPATOR

PRELIMINARY

STATE OF ALASKA
KRISTIN KEK
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

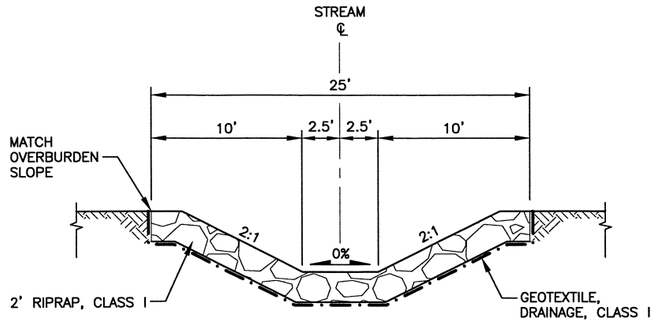
SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

CULVERT INSTALLATION DETAILS
RIPRAP FLUME DOWNDRAINS
OUTLET ENERGY DISSIPATORS

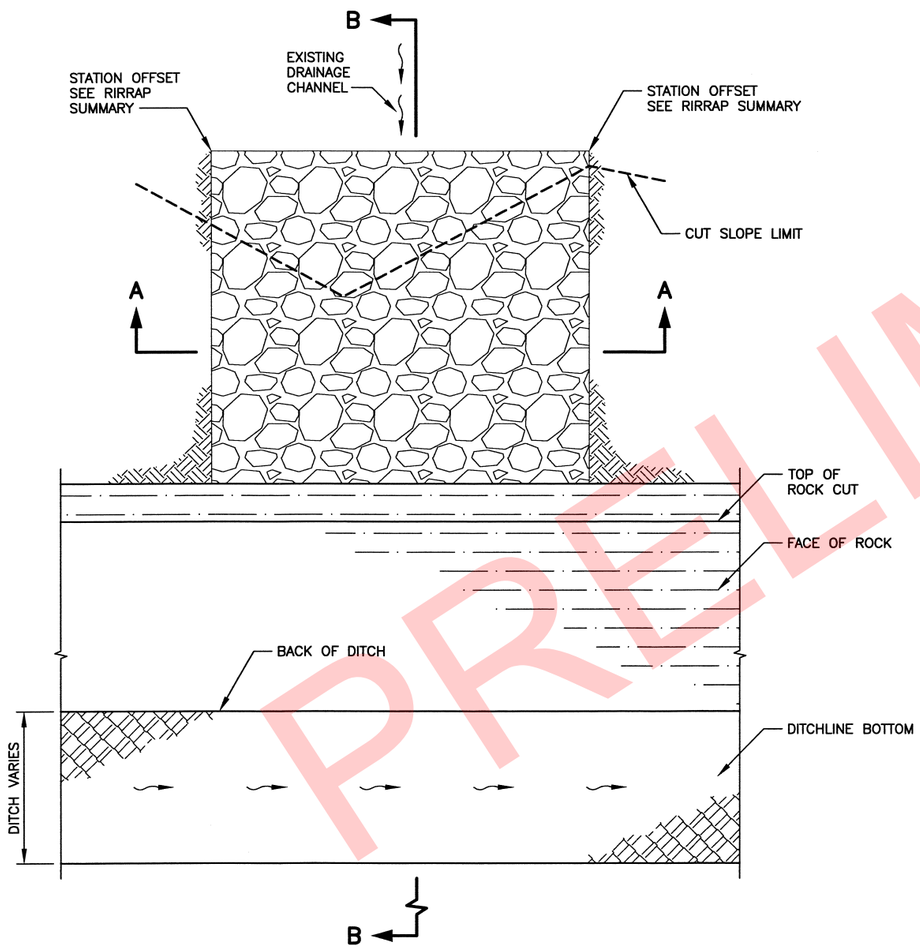
DRAWING LOCATION	DATE TIME	LAYOUT	SCALE	XREFS: XR-53610-Border-Detail	DESIGNED BY	KOS/ZDK
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_E03_Drainage Details.DWG	3/8/2018 9:09 AM	E7	1"= 5'	XR-53610-Border_Detail.dwg	CHECKED BY	KEK
					DRAFTED BY	ZDK/VJS

REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	E8	E27



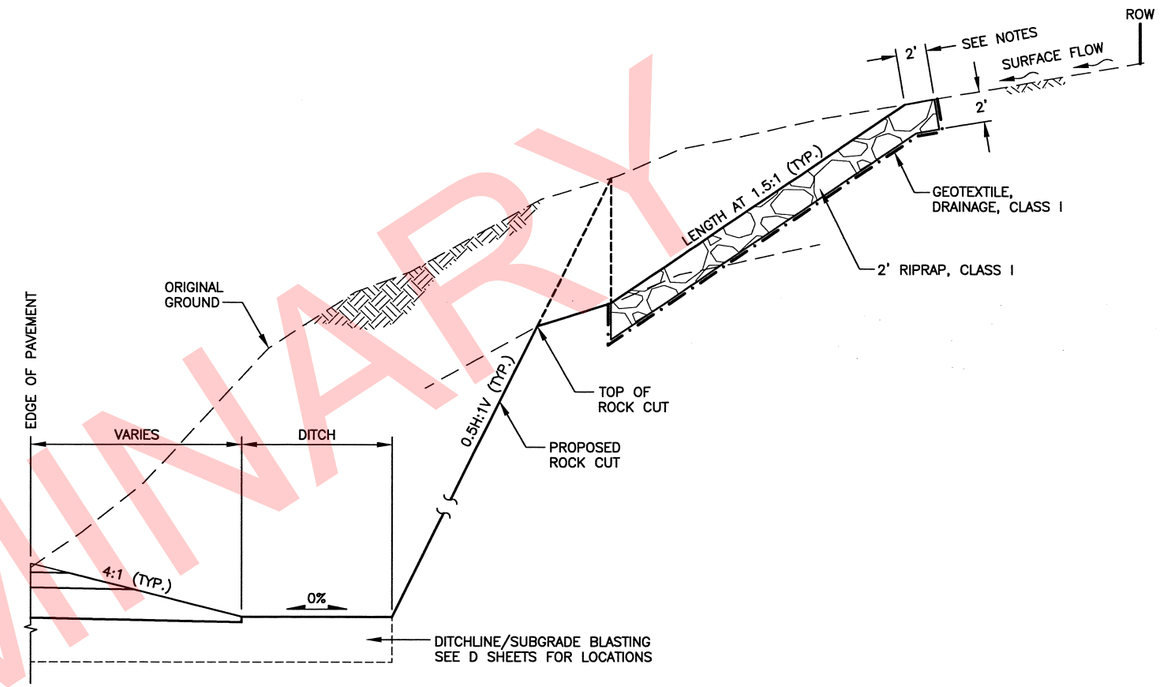
SECTION A–A



PLAN

ROCK GROTTO DETAIL

SEE RIPRAP SUMMARY



SECTION B–B

NOTES:

1. LOCATIONS TO BE FIELD ADJUSTED TO MATCH NEW STREAM LOCATIONS AS APPROVED BY THE ENGINEER.
2. WHERE BEDROCK IS ENCOUNTERED, NO RIPRAP IS NECESSARY. STABILIZE SLOPE AS DIRECTED BY THE ENGINEER.
3. SLOPES MAY VARY. SEE TYPICAL SECTIONS AND EXCEPTION TABLES.
4. WHERE OVERBURDEN SLOPES ARE 1:1 OR GREATER, INSTALL WIRE MESH PER MANUFACTURER'S RECOMMENDATIONS.
5. ADJUST WIDTH AT NEW STREAM LOCATIONS AS APPROVED BY THE ENGINEER.

PRELIMINARY

STATE OF ALASKA
KRISTEN ELDER
CE 132
REGISTERED PROFESSIONAL ENGINEER
PSSE REVIEW

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

ROCK GROTTO DETAILS

DRAWING LOCATION	DATE TIME	LAYOUT	SCALE	XREFS: XR-53610-Border-Detail	DESIGNED BY	KGS\ZDK
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_E08_Rock Grotto Details.dwg	3/6/2018 6:41 PM	E08	1"= 5'	XR-53610-Border_Detail.dwg	CHECKED BY	KEK
					DRAFTED BY	ZDK

REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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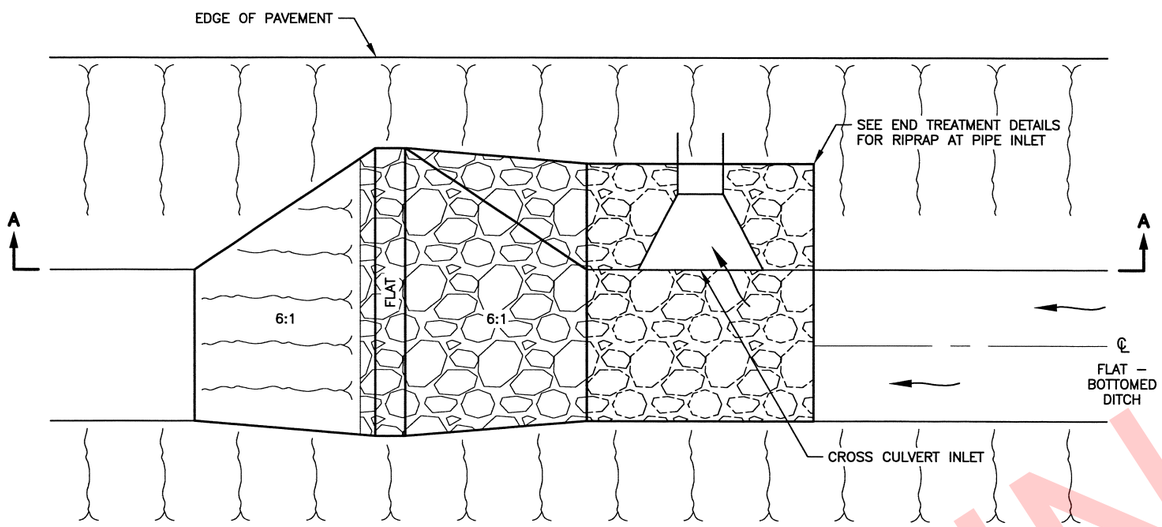
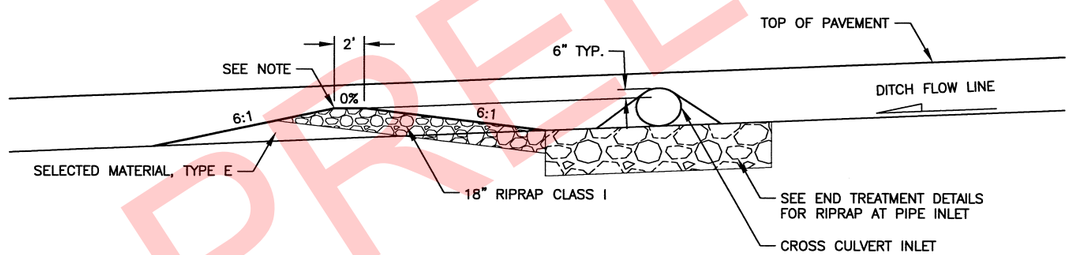


PLAN



SECTION A-A

DITCH DIKE DETAIL

NOTE:

INCREASE HEIGHT OF DITCH DIKE TO MAINTAIN APPROXIMATE 6" ELEVATION DIFFERENCE BETWEEN THE TOP OF THE DIKE AND THE TOP OF THE PIPE.

PRELIMINARY

STATE OF ALASKA PS&E REVIEW KRISTIN L. CE 13241 REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

DITCH DIKE
DETAIL

DESIGNED BY	KDS\ZDK
CHECKED BY	KEK
DRAFTED BY	ZDK
XREFS:	XR-53610-Border-Detail
	XR-53610-Border_Detail.dwg
SCALE	1" = 5'
LAYOUT	E09 - DITCH DIKE
DATE TIME	3/6/2018 6:49 PM
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REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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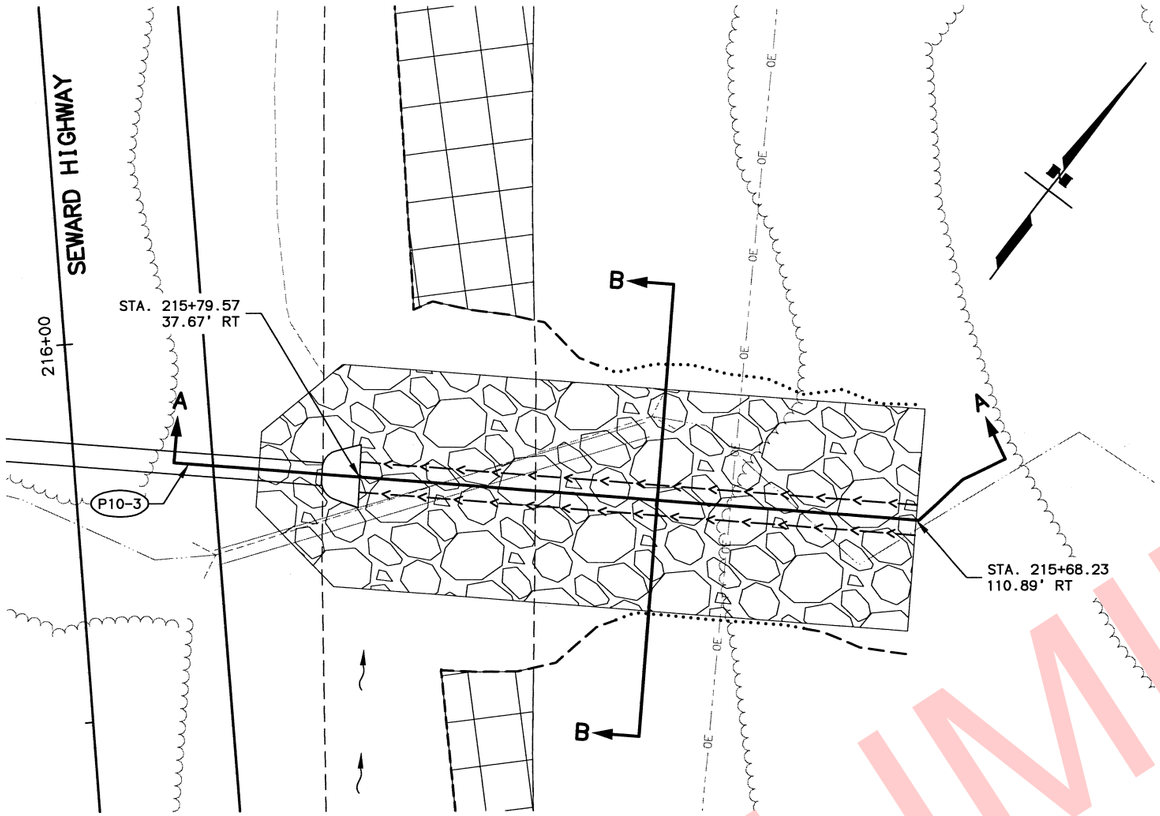
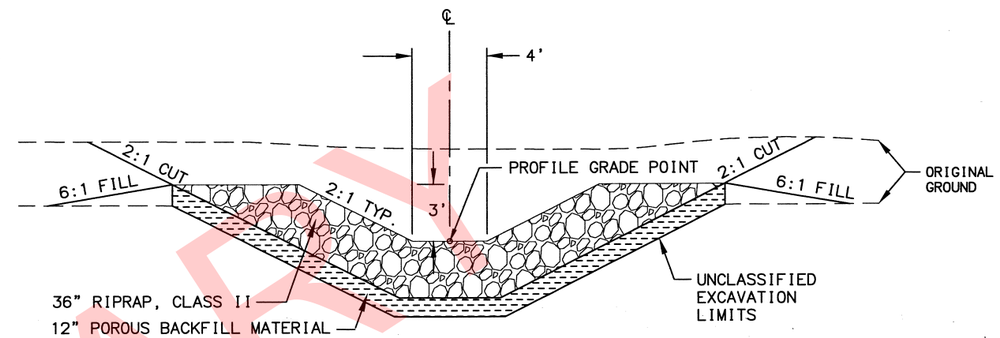
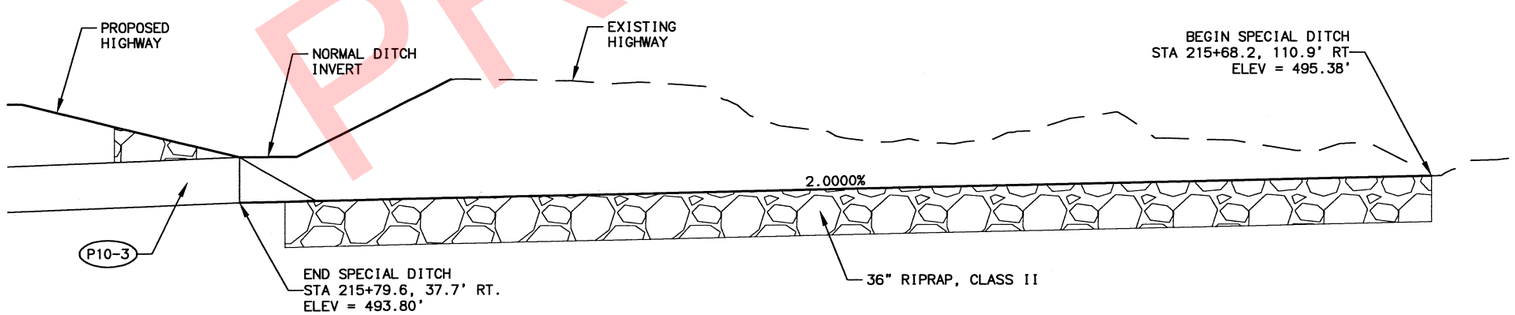


PLAN



SECTION B-B



SECTION A-A

PRELIMINARY

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				N/A	DRAFTED BY	ZDK

STATE OF ALASKA
KRISTIN KOLSTAD
REG. NO. CE 132
REGISTERED PROFESSIONAL ENGINEER
PSSE REVIEW

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

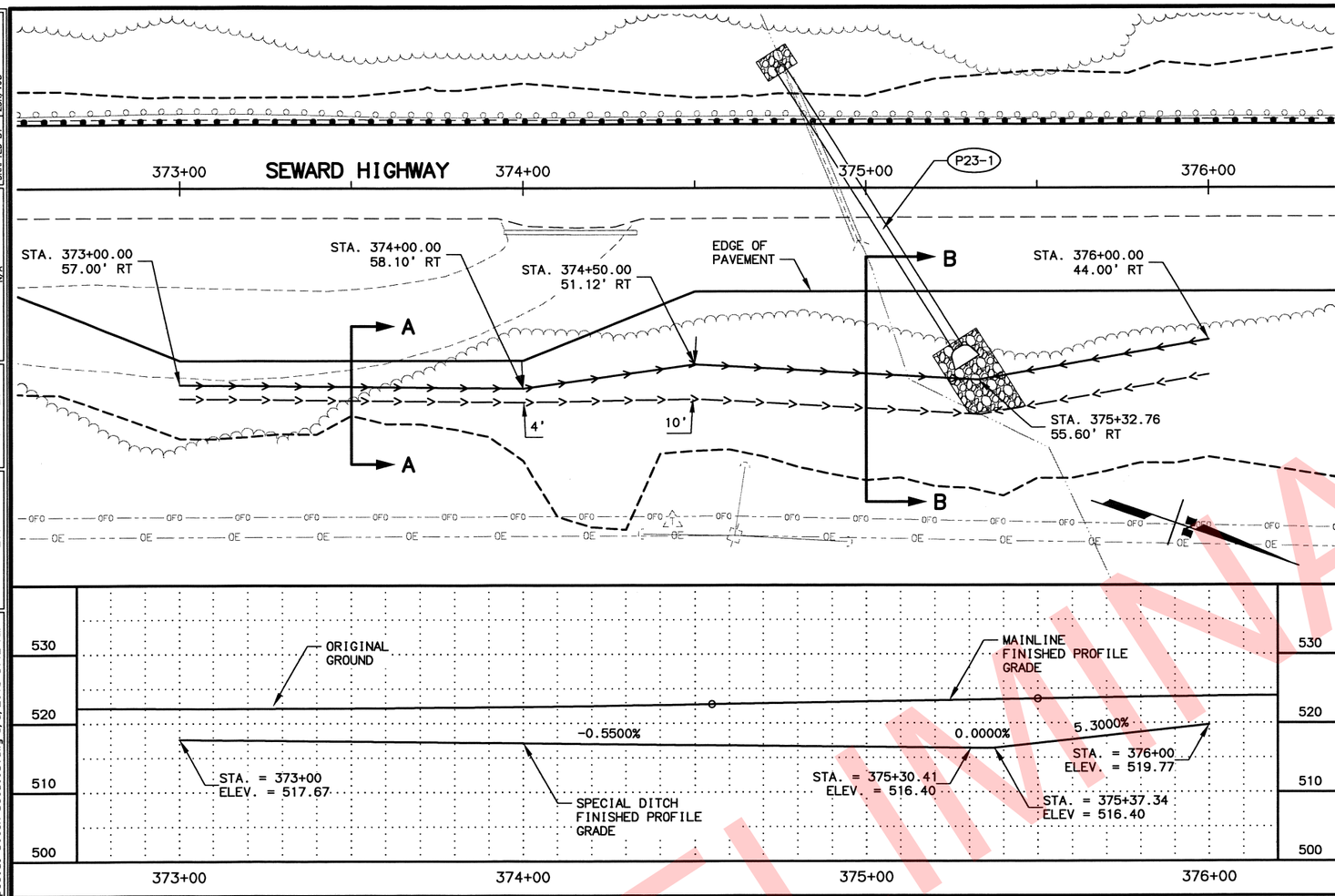
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

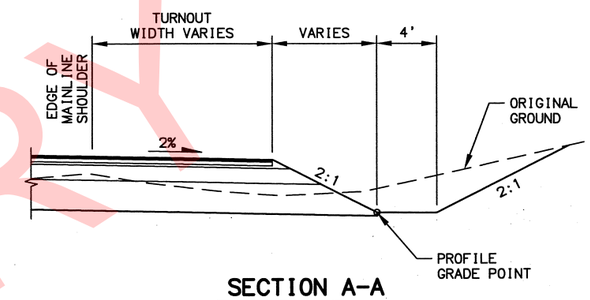
SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

SPECIAL DITCH DETAILS
STA 215+80

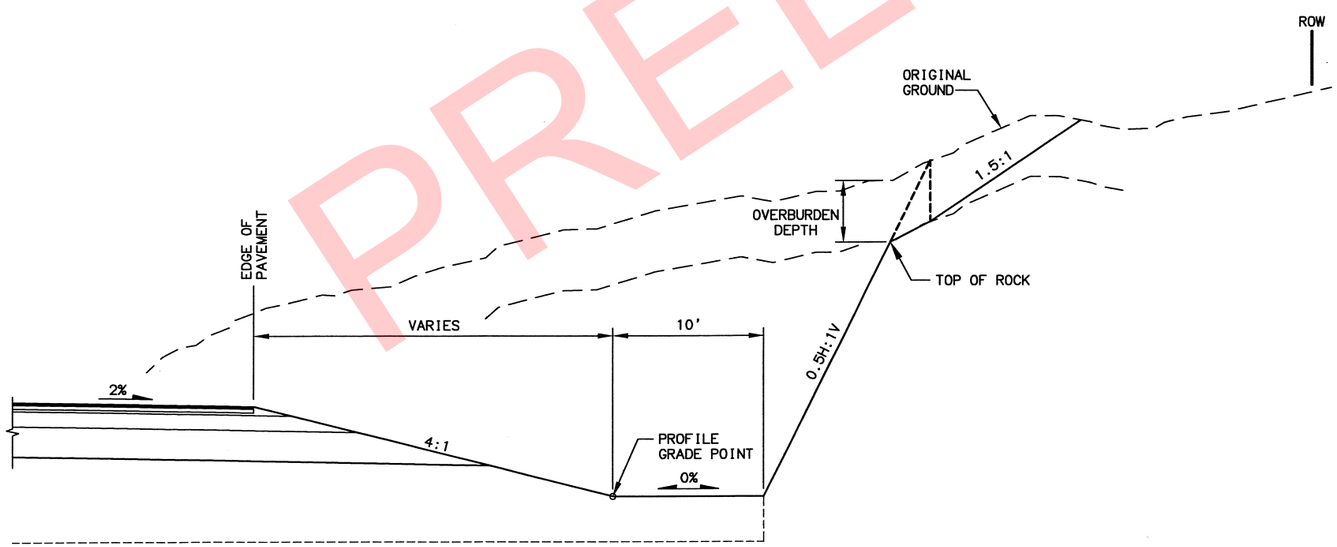
REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	E11	E27





SECTION A-A



SECTION B-B

PRELIMINARY

STATE OF ALASKA
KRISTEN
CE 132
REGISTERED PROFESSIONAL ENGINEER
PS&E REVIEW

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

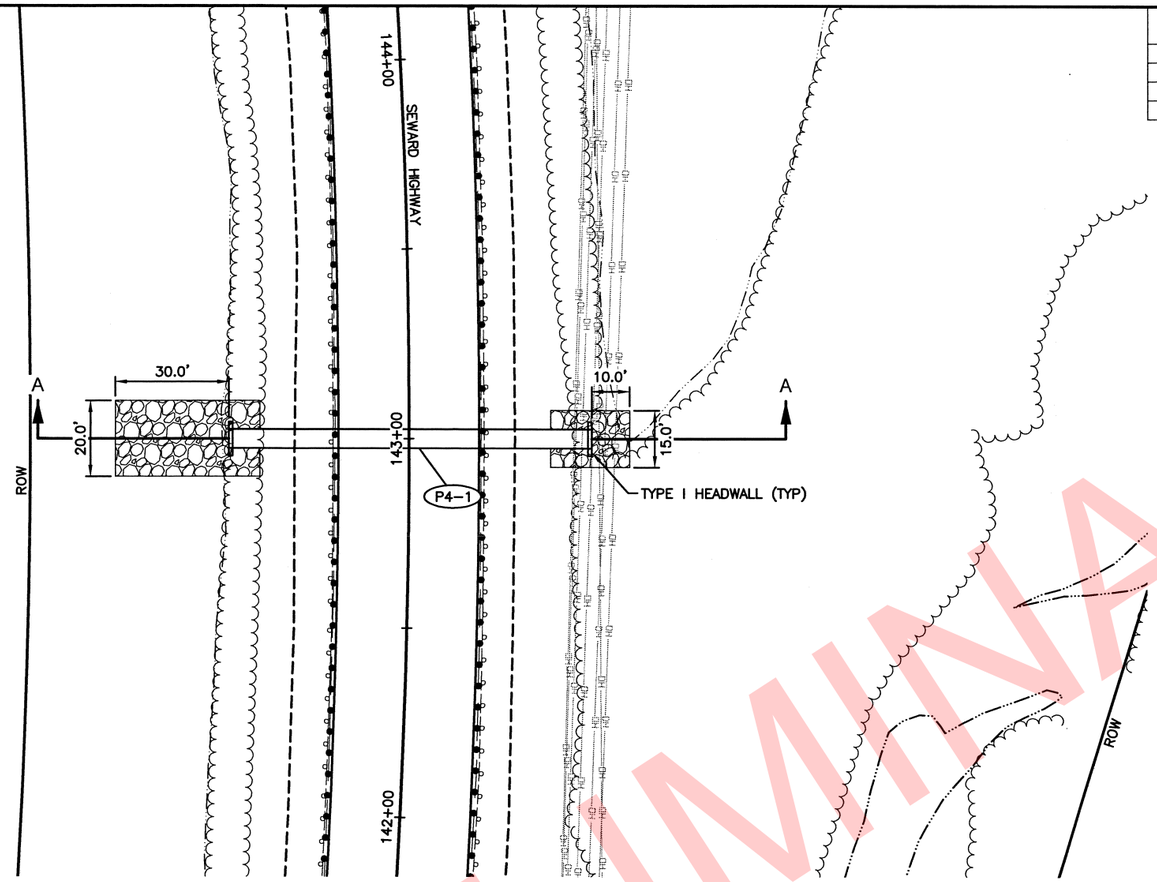
SPECIAL DITCH DETAILS
STA 373+00 TO 375+00

DRAWING LOCATION
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_E10_Special Ditch Details.dwg 3/8/2018 8:12 AM

DATE TIME | LAYOUT E11 | SCALE 1" = 20' | XREFS: XR-53610-Border-Detail N/A N/A | DESIGNED BY KDS/ZDK | CHECKED BY KEK | DRAFTED BY ZDK/VJS

REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0311(032)/Z536100000	2018	E12	



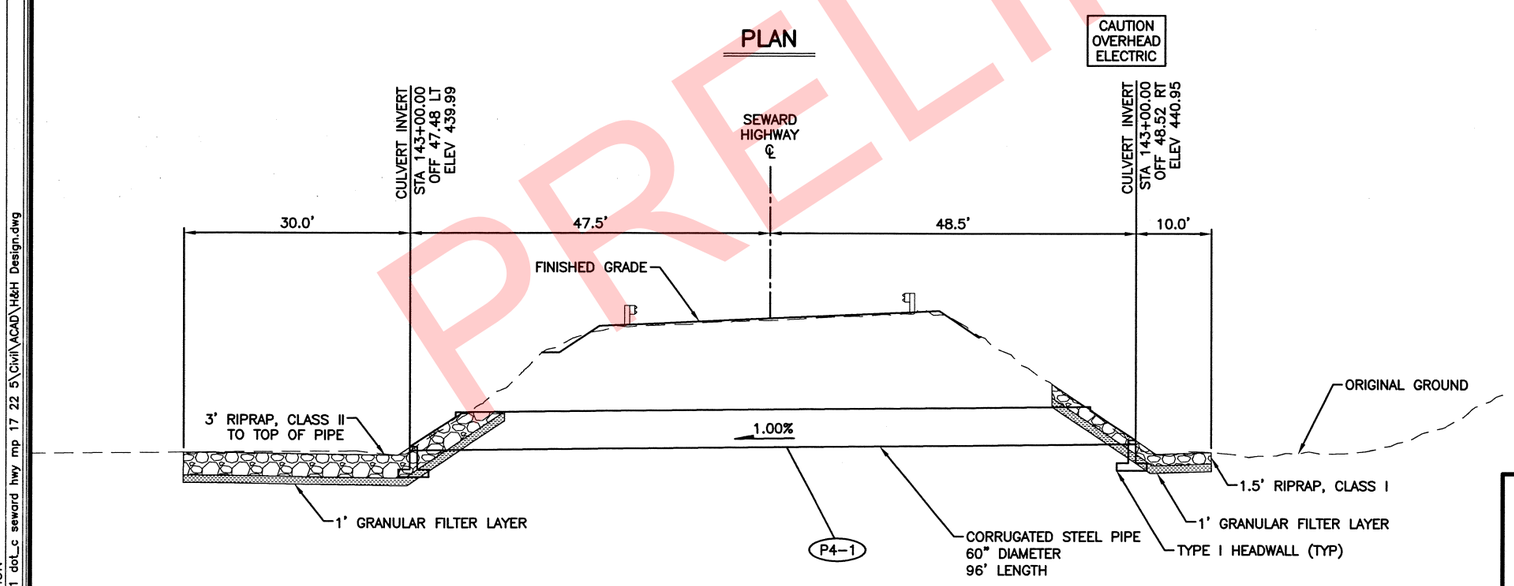
PLAN

HYDROLOGIC AND HYDRAULIC SUMMARY

DRAINAGE AREA = 0.3 SQUARE MILES		
EXCEEDANCE PROBABILITY	2%	1%
RETURN PERIOD	50 YEAR (Q_{50})	100 YEAR (Q_{100})
DESIGN DISCHARGE	90	100
DESIGN HIGH WATER ELEVATION	443.4	444.0

NOTES:

1. CONSTRUCT CULVERT BEVELS IN ACCORDANCE WITH STANDARD DRAWING D-07.00.
2. CONSTRUCT HEADWALLS IN ACCORDANCE WITH STANDARD DRAWING D-31.01.



SECTION A-A

PRELIMINARY

PLANS DEVELOPED BY:
R&M CONSULTANTS, INC.
9101 VANGUARD DRIVE
ANCHORAGE, AK 99507
(907) 522-1707
CERT. OF AUTH. NO. AECC111

STATE OF ALASKA 49TH Name License # REGISTERED PROFESSIONAL ENGINEER

R&M CONSULTANTS, INC.

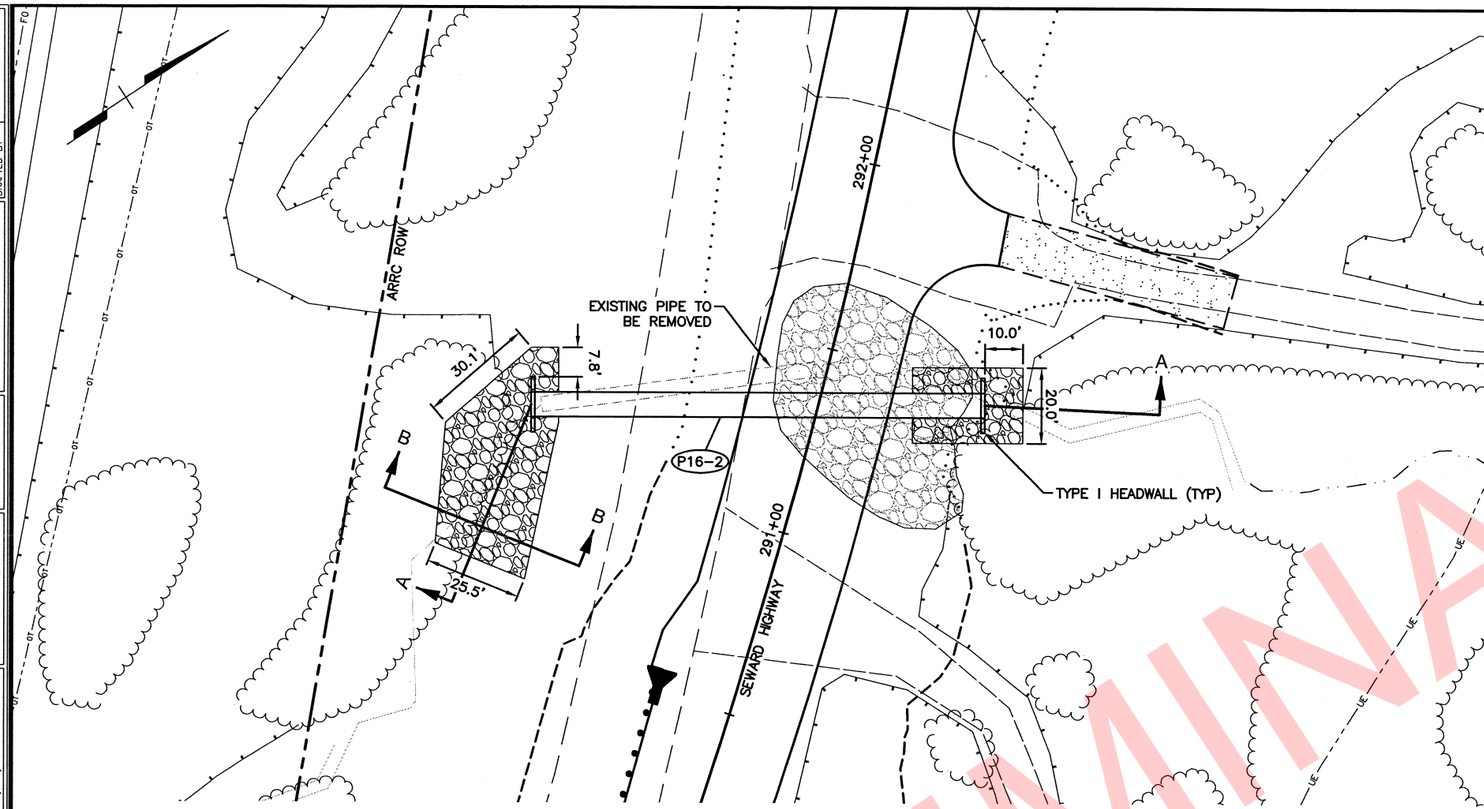
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HWY: MP 17-22.5
REHABILITATION

P4-1 DETAILS

DESIGNED BY
CHECKED BY
DRAFTED BY
XREFS
SCALE
LAYOUT P4-1
DATE TIME 2/22/2018 4:03 PM
DRAWING LOCATION
z:\project\2456.01 dot_c seward hwy mp 17 22 5\Civil\ACAD\H&H Design.dwg

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION	ALASKA	0311(032)/Z536100000	2018	E13	



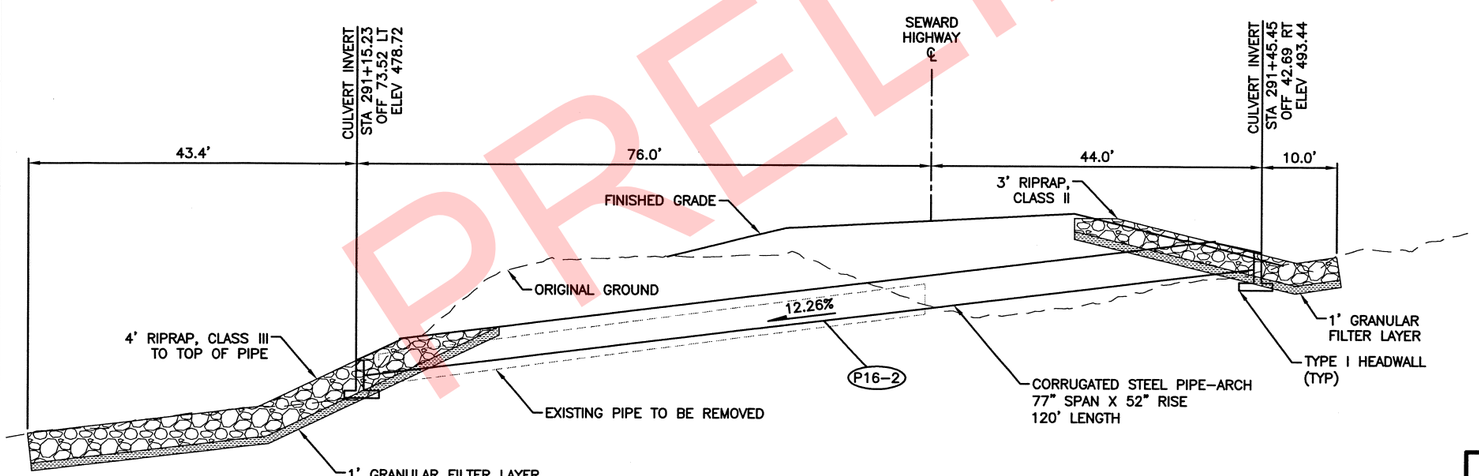
PLAN

HYDROLOGIC AND HYDRAULIC SUMMARY

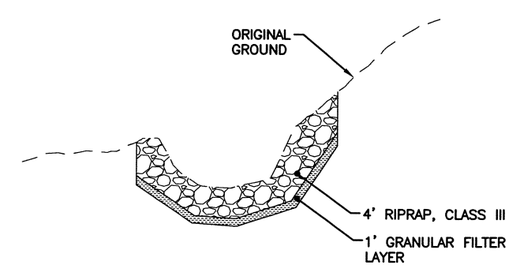
DRAINAGE AREA = 0.3 SQUARE MILES		
EXCEEDANCE PROBABILITY	2%	1%
RETURN PERIOD	50 YEAR (Q_{50})	100 YEAR (Q_{100})
DESIGN DISCHARGE	90	110
DESIGN HIGH WATER ELEVATION	499.0	499.5

NOTES:

1. CONSTRUCT CULVERT BEVELS IN ACCORDANCE WITH STANDARD DRAWING D-07.00.
2. CONSTRUCT HEADWALLS IN ACCORDANCE WITH STANDARD DRAWING D-31.01.



SECTION A-A



SECTION B-B

PRELIMINARY

PLANS DEVELOPED BY:
R&M CONSULTANTS, INC.
9101 VANGUARD DRIVE
ANCHORAGE, AK 99507
(907) 522-1707
CERT. OF AUTH. NO. AECC111

STATE OF ALASKA 49TH REGISTERED PROFESSIONAL ENGINEER Name License #

R&M CONSULTANTS, INC.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HWY: MP 17-22.5
REHABILITATION

P16-2 DETAILS

DRAWING LOCATION
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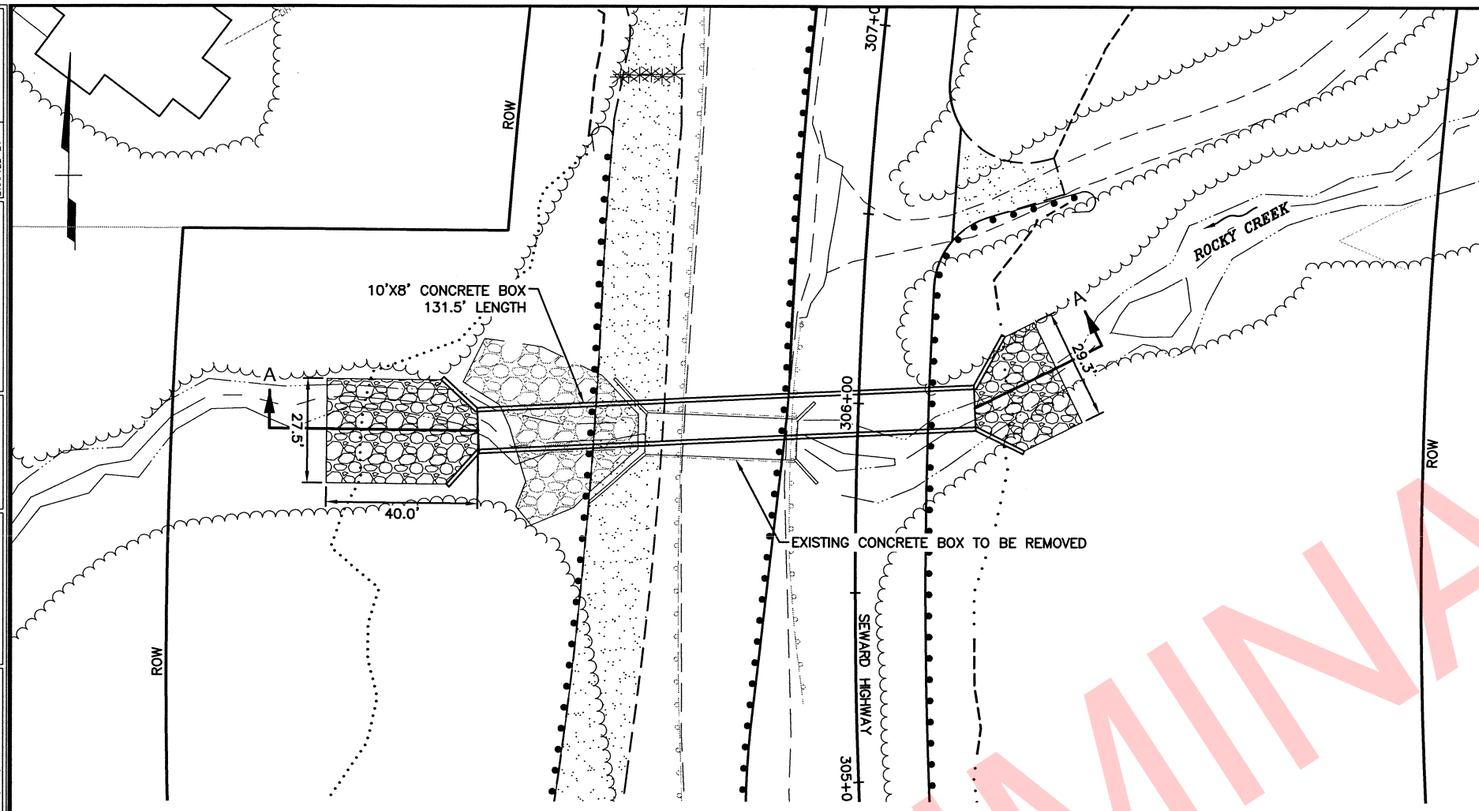
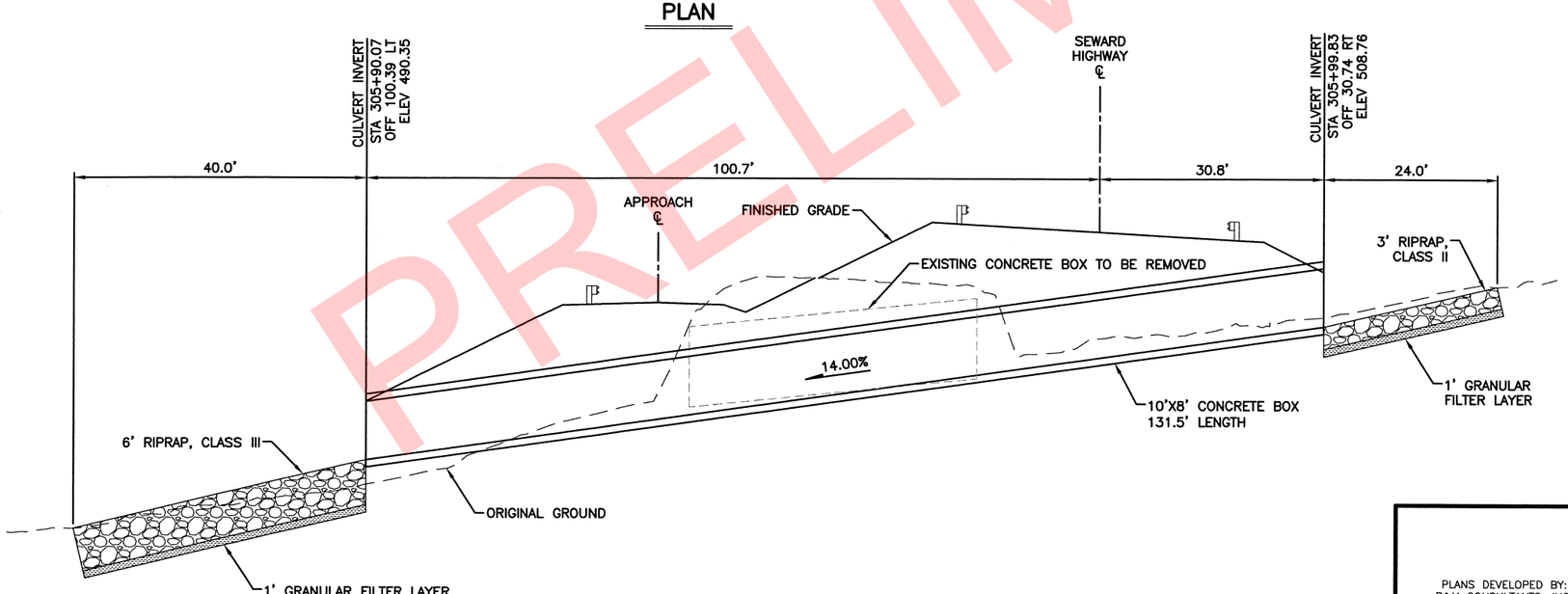
DATE TIME 2/22/2018 4:04 PM | LAYOUT P16-2 | SCALE | XREFS | DESIGNED BY | CHECKED BY | DRAFTED BY

REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0311(032)/Z536100000	2018	E14	



PLAN



SECTION A–A

HYDROLOGIC AND HYDRAULIC SUMMARY

DRAINAGE AREA = 0.7 SQUARE MILES		
EXCEEDANCE PROBABILITY	2%	1%
RETURN PERIOD	50 YEAR (Q_{50})	100 YEAR (Q_{100})
DESIGN DISCHARGE	190	230
DESIGN HIGH WATER ELEVATION	511.8	512.2

PRELIMINARY

PLANS DEVELOPED BY:
R&M CONSULTANTS, INC.
9101 VANGUARD DRIVE
ANCHORAGE, AK 99507
(907) 522–1707
CERT. OF AUTH. NO. AECC111

STATE OF ALASKA 49TH
Name
License #
REGISTERED PROFESSIONAL ENGINEER

R&M CONSULTANTS, INC.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HWY: MP 17–22.5
REHABILITATION

ROCKY CREEK DETAILS

DESIGNED BY
CHECKED BY
DRAFTED BY
XREFS
SCALE
LAYOUT P17–2
DATE TIME 2/22/2018 4:04 PM
DRAWING LOCATION
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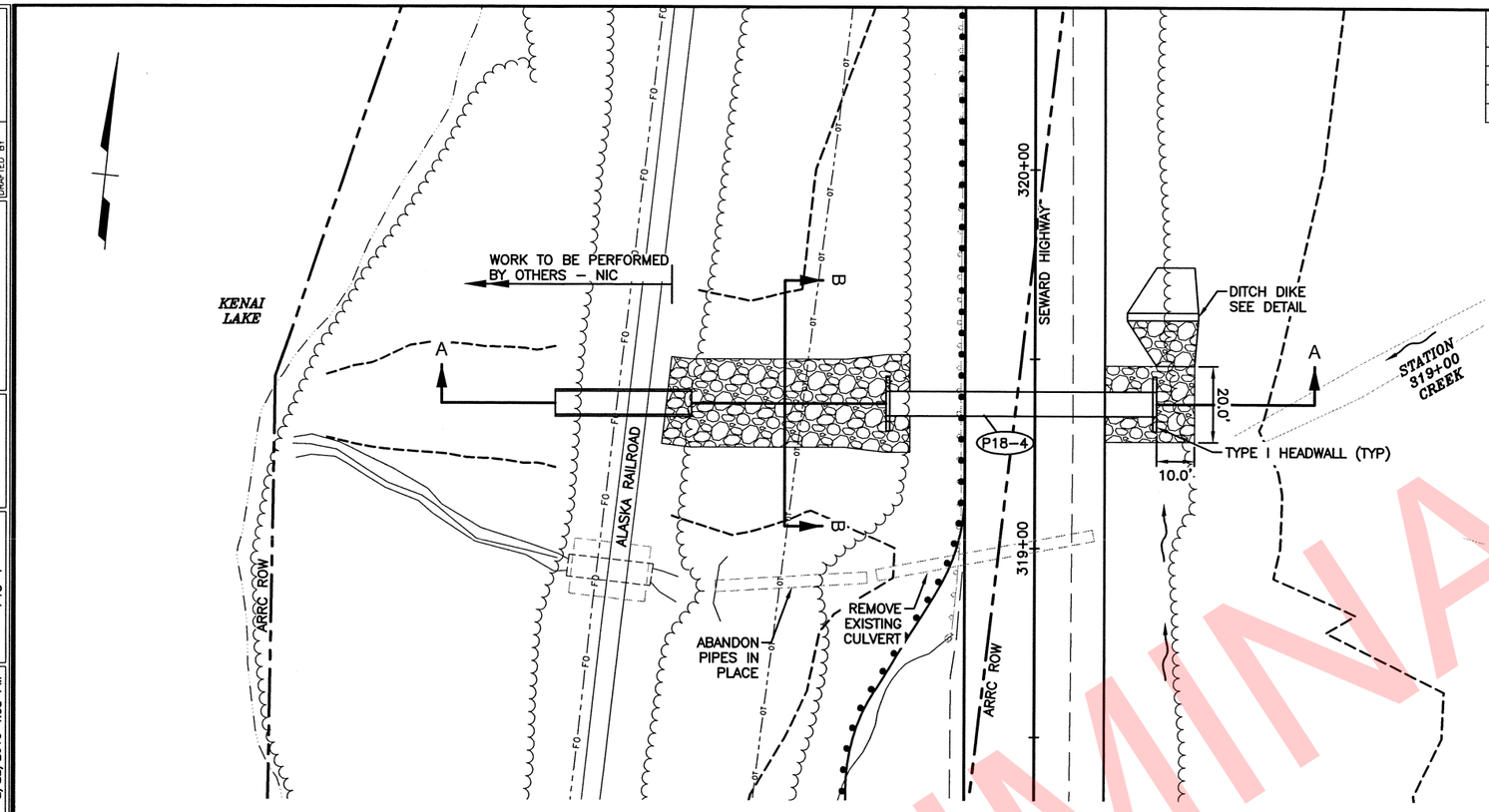
REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION	ALASKA	0311(032)/Z536100000	2018	E15	



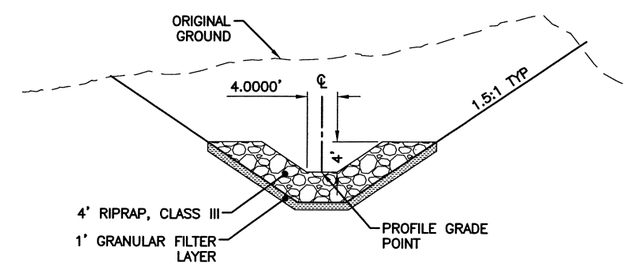
PLAN

HYDROLOGIC AND HYDRAULIC SUMMARY

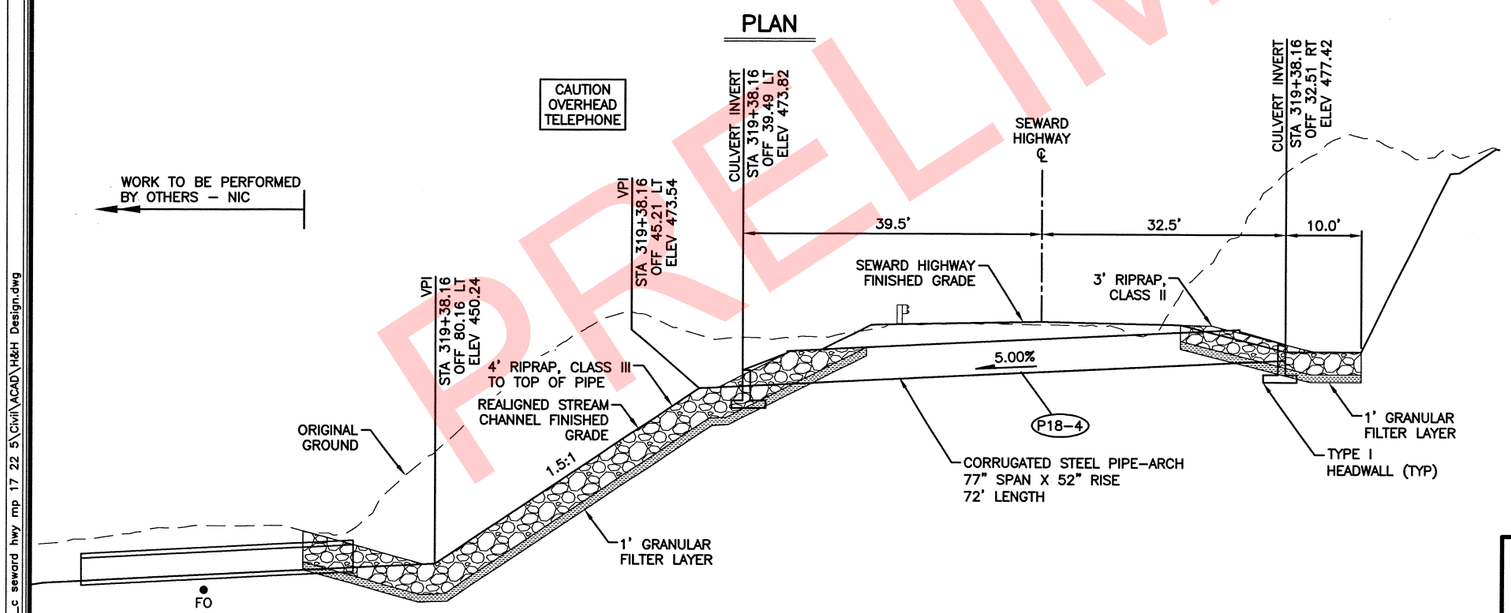
DRAINAGE AREA = 0.3 SQUARE MILES		
EXCEEDANCE PROBABILITY	2%	1%
RETURN PERIOD	50 YEAR (Q_{50})	100 YEAR (Q_{100})
DESIGN DISCHARGE	90	110
DESIGN HIGH WATER ELEVATION	482.5	482.7

NOTES:

1. CONSTRUCT CULVERT BEVELS IN ACCORDANCE WITH STANDARD DRAWING D–07.00.
2. CONSTRUCT HEADWALLS IN ACCORDANCE WITH STANDARD DRAWING D–31.01.



SECTION B–B



SECTION A–A

PRELIMINARY

PLANS DEVELOPED BY:
R&M CONSULTANTS, INC.
9101 VANGUARD DRIVE
ANCHORAGE, AK 99507
(907) 522–1707
CERT. OF AUTH. NO. AECC111

STATE OF ALASKA 49TH Name License REGISTERED PROFESSIONAL ENGINEER

R&M CONSULTANTS, INC.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

SEWARD HWY: MP 17–22.5 REHABILITATION

P18–4 DETAILS

DRAWING LOCATION
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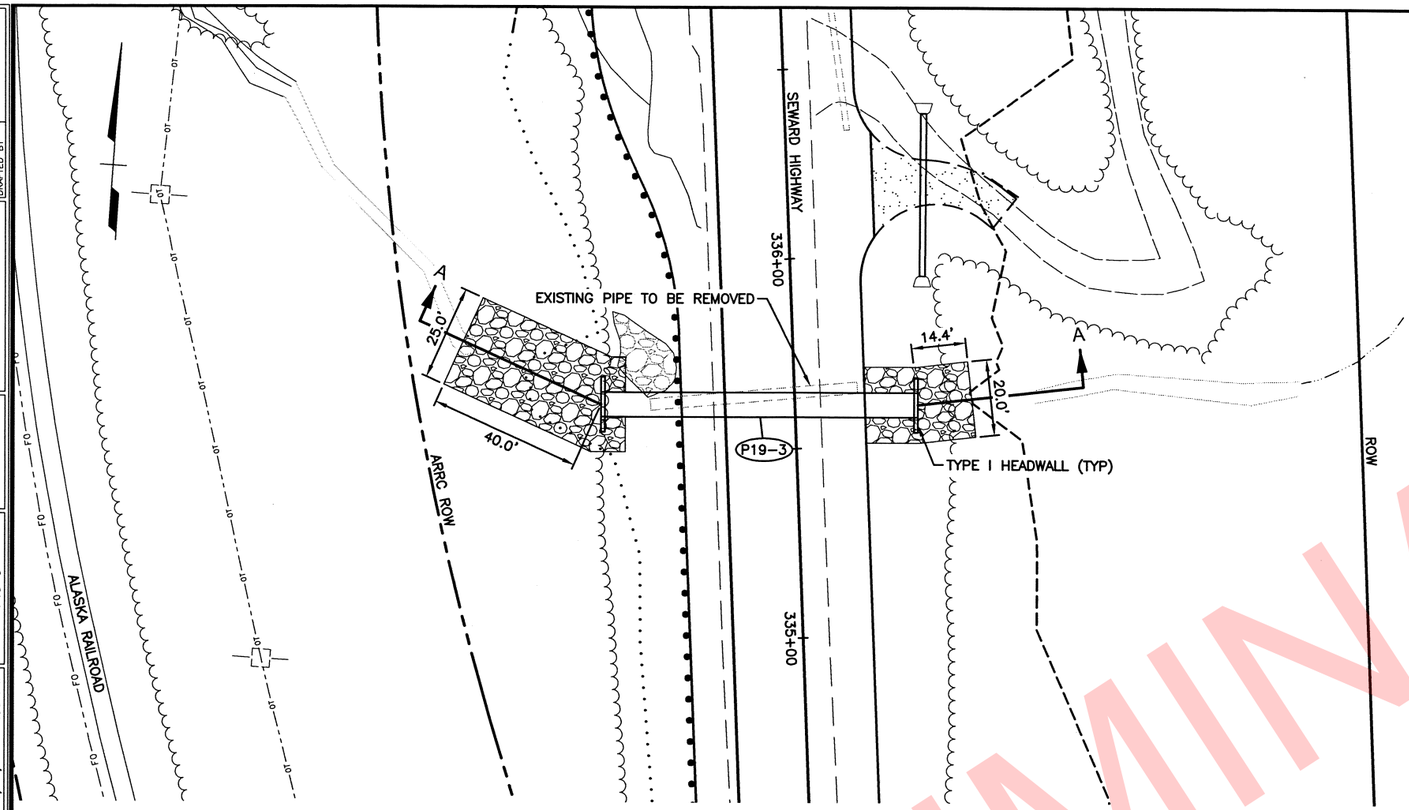
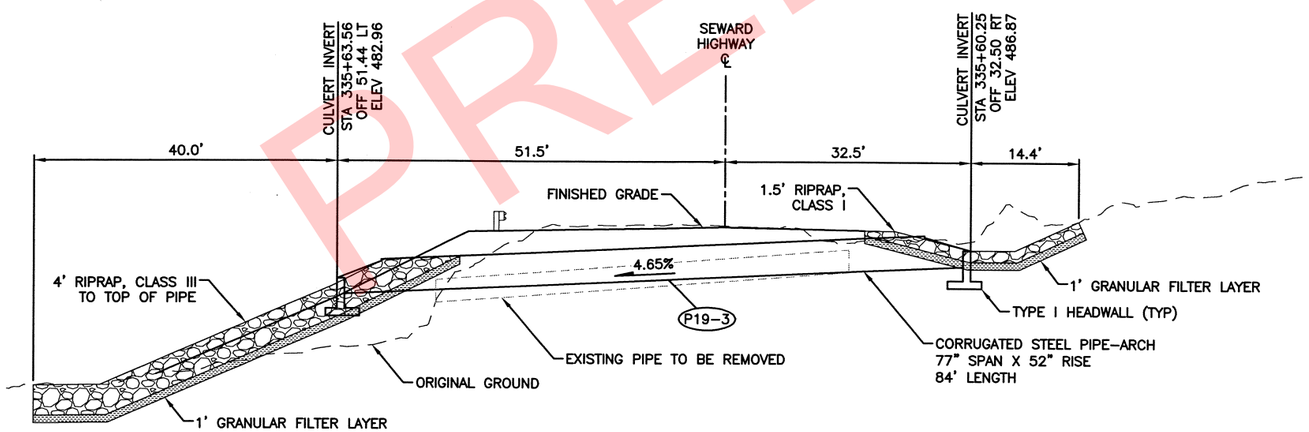
DATE TIME 2/22/2018 4:05 PM | LAYOUT P18–4 | SCALE | XREFS | DESIGNED BY | CHECKED BY | DRAFTED BY

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION	ALASKA	0311(032)/Z536100000	2018	E16	



PLAN



SECTION A–A

HYDROLOGIC AND HYDRAULIC SUMMARY

DRAINAGE AREA = 0.3 SQUARE MILES		
EXCEEDANCE PROBABILITY	2%	1%
RETURN PERIOD	50 YEAR (Q_{50})	100 YEAR (Q_{100})
DESIGN DISCHARGE	80	100
DESIGN HIGH WATER ELEVATION	491.6	492.1

NOTES:

1. CONSTRUCT CULVERT BEVELS IN ACCORDANCE WITH STANDARD DRAWING D–07.00.
2. CONSTRUCT HEADWALLS IN ACCORDANCE WITH STANDARD DRAWING D–31.01.

PRELIMINARY

PLANS DEVELOPED BY:
R&M CONSULTANTS, INC.
9101 VANGUARD DRIVE
ANCHORAGE, AK 99507
(907) 522–1707
CERT. OF AUTH. NO. AECC111

STATE OF ALASKA 49TH Name License # REGISTERED PROFESSIONAL ENGINEER

R&M CONSULTANTS, INC.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HWY: MP 17–22.5
REHABILITATION

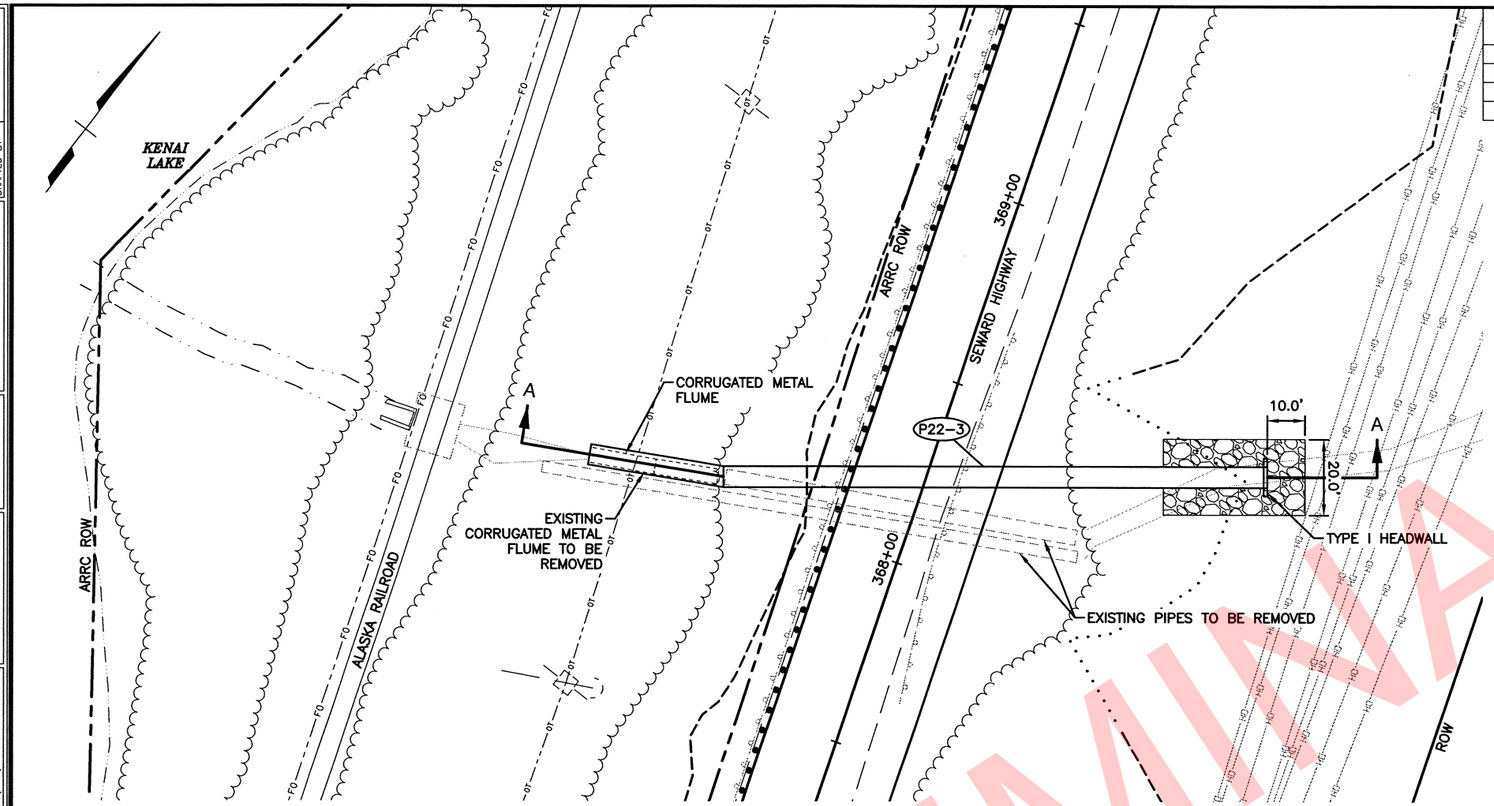
P19–3 DETAILS

DRAWING LOCATION
z:\project\2456.01 dot_c seward hwy mp 17 22 5\Civil\ACAD\H&H Design.dwg

DATE TIME 2/22/2018 4:06 PM | LAYOUT P19-3 | SCALE | XREFS | DESIGNED BY | CHECKED BY | DRAFTED BY

REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0311(032)/Z536100000	2018	E17	



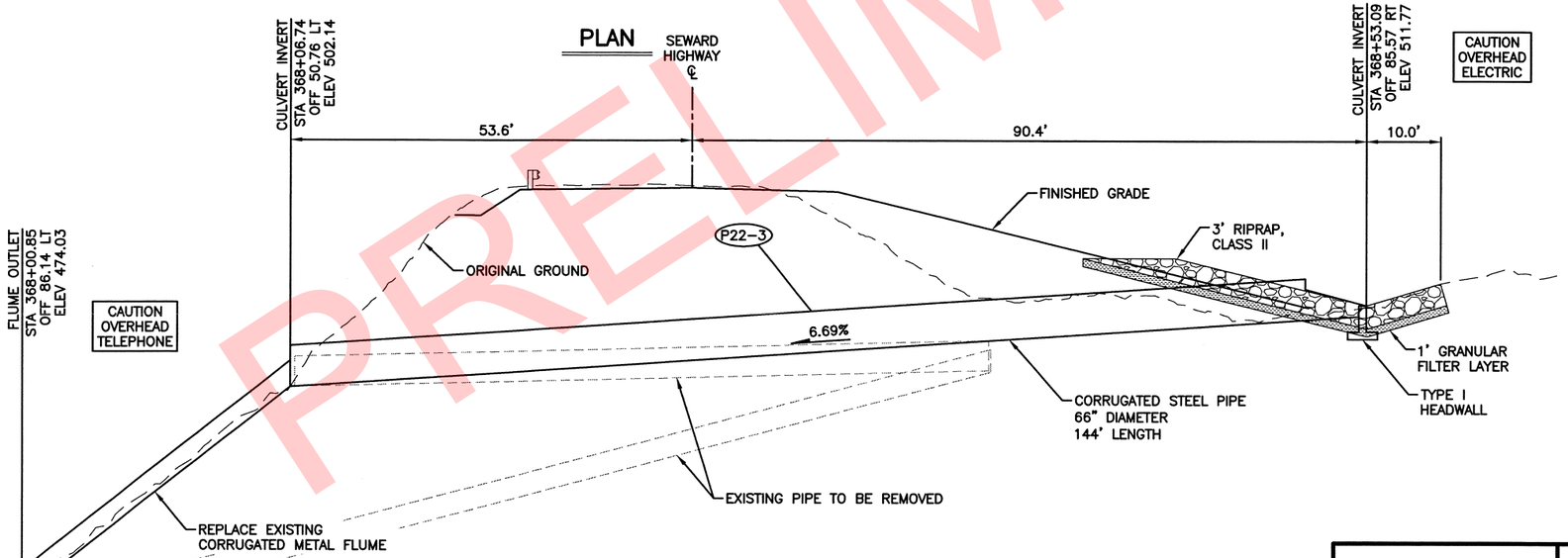
HYDROLOGIC AND HYDRAULIC SUMMARY

DRAINAGE AREA = 0.4 SQUARE MILES		
EXCEEDANCE PROBABILITY	2%	1%
RETURN PERIOD	50 YEAR (Q_{50})	100 YEAR (Q_{100})
DESIGN DISCHARGE	100	120
DESIGN HIGH WATER ELEVATION	516.3	517.7

NOTES:

1. CONSTRUCT CULVERT BEVELS IN ACCORDANCE WITH STANDARD DRAWING D-07.00.
2. CONSTRUCT HEADWALLS IN ACCORDANCE WITH STANDARD DRAWING D-31.01.

PLAN



SECTION A-A

PRELIMINARY

PLANS DEVELOPED BY:
R&M CONSULTANTS, INC.
9101 VANGUARD DRIVE
ANCHORAGE, AK 99507
(907) 522-1707
CERT. OF AUTH. NO. AECC111

STATE OF ALASKA 49TH Name License # REGISTERED PROFESSIONAL ENGINEER

R&M CONSULTANTS, INC.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HWY: MP 17-22.5
REHABILITATION

P22-3 DETAILS

DESIGNED BY
REVIEWED BY
DRAFTED BY

XREFS

SCALE

LAYOUT
P22-3

DATE TIME
2/22/2018 4:06 PM

DRAWING LOCATION
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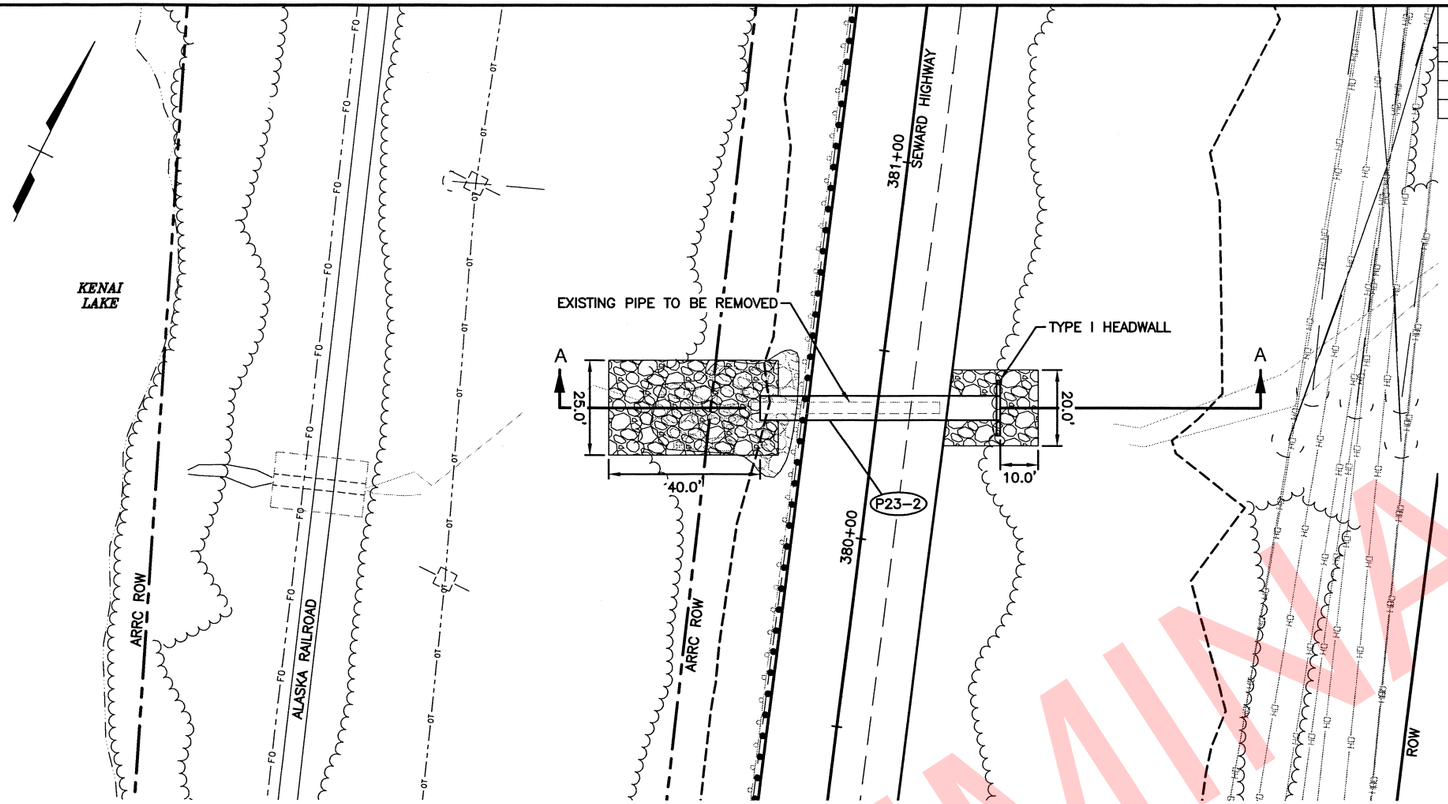
REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION	ALASKA	0311(032)/Z536100000	2018	E18	



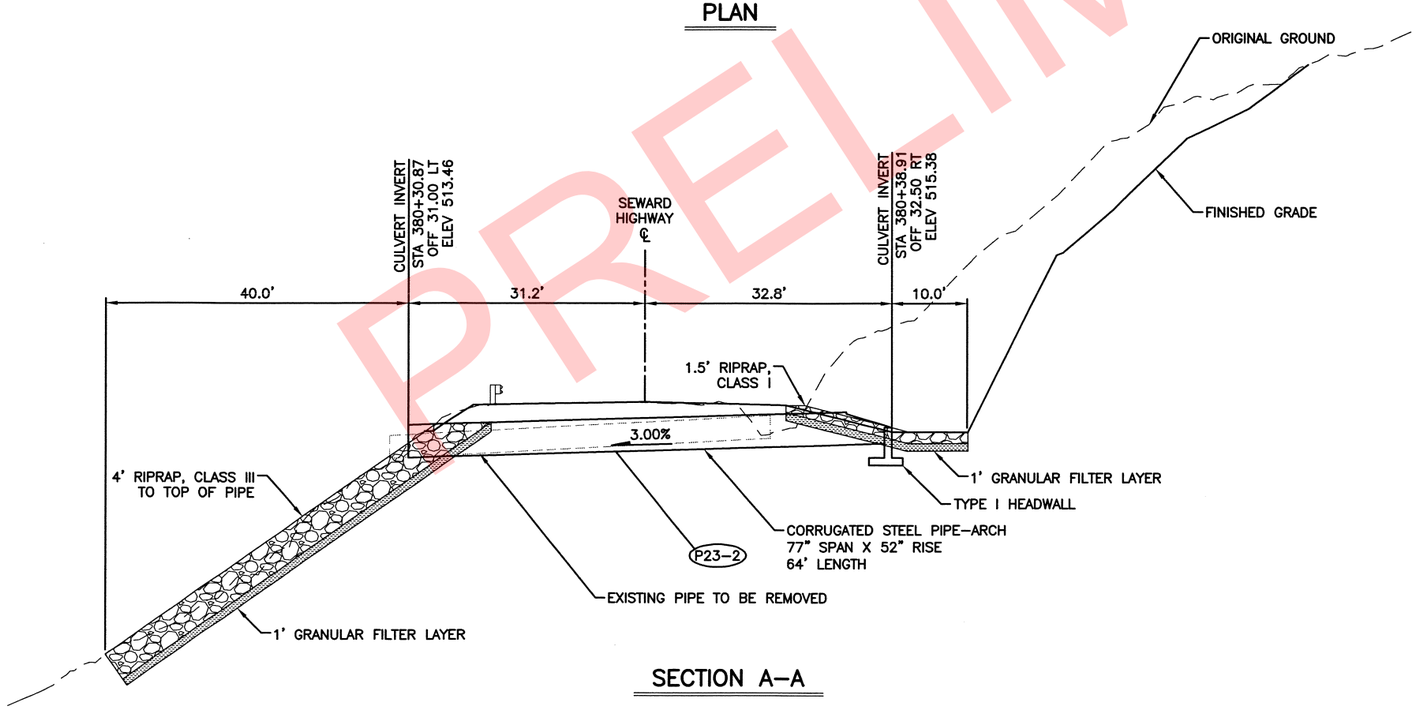
PLAN

HYDROLOGIC AND HYDRAULIC SUMMARY

DRAINAGE AREA = 0.3 SQUARE MILES		
EXCEEDANCE PROBABILITY	2%	1%
RETURN PERIOD	50 YEAR (Q_{50})	100 YEAR (Q_{100})
DESIGN DISCHARGE	80	90
DESIGN HIGH WATER ELEVATION	520.7	521.1

NOTES:

1. CONSTRUCT CULVERT BEVELS IN ACCORDANCE WITH STANDARD DRAWING D-07.00.
2. CONSTRUCT HEADWALLS IN ACCORDANCE WITH STANDARD DRAWING D-31.01.



SECTION A-A

PLANS DEVELOPED BY:
R&M CONSULTANTS, INC.
9101 VANGUARD DRIVE
ANCHORAGE, AK 99507
(907) 522-1707
CERT. OF AUTH. NO. AECC111

STATE OF ALASKA 49TH Name License # REGISTERED PROFESSIONAL ENGINEER

R&M CONSULTANTS, INC.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HWY: MP 17-22.5
REHABILITATION

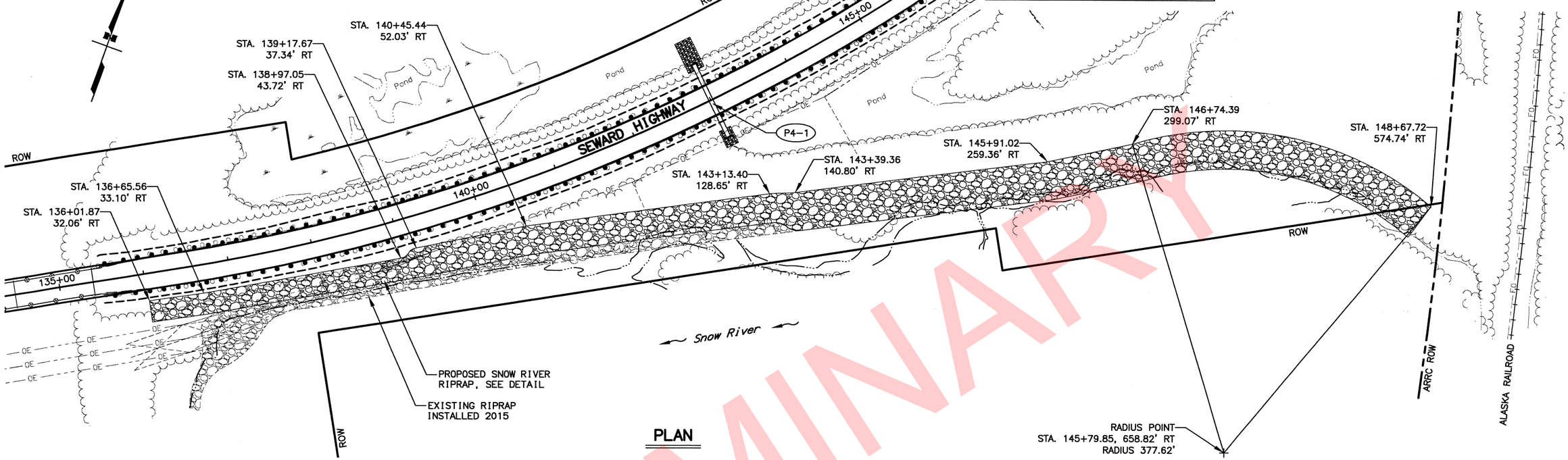
P23-2 DETAILS

DESIGNED BY
CHECKED BY
DRAFTED BY
XREFS
SCALE
LAYOUT P23-2
DATE TIME 2/22/2018 4:07 PM
DRAWING LOCATION
z:\project\2456.01 dot_c seward hwy mp 17 22 5\Civil\ACAD\H&H Design.dwg

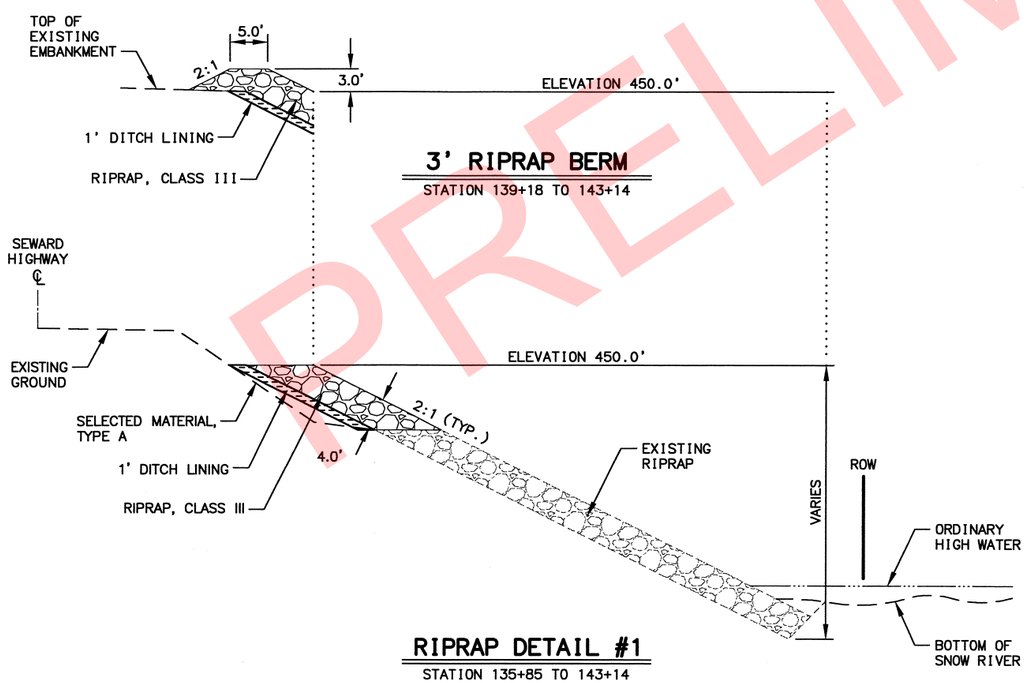
PRELIMINARY

REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	E19	E27



PLAN

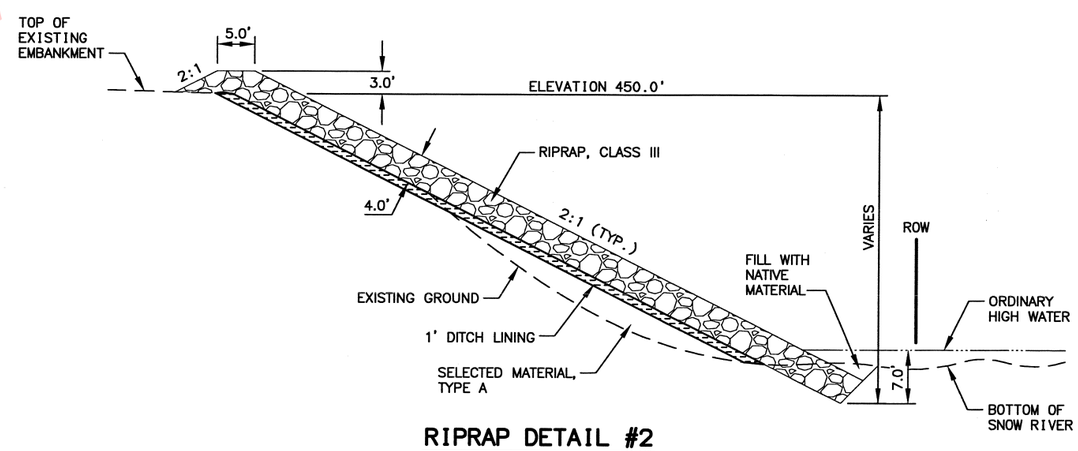


3' RIPRAP BERM

STATION 139+18 TO 143+14

RIPRAP DETAIL #1

STATION 135+85 TO 143+14



RIPRAP DETAIL #2

STATION 143+14 TO 148+75

PRELIMINARY

STATE OF ALASKA
KRISTOPHER K. KIEFER
CE 132
REGISTERED PROFESSIONAL ENGINEER
PSAE REVIEW

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

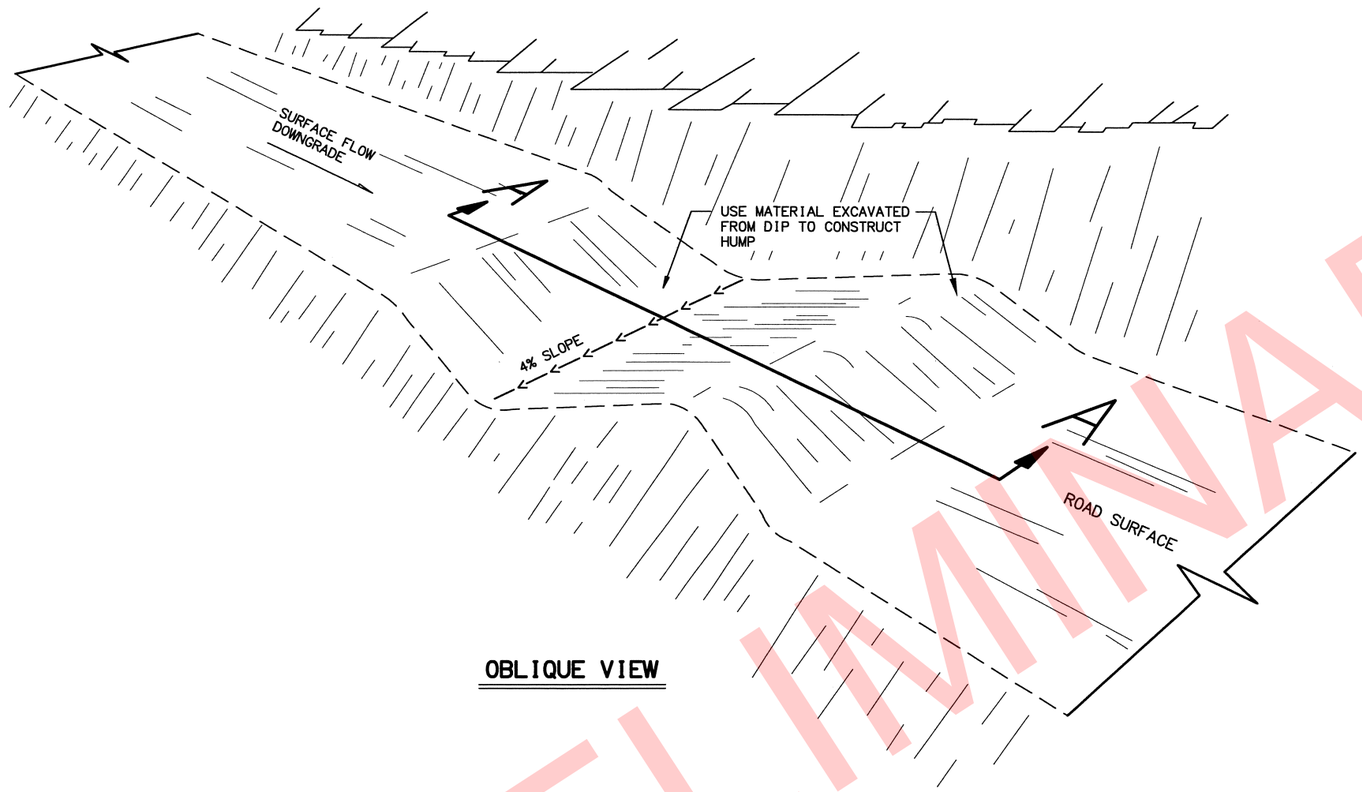
SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

SNOW RIVER RIPRAP DETAIL

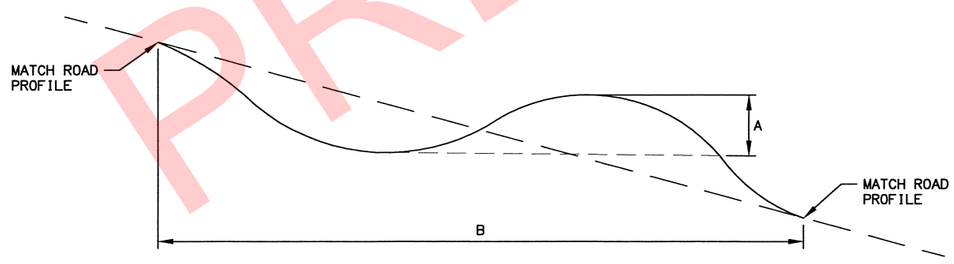
DRAWING LOCATION	DATE TIME	LAYOUT	SCALE	XREFS: XR-53610-Border-Detail XR-53610-Base XR-53610-Design XR-53610-ROW XR-53610-Utils	DESIGNED BY KDS/ZDK
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_E19_Snow River RipRap.dwg	3/8/2018 7:59 AM	E19	1"= 60'/1"= 10'		CHECKED BY KEK
					DRAFTED BY ZDK

REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	E20	E27



OBLIQUE VIEW



SECTION A-A

A = 8 TO 12 INCHES
B = 6 TO 12 FEET

NOTES:

1. ALL WATER BARS SHALL BEGIN AT THE INTERSECTION OF THE ROADBED AND CUT SLOPE AND RUN ACROSS THE ENTIRE WIDTH OF THE ROADBED.
2. ALL WATER BARS SHALL HAVE FREE FLOWING OUTLETS.
3. SEE F SHEETS FOR ELECTRIC TRAIL WATER BAR LOCATIONS.

WATER BAR SPACING INTERVALS

ROAD GRADE (%)	SPACING (FT)
2	250
5	135
10	80
15	60
20	45
30	35

PRELIMINARY

STATE OF ALASKA
KRISTIN K. CAMPBELL
CE 132
REGISTERED PROFESSIONAL ENGINEER
PS&E REVIEW

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

ELECTRIC TRAIL
WATER BAR DETAIL

DESIGNED BY	KGS\ZDK
CHECKED BY	KEK
DRAFTED BY	DETAIL

XREFS: XR-53610-Border-Detail
N/A
N/A

SCALE 1" = 1'

LAYOUT E20

DATE TIME 3/6/2018 7:43 PM

DRAWING LOCATION
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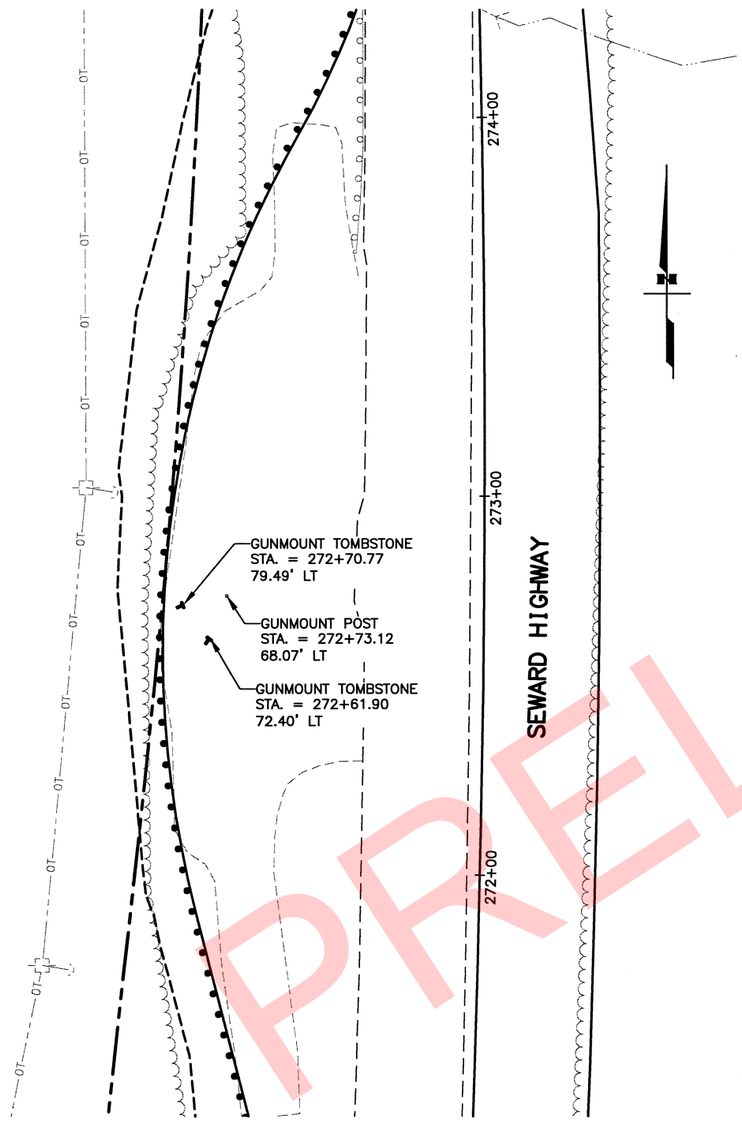
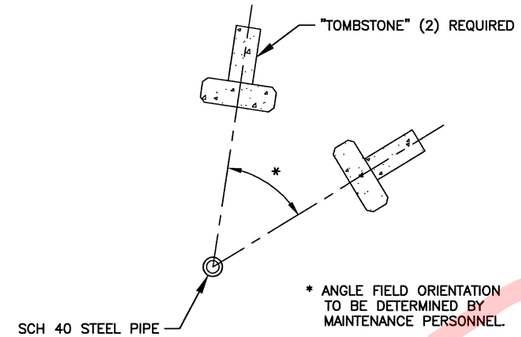
REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	E21	E27



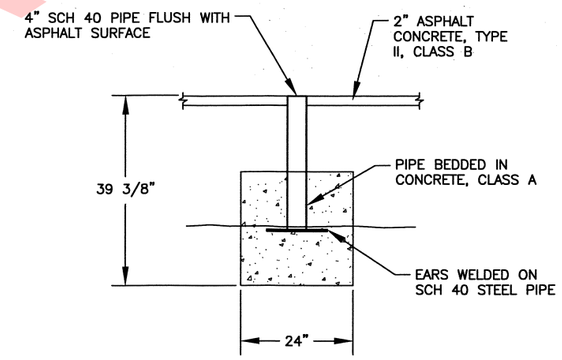
GUNMOUNT TURNOUT



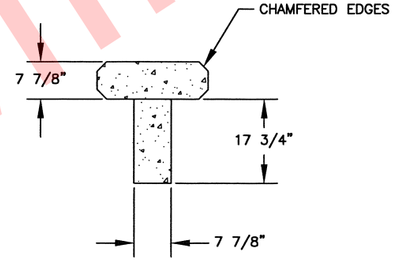
PLAN LAYOUT

GUNMOUNT NOTES:

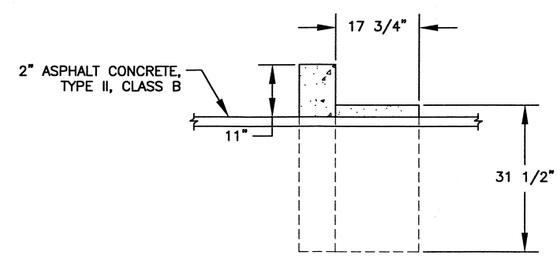
1. STAKE GUNMOUNT PIPE LOCATION PRIOR TO CONSTRUCTION STAKING OF PAD. FINAL LOCATION OF PAD AND GUNMOUNT LOCATION AS DIRECTED BY THE ENGINEER.
2. TOMBSTONES TO BE CONSTRUCTED FROM CONCRETE, CLASS A.
3. COORDINATE PAD PLACEMENT AND GUNMOUNT ORIENTATION WITH CENTRAL REGION M&O AVALANCHE SPECIALIST AT 907-783-2772 PRIOR TO CONSTRUCTION.
4. EXCAVATE AND POUR CONCRETE PRIOR TO PLACING ASPHALT CONCRETE PAVEMENT.



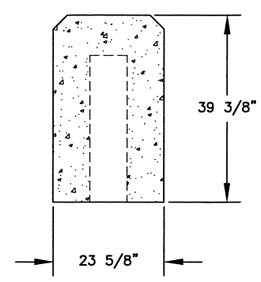
GUNMOUNT PIPE SIDE VIEW



"TOMBSTONE" PLAN VIEW



"TOMBSTONE" SIDE VIEW



"TOMBSTONE" FRONT VIEW

PRELIMINARY

STATE OF ALASKA
KRISTIN KEK
CE 132
PROFESSIONAL ENGINEER
PSSE REVIEW

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

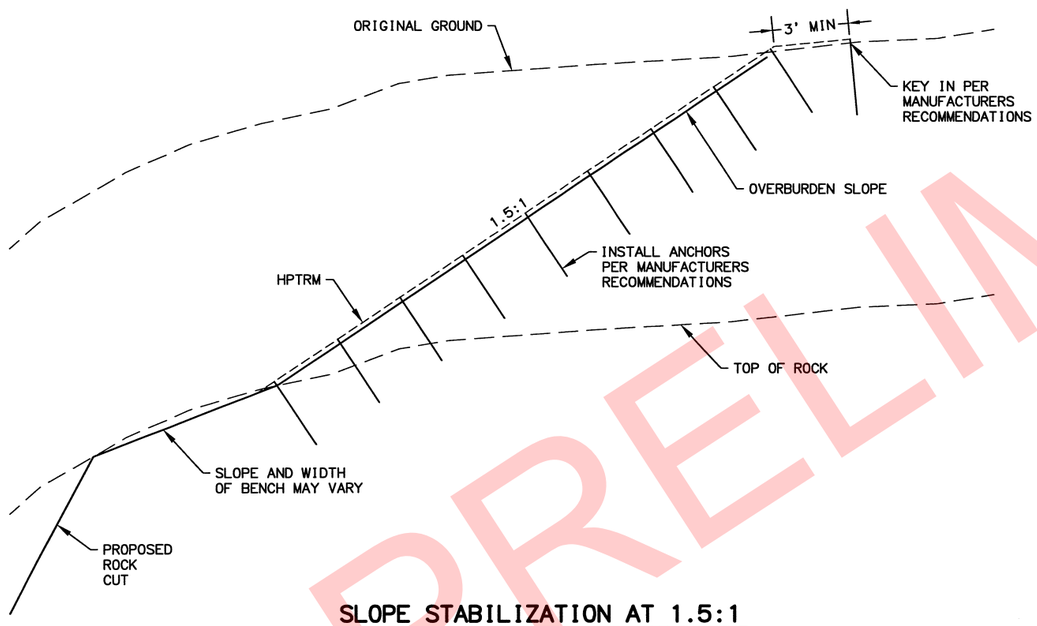
SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

TOMBSTONE GUN
MOUNT DETAILS

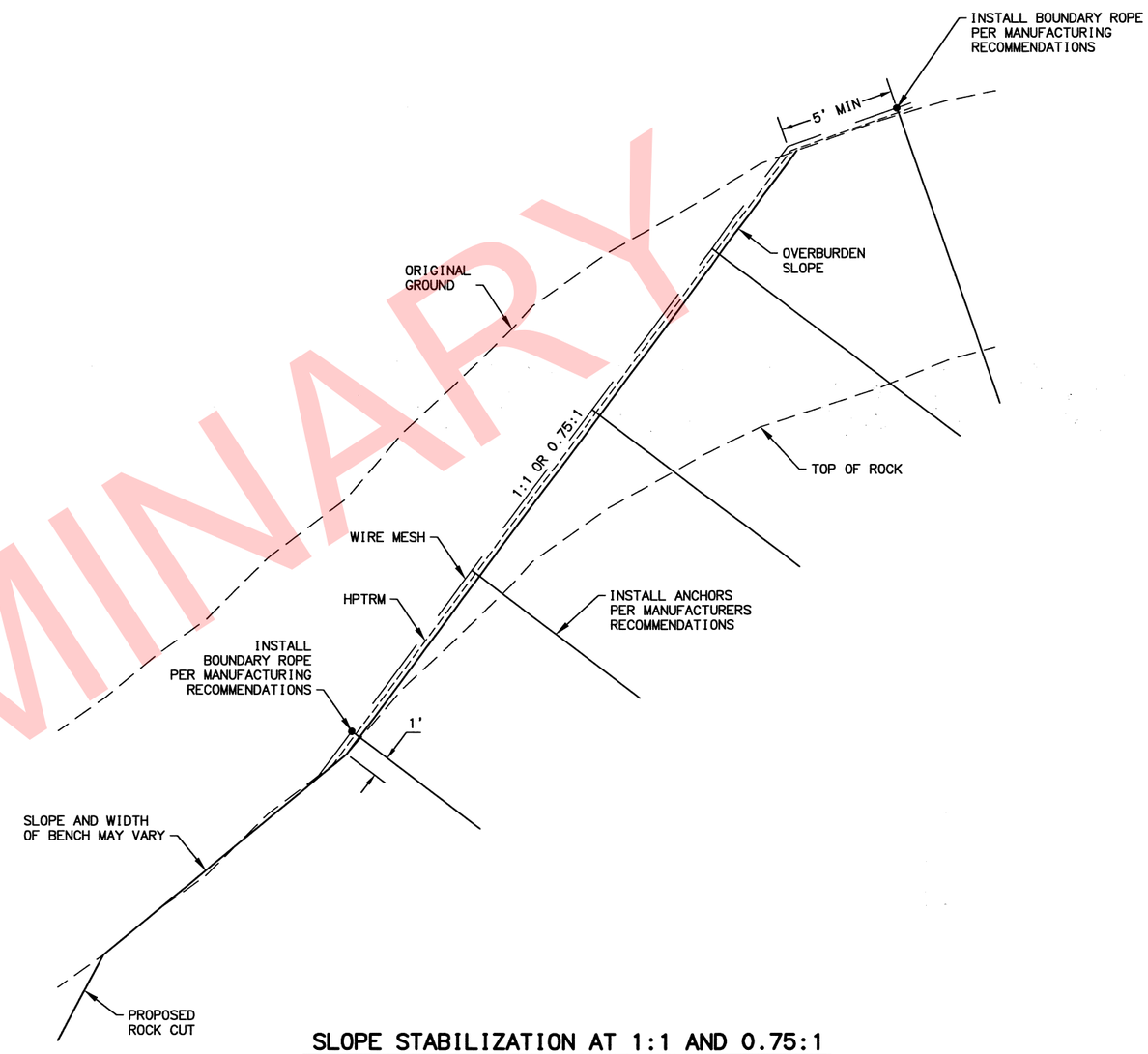
DRAWING LOCATION	DATE TIME	LAYOUT	SCALE	XREFS: XR-53610-Border-Detail	DESIGNED BY	KDS/ZDK
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_E21_GunmountDetail.dwg	3/5/2018 11:06 AM	E21 - GUN MOUNT	N/A	N/A	CHECKED BY	KEK
				N/A	DRAFTED BY	RH

REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	311032/Z536100000	2019	E22	E27



SLOPE STABILIZATION AT 1.5:1



SLOPE STABILIZATION AT 1:1 AND 0.75:1

PRELIMINARY

NOTES:

1. ON 1:1 OR 0.75:1 SLOPES, INSTALL HPTRM MAT ON THE SLOPE UNDER THE WIRE MESH OR AS INDICATED ON THE PLANS AND AS DIRECTED BY THE ENGINEER. ON 1.5:1 SLOPES, INSTALL HPTRM ONLY.
2. WIRE MESH, HPTRM, ANCHORS, AND BOUNDARY ROPES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
3. ANCHORS AND WIRE MESH SHALL BE INSTALLED FROM THE TOP DOWN AS EXCAVATION PROCEEDS. THE EXCAVATION SHALL PROCEED IN STAGES. THE WIRE MESH SHALL BE INSTALLED ON THE EXPOSED PORTION OF THE SLOPE PRIOR TO EXCAVATING THE NEXT LEVEL.
4. HYDROSEED OVERBUREDN SLOPES BEFORE AND AFTER PLACEMENT OF HPTRM AND WIRE MESH.

STATE OF ALASKA
KRISTIN FISHER
CE 13132
PROFESSIONAL ENGINEER
PS&E REVIEW

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
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(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5 REHABILITATION

OVERBURDEN SLOPE
PROTECTION DETAILS

DESIGNED BY	RH
CHECKED BY	KEK
DRAFTED BY	RH

XREFS: XR-53610-Border-Detail
N/A
N/A

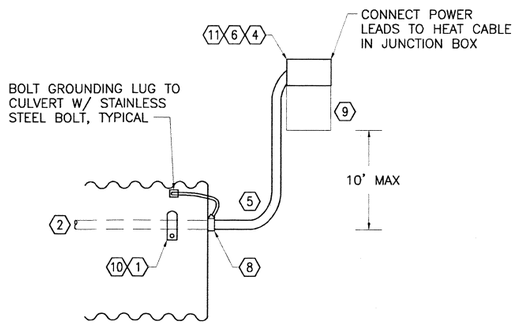
SCALE 1"= 1'

LAYOUT E22

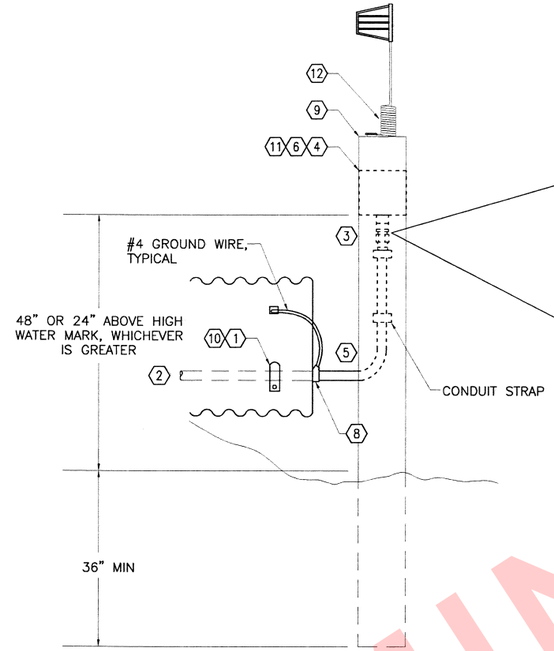
DATE TIME 3/6/2018 11:03 AM

DRAWING LOCATION
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_E22_OB Slope Protection.dwg

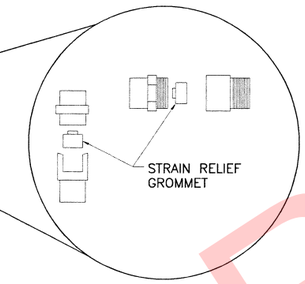
REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION	ALASKA	0311032/Z536100000	2018	E23	E27



CULVERT INLET DETAIL – PLAN VIEW



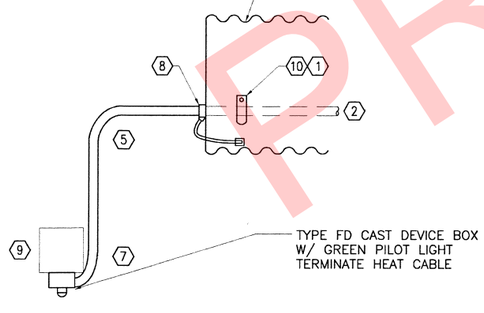
PROFILE VIEW



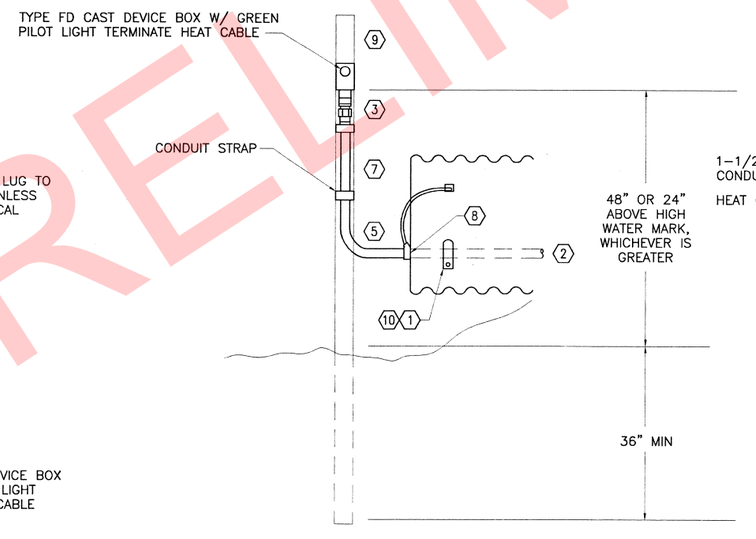
HEAT TRACE CABLE SEAL
STRAIN RELIEF FITTING DETAIL

SHEET NOTES

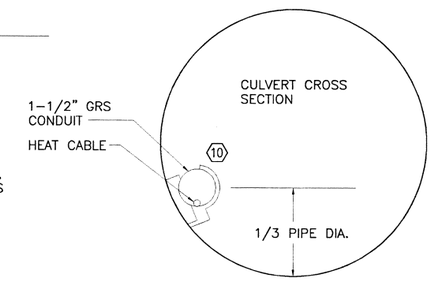
1. CONDUIT SUPPORTS IN CULVERTS TO BE SPACED PER NEC TABLE 344.30 (B)(2).
2. HEAT TRACE CABLE IN RIGID CONDUIT.
3. STRAIN RELIEF FITTING, SEPARATES ELECTRICAL CONNECTIONS FROM WATER IN CONDUIT CONTAINING HEAT TRACE CABLE.
4. WET LOCATION JUNCTION BOX 8"H X 8"W X 4"D W/ INTERFACE BETWEEN THE HEATING CONDUCTORS AND NON–HEATING CONDUCTORS – MOUNT 49 INCHES OR 24 INCHES ABOVE HIGH WATER LEVEL.
5. LIQUID TIGHT FLEXIBLE METAL CONDUIT. LEAVE ENOUGH SLACK FOR 2' MOVEMENT OF POST.
6. POWER INLET LOCKING NEMA L6–30, 240 VOLT 30 AMP.
7. CONDUIT WITH HEAT TRACE CABLE TO GREEN PILOT LIGHT.
8. CONNECTOR WITH GROUNDING LUG FOR #4 GROUND WIRE.
9. 6" X 6" TREATED WOOD POST. PLACE AS APPROVED BY THE ENGINEER.
10. ONE–HOLE MALLEABLE IRON CONDUIT CLAMP. SECURE TO CULVERT WITH SELF–TAPING STAINLESS STEEL SCREW.
11. SPLICE HEATING AND NON–HEATING CONDUCTORS IN JUNCTION BOX.
12. PROVIDE 6'–0", FLEXIBLE, SPRING STEEL MARKER WITH HDPE FLAG. NORDIC FIBERGLASS FLEXI–FLAG CM–2 OR APPROVED EQUAL.
13. ALL PILOT LIGHTS SHALL BE LIGHT EMITTING DIODE (LED).
14. PLACE 6" X 6" POST ON HIGH GROUND OUT OF WATER AT ENGINEER'S DISCRETION, OUTSIDE OF 24 FOOT CLEAR ZONE.
15. HEAT TRACE CABLE – 12 WATTS/FOOT AT 240 VOLT CURRENT SELF LIMITING, MAX TEMP 150 DEGREES FAHRENHEIT.



CULVERT OUTLET DETAIL – PLAN VIEW



PROFILE VIEW



CONDUIT FASTENING DETAIL

SUPPORT FOR RIGID METAL CONDUIT

CONDUIT SIZE	MAXIMUM DISTANCE BETWEEN RIGID METAL CONDUIT SUPPORTS (INCHES)
1	12
1.25 – 1.5	14
2 – 2.5	16

PRELIMINARY

PLANS DEVELOPED BY:
AMC ENGINEERS
701 EAST TUDOR ROAD
ANCHORAGE, AK 99503
(907) 257–9100
CERT. OF AUTH. NO. AECC342

STATE OF ALASKA 49TH Keith A. Confer EE 11391 REGISTERED PROFESSIONAL ENGINEER

AMC ENGINEERS

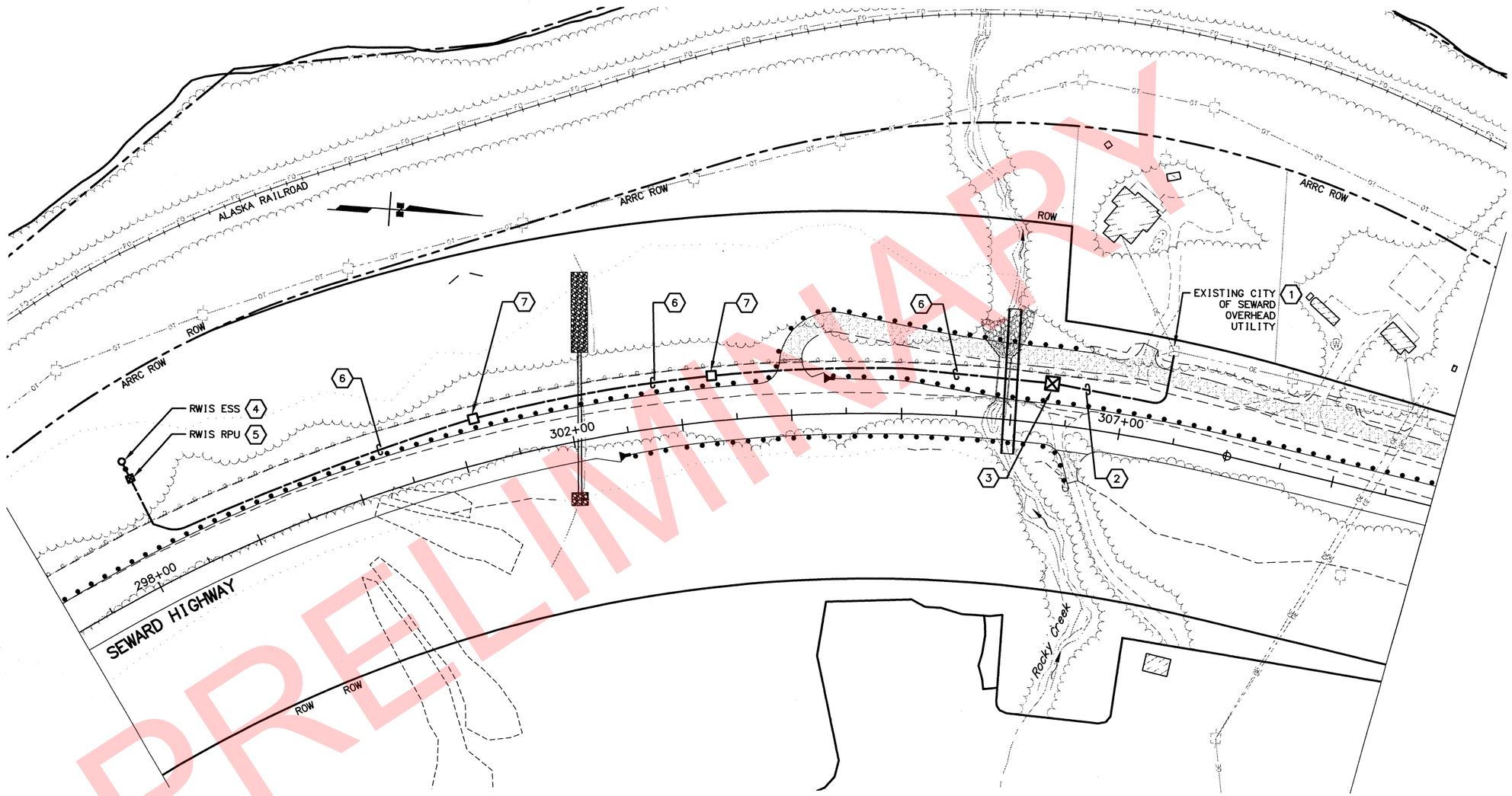
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17 – 22.5
REHABILITATION

REMOTE THAW WIRE DETAILS

DESIGNED BY
CHECKED BY
DRAFTED BY
XREFS
SCALE
LAYOUT: 16811 – E1
DATE TIME: 1/16/2018 10:42 AM
DRAWING LOCATION: x:\16811 dotseward\Dwgs\Edwg\sheet files\16811 – E1.dwg

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION	ALASKA	0311032/Z536100000	2018	E24	E27



PRELIMINARY

SHEET NOTES

1. EXISTING CITY OF SEWARD (COS) 25KV PRIMARY DISTRIBUTION LINE.
2. COORDINATE WITH COS FOR A LINE EXTENSION AND ELECTRICAL SERVICE TO THE TYPE 2 LOAD CENTER PROVIDED IAW SHEET NOTE 3.
3. PROVIDE A DUAL POST, TYPE 2 LOAD CENTER IN ACCORDANCE WITH DOT STANDARD DRAWING L-26.00 AND SHEET E29.
4. PROVIDE RWIS STATION ON POLE AT STA 298+19.3, OFF 109.95 LT IN ACCORDANCE WITH THE DETAIL DRAWINGS.
5. PROVIDE RWIS EQUIPMENT STAND, EQUIPMENT, AND EQUIPMENT CONNECTIONS IN ACCORDANCE WITH SHEET E28.
6. PROVIDE 2 INCH GRC WITH 3C-#8 (XHHW-2) AND 1-#8 AWG GROUND FROM LOAD CENTER PROVIDED IN ACCORDANCE WITH SHEET NOTE 3 TO THE RWIS PROVIDED IN ACCORDANCE WITH SHEET NOTES 4 AND 5. PAYMENT FOR PROVING AND INSTALLING THIS ITEM IS SUBSIDIARY TO PAY ITEM 663(1).
7. PROVIDE TYPE 1A JUNCTION BOX TO FACILITATE PULLING OF THE RWIS RPU SERVICE CONDUCTORS FROM THE RWIS LOAD CENTER PROVIDED IN ACCORDANCE WITH SHEET NOTE 3. PAYMENT FOR PROVING AND INSTALLING THIS ITEM IS SUBSIDIARY TO PAY ITEM 663(1).

PLANS DEVELOPED BY:
AMC ENGINEERS
701 EAST TUDOR ROAD
ANCHORAGE, AK 99503
(907) 257-9100
CERT. OF AUTH. NO. AECC342

STATE OF ALASKA 49TH
Keith A. Confer
EE 11391
REGISTERED PROFESSIONAL ENGINEER

AMC ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17 - 22.5
REHABILITATION

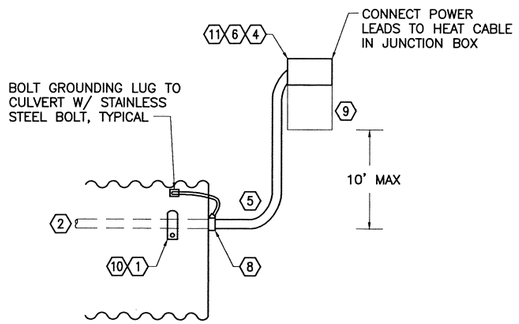
PLAN - RWIS INSTALLATION
STA 298+00 TO 307+50

DRAWING LOCATION
x:\16811 dotseward\Dwgs\Edwg\16811 E-SITE.dwg

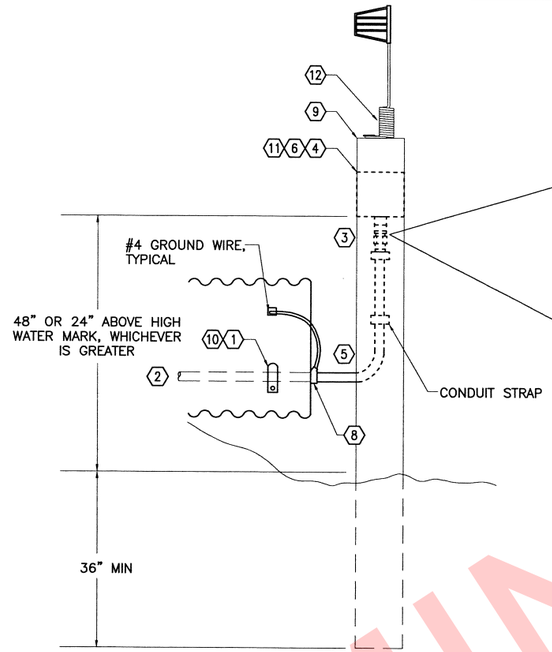
DATE TIME 2/8/2018 10:56 AM
LAYOUT E26
SCALE
XREFS
DESIGNED BY
CHECKED BY
DRAFTED BY

REVISIONS		
NO.	DATE	DESCRIPTION

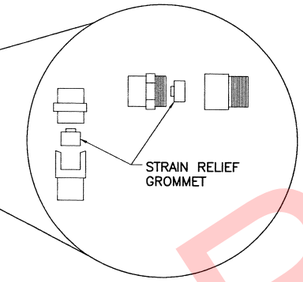
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0311032/Z536100000	2018	E25	E27



CULVERT INLET DETAIL – PLAN VIEW



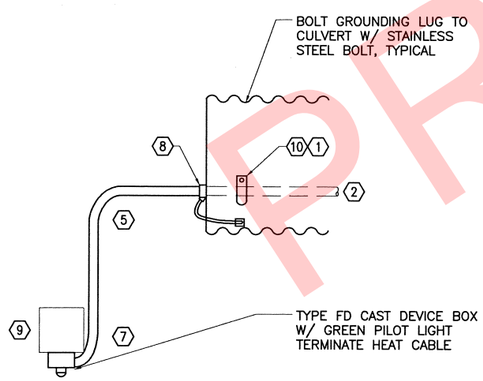
PROFILE VIEW



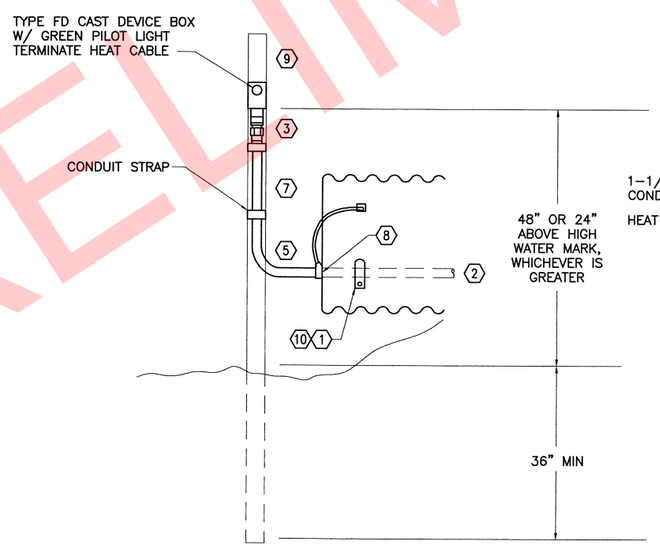
HEAT TRACE CABLE SEAL
STRAIN RELIEF FITTING DETAIL

SHEET NOTES

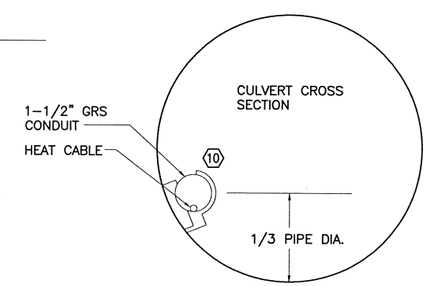
1. CONDUIT SUPPORTS IN CULVERTS TO BE SPACED PER NEC TABLE 344.30 (B)(2).
2. HEAT TRACE CABLE IN RIGID CONDUIT.
3. STRAIN RELIEF FITTING, SEPARATES ELECTRICAL CONNECTIONS FROM WATER IN CONDUIT CONTAINING HEAT TRACE CABLE.
4. WET LOCATION JUNCTION BOX 8"H X 8"W X 4"D W/ INTERFACE BETWEEN THE HEATING CONDUCTORS AND NON–HEATING CONDUCTORS – MOUNT 49 INCHES OR 24 INCHES ABOVE HIGH WATER LEVEL.
5. LIQUID TIGHT FLEXIBLE METAL CONDUIT. LEAVE ENOUGH SLACK FOR 2' MOVEMENT OF POST.
6. POWER INLET LOCKING NEMA L6–30, 240 VOLT 30 AMP.
7. CONDUIT WITH HEAT TRACE CABLE TO GREEN PILOT LIGHT.
8. CONNECTOR WITH GROUNDING LUG FOR #4 GROUND WIRE.
9. 6" X 6" TREATED WOOD POST. PLACE AS APPROVED BY THE ENGINEER.
10. ONE–HOLE MALLEABLE IRON CONDUIT CLAMP. SECURE TO CULVERT WITH SELF–TAPING STAINLESS STEEL SCREW.
11. SPLICE HEATING AND NON–HEATING CONDUCTORS IN JUNCTION BOX.
12. PROVIDE 6'–0", FLEXIBLE, SPRING STEEL MARKER WITH HDPE FLAG. NORDIC FIBERGLASS FLEXI–FLAG CM–2 OR APPROVED EQUAL.
13. ALL PILOT LIGHTS SHALL BE LIGHT EMITTING DIODE (LED).
14. PLACE 6" X 6" POST ON HIGH GROUND OUT OF WATER AT ENGINEER'S DISCRETION, OUTSIDE OF 24 FOOT CLEAR ZONE.
15. HEAT TRACE CABLE – 12 WATTS/FOOT AT 240 VOLT CURRENT SELF LIMITING, MAX TEMP 150 DEGREES FAHRENHEIT.



CULVERT OUTLET DETAIL – PLAN VIEW



PROFILE VIEW



CONDUIT FASTENING DETAIL

SUPPORT FOR RIGID METAL CONDUIT	
CONDUIT SIZE	MAXIMUM DISTANCE BETWEEN RIGID METAL CONDUIT SUPPORTS (INCHES)
1	12
1.25 – 1.5	14
2 – 2.5	16

PRELIMINARY

PLANS DEVELOPED BY:
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CERT. OF AUTH. NO. AECC342

STATE OF ALASKA 49TH
Keith A. Confer
EE 11391
REGISTERED PROFESSIONAL ENGINEER

AMC ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17 – 22.5
REHABILITATION

DETAILS

DRAWING LOCATION
x:\16811 dotseward\Dwgs\Edwg\sheet files\16811 – E2.dwg

DATE TIME 2/8/2018 10:56 AM
LAYOUT 16811 – E27
SCALE
XREFS
DESIGNED BY
CHECKED BY
DRAFTED BY

REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0311032/Z536100000	2018	E26	E27

NOTES

PORTLAND CEMENT CONCRETE FOUNDATION NOTES:

1. CAST PORTLAND CEMENT CONCRETE FOUNDATIONS IN DRILLED HOLES AT THE LOCATIONS INDICATED IN THE PLANS.
2. COMPLETE CONCRETE WORK IN CONFORMANCE WITH SECTIONS 501, 503 AND 660 OF THE STATE OF ALASKA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
3. CHAMFER EXPOSED CONCRETE EDGES 1".
4. REINFORCING STEEL SHALL BE DEFORMED BARS OF BILLET STEEL CONFORMING TO ASTM A615M GRADE 420.
5. CONCRETE: f'c = 28 MPa
6. FURNISH EACH SPIRAL REBAR CAGE WITH 1 1/2 TURNS OF REBAR AT BOTH ENDS.
7. THE ELEVATION OF POINT A SHALL NOT BE MORE THAN 3" ABOVE OR BELOW THE PROJECTED FINISHED SLOPE. NO PORTION OF THE FOUNDATION SHALL PROTRUDE MORE THAN 3" ABOVE THE PROJECTED FINISHED SLOPE.
8. BACKFILL AND COMPACT THE TOP 48" SPACE AROUND FORMS IN 8" LIFTS WITH A CEMENT–SOIL MIXTURE, CONSISTING OF 3 SACKS OF PORTLAND CEMENT PER CUBIC YARD OF SOIL.

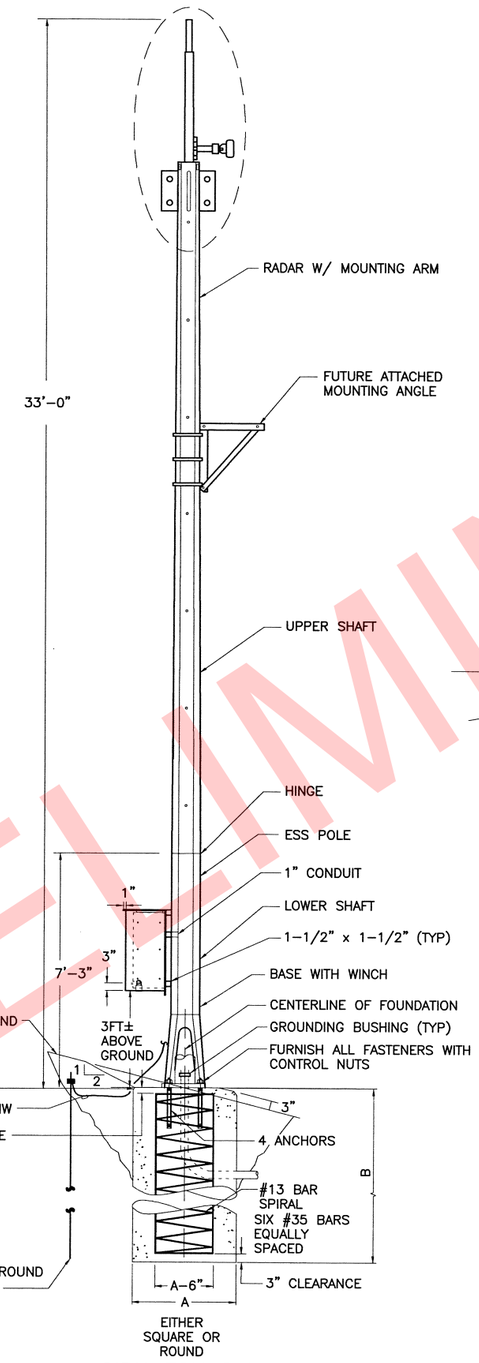
WOOD POSTS NOTES:

1. PRESSURE TREATED, 4"X4" POSTS FOR PANEL SUPPORTS ONLY.

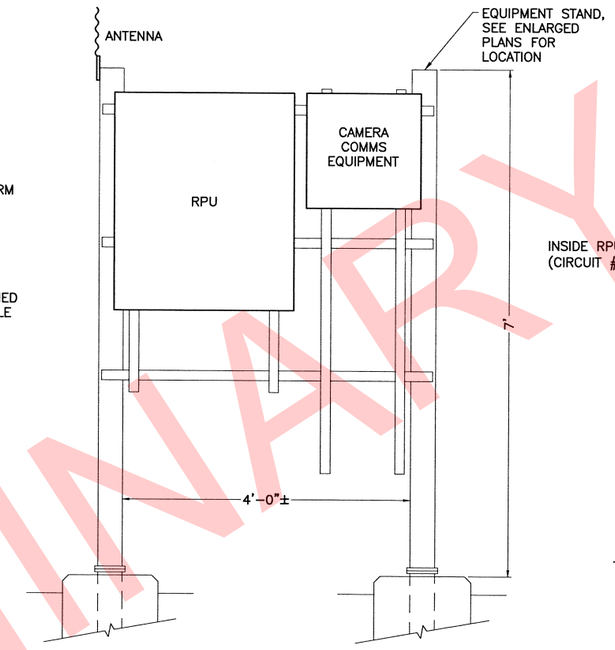
ANCHOR NOTES:

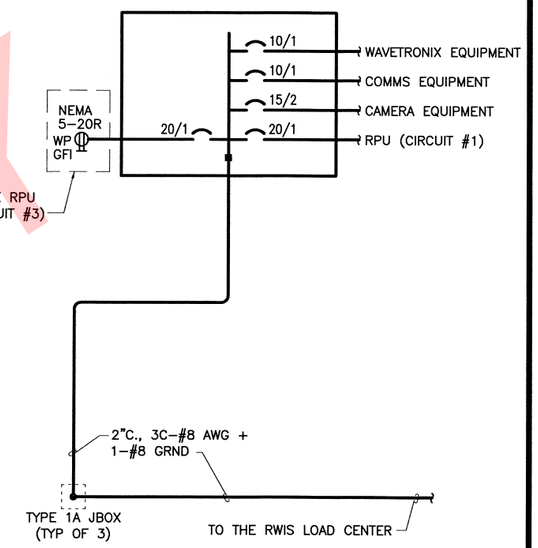
1. INSTALL ANCHORS IN THE FOUNDATIONS THAT ARE PART OF AN FHWA APPROVED FRANGIBLE COUPLING LIGHT POLE SUPPORT SYSTEM DESIGNED FOR ALL DIRECTIONS OF IMPACT. THE SYSTEM USED SHALL NOT INCLUDE SPECIFIC TORQUE REQUIREMENTS AND SHALL MEET NCHRP 350 TEST LEVEL 3 CRITERIA.
2. INSTALL ALL THE ANCHORS OF THE FRANGIBLE COUPLING SUPPORT SYSTEM IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.

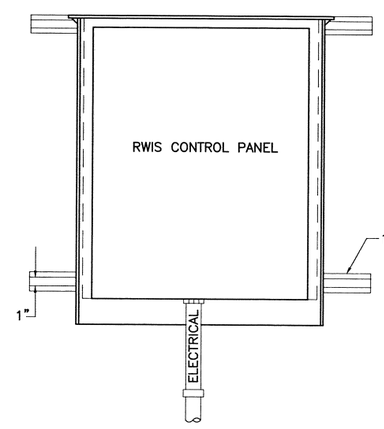
	CONCRETE		PIPE PILE	
FOUNDATION DIMENSIONS	A	B	A	B
ESS POLE	36"	80"	12"	200"



CIDH FOUNDATION
(SHOWN WITH FRANGIBLE COUPLINGS)



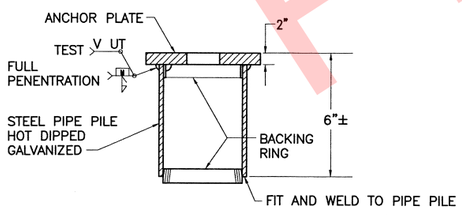




RWIS PANEL & SERVICE
(FRONT)

NOTES:

1. PROVIDE CABINET SHIELDS FOR THE CONTROL PANEL AND POWER EQUIPMENT.
2. LOCATE ALL RWIS CONTROL PANELS BEHIND GUARDRAIL OR OUTSIDE CLEAR ZONE.
3. UTILIZE RSC ABOVE GRADE AND INTO GROUND FIVE FEET, MINIMUM.



PIPE PILE ANCHOR PLATE

PLANS DEVELOPED BY:
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CERT. OF AUTH. NO. AECC342

STATE OF ALASKA 49TH Keith A. Confer EE 11391 REGISTERED PROFESSIONAL ENGINEER

AMC ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

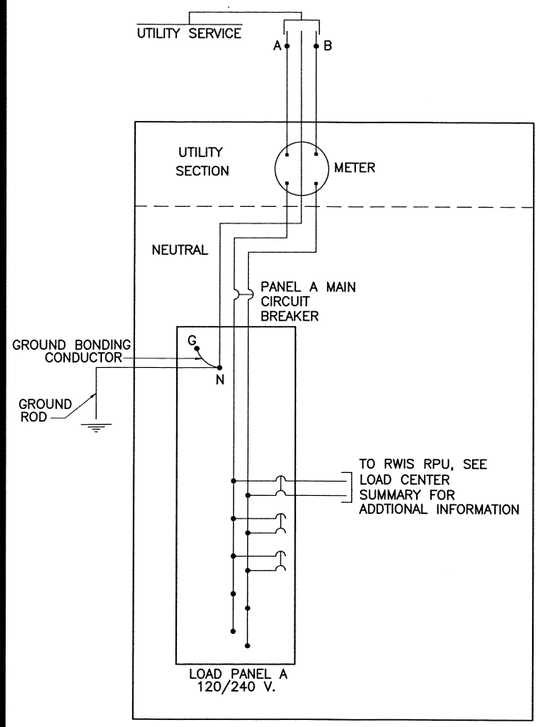
SEWARD HIGHWAY
MP 17 – 22.5
REHABILITATION

DETAILS – RWIS FOUNDATION AND POLE

DESIGNED BY
CHECKED BY
DRAFTED BY
XREFS
SCALE
LAYOUT 16811 – E28
DATE TIME 2/8/2018 10:56 AM
DRAWING LOCATION x:\16811 dotseward\Dwgs\Edwg\sheet files\16811 – E3.dwg

PRELIMINARY

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION	ALASKA	0311032/Z536100000	2018	E27	E27

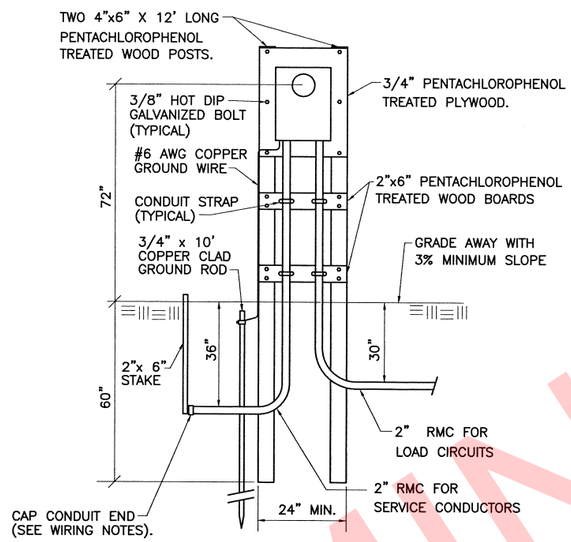


LOAD CENTER ONE LINE DIAGRAM AND

* GROUNDED NEUTRAL, IF SERVICE IS 240/480 VOLT SINGLE PHASE OR 277/480 VOLT THREE-PHASE; AND UNDERGROUND LINE, IF SERVICE IS 120/240 VOLT SINGLE PHASE.

INSTALLATION NOTES:

1. ATTACH ALL CONDUITS TO THE POSTS AND POLES USING TWO HOLE RIGID METAL CONDUIT STRAPS LOCATED ON 24 INCH MAXIMUM CENTERS.
2. ATTACH ALL GROUND CONDUCTORS TO THE POSTS AND POLES USING CABLE STAPLES LOCATED ON 12 INCH CENTERS.



TYPE 2 LOAD CENTER

DUAL POST – ALTERNATE

WIRING NOTES:

1. FURNISH ALL EQUIPMENT NOTED IN THE LOAD CENTER SUMMARY, PLUS TWO 20-AMP 2-POLE SPARE CIRCUIT BREAKERS, AND SPACE FOR A MINIMUM OF TWO ADDITIONAL TWO-POLE CIRCUIT BREAKERS, IN EACH LOAD PANEL. SEE SUMMARIES FOR LOAD PANEL VOLTAGES, CURRENT RATINGS, SHORT CIRCUIT INTERRUPTING RATINGS, AND THE NAME OF THE SERVING UTILITY.
2. SIZE THE TYPE 2 LOAD CENTER CABINETS TO HOLD THE EQUIPMENT SHOWN IN THE WIRING DIAGRAM AND DETAILED IN EACH LOAD CENTER SUMMARY, ALLOWING SPACE FOR WIRING PER THE NATIONAL ELECTRICAL CODE. INSTALLING A METER BASE AND MAIN BREAKER IN A SEPARATE ENCLOSURE IS ALLOWABLE. HOWEVER IN THIS CASE, FURNISH A BREAKER PANEL WITH A MAIN BREAKER.
3. LABEL ALL CIRCUIT BREAKERS AS TO FUNCTION AND POSITION.
4. STORE A SCHEMATIC DIAGRAM, A CIRCUIT DIRECTORY, AND A MATERIALS LIST THAT INCLUDES THE MANUFACTURER'S NAME AND PART/CATALOG NUMBERS, ALL LAMINATED IN PLASTIC, IN A METAL POCKET ATTACHED TO THE INSIDE OF THE LOAD CENTER. INSTALL THE POCKET ON THE LOAD CENTER DOOR, PROVIDING DRAIN HOLES TO PREVENT WATER ACCUMULATION.
5. THE LENGTH AND TYPE OF SERVICE ENTRANCE CONDUIT INSTALLED BY THE CONTRACTOR VARIES BY UTILITY. REGARDLESS OF ITS LENGTH, INSTALL A PULL ROPE IN THE SERVICE CONDUIT AND A CAP ON THE BURIED END: MARK THE BURIED END WITH A 2"X 6" STAKE. SEE THE LOAD CENTER SUMMARIES FOR THE FOLLOWING INFORMATION.
   - A. STATION AND OFFSET OF THE LOAD CENTER AND POWER SOURCE.
   - B. WHERE THE CONTRACTOR TERMINATES THE SERVICE ENTRANCE CONDUIT.
   - C. THE TYPE OF SERVICE ENTRANCE CONDUIT (SUCH AS RIGID METAL CONDUIT OR LIQUID-TIGHT FLEXIBLE METAL CONDUIT).
   - D. THE MAXIMUM AND MINIMUM DISTANCES ALLOWED BETWEEN THE TYPE-3 LOAD CENTER POLE AND UTILITY POLE TO WHICH THE AERIAL DROP IS CONNECTED.

LOAD CENTER "RWIS" SUMMARY, TYPE 2 (DUAL POST) INSTALLATION

TOTAL CONNECTED LOAD: 0.10 KVA, 0.42 A @ 240V, 1-PH

LOAD CENTER LOCATION: SEWARD HIGHWAY 306+34, 37 LT — POWER SOURCE LOCATION: CITY OF SEWARD

SERVICE: SINGLE PHASE, 3 WIRE, 120/240, 100A, WITH GROUNDED NEUTRAL — METER SOCKET REQD: YES

LOAD	MAIN BREAKERS			TYPE 2 LOAD CENTER
A	240 VOLT	2 POLE	100 AMPS	NO CONTACTOR CONTROL
N/A	N/A VOLT	N/A POLE	N/A AMPS	

TRANSFORMER: NONE VOLT PRIMARY WITH N/A VOLT SECONDARY N/A KVA 60 HERTZ

P.E. CONTROL LOCATION: NOT APPLICABLE

PANEL MAIN BREAKER: 240 VOLT, 2 POLE, 100 AMPS

	LOAD PANEL"A"	LOAD	BREAKER				LOAD	BREAKER	
CKT #	DESCRIPTION	KVA	AMP	POLE	CKT #	DESCRIPTION	KVA	AMP	POLE
RWIS-A-1	RWIS RPU	0.100	20	2	--	SPACE	--	--	--
--	--	--	--	--	--	--	--	--	--
RWIS-A-2	SPARE		20	2	--	SPACE	--	--	--
--	--	--	--	--	--	--	--	--	--
RWIS-A-3	SPARE		20	2	--	SPACE	--	--	--
--	--	--	--	--	--	--	--	--	--

NOTES: NONE

PRELIMINARY

PLANS DEVELOPED BY:
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STATE OF ALASKA 49TH Keith A. Confer EE 11391 REGISTERED PROFESSIONAL ENGINEER

AMC ENGINEERS

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DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17 - 22.5
REHABILITATION

DETAILS - RWIS LOAD CENTER

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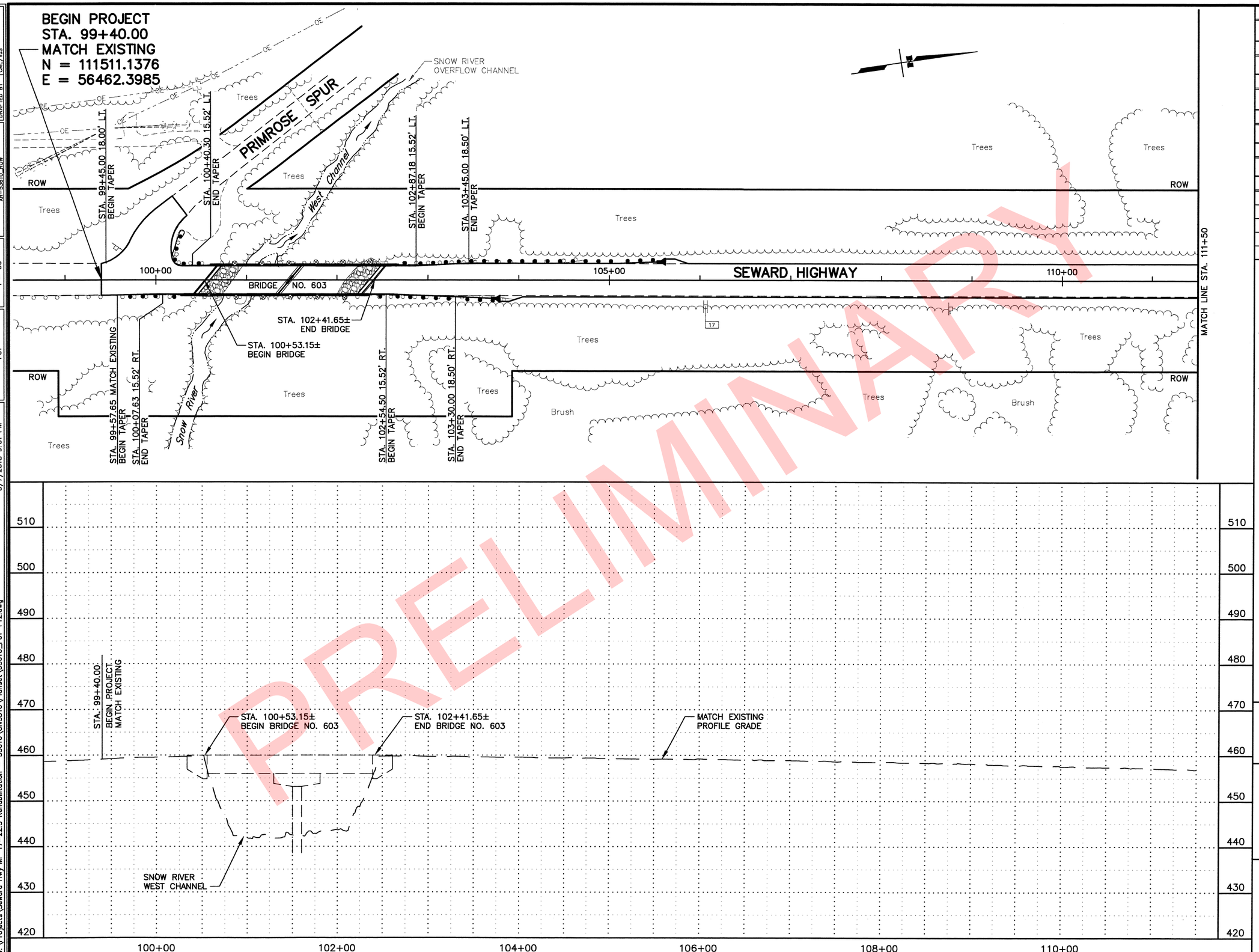


PRELIMINARY

SHEET NO.	TOTAL SHEETS
F1	F38
STATE	YEAR
ALASKA	2019

PROJECT DESIGNATION

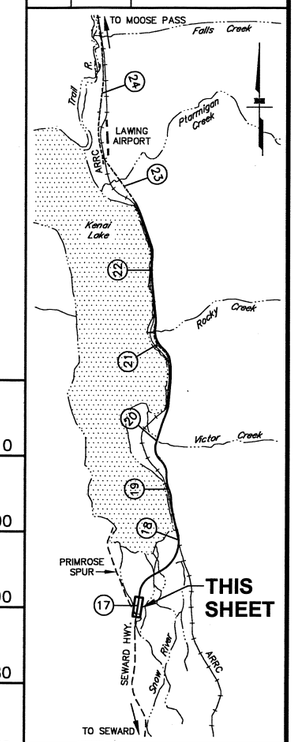
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

PS&E REVIEW

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

PLAN AND PROFILE
BOP TO 111+50

DRAWING LOCATION
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DATE TIME 3/7/2018 9:01 PM
LAYOUT F01
SCALE 1" = 50'

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DESIGNED BY CML/KDS
CHECKED BY KEK
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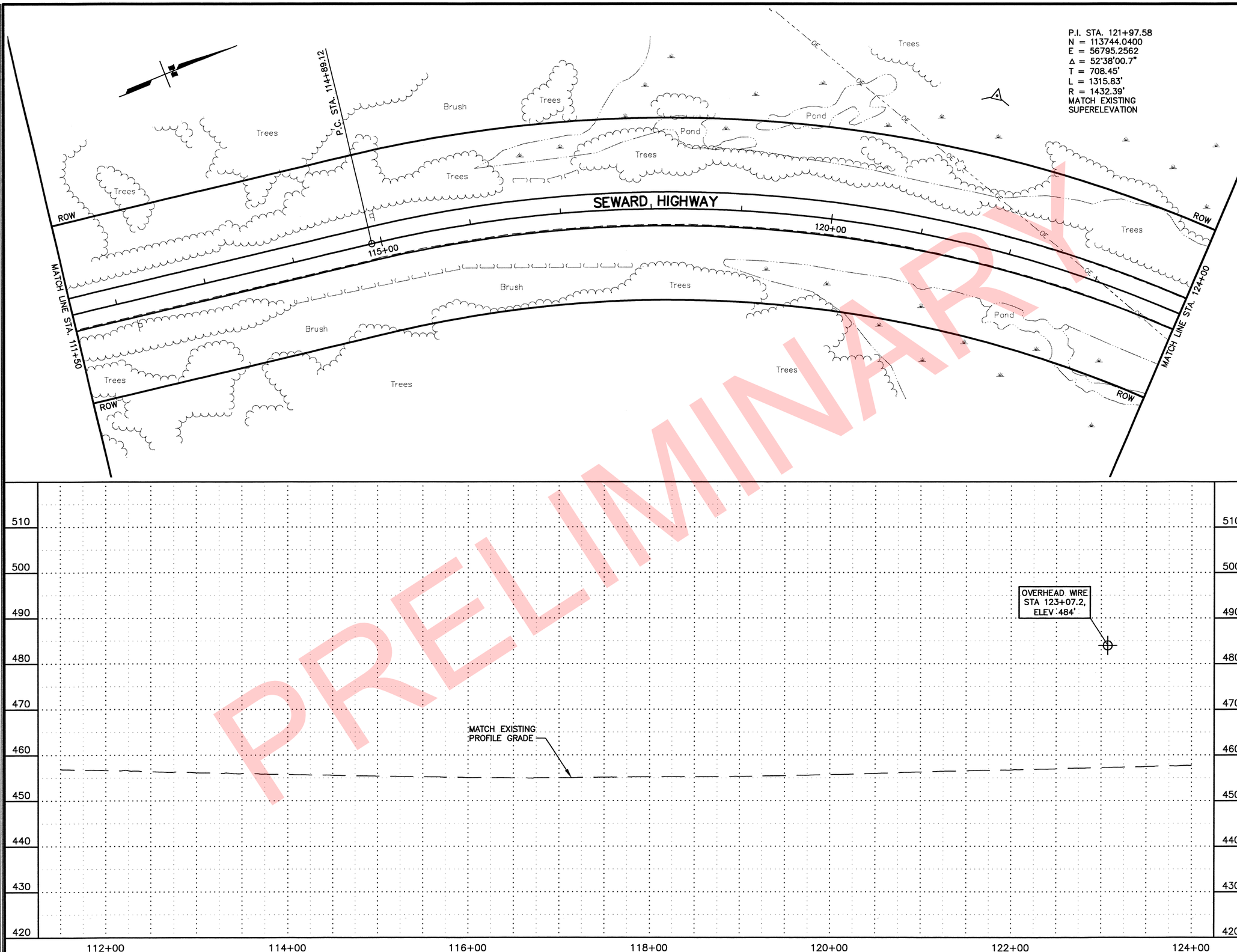

PRELIMINARY

SHEET NO.	TOTAL SHEETS
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STATE	YEAR
ALASKA	2019

PROJECT DESIGNATION

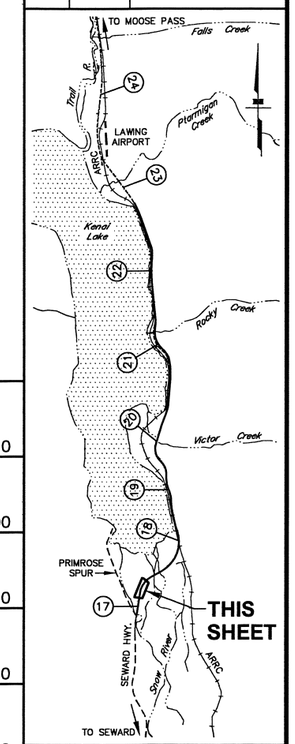
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

PLAN AND PROFILE
111+50 TO TO 124+00

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F3	F38
STATE	YEAR
ALASKA	2019

PROJECT DESIGNATION

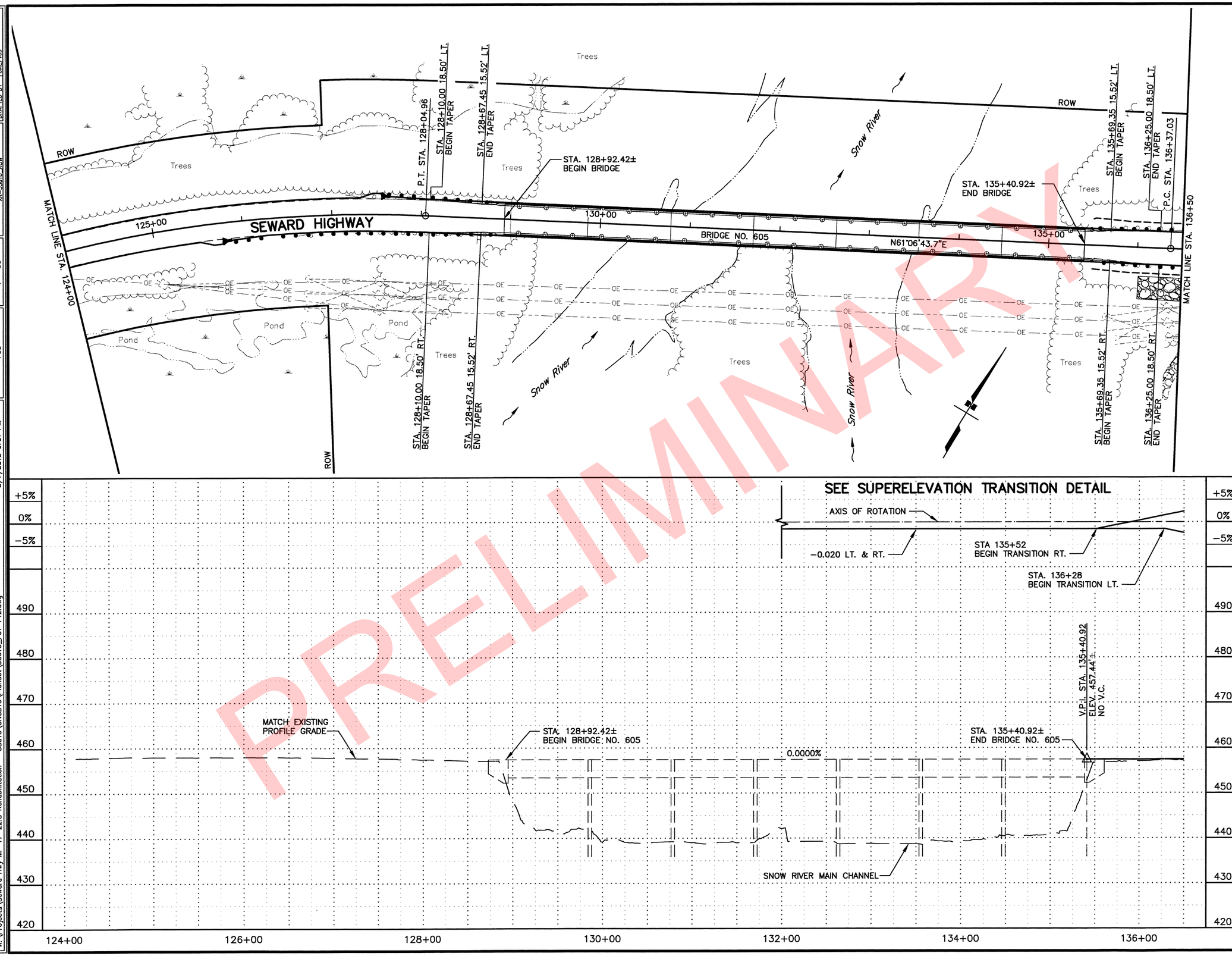
311032/Z536100000

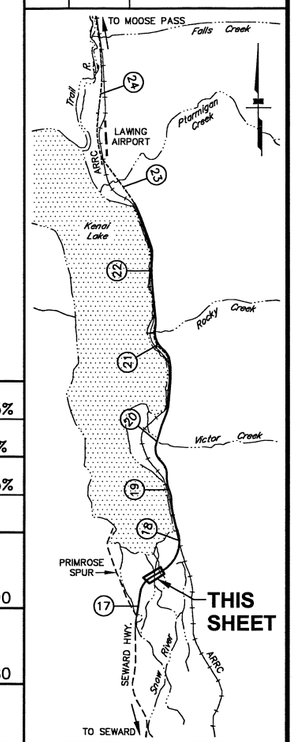
ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION





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AND PUBLIC FACILITIES
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

PLAN AND PROFILE
124+00 TO 136+50

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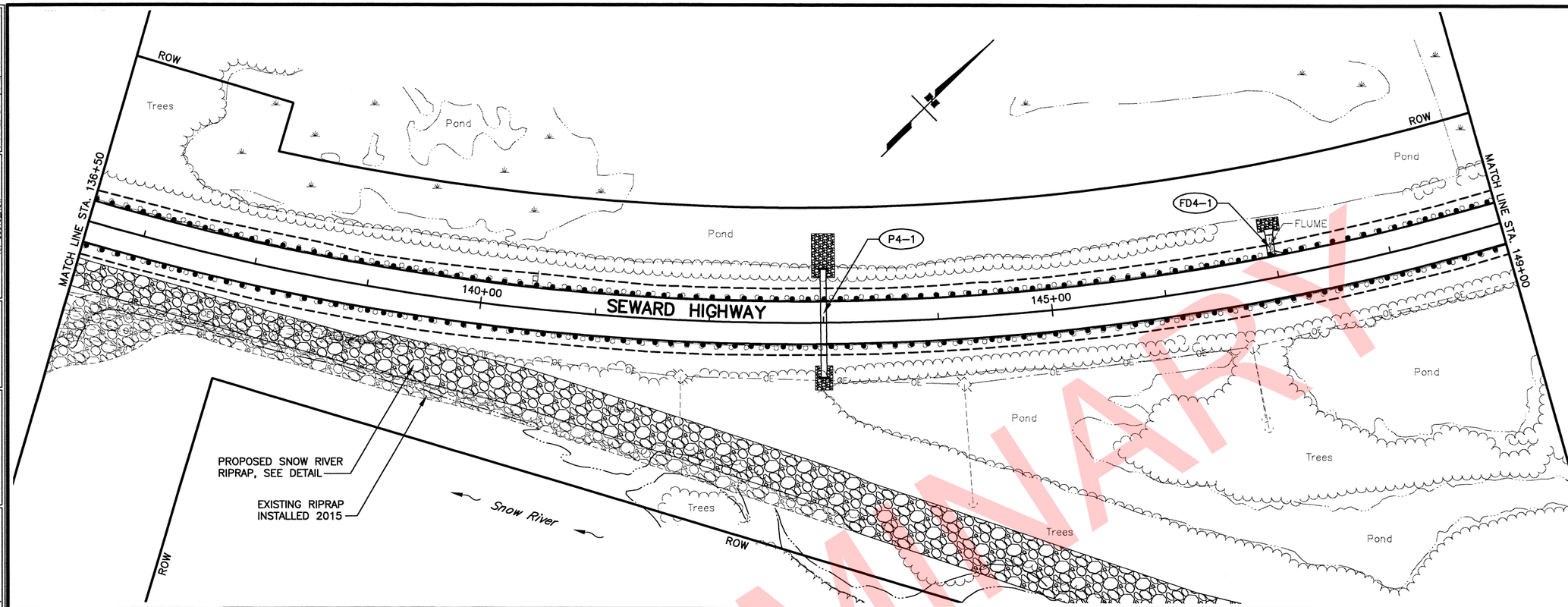
DESIGNED BY	CML/KDS
CHECKED BY	KEK
DRAFTED BY	CML/VJS

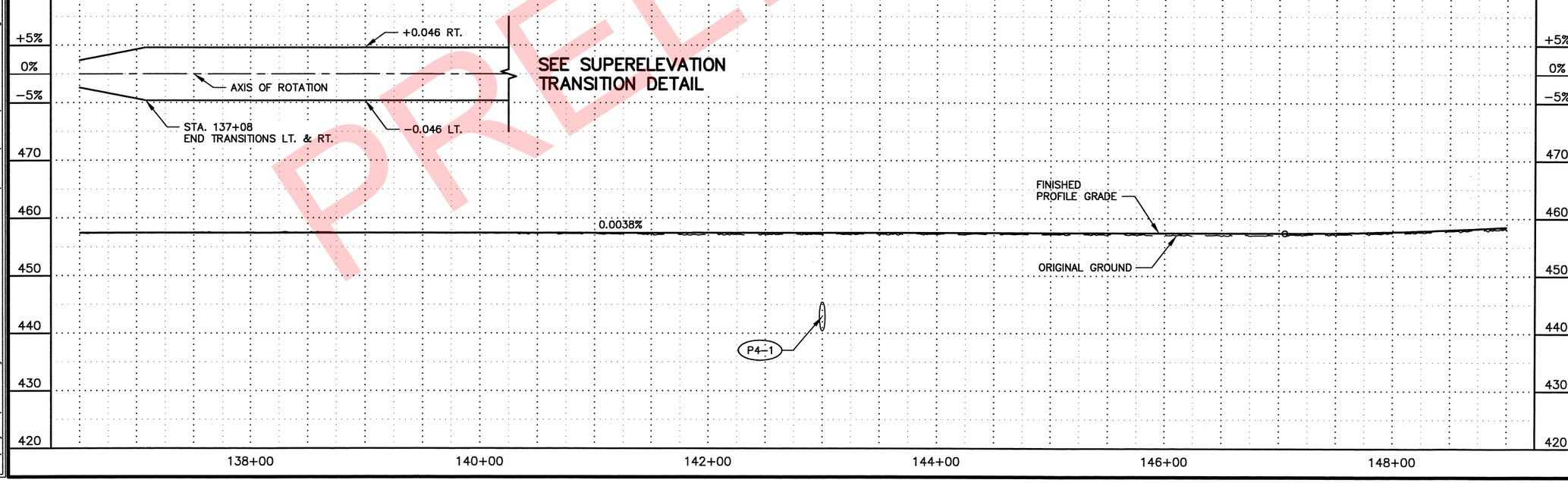
PRELIMINARY

STATE OF ALASKA
PS&E REVIEW
KRISTEN KEELER
CE 132
REGISTERED PROFESSIONAL ENGINEER



PIPE SUMMARY

PIPE	SIZE (IN)	LENGTH (FT)	INLET STATION	INLET OFFSET	INLET ELEVATION	INLET END SEC'N	INLET END TREATMENT	OUTLET STATION	OUTLET OFFSET	OUTLET ELEVATION	OUTLET END SEC'N	OUTLET END TREATMENT	SLOPE %	THAW WIRE (FT)
P4–1	48	98.0	SEE LARGE DIAMETER CULVERT DETAIL											
FD4–1	–	20.0	146+97.3	20.1 LT	453.66			146+98.5	37.6 LT	444.04	X	IV	1.8:1(H:V)	



PRELIMINARY

SHEET NO.	TOTAL SHEETS
F4	F38
STATE	YEAR
ALASKA	2019

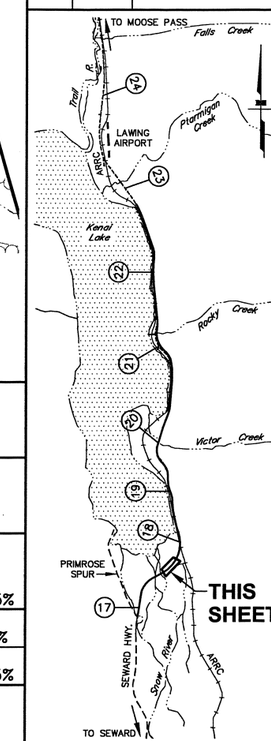
PROJECT DESIGNATION: 311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
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PSSE REVIEW

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17–22.5
REHABILITATION

PLAN AND PROFILE
136+50 TO 149+00

DRAWING LOCATION: W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3016\Planset\53610_F01-F12.dwg

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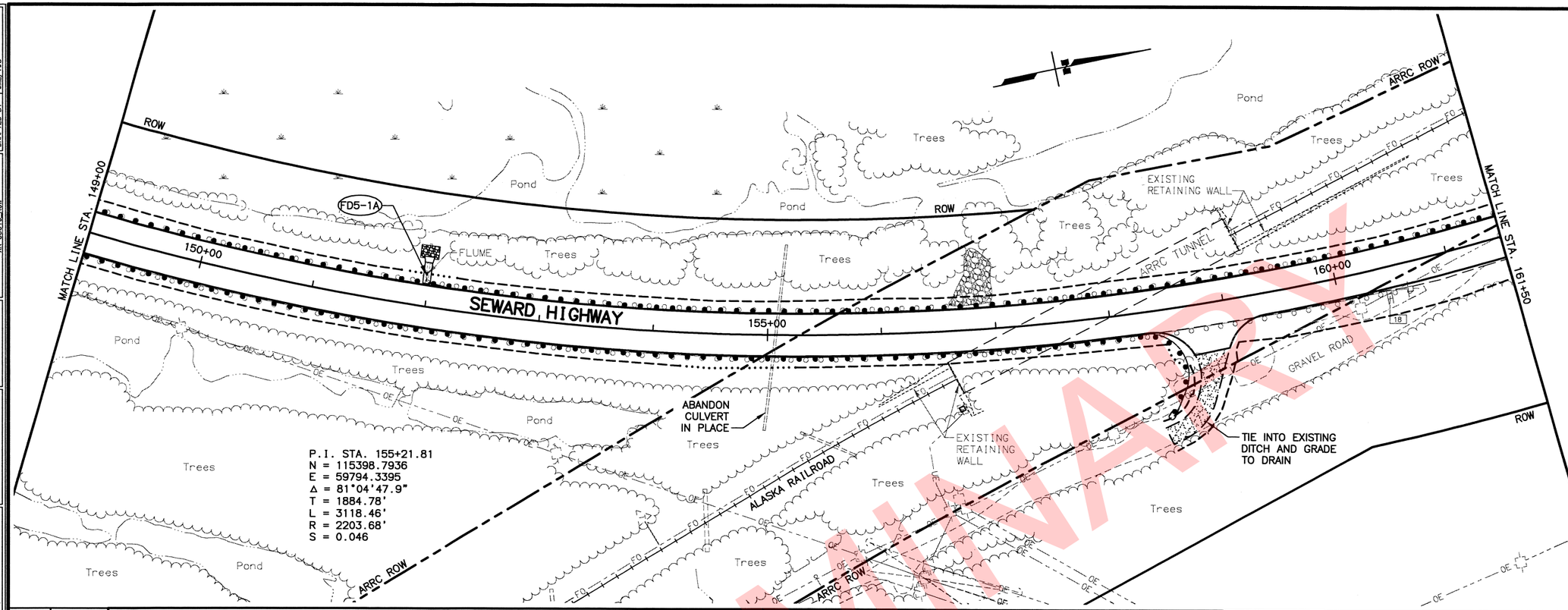
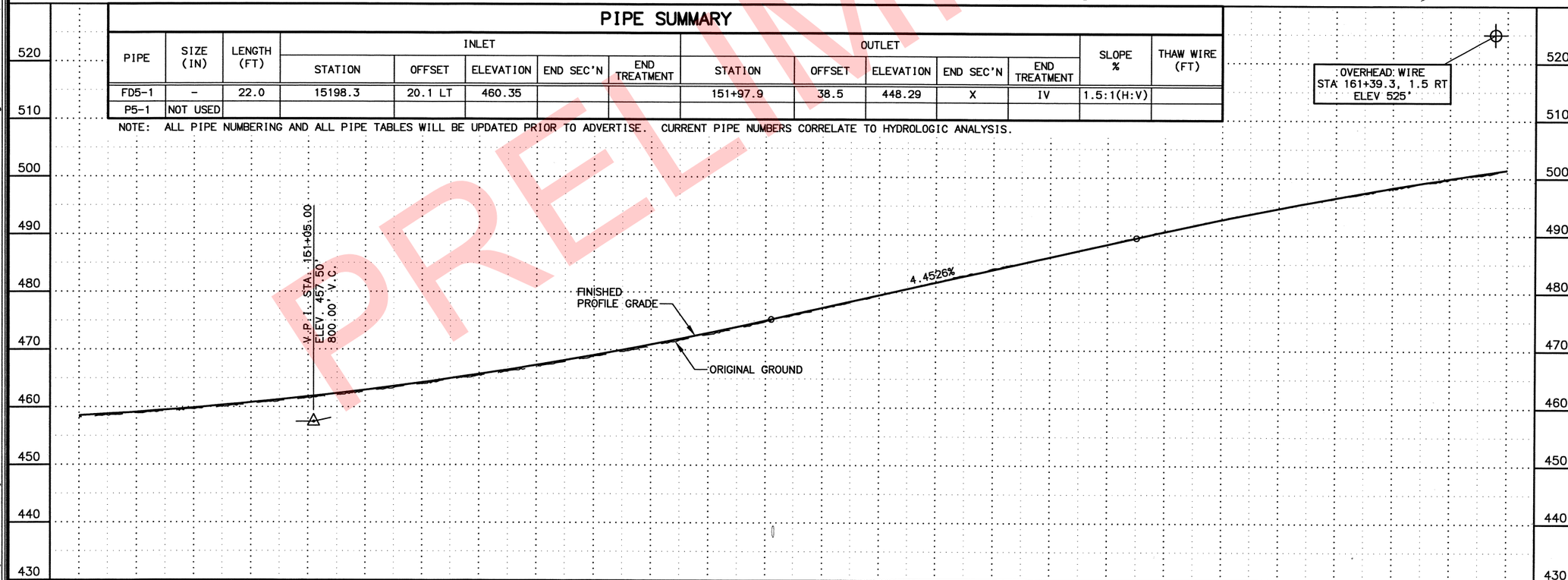


PIPE SUMMARY

PIPE	SIZE (IN)	LENGTH (FT)	INLET STATION	INLET OFFSET	INLET ELEVATION	INLET END SEC'N	INLET END TREATMENT	OUTLET STATION	OUTLET OFFSET	OUTLET ELEVATION	OUTLET END SEC'N	OUTLET END TREATMENT	SLOPE %	THAW WIRE (FT)
FD5-1	-	22.0	15198.3	20.1 LT	460.35			151+97.9	38.5	448.29	X	IV	1.5:1(H:V)	
P5-1	NOT USED													

NOTE: ALL PIPE NUMBERING AND ALL PIPE TABLES WILL BE UPDATED PRIOR TO ADVERTISE. CURRENT PIPE NUMBERS CORRELATE TO HYDROLOGIC ANALYSIS.



SHEET NO.	TOTAL SHEETS
F5	F38
STATE	YEAR
ALASKA	2019

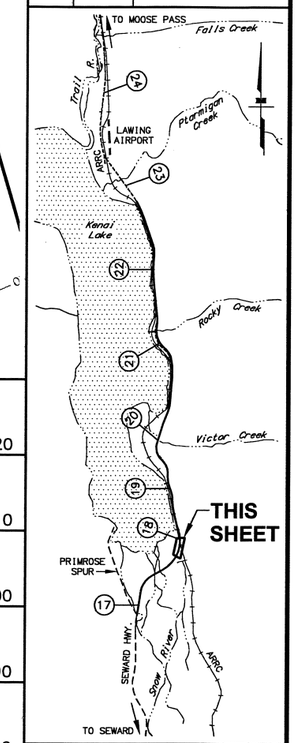
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



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ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

PLAN AND PROFILE
149+00 TO 161+50

DESIGNED BY	OML/KDS
CHECKED BY	KEK
DRAFTED BY	OML/VJS

XREFS: XR-53610-Border_PortP
XR-53610_Dreign, XR-53610_Base
XR-53610_ROW

SCALE	LAYOUT	DATE	TIME
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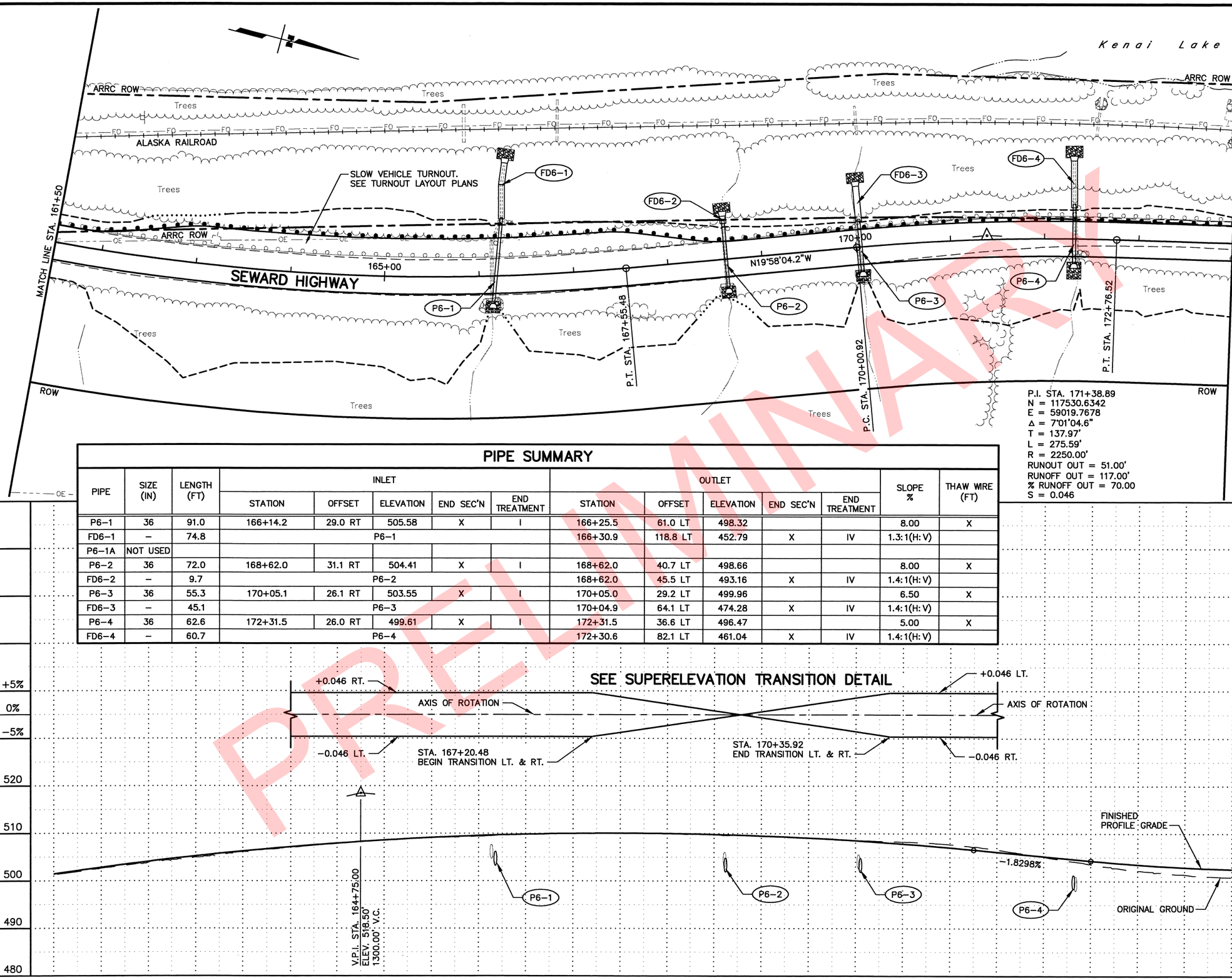
PRELIMINARY

STATE OF ALASKA
KRISTEN K. EDER
PE 132
REGISTERED PROFESSIONAL ENGINEER
PS&E REVIEW



PIPE SUMMARY

PIPE	SIZE (IN)	LENGTH (FT)	INLET STATION	INLET OFFSET	INLET ELEVATION	INLET END SEC'N	INLET END TREATMENT	OUTLET STATION	OUTLET OFFSET	OUTLET ELEVATION	OUTLET END SEC'N	OUTLET END TREATMENT	SLOPE %	THAW WIRE (FT)
P6–1	36	91.0	166+14.2	29.0 RT	505.58	X	I	166+25.5	61.0 LT	498.32			8.00	X
FD6–1	–	74.8	P6–1					166+30.9	118.8 LT	452.79	X	IV	1.3:1(H:V)	
P6–1A	NOT USED													
P6–2	36	72.0	168+62.0	31.1 RT	504.41	X	I	168+62.0	40.7 LT	498.66			8.00	X
FD6–2	–	9.7	P6–2					168+62.0	45.5 LT	493.16	X	IV	1.4:1(H:V)	
P6–3	36	55.3	170+05.1	26.1 RT	503.55	X	I	170+05.0	29.2 LT	499.96			6.50	X
FD6–3	–	45.1	P6–3					170+04.9	64.1 LT	474.28	X	IV	1.4:1(H:V)	
P6–4	36	62.6	172+31.5	26.0 RT	499.61	X	I	172+31.5	36.6 LT	496.47			5.00	X
FD6–4	–	60.7	P6–4					172+30.6	82.1 LT	461.04	X	IV	1.4:1(H:V)	

PRELIMINARY

SHEET NO.	TOTAL SHEETS
F6	F38
STATE	YEAR
ALASKA	2019

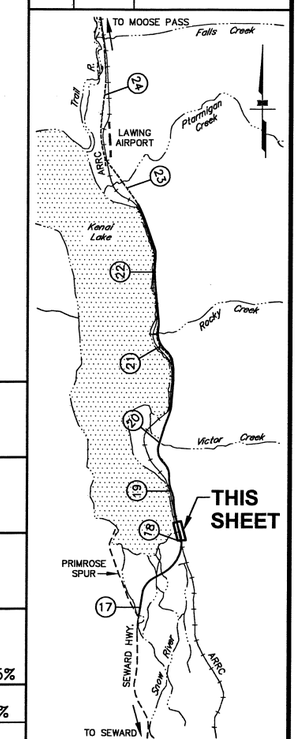
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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ANCHORAGE, AK 99502
(907) 269–0590

PS&E REVIEW

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17–22.5
REHABILITATION

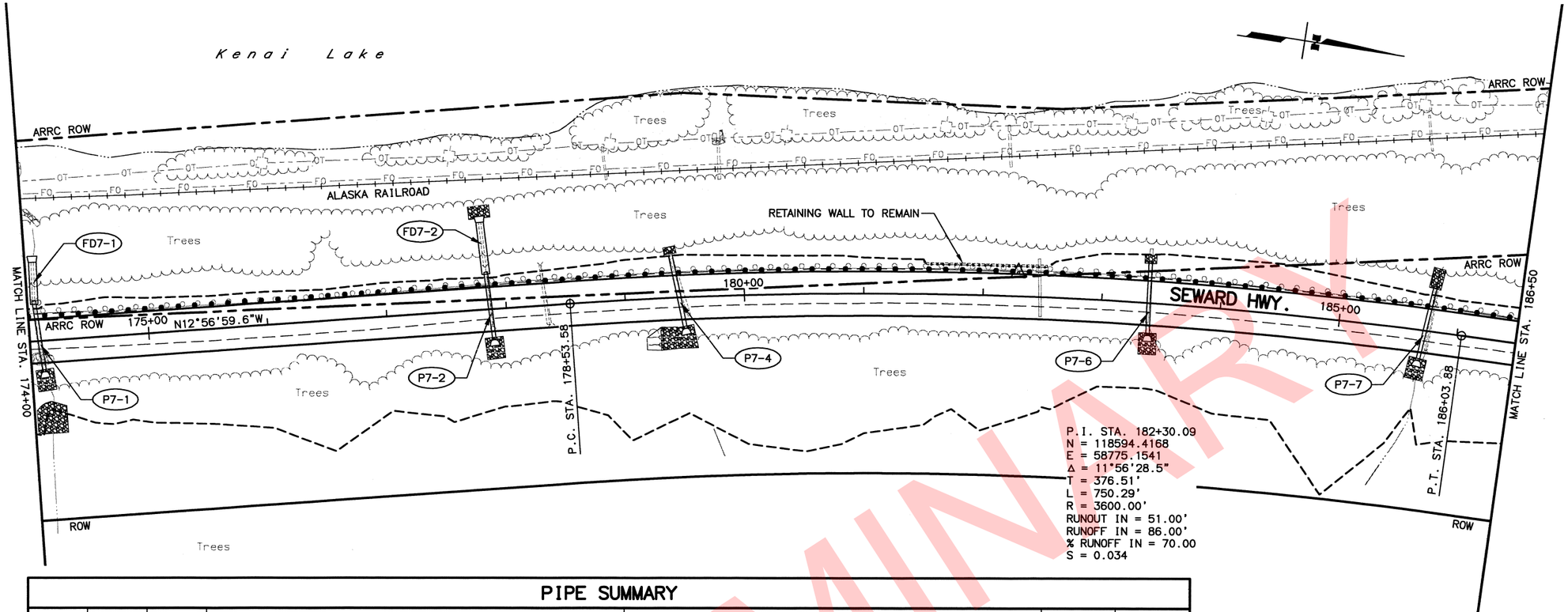
PLAN AND PROFILE
161+50 TO 174+00

DRAWING LOCATION
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation – 53610\Civ3D16\Planset\53610_F01-F12.dwg

DATE TIME 3/7/2018 9:01 PM
LAYOUT F06
SCALE 1" = 50'

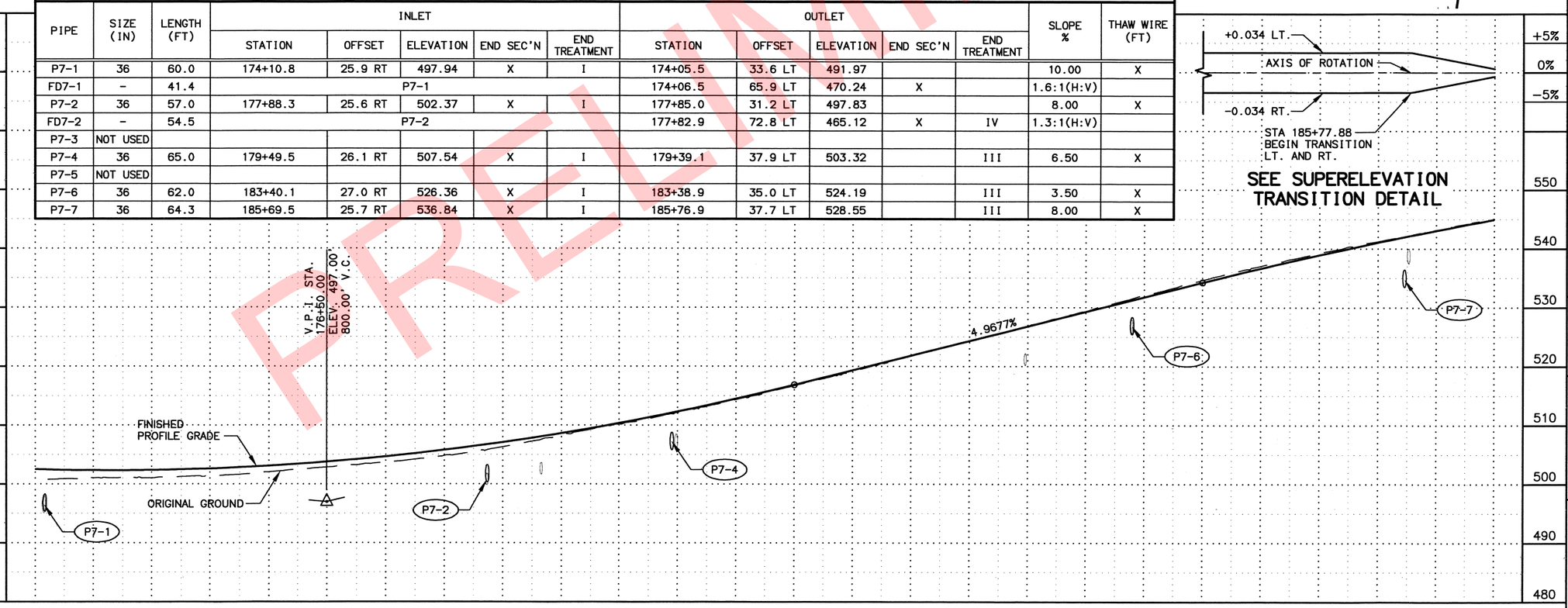
XREFS: XR–53610–Border_PrintP, XR–53610_Design, XR–53610_Base, XR–53610_ROW

DESIGNED BY CML/KDS
CHECKED BY KEK
DRAFTED BY CML/VJS



PIPE SUMMARY

PIPE	SIZE (IN)	LENGTH (FT)	INLET STATION	INLET OFFSET	INLET ELEVATION	INLET END SEC'N	INLET END TREATMENT	OUTLET STATION	OUTLET OFFSET	OUTLET ELEVATION	OUTLET END SEC'N	OUTLET END TREATMENT	SLOPE %	THAW WIRE (FT)
P7-1	36	60.0	174+10.8	25.9 RT	497.94	X	I	174+05.5	33.6 LT	491.97			10.00	X
FD7-1	-	41.4	P7-1					174+06.5	65.9 LT	470.24	X		1.6:1(H:V)	
P7-2	36	57.0	177+88.3	25.6 RT	502.37	X	I	177+85.0	31.2 LT	497.83			8.00	X
FD7-2	-	54.5	P7-2					177+82.9	72.8 LT	465.12	X	IV	1.3:1(H:V)	
P7-3	NOT USED													
P7-4	36	65.0	179+49.5	26.1 RT	507.54	X	I	179+39.1	37.9 LT	503.32		III	6.50	X
P7-5	NOT USED													
P7-6	36	62.0	183+40.1	27.0 RT	526.36	X	I	183+38.9	35.0 LT	524.19		III	3.50	X
P7-7	36	64.3	185+69.5	25.7 RT	536.84	X	I	185+76.9	37.7 LT	528.55		III	8.00	X



SHEET NO.	TOTAL SHEETS
F7	F38
STATE	YEAR
ALASKA	2019

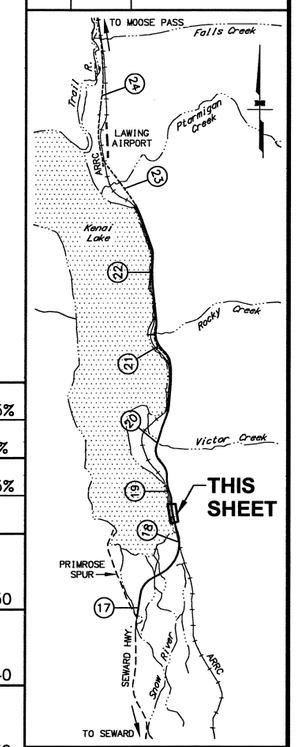
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:
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STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

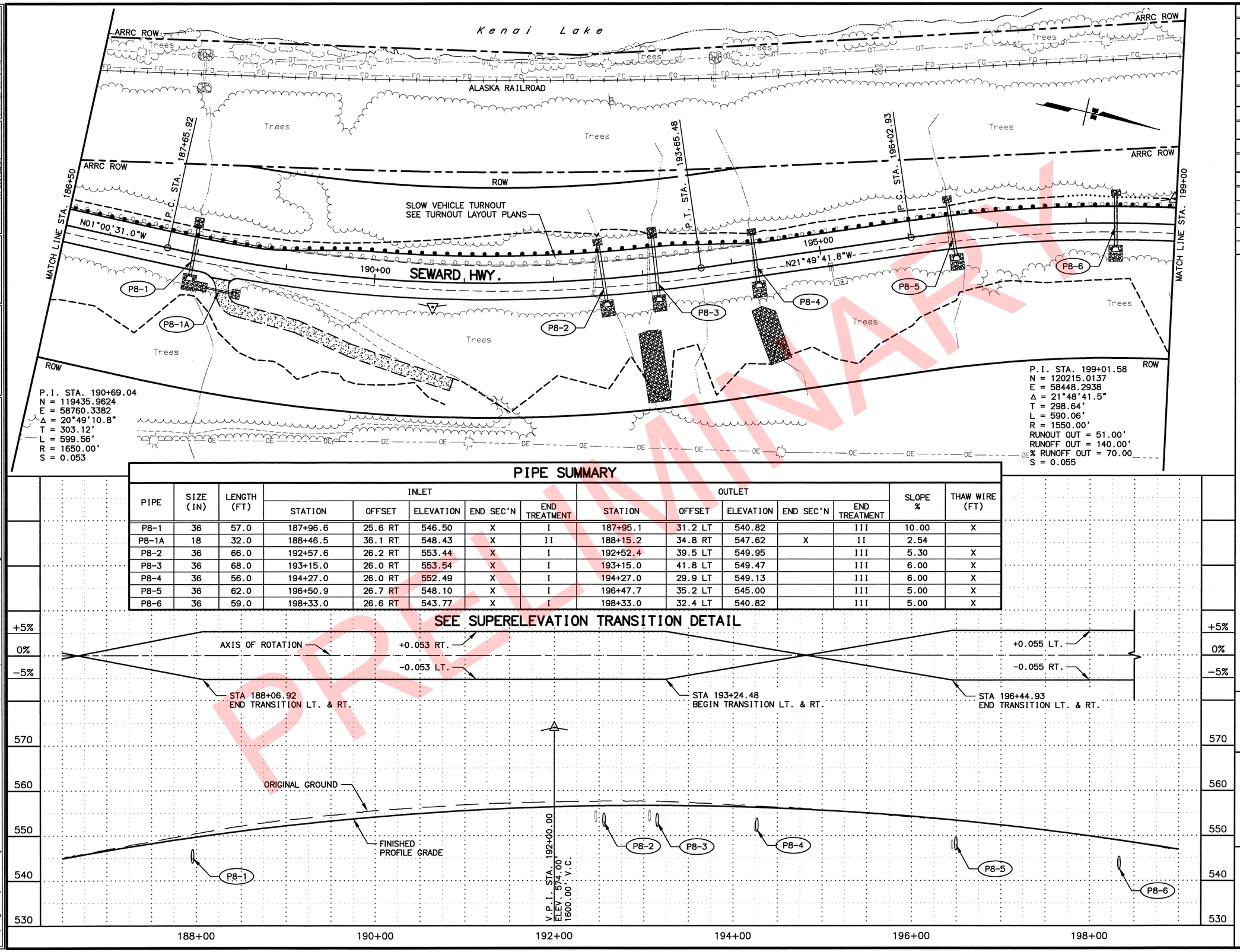
PLAN AND PROFILE
174+00 TO 186+50

PRELIMINARY

PS&E REVIEW

DRAWING LOCATION
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Plansset\53610_F01-F12.dwg

DATE	TIME	LAYOUT	SCALE	XREFS: XR-53610-Border_PortP XR-53610_Design_XR-53610_Base XR-53610_ROW	DESIGNED BY	CHECKED BY	DRAFTED BY
3/8/2018	8:56 AM	F07	1"= 50'		CML/KDS	KEK	CML/VJS



PIPE SUMMARY

PIPE	SIZE (IN)	LENGTH (FT)	INLET STATION	INLET OFFSET	INLET ELEVATION	INLET END SEC'N	INLET END TREATMENT	OUTLET STATION	OUTLET OFFSET	OUTLET ELEVATION	OUTLET END SEC'N	OUTLET END TREATMENT	SLOPE %	THAW WIRE (FT)
P8-1	36	57.0	187+96.6	25.6 RT	546.50	X	I	187+95.1	31.2 LT	540.82		III	10.00	X
P8-1A	18	32.0	188+46.5	36.1 RT	548.43	X	II	188+15.2	34.8 RT	547.62	X	II	2.54	
P8-2	36	66.0	192+57.6	26.2 RT	553.44	X	I	192+52.4	39.5 LT	549.95		III	5.30	X
P8-3	36	68.0	193+15.0	26.0 RT	553.54	X	I	193+15.0	41.8 LT	549.47		III	6.00	X
P8-4	36	56.0	194+27.0	26.0 RT	552.49	X	I	194+27.0	29.9 LT	549.13		III	6.00	X
P8-5	36	62.0	196+50.9	26.7 RT	548.10	X	I	196+47.7	35.2 LT	545.00		III	5.00	X
P8-6	36	59.0	198+33.0	26.6 RT	543.77	X	I	198+33.0	32.4 LT	540.82		III	5.00	X

PRELIMINARY

SHEET NO.	TOTAL SHEETS
F8	F38
STATE	YEAR
ALASKA	2019

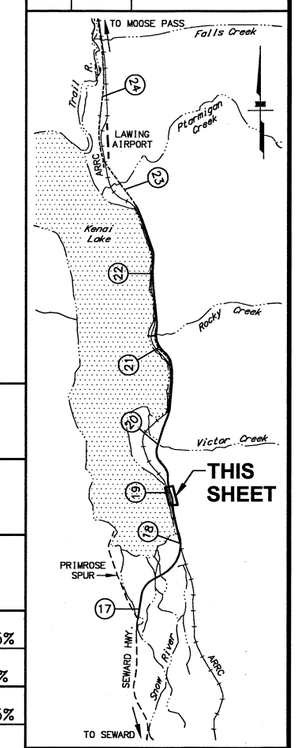
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

PLAN AND PROFILE
186+50 TO 199+00

DRAWING LOCATION	DATE TIME	LAYOUT	SCALE	XREFS: XR-53610-Border_PondP XR-53610_ DesIgn_ XR-53610_Base XR-53610_ROW	DESIGNED BY	CHECKED BY	DRAFTED BY
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SHEET NO.	TOTAL SHEETS
F9	F38
STATE	YEAR
ALASKA	2019

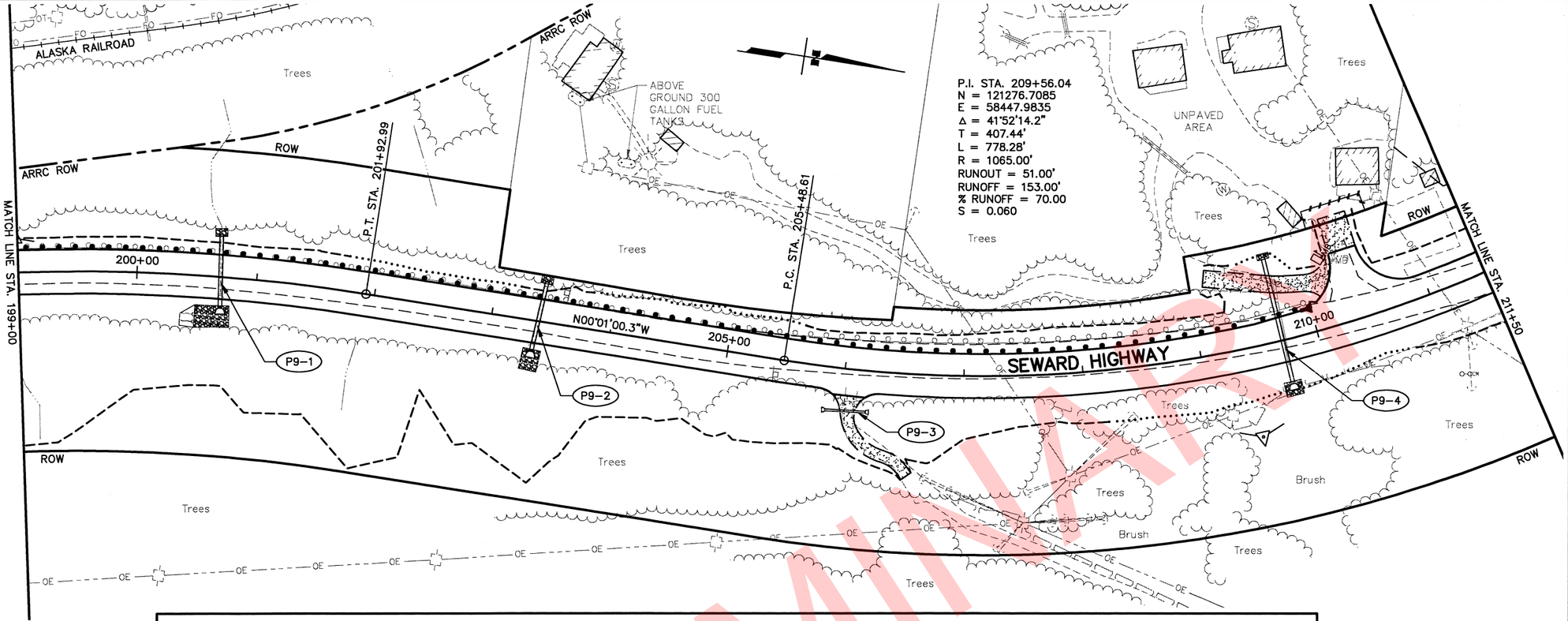
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

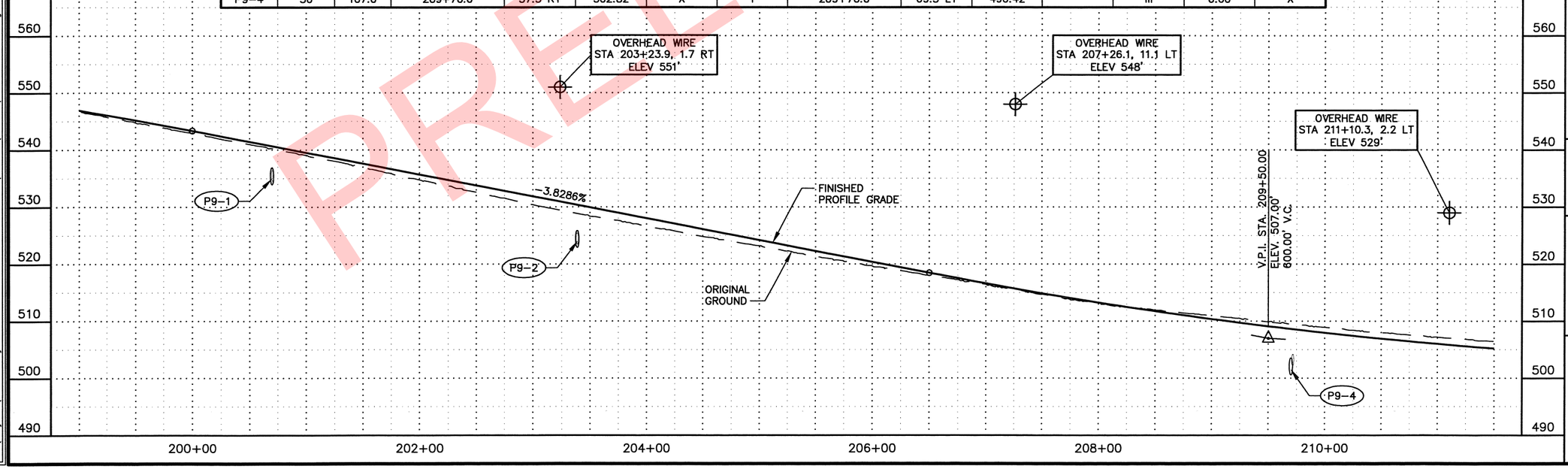
REVISIONS

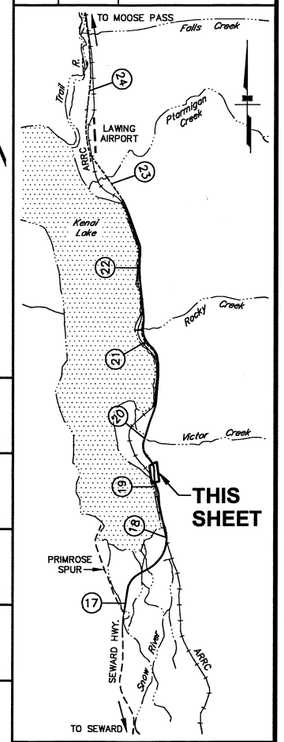
NO.	DATE	DESCRIPTION



PIPE SUMMARY

PIPE	SIZE (IN)	LENGTH (FT)	INLET					OUTLET					SLOPE %	THAW WIRE (FT)
			STATION	OFFSET	ELEVATION	END SEC'N	END TREATMENT	STATION	OFFSET	ELEVATION	END SEC'N	END TREATMENT		
P9-1	36	62.0	200+71.3	26.0 RT	535.50	X	I	200+68.2	35.8 LT	531.78		III	6.00	X
P9-2	36	60.3	203+37.2	26.0 RT	525.55	X	I	203+41.5	33.9 LT	519.49		III	10.10	X
P9-3	18	34.0	205+87.1	36.2 RT	518.40	X		206+19.9	34.5 RT	517.23	X		3.46	
P9-4	36	107.0	209+70.0	37.3 RT	502.82	X	I	209+70.0	69.5 LT	496.42		III	6.00	X





PLANS DEVELOPED BY:
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ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

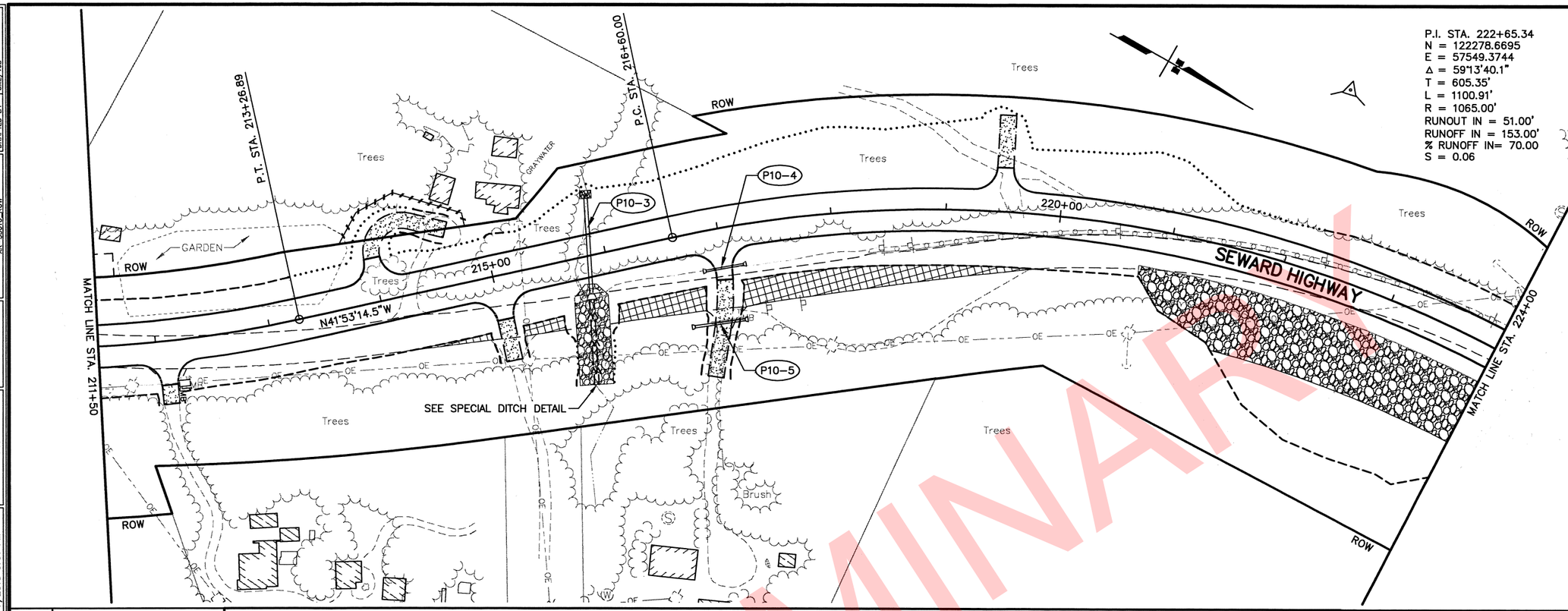
SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

PLAN AND PROFILE
199+00 TO 211+50

PS&E REVIEW

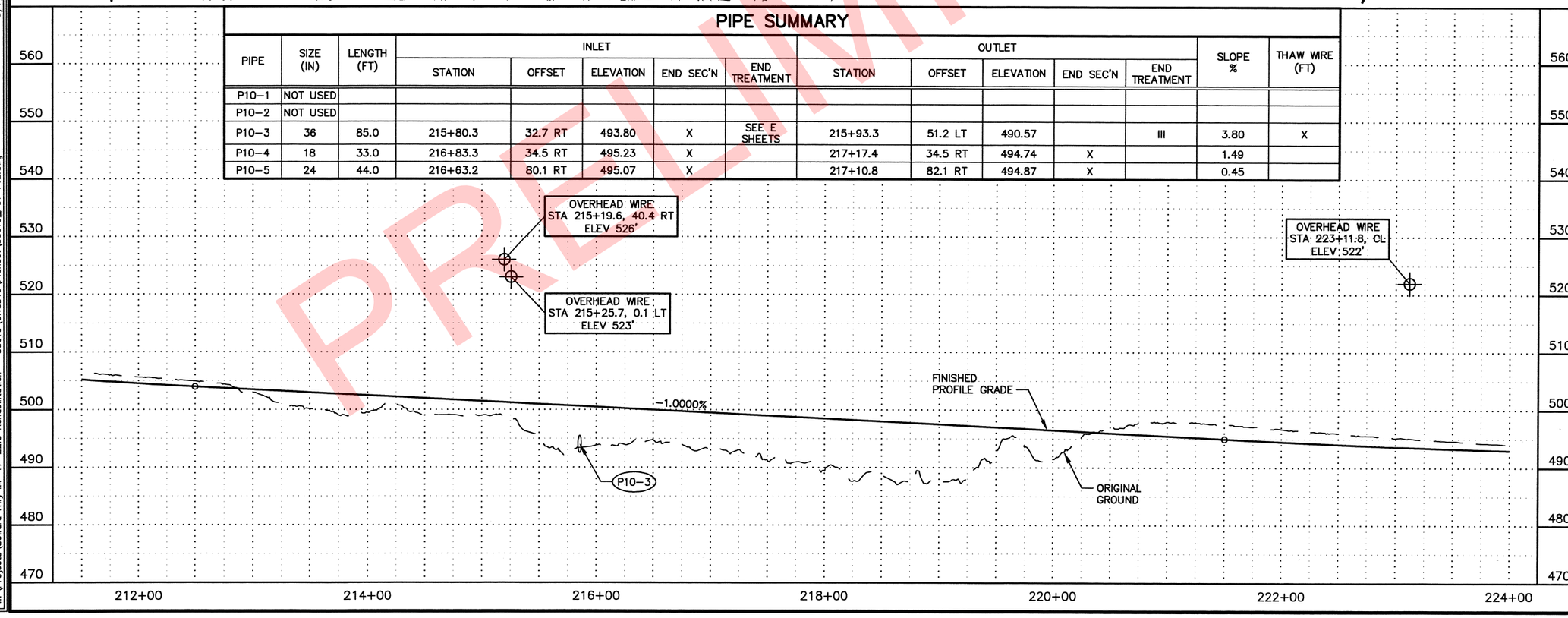
PRELIMINARY

DRAWING LOCATION	DATE TIME	LAYOUT	SCALE	XREFS: XR-53610-Border_PandP XR-53610_Design XR-53610_Base XR-53610_ROW	DESIGNED BY CML/KDS CHECKED BY KEK DRAFTED BY CML/JLS
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_F01-F12.dwg	3/7/2018 9:01 PM	F09	1"= 50'		



PIPE SUMMARY

PIPE	SIZE (IN)	LENGTH (FT)	INLET STATION	INLET OFFSET	INLET ELEVATION	INLET END SEC'N	INLET END TREATMENT	OUTLET STATION	OUTLET OFFSET	OUTLET ELEVATION	OUTLET END SEC'N	OUTLET END TREATMENT	SLOPE %	THAW WIRE (FT)
P10-1	NOT USED													
P10-2	NOT USED													
P10-3	36	85.0	215+80.3	32.7 RT	493.80	X	SEE E SHEETS	215+93.3	51.2 LT	490.57		III	3.80	X
P10-4	18	33.0	216+83.3	34.5 RT	495.23	X		217+17.4	34.5 RT	494.74	X		1.49	
P10-5	24	44.0	216+63.2	80.1 RT	495.07	X		217+10.8	82.1 RT	494.87	X		0.45	



SHEET NO.	TOTAL SHEETS
F10	F38
STATE	YEAR
ALASKA	2019

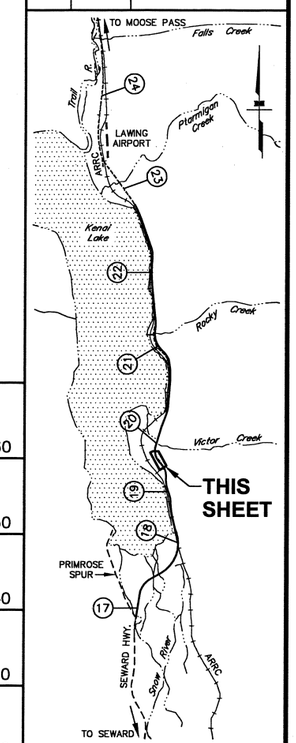
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

PS&E REVIEW

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

PLAN AND PROFILE
211+50 TO 224+00

DRAWING LOCATION	W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_F01-F12.dwg
DATE TIME	3/7/2018 9:01 PM
LAYOUT	F10
SCALE	1" = 50'
XREFS:	XR-53610-Border_PondP, XR-53610_Design, XR-53610_Base, XR-53610_ROW
DESIGNED BY	CML/KDS
CHECKED BY	KEK
DRAFTED BY	CML/VJS

PRELIMINARY

SHEET NO.	TOTAL SHEETS
F11	F38
STATE	YEAR
ALASKA	2019

PROJECT DESIGNATION

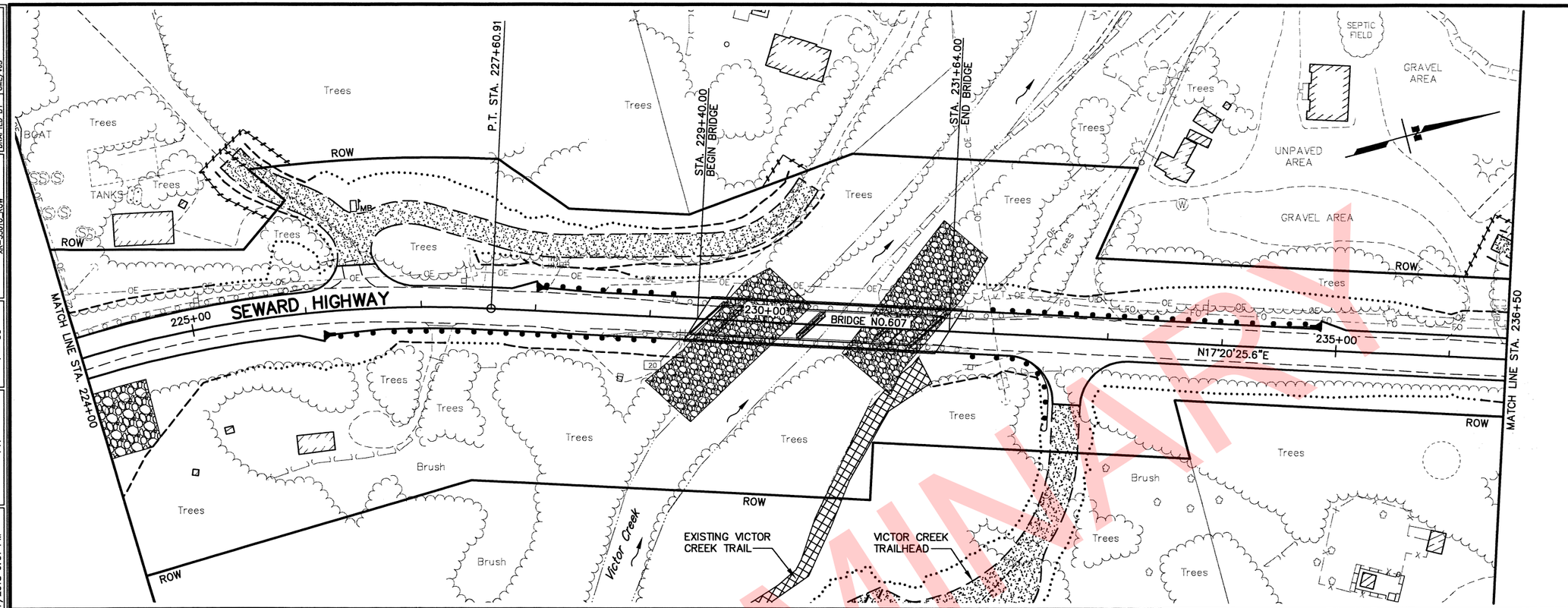
311032/Z536100000

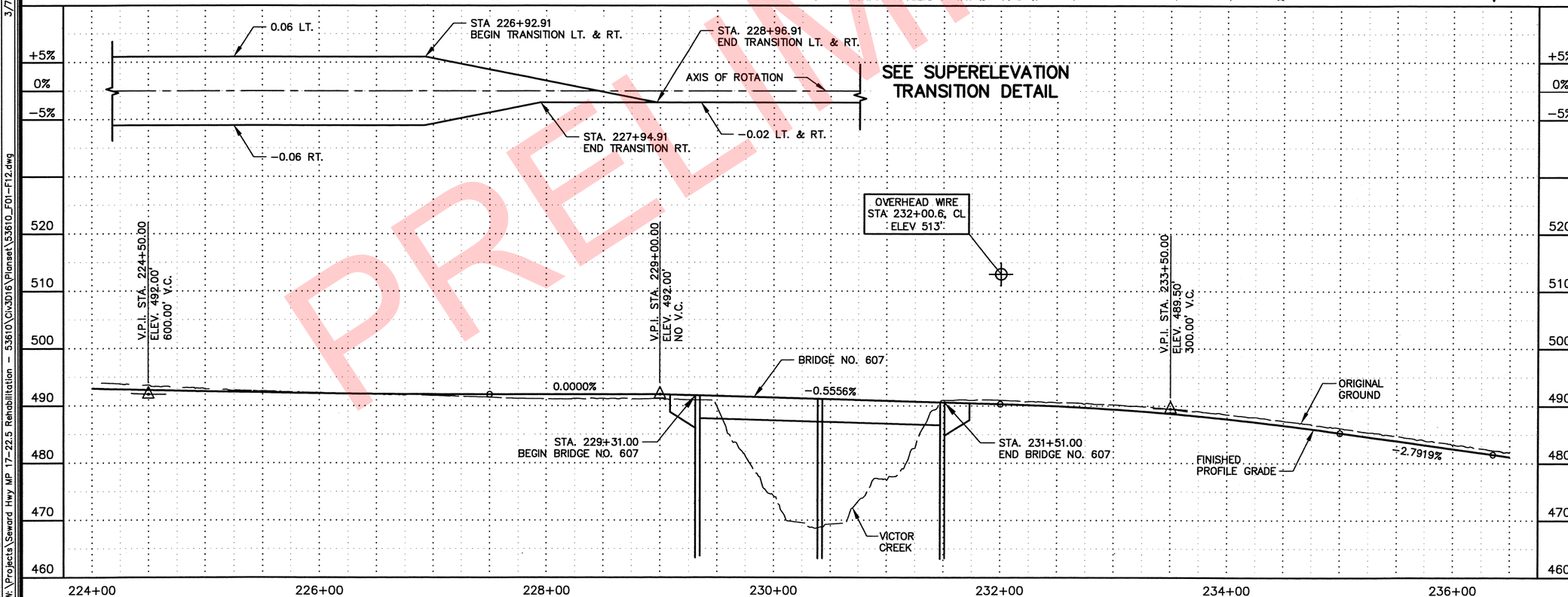
ADDENDUM NO.

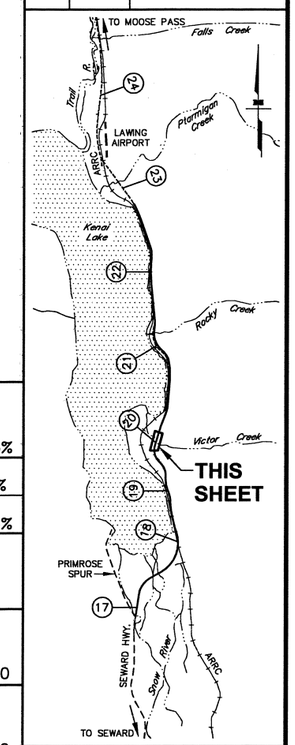
ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION







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AND PUBLIC FACILITIES
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17–22.5
REHABILITATION

PLAN AND PROFILE
224+00 TO 236+50

DRAWING LOCATION	W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_F01-F12.dwg
DATE TIME	3/7/2018 9:01 PM
LAYOUT	F11
SCALE	1" = 50'
XREFS:	XR-53610-Border_PandP, XR-53610_Base, XR-53610_Design, XR-53610_ROW
DESIGNED BY	CML/KDS
CHECKED BY	KEK
DRAFTED BY	CML/VJS

PRELIMINARY

PS&E REVIEW
STATE OF ALASKA
KRISTOPHER E. KEMPER
PROFESSIONAL ENGINEER

SHEET NO.	TOTAL SHEETS
F12	F38
STATE	YEAR
ALASKA	2019

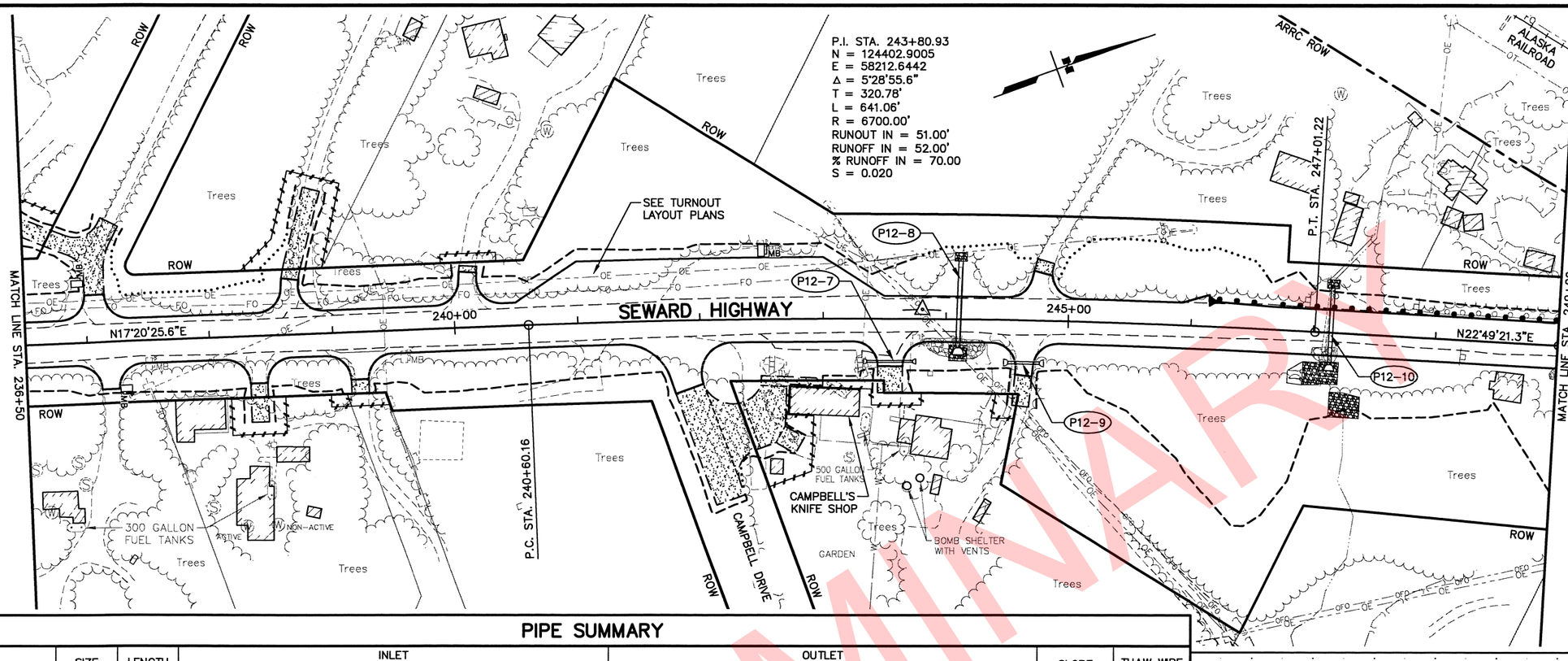
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

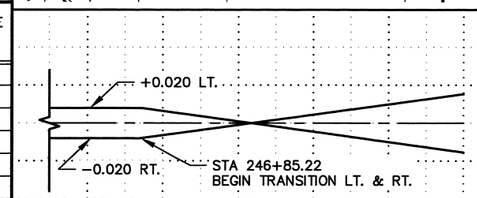
REVISIONS

NO.	DATE	DESCRIPTION

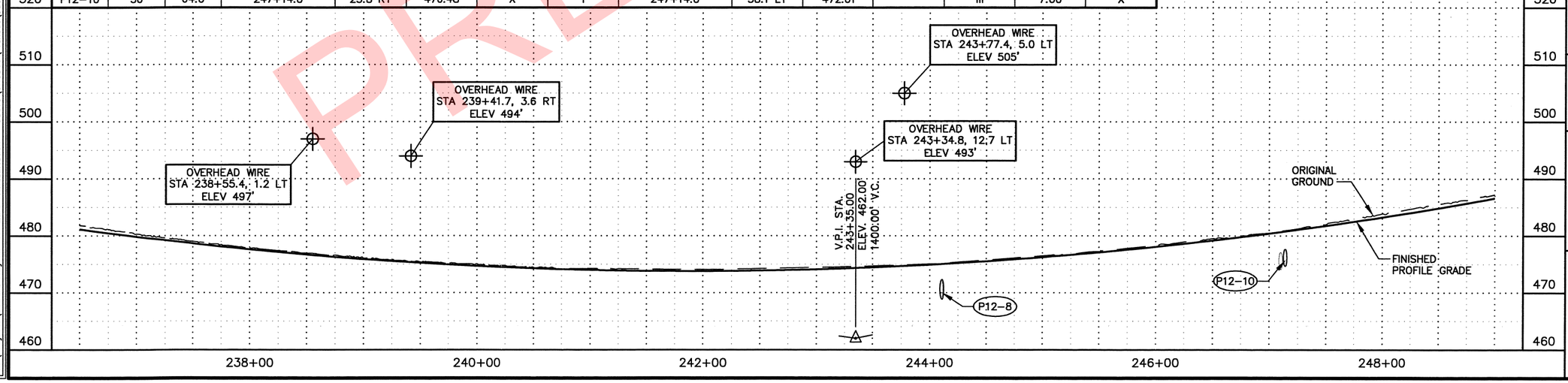


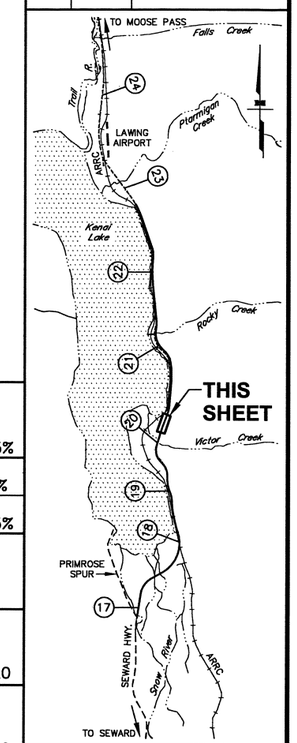
PIPE SUMMARY

PIPE	SIZE (IN)	LENGTH (FT)	INLET STATION	INLET OFFSET	INLET ELEVATION	INLET END SEC'N	INLET END TREATMENT	OUTLET STATION	OUTLET OFFSET	OUTLET ELEVATION	OUTLET END SEC'N	OUTLET END TREATMENT	SLOPE %	THAW WIRE (FT)
P12–1	NOT USED													
P12–2	NOT USED													
P12–3	NOT USED													
P12–4A	NOT USED													
P12–5	NOT USED													
P12–5A	NOT USED													
P12–6	NOT USED													
P12–7	18	37.1	243+73.1	34.6 RT	470.83	X		243+35.9	34.6 RT	470.50	X		0.88	
P12–8	42	72.3	244+10.1	23.1 RT	470.39	X	I	244+11.9	49.1 LT	465.69		III	6.50	X
P12–9	24	26.0	244+77.2	34.5 RT	471.96	X		244+51.0	34.5 RT	471.67	X		1.10	
P12–10	36	64.0	247+14.0	25.8 RT	476.48	X	I	247+14.0	38.1 LT	472.01		III	7.00	X



SEE SUPERELEVATION TRANSITION DETAIL





PLANS DEVELOPED BY:
STATE OF ALASKA
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PS&E REVIEW

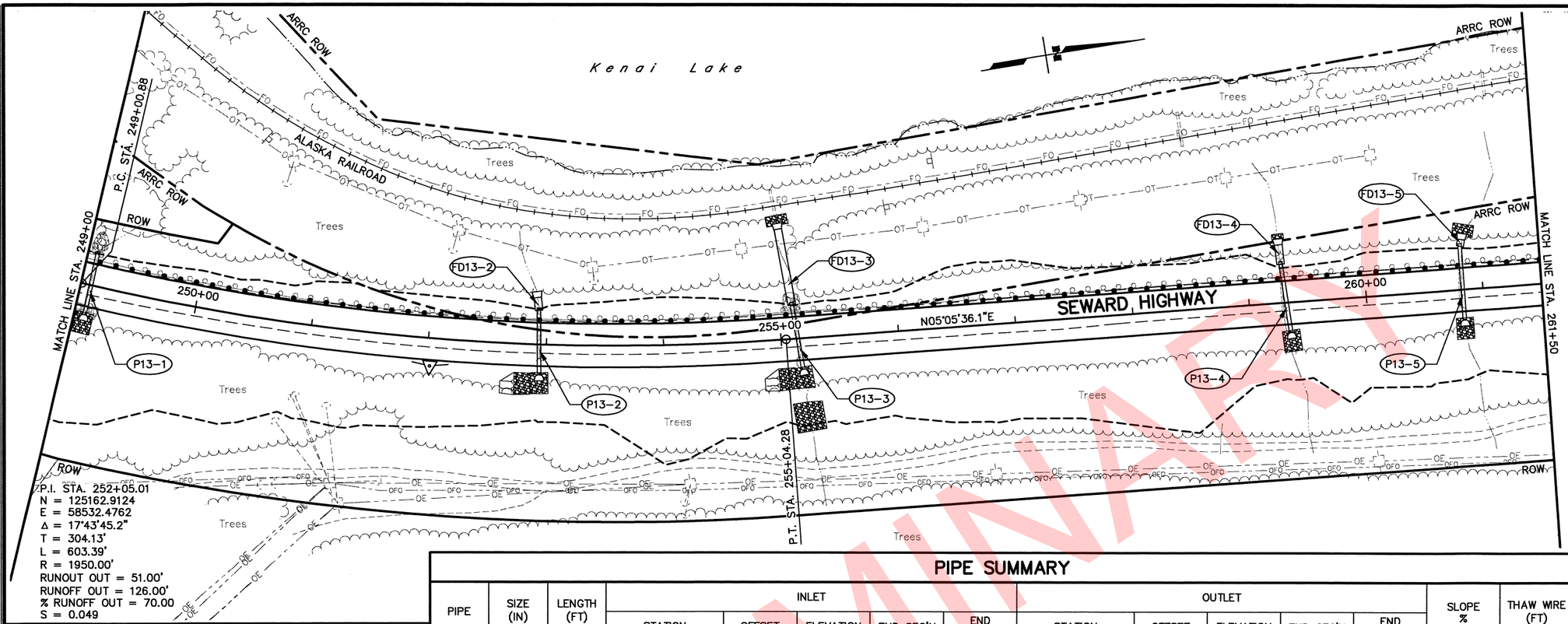
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

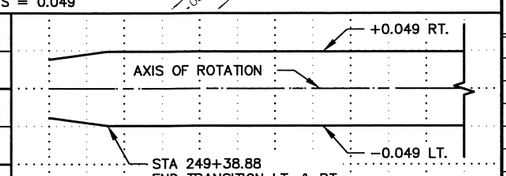
SEWARD HIGHWAY
MP 17–22.5
REHABILITATION

PLAN AND PROFILE
236+50 TO 249+00

PRELIMINARY

DRAWING LOCATION	W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_F01-F12.dwg
DATE TIME	3/7/2018 9:01 PM
LAYOUT	F12
SCALE	1" = 50'
XREFS:	XR-53610-Border_PondP, XR-53610_Base, XR-53610_Design, XR-53610_ROW
DESIGNED BY	CML/KDS
CHECKED BY	KEK
DRAFTED BY	CML/KJS

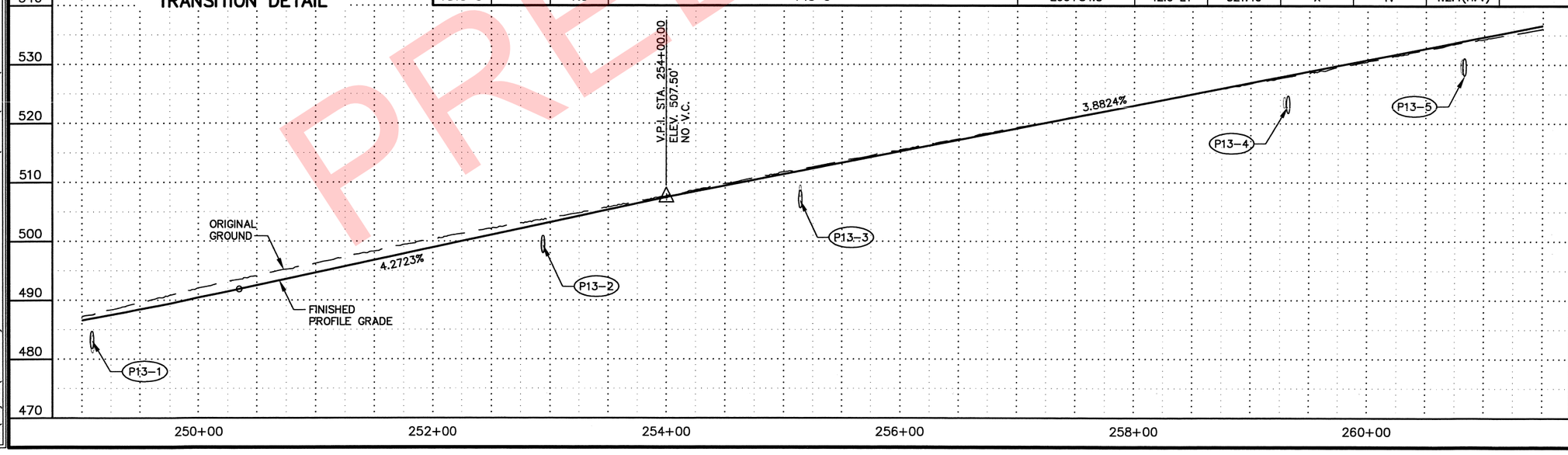




SEE SUPERELEVATION TRANSITION DETAIL

PIPE SUMMARY

PIPE	SIZE (IN)	LENGTH (FT)	INLET STATION	INLET OFFSET	INLET ELEVATION	INLET END SEC'N	INLET END TREATMENT	OUTLET STATION	OUTLET OFFSET	OUTLET ELEVATION	OUTLET END SEC'N	OUTLET END TREATMENT	SLOPE %	THAW WIRE (FT)
P13–1	36	55.0	249+09.0	25.7 RT	483.59	X	I	249+08.4	29.1 LT	479.75			7.00	X
P13–2	36	57.0	252+94.7	25.8 RT	499.82	X	I	252+93.1	31.0 LT	495.84			7.00	X
FD13–2	–	12.6	P13–2					252+91.5	39.7 LT	489.89	X		1.8:1(H:V)	
P13–3	36	58.0	255+17.1	26.4 RT	507.94	X	I	255+11.0	31.0 LT	502.97			8.60	X
FD13–3	–	80.0	P13–3					255+04.3	93.6 LT	456.27	X	IV	1.4:1(H:V)	
P13–4	36	61.0	259+33.8	25.6 RT	523.81	X	I	259+28.8	35.0 LT	518.95			8.00	X
FD13–4	–	19.4	P13–4					259+28.2	49.4 LT	509.12	X	VI	1.7:1(H:V)	
P13–5	36	65.0	260+82.8	25.9 RT	529.41	X	I	260+82.8	39.0 LT	526.17			5.00	X
FD13–5	–	7.5	P13–5					260+84.3	42.6 LT	521.46	X	IV	1.2:1(H:V)	



PRELIMINARY

SHEET NO.	TOTAL SHEETS
F13	F38
STATE	YEAR
ALASKA	2019

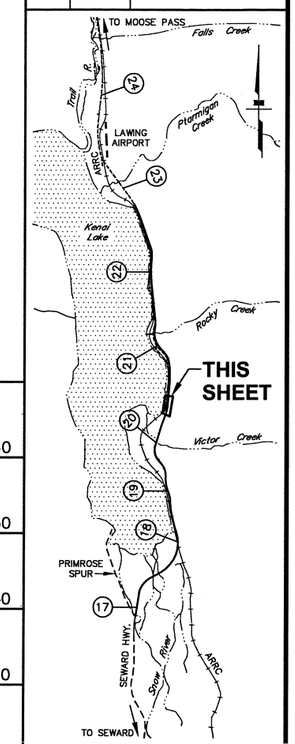
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:
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4111 AVIATION AVENUE
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(907) 269–0590

PS&E REVIEW

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17–22.5
REHABILITATION

PLAN AND PROFILE
STA. 249+00 TO 261+50

DRAWING LOCATION
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3016\Planset\53610_F13-F24.dwg

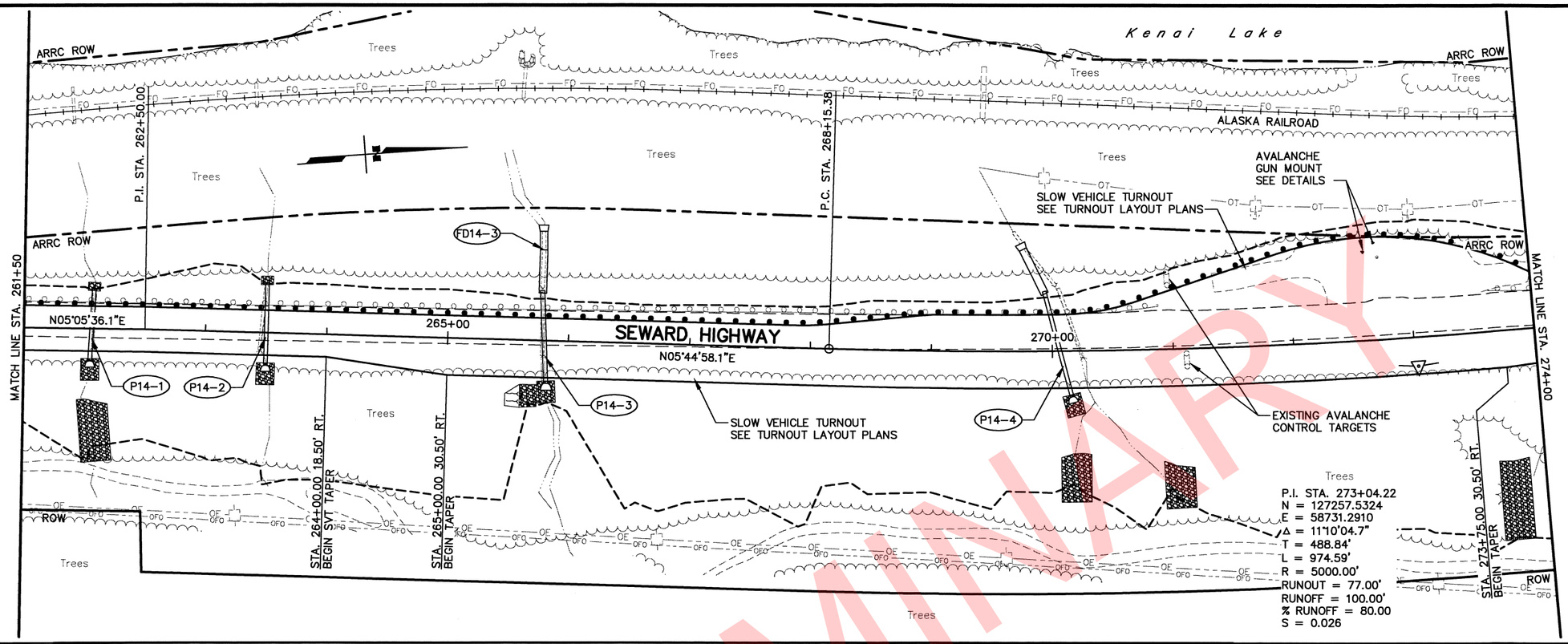
DATE TIME
3/7/2018 7:35 PM

LAYOUT
F13

SCALE
1" = 50'

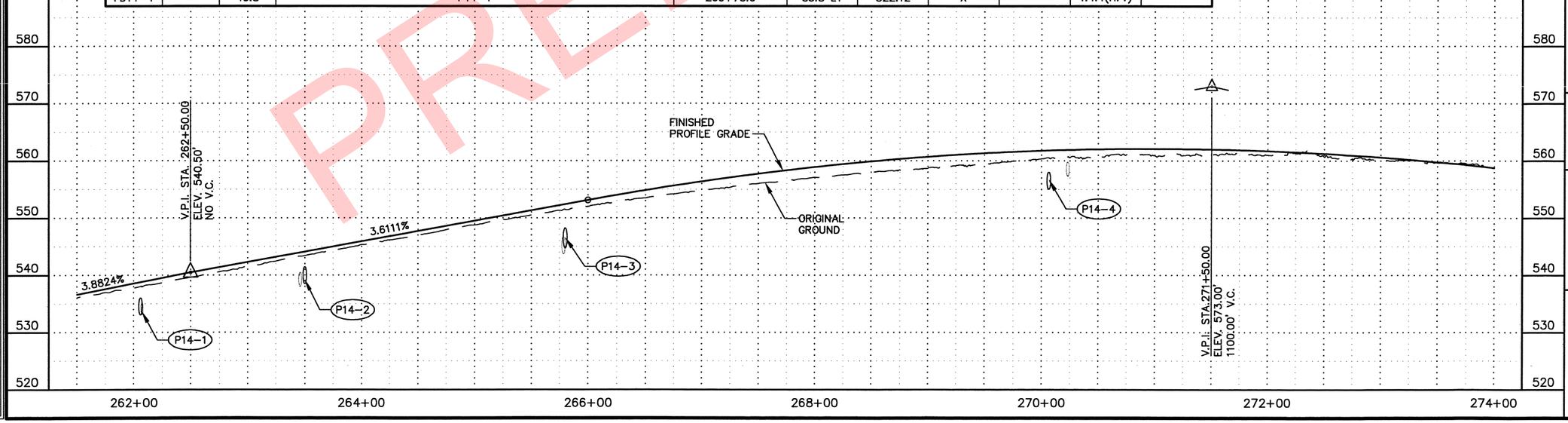
XREFS: XR-53610-Border_PondP
XR-53610_Design XR-53610_Base
XR-53610_ROW XR-53610_Avalanche

DESIGNED BY GML/KDS
CHECKED BY KEK
DRAFTED BY GML/VJS



PIPE SUMMARY

PIPE	SIZE (IN)	LENGTH (FT)	INLET STATION	INLET OFFSET	INLET ELEVATION	INLET END SEC'N	INLET END TREATMENT	OUTLET STATION	OUTLET OFFSET	OUTLET ELEVATION	OUTLET END SEC'N	OUTLET END TREATMENT	SLOPE %	THAW WIRE (FT)
P14-1	36	60.0	262+04.8	26.6 RT	534.13	X	I	262+07.8	33.2 LT	531.73		III	4.00	X
P14-2	36	68.0	263+50.0	26.9 RT	539.45	X	I	263+50.0	41.1 LT	537.07		III	3.50	X
P14-3	42	76.7	265+82.1	35.1 RT	547.57	X	I	265+77.5	41.2 LT	541.45			8.00	X
FD14-3	–	63.0	P14-3					265+77.3	89.9 LT	504.70	X		1.5:1(H:V)	
P14-4	36	90.2	270+15.9	37.8 RT	558.55	X	I	269+93.5	49.2 LT	550.46			9.00	X
FD14-4	–	49.8	P14-4					269+75.6	83.8 LT	522.12	X		1.4:1(H:V)	



SHEET NO.	TOTAL SHEETS
F14	F38
STATE	YEAR
ALASKA	2019

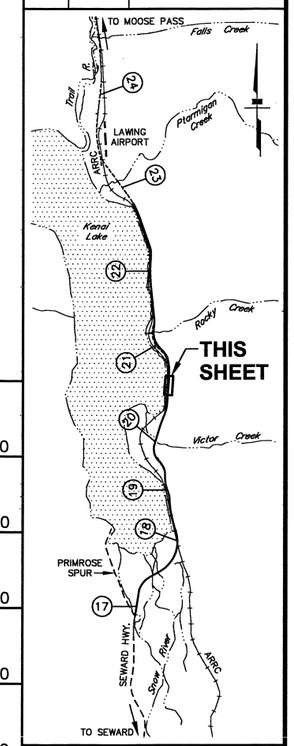
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



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4111 AVIATION AVENUE
ANCHORAGE, AK 99502
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STATE OF ALASKA
KRISTIN M. KEY
CE 13211
REGISTERED PROFESSIONAL ENGINEER
PS&E REVIEW

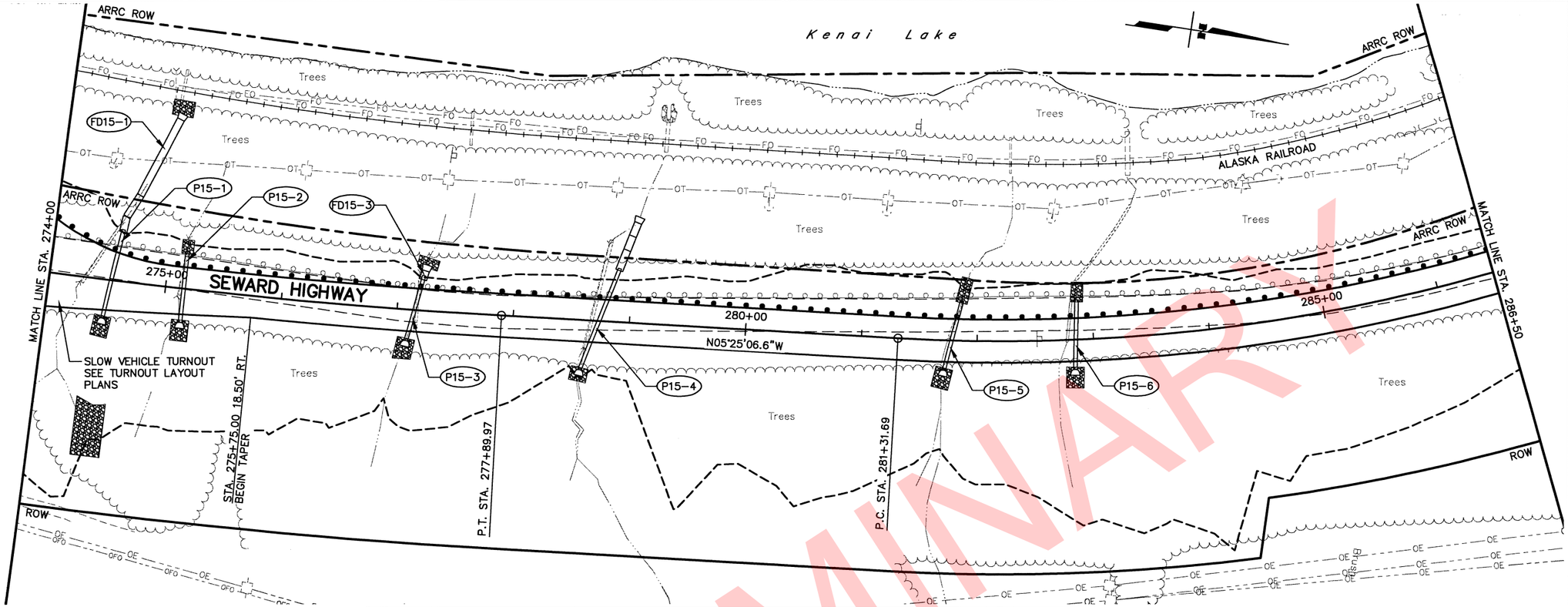
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

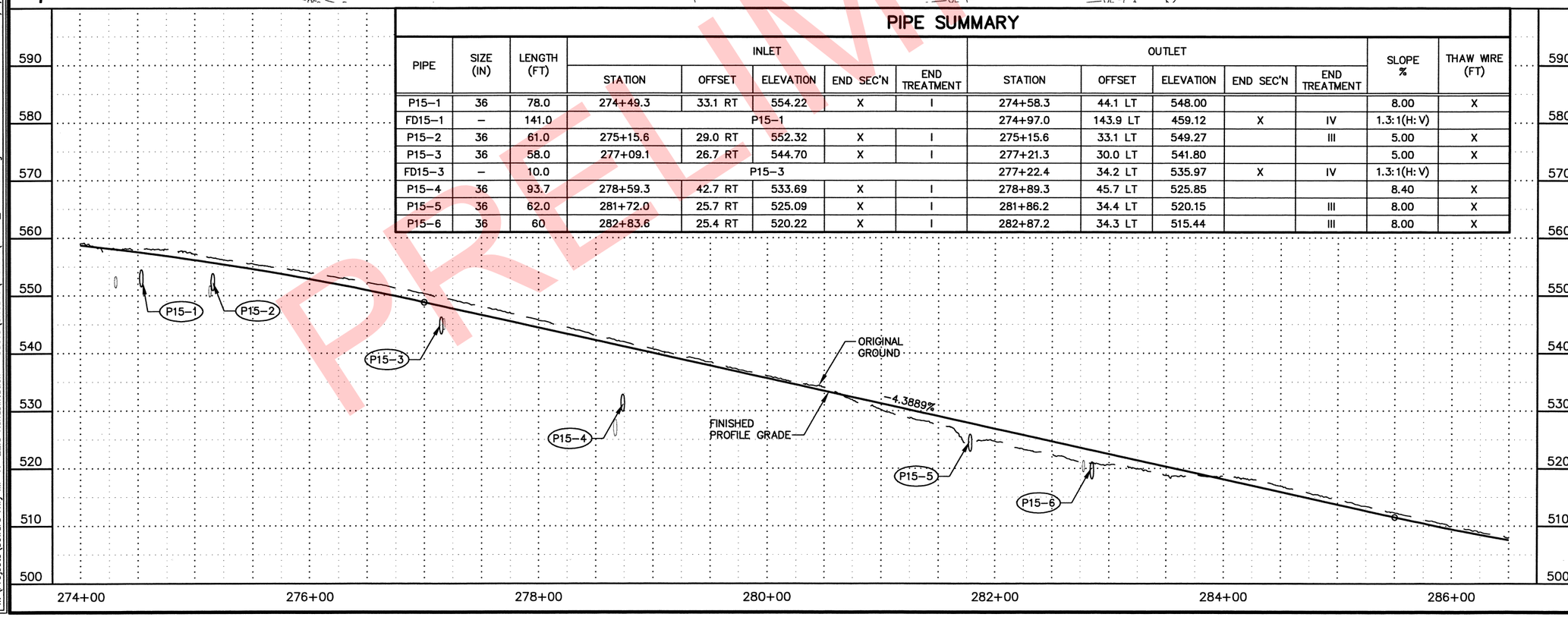
SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

PLAN AND PROFILE
STA. 261+50 TO 274+00

PRELIMINARY

XREFS:	XR-53610-Border_PandP
	XR-53610_Design_XR-53610_Base
	XR-53610_ROW_XR-53610_Avalanche
DESIGNED BY	CML/KDS
CHECKED BY	KEK
DRAFTED BY	CML/VJS
SCALE	1" = 50'
LAYOUT	F14
DATE TIME	3/7/2018 7:35 PM
DRAWING LOCATION	W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3016\Planset\53610_F13-F24.dwg





PIPE	SIZE (IN)	LENGTH (FT)	INLET					OUTLET					SLOPE %	THAW WIRE (FT)
			STATION	OFFSET	ELEVATION	END SEC'N	END TREATMENT	STATION	OFFSET	ELEVATION	END SEC'N	END TREATMENT		
P15-1	36	78.0	274+49.3	33.1 RT	554.22	X	I	274+58.3	44.1 LT	548.00			8.00	X
FD15-1	–	141.0	P15-1					274+97.0	143.9 LT	459.12	X	IV	1.3:1(H:V)	
P15-2	36	61.0	275+15.6	29.0 RT	552.32	X	I	275+15.6	33.1 LT	549.27		III	5.00	X
P15-3	36	58.0	277+09.1	26.7 RT	544.70	X	I	277+21.3	30.0 LT	541.80			5.00	X
FD15-3	–	10.0	P15-3					277+22.4	34.2 LT	535.97	X	IV	1.3:1(H:V)	
P15-4	36	93.7	278+59.3	42.7 RT	533.69	X	I	278+89.3	45.7 LT	525.85			8.40	X
P15-5	36	62.0	281+72.0	25.7 RT	525.09	X	I	281+86.2	34.4 LT	520.15		III	8.00	X
P15-6	36	60	282+83.6	25.4 RT	520.22	X	I	282+87.2	34.3 LT	515.44		III	8.00	X

PRELIMINARY

SHEET NO.	TOTAL SHEETS
F15	F38
STATE	YEAR
ALASKA	2019

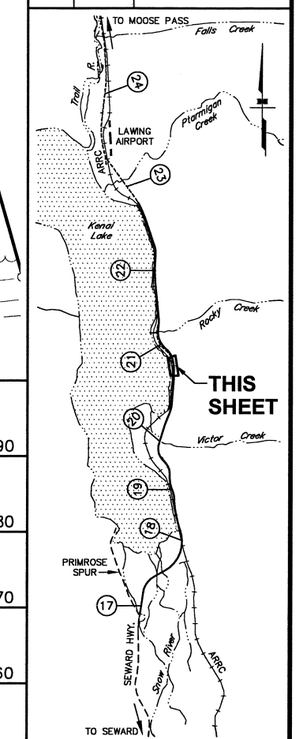
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:
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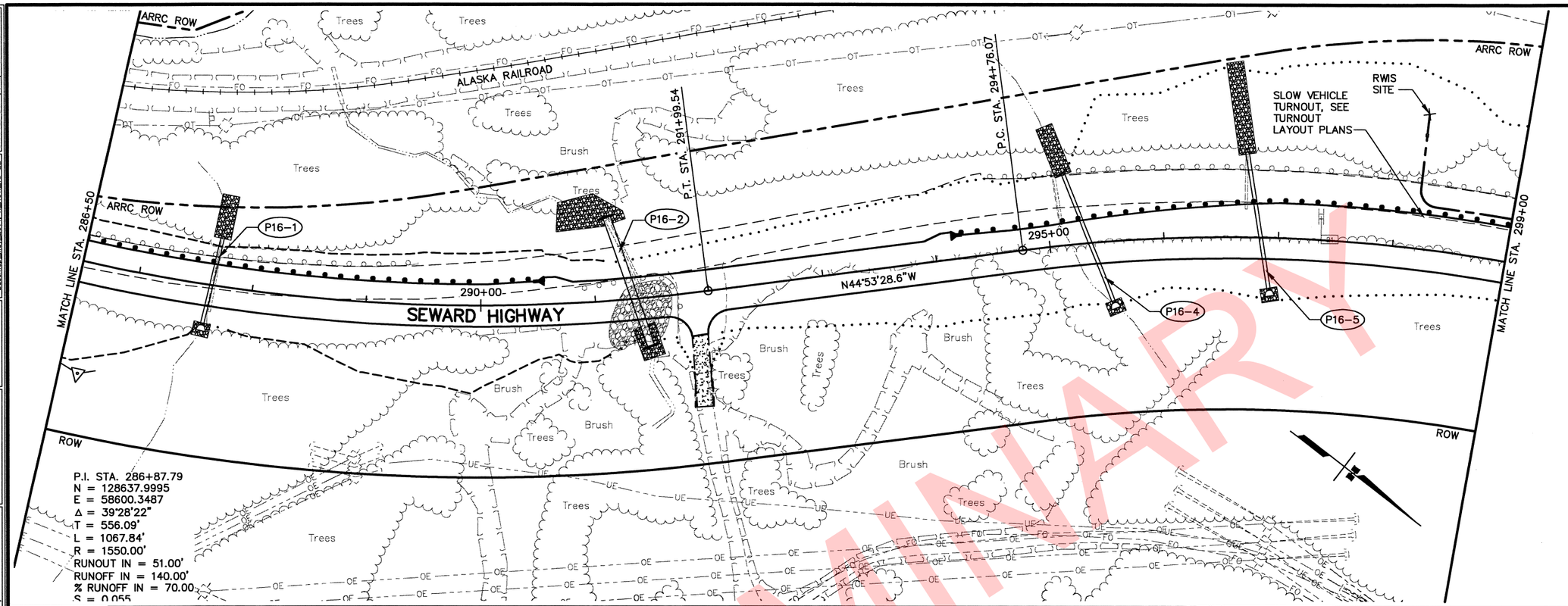
PS&E REVIEW

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

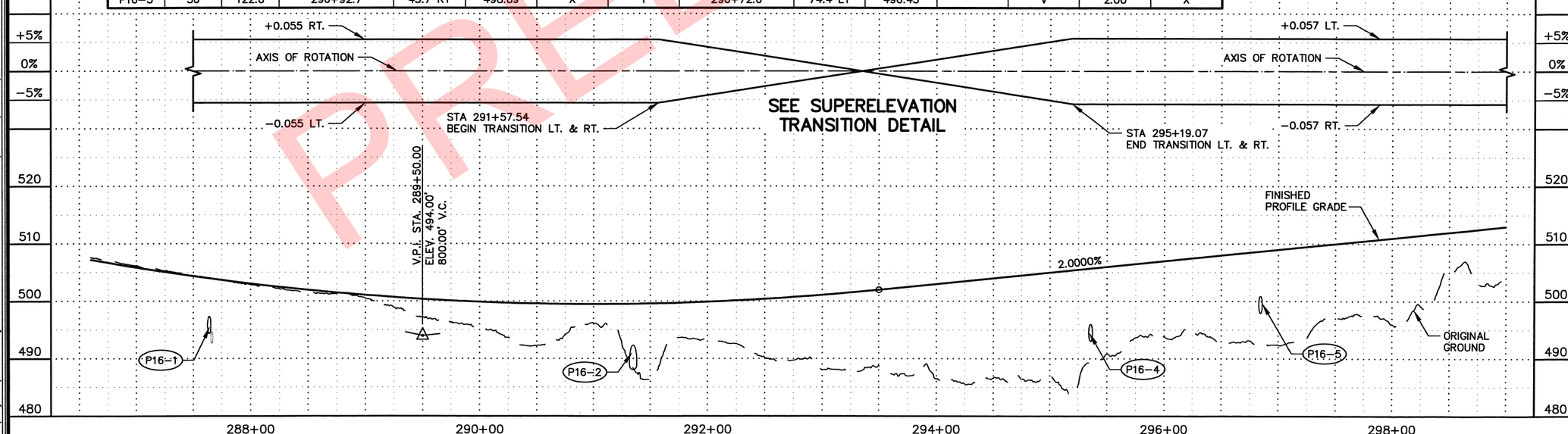
PLAN AND PROFILE
STA. 274+00 TO 286+50

DRAWING LOCATION	W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_F13-F24.dwg
DATE TIME	3/7/2018 7:35 PM
LAYOUT	F15
SCALE	1" = 50'
XREFS:	XR-53610-Border_PondP; XR-53610_Design; XR-53610_Base; XR-53610_ROW; XR-53610_Andrichuk
DESIGNED BY	CML/KGS
CHECKED BY	KEK
DRAFTED BY	CML/VJS



PIPE SUMMARY

PIPE	SIZE (IN)	LENGTH (FT)	INLET STATION	INLET OFFSET	INLET ELEVATION	INLET END SEC'N	INLET END TREATMENT	OUTLET STATION	OUTLET OFFSET	OUTLET ELEVATION	OUTLET END SEC'N	OUTLET END TREATMENT	SLOPE %	THAW WIRE (FT)
P16-1	36	80.0	287+60.8	35.5 RT	498.65	X	I	287+68.0	43.6 LT	489.12		V	12.00	X
P16-2	48	110.7	SEE LARGE DIAMETER CULVERT DETAIL											
P16-3	NOT USED													
P16-4	36	122.0	295+52.6	53.6 RT	494.16	X	I	295+17.1	63.1 LT	491.72		V	2.00	X
P16-5	36	122.0	296+92.7	45.7 RT	498.89	X	I	296+72.0	74.4 LT	496.45		V	2.00	X



PRELIMINARY

SHEET NO.	TOTAL SHEETS
F16	F38
STATE	YEAR
ALASKA	2019

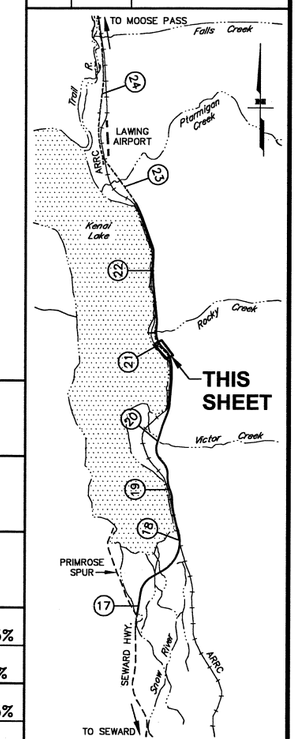
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



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PS&E REVIEW

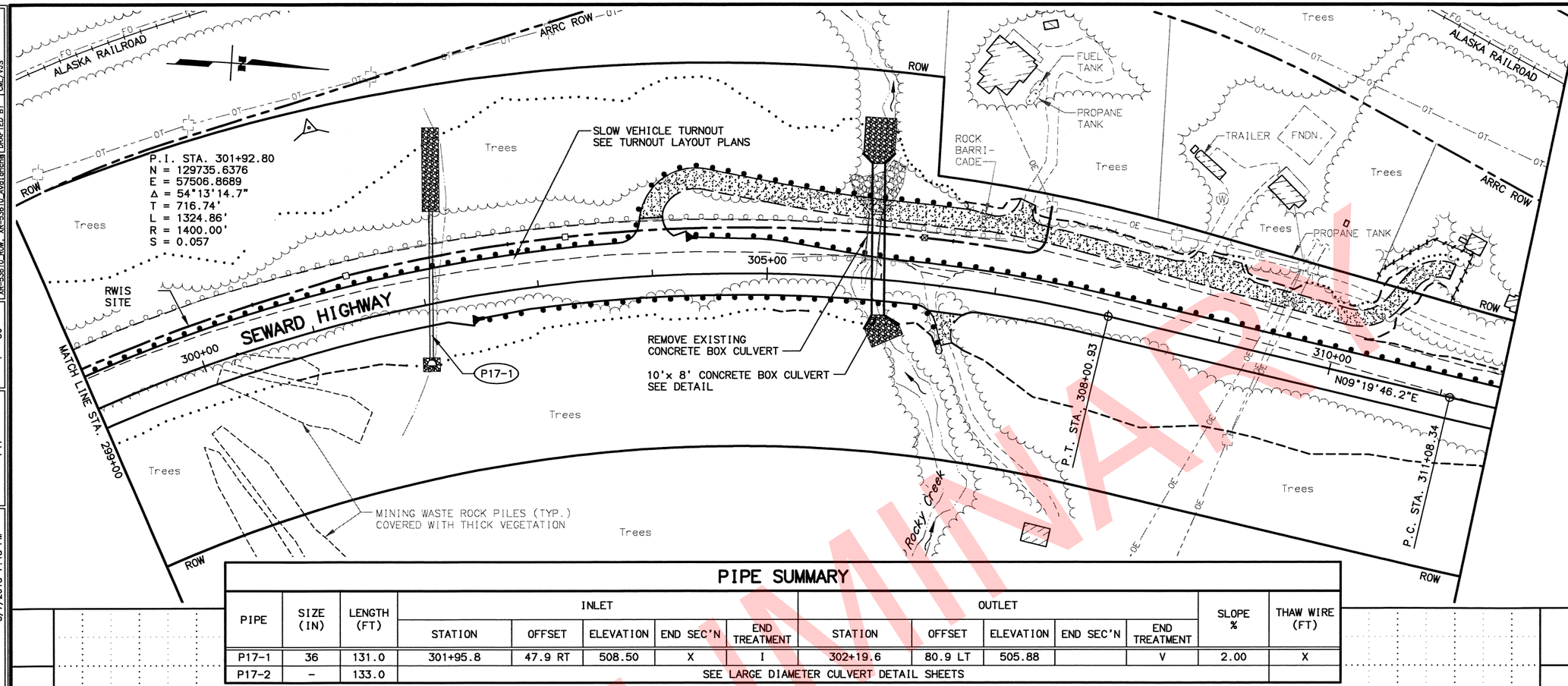
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

PLAN AND PROFILE
STA. 286+50 TO 299+00

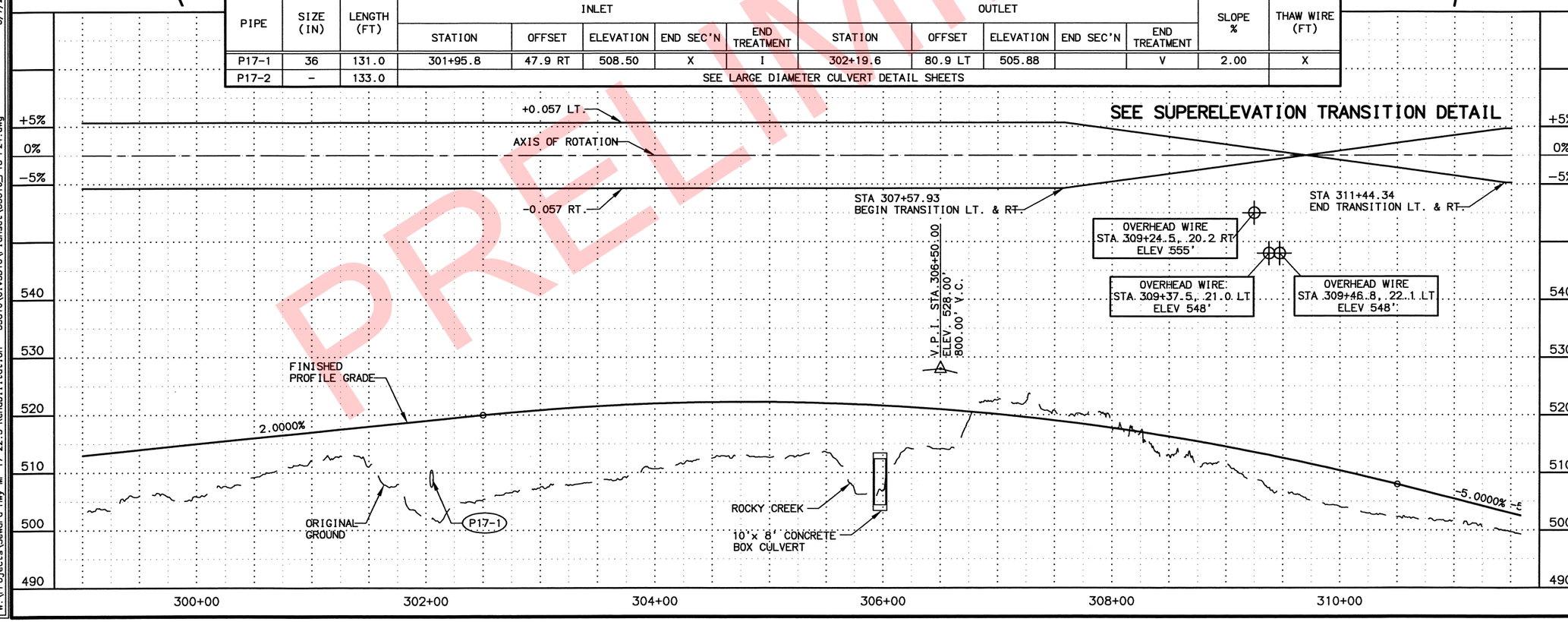
DRAWING LOCATION
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_F13-F24.dwg

DATE	TIME	LAYOUT	SCALE	XREFS: XR-53610-Border_PandP XR-53610_Design_XR-53610_Base Basemap_May_2014_X_ROW_18-22	DESIGNED BY OML/KDS CHECKED BY KEK DRAFTED BY OML/VJS
3/7/2018	7:35 PM	F16	1" = 50'		



PIPE SUMMARY

PIPE	SIZE (IN)	LENGTH (FT)	INLET					OUTLET					SLOPE %	THAW WIRE (FT)
			STATION	OFFSET	ELEVATION	END SEC'N	END TREATMENT	STATION	OFFSET	ELEVATION	END SEC'N	END TREATMENT		
P17-1	36	131.0	301+95.8	47.9 RT	508.50	X	I	302+19.6	80.9 LT	505.88		V	2.00	X
P17-2	–	133.0	SEE LARGE DIAMETER CULVERT DETAIL SHEETS											



PRELIMINARY

SHEET NO.	TOTAL SHEETS
F17	F38
STATE	YEAR
ALASKA	2019

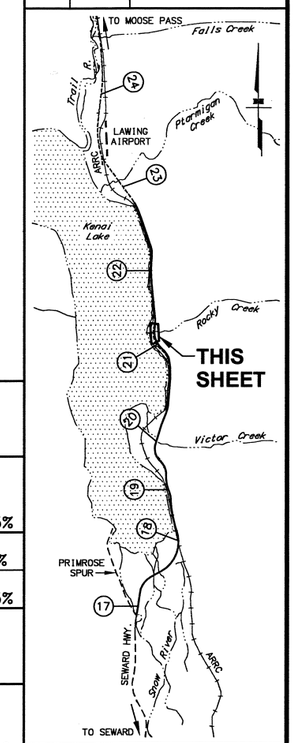
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:
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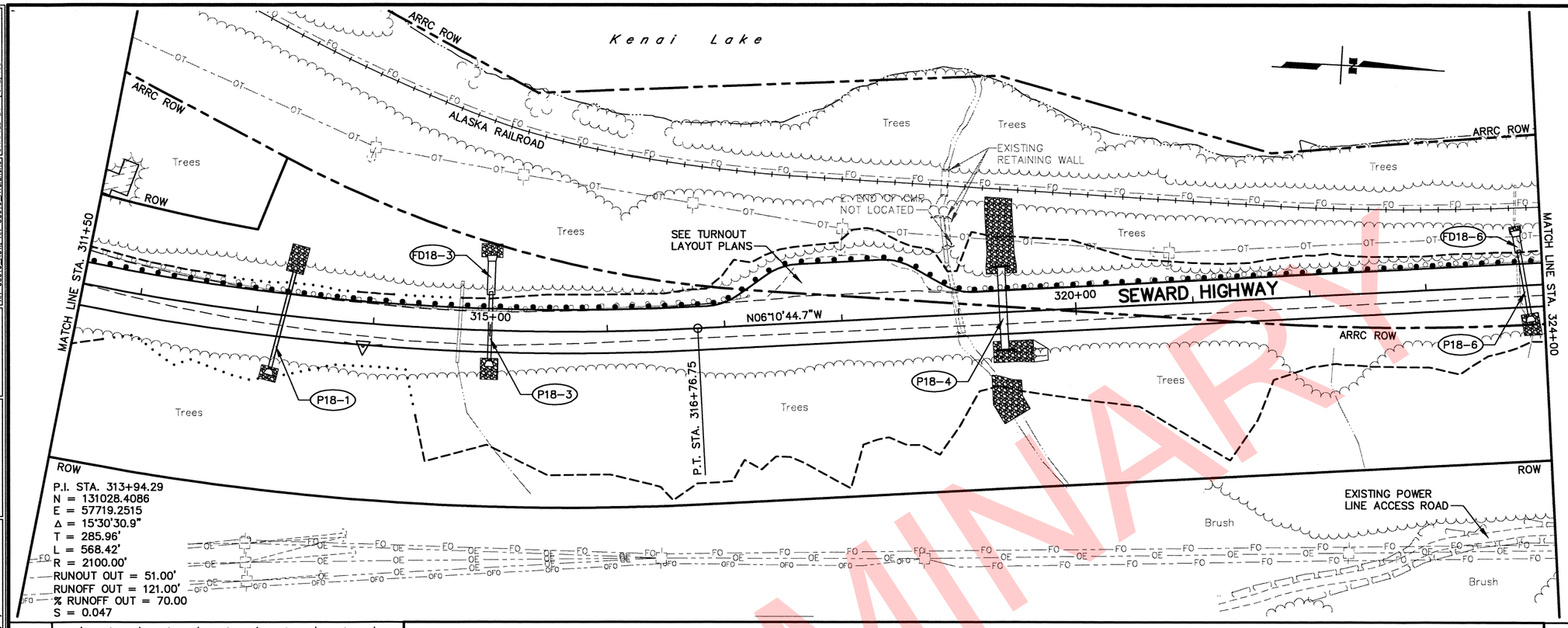
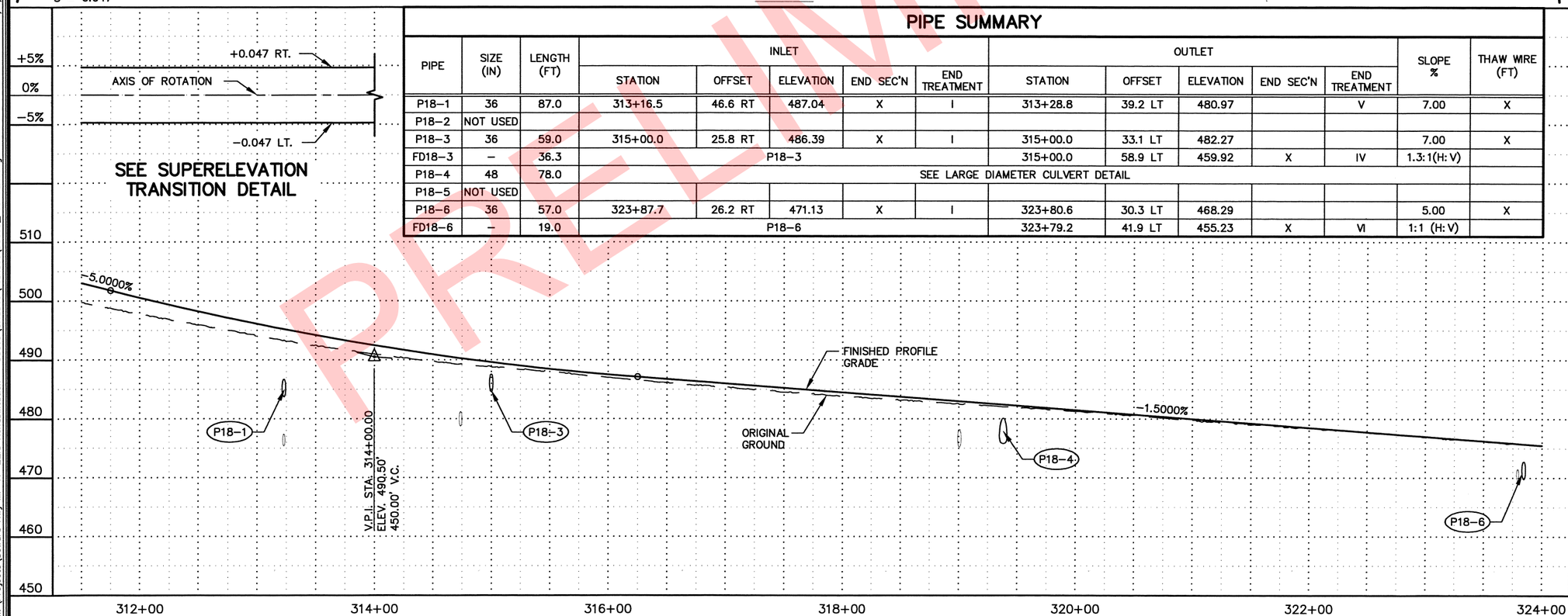
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

PLAN AND PROFILE
STA. 299+00 TO 311+50

DRAWING LOCATION	DATE	TIME	LAYOUT	SCALE	XREFS: XR-53610-Border_PondP, XR-53610_Area1ign, XR-53610_Base, XR-53610_ROW, XR-53610_AvoLanche	DESIGNED BY	CHECKED BY	DRAFTED BY
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_F13-F24.dwg	3/7/2018	7:48 PM	F17	1" = 50'		QML/KDS	KEK	QML/KJS





PIPE SUMMARY

PIPE	SIZE (IN)	LENGTH (FT)	INLET STATION	INLET OFFSET	INLET ELEVATION	INLET END SEC'N	INLET END TREATMENT	OUTLET STATION	OUTLET OFFSET	OUTLET ELEVATION	OUTLET END SEC'N	OUTLET END TREATMENT	SLOPE %	THAW WIRE (FT)
P18-1	36	87.0	313+16.5	46.6 RT	487.04	X	I	313+28.8	39.2 LT	480.97		V	7.00	X
P18-2	NOT USED													
P18-3	36	59.0	315+00.0	25.8 RT	486.39	X	I	315+00.0	33.1 LT	482.27			7.00	X
FD18-3	–	36.3	P18-3					315+00.0	58.9 LT	459.92	X	IV	1.3:1(H:V)	
P18-4	48	78.0	SEE LARGE DIAMETER CULVERT DETAIL											
P18-5	NOT USED													
P18-6	36	57.0	323+87.7	26.2 RT	471.13	X	I	323+80.6	30.3 LT	468.29			5.00	X
FD18-6	–	19.0	P18-6					323+79.2	41.9 LT	455.23	X	VI	1:1 (H:V)	

PRELIMINARY

SHEET NO.	TOTAL SHEETS
F18	F38
STATE	YEAR
ALASKA	2019

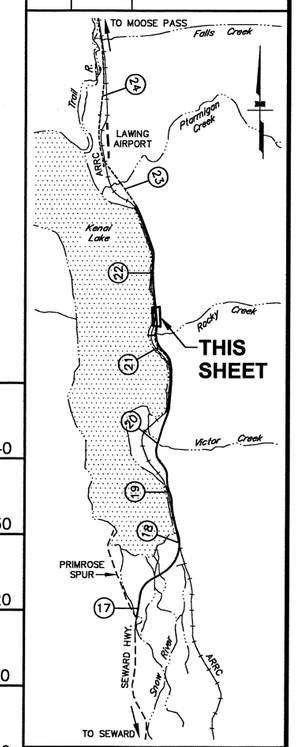
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:
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PS&E REVIEW

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

PLAN AND PROFILE
STA. 311+50 TO 324+00

DESIGNED BY GML/KDS
CHECKED BY KEK
DRAFTED BY GML/VJS

XREFS: XR-53610-Border_PondP
XR-53610_Design_XR-53610_Base
XR-53610_ROW_XR-53610_Avalanche

SCALE 1:50

LAYOUT F18

DATE TIME 3/7/2018 7:35 PM

DRAWING LOCATION
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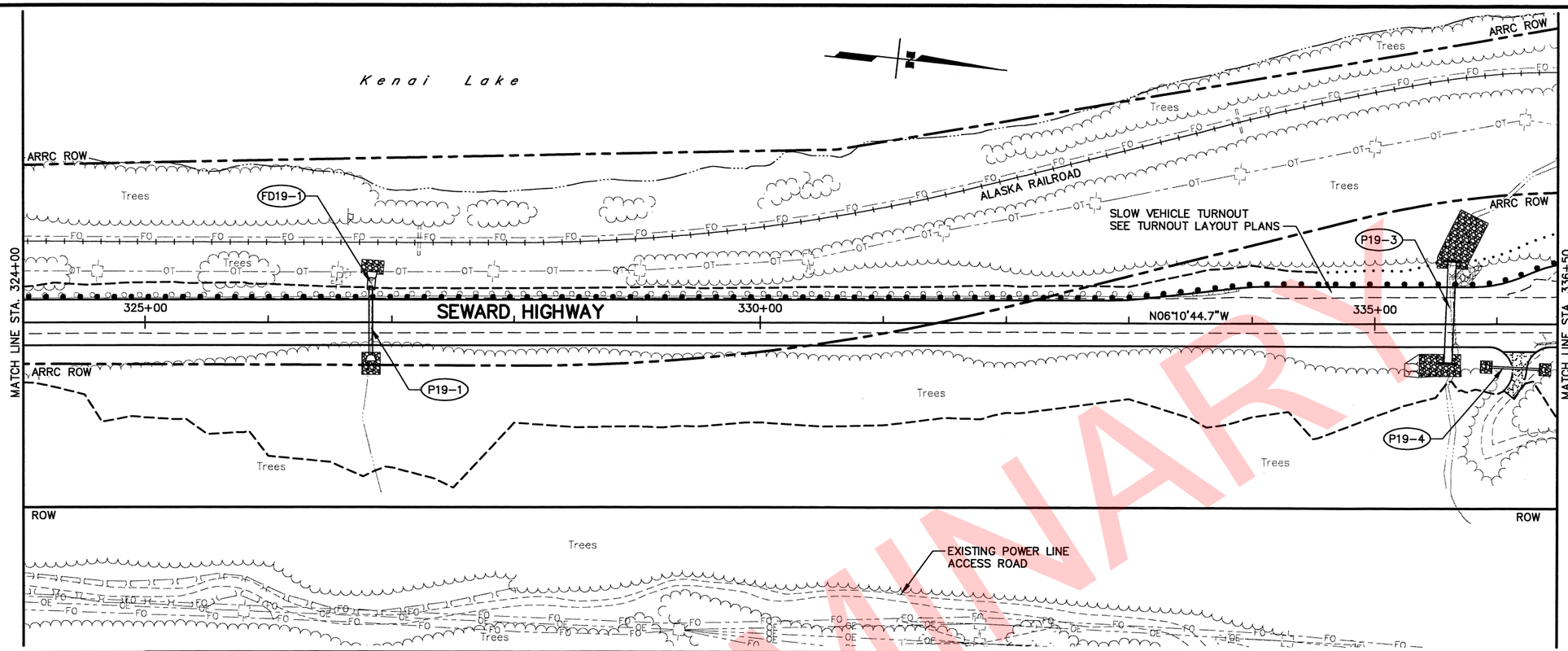
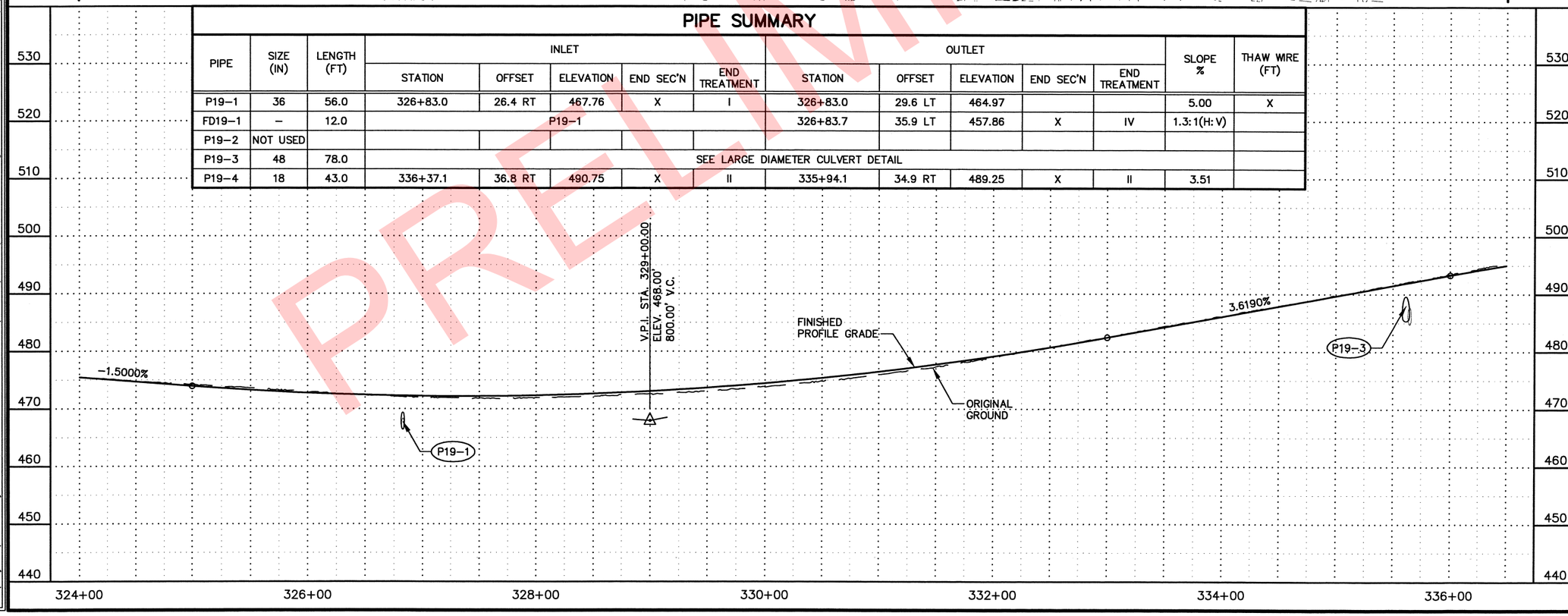


PIPE SUMMARY

PIPE	SIZE (IN)	LENGTH (FT)	INLET					OUTLET					SLOPE %	THAW WIRE (FT)
			STATION	OFFSET	ELEVATION	END SEC'N	END TREATMENT	STATION	OFFSET	ELEVATION	END SEC'N	END TREATMENT		
P19-1	36	56.0	326+83.0	26.4 RT	467.76	X	I	326+83.0	29.6 LT	464.97			5.00	X
FD19-1	–	12.0	P19-1					326+83.7	35.9 LT	457.86	X	IV	1.3:1(H:V)	
P19-2	NOT USED													
P19-3	48	78.0	SEE LARGE DIAMETER CULVERT DETAIL											
P19-4	18	43.0	336+37.1	36.8 RT	490.75	X	II	335+94.1	34.9 RT	489.25	X	II	3.51	



SHEET NO.	TOTAL SHEETS
F19	F38
STATE	YEAR
ALASKA	2019

PROJECT DESIGNATION

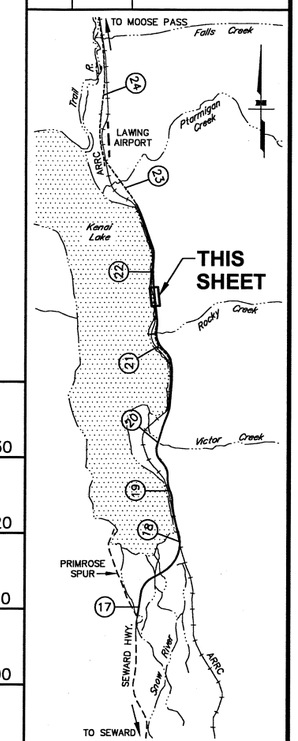
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:
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4111 AVIATION AVENUE
ANCHORAGE, AK 99502
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

PLAN AND PROFILE
STA. 324+00 TO 336+50

DESIGNED BY	CML/KDS
CHECKED BY	KEK
DRAFTED BY	CML/VJS

XREFS: XR-53610_Border_PondP, XR-53610_Design, XR-53610_Base, XR-53610_ROW, XR-53610_Avalanche

SCALE 1:50

LAYOUT F19

DATE TIME 3/7/2018 7:35 PM

DRAWING LOCATION
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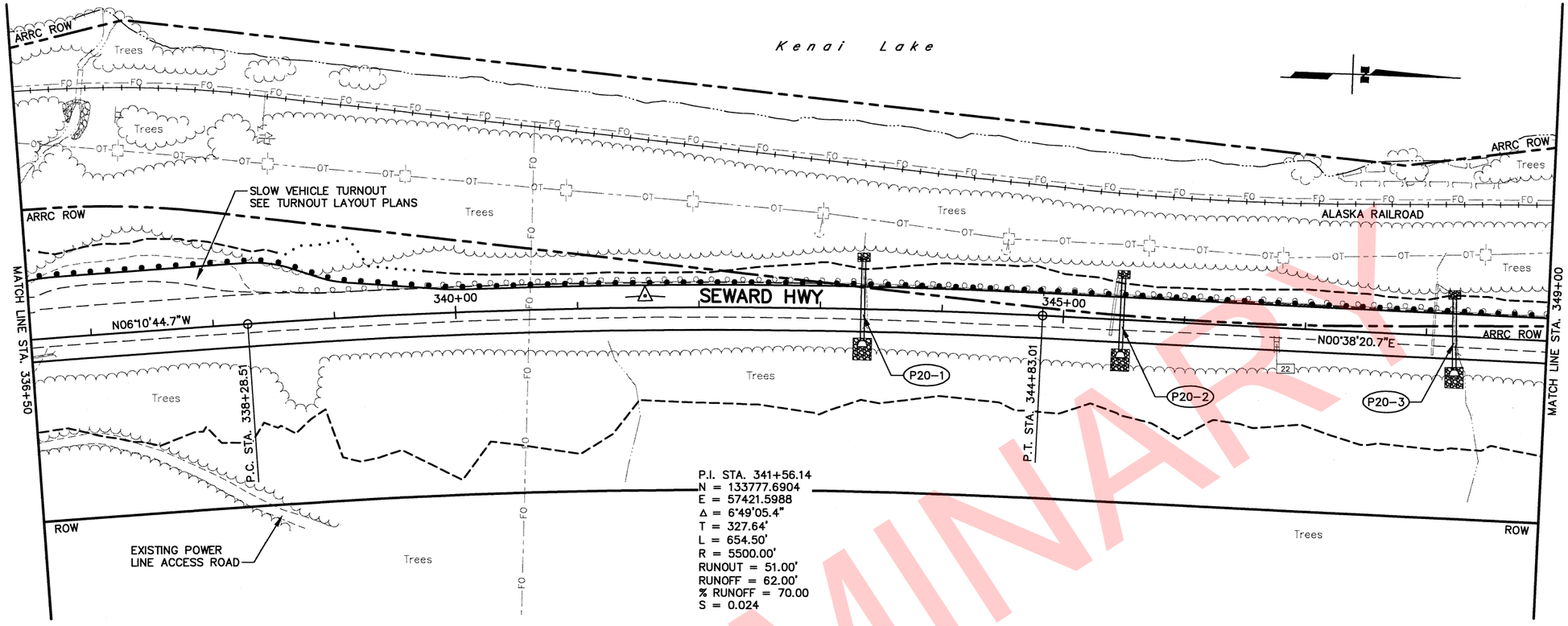
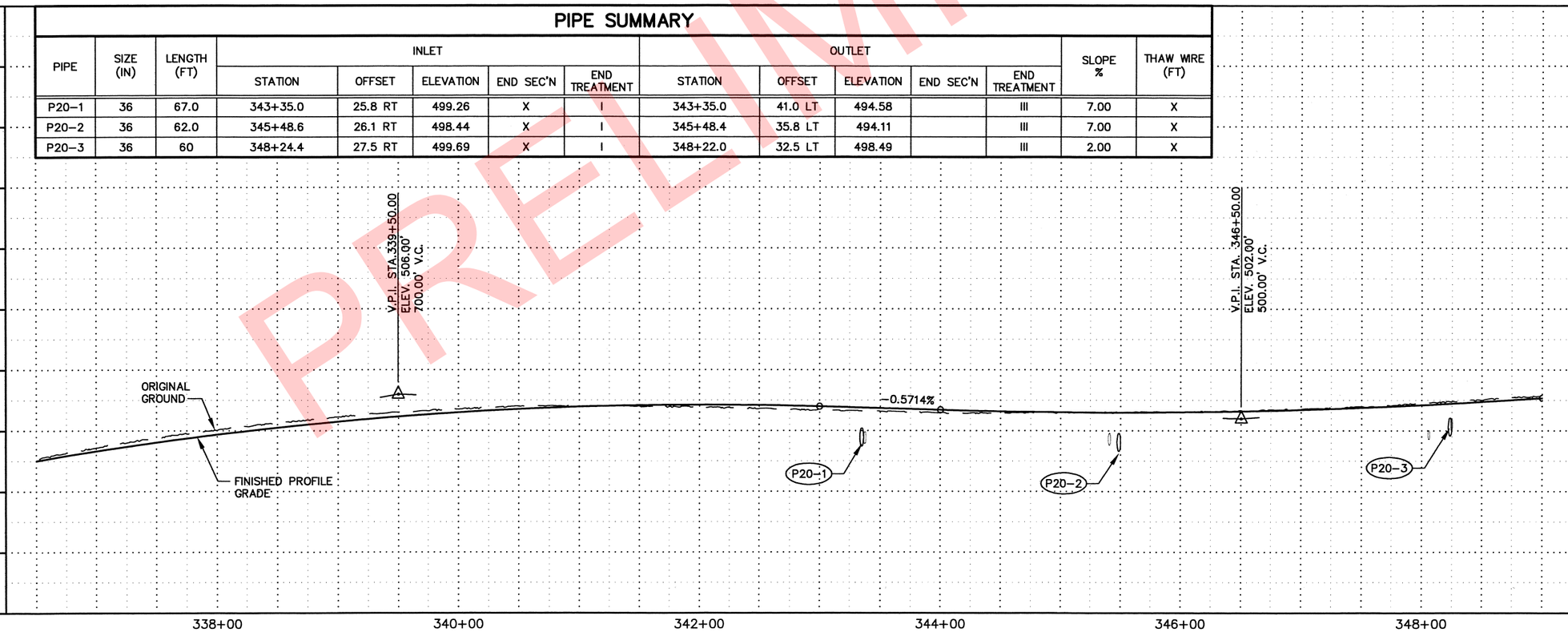
PRELIMINARY
PSSE REVIEW



PIPE SUMMARY

PIPE	SIZE (IN)	LENGTH (FT)	INLET					OUTLET					SLOPE %	THAW WIRE (FT)
			STATION	OFFSET	ELEVATION	END SEC'N	END TREATMENT	STATION	OFFSET	ELEVATION	END SEC'N	END TREATMENT		
P20-1	36	67.0	343+35.0	25.8 RT	499.26	X	I	343+35.0	41.0 LT	494.58		III	7.00	X
P20-2	36	62.0	345+48.6	26.1 RT	498.44	X	I	345+48.4	35.8 LT	494.11		III	7.00	X
P20-3	36	60	348+24.4	27.5 RT	499.69	X	I	348+22.0	32.5 LT	498.49		III	2.00	X



SHEET NO.	TOTAL SHEETS
F20	F38
STATE	YEAR
ALASKA	2019

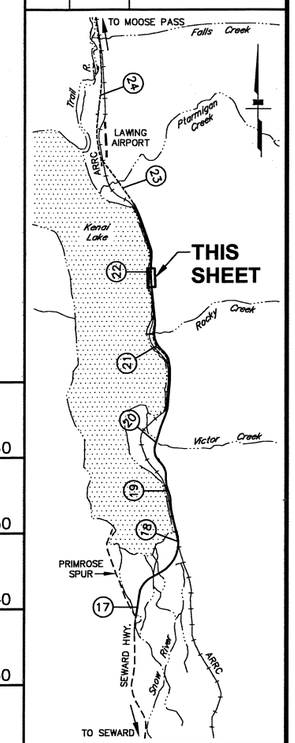
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:
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AND PUBLIC FACILITIES
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ANCHORAGE, AK 99502
(907) 269-0590

PS&E REVIEW

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

PLAN AND PROFILE
STA. 336+50 TO 349+00

XREFS:	XR-53610-Border_PandP
	XR-53610_Design_XR-53610_Rose
	XR-53610_ROW_XR-53610_Avalanche
DESIGNED BY	CML/KDS
CHECKED BY	KEK
DRAFTED BY	CML/YJS
SCALE	1" = 50'
LAYOUT	F20
DATE TIME	3/7/2018 7:35 PM
DRAWING LOCATION	W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_F13-F24.dwg

PRELIMINARY

SHEET NO.	TOTAL SHEETS
F21	F38
STATE	YEAR
ALASKA	2019

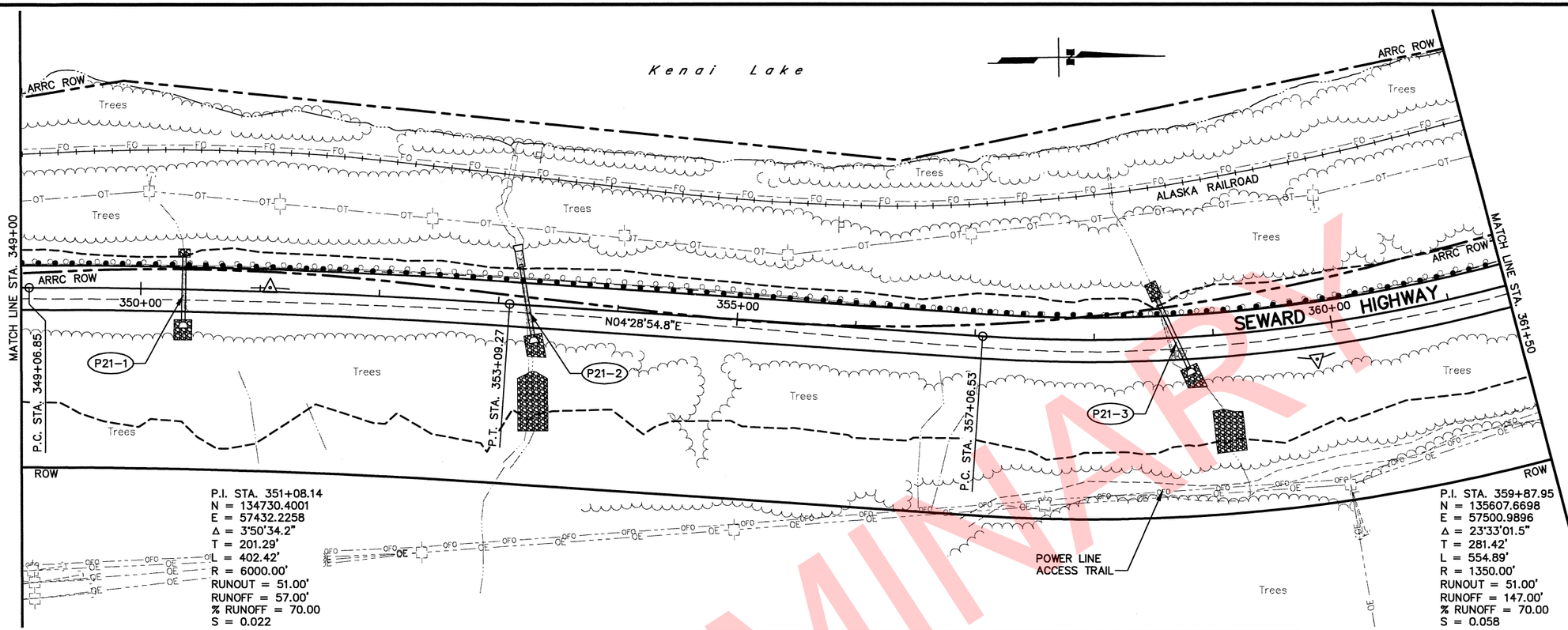
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

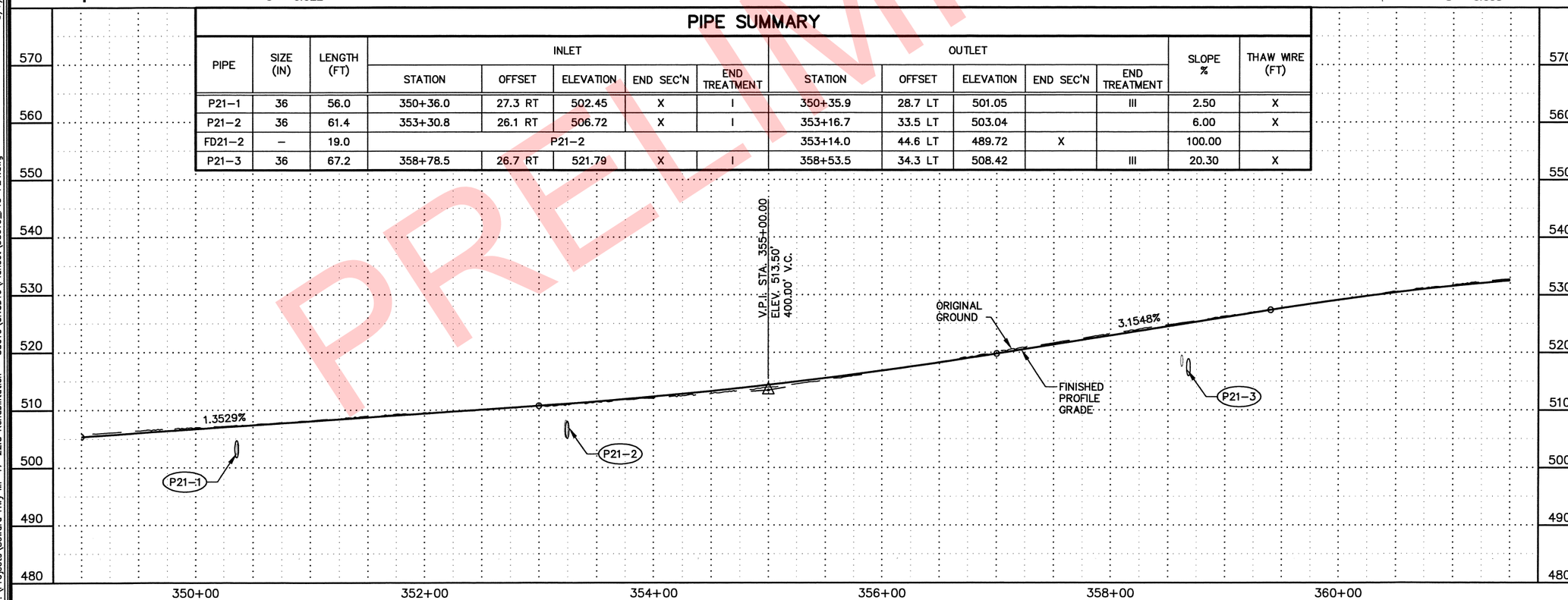
REVISIONS

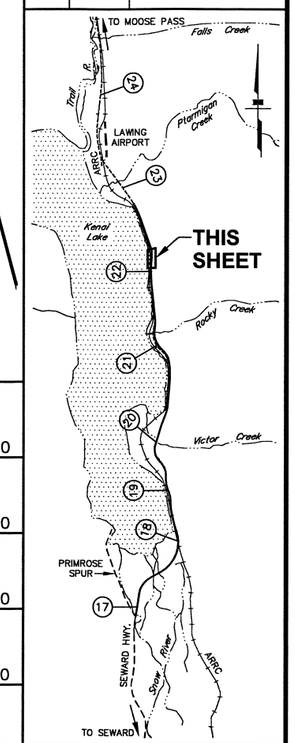
NO.	DATE	DESCRIPTION



PIPE SUMMARY

PIPE	SIZE (IN)	LENGTH (FT)	INLET					OUTLET					SLOPE %	THAW WIRE (FT)
			STATION	OFFSET	ELEVATION	END SEC'N	END TREATMENT	STATION	OFFSET	ELEVATION	END SEC'N	END TREATMENT		
P21-1	36	56.0	350+36.0	27.3 RT	502.45	X	I	350+35.9	28.7 LT	501.05		III	2.50	X
P21-2	36	61.4	353+30.8	26.1 RT	506.72	X	I	353+16.7	33.5 LT	503.04			6.00	X
FD21-2	–	19.0	P21-2					353+14.0	44.6 LT	489.72	X		100.00	
P21-3	36	67.2	358+78.5	26.7 RT	521.79	X	I	358+53.5	34.3 LT	508.42		III	20.30	X





PLANS DEVELOPED BY:
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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4111 AVIATION AVENUE
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

PLAN AND PROFILE
STA. 349+00 TO 361+50

DESIGNED BY	CML/KDS
CHECKED BY	KEK
DRAFTED BY	CML/VJS

XREFS: XR-53610-Border_PondP
XR-53610_Design, XR-53610_Base
XR-53610_ROW, XR-53610-Avalanche

SCALE 1"= 50'

LAYOUT F21

DATE TIME 3/7/2018 7:35 PM

DRAWING LOCATION
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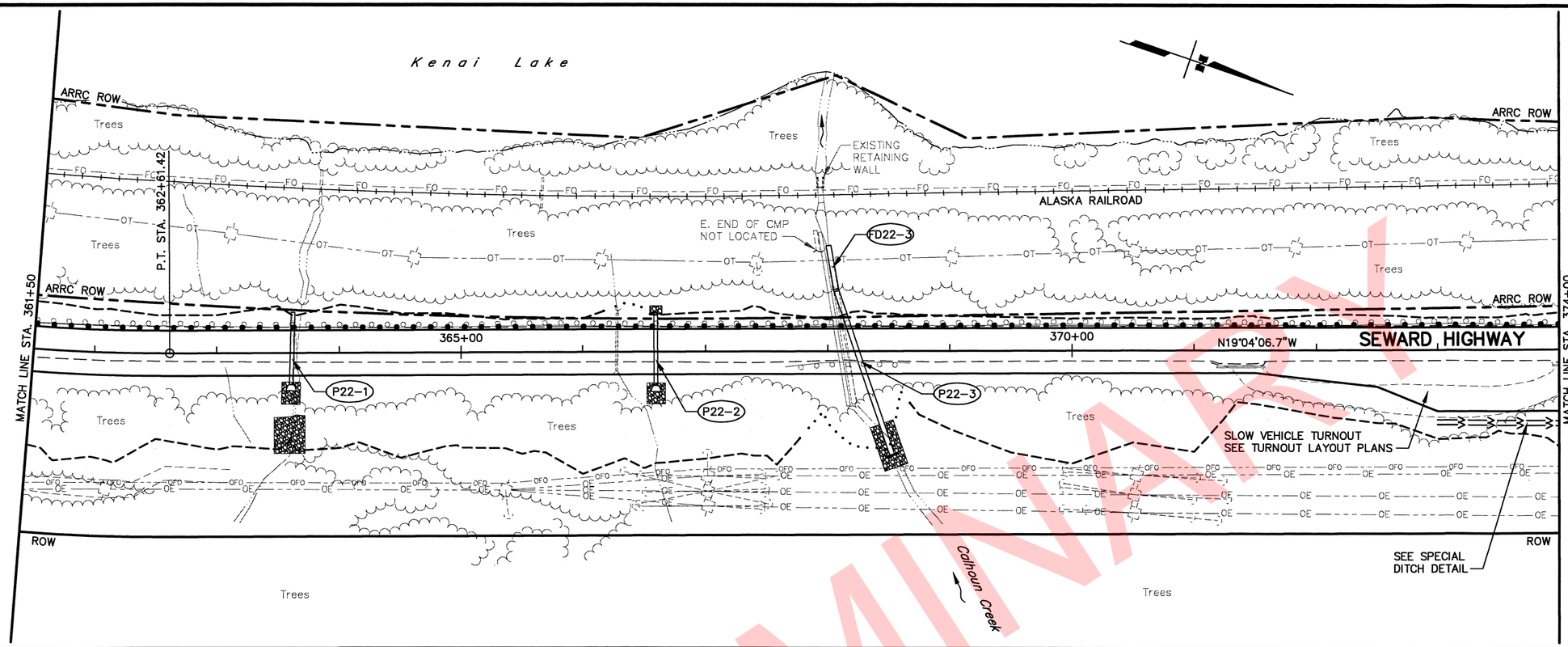
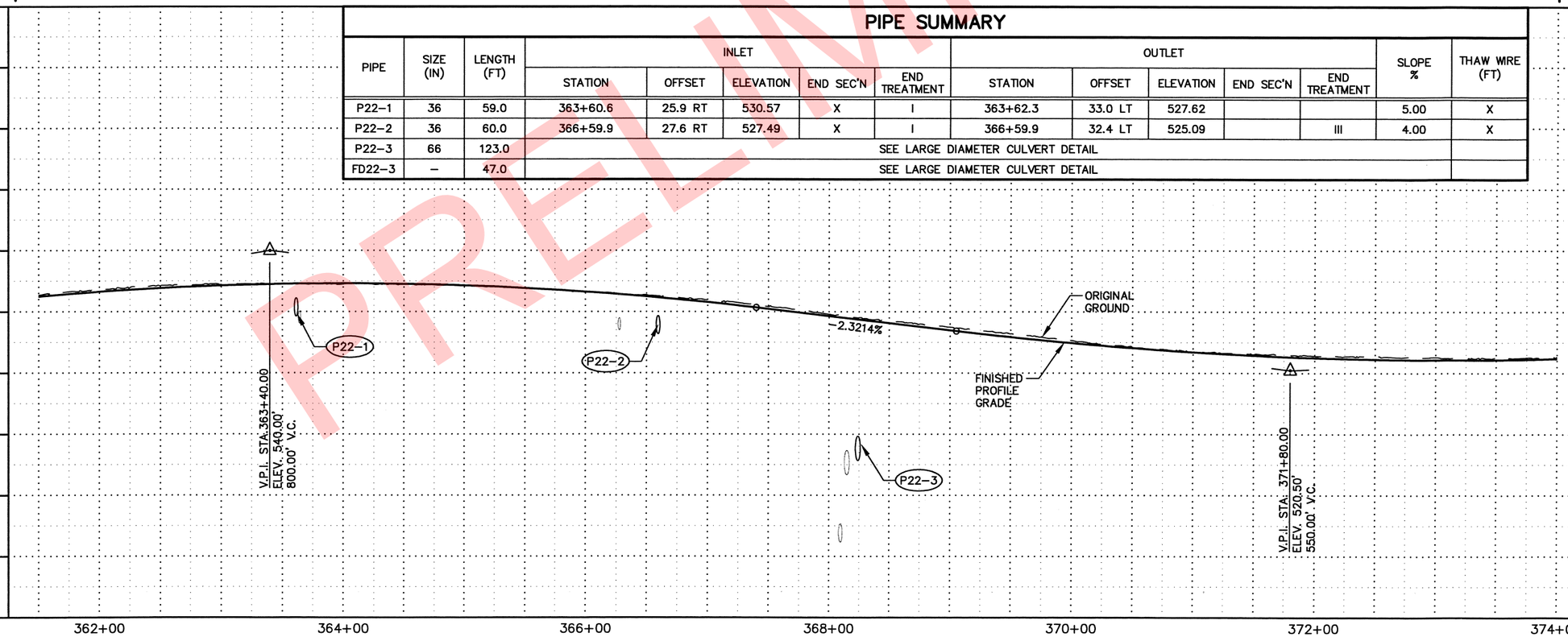
PRELIMINARY

PSSE REVIEW



PIPE SUMMARY

PIPE	SIZE (IN)	LENGTH (FT)	INLET STATION	INLET OFFSET	INLET ELEVATION	INLET END SEC'N	INLET END TREATMENT	OUTLET STATION	OUTLET OFFSET	OUTLET ELEVATION	OUTLET END SEC'N	OUTLET END TREATMENT	SLOPE %	THAW WIRE (FT)
P22-1	36	59.0	363+60.6	25.9 RT	530.57	X	I	363+62.3	33.0 LT	527.62			5.00	X
P22-2	36	60.0	366+59.9	27.6 RT	527.49	X	I	366+59.9	32.4 LT	525.09		III	4.00	X
P22-3	66	123.0	SEE LARGE DIAMETER CULVERT DETAIL											
FD22-3	–	47.0	SEE LARGE DIAMETER CULVERT DETAIL											



SHEET NO.	TOTAL SHEETS
F22	F38
STATE	YEAR
ALASKA	2019

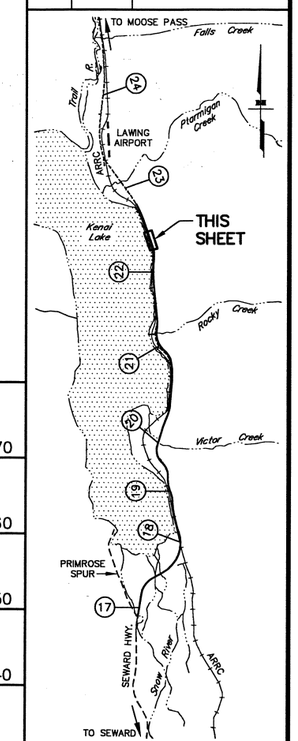
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

PS&E REVIEW

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

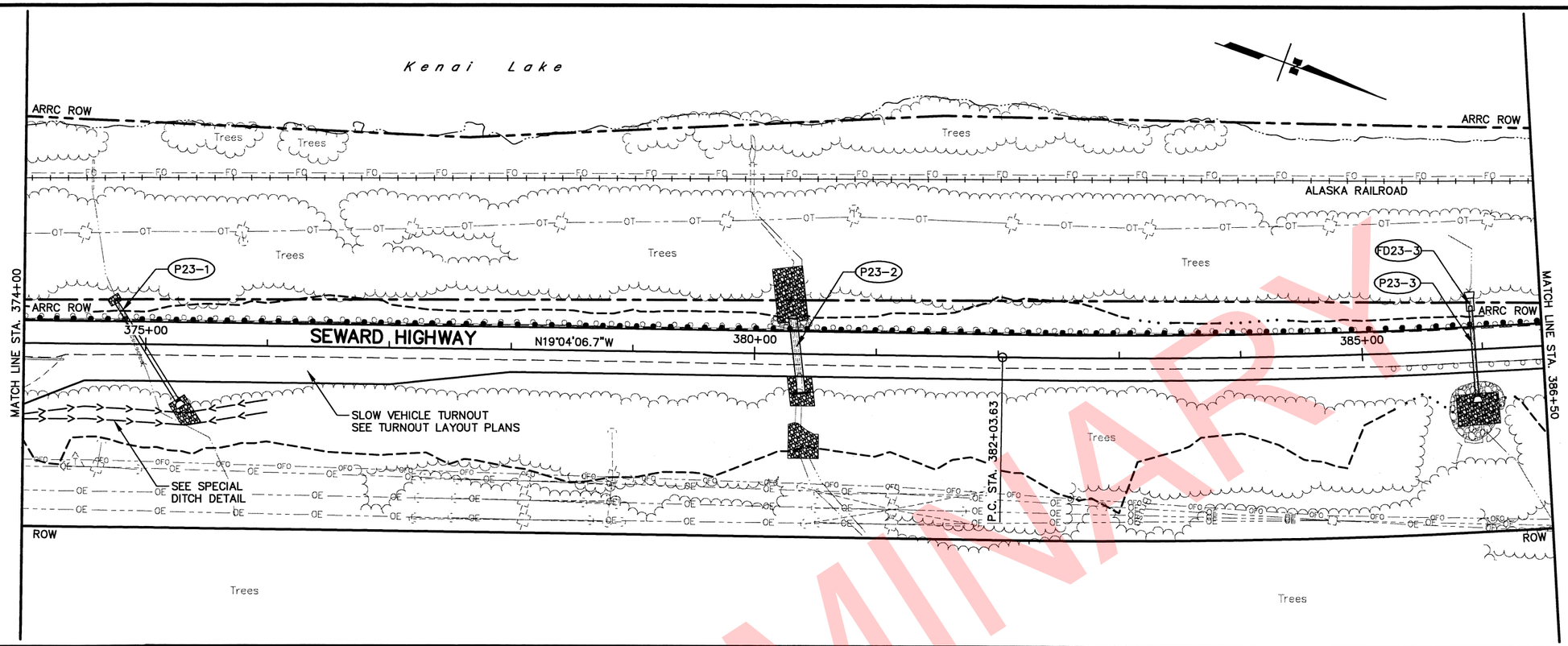
PLAN AND PROFILE
STA. 361+50 TO 374+00

DESIGNED BY	CML/KDS
CHECKED BY	KEK
DRAFTED BY	CML/VJS
SCALE	1" = 50'
LAYOUT	F22
DATE TIME	3/7/2018 7:35 PM

XREFS: XR-53610_Border_PenalP
XR-53610_Design_XR-53610_Base
XR-53610_ROW_XR-53610_Avalanche

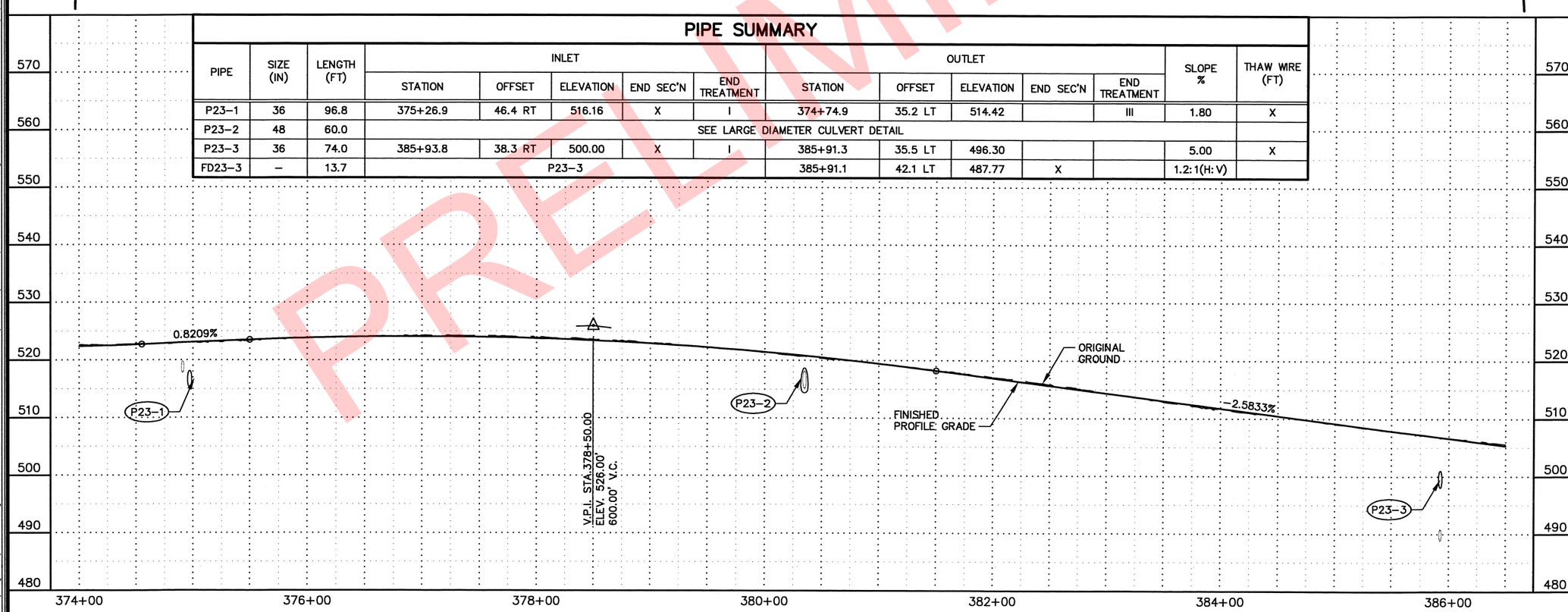
DRAWING LOCATION
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_F13-F24.dwg

PRELIMINARY



PIPE SUMMARY

PIPE	SIZE (IN)	LENGTH (FT)	INLET					OUTLET					SLOPE %	THAW WIRE (FT)
			STATION	OFFSET	ELEVATION	END SEC'N	END TREATMENT	STATION	OFFSET	ELEVATION	END SEC'N	END TREATMENT		
P23-1	36	96.8	375+26.9	46.4 RT	516.16	X	I	374+74.9	35.2 LT	514.42		III	1.80	X
P23-2	48	60.0	SEE LARGE DIAMETER CULVERT DETAIL											
P23-3	36	74.0	385+93.8	38.3 RT	500.00	X	I	385+91.3	35.5 LT	496.30			5.00	X
FD23-3	–	13.7	P23-3					385+91.1	42.1 LT	487.77	X		1.2:1(H:V)	



PRELIMINARY

SHEET NO.	TOTAL SHEETS
F23	F38
STATE	YEAR
ALASKA	2019

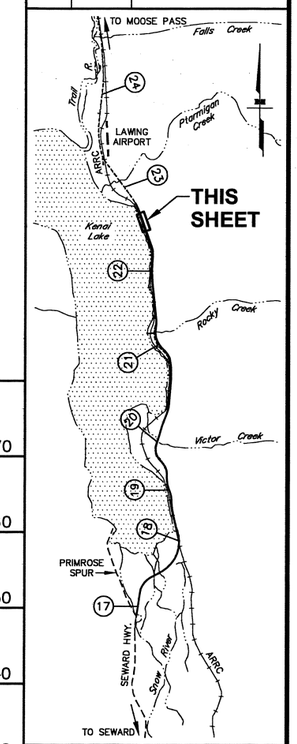
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:
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PS&E REVIEW

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

PLAN AND PROFILE
STA. 374+00 TO 386+50

DRAWING LOCATION	W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3016\Planset\53610_F13-F24.dwg
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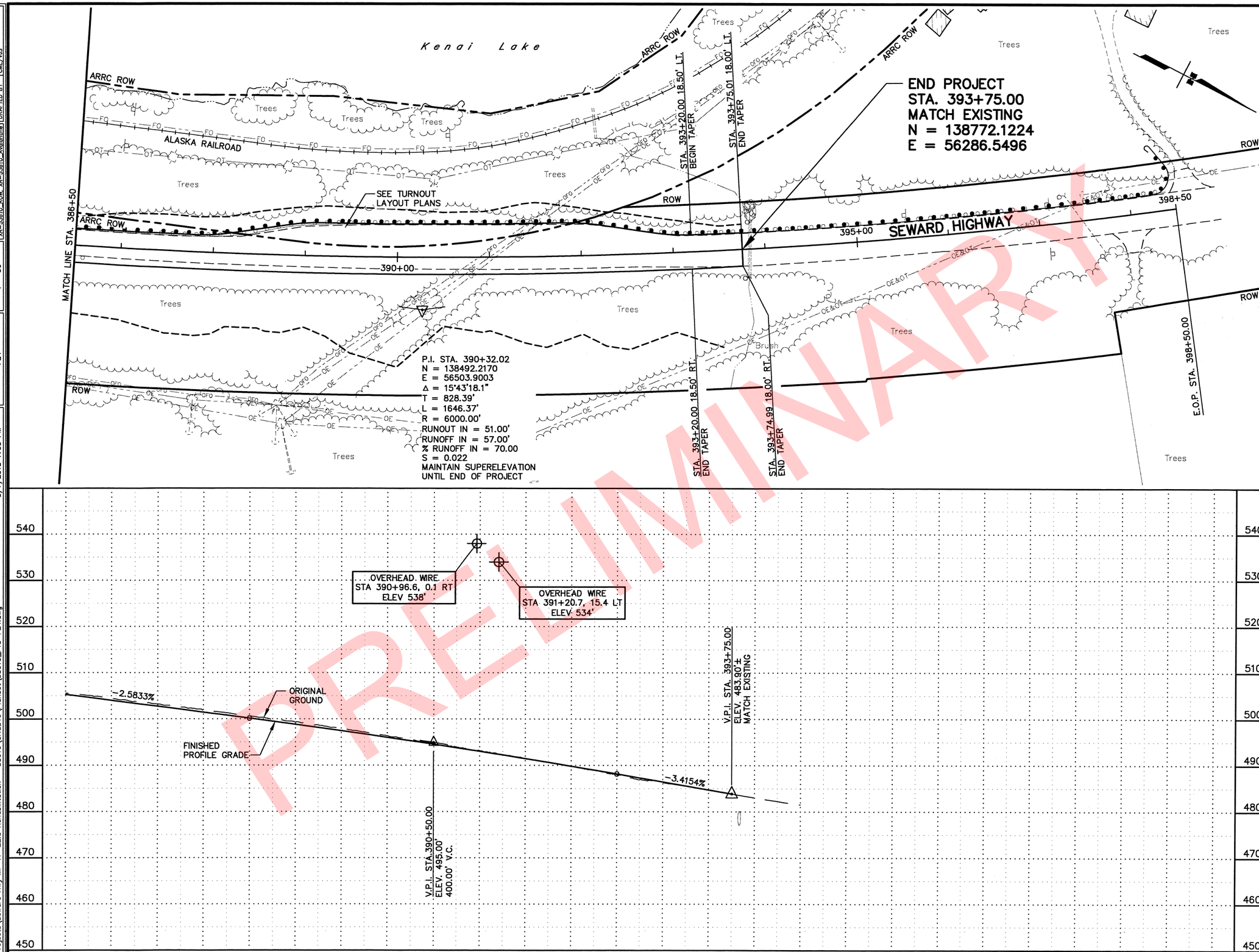
LAYOUT	F23
SCALE	1" = 50'
XREFS:	XR-53610_Border_PondP, XR-53610_Design, XR-53610_Base, XR-53610_ROW, XR-53610_Avalanche
DESIGNED BY	CML/KDS
CHECKED BY	KEK
DRAFTED BY	CML/VJS



SHEET NO.	TOTAL SHEETS
F24	F38
STATE	YEAR
ALASKA	2019

PROJECT DESIGNATION

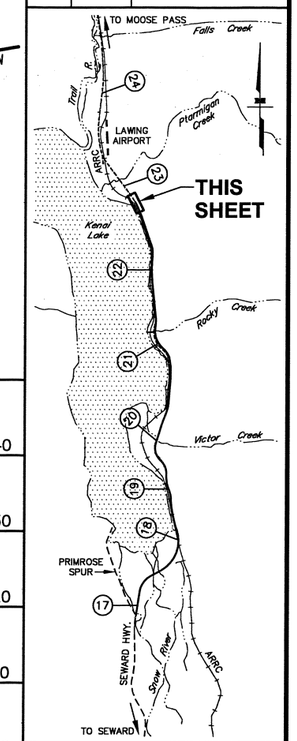
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:
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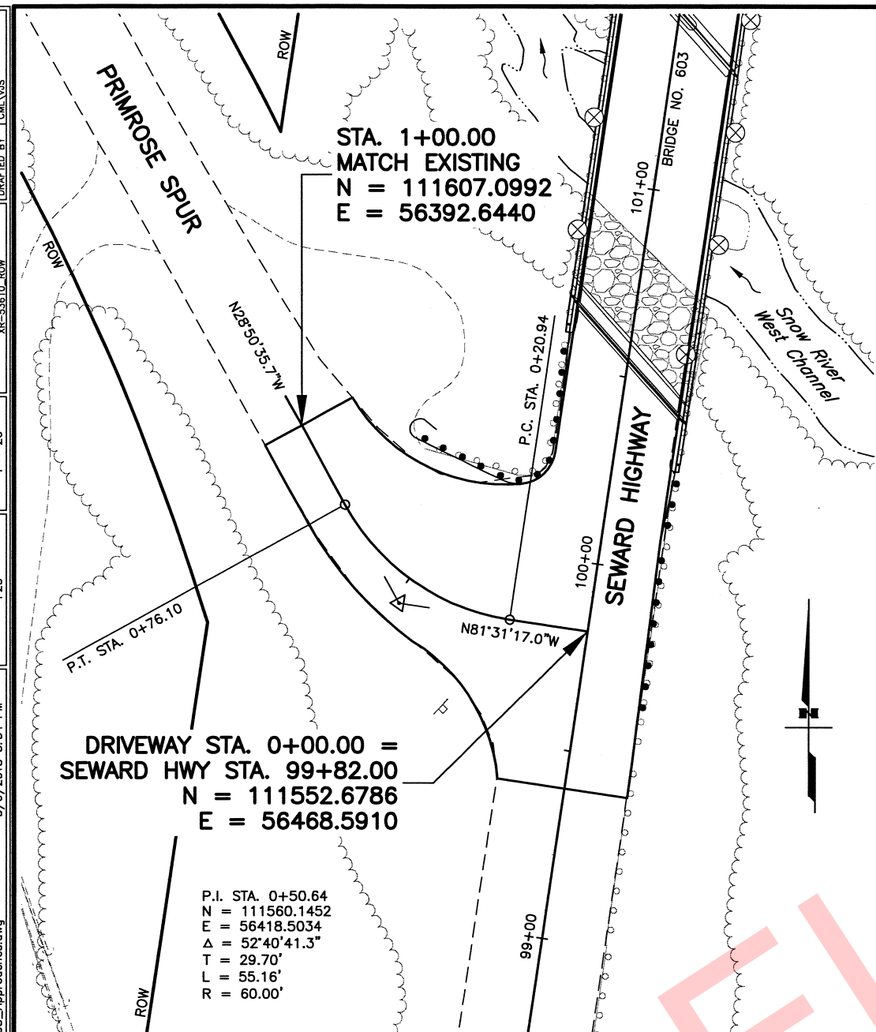
PS&E REVIEW

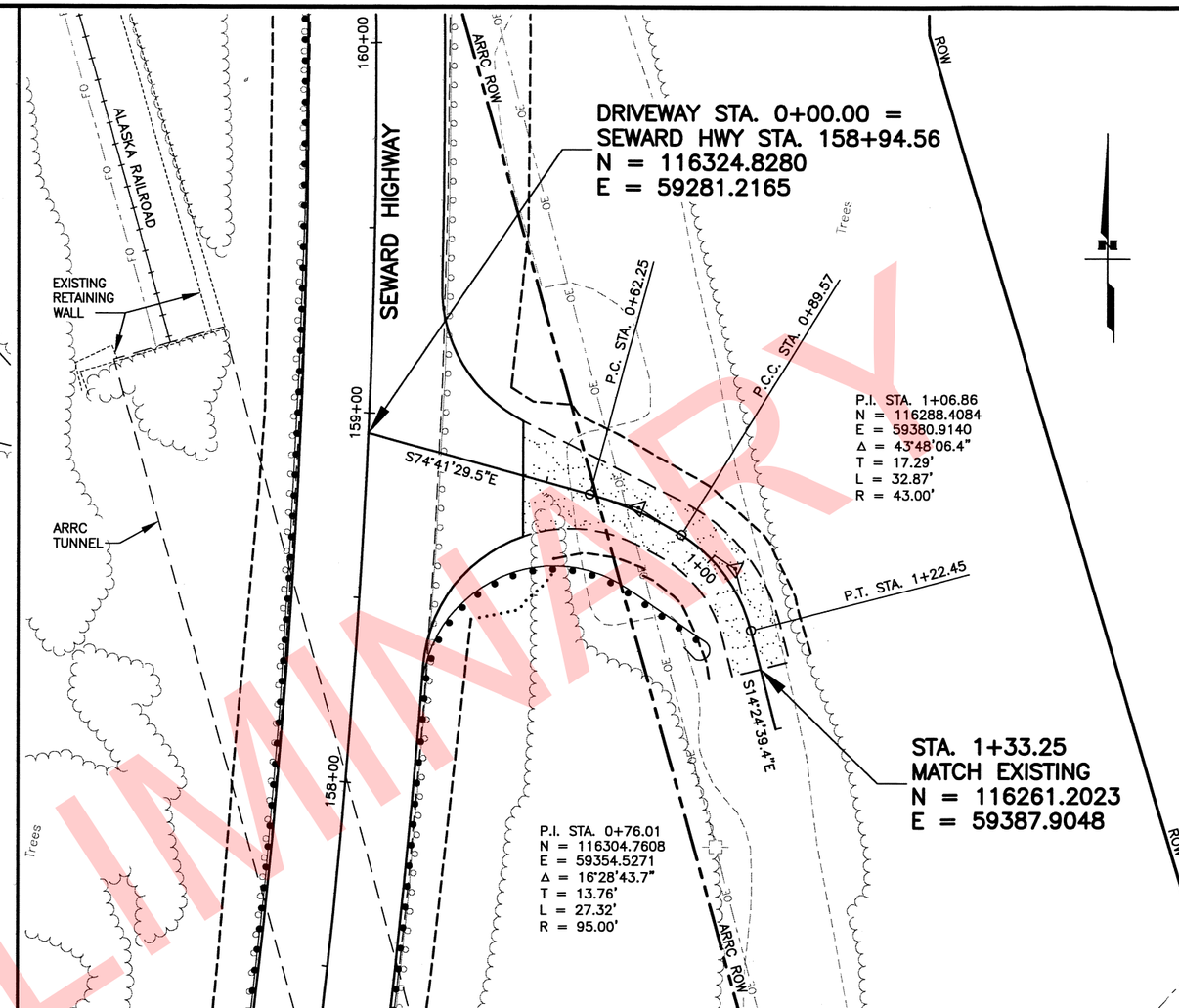
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

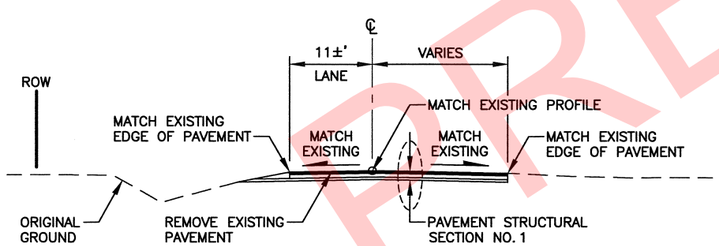
SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

PLAN AND PROFILE
STA. 386+50 TO E.O.P.

DRAWING LOCATION	W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_F13-F24.dwg
DATE TIME	3/7/2018 7:35 PM
LAYOUT	F24
SCALE	1" = 50'
XREFS:	XR-53610-Border_PondP, XR-53610_Base, XR-53610_Avalanche, XR-53610_ROW, XR-53610_Design
DESIGNED BY	CML/KDS
CHECKED BY	KEK
DRAFTED BY	CML/KJS

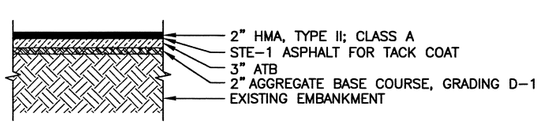




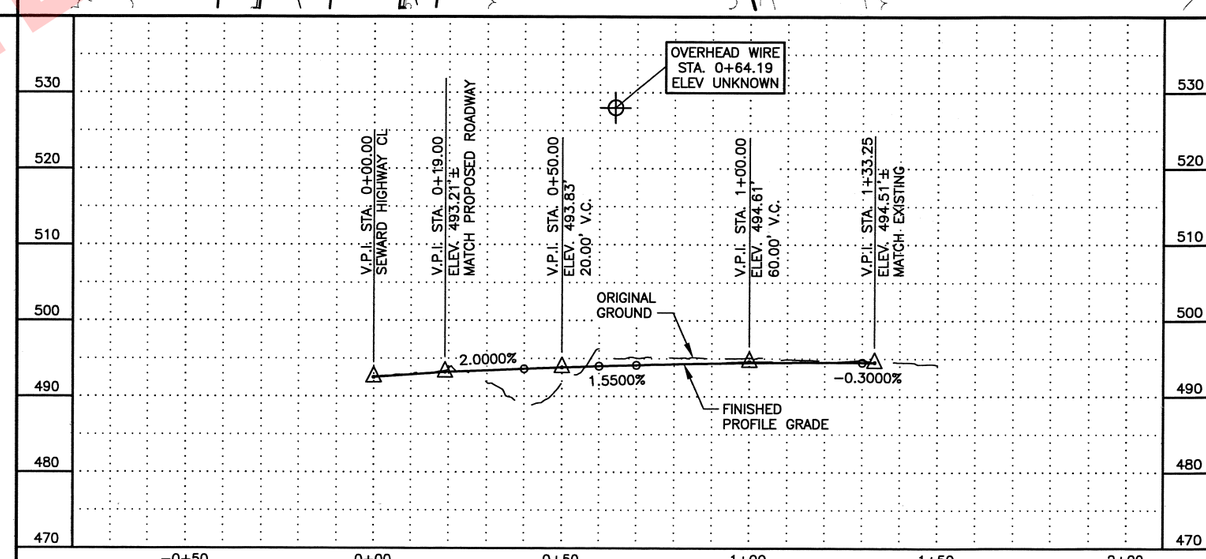


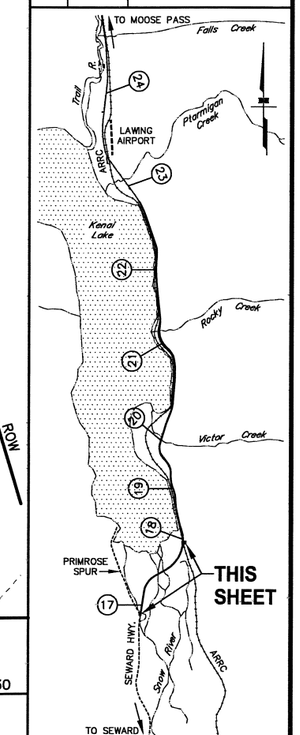
PRIMROSE SPUR

STA. 0+00 TO STA. 1+00



PAVEMENT STRUCTURAL SECTION NO. 1





SHEET NO.	TOTAL SHEETS
F25	F38
STATE	YEAR
ALASKA	2019

PROJECT DESIGNATION

311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION

PLANS DEVELOPED BY:
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

PS&E REVIEW

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION
PLAN AND PROFILE
PRIMROSE SPUR
DRIVEWAY AT 158+94.56 RT

DATE	TIME	LAYOUT	SCALE	XREFS: XR-53610-Border_PlanGP XR-53610_Design_ XR-53610_Base XR-53510_ROW	DESIGNED BY	CML\VGS\ZDK
3/6/2018	3:54 PM	F25	1= 20'		CHECKED BY	KEK
					DRAFTED BY	CML\VJS

DRAWING LOCATION
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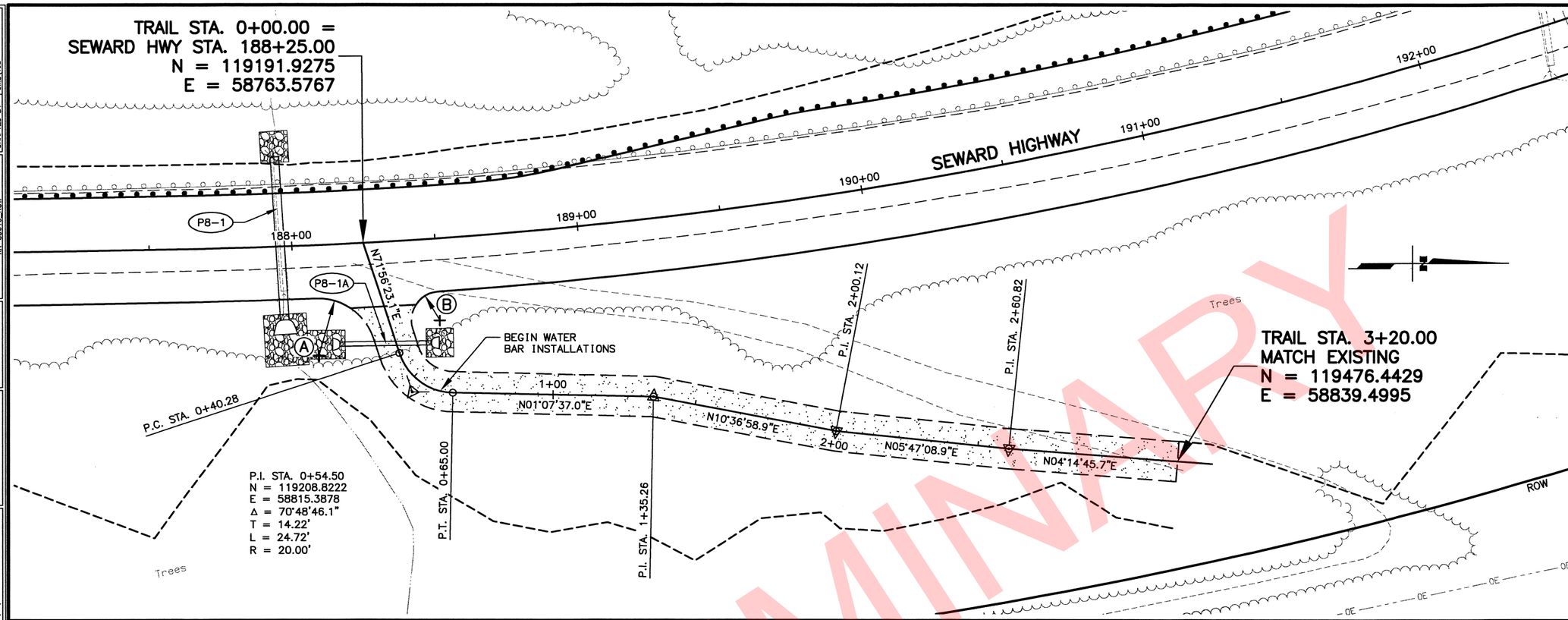
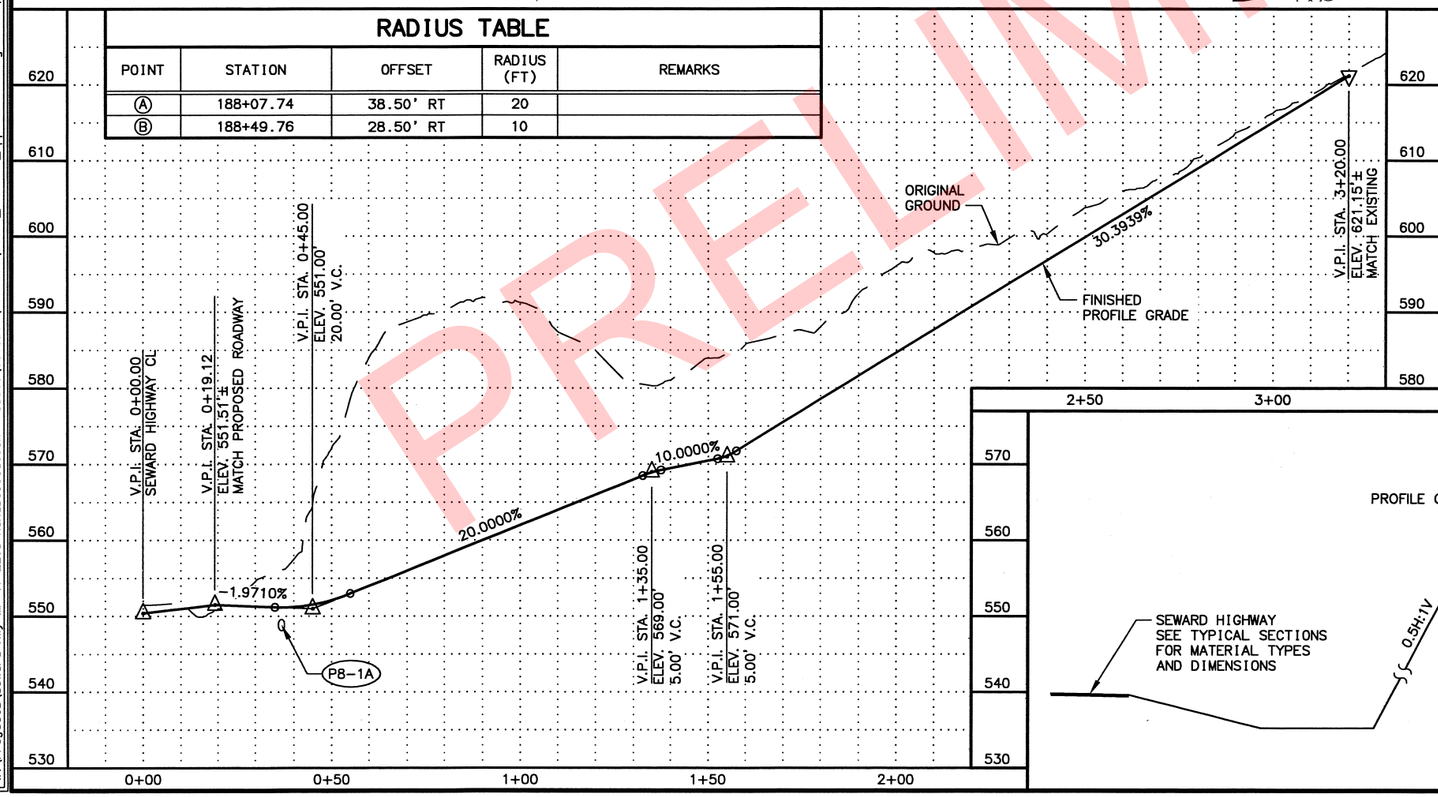
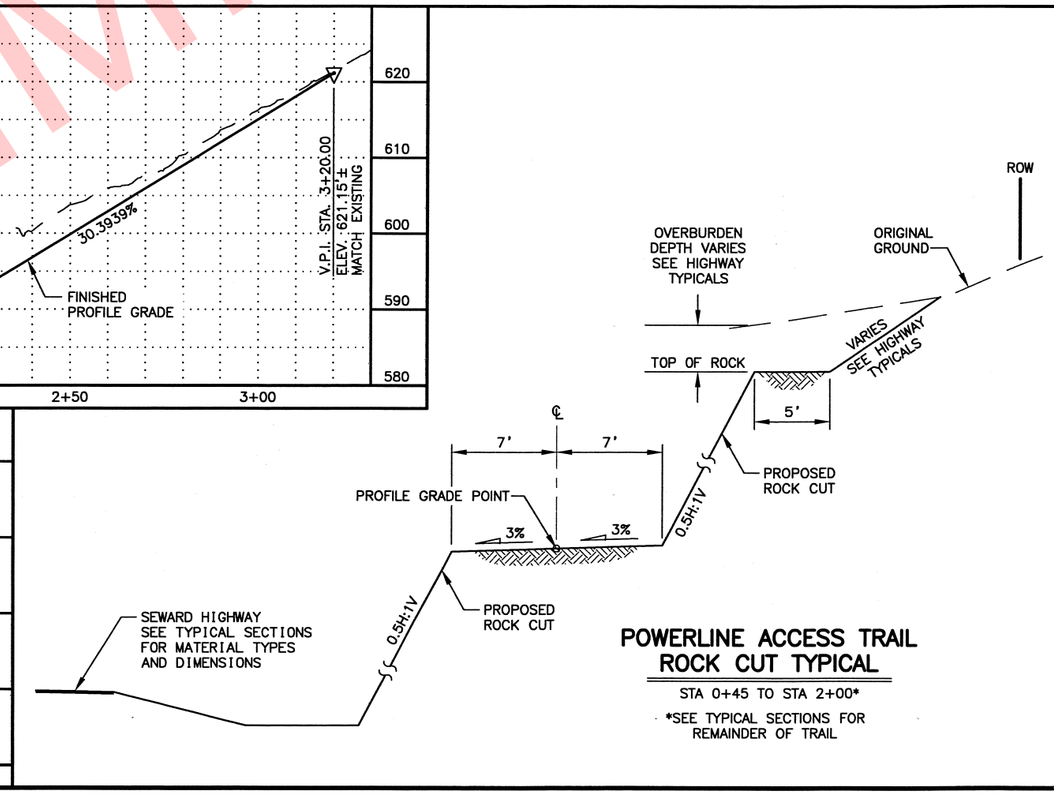
PRELIMINARY



RADIUS TABLE

POINT	STATION	OFFSET	RADIUS (FT)	REMARKS
A	188+07.74	38.50' RT	20	
B	188+49.76	28.50' RT	10	





POWERLINE ACCESS TRAIL
ROCK CUT TYPICAL

STA 0+45 TO STA 2+00*

*SEE TYPICAL SECTIONS FOR REMAINDER OF TRAIL

SHEET NO.	TOTAL SHEETS
F26	F38
STATE	YEAR
ALASKA	2019

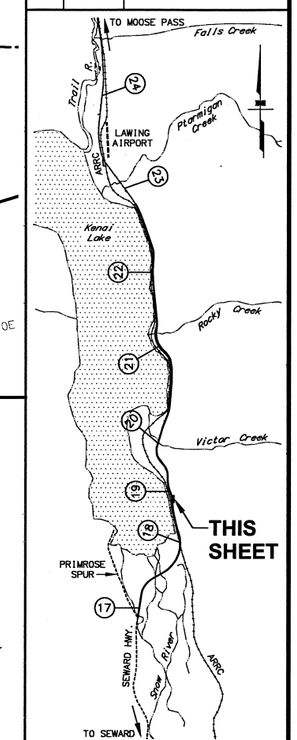
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

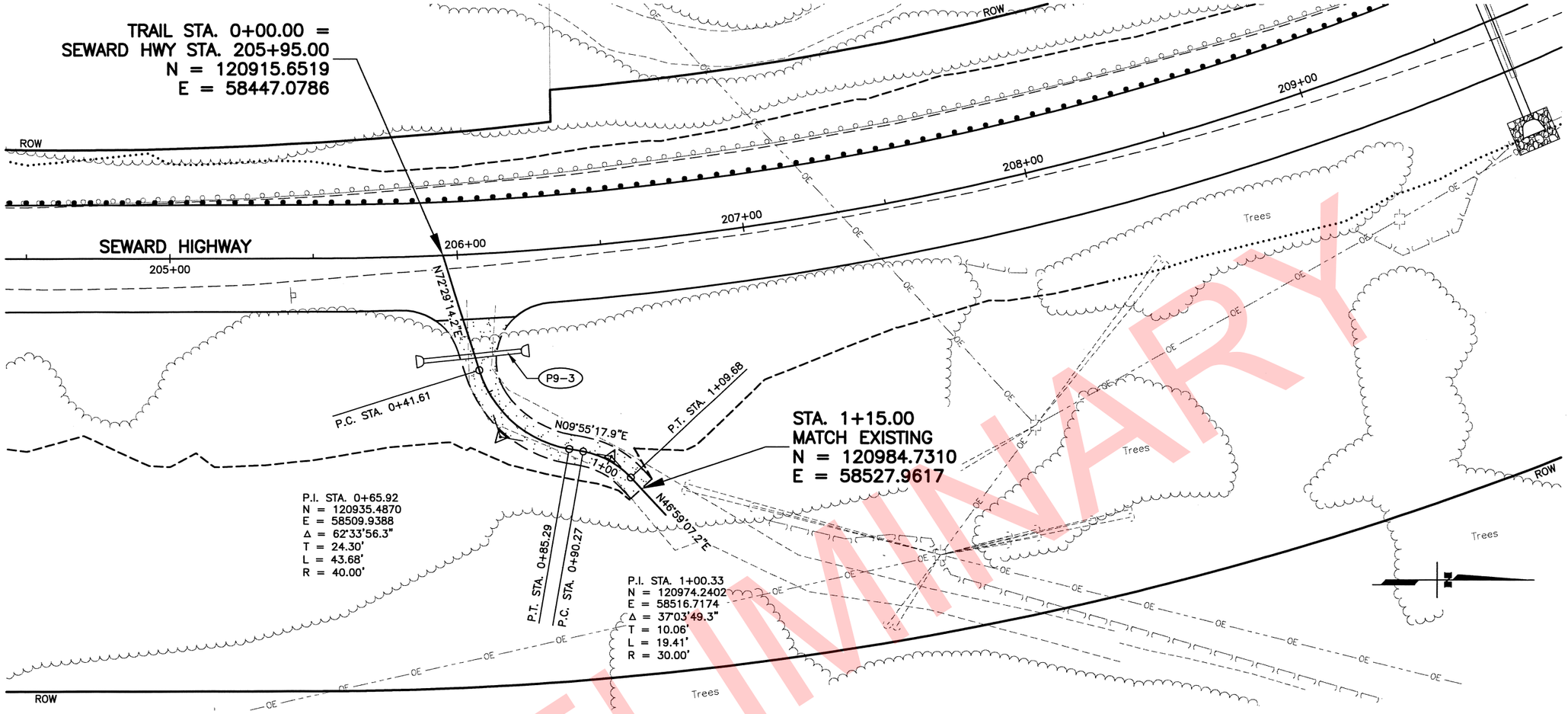
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

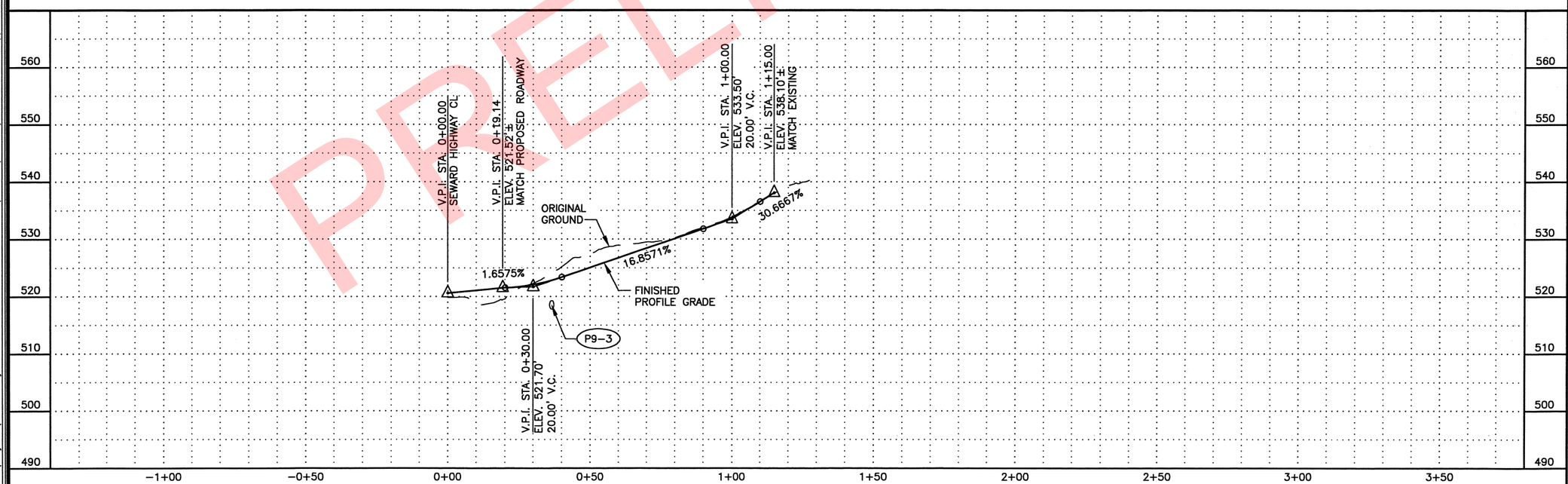
SEWARD HIGHWAY
MP 17-22.5
REHABILITATION
PLAN AND PROFILE
POWERLINE ACCESS TRAIL
AT STA. 188+25 RT

PRELIMINARY
PS&E REVIEW

DRAWING LOCATION
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3016\Planset\53610_F25-F38_Approaches.dwg

DATE TIME 3/8/2018 9:22 AM
LAYOUT F26
SCALE 1"= 20'
XREFS: XR-53610-Border_PortP XR-53610_Design, XR-53610_Base, XR-53610_ROW
DESIGNED BY CML\CGS\ZDK
CHECKED BY KEK
DRAFTED BY CML\VJS





PRELIMINARY

SHEET NO.	TOTAL SHEETS
F27	F38
STATE	YEAR
ALASKA	2019

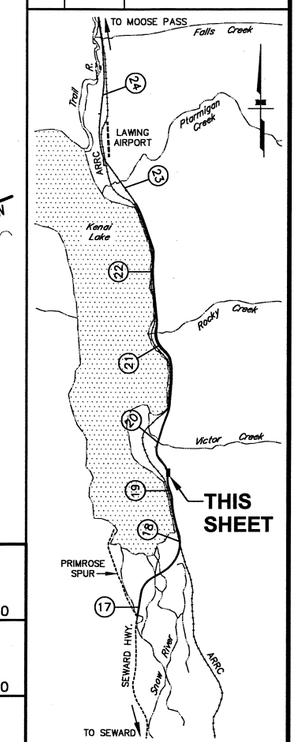
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:
STATE OF ALASKA
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4111 AVIATION AVENUE
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PS&E REVIEW

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

PLAN AND PROFILE
POWERLINE ACCESS TRAIL
AT STA. 205+95 RT

DESIGNED BY	CML\KDS\ZDK
CHECKED BY	KEK
DRAFTED BY	CML\VJS

XREFS: XR-53610-Border_Pend0
XR-53610_Design, XR-53610_Base,
XR-53610_ROW

SCALE	LAYOUT	DATE	TIME
1" = 20'	F27	3/6/2018	3:54 PM

DRAWING LOCATION
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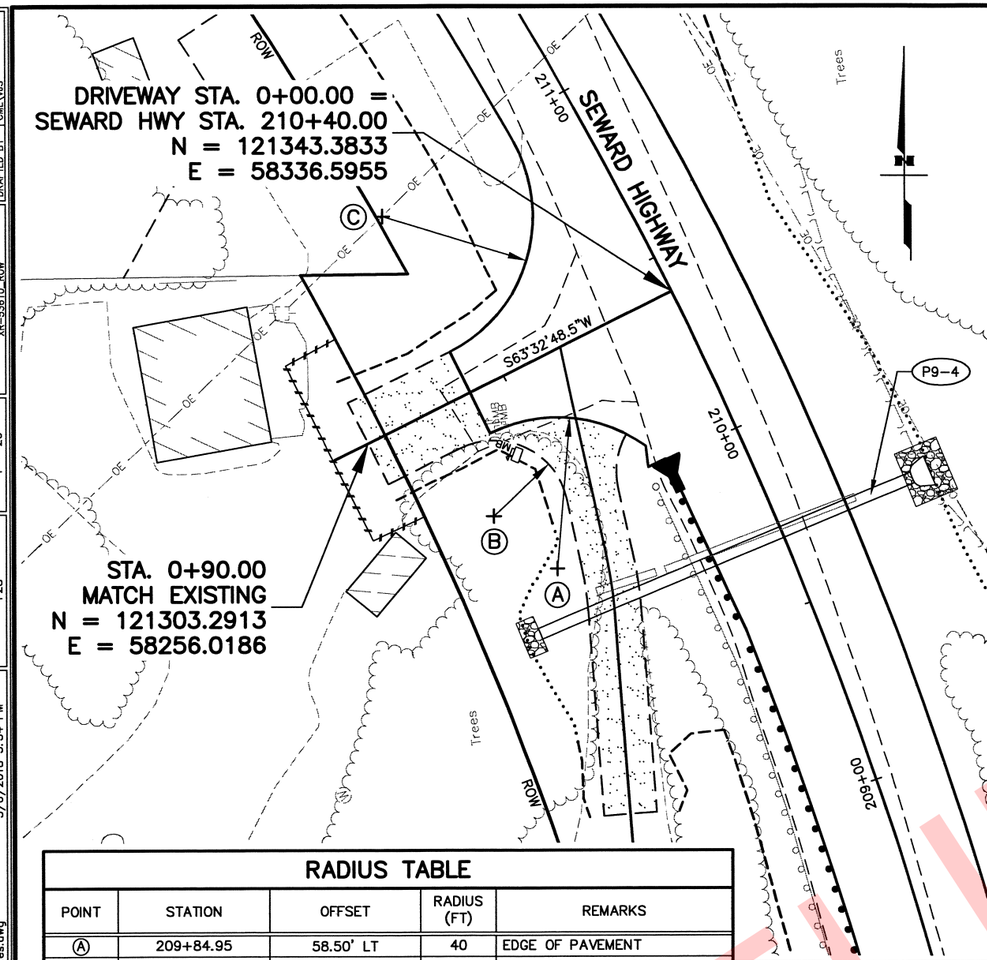
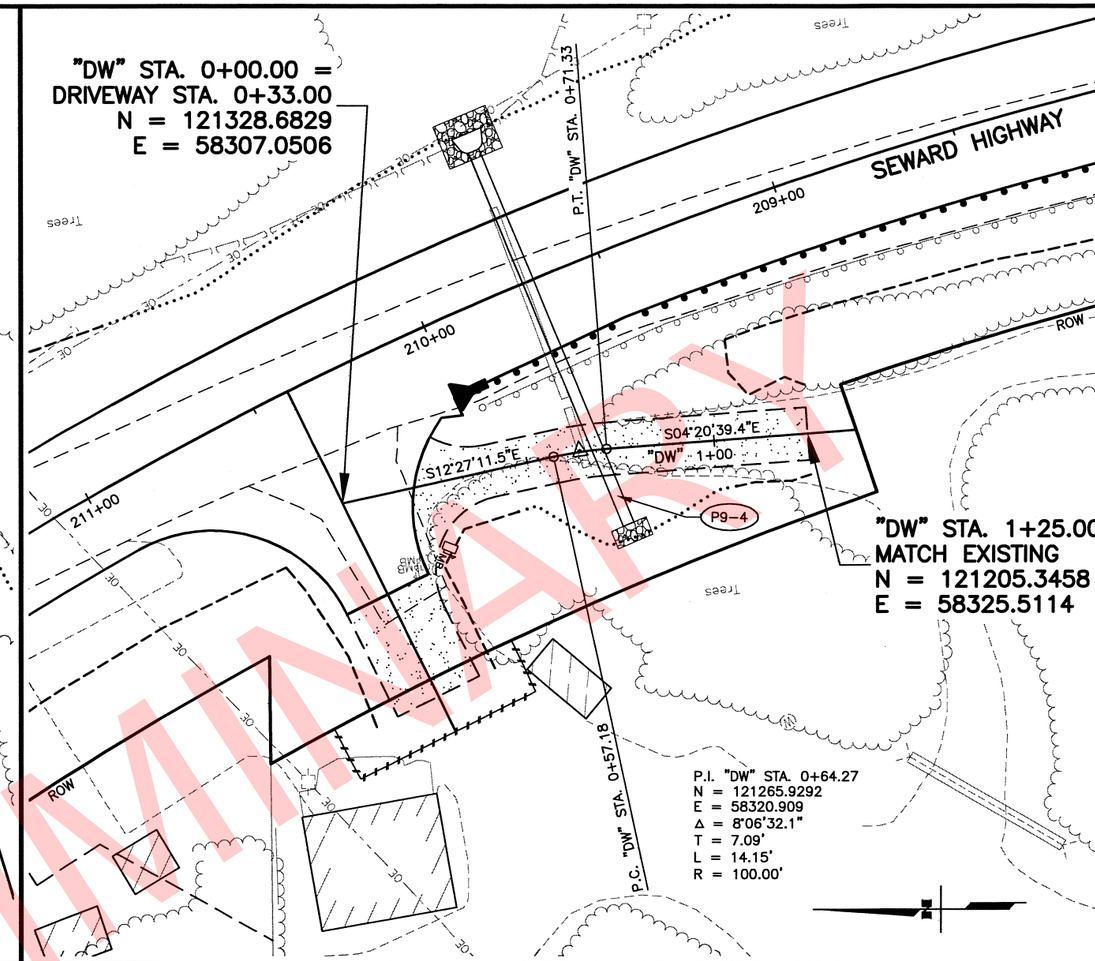
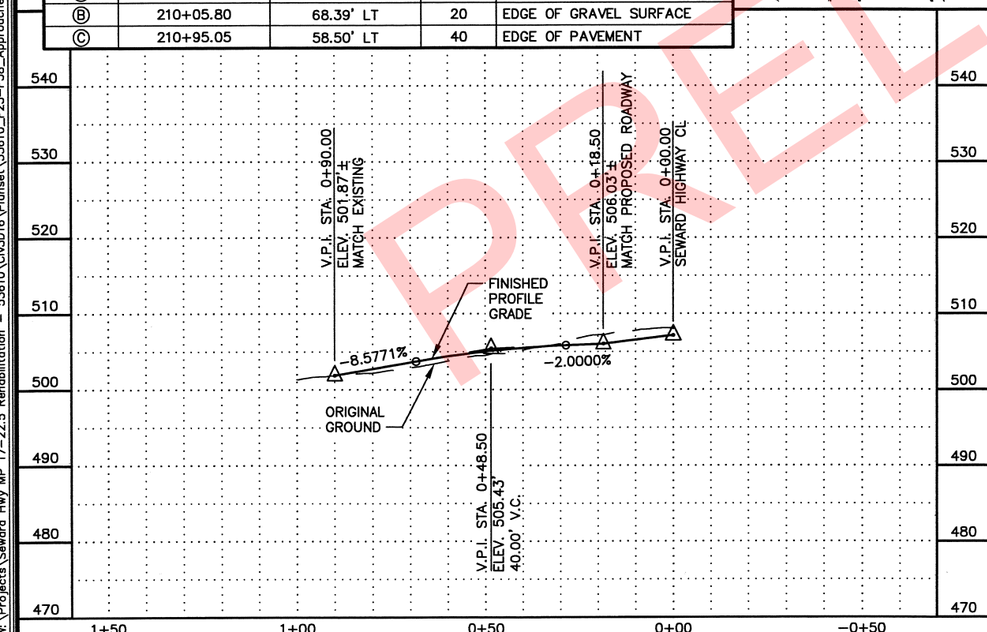
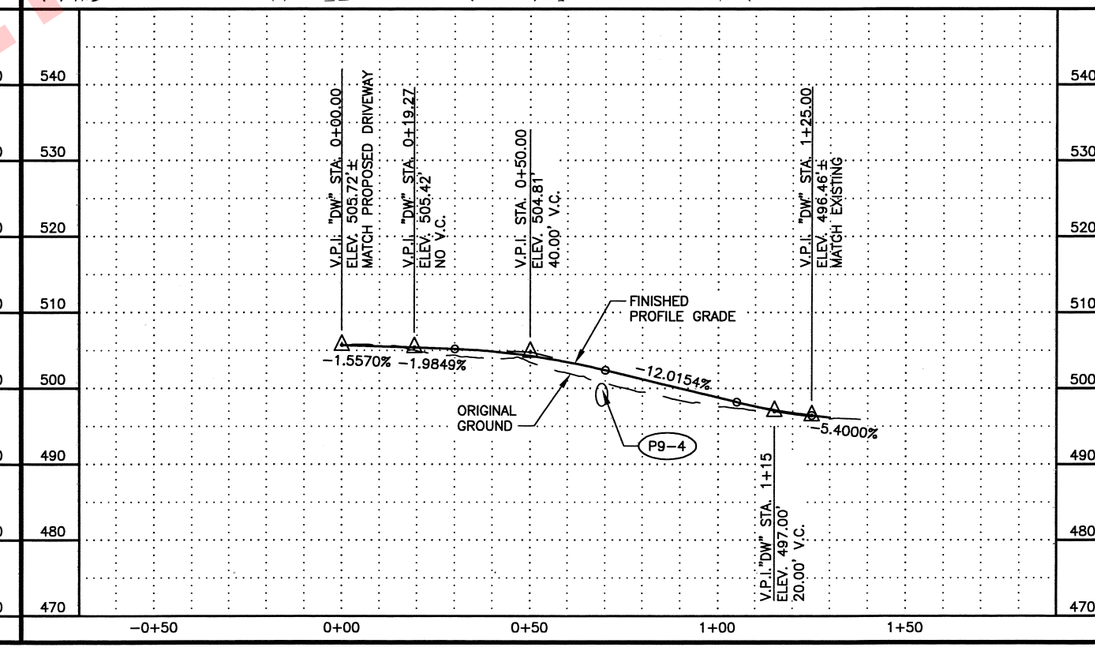


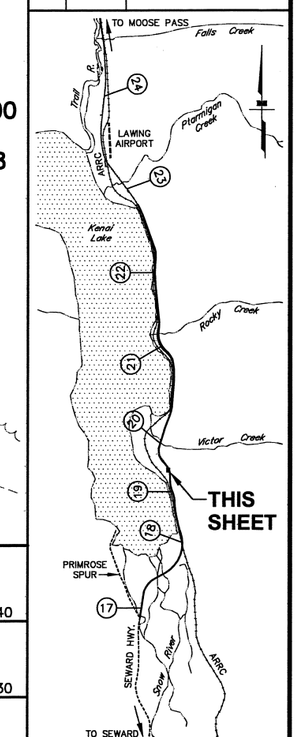


RADIUS TABLE

POINT	STATION	OFFSET	RADIUS (FT)	REMARKS
Ⓐ	209+84.95	58.50' LT	40	EDGE OF PAVEMENT
Ⓑ	210+05.80	68.39' LT	20	EDGE OF GRAVEL SURFACE
Ⓒ	210+95.05	58.50' LT	40	EDGE OF PAVEMENT







PLANS DEVELOPED BY:
STATE OF ALASKA
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4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
KRISTIN KEK
PROFESSIONAL ENGINEER
PS&E REVIEW

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION
PLAN AND PROFILE
DRIVEWAY AT 210+40 LT
"DW" AT 210+40 LT

SHEET NO.	TOTAL SHEETS
F28	F38
STATE	YEAR
ALASKA	2019

PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION

DESIGNED BY	CML\CDS\ZDK
CHECKED BY	KEK
DRAFTED BY	CML\VJS

XREFS: XR-53610-Border_PondP
XR-53610_Design, XR-53610_Base,
XR-53610_ROW

SCALE 1" = 20'

LAYOUT F28

DATE TIME 3/6/2018 3:54 PM

DRAWING LOCATION
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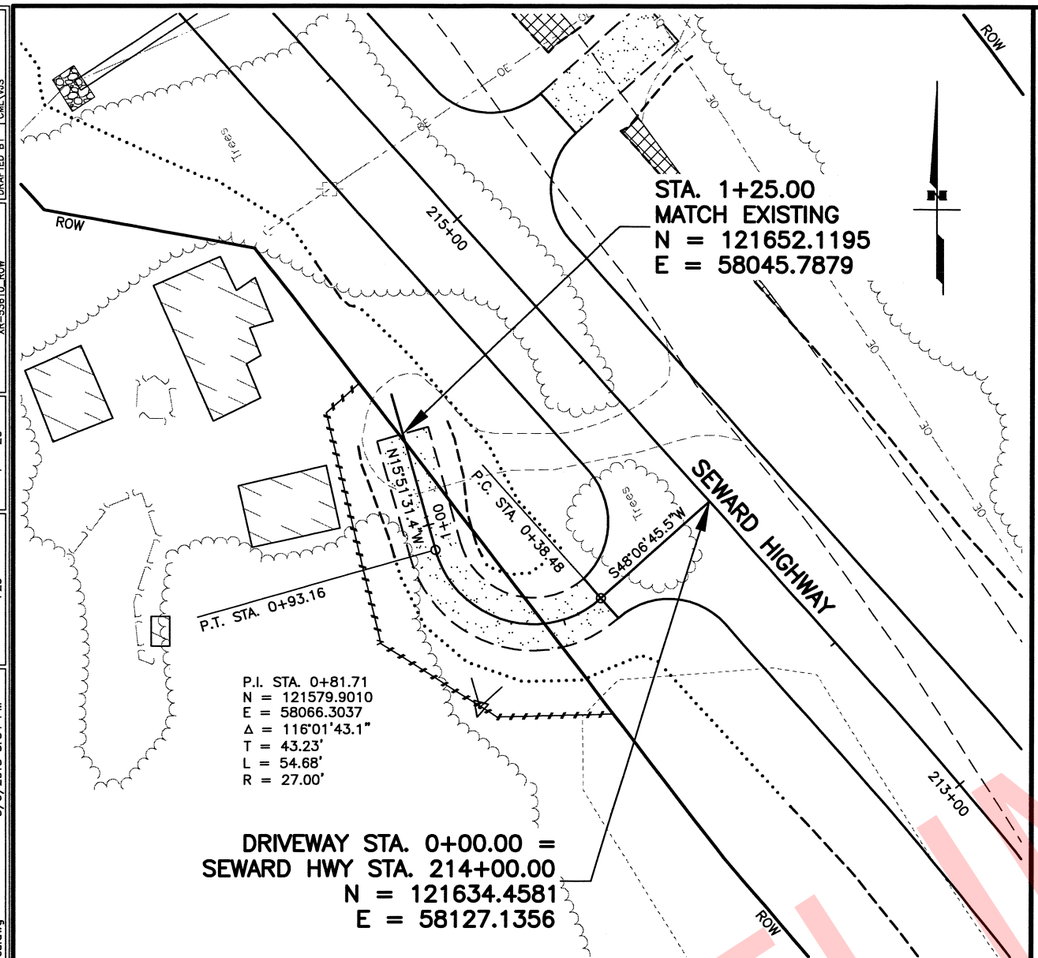
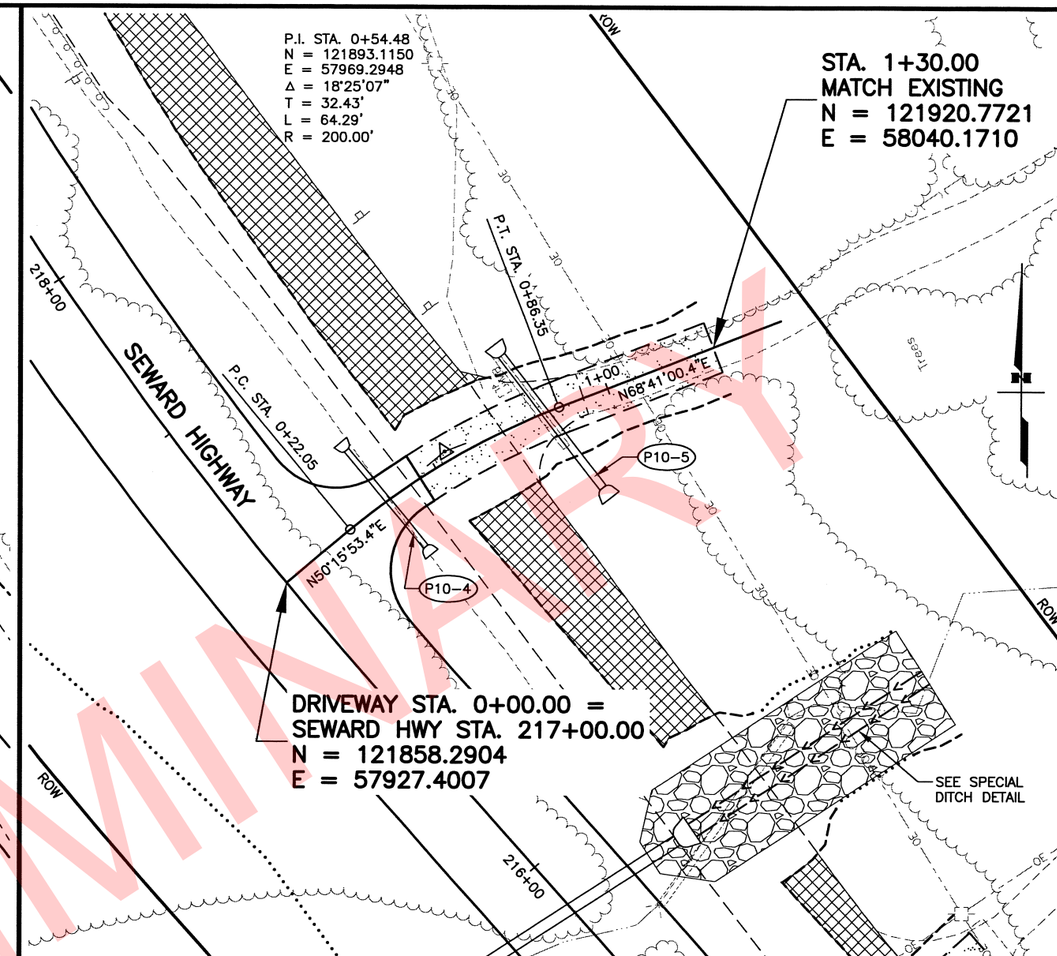
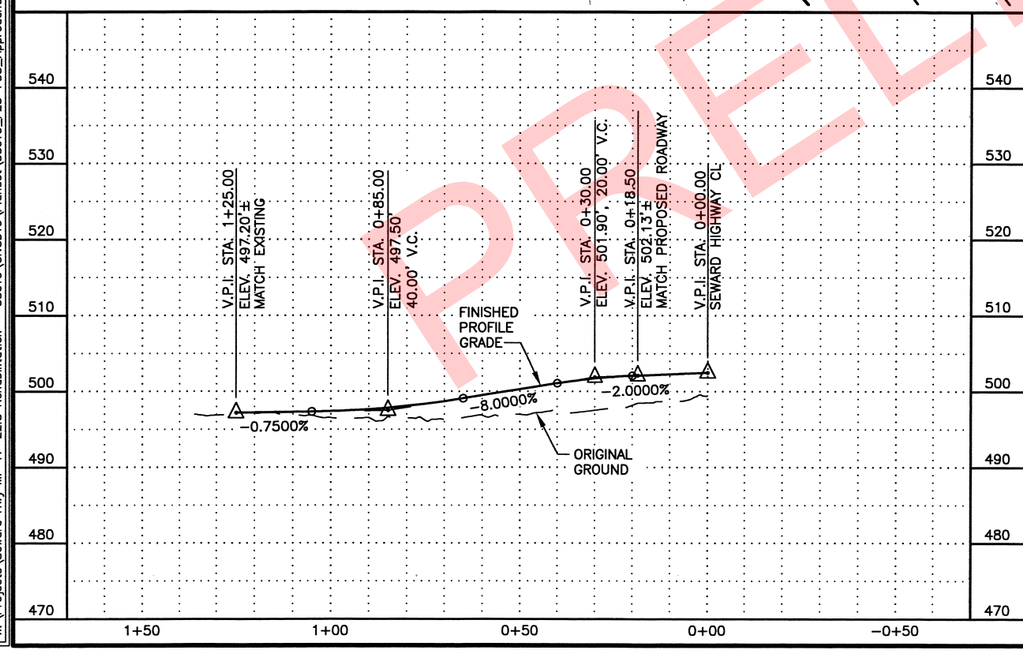
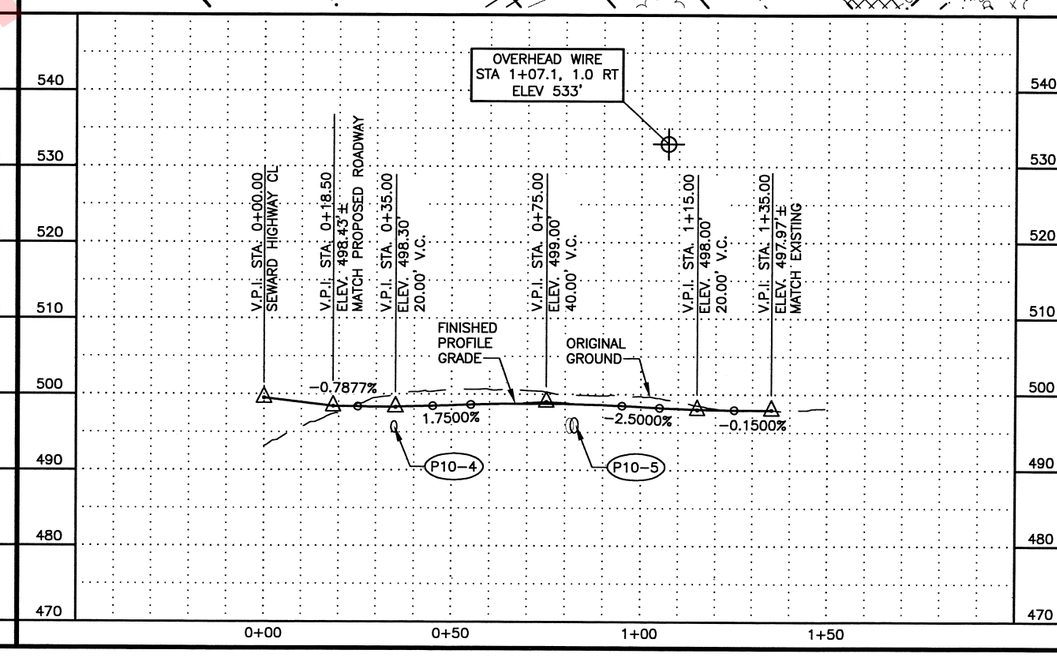
PRELIMINARY









SHEET NO.	TOTAL SHEETS
F29	F38
STATE	YEAR
ALASKA	2019

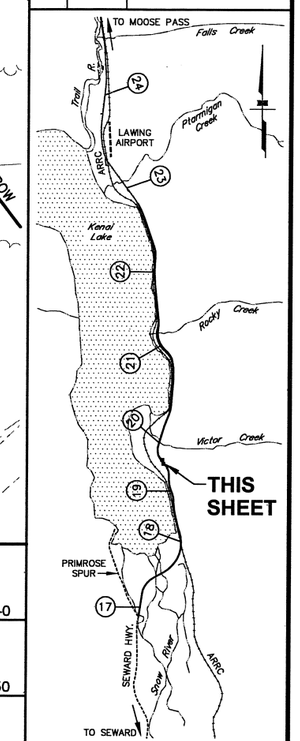
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

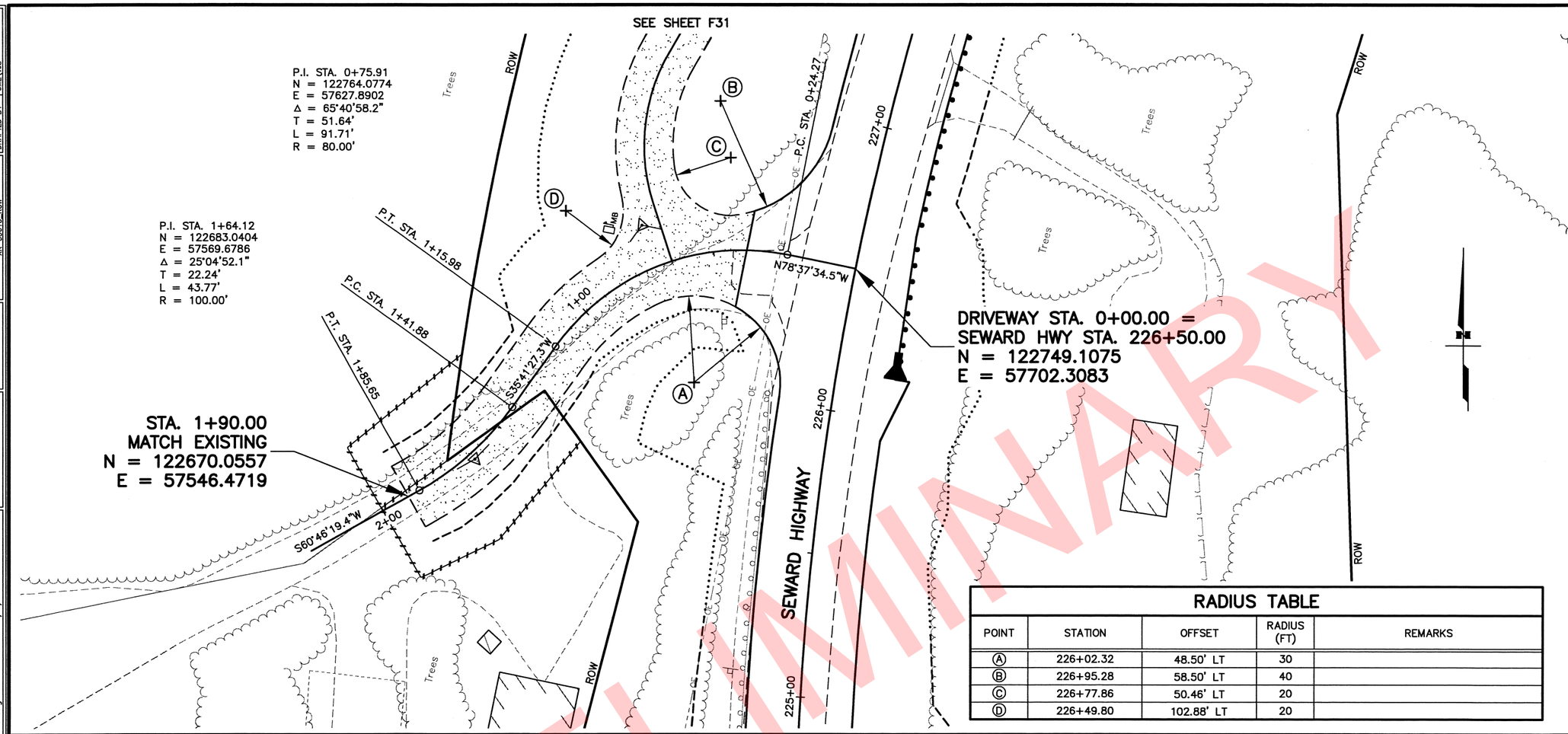
PLAN AND PROFILE
DRIVEWAY AT 214+00 LT
DRIVEWAY AT 217+00 RT

PS&E REVIEW

PRELIMINARY

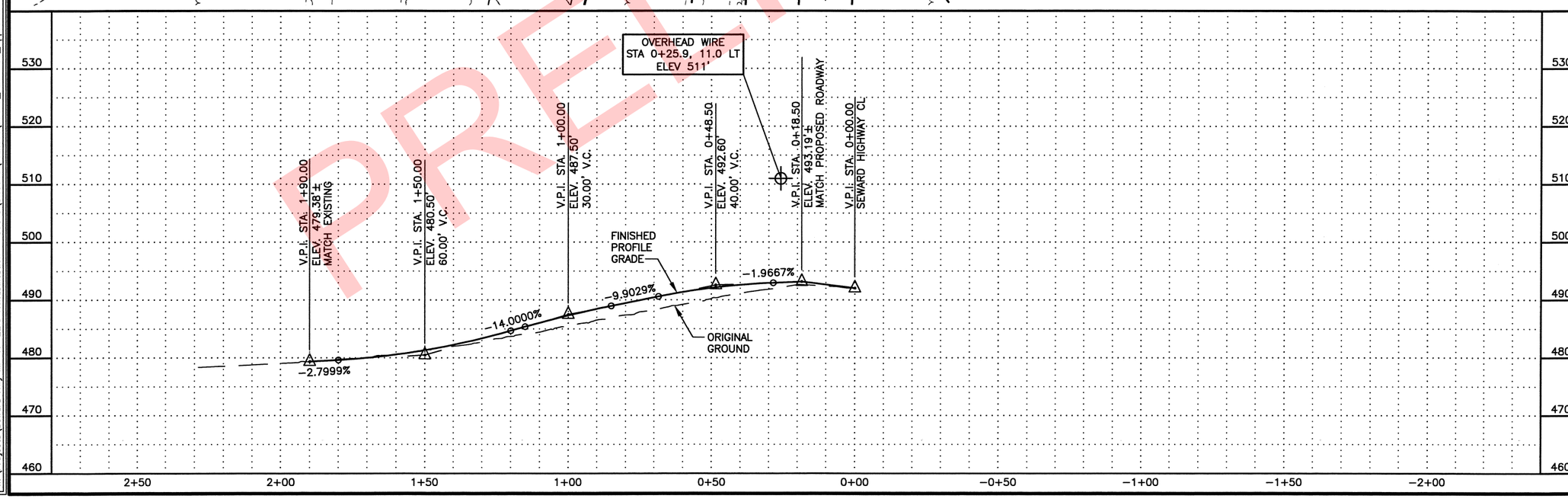
DATE	TIME	LAYOUT	SCALE	XREFS: XR-53610-Border_PondP, XR-53610_Design, XR-53610_Base, XR-53610_ROW	DESIGNED BY	CML\KDS\ZDK
3/6/2018	3:54 PM	F29	1"= 20'		CHECKED BY	KEK
					DRAFTED BY	CML\VJS

DRAWING LOCATION
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3016\Planset\53610_F25-F38_Approaches.dwg



RADIUS TABLE

POINT	STATION	OFFSET	RADIUS (FT)	REMARKS
A	226+02.32	48.50' LT	30	
B	226+95.28	58.50' LT	40	
C	226+77.86	50.46' LT	20	
D	226+49.80	102.88' LT	20	



SHEET NO.	TOTAL SHEETS
F30	F38
STATE	YEAR
ALASKA	2019

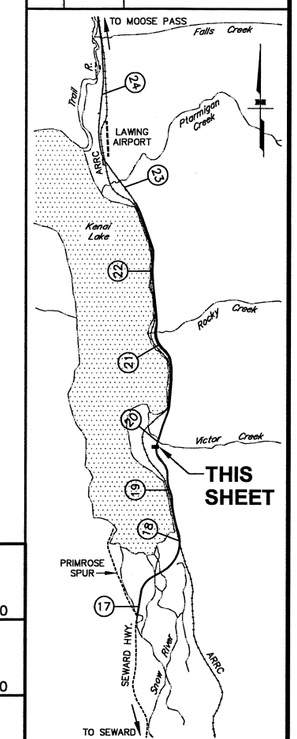
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:
STATE OF ALASKA
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AND PUBLIC FACILITIES
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
KRISTOPHER J. MICHEL
PROFESSIONAL ENGINEER
PSSE REVIEW

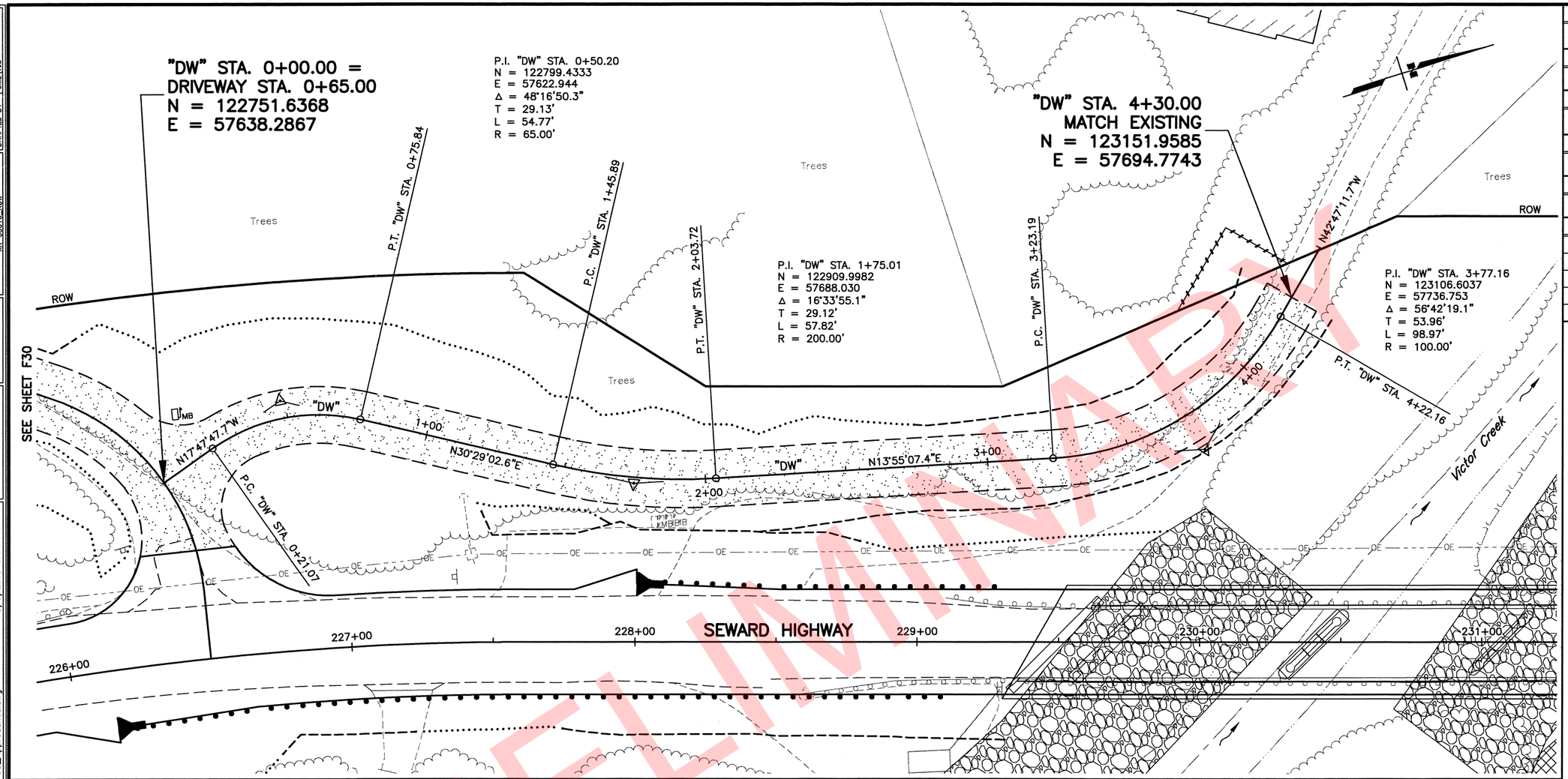
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

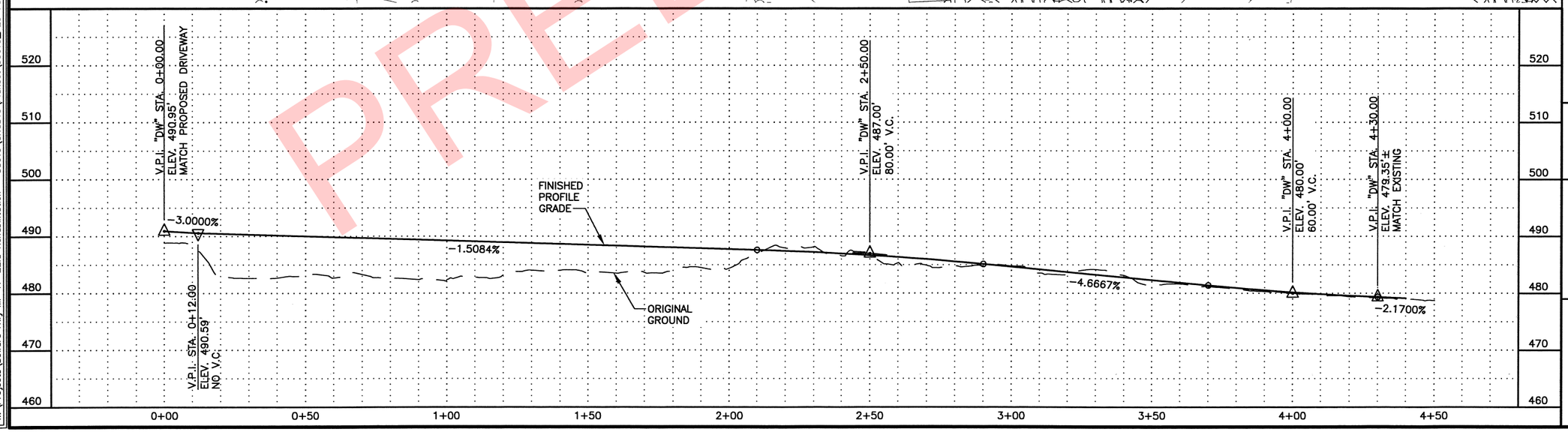
SEWARD HIGHWAY
MP 17–22.5
REHABILITATION

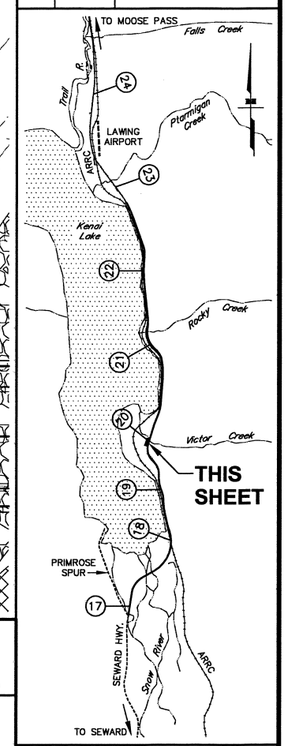
PLAN AND PROFILE
DRIVEWAY AT 226+50 LT

PRELIMINARY

DRAWING LOCATION	DATE TIME	LAYOUT	SCALE	XREFS: XR-53610-Border_PondP, XR-53610_Design, XR-53610_Base, XR-53610_ROW	DESIGNED BY CML\KGS\ZDK	CHECKED BY KEK	DRAFTED BY CML\VJS
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_F25-F38_Approaches.dwg	3/6/2018 3:54 PM	F30	1"= 20'				







SHEET NO.	TOTAL SHEETS
F31	F38
STATE	YEAR
ALASKA	2019

PROJECT DESIGNATION

311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION

PLANS DEVELOPED BY:
STATE OF ALASKA
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AND PUBLIC FACILITIES
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

PS&E REVIEW

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

PLAN AND PROFILE
"DW" AT 226+40 LT

PRELIMINARY

DRAWING LOCATION	SCALE	LAYOUT	DATE	TIME
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3016\Planset\53610_F25-F38_Approaches.dwg	1"= 20'	F31	3/6/2018	3:54 PM

XREFS: XR-53610-Border_PondP, XR-53610_Design, XR-53610_Base, XR-53610_ROW

DESIGNED BY	CML\VDS\ZDK
CHECKED BY	KEK
DRAFTED BY	CML\VJS

SHEET NO.	TOTAL SHEETS
F32	F38
STATE	YEAR
ALASKA	2019

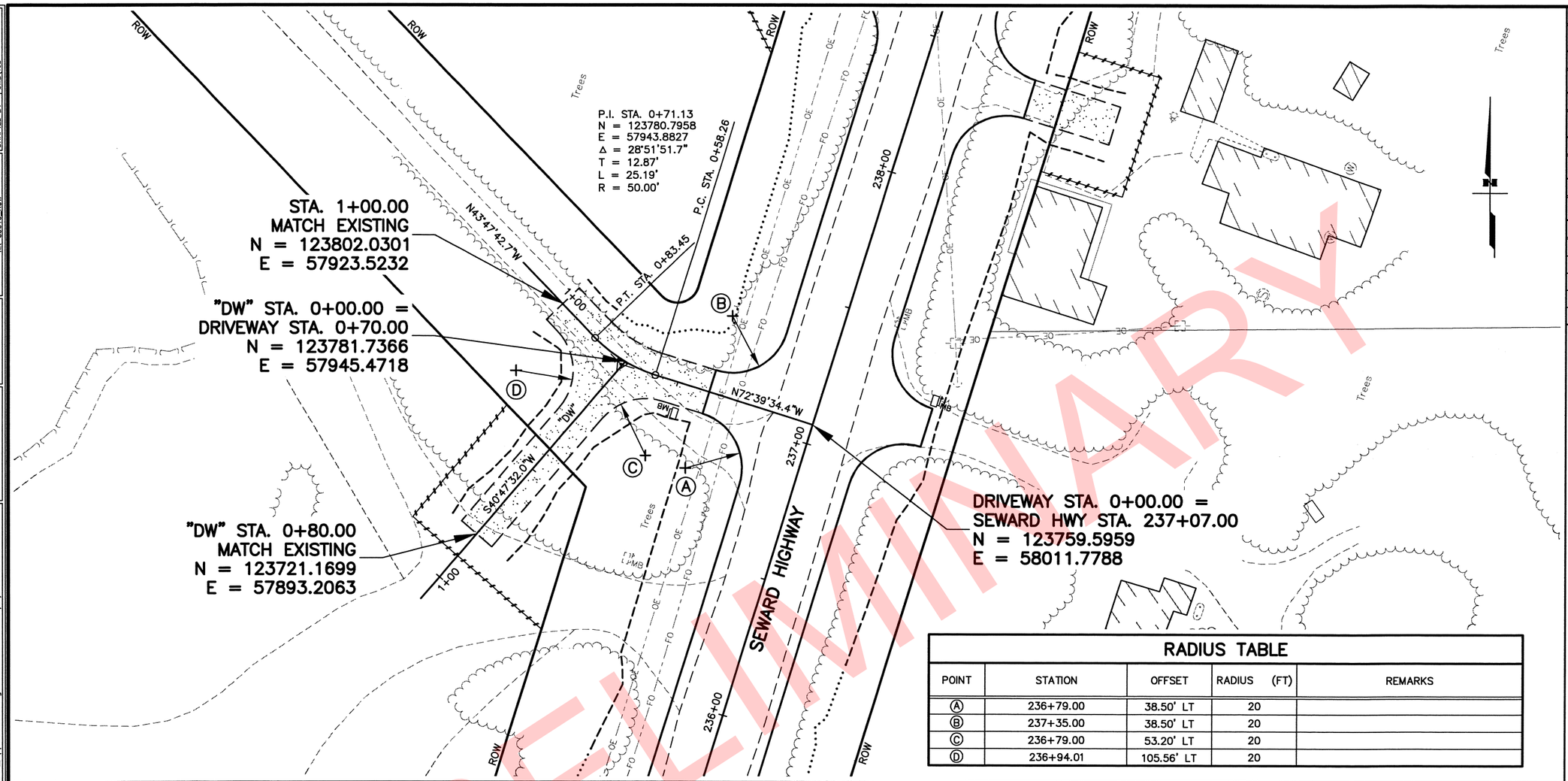
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

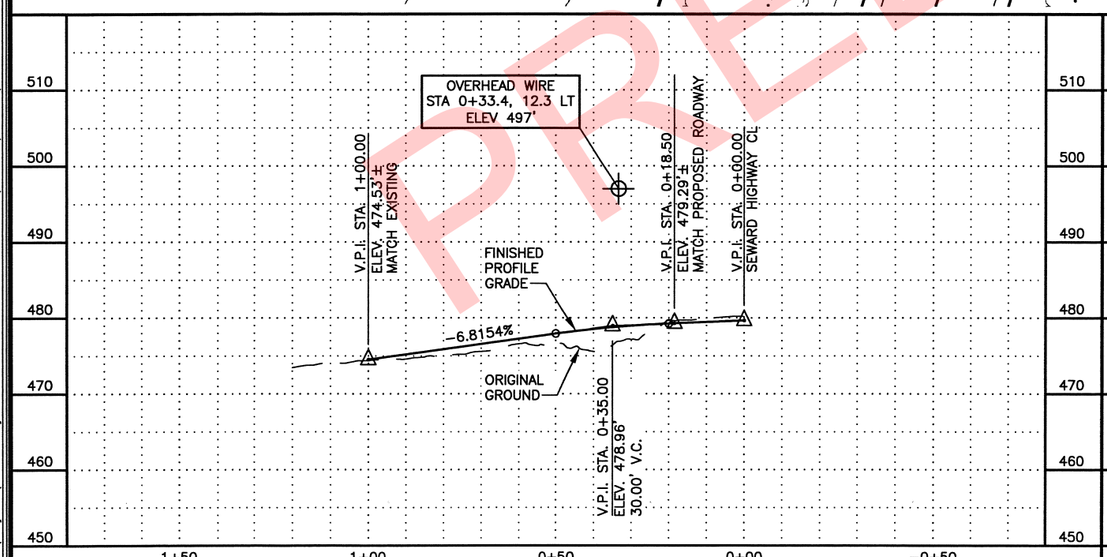
REVISIONS

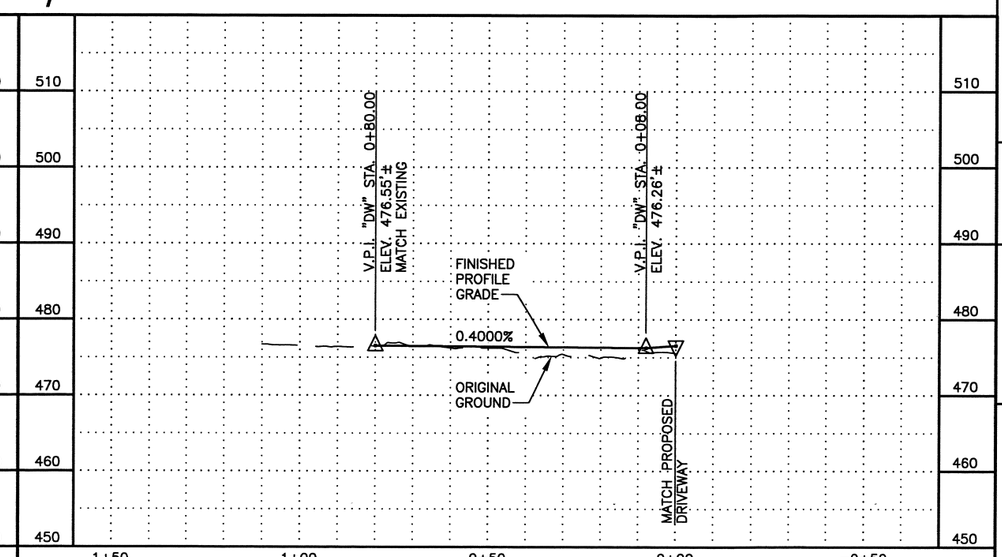
NO.	DATE	DESCRIPTION

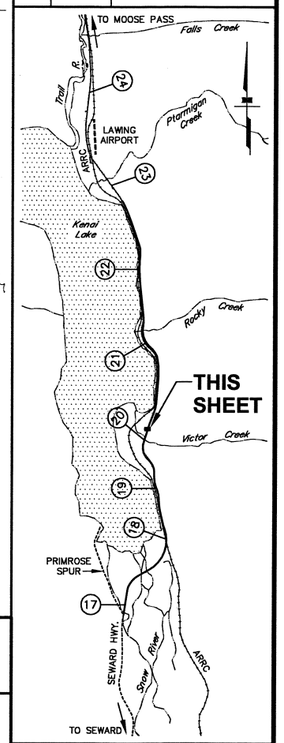


RADIUS TABLE

POINT	STATION	OFFSET	RADIUS (FT)	REMARKS
Ⓐ	236+79.00	38.50' LT	20	
Ⓑ	237+35.00	38.50' LT	20	
Ⓒ	236+79.00	53.20' LT	20	
Ⓓ	236+94.01	105.56' LT	20	







PLANS DEVELOPED BY:
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
PS&E REVIEW
KRISTOPHER J. FISHER
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

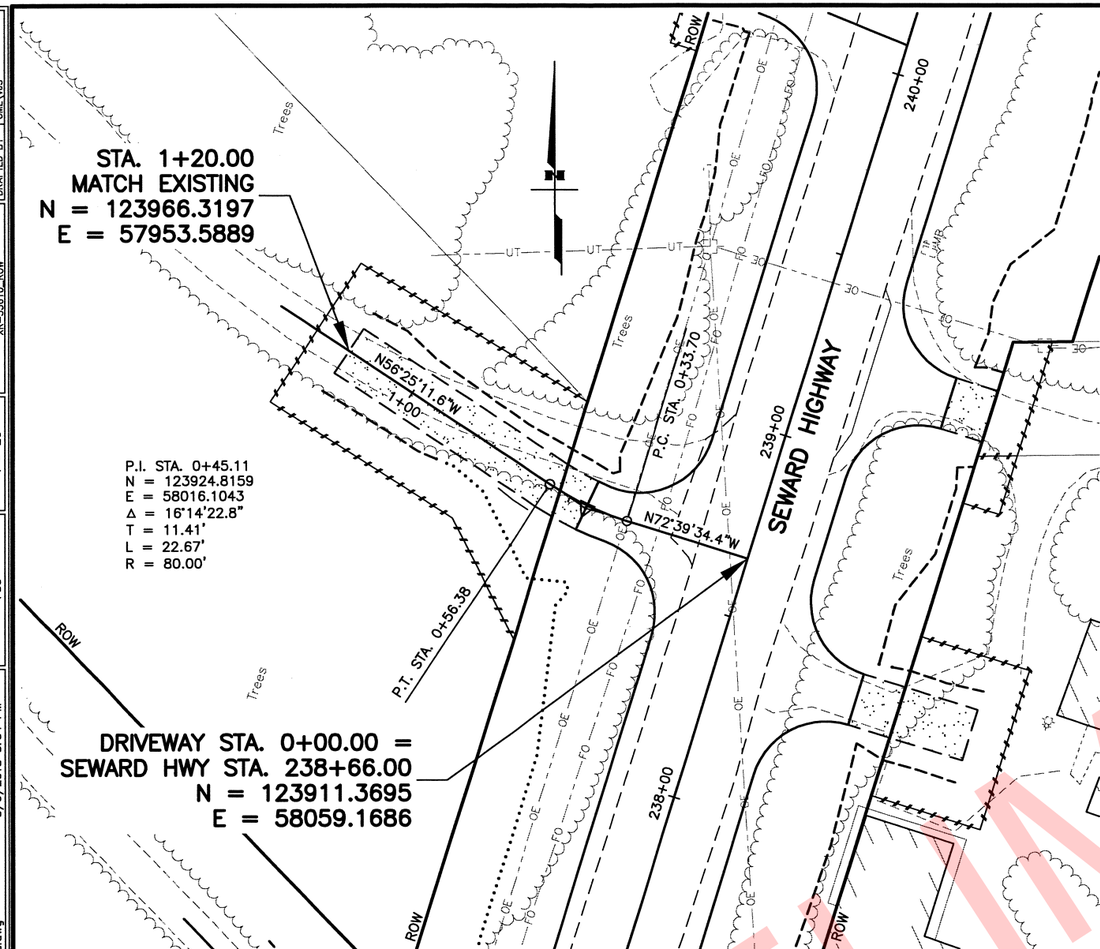
PLAN AND PROFILE
DRIVEWAY AT 237+07 LT
"DW" AT 237+07 LT

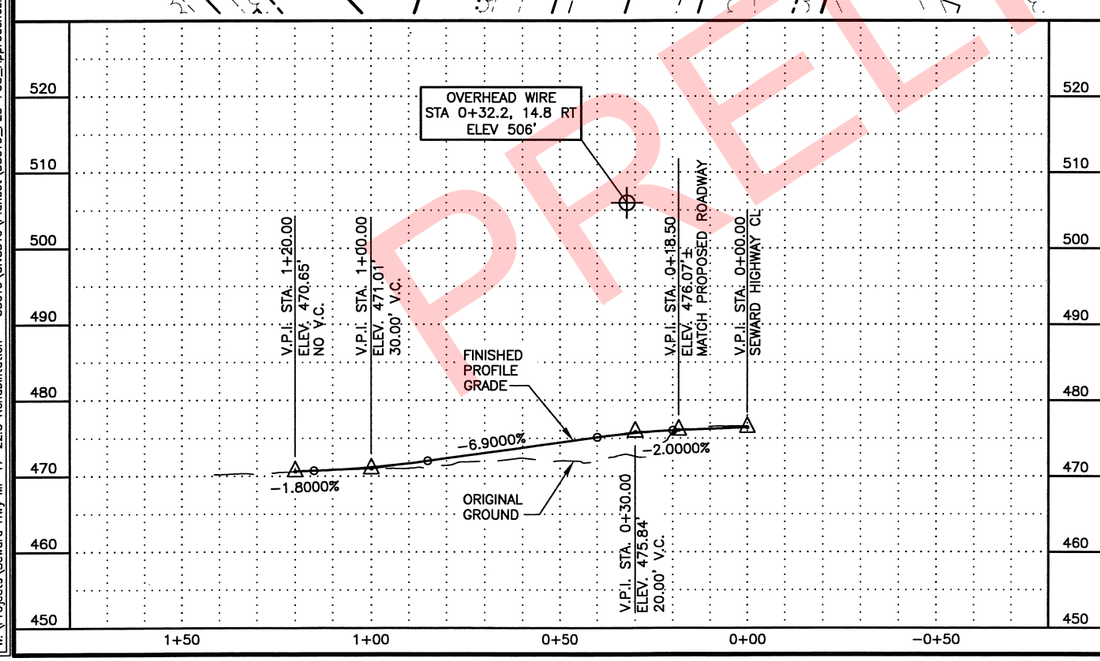
DATE TIME	LAYOUT	SCALE
3/6/2018 3:54 PM	F32	1" = 20'

XREFS: XR-53610-Border_PandP, XR-53610_Design, XR-53610_Base, XR-53610_ROW

DESIGNED BY	CML\KGS\ZDK
CHECKED BY	KGK
DRAFTED BY	CML\VJS

DRAWING LOCATION
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_F25-F38_Approaches.dwg





DRAWING LOCATION			
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3016\Planset\53610_F25-F38_Approaches.dwg			
DATE TIME	LAYOUT	SCALE	XREFS: XR-53610-Border_PondP, XR-53610_Design, XR-53610_Base, XR-53610_ROW
3/6/2018 3:54 PM	F33	1"= 20'	

DESIGNED BY	CML\KDS\VZDK
CHECKED BY	KERK
DRAFTED BY	CML\VJS

SHEET NO.	TOTAL SHEETS
F33	F38
STATE	YEAR
ALASKA	2019

PROJECT DESIGNATION

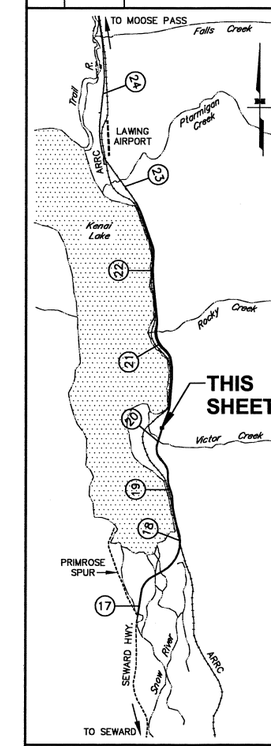
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:
STATE OF ALASKA
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AND PUBLIC FACILITIES
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

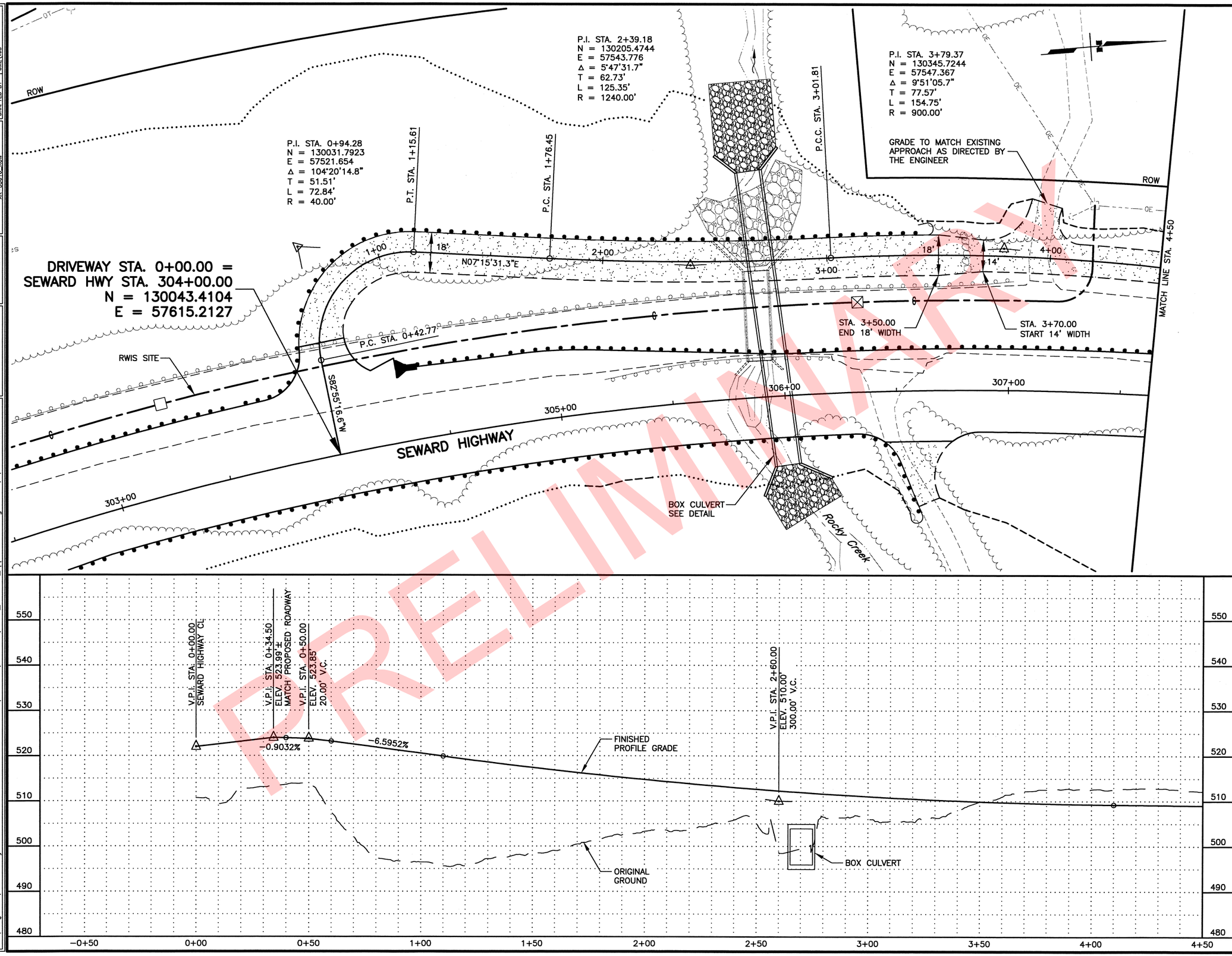
STATE OF ALASKA
KRISTEN KERKER
PE 132
REGISTERED PROFESSIONAL ENGINEER
PS&E REVIEW

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

PLAN AND PROFILE
DRIVEWAY AT 238+66 LT

PRELIMINARY



SHEET NO.	TOTAL SHEETS
F34	F38
STATE	YEAR
ALASKA	2019

PROJECT DESIGNATION

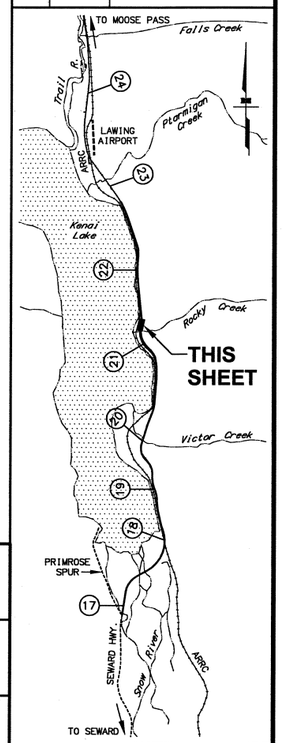
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:
STATE OF ALASKA
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AND PUBLIC FACILITIES
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
KRISTIN LEMER
PE 12132
PROFESSIONAL ENGINEER
P&E REVIEW

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

PLAN AND PROFILE
DRIVEWAY AT 304+00 LT

DRAWING LOCATION
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_F25-F38_Approaches.dwg

DATE	TIME	LAYOUT	SCALE	XREFS: XR-53610-Border_Pond2 XR-53610_Design XR-53610_Base XR-53610_ROW	DESIGNED BY CHL\KGS\ZDK	CHECKED BY KEK	DRAFTED BY CHL\VJS
3/8/2018	9:22 AM	F34	1" = 20'				

RADIUS TABLE

POINT	STATION	OFFSET	RADIUS (FT)	REMARKS
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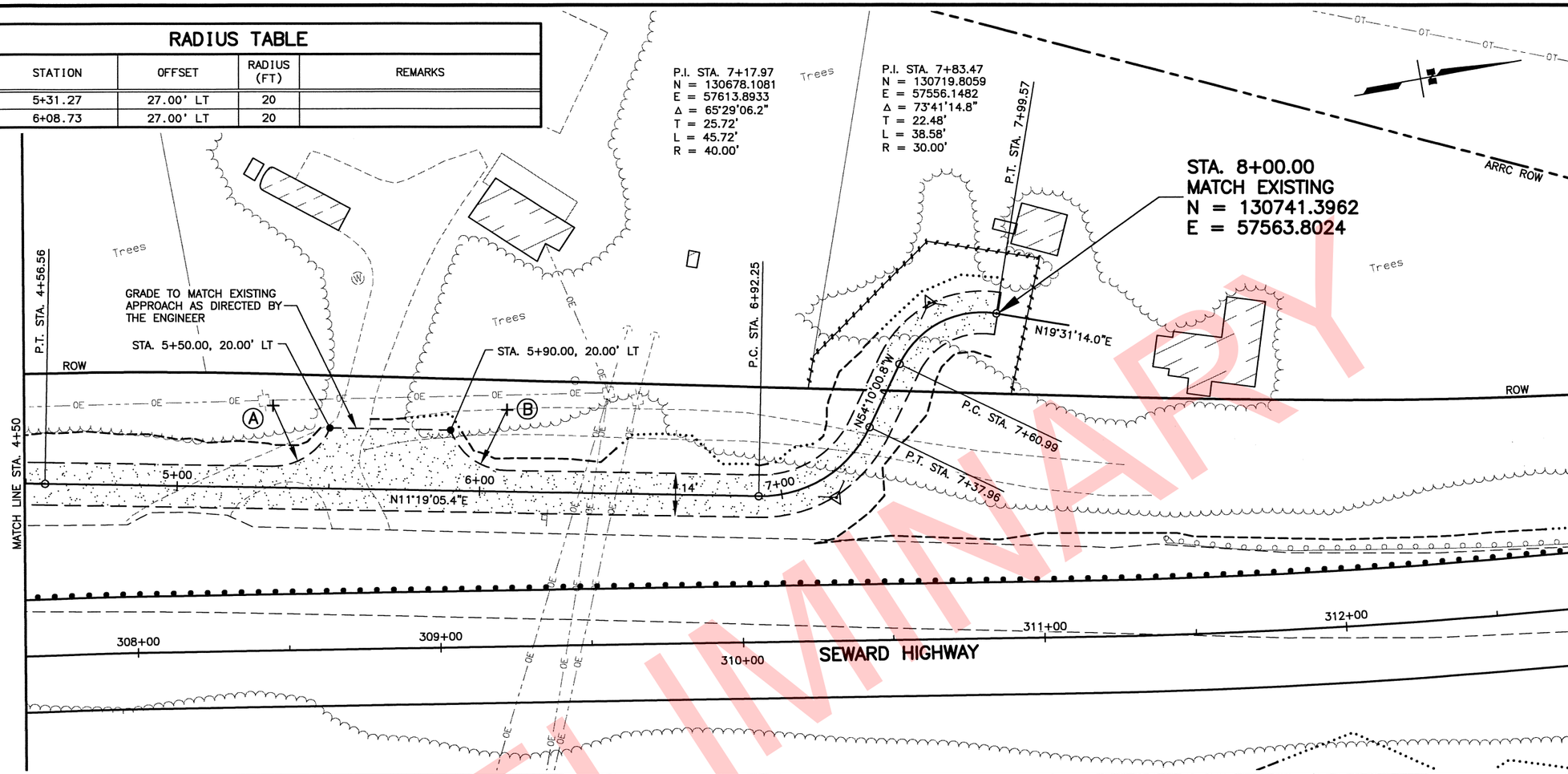
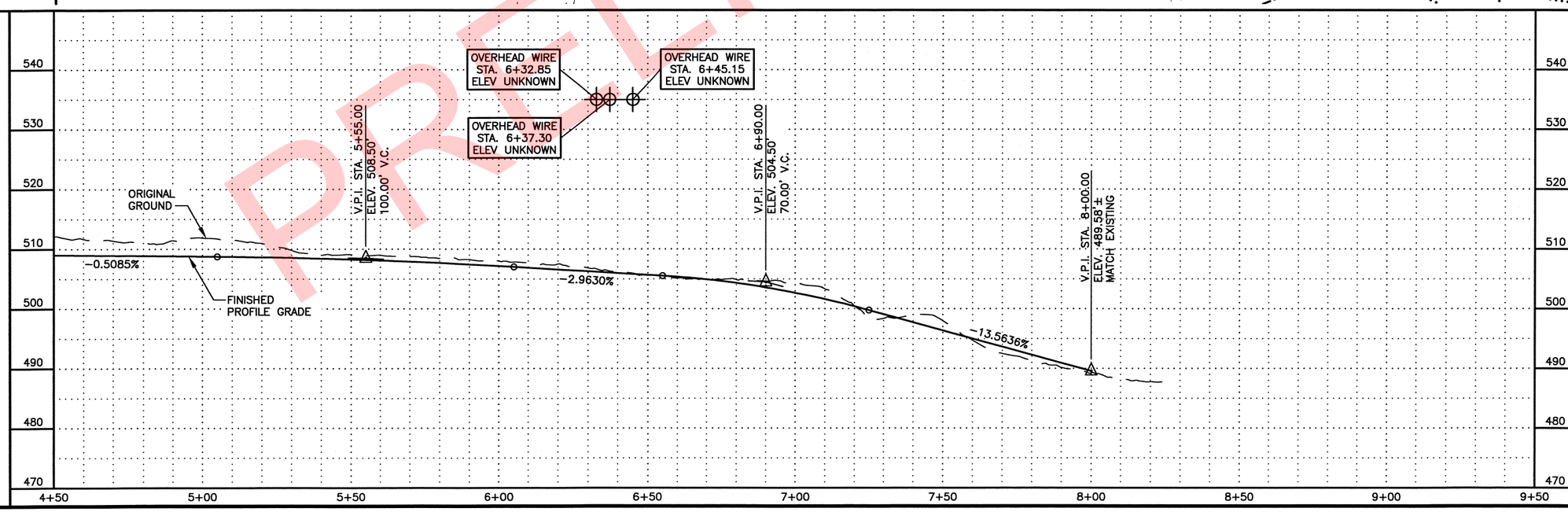
Ⓑ	6+08.73	27.00' LT	20	





SHEET NO.	TOTAL SHEETS
F35	F38
STATE	YEAR
ALASKA	2019

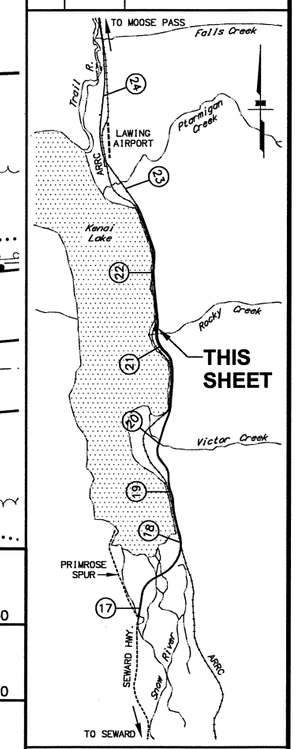
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

PLAN AND PROFILE
DRIVEWAY AT 304+00 LT
(CONTINUED)

PRELIMINARY
PSE REVIEW

DRAWING LOCATION
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3016\Planset\53610_F25-F38_Approaches.dwg

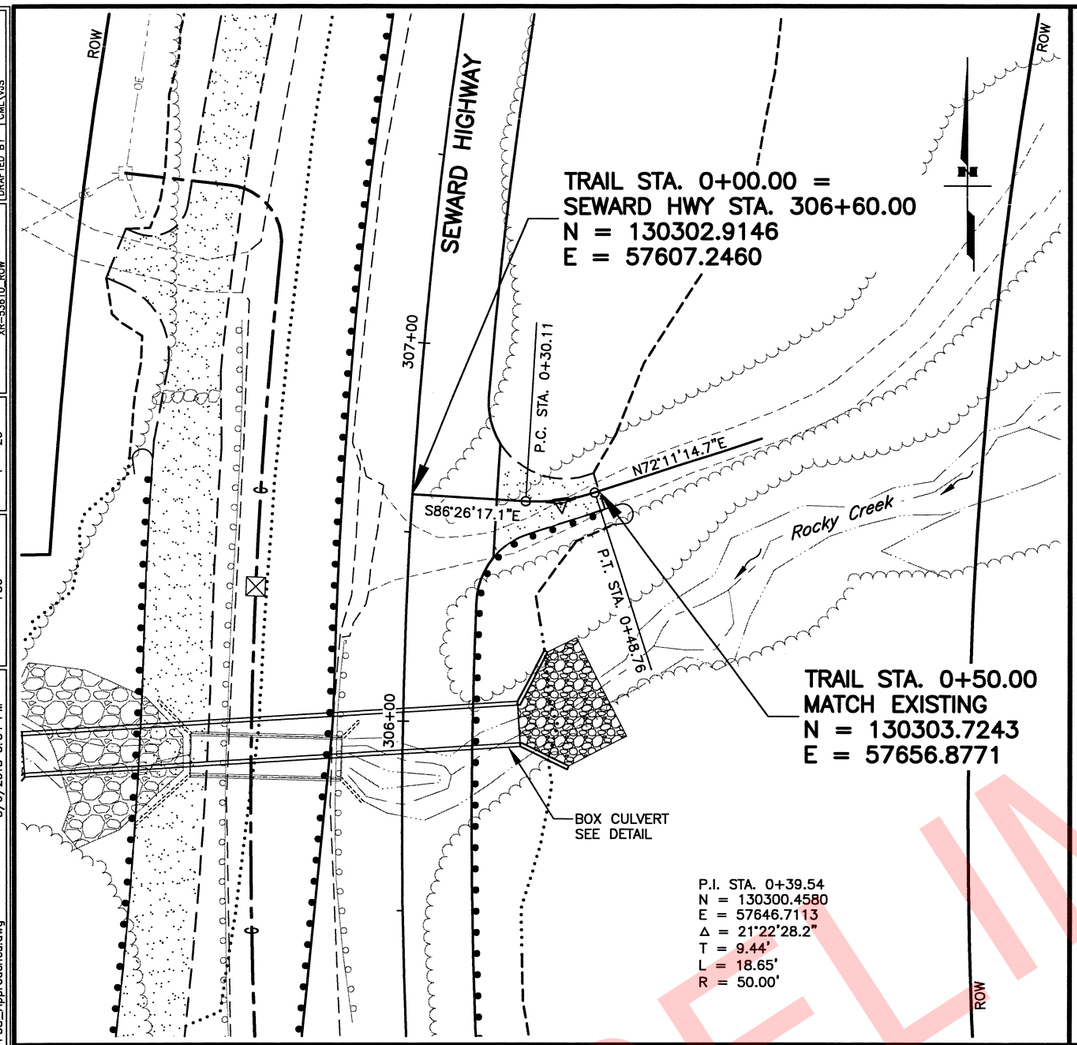
DATE TIME
3/8/2018 9:22 AM

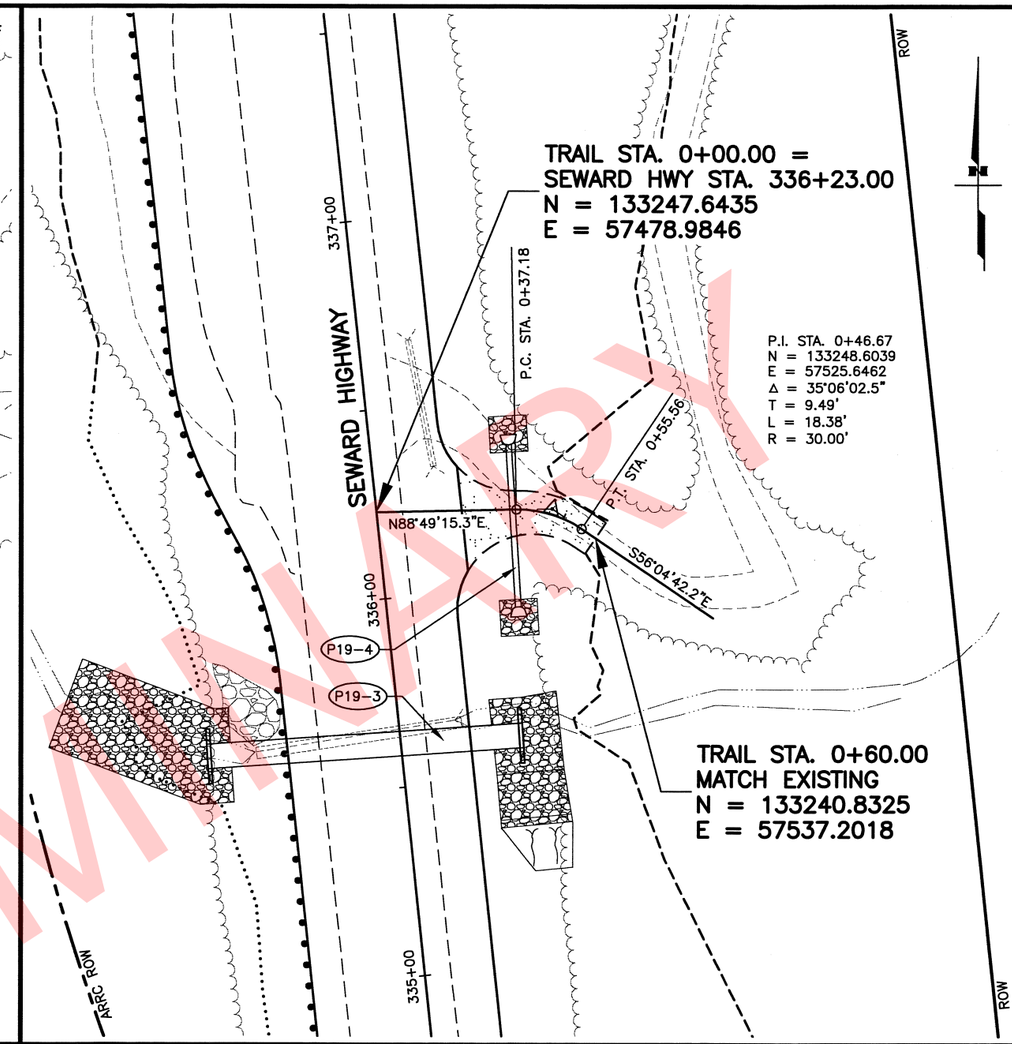
LAYOUT
F35

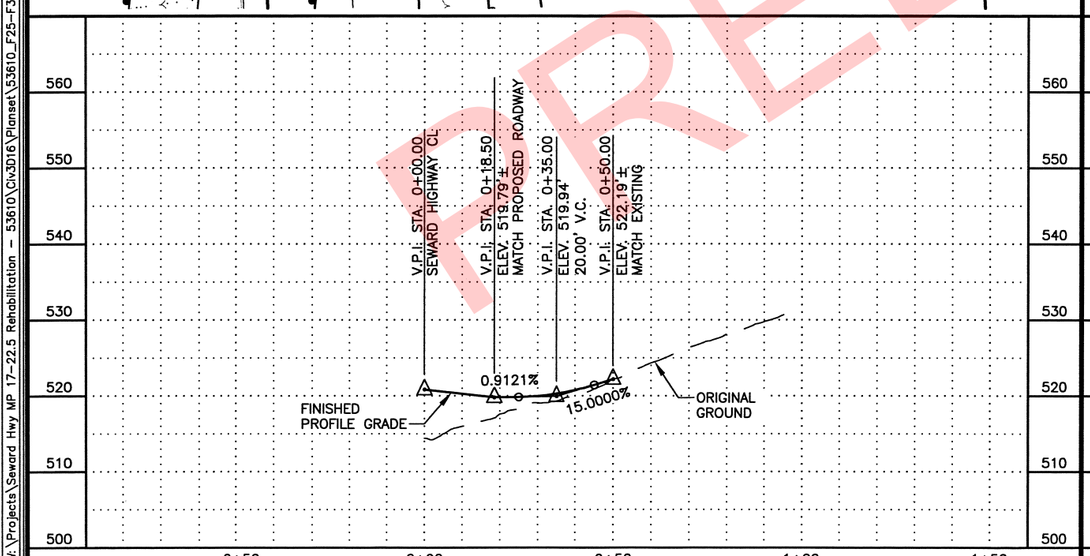
SCALE
1" = 20'

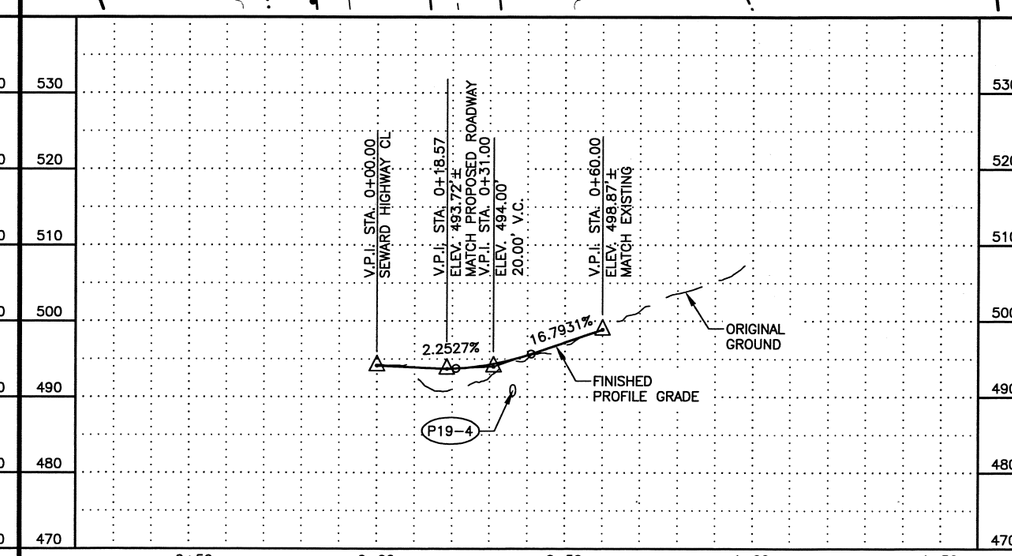
XREFS: XR-53610-Border_PondP, XR-53610_Base, XR-53610_Design, XR-53610_ROW

DESIGNED BY CMJ\KGS\ZDK
CHECKED BY KEK
DRAFTED BY CMJ\VJS









SHEET NO.	TOTAL SHEETS
F36	F38
STATE	YEAR
ALASKA	2019

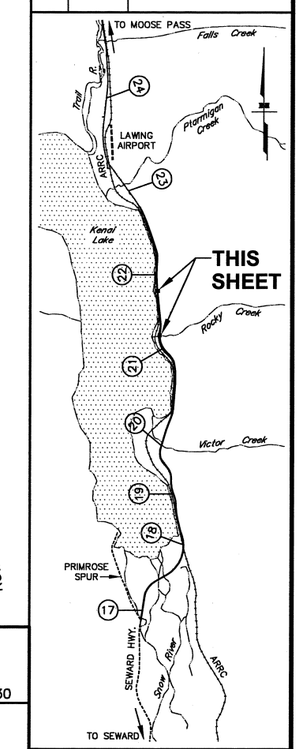
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION
PLAN AND PROFILE
POWERLINE ACCESS TRAILS
AT 306+60 RT & 336+23 RT

DRAWING LOCATION
W:\Projects\Seward Hwy MP 17-22.5 Rehabilitation - 53610\Civ3D16\Planset\53610_F25-F38_Approaches.dwg

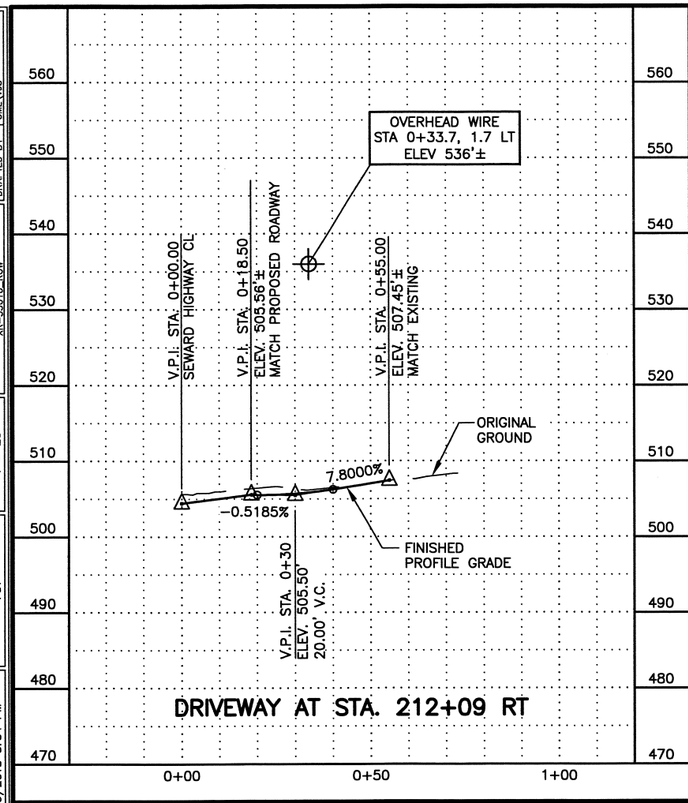
DATE TIME 3/6/2018 3:54 PM | LAYOUT F36 | SCALE 1" = 20'

XREFS: XR-53610-Border_PondP, XR-53610_Design, XR-53610_Base, XR-53610_ROW

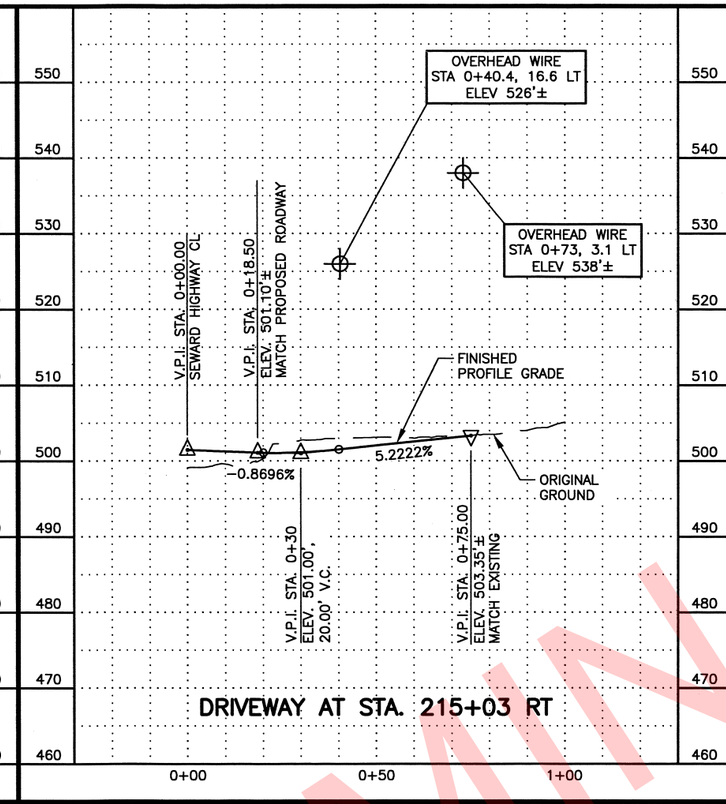
DESIGNED BY CML\KGS\ZDK
CHECKED BY KEK
DRAFTED BY CML\VJS

PRELIMINARY

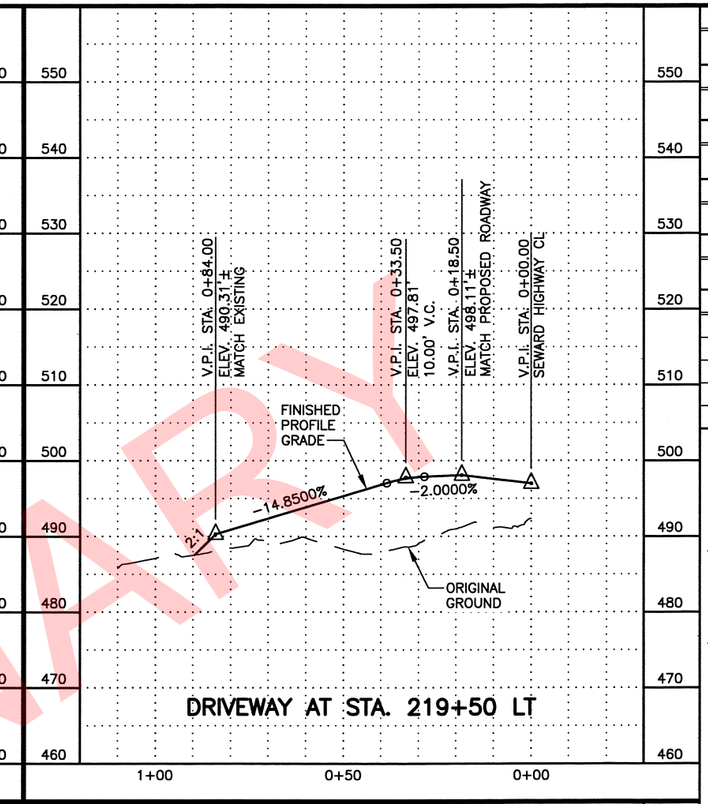
STATE OF ALASKA
KRISTEN KEK
REG. NO. CE 132
PROFESSIONAL ENGINEER
PS&E REVIEW



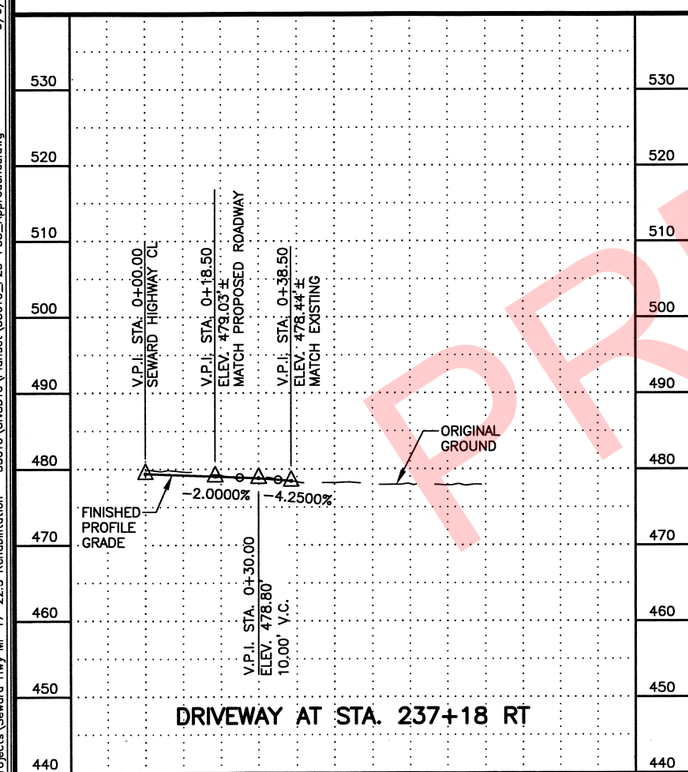
DRIVEWAY AT STA. 212+09 RT



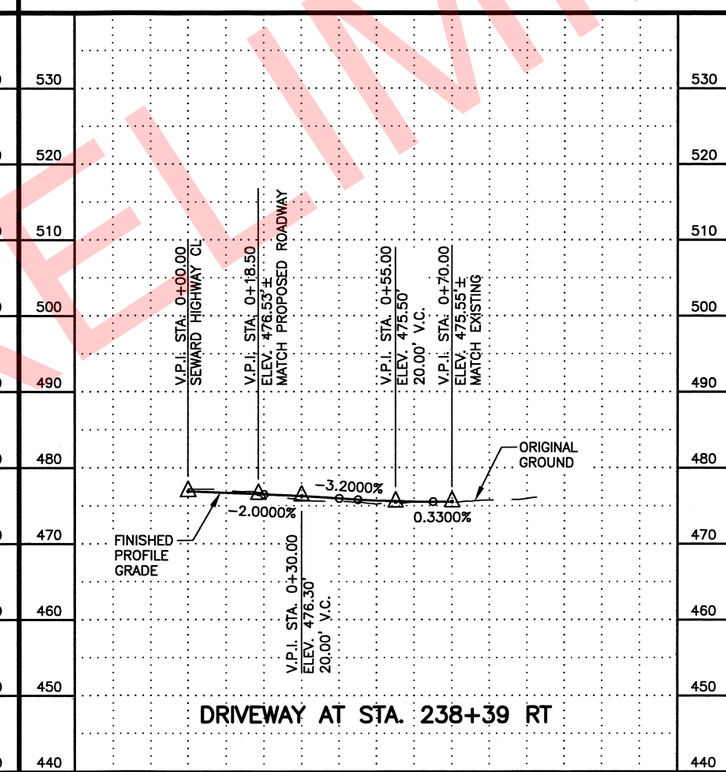
DRIVEWAY AT STA. 215+03 RT



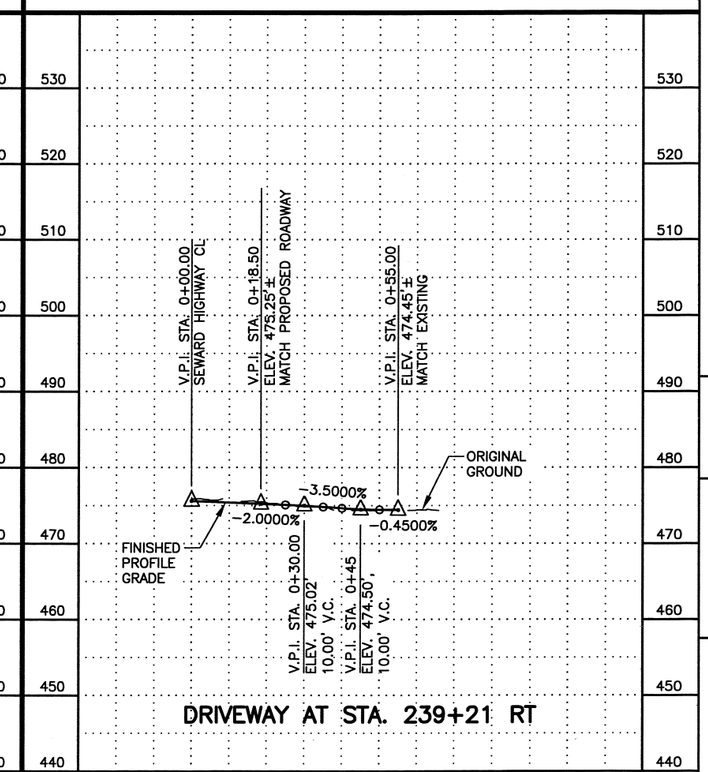
DRIVEWAY AT STA. 219+50 LT



DRIVEWAY AT STA. 237+18 RT



DRIVEWAY AT STA. 238+39 RT



DRIVEWAY AT STA. 239+21 RT

PRELIMINARY

SHEET NO.	TOTAL SHEETS
F37	F38
STATE	YEAR
ALASKA	2019

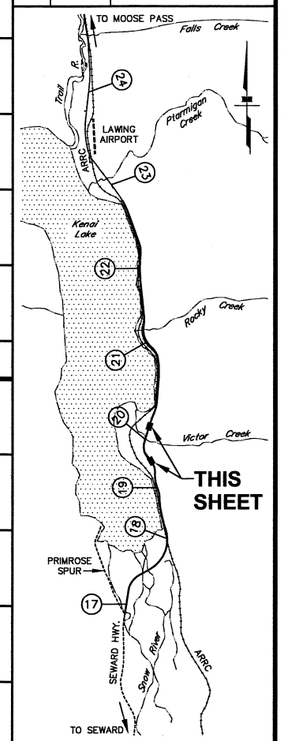
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



PLANS DEVELOPED BY:
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

PS&E REVIEW

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

DRIVEWAY PROFILES

DRAWING LOCATION
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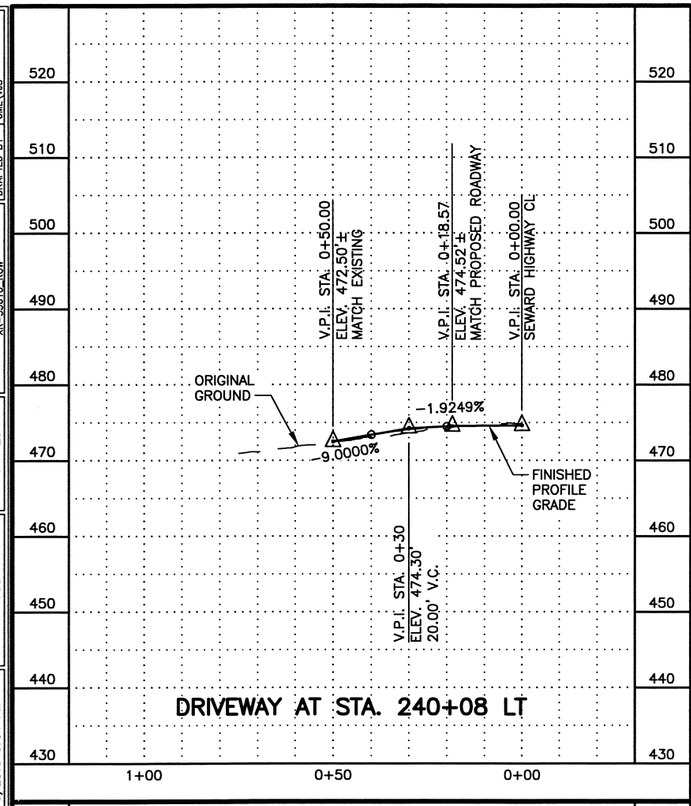
DATE TIME: 3/6/2018 3:54 PM

LAYOUT: F37

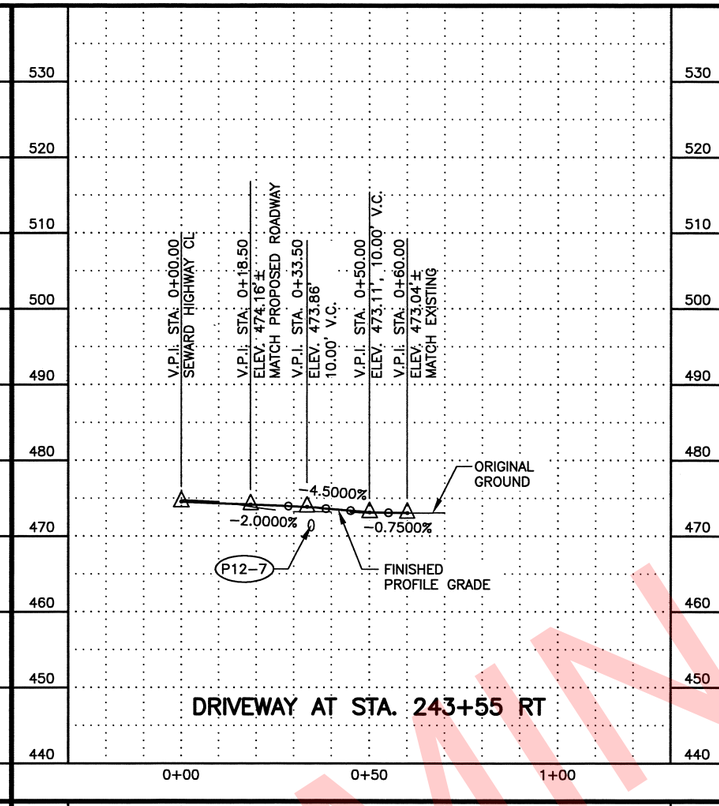
SCALE: 1"= 20'

XREFS: XR-53610-Border_PlanP, XR-53610_Base, XR-53610_Design, XR-53610_ROW

DESIGNED BY: CML/KDS/ZDK
CHECKED BY: KEK
DRAFTED BY: CML/VJS



DRIVEWAY AT STA. 240+08 LT



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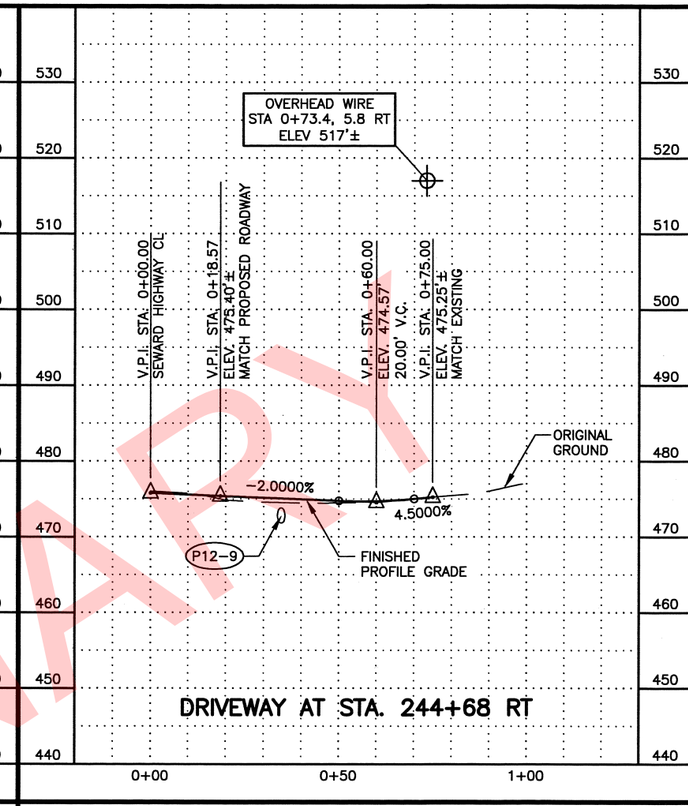
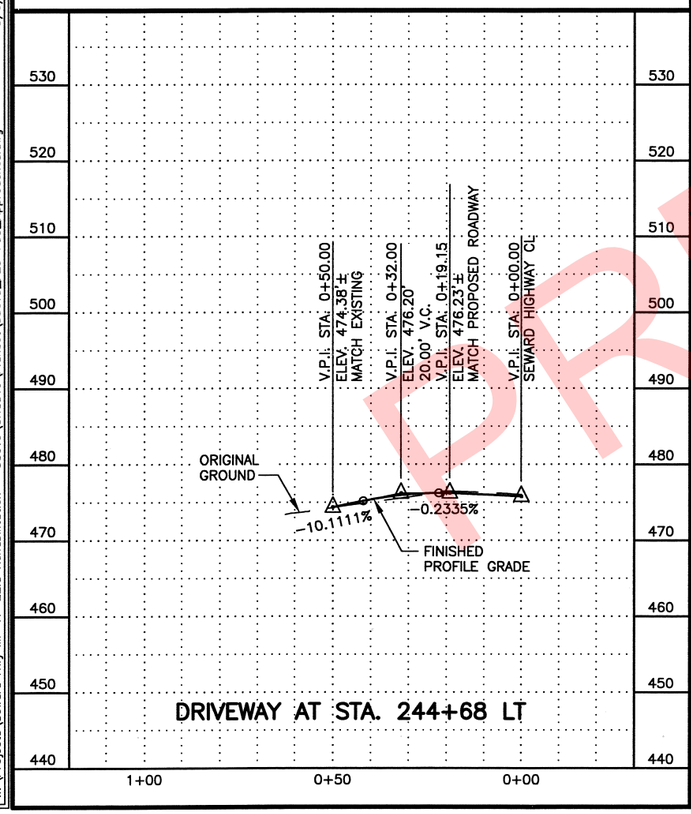
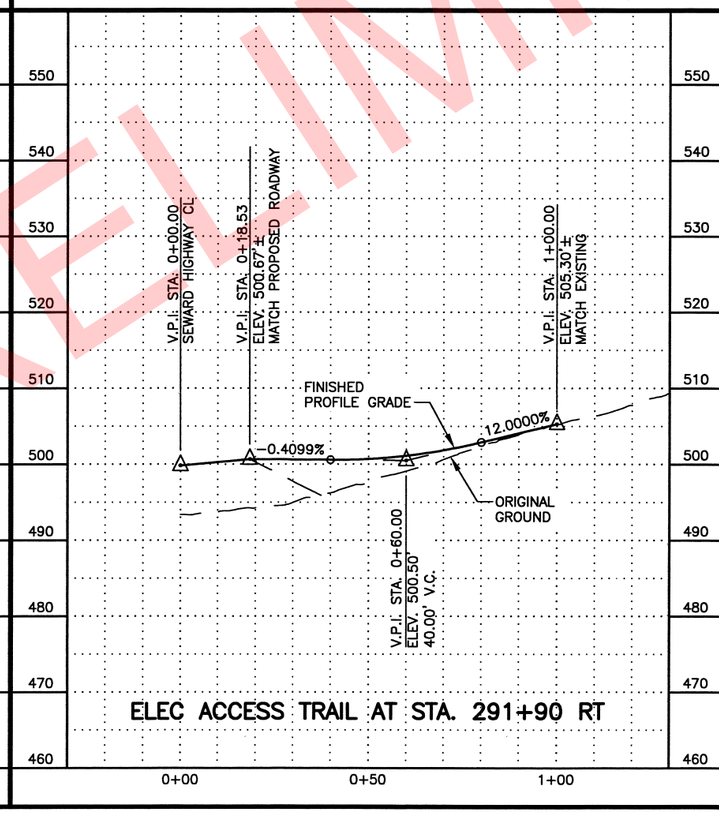


DRIVEWAY AT STA. 244+68 RT



DRIVEWAY AT STA. 244+68 LT



ELEC ACCESS TRAIL AT STA. 291+90 RT

PRELIMINARY

SHEET NO.	TOTAL SHEETS
F38	F38
STATE	YEAR
ALASKA	2019

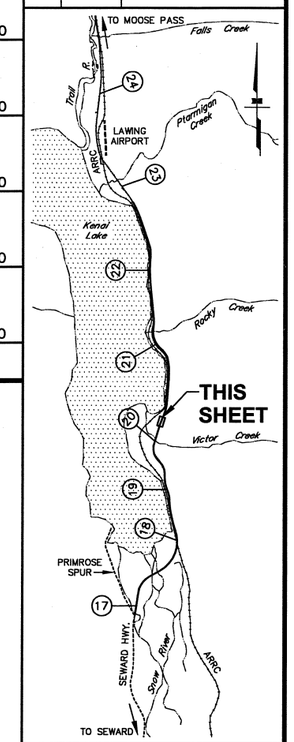
PROJECT DESIGNATION
311032/Z536100000

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION



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STATE OF ALASKA
KRISTIN MILLER
PROFESSIONAL ENGINEER
PS&E REVIEW

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

SEWARD HIGHWAY
MP 17-22.5
REHABILITATION

DRIVEWAY PROFILES

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LAYOUT
F38

SCALE
1" = 20'

XREFS: XR-53610-Border_PandP, XR-53610_Design, XR-53610_Base, XR-53610_ROW

DESIGNED BY CML\VJS\ZDK
CHECKED BY KEK
DRAFTED BY CML\VJS