

State of Alaska

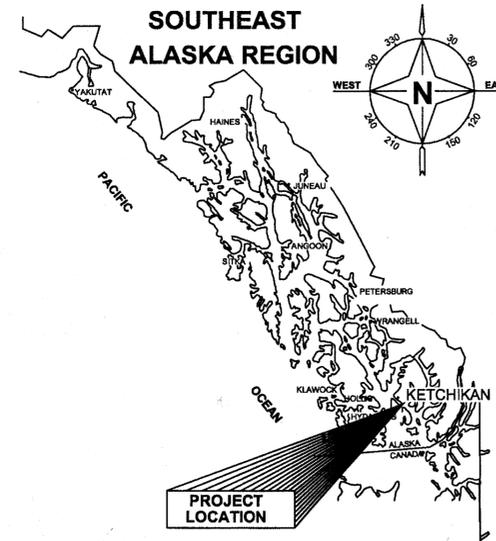
Department of Transportation and Public Facilities

Southeast Region

Ketchikan, Alaska

Ketchikan South Tongass Highway Guardrail Replacement

PROJECT No. HHE-0902(33)~67442



PROJECT INDEX

SHEET NO.	DESCRIPTION
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T1	ENVIRONMENTAL DETAILS
T2-11	EROSION SEDIMENT CONTROL LAYOUT

Project Engineer: Allen Shepard

Start Date: January 7, 2010

End Date: October 26, 2010

GENERAL CONTRACTOR: SECON, INC.
KETCHIKAN

GUARD RAIL SUBCONTRACTOR: ACME FENCE
ANCHORAGE

PATH: Q:\KTN\67442\TRIP\ANSET\PLANSET OCT 09\67442_A1_TITLE.DWG TAB:A1
Wednesday, June 18, 2008 10:28:48 AM
PLOT: PSPACE OR MSPACE: 1=1(F)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION



RECOMMENDED FOR APPROVAL:
VICTOR WINTERS, P.E.
REGIONAL PRE-CONSTRUCTION ENGINEER

11/3/09
DATE

APPROVED:
GARY L. DAVIS
SOUTHEAST REGION DIRECTOR

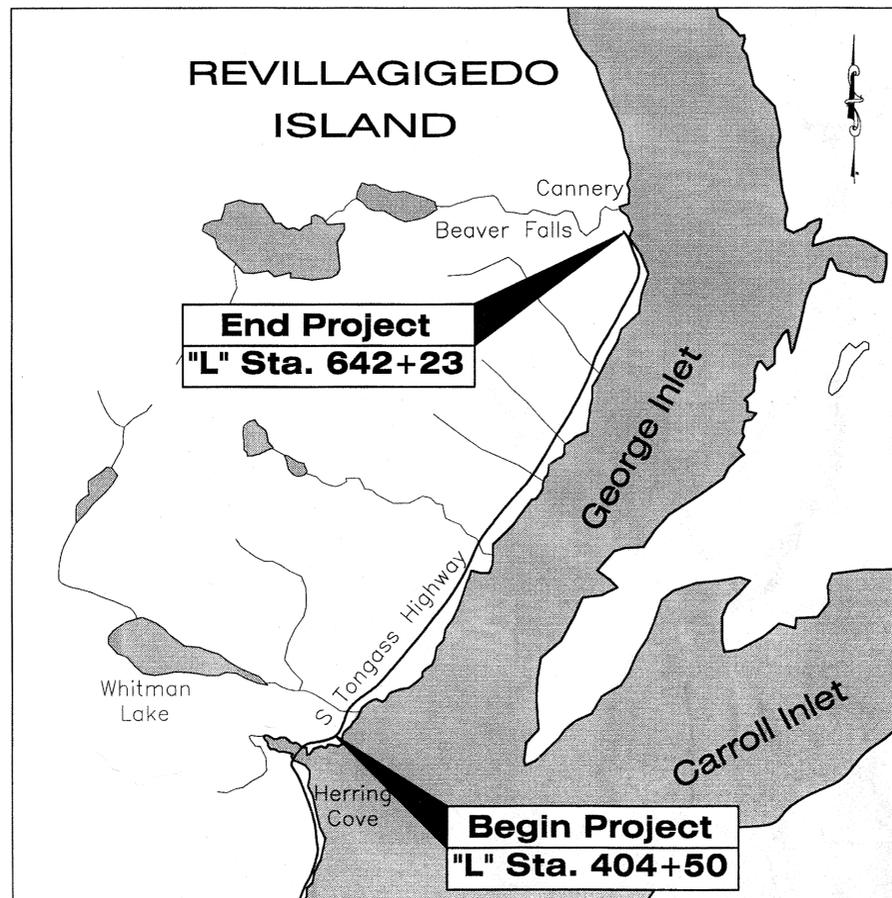
11-3-09
DATE

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

CONSTRUCTION PROJECT MANAGER

6/8/11
DATE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	HHE-0902(33) ~ 67442	2009	A1	43



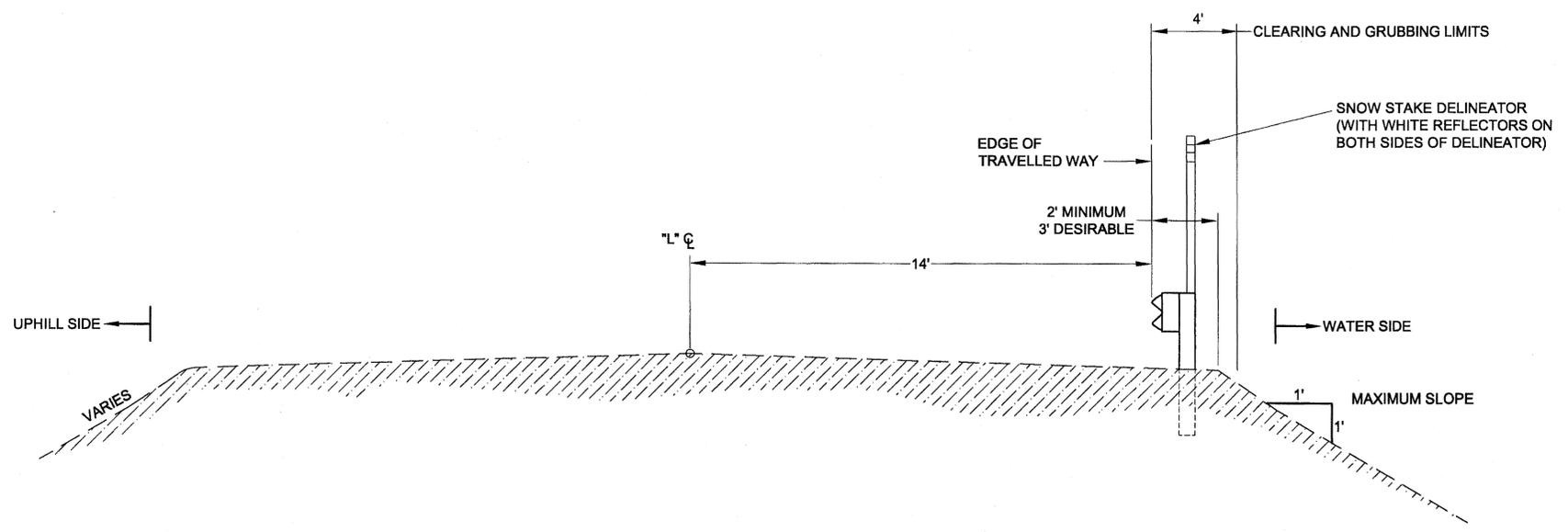
VICINITY MAP

DESIGN DESIGNATIONS		
ITEM	2007	2025
A.D.T.	130	140
D.H.V. 10.5%	10	20
V. (MPH)	50	50
P.H.F.	0.9	0.9
Direction Distribute	55/45	55/45
%T.	6.2%	6.2%
E.A.L. (20yr.)		50,000

PROJECT SUMMARY
B.O.P. 404+50 TO
E.O.P. 642+23
CDS ROUTE NO. 291400
CDS MILEPOINT 10.5 to 15.14
LENGTH OF PROJECT 24,500 FT.

THE FOLLOWING STANDARD DRAWINGS APPLY TO THESE PROJECTS:

G-00.01	G-13.00	G-25.20W
G-04.07W	G-15.10	G-29.03W
G-10.01	G-20.10	G-27.11
		G-31.00



TYPICAL SECTION - GUARDRAIL REPLACEMENT
 (SEE GUARDRAIL SUMMARY FOR LOCATIONS)

- TYPICAL SECTION NOTES**
- EXISTING GUARDRAIL IS NOT SHOWN FOR CLARITY. THE NEW GUARDRAIL ALIGNMENT IS TYPICALLY 1' TO 2' CLOSER TO THE CENTERLINE THAN THE EXISTING GUARDRAIL ALIGNMENT.
 - GUARDRAIL OCCURS ON UPHILL SIDE AT SOME LOCATIONS. SEE GUARDRAIL SUMMARY, SHEET D1.
 - SEE GUARDRAIL DETAIL, SHEET E2.
 - AS-BUILT "L" CENTERLINE & STATIONING LOCATION SHOWN ON PLANS IS APPROXIMATE ONLY.
 - REFER TO STANDARD DRAWING G-10.01 FOR HEIGHT OF WOOD POSTS. THE MAJORITY OF THE GUARDRAIL ON THE "WATER SIDE" WILL INVOLVE CASE 2. CASE 2 WILL ALSO BE ENCOUNTERED ON THE "UPHILL SIDE". USE STANDARD DRAWING G-04.07W TYPE II POST INSTALLATION IN ORDER TO FACILITATE RAISING GUARDRAIL FOR FUTURE OVERLAY.
 - OFFSET FOR GUARDRAIL TO BE ESTABLISHED BY:
 - SPLITTING ROADWAY AND OFFSETTING AS SHOWN IN TYPICAL DRAWING.
 - USING EXISTING GUARDRAIL AS TEMPLATE FOR NEW GUARDRAIL INSTALLATION.
 - THE CONTRACTOR MUST RECEIVE THE ENGINEER'S APPROVAL OF GUARDRAIL OFFSETS BEFORE ANY GUARDRAIL WORK COMMENCES.
 - PORTIONS OF THIS ROADWAY ARE BUILT ON SHOT ROCK. LARGE SHOT ROCK AND SOLID ROCK MAY BE ENCOUNTERED WHILE INSTALLING GUARDRAIL POSTS. SPECIAL EQUIPMENT AND DRILLING MAY BE REQUIRED TO ACHIEVE REQUIRED PENETRATION FOR INSTALLING GUARDRAIL POSTS.
 - INSTALL SNOW STAKE DELINEATOR EVERY 500' OF GUARDRAIL LENGTH. SEE SHEET E2 FOR DETAILS.
 - INSTALL DELINEATOR ON ALL ET PLUS END TERMINALS. SEE SHEET E1 FOR DETAILS.
 - APPROXIMATE CULVERT LOCATIONS ARE SHOWN ON THE F PLAN SHEETS. ONE POST MAY BE REMOVED TO ACCOMMODATE FOR CULVERT BY STIFFENING THE GUARDRAIL FACE AS DETAILED IN STANDARD DRAWING G-27.11.

- TYPICAL SECTION NOTES**
- EXISTING GUARDRAIL IS NOT SHOWN FOR CLARITY. THE NEW GUARDRAIL ALIGNMENT IS TYPICALLY 1' TO 2' CLOSER TO THE CENTERLINE THAN THE EXISTING GUARDRAIL ALIGNMENT.
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 - AS-BUILT "L" CENTERLINE & STATIONING LOCATION SHOWN ON PLANS IS APPROXIMATE ONLY.
 - THE MAJORITY OF THE GUARDRAIL ON THE "WATER SIDE" WILL INVOLVE CASE 2. CASE 2 WILL ALSO BE ENCOUNTERED ON THE "UPHILL SIDE".
 - IF WOOD POSTS ARE USED, REFER TO STANDARD DRAWING G-10.01 FOR HEIGHT OF WOOD POSTS. USE STANDARD DRAWING G-04.07W TYPE II POST INSTALLATION IN ORDER TO FACILITATE RAISING GUARDRAIL FOR FUTURE OVERLAY.
 - IF STEEL POSTS ARE USED, POST LENGTH SHALL BE 8'6" LONG IN ORDER TO FACILITATE RAISING GUARDRAIL FOR FUTURE OVERLAY.
 - OFFSET FOR GUARDRAIL TO BE ESTABLISHED BY:
 - SPLITTING ROADWAY AND OFFSETTING AS SHOWN IN TYPICAL DRAWING.
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 - APPROXIMATE CULVERT LOCATIONS ARE SHOWN ON THE F PLAN SHEETS. ONE POST MAY BE REMOVED TO ACCOMMODATE FOR CULVERT BY STIFFENING THE GUARDRAIL FACE AS DETAILED IN STANDARD DRAWING G-27.11.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE *KS* Date 3-18-11

KTN - SOUTH TONGASS HIGHWAY GUARDRAIL REPLACEMENT
 PROJECT NO. HHE-0902(33) ~ 67442
TYPICAL SECTION

PLAN LEGEND

CHECKED BY: C. MOREHOUSE

DESIGNED BY: C. DIONISIO
 DRAWN BY: C. DIONISIO

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION

KTN SOUTH TONGASS HIGHWAY GUARDRAIL REPLACEMENT PROJECT #67442

TYPICAL SECTION

PROJECT DESIGNATION
HHE-0902(33)~67442

STATE	YEAR
ALASKA	2009

SHEET NUMBER	TOTAL SHEETS
D1	43

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

KTN - SOUTH TONGASS HIGHWAY GUARDRAIL REPLACEMENT
PROJECT NO. HHE-0902(33) ~ 67442

ESTIMATE OF QUANTITIES & BASIS OF ESTIMATE

ESTIMATE OF QUANTITIES			
ITEM NO.	ITEM DESCRIPTION	QUANTITY	ESTIMATED UNIT
201(3B)	CLEARING AND GRUBBING	ALL REQUIRED	LUMP SUM
203(19)	CONTROL OF INVASIVE PLANTS	ALL REQUIRED	LUMP SUM
203(20)	GRADING FOR GUARDRAIL	20,475 22,399.00	LINEAR FOOT
203(21)	EMBANKMENT FOR LINEAR GRADING Deleted C.O.I	1,000	CUBIC YARD
606(1)	W-BEAM GUARDRAIL	19,131 19,045.10	LINEAR FOOT
606(11)	EXTRUDER TERMINAL (ET-PLUS)	24 23	EACH
606(13)	DOWNSTREAM END ANCHOR	24 23	EACH
606(14)	ROCK TERMINAL	2	EACH
606(15)	REMOVING AND DISPOSING OF GUARDRAIL	ALL REQUIRED	LUMP SUM
615(5)	DELINEATOR, FLEXIBLE	64 39	EACH
633(2)	SILT BARRIER	1,100 1201.0	LINEAR FOOT
640(1)	MOBILIZATION AND DEMOBILIZATION	ALL REQUIRED	LUMP SUM
640(4)	WORKER MEALS AND LODGING, OR PER DIEM	ALL REQUIRED	LUMP SUM
641(1)	EROSION AND POLLUTION CONTROL ADMINISTRATION	ALL REQUIRED	LUMP SUM
641(3)	TEMPORARY EROSION AND POLLUTION CONTROL	ALL REQUIRED	LUMP SUM
641(4)	TEMPORARY EROSION AND POLLUTION CONTROL ADDITIVES	ALL REQUIRED	CONTINGENT SUM
641(7)	TEMPORARY CHECK DAMS	37 19	EACH
642(1)	CONSTRUCTION SURVEYING	ALL REQUIRED	LUMP SUM
643(2)	TRAFFIC MAINTENANCE	ALL REQUIRED	LUMP SUM
643(3)	PERMANENT CONSTRUCTION SIGNS	ALL REQUIRED	LUMP SUM
643(15)	FLAGGING	ALL REQUIRED	CONTINGENT SUM
643(25)	TRAFFIC CONTROL	ALL REQUIRED	CONTINGENT SUM
203(22)	Embankment for Linear Grading Truck Count	119.5	Truck Count

PLAN LEGEND

CHECKED BY: C. MOREHOUSE



DESIGNED BY: C. DIONISIO

DRAWN BY: C. DIONISIO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

KTN SOUTH TONGASS HIGHWAY GUARDRAIL REPLACEMENT PROJECT #67442

ESTIMATE OF QUANTITIES & BASIS OF ESTIMATE

PROJECT DESIGNATION
HHE-0902(33)-67442

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
C1	43

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE: *[Signature]* Date: 3-18-11

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ATTACHMENT NUMBER		
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No.	DATE	DESCRIPTION

KTN - SOUTH TONGASS HIGHWAY GUARDRAIL REPLACEMENT
 PROJECT NO. HHE-0902(33) ~ 67442

END TREATMENT SUMMARIES

END TREATMENT SUMMARY

STATION	LOCATION		ET-PLUS	ROCK TERMINAL	DOWNSTREAM ANCHOR
	LT	RT			
404+66		X	X		
409+26		X			X
411+31		X	X		
417+57		X			X
432+77		X	X		
433+57	X				X
436+78	X		X		
443+13		X			X
444+22		X	X		
473+36		X			X
476+67		X	X		
484+58		X			X
487+92		X	X		
504+22		X			X
504+63		X	X		
522+00		X		X	
524+67		X	X		
532+27		X			X
534+84		X	X		
536+65	X				X
539+30	X		X		
547+85		X			X
548+72		X	X		
556+47		X			X
559+04	X				X
TOTAL			24	2	24

409+22

END TREATMENT SUMMARY

STATION	LOCATION		ET-PLUS	ROCK TERMINAL	DOWNSTREAM ANCHOR
	LT	RT			
554+39	X		X		
558+35		X	X		
564+19		X			X
566+36		X	X		
579+44		X			X
583+30		X	X		
583+62	X				X
587+39	X			X	
592+16		X			X
593+00		X	X		
597+40		X			X
598+93		X	X		
599+70	X				X
601+68	X		X		
601+74		X			X
602+30		X	X		
606+12		X			X
606+53		X	X		
608+85		X			X
609+90		X	X		
613+86		X			X
615+64		X	X		
619+65		X			X
620+76		X	X		
642+60		X			X
TOTAL			24	2	24

PLAN LEGEND

CHECKED BY: C. MOREHOUSE



DESIGNED BY: C. DIONISIO

DRAWN BY: C. DIONISIO

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION

**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

END TREATMENT SUMMARIES

PROJECT DESIGNATION
HHE-0902(33)~67442

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS

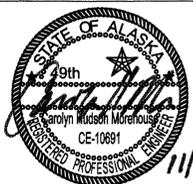
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 PE: [Signature] Date 3-18-11

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ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

KTN - SOUTH TONGASS HIGHWAY GUARDRAIL REPLACEMENT
 PROJECT NO. HHE-0902(33) ~ 67442
**NEW GUARDRAIL/
 GUARDRAIL REMOVAL
 SUMMARY**

PLAN LEGEND

CHECKED BY: C. MOREHOUSE



DESIGNED BY: C. DIONISIO
 DRAWN BY: C. DIONISIO

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION

**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

**NEW GUARDRAIL/
 GUARDRAIL REMOVAL
 SUMMARIES**

PROJECT DESIGNATION
HHE-0902(33)~67442

STATE	YEAR
ALASKA	2009

SHEET NUMBER	TOTAL SHEETS
D2	43

NEW GUARDRAIL SUMMARY

BEGIN STATION	TO	END STATION	OVERALL LENGTH (L.F.)	LOCATION		* TOTAL (LF)
				LT	RT	
405+16		409+29	403.75		X	406 ²
411+82		417+51	568.75		X	
433+27		443+07	979.75		X	1036 ²
433+63		436+28	264.75	X		330 ²
444+71		473+32	2860.75		X	2795 ²
477+17		484+52	734.75		X	
487+52		504+16	1663.75		X	1586 ²
505+19		521+94	1680.75		X	1654 ²
525+17		532+21	703.75		X	711 ²
535+34		547+79	1244.75		X	1248 ²
536+91		538+80	188.75	X		106 ²
549+22		556+41	718.75		X	618 ²
553+22		553+89	66.75	X		180.7 ²
568+05		564+13	527.75		X	508 ²
568+66		579+38	1251.75		X	1273 ²
583+80		592+10	829.75		X	730 ²
583+68		587+39	364.5	X		294 ²
593+56		597+34	383.75		X	355 ²
599+43		601+68	224.75		X	
599+76		601+18	141.75	X		136 ²
602+80		606+06	325.75		X	878 ²
607+03		608+79	175.75		X	
610+40		613+80	339.75		X	337 ²
616+14		619+59	344.75		X	2420 ²
621+28		641+94	2065.75		X	19,045 ²
TOTAL						19,131.25

NOTE:
 * VALUES ROUNDED TO NEXT HIGHER MULTIPLE OF 6.25, 12.5, 18.75, ETC. TO ACCOUNT FOR STANDARD SECTIONS OF GUARDRAIL

EXISTING GUARDRAIL REMOVAL SUMMARY

BEGIN STATION	TO	END STATION	OVERALL LENGTH (L.F.)	LOCATION	
				LT	RT
404+89		409+11	422		X
411+65		417+56	591		X
430+65		431+50	85		X
433+40		436+40	300		X
433+71		436+09	238	X	
438+31		442+81	450		X
444+91		472+91	2800		X
477+00		484+31	731		X
488+47		503+54	1507		X
505+04		521+54	1650		X
524+70		532+20	750		X
535+11		543+86	875		X
537+48		538+29	81	X	
545+13		547+13	200		X
549+10		555+17	607		X
552+37		553+93	156	X	
559+18		563+62	444		X
567+31		578+94	1163		X
571+96		572+91	94	X	
583+57		590+95	738		X
584+16		586+54	244	X	
592+66		593+22	56		X
593+60		597+35	375		X
598+99		601+11	212		X
600+31		600+95	63	X	
602+64		605+86	322		X
604+27		605+02	75	X	
606+91		607+97	106		X
610+34		613+57	323		X
615+78		617+38	160		X
618+52		639+45	2093		X
TOTAL			17,911		

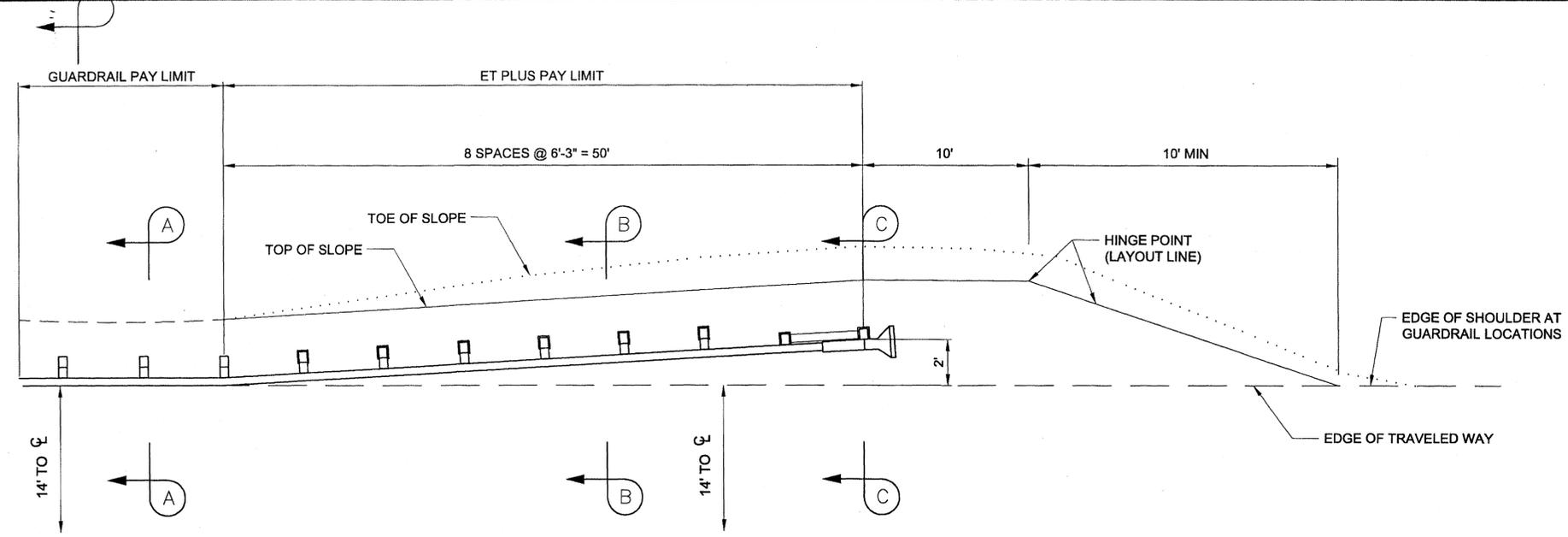
THIS SUMMARY IS BASED ON EXISTING AS-BUILTS AND IS CONSIDERED APPROXIMATE.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE: [Signature] Date 3-18-11

ADDENDUM NUMBER		
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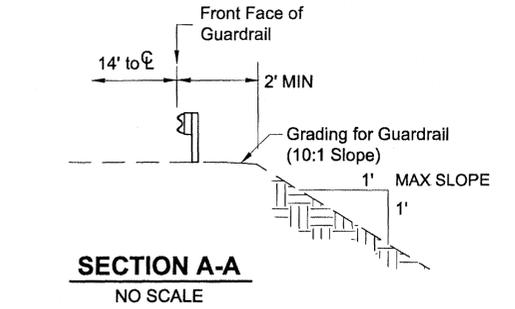
KTN - SOUTH TONGASS HIGHWAY GUARDRAIL REPLACEMENT
 PROJECT NO. HHE-0902(33) ~ 67442

ET PLUS GUARDRAIL DETAILS

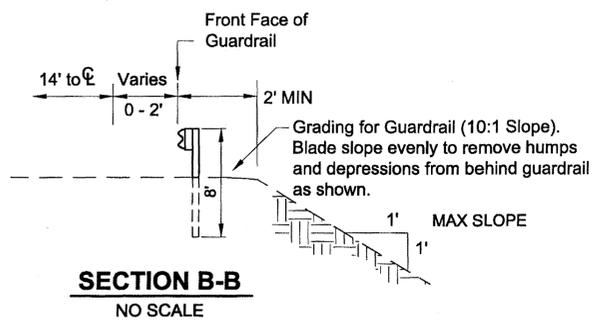


ET-PLUS LAYOUT PLAN
NO SCALE

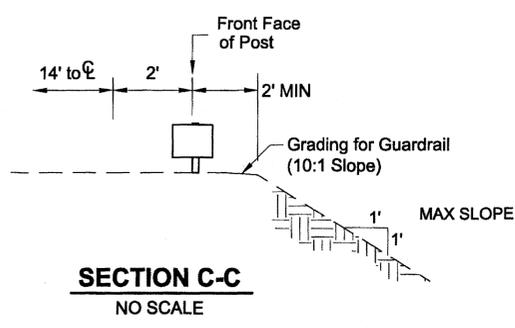
- NOTES:
1. INSTALLATION AND MATERIALS PER ET-PLUS (FORMERLY ET-2000) MANUFACTURER RECOMMENDATION, DIRECTION, AND SUPPLY.
 2. SEE STANDARD DRAWING G-20.10 FOR ADDITIONAL INFORMATION.
 3. ROADWAY IS BUILT ON SHOT ROCK. LARGE SHOT ROCK AND SOLID ROCK MAY BE ENCOUNTERED WHILE INSTALLING GUARDRAIL POSTS. SPECIAL EQUIPMENT AND DRILLING MAY BE REQUIRED TO ACHIEVE REQUIRED PENETRATION FOR INSTALLING GUARDRAIL POSTS.



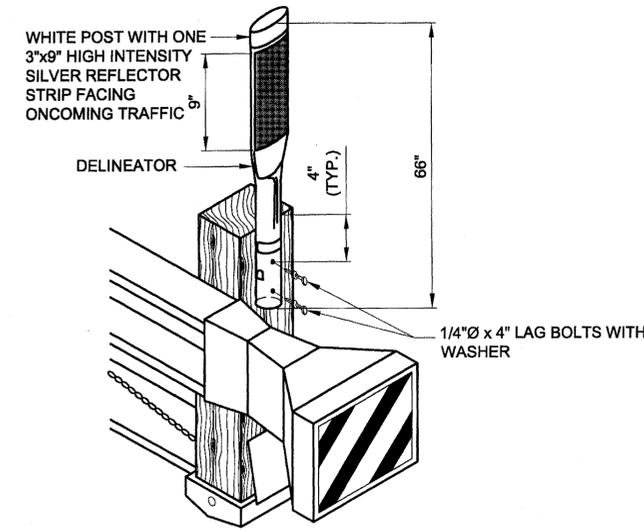
SECTION A-A
NO SCALE



SECTION B-B
NO SCALE



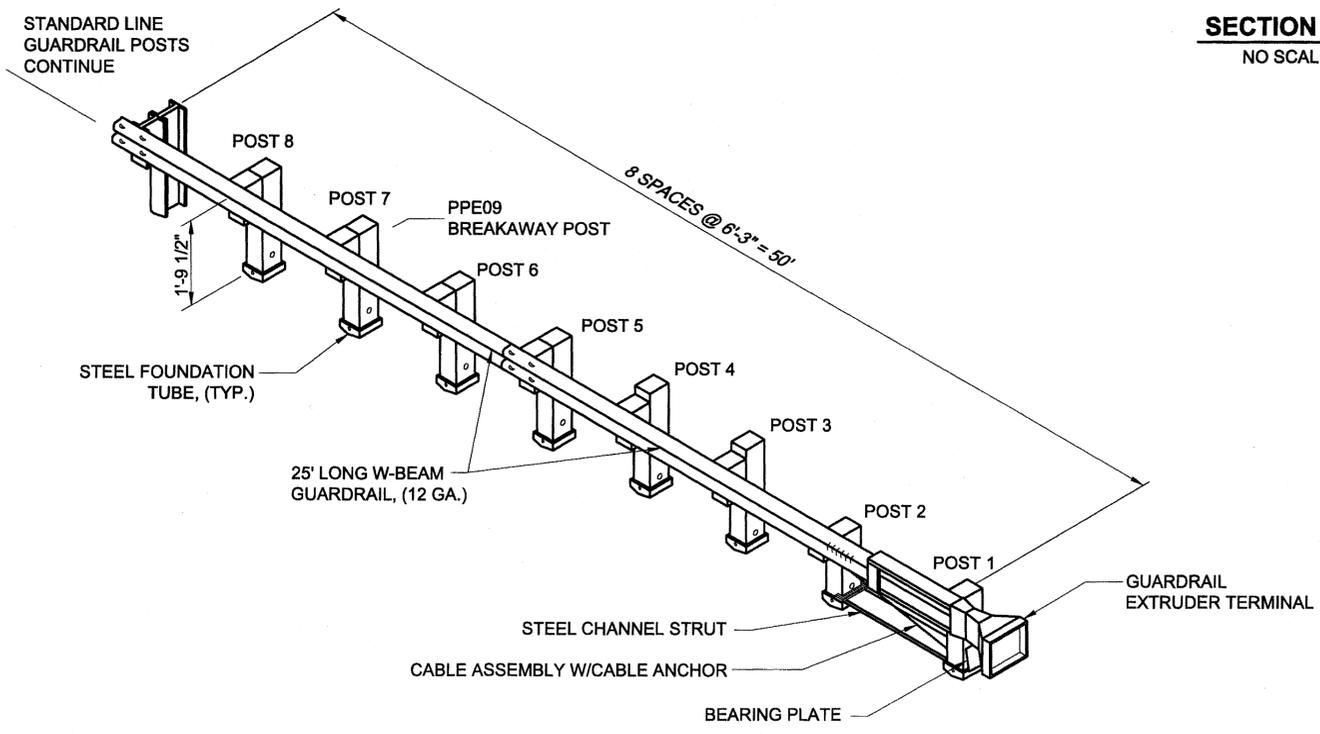
SECTION C-C
NO SCALE



DELINEATOR NOTES:

1. EACH ET PLUS GUARDRAIL END SHALL HAVE ONE DELINEATOR.
2. DELINEATOR SHALL HAVE WHITE REFLECTIVE SHEETING.
3. STEEL POST GUARDRAIL SHALL BE PRE-DRILLED PRIOR TO SECURING DELINEATOR WITH SELF-TAPPING SCREWS.
4. DELINEATORS SHALL COME WITH PRE-DRILLED HOLES. INSTALL DELINEATOR WITH TOP HOLE 1" BELOW TOP OF GUARDRAIL POST

FLEXIBLE GUARDRAIL DELINEATOR
NO SCALE



ET PLUS TERMINAL DETAILS
NO SCALE

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE [Signature] Date 3-18-11

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PLAN LEGEND

CHECKED BY: C. MOREHOUSE



DESIGNED BY: C. DIONISIO

DRAWN BY: C. DIONISIO

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION
KTN SOUTH TONGASS HIGHWAY GUARDRAIL REPLACEMENT PROJECT #67442

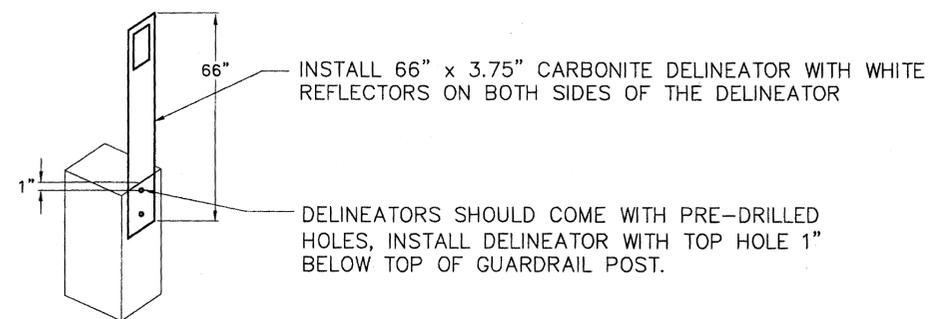
ET PLUS GUARDRAIL DETAILS

PROJECT DESIGNATION
HHE-0902(33)-67442

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
E1	43

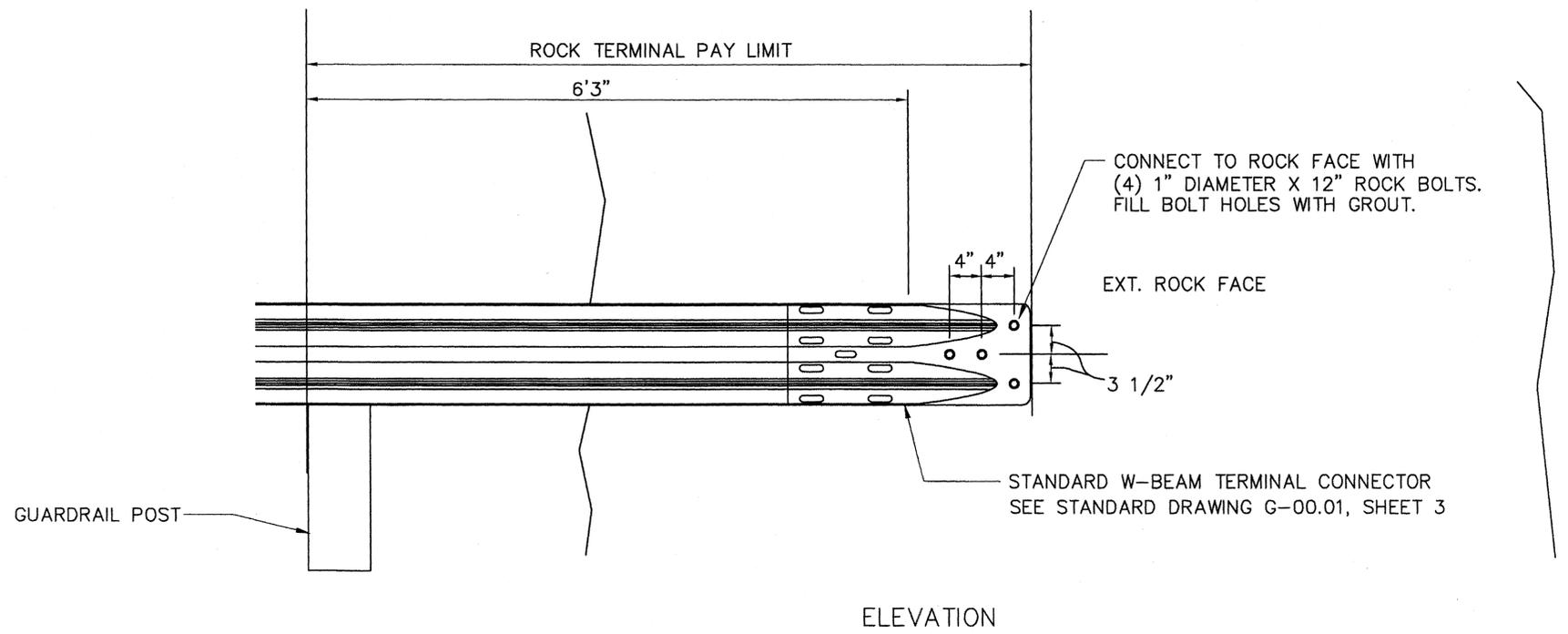
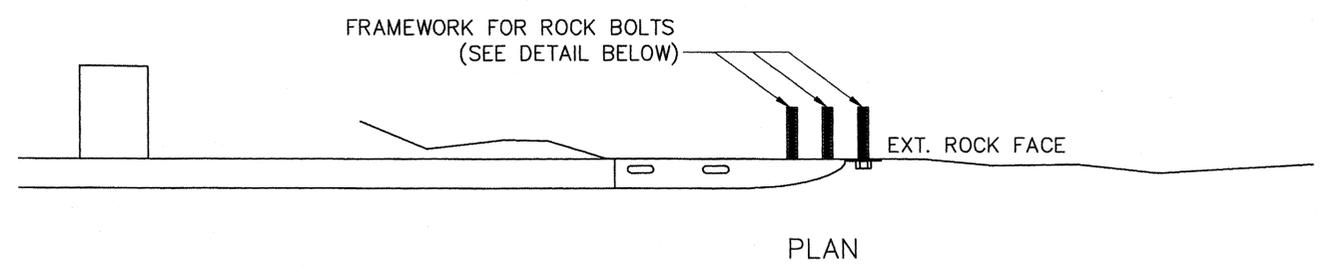
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KTN - SOUTH TONGASS HIGHWAY GUARDRAIL REPLACEMENT
 PROJECT NO. HHE-0902(33) ~ 67442
Rock Terminal and Delineator Details



SNOWSTAKE GUARDRAIL DELINEATOR INSTALLATION
 NO SCALE

NOTE: CHIPPING AND GROUTING OF ROCK FACE AS REQUIRED IS SUBSIDIARY TO THE ROCK TERMINAL ITEM 606(14)



ROCK TERMINAL ANCHOR
 NO SCALE

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE *[Signature]* Date 3-18-11

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PLAN LEGEND

CHECKED BY: C. MOREHOUSE



DESIGNED BY: C. DIONISIO

DRAWN BY: C. DIONISIO

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 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION

KTN SOUTH TONGASS HIGHWAY GUARDRAIL REPLACEMENT PROJECT #67442

Rock Terminal and Delineator Details

PROJECT DESIGNATION
HHE-0902(33)~67442

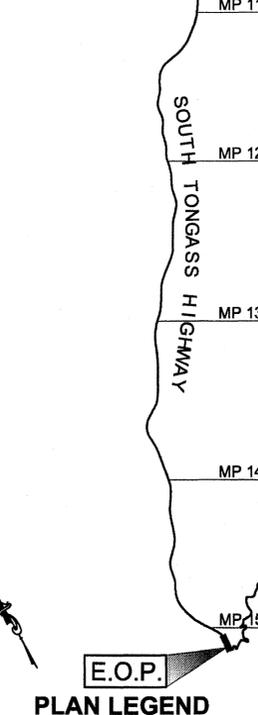
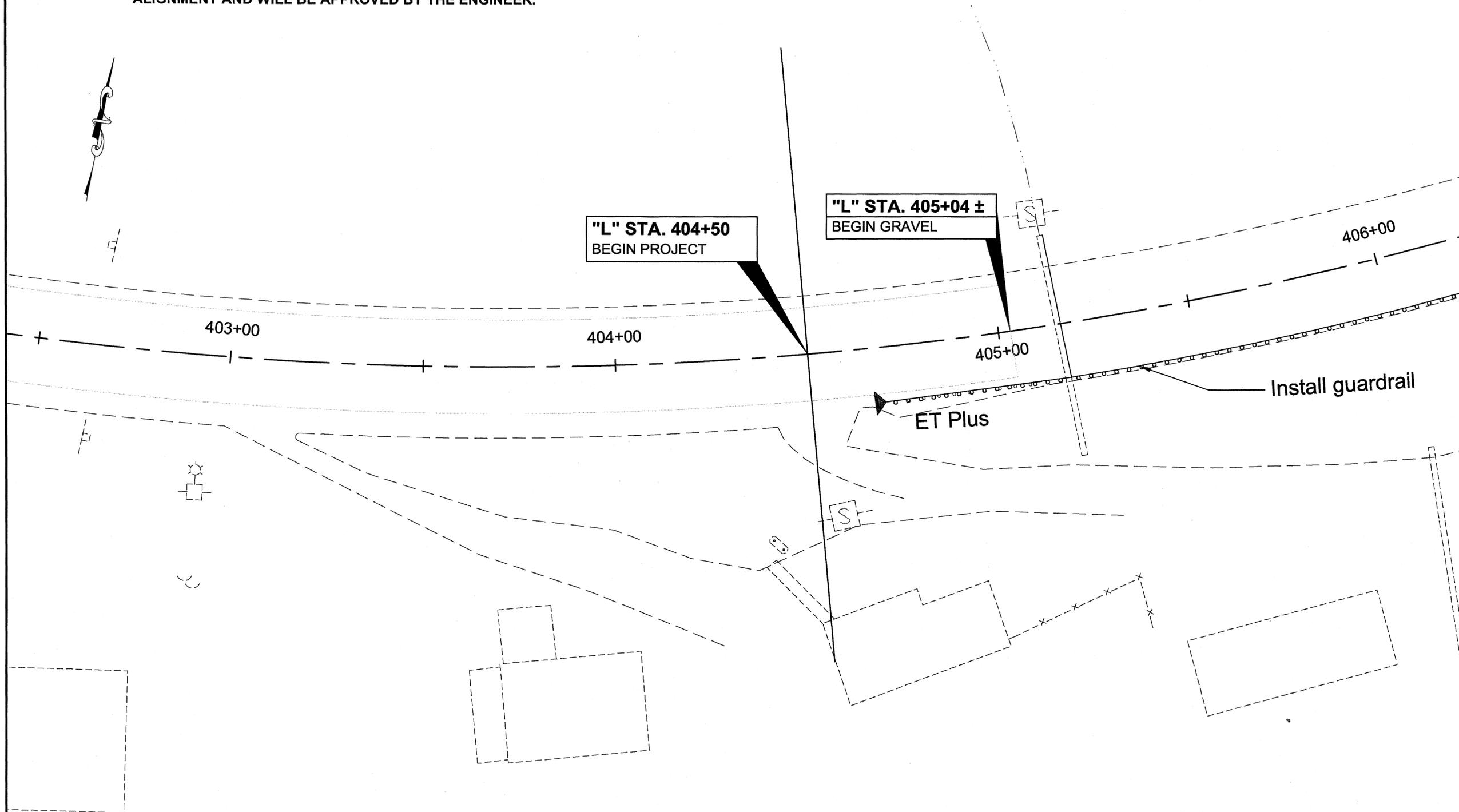
STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
E2	43

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

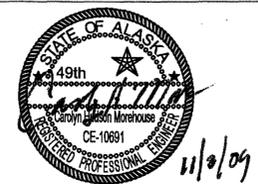
NOTE FOR ALL F SHEETS

1. WHERE PROPOSED AND EXISTING GUARDRAILS OVERLAP, THE EXISTING GUARDRAIL IS NOT SHOWN FOR CLARITY. SEE SUMMARY TABLES FOR LOCATIONS OF PROPOSED AND EXISTING GUARDRAIL.

2. GUARDRAIL ALIGNMENT WILL BE ESTABLISHED FROM CENTERLINE ALIGNMENT AND WILL BE APPROVED BY THE ENGINEER.



CHECKED BY: C. MOREHOUSE



DESIGNED BY: C. DIONISIO

DRAWN BY: C. DIONISIO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

**KTN SOUTH TONGASS HIGHWAY
GUARDRAIL REPLACEMENT
PROJECT #67442**

LAYOUT PLAN

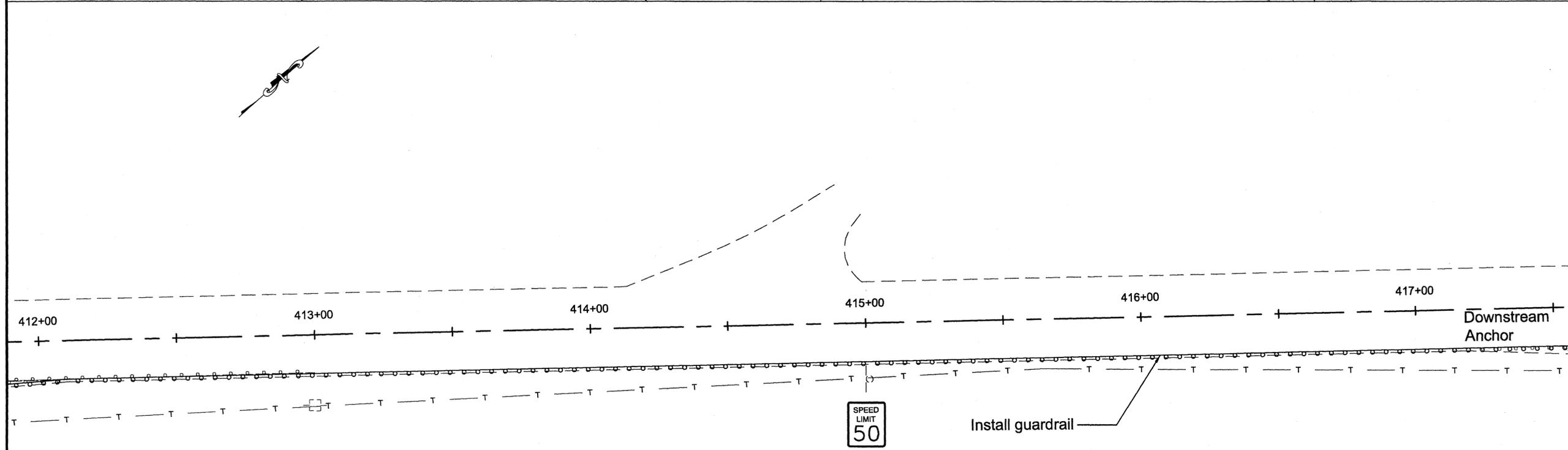
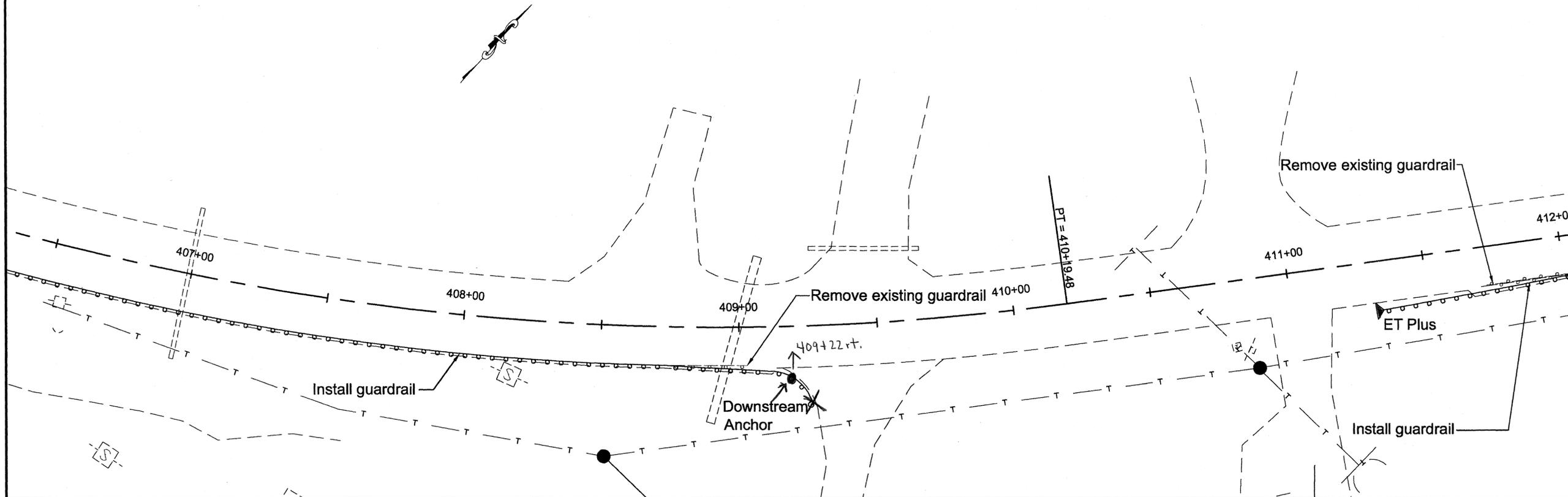
PROJECT DESIGNATION
HHE-0902(33)-67442

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
F1	43

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE *[Signature]* Date 3/8-11

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RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



PLAN LEGEND

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STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
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 DIVISION-SOUTHEAST REGION
**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

LAYOUT PLAN

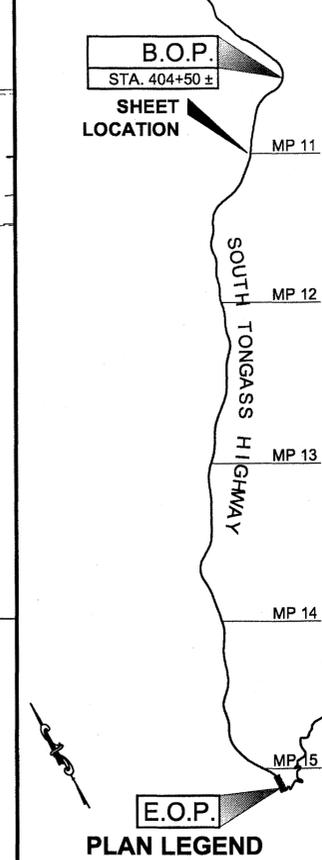
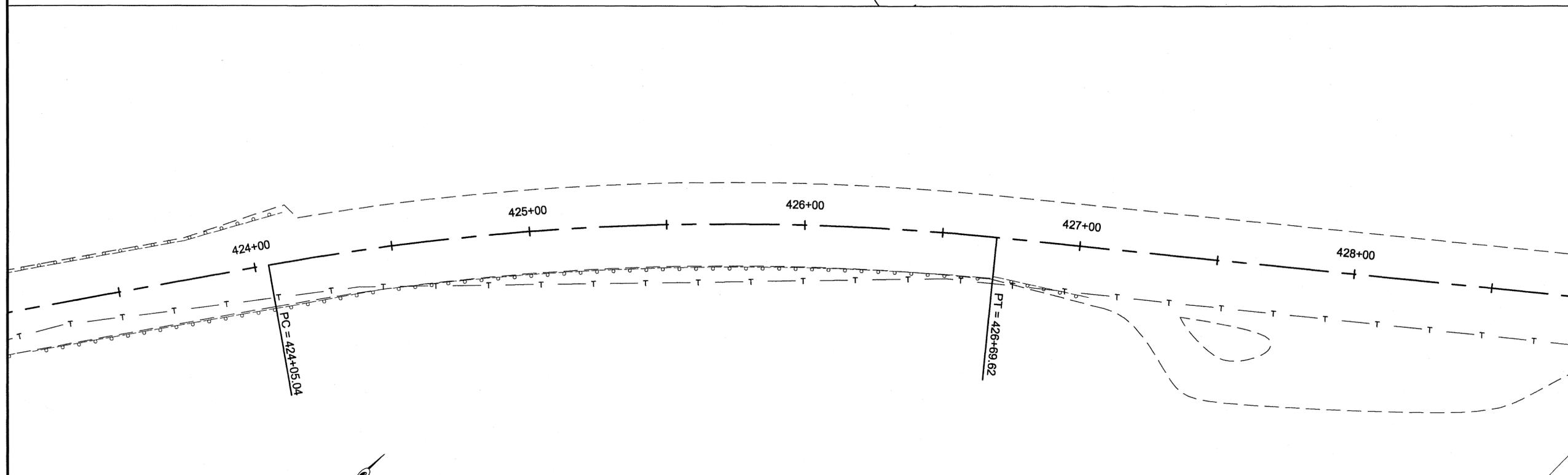
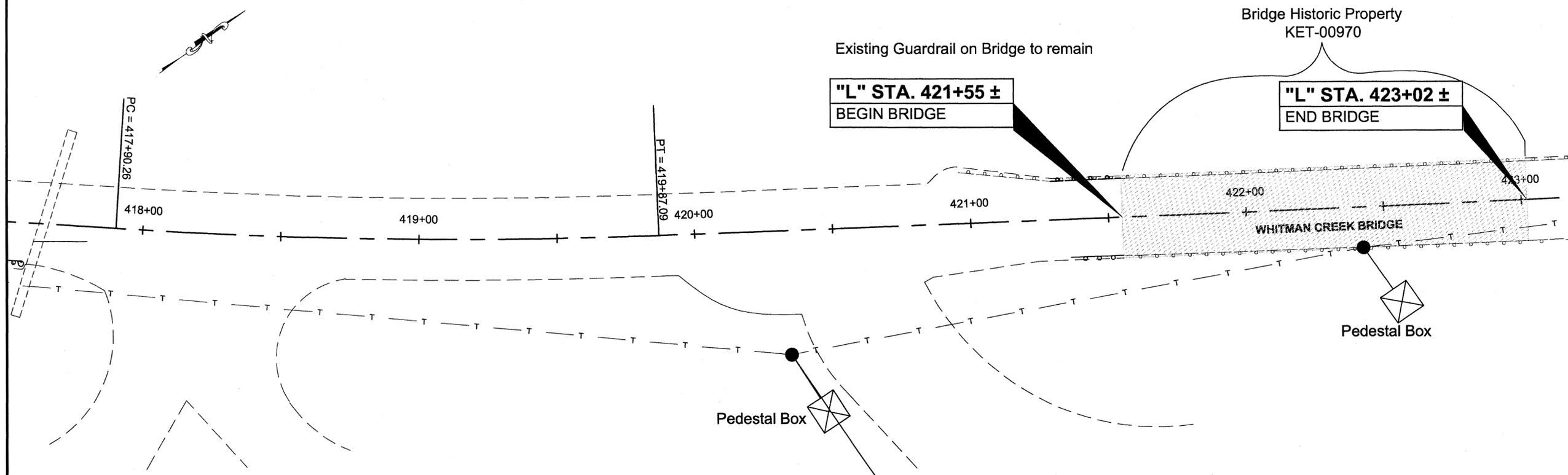
PROJECT DESIGNATION
HHE-0902(33)-67442

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
F2	43

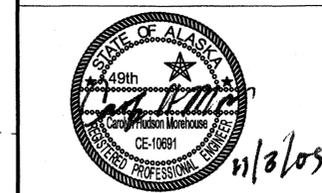
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 PE: [Signature] Date: 3-18-11

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STATE OF ALASKA
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 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION

**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

LAYOUT PLAN

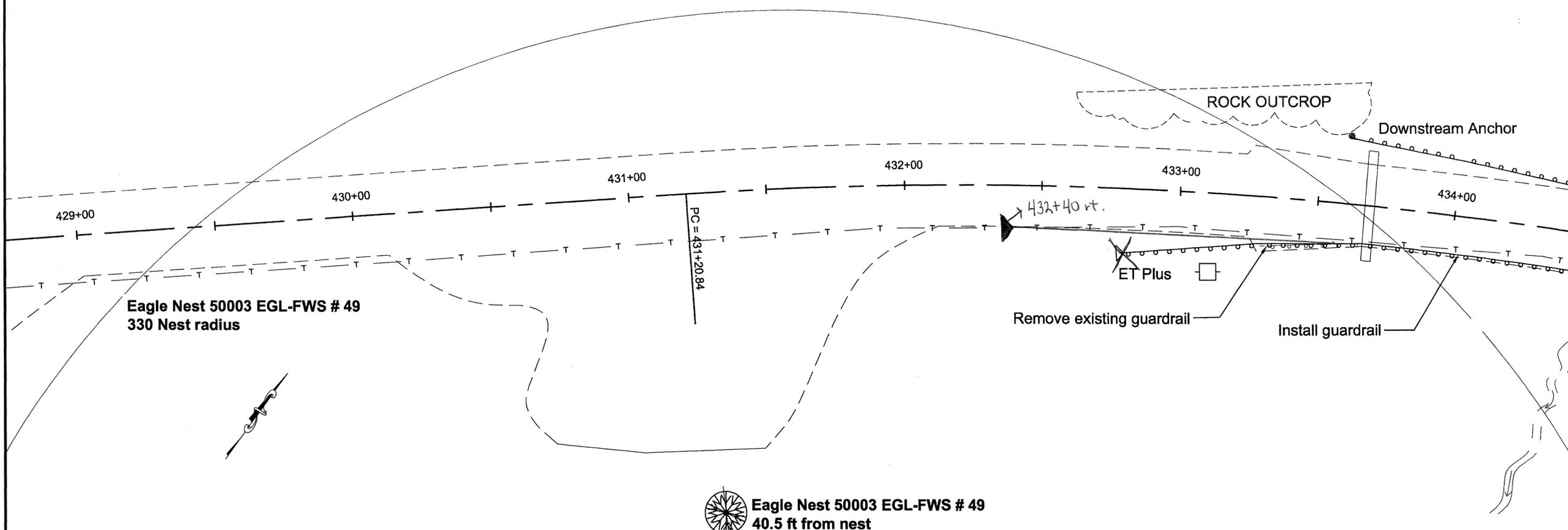
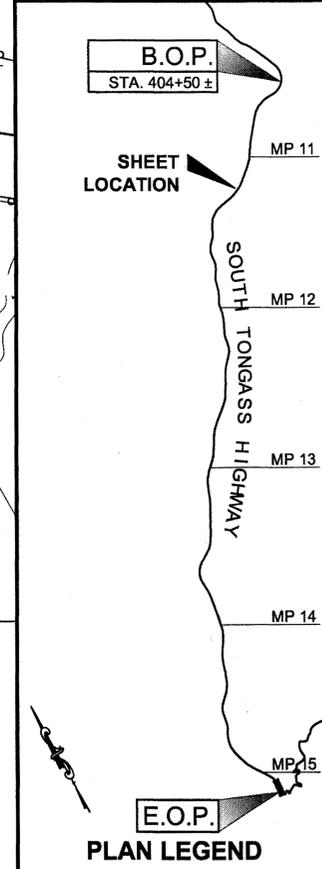
PROJECT DESIGNATION
HHE-0902(33)~67442

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
F3	43

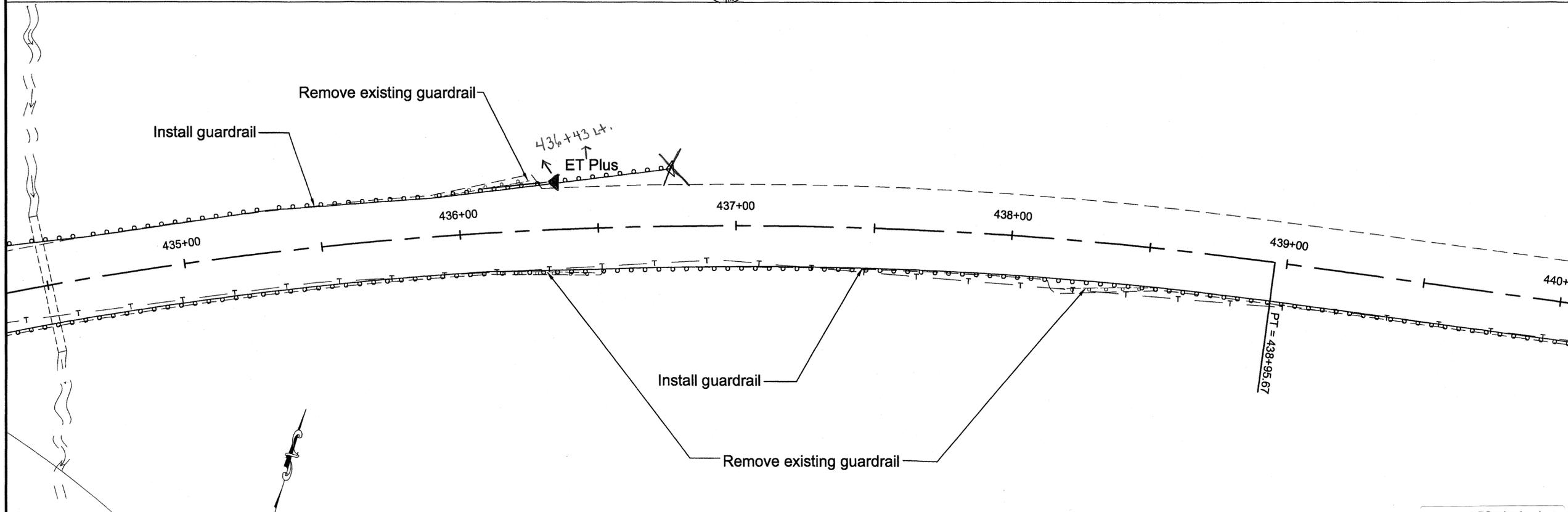
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 PE: [Signature] Date: 3-18-11

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ATTACHMENT NUMBER		
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No.	DATE	DESCRIPTION



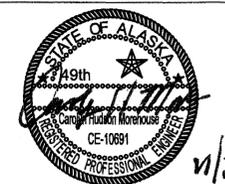
Eagle Nest 50003 EGL-FWS # 49
 40.5 ft from nest



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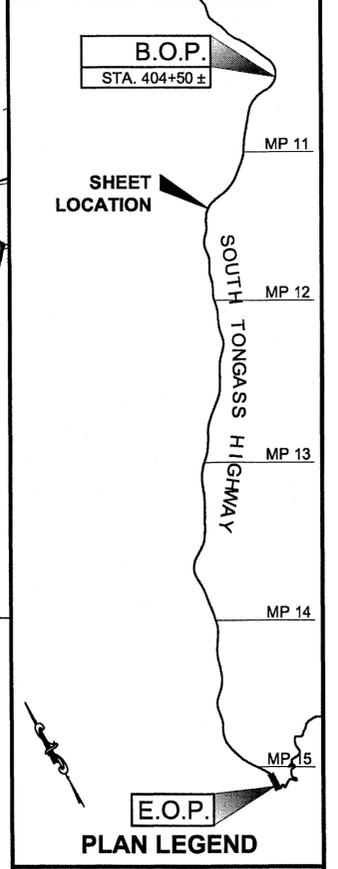
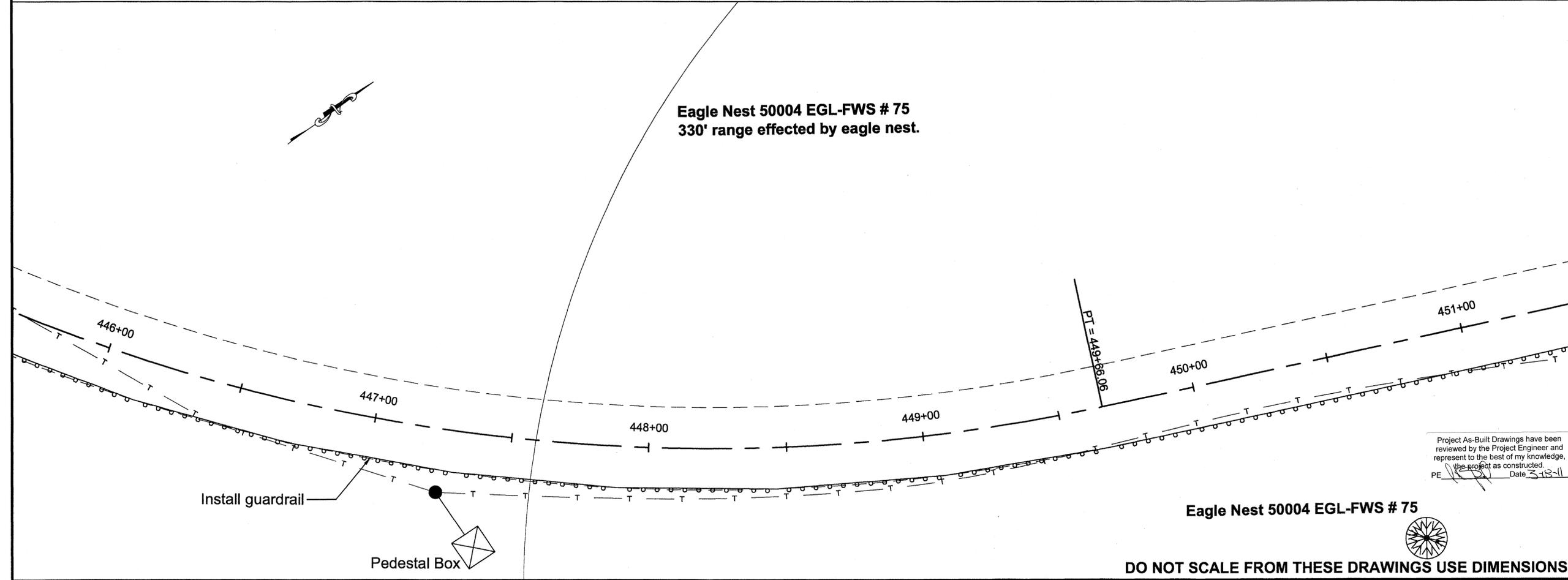
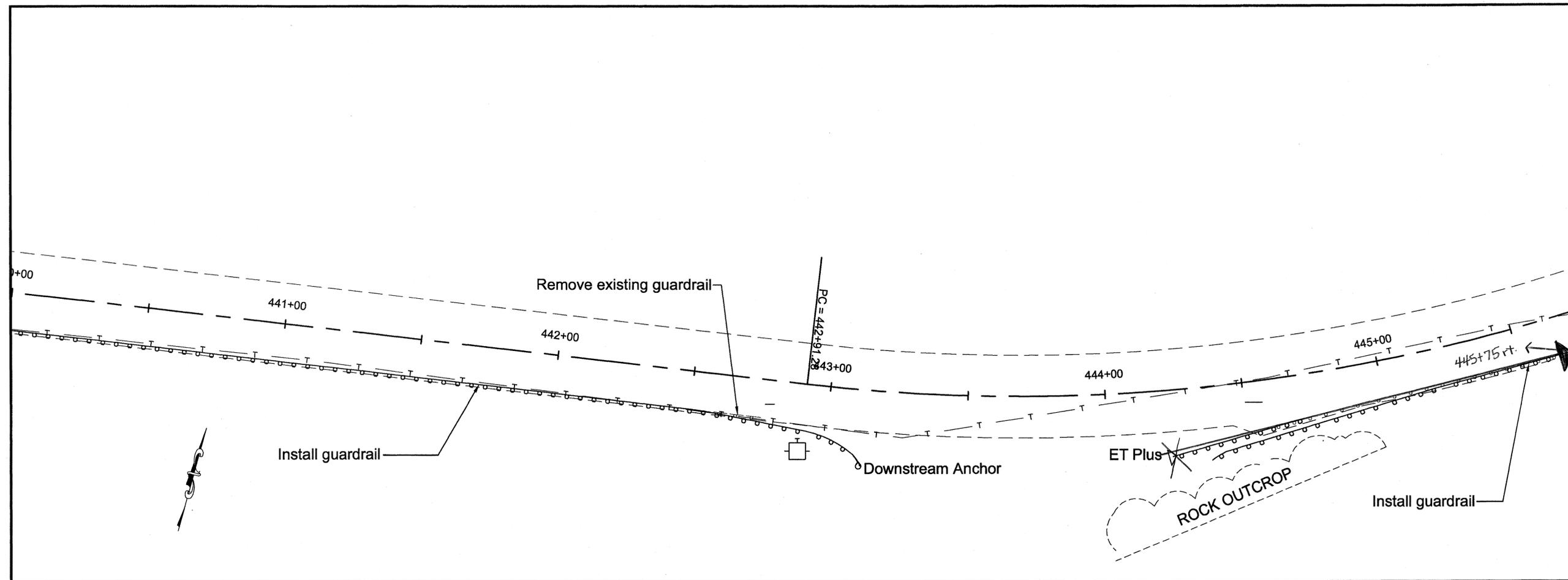


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STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
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 DIVISION-SOUTHEAST REGION
**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

LAYOUT PLAN	
PROJECT DESIGNATION HHE-0902(33)-67442	
STATE ALASKA	YEAR 2009
SHEET NUMBER F4	TOTAL SHEETS 43

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



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STATE OF ALASKA
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 DIVISION-SOUTHEAST REGION
**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

LAYOUT PLAN	
PROJECT DESIGNATION HHE-0902(33)-67442	
STATE ALASKA	YEAR 2009
SHEET NUMBER F5	TOTAL SHEETS 43

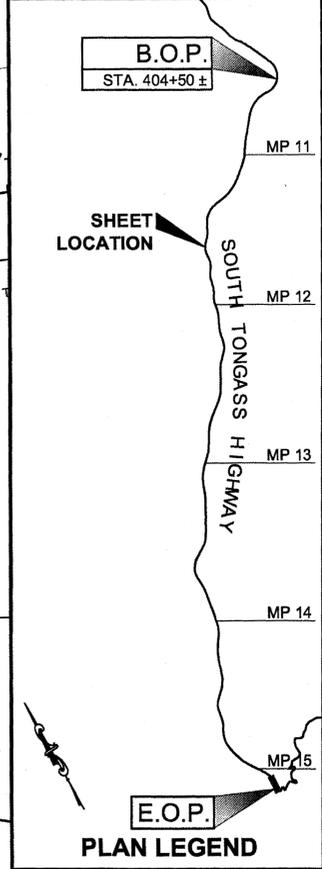
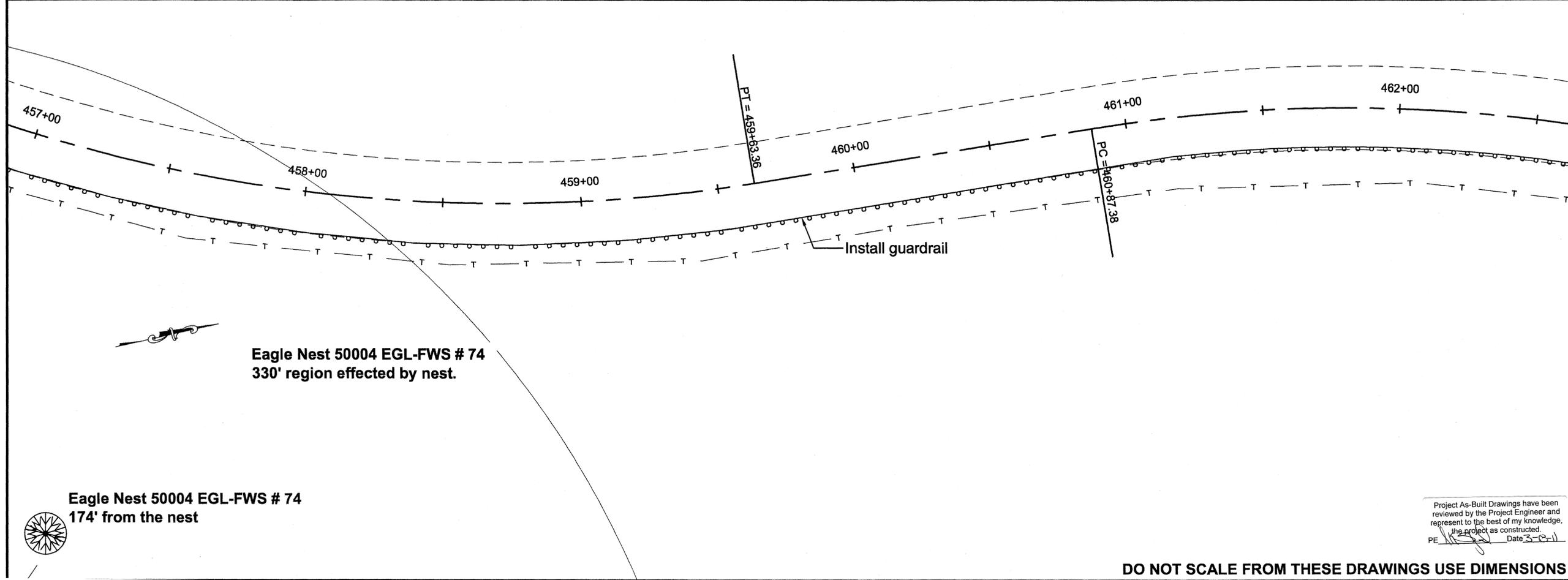
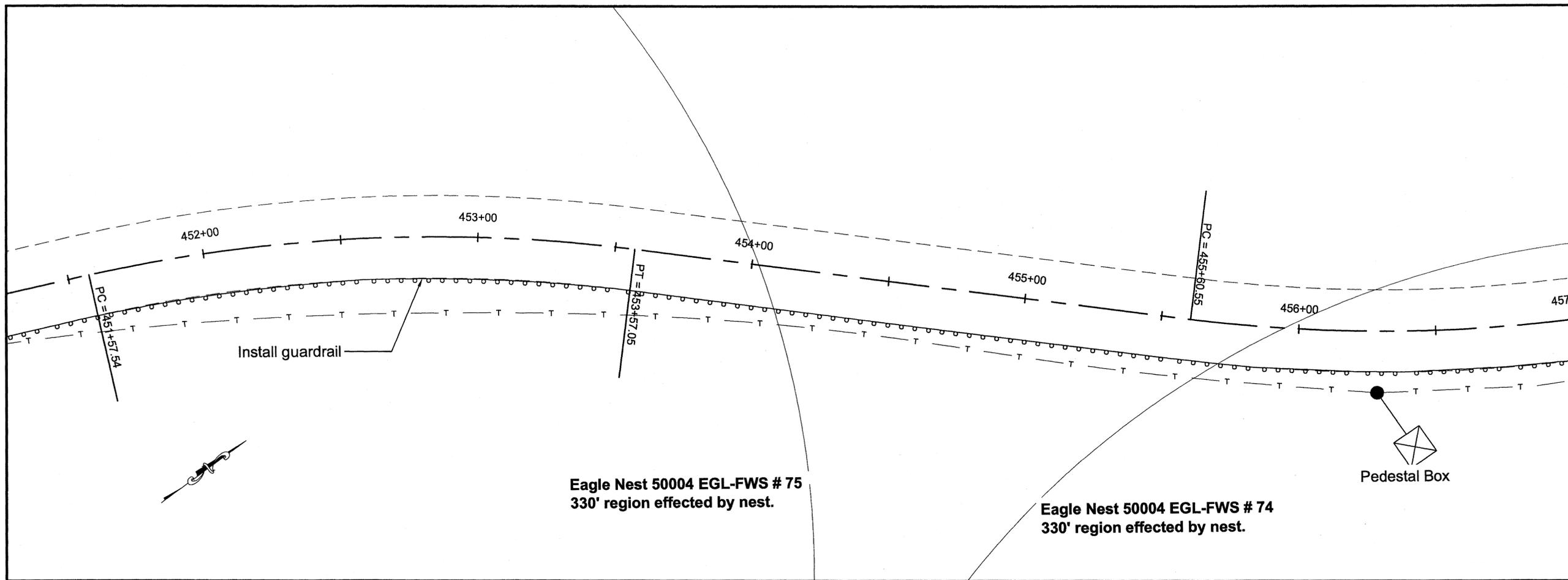
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 PE [Signature] Date 3-18-11

Eagle Nest 50004 EGL-FWS # 75



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STATE OF ALASKA
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 DIVISION-SOUTHEAST REGION

**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

LAYOUT PLAN

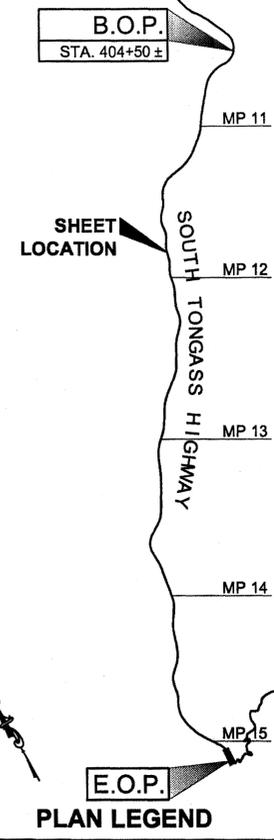
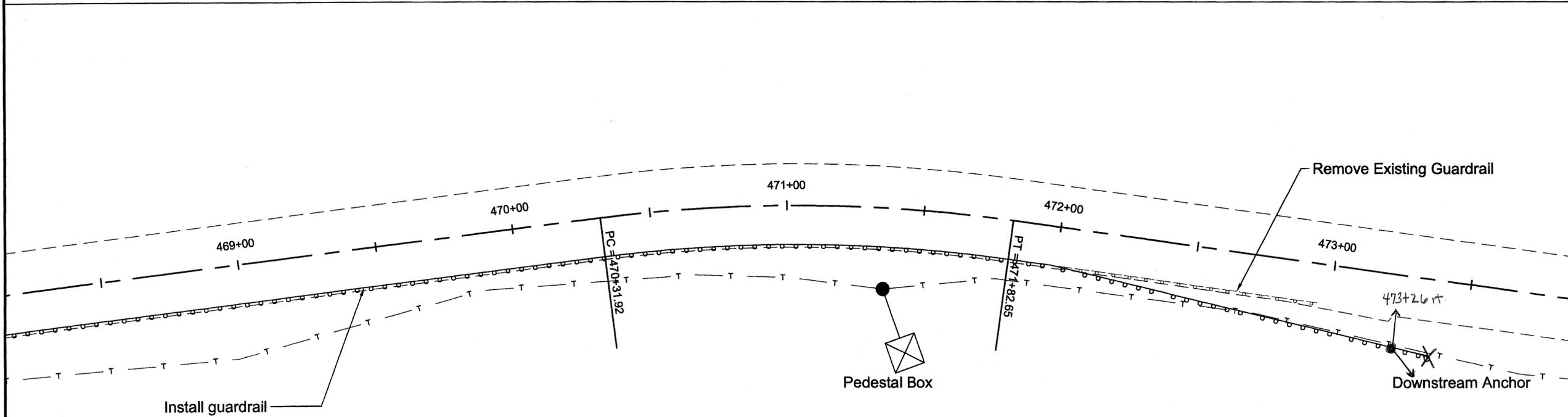
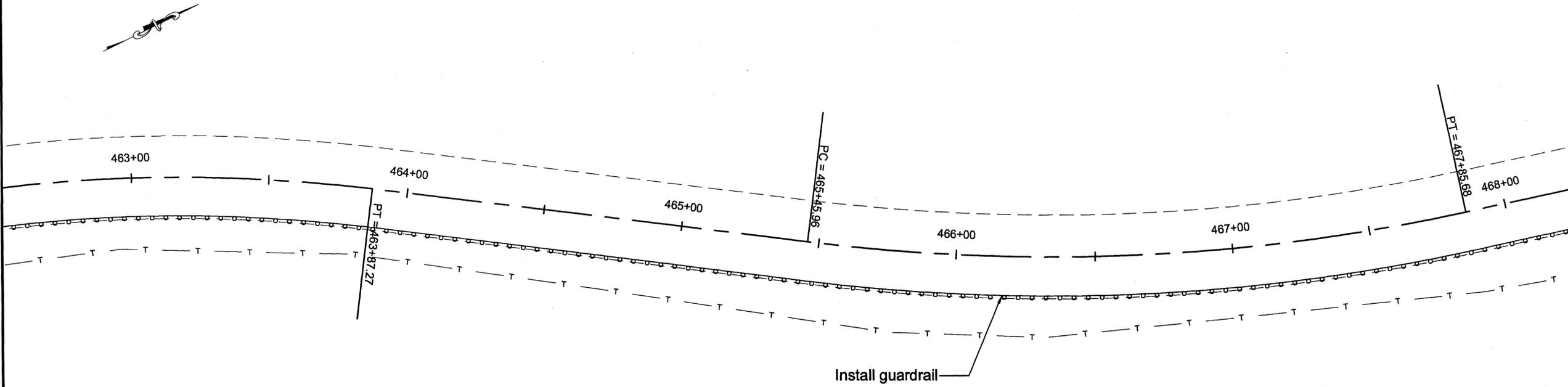
PROJECT DESIGNATION
HHE-0902(33)-67442

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
F6	43

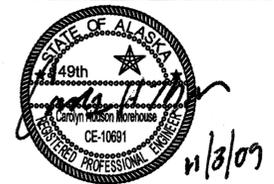
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STATE OF ALASKA
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**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

LAYOUT PLAN

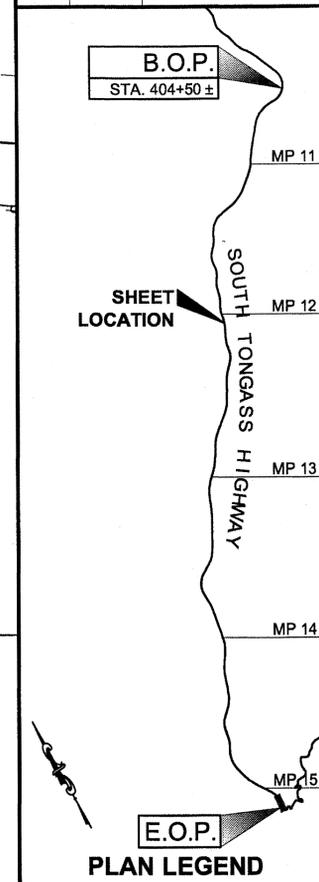
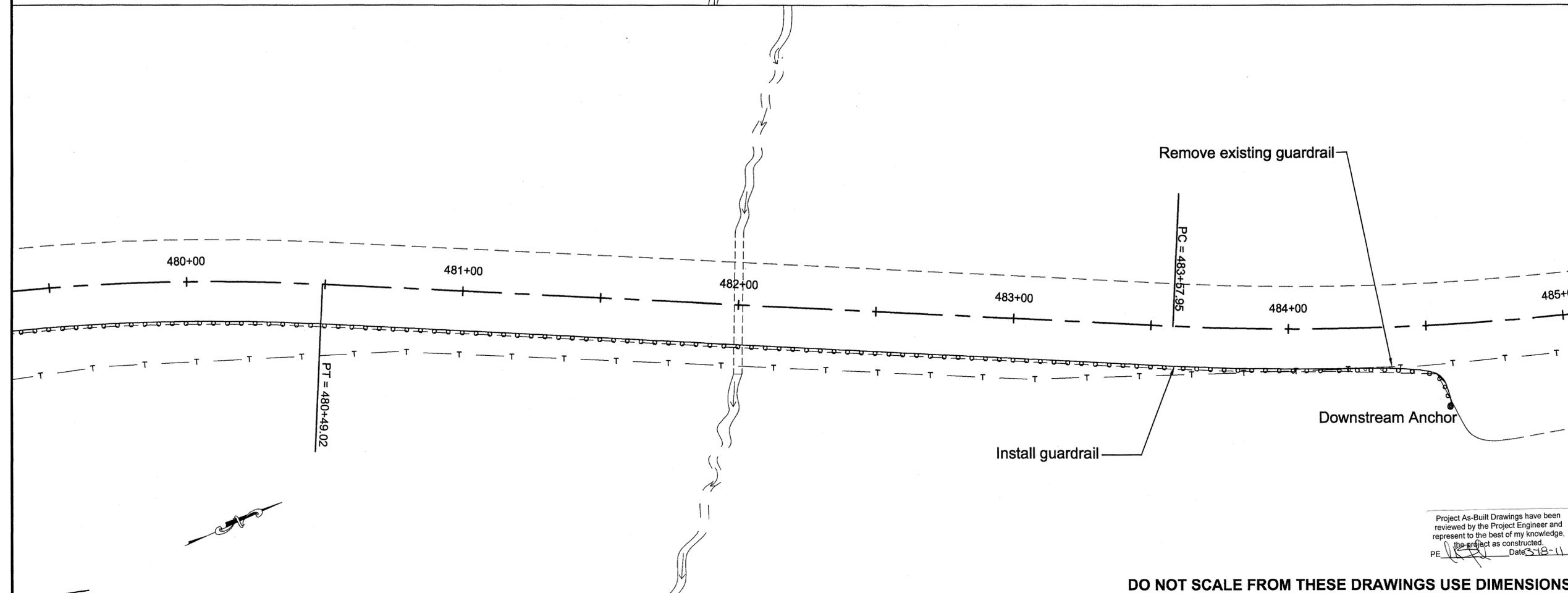
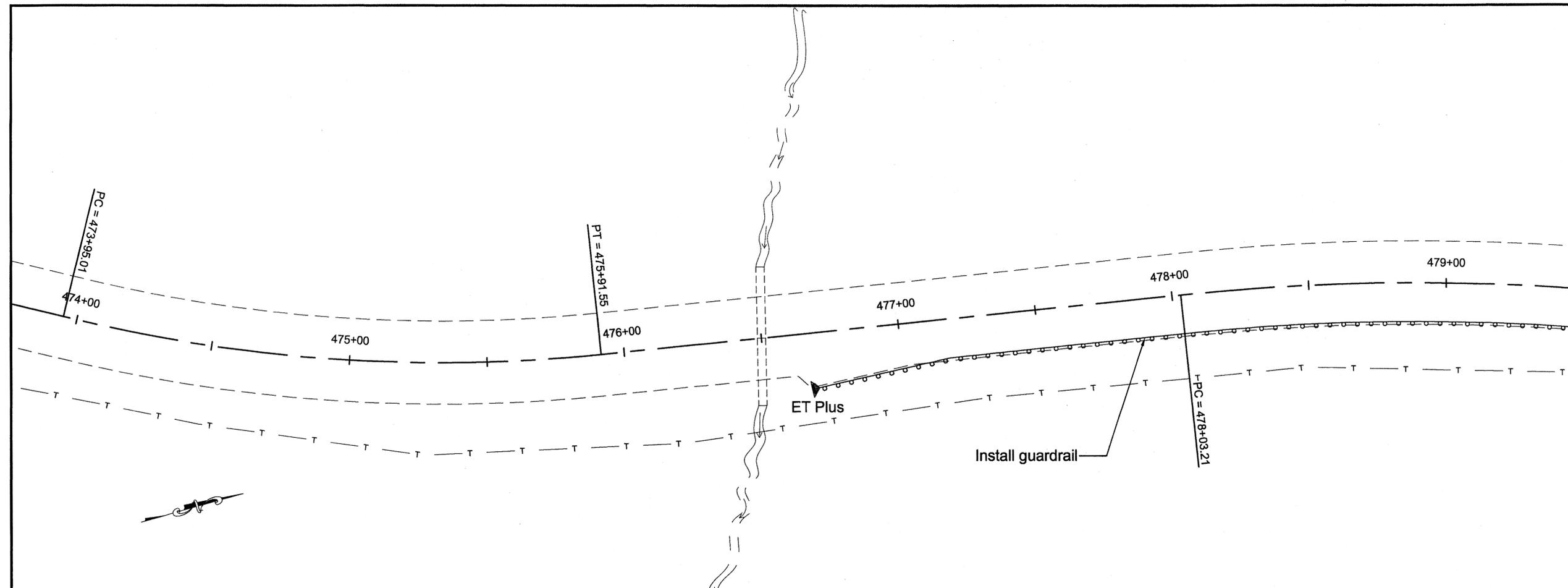
PROJECT DESIGNATION
HHE-0902(33)-67442

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
F7	43

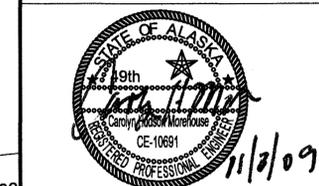
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STATE OF ALASKA
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 DIVISION-SOUTHEAST REGION

**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

LAYOUT PLAN

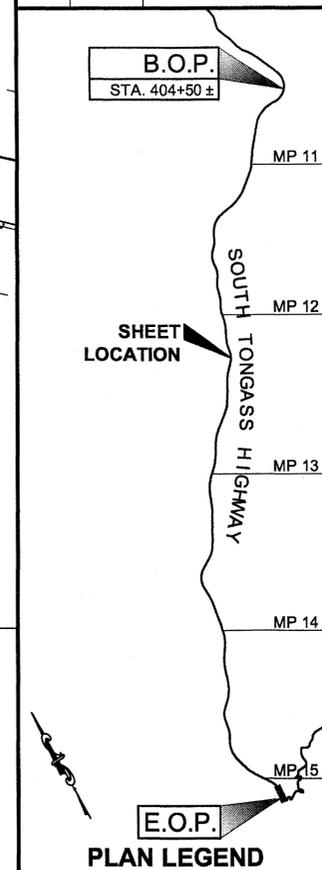
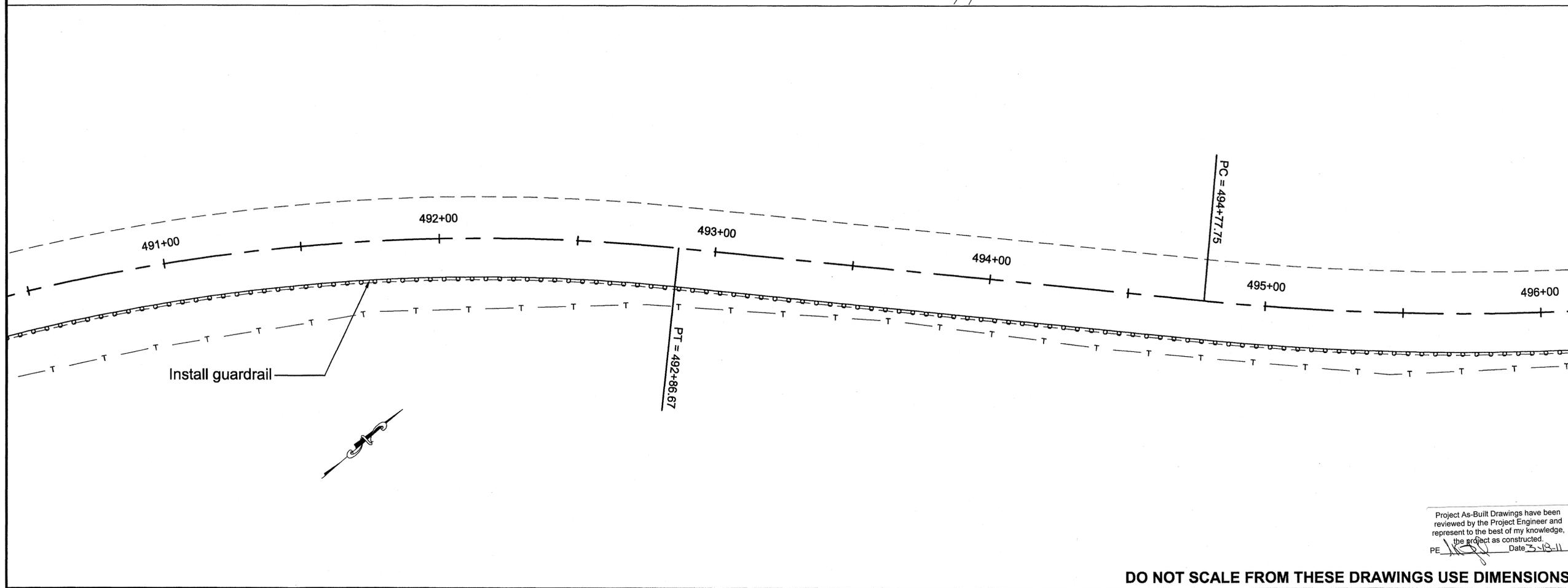
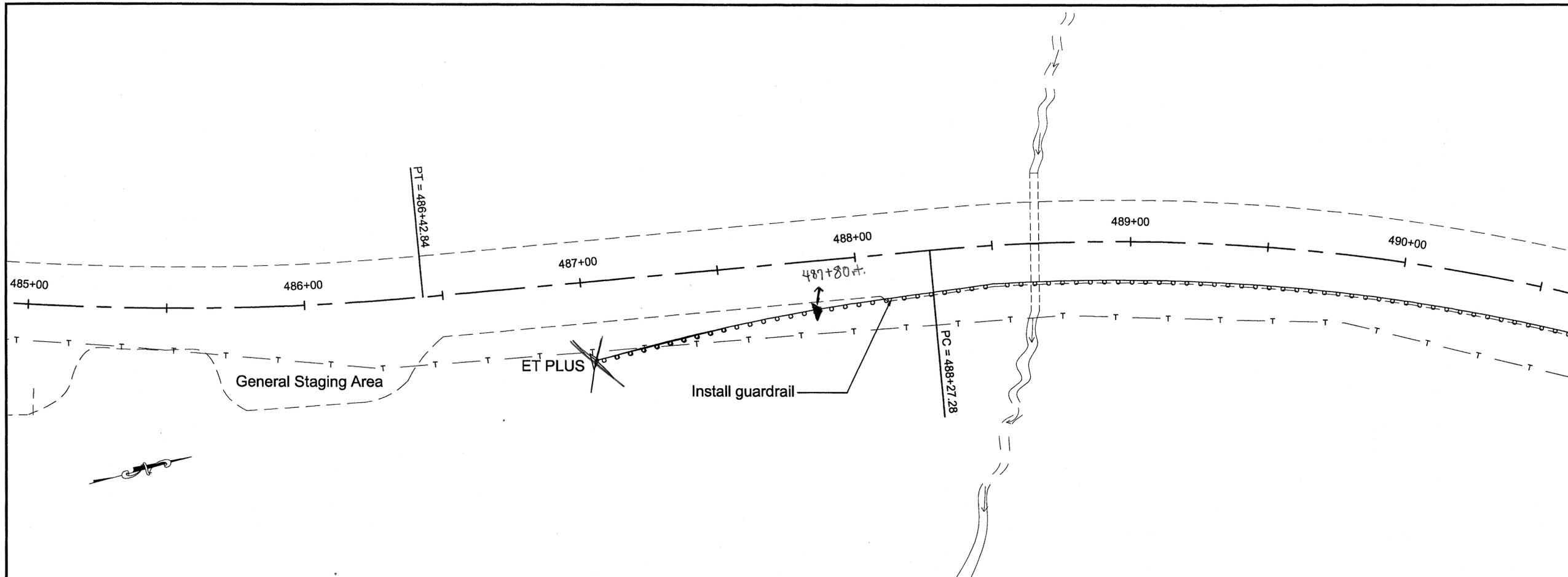
PROJECT DESIGNATION
HHE-0902(33)-67442

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
F8	43

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ATTACHMENT NUMBER		
RECORD OF REVISIONS		
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STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
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 DIVISION-SOUTHEAST REGION

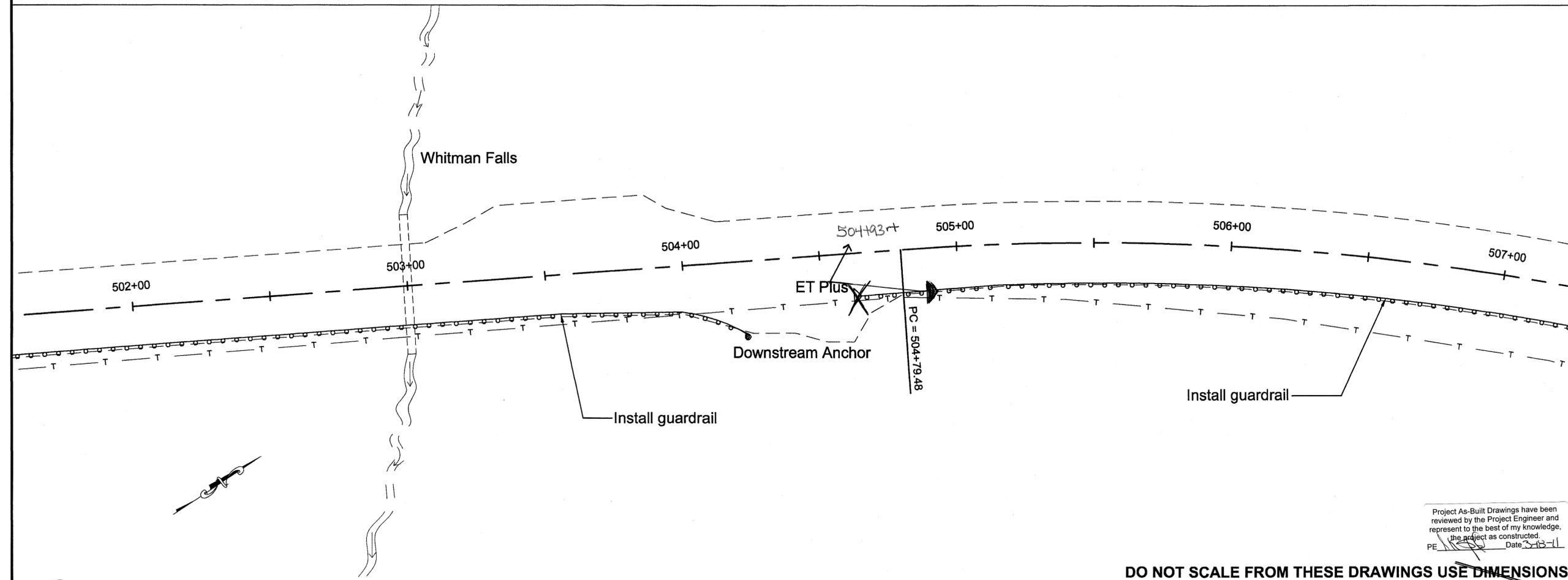
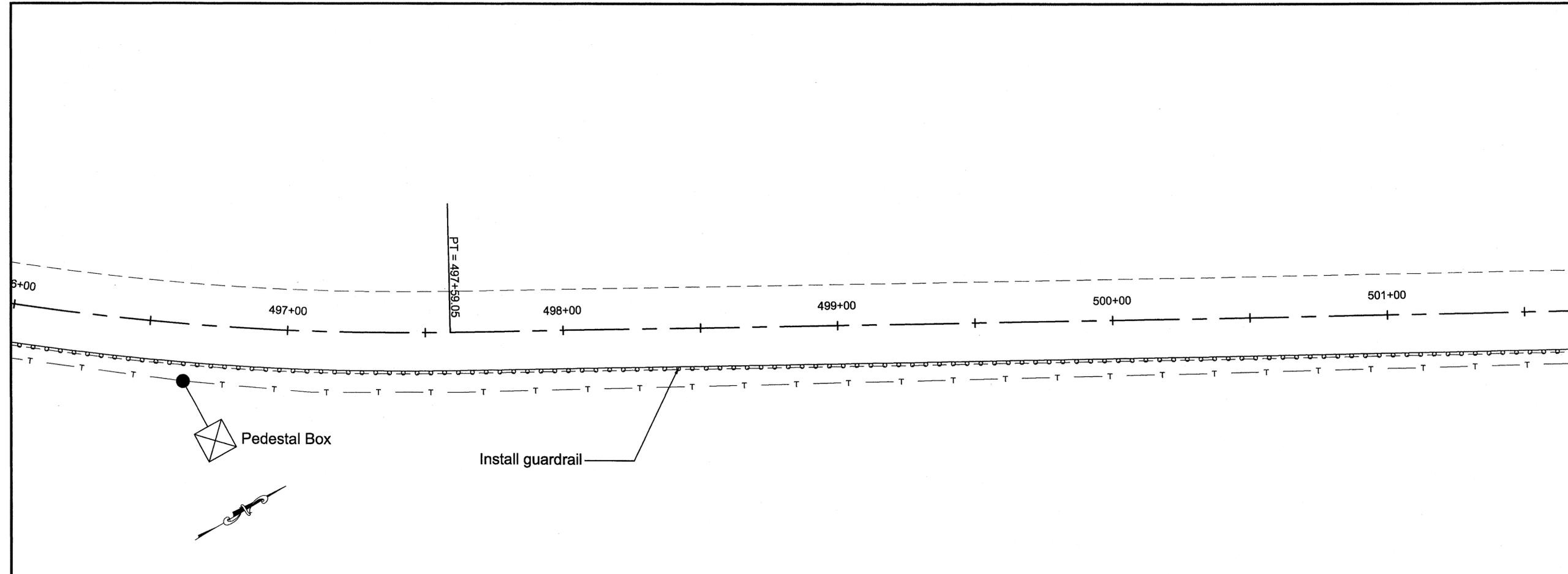
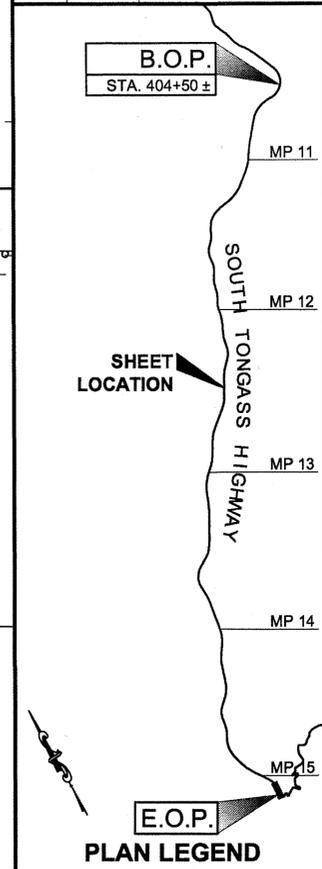
**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

LAYOUT PLAN	
PROJECT DESIGNATION HHE-0902(33)-67442	
STATE ALASKA	YEAR 2009
SHEET NUMBER F9	TOTAL SHEETS 43

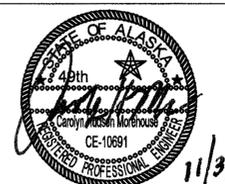
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ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



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STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION
**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

LAYOUT PLAN

PROJECT DESIGNATION
HHE-0902(33)-67442

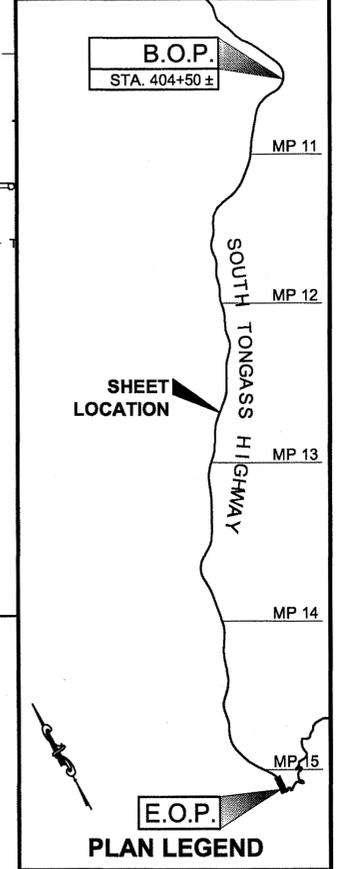
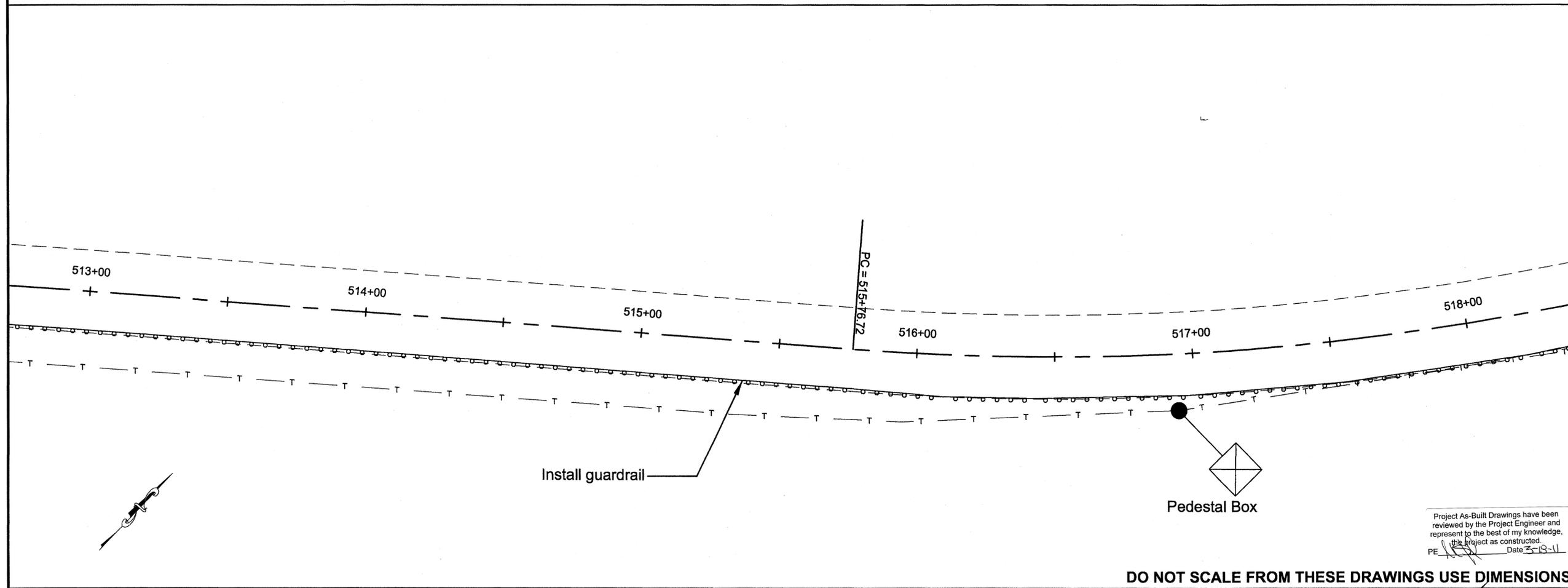
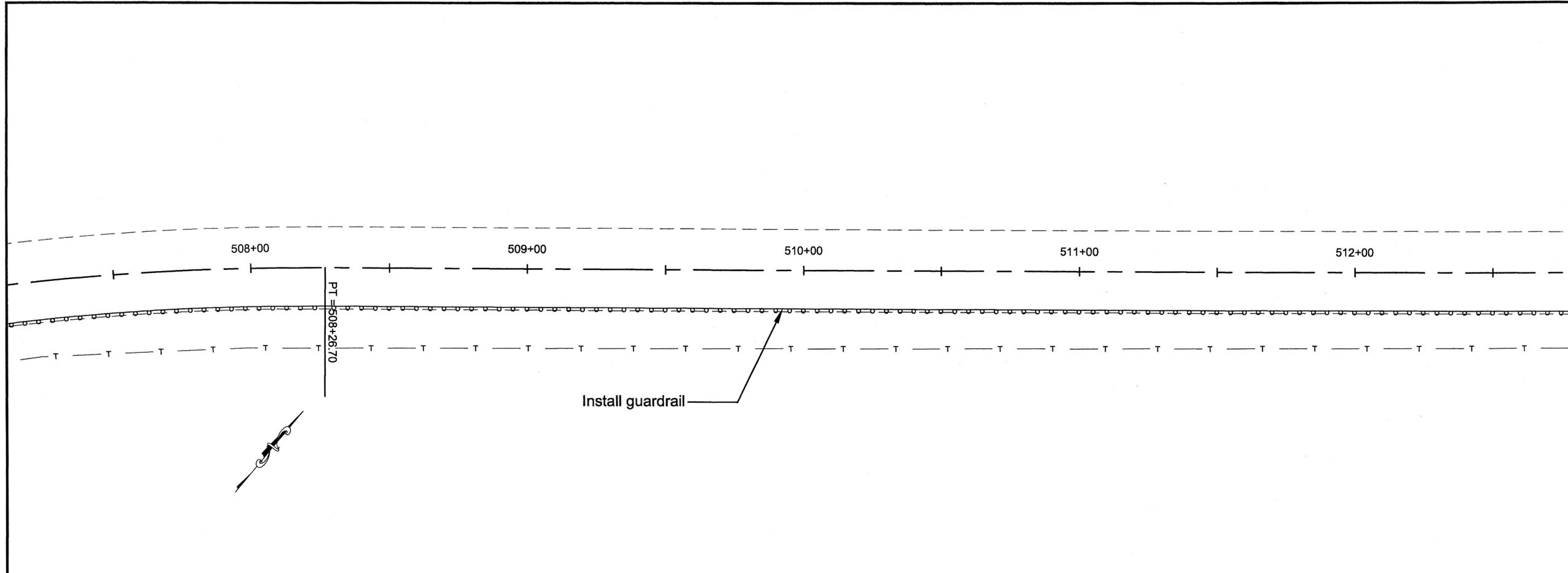
STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
F10	43

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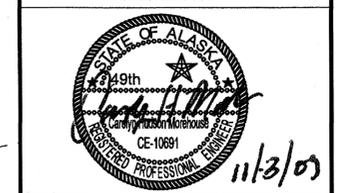
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DIONISIO, CHRISTOPHER J (DOT)
 TAB: F11 Wednesday, September 30, 2009 10

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



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STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
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 DIVISION-SOUTHEAST REGION

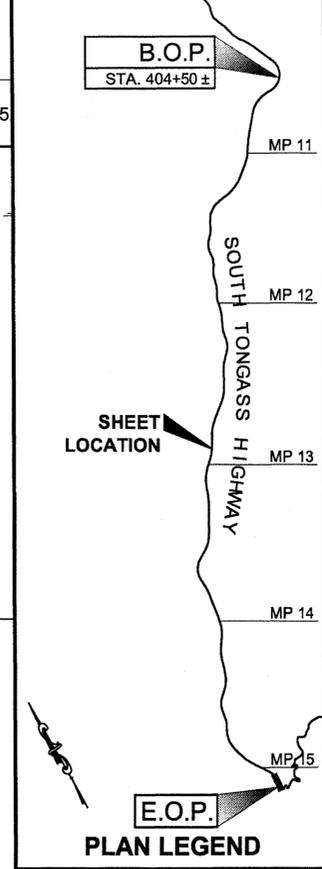
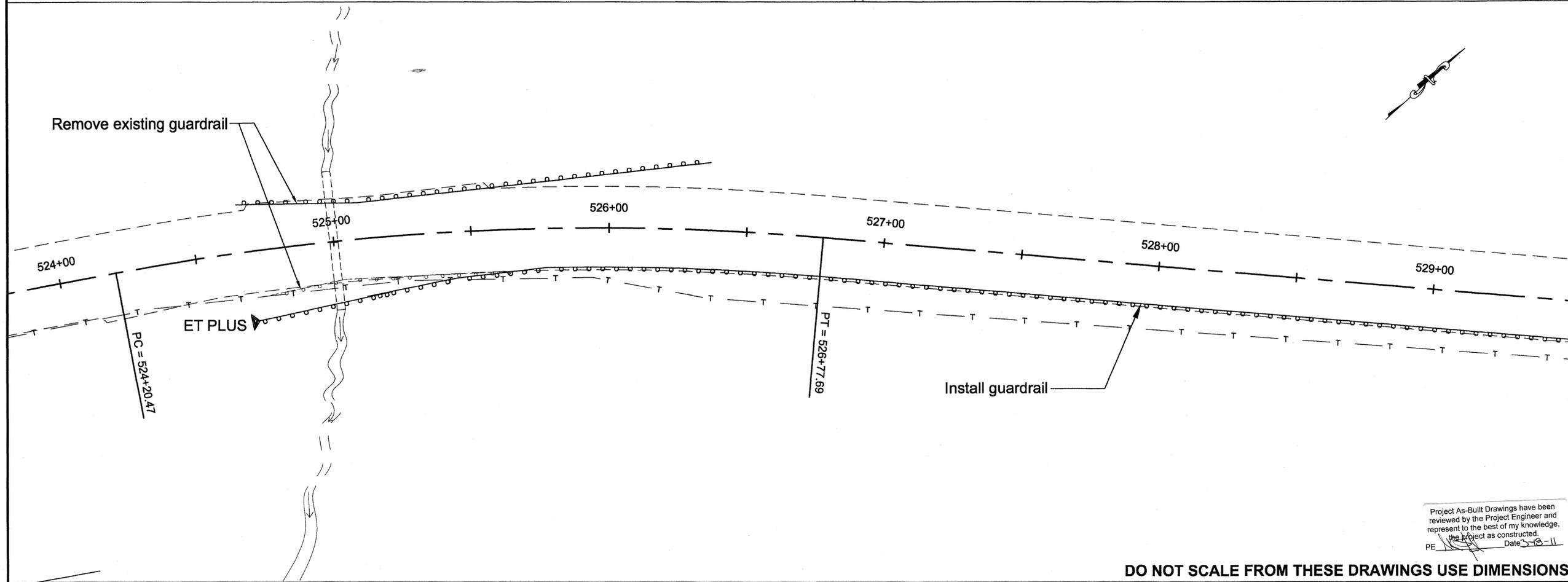
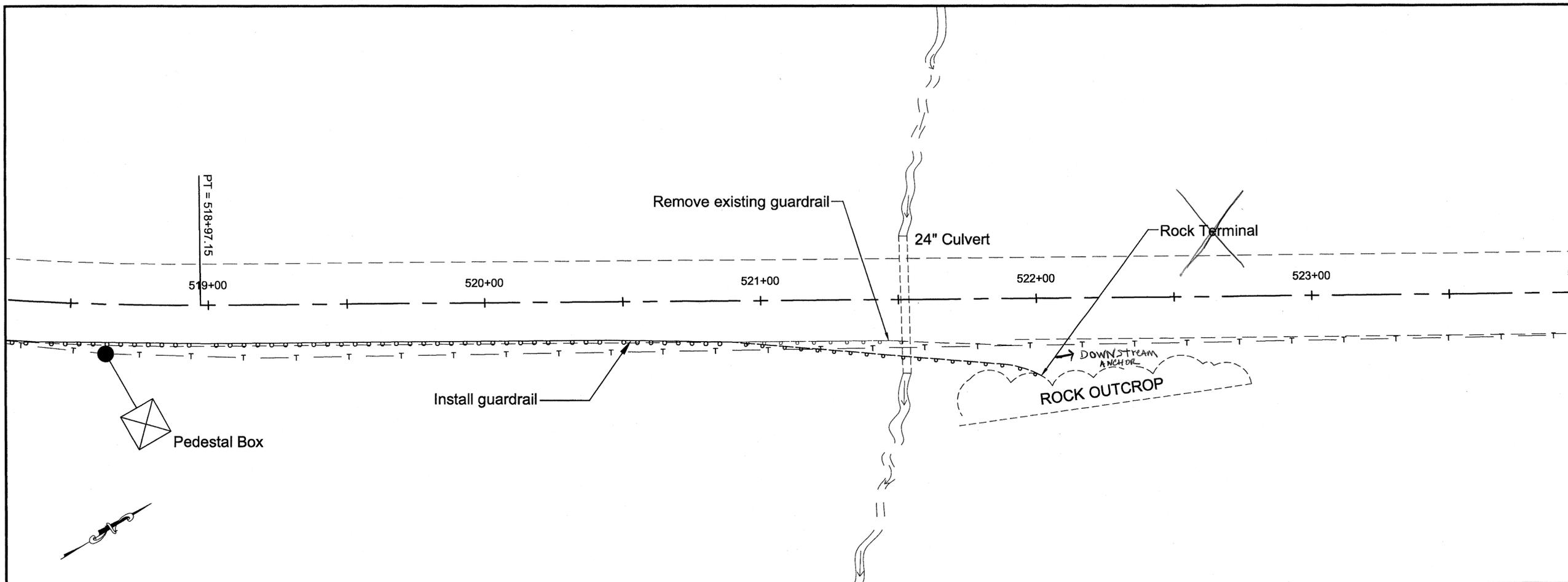
**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

LAYOUT PLAN	
PROJECT DESIGNATION HHE-0902(33)-67442	
STATE ALASKA	YEAR 2009
SHEET NUMBER F11	TOTAL SHEETS 43

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STATE OF ALASKA
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 DIVISION-SOUTHEAST REGION

**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

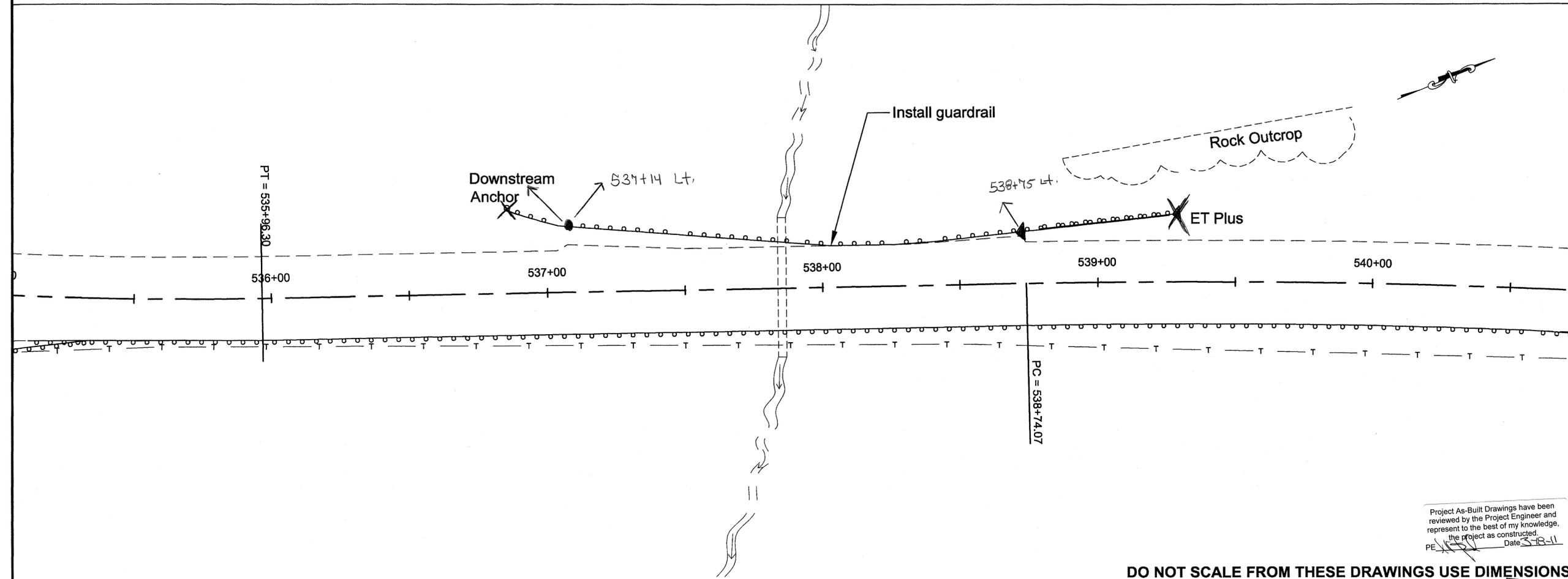
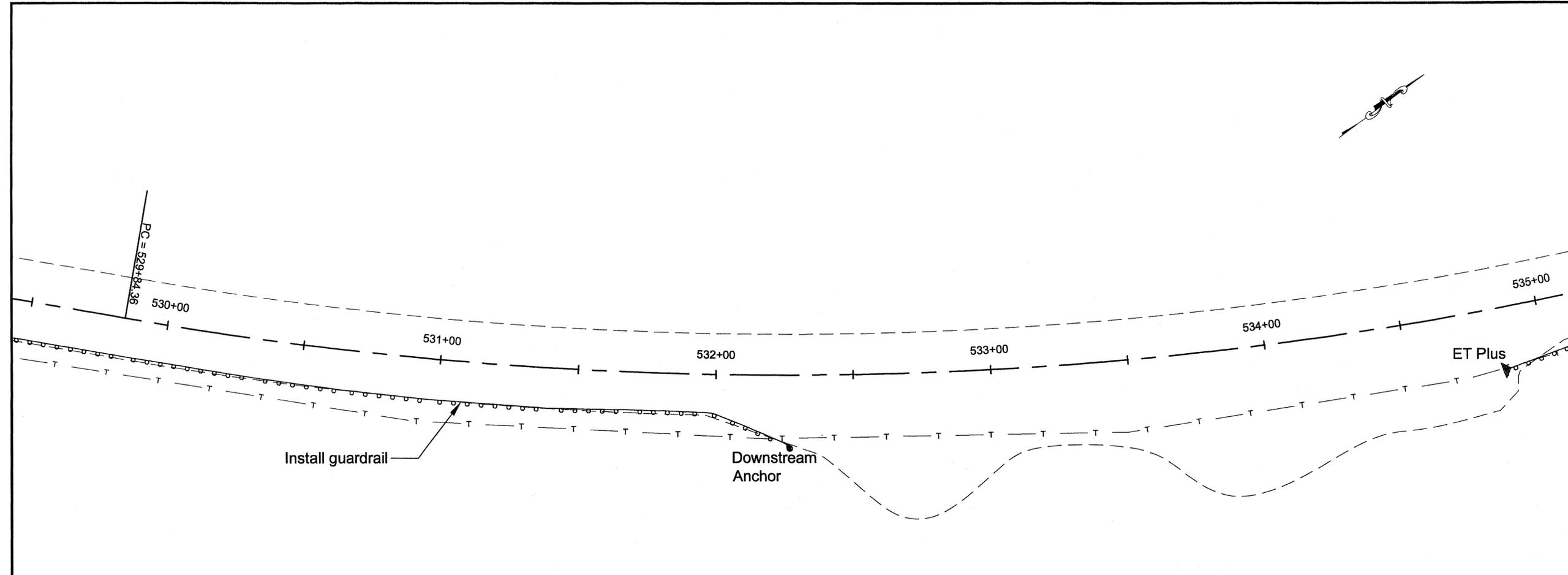
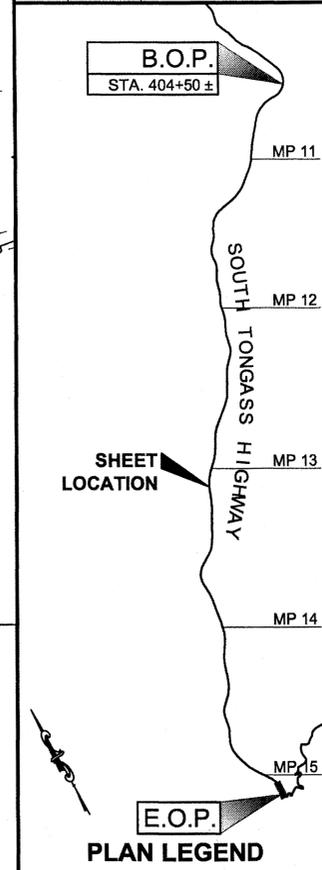
LAYOUT PLAN	
PROJECT DESIGNATION HHE-0902(33)-67442	
STATE ALASKA	YEAR 2009
SHEET NUMBER F12	TOTAL SHEETS 43

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE: [Signature] Date: 10-11

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ATTACHMENT NUMBER

RECORD OF REVISIONS		
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STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
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 DIVISION-SOUTHEAST REGION

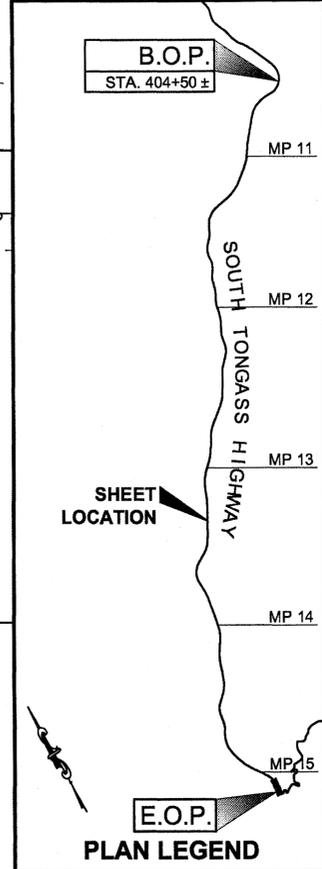
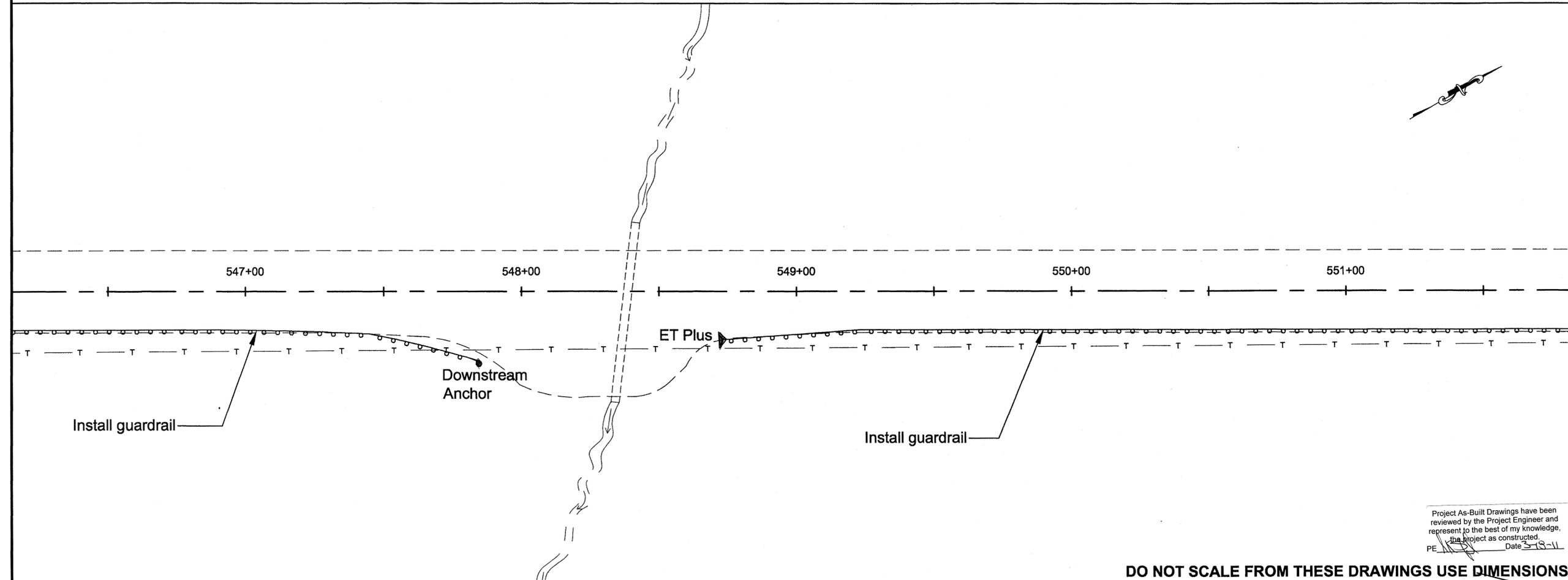
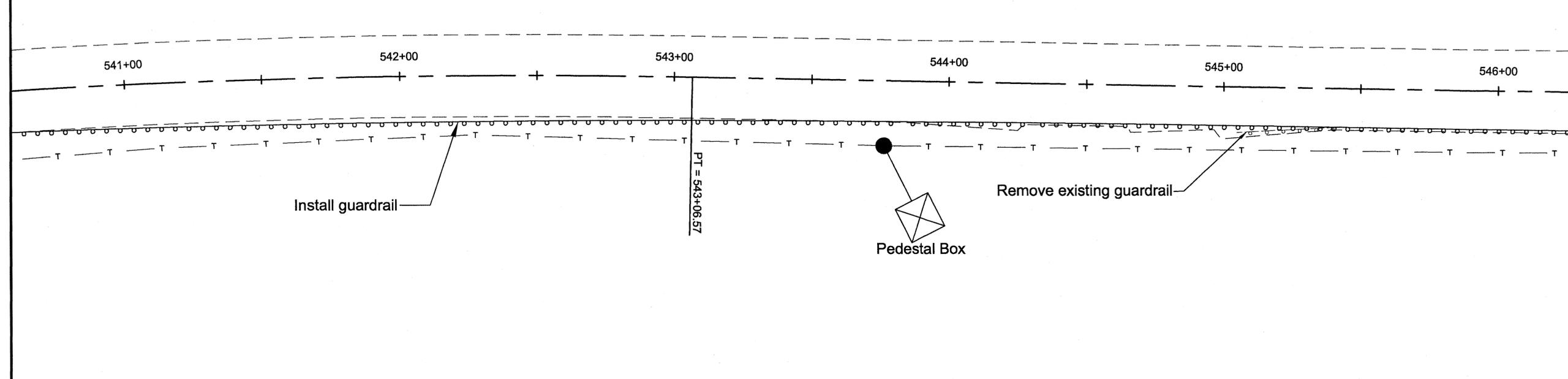
**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

LAYOUT PLAN

PROJECT DESIGNATION
HHE-0902(33)-67442

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
F13	43

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
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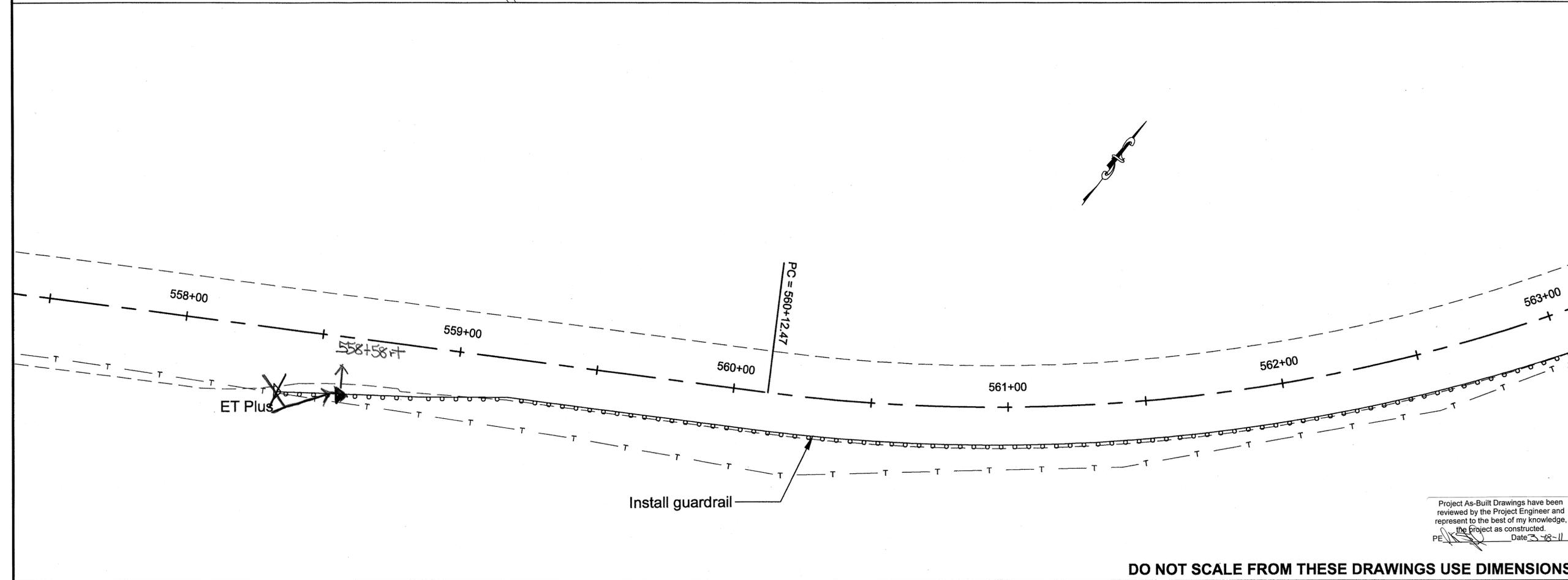
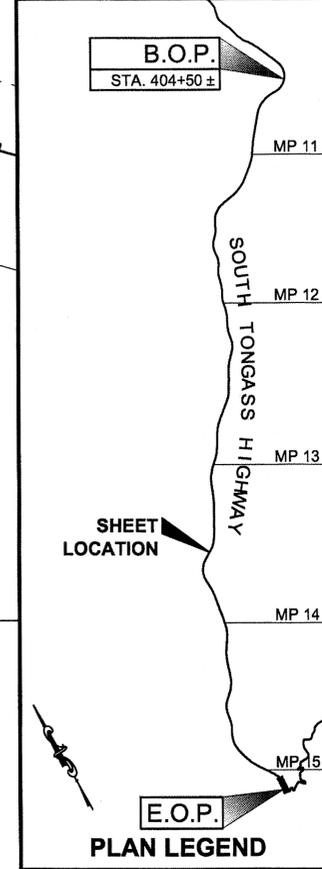
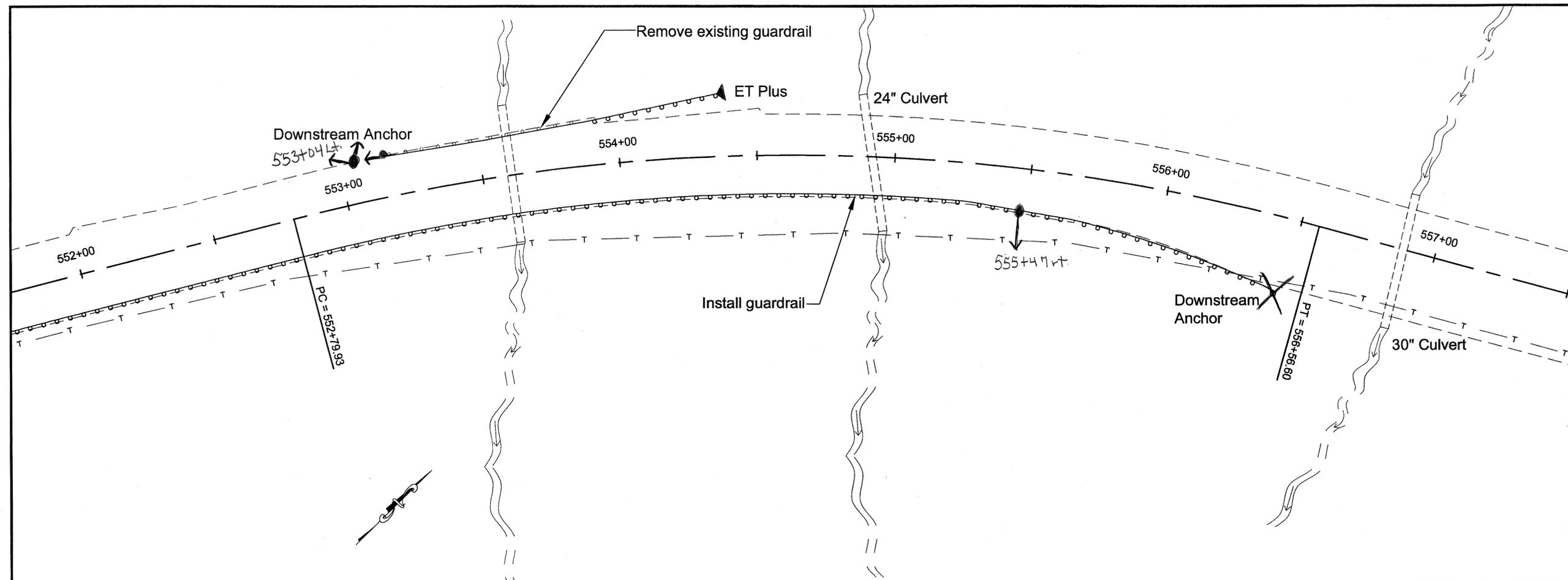
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION
**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

LAYOUT PLAN	
PROJECT DESIGNATION HHE-0902(33)-67442	
STATE ALASKA	YEAR 2009
SHEET NUMBER F14	TOTAL SHEETS 43

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
 PE [Signature] Date 3-18-11

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



CHECKED BY: C. MOREHOUSE



DESIGNED BY: C. DIONISIO

DRAWN BY: C. DIONISIO

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION

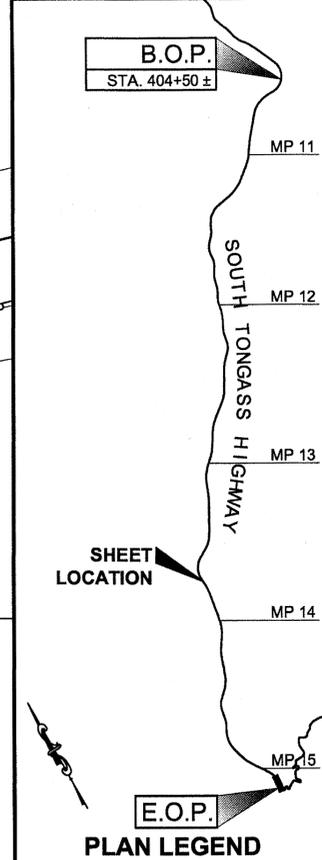
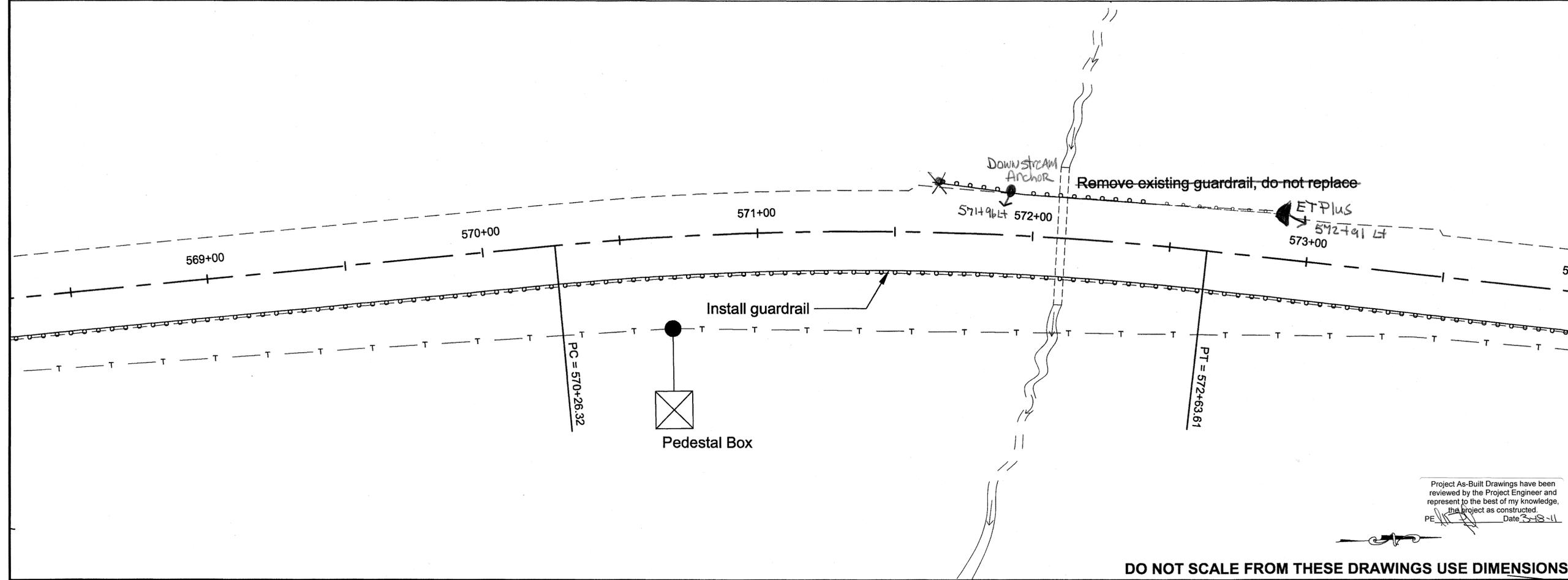
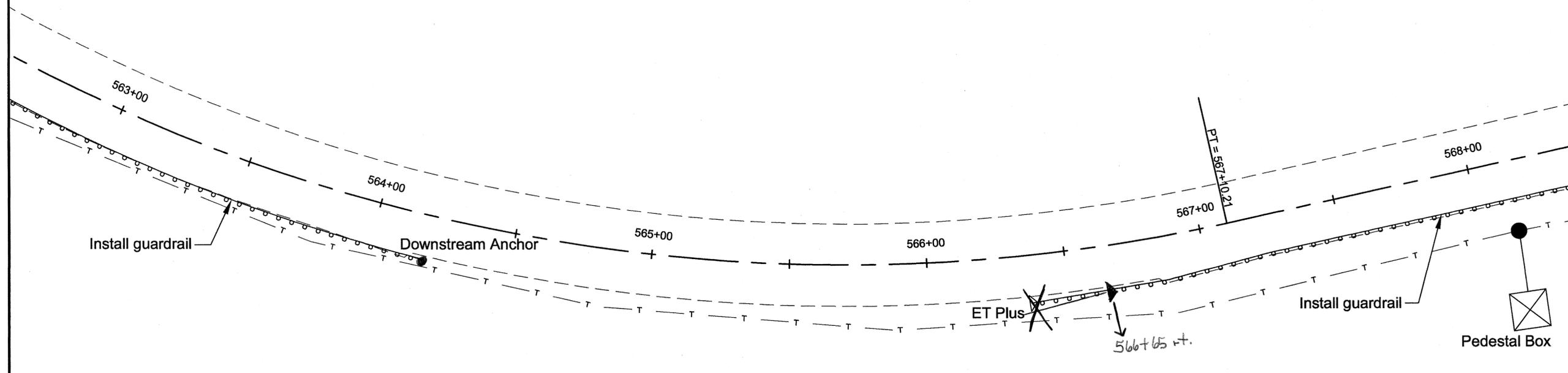
**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

LAYOUT PLAN	
PROJECT DESIGNATION HHE-0902(33)-67442	
STATE ALASKA	YEAR 2009
SHEET NUMBER F15	TOTAL SHEETS 43

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the Project as constructed.
 PE: [Signature] Date: 9-28-11

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



CHECKED BY: C. MOREHOUSE



DESIGNED BY: C. DIONISIO
 DRAWN BY: C. DIONISIO

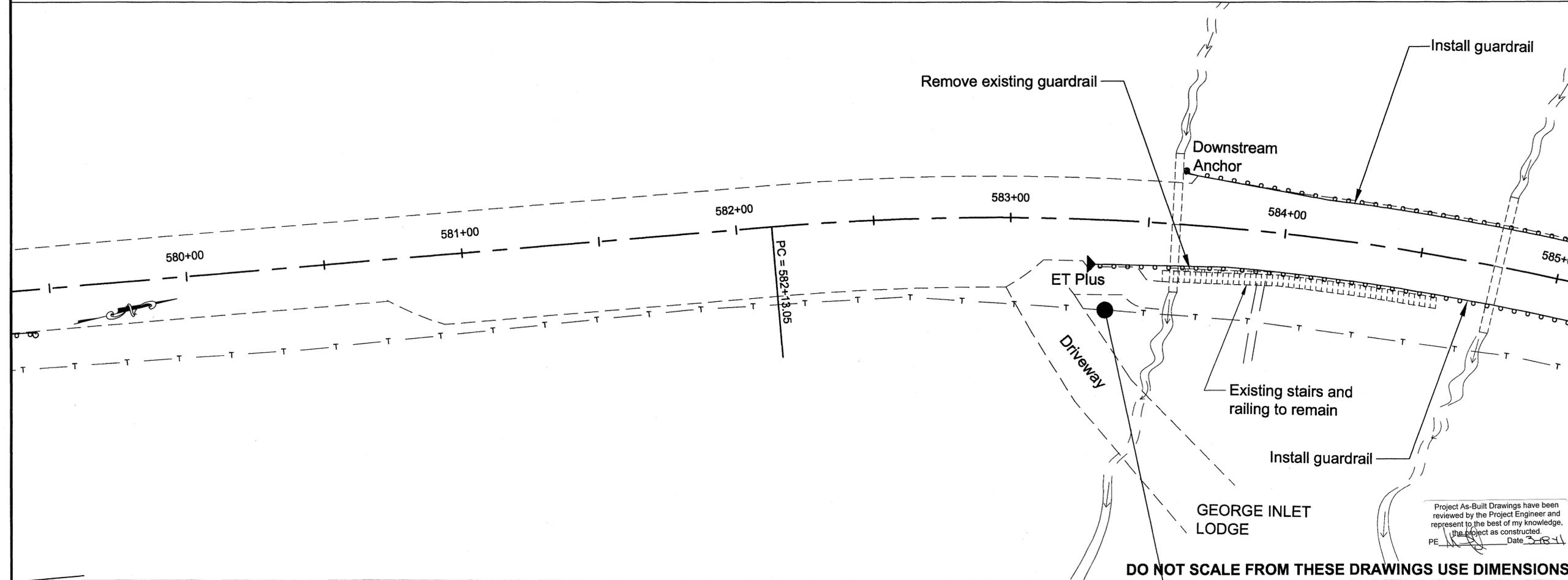
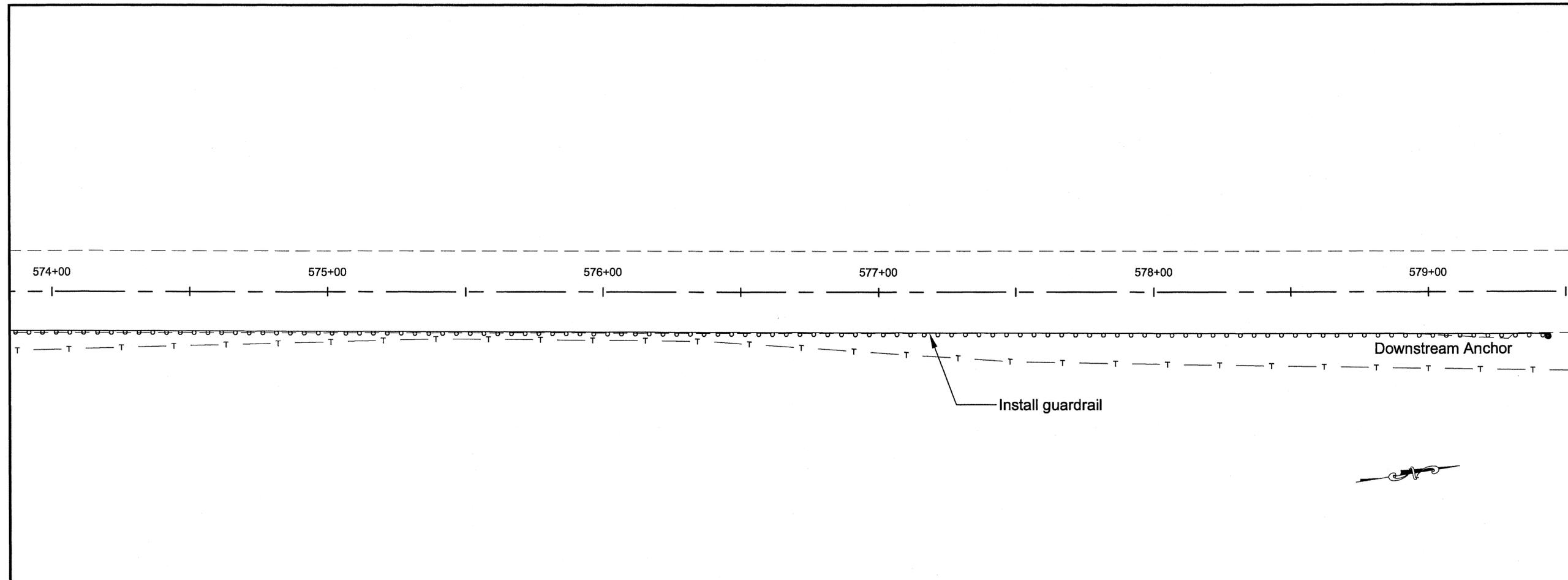
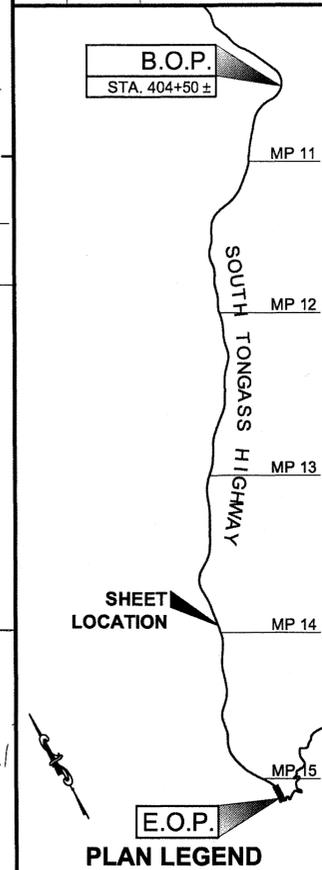
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION
**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

LAYOUT PLAN	
PROJECT DESIGNATION	
HHE-0902(33)-67442	
STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
F16	43

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE: [Signature] Date: 3-18-11

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



CHECKED BY: C. MOREHOUSE



DESIGNED BY: C. DIONISIO
 DRAWN BY: C. DIONISIO

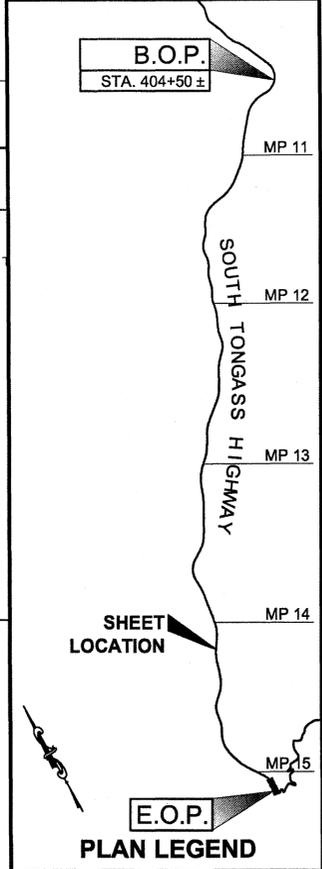
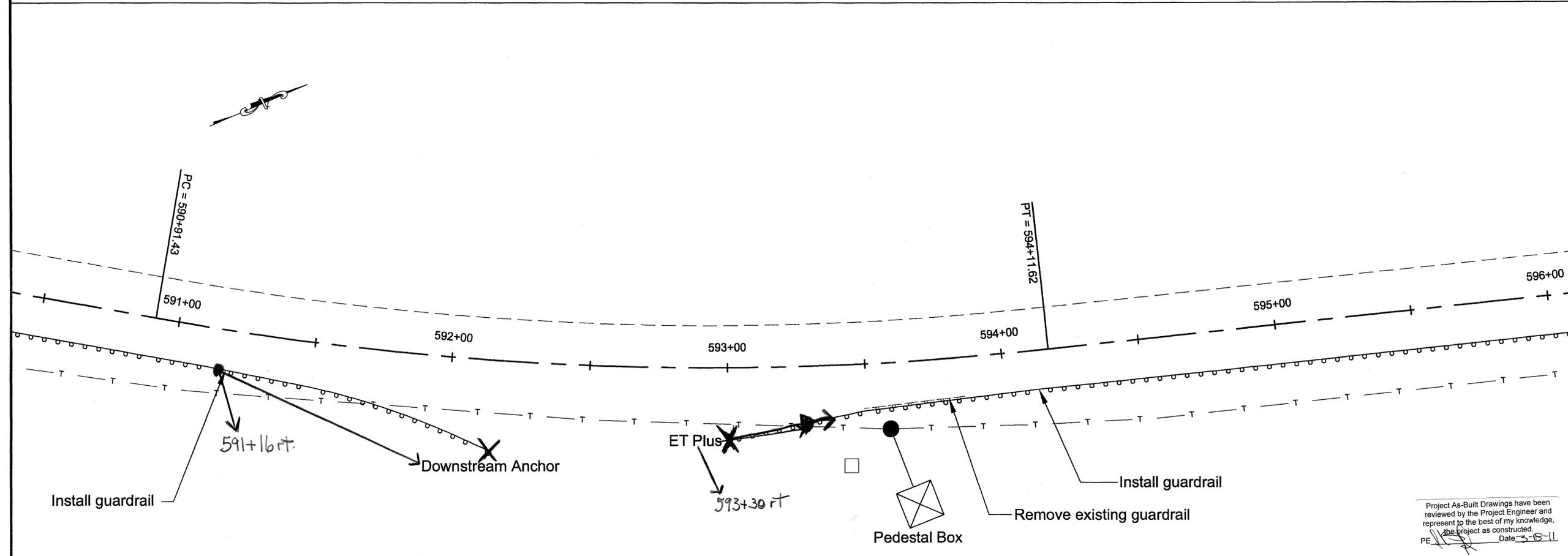
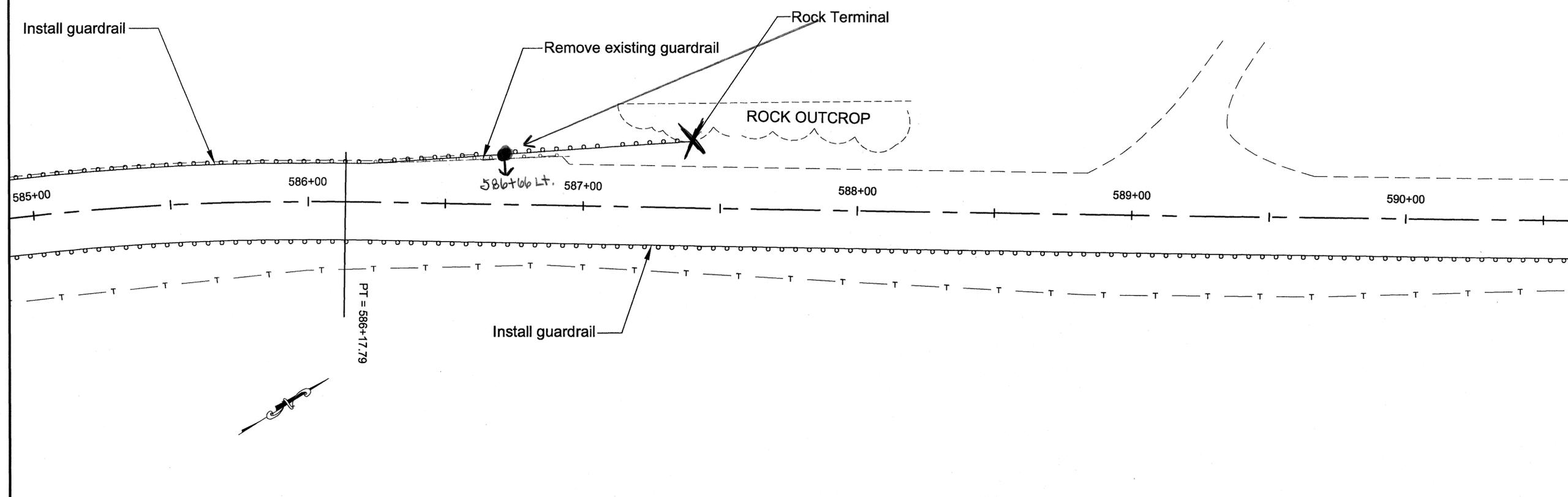
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION
**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

LAYOUT PLAN	
PROJECT DESIGNATION HHE-0902(33)~67442	
STATE ALASKA	YEAR 2009
SHEET NUMBER F17	TOTAL SHEETS 43

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE [Signature] Date 3/18/11

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



CHECKED BY: C. MOREHOUSE



DESIGNED BY: C. DIONISIO

DRAWN BY: C. DIONISIO

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION
**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

LAYOUT PLAN

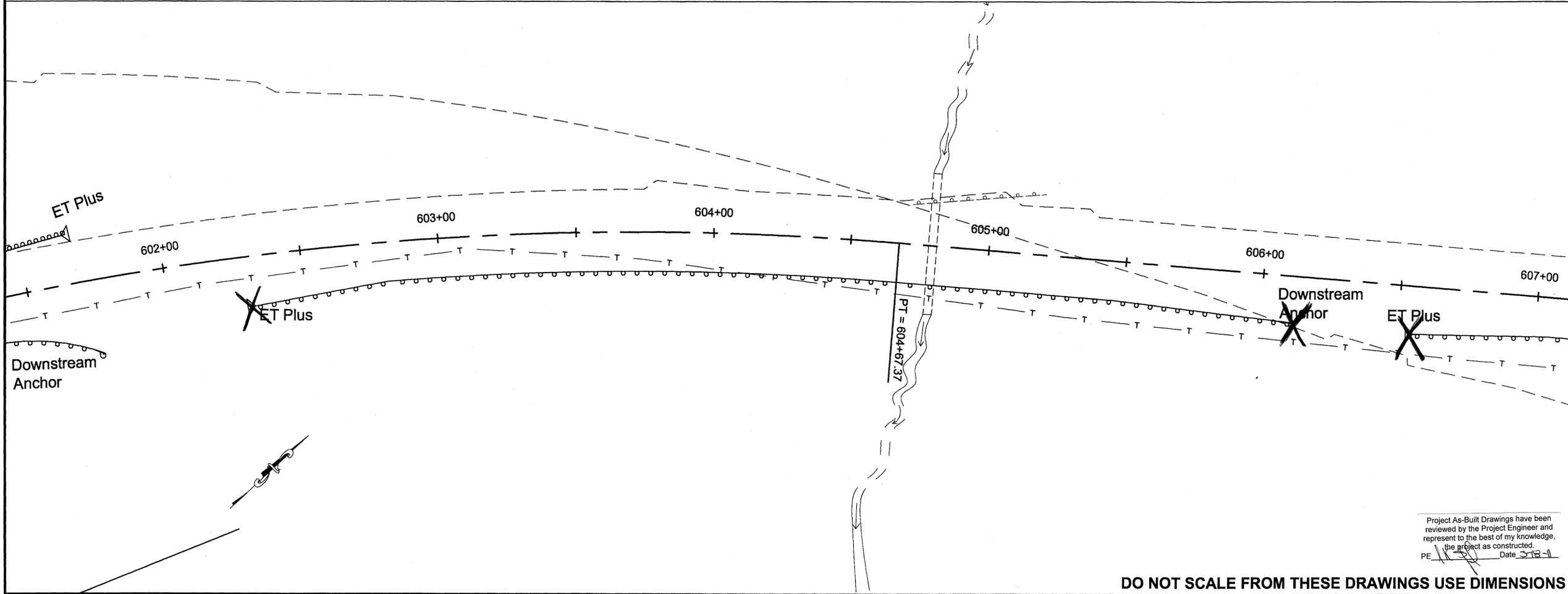
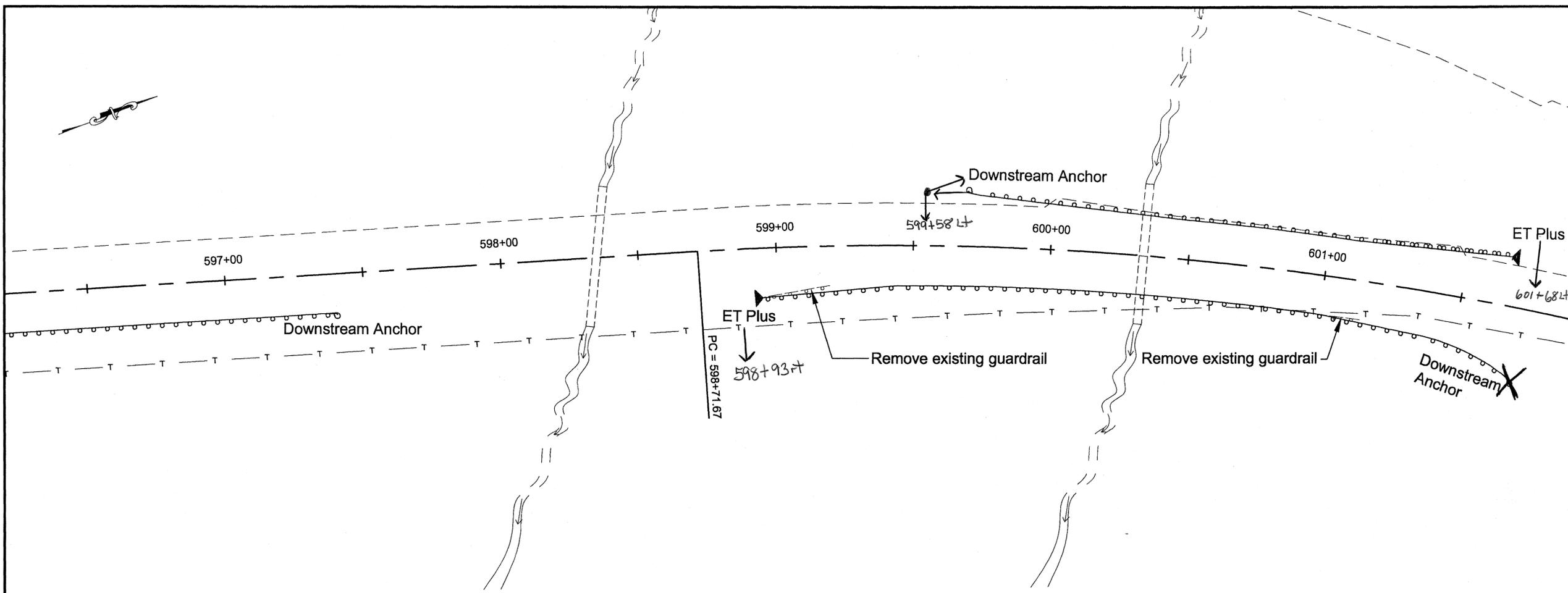
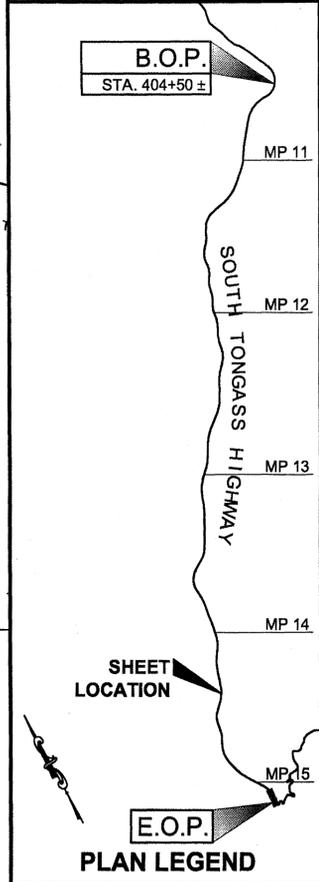
PROJECT DESIGNATION
HHE-0902(33)-67442

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
F18	43

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE: [Signature] Date: 3-8-11

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



CHECKED BY: C. MOREHOUSE



11/3/05

DESIGNED BY: C. DIONISIO

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

**KTN SOUTH TONGASS HIGHWAY
GUARDRAIL REPLACEMENT
PROJECT #67442**

LAYOUT PLAN

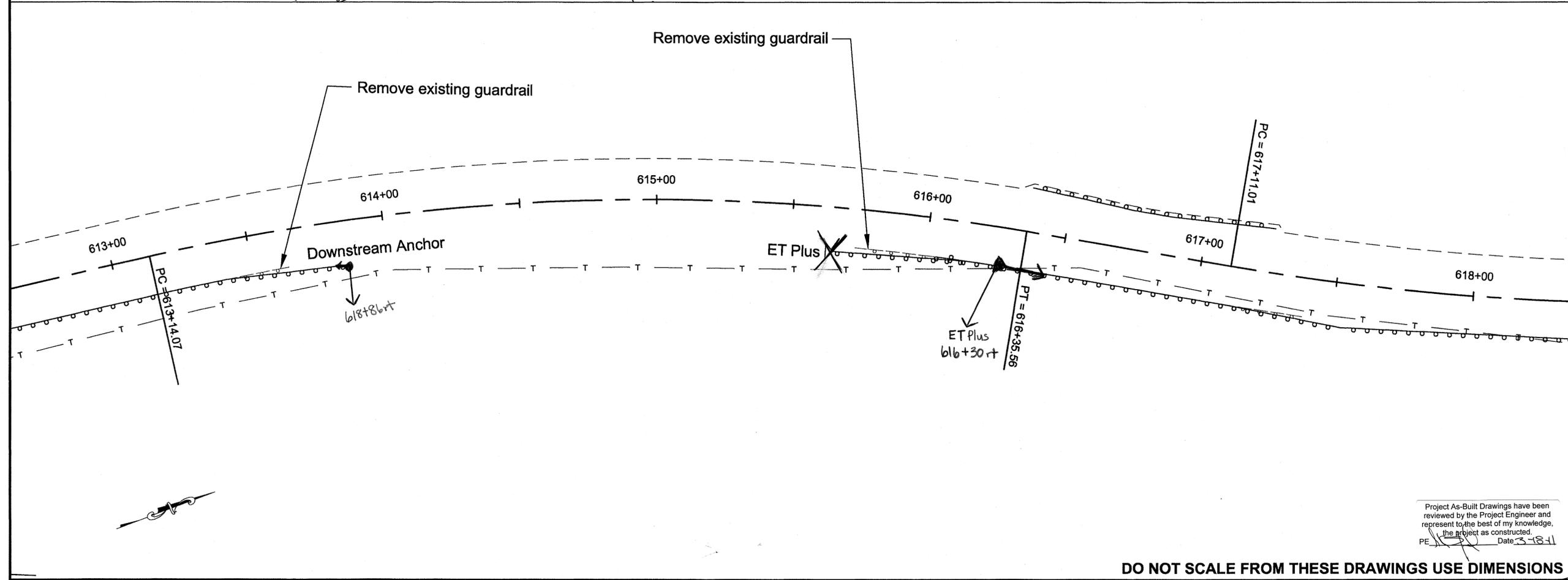
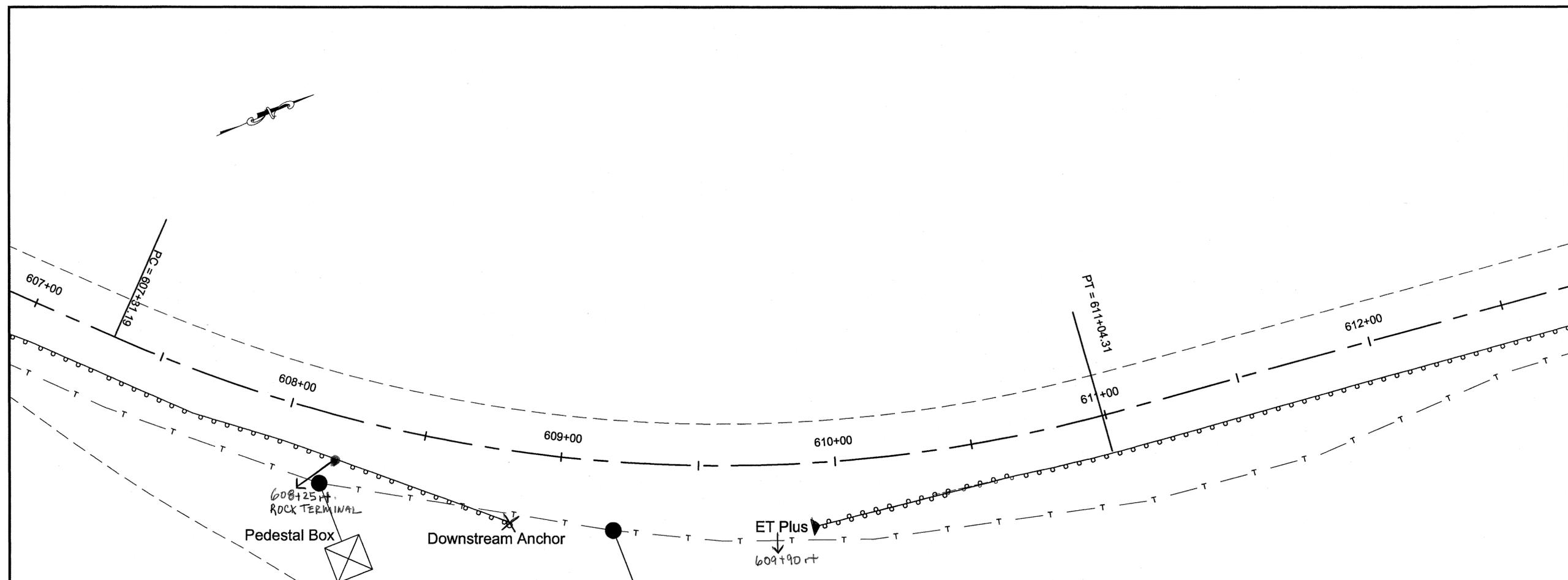
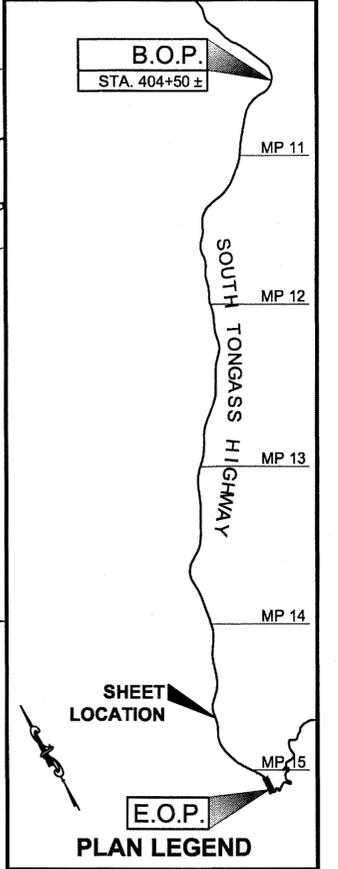
PROJECT DESIGNATION
HHE-0902(33)-67442

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
F19	43

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE *[Signature]* Date 3-18-11

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



CHECKED BY: C. MOREHOUSE



DESIGNED BY: C. DIONISIO

DRAWN BY: C. DIONISIO

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION

**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

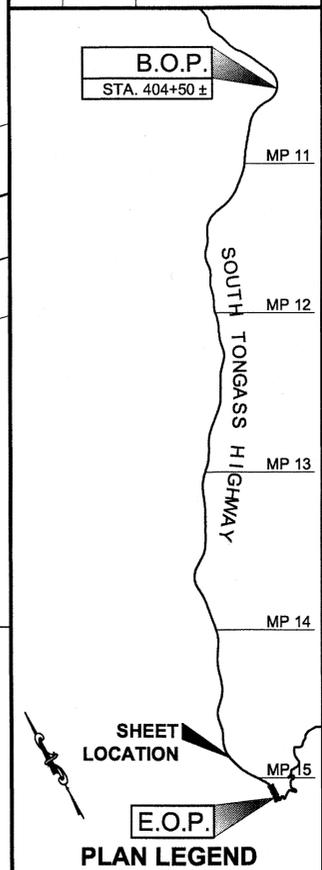
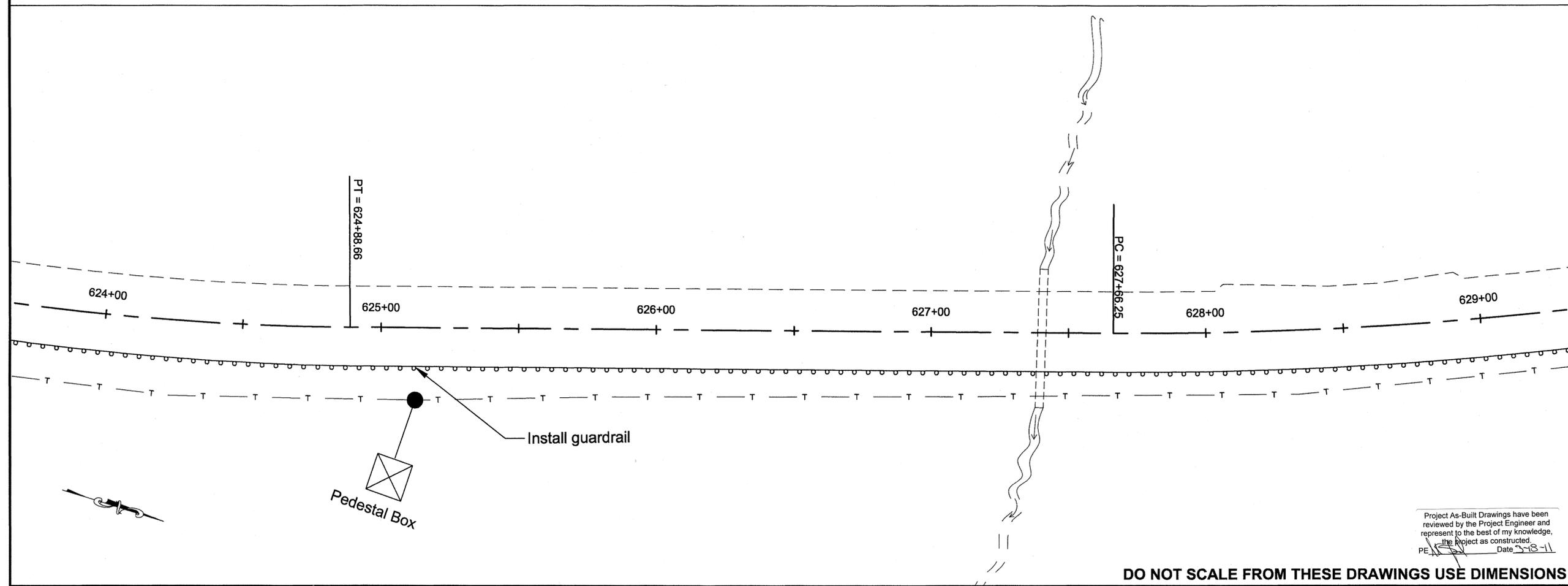
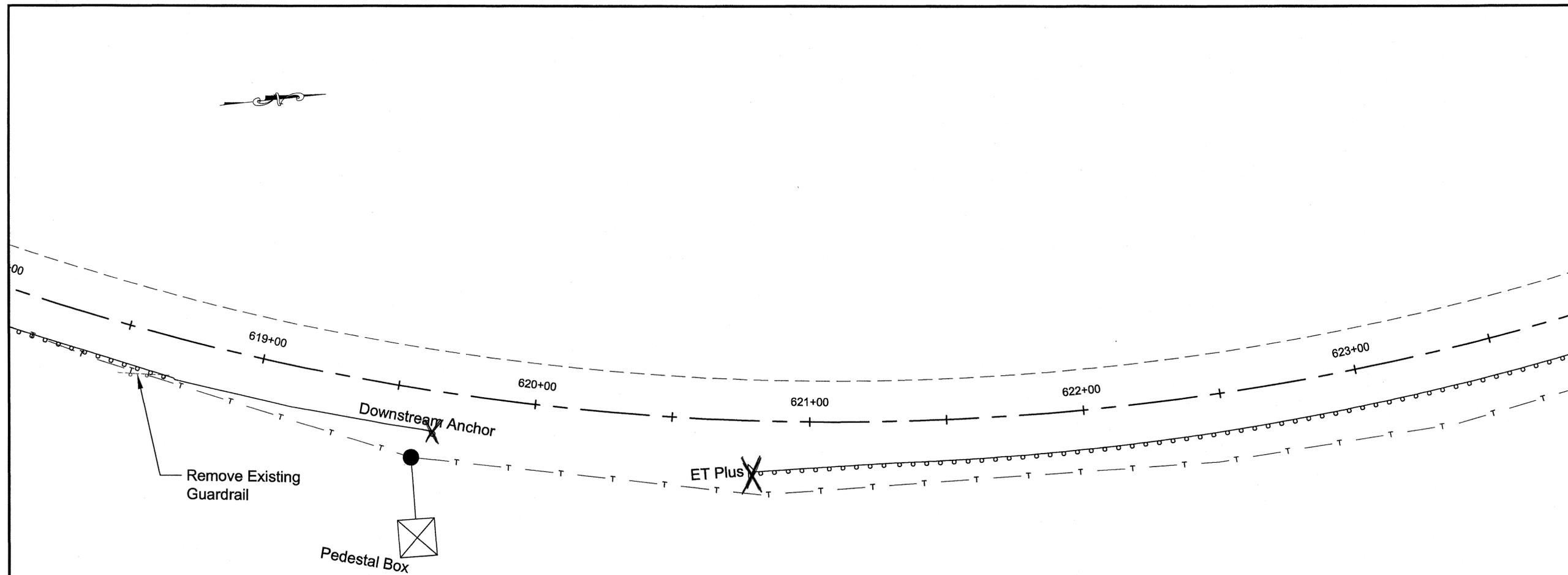
LAYOUT PLAN

PROJECT DESIGNATION	
HHE-0902(33)-67442	
STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
F20	43

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
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DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



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DESIGNED BY: C. DIONISIO

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STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION

**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

LAYOUT PLAN

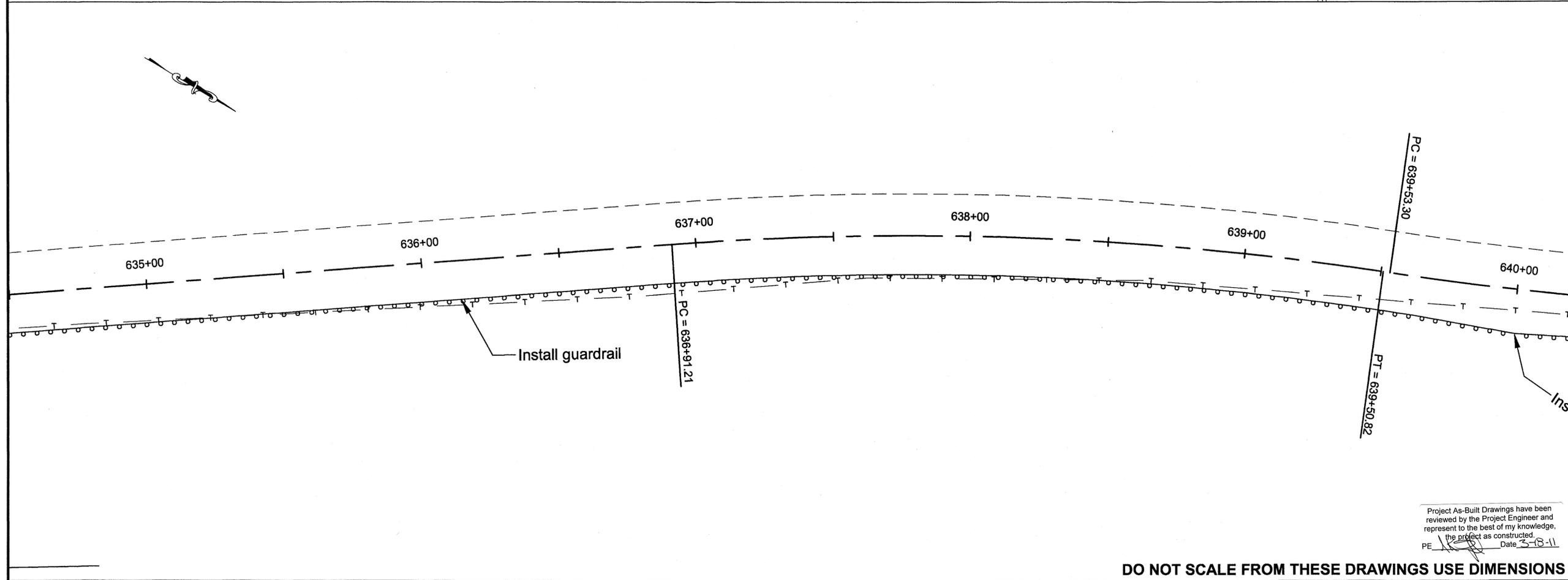
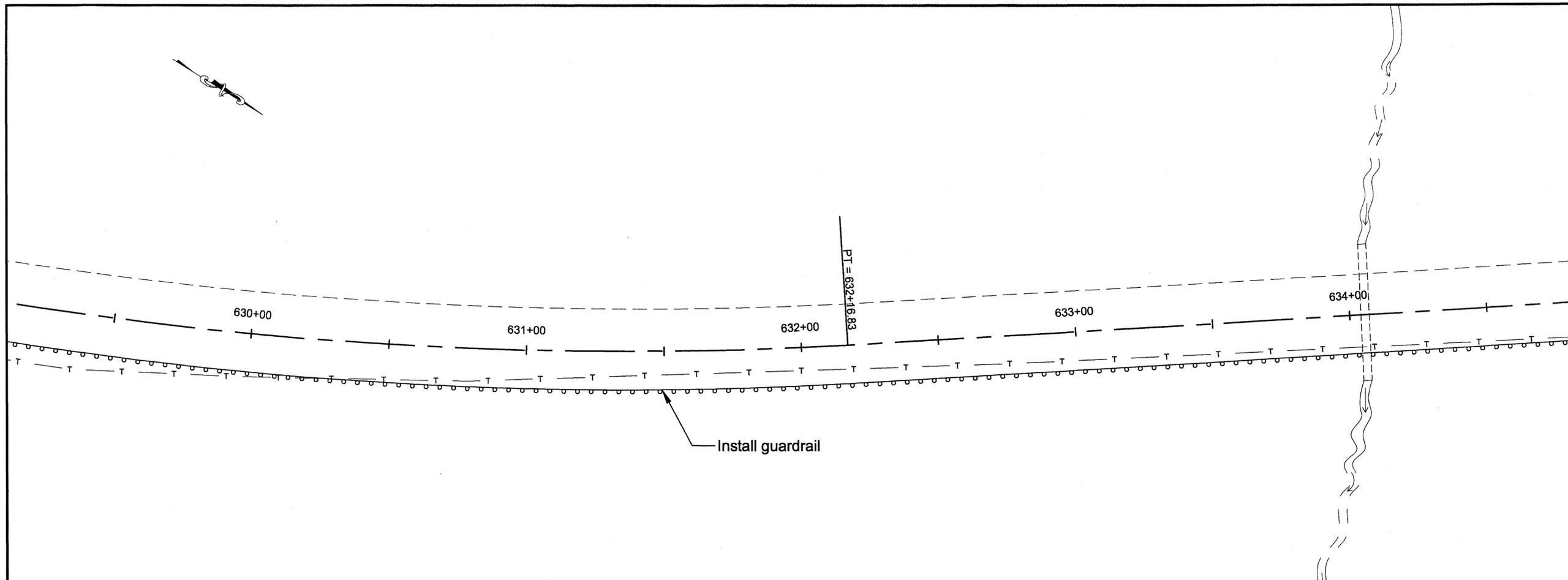
PROJECT DESIGNATION
HHE-0902(33)~67442

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
F21	43

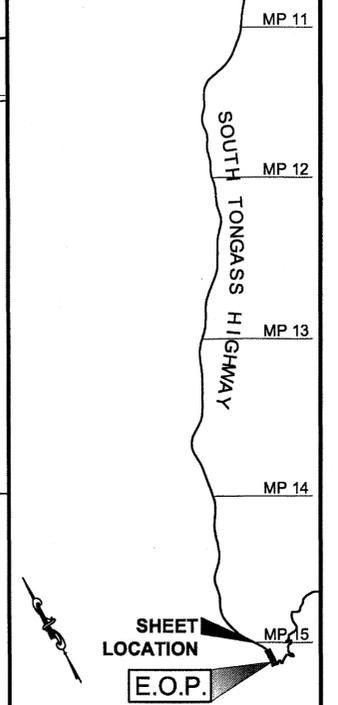
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE: [Signature] Date 3-18-11

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



B.O.P.
 STA. 404+50 ±



SHEET LOCATION
E.O.P.

PLAN LEGEND

CHECKED BY: C. MOREHOUSE



DESIGNED BY: C. DIONISIO
 DRAWN BY: C. DIONISIO

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION
**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

LAYOUT PLAN

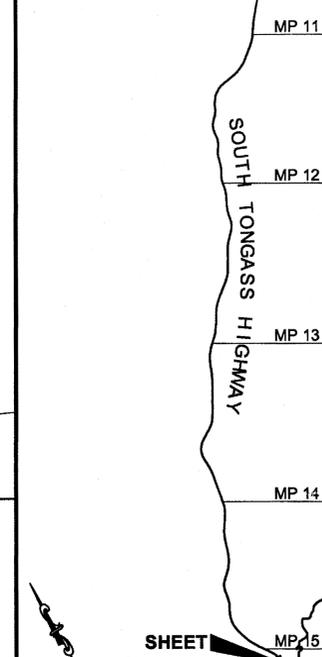
PROJECT DESIGNATION	
HHE-0902(33)-67442	
STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
F22	43

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE: [Signature] Date: 3-18-11

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

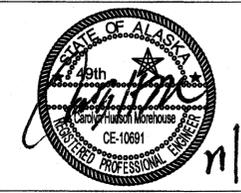
ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

B.O.P.
 STA. 404+50 ±



SHEET LOCATION
 E.O.P.
PLAN LEGEND

CHECKED BY: C. MOREHOUSE



DESIGNED BY: C. DIONISIO
 DRAWN BY: C. DIONISIO

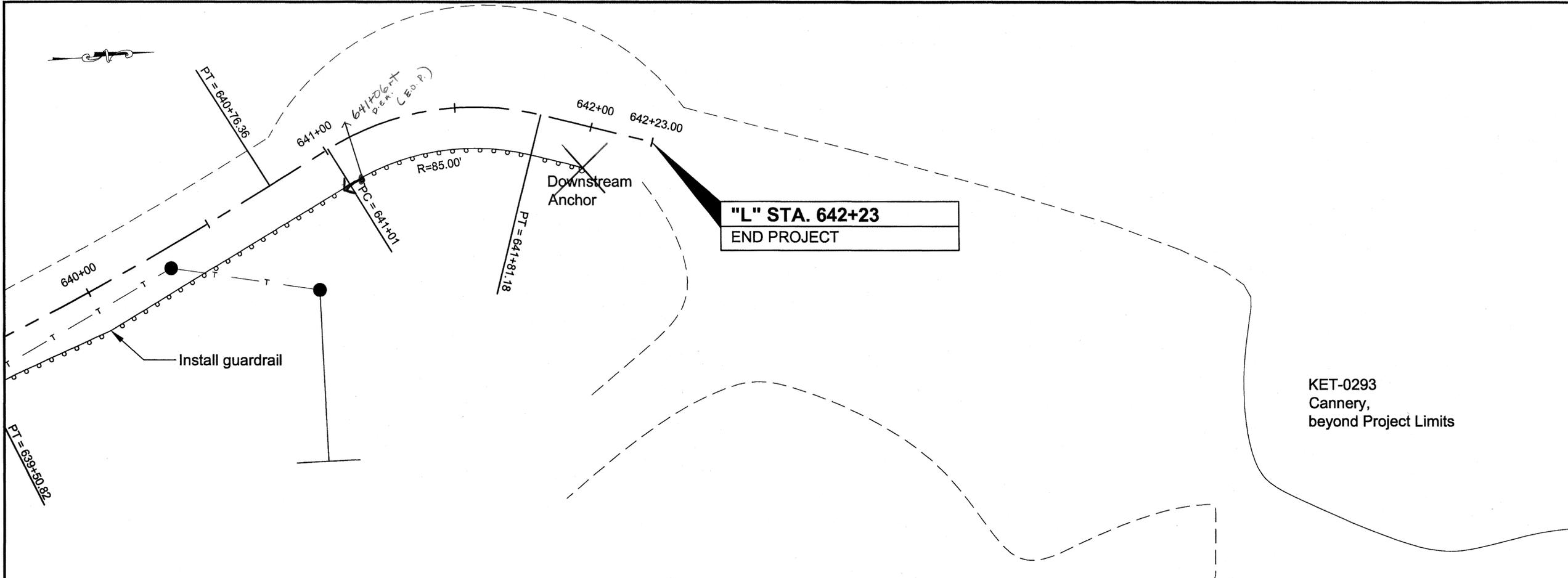
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION

**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

LAYOUT PLAN

PROJECT DESIGNATION
HHE-0902(33)~67442

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
F23	43



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
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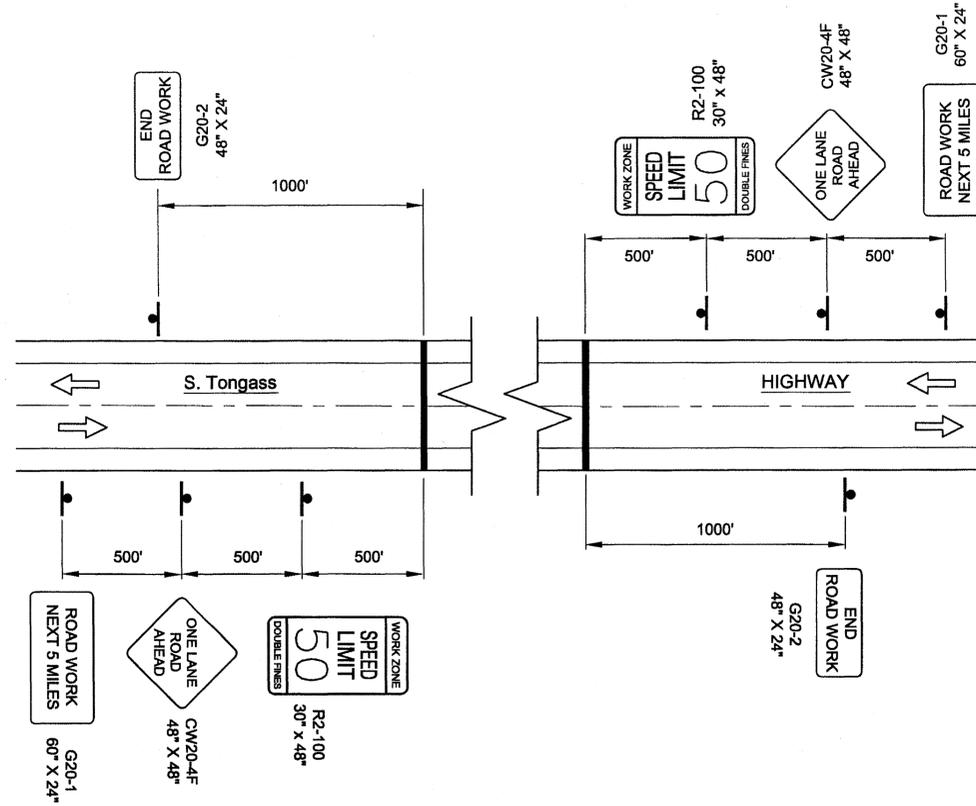
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Traffic Control Notes:

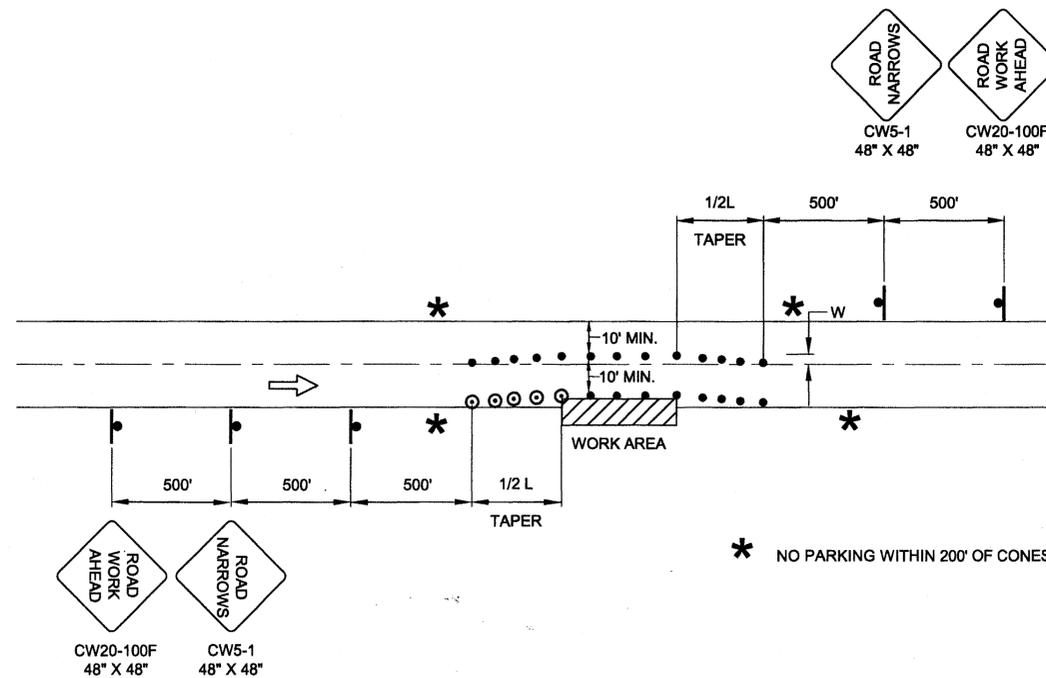
- IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME BUT NOT ALL OF THE TRAFFIC CONTROL CONFIGURATIONS THAT WILL BE REQUIRED BY THIS PROJECT. TRAFFIC CONTROL PLANS FOR CONFIGURATIONS NOT COVERED BY THIS TCP SHALL BE DEVELOPED AND SUBMITTED FOR APPROVAL PRIOR TO USE.
- TRAFFIC LANES SHALL BE A MINIMUM OF 10' WIDE.
- CONSTRUCTION SIGNING SHALL BE IN PLACE ONLY WHEN THE CONDITIONS EXIST FOR WHICH THE SIGNS ARE INTENDED.
- CHANNELIZATION DEVICES WILL BE LIT IN ACCORDANCE WITH THE ALASKA TRAFFIC MANUAL IF USED AT NIGHT.
- KEEP THE PUBLIC INFORMED OF CONSTRUCTION ACTIVITIES THROUGH THE USE OF THE LOCAL NEWS MEDIA. NEWS RELEASES SHALL BE APPROVED PRIOR TO THEIR RELEASE. NEWS RELEASES WILL BE REQUIRED BUT NOT LIMITED TO, THE ONSET OF WORK, PAVING, AND CHANGES IN THE LANE CONFIGURATIONS.
- ALL ORANGE BACKGROUND SIGNS SHALL BE FLUORESCENT ORANGE IN ACCORDANCE WITH SECTION 615.
- IF A GUARDRAIL SECTION IS NOT COMPLETED BY THE END OF THE WORK SHIFT, CONES MUST BE PLACED TO MARK THE UNFINISHED END OF RAIL. CONES MAY BE USED TO MARK AN OPENING IN THE RAIL FOR A MAXIMUM OF 7 DAYS OR AS APPROVED BY THE ENGINEER.

LEGEND	
	SIGN
	CONE
	DRUM
	TYPE III BARRICADE
	FLAGGING STATION
WHERE	
L	= LENGTH OF TAPER
W	= WIDTH OF OFFSET
S	= SPEED (mph)
L	= WS for 45 mph or Greater
L	= $\frac{WS}{60}$ for 40 mph or Less

TCP TABLE SETUP		
SPEED (MILES PER HOUR)	BUFFER/LENGTH (FT.)	CONE/DRUM SPACING (FT.)
20	115	20
25	155	25
30	200	30
35	250	35
40	305	40
45	360	45
50	425	50
55	495	55
60	570	60
65	645	65



Permanent Construction Signing



Roadway Encroachment

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE: [Signature] Date: 3-13-11

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH:Q:\KTN\67442\TRIPLANSET\PLANSET OCT 09\67442_H1-2_TRAFFIC.DWG
 DIONISIO, CHRISTOPHER J (DOT)
 TAB: H1 Thursday, October 29, 2009 2:47:25
 ADDENDUM NUMBER
 ATTACHMENT NUMBER
 RECORD OF REVISIONS
 No. DATE DESCRIPTION

KTN - SOUTH TONGASS HIGHWAY GUARDRAIL REPLACEMENT
 PROJECT NO. HHE-0902(33) ~ 67442

TRAFFIC CONTROL PLAN

PLAN LEGEND

CHECKED BY: C. MOREHOUSE



DESIGNED BY: C. DIONISIO

DRAWN BY: C. DIONISIO

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION

KTN SOUTH TONGASS HIGHWAY GUARDRAIL REPLACEMENT
 PROJECT #67442

TRAFFIC CONTROL PLAN

PROJECT DESIGNATION

HHE-0902(33)-67442

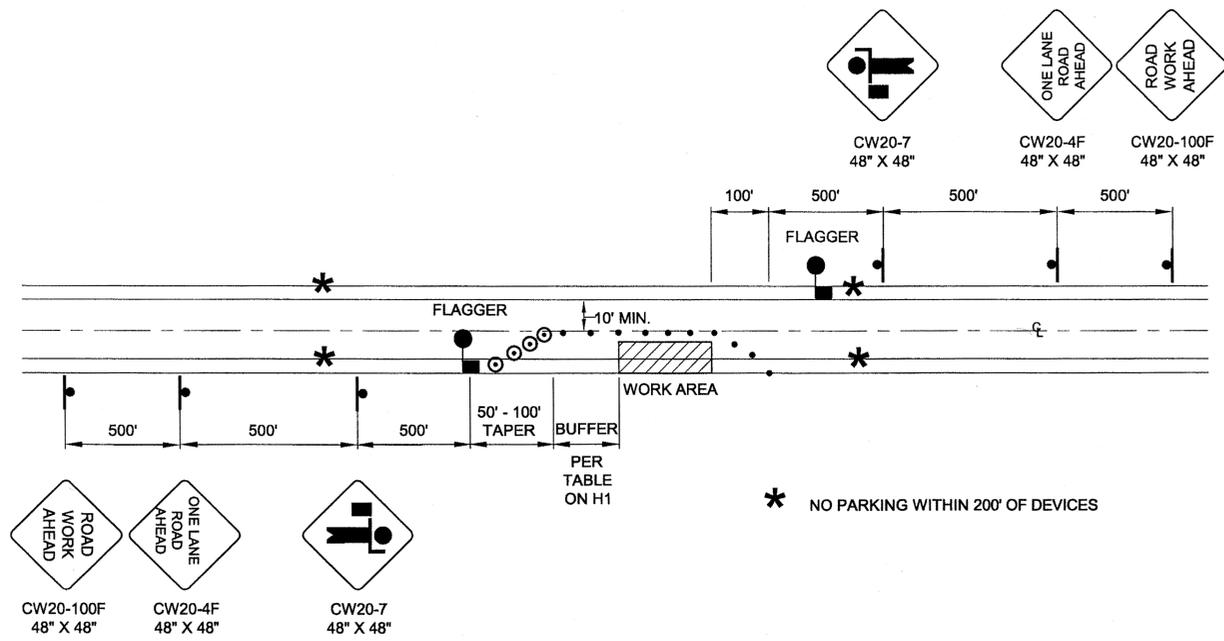
STATE YEAR

ALASKA 2009

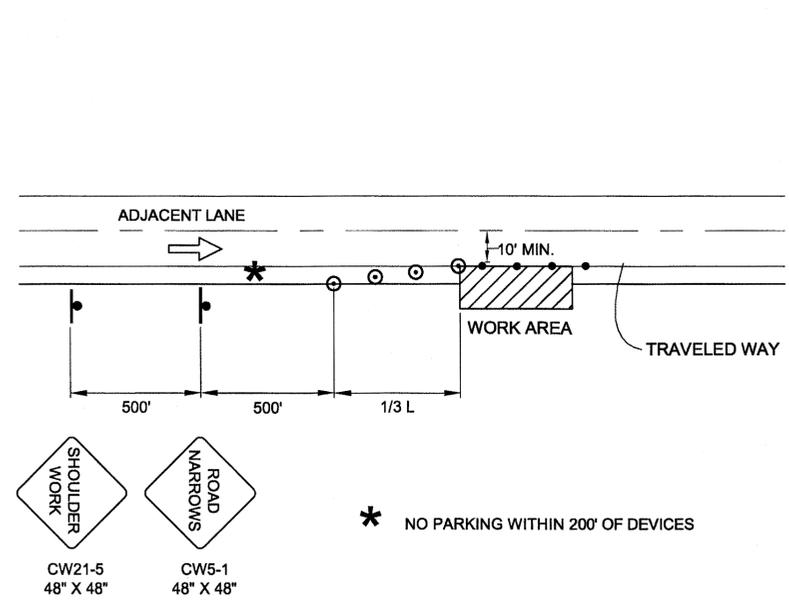
SHEET NUMBER TOTAL SHEETS

H1 43

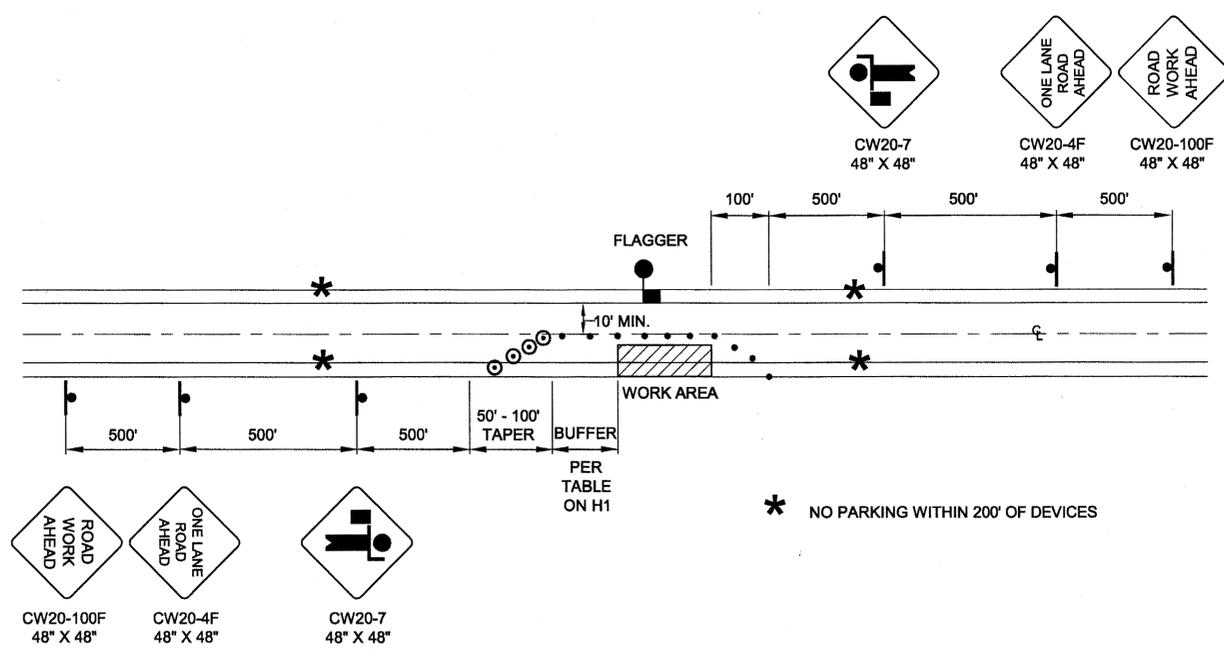
ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



**TWO LANE ROAD - SINGLE LANE CLOSURE
 DOUBLE FLAGGER**



SHOULDER WORK



**TWO LANE ROAD - SINGLE LANE CLOSURE
 SINGLE FLAGGER**

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE: [Signature] Date: 3-18-11

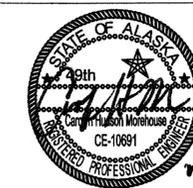
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

KTN - SOUTH TONGASS HIGHWAY GUARDRAIL REPLACEMENT
 PROJECT NO. HHE-0902(33) ~ 67442

TRAFFIC CONTROL PLAN

PLAN LEGEND

CHECKED BY: C. MOREHOUSE



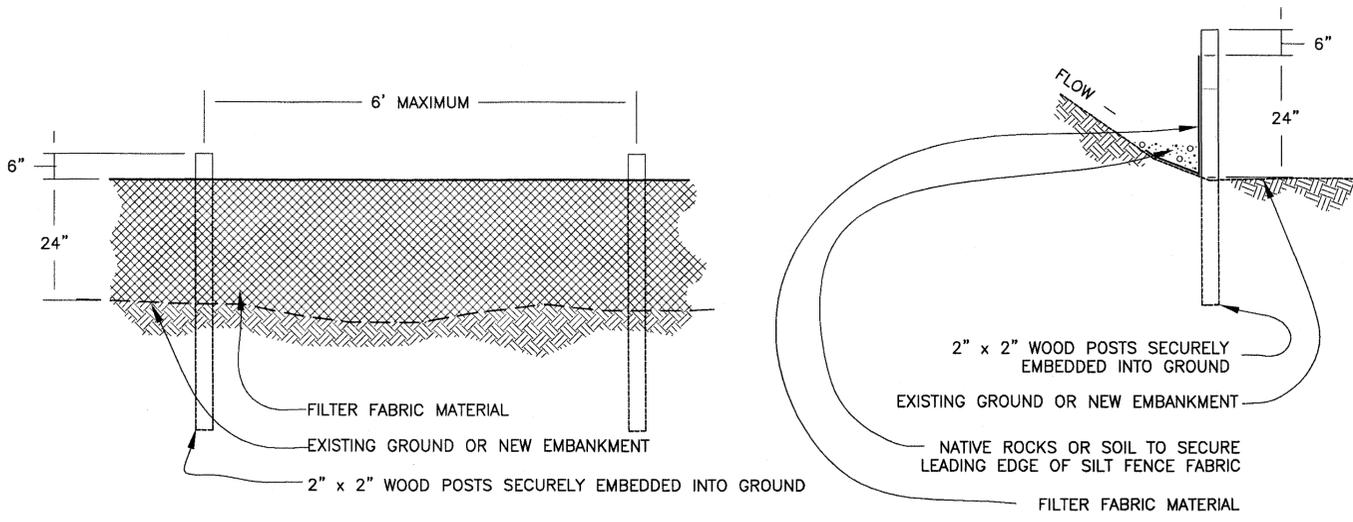
DESIGNED BY: C. DIONISIO
 DRAWN BY: C. DIONISIO

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION
KTN SOUTH TONGASS HIGHWAY GUARDRAIL REPLACEMENT PROJECT #67442

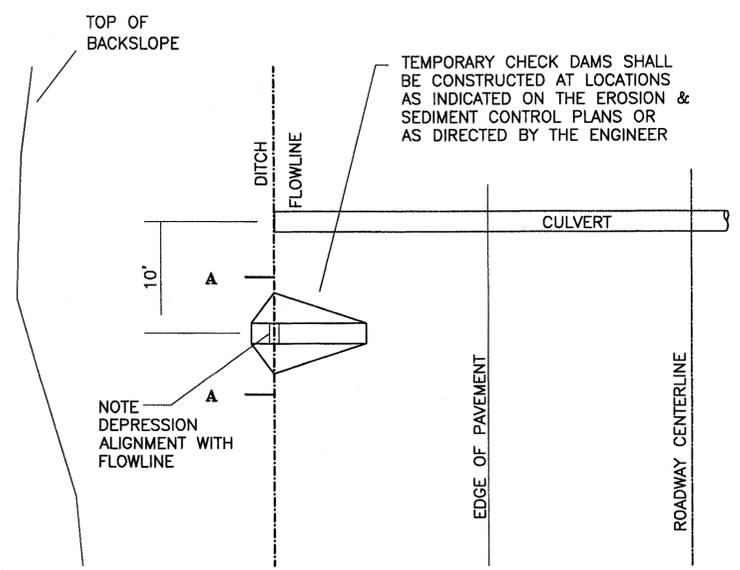
TRAFFIC CONTROL PLAN

PROJECT DESIGNATION
HHE-0902(33)-67442

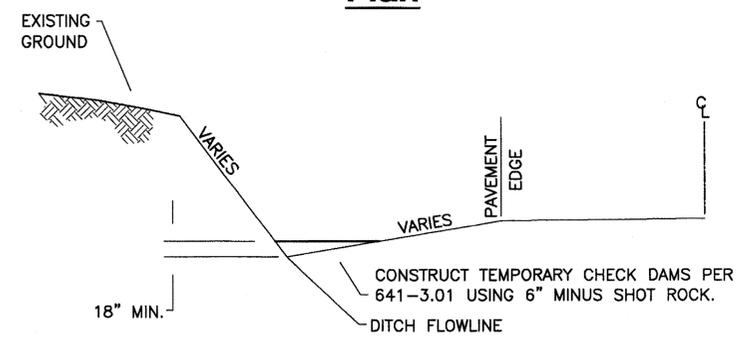
STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
H2	43



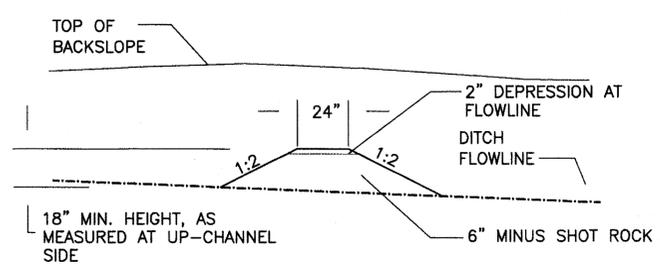
Elevation
Silt Fence Details
Section



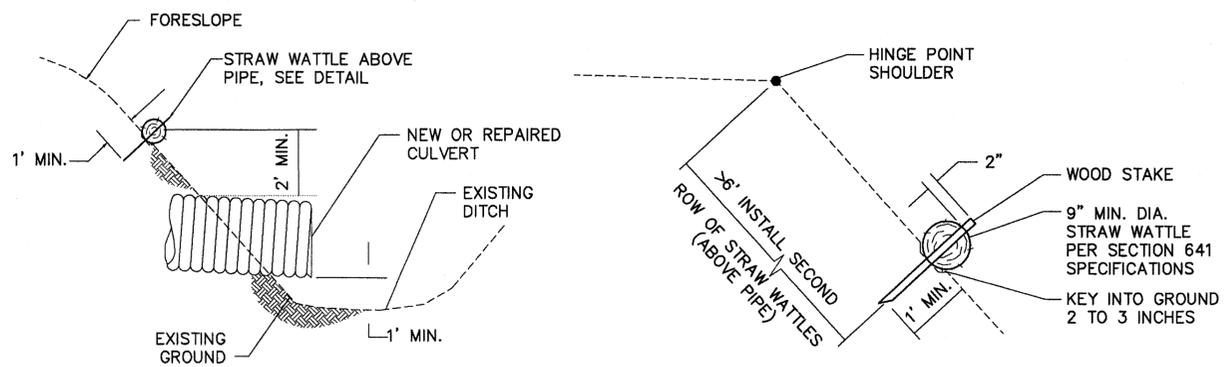
Plan



Elevation



Section A-A



SECTION
N.T.S.
DETAIL
N.T.S.

STRAW WATTLE DETAIL

NOTE:
FOR LAYOUT LOCATIONS
SEE SHEETS T4-T11.

TEMPORARY CHECK DAM DETAILS

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Date: 3-18-11

PATH: Q:\KTM67442\TR\PLANSET\EROSION SEDIMENT CONTROL\67442_T1-2_EROSION CONTROL DETAILS.DWG
DIONISIO, CHRISTOPHER J (DOT)
TAB: T1 Wednesday, September 30, 2009 10:00 AM

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

KTN - SOUTH TONGASS HIGHWAY GUARDRAIL REPLACEMENT
PROJECT NO. HHE-0902(33) ~ 67442

Environmental Details

PLAN LEGEND

CHECKED BY: C. MOREHOUSE



DESIGNED BY: C. DIONISIO
DRAWN BY: C. DIONISIO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

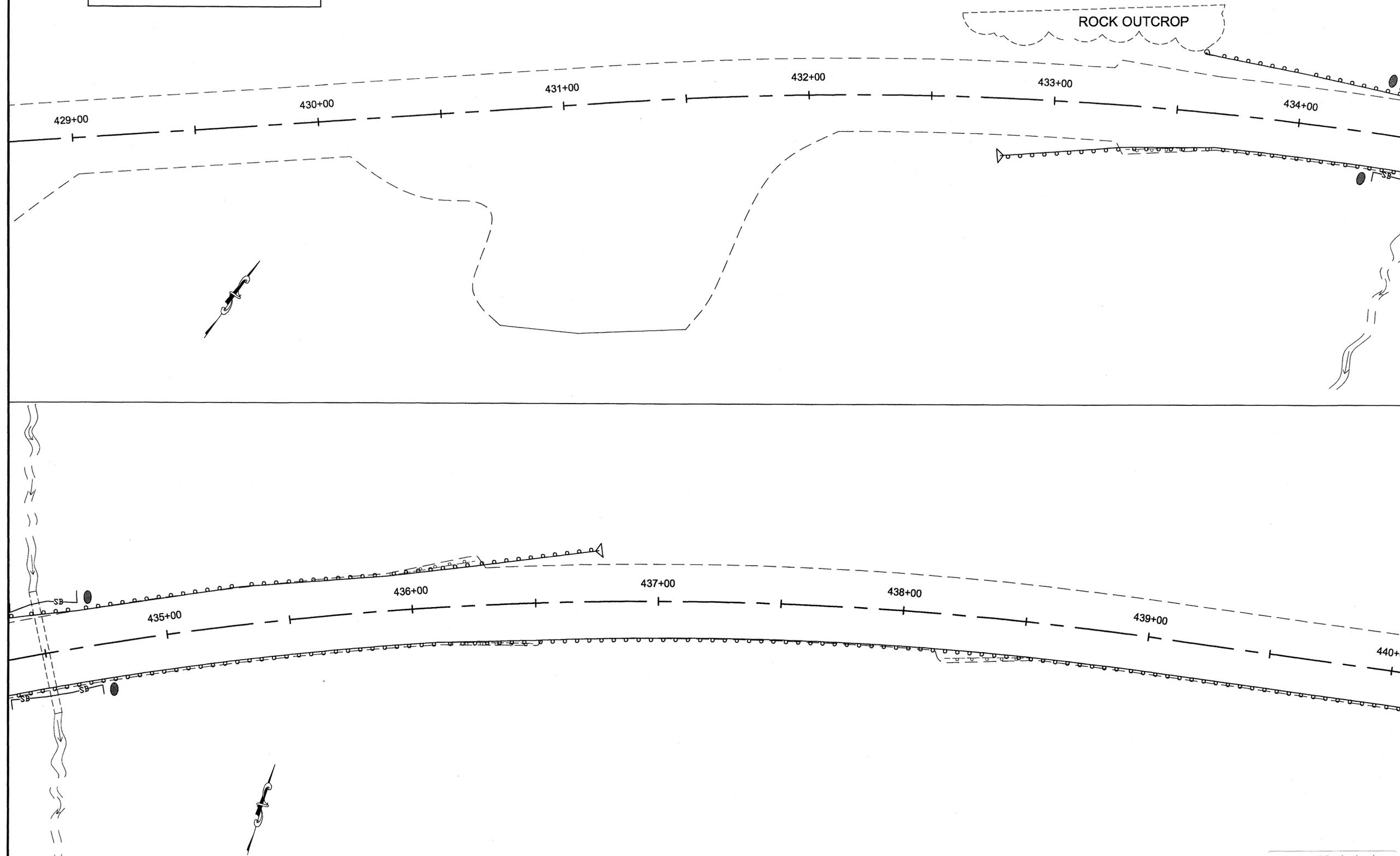
KTN SOUTH TONGASS HIGHWAY GUARDRAIL REPLACEMENT PROJECT #67442

Environmental Details

PROJECT DESIGNATION
HHE-0902(33)-67442

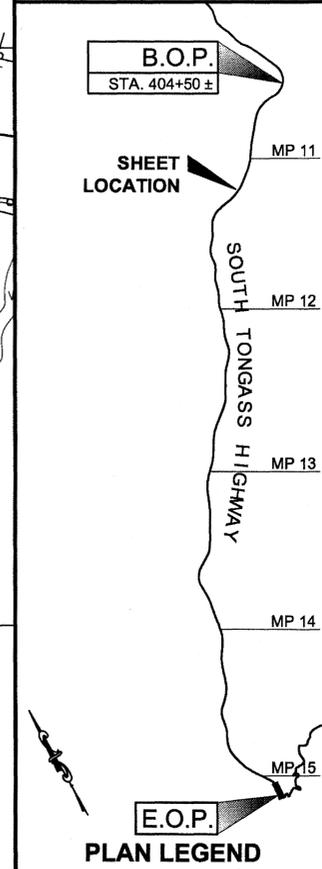
STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
T1	43

LEGEND	
	SILT BARRIER
	TEMPORARY ROCK CHECK DAM



PATH: Q:\KTN67442\TRIP\ANSET\EROSION SEDIMENT CONTROL\67442_T2-11_ESCP_RECOVER.DWG
 DIONISIO, CHRISTOPHER J (DOT)
 TAB: T2 Wednesday, September 30, 2009 11

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



CHECKED BY: C. MOREHOUSE



DESIGNED BY: C. DIONISIO
 DRAWN BY: C. DIONISIO

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION
**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442
 EROSION SEDIMENT
 CONTROL LAYOUT
 PLAN**

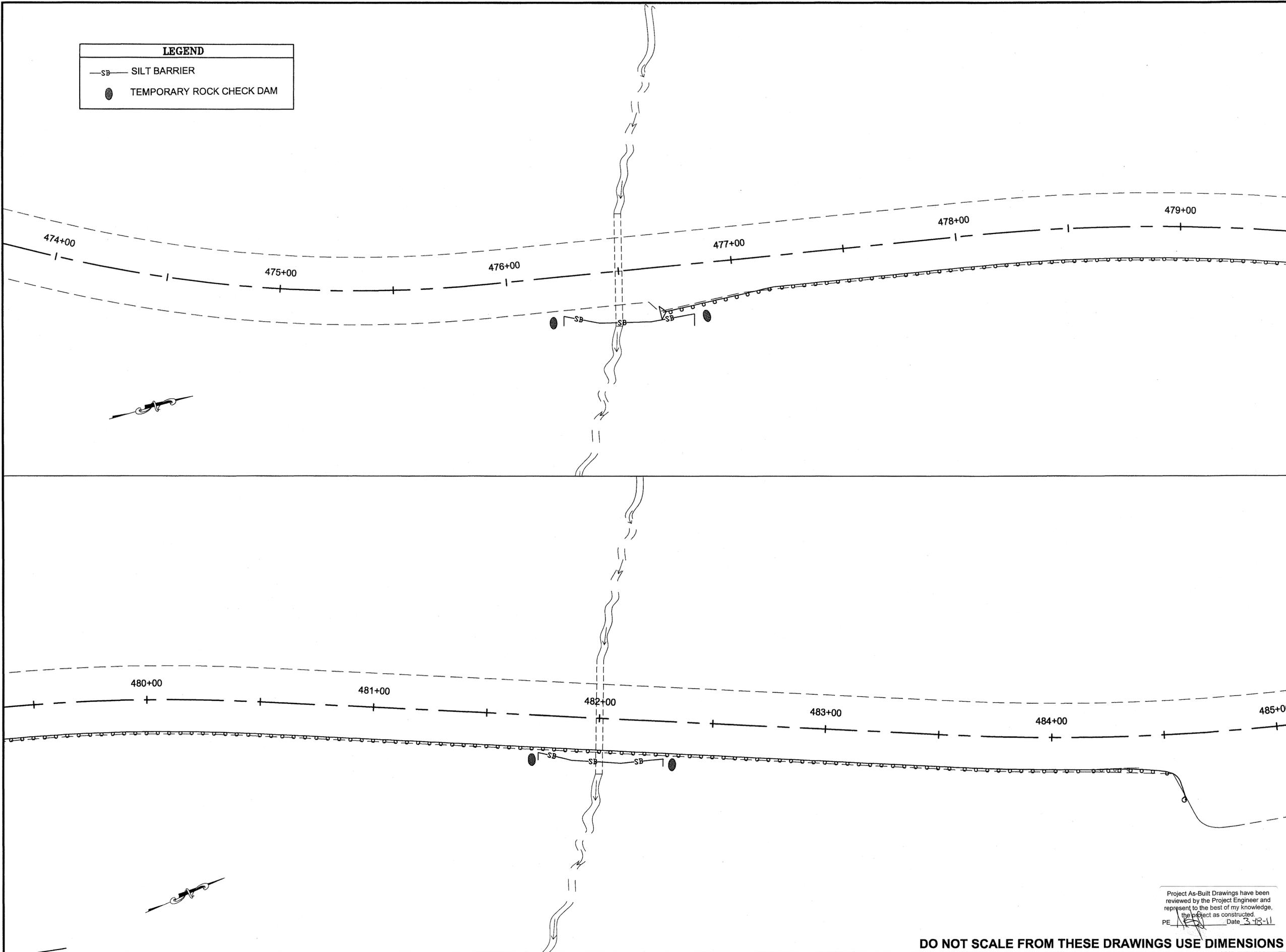
PROJECT DESIGNATION
HHE-0902(33)-67442

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
T2	43

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE: *[Signature]* Date: 3-18-11

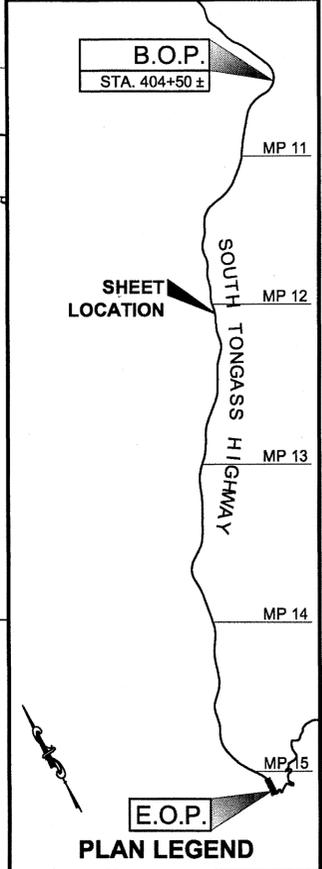
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

LEGEND	
—SB—	SILT BARRIER
●	TEMPORARY ROCK CHECK DAM



PATH: Q:\KTM67442\TR\PLANSET\EROSION SEDIMENT CONTROL\67442_T2-11_ESCP_RECOVER.DWG
 DIONISIO, CHRISTOPHER J (DOT)
 TAB: T3 Wednesday, September 30, 2009 11:00 AM

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



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DESIGNED BY: C. DIONISIO
 DRAWN BY: C. DIONISIO

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION

**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

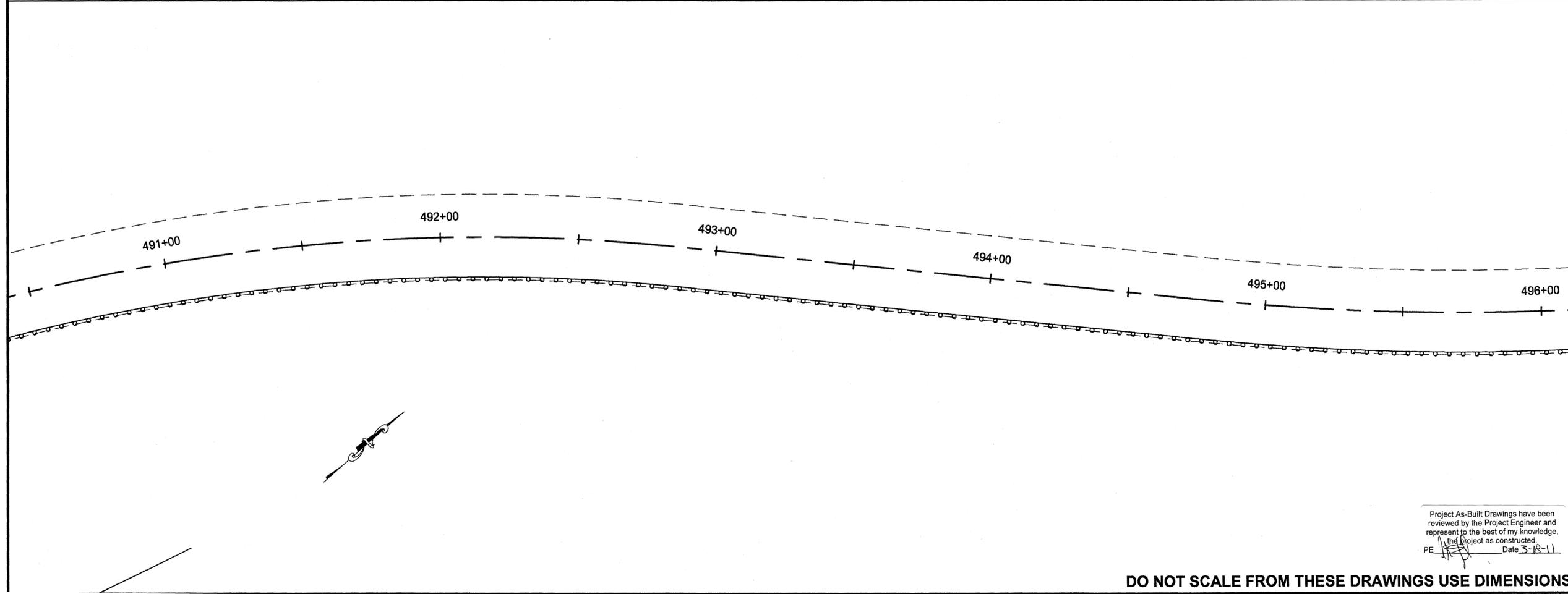
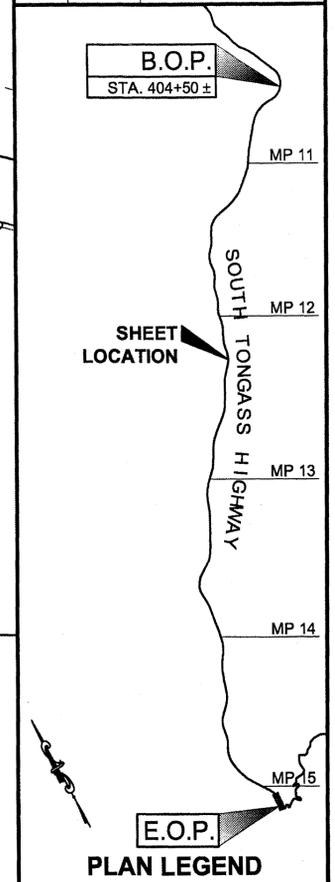
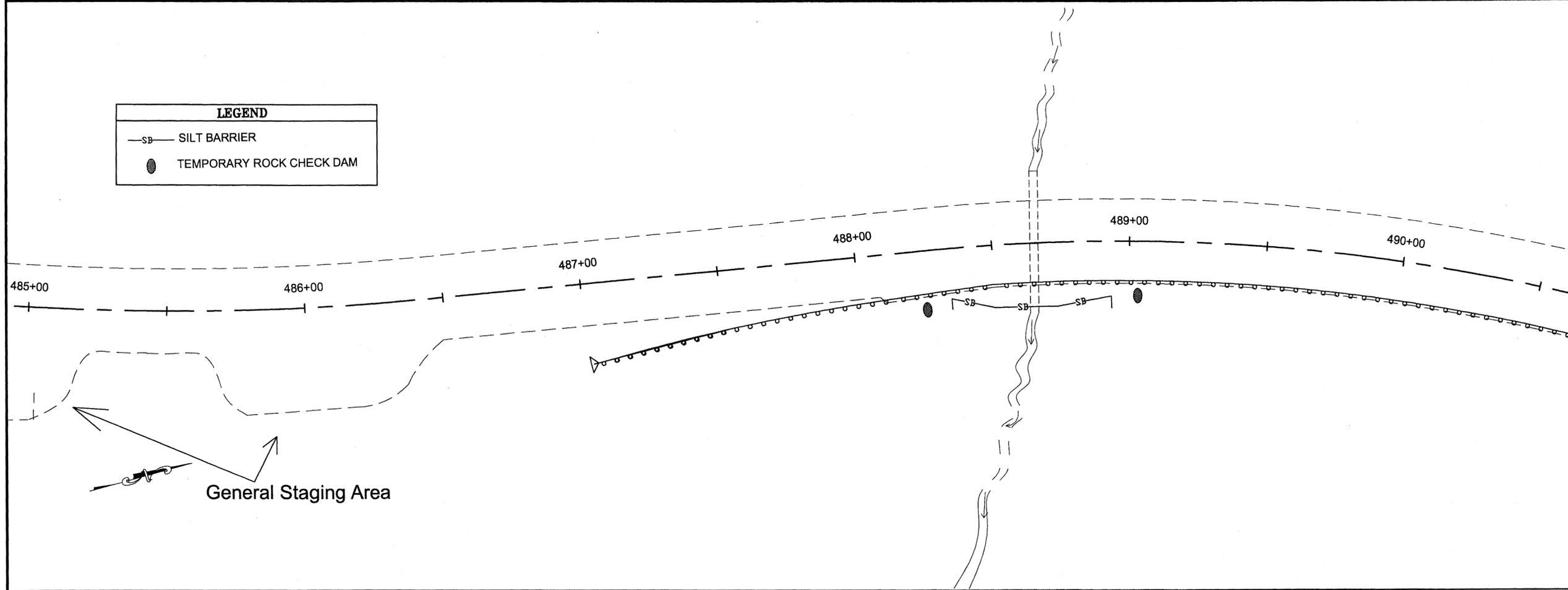
**EROSION SEDIMENT
 CONTROL LAYOUT
 PLAN**

PROJECT DESIGNATION	
HHE-0902(33)-67442	
STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
T3	43

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE: *[Signature]* Date: 3-18-11

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

LEGEND	
	SILT BARRIER
	TEMPORARY ROCK CHECK DAM



CHECKED BY: C. MOREHOUSE

DESIGNED BY: C. DIONISIO
 DRAWN BY: C. DIONISIO

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION

**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

**EROSION SEDIMENT
 CONTROL LAYOUT
 PLAN**

PROJECT DESIGNATION
HHE-0902(33)-67442

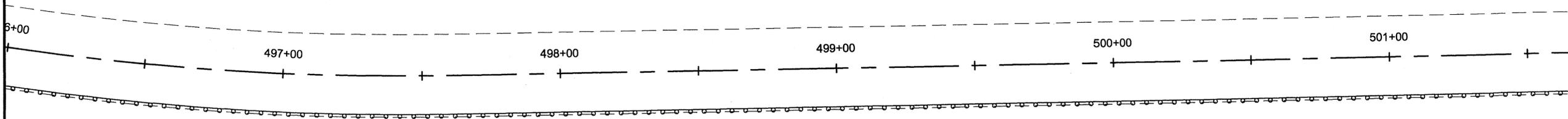
STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
T4	43

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE *[Signature]* Date 5-18-11

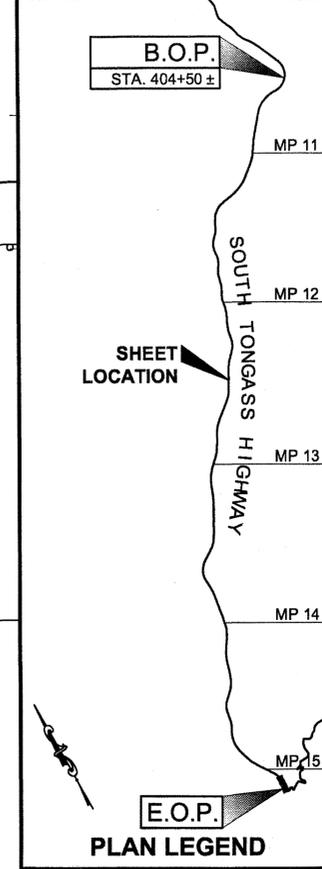
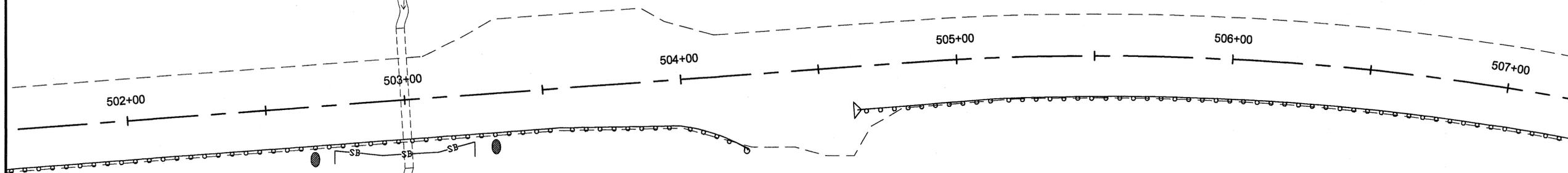
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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 DIONISIO, CHRISTOPHER J (DOT)
 TAB: T5 Wednesday, September 30, 2009 11

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



LEGEND	
—SB—	SILT BARRIER
●	TEMPORARY ROCK CHECK DAM



CHECKED BY: C. MOREHOUSE



DESIGNED BY: C. DIONISIO
 DRAWN BY: C. DIONISIO

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION

**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

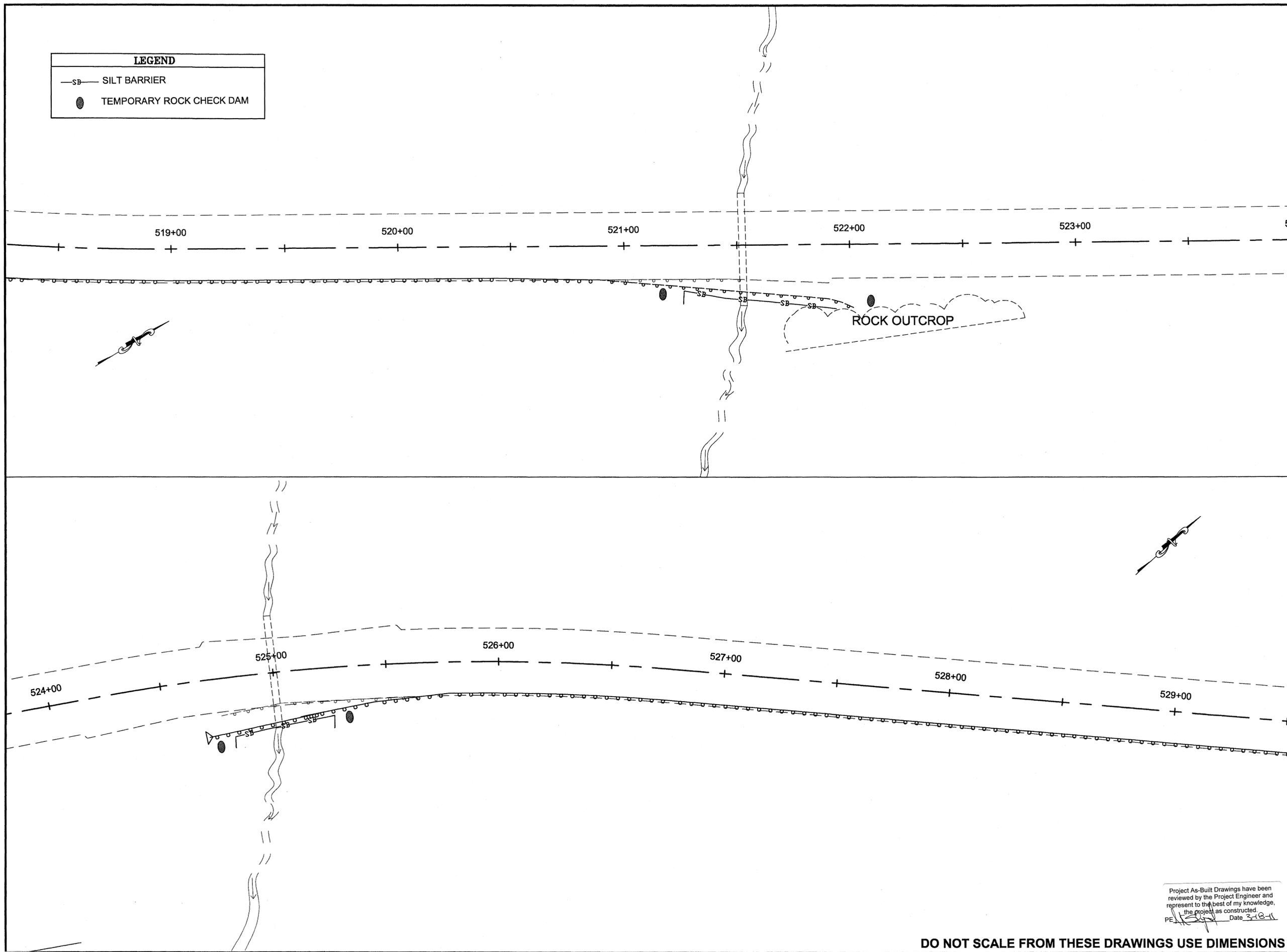
**EROSION SEDIMENT
 CONTROL LAYOUT
 PLAN**

PROJECT DESIGNATION	
HHE-0902(33)-67442	
STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
T5	43

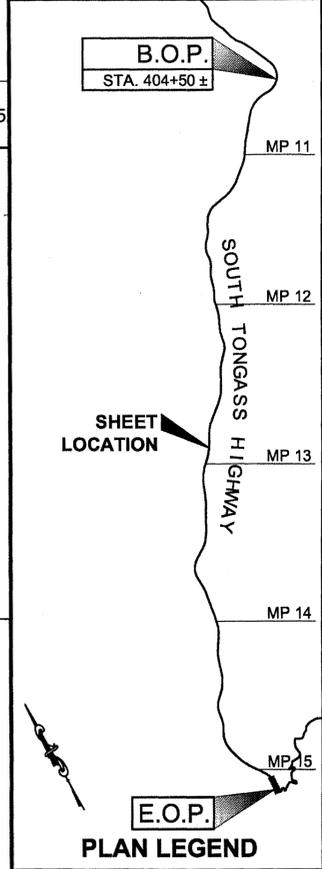
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE: [Signature] Date 3-18-11

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

LEGEND	
—SB—	SILT BARRIER
●	TEMPORARY ROCK CHECK DAM



ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



CHECKED BY: C. MOREHOUSE



DESIGNED BY: C. DIONISIO

DRAWN BY: C. DIONISIO

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION

**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442
 EROSION SEDIMENT
 CONTROL LAYOUT
 PLAN**

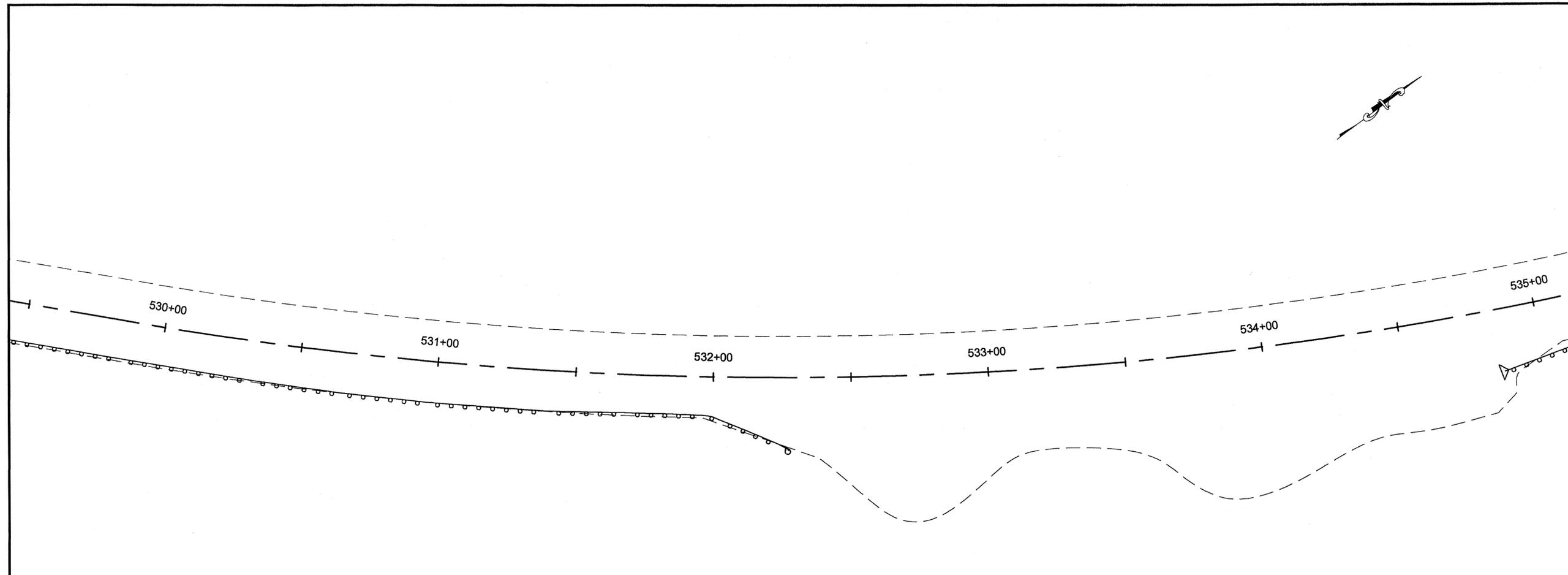
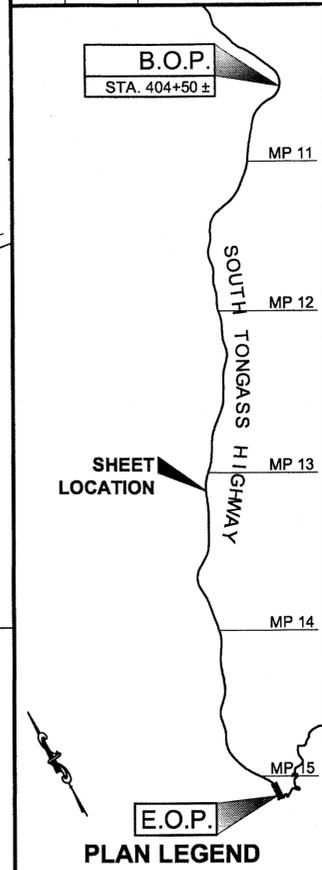
PROJECT DESIGNATION
HHE-0902(33)~67442

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
T6	43

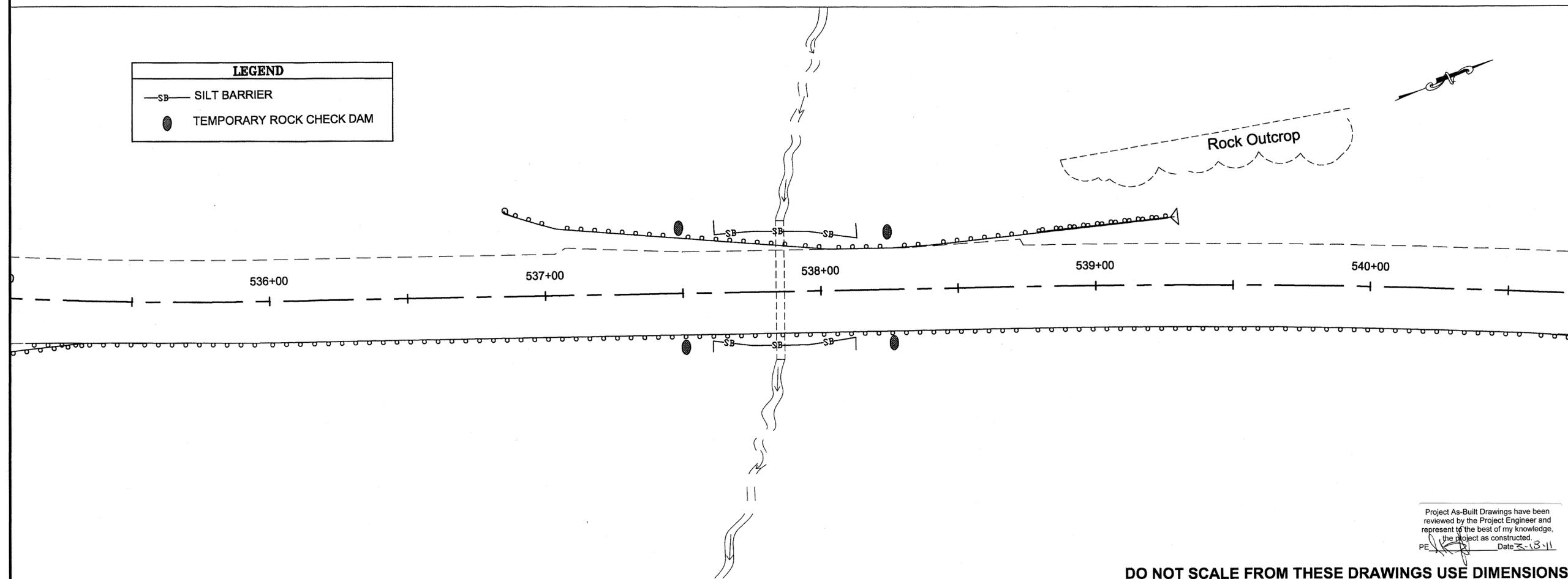
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 PE: [Signature] Date: 3-18-11

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



LEGEND	
—SB—	SILT BARRIER
●	TEMPORARY ROCK CHECK DAM



CHECKED BY: C. MOREHOUSE



DESIGNED BY: C. DIONISIO

DRAWN BY: C. DIONISIO

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION

**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442
 EROSION SEDIMENT
 CONTROL LAYOUT
 PLAN**

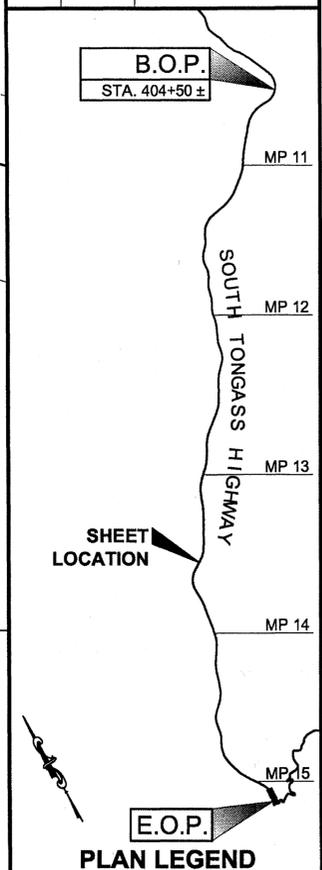
PROJECT DESIGNATION
HHE-0902(33)~67442

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
T7	43

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE *[Signature]* Date 3-18-11

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ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



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DESIGNED BY: C. DIONISIO
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STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTH EAST REGION

**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

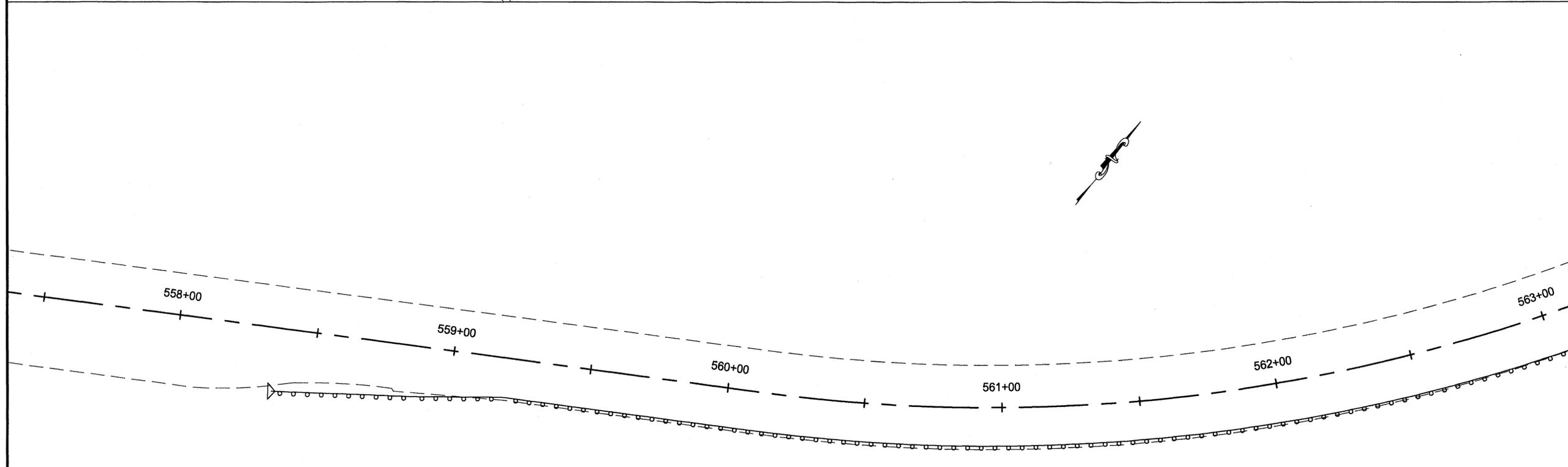
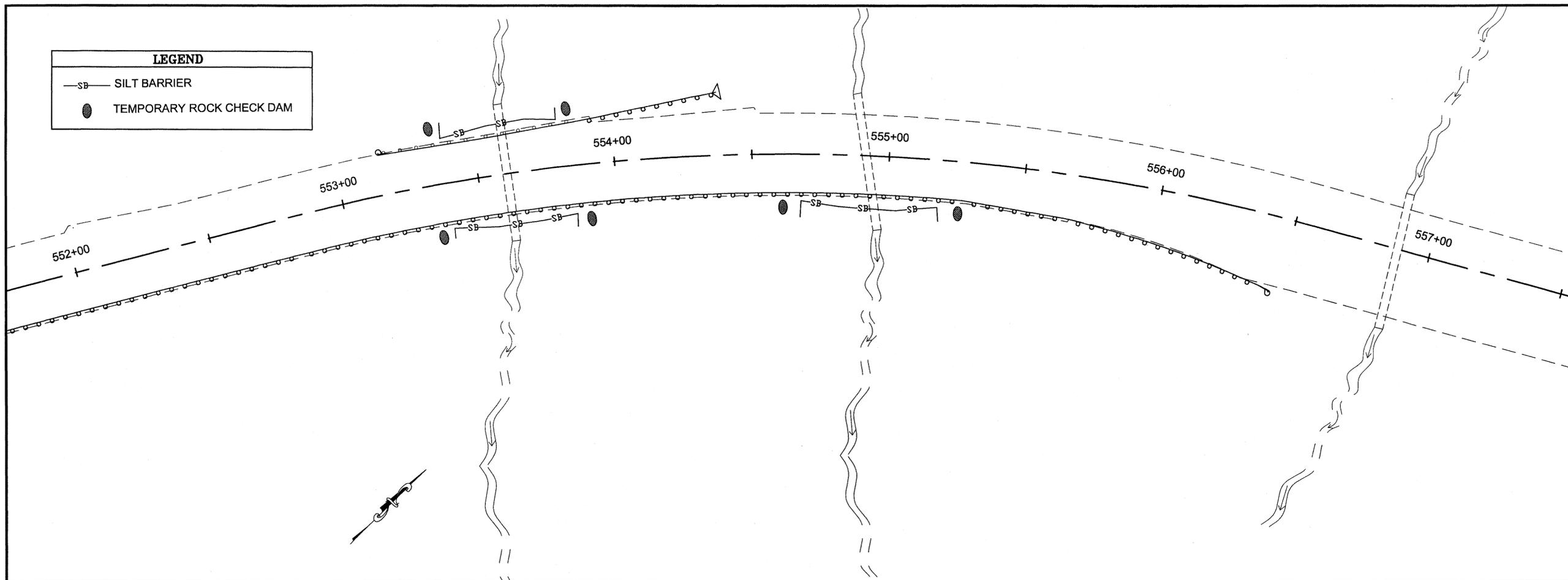
**EROSION SEDIMENT
 CONTROL LAYOUT
 PLAN**

PROJECT DESIGNATION	
HHE-0902(33)-67442	
STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
T8	43

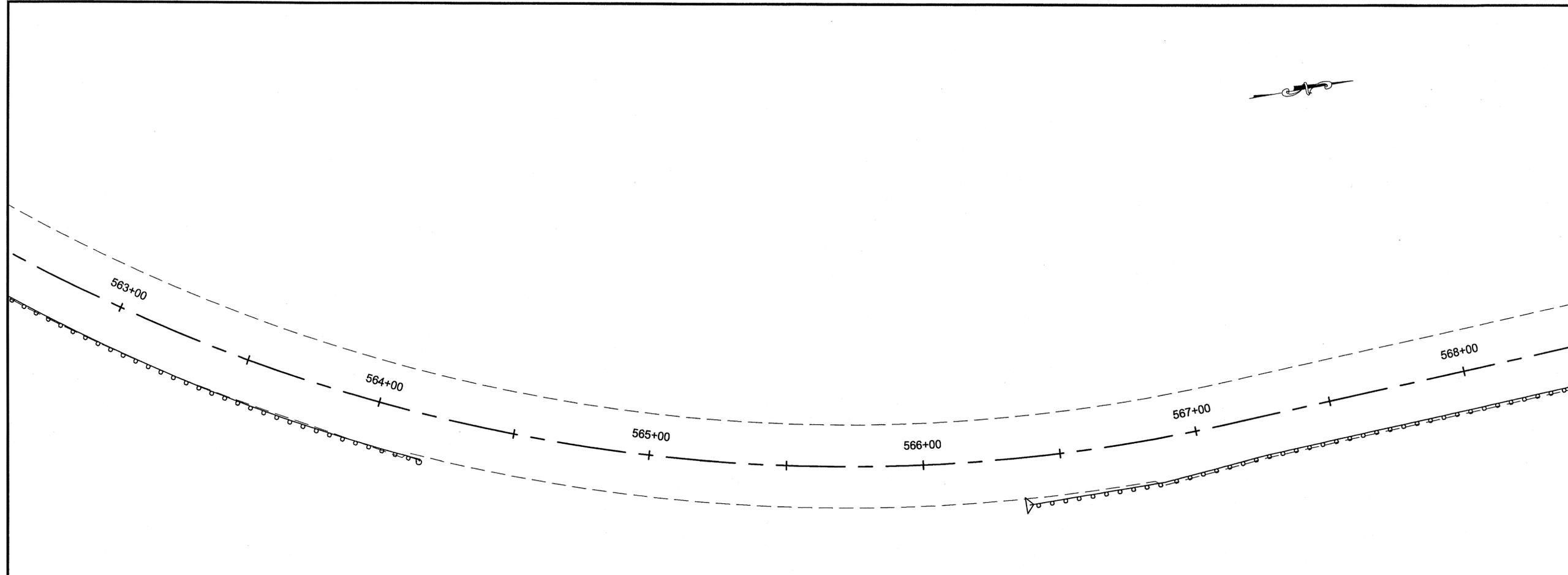
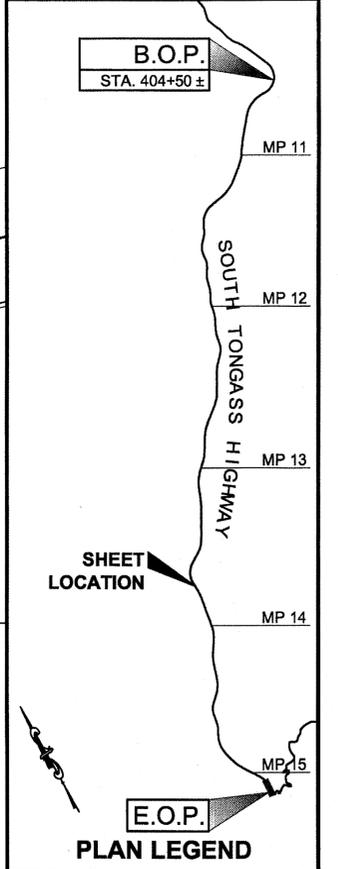
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE: *[Signature]* Date: 3/8/11

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

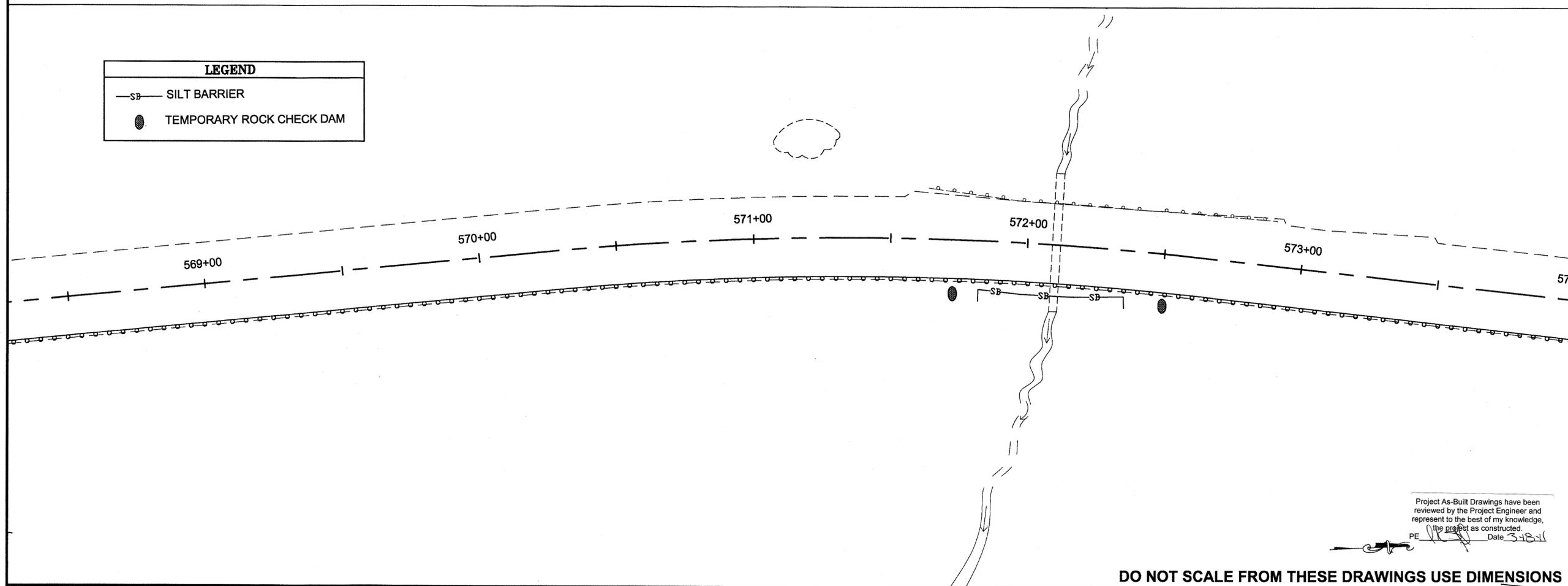
LEGEND	
	SILT BARRIER
	TEMPORARY ROCK CHECK DAM



ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



LEGEND	
—SB—	SILT BARRIER
●	TEMPORARY ROCK CHECK DAM



CHECKED BY: C. MOREHOUSE



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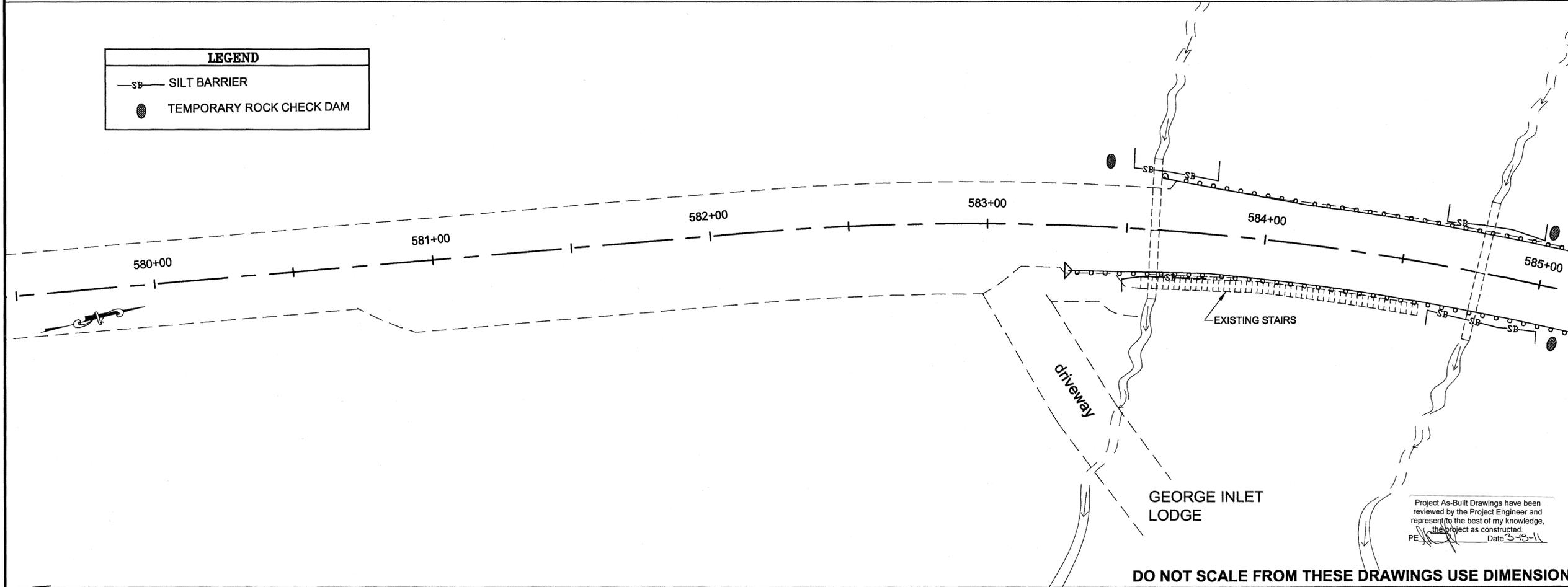
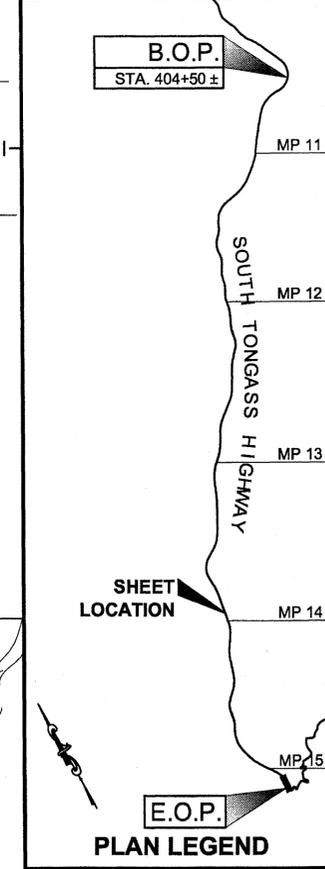
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION
**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**
**EROSION SEDIMENT
 CONTROL LAYOUT
 PLAN**

PROJECT DESIGNATION	
HHE-0902(33)-67442	
STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
T9	43

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE *[Signature]* Date 3-18-11

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ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



LEGEND	
—SB—	SILT BARRIER
●	TEMPORARY ROCK CHECK DAM

CHECKED BY: C. MOREHOUSE



DESIGNED BY: C. DIONISIO

DRAWN BY: C. DIONISIO

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION

**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442
 EROSION SEDIMENT
 CONTROL LAYOUT
 PLAN**

PROJECT DESIGNATION
HHE-0902(33)~67442

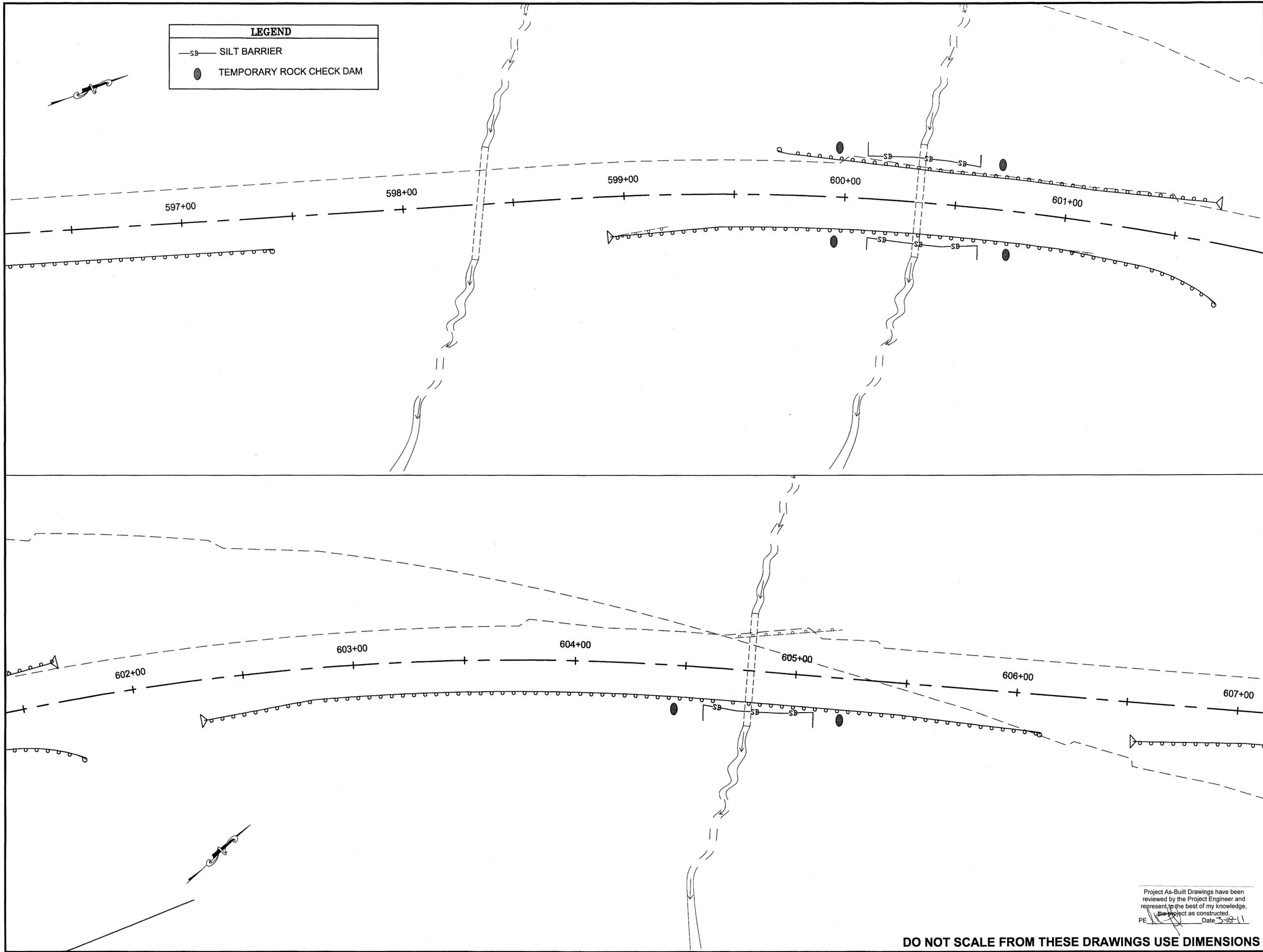
STATE	YEAR
ALASKA	2009

SHEET NUMBER	TOTAL SHEETS
T10	43

Project As-Built Drawings have been reviewed by the Project Engineer and represent the project as constructed.
 Date 3-8-11
 PE: [Signature]

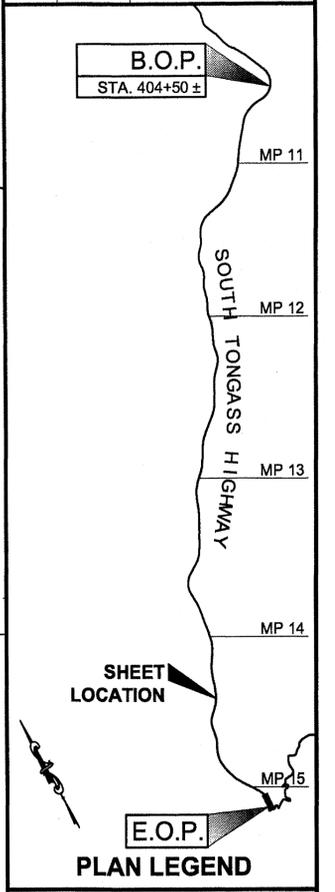
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

LEGEND	
	SILT BARRIER
	TEMPORARY ROCK CHECK DAM



PATH: Q:\KTM67442\TRIPLANSET\EROSION SEDIMENT CONTROL\67442_T2-11_ESCP_RECOVER.DWG
 DIONISIO, CHRISTOPHER J (DOT)
 TAB: T11 Wednesday, September 30, 2009 11:00 AM

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



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DESIGNED BY: C. DIONISIO
 DRAWN BY: C. DIONISIO

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
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 DIVISION-SOUTHEAST REGION

**KTN SOUTH TONGASS HIGHWAY
 GUARDRAIL REPLACEMENT
 PROJECT #67442**

**EROSION SEDIMENT
 CONTROL LAYOUT
 PLAN**

PROJECT DESIGNATION
HHE-0902(33)-67442

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
T11	43

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