

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND  
 PUBLIC FACILITIES  
 SOUTHEAST REGION  
 DESIGN AND CONSTRUCTION DIVISION

JUNEAU AREA GUARDRAIL  
 IMPROVEMENTS

FG-000S(124) 70626

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTION SHEET
3	ESTIMATE OF QUANTITIES
4-10	ROUTE LAYOUT PLAN & MISC. SUMMARIES
11	MISC. DETAILS
12	TRAFFIC CONTROL PLAN

The following Standard Drawings apply to this project:  
 C-01.03, C-02.01, C-05.00, D-01.01, D-04.10, D-05.01,  
 G-04.03S, G-04.04W, G-14.04S, G-14.04W, G-15.00, G-18.00S,  
 G-18.00W, G-25.00S, G-25.00W, G-27.00S, G-27.00W, M-05.00

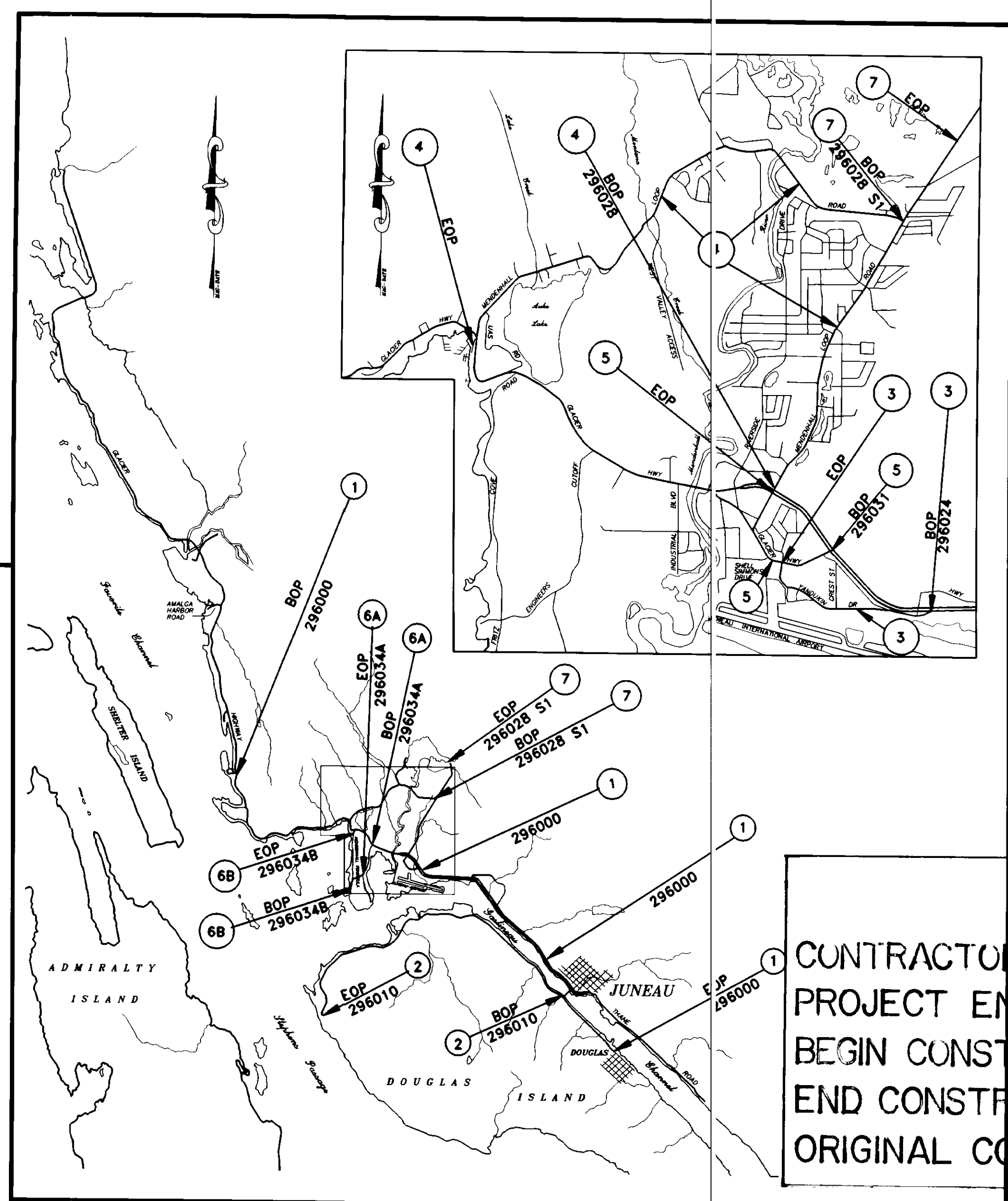
SHY DISTANCE EXCEPTIONS	
Install new railing at existing offset at the following locations:	
<u>Mendenhall Peninsula Road #296034A</u>	
All locations = 1' Shy Distance	
<u>Fritz Cove Road #296034B</u>	<u>Shy Distance</u>
<b>ALL GUARDRAIL LOCATIONS MAINTAIN 2' SHY DISTANCE EXCEPT AS NOTED BELOW</b>	
CDS MPT 5.796 to CDS MPT 5.833 = varies 2' to 1'	
CDS MPT 5.842 to CDS MPT 5.869 = 0	
CDS MPT 5.893 to CDS MPT 5.905 = 0	

Exceptions were approved and signed by FHWA, Dated on 7-29-92

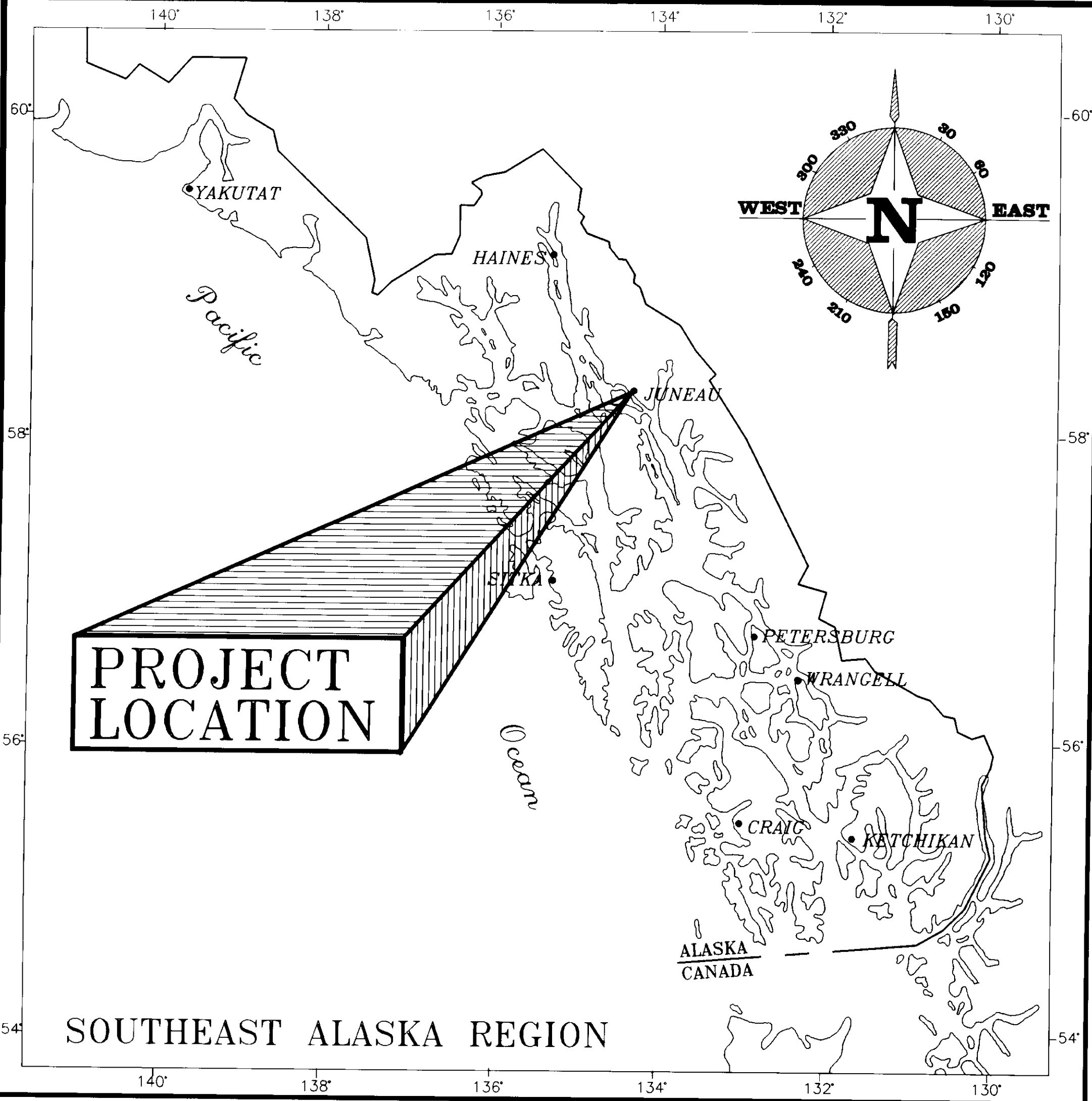
Shy Distance- Definition  
 The distance from the edge of the traveled way beyond which a roadside object will not be perceived as an immediate hazard by the typical driver, to the extent that he will change his vehicle's placement or speed.

RECOMMENDED SHY LINE OFFSETS	
Design Speed (mph)	Recommended Shy Line Offsets (feet)
80	12.0
70	10.0
60	8.0
50	6.5
40	5.0
30	3.5

From AASHTO 1988 Roadside Design Guide.



JUNEAU AREA  
 VICINITY MAP



PROJECT  
 LOCATION

ROUTE KEY	CDS ROUTE NUMBER	ROUTE LENGTH	SHEET NUMBER
① GLACIER/DOUGLAS HWY.	#296000	18.49 MI.	4
② NORTH DOUGLAS ROAD	#296010	12.04 MI.	5
③ YANDUKIN DRIVE	#296024	1.15 MI.	6
④ MENDENHALL LOOP ROAD	#296028	6.17 MI.	7
⑤ OLD GLACIER HIGHWAY	#296031	0.97 MI.	8
⑥A MENDENHALL PENINSULA	#296034A	1.13 MI.	9
⑥B FRITZ COVE ROAD	#296034B	2.58 MI.	10
⑦ GLACIER SPUR	#296028 S1	1.47 MI.	8

**"AS-BUILT" PLANS**  
 CONTRACTOR: Arete Construction, Inc  
 PROJECT ENGINEER: Kreuzenstein  
 BEGIN CONSTRUCTION: 3-15-93  
 END CONSTRUCTION: 9-30-93  
 ORIGINAL CONTRACT: \$484,945

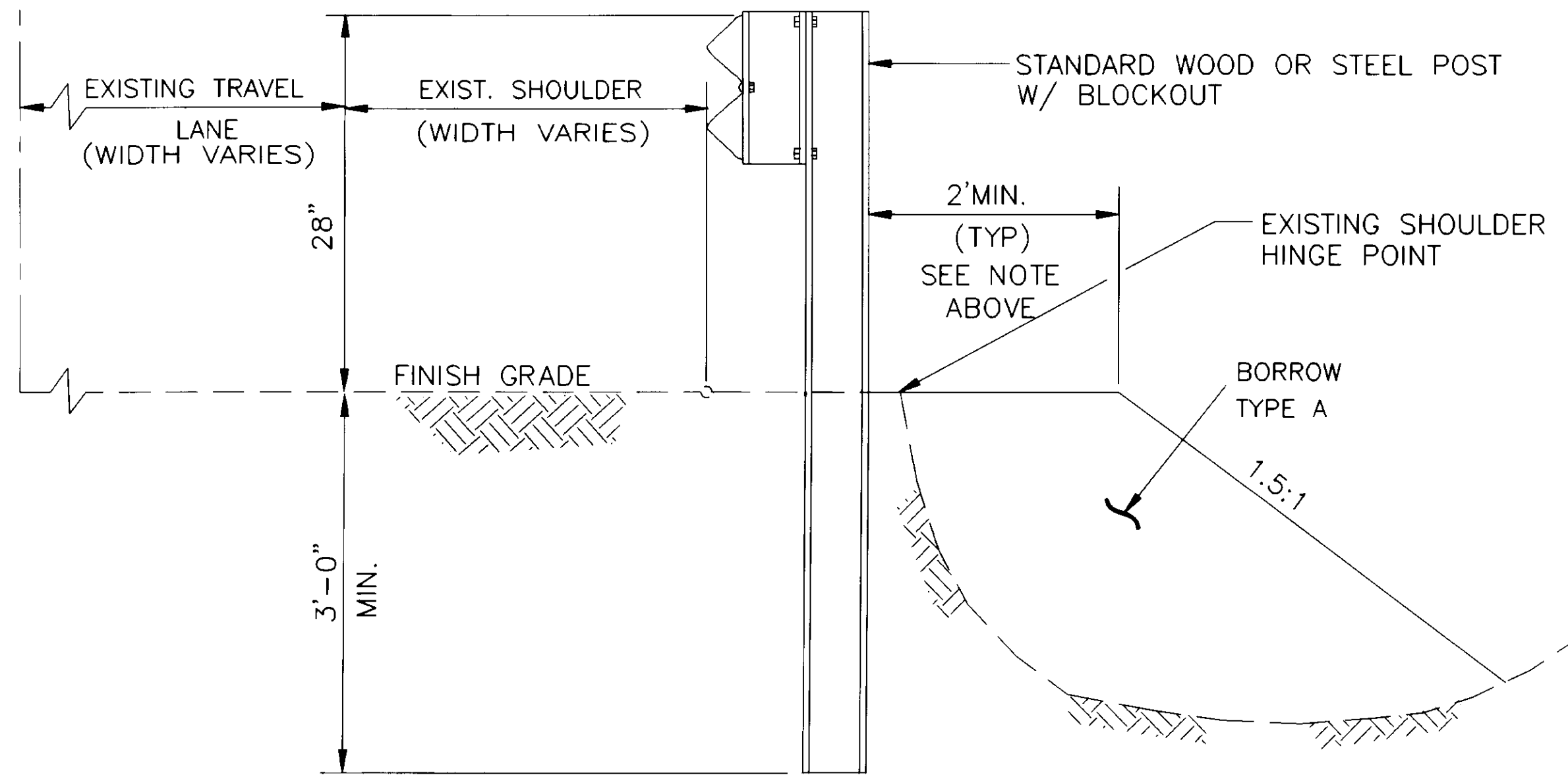
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND  
 PUBLIC FACILITIES  
 SOUTHEAST REGION DESIGN SECTION

APPROVED  
*Gary P. McCallon* Date 9/10/92  
 Engineering Manager

APPROVED  
*W. J. Williams* Date 9/10/92  
 Director, S.E. Region Design & Construction

PROJECT NUMBER: <b>70626</b>	ENGINEER'S SEAL
DATE: <b>SEPT. 1992</b>	
SHEET <b>1</b> OF <b>12</b>	

ALL GUARDRAIL INSTALLATIONS THAT CANNOT MEET THE MINIMUM 2' OF FILL BEHIND THE GUARDRAIL POST SHALL REQUIRE 7'-0" POST. SEE ROUTE SUMMARY TABLES FOR LOCATIONS



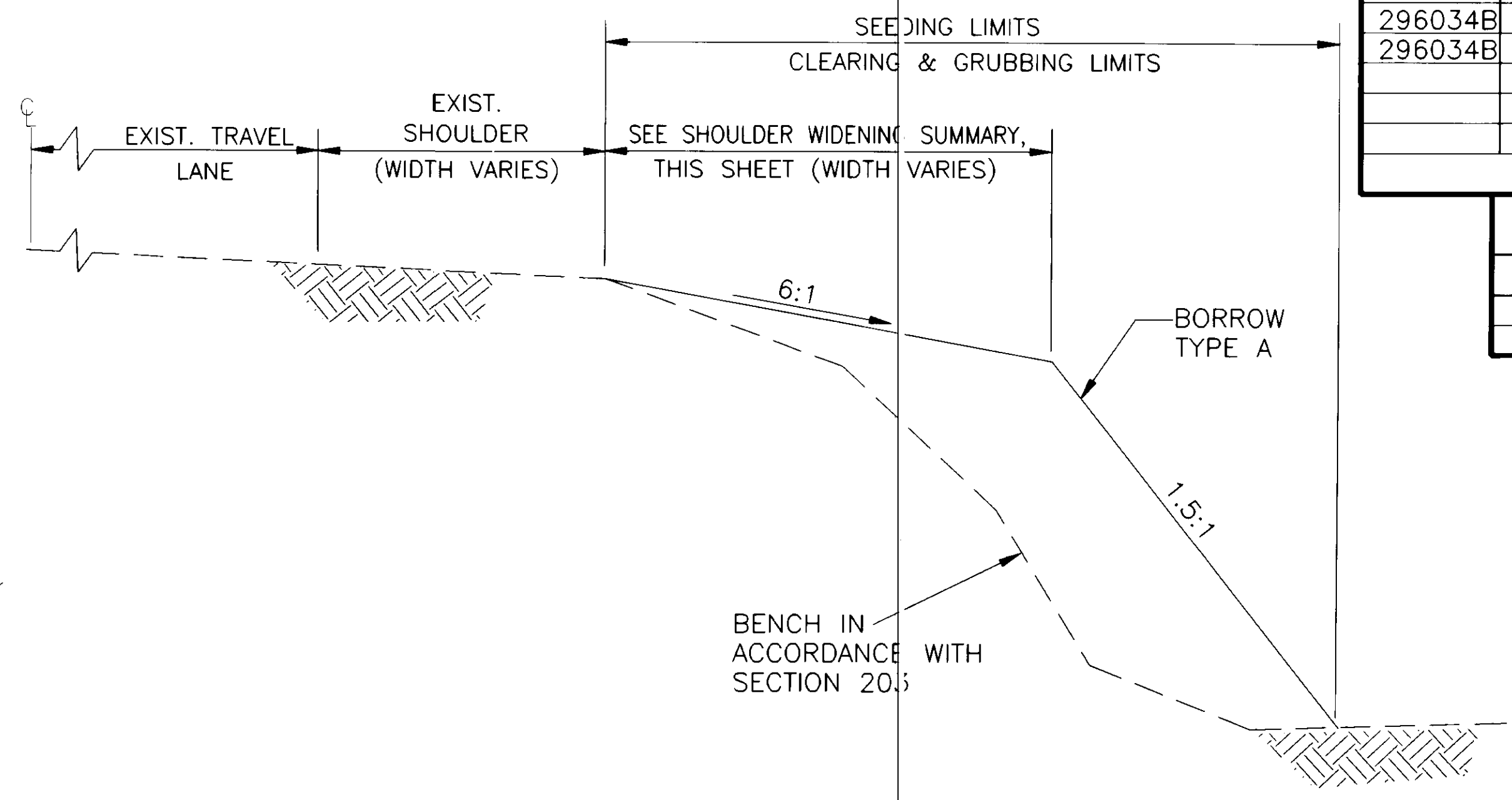
**EXTENDING EXISTING GUARDRAIL AND NEW GUARDRAIL INSTALLATION TYPICAL**  
SEE ROUTE SUMMARY TABLES

**SHOULDER WIDENING SUMMARY**

ROUTE NO.	CDS MPT	CDS MPT	LTRT	LENGTH	WIDTH	BORROW TONS	BENCHING EXCAVATION	REMARKS
296000	29.145	29.200	X	264'	15'	3,006	835	
296034B	5.282	5.292	X	50'	8'	133	37	
296034B	5.600	5.630	X	150'	8'	241	178	
296034B	5.873	5.885	X	65'	8'	347	97	
						TOTALS	3,727 TONS	1,147 CY

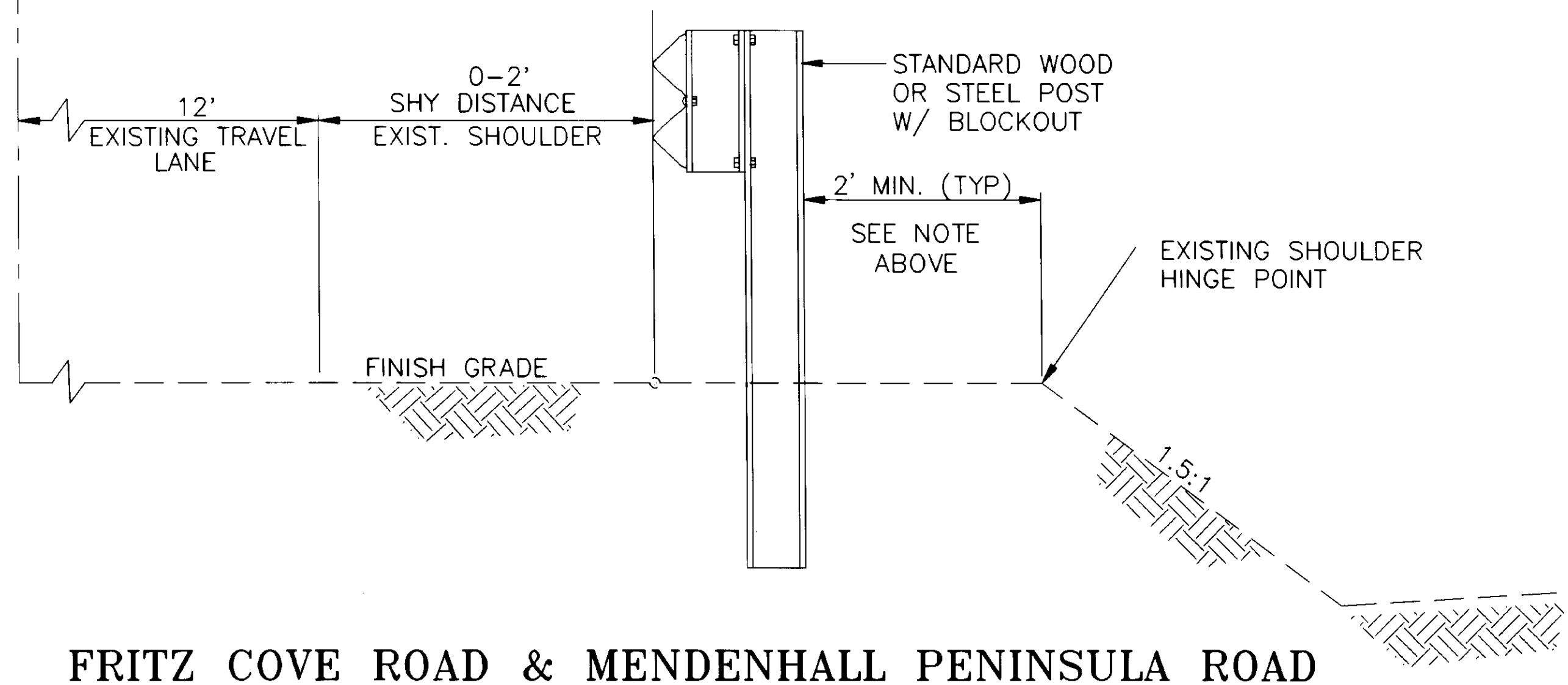
**BASIS OF ESTIMATE**

ITEM NO.	ESTIMATING FACTOR
203(6)	1.8 TONS PER CUBIC YARD
301 (1)	2.0 TONS PER CUBIC YARD

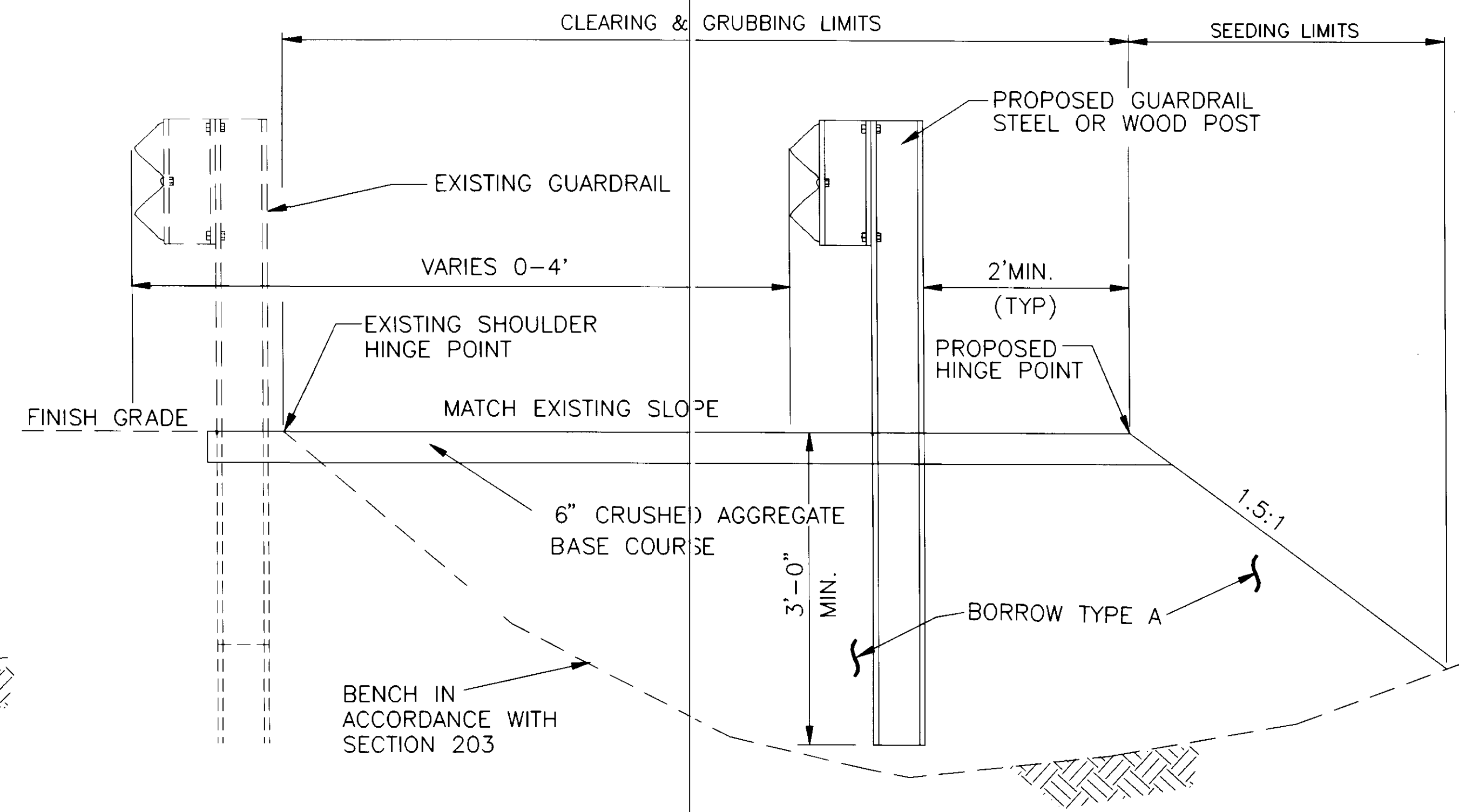


**SHOULDER WIDENING TYPICAL**  
SEE SUMMARY TABLE

ALL GUARDRAIL INSTALLATIONS THAT CANNOT MEET THE MINIMUM 2' OF FILL BEHIND THE GUARDRAIL POST SHALL REQUIRE 7'-0" POST. SEE NEW GUARDRAIL ROUTE SUMMARY TABLES FOR LOCATIONS. (SEE PLAN SHEETS 4-8)



**FRITZ COVE ROAD & MENDENHALL PENINSULA ROAD EXTENDING EXISTING GUARDRAIL AND NEW GUARDRAIL INSTALLATION**  
SEE ROUTE SUMMARY TABLES (SEE PLAN SHEETS 9 & 10)  
SEE STD. DWG. G-14.04S & G-14.04W



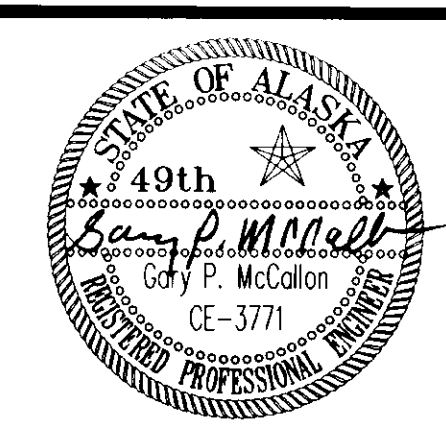
**REMOVE & RELOCATE GUARDRAIL & FLARE TYPICAL**  
SEE STD. DWG. G-14.04S & G-14.04W

BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU  
JUNEAU AREA GUARDRAIL IMPROVEMENTS  
TYPICAL SECTIONS  
FG-000S (124) 70626

ALASKA  
DESIGNED BY: P. JONES  
DRAWN BY: AutoCAD/B. ADAMS  
CHECKED BY: W.J. HOLBROOK  
PROJECT NO. 70626  
DATE:  
SHEET 2 OF 12



**GENERAL NOTES**

1. ALL GUARDRAIL LOCATIONS ARE APPROXIMATE ONLY AND SUBJECT TO MINOR REVISION.
  2. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL WASTE EXCAVATION, BOULDERS, TREES AND CONSTRUCTION DEBRIS TO AN APPROVED WASTE SITE.
  3. ALL USEABLE HARDWARE DESIGNATED BY THE ENGINEER SHALL BE SALVAGED AND BECOME THE PROPERTY OF THE DOT\PF STATE MAINTENANCE AND SHALL BE DELIVERED TO THE 7 MILE MAINTENANCE YARD.
- ABBREVIATIONS**
- CDS = COORDINATED DATA SYSTEM. 1988 ROADLOG  
 MB = MAIL BOX  
 MPT = MILE POINT  
 WP = WOOD POST  
 MP = METAL POST
4. CDS MPTS ARE APPROXIMATE AND INTENDED TO BE ADJUSTED TO FIT ACTUAL FIELD CONDITIONS.
  5. HOLES OR DEPRESSIONS RESULTING FROM THE REMOVAL OF GUARDRAIL POSTS AND EXISTING TERMINAL END SECTIONS SHALL BE BACKFILLED WITH BORROW TYPE "A" MATERIAL AND COMPACTED IN ACCORDANCE WITH SECTION 203.
  6. DO NOT SCALE FROM THESE PLANS - USE DIMENSIONS.

**ESTIMATE OF QUANTITIES**

**ROUTE SHEET NUMBERS**

ITEM NO.	PAY ITEM	UNIT	ROUTE 296000	ROUTE 296010	ROUTE 296024	ROUTE 296028	ROUTE 296028-S1 296031	ROUTE 296034 A*	ROUTE 296034 B*	TOTAL QUANTITIES
120 (1)	DBE ADJUSTMENT	CONT. SUM								ALL REQ'D
201 (3B)	CLEARING & GRUBBING	LS	(SEE SUMMARY TABLES FOR QUANTITIES)							ALL REQ'D
202 (1)	REMOVAL OF STRUCTURES & OBSTRUCTIONS	LS	(SEE SUMMARY TABLES FOR QUANTITIES)							ALL REQ'D
202 (10)	SINGLE MAILBOX INSTALLATION	EACH						4	6	0-10
203 (6)	BORROW TYPE "A"	TON	3,186	684		243		2,100	2,342	<del>8,395</del> 8,555
301 (1)	CRUSHED AGGREGATE BASE COURSE	TON	20	30	10	30		60	50	<del>438200</del>
506 (1)	TREATED TIMBER	LS								ALL REQ'D
512 (1)	ROCKERY WALL	SQ. YD.							123	<del>203423</del>
603 (17-18)	18 INCH PIPE	LF	110							0-110
603 (17-24)	24 INCH PIPE	LF							30	96-30
606 (1)	W-BEAM GUARDRAIL <i>C.O.I</i>	LF	1137.5	1,931.25	37.5	412.5		2,425	2,905	<del>9,112.5</del> 8,848.75
606 (4)	REMOVAL & RECONSTRUCTION OF GUARDRAIL <i>C.O.I</i>	LF	75	225	25	100	25	150	50	<del>2625650</del> 4,718.25
606 (5)	REMOVAL & DISPOSAL OF GUARDRAIL <i>C.O.I</i>	LF	93.75	225	12.5	75		75	2,362.5	<del>4,718.25</del> 2,843.75
606 (6)	END ANCHORAGES <i>C.O.I</i>	EACH	15	28	1	10		10	31	<del>83-95</del>
606 (8)	BURIED ANCHOR TERMINAL	EACH	1			1				2
606 (10)	GUARDRAIL MODIFICATION <i>C.O.I</i>	LF							390	<del>1,025390</del>
606 (11)	END ANCHORAGES CLEANUP	EACH	5	9	1	8	2			<del>22-25</del>
606 (12)	REMOVAL & DISPOSAL OF TERMINAL SECTION	EACH	6	18	1	7		6		<del>23-38</del>
606 (14)	GUARDRAIL ADJUSTMENT	LF						677		<del>714-677</del>
615 (1)	STANDARD SIGNS	SQ. FT.	<del>9.5-8</del>							9.5-8
618 (1)	SEEDING	LS	(SEE SUMMARY TABLES FOR QUANTITIES)							ALL REQ'D
606(15)	Remove Guardrail Posts <i>C.O.I</i>									All Req'd.
640 (1)	MOBILIZATION & DEMOBILIZATION	LS								ALL REQ'D
641 (1)	TEMPORARY EROSION AND POLLUTION CONTROL	CONT. SUM								ALL REQ'D
642 (1)	CONSTRUCTION SURVEYING	LS								ALL REQ'D
643 (2)	TRAFFIC MAINTENANCE	LS								ALL REQ'D
643 (4)	CONSTRUCTION SIGN	EA. PER DAY							46	<del>2,500</del>
643 (5)	TYPE II BARRICADE	EA. PER DAY								<del>60-500</del>
643 (7)	TRAFFIC CONE	EA. PER DAY							2,150	<del>10,000</del>
643 (15)	FLAGGING	HR								<del>751-500</del>

A\* = MENDENHALL PENINSULA ROAD  
 B\* = FRITZ COVE ROAD

BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU

JUNEAU AREA GUARDRAIL IMPROVEMENTS  
 ESTIMATE OF QUANTITIES  
 FG-000S (124) 70626

ALASKA

DESIGNED BY: P. JONES PROJECT NO. 70626  
 DRAWN BY: AutoCAD/B. ADAMS DATE: SEPT. 1992  
 CHECKED BY: W.J. HOLBROOK SHEET 3 OF 12





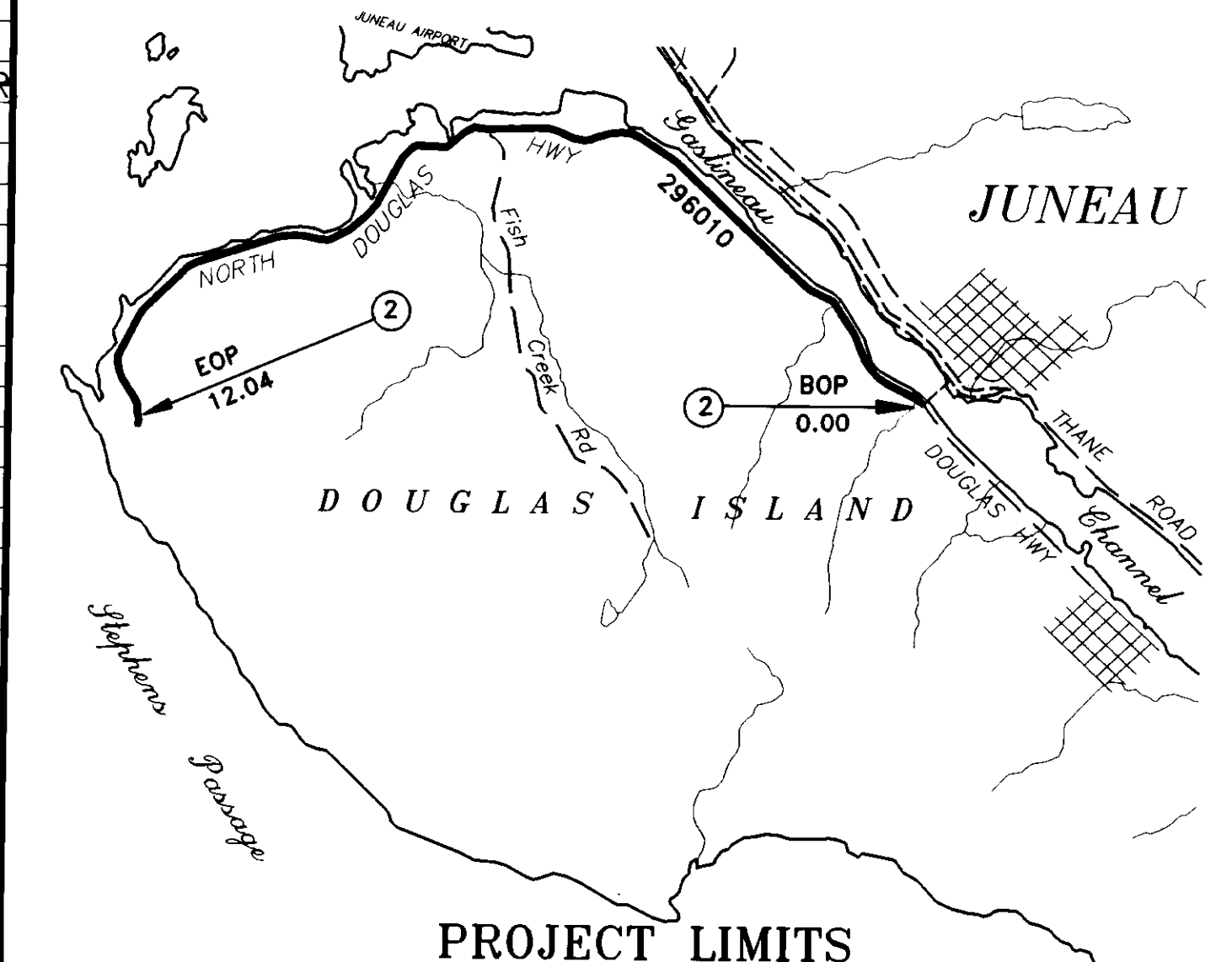
**ROUTE ESTIMATE OF QUANTITIES**

ITEM NO	PAY ITEM	UNIT	QUANTITY
512(7)	Rockery Wall	30 YDS	31
202 (1)	REMOVAL OF STRUCTURES & OBSTRUCTIONS	LS	ALL REQ'D
203 (6)	BORROW TYPE "A"	TON	684
301 (1)	CRUSHED AGGREGATE BASE COURSE	TON	30
606 (1)	W-BEAM GUARDRAIL	LF	1350+931.25
606 (4)	REMOVAL AND RECONSTRUCTION OF GUARDRAIL	LF	0-225
606 (5)	REMOVAL AND DISPOSAL OF GUARDRAIL	LF	225
606 (6)	END ANCHORAGES	EA	14-28
606 (11)	END ANCHORAGE CLEANUP	EA	7-9
606 (12)	REMOVAL AND DISPOSAL OF TERMINAL END SECTION	EA	0-18
022(11-24)	24" SIGN PILE	LF	66

**NEW GUARDRAIL SUMMARY**

CDS MPT TO	CDS MPT	OFFSET LT.	OFFSET RT.	LENGTH	REMARKS
-0.117	0.122		X	25'	EXTEND EXIST. FLARE 25' @ TRUCANO DRIVE
-1.131	1.141		X	50'	EXTEND 50' GUARDRAIL (INCLUDES FLARE) @ MB #4600
-1.437	1.452		X	75'	EXTEND EXIST. GUARDRAIL 75' AND TO DRIVE (INCLUDE FLARE)
-1.518	1.528		X	75' *	EXTEND 75' GUARDRAIL LENGTH, INCLUDES FLARE @ MB #5010
-1.630	1.637		X	37.5'	EXTEND EXIST. GUARDRAIL 37.5' AND (INCLUDE FLARE) @ POWELL GAR
-1.650	1.670		X	100' *	INSTALL 100' NEW GUARDRAIL, END @ HOUSE #5140
1.977	2.013		X	175' *	INSTALL 175' NEW GUARDRAIL BETWEEN DRIVES OPPOSITE MB #5475
2.025	2.070		X	300' 275' *	INSTALL 275' NEW GUARDRAIL (INCLUDE FLARES) END GUARDRAIL NEAR DRIVEWAY APPROX. LOCATION OF 3 MILE SIGN
2.260	2.280		X	875' 00'	INSTALL 100' NEW GUARDRAIL (INCLUDES FLARE ENDS) END GUARDRAIL @ MB #5630 DRIVE MB #5734
-2.598	2.605		X	37.5' *	EXTEND 37.5' GUARDRAIL LENGTH (INCLUDES FLARE) STREAM NEAR HOUSE #6050
-2.630	2.635		X	25' *	EXTEND 25' GUARDRAIL LENGTH @ MAILBOX 610*
2.730	2.810		X	400'	INSTALL 400' NEW GUARDRAIL (INCLUDES FLARE ENDS) END OF GUARDRAIL APPROXIMATELY 130' BACK FROM GARAGE # 6300
-3.445	3.455		X	50'	ADD 50' GUARDRAIL LENGTH (INCLUDE FLARE END) END GRD NEAR HELIPORT RD.
-3.455	3.462		X	68.75'	ADD 68.75' GUARDRAIL LENGTH (INCLUDES FLARE) (N. APPR. RADIUS @ WEE BURN DRIVE)
-3.482	3.495		X	62.5'	ADD 62.5' GUARDRAIL LENGTH (INCLUDES FLARE)
-5.310	5.327		X	87.5' *	EXTEND 87.5' GUARDRAIL LENGTH (INCLUDES FLARE)
-5.321	5.337		X	87.5' *	EXTEND 87.5' GUARDRAIL LENGTH (INCLUDES FLARE)
-5.371	5.378		X	25'	EXTEND 25' GUARDRAIL LENGTH PLUS FLARE INTO DRIVEWAY INCLUDES FLARE
-5.371	5.378		X	25'	EXTEND EXIST. FLARE 25' (150' BEFORE MB 8982)
8.917	8.924		X	50' 37.5'	EXTEND 37.5' GUARDRAIL LENGTH (INCLUDES FLARE)
9.119	9.126		X	37.5'	EXTEND 37.5' GUARDRAIL LENGTH (INCLUDES FLARE)
9.462	9.469		X	37.5'	EXTEND 37.5' GUARDRAIL LENGTH (INCLUDES FLARE)
10.520	10.527		X	300' 37.5'	EXTEND 37.5' GUARDRAIL LENGTH (INCLUDES FLARE)
TOTAL 1,931.25 LF * 7'-0" GUARDRAIL POST REQUIRED (SEE TYPICAL).					

**NORTH DOUGLAS ROAD ROUTE # 296010**



**PROJECT LIMITS**

EOP = INTERSECTION OF GLACIER/DOUGLAS HIGHWAY & NORTH DOUGLAS ROAD TO END OF PAVEMENT ON NORTH DOUGLAS ROAD  
 BOP = INTERSECTION WITH GLACIER/DOUGLAS HWY. & NORTH DOUGLAS HWY. AT CDS MILEPOINT 39.07

**HORIZONTAL CONTROL**

BOP = INTERSECTION WITH GLACIER/DOUGLAS HWY. & NORTH DOUGLAS HWY. AT CDS MILEPOINT 39.07

**TERMINAL END SECTION SUMMARY**

CDS MPT	OFFSET LT.	OFFSET RT.	CLEANUP EXISTING	REMOVAL & DISPOSAL	NEW	REMARKS
0.028		X	1			(MB=MAILBOX)
0.043	X		1			1ST DRIVEWAY BEFORE KOWEE CRK. BRIDGE
0.117	X			-1	-1	
0.178	X		1			
0.190	X		1			
0.205	X		1			CLEAN END @ MB #3670
1.131	X			-1	-1	
1.345	X			-1	-1	
1.440	X			-1	-1	
1.528	X			-1	-1	
1.637	X			-1	-1	
1.650	X			-1	-1	
1.670	X			-1	-1	
1.977	X				1	
2.013	X				1	
2.050	X				1	
2.070	X				1	
2.116	X		1			
2.149	X		1			CLEAN END @ MB #5630
2.260	X				1	
2.700	X				1	
2.280	X				1	
2.598	X			-1	-1	
2.635	X			-1	-1	
2.730	X				1	
2.810	X				1	
2.777	X				1	
3.452	X			-1	-1	
3.460	X			-1	-1	
3.484	X			-1	-1	
5.325	X			-1	-1	
5.330	X			-1	-1	
5.373	X			-1	-1	
5.373	X			-1	-1	
8.920	X			-1	-1	
9.120	X			-1	-1	
9.470	X			-1	-1	
10.500	X			-1	-1	
TOTAL 7 9 0-18 14 28						

**GUARDRAIL REMOVAL & DISPOSAL SUMMARY**

CDS MPT TO	CDS MPT	OFFSET LT.	OFFSET RT.	LENGTH	REMARKS
0.119	0.122		X	12.5'	
1.138	1.141		X	37.5'	
1.437	1.440		X	12.5'	
1.518	1.520		X	12.5'	
1.630	1.632		X	12.5'	
2.603	2.605		X	12.5'	
2.630	2.632		X	12.5'	
3.452	3.455		X	12.5'	
3.460	3.462		X	12.5'	
3.482	3.484		X	12.5'	
5.325	5.327		X	12.5'	
5.330	5.332		X	12.5'	
5.371	5.373		X	12.5'	
5.371	5.373		X	12.5'	
8.917	8.920		X	12.5'	
9.119	9.222		X	12.5'	
TOTAL 225 LF					

**WIDENING FOR GUARDRAIL FLARE**

CDS MPT TO	CDS MPT	OFFSET LT.	OFFSET RT.	BORROW TONS	REMARKS
1.131	1.138		X	45	
1.440	1.448		X	90	
1.528	1.535		X	90	
2.598	2.605		X	72	
2.630	2.635		X	72	
2.730	2.738		X	90	
2.810	2.818		X	90	
3.484	3.492		X	45	
5.325	5.332		X	45	
5.330	5.338		X	45	
TOTAL 684 TONS					

**REMOVAL OF STRUCTURES & OBSTRUCTION SUMMARY**

CDS MPT	OFFSET LT.	OFFSET RT.	REMARKS
0.117		X	REMOVE 2 IRON SAWHORSES AT GATE.
3.750		X	LARGE BOULDER
4.95		X	15" Ø SPRUCE TREE

**GUARDRAIL REMOVAL & RECONSTRUCTION SUMMARY**

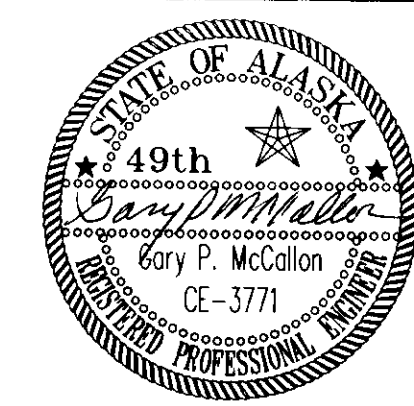
CDS MPT TO	CDS MPT	OFFSET LT.	OFFSET RT.	LENGTH	REMARKS
1.141	1.146		X	25	(WP) = CONNECT TO EXIST. WOOD POST
1.432	1.437		X	25	(MP) = CONNECT TO EXIST. METAL POST
1.513	1.518		X	25	(WP)
2.630	2.635		X	25	(WP)
3.445	3.450		X	25	(WP)
5.322	5.337		X	25	(WP)
5.327	5.333		X	25	(WP)
5.371	5.376		X	25	(WP)
5.371	5.376		X	25	(WP)
TOTAL 225 LF					

BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
 SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU  
 JUNEAU AREA GUARDRAIL IMPROVEMENTS  
 ROUTE SUMMARY SHEET  
 NORTH DOUGLAS ROAD ROUTE #296010  
 FG-00S (124) 70626

ALASKA  
 DESIGNED BY: P. JONES  
 DRAWN BY: AutoCAD/B. ADAMS  
 CHECKED BY: W.J. HOLBROOK  
 PROJECT NO. 70626  
 DATE: SEPT. 1992  
 SHEET 5 OF 12



## ROUTE ESTIMATE OF QUANTITIES

ITEM NO.	PAY ITEM	UNIT	QUANTITY
202 (1)	REMOVAL OF STRUCTURES & OBSTRUCTIONS	LS	ALL REQ'D.
301 (1)	CRUSHED AGGREGATE BASE COURSE	TON	10
606 (1)	W-BEAM GUARDRAIL	LF	<del>50</del> 37.5
606 (4)	REMOVAL & RECONSTRUCTION OF GUARDRAIL	LF	25
606 (5)	REMOVAL & DISPOSAL OF GUARDRAIL	LF	12.5
606 (6)	END ANCHORAGES	EA	2 +
606 (11)	END ANCHORAGE CLEANUP	EA	1
606 (12)	REMOVAL & DISPOSAL OF TERMINAL END SECTION	EA	2 +

### TERMINAL END SECTION SUMMARY

CDS MPT	OFFSET		CLEANUP EXISTING	REMOVAL & DISPOSAL	NEW	REMARKS
	LT	RT				
0.610	X			1	1	
<del>0.582</del>		X		1	1	
0.593	X		1			
TOTAL			1	2 +	2 +	

### NEW GUARDRAIL SUMMARY

CDS MPT	TO CDS MPT	OFFSET		LENGTH	REMARKS (WP) = CONNECT TO EXIST. WOOD POST (MP) = CONNECT TO EXIST. METAL POST
		LT	RT		
0.608	0.615	X		37.5	EXTEND 37.5' NEW GUARDRAIL (FLARE ENDS)(MP)
<del>0.582</del>	<del>0.584</del>		X	12.5	
TOTAL - 37.5 LF 50 L.F.					

### REMOVAL OF STRUCTURES & OBSTRUCTIONS

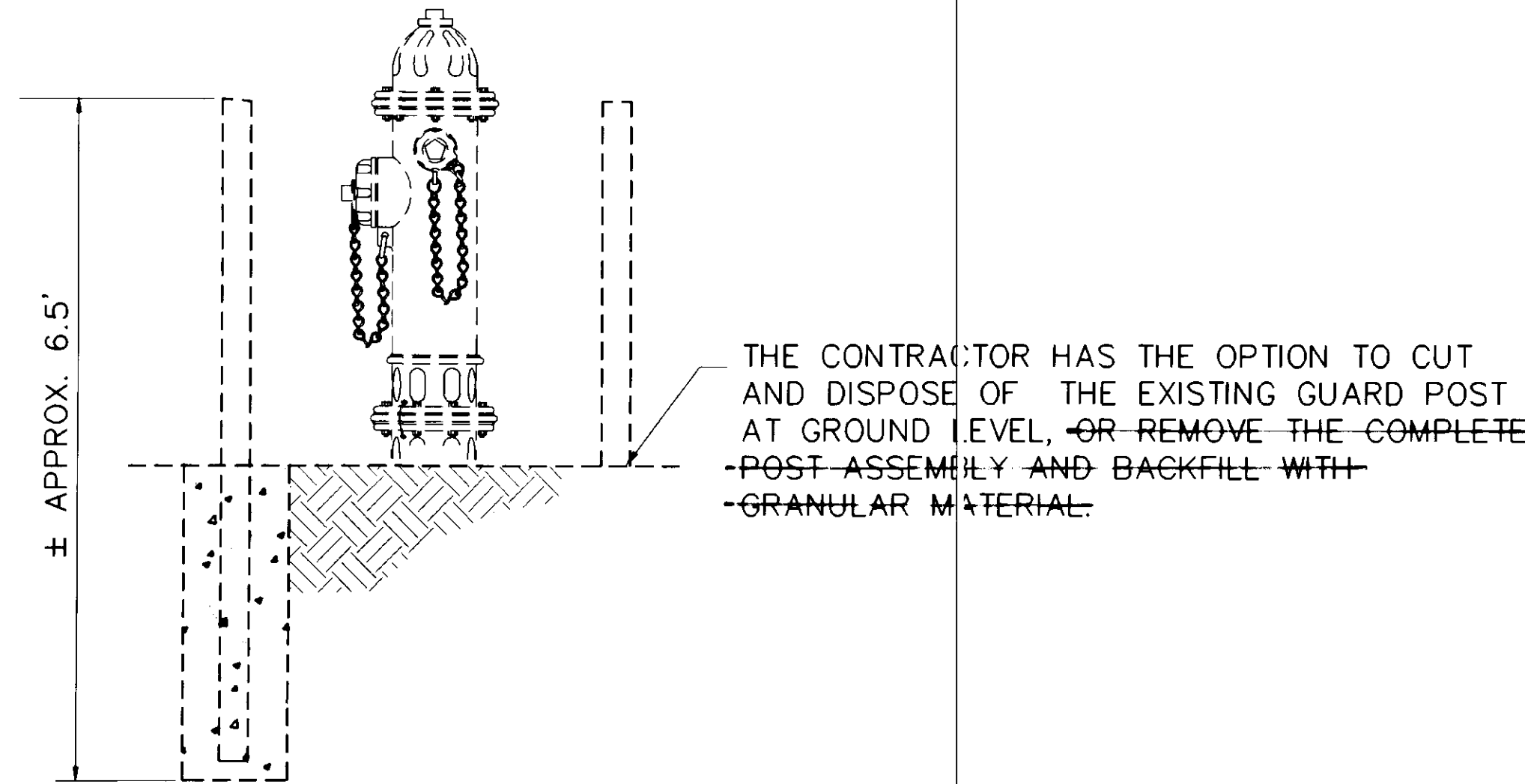
CDS MPT	OFFSET		DESCRIPTION	REMARKS
	LT	RT		
0.680	X		FIRE HYDRANT GUARD POST	SEE DETAIL THIS SHEET
0.775	X		FIRE HYDRANT GUARD POST	SEE DETAIL THIS SHEET

### GUARDRAIL REMOVAL & RECONSTRUCTION SUMMARY

CDS MPT	TO CDS MPT	OFFSET		LENGTH	REMARKS
		LT	RT		
0.603	0.608	X		25	
TOTAL 25 LF					

### GUARDRAIL REMOVAL & DISPOSAL SUMMARY

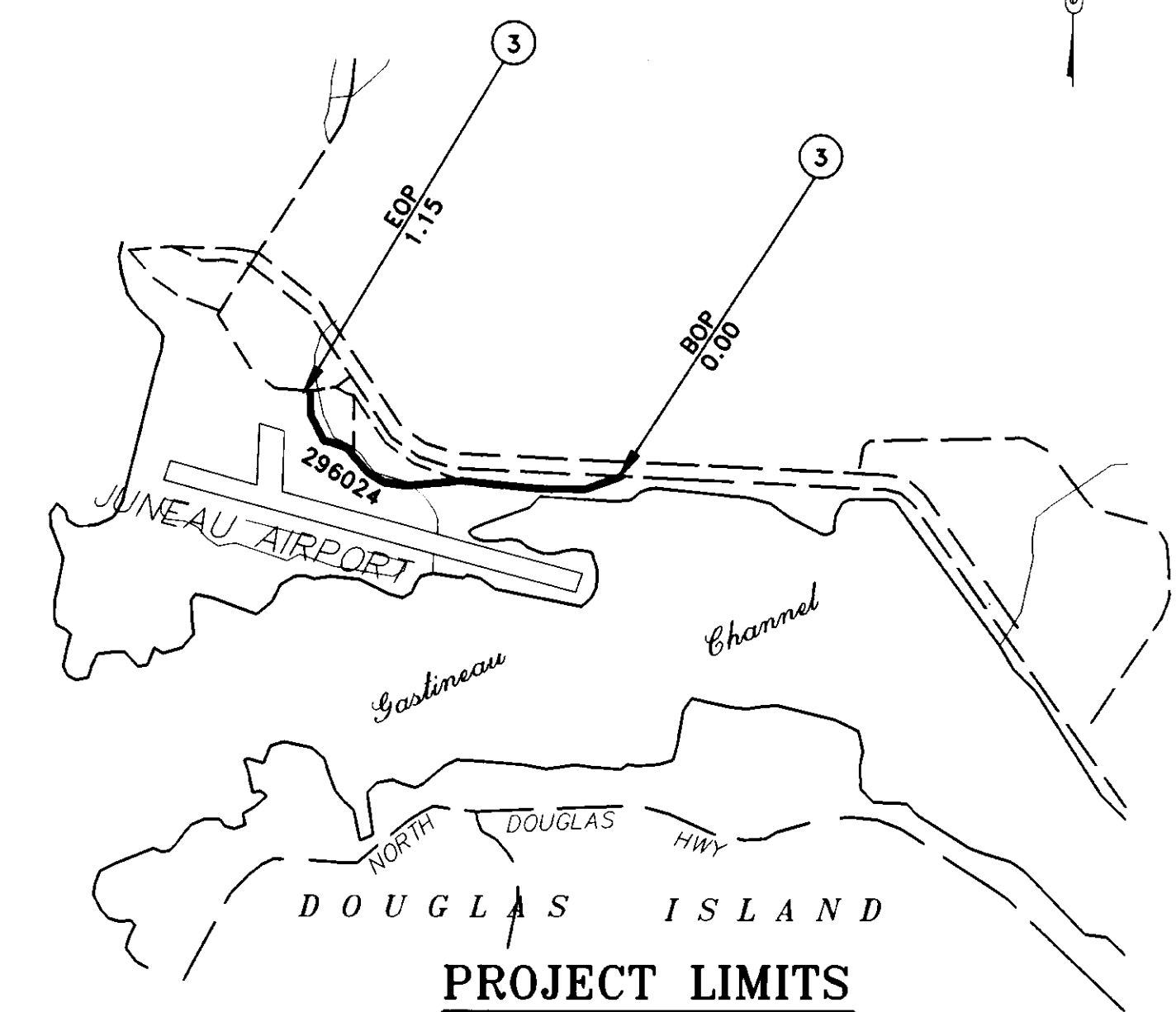
CDS MPT	TO CDS MPT	OFFSET		LENGTH	REMARKS (WP) = CONNECT TO EXIST. WOOD POST (MP) = CONNECT TO EXIST. METAL POST
		LT	RT		
0.608	0.610	X		12.5	(MP)
<del>0.582</del>	<del>0.584</del>		X	12.5	
TOTAL - 12.5 LF 25 L.F.					



**EXISTING GUARD POST REMOVAL DETAIL**

CDS MPT 0.680  
CDS MPT 0.775

## YANDUKIN DRIVE ROUTE # 296024



### HORIZONTAL CONTROL

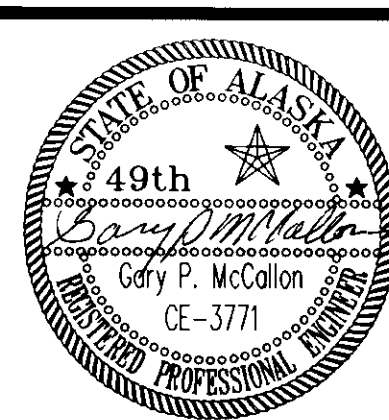
BOP INTERSECTION YANDUKIN DRIVE & GLACIER/DOUGLAS HWY.  
AT CDS MILEPOINT 31.98  
EOP = INTERSECTION OF YANDUKIN DRIVE & OLD GLACIER HWY./  
SHELL SIMMONS RD.

BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU ALASKA  
JUNEAU AREA GUARDRAIL IMPROVEMENTS  
ROUTE SUMMARY SHEET  
YANDUKIN DRIVE #296024  
FG-000S (124) 70626

DESIGNED BY: <b>P. JONES</b>	PROJECT NO. <b>70626</b>
DRAWN BY: <b>AutoCAD/B. ADAMS</b>	DATE: <b>SEPT. 1992</b>
CHECKED BY: <b>W.J. HOLBROOK</b>	SHEET <b>6 OF 12</b>



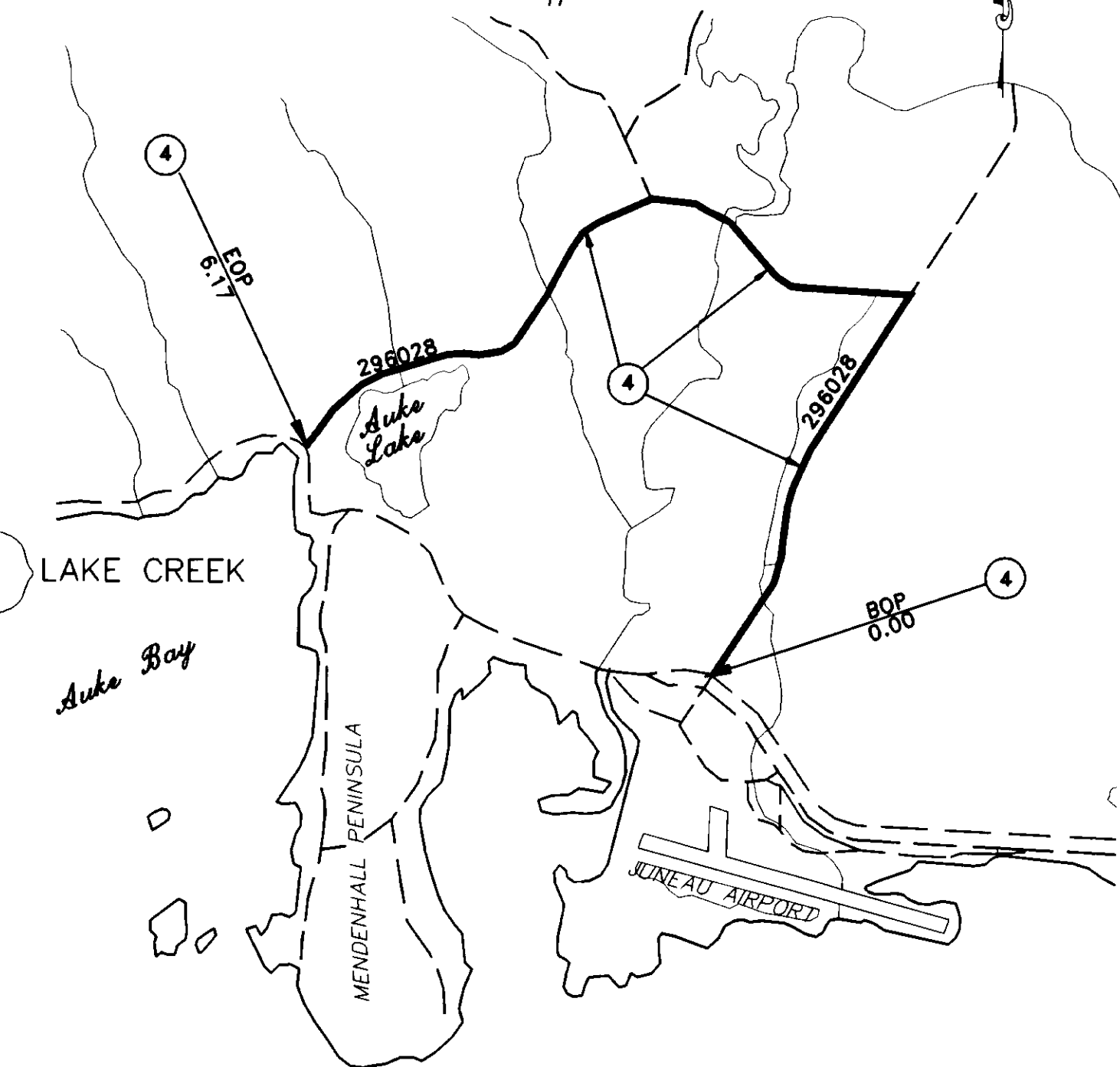
**ROUTE ESTIMATE OF QUANTITIES**

ITEM NO.	PAY ITEM	UNIT	QUANTITY
201 (1)	REMOVAL OF STRUCTURES & OBSTRUCTIONS	LS	ALL REQ'D.
203 (6)	BORROW TYPE "A"	TON	243
301 (1)	CRUSHED AGGREGATE BASE COURSE	TON	30
606 (1)	W-BEAM GUARDRAIL	LF	407.5
606 (4)	REMOVAL AND RECONSTRUCTION OF GUARDRAIL	LF	37.5
606 (5)	REMOVAL AND DISPOSAL OF GUARDRAIL	LF	100
606 (6)	END ANCHORAGES	EA	7
606 (8)	BURIED ANCHOR TERMINAL	EA	1
606 (11)	END ANCHORAGE CLEANUP	EA	7
606 (12)	REMOVAL AND DISPOSAL OF TERMINAL SECTION	EA	5
606 (10)	Guardrail Modification	LF	50

**NEW GUARDRAIL SUMMARY**

CDS TO MPT	CDS TO MPT	OFFSET LT.	OFFSET RT.	LENGTH	REMARKS
3.268	3.278		X	50'	EXTEND 50' GUARDRAIL LENGTH (INCLUDES FLARE)
4.843	4.868	X		137.5' -131.25'	INSTALL 137.5' NEW GUARDRAIL, BEGIN GUARDRAIL BEFORE SPRING ST. (INCLUDES FLARE) @ 4' OFFSET, SEE DETAIL BELOW
5.012	5.040	X		150'	EXTEND 150' GUARDRAIL LENGTH (INCLUDES FLARE)
5.010	5.048	X	X	50' 31.25'	EXTEND 50' GUARDRAIL LENGTH ANCHOR IN ROCK BACK SLOPE
5.495	5.502	X		62.5' 37.5'	EXTEND 37.5' GUARDRAIL LENGTH (INCLUDES FLARE), CONNECT TO EXIST. GUARDRAIL
5.517	5.519	X	X	37.5' 12.5'	REPLACE 12.5' END SECTION GUARDRAIL, CONNECT TO EXIST. GUARDRAIL * Existing Posts did not meet specification.
TOTAL					407.5 LF * 7'-0" GUARD RAIL POST REQUIRED (SEE TYPICAL)

**MENDENHALL LOOP ROAD ROUTE # 296028**



**PROJECT LIMITS**

EOP = INTERSECTION OF BACK LOOP RD. & GLACIER HWY.

**HORIZONTAL CONTROL**

BOP = INTERSECTION OF MENDENHALL LOOP ROAD & GLACIER/DOUGLAS HWY. AT CDS MILEPOINT 30.63

**TERMINAL END SECTION SUMMARY**

CDS MPT	OFFSET LT.	OFFSET RT.	CLEANUP EXISTING	REMOVAL & DISPOSAL	NEW	REMARKS
3.208		X	1			
3.212		X	1			
3.278		X		1	1	
3.331		X	1			
3.347	X		1			
3.380		X	1			
4.442		X	1			
4.491		X	1			
4.502		X				
4.843	X				1	
4.863	X				1	
5.038		X		1		
5.010		X				
5.046		X		1	1	Δ BURIED ANCHOR TERMINAL, SEE STANDARD DWG. G-15.00
5.012	X				1	
5.480		X				
5.493	X			1	1	
5.519		X		1	1	
TOTAL						78 57 710 Δ BURIED ANCHOR TERMINAL, SEE STANDARD DWG. G-15.00

**GUARDRAIL REMOVAL & DISPOSAL SUMMARY**

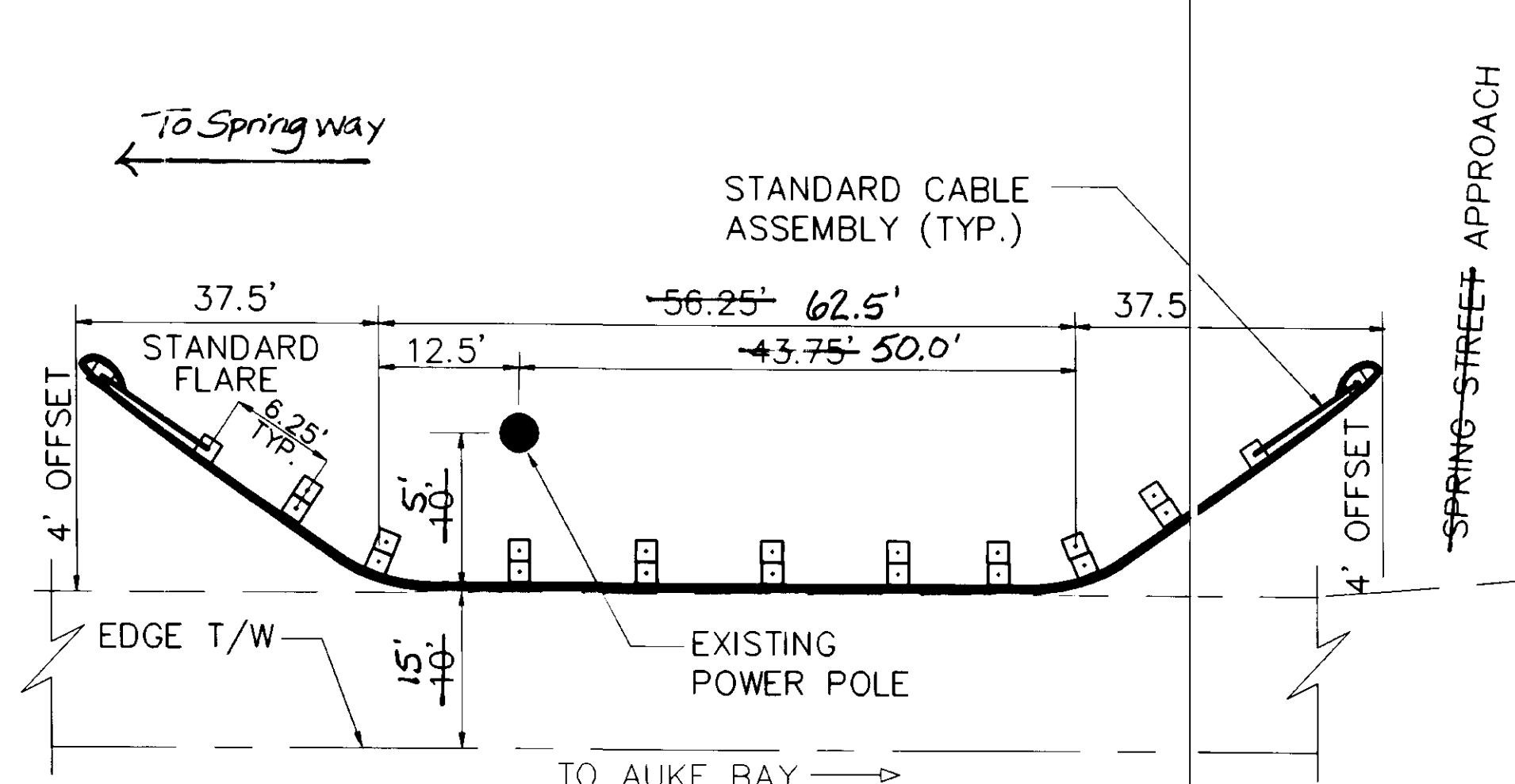
CDS TO MPT	CDS TO MPT	OFFSET LT.	OFFSET RT.	LENGTH	REMARKS
-3.268	3.270		X	12.5'	
5.038	5.040	X		12.5'	
-5.046	5.048		X	12.5'	
5.480	5.482		X	12.5'	
5.493	5.495	X		37.5' 12.5'	Existing Guardrail Posts did not meet specification.
5.517	5.519	X	X	37.5' 12.5'	Existing Guardrail Posts did not meet specification.
TOTAL					75 LF 100 L.F.

**REMOVAL OF STRUCTURES & OBSTRUCTION SUMMARY**

CDS MPT	OFFSET LT.	OFFSET RT.	REMARKS
5.519		X	REMOVE APPROX. 2 LF OF WOOD FENCE FROM THE END NEAREST TO THE ROAD & RECONSTRUCT. SEE FENCE RECONSTRUCTION DETAIL SHEET 11

**WIDENING FOR GUARDRAIL FLARE SUMMARY**

CDS TO MPT	CDS TO MPT	OFFSET LT.	OFFSET RT.	BORROW TONS	REMARKS
4.843	4.850	X		108	
4.855	4.863	X		108	
5.477	5.482		X	27	
TOTAL					243 TONS



**POWER POLE PROTECTION DETAIL**

ROUTE #296028 MENDENHALL LOOP ROAD  
CDS MPT. 4.843 LT TO CDS MPT. 4.863 RT

**GUARDRAIL REMOVAL & RECONSTRUCTION SUMMARY**

CDS TO MPT	CDS TO MPT	OFFSET LT.	OFFSET RT.	LENGTH	REMARKS
3.263	3.268		X	12.5'	(MP)
5.040	5.045	X		25'	(MP)
5.482	5.487		X	25'	(MP)
5.512	5.517	X		25'	(MP)
TOTAL					37.5 LF 100 LF

BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU JUNEAU AREA GUARDRAIL IMPROVEMENTS ALASKA  
ROUTE SUMMARY SHEET  
MENDENHALL LOOP ROAD ROUTE #296028  
FG-000S (124) 70626

DESIGNED BY: P. JONES PROJECT NO. 70626  
DRAWN BY: AutoCAD/B. ADAMS DATE: SEPT. 1992  
CHECKED BY: W.J. HOLBROOK SHEET 7 OF 12



**ROUTE ESTIMATE OF QUANTITIES**

ITEM NO.	PAY ITEM	UNIT	QUANTITY
202 (1)	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	L.S.	ALL REQ'D.
<del>606(4)</del>	<del>REMOVAL &amp; RECONSTRUCTION OF GUARDRAIL</del>	<del>L.F.</del>	<del>25</del>
606(11)	END ANCHORAGES CLEANUP	EACH	2
<del>606(10)</del>	<del>Guardrail Modification</del>	<del>L.F.</del>	<del>25</del>

**TERMINAL END SECTION SUMMARY**

CDS MPT	OFFSET		CLEANUP EXISTING	REMOVAL & DISPOSAL	NEW	REMARKS
	LT	RT				
0.459	X		1			
0.490	X		1			
TOTAL			2			

**REMOVE & RECONSTRUCTION SUMMARY**

CDS MPT TO	CDS MPT	OFFSET		LENGTH	REMARKS
		LT	RT		
0.468	0.468	X		12.5'	EXTEND 12.5' NEW GUARDRAIL *
0.477	0.477	X		12.5'	EXTEND 12.5' NEW GUARDRAIL *
TOTAL				25 LF	

**\*NOTES:**

- REMOVE POST AT 4'-1" SPACING ~~BOTH RADI~~ TO BERNERS AVE. RECONSTRUCT AT 6'-3" STANDARD SPACING.
- REPLACE BEAM ELEMENT AS DIRECTED BY THE ENGINEER.

**ROUTE #296028 S1**

**REMOVAL OF STRUCTURES & OBSTRUCTIONS SUMMARY**

CDS MPT	LT.	RT.	REMARKS
0.780		X	LARGE BOULDER
0.850		X	LARGE BOULDER
0.850	X		LARGE BOULDER

**HORIZONTAL CONTROL**

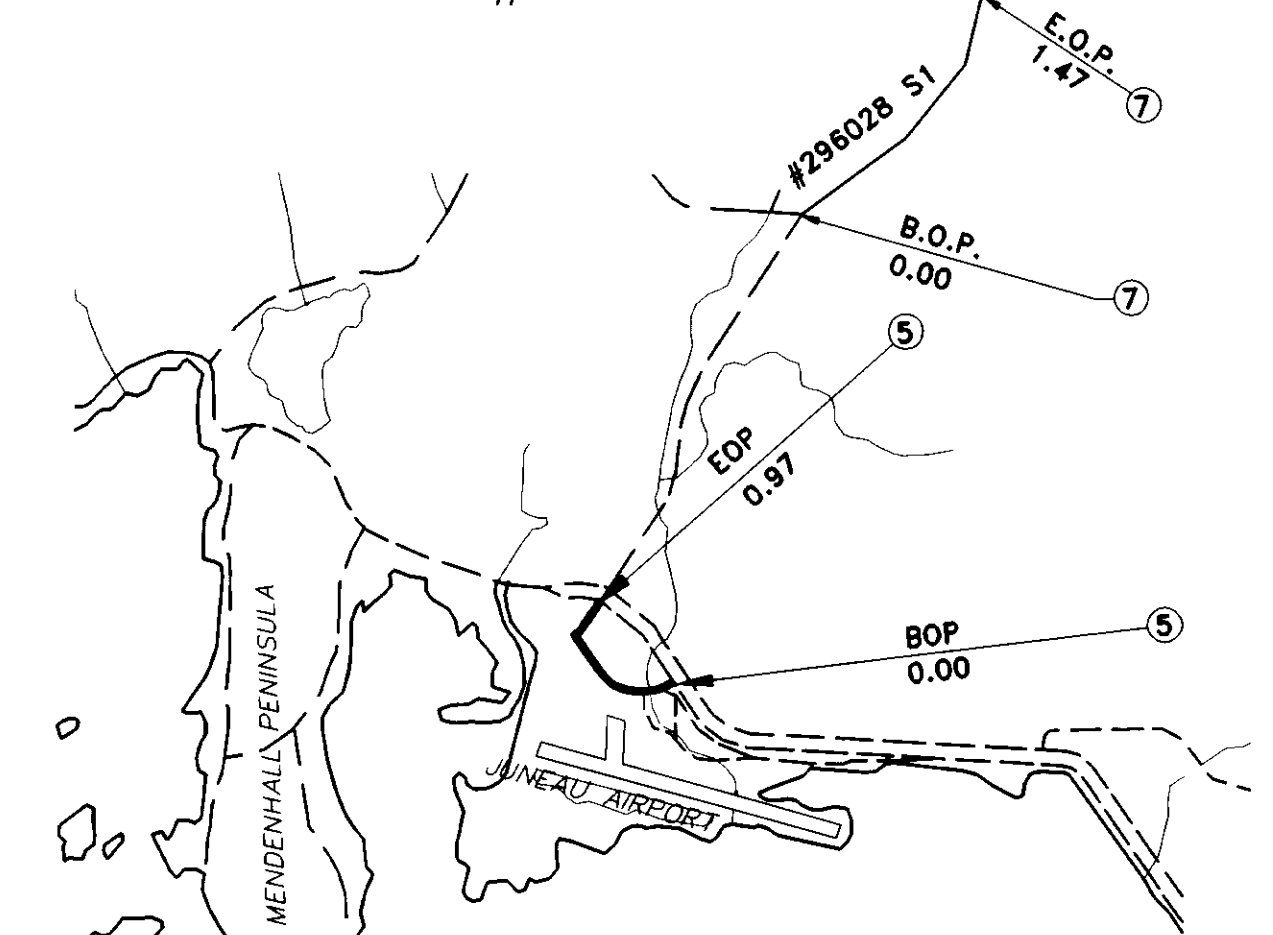
BOP = INTERSECTION OF MENDENHALL LOOP ROAD & GLACIER SPUR ROAD CDS MPT 0.00  
 EOP = CENTER OF THE EXISTING PARKING LOT AT MENDENHALL GLACIER CDS MPT 1.47

**NOTE:**

THE REMOVAL OF STRUCTURES AND OBSTRUCTIONS, AS LISTED IN THE TABLE IS THE ONLY WORK THAT WILL BE ACCOMPLISHED ON ROUTE # 296028 S1.

**OLD GLACIER HIGHWAY & GLACIER SPUR**

**ROUTE # 296031 & ROUTE # 296028 S1**



**PROJECT LIMITS**

**HORIZONTAL CONTROL**

B.O.P. = JUNCTION OF MCNUGGET INTERSECTION & GLACIER/DOUGLAS HWY. AT CDS MILEPOINT 31.21.  
 EOP = OLD GLACIER HWY./GLACIER/DOUGLAS HWY. INTERSECTION AT LOOP/EGAN HWY.

BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
 SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU ALASKA  
 JUNEAU AREA GUARDRAIL IMPROVEMENTS  
 ROUTE SUMMARY SHEET FG-000S (124) 70626  
 OLD GLACIER HIGHWAY ROUTE #296031 & GLACIER SPUR ROUTE #296028 S1

DESIGNED BY: P. JONES  
 DRAWN BY: AutoCAD/B.ADAMS  
 CHECKED BY: W.J. HOLBROOK  
 PROJECT NO. 70626  
 DATE: SEPT. 1992  
 SHEET 8 OF 12



**ROUTE ESTIMATE OF QUANTITIES**

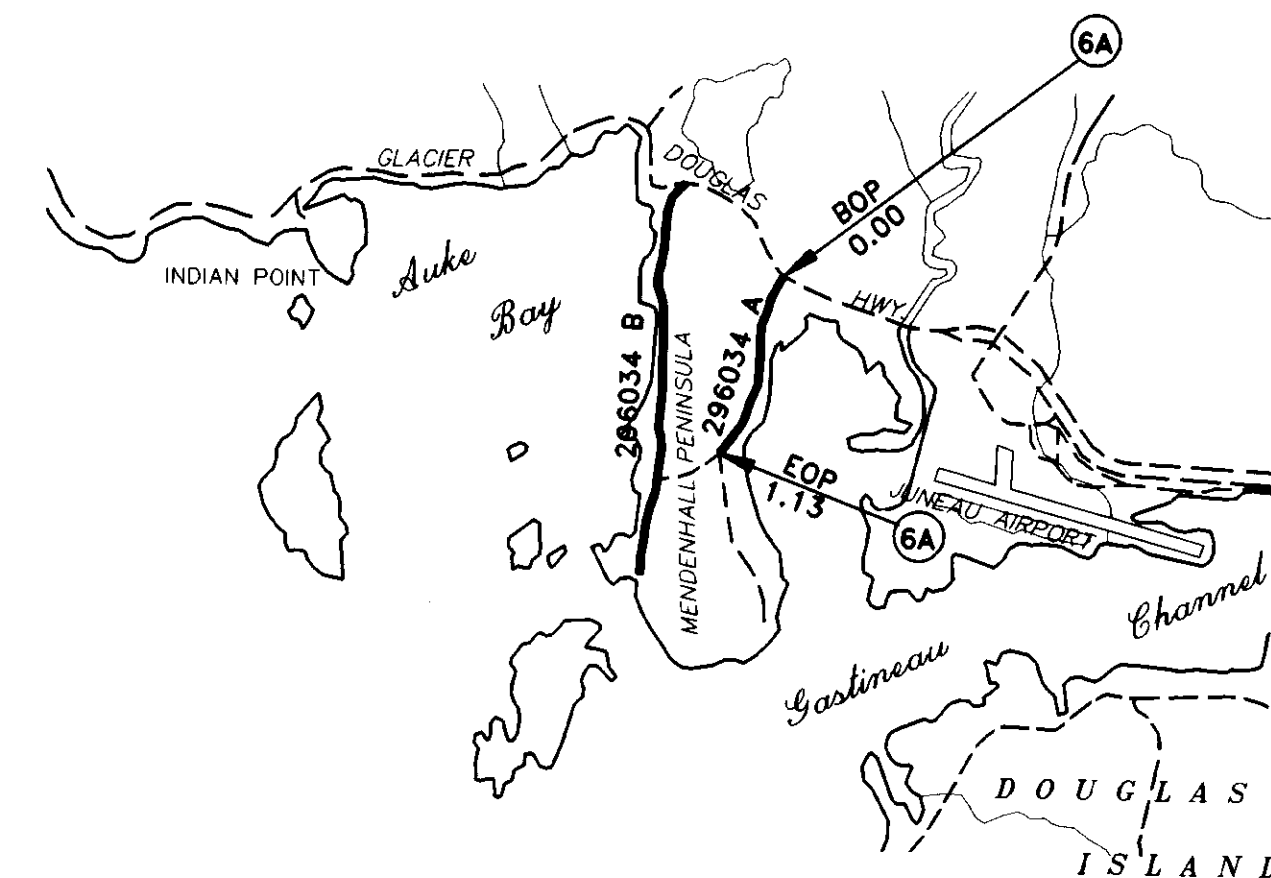
ITEM NO.	PAY ITEM	UNIT	QUANTITY
201 (3B)	CLEARING AND GRUBBING	LS	ALL REQ'D
<del>203 (10)</del>	<del>SINGLE MAILBOX INSTALLATION</del>	EA	<del>4</del>
203 (6)	BORROW TYPE "A"	TON	2,100
<del>603 (17-24)</del>	<del>24 Inch Pipe</del>	L.F.	<del>30</del>
301 (1)	CRUSHED AGGREGATE BASE COURSE	TON	60
<del>606 (0)</del>	<del>Guardrail Modification</del>	L.F.	<del>462.5</del>
606 (1)	W-BEAM GUARDRAIL	LF	2815.2-425
606 (4)	REMOVAL AND RECONSTRUCTION OF GUARDRAIL	LF	50-150
606 (5)	REMOVAL AND DISPOSAL OF GUARDRAIL	LF	100-75
606 (6)	END ANCHORAGES	EA	12-10
606 (12)	REMOVAL AND DISPOSAL OF TERMINAL SECTION	EA	5-6
606 (14)	GUARDRAIL ADJUSTMENT	LF	115-677
618 (1)	SEEDING	LS	ALL REQ'D

**NEW GUARDRAIL SUMMARY**

CDS MPT TO	CDS MPT	OFFSET LT. RT.	LENGTH	REMARKS
0.460-0.490	0.490	X	331.162.5*	INSTALL 162.5' NEW GUARDRAIL (INCLUDES FLARE) END GUARDRAIL
0.517-0.579	0.579	X	331.932.5*	INSTALL 325' NEW GUARDRAIL (INCLUDES FLARE) END GUARDRAIL
0.585-0.649	0.649	X	362.5337.5*	INSTALL 337.5' NEW GUARDRAIL, TIE TO EXIST. RAIL, CDS MPT 0.649
0.703-0.720	0.720	X	125'-95'*	INSTALL 95' NEW GUARDRAIL, INCLUDE FLARE
0.873-0.975	0.975	X	540'-540'*	INSTALL 450' NEW GUARDRAIL, TIE TO EXISTING RAIL, CDS MPT 0.808 AND CDS MPT 0.975
1.015-1.027	1.027	X	50'-65'*	INSTALL GUARDRAIL 65' (INCLUDE FLARE)
1.046-1.131	1.131	X	325'-450'*	INSTALL 450' NEW GUARDRAIL (INCLUDE FLARES)
2815 L.F. TOTAL			2,425 LF	*7'-0" GUARDRAIL POST REQUIRED, SEE TYPICAL SHEET

**MENDENHALL PENINSULA ROAD**

**ROUTE #296034 A**



**PROJECT LIMITS**

EOP = INTERSECTION OF ENGINEER'S CUTOFF & MENDENHALL PENINSULA ROAD

**HORIZONTAL CONTROL**

BOP = INTERSECTION MENDENHALL PENINSULA ROAD & GLACIER/DOUGLAS HWY. @ CDS MILEPOINT 29.25

**TERMINAL END SECTION SUMMARY**

CDS MPT	OFFSET LT. RT.	CLEANUP EXISTING	REMOVAL & DISPOSAL	NEW	REMARKS
0.460	X			1	
0.490	X			1	
0.517	X			1	
0.579	X			1	
0.585	X			1	
<del>0.646</del>	<del>X</del>				
0.705	X			1	
0.720	X			1	
0.723	X			1	
0.805	X		1		
0.876	X		1		
0.975	X		1		
1.018	X		1		
1.027	X			1	
1.046	X			1	
1.131	X			1	
				1	Engineer's Cutoff
				1	Engineer's Cutoff
TOTAL		5-6	12-10		

**SEEDING SUMMARY**

CDS MPT TO	CDS MPT	OFFSET LT. RT.	ACRE	REMARKS
0.460	0.467	X	.02	
0.483	0.490	X	.02	
0.517	0.524	X	.02	
0.572	0.579	X	.02	
0.585	0.592	X	.02	
0.712	0.720	X	.02	
0.723	0.731	X	.02	
1.019	1.027	X	.02	
1.046	1.054	X	.02	
1.123	1.131	X	.02	
TOTAL			.20	ACRE

**MAILBOX SUMMARY**

CDS MPT	OFFSET LT. RT.	REMARKS	
0.478	X	MAILBOX 2470	
0.515	X	MAILBOX 2433	
0.555	X	MAILBOX 2390	
0.613	X	MAILBOX 2338	
TOTAL		4	
24 Inch Pipe			
CDS MPT	Offset LT. RT.	Length	Remarks
1.047	X	10'	Extension
1.09	X	20'	Extension

**CLEARING AND GRUBBING SUMMARY**

CDS MPT TO	CDS MPT	OFFSET LT. RT.	ACRE	REMARKS
0.460	0.647	X	.02	
0.483	0.490	X	.02	
0.517	0.524	X	.02	
0.572	0.579	X	.02	
0.585	0.592	X	.02	
0.712	0.720	X	.02	
0.723	0.731	X	.02	
1.019	1.027	X	.02	
1.046	1.054	X	.02	
1.123	1.131	X	.02	
TOTAL			.20	ACRE

**GUARDRAIL REMOVAL & DISPOSAL SUMMARY**

CDS MPT TO	CDS MPT	OFFSET LT. RT.	LENGTH	REMARKS
0.646	0.649	X	12.5'	
0.703	0.705	X	12.5'	
0.805	0.808	X	315'-12.5'	
0.873	0.876	X	12.5'	
0.972	0.975	X	12.5'	
1.018	1.015	X	12.5'	
TOTAL			100'-75.0 LF	

**GUARDRAIL ADJUSTMENT SUMMARY**

CDS MPT TO	CDS MPT	OFFSET LT. RT.	LENGTH	REMARKS
0.654	0.697	X	231.5'-227'	(MP)
0.813	0.868	X	302.5'-290'	(MP)
0.980	1.010	X	175'-160'	(MP)
TOTAL			715.0'-677 LF	

**GUARDRAIL REMOVAL & RECONSTRUCTION SUMMARY**

CDS MPT TO	CDS MPT	OFFSET LT. RT.	LENGTH	REMARKS
0.649	0.654	X	25'	(MP)
0.703	0.697	X	12.5'	(MP)
0.808	0.813	X	2.5'	(MP)
0.873	0.868	X	25'	(MP)
0.975	0.980	X	12.5'	(MP)
1.015	1.010	X	12.5'	(MP)
TOTAL			150 LF	50 L.F.

**WIDENING FOR GUARDRAIL FLARE SUMMARY**

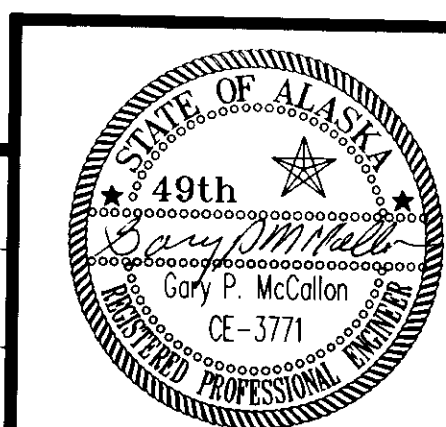
CDS MPT TO	CDS MPT	OFFSET LT. RT.	BORROW TONS	REMARKS
0.460	0.467	X	200	
0.483	0.490	X	100	
0.517	0.524	X	100	
0.572	0.579	X	100	
0.585	0.592	X	100	
0.712	0.720	X	300	
0.723	0.731	X	300	
1.019	1.027	X	300	
1.046	1.054	X	300	
1.123	1.131	X	300	
TOTAL			2,100	TONS

BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU  
JUNEAU AREA GUARDRAIL IMPROVEMENTS  
ROUTE SUMMARY SHEET  
MENDENHALL PENINSULA #296034A  
FG-00S (124) 70326

ALASKA  
DESIGNED BY: P. JONES  
DRAWN BY: AutoCAD/B. ADAMS  
CHECKED BY: W.J. HOLBROOK  
PROJECT NO. 70626  
DATE: SEPT. 1992  
SHEET 9 OF 12



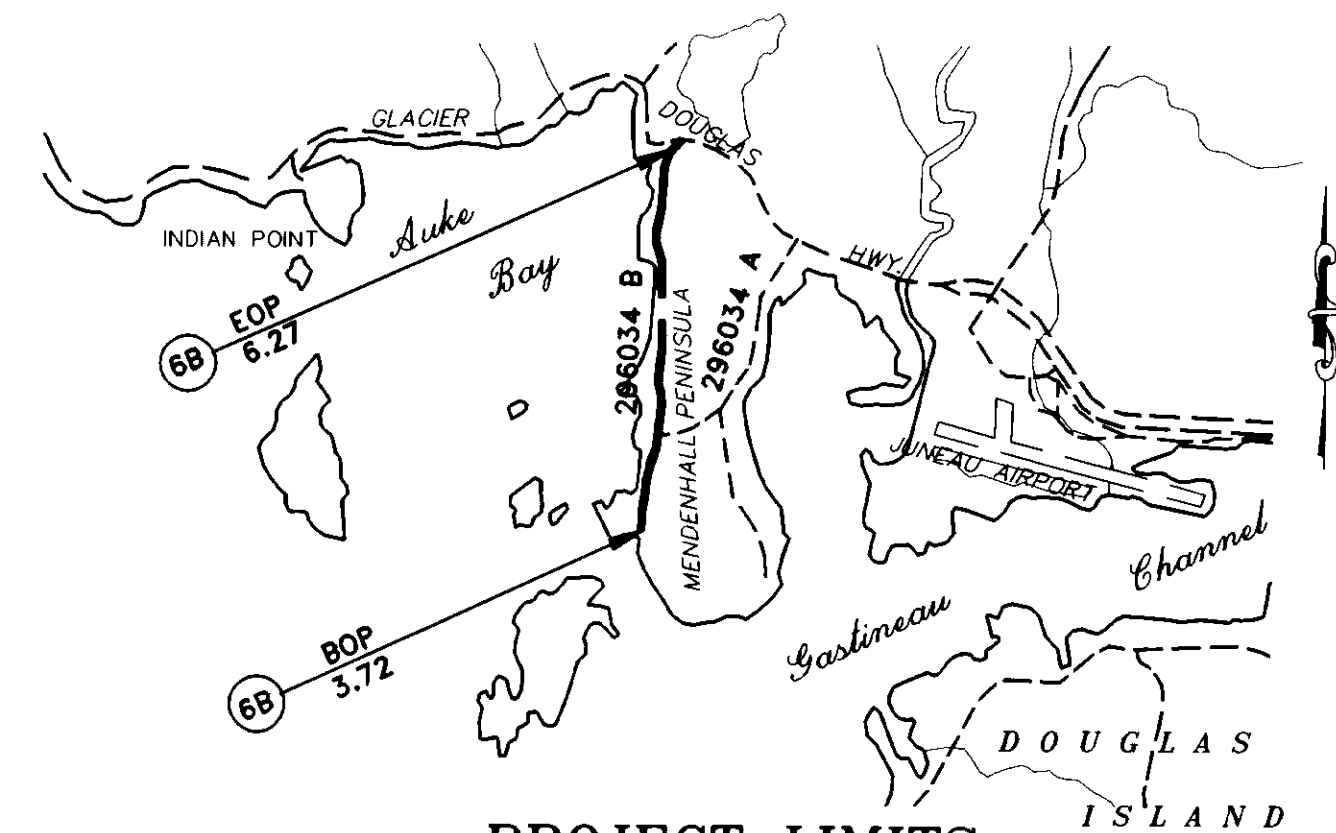
ROUTE ESTIMATE OF QUANTITIES

ITEM NO.	PAY ITEM	UNIT	QUANTITY
201 (3B)	CLEARING & GRUBBING	LS	ALL REQ'D
202 (10)	SINGLE MAILBOX INSTALLATION	EA	6
203 (6)	BORROW TYPE "A"	TON	2,342
301 (1)	CRUSHED AGGREGATE BASE COURSE	TON	50
506 (1)	TREATED TIMBER	LS	ALL REQ'D
512 (1)	ROCKERY WALL	SQ. YD.	143-123
603 (17-24)	24" PIPE	LF	0-30
606 (1)	W-BEAM GUARDRAIL	LF	2937.52-905
606 (4)	REMOVAL & RECONSTRUCTION OF GUARDRAIL	LF	12.5-50
606 (5)	REMOVAL AND DISPOSAL OF GUARDRAIL	LF	2475.12-362.5
606 (6)	END ANCHORAGES	EA	25-3+
606 (10)	GUARDRAIL MODIFICATION	LF	137.5390
618 (1)	SEEDING	LS	ALL REQ'D

NEW GUARDRAIL SUMMARY

CDS MPT TO	CDS MPT	OFFSET LT.	OFFSET RT.	LENGTH	REMARKS
4.942	4.968	X		137.5'	INSTALL 137.5' NEW GUARDRAIL AHEAD OF MB #2290 (INCLUDES FLARE)
4.973	5.05665	X		425-440'	INSTALL 440' NEW GUARDRAIL @ EXIST. WOOD STAIRS (INCLUDES FLARE)
5.16774	5.195	X		112.5-150'	INSTALL 150' NEW GUARDRAIL @ MB #2490 (INCLUDES FLARE)
5.200	5.21921	X		112.5-100'	INSTALL 100' NEW GUARDRAIL @ MB #2530 (INCLUDES FLARE)
5.375	5.432	X		300'	INSTALL 300' NEW GUARDRAIL @ MB #2730 (INCLUDES FLARE)
5.4905	5.521	X		131.5+62.5'	END NEW GUARDRAIL @ OPPOSITE SIDE OF MB #2835 (INCLUDES FLARE)
5.529	5.555	X		137.5'	INSTALL 137.5' NEW GUARDRAIL @ MB #2810 (INCLUDES FLARE)
5.745	5.778	X		175'	END NEW GUARDRAIL @ HOUSE #3140 (INCLUDES FLARE)
5.796	5.89134	X		200-25'	EXTEND NEW GUARDRAIL 12.5 BEGIN @ APPROACH GATE (INCLUDE FLARE)
5.829	5.834	X		25'	EXTEND NEW GUARDRAIL 12.5' END @ MB 3170 (INCLUDES FLARE)
5.84251	5.86375	X		125+112.5'	INSTALL 112.5' NEW GUARDRAIL @ HOUSE #3170 (INCLUDES FLARE)
5.893	5.907	X		75'	INSTALL 75' NEW GUARDRAIL @ TURNOUT HOUSE #3910-3200 (INCLUDES FLARE)
5.936	5.9730	X		225-200'	END NEW GUARDRAIL @ MB #3320 (INCLUDES FLARE)
6.02932	6.05750	X		137.5-150'	INSTALL 150' NEW GUARDRAIL @ LOBAUGH SIGN (INCLUDES FLARE)
6.1035	6.17705	X		487.5-390'	END NEW GUARDRAIL @ APP/W GATE (INCLUDES FLARE)
6.19007	6.25240	X		325'	INSTALL 325' NEW GUARDRAIL @ APPROACH GATE END @ METAL POST (INCLUDES FLARE)
TOTAL					2,905 LF 2937.5 LF * 7'-0" GUARDRAIL POS REQUIRED (SEE SUMMARY)

FRITZ COVE ROAD  
ROUTE #296034 B



PROJECT LIMITS

EOP = INTERSECTION FRITZ COVE ROAD & GLACIER/DOUGLAS HWY

HORIZONTAL CONTROL

BOP = CENTER OF THE CULDESAC AT THE END OF FRITZ COVE ROAD AT CDS MILEPOINT 3.72

TERMINAL END SECTION SUMMARY

CDS MPT	OFFSET LT.	OFFSET RT.	CLEANUP EXISTING	NEW	REMARKS
4.942	X			1	
4.968	X			1	CONNECT TO EXIST. STAIRS
4.973	X			1	CONNECT TO EXIST. STAIRS
5.050	X			+	CONNECT TO EXIST. GUARDRAIL
5.16774	X			1	
5.195	X			1	
5.200	X			1	
5.21921	X			1	
5.38475	X			1	
5.432	X			1	
5.4935	X			1	
5.521	X			1	
5.529	X			1	
5.763	X		1	1	
5.555	X			1	
5.760	X		1		
5.745	X			+	
5.778	X			+	
5.796	X			1	
5.829	X			+	
5.834	X			1	
5.84251	X			1	
5.86375	X			1	
5.893	X			+	
5.907	X			+	
5.936	X			1	
5.9730	X			1	
6.02932	X			1	
6.05750	X			1	
6.1035	X			1	
6.17705	X			1	
6.19007	X			1	
6.252	X			+	CONNECT TO EXIST. METAL POST GUARDRAIL
3 TOTAL -3+25					

GUARDRAIL REMOVAL & DISPOSAL SUMMARY

CDS MPT TO	CDS MPT	OFFSET LT.	OFFSET RT.	LENGTH	REMARKS
4.950	4.964	X		75'	
4.973	5.048	X		400-400'	
5.170	5.179	X		100-125'	
5.283	5.293	X		100-62.5'	
5.384	5.433	X		237.5-262.5'	
5.495	5.521	X		125'	
5.532	5.554	X		125'	
5.605	5.631	X		175'	
5.773	5.785	X		50'	
5.800	5.802	X		12.5'	
5.829	5.831	X		12.5'	
5.844	5.866	X		100'	
5.867	5.883	X		62.5'	
5.896	5.905	X		62.5'	
5.919	5.912	X		12.5'	
5.946	5.973	X		150'	
6.033	6.047	X		75'	
6.103	6.117	X		75'	
6.190	6.230	X		156-3400'	
TOTAL					2475.1 2,362.5 LF

WIDENING FOR GUARDRAIL FLARE SUMMARY

CDS MPT TO	CDS MPT	OFFSET LT.	OFFSET RT.	BORROW TON	REMARKS
4.942	4.950	X		18	
4.961	4.968	X		135	
5.152	5.159	X		90	
5.167	5.174	X		90	
5.215	5.222	X		45	
5.282	5.292	X		133	(SEE SHOULDER WIDENING SUMMARY SHT. 2)
5.375	5.382	X		45	
5.428	5.435	X		135	
5.490	5.471	X		18	
5.517	5.524	X		45	
5.529	5.526	X		45	
5.549	5.556	X		18	
5.600	5.630	X		642	(SEE SHOULDER WIDENING SUMMARY SHT. 2)
5.775	5.781	X		108	
5.796	5.803	X		18	
5.839	5.846	X		45	
5.848	5.855	X		90	
5.862	5.833	X		90	
5.876	5.885	X		347	(SEE SHOULDER WIDENING SUMMARY SHT. 2)
5.893	5.900	X		45	
5.900	5.905	X		50	
5.936	5.942	X		18	
5.965	5.973	X		18	
6.023	6.030	X		18	
6.046	6.054	X		18	
6.103	6.110	X		18	
TOTAL					2,342 TONS

GUARDRAIL REMOVAL & RECONSTRUCTION SUMMARY

CDS MPT TO	CDS MPT	OFFSET LT.	OFFSET RT.	LENGTH	REMARKS
5.152	5.156	X		12.5-25'	
5.802	5.809	X		25'	
TOTAL					50 LF 12.5 LF

CLEARING & GRUBBING SUMMARY

CDS MPT TO	CDS MPT	OFFSET LT.	OFFSET RT.	ACRE	REMARKS
5.282	5.292	X		.02	
5.600	5.630	X		.02	
5.873	5.885	X		.02	
TOTAL					.06 ACRE

SEEDING SUMMARY

CDS MPT TO	CDS MPT	OFFSET LT.	OFFSET RT.	ACRE	REMARKS
5.282	5.292	X		.02	
5.600	5.630	X		.02	
5.873	5.885	X		.02	
TOTAL					.06 ACRE

MAILBOX SUMMARY

CDS MPT	OFFSET LT.	OFFSET RT.	REMARKS
4.942	16'		MAILBOX 2290
5.159	16'		MAILBOX 2490
5.375	16'		MAILBOX 2730
5.520	16'		MAILBOX 2810
5.634	16'		MAILBOX 3020
5.973	16'		MAILBOX 3320
TOTAL			6

TREATED TIMBER SUMMARY

CDS MPT	OFFSET LT.	OFFSET RT.	REMARKS
4.968	X		CONSTRUCT NEW LANDING & REMOVE THE TOP 2 STAIRS, SEE DETAIL SHEET 11 ESTIMATED QUANTITY - 250 BM

GUARDRAIL MODIFICATION SUMMARY

CDS MPT TO	CDS MPT	OFFSET LT.	OFFSET RT.	LENGTH	REMARKS
5.050	5.070	X		12.5-100'	REPLACE RAIL ELEMENT
5.104	5.159	X		75-290'	REPLACE RAIL ELEMENT
TOTAL					137.5 390 LF

24-INCH PIPE SUMMARY

CDS MPT TO	CDS MPT	OFFSET LT.	OFFSET RT.	LENGTH	REMARKS
5.282	5.292	X		10'	
5.600	5.615	X		10'	
5.873	5.885	X		10'	
TOTAL					30 LF

ROCKERY WALL SUMMARY

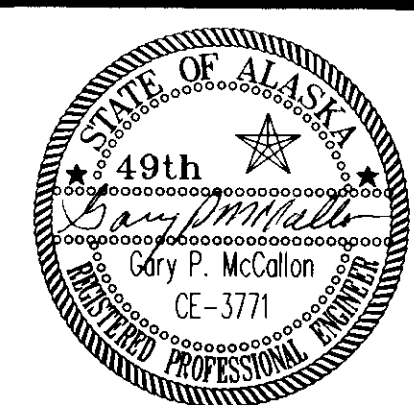
CDS MPT TO	CDS MPT	OFFSET LT.	OFFSET RT.	TOTAL SQ. YD.	REMARKS
4.9629	4.96871	X		36-34	BEGIN WALL @ MB2320
5.4280	5.43505	X		31-8	BEGIN WALL @ MB2770
5.7740	5.78081	X		19-34	BEGIN WALL @ MB3140
5.8426	5.84900	X		0-13	BEGIN WALL @ MB3170
5.8620	5.86997	X		54-34	BEGIN WALL @ MB3170
TOTAL					140-123 SQ. YD.

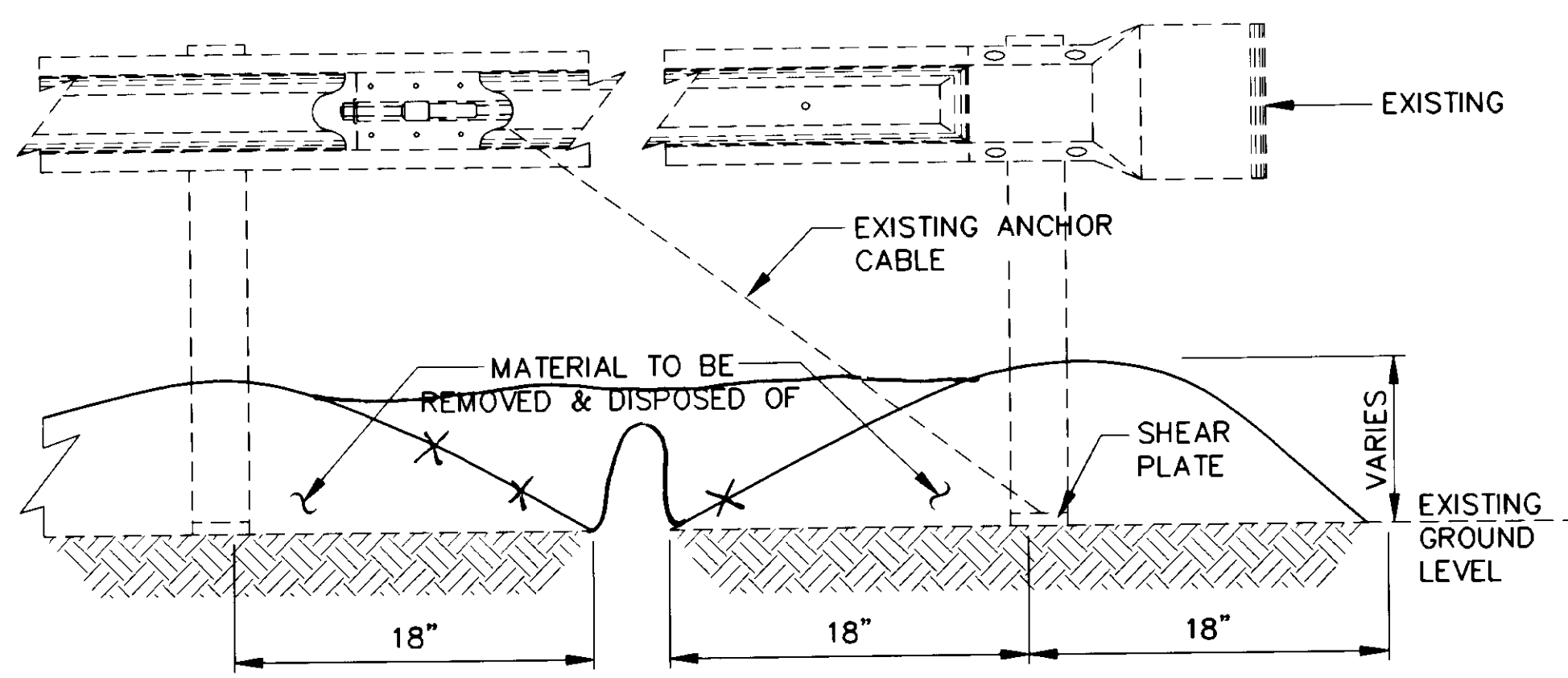
BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU  
JUNEAU AREA GUARDRAIL IMPROVEMENTS  
ROUTE SUMMARY SHEET  
FRITZ COVE ROAD #296034B  
FG-000S (124) 70626

ALASKA  
DESIGNED BY: P. JONES  
DRAWN BY: AutoCAD/B. ADAMS  
CHECKED BY: W.J. HOLBROOK  
PROJECT NO. 70626  
DATE: SEPT. 1992  
SHEET 10 OF 12

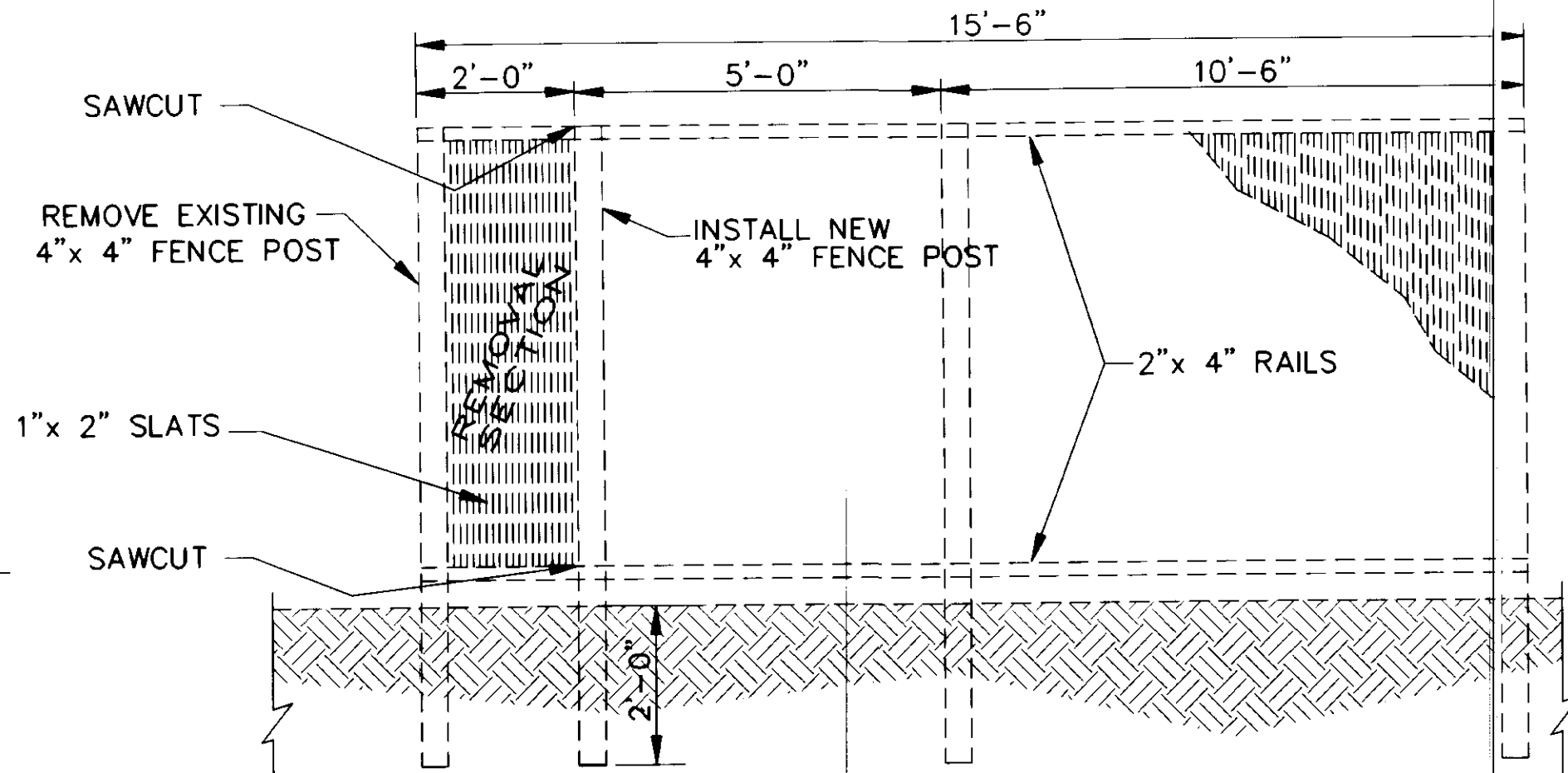




**END ANCHORAGE CLEANUP DETAIL**

**ROCKERY NOTE:**

FOR END ANCHORAGES REQUIRING CLEANING THE WORK SHALL CONSIST OF THE REMOVAL AND DISPOSAL OF GRAVEL, SOD, EARTH, ORGANICS, OR WHATEVER NATURE ENCOUNTERED ABOVE THE SHEAR PLATE OF THE EXISTING END ANCHORS. THE WORK AREA TO BE CLEANED SHALL BE A 3' X 3' DIMENSION MEASURED IN THE HORIZONTAL PLANE.

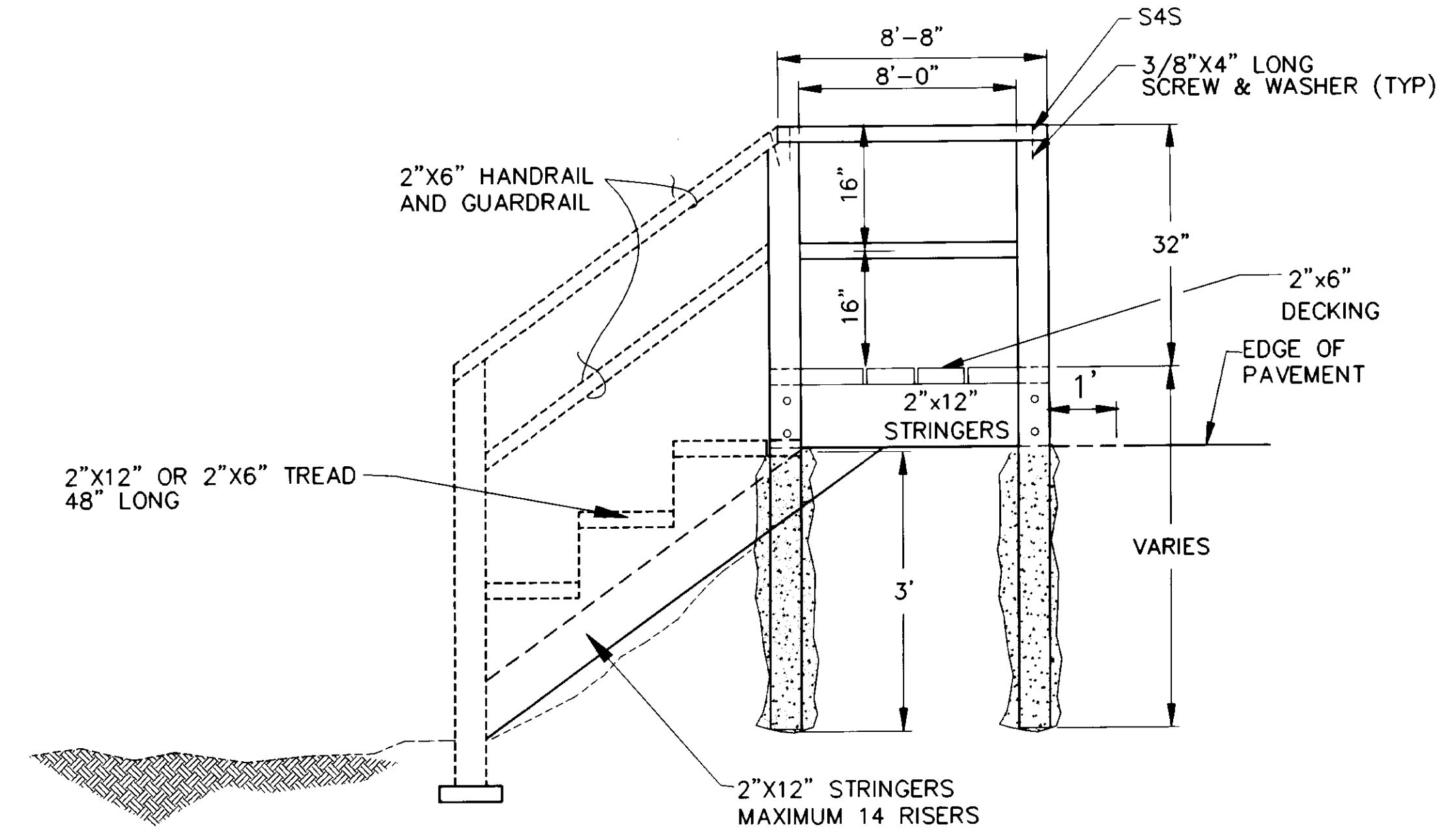


**WOOD FENCE RECONSTRUCTION DETAIL**

@ LOOP ROAD, CDS MILEPOINT 5.519

**FENCE NOTE:**

ALL MATERIAL USED IN RECONSTRUCTION SHALL BE HAULED TO AN APPROVED WASTE SITE.

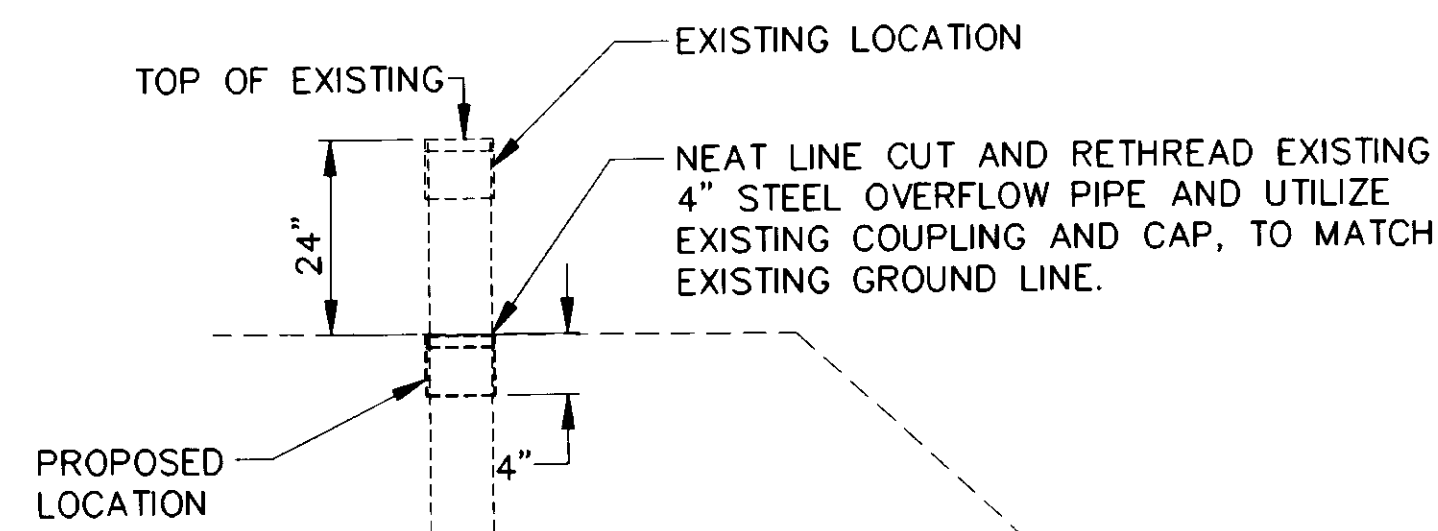


**NEW STAIRWAY LANDING DETAIL**

(SEE STANDARD DRAWING M-05.00)

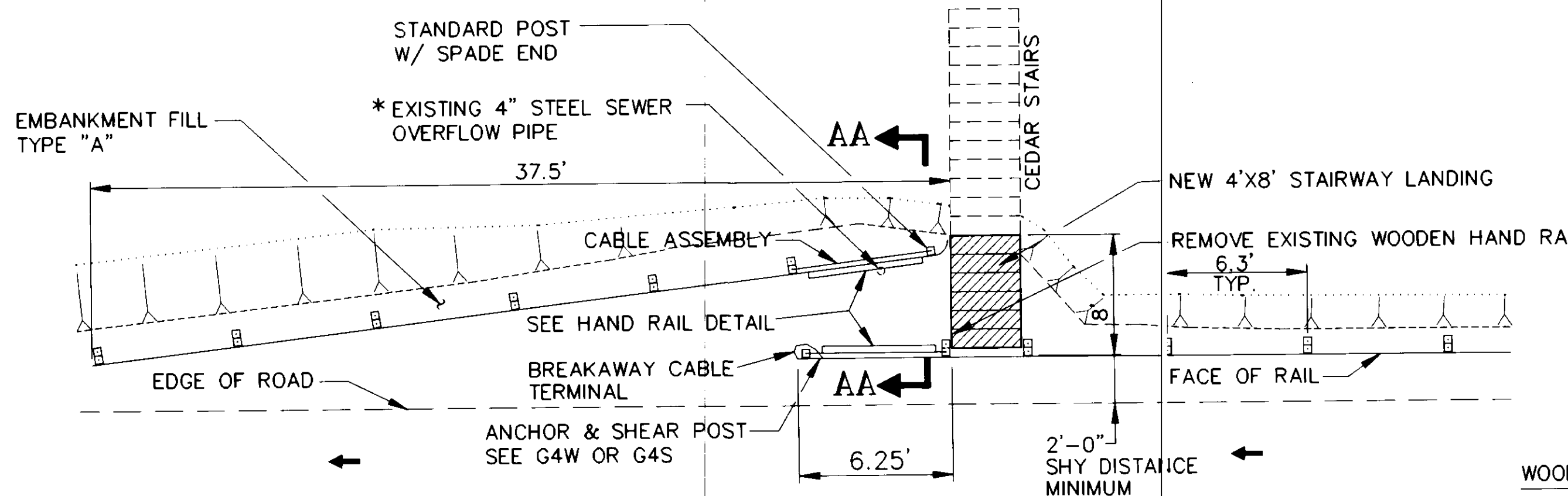
**LANDING NOTE:**

LANDING AND HANDRAIL SHALL BE CONSTRUCTED OUT OF TREATED TIMBER.



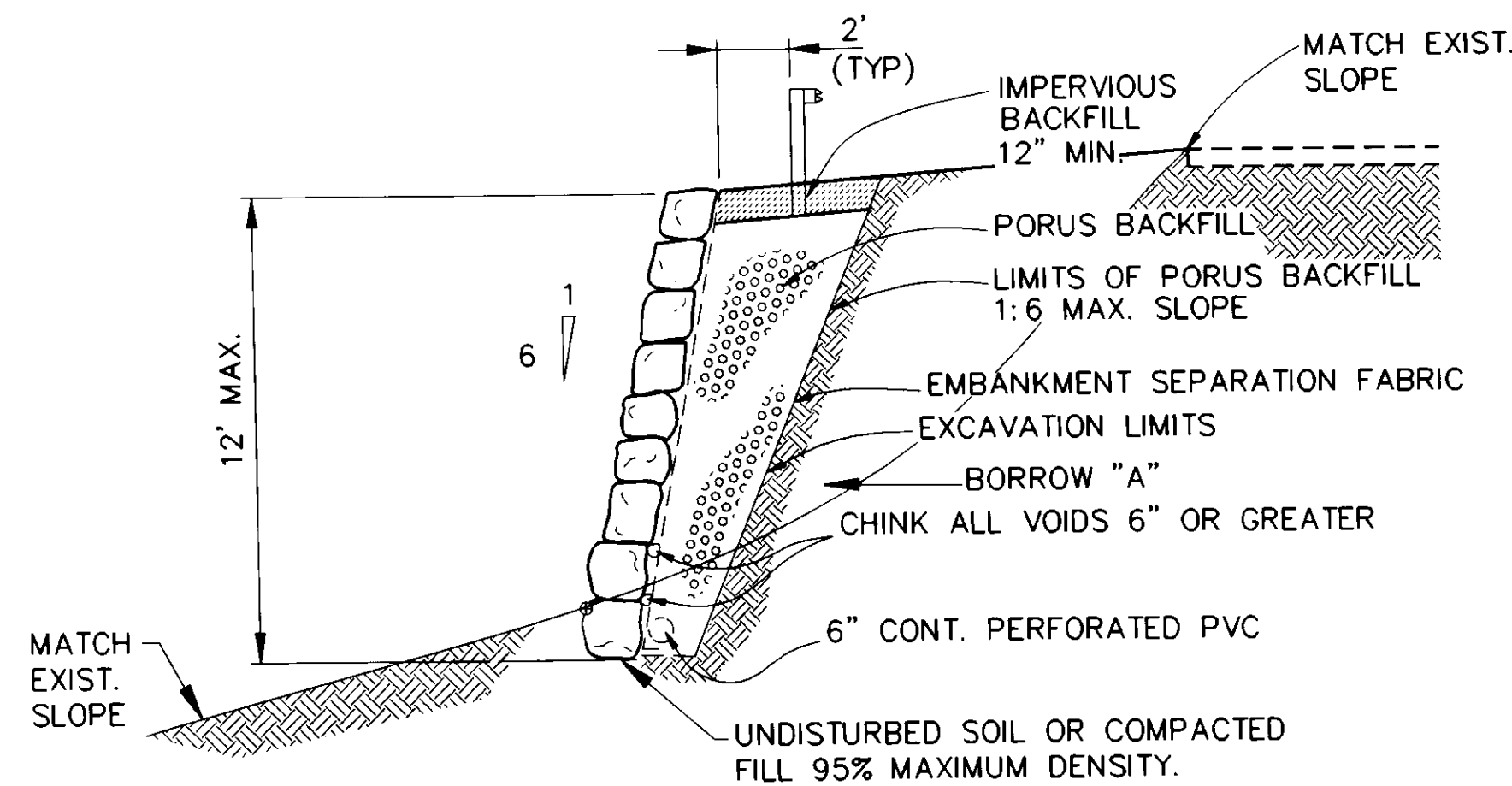
**OVERFLOW PIPE DETAIL**

ROUTE #296000 @ FRITZ COVE ROAD  
CDS MILEPOINT 28.034



**STAIRWAY ACCESS DETAIL**

ROUTE #296000 @ GLACIER/DOUGLAS HWY. CDS MILEPOINT 28.034  
ROUTE #296034B @ FRITZ COVE ROAD CDS MILEPOINT 4.968



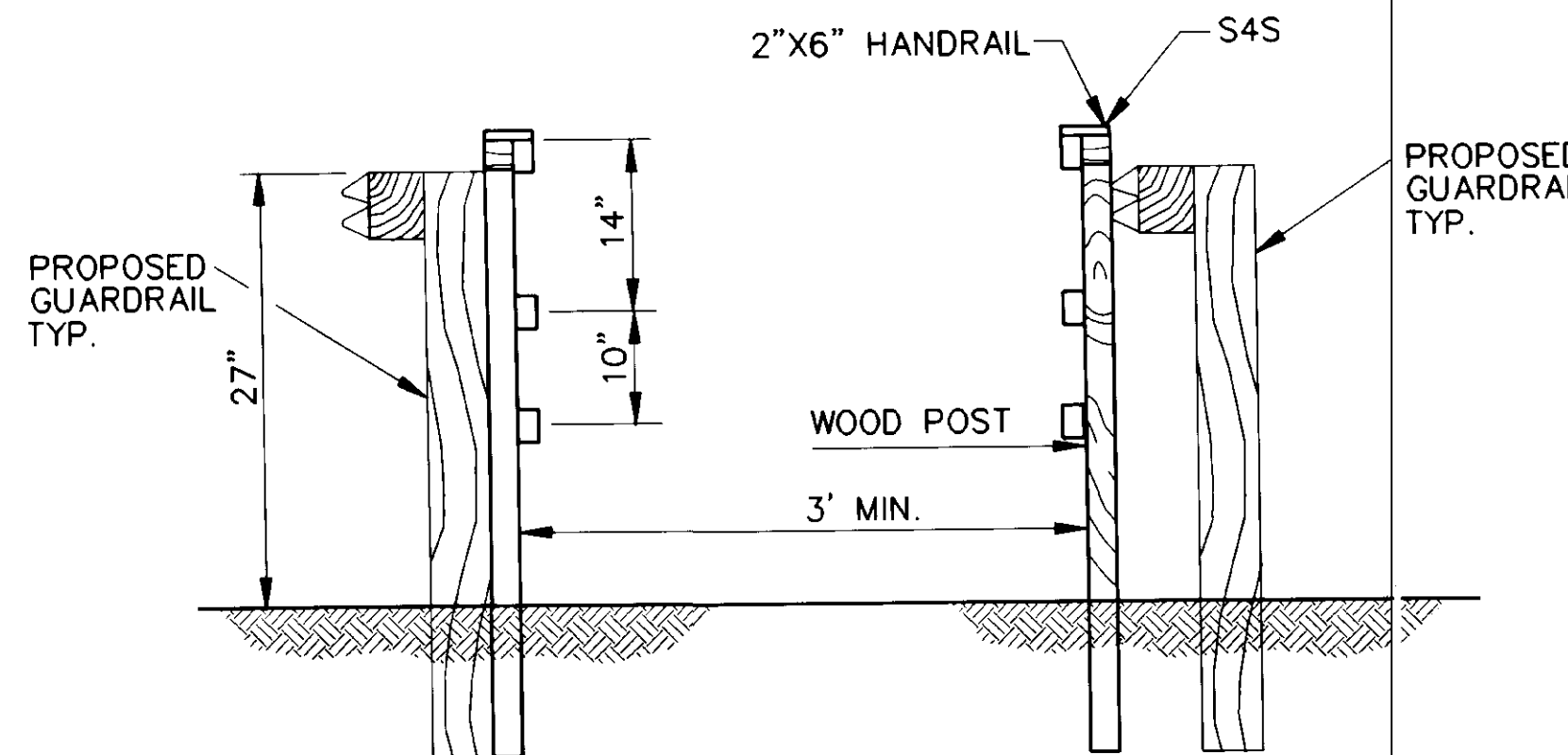
**ROCKERY WALL**

ROUTE #296034B @ FRITZ COVE ROAD

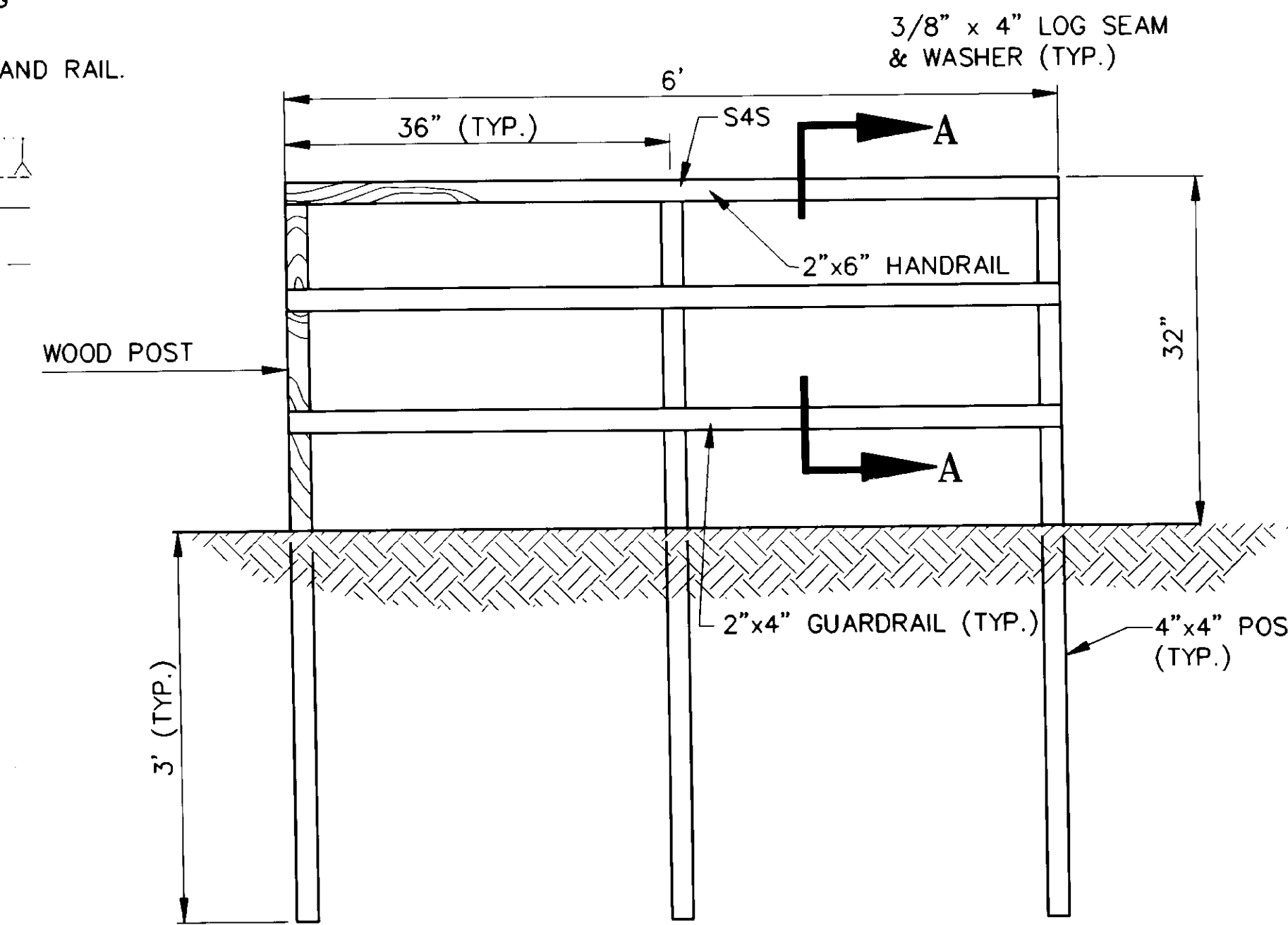
**ROCKERY NOTE:**

THE ROCKERY SHALL BE CONSTRUCTED OF ROCK RANGING IN SIZE AS SHOWN IN TABLE BELOW.

AREA	LEAST DIMENSION	MINIMUM WEIGHT
TOP 3 FT. OF ROCKERY	13" TO 18"	500 LBS.
3 TO 6 FT. FROM TOP OF ROCKERY	18" TO 24"	1500 LBS.
6 TO 9 FT. FROM TOP OF ROCKERY	24" TO 32"	3000 LBS.
9 TO 12 FT FROM TOP OF ROCKERY	30" TO 38"	4000 LBS.



**SECTION A-A**



**NEW HAND RAIL DETAIL**

**HAND RAIL NOTES:**

- ROUTE #296000 @ GLACIER/DOUGLAS HIGHWAYS, CDS MILEPOINT 28.034.
- ALL MATERIAL TO CONSTRUCT THE NEW HAND RAIL WILL BE TREATED TIMBER.
- ROUTE #296034B @ FRITZ COVE ROAD, CDS MILEPOINT 4.968.

BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU

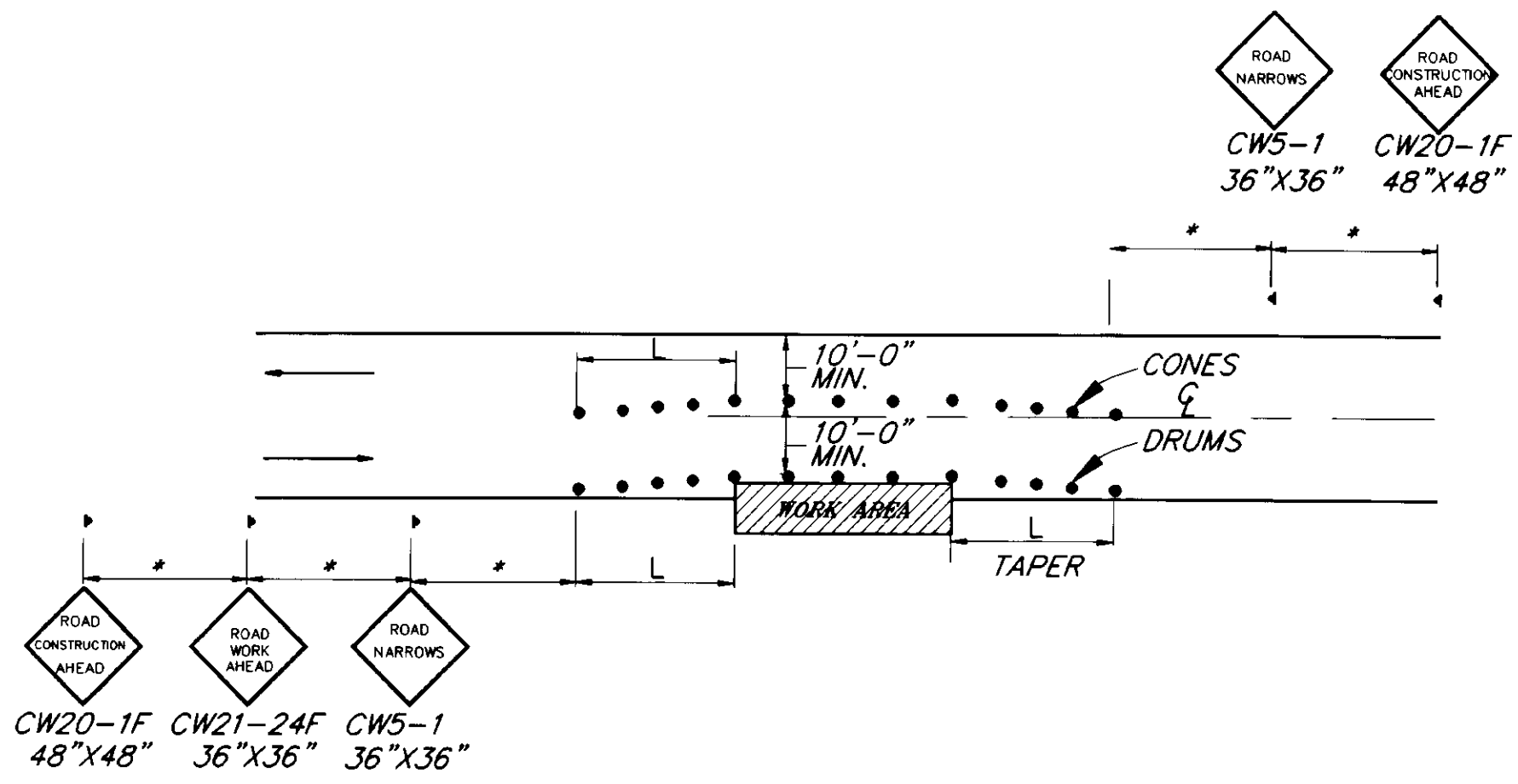
JUNEAU AREA GUARDRAIL IMPROVEMENTS  
MISCELLANEOUS DETAILS  
FG-000S (124) 70626

ALASKA

DESIGNED BY: P. JONES  
DRAWN BY: AutoCAD/B. ADAMS  
CHECKED BY: W.J.HOLBROOK

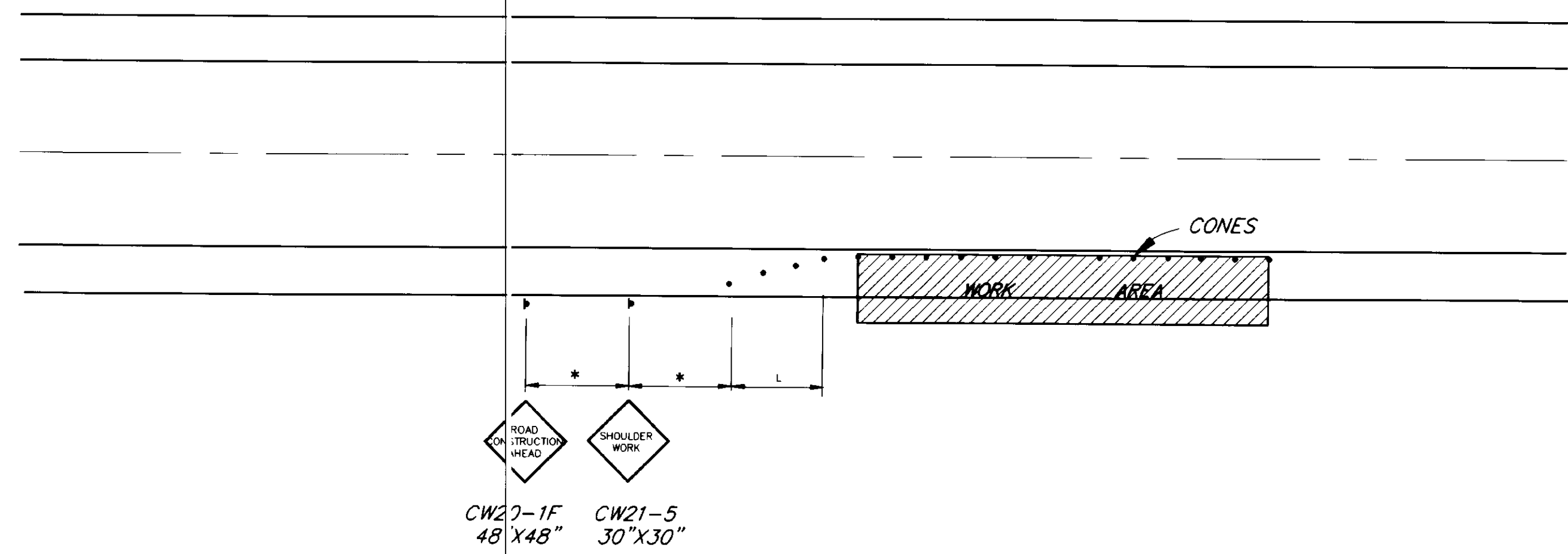
PROJECT NO. 70626  
DATE: SEPT. 1992  
SHEET 11 OF 12





### ROADWAY ENCROACHMENT

NOTE: IF ONLY ONE LANE IS EFFECTED BY ROAD WORK (THAT IS, THE DRUMS ALONG THE WORK AREA ARE NO CLOSER THAN 10' TO CENTERLINE) THE CENTERLINE CONES FOR THE OPPOSING LANE MAY BE DELETED.



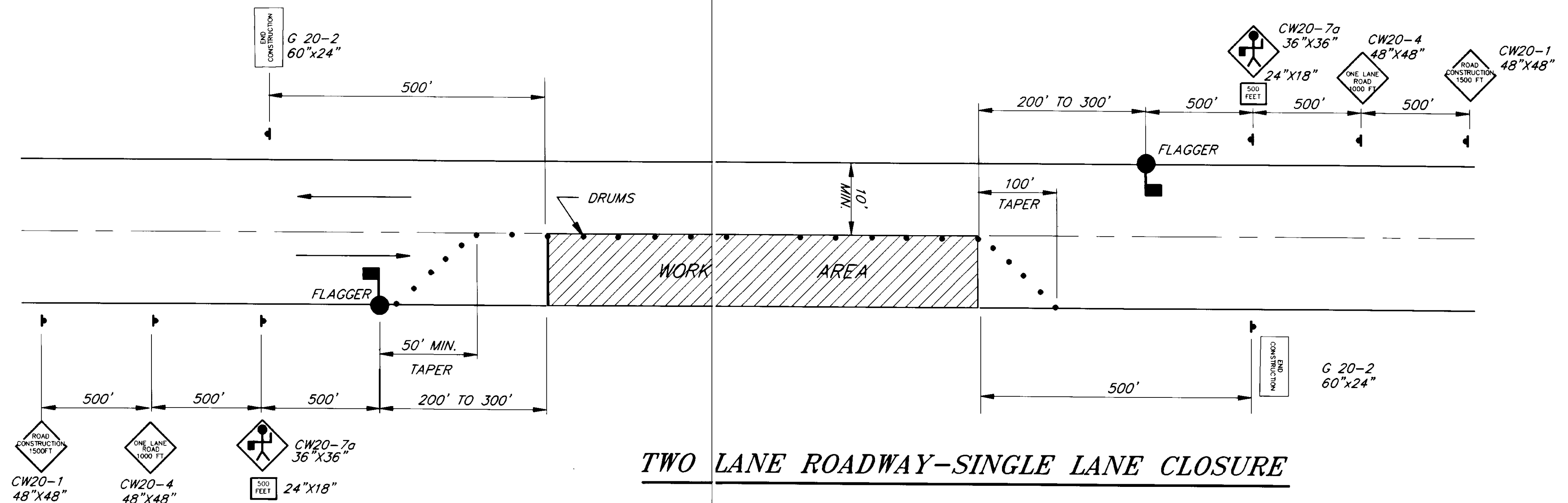
### SHOULDER WORK

( NO ENCROACHMENT INTO TRAVELLED WAY )

### TRAFFIC CONTROL NOTES

1. A MINIMUM OF ONE LANE SHALL BE MAINTAINED AT ALL TIMES AT WORK AREAS.
2. TWO LANES SHALL BE MAINTAINED AT ALL TIMES AT WORK SITES DURING NON-WORKING HOURS.
3. MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES SHALL BE EQUAL TO THE SPEED LIMIT IN FEET.
4. FLOOD LIGHTS SHALL BE PROVIDED FOR FLAGGER STATIONS DURING NIGHT OPERATIONS.
5. A SINGLE FLAGGER MAY BE APPROVED BY THE ENGINEER IF THE ENTIRE WORK AREA IS LESS THAN 50' LONG AND IS VISIBLE FROM BOTH DIRECTIONS.
6. ON MULTILANE ROADWAYS, SINGLE LANE CLOSURES SHALL CONFORM TO STANDARD DRAWING C-05.00, "SINGLE LANE CLOSURE". OMIT SIGNS IN THE OPPOSITE DIRECTION IF THE ROADWAY IS DIVIDED.
7. ON EGAN DRIVE OUTBOUND, NO LANE CLOSURES WILL BE ALLOWED FROM 3:30 PM TO 6:00 PM, MON. THRU FRI. ON EGAN DRIVE INBOUND, NO LANE CLOSURES WILL BE ALLOWED FROM 7:00 AM TO 8:30 A.M.
8. ON GLACIER HWY., BROTHERHOOD BRIDGE TO AUKE BAY, NO LANE CLOSURES WILL BE ALLOWED 7:00 AM TO 8:30 AM, 11:30 AM TO 6:00 PM, MON. THRU FRI. AND 3:00 PM TO 6:30 PM, ON SAT.
9. IF USED DURING DARKNESS, EVERY OTHER DRUM SHALL HAVE A TYPE C STEADY BURN WARNING LIGHT.

L = SWW L = MIN. LENGTH OF TAPER IN FEET  
 S = POSTED SPEED LIMIT  
 W = WIDTH OF OFFSET  
 \* SPEED LIMIT 40 OR GREATER : 500 FT.  
 35 ON LESS THAN 250 FT.



### TWO LANE ROADWAY-SINGLE LANE CLOSURE

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU  
 JUNEAU AREA GUARDRAIL  
 IMPROVEMENTS  
 TRAFFIC CONTROL  
 PLAN  
 FG-000S (124)  
 70626

DESIGNED BY: R. PURVIS	PROJECT NO. 71003
DRAWN BY: AutoCAD/B. ADAMS	DATE: SEPT. 1992
CHECKED BY: K. SMITH	SHEET 12 OF 12

