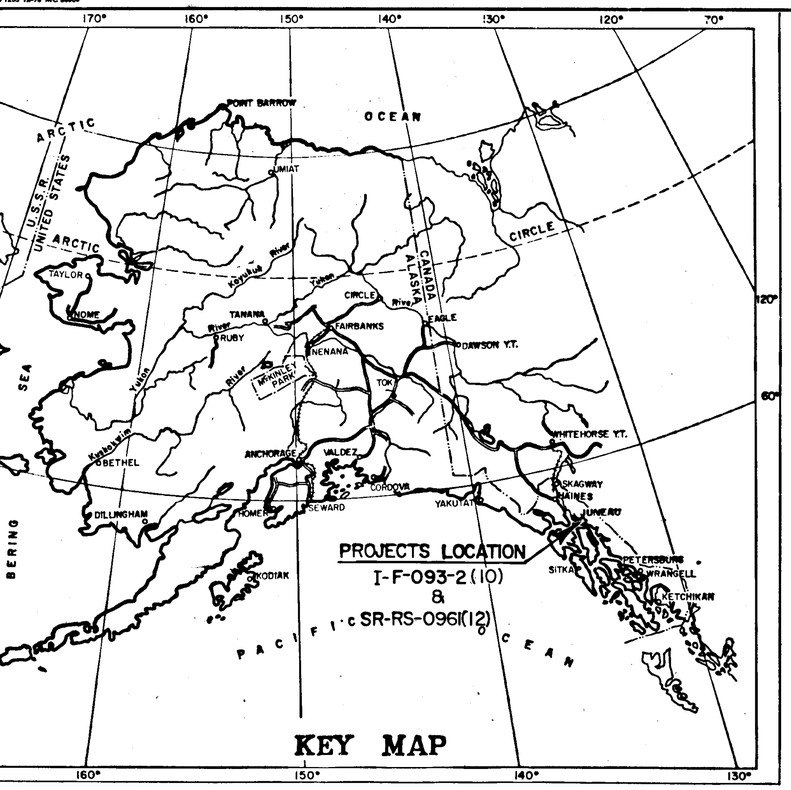


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

PLAN AND PROFILE
PROPOSED HIGHWAY PROJECT
BROTHERHOOD BRIDGE
TO
AUKE BAY FERRY TERMINAL
PHASE II I-F-093-2(10)
&
AUKE BAY FERRY TERMINAL
TO
INDIAN POINT
SR-RS-0961(12)
GRADING, PAVING & DRAINAGE

STATE	PROJECT	SHEET NO.	TOTAL SHEETS
ALASKA	I-F-093-2(10) SR-RS-0961(12)	1	22

TITLE SHEET 21

INDEX OF SHEETS

THE FOLLOWING STANDARD DRAWINGS APPLY TO THESE PROJECTS:

A-1, C-00.04, C-10.04, C-11.04, D-01.00, D-04.00 D-05.00, D-23.02, D-24.13, D-26.03, E-00.01 G-04.15, G-04.34, G-13.16, G-14.08, G-15.00 G-18.12, G-45.00, I-40.21, I-80.00, M-05.01 M-16.03, M-20.02, M-23.02, S-00.11, S-05.00 S-20.10, S-30.12, T-20.03, T-21.03

"AS BUILT PLANS"

BERG CONSTRUCTION

P.E. GARY HOGINS

BEGIN CONSTRUCTION: SEPT. 1981

END CONSTRUCTION: ?

PROJECT LENGTH: 1.45 Miles

STATE OF ALASKA 49TH

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

APPROVED
Wallace K. Williams Date 6/18/81
SOUTHEASTERN REGION
DESIGN/CONSTRUCTION ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

APPROVED
Charles E. Mallott Date 6-16-81
DIRECTOR-HIGHWAY DESIGN & CONSTRUCTION

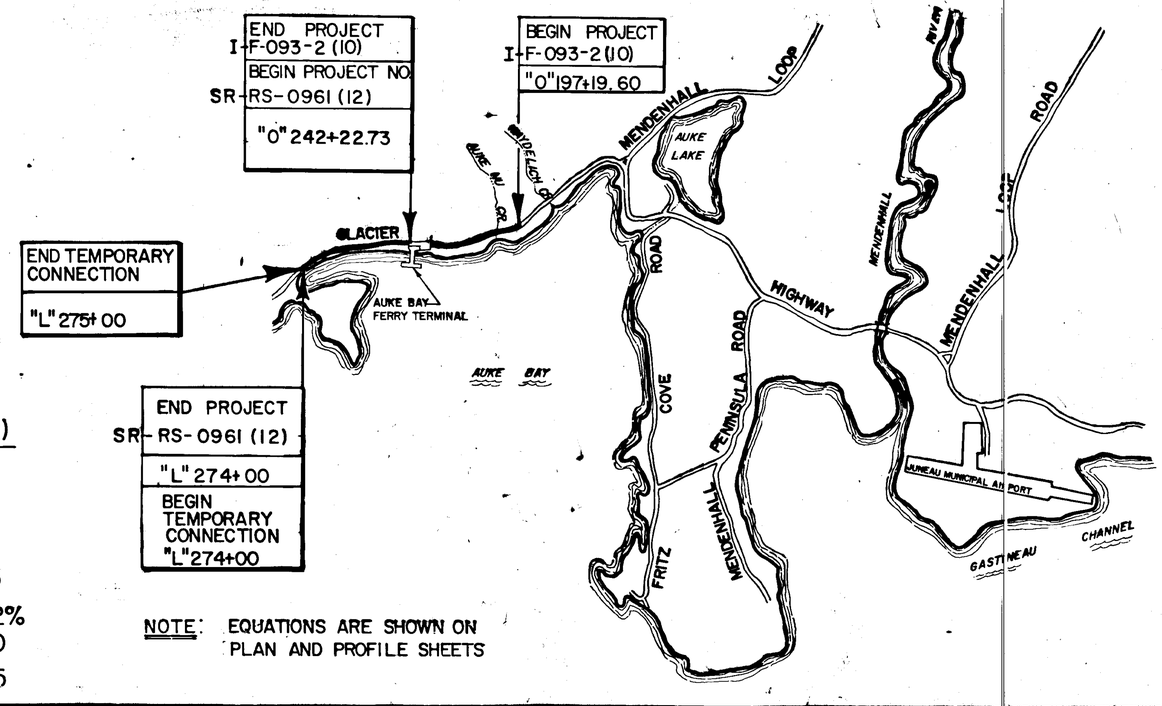
PROJECT SUMMARY I-F-093-2(10)

WIDTH OF PAVEMENT = 40'
LENGTH OF PROJECT = 4,490.37'
= 0.8504 mi.

PROJECT SUMMARY SR-RS-0961(12)

WIDTH OF PAVEMENT = 40'
LENGTH OF PROJECT = 3,139.94' = 0.5947 mi.
LENGTH OF TEMPORARY CONNECTION = 100'

DESIGN DESIGNATION FOR I-F-093-2(10)		DESIGN DESIGNATION FOR SR-RS-0961(12)	
ADT (1979)	= 2,204	ADT (1979)	= 1,095
ADT (2000)	= 5,729	ADT (2000)	= 2,683
DHV (12%)	= 687	DHV (13%)	= 349
D	= 60-40	D	= 55-45
T	= 5%	T	= 2%
V	= 50	V	= 50
T.I.	= 80	T.I.	= 6.5

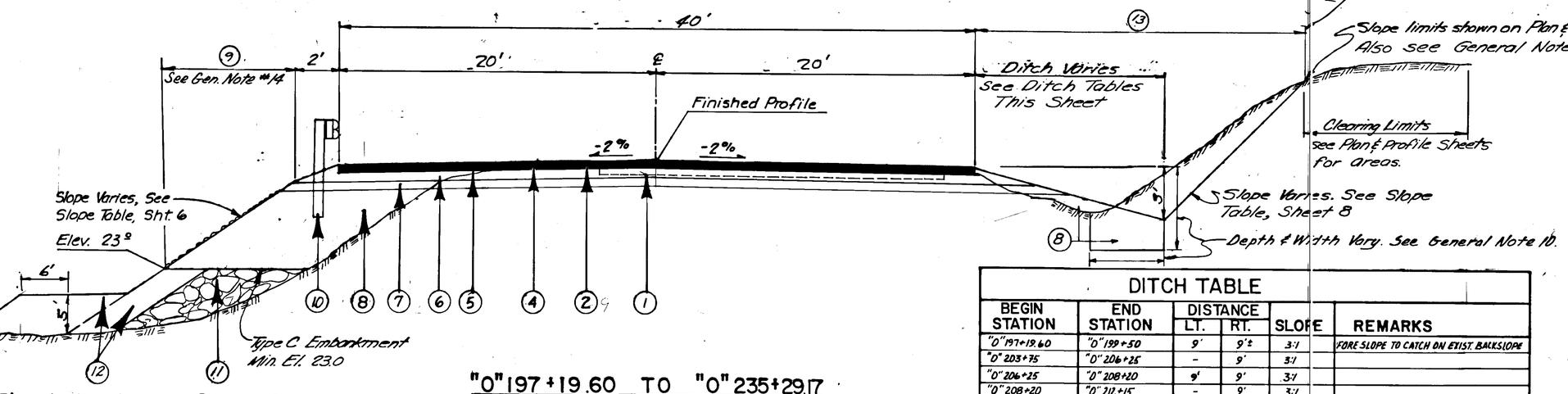


NOTE: EQUATIONS ARE SHOWN ON PLAN AND PROFILE SHEETS

TYPICAL SECTIONS OF IMPROVEMENT

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	(F-093-2(10) & RS-0961(12)	1980	2	22

TYPICAL SECTION OF IMPROVEMENT



"0" 197+19.60 TO "0" 235+29.17

"0" 235+29.17 TO "0" 242+22.73 WILL REQUIRE RESTRIPING & SIGNING ONLY. SEE SHT. 19 FOR DETAILS.

LABELING INDEX

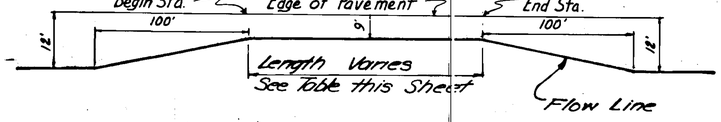
1. Exist. Pavement. Depth varies - See General Note #9
2. 3 1/2" Asphalt Concrete, Type I
3. 2 1/2" Asphalt Concrete, Type I
4. CSS-1 Asphalt for Tack Coat ed placed between compacted layers if directed.
5. MC-30 Liquid Asphalt for Prime Coat
6. 6" Crushed Aggregate Base Coarse
7. 6" Subbase, Grading "A"
8. Unclassified Excavation
9. Soil Stabilization, Matting & Seeding, See T.C.P. note #9
10. Beam Type Guardrail, Type I Posts
11. Embankment, Type C (SEE GEN. NOTE 8 & SEC. 703-2.13 OF SPECIALS)
12. Riprap, Class II A
13. Seeding

BASIS OF ESTIMATE

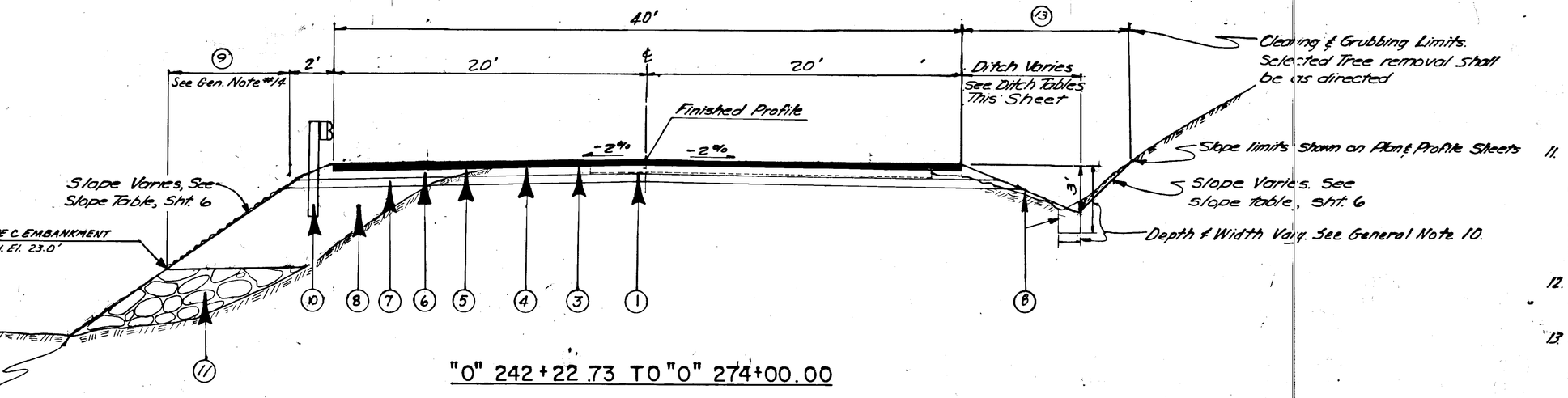
ITEM NO	ESTIMATING FACTOR
301(1)	1.96 Tons per cubic yard
304(1)	1.98 Tons per cubic yard
401(1)	14 lbs. per sq. yd. per inch depth
401(2)	6% of Item 401(1)
402(2)	0.10 gal/S.Y. - 240 gal/Ton @ 60 Kdlt/mm
403(2)	0.25 Gal. per sq. yd. - 253 Gal. per ton @ 60 Degrees F.

DITCH TABLE

BEGIN STATION	END STATION	DISTANCE LT.	DISTANCE RT.	SLOPE	REMARKS
"0" 197+19.60	"0" 199+50	9'	9'±	3:1	FORE SLOPE TO CATCH ON EXIST. BACKSLOPE
"0" 203+75	"0" 206+25	-	9'	3:1	
"0" 206+25	"0" 208+20	9'	9'	3:1	
"0" 208+20	"0" 212+15	-	9'	3:1	
"0" 212+15	"0" 213+90	-	12'	4:1	
"0" 213+90	"0" 216+65	-	9'	3:1	
"0" 216+65	"0" 224+65		Varies	3:1	Foreslope to catch on existing backslope
"0" 224+65	"0" 231+75	-	9'	3:1	
"0" 231+75	"0" 233+75	-	9'±	3:1	Foreslope to catch on existing backslope
"0" 233+75	"0" 235+29.17	-	9'	3:1	
"L" 242+50	"L" 244+50	-	6'±	3:1	Foreslope to catch on existing backslope
"L" 244+50	"0" 247+50	-	6'	3:1	
"0" 247+50	"0" 248+00		6'±	3:1	Foreslope to catch on existing backslope
"0" 248+00	"0" 249+50	-	6'	3:1	See transition detail below
"0" 249+50	"0" 262+90	-	12'	4:1	
"0" 262+90	"0" 263+40	-	12'±	4:1	Daylight foreslope to existing ditch
"0" 263+40	"0" 266+40	-	12'	4:1	
"0" 266+40	"0" 266+90		12'+	4:1	Daylight foreslope to existing ditch
"0" 266+90	"L" 273+50	-	12'	4:1	
"L" 273+50	"L" 274+00	-	9'	3:1	See transition detail below



DITCH TRANSITION DETAIL



"0" 242+22.73 TO "0" 274+00.00

GENERAL NOTES

1. Grade & alignment shown on these plans are subject to minor revisions.
2. Culvert lengths and locations shown on these plans are subject to minor revisions.
3. The location of all utilities shown on these plans are approximate only and should be field verified by the Contractor.
4. The installation, adjustment or removal of Utility Poles and appurtenances shall be performed by others and are not considered items of work under this Contract.
5. Both the existing and proposed utility pole locations are shown and are considered informational only.
6. For removal of structures and obstructions, see summary on sheet 4.
7. The rate & transition length for superelevations are listed on the Plan & Profile sheets.
8. Between April 25 & June 30, the Contractor shall not place embankment material below elevation + 23.00.
9. The existing asphalt shall be broken to 12" (inch) minus material and utilized in the "Type B embankment". Payment for removal and fracturing shall be considered incidental to Item 203.
10. The insitu material between the toe of existing and toe of proposed foreslopes shall be excavated to the depths shown below, and the material will be wasted as directed.

Station to Station	Left or Right	Depth
198~ to 199+50	Left	42"
242+50 to 247+50	Right	38"
268+50 to 274~	Right	38"

11. Straight clean pavement cuts shall be made at the following locations for butt joints between existing and proposed pavement:

"0" 197+19.60, "0" 235+29.17, "0" 242+22.73, & "0" 275+00.00

12. Between "0" 204+00 and "0" 216+64 : Rt., all excavation requiring blasting shall have presheared backslope.
13. All bedding and backfill material required that is not obtained from structure excavation shall be obtained from useable unclassified excavation.
14. Jute Mesh Staples shall meet requirements of Sec. 727.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOT SHE
ALASKA	F-093-2(10) & RS-0961(12)	1981	3	22

TRAFFIC CONTROL PLAN

1. A designated employee of the contractor shall have the sole duty and responsibility of installing and maintaining the required traffic control elements for this project.

2. Project identification signing shall be as shown on Standard Drawing C-11.04.

3. All one-lane closures shall be as shown in Standard Drawing C-11.04, without a pilot car. All detours required on the project shall be constructed and maintained to the following minimum widths at all times:
   One-Way Traffic – 12'
   Two-Way Traffic – 20'
   The contractor may maintain one-way traffic with a flagging operation during his normal working hours, however, during non-working hours the roadway shall be re-opened to two-way traffic.

4. Any one-lane closures during dusk to dawn hours will require temporary illumination. The minimum level of illumination shall be 2.0 foot candles on the roadway surface.

5. Shoulder drop-offs greater than 1.5" inches shall not be allowed during non-working hours.

6. All flagging required shall be paid for under Item 113(1) Flagging.

7. Each construction activity listed below shall be completed prior to beginning any work on the proposed pavement structure.

   A. Complete all clearing & grubbing and clearing work required. See Sheets 2 and 8 for limits of work.

   B. Complete all work required on the existing Auke Nu Creek Culvert. See Sheets 14 thru 16

   C. Complete all unclassified excavation required between "O" 204+00 and "O" 216+88.24 Rt. See Sections 107, 108 and 203 of the Special Provisions and T.C.P. Notes 13 thru 17 for more details.

8. Removal and reinstallation of culverts shall not begin prior to completing placement of Type C embankment. Should the contractor elect to begin removal and replacement of culverts prior to beginning reconstruction of the existing roadway, as stated in Note No. 9, he shall patch all existing pavement destroyed with 1½ inches of Asphalt Concrete. Installation of culvert patches shall be complete prior to any succeeding weekend, Federal or State holiday, or the Golden North Salmon Derby.

9. Placement of Embankment, Subbase, Base Course, and Jute Mesh between "O" 242+22 and "L" 275+00 shall be completed prior to beginning reconstruction of the existing roadbed between "O" 197+19 and "O" 235+29.

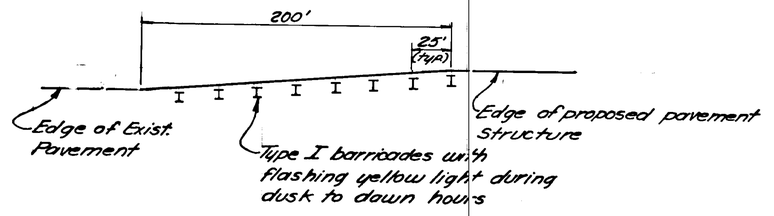
10. Construction signing for the following work areas shall be installed prior to beginning any reconstruction of the existing roadway:

    "O" 242+22 to "L" 275+00
    "O" 197+19 to "O" 235+29

    See Standard Drawing C-10.04, Reconstruction of Entire Paved Roadway, for details.

11. After widening the existing roadbed to 40 feet, the left hand shoulder shall be delineated with Type I barricades until installation of the proposed guardrail is complete. Barricades shall be spaced at 200 foot intervals and equipped with flashing yellow lights during dusk to dawn hours.

12. During non-working hours all transitions between proposed and existing pavement structures shall be delineated as detailed below.



13. All roadway closures for blasting and re-opening the roadway shall be limited to four (4) hours total, two hours of total closure will be allowed and two (2) hours of one-way traffic with a flagging operation.

14. No roadway closures shall be scheduled during the following periods:
    6:00 a.m. to 8:30 a.m.; 4:00 p.m. to 6:30 p.m., to delay school bus schedules, on Federal or State holiday weekends, or during the Golden North Salmon Derby.

15. Five (5) days prior to any roadway closures, the contractor shall notify the Engineer, Department of Public Safety, and the Coordinating Fire Chief for the City and Borough of Juneau.

16. The contractor shall also broadcast the times of any closures on all local radio stations. All notices of closure shall be broadcast for five (5) days prior to the closure, a minimum of five (5) times per day, and between the hours of 8:00 a.m. and 10:00 p.m.

17. The contractor shall construct the underdrain and drainage structures detailed on Sheet 11 prior to beginning reconstruction of the existing roadway as stated in Note No. 9.

TRAFFIC CONTROL PLAN | SIGNING SCHEDULE ±

QUANT.	SQ. FT.	TYPE	SIZE	LEGEND
2	30	C1-1	36 x 60	Road Construction next 1.5mi.
4	40	C1-2	24 x 60	End Construction
2	32	CW20-1E	48 x 48	Road Construction 1500 ft.
2	18	CW-8-3	36x36	Pavement Ends
2	8	CW13-1	24x24	** M.P.H.
2	18	CW21-9	36 x 36	Rough Road
26	—	Type 1	—	Barricades
2	32	CW22-1	48 x 48	Blasting Zone 1000 ft.
2	12.25	CW22-2	42 x 42	Turn off 2-Way Radio
2	12.25	CW22-3	42x42	End Blasting Zone

NOTES

1. ** Indicates Advisory Speed to be determined at site.
2. ± This schedule is to be used for cost estimating only. Other signs may be required by the engineer or used at the contractor's option.

See page 6 for added items by E.W.O.

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	PAY UNIT	SHEET NUMBERS 7	8	9	10	11	12	TOTAL FOR I-F-093-2(10)	TOTAL FOR STRS-0961(12)
109(1)	PETROLEUM ESCALATION	cont. sum							All Req'd	
110(1)	MOBILIZATION	L.S.							All Req'd	
111(1)	TEMP. EROSION & POLLUTION CONTROL	cont. sum							All Req'd	
112(1)	TRAIN. PROG. IN ACCORD W/F.H.W.A. ORDER, INTERIM 7.2(2)	cont. sum							All Req'd	
113(1)	FLAGGING	M.H.							All Req'd	
114(1)	CONST. SURVEYING BY THE CONTRACTOR	L.S.							All Req'd	
115(1)	TRAFFIC MAINTENANCE	L.S.							All Req'd.	
115(2)	CONSTRUCTION SIGNS	L.S.	Est. Quant - Both Proj. = 485 S.F.						All Req'd.	
115(7)	TEMPORARY LIGHTING	L.S.							All Req'd.	
116(1)	FURN. & MAINT. FIELD OFFICE	L.S.							All Req'd.	
116(2)	FURN. & MAINT. FIELD LAB.	L.S.							All Req'd.	
201(1B)	CLEARING	L.S.	Est. Quant. = 21.2 M.S.F.						All Req'd.	
201(2B)	CLEARING & GRUBBING	L.S.	Est. Quant. = 30.3 M.S.F.						All Req'd	
201(5)	Selective Tree Removal	ea.	Est. Quant. = ~~85~~ Trees						~~85~~ 1	
202(1)	REMOVAL OF STRUCTURES & OBSTRUCTIONS	L.S.							All Req'd.	
202(4)	REMOVAL OF CULVERT PIPE	L.F.	40	~~242~~ 192	~~289~~ 200	~~457~~ 130	~~670~~ 493	~~434~~ 386	~~1832~~ 1450	~~1948~~ 1394
202(9)	SINGLE MAILBOX INSTALLATION	ea.				X	2	3	5	~~6~~
202(10)	MULTIPLE MAILBOX INSTALLATION	L.F.						~~X~~ 12.5		~~X~~ 12.5
203(3A)	UNCLASSIFIED EXCAVATION	L.S.	Est. Quant.: Rock Exc. = 16,615 C.Y., Comm. Exc. = 13,391 C.Y.						All Req'd	
203(8)	ROCK DOWELS	ea.		~~X~~ 16					~~X~~ 16	
203(9)	ROCK BOLTS 12 Ft. LENGTH	ea.		~~X~~ 6					~~X~~ 6	
301(1)	CRUSHED AGGREGATE BASE COURSE	ton	1,077	2,401	2,236	1,004	2,636	2,400	~~6723~~ 6175	~~6631~~ 5613
304(1)	SUBBASE, GRADING "A"	ton	1,124	2,535	2,384	1,075	2,697	2,609	~~7779~~ 7117	~~7345~~ 6720
401(1)	ASPHALT CONCRETE, TYPE I	ton	590	1,323	1,239	466	1,041	890	~~5379~~ 4708	~~2,770~~ 2222
401(2)	ASPHALT CEMENT	ton	36	80	75	28	63	54	~~325~~ 214	~~137~~ 128
402(2)	CSS-1 ASPHALT FOR TACK COAT	L.S.	Est. Quant. Both Proj. = 11 Tons						All Req'd.	
403(2)	MC-30 LIQUID ASPHALT FOR PRIME COAT	ton	3	6	6	3	7	6	~~X~~ 10	~~X~~ 11
506(1)	TREATED TIMBER	L.S.	Est. Quant. = 148 M.B.M.						All Req'd.	
603(29)	33 1/2° 24" INCH ELBOW	ea.			~~X~~				~~X~~	
603 (22-8)	8 INCH PIPE	L.F.					~~74~~ 43			~~74~~ 43
603 (22-18)	18 INCH PIPE	L.F.	40	~~36~~ 39		~~70~~ 76	~~80~~ 76	~~136~~ 146	~~76~~ 79	~~136~~ 118
603 (22-24)	24 INCH PIPE	L.F.	0	~~274~~ 242	~~314~~ 262	~~170~~ 202	~~800~~ 830	~~316~~ 322	~~652~~ 624	~~1,232~~ 1284
603 (22-48)	48 INCH PIPE	L.F.						76.80		76.80
603(28)	END SECTION FOR 48 INCH PIPE	ea.						2		2
604(5)	INLETS, TYPE A	ea.					2			2
605(3)	8 INCH PERFORATED PIPE UNDERDRAIN	L.F.					82.80			82.80
606(1)	BEAM TYPE GUARDRAIL, TYPE I POST	L.F.	628.5	1,306.3	1396.8	566	1,531.9	982.7	~~6525~~ 6315	~~5,885~~ 5,715
606(4)	REMOVAL & RECONSTRUCT. OF GUARDRAIL	L.F.	125						125	
606(5)	REMOVAL & DISPOSAL OF GUARDRAIL	L.F.	~~437~~ 438	469					~~907~~ 907	
606(6)	END ANCHORAGES	ea.	2	2		2	4	1	4	~~8~~
611(3)	RIPRAP, CLASS II A	L.S.	Est. Quant. = 6,595 C.Y.						All Req'd.	
614(1)	SURVEY MONUMENTS	ea.	1	5	6	2	3	2	12	7
614(2)	MONUMENT CASES	ea	1	5	6	2	3	2	12	7
615(1)	STANDARD SIGNS	S.F.		16.5	16.5	59.0	3	~~17.9~~ 19.4	39	~~73.3~~ 75.4
618(1)	SEEDING	1,000 S.F.	28.5	37.5	46	13	47	32	116	88
618(4)	WATER FOR MAINTENANCE	M.Gal.	1.5	2.0	2.5	0.5	2.0	1.5	6	4
619(1)	SOIL STABILIZATION MATTING	1,000 S.F.	13.5	9.3	34.9	4.2	18.6	10.1	~~53.3~~ 52.3	~~30.7~~ 22.2
627(1)	WATERING	M.Gal.	10	23	21	9	24	9	~~105~~ 96	~~87~~ 87
670(1)	PAINTED TRAFFIC MARKINGS	L.S.	See Summary, Sht. 19						All Req'd.	
670(6)	THERMOPLASTIC PAVEMENT MARKINGS	L.S.	See Summary, Sht. 19						All Req'd.	
671(1)	BUS STOP SHELTER	L.S.							All Req'd.	

REMOVAL OF STRUCTURES AND OBSTRUCTIONS

FROM STATION	TO STATION	LT.	RT.	REMARKS
"0" 245+57			X	EXIST. 3.5' X 12' WOODEN STAIRS
"L" 271+61		X		EXIST. WOODEN PEDESTRIAN BUS STOP
"0" 201+65		X		EXIST. WOODEN BOX CULVERT WING WALLS

STAIRWAY SUMMARY

STATION		LT.	RT.	REMARKS
"0" 245+57		X		SEE STANDARD DRAWING M-05.01 FOR MORE DETAILS

CULVERT SUMMARY

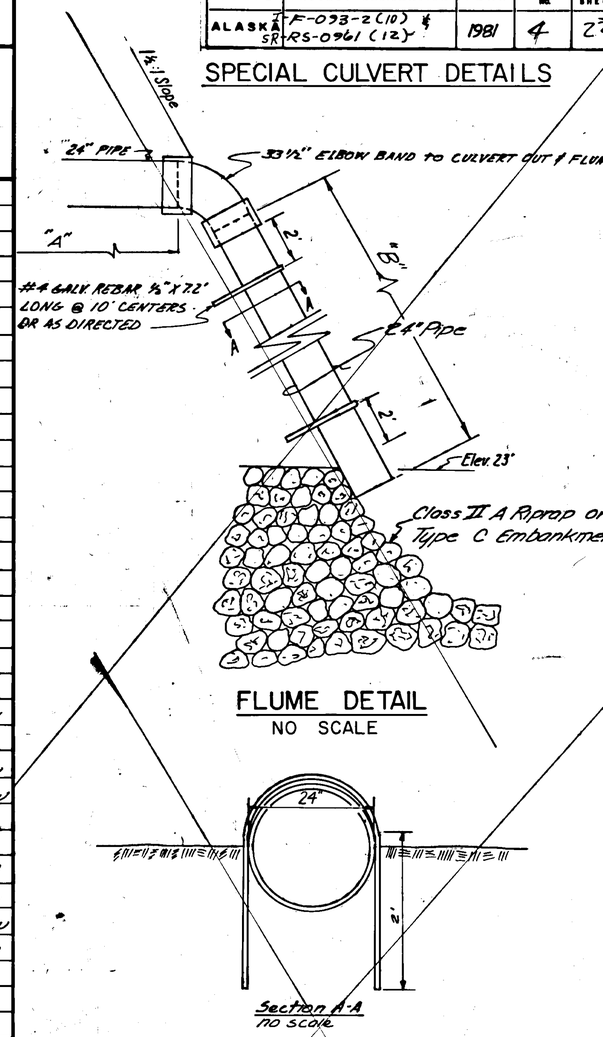
STATION	REMOVAL & DISPOSAL OF CULVERTS	INSTALL: HEIGHT OF COVER	INSTALL: 18" PIPE CONDUIT	INSTALL: 24" PIPE CONDUIT	INSTALL: 48" PIPE CONDUIT	INSTALL: 8" PIPE CONDUIT	REMARKS
"0" 199+86 Rt.	40'	1.5'	40'				
"0" 205+78	~~38~~ 50'	2.5'		~~80~~ 82' 34'			
"0" 206+21 Lt.	40'	1.5'	~~36~~ 39'				
"0" 212+75	53'	2'		~~66~~ 66' 10'			
"0" 215+61	49'	2'		~~58~~ 58' 12'			Skew 7° Lt. Ahd.
"0" 218+70	~~54~~ 46'	2.5'		~~78~~ 78' 06'			Skew 6° Lt. Ahd.
"0" 223+43	47'	2'		~~82~~ 82' 04'			~~*~~ A-56", B-28"
"0" 226+80	42'	3'		~~84~~ 84' 02'			~~*~~ A=60", B=24" Skew 18° Lt. Ahd.
"0" 230+35	~~46~~ 41'	2.5'		~~76~~ 76' 03'			~~*~~ A-58", B-18"
"0" 231+73	~~54~~ 24'	2.5'		~~72~~ 72' 03'			~~*~~ A-58", B-14"
"0" 233+~~34~~ 00	~~38~~ 26'	3.5'		~~64~~ 64' 72'			
"0" 243+99	46'	1.5'		~~54~~ 54' 96'			# See Note Below
"245+47	~~48~~ 10'	2'		~~52~~ 52' 74'			
"0" 245+54 Rt.	~~48~~ 48'	~~X~~ 6'					
"0" 247+60	~~55~~ 20'	2.5'		~~56~~ 56' 60'			# See Note Below
"0" 248+59	47'	2.5'		~~58~~ 58' 64'			# See Note Below
"0" 250+62	~~55~~ 52'	4'		~~66~~ 66' 72'			# See Note Below
"0" 251+75		4'		66' 68'			
"0" 252+24	51'						
"0" 253+59	~~49~~ 48'	5'		~~72~~ 72' 10'			# See Note Below
"0" 254+50	~~48~~ 40'	3.5'		~~66~~ 66' 70'			# See Note Below
"0" 255+13	~~57~~ 20'	5.5'		~~76~~ 76' 70'			# See Note Below
"0" 256+46	~~58~~ 20'	4'		~~70~~ 70' 71'			# See Note Below
"0" 257+17	50'	3.5'		~~66~~ 66' 71'			# See Note Below
"0" 258+45	54'	4.5'		~~74~~ 74' 70'			# See Note Below
"0" 259+~~86~~ 00+95	~~47~~ 48'	3.5'		64'			# See Note Below
"0" 260+79	~~46~~ 43'	3.5'		66			# See Note Below
"0" 262+92	65'	2.5'		66			# See Note Below
"0" 264+38	66'	7'				~~76~~ 66'	Skew 12° Lt. Ahd.
"0" 264+55 Rt.	22'	1.5'	~~30~~ 42'				
"0" 266+40	~~50~~ 52'	3'		~~68~~ 68' 37'			
"0" 268+47	~~24~~ 22'	5'		~~86~~ 86' 72'			# See Note Below
"0" 268+99 Rt.	21'	1.5'	~~36~~ 32'				
"0" 270+40	53'	1.5'		60'			
"L" 271+74 Rt.	37'	1.5'	40'				
"L" 272+75	~~43~~ 48'	2.5'		~~62~~ 62' 60'			
"0" 249+50			~~80~~ 76				
"0" 249+52 Rt.						~~74~~ 74' 43'	
"I" 1+50 Rt. end				7'			added add 41, pipe to existing

Install culvert invert at elev 23'

* Denotes flume installation; See details this sheet.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	I-F-093-2(10) & STRS-0961(12)	1981	4	27

SPECIAL CULVERT DETAILS



FLUME DETAIL
NO SCALE

Section A-A
no scale

Notes:

1. Rebar stakes shall be galvanized
2. Riprap @ flume outlet shall be shaped as directed.
3. Flume lengths & locations as indicated in culvert summary

This item not required

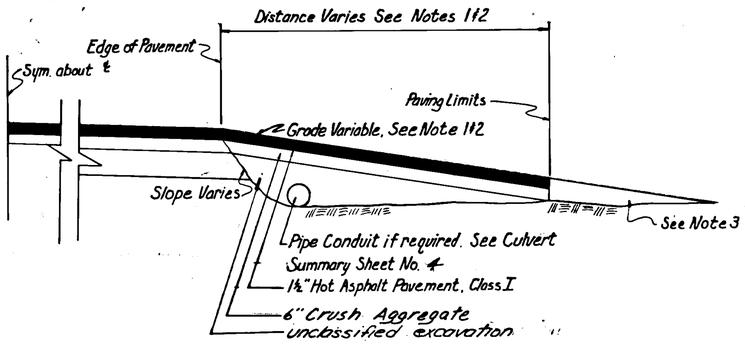
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-093-2(10) & SR-RS-096(12)	1981	5	22

GUARDRAIL, APPROACH AND MAILBOX SUMMARIES

APPROACH SUMMARY

STATION	LT.	RT.	WIDTH	RADIUS	REMARKS
"0" 198+92		X	~~18'~~ 20'	25'	≠ See Note 1 Below
"0" 206+20	X		~~16'~~ 20'	25'	
"0" 249+72		X	40'	25'	
"0" 250+~~75~~ +25		X	~~24'~~ 26'	25'	
"0" 252+10		X	14'	25'	
"0" 254+74		X	~~16'~~ 18'	25'	
"0" 260+07		X	~~16'~~ 20'	25'	
"0" 264+55		X	~~16'~~ 28'	25'	
"0" 268+13		X	~~14'~~ 18'	25'	
"0" 268+97		X	~~16'~~ 22'	25'	
"L" 271+74		X	14'	25'	≠
"L" 271+84	X		28'	30R~~2~~ 23.5 Lft.	* Lievers Pt. Road & Bus Shelter
"L" 272+52		X	~~20'~~ 16'	25'	≠ See Note 1 Below
270+60			20		

APPROACH DETAIL



Notes:

1. ≠ Indicates approaches to be reconstructed with materials detailed above. Paving limits shall be 20' beyond the edge of pavement or to the R/W line whichever is less.
2. * Indicates approoches to be reconstructed with 1½" Hot Asphalt Pavement MC-30 for Prime Coat, 4" Crushed Aggregate, and 9" Subbase Grading "A" Paving limits and finished profiles grades are shown on the intersection details.
3. This area shall be surfaced with unclassified excavation topped with 6" Crushed Aggregate.

GUARDRAIL SUMMARY

FROM STATION	TO STATION	OFFSET LT.	OFFSET RT.	REMOVE & DISPOSE	INSTALL	REMARKS
"L" 200+97.5	"L" 206+05.3	X		~~507.5~~ 506		
"L" 199+84	"L" 201+21		X	137.~~5~~ L.F.		
"L" 208+27	"L" 209+02	X		75 L.F.		
"L" 210+77	"L" 212+66	X		187.5 L.F.		
"L" 199+73	"L" 200+97.5	X		125 L.F.	X	Remove & Reconstruct Exist. Guardrail
"0" 199+~~75~~ 25	"0" 202+75		X		350 ~~300~~ L.F.	125 L.F. of reconst.
"0" 200+~~50~~ 55	"0" 206+10	X		581.25→	~~537.5~~ L.F.	R=25'
"0" 208+~~00~~ 02	"0" 235+29 #	X		2718.75→	~~2712.5~~	See Note #4
"0" 242+32.5 #	"0" 245+~~39~~ 65	X		312.5→	~~312.5~~ L.F.	See Note #3 & 4
"0" ~~243+69~~ 246+05	"0" 248+~~0~~ 03	X		200→	~~150~~ L.F.	See Note #3
"0" 248+~~32~~ 38	"0" 253+~~80~~ 80	X		537.5→	~~550~~ L.F.	
"0" 254+~~12~~ 10	"0" 303+25 "L" 0+~~73~~	X		912.5→	~~762.5~~ L.F.	R=30', L=47.12'
"0" 263+66	"0" 271+66	X			806.25 L.F.	

MAILBOX SUMMARY

STATION	L.T.	R.T.	no. OF BOXES	REMARKS
"0" 245+51		X	1	
"0" 254+70		X	1	
"0" 259+97		X	1	
"0" 264+74		X	1	
~~"0" 268+11~~ 267+95		X	1	
~~"0" 271+52~~ 271+40	X			~~R=25'~~ 12.5 L.F.
"0" 271+56		X	1	

NOTES

1. Guardrail lengths and locations shown in the above table are approx. only and are subject to minor revisions.
2. All guardrail radii of 150' or less shall be shop formed. Radii and approx. lengths are indicated in the table to the left.
3. Existing terminal ends @ "0" 235+29 & "0" 242+32.5 shall be reinstalled @ "0" 245+59 & "0" 245+89.
4. # Indicates proposed guardrail shall be connected to the existing guardrail. Standard Drawing G-13.16 or G14.08 shall not apply at these locations.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOT SHE
ALASKA	SR-RS-0961(12) I-F-093-2(10)	1981	6	22

SLOPE, UTILITY MONUMENT SUMMARIES

ESTIMATE OF QUANTITIES

Item No.	Item Description	Pay Unit	Remarks	I-F-093-2(10)	SR-RS-0961(12)
203(1A)	Common Excavation	C.Y.		281	36
203(2A)	Rock Excavation	C.Y.	8631	All Req'd	
203(10)	Rock Bolts	L.S.	Page 8	16 ea.	
203(9)	Rock Embankment	C.Y.	Page 11		473
203(5A)	Rock Borrow	C.Y.			
203(5B)	Common Borrow	Ton			
610(4)	Hand Laid Rock Embankment	L.S.	Sheets 10 & 11		All Req'd

TABLE OF SLOPES

LEFT CUT	LEFT FILL	STATION	RIGHT CUT	RIGHT FILL	LEFT CUT	LEFT FILL	STATION	RIGHT CUT	RIGHT FILL
		"0" 197+19.60 E.O.P.					"0" 235+29.17		
1½:1				3:1					
		"0" 199+90					"0" 242+22.73		
	1½:1			1½:1		1½:1			3:1
		"0" 203+75	1½:1				"L" 244+50		
	1½:1					1½:1		1:1	
		"0" 204+80					"0" 245+00		
50:1			¼:1			1½:1		1½:1	
		"0" 206+25					"0" 246+50		
1½:1			¼:1			1½:1		1:1	
		"0" 208+20					"0" 247+50		
50:1			¼:1			1½:1			3:1
		"0" 210+65					"0" 248+00		
	1½:1		¼:1			1½:1		1½:1	
		"0" 212+15					"0" 252+00		
50:1			1½:1			1½:1		Daylight to Ditch	
		"0" 213+90					"0" 259+90		
50:1			¼:1			1½:1		1½:1	
		"0" 214+65					"0" 268+40		
	1½:1		¼:1			1½:1			1½:1
		"0" 216+65					"0" 268+90		
	1½:1			3:1		1½:1	"L" 274+00 E.O.P.	1½:1	
		"0" 224+65							
	1½:1		1:1						
		"0" 225+65							
	1½:1		1½:1						
		"0" 231+75							
	1½:1			3:1					
		"0" 233+75							
	1½:1		1½:1						

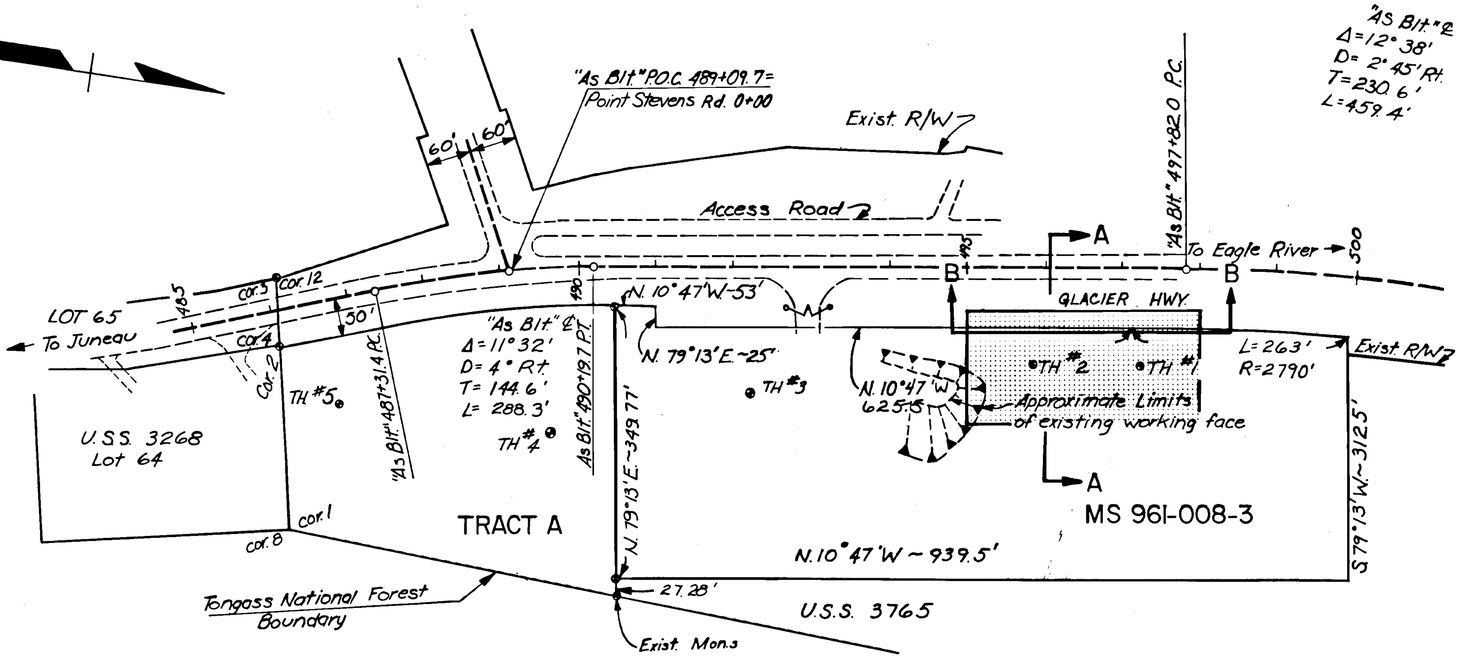
SURVEY MONUMENT SUMMARY

STATION	POINT	MONUMENT	CASE
"0" 203+78.08	P.T.	X	X
"0" 204+01.62	P.C.	X	X
"0" 208+00.00	P.O.C.	X	X
"0" 210+75.97	P.C.C.	X	X
"0" 213+79.71	P.I.	X	X
"0" 216+81.92	P.T.	X	X
"0" 219+26.09	P.C.	X	X
"0" 224+26.08	P.T.	X	X
"0" 225+17.08	P.C.	X	X
"0" 226+48.52	P.I.	X	X
"0" 227+79.30	P.T. BK.	X	X
227+92.06	P.O.T. AHD.		
"0" 232+75.54	P.C.	X	X
"0" 242+55.58	P.T. BK.	X	X
242+82.69	P.O.T. AHD.		
"0" 244+82.23	P.T.S.	X	X
"0" 250+82.23	P.S.C.	X	X
"0" 255+29.29	P.C.S.	X	X
"0" 261+29.29	P.S.T.	X	X
"0" 266+06.10	P.C.	X	X
"0" 271+28.50	P.T. BK.	X	X
"L" 271+38.70	P.O.T. AHD.		

NOTE:
The contractor shall install the new monuments in accordance with the plans and specifications. This work shall be accomplished under the direct supervision of a registered land surveyor, furnished by the contractor, who will furnish the Department a document certifying their accuracy. The standard of accuracy shall be Third-Order, Class I as specified in "Classification, Standards of Accuracy, and General Specifications of Geodetic Control Surveys," U.S. Dept. of Commerce-N.I.I.S. #PB 261037.

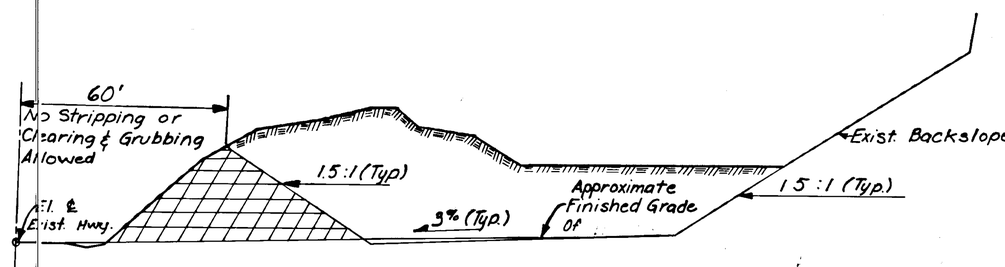
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	IF-093-2(10) & SR-RS-0961(12)	1981	6A	22

STATE FURNISHED MATERIAL SITE



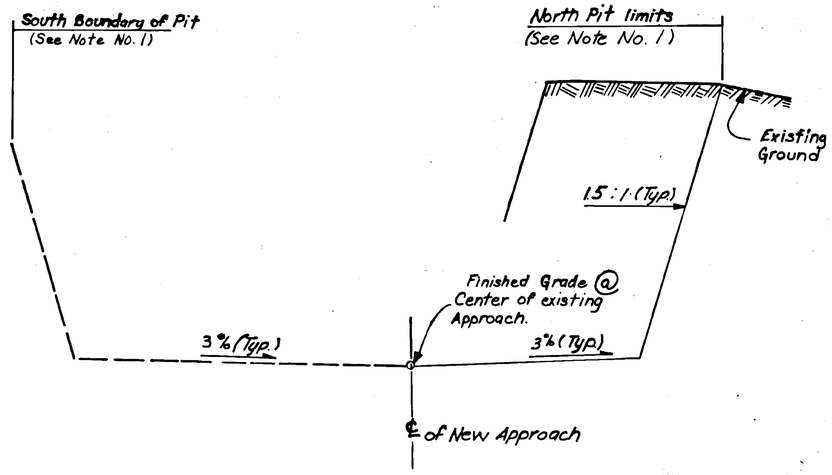
NOTES

1. ▨ Indicates the area of this material site that is available for the production of Asphalt Aggregate-Type I, Crushed Aggregate Base Course, and Subbase Grading "A".
2. The shaded area of this Borrow Site contains approximately 28,000 Bank Cubic Yards of material.
3. T.B.M. "T-H2 is a spike set in a 36" Spruce Tree located 36.5' Lt of "As Blt" 499+58.
4. Payment for any material not actually utilized on this project shall be considered incidental to other item of work
5. All waste material encounter in this source shall be disposed of outside the pit limits shown below.
6. Plant and stockpile sites may be located within the pit limits shown below. However the contractor shall obtain all required permits.
7. This material site is located at approximately 18 mile Glacier Highway.



1 ▨ Indicates existing material that's to remain in place.

SECTION A-A



SECTION B-B

Test Pit No. 1
Date 3/14/80
Elev. 115.20

1.0' 0.0' to 1.0' Brown Organic Overburden

FS-1 1.0' to 14.0' Greenish Gray Sandy Gravel with cobbles and Boulders - Dense. FS-1 = A-1-a, NFS, Mc = 9% - FS-2 = A1-9, NFS, Mc = 6%

FS-2 / End of Test Pit at Elev. 101.20

Test Pit No. 2
Date 3/14/80
Elev. 115.80

1.0' 0.0' to 1.0' Brown Organic Overburden

1.0' to 15.0' Greenish Gray Sandy Gravel with cobbles and Boulders - Dense. FS-3 = A-1-a NFS, Mc = 6%.

FS-3 End of Test Pit at Elev. 100.80

Test Pit No. 3
Date 3/19/80
Elev. 88.68

0.0' 0.0' to 10.0' Brown Sandy Gravel with cobbles and some boulders ~ Loose. FS-5 = A-1-a, NFS, MC 25%

FS-5

10.0' End of Test Pit at Elev. 78.68

Test Pit No. 4
Date 3/19/80
Elev. 89.18

0.0' 0.0' to 5.0' Brownish Green Sandy Gravel - Loose. FS-6 = A-1-a, F-1, MC = 11%

FS-6

5.0' 5.0' to 11.0' Brown Sandy Gravel with Cobbles and Boulders ~ Dense. FS-9 = A-1-a NFS, MC = 9%

FS-7 End of Test Pit at Elev. 78.18

Test Pit No. 5
Date 3/19/80
Elev. 89.68

0.0' 0.0' to 10.0' Brown Sandy Gravel with cobbles and some Boulders ~ Wet toward bottom of Pit - Loose. FS-8 = A-1-a, NFS, MC 7%

FS-8 End of Test Pit at Elev. 79.68

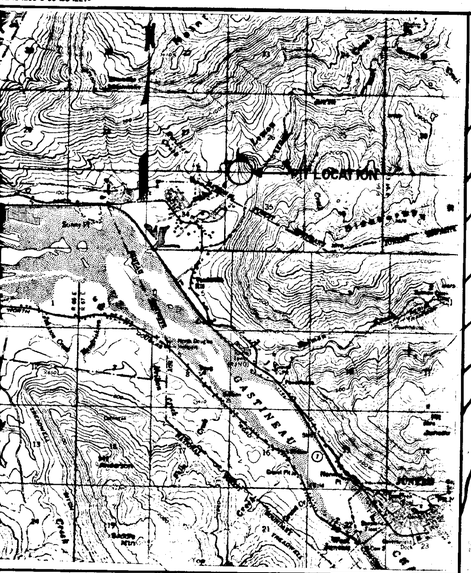
SYMBOLS

- Organic Material
- Gravel
- Test Pit Location
- Field Sample Location
- ▼ Water Table
- 5.0' - Debt. ↓ Feet

LOG OF TEST BORINGS

Addendum No. 1, Attachment No. 3

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEET
ALASKA	I-F-093-2(10) & SR-RS-0961(12)	1981	6B	



KEY MAP
SCALE 1"=5280'
BASED ON USGS JUNEAU B-2

VICINITY MAP FOR STATE FURNISHED MATERIAL SITE, U.S.M.S. 95-8-009-3

U.S. SURVEY 1762

"A" See Sheet No. X

LEMON CREEK PIT
MS 95-8-009-3

INDICATES THE AREA IN THIS MATERIAL SITE THAT IS AVAILABLE FOR DEVELOPMENT ON THIS PROJECT. SEE NOTE NO. 1 ON SHEET 6C.

US SURVEY 2487

US SURVEY 5504

US MINERAL SURVEY 609

SOUTH

VALLEY COURT

STOCKPILE ALL EXCESS EXCAVATION FROM CONSTRUCTION OF THE ACCESS ROAD IN THIS AREA

JUNEAU

JENKINS DRIVE

GLACIER HIGHWAY (LEMON ROAD)

ANKA STREET

APPROX. ALIGNMENT & LIMITS OF XX' ACCESS ROAD TO BE CONSTRUCTED. SEE SHEET 6D FOR TYPICAL SECTION.

APPROX. ALIGNMENT OF EXISTING ACCESS ROAD, APPROX. WIDTH = 24'

LEMON CREEK ROAD

MOBILEHAVEN

DAVIS AVENUE

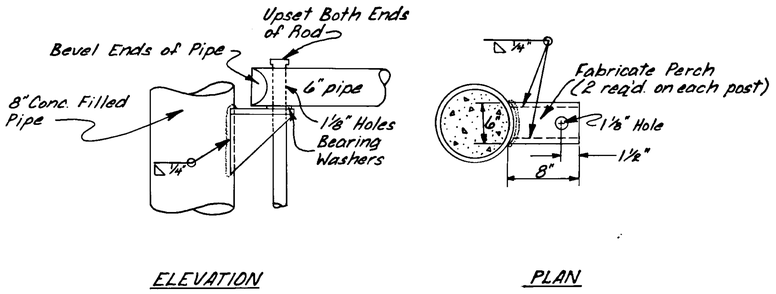
LEMON CREEK

LEMON CREEK PIT DEVELOPMENT PLAN

200 100 | 200
SCALE 1"=200'

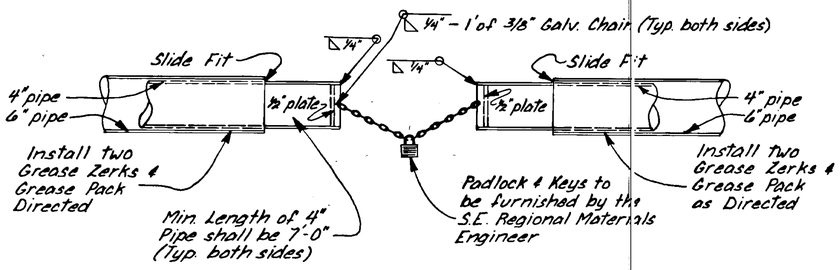
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	I-F-093-2(10) & SR-RS-0961(12)	1981	6C	

GENERAL NOTES & SECURITY GATE DETAILS FOR STATE FURNISHED MATERIAL SITE U.S.M.S. 95-8-009-3

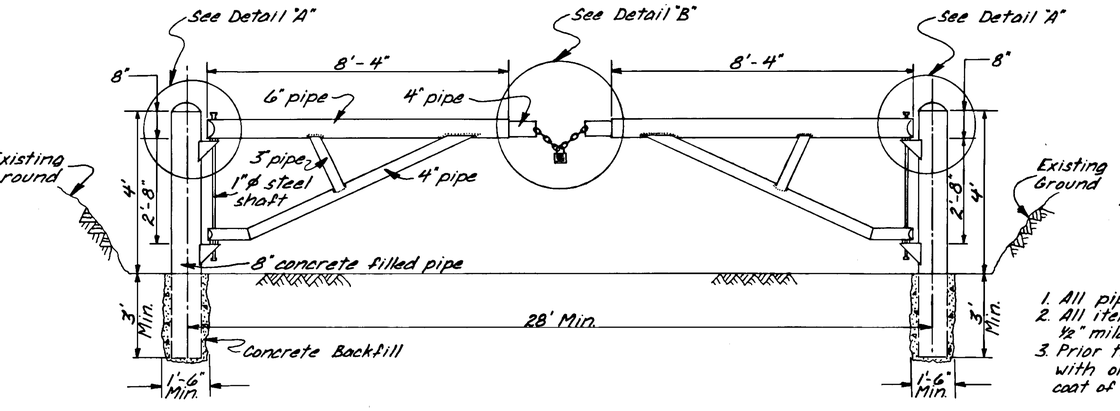


ELEVATION PLAN

DETAIL "A"



DETAIL "B"



NOTES
1. All pipe shall be schedule 40.
2. All items to be fabricated shall be made of ½" mild steel plate or flat bar.
3. Prior to erecting the gate it shall be painted with one coat of zinc chromate primer & one coat of international orange paint.

SECURITY GATE DETAIL
(Details Not to Scale)

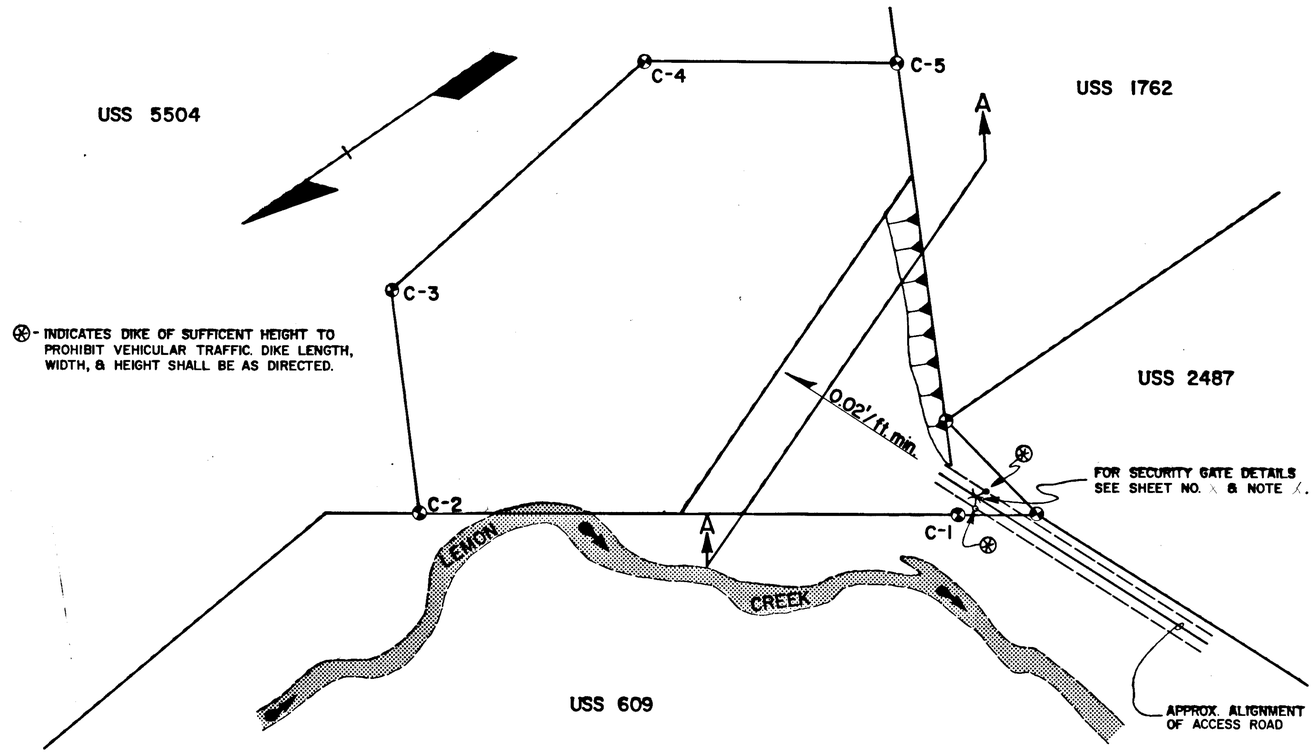
GENERAL NOTES

1. ▨ Indicates the area of this borrow site that is available for the production of Asphalt Aggregate-Type I, Crushed Aggregate Base Course, & Subbase-Grading "A".
2. The shaded area of this borrow site contains approx. 26,000 Bank Cubic Yards of material.
3. Construction & utilization of the access road accross U.S.S. 609 to the material site, by the contractor and/or his agents, is covered by an Access Agreement between the private land owners & D.O.T. & P.F. Copies of these agreements may be obtained from the S.E. Regional Design & Construction Engineer during regular working hours.
4. Payment for any material not actually utilized on this project shall be considered incidental to other items of work.
5. All organic material encountered in this source shall be disposed of outside the pit limits. All A-2 through A-4 material shall be stock-piled for future use. Payment for removal of all material not util-ized on this project shall be considered incidental to other items of work.
6. Plant & stockpile sites may be located within the available pit limits. However, the contractor shall obtain all required permits.
7. Working hours within this borrow site, limits shown on sheet 6B, shall be limited to 7:00 A.M. to 10:00 P.M. Monday through Friday, 8:00 A.M. to 5:00 P.M. on Saturday, & no work shall be allowed on Sunday.
8. The proposed security gate & dikes called for on sheet 6D shall be installed upon completion of the access road & shall be closed & locked during all non-working hours.
9. After clearing the interim area the contractor shall salvage & stock-pile all timber, 8" or more in dia., within the pit limits.
10. At no time shall unbenched faces greater than 20' in height be allowed in the pit.
11. If benched faces are required they shall be accessible from the pit floor & the distance between faces shall be 25'.
12. Upon completion of interim removal of material the pit floor shall be left in such a manner as not to impede the flow of water.

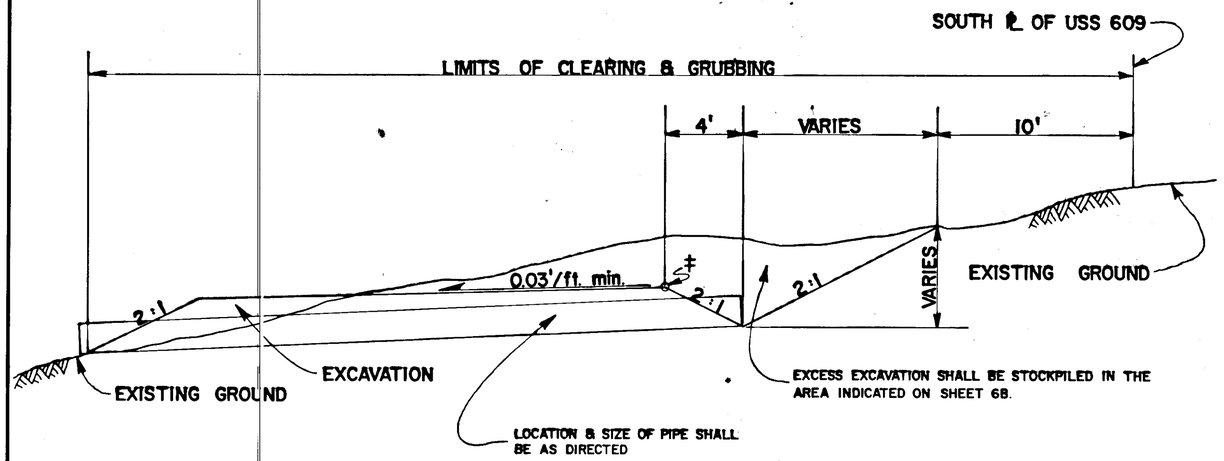
Addendum No. 1, Attachment No. 5

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	I-F-093-2(10) & SR-RS-0961(12)	1981	6D	

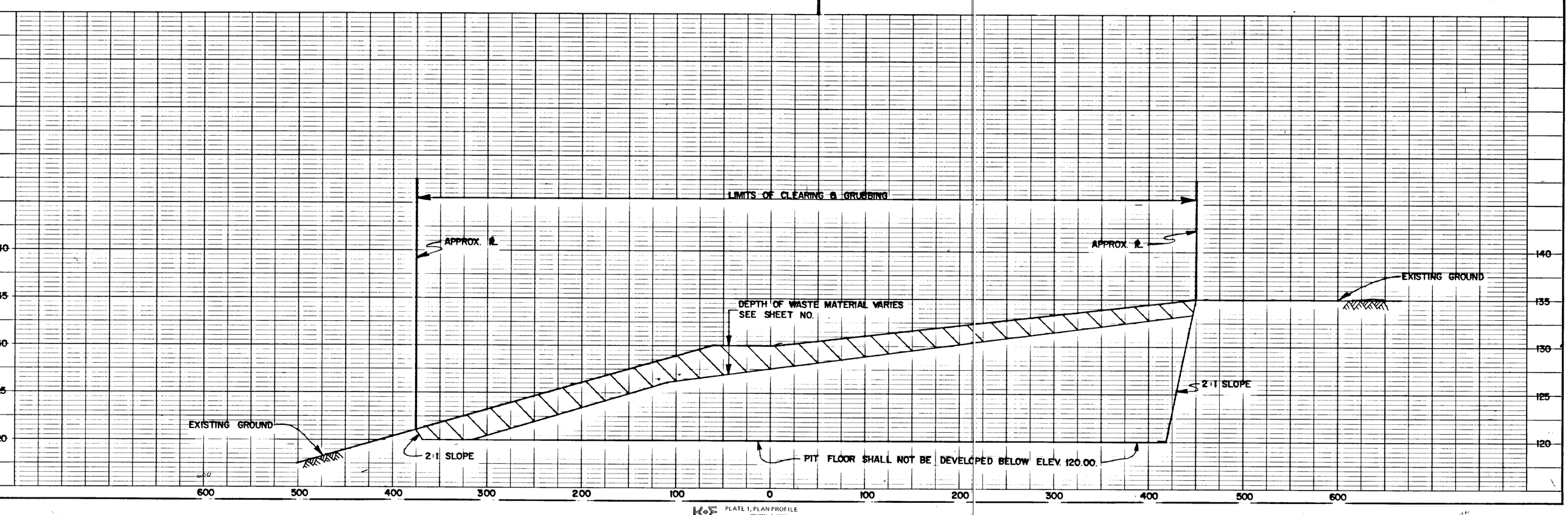
DEVELOPMENT PLAN



SITE DEVELOPMENT PLAN & TYPICAL SECTION OF ACCESS ROAD TO U.S.M.S. 958-009-3



‡ - FINISHED GRADE & ALIGNMENT SHALL BE APPROVED BY THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION.

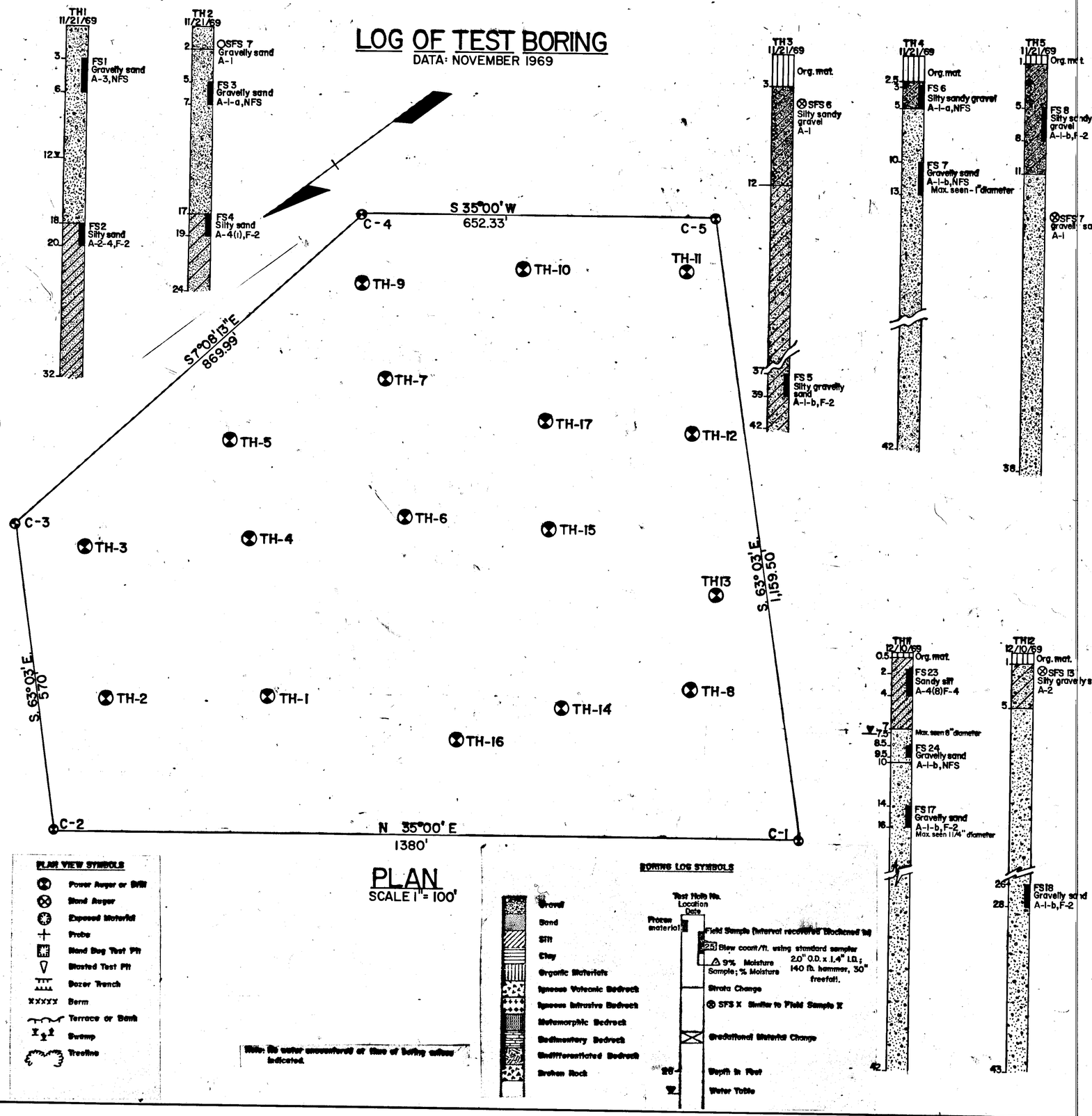


Addendum No. 1, Attachment No. 6

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	I-F-093-2(10) & SR-RS-0961(12)	1981	6E	

LOG OF TEST BORING

DATA: NOVEMBER 1969



PLAN

SCALE 1" = 100'

PLAN VIEW SYMBOLS

- Power Auger or Drill
- Hand Auger
- Exposed Material
- Probe
- Hand Dug Test Pit
- Blasted Test Pit
- Dozer Trench
- Berm
- Terrace or Bank
- Swamp
- Treeline

Note: No water encountered at time of boring unless indicated.

BORING LOG SYMBOLS

- Gravel
- Sand
- Silt
- Clay
- Organic Materials
- Igneous Volcanic Bedrock
- Igneous Intrusive Bedrock
- Metamorphic Bedrock
- Sedimentary Bedrock
- Undifferentiated Bedrock
- Broken Rock

Test Hole No. / Location / Date

Process material

Field Sample (Interval recovered Blackened by)

25 Blow count/ft. using standard sampler 2.0" O.D. x 1.4" I.D.; 140 lb. hammer, 30" freefall.

9% Moisture Sample; % Moisture

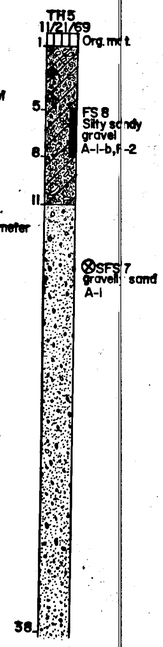
Strata Change

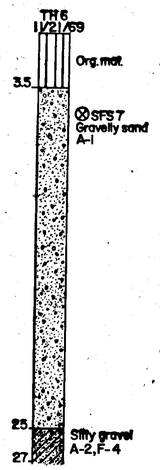
SFS X Similar to Field Sample X

Gradational Material Change

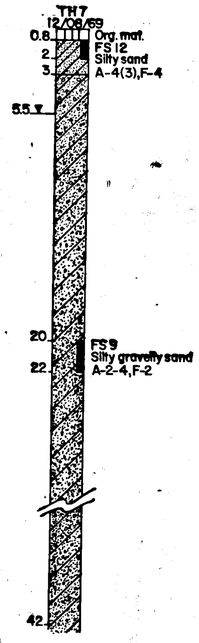
Depth in Feet

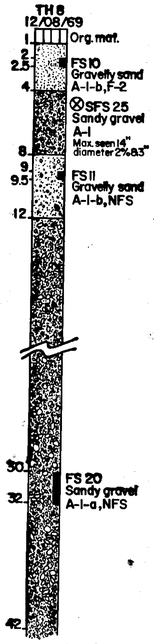
Water Table

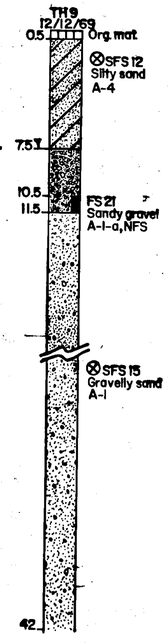


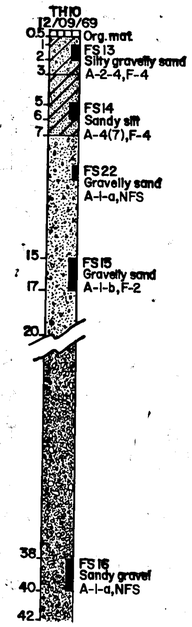


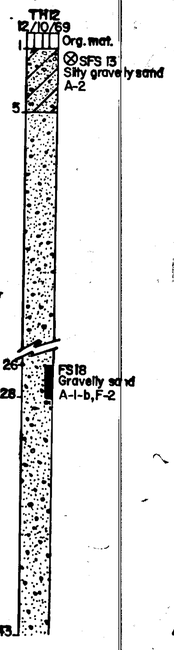
LOG OF TEST BORINGS FOR STATE FURNISHED MATERIAL SITE, U.S.M.S. 95-8-009-3

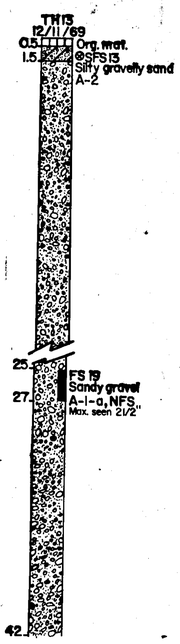


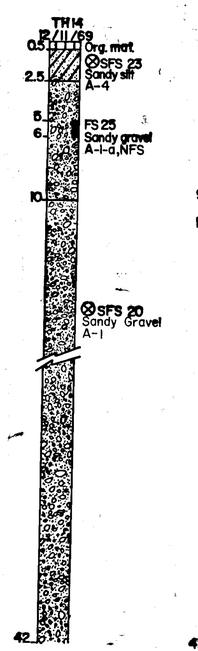


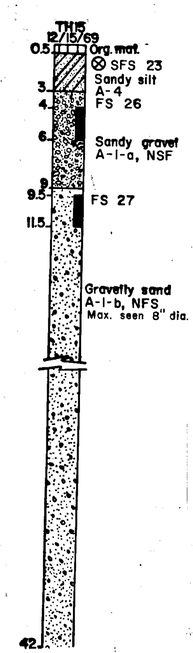


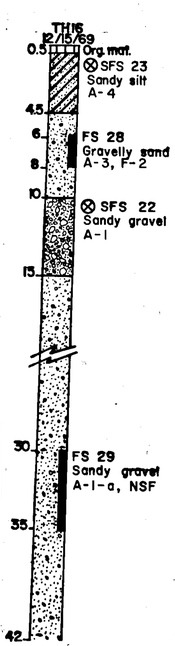


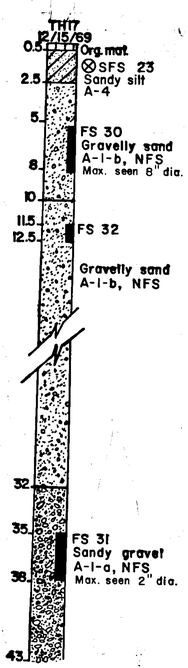












PLAN & PROFILE	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
	ALASKA	I-F-093-2(10)	1981	7	22

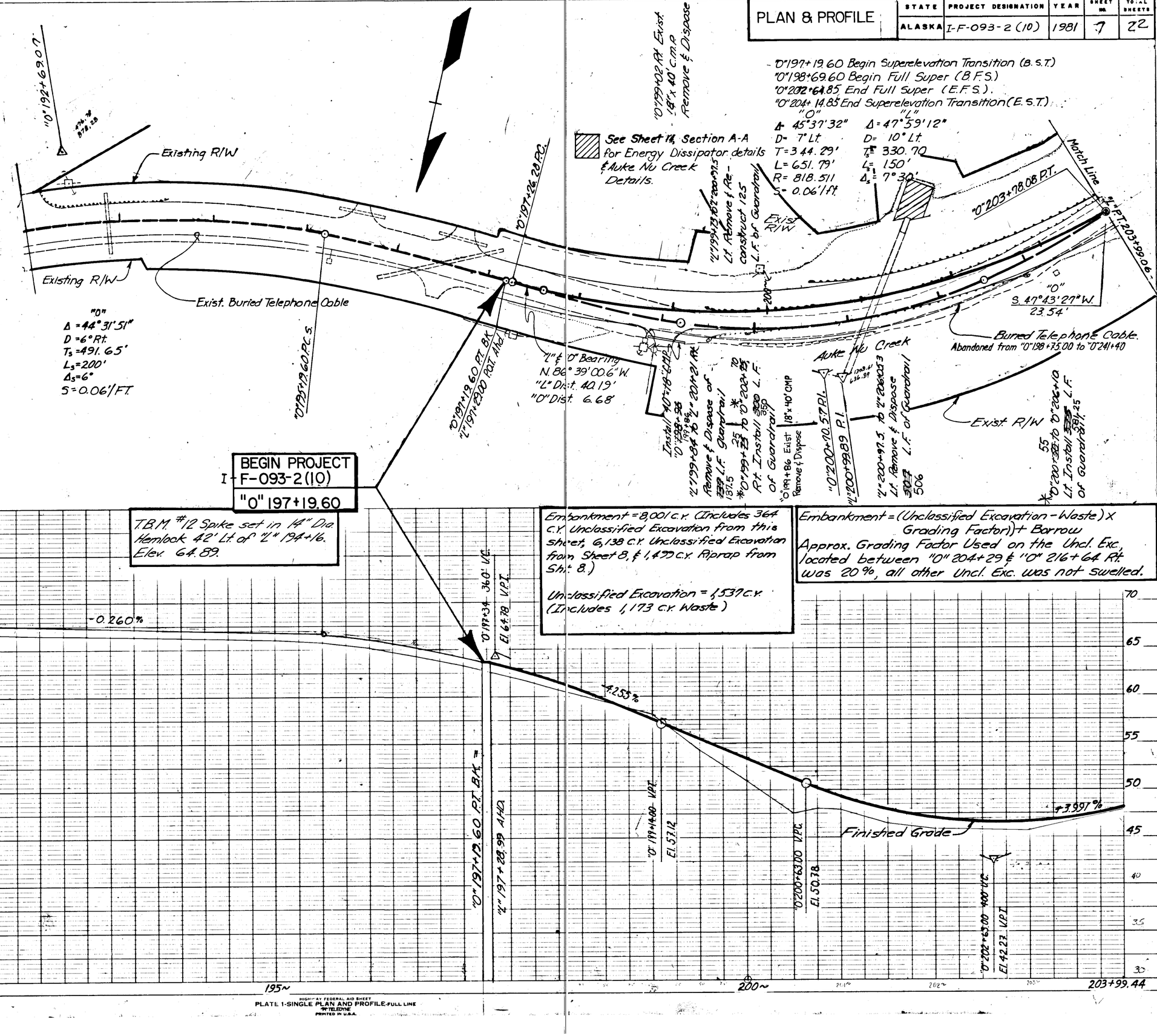
F-093-2(10) ONLY

HORIZONTAL CONTROL

State Plane Coordinates at Begin Project "0" 197+19.60
North 2,394,073.731
East 2,494,207.670
State Plane Coordinates at End Project "0" 242+22.73
North 2,393,835.419
East 2,489,856.712
Bearings Shown are Grid Bearings.
Distances Shown are Geodetic Distances.
Scale Factor = 0.9999271

VERTICAL CONTROL

Vertical Control was derived from U.S.C. & G.S. bench mark 2 (1917) a standard disc stamped "BM 2", set in the top of a large granite boulder on the north side of a small bay leading to the outlet of Auke Lake, with an elev. of 19.27 feet MLLW (Tidal Datum 1960)



BEGIN PROJECT
I-F-093-2(10)
"0" 197+19.60

T.B.M. #12 Spike set in 14" Dia. Hemlock 42' Lt. of "L" 194+16. Elev. 64.89.

Embankment = 8,001 c.y. (Includes 364 c.y. Unclassified Excavation from this sheet, 6,138 c.y. Unclassified Excavation from Sheet 8, & 1,499 c.y. Riprap from Sht. 8.)

Unclassified Excavation = 1,537 c.y. (Includes 1,173 c.y. Waste)

Embankment = (Unclassified Excavation - Waste) X Grading Factor)) + Borrow
Approx. Grading Factor Used on the Uncl. Exc. located between "0" 204+29 & "0" 216+64 Rt. was 20%, all other Uncl. Exc. was not swelled.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	I-F-093-2(10)	1981	8	22

PLAN AND PROFILE

"0" 202+59.24 P.I.
"L" 202+67.02 P.I.
"0" 213+79.10 P.I.
"L" 213+79.71 P.I.
"0" 216+81.92 P.I.
"L" 219+00.00
"0" 202+21, Lt. Remove & Dispose 18"x 40' C.M.P.
"0" 206+21, Lt. Install 18"x [illegible] C.M.P.
"0" 205+18, Existing Remove & Dispose 24"x [illegible] C.M.P.
"0" 205+00, Lt. Install 18"x [illegible] C.M.P.
"0" 205+00 to 208+00 Lt. Install 5'-5" O.F. Guardrail
"L" 208+27 to 209+02 Lt. Remove & Dispose 75 L.F. of Guardrail
"0" 208+00 Rt.
"0" 208+00 to "0" 235+23 Lt. Install [illegible] L.F. of Guardrail
"L" 209+77 to "L" 212+66 Lt. Remove & Dispose 187.5 L.F. of Guardrail
"0" 210+75.97 P.C.C.
"0" 212+75 Install 24"x [illegible]' C.M.P. "0"
"0" 212+75 Exist. 24"x 53' C.M.P. Remove & Dispose
"0" 215+46 Install 24"x [illegible]' C.M.P.
"0" 215+46 Existing 24"x 49' C.M.P. Remove & Dispose.
House
Concrete Water Tank
Garage
40'
"0" 202+62 P.C.
"0" 202+02.0
Match Line "L" P.T. 203+99.06
S 47°43'27" W ~ 23.54'
"0" 204+40
"0" 208+00 P.C.
Tan. Bearing N. 85°04'18" W
"0" 212+10.40
Abandoned Buried Telephone Cable
Exist. R/W
N 75°07'27" W ~ 244.17'
Match Line — "L" 219+00.00

"0"
Δ = 4°12'15"
D = 7°00' Rt.
T = 357.63'
L = 674.35'
R = 818.511'
S = 0.06'/ft.

"L"
Δ = 49°00'46" rock backslope.
D = 10° Rt.
T = 336.89
L = 150'
Δ = 7°30'

Sta. 208 ~ to 208+50 Rt., install 16 rock bolts, 1⅜" diameter, varying in length (25'-40'-total 480 L.F.)

Existing Eagle Tree "L" 208+50 — 168.2' Rt.

"0"
Δ = 9°56'51"
D = 1°38'30" Rt
T = 303.73'
L = 605.94'
R = 3490.10'
S = 0.035'/ft.

"L"
Δ = 10°42'17"
D = 4° Rt.
T = 134.20'
L = 267.62'
R = 1432.39'

"0" 204+63.00 V.P.I. El. 50.25
"0" 204+25.00 V.P.C. El. 51.53
"0" 203+64.85 B.S.T. -
"0" 205+14.85 B.F.S. -
"0" 210+01.00 E. 6% F.S.
"0" 211+57.00 B.F. 3.5% S.
"0" 216+31.93 E.F.S.
"0" 217+81.93 E.S.T.
* Installation of end anchorage

Indicates Clearing Limits

T.B.M. #13 Point on rock outcropping 24' Rt. of "L" 208+21. Elev. 62.07

Embankment = 1,793 c.y. (Includes 902 c.y. Unclassified Excavation from this sheet & 891 c.y. Riprap from this sheet.)

Unclassified Excavation = 13,885 unsweetted (c.y. Includes 883 c.y. waste.)

"0" 209+00.00 V.C. El. 68.49 V.P.I.
Finished Grade
-3.705 %
+3.991 %
"0" 213+15.00 V.P.T. El. 52.35
"0" 215+25 V.P.C. El. 44.09
"0" 217+25.00 400' V.C. El. 38.68 V.P.I.

65 60 55 50 45 40 35

203+99.44 205 206 207 208 209 210~ 211 212 213 214 215~ 216 217 218 219~

HIGHWAY FEDERAL AID SHEET
PLATE 1-SINGLE PLAN AND PROFILE-FULL LINE
TELEDYNE
PRINTED IN U.S.A.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	I-F-093-2(10)	1981	9	22

PLAN AND PROFILE

"0" 218+10 Exist. 24"x [illegible] C.M.P. Remove & Dispose

"0" 219+26.08 P.C.

"0" 219+26.08 Install 24"x [illegible] C.M.P.

"0" 223+43 Existing 24"x 47' C.M.P. Remove & Dispose

"0" 223+49 Install 24"x [illegible] C.M.P. 64'

"0" 224+26.08 P.T.

"0" 225+67.08 P.C.

"0" 226+80 Existing 24"x 42' C.M.P. Remove & Dispose

"0" 226+80 Install 24"x [illegible] C.M.P. 62'

"0" 227+03.66 P.I.

"0" 227+29.30 P.T. Bk. = 227+00.06 P.O.T. Ahd

"0" 230+35 Existing 24"x [illegible] C.M.P. Remove & Dispose

"0" 230+35 Install 24"x [illegible] C.M.P. 68'

"0" 231+73 Exist. 24"x [illegible] C.M.P. Remove & Dispose

"0" 231+73 Install 24"x [illegible] C.M.P. 68'

"0" 232+75.54 P.C.

"0" 232+75.54 P.C.

"L" 219+00.00

"L" 233+00.00

Match Line

Match Line

Exist. R/W

Exist. R/W

220'

225'

25'

N 75°07'27" W ~ 244.17'

S 84°52'34" W 91.00'

N 85°17'27" W 483.48'

"L" 222+01.27 P.I.

"0" 221+78.65 P.I.

Abandoned Buried Telephone Cable

"L" 228+92.87 P.T. Bk. = "L" 228+96.39 P.O.T. Ahd

"0"	"L"
Δ = 20°00'00"	Δ = 18°27'26"
D = 4°00'00" Lt.	D = 4° Lt.
T = 252.57'	T = 232.73'
L = 500.00'	L = 461.43'
R = 1,432.39'	R = 1432.39'
S = 0.05'/ft.	

"0" 218+26.08	B.S.T.
"0" 219+76.08	B.F.S.
"0" 223+76.08	E.F.S.
"0" 225+67.08	E.S.T.

"0"	"L"
Δ = 9°50'00"	Δ = 7°34'46"
D = 3°45'00" Rt.	D = 2° Rt.
T = 131.43'	T = 189.76'
L = 262.22'	L = 378.97'
R = 1527.89'	R = 2864.79'
S = 0.05'/ft.	

"0" 223+76.08	B.S.T.
"0" 225+67.08	B.F.S.
"0" 227+29.30	E.F.S.
"0" 228+92.0	E.S.T.

⊕ INDICATES THE INSTALLATION OF AN ANCHOR FURNISHED BY THE GLACIER HIGHWAY ELECTRICAL ASSOCIATION AND INSTALLED IN CONJUNCTION WITH THE PLACEMENT OF THE EMBANKMENT. THE ANCHOR SHALL BE INSTALLED AT "0" 226+60, 51' LT. AND TOP OF THE ANCHOR ROD SHALL BE SET AT ELEVATION + 24.0'.

Embankment = 10,775 c.y. (Includes 2,863 c.y. Unclass. Excavation from this Sheet, 292 c.y. Uncl. Excav. from Sheet 10, 3,415 c.y. Uncl. Excav. from Sht. B, & 4,205 c.y. Riprap from Sht. B)
Uncl. Excav. = 2,863 c.y. (Incl. No Waste)

+0.44%

-1.33%

"0" 219+25 V.P.C. El. 39.57

"0" 224+15 V.P.C. El. 41.74

"0" 226+15 V.P.T. El. 42.63 100' V.C.

"0" 227+29.30 P.T. Bk. = 227+00.06 P.O.T. Ahd

"0" 228+27.78 V.P.T. El. 39.07

"L" 228+92.87 P.T. Bk. = "L" 228+96.39 P.O.T. Ahd

"0" 231+94 V.P.T. El. 35.08

Finished Grade

219'

220'

225'

230'

233'

45

40

35

30

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	I-F-093-2(10) & SR-RS-0961(12)	1981	10	22

PLAN AND PROFILE

SR-RS-0961(12)
HORIZONTAL CONTROL

State Plane Coordinates @ Begin Project "0" 242+22.73
North 2,393,835.419
East 2,489,856.712

State Plane Coordinates @ End Project "L" 274+00
North 2,392,746.517
East 2,487,032.985

Bearings Shown are Grid Bearings.
Distances Shown are Geodetic Distances.
Scale Factor = 0.9999271

SR-RS-0961(12)
VERTICAL CONTROL

A Standard Highway Disk stamped "BM Auke 1977," set in a large boulder, 55' Lt. of "L" 243+84, Elev. 18.98 M.L.L.W. (1960 Tidal Datum)

"0" Δ = 11°29'07" Lt.
D = 2°15'00"
T = 256.09'
L = 510.46'
R = 2546.48'
S = 0.04'/ft
"0" 231+75.54 B.S.T.
"0" 233+25.54 B.F.S.

"0" 233+31 Existing 24" x 26' CMP Remove & Dispose

Exist. Water Line

Exist. Ferry Terminal

Show proposed pile

"L" 233+00.00

Match Line

Exist. Wood Stave Water Tank

S 83°13'26" W ~ 163.26'

"L" 235+70.39 P.I.
"0" 235+31.63 P.I.

"0" 237+86.00 P.T.

"0" 239+49.26 P.C.

Abandoned Buried Telephone Cable

"0" 241+02.75 P.I.

"L" 242+17.94 P.I.

"L" Δ = 10°11'22" D = 3° T = 170.27' L = 339.65' R = 1909.86'

"0" 233 ~ Install 24" x 72' CMP

Existing R/W

"0" Δ = 9°11'21" D = 3° T = 153.48' L = 306.30' R = 1,909.86'

"L" Δ = 8°23'59" D = 2°30' Rt. T = 168.29' L = 335.99' R = 2,291.83

"0" 242+05.57 E.F.S., "L" 243+82.70 E.S.T

END PROJECT
I-F-093-2(10)
BEGIN PROJECT
SR-RS-0961(12)
"0" 242+22.73

"0" 242+32.5 to "0" 245+32.5 Lt. Install 3225 L.F. of Guardrail 312.5

*246+05 "0" 245+32.5 to "0" 246+00 Install 225 L.F. Guardrail 200

03 Approval

"0" 243+99 Exist. 24" x 46' C.M.P. Remove & Dispose

"0" 243+99 Install 24" x 36' C.M.P.

"0" 245+47 Exist. 24" x 66' C.M.P. Remove & Dispose

"0" 245+47 Install 24" x 54' C.M.P.

"0" 245+55 Rt. Exist. 24" x 48' C.M.P. Remove & Dispose

"L" & "0" N 87°35'13" W ~ 199.54'

Existing R/W

Existing Buried Telephone Cable

"0" 244+55.57 Rt. Bk. "L" 242+82.23 Ahd

"0" 244+82.23 P.C.

Sta. 244+59 to Sta. 245 ~ Rt. Install 10' x 41' Stabilization matting.

"0" 244+80 to "0" 246+20 Install hand Laid Rock embankment

"0" Sta. 245+54 Rt. Install 18" x 6' C.M.P.

P-3

House

Match Line "L" 246+00.00

Soil Stabilization Matting

* Installation of End Anchorage

"L" 233+00 to "0" 235+29.17:
Embankment = 37 C.Y. (Includes 37 C.Y. Undl. Excav. From this Sht.)
Unclass. Excav. = 329 C.Y. (Includes No Waste)
"0" 242+22.73 to "L" 246+00:
Embankment = 213 C.Y. (Includes 141 C.Y. Undl. Excav. from this Sht. & 72 C.Y. from Sht. 8)
Unclass. Excav. = 878 C.Y. (Includes 305 C.Y. Waste.)

Finished Grade

"0" 233+44 V.P.I. El. 33.08 300' V.C.

"0" 234+94.00 V.P.T. El. 32.11

"0" 235+29.17

0.580 %

Requires Striping & Signing Only
See Project I-F-093-2(2)

"0" 242+20 V.P.C. El. 28.17

"0" 242+22.73

"0" 242+55.57 Bk. "L" 242+82.70 Ahd

+0.91 %

Finished Grade

"0" 244+70 500' V.C.
El. 26.71 V.P.T.

35 30 25 20

233~ 234~ 235~ 236~ 237~ 238~ 240~ 241~ 242~ 243~ 244~ 245~ 246~

HIGHWAY FEDERAL AID SHEET
PLATE 1-SINGLE PLAN AND PROFILE-FULL LINE
TELEDYNE
PRINTED IN U.S.A.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SR-RS-0961(12	1981	11	22

"0" Δ=3°24'43" D=3° L.T. Ts=839.01' Δs=9° Ls=600' Lc=447.06' S=0.45'/ft. "0"244+82.22 B.S.T. "0"250+82.22 B.F.S. "0"255+29.30 E.F.S. "0"261+29.30 E.S.T.

"L" Δ=3°24'45" D=3° L.T. T=537.06' L=1047.08'

Match Line "1" 246+00.00

Match Line 262+

Exist. RW

Exist. Buried Tele. Cable

"0"247+58 Install 24"x36' C.M.P. 61'

"0"247+59 Exist. 24"x41' C.M.P. Remove & Dispose

"0"248+59 Install 24"x64' C.M.P. 64' Install 18"x76' C.M.P.

"0"249+40 Exist. 24"x35' C.M.P. 28' Remove & Dispose

Exist. non activity located 1.61' left of "L" line P.C.

"0"250+62 Exist. 24"x52' C.M.P. Remove & Dispose

"0" 250+82.23 P.S.C.

"0"250+62 Install 24"x72' C.M.P.

"0"253+59 Exist. 24"x41' C.M.P. Remove & Dispose

"0"253+59 Install 24"x64' C.M.P. 70'

"0"253+59 Exist. 24"x48' C.M.P. Remove & Dispose

"0"253+59 Install 24"x70' C.M.P.

"0"253+59 Existing 24"x48' C.M.P. Remove & Dispose

"0"254+30 Install 24"x70' C.M.P.

"0" 255+29.29 P.S.C.

"0"255+13 Install 24"x48" C.M.P. 70'

"0"255+19 Existing 24"x51' C.M.P. Remove & Dispose

"0"256+46 Install 24"x70' C.M.P.

"0"256+46 Existing 24"x58' C.M.P. Remove & Dispose

"0"257+12 Existing 24"x50' C.M.P. Remove & Dispose

"0"257+12 Install 24"x C.M.P. 41'

"0"258+45 Exist. 24"x54' C.M.P. Remove & Dispose

"0"258+45 Install 24"x C.M.P. 70'

"0"259+84 Exist. 24"x48' C.M.P. Remove & Dispose

"0"260+79 Exist. 18"x C.M.P. Exist. C.M.P. Remove & Dispose

"0"261+29.29 P.S.T.

561°00'04"W 476.81'

Exist. Buried Telephone Cable

"0"262+22 Install 24"x C.M.P.

"0"262+69 Install 24"x C.M.P.

Exist. RW

Garage

House

"0" 248+69 to "0" 251+70 Lt. construct 8' wide parking turnout.

P.T. "0"253+21.24

P.C. "0"253+50.02

"0" 248+38 to "0" 253+80 Lt. Install 537.5 L.F. of guard-rail.

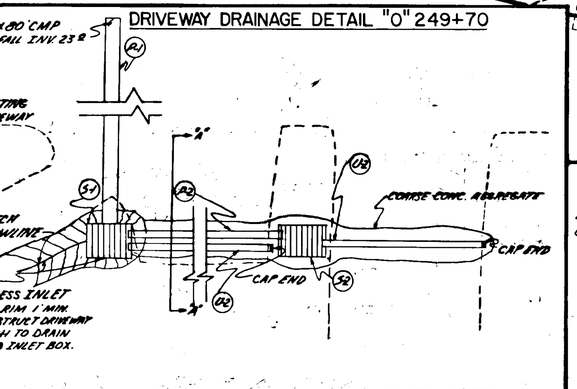
"0" 254+ to "0" 258+ Lt. Install 805 L.F. of Guardrail.

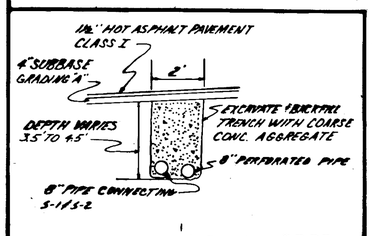
"0" 255+60 to "0" 258+30 Lt. Construct 8' wide parking turnout.

*Sta. "0" 263+66 to *Sta. "0" 271+66 Lt. Install 806.25 L.F. of Guardrail

* Installation of end anchorage

DRIVEWAY DRAINAGE DETAIL "0" 249+70





Drainage Structure Summary

INLET NO.	TYPE INLET	LOCATION STATION	LOCATION OFFSET	El. TOP OF STRUCTURE	INLET	OUTLET
S-1	"A"	249+50	36' RT	32.5	28.7	28.0
S-2	"A"	249+96	37' RT	33.1	29.5	29.[illegible]

Pipe Summary

PIPE NO.	PIPE DIA.	PIPE LENGTH	FROM STRUCTURE	FROM INVERT	TO STRUCTURE	TO INVERT
P-1	18"	89'-1½"	S-1	28.0	OUTFALL	23.0 x6.8
P-2	8"	[illegible]'-4¾"	S-2	29.14	S-1	28.7
U-1	8"	[illegible]' 40'	UNDERDRAIN	[illegible] 29.2	S-1	28.7
U-2	8"	40'	UNDERDRAIN	[illegible] 30.2	S-2	29.5

Notes:
1) Estimated quantity porous backfill material = 34 c.y.
2) Type 6-9 gutter grate to be used on both inlet structures.

TBM #1 ~ High point on 4'x4'x4' Boulder 86' Lt. ℄ Sta. 255+22

Embankment = 6,187 c.y. (Includes 2,369 c.y. Uncl. Exc. from this sht, 432 c.y. Uncl. Exc. from Sht. 10, 48 c.y. Uncl. Exc. from Sht. 12, & 3,438 c.y. Uncl. Exc. from Sht. 8) Uncl. Exc. = 2,448 c.y. (Incl. 179 c.y. waste)

+1.07 %

-0.16%

-0.31%

+0.06 %

Finished Grade

"0"249+20 U.P.I. 100 V.C. El. 28.99

"0"249+30 U.P.C. El. 31.24

"0"252+30.82 U.P.T. El. 32.31 200 V.C.

"0"251+30 U.P.T. El. 32.15

"0"257+82.40 U.P.T. El. 31.05 100 V.C.

"0"260+19.86 U.P.T. El. 30.15 100 V.C.

246~ 247~ 248~ 249~ 250~ 251~ 252~ 253~ 254~ 255~ 256~ 257~ 258~ 259~ 260~ 261~ 262~

35 30 25 20

K&E PLATE 1, PLAN PROFILE KEUFFEL & ESSER CO.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SR-RS-0961(12)	1981	12	22

"L" & "O"
Δ = 15° 40' 19"
D = 3° Lt.
T = 262.84'
L = 522.40'
R = 1909.86'
S = .045'/ft.

"O" 262+32, Exist 24" C.M.P. Remove & Dispose
"O" 262+92, Install 24" x 66' C.M.P.
"O" 264+38, Install 48" x 80' C.M.P.
"O" 264+38 Exist 24" x 66' C.M.P. Remove & Dispose
"O" 264+38 RT. Exist 24" x 22' C.M.P. Remove & Dispose
"O" 266+06.10 P.C.
"O" 266+40 Exist 24" x 52' C.M.P. Remove & Dispose
"O" 266+47 Exist 24" x 36' C.M.P. Remove & Dispose
"O" 265+06.11 B.S.T.
"O" 266+56.11 B.F.S.
"O" 270+78.51 E.F.S.
"L" 272+38.71 E.S.T.
"O" 266+79 Exist 24" x 21' C.M.P. Remove & Dispose
"O" 270+40 Exist 24" x 53' C.M.P. Remove & Dispose
"O" 270+40 Install 24" x 60' C.M.P.
Sta "L" 1+50 Install 24" x 7' C.M.P. on Existing Pipe.
0+37.60 P.C.
1+72.04 P.T.
"L" S. 45° 19' 45" W.
"O" S. 61° 00' 04" W - 476.84'
Sta "O" 263+46 to Sta "O" 271+46 Install 806.25 L.F. Guardrail.
"O" 263+55.42 Rt. Install 18" x 42' C.M.P.
Exist. Buried Telephone Cable
"O" 266+42 Install 24" x 57' C.M.P.
"L" 269+23.61 P.I.
"O" 269+68.94 P.I.
"O" 269+99, 32' Rt. Install 18" x 32' C.M.P.
"L" 270+10.38 P.C.C.
"O" 270+28.38 P.O.T. Ahd.
"O" 270+175, Install 18" x 32' C.M.P.
"O" 271+28.38 P.O.T. Bk.
"L" 271+38.38 Rt. Exist. 24" x 37' C.M.P. Remove & Dispose
"L" 272+74.32' Rt. Install 18" x 40' C.M.P.
"L" 272+74.75 Exist. 24" x 48' C.M.P. Remove & Dispose
"L" 272+75 Install 24" x 60' C.M.P.
Exist RW
National Park Road
Liever's Pt. Rd.
Exist RW
END TEMPORARY CONNECTION "L" 275+00
END PROJECT SR RS-0961(12)
BEGIN TEMPORARY CONNECTION "L" 274+00
See Sht. 13 for Liever's Point Road Intersection.

✳ Installation of end anchorage

T.B.M #2 - 8" Spike in 20" Spruce, 60' Rt. ℄ Sta. 270+83

Embankment = 2,270 c.y. (Incl. 1,830 c.y. Uncl. Exc. from this Sht., & 440 c.y. Uncl. Exc. from Sht #8)
Uncl. Excav. = 2,266 c.y. (Incl. 388 c.y. Waste.)

+0.06 %
Finished Grade
Exist Roadway
"O" 265+35.41 V.P.C. Elev. 30.41
"O" 269+90.41 V.P.T. Elev. 30.57
"O" 270+55.41 V.P.T. Elev. 39.91
Finished Grade
Match @ "L" 274+00.00 Elev. 51.70
"O" 271+28.51 P.T. Bk.
"L" 271+38.31 P.O.T. Ahd.

262~ 270 275~

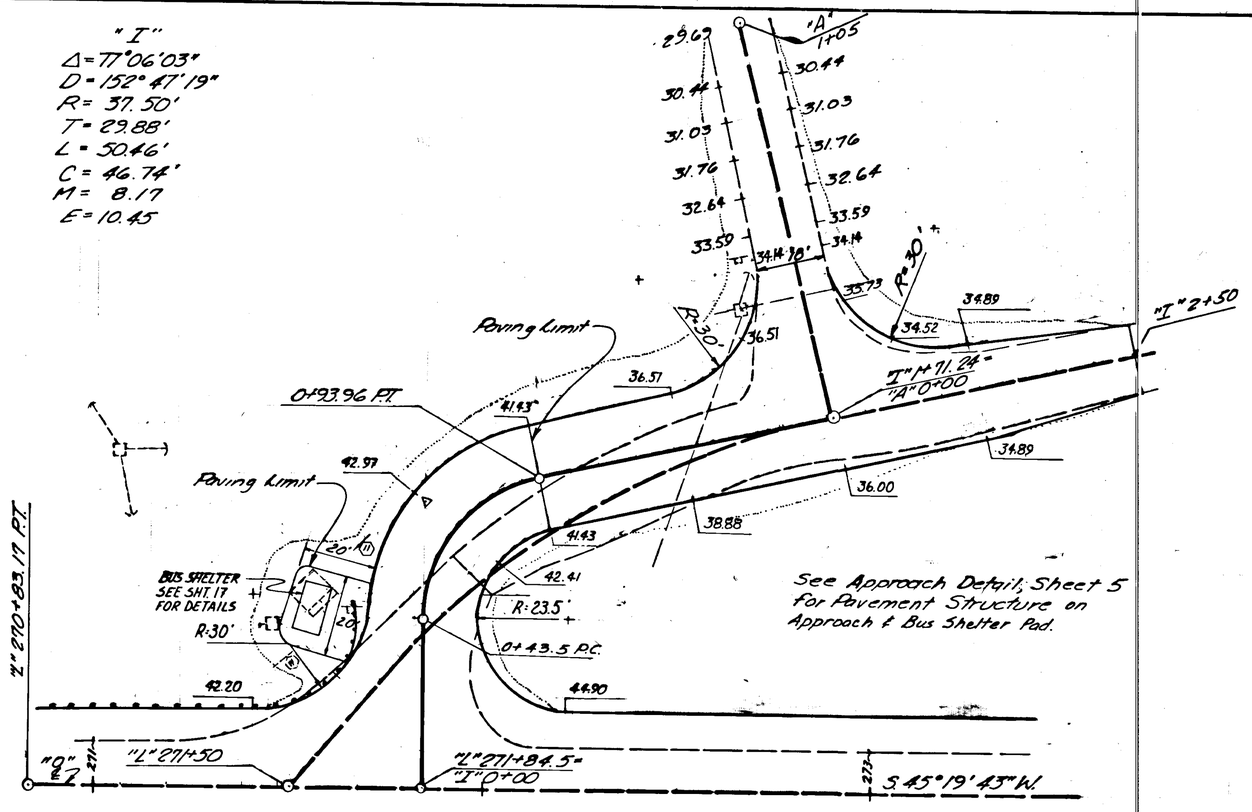
55 50 45 40 35 30 25 20

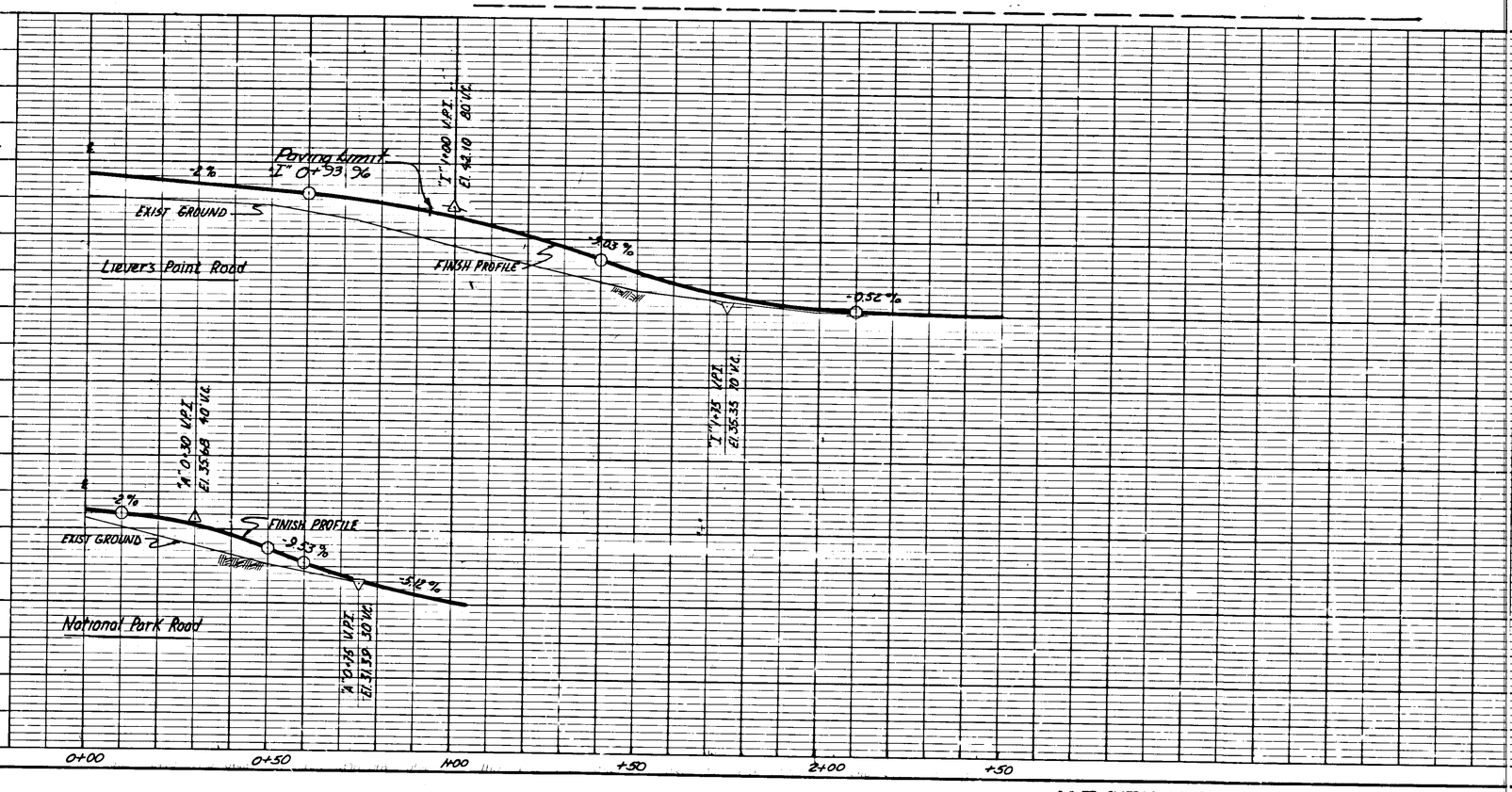
K·E PLATE 1, PLAN-PROFILE KEUFFEL & ESSER CO.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SP-RS-0961(12)	1981	13	22

LIEVERS PT. ROAD INTERSECTION DETAILS

"I"
Δ = 77°06'03"
D = 152°47'19"
R = 37.50'
T = 29.88'
L = 50.46'
C = 46.74'
M = 8.17
E = 10.45

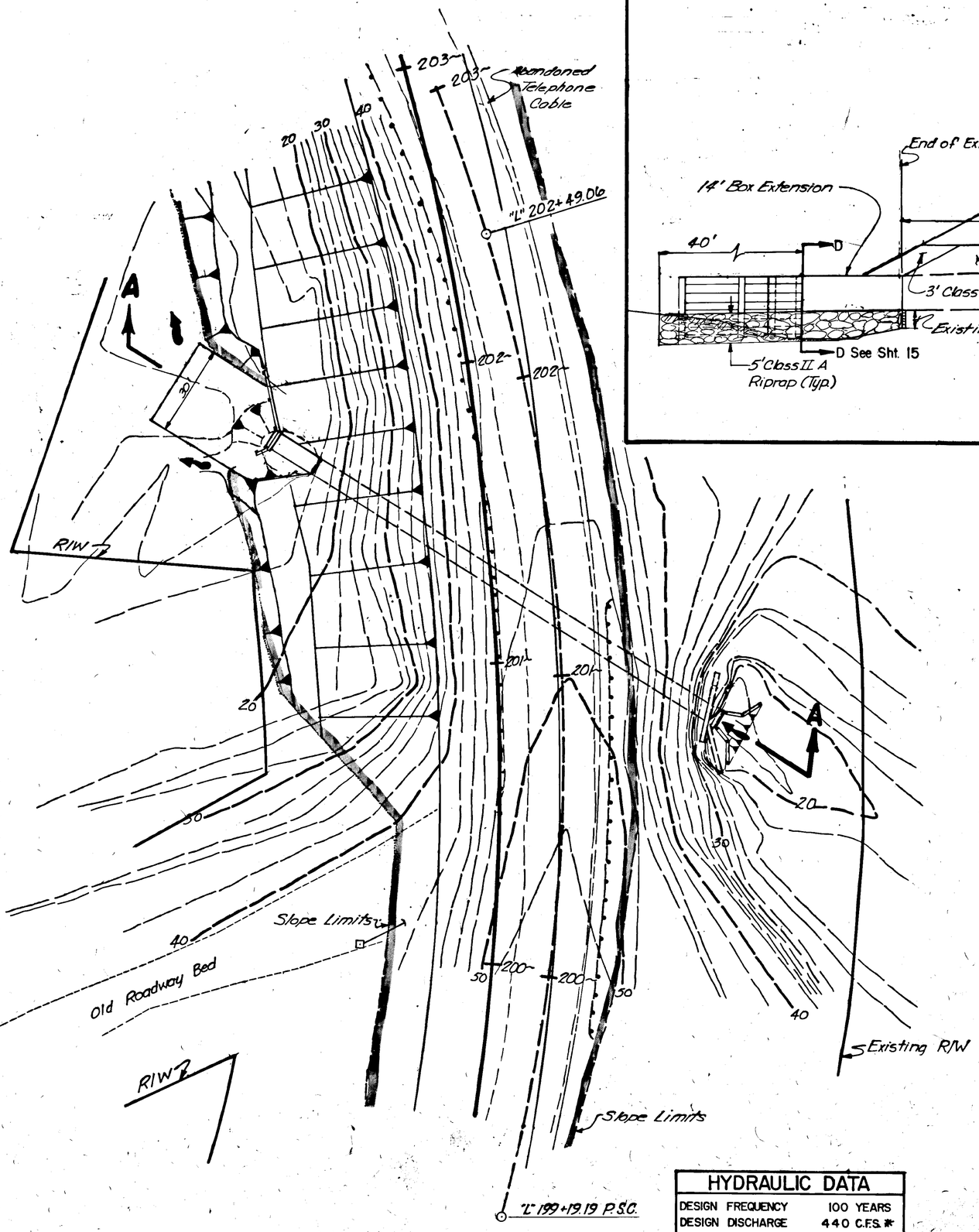


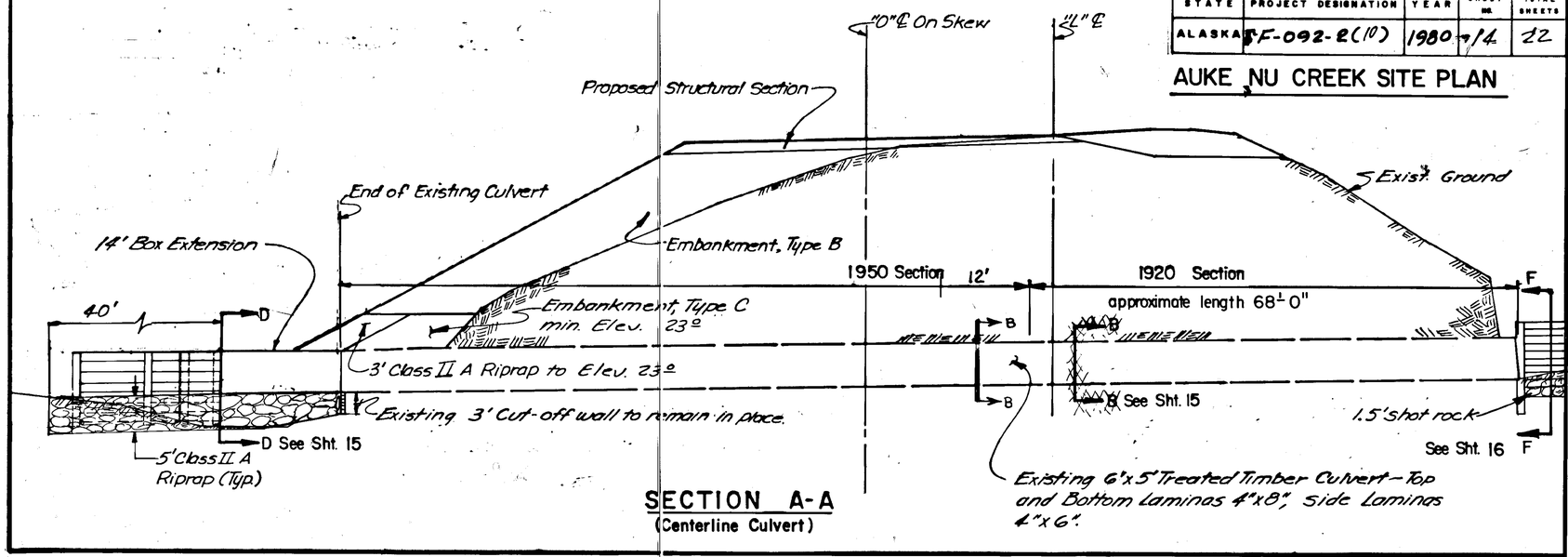


K+E PLATE 1, PLAN-PROFILE
KEUFFEL & ESSER CO.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-092-2(10)	1980	14	22

AUKE NU CREEK SITE PLAN





SECTION A-A
(Centerline Culvert)

NOTES

1. Portal As Built Plans of the existing Auke Nu Creek Culvert are available for inspection in the Design Office of the Southeast Region, 7 Mile Glacier Highway.
2. If the contractor damages the existing box culvert during the placement and/or compaction of riprap or embankments, he shall repair all damaged sections as directed and at his cost.
3. See Sheet 16 for Estimate of Quantities.
4. All angles, bolts, nuts, washers and spikes shown on Sheets 15 and 16 shall be galvanized after fabrication.
5. All drilling required on the Glu-Lam panels and timbers used in shoring up the 1920 section of existing culvert shall be field drilled. All field drilled holes and cuts shall be treated in accordance with AWPA-M4. — +12 additional feet of the 1950 section
6. All drilling required on the Glu-Lam panels used on the 14' extension shall be Shop drilled and treated in accordance with AWPA-M4.
7. Dual treatment of all timbers & Glu-Lam panels detailed on Sheet 15 and 16 shall be required. Timbers shall be treated in accordance with AWPA-C14, Glu-Lam panels shall be treated in accordance with AWPA-C28 "Treatment of Individual Laminations Before Gluing".

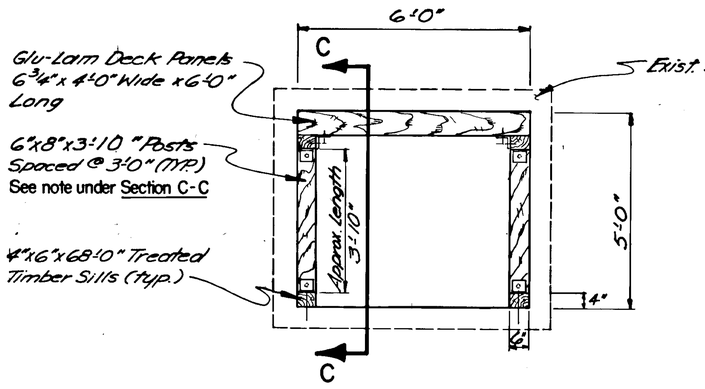
HYDRAULIC DATA

DESIGN FREQUENCY	100 YEARS
DESIGN DISCHARGE	440 C.F.S. *

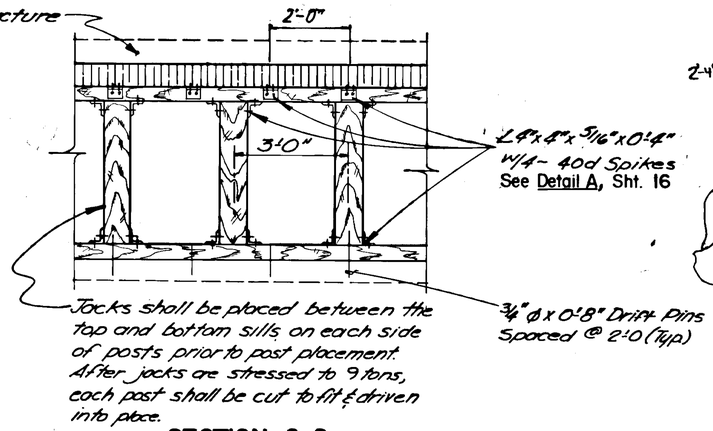
* WHEN TAIL WATER = ELEV. 24.92

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	FF-093-2(10)	1981	15	22

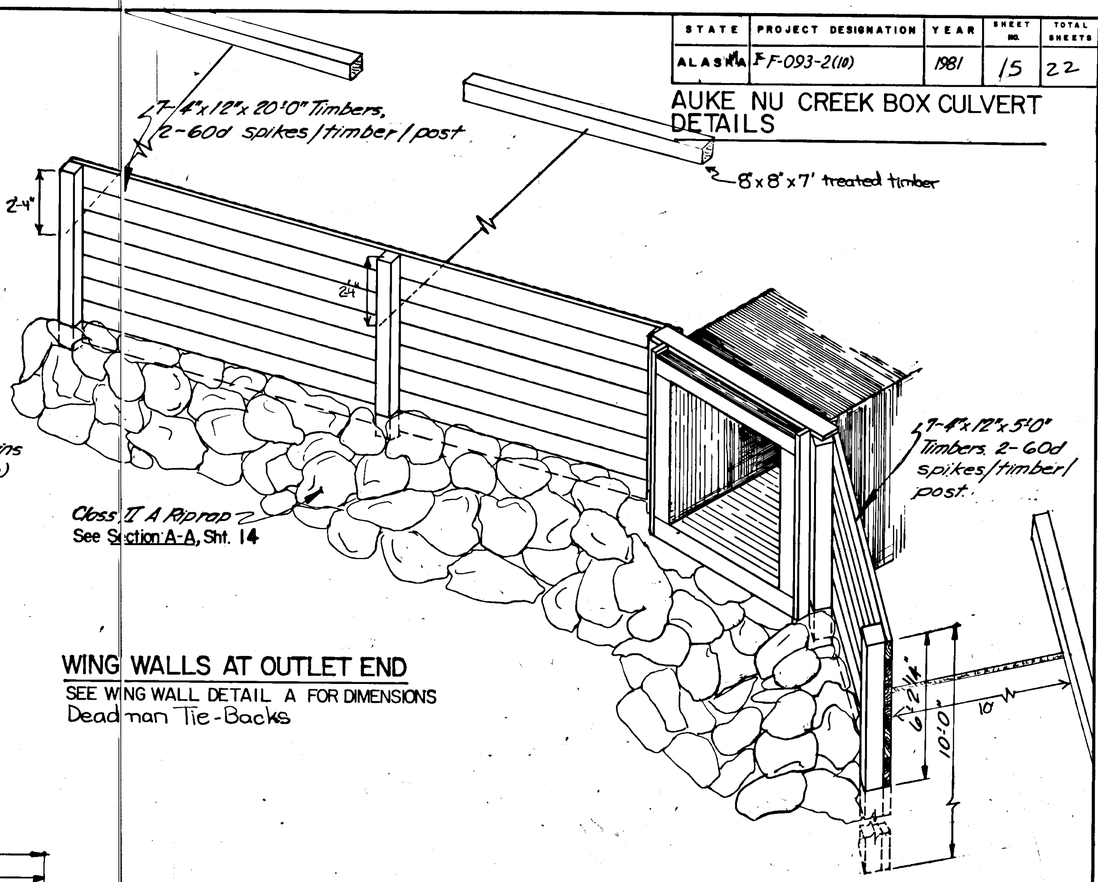
AUKE NU CREEK BOX CULVERT DETAILS



SECTION B-B



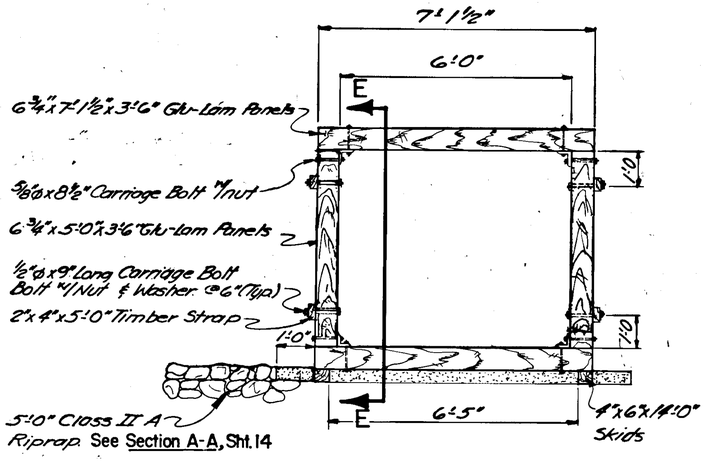
SECTION C-C



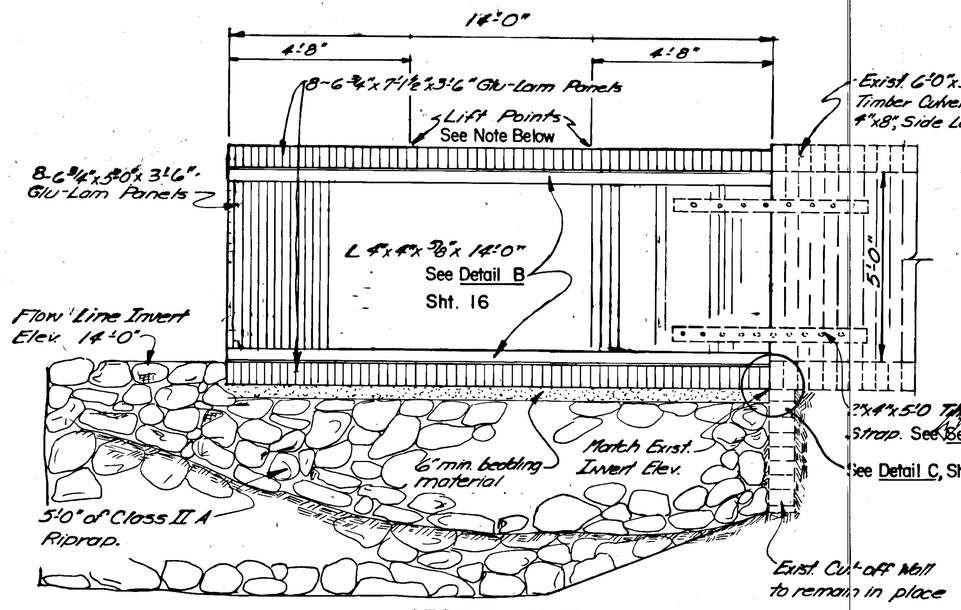
WING WALLS AT OUTLET END

SEE WING WALL DETAIL A FOR DIMENSIONS

Dead man Tie-Backs

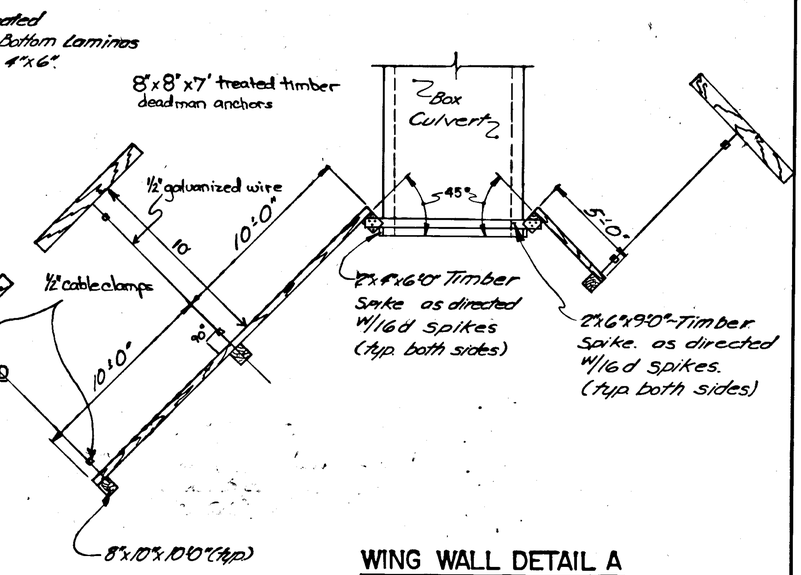


SECTION D-D



SECTION E-E

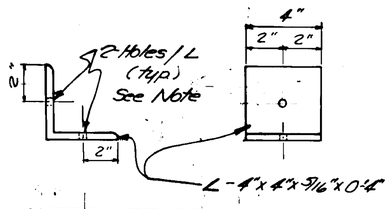
NOTE:
If the contractor's method of placement for the entire 7'-1 1/2" x 6'-1 1/2" x 14'-0" structure requires it to be lifted, it shall be slung at the locations detailed above.



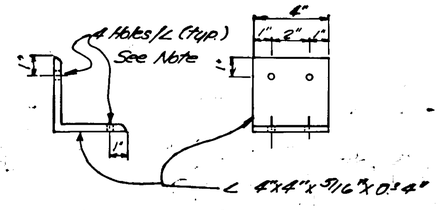
WING WALL DETAIL A

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-093-2(10)E RS-0961(12)	1981	16	22

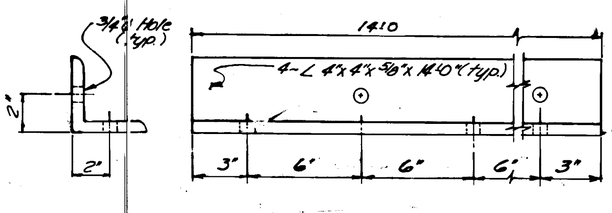
AUKE NU CREEK BOX CULVERT DETAILS



ALTERNATE DETAIL A

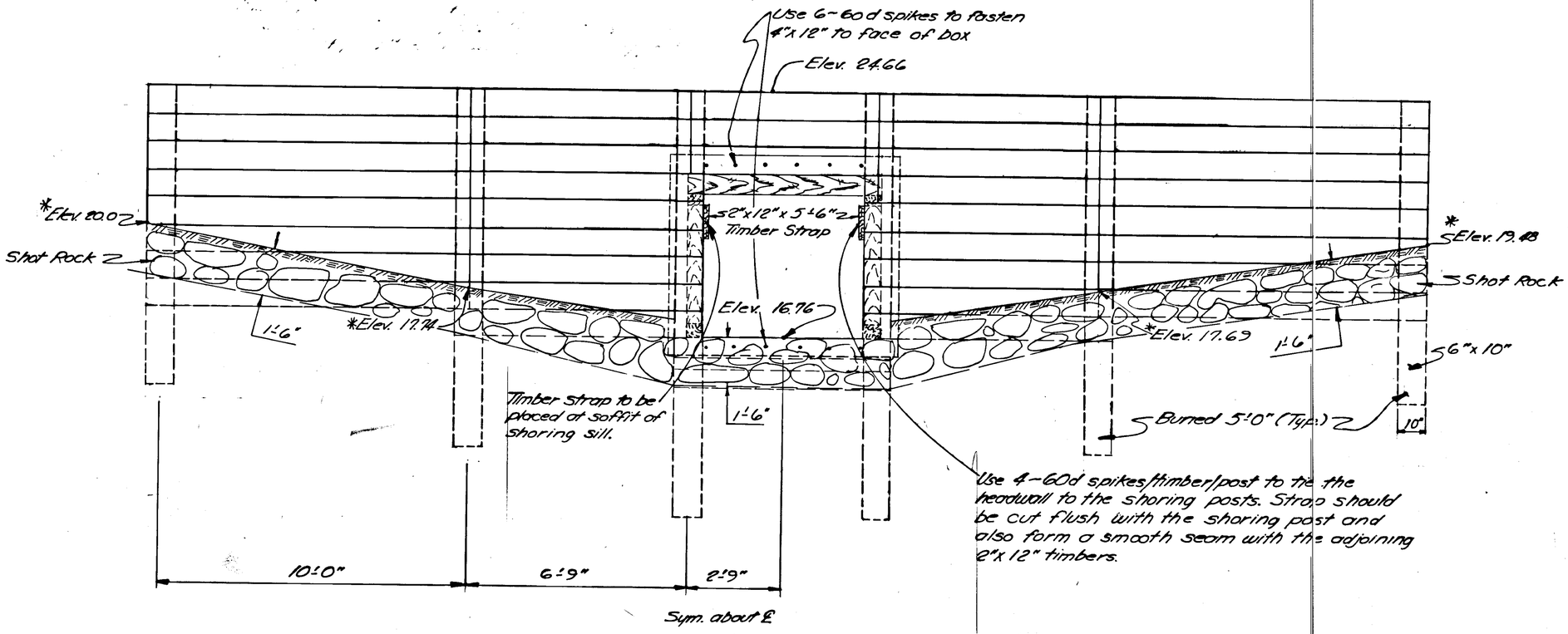


DETAIL A



DETAIL B

NOTE:
The contractor, at his option, may use either 4-40d spikes or 2-3/4"x5" long lag bolts to fasten the angles to their respective members. All angle fabrication will be done prior to Galvanization, and fastener holes shall not exceed the diameter of the spike/lag bolt diameter by more than 1/8". All fasteners should be installed into prebored holes to prevent the wood from splitting. Pre-boring information for spikes and lags can be found in tables 5.9 and 5.10 respectively of the A.I.T.C. "Timber Construction Manual," Second Edition.



Use 4-60d spikes/timber/post to tie the headwall to the shoring posts. Straps should be cut flush with the shoring post and also form a smooth seam with the adjoining 2"x12" timbers.

* Indicate Approximate Existing Ground Elevations.

SECTION F-F

WING WALLS AT INLET END

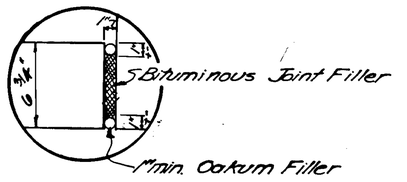
SEE WING WALL DETAIL B FOR DIMENSIONS

ESTIMATE OF QUANTITIES CULVERT SHORING

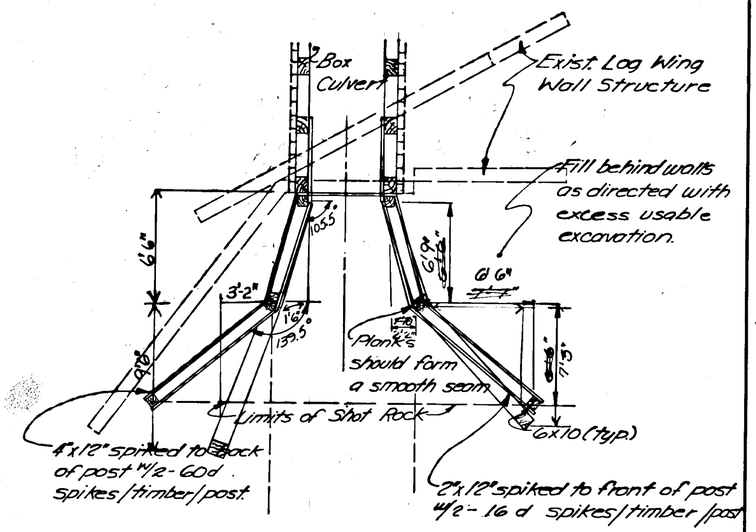
ITEM	QUANTITY
Glu-Lam Panel	4.35 MBM
Treated Timber	1.25 MBM
Treat. Timber (Wing Walls)	3.98 MBM
Angles-4"x4"x5/8"x14'0"	56 Ft.
Drift Pins-3/4"Øx0'-8"	24 Ft.
Spikes-60d	15.0 Lbs.
Spikes-40d	36 Lbs.
Spikes-16d	3 Lbs.
Shot Rock	7.0 Yds.

ESTIMATE OF QUANTITIES FOR CULVERT EXTENSION

ITEM	QUANTITY
Glu-Lam Panels	3.81 MBM
Treat. Timber (Wingwalls & Bracing)	1.10 MBM
Spikes-16d	0.5 Lbs.
Spikes-60d	6.5 Lbs.
Bolts-1/2"Ø x 9"	17.4 Lbs
Bolts-3/8"Ø x 8 1/2"	93.5 Lbs.
Unclass. Excavation	197 C.Y.
Class II A Riprap	260 C.Y.
Bedding Material	1.5 C.Y.
Angles-4"x4"x5/8"x14'-0"	56 Ft.



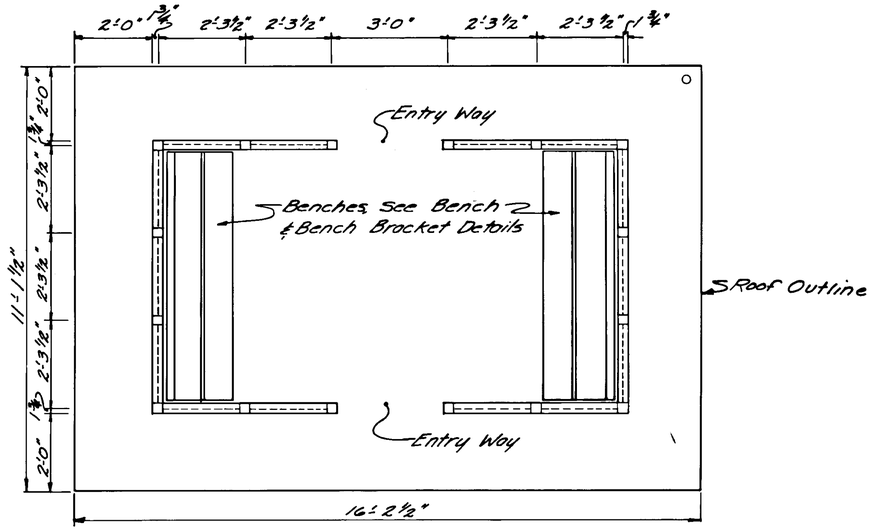
DETAIL C



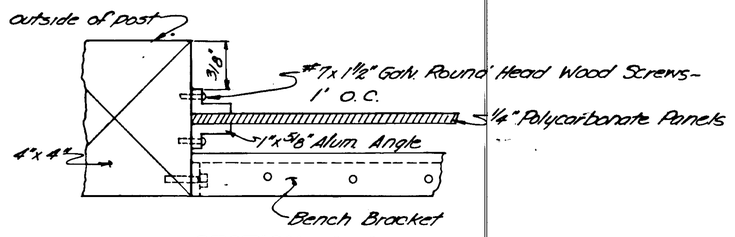
WING WALL DETAIL B

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RRS-0961(12)	1981	17	22

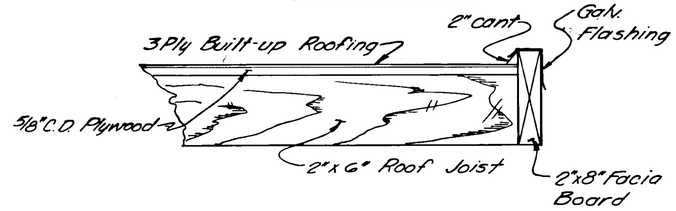
BUS SHELTER



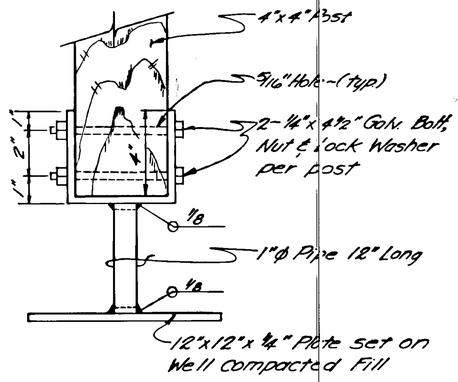
PLAN VIEW



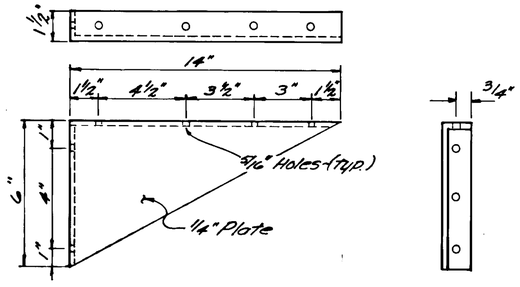
SECTION A-A



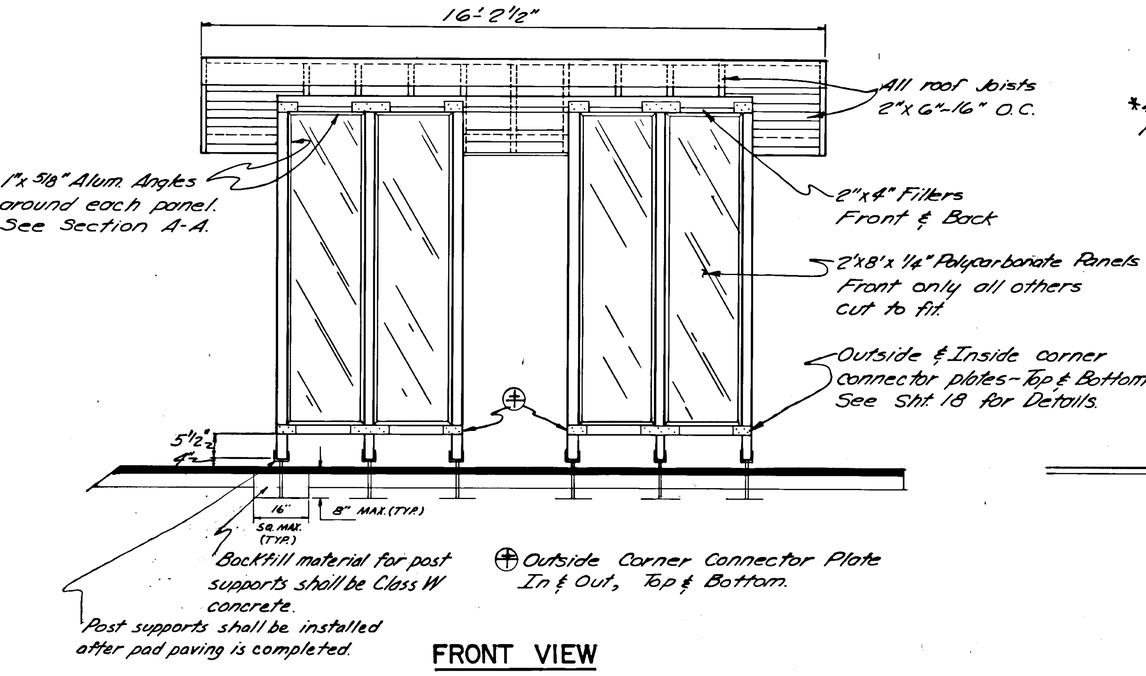
ROOF DETAIL



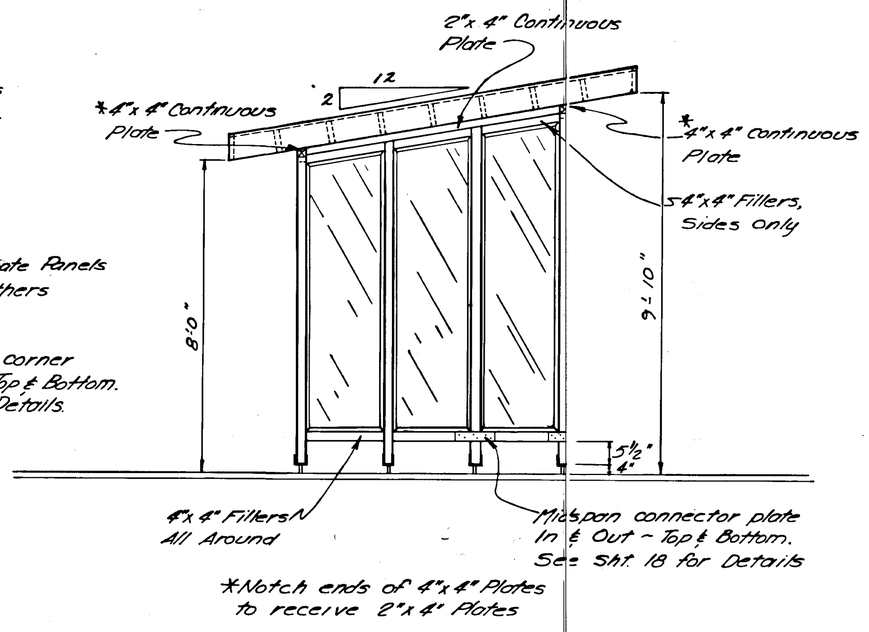
POST SUPPORT DETAIL



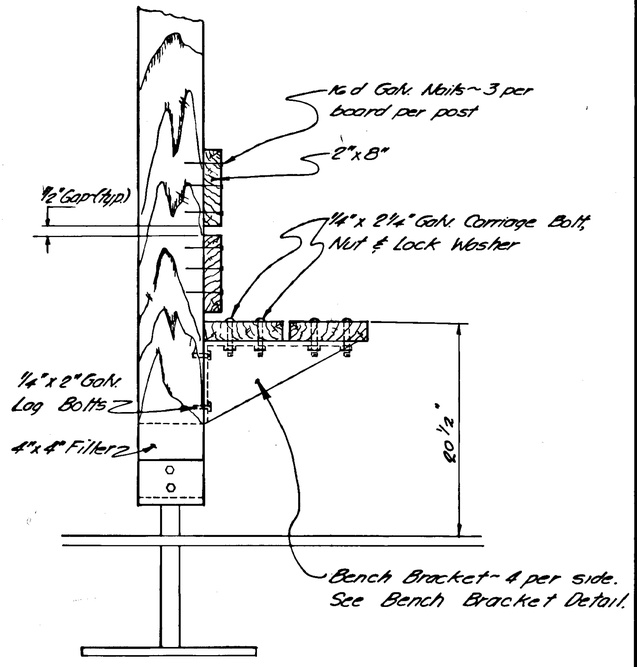
BENCH BRACKET DETAIL



FRONT VIEW



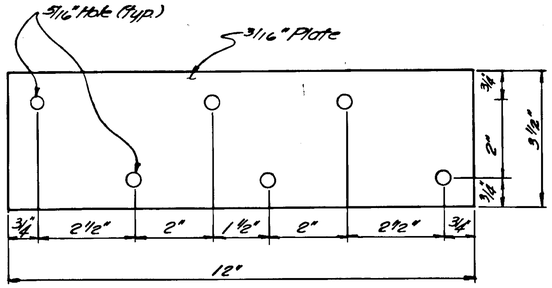
SIDE VIEW



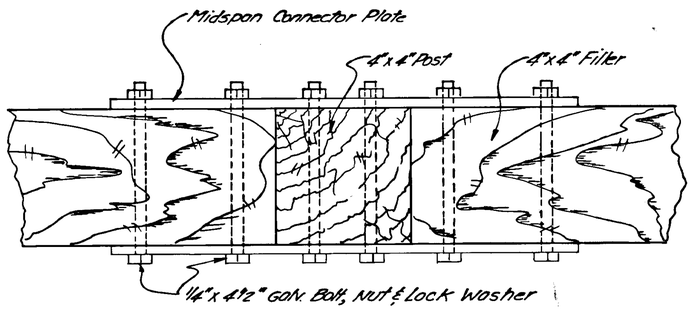
BENCH DETAIL

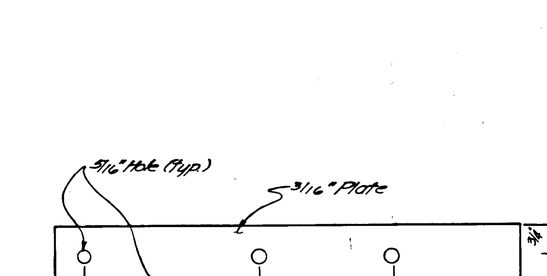
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RRS-0961 (12)	1981	18	22

BUS SHELTER



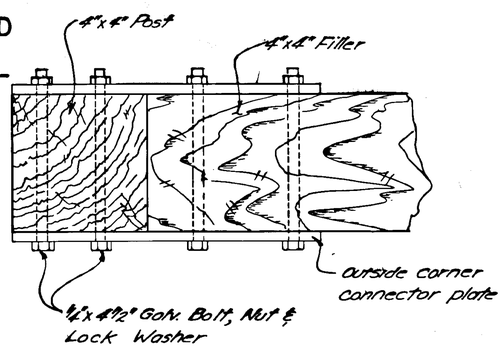
MIDSPAN



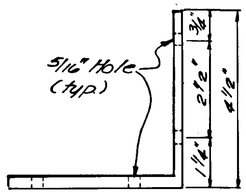


OUTSIDE CORNER AND ENTRY WAY

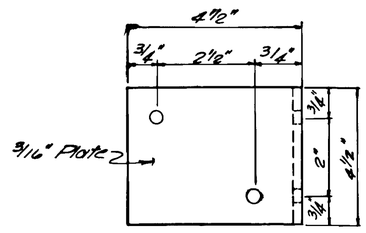
←ENTRY WAY→

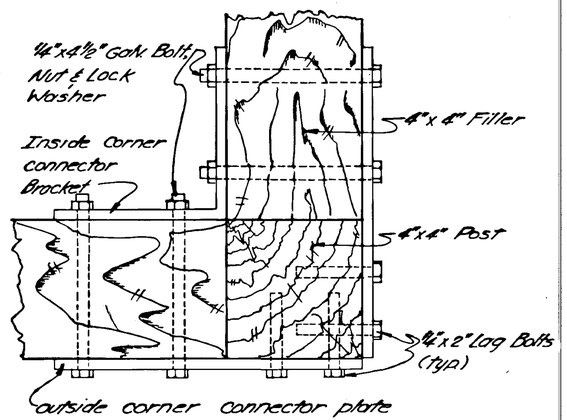


CONNECTOR PLATE DETAIL



INSIDE CORNER





ESTIMATE OF QUANTITIES	
ITEM	AMOUNT
Post Supports	16 ea.
1/4"x 4 1/2" Galv. Bolts, Nuts & Lock Washers	192 ea.
4" x 4"	272 B.M.
2"x 9"	40 B.M.
2"x 6"	150 B.M.
2"x 8"	154 B.M.
4'x8'x 3/8" CDX Plywood	6 Shts
15 lbs. Roofing Felt	1-600 Sq. roll
Tar	2-100# Blocks
Galv. Flashing	60 L.F.
4'x8'x 1/4" Clear Polycarbonate	7 Shts.
1"x 3/8"x 1/4" Alum. Angle	560 L.F.
3 1/2" x 12" Midspan Connector Plates	8 ea.
3 1/2" x 8" Outside Corner Connector Plates	12 ea.
Inside Corner Connector Brackets	8 ea.
Bench Brackets	8 ea.
1/4"x 2" Galv. Lag Bolts	48 ea.
1/4"x 2 1/4" Galv. Carriage Bolts, Nuts & Lock Washers	32 ea.
#7 x 1/2" Wood Screws	672 ea.
1 1/2" Roof Drain	1 ea.

GENERAL NOTES

1. Post Supports, Bench Brackets & Connector Plates shall be shop fabricated and receive two coats of metal paint prior to installation.
2. All lumber shall be S-4-S, Douglas Fir or Hemlock, Construction Grade No. 1 or better.
3. Sizing of the Polycarbonate panel for expansion, shall be in accordance with the manufacturer's specification.
4. All wood shall be stained with linseed oil base semi-transparent stain. Stain specifications, manufacturer's application recommendations and color samples shall be submitted for the approval of the engineer prior to application of any stain.

Form 10-1293 6-80 SEC 1227a

SIGNING SCHEDULE

No.	Station	Dist. from ℄ Lt.	Dist. from ℄ Rt.	Code No.	Legend	Sign Panel Thickness: Size	Unframed	Framed	Area S.F.	* Post: No. Of Posts	Type	Size	Length	Embedment	Facing Traffic	Remarks
1	"0"212+00	26		R7-101B	No Park. Anytime ←	12"x18"	.080		1.5	1	Tube	2"	15'	3'	N.B.	
2	"0"212+00	26		D11-1	Bike Route	24"x18"	.080		3.0						W.B.	Mount Below #1
3	"0"212+00		26	R7-101B	No Park. Anytime →	12"x18"	.080		1.5	1	Tube	2"	14'	3'	S.B.	
4	"0"212+00		26	D11-1	Bike Route	24"x18"	.080		3.0						E.B.	Mount Below #3
5	"0"218+00	26		R2-1	Speed Limit 40	30"x36"	.080		7.5	1	Tube	2"	14'	3'	E.B.	
6	"0"223+30		26	R2-1	Speed Limit 55	30"x36"	.080		7.5	1	Tube	2"	14'	3'	W.B.	
7	"0"232+00	26		R7-101B	No Park. Anytime ←	12"x18"	.080		1.5	1	Tube	2"	15'	3'	N.B.	
8	"0"232+00	26		D11-1	Bike Route	24"x18"	.080		3.0						W.B.	Mount Below #7
9	"0"232+00		26	R7-101B	No Park. Anytime →	12"x18"	.080		1.5	1	Tube	2"	14'	3'	S.B.	
10	"0"232+00		26	D11-1	Bike Route	24"x18"	.080		3.0						E.B.	Mount Below #9
11	"0"245+01	26		M10-1	Mile 14	6"x12"	.080		.5	1	Tube	2"	11'	3'	E.B.	
12	"0"245+01		26	M10-1	Mile 14	6"x12"	.080		.5						W.B.	
13	"0"259+00	26		R7-101B	No Park. Anytime ←	12"x18"	.080		1.5	1	Tube	2"	13'	3'	N.B.	
14	"0"259+00		26	R7-101B	No Park. Anytime →	12"x18"	.080		1.5	1	Tube	2"	11'	3'	S.B.	
18	"0"263+00	26'			No Park. Anytime ↔				1.5	1			13'	3'	N.B.	
15	"0"274+55	26		R1-1	Stop	30"x30"	.080		6.25	1	Tube	2"	13'	3'		Mount Above #15 Sign Shall Have The Legend On Both Faces.
16	"0"274+55	26		D3-1	Lievers Pt. Rd.	48"x9"	.100		2.67							
17	"0"291+50		26	W5-1	Road Narrows	36"x36"	.080		9.00	1	Tube	2"	13'	3'	N.B.	
10A	"0"234+50		26	R12-7	No Studded Tires 3/15 to 9/30	66"x84"	0.80		38.50	2	Tube	2"	21'	3'	E.B.	
10B	"0"235+72		26	D9-3	Δ	24"x24"	0.80		4.00	1	Tube	2"	15'	3'	N.B.	
10C	"0"235+72		26	Plaque	Camping	6"x24"	0.80		1.00							Mount Below 10B
10D	"0"235+72		26	Plaque	← →	6"x24"	0.80		1.00							Mount Below 10C
10E	"0"242+85		26	D9-3	Δ	24"x24"	0.80		4.00	1	Tube	2"	15'	3'	N.B.	
10F	"0"242+85		26	Plaque	Camping	6"x24"	0.80		1.00							Mount Below 10E
10G	"0"242+85		26	Plaque	← →	6"x24"	0.80		1.00							Mount Below 10F
10H	"0"243+00		26	R2-1	Speed Limit 55	30"x36"	0.80		7.5	1	Tube	2"	13'	3'	W.B.	

* Galvanized Perforated Square Tube.

** The 2½" Size Shall Be Used For The Full Embedment Depth.

GENERAL SIGNING AND STRIPING NOTES

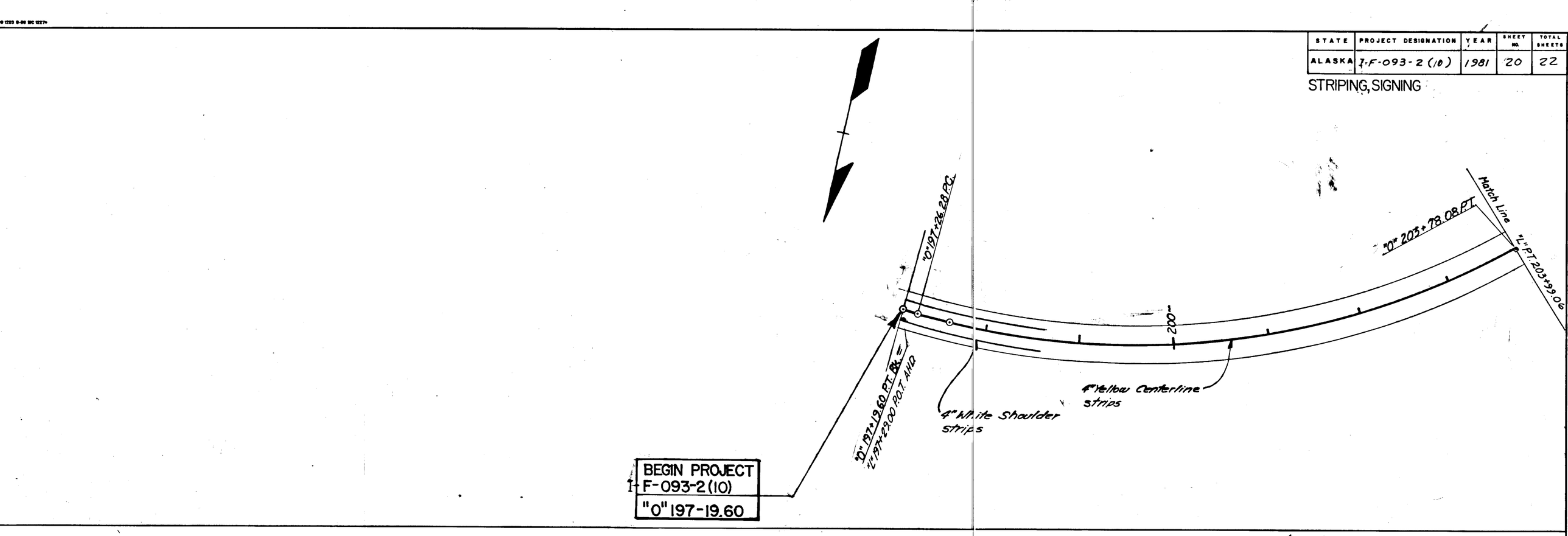
1. Sign locations & post lengths are approximate only and are subject to minor revisions.
2. All sign posts shall be square telescoping perforated galvanized steel posts; the 2" size shall be used above ground and the 2¼" size shall be used below ground for the sleeve.
3. All posts shall be installed with the Sleeve Type Embedment in accordance with Standard Drawing S-30.12, except that the 2¼" size shall be used for the entire embedment depth.
4. Post lengths are from the cut-off in the sleeve to the top of the post. See Standard Drawings S-05.00 & S-30.12.
5. All pavement markings shall be applied in accordance with the "Alaska Traffic Manual." Standard Drawings T-21.03.
   - A. Approximate length of 24" White Thermoplastic Pavement markings for Stop Lines = 34 L.F.
   - B. Approximate length of 4" Yellow Thermoplastic Pavement markings for Centerline Striping = 76.15 L.F.
   - C. Approximate length of 4" White Painted Pavement Markings for Shoulder Striping = 15,512 L.F.
6. All existing signs between "0"197+19.60 & "0"235+29.17, & between "0"242+22.23" & "L"274+00 shall be removed and stockpiled as directed at the D.O.T./P.F. maintenance yard, 7 mile Glacier Highway.
7. The existing pavement markings located between "0"234+23 & "L"243+25 shall be removed with chemicals or propane/oxygen burner. Black-out paint shall not be used.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-F-093-2(10) S-RS-0961(12)	1981	19	22

SIGNING SCHEDULE

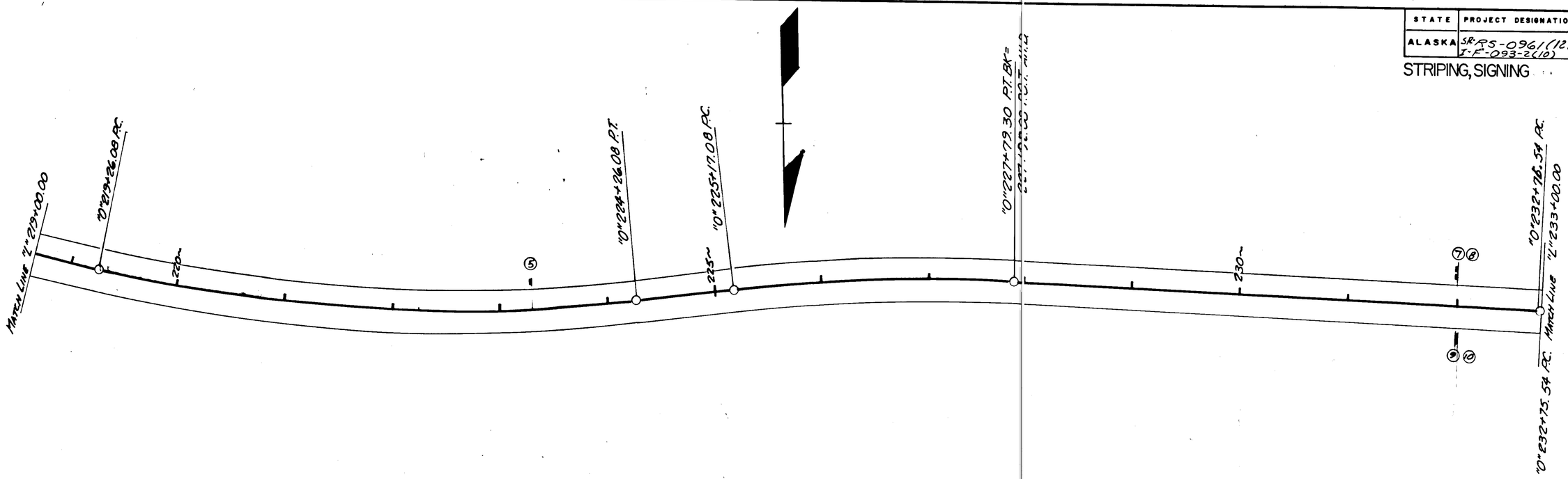
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	I-F-093-2(10)	1981	20	22

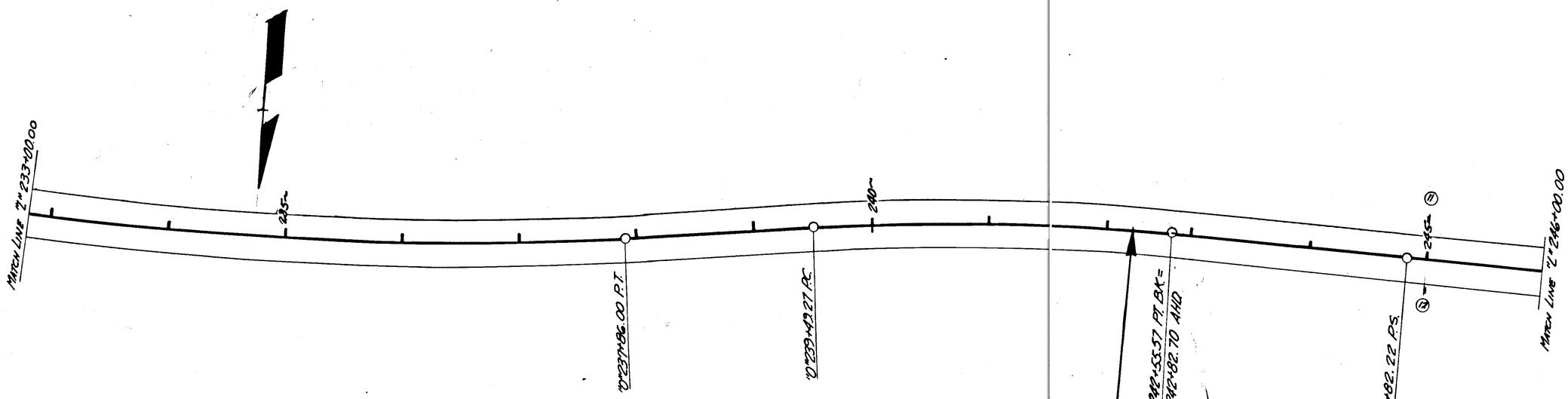
STRIPING, SIGNING



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SR-RS-0961(12) I-F-093-2(10)	1981	21	22

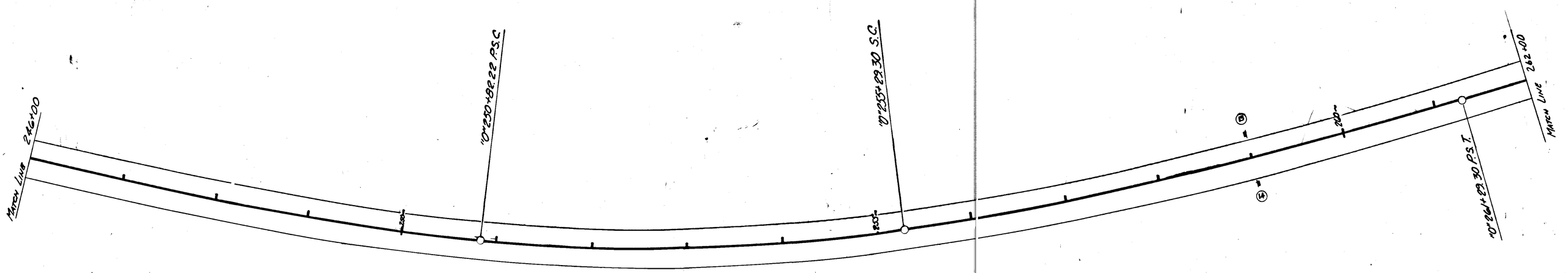
STRIPING, SIGNING

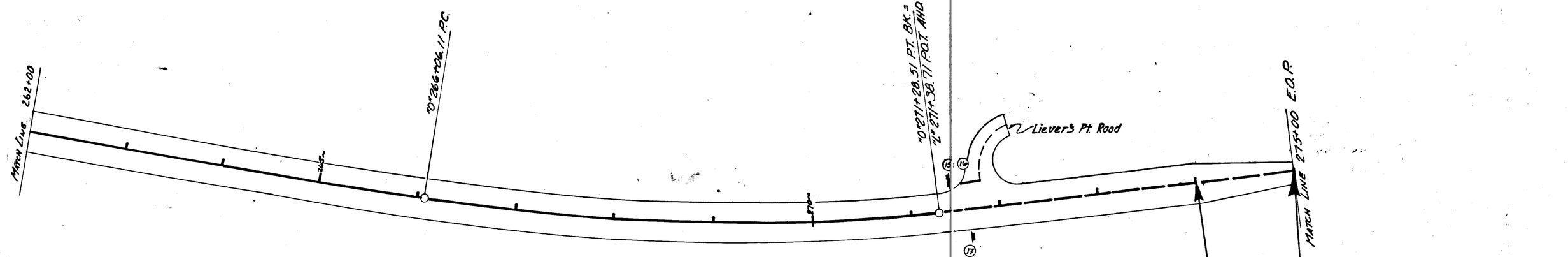




STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SR RS-0961(12)	1981	22	22

STRIPING, SIGNING





END PROJECT
SR- RS-0961(12)
STA. 274+00

END TEMPORARY CONNECTION
SR- RS-0961(12)
Sta. 275+00.00