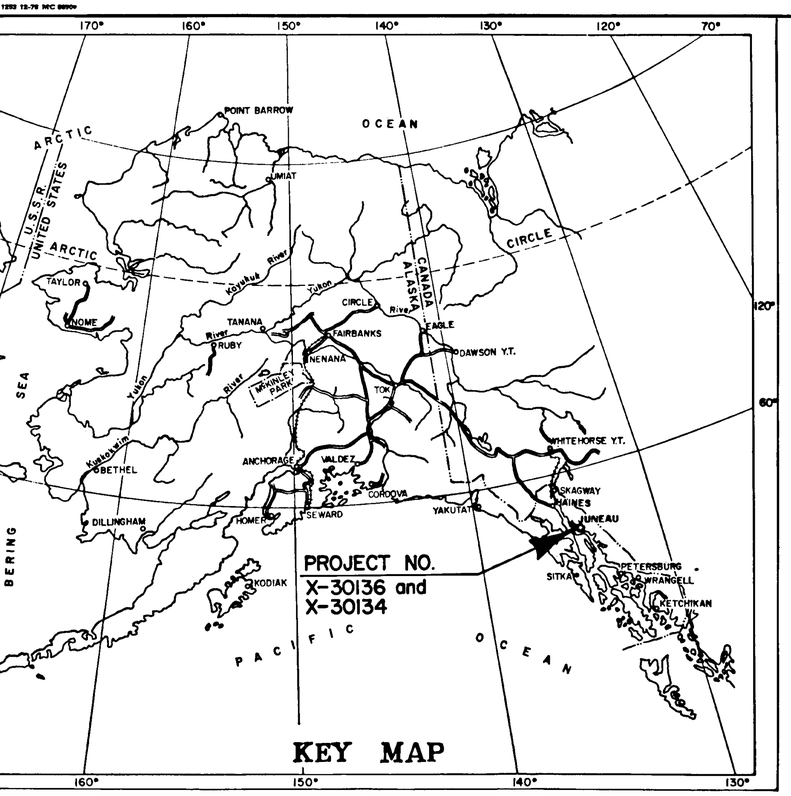
STATE	PROJECT	SHEET NO.	TOTAL SHEETS
ALASKA	X-30136 & X-30134	1	5

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

PLAN AND PROFILE
PROPOSED HIGHWAY PROJECT

X-30136 and X-30134

THANE ROAD PAVING



KEY MAP

INDEX OF SHEETS	
Sheet No.	DESCRIPTION
1	TITLE SHEET
2	ESTIMATE OF QUANTITIES
3	CULVERT TABLES
4-5	SHEEP CREEK BRIDGE APPROACHES

The following standard drawings apply to this project: A-1, C-00.04, C-10.03, C-11.03, D-01.00, D-04.00, D-05.00, D-24.13, D-26.03, G-04.15, G-04.34, G-13.14, G-14.06, G-15.00, G-18.12, I-80.00, M-20.02, M-23.01, T-21.03.

"AS-BUILT PLANS"

CONTRACTOR: BERG CONSTRUCTION CO., INC.

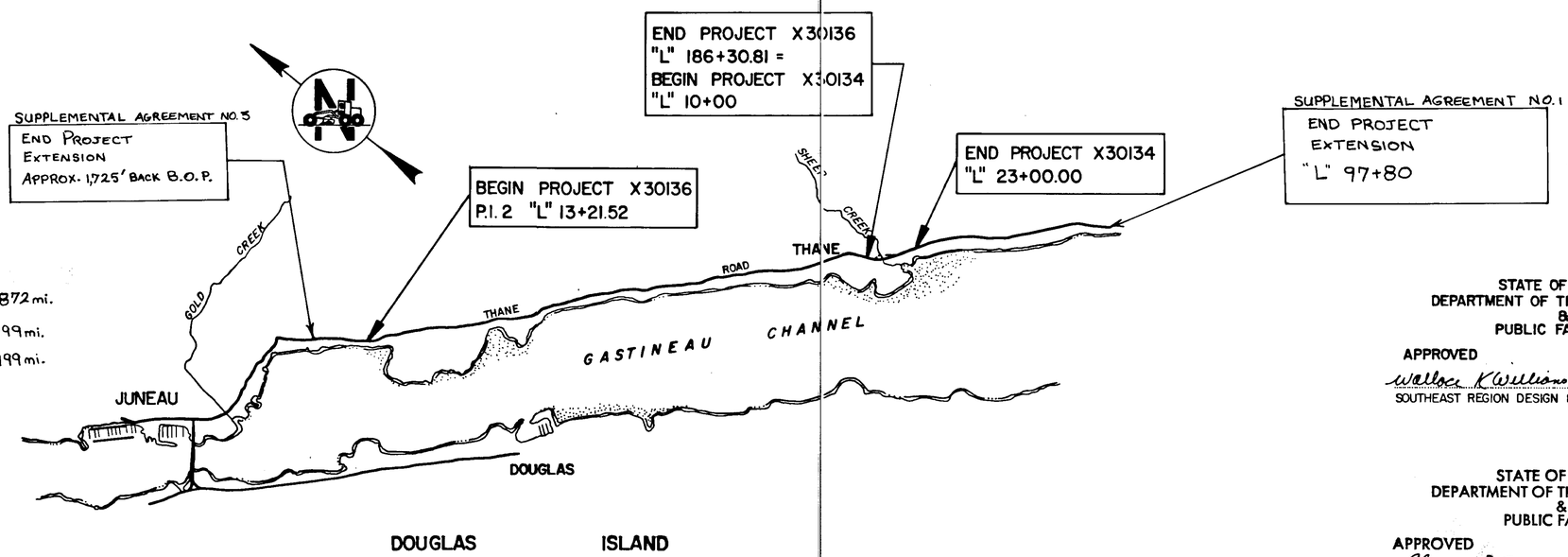
PROJECT ENGINEER: PHIL SPEER

PROJECT BEGAN: AUGUST 30, 1980

PROJECT END: NOVEMBER, 10, 1981

DESIGN DESIGNATION	
ADT (1978)	= 330
ADT (2000)	= 510
DHV (18%)	= 90
D	= 70-30
T	= 3%
V	= 30 m.p.h.
TI	= 5.5

PROJECT SUMMARY		
WIDTH OF PAVING	= 22'	
LENGTH OF GRADING	= ~~18,471.29' = 3.498 mi.~~	25,727.29' = 4.872 mi.
LENGTH OF PAVING	= ~~18,471.29' = 3.498 mi.~~	27,452.29' = 5.199 mi.
LENGTH OF PROJECT	= ~~18,471.29' = 3.498 mi.~~	27,452.29' = 5.199 mi.



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

APPROVED
Wallace K Williams DATE 6/18/80
SOUTHEAST REGION DESIGN & CONSTRUCTION ENGR.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

APPROVED
Charles D. Gilbert Date 6-24-80
DIRECTOR-HIGHWAY DESIGN & CONSTRUCTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	X-30136 & X-30134	1980	2	5

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL
1	Furnishing & Maintaining Engineering Facilities	L.S.	All Req'd
109 (1)	Petroleum Escalation	C.S.	All Req'd
110 (1)	Mobilization	L.S.	All Req'd
111 (1)	Temporary Erosion & Pollution Control	C.S.	All Req'd
114 (1)	Construction Engineering by the Contractor	C.S.	All Req'd
115 (1)	Traffic Maintenance	L.S.	All Req'd
202 (4)	Removal & Disposal of Culvert Pipe	Lin. Ft.	~~3,324~~ 3,710
203 (3)	Unclassified Excavation	Cu. Yd.	~~4,000~~ 4,738
203(5B)	Borrow	Ton	~~1,000~~ 2,033
203(5D)	Borrow (E.W.O. No. 3)	Ton	6,164
301 (1)	Crushed Aggregate Base Course	Ton	~~2,000~~ 4,040
303 (1)	Reconditioning Roadbed	Mile	~~3.3~~ 4.645
306 (1)	Asphalt Treated Base	Ton	~~10,800~~ 15,281.22
202 (9)	Removal & Reinstall Mailboxes (Supp. Agr. No. 1)	Ea.	32
401 (1)	Hot Asphalt Pavement Class I	Ton	~~5,460~~ 8,416.87
401 (2)	AC5 Asphalt Cement	Ton	~~764~~ 1,077.23
402 (2)	CSSI Emulsified Asphalt for Tack Coat	Ton	~~18~~ 17.160
403 (1)	MC30 Liquid Asphalt for Prime Coat	Ton	~~4.3~~ 1.710
305 (1A)	Stockpiled Mat'L D-1 (Supp. Agr. No. 2)	L.S.	All Req'd
603(22G)	24-inch Pipe Conduit	Lin. Ft.	~~3,330~~ 4,106
603(22H)	30-inch Pipe Conduit	Lin. Ft.	~~150~~ 158
603(22I)	36-inch Pipe Conduit	Lin. Ft.	~~148~~ 132
604 (5A)	Inlet Type A	Each	1
606 (1)	Beam Type Guardrail Type I Posts	Lin. Ft.	~~7,525~~ 8,000
606 (4)	Removal & Disposal of Guardrail	Lin. Ft.	3,875
670 (1)	Painted Traffic Markings	L.S.	All Req'd
670 (6)	Thermoplastic Pavement Markings	L.S.	All Req'd
401 (1A)	Hot Asphalt Pavement Class I (Supp. Agr. No. 3)	Ton	494.57
603(22F)	18"-inch Pipe Conduit (Supp. Agr. No. 1)	Lin. Ft.	404
604 (7)	Water Sump Cleanup (E.W.O. No. 2)	L.S.	All Req'd

ITEM NO.	ITEM	UNIT	TOTAL
611 (3A)	Drainage and Slope Protection (EWO No. 5)	L.S.	All Req'd
683 (1)	Approaches (Supp. Agr. No. 1)	Ea.	44

BASIS OF ESTIMATE

ITEM	FACTOR
203(5B)	1.95 TONS PER CU. YD.
301 (1)	1.95 TONS PER CU. YD.
306 (1)	107 LBS. PER SQ. YD. INCH DEPTH
401 (1)	114 LBS. PER SQ. YD. INCH DEPTH
401 (2)	6% ITEM 401 (1), 4% ITEM 306 (1)
402 (2)	0.05 GAL. PER SQ. YD. 253 GAL. PER TON
670 (1)	37,450 LIN. FT. 4" WIDE PAINTED WHITE STRIPING
670 (6)	27,735 L.F. 4" WIDE THERMOPLASTIC YELLOW STRIPING

GUARDRAIL REMOVAL

STATION	TO STATION	LENGTH
"0"127+00	"0"130+63	362.5'
"0"131+55	"0"133+05	150.0'
"0"133+30	"0"136+30	300.0'
"0"75+14	"0"77+14	200.0'
"0"79+44	"0"102+35	2287.5'
"0"103+97	"0"104+97	100.0'
"0"106+69	"0"108+69	200.0'
"0"119+57	"0"122+32	275.0'

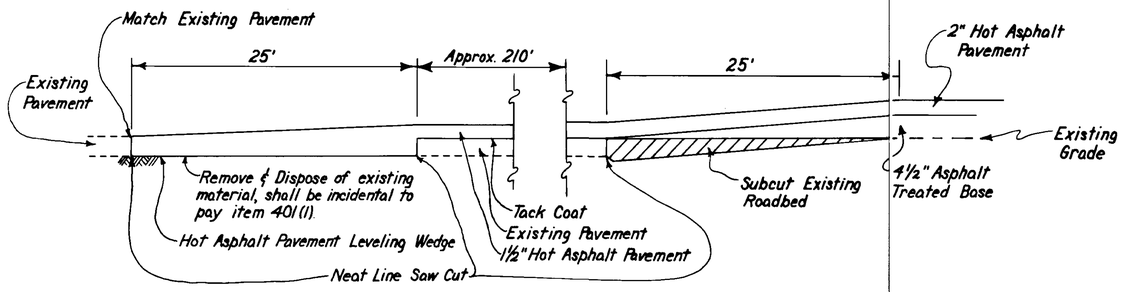
GUARDRAIL INSTALLATION

STATION	LEFT	RIGHT	
"0"13+95 to "0"~~21+20~~ 20+95		~~725.0'~~	700.0'
"0"21+70 to "0"22+70		100.0'	
"0"23+85 to "0"28+10		425.0'	
"0"29+80 to "0"34+80 67.5		~~500.0'~~	487.5'
* "0"32+00 to "0"32+~~50~~ 75	75.0	~~50.0'~~	
"0"35+80 to "0"39+05		325.0'	
"0"44+05 to "0"45+55		150.0'	
~~"0"48+55 to "0"50+80~~		~~225.0'~~	"0"139+20 to "0"142+57.5 — 337.5' Rt.
"0"66+05 to "0"67+42.5		137.5'	
"0"78+95 to "0"104+95 82.5		~~2600.0'~~	2,587.5'
"0"105+45 to "0"~~113+32.5~~	112+95	~~787.5'~~	750.0'
"0"119+50 to "0"122+~~37.5~~	112.5	~~287.5'~~	262.5'
"0"126+25 to "0"137+50 25		~~1125.0'~~	1,100.0'
"0"156+25 to "0"156+87.5		62.5'	

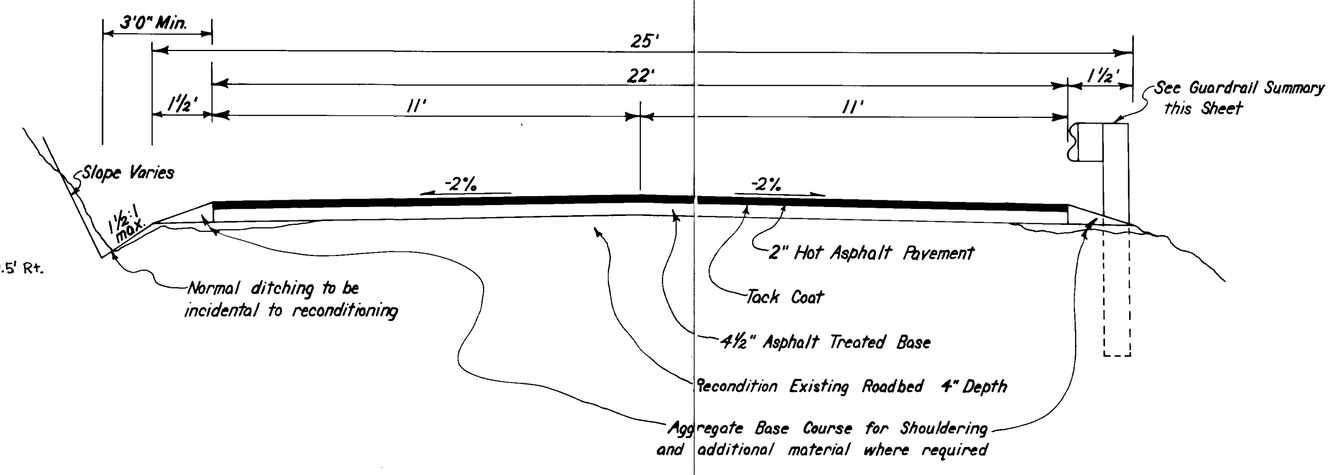
* Grout north end of guardrail using terminal connector to concrete foundation. Bury south end in bank. See Standard Drawing G-15.00.

"L" 23+00 to "L" 28+00 (Supp Agr. No. 1)	500.0'
TOTAL	8,000'

TRANSITION DETAIL



TYPICAL SECTION OF IMPROVEMENT



ESTIMATE OF QUANTITIES & TYPICAL SECTION

GENERAL NOTES

1. *Grade will be achieved by scarifying the existing roadbed to a depth of 4 inches and blading the surface to conform to crown and superelevation as well as developing a profile that will afford a good ride on the finished surface. Superelevation rates will conform to standard drawing I-80.000, Case II, Table 2, V=40 mph.*
2. *Alignment shall be along the existing route as noted in the State's preconstruction field books which will be made available to the Contractor for his use in staking and control of work. Minor revisions may be made with the approval of the engineer.*
3. *Culvert lengths and locations are approximate only and are subject to revisions to better match existing streambeds.*
4. *Payment for removal of concrete drainage headwalls and other conflicting minor structures will be incidental to Item 202(4) Removal and Disposal of Culvert Pipe.*
5. *Unclassified Excavation shall include the quantities required for removal of unsuitable material in the existing road and any backslope excavation required to obtain roadway width. Before and after sections shall be required to determine quantities.*
6. *The face of the guardrail shall not be installed any closer than 2.3 feet from the face of any fixed object such as a power pole. Where this situation occurs, only wooden guardrail posts shall be used. The roadway will be widened on the side opposite the fixed object to achieve design width.*

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	X-30136 & X-30134	1980	3	5

CROSS CULVERT INSTALLATION SUMMARY

STATION	18"	24"	30"	36"	Remove Headwall
"L" 18+08		~~40~~ 48'			
"L" 21+65 *		38'			
"L" 23+54		~~50~~ 48'			X
"L" 24+19		~~56~~ 48'			
"L" 27+58		48'			
"L" 30+13		48'			
"L" 30+89		~~56~~ 48'			
"L" 34+61		~~46~~ 48'			
"L" 35+76		40'			X
"L" 42+28		44'			
"L" 49+50		~~50~~ 48'			
"L" 53+21				44'	
"L" 53+78		40'			
"L" 54+70		50'			
"L" 55+69		~~46~~ 48'			
"L" 57+04		48'			
"L" 58+31		44'			X
"L" 59+16		42'			
"L" 60+12		42'			
"L" 62+03		40'			X
"L" 69+76					X
"L" 72+57			16~~6~~' ext.		X
"L" 74+31		52'			X
"L" 75+72					X
"L" 79+59		40'			
"L" 81+42		~~46~~ 40'			
"L" 87+78		36'			X
"L" 89+76		34'			
"L" 93+74		40'			
"L" 95+26		~~36~~ 42'			
"L" 97+31		~~42~~ 44'			
"L" 100+58		~~34~~ 36'			
"L" 104+51		4' ext.			X
"L" 105+76		44'			
"L" 107+39			4' ext.		X
"L" 108+68		50'			
"L" 112+77		50'			
"L" 114+01		~~40~~ 48'			
"L" 115+13		48'			
"L" 116+63		44'			
"L" 117+33		42'			
"L" 118+53			~~50~~ 48'		
"L" 119+77		40'			
"L" ~~123+22~~ "L" 122+22		~~50~~ 44'			
"L" 125+93		44'			
"L" 131+83				50'	X
"L" 133+29		~~50~~ 44'			
"L" 133+84			~~50~~ 48'		X
"L" 136+08		~~60~~ 42'			
"L" 136+59		~~56~~ 44'			
"L" 137+31		~~58~~ 40'			X
"L" 139+28		44'			
"L" 140+50		~~56~~ 40'			
"L" 141+41		~~56~~ 40'			
"L" 142+23			~~50~~ 42'		

* Type A Inlet to connect outlet of cross pipe & inlet of culvert under Union Oil Access Rd.

STATION	18"	24"	30"	36"	Remove Headwall
"L" 144+34		44'			
"L" 145+44		~~46~~ 40'			
"L" 146+87		~~50~~ 44'			
"L" 147+74		44'			
"L" 149+56		~~42~~ 50'			
"L" 150+01		~~48~~ 40'			X
"L" 151+12		~~46~~ 40'			X
"L" 151+52		~~68~~ 50'			X
"L" 151+85		~~42~~ 50'			
"L" 153+23		~~50~~ 44'			X
"L" 154+30		~~58~~ 46'			
"L" 156+53		~~44~~ 40'			
"L" 157+32				~~34~~ 44'	X
"L" 159+05		~~42~~ 40'			
"L" 160+04		~~44~~ 40'			
"L" 162+07		~~42~~ 40'			
"L" 162+44		44'			
"L" 164+87		~~42~~ 44'			
"L" 166+67		~~36~~ 44'			
"L" 167+49		~~42~~ 44'			
~~"L" 167+89~~	"L" 168+89	~~36~~ 44'			
~~"L" 168+88~~	"L" 169+88	~~38~~ 40'			
~~"L" 171+21~~	"L" 172+21	~~42~~ 38'			
~~"L" 171+65~~	"L" 172+65	~~38~~ 44'			
"L" 174+76		~~48~~ 40'			
"L" 180+15		~~40~~ 44'			X
"L" 182+40		~~66~~ 54'			X
"L" 183+35		~~56~~ 64'			X
"L" 186+08		~~36~~ 38'			X
"L" 52+40		7' EXT.			
"L" 82+58		42'			
"L" 146+33		40'			
"L" 177+73		44'			
"L" 179+40		44'			
TOTAL		~~3330'~~ 3385'	~~160'~~ 158'	~~148'~~ 152'	

BEYOND SHEEP CREEK BRIDGE

CULVERT REMOVAL SUMMARY Supplemental Agreement No. 1

STATION	LENGTH
"L" 23+72	40'
"L" 26+50	35'
"L" 35+30	44'
"L" 36+42	44'
"L" 37+00	34'
"L" 37+69	24'
"L" 43+67	44'
"L" 48+27	36'
"L" 50+76	32'
"L" 52+97	36'
"L" 53+82	37'
"L" 55+10	34'
"L" 56+69	42'
"L" 59+94	40'
"L" 61+43	20'
"L" 62+86	40'
"L" 65+41	40'
"L" 66+26	35'
"L" 69+66	36'
"L" 70+89	25'
"L" 80+88	42'
"L" 82+90	15'
"L" 93+85	40'
"L" 94+91	40'
"L" 96+03	38'
TOTAL	893'

CULVERT REMOVAL SUMMARY

STATION	LENGTH	STATION	LENGTH
"L" 18+08	40'	"L" 147+74	38'
"L" 21+65	34'	"L" 149+56	36'
"L" 23+54	40'	"L" 150+01	48'
"L" 24+19	54'	"L" 151+12	44'
"L" 27+58	40'	"L" 151+52	60'
"L" 30+13	42'	"L" 151+85	36'
"L" 30+89	46'	"L" 153+23	40'
"L" 34+61	40'	"L" 154+30	40'
"L" 35+76	40'	"L" 156+53	34'
"L" 42+28	42'	"L" 157+32	48'
"L" 49+50	45'	"L" 159+05	36'
"L" 53+21	42'	"L" 160+04	38'
"L" 53+78	34'	"L" 162+07	38'
"L" 54+70	44'	"L" 162+44	40'
"L" 55+69	42'	"L" 164+87	40'
"L" 57+04	46'	"L" 166+67	36'
"L" 58+21	38'	"L" 167+49	36'
"L" 59+16	37'	"L" 167+89	36'
"L" 60+12	35'	"L" 168+88	34'
"L" 62+03	36'	"L" 171+21	36'
"L" 74+31	48'	"L" 171+65	34'
"L" 75+72	*	"L" 174+76	48'
"L" 79+59	40'	"L" 177+73	50'
"L" 81+42	44'	"L" 180+15	50'
"L" 87+78	36'	"L" 182+40	66'
"L" 89+76	32'	"L" 183+35	56'
"L" 93+74	38'	"L" 186+08	32'
"L" 95+26	32'		
"L" 100+58	33'		
"L" 105+76	44'		
"L" 108+68	50'		
"L" 112+77	50'		
"L" 114+01	40'		
"L" 115+13	42'		
"L" 116+63	36'		
"L" 117+33	42'		
"L" 118+53	40'		
"L" 119+77	40'		
"L" 123+22	50'		
"L" 125+93	44'		
"L" 131+83	50'		
"L" 133+29	50'		
"L" 133+84	50'		
"L" 136+08	60'		
"L" 136+59	50'		
"L" 137+31	44'		
"L" 139+28	34'		
"L" 140+50	50'		
"L" 141+41	50'		
"L" 142+23	40'		
"L" 144+34	34'		
"L" 145+44	40'		
"L" 146+87	44'		
Plug & Grade to Drain		TOTAL	3324'

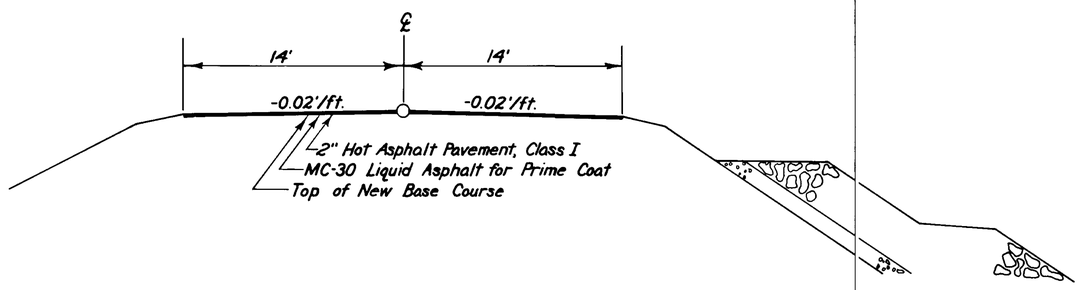
CROSS CULVERT INSTALLATION SUMMARY SUPPLEMENTAL AGREEMENT NO. 1 BEYOND SHEEP CREEK BRIDGE

STATION	18"	24"	REMARKS
"L" 23+72		44'	
"L" 26+50		50'	
"L" 35+30		44'	
"L" 36+42		44'	
"L" 37+00	40'		DRIVEWAY LT.
"L" 37+69	34'		DRIVEWAY LT.
"L" 43+67		44'	
"L" 47+74		4'	EXTENSION OUTLET
"L" 48+36		42'	
"L" 50+76		40'	
"L" 52+97		40'	
"L" 53+82		44'	
"L" 55+10		40'	
"L" 57+75	24'		DRIVEWAY LT.
"L" 59+94		48'	
"L" 61+43	20'		DRIVEWAY LT.
"L" 62+86		48'	
"L" 63+00	50' (12")		12" DRIVEWAY LT. L.S. PAY E.W.O. #5
"L" 65+41	42'		CROSS CULVERT
"L" 66+26	44'		CROSS CULVERT
"L" 69+66		48'	
"L" 70+89	40'		CROSS CULVERT
"L" 76+90	24'		DRIVEWAY LT.
"L" 80+88		48'	
"L" 82+90	48'		CROSS CULVERT
"L" 83+38		3'	EXTENSION INLET
"L" 93+85	48'		CROSS CULVERT
"L" 94+91	40'		CROSS CULVERT
"L" 96+03		44'	
"L" 56+69		46'	
TOTAL	404'	721'	

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	X-30136 & X-30134	1980	4	5

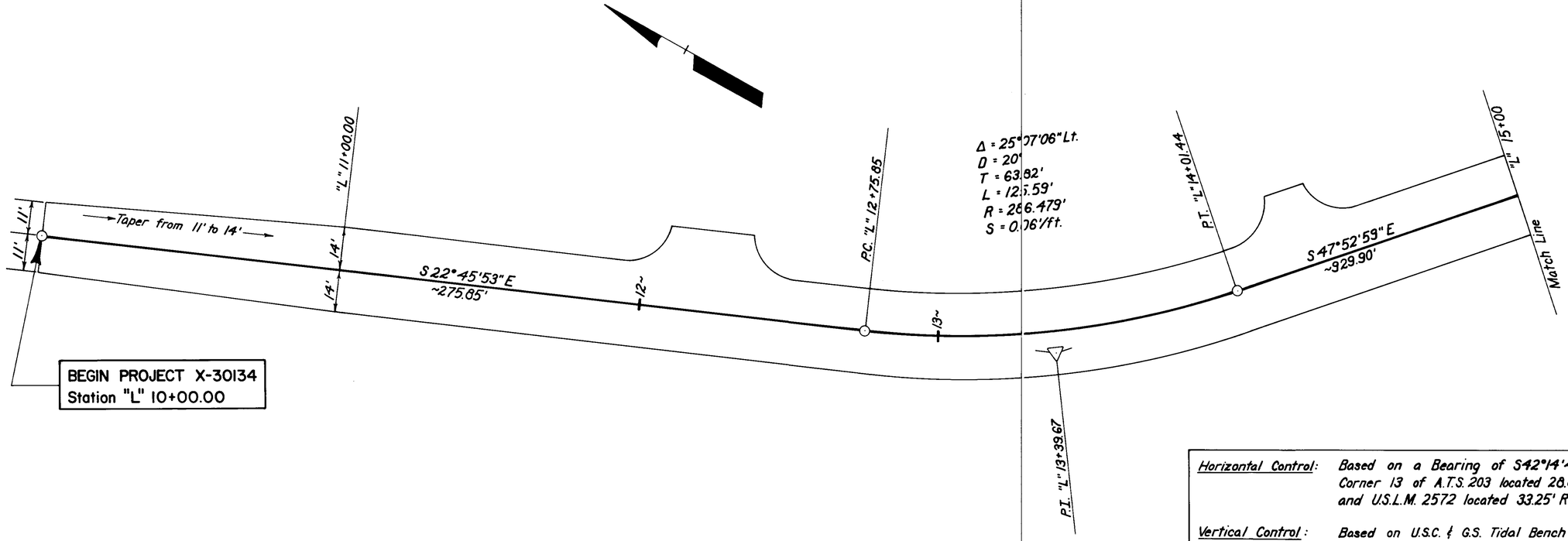
SHEEP CREEK BRIDGE APPROACHES

TYPICAL SECTION OF IMPROVEMENT



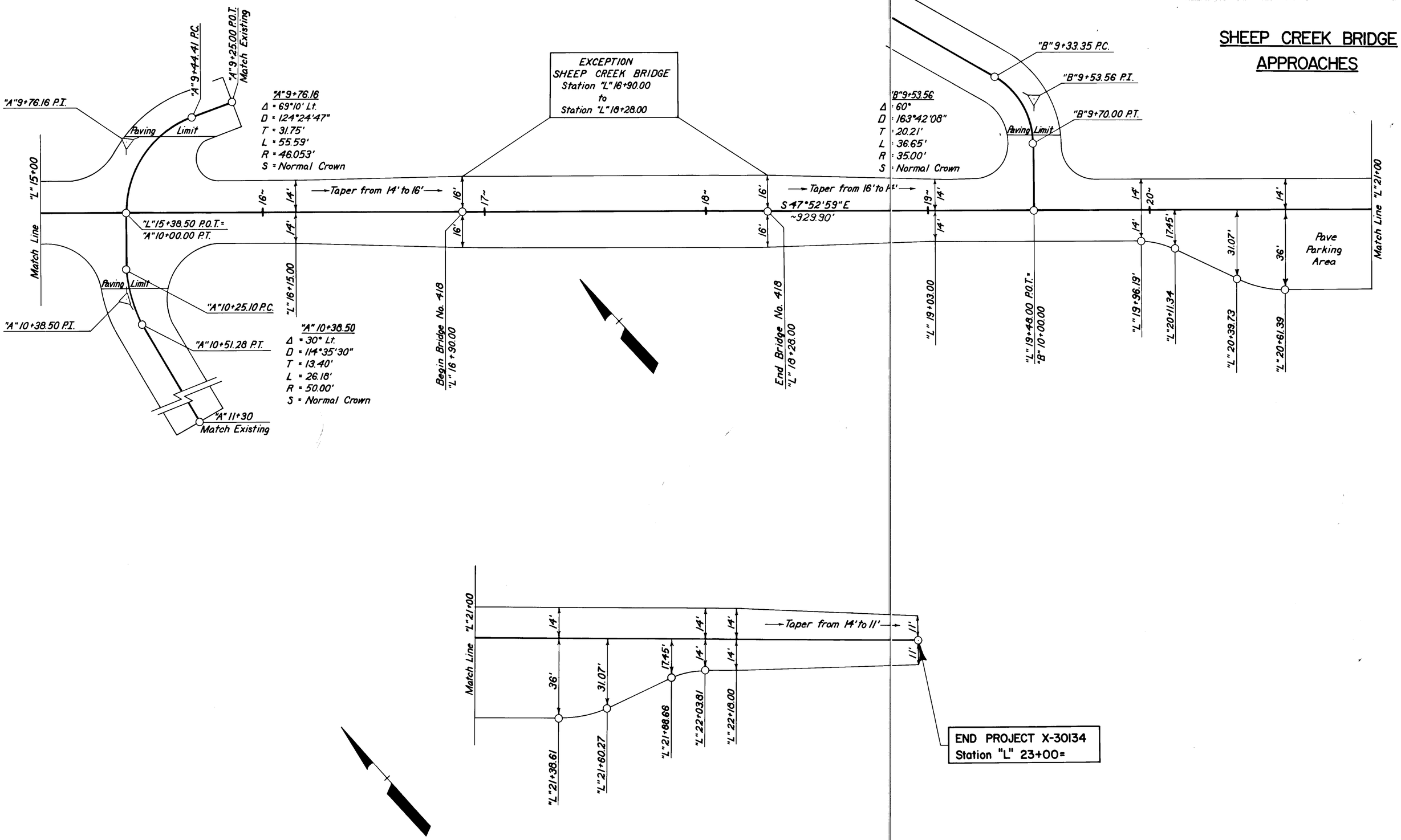
B.O.P. X-30134 Sta. "L" 10+00.00 to E.O.P. X-30134 Sta. "L" 23+00.00

General Note:
On project X-30134, where guardrail has previously been installed, the paving width on the guardrail side may be decreased by one foot.



Horizontal Control: Based on a Bearing of S42°14'40"E established between Corner 13 of A.T.S. 203 located 28.88' Lt. of Sta. "L" 16+93.16 and U.S.L.M. 2572 located 33.25' Rt. of Sta. "L" 23+22.52.

Vertical Control: Based on U.S.C. & G.S. Tidal Bench Mark #21 located in the circular flagpole base in front of the Alaska National Guard Armory in Juneau, Alaska, with an elevation of 25.93 feet above MLLW.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	X-30136 & X-30134	1980	5	5

SHEEP CREEK BRIDGE APPROACHES