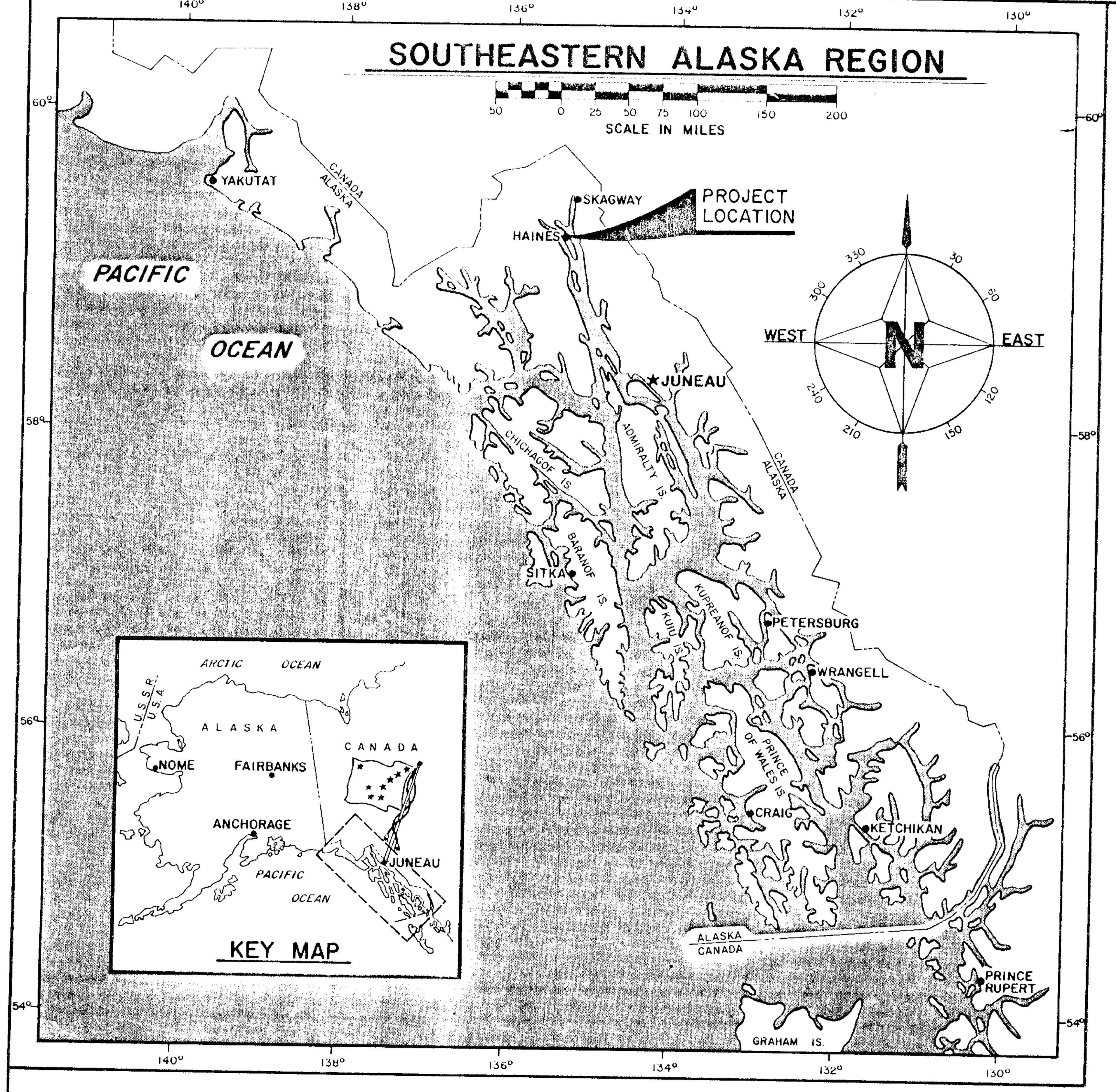
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEASTERN REGION
DESIGN AND CONSTRUCTION DIVISION



PLAN AND PROFILE

PROPOSED HIGHWAY PROJECT
RS-0991 (5) 70244
HAINES LUTAK ROAD
GRADING & SURFACING

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTION
3	ESTIMATE OF QUANTITIES, HORIZONTAL ALIGNMENT
4	TRAFFIC CONTROL PLAN

INDEX OF SHEETS

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT: A-1, C-01.03, C-02.01, C-03.01, I-40.00, I-81.00, M-13.01, M-16.01, T-20.00, & T-21.01

As-Built Plans

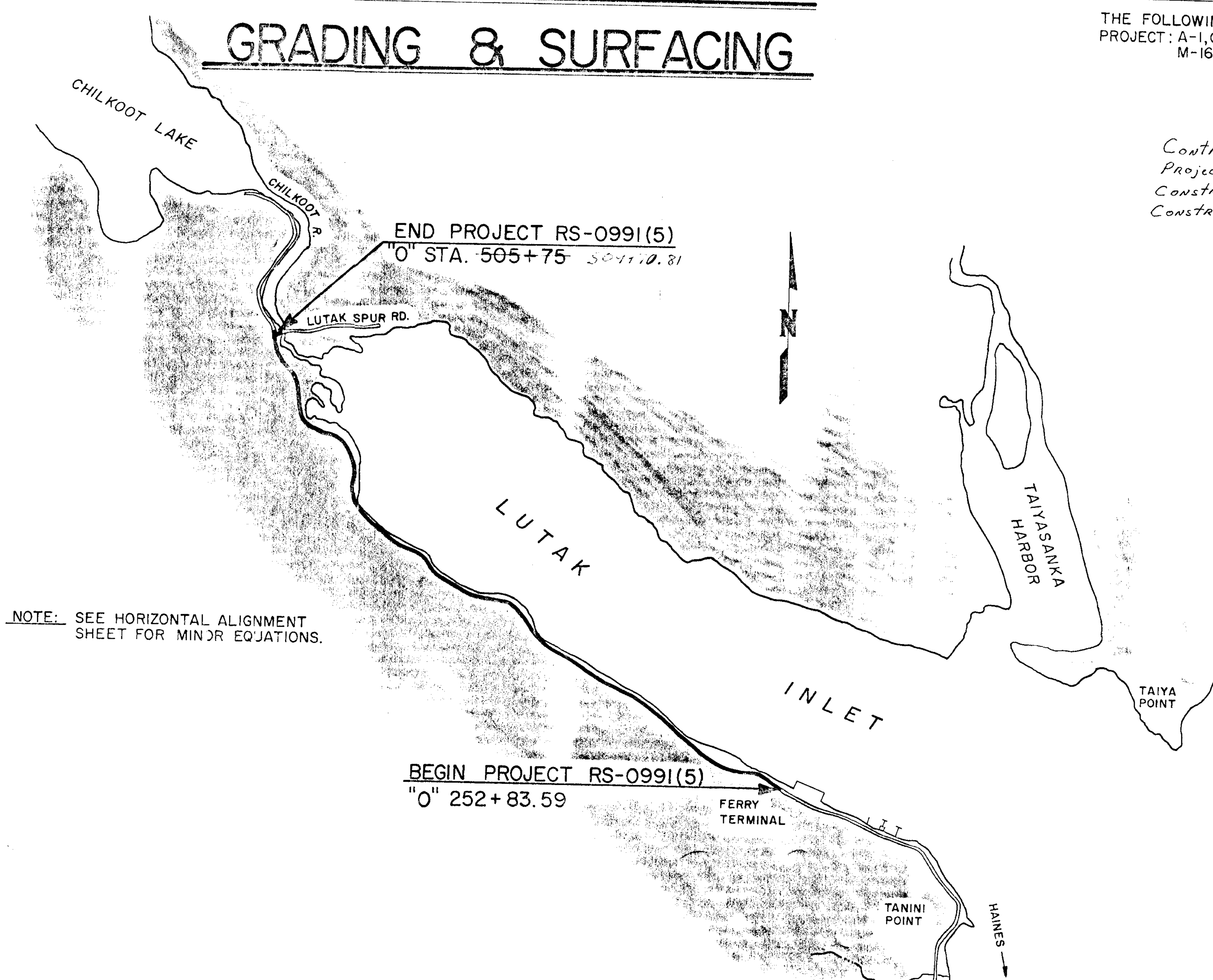
Contractor – Northern Timber Corporation
Project Engineer – Cliff Douglas
Construction Begin – April 1991
Construction End – July 1991

DESIGN DESIGNATION

ADT (1990)	= 454
ADT (2010)	= 611
DHV (12%)	= 73
T	= 7%
T. I.	= 6.5
V	= 35 M.P.H.

PROJECT SUMMARY

WIDTH OF SURFACING	22' to 24'
LENGTH OF GRADING	~~25,123.15' - 4.76 MI.~~ 25497.57 — 4.83
LENGTH OF SURFACING	~~25,123.15' - 4.76 MI.~~ 25497.57 — 4.83



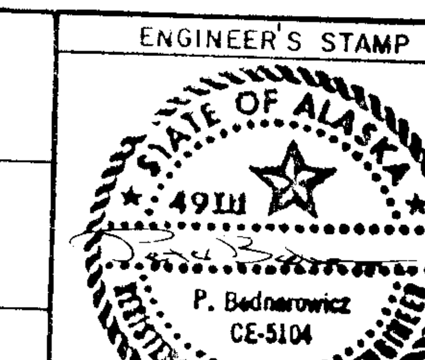
NOTE: SEE HORIZONTAL ALIGNMENT SHEET FOR MINOR EQUATIONS.

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

APPROVED
J Merrill — S.E. Region Design Chief — Date *7/30/90*

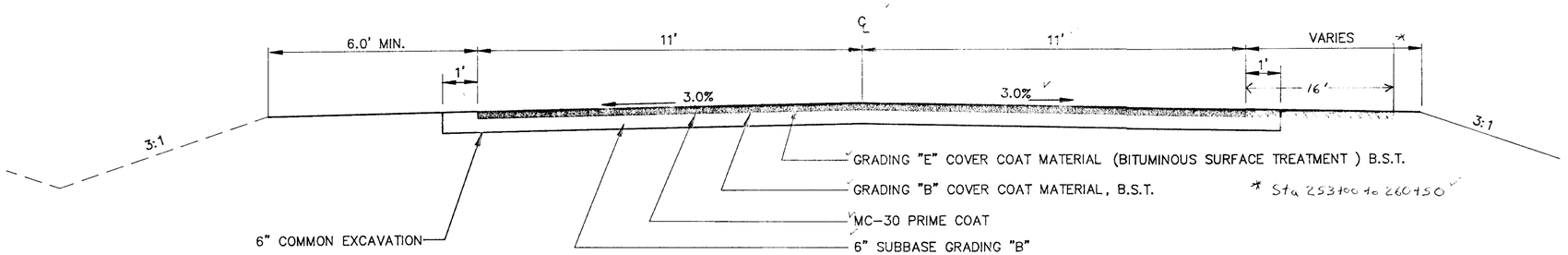
APPROVED
E. V. Darnell — Director, S.E. Region Design & Construction — Date *7/30/90*

PROJECT NUMBER:	ENGINEER'S STAMP
RS-0991(5) 70244	
DATE: 10/90	
SHEET 1 OF 4	

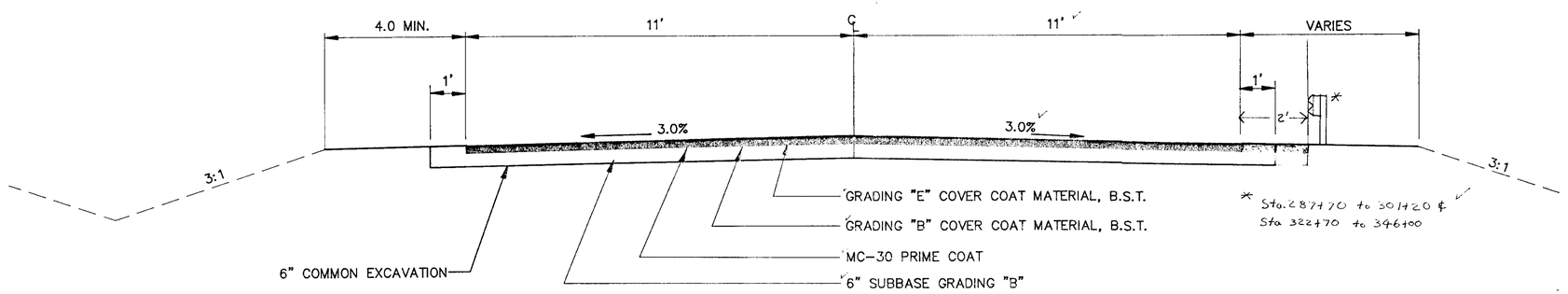


A.E. SUPPLIES

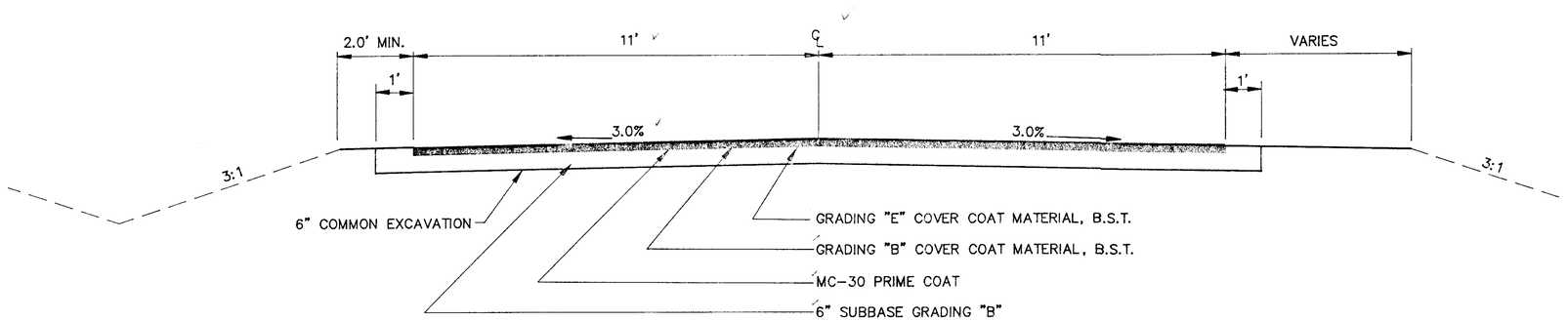
ATTACHMENT NO. 2 ADDENDUM NO. 1



STA. 252+83.59 TO STA. 285+15



STA. 287+15 TO 352+33



STA. 354+33 TO ~~505+75~~ 509+70.81

GENERAL NOTES

1. HORIZONTAL ALIGNMENT SHOWN ON THE PLANS IS SUBJECT TO MINOR REVISIONS.
2. LEFT SHOULDER WIDTH SHALL TRANSITION BETWEEN STA. 285+15 AND STA. 287+15 AND BETWEEN STA. 352+33 AND STA. 354+33, AS SHOWN.
3. ~~ENDING STATION FOR COMMON EXCAVATION IS 352+33. BEGIN RECONDITIONING AT STA. 352+33.~~
4. IT IS THE INTENT OF THIS CONTRACT TO MAINTAIN THE SHOULDER OFFSETS SHOWN ON THE LEFT SIDE OF THE TYPICAL SECTIONS. THIS MAY REQUIRE ADJUSTMENT OF THE HORIZONTAL ALIGNMENT.

BASIS OF ESTIMATE

ITEM	ESTIMATING FACTOR
304(1)	SUBBASE GRADING "B" 2.09 TONS/C.Y.
403(1)	MC-30 LIQUID ASPHALT FOR PRIME COAT ~~0.25~~ 0.55 GAL/SY 253 GAL/TON
405(1)	CRS-2 ASPHALT FOR SURFACE TREATMENT ~~1.03~~ GAL/SY 241 GAL/TON
405(2B)	GRADING B COVER COAT FOR SURFACE TREATMENT 48LB/SY
405(2E)	GRADING E COVER COAT FOR SURFACE TREATMENT 28LB/SY

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

BY:	DATE:	DESCRIPTION OF CHANGE:
PB/CSA	11/5/90	CHANGED TYPICAL STA. 354+33 TO 505+75. DELETED RECONDITIONING AND ADDED SUBBASE.

RECORD OF REVISIONS

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

HAINES — ALASKA

HAINES LUTAK ROAD SURFACING
PROJECT NO. 70244
TYPICAL SECTIONS

DESIGNED BY: E. MURPHY	PROJECT NO. 70244
DRAWN BY: AUTOCADD/CSA	DATE: 10/90
CHECKED BY: P. JONES	SHEET 2 OF 4

STATE OF ALASKA ★ 49th ★ P. BEDNAROWICZ CE-5104 REGISTERED PROFESSIONAL ENGINEER

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	UNIT	QUANTITY
109(1)	PETROLEUM ADJUSTMENT	C.S.	ALL REQUIRED
120(1)	DBE ADJUSTMENT	C.S.	ALL REQUIRED
203(1A)	COMMON EXCAVATION	S.Y.	~~66,384~~ 68624
304(1)	SUBBASE, GRADING "B"	TON	~~23,124~~ 25619
403(1)	MC-30 LIQUID ASPHALT FOR PRIME COAT	TON	~~61.00~~ 52.08
405(1)	CRS-2 ASPHALT FOR SURFACE TREATMENT	TON	~~263.00~~ 333.75
405(2B)	GRADING "B", COVER COAT MATERIAL FOR ASPHALT SURFACE TREATMENT	TON	~~1,475.00~~ 1600
405(2E)	GRADING "E", COVER COAT MATERIAL FOR ASPHALT SURFACE TREATMENT	TON	~~860.00~~ 1067
614(1)	SURVEY MONUMENTS	EACH	4.00
614(2)	MONUMENT CASES	EACH	4.00
614(3)	ADJUST EXISTING MONUMENTS AND CASES	EACH	1.00
640(1)	MOBILIZATION AND DEMOBILIZATION	L.S.	ALL REQUIRED
203(11)	Ditch Reconstruction (C.O. #1)	Sta.	99 Sta. Sta. 252+83± to 351+83±
606(5)	Removal and Disposal of Guardrail (C.O. #2)	ft.	750' Sta 310+90 to 318+40
642(1)	CONSTRUCTION SURVEYING	L.S.	ALL REQUIRED
642(2)	THREE PERSON SURVEY PARTY	HOUR	~~8.00~~ 3.00
643(2)	TRAFFIC MAINTENANCE	L.S.	ALL REQUIRED
643(3)	PERMANENT CONSTRUCTION SIGNING	EA/DAY	~~360.00~~ 455
643(4)	CONSTRUCTION SIGN	EA/DAY	~~500.00~~ 393
643(5)	TYPE II BARRICADE	EA/DAY	~~360.00~~ 33
643(7)	TRAFFIC CONE	EA/DAY	~~1,200.00~~ 249
643(13)	TEMPORARY PAVEMENT MARKING	STATION	~~252.00~~ 255.2
643(15)	FLAGGING	HOUR	~~400.00~~ 623.5
670(1)	PAINTED TRAFFIC MARKINGS	L.S.	ALL REQUIRED

HORIZONTAL CONTROL

THE BASIS OF BEARING IS THE BEARING OF N. 41°45'03"W. BETWEEN THE CENTERLINE MONUMENT AT APPROXIMATE ℄ STATION 348+62 AND THE D.O.T./P.F. CONTROL MONUMENT "ZOD" (1.5" CAP ON #5 REBAR.)

PROJECT COORDINATES ARE: N. 30318.35 AND E. 41650.714 FOR THE CENTERLINE MONUMENT AT APPROXIMATE STATION 348+62.

VERTICAL CONTROL

THE BASIS OF VERTICAL CONTROL IS THE ELEVATION OF 30.6 AT THE END OF THE EXISTING PAVEMENT.

Survey Monuments

Station	Offset
266+51.51	12.89' Rt. of ℄
* 348+00.80	0.02' Lt. of ℄
361+79.14	16.77' Lt. of ℄
492+39.20	13.92' Rt. of ℄
496+70.39	12.59' Lt. of ℄

* Existing Monument

ATTAC

Horizontal Alignment

	Station	A	D	T	L	S
Begin Project	252+83.59					
	258+39.48 PI	4-06-43.8 Rt.	1° 14'	167.18	334.21	0.14
	263+78.53 PI	14-53-43.8 Lt.	4° 52'	153.64	305.55	0.40
	275+42.19 PI	9-49-49.4 Rt.	3°-01'	163.10	325.40	0.28
	280+53.08 PI	22-11-47.6 Lt.	6°-49'	164.68	325.24	0.47
	285+27.10 PI	24-29-32.7 Rt.	8°-20'	149.15	293.73	0.53
	288+80.25 PI	5-42-20.1 Rt	1° 34'	180.72	361.14	0.16
	295+35.13 PI	4-52-45.1 Rt	3° 28'	70.45	140.81	0.32
	298+67.75 PI	4-32-42.5 Rt	1° 48'	126.05	251.97	0.21
	303+71.71 PI	2-44-54.6 Lt	0° 49'	166.75	333.43	Crown
	319+77.19 PI	20-23-15.1 Lt	7° 04'	145.75	288.41	0.48
	323+73.88 PI	7-13-06.7 Rt	3° 15'	111.09	221.89	0.30
	333+56.74 PI	6-19-19.0 Rt	2° 24'	131.84	263.41	0.26
	335+43.05 PI	4-15-46.0 Lt	4° 16'	50.00	99.95	0.37
	342+22.63 PI	10-15-44.7 Rt	2° 52'	179.12	357.28	0.28
	346+33.52 PI	23-44-39.5 Lt.	10° 26'	115.46	227.60	0.52
	348+00.80 monument 0.02' Lt. of tangent Line.					—
	350+30.69 PI	15-14-57.2 Rt	7° 30'	102.27	203.33	0.52
	351+72.26 P.O.T. BK = 352+53.29 Equation AHD.					—
	355+69.49 P.I.	10-25-57.9 Rt	5° 00'	104.62	208.66	0.40
	361+81.64 PI	23-49-23.4 Rt	7° 30'	161.15	317.64	0.48
	368+59.21 PI	38-11-48.6 Lt	8° 00'	247.98	477.46	0.51
	373+38.53 PI	5-23-53.6 Lt	2° 35'	100.04	199.93	0.25
	374+38.42 P.T. BK = 374+52.00 EQUATION AHD.					—
	377+29.93 PI	19-02-23.4 Lt.	7° 45'	123.98	245.68	0.48
	381+09.53 PI	16-56-14.6 Rt	7° 00'	121.87	241.96	0.48
	382+29.62 P.T. BK = 382+30.39 EQUATION AHD.					—
	391+02.01 PI	3-48-07.6 Rt	1° 45'	108.34	216.61	0.16
	395+95.96 PI	12-07-26.5 Rt	6° 02'	100.64	200.54	0.44
	399+57.33 PI	18-48-55.8 Lt	9° 15'	102.63	203.41	0.53
	402+95.15 PI	21-50-11.4 Rt	10° 45'	102.81	203.13	0.56
	410+83.26 PI	25-32-35.3 Rt.	10°-00'	129.87	255.43	0.55
	415+79.00 PI	46-44-17.0 Lt.	10° 45'	230.30	434.77	0.56
	421+91.06 PI	12-08-25.1 Rt.	6° 03'	100.71	200.67	0.43
	431+24.28 PI	16-56-56.1 Rt.	8° 26'	101.23	200.98	0.53
	435+42.07 PI	8-29-43.3 Lt.	4° 15'	100.13	199.89	0.37
	442+84.39 PI	56-37-03.7 Rt	8° 00'	385.78	707.72	0.51
	449+84.19 PI	4-51-44.4 Lt	2° 26'	99.63	199.14	0.26
	450+83.70 PT BK. = 451+77.97 EQUATION AHD.					—
	458+16.07 PI	40-34-42.5 Lt	7° 45'	273.32	523.59	0.45
	464+46.02 PI	26-26-42.4 Lt.	8° 59'	149.58	293.83	0.53
	469+58.93 PI	14-18-36.2 Lt	7° 00'	102.75	204.43	0.48
	477+82.38 PI	73-15-01.8 Rt.	11° 14'	379.11	652.02	0.57
	487+58.14 PI	12-13-23.0 Lt	6° 05'	100.71	200.65	0.44
	492+41.41 PI	21-11-34.0 Lt.	7° 00'	164.90	326.04	0.48
	496+71.88 PI	18-06-51.6 Rt.	7° 00'	140.51	278.68	0.48
	500+77.82 PI	1-47-56.0 Lt	0° 45'	119.94	239.85	Crown
	504+24.69 PI	24-27-00 Rt.	12°-00'	103.45	203.75	0.58
	505+46.32 PI	5-41-00 Rt.	7°-03'	40.32	80.57	0.40
	508+50.26 PI	78-55-36.1 Rt	31°-18'	150.55	251.91	0.32
	509+70.81 P.O.T. & E.O.P., Beginning of Chilkoot River Bridge					

(STATIO… column, partly covered)

STATIO…
BEGIN PROJE…
252+83.59 M…
259+22.10 P
263+75.02 P
275+60.52 P
280+46.69 P
286+03.10 P
296+93.30 P
303+79,82 P
319+89.78 P
323+83.61 P
332+82.91 P
336+71.62 P
342+15.02
346+53.37
348+04.61 M…
350+61.61 P
351+76.13
352+53.29 A
355+69.62 P
361+81.69 P
368+59.05 F
373+29.53 F
374+29.57 P
374+52.00 E
377+29.73 F
381+10.03 P
382+30.40 F
382+30.40 E
391+01.53 P.
395+95.46 F
399+56.76 F
402+94.57 F
410+82.61 P
415+78.67 P
421+91.09 P
431+24.34 P
435+42.13 F
442+83.93 F
449+84.31 F
450+84.30 F
451+77.97 E
458+15.88 F
464_45.96 F
465+90.24 F
465+90.24 E
469+58.65 F
477+82.00 F
487+57.95 F
492+41.21 F
496+58.92 F
504+39.00 F
505+75

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0.57
0.44
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0.52
0.59

* See Attached

BY:	DATE:	DESCRIPTION OF CHANGE:
PB/CSA	11/5/90	ADDED 109(1), DELETED 303(1), INCREASED 304(1) & 203(1A)

RECORD OF REVISIONS

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

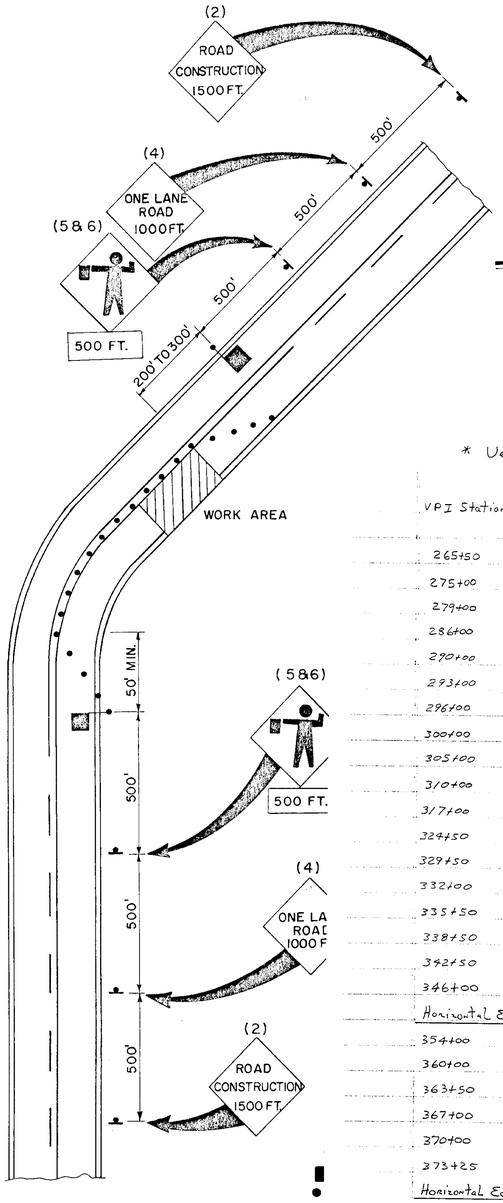
HAINES

HAINES LUTAK ROAD SURFACING
PROJ. NO. 70244
HORIZONTAL ALIGNMENT SUMMARY

ALASKA

DESIGNED BY: F. MURPHY	PROJECT NO. 70244
DRAWN BY: AUTOCADD/CSA	DATE: 10/90
CHECKED BY: P.JONES	SHEET 3 OF 4

STATE OF ALASKA 49th P. BEDNAROWICZ CE-5104 REGISTERED PROFESSIONAL ENGINEER



TYPICAL ONE LANE ROAD

-GENERAL NOTES-

1. IF ENTIRE WORK AREA IS VISABLE FROM ONE STATION, SINGLE FLAGGER MAY BE USED.
2. WARNING LIGHTS SHOULD BE USED TO MARK CHANNELIZING DEVICES AT NIGHT AS NEEDED.
3. CHANNELING DEVICES ARE TO BE EXTENDED TO A POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC.

Lutak Road

* Vertical Curve Information

Page #1

VPI Station	Top of Seal Coat Elev.	Length of V.C.	% in	% out
265+50	30.70	300'	0.00	+1.189
275+00	42.00	200'	+1.189	+1.150
279+00	46.60	200'	+1.150	+1.371
286+00	56.20	200'	+1.371	+2.200
290+00	65.00	200'	+2.200	+1.050
293+00	68.15	200'	+1.050	-0.983
296+00	65.20	200'	-0.983	-1.300
300+00	60.00	200'	-1.300	-1.160
305+00	54.20	200'	-1.160	-1.080
310+00	48.80	200'	-1.080	-3.071
317+00	27.30	200'	-3.071	+0.187
324+50	28.70	200'	+0.187	+0.720
329+50	32.30	200'	+0.720	+0.480
332+00	33.50	200'	+0.480	-0.743
335+50	30.90	300'	-0.743	-0.267
338+50	30.10	300'	-0.267	-0.550
342+50	27.90	200'	-0.550	+0.612
346+00	30.05	200'	+0.612	0.00
Horizontal Equation 351+72.26 P.O.T. BK. = 352+53.29 P.O.T. AHD.				
354+00	30.05	200'	0.00	-0.733
360+00	25.65	200'	-0.733	-0.343
363+50	24.45	300'	-0.343	+2.171
367+00	32.05	400'	+2.171	-0.233
370+00	31.35	200'	-0.233	+1.833
373+25	37.05	200'	+1.833	-3.035
Horizontal Equation 374+38.32 P.T. BK. = 374+52.00 P.O.T. AHD				
378+00	23.05	300'	-3.035	+0.750

Page #2

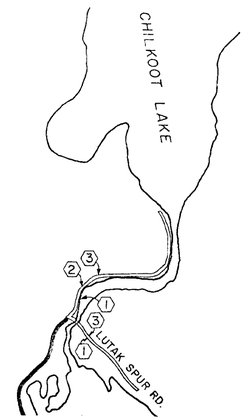
VPI Station	Top of Seal Coat Elev.	Length of V.C.	% in	% out
382+00	26.05	200'	+0.750	+1.771
Horizontal Equation 382+29.62 P.T. BK. = 382+30.39 P.O.T. AHD.				
385+00	31.35	200'	+1.771	-1.929
389+20	23.25	300'	-1.929	+1.302
393+50	28.85	200'	+1.302	0.00
396+00	28.85	200'	0.00	-0.900
398+00	27.05	200'	-0.900	+2.200
400+00	31.45	200'	+2.200	-1.200
402+00	29.05	200'	-1.200	+0.600
404+00	30.25	200'	+0.600	+1.000
406+50	32.75	200'	+1.000	-2.767
409+50	24.45	200'	-2.767	+1.400
412+50	28.65	200'	+1.400	+2.400
414+50	33.45	200'	+2.400	-2.356
419+00	22.85	350'	-2.356	+1.400
425+00	31.25	200'	+1.400	-1.533
428+00	26.65	200'	-1.533	+2.123
431+25	33.55	200'	+2.123	-2.400
435+00	24.55	200'	-2.40	+0.733
439+50	27.85	200'	+0.733	-1.000
442+00	25.35	300'	-1.000	+0.00
Horizontal Equation 450+83.70 P.T. BK. = 451+77.97 AHD.				
452+00	25.35	200'	0.000	+0.933
456+50	25.35	200'	+0.933	-0.360
459+00	28.65	200'	-0.360	-0.600
462+00	26.85	200'	-0.600	+0.300
464+00	27.45	200'	+0.300	-0.733
467+00	25.25	200'	-0.733	0.00

Page #3

VPI Station	Top of Seal Coat Elev.	Length of V.C.	% in	% out
469+50	25.25	200'	0.00	-0.333
472+50	24.25	300'	-0.333	+0.360
475+00	25.15	200'	+0.360	0.00
480+00	25.15	200'	0.00	-0.350
482+00	24.45	200'	-0.350	+1.409
487+50	32.20	200'	+1.409	+0.200
489+50	32.60	200'	+0.200	+0.655
492+25	34.40	250'	+0.655	-2.455
495+00	27.65	200'	-2.455	-1.133
498+00	24.25	200'	-1.133	+0.700
500+00	25.65	200'	+0.700	+1.314
503+50	30.25	200'	+1.314	+0.00
506+80	30.25	200'	0.00	-2.194
508+60	26.30	100'	-2.194	0.00

Match Bridge at 509+70 ± at Elev. 26.30

* Vertical Alignment



PERMANENT CONSTRUCTION SIGN DETAIL

BY	DATE	DESCRIPTION OF CHANGE

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

HAINES LUTAK ROAD SURFACING
PROJECT NO. 70244
TRAFFIC CONTROL PLAN

APPROVED BY: DESIGN GROUP CHIEF DATE	DESIGNED BY: F.M.	SCALE: NONE
RECOMMENDED BY: DESIGN ENGINEER, GROUP DATE	DRAWN BY: B.A.	DATE: 10/90
PREPARED BY: PROJECT MANAGER LEAD DESIGNER	CHECKED BY: P.J.	SHEET 4 OF 4

ENGINEER'S STAMP
STATE OF ALASKA
49TH
P. Bednarowicz
CE-5104
REGISTERED PROFESSIONAL ENGINEER