

**STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES**

**PLAN AND PROFILE
PROPOSED HIGHWAY PROJECT**

RS 0987(3) ~~(B 59592)~~ ^{B 59532}

MUD BAY ROAD—HAINES

**STAGE I
GRADING, DRAINAGE,
SURFACE TREATMENT**

STATE	PROJECT	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS0987(3)	1982	1	12

ADDENDUM No 1, ATTACHMENT No 1

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTION
3	ESTIMATE OF QUANTITIES
4	TRAFFIC CONTROL & CONSTRUCTION SIGNING PLANS
5	DRAINAGE DETAILS STA. 64+11
6-X	INTERSECTION & DRAINAGE DETAILS <i>Sht. 7 deleted 5-17-83</i>
8-11	PLAN & PROFILE DRAWINGS
12	HORIZONTAL CONTROL DIAGRAM

STANDARD PLANS:

- A-1
- C-00.00, C-10.01, C-11.01
- D-01.00, D-04.00, D-05.00, D-06.00, D-13.00, D-24.00, D-26.00
- G-04.00S, G-04.00W, G-14.00S, G-14.00W, G-18.00
- I-80.00, I-40.00
- M-18.00
- S-00.00, S-05.00, S-20.00, S-30.00
- T-20.00, T-21.00, T-22.00
- U-03.00

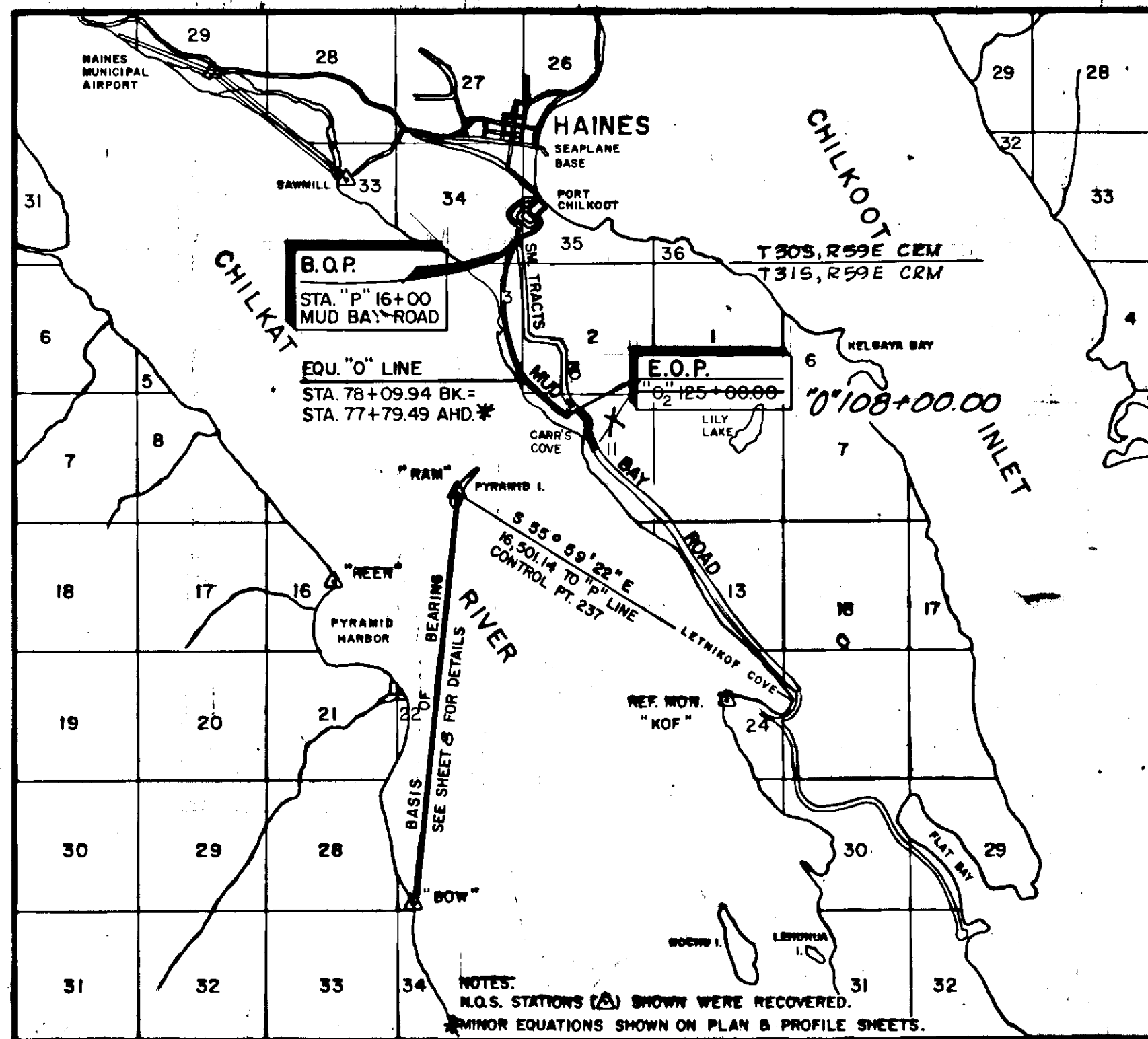
DESIGN DESIGNATION

- ADT (1980) = 252
- ADT (2000) = 455
- DHV = 16%
- D = 55-45
- T = 3.5%
- V = 40 MPH - "0" 16+97.16 to "0" 23+00.00 (Small Tracts Road)
- V = 30 MPH - "0" 17+64.35 to "0" 43+27.34 109+00.00
- V = 40 MPH - "0" 106+00 to "0" 125+00 (Small Tracts & Mud Bay Roads)
- T.I. = 6.0

EXCEPTIONS TO VERTICAL ALIGNMENTS BETWEEN THE FOLLOWING STATIONS; "0" 21+00± to "0" 41+00±, AND "0" 117±00± to "0" 125+00± WERE GRANTED BY THE FHWA ON 3-11-82.

PROJECT SUMMARY

WIDTH OF SUBGRADE	32 FEET
LENGTH OF PROJECT	9,278.96' ± 11.142-20 FEET 2.11 MILES
LENGTH OF GRADING	10,165.61' ± 12.500-85 FEET 2.33 MILES
LENGTH OF SURFACE TREATMENT	12,165.61' ± 1.93 FEET 2.42 MILES
LENGTH OF TEMPORARY CONNECTION	886.65' ± 0.17 FEET 0.33 MILES

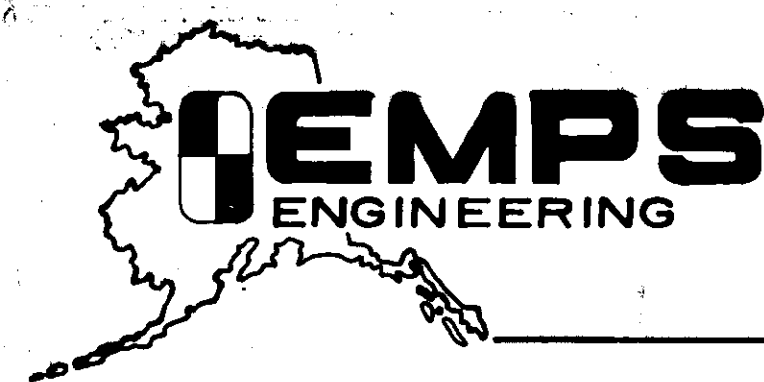
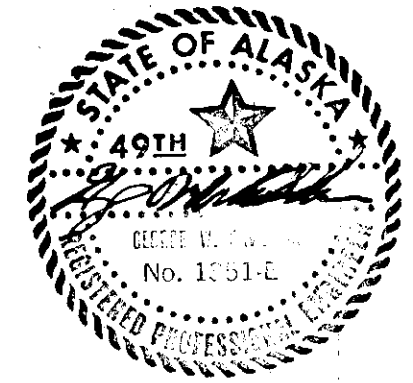


VICINITY MAP
SCALE: 1" = 1 MILE
USGS QUAD MAPS SKAGWAY A-1, A-2, B-1 & B-2 N5900-W13500/18X22.5



Taylor Construction Services/
Ritchie Transportation, J.V.
1983-1984

Project Engineer:
LARRY GEISE



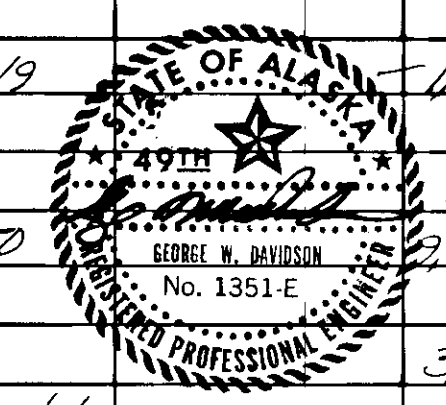
JUNEAU, ALASKA

ESTIMATE OF QUANTITIES

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.
ALASKA	RS 0987 (9)	1982	3

ADDENDUM No. 1, ATTACHMENT No. 9

ITEM NO.	ITEM	UNIT	SHEET					NUMBER	TOTALS PER ADDENDUM #1	Quantities	Totals	\$ Amount	TOTALS
			8	9	10	#	11A ADDENDUM #1						
110(1)	MOBILIZATION	L.S.						All Req'd.	All Req'd.	All Req'd.	52,800	ALL REQUIRED	
111(1)	TEMPORARY EROSION & POLLUTION CONTROL	CONT.S						Cont. Sum	0	Cont. Sum	0	CONT. SUM	
112(1)	TRAINING PROGRAM IN ACCORDANCE WITHWA ORDER, INTERIM 7-2(2)	CONT.S						Cont. Sum	420.5	Cont. Sum	336	CONT. SUM	
113(1)	FLAGGING	MAN-HR						All Req'd.	1668.5	All Req'd.	21,392	ALL REQUIRED	
114(1)	CONSTRUCTION SURVEYING BY CONTRACTOR	L.S.						All Req'd.	L.S.	" "	30,000	ALL REQUIRED	
115(1)	TRAFFIC MAINTENANCE	L.S.						All Req'd.	L.S.	" "	5,000	ALL REQUIRED	
115(2)	CONSTRUCTION SIGNS (APPROX. QUANTITIES= 196 S.F.)	L.S.						All Req'd.	L.S.	" "	4,000	ALL REQUIRED	
201(2B)	CLEARING & GRUBBING	L.S.						All Req'd.	L.S.	" "	6,000	ALL REQUIRED	
201(5)	SELECTIVE TREE REMOVAL	EACH	35	15	15	15	7	72	5	5	250	80	
202(1)	REMOVAL OF STRUCTURES & OBSTRUCTIONS	L.S.						All Req'd.	L.S.	All Req'd.	2,000	ALL REQUIRED	
202(4)	REMOVAL OF CULVERT PIPE	L.F.	205	225	40	280	0	470	398	398	1,592	750	
203(3)	UNCLASSIFIED EXCAVATION	C.Y.	8,862	3,670	5,703	23,342	1,100	19,335	20,250	20,250	91,125	41,577	
203(8)	EMBANKMENT	C.Y.	3711	9305	5167	47,769	15,762	33,945	36,948	36,948	184,940	65,952	
207(3)	FILTER CLOTH	S.Y.						7,100	4,128	914	914	1,188	1,100
304(10)	SUBBASE, GRADING B	TONS	7,247	7,453	7,790	9,835	3,058	25,548	20,794	21,794	162,595	32,325	
304(10)	SUBBASE, GRADING C	TONS	3,497	3,596	3,758	4,745	1,476	12,327	16,591	16,591	116,137	15,596	
405(1A)	HF 3505 Asphalt for Surface Treatment	TONS	3.3	36.9	21.5			61.7	57.08	57.08	37,308		
403(2)	MC-30 LIQUID ASPHALT FOR PRIME COAT	TONS	10.51	9.1	0	14.03		19.6	15.25	15.25	8,571	47.16	
405(1)	GRS-2 ASPHALT FOR SURFACE TREATMENT	TONS	42.11	46.81	43.77	56.21	16.74	149.48				188.95	
405(2A)	GRADING "B", COVER COAT MATERIAL	TONS	237.45	246.88	247.90	314.45	95.20	850.03				1074.48	
405(2B)	GRADING "E", COVER COAT MATERIAL	TONS	133.03	147.99	138.23	177.58	52.89	472.24				596.93	
405(1B)	CMS-2 Asphalt for Surface Treatment	TONS	29.8	0	14.5			57.6	55.14	55.14	26,247		
405(2)	Grading D-1, Cover Coat Material for Asphalt Surface Treatment	TONS	56.4	627.5	584.5			25.3	2,137	2,137	102,596		
603(22-18)	18 INCH PIPE	L.F.	290	200	370	80	0	860	1,180	1,180	21,240	940	
603(22-24)	24 INCH PIPE	L.F.	210	244	182	160	60	696	932	932	21,436	796	
603(22-36)	36 INCH PIPE	L.F.						100	100	100	2,800	100	
603(22-48)	48 INCH PIPE	L.F.						0				86	
603(13-54)	54 INCH CORRUGATED ALUMINUM PIPE	L.F.						270				270	
603(13-66)	66 INCH CORRUGATED ALUMINUM PIPE	L.F.						72	82	82	11,480	72	
603(28-48)	END SECTION FOR 48 INCH PIPE	EACH						2				2	
603(15-54)	END SECTION FOR 54 INCH CORRUGATED ALUMINUM PIPE	EACH						4				4	
603(15-66)	END SECTION FOR 66 INCH CORRUGATED ALUMINUM PIPE.	EACH						2	2	2	3,200	2	
604(4)	ADJUST EXISTING MANHOLES	EACH	2					2	0	0	0	2	
604(5A)	INLET, TYPE "A" W/GUTTER INLET FRAME & GRATE	EACH	2					2	2	2	2,000	2	
604(8)	ADJUST EXISTING SANITARY SEWER CLEANOUTS	EACH	1					1	1	1	300	1	
605(1)	8 INCH PERFORATED CORRUGATED STEEL PIPE UNDERDRAINS	L.F.	352					90	352	354	7,080	272	
606(2)	BEAM TYPE GUARDRAIL, TYPE II POST	L.F.	550	537.5	100	4116	1300	2,487.5				5311	
606(6)	END ANCHORAGES	EACH	1	3	1	11	2	7	6	6	4,200	16	
606(2A)	Beam Type Guardrail, Modified Type II Post	L.F.							2044	2,044	41,902		
611(1)	RIP RAP, CLASS II	C.Y.						24	23	23	345	82	
614(1)	MONUMENTS	EACH	8	6	8	11	2	24	24	24	2,400	33	
614(2)	MONUMENT CASES	EACH	8	6	8	11	2	24	24	24	2,400	33	
615(1)	STANDARD SIGNS	S.F.	90.50					44.25	109	117	5,265	134.75	
618(2)	SEEDING	ACRES	2.57	2.68	2.95	4.06	0.61	8.81	932	932	30,313	12.26	
618(4)	WATER FOR MAINTENANCE	M/GAL.	5.6	5.8	6.4	8.8	1.33	19.13				26.60	
627(1)	WATERING	M/GAL.	42.7	47.9	48.5	59.3	18.2	157.30	69.19	69.19	1,384	198.40	
628(7)	FIRE HYDRANT, RELOCATION	EACH						1	1	1	900	1	
628(11)	ADJUSTMENT OF VALVE BOX	EACH						2	2	2	600	1	
635(1)	INSULATION BOARD	MBM	8.80					8.80	9.50	9.50	2,500	8.80	
639(1)	APPROACHES (DRIVEWAYS)	EACH	11	12	8	6	0	31	36	36	3,600	37	
670(1)	PAINTED TRAFFIC MARKINGS (APPROX. QTY. 8.2 MILES)	L.S.						All Req'd.	L.S.	All Req'd.	8,500	ALL REQUIRED	



T.C.P. GENERAL NOTES

- A DESIGNATED EMPLOYEE OF THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY OF INSTALLING AND MAINTAINING THE REQUIRED TRAFFIC CONTROL ELEMENTS FOR THIS PROJECT.
- ALL PROJECT SIGNING AND BARRICADES REQUIRED SHALL BE AS SHOWN ON STANDARD PLANS C-00.00, C-10.01 and C-11.01. ADDITIONAL REQUIREMENTS ARE SHOWN IN THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, ALASKA SUPPLEMENT.
- ALL ONE-LANE CLOSURES SHALL BE AS SHOWN ON STANDARD PLAN C-11.01. ALL DETOURS REQUIRED ON THE PROJECT SHALL BE CONSTRUCTED AND CONTINUOUSLY MAINTAINED TO THE FOLLOWING MINIMUM WIDTHS AT ALL TIMES:
ONE-WAY TRAFFIC - 12'
TWO-WAY TRAFFIC - 20'
- ANY ONE-WAY DETOURS DURING DUST TO DAWN WILL REQUIRE TEMPORARY ILLUMINATION. THE MINIMUM LEVEL OF ILLUMINATION SHALL BE 2.0 FOOT-CANDLES ON THE ROADWAY SURFACE.
- SHOULDER DROP-OFFS GREATER THAN 1 1/2 INCHES SHALL NOT BE ALLOWED DURING NON-WORKING HOURS.
- THE FOLLOWING CONSTRUCTION SIGNING SCHEDULE SHALL BE CONSIDERED AS THE MINIMUM AMOUNT OF REQUIRED SIGNING. ADDITIONAL SIGNS MAY BE REQUIRED BY THE ENGINEER.
- DURING THE CONSTRUCTION OF THIS PROJECT, THE CONTRACTOR MAY CLOSE THE WORK AREA BETWEEN 10⁰⁰ 18+00 AND 11+00 TO ALL BUT LOCAL TRAFFIC. THROUGHOUT THE REMAINING PORTIONS OF THE PROJECT THE CONTRACTOR SHALL MAINTAIN ONE-WAY TRAFFIC WITH FLAGGING OPERATIONS DURING WORKING HOURS. DURING NON-WORKING HOURS THE CONTRACTOR SHALL MAINTAIN TWO-WAY TRAFFIC THROUGHOUT THE ENTIRE PROJECT.
- ALL ROADWAY CLOSURES FOR BLASTING SHALL BE LIMITED TO TWO (2) HOURS TOTAL. ONE (1) HOUR OF TOTAL CLOSURE WILL BE ALLOWED AND ONE (1) HOUR OF ONE-WAY TRAFFIC WITH A FLAGGING OPERATION.
- ALL ROADWAY CLOSURES FOR REMOVAL AND INSTALLATION OF CULVERTS SHALL BE IN ACCORDANCE WITH SECTION 115-3.01 OF THE STANDARD SPECIFICATIONS.
- IN ORDER TO AVOID DELAY TO SCHOOL BUS SCHEDULES NO ROAD CLOSURES WILL BE PERMITTED DURING THE FOLLOWING PERIODS: 6:00 A.M. TO 8:30 A.M. OR 4:00 P.M. TO 6:30 P.M. ADDITIONALLY, NO CLOSURES WILL BE PERMITTED ON FEDERAL OR STATE HOLIDAYS, WEEKENDS, OR DURING THE HAINES SALMON DERBY OR 2 HOURS PRIOR TO ANY FERRY DEPARTURE FROM HAINES.
- 24 HOURS PRIOR TO ANY ROADWAY CLOSURES, THE CONTRACTOR SHALL NOTIFY, IN WRITING, THE FOLLOWING PERSONS AND OR AGENCIES:
 - D.O.T. & P.F. ENGINEER
 - ALL LOCAL FIRE, POLICE AND CITY OFFICIALS
 - PARK RANGERS AT CHILKAT AND CHILKOOT STATE PARKS
 - SCHOOL BUS COMPANY, IF SCHOOL IS IN SESSION
- THE CONTRACTOR SHALL ALSO BROADCAST THE TIMES OF ANY CLOSURES ON ALL LOCAL RADIO STATIONS. ALL NOTICES OF CLOSURES SHALL BE BROADCAST FOR 24 HOURS PRIOR TO THE CLOSURE, A MINIMUM OF FIVE (5) TIMES PER DAY BETWEEN THE HOURS OF 8:00 A.M. AND 10:00 P.M.
- THE CONTRACTOR SHALL NOTIFY ALL LOCAL PROPERTY OWNERS 24 HOURS IN ADVANCE OF ANY RECONSTRUCTION OF PRIVATE DRIVEWAYS.
- DURING PLACEMENT OF EACH SURFACE TREATMENT COURSE, THE CONTRACTOR SHALL UTILIZED ONE-WAY TRAFFIC WITH PILOT CARS FOR A MINIMUM OF 18 HOURS. NO TRAFFIC WILL BE ALLOWED ON THE FRESHLY PLACED SURFACE COURSE FOR A MINIMUM OF 8 HRS. DURING THE 18 HOUR CURING PERIOD THE MAXIMUM SPEED ON FRESHLY PLACED SURFACE COURSES SHALL BE 20 MPH.

TRAFFIC CONTROL PLAN (T.C.P.) CONSTRUCTION SIGNING SCHEDULE

LOCATION	QUANTITY	SQ. FT.	CODE	SIZE	LEGEND
①	2	30.0	G20-1	36" x 60"	ROAD CONSTRUCTION NEXT 2 MILES
②	4	40.0	G20-2	24" x 60"	END CONSTRUCTION
③	4	9.0	CW13-1	18" x 18"	* M.P.H.
④	4	36.0	CW20-1B	36" x 36"	ROAD CONSTRUCTION 1000 FT.
⑤	7	43.75	CW8-8	30" x 30"	ROUGH ROAD
⑥	1	6	M4-10AL	18" x 48"	DETOUR LEFT
⑦	1	6	M4-10AR	18" x 48"	DETOUR RIGHT
⑧	2	25.0	R11-4	30" x 60"	ROAD CLOSED TO THRU TRAFFIC
⑨	6				TYPE 3 BARRICADES
TOTAL SQ. FT.		195.75			

* INDICATES ADVISORY SPEED TO BE DETERMINED AT SITE.

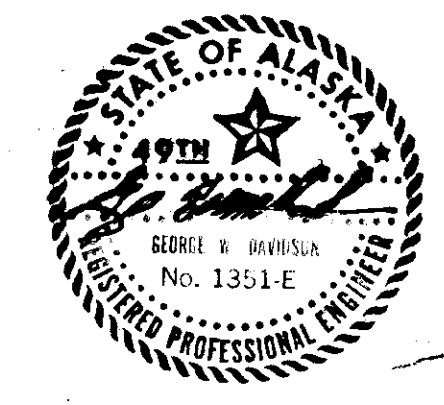
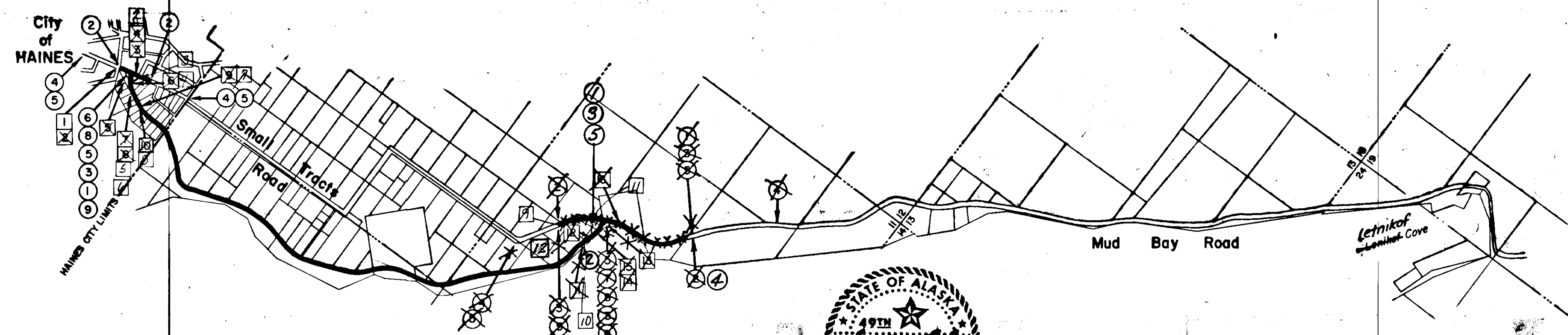
STANDARD SIGN SUMMARY

No.	Station	Dist. From Centerline	Code No.	Legend	Size	Thickness	Area S.F.	No. Posts	Type	Size	Length*	Facing Traffic	Remarks	Sheet No.
1	"P" 16+00 RT.	28'	D1-1	SMALL / TRACTS / ROAD ↑	36" x 60"	0.10	15.0	2	TUBE	2"	2 @ 11.5'	S.B.		8
2	"P" 16+00 RT.	28'	D7-1	CHILKAT STATE PARK 7 MILES →	24" x 72"	0.10	12	-	-	-	-	S.B.	MOUNT BELOW 1	8
3	"P" 19+00 LT.	28'	D1-1	HAINES ↑	12" x 48"	0.08	4	2	TUBE	2"	2 @ 16'	N.B.		8
4	"P" 19+00 LT.	28'	D7-1	← CHILKAT STATE / PARK 7 MILES	24" x 72"	0.08	12	-	-	-	-	N.B.	MOUNT BELOW 3	8
5	"O" 18+15 LT.	28'	R1-1	STOP	30" x 30"	0.08	6.25	1	TUBE	2"	11'	E.B.		8
6	"O" 19+50 LT.	28'	D1-2	← HAINES SMALL TRACTS / ROAD →	36" x 72"	0.10	18	2	TUBE	2"	2 @ 14'	E.B.		8
7	"O" 20+00 RT.	28'	W7-1	SYMBOL	30" x 30"	0.08	6.25	1	TUBE	2"	2 @ 14'	S.B.		8
8	"O" 20+00 RT.	28'	W7-3	9% GRADE	24" x 18"	0.08	3.0	-	-	-	-	S.B.	MOUNT BELOW 7	8
9	"O" 21+00 LT.	28'	W3-1A	SYMBOL	36" x 36"	0.08	9.0	1	TUBE	2"	11.5'	N.B.		8
10	"O" 21+00 RT.	28'	R2-1	SPEED LIMIT 30	24" x 30"	0.08	5.0	1	TUBE	2"	11'	S.B.		8
11	"O" 10+00 RT.	19'	W3-1A	SYMBOL	36" x 36"	0.08	9.0	1	TUBE	2"	14'	E.B.		11
12	"O" 11+00 LT. 0' 105+50	28' 19'	W3-1A R2-1	SPEED LIMIT 30 Road Narrows	36" x 36" 24" x 30"	0.08	5.0	1	TUBE	2"	15'	S.B.		11
13	"O" 113+05 RT.	19'	R1-1	STOP	30" x 30"	0.08	6.25	1	TUBE	2"	14'	N.B.		11
14	"O" 111+50 RT.	19'	D1-1	← HAINES	12" x 48"	0.08	4.0	2	TUBE	2"	14' & 16'	N.E. B.		11
15	"O" 111+50 RT.	19'	D7-1	CHILKAT STATE / PARK 5 MILES →	30" x 72"	0.10	15.0	-	-	-	-	N.E. B.	MOUNT BELOW 14	11
16	"O" 116+00 RT.	19'	R2-1	SPEED LIMIT 35	24" x 30"	0.08	5.0	1	TUBE	2"	14'	S.E. B.		11
17	AS DIRECTED	28'	D10-1	MILE 2	10" x 18"	0.08	1.25	1	TUBE	2"	-	N.W. B.	Replace existing Milepost with new sign at original location if possible.	
* POST LENGTHS ARE APPROXIMATE ONLY. VERIFY LENGTH AFTER GRADING HAS BEEN COMPLETED.														
18	"O" 107+00	19'	W8-3a	Pavement Ends	36" x 36"	0.08	5.09	1	tube	2"	15"	S.B.		
19	"O" 111+00	15'	R2-1	Speed Limit 30	24" x 30"	0.08	5.0	1	tube	2"	15"	N.B.		

N.I.C. →

GENERAL SIGNING AND STRIPING NOTES.

- Sign locations and post lengths are approximate only and are subject to minor revisions.
- All sign posts shall be square telescoping perforated galvanized steel posts, the 2" size shall be used above ground and the 2-1/4" shall be used below ground for the sleeve.
- All posts shall be installed with the sleeve type embedment in accordance with Standard Plan S-30.00 except that the 2-1/4" size shall be used for the entire embedment depth.
- Post lengths are from the cut-off in the sleeve to the top of the post. See Standard Plans S-05.00 & S-30.00
- Painted Traffic Markings shall be in accordance with Standard Plans T-21.00 and Section 670 of the Specifications.



TRAFFIC CONTROL & CONSTRUCTION SIGNING PLAN

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0987(3)	1982	4A	12

STANDARD SIGN SUMMARY

NO.	STATION	DIST. FROM E.	CODE NO.	LEGEND	SIZE	THICKNESS	AREA S.F.	NO. POSTS	TYPE	SIZE	LENGTH	FACING TRAFFIC	REMARKS	SHEET NO.
1	"P" 16+00 Rt.	28'	D1-3	SMALL TRACTS ROAD SILKEAT PARK →	36" x 108"		275	2	Tube	2"	20' 14"	S.B.		8
2	"P" 19+00 Lt.	28'	D1-3	HAINES STATE PARK	36" x 78"		19.55	2	Tube	2"	20' 16"	N.B.		8
3	"D" 18+15 Lt.	28'	R1-1	STOP	30" x 30"	0.08	6.25	1	Tube	2"	11'	E.B.		8
4	"D" 19+50 Lt.	28'	D1-2	HAINES SMALL TRACTS RD. →	24" x 108"		18.0	2	Tube	2"	20' 14"	E.B.		8
5	"D" 20+00 Rt.	28'	W7-1	SYMBOL	30" x 30"	0.08	6.25	1	Tube	2"	20' 14"	S.B.		8
6	"D" 20+00 Rt.	28'	W7-3	9% GRADE	24" x 18"	0.08	3.0	-	-	-	-	-	Mount Below 7	8
7	"D" 21+00 Lt.	28'	W3-1A	SYMBOL	36" x 36"	0.08	9.0	1	Tube	2"	11.5'	N.B.		8
8	"D" 21+00 Rt.	28'	R2-1	SPEED LIMIT 30	24" x 30"	0.08	5.0	1	Tube	2"	11'	S.B.		8
9	"D" 105 + 50 Lt.	19'	W5-1	ROAD NARROWS	36" x 36"	0.08	9.0	1	Tube	2"	15'	S.B.		11
10	"D" 107+00	19'	W3-3a	PAVEMENT ENDS	36" x 36"	0.08	9.0	1	Tube	2"	15'	S.B.		
11	"D" 111+00	15'	R2-1	SPEED LIMIT 30	24" x 30"	0.08	5.0	1	Tube	2"	15'	N.B.		

ADDENDUM No. 1, ATTACHMENT No. 4A

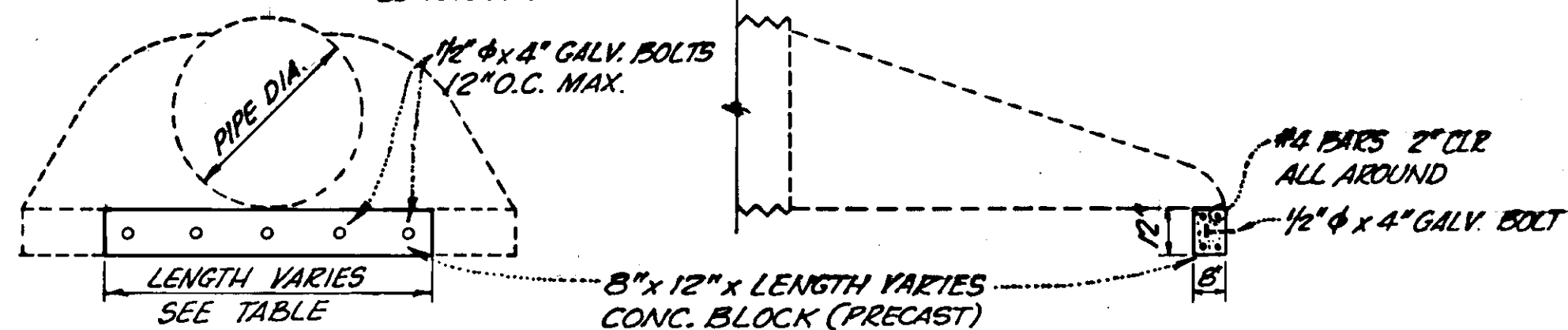
* Post lengths are approx. only. Verify length after grading has been completed.

HYDRAULIC & HYDROLOGIC SUMMARY STA 64 + 58

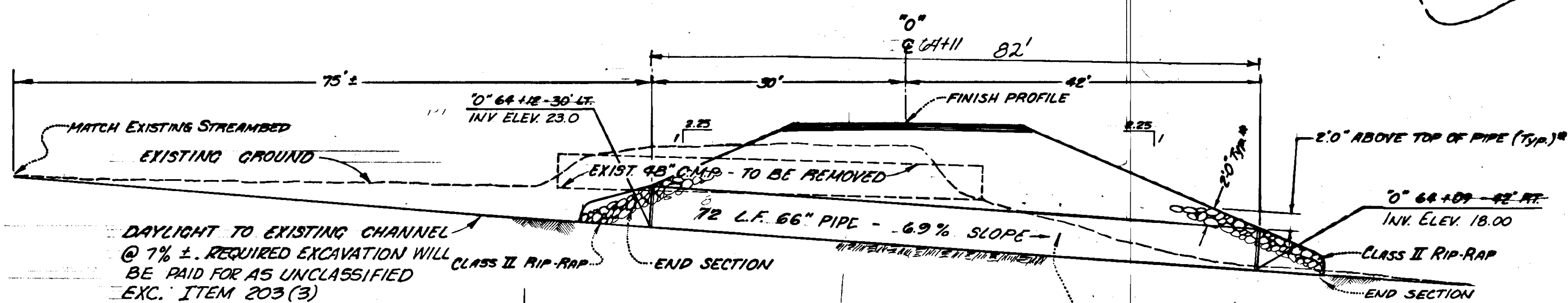
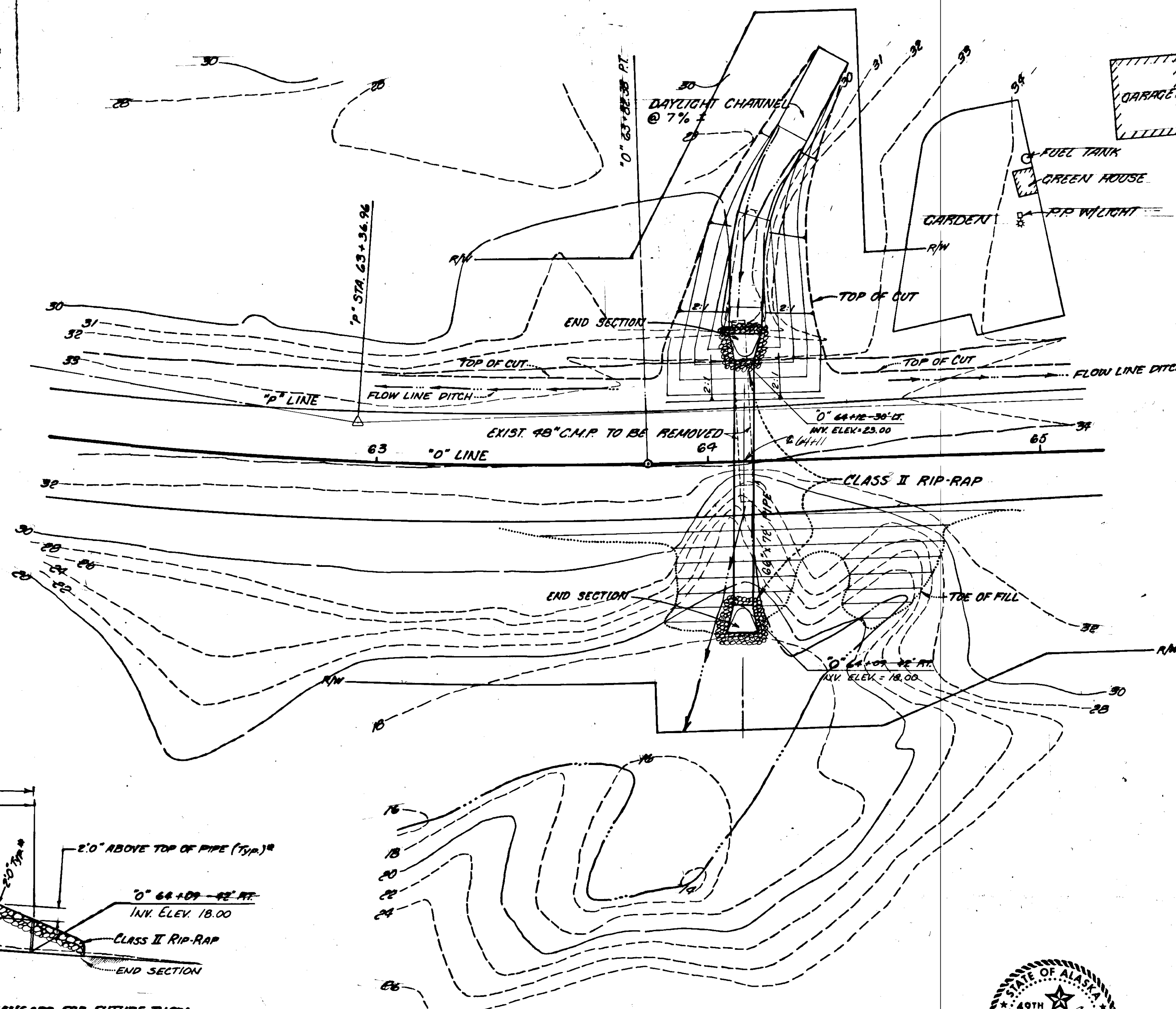
Flood Frequency	50 year	100 year
Exceedance Probability	2%	1%
Drainage Discharge	0.73 mi ²	0.73 mi ²
Design Discharge	149 cfs	166 cfs
Design Elevation	28.1	28.8
Hydraulic Capacity of the structure equals 160 cfs at Elev. 28.5 which has an Exceedance Probability less than 2%.		
Projected backwater at Q100=5.8 feet.		

PIPE DIA.	LENGTH
48"	84"
54"	96"
66"	114"

NOTE:
CONC. BLOCK TO BE INSTALLED ON ALL PIPES WITH END SECTIONS. INSTALL ON UPSTREAM END ONLY. PAYMENT IS CONSIDERED INCIDENTAL TO END SECTION.



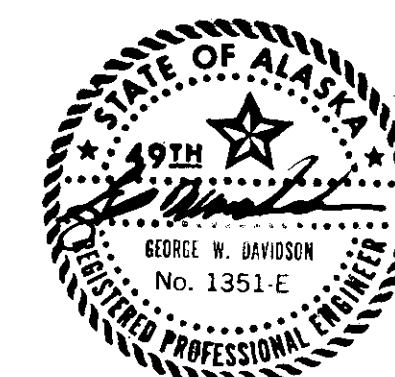
END SECTION TIE-DOWN BLOCK



PROFILE ALONG PIPE @

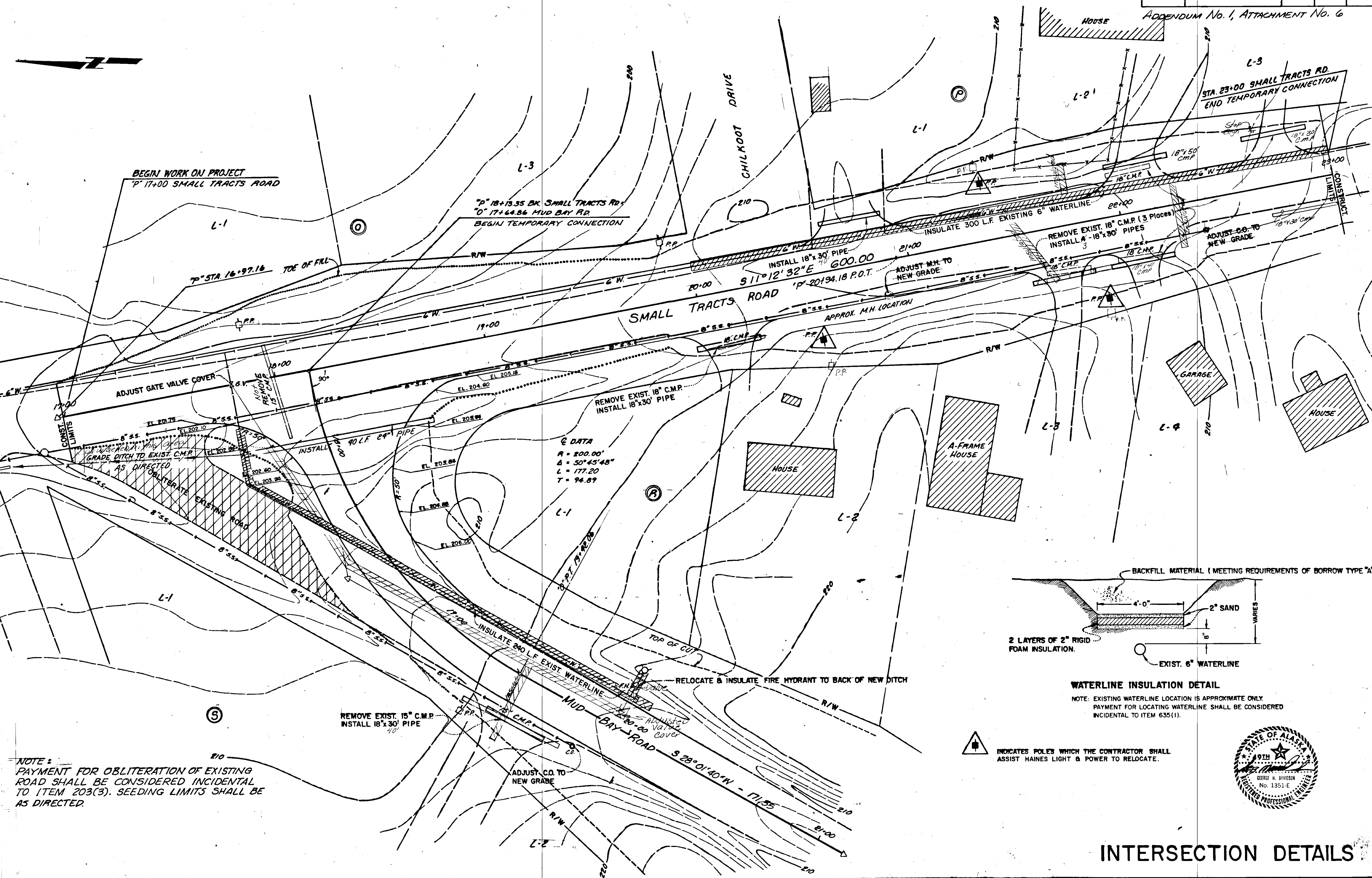
INSTALL PIPE HANGARS FOR FUTURE THIN WIRE INSTALLATION - SEE STANDARD PLAN D-13.00 FOR DETAILS. ALL LABOR AND MATERIALS SHALL BE CONSIDERED INCIDENTAL TO ITEM 603(13-66).

NOTE:
* DIMENSIONS SHOWN ARE TYPICAL FOR PLACEMENT OF CLASS II RIP-RAP AT INLET AND OUTLET OF PIPE.

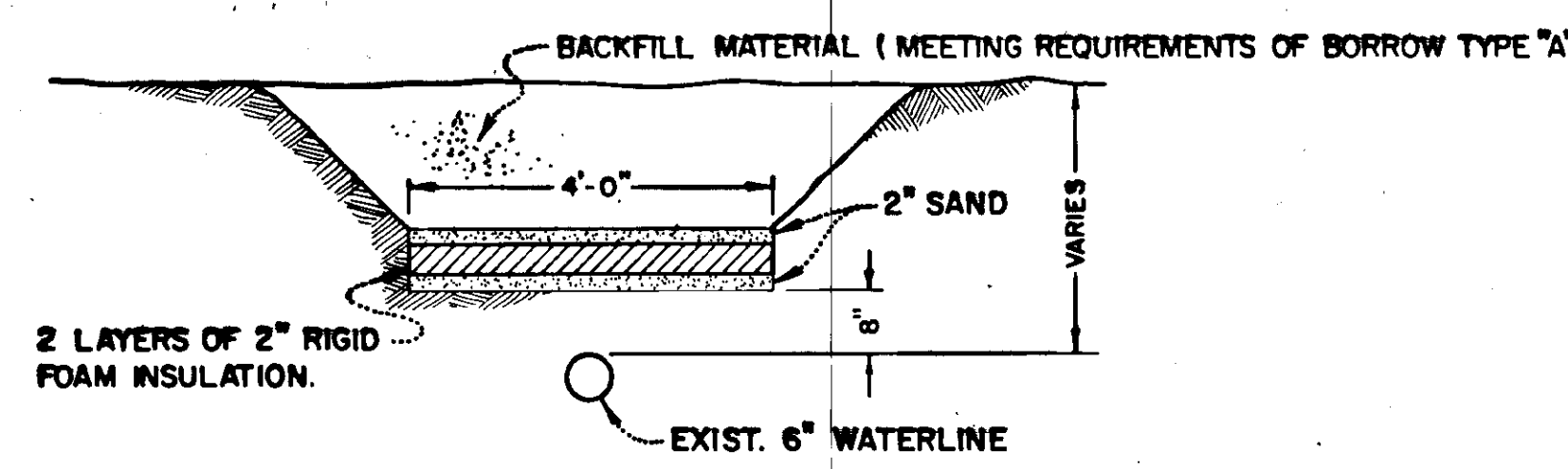


STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS 0987(3)	1982	6	12

ADDENDUM No. 1, ATTACHMENT No. 6

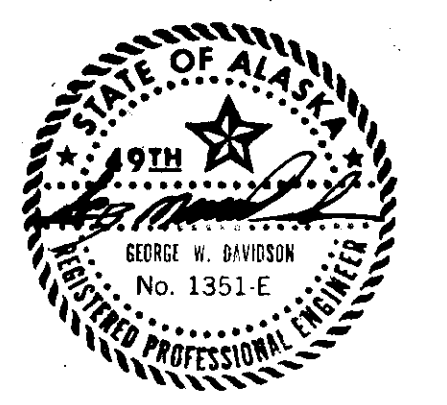


Q DATA
 R = 200.00'
 Δ = 50°45'48"
 L = 177.20
 T = 94.89



WATERLINE INSULATION DETAIL
 NOTE: EXISTING WATERLINE LOCATION IS APPROXIMATE ONLY.
 PAYMENT FOR LOCATING WATERLINE SHALL BE CONSIDERED INCIDENTAL TO ITEM 635(1).

INDICATES POLES WHICH THE CONTRACTOR SHALL ASSIST HAINES LIGHT & POWER TO RELOCATE.

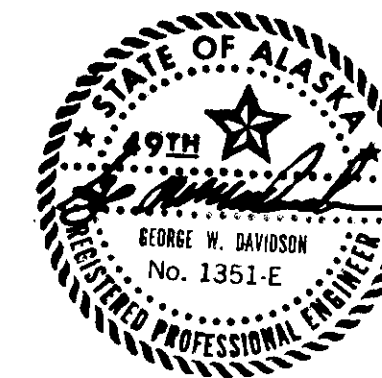


NOTE:
 PAYMENT FOR OBLITERATION OF EXISTING ROAD SHALL BE CONSIDERED INCIDENTAL TO ITEM 203(3). SEEDING LIMITS SHALL BE AS DIRECTED.

INTERSECTION DETAILS

STATE	PROJECT	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS0987(3)	1982	8	12

ADDENDUM No. 1, ATTACHMENT No. 8



VERTICAL CONTROL
 S.C. & G.S. BENCHMARK No. 5 (1943)
 BRASS CAP ON GRANITE ROCK, 50' ±
 EAST OF FRONT STREET & 300' ±
 NORTH OF INTERSECTION OF FRONT
 STREET & HAINES CUTOFF ROAD.
 ELEV. = 27.60 (1961 DATUM)

HORIZONTAL CONTROL
 BASED UPON THE GRID BEARING BETWEEN
 U.S. STATION "RAM" AND "BOW"
 "RAM" LAT. 59° 11' 45.00" LONG. 135° 27' 25.85"
 "BOW" LAT. 59° 09' 00.53" LONG. 135° 27' 58.86"
 PROJECT COORDINATES
 17+00.00 N 46,014.760 E 30,362.310
 18+00.00 N 38,437.050 E 32,901.193
 19+00.00 N 33,354.567 E 37,104.798
 20+00.00 N 25,928.201 E 41,724.099

T.B.M. No. 6
 SPIKE IN TOP OF 28" SPRUCE STUMP, 24.7 FEET
 EAST OF CENTERLINE OF MUD BAY ROAD & APPROX.
 70' ± NORTH OF INTERSECTION OF TOWER ROAD.
 ELEV. = 195.76

SEE SHEET 6 FOR
 INTERSECTION DETAILS

"P" 23+00 SMALL TRACTS RD.
 END TEMPORARY CONNECTION

"O" 17+64.84 A/D. MUD BAY RD.
 "P" 18+13.35 BK. SMALL TRACTS RD.
 BEGIN TEMPORARY CONNECTION

BEGIN WORK ON RS-0987(2)
 "P" 17+00 SMALL TRACTS ROAD

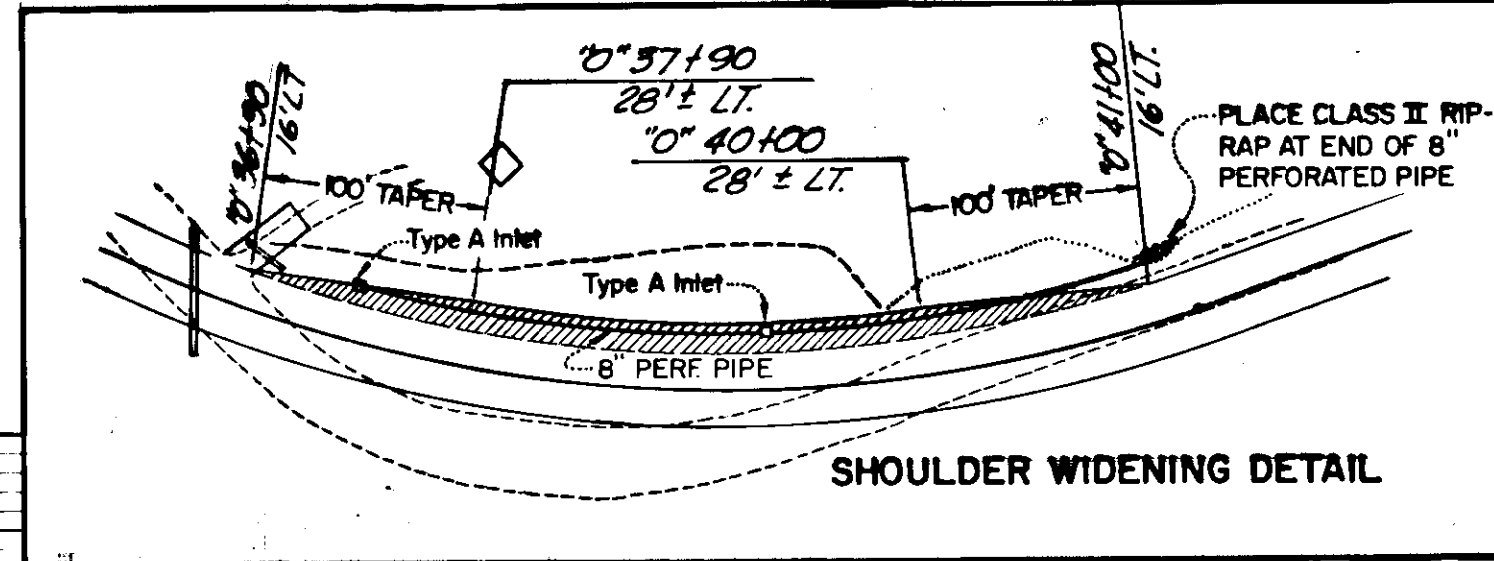
T.B.M. No. 7
 WEST FLANGE BOLT ON FIRE HYDRANT
 EAST SIDE OF MUD BAY ROAD STA. 20+00 ±
 ELEV. = 213.82

T.B.M. No. 7-A
 SPIKE IN BASE OF POWER POLE
 STA. 28+70 ±, 35' RT.
 ELEV. = 144.46

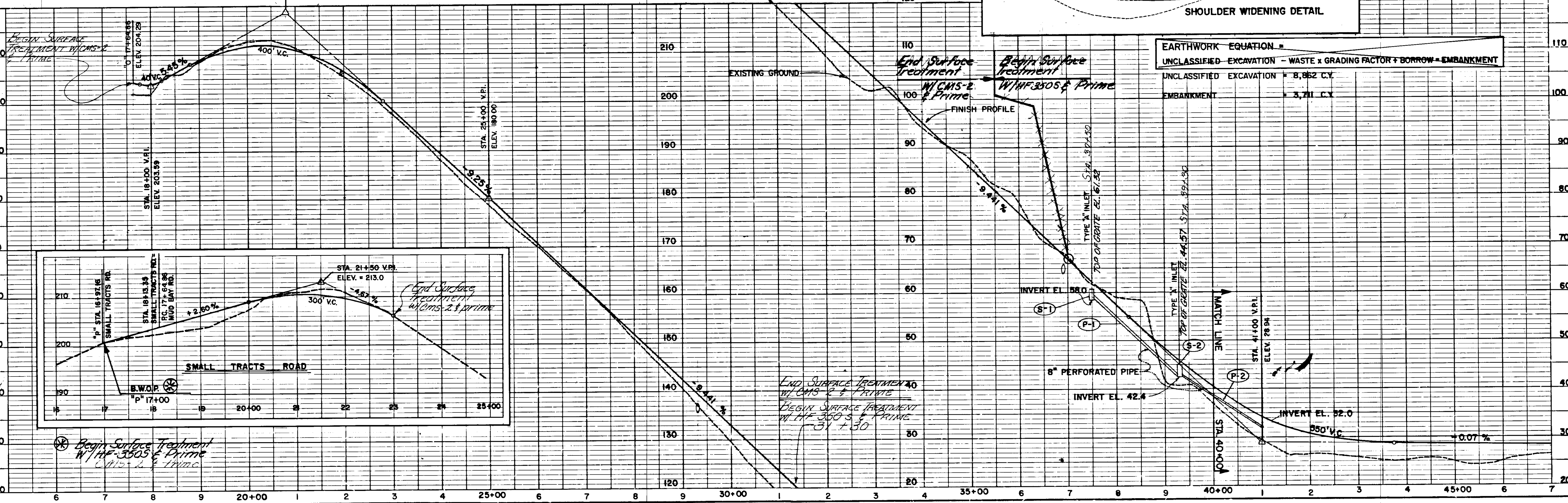
T.B.M. No. 8
 SPIKE IN BASE OF 26" SPRUCE
 S 44° W, 28.9 FEET FROM "P"
 STA. 38+96.17, ELEV. = 52.58
 50' RT. ± FROM "O" STA. 39+00 ±

NOTE: ALL T.B.M.'S SHOWN HEREON ARE TO BE CONSIDERED
 INFORMATIONAL ONLY. IT SHALL BE THE RESPONSIBILITY
 OF THE CONTRACTOR TO VERIFY THE STATED INFORMATION
 PRIOR TO BEGINNING ANY WORK.

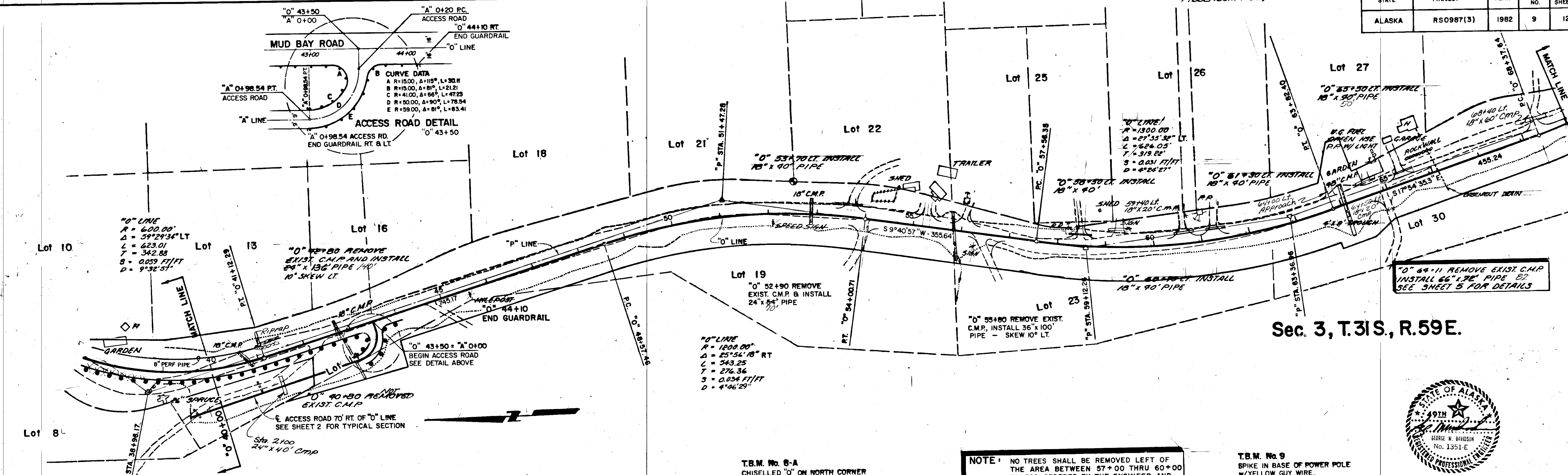
NOTE: THE CONTRACTOR SHALL MAKE ALL EFFORTS TO
 PROTECT ALL TREES AND THEIR ROOT SYSTEMS
 WHICH ARE NOT TO BE REMOVED.



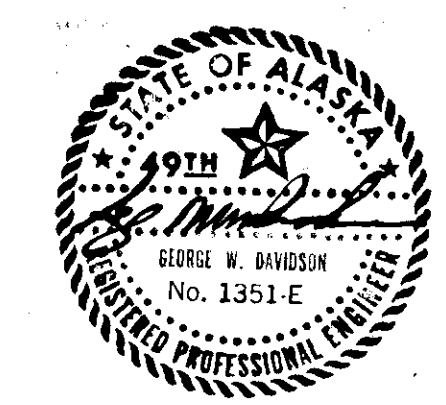
Sec. 3, T.31S, R.59E.



STATE	PROJECT	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS0987(3)	1982	9	12



Sec. 3, T.31S, R.59E.

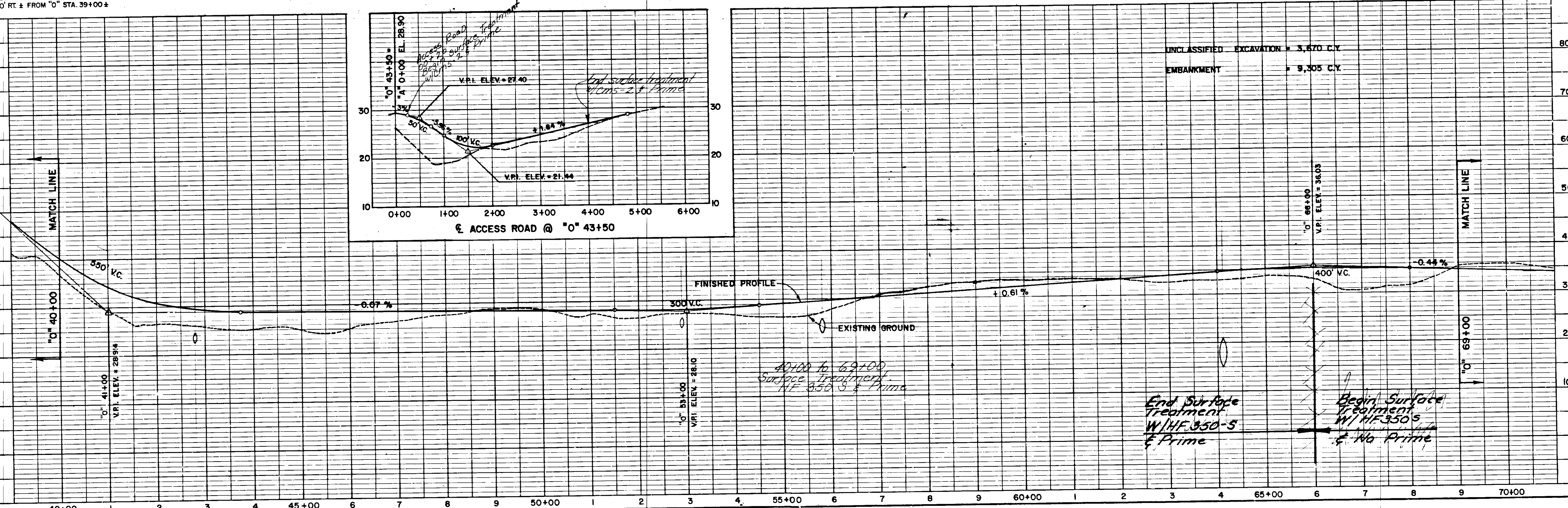


NOTE: NO TREES SHALL BE REMOVED LEFT OF THE AREA BETWEEN 57+00 THRU 60+00 UNLESS ORDERED BY THE ENGINEER AND APPROVED BY THE RIGHT-OF-WAY SECTION.

T.B.M. No. 8-A
 CHISELLED 'O' ON NORTH CORNER
 6' x 16' GRANITE BOULDER, 50' RT. ±
 OF STA. 49+75 ±. ELEV. = 28.65

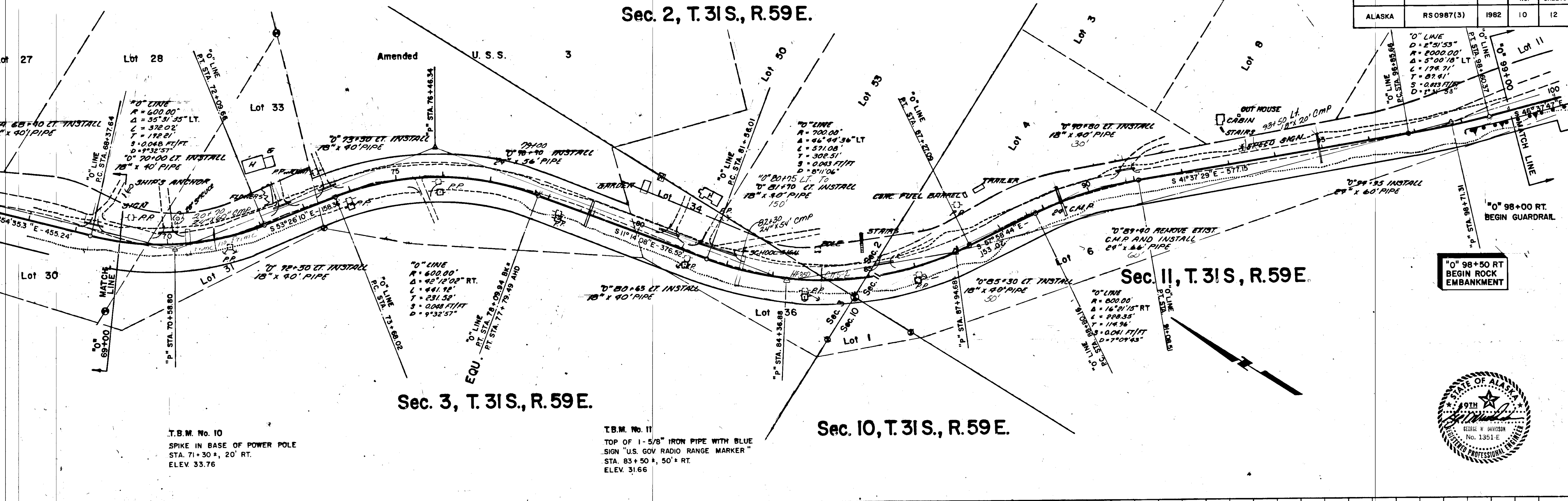
T.B.M. No. 9
 SPIKE IN BASE OF POWER POLE
 W/ YELLOW GUY WIRE.
 60' RT. ± OF STA. 61+00 ±
 ELEV. = 34.55

T.B.M. No. 8
 SPIKE IN BASE OF 26" SPRUCE
 S 44° W, 28.9' FROM "P" STA. 38+96.17
 ELEV. = 52.58
 50' RT. ± FROM "O" STA. 39+00 ±



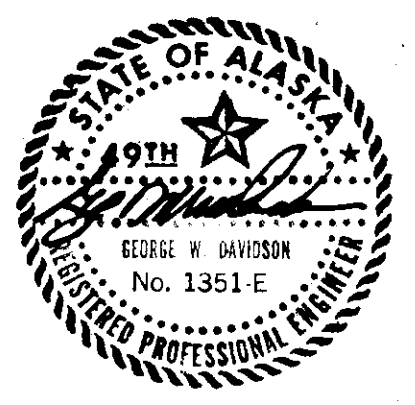
STATE	PROJECT	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS0987(3)	1982	10	12

Sec. 2, T. 31 S., R. 59 E.



T.B.M. No. 10
SPIKE IN BASE OF POWER POLE
STA. 71+30 ±, 20' RT.
ELEV. 33.76

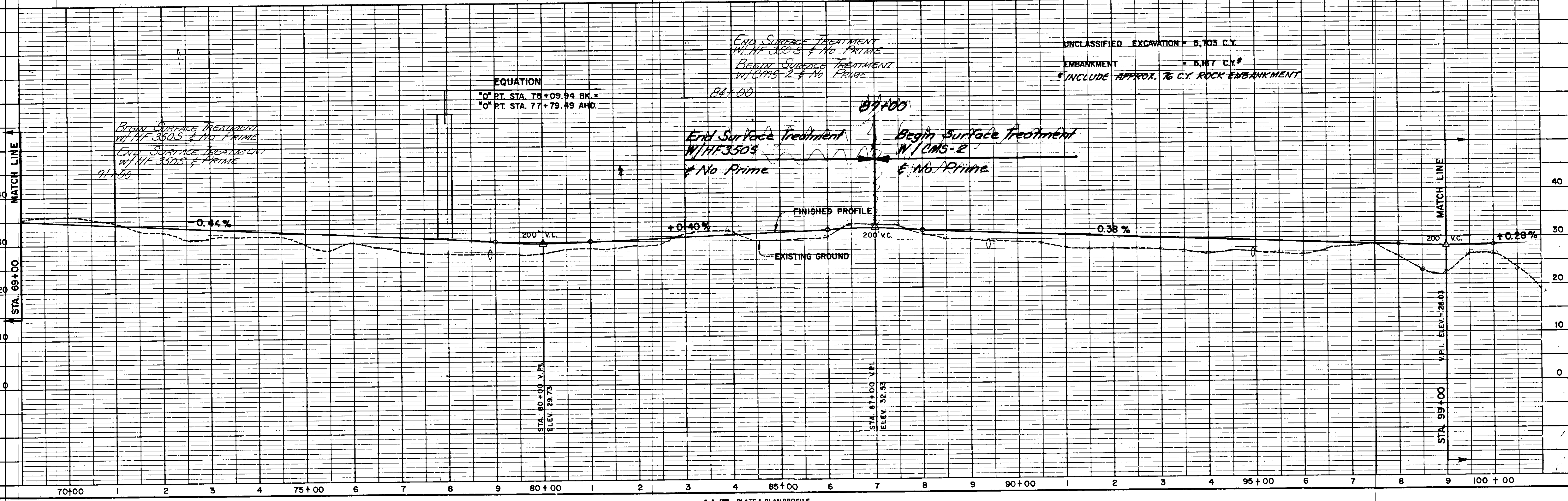
T.B.M. No. 11
TOP OF 1-5/8" IRON PIPE WITH BLUE
SIGN "U.S. GOV RADIO RANGE MARKER"
STA. 83+50 ±, 50' ± RT.
ELEV. 31.66



Sec. 3, T. 31 S., R. 59 E.

Sec. 10, T. 31 S., R. 59 E.

Sec. 11, T. 31 S., R. 59 E.

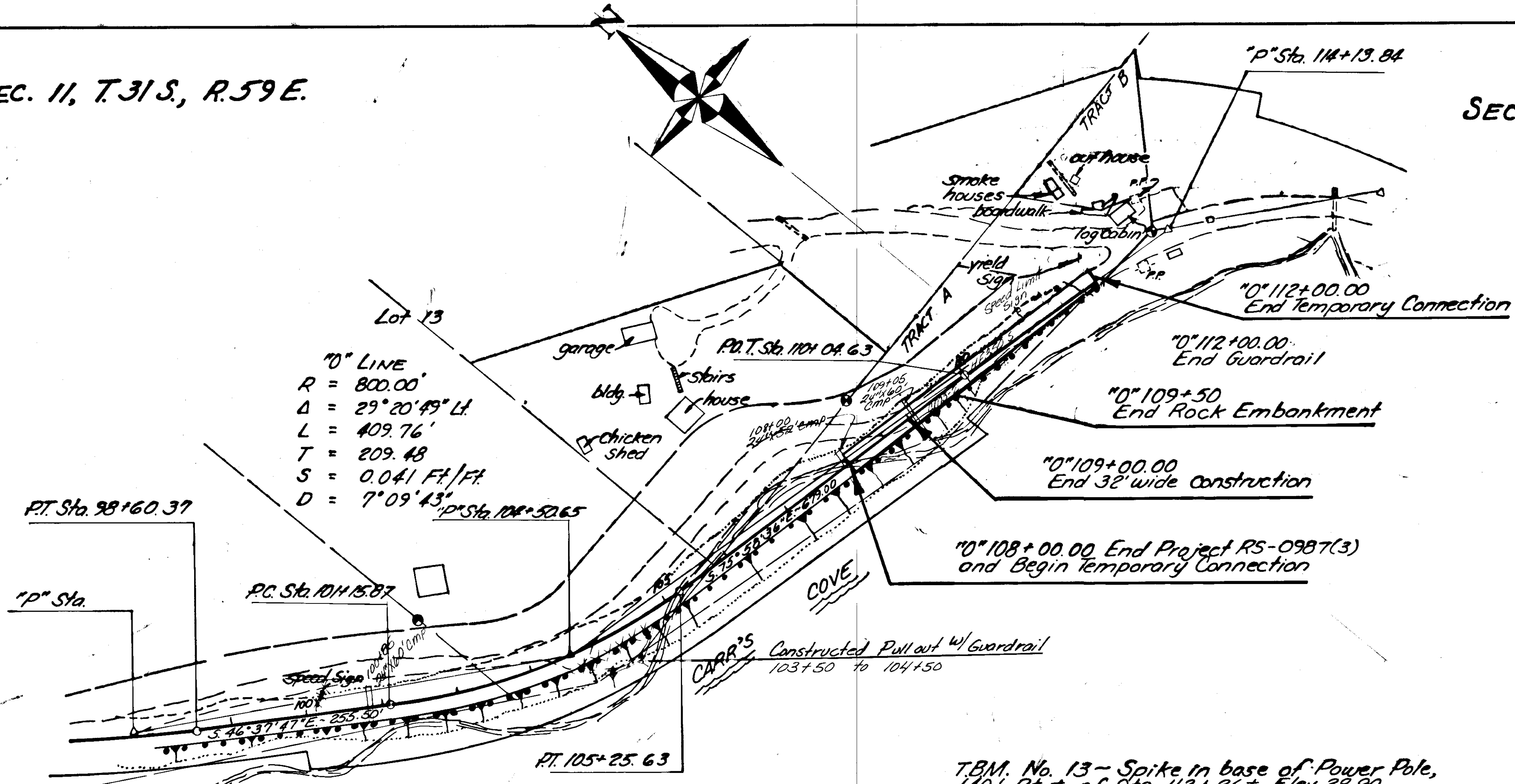
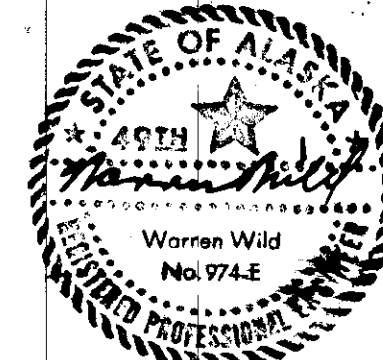


SEC. 11, T. 31 S., R. 59 E.

SEC. 11, T. 31 S., R. 59 E.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS 0987(3)	1983	11A	

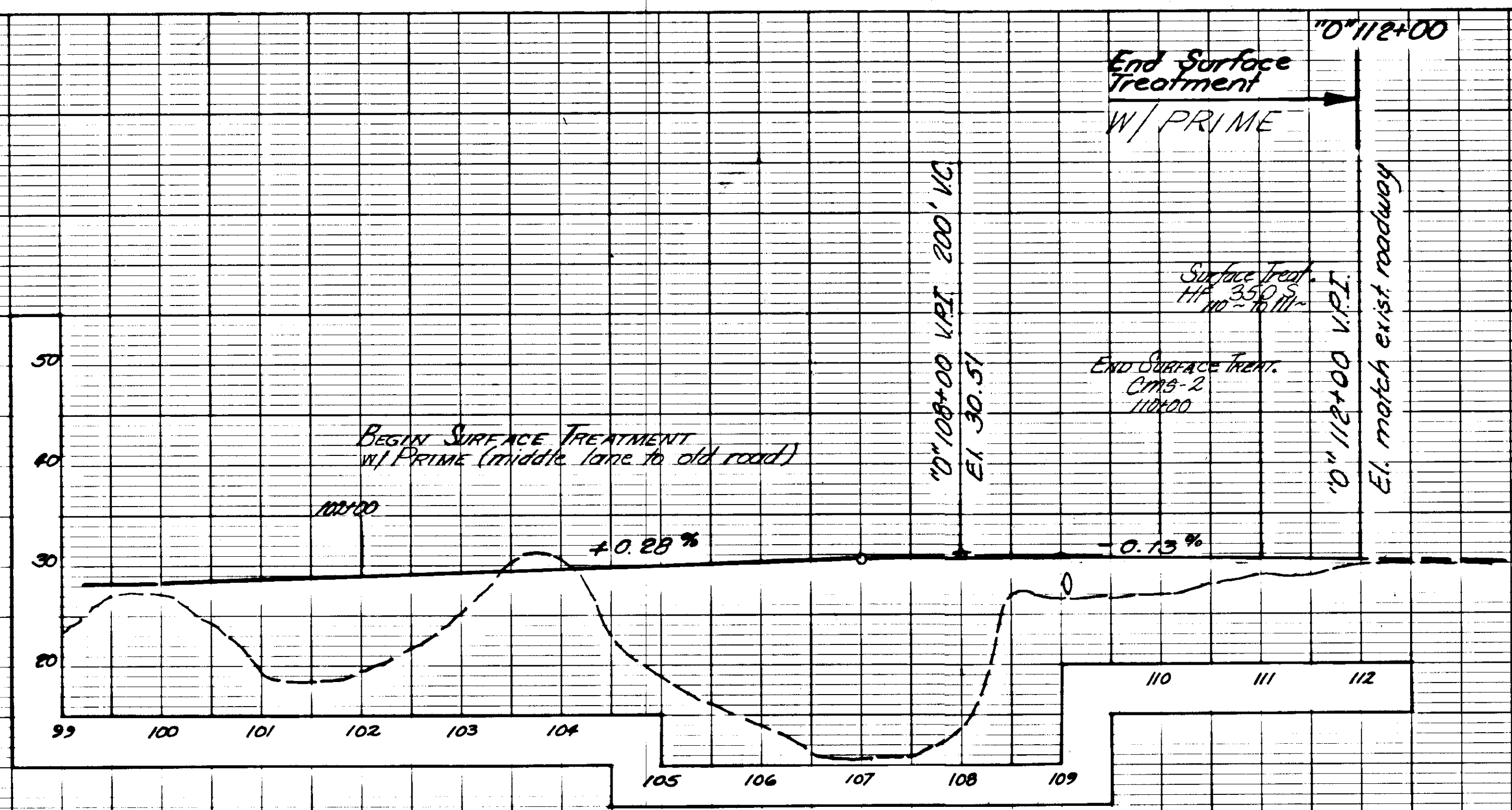
ADDENDUM No. 1, ATTACHMENT No. 11A



"D" LINE
 $R = 800.00'$
 $\Delta = 29^\circ 20' 49" Lt.$
 $L = 409.76'$
 $T = 209.48'$
 $S = 0.041 Ft./Ft.$
 $D = 7^\circ 09' 43"$

T.B.M. No. 12
 Chisled "D" on East side of 8'x10'
 granite boulder, 15 ft. Lt. of Sta 100+20±
 Elev. 30.86.

T.B.M. No. 13 - Spike in base of Power Pole,
 140' Rt. ± of Sta. 112+26±, Elev. 28.90



Unclassified Excavation = 1,000 c.y.
 Embankment = 15,762 c.y.*
 * Includes approx. 15,062 c.y. rock embankment