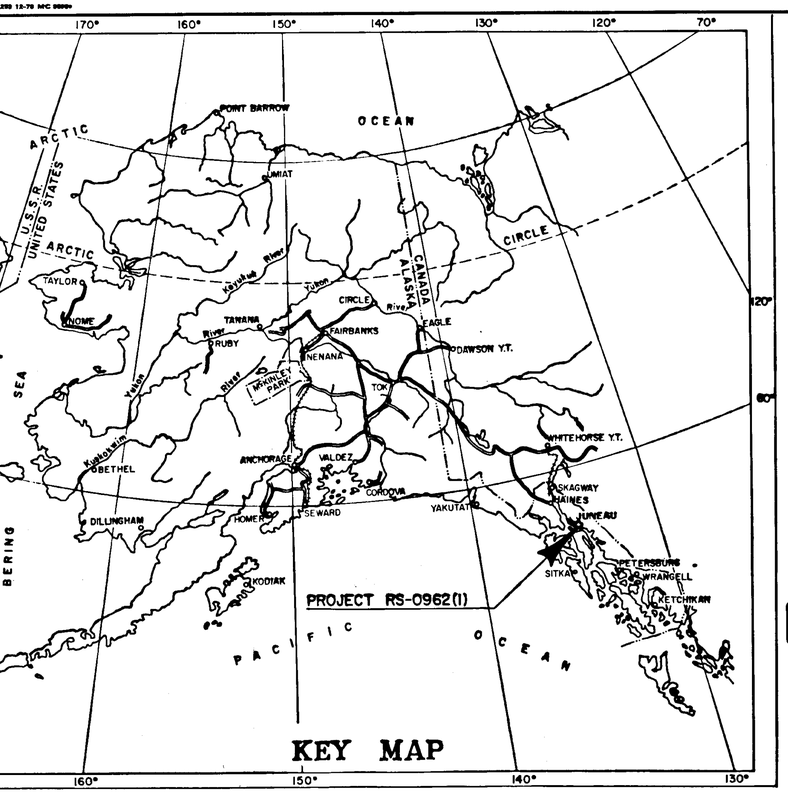
STATE	PROJECT	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0962(I)	1	13

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

PLAN AND PROFILE
PROPOSED HIGHWAY PROJECT

JUNEAU AIRPORT ACCESS
RS-0962(I)
PAVING & INTERSECTION CONSTRUCTION

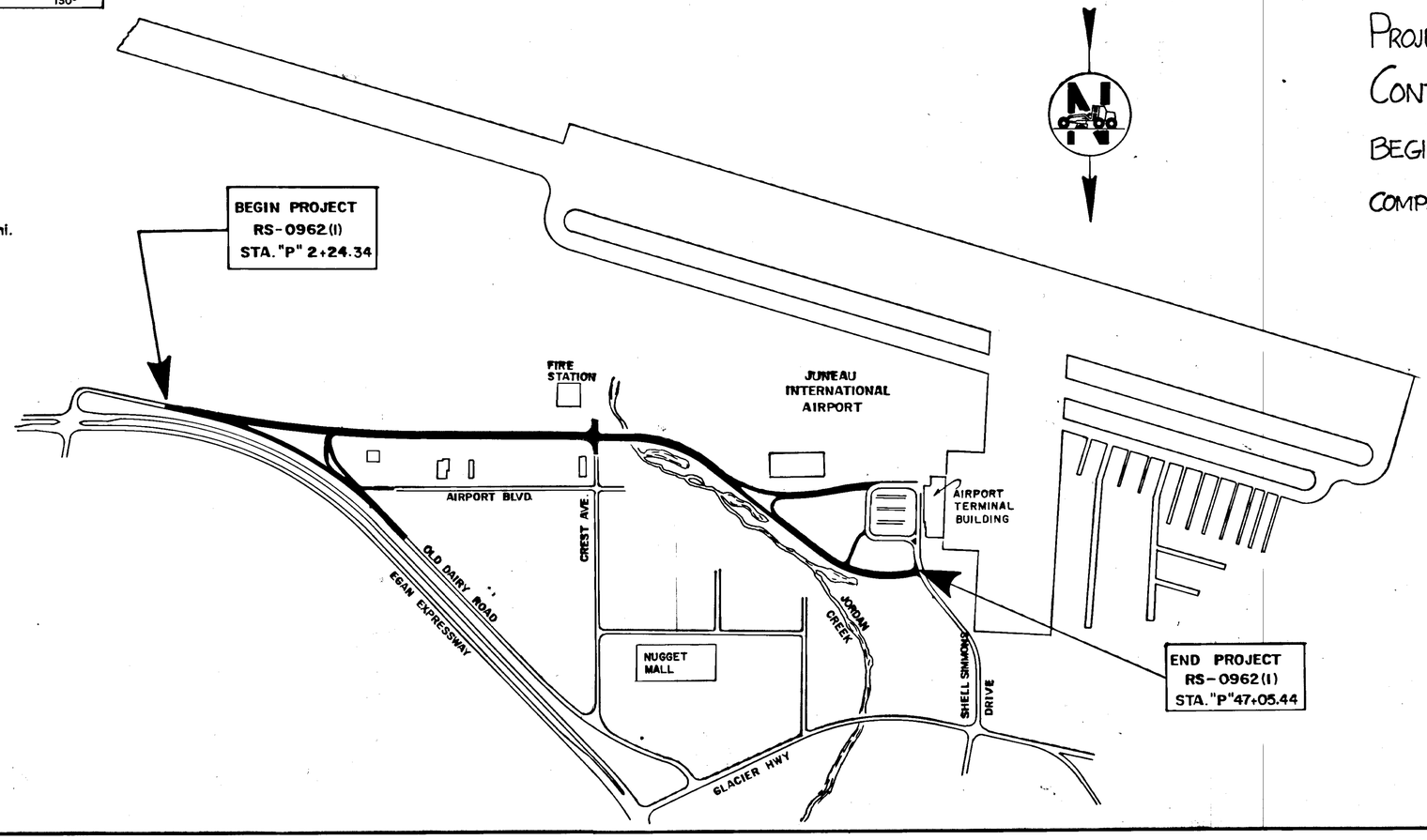


PROJECT SUMMARY

WIDTH OF PAVEMENT	= 40' & 36'
LENGTH OF PAVING	= ~~6189.5'~~ 6219.5' = ~~1.1685 mi.~~ 1.1779 mi.
LENGTH OF PROJECT	= 4481.10' = 0.8487 mi.

DESIGN DESIGNATION

ADT(1981)	2599
ADT(2000)	5171
DHV(16%)	827
D	60-40
T	3.5%
TRAFFIC INDEX	7.5



INDEX OF SHEETS	
1	TITLE SHEET
2	SUMMARY TABLES
3	TYPICAL SECTIONS
4-8	PLAN & PROFILE SHEETS
9,10	INTERSECTION DETAIL SHEETS
11-13	STRIPING, SIGNING & ILLUMINATION

The following standard drawings apply to this project: A-1, C-00.04, C-10.04, C-11.04, D-01.00, D-04.00, D-05.00, D-06.11, D-24.13, D-26.03, G-04.15, G-04.34, G-13.16, G-14.08, I-40.21, I-80.00, L-03.12, L-10.13, L-14.01, L-20.03, L-23.03, L-30.01, M-16.03, S-00.11, S-05.00, S-20.10, S-30.12, T-20.03, T-21.03, T-22.00.

"AS BUILT" PLANS
PROJECT ENGR.- BRIAN BELT
CONTRACTOR- RED SAMM CONST.
BEGIN PROJECT: JULY 16, 1981
COMPLETE PROJECT: JUNE 6, 1982

STATE OF ALASKA
49TH
BRIAN P. BELT
No. CE 4597
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

APPROVED
Wallace K Williams DATE 4/7/81
SOUTHEASTERN REGION DESIGN CONST. ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

APPROVED
Charles D. Matlock Date 5-5-81
DIRECTOR-HIGHWAY DESIGN & CONSTRUCTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0962 (1)	1981	2	13

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	UNIT	QUANTITY
109(1)	Petroleum Escalation	contingent sum	all required ϕ
110(1)	Mobilization	lump sum	all required
111(1)	Temporary Erosion and Pollution Control	contingent sum	all required ϕ
114(1)	Construction Surveying by the Contractor	lump sum	all required
115(1)	Traffic Maintenance	lump sum	all required
115(2)	Construction Signs	lump sum	all required
116(1)	Furnishing and Maintaining Field Office	lump sum	all required
116(2)	Furnishing and Maintaining Field Laboratory	lump sum	all required
202(2A)	Removal of Pavement	lump sum	all required
~~202(4)~~	~~Removal of Culvert Pipe~~ deleted by C.O. #1	~~linear foot~~	~~50~~
203(3A)	Unclassified Excavation	lump sum	all required
301(1)	Crushed Aggregate Base Course	Ton	~~8,569~~ 10,418
304(1)(1A)	Subbase, Grading B A	Ton	~~5,819~~ 4,417
401(1)	Asphalt Concrete, Type I	Ton	~~4,560~~ 5264.83
401(2)	Asphalt Cement (AC-5)	Ton	315.57 ~~273.6~~
403(2)	MC-30 Liquid Asphalt for Prime Coat	Ton	20.10 ~~26.0~~
603(22-18)	18 Inch Pipe	linear foot	48
603(22-24)	24 Inch Pipe	linear foot	82 ~~128~~
603(28-18)	End Section for 18 Inch Pipe	each	1
603(28-24)	End Section for 24 Inch Pipe	each	~~4~~ 3
604(4)	Adjust Existing Manholes	each	2
604(5)	Inlets	each	~~4~~ 3
~~604(5A)~~	~~Reconstruct Existing Inlet~~ deleted by E.W.O. #3	each	1
606(1)	Beam Type Guardrail, Type I Post	linear foot	250.600
606(6)	End Anchorages	each	4
614(1)	Survey Monuments	each	17
614(2)	Monument Cases	each	17
615(1)	Standard Sign	square foot	699.23 ~~722.98~~
618(1A)	Seeding	lump sum	all required
660(3)(3A)	Highway Lighting System Complete (Revised)	lump sum	all required
670(6)	Thermoplastic Pavement Markers	lump sum	all required
670(7)	Raised Pavement Markers	each	182 ~~183~~

BASIS OF ESTIMATE

ITEM NO.	ESTIMATING FACTOR
301(1)	1.96 Tons / cubic yard
304(1)	1.96 Tons / cubic yard
401(1)	114 lb / square yard / inch depth
401(2)	6% of 401(1)
403(2)	0.25 gallons / square yard
403(2)	256 gallons / ton

SUMMARY OF LUMP SUM ITEMS

ITEM NO.	LOCATION	ESTIMATED QUANTITY	
115(2)	all	443 sq. ft.	
202(2A)	"D"-Line (Sheet 4)	4311 sq. yd.	No Measure
	"F"-Line (Sheet 5)	600 sq. yd.	
	"P"-Line (Sheet 6)	100 sq. yd.	
	"Y"-Line (Sheet 7)	78 sq. yd.	
	Total	5089 sq. yd.	
203(3A)	"B"/"D"-Line (Sheet 4)	1379 cy	No Measure
	"F"-Line (Sheet 5)	264 cy	
	Terminal Intersection	25 cy	
	Total	1668 cy	
618(1A)	all	69.5 msf	No Measure
660(3)	see sheet 11	-	
670(7)	see sheet 11	-	

603(22-12)	12- inch Pipe	Linear Foot	132
603(28-12)	End Section for 12-inch Pipe	Each	1
604(8)	Removal of Drainage Structures	Lump Sum	All Required
660(3B)	Multi-Legged Ballasts	Lump Sum	All Required
670(1A)	Painted Traffic Marking Modification	Lump Sum	All Required
670(6A)	Thermoplastic Modification	Lump Sum	All Required
114(1A)	Terminal Construction Surveying by the Contractor	Lump Sum	All Required
115(1A)	Terminal Traffic Maintenance	Lump Sum	All Required
115(2A)	Terminal Construction Signs	Lump Sum	All Required
202(1)	Removal of Structures and Obstructions	Lump Sum	All Required
202(2B)	Removal of Terminal Pavement	Lump Sum	All Required
202(11)	Remove and Replace Spitter and Gate	Lump Sum	All Required

MONUMENTATION

STATION	DENOTES	REMARKS
"P" 3+74.34 = "D" 10+00.00	PC / PC	Install Monument & Case
"D" 16+43.46, 37.02' Lt	R/W	Adjust R & M monument *
"D" 22+55.53	PT	Install Monument & Case
"P" 11+50.00 = "B" 10+00.00	"P"/"B" Intersection	"
"B" 10+57.12	PC	"
"B" 12+26.59	PT	"
"P" 16+92.94 Bk = "P" 16+89.83 Ah	PT	"
"P" 26+43.85 = "F" 10+00.00	"P"/"F" Intersection	"
"P" 28+52.09	PC	"
"P" 33+11.87	PT	"
"P" 34+01.13 = "Y" 109+27.06	PT/"P"/"Y" Intersection	"
"P" 41+39.65	PC	"
"P" 46+95.44	PT	"
"Y" 100+00.00	PC	"
"Y" 101+50.00	PT	"
"Y" 103+35.97	PC	"
"Y" 104+85.97	PT	"
"Y" 105+41.02	PC	"

* payment incidental to Item 614(1) Survey Monuments

Note: Monument legend, as shown on Std. Drg. M-16.03, shall be changed from "Department of Highways" to "Juneau International Airport".

UTILITY/DRAINAGE WORK SUMMARY

SYMBOL	LOCATION	WORK	REMARK	PAY UNDER
①	"A" 10+86, 2.00' Rt.	Adjust Existing Manhole	Adjust Cover Elevation to 2370	604.(4)
②	"B" 14+45, 19.50' Lt.	Adjust Existing Manhole	Adjust Cover Elevation to 2461	604.(4)
③	"B" 12+65, Left	~~Remove & Dispose Culvert~~	~~Existing 24"x 50' driveway CMP~~	202(4)
④	deleted			
⑤	"B" 13+82, Left	Extend Existing 24" CMP by 16' Install End Section	clean culvert of siltation *	603(22G) 603(28G)
⑥	"B" 11+80, 15.00' Rt.	Install Field Inlet	see detail on Sheet 9	604(5)
⑦	"B" 11+80, 15.00' Rt. to "B" 11+80, 33.00' Lt.	Install 18"x 48" CMP w/end section	flows from inlet ⑥ inlet elev = 2156, outlet elev = 2108	603(22E) 603(28E)
⑧	"P" 36+90, 33.50' Lt.	Install Field Inlet ~~Reconstruct Existing Inlet~~ E.W.O. #3	see detail on Sheet 10 and Special Provisions	604(5)
⑨	"P" 37+51.50, 40.50' Lt.	~~Extend Existing 24" CMP~~ Lay 24", install end section	flows to inlet ⑧ inlet elev = 2132, connect elev = 2178	603(22G) 603(28G)
⑩	"P" 12+10	Install 24" ~~x 96'~~ 84' CMP with end sections	mainline cross-culvert see Sheet 4	603(226) 603(286)
	"P" 36+90 Lt to 37+51.5	Install 12"x 60' CMP w/end Section	E.W.O. # 3	603(12-12) 603(28-12)
	"Y" 100+50 to 100+80 Lt.	Install 12"x 72' CMP	Supp. Agreement # 1	603(22-12)
	"P" 37+00, Left	Removal of Drainage Structure	E.W.O. # 3	604(8)

* incidental to other items of work

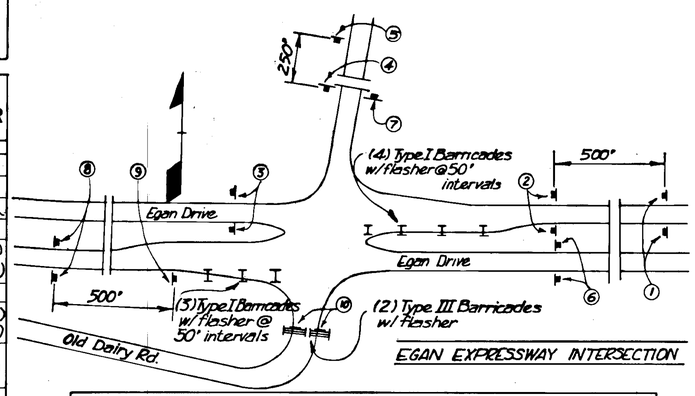
202(12)	Remove and Replace Guard Posts	Lump Sum	All Required
203(3B	Terminal Unclassified Excavation	Lump Sum	All Required
501(1)	Class A Concrete	Lump Sum	All Required
606(5)	Removal and Reconstruction of Guardrail	Lump Sum	All Required
607(4)	Reconstructed Fence	Linear ~~Foot~~	50
608(1)	Concrete Sidewalk, 4" depth	Square Yard	65.9
609(2)	Curb and Gutter, Type I	Linear Foot	286
620(1A)	Topsoil	Lump Sum	All Required
660(1A)	Loop Detector Installation	Lump Sum	All Required
660(3C)	Luminaire Base Reinforcement	Lump Sum	All Required
660(3D)	Repair Anchor Bolts and Illumination Conduits and Transports	Lump Sum	All Required

STATE OF ALASKA 49TH BRIAN P. BELT No. CE 4597 REGISTERED PROFESSIONAL ENGINEER

SUMMARY TABLES

GENERAL NOTES:

1. The Contractor shall erect and maintain Type I Barricades at the termini and any other point of possible access to keep the public from entering the project, except as otherwise specified; these barricades are incidental to Item 115(1) Traffic Maintenance.
2. Superelevation for this project shall be Case I as shown on Std. Drg. I-80.00.
3. Logs, timbers, and other miscellaneous debris within the project limits shall be removed and disposed of by the Contractor; payment for this work will be considered incidental to other items of work.
4. Petroleum Escalation attributable to Item 203(3A) Unclassified Excavation, a lump sum item, shall be paid proportionately at the same rate as payment for that work is made to the Contractor.
5. Approach construction shall be paid for under the applicable Contract bid items.



EGAN EXPRESSWAY INTERSECTION

CONSRUCTION SIGNING SCHEDULE

SYMBOL	LOCATION	FACING	LEGEND	CODE	AREA (SF)
①	Egan Drive (2 signs)	E	ROAD CONSTRUCTION AHEAD	CW20-1F(E)	2×25=50
②	" "	E	NO LEFT TURN	R3-2(E)	2×12=24
③	" "	E	END CONSTRUCTION	G20-2	2×10=20
④	Glacier Highway	N	ROAD CLOSED AHEAD	CW20-3F(T)	16
⑤	"	N	ROAD CONSTRUCTION AHEAD	CW20-1F(T)	16
⑥	Egan Drive (2signs)	W	END CONSTRUCTION	G20-2	2×10=20
⑦	Glacier Highway	S	"	"	10
⑧	Egan Drive (2 signs)	W	ROAD CONSTRUCTION AHEAD	CW20-1F(E)	2×25=50
⑨	"	W	NO RIGHT TURN	R3-1(E)	12
⑩	Old Dairy Rd. (2 signs)	N	ROAD CLOSED	R11-2	2×10=20
Shell Simmons Dr., Old Dairy Rd.		NW NW	ROAD CONSTRUCTION AHEAD	CW20-1F(T)	4×16=64
Airport Blvd., Crest Ave (4 signs)		W N			
Airport Blvd., Old Dairy Rd (2 signs)		W NW	DETOUR AHEAD	CW20-2F(T)	2×16=32
Airport Blvd, Old Dairy Rd. "		W NW	DETOUR (w/arrow)	M4-10(L)(R)	2×6=12
Shell Simmons Dr., Old Dairy Rd. "		NW NW	BE PREPARED TO STOP	CW20-8(E)	2×16=32
Airport Blvd, Old Dairy Rd. "		W NW	ROAD CLOSED TO THRU TRAFFIC	R11-4	2×12½=25
Shell Simmons Dr., Old Dairy Rd.		SE SE	END CONSTRUCTION	G20-2	4×10=40
Airport Blvd., Crest Ave. (4 signs)		E S			
			Total Area =		443 sq. ft.

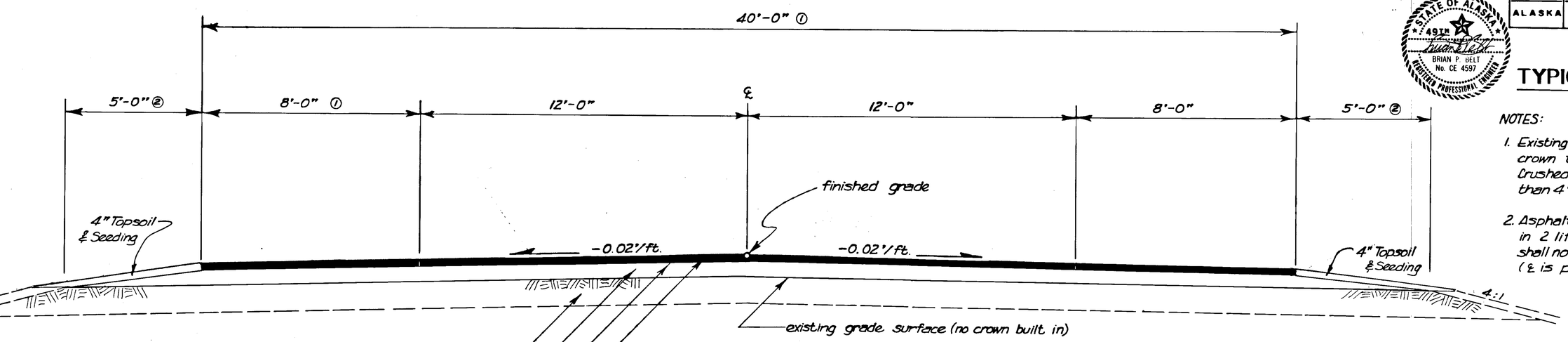
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0962(1)	1981	3	13

STATE OF ALASKA — 49TH — BRIAN P. BELT No. CE 4597 — REGISTERED PROFESSIONAL ENGINEER

TYPICAL SECTIONS

NOTES:

1. Existing "P"-Line crown varies from "P"-Line crown to be constructed. Depth of Crushed Aggregate shall be no less than 4" and no greater than 6".
2. Asphalt Concrete shall be constructed in 2 lifts; paving joint of final lift shall not fall within the traffic lanes (℄ is permissible).

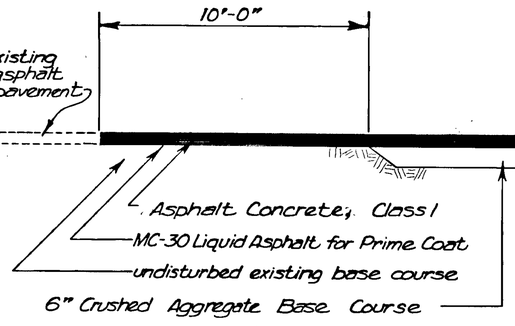


TYPICAL SECTION OF IMPROVEMENT

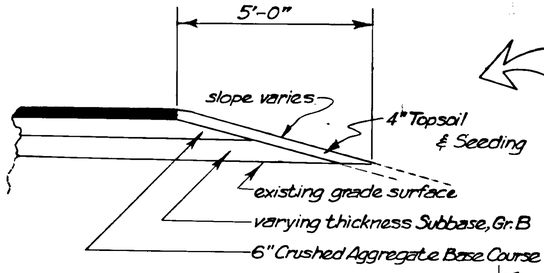
Stations "P" 2+24.34 to "P" 46+95.44 & "Y" 100+00.00 to "Y" 109+27.06

① Decrease left shoulder width to 4'-0" from "P" 38+13.92 to "P" 46+95.44 & "Y" 100+00.00 to "Y" 105+28.23 (unless specified otherwise on the Intersection Construction Detail Sheets).

② See Detail A (this sheet) if additional embankment is required between existing grade surface and bottom of Crushed Aggregate Base Course.



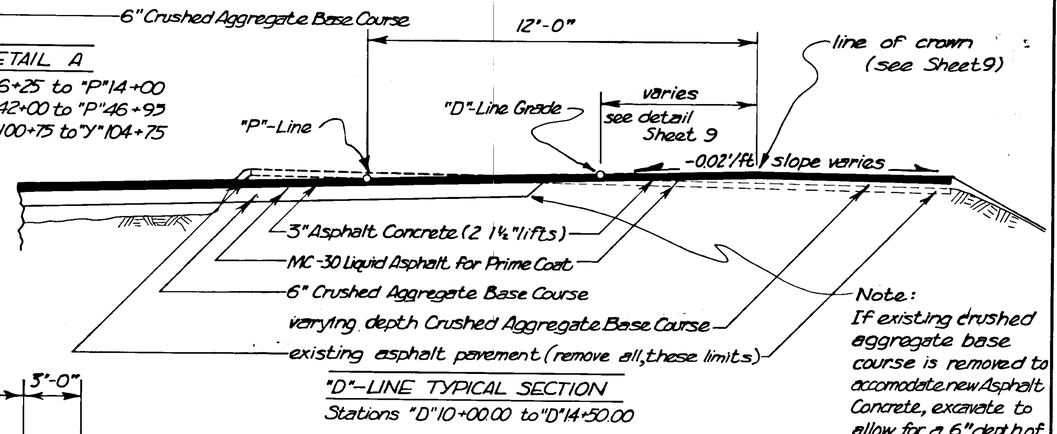
PAVEMENT MATCH JOINT DETAIL



DETAIL A

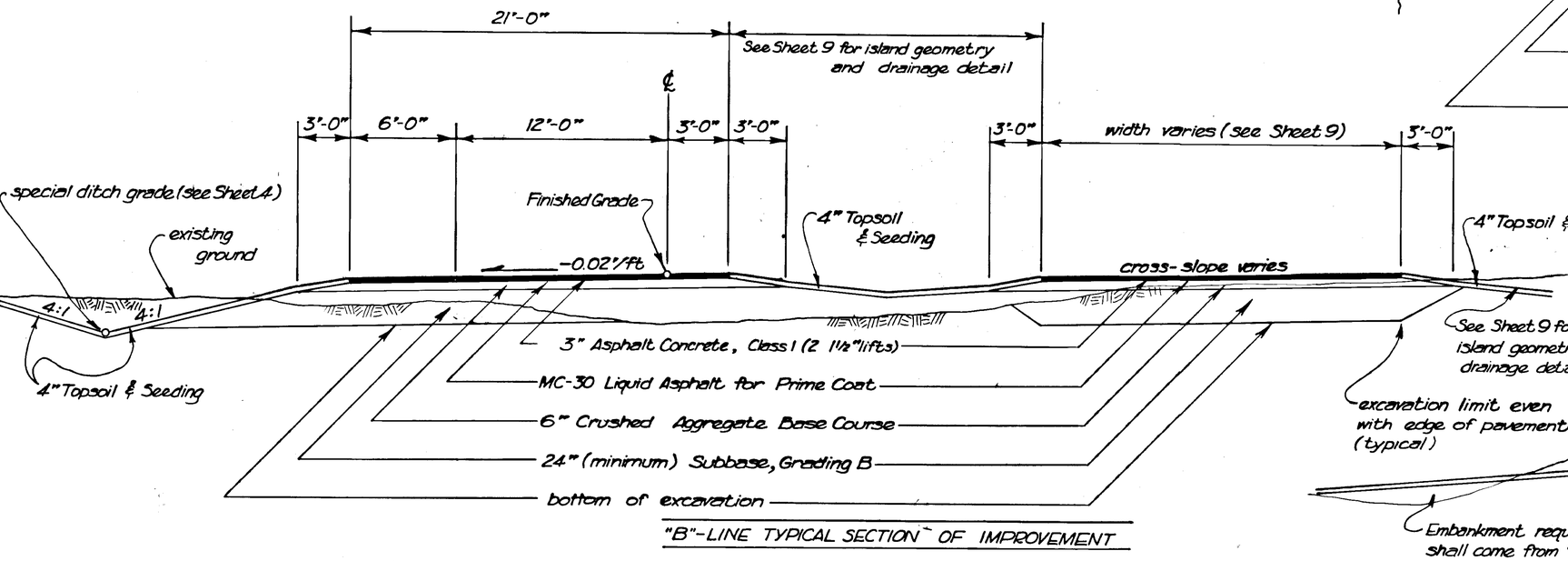
Stations: "P" 6+25 to "P" 14+00
"P" 42+00 to "P" 46+95
"Y" 100+75 to "Y" 104+75

for use in areas where top of finished grade is greater than 9" above top of existing grade surface

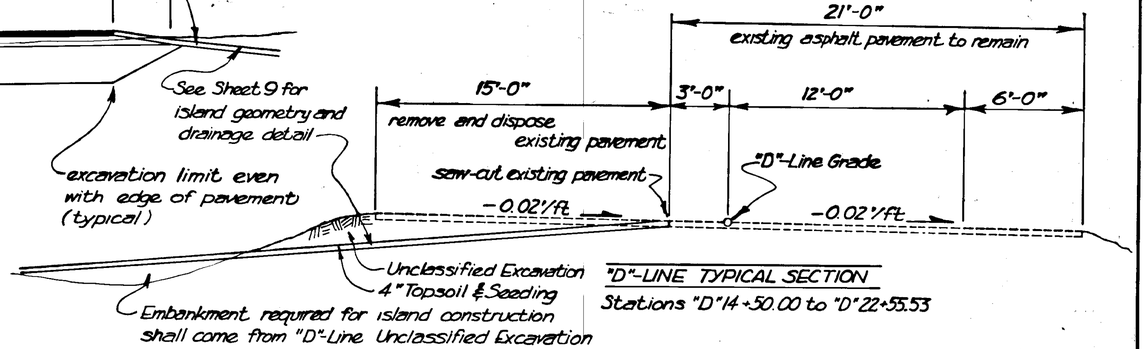


"D"-LINE TYPICAL SECTION

Stations "D" 10+00.00 to "D" 14+50.00



"B"-LINE TYPICAL SECTION OF IMPROVEMENT



"D"-LINE TYPICAL SECTION

Stations "D" 14+50.00 to "D" 22+55.53

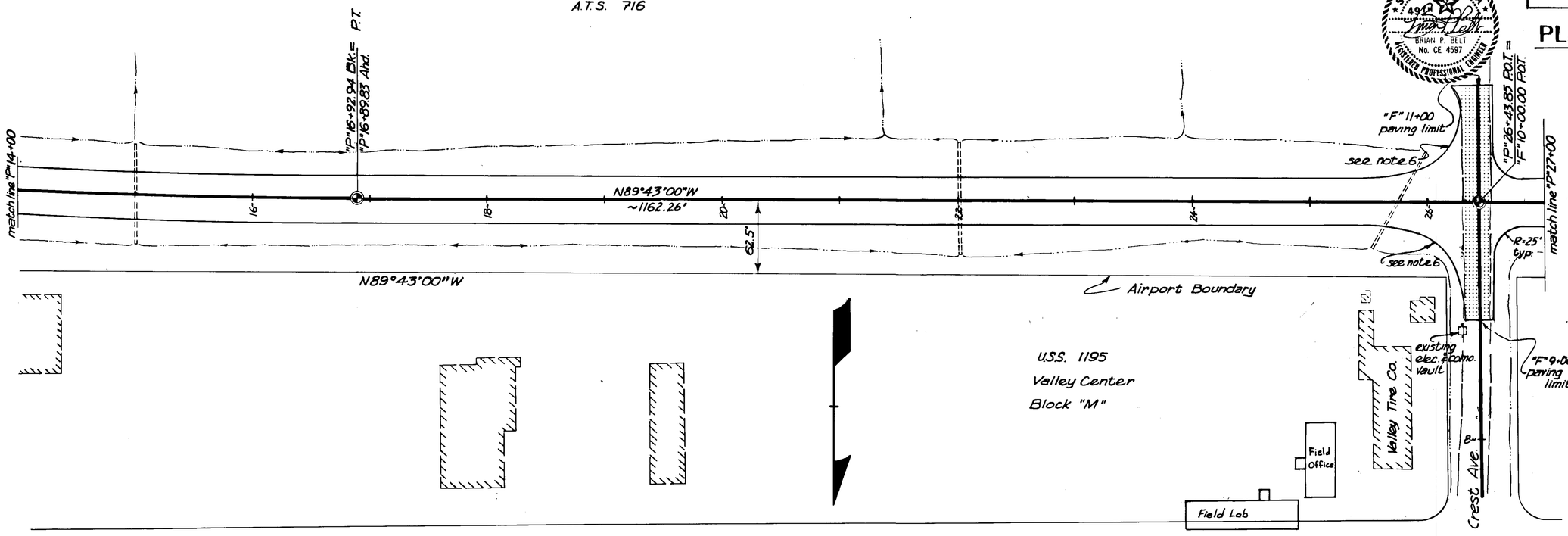
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0962(1)	1981	4	13

PLAN & PROFILE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0962(1)	1981	5	13

PLAN & PROFILE (CONT'D)

STATE OF ALASKA 49th — BRIAN P. BELT No. CE 4597 — REGISTERED PROFESSIONAL ENGINEER

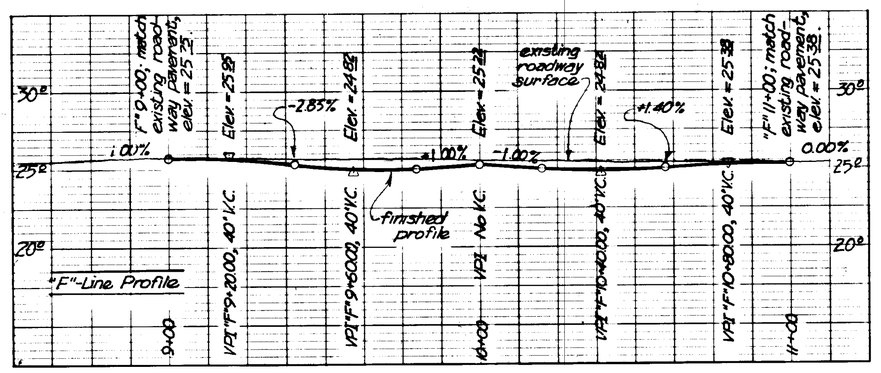


"F"-LINE PAVING NOTES:

1. Saw-cut and remove existing pavement between limits shown; estimated quantity = 600 sq.yds..
2. Excavate, remove and dispose of material to a depth of 0.75' below finished grade. This quantity is approximately 264 cu.yds. Payment for this work shall be paid as Item 203(3A) Unclassified Excavation.
3. Pavement depth = 3" (2 1½" lifts), width = 24'; install 6" lift of Crushed Aggregate Base Course beneath pavement.
4. Crown = 0.02"/ft.
5. Construct pavement match joints as shown on Sheet 2, at "F"-Line paving extremities.
6. NE & SE quadrant of intersection, construct 3-cntr. curve as per Std. Drwg. I 40.21

Airport Blvd.

Embankment = 27cy
includes 27cy borrow (all Subbase)
Excavation = 264 cy (all waste.)



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOT SHE
ALASKA	RS-0962(1)	1981	6	13

PLAN & PROFILE (CONT'D)

STATE OF ALASKA — 7491 — BRIAN P. BILI — No. CE 4597 — REGISTERED PROFESSIONAL ENGINEER

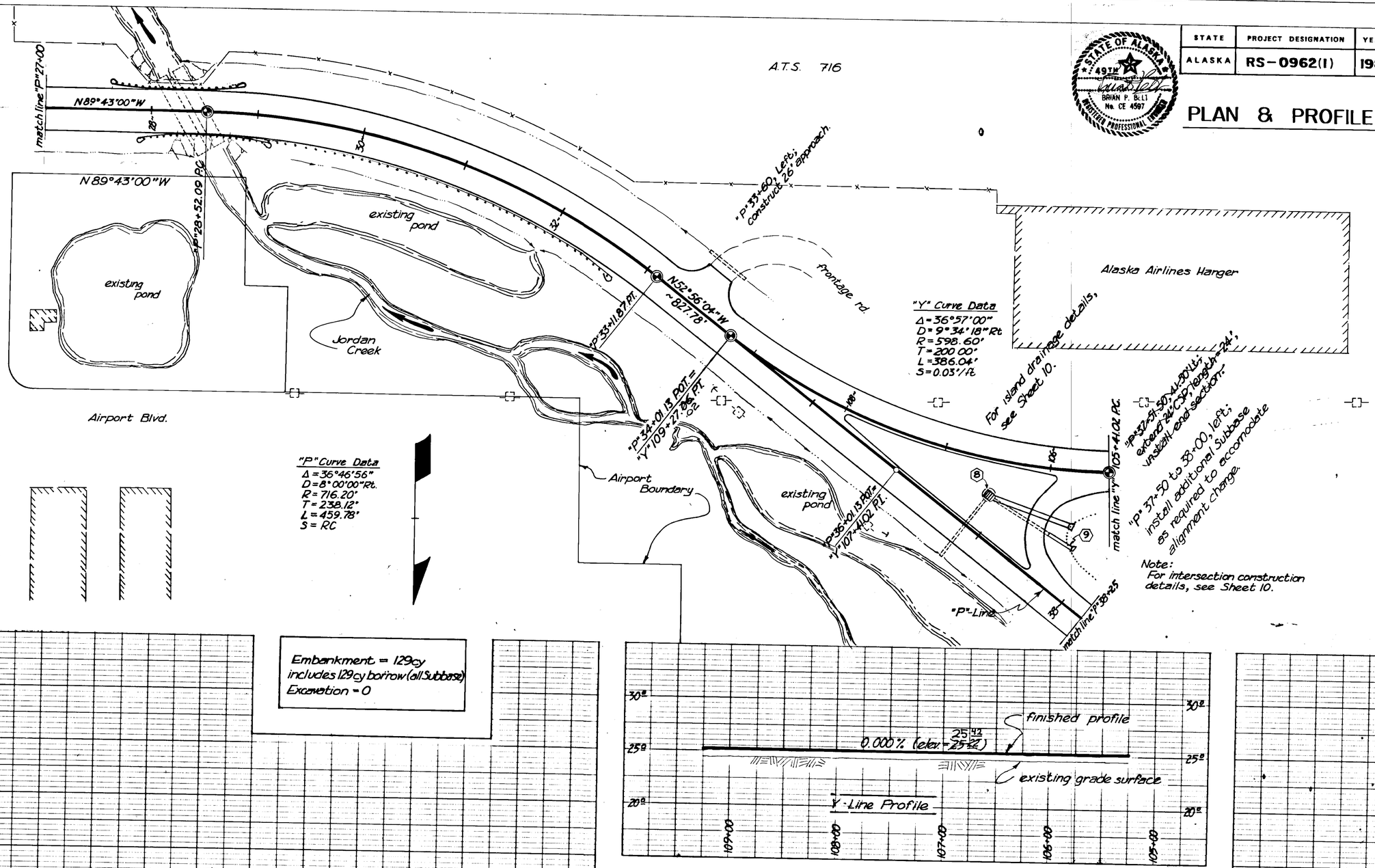
A.T.S. 716

GUARDRAIL SCHEDULE

Left		Right	
Station	Offset	Station	Offset
27+62.50	22.00'	27+87.50	22.00'
28+00.00	18.00'	28+25.00	18.00'
28+50.00	18.00'	~~28+75.00~~ 28+46.98	18.00'
28+87.50	22.00'	~~29+12.50~~ 29+09.48	22.00'

Notes:

1. Adjust stationing so that post does not coincide with top of plate arch culvert.
2. Guardrail quantity = ~~600~~ 588 linear ft.
3. See relevant guardrail Standard Drawings listed on Sheet 1.



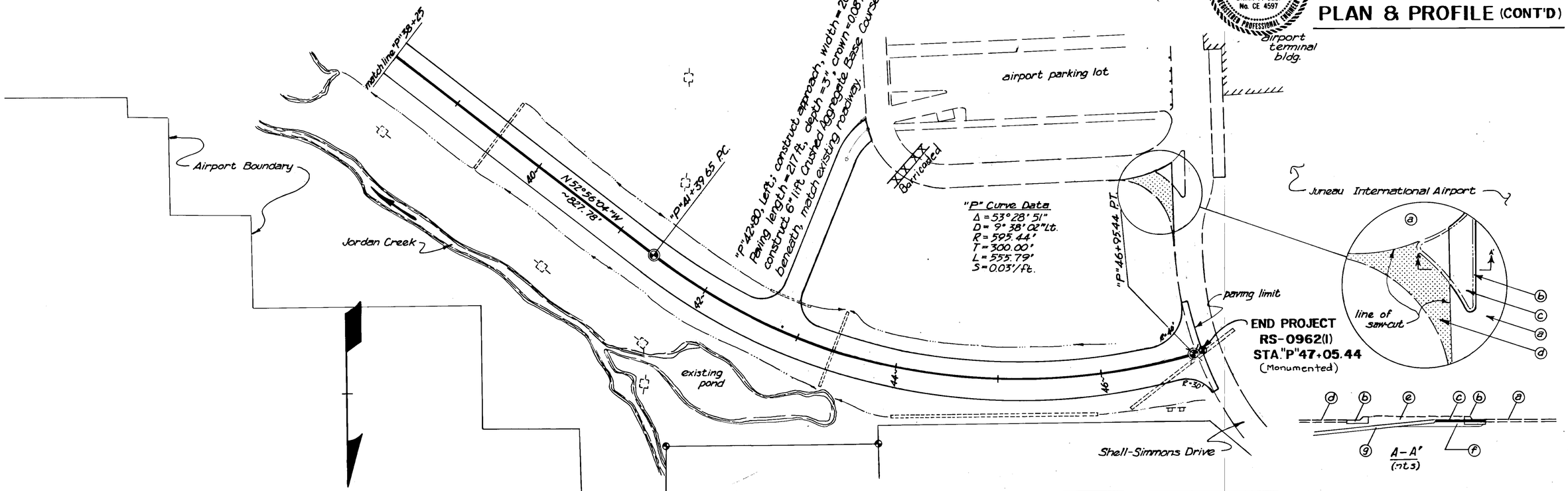
Embankment = 129cy
includes 129cy borrow (all Subbase)
Excavation = 0

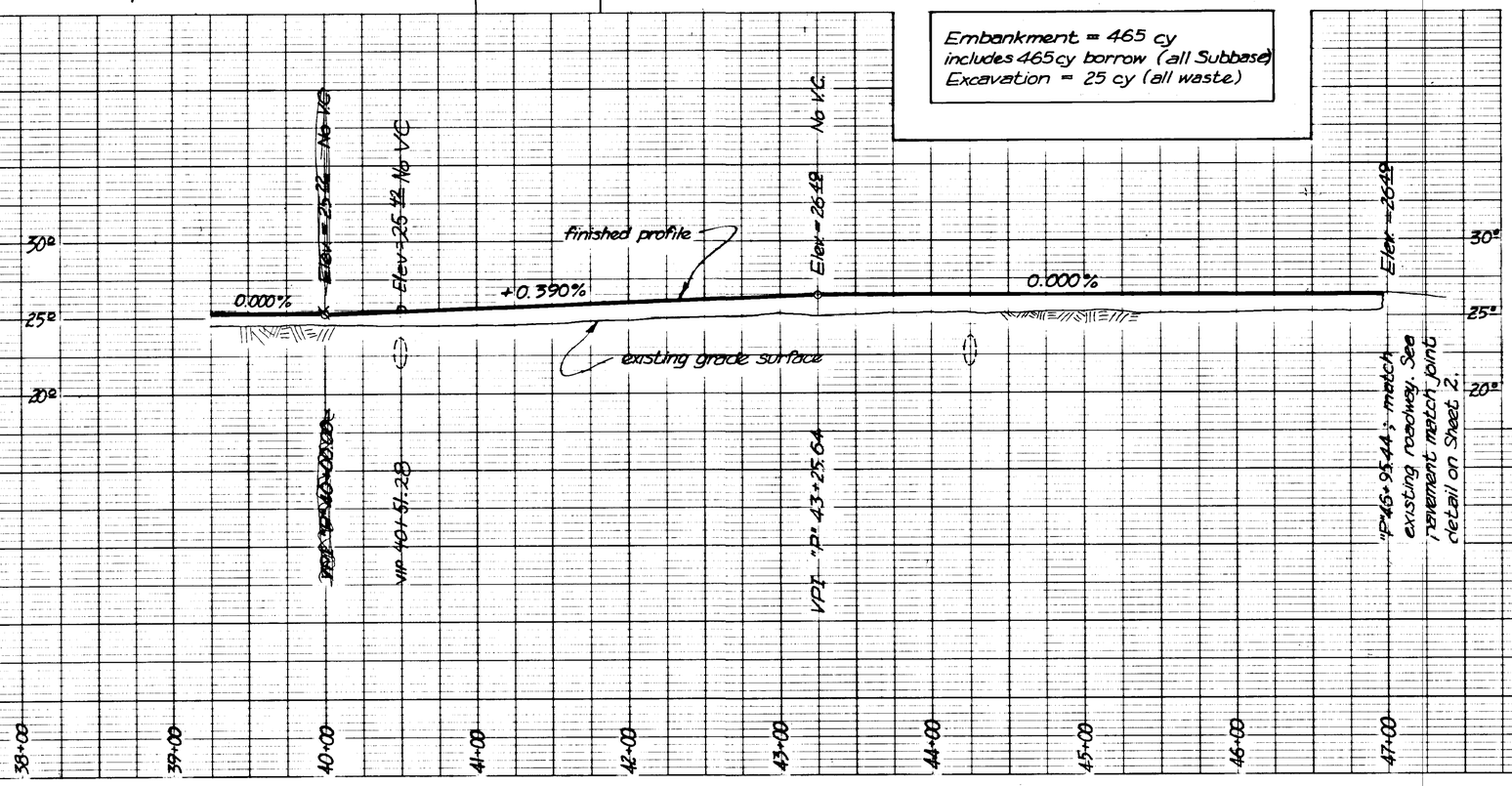
HIGHWAY FEDERAL AID SHEET
PLATE 1-SINGLE PLAN AND PROFILE-FULL LINE
TELEDYNE
PRINTED IN U.S.A.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0962(1)	1981	7	13

STATE OF ALASKA — BRIAN P. BELT No. CE 4597 — REGISTERED PROFESSIONAL ENGINEER

PLAN & PROFILE (CONT'D)





ⓐ existing pavement to remain in place

ⓑ existing concrete curb & gutter to be removed, estimated quantity = 120 lin. ft.; to be paid for incidental to other items of work.

ⓒ 3" Hot Asphalt Pavement, estimated quantity = 9.0 Tons.

ⓓ saw-cut, remove and dispose of existing pavement, estimated quantity = 78 sq. yds; paid for under Item 202(2A).

ⓔ Unclassified Excavation, estimated quantity = 25 cu.yds. (grade to drain).

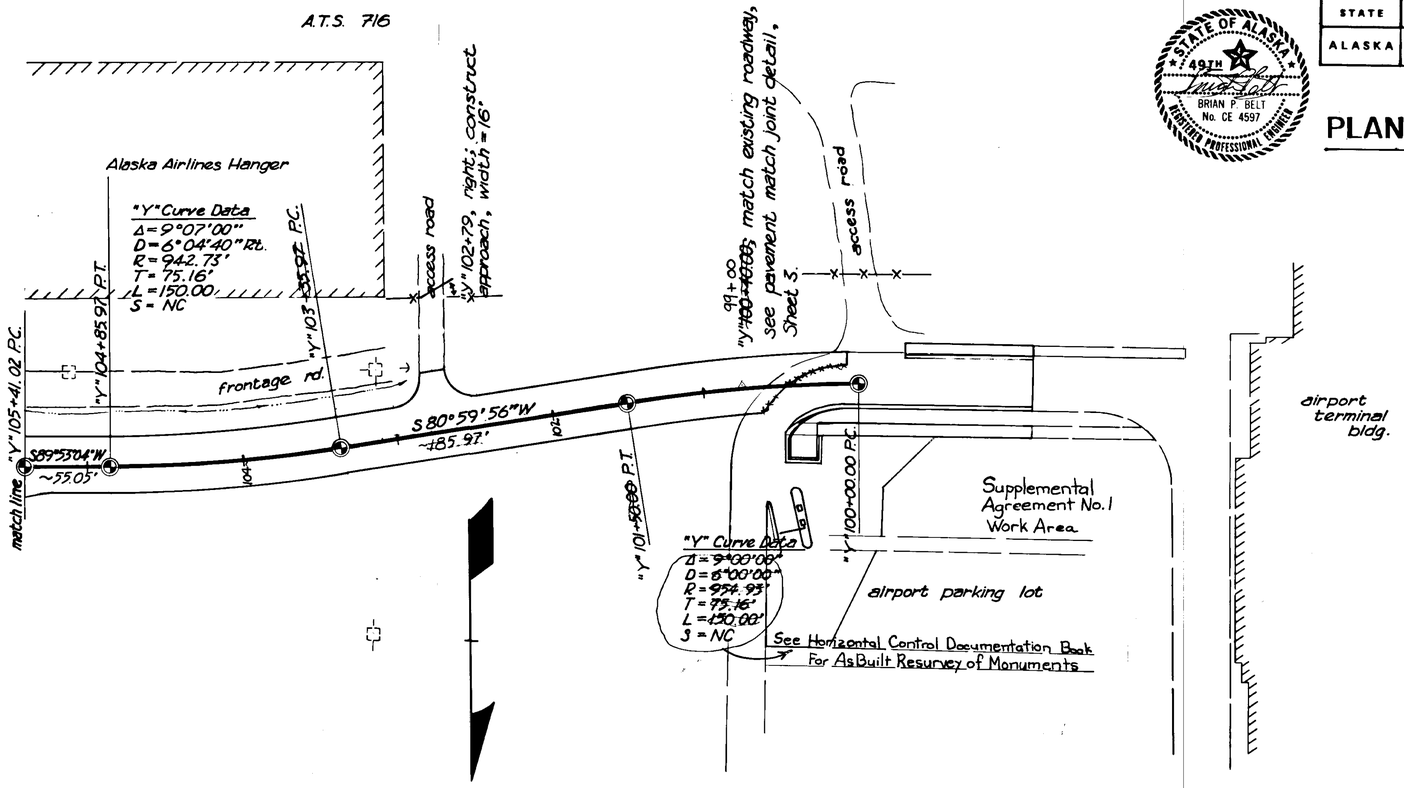
ⓕ 6" Crushed Aggregate Base Course, estimated quantity = 17 Tons.

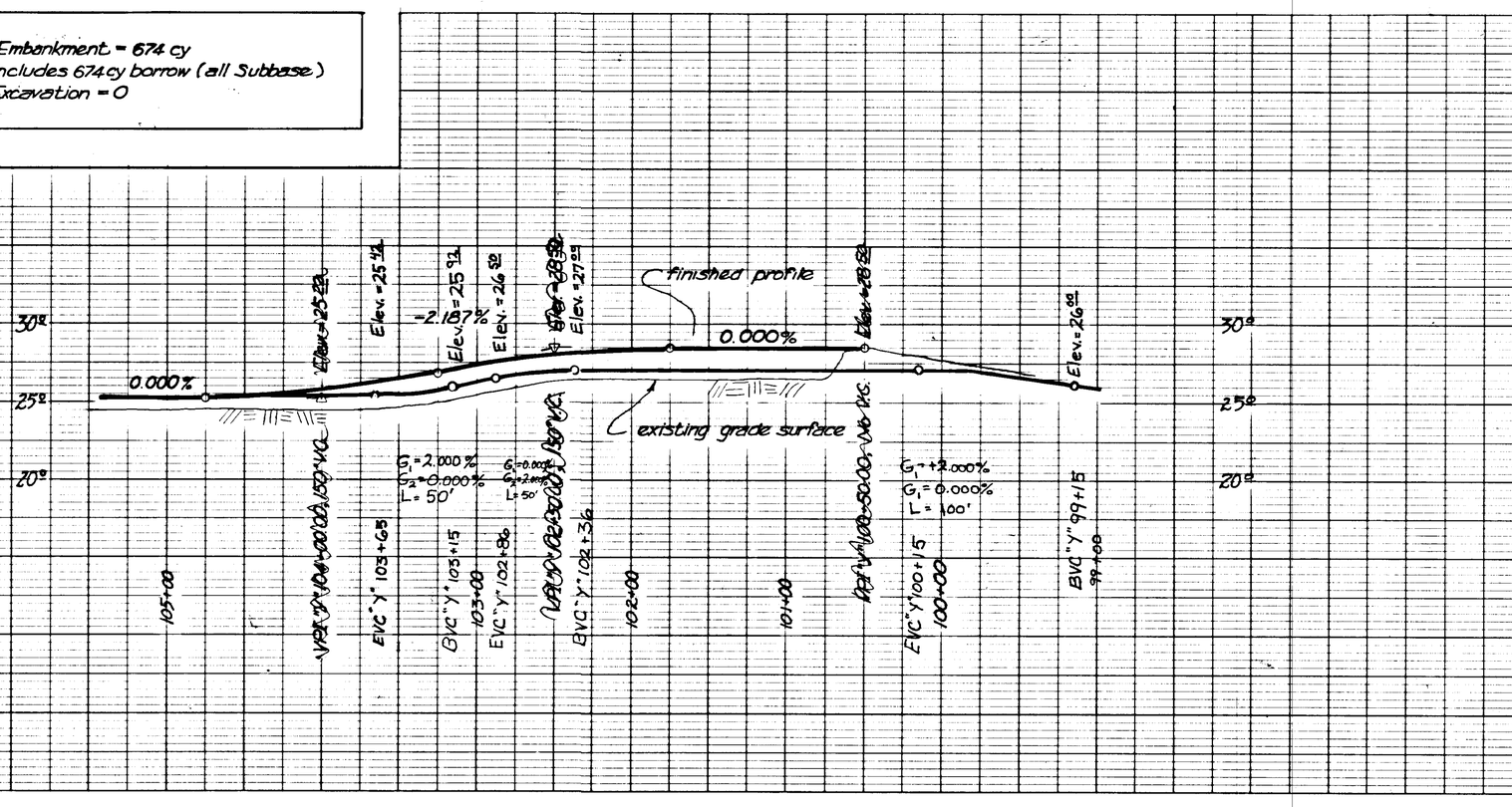
ⓖ 4" Topsoil & Seeding, estimated quantity = 1200 sq. ft.

PARKING LOT INTERSECTION MODIFICATION DETAIL

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0962 (1)	1981	8	13

PLAN & PROFILE (CONT'D)





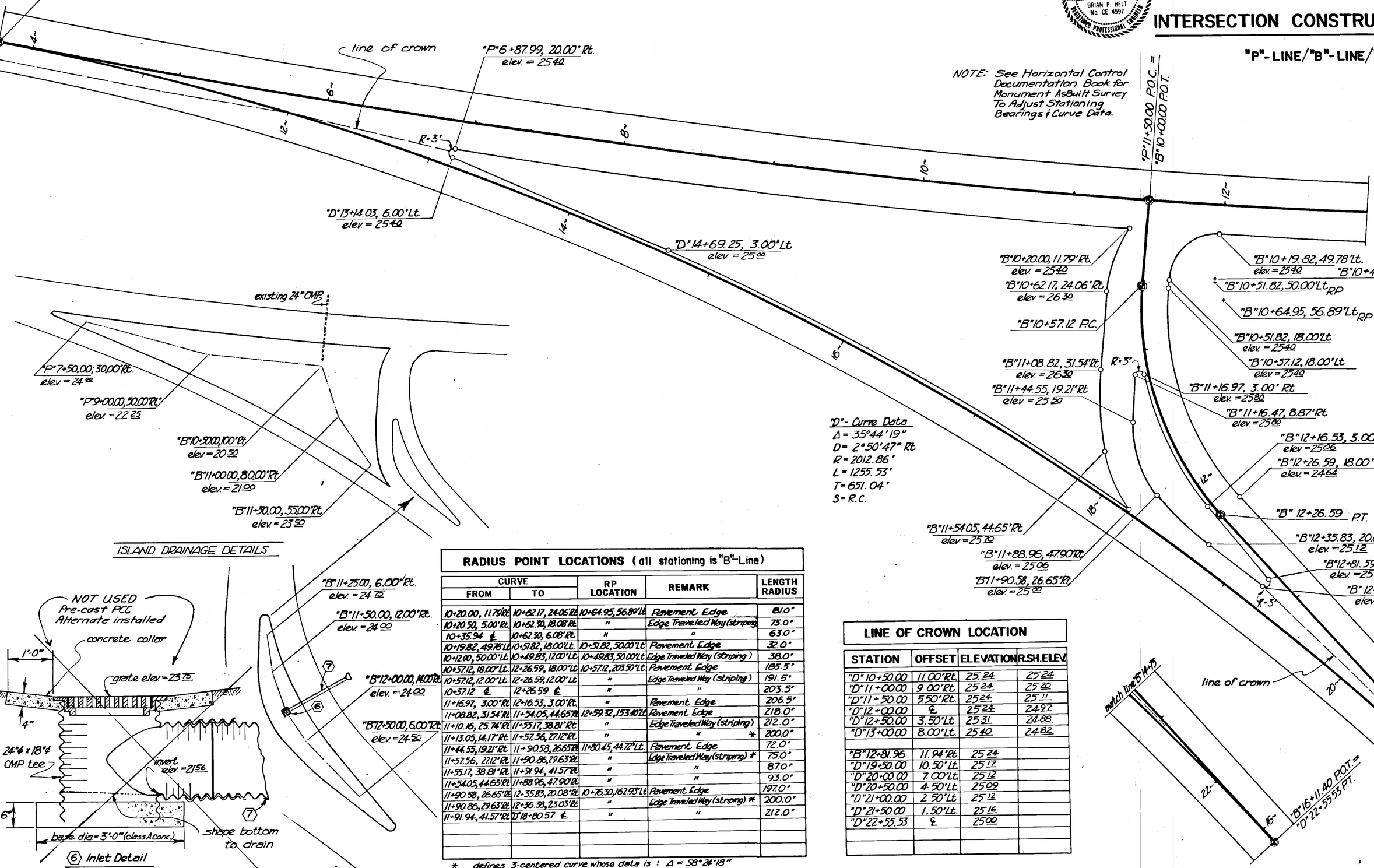
HIGHWAY FEDERAL AID SHEET
PLATE 1-SINGLE PLAN AND PROFILE-FULL LINE
TELEDYNE
PRINTED IN U.S.A.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0962(1)	1981	9	13

STATE OF ALASKA 49TH
BRIAN P. BELT
No. CE 4597
DEVELOPED PROFESSIONAL ENGINEER

INTERSECTION CONSTRUCTION DETAIL

"P"- LINE/"B"- LINE/"D"-LINE



ISLAND DRAINAGE DETAILS

RADIUS POINT LOCATIONS (all stationing is "B"-Line)

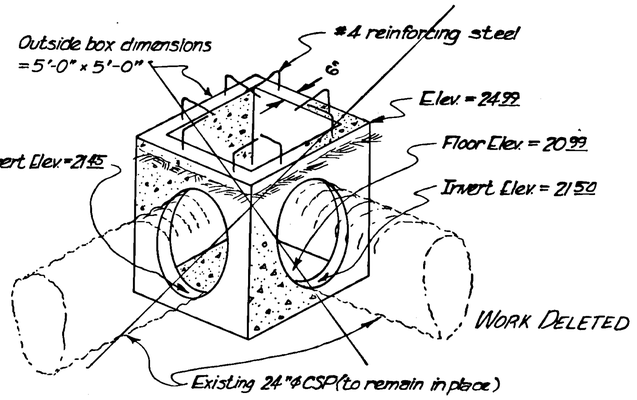
CURVE FROM	CURVE TO	RP LOCATION	REMARK	LENGTH RADIUS
10+20.00, 11.79' Rt.	10+62.17, 24.06' Rt.	10+64.95, 56.89' Lt.	Pavement Edge	81.0'
10+20.50, 5.00' Rt.	10+62.30, 18.08' Rt.	"	Edge Traveled Way (striping)	75.0'
10+35.94 ℄	10+62.30, 6.08' Rt.	"	"	63.0'
10+19.82, 49.78' Lt.	10+51.82, 18.00' Lt.	10+51.82, 50.00' Lt.	Pavement Edge	32.0'
10+12.00, 50.00' Lt.	10+49.83, 12.00' Lt.	10+49.83, 50.00' Lt.	Edge Traveled Way (striping)	38.0'
10+57.12, 18.00' Lt.	12+26.59, 18.00' Lt.	10+57.12, 203.50' Lt.	Pavement Edge	185.5'
10+57.12, 12.00' Lt.	12+26.59, 12.00' Lt.	"	Edge Traveled Way (striping)	191.5'
10+57.12 ℄	12+26.59 ℄	"	"	203.5'
11+16.97, 3.00' Rt.	12+16.53, 3.00' Rt.	"	Pavement Edge	206.5'
11+08.82, 31.54' Rt.	11+54.05, 44.65' Rt.	12+59.32, 153.40' Lt.	Pavement Edge	218.0'
11+10.16, 25.74' Rt.	11+55.17, 38.81' Rt.	"	Edge Traveled Way (striping)	212.0'
11+13.05, 14.17' Rt.	11+57.56, 27.12' Rt.	"	" *	200.0'
11+44.55, 19.21' Rt.	11+90.58, 26.65' Rt.	11+80.45, 44.72' Lt.	Pavement Edge	72.0'
11+57.56, 27.12' Rt.	11+90.86, 29.63' Rt.	"	Edge Traveled Way (striping) *	75.0'
11+55.17, 38.81' Rt.	11+91.94, 41.57' Rt.	"	"	87.0'
11+54.05, 44.65' Rt.	11+88.96, 47.90' Rt.	"	"	93.0'
11+90.58, 26.65' Rt.	12+35.83, 20.08' Rt.	10+78.30, 162.95' Lt.	Pavement Edge	197.0'
11+90.86, 29.63' Rt.	12+36.38, 23.03' Rt.	"	Edge Traveled Way (striping) *	200.0'
11+91.94, 41.57' Rt.	D 18+80.57 ℄	"	"	212.0'

* defines 3-centered curve whose data is : Δ = 58°24'18"
D = 4.00°
R_1 = 200.00'
R_2 = 75.00'

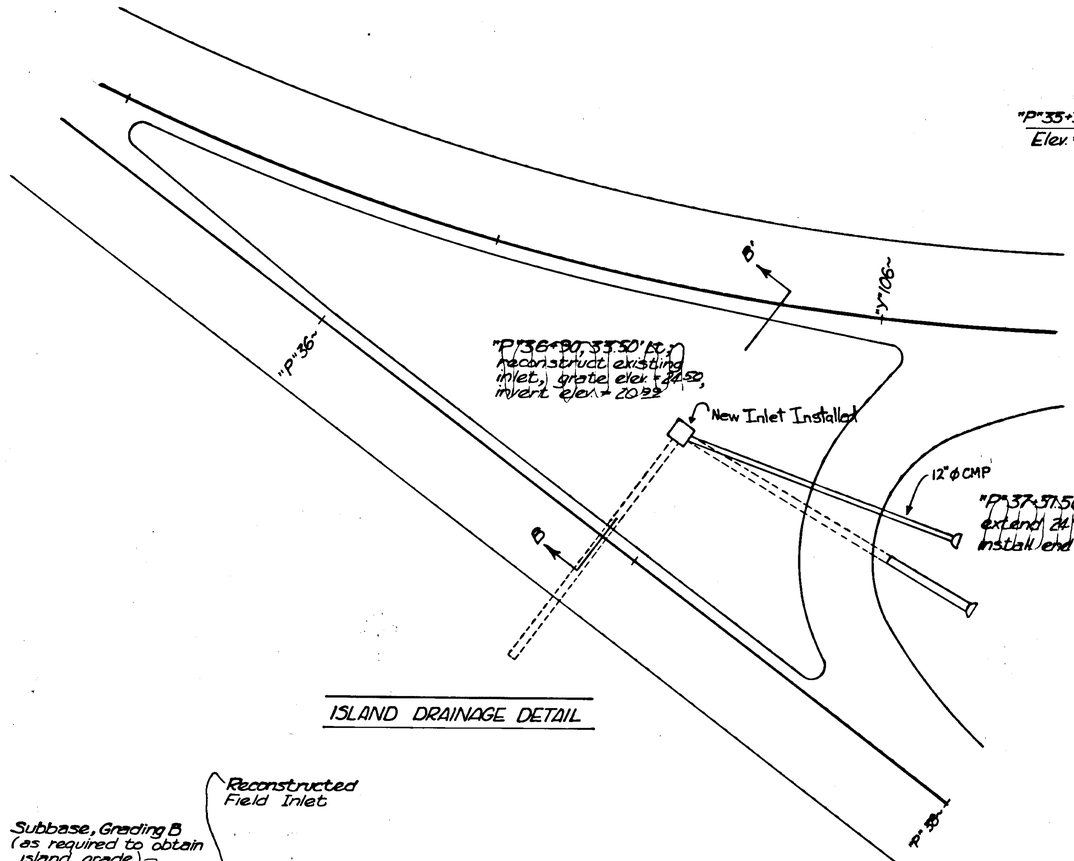
LINE OF CROWN LOCATION

STATION	OFFSET	ELEVATION	R.SH. ELEV.
"D" 10+50.00	11.00' Rt.	25.24	25.24
"D" 11+00.00	9.00' Rt.	25.24	25.20
"D" 11+50.00	5.50' Rt.	25.24	25.11
"D" 12+00.00	℄	25.24	24.97
"D" 12+50.00	3.50' Lt.	25.31	24.88
"D" 13+00.00	8.00' Lt.	25.40	24.82
"B" 12+81.96	11.94' Rt.	25.24	
"D" 19+50.00	10.50' Lt.	25.17	
"D" 20+00.00	7.00' Lt.	25.12	
"D" 20+50.00	4.50' Lt.	25.09	
"D" 21+00.00	2.50' Lt.	25.12	
"D" 21+50.00	1.50' Lt.	25.16	
"D" 22+55.53	℄	25.00	

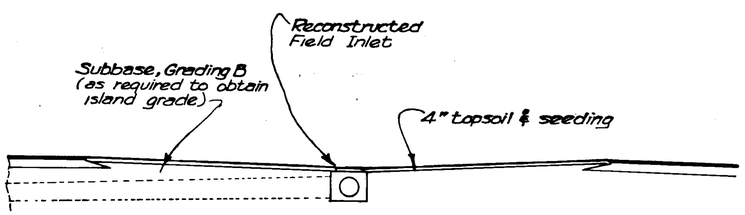
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0962 (1)	1981	10	13



EXISTING FIELD INLET FOR RECONSTRUCTION

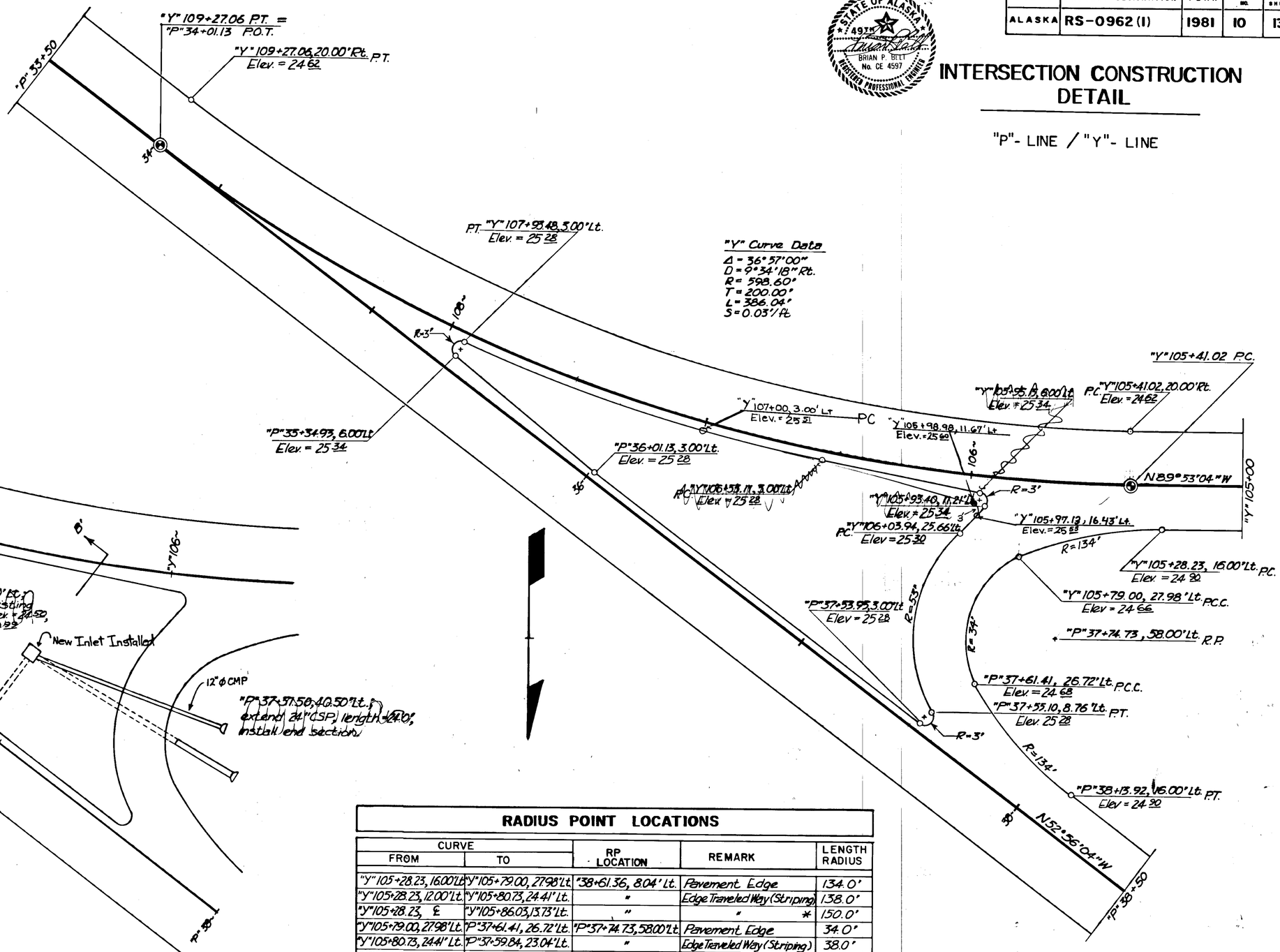


ISLAND DRAINAGE DETAIL



Section B-B'

(N.T.S.)



RADIUS POINT LOCATIONS

CURVE FROM	CURVE TO	RP LOCATION	REMARK	LENGTH RADIUS
"Y" 105+28.23, 16.00'Lt.	"Y" 105+79.00, 27.98'Lt.	"38+61.36, 8.04' Lt.	Pavement Edge	134.0'
"Y" 105+28.23, 12.00'Lt.	"Y" 105+80.73, 24.41' Lt.	"	Edge Traveled Way (Striping)	138.0'
"Y" 105+28.23, ℄	"Y" 105+86.03, 13.73' Lt.	"	" *	150.0'
"Y" 105+79.00, 27.98'Lt.	"P" 37+61.41, 26.72' Lt.	"P" 37+74.73, 58.00'Lt.	Pavement Edge	34.0'
"Y" 105+80.73, 24.41' Lt.	"P" 37+59.84, 23.04' Lt.	"	Edge Traveled Way (Striping)	38.0'
"Y" 105+86.03, 13.73' Lt.	"P" 37+55.14, 12.00' Lt.	"	" *	50.0'
"Y" 106+03.94, 25.66' Lt.	"P" 37+55.10, 8.76' Lt.	"	Pavement Edge	53.0'
"P" 37+61.41, 26.72' Lt.	"P" 38+13.92, 16.00' Lt.	"Y" 104+80.79, 8.03' Lt.	"	134.0'
"P" 37+59.84, 23.04' Lt.	"P" 38+13.92, 12.00' Lt.	"	Edge Traveled Way (Striping)	138.0'
"P" 37+55.14, 12.00' Lt.	"P" 38+13.92, ℄	"	" *	150.0'

* defines 3-centered curve whose data is: Δ = 143°03'00"
D = 8°
R₁ = 150'
R₂ = 50'

INTERSECTION CONSTRUCTION DETAIL

"P"- LINE / "Y"- LINE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0962(1)	1981	11	13

STATE OF ALASKA — 492TH — BRIAN P. BELT No. CE 4597 — REGISTERED PROFESSIONAL ENGINEER

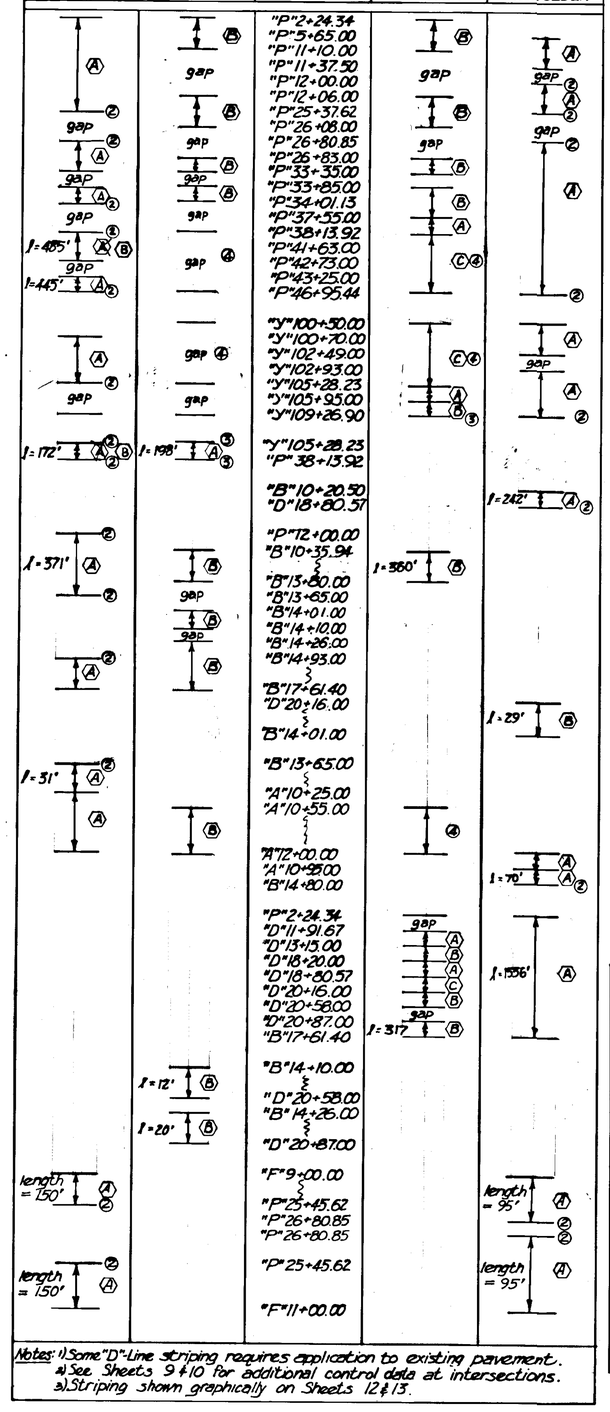
STRIPING, SIGNING & ILLUMINATION

SIGNING SCHEDULE

STATION	LEFT	RIGHT	FACE	LEGEND	CODE	SIZE	AREA (SF)	
"P" 2+25		x	SE	↑ Airport / Old Dairy Rd. ↗	D1-2	42"x126"	36.75	
"P" 3+50		x	SE	SPEED LIMIT 40	R2-1	30"x36"	7.50	
"P" 6+88		x	E	↙ ↘	W12-1	24"x24"	4.00	
"P" 6+88		x	E	(type I marker)	OM-1	18"x18"	2.25	
"P" 8+50		x	E	EMERGENCY PARKING ONLY	R8-4	24"x30"	5.00	
"P" 10+00		x	E	(P)	R3-1	30"x30"	6.25	
"P" 10+00		x	E	NO RIGHT TURN	R3-1	18"x24"	3.00	
"P" 11+60	x		N	Airport ← / Juneau	D1-2	42"x126"	36.75	
"D" 18+60	x		SE	LEFT LANE MUST TURN LEFT	R3-7L	36"x36"	9.00	
"D" 18+60		x	SE	LEFT LANE MUST TURN LEFT	R3-7L	36"x36"	9.00	
"D" 18+95		x	NW	WRONG WAY	R5-9	24"x36"	6.00	
"D" 18+95	x		N	WRONG WAY	R5-9	24"x36"	6.00	
"B" 10+40	x		N	STOP	R1-1	30"x30"	6.25	
"B" 12+81		x	NW	KEEP RIGHT ↗	R4-7B	30"x36"	7.50	
"B" 12+81		x	NW	(type I marker)	OM-1	18"x18"	2.25	
"B" 13+50	x		NW	O ↑	W3-1	36"x36"	9.00	
"B" 13+50	x		NW	STOP AHEAD	W3-1	18"x24"	3.00	
"B" 17+50		x	SE	SPEED LIMIT 40	R2-1	30"x36"	7.50	
"A" 10+50	x		W	STOP	R1-1	30"x30"	6.25	
"P" 13+00		x	E	SPEED LIMIT 40	R2-1	30"x36"	7.50	
"P" 14+50	x		W	↑ Juneau / ← Old Dairy Rd.	D1-2	42"x126"	36.75	
"P" 15+50	x		W	↑	W2-2L	36"x36"	9.00	
"P" 21+00		x	E	(fire station symbol)	W11-8	30"x30"	6.25	
"P" 21+00		x	E	FIRE STATION	W11-8	18"x24"	3.00	
"P" 22+50		x	E	+	W2-1	36"x36"	9.00	
"P" 25+00		x	E	↑ Airport / Commercial Area ←	D1-2	42"x140"	40.83	
"P" 25+00	x		W	EMERGENCY PARKING ONLY	R8-4	24"x30"	5.00	
"P" 25+50	x		W	SPEED LIMIT 40	R2-1	30"x36"	7.50	
"F" 9+60		x	N	STOP	R1-1	30"x30"	6.25	
"F" 10+50	x		S	STOP	R1-1	30"x30"	6.25	
"P" 27+10		x	E	EMERGENCY PARKING ONLY	R8-4	24"x30"	5.00	
"P" 31+00	x		NW	(fire station symbol)	W11-8	30"x30"	6.25	
"P" 31+00	x		NW	FIRE STATION	W11-8	18"x24"	3.00	
"P" 32+50		x	SE	SPEED LIMIT 40	R2-1	30"x36"	7.50	
"P" 35+35	x		NW	KEEP RIGHT ↗	R4-7B	30"x36"	7.50	
"P" 36+50		x	SE	(merge symbol)	W4-1L	36"x36"	9.00	*
"P" 36+50		x	SE	MERGE	W4-1L	18"x24"	3.00	*
"P" 41+75	x		SE	(O)	R3-2	30"x30"	6.25	
"P" 41+75	x		SE	NO LEFT TURN	R3-2	18"x24"	3.00	
"P" 42+58	40'		NE	DO NOT ENTER	R5-1	30"x30"	6.25	
"P" 42+58	40'		SW	STOP	R1-1	30"x30"	6.25	
"P" 42+58	90'		SW	(P)	R3-1	30"x30"	6.25	
"P" 42+58	90'		SW	NO RIGHT TURN	R3-1	18"x24"	3.00	
"P" 42+80		x	SW	← ONE WAY	R6-1(L)	48"x16"	5.33	
"P" 43+02	40'		NE	DO NOT ENTER	R5-1	30"x30"	6.25	
"P" 43+02	40'		SW	STOP	R1-1	30"x30"	6.25	
"P" 44+00		x	E	↑ O	W3-1	36"x36"	9.00	*
"P" 44+00		x	E	STOP AHEAD	W3-1	18"x24"	3.00	*
"P" 44+00	x		E	↑ O	W3-1	36"x36"	9.00	*
"P" 44+00	x		E	STOP AHEAD	W3-1	18"x24"	3.00	*
"P" 45+00	x		E	ONLY ↱	R3-8L/R	30"x36"	7.50	
"P" 45+00		x	E	ONLY ↱	R5-8L/R	30"x36"	7.50	
"P" 45+75		x	E	← Airport Terminal / Mendenhall Valley →	D1-2	40"x140"	40.83	
"P" 46+75	x		NE	STOP	R1-1	30"x30"	6.25	*
"P" 46+75		x	NE	STOP	R1-1	30"x30"	6.25	*
"P" 46+75	x		SW	DO NOT ENTER	R5-1	30"x30"	6.25	
"P" 46+75		x	SW	DO NOT ENTER	R5-1	30"x30"	6.25	
"P" 47+25			NE	← →	W1-7	24"x48"	8.00	
"P" 47+25		100'	NW	(P)	R3-2	30"x30"	6.25	
"P" 47+25		100'	NW	NO LEFT TURN	R3-2	18"x24"	3.00	
"P" 46+95	175'		NE	(P)	R3-1	30"x30"	6.25	
"P" 46+95	175'		NE	NO RIGHT TURN	R3-1	18"x24"	3.00	
"Y" 101+00	x		W	SPEED LIMIT 40	R2-1	30"x36"	7.50	
"Y" 101+00		x	W	SPEED LIMIT 40	R2-1	30"x36"	7.50	
"Y" 101+50	x		W	NO PARKING	R8-3	24"x30"	5.00	
"Y" 101+50		x	W	EMERGENCY PARKING ONLY	R8-4	24"x30"	5.00	
"Y" 102+00	x		W	↑ Juneau City Center / ← Mendenhall Valley	D1-2	42"x140"	40.83	
"Y" 102+00		x	W	↑ Juneau City Center / ← Mendenhall Valley	D1-2	42"x140"	40.83	
"Y" 102+79	x		S	ONE WAY →	R6-1(R)	48"x16"	5.33	
"Y" 103+00	x		W	LEFT LANE MUST TURN LEFT	R3-7L	36"x36"	9.00	
"Y" 104+00		x	W	↱	W1-2R	36"x36"	9.00	
"Y" 104+25	x		W	ONLY ↱	R3-5L	30"x36"	7.50	
"Y" 104+25	x		W	10 / 25 MPH	W13-1	18"x18"	2.25	
"Y" 105+96	x		W	↙ ↘	W12-1	24"x24"	4.00	*
"Y" 105+96	x		W	(type I marker)	OM-1	18"x18"	2.25	
"Y" 107+50	x		SE	WRONG WAY	R5-9	24"x36"	6.00	
"Y" 107+50		x	SE	WRONG WAY	R5-9	24"x36"	6.00	
"Y" 108+00		x	NW	↑↓	W6-3	36"x36"	9.00	
"Y" 108+00		x	NW	2 WAY TRAFFIC	W6-3	18"x24"	3.00	
"P" 33+35	35'		SW	STOP	R1-1	30"x30"	6.25	
"Y" 102+87		35'	S	STOP	R1-1	30"x30"	6.25	
"P" 35+35	x		NW	(type I marker)	OM-1	18"x18"	2.25	
"D" 19+75		x	W	DO NOT ENTER	R5-1	30"x30"	6.25	
Supp #1				YIELD	R1-2	36"x36"	9.00	
Supp #1				ONLY	R3-5L	30"x36"	7.50	

* Installed, but removed by others

STRIPING SCHEDULE



Notes: 1) Some "D"-Line striping requires application to existing pavement.
2) See Sheets 9 & 10 for additional control data at intersections.
3) Striping shown graphically on Sheets 12 & 13.

THERMOPLASTIC SUMMARY

COLOR	SIZE	LENGTH	AREA
Yellow	4" Stripe	8,716'	2,905 SF
Yellow	special marking	—	688
white	4" Stripe	13,492'	4,497
white	special markings	—	1,135
		Total Area =	9,225 SF

SPECIAL PAVEMENT MARKING SCHEDULE

STATION / SYMBOL	LEFT	RIGHT	LEGEND	COLOR	SIZE	APPROX AREA
"P" 2+50	.	x	← .	white	9' x 24'	50
"D" 19+50	x		↑ ONLY	white	—	25
1	(island end tapers)			white	18" — 165' / 4" — 220'	320
2	"			yellow	18" — 96' / 4" — 160'	197
3	"			white	18" — 26' / 4" — 60'	59
4	"			yellow	18" — 84' / 4" — 170'	183
5	"			yellow	18" — 22' / 4" — 54'	51
6	"			yellow	18" — 41' / 4" — 208'	131
7	"			yellow	18" — 44' / 4" — 180'	126
8	"			white	18" — 48' / 4" — 102'	106
9	"			white	18" — 39' / 4" — 84'	87
"B" 10+35	x		(stop bar)	white	2' x 15'	30
"A" 10+55	x		"	"	2' x 12'	24
"P" 34+15	x		lane arrow	white	6' x 24'	31
"P" 34+15		x	"	"	"	31
"P" 33+50	x		"	"	"	31
"P" 38+50		x	"	"	"	31
"P" 45+50	x		↑ ONLY	white	—	25
"P" 45+50		x	ONLY ↱	"	—	25
"Y" 103+00	x		↑ ONLY	"	—	25
"Y" 104+25	x		↑ ONLY	"	—	25
"P" 42+80	40'		(stop bar)	white	2' x 20'	40
"P" 46+75	x		"	"	2' x 15'	30
"P" 46+75		x	"	"	2' x 15'	30
"F" 9+60		x	"	"	2' x 15'	30
"F" 10+50	x		"	"	2' x 15'	30
"P" 33+60	35'		"	"	2' x 15'	30
"Y" 102+79		35'	"	"	2' x 10'	20
					Area (yellow)	688 SF
					Area (white)	1,135 SF
					TOTAL AREA =	1,823 SF

STRIPING SCHEDULE KEY

(1) length stripe = 3', width = 6", gap = 12'
(2) follow radius to adjoining road shoulder stripe
(3) meet adjoining roadway center stripe
(4) single line coincident with ℄
(A) solid white 4" wide, total length = 13,118 ft.
(B) solid yellow 4" wide, total length = 8,716 ft.
(C) broken white 4" wide, total length = 374 ft. *

Total Length 4" wide stripe = 22,208 ft.

* space between segments not included

ILLUMINATION SUMMARY *

Changed in Spec. by E.W.O #1

ITEM	QUANTITY
Electrolier	26 each
conductor (estimated)	5,000 lin. ft.
rigid metal conduit 80% PVC, 20% RMC	4,666 lin. ft.
junction boxes	8 each
load centers	2 each
existing pole relocation	1 each

* See Sheets 12 & 13 for schedules

Note: All paid for under Item 660(3) Highway Lighting System Complete (Revised)

RAISED PAVEMENT MARKER PLACEMENT

1. Raised Pavement Markers (RPM's) shall be installed the entire length of this project; they shall be precast Portland cement concrete with parallel abrasive-resistive steel strips. Reflectors shall be two-way prismatic, with color consistent with coincident roadway striping. The contractor's choice of product and installation procedure shall be submitted to the Engineer for approval.
2. RPM's shall be installed along all centerlines with intervals of 80' on tangent sections and 40' on horizontal curves. General placement pattern shall coincide with thermoplastic striping installation; RPM's shall be placed at the leading edge of broken stripes. Diverging lanes shall have 4 shoulder RPM's with same stationing and interval as their respective center markers.
3. All island tapers shall be adequately marked and shall have one-way markers placed in areas of conflict; all wrong-way situations shall have red reflectors installed backing the lane's appropriate colored marker.
4. RPM's shall be installed in accordance with the manufacturer's instructions and these specifications. Allowed protrusion above roadway pavement surface is 1/4".
5. Raised Pavement Marker quantity is as follows:

Yellow / Yellow	72
Yellow	12
White	23
Yellow / Red	15
White / Red	61
Total	183

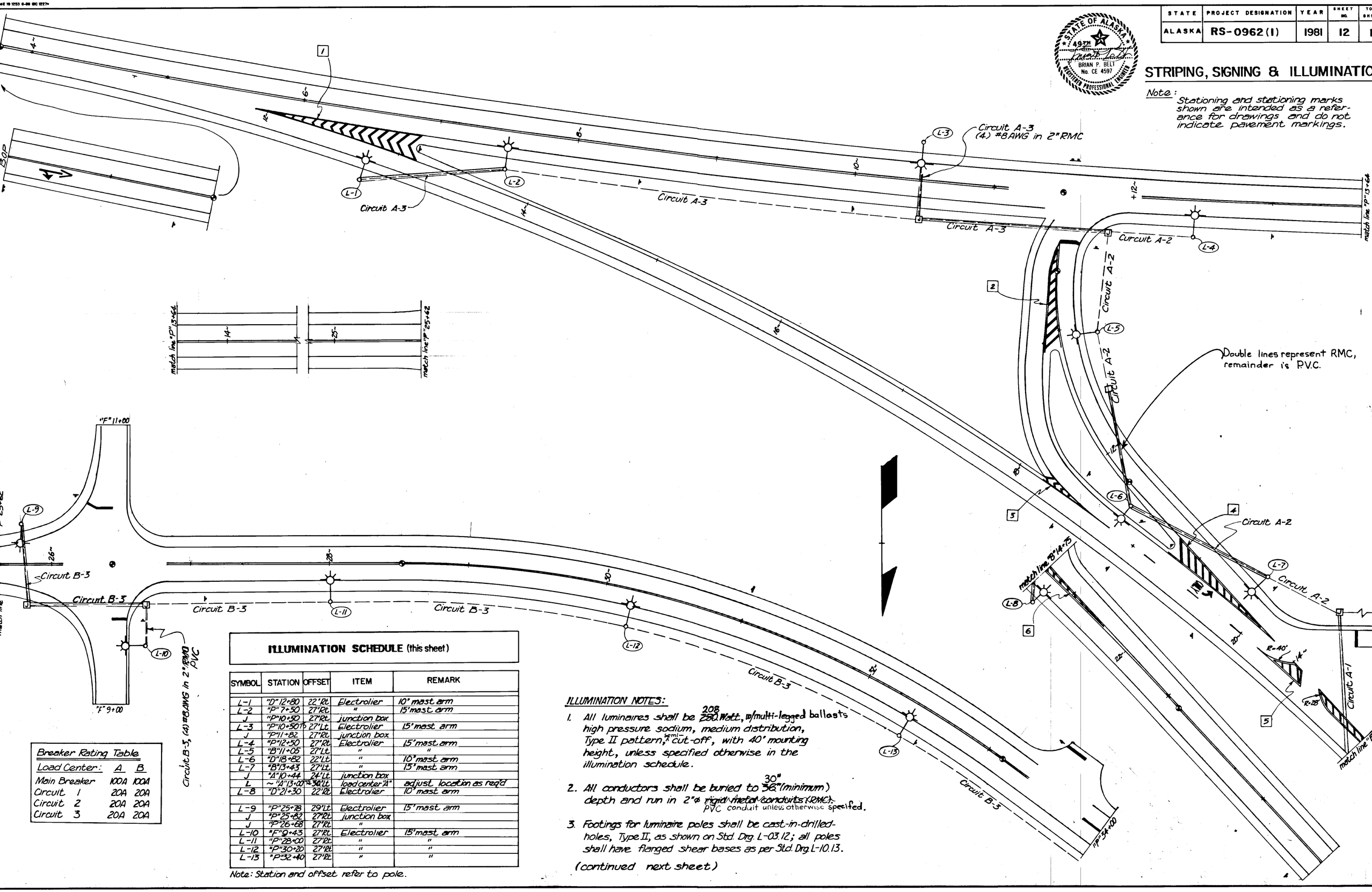
6. The Contractor shall place markers as directed by the Engineer in areas not specifically described above such as intersections and island end tapers.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEET
ALASKA	RS-0962(1)	1981	12	13

STATE OF ALASKA
49TH
BRIAN P. BELT
No. CE 4597
REGISTERED PROFESSIONAL ENGINEER

STRIPING, SIGNING & ILLUMINATION

Note: Stationing and stationing marks shown are intended as a reference for drawings and do not indicate pavement markings.



ILLUMINATION SCHEDULE (this sheet)

SYMBOL	STATION	OFFSET	ITEM	REMARK
L-1	"D" 12+80	22' Rt.	Electrolier	10' mast arm
L-2	"P" 7+50	27' Rt.	"	15' mast arm
J	"P" 10+50	27' Rt.	junction box	
L-3	"P" 10+50 75	27' Lt.	Electrolier	15' mast arm
J	"P" 11+82	27' Rt.	junction box	
L-4	"P" 12+50	27' Rt.	Electrolier	15' mast arm
L-5	"B" 11+05	27' Lt.	"	"
L-6	"D" 18+82	22' Lt.	"	10' mast arm
L-7	"B" 13+43	27' Lt.	"	15' mast arm
J	"A" 10+44	24' Lt.	junction box	
L	~"A" 13+00	30' Lt.	load center "A"	adjust location as reqd
L-8	"D" 21+30	22' Rt.	Electrolier	10' mast arm
L-9	"P" 25+78	29' Lt.	Electrolier	15' mast arm
J	"P" 25+82	27' Rt.	junction box	
J	"P" 26+68	27' Rt.	"	
L-10	"F" 9+43	27' Rt.	Electrolier	15' mast arm
L-11	"P" 28+00	27' Rt.	"	"
L-12	"P" 30+20	27' Rt.	"	"
L-13	"P" 32+40	27' Rt.	"	"

Note: Station and offset refer to pole.

Breaker Rating Table		
Load Center:	A	B
Main Breaker	100A	100A
Circuit 1	20A	20A
Circuit 2	20A	20A
Circuit 3	20A	20A

ILLUMINATION NOTES:

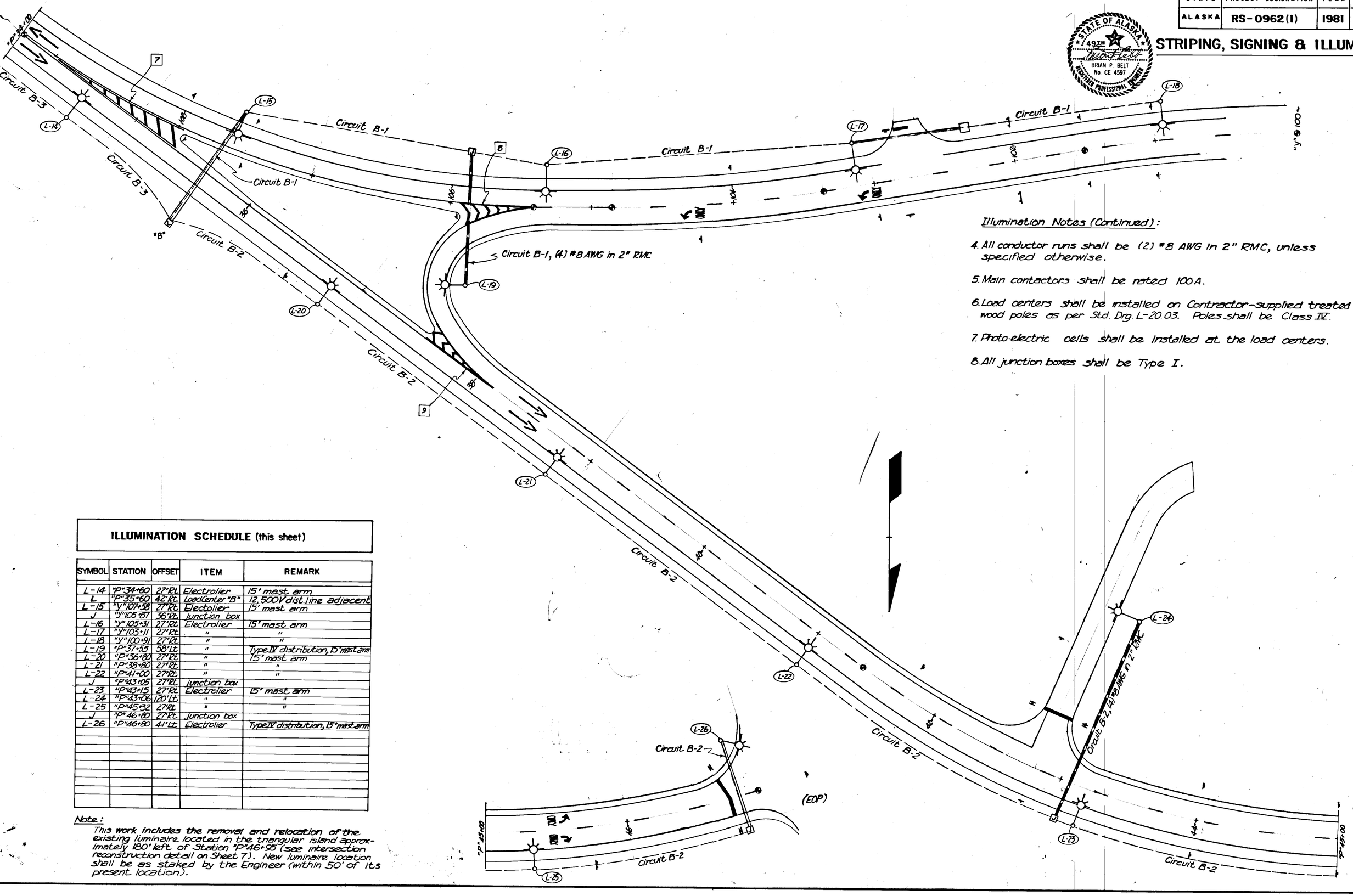
1. All luminaires shall be ~~250~~ 208 Watt, w/multi-legged ballasts high pressure sodium, medium distribution, Type II pattern, ~~semi~~* cut-off, with 40' mounting height, unless specified otherwise in the illumination schedule.
2. All conductors shall be buried to ~~36"~~ 30" (minimum) depth and run in 2"ø ~~rigid metal conduits (RMC)~~ PVC conduit unless otherwise specified.
3. Footings for luminaire poles shall be cast-in-drilled-holes, Type II, as shown on Std. Drg. L-03.12; all poles shall have flanged shear bases as per Std. Drg. L-10.13.

(continued next sheet)

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0962(1)	1981	13	13

STRIPING, SIGNING & ILLUMINATION

STATE OF ALASKA 49TH
BRIAN P. BELT
No. CE 4597
REGISTERED PROFESSIONAL ENGINEER



Illumination Notes (Continued):

4. All conductor runs shall be (2) #8 AWG in 2" RMC, unless specified otherwise.
5. Main contactors shall be rated 100A.
6. Load centers shall be installed on Contractor-supplied treated wood poles as per Std. Drg. L-20.03. Poles shall be Class IV.
7. Photo-electric cells shall be installed at the load centers.
8. All junction boxes shall be Type I.

ILLUMINATION SCHEDULE (this sheet)

SYMBOL	STATION	OFFSET	ITEM	REMARK
L-14	"P"34+60	27'Rt.	Electrolier	15' mast arm
L	"P"35+60	42'Rt.	Loadcenter "B"	12,500V dist. line adjacent
L-15	"y"107+58	27'Rt.	Electolier	15' mast arm
J	"y"105+87	36'Rt.	junction box	
L-16	"y"105+31	27'Rt.	Electrolier	15' mast arm
L-17	"y"103+11	27'Rt.	"	"
L-18	"y"100+91	27'Rt.	"	"
L-19	"P"37+55	58'Lt.	"	TypeIV distribution, 15' mast arm
L-20	"P"36+80	27'Rt.	"	15' mast arm
L-21	"P"38+80	27'Rt.	"	"
L-22	"P"41+00	27'Rt.	"	"
J	"P"43+05	27'Rt.	junction box	
L-23	"P"43+15	27'Rt.	Electrolier	15' mast arm
L-24	"P"43+06	120'Lt.	"	"
L-25	"P"45+32	27'Rt.	"	"
J	"P"46+80	27'Rt.	junction box	
L-26	"P"46+80	41'Lt.	Electrolier	TypeIV distribution, 15' mast arm

Note:
This work includes the removal and relocation of the existing luminaire located in the triangular island approximately 180' left of Station "P"46+95 (see intersection reconstruction detail on Sheet 7). New luminaire location shall be as staked by the Engineer (within 50' of its present location).