

STATE	PROJECT	SHEET NO.
ALASKA	HHS-0935(3)	1

INDEX OF SHEETS	
1	TITLE SHEET
2	TYPICAL SECTIONS
3	MISC. DETAILS & SUMMARIES
4	INTERSECTION DETAILS
5	PLAN
6	SIGNING & STRIPING DETAILS
7	ILLUMINATION & SIGNALIZATION

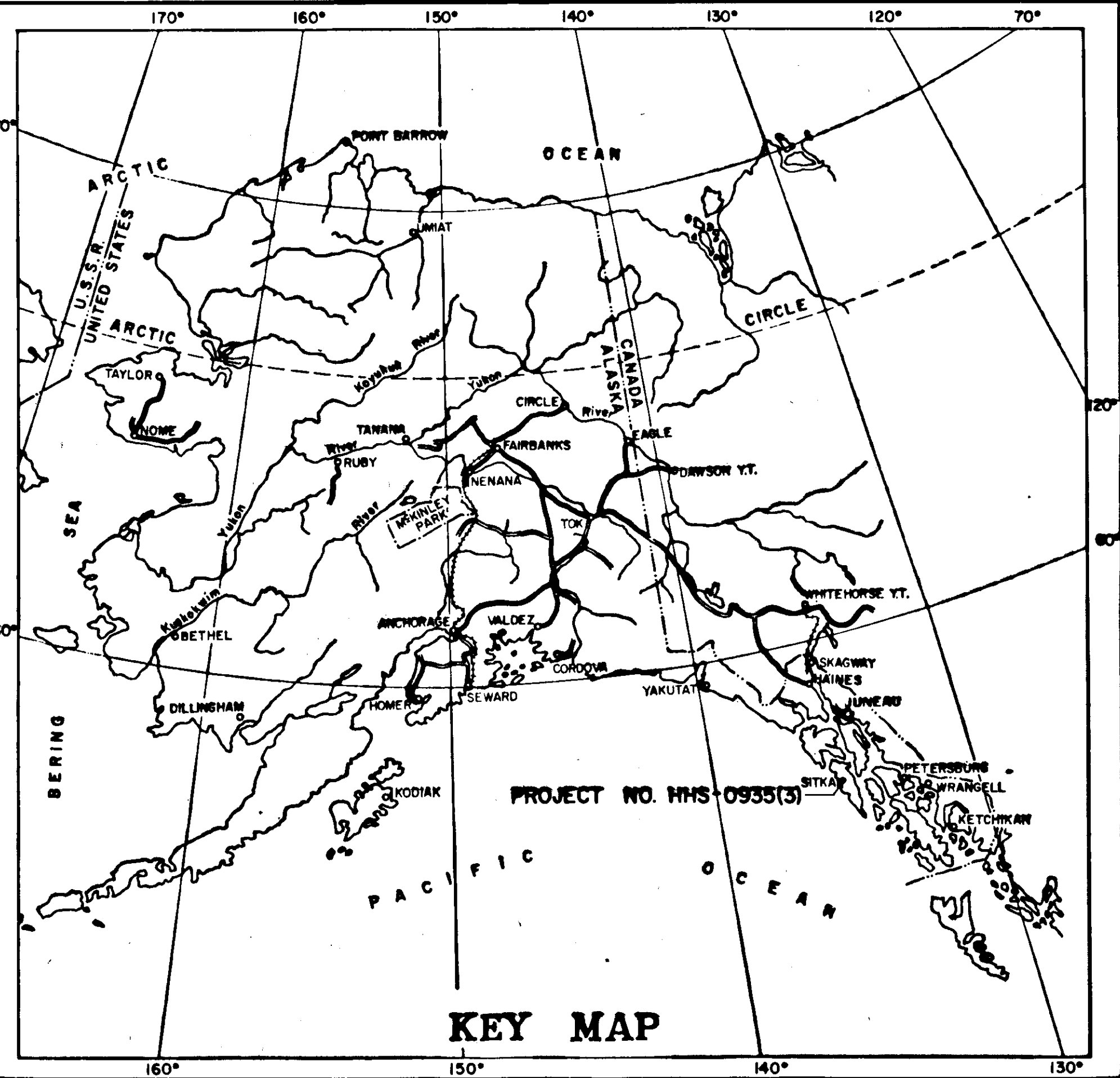
THESE STANDARD DRAWINGS APPLY TO THIS PROJECT: A-1, C-00.04, C-10.03, C-11.03, D-02.02, D-23.01, D-26.02, D-27.10, G-04.32, G-13.13, I-20.01, L-03.11, L-20.03, L-10.13, L-30.01, M-16.03, S-00.11, S-05.00, S-20.10, S-30.11, T-20.03, T-21.02, T-22.00, T-31.01, T-32.01, T-33.03, T-34.03, T-40.00, T-52.01, U-03.00

AS BUILTS

Contractor: Constructors Pamco
Project Engineer: Gary Hoggins
Beginning Date: 4-14-80
Completion Date: 9-18-80

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

PROPOSED HIGHWAY PROJECT
INTERSECTION OF
HALIBUT POINT BOULEVARD
&
SAWMILL CREEK BOULEVARD
HHS-0935(3)
INTERSECTION IMPROVEMENTS

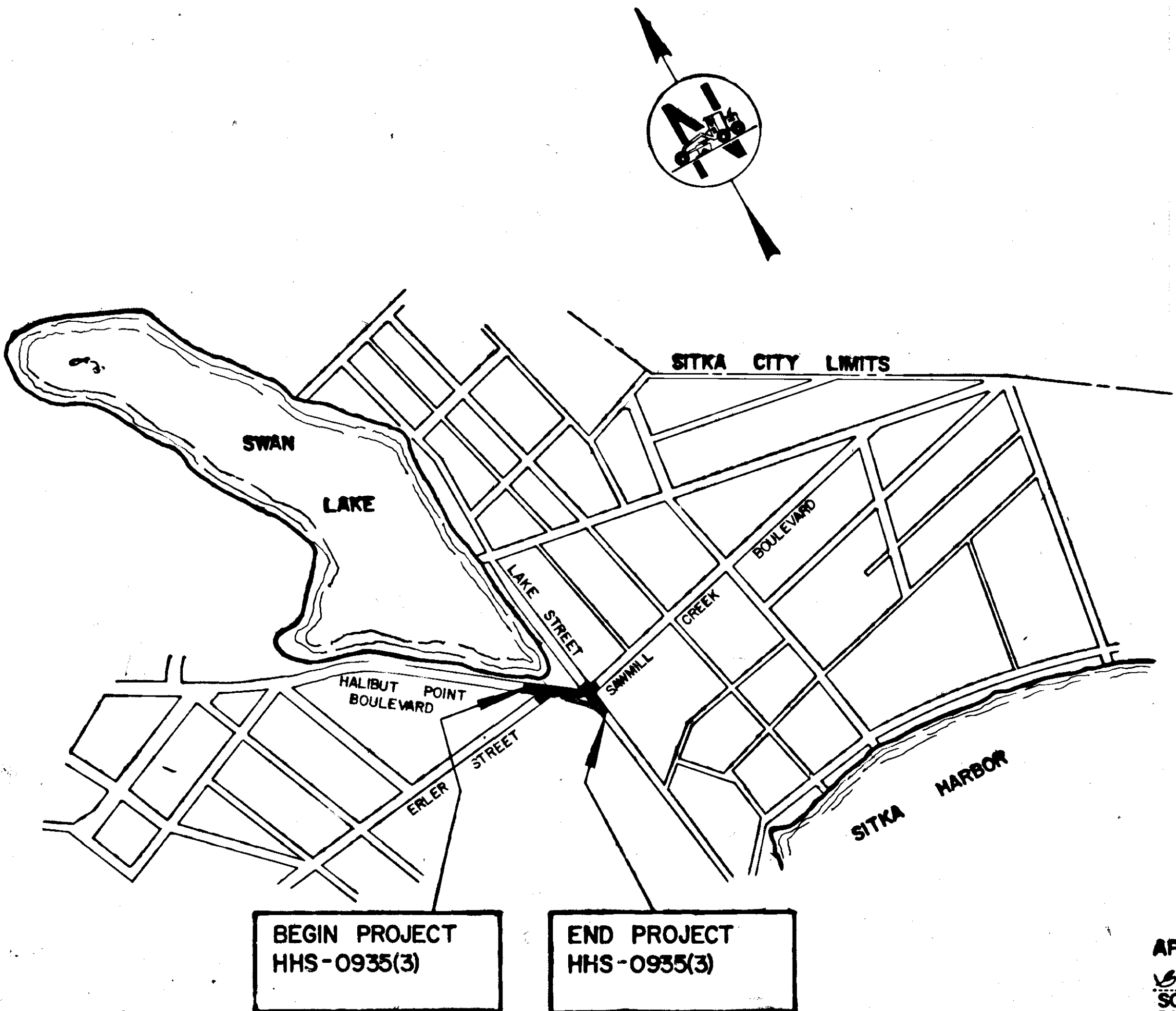


PROJECT SUMMARY

WIDTH OF SUBGRADE	=	VARIABLE
WIDTH OF PAVEMENT	=	VARIABLE
LENGTH OF PAVEMENT	=	622.34' = 0.12 Mi.
LENGTH OF GRADING	=	622.34' = 0.12 Mi.
LENGTH OF PROJECT	=	622.34' = 0.12 Mi.

DESIGN DESIGNATION
OF INTERSECTION

ADT 1979	=	8935
ADT 1999	=	12000
DHV Peak Hour Entering (Total all Legs)	=	1700
%T	=	5%
TI	=	8.0

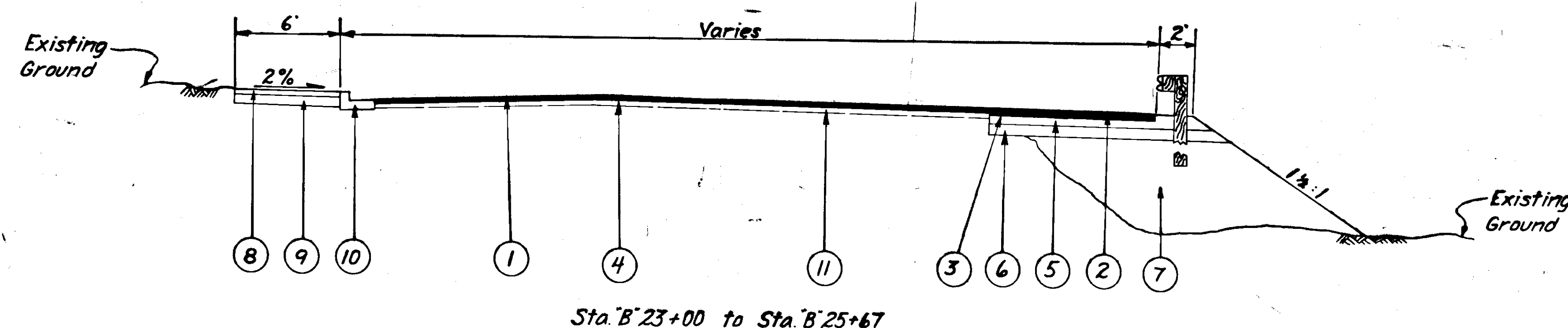
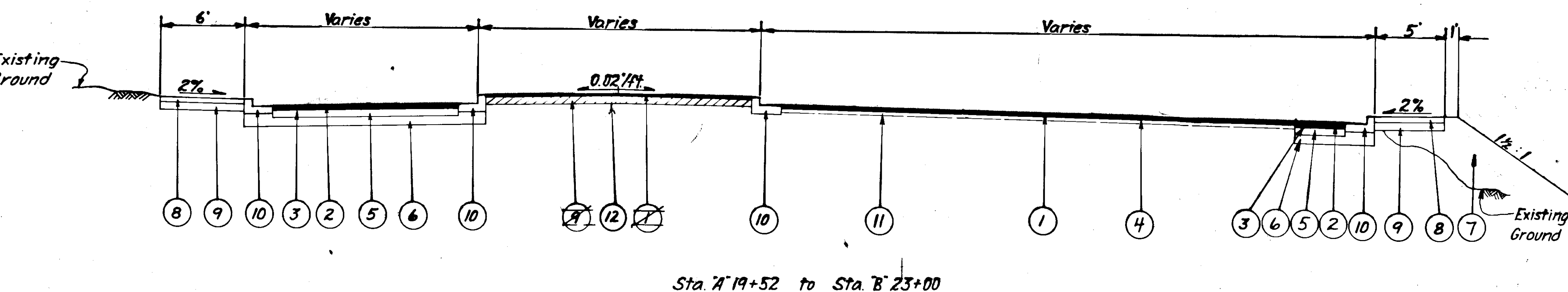


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES
APPROVED
SOUTHEASTERN REGION
DESIGN/CONSTRUCTION ENGINEER
Date 3/5/79

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES
APPROVED
DIRECTOR-HIGHWAY DESIGN & CONSTRUCTION
Date 4-2-80

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	HHS-0935 (3)	1979	2	7

TYPICAL SECTIONS



LABELING INDEX

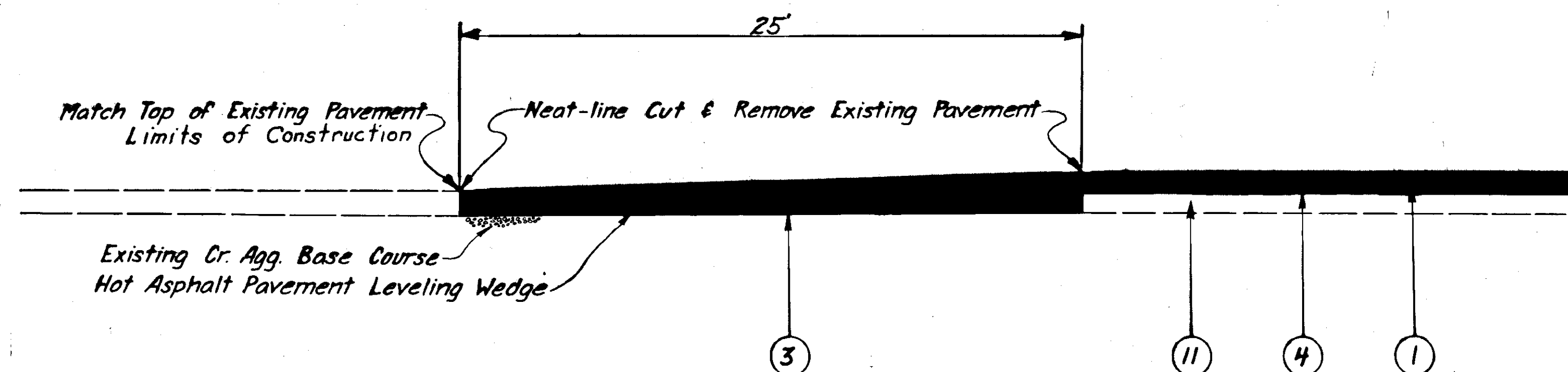
- | | |
|----|--|
| 1 | 1 1/2" Hot Asphalt Pavement (Class I) |
| 2 | 3 1/2" Hot Asphalt Pavement (Class I) |
| 3 | MC-30 Liquid Asphalt for Prime Coat |
| 4 | CSS-1 Emulsified Asphalt for Tack Coat |
| 5 | 6" Crushed Aggregate Base Course |
| 6 | 7" Subbase, Grading "A" |
| 7 | Unclassified Excavation (Usable) |
| 8 | 4" Concrete Sidewalk |
| 9 | 6" Subbase, Grading "A" |
| 10 | Standard Curb & Gutter |
| 11 | Existing Asphalt |
| 12 | 6" Top Soil |

BASIS OF ESTIMATE

ITEM NO.	ESTIMATING FACTOR
301 (1)	1.95 Tons Per Cubic Yard
304 (1)	1.95 Tons Per Cubic Yard
401 (1)	114.4 Lbs. Per Sq. Yard Per Inch Depth
401 (2)	6% of Item 401 (1)
402 (2)	0.1 Gal. Per Sq. Yard - 253 Gals./Ton
403 (1)	0.25 Gal. Per Sq. Yard - 256 Gal. Per Ton at 60°F

GENERAL NOTES

- Grades & alignment shown on the plans are subject to minor revisions.
- Storm inlets, culvert locations, and lengths are subject to minor revisions.
- Sta. B' 22+25 to B' 23+75 ± left of E. Existing asphalt shall be removed as shown in the pavement transition detail. Crushed aggregate shall then be added to the line & grade as directed by the engineer & compacted in accordance with 203-3.04 of the standard specifications.
- Power poles shall be relocated by others after installation of plastic conduit encasement is completed.
- Existing guardrail to be replaced shall be removed & dismantled by the contractor & stockpiled at the State of Alaska D.O.T. & P.F. Maintenance Station as directed by the engineer.
- Removed pavement may be placed in embankment areas in accordance with the Standard Specifications.
- Pavement transition as detailed shall be used in all areas where matching existing grade of asphalt.
- Pavement Removal is incidental to item 401(1) and no separate payment will be made therefore.



PAVEMENT TRANSITION DETAIL

MISCELLANEOUS DETAILS
& SUMMARIES

STRUCTURE SUMMARY					
STRUCTURE	TYPE	LOCATION	OFFSET		INVERT ELEVATION
			LEFT	RIGHT	
S-1	A	A" 20+90	39		33.58
S-2	A	A" 20+00		23.92	33.70
S-3	A	A" 22+19.71		48	34.30
S-4	B	B" 22+04		80	34.24
S-5	A	B" 22+38.12	13.18		33.85
S-6	A	B" 24+20	14.2		34.26
S-7	A	A" 21+50	18.5		32.34
S-8	A	L 23+16.5	14		34.31

* F.T. = Forward Tangent					
P-9	18"	43'	EXIST. SUMP		
P-10	18"	54'	S-8	DITCH	
P-11	18"	29'	DITCH	S-6	

PIPE SUMMARY					
PIPE	DIA.	LENGTH	FROM		TO
			STRUCTURE	ELEV.	STRUCTURE ELEV.
P-1	18"	24' 25"	S-1	30.58	Exist. 60" CMP 23.0
P-2	12"	4'	S-2	31.3	Exist. 12" CMP 31.0
P-3	18"	40' 43"	S-3	29.37	S-4 28.49
P-4	-	6' 0"	S-4	25.55	Exist. 18" CMP 25.61
P-5	-	6' 13"	Exist. 18" CMP	25.43	S-4 25.48
P-6	-	6' 11"	S-5	30.85	Exist. 60" CMP 22.75
P-7	-	54' 63"	S-6	29.45	Outfall 27.77
P-8	12"	4'	S-7	30.59	Exist. C.B. 30.49

ADJUST EXISTING VALVE BOXES			
STATION		OFFSET	STATION
A" 21+81.29		36.5' Lt.	B" 23+90.00
B" 22+54.50		53.7' Rt.	B" 24+12.00
B" 23+17.5		31' Lt.	B" 24+15

RELOCATE EXISTING FIRE HYDRANTS			
FROM		TO	
STATION	OFFSET	STATION	OFFSET
A" 21+76	40' Lt.	A" 21+64	78' Lt.

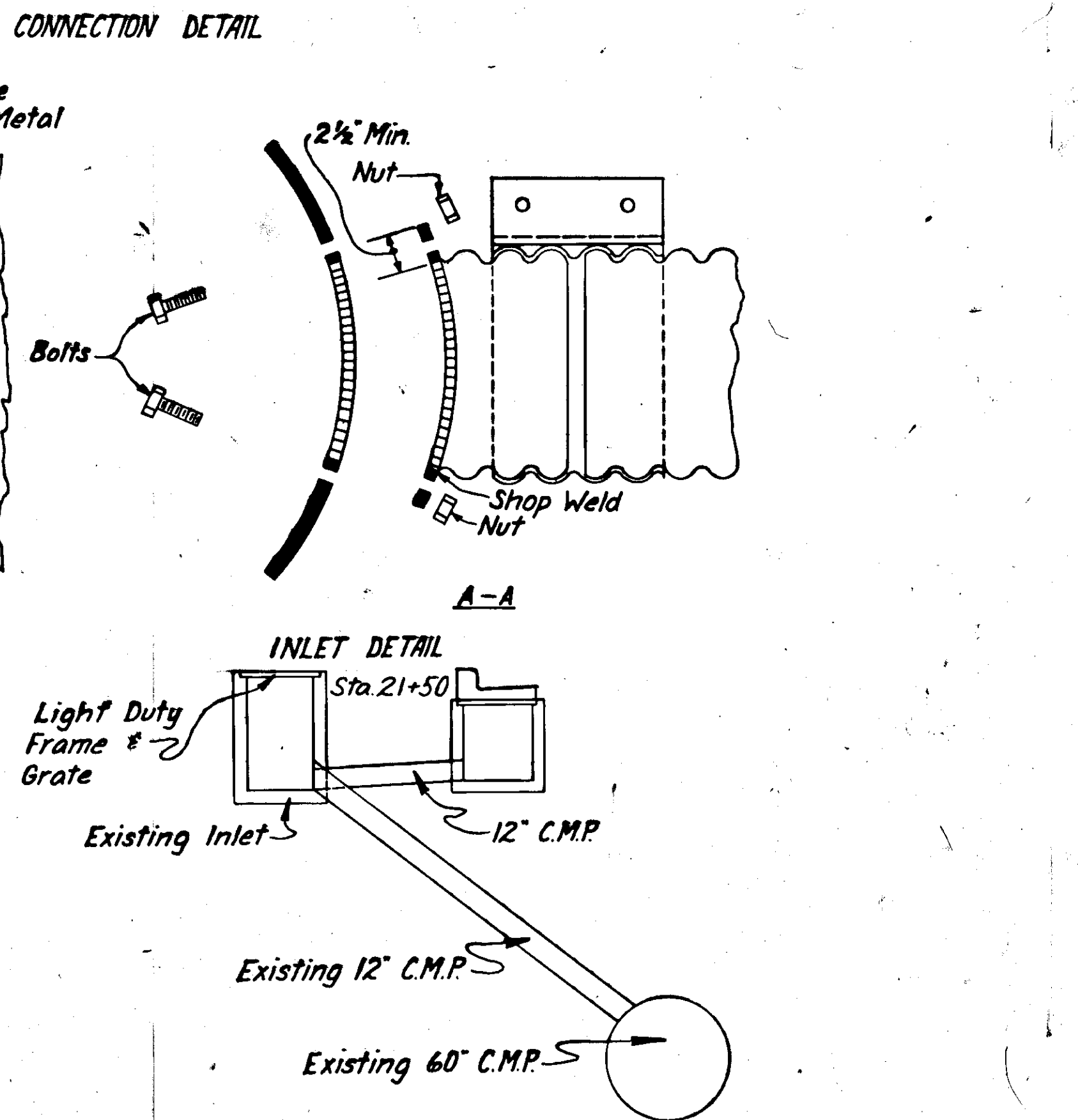
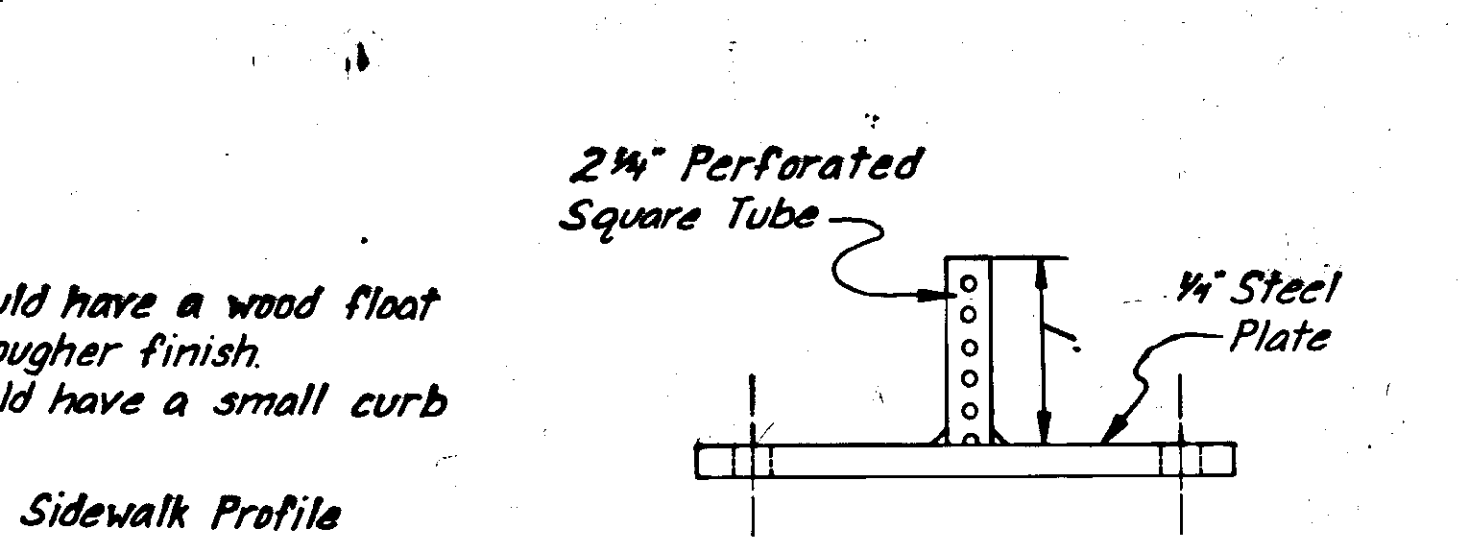
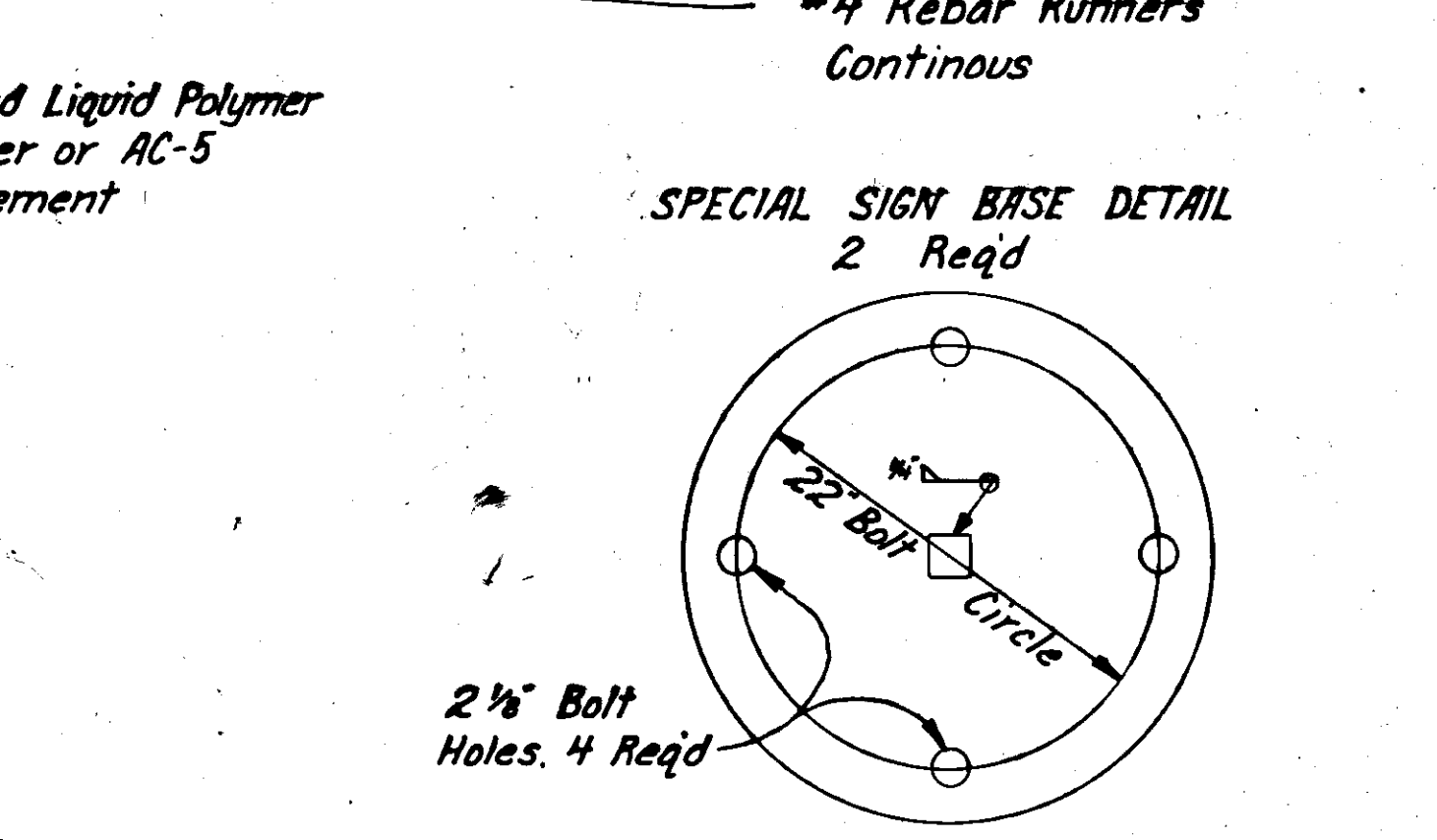
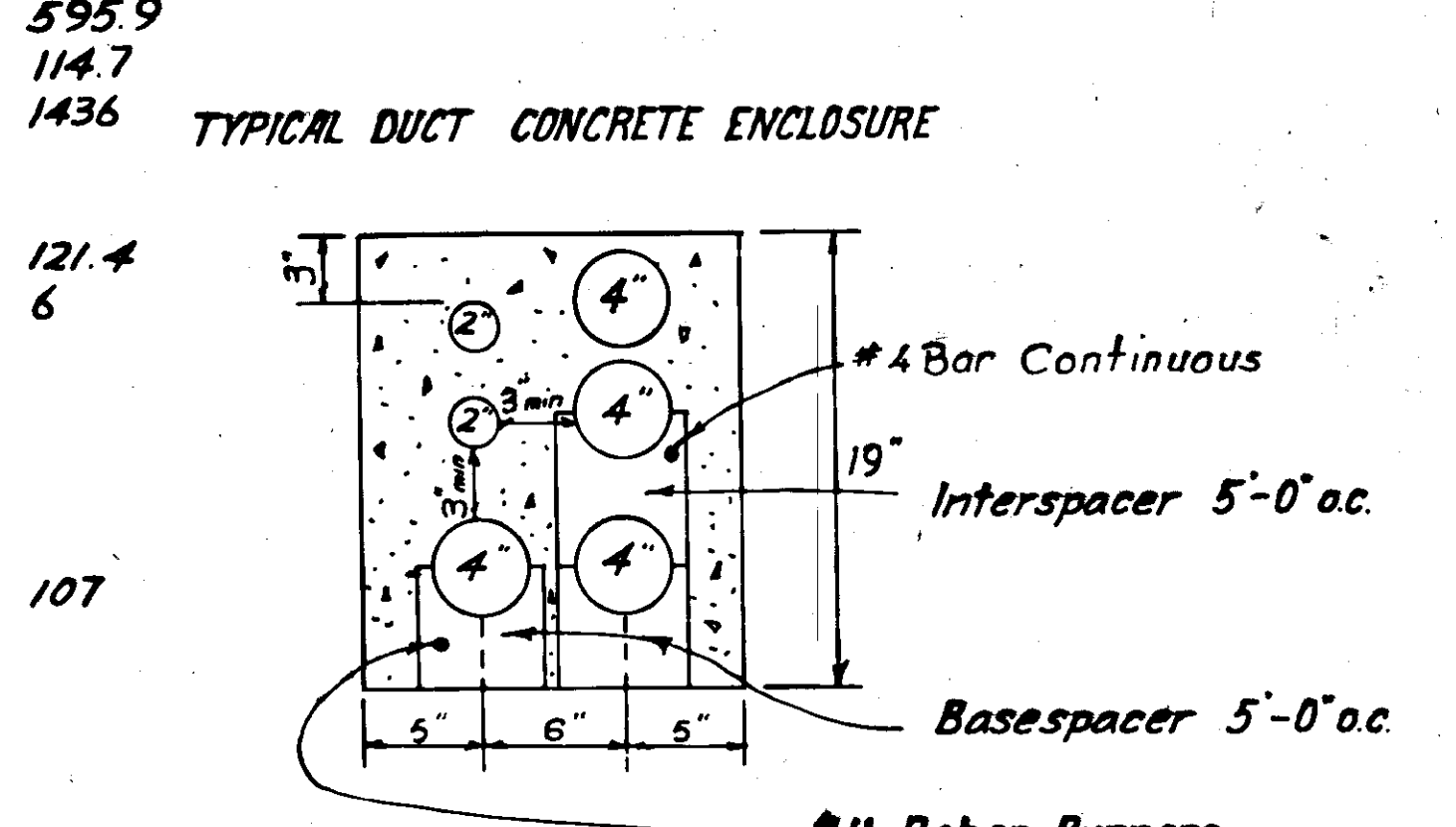
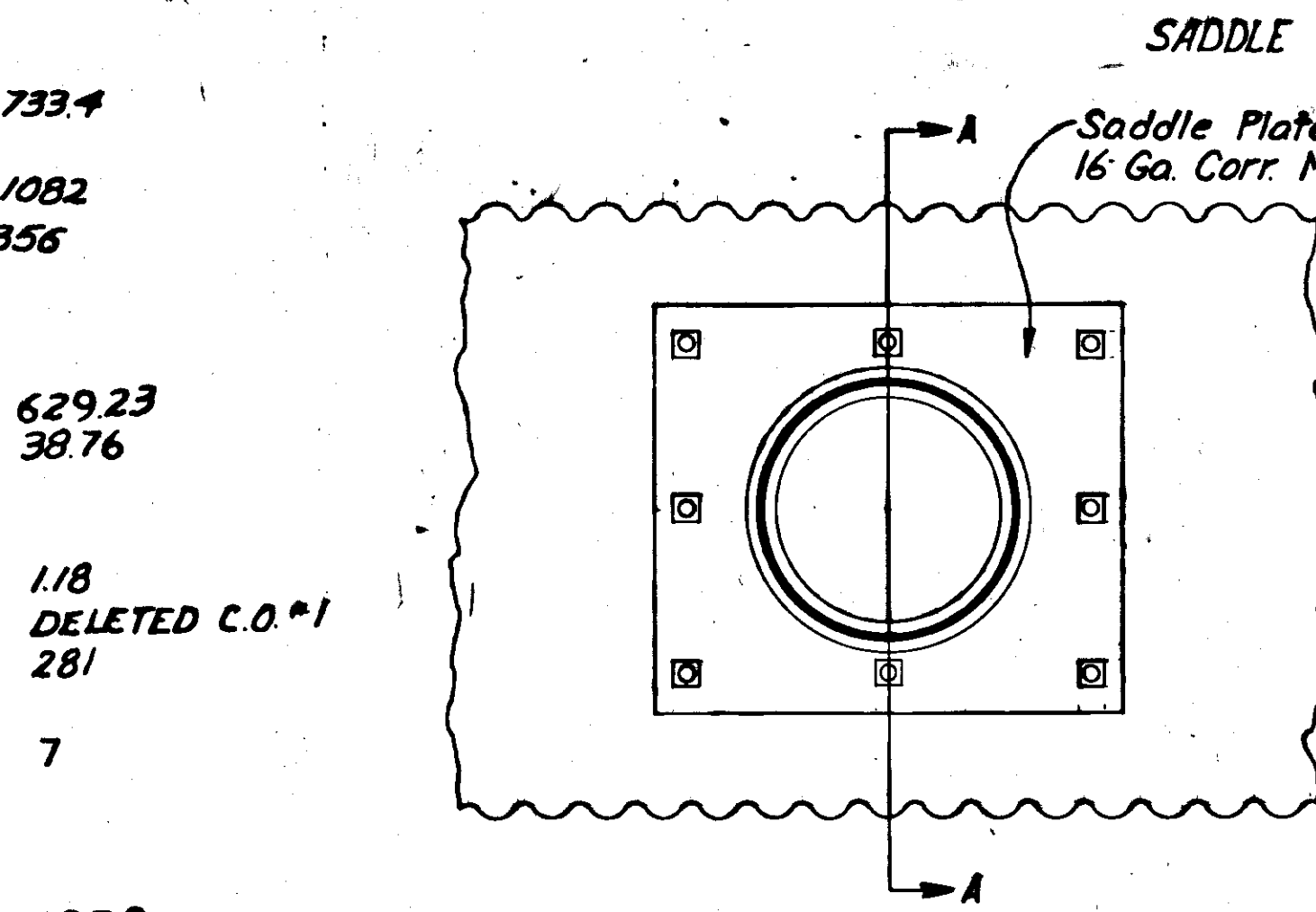
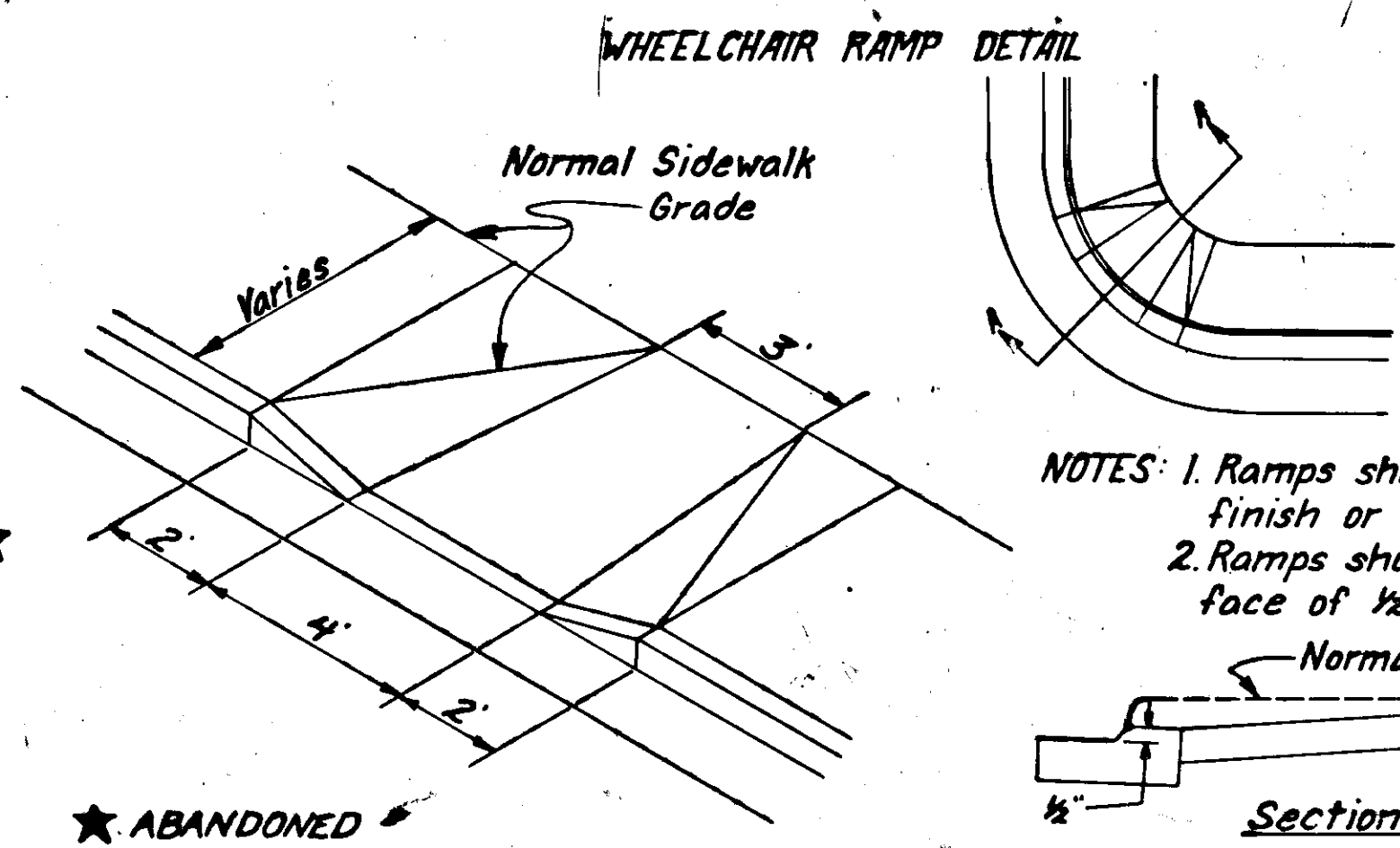
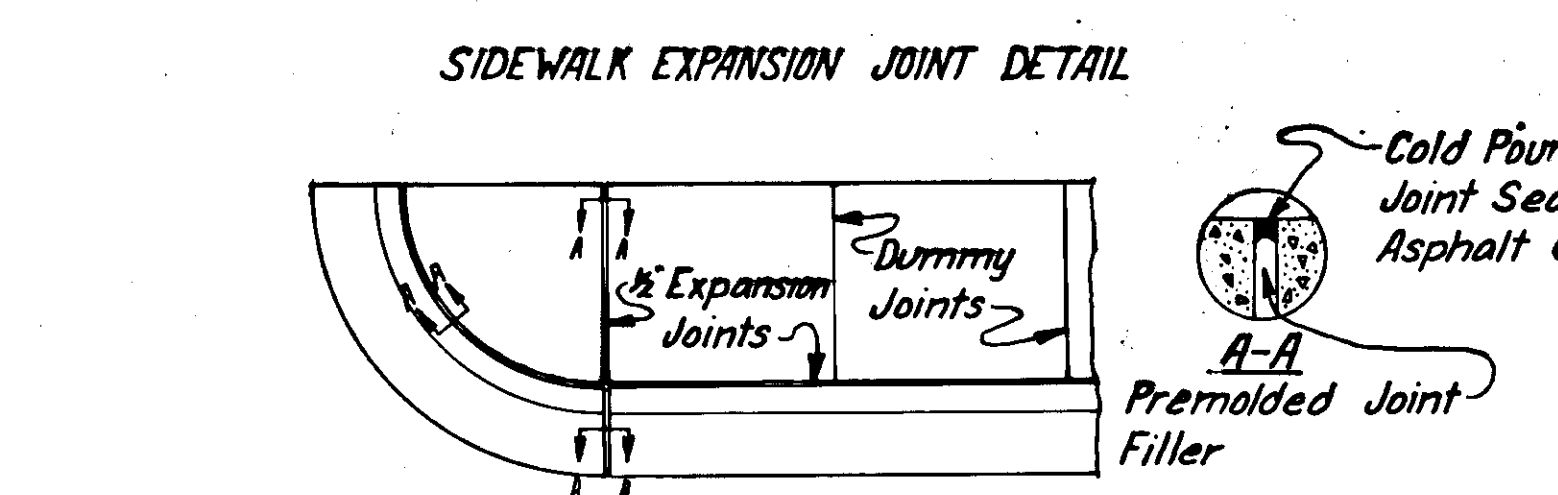
MONUMENT SUMMARY			
STATION	ADJUST	INSTALL	REMARKS
A" 21+27.79	X		Located on E
B" 22+15.13	X		Located 28.89' Rt.
B" 22+77.22	X		Located on E
B" 23+93.08	X		Located 7.28' Lt.

CURB CUT SUMMARY				
STATION	WIDTH	LEFT	RIGHT	OFFSET
A" 20+35	24' 28"	X		26'
A" 20+37	46' 18"		X	25.77
A" 21+32	44' 20"		X	26'
B" 22+59	32'	X		62'
B" 24+16	24'	X		53'
B" 25+34	44' 20"	X		19'
B" 26+46	30'	X		50'

ADJUST EXISTING MANHOLES			
STATION	OFFSET		REMARKS
	LEFT	RIGHT	
A" 21+77.34	21.5'		33.63
B" 22+05		26'	34.14
B" 22+06		43'	34.23
B" 22+40	45'		34.10
B" 23+36	32.5'		33.76
B" 23+79		1'	34.03

GUARDRAIL SUMMARY		
FROM	TO	LENGTH
23+09	25+67	262.5

ESTIMATE OF QUANTITIES			
ITEM NO.	ITEM	UNIT	QUANTITY
1	Furnish & Maintain Engineering Facilities	LS	All Req'd
110 (1)	Mobilization	LS	All Req'd
111 (1)	Temporary Erosion & Pollution Control	CS	All Req'd
114 (1)	Construction Engineering by Contractor	LS	All Req'd
115 (1)	Traffic Maintenance	LS	All Req'd
202 (3)	Removal of Sidewalk	SY	708
202 (7)	Removal of Inlets	EA	4
202 (8)	Removal of Curb & Gutter	LF	1093
203 (3)	Unclassified Excavation	CY	488
301 (1)	Crushed Aggregate Base Course	TON	328
304 (1)	Subbase, Grading A	TON	651
401 (1)	Hot Asphalt Pavement, Class I	TON	553
401 (2)	AC-5 Asphalt Cement	TON	33
401 (4)	Anti-Stripping Additive	CS	All Req'd
402 (2)	CSS-1 Cationic Emulsified Asph for Tack	TON	14
403 (1)	MC-30 Liquid Asphalt for Prime Coat	TON	14
603 (22E)	18" Pipe Conduit	LF	136
604 (4)	Adjust Existing Manholes	EA	6
604 (5A)	Inlet, Type A	EA	6
604 (5B)	Inlet, Type B	EA	1
604 (5C)	Adjust Existing Inlets	EA	1
606 (1)	Beam Type Guardrail, Type 1 Post	LF	262.5
608 (1A)	Concrete Sidewalk 4" Depth	SY	525
608 (1B)	Concrete Sidewalk 6" Depth	SY	100
609 (2)	Curb & Gutter	LF	479
614 (3)	Adjust Existing Monument Cases	EA	4
615 (1)	Standard Signs	SF	120
628 (1)	Adjust Existing Valve Boxes	EA	5
628 (7)	Relocation of Fire Hydrants	EA	1
660 (1)	Traffic Signal System	LS	All Req'd
660 (3)	Highway Lighting System	LS	All Req'd
670 (6)	Thermoplastic Traffic Markings	LS	All Req'd
684 (6D)	3-4", 2-2" Concrete Encased Plastic Conduit	LF	105

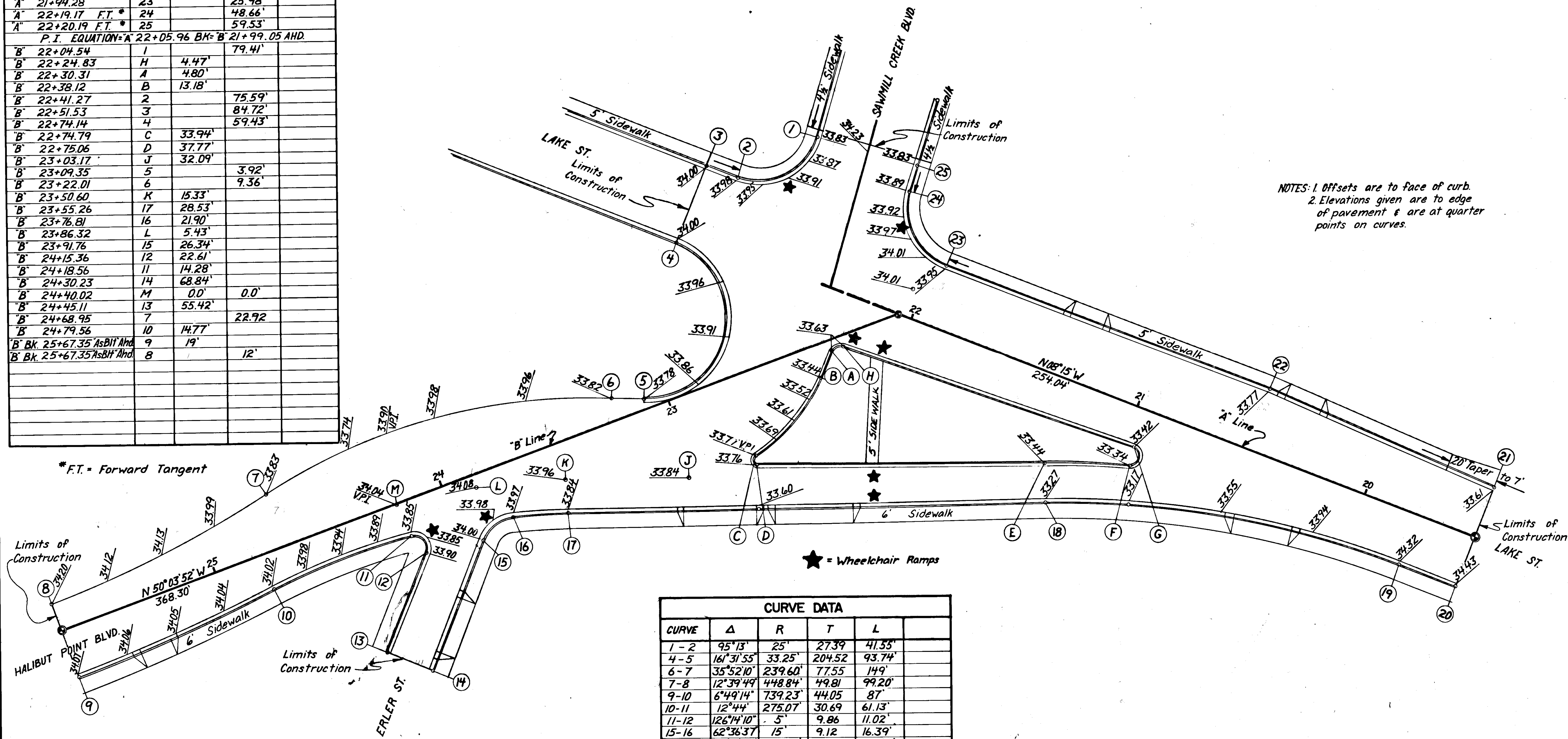


- NOTES
1. Premolded expansion joint filler & liquid polymer joint sealer (See Specs) or AC-5 asphalt cement shall be considered incidental to pay item 608(1A,1B) "Concrete Sidewalk" & no separate payment shall be made therefore.
 2. Curb & Gutter expansion joints shall be at each end of the curb return, & immediately following & preceding curb cuts. Thereafter they shall be placed at intervals of 30' except where shorter sections are needed for closure.
 3. Sidewalk expansion joints shall be opposite expansion joints in adjoining curb & gutter. Dummy joints shall be equally spaced between expansion joints and the spacing shall not exceed 6'.
 4. Wheelchair ramps shall be constructed as detailed on this sheet & shall be constructed at locations designated by a ★ on the plan sheets.
 5. Reconstruct existing stairs at Sta. A" 20+87, 29' Rt. Labor & materials shall be considered incidental to pay items 608(1A,1B) Concrete Sidewalk & no separate payment shall be made therefore.

INTERSECTION DETAIL

RIGHT ANGLE OFFSETS				
STATION	POINT NUMBER	OFFSET L	OFFSET R	
As Bt Bk 19 + 51.92 A' Ahd.	20	22'		
As Bt Bk 19 + 51.92 A' Ahd.	21		22'	
A' 19 + 76.92	19	22'		
A' 20 + 51.92	22		26'	
A' 20 + 74.34	F	23.85'		
A' 20 + 95.63	G	16.02'		
A' 21 + 21.29	18	50.53'		
A' 21 + 27.53	E	35.32'		
A' 21 + 94.28	23		25.98'	
A' 22 + 19.17 F.T. *	24		48.66'	
A' 22 + 20.19 F.T. *	25		59.53'	
P.I. EQUATION: A' 22 + 05.96 Bk B' 21 + 99.05 AHD.				
B' 22 + 04.54	1		79.41'	
B' 22 + 24.83	H	4.47'		
B' 22 + 30.31	A	4.80'		
B' 22 + 38.12	B	13.18'		
B' 22 + 41.27	2		75.59'	
B' 22 + 51.53	3		84.72'	
B' 22 + 74.14	4		59.43'	
B' 22 + 74.79	C	33.94'		
B' 22 + 75.06	D	37.77'		
B' 23 + 03.17	J	32.09'		
B' 23 + 09.35	5		3.92'	
B' 23 + 22.01	6		9.36'	
B' 23 + 50.60	K	15.33'		
B' 23 + 55.26	17	28.53'		
B' 23 + 76.81	16	21.90'		
B' 23 + 86.32	L	5.43'		
B' 23 + 91.76	15	26.34'		
B' 24 + 15.36	12	22.61'		
B' 24 + 18.56	11	14.28'		
B' 24 + 30.23	14	68.84'		
B' 24 + 40.02	M	0.0'	0.0'	
B' 24 + 45.11	13	55.42'		
B' 24 + 68.95	7		22.92'	
B' 24 + 79.56	10	14.77'		
B' Bk 25 + 67.35 As Bt Ahd.	9	19'		
B' Bk 25 + 67.35 As Bt Ahd.	8		12'	

*F.T. = Forward Tangent



NOTES: 1. Offsets are to face of curb.
2. Elevations given are to edge of pavement & are at quarter points on curves.

CURVE DATA				
CURVE	Δ	R	T	L
1-2	95°13'	25'	27.39	41.55'
4-5	161°31'55"	33.25'	204.52	93.74'
6-7	35°52'10"	239.60'	77.55	149'
7-8	12°39'49"	448.84'	49.81	99.20'
9-10	6°49'14"	739.23'	44.05	87'
10-11	12°44'	275.07'	30.69	61.13'
11-12	126°14'10"	5'	9.86	11.02'
15-16	62°36'37"	15'	9.12	16.39'
16-17	04°41'52"	275.07'	11.28	22.55'
18-19	22°21'23"	379.54'	75	148.09'
23-24	34°38'38"	25'	22.76	36.93'
B-C	35°02'52"	69.97'	22.09	42.80'
C-D	147°47'35"	2'	6.93	5.16'
E-F	05°04'55"	395.98'	17.57	35.12'
F-G	165°30'57"	4'	31.48	11.55'
H-A	86°49'15"	4'	3.78	6.06'

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	HHS-0935 (3)	1979	5	7

DRAINAGE & UTILITIES

Horizontal Control
Control is based on a bearing of N. 8° 15' 00" W. from a monument located on centerline at Sta. PT. 19+51.92 to a monument on centerline at Sta. PC. 21+27.79.

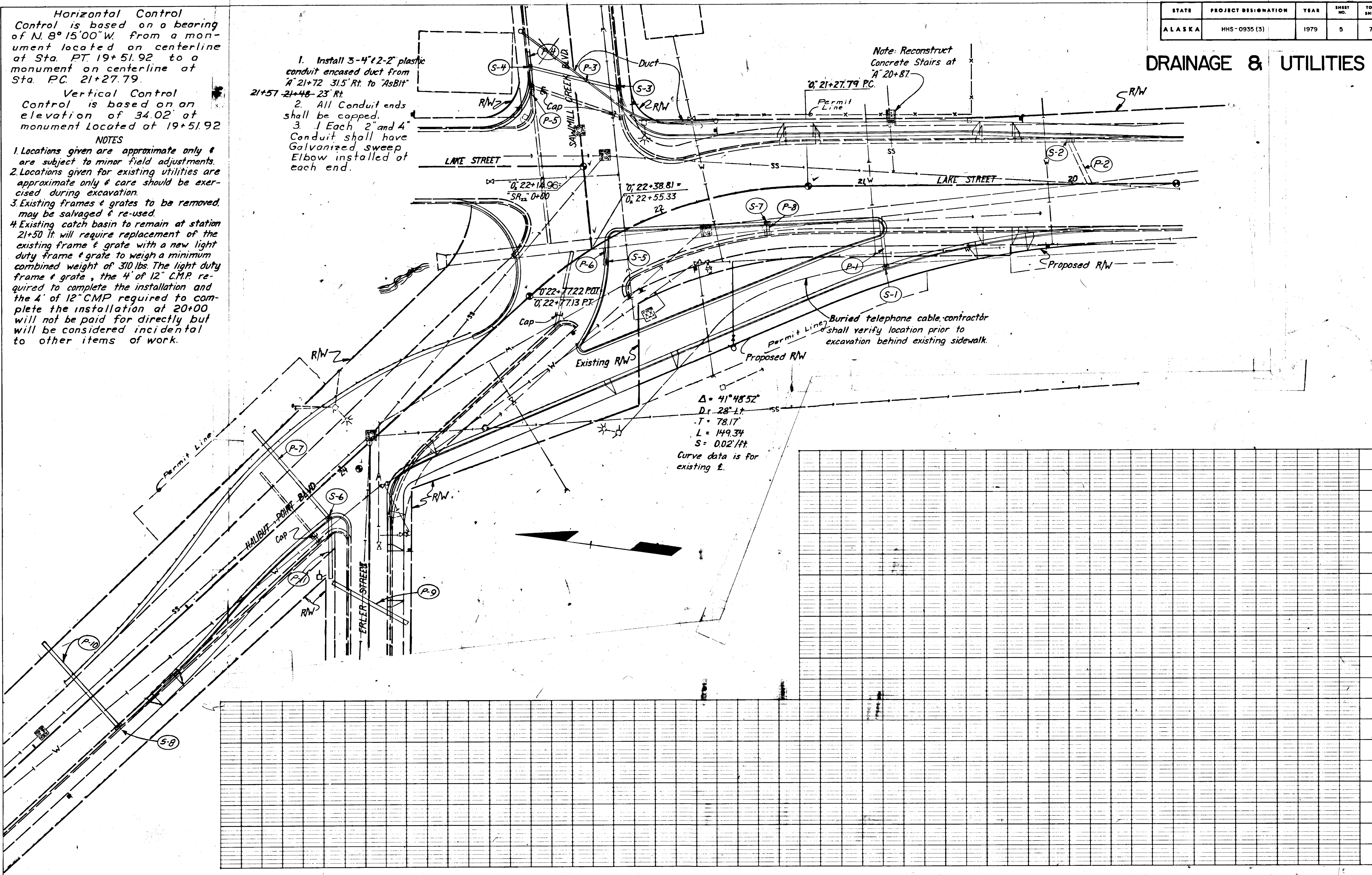
Vertical Control
Control is based on an elevation of 34.02 at monument located at 19+51.92

NOTES

- Locations given are approximate only & are subject to minor field adjustments.
- Locations given for existing utilities are approximate only & care should be exercised during excavation.
- Existing frames & grates to be removed, may be salvaged & re-used.
- Existing catch basin to remain at station 21+50 it will require replacement of the existing frame & grate with a new light duty frame & grate to weigh a minimum combined weight of 310 lbs. The light duty frame & grate, the 4' of 12" C.M.P. required to complete the installation and the 4' of 12" C.M.P. required to complete the installation at 20+00 will not be paid for directly but will be considered incidental to other items of work.

1. Install 3-4' x 2-2" plastic conduit encased duct from A' 21+72 31.5' Rt. to "As Bld" 21+57 21+48-23' Rt.
2. All Conduit ends shall be capped.
3. 1 Each 2" and 4" Conduit shall have Galvanized sweep Elbow installed at each end.

Note: Reconstruct Concrete Stairs at A' 20+87

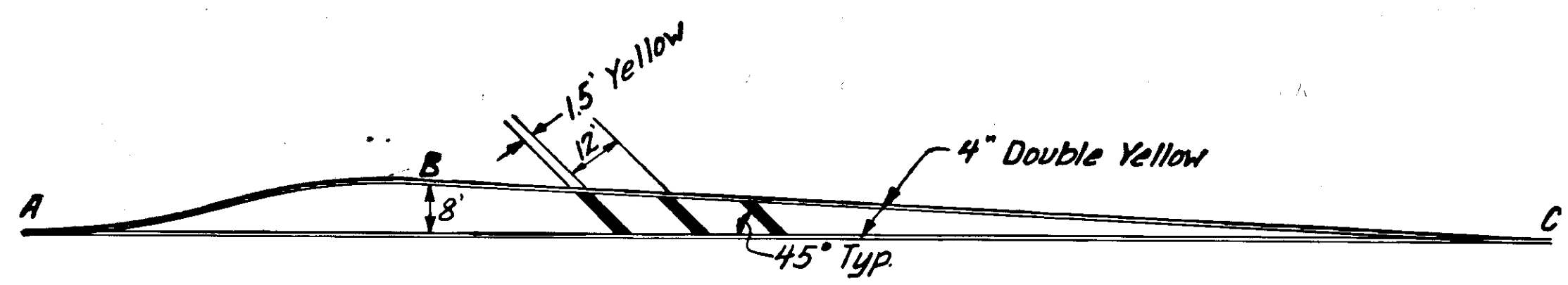
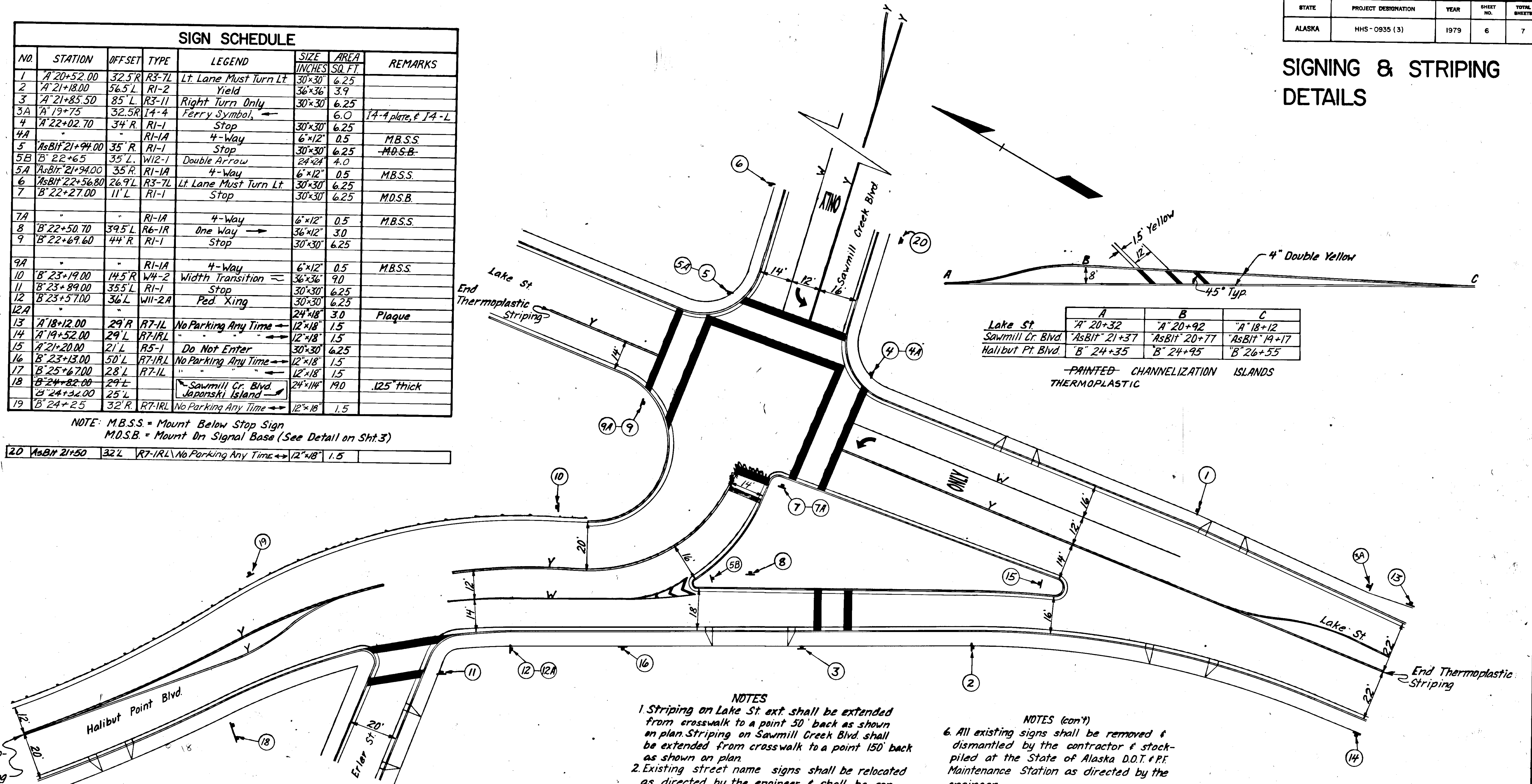


SIGNING & STRIPING
DETAILS

SIGN SCHEDULE						
NO.	STATION	OFFSET	TYPE	LEGEND	SIZE INCHES	AREA SQ. FT.
1	A 20+52.00	32.5 R	R3-7L	Lt. Lane Must Turn Lt.	30x30	6.25
2	A 21+18.00	56.5 L	R1-2	Yield	36x36	3.9
3	A 21+85.50	85 L	R3-11	Right Turn Only	30x30	6.25
3A	A 19+75	32.5 R	I4-4	Ferry Symbol	6.0	14-4 plate, & I4-L
4	A 22+02.70	34 R	R1-1	Stop	30x30	6.25
4A			R1-1A	4-Way	6x12	0.5
5	AsBlt 21+94.00	35 R	R1-1	Stop	30x30	6.25
5B	B 22+65	35 L	W12-1	Double Arrow	24x24	4.0
5A	AsBlt 21+94.00	35 R	R1-1A	4-Way	6x12	0.5
6	AsBlt 22+56.80	26.9 L	R3-7L	Lt. Lane Must Turn Lt.	30x30	6.25
7	B 22+27.00	11 L	R1-1	Stop	30x30	6.25
7A			R1-1A	4-Way	6x12	0.5
8	B 22+50.70	39.5 L	R6-1R	One Way	36x12	3.0
9	B 22+69.60	44 R	R1-1	Stop	30x30	6.25
9A			R1-1A	4-Way	6x12	0.5
10	B 23+19.00	14.5 R	W4-2	Width Transition	36x36	9.0
11	B 23+89.00	35.5 L	R1-1	Stop	30x30	6.25
12	B 23+57.00	36 L	W11-2A	Ped. Xing	30x30	6.25
12A					24x18	3.0
13	A 18+12.00	29 R	R7-1L	No Parking Any Time	12x18	1.5
14	A 19+52.00	29 L	R7-1RL	No Parking Any Time	12x18	1.5
15	A 21+20.00	21 L	R5-1	Do Not Enter	30x30	6.25
16	B 23+13.00	50 L	R7-1RL	No Parking Any Time	12x18	1.5
17	B 25+67.00	28 L	R7-1L	No Parking Any Time	12x18	1.5
18	B 24+82.00	29 L		Sawmill Cr. Blvd. Japanski Island	24x14	19.0
18	B 24+32.00	25 L				.125" thick
19	B 24+25	32 R	R7-1RL	No Parking Any Time	12x18	1.5

NOTE: M.B.S.S. = Mount Below Stop Sign
M.O.S.B. = Mount On Signal Base (See Detail on Sht. 3)

20	AsBlt 21+50	32 L	R7-1RL	No Parking Any Time	12x18	1.5
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	A	B	C
Lake St	A 20+32	A 20+92	A 18+12
Sawmill Cr. Blvd	AsBlt 21+37	AsBlt 20+77	AsBlt 19+17
Halibut Pt. Blvd	B 24+35	B 24+95	B 26+55

PAINTED CHANNELIZATION ISLANDS
THERMOPLASTIC

- NOTES
1. Striping on Lake St. ext. shall be extended from crosswalk to a point 50' back as shown on plan. Striping on Sawmill Creek Blvd. shall be extended from crosswalk to a point 150' back as shown on plan.
 2. Existing street name signs shall be relocated as directed by the engineer & shall be considered incidental to other items of work.
 3. Sign locations are approx. only & are subject to minor revisions.
 4. All sign posts shall be 12 ga. telescoping perforated galv. steel posts; the 2" size shall be used above ground & the 2 1/4" size shall be used below ground for the sleeve.
 5. All posts shall be installed with sleeve type embedment & a concrete foundation.

- NOTES (cont)
6. All existing signs shall be removed & dismantled by the contractor & stock-piled at the State of Alaska D.O.T. & P.F. Maintenance Station as directed by the engineer.
 7. Painted channelization islands shall be applied as indicated on the plan & shall be considered incidental to item 670(b) Thermoplastic Traffic Markings; & no separate payment shall be made therefore.
 8. All signs shall be .063" thick unless noted otherwise.

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ILLUMINATION & SIGNALIZATION DETAILS

SIGNALIZATION GENERAL NOTES

- Locations given are approximate only & are subject to minor field adjustments.
- Separate conduits shall be used for signal control cable & luminaire lighting cable.
- Signal pole bases "AsBlt" 21+94 & "B" 22+27 shall have plates fabricated to protect the anchor bolts & conduit from damage. (See detail sht. 3)
- Signal pole "A" 22+11 shall be designed for future installation of a 20' mast arm. Signal pole "B" 22+72 shall be designed for future installation of a 30' mast arm. Mast arm mounting bracket holes shall be covered.
- R.M.C. = Rigid metallic conduit.

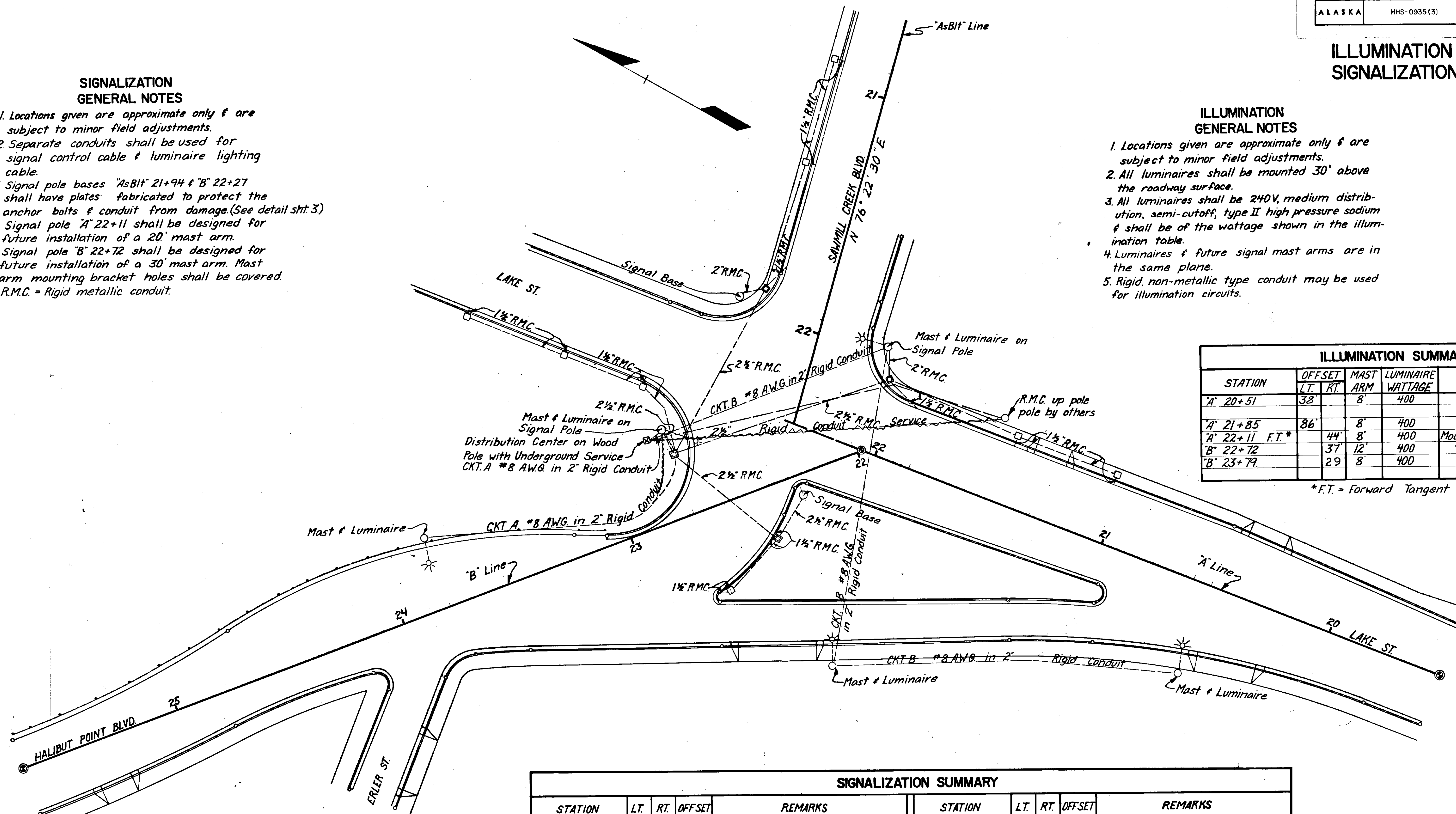
ILLUMINATION GENERAL NOTES

- Locations given are approximate only & are subject to minor field adjustments.
- All luminaires shall be mounted 30' above the roadway surface.
- All luminaires shall be 240V, medium distribution, semi-cutoff, type II high pressure sodium & shall be of the wattage shown in the illumination table.
- Luminaires & future signal mast arms are in the same plane.
- Rigid, non-metallic type conduit may be used for illumination circuits.

ILLUMINATION SUMMARY

STATION	OFFSET		MAST ARM	LUMINAIRE WATTAGE	REMARKS
	LT.	RT.			
"A" 20+51	38'		8'	400	
"A" 21+85	86'		8'	400	
"A" 22+11 F.T.*		44'	8'	400	Mount on Signal Pole
"B" 22+72		37'	12'	400	
"B" 23+79		29'	8'	400	

*F.T. = Forward Tangent



BREAKER RATING TABLE

BREAKER	RATING
MAIN	100 A
CONTACTOR	100 A
A	10A / 240V
B	10A / 240V
FUTURE	50A / 110V

SIGNALIZATION SUMMARY

STATION	LT.	RT.	OFFSET	REMARKS	STATION	LT.	RT.	OFFSET	REMARKS
"A" 21+04		X	29'	Install Type I J-Box (Traffic)	"B" 22+27	X		11'	Install C.I.D.H. Signal Base
"A" 21+48		X	29'	" " " " " "	"B" 22+43	X		22'	Install Type II J-Box (Traffic)
"A" 22+06		X	31.5'	" " " " " "	"B" 22+69	X		35'	" " " " " "
"A" 22+11		X	44'	Install C.I.D.H. Base & Signal Pole	"B" 22+71		X	26'	" " " " " "
"AsBlt" 20+90-20+31		X	24'	Install Type I J-Box (Traffic)	"B" 22+72		X	37'	Install C.I.D.H. Base & Signal Pole
"AsBlt" 21+34-21+25		X	24'	" " " " " "	"B" 22+85		X	35'	Install Distribution Center
"AsBlt" 21+87-21+19		X	25.5'	" " " " " "	"B" 22+73		X	56'	Install Type I J-Box (Traffic)
"AsBlt" 21+94-21+85		X	35'	Install C.I.D.H. Signal Base	"B" 22+99		X	80'	" " " " " "
					"B" 23+31		X	108'	" " " " " "