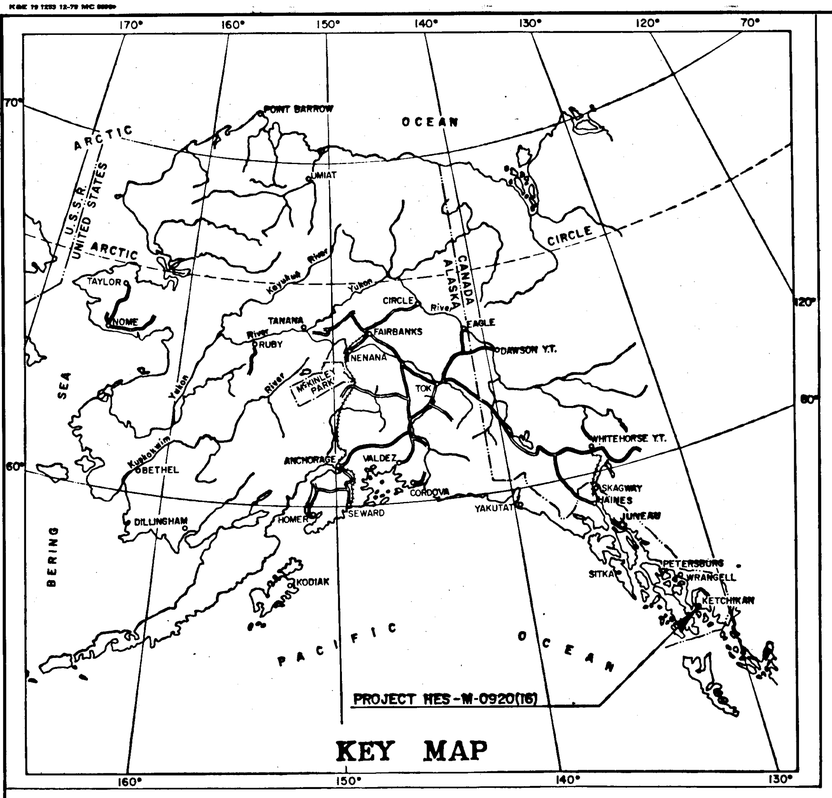


KEY MAP

STATE	PROJECT	SHEET NO.	TO SH
ALASKA	HES-M-0920(16)	1	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

PLAN AND PROFILE
PROPOSED HIGHWAY PROJECT

KETCHIKAN - NORTH TONGASS

HIGHWAY SIGHT DISTANCE

HES-M-0920(16)

(E-90082)

INDEX OF SHEETS	
1	TITLE SHEET
2	TYPICAL SECTIONS
3	ESTIMATE OF QUANTITIES, MISC. DETAILS AND SUMMARIES
4-5	PLAN SHEETS
6	RAISED PAVEMENT MARKER & STRIPING PLAN

THE FOLLOWING STANDARD DRAWINGS SHALL APPLY TO THIS PROJECT: A-1, C-00.00, C-10.01, C-11.01, D-01.0 D-04.01, D-05.01, I-40.00, I-80.00, T-20.00, T-21.00, T-22.00

PROJECT ASBUILTS
DATE: 7-9-85
PROJECT ENGINEER: RAY DEMMEL

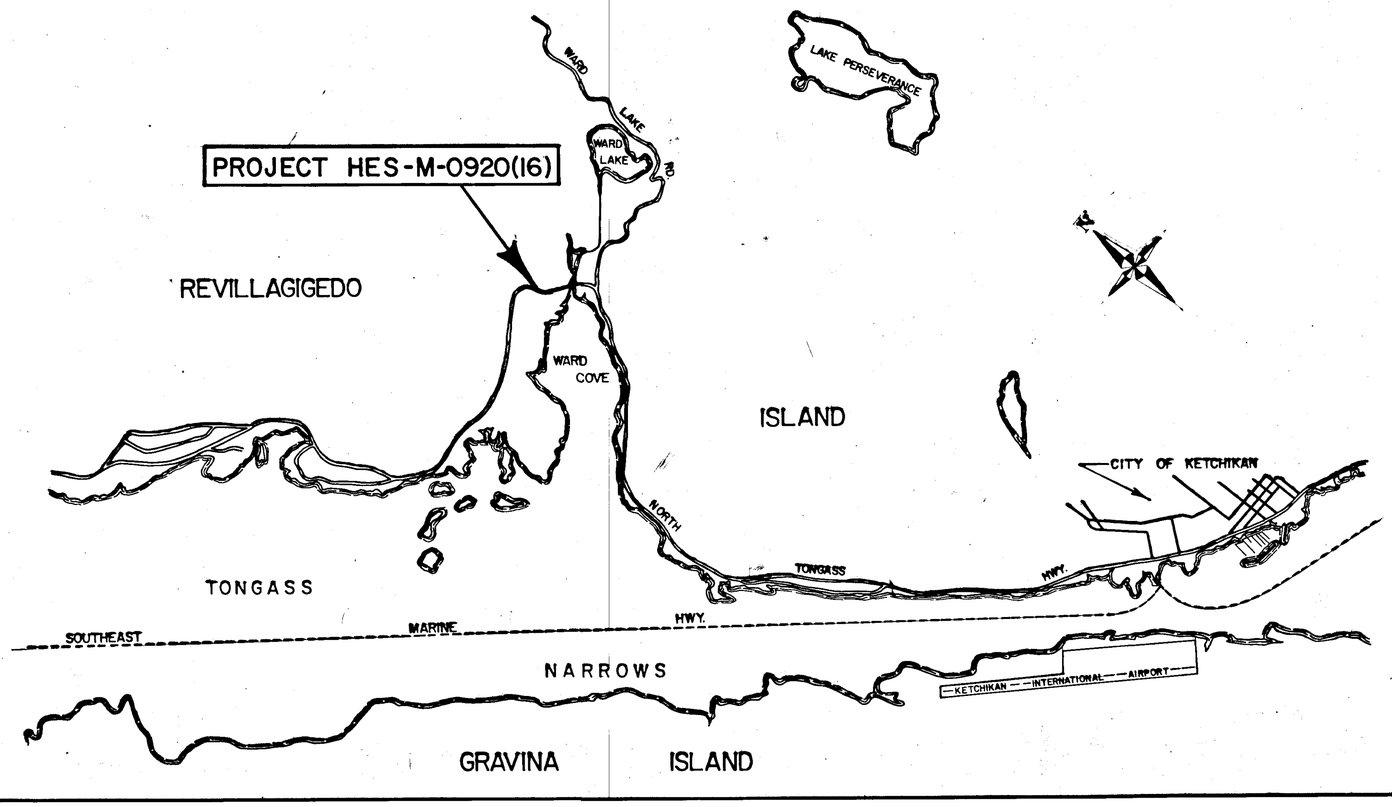
PROJECT SUMMARY

WIDTH OF WIDENING = 0'-12'

LENGTH OF PROJECT = 780.00' = 0.148 MI.

DESIGN DESIGNATION

A.D.T. (1983)	=	4464
A.D.T. (2004)	=	6633
D.H.V. 15%	=	995
T.	=	7%
T.I.	=	8.0
D.	=	.35



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

APPROVED
Wallace Kwilliam Date 6/22/8
SOUTHEASTERN REGION DESIGN ENGINEER

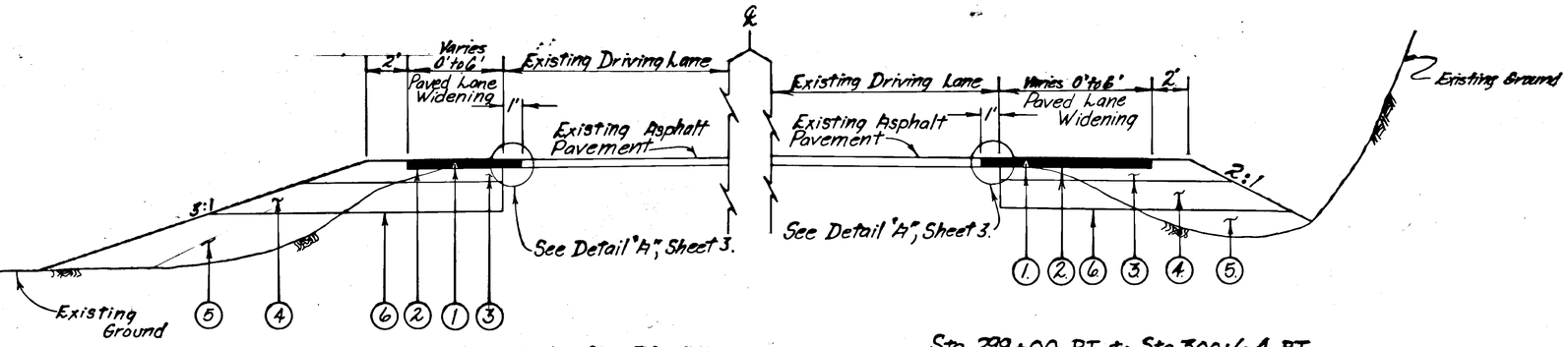
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

APPROVED
A.D. Dickmeyer Date 6/22/8
DIRECTOR, HIGHWAY DESIGN/CONSTRUCTION

HES-M-0920(16)

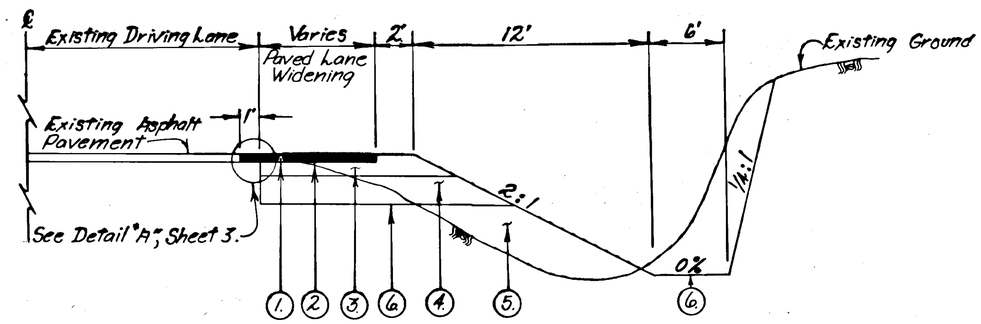
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	HES-M-0920(16)	1984	2	6

TYPICAL SECTIONS OF IMPROVEMENT



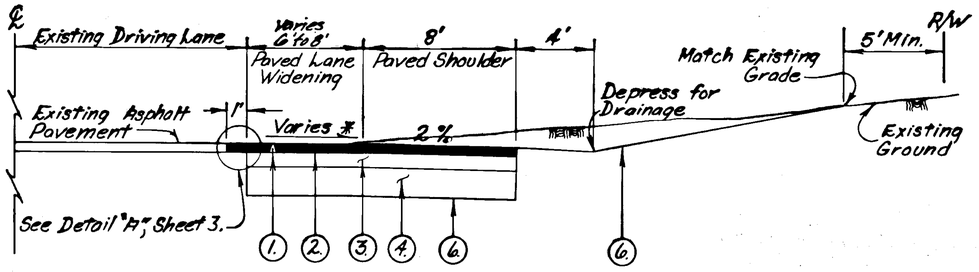
Sta. 299+00, LT. to Sta. 302+30

Sta. 299+00, RT. to Sta. 300+64, RT.



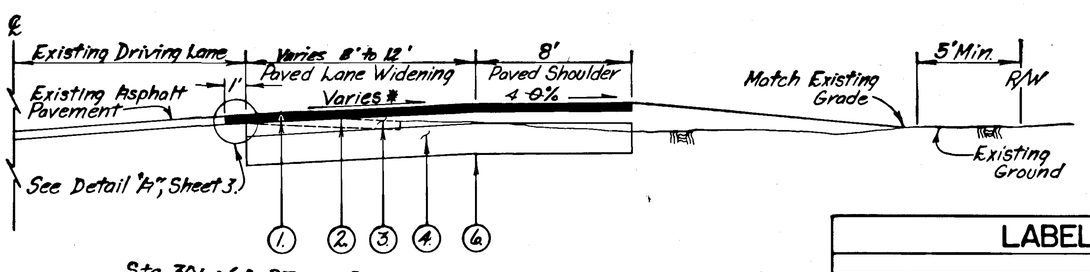
Sta. 300+64, RT. to Sta. 300+90, RT.

ROCK CUT - RIGHT



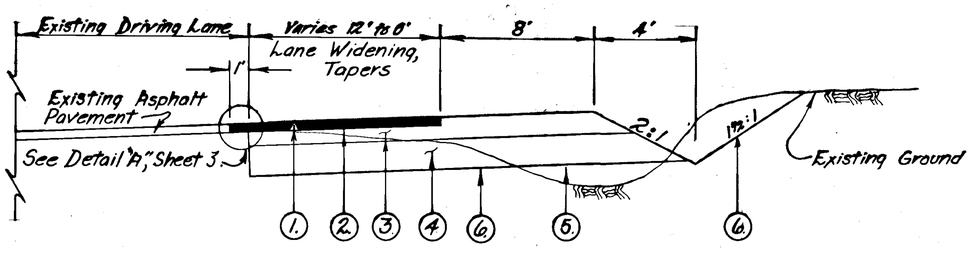
Sta. 300+90, RT. to Sta. 301+60, RT.

ACCESS ROAD - RIGHT



Sta. 301+60, RT. to Sta. 304+00, RT.

* Project Superelevation - Not to Exceed 6%.



Sta 304+00, RT. to Sta. 306+80, RT.

GENERAL NOTES

1. Alignment & Grades shown on the plans are subject to minor revisions.
2. Pipe Conduit lengths and locations are subject to minor revisions as approved by the Engineer.
3. Saw Cuts shall be considered incidental to Item 202 (11), Removal of Pavement. Saw Cut line may be adjusted in the field.
4. The Contractor is responsible for any damage to underground or suspended utilities that is a result of his Construction.
5. Clearing and Grubbing Limits shall be 10' beyond the slope limits in cut areas and 5' beyond the slope limits in fill areas or to the R/W Line or as directed by the Engineer. Clearing and Grubbing shall be considered incidental to Item 203 (8), Unclassified Excavation and Embankment.
6. Excavated material not used for Embankment shall be disposed of in an uplands area outside the R/W Limits at a location selected by the Contractor and approved by the Engineer.
7. The Contractor's Traffic Control Plan shall follow the guidelines set by Standard Drawing C-1001 and Part II of the Manual on Uniform Traffic Control Devices and shall be approved by the Engineer.
8. It shall be the Contractor's responsibility to begin only that amount of work which can be completed by the end of the shift. There will be no drop-off at the edge of the existing pavement during non-working hours.

STATE OF ALASKA 4918 Edna Witcher No. CE3274 REGISTERED PROFESSIONAL ENGINEER

LABELING INDEX

1.	4" Asphalt Concrete Type II
2.	MC-30 Liquid Asphalt For Prime Coat
3.	6" Crushed Aggregate Base Course
4.	14" Subbase (Grading "A")
5.	Embankment or Usable Unclassified Excavation
6.	Limits of Unclassified Excavation

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	HES-M-0920(16)	1984	3	6

ESTIMATE OF QUANTITIES, MISC. DETAILS AND SUMMARY TABLES

ESTIMATE OF QUANTITIES

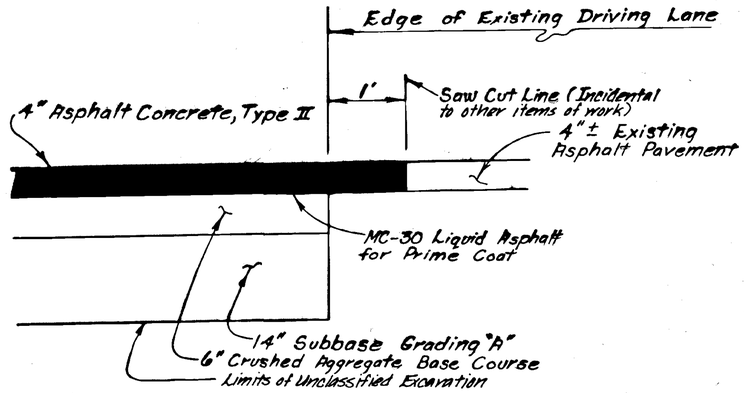
NO.	ITEM	UNIT	QUANTITY
110(1)	Mobilization	L.S.	All Req'd
111(1)	Temporary Erosion and Pollution Control	C.S.	All Req'd
114(1)	Construction Surveying by the Contractor	L.S.	All Req'd
115(1)	Traffic Maintenance	L.S.	All Req'd
202(11)	Removal of Pavement (Est. Quantity = 410 S.Y.)	L.S.	All Req'd
203(8)	Unclassified Excavation and Embankment	L.S.	All Req'd
	Estimated Unclassified Excavation = 650 C.Y.		
	Estimated Embankment = 115 C.Y.		
301(1)	Crushed Aggregate Base Course	Ton	~~753~~ 1,024.67
304(1)	Subbase, Grading "A"	Ton	~~1175~~ 1,256.92
401(1)	Asphalt Concrete Type II.	Ton	~~275~~ 342.83
401(2)	Asphalt Cement	Ton	~~17.2~~ 18.2
402(2)	CSS-1 Asphalt for Tack Coat	L.S.	All Req'd
403(2)	MC-30 Liquid Asphalt for Prime Coat.	Ton	~~1.2~~ 1.1
603(1)	24-Inch Corrugated Steel Pipe	L.F.	~~32~~ 49
603(22)	18-Inch Pipe	L.F.	~~34~~
604(5A)	Field Inlet, Type A	Each	1
670(1)	Painted Traffic Markings.	L.S.	All Req'd
670(7)	Raised Pavement Markers.	Each	~~85~~ 77

PIPE CONDUIT SUMMARY

STATION	PIPE LENGTH 18"	PIPE LENGTH 24"	REMARKS	STATION	PIPE LENGTH 18"	PIPE LENGTH 24"	REMARKS
Sta. 300+60, ℄		18'	Existing 24" pipe extended 12' w/ a 6' ht.	Sta. 304+59, 44' Rt.	34'		
Sta. 300+90, 28' Rt.		14'	Includes 25° Elbow				

BASIS OF ESTIMATE

NO.	ITEM	FACTOR
301(1)	Crushed aggregate base course	1.96 Tons/Cu. yd.
304(1)	Subbase, grading "A"	1.90 Tons/Cu. yd.
401(1)	Asphalt concrete type II.	116 lbs./S.Y./Inch depth
401(2)	Asphalt AC-5	6% of Item 401(1)
402(2)	CSS-1 asphalt for tack coat	0.04 Gal./S.Y. (Residual), 240 gal./Ton, application rate = 0.10 gal./S.Y.
403(2)	MC-30 Liquid asphalt for prime coat.	0.25 gal./S.Y./256 gal./Ton.



DETAIL "A"

STATE OF ALASKA
Edna Witcher
No. CE3274
REGISTERED PROFESSIONAL ENGINEER

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	HES-M-0920(16)	1984	4	6

Warp slope limits to stay within R/W

R/W

299+00.00, 12' Lt. Begin Lane Widening

INV. EL = 90.30'

300+80.94, 18' Lt.

Pole # 147

Existing Curve Data
Δ = 106°11'48"
D = 14°00' Lt.
T_1 = 623.01'
L = 608.55'
Δ_2 = 10°30'
L_s = 150.00'

302+49.80, 12' Lt. End Lane Widening

C.S. 298+43.60

S.T. 300+43.60

T.S. 300+80.94

S.C. 302+30.94

Edge of Pavement

303+00.00 Match Line

50'

50'

298~

℄ Existing Road = New Baseline 300~

301~

Saw Cut

302~

Saw Cut

EDGE OF A.C. APRON

299+00.00, 12' Rt. Begin Lane Widening

BEGIN PROJECT
HES-M-0920(16)
STA. 299+00.00

STA 300+69.30' Rt. INSTALL TYPE A FIELD INLET. TOP OF GRATE EL. 97.0. INV. EL. 92.72

25°

301+45.31' Rt. Edge of Pavement

Edge of Existing Paved Shoulder

302+49.00, 24' Rt. End Pavement Taper, Begin 12' Widening.

EXISTING 30"ø CORR. ALUM. PIPE

30"ø-24"ø REDUCER

300+85.00, 26' Rt. Begin 8' Paved Shoulder

R/W

L.F. OF 36"ø

Existing Curve Data
Δ = 37°14'30"
D = 12°00' Rt.
T_2 = 261.91'
L_c = 110.35'
Δ_1 = 12°30'
L_1 = 200.00'

Indicates New Pavement under this Contract

CONSTRUCT A 10' WIDE, 3" THICK ASPHALT CONCRETE APRON AND SLOPE TO CARRY SURFACE RUN-OFF TO THE FIELD INLET.

24"ø CORR. STEEL PIPE

Gas Pumps

WARD COVE STORE

Parking Area

Access Road

POST OFFICE

N

REMOVE

Sta. 300+69.30, 8' Lt. Remove existing 24"ø Pipe Culvert 78' Lt. and 6' Rt. AND INSTALL 24"ø CORR. STEEL PIPE (43'LT, 29' RT.)

Sta. 300+01.21' Rt. Extend Existing 24" Pipe Culvert as shown on the Plans. Total length of extension is 74' (including 45° Elbow). The 45° Elbow and connecting bands shall be considered incidental to Item 603(1), 24 Inch Corrugated steel Pipe. INSTALL A 30"ø-24"ø REDUCER TO THE EXISTING 30"ø CORR. STEEL PIPE AT STA. 301+18.30 Rt. INSTALL 49 L.F. OF 24"ø CORR. STEEL PIPE FROM THE REDUCER TO THE FIELD INLET AT STA 300+69.30 Rt.

HORIZONTAL CONTROL

The basis of bearing was the line-of-sight between WCMC-1 U.S.S. 1659 and C-2 U.S.S. 1659 with a record bearing of N.80°55' E — 476.52' (476.48' measured by this survey.)

PROJECT CO-ORDINATES

WCMC-1, U.S.S. 1659	N. 20,000.00	E. 30,000.00
P.O.S.T. 20 (H&T)	N. 20,713.51	E. 29,059.84
P.O.S.T. 21A (#4 Rebar 30" Long)	N. 21,330.31	E. 28,871.02
P.I. 297+95.16	N. 20,781.16	E. 29,055.66
P.I. 307+05.95	N. 21,655.71	E. 28,762.87

VERTICAL CONTROL

The basis of Vertical Control for this project was N.O.S. Tidal Benchmark No. 11 Ward Cove, Tongass Narrows, 1952, with a published elevation of 12.39' MLLW.

PROJECT BENCHMARKS

P.O.S.T. 20 (on H&T) Elev. 79.16'
P.O.S.T. 21-A (on top #4 Rebar) Elev. 116.48'

Existing ℄ Profile

6.00%

112 110 108 106 104 102 100 98 96 94 92 90 88 86 84 82 80 78 76

297+50 298~ 299~ 300~ 301~ 302~ 303~

STATE OF ALASKA
4911
Edna Witcher
No. CE3274
REGISTERED PROFESSIONAL ENGINEER

KEUFFEL & ESSER
A XRATUS Company

PLATE 1, PLAN-PROFILE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	HES-M-0920(16)	1984	5	6

Existing Curve Data
Δ = 106°11'48"
D = 14°00' Lt.
T_s = 625.01'
L = 609.55'
Δ_s = 10°30'
L_s = 150.00'

303+00.00
Pole # 148
Match Line
Gas Pumps
Parking
Edge of Existing Paved Shoulder
WARD COVE STORE
Public Phone Booth
K.P.C. BLDG.
304+17.00, 24' Rt.
End 12' Widening, Begin Pavement Taper
304~
Pole # 149
R/W
Edge of existing Pavement
Pole # 150
308~
C.S. 308+39.49
305~
℄ Existing Road = New Baseline
306~
307~
25' R
304+00.00, 32' Rt.
End 8' Paved Shoulder
℄ Saw Cut
Pipeline Access Rd.
Edge of Pavement
Warp slope to maintain drainage to existing 24" Pipe Conduit.
INV. EL. = 118.10'
INV. EL. = 119.83'
306+80.00, 12' Rt.
End Lane Widening
16" THICK CONC. for underground pipe
Sta. 304+37.44 Rt. Install 18"ø Pipe Conduit.
R/W
Existing Curve Warning signs to remain in place
Pipeline Access Rd.
H_2O Pipeline 4'ø Wood stave Const. (Above Ground)
END PROJECT
HES-M-0920(16)
STA. 306+80.00
N

Existing ℄ Profile
+6.00%

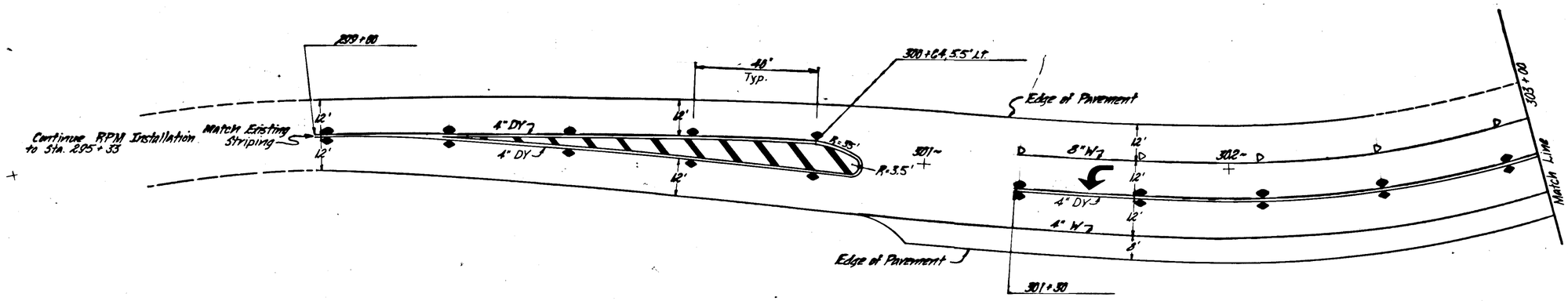
146 144 142 140 138 136 134 132 130 128 126 124 122 120 118 116 114 112

303~ 304~ 305~ 306~ 307~ 308~

STATE OF ALASKA
Edna Witcher
No. CE3278
REGISTERED PROFESSIONAL ENGINEER

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	HES-M-0920(16)	1984	6	6

RAISED PAVEMENT MARKER AND STRIPING PLANS



LEGEND

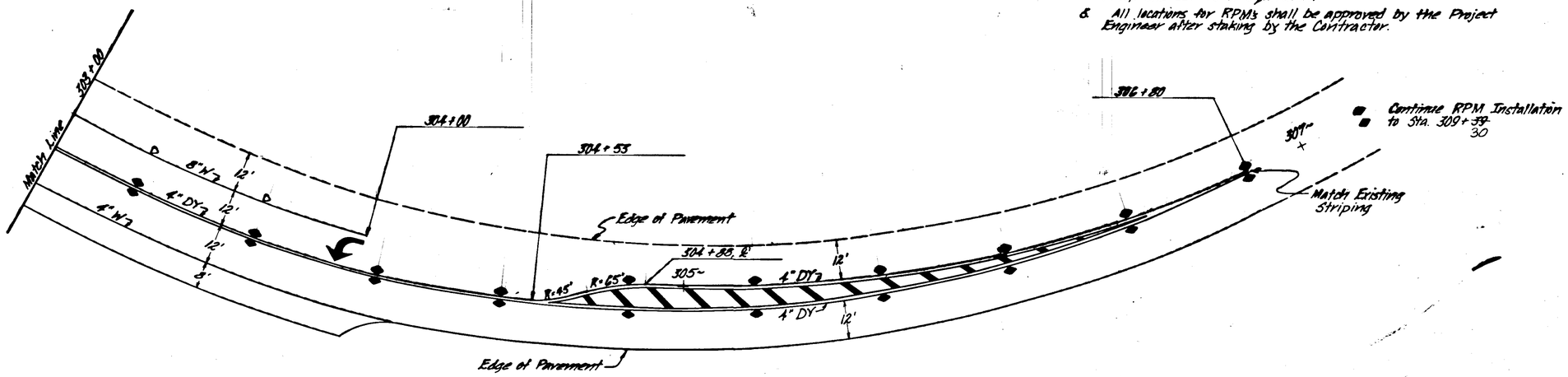
7 INSTALLED ▷	One-Way White Raised Pavement Marker
70 INSTALLED ●	Two-Way Yellow Raised Pavement Marker

GENERAL STRIPING NOTES

1. All Pavement Markings shall be painted.
2. Markings as shown on the plans are approximate only. The exact locations shall be determined after the widening is complete. The Contractor is responsible for alignment layout.

GENERAL RPM NOTES

1. Installation methods for Raised Pavement Markers (RPM's) shall be according to the manufacturers recommendations.
2. Epoxy Adhesive shall be standard set type. Temperature and curing times shall be as recommended by the manufacturer of the adhesive.
3. Raised Pavement Markers will not be installed within the limits of intersecting streets.
4. If Concrete Markers are used, the mortar shall be Magnesium Phosphate Set 45 or equivalent.
5. All locations for RPMs shall be approved by the Project Engineer after staking by the Contractor.



STATE OF ALASKA
1978
Edna Witcher
No. CE3274
REGISTERED PROFESSIONAL ENGINEER