

STATE OF ALASKA DEPARTMENT OF HIGHWAYS

PLAN AND PROFILE PROPOSED HIGHWAY PROJECT RS-0902(4) DEERMOUNT ST. TO SOUTH CITY LIMITS GRADING, DRAINAGE & PAVING

As BUILT

WAYNE CONSTRUCTION CO.
PROJECT ENGR, LARRY GEISE P.E.

INDEX OF SHEETS	
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SS1-SS8	SANITARY SEWER PLANS

The following standard drawings apply to this project:
A-1, C-00.01, C-10.00, C-11.01, D-02.02, D-23.01, D-24.12, D-26.01, D-27.10, I-20.01, I-40.10, M-16.03, S-00.10, S-05.00, S-20.10, S-30.11, U-03.00.

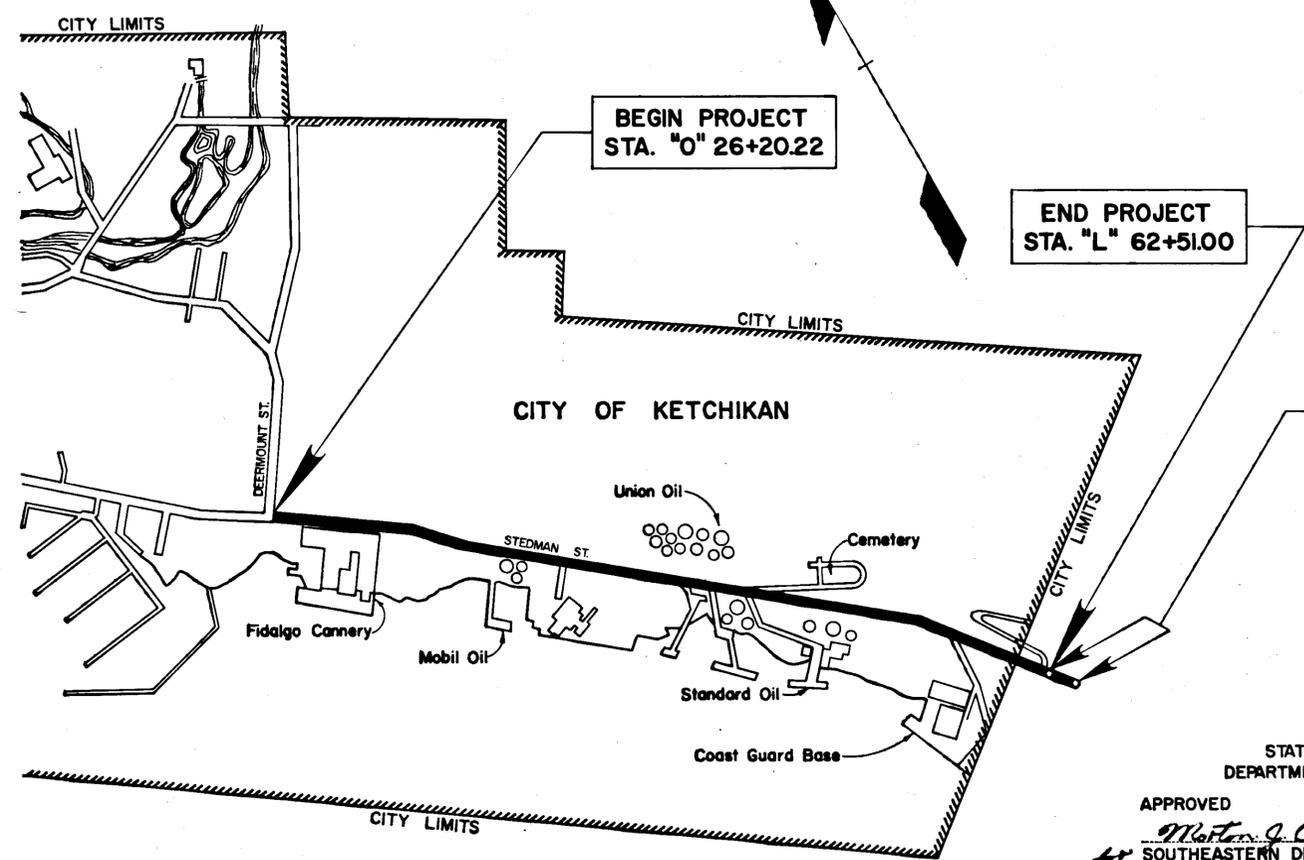
PROJECT SUMMARY

WIDTH of PAVEMENT = 24.5'
LENGTH of TEMPORARY CONNECTION = 100ft. = 0.0189mi.
LENGTH of PROJECT = 3,628.30ft. = 0.6872mi.

(No Change in Length)

PROJECT BEGINNING 8-11-76

PROJECT COMPLETION 10-31-77



DESIGN DESIGNATION

RS-0902(4)
ADT (1974) = 2600
ADT (1995) = 6000
DHV (13%) = 780
D = 40-60
T = 7%
V = 35 mph

TEMPORARY CONNECTION
STA. "L" 62+51.00 to STA. "L" 63+51.00

Note: See Plan & Profile Shts. for Minor Equations.

STATE OF ALASKA DEPARTMENT OF HIGHWAYS
APPROVED *Martin J. Cook* Date 12/29/75 SOUTHEASTERN DISTRICT ENGINEER
STATE OF ALASKA DEPARTMENT OF HIGHWAYS
APPROVED *David Chitt* Date 4/28/76 DEP. COMMISSIONER OF HIGHWAYS

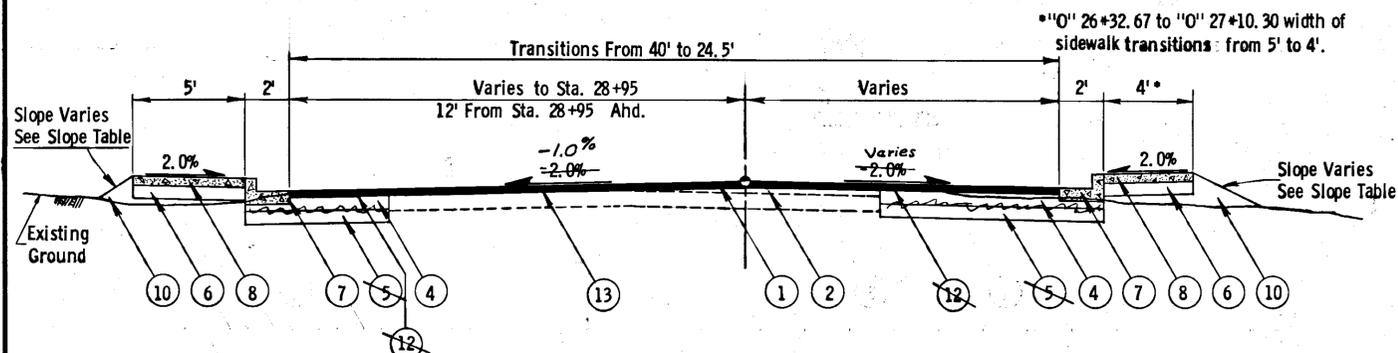
TYPICAL SECTIONS OF IMPROVEMENT

BASIS OF ESTIMATE Asphalt Surface Treatment	
Item No.	Estimating Factor
405(4)	First layer CRS-2 Cationic Emulsified Asphalt : 0.40 gal. per sq. yd.
405(4)	Second layer CRS-2 Cationic Emulsified Asphalt: 0.30 gal. per sq. yd.
405(5)	First layer cover coat material, Type 3, Grading C- 35 lbs. / sq. yd.
405(5)	Second layer cover coat material, Type 3, Grading C- 20 lbs. / sq. yd.

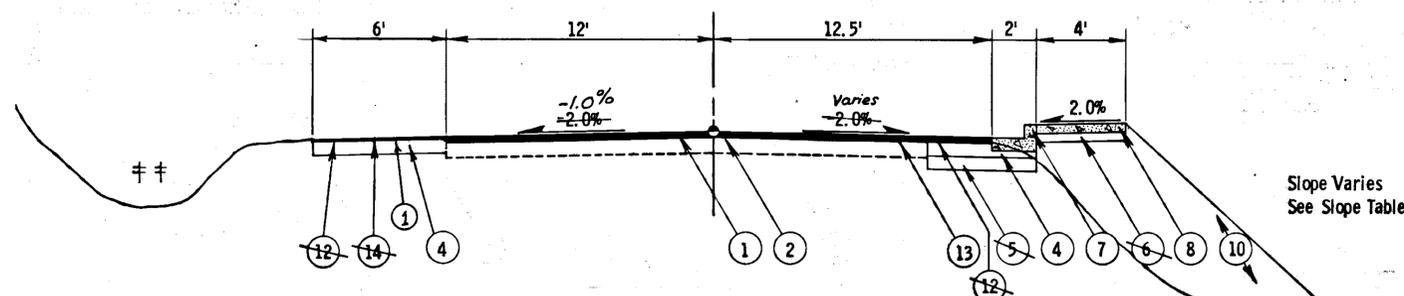
TYPICAL SECTION

GENERAL NOTES:

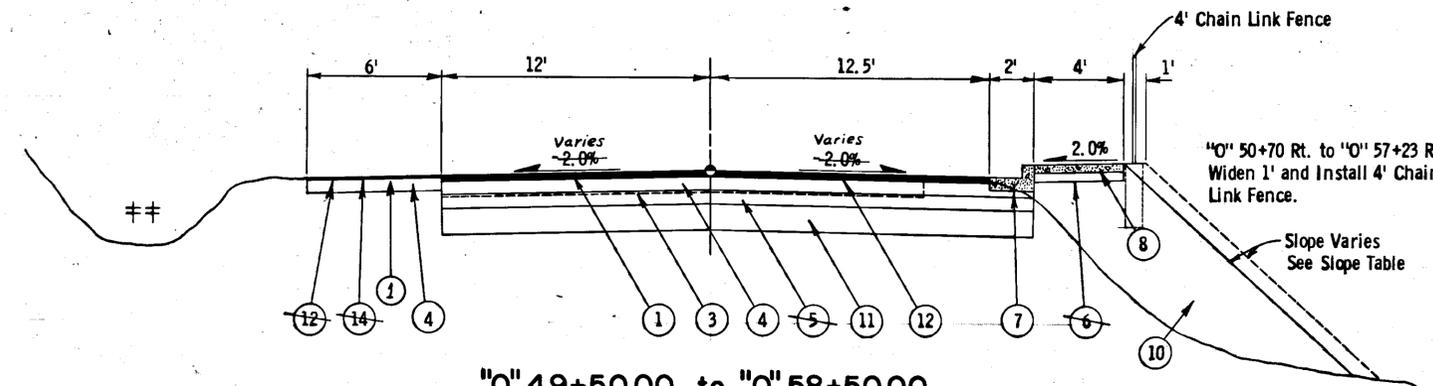
- Alignment shown on plans is subject to minor revisions.
- Storm inlets, culvert locations and lengths are subject to minor revisions.
- All existing signs to be removed by others.
- Existing ditches shall be cleaned and graded as directed by the Engineer, this work shall be paid for under Item 203(3)- Unclassified Excavation.
- In areas indicated on the plans where concrete pavement is to remain and its removal is required for installation of structures and utilities, the contractor will not be required to patch the concrete, but shall construct the areas as shown on the typical sections where no concrete pavement exists.
- Clearing & Grubbing shall be to the R/W line.
- Station 60+00 ahead to EOP, the bituminous surface treatment shall vary from 6' to 3' along the existing shoulder as directed by the Engineer.



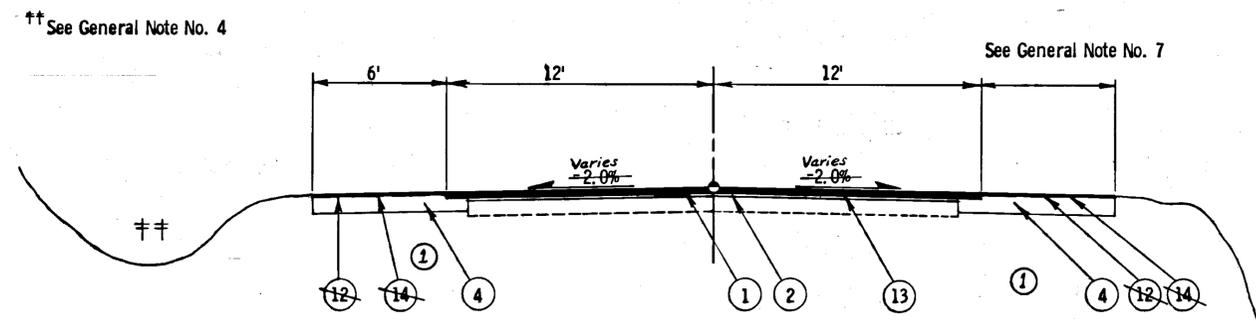
30+75.00
"0"26+20.22 to "0"31+76.71



30+75.00
"0"31+76.71 to "0"49+50.00



"0"49+50.00 to "0"58+50.00



"0"58+50.00 to "L"63+51.00

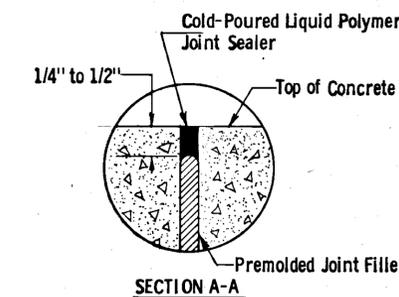
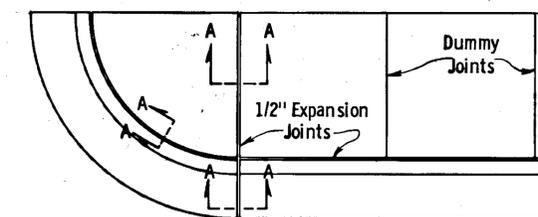
LABELING INDEX

- | | |
|--|--------------------------------------|
| ① -2" Hot Asphalt Pavement | ⑫ -MC-30 For Prime Coat |
| ② Leveling Course | ⑬ CR-S2 Liquid Asphalt For Tack Coat |
| ③ 7" Existing Concrete Pavement for Removal | ⑭ -Asphalt Surface Treatment |
| ④ 6" Crushed Aggregate Base Course, Grading C-D-1 | |
| ⑤ 6" Subbase, Grading A | |
| ⑥ 4" Subbase, Grading A 4" Crushed Agg. Base Course, Grading D-1 | |
| ⑦ Standard Curb & Gutter, Type 1 | |
| ⑧ 4" Concrete Sidewalk | |
| ⑩ Usable Unclassified Excavation and/or Borrow | |
| ⑪ 12" Selected Material | |

Material	Slopes
Rock	0.25 : 1
Other	1.5 : 1

Height	Slope
0 to 5'	2 : 1
Over 5'	1.5 : 1

TYPICAL CONCRETE CURB & SIDEWALK JOINT DETAILS



See Standard Drawing I-20.01 for Curb and Gutter Detail.

NOTES:

- Premolded expansion joint filler and liquid polymer joint sealer (see specifications) shall be considered incidental to pay Item 608(1) "Concrete Sidewalk" and no separate payment shall be made.
- Curb and Gutter expansion joints shall be at the end of the curb return, and immediately following and preceding curb cuts. Thereafter expansion joints shall be spaced intermediately at intervals of 30' except where shorter sections are needed for closure.
- Sidewalk expansion joints shall be opposite expansion joints in adjoining curb and gutter. Dummy joints shall be equally spaced between expansion joints, spacing shall not exceed 6'.

ESTIMATE OF QUANTITIES

Item No.	Item	Unit	Sheet Numbers							Total
			5	6	7	8	9	10	11	
1	Furnishing and Maintaining Engineering Facilities	L. S.								All Req'd.
110(1)	Mobilization	L. S.								All Req'd.
111(1)	Temporary Erosion & Pollution Control	C. S.								All Req'd.
112(1)	Training Program	C. S.								All Req'd.
113(1)	Flagging	M. H.								1850
201(3B)	Clearing & Grubbing	L. S.								All Req'd.
202(1)	Removal of Structures and Obstructions	L. S.								All Req'd.
202(2)	Removal of Concrete Pavement	S. Y.	71	224			856	1555	37	-2,743 2900
202(4)	Removal and Disposal of Culvert Pipe	L. F.			12					12 9
202(7)	Removal of Inlets	Each	1							1
203(3)	Unclassified Excavation	C. Y.	83	203	163	249	633	836	70	-2,237 5416
203(5B)	Borrow	Ton		176	99	612	962	1,448		-3,297 12284
301(1)	Crushed Aggregate Base Course Grading C	Ton	118	240	200	262	495	640	190	-2,145
304(1)	Subbase Grading A	Ton	205	202	165	225	419	567	16	-1,799
401(1)	Hot Asphalt Pavement	Ton	203	243	243	274	226	189	208	-1,586 2453
401(2)	AR-20 Asphalt Cement	Ton	15	18	18	20.3	16.7	14	15.4	-117.4 134.6
402(2)	CRS-2 Cationic Emulsified Asphalt for Tack Coat	Ton	0.4	0.5	0.5	0.6	0.6		0.5	-3.1 3.7
403(1)	MC-30 Liquid Asphalt for Prime Coat	Ton	0.3	0.3	0.2	0.4	1.1	1.7	0.3	-4.3
405(4)	Cationic Emulsified Asphalt for Surface Treatment (CRS-2)	Ton	1.5	1.01	1.01	1.11	1.11	1.73	1.57	-6.69
405(5)	Cover Coat Material for Surface Treatment	Ton	1.51	10.08	10.08	11	11	7.34	15.61	-66.62
505(12)	Retaining Wall	S. F.	3,058	1,404						-4,462
603(22E)	18" Pipe Conduit	L. F.	60		275	79	282	14	62	-772 775
603(22I)	36" Pipe Conduit	L. F.				154	14			-168 175
603(22J)	42" Pipe Conduit	L. F.					10			-10
603(22K)	48" Pipe Conduit	L. F.					6			-6 18
604(5A)	Inlets Type A	Each	2		2	2	3	1		-10 11
604(5B)	Concrete Field Inlet	Each				1				1
607(3)	4' Chain Link Fence	L. F.					227	423		-650 691
608(1A)	Concrete Sidewalk 4" Depth	S. Y.	222	187	102	200	238	187		-1,136 928
608(1B)	Concrete Sidewalk 6" Depth	S. Y.	44	58	142	67	29			-340 490
609(2)	Concrete Curb & Gutter Type 1	L. F.	640	550	550	600	600	423		-3,363 3412
611(2)	Riprap Class 1	Ton					414	300		-714
614(1)	Survey Monuments	Each		3	1	1		1	2	8
614(2)	Monument Cases	Each		3	1	1		1	2	8
615(1)	Standard Sign	S. F.	6	4.5	4.5	4.5	4.5	15	15	54
625(1)	Pipe Handrail	L. F.	247.5	102.5						-350 295
628(2A)	4" Ductile Iron Water Conduit	L. F.					35		10	-45 6
628(2B)	6" Ductile Iron Water Conduit	L. F.	5			5	440	5		-455 524
628(2C)(2C')	8" Ductile Iron Water Conduit	L. F.	374	560	557	600	600	618	87	-1,100 1187
628(4)	Install Valve Box	Each	2	3	2	2	1	5	2	-17 23
628(6)	Fire Hydrant Installation	Each		2	3	3	2	1	1	12
628(7)	Fire Hydrant Relocation	Each	1							1
628(8)	Fire Hydrant Removal	Each	1	2	2	3	1	2		11
628(9A)	3/4" Water Service Connection	Each				1		1		-2 4
628(9B)	1" Water Service Connection	Each	1				2			3
628(9C)	2" Water Service Connection	Each			1	1				2
505(11) Ewo 1		L. S.								All Req'd.
503(22E) Ewo 2		L. F.								10
604(1) Ewo 3		Each								1
603(22J) Ewo 6		L. F.								118
601(1A) Ewo 7		Ton								6927
628(10D)	Install 4" Gate Valve	Each					1			1 0
628(10E)	Install 6" Gate Valve	Each	1			1		1	1	-4 8
628(10F)(10F')	Install 8" Gate Valve	Each	1		1	1		1	1	-4 11
628(11)	Adjust Valve Box	Each	5	2	1	1				-9 4
628(13B)	4" Pressure Reducing Valve & Vault	Each							1	1
628(13B)	6" Pressure Reducing Valve & Vault	Each						1		1
109(1)	Inlet Relocation	L. S.								
109(2)	Hand Laid Rock Embankment	L. S.								
114(1)	Construction Engineering by Contractor	L. S.								All Req'd.
109(3)	Cast-in-Place Field Inlet	L. S.								
628(2G)	8" D.I. Water Conduit	L. F.	374	560	557	600	605	618	87	3401
109(4)	Wooden Stairs	L. S.								
628(2E)	12" D.I. Water Conduit	L. F.	374	560	557	600	605	618	87	3401
109(5)	Rock Excavation	L. S.								
628(10F')	8" Gate Valve	Each		1				4		-5
109(6)	Concrete Stairs	L. S.								
628(10G)	12" Gate Valve	Each		1				4		-5
660(9)	Traffic Reflectors	Each								
660(10)	Guide Post	Each								
See Sheet 19A for Supplemental Quantities										
606(1)	Beam Type Guardrail	Each								
606(2KK)	48" Culverts in Rock Exc.	L. F.								
625(1A)	Purchase of Pipe Handrail	L. S.								

CURB CUT SUMMARY

Station	Length		Remarks
	Lt.	Rt.	
10+26+80		35'	Special
10+27+05	25'		
10+27+64	25'		
10+31+29		95'	
10+33+40		35'	
10+36+35		105'	
10+37+63		45'	
10+39+07		28	
10+38+50		25	
10+39+76		44	
10+41+63		30'	
10+42+28		35'	
10+45+65		30'	
10+46+73		30'	
10+48+71		30'	
10+50+53		35'	Special

MONUMENT SUMMARY

Station	Mon.	Case	Point
10+31+76.71	X	X	P. C.
10+33+23.78	X	X	P. T.
10+33+77.56	X	X	P. C.
10+36+15.66	X	X	P. T.
10+46+03.16	X	X	P. I.
10+53+74.50	X	X	P. C.
10+54+15.24	X	X	P. C.
10+60+28.84 Bk	X	X	P. T.
10+60+31.32 Ahd	X	X	P. T.
10+60+69.00	X	X	P. T.
10+62+51.00 Bk	X	X	E. O. P.
10+62+54.06 Ahd			P. O. T.

REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Station	Offset		Remarks
	Lt.	Rt.	
10+31+33	18.5		Remove Concrete Oil Tank
10+32+50	17.0		Building to be Removed by Others
10+33+09	12.0		Remove wooden Valve Box
10+34+22	10.0		Remove Wooden Valve Box
10+38+75	12.0		Remove Wooden Valve Box
10+41+79	12.0		Remove Wooden Valve Box

APPROACH SUMMARY

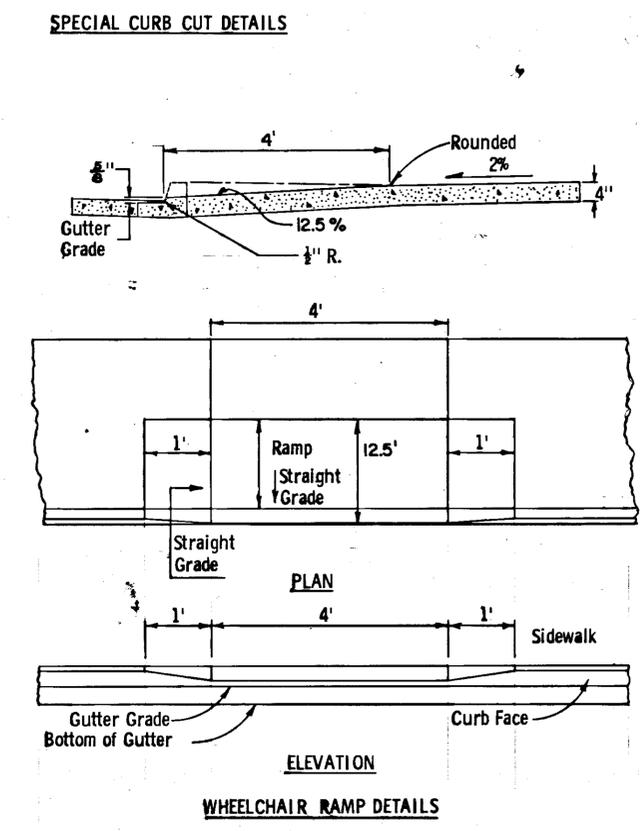
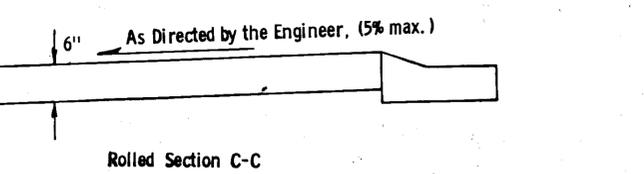
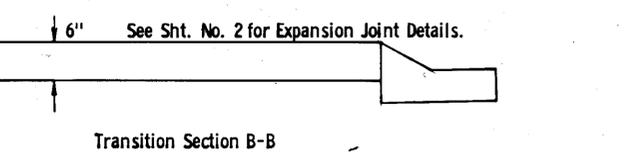
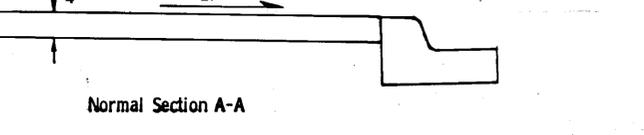
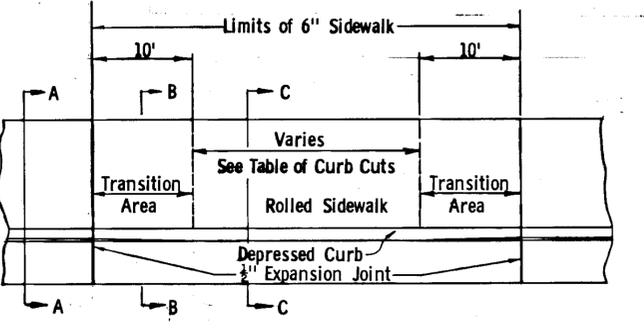
Station	Lt.	Rt.	Remarks
10+29+10	X		Service
10+43+92	X		Service
10+44+67	X		Service
10+46+64	X		Service
10+49+05	X		Service
10+57+90		X	Service
10+61+85	X		Service

ABBREVIATIONS

- H. P. - High Pressure Main, 120 P. S. I.
- L. P. - Low Pressure Main, 75 P. S. I.
- C. I. - Cast Iron.
- D. I. - Ductile Iron.
- F. H. - Fire Hydrant.
- G. V. - Gate Valve.
- C. S. - Curb Stop.
- Corp. S. - Corporation Stop.
- V. B. - Valve Box.
- W. M. - Water Main.
- R. I. C. - Reinforced Concrete Pipe

BASIS OF ESTIMATE

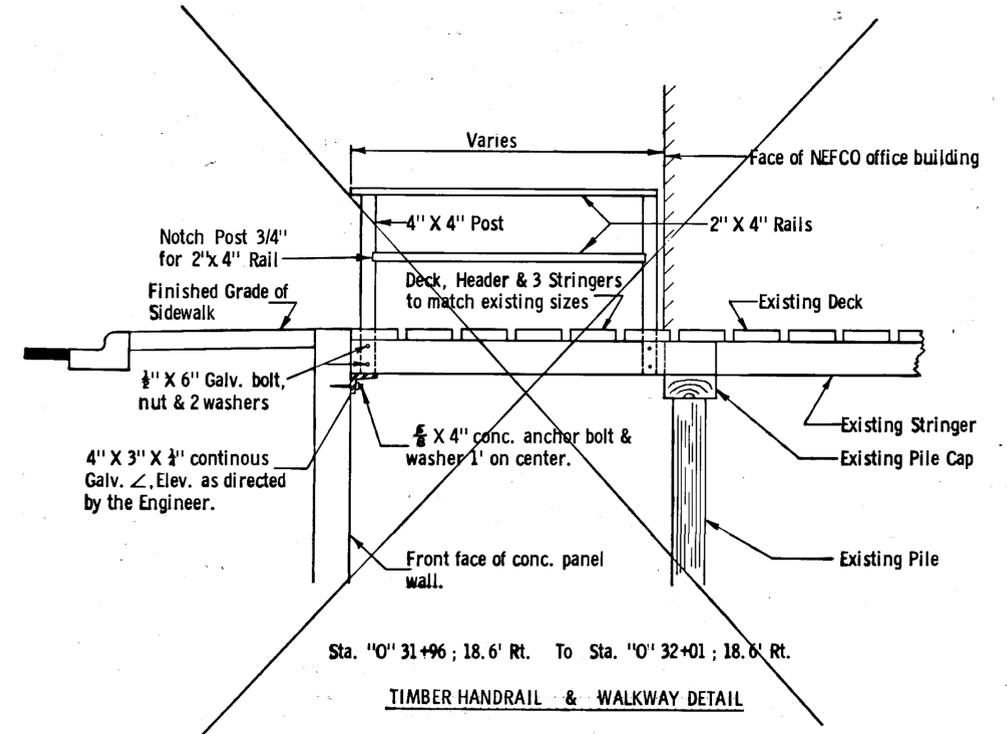
Item No.	Estimating Factor
203(5B)	1.87 Ton/C. Y.
301(1)	1.96 Ton/C. Y.
304(1)	1.87 Ton/C. Y.
401(1)	112 Lbs./Sq. Yd./Inch Depth
401(2)	7.4% of 401(1)
402(2)	0.10 Gal./Sq. Yd. - 253 Gal./Ton
403(1)	0.25 Gal./Sq. Yd. - 256 Gal./Ton
611(2)	1.90 Ton/C. Y.



* Options

SIGNING SCHEDULE

NO.	STATION	Dist. From C		CODE NUMBER	LEGEND	SIGN PANEL THICKNESS			POST				FACING TRAFFIC	REMARKS		
		Lt.	Rt.			Size	Unframed	Framed	Sq. Ft.	No. of Post	Type	Size			Length	Embedment
1	"O' 26+31		24'	R7-1	No Parking	12 X 18	0.063"		1.5	1	Tube	2"	8' 6"	4' 6"	NB	
2	"O' 26+50.5	30'		R7-1	No Parking	12 X 18	0.063"		1.5	1	Tube	2"	8' 6"	4' 6"	SB	
3	"O' 28+31		Wall	R7-1	No Parking	12 X 18	0.063"		1.5	1	Tube	2"	8' 6"	4' 6"	NB	
4	"O' 28+31	22'		R7-1	No Parking	12 X 18	0.063"		1.5	1	Tube	2"	8' 6"	4' 6"	SB	
5	"O' 30+31		Wall	R7-1	No Parking	12 X 18	0.063"		1.5	1	Tube	2"	8' 6"	4' 6"	NB	
6	"O' 32+31		20.5'	R7-1	No Parking	12 X 18	0.063"		1.5	1	Tube	2"	8' 6"	4' 6"	NB	
7	"O' 34+31		20.5'	R7-1	No Parking	12 X 18	0.063"		1.5	1	Tube	2"	8' 6"	4' 6"	NB	
8	"O' 36+31		20.5'	R7-1	No Parking	12 X 18	0.063"		1.5	1	Tube	2"	8' 6"	4' 6"	NB	
9	"O' 38+31		20.5'	R7-1	No Parking	12 X 18	0.063"		1.5	1	Tube	2"	8' 6"	4' 6"	NB	
10	"O' 40+31		20.5'	R7-1	No Parking	12 X 18	0.063"		1.5	1	Tube	2"	8' 6"	4' 6"	NB	
11	"O' 42+59		20.5'	R7-1	No Parking	12 X 18	0.063"		1.5	1	Tube	2"	8' 6"	4' 6"	NB	
12	"O' 44+31		20.5'	R7-1	No Parking	12 X 18	0.063"		1.5	1	Tube	2"	8' 6"	4' 6"	NB	
13	"O' 46+31		20.5'	R7-1	No Parking	12 X 18	0.063"		1.5	1	Tube	2"	8' 6"	4' 6"	NB	
14	"O' 48+31		20.5'	R7-1	No Parking	12 X 18	0.063"		1.5	1	Tube	2"	8' 6"	4' 6"	NB	
15	"O' 50+31		20.5'	R7-1	No Parking	12 X 18	0.063"		1.5	1	Tube	2"	8' 6"	4' 6"	NB	
16	"O' 52+31		20.5'	R7-1	No Parking	12 X 18	0.063"		1.5	1	Tube	2"	8' 6"	4' 6"	NB	
17	"O' 54+31		20'	R7-1	No Parking	12 X 18	0.063"		1.5	1	Tube	2"	8' 6"	4' 6"	NB	
18	"O' 56+31		18.5'	R7-1	No Parking	12 X 18	0.063"		1.5	1	Tube	2"	8' 6"	4' 6"	NB	
19	"O' 57+25	19.5'		W11-2	Ped. Symbols	36 X 36	0.063"		9	1	Tube	2"	8' 6"	4' 6"	SB	
20	"O' 57+25			Plaque	Ped. Xing	24 X 18	0.063"		3	1	Tube	2"	8' 6"	4' 6"	SB	
21	"O' 58+58	19.5'		W11-2	Ped. Symbol	24 X 18	0.063"		9	1	Tube	2"	8' 6"	4' 6"	NB	
22	"O' 58+58			Plaque	Ped. Xing	24 X 18	0.063"		3	1	Tube	2"	8' 6"	4' 6"	NB	
23	"O' 59+31		19.5'	R7-1	No Parking	12 X 18	0.063"		1.5	1	Tube	2"	8' 6"	4' 6"	NB	
24	"O' 61+31		19.5'	R7-1	No parking	12 X 18	0.063"		1.5	1	Tube	2"	8' 6"	4' 6"	NB	

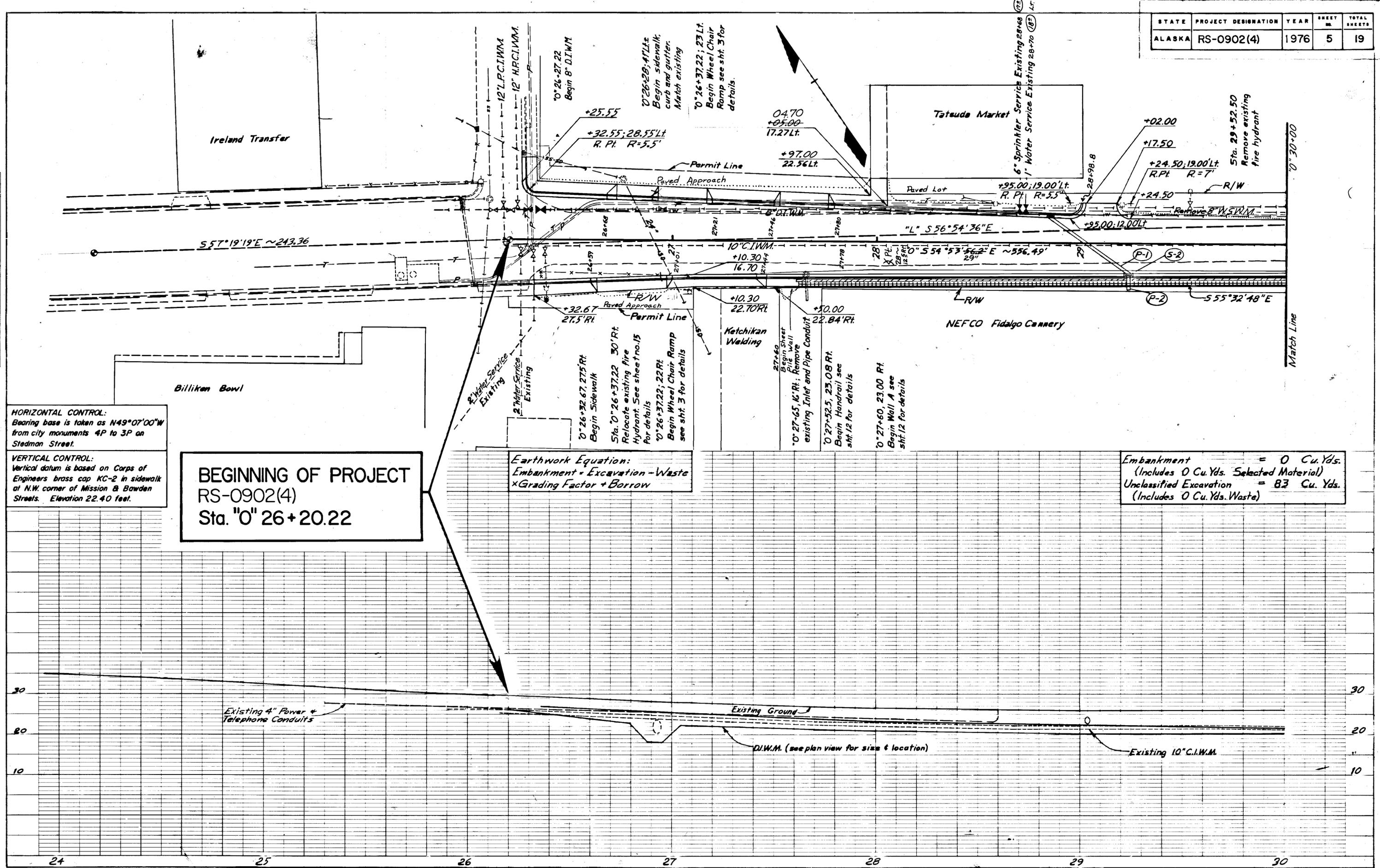


- Notes:
- Width shall match existing timber walkway.
 - Existing timber walkway shall be removed to face of building, or as directed by the Engineer.
 - All timber shall be S-4-S construction grade f = 1200 p. s. i. minimum, Douglas Fir or Hemlock.
 - All timber shall be treated with a waterborne preservative in accordance with the latest standards of the American Wood Preserves' Association.
 - All ferrous metal used in construction of timber - wall connection shall be galvanized.
 - Furnishing and installation of timber walkway shall be considered incidental to Pay Item 508(1) - Retaining Walls.
 - Height of timber walkway handrail shall match height of retaining wall pipe handrail.
 - Handrail both sides.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0902(4)	1976	5	19

PLAN	DATE
SURVEYED	
PLOTTED	
ALIGNED	
ENLARGED	
BY	
NO.	

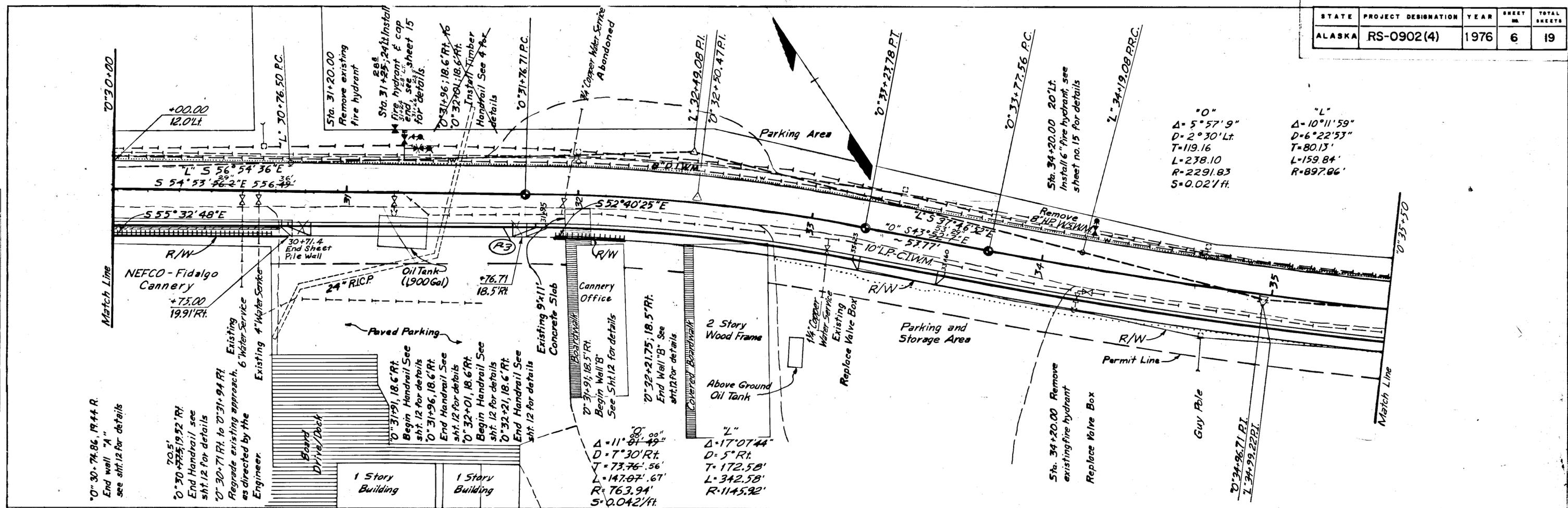
PROFILE	DATE
SURVEYED	
PLOTTED	
ENLARGED	
BY	
NO.	



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0902(4)	1976	6	19

DATE	BY
SURVEYED	
PLOTTED	
ALIGNMENT CHECKED	
BY: [Signature]	
NOTE BOOK NO. []	
BY: [Signature]	
DATE	

DATE	BY
SURVEYED	
PLOTTED	
ALIGNMENT CHECKED	
BY: [Signature]	
NOTE BOOK NO. []	
BY: [Signature]	
DATE	



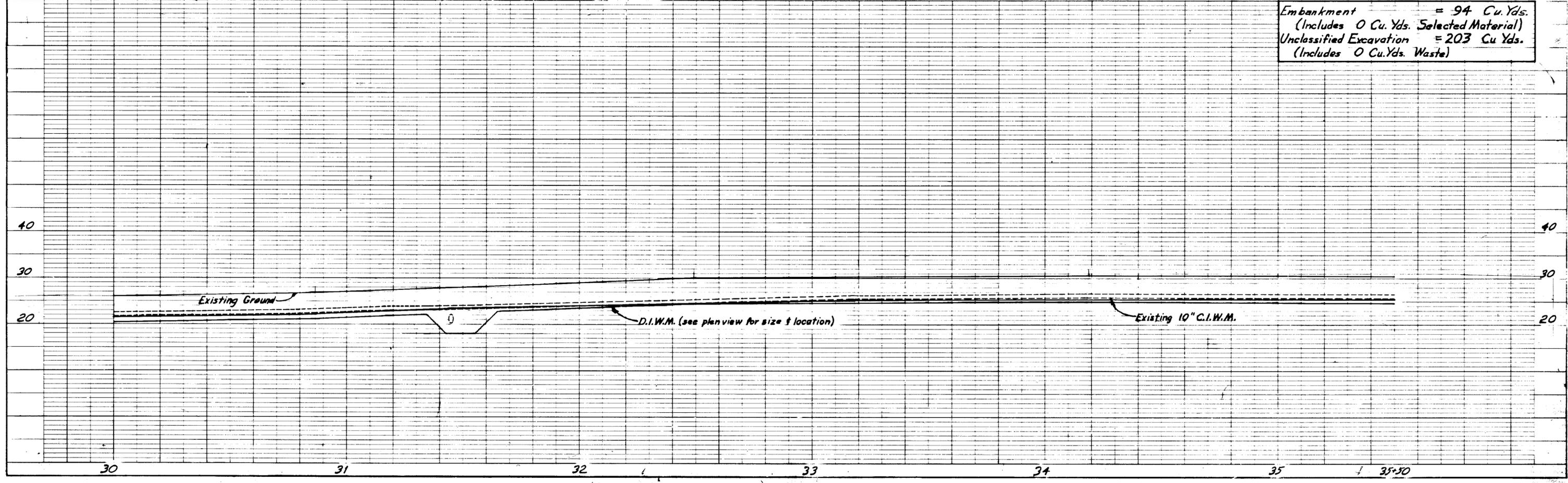
"O"
 $\Delta = 5^{\circ}57'9"$
 $D = 2^{\circ}30'Lt$
 $T = 119.16$
 $L = 238.10$
 $R = 2291.83$
 $S = 0.021/ft.$

"L"
 $\Delta = 10^{\circ}11'59"$
 $D = 6^{\circ}22'53"$
 $T = 80.13$
 $L = 159.84$
 $R = 897.86$

"O"
 $\Delta = 11^{\circ}07'49"$
 $D = 7^{\circ}30'Rt$
 $T = 73.76'56'$
 $L = 147.07'67'$
 $R = 763.94'$
 $S = 0.042/ft.$

"L"
 $\Delta = 17^{\circ}07'44"$
 $D = 5^{\circ}Rt$
 $T = 172.58'$
 $L = 342.58'$
 $R = 1145.92'$

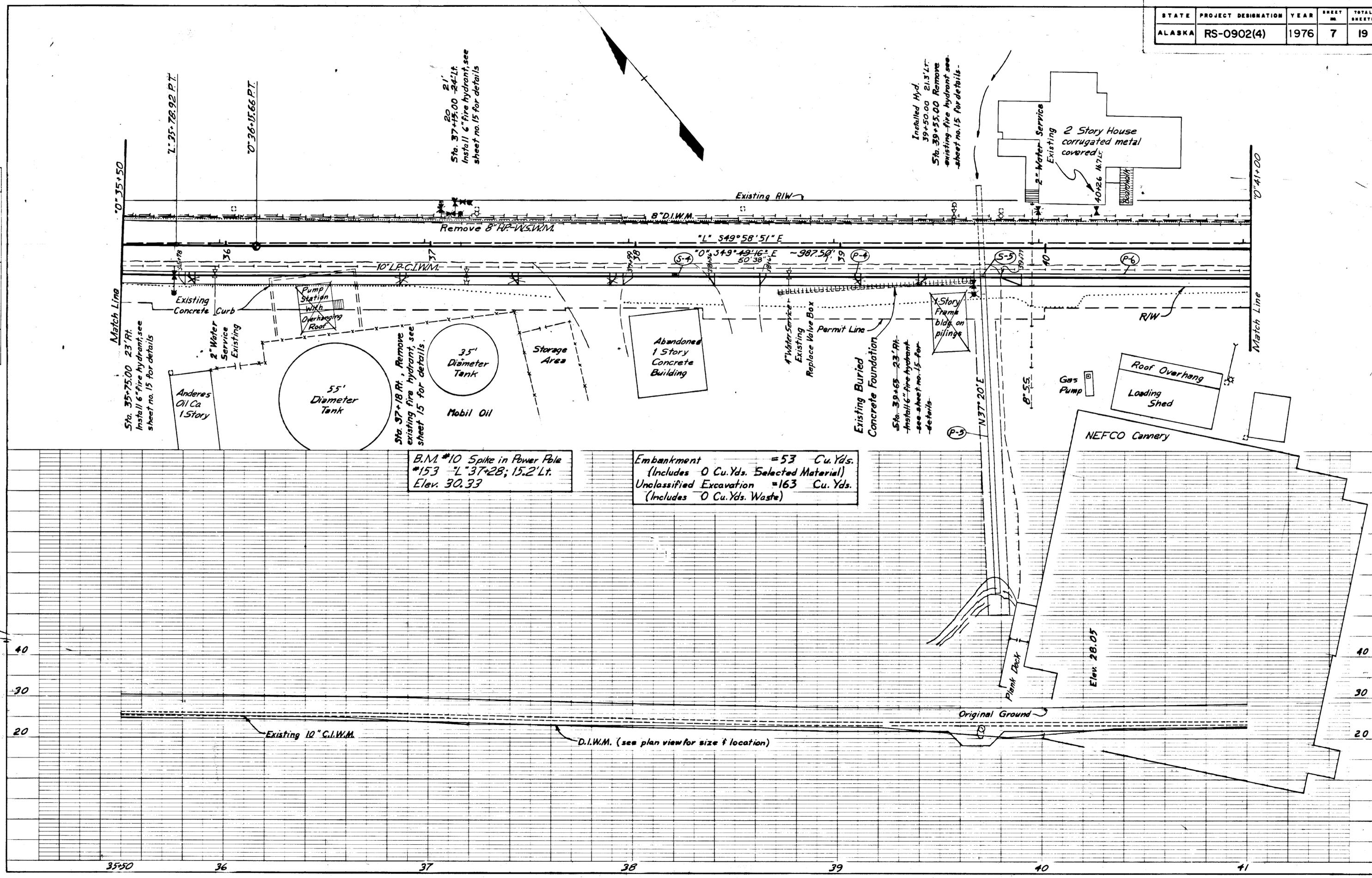
Embankment = 94 Cu.Yds.
 (Includes 0 Cu.Yds. Selected Material)
 Unclassified Excavation = 203 Cu.Yds.
 (Includes 0 Cu.Yds. Waste)



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0902(4)	1976	7	19

PLAN	DATE	BY
SURVEYED		
PLOTTED		
ALIGNED CHECKED		
NOTE BOOK		
NO.		

PROFILE	DATE	BY
SURVEYED		
PLOTTED		
ALIGNED CHECKED		
NOTE BOOK		
NO.		



B.M. #10 Spike in Power Pole
 #153 "L" 37+28; 15.2'Lt.
 Elev. 30.33

Embankment = 53 Cu. Yds.
 (Includes 0 Cu. Yds. Selected Material)
 Unclassified Excavation = 163 Cu. Yds.
 (Includes 0 Cu. Yds. Waste)

Sta. 35+75.00 23 Ft.
 Install 6" fire hydrant, see
 sheet no. 15 for details

Anderes
 Oil Co
 1 Story

55'
 Diameter
 Tank

Sta. 37+18 Ft., Remove
 existing fire hydrant, see
 sheet 15 for details.

35'
 Diameter
 Tank
 Mobil Oil

Storage
 Area

Abandoned
 1 Story
 Concrete
 Building

4" Water Service
 Existing
 Replace Valve Box

Existing Buried
 Concrete Foundation

Sta. 39+65 - 23' Rt.
 - Install 6" fire hydrant
 - see sheet no. 15 for
 details

1 Story
 Frame
 bldg on
 pilings

Gas
 Pump

Roof Overhang
 Loading
 Shed

NEFCO Camery

Elev. 28.05

Original Ground

D.I.W.M. (see plan view for size & location)

Existing 10" C.I.W.M.

Remove 8" RP-WSWM.

Existing RIW

2 Story House
 corrugated metal
 covered
 Existing 2" Water Service

Installed Hyd.
 39+50.00 21.5'Lt.
 Sta. 39+55.00 Remove
 existing fire hydrant see
 sheet no. 15 for details.

Sta. 37+20 21'
 Install 6" fire hydrant, see
 sheet no. 15 for details

"0" 36+15.66 P.T.

"0" 35+78.92 P.T.

"0" 35+50

"0" 41+00

"L" 549°58'51" E

"0" 549°49'16" E - 987.50'
 50' 38"

N 37° 20' E

35+50

36

37

38

39

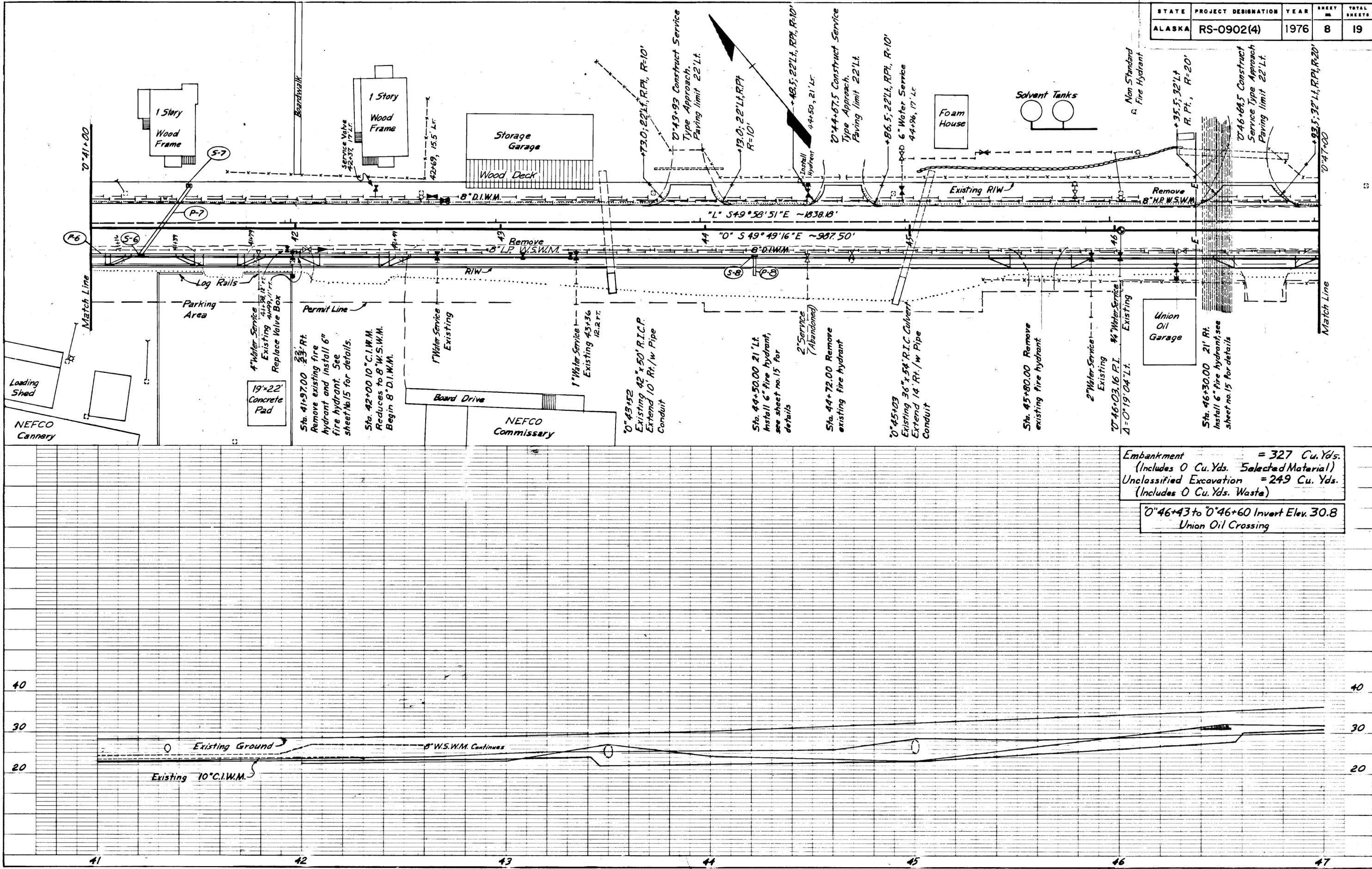
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41

STATE	PROJECT DESIGNATION	YEAR	SHEET #	TOTAL SHEETS
ALASKA	RS-0902(4)	1976	8	19

DATE	
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REVISIONS	
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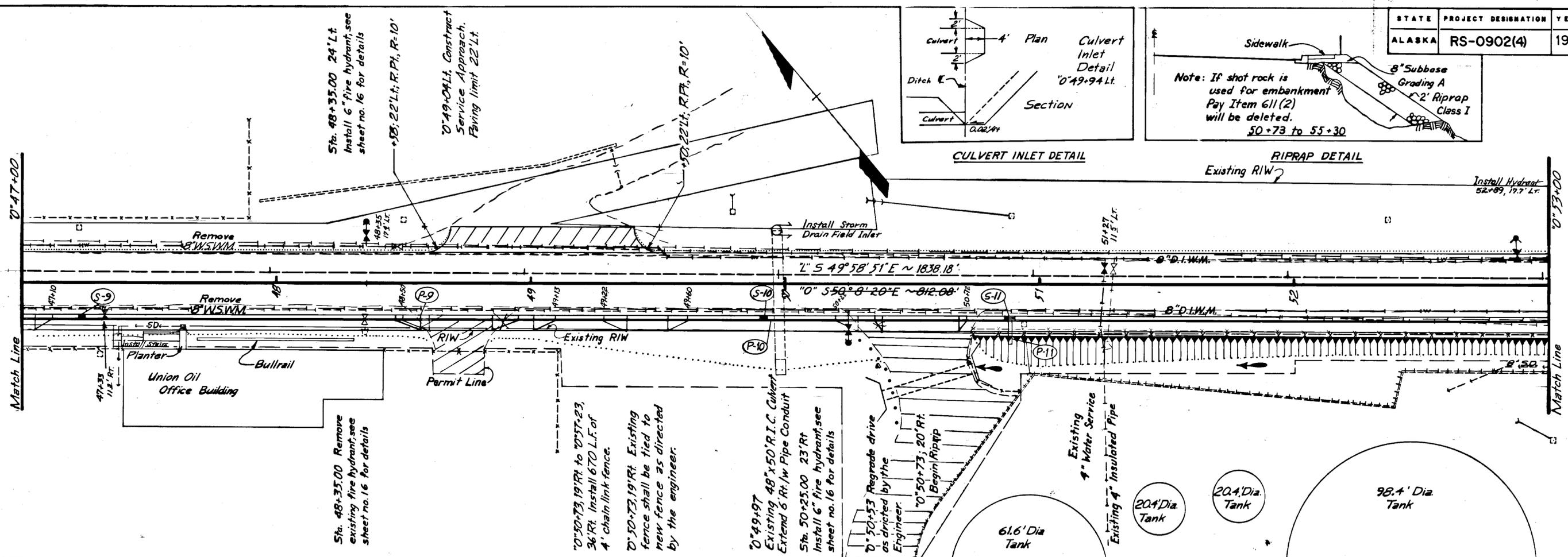
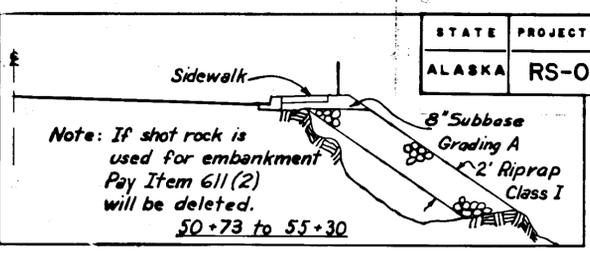
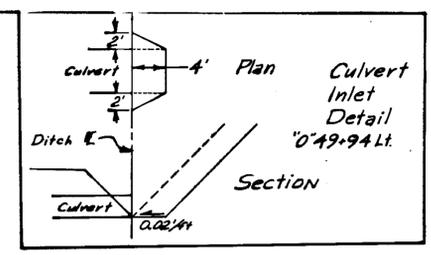
DATE	
BY	
PROFILE	
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REVISIONS	
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Embankment = 327 Cu. Yds.
 (Includes 0 Cu. Yds. Selected Material)
 Unclassified Excavation = 249 Cu. Yds.
 (Includes 0 Cu. Yds. Waste)

"0" 46+43 to "0" 46+60 Invert Elev. 30.8
 Union Oil Crossing

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0902(4)	1976	9	19

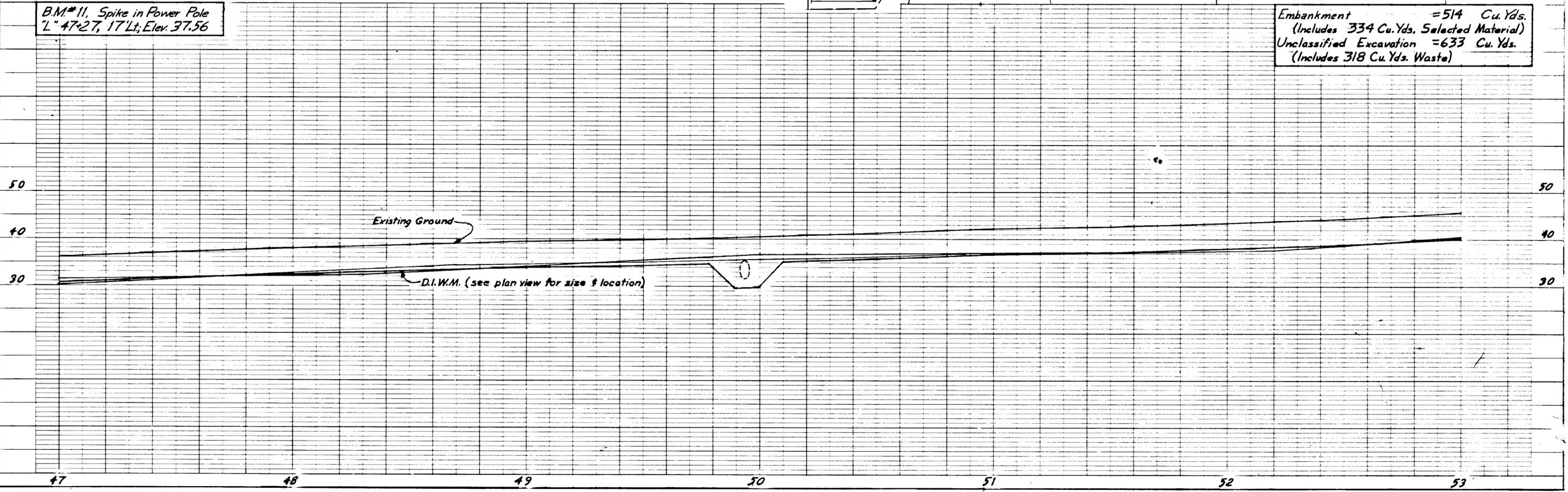


B.M.#11, Spike in Power Pole
 "L" 47+27, 17 Lt; Elev. 37.56

Embankment = 514 Cu. Yds.
 (Includes 334 Cu. Yds. Selected Material)
 Unclassified Excavation = 633 Cu. Yds.
 (Includes 318 Cu. Yds. Waste)

PLAN
 SURVEYED BY: _____
 PLOTTED BY: _____
 NOTE BOOK NO. _____
 DATE _____

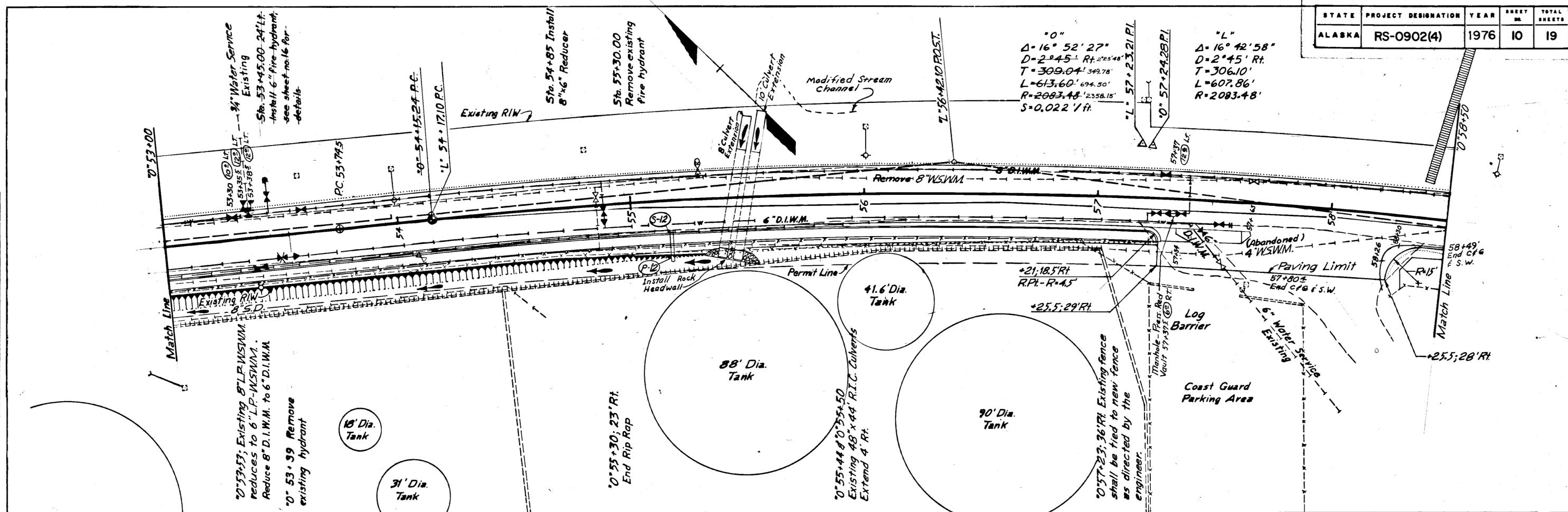
PROFILE
 SURVEYED BY: _____
 PLOTTED BY: _____
 NOTE BOOK NO. _____
 DATE _____



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0902(4)	1976	10	19

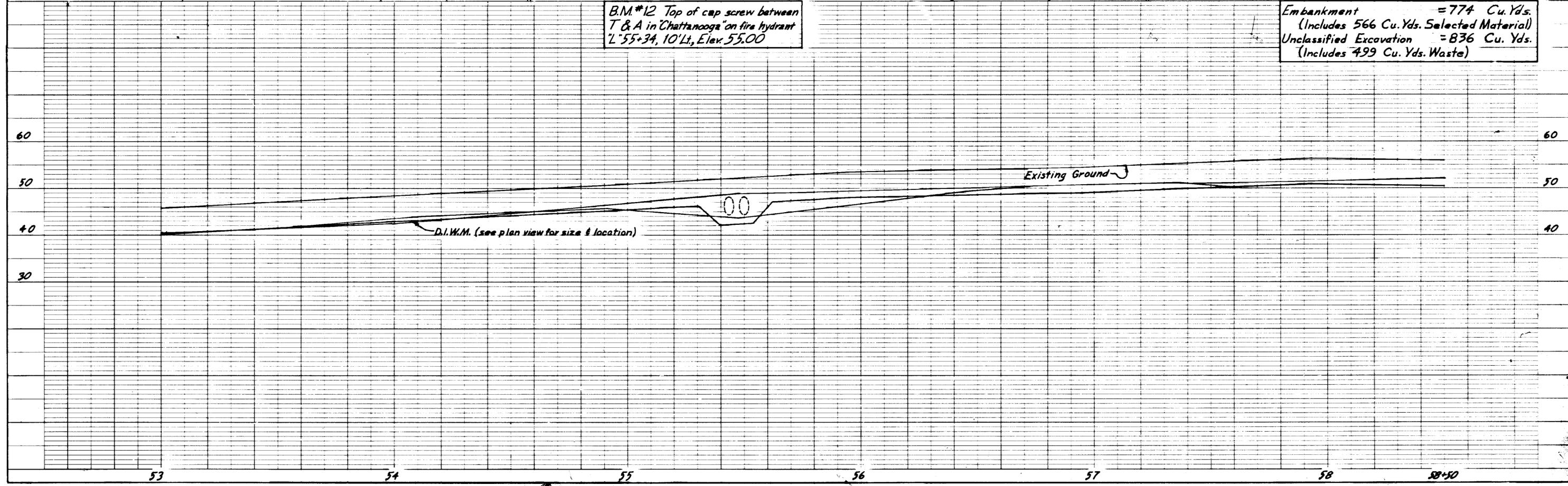
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SURVEYED		
PLOTTED		
NOTED		
BY		
NO.		

PROFILE	DATE	BY
SURVEYED		
NOTED		
BY		
NO.		



B.M.#12 Top of cap screw between T & A in Chattanooga on fire hydrant L'55+34, 10' Lt., Elev. 55.00

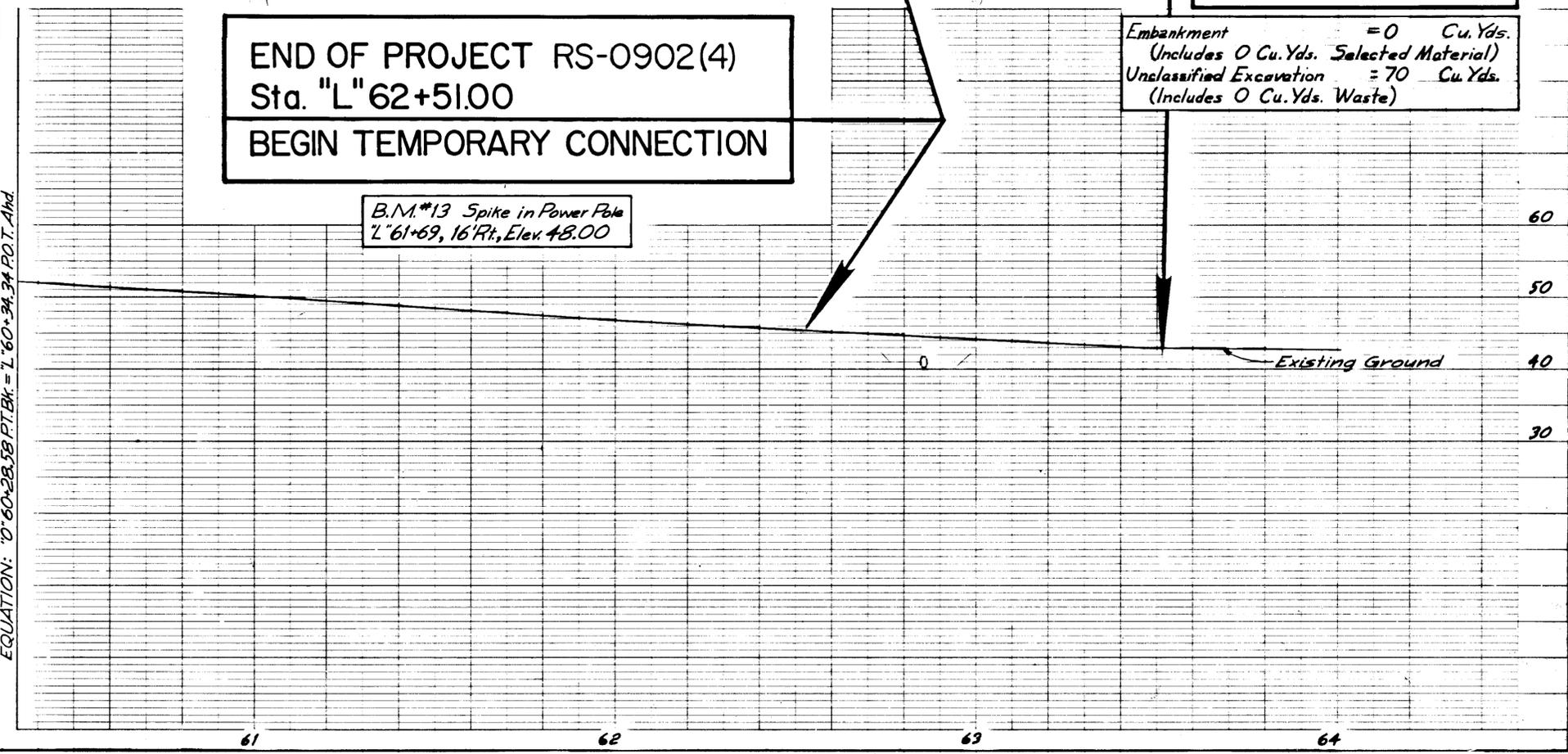
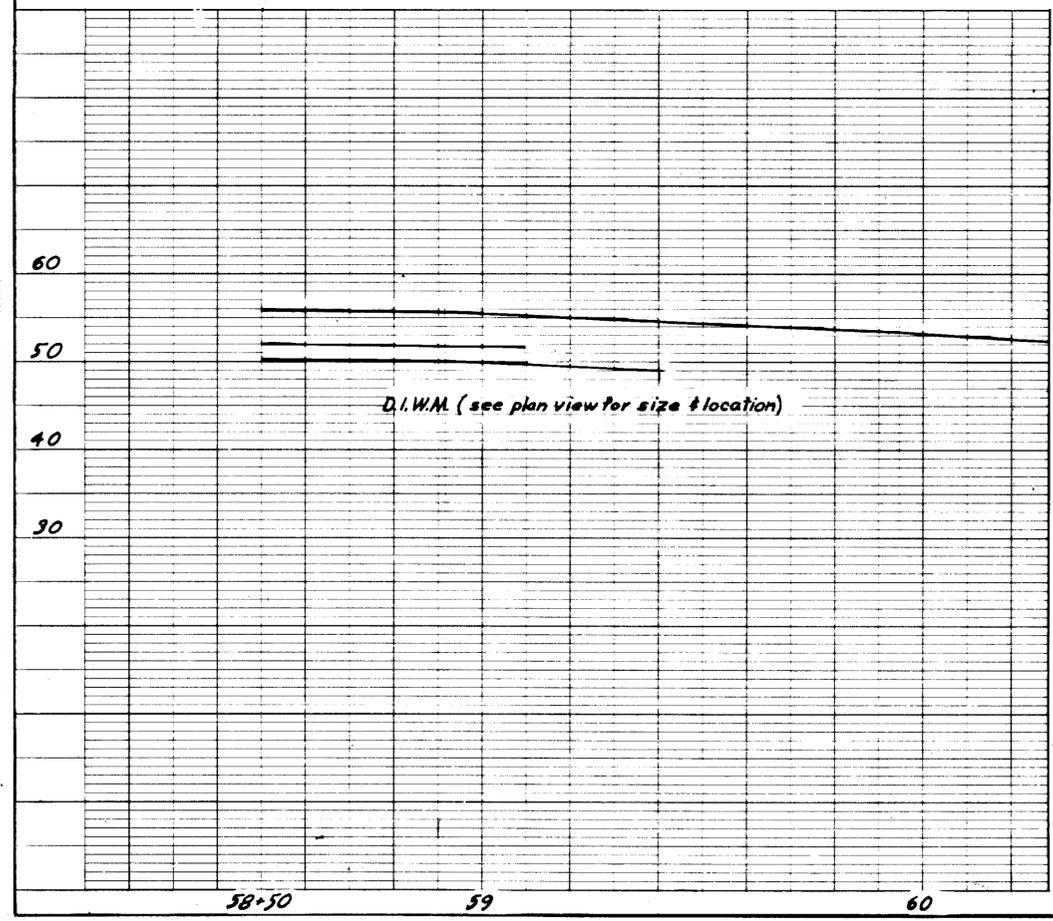
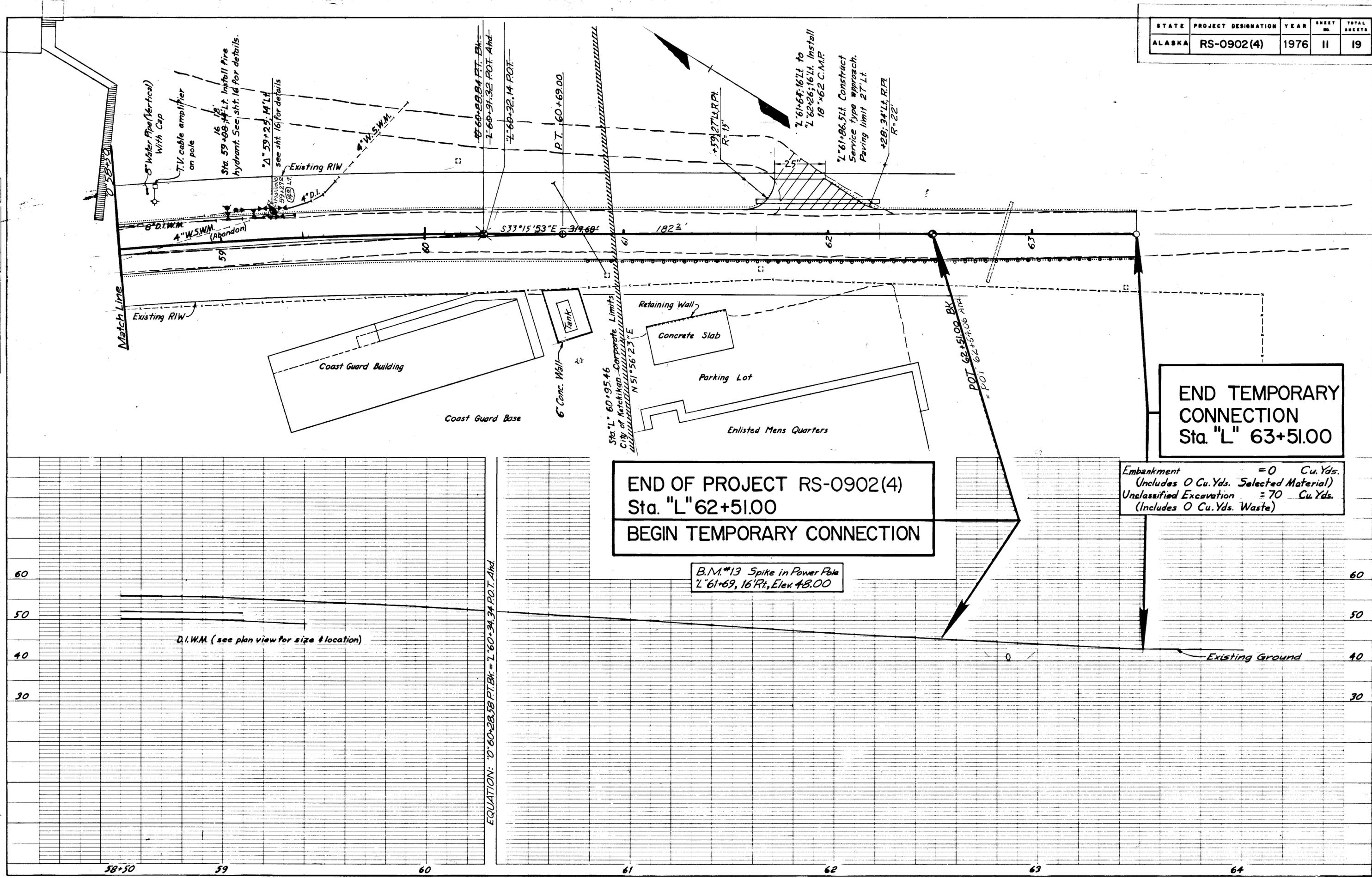
Embankment = 774 Cu. Yds. (Includes 566 Cu. Yds. Selected Material)
 Unclassified Excavation = 836 Cu. Yds. (Includes 499 Cu. Yds. Waste)



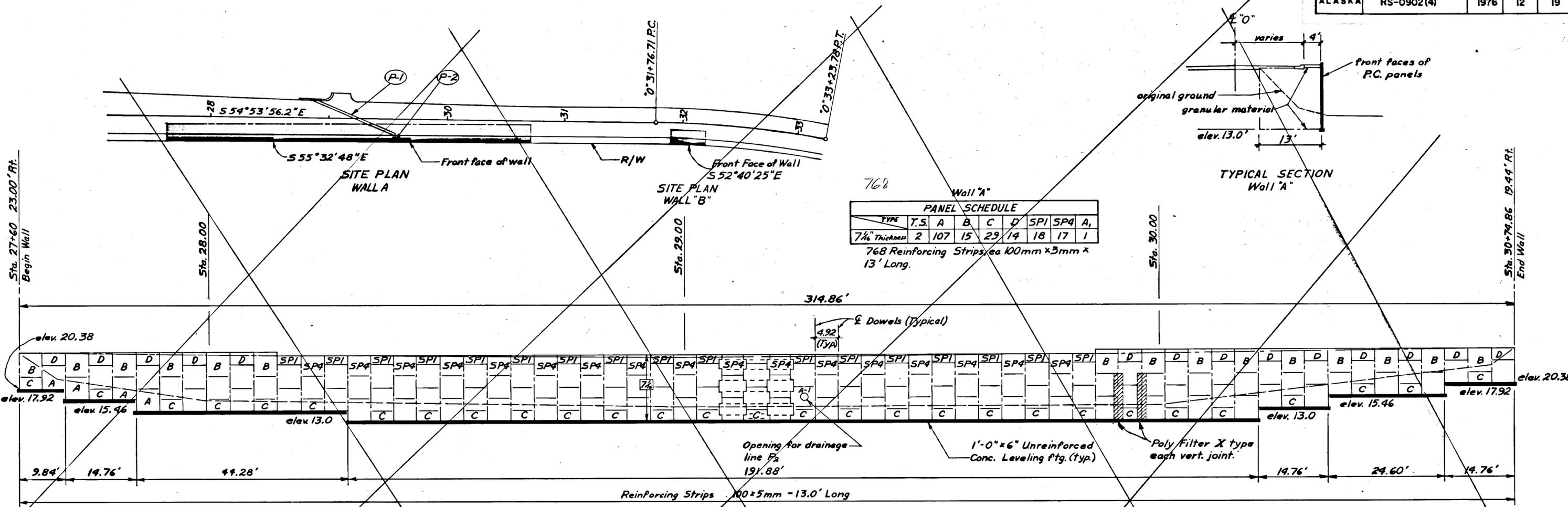
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0902(4)	1976	11	19

DATE: _____ BY: _____
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 CHECKED: _____
 NOTE BOOK NO: _____

DATE: _____ BY: _____
 SURVEYED: _____
 PLOTTED: _____
 CHECKED: _____
 NOTE BOOK NO: _____



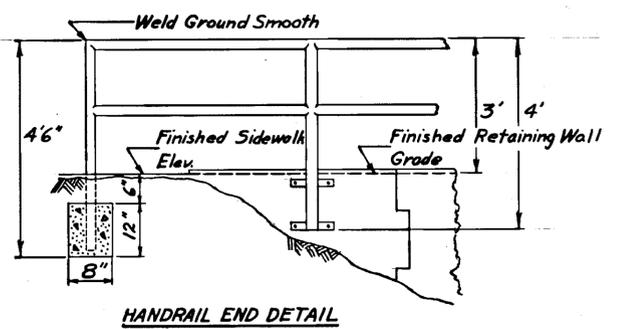
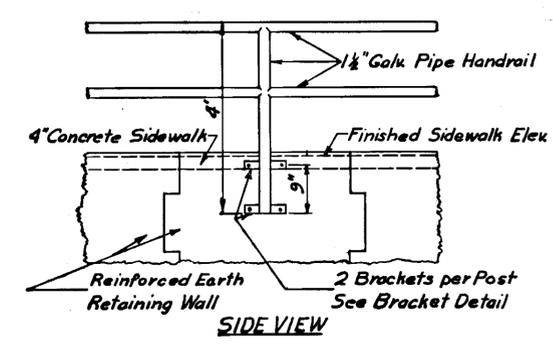
EQUATION: $0^{\circ}60'28.58''$ P.T. Bk. = $1^{\circ}60'34.34''$ P.O.T. Ahd.



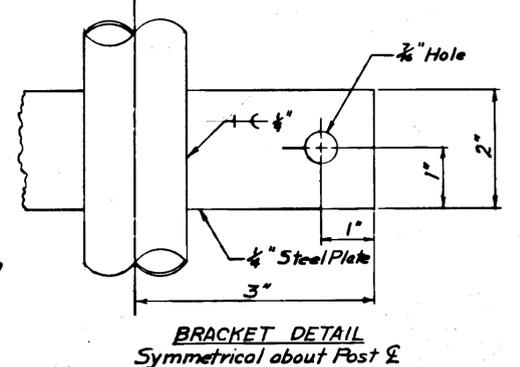
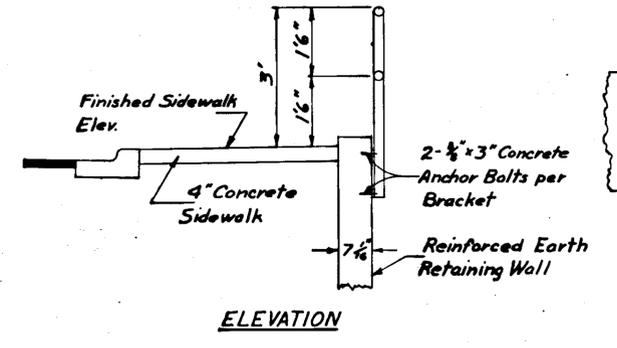
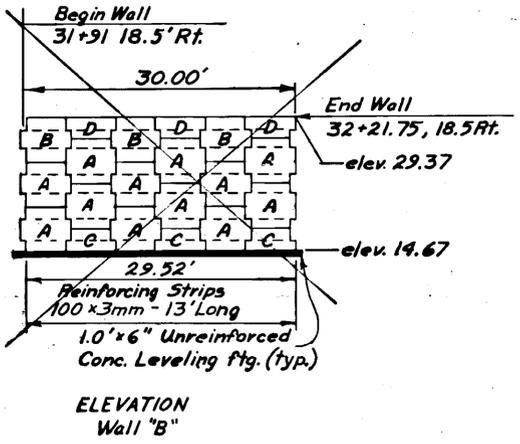
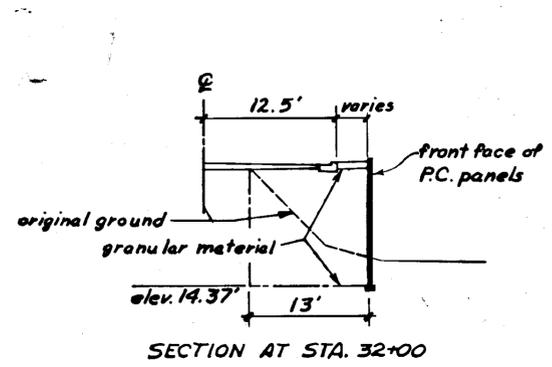
Wall "B"

PANEL SCHEDULE				
TYPE	T.S.	A	B	C
7/8" Thickness	12	3	3	3

Reinforcing Strips, ea. 100mm x 3mm x 13' Long.



- Handrail Notes**
1. All fabrication of brackets shall be completed before being galvanized.
 2. Handrail may be erected using either adjustable type fittings or welded joints (ground smooth).
 3. All hardware used in the installation of the handrail shall be galvanized.
 4. See Plan & Profile sheet for handrail location & length.
 5. Furnishing & installation of concrete shall be incidental to handrail.
 6. Handrail posts are spaced at 5' intervals and are located in the longitudinal center of each concrete panel.



DRAINAGE STRUCTURE SUMMARY

Inlet Number	Inlet Type	Location		Top of Curb Elev.	Invert Elev.
		Station	Offset		
S-1	A	0+28.85	16.49' Lt	26.37	23.09
S-2	A	0+29+27	16.25' Rt.	26.31	17.20
S-4	A	0+38+20	14.50' Rt.	28.64	25.36
S-5	A	0+39+70	14.50' Rt.	28.00	20.49
S-6	A	0+41+23	14.50' Rt.	28.77	24.80
S-7	A	0+41+53	28.00' Lt.	27.90	25.40

Top of curb elev's shown are approx., and shall be as staked by the Engineer.

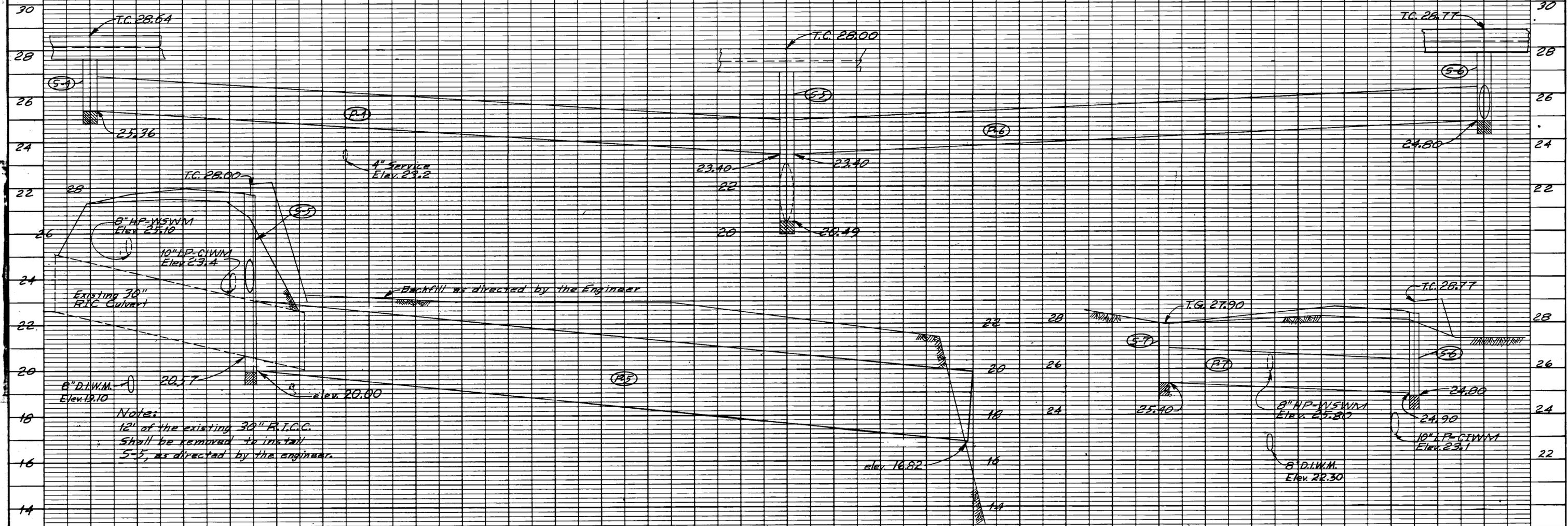
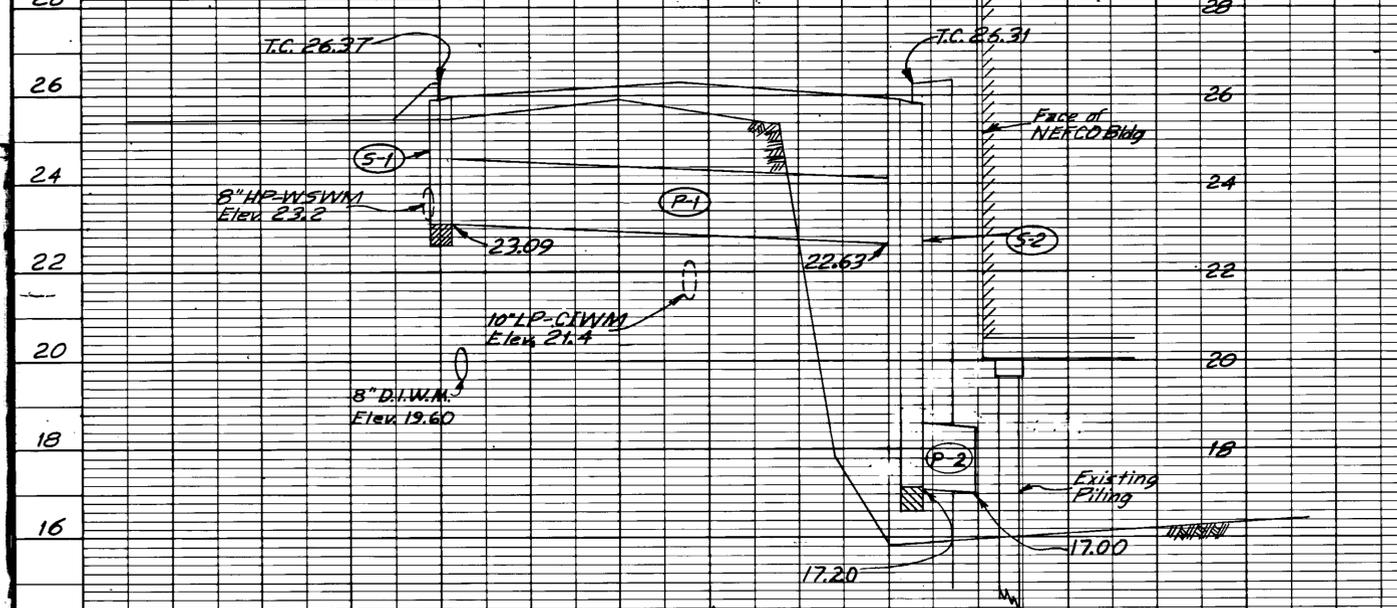
T.C. = Top of Curb T.G. = Top of Grate
 Note: Location of utilities as shown are approximate. Offset distance is to the back of curb for type A inlets and to centerline of field inlets.

DRAINAGE PROFILES

PIPE SUMMARY

Pipe Number	Pipe Diameter	Pipe Length	From		To	
			Structure	Invert Elev.	Structure	Invert Elev.
P-1	18"	52'	S-1	23.09	S-2	22.63
P-2 †	18"	8' 5"		17.20	Outfall	17.00
P-4	18"	148'	S-4	25.36	S-5	23.40
P-5 †	36"	154' (incl. 3')	S-5	20.00	Outfall	16.82
P-6	18"	150'	S-6	24.80	S-5	23.40
P-7	18"	10' 42"	S-7	25.40	S-6	24.90

† Indicates storm drains that are to be Aluminum Conduit. The remaining storm drains are to be Pipe Conduit.



Notes:
 12" of the existing 30" R.I.C. shall be removed to install S-5, as directed by the engineer.

DRAINAGE STRUCTURE SUMMARY

Inlet Number	Inlet Type	Location		Top Of Curb Elev.	Invert Elev.
		Station	offset		
S-8	A	0+44+23	14.50'RT	31.48	24.40
S-9	A	0+47+23	14.50'RT	37.08	33.83
S-10	A	0+49+91	14.50'RT	41.10	31.07
S-11	A	0+50+88	14.50'RT	42.34	39.06
S-12	A	0+55+20	14.50'RT	51.74	48.49

Top of curb elev's shown are approx., and shall be as stated by the Engineer.

PIPE SUMMARY

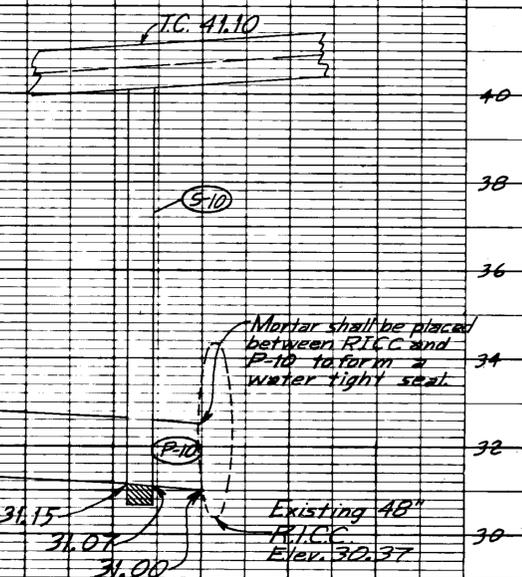
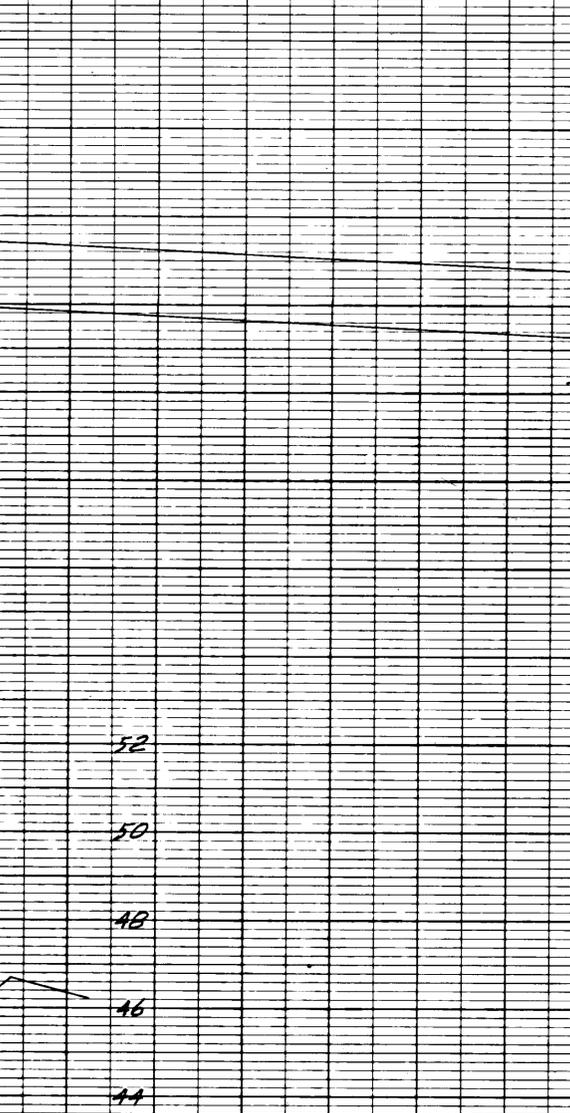
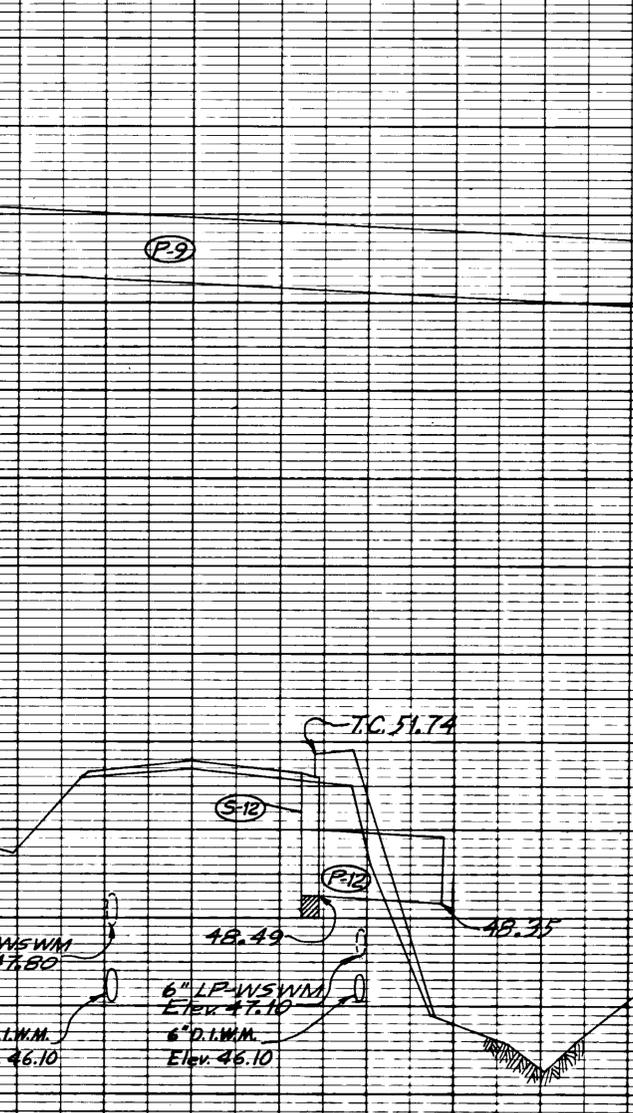
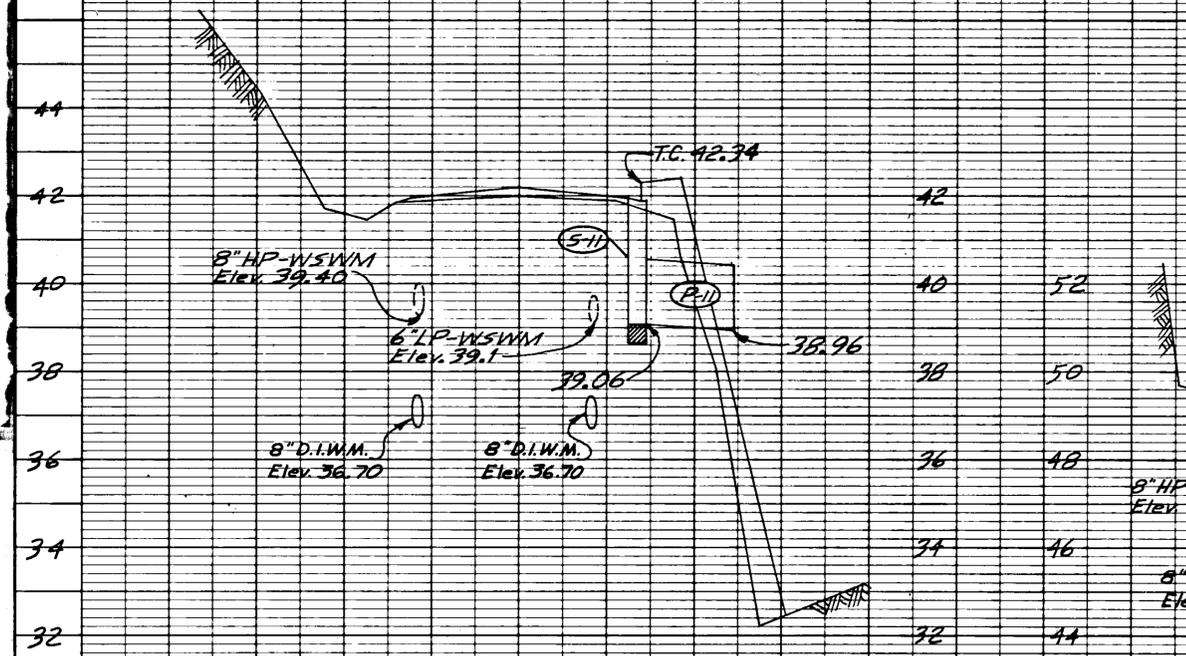
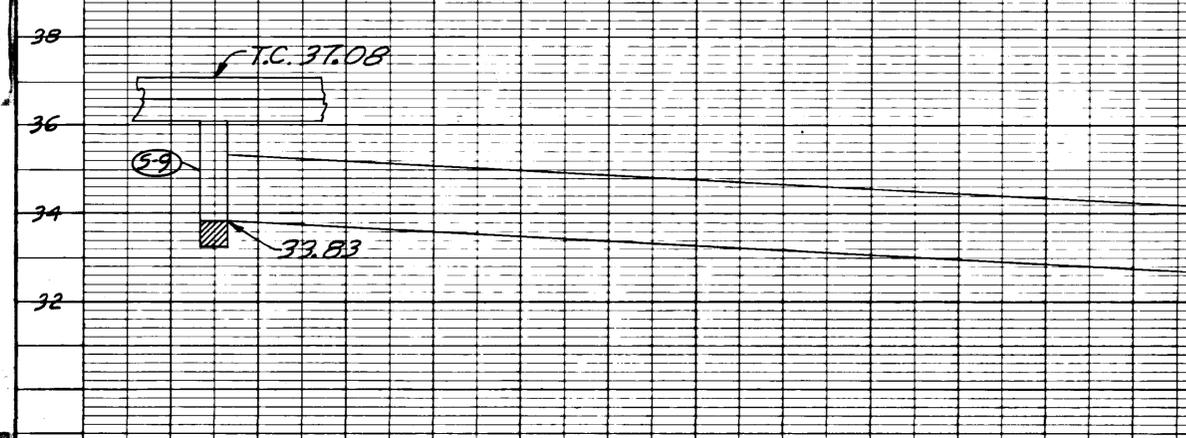
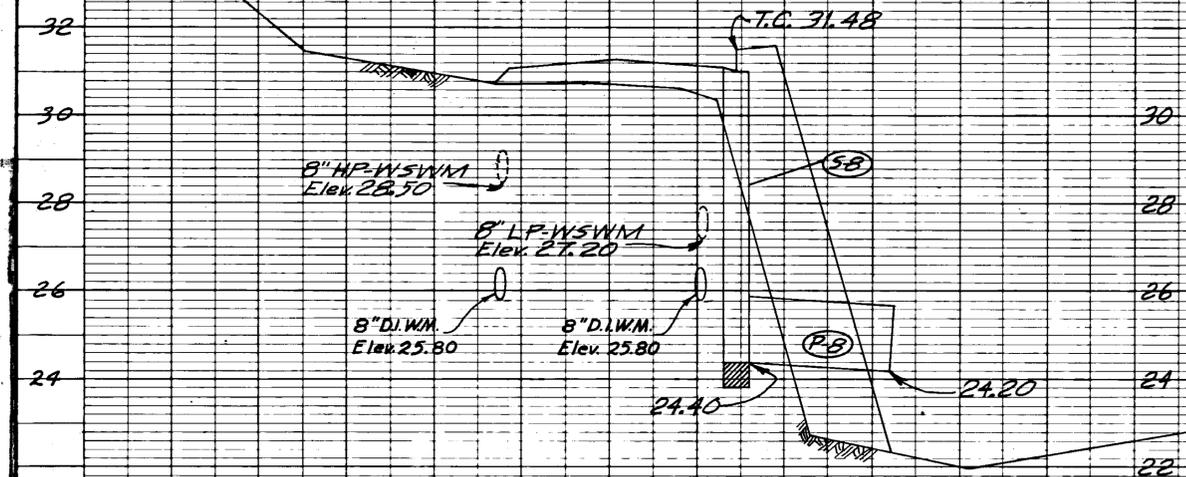
Pipe Number	Pipe Diameter	Pipe Length	From		To	
			Structure	Invert Elev.	Structure	Invert Elev.
P-8	18"	16'19"	S-8	24.40	Outfall	24.20
P-9	18"	266'20"	S-9	33.83	S-10	31.15
P-10	18"	6'	S-10	31.07	Outfall	31.00
P-11	18"	10'	S-11	39.06	Outfall	38.96
P-12	18"	14'12"	S-12	48.49	Outfall	48.35

† Indicates storm drains that are to be Aluminum Conduit. The remaining storm drains are to be Pipe Conduit.

T.C. = Top of Curb — T.G. = Top of Grate
 Note: Location of utilities as shown are approximate. Offset distance is to the back of curb for type A inlets and to centerline of field inlets

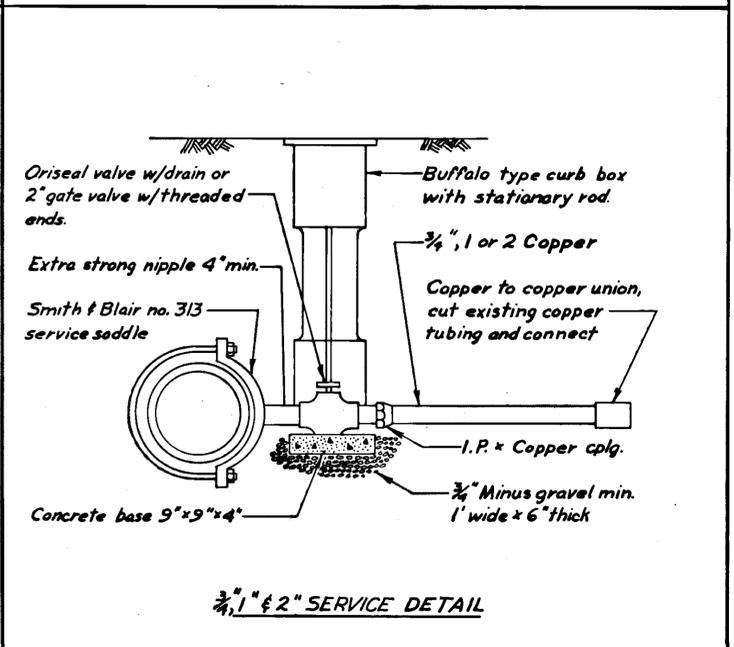
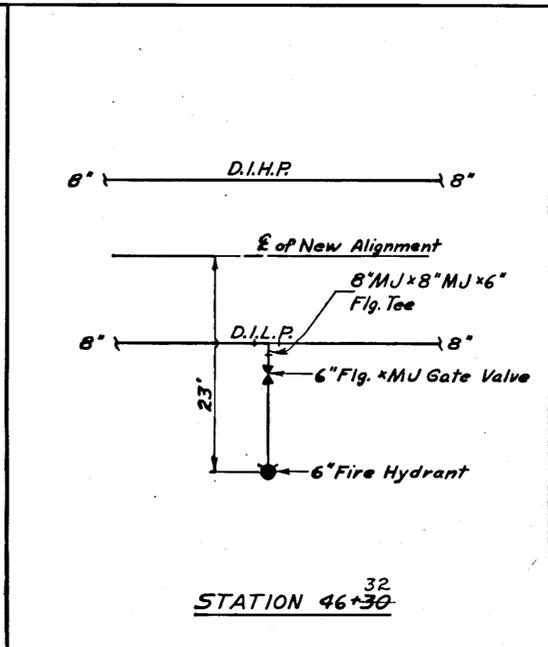
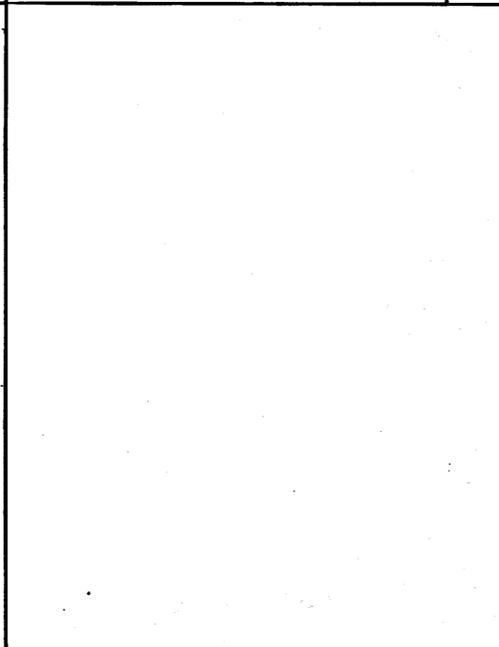
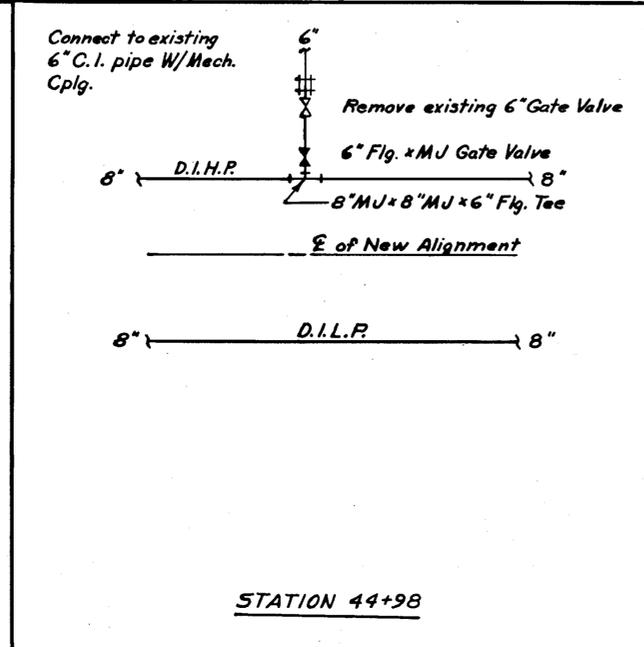
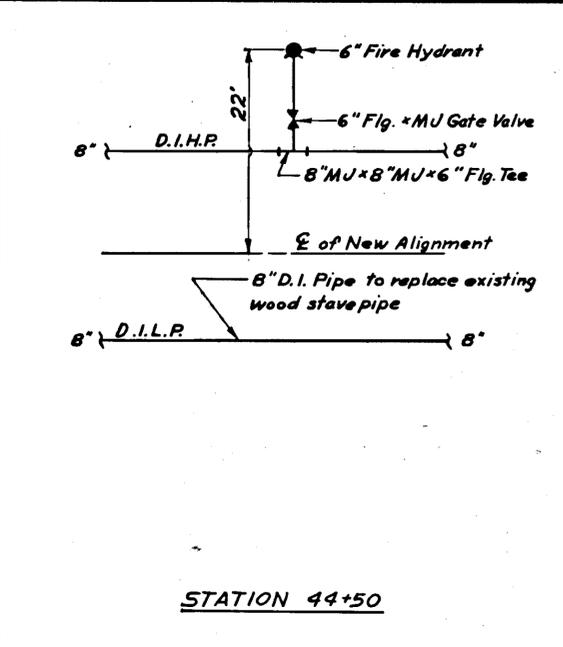
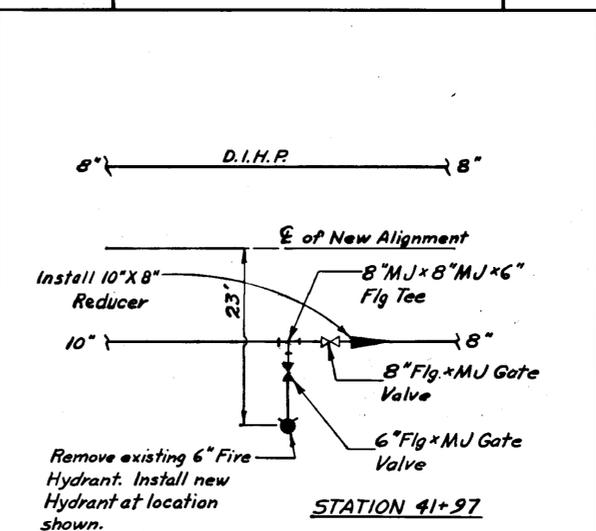
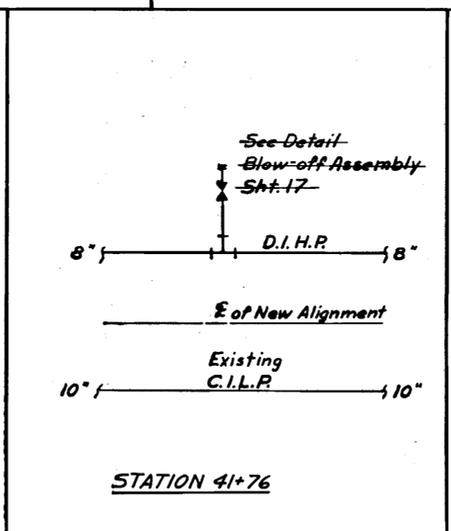
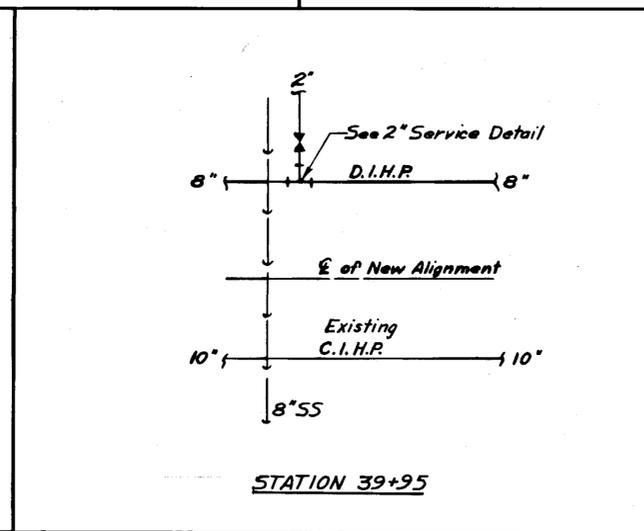
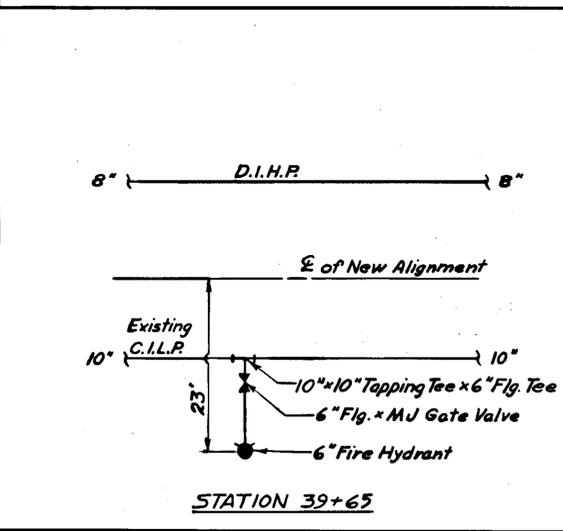
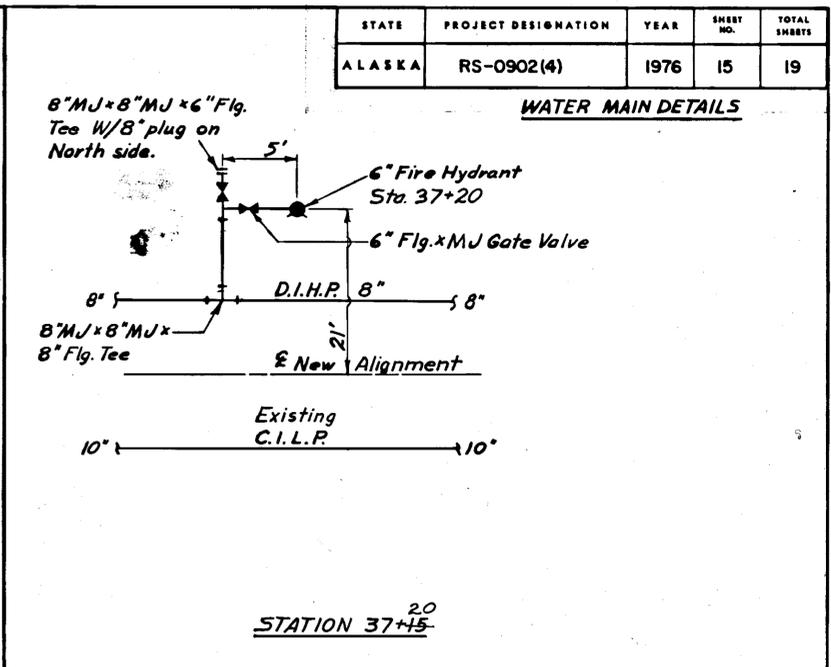
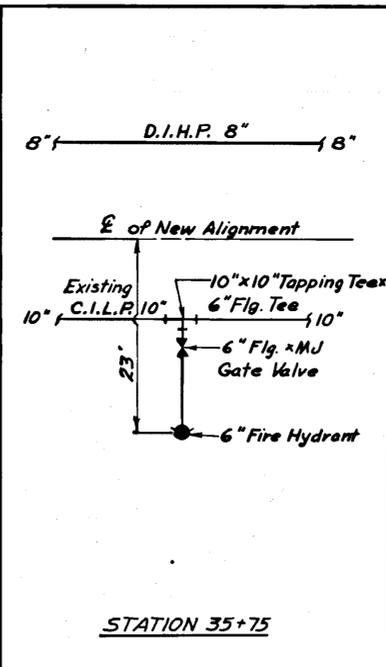
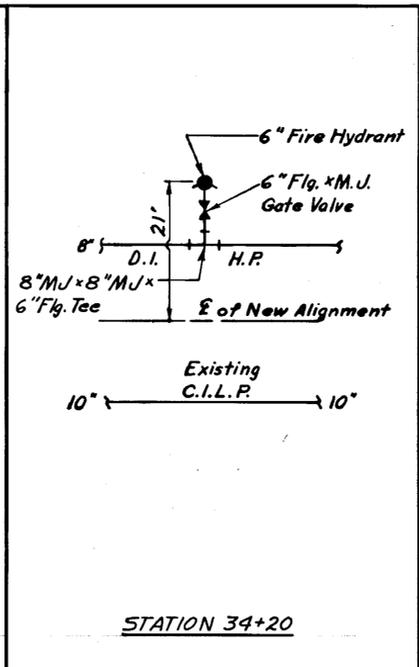
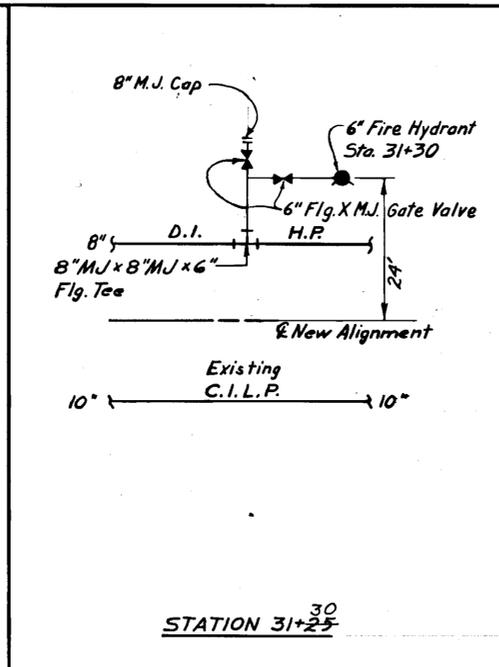
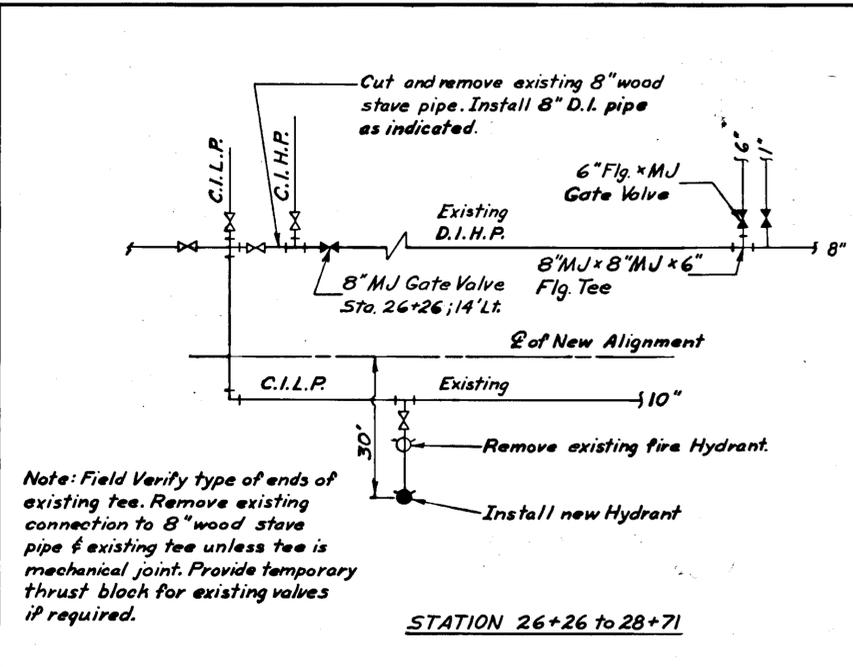
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0902(4)	1976	14	19

DRAINAGE PROFILES

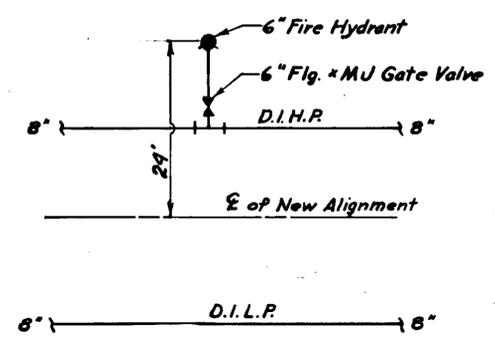


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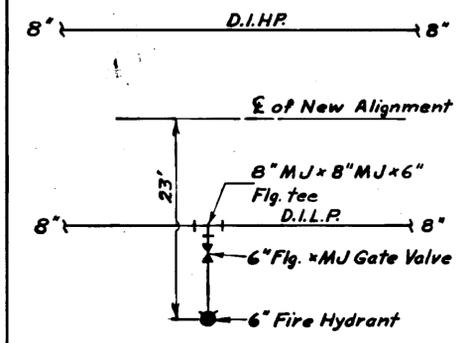
WATER MAIN DETAILS



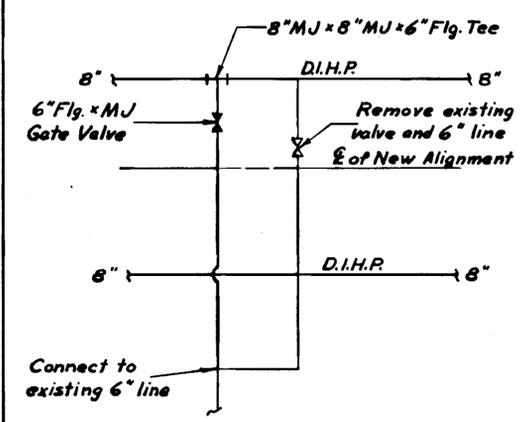
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ALASKA	RS-0902(4)	1976	16	19



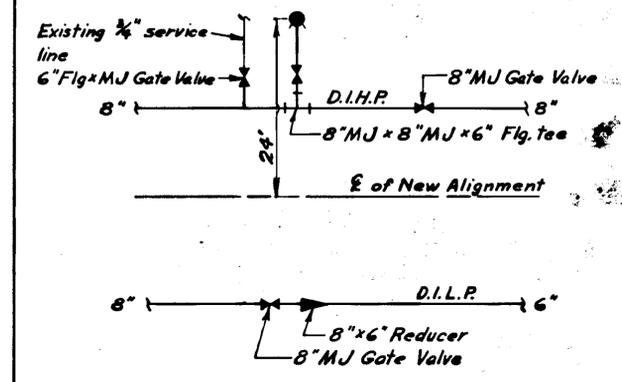
STATION 48+35



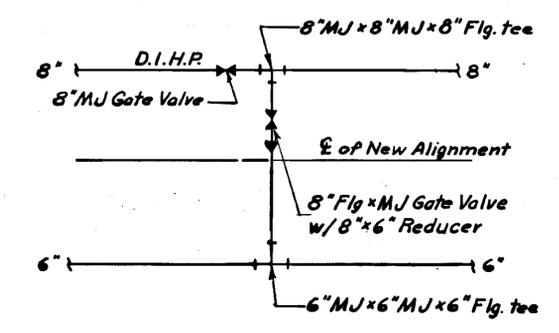
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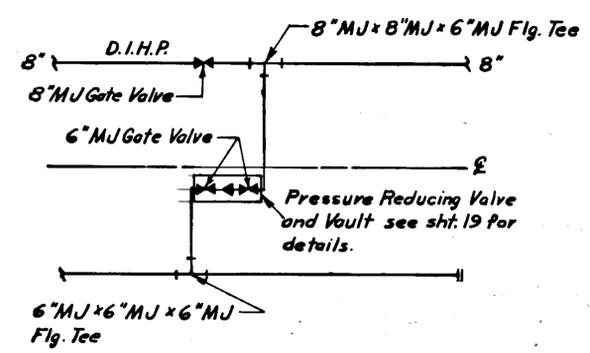
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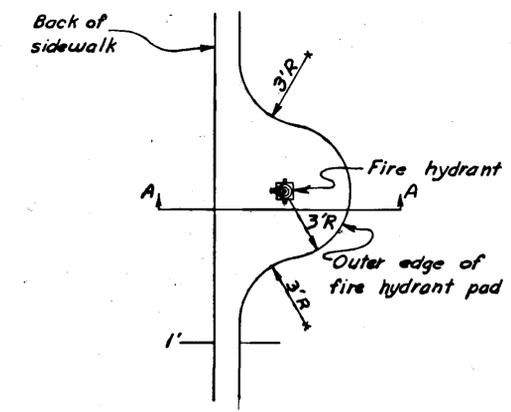
STATION 52+89
STATION 53+49 to 53+53



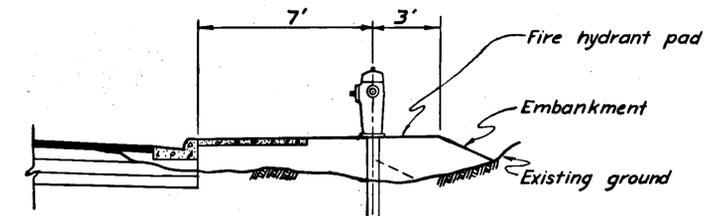
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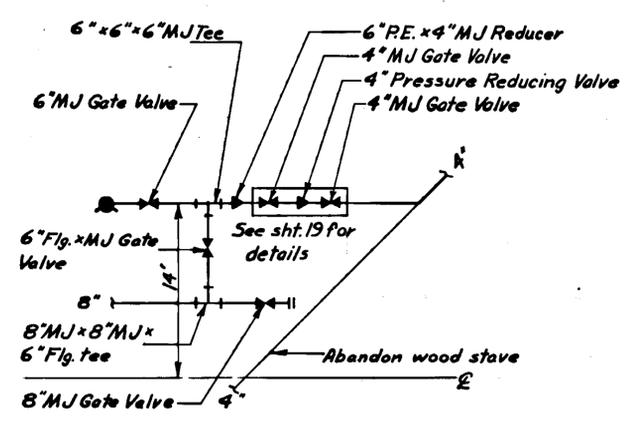
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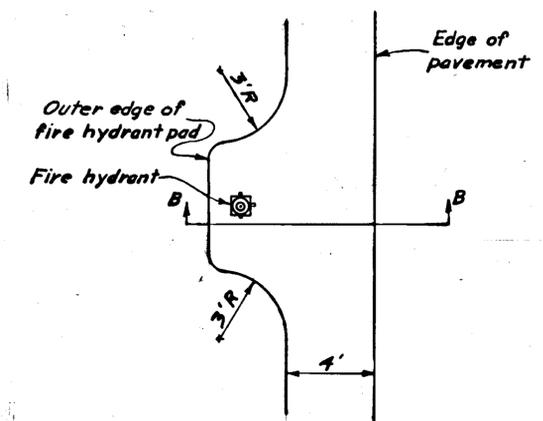
FIRE HYDRANT PAD



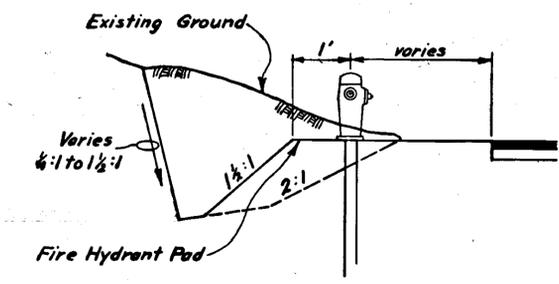
SECTION AA



STATION 59+40

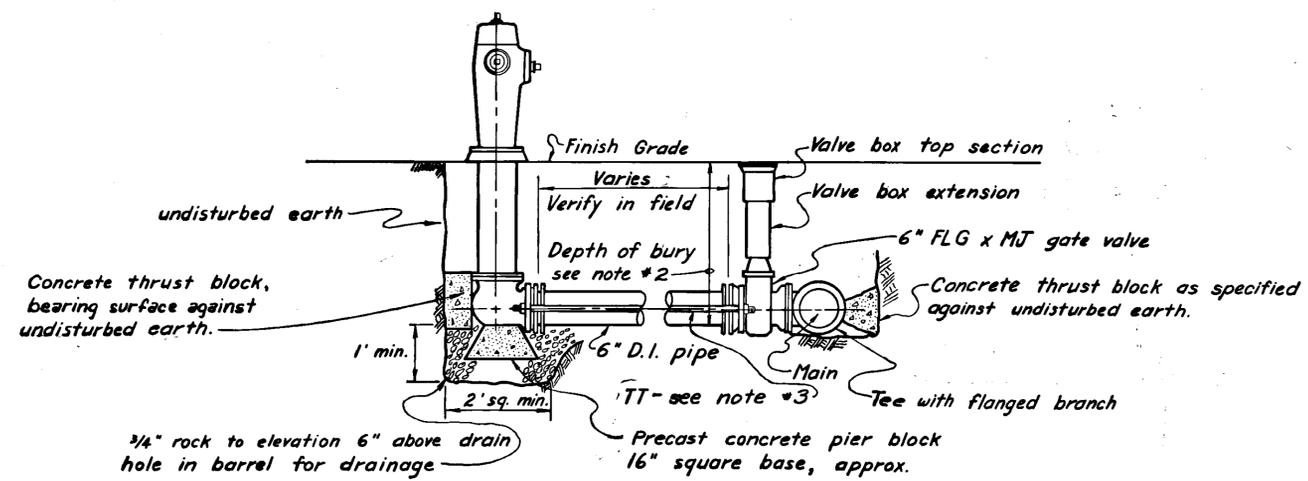


FIRE HYDRANT PAD



SECTION BB

WATER MAIN DETAILS



FIRE HYDRANT ASSEMBLY

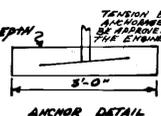
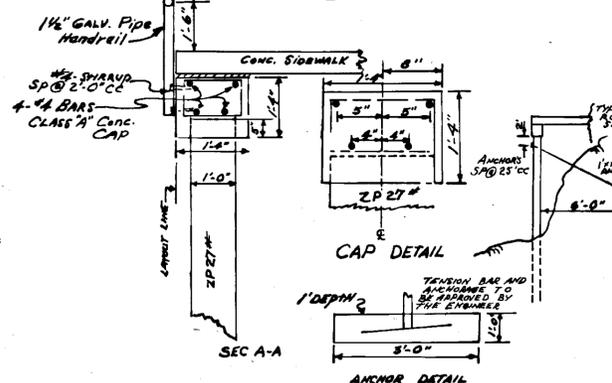
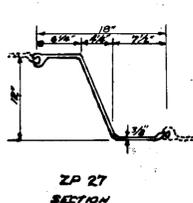
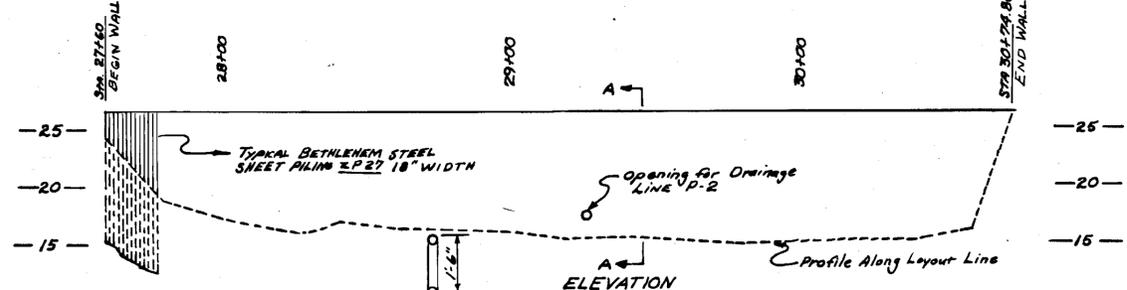
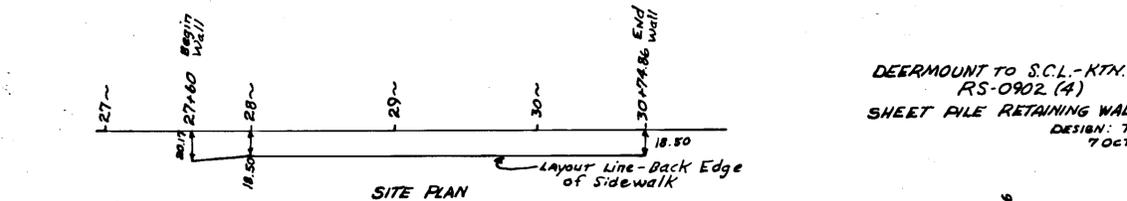
NOTES

1. Provide 2'-6" dia. x 6'-0" long guard post, to be located & installed as directed by the engineer. Paint the exposed part of the guard posts with two coats of white exterior grade paint.
2. See hydrant schedule for depth of bury.
3. TT= thrust ties. Provide 2 - 3/4" dia. rods and clamps for thrust ties. When distance between hydrant and auxiliary valve is 13' or less provide thrust ties for the full length. For distances greater than 13' provide ties from hydrant to behind first bell in pipe.

HYDRANT SCHEDULE			
STATION	DEPTH OF BURY	CONDITION OF HYDRANT	DISTANCE FROM CENTER LINE
26+27-22 R 37.72	5.5'	RELOCATE EXISTING HYDRANT	30'
31+25 L 30	5.5'	NEW HYDRANT	24'
34+20 L	6'	NEW HYDRANT	20' 19 3/4
35+75 R	5.5'	NEW HYDRANT	23'
37+15 L 20	6'	NEW HYDRANT	24'
39+65 R	5.5'	NEW HYDRANT	23'
41+97 R	5.5'	NEW HYDRANT	23' 22 1/2
44+50 L	5.5'	NEW HYDRANT	21'
46+30 R 32	5.5'	NEW HYDRANT	23'
48+35 L	5.5'	NEW HYDRANT	24' 24 3/4
50+25 R	6'	NEW HYDRANT	23' 24
53+45 L 52+89	5.5'	NEW HYDRANT	24'
59+08 L 05	5.5'	NEW HYDRANT	14' 17

WATER MAIN DETAILS

DEERMOUNT TO S.C.L.-KTN.
RS-0902(4)
SHEET PILE RETAINING WALL
DESIGN: T. MOORE
7 OCT. 76



RETAINING WALL NOTES

All materials and workmanship to be in accordance with State of Alaska Standard Specifications for Highway Construction, 1972 edition and 1975 supplementals.

All sheet piling shall be driven to a minimum penetration of 10 feet.

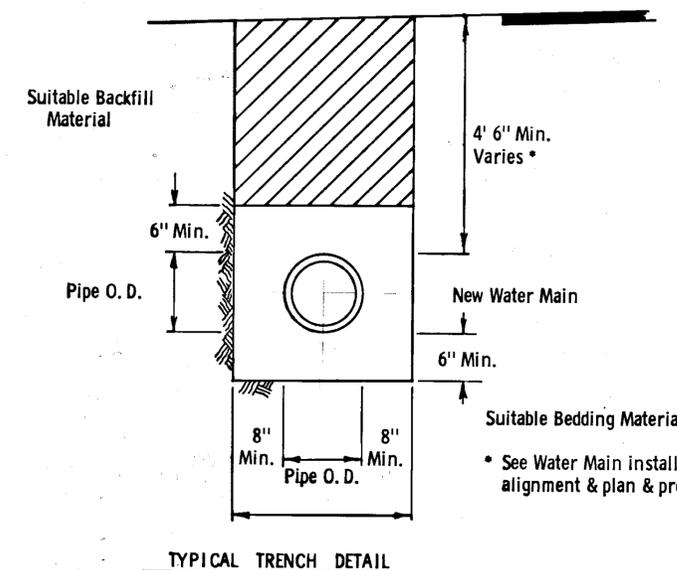
Steel for sheet piling shall conform to standard ASTM A328.

All concrete shall be Class "A".

Reinforcing steel shall be ASTM A 615 Grade 60.

Anchors shall be sp @ 25' center or as directed by the Engineer.

The top 15 foot portion of the sheet piling shall be painted with two coats of coal tar epoxy conforming to structural steel Joint Council PS 401-68T prior to driving. After driving, the accessible areas of damaged coating shall be prepared, cleaned & touched up with the material specified above.



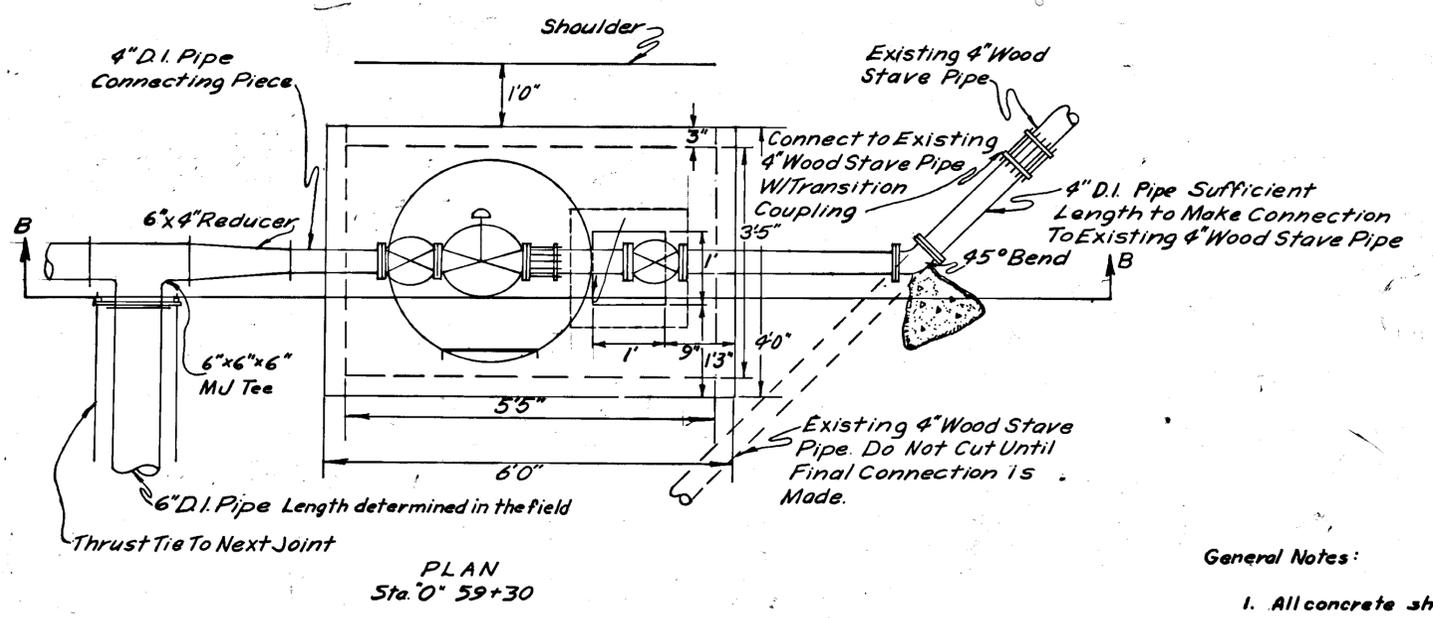
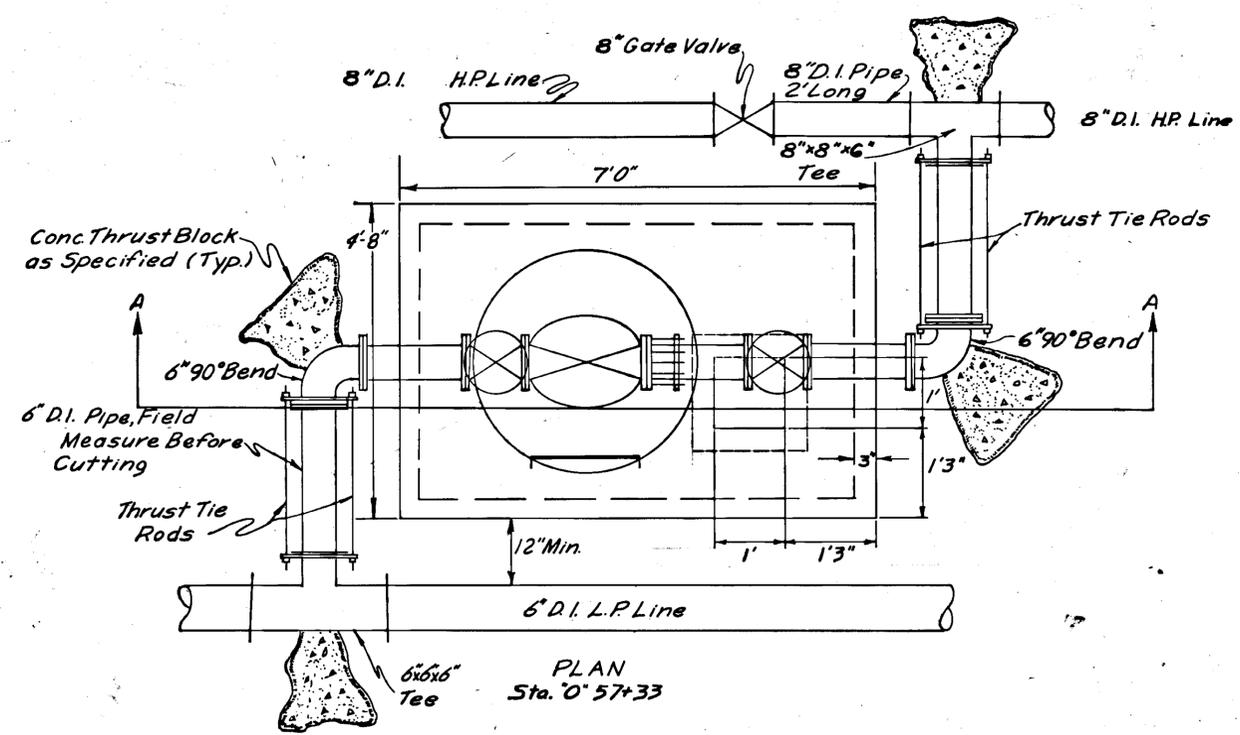
* See Water Main installation table for horizontal alignment & plan & profile for vertical alignment

WATER MAIN APPURTENANCES			
Station	Lt.	Rt.	Remarks
"0" 26+26.35	X		Install 8" G.V. & V.B. see sht. 15 for details
"0" 28+70	X		Install 6" G.V. / V.B. & Conduit. See sht. 15 for details
"0" 28+71.68	X		Install 1" Water Service. See sht. 15 for details.
"0" 31+25	X		Install 8" G.V. / V.B. & Conduit. See sht. 15 for details 6"
"0" 37+15	X		Install 8" G.V. / V.B. & Conduit. See sht. 15 for details
"0" 39+95	X		Install 2" Water Service. See sht. 15 for details.
41+93			
"0" 42+00		X	10" x 8" Reducer. See sht. 15 for details
"0" 42+71.33	12	X	Install 1" Water Service. See sht. 15 for details.
"0" 42+73.69	X		Install 8" G.V. & V.B. See sht. 15 for details.
"0" 43+37.56	X		Install 1" Water Service. See sht. 15 for details.
"0" 44+98.96	X		Install 6" G.V. / V.B. & Conduit. See sht. 15 for details
"0" 45+86.47	32	X	Install 2" Water Service. See sht. 15 for details.
"0" 46+03	X		Install 1/2" Water Service. See sht. 15 for details.
"0" 51+28.27	X		Install 4" G.V. / V.B. & Conduit. 6"
"0" 42+37			Install 3/4" Water Service
"0" 53+27.68	X		Install 3/4" G.V. & V.B. Water service. See sht. 15 for details.
"0" 53+53.10	X		Install 8" G.V. & V.B. & 8" x 6" Reducer. See sht. 16 for details.
"0" 53+60.30	X		Install 8" G.V. & V.B. See sht. 16 for details.
"0" 54+88.97	X		Install 8" G.V. & V.B. & 8" x 6" Reducer. See sht. 16 for details.
"0" 57+33.97	X		Install 8" G.V. & V.B. See sht. 16 for details.
"0" 57+42	X		Install 6" Water Service to Coast Guard Station. See sht. 16 for details.
"0" 57+45.99	X		Install 6" G.V. & V.B. & Cap.
"0" 59+15	X		Install 6" G.V. & V.B. See sht. 16 for details.
"0" 59+23.65	X		Install 8" G.V. & V.B. & Cap.

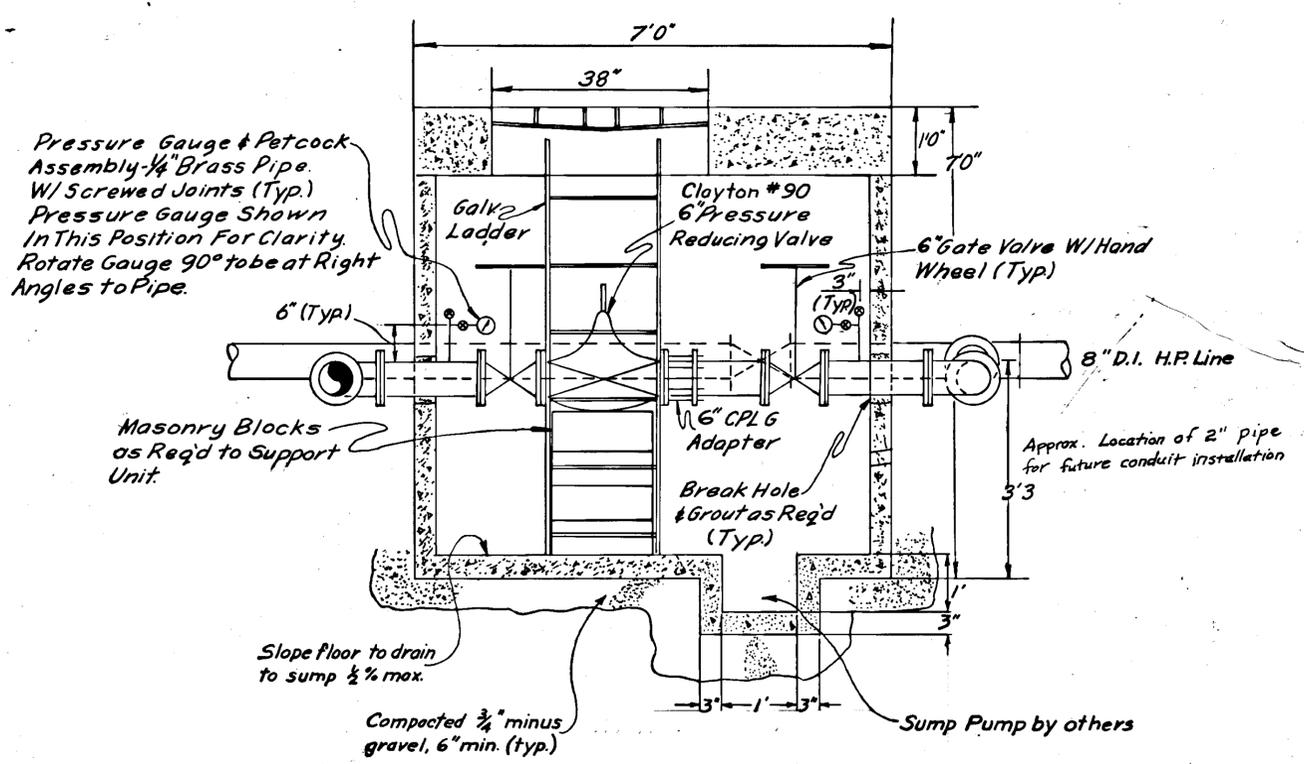
ADJUST VALVE BOX		
Station	Lt.	Rt.
"0" 26+26.00		6'
"0" 26+32.00		6'
"0" 26+38.00		6'
"0" 30+56.00		1'
"0" 30+64.00		1'
"0" 31+94.00		9'
"0" 33+09.00-10.00		9'
"0" 34+21.00		10'
"0" 35+94.00		10'
"0" 38+74.00		10'
"0" 42+05.00		10'

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RS-0902(4)	1976	19	19

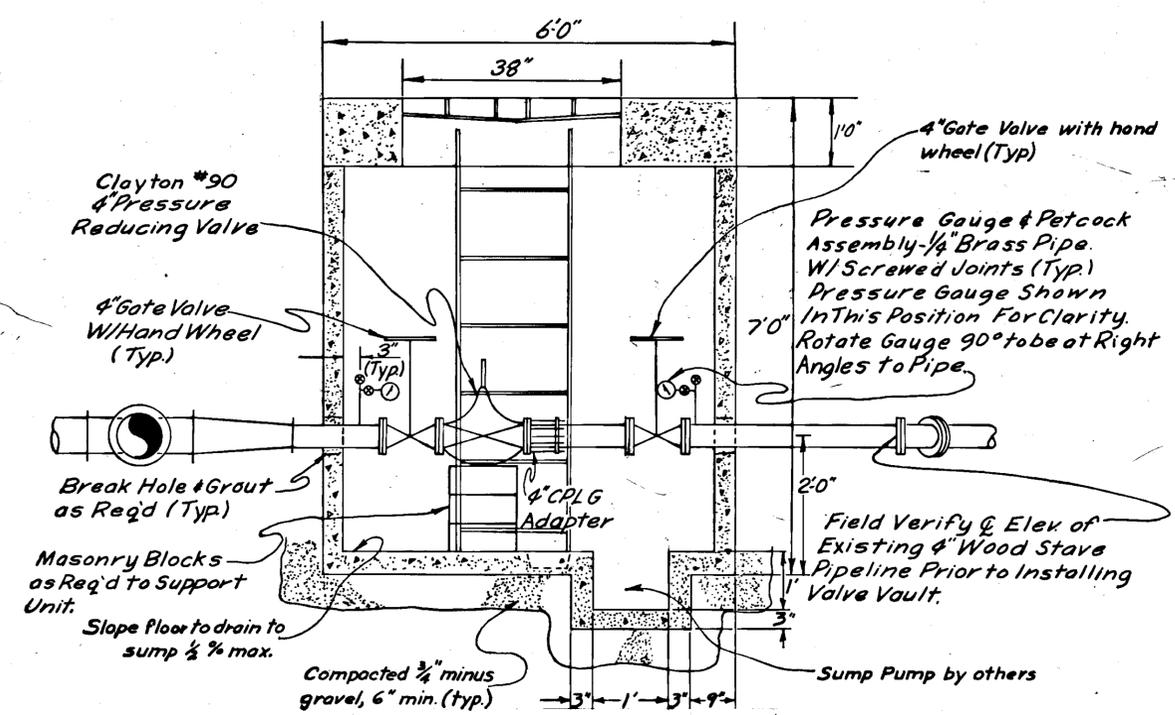
WATER MAIN DETAILS



- General Notes:**
1. All concrete shall be Class A.
 2. Provide 2 power conduit stub outs as directed by the Engineer.



SECTION A-A



SECTION B-B

B-2002(4) DESIGNER: [unreadable]