

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND  
PUBLIC FACILITIES  
SOUTHEAST REGION  
DESIGN AND CONSTRUCTION DIVISION  
JUNEAU, ALASKA

**JNU-BROTHERHOOD BRIDGE  
TO ENGINEER'S CUTOFF**

**GRADING, DRAINAGE & PAVING**

*HES-093-3(5)  
PROJECT NO. 70657*

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-5	TYPICAL SECTIONS
6	ESTIMATE OF QUANTITIES
7	MISCELLANEOUS SUMMARIES
8	TRAFFIC CONTROL PLAN
9-13	PLAN & PROFILE SHEETS
14-15	INTERSECTION DETAILS
16	DRIVEWAY DETAILS
17	PATH PLAN & PROFILE
18-21	SIGNING & STRIPING
22-24	MISCELLANEOUS DETAILS
25	ENVIRONMENTAL DETAILS
26-27	BUS STOP & SHELTER DETAILS
28	BEARING DETAILS
L1-L3	LIGHTING PLANS

The following Standard Drawings apply to this project :

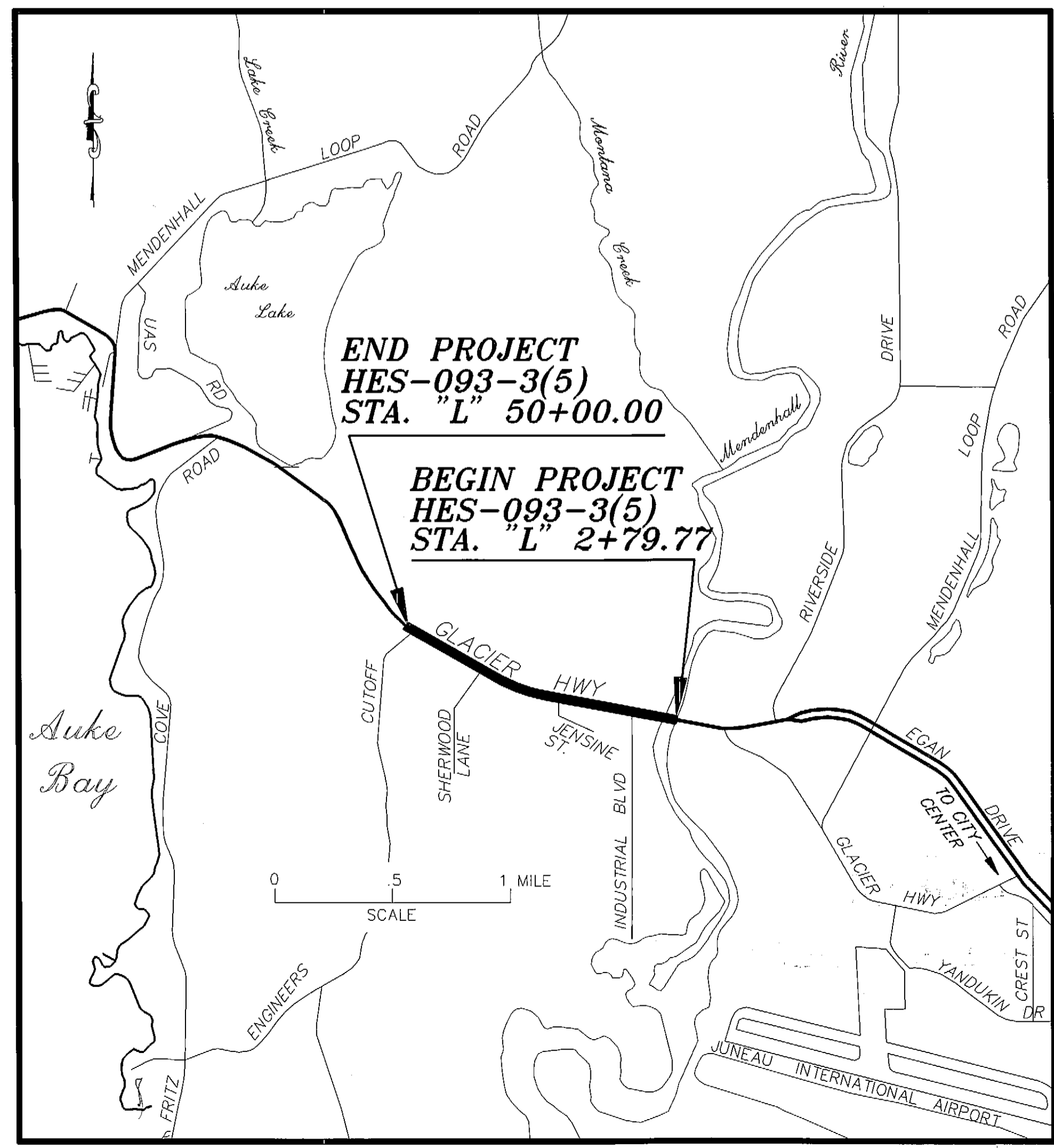
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**DESIGN DESIGNATION**

ADT 1994	10,200
ADT 2014	14,430
DHV 12% (2014)	1,730
% T	5%
V	55 M.P.H.

**PROJECT SUMMARY**

LENGTH OF PROJECT	4,720 FEET 0.90 MILE
LENGTH OF GRADING	3,901 FEET 0.74 MILE
LENGTH OF PAVING	4,402 FEET 0.84 MILE
WIDTH OF PAVING	VARIES 40 FEET TO 62 FEET



**"AS - BUILTS"**

contractor: Fosco Inc./Aggregate Construction Inc.

project engineer: Soc Kreuzenstein

begin date: 8-15-94

end date: 9-2-95

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND  
PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN SECTION

APPROVED *[Signature]* Date 6/10/94  
Regional Preconstruction Engineer

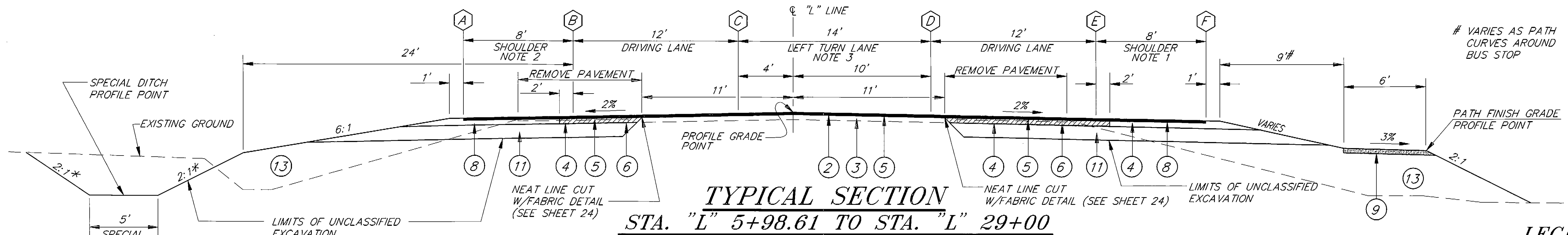
APPROVED *[Signature]* Date 6/10/94  
Director, S.E. Region Design & Construction

**AS-BUILT**

BY: *B.P.* DATE: 1-97

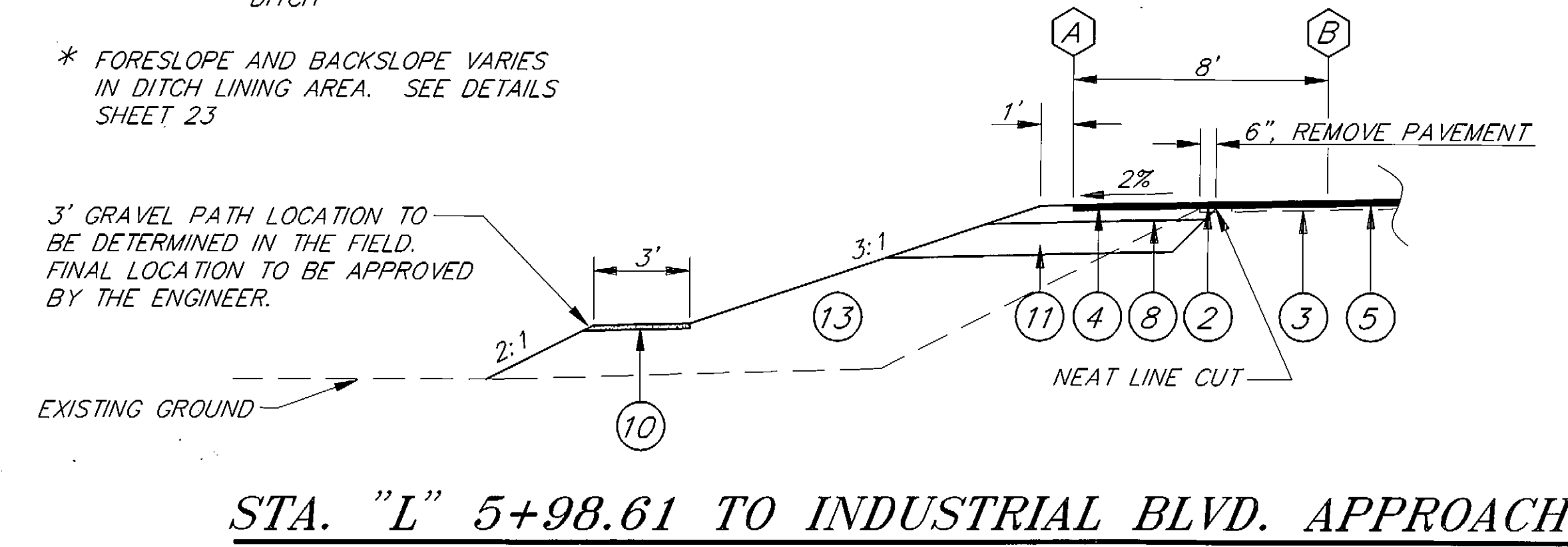
PROJECT NUMBER: <b>70657</b>	ENGINEER'S SEAL
DATE: <b>JUNE 1994</b>	
SHEET <b>1</b> OF <b>28</b>	

P. L. W. U. B. R. O. - E. N. G. I. N. E. E. R. S. 1/1

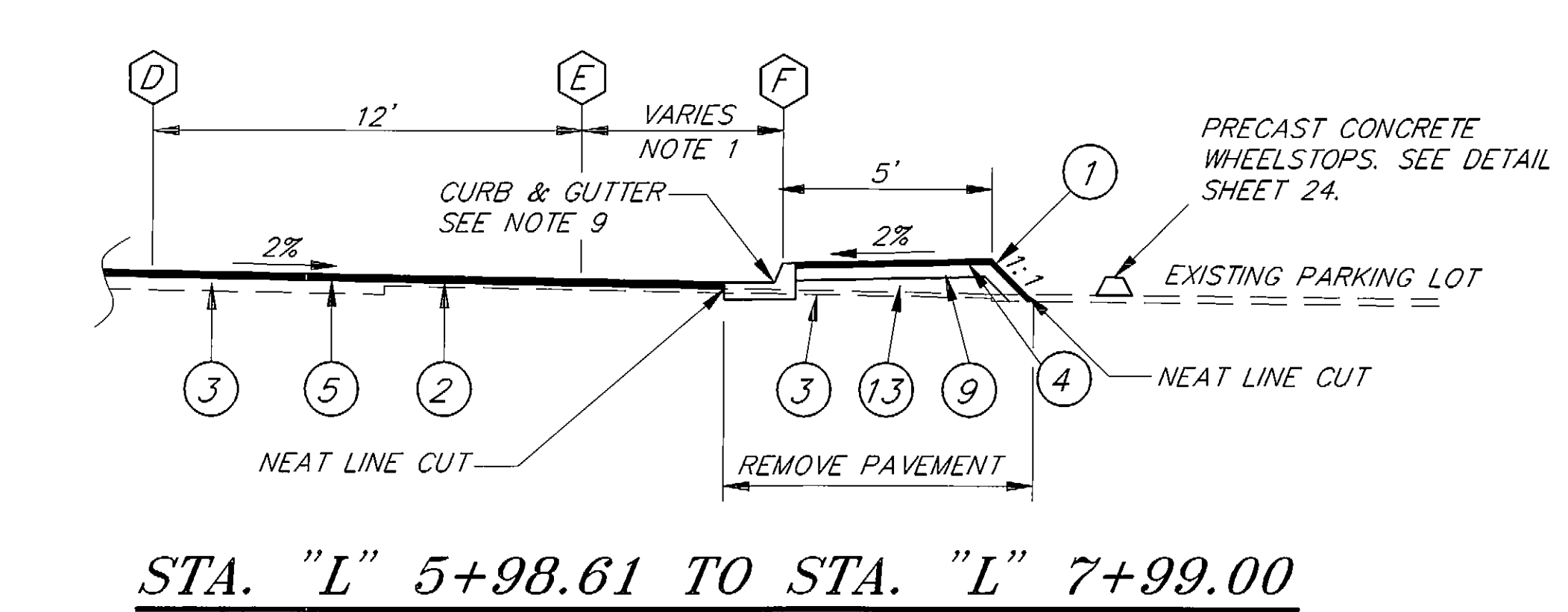


**TYPICAL SECTION**  
**STA. "L" 5+98.61 TO STA. "L" 29+00**

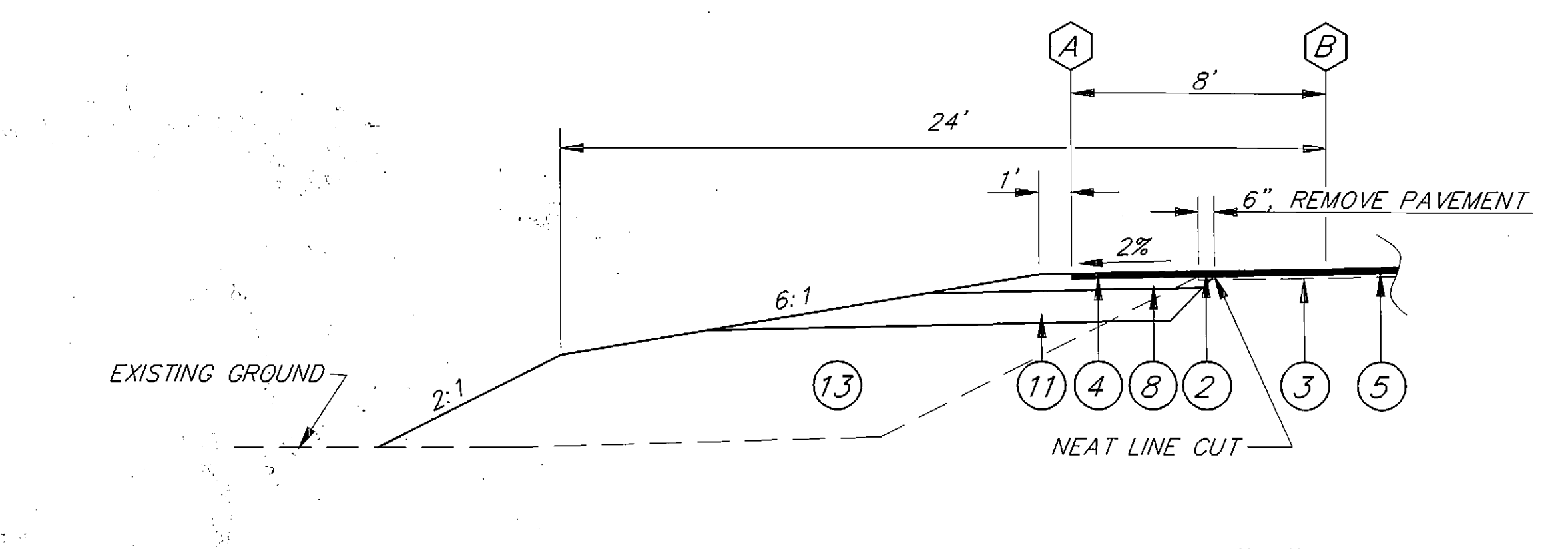
# VARIES AS PATH CURVES AROUND BUS STOP



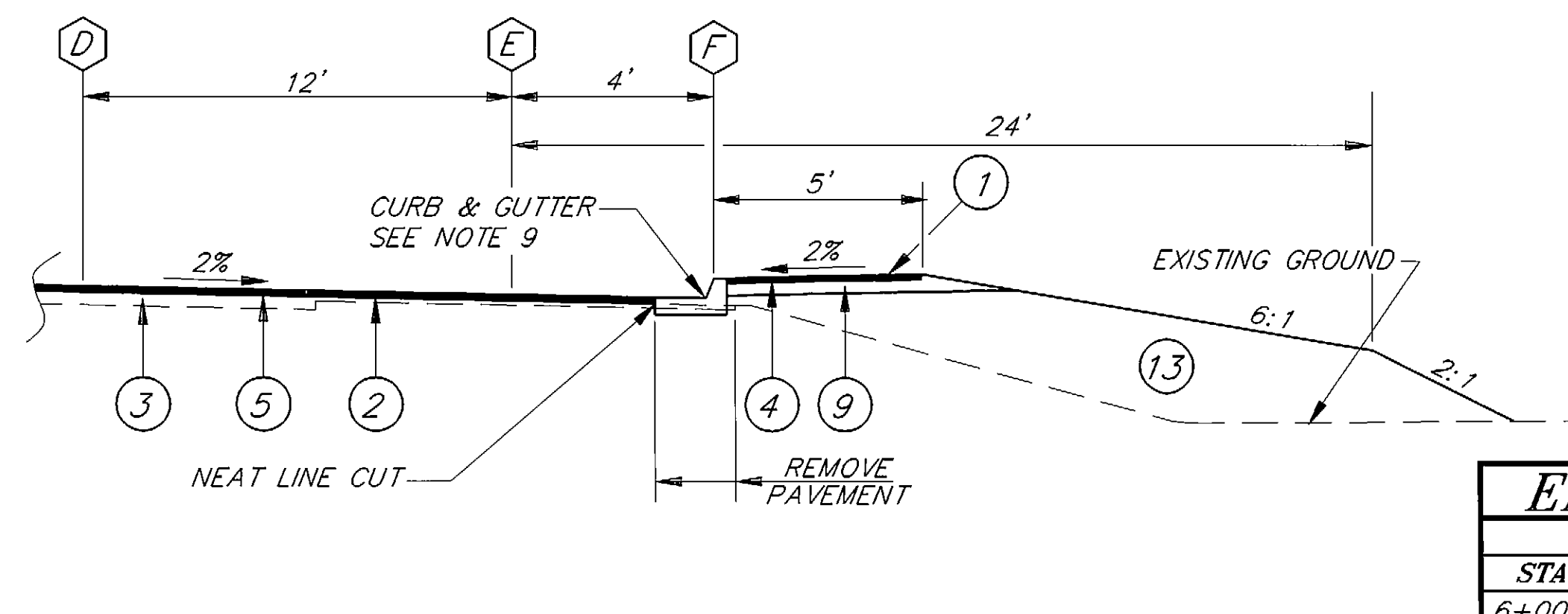
**STA. "L" 5+98.61 TO INDUSTRIAL BLVD. APPROACH**



**STA. "L" 5+98.61 TO STA. "L" 7+99.00**



**INDUSTRIAL BLVD. APPROACH TO STA. "L" 12+00.00**



**STA. "L" 7+99.00 TO STA. "L" 9+32.47**

- LEGEND**
- ① 1 1/2" ASPHALT CONCRETE PAVEMENT
  - ② 2" ASPHALT CONCRETE PAVEMENT
  - ③ EXISTING PAVEMENT
  - ④ PRIME COAT
  - ⑤ TACK COAT
  - ⑥ 4 1/2" ASPHALT TREATED BASE COURSE
  - ⑦ 4" ASPHALT TREATED BASE COURSE
  - ⑧ 4 1/2" CRUSHED AGGREGATE BASE COURSE
  - ⑨ 4" CRUSHED AGGREGATE BASE COURSE
  - ⑩ 2" CRUSHED AGGREGATE BASE COURSE
  - ⑪ 12" SUBBASE GRADING "E"
  - ⑫ 8" SUBBASE GRADING "E"
  - ⑬ BORROW, TYPE "B" OR USEABLE EXCAVATION
  - ⬡ ALIGNMENT POINTS FOR PARTIAL CROSS SECTIONS

- 1. RIGHT SHOULDER VARIATIONS FROM TYPICAL.**  
 SHOULDER ON BROTHERHOOD BRIDGE IS 3'  
 TRANSITION 3' TO 4' FROM MATCH AT BROTHERHOOD BRIDGE TO STA. 6+55.00  
 TRANSITION 4' TO 8' FROM 9+32.47 TO 10+98.29  
 TRANSITION 8' TO 12' FROM STA. 11+44.88 TO STA. 11+68.81  
 12' WIDTH FROM STA. 11+68.81 TO 12+18.81  
 TRANSITION 12' TO 8' FROM STA. 12+18.81 TO STA. 12+34.73  
 TRANSITION 8' TO 12' FROM STA. 30+26.58 TO STA. 30+49.88  
 12' WIDTH FROM STA. 30+49.88 TO 31+02.35  
 TRANSITION 12' TO 8' FROM STA. 31+02.35 TO STA. 31+18.35
- 2. LEFT SHOULDER VARIATIONS FROM TYPICAL.**  
 TRANSITION 8' TO 12' FROM STA. 12+38.44 TO STA. 12+54.44  
 12' WIDTH FROM STA. 12+54.44 TO 13+04.44  
 TRANSITION 12' TO 8' FROM STA. 13+04.44 TO STA. 13+30.00  
 TRANSITION 8' TO 12' FROM STA. 30+01.87 TO STA. 30+18.02  
 12' WIDTH FROM STA. 30+18.02 TO 30+66.94  
 TRANSITION 12' TO 8' FROM STA. 30+68.94 TO STA. 30+93.92

- 3. CENTER LEFT TURN LANE VARIATIONS FROM TYPICAL.**  
 TRANSITION 0' TO 18' FROM 5+98.61 TO 8+98.61.  
 18' WIDTH FROM STA. 8+98.61 TO 11+68.01  
 TRANSITION 18' TO 16' FROM STA. 11+68.01 TO STA. 12+88.01  
 TRANSITION 16' TO 14' FROM STA. 12+88.01 TO STA. 14+08.01  
 TRANSITION 14' TO 0' FROM STA. 33+00.00 TO STA. 38+05.00
- 4. FOR PAVEMENT WIDTH VARIATIONS REQUIRED FOR LEFT TURN LANE AT ENGINEER'S CUTOFF, SEE PAVEMENT EDGE TRANSITION CALLOUTS ON PLAN & PROFILE SHEETS 12 & 13.**
- 5. FROM STA. "L" 45+00 TO E.O.P. STATION "L" 50+00, APPLY TACK COAT TO EXISTING PAVEMENT AND OVERLAY WITH 2" OF ASPHALT CONCRETE.**
- 6. CLEARING AND GRUBBING SHALL BE DONE TO THE PROJECT SLOPE LIMITS.**
- 7. SEED ALL FORESLOPES AND BACKSLOPES.**

- 8. PAVEMENT REMOVAL DISTANCES SHOWN ARE FROM EDGE OF EXISTING PAVEMENT, EXCEPT FOR RIGHT SIDE SECTION FROM STA. "L" 5+98.61 TO STA. "L" 7+99.00.**
- 9. CURB & GUTTER SHALL BE CONSTRUCTED PER STANDARD DRAWING 1-20.11 STANDARD CURB & GUTTER, BUT TOP OF CURB NOSE RADIUS SHALL BE CHANGED FROM 1 1/2" TO 2".**
- 10. ALL MATERIAL EXCAVATED FROM THE EXISTING ROADWAY PRISM IS ASSUMED TO BE USEABLE EXCAVATION. ALL OTHER EXCAVATION IS ASSUMED TO BE WASTE.**

EDGE OF NEW PAVEMENT SUMMARY					
LEFT			RIGHT		
STATION	OFFSET	REMARKS	STATION	OFFSET	REMARKS
6+00	20.00		6+00	15.00	MATCH EXISTING FACE OF CURB
8+80.53	26.00		6+55.00	18.27	#
12+38.44	26.00		8+98.29	28.00	#
12+54.44	30.00		9+32.47	28.00	# BEGIN BROTHERHOOD PARK APPROACH RADII
13+04.44	30.00		10+98.29	32.00	END BROTHERHOOD PARK APPROACH RADII
13+30.00	25.30		11+44.88	32.00	
14+08.01	24.00		11+68.81	35.99	
			12+18.81	35.15	
30+01.87	24.00		12+34.73	30.89	
30+18.02	28.00		12+88.17	30.00	
30+68.94	28.00		30+26.58	30.00	
30+93.92	24.00		30+49.88	34.00	
33+00.00	24.00		31+02.35	34.00	
38+05.00	20.00		31+18.35	30.00	
45+00.00		MATCH OVERLAY	33+00.00	30.00	
			38+05.00	20.00	
			41+50.00	20.00	
			44+00.00*	31.91	
			45+00.00*		MATCH OVERLAY

\* 1968' RADIUS BETWEEN POINTS  
 # FACE OF CURB  
 TABLE DOES NOT INCLUDE PAVEMENT FOR BUS STOP SHELTER PADS.

**AS-BUILT**  
 BY: B.D. DATE: 6/97

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

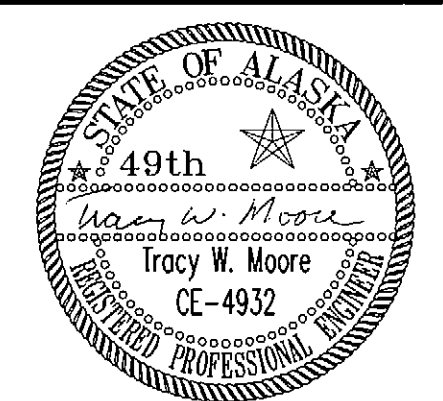
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P:\JUN\BRO-ENG\DR\TYPBOP 1=4		

**RECORD OF REVISIONS**

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 SOUTHEAST REGION DESIGN & CONSTRUCTION

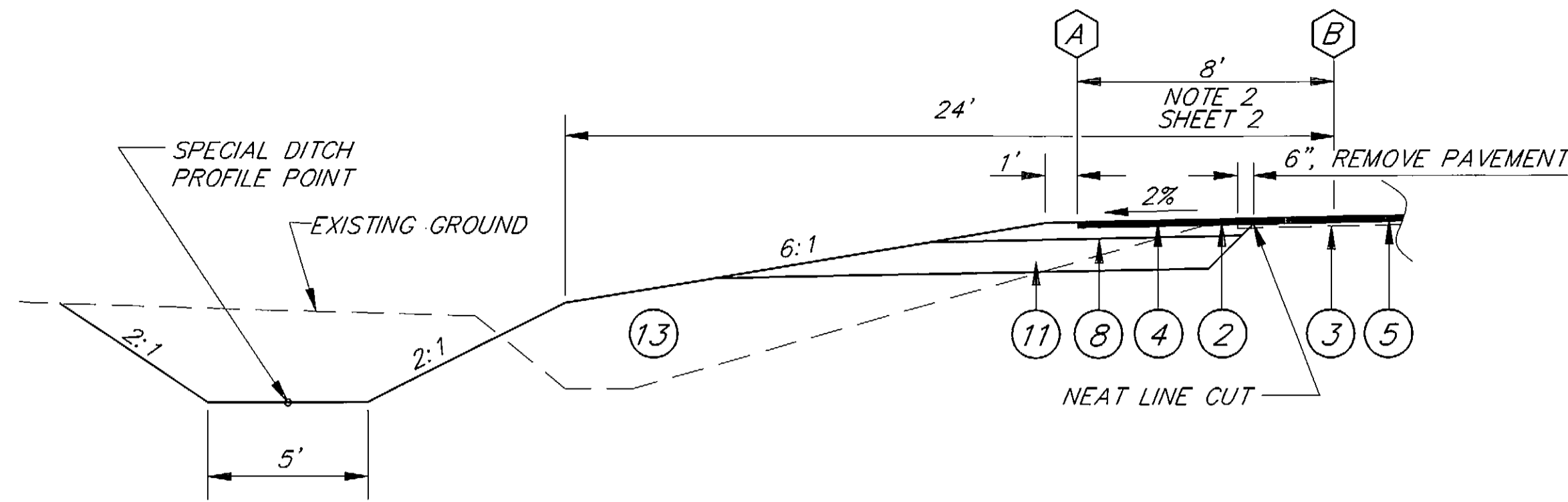
JUNEAU BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF ALASKA  
 HES-093-3(5) 70657  
**TYPICAL SECTIONS**  
 STA. "L" 5+98.61 TO STA. "L" 29+00

DESIGNED BY: L.P. CARROLL  
 DRAWN BY: AutoCAD/R. SNYDER  
 CHECKED BY: T.W. MOORE  
 PROJECT NO. 70657  
 DATE: JUNE 1994  
 SHEET 2 OF 28

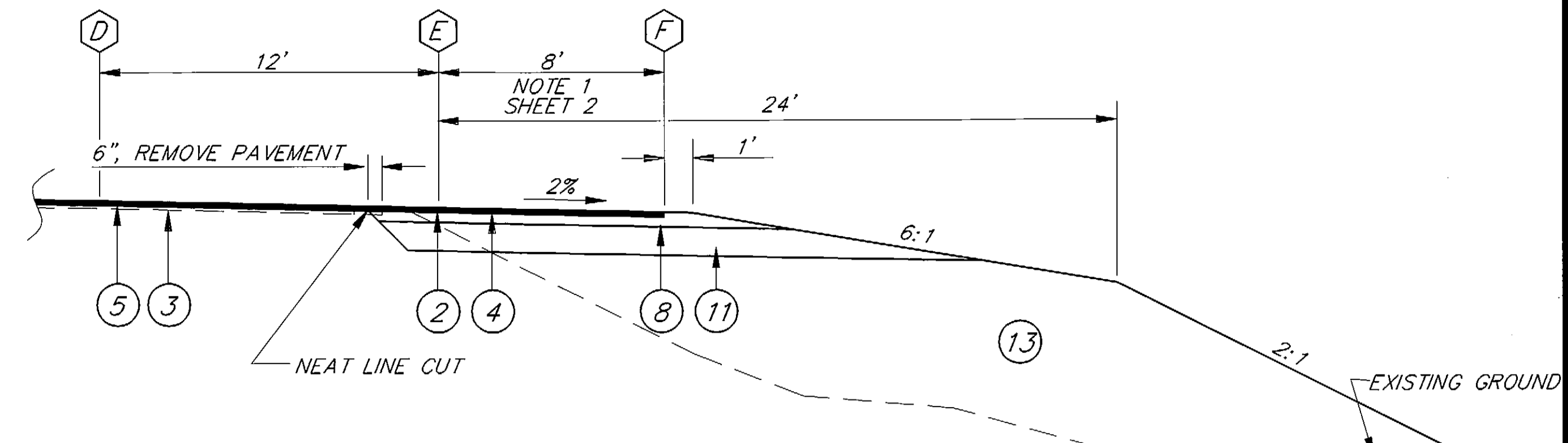


**LEGEND**

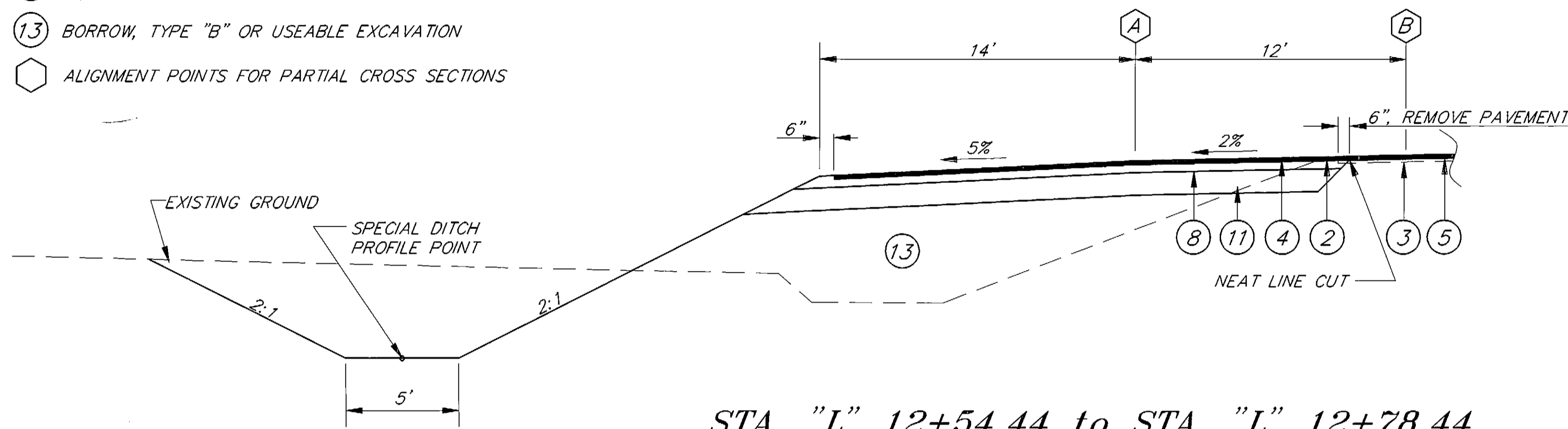
- ① 1 1/2" ASPHALT CONCRETE PAVEMENT
- ② 2" ASPHALT CONCRETE PAVEMENT
- ③ EXISTING PAVEMENT
- ④ PRIME COAT
- ⑤ TACK COAT
- ⑥ 4 1/2" ASPHALT TREATED BASE COURSE
- ⑦ 4" ASPHALT TREATED BASE COURSE
- ⑧ 4 1/2" CRUSHED AGGREGATE BASE COURSE
- ⑨ 4" CRUSHED AGGREGATE BASE COURSE
- ⑩ 2" CRUSHED AGGREGATE BASE COURSE
- ⑪ 12" SUBBASE GRADING "E"
- ⑫ 8" SUBBASE GRADING "E"
- ⑬ BORROW, TYPE "B" OR USEABLE EXCAVATION
- ⬡ ALIGNMENT POINTS FOR PARTIAL CROSS SECTIONS



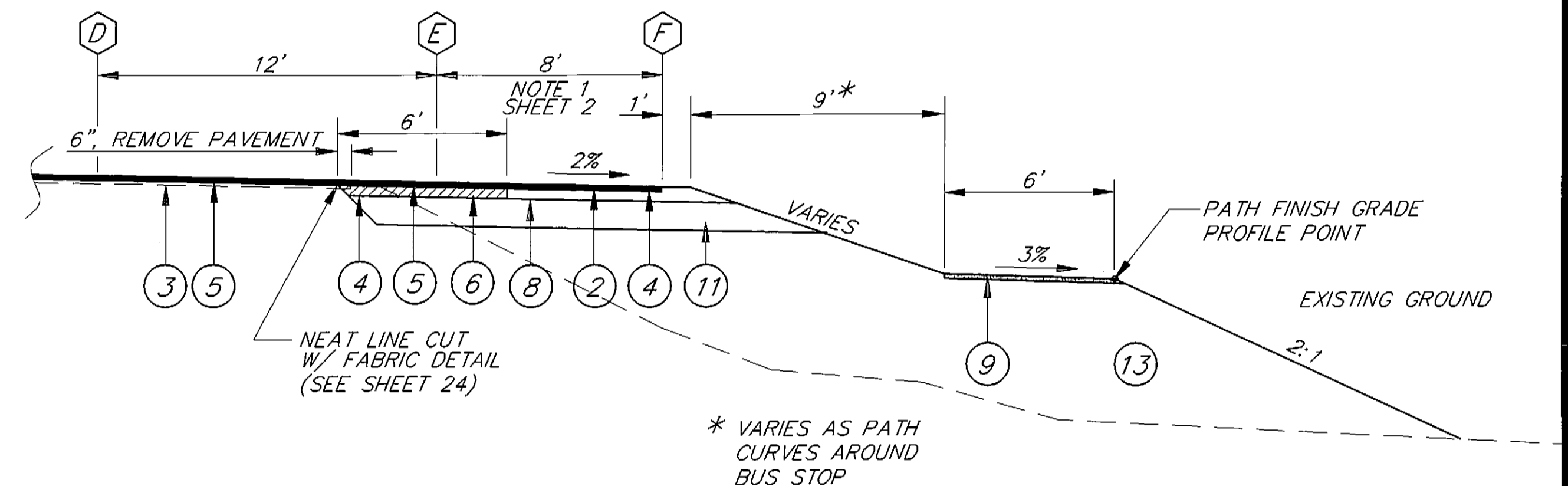
**STA. "L" 12+00.00 TO STA. "L" 12+54.44**  
**STA. "L" 12+78.44 TO STA. "L" 13+29.00**



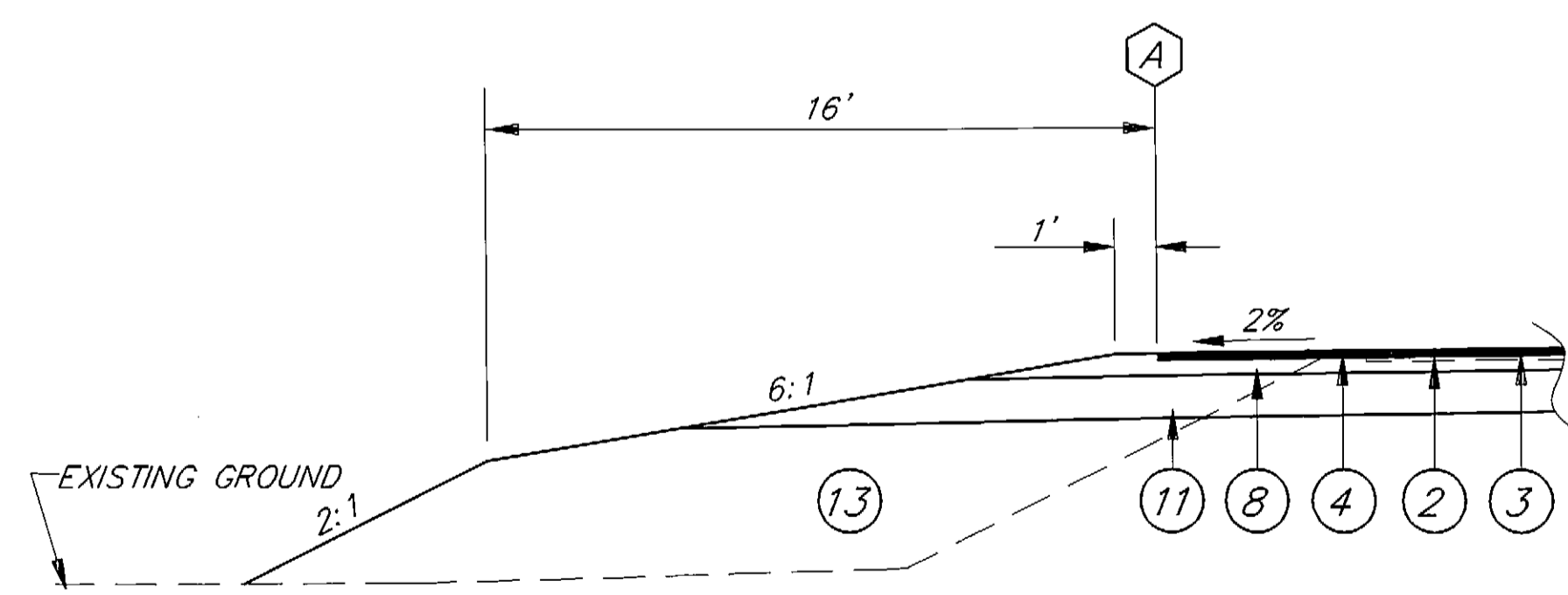
**STA. "L" 9+32.47 TO STA. "L" 11+20.00**



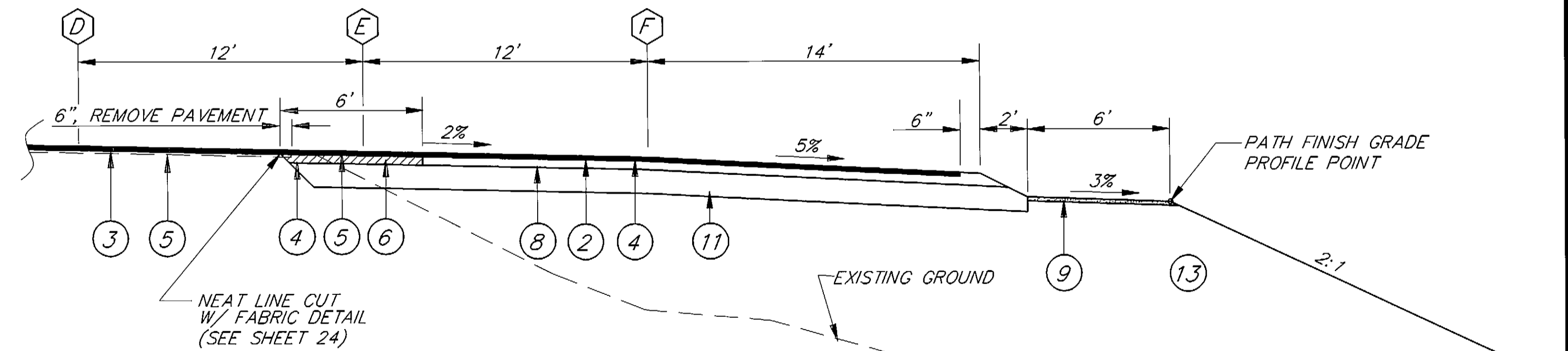
**STA. "L" 12+54.44 to STA. "L" 12+78.44**  
**BUS STOP**



**STA. "L" 11+20.00 TO STA. "L" 11+94.81**  
**STA. "L" 12+18.81 TO STA. "L" 13+29.00**



**STA. "L" 25+75.00 to STA. "L" 29+00.00**



**STA. "L" 11+94.81 TO STA. "L" 12+18.81**  
**BUS STOP**

**AS-BUILT**  
 BY: *B.A.* DATE: *1-99*

**AS-BUILT**  
 BY: *B.A.* DATE: *1-99*

NOTE: SEE TYPICAL SECTION NOTES ON SHEET 2.

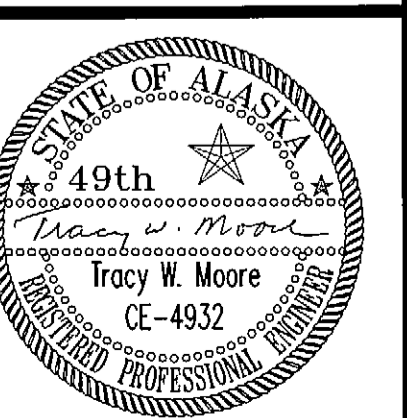
NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

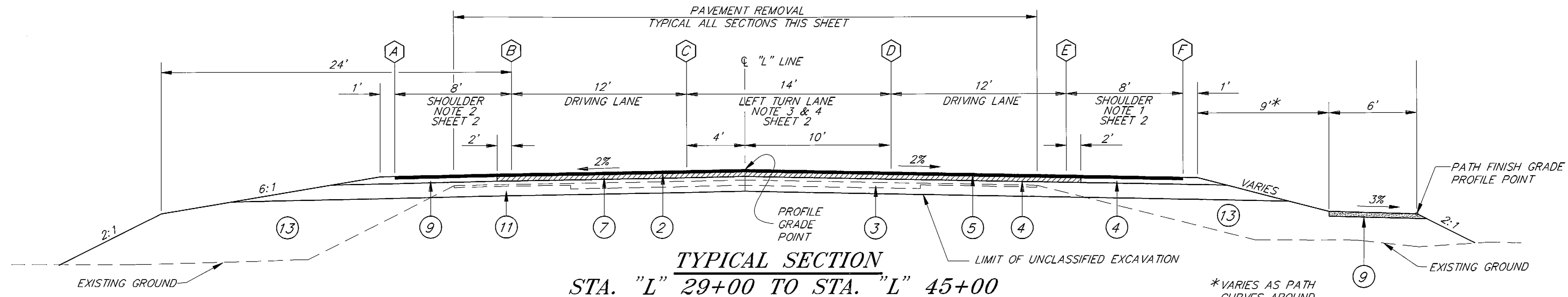
RECORD OF REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGE

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 SOUTHEAST REGION DESIGN & CONSTRUCTION

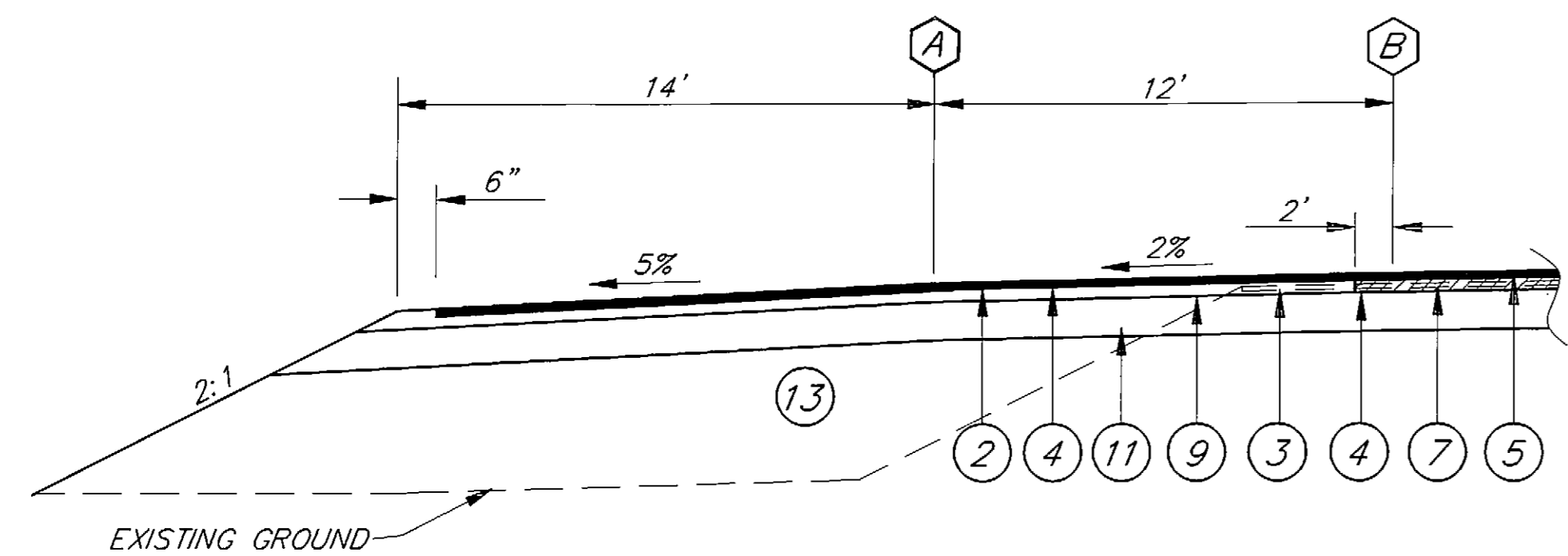
JUNEAU BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF ALASKA  
 HES-093-3(5) 70657  
 STA. "L" 9+33 TO STA. "L" 29+00  
 TYPICAL SECTIONS

DESIGNED BY: **L.P. CARROLL**  
 DRAWN BY: **AutoCAD/R. SNYDER**  
 CHECKED BY: **T.W. MOORE**  
 PROJECT NO. **70657**  
 DATE: **JUNE 1994**  
 SHEET 3 OF 28

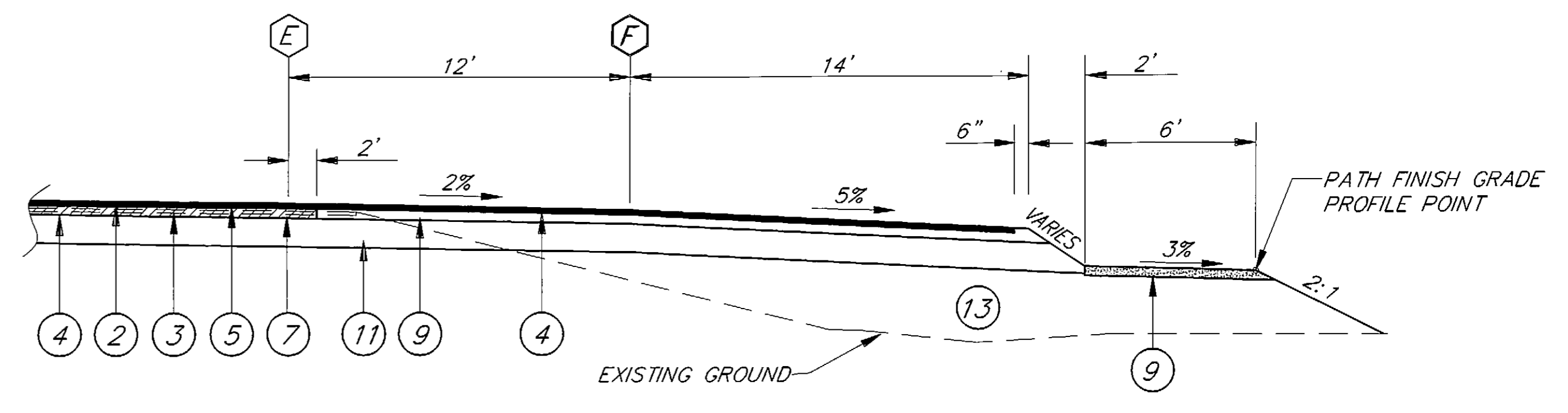




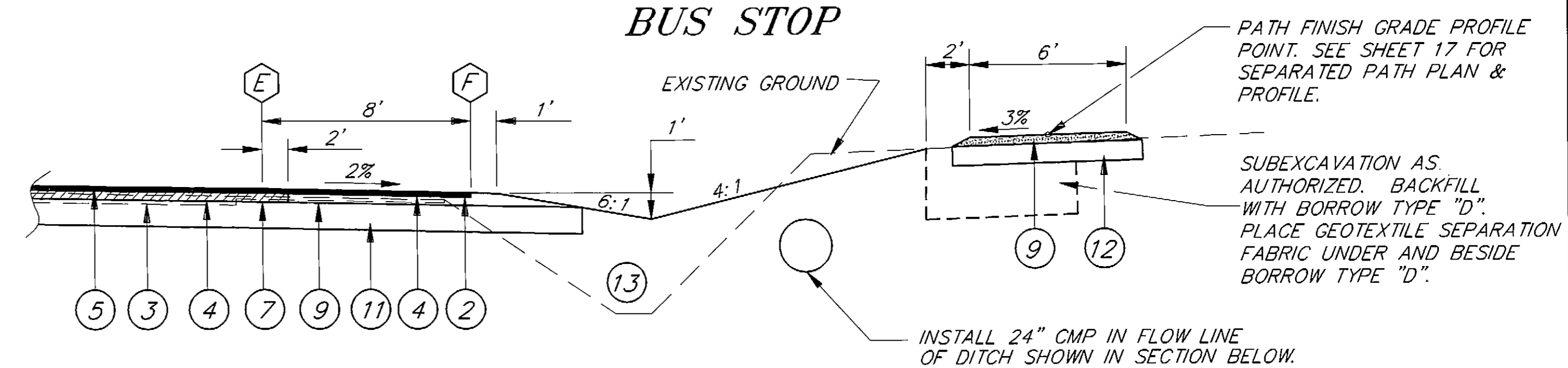
**TYPICAL SECTION**  
**STA. "L" 29+00 TO STA. "L" 45+00**



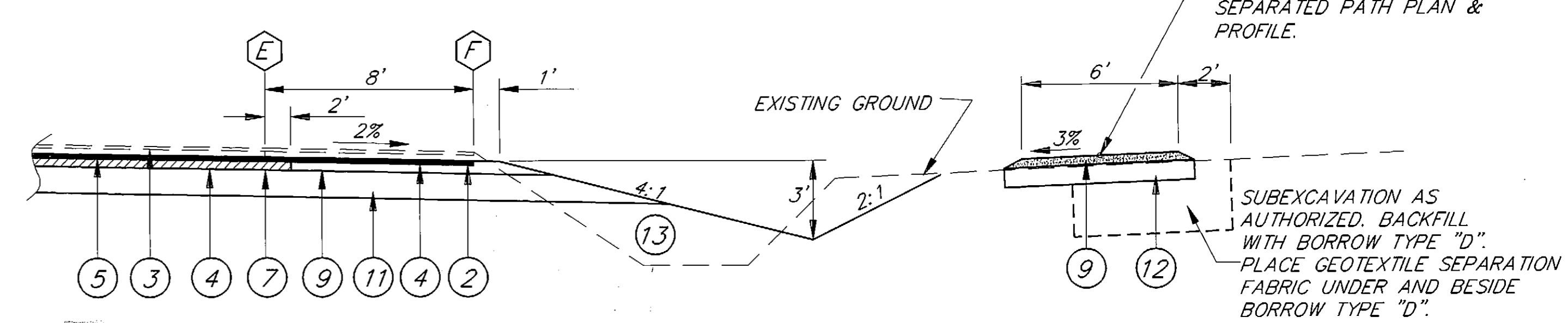
**STA. "L" 30+18.02 TO STA. "L" 30+41.56**  
**BUS STOP**



**STA. "L" 30+77.94 TO STA. "L" 31+02.35**  
**BUS STOP**



**STA. "L" 35+75 TO STA. "L" 36+75**



**CHRIST LUTHERAN EVANGELICAL CHURCH TO STA. "L" 35+75**

**AS-BUILT**  
**STA. "L" 36+75 TO STA. "L" 45+00**

**AS-BUILT**  
 BY: B.A. DATE: 1-97

**AS-BUILT**  
 BY: B.A. DATE: 1-97

JUNEAU BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF ALASKA  
 HES-093-3(5) 70657  
**STA. "L" 29+00 TO STA. "L" 45+00**  
**TYPICAL SECTIONS**

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS  
 DESIGNED BY: L.P. CARROLL  
 DRAWN BY: AutoCAD/R. SNYDER  
 CHECKED BY: T.W. MOORE  
 PROJECT NO. 70657  
 DATE: JUNE 1994  
 SHEET 4 OF 28



**GENERAL NOTES:**

1. VERTICAL AND HORIZONTAL ALIGNMENTS SHOWN ON THESE PLANS ARE SUBJECT TO MINOR REVISIONS.
2. STORM INLET LOCATIONS AND ELEVATIONS SHOWN ON THESE PLANS ARE SUBJECT TO MINOR REVISIONS.
3. CULVERT LENGTHS AND LOCATIONS SHOWN ON THESE PLANS ARE SUBJECT TO MINOR REVISIONS.
4. THE LOCATION OF ALL UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY AND SHOULD BE VERIFIED BY CONTRACTOR.
5. THE SUPERELEVATION SHALL BE REVOLVED ABOUT THE CENTERLINE. THE RATE OF SUPERELEVATION AND OTHER SUPERELEVATION DETAILS ARE SHOWN ON THE PLAN AND PROFILE SHEETS.
6. PAVEMENT REMOVED UNDER THIS CONTRACT SHALL BE STOCKPILED AT THE SITE LOCATED AT THE INTERSECTION OF MENDENHALL LOOP ROAD AND EGAN DRIVE.
7. ALL WASTE MATERIAL SHALL BE PLACED OUTSIDE THE PROJECT LIMITS AT A LOCATION PROVIDED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

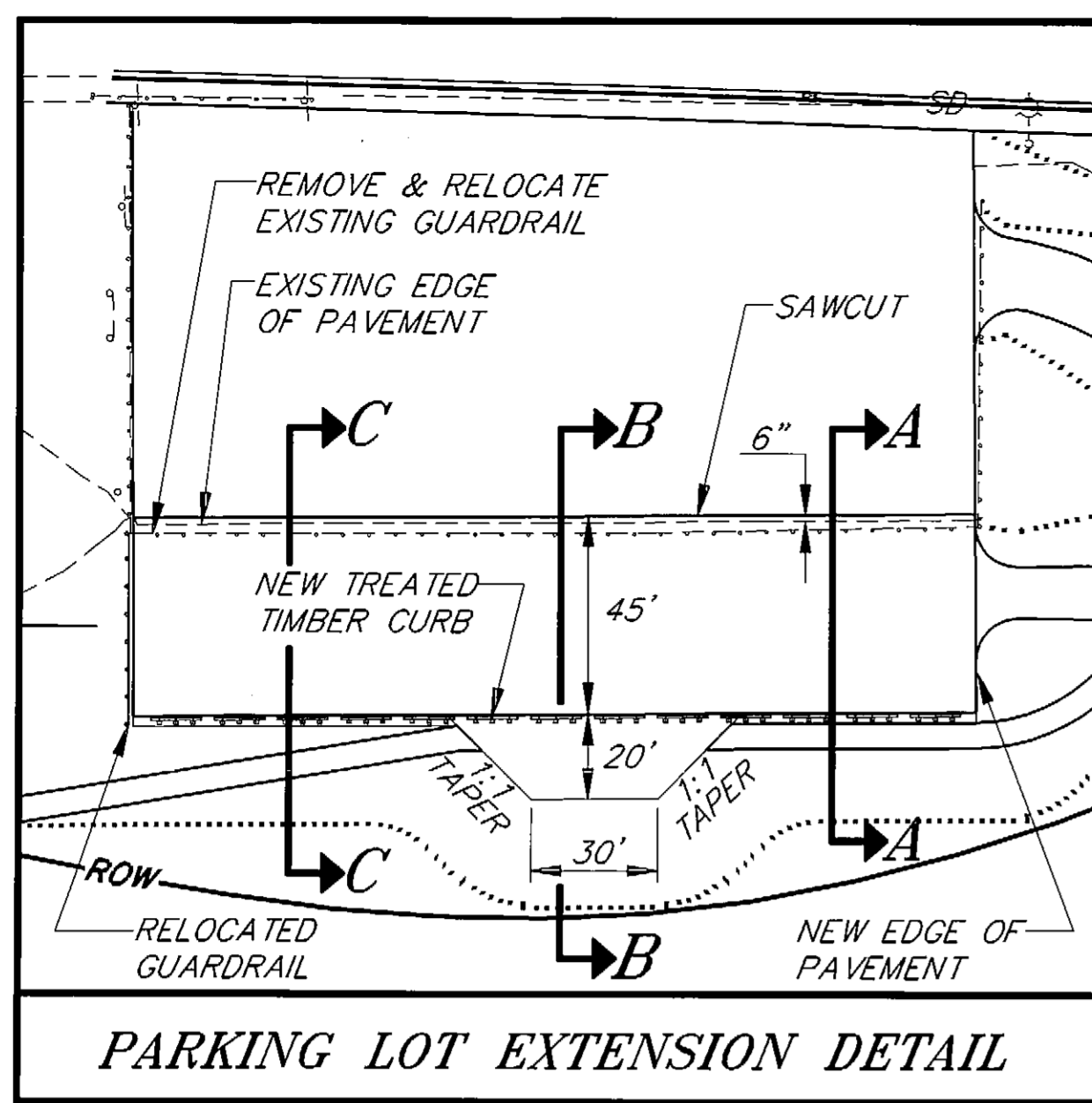
- LEGEND**
- ① 1 1/2" ASPHALT CONCRETE PAVEMENT
  - ② 2" ASPHALT CONCRETE PAVEMENT
  - ③ EXISTING PAVEMENT
  - ④ PRIME COAT
  - ⑤ TACK COAT
  - ⑥ 4 1/2" ASPHALT TREATED BASE COURSE
  - ⑦ 4" ASPHALT TREATED BASE COURSE
  - ⑧ 4 1/2" CRUSHED AGGREGATE BASE COURSE
  - ⑨ 4" CRUSHED AGGREGATE BASE COURSE
  - ⑩ 2" CRUSHED AGGREGATE BASE COURSE
  - ⑪ 12" SUBBASE GRADING "E"
  - ⑫ 8" SUBBASE GRADING "E"
  - ⑬ BORROW, TYPE "B" OR USEABLE EXCAVATION
  - ⬡ ALIGNMENT POINTS FOR PARTIAL CROSS SECTIONS

NO.	DATE	DESCRIPTION OF CHANGE

RECORD OF REVISIONS

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
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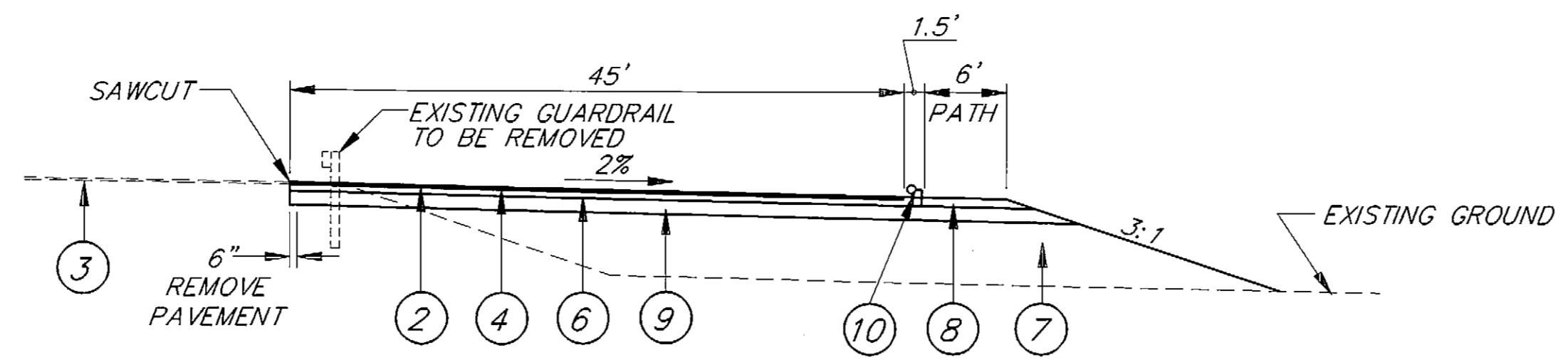
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 BY: DATE: DESCRIPTION OF CHANGE:



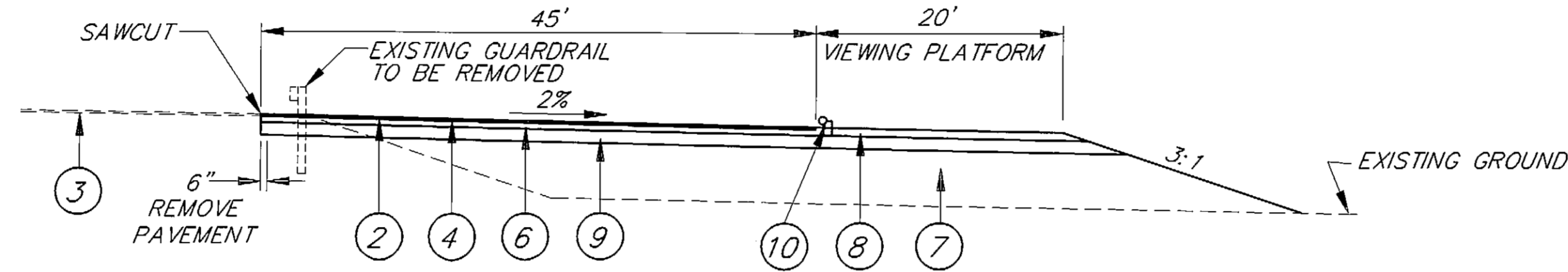
**PARKING LOT EXTENSION DETAIL**

**LEGEND**

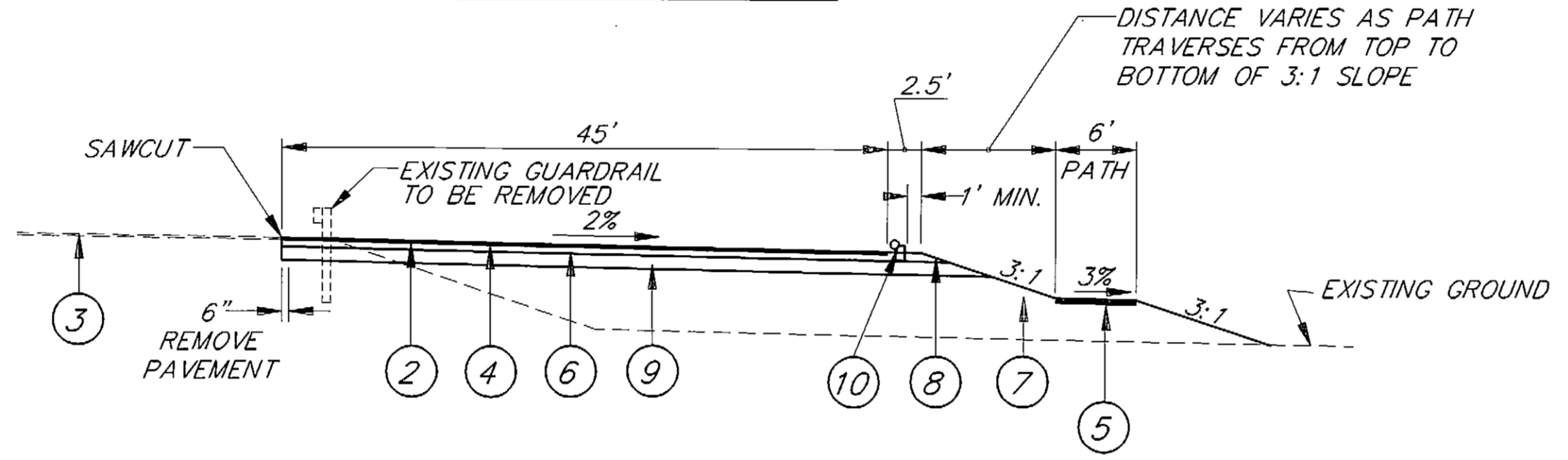
- ① 1 1/2" ASPHALT CONCRETE PAVEMENT
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- ③ EXISTING PAVEMENT
- ④ PRIME COAT
- ⑤ 4" CRUSHED AGGREGATE BASE COURSE
- ⑥ 6" CRUSHED AGGREGATE BASE COURSE
- ⑦ BORROW, TYPE "B" OR USEABLE EXCAVATION
- ⑧ 8" CRUSHED AGGREGATE BASE COURSE
- ⑨ 12" SUBBASE GRADING "E"
- ⑩ NEW TREATED TIMBER CURB (SEE DETAIL SHEET 23)



**SECTION A-A**

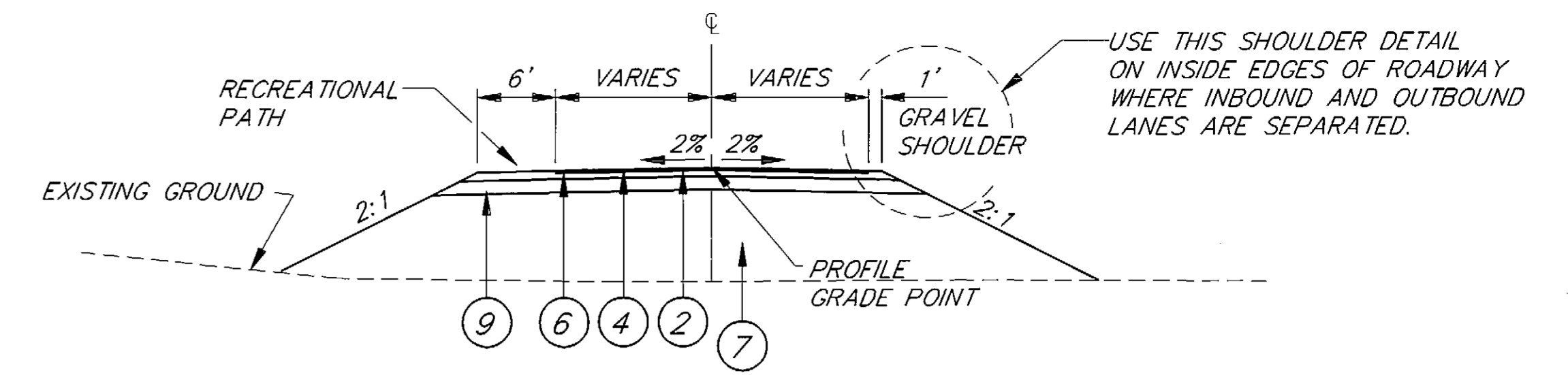


**SECTION B-B**



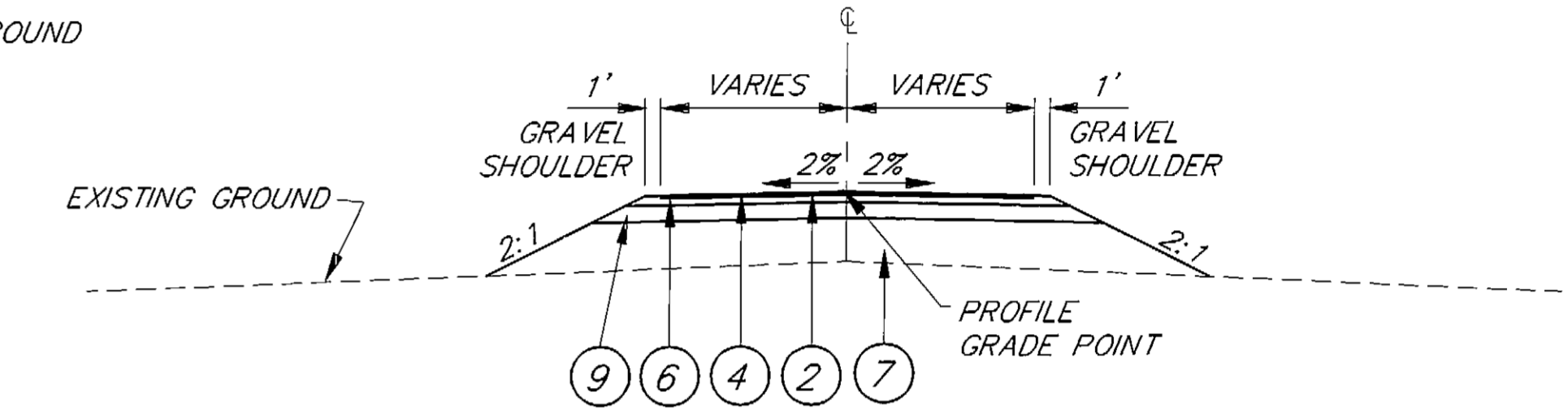
**SECTION C-C**

**PARKING LOT EXTENSION SECTIONS**



**TYPICAL SECTION**

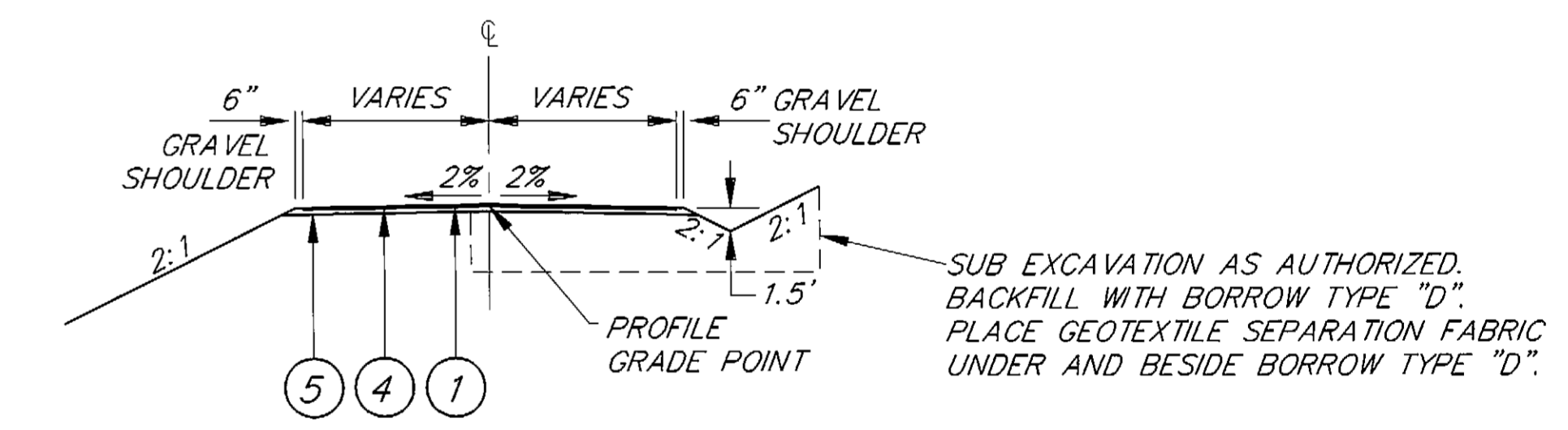
NEW APPROACH ROAD TO BROTHERHOOD PARK



**TYPICAL SECTION**

MAJOR APPROACHES INCLUDE:

- SHERWOOD LANE
- ENGINEER'S CUTOFF ROAD
- INDUSTRIAL BOULEVARD
- JENSINE STREET



**TYPICAL SECTION**

MINOR APPROACH/DRIVEWAY

**APPROACH NOTES**

1. FOR EXISTING APPROACHES AND DRIVEWAYS WITHOUT VERTICAL GRADE RECONSTRUCTION, THE WIDENING SHALL BE CONSTRUCTED USING THE TYPICAL SECTIONS SHOWN ON THIS SHEET. THE EXISTING PAVED AREAS SHALL HAVE ONLY THE PAVEMENT REPLACED TO THE DEPTHS SHOWN IN THE TYPICAL SECTIONS ON THIS SHEET. THE LIMITS OF PAVEMENT REMOVAL ARE SHOWN ON THE PLAN SHEETS.
2. CONTRACTOR SHALL SMOOTHLY TRANSITION 6:1 MAINLINE SLOPES INTO 2:1 APPROACH SLOPES.

AS-BUILT  
BY: B.A. DATE: 1-97

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

RECORD OF REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGE

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU ALASKA  
BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF  
HES-093-3(5) 70657  
TYPICAL SECTIONS  
PARKING LOT AND APPROACHES

DESIGNED BY:	L.P. CARROLL	PROJECT NO.	70657
DRAWN BY:	AutoCAD/R. SNYDER	DATE:	JUNE 1994
CHECKED BY:	T.W. MOORE	SHEET	5 OF 28



ESTIMATE OF QUANTITIES			
Item No.	Item	Unit	Total
120 (1)	DBE Adjustment	C.S.	All Req'd
201 (3B-1)	Additional Clearing & Grubbing C.O.#3	L.S.	All Req'd
201 (3B)	Clearing & Grubbing	L.S.	All Req'd
202 (2)	Removal of Pavement	S.Y.	12,195 <del>13,100</del>
202 (4)	Removal of Culvert Pipe	L.F.	1,013 <del>1,100</del>
202 (10)	Single Mail Box Installation	Each	3 <del>2</del>
203 (3)	Unclassified Excavation	C.Y.	10,071 <del>12,700</del>
203 (6B)	Borrow, Type "B" C.O.#1	Ton	0 <del>22,000</del>
203 (6D)	Borrow, Type "D"	Ton	0 <del>1000</del>
301 (1)	Crushed Aggregate Base Course	Ton	5,594.3 <del>5,000</del>
304 (1)	Subbase, Grading "E"	Ton	35,551 <del>15,600</del>
306 (1)	Asphalt Treated Base Course	Ton	2,541.2 <del>2,300</del>
401 (1)	Asphalt Concrete Pavement, Type II, Class "B"	Ton	4,033.6 <del>3,800</del>
401 (2)	PBA-2 Asphalt Cement	Ton	369.91 <del>320</del>
402 (2)	STE-1 Asphalt for Tack Coat	Ton	8.43 <del>8</del>
403 (2)	CSS-1 Emulsified Asphalt for Prime Coat	Ton	0 <del>17</del>
504 (4)	Bearing Replacement	L.S.	All Req'd
506 (5)	Bus Stop Shelter	Each	4
509 (1)	Rock Facing	S.F.	700 <del>600</del>
603 (1-36)	36 Inch Corrugated Steel Pipe	L.F.	56
603 (2-64)	64x43 Inch Corrugated Steel Pipe Arch	L.F.	84
603 (2-71)	71x47 Inch Corrugated Steel Pipe Arch	L.F.	15
603 (10-49)	49x33 Inch Corrugated Aluminum Pipe Arch	L.F.	240
603 (10-57)	57x38 Inch Corrugated Aluminum Pipe Arch	L.F.	276
603 (17-12)	12 Inch Pipe	L.F.	25
603 (17-18)	18 Inch Pipe	L.F.	605 <del>600</del>
603 (17-24)	24 Inch Pipe	L.F.	913.5 <del>900</del>
604 (5A)	Inlet, Type A	Each	2
604 (5F)	Inlet, Type Field	Each	2
605 (7)	Modified Underdrain	L.F.	185 <del>175</del>
606 (4)	Removal and Reconstruction of Guardrail	L.F.	100
606 (5)	Removal and Disposal of Guardrail	L.F.	230
606 (6)	End Anchorages	Each	2
607 (4)	Reconstructed Fence	L.F.	0 <del>40</del>
608 (3)	Asphalt Sidewalk	S.Y.	234.2 <del>235</del>
609 (2)	Curb and Gutter, Type Standard	L.F.	434 <del>415</del>
609 (7)	Precast Concrete Wheelstops	Each	51 <del>19</del>

ESTIMATE OF QUANTITIES			
Item No.	Item	Unit	Total
610 (1)	Ditch Lining	S.Y.	1,416.0 <del>5000</del>
614 (1)	Survey Monuments	Each	2
614 (2)	Monument Cases	Each	2
614 (4)	Adjust Existing Monument Cases	Each	2
615 (1)	Standard Signs	S.F.	190.6 <del>208</del>
615 (2)	Remove and Relocate Existing Signs	Each	2 <del>8</del>
615 (4)	Object Markers	Each	10 <del>5</del>
618 (1)	Seeding	Acre	1.999 <del>4</del>
618 (3)	Water for Seeding	M. Gal.	0 <del>20</del>
619 (2)	Matting	S.Y.	639.1 <del>100</del>
619 (3)	Straw Bales	Each	47 <del>30</del>
622 (8)	Treated Timber Curb	L.F.	180
627 (4)	Fire Hydrant Adjustment	Each	1
627 (10)	Adjustment of Valve Box	Each	13
630 (1)	Geotextile, Separation	S.Y.	2,244 <del>500</del>
632 (1)	Geotextile, Paving	S.Y.	0 <del>1,150</del>
633 (1)	Silt Fence	L.F.	2,016 <del>500</del>
635 (1)	Insulation Board	MBM	2.23 <del>10</del>
639 (3)	Approaches	Each	24 <del>14</del>
640 (1)	Mobilization and Demobilization	L.S.	All Req'd
641 (1)	Erosion and Pollution Control Admin.	L.S.	All Req'd
641 (2)	Erosion and Pollution Control	C.S.	All Req'd
642 (1)	Construction Surveying	L.S.	All Req'd
642 (2)	Three Person Survey Party	Hour	6 <del>10</del>
643 (2)	Traffic Maintenance	L.S.	All Req'd
643 (3)	Permanent Construction Signing	L.S.	All Req'd
643 (4)	Construction Sign	Ea. Per Day	524 <del>1,000</del>
643 (7)	Traffic Cone	Ea. Per Day	5,413 <del>5,200</del>
643 (8)	Drums	Ea. Per Day	914 <del>900</del>
643 (9)	Sequential Arrow Panel, Type "C"	Ea. Per Day	5 <del>60</del>
643 (13)	Temporary Pavement Markings	Station	62 <del>45</del>
643 (15)	Flagging	Hour	1,271 <del>1,000</del>
660 (11)	Telephone Cable Relocation C.O.#2	L.S.	All Req'd
660 (1)	Traffic Signal System Complete	L.S.	All Req'd
660 (3)	Highway Lighting System Complete	L.S.	All Req'd
660 (24)	Electrolier Foundation Bedding	Each	0 <del>2</del>
661 (1)	Load Center, Type I	Each	2
670 (1)	Painted Traffic Markings	L.S.	All Req'd
670 (6)	Preformed Pavement Markings	L.S.	All Req'd
670 (8)	Recessed Pavement Markings	Each	257 <del>280</del>

BASIS OF ESTIMATE		
Item No.	Item	Quantity
203 (6B)	Borrow, Type "B"	1.85 Ton/Cubic Yard
203 (6D)	Borrow, Type "D"	1.85 Ton/Cubic Yard
301 (1)	Crushed Aggregate Base Course	1.96 Ton/Cubic Yard
304 (1)	Subbase Grading "E"	1.85 Ton/Cubic Yard
401 (1)	Asphalt Concrete, Type II, Class "B"	115.0 lbs/Sq. Yd./In Depth
401 (2)	PBA-2 Asphalt Cement	6.0% of Item 401(1) plus 4.0% of Item 306(1)
403 (2)	CSS-1 Emulsified Asphalt for Prime Coat	0.20 Gal./Sq. Yd., 256 Gal./Ton
402 (2)	STE-1 Asphalt for Tack Coat	.10 Gal./Sq. Yd., 248 Gal./Ton

RECORD OF REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGE

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF ALASKA  
ESTIMATE OF QUANTITIES  
HES-093-3(5) 70657

DESIGNED BY: L.P. CARROLL  
DRAWN BY: AutoCAD/R. SNYDER  
CHECKED BY: T.W. MOORE  
PROJECT NO. 70657  
DATE: JUNE 1994  
SHEET 6 OF 28

AS-BUILT  
BY: B.A.L. DATE: 1-97



NOTE: DO NOT SCALE FROM THESE PLANS - USE DIMENSIONS

**CULVERT SUMMARY**

STATION	OFFSET	12"	18"	24"	36"	49"X 33"	57"X 38"	64"X 43"	71"X 47"	REMARKS
7+65			168'							(P-1) CONNECT INLET BOXES S-1 & S-2
9+33			37'							(P-2) OUT OF INLET BOX S-2
"A1" 10+95				<del>77'</del>						
A1" 12+70	℄			<del>49'</del>						
10+81	64' LT.				24'					ANGLE & EXTEND TO DITCH
12+43	℄							18' LT.		EXTEND EXISTING CULVERT
12+54	℄							25' RT.		EXTEND EXISTING CULVERT
14+39	℄							18' LT.		EXTEND EXISTING CULVERT
14+40	52' LT.							23' RT.		
14+40	52' LT.			<del>58'</del>						
16+46	℄								4' LT.	EXTEND EXISTING CULVERT
18+00	48' LT.			<del>48'</del>					11' RT.	
19+21	54' RT.			30'						
20+09	℄			98'						
20+48	48' LT.			45'						
23+00	51' LT.			85'						
25+39	℄							138'		DESIGNATED FISH STREAM
25+53	℄							138'		DESIGNATED FISH STREAM
27+50	℄							120'		DESIGNATED FISH STREAM
30+94	℄							120'		DESIGNATED FISH STREAM
32+55	52' LT. 61'			106'						DESIGNATED FISH STREAM
33+54	46' RT.		50'							
33+63	55' RT. 56'		20'							
35+75	39' RT.			100'						TO STA. 36+75, 35' RT.
35+13	32' LT.		80'							
38+52	℄			73'						(P-3) DESIGNATED FISH STREAM
38+60	43' LT.			25'						(P-5)
38+75	33' RT.		50'							(P-4)
39+50			20'							
39+81	38' LT.		10'							
39+75	33' RT.		75'							
40+82	42' RT.	25'								
39+80	RT.			80'						
41+09	33' RT.		75'							(P-6)
41+60	42' RT.		20'							(P-7)
44+61	℄			95'						
ALLOWANCE FOR EXTRA			60'	41'						
TOTALS	25'		605'	913'	56'	240'	276'	84'	15'	

- SEE SPECIAL PROVISIONS AND ENVIRONMENTAL DETAILS, SHEET 25 FOR INFORMATION REGARDING FISH STREAMS.
- PIPE (P-8) IS 8" PERFORATED CMP FROM STA. "L" 41+50 TO STA. "L" 43+25. THIS WILL BE PAID FOR AS ITEM 605(7) MODIFIED UNDERDRAIN.

**CULVERT REMOVAL SUMMARY**

STATION	OFFSET	LENGTH	STATION	OFFSET	LENGTH
14+40	44' LT.	45'	29+00	38' RT.	39'
18+00	49' LT.	49'	31+14	℄	91'
19+21	53' RT.	30'	32+55	51' LT.	45'
20+07	℄	80'	33+54	39' RT.	38'
20+48	45' LT.	41'	35+13	32' LT.	75'
23+00	39' LT.	48'	38+52	℄	75'
25+42	℄	83'	39+81	37' LT.	10'
25+53	℄	83'	41+09	32' RT.	55'
27+64	℄	85'	44+61	℄	80'
<b>TOTAL</b>					1,052'

**INLET SUMMARY**

STRUCTURE	STATION	ELEVATION	REMARKS
S-1	7+65 RT.	36.42 (TOP OF CURB)	TYPE "A" (FACE OF CURB)
S-2	9+30 RT.	34.75 (TOP OF CURB)	TYPE "A" (FACE OF CURB)
S-3	38+52 RT.	53.65	FIELD INLET 36" CMP (33' RT)
S-4	41+50 RT.	62.00	FIELD INLET 36" CMP (33' RT)

**ADJUST VALVE BOX SUMMARY**

STATION	OFFSET	REMARKS
10+28	35' LT.	
10+32	40' LT.	
31+37	30' LT.	
31+43	26' LT.	
32+40	28' LT.	
33+00	28' LT.	
33+00 32+05	28' 50' LT.	WATER SERVICE
33+92	28' 23' LT.	
38+20	47' RT.	WATER SERVICE
41+28	23' LT.	
41+30	45' RT.	WATER SERVICE
44+99	47' RT.	WATER SERVICE
45+84	25' LT.	

**MAILBOX SUMMARY**

EXISTING		PROPOSED		REMARKS
STATION	OFFSET	STATION	OFFSET	
14+29	51.0' LT.	14+29	57.0' LT.	NEWSPAPER TUBE ONLY
38+24	28.5' RT.	38+40	25.0' RT.	
41+37	24' RT.	41+62	26.0' RT.	RELOCATE SIGNS FROM EXISTING MAILBOX TO NEW MAILBOX.

**DRIVEWAY SUMMARY**

STATION	OFFSET	RADIUS		WIDTH	REMARKS
		LEFT	RIGHT		
8+38	RT.				REMOVE APPROACH
14+40	LT.	25	25	22' 23"	
12+10	RT.			22'	
16+98	LT.				REMOVE APPROACH
12+05	LT.			23'	
18+00	LT.	25	25	22' 23"	
18+85	LT.	25	25	20' 23"	
19+20	RT.	30	30	22' 5"	DO NOT PAVE
19+20	RT.			22'	* RETURN & EXTENDED
20+48	LT.	25	25	26' 10"	
24+40	RT.			24'	
24+48	RT.				REMOVE APPROACH
26+05	RT.			26'	* RETURNED & EXTENDED
26+05	RT.	25	15	26' 26"	
26+40	LT.	30	20	22' 13"	
31+40	LT.			20'	
29+00	RT.				REMOVE APPROACH
30+30	LT.			24'	
33+54	RT.	25	25	25' 21"	
30+90	RT.			25'	
35+04	LT.	40	35	27'	
31+00	RT.			20'	
38+10	RT.	20	20	20' 175"	
39+05	RT.				NOT PAVED, NEW DRIVEWAY
40+95	LT.	20	20	20' 17"	
41+08	RT.	40	30	24' 25"	
42+88	RT.				REMOVE APPROACH
41+00	RT.	MATCH EXISTING		18' MATCH EXISTING	
46+07	RT.				
49+61	LT.	MATCH EXISTING		20' MATCH EXISTING	

**MONUMENT SUMMARY**

STATION	OFFSET	NEW MONUMENT & CASE	ADJUST CASE	REMARKS
14+60.32	℄		X	
28+72.40	17.52 LT.		X	
41+22.04	0.15' LT.	X		
46+26.12	27.72 LT.	X		

- MONUMENTS AND CASES ARE DETAILED IN STD. DWG. M-16.01.
- ALL NEW MONUMENTS SHALL RETAIN THE MARKINGS OF THE MONUMENT BEING REPLACED.

**AS-BUILT**  
 BY: B.A. DATE: 1-97

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

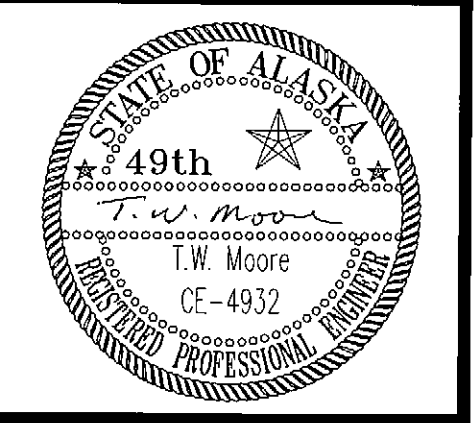
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BY:	DATE:
DESCRIPTION OF CHANGE:	

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF ALASKA  
 HES-093-3(5) 70657

**MISCELLANEOUS SUMMARIES**

DESIGNED BY:	L.P. CARROLL	PROJECT NO.	70657
DRAWN BY:	AutoCAD/R. SNYDER	DATE:	JUNE 1994
CHECKED BY:	T.W. MOORE	SHEET	7 OF 28



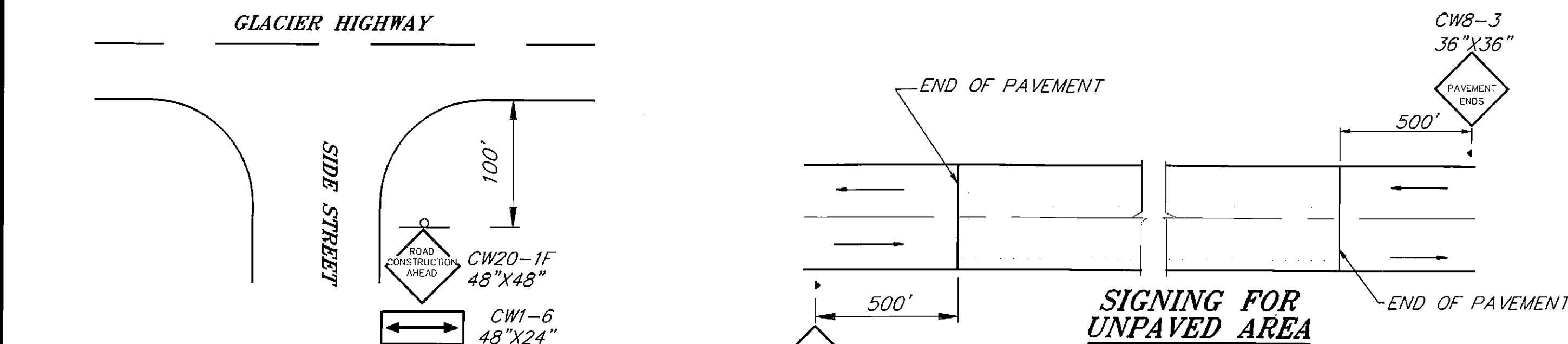
CONSTRUCTION SIGNS			
CODE	LEGEND	SIZE	QUANT.
CW8-3	PAVEMENT ENDS	36"X36"	2
CW20-1E	ROAD CONSTRUCTION 1500 FEET	48"X48"	2
CW20-4B	ONE LANE ROAD 1000 FEET	48"X48"	2
CW20-7A	FLAGGER SYMBOL WITH SUPPLEMENTAL PLATE - 500 FT	36"X36"	5
CW20-1F	ROAD CONSTRUCTION AHEAD	48"X48"	2
CW21-24F	ROAD WORK AHEAD	36"X36"	2
CW5-1	ROAD NARROWS	36"X36"	2

PERMANENT CONSTRUCTION SIGNS			
CODE	LEGEND	SIZE	QUANT.
G20-1	ROAD CONSTRUCTION NEXT 1 MILE	60"X36"	2
G20-2	END CONSTRUCTION	60"X24"	2
CW20-1F	ROAD CONSTRUCTION AHEAD	48"X48"	5
CW1-6		48"X24"	5

1. THESE SIGNS ARE TO BE INSTALLED USING THE HIGH LEVEL WARNING DEVICE CONFIGURATION DETAILED IN STANDARD DRAWING C-01.03, EXCEPT THAT THE MOUNTING SHALL BE THE SAME AS THAT FOUND ON A NORMAL PERMANENT INSTALLATION.

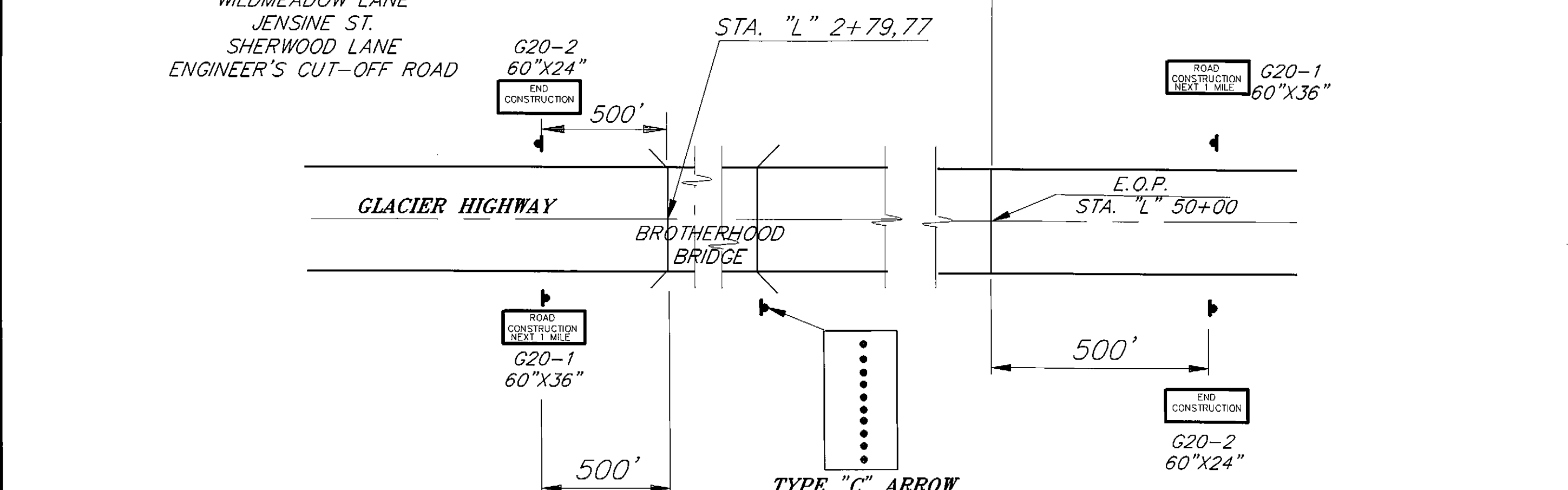
### TRAFFIC CONTROL NOTES

- CONSTRUCTION SIGNING, FLAGGING, DETOURS AND GENERAL TRAFFIC CONTROL FEATURES SHALL CONFORM TO THE GUIDELINES SET FORTH IN THE "C" SERIES STANDARD DRAWINGS, THE APPLICABLE PORTIONS OF SECTION 115 AND 643 OF THE SPECIFICATIONS AND THE ALASKA TRAFFIC MANUAL.
- TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES IN NON-WORK AREAS AND DURING NON-WORKING HOURS. SEE SECTION 643 OF THE SPECIAL PROVISIONS FOR LANE CLOSURE LIMITATIONS.
- TEMPORARY DRIVING LANES SHALL HAVE A MINIMUM WIDTH OF 12'-0".
- NO DRIVEWAY CLOSURES WILL BE ALLOWED WITHOUT THE CONSENT OF THE PROPERTY OWNER. THE CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNERS.
- MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES SHALL BE EQUAL TO THE SPEED LIMIT IN FEET ON TANGENTS CLOSURES AND 25' IN TAPER AREAS.
- TEMPORARY PAVEMENT MARKINGS WILL BE REQUIRED AS DESCRIBED IN SECTION 643-3.04 OF THE SPECIFICATIONS.
- FLOOD LIGHTS SHALL BE PROVIDED FOR FLAGGER STATIONS DURING NIGHT OPERATIONS.
- THE CONSTRUCTION SIGN SUMMARY SHOWN IN THESE PLANS IS TO BE USED FOR COST ESTIMATING ONLY. ADDED SIGNS MAY BE REQUIRED BY THE ENGINEER, OR MAY BE USED AT THE CONTRACTOR'S OPTION WITH PRIOR APPROVAL OF THE ENGINEER.
- CONSTRUCTION SIGNING SHALL BE IN PLACE ONLY WHEN THE CONDITIONS EXIST FOR WHICH THE SIGNS ARE INTENDED.
- CHANNELIZING DEVICES IN USE AT NIGHT SHALL BE LIT IN ACCORDANCE WITH THE ALASKA TRAFFIC MANUAL.
- THE CONTRACTOR SHALL KEEP THE PUBLIC INFORMED OF HIS CONSTRUCTION ACTIVITIES THROUGH THE USE OF THE LOCAL NEWS MEDIA. ADVANCE NOTICE OF PARTIAL ROAD CLOSURES AND DETOURS SHALL BE PUBLISHED IN THE LOCAL NEWSPAPER(S) AND BROADCAST OVER THE LOCAL RADIO AND TV STATIONS AT LEAST ONE DAY PRIOR TO EACH ACTIVITY. THE MEDIA NOTICE SHALL BE APPROVED BY THE ENGINEER PRIOR TO ITS USE.
- THE SEQUENTIAL ARROW PANEL SHALL BE IN OPERATION 24 HOURS PER DAY AND BE SET IN THE CAUTION MODE WHILE CONSTRUCTION IS WITHIN 500' OF BROTHERHOOD BRIDGE.



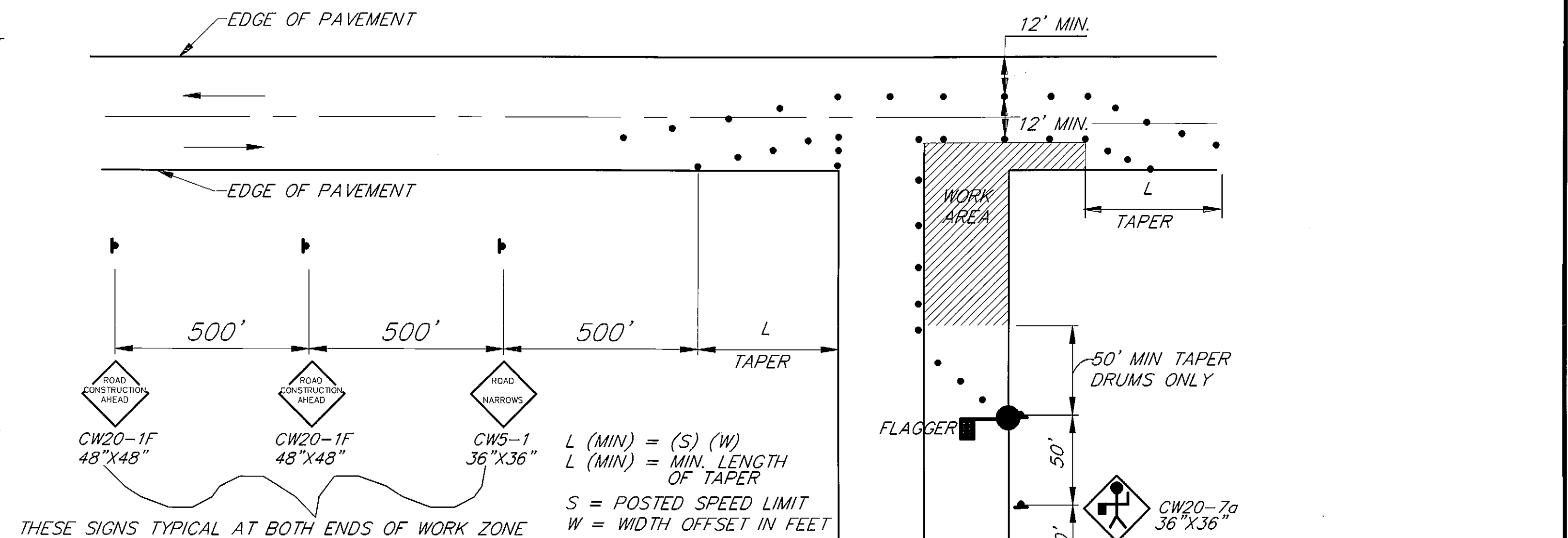
### PERMANENT CONSTRUCTION SIGNING FOR SIDE STREETS

SIDE STREET PLACEMENT AT:  
INDUSTRIAL BLVD.  
WILDMEADOW LANE  
JENSINE ST.  
SHERWOOD LANE  
ENGINEER'S CUT-OFF ROAD

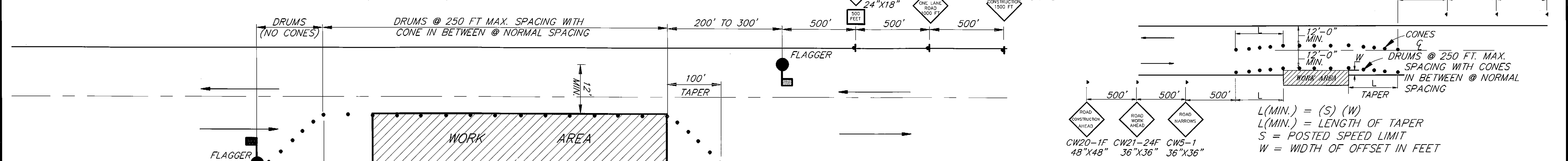


### PERMANENT CONSTRUCTION SIGNING

TYPE "C" ARROW SEQUENTIAL PANEL SEE NOTE 12 (BAR TO FLASH)



### TYPICAL INTERSECTION WORK ZONE



### ROADWAY ENCROACHMENT

NOTE: IF ONLY ONE LANE IS EFFECTED BY ROAD WORK (THAT IS, THE DRUMS ALONG THE WORK AREA ARE NO CLOSER THAN 12' TO CENTERLINE) THE CENTERLINE CONES FOR THE OPPOSING LANE MAY BE DELETED.

### TWO LANE ROADWAY-SINGLE LANE CLOSURE

AS-BUILT  
BY: B.A. DATE: 1-97

RECORD OF REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGE

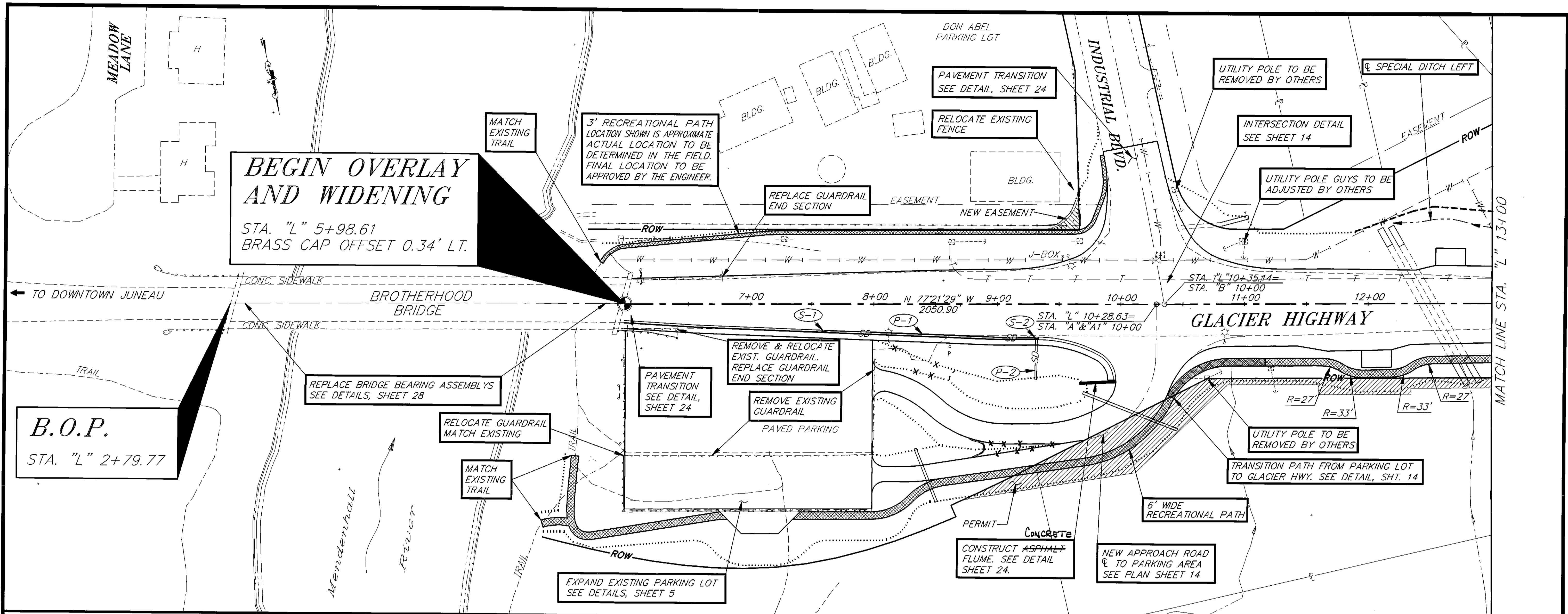
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU  
JUNEAU BROTHERHOOD BRIDGE TO ENGINEERS CUTOFF  
PROJECT NO. HES-093-3(5), 70657  
TRAFFIC CONTROL PLAN

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

DESIGNED BY:	C. HAKARI	PROJECT NO.	70657
DRAWN BY:	C. ANDERSON	DATE:	JUNE 1994
CHECKED BY:	T.W. MOORE	SHEET	8 OF 28





**BEGIN OVERLAY**  
 STA. "L" 5+98.61

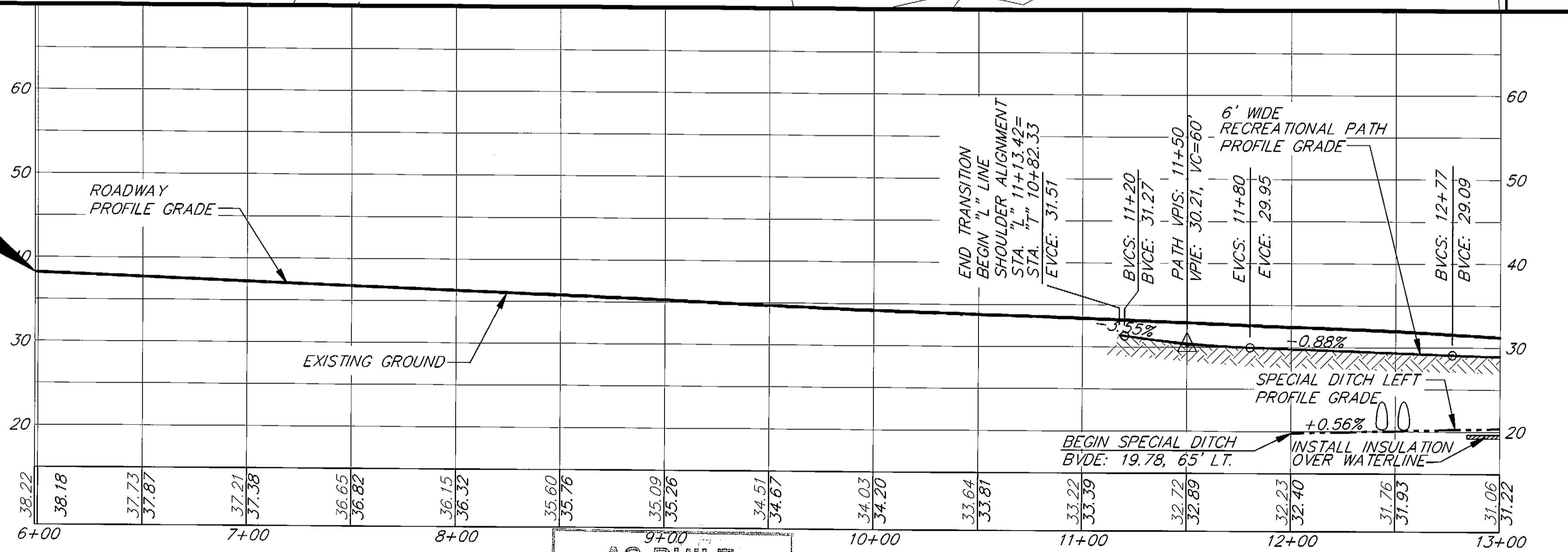
**BASIS OF BEARING**

**HORIZONTAL CONTROL**

THE BASIS OF BEARING IS THE RECORD BEARING N 77°21'29"W, 1,413.89' BETWEEN THE MONUMENTS AT THE P.O.T. STA. "L" 14+60.32 OF GLACIER HIGHWAY AND THE MONUMENTS AT THE PI STA. 28+74.21 OF GLACIER HIGHWAY.

**VERTICAL CONTROL**

THE BASIS OF VERTICAL CONTROL IS THE EXISTING BRASS CAP MONUMENT LOCATED AT THE END OF BROTHERHOOD BRIDGE STA. "L" 5+98.61, 0.34' LEFT WITH AN ACCEPTED ELEVATION OF 38.22' ABOVE MLLW.



RECORD OF REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGE

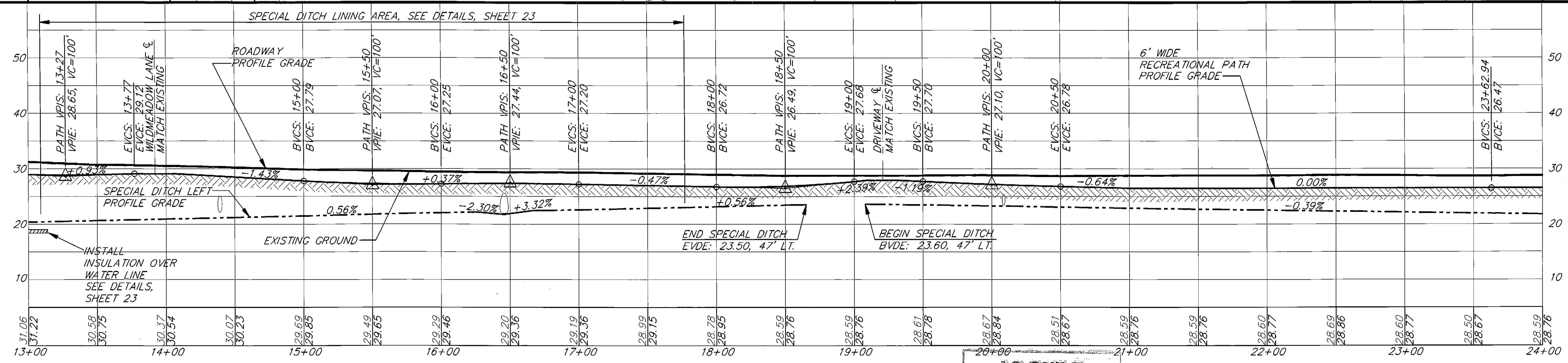
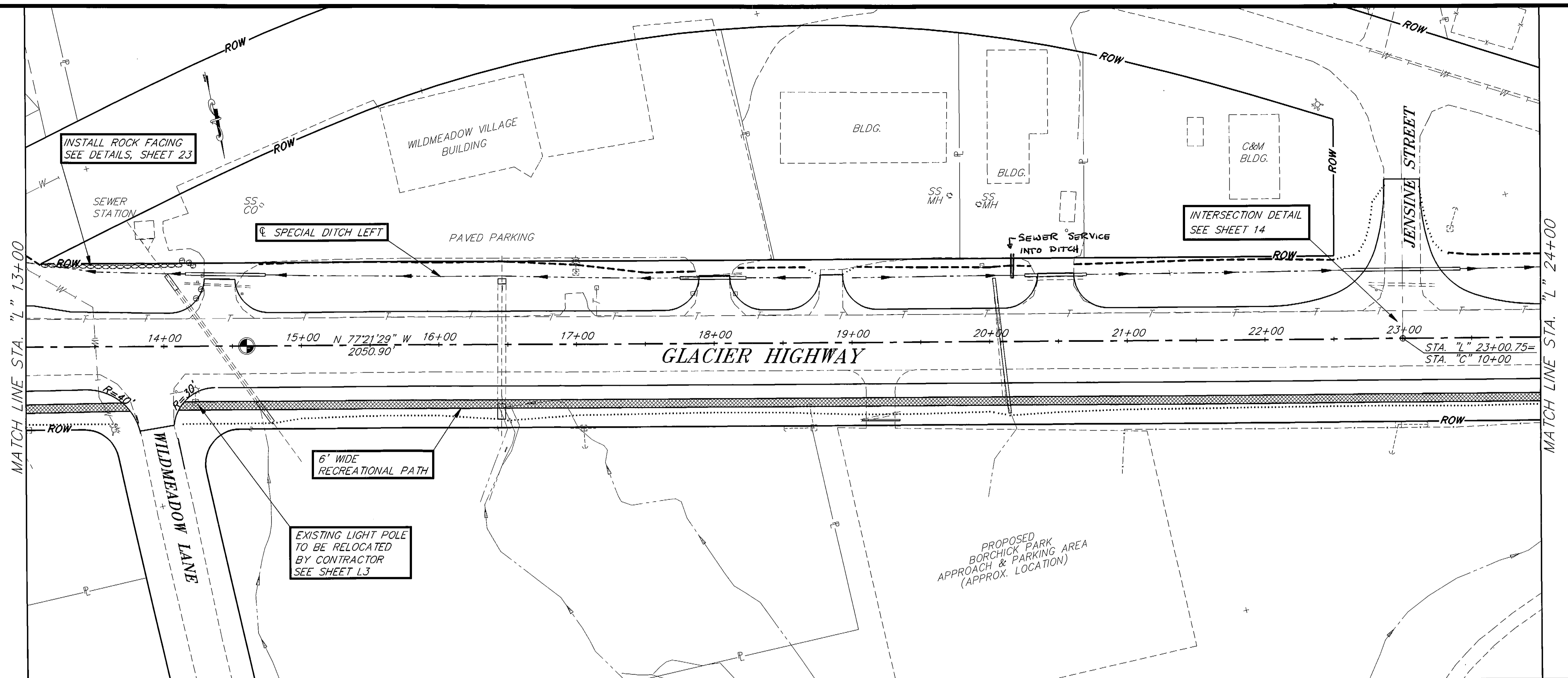
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF ALASKA  
 HES-093-3(5) 70657  
 B.O.P. TO STA. "L" 13+00  
 PLAN & PROFILE

DESIGNED BY: L.P. CARROLL  
 DRAWN BY: AutoCAD/R. SNYDER  
 CHECKED BY: T.W. MOORE  
 PROJECT NO. 70657  
 DATE: JUNE 1994  
 SHEET 9 OF 28



BY: B.A. DATE: 1994 NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS



**AS-BUILT**

BY: *BP* DATE: *1-17* NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

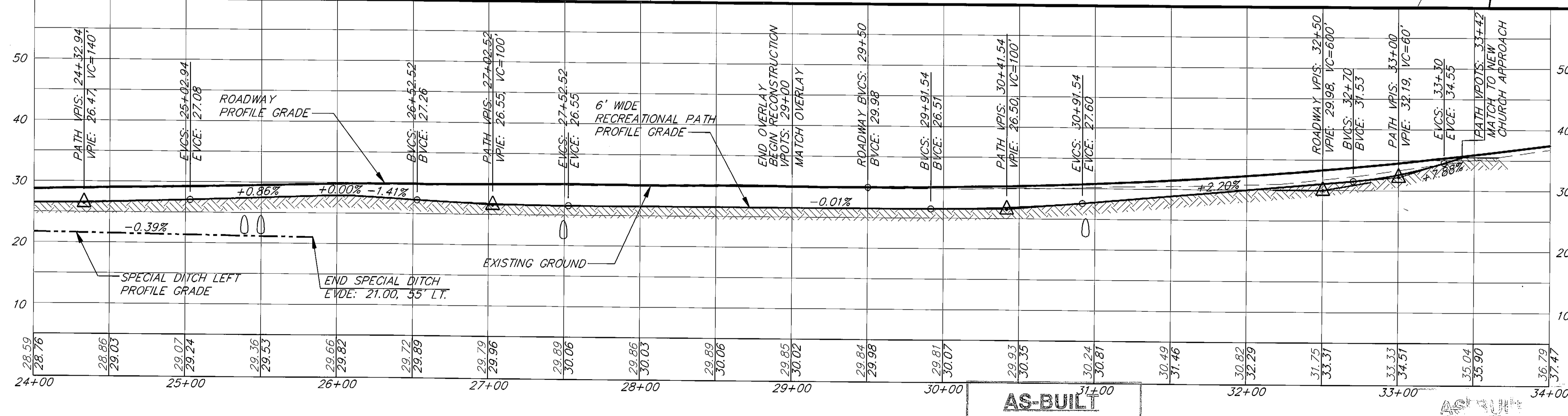
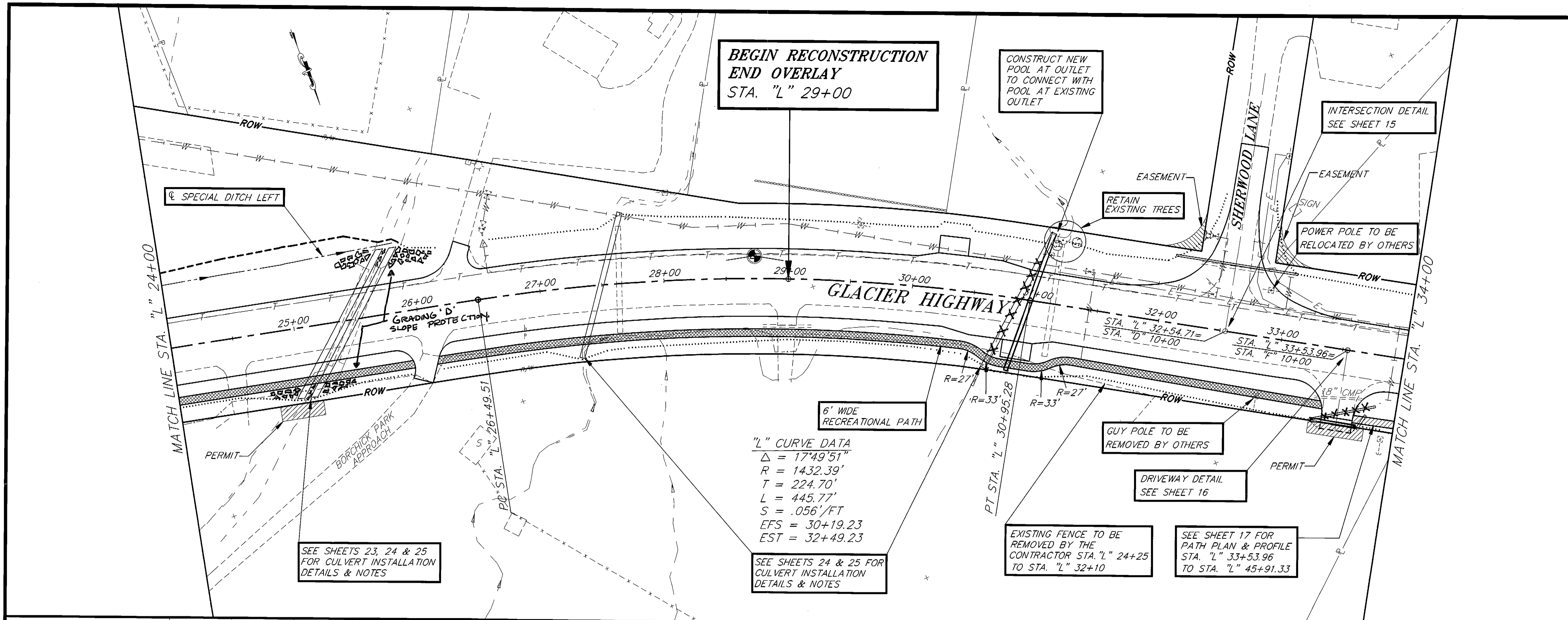
NO.	DATE	DESCRIPTION OF CHANGE

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF ALASKA  
HES-093-3(5) 70657  
STA. "L" 13+00 TO STA. "L" 24+00  
PLAN & PROFILE

DESIGNED BY: <i>L.P. CARROLL</i>	PROJECT NO. <b>70657</b>
DRAWN BY: <i>AutoCAD/R. SNYDER</i>	DATE: <b>JUNE 1994</b>
CHECKED BY: <i>T.W. MOORE</i>	SHEET 10 OF 28





**AS-BUILT**

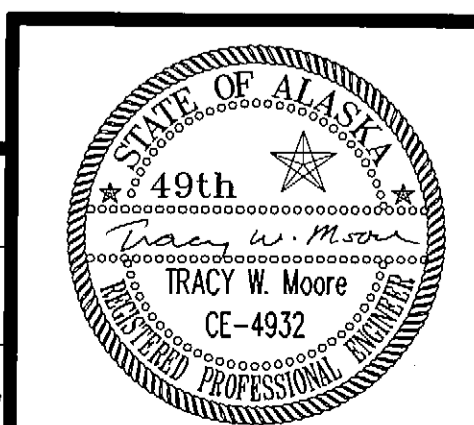
BY: B.P. DATE: 1-97 NOTE: DO NOT SCALE FROM THESE PLANS—USE DIMENSIONS

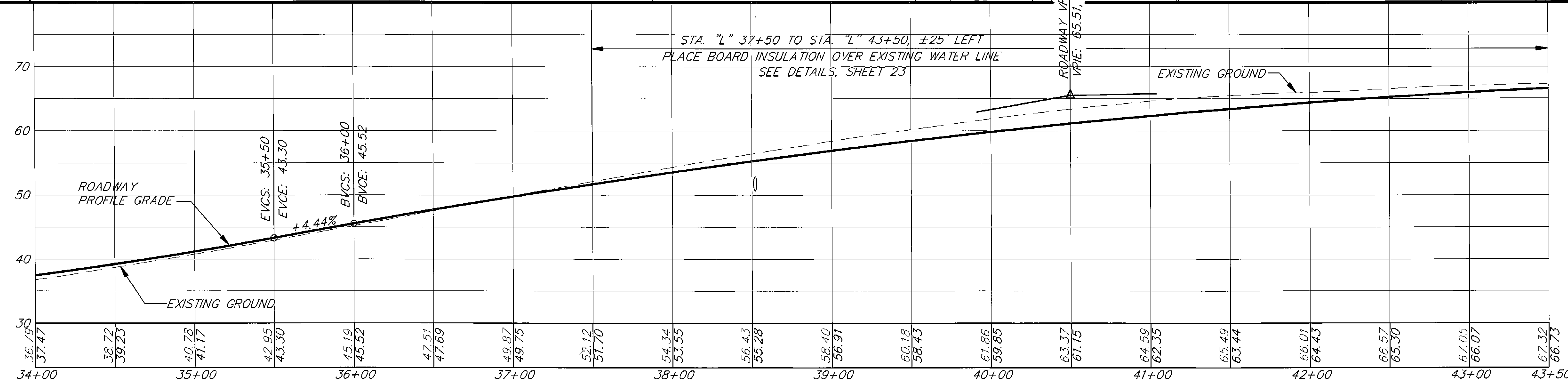
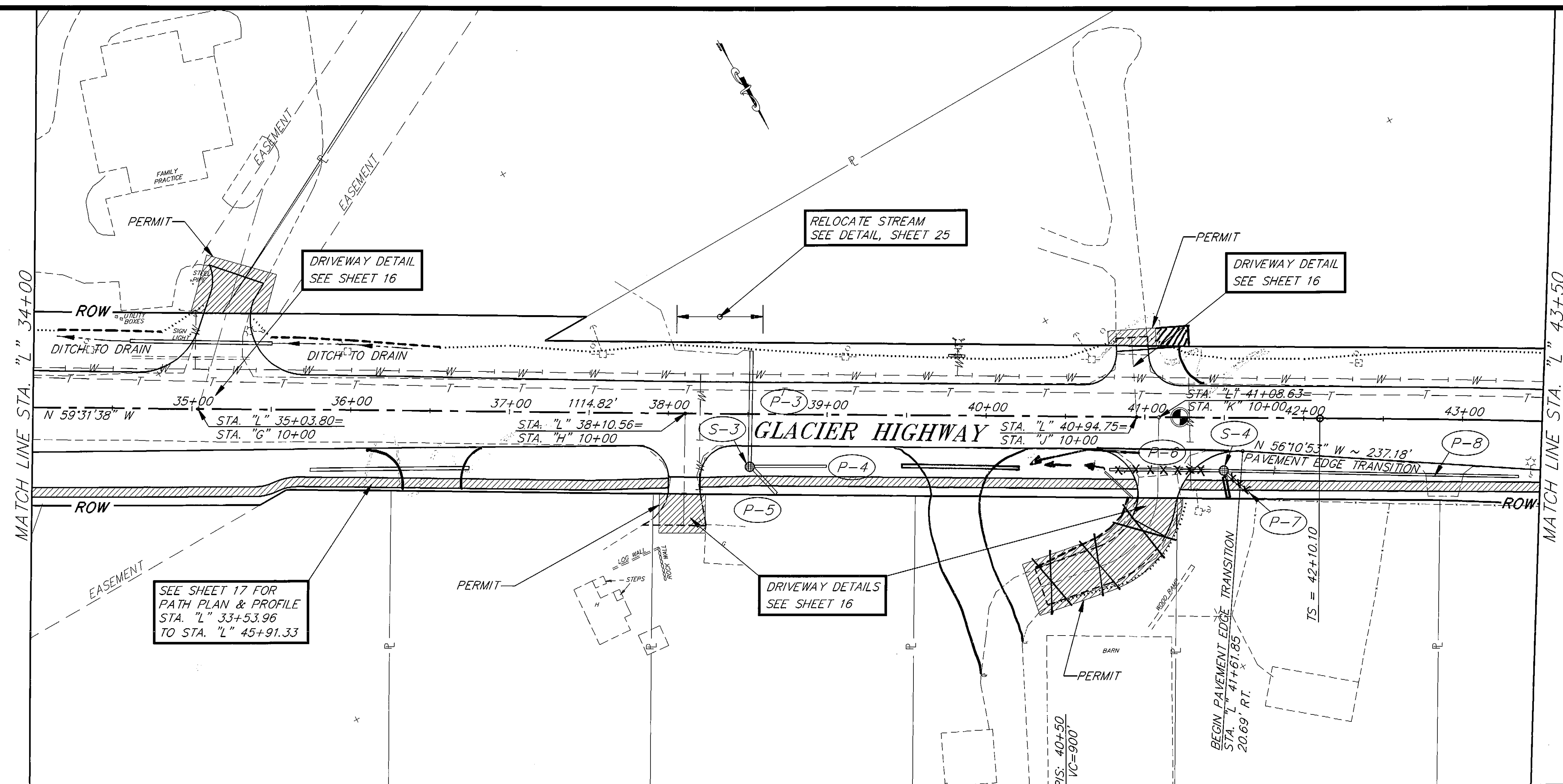
RECORD OF REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGE

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF ALASKA  
HES-093-3(5) 70657  
STA. "L" 24+00 TO STA. "L" 34+00  
PLAN & PROFILE

DESIGNED BY:	L.P. CARROLL	PROJECT NO.	70657
DRAWN BY:	AutoCAD/R. SNYDER	DATE:	JUNE 1994
CHECKED BY:	T.W. MOORE	SHEET	11 OF 28





AS-BUILT  
 BY: B.A. DATE: 1-97

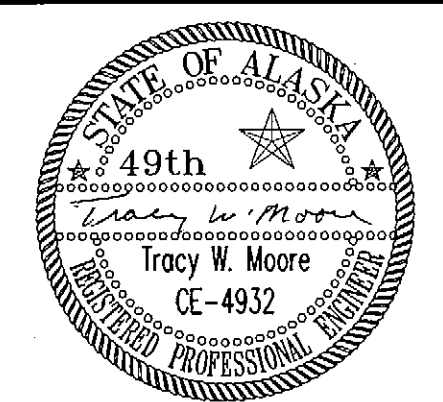
DO NOT SCALE FROM THESE PLANS USE DIMENSIONS

PATH:	DATE:	DESCRIPTION OF CHANGE:
P:\JNU\BRO-ENG\DR\NEWPP34 1=40		

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF ALASKA  
 HES-093-3(5) 70657  
 STA. "L" 34+00 TO STA. "L" 43+50  
 PLAN & PROFILE

DESIGNED BY:	L.P. CARROLL	PROJECT NO.	70657
DRAWN BY:	AutoCAD/R. SNYDER	DATE:	JUNE 1994
CHECKED BY:	T.W. MOORE	SHEET	12 OF 28



**END RECONSTRUCTION  
BEGIN OVERLAY**  
STA. "L" 45+00

**END PROJECT**  
STA. "L" 50+00.00

CONNECT TO EXISTING  
DITCH/DRAINAGE  
CHANNEL (FISH  
STREAM)

INTERSECTION DETAIL  
SEE SHEET 15

TRANSITION OVERLAY TO  
MATCH EXISTING PAVEMENT  
SEE DETAIL, SHEET 24

GRADING 'D'  
SLOPE PROTECTION  
ROW

MATCH LINE STA. "L" 43+50

PC PAVEMENT EDGE  
TRANSITION  
STA. "L" 44+00, 31.91' RT.

R=1968'

END PAVEMENT  
EDGE TRANSITION  
MATCH EXISTING EOP

DITCH TO DRAIN

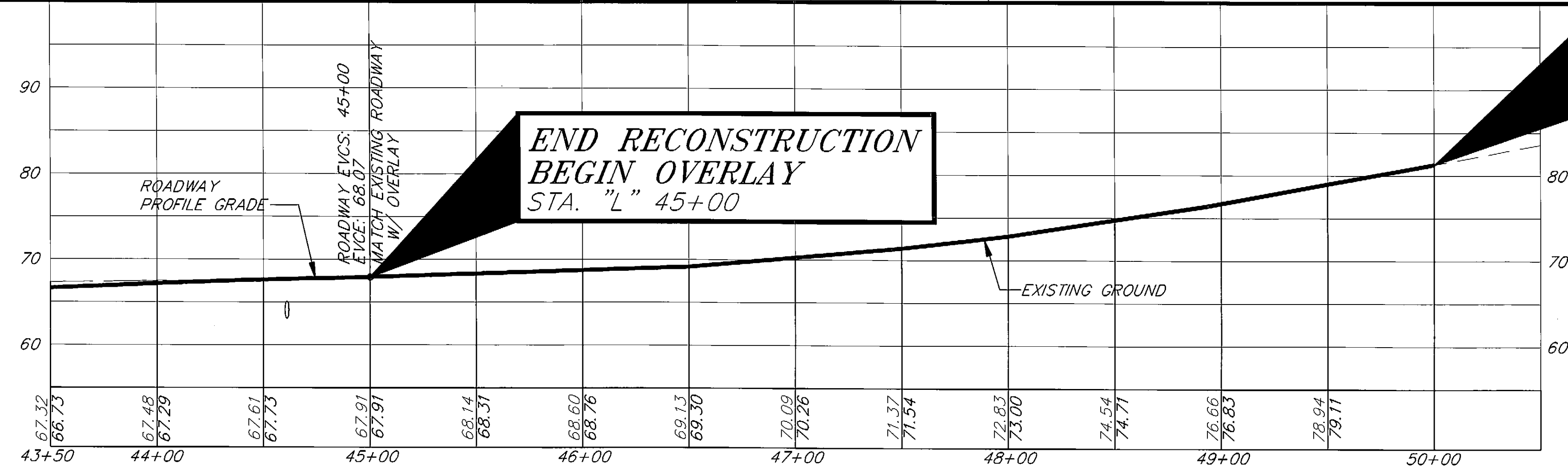
SC STA. "L" 45+10.10

**END PATH**  
STA. "L" 45+91.33, 36.55' RT.=  
STA. "P" 22+32.40

"L" CURVE DATA  
Δ = 21°16'53"  
R = 1432.39'  
L = 232.03'  
S = 0.056'/FT  
T<sub>s</sub> = 419.55'  
L<sub>s</sub> = 300.00'  
Δ<sub>s</sub> = 06°00'00"  
BST = "L" 42+10.10  
BFS = "L" 45+10.10

TRANSITION OVERLAY  
TO MATCH EXISTING  
PAVEMENT AT R.O.W LINE  
SEE DETAIL SHEET 24

SEE SHEET 17 FOR  
PATH PLAN & PROFILE  
STA. "L" 33+53.96  
TO STA. "L" 45+91.33



AS-BUILT

AS-BUILT  
BY: BB DATE: 1-97

NOTE: DO NOT SCALE FROM THESE PLANS USE DIMENSIONS

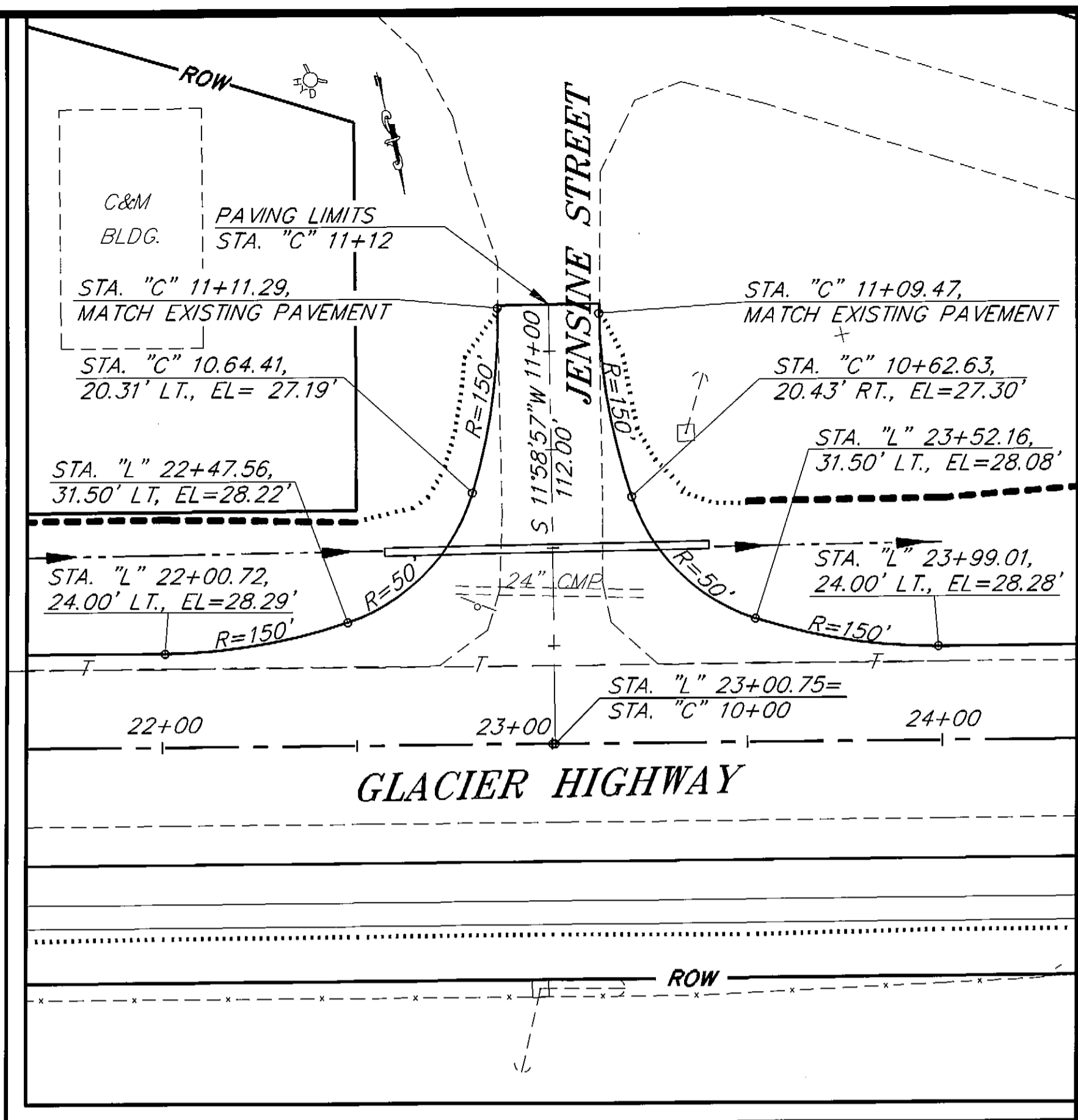
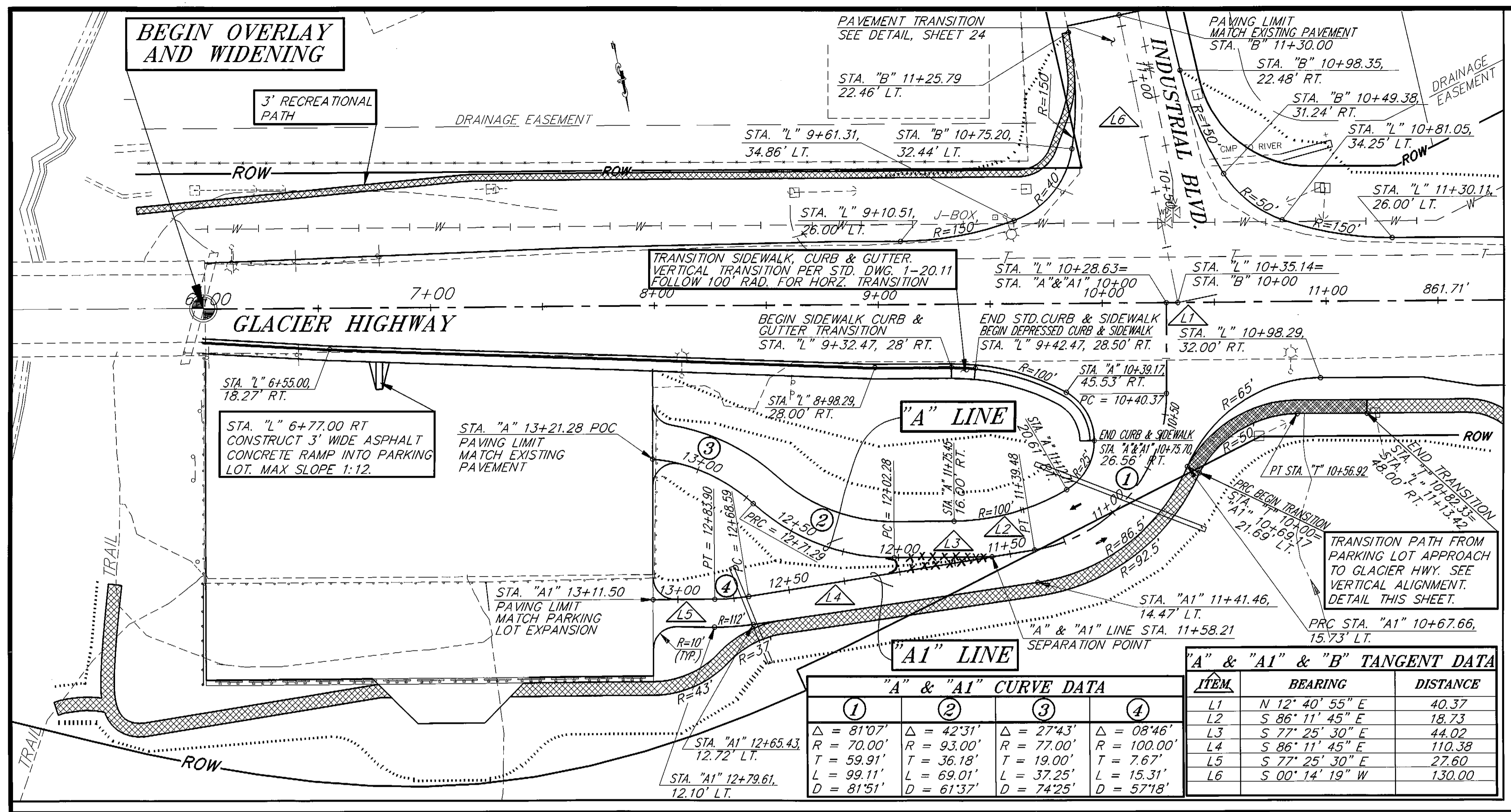
NO.	DATE	DESCRIPTION OF CHANGE

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

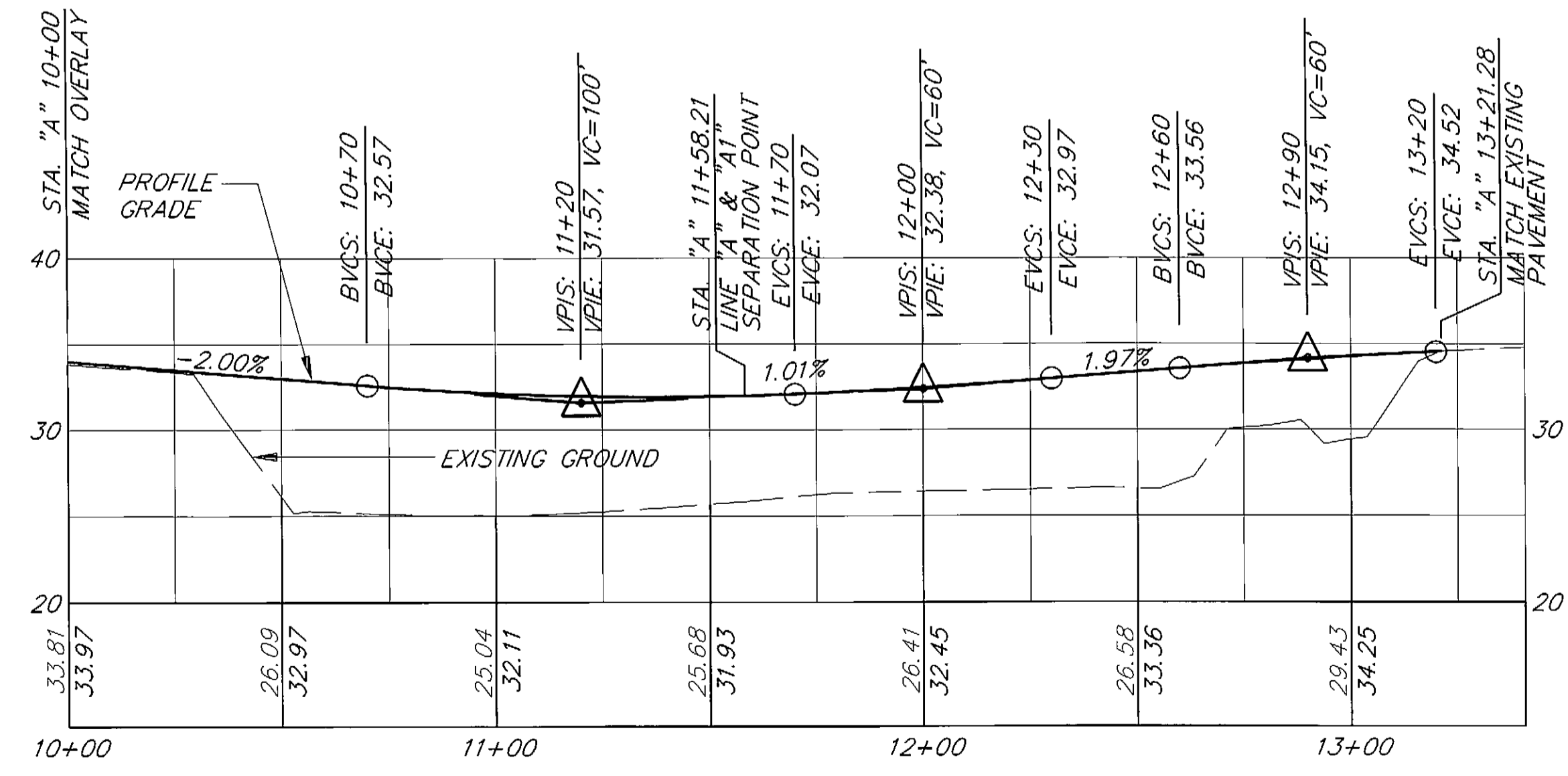
JUNEAU ALASKA  
BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF  
HES-093-3(5) 70657  
STA. "L" 43+50 TO E.O.P. STA. "L" 50+00  
PLAN & PROFILE

DESIGNED BY: <b>L.P. CARROLL</b>	PROJECT NO. <b>70657</b>
DRAWN BY: <b>AutoCAD/R. SNYDER</b>	DATE: <b>JUNE 1994</b>
CHECKED BY: <b>T.W. MOORE</b>	SHEET <b>13</b> OF <b>28</b>

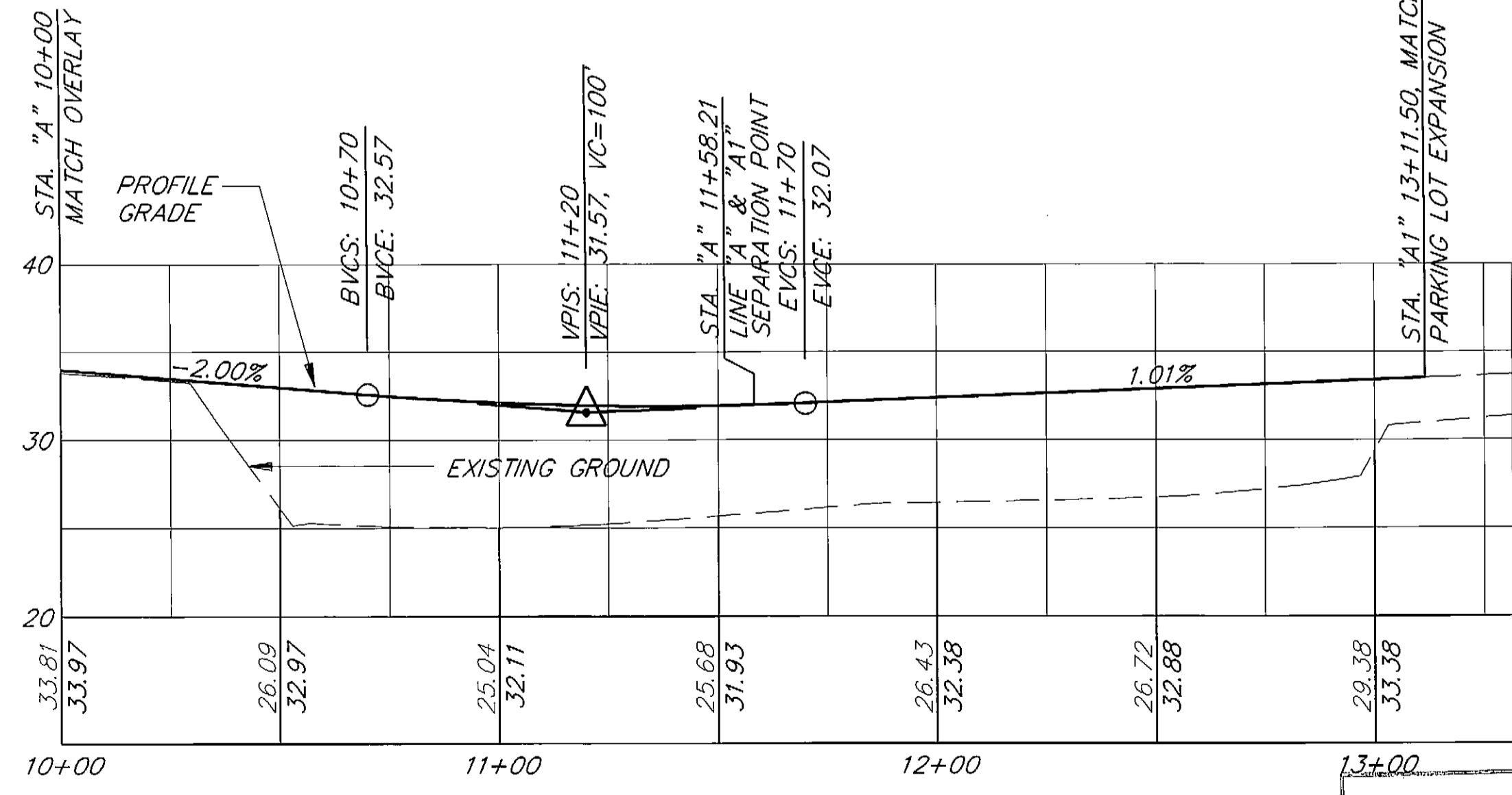




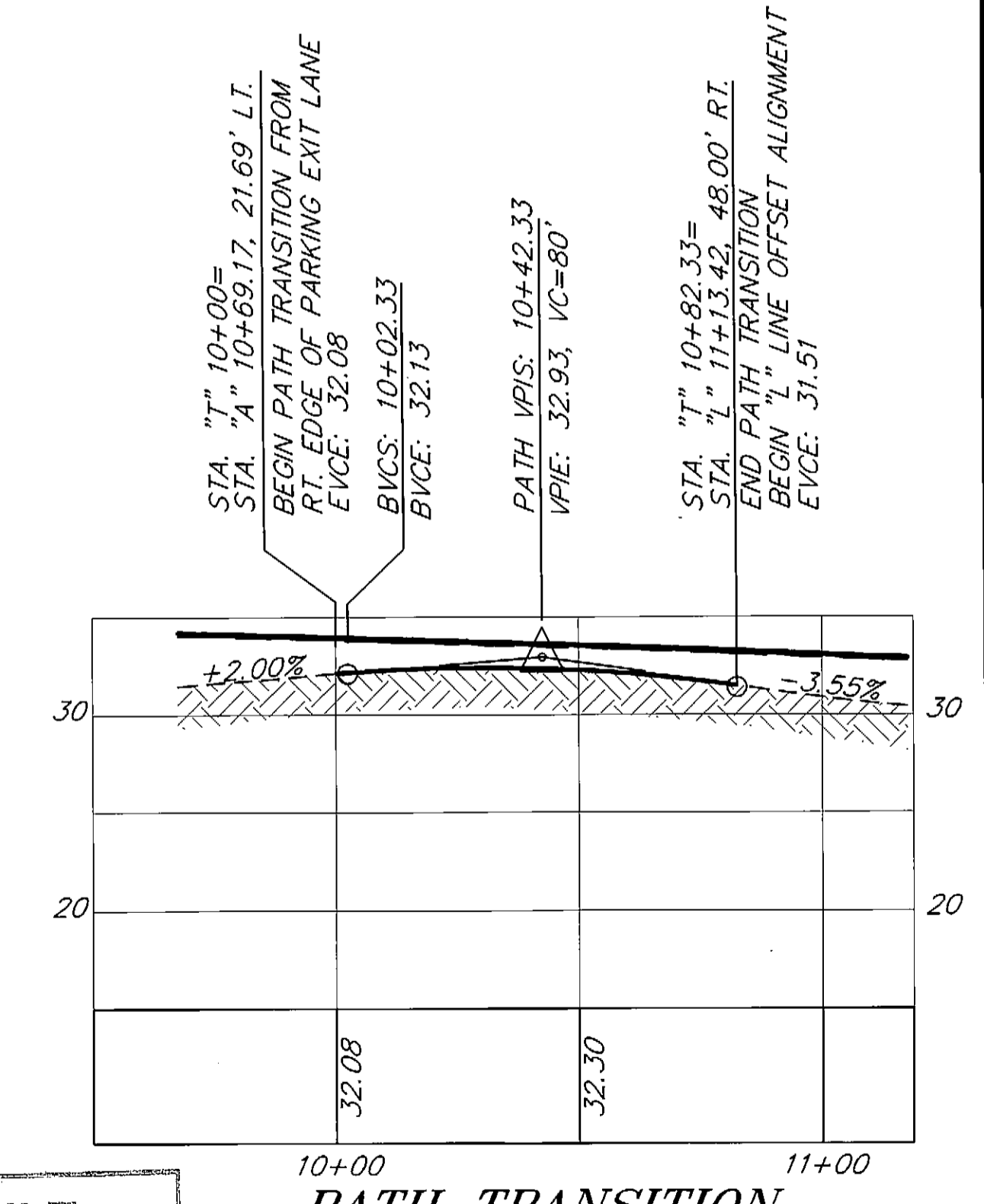
"A" & "A1" CURVE DATA				"A" & "A1" & "B" TANGENT DATA		
①	②	③	④	ITEM	BEARING	DISTANCE
$\Delta = 81'07"$	$\Delta = 42'31"$	$\Delta = 27'43"$	$\Delta = 08'46"$	L1	N 12° 40' 55" E	40.37
$R = 70.00'$	$R = 93.00'$	$R = 77.00'$	$R = 100.00'$	L2	S 86° 11' 45" E	18.73
$T = 59.91'$	$T = 36.18'$	$T = 19.00'$	$T = 7.67'$	L3	S 77° 25' 30" E	44.02
$L = 99.11'$	$L = 69.01'$	$L = 37.25'$	$L = 15.31'$	L4	S 86° 11' 45" E	110.38
$D = 81'51"$	$D = 61'37"$	$D = 74'25"$	$D = 57'18"$	L5	S 77° 25' 30" E	27.60
				L6	S 00° 14' 19" W	130.00



"A" LINE PROFILE  
INBOUND LANE



"A1" LINE PROFILE  
OUTBOUND LANE



AS-BUILT  
PATH TRANSITION  
VERTICAL ALIGNMENT DETAIL

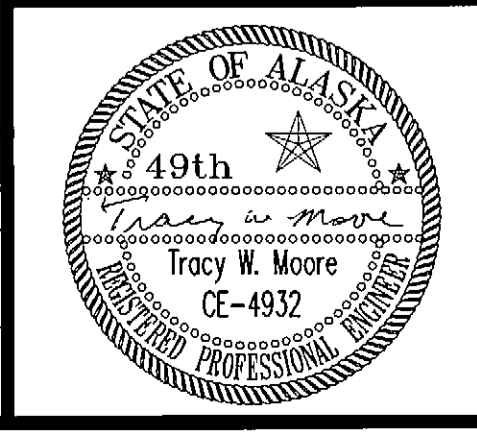
NOTE: DO NOT SCALE FROM THESE PLANS—USE DIMENSIONS

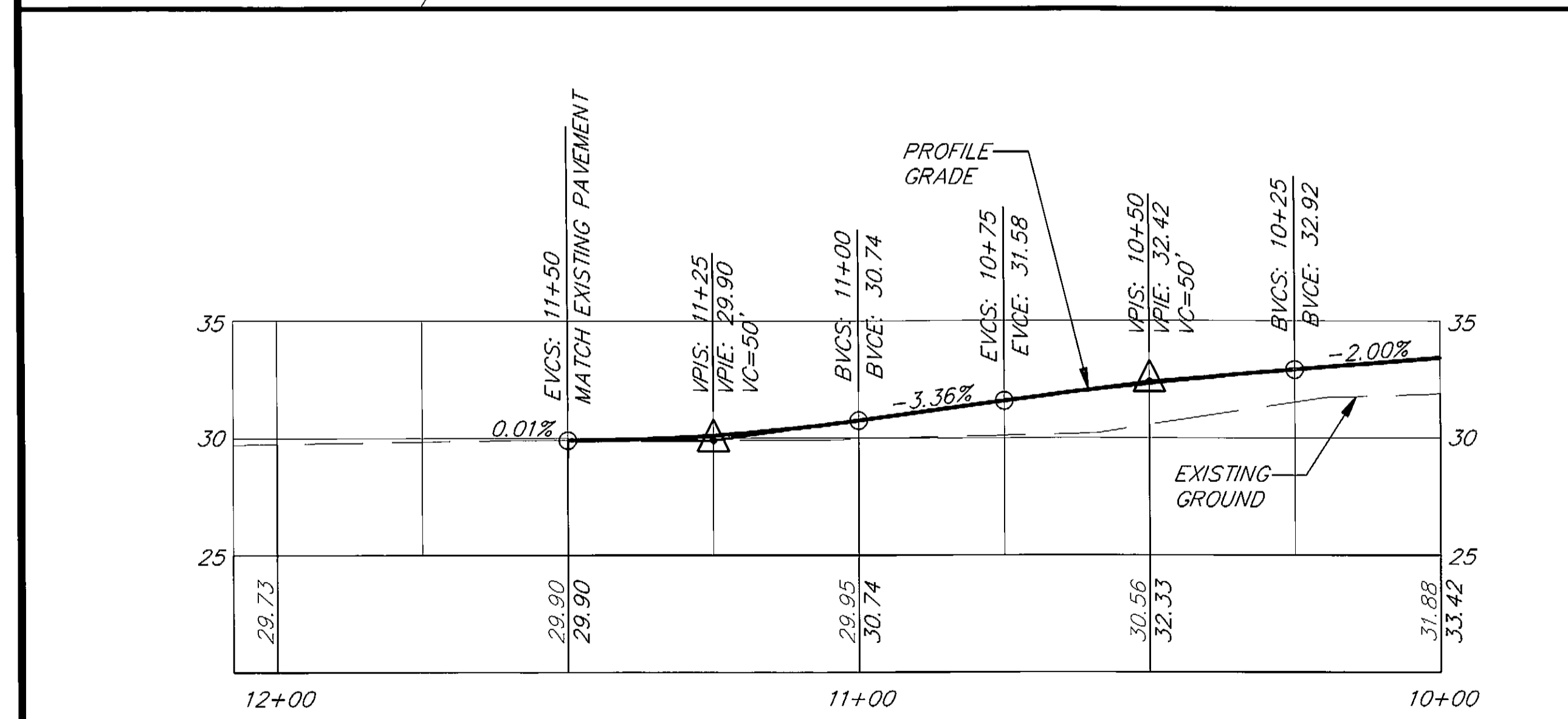
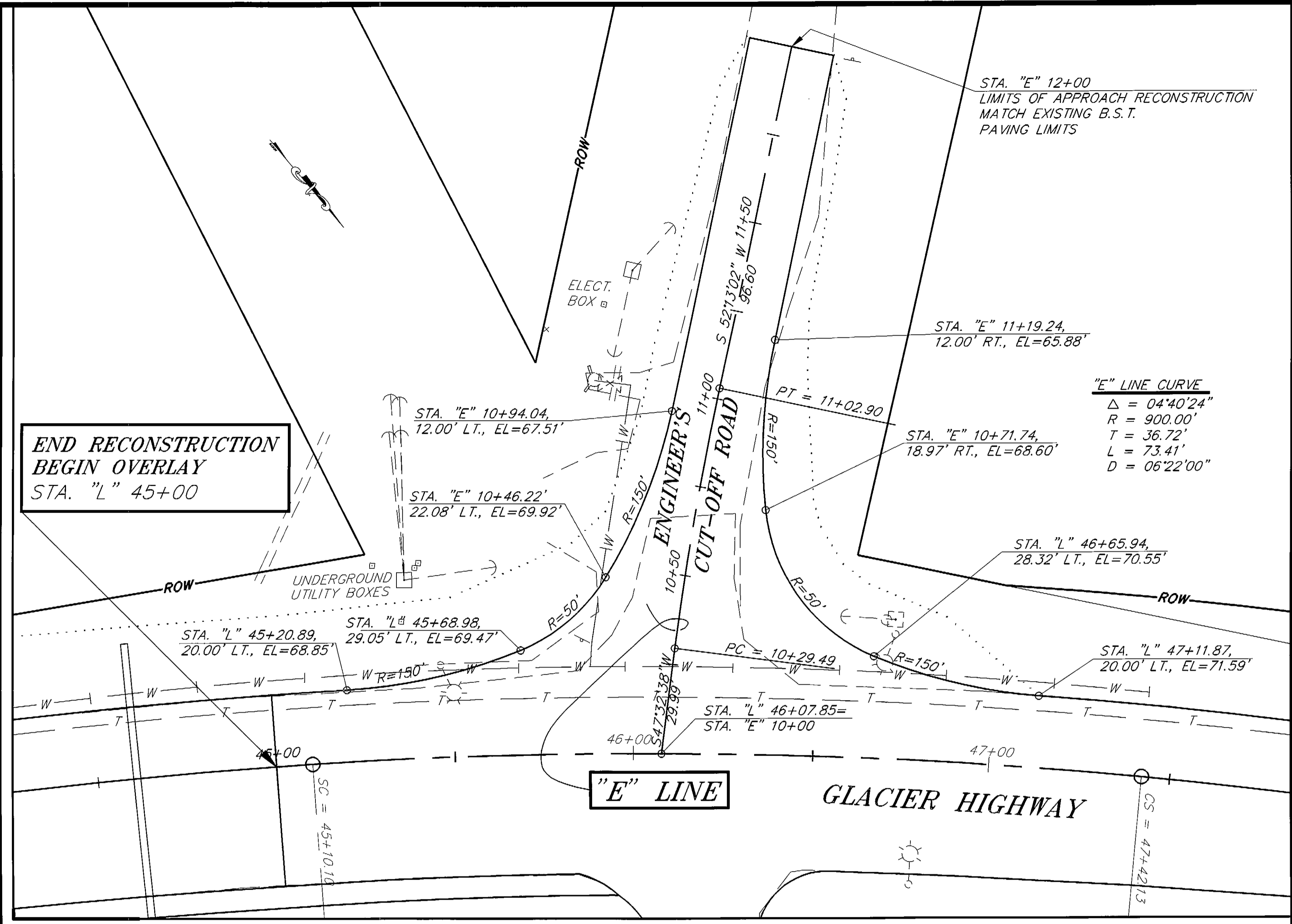
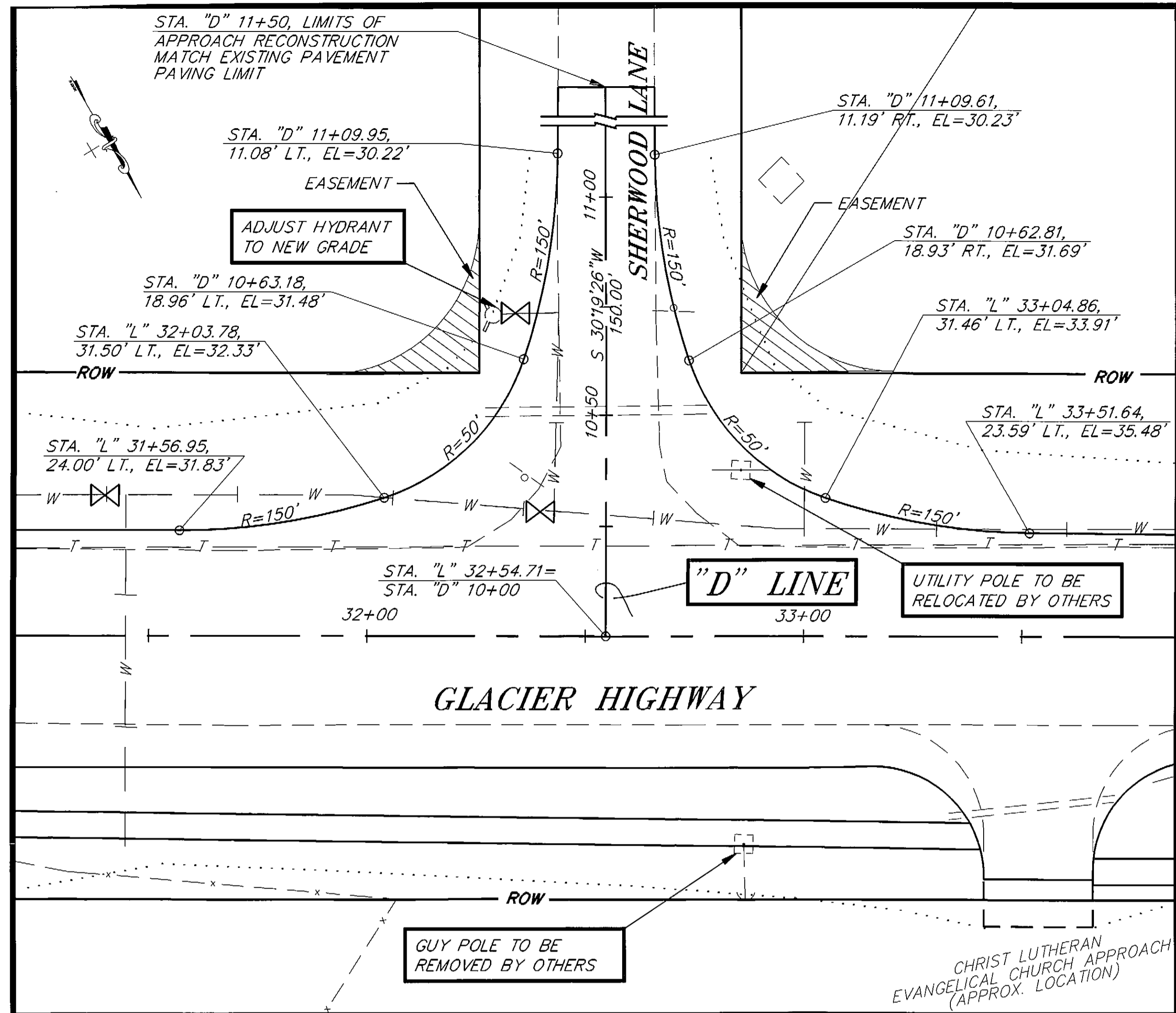
RECORD OF REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGE

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

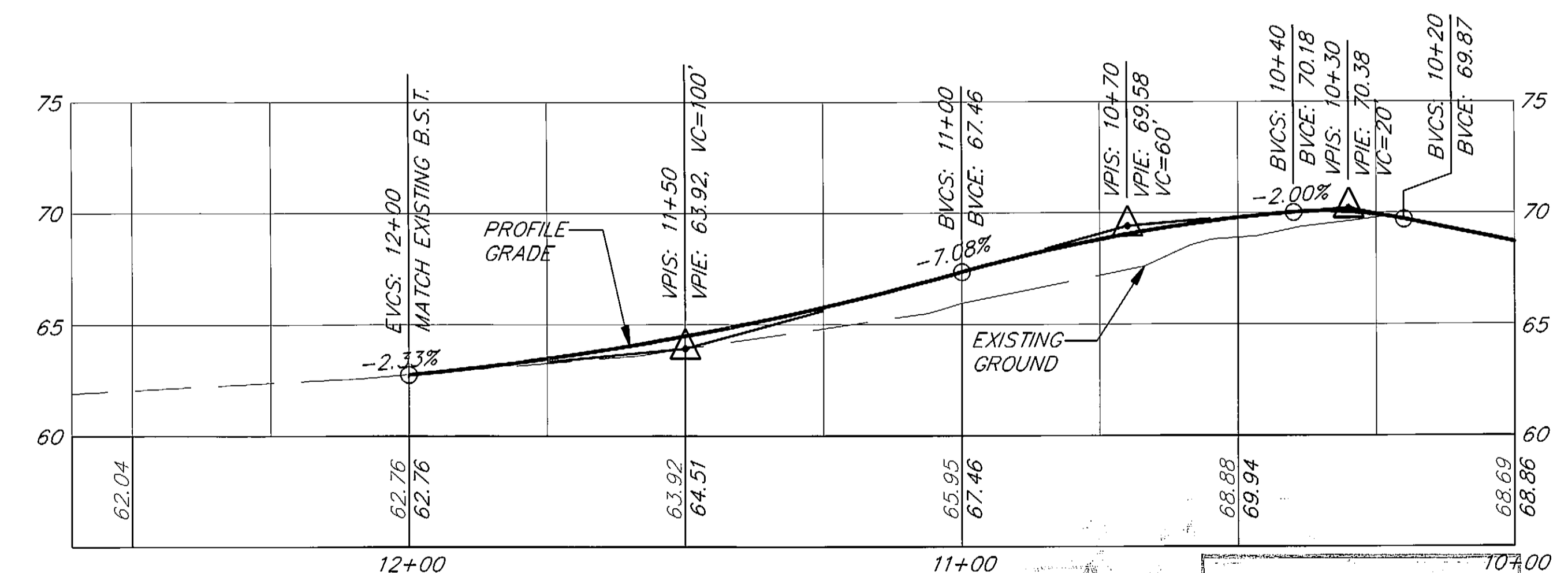
JUNEAU BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF ALASKA  
HES-093-3(5) 70657  
INDUSTRIAL BOULEVARD & JENSINE STREET  
APPROACH PLAN & PROFILES

DESIGNED BY:	L.P. CARROLL	PROJECT NO.:	70657
DRAWN BY:	AutoCAD/R. SNYDER	DATE:	JUNE 1994
CHECKED BY:	T.W. MOORE	SHEET	14 OF 28





**"D" LINE PROFILE**  
SHERWOOD LANE



**"E" LINE PROFILE**  
ENGINEER'S CUT-OFF ROAD

RECORD OF REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGE

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

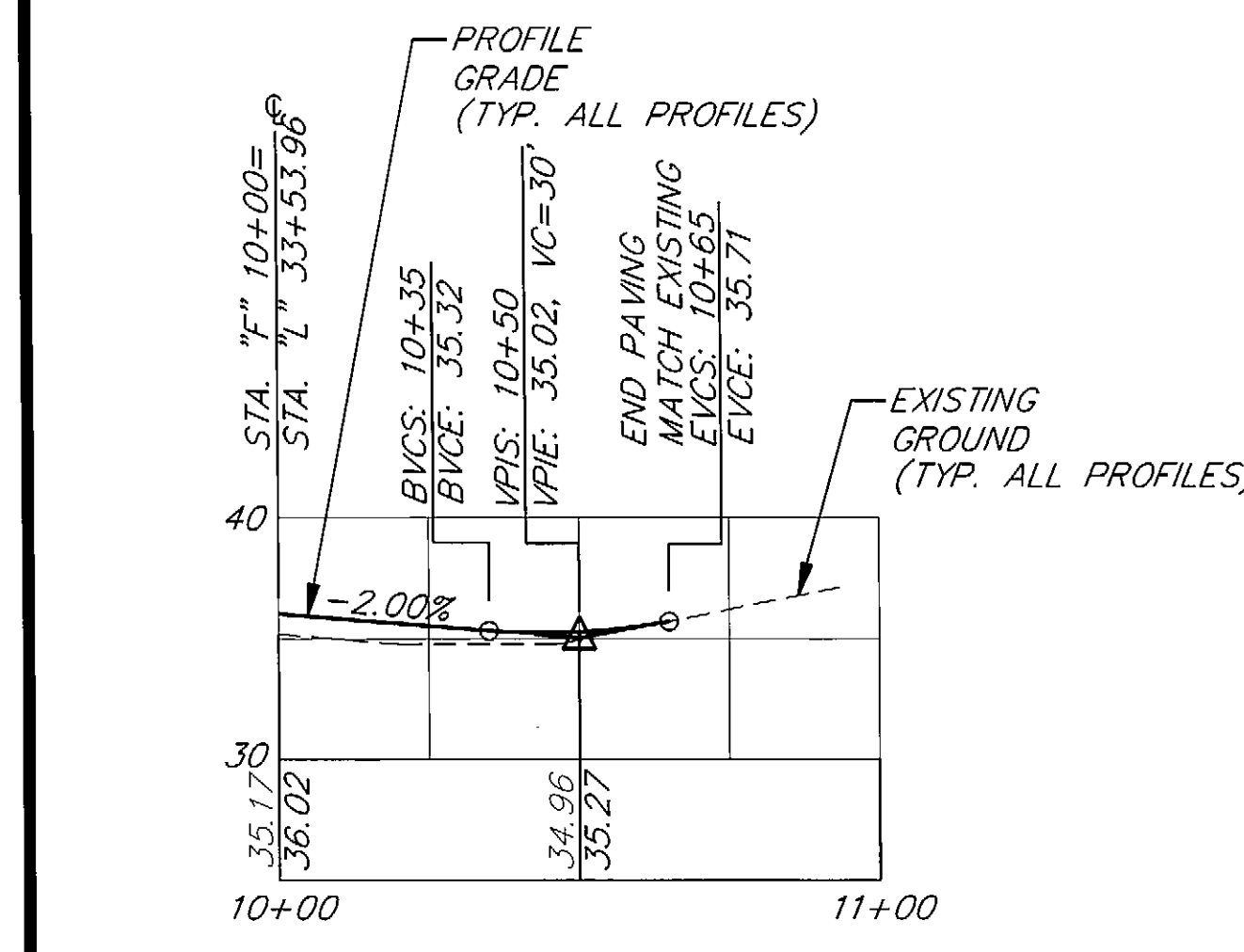
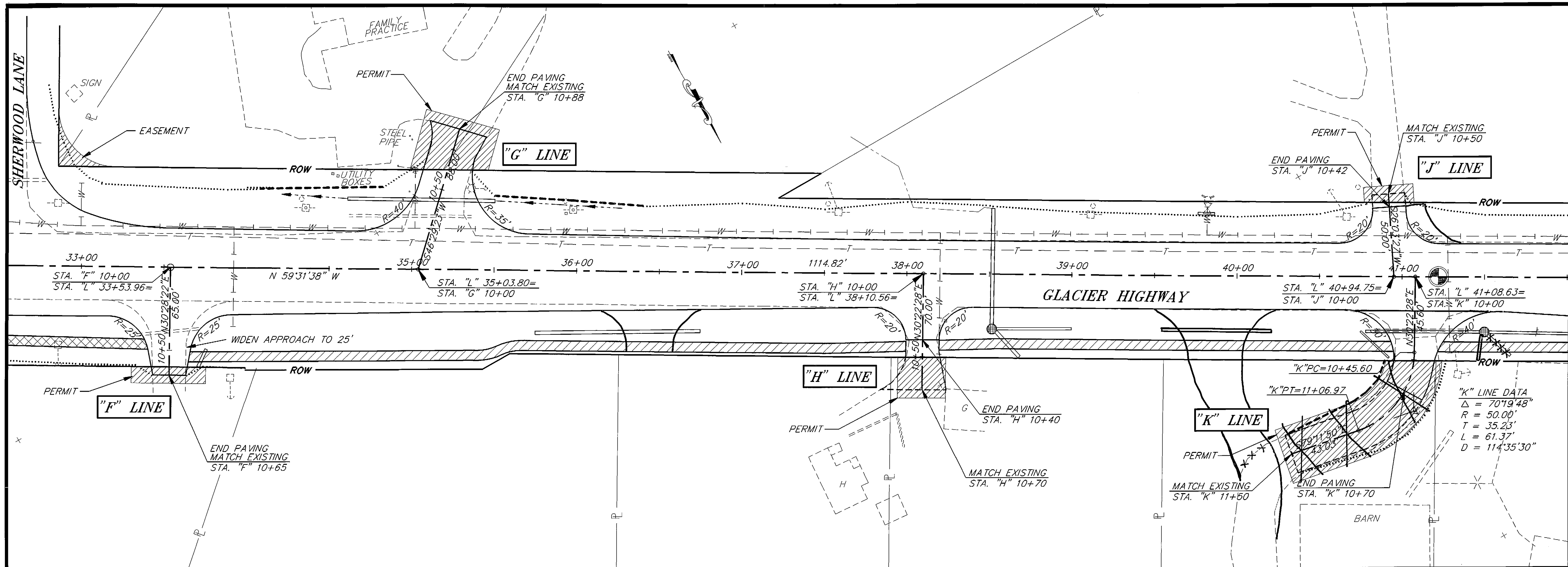
JUNEAU BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF ALASKA  
HES-093-3(5) 70657  
SHERWOOD LANE & ENGINEER'S CUT-OFF ROAD  
APPROACH PLAN & PROFILES

DESIGNED BY: L.P. CARROLL	PROJECT NO. 70657
DRAWN BY: AutoCAD/R. SNYDER	DATE: JUNE 1994
CHECKED BY: T.W. MOORE	SHEET 15 OF 28

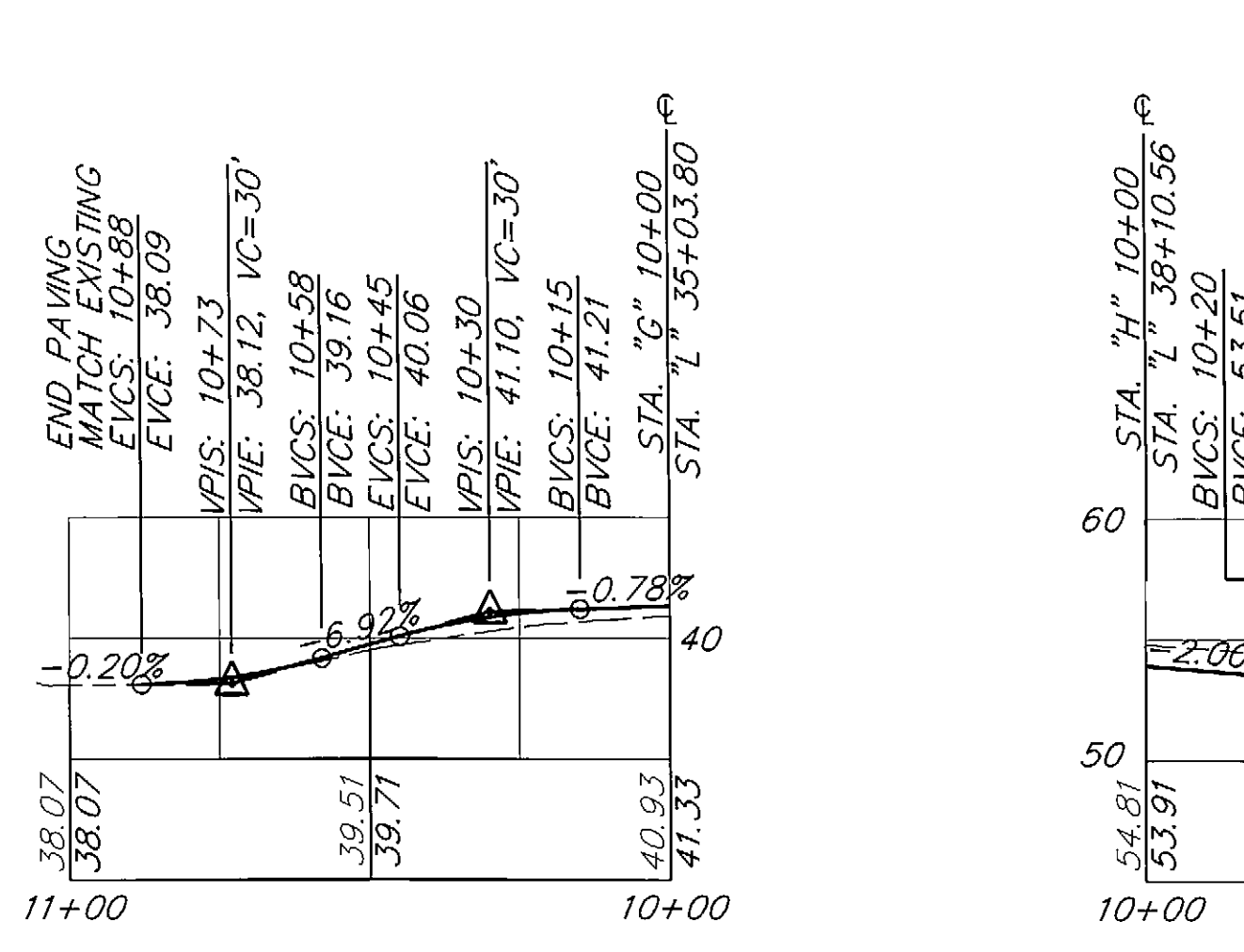


AS BUILT  
BY: B.A. DATE: 1-97

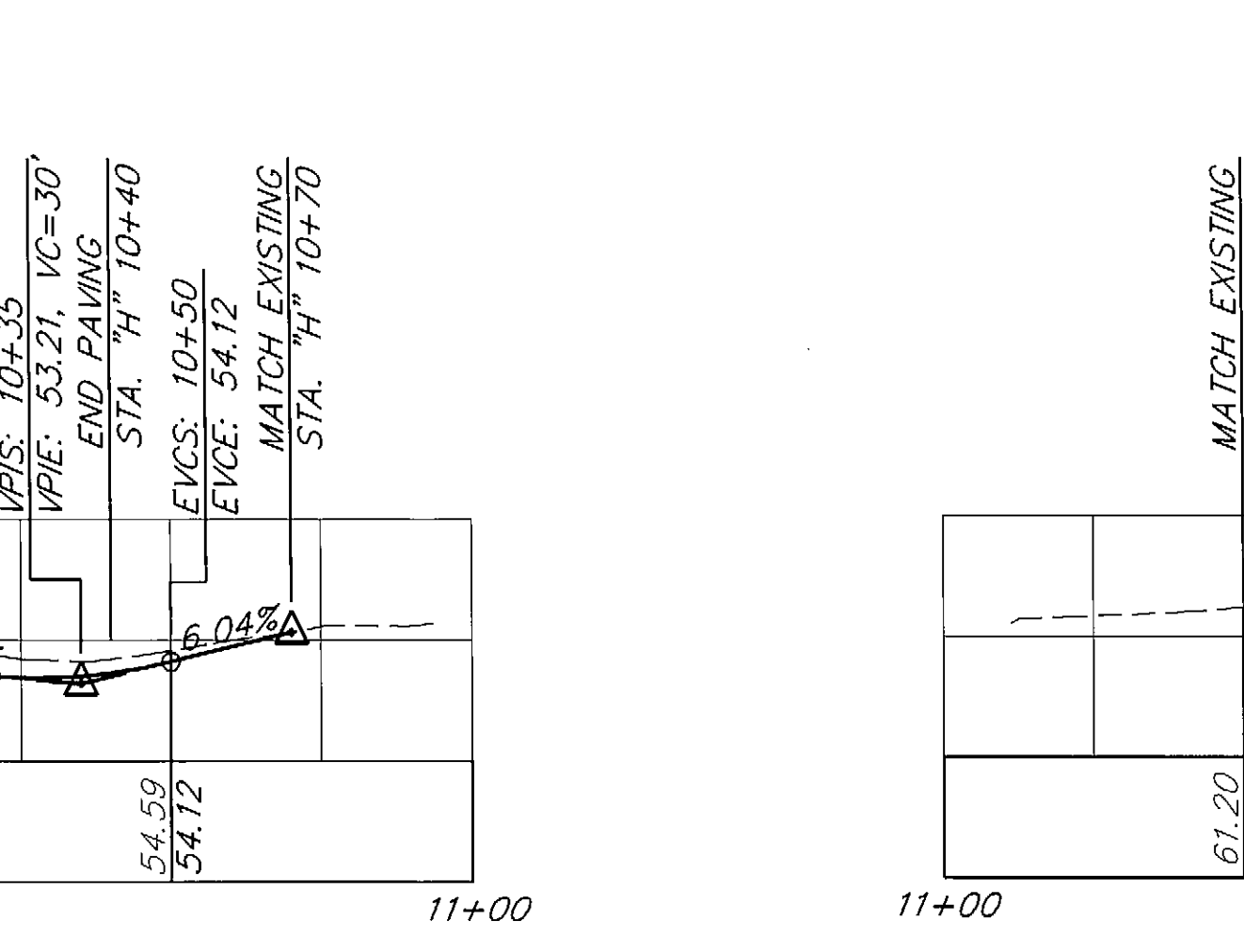
NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS



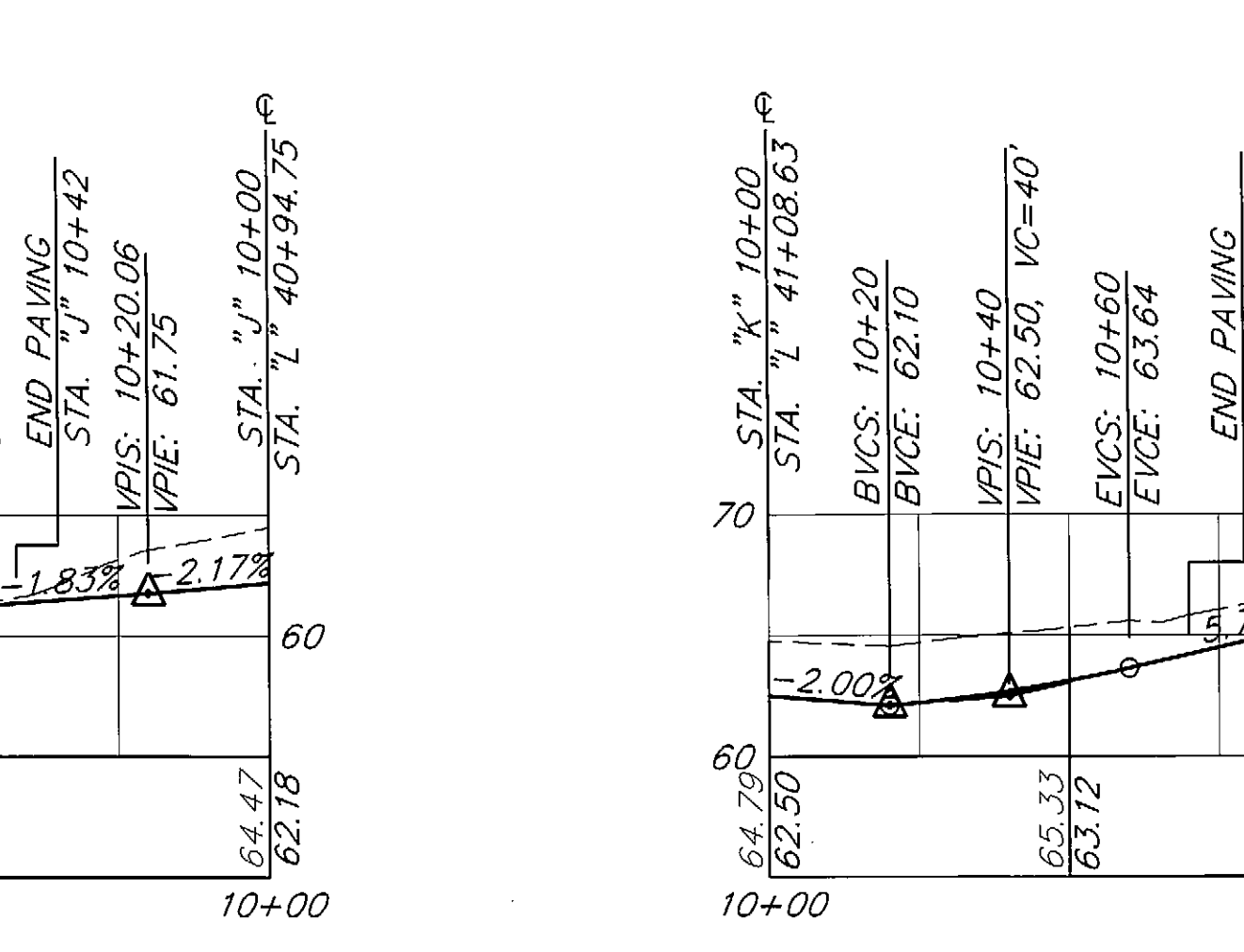
**"F" LINE**  
CHRIST LUTHERAN EVANGELICAL CHURCH



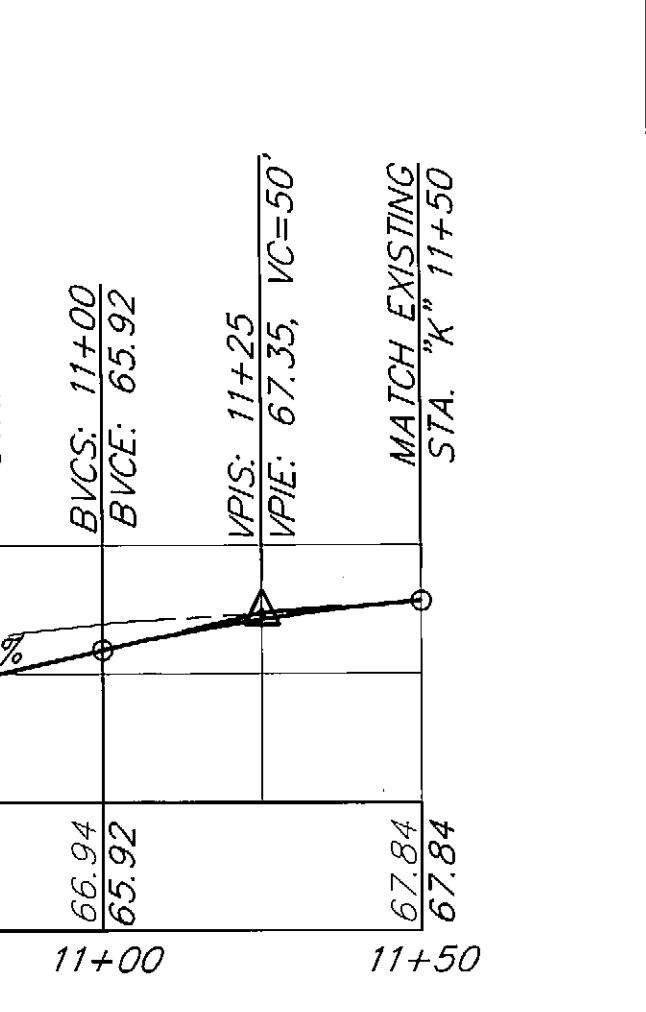
**"G" LINE**  
FAMILY PRACTICE CLINIC



**"H" LINE**  
SIDNEY PROPERTY



**"J" LINE**  
LANZ PROPERTY



**"K" LINE**  
SWAMPY ACRES

**AS-BUILT**  
BY: B.D. DATE: 1-97

**AS-BUILT**

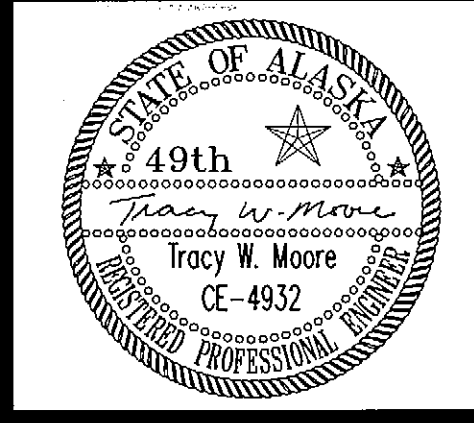
NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

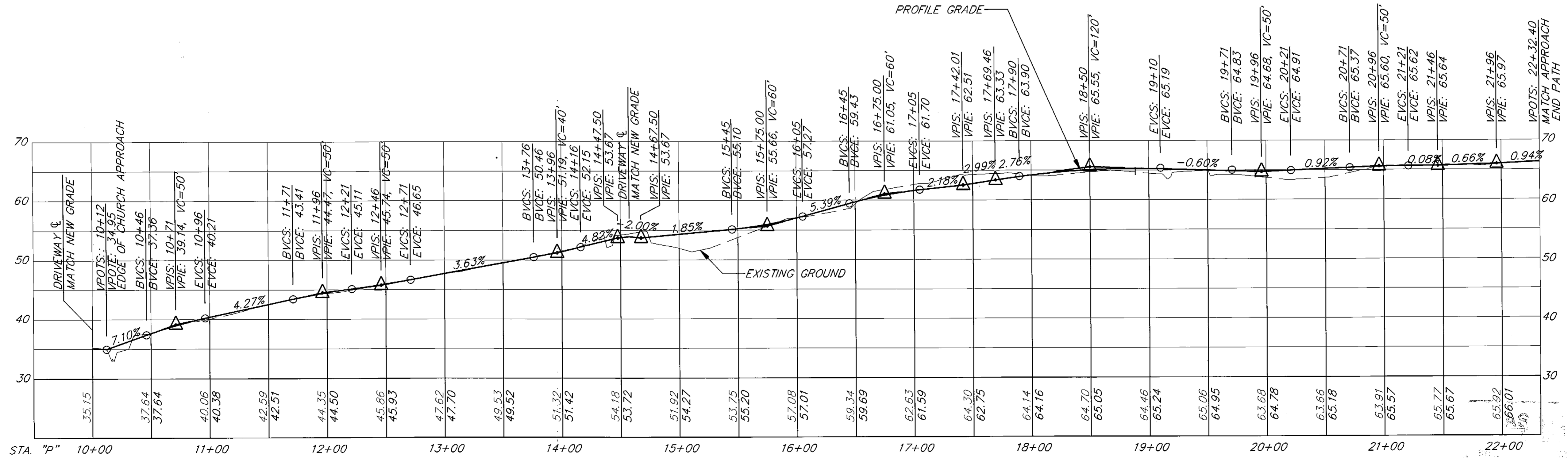
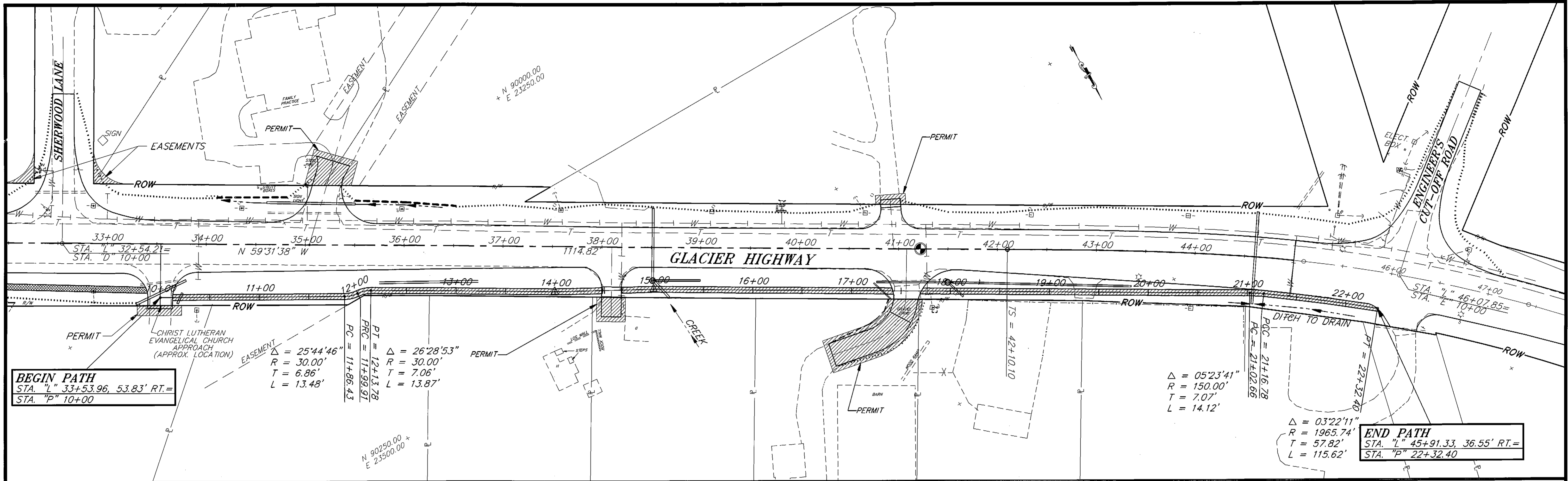
RECORD OF REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGE

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF ALASKA  
HES-093-3(5) 70657  
DRIVEWAY DETAILS  
PLAN & PROFILES

DESIGNED BY: <b>L.P. CARROLL</b>	PROJECT NO. <b>70657</b>
DRAWN BY: <b>AutoCAD/R. SNYDER</b>	DATE: <b>JUNE 1994</b>
CHECKED BY: <b>T.W. MOORE</b>	SHEET 16 OF 28





**RECREATIONAL PATH PROFILE**

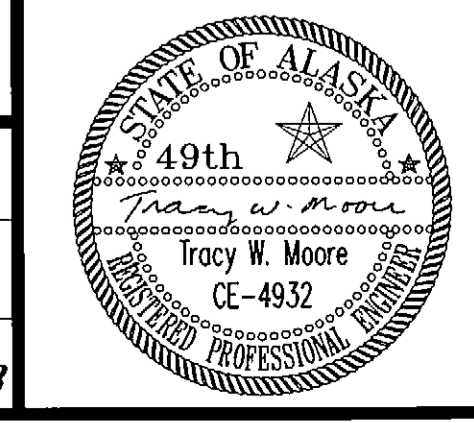
NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

RECORD OF REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGE

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF ALASKA  
 HES-093-3(5) 70657  
 STA. "P" 10+00 TO STA. "P" 22+32.40  
 PATH PLAN & PROFILE

DESIGNED BY:	L.P. CARROLL	PROJECT NO.	70657
DRAWN BY:	AutoCAD/R. SNYDER	DATE:	JUNE 1994
CHECKED BY:	T.W. MOORE	SHEET	17 OF 28



# STANDARD SIGNING SCHEDULE

SIGN NO.	STATION	OFFSET		CODE NO. (ASDS)	LEGEND	SIZE	AREA S.F.	NO. OF POSTS	POST SIZE	TYPE	EMBEDMENT TYPE	FACING TRAFFIC	REMARKS
		LT.	RT.										
1	"L" 5+95		X	D6-1	SCENIC AREA →	24"X24"	4.00	1	2"X2"	PST	SLEEVE (SOIL)	WB	
2	"L" 5+95		X	M10-2	10	6"X12"	0.50					WB	MOUNT BELOW #1
3	"L" 5+95	X		M10-2	10	6"X12"	0.50	1	2"X2"	PST	SLEEVE (SOIL)	EB	
4	"L" 8+10		X	D9-3C	NO CAMPING SYMBOL	24"X24"	4.00	1	2.5"X2.5"	PST	SLEEVE (SOIL)	EB	
5	"L" 8+10		X	D9-3C	NO CAMPING	6"X24"	1.00					EB	MOUNT BELOW #4
6	"L" 8+60		X	D3-2(L)	← INDUSTRIAL BLVD	18"X112"	14.00	2	2.5"X2.5"	PST	SLEEVE (SOIL)	WB	FRAMED, 0.125 THICK
7	"L" 9+72	X		R1-1	STOP	30"X30"	6.25	1	2.5"X2.5"	PST	SLEEVE (SOIL)	NB	
8	"L" 9+72	X		D3-1	INDUSTRIAL BLVD	8"X36"	2.00					EB-WB	USE SERIES "B" LETTERS. MOUNT ABOVE #7
9	"L" 10+65		X	R1-1	STOP	30"X30"	6.25	1	2.5"X2.5"	PST	SLEEVE (SOIL)	SB	
10	"L" 11+05		X	R2-1	SPEED LIMIT 50	30"X36"	7.50					WB	MOUNT ON ELECTROLIER POLE
11	"L" 12+00	X		D3-2(R)	INDUSTRIAL BLVD →	18"X112"	14.00	2	2.5"X2.5"	PST	SLEEVE (SOIL)	EB	FRAMED, 0.125 THICK
12	"L" 13+00		X	R3-9B	CENTER LANE ↙ ONLY	24"X36"	6.00					WB	MOUNT BELOW #12A
12A	"L" 13+00		X	R7-202K	BEGIN	12"X24"	2.00	1	2.5"X2.5"	PST	SLEEVE (SOIL)	WB	
13	"L" 14+18		X	R1-1	STOP	30"X30"	6.25	1	2.5"X2.5"	PST	SLEEVE (SOIL)	SB	
14	"L" 14+18		X	R3-1	WILDMEADOW LANE	8"X36"	2.00					EB-WB	USE SERIES "B" LETTERS. MOUNT ABOVE #13
15	"L" 13+40	X		R3-9B	CENTER LANE ↙ ONLY	24"X36"	6.00					EB	MOUNT BELOW #16
16	"L" 13+40	X		R7-202M	END	12"X24"	2.00					EB	MOUNT ON ELECTROLIER POLE
16A	"L" 13+40	X		D6-1	← SCENIC AREA	24"X24"	4.00						MOUNT BELOW #15
17	"L" 21+00	X		R3-9B	CENTER LANE ↙ ONLY	24"X36"	6.00	1	2.5"X2.5"	PST	SLEEVE (SOIL)	EB	
18	"L" 22+50	X		R1-1	STOP	30"X30"	6.25	1	2.5"X2.5"	PST	SLEEVE (SOIL)	SB	
19	"L" 22+50	X		R3-1	JENSINE ST	8"X30"	1.67					EB-WB	USE SERIES "B" LETTERS. MOUNT ABOVE #18
20	"L" 24+00		X	R3-9B	CENTER LANE ↙ ONLY	24"X36"	6.00	1	2.5"X2.5"	PST	SLEEVE (SOIL)	WB	
23	"L" 29+50		X	R9-18G(L)	FISH AND WILDLIFE PROTECTION STATE TROOPERS W/BADGE	36"X54"	13.50	2	2.5"X2.5"	PST	SLEEVE (SOIL)	WB	
24	"L" 29+50	X		R2-1	SPEED LIMIT 50	30"X36"	7.50	1	2.5"X2.5"	PST	SLEEVE (SOIL)	EB	
25	"L" 31+50	X		R3-9B	CENTER LANE ↙ ONLY	24"X36"	6.00					EB	MOUNT BELOW #25A
25A	"L" 31+50	X		R7-202K	BEGIN	12"X24"	2.00	1	2.5"X2.5"	PST	SLEEVE (SOIL)	EB	
26	"L" 32+20	X		R1-1	STOP	30"X30"	6.25	1	2.5"X2.5"	PST	SLEEVE (SOIL)	NB	
27	"L" 32+20	X		D3-1	SHERWOOD LN	8"X30"	1.67					EB-WB	USE SERIES "B" LETTERS. MOUNT ABOVE #26
27A	"L" 32+20		X	R7-202M	END	12"X24"	2.00	1	2.5"X2.5"	PST	SLEEVE (SOIL)	WB	
27B	"L" 32+20		X	R3-9B	CENTER LANE ↙ ONLY	24"X36"	6.00					WB	MOUNT BELOW #27A
28	"L" 33+75		X	R1-1	STOP	30"X30"	6.25	1	2.5"X2.5"	PST	SLEEVE (SOIL)	SB	
29	"L" 32+75	X		W14-1	DEAD END	24"X24"	4.00	1	2.5"X2.5"	PST	SLEEVE (SOIL)	SB	
30	"L" 34+50	X		R9-18G(R)	FISH AND WILDLIFE PROTECTION STATE TROOPERS W/BADGE	36"X54"	13.50	2	2.5"X2.5"	PST	SLEEVE (SOIL)	EB	
31	"L" 42+00		X	D1-2(L)	← ENGINEER'S CUTOFF RD	24"X90"	15.00	2	2.5"X2.5"	PST	SLEEVE (SOIL)	SB	
32	"L" 45+80	X		R1-1	STOP	30"X30"	6.25	1	2.5"X2.5"	PST	SLEEVE (SOIL)	NB	
33	"L" 45+80	X		D3-1	ENGINEER'S CUTOFF RD	8"X36"	2.00					EB-WB	USE SERIES "B" LETTERS. MOUNT ABOVE #32
34	"L" 46+36	X		R2-1	SPEED LIMIT 35	30"X36"	7.50	1	2.5"X2.5"	PST	SLEEVE (SOIL)	SB	

### GENERAL SIGNING NOTES

1. SIGN LOCATIONS ARE APPROXIMATE ONLY AND ARE SUBJECT TO MINOR REVISIONS.
2. SEE STD. DWG. S-30.01 FOR POST SLEEVE TYPE SOIL EMBEDMENT.
3. ALL SIGN POSTS SHALL BE TELESCOPING PERFORATED GALVANIZED SQUARE STEEL POSTS.
4. ALL SIGNS SHALL BE .080" THICK EXCEPT AS NOTED IN THE STANDARD SIGN SCHEDULE.
5. ALL NEW SIGNS SHALL BE UNFRAMED EXCEPT AS NOTED IN THE STANDARD SIGN SCHEDULE.
6. ALL EXISTING SIGNS NOT BEING RELOCATED SHALL BE DISMANTLED BY THE CONTRACTOR AND STOCKPILED AT THE STATE OF ALASKA D.O.T./P.F. MAINTENANCE STATION AS DIRECTED BY THE ENGINEER.

7. ALL D3-1 STREET NAME SIGNS HAVE THE LEGEND ON BOTH SIDES.
8. SIGNS SHALL BE INSTALLED SO THAT THE BOTTOM OF THE SIGN PANEL IS 7 FEET ABOVE THE ROADWAY SURFACE.

### GENERAL STRIPING NOTES

1. ALL ISLANDS, TURN BAYS, TWO WAY LEFT TURN LANE STRIPING AND MAINLINE CENTERLINE STRIPES TO BE PREFORMED PAVEMENT MARKING TAPE. THE REMAINDER OF THE STRIPING WILL BE PAINTED PAVEMENT MARKINGS.

**AS-BUILT**  
BY: B.A. DATE: 1-17

**AS-BUILT**  
DATE: \_\_\_\_\_

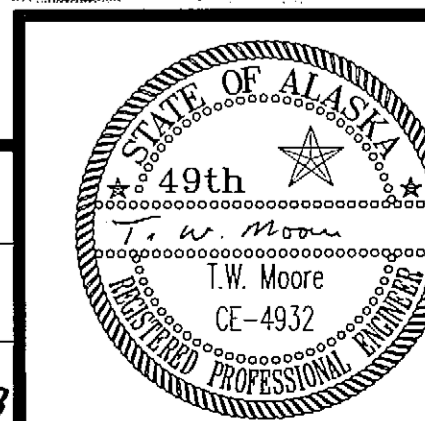
NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH:	BY:	DATE:	DESCRIPTION OF CHANGE:
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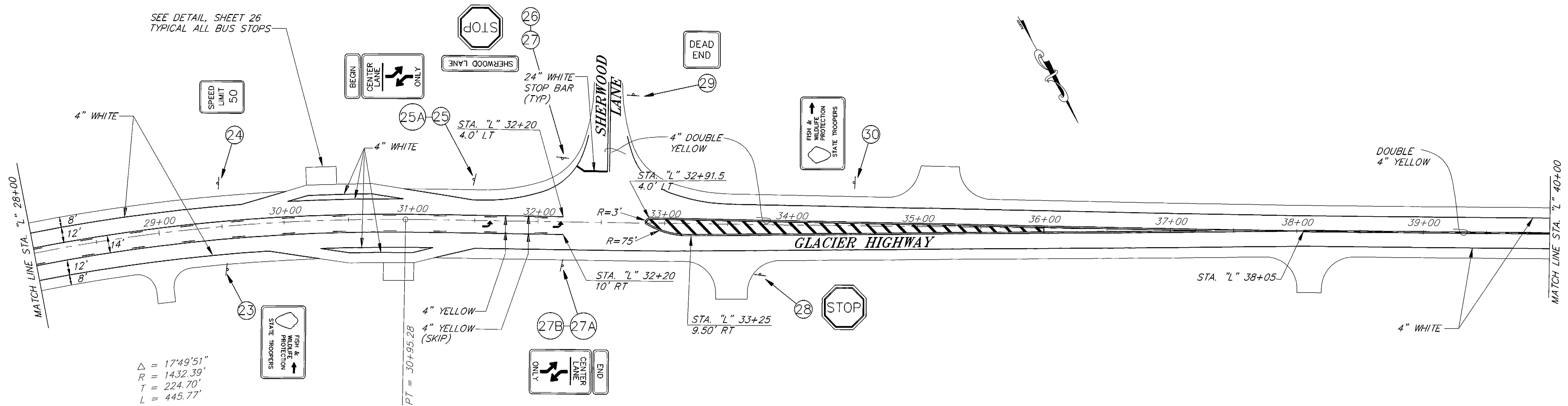
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF ALASKA  
HES-093-3(5) 70657  
SIGNING SUMMARIES

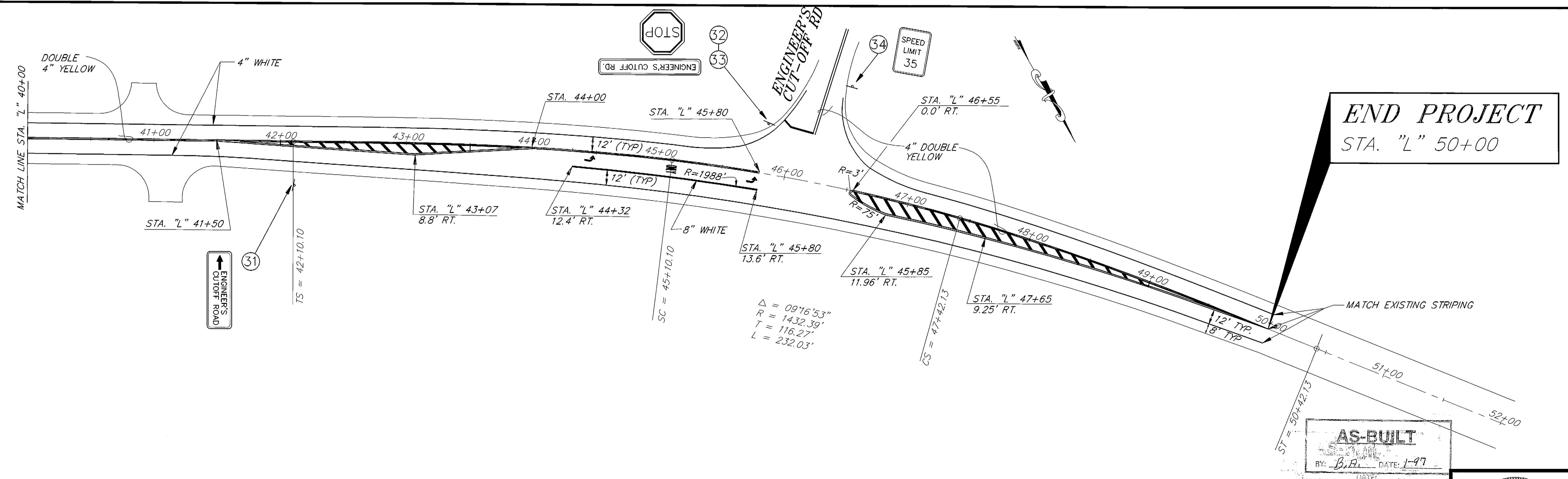
DESIGNED BY:	L.P. CARROLL	PROJECT NO.	70657
DRAWN BY:	AutoCAD/R. SNYDER	DATE:	JUNE 1994
CHECKED BY:	T.W. MOORE		







$\Delta = 17^{\circ}49'51''$   
 $R = 1432.39'$   
 $T = 224.70'$   
 $L = 445.77'$



**END PROJECT**  
STA. "L" 50+00

$\Delta = 09^{\circ}16'53''$   
 $R = 1432.39'$   
 $T = 116.27'$   
 $L = 232.03'$

**AS-BUILT**  
BY: B.A. DATE: 1-97

NOTE: DO NOT SCALE FROM THESE PLANS—USE DIMENSIONS

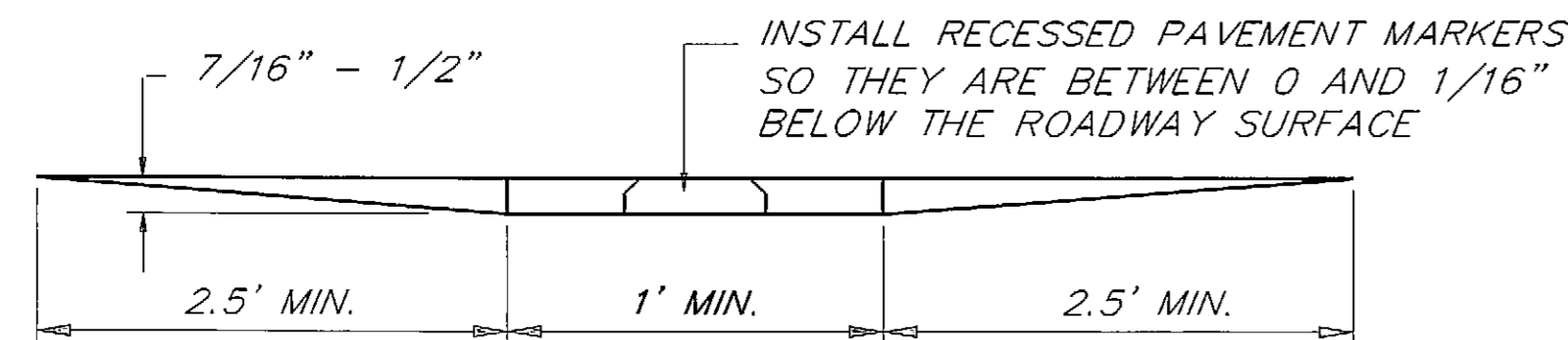
RECORD OF REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGE

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

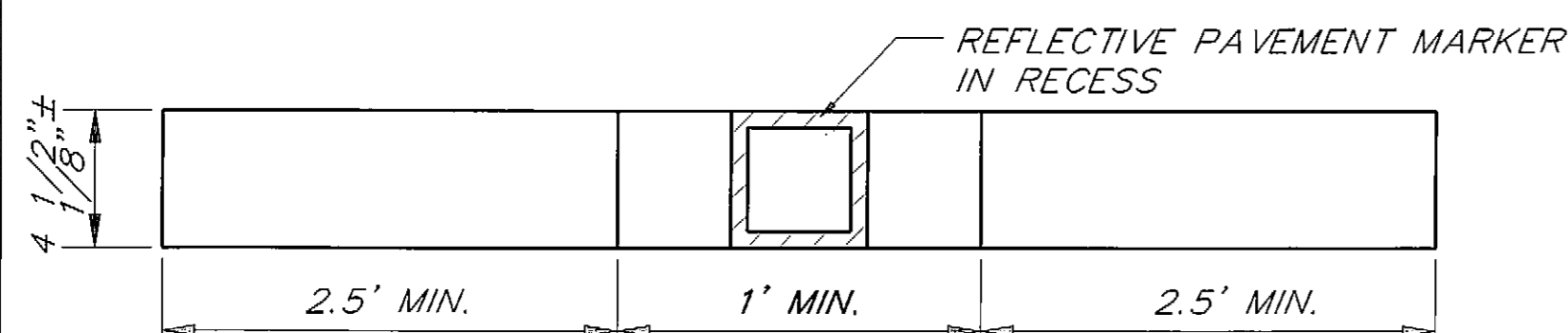
JUNEAU BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF ALASKA  
HES-093-3(5) 70657  
STA. "L" 28+00 TO E.O.P. STA. "L" 50+00  
STRIPING & SIGNING

DESIGNED BY: L.P. CARROLL  
PROJECT NO. 70657  
DRAWN BY: AutoCAD/R. SNYDER  
DATE: JUNE 1994  
CHECKED BY: T.W. MOORE  
SHEET 20 OF 28

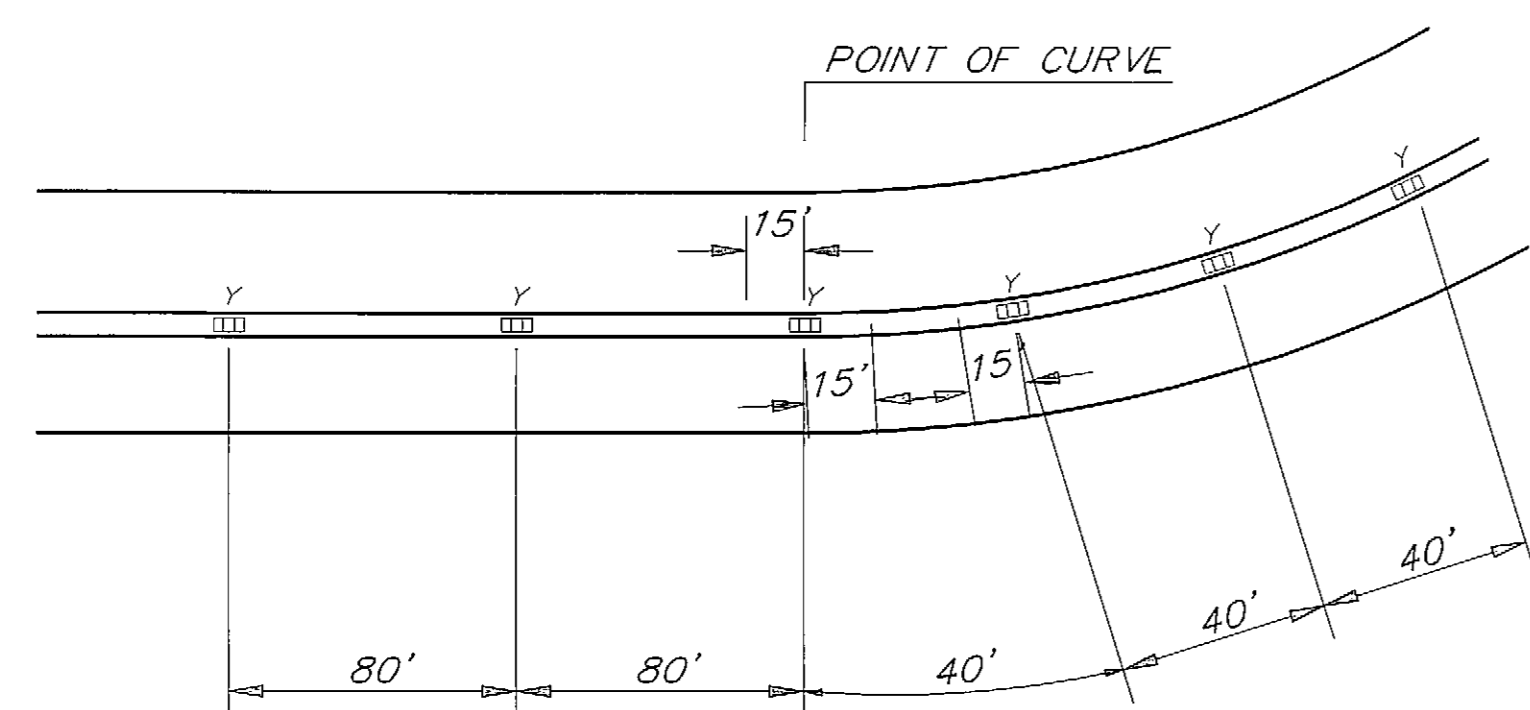




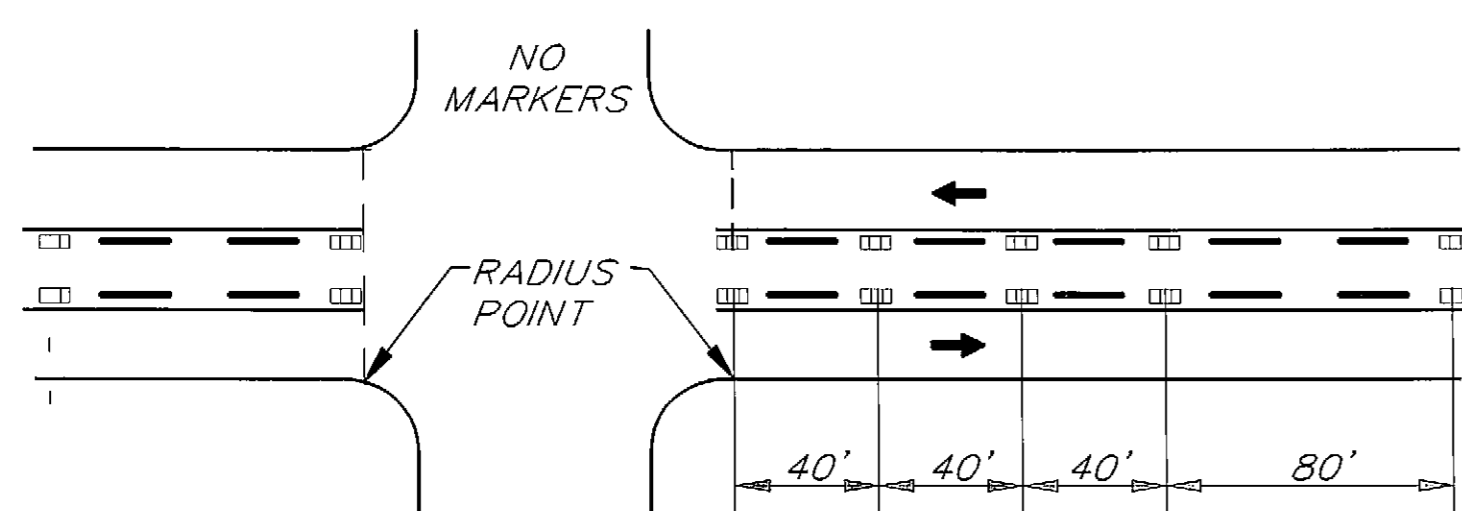
**SECTION X-X  
RECESSED PAVEMENT MARKER**



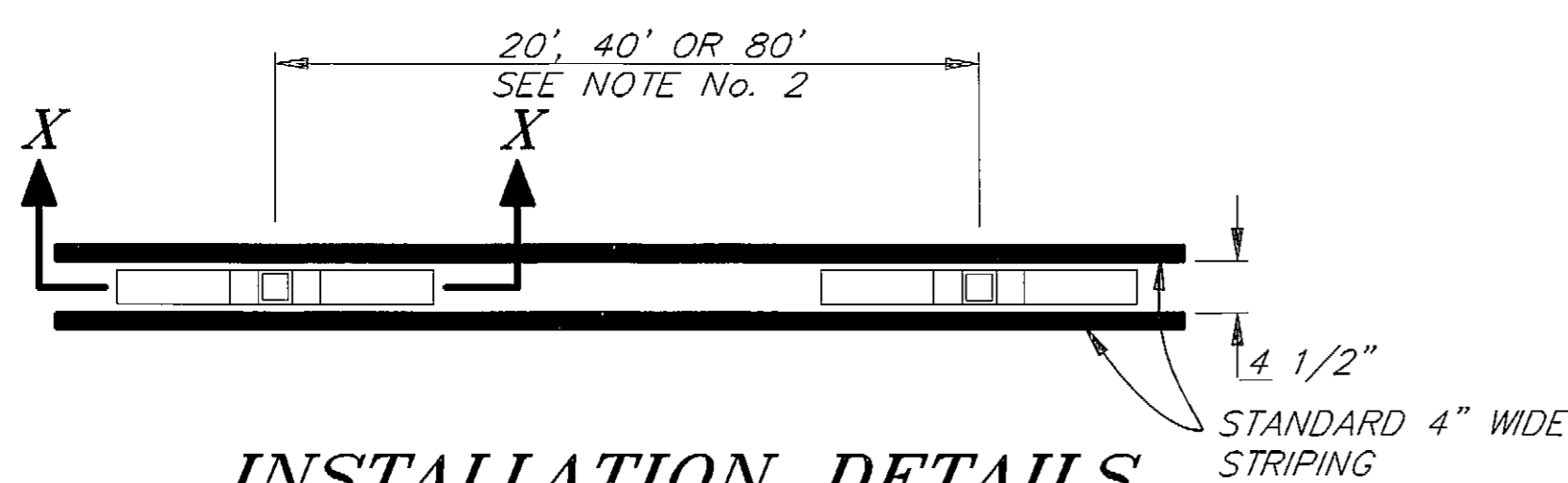
**PLAN  
RECESSED PAVEMENT MARKER**



**TWO LANE, TWO WAY DETAIL  
RECESSED PAVEMENT MARKER**



**INTERSECTION APPROACH DETAIL  
RECESSED PAVEMENT MARKER**



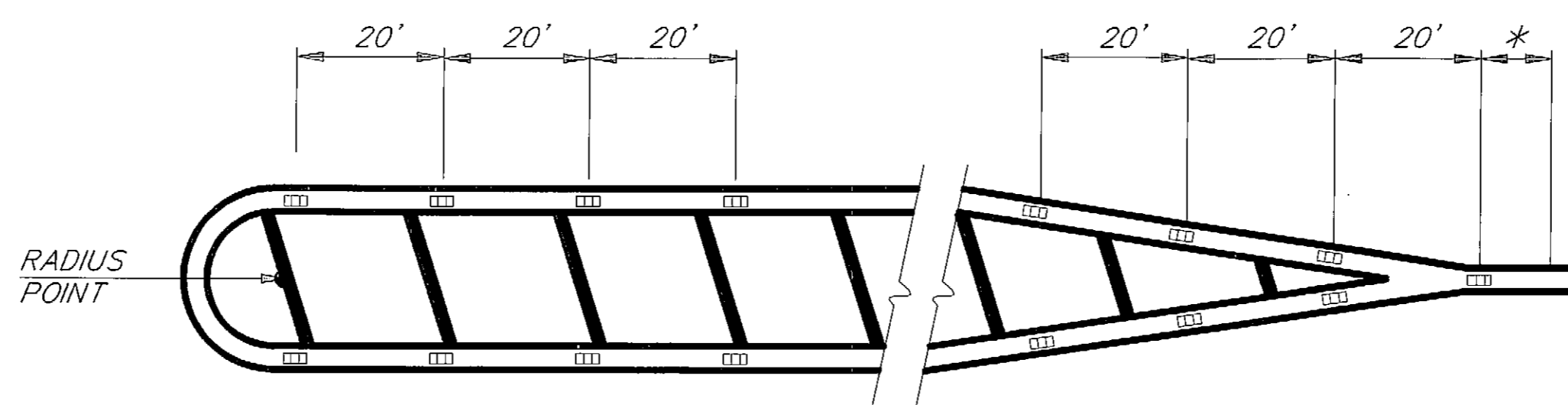
**INSTALLATION DETAILS  
RECESSED PAVEMENT MARKER**

BEG. STA. "L" LINE		END STA. "L" LINE		SPACING			QUANTITY		COMMENTS
				80	40	20	YELLOW/YELLOW	RED/WHITE	
"L" 5+98.61	"L" 9+82			X			33	15	SEE PAINTED ISLAND RPM PLACEMENT DETAIL
"L" 10+68	"L" 11+68			X				6	SEE TURN BAY RPM PLACEMENT DETAIL
"L" 13+20	"L" 21+20	X					23		SEE PAINTED ISLAND RPM PLACEMENT DETAIL
"L" 21+20	"L" 22+40		X				22		SEE TWO-WAY LEFT TURN LANE DETAIL
"L" 23+60	"L" 24+80		X				6		SEE INTERSECTION APPROACH DETAIL
"L" 24+80	"L" 31+00	X					8		SEE INTERSECTION APPROACH DETAIL
"L" 31+00	"L" 32+20		X				16		SEE TWO-WAY LEFT TURN LANE DETAIL
"L" 33+10	"L" 37+70			X			6		SEE INTERSECTION APPROACH DETAIL
"L" 37+70	"L" 41+70	X					48		SEE PAINTED ISLAND RPM PLACEMENT DETAIL
"L" 41+70	"L" 45+80			X			6		SEE TWO-LANE, TWO-WAY DETAIL
"L" 44+30	"L" 45+80			X			32		SEE PAINTED ISLAND RPM PLACEMENT DETAIL
"L" 46+55	"L" 50+42.13			X			8		SEE TURN BAY RPM PLACEMENT DETAIL
				X			39		SEE PAINTED ISLAND RPM PLACEMENT DETAIL

**R.P.M. SUMMARY TABLE**

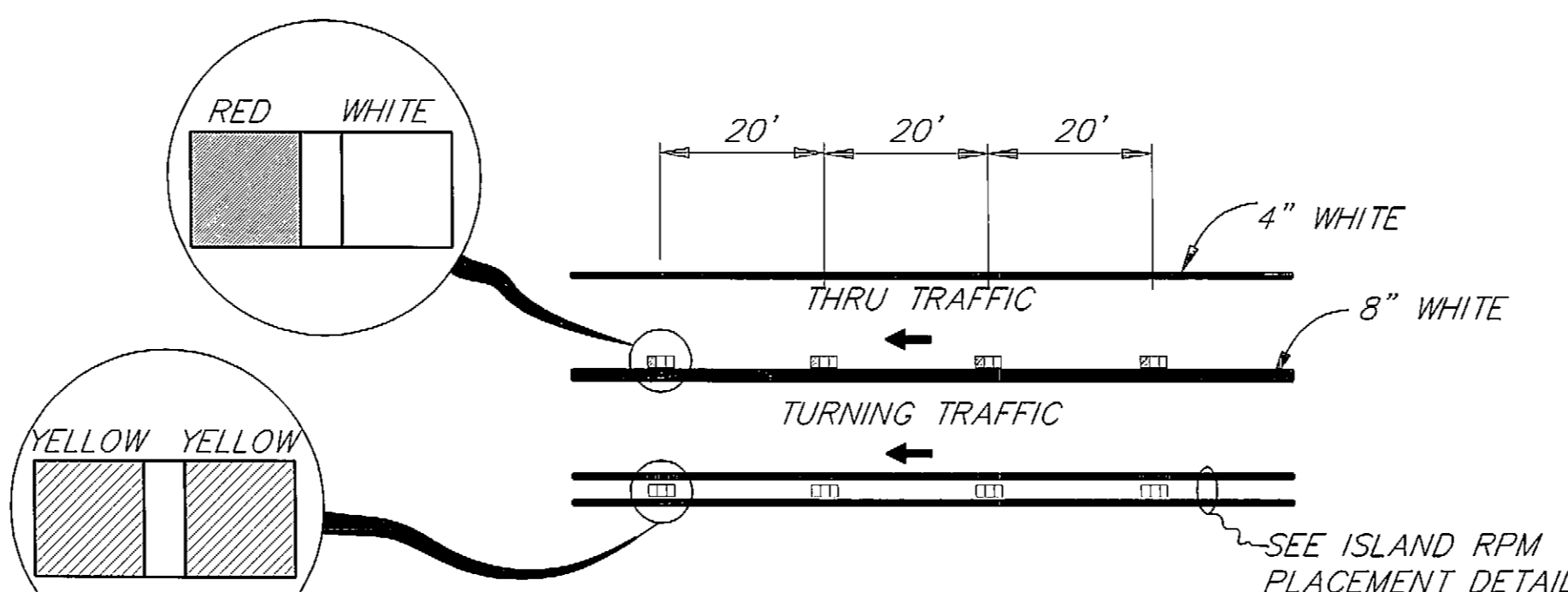
**NOTES:**

1. INSTALL REFLECTIVE PAVEMENT MARKERS ALONG ENTIRE PROJECT. RPM'S SHALL NOT BE PLACED IN INTERSECTIONS WITH PUBLIC ROADWAYS.
2. RPM SPACING SHALL START OVER AT INTERSECTION BOUNDARY.
3. ONLY PUBLIC ROADWAYS WILL BE MARKED AS INTERSECTION APPROACHES.
4. REFLECTIVE PAVEMENT MARKERS SHALL HAVE DUAL YELLOW REFLECTIVE SURFACES FOR TWO-WAY LEFT TURN LANE AND TWO-LANE ROADWAY AREAS. THE REFLECTIVE SURFACE SHALL BE RED/WHITE IN THE LEFT TURN BAY AREAS, WITH THE RED SURFACE FACING OPPOSING TRAFFIC.

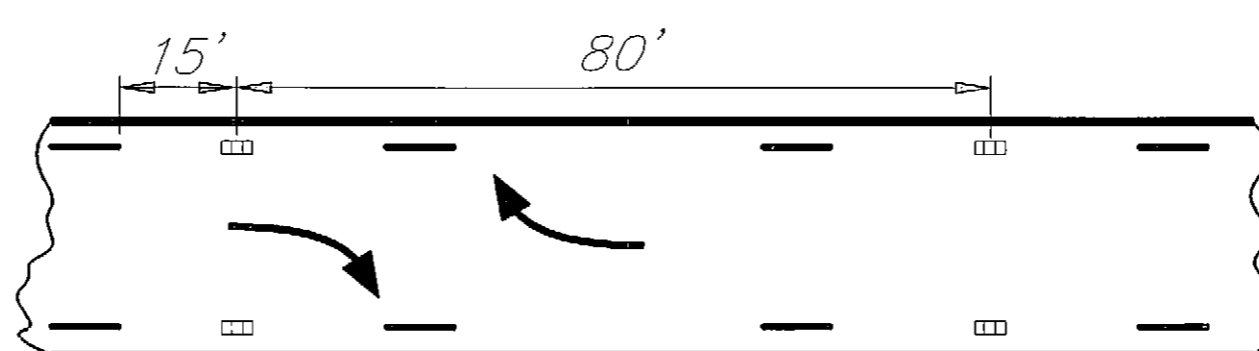


\* CONTINUE 20' SPACING IN TURN BAYS FOR SPACING IN OTHER SECTIONS, SEE R.P.M. SUMMARY TABLE.

**PAINTED ISLAND RPM PLACEMENT DETAIL**



**TURN BAY RPM PLACEMENT DETAIL**



**TWO WAY LEFT TURN LANE DETAIL**

**AS-BUILT**  
BY: B.A. DATE: 1-97

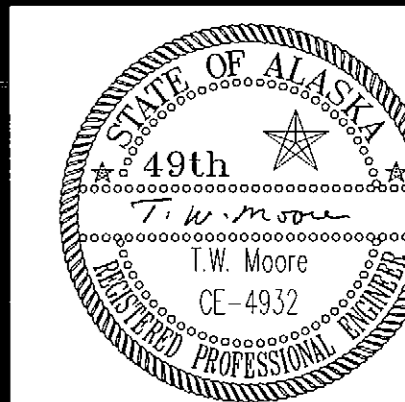
NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

RECORD OF REVISIONS		
PATH:	P:\JNU\BRO-ENG\DR\DETAIL2 1=1	
BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF ALASKA  
HES-093-3(5) 70657  
**RECESSED PAVEMENT MARKER & DETAILS**

DESIGNED BY:	L.P. CARROLL	PROJECT NO.	70657
DRAWN BY:	AutoCAD/R. SNYDER	DATE:	JUNE 1994
CHECKED BY:	T.W. MOORE	SHEET	21 OF 28

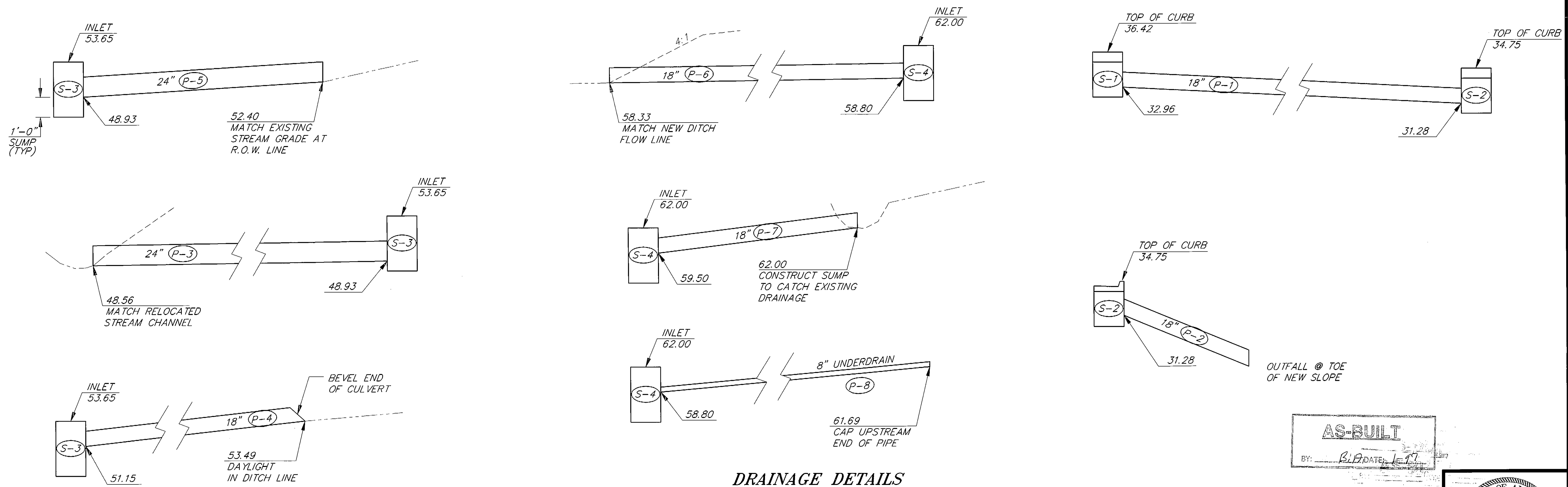


# SIGN RELOCATION SCHEDULE

SIGN NO.	EXISTING		PROPOSED		FACING TRAFFIC	LEGEND	POST		REMARKS
	STATION	OFFSET	STATION	OFFSET			TYPE	EMBEDMENT	
△	5+95	RT	6+70	170' RT	SB	MENDENHALL RIVER W/MAN, BIRDS & LOGO	WOOD	DIRECT BURY	
△	8+00	RT	8+10	78' RT	EB	NO OVERNIGHT PARKING/TOW AWAY ZONE	PSP	SLEEVE (SOIL)	
△	11+00	RT	11+92	RT	WB	BUS STOP	-	-	SEE NOTE 1
△	11+45	LT	12+80	LT	EB	BUS STOP	-	-	SEE NOTE 1
△	14+20	LT	SEE NOTE 2			DRIVEWAY MARKER W/REFLECTORS	WOOD	DIRECT BURY	
△	14+60	LT	SEE NOTE 2			DRIVEWAY MARKER W/REFLECTORS	WOOD	DIRECT BURY	
△	17+50	LT	30+40	LT	EB	BUS STOP	-	-	SEE NOTE 1
△	17+80	LT	SEE NOTE 2			DRIVEWAY MARKER W/REFLECTORS	WOOD	DIRECT BURY	
△	18+15	LT	SEE NOTE 2			DRIVEWAY MARKER W/REFLECTORS	WOOD	DIRECT BURY	
△	18+65	LT	SEE NOTE 2			DRIVEWAY MARKER W/REFLECTORS	STEEL	DIRECT BURY	
△	19+00	LT	SEE NOTE 2			DRIVEWAY MARKER W/REFLECTORS	STEEL	DIRECT BURY	
△	26+45	RT	26+45	33' RT.	WB	STATE TROOPERS W/SILHOUETTE	PSP	SLEEVE (SOIL)	
△	32+90	RT	30+76	RT	WB	BUS STOP	-	-	SEE NOTE 1
△	40+00	LT	40+00	28' RT	EB	STATE TROOPERS W/ SILHOUETTE	PSP	SLEEVE (SOIL)	

**NOTES:**

1. REMOVE BUS STOP SIGNS FROM EXISTING POSTS AND REINSTALL THEM BY FASTENING DIRECTLY TO NEW BUS STOP SHELTERS.
2. RELOCATE DRIVEWAY MARKERS TO LOCATIONS DESIGNATED BY THE ENGINEER.



**DRAINAGE DETAILS**

**AS-BUILT**  
BY: BLP DATE: 1-17

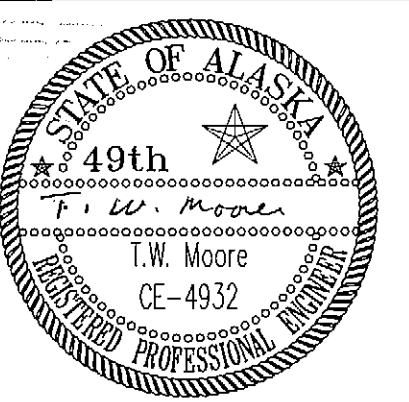
NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

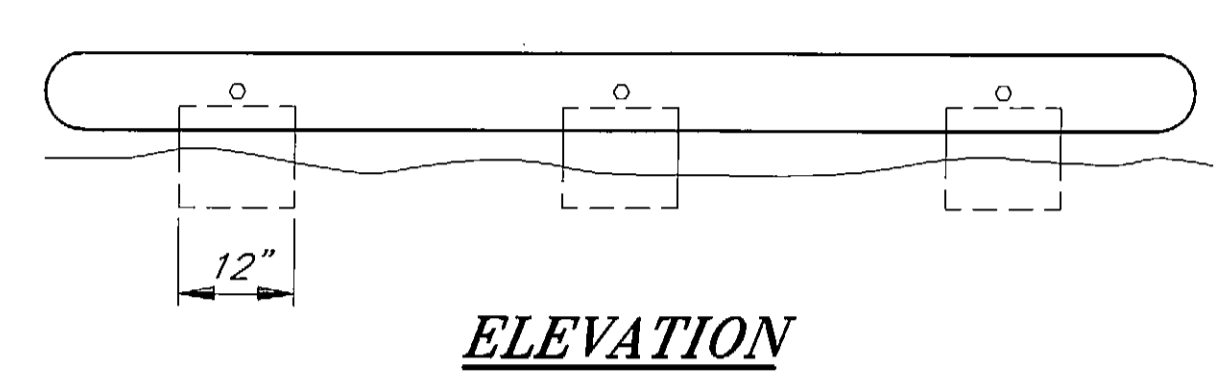
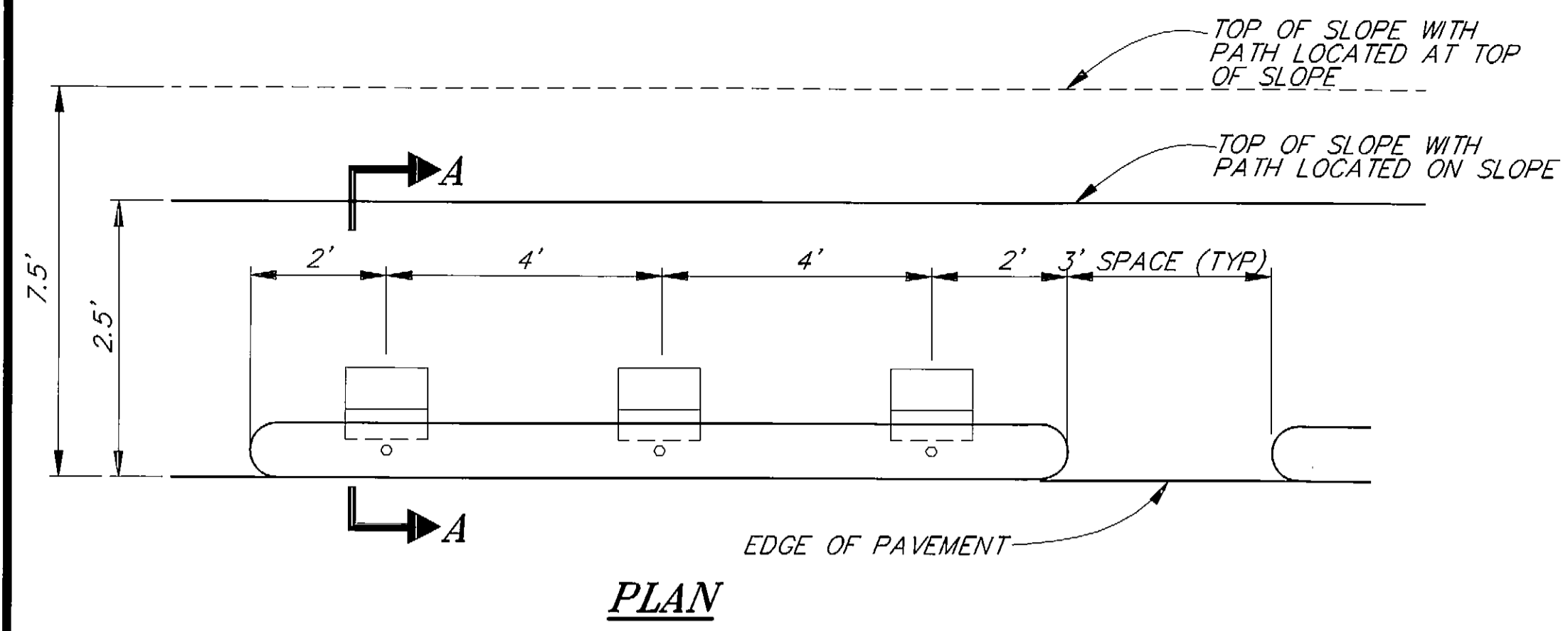
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STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

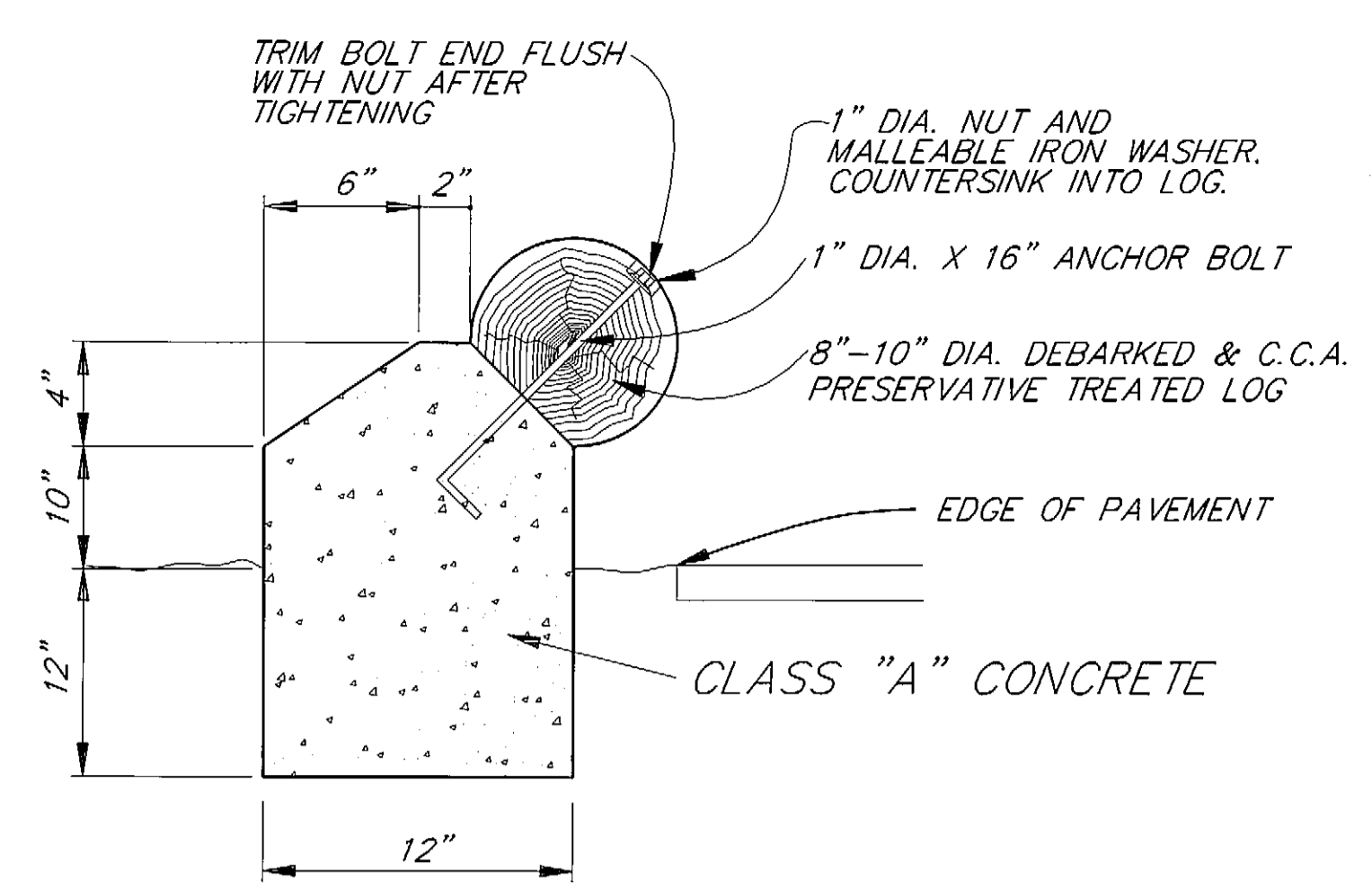
JUNEAU BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF ALASKA  
HES-093-3(5) 70657  
**SIGN RELOCATION SUMMARY  
& DRAINAGE DETAILS**

DESIGNED BY: <b>L.P. CARROLL</b>	PROJECT NO. <b>70657</b>
DRAWN BY: <b>AutoCAD/R. SNYDER</b>	DATE: <b>JUNE 1994</b>
CHECKED BY: <b>T.W. MOORE</b>	SHEET 22 OF 28

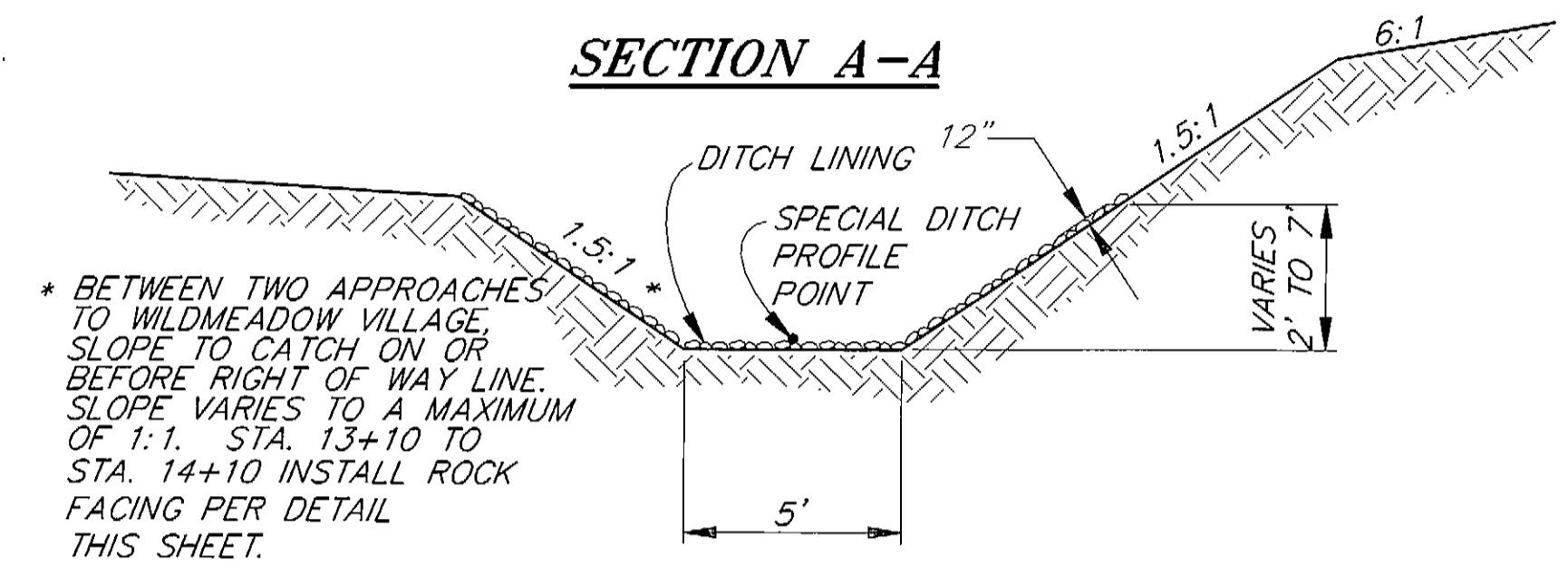




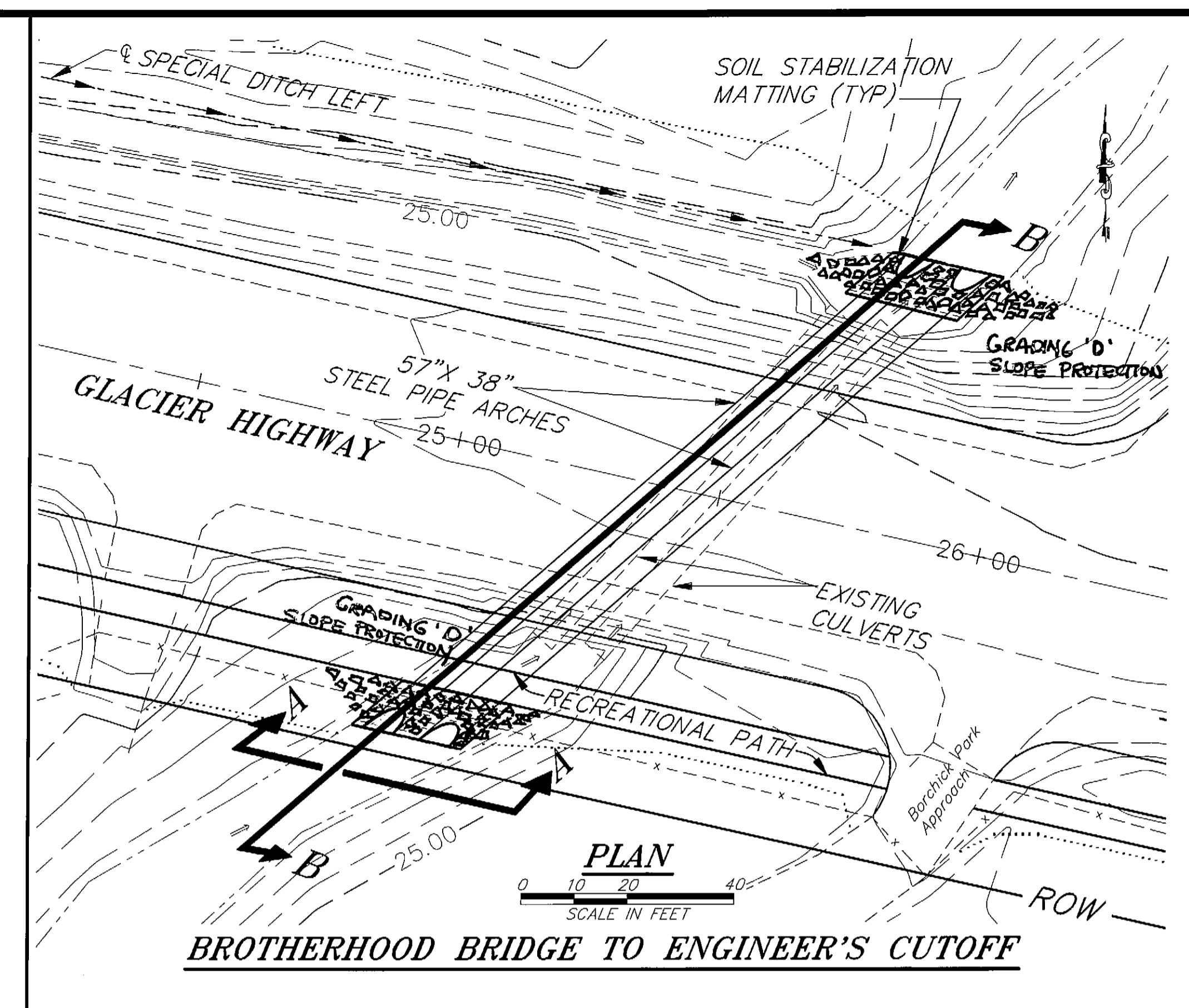
**TREATED TIMBER CURB DETAILS**



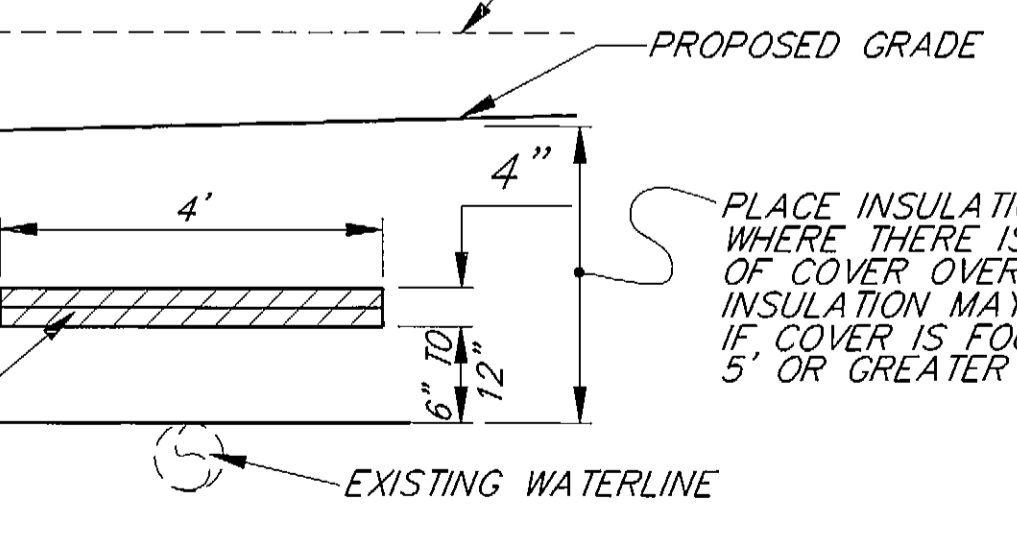
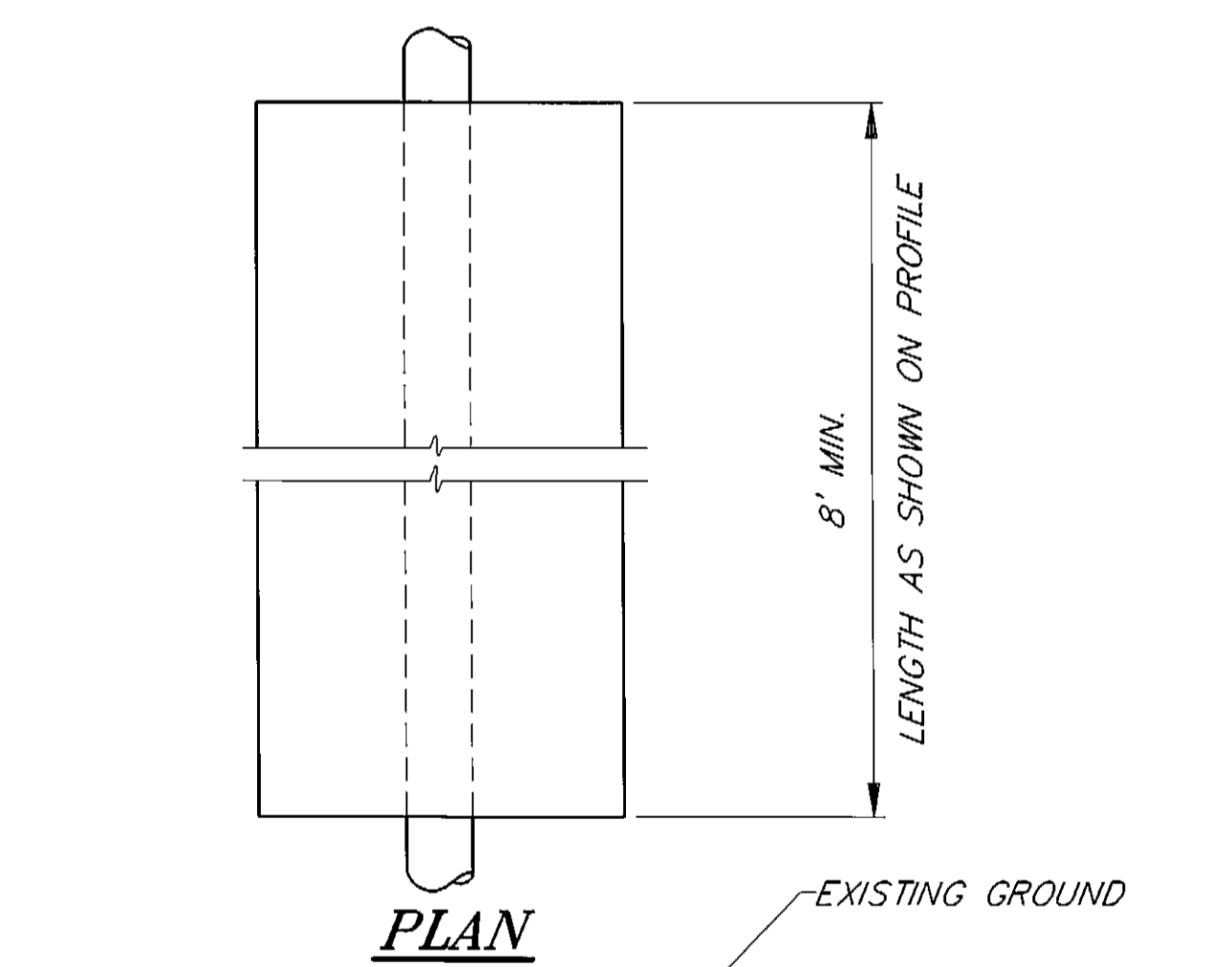
**SECTION A-A**



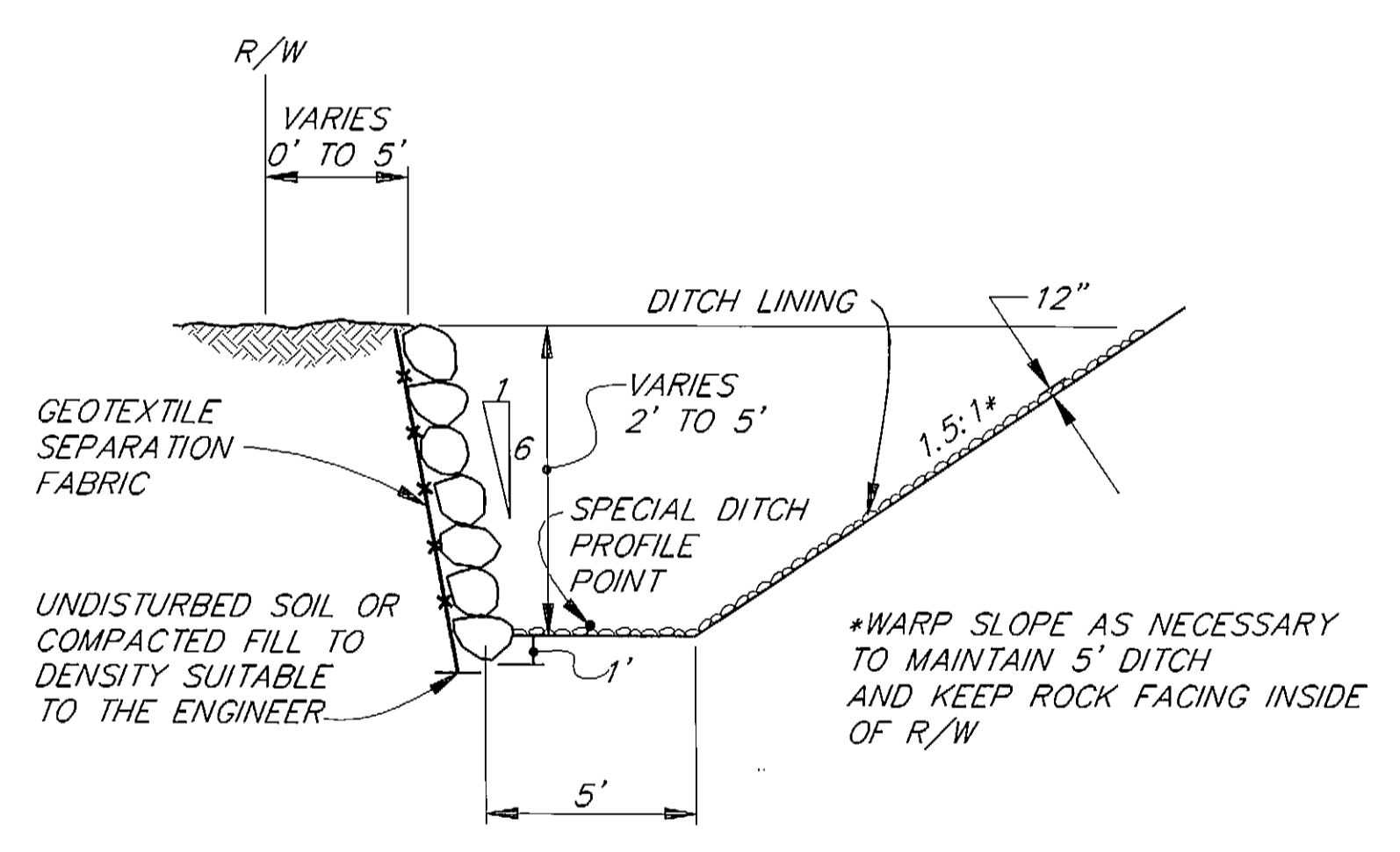
**DITCH LINING DETAIL**



**BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF**



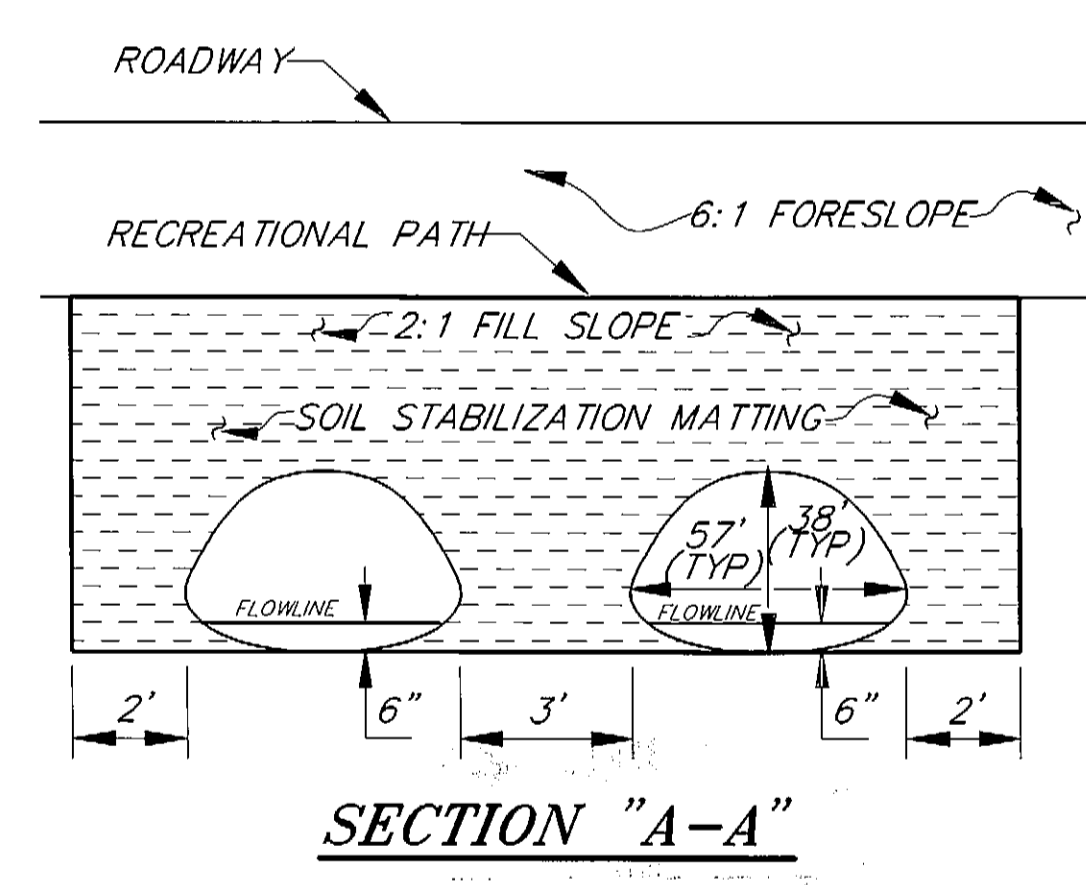
**WATERLINE INSULATION DETAIL**



**ROCK FACING DETAIL**

THE ROCK FACING SHALL BE CONSTRUCTED OF ROCK RANGING IN SIZE AS SHOWN BELOW:

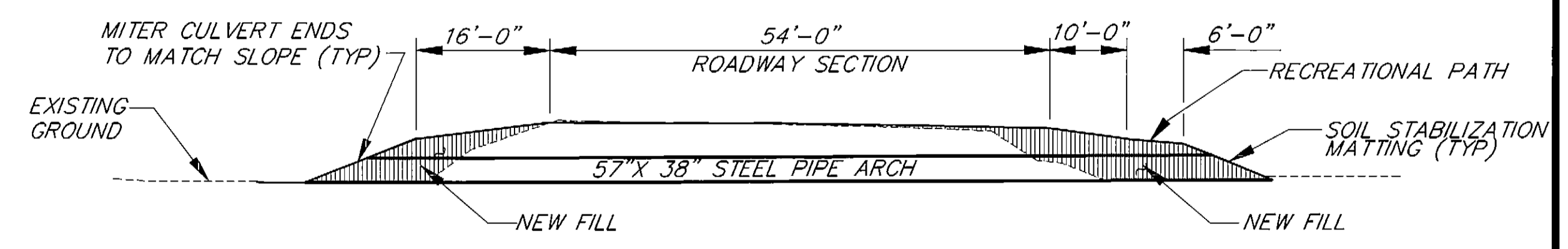
LOCATION	LEAST DIMENSION	MINIMUM WEIGHT
TOP 3' OF ROCK FACING	13" TO 18"	500 LBS
3' TO 6' FROM TOP OF ROCK FACING	18" TO 24"	1500 LBS



**SECTION "A-A"**

**CULVERT INSTALLATION NOTES:**

- DIVERT ALL WATER FROM STREAM INTO THE EXISTING UPSTATION CULVERT.
- REMOVE EXISTING DOWNSTATION CULVERTS AND INSTALL NEW DOWNSTATION CULVERTS.
- DIVERT ALL WATER TO DOWNSTATION CULVERT.
- REMOVE EXISTING UPSTATION CULVERT AND INSTALL NEW UPSTATION CULVERT.
- SHAPE SLOPES AND PLACE SOIL STABILIZATION MATTING.



**SECTION "B-B"**

**AS-BUILT**  
BY: B.H. DATE: 97

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\JUN\BRO-ENG\DR\DETAILS 1=20

BY:	DATE:	DESCRIPTION OF CHANGE:

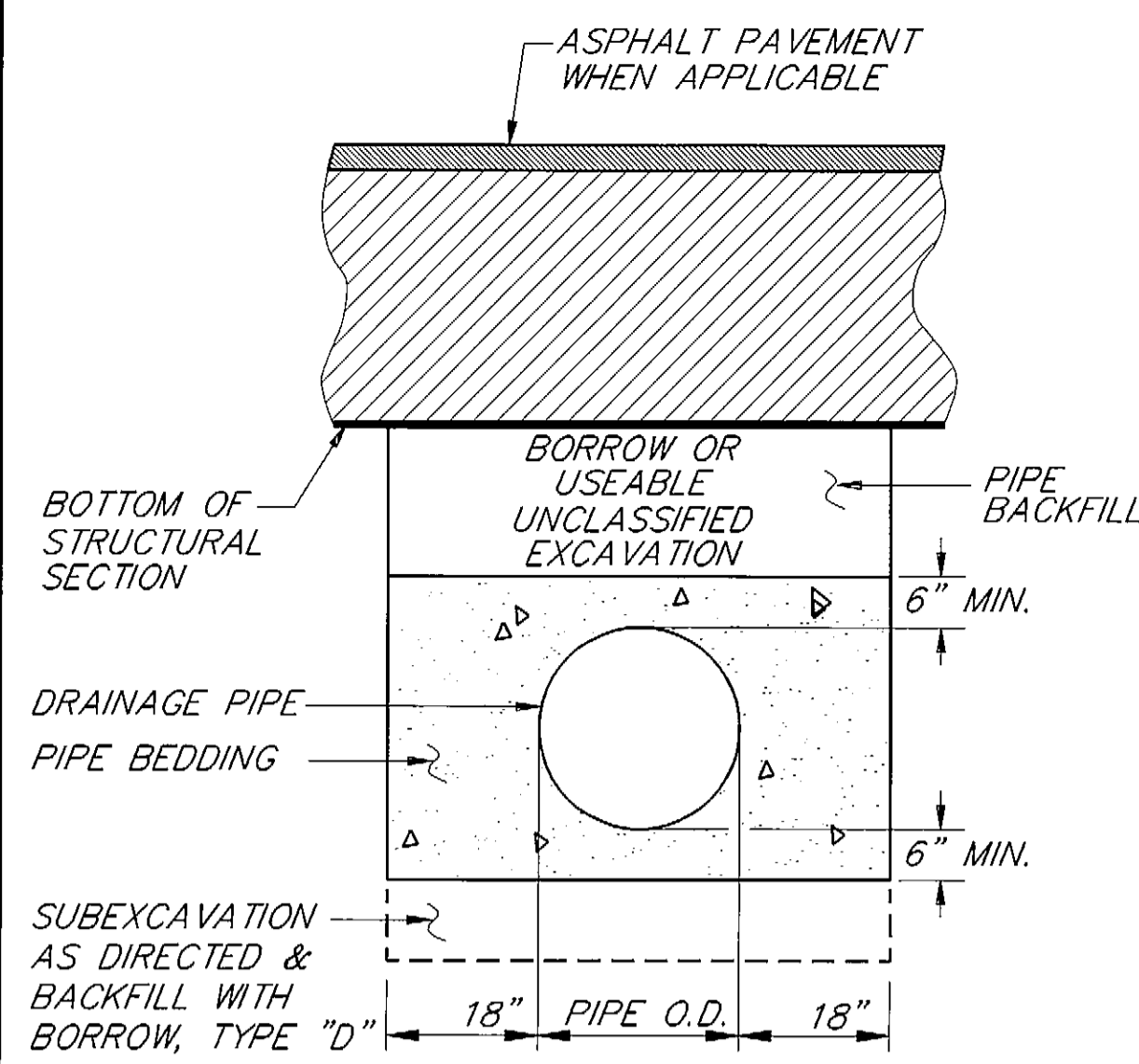
**RECORD OF REVISIONS**

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

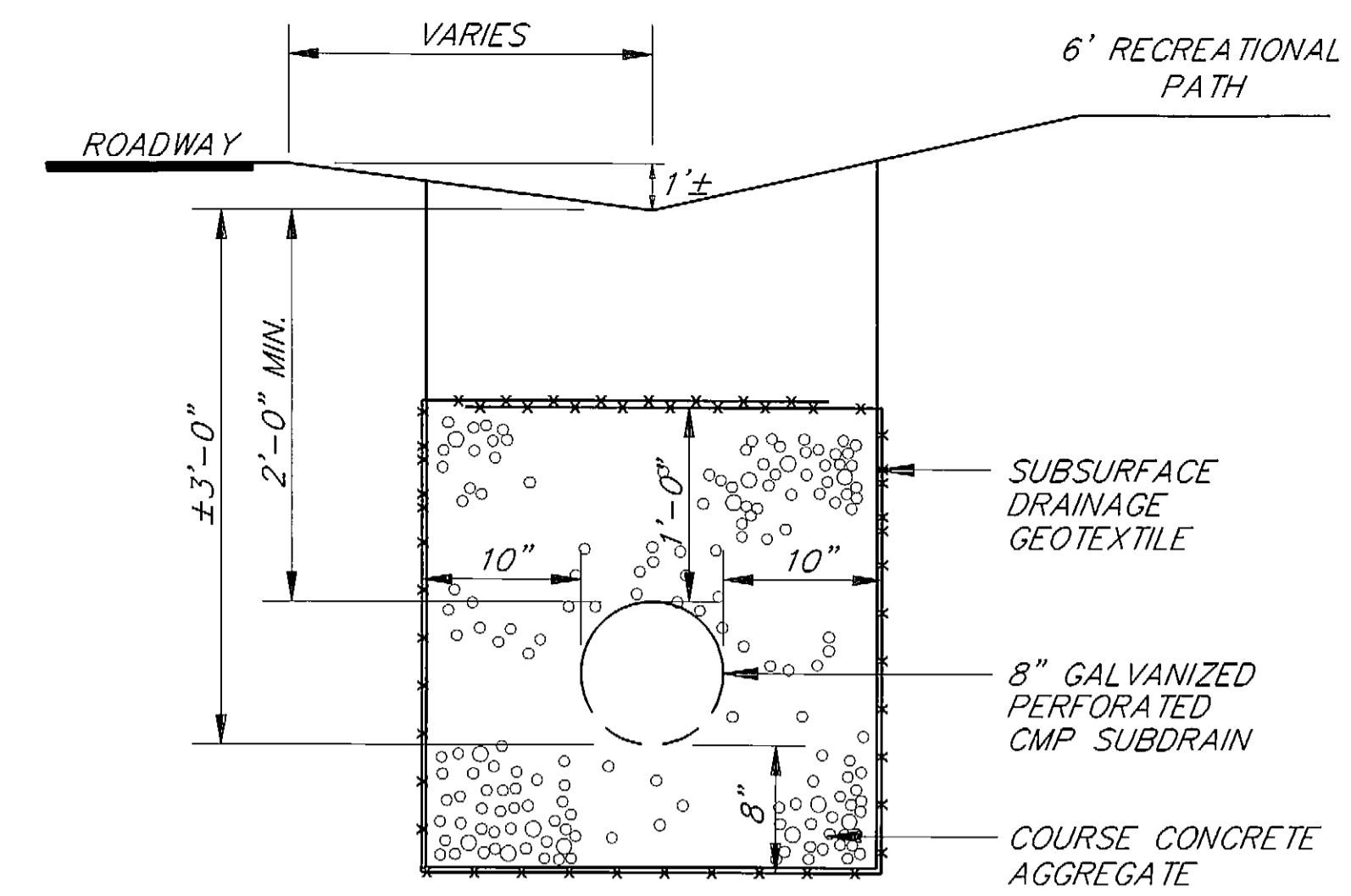
JUNEAU BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF ALASKA  
HES-093-3(5) 70657  
MISCELLANEOUS DETAILS

DESIGNED BY: L.P. CARROLL	PROJECT NO. 70657
DRAWN BY: AutoCAD/C. ANDERSON	DATE: JUNE 1994
CHECKED BY: T.W. MOORE	SHEET 23 OF 28

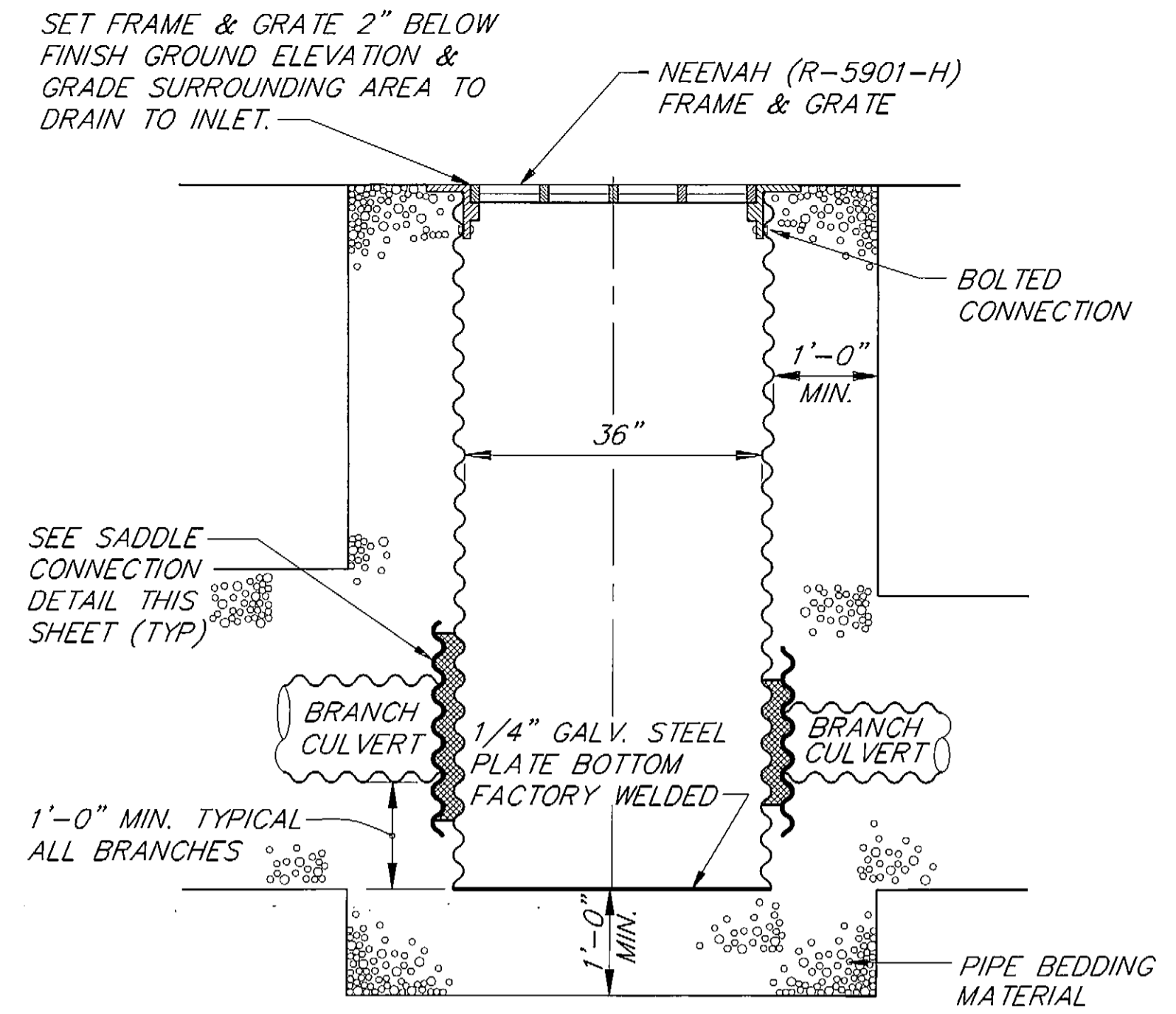




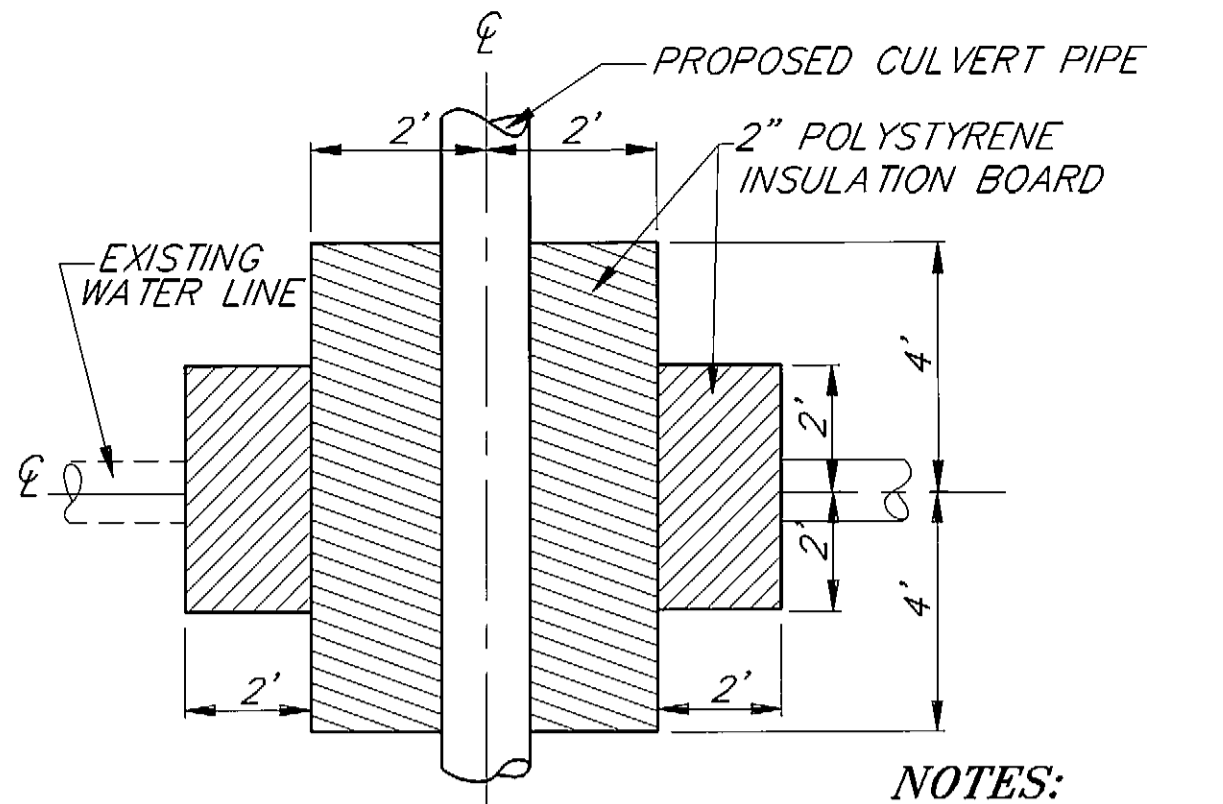
**CULVERT DETAIL**  
N.T.S.



**MODIFIED UNDERDRAIN DETAIL**  
N.T.S.

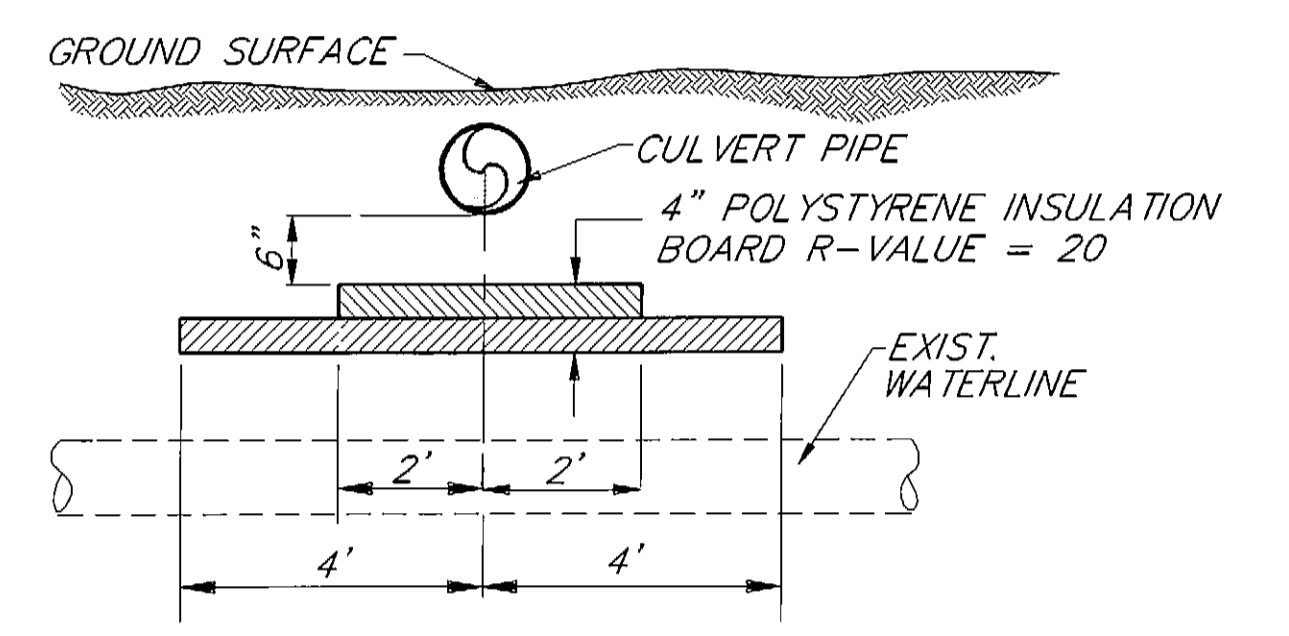


**TYPICAL FIELD INLET DETAIL**  
N.T.S.

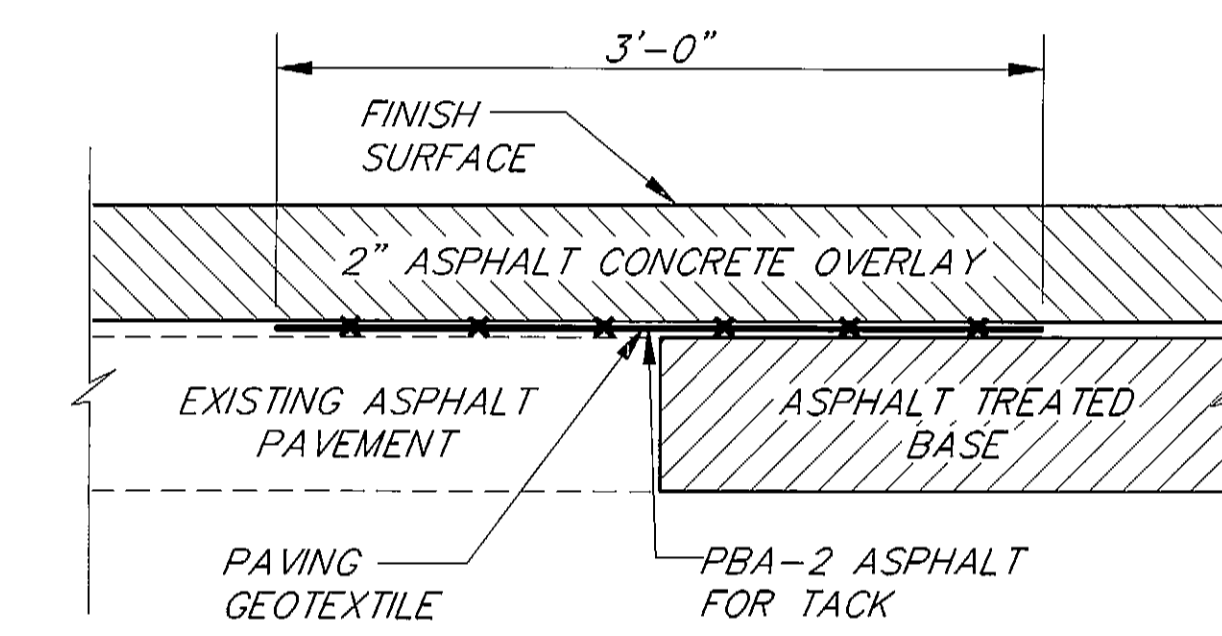


**PLAN**  
N.T.S.

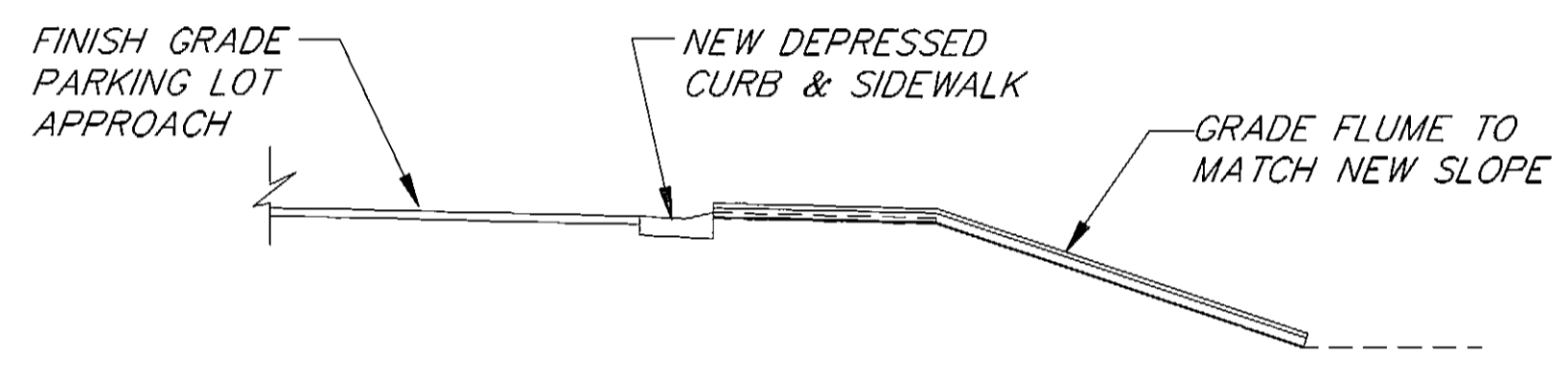
NOTES:  
1. INSTALL INSULATION AS SHOWN.  
2. WRAP AROUND INSULATION WITH R-VALUE EQUAL TO 20 MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.



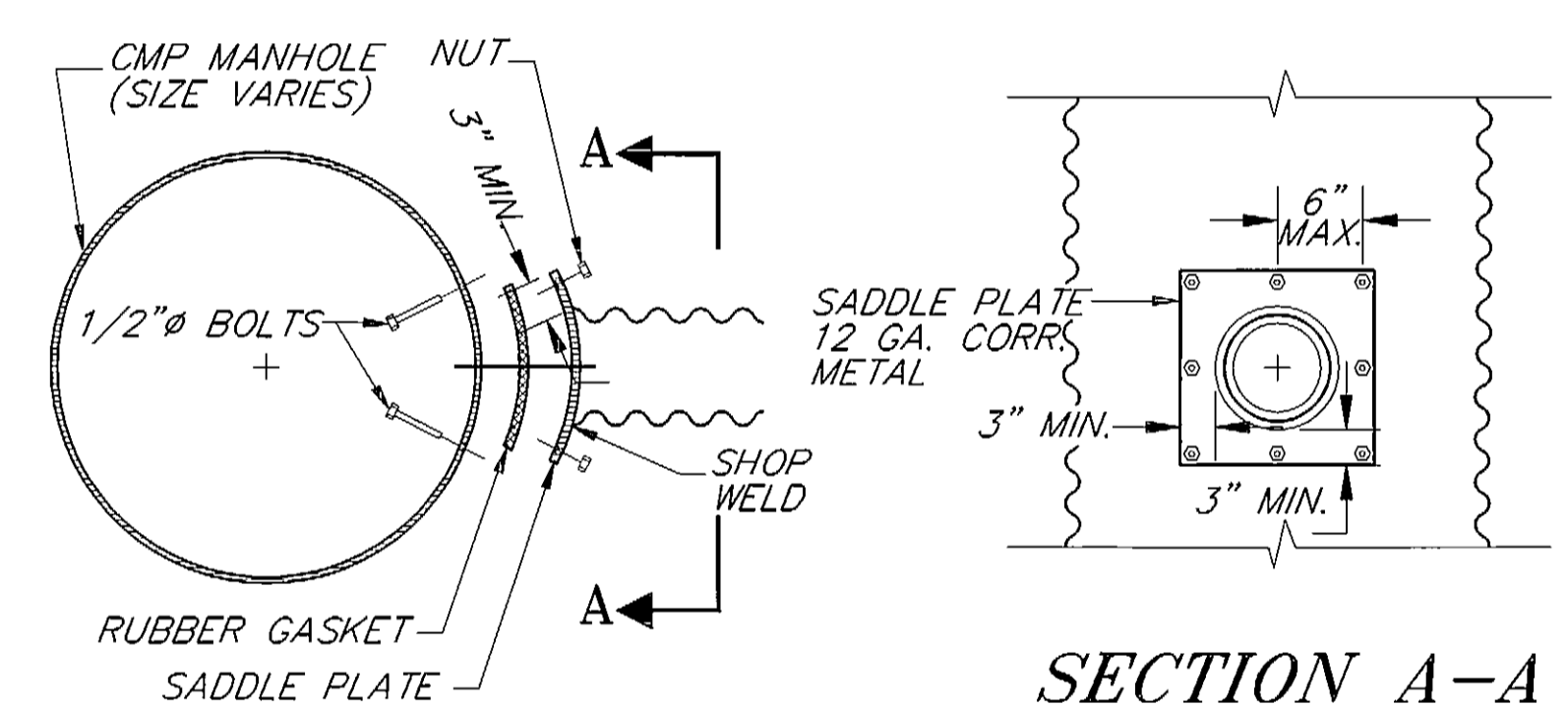
**SECTION RIGID INSULATION**  
N.T.S.



**FABRIC DETAIL**  
N.T.S.



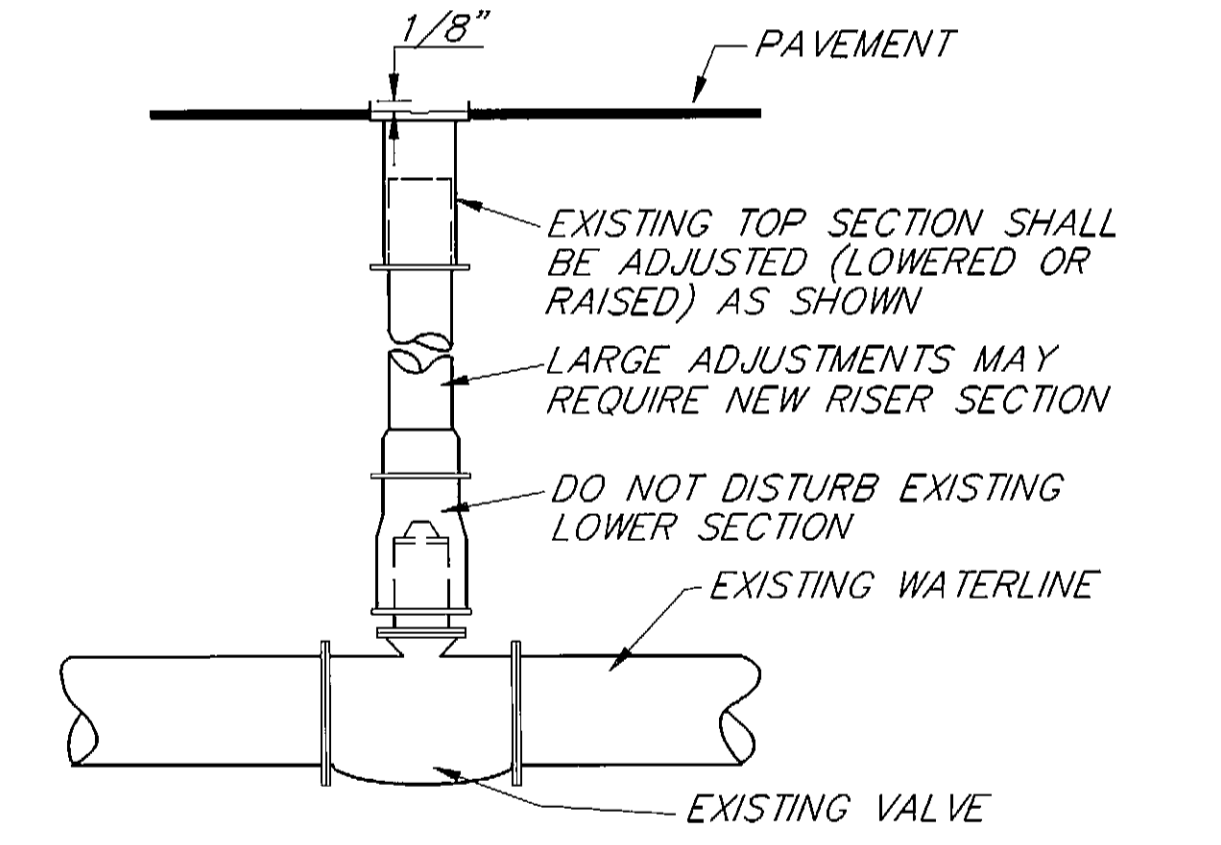
**FLUME DETAIL**  
N.T.S.



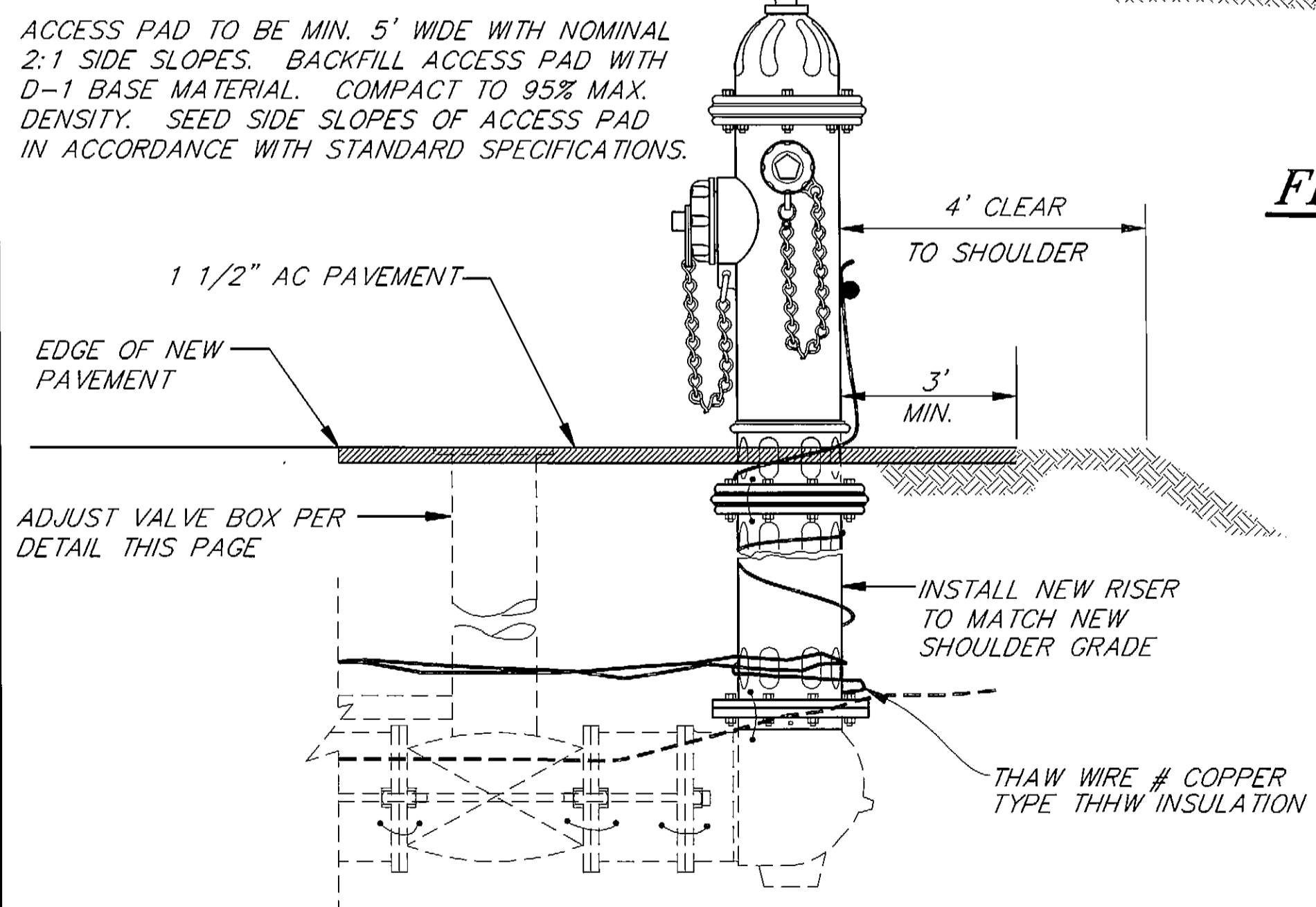
**SADDLE CONNECTION DETAIL**  
N.T.S.

NOTE:  
AT THE CONTRACTOR'S OPTION, FACTORY BRANCH CULVERT SECTIONS MAY BE FABRICATED ONTO THE FIELD INLETS IN LIEU OF SADDLE CONNECTION.

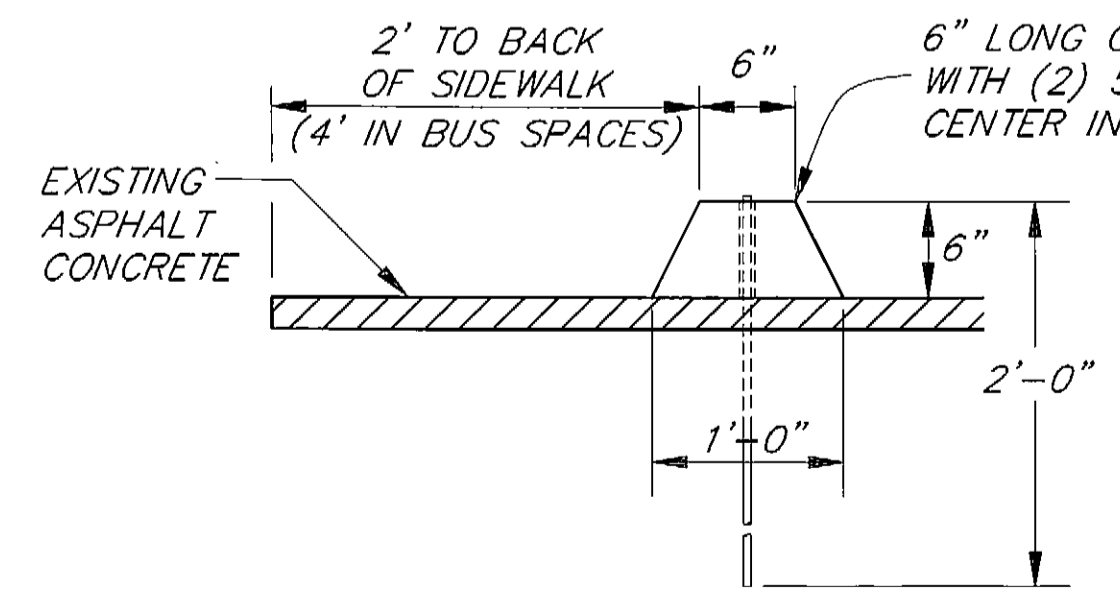
**AS-BUILT**  
BY: *B.P.* DATE: *1-97*



**VALVE BOX ADJUSTMENT DETAIL**  
N.T.S.



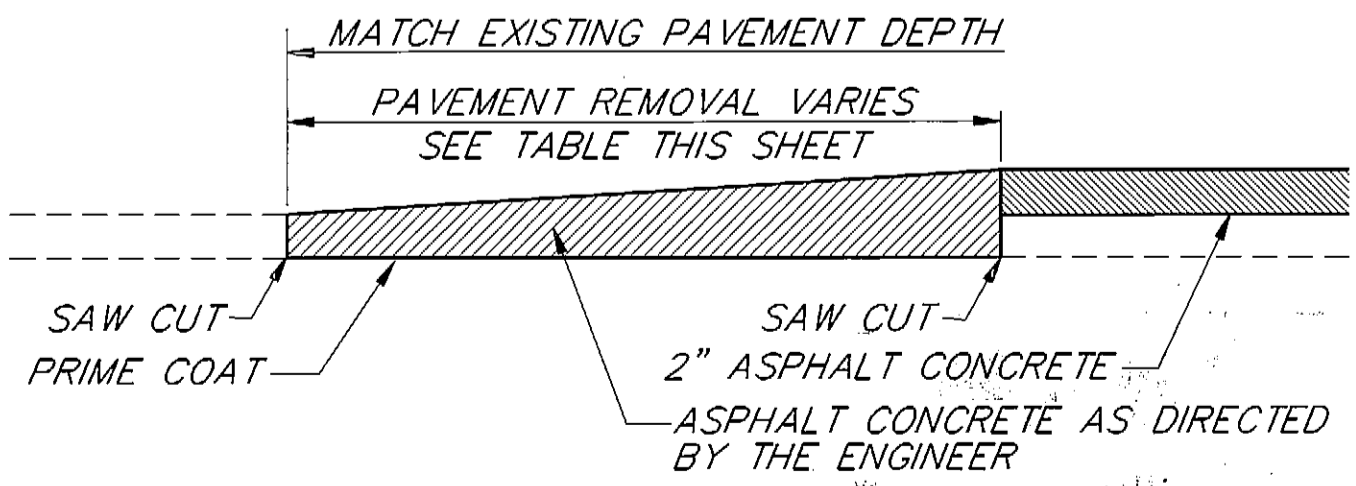
**HYDRANT & ACCESS PAD**  
N.T.S.



**WHEELSTOP DETAIL**  
N.T.S.

NOTE: CONTRACTOR MAY SUBSTITUTE AN APPROVED ALTERNATE.

PAVEMENT TRANSITION TABLE		
BEGINNING STATION	END STATION	REMARKS
"L" 5+98.61	"L" 6+50	BEGIN OVERLAY
"B" 11+10	"B" 11+30	INDUSTRIAL BOULEVARD
"L" 49+61, 20' LT.	"L" 49+61, 30' LT.	KAISER
"L" 49+50	"L" 50+00	END OVERLAY
"L" 46+17, 33' RT.	"L" 46+17, @ R.O.W. LINE	EMANUAL BAPTIST CHURCH



**PAVEMENT TRANSITION DETAIL**  
N.T.S.

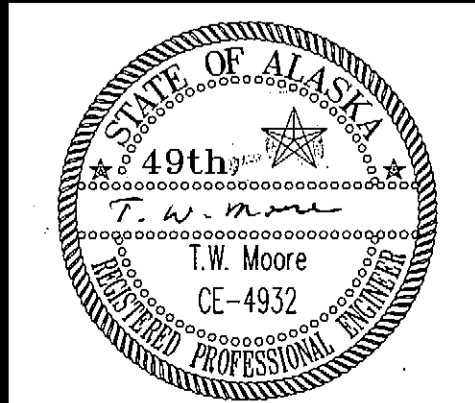
NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

RECORD OF REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGE

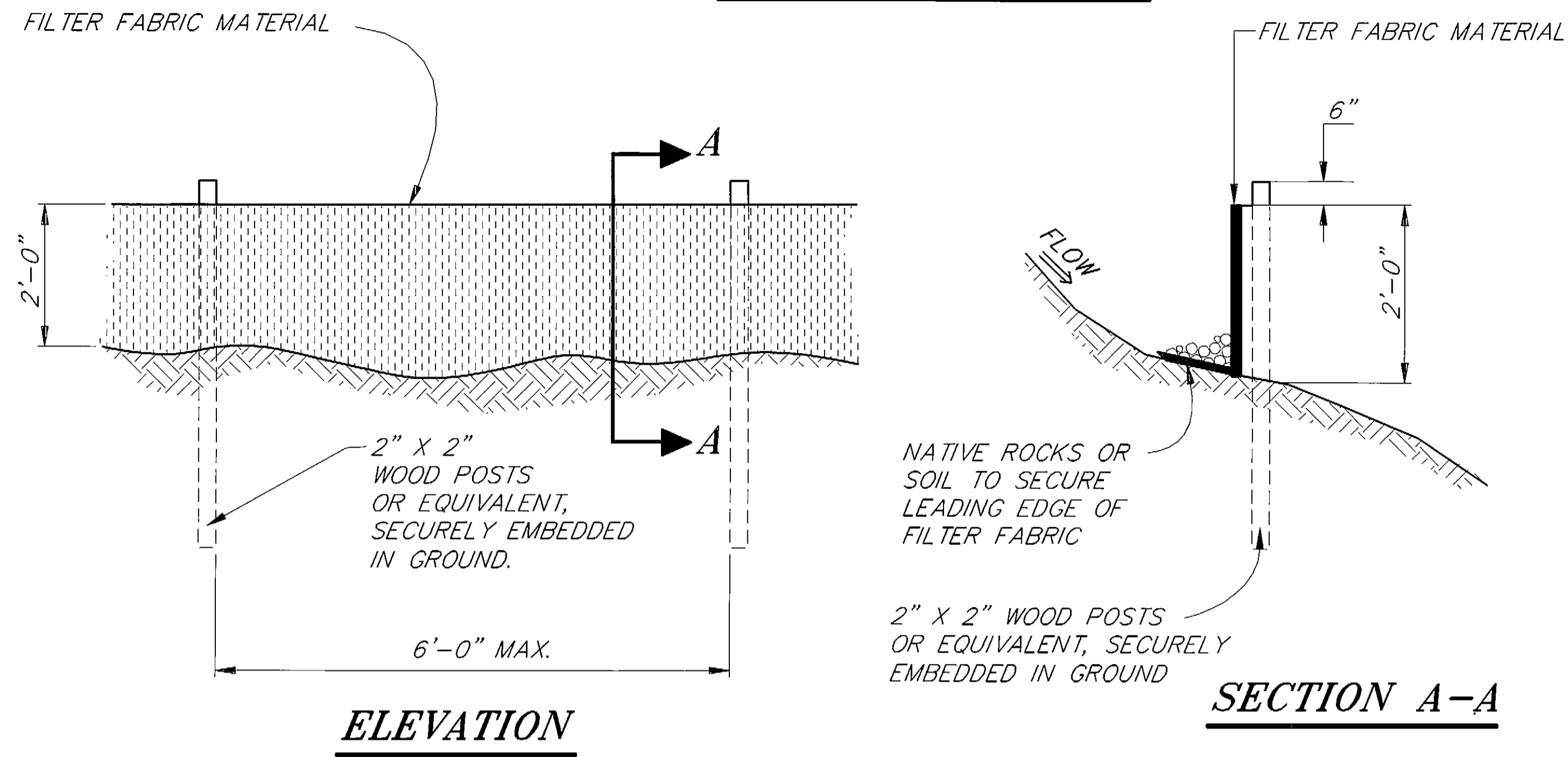
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF ALASKA  
HES-093-3(5) 70657  
**MISCELLANEAUS DETAILS**

DESIGNED BY: <i>L.P. CARROLL</i>	PROJECT NO. <b>70657</b>
DRAWN BY: <i>AutoCAD/R. SNYDER</i>	DATE: <b>JUNE 1994</b>
CHECKED BY: <i>T.W. MOORE</i>	SHEET <b>24 OF 28</b>



**SILT FENCE DETAIL**



SILT FENCE SUMMARY	
LOCATION	* COMMENTS
30+60 TO 33+50 RT	ALONG SLOPE LIMIT
33+90 RT	ACROSS DITCH
34+50 LT	ACROSS DITCH
35+00 RT	ACROSS DITCH
35+60 LT	ACROSS DITCH
37+10 RT	ACROSS DITCH
38+60 LT	ACROSS DITCH
38+70 RT	ACROSS DITCH
41+40 RT	ACROSS DITCH
44+70 RT	ACROSS DITCH
44+90 LT	ACROSS DITCH

\* DITCH CHECKS CAN BE STRAWBALES OR SILT FENCE OR BOTH AS DIRECTED BY THE ENGINEER.  
 SILT FENCE RELOCATED PER ADF 46 REQUEST.

**FISH STREAM/WATERWAY AREAS SUBJECT TO PERMIT**

ROADWAY CROSS CULVERTS AT THE FOLLOWING STATIONS ARE CONSIDERED FISH PASSAGE AREAS: STA. 25+39  
 STA. 25+53  
 STA. 27+50  
 STA. 30+94  
 STA. 32+55  
 STA. 38+52  
 (APPROACH CULVERT UNDER SHERWOOD LN.)

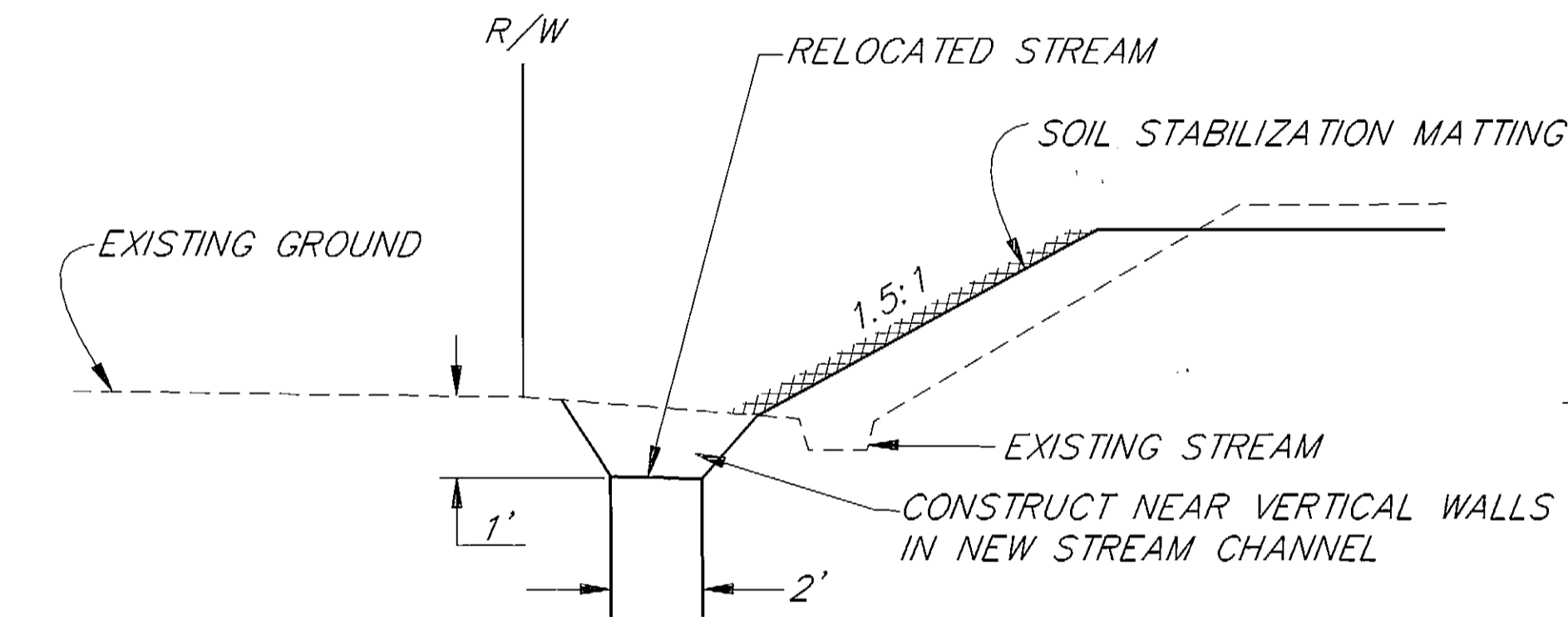
DITCHES ALONG THE ROADWAY CONSIDERED AS FISH PASSAGE AREAS ARE AS FOLLOWS:  
 STA. 38+00 TO 38+50 LT.

**GENERAL NOTES**

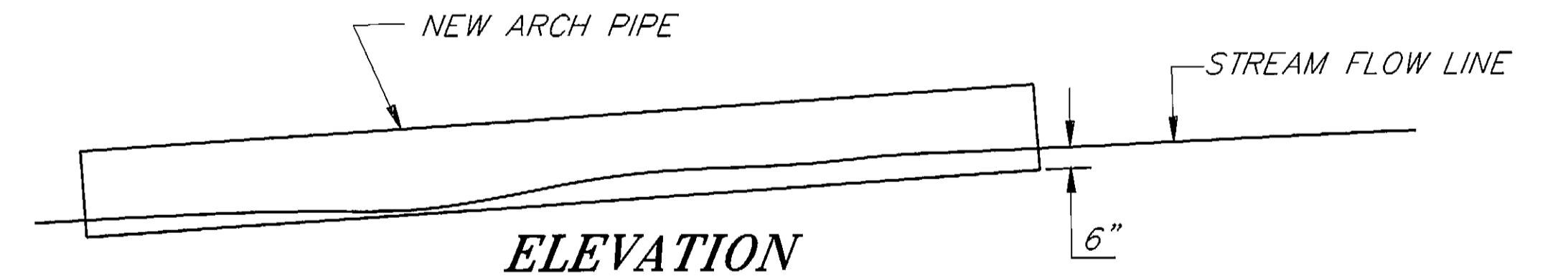
- FISH SHALL BE TRAPPED OR FENCED OUT OF WORK AREAS TWO DAYS PRIOR TO BEGINNING WORK OPERATIONS IN A DESIGNATED FISH STREAM. FISH TRAPPING AND FENCING INSTALLATION WILL BE ACCOMPLISHED BY DOT/PF EMPLOYEES; CONTRACTOR SHALL NOTIFY 1 WEEK IN ADVANCE OF SCHEDULED WORK.
- INSTREAM WORK AREAS SHALL BE DEWATERED EXCEPT FOR DUAL PIPE CROSSING AT STATION 25+50, AND WATER FROM PIPE INSTALLATION AREAS MAY BE PUMPED TO A LOW AREA THAT DRAINS ACROSS A VEGETATED SURFACE TO A NATURAL DRAINAGE AREA. OUTLET FROM PUMP TO BE LOCATED NO CLOSER THAN 50 FEET FROM FISH STREAM.

**BROTHERHOOD BRIDGE PARKING AREA NOTES**

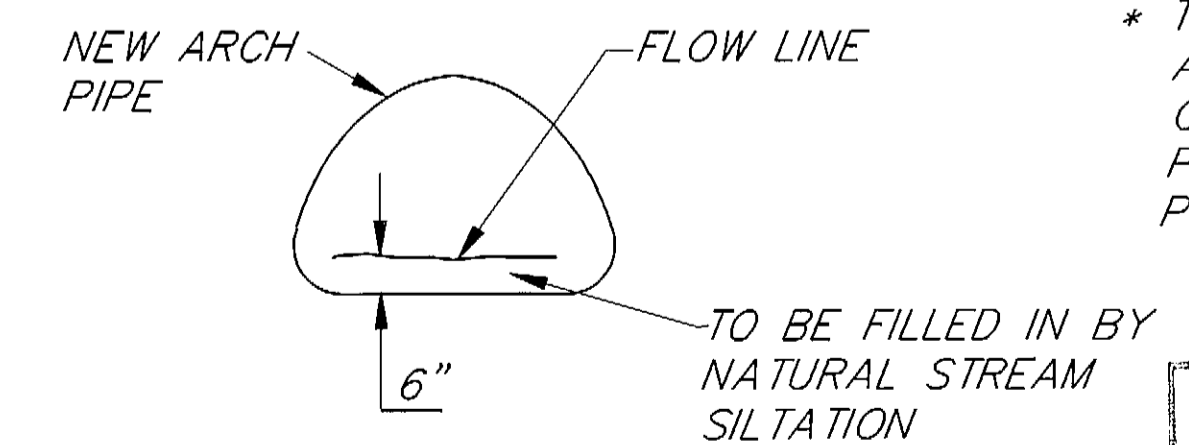
- PARKING AREA SHALL REMAIN OPEN AT ALL TIMES FOR VISITORS AND USERS OF THE RECREATIONAL TRAILS AND MENDENHALL RIVER.
- PROVISIONS FOR PEDESTRIANS/HORSE BACK RIDERS/HIKERS SHALL BE MAINTAINED AT ALL TIMES.
- CLEARING AND GRUBBING LIMITS SHALL END AT SLOPE LIMITS IN AREAS ADJACENT TO THE PARK.



**PETERSON HILL CREEK RELOCATION  
 STA. 38+00 TO 38+50 LT.**

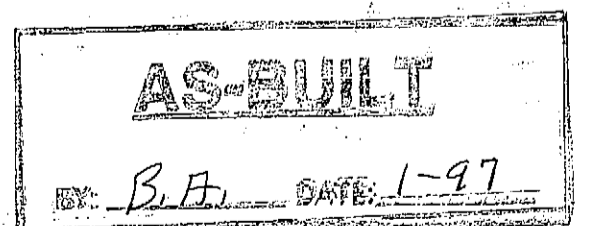


**ELEVATION**

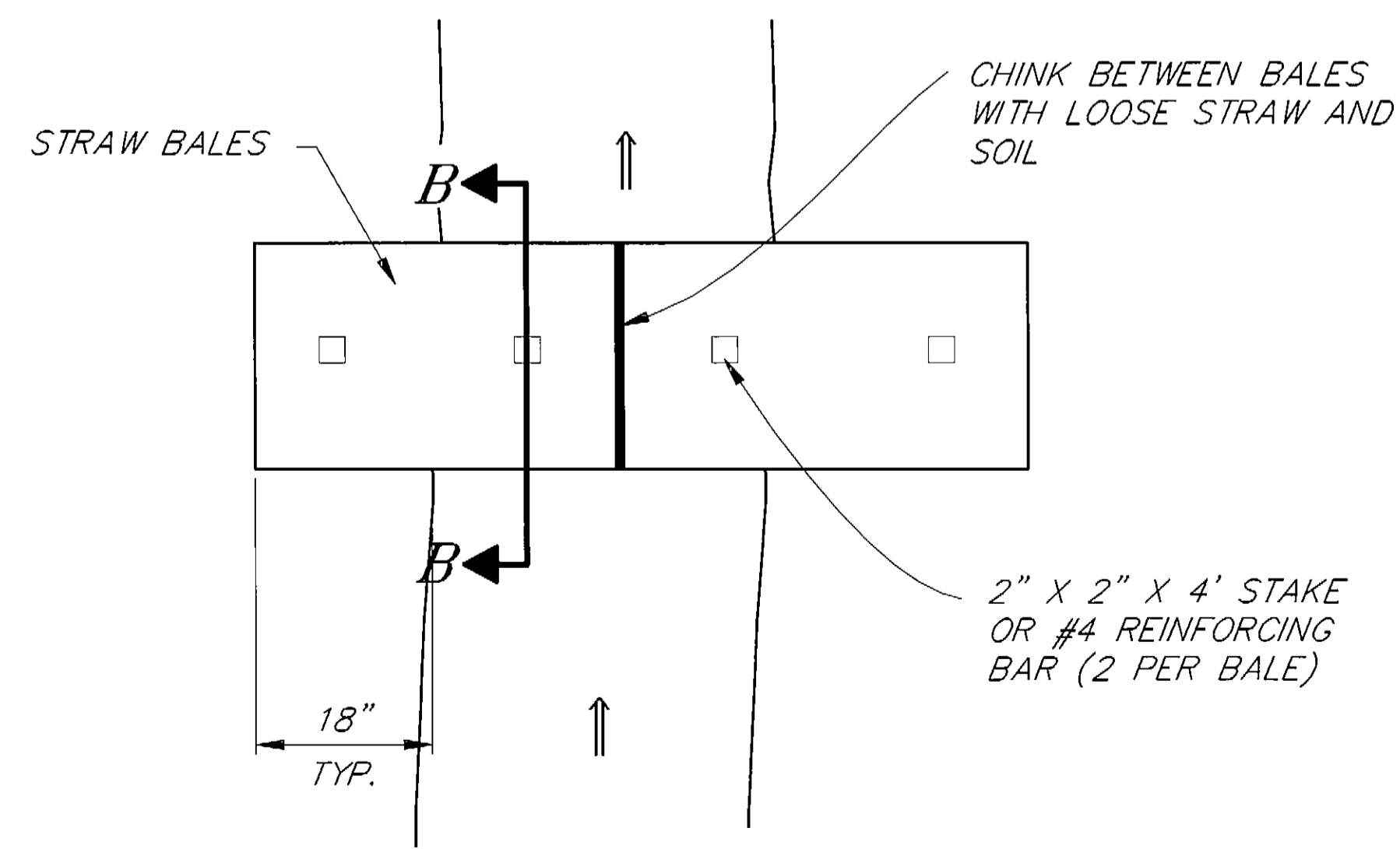


**SECTION**

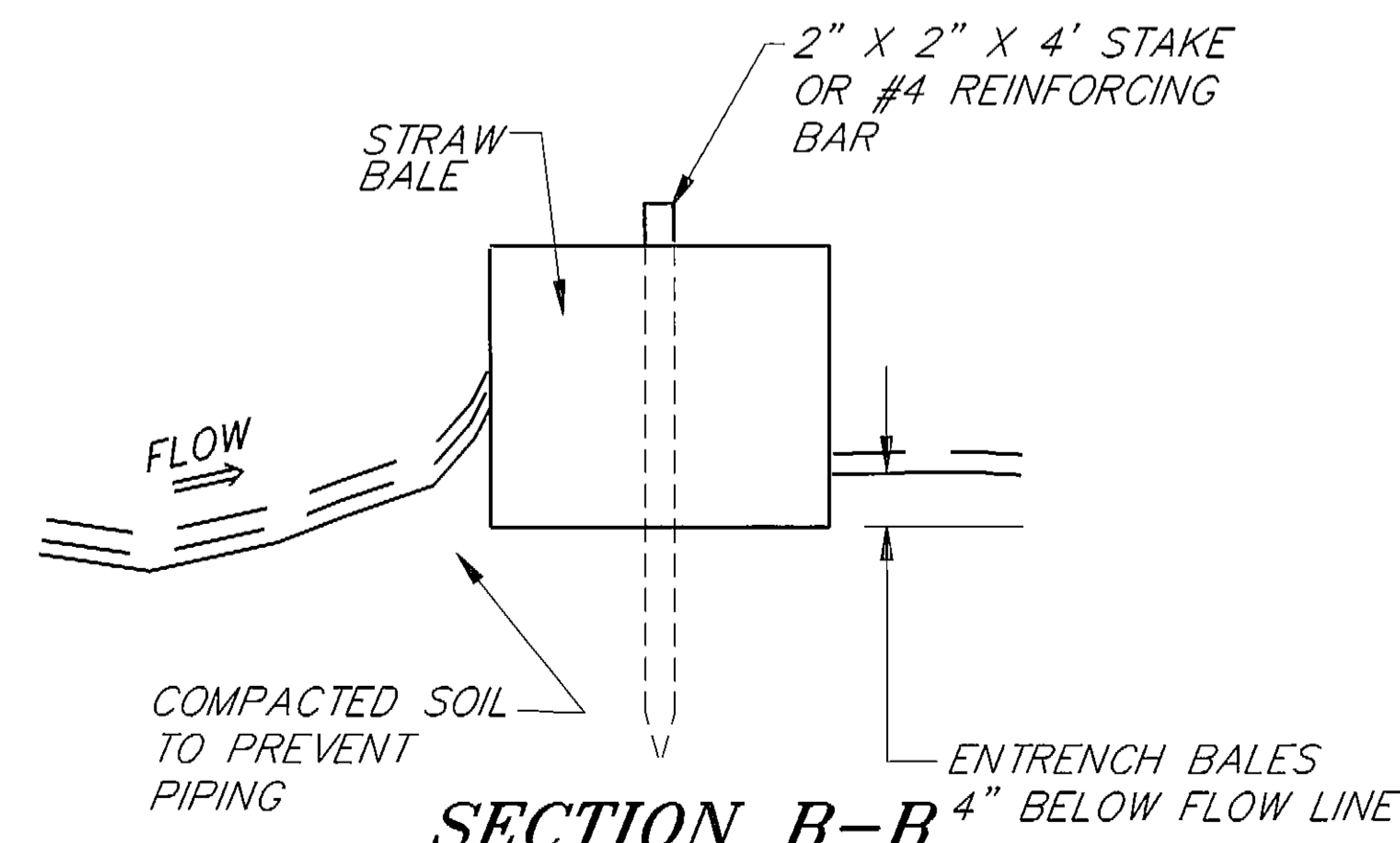
\* THIS DETAIL APPLIES TO ARCH PIPE REPLACEMENTS ONLY, DOES NOT APPLY TO PIPE EXTENSIONS OR ROUND PIPE INSTALLATIONS.



**NEW PIPE ARCH INSTALLATION DETAIL**



**STRAW BALE SEDIMENT FILTER DETAIL**



**SECTION B-B**

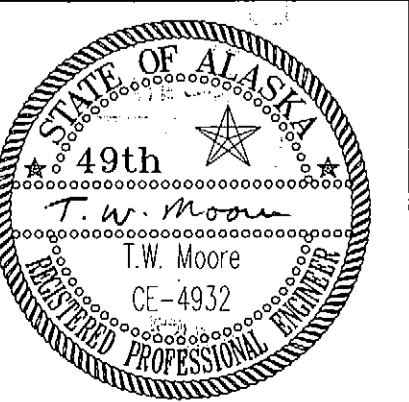
NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH:	DATE:	DESCRIPTION OF CHANGE:
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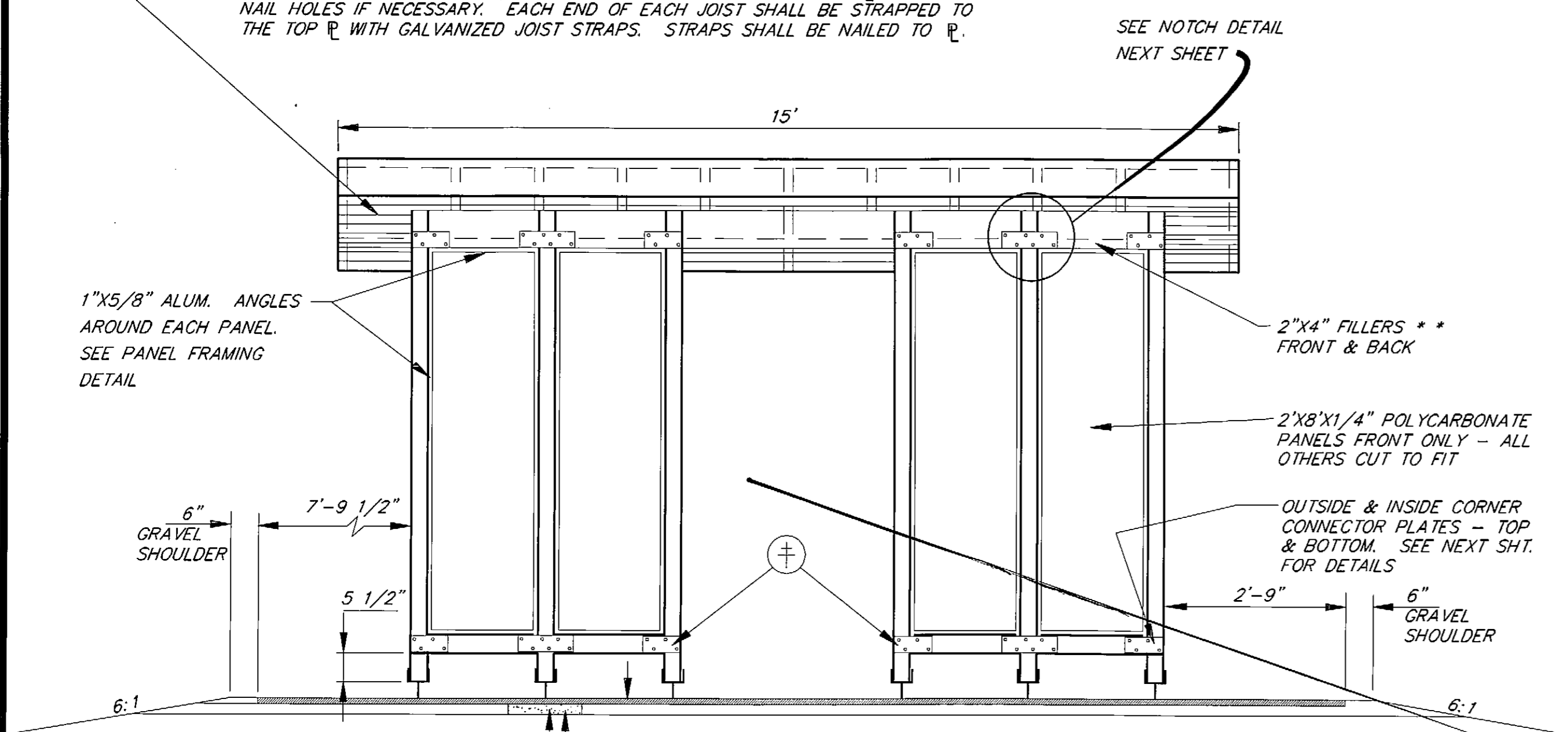
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF ALASKA  
 HES-093-3(5) 70657  
**ENVIRONMENTAL DETAILS**

DESIGNED BY:	L.P. CARROLL	PROJECT NO.	70657
DRAWN BY:	C. ANDERSON	DATE:	JUNE 1994
CHECKED BY:	T.W. MOORE	SHEET	25 OF 28



ALL ROOF JOISTS SHALL BE 2"x6" ON 16" CENTERS. TOE NAIL EACH JOIST WITH 2-12d NAILS (PER END) TO FASTEN THE JOISTS TO THE TOP R. PREBORE NAIL HOLES IF NECESSARY. EACH END OF EACH JOIST SHALL BE STRAPPED TO THE TOP R WITH GALVANIZED JOIST STRAPS. STRAPS SHALL BE NAILED TO R.



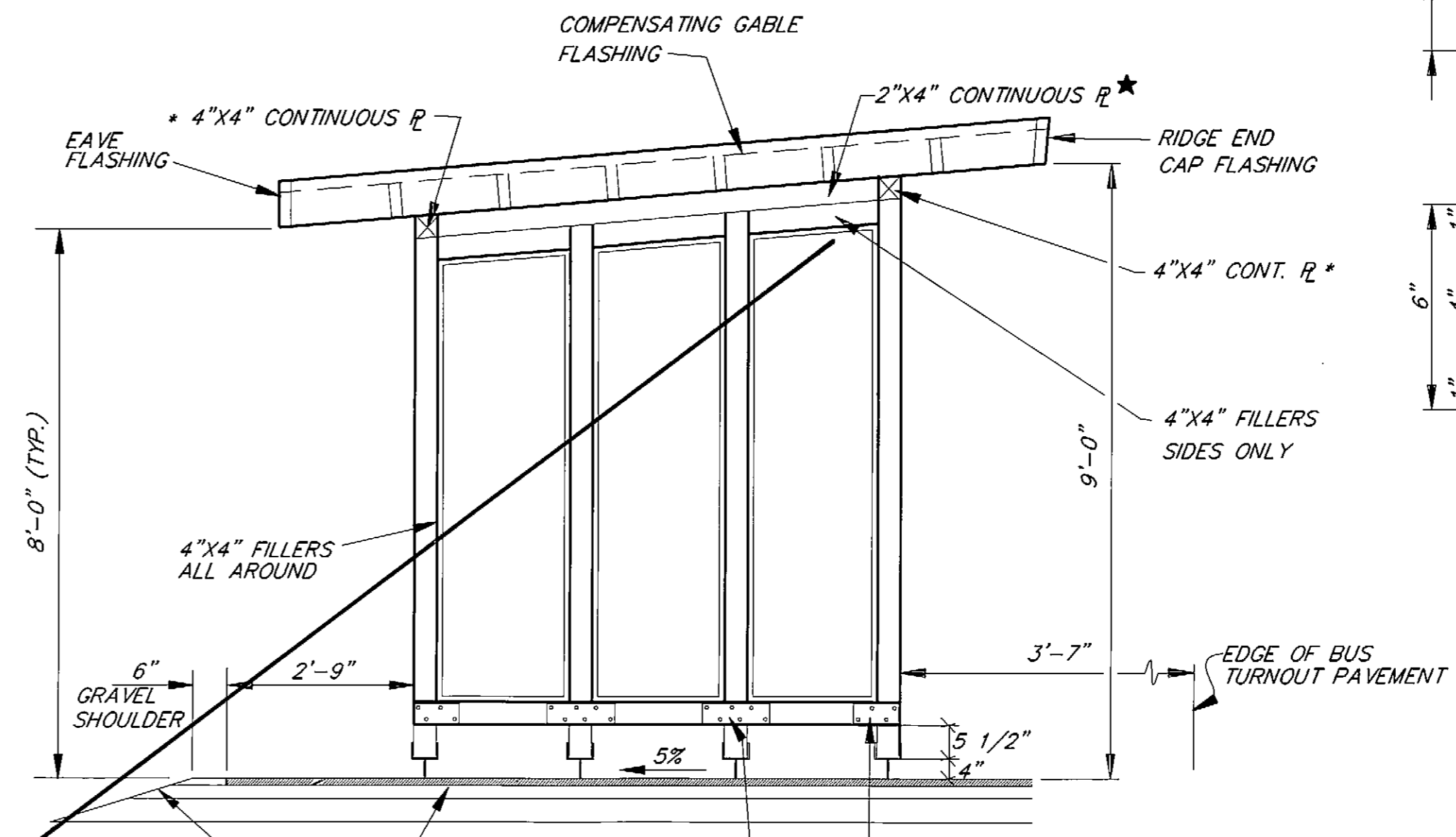
**FRONT VIEW**

POST SUPPORTS SHALL BE INSTALLED AFTER PAD PAVING IS COMPLETE. BACKFILL MATERIAL FOR POST SUPPORTS SHALL BE CLASS "A" CONCRETE. SEE POST SUPPORT DETAIL.

⊕ ENTRYWAY CONNECTOR PLATE IN & OUT, TOP & BOTTOM.

\*\* MIDSPAN CONNECTOR PLATE IN & OUT, TOP & BOTTOM

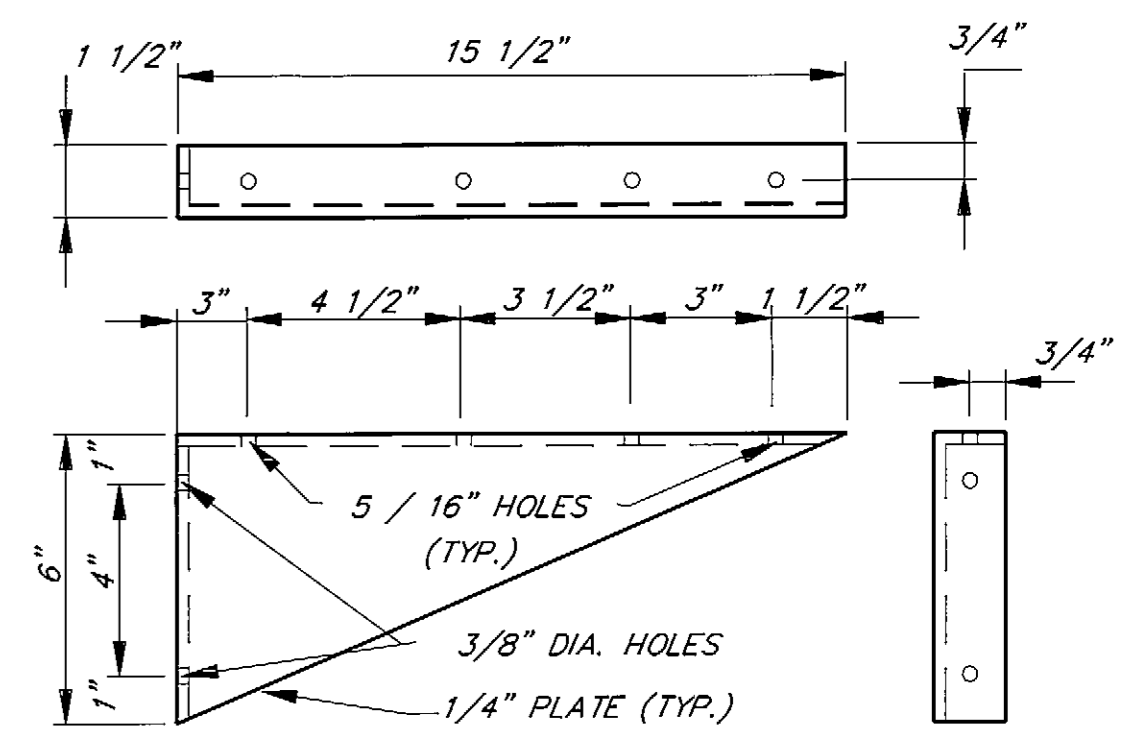
▲ FOR TRAFFIC FLOW IN OPPOSITE DIRECTION, SWAP EDGE OF PAVEMENT TO SHELTER DIMENSIONS.



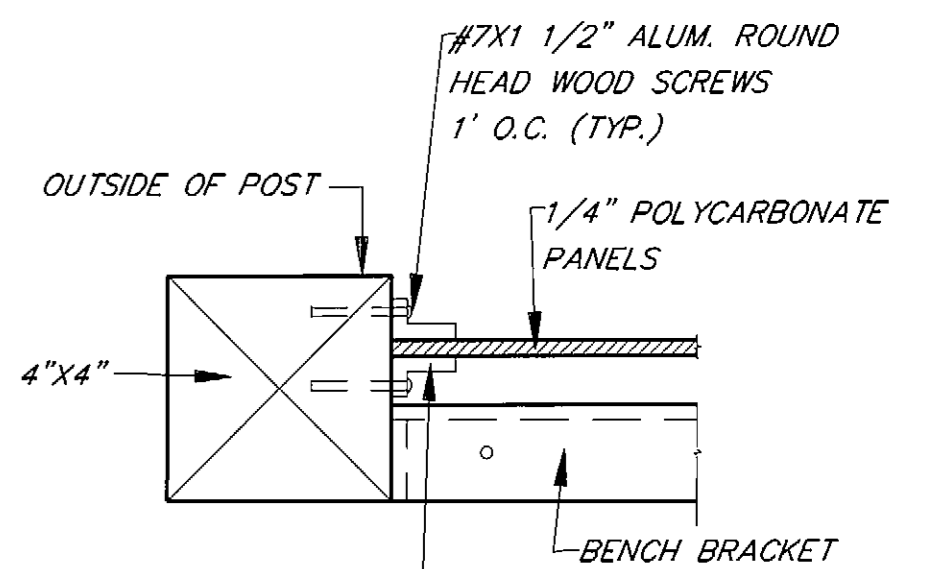
**SIDE VIEW**

SEE TYPICAL SECTIONS FOR STRUCTURAL SECTION AND SLOPE DETAILS

INSIDE & OUTSIDE CORNER CONNECTOR PLATES, TOP & BOTTOM  
MIDSPAN CONNECTOR R. IN & OUT, TOP & BOTTOM. SEE NEXT SHT. FOR DETAILS



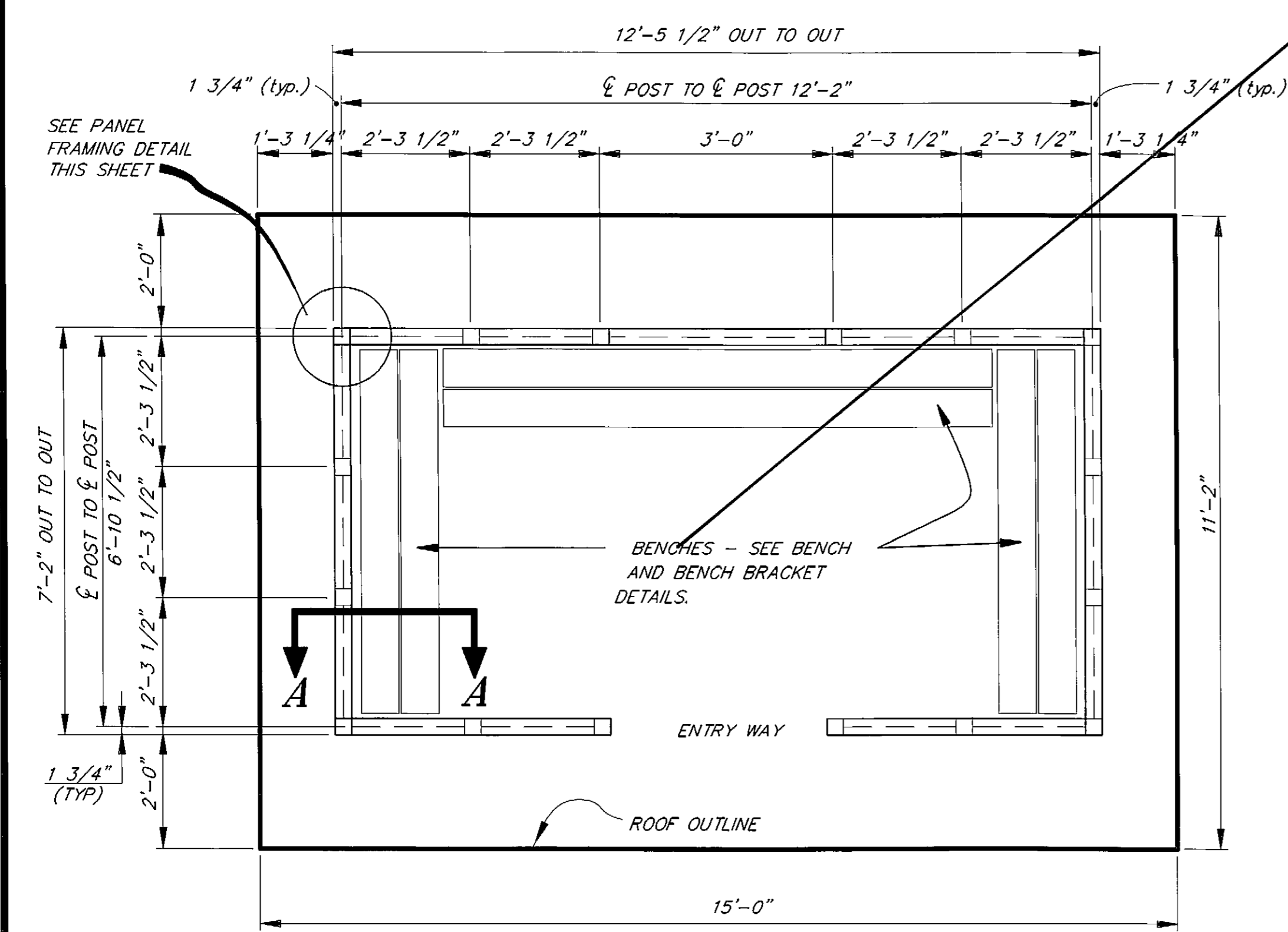
**BENCH BRACKET DETAIL**



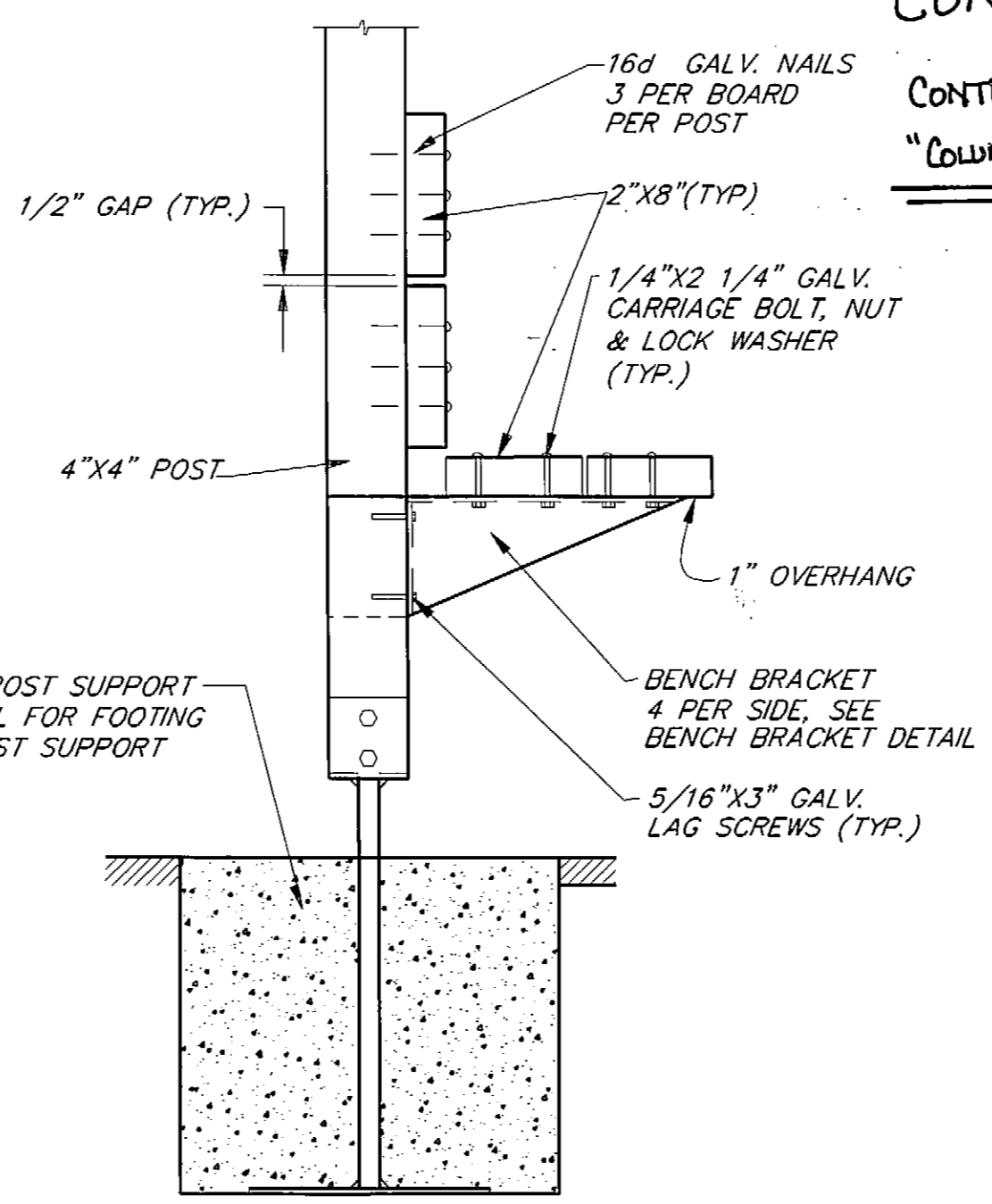
**PANEL FRAMING DETAIL**

\* ALL FILLER PLATES SHALL BE SECURELY NAILED TO CONTINUOUS PLATE WITH 16d NAILS 6" C. C.

\* NOTCH ENDS OF 4"x4" R TO RECEIVE 2"x4" R S

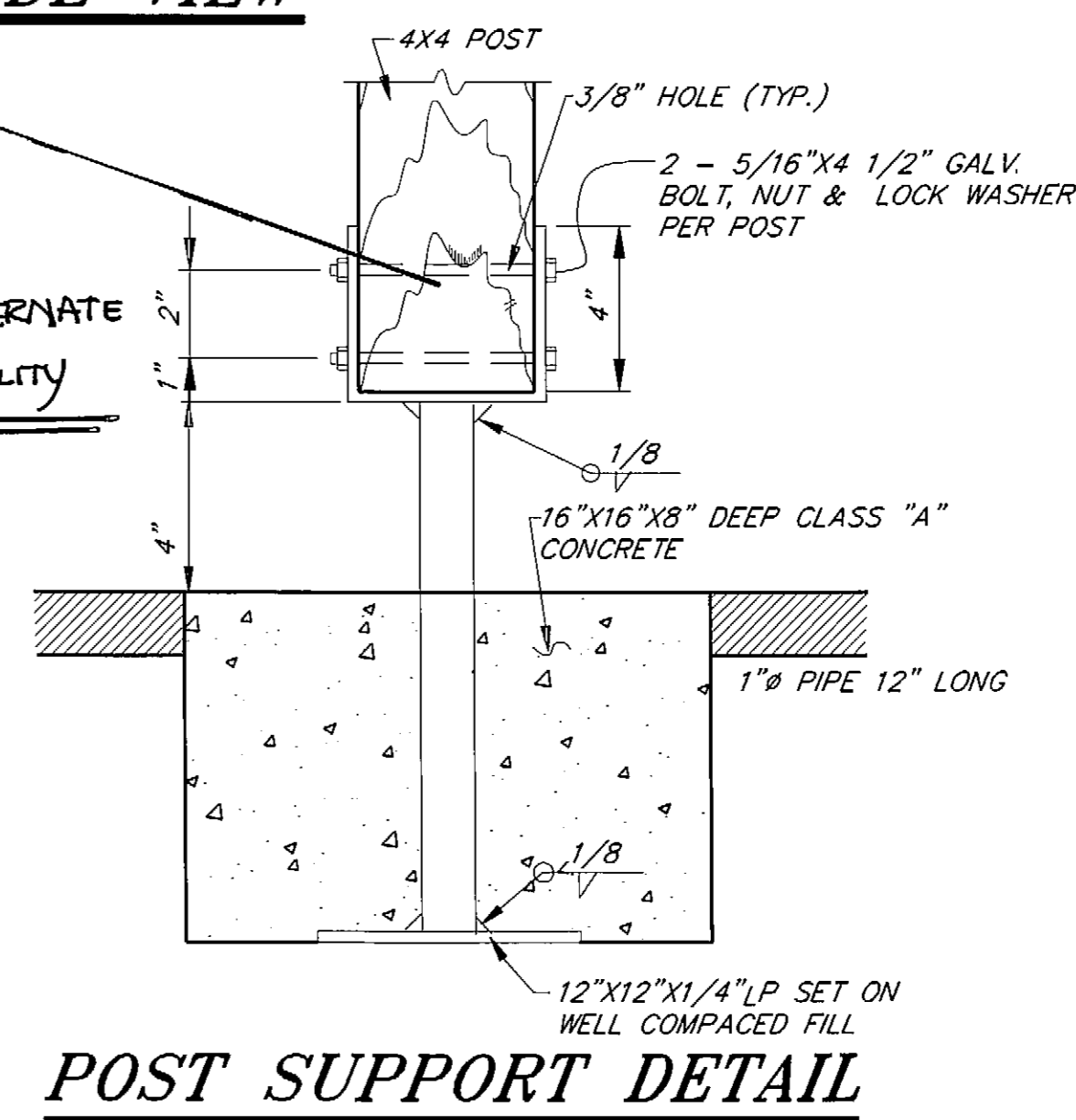


**PLAN VIEW**

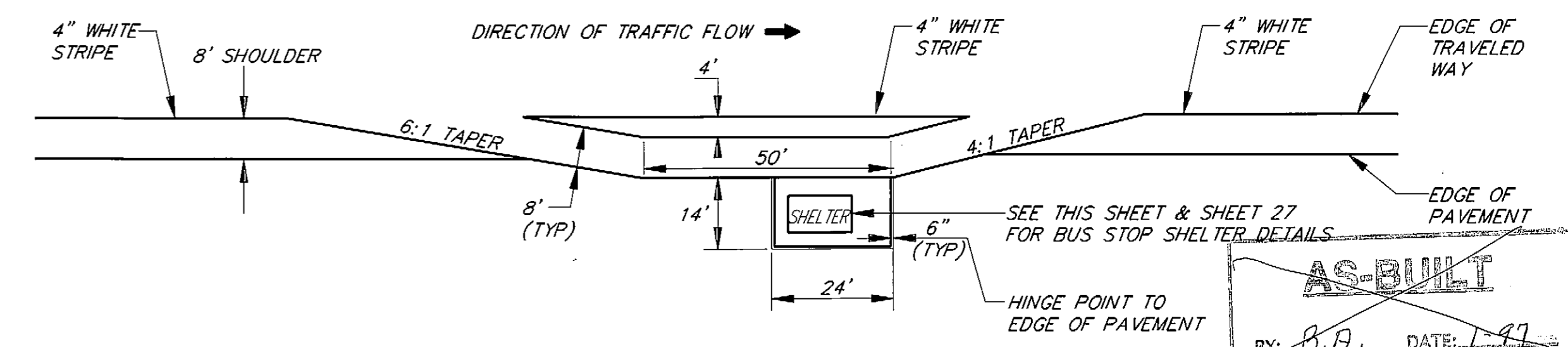


**BENCH DETAIL SECTION A-A**

NOT IN CONTRACT!  
CONTRACTOR USED ALTERNATE "COLUMBIA SHELTER" FACILITY



**POST SUPPORT DETAIL**



**TYPICAL BUS STOP DETAIL**

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

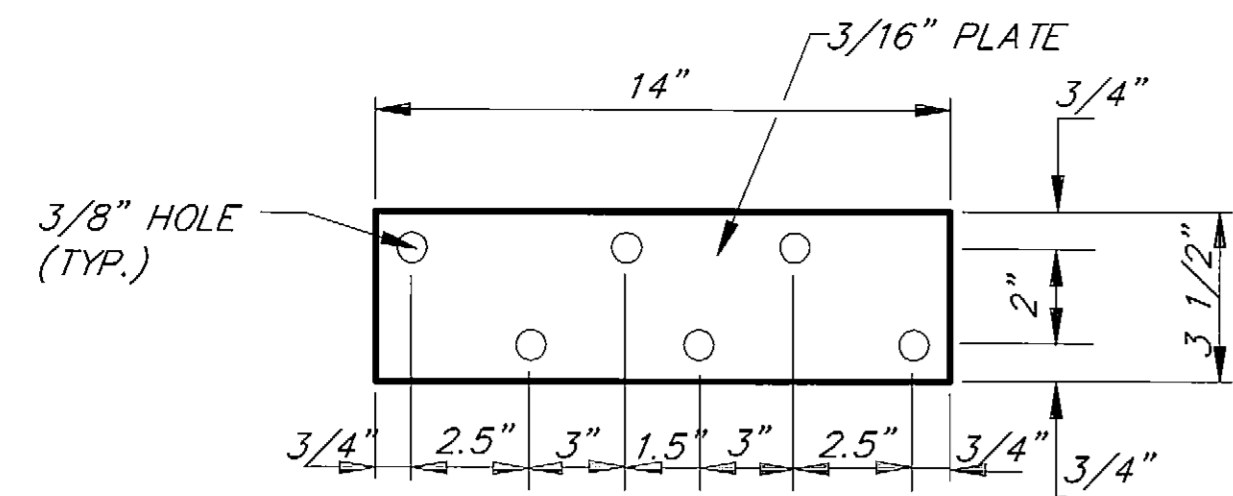
RECORD OF REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGE

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

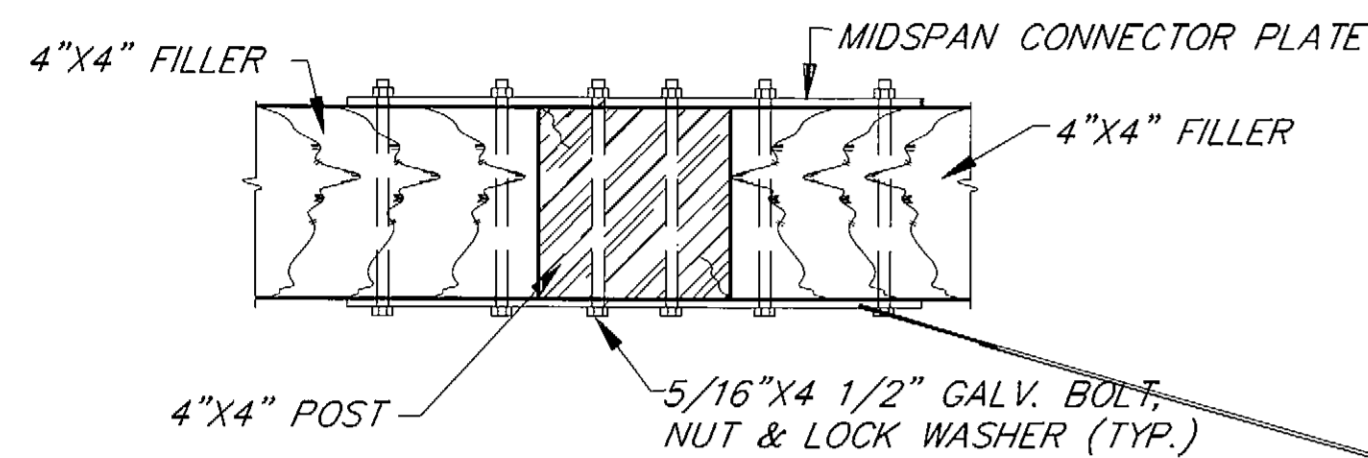
JUNEAU BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF ALASKA  
HES-093-3(5) 70657  
**TYPICAL BUS STOP SHELTER DETAILS**

DESIGNED BY: <b>L.P. CARROLL</b>	PROJECT NO. <b>70657</b>
DRAWN BY: <b>AutoCAD/C. ANDERSON</b>	DATE: <b>JUNE 1994</b>
CHECKED BY: <b>T.W. MOORE</b>	SHEET 26 OF 28



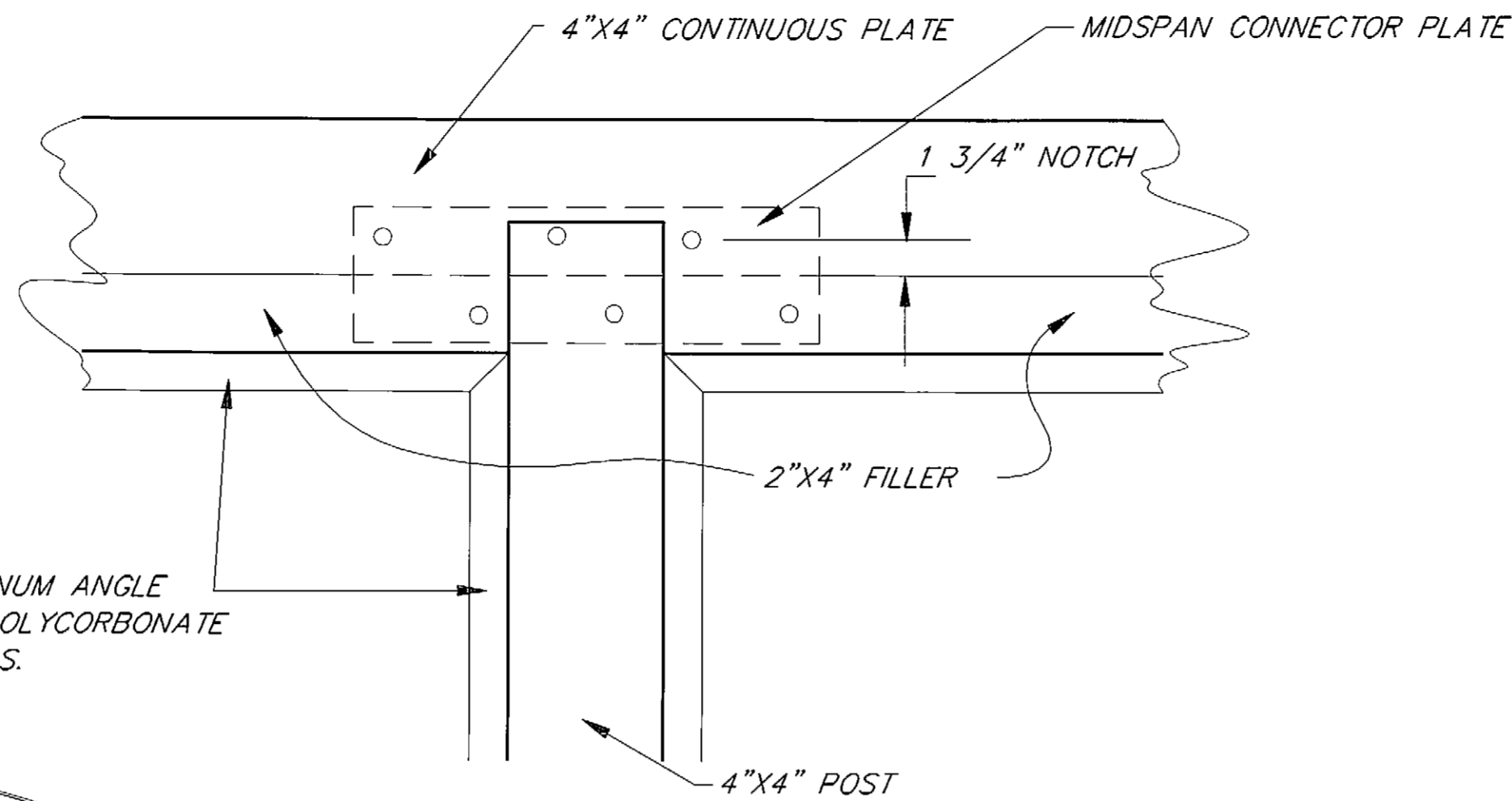


PLAN

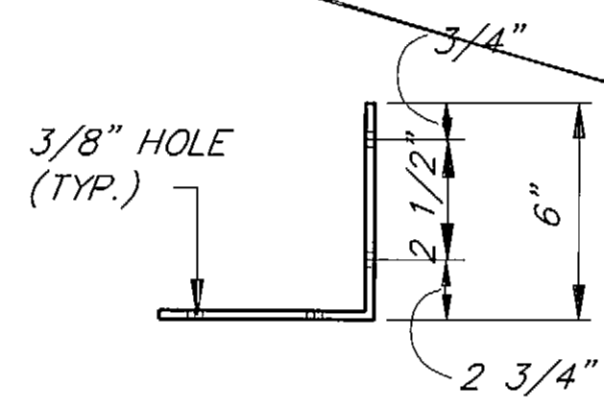


ELEVATION

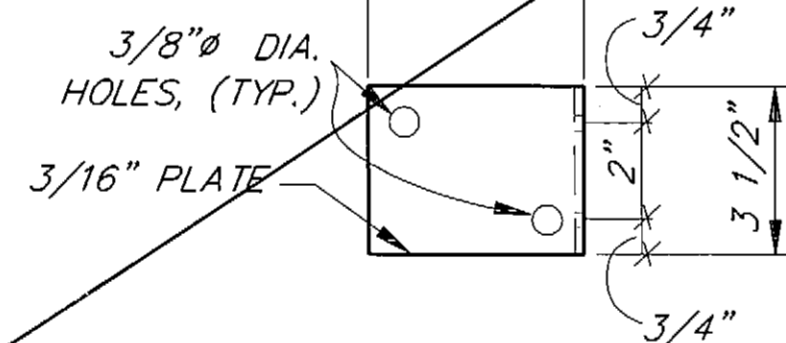
MIDSPAN CONNECTOR PLATE DETAIL



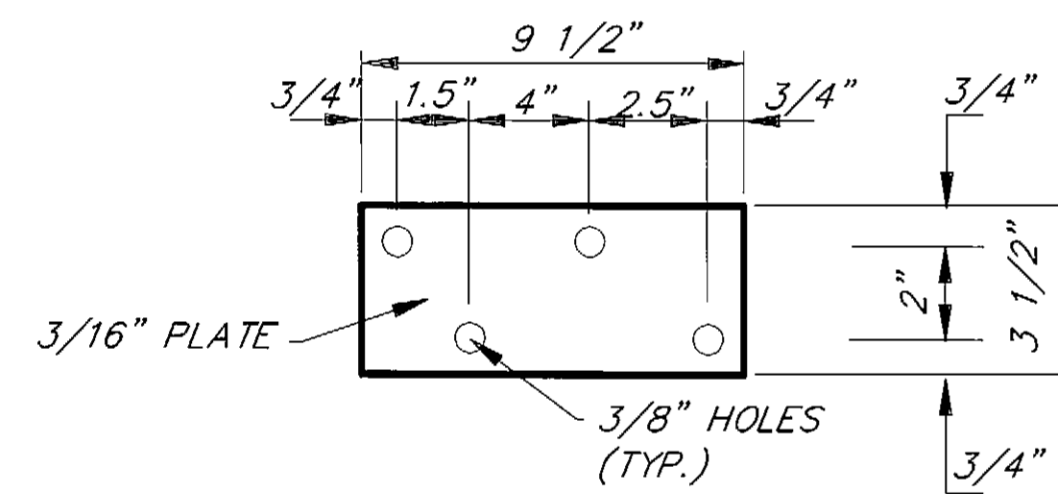
NOTCH DETAIL



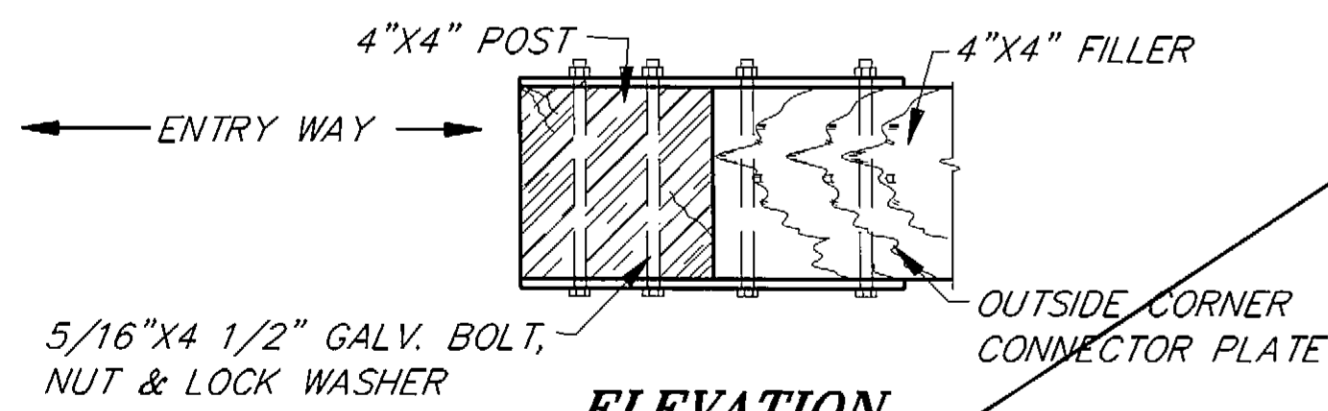
PLAN



ELEVATION

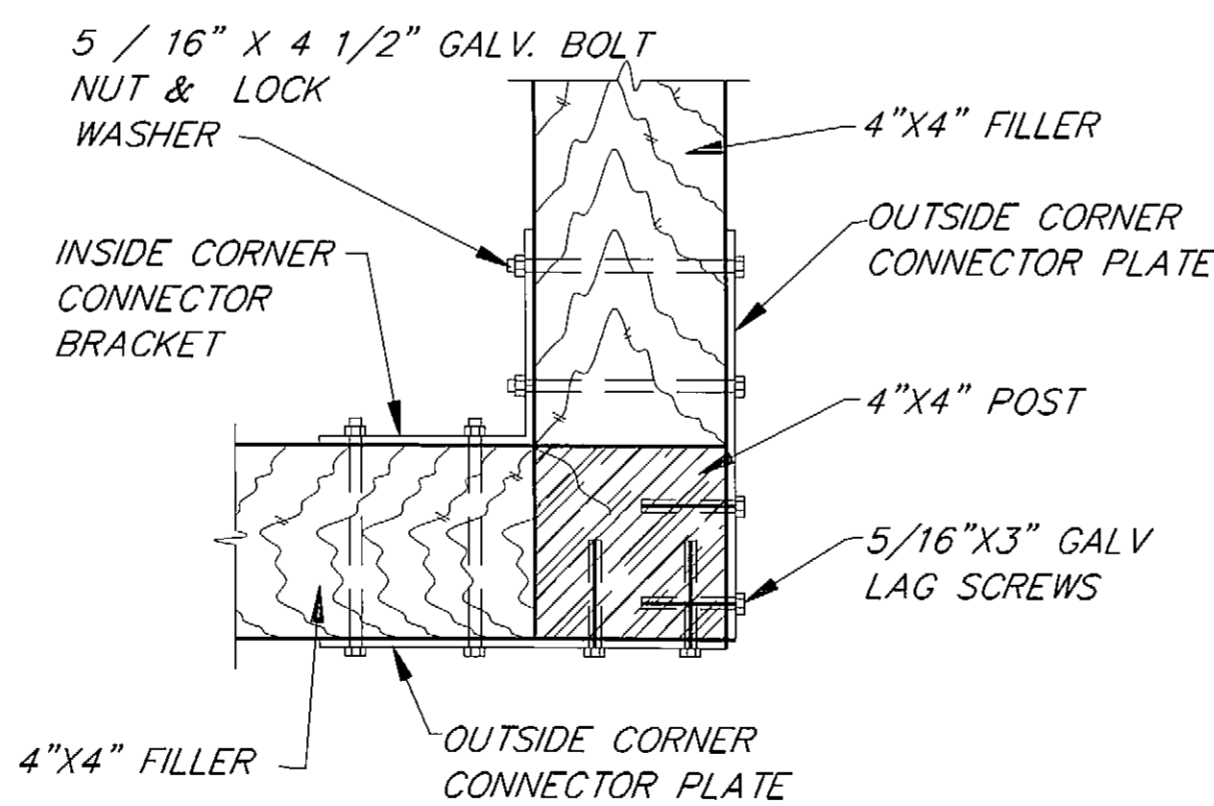


PLAN



ELEVATION

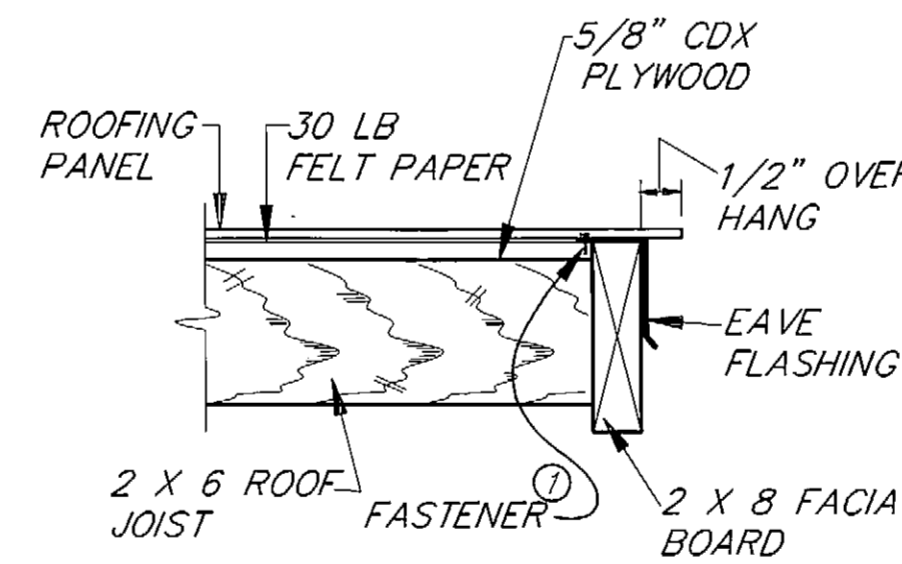
OUTSIDE CORNER AND ENTRY WAY CONNECTOR PLATE DETAIL



INSIDE CORNER CONNECTOR BRACKET DETAIL

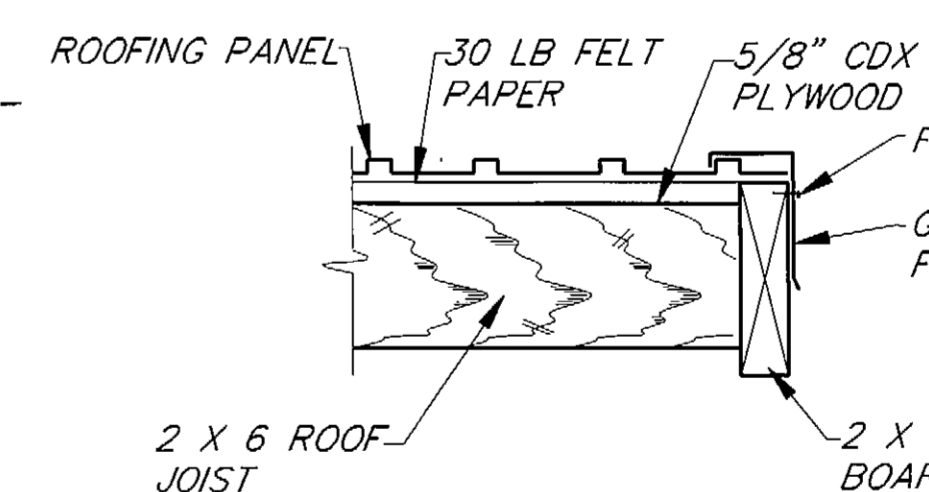
NOT IN CONTRACT

CONTRACTOR USED ALTERNATE "COLUMBIA SHELTER" FACILITY



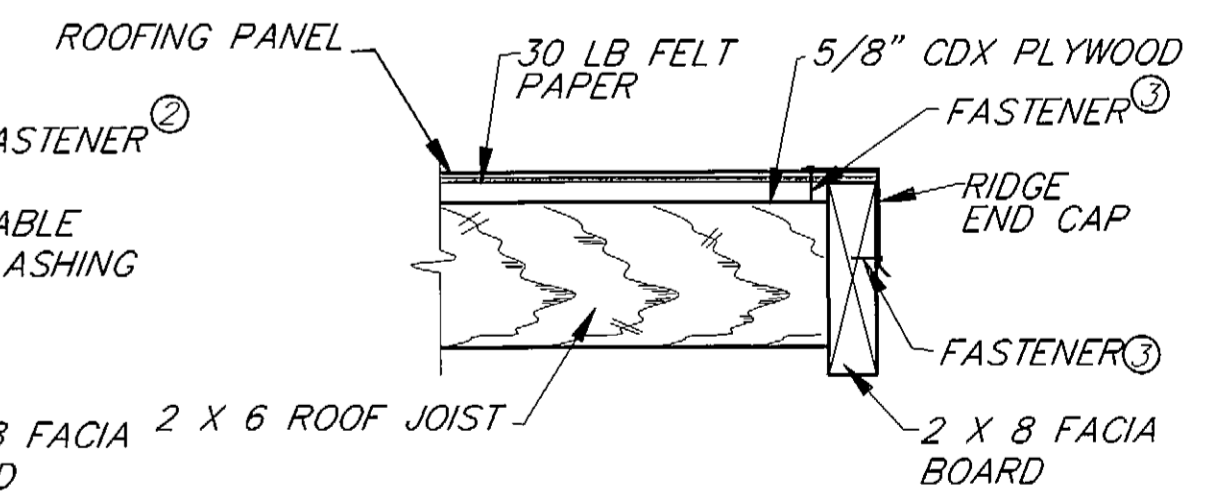
ROOFING DETAIL

EAVE  
① FASTENER EVERY 5 FEET



ROOFING DETAIL

GABLE  
② FASTENERS EVERY 2 FEET



ROOFING DETAIL

END CAP  
③ FASTENERS EVERY 2 FEET

NOTE: USE 8d NAILS TO FASTEN PLYWOOD TO JOISTS. SPACING ALONG EDGES OF PLYWOOD SHALL BE 1 FT. C-C.

ESTIMATE OF QUANTITIES		
ITEM	SINGLE ENTRY	TOTALS
POST SUPPORTS	16 EA	64 EA
5/16"X4 1/2" GAL. BOLTS, NUTS & WASHERS	208 EA	832 EA
4"X4"	290 BM	1,160 B.M.
2"X4"	40 BM	160 B.M.
2"X6"	150 BM	600 B.M.
2"X8"	200 BM	800 B.M.
4'X8'X5/8" CDX PLYWOOD	6 SHEETS	24 SHEETS
30 LBS. ROOF FELT	1-600 SQ ROLL	4-600 SQ. ROLL
METAL ROOFING	16-11'-4"X12" PANELS	64
EAVE, RIDGE END LAP AND COMPENSATING GABLE FLASHING	55 LF	220 L.F.
4'X8'X1/4" CLEAR POLYCARBONATE PANELS	8 SHTS	32 SHTS.
1"X5/8"X1/4" ALUM. ANGLE	600 LF	2,400 L.F.
3 1/2"X14" MID - SPAN CONNECTOR PLATES	36 EA	144
3 1/2"X9 1/2" OUTSIDE CORNER CONNECTOR PLATES	28 EA	112
INSIDE CORNER CONNECTOR BRACKETS	8 EA	32
BENCH BRACKETS	12 EA	48
5/16"X3" GALV. LAG SCREWS	56 EA	224
5/16"X4 1/2" GALV. CARRIAGE BOLTS, NUTS & LOCK WASHERS	32 EA	128
#7X1 1/2" ALUM. ROUND HEAD WOOD SCREW	745 EA	2,980
16d GALV. NAILS	3 LBS	12 LBS
12d GALVANIZED NAILS	1 LB	4 LBS.
CLASS "A" CONCRETE	.7 CU. YDS.	3 CU. YDS.
GALV. JOIST STRAPS	18 EA	72 EA
8d GALV. NAILS	10 LBS	40 LBS

GENERAL NOTES

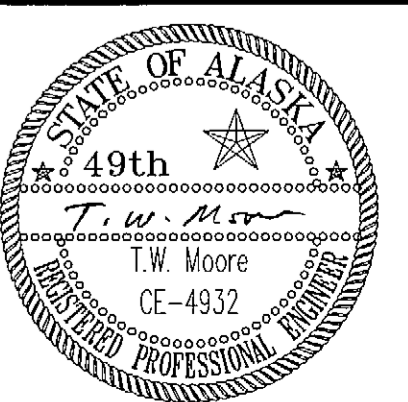
- POST SUPPORTS, BENCH BRACKETS & CONNECTOR PLATES SHALL BE SHOP FABRICATED AND RECEIVE TWO COATS OF METAL PAINT PRIOR TO INSTALLATION.
- ALL LUMBER SHALL BE S-4-S, DOUGLAS FIR OR HEMLOCK, CONSTRUCTION GRADE NO. 1 OR BETTER.
- SIZING OF THE POLYCARBONATE PANEL FOR EXPANSION, SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
- ALL WOOD SHALL BE STAINED WITH LINSEED OIL BASE SEMI-TRANSPARENT STAIN. STAIN SPECIFICATIONS, MANUFACTURER'S APPLICATION RECOMMENDATIONS AND COLOR SAMPLES SHALL BE SUBMITTED FOR APPROVAL BY THE ENGINEER PRIOR TO APPLICATION OF ANY STAIN.
- PRE-DRILL AND STAIN ALL HOLES FOR ALL BOLTS.

RECORD OF REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGE

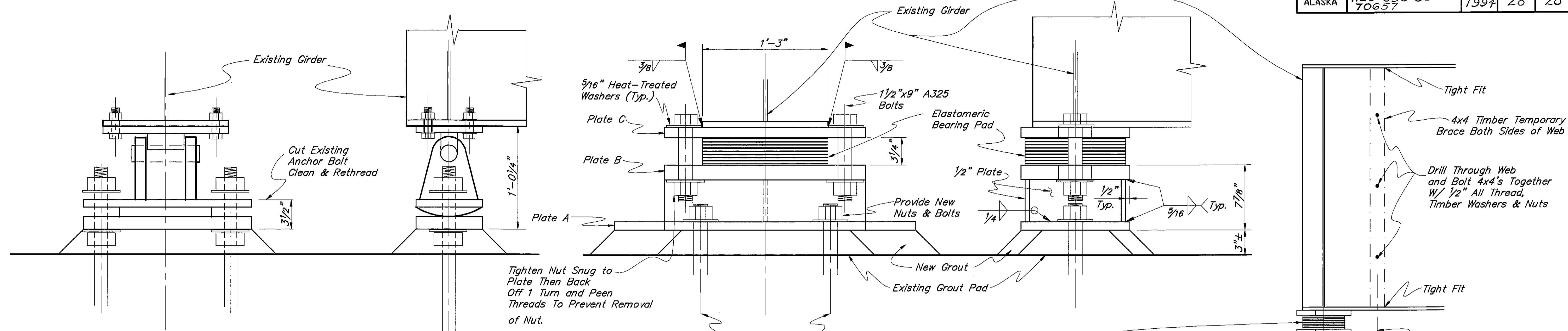
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF ALASKA  
HES-093-3(5) 70657  
CONNECTOR PLATE DETAILS  
BUS STOP

DESIGNED BY: L.P. CARROLL	PROJECT NO. 70657
DRAWN BY: AutoCAD/C. ANDERSON	DATE: JUNE 1994
CHECKED BY: T.W. MOORE	SHEET 27 OF 28



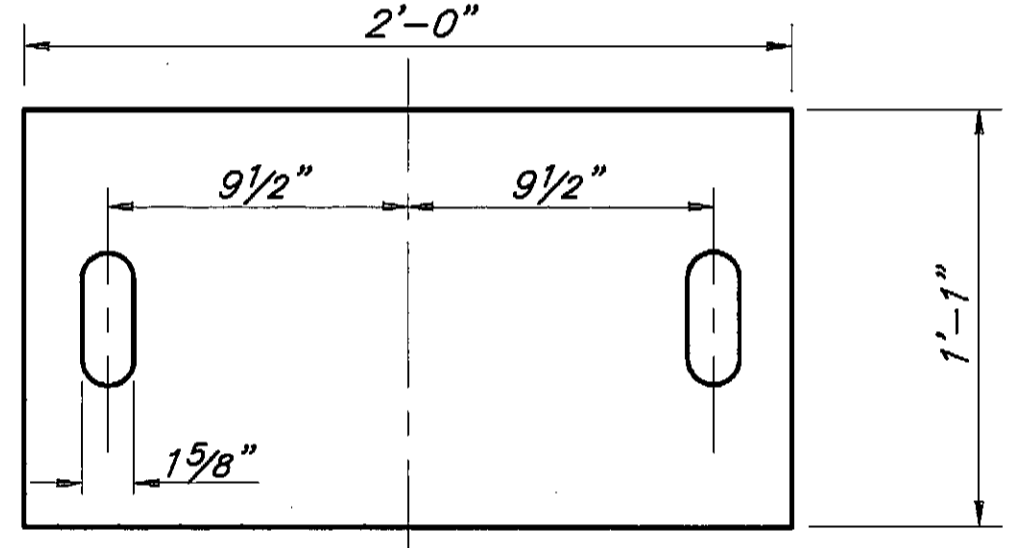
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	HEB-093-35 70657	1994	28	28



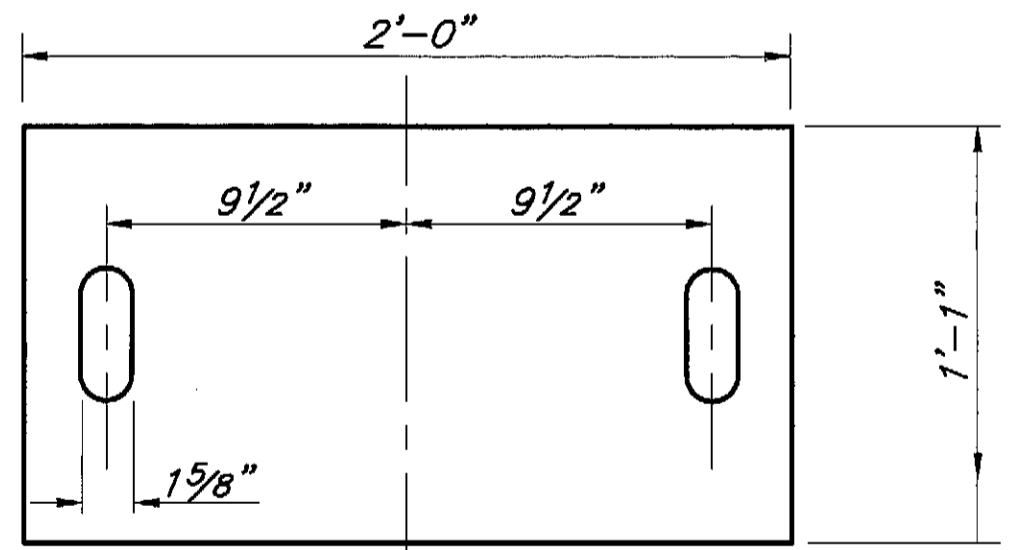
**EXISTING BEARING**  
(TO BE REMOVED)

**NEW BEARING ASSEMBLY**

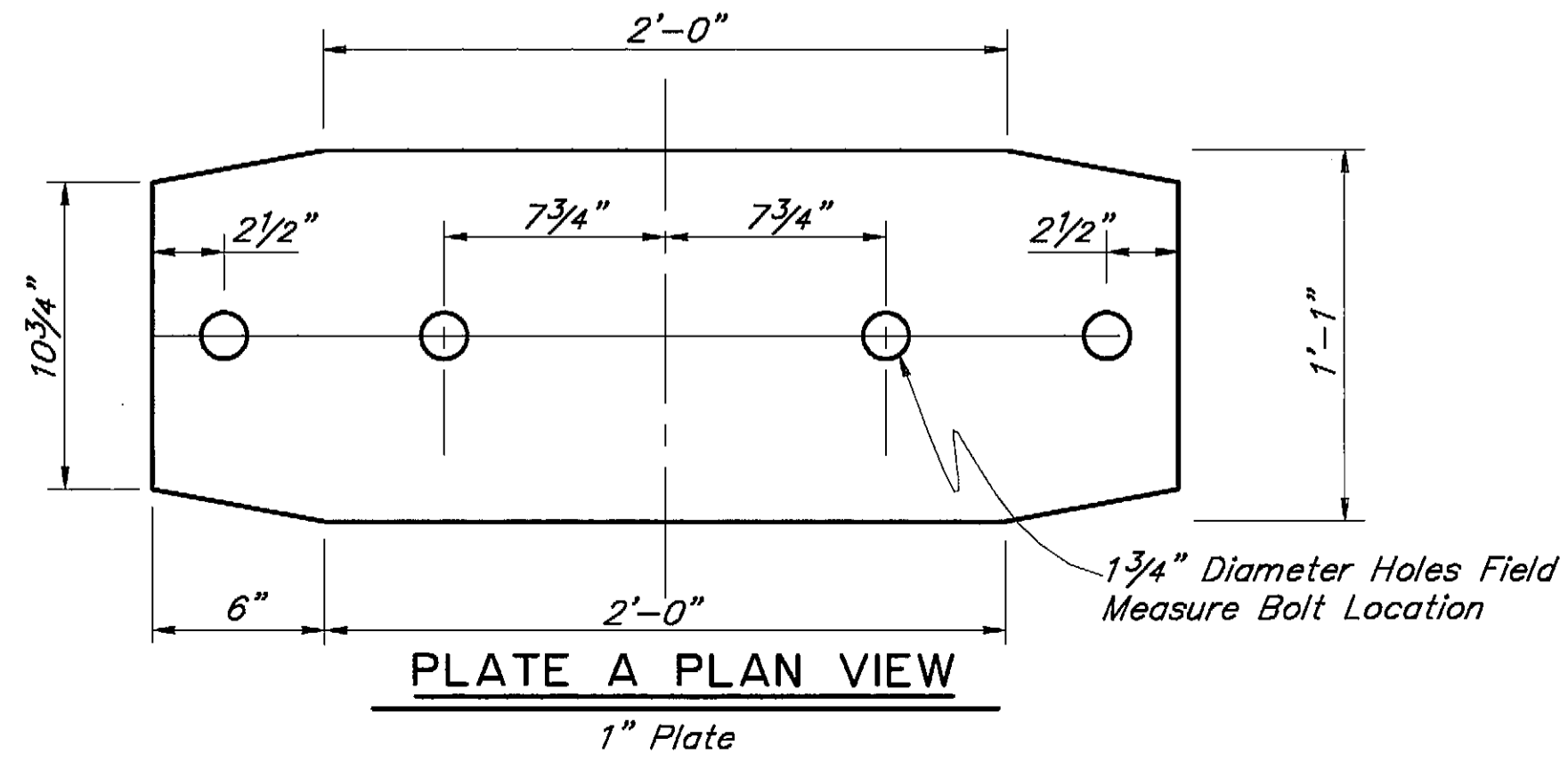
**GIRDER BRACING DETAIL**



**PLATE C PLAN VIEW**  
1 1/4\" Plate (A572 Galvanized)



**PLATE B PLAN VIEW**  
1 3/4\" Plate



**PLATE A PLAN VIEW**  
1\" Plate

**GENERAL NOTES**

**SPECIFICATIONS:**

Design and Construction: AASHTO Standard Specifications for Highway Bridges, 1992 edition with latest Interim Specifications.  
State of Alaska Standard Specifications for Highway Construction 1988, with Standard Modifications and Special Provisions.

**DESIGN UNIT STRESSES:**

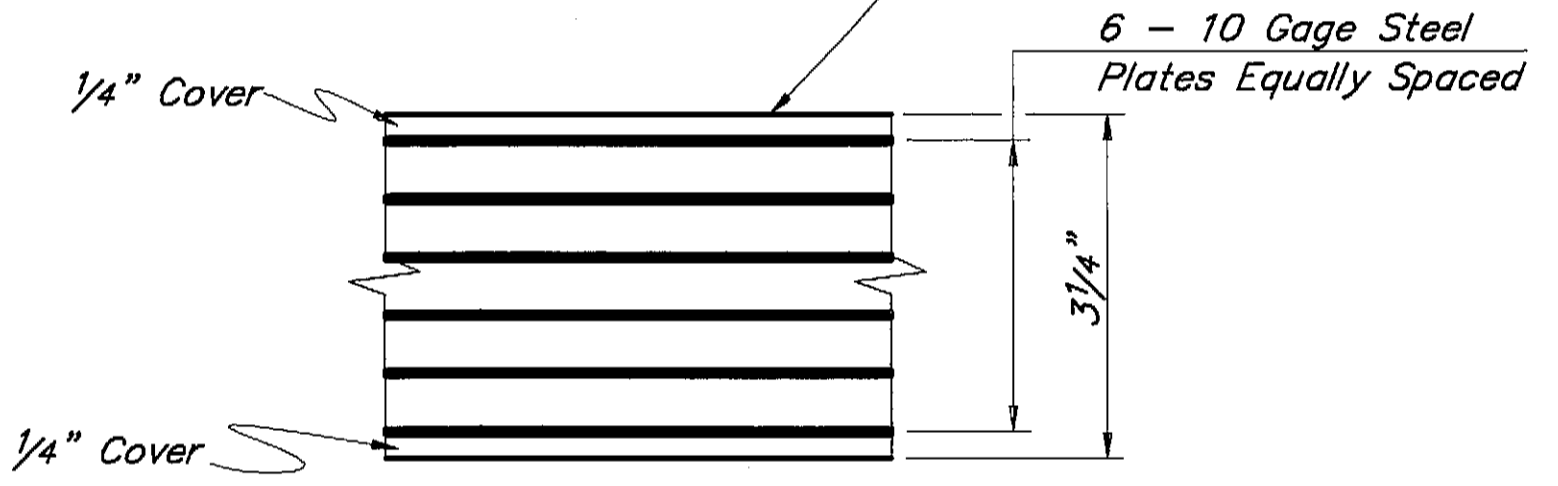
Structural Steel: A36:  $F_y = 36,000$  psi  $F_s = 20,000$  psi  
A572:  $F_y = 50,000$  psi  $F_s = 27,000$  psi

**STRUCTURAL MATERIALS:**

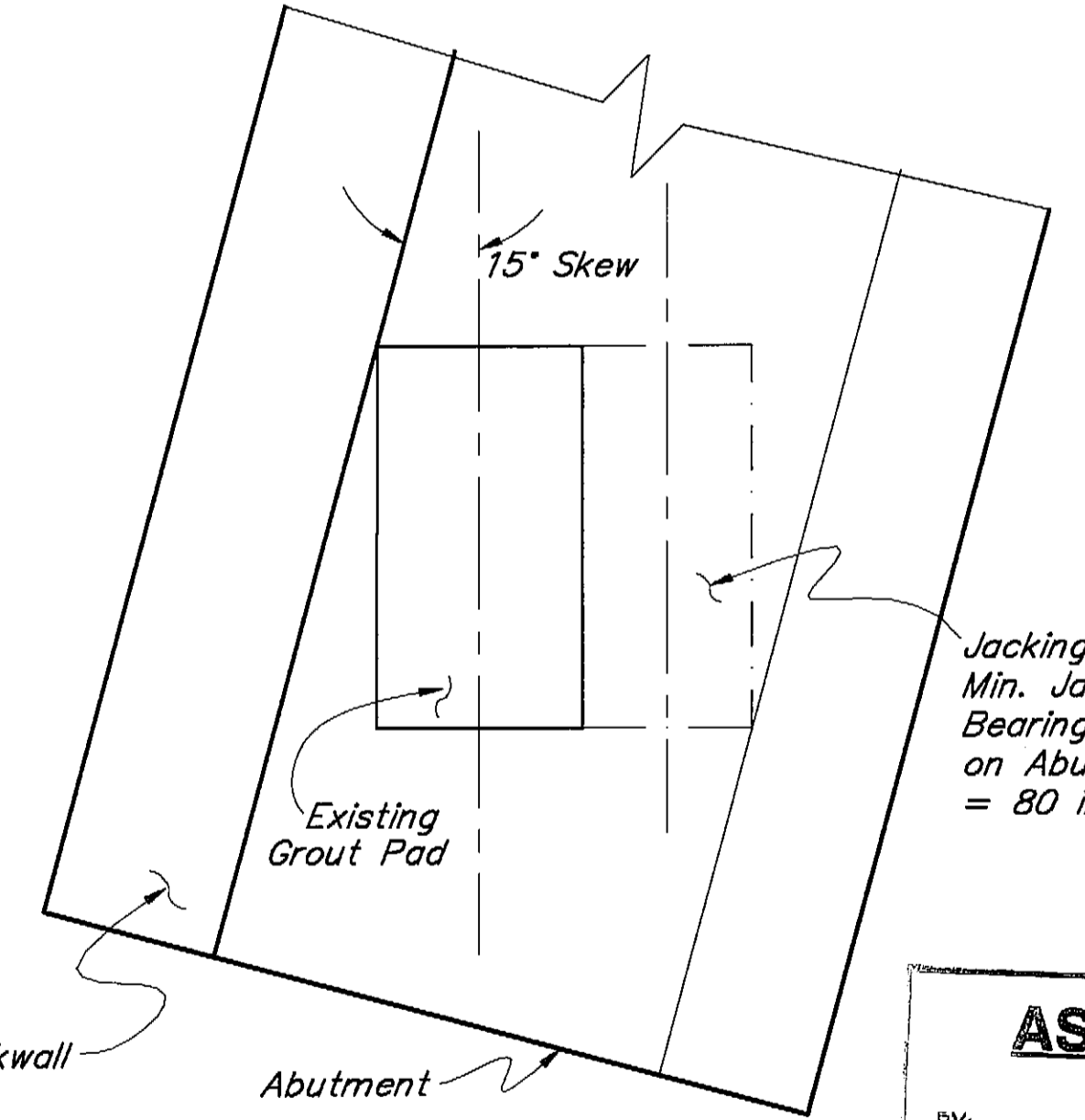
Structural Steel: All structural steel shall be galvanized A36, unless otherwise noted.

**NOTES:**

1. A girder jacking plan must be submitted for approval prior to jacking.
2. Girder jacking and bearing replacement shall be accomplished with one lane of the bridge closed to traffic. (See special provisions)
3. The existing grout pad shall be left in place; any high spots shall be bushed even with the rest of the pad, and a thin layer of grout shall be placed on top of the existing grout pad to "set" the new bearing assembly and fill any voids.
4. The existing anchor bolts shall be cut as shown, cleaned of corrosion and rethreaded.
5. This drawing applies to 5 bearings at each abutment; 10 bearings total.
6. Jack load approximately 46 tons.
7. Bolts, nuts, & washers shall be galvanized.



**ELASTOMERIC PAD DETAIL**



**ABUTMENT PLAN VIEW**

**AS-BUILT**  
BY: B.F. DATE: 1-97



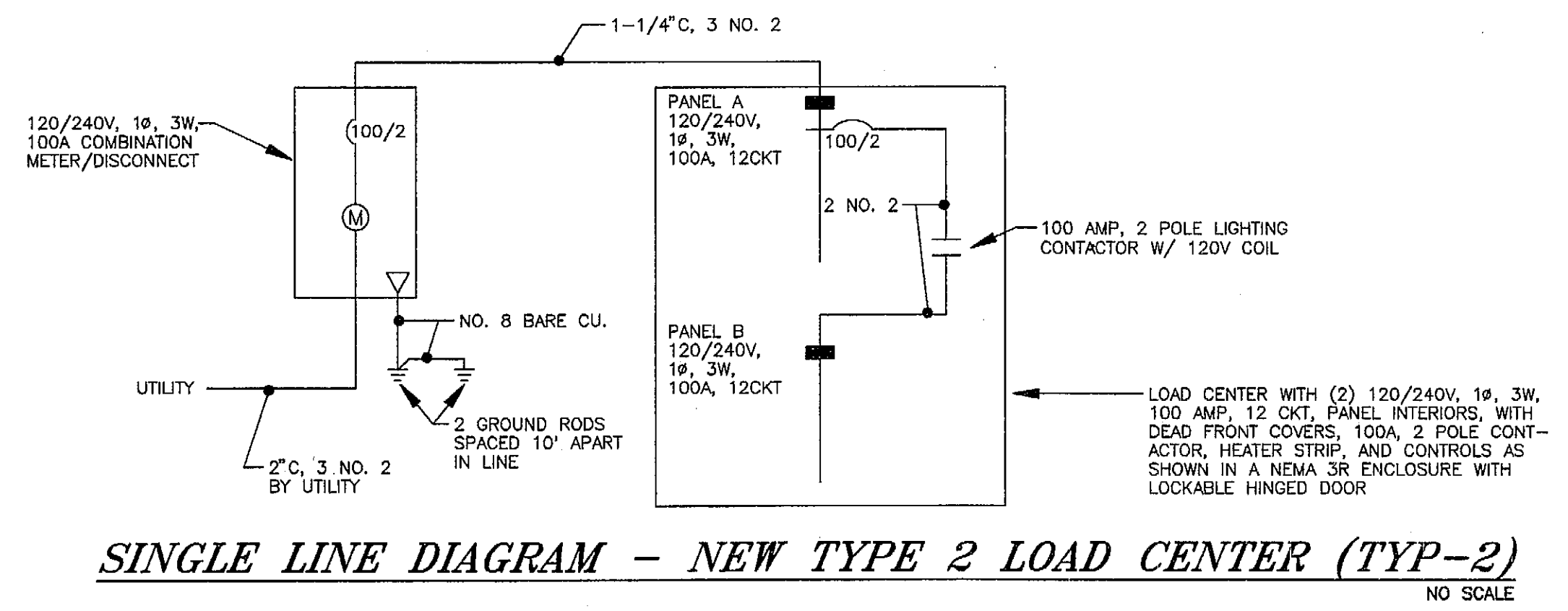
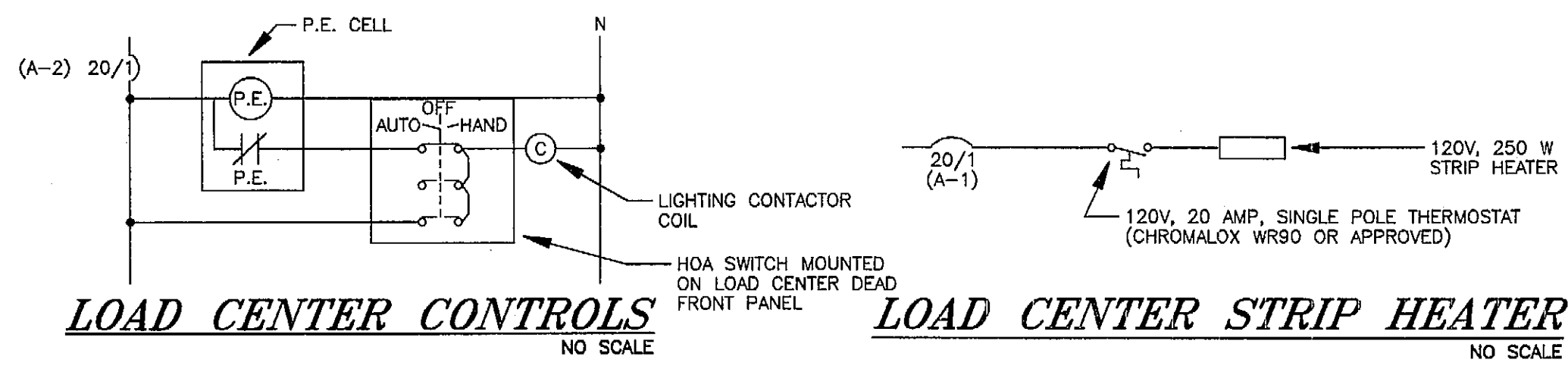
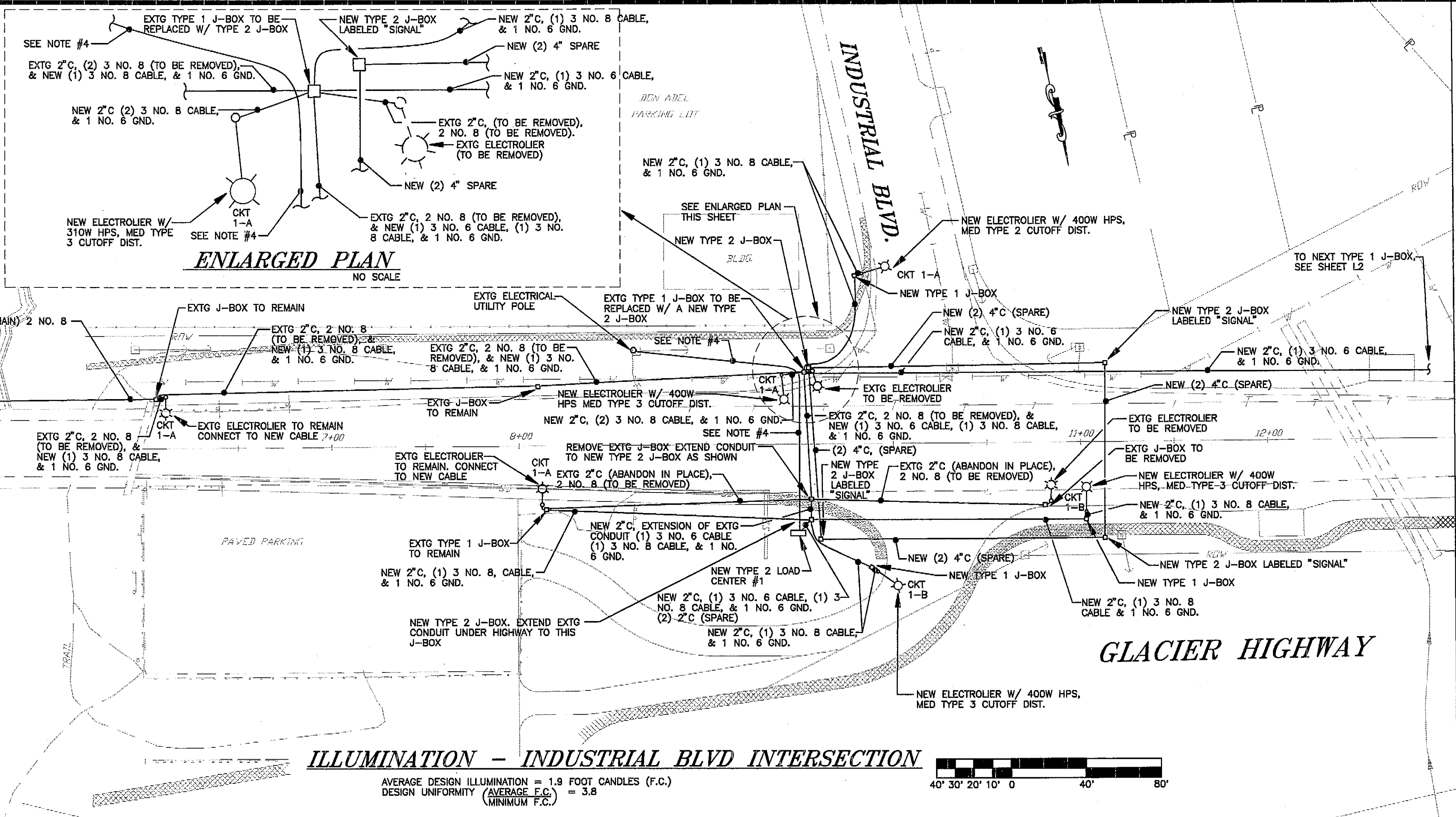
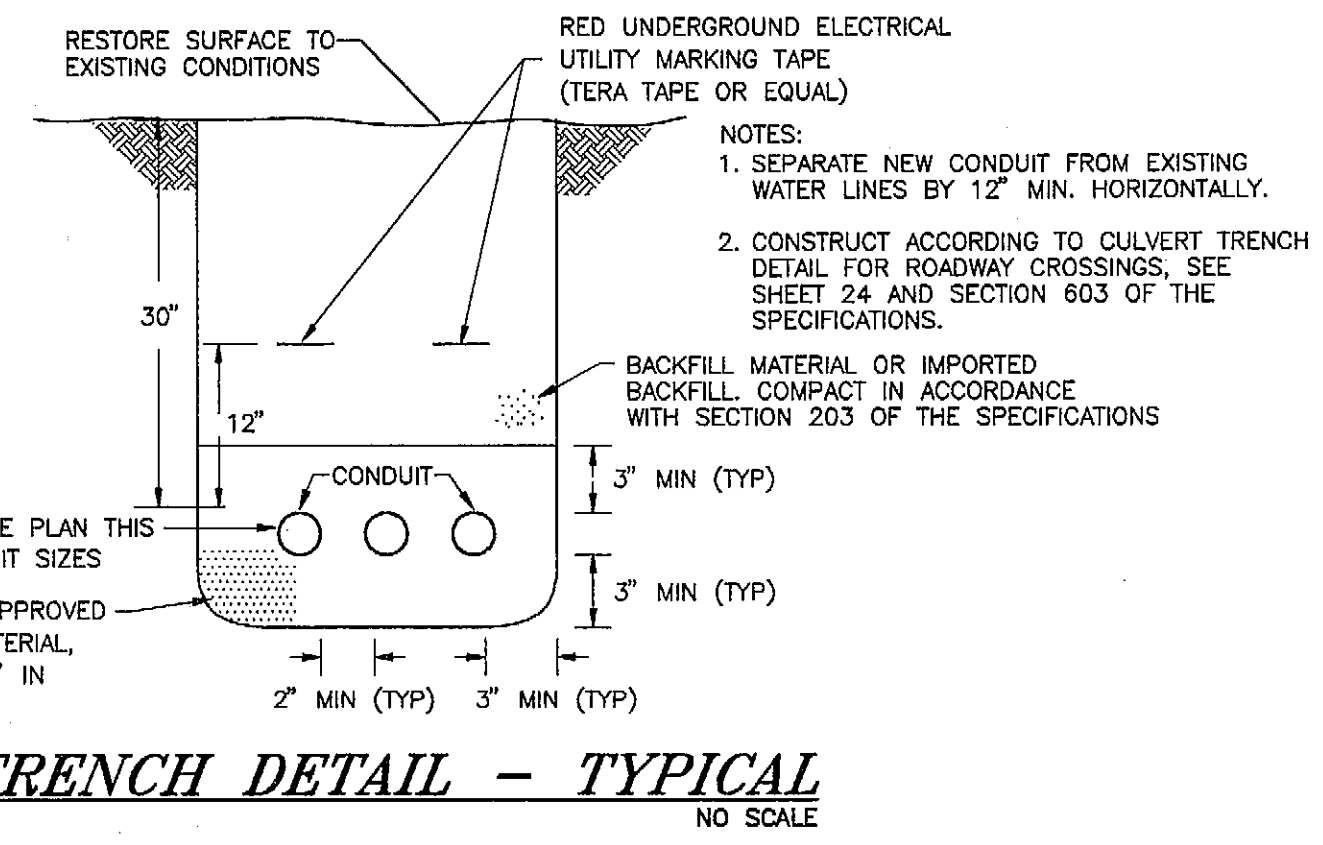
**BROTHERHOOD BRIDGE**  
**ABUTMENT BEARING DETAILS**

STATE of ALASKA  
DEPARTMENT of TRANSPORTATION  
and PUBLIC FACILITIES  
JUNEAU, ALASKA



BRIDGE NO. 737  
DWG. NO. 1

P: 1717BRW00  
6/3/1994 8:51  
Plot Scale = 1.00  
Drawn or Revised By: DM



PANEL A		SIZE	VOLTS/PHASE		MAIN		LOCATION		MOUNT	
C K T NO	WIRE NO/ SIZE	BREAKER AMP/ POLE	KVA		BREAKER AMP/ POLE	DESCRIPTION	INDUSTRIAL BLVD INT.	LOAD CENTER #1	WIRE NO/ SIZE	C K T NO
			CKT	AØ						
1	2/12	20/1	0.3	0.4	0.1	CONTROLS			2/12	2
3	2/2	100/2	2.4		2.4	SPACE				4
5	---	---	2.4	2.4						6
7	SPARE	20/1								8
9										10
11	SPACE									12
TOTAL CONNECTED LOAD = 5.2 KVA / 22 AMPS			2.8	2.4						

PANEL B		SIZE	VOLTS/PHASE		MAIN		LOCATION		MOUNT	
C K T NO	WIRE NO/ SIZE	BREAKER AMP/ POLE	KVA		BREAKER AMP/ POLE	DESCRIPTION	INDUSTRIAL BLVD INT.	LOAD CENTER #1	WIRE NO/ SIZE	C K T NO
			CKT	AØ						
1	2/8, 1/6 GND.	20/2	0.8	2.4	1.8	LTC CKT "A" BROT. BRIDGE TO			2/8, 1/6 GND.	2
3	& 1/8 SPARE	---	0.8		2.4	INDUSTRIAL BLVD TO JENKINS ST			& 1/8 SPARE	4
5	SPARE	20/2				SPACE				6
7										8
9										10
11	SPACE									12
TOTAL CONNECTED LOAD = 4.8 KVA / 20 AMPS			2.4	2.4						

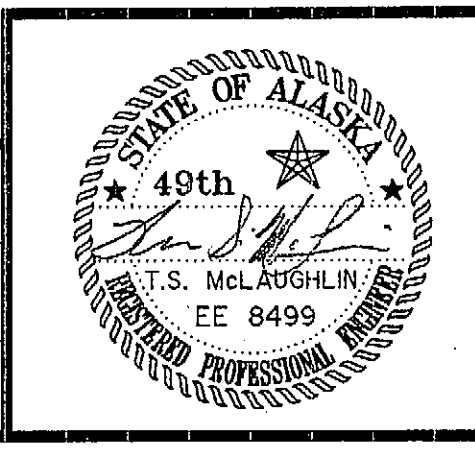
**AS-BUILT**  
By: B.A. DATE: 1-97

RECORD OF REVISIONS		
PATH:	DATE:	DESCRIPTION OF CHANGE:

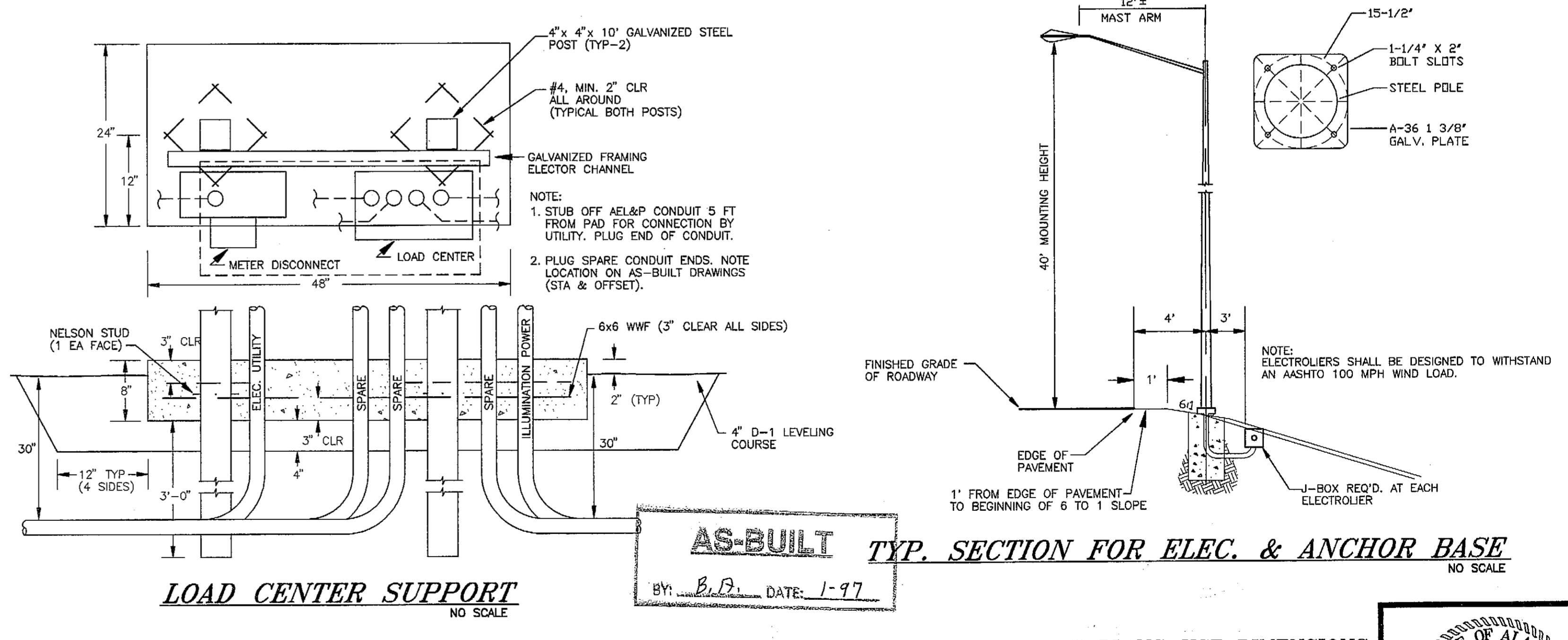
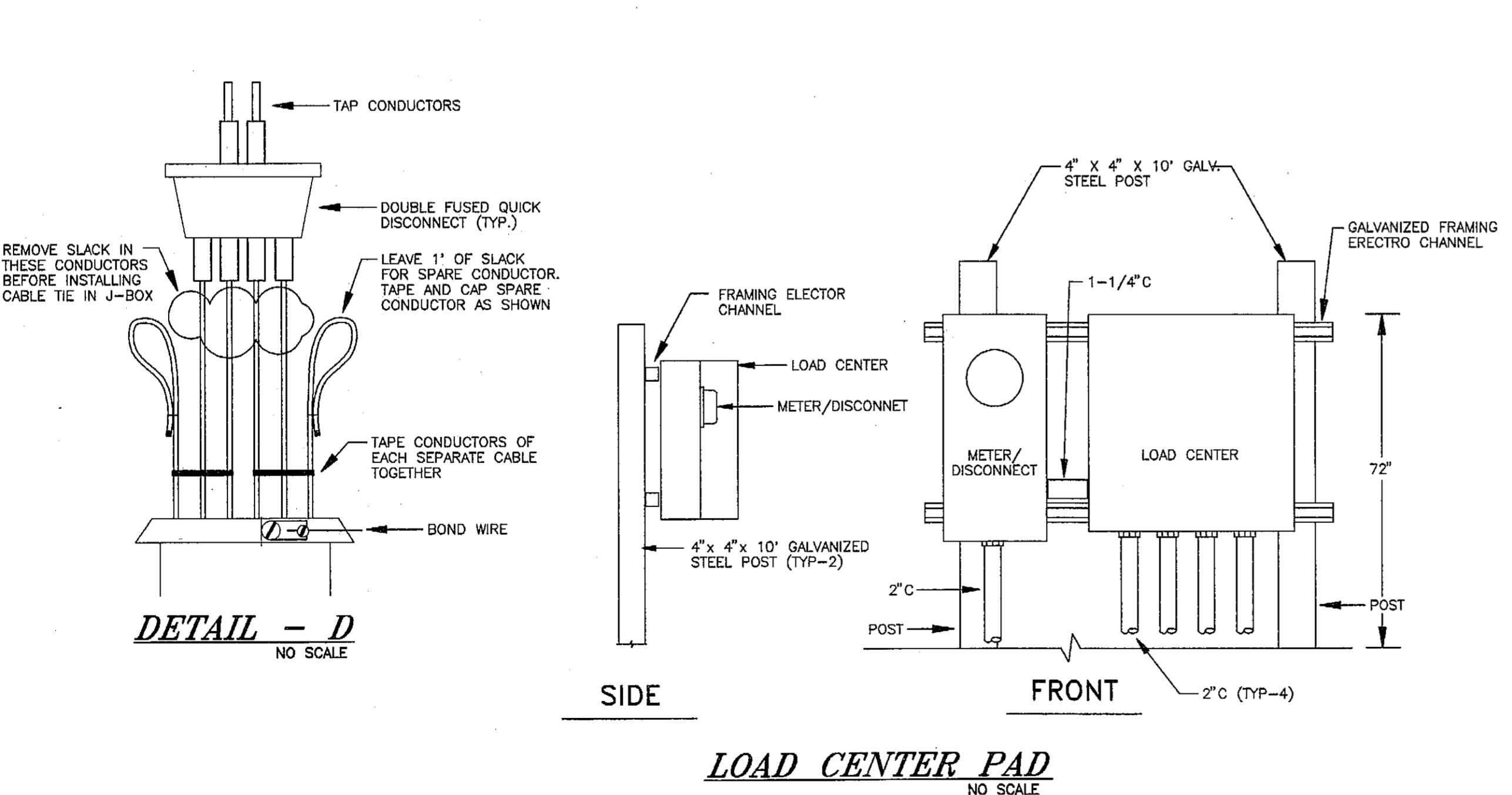
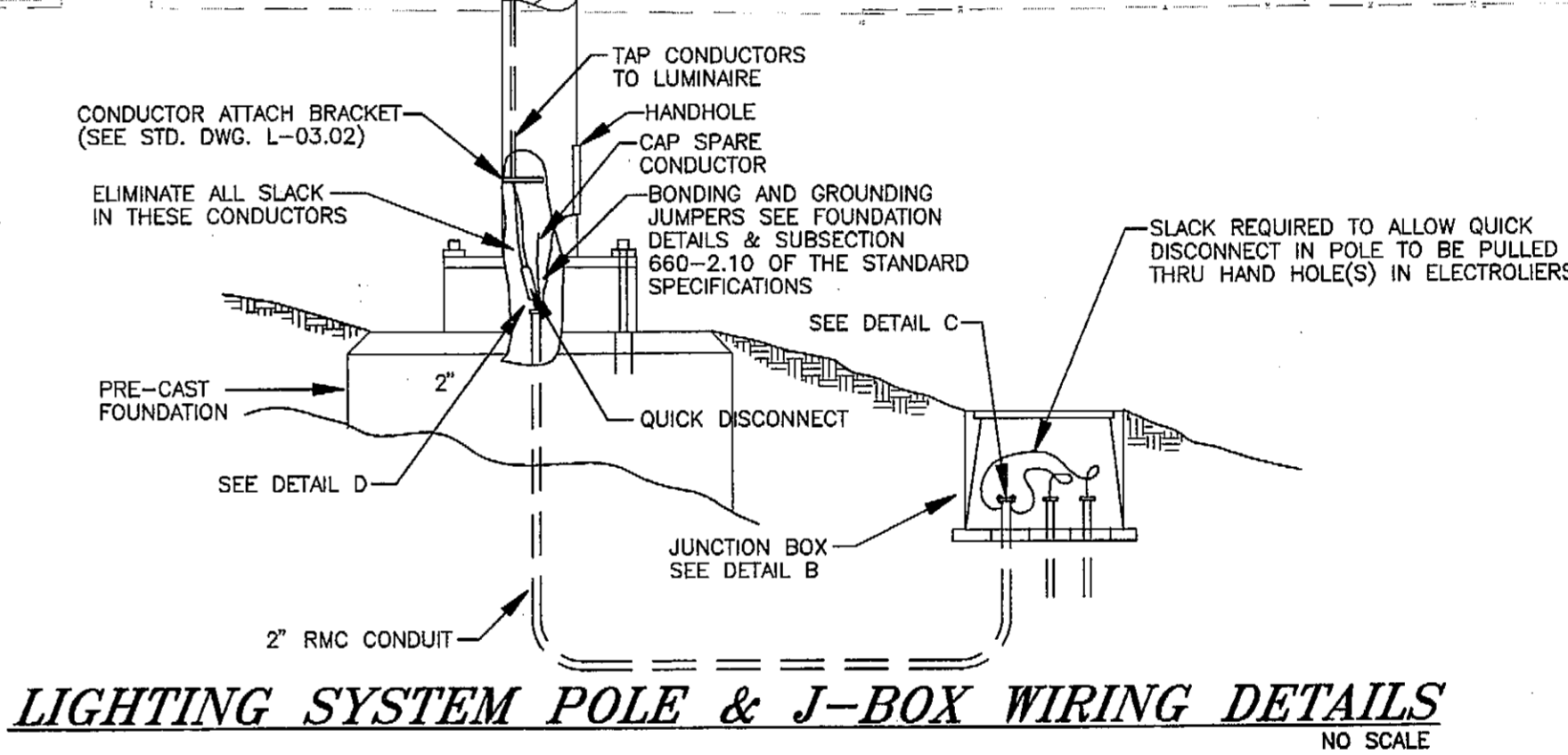
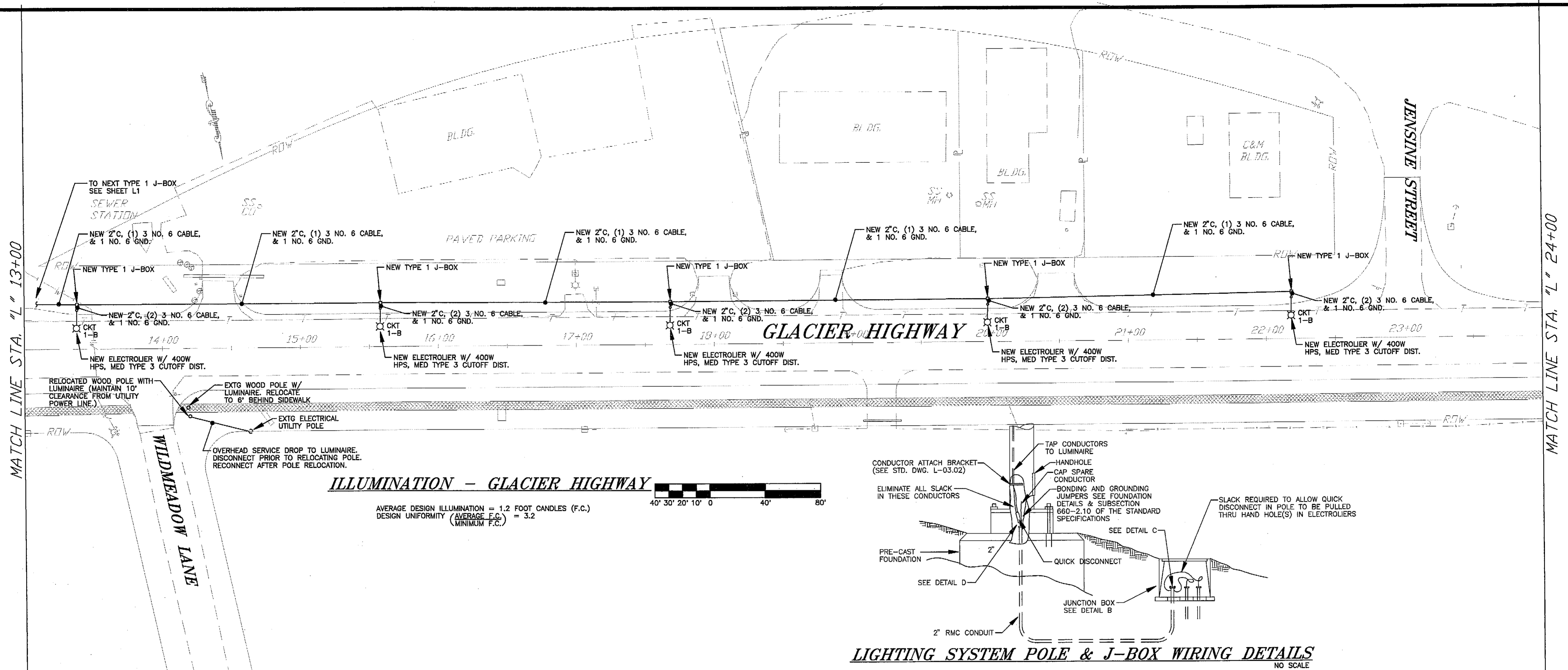
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU ALASKA  
BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF  
HES-093-3(5) 70657  
BROTHERHOOD BRIDGE TO STA 13+00  
ILLUMINATION - LOAD CENTER DETAILS

DESIGNED BY:	MGM	PROJECT NO.	70657
DRAWN BY:	JLC	DATE:	JUNE 1994
CHECKED BY:	TSM		SHEET L1 OF L3



NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

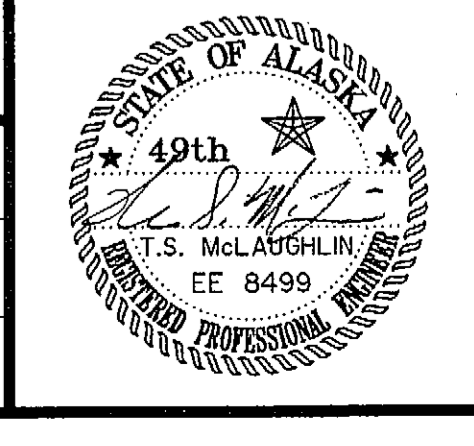


RECORD OF REVISIONS		
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BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF ALASKA  
 HES-093-3(5) 70657  
 ILLUMINATION - STA 13+00 TO  
 JENSINE ST, DETAILS

DESIGNED BY:	MGM	PROJECT NO.	70657
DRAWN BY:	JLC	DATE:	JUNE 1994
CHECKED BY:	TSM	SHEET	L2 OF L3

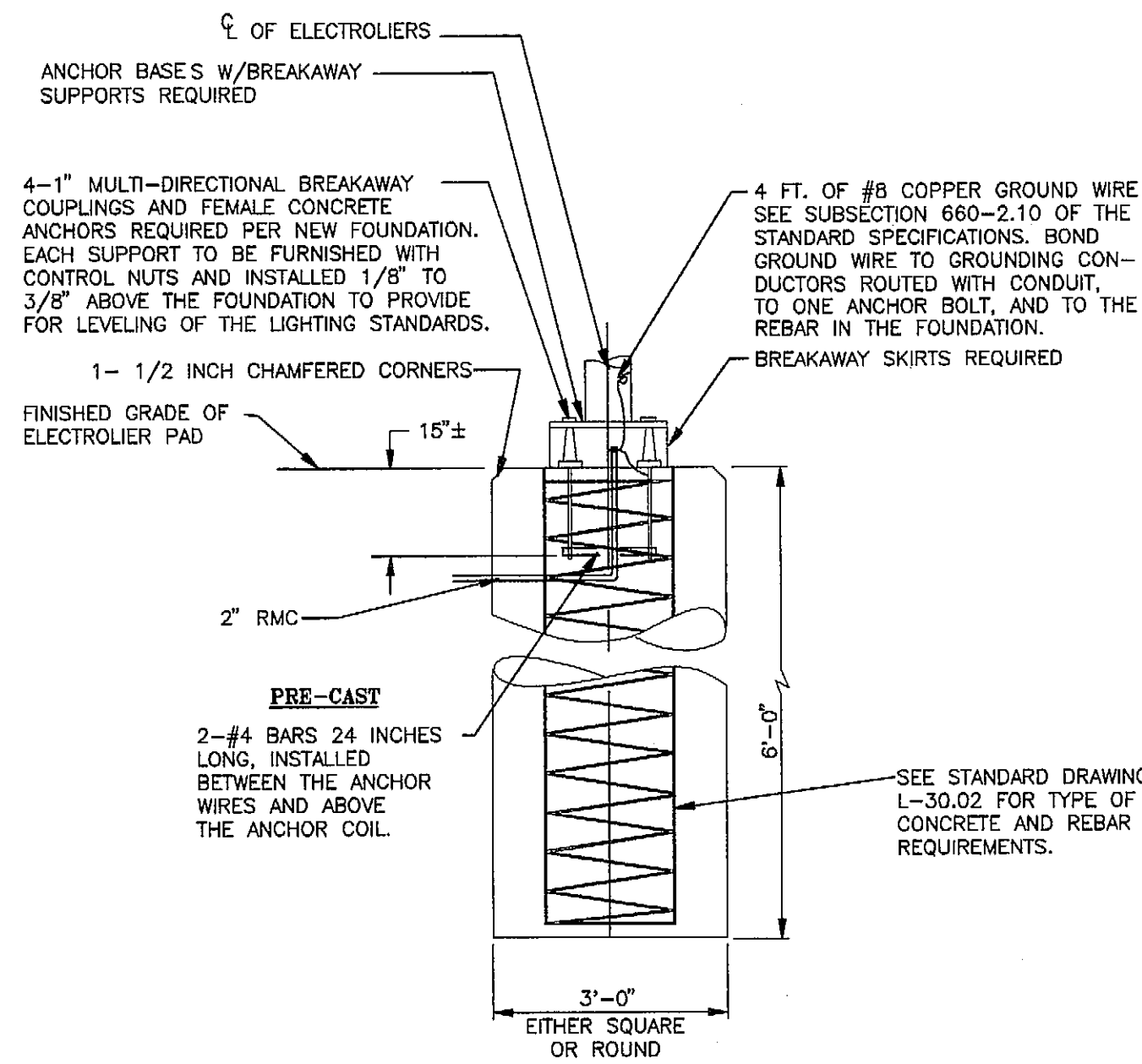


AS-BUILT  
 BY: *B.D.* DATE: 1-97

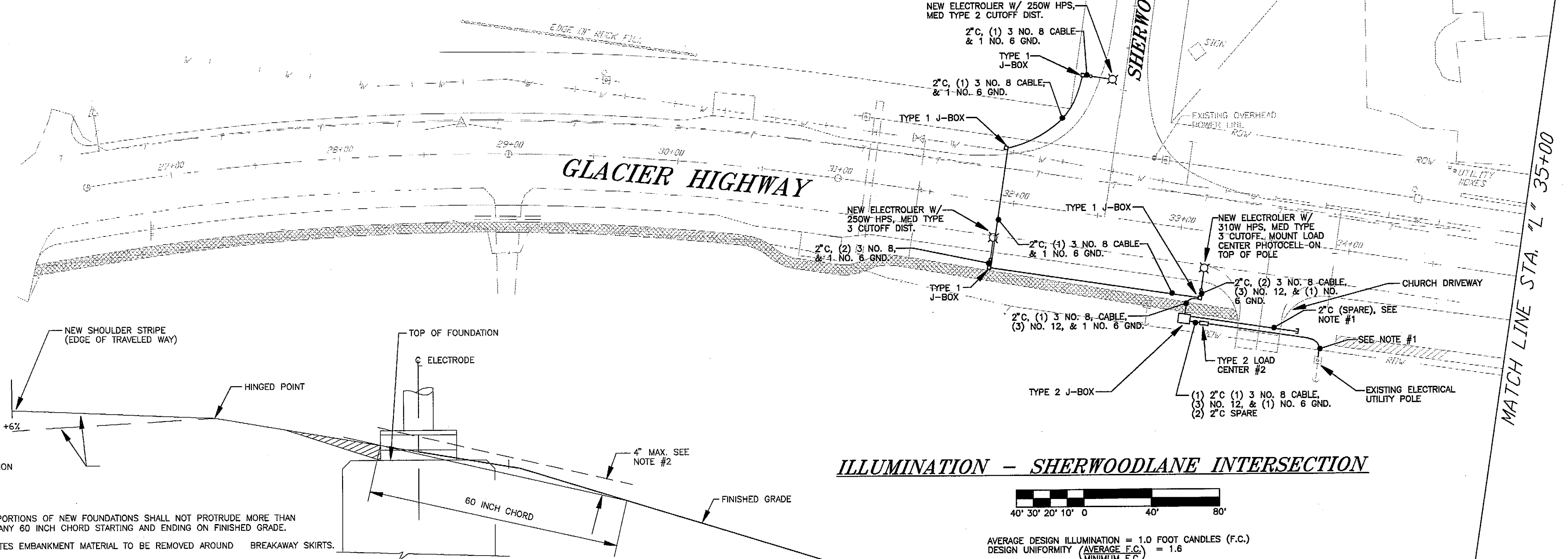
NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

**SHERWOOD LANE INTERSECTION ILLUMINATION NOTES**

1. PROVIDE A 18" WIDE BY 30" DEEP TRENCH BETWEEN THE NEW LOAD CENTER AND THE EXISTING ELECTRICAL UTILITY POLE. THE BOTTOM OF THE TRENCH SHALL HAVE NO MORE THAN A 3% SLOPE. COORDINATE WITH THE ELECTRICAL UTILITY, AEL&P, TO ALLOW AEL&P TO INSTALL A 2" CONDUIT BETWEEN THEIR POLE AND THE LOAD CENTER. BACKFILL THE TRENCH PER THE TRENCH DETAIL ON SHEET L-1 AND PER THE SPECIFICATIONS. INSTALL ONE SPARE 2" CONDUIT ACROSS CHURCH DRIVEWAY IN THE SAME TRENCH. CAP THE CONDUIT AND SHOW EXACT POSITION OF CAP ON AS-BUILT DRAWINGS. THE LOAD CENTER SERVICE CONDUCTORS WILL BE PROVIDED BY AEL&P. ALL AEL&P CHARGES FOR THE SERVICE TO THE LOAD CENTER SHALL BE PAID AS PART OF THIS CONTRACT.
2. ALL EQUIPMENT AND MATERIALS SHALL BE NEW UNLESS OTHERWISE NOTED.



**FOUNDATION DETAIL**  
NO SCALE



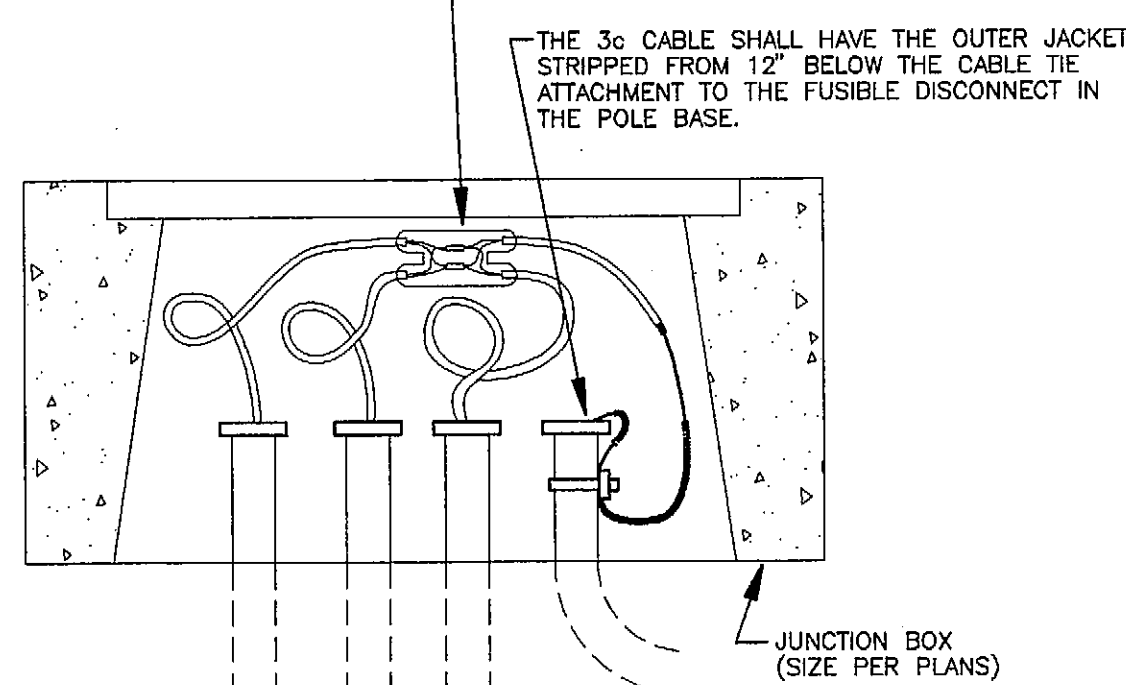
**ILLUMINATION - SHERWOODLANE INTERSECTION**

**NOTES:**

1. NON BREAKAWAY PORTIONS OF NEW FOUNDATIONS SHALL NOT PROTRUDE MORE THAN 4 INCHES ABOVE ANY 60 INCH CHORD STARTING AND ENDING ON FINISHED GRADE.
2. [Hatched area symbol] INDICATES EMBANKMENT MATERIAL TO BE REMOVED AROUND BREAKAWAY SKIRTS.

**FOUNDATION INSTALLATION DETAIL**  
NO SCALE

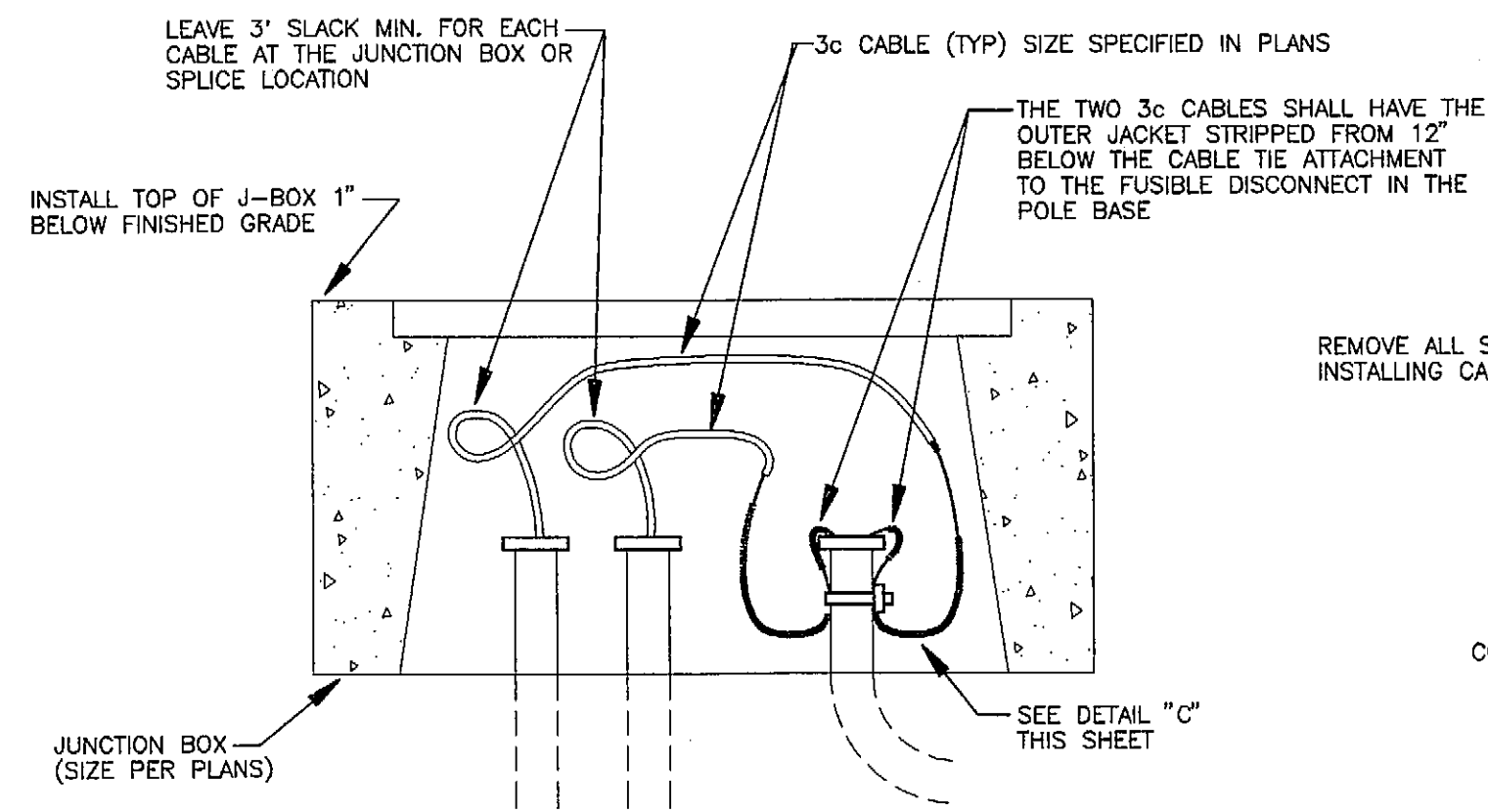
EPOXY RESIN ENCAPSULATED SPLICE AS PER SUBSECTION 660-2.09(A) OF THE STANDARD SPECIFICATIONS



**NOTES:**

1. BOND ALL GROUNDING CONDUCTORS AND CONDUITS TOGETHER AT EACH J-BOX WITH A NO. 6 BONDING CONDUCTOR. BOND J-BOX COVER (IF METALLIC) TO GROUNDING CONDUCTORS.
2. REFER TO STD. DWG L-23.01 FOR JUNCTION BOX DESIGN & INSTALLATION REQUIREMENTS.
3. SPLICE ADDITIONAL CABLES IN THE SAME MANNER.

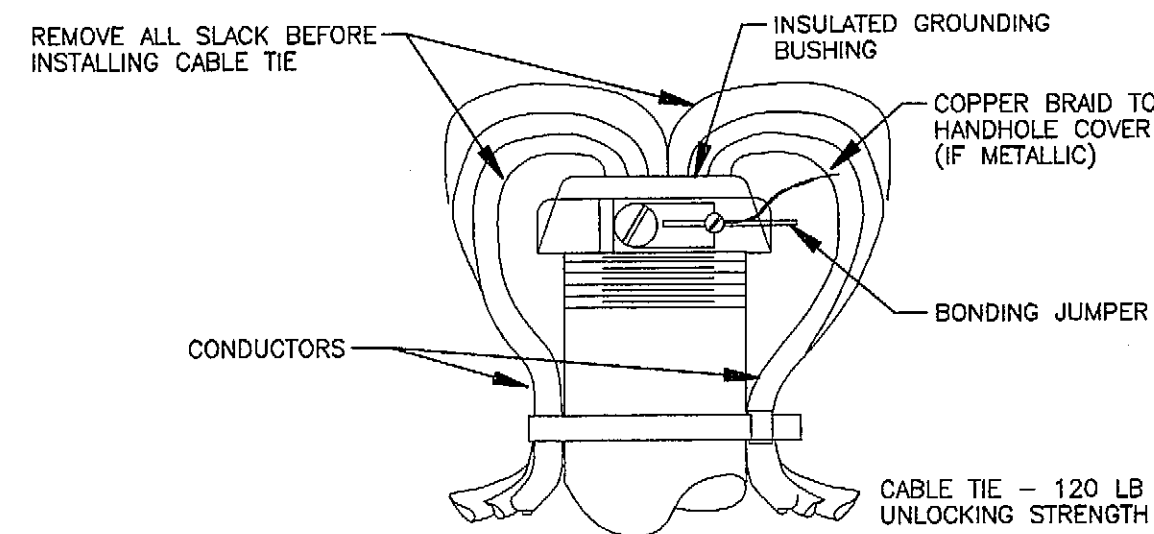
**DETAIL - A**  
NO SCALE



**NOTES:**

1. SEE DETAIL FOR FOUR-WAY SPLICE.
2. BOND ALL GROUNDING CONDUCTORS AND CONDUITS TOGETHER AT EACH J-BOX WITH A NO. 6 BONDING CONDUCTOR. BOND J-BOX COVER (IF METALLIC) TO GROUNDING CONDUCTORS.
3. REFER TO STD. DWG L-23.01 FOR JUNCTION BOX DESIGN & INSTALLATION REQUIREMENTS.

**DETAIL - B**  
NO SCALE



**DETAIL - C**  
NO SCALE

PANEL A		SIZE	VOLTS/PHASE		MAIN		LOCATION		MOUNT	
		100 AMP	120/240V, 1φ		LUGS ONLY		SHERWOOD LANE INT.		LOAD CENTER #2	
C <sub>K</sub>	WIRE NO./SIZE	BREAKER AMP/POLE	KVA		BREAKER AMP/POLE	DESCRIPTION		WIRE NO./SIZE	C <sub>K</sub>	T NO.
1	2/12	20/1	0.3	0.4	0.1	20/1	CONTROLS	2/12	2	2
3	2/2	100/2	0.6	0.6			SPACE			4
5	---	---	0.6	0.6						6
7	SPARE	20/1								8
9										10
11	SPARE									12
TOTAL CONNECTED LOAD = 1.6 KVA / 7 AMPS			1.0		0.6					

PANEL B		SIZE	VOLTS/PHASE		MAIN		LOCATION		MOUNT	
		100 AMP	120/240V, 1φ		LUGS ONLY		SHERWOOD LANE INT.		LOAD CENTER #2	
C <sub>K</sub>	WIRE NO./SIZE	BREAKER AMP/POLE	KVA		BREAKER AMP/POLE	DESCRIPTION		WIRE NO./SIZE	C <sub>K</sub>	T NO.
1	2/8, 1/8 GND.	20/2	0.6	0.6			SPACE			2
3	1/8 SPARE	---	0.6	0.6						4
5	SPARE	20/2								6
7										8
9										10
11										12
TOTAL CONNECTED LOAD = 1.2 KVA / 5 AMPS			0.6		0.6					

**AS-BUILT**

BY: *B.A.* DATE: *1-77*

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH:	DATE:	DESCRIPTION OF CHANGE:
P:\JNL\BRD-ENG\DR\NEWPP24	1-40	
BY:		

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU BROTHERHOOD BRIDGE TO ENGINEER'S CUTOFF ALASKA  
HES-093-3(5) 70657  
ILLUMINATION - SHERWOOD LANE, DETAILS

DESIGNED BY:	MGM	PROJECT NO.	70657
DRAWN BY:	JLC	DATE:	JUNE 1994
CHECKED BY:	TSM	SHEET	L3 OF L3

