



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

JUNEAU, ALASKA

MENDENHALL RIVER TRAIL
GRADING, DRAINAGE, PAVING
& BRIDGE STRUCTURE
PROJECT NO. TE-0003(32)/71466

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS & ESTIMATE OF QUANTITIES
3	PROFILES & DETAILS
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11	SUMMARIES & MISCELLANEOUS DETAILS

The following Standard Drawings apply to this project :
A-1, C-01.03, D-01.02, D-04.10, D-05.10, S-00.00, S-05.00, S-20.00, S-30.01

AS-BUILT Plans

CONTRACTOR = Glacier State Contractor's Inc.

Project Engineer = Paul Jones

Construction Begins: 4-6-95

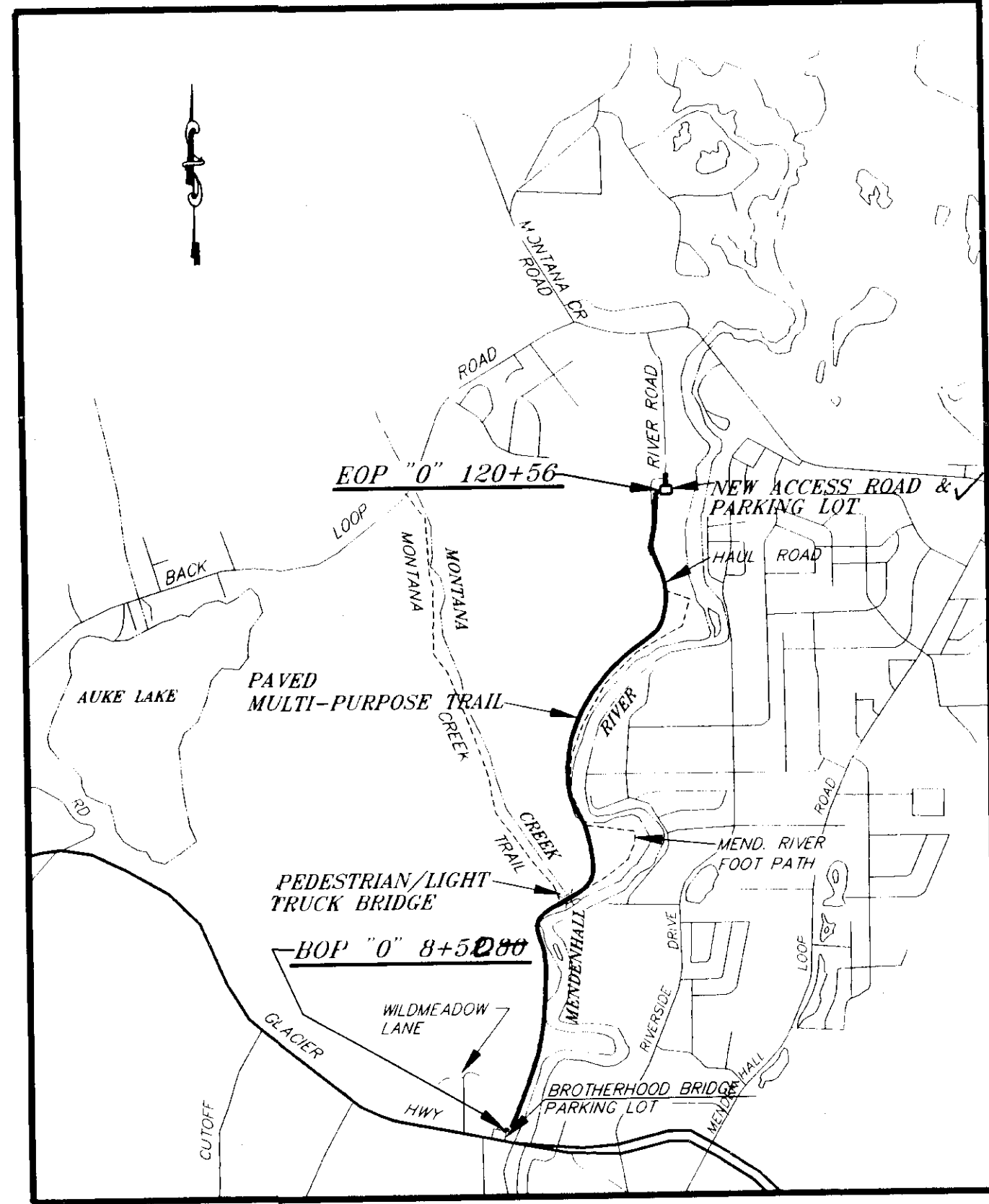
Completed Project: 7-15-95

PROJECT SUMMARY

- WIDTH OF PAVING.....8 FT $\frac{1}{2}$ 10 FT
- LENGTH OF PROJECT.....11,203 FT (2.1 MILES)
- LENGTH OF PAVING.....11,117 FT ✓
- LENGTH OF GRADING.....10,878 FT ✓
- LENGTH OF ACCESS ROAD.....370 FT ✓
- WIDTH OF ACCESS ROAD.....20 FT 22
- MONTANA CREEK BIKE PATH BRIDGE.....86'-1.5" ✓

PROJECT DESIGN CRITERIA

- MAXIMUM PROFILE GRADIENT.....8% ✓
- MAXIMUM CROSS SLOPE.....2% ✓
- DESIGN SPEED.....20 MPH ✓
- MINIMUM CURVE RADIUS.....115' ✓
- MINIMUM VERTICAL CURVE.....40' ✓
- STOPPING SIGHT DISTANCE.....125' ✓



VICINITY MAP
NO SCALE

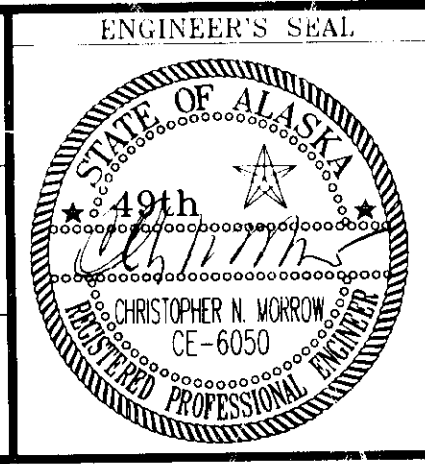
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
SOUTHEAST REGION DESIGN SECTION

APPROVED Date 12/7/94
Regional Preconstruction Engineer

APPROVED Date 12/7/94
Director, S.E. Region Design & Construction

AS-BUILT
BY: Bill DATE: 10/96

PROJECT NUMBER: 71466
DATE: DEC. 1994
SHEET 1 OF 11



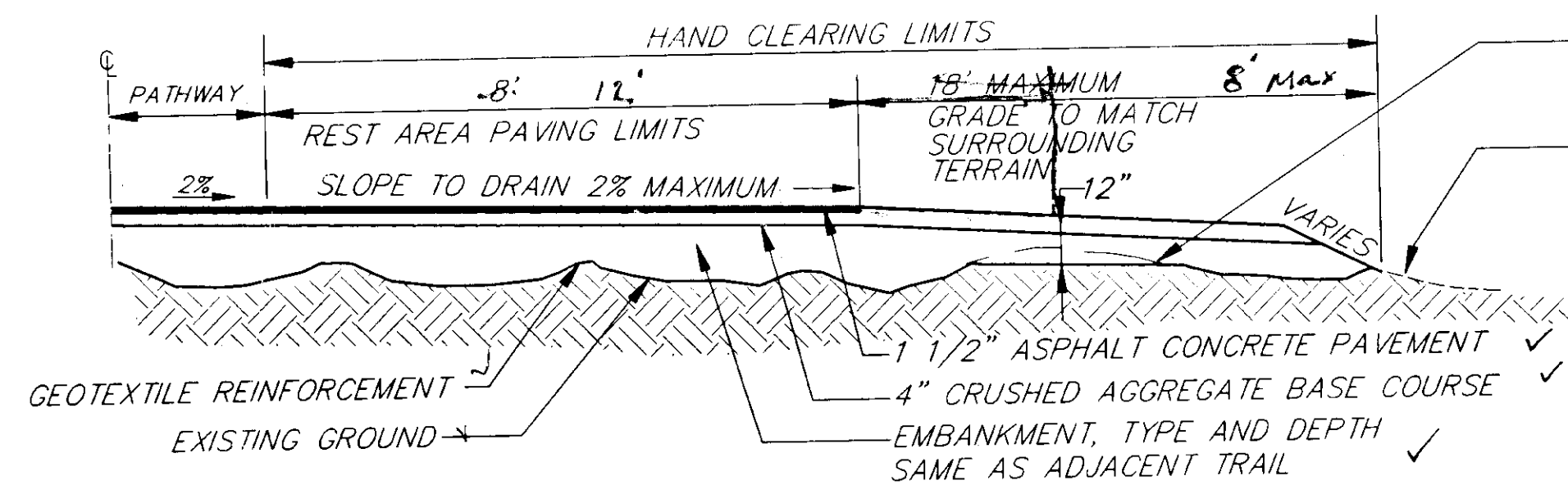
P: JUNU\MENRTRAIL\DR\1-75HT 1=1

ESTIMATE OF QUANTITIES

ITEM NO.	PAY ITEM	UNIT	QUANTITY
120(1)	DBE ADJUSTMENT	C.S.	ALL-REQ'D
201(3A)	CLEARING AND GRUBBING	ACRE	0.4
201(4B)	HAND CLEARING	L.S.	ALL-REQ'D
202(1)	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	L.S.	ALL-REQ'D
203(6A)	BORROW TYPE "A"	TON	6,000
203(6D)	BORROW TYPE "D"	TON	10,000
301(1)	CRUSHED AGGREGATE BASE COURSE	TON	12,650
401(1)	ASPHALT CONCRETE PAVEMENT, TYPE II, CLASS B	TON	-925
401(2)	PBA-2 ASPHALT CEMENT	TON	-56
506(1)	TREATED TIMBER	L.S.	ALL-REQ'D
506(3)	TREATED TIMBER BARRIER	L.F.	196
506(6)	PARK BENCH	EA.	11
507(2)	PEDESTRIAN RAILING	L.F.	170
507(5)	APPROACH RAILING	L.F.	32
513(1)	ROCKERY WALL	SQ. YD.	-100
603(17-18)	18 INCH PIPE	L.F.	-110
603(17-24)	24 INCH PIPE	L.F.	-60
603(17-36)	36 INCH PIPE	L.F.	-100
615(1)	STANDARD SIGNS	SQ. FT.	45.75
630(2)	GEOTEXTILE, REINFORCEMENT	SQ. YD.	16,000
640(1)	MOBILIZATION AND DEMOBILIZATION	L.S.	ALL-REQ'D
641(1)	EROSION AND POLLUTION CONTROL	C.S.	ALL-REQ'D
642(1)	CONSTRUCTION SURVEYING	L.S.	ALL-REQ'D
642(2)	THREE PERSON SURVEY PARTY	HOURLY	-10
643(4)	CONSTRUCTION SIGN	EACH PER DAY	-420
643(6)	TYPE III BARRICADE	EACH PER DAY	-420
670(1)	PAINTED TRAFFIC MARKINGS	L.S.	ALL-REQ'D

BASIS OF ESTIMATE

ITEM NO.	ESTIMATING FACTOR
203(6)	1.80 TON/CUBIC YARD
301(1)	1.96 TON/CUBIC YARD
401(1)	114 LBS./SQ. YD./INCH DEPTH
401(2)	6% OF ITEM 401(1) TYPE II, CLASS "B"

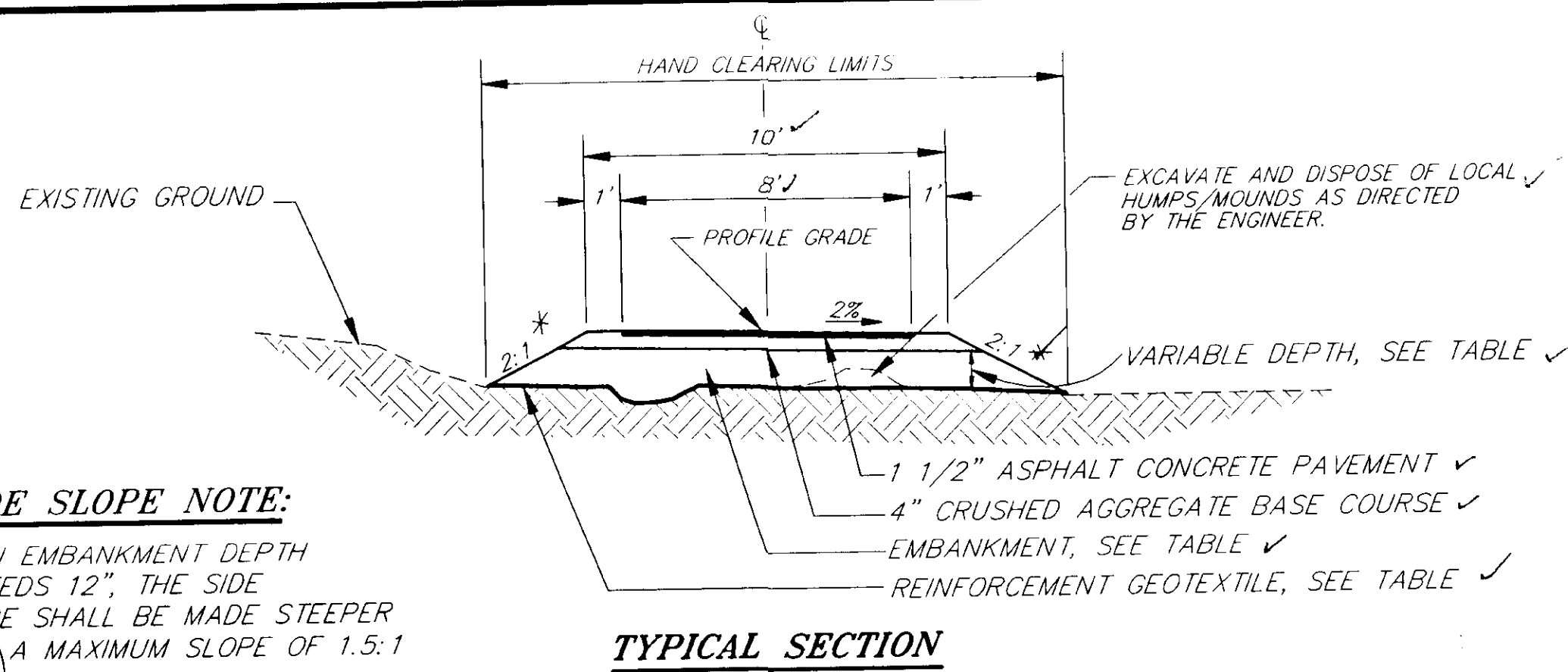


10' X 25' REST AREA TYPICAL SECTION

(SYMMETRICAL BOTH SIDES OF CENTERLINE)

REST AREA LOCATIONS

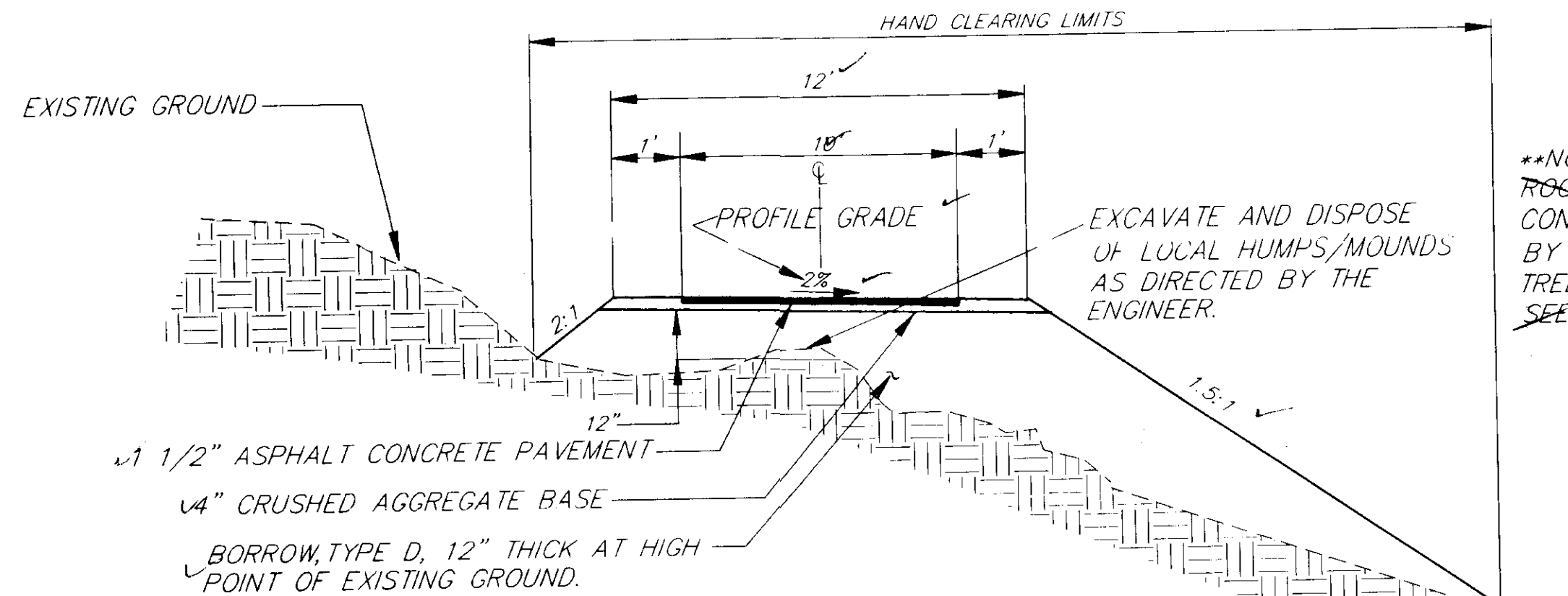
"0" 19+00	RT.	"0" 70+00	LT.
"0" 28+00	LT.	"0" 79+00	RT.
"0" 36+50	RT.	"0" 88+00	LT.
"0" 43+50	RT.	"0" 97+00	RT.
"0" 54+00	LT.	"0" 105+00	RT.
"0" 61+00	LT.		



TYPICAL SECTION

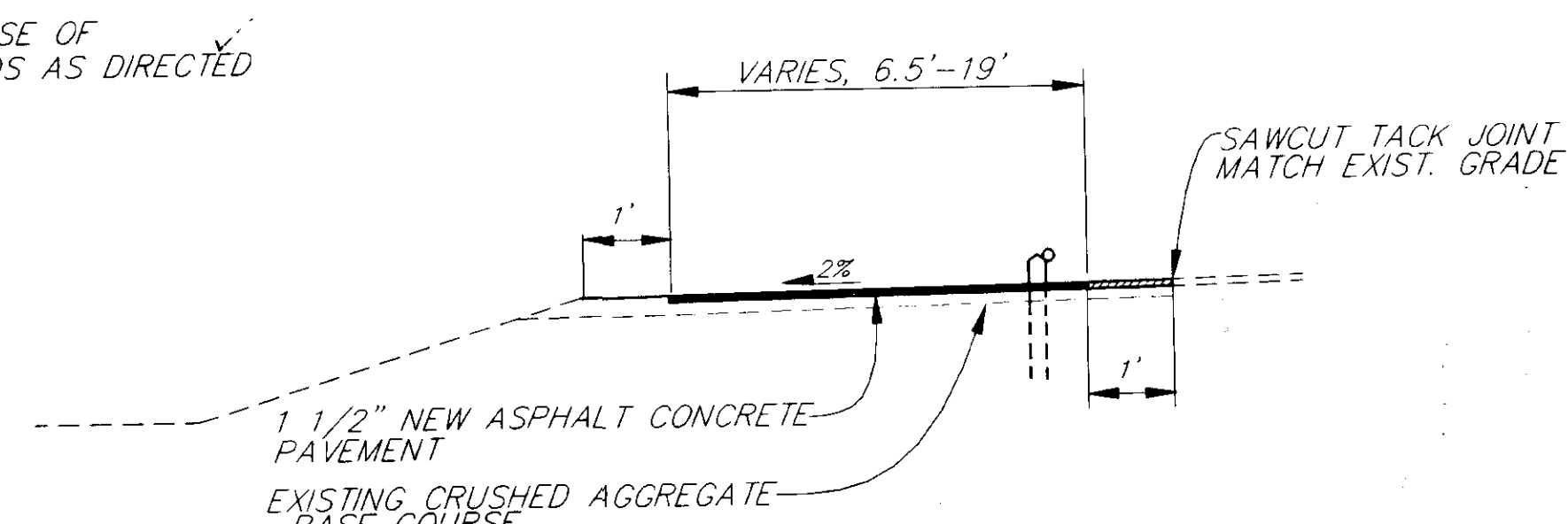
STATION TO STATION	EMBANKMENT		GEOTEXTILE
	TYPE	DEPTH	
"0" 10+92.10 TO "0" 31+00	BORROW TYPE "D"	12"	YES
"0" 31+00 TO "0" 39+00	NO EMBANKMENT		YES
"0" 39+00 TO "0" 40+00	CABC*	8"	YES
"0" 49+00 TO "0" 54+62.72	CABC*	8"	YES
"0" 55+48.84 TO "0" 106+07	CABC*	8"	YES
"0" 106+07 TO "0" 118+19	NO EMBANKMENT		NO
"0" 118+19 TO "0" 120+56.24	CABC*	8"	YES

*CABC: CRUSHED AGGREGATE BASE COURSE
**DEPTH AT HIGH POINT OF EXISTING GROUND



TYPICAL SECTION

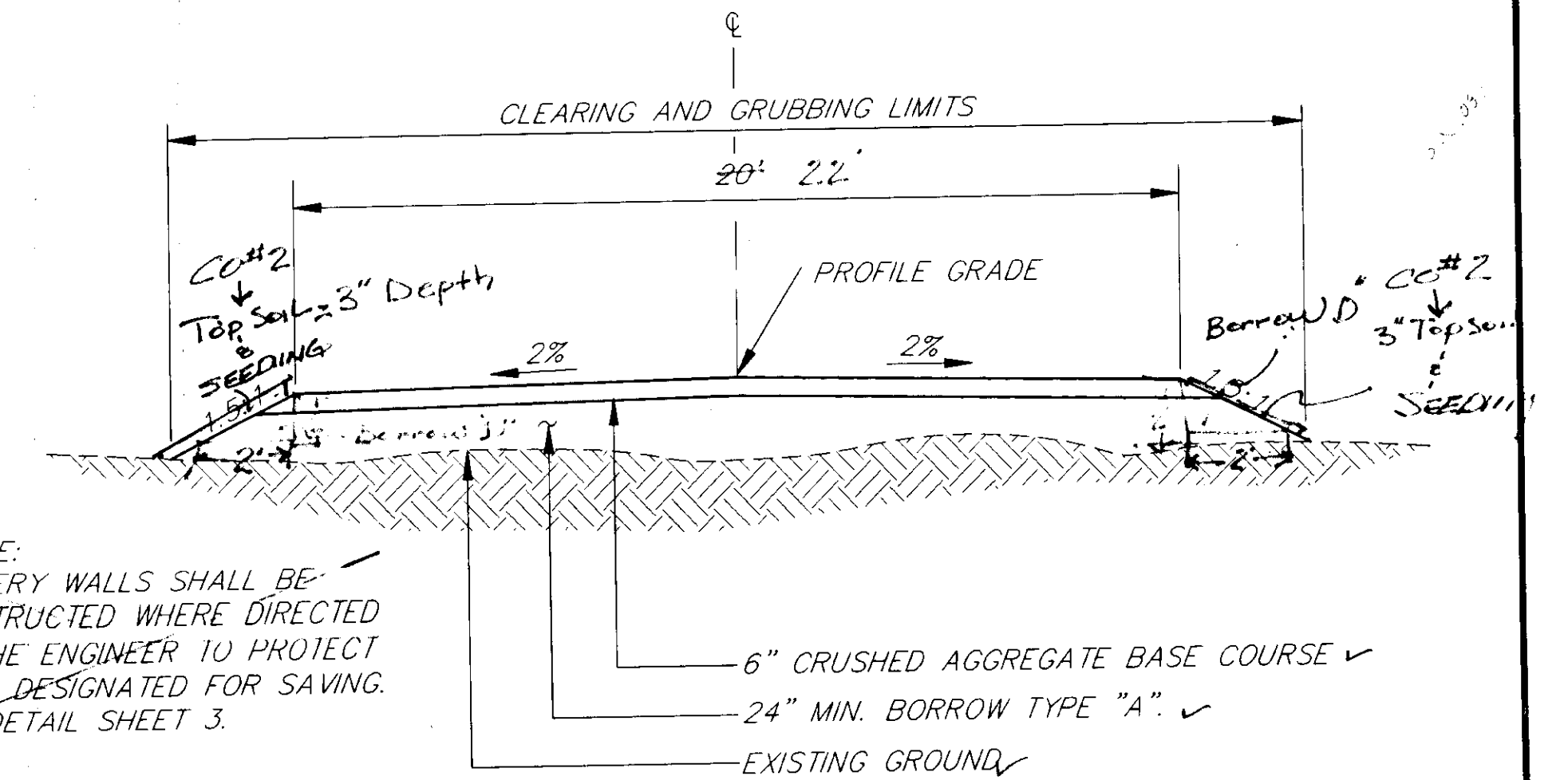
STA "0" 40+10 STA "0" 48+90
TRANSITION FROM 8' WIDE AT STA. "0" 40+00 TO 10' WIDE AT STA. "0" 40+10
TRANSITION FROM 10' WIDE AT STA. "0" 48+90 TO 8' WIDE AT STA. "0" 49+00



TYPICAL SECTION

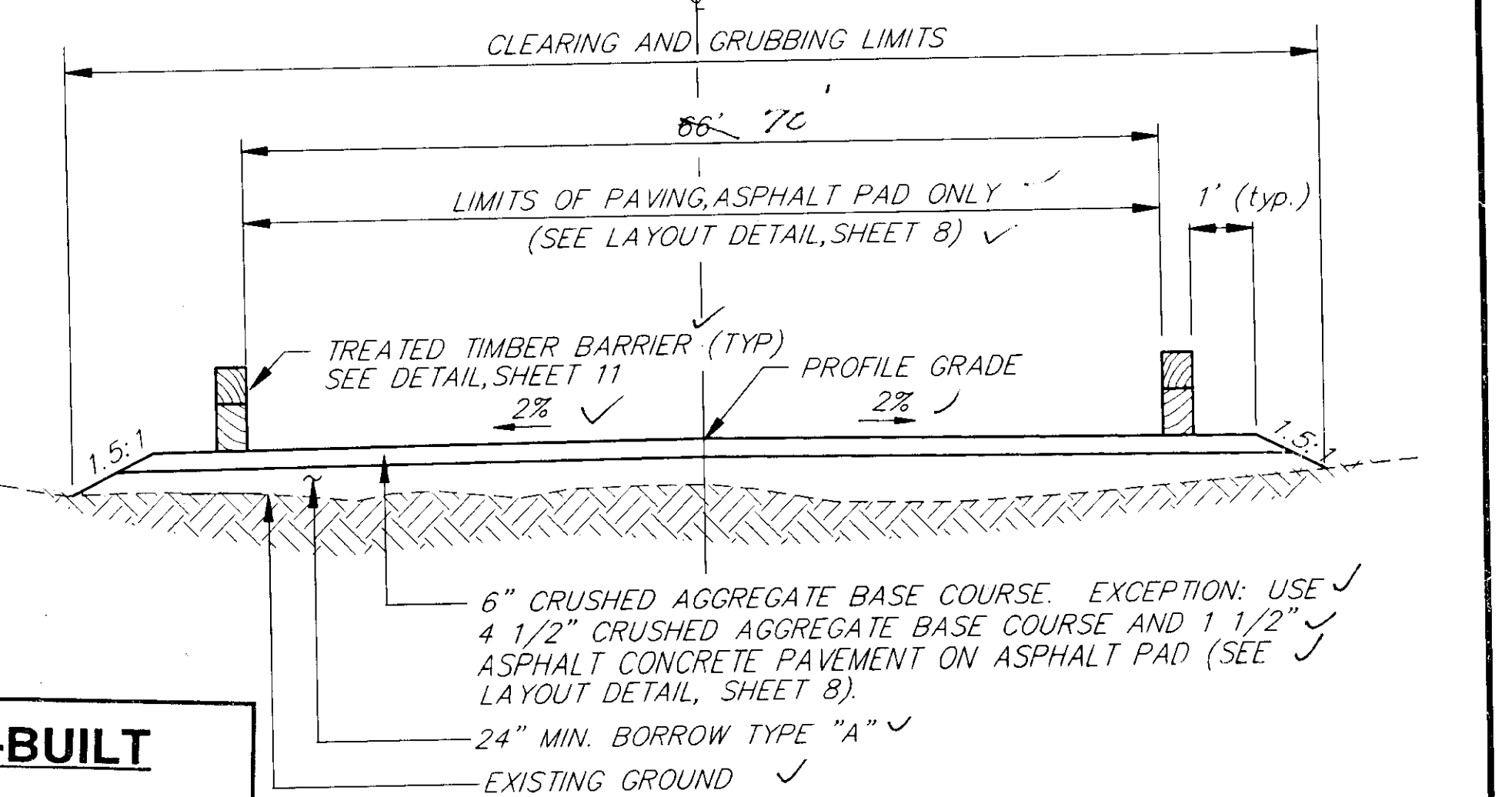
VIEWING PLATFORM AT BROTHERHOOD BRIDGE PARKING LOT

- ### GENERAL NOTES:
- FROM THE B.O.P. STATION 8+52.80 TO STATION 10+92.10 SHAPING THE NEWLY CONSTRUCTED TRAIL TO A 2% CROSS SLOPE SHALL BE REQUIRED PRIOR TO PLACEMENT OF ASPHALT CONCRETE PAVEMENT AS SHOWN IN THE TYPICAL SECTION.
 - GRADES AND ALIGNMENT SHOWN ON THESE PLANS ARE SUBJECT TO REVISIONS.
 - CULVERT LENGTHS AND LOCATIONS ARE APPROXIMATE AND ARE SUBJECT TO FIELD REVISIONS.
 - CLEARING WORK SHALL CONSIST OF REMOVING VEGETATION AND DEBRIS ABOVE THE ORIGINAL GROUND SURFACE.
 - ALL TREE STUMPS SHALL BE CUT LEVEL TO THE ORIGINAL GROUND SURFACE.
 - DISPOSAL OF TREES SELECTED FOR REMOVAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
 - DURING CONSTRUCTION THE MENDENHALL RIVER TRAIL CAN BE CLOSED TO ALL TRAFFIC. CLOSURE WILL BE POSTED WITH TYPE III BARRICADES AT THE ENTRANCE AND EXIT OF THE TRAIL WITH R11-2 SIGNS READING "ROAD CLOSED".
 - ALL UNCLASSIFIED EXCAVATION AND GRUBBING SHALL BE CONSIDERED WASTE AND HAULED TO AN APPROVED WASTE SITE.



PARKING LOT ACCESS ROAD TYPICAL SECTION

STA. "A" 10+00 TO STA. "A" 13+69.55



PARKING LOT TYPICAL SECTION

66' X 70'

AS-BUILT

BY: B.A. DATE: 10-96

NOTE: DO NOT SCALE FROM THESE PLANS—USE DIMENSIONS

PATH: P:\JNU\MENRTRAIL\DR\EST 1-4
BY: DATE: DESCRIPTION OF CHANGE:

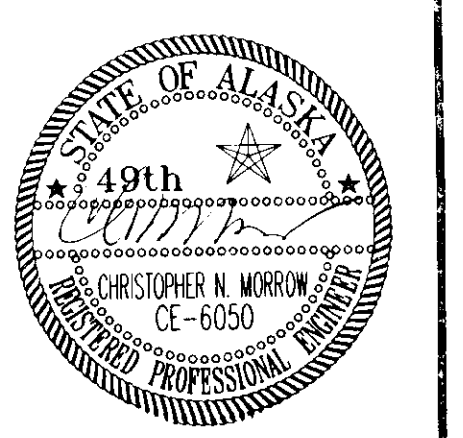
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

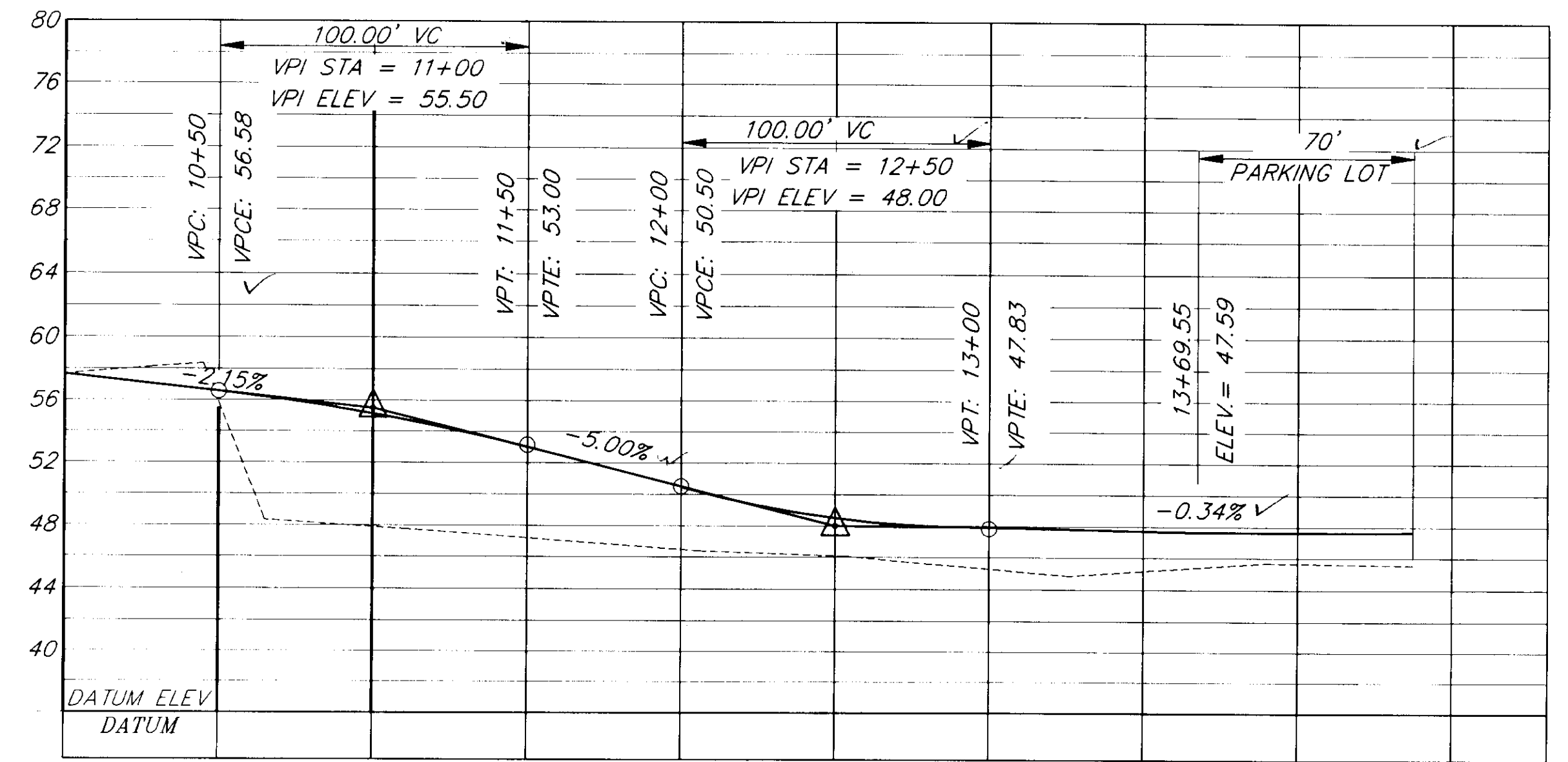
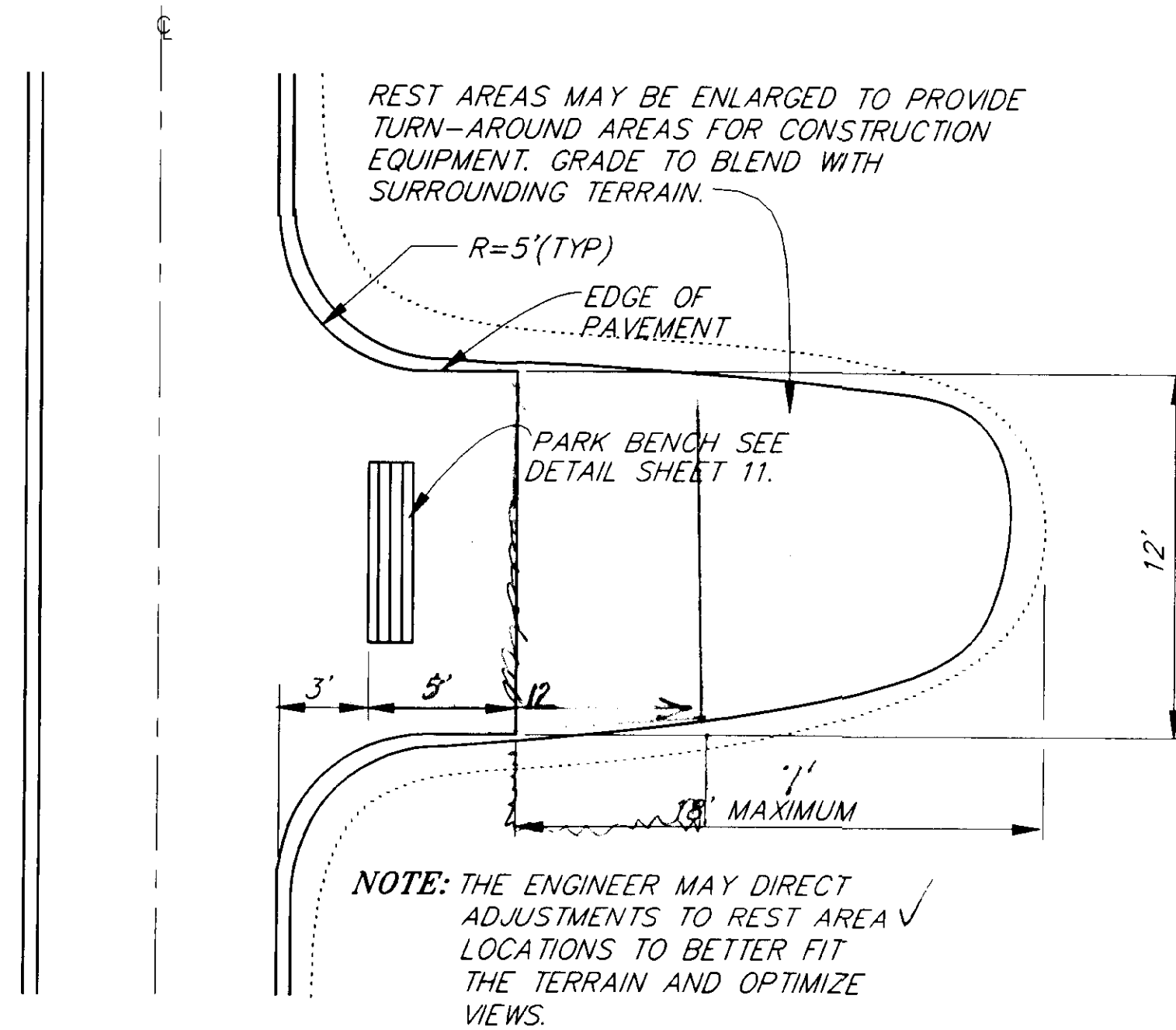
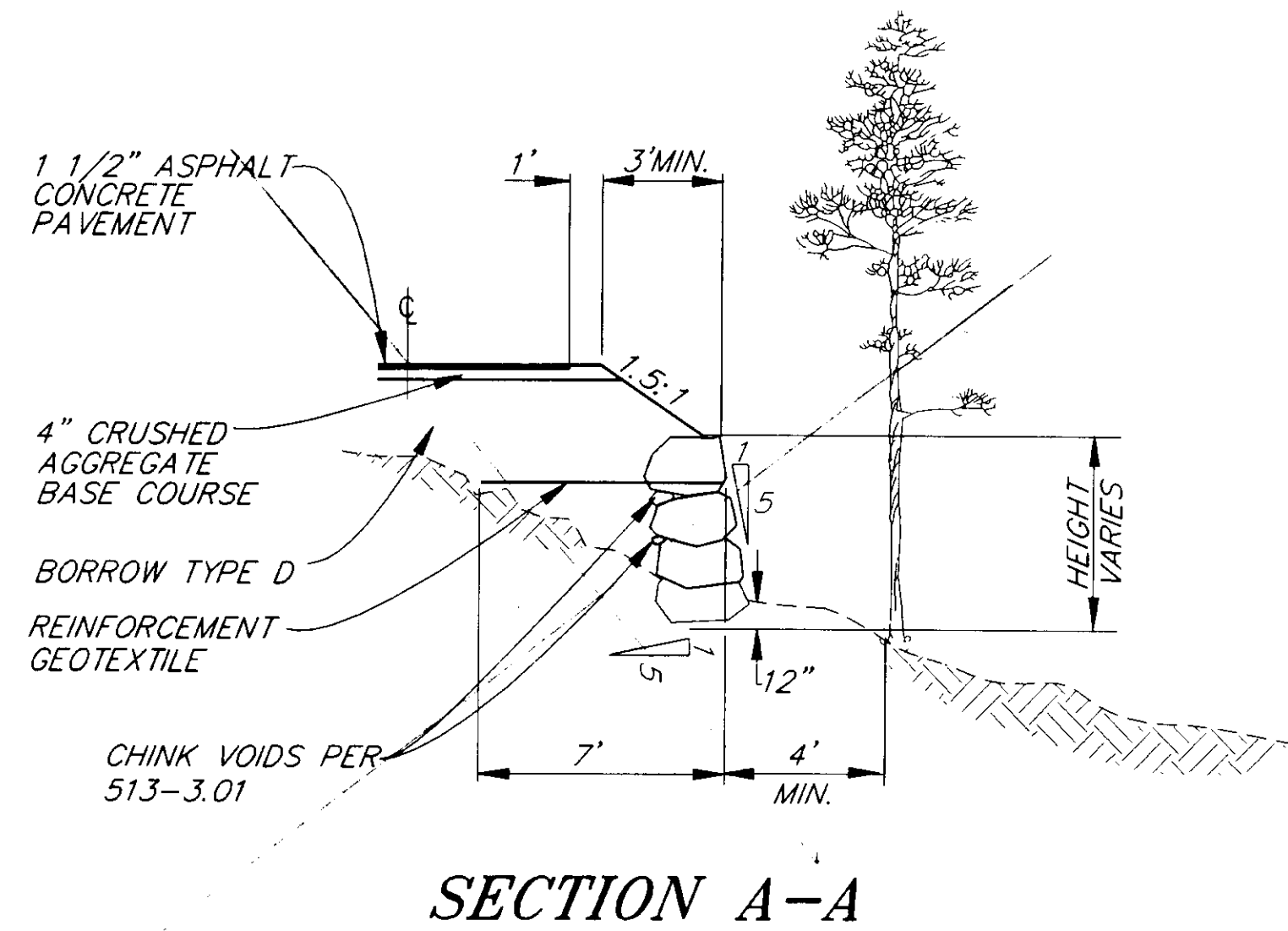
JUNEAU
JNU-MENDENHALL RIVER TRAIL
PROJECT NO. TE-0003 (32) ~ 71466

TYPICAL SECTIONS & ESTIMATE OF QUANTITIES

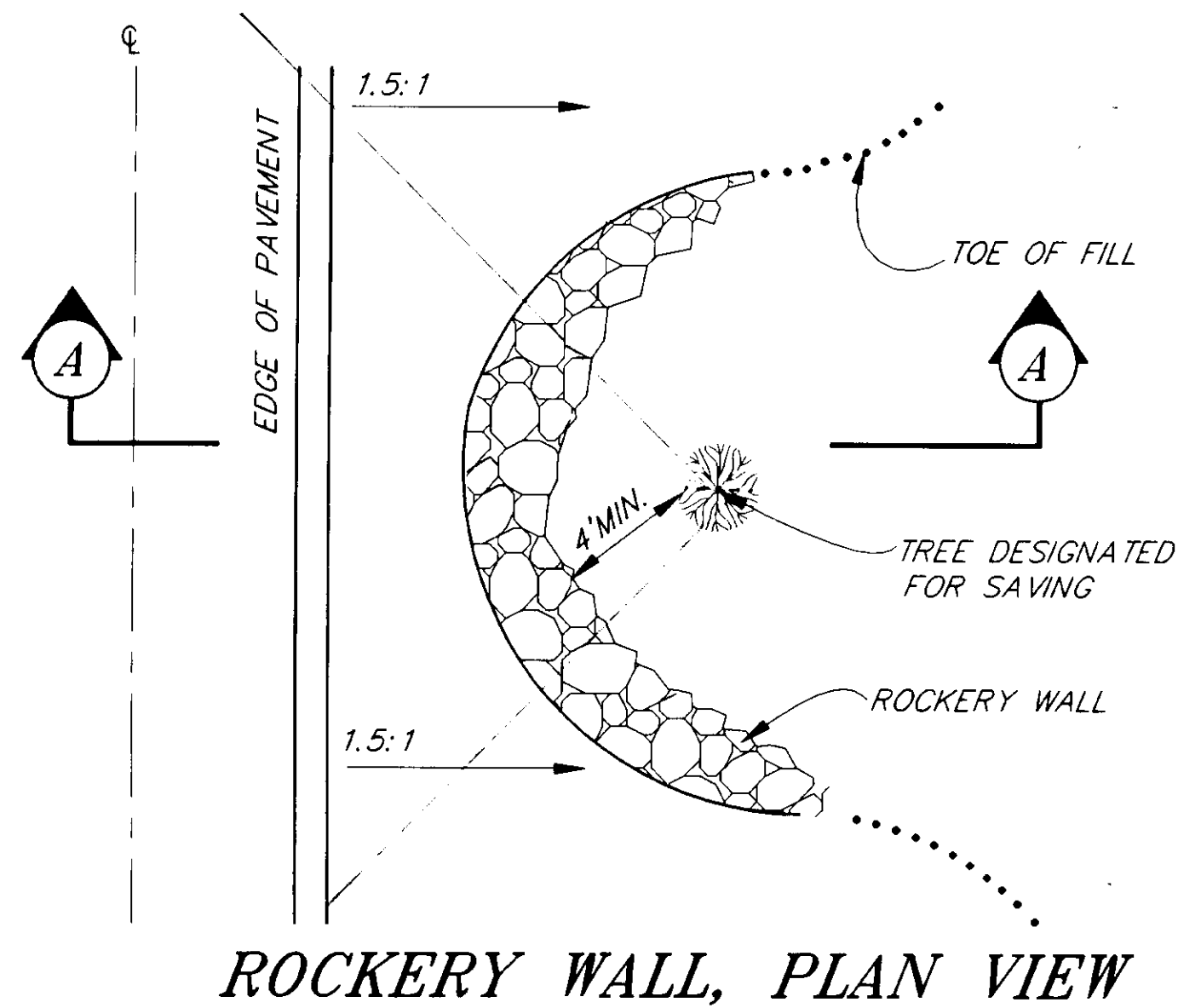
ALASKA
DESIGNED BY: P. JONES
DRAWN BY: BECKER/C. ANDERSON
CHECKED BY: C. MORROW

PROJECT NO. 71466
DATE: DEC. 1994
SHEET 2 OF 11





ACCESS ROAD AND PARKING LOT PROFILE

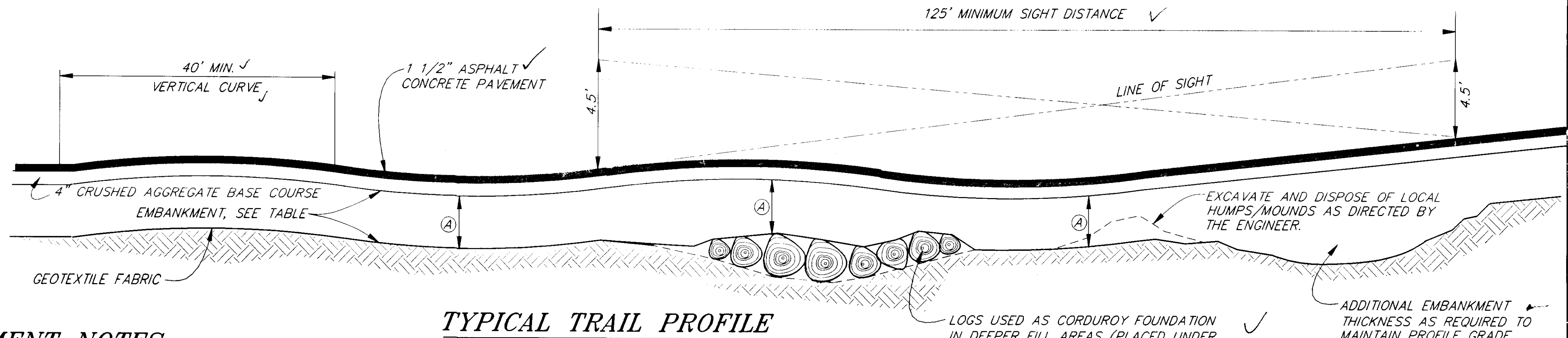


ROCKERY WALL, PLAN VIEW

REST AREA PLAN VIEW
(SYMMETRICAL BOTH SIDES CENTERLINE)

VERTICAL CONTROL

BASIS OF VERTICAL CONTROL FOR ACCESS ROAD AND PARKING LOT IS TBM "BOB" SPIKE IN BASE 20" SPRUCE TREE ELEV. 50.95 (SEE SHEET 8 FOR LOCATION)



TYPICAL TRAIL PROFILE

TRAIL ALIGNMENT NOTES

1. TRAIL PROFILE GRADES WILL BE DEPENDENT ON THE FOLLOWING FACTORS:

- ~MATCHING EXISTING TERRAIN.
- ~125' MINIMUM SIGHT DISTANCE FOR ALL VERTICAL GRADE CHANGES EXCEPT ON THE CREST VERTICAL CURVES BETWEEN STA. "0" 40+00 AND STA "0" 49+00.
- ~40' MINIMUM VERTICAL CURVE LENGTHS.
- ~8% MAXIMUM PROFILE GRADIENT.

2. PRIOR TO BEGINNING CLEARING AND EMBANKMENT OPERATIONS ON THE TRAIL THE CONTRACTOR SHALL LAY OUT THE DESIGN HORIZONTAL ALIGNMENT, PLACING STAKES AT 50' INTERVALS AND AT CURVE'S P.I., P.C., AND P.T.

PROFILE ELEVATIONS SHALL BE DETERMINED AT EACH CENTERLINE STAKE AND AT ALL GRADE BREAKS. THE CONTRACTOR SHALL ALSO CROSS-SECTION THE EXISTING GROUND BETWEEN STA. "0" 40+00 AND STA. "0" 49+00 TO A DISTANCE OF 30' EITHER SIDE OF CENTERLINE. A COMPUTER-GENERATED PLOT OF THE CROSS-SECTIONS AT A SCALE OF 1"= 10' HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED TO THE ENGINEER.

THE ENGINEER WILL REVIEW THE STAKED ALIGNMENT AND MAKE FIELD ADJUSTMENTS AS NEEDED TO AVOID IMPACTS TO TREES DESIGNATED FOR SAVING. CONTRACTOR SHALL STAKE AND PROFILE THE REVISED ALIGNMENT USING NEW CURVE AND STATIONING INFORMATION PROVIDED BY THE ENGINEER.

THE CONTRACTOR SHALL SUBMIT A PLOT OF EXISTING GRADES ON A SCALE OF 1"=20' HORIZONTALLY, 1"=10' VERTICALLY, ALONG WITH COPIES OF THE REDUCED SURVEY NOTES. USING THE CRITERIA LISTED IN NOTE 1, THE ENGINEER WILL DESIGN A PROFILE GRADE FOR THE TRAIL AND FURNISH THE DESIGN TO THE CONTRACTOR WITHIN SEVEN CALENDAR DAYS OF RECEIPT OF THE PLOTTED PROFILE AND SURVEY NOTES.

- 3. APPROVED PROFILE GRADES ARE SUBJECT TO FIELD ADJUSTMENT BY THE ENGINEER.
- 4. THE ENGINEER SHALL DESIGNATE AREAS WHERE ROCKERY WALLS SHALL BE CONSTRUCTED TO PRESERVE TREES DESIGNATED FOR SAVING.

STATION TO STATION	EMBANKMENT	
	TYPE	DEPTH
"0" 10+92.10 TO "0" 31+00	BORROW TYPE "D"	12"
"0" 39+00 TO 40+00	CABC*	8"
"0" 49+00 TO "0" 54+62.72	CABC*	8"
"0" 55+48.84 TO "0" 106+07	CABC*	8"
"0" 118+10 TO "0" 120+56.24	CABC*	8"

*CABC: CRUSHED AGGREGATE BASE COURSE
**DEPTH AT HIGH POINT OF EXISTING GROUND

AS-BUILT
BY: B.H. DATE: 12-7-94

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

DATE	DESCRIPTION OF CHANGE

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

JUNEAU

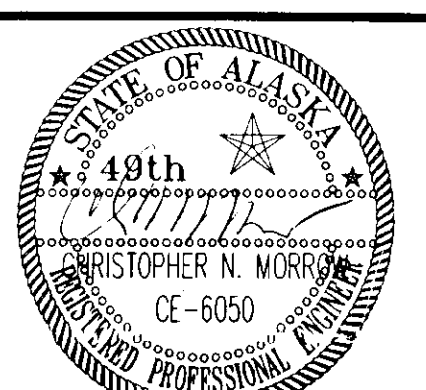
JNU-MENDENHALL RIVER TRAIL
PROJECT NO. TE-0003 (32) ~ 71466

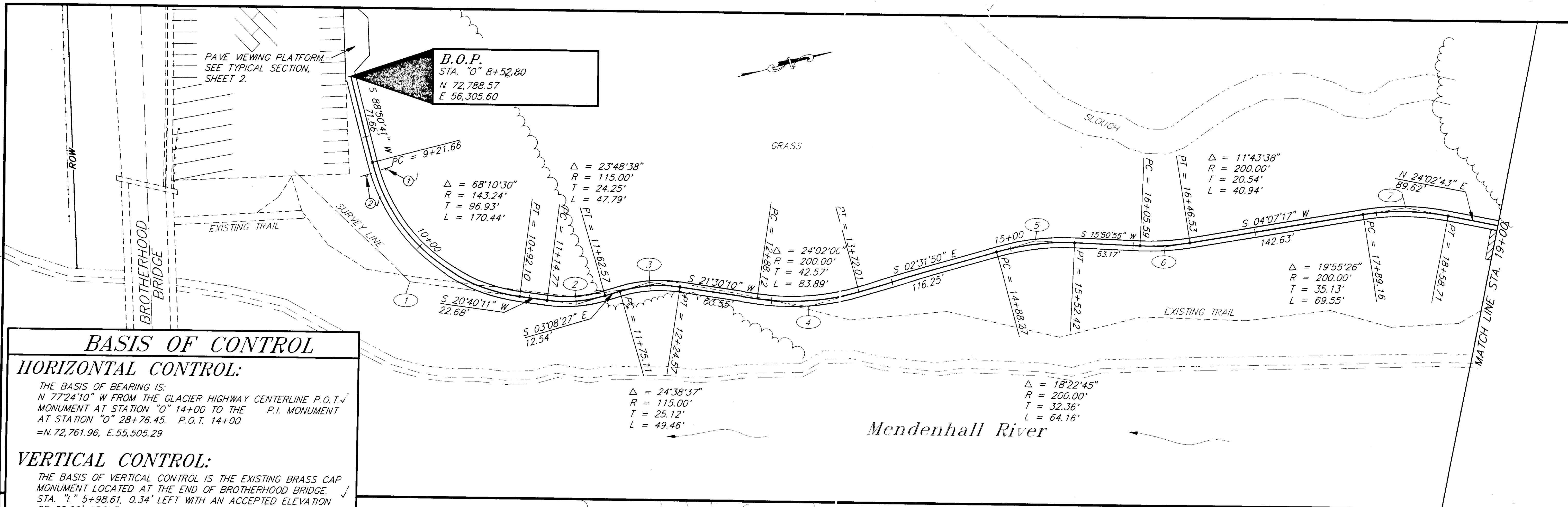
ALASKA

PROFILES AND DETAILS

DESIGNED BY:
P. JONES
DRAWN BY:
KLEMMETSON/C. ANDERSON
CHECKED BY:

PROJECT NO.
71466
DATE:
DEC. 1994





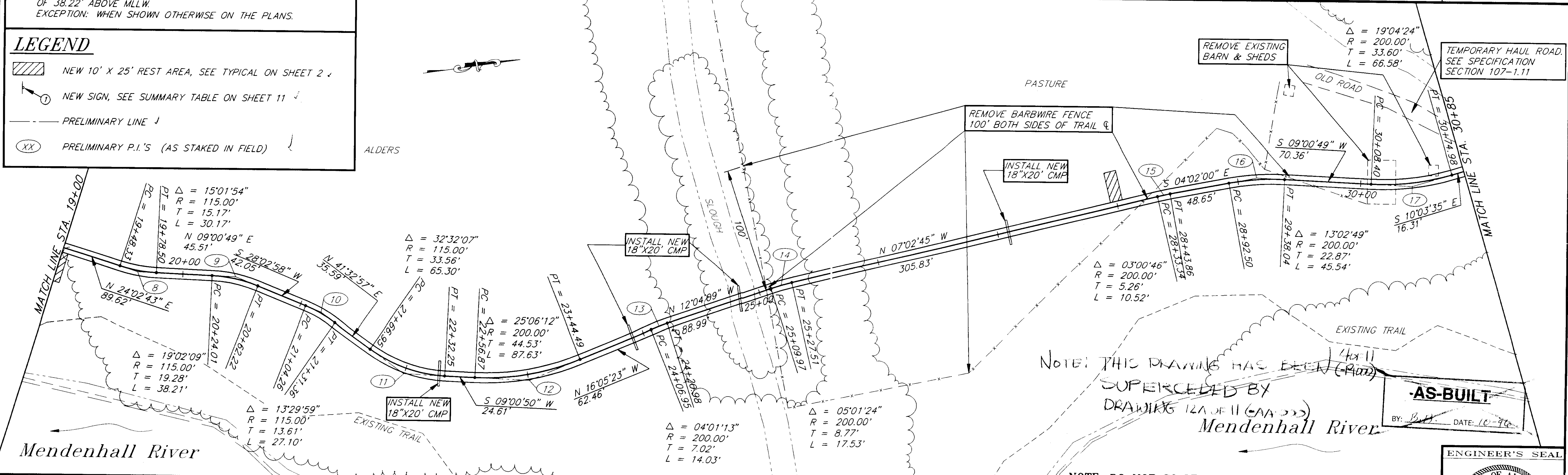
BASIS OF CONTROL

HORIZONTAL CONTROL:
 THE BASIS OF BEARING IS:
 N 77°24'10" W FROM THE GLACIER HIGHWAY CENTERLINE P.O.T. MONUMENT AT STATION "0" 14+00 TO THE P.I. MONUMENT AT STATION "0" 28+76.45. P.O.T. 14+00
 =N.72,761.96, E.55,505.29

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.
 EXCEPTION: WHEN SHOWN OTHERWISE ON THE PLANS.

LEGEND

- NEW 10' X 25' REST AREA, SEE TYPICAL ON SHEET 2
- NEW SIGN, SEE SUMMARY TABLE ON SHEET 11
- PRELIMINARY LINE
- PRELIMINARY P.I.'S (AS STAKED IN FIELD)



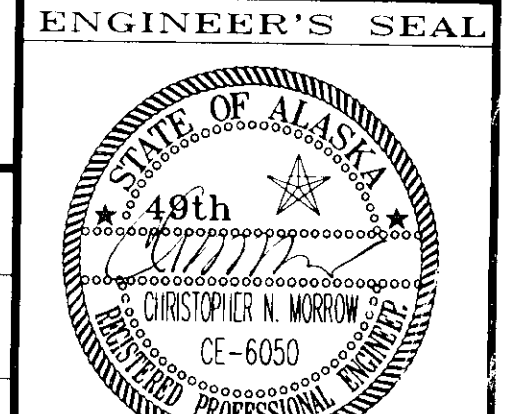
RECORD OF REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGE

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JUNEAU
 JNU-MENDENHALL RIVER TRAIL
 PROJECT NO. TE-0003 (32) ~ 71466
 ALASKA
B.O.P. STA. 8+52.80 TO STA. 30+85
 PLAN

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

DESIGNED BY: P. JONES	PROJECT NO. 71466
DRAWN BY: R. SNYDER	DATE: DEC. 1994
CHECKED BY:	



NOTE: THIS DRAWING HAS BEEN SUPERCEDED BY DRAWING 12A OF 11 (CAA-322) Mendenhall River

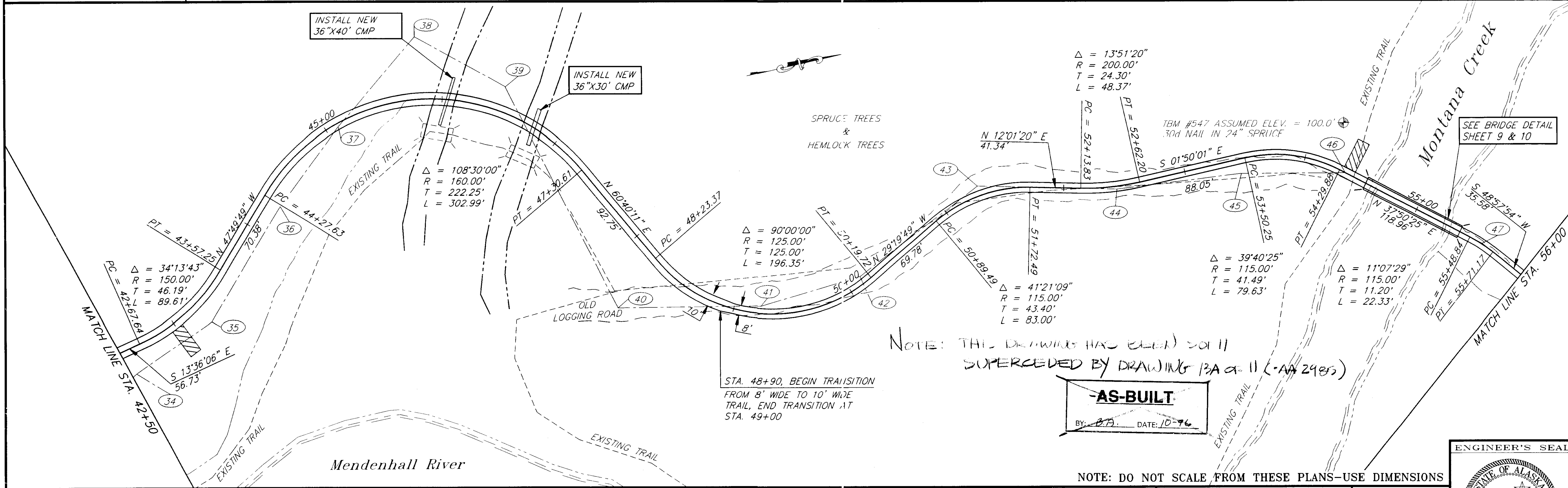
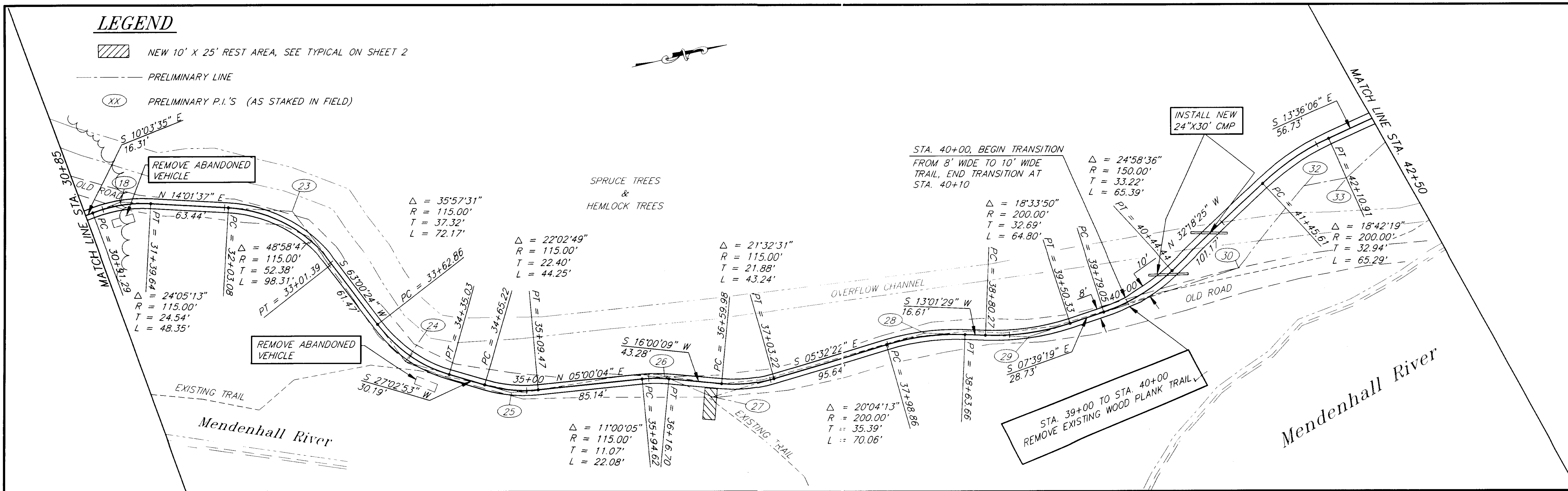
-AS-BUILT-
 BY: B.D. DATE: 10-96

LEGEND

NEW 10' X 25' REST AREA, SEE TYPICAL ON SHEET 2

PRELIMINARY LINE

PRELIMINARY P.I.'S (AS STAKED IN FIELD)



NOTE: THIS DRAWING HAS BEEN SUPERCEDED BY DRAWING 13A α 11 (AA 2985)

AS-BUILT
BY: *[Signature]* DATE: 10-96

SEE BRIDGE DETAIL SHEET 9 & 10

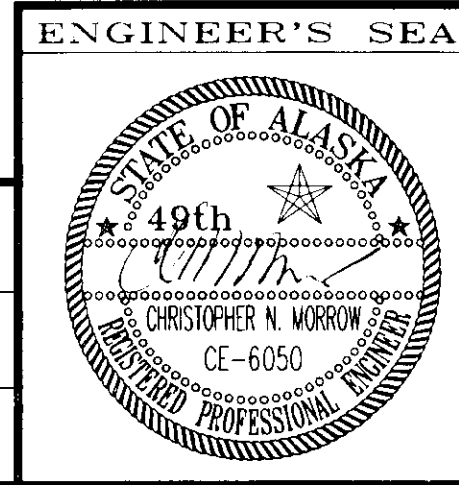
NOTE: DO NOT SCALE FROM THESE PLANS—USE DIMENSIONS

RECORD OF REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU
JNU-MENDENHALL RIVER TRAIL
PROJECT NO. TE-0003 (32) ~ 71466
ALASKA
STA. 30+85 TO STA. 56+00
PLAN


DESIGNED BY: <i>P. JONES</i>	PROJECT NO. 71466
DRAWN BY: <i>R. SNYDER</i>	DATE: DEC. 1994
CHECKED BY: <i>C. MORROW</i>	SHEET 5 OF 11



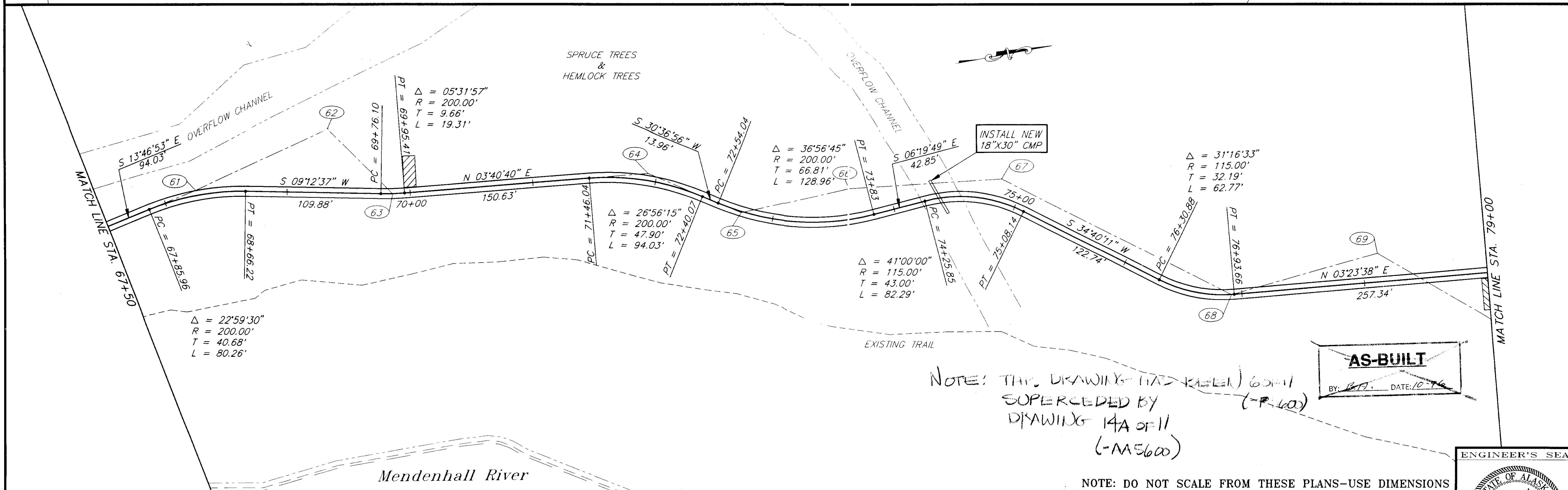
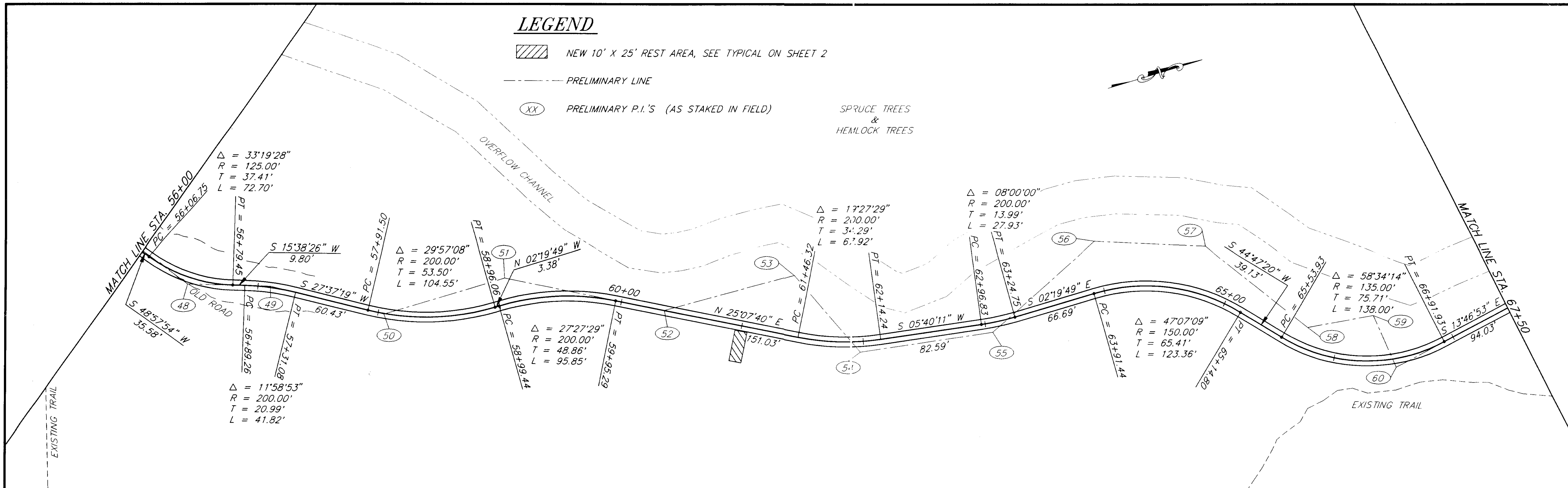
LEGEND

 NEW 10' X 25' REST AREA, SEE TYPICAL ON SHEET 2

 PRELIMINARY LINE

 PRELIMINARY P.I.'S (AS STAKED IN FIELD)

SPRUCE TREES & HEMLOCK TREES



NOTE: THIS DRAWING HAS BEEN SUPERCEDED BY DRAWING 14A OF 11 (-M5600)

AS-BUILT
BY: *[Signature]* DATE: 12-7-96

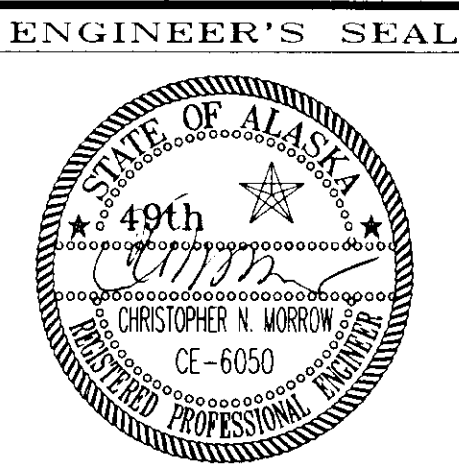
NOTE: DO NOT SCALE FROM THESE PLANS—USE DIMENSIONS

PATH: P:\JNU\MENTRAIL\DR\ -P5600 PLO11.PCP(40) OR PLO1H.PCP(80)	
BY:	DESCRIPTION OF CHANGE:
DATE:	
RECORD OF REVISIONS	


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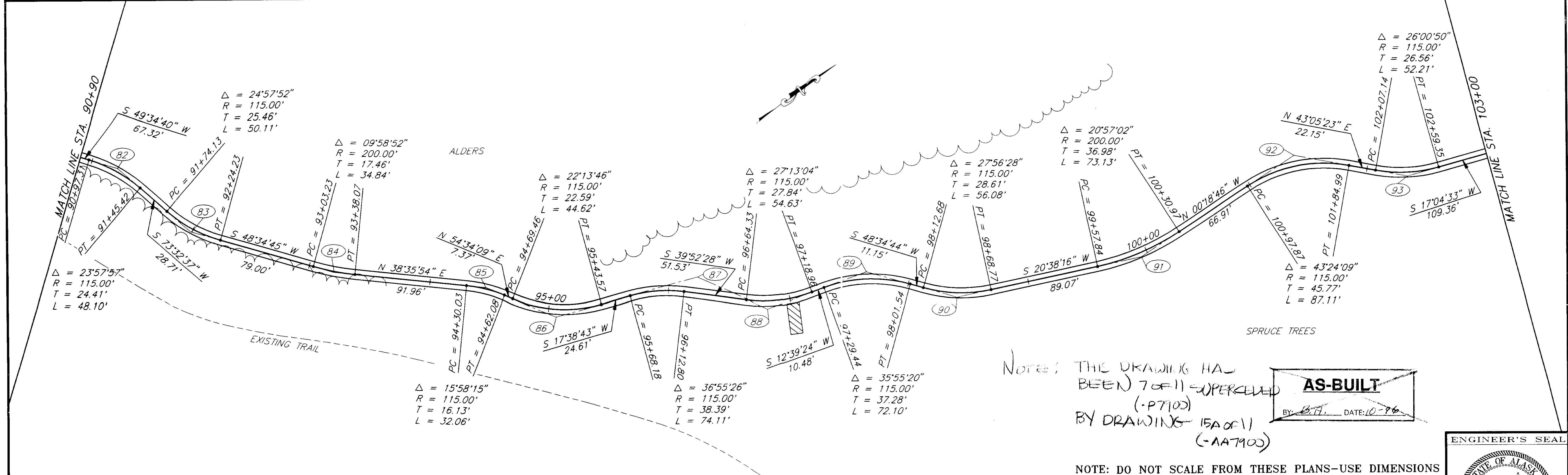
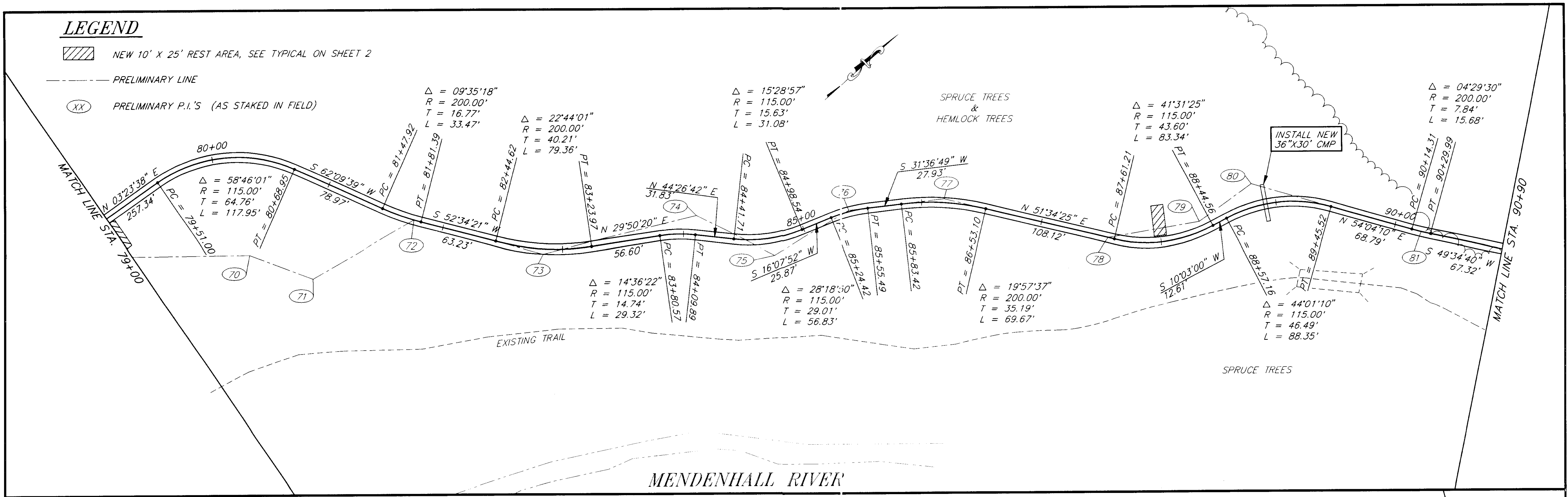
JUNEAU
JNU-MENDENHALL RIVER TRAIL
PROJECT NO. TE-0003 (32) ~ 71466
ALASKA
STA. 56+00 TO STA. 79+00
PLAN

DESIGNED BY: P. JONES	PROJECT NO. 71466
DRAWN BY: K. SNYDER	DATE: DEC. 1994
CHECKED BY: C. MORROW	SHEET 6 OF 11



LEGEND

-  NEW 10' X 25' REST AREA, SEE TYPICAL ON SHEET 2
- PRELIMINARY LINE
- (XX) PRELIMINARY P.I.'S (AS STAKED IN FIELD)



NOTE: THIS DRAWING HAS BEEN 70% SUPERCEDED (-P7100) BY DRAWING 15A OF 11 (-AA7100)

AS-BUILT
 BY: *[Signature]* DATE: 10-96

NOTE: DO NOT SCALE FROM THESE PLANS—USE DIMENSIONS

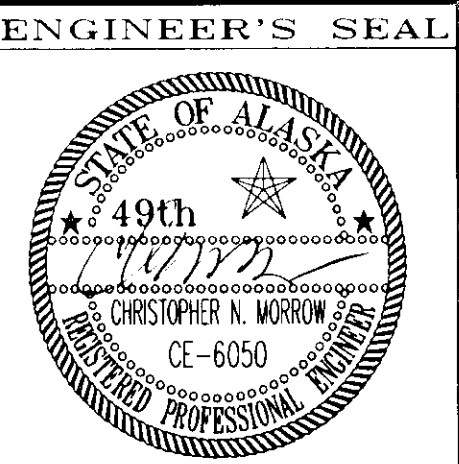
RECORD OF REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGE

STATE OF ALASKA
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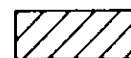



JUNEAU
 JNU-MENDENHALL RIVER TRAIL
 PROJECT NO. TE-0003 (32) ~ 71466
STA. 79+00 TO STA. 103+00
 PLAN

ALASKA
 DESIGNED BY: P. JONES
 DRAWN BY: R. SNYDER
 CHECKED BY: C. MORROW

PROJECT NO. 71466
 DATE: DEC. 1994
 SHEET 7 OF 11



LEGEND

-  NEW 10' X 25' REST AREA, SEE TYPICAL ON SHEET 2
-  NEW SIGN, SEE SUMMARY TABLE ON SHEET 11
-  PRELIMINARY LINE
-  PRELIMINARY P.I.'S (AS STAKED IN FIELD)

$\Delta = 25^{\circ}01'18"$
 $R = 200.00'$
 $T = 44.38'$
 $L = 87.34'$

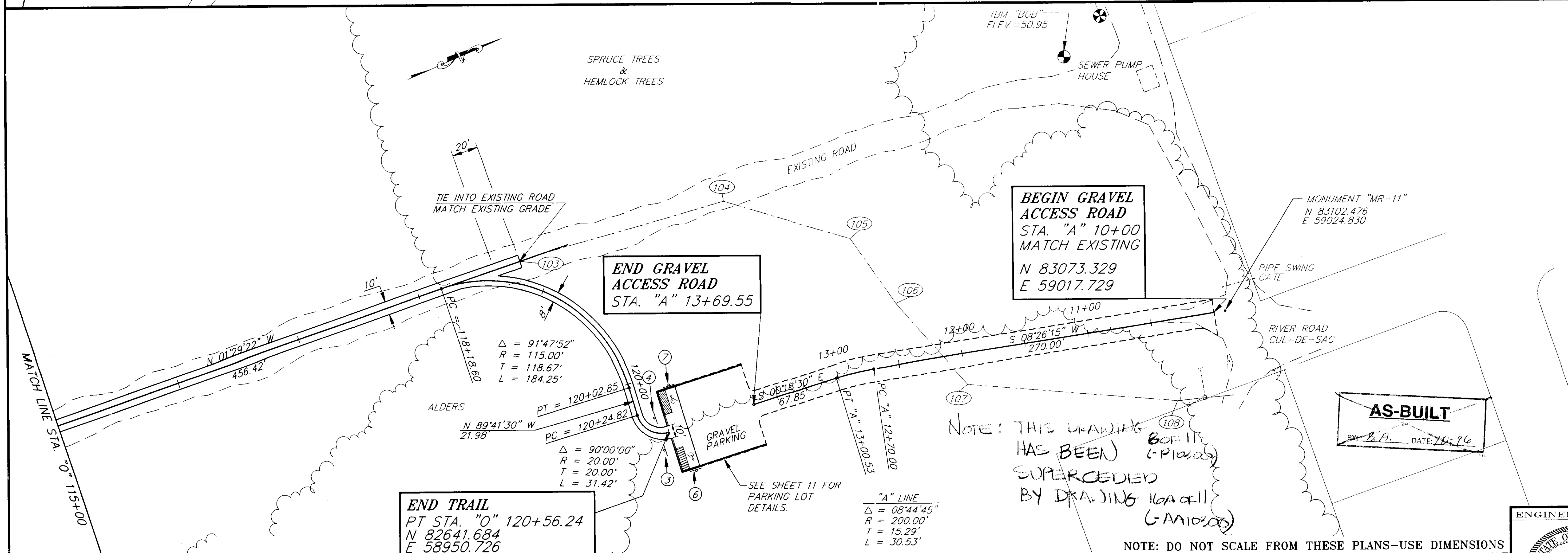
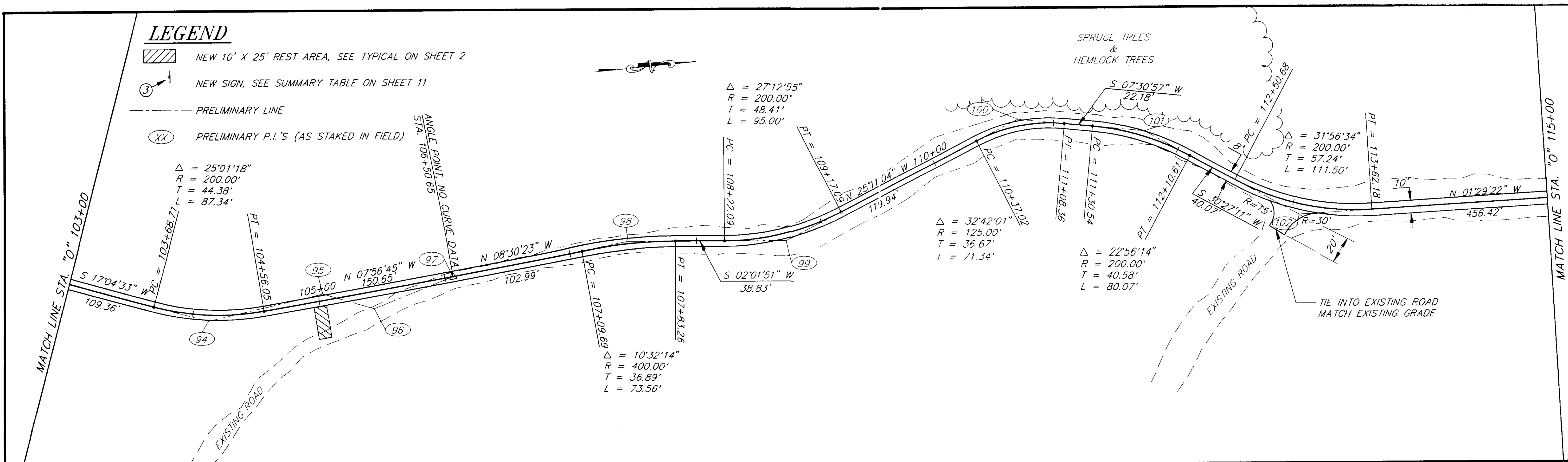
$\Delta = 27^{\circ}12'55"$
 $R = 200.00'$
 $T = 48.41'$
 $L = 95.00'$

$\Delta = 32^{\circ}42'01"$
 $R = 125.00'$
 $T = 36.67'$
 $L = 71.34'$

$\Delta = 22^{\circ}56'14"$
 $R = 200.00'$
 $T = 40.58'$
 $L = 80.07'$

$\Delta = 10^{\circ}32'14"$
 $R = 400.00'$
 $T = 36.89'$
 $L = 73.56'$

$\Delta = 31^{\circ}56'34"$
 $R = 200.00'$
 $T = 57.24'$
 $L = 111.50'$



BEGIN GRAVEL ACCESS ROAD
 STA. "A" 10+00
 MATCH EXISTING
 N 83073.329
 E 59017.729

END GRAVEL ACCESS ROAD
 STA. "A" 13+69.55

END TRAIL
 PT STA. "O" 120+56.24
 N 82641.684
 E 58950.726

NOTE: THIS DRAWING HAS BEEN SUPERCEDED BY DRAWING 16A-11 (6-11-00)

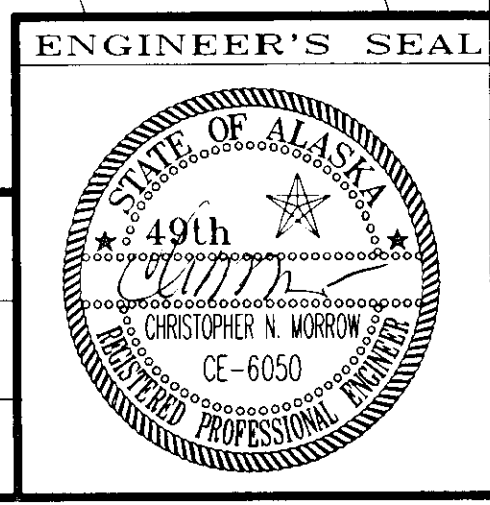
AS-BUILT
 BY: B.A. DATE: 11-96

RECORD OF REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGE

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

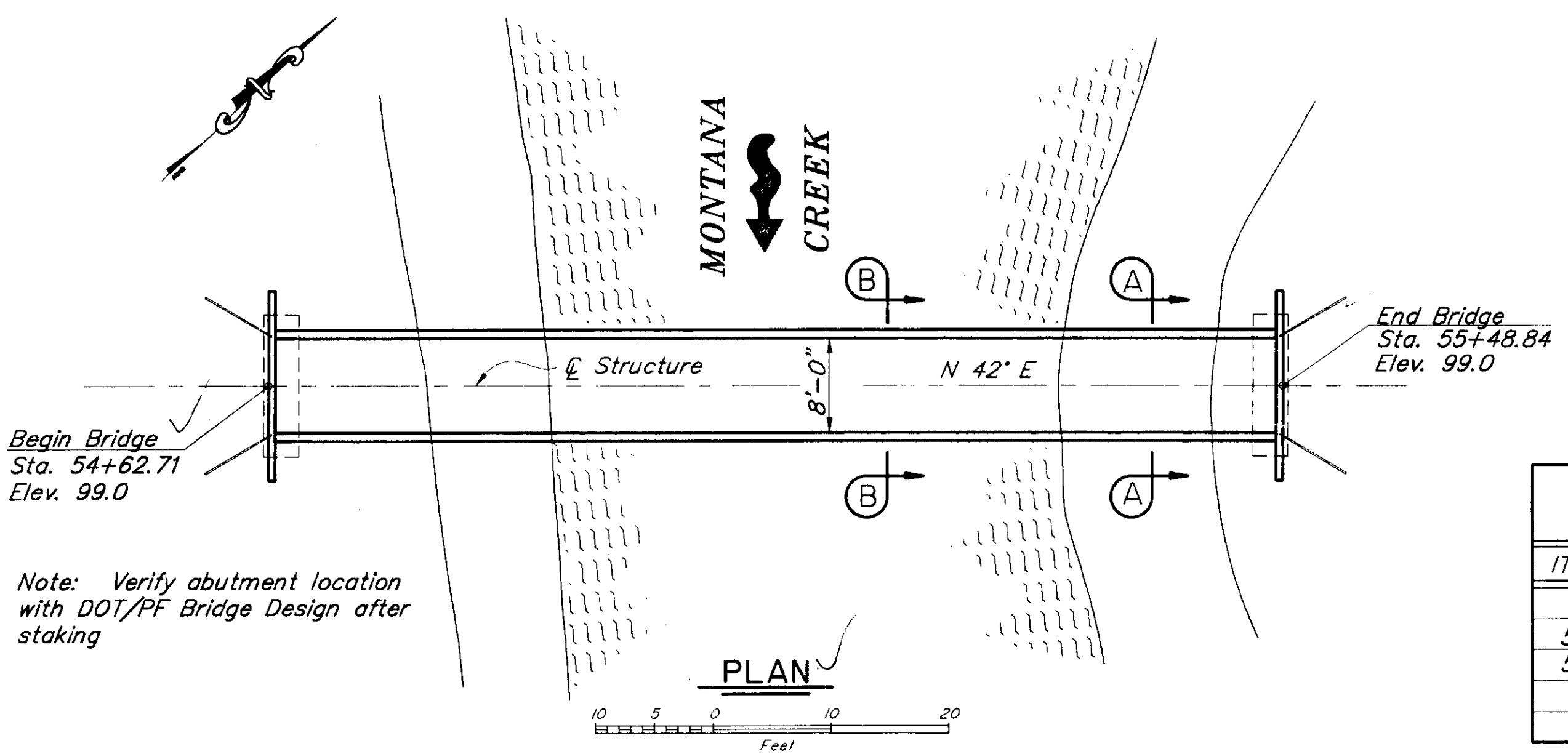
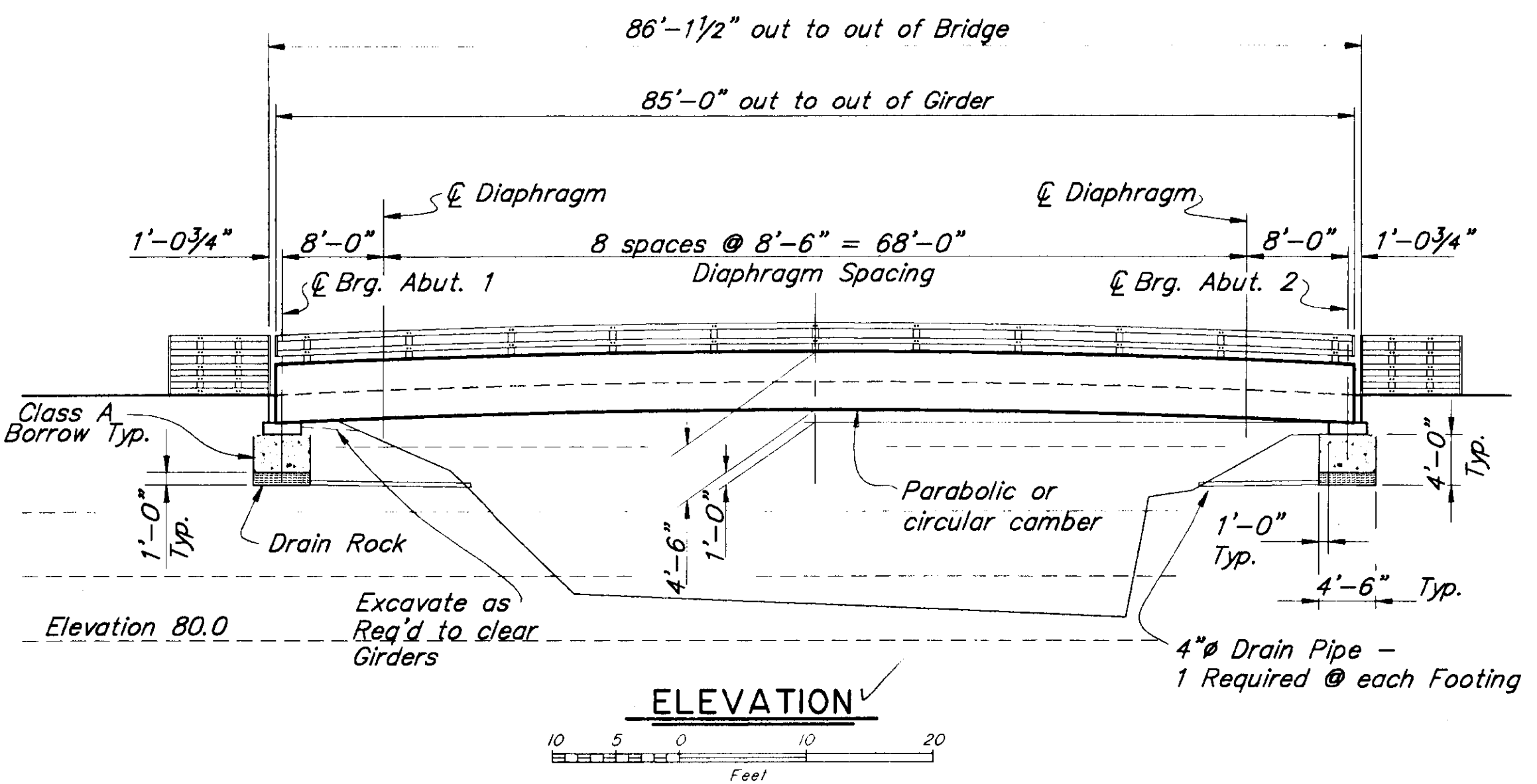
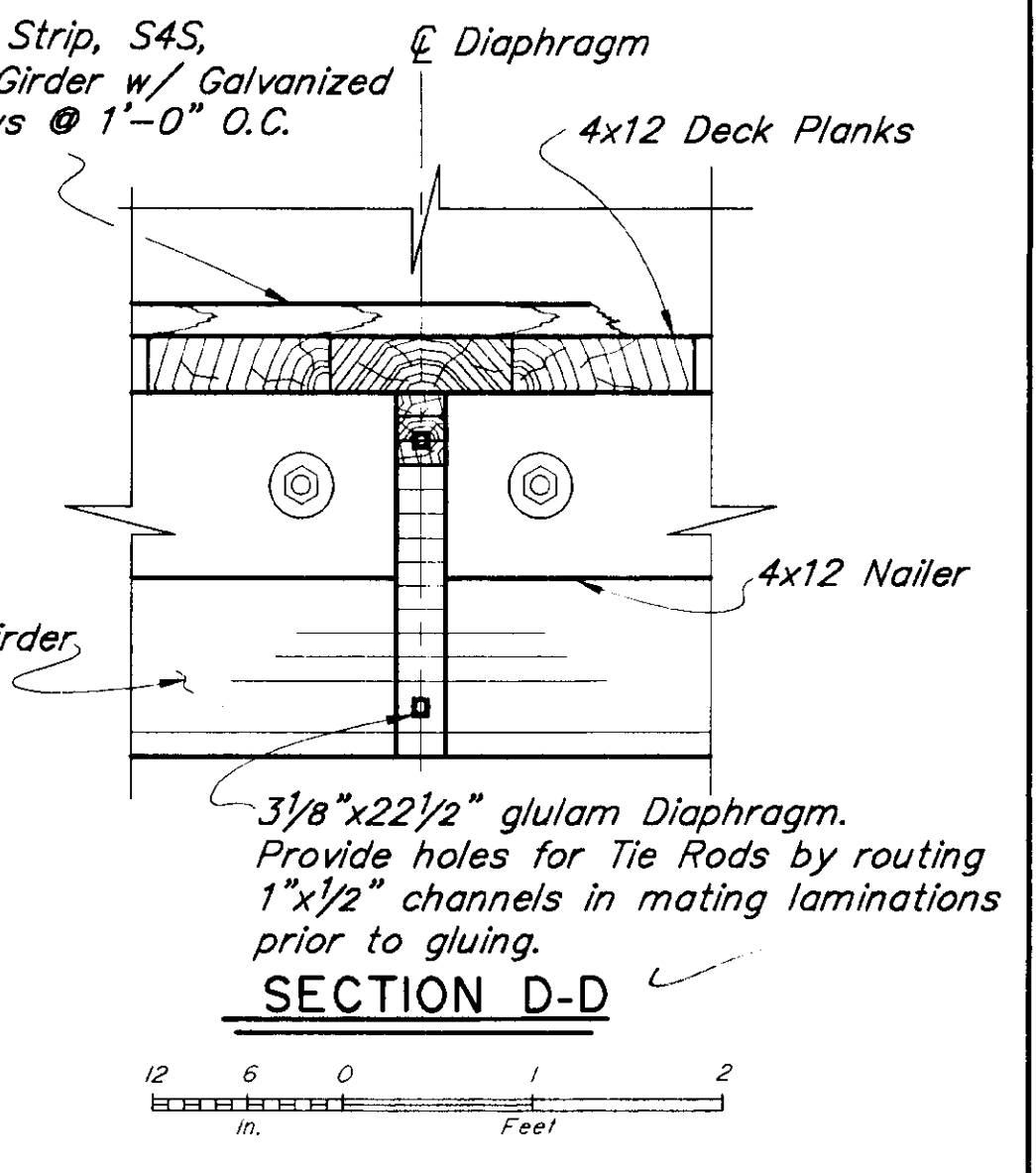
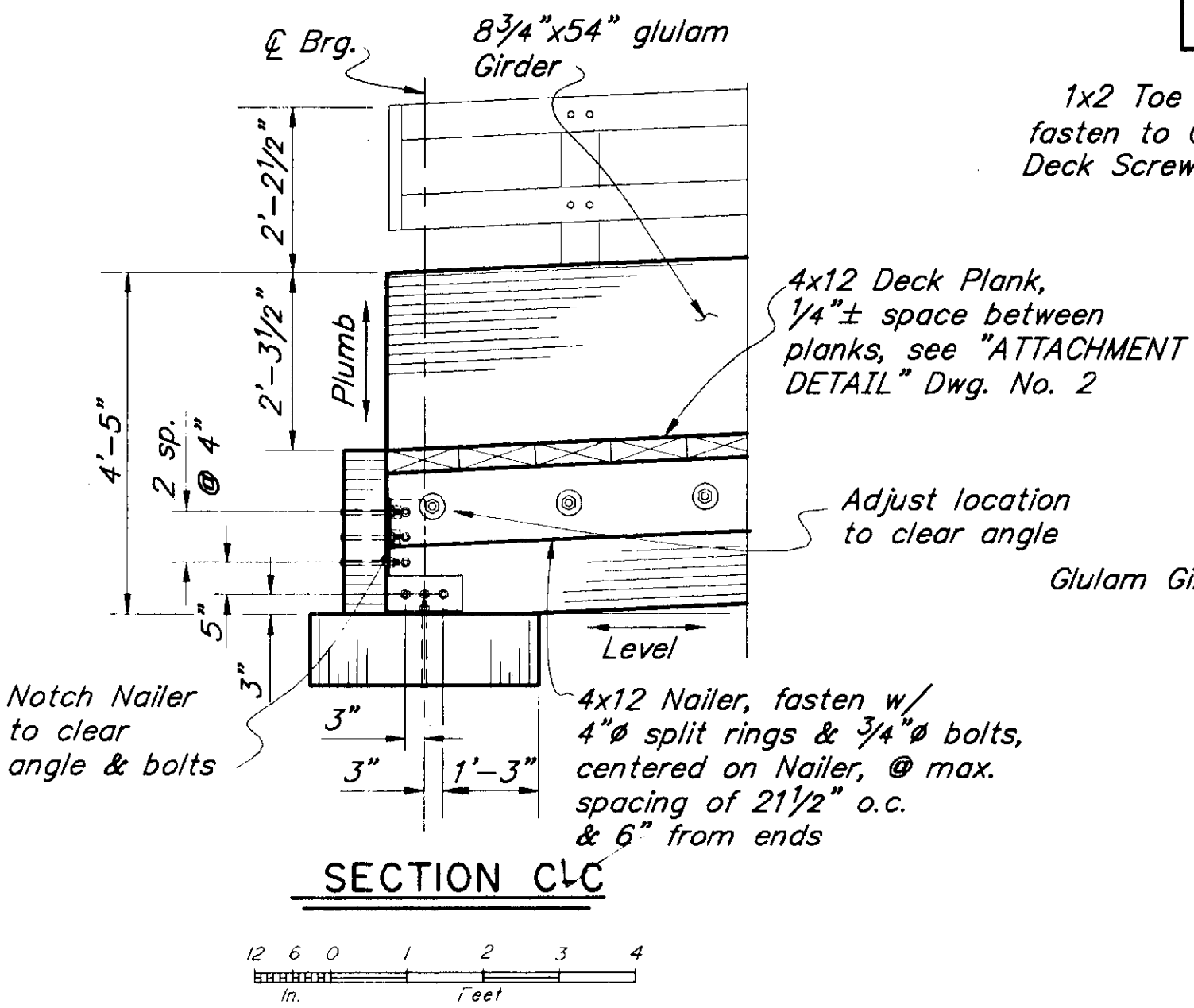
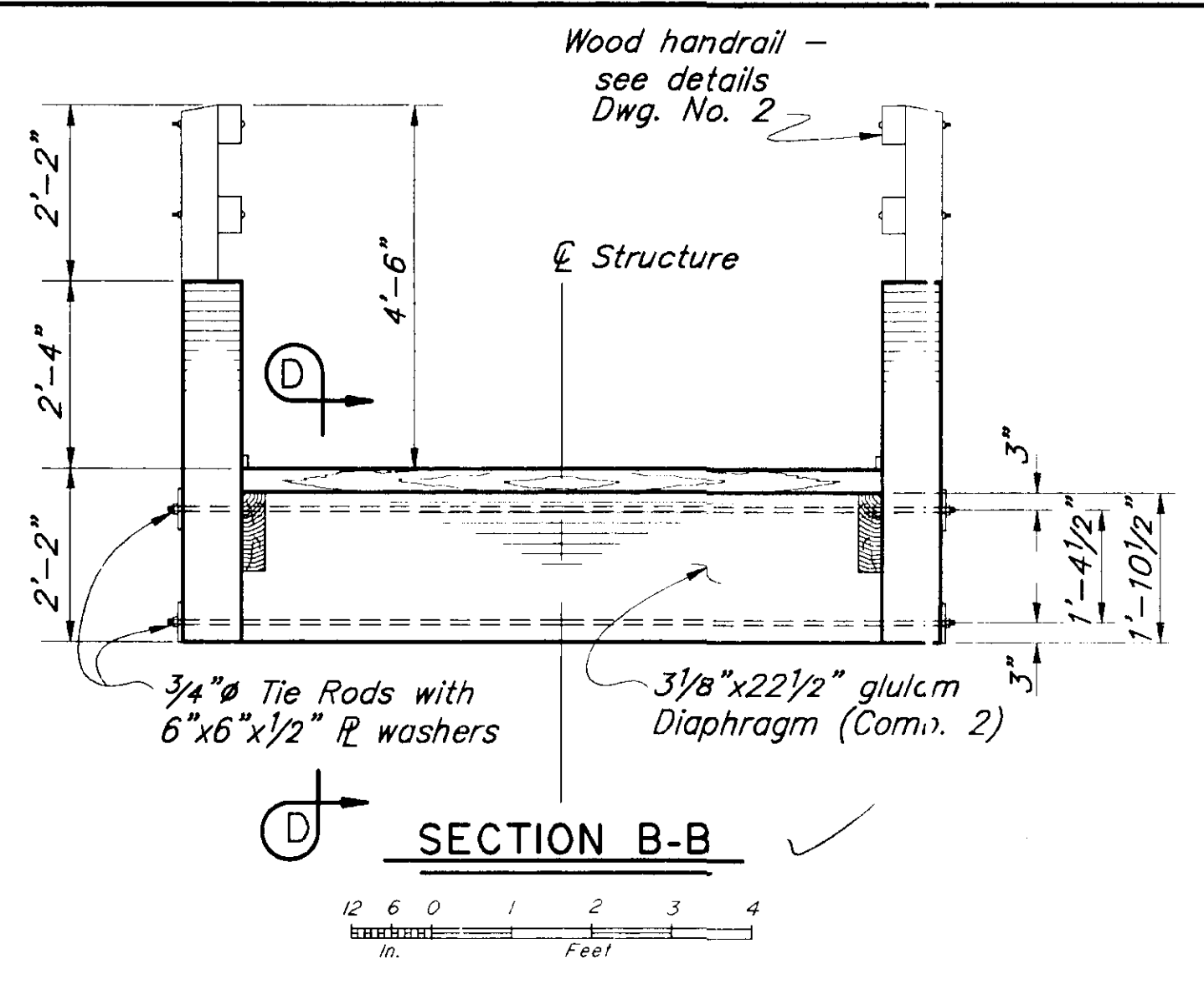
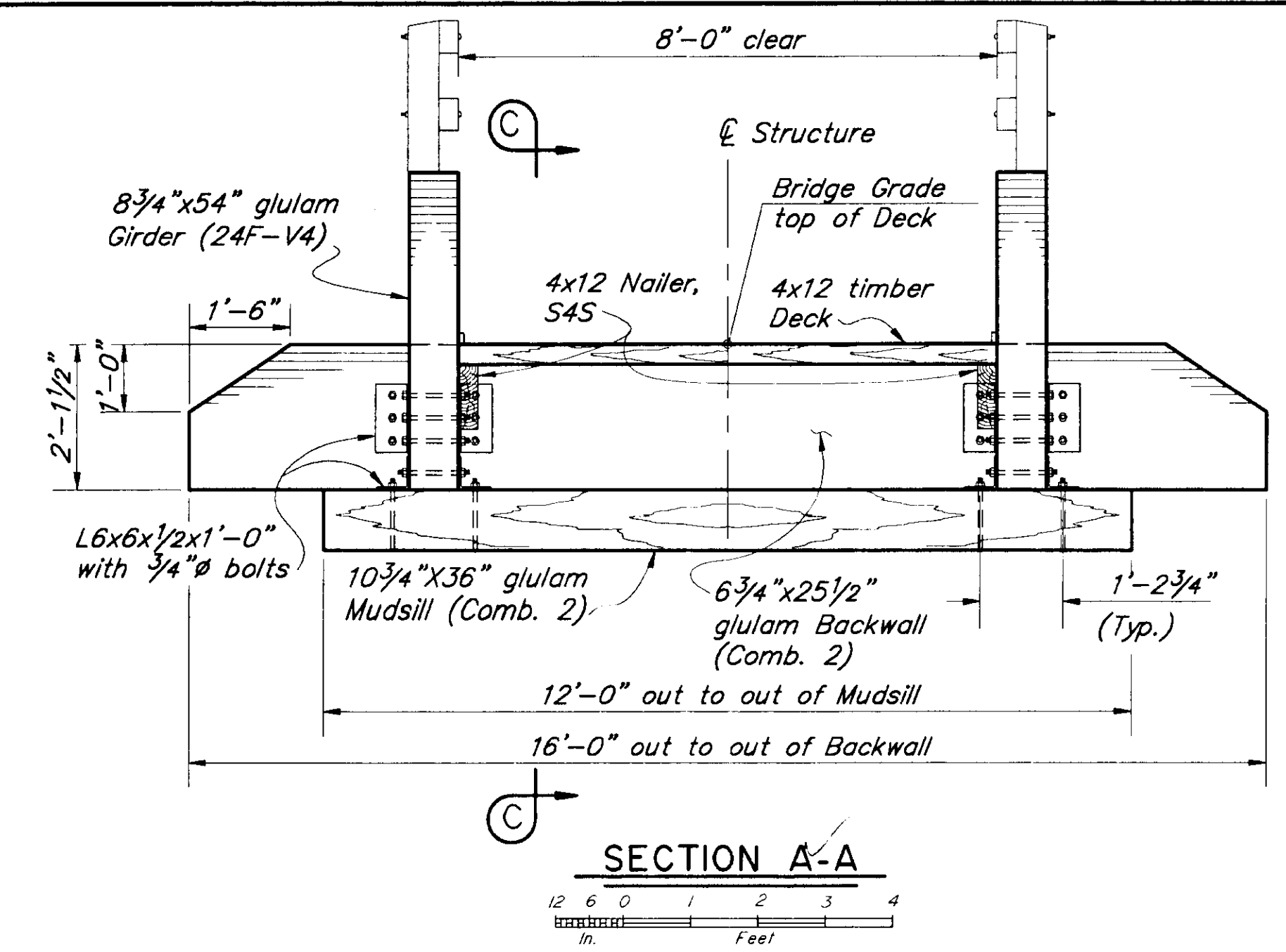
JUNEAU
 JNU-MENDENHALL RIVER TRAIL
 PROJECT NO. TE-0003 (32) ~ 71466
 ALASKA
STA. 103+00 TO E.O.P. STA. 121+04.63
 PLAN

DESIGNED BY: P. JONES	PROJECT NO. 71466
DRAWN BY: R. SNYDER	DATE: DEC. 1994
CHECKED BY: C. MORROW	SHEET 8 OF 11



NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	71466	1994	9	11



Note: Before excavating at footings, contractor shall install a silt fence between the creek and the bridge foundations or both sides of the creek. Each of the two silt fences shall be 26' long centered on the centerline of the bridge. Location shall be as directed by the engineer.

Field drilling & cutting of treated timber will not be allowed.

Shop drawings shall be submitted to Bridge Design for approval prior to fabrication. See section 105-1.02 of the State of Alaska Standard Specifications.

SPECIFICATIONS:

- Design: AASHTO Standard Specifications for Highway Bridges, 1992 edition with latest Interim Specifications.
- Construction: State of Alaska Standard Specifications for Highway Construction 1988, with Standard Modifications and Special Provisions.
- Live Load: 10,000 lb vehicle (25% of H20-44)
- Future Paving Allowance: Not designed for pavement

DESIGN UNIT STRESSES:

Treated Timber: Glulam Mudsills, Backwalls, and Diaphragms, wet use:	F _b = 1800 psi	F _v = 145 psi	F _{c⊥} = 560 psi
Glulam Girders, wet use:	F _b = 2400 psi	F _v = 165 psi	F _{c⊥} = 650 psi
Deck:	F _b = 1150 psi	F _v = 95 psi	F _{c⊥} = 625 psi
Any other timber:	F _b = 1150 psi	F _v = 95 psi	F _{c⊥} = 625 psi
Structural Steel: A36:	F _s = 20,000 psi		

STRUCTURAL MATERIALS:

Structural Steel: All structural steel shall be A36. All hardware shall be A307, unless otherwise noted. All steel and hardware shall be galvanized after fabrication. All threaded fasteners bearing on timber shall have malleable iron washers or economy heads.

Timber: All glued laminated timber shall be fabricated of Coast Region Douglas Fir or Western Larch using wet use adhesives. Glulam timber shall be of the stress grade combination designated in the details on this sheet. Sawn timber shall be No. 1 Douglas Fir or better. All timber shall be pressure treated by the empty cell process after fabrication using 0.6 lb/ft³ penta in heavy oil for pieces in ground contact and 0.3 lb/ft³ penta in heavy oil for all other. (See Special Provisions).

FOUNDATION PRESSURE:

Mudsills, 1.50 ksf max.

DATUM: Assumed 100.0' at TBM Point No. 547, N76889.212 E56803.199, 30d spike in 24" spruce.

Flood Frequency (yr)	50
Exceedance Probability (%)	2
Design Discharge (cfs)	2710
Design High Water (ft)	89.1
Drainage Area (sq. mi.)	25.5

ITEM NO.	ITEM	UNIT	SUBST.	SUPERST.	TOTAL
506(1)	Treated Timber	L.S.	1.2	15.6	16.8 MBM
507(2)	Railing	L.F.		170	170
507(5)	Approach Railing	L.F.		32	32

Note: Verify abutment location with DOT/PF Bridge Design after staking



**MONTANA CREEK
BIKE PATH BRIDGE**

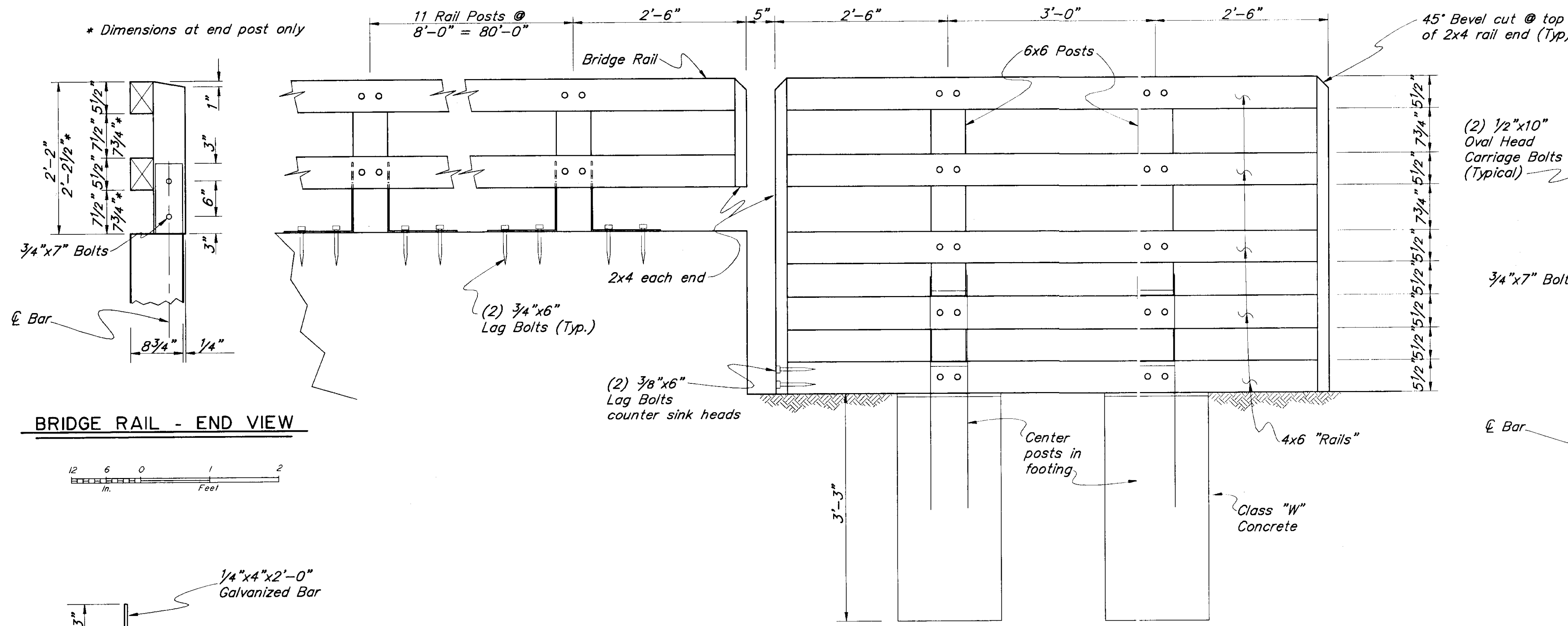
STATE of ALASKA
DEPARTMENT of TRANSPORTATION
and PUBLIC FACILITIES
JUNEAU, ALASKA

BRIDGE NO. 1955
DWG. NO. 1

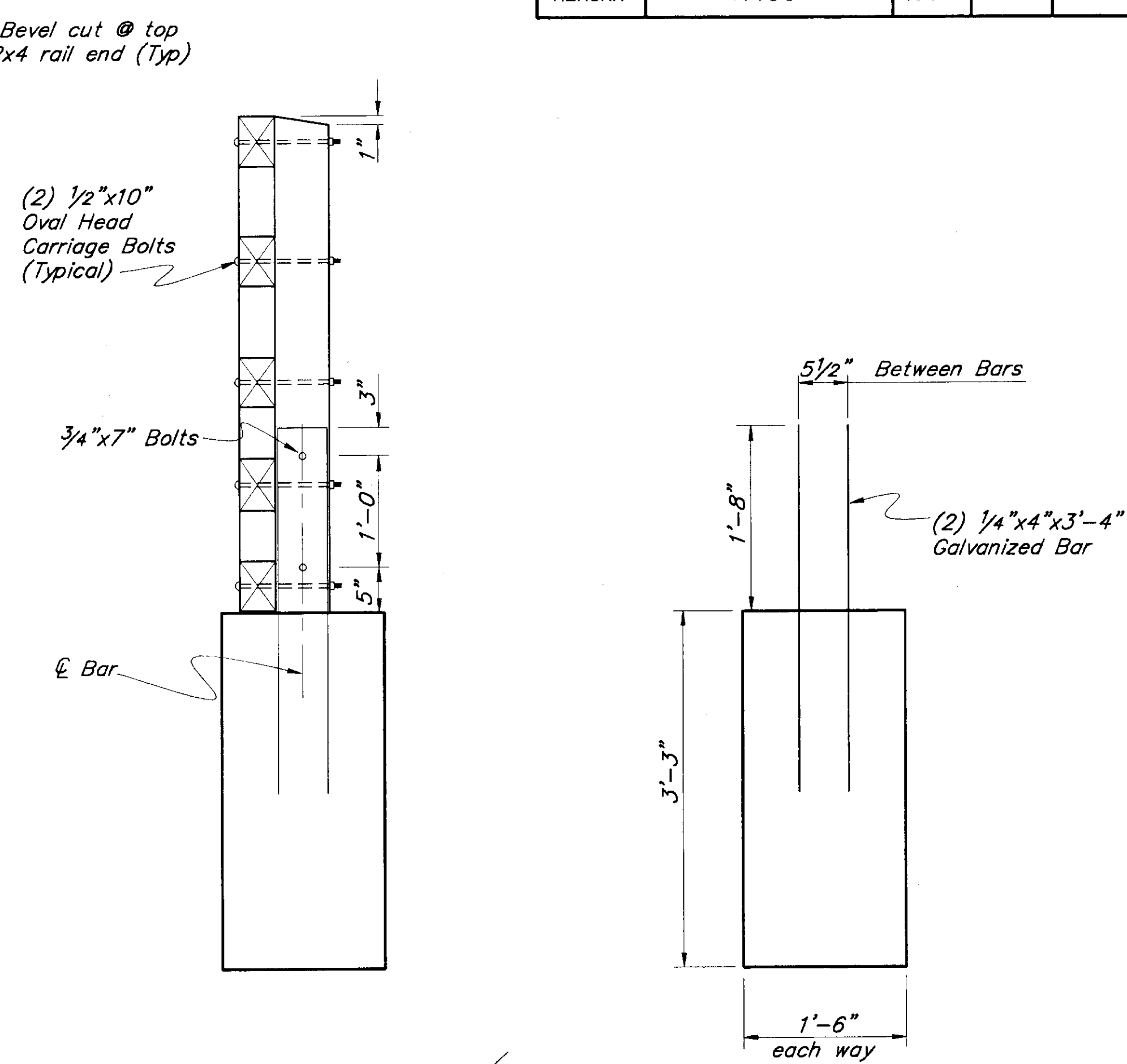
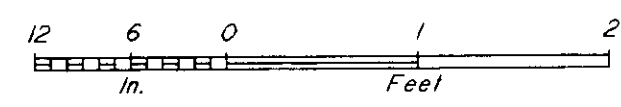
Designed By: MCF
Detail Check By: JJP
Design Check By: JJP

P: 1955/P: 1955/1955-1
12/2/1994 13:56
Plot Scale = 1:50
Drawn or Revised By: GJM

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	71466	1994	10	11



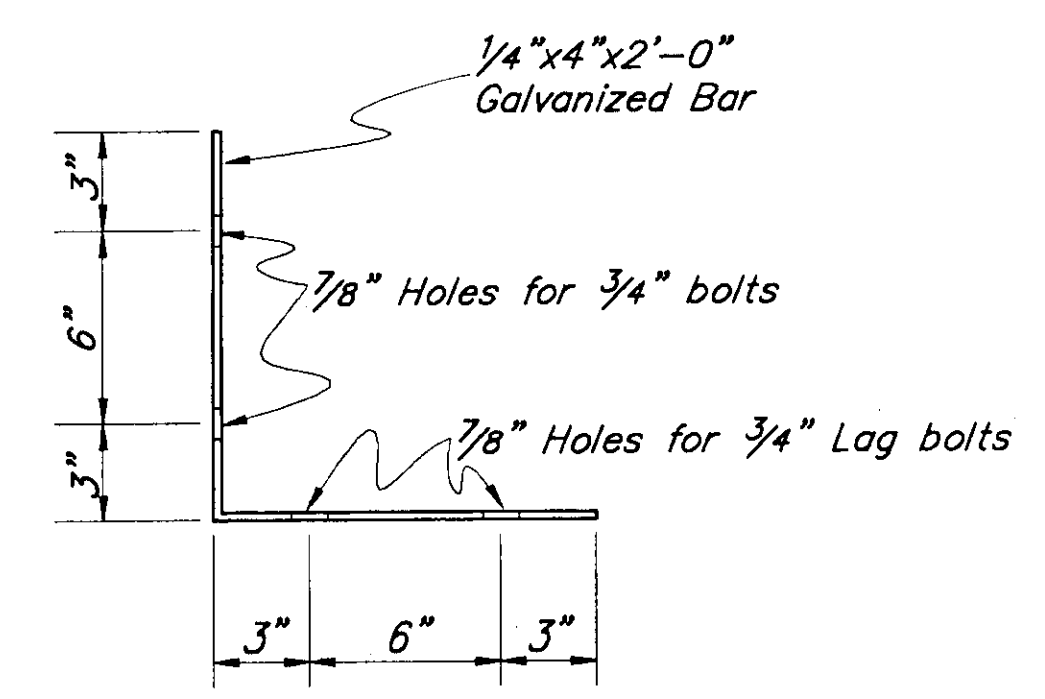
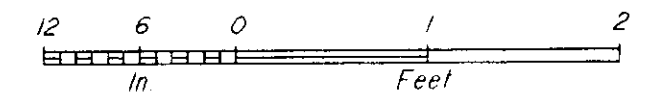
BRIDGE RAIL - END VIEW



APPROACH RAIL - END VIEW

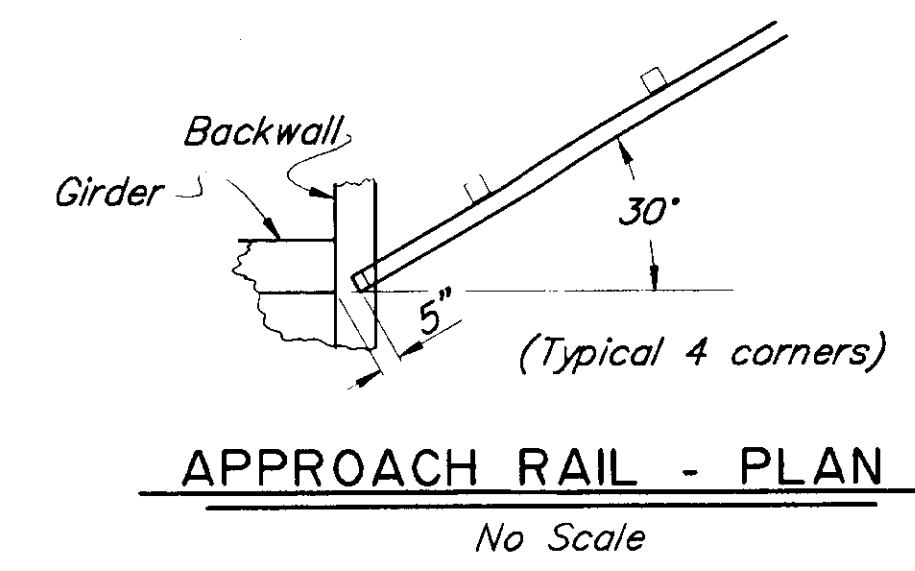


RAIL POST FOOTING



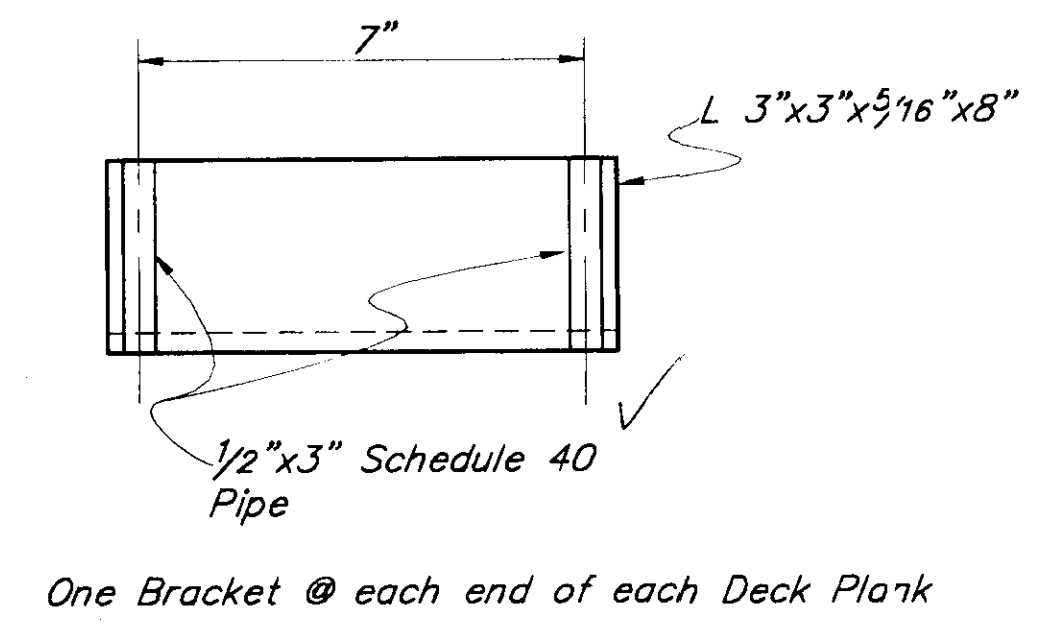
BRIDGE RAIL ANGLE BRACKET

2 Required per post
No Scale



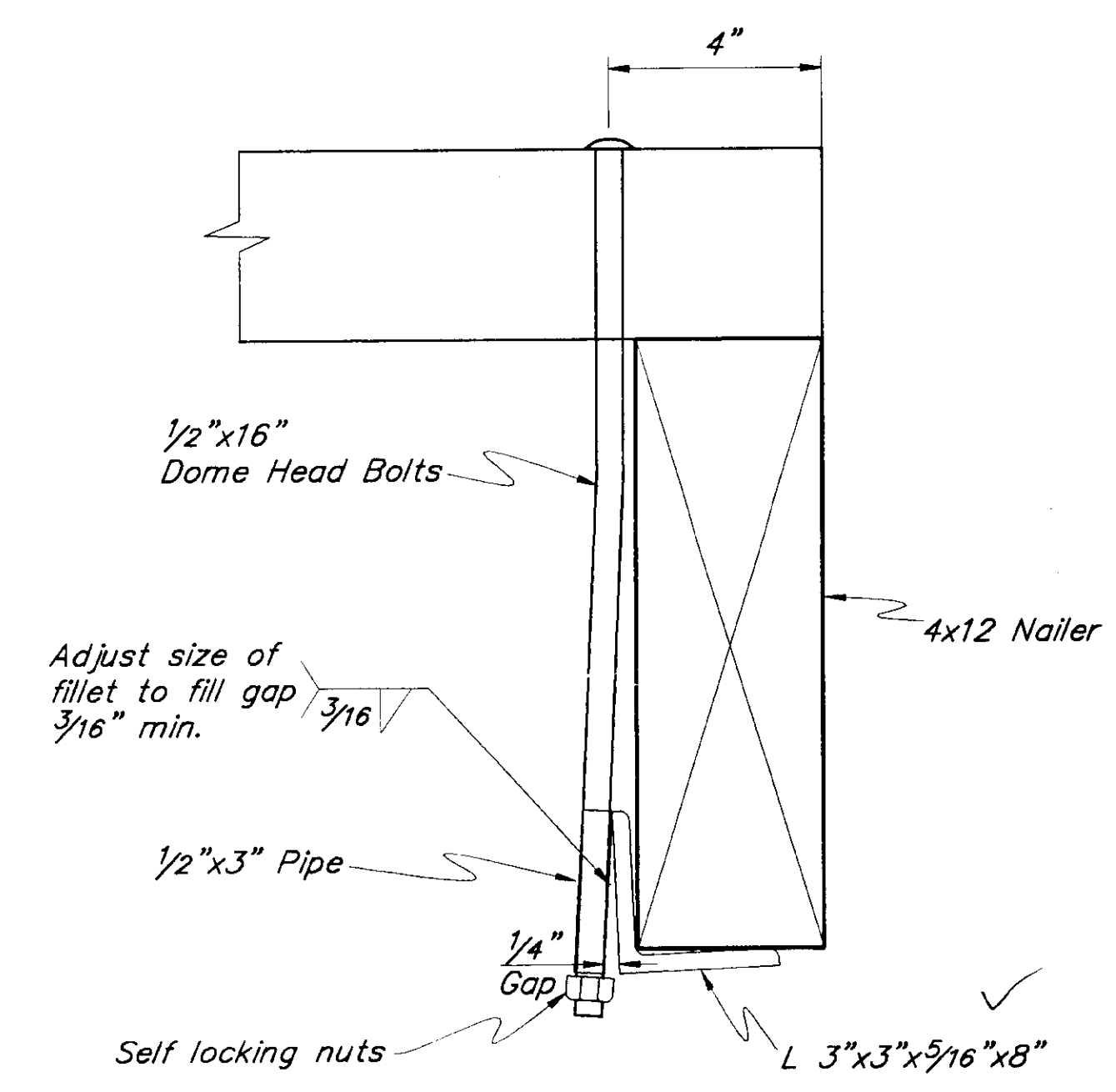
APPROACH RAIL - PLAN

No Scale



DECK PLANK ATTACHMENT DETAILS

No Scale



**MONTANA CREEK
BIKE PATH BRIDGE**

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

Designed By: MDP
Detail Check By: JJP
Design Check By: JJP
P:\1955\1955-2
11/30/1994 9:50
Plot Scale = 1:100
Drawn or Revised By: SHS

BRIDGE NO. 1955
DWG. NO. 2

CULVERT INSTALLATION SUMMARY

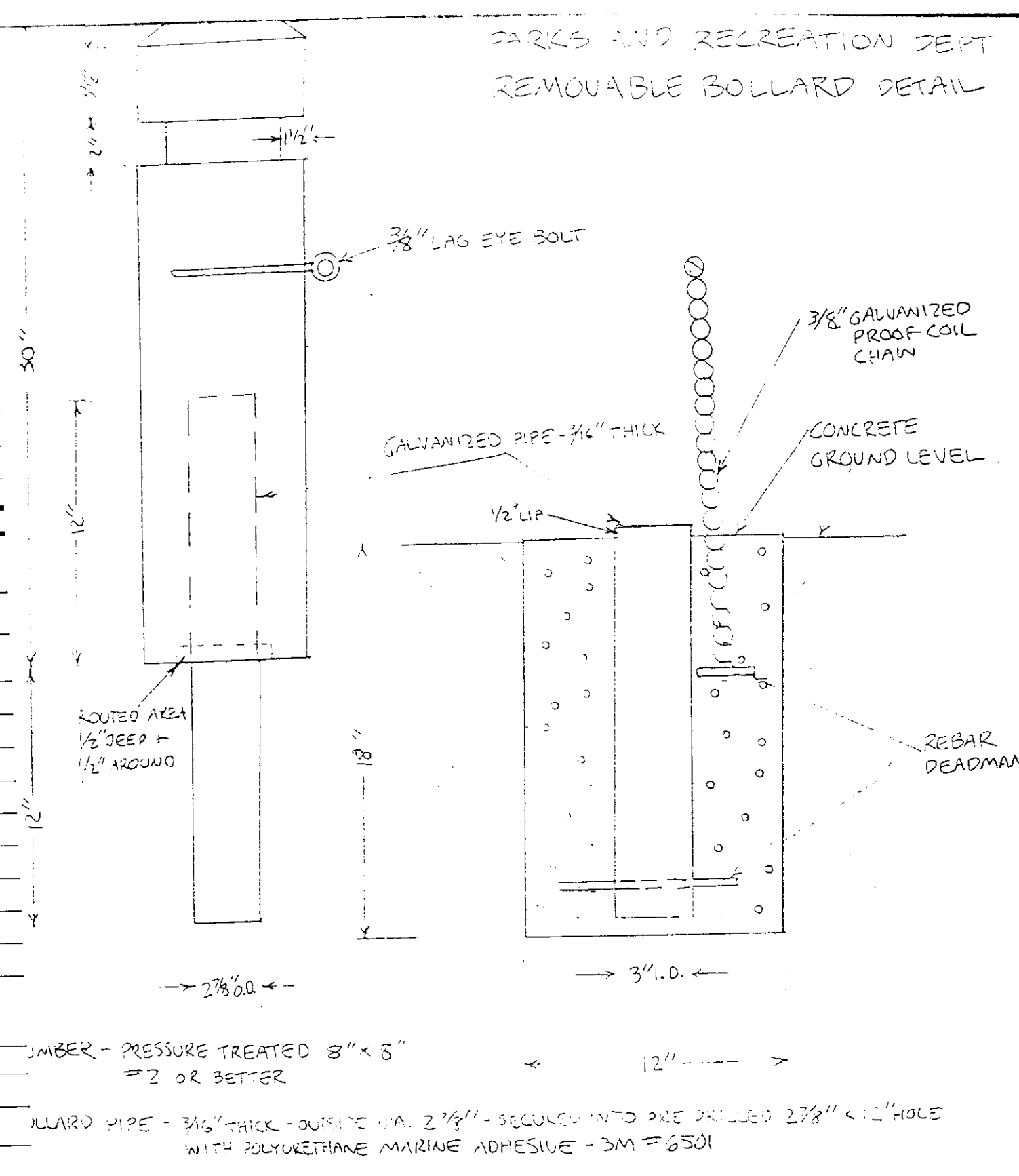
STATION	18"	24"	36"	REMARKS
"0" 22+25	20'			
"0" 23+90	20'			
"0" 24+80	20'			
"0" 27+10	20'			
"0" 40+40		30'		
"0" 40+95		30'40		
"0" 46+10			40' ✓	1 1/2 MAX. SLOPE
"0" 46+80			30' 40	1 1/2 MAX. SLOPE
"0" 74+40	30' 40			
"0" 88+90			30' 40	
TOTAL	110'	60'	100'	L.F.
	125	40	125	

REMOVAL OF STRUCTURES & OBSTRUCTIONS SUMMARY

STATION	REMARKS
"0" 25+00 TO "0" 30+00	BARBED WIRE FENCE (WITHIN 100' OF C, BOTH SI.)
"0" 29+40	SHED (60' LEFT OF C)
"0" 30+10	30'X50' BARN
"0" 30+50	SHED
"0" 31+20	JUNKED VEHICLE (RIGHT OF C)
"0" 35+00	JUNKED VEHICLE (RIGHT OF C)
"0" 39+00 TO "0" 40+00	4"X 12" WOODEN PLANKS AND BLOCKS

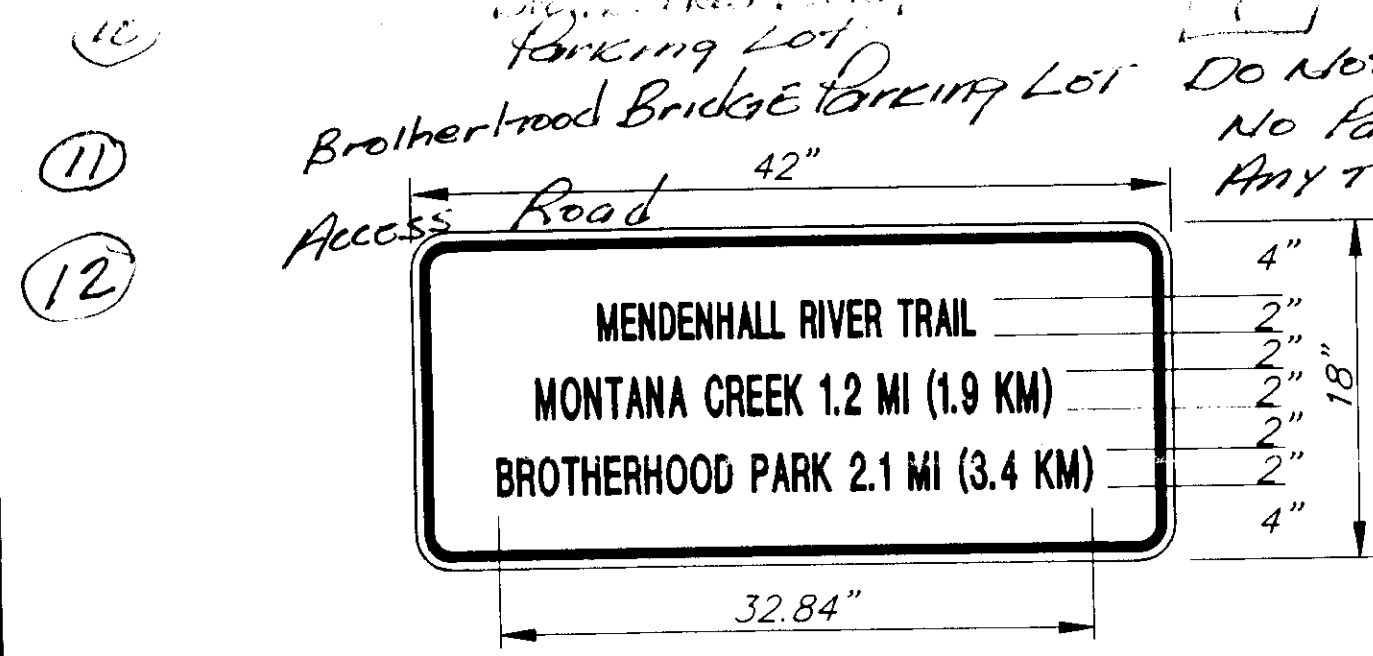
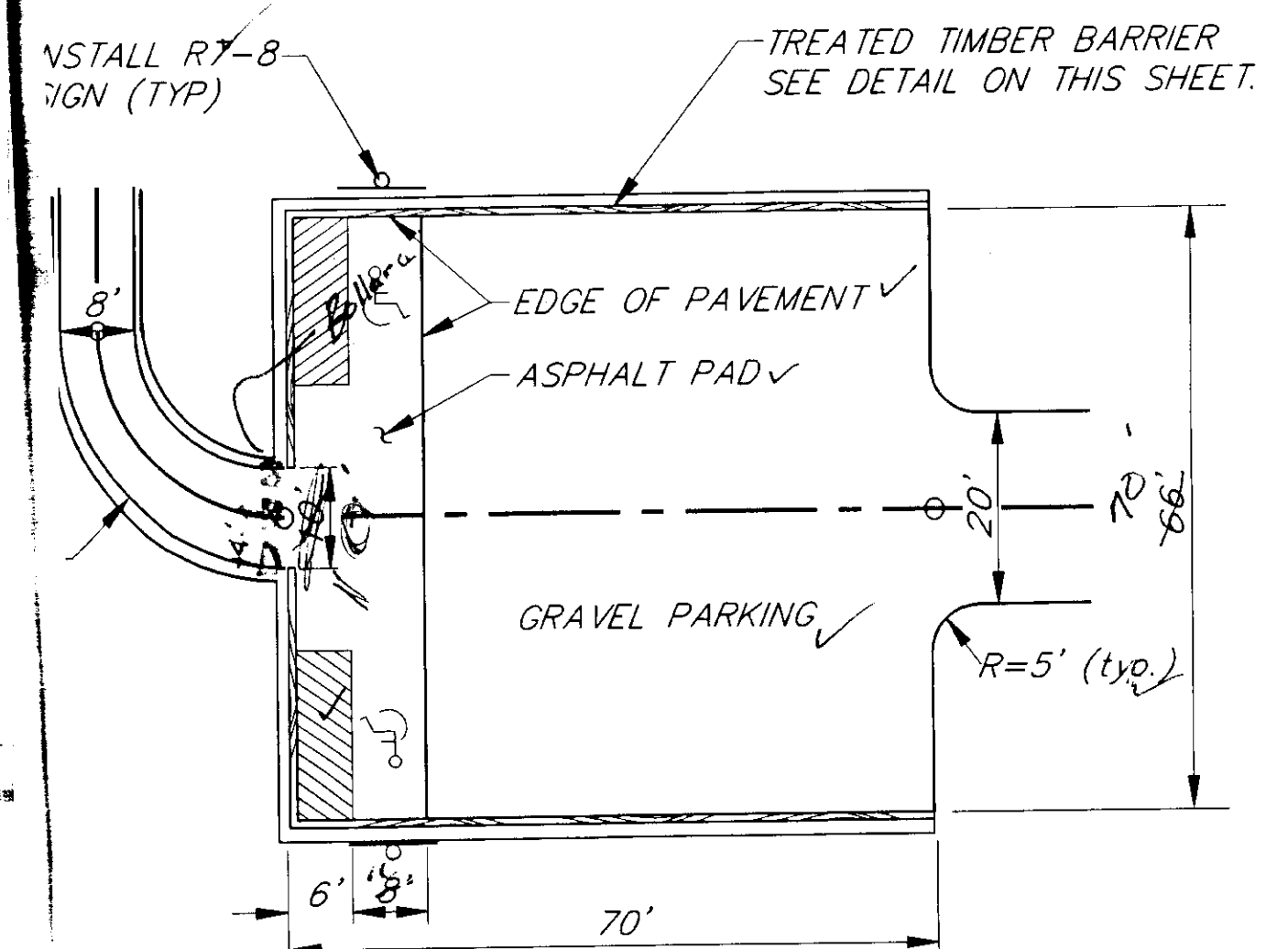
SIGN SUMMARY

SIGN NO.	STATION	LT.	RT.	NO. POST	LEGEND	CODE	SIGN SIZE	AREA SQ. FT.	REMARKS
1	"0" 9+25		X	1	NO MOTOR VEHICLES	R5-3	18"X24"	3.00	
2	"0" 9+25	X		2	SEE SPECIAL SIGN DETAIL "B"	SPECIAL	18"X42"	5.25	DETAIL ON THIS SHEET ✓
					SEE SPECIAL SIGN DETAIL "C"	SPECIAL	18"X36"	4.50	SEE SIGNING NOTE 7 ✓
3	"0" 120+50		X	1	NO MOTOR VEHICLES	R5-3	18"X24"	3.00	
4	"0" 120+50	X		2	SEE SPECIAL SIGN DETAIL "A"	SPECIAL	18"X42"	5.25	DETAIL ON THIS SHEET ✓
					SEE SPECIAL SIGN DETAIL "C"	SPECIAL	18"X36"	4.50	SEE SIGNING NOTE 7 ✓
5	"A" 10+00	X		1	STOP	R1-1	30"X30"	6.25	
6	PARKING LOT			1	RESERVED PARKING (HANDICAP)	R7-8	12"X18"	1.50	
7	PARKING LOT			1	RESERVED PARKING (HANDICAP)	R7-8	12"X18"	1.50	
8	BACK LOOP	X		2	SEE SPECIAL SIGN DETAIL "C"	SPECIAL	18"X36"	4.50	200' WEST OF RIVER ROAD
							4"X18"	0.50	
							4"X18"	0.50	
9	BACK LOOP	X		1	SEE SPECIAL SIGN DETAIL "C"	SPECIAL	18"X36"	4.50	200' EAST OF RIVER ROAD
							4"X18"	0.50	
							4"X18"	0.50	
							TOTAL	45.75 SQ. FT.	61.50

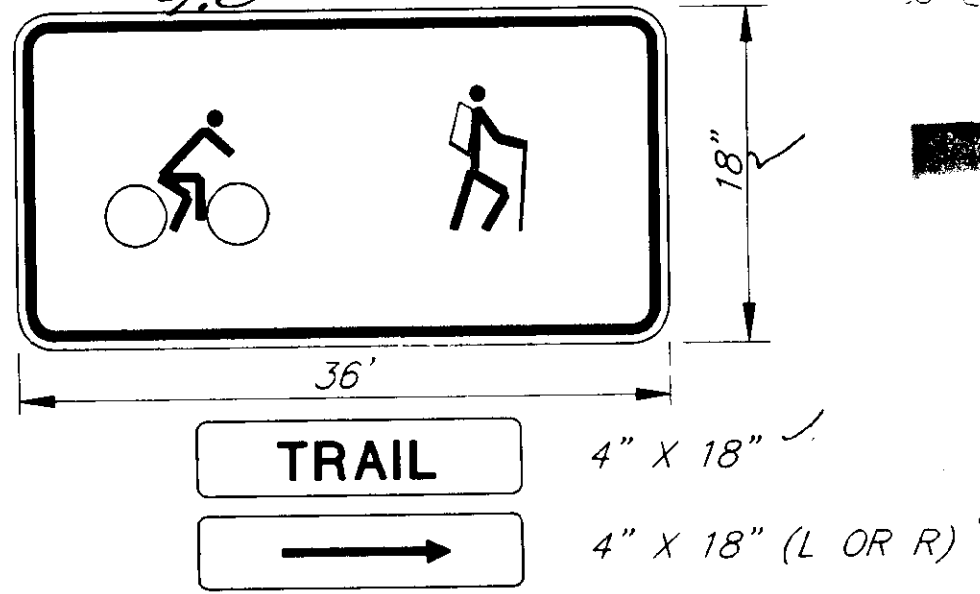


SIGNING NOTES:

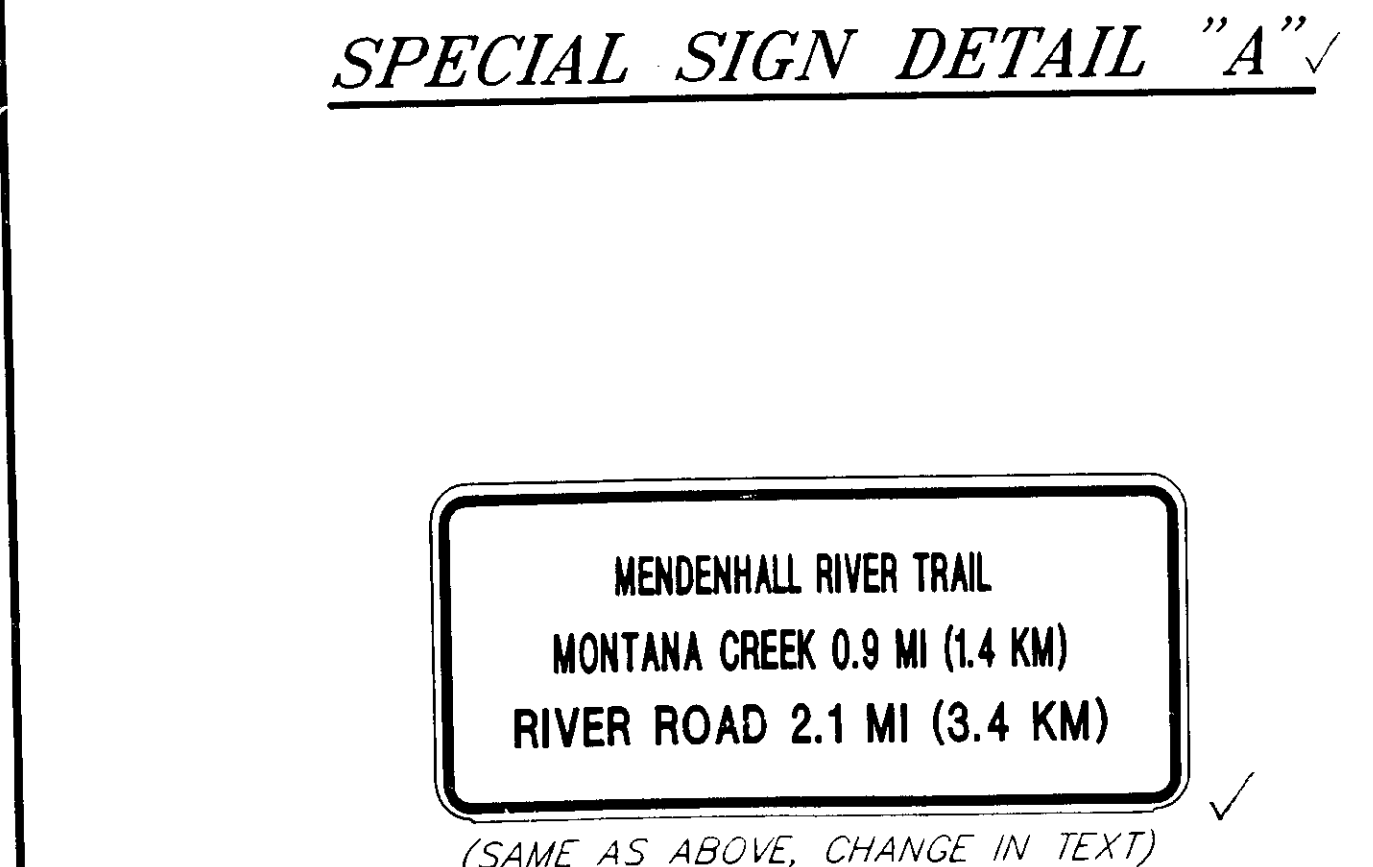
1. SIGN LOCATIONS ARE APPROXIMATE ONLY AND SUBJECT TO MINOR REVISIONS.
 2. SEE STD. DWG. S-30.01 FOR POST SLEEVE TYPE SOIL EMBEDMENT.
 3. SIGN POSTS SHALL BE TELESCOPING PERFORATED GALVANIZED SQUARE STEEL POSTS.
 4. SIGN SIGNS SHALL BE .080" THICK EXCEPT AS NOTED IN THE STANDARD SIGN SCHEDULE.
 5. SIGNS SHALL BE INSTALLED SO THAT THE BOTTOM OF THE SIGN PANEL IS 5 FEET ABOVE THE ROADWAY SURFACE AND THE INSIDE EDGE IS 2 FEET FROM EDGE OF PAVEMENT. EXCEPTION: INSTALLATION OF SIGNS IN PEDESTRIAN/BICYCLE SIGN BELOW MENDENHALL RIVER TRAIL SIGN SHALL BE 9 PER STD. DWG. S-05.00.
 6. SPECIAL SIGNS ARE 2" WHITE UPPER CASE ON BROWN BACKGROUND.
 7. INST. PEDESTRIAN/BICYCLE SIGN BELOW MENDENHALL RIVER TRAIL SIGN. EXCEPT "TRAIL" AND ARROW SIGNS.



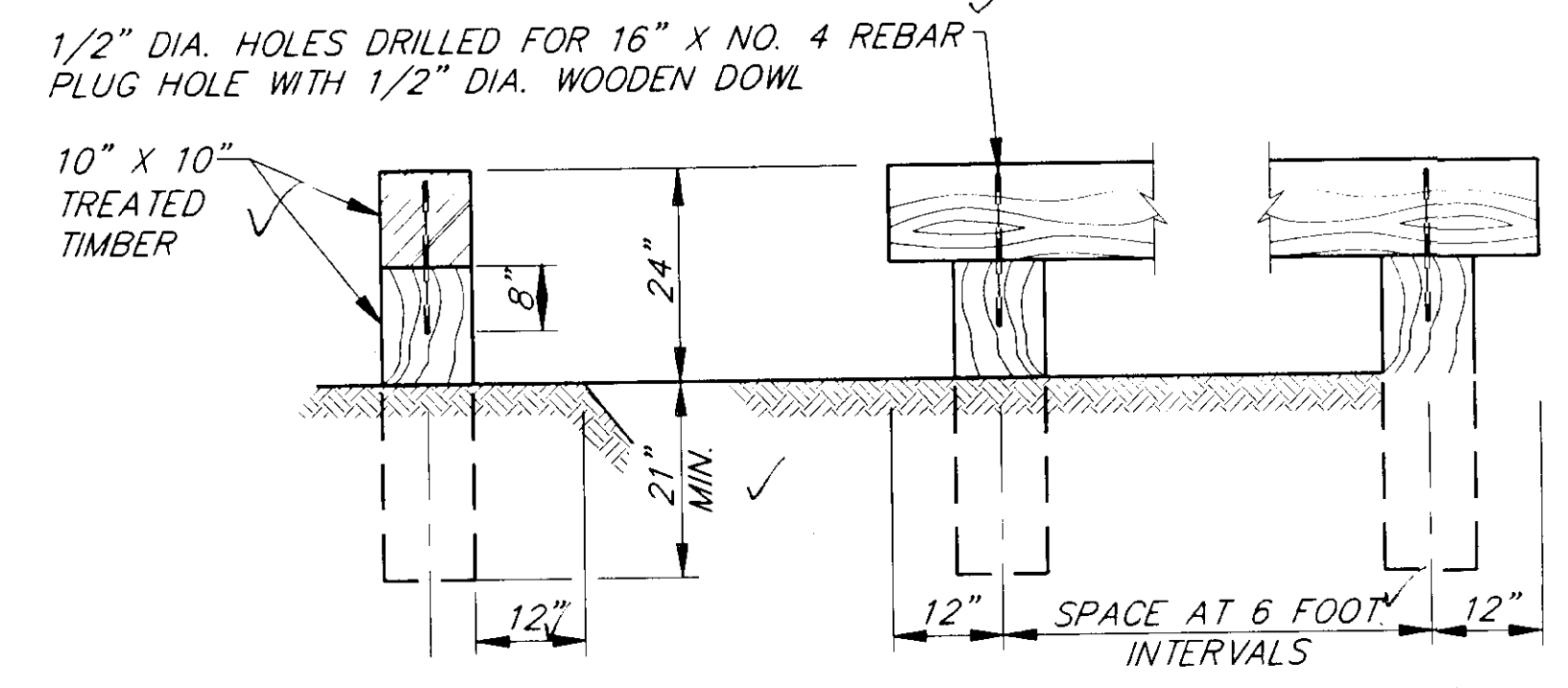
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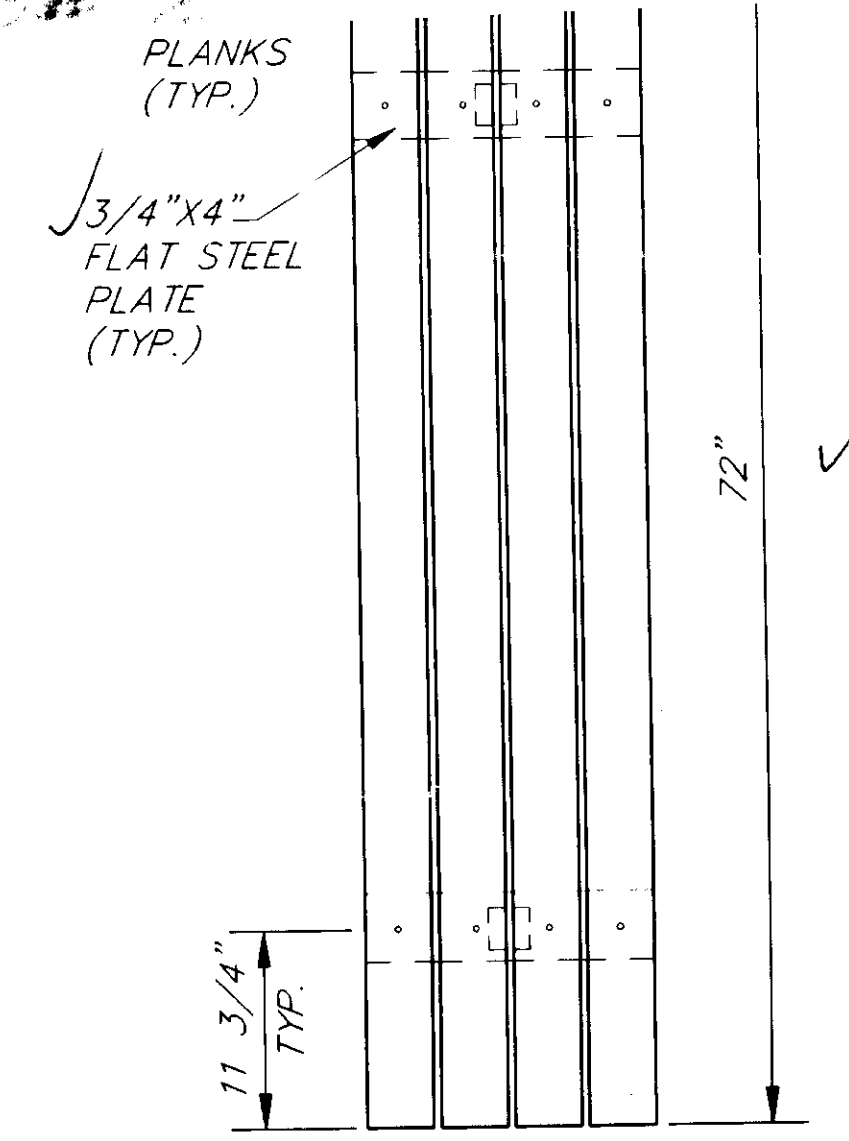
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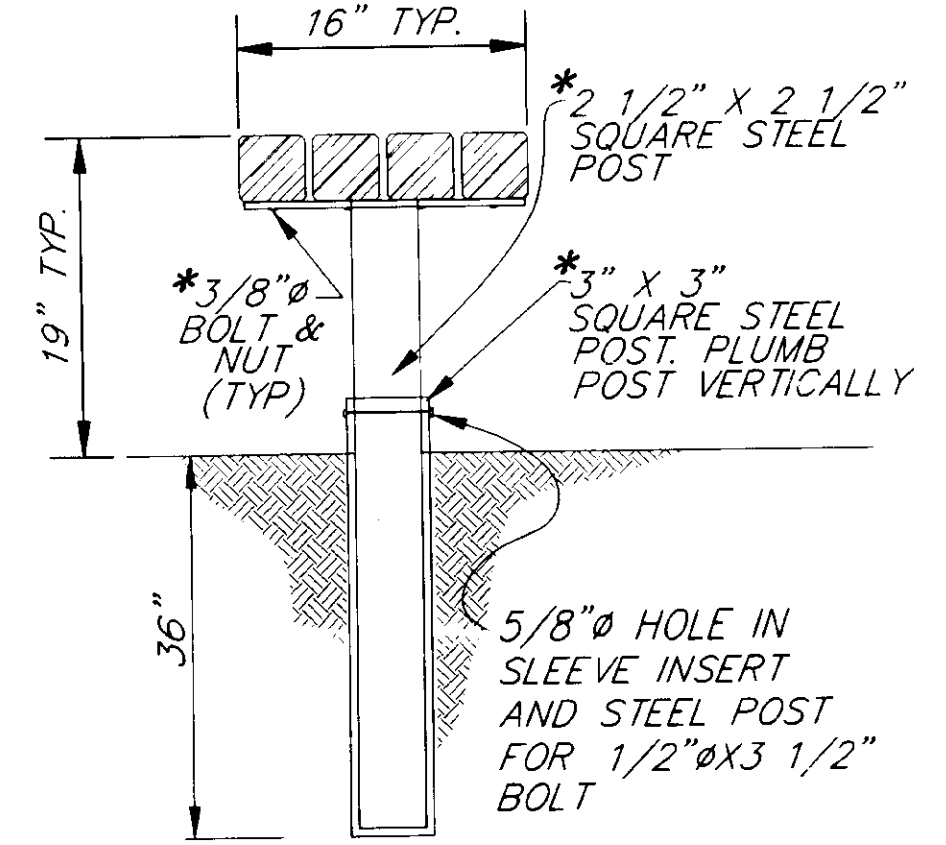
SPECIAL SIGN DETAIL "B"



TREATED TIMBER BARRIER DETAILS



PARK BENCH PLAN VIEW



PARK BENCH DETAIL

AS-BUILT
 BY: 10.12. DATE: 10-96

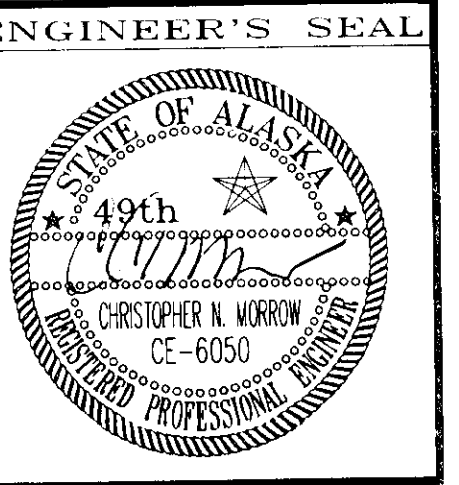
NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

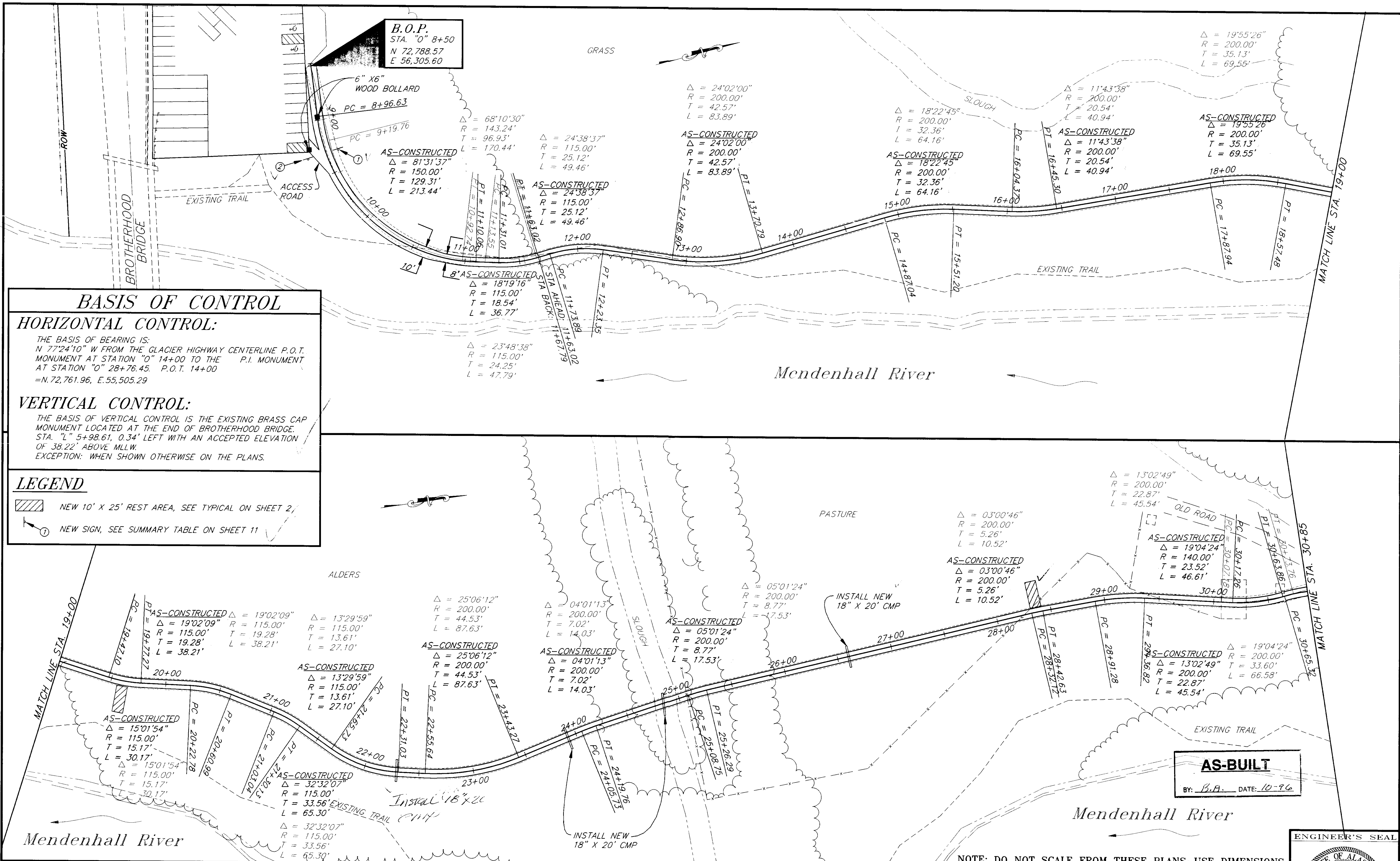
PATH:	P:\JNU\MENRTRAIL\DR\1-30\ PLOT1.FCP(1) OR PLOT1.FCP(2)
BY:	
DATE:	
DESCRIPTION OF CHANGE:	

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

JUNEAU
 JNU-MENDENHALL RIVER TRAIL
 PROJECT NO. TE-0003 (32) ~ 71466
 ALASKA
SUMMARIES & MISCELLANEOUS DETAILS

DESIGNED BY:	P. JONES	PROJECT NO.	71466
DRAWN BY:	C. BECKER	DATE:	DEC. 1994
CHECKED BY:	C. MORROW	SHEET	11 OF 11





BASIS OF CONTROL

HORIZONTAL CONTROL:
 THE BASIS OF BEARING IS:
 N 77°24'10" W FROM THE GLACIER HIGHWAY CENTERLINE P.O.T.
 MONUMENT AT STATION "0" 14+00 TO THE P.I. MONUMENT
 AT STATION "0" 28+76.45 P.O.T. 14+00
 =N. 72,761.96, E. 55,505.29

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.
 EXCEPTION: WHEN SHOWN OTHERWISE ON THE PLANS.

LEGEND

NEW 10' X 25' REST AREA, SEE TYPICAL ON SHEET 2/

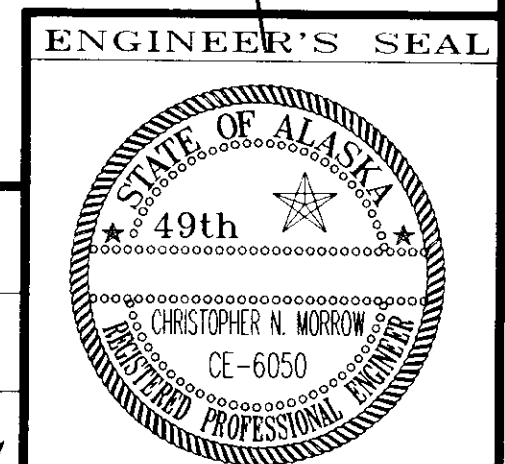
NEW SIGN, SEE SUMMARY TABLE ON SHEET 11

RECORD OF REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGE

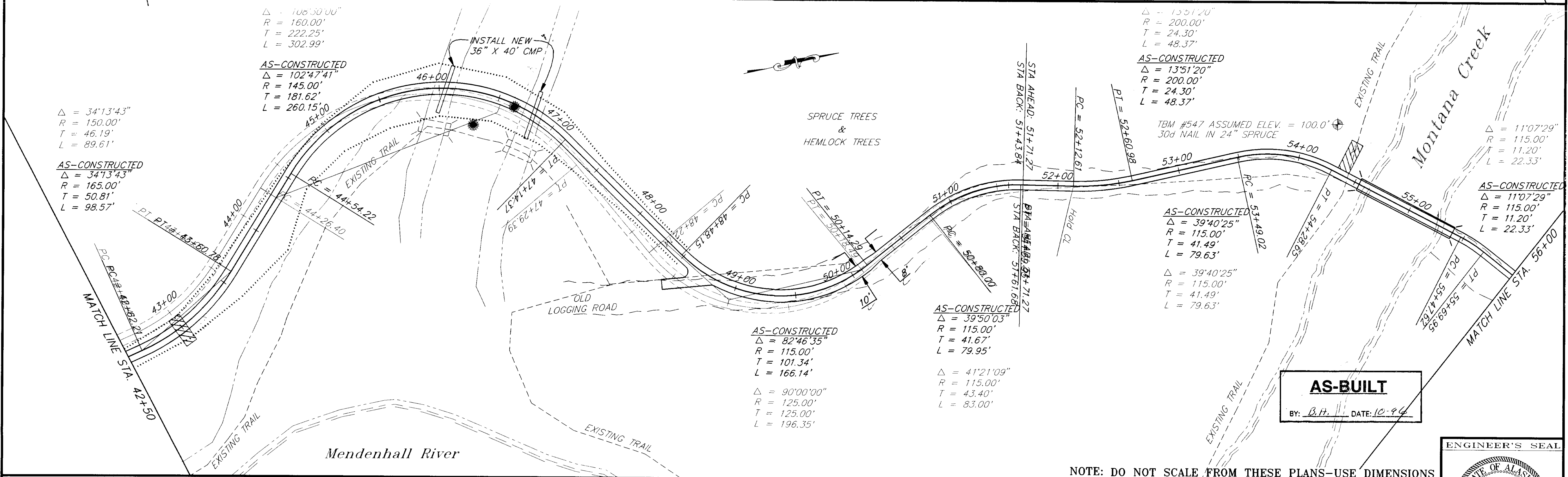
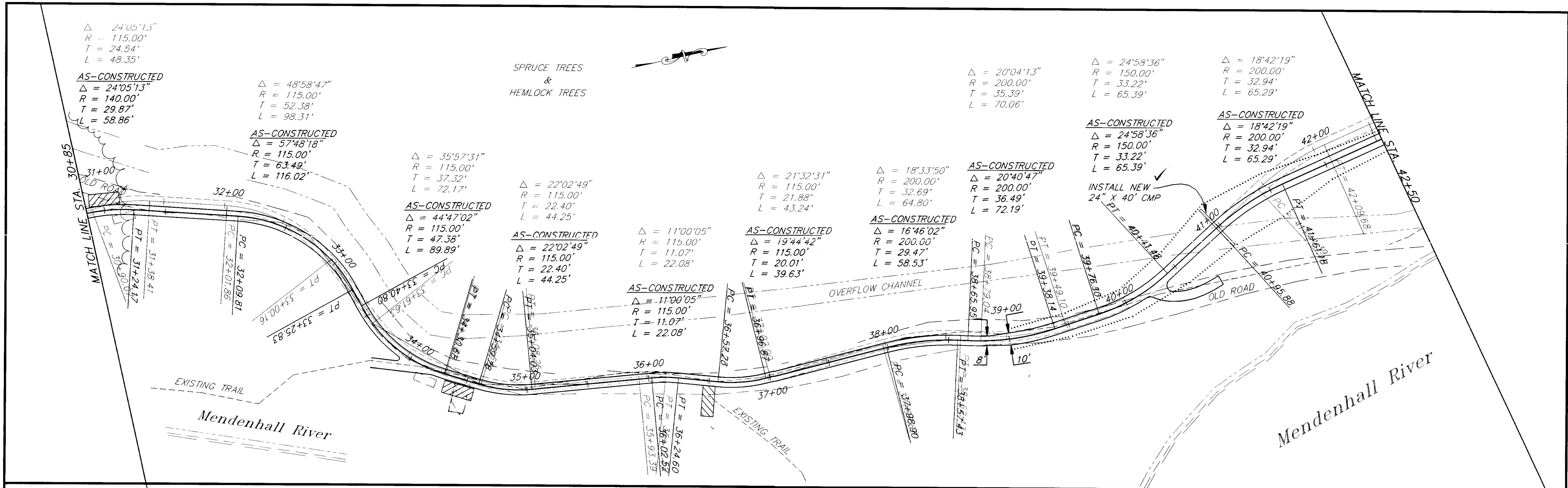
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU
 JNU-MENDENHALL RIVER TRAIL
 PROJECT NO. TE-0003 (32) ~ 71466
 ALASKA
B.O.P. STA. 8+52.80 TO STA. 30+85
AS-CONSTRUCTED

DESIGNED BY: P. JONES	PROJECT NO. 71466
DRAWN BY: R. SNYDER	DATE: 1996
CHECKED BY: C. MORROW	SHEET 12A OF 11



NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS



AS-BUILT
 BY: B.H. DATE: 10-96

NOTE: DO NOT SCALE FROM THESE PLANS—USE DIMENSIONS

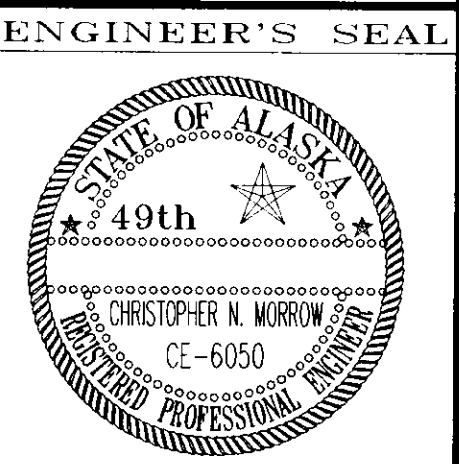
RECORD OF REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGE

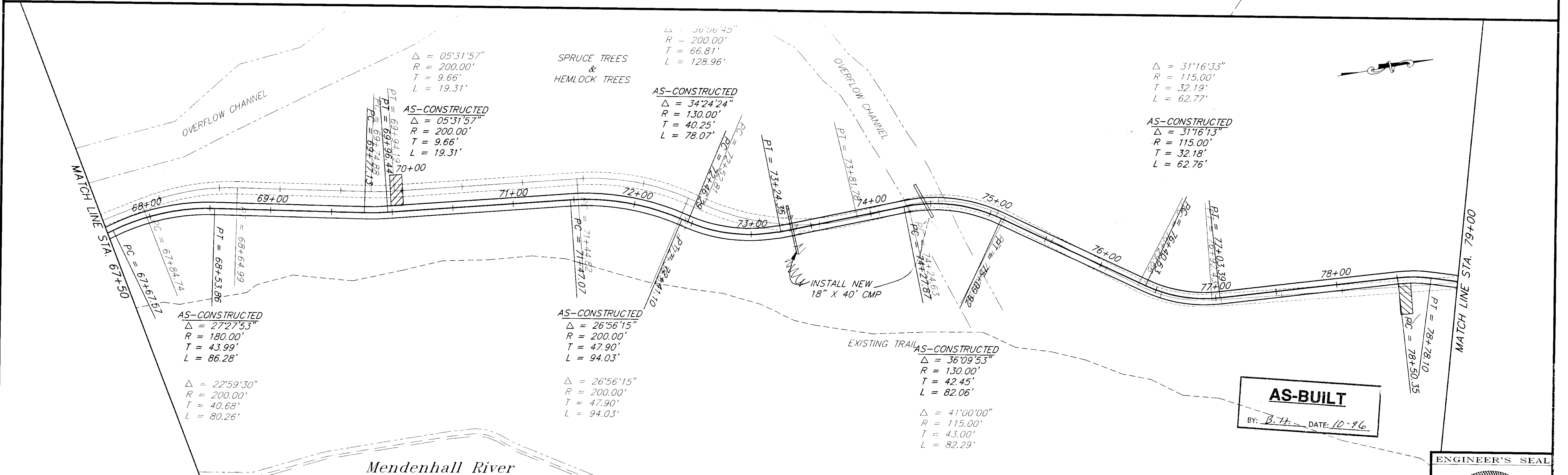
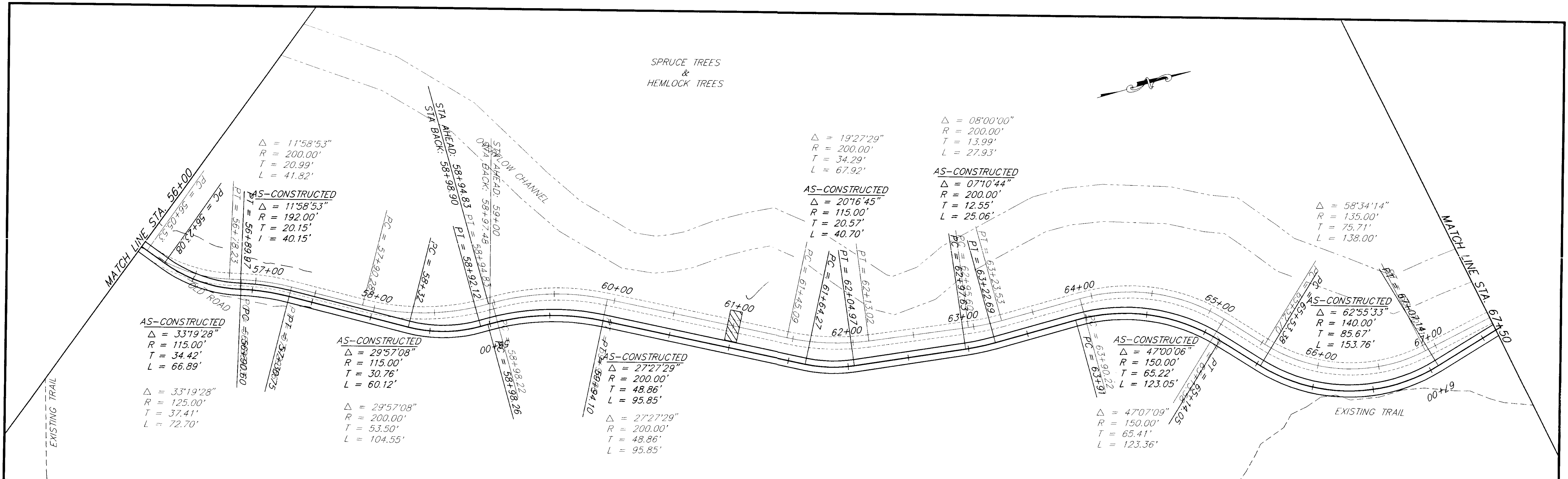
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU
 JNU-MENDENHALL RIVER TRAIL
 PROJECT NO. TE-0003 (32) ~ 71466
STA. 30+85 TO STA. 56+00
 AS-CONSTRUCTED

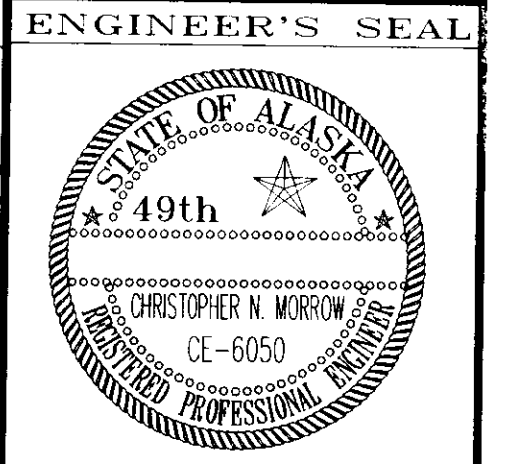
ALASKA
 DESIGNED BY: P. JONES
 DRAWN BY: R. SNYDER
 CHECKED BY: C. MORROW

PROJECT NO. 71466
 DATE: 1996
 SHEET 13A OF 11





AS-BUILT
 BY: B. J. DATE: 10-96



RECORD OF REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGE

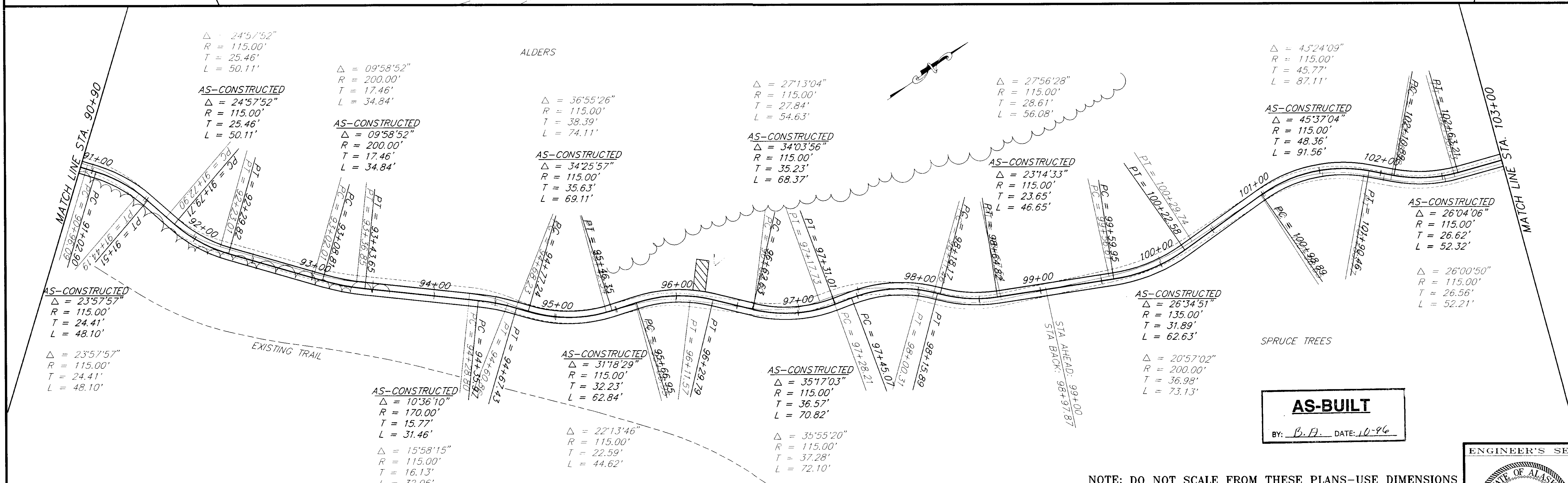
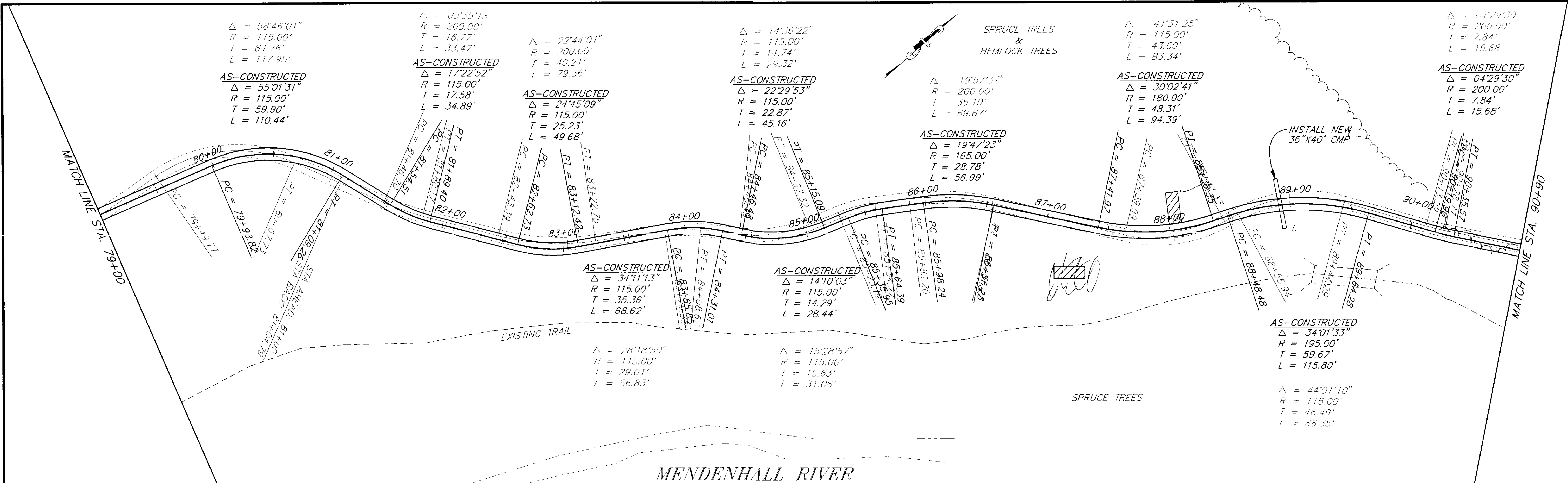
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU
 JNU-MENDENHALL RIVER TRAIL
 PROJECT NO. TE-0003 (32) ~ 71466
 ALASKA
STA. 56+00 TO STA. 79+00
 AS-CONSTRUCTED

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

DESIGNED BY: P. JONES	PROJECT NO. 71466
DRAWN BY: K. SNYDER	DATE: 1996
CHECKED BY: C. MORROW	SHEET 14A OF 11

PATH: P:\JNU\MENIRAIL\DR\AA5600 PLOT1.PCP(40) OR PLOT1H.PCP(80)



AS-BUILT
 BY: B.P. DATE: 10-96

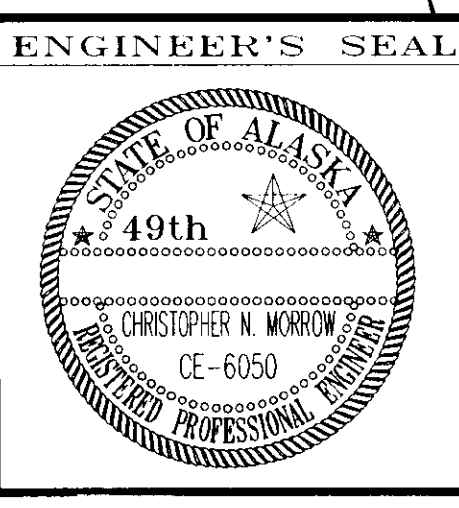
RECORD OF REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGE

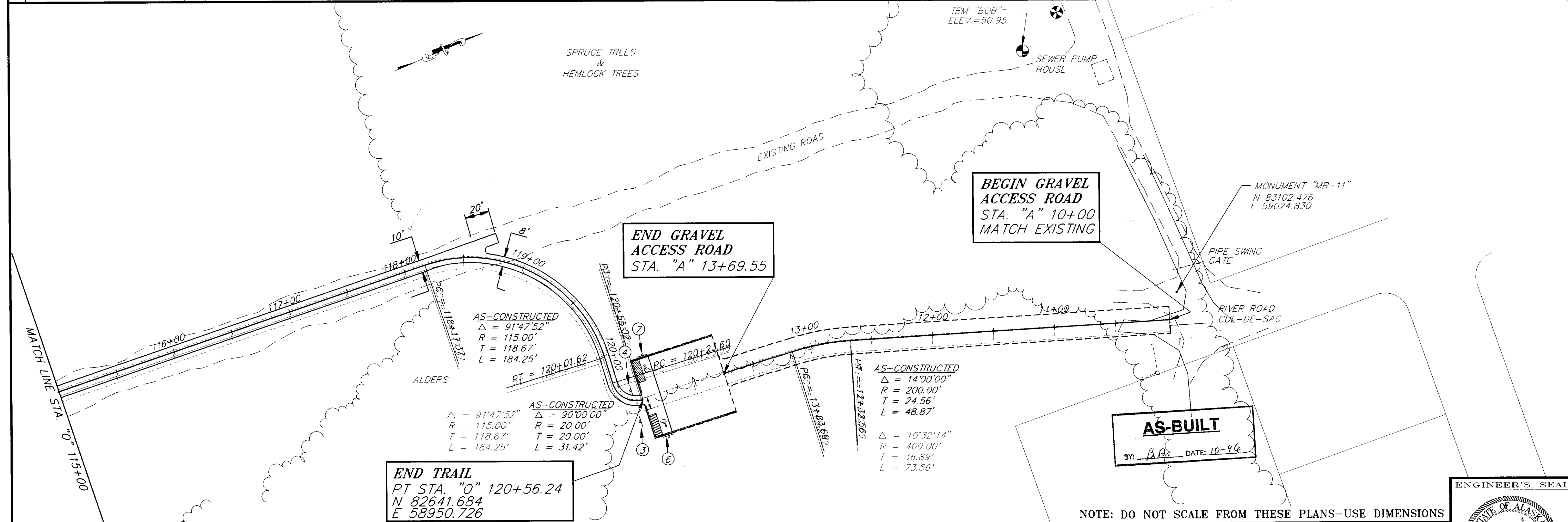
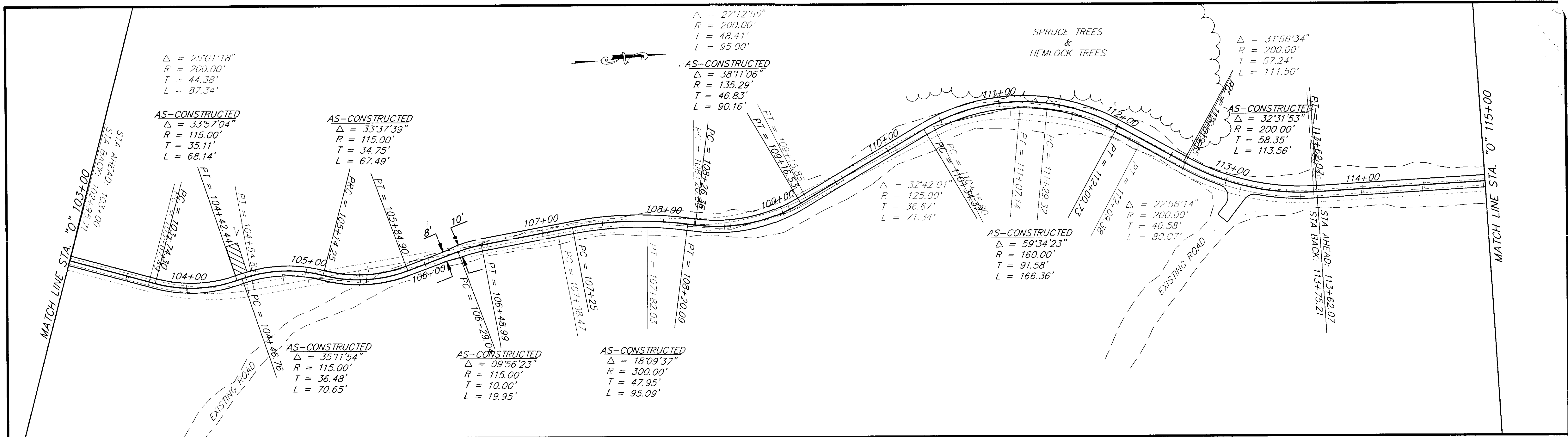
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU
 JNU-MENDENHALL RIVER TRAIL
 PROJECT NO. TE-0003 (32) ~ 71466
 ALASKA
STA. 79+00 TO STA. 103+00
 AS-CONSTRUCTED

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

DESIGNED BY: P. JONES	PROJECT NO. 71466
DRAWN BY: R. SNYDER	DATE: 1996
CHECKED BY: C. MORROW	SHEET 15A OF 11



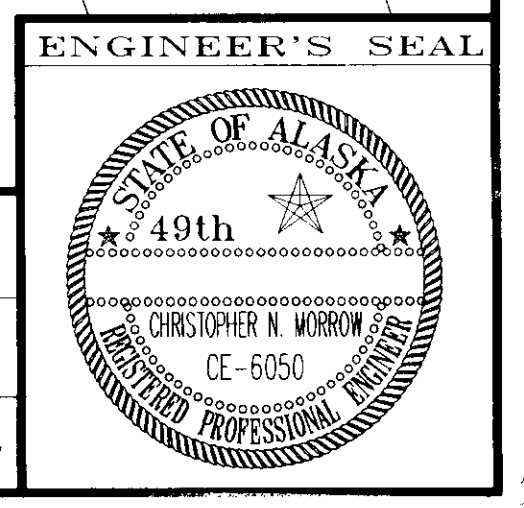


RECORD OF REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGE

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

JUNEAU
 JUNU-MENDENHALL RIVER TRAIL
 PROJECT NO. TE-0003 (32) ~ 71466
 ALASKA
STA. 103+00 TO E.O.P. STA. 121+04.63
 AS-CONSTRUCTED

DESIGNED BY: P. JONES	PROJECT NO. 71466
DRAWN BY: R. SNYDER	DATE: 1996
CHECKED BY: C. MORROW	SHEET 16A OF 11



NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS