

# State of Alaska

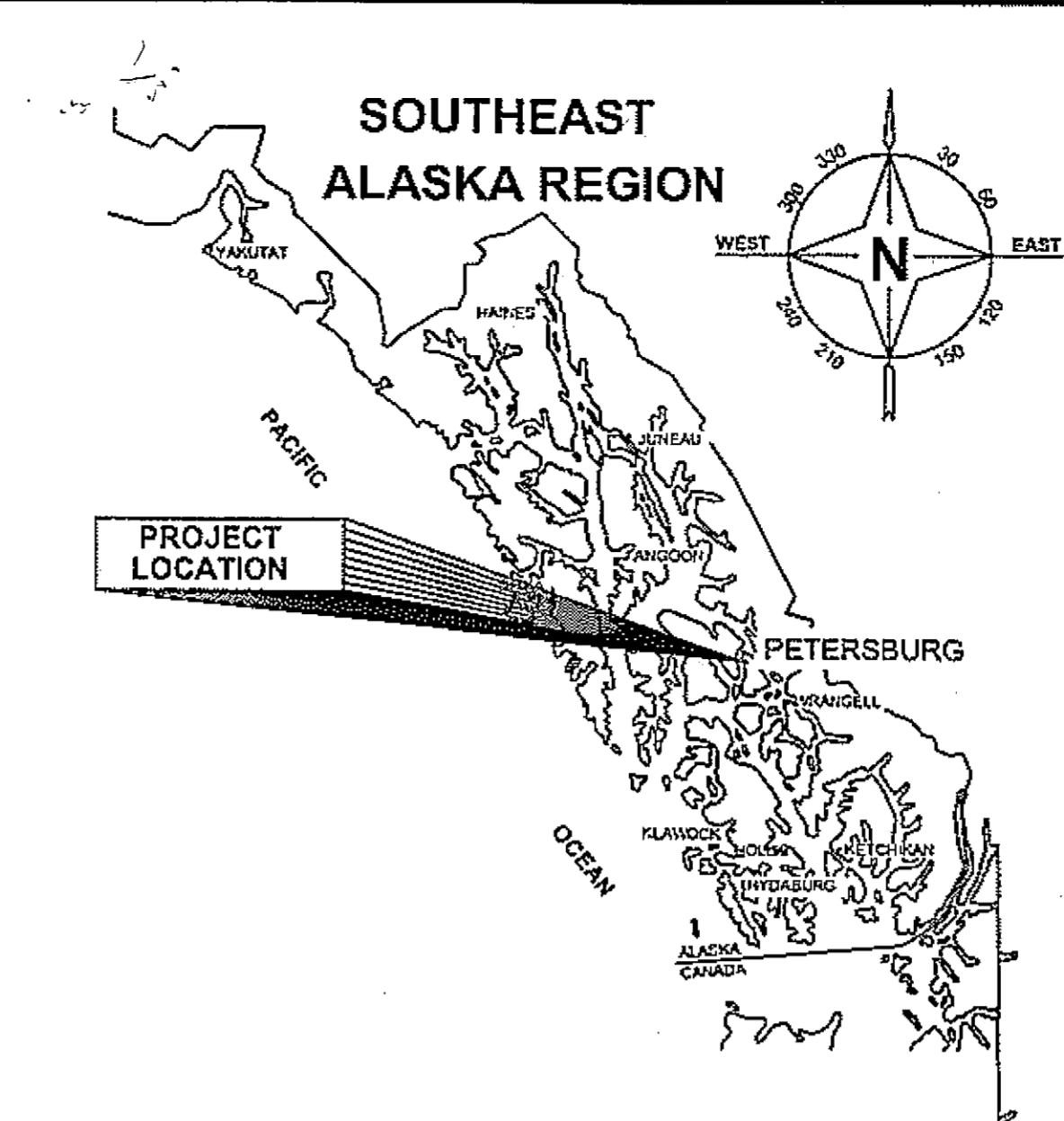
## Department of Transportation and Public Facilities

Design and Engineering Services Division-Southeast Region

### Petersburg, Alaska

# Petersburg South Mitkof Highway Upgrade (Phase II) & South Mitkof Island Terminal Paving

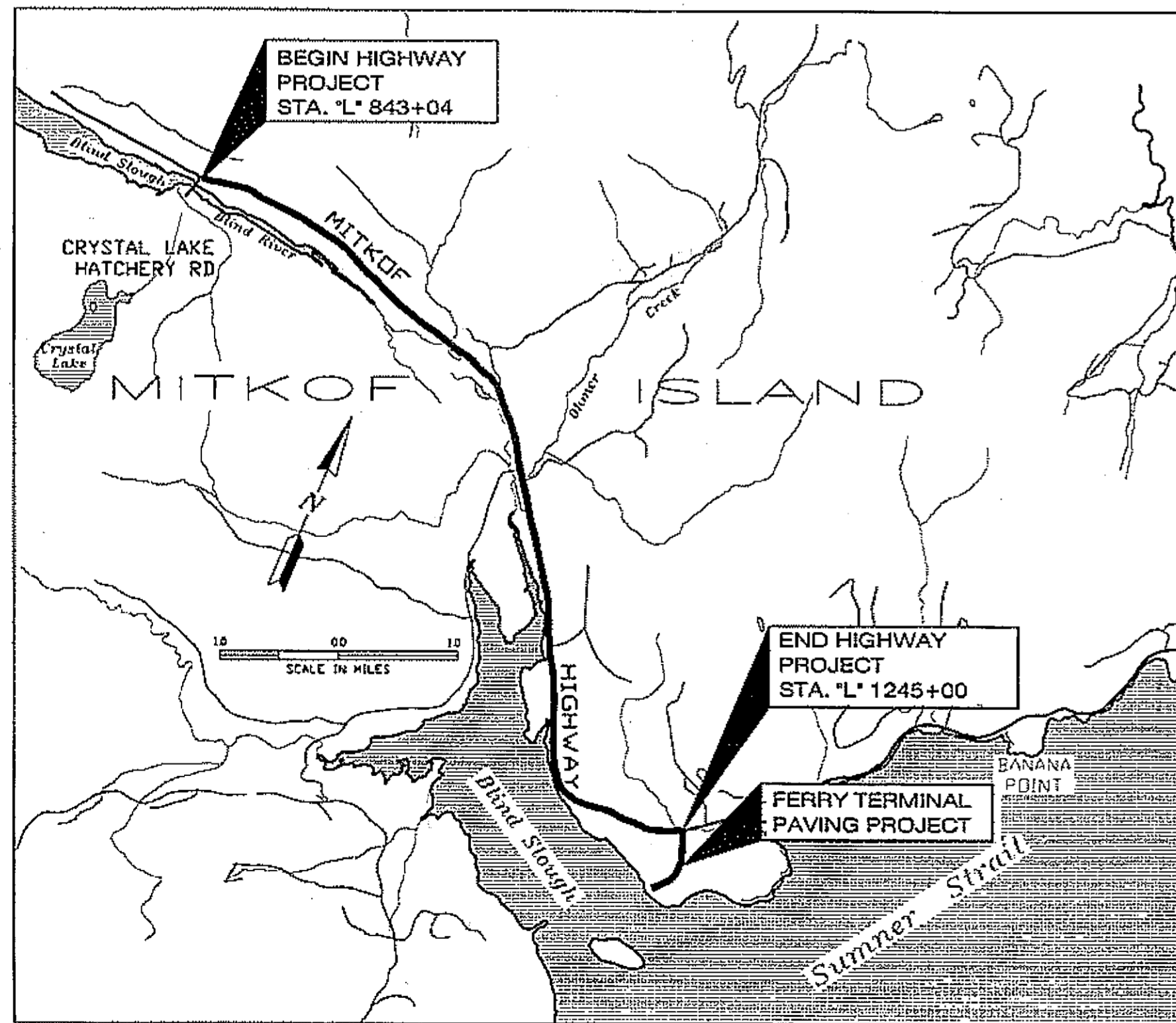
PROJECT No. MGS-0937(31)~68646



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### AS-BUILT PLANS

CONTRACTOR: *SECON*  
 PROJECT ENGINEER: *ART HELL / RYAN REDICK*  
 BEGIN DATE: *06/09/06*  
 END DATE: *10/31/08*



VICINITY MAP

DESIGN DESIGNATIONS		
ITEM	2006	2026
A.D.T.	240	290
D.H.V. 12.7%	30	40
V. (MPH)	50	50
P.H.F.	0.9	0.9
Direction Distribute	55/45	55/45
%T.	3.0%	3.0%
E.A.L. (20yr.)		50,000

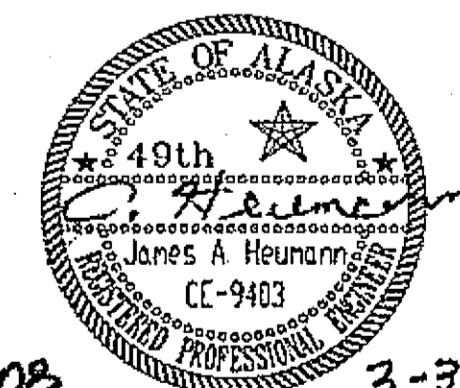
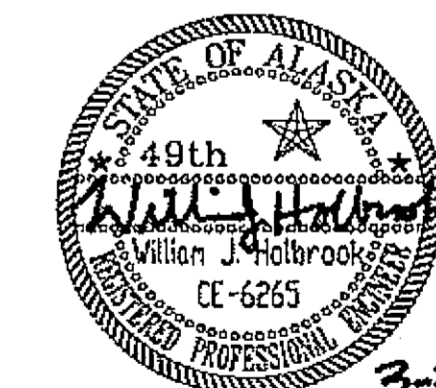
PROJECT SUMMARY
B.O.P. <i>843+04</i> TO <i>841+89</i>
E.O.P. 1245+00
CDS ROUTE NO. 294.000
CDS MILEPOINT 16.24 to 23.74
LENGTH OF PROJECT - 39,606 FT.
LENGTH OF PAVING - 39,606 FT.
LENGTH OF GRADING - 39,606 FT.
WIDTH OF PAVING 24 FT.

### THE FOLLOWING STANDARD DRAWINGS APPLY TO THESE PROJECTS:

A-1	E-00.00	G-09.04S	G-25.20	S-00.10	T-21.02
C-04.12	E-13.00	G-09.04W	G-30.00	S-05.01	
C-05.10	G-00.01	G-10.01	G-31.00	S-30.03	
D-04.21	G-04.06S	G-13.00	I-20.13	T-05.10	
D-06.10	G-04.07W	G-20.10	I-81.00	T-06.00	

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 PLOT: PSPACE OR MSPACE: 1=1(F)

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION



RECOMMENDED FOR APPROVAL: *Jack D. Beedle* 3-3-08  
 JACK D. BEEDLE, P.E. 3/6/08  
 REGIONAL PRE-CONSTRUCTION ENGINEER DATE  
 APPROVED: *Malcolm A. Menzies* 3/6/08  
 MALCOLM A. MENZIES, P.E., L.S. 3/6/08  
 SOUTHEAST REGION DIRECTOR DATE

CERTIFIED TRUE & CORRECT AS-BUILT OF ACTUAL FIELD CONDITION:

CONSTRUCTION PROJECT MANAGER DATE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	MGS-0003(31) ~ 68646	2008	A1	46

No.	DATE	DESCRIPTION

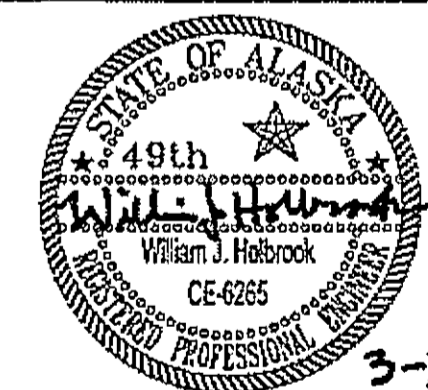
### ESTIMATE OF QUANTITIES

ITEM NO.	PAY ITEM	PAY UNIT	PROJECT QUANTITIES		COMBINED TOTALS
			PETERSBURG SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)	SOUTH MITKOF ISLAND TERMINAL PAVING	
201(1B)	CLEARING	LUMP SUM	ALL REQUIRED		ALL REQUIRED
202(1)	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LUMP SUM	ALL REQUIRED		ALL REQUIRED
202(4)	REMOVAL OF CULVERT PIPE	LINEAR FOOT	583 <del>583</del> 346 543.5		543.5 583 <del>583</del> 346
203(5)	BORROW, TYPE D	CUBIC YARD	22250 <del>22250</del> 23079		22250 <del>22250</del> 23079
203(19)	DITCH BLOCK	EACH	16		16
301(1)	AGGREGATE BASE COURSE, GRADING D-1	TON	24978 All Req'd	2010	All Req'd 26988 34005
303(1)	RE-CONDITIONING	STATION	88 88.5		88 88.5
303(3)	DITCH RE-CONDITIONING	STATION	12 13.2		12 13.2
309(1)	RE-CROWNING	STATION	150	24	174 173.5
401(1)	ASPHALT CONCRETE PAVEMENT, TYPE II CLASS B	TON	20340	2500	22840 22802.72
401(2)	ASPHALT CEMENT, GRADE PG 58-28	TON	1221	150	1371 1145.1
401(6)	ASPHALT PRICE ADJUSTMENT	CONTINGENT SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
401(10)	ASPHALT MATERIAL PRICE ADJUSTMENT	CONTINGENT SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
401(11)	TEST SECTION	LUMP SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
402(1)	STE-1 ASPHALT FOR TACK COAT	TON	0.2 0	0.1 0	0.3 0
501(9)	EPOXY INJECTION PORT REMOVAL	LUMP SUM	ALL REQUIRED		ALL REQUIRED
508(1)	WATERPROOFING MEMBRANE	LUMP SUM	ALL REQUIRED		ALL REQUIRED
603(1-18)	18-INCH CSP	LINEAR FOOT	292 273		292 273
603(9-48)	48-INCH CORRUGATED ALUMINUM PIPE	LINEAR FOOT	88		88 65 65
603(11-48)	END SECTION FOR 48-INCH CORRUGATED ALUMINUM PIPE	EACH	1		1
603(17-24)	24-INCH PIPE	LINEAR FOOT	344 224		313 344 224
603(17-30)	30-INCH PIPE	LINEAR FOOT	52 51		52 51
603(17-36)	36-INCH PIPE	LINEAR FOOT	8 10		8 10
603(20-30)	END SECTION FOR 30-INCH PIPE	EACH	1		1
603(22)	CULVERT MARKER POST, FLEXIBLE	EACH	148		148 142
603(23)	BEAVER DECEIVER	EACH	1		1
603(24)	CULVERT MARKER POST, FLEXIBLE, REMOVE AND REINSTALL	EACH	144		144
606(1)	W-BEAM GUARDRAIL	LINEAR FOOT	150	250	400 500
606(6)	REMOVING AND DISPOSING OF GUARDRAIL	LINEAR FOOT	181		181
606(7)	RAISING EXISTING GUARDRAIL	LINEAR FOOT	400		400 293.75
606(11)	EXTRUDER TERMINAL (ET PLUS)	EACH	2		2
606(13)	BREAKAWAY CABLE TERMINAL	EACH		2	2
609(8)	CONCRETE WHEEL STOP	EACH		15	15 14
611(1)	RIPRAP, CLASS I	CUBIC YARD	180 129.21		180 129.2
615(1)	STANDARD SIGN	SQUARE FOOT	60.58	74.00	134.58 134.58 129.21
615(5)	DELINEATOR, FLEXIBLE	EACH	322		322
615(7)	DELINEATOR, FLEXIBLE, REMOVE AND REINSTALL	EACH	336		336
615(8)	ADJUST EXISTING SIGNS	EACH			0 6
618(1)	SEEDING	ACRE	0.0		0.0
618(4)	HAND SEEDING	ACRE	0.5 4.24		4.32 0.5 4.24
619(2)	MATTING	SQUARE YARD	1885 3368		1885 3368
630(1)	GEOTEXTILE SEPARATION	SQUARE YARD	52000 12779		0 52000 12779
633(1)	SILT FENCE	LINEAR FOOT	2000 2637		2000 2637
639(2)	COMMERCIAL DRIVEWAY	EACH	13		13
640(1)	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
640(4)	WORKERS MEALS AND LODGING OR PER DIEM	LUMP SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
641(1)	EROSION AND POLLUTION CONTROL ADMINISTRATION	LUMP SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
641(3)	TEMPORARY EROSION AND POLLUTION CONTROL	LUMP SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
641(4)	TEMPORARY EROSION AND POLLUTION CONTROL AMENDMENTS	CONTINGENT SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
641(5)	STRAW WATTLES	LINEAR FOOT	500 374		500 374
642(1)	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
642(3)	THREE PERSON SURVEY PARTY	HOUR	50	20	70 9
643(2)	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
643(3)	PERMANENT CONSTRUCTION SIGNS	LUMP SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
643(15)	FLAGGING	CONTINGENT SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
 AND SOUTH MITKOF ISLAND TERMINAL PAVING  
 PROJECT NO. MGS-0937(31) - 68646  
**ESTIMATE OF QUANTITIES & BASIS OF ESTIMATE**

PLAN LEGEND

CHECKED BY: J. HEUMANN



DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION  
PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II) AND SOUTH MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. 68646

**ESTIMATE OF QUANTITIES & BASIS OF ESTIMATE**

PROJECT DESIGNATION NUMBER

MGS-0937(31)-68646

STATE	YEAR
ALASKA	2008

SHEET NUMBER	TOTAL SHEETS
A2	46

No.	DATE	DESCRIPTION

ESTIMATE OF QUANTITIES					
ITEM NO.	PAY ITEM	PAY UNIT	PROJECT QUANTITIES		
			PETERSBURG SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)	SOUTH MITKOF ISLAND TERMINAL PAVING	COMBINED TOTALS
643(23)	TRAFFIC PRICE ADJUSTMENT	CONTINGENT SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
643(25)	TRAFFIC CONTROL	CONTINGENT SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
644(1)	FIELD OFFICE	LUMP SUM	ALL REQUIRED		ALL REQUIRED
644(6)	VEHICLES	LUMP SUM	ALL REQUIRED		ALL REQUIRED
645(1)	TRAINING PROGRAM, 1 TRAINEE / APPRENTICE	LABOR HOUR	500		500
670(1)	PAINTED TRAFFIC MARKINGS	LUMP SUM	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
670(8)	RECESSED PAVEMENT MARKERS	EACH	548	38	584
630(3)	Geotextile Separation, C.O. #1	Square Yard	501	39	540
203(6)	Barrow, Type D, C.O. # 2,3	Ton			19,789
203(6a)	Barrow, Type D, C.O. # 3	Lump Sum			All Required
303(1a)	Agg. Base Course for Leveling, C.O. #3	Lump Sum			All Required
401(9)	Blend Sand, C.O. #5	Lump Sum			All Required
108(1)	Interim Completion Date Credit, C.O. #6	Lump Sum			All Required
202(13)	Asphalt Concrete, C.O. #6	Lump Sum			All Required
203(19)	Excess Material Drilled, C.O. #6	Lump Sum			All Required
404(3)	Asphalt Sealcoater, C.O. #6	Lump Sum			All Required
640(2)	USFS Quarry Site Reclamation, C.O. #6	Lump Sum			All Required

BASIS OF ESTIMATE		
ITEM #	ITEM	FACTOR / QUANTITY
201(18)	CLEARING	0.8 ACRES
203(19)	DITCH BLOCK (TEMPORARY CHECK DAMS)	5 CUBIC YARDS / EACH - 16 TOTAL
301(1)	AGGREGATE BASE COURSE, GRADING D-1	2.04 TONS / CUBIC YARD
401(1)	ASPHALT CONCRETE, TYPE II, CLASS "B"	120 LB/SQ YARD/ IN DEPTH
401(2)	ASPHALT CEMENT, GRADE PG 58-22	5.8% OF A.C. 401(1)
402(1)	STE-1 ASPHALT FOR TACKCOAT	0.10 GAL/S.Y.; 253 GAL/TON
508(1)	WATERPROOFING MEMBRANE	503 SQUARE YARD
630(1)	GEOTEXTILE, SEPARATION	* 13000 LF x 36 LF / 9 = 52000 SY

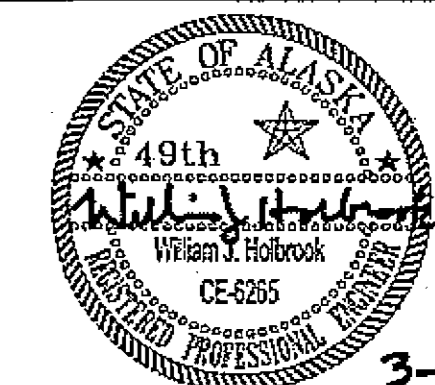
\* OVERLAPS NOT COUNTED

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
AND SOUTH MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. MGS-0937(31) ~ 68646

ESTIMATE OF QUANTITIES &  
BASIS OF ESTIMATE

PLAN LEGEND

CHECKED BY: J. HEUMANN



DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION  
PSG-SOUTH MITKOF HIGHWAY  
UPGRADE (PHASE II) AND SOUTH  
MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. 68646

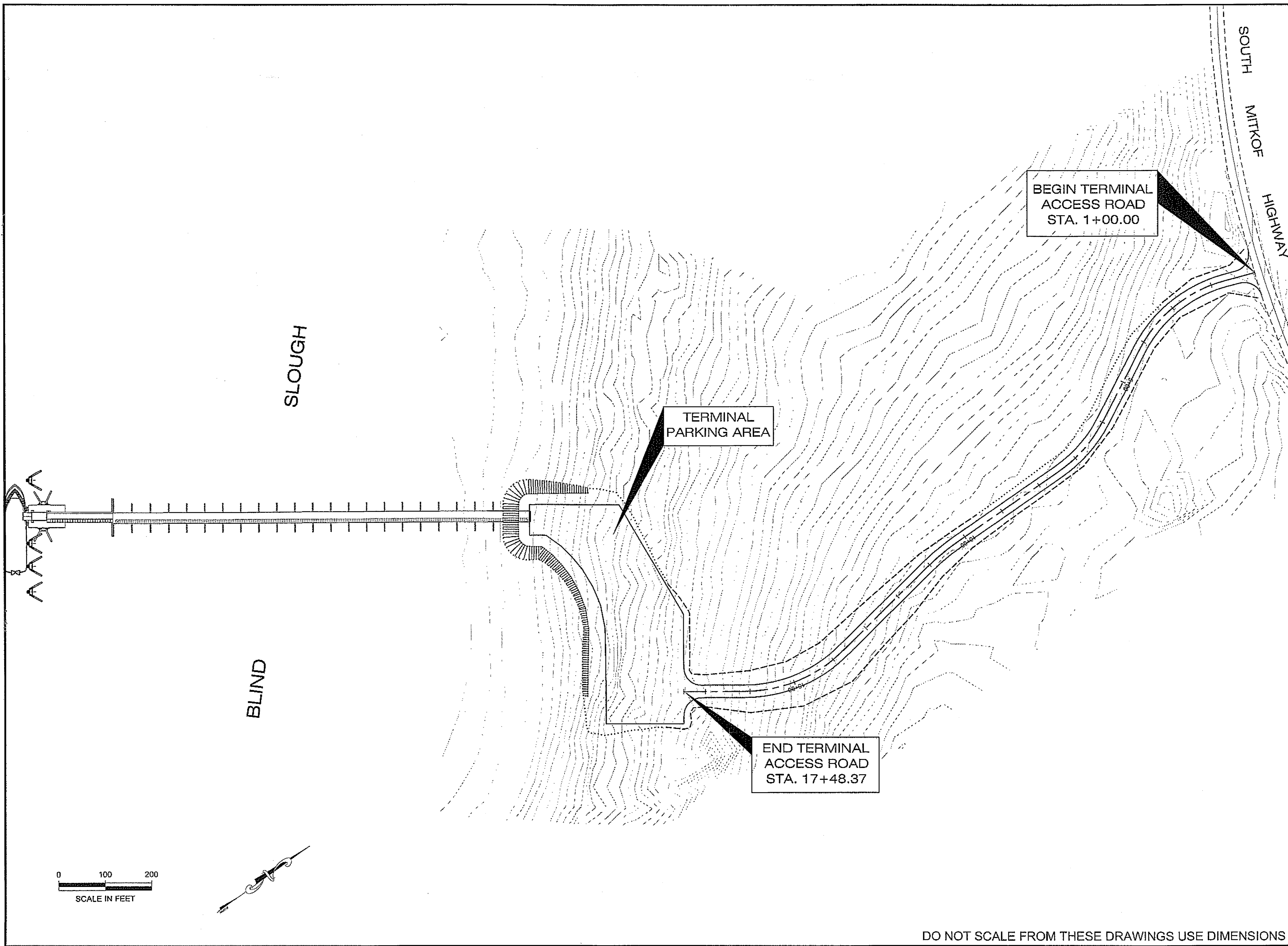
ESTIMATE OF QUANTITIES & BASIS OF ESTIMATE

PROJECT DESIGNATION NUMBER

MGS-0937(31)-68646

STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
A3	46

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

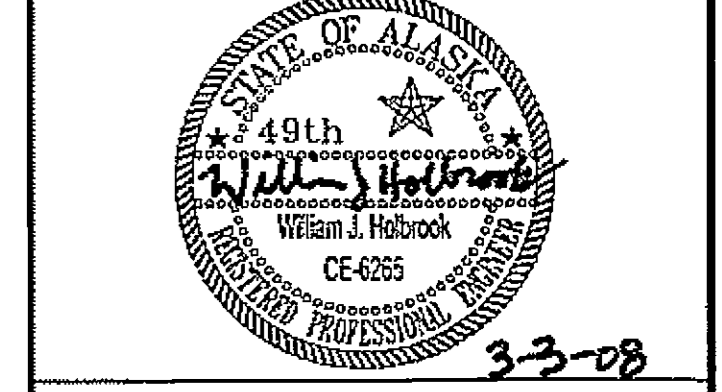
No.	DATE	DESCRIPTION

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
AND SOUTH MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. MGS-0937(31) ~ 68646

**FERRY TERMINAL SITE PLAN**

PLAN LEGEND

CHECKED BY: J. HEUMANN



DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION  
PSG-SOUTH MITKOF HIGHWAY  
UPGRADE (PHASE II) AND SOUTH  
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PROJECT NO. 68646

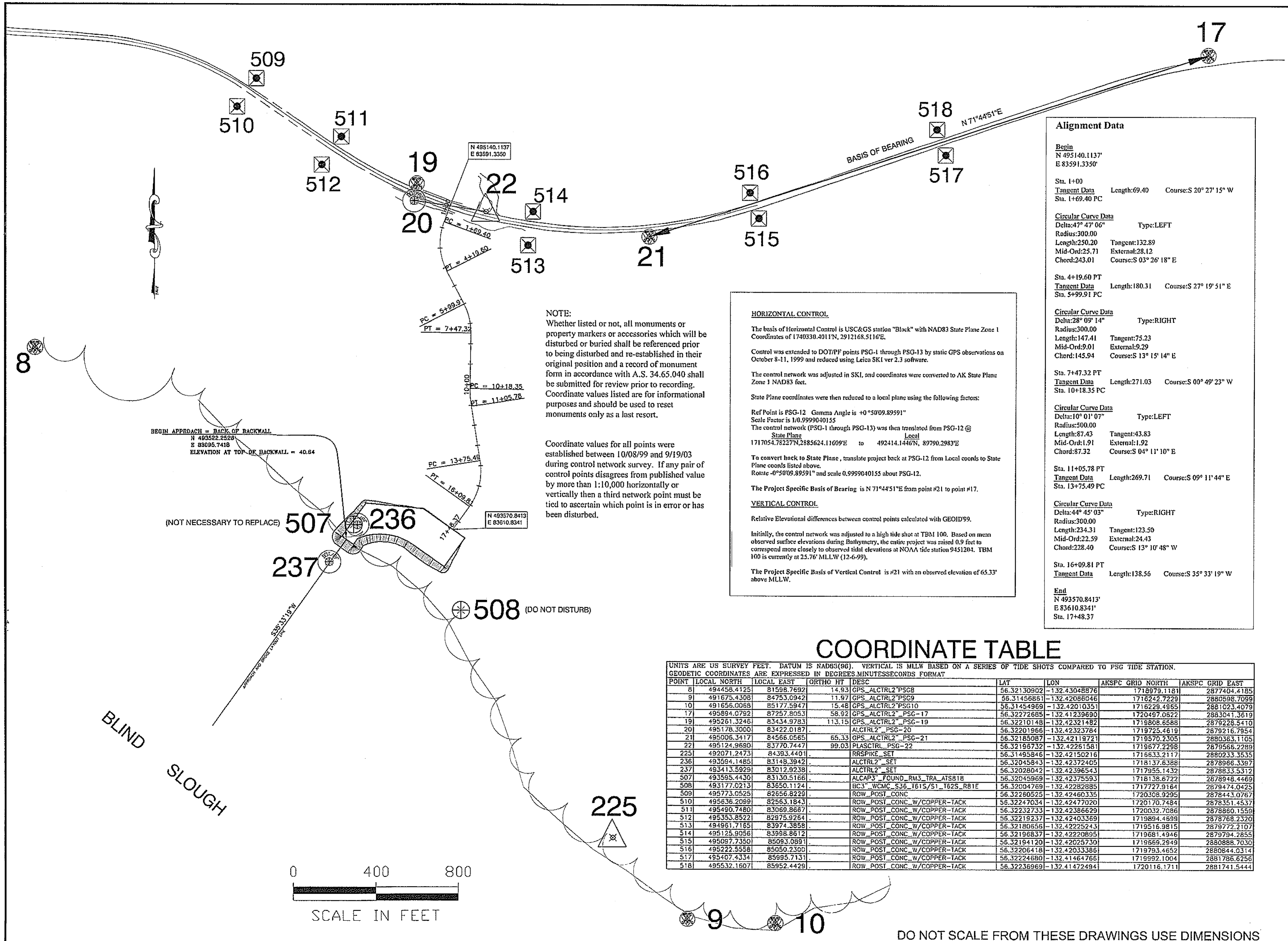
**FERRY TERMINAL SITE PLAN**

PROJECT DESIGNATION NUMBER  
MGS-0937(31)-68646

STATE	YEAR
ALASKA	2008

SHEET NUMBER	TOTAL SHEETS
AA1	46

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



**NOTE:**  
Whether listed or not, all monuments or property markers or accessories which will be disturbed or buried shall be referenced prior to being disturbed and re-established in their original position and a record of monument form in accordance with A.S. 34.65.040 shall be submitted for review prior to recording. Coordinate values listed are for informational purposes and should be used to reset monuments only as a last resort.

Coordinate values for all points were established between 10/08/99 and 9/19/03 during control network survey. If any pair of control points disagrees from published value by more than 1:10,000 horizontally or vertically then a third network point must be tied to ascertain which point is in error or has been disturbed.

**HORIZONTAL CONTROL**  
The basis of Horizontal Control is US&GS station "Black" with NAD83 State Plane Zone 1 Coordinates of 1740330.4011N, 2912168.5116E.  
Control was extended to DOT/PF points PSG-1 through PSG-13 by static GPS observations on October 8-11, 1999 and reduced using Leica SKI ver 2.3 software.  
The control network was adjusted in SKI, and coordinates were converted to AK State Plane Zone 1 NAD83 feet.  
State Plane coordinates were then reduced to a local plane using the following factors:  
Ref Point is PSG-12 Gamma Angle is +0°50'09.89591"  
Scale Factor is 1.0.9999040155  
The control network (PSG-1 through PSG-13) was then translated from PSG-12 @ State Plane Local  
1717054.78227N, 2885624.11609E to 492414.1446N, 89790.2983E  
To convert back to State Plane, translate project back at PSG-12 from Local coords to State Plane coords listed above.  
Rotate -0°50'09.89591" and scale 0.9999040155 about PSG-12.  
The Project Specific Basis of Bearing is N 71°44'51"E from point #21 to point #17.

**VERTICAL CONTROL**  
Relative Elevational differences between control points calculated with GEOID99.  
Initially, the control network was adjusted to a high tide shot at TBM 100. Based on mean observed surface elevations during Bathymetry, the entire project was raised 0.9 feet to correspond more closely to observed tidal elevations at NOAA tide station 9451204. TBM 100 is currently at 25.76' MLLW (12-6-99).  
The Project Specific Basis of Vertical Control is #21 with an observed elevation of 65.33' above MLLW.

**Alignment Data**

**Begin**  
N 495140.1137'  
E 83591.3350'

**Sta. 1+00**  
Tangent Data Length:69.40 Course:S 20° 27' 15" W  
Sta. 1+69.40 PC

**Circular Curve Data**  
Delta:47° 47' 06" Type:LEFT  
Radius:300.00  
Length:250.20 Tangent:132.89  
Mid-Ord:25.71 External:28.12  
Chord:243.01 Course:S 03° 26' 18" E

**Sta. 4+19.60 PT**  
Tangent Data Length:180.31 Course:S 27° 19' 51" E  
Sta. 5+99.91 PC

**Circular Curve Data**  
Delta:28° 09' 14" Type:RIGHT  
Radius:300.00  
Length:147.41 Tangent:75.23  
Mid-Ord:9.01 External:9.29  
Chord:145.94 Course:S 13° 15' 14" E

**Sta. 7+47.32 PT**  
Tangent Data Length:271.03 Course:S 00° 49' 23" W  
Sta. 10+18.35 PC

**Circular Curve Data**  
Delta:10° 01' 07" Type:LEFT  
Radius:500.00  
Length:87.43 Tangent:43.83  
Mid-Ord:1.91 External:1.92  
Chord:87.32 Course:S 04° 11' 10" E

**Sta. 11+05.78 PT**  
Tangent Data Length:269.71 Course:S 09° 11' 44" E  
Sta. 13+75.49 PC

**Circular Curve Data**  
Delta:44° 45' 03" Type:RIGHT  
Radius:300.00  
Length:234.31 Tangent:123.50  
Mid-Ord:22.59 External:24.43  
Chord:228.40 Course:S 13° 10' 48" W

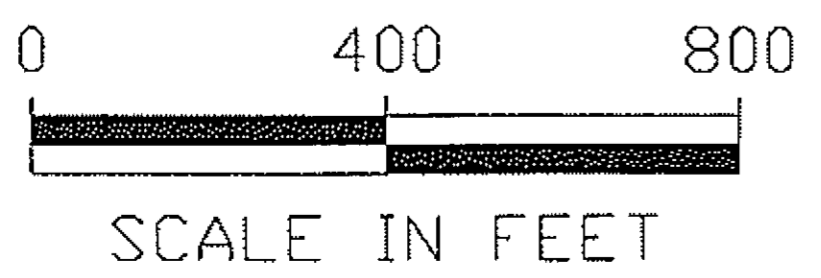
**Sta. 16+09.81 PT**  
Tangent Data Length:138.56 Course:S 35° 33' 19" W  
Sta. 17+48.37

**End**  
N 493570.8413'  
E 83610.8341'  
Sta. 17+48.37

**COORDINATE TABLE**

UNITS ARE US SURVEY FEET. DATUM IS NAD83(96). VERTICAL IS MLLW BASED ON A SERIES OF TIDE SHOTS COMPARED TO PSG TIDE STATION. GEODETTIC COORDINATES ARE EXPRESSED IN DEGREES, MINUTES, SECONDS FORMAT

POINT	LOCAL NORTH	LOCAL EAST	ORTHO HT	DESC	LAT	LONG	AKSPC GRID NORTH	AKSPC GRID EAST
8	494458.4125	81598.7692	14.93	GPS_ALCTRL2_PSG8	56.32150902	-132.43048876	1718675.1181	2877404.4185
9	491675.4308	84753.0942	11.97	GPS_ALCTRL2_PSG9	56.31456861	-132.42086046	1716242.7229	2880598.7099
10	491656.0069	85177.5947	15.48	GPS_ALCTRL2_PSG10	56.31454969	-132.42010351	1716225.4855	2881023.4079
17	495894.0792	87257.8053	58.92	GPS_ALCTRL2_PSG-17	56.32272685	-132.41239690	1720487.0822	2883041.3619
19	495261.3246	83434.9783	113.15	GPS_ALCTRL2_PSG-19	56.32210148	-132.42321482	1719808.6588	2879228.5410
20	495178.3000	83422.0187		ALCTRL2_PSG-20	56.32201966	-132.42323784	1719725.4619	2879216.7954
21	495006.3417	84566.0565	65.33	GPS_ALCTRL2_PSG-21	56.32185087	-132.42119721	1719570.2305	2880363.1105
22	495124.9680	83770.7447	99.03	PLASCTRL_PSG-22	56.32196732	-132.42261581	1719677.2298	2879566.2289
225	492071.2473	84393.4401		RRSPIKE_SET	56.31495846	-132.42150216	1716633.2117	2880233.3535
236	493594.1485	83148.3942		ALCTRL2_SET	56.32045843	-132.42372405	1718137.6388	2878966.3397
237	493413.5929	83012.9238		ALCTRL2_SET	56.32028042	-132.42396543	1717955.1432	2878833.5312
507	493595.4430	83130.5166		ALCAP3_FOUND_RM3_TRA_ATS81B	56.32045969	-132.42375593	1718138.6722	2878948.4469
508	493177.0213	83650.1124		BC3_WCMC_S36_T61S/S1_T62S_R81E	56.32004769	-132.42282885	1717727.9164	2879474.0425
509	495773.0525	82656.8229		ROW_POST_CONC	56.32260525	-132.42460335	1720308.9295	2878443.0767
510	495636.2099	82563.1843		ROW_POST_CONC_W/COPPER-TACK	56.32247034	-132.42477020	1720170.7484	2878351.4537
511	495490.7480	83069.8667		ROW_POST_CONC_W/COPPER-TACK	56.32232733	-132.42386629	1720032.7086	2878860.1559
512	495353.8522	82975.9264		ROW_POST_CONC_W/COPPER-TACK	56.32219237	-132.42403369	1719894.4699	2878768.2320
513	494961.7165	83974.3858		ROW_POST_CONC_W/COPPER-TACK	56.32180656	-132.4225243	1719516.9815	2879772.2107
514	495125.9056	83998.8612		ROW_POST_CONC_W/COPPER-TACK	56.32196837	-132.4220895	1719681.4946	2879794.2855
515	495097.7350	85093.0891		ROW_POST_CONC_W/COPPER-TACK	56.32194120	-132.42025730	1719669.2949	2880888.7030
516	495222.5558	85050.2300		ROW_POST_CONC_W/COPPER-TACK	56.32206418	-132.42033386	1719793.4652	2880844.0314
517	495407.4334	85995.7131		ROW_POST_CONC_W/COPPER-TACK	56.32224680	-132.41464766	1719992.1004	2881786.6256
518	495532.1607	85952.4429		ROW_POST_CONC_W/COPPER-TACK	56.32236969	-132.41472494	1720116.1711	2881741.5444



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH:  
Q:\PSG\68646\PLANSET\68646\_AA2\_SURVEY\_CONTROL.DWG

DRDODGE  
TAB: AA2 Friday, July 29, 2005 11:27:44 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

**RECORD OF REVISIONS**

No.	DATE	DESCRIPTION

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
AND SOUTH MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. MGS-0937(31) ~ 68646

**CONTROL SURVEY DATA SHEET**

PLAN LEGEND

CHECKED BY: T. REED

DESIGNED BY: T. REED

DRAWN BY: T. REED

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION

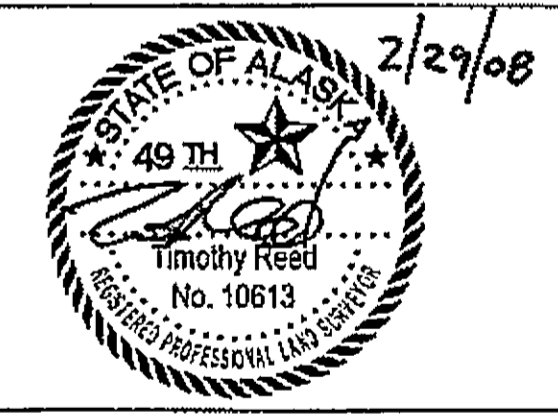
PSG-SOUTH MITKOF HIGHWAY  
UPGRADE (PHASE II) AND SOUTH  
MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. 68646

**CONTROL SURVEY DATA SHEET**

PROJECT DESIGNATION NUMBER  
MGS-0937(31)-68646

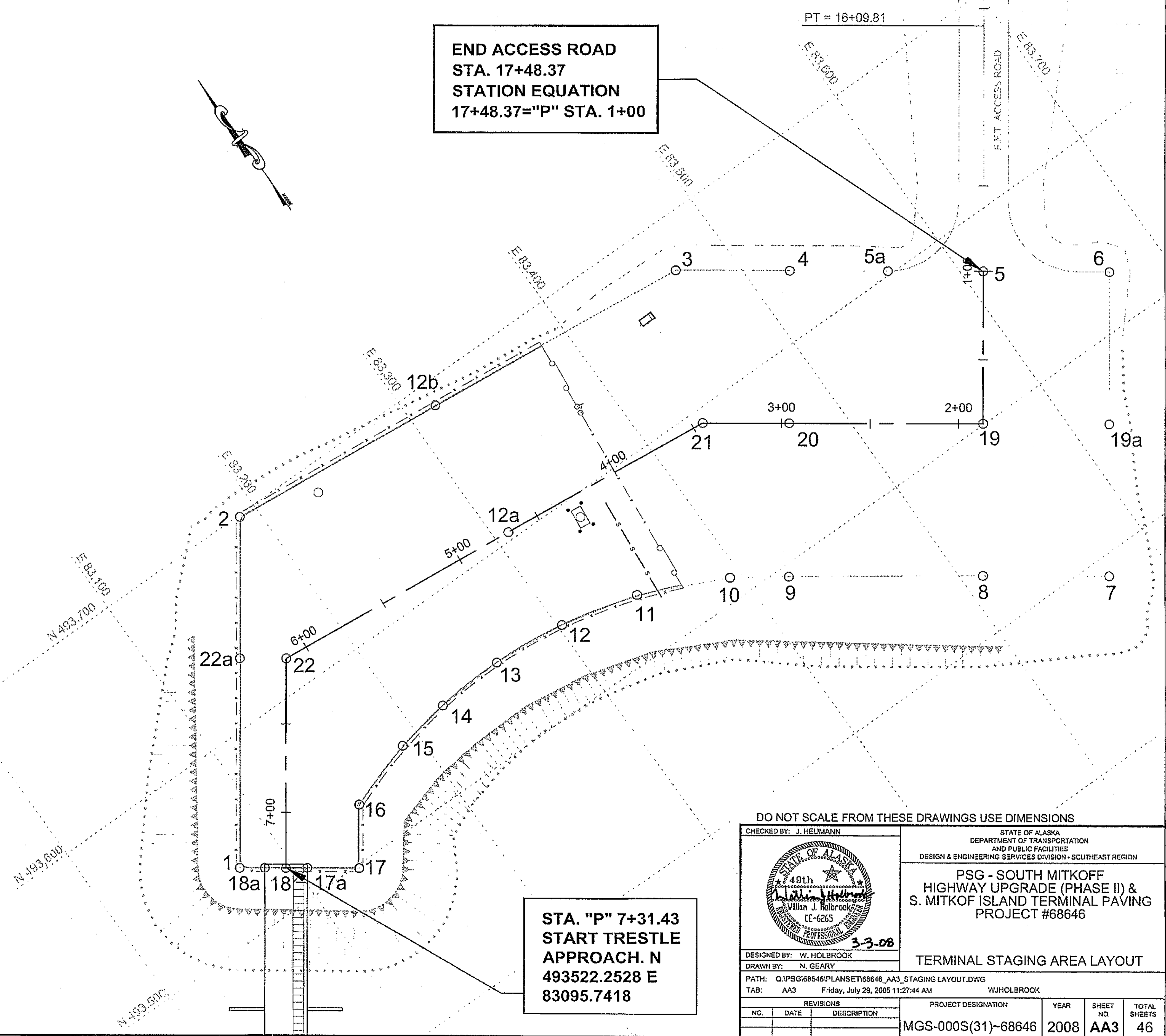
STATE	YEAR
ALASKA	2008

SHEET NUMBER	TOTAL SHEETS
AA2	46



POINT TABLE						
POINT NO.	NORTHING	EASTING	BEARING	DIST.	ELEV.	COMMENTS
1	493537.52	83074.37			40.36	HINGE POINT SUBGRADE (H.P.S.)
2	493699.01	83189.83	N 35°33'53.5" E	198.52'	40.50	H.P.S.
3	493671.68	83469.79	S 84°24'29.1" E	281.44'	48.00	H.P.S.
4	493634.45	83521.86	S 54°26'04.5" E	63.84'	49.00	H.P.S.
5	493870.84	83610.83	S 54°26'13.4" E	109.37'	51.56	CENTERLINE
5a	493602.25	83586.90	N 54°26'11" W	54.01'	50.48	H.P.S.
6	493529.06	83669.19	S 54°24'50" E	125.78'	50.00	H.P.S.
7	493389.17	83569.29	S 35°32'05.0" W	171.90'	47.60	H.P.S.
8	493430.79	83511.06	N 54°26'30.2" W	71.57'	49.00	H.P.S.
9	493493.83	83421.33	N 54°54'38.5" W	109.66'	49.00	H.P.S.
10	493512.51	83393.82	N 55°49'38.9" W	33.25'	48.40	H.P.S.
11	493534.30	83346.21	N 85°24'15.1" W	52.36'		H.P.S.
12	493544.49	83302.40	N 76°54'14.3" W	44.98'	45.10	H.P.S.
12a	493604.57	83308.29	N 5°35'30" E	60.37'	46.90	CENTERLINE
12b	493686.62	83316.32	N 5°35'32" E	82.44'	44.40	H.P.S.
13	493548.23	83280.04			43.29	H.P.S.
14	493546.83	83221.10	S 86°28'38.7" W	39.02'	41.62	H.P.S.
15	493540.49	83189.35	S 80°27'09.4" W	32.19'	40.25	H.P.S.
16	493527.49	83150.36	S 71°33'28.2" W	41.10'	40.15	H.P.S.
17	493498.22	83129.50	S 35°29'17.7" W	35.95'	40.05	H.P.S.
17a	493515.29	83105.51	N 54°33'47" W	29.44'	40.64	BEGIN TRESTLE CORNER / H.P.S.
18	493522.25	83095.74	N 54°30'43.4" W	12.00'	40.64	BEGIN TRESTLE CENTERLINE
18a	493529.22	83085.97	N 54°30'43.4" W	12.00'	40.64	BEGIN TRESTLE CORNER / H.P.S.
19	493500.69	83560.86	N 54°24'27" W	14.26'	40.36	H.P.S.
19a	493459.11	83519.24	S 54°32'04" E	71.67'	51.56	CENTERLINE
20	493564.24	83471.67	N 54°32'04" W	181.19'	49.40	H.P.S.
21	493592.45	83432.07	S 54°26'04.5" E	48.62'	51.56	CENTERLINE / GRADE BREAK
22	493618.63	83164.65	S 84°24'29.1" E	264.08'	50.71	CENTERLINE
22a	493633.91	83143.29	S 54°26'13" E	26.26'	42.10	H.P.S.

CENTERLINE BEARING TABLE				
POINT NO.	NORTHING	EASTING	BEARING	DIST.
5	493870.84	83610.83	S 35°27'58" W	86.12'
19	493500.69	83560.86	S 54°26'04.5" E	109.52'
20	493564.24	83471.67	S 54°26'04.5" E	48.62'
21	493592.45	83432.07	S 84°24'29.1" E	264.08'
22	493618.63	83164.65	S 35°33'54" W	118.48'
18	493522.25	83095.74		



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: J. HEUMANN

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
DESIGN & ENGINEERING SERVICES DIVISION - SOUTHEAST REGION

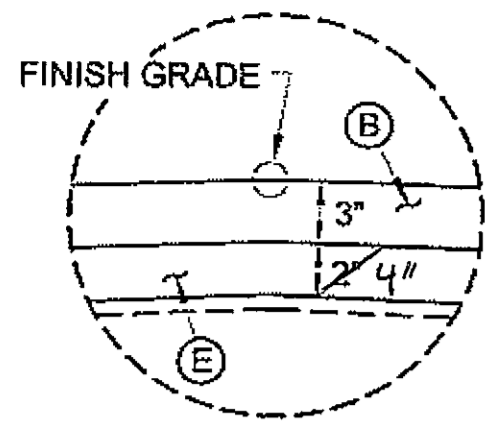
PSG - SOUTH MITKOFF  
HIGHWAY UPGRADE (PHASE II) &  
S. MITKOFF ISLAND TERMINAL PAVING  
PROJECT #68646

TERMINAL STAGING AREA LAYOUT

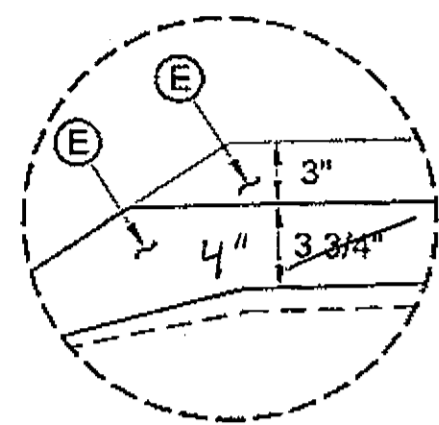
DESIGNED BY: W. HOLBROOK  
DRAWN BY: N. GEARY

PATH: Q:\PSG\68646\PLANS\SET\68646\_AA3\_STAGING\_LAYOUT.DWG  
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REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			MGS-000S(31)-68646	2008	AA3	46



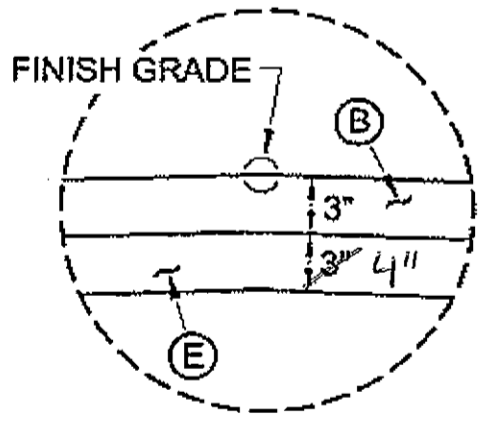
**DETAIL "A"**



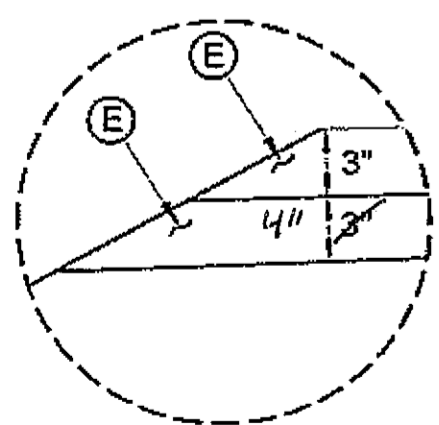
**DETAIL "B"**

TOE OF SLOPE NOT LOWER THAN LIMIT OF ACTIVE DITCH

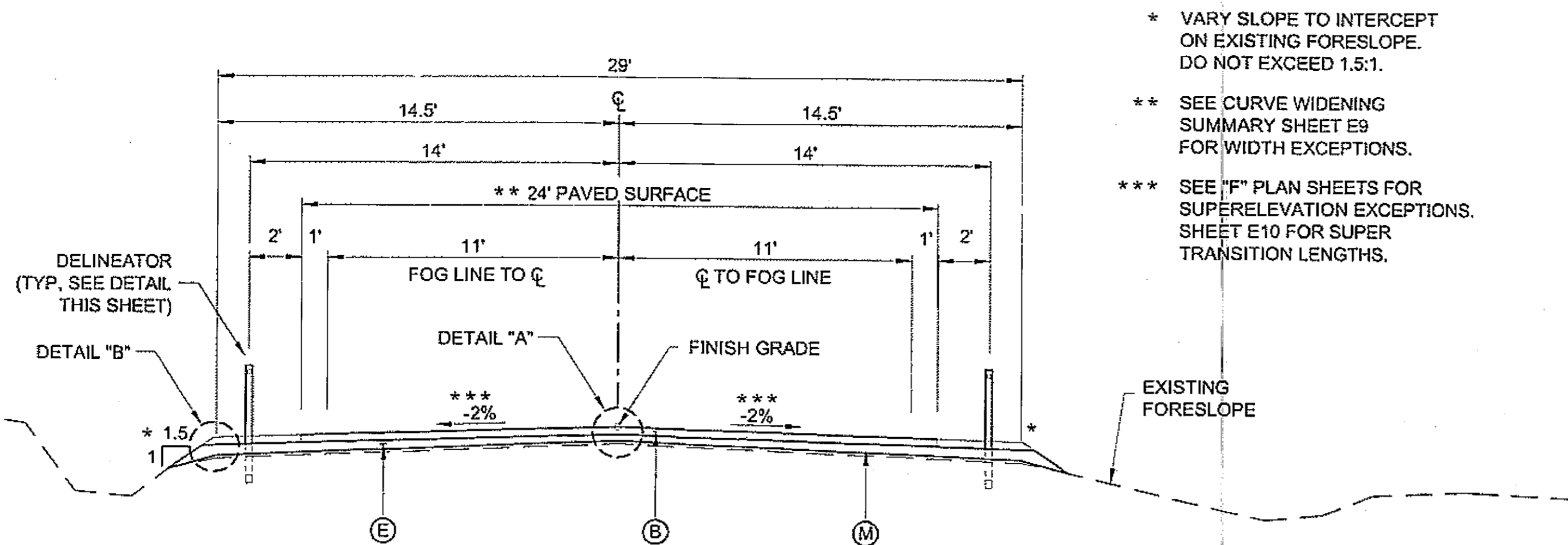
FORESLOPE VARIES 1 1/2:1 OR FLATTER OR AS DIRECTED BY THE ENGINEER (TYP)



**DETAIL "C"**



**DETAIL "D"**

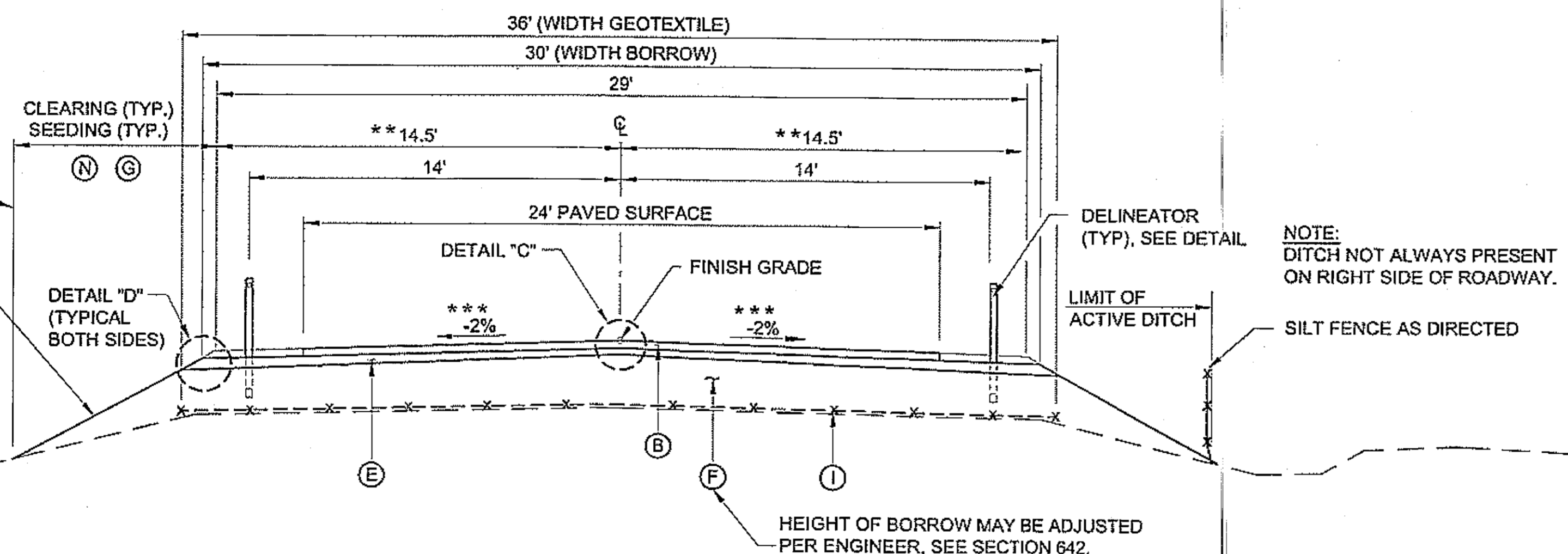


**TYPICAL SECTION A - RE-CROWNED ROADWAY**

BOP STA. 843+04 TO 989+00  
STA. 1029+00 TO 1039+00

- \* VARY SLOPE TO INTERCEPT ON EXISTING FORESLOPE. DO NOT EXCEED 1.5:1.
- \*\* SEE CURVE WIDENING SUMMARY SHEET E9 FOR WIDTH EXCEPTIONS.
- \*\*\* SEE "F" PLAN SHEETS FOR SUPERELEVATION EXCEPTIONS. SHEET E10 FOR SUPER TRANSITION LENGTHS.

**NOTE:**  
DITCH NOT ALWAYS PRESENT ON RIGHT SIDE OF ROADWAY.



**TYPICAL SECTION B - RAISED ROADWAY**

STA. 992+00 TO 1026+00, STA. 1042+00 TO 1050+00  
STA. 1061+50 TO 1075+50, STA. 1109+00 TO 1121+00  
STA. 1135+00 TO 1150+00, STA. 1162+00 TO 1178+00  
STA. 1193+00 TO 1203+00

**NOTES:**

TRANSITION FILL:  
300 FEET BETWEEN TYPICAL SECTION A & TYPICAL SECTION B, STA. 989+00 & 992+00  
STA. 1039+00 & 1042+00

300 FEET BETWEEN TYPICAL SECTION B AND TYPICAL SECTION A, STA. 1026+00 & 1029+00

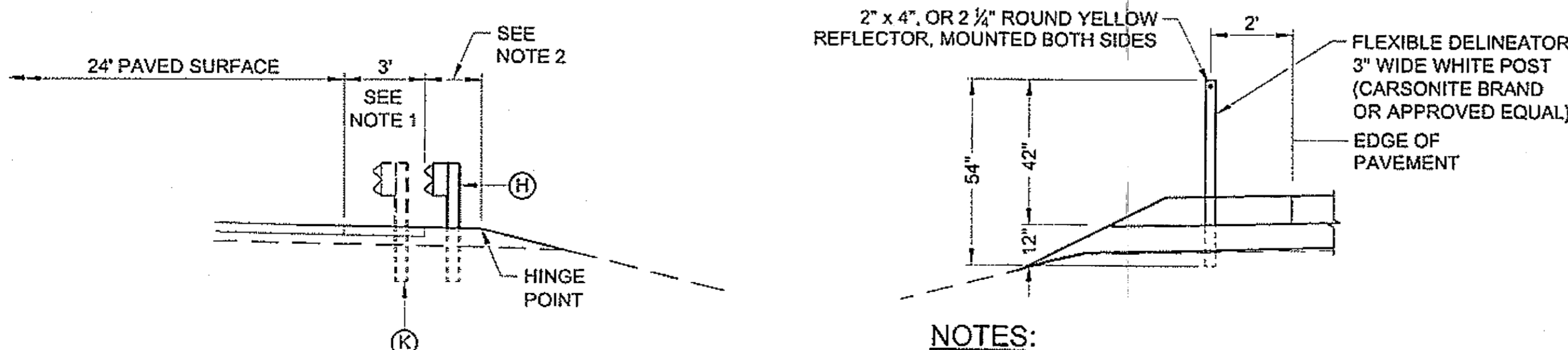
634 FEET AND 365 FEET, RESPECTIVELY, BETWEEN TYPICAL SECTION B AND TYPICAL SECTION C, STA. 1050+00 & 1056+34  
STA. 1061+50 & 1057+85

300 FEET BETWEEN TYPICAL SECTION B AND TYPICAL SECTION D, STA. 1075+50 & 1078+50  
STA. 1121+00 & 1124+00;  
STA. 1150+00 & 1153+00;  
STA. 1178+00 & 1181+00;  
STA. 1203+00 & 1206+00

300 FEET BETWEEN TYPICAL SECTION D AND TYPICAL SECTION B, STA. 1106+00 & 1109+00  
STA. 1132+00 & 1135+00  
STA. 1159+00 & 1162+00  
STA. 1190+00 & 1193+00

CARRY GEOTEXTILE SEPARATION FABRIC 150' MINIMUM INTO TRANSITIONS. EXCEPT AT BRIDGE.

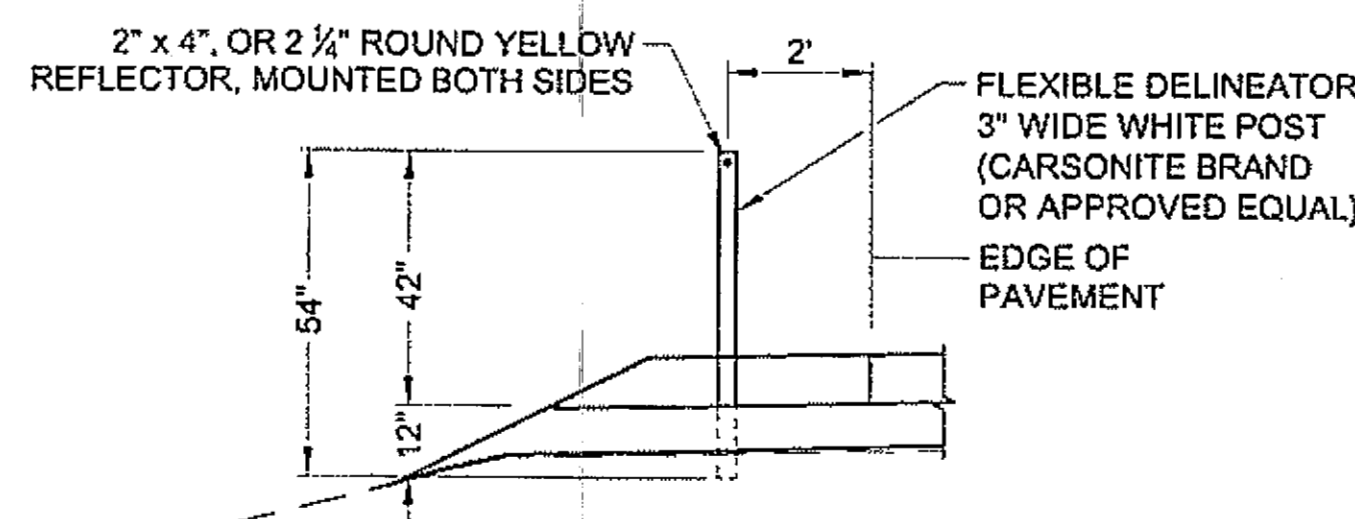
- LEGEND:**
- (A) EXISTING GROUND
  - (B) 3" ASPHALT CONCRETE PAVEMENT, TYPE II, CLASS B (ITEM 401(1))
  - (E) AGGREGATE BASE COURSE, GRADING D-1 (301(1))
  - (F) \* 12" BORROW (SELECT MATERIAL, TYPE "D") (ITEM 203(5))
  - (G) SEEDING (ITEM 618(1))
  - (H) W-BEAM GUARDRAIL
  - (I) GEOTEXTILE SEPARATION (ITEM 630(1))
  - (J) WATERPROOFING MEMBRANE (ITEM 508(1))
  - (K) REMOVING AND DISPOSING OF GUARDRAIL
  - (L) RE-CONDITIONING (ITEM 303(1))
  - (M) RE-CROWNING (ITEM 309(1))
  - (N) CLEARING (ITEM 201(1B))
- \* 4" MIN., 12" MAX. (SEE SPECIALS SECTION 642)



**TYPICAL SECTION GUARDRAIL**

STA. 846+25 TO 848+75

- GUARDRAIL NOTES:**
1. PAVE TO FACE GUARDRAIL, SEE DETAIL SHEET E13.
  2. CASE 1; STANDARD DRAWG G-10.01.



**DELINEATOR DETAIL**

- NOTES:**
1. SEE SECTION 615-3.02 SPECIALS FOR SPACING.
  2. REMOVE AND REINSTALL EXISTING DELINEATORS BETWEEN B.O.P. STATION 843+04 AND OHMER CREEK BRIDGE, SEE SECTION 615 OF THE SPECIALS FOR FURTHER INFORMATION.
  3. SEE SECTION 730-2.05 FOR ADDITIONAL REQUIREMENTS.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Q:\PSG\68646\PLANSET\68646\_B1-2\_TYPICALS.DWG

DRDODGE  
TAB: B1 Friday, July 29, 2005 11:27:44 AM

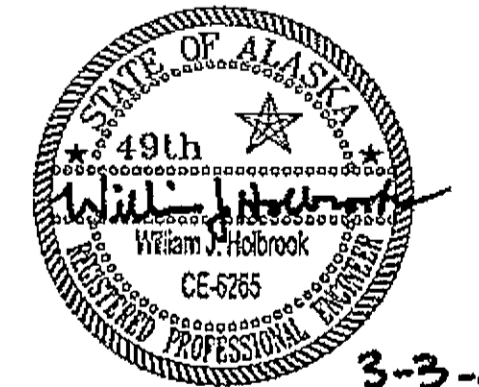
ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
AND SOUTH MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. MGS-0937(31) ~ 68646

**TYPICAL SECTIONS**

**PLAN LEGEND**

CHECKED BY: J. HEUMANN



DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION  
PSG-SOUTH MITKOF HIGHWAY  
UPGRADE (PHASE II) AND SOUTH  
MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. 68646

**TYPICAL SECTIONS**

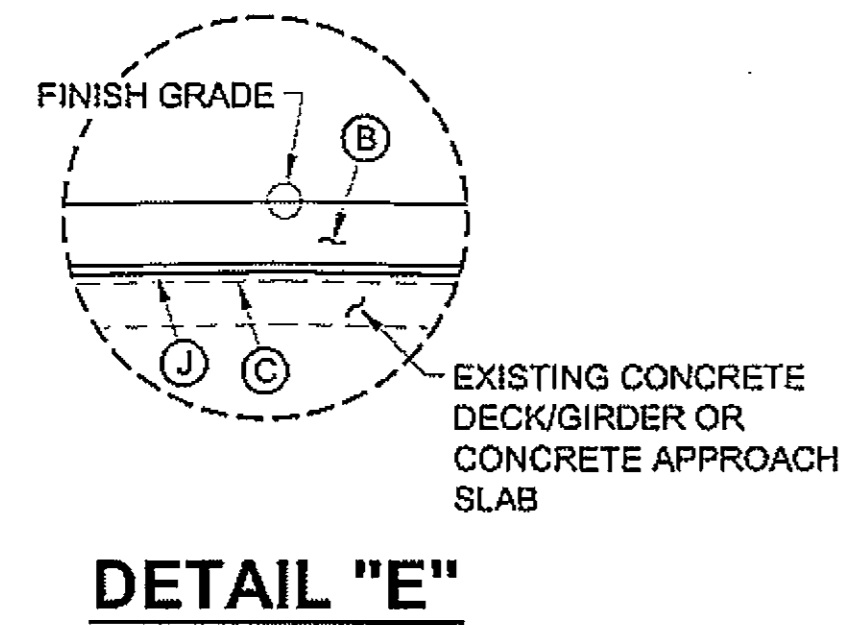
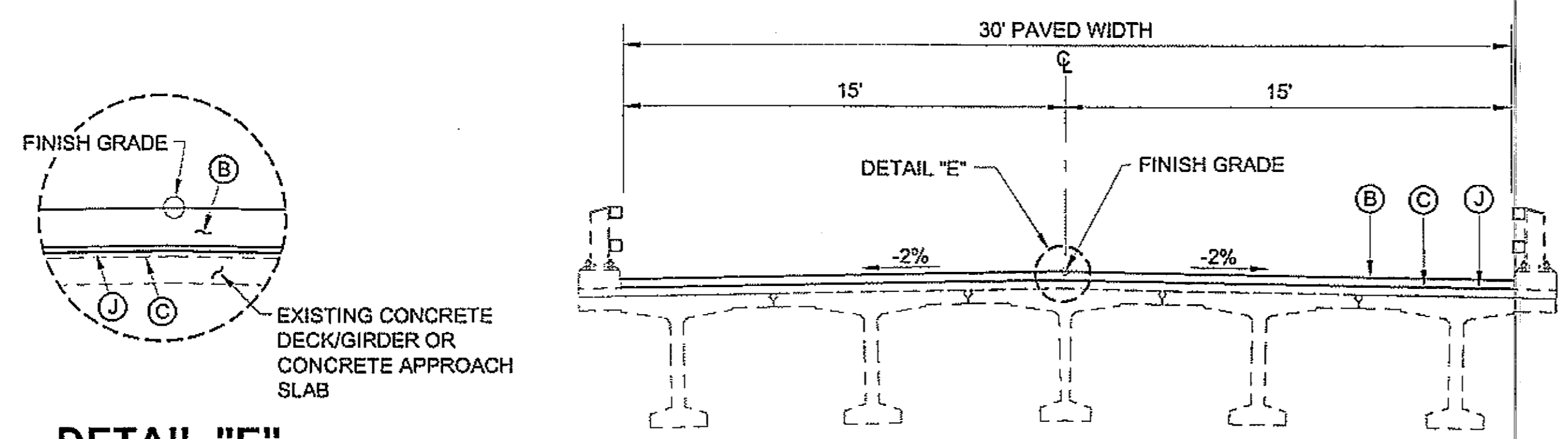
PROJECT DESIGNATION NUMBER

MGS-0937(31)-68646

STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
B1	46

RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
 AND SOUTH MITKOF ISLAND TERMINAL PAVING  
 PROJECT NO. MGS-0937(31) ~ 68646  
**TYPICAL SECTIONS**

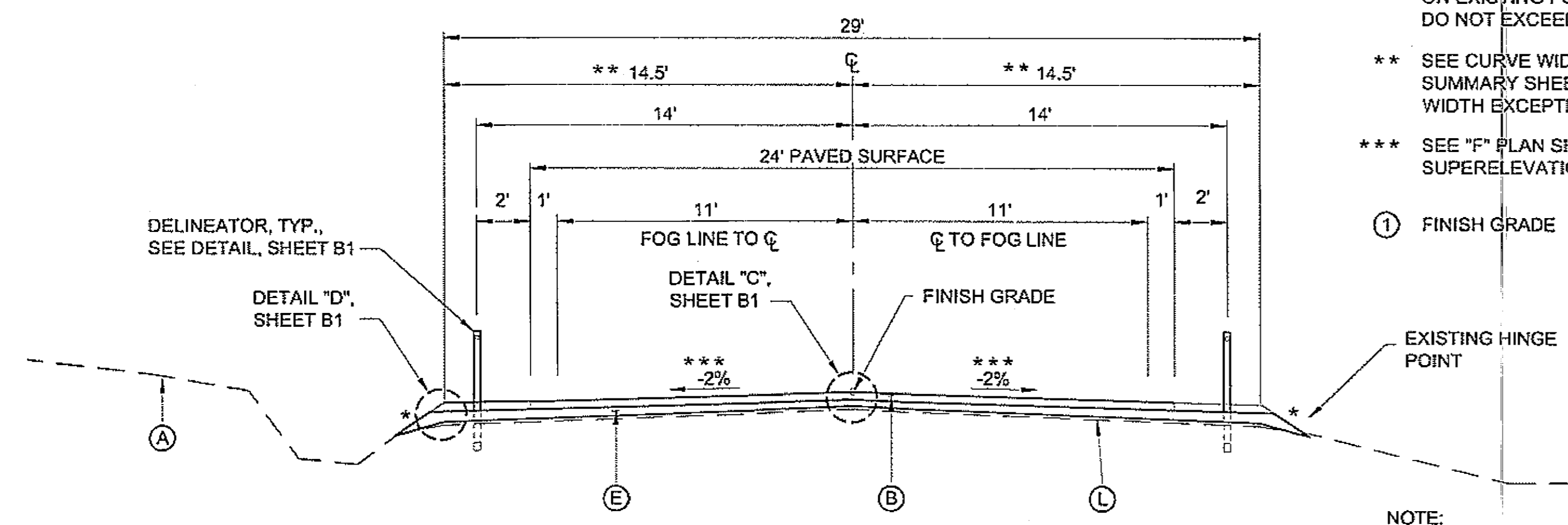


**TYPICAL SECTION C - BRIDGE**  
 † STA. 1056+34 TO 1057+85

† NOTE:  
STATIONING SHOWN INCLUDES  
CONCRETE APPROACH SLABS.

- LEGEND:**
- (A) EXISTING GROUND
  - (B) 3" ASPHALT CONCRETE PAVEMENT, TYPE II, CLASS B (ITEM 401(1))
  - (C) STE-1 ASPHALT FOR TACK COAT (ITEM 402(1))
  - (E) AGGREGATE BASE COURSE, GRADING D-1 (ITEM 301(1))
  - (F) 12" BORROW (SELECT MATERIAL, TYPE "D") (ITEM 203(5))
  - (G) SEEDING (ITEM 618(1))
  - (I) GEOTEXTILE SEPARATION (ITEM 630(1))
  - (J) WATERPROOFING MEMBRANE (ITEM 508(1))
  - (L) RE-CONDITIONING (ITEM 303(1))
  - (N) CLEARING (ITEM 201(1B))
  - (O) MATTING (ITEM 619 (2))
  - (P) DITCH RE-CONDITIONING (ITEM 303(3))

\* 4" MIN., 12" MAX. (SEE SPECIALS SECTION 642)

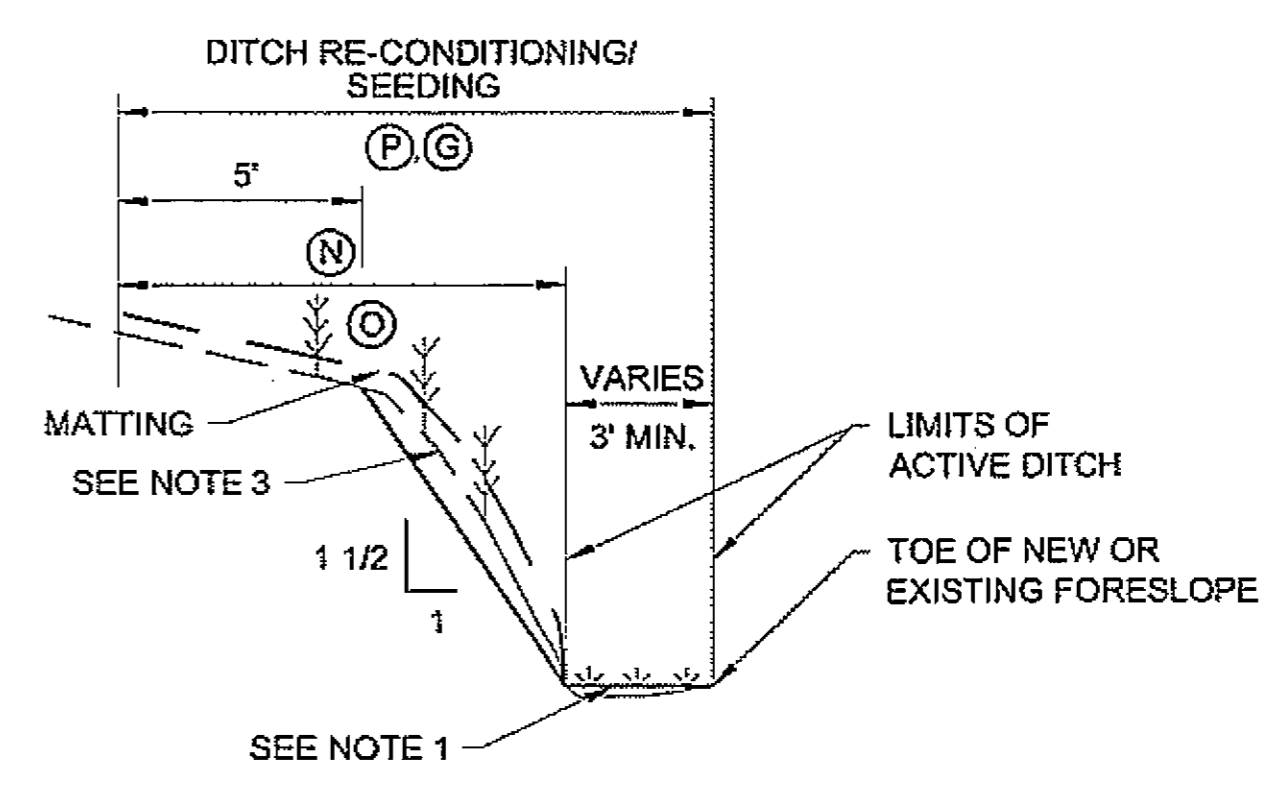


**TYPICAL SECTION D - RE-CONDITIONED ROADWAY**

STA. 1078+50 TO 1106+00  
 STA. 1124+00 TO 1132+00  
 STA. 1153+00 TO 1159+00  
 STA. 1181+00 TO 1189+00  
 STA. 1206+00 TO E.O.P. 1245+00

- \* VARY SLOPE TO INTERCEPT ON EXISTING FORESLOPE. DO NOT EXCEED 1.5:1.
- \*\* SEE CURVE WIDENING SUMMARY SHEET E9 FOR WIDTH EXCEPTIONS.
- \*\*\* SEE "F" PLAN SHEETS FOR SUPERELEVATION EXCEPTIONS.
- (I) FINISH GRADE

NOTE:  
DITCH NOT ALWAYS PRESENT ON RIGHT SIDE OF ROADWAY.



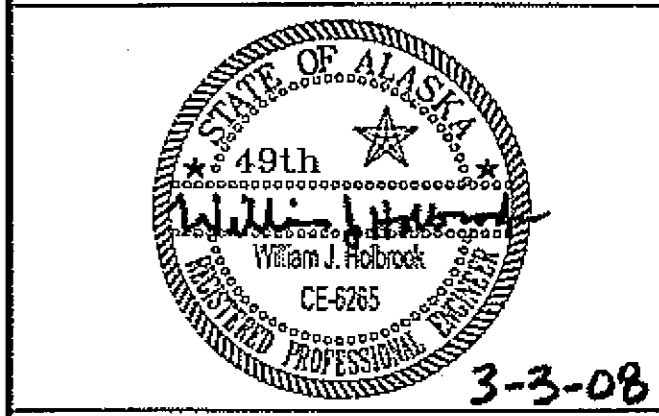
**DITCH RE-CONDITIONING**

- DITCH RE-CONDITIONING NOTES:**
- REMOVE ORGANICS, MUD, SAND, GRAVEL AND WOODY DEBRIS TO LIMITS OF ACTIVE DITCH. RE-ESTABLISH EXISTING STREAM GRADE.
  - SEEDING SHALL OCCUR WHERE VEGETATIVE MAT HAS BEEN DISTURBED. SEEDING SHALL TAKE PLACE DURING DRY WEATHER CONDITIONS.
  - RE-ESTABLISH BACKSLOPE AT 1 1/2:1 AND MAT AFTER CLEARING AND RE-CONDITIONING.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

**PLAN LEGEND**

CHECKED BY: J. HEUMANN



DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 SOUTHEAST REGION  
 PSG-SOUTH MITKOF HIGHWAY  
 UPGRADE (PHASE II) AND SOUTH  
 MITKOF ISLAND TERMINAL PAVING  
 PROJECT NO. 68646

**TYPICAL SECTIONS**

PROJECT DESIGNATION NUMBER

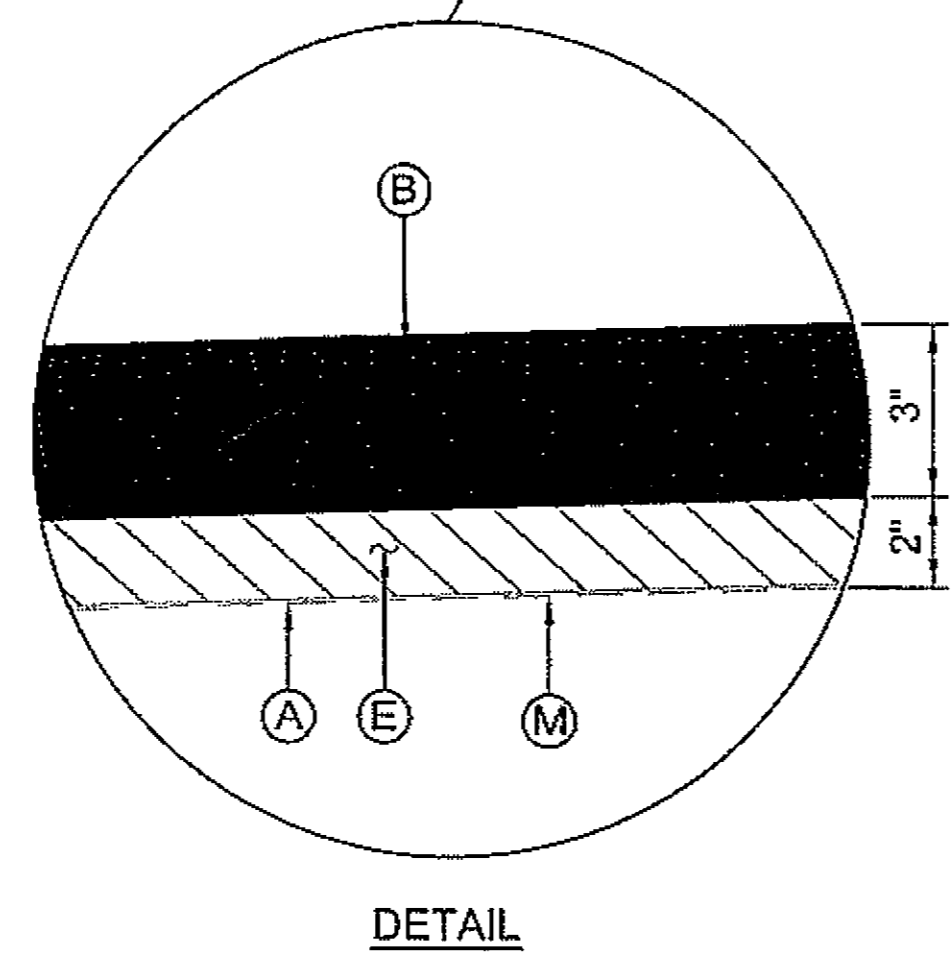
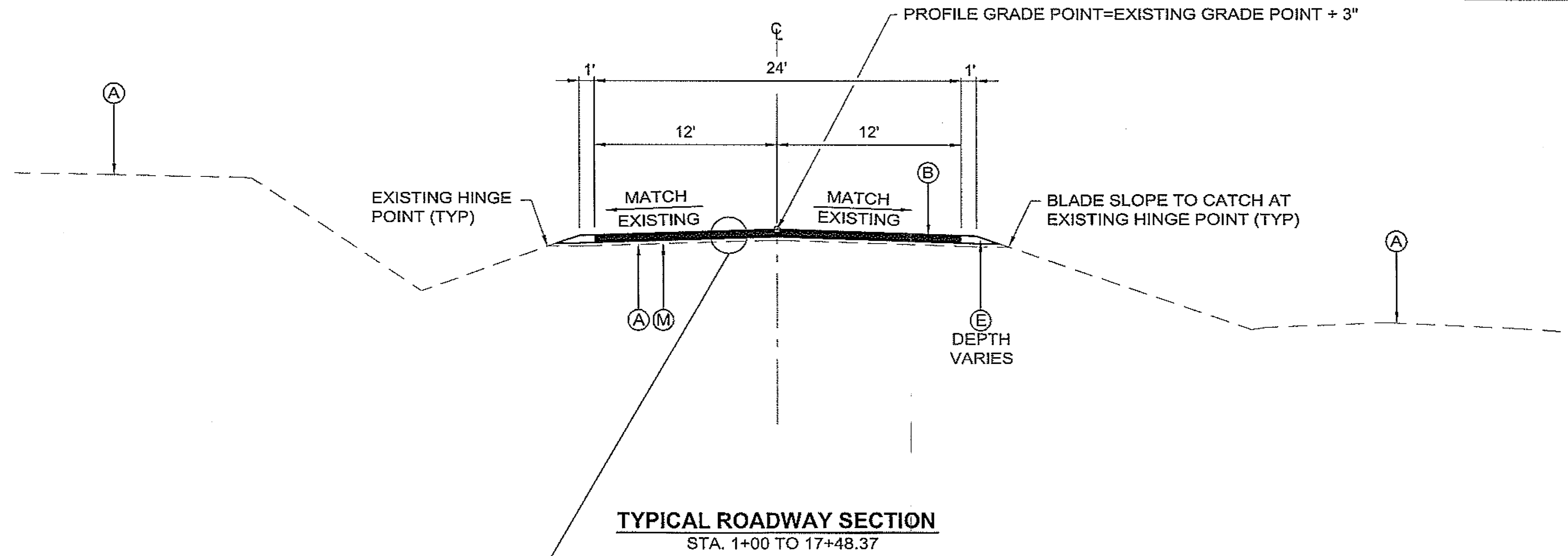
MGS-0937(31)-68646

STATE	YEAR
ALASKA	2008

SHEET NUMBER	TOTAL SHEETS
B2	46

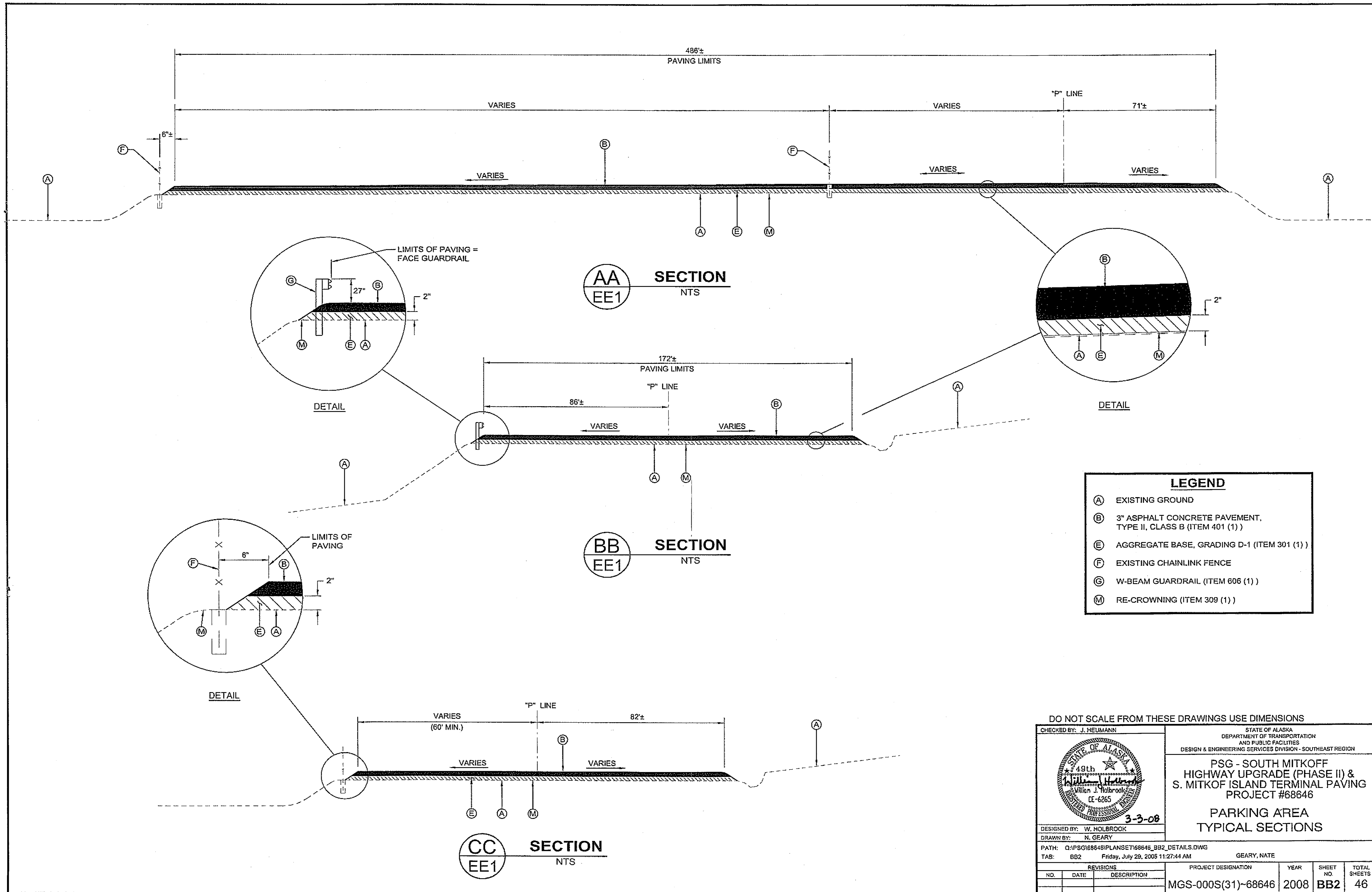
**LEGEND**

- (A) EXISTING GROUND
- (B) 3" ASPHALT CONCRETE PAVEMENT, TYPE II, CLASS B (ITEM 401(1))
- (E) AGGREGATE BASE, GRADING D-1 (ITEM 301 (1))
- (M) RE-CROWNING (ITEM 309(1))



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: J. HEUMANN		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES DESIGN & ENGINEERING SERVICES DIVISION - SOUTHEAST REGION			
		PSG - SOUTH MITKOFF HIGHWAY UPGRADE (PHASE II) & S. MITKOFF ISLAND TERMINAL PAVING PROJECT #68646 ACCESS ROAD TYPICAL SECTION			
		DESIGNED BY: W. HOLBROOK		DRAWN BY: N. GEARY	
PATH: Q:\PSG\68646\PLANSET\68646_BB1_TYP SECTIONS.OWG		GEARY, NATE			
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REVISIONS		PROJECT DESIGNATION		YEAR	SHEET NO.
NO.	DATE	DESCRIPTION			TOTAL SHEETS
		MGS-000S(31)-68646		2008	BB1 46



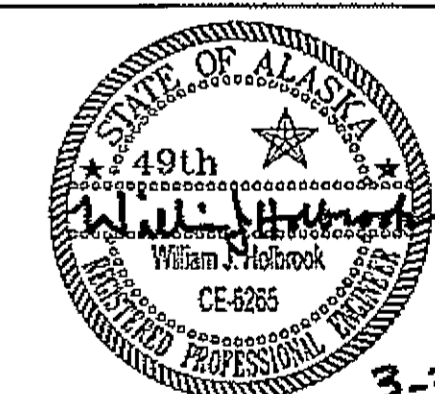
No.	DATE	DESCRIPTION

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
AND SOUTH MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. MGS-0937(31) - 68646

# CULVERTS & DITCHES WORK SUMMARY

## PLAN LEGEND

CHECKED BY: J. HEUMANN



DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION  
PSG-SOUTH MITKOF HIGHWAY  
UPGRADE (PHASE II) AND SOUTH  
MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. 68646

## CULVERTS & DITCHES WORK SUMMARY

PROJECT DESIGNATION NUMBER

MGS-0937(31)-68646

STATE	YEAR
ALASKA	2008

SHEET NUMBER	TOTAL SHEETS
D1	46

### CULVERT PIPE EXTENSION, REPAIR, OR REPLACEMENT, & FISH ENHANCEMENTS SUMMARY

PIPE	STATION	EXIST PIPE SIZE (INCHES)	* EXISTING PIPE MATERIAL	SKEW ANGLE	† PIPE LENGTH (FEET)	WATERS US STREAM	FISH STREAM	ACTION								REMARKS			
								REPLACE PIPE (INCHES)	†† EXTEND REPAIR PIPE (INCHES)	INSTALL OUTLET ROCK	ADD X (FEET) AT INLET	ADD X (FEET) AT OUTLET	REMOVE X (FEET) AT INLET	REMOVE X (FEET) AT OUTLET	ADD INLET END SECTION		REMOVE INLET END SECTION	REMOVE OUTLET END SECTION	
82	1071+77	18	CSP	7	54.2			-	18	X									
83	1073+03	18	CSP	12	53.6			-	18	X									
84	1074+21	18	CSP		55.8			-	18	X									
85	1074+97	18	CSP		68			-	18	X									
86	1076+22	18	CSP	4	68.2			-	18	X	4'								
87	1078+27	18	CSP		47.5			-	18	X	4'								
88	1080+00	18	CSP	10	48			-	18	X									FLUSH PIPES, SEE SPECIALS
89	1080+94	18	CSP		52.6			-	18	X	4'								FLUSH PIPES, SEE SPECIALS
90	1082+22	24	CSP	13	57.5			-	24	X									
91	1084+60	18	CSP		54.8			-	18	X									
92	1086+56	18	CSP	3	63			-	18	X	4'								
93	1088+49	18	CSP	8	55.8			-	18	X									
94	1090+75	36	CSP	6	60.3	X	X	48	-		4'				X				SEE SHEET E6
95	1092+23	24	CSP		61			-	24	X			2'						
96	1094+76	18	CSP		53			-	18	X	4'								
97	1097+88	24	CSP		50.9			-	24	X	4'								
98	1098+61	18	CSP		55.6			-	18	X	4'								
99	1100+56	18	CSP		55.9			-	18	X	4'								
100	1102+04	18	CSP		59			-	18	X	4 5'								
101	1103+59	18	CSP	5	62.1			-	18	X	4'								
102	1108+16	18	CSP		58.5			-	18	X	4 5'								
103	1109+70	30	CSP	16	74.6	X		-	30	X	4'	3'							
104	1112+32	24	CSP		44.5			-	24	X	4'	4'							
105	1114+26	18	CSP	9	56.8			-	18	X	4'								
106	1116+54	24	CSP		52.4	X		-	24	X	4'	2'							
107	1119+26	18	CSP	8	57.2	X		-	18	X	4'			2'					
108	1121+97	18	CSP		69.1	X		-	18	X	4'								
109	1122+74	18	CSP		53.2	X		-	18	X	4'	4'							
110	1125+37	18	CSP		53.1	X		-	18	X	4'	4'							X
111	1128+82	18	CSP	12	71.1	X		-	18	X	4'								X
112	1129+64	18	CSP	12	55.3	X		-	18	X	4'	4'							X
113	1130+95	18	CSP		48.7	X		-	18	X	4'	4'							X
114	1133+08	18	CSP		46.3	X		-	18	X	4'	4'							X
115	1135+01	18	CSP	28	66.1	X		-	18	X	6'	6'							X
116	1136+23	18	CSP	18	53.6	X		-	18	X	4'	4'							X
117	1138+41	18	CSP	43	66.8	X		-	18	X	4'	4 4'							X
118	1141+68	18	CSP	8	51.3	X		-	18	X	4'	4'							X
119	1144+17	18	CSP	24	87.8	X		-	18	X	4'								X
120	1145+01	24	CSP	30	92.8	X		-	24	X									X
121	1150+51	36	CSP	49	130.3	X	X	-	-										REPLACE BEAVER TRAP, SEE SHEET E8
122	1156+66	24	CSP		47.4			-	24	X	4'	4'							X
123	1162+19	18	CSP	11	68.6			-	18	X	4'								X
124	1166+12	24	CSP		52.9			-	24	X	4'								X
125	1169+68	24	CSP		52.6			-	24	X	2 4'			2'					X
126	1172+32	18	CSP		57.4			-	18	X	4'								CLEAN MUD OUTLET, SEE SPECIALS
127	1173+66	24	CSP		59.8			-	24	X	4'								X
129	1174+90	18	CSP		60.3			-	18	X	4'								X
130	1177+71	24	CSP		54.8			-	24	X	6'								X
132	1180+45	18	CSP		56.9			-	18	X	4'								X
133	1184+35	24	CSP	4	52.9			-	24	X	6'								X
134	1185+88	18	CSP		58.6			-	18	X	4'								X
135	1187+48	18	CSP		55			-	18	X	4'								FLUSH PIPES, SEE SPECIALS
136a	1188+60	18	CSP		56.0			-	18	X	4'								X
136	1189+96	18	CSP		67.4			-	18	X	4'								REMOVE OUTLET STREAM DEBRIS, SEE SPECIALS

**NOTES:**

† LENGTHS GIVEN ARE ALONG AXIS OF PIPE.

\* { CSP = CORRUGATED STEEL PIPE  
CSPA = CORRUGATED STEEL PIPE ARCH  
HDPE = HIGH DENSITY POLYETHYLENE PIPE

†† EXISTING PIPES EXTENDED AND REPAIRED, RE-END SECTIONED MUST USE SAME MATERIAL FOR SPLICING, EXTENDING, REPAIRING AS IN-SITU PIPE. CONTRACTOR SHALL TAKE THIS INTO ACCOUNT WHEN PREPARING HIS BID FOR 24-INCH PIPE.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

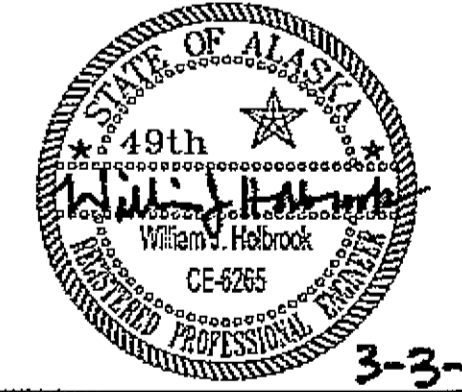
**CULVERT PIPE EXTENSION, REPAIR, OR REPLACEMENT, & FISH ENHANCEMENTS SUMMARY**

PIPE	STATION	EXIST PIPE SIZE (INCHES)	* EXISTING PIPE MATERIAL	SKEW ANGLE	† PIPE LENGTH (FEET)	WATERS US STREAM	FISH STREAM	ACTION								REMARKS			
								REPLACE PIPE (INCHES)	EXTEND REPAIR PIPE (INCHES)	INSTALL OUTLET ROCK	ADD X (FEET) AT INLET	ADD X (FEET) AT OUTLET	REMOVE X (FEET) AT INLET	REMOVE X (FEET) AT OUTLET	ADD INLET END SECTION		REMOVE INLET END SECTION	REMOVE OUTLET END SECTION	
137	1191+41	18	CSP		55.3			-	18	X	4' 5"			5'			X		REMOVE OUTLET STREAM DEBRIS, SEE SPECIALS
138	1194+58	24	CSP		45.3			-	24	X								X	
138a	1197+53	24	CSP		44.4			-	24	X								X	CLEAN OUTLET DITCH, SEE SPECIALS
139	1200+07	24	CSP		42.9			24	-	X	7'							X	LOWER INLET INVERT 1'
140	1204+02	24	CSP		43.2			-	24		5"							X	REMOVE GRAVEL DEBRIS, SEE SPECIALS
141	1207+87	24	CSP		38.9			-	24		5"							X	REMOVE GRAVEL DEBRIS, SEE SPECIALS
142	1211+87	36	CSP		36.6	X		-	36		10' 5"							X	REMOVE GRAVEL DEBRIS, SEE SPECIALS
143	1216+29	43Wx27H	CSPA		39.5	X		30	-	X	4"	4"			X	X			
144	1220+43	24	CSP		48.8	X		-	24									X	CLEAN OUTLET DITCH, SEE SPECIALS
145a	1221+55	24	CSP		50.0	X		24	-										
145	1224+30	24	CSP		48.9			-	24									X	CLEAN OUTLET DITCH, SEE SPECIALS
146	1226+54	24	CSP		37.8			-	24									X	CLEAN OUTLET DITCH, SEE SPECIALS
147	1228+66	24	CSP		54.5			-	24									4"	REMOVE OUTLET BOULDER DEBRIS, SEE SPECIALS
147a	1229+79	24	HDPE	14	55.8			24	-										
148	1232+66	24	CSP	6	45.7			-	24		2'	5"						X	REMOVE OUTLET BOULDER DEBRIS, SEE SPECIALS
149	1235+18	24	CSP		42.4			-	24		2'	40"						X	REMOVE OUTLET BOULDER DEBRIS, SEE SPECIALS
150	1245+05	24	CSP		46.8			-	-										DO NOTHING

**NOTES:**

- † LENGTHS GIVEN ARE ALONG AXIS OF PIPE.
- \* { CSP = CORRUGATED STEEL PIPE  
CSPA = CORRUGATED STEEL PIPE ARCH  
HDPE = HIGH DENSITY POLYETHYLENE PIPE

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Q:\PSG\68646\PLANSET\68646\_D1-4\_SUMMARIES-2.DWG  
 DRDODGE  
 TAB: D2 Friday, July 29, 2005 11:27:44 AM  
 ADDENDUM NUMBER  
 ATTACHMENT NUMBER  
 RECORD OF REVISIONS  
 No. DATE DESCRIPTION  
 PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II) AND SOUTH MITKOF ISLAND TERMINAL PAVING PROJECT NO. MGS-0937(31) ~ 68646  
**CULVERTS & DITCHES WORK SUMMARY**  
 PLAN LEGEND  
 CHECKED BY: J. HEUMANN  
  
 DESIGNED BY: B. HOLBROOK  
 DRAWN BY: N. GEARY  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
 SOUTHEAST REGION  
 PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II) AND SOUTH MITKOF ISLAND TERMINAL PAVING PROJECT NO. 68646  
**CULVERTS & DITCHES WORK SUMMARY**  
 PROJECT DESIGNATION NUMBER  
 MGS-0937(31)~68646  

STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
D2	46

NEW CULVERT MATERIAL SUMMARY							
PIPE NO.	STATION	CULVERT SIZE					CULVERT MATERIAL
		18 INCH	24 INCH	30 INCH	36 INCH	42 INCH	
82	1071+77	4					CSP
83	1073+03	4					CSP
84	1074+21	4					CSP
85	1074+97	4					CSP
86	1076+22	4					CSP
87	1078+27	4					CSP
88	1080+00	4					CSP
89	1080+94	4					CSP
90	1082+22		4				CSP
91	1084+60	4					CSP
92	1086+56	12					CSP
93	1088+49	12					CSP
94	1090+75						65
95	1092+23		4				CSP
96	1094+76	12					CSP
97	1097+88		12				CSP
98	1098+61	12					CSP
99	1100+56	12					CSP
100	1102+04	4					CSP
101	1103+59	12					CSP
102	1108+16	12					CSP
103	1109+70			4			CSP
104	1112+32		12				CSP
105	1114+26	4					CSP
106	1116+54		12				CSP
107	1119+26	4					CSP
108	1121+97	4					CSP
109	1122+74	4					CSP
110	1125+37	12					CSP
111	1128+82	4					CSP
112	1129+64	12					CSP
113	1130+95	12					CSP
114	1133+08	12					CSP
115	1135+01	4					CSP
116	1136+23	4					CSP
117	1138+41	4					CSP
118	1141+68	4					CSP
119	1144+17	4					CSP
120	1145+01		4				CSP
121	1150+51						CSP
122	1156+66		4				CSP
123	1162+19	4					CSP
124	1166+12		4				CSP
125	1169+68		8				CSP
126	1172+32	4					CSP
127	1173+66		8				CSP
129	1174+90	4					CSP
130	1177+71		4				CSP
132	1180+45	4					CSP
133	1184+35		4				CSP
134	1185+88	4					CSP
135	1187+48	4					CSP
136a	1188+60	4					CSP
136	1189+96	4					CSP
137	1191+41	8					CSP
138	1194+58		4				CSP
138a	1197+53		4				CSP
139	1200+07		44				HDPE
140	1204+02		8				CSP
141	1207+87		8				CSP
142	1211+87				5		CSP
143	1216+29			48			CC
144	1220+43		10				CSP
145a	1221+55		50				HDPE
145	1224+30		10				CSP
146	1226+54		10				CSP
147	1228+66		10				CSP
147a	1229+79		66				HDPE
148	1232+66		10				CSP
Total 18 Inch Pipe=		252					
Total 24 Inch Pipe=			314				
Total 30 Inch Pipe=				52			
Total 36 Inch Pipe=					5		
Total 42 Inch Pipe=							
Total 48 Inch Pipe=							65

CC=CONTRACTORS CHOICE

\* NOTE:

- 1.) ALL ORIGINAL CONSTRUCTION METAL PIPES ARE BITUMINOUS COATED.
- 2.) REPAIR AND EXTENSION PIPE LENGTHS SHALL MATCH EXISTING PIPE IN MATERIAL AND COATING.
- 3.) FIELD VERIFY ALL EXISTING PIPES TO REMAIN.
- 4.) ALL NEW 24" PIPE SHALL BE HIGH DENSITY POLYETHYLENE PIPE (HDPE).

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PATH: O:\PSG\68646\PLANSET\68646\_D1-6\_SUMMARIES-2.DWG

DRDDGGE  
TAB: D3 Friday, July 29, 2005 11:27:44 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

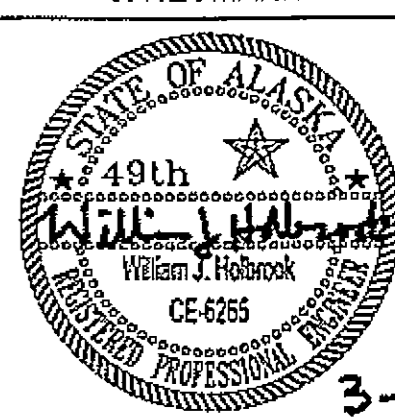
No.	DATE	DESCRIPTION

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
AND SOUTH MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. MGS-0937(31) ~ 68646

**CULVERT SUMMARY**

PLAN LEGEND

CHECKED BY: J. HEUMANN



DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION

PSG-SOUTH MITKOF HIGHWAY  
UPGRADE (PHASE II) AND SOUTH  
MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. 68646

**CULVERT SUMMARY**

PROJECT DESIGNATION NUMBER  
MGS-0937(31)-68646

STATE	YEAR
ALASKA	2008

SHEET NUMBER	TOTAL SHEETS
D3	46

CULVERT REMOVAL SUMMARY				
PIPE NO.	STATION	SIZE (INCHES)	REMOVAL LENGTH (FEET)	REMARKS
82	1071+77	18	4	
83	1073+03	18	4	
84	1074+21	18	4	
85	1074+97	18	4	
86	1075+22	18	4	
87	1078+27	18	4	
88	1080+00	18	4	
89	1080+94	18	4	
90	1082+22	24	4	
91	1084+60	18	4	
92	1086+56	18	11	
93	1088+49	18	11	
94	1090+75	36	60	
95	1092+23	24	4	
96	1094+76	18	11	
97	1097+88	24	11	
98	1098+61	18	11	
99	1100+56	18	11	
100	1102+04	18	4	
101	1103+59	18	11	
102	1108+16	18	11	
103	1109+70	30	4	
104	1112+32	24	11	
105	1114+26	18	4	
106	1116+54	24	11	
107	1119+26	18	4	
108	1121+97	18	4	
109	1122+74	18	4	
110	1125+37	18	11	
111	1128+82	18	4	
112	1129+64	18	11	
113	1130+95	18	11	
114	1133+08	18	11	
115	1135+01	18	4	
116	1136+23	18	4	
117	1138+41	18	4	
118	1141+68	18	4	
119	1144+17	18	4	
120	1145+01	24	4	
122	1156+66	24	4	
123	1162+19	18	4	
124	1166+12	24	4	
125	1169+68	24	7	
126	1172+32	18	4	
127	1173+66	24	7	
129	1174+90	18	4	
130	1177+71	24	4	
132	1180+45	18	4	
133	1184+35	24	4	
134	1185+88	18	4	
135	1187+48	18	4	
136a	1188+60	18	4	
136	1189+96	18	4	
137	1191+41	18	7	
138	1194+58	24	4	
138a	1197+53	24	4	
139	1200+07	24	43	
140	1204+02	24	7	
141	1207+87	24	7	
142	1211+87	36	7	
143	1216+29	43x27	40	
144	1220+43	24	7	
145a	1221+55	24	50	
145	1224+30	24	7	
146	1226+54	24	7	
147	1228+66	24	7	
147a	1229+79	24	56	
148	1232+66	24	9	
149	1235+18	24	12	
			TOTAL = 583	

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DRDODGE  
TAB: D4 Friday, July 29, 2005 11:27:44 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

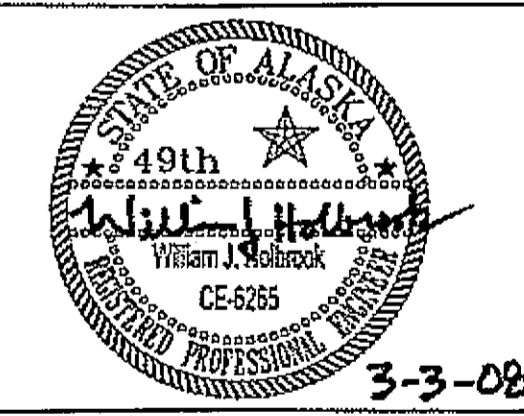
No.	DATE	DESCRIPTION

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
AND SOUTH MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. MGS-0937(31) - 68646

**CULVERT SUMMARY**

PLAN LEGEND

CHECKED BY: J. HEUMANN



DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION

PSG-SOUTH MITKOF HIGHWAY  
UPGRADE (PHASE II) AND SOUTH  
MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. 68646

**CULVERT SUMMARY**

PROJECT DESIGNATION NUMBER

MGS-0937(31)-68646

STATE	YEAR
ALASKA	2008

SHEET NUMBER	TOTAL SHEETS
D4	46

TEMPORARY CHECK DAM				
PIPE	STATION	INLET	OUTLET	REMARKS
P-56	992+60	X		LOCATE AT NORTHEAST/SOUTHEAST SIDES OF CULVERT (2 REQ'D)
P-58	998+60	X		LOCATE AT SOUTHEAST SIDE OF CULVERT (1 REQ'D)
P-66	1022+30	X	X	LOCATE AT NORTHWEST/SOUTHWEST SIDES OF CULVERT (2 REQ'D)
P-67	1023+50	X	X	LOCATE AT NORTHEAST/SOUTHEAST SIDES OF CULVERT (2 REQ'D)
P-73	1043+75	X	X	LOCATE AT NORTHEAST/NORTHWEST SIDES OF CULVERT (2 REQ'D)
P-79	1080+50	X		LOCATE AT NORTHEAST SIDE OF CULVERT (1 REQ'D)
P-89	1080+90	X		LOCATE AT NORTH SIDE OF CULVERT (1 REQ'D)
P-94	1090+80	X		LOCATE AT NORTHWEST SIDE OF CULVERT (1 REQ'D)
P-95	1092+15	X		LOCATE AT NORTHWEST SIDE OF CULVERT (1 REQ'D)
P-138	1194+55	X		LOCATE AT NORTHWEST/NORTHEAST SIDES OF CULVERT (2 REQ'D)
TOTAL = 15 EACH				

NOTE:  
TEMPORARY CHECK DAMS PAID FOR AS DITCH BLOCKS.

DITCH RECONDITIONING SUMMARY						
FROM STATION	TO STATION	LEFT	RIGHT	LENGTH		TOTAL LENGTH (FEET)
				LEFT	RIGHT	
1080+50	1081+00	X	-	50	-	50
1082+50	1083+25	X	-	75	-	75
1083+50	1084+60	X	-	110	-	110
1086+25	1086+75	X	-	50	-	50
1182+75	1183+40	X	-	65	-	65
1185+90	1186+40	X	-	50	-	50
1189+00	1189+50	X	-	50	-	50
1197+80	1204+60	X	-	680	-	680
TOTAL = 1,130						

MATTING SUMMARY					
FROM STATION	TO STATION	INLET DITCH	OUTLET DITCH	SUBTOTAL LENGTH (FT)	REMARKS
1080+50	1081+00	X		50	
1082+50	1083+25	X		75	
1083+50	1084+60	X		110	
1086+25	1086+75	X		50	
1182+75	1183+40	X		65	
1185+90	1186+40	X		50	
1189+00	1189+50	X		50	
1197+80	1204+60	X		680	
TOTAL: 1,130					
COVERAGE AREA = 1,130 x 15/9 = 1,885					

BEFORE  
BOP, NO WORK  
PERFORMED

ADJUST EXISTING GUARDRAIL SUMMARY				
STATION TO STATION	LEFT (FEET)	RIGHT (FEET)	TOTAL (FEET)	REMARKS
1055+60 TO 1058+40	X	X	400	4 APPROACH LEGS AT BRIDGE

NEW GUARDRAIL SUMMARY				
STATION TO STATION	LEFT (FEET)	RIGHT (FEET)	SUBTOTAL (FEET)	REMARKS
846+25 TO 848+75	-	-	150	LENGTH DOES NOT INCLUDE END TREATMENTS-SEE SHT E11-12
TOTAL = 150				

GUARDRAIL REMOVAL SUMMARY				
STATION TO STATION	LEFT (FEET)	RIGHT (FEET)	SUBTOTAL (FEET)	REMARKS
846+62 TO 848+43	-	-	181	REMOVE / REPLACE EXISTING GUARDRAIL
TOTAL = 181				

NEW GUARDRAIL END TERMINAL			
ET - 2000			
NO.	STATION	OFFSET	REMARKS
1	846+25	RT	
2	848+75	RT	

DITCH BLOCK SUMMARY				
PIPE	STATION	INLET	OUTLET	REMARKS
P-82	1071+77	X		LOCATE AT NORTHWEST SIDE OF CULVERT (1 REQ'D)
TOTAL = 1 EACH				

DRIVEWAY SUMMARY				
STATION	OFFSET		TYPE = { C= COMMERCIAL T= TURNOUT A= ACCESS ROAD	REMARKS
	LEFT	RIGHT		
843+00 (Crystal Lake Hatchery Rd.)		X	A	CONSTRUCT AS DIRECTED
865+30	X		C	SEE SHEET E14
907+75		X	T	" " "
979+45 (Man Made Hole)		X	C	" " "
1013+85 (3 Lakes Loop)	X		A	CONSTRUCT AS DIRECTED
1052+50 (F.S. Rd. #6245)		X	A	CONSTRUCT AS DIRECTED
1055+00		X	C	SEE SHEET E14
1058+65 (F.S. Rd. #40010)	X		A	CONSTRUCT AS DIRECTED
1071+00 (Ohmer Ck. Campground #6238)		X	C	SEE SHEET E14
1135+35 (F.S. Rd. #6224)	X		C	" " "
1196+75 (Log Transfer Facility Access Rd.)		X	A	CONSTRUCT AS DIRECTED
1221+15	X		A	" " "
1240+00		X	A	" " "
TOTAL = 13				

PATH:  
Q:\PSG68646\PLANSET\68646\_D1-4\_SUMMARIES-2.DWG

BRIDGE  
TAB: D5 Friday, July 29, 2005 11:27:44 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

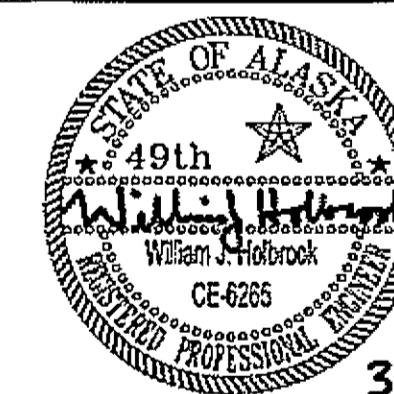
No.	DATE	DESCRIPTION

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
AND SOUTH MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. MGS-0937(31) ~ 68646

MISCELLANEOUS  
SUMMARIES

PLAN LEGEND

CHECKED BY: J. HEUMANN



3-3-08

DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION  
PSG-SOUTH MITKOF HIGHWAY  
UPGRADE (PHASE II) AND SOUTH  
MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. 68646

MISCELLANEOUS  
SUMMARIES

PROJECT DESIGNATION NUMBER

MGS-0937(31)-68646

STATE	YEAR
ALASKA	2008

SHEET NUMBER	TOTAL SHEETS
D5	46

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Sign Summary - PSG 68646											
SIGN NO.	"L" STATION	OFFSET		LEGEND	CODE NO. (ASDS)	WIDTH (INCHES)	HEIGHT (INCHES)	AREA (SQ FT)	NO. OF *POSTS	FACING TRAFFIC	REMARKS
		LT	RT								
33a	1065+54		X	CAMPING SYMBOL	D7-RM-010	24	24	4	1	SB	
33b	1065+54		X	=>	D9-307	24	6	1	-	SB	MOUNT BELOW SIGN 33a
34	1071+07		X	STOP	R1-1	30	30	6.25	1	EB	
35	1071+07		X	MITKOF HIGHWAY	D3-1	48	8	2.667	1	EB	MOUNT ABOVE SIGN 34
36	1071+07		X	OHMER CREEK CAMPGROUND	D3-1	48	8	2.667	1	NB	MOUNT ABOVE SIGN 34
37a	1074+28	X		CAMPING SYMBOL	D7-RM-010	24	24	4	1	NB	
37b	1074+28	X		<=>	D9-307	24	6	1	-	NB	MOUNT BELOW SIGN 37a
38	1085+17		X	MILE 22	D10-2	10	27	1.88	1	SB	
39	1085+17		X	MILE 22	D10-2	10	27	1.88	1	NB	MOUNT BEHIND SIGN 38
40	1136+58		X	MILE 23	D10-2	10	27	1.88	1	SB	
41	1136+58		X	MILE 23	D10-2	10	27	1.88	1	NB	MOUNT BEHIND SIGN 40
42	1188+98		X	MILE 24	D10-2	10	27	1.88	1	SB	
43	1188+98		X	MILE 24	D10-2	10	27	1.88	1	NB	MOUNT BEHIND SIGN 42
44	1230+00		X	SPEED LIMIT 50	R2-1	30	36	7.5	1	EB	
45	1230+00	X		SPEED LIMIT 50	R2-1	30	36	7.5	1	WB	
47	1238+98		X	MILE 25	D10-2	10	27	1.88	1	EB	
48	1238+98		X	MILE 25	D10-2	10	27	1.88	1	WB	MOUNT BEHIND SIGN 44
52	1242+00		X	PAVEMENT ENDS	W8-3	36	36	9	1	EB	
TOTAL:								60.58			

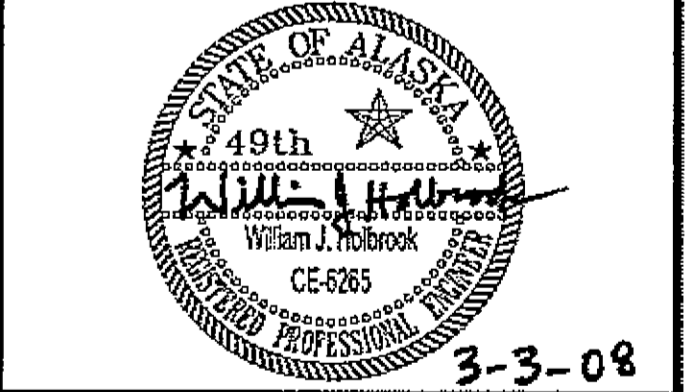
\* ALL POSTS SHALL BE 2.5" PST

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
 AND SOUTH MITKOF ISLAND TERMINAL PAVING  
 PROJECT NO. MGS-0937(31) - 68646

**HIGHWAY SIGN SUMMARY**

**PLAN LEGEND**

CHECKED BY: J. HEUMANN



DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 SOUTHEAST REGION  
 PSG-SOUTH MITKOF HIGHWAY  
 UPGRADE (PHASE II) AND SOUTH  
 MITKOF ISLAND TERMINAL PAVING  
 PROJECT NO. 68646

**HIGHWAY SIGN SUMMARY**

PROJECT DESIGNATION NUMBER

MGS-0937(31)-68646

STATE	YEAR
ALASKA	2008

SHEET NUMBER	TOTAL SHEETS
D6	46

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

No.	DATE	DESCRIPTION

Sign Summary - PSG 67519											
SIGN NO.	STATION	OFFSET		LEGEND	CODE NO. (ASDS)	WIDTH (INCHES)	HEIGHT (INCHES)	AREA (SQ FT)	NO. OF *POSTS	FACING TRAFFIC	REMARKS
		LT	RT								
1	16+48		X	TICKETED VEHICLES KEEP RIGHT	SPECIAL SIGN	36	24	6.00	1	SB	
2	1+16		X	ONE WAY =>	R6-1R	36	12	3.00	1	SB	
3	2+45		X	<= ONE WAY	R6-1L	36	12	3.00	1	NB	
4	2+55		X	TERMINAL PARKING LEFT LANE	SPECIAL SIGN	42	24	7.00	1	WB	SAME POST AS SIGN 5
5	2+55		X	BOARDING VEHICLES RIGHT LANE	SPECIAL SIGN	42	24	7.00	1	WB	MOUNT ABOVE SIGN 4
6	3+21		X	<= ONE WAY	R6-1L	36	12	3.00	1	NB	
7	3+21	X		TO EXIT KEEP RIGHT	SPECIAL SIGN	36	24	6.00	1	EB	
8	3+12	X		<= ONE WAY	R6-1L	36	12	3.00	1	SB	
9	2+60	X		TERMINAL PARKING STAGING	SPECIAL SIGN	42	24	7.00	1	EB	
10	1+91	X		<= ONE WAY	R6-1L	36	12	3.00	1	EB	SAME POST AS SIGN 11
11	1+91	X		EXIST & RETURN TO TERMINAL	SPECIAL SIGN	48	24	8.00	1	EB	MOUNT ABOVE SIGN 10
12	1+88	X		LONG TERM PARKING	SPECIAL SIGN	18	24	3.00	1	EB	
13	17+39	X		PETERSBURG TO TERMINAL	D1-2-2	90	24	15.00	2	NB	
TOTAL:								74.00			

\* ALL POSTS SHALL BE 2.5" PST  
EXCEPT SIGN 13 SHALL BE 2.0" PST

NEW GUARDRAIL SUMMARY		
LOCATION	TOTAL	REMARKS
SEE SHEET EE1	250'	

* NEW BREAKAWAY END TREATMENTS		
LOCATION	TOTAL	REMARKS
SEE SHEET EE1	2 EACH	PLACE AT GUARDRAIL ENDS

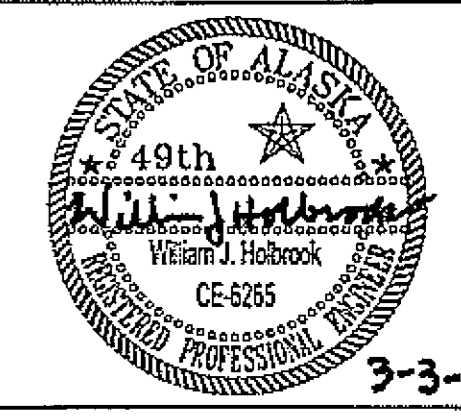
\* STANDARD DRAWING G-13.00

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
AND SOUTH MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. MGS-0937(31) ~ 68646

**FERRY TERMINAL SIGN SUMMARY**

PLAN LEGEND

CHECKED BY: J. HEUMANN



DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION  
PSG-SOUTH MITKOF HIGHWAY  
UPGRADE (PHASE II) AND SOUTH  
MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. 68646

**FERRY TERMINAL SIGN SUMMARY**

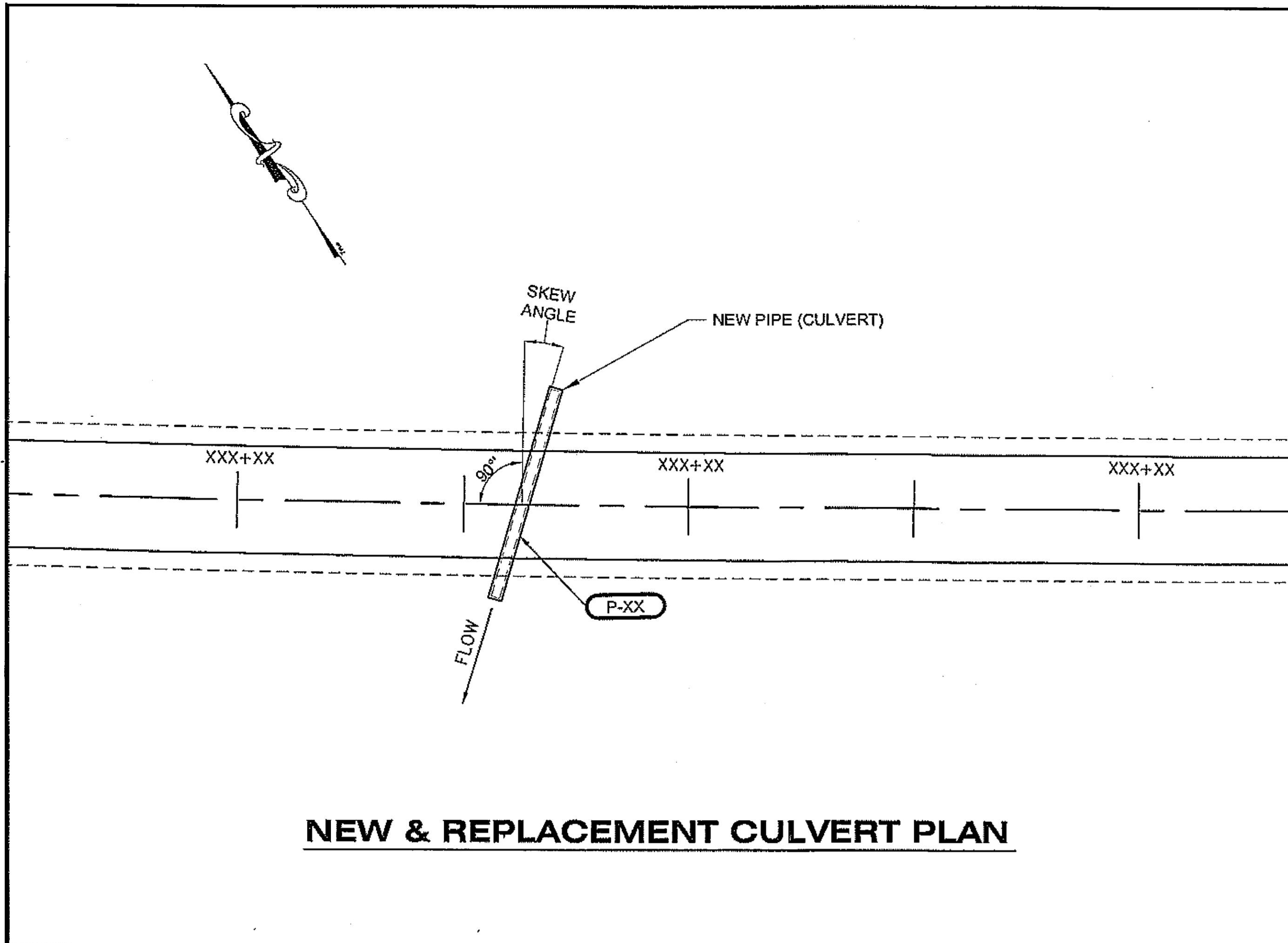
PROJECT DESIGNATION NUMBER

MGS-0937(31)-68646

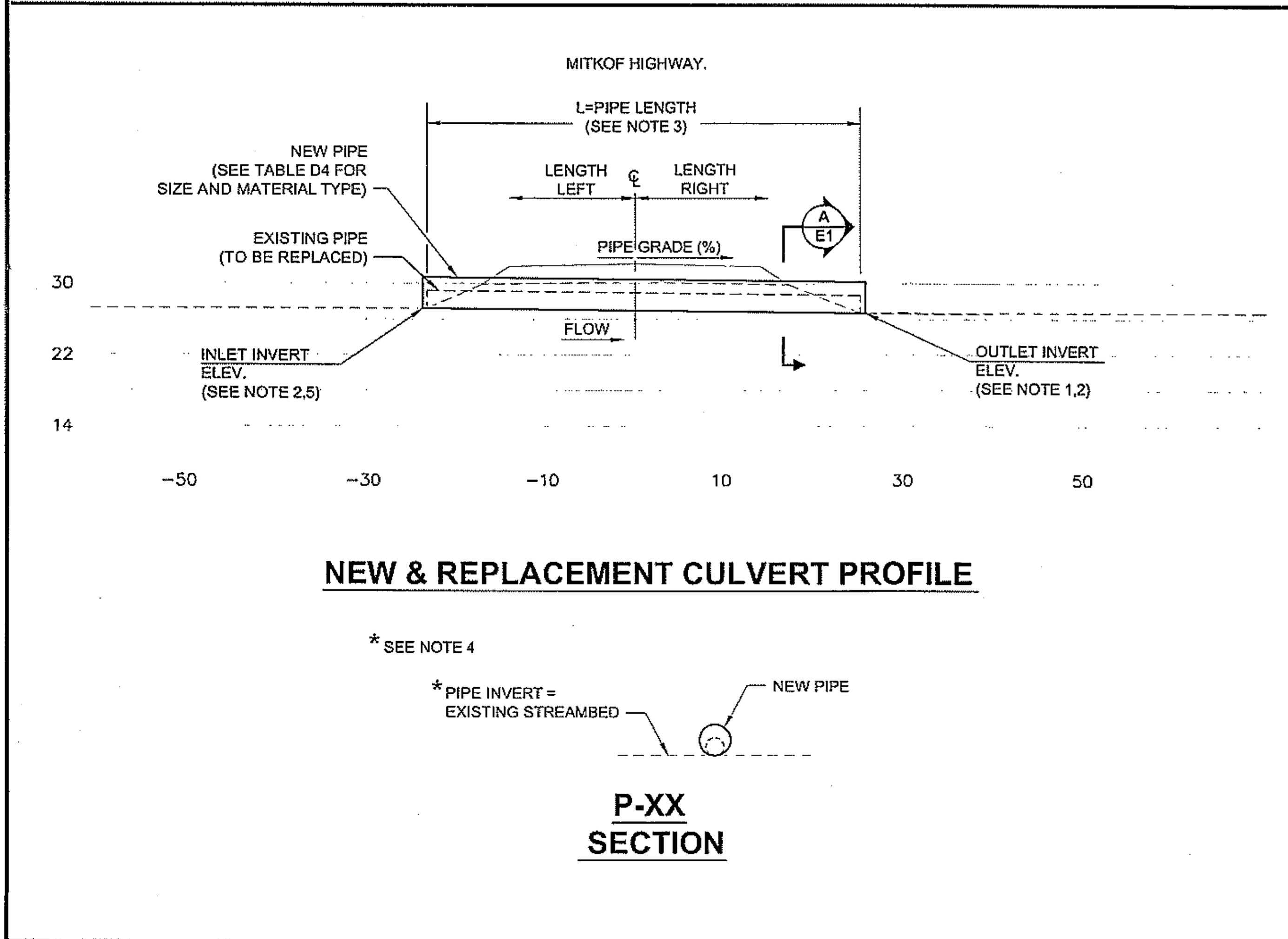
STATE	YEAR
ALASKA	2008

SHEET NUMBER	TOTAL SHEETS
DD1	46

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

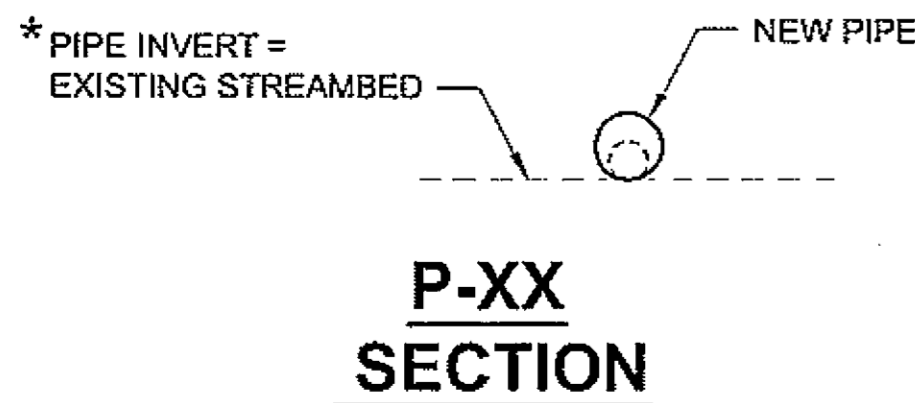


**NEW & REPLACEMENT CULVERT PLAN**

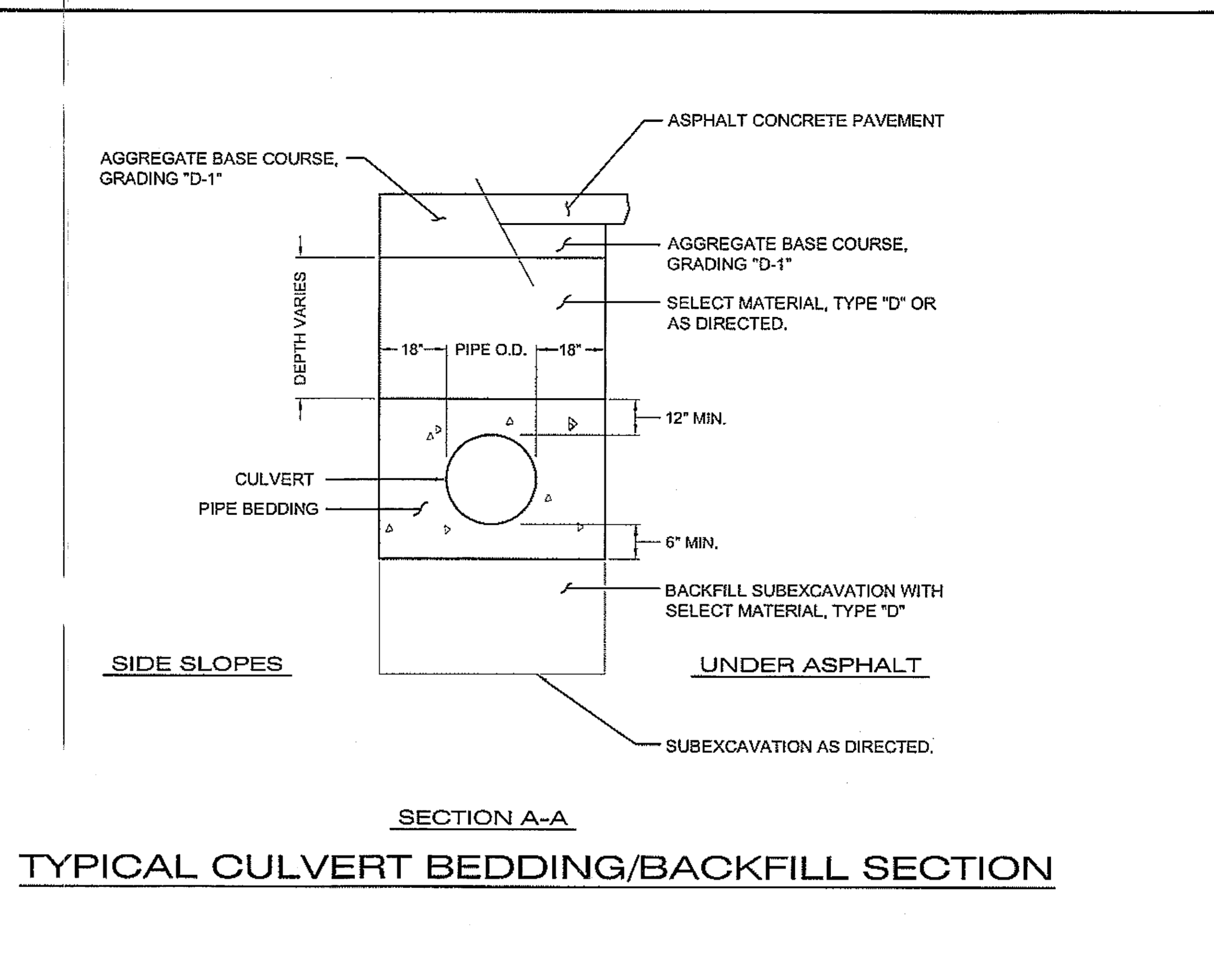


**NEW & REPLACEMENT CULVERT PROFILE**

\* SEE NOTE 4



**P-XX SECTION**



**SECTION A-A**

**TYPICAL CULVERT BEDDING/BACKFILL SECTION**

**GENERAL NOTES:**

1. REPLACEMENT CULVERTS ARE TO BE INSTALLED AT SAME INVERT ELEVATION, GRADE, SKEW ANGLE, AND CHANNEL ALIGNMENT AS EXISTING PIPE UNLESS OTHERWISE DETAILED IN THESE PLANS OR AS DIRECTED.
2. FOR EXISTING PIPE REPAIR, AND /OR EXTENSIONS, SEE DETAIL ON SHEET E2.
3. NEW PIPE LENGTH SHALL MATCH EXISTING PIPE LENGTH, EXCEPT AS NOTED IN CULVERT PIPE EXTENSION, REPAIR OR REPLACEMENT, AND FISH ENHANCEMENT'S SUMMARY TABLE SHEET D1, COLUMN 13. EXISTING PIPE LENGTHS CAN BE FOUND IN SAME SUMMARY TABLE, COLUMN 11.
4. FOR BURIED AND PARTIALLY BURIED EXISTING PIPES TO BE REPLACED, GRADES AND INVERTS ARE TO BE AS DIRECTED AND CONTINGENT UPON DITCH CLEANING OPERATIONS.
5. NEW END SECTIONS ARE TO BE INSTALLED ONLY AT INLET, AND ONLY AT DESIGNATED PIPES, SEE SHEETS D1 - D3.
6. AT FISH PASSAGE CULVERT LOCATIONS WHERE EXISTING PIPE IS BEING REPLACED, SEE PLAN SHEETS STARTING WITH SHEET E6 FOR SPECIAL INSTALLATION DETAILS

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Q:\PSG\68646\PLANSET\68646\_E1-2\_DET&DWG

DRDODGE  
TAB: E1 Friday, July 29, 2005 11:27:44 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

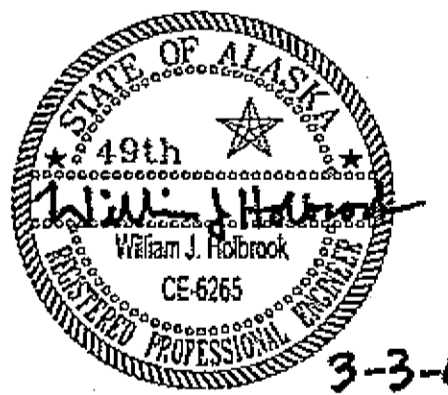
No.	DATE	DESCRIPTION

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
AND SOUTH MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. MGS-0937(31) ~ 68646

**CULVERT  
INSTALLATION  
DETAILS**

**PLAN LEGEND**

CHECKED BY: J. HEUMANN



DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION

PSG-SOUTH MITKOF HIGHWAY  
UPGRADE (PHASE II) AND SOUTH  
MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. 68646

**CULVERT  
INSTALLATION  
DETAILS**

PROJECT DESIGNATION NUMBER

MGS-0937(31)-68646

STATE YEAR

ALASKA 2008

SHEET NUMBER TOTAL SHEETS

E1 46

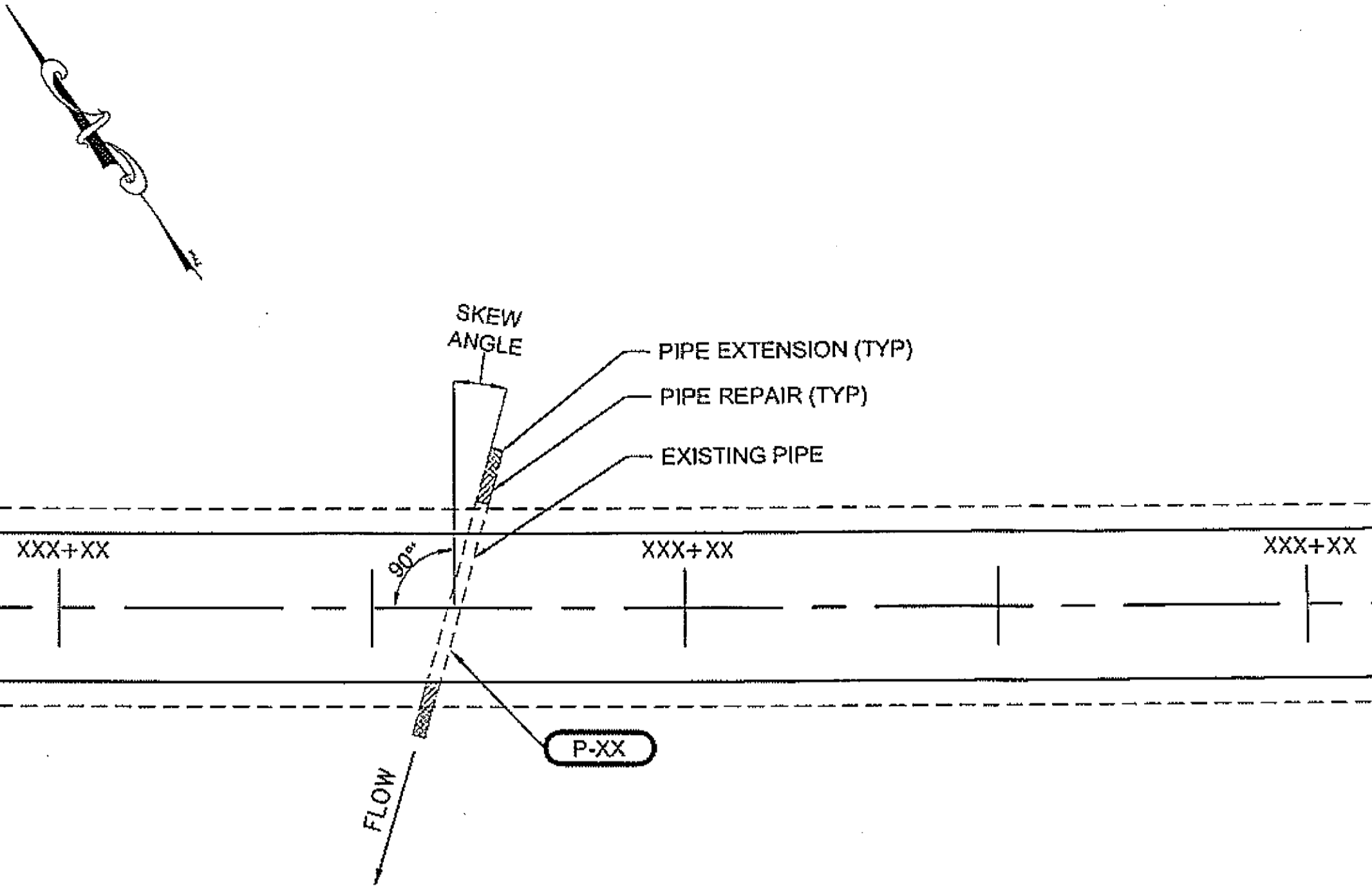
No.	DATE	DESCRIPTION

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
AND SOUTH MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. MGS-0937(31) ~ 68646

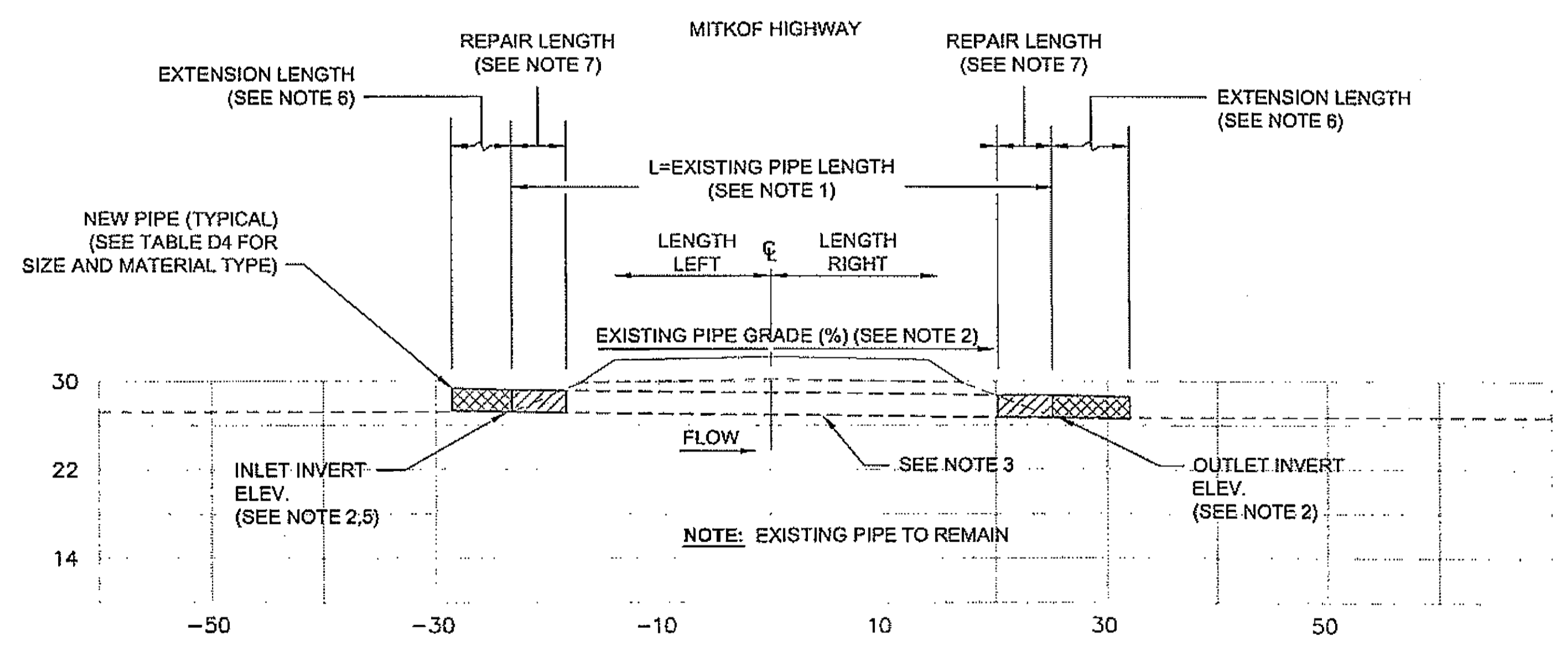
**CULVERT REPAIR DETAILS**

**GENERAL NOTES:**

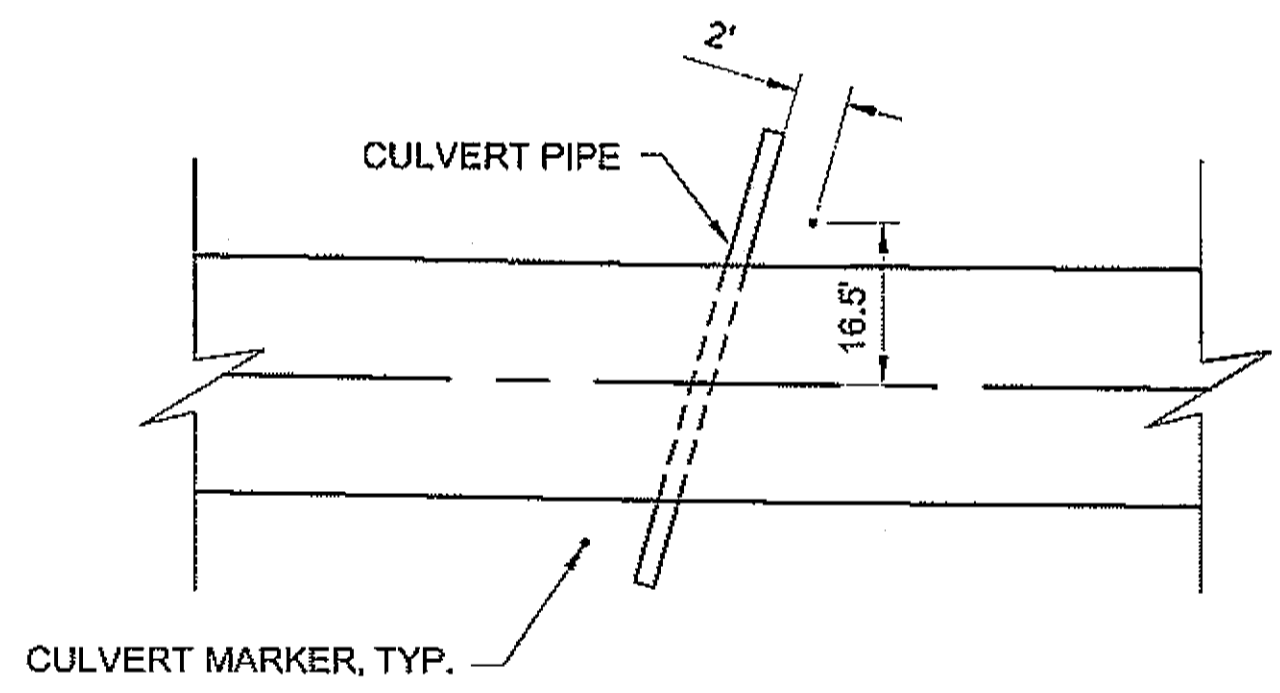
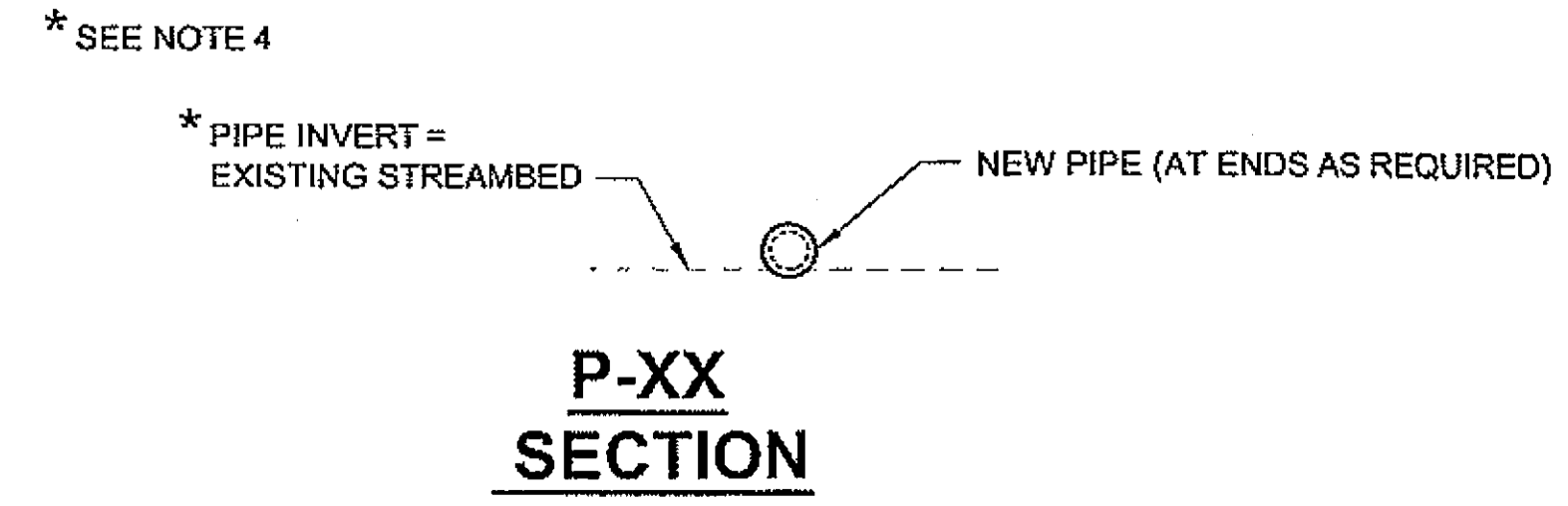
1. SEE EXISTING PIPE LENGTHS IN SUMMARY TABLE SHEET D1, COLUMN 11.
2. EXISTING PIPE REPAIR, EXTENSIONS AND NEW END SECTION INSTALLATIONS SHALL MAINTAIN EXISTING PIPE GRADE, SKEW ANGLE AND CHANNEL ALIGNMENT UNLESS OTHERWISE DIRECTED.
3. EXISTING PIPE SHALL REMAIN, EXCEPT AS NOTED IN CULVERT PIPE EXTENSION, REPAIR OR REPLACEMENT, AND FISH ENHANCEMENTS SUMMARY TABLE SHEET D1.
4. BURIED AND PARTIALLY BURIED EXISTING PIPES HAVING ENDS TO BE REPAIRED OR EXTENDED SHALL BE FLUSHED CLEAN AS PART OF PIPE RESTORATION OPERATIONS.
5. NEW END SECTIONS SHALL BE INSTALLED AT INLET LOCATIONS NOTED IN TABLE SHEET D1.
6. EXISTING PIPES SHALL BE EXTENDED AT LOCATIONS CALLED FOR IN ACTION COLUMN OF SUMMARY TABLE D1.
7. EXISTING PIPES SHALL BE TRIMMED BACK AND PORTIONS OF PIPE AT EITHER END REPLACED AT LOCATIONS CALLED FOR IN ACTION COLUMN OF SUMMARY TABLE D1.



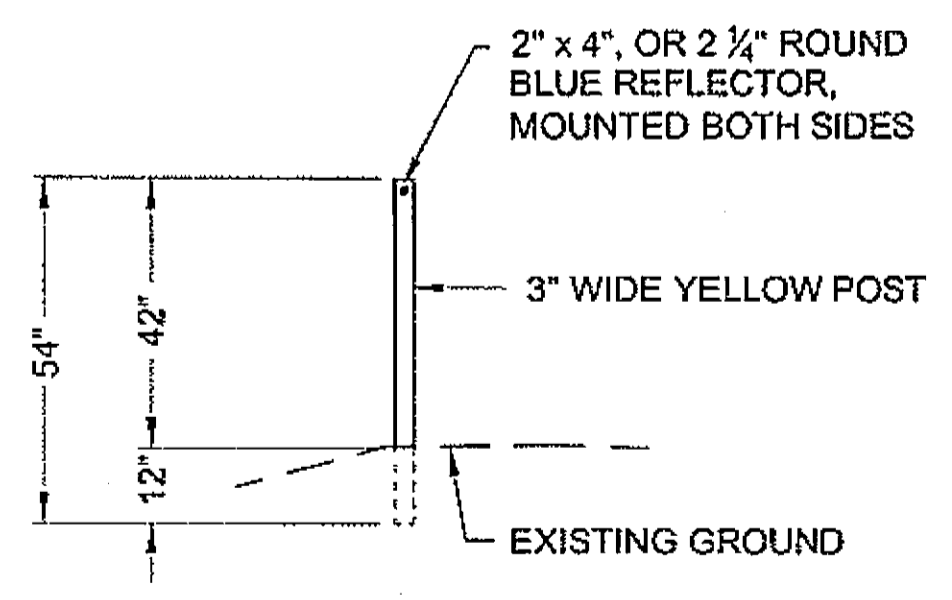
**EXISTING CULVERT REPAIR / EXTENSION PLAN**



**EXISTING CULVERT REPAIR/EXTENSION PROFILE**



**TYPICAL CULVERT MARKER POST INSTALLATION PLAN**



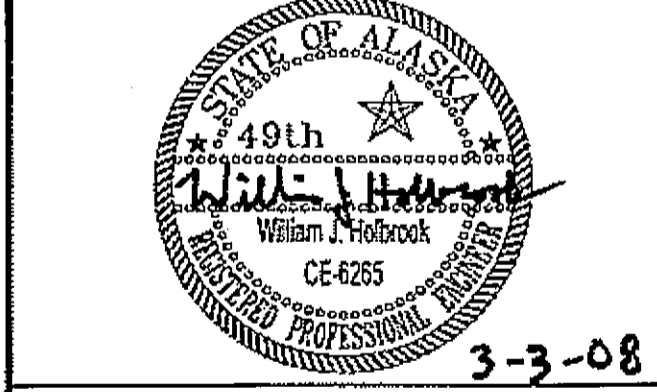
**CULVERT MARKER POST DETAIL**

- NOTES:  
1. REMOVE AND REINSTALL EXISTING CULVERT MARKER POSTS BETWEEN B.O.P. STATION 843+04 AND OHMER CREEK BRIDGE. SEE SECTION 603 OF THE SPECIALS FOR FURTHER INFORMATION.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

**PLAN LEGEND**

CHECKED BY: J. HEUMANN



DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION  
PSG-SOUTH MITKOF HIGHWAY  
UPGRADE (PHASE II) AND SOUTH  
MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. 68646

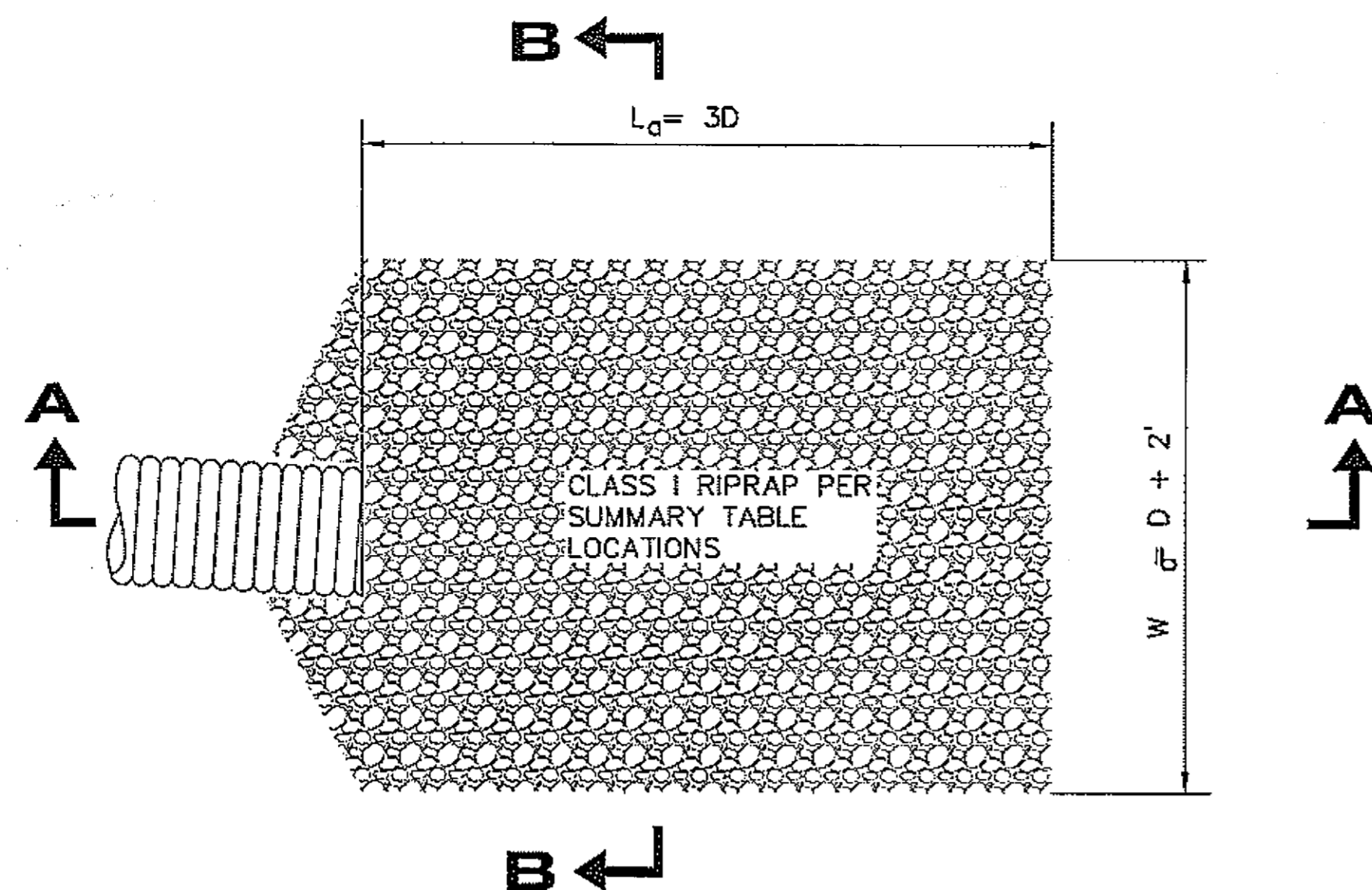
**CULVERT REPAIR DETAILS**

PROJECT DESIGNATION NUMBER

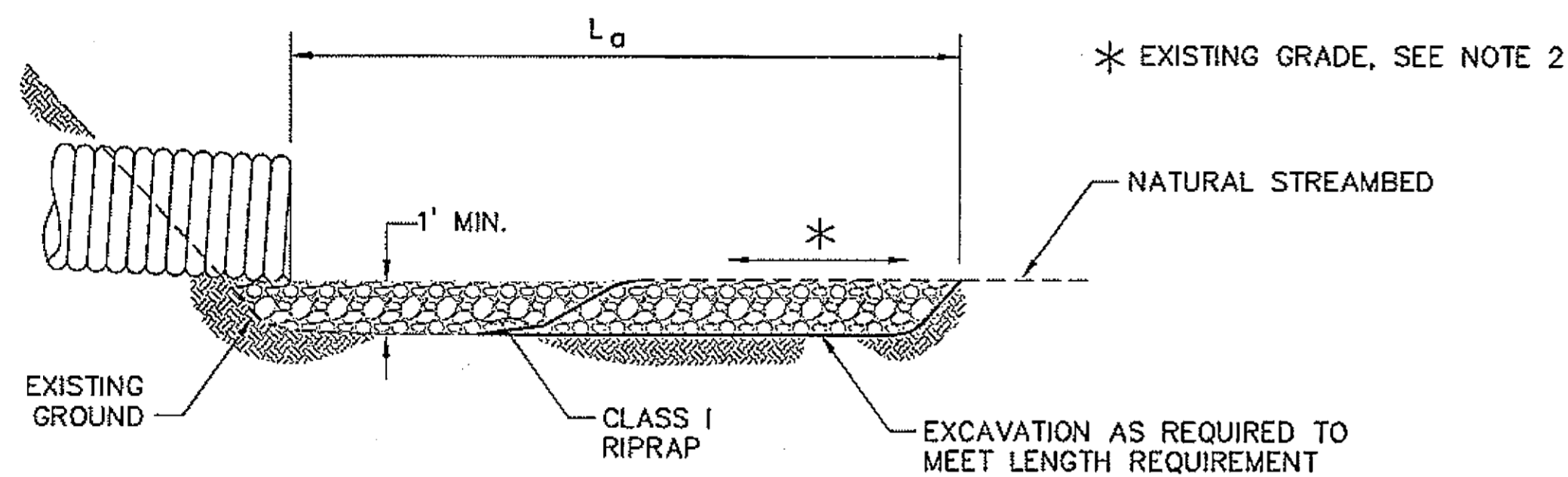
MGS-0937(31)-68646

STATE	YEAR
ALASKA	2008

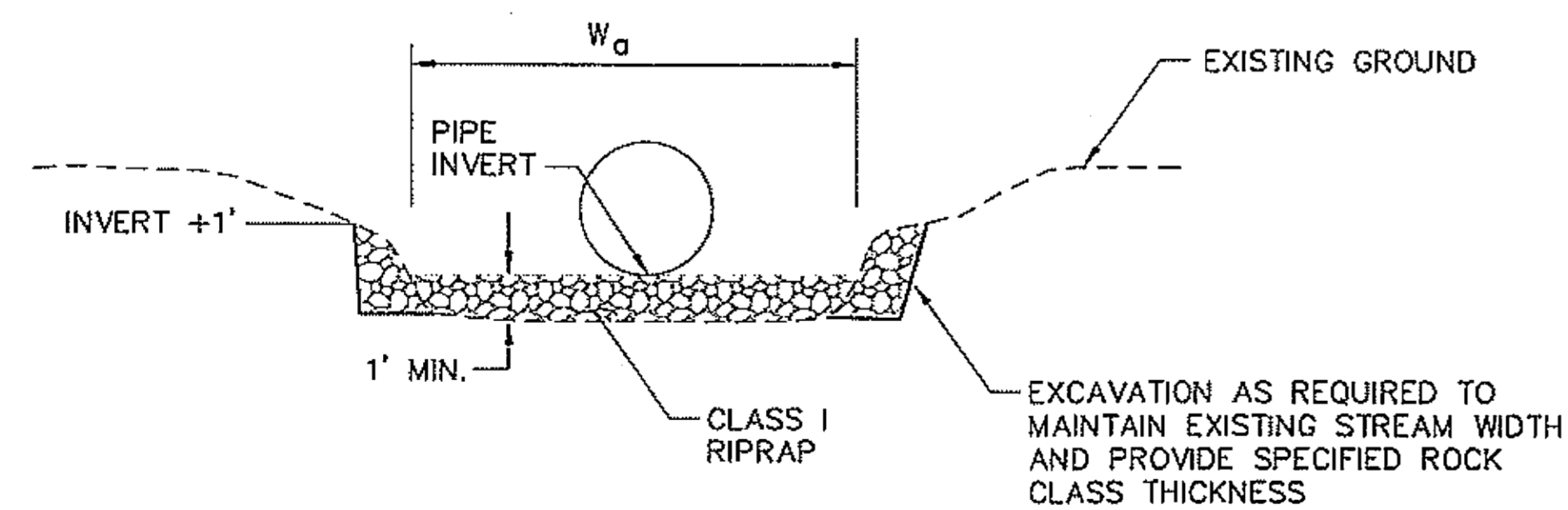
SHEET NUMBER	TOTAL SHEETS
E2	46



PLAN  
N.T.S.



SECTION A-A  
N.T.S.

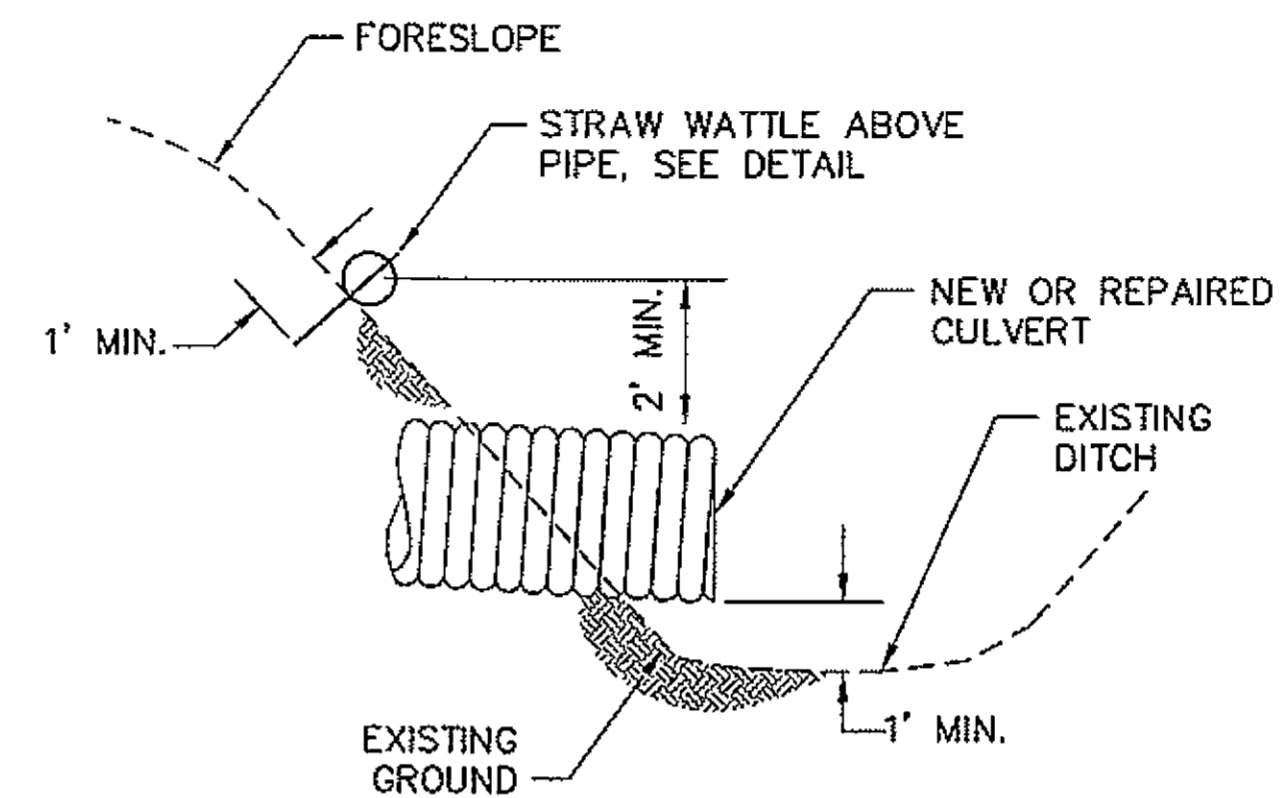


VIEW B-B  
N.T.S.

**RIPRAP LINED OUTLET  
APRON DETAIL**

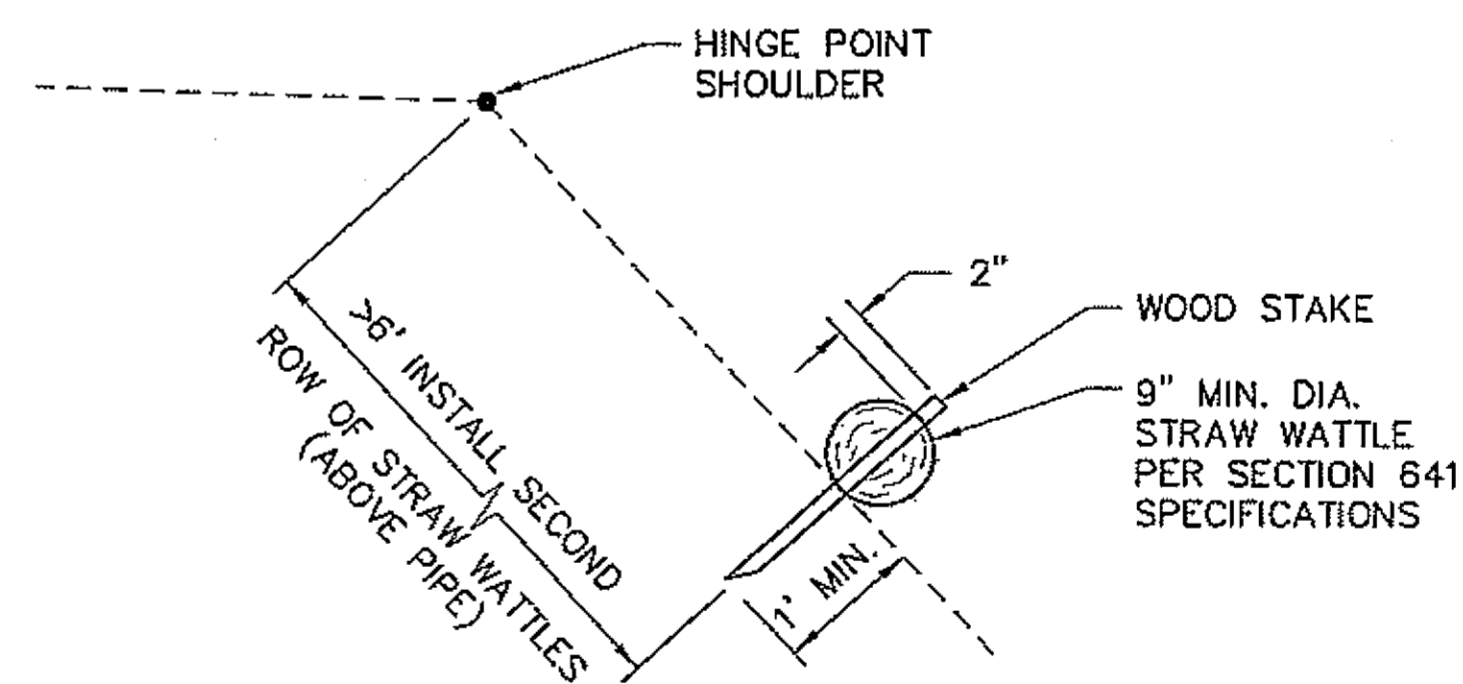
**NOTES:**

1. "L<sub>a</sub>" = LENGTH OF APRON. "W<sub>a</sub>" = WIDTH OF APRON.
2. APRON SHALL BE SET AT EXISTING STREAM GRADE AND ALIGNMENT.
3. OHW = ORDINARY HIGH WATER.
4. "D" = PIPE DIAMETER.
5. FOR LOCATIONS SEE CULVERT PIPE EXTENSION, REPAIR OR REPLACEMENT AND FISH ENHANCEMENTS SUMMARY SHEET D1.



SECTION  
N.T.S.

NOTE:  
SEE LAYOUT LOCATIONS  
AND DETAIL SHEET E4.



DETAIL  
N.T.S.

**STRAW WATTLE DETAIL**

PATH: Q:\PSG\68646\PLANSET\68646\_E3-5.7\_DETAILS.DWG

DRDDOGE  
TAB: E3 Friday, July 29, 2005 11:27:44 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

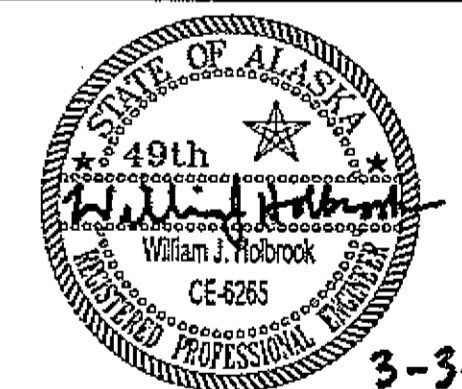
No.	DATE	DESCRIPTION

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
AND SOUTH MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. MGS-0937(31) ~ 68646

**CULVERT DETAILS**

**PLAN LEGEND**

CHECKED BY: J. HEUMANN



3-3-08

DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION  
PSG-SOUTH MITKOF HIGHWAY  
UPGRADE (PHASE II) AND SOUTH  
MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. 68646

**CULVERT  
DETAILS**

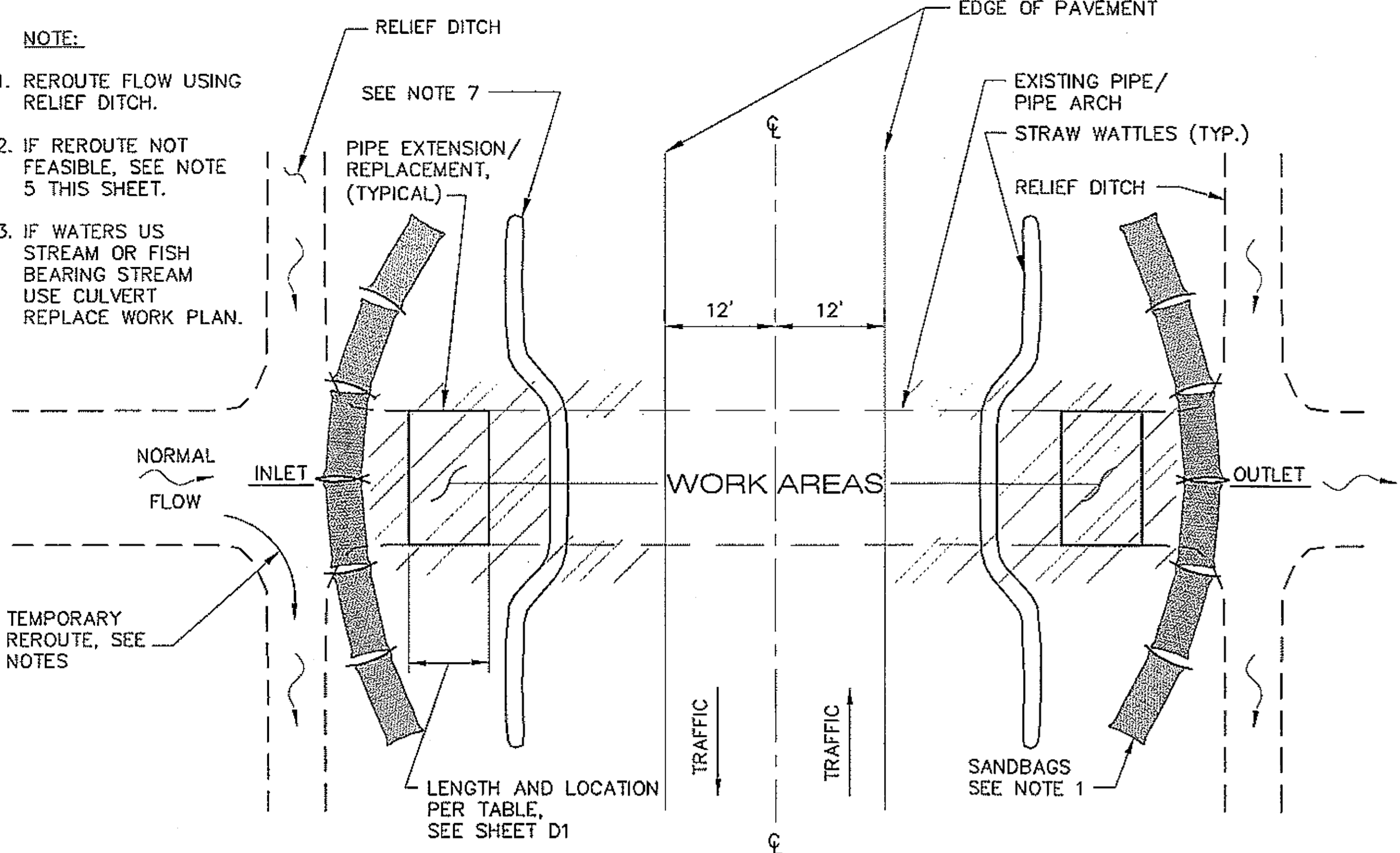
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MGS-0937(31)-68646

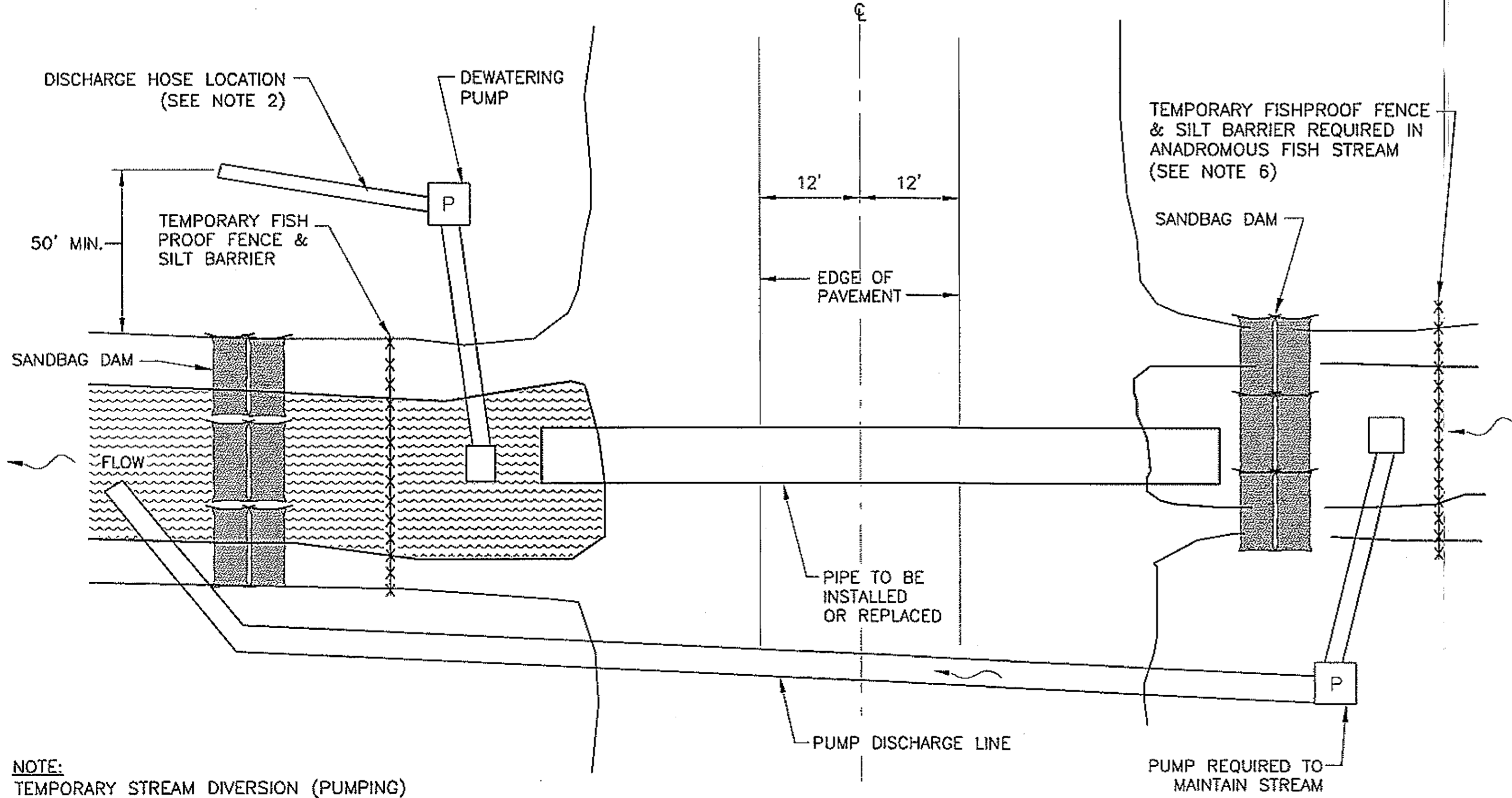
STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
E3	46

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

- NOTE:**
1. REROUTE FLOW USING RELIEF DITCH.
  2. IF REROUTE NOT FEASIBLE, SEE NOTE 5 THIS SHEET.
  3. IF WATERS US STREAM OR FISH BEARING STREAM USE CULVERT REPLACE WORK PLAN.



**CONSTRUCTION WORK PLAN  
CULVERT REPAIR**

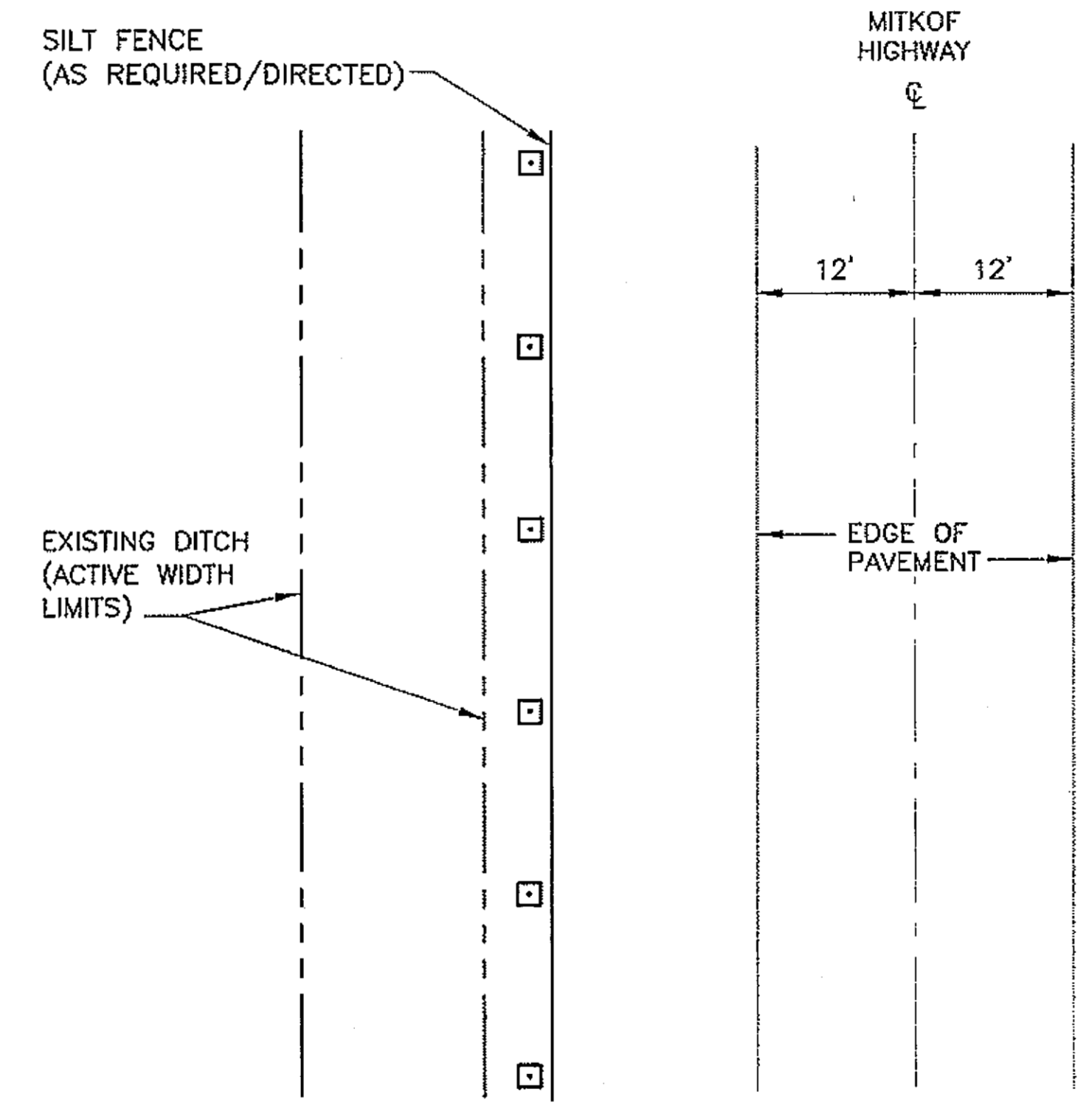


**CONSTRUCTION WORK PLAN  
CULVERT REPLACE**

**NOTE:**  
TEMPORARY STREAM DIVERSION (PUMPING) METHOD ILLUSTRATED. SEE NOTE 5.

**NOTES:**

1. A WORK PLAN BASED ON THESE DETAILS AND THE FISH AND GAME PERMIT (SEE APPENDIX B) SHALL BE SUBMITTED FOR APPROVAL BEFORE WORKING IN ANY FISH STREAM OR WATERS OF U.S. THE PLAN WILL INCLUDE MATTING AND NATIVE GRASS MIX ABOVE ORDINARY HIGH WATER AND IN ALL DISTURBED AREAS. THE STREAM FLOW SHALL BE DIVERTED TO ANOTHER PIPE WHILE WORKING ON ANY GIVEN PIPE. A COMBINATION OF SILT FENCE, STRAW BALES, PLASTIC SHEETS AND SANDBAGS SHALL BE USED TO MINIMIZE IMPACTS TO THE STREAM. SANDBAGS AND PLASTIC SHEETS SHALL BE USED TO DIRECT FLOW AWAY FROM THE WORK AREA.
2. IF DEWATERING PUMPS ARE USED, DISCHARGE SHALL BE SITUATED A MINIMUM OF 50' FROM STREAMBED HIGHWATER LINE. THE 50' SEPARATION MUST BE VEGETATED; AND THE DISCHARGE END SHALL BE RELOCATED PERIODICALLY AS REQUIRED. PUMP INTAKE MUST BE OPERATED, AND MAINTAINED TO PREVENT FISH ENTRAPMENT, ENTRAINMENT, OR INJURY WITH THE USE OF PERFORATED PLATE AND WOVEN WIRE HAVING A MESH SIZE NOT GREATER THAN 3/32" OR PROFILE BAR AND WEDGEWIRE HAVING OPENINGS NOT GREATER THAN 1.75mm. APPROACH VELOCITIES SHALL NOT EXCEED A PASSIVE VELOCITY OF 0.2 FEET PER SECOND (FPS) OR AN ACTIVE VELOCITY OF 0.4 FPS.
3. REVEGETATE STREAM BANKS AND ALL UPLAND AREAS DISTURBED BY CONSTRUCTION ACTIVITY PER SECTIONS 618 AND 641.
4. PROVIDE NOTICE AT LEAST 5 WORKING DAYS IN ADVANCE OF IN WATER WORK.
5. TEMPORARY STREAM DIVERSION METHOD (PUMPING) ILLUSTRATED. OTHER STREAM DIVERSION METHODS ACCEPTABLE SUBJECT TO APPROVAL.
6. SEE CULVERT EXTENSION REPAIR, OR REPLACEMENT AND FISH ENHANCEMENTS SUMMARY SHEET D1 FOR LIST OF FISH AND WATERS US CULVERTS.
7. INSTALL STRAW WATTLES AT CULVERT REPAIR LOCATIONS AS SHOWN WHERE GRADE IS BEING RAISED, ALSO INSTALL AS SHOWN AT PIPE REPLACEMENT LOCATIONS, ONCE PIPE IS INSTALLED (GRADE RAISE AREAS ONLY).



**CONSTRUCTION WORK PLAN  
RAISED ROADWAY FILL AREAS**

**NOTE:**  
WORK TYPICAL BOTH SIDES ROADWAY WHERE DITCH OCCURS.

PATH: Q:\P606646\PLANSET\68646\_E3-57\_DETAILS.DWG

DRDODGE

TAB: E4 Friday, July 29, 2005 11:27:44 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

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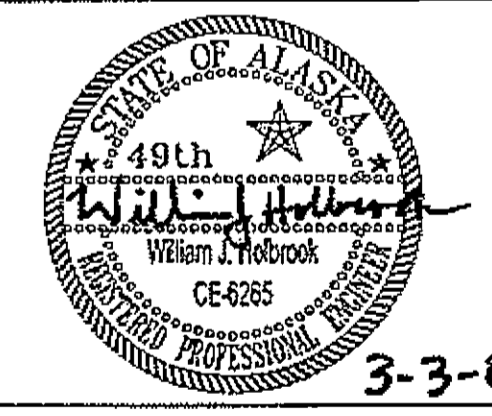
No.	DATE	DESCRIPTION

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
AND SOUTH MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. MGS-0937(31) ~ 68646

**CULVERT  
CONSTRUCTION  
WORK PLANS**

**PLAN LEGEND**

CHECKED BY: J. HEUMANN



DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION  
PSG-SOUTH MITKOF HIGHWAY  
UPGRADE (PHASE II) AND SOUTH  
MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. 68646

**CULVERT  
CONSTRUCTION  
WORK PLANS**

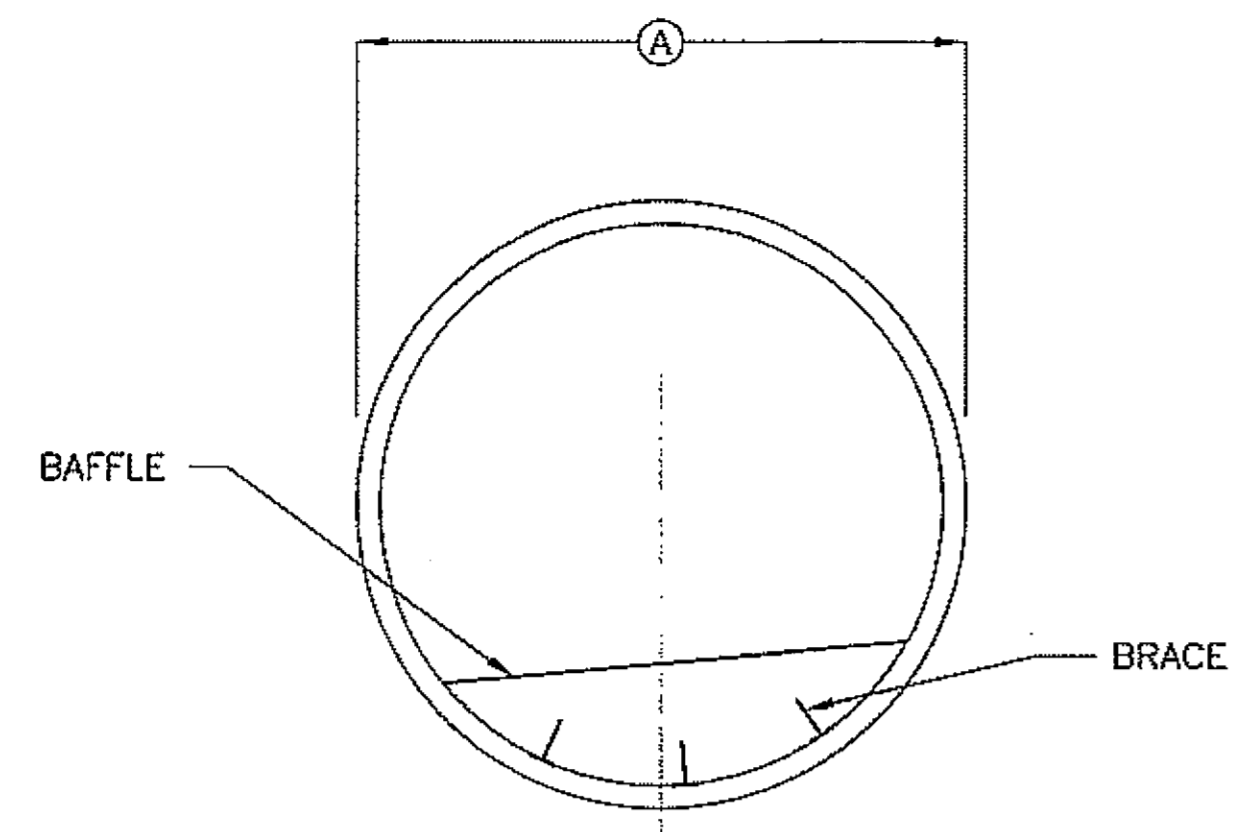
PROJECT DESIGNATION NUMBER

MGS-0937(31)-68646

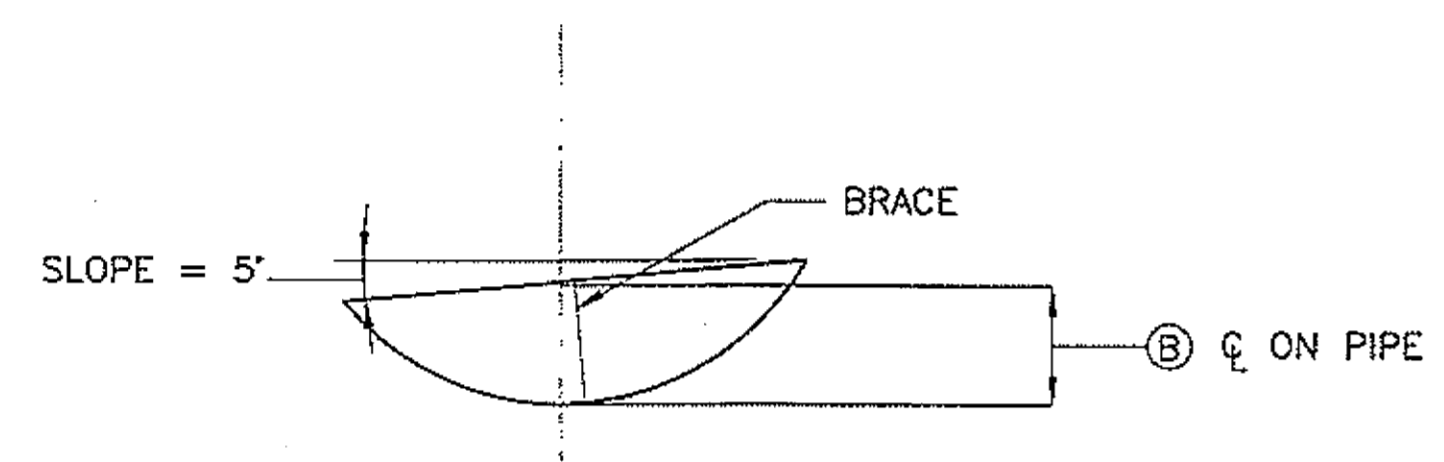
STATE	YEAR
ALASKA	2008

SHEET NUMBER	TOTAL SHEETS
E4	46

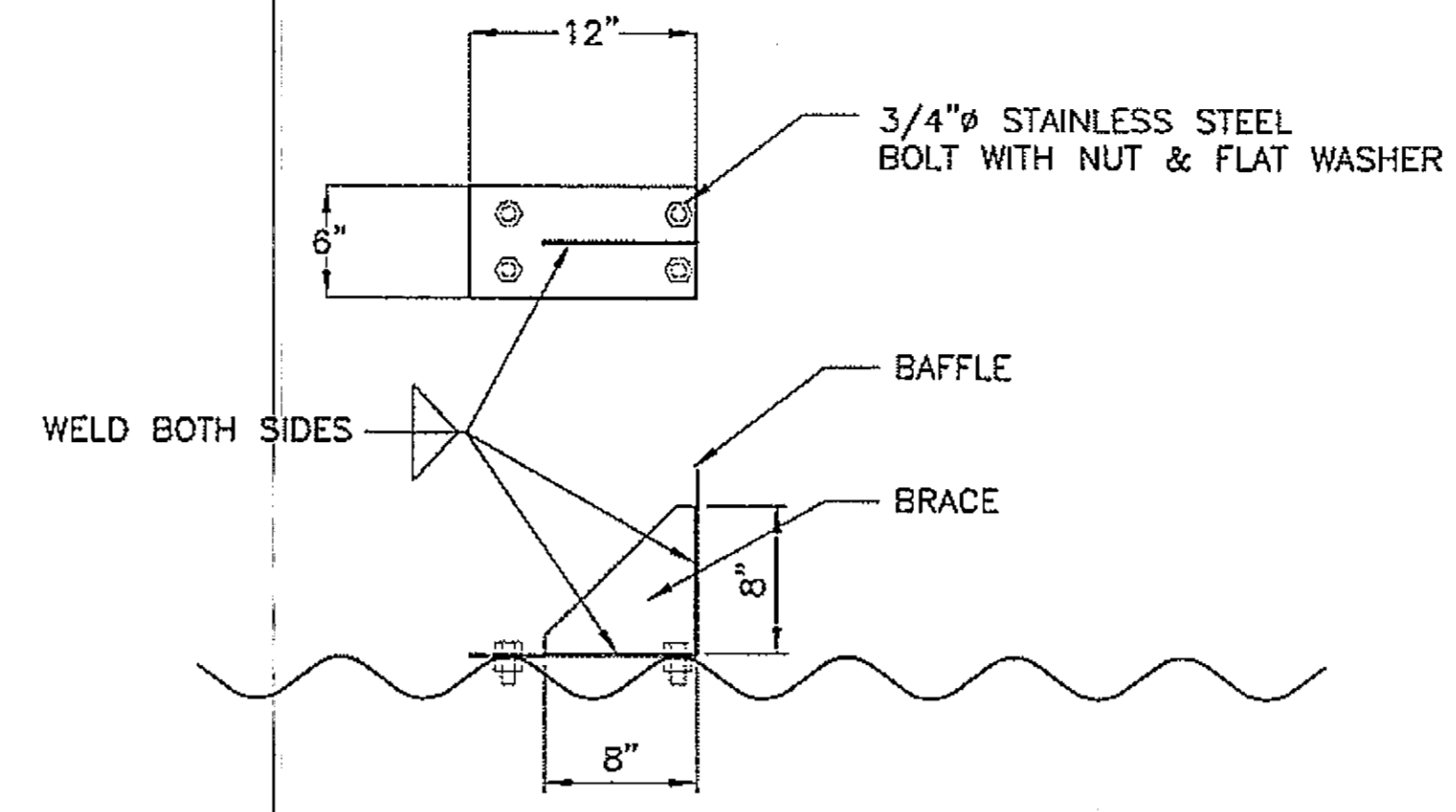
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



**BAFFLE & PIPE  
DETAIL**



**BAFFLE DETAIL**

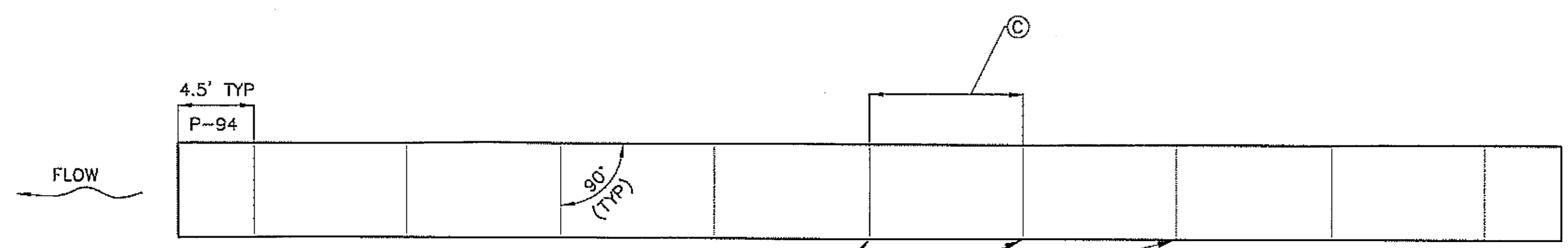


**BRACE DETAIL**

**NOTES:**

1. TOP EDGE OF BAFFLE SHALL BE SLOPED 5 DEGREES FROM HORIZONTAL. SEE TABLE FOR HEIGHT OF BAFFLE ON CENTERLINE OF PIPE
2. ALL BAFFLES AND BRACES SHALL BE MANUFACTURED FROM 1/4" SHEET MATERIAL AND COATING (SAME AS PIPE). PREDRILL BAFFLE HOLES
3. EACH BAFFLE SHALL HAVE A MINIMUM OF 3 BRACES WITH A MAXIMUM SPACING BETWEEN BRACES OF 15".
4. ALL DIMENSIONS ON THIS SHEET ARE NOMINAL - BAFFLES SHALL BE MANUFACTURED TO FIT PARTICULAR PIPE.
5. PIPE SHALL HAVE ANNULAR CORRUGATIONS.

PIPE NO.	A	B	C	REQ'D NO. OF BAFFLES	PIPE MATERIAL	PIPE LENGTH
P-94	48"	12"	7'	9	ALUMIN.	65'



BAFFLES (TYPICAL)

**TYPICAL BAFFLE PLAN  
LAYOUT**

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\PSG\68640\PLANSET\68646\_E3-5.7\_DETAILS.DWG

DRDODGE  
TAB: E5 Friday, July 29, 2005 11:27:44 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

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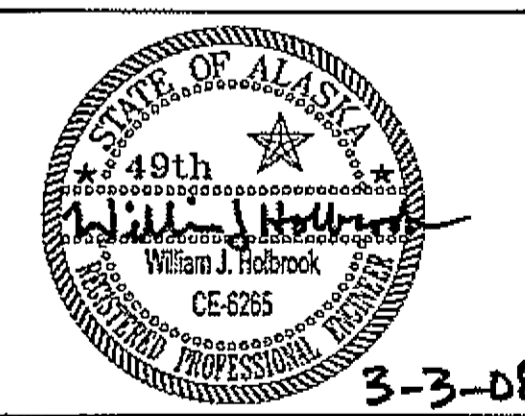
No.	DATE	DESCRIPTION

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
AND SOUTH MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. MGS-0937(31) ~ 68646

**FISH CULVERT BAFFLE  
DETAILS**

**PLAN LEGEND**

CHECKED BY: J. HEUMANN



DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION

PSG-SOUTH MITKOF HIGHWAY  
UPGRADE (PHASE II) AND SOUTH  
MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. 68646

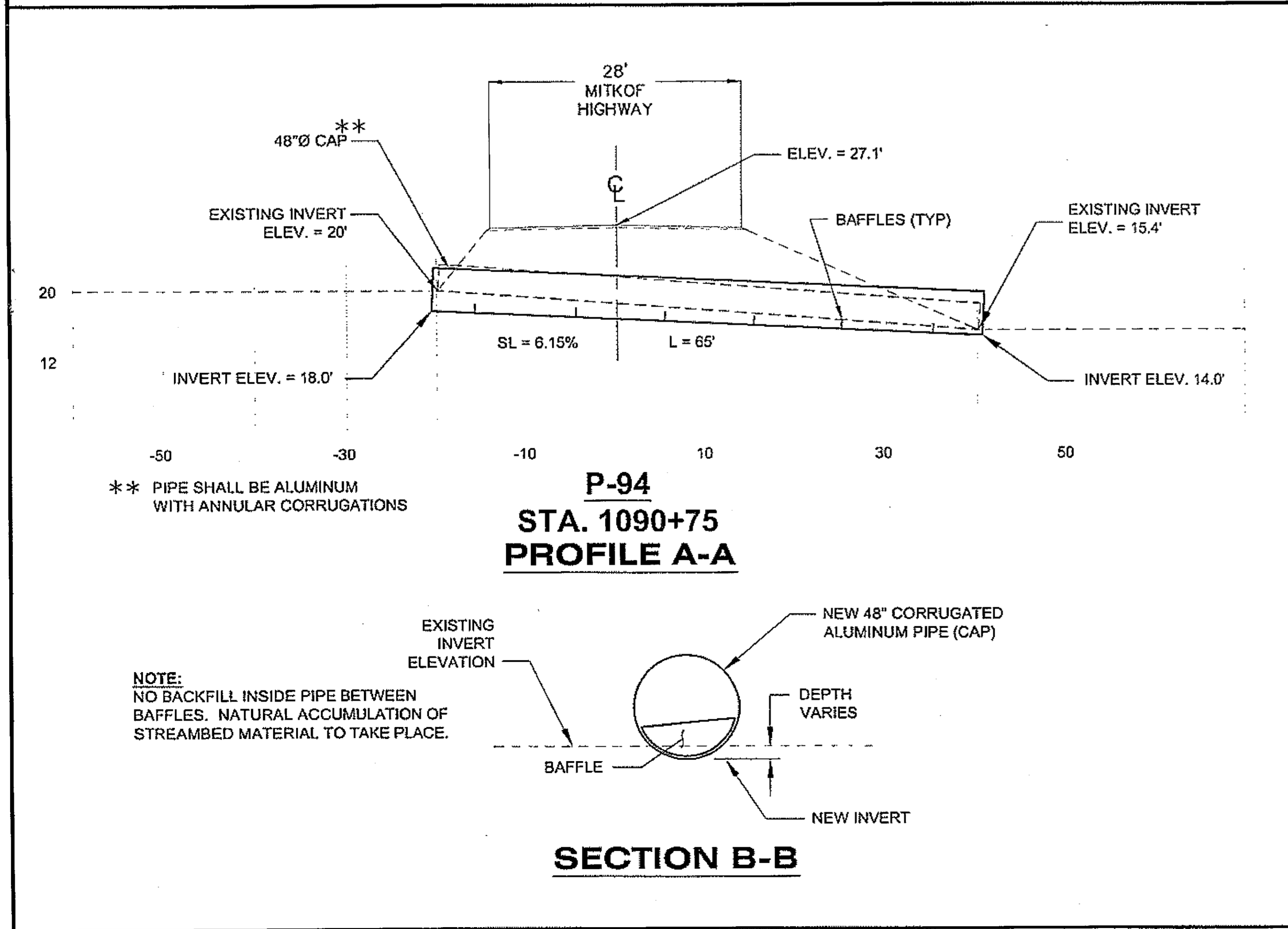
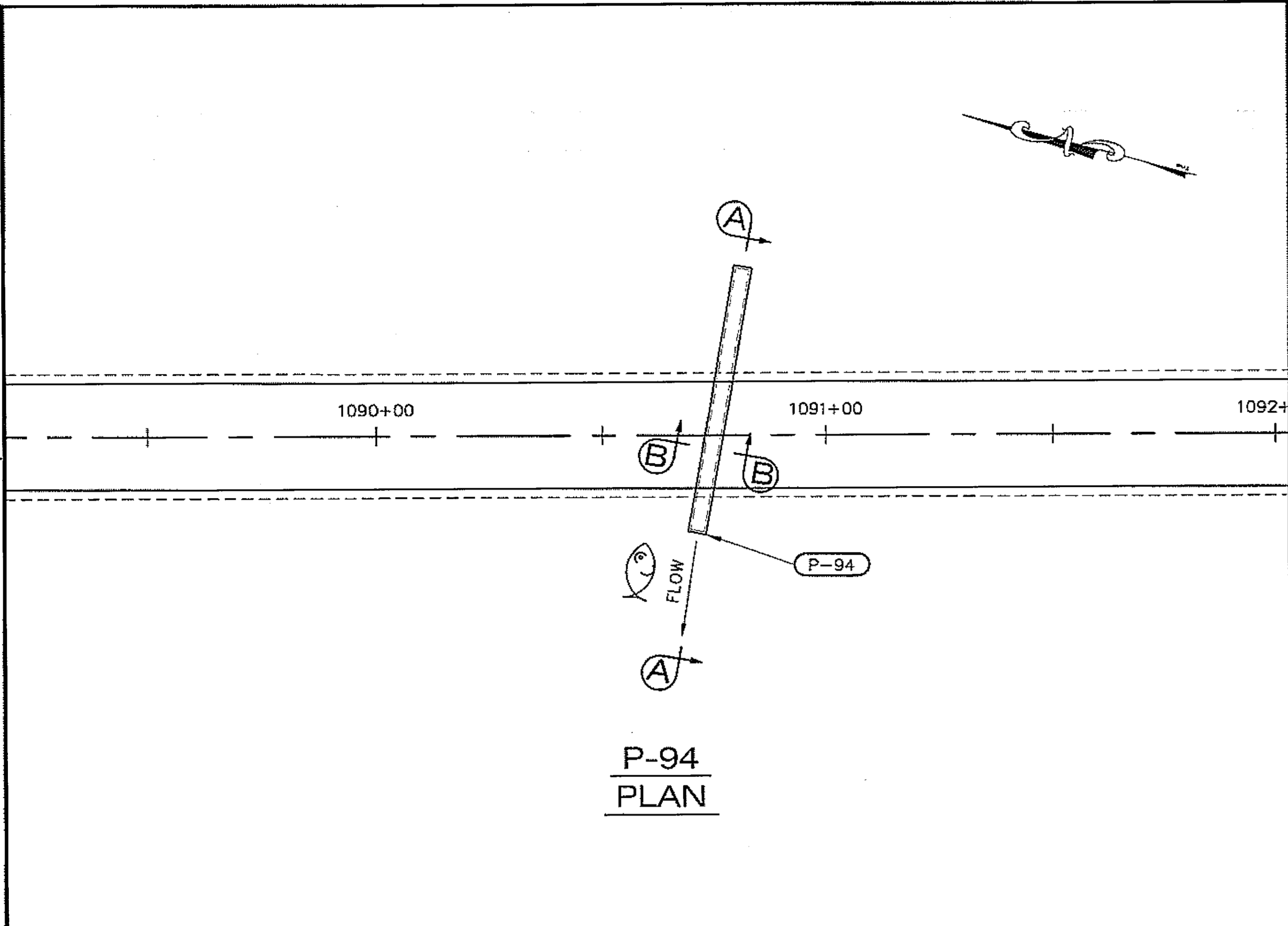
**FISH CULVERT  
BAFFLE  
DETAILS**

PROJECT DESIGNATION NUMBER

MGS-0937(31)-68646

STATE	YEAR
ALASKA	2008

SHEET NUMBER	TOTAL SHEETS
E5	46



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Q:\PSG\68646\PLANSET\68646\_E6\_CULVERT  
P&P.DWG

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TAB: E6 Friday, July 29, 2005 11:27:44 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
 AND SOUTH MITKOF ISLAND TERMINAL PAVING  
 PROJECT NO. MGS-0937(31) - 68646

FISH CULVERT  
 PLAN & PROFILE

PLAN LEGEND

CHECKED BY: J. HEUMANN

DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

3-3-08

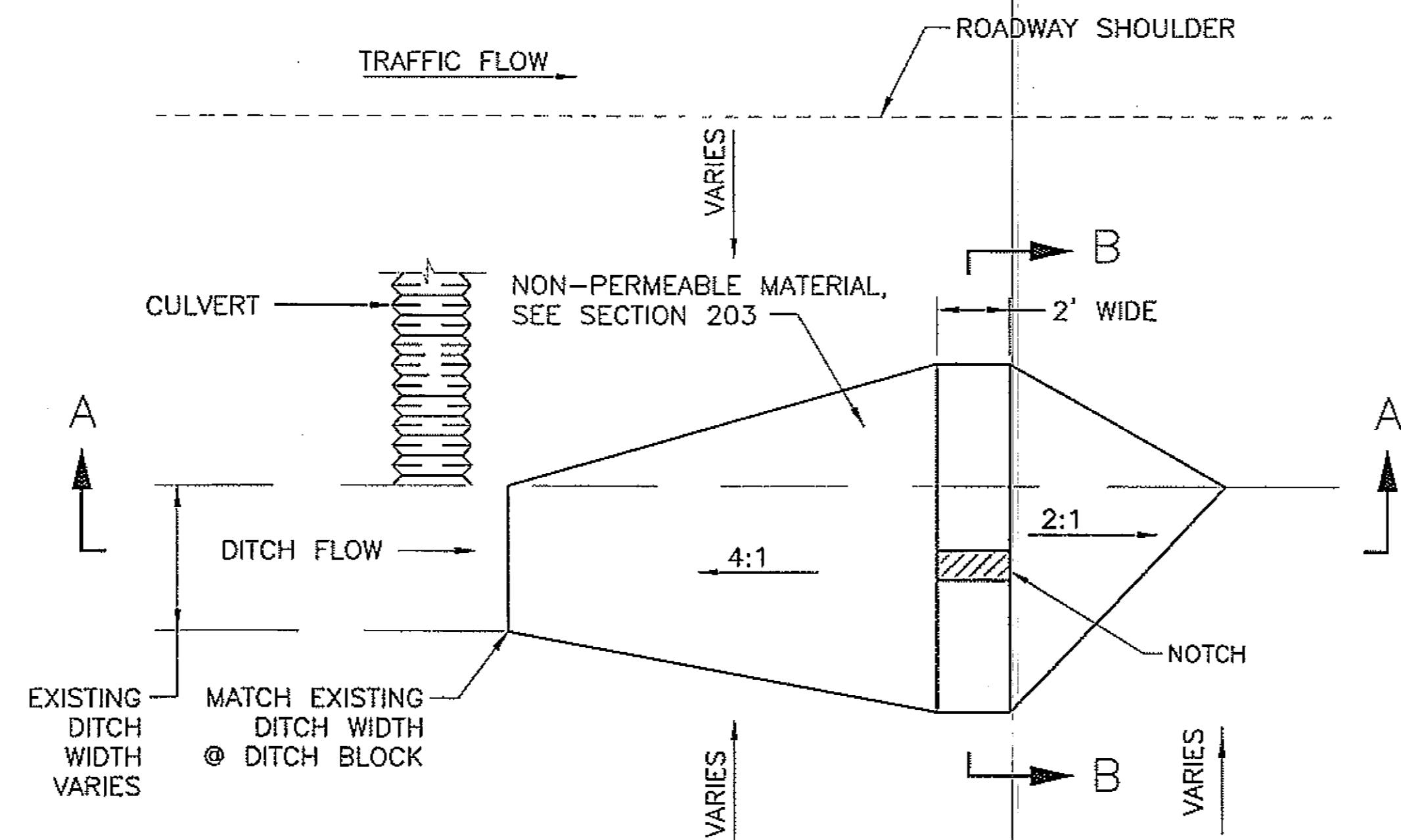
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION

PSG-SOUTH MITKOF HIGHWAY  
UPGRADE (PHASE II) AND SOUTH  
MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. 68646

**FISH CULVERT  
PLAN & PROFILE**

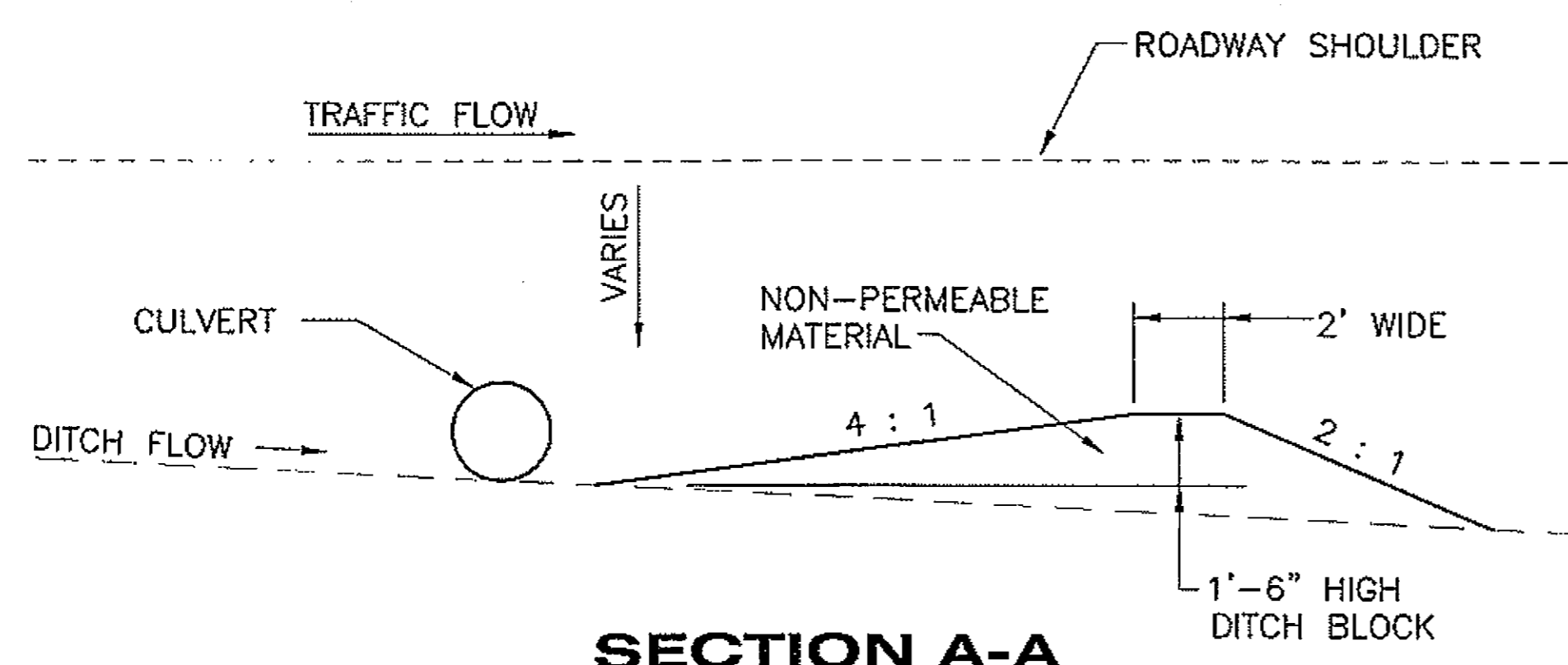
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MGS-0937(31)-68646	
STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
E6	46

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

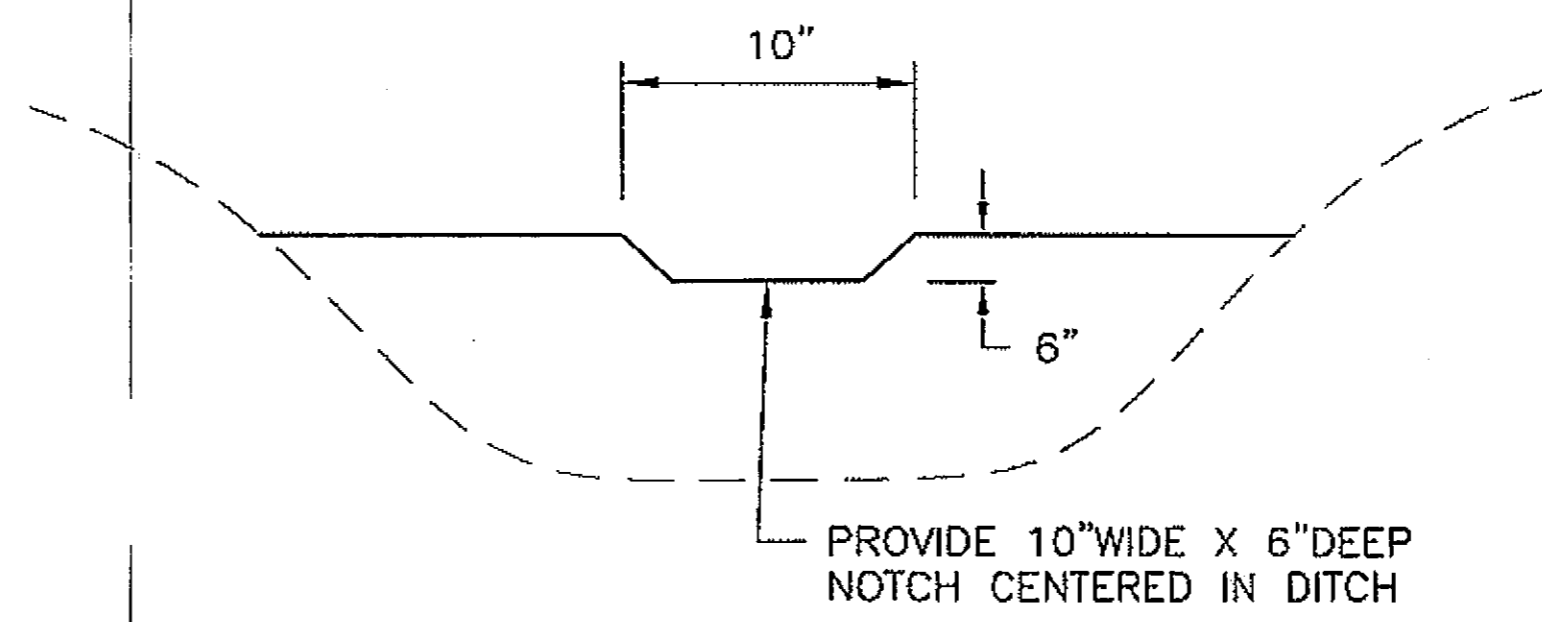


**PLAN**  
N.T.S.

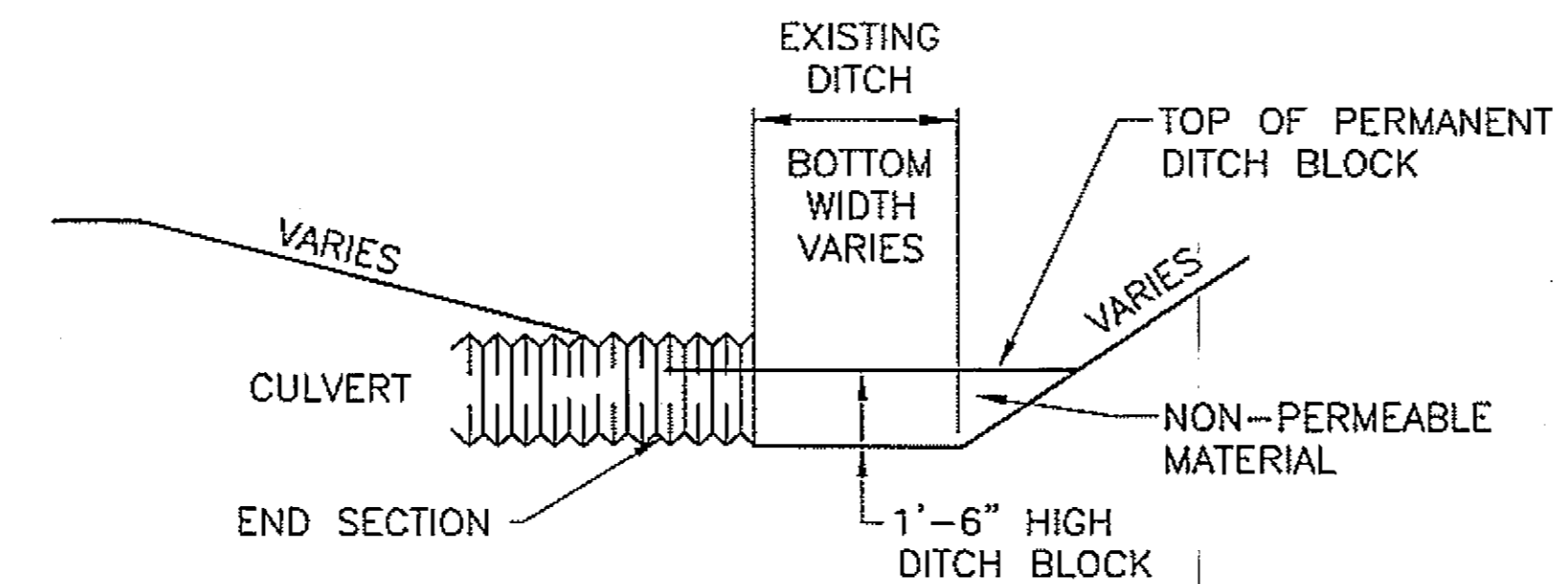
**NOTE:**  
1. INSPECT AND MAINTAIN TEMPORARY CHECK DAMS PER BEST MANAGEMENT PRACTICES, EXAMPLE SS9 LOCATED ON THE STATE OF ALASKA, DEPARTMENT OF TRANSPORTATION, JUNEAU, ALASKA, 3 MILE SERVER ([HTTP://WWW.DOT.STATE.AK.US](http://www.dot.state.ak.us) UNDER ENVIRONMENTAL STANDARDS) AND AS DISCUSSED IN SPECIAL PROVISIONS SECTION 203-3.01.



**SECTION A-A**  
N.T.S.



**SECTION B-B**  
N.T.S.



**ELEVATION**  
N.T.S.

**TEMPORARY ROCK CHECK DAM/PERMANENT DITCH BLOCK DETAILS**

SEE SUMMARY SHEET D5 FOR LOCATIONS

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH:  
Q:\PSG\68646\PLANS\SET168646\_E3-S7\_DETAILS.DWG

DRDDGGE  
TAB: E7 Friday, July 29, 2005 11:27:44 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

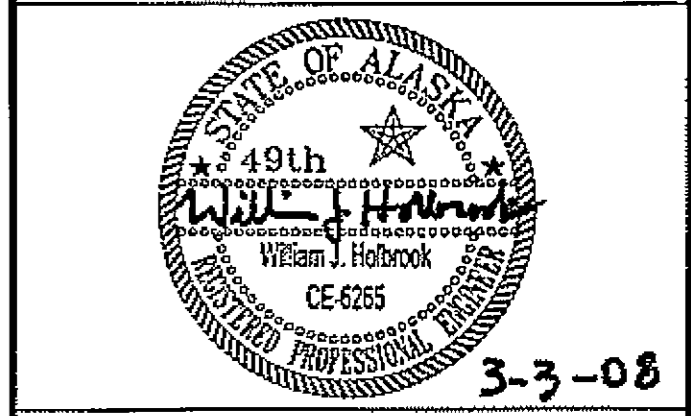
No.	DATE	DESCRIPTION

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
AND SOUTH MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. MGS-0937(31) ~ 68646

**DITCH BLOCK  
DETAILS**

PLAN LEGEND

CHECKED BY: J. HEUMANN



DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION  
PSG-SOUTH MITKOF HIGHWAY  
UPGRADE (PHASE II) AND SOUTH  
MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. 68646

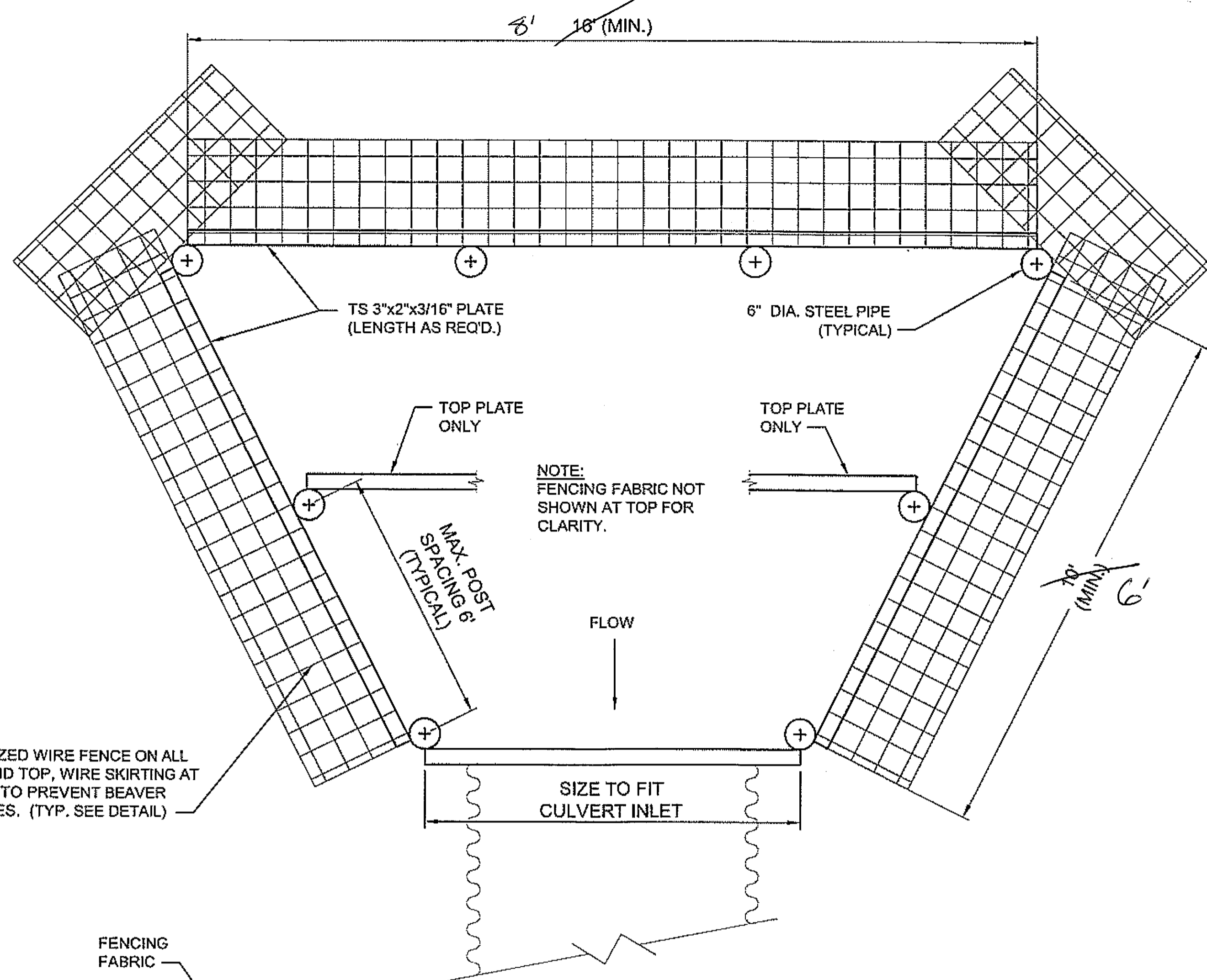
**DITCH BLOCK  
DETAILS**

PROJECT DESIGNATION NUMBER

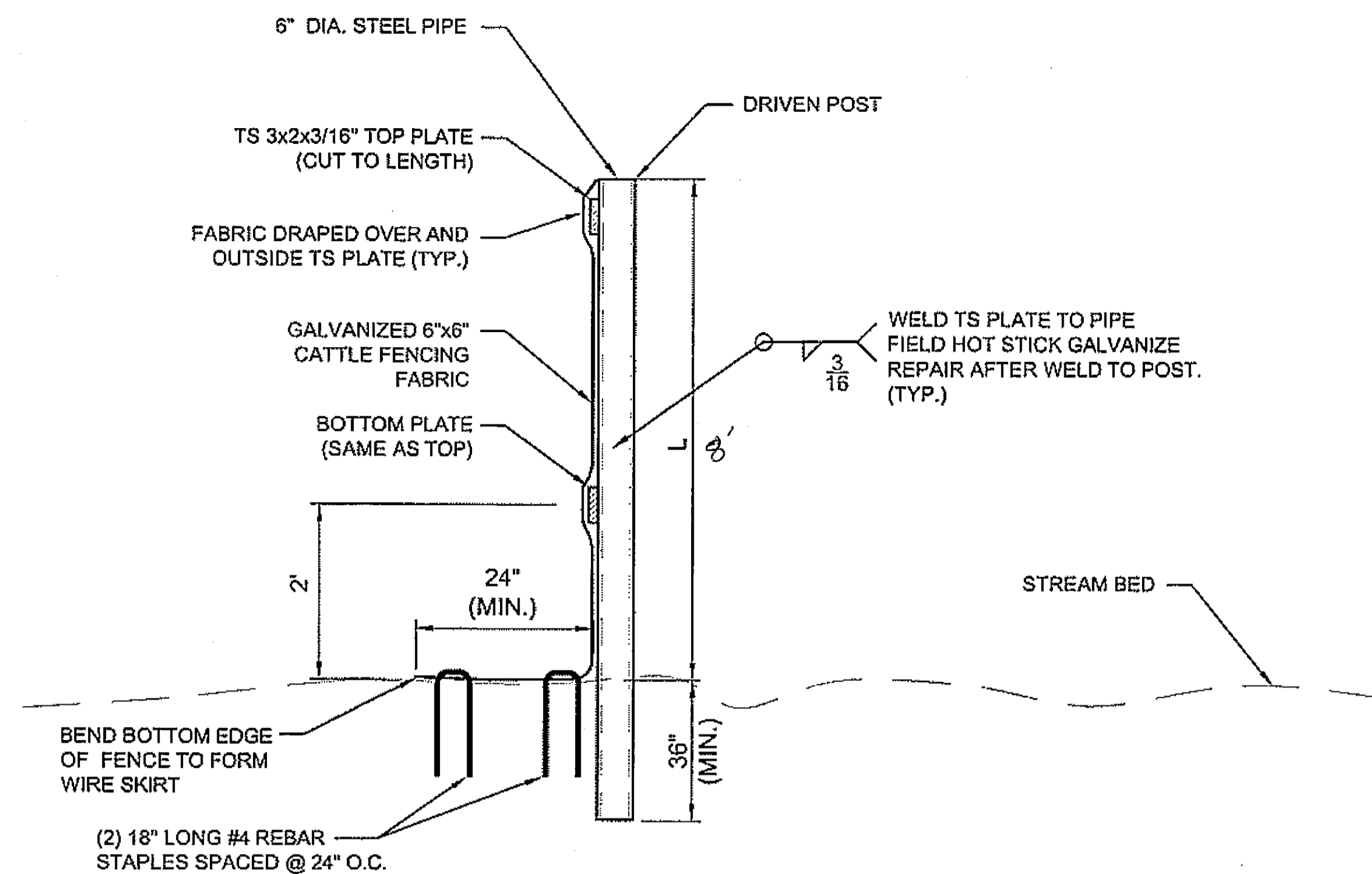
MGS-0937(31)-68646

STATE	YEAR
ALASKA	2008

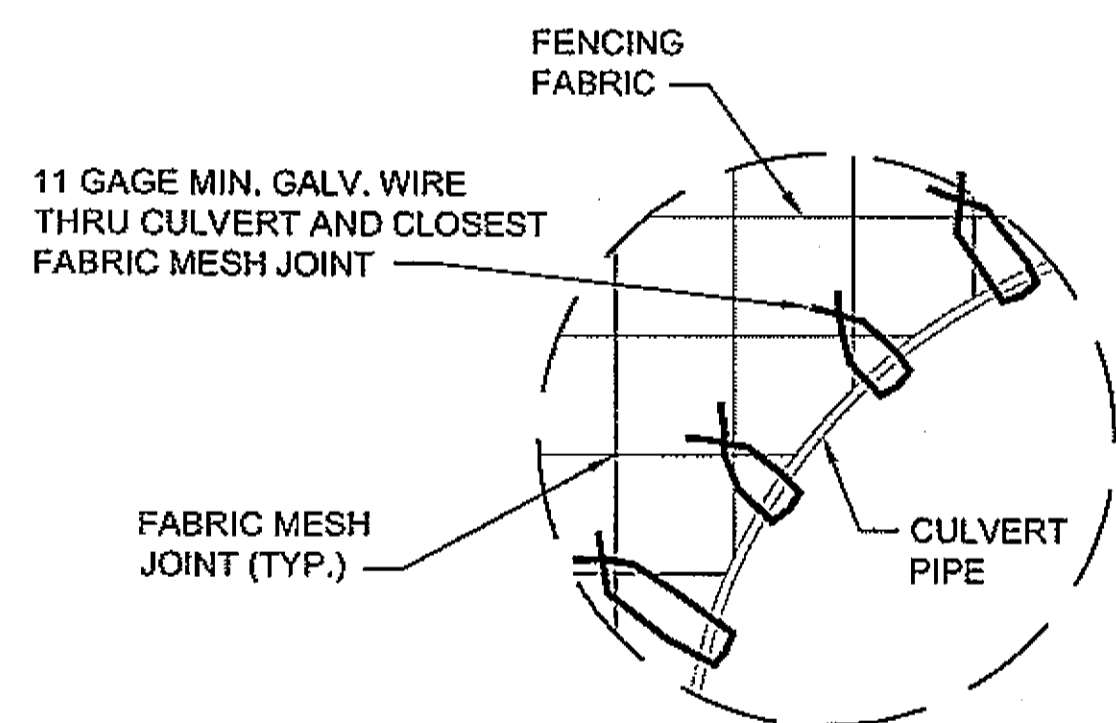
SHEET NUMBER	TOTAL SHEETS
E7	46



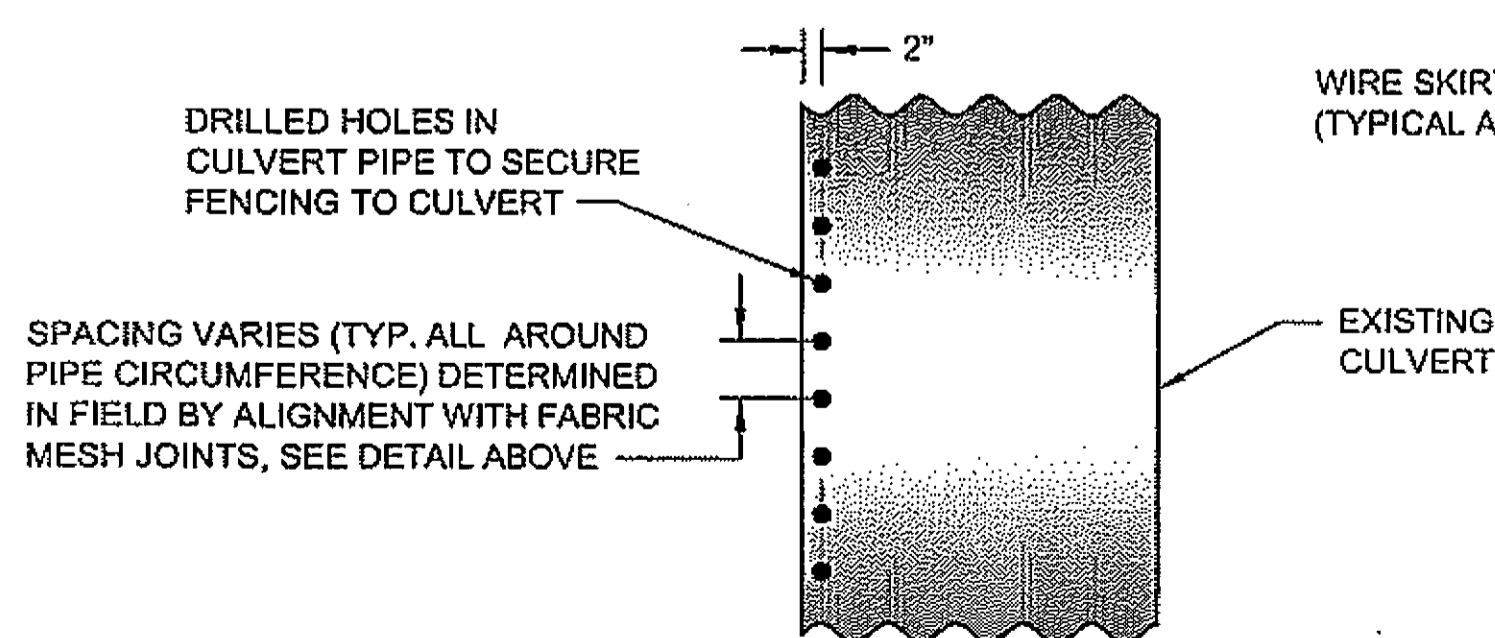
PLAN VIEW



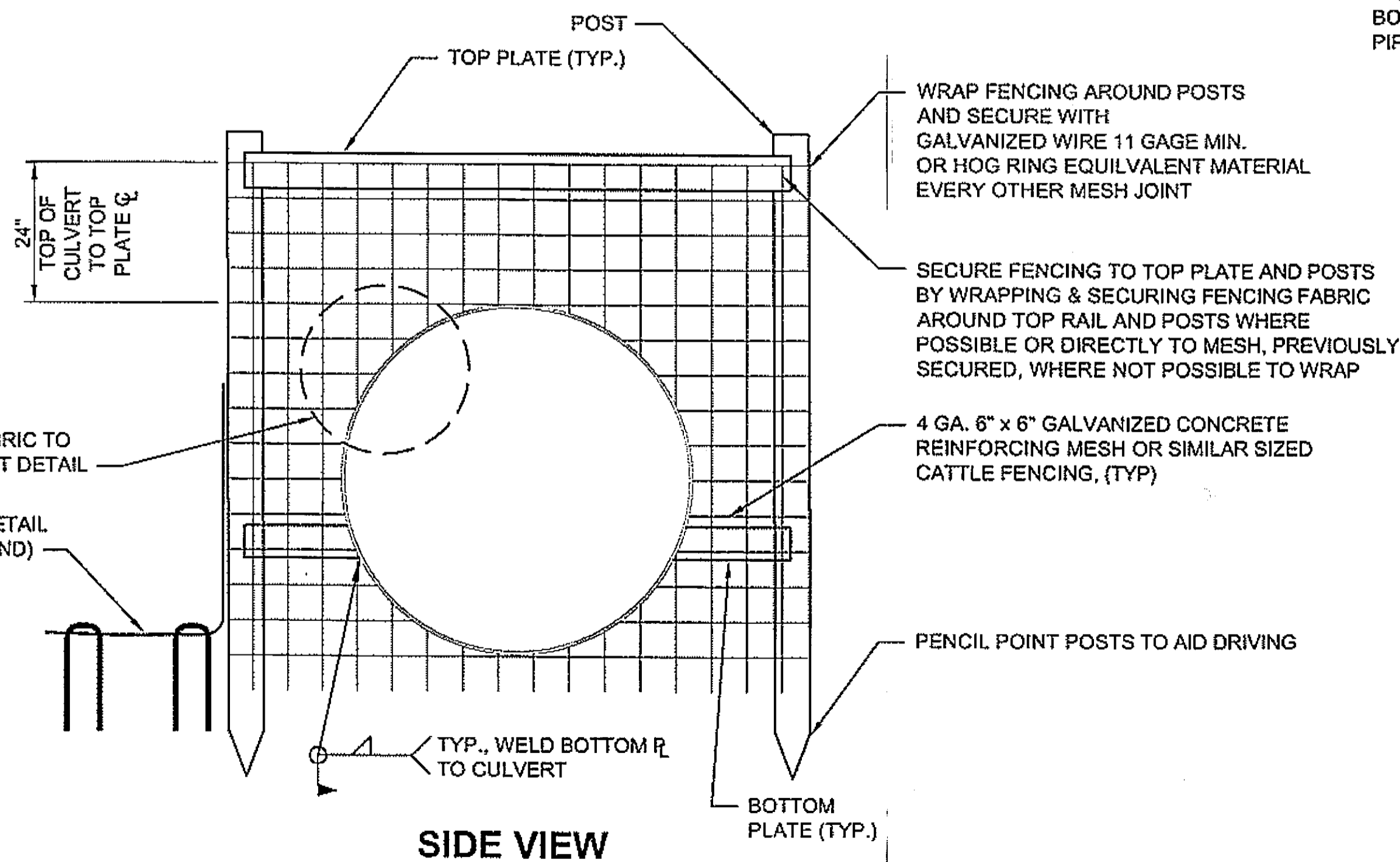
POST, FENCE FABRIC & SKIRT DETAIL



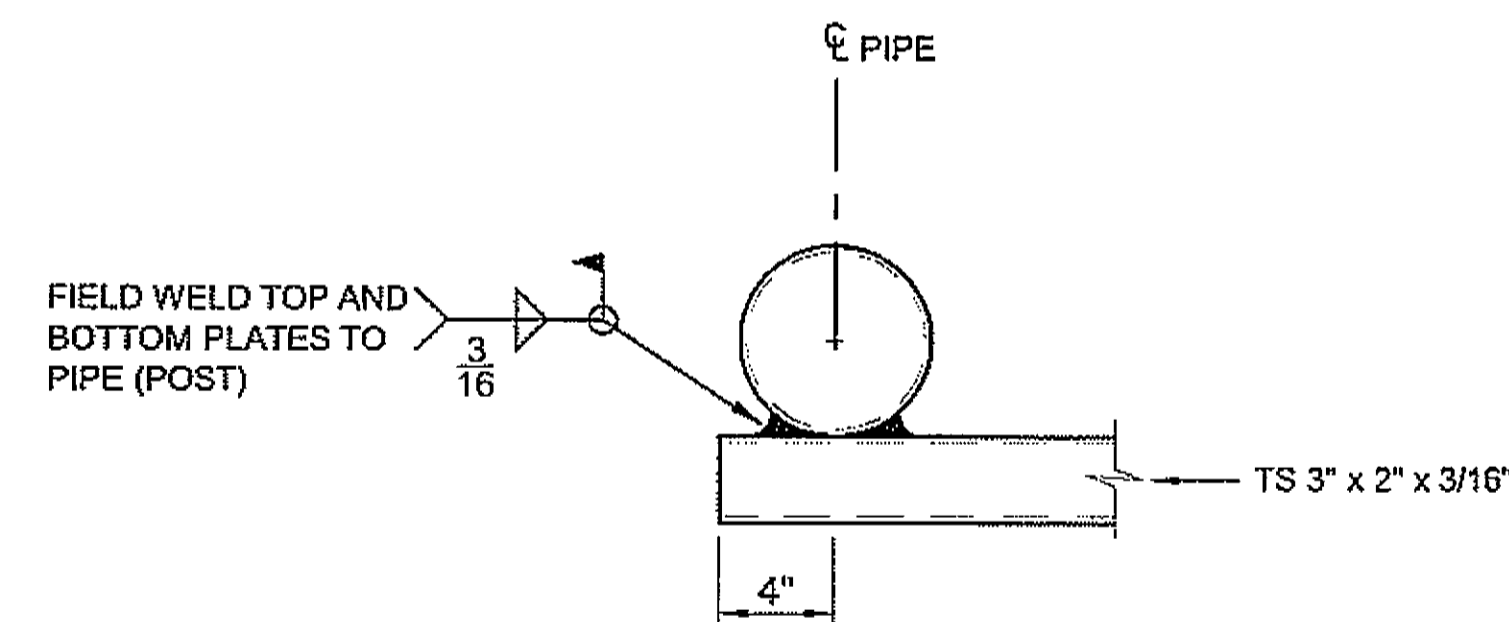
FABRIC TO CULVERT CONNECTION DETAIL



FABRIC TO CULVERT DETAILS



BEAVER DECEIVER



TS PLATE TO POST DETAIL

GENERAL NOTES:

1. REMOVE EXISTING BEAVER CONTROL STRUCTURE AT INLET END OF P-121.
2. INSTALL "BEAVER DECEIVER" DEVICE SHOWN THIS SHEET AT P-121 INLET END.
3. SEE SHEET F6 FOR PLAN LOCATION.

PATH: Q:\PSG\68646\PLANSET\68646\_E8\_BEAVER DECEIVER.DWG  
 DRDODGE  
 TAB: E8 Friday, July 29, 2005 11:27:44 AM

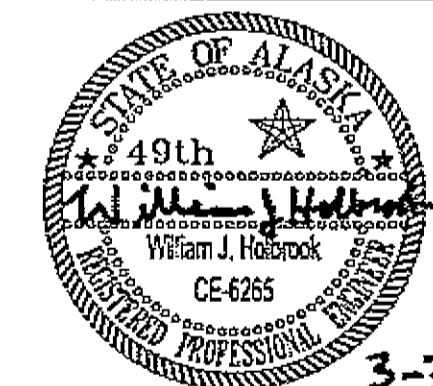
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
 AND SOUTH MITKOF ISLAND TERMINAL PAVING  
 PROJECT NO. MGS-0937(31) - 68646

BEAVER DECEIVER  
 PLAN AND DETAILS

PLAN LEGEND

CHECKED BY: J. HEUMANN



DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 SOUTHEAST REGION  
 PSG-SOUTH MITKOF HIGHWAY  
 UPGRADE (PHASE II) AND SOUTH  
 MITKOF ISLAND TERMINAL PAVING  
 PROJECT NO. 68646

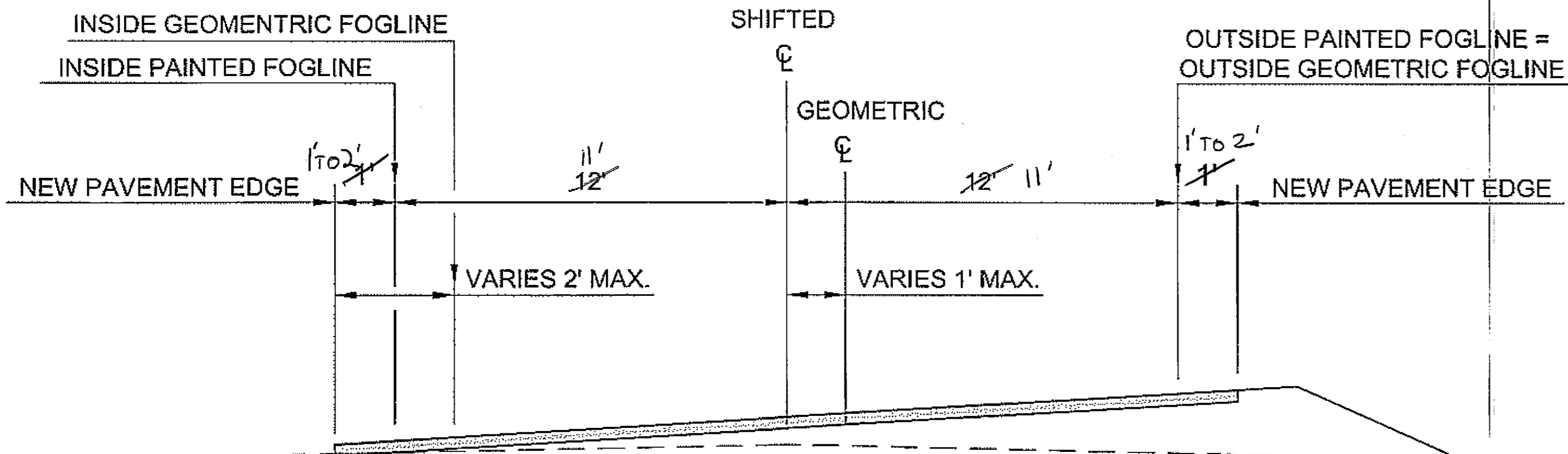
BEAVER DECEIVER  
 PLAN AND DETAILS

PROJECT DESIGNATION NUMBER

MGS-0937(31)-68646

STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
E8	46

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

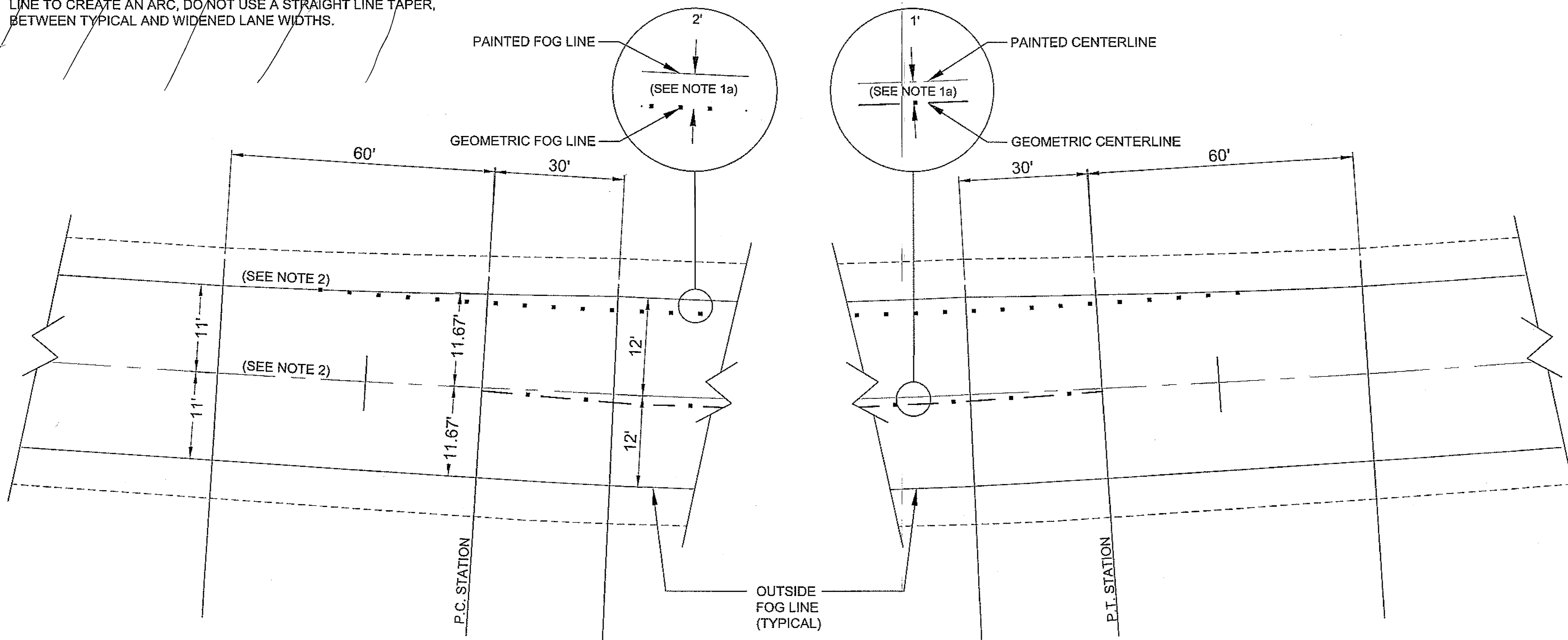
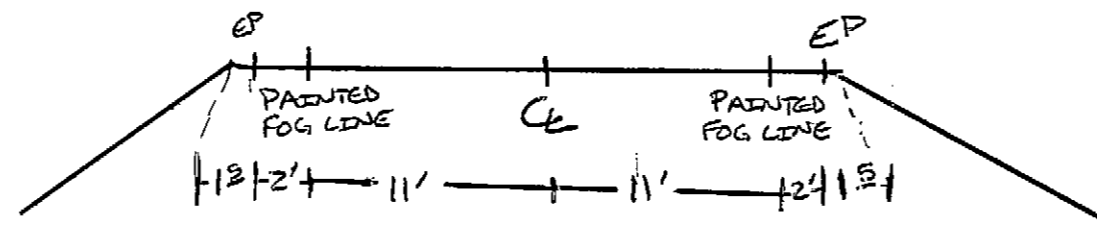


**TYPICAL CURVE WIDENING SECTION**  
N.T.S.

**NOTES:**

- 1) THE PAINTED FOG LINE AND THE GEOMETRIC FOG LINE ON THE OUTSIDE OF THE CURVE REMAINS UNCHANGED.
  - a) TO ESTABLISH THE CENTERLINE IN THE WIDENED CURVE, OFFSET THE OUTSIDE FOG LINE BY 12'. THEN OFFSET THIS LINE BY ANOTHER 12' TO ESTABLISH THE INSIDE FOG LINE.
- 2) AFTER ESTABLISHING BOTH ENDS OF THE TRANSITION USE A STRING LINE TO CREATE AN ARC, DO NOT USE A STRAIGHT LINE TAPER, BETWEEN TYPICAL AND WIDENED LANE WIDTHS.

*CENTERLINE DID NOT SHIFT. LANE WIDTHS REMAINED 11'. ASPHALT PAVEMENT WAS WIDENED TO 13' PER LANE*



CURVE WIDENING SUMMARY			
CURVE No.	PC STATION	PT STATION	REMARKS
1	844+24.25	848+15.92	
2	855+47.35	864+86.91	
3	900+22.70	916+10.50	
4	927+84.77	932+51.27	
5	942+66.92	965+22.00	
6	1008+68.80	1026+99.90	
7	1101+65.56	1108+00.56	
8	1111+05.05	1118+57.24	
9	1138+34.09	1149+65.85	
10**	1187+26.36	1213+86.60	
13	1221+60.80	1229+13.30	
14	1234+13.66	1255+46.99	

\*\* CURVE 10 STATIONING INCLUDES CURVE NUMBER 11 AND 12.

PATH: C:\PSG\68646\PLANSET\68646\_E9\_CURVE WIDENING.DWG  
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 TAB: E9 Friday, July 29, 2005 11:27:44 AM

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
 AND SOUTH MITKOF ISLAND TERMINAL PAVING  
 PROJECT NO. MGS-0937(31) ~ 68646

**CURVE WIDENING  
 DETAILS AND SUMMARY**

**PLAN LEGEND**

CHECKED BY: J. HEUMANN

DESIGNED BY: B. HOLBROOK  
 DRAWN BY: N. GEARY

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 SOUTHEAST REGION

PSG-SOUTH MITKOF HIGHWAY  
 UPGRADE (PHASE II) AND SOUTH  
 MITKOF ISLAND TERMINAL PAVING  
 PROJECT NO. 68646

**CURVE WIDENING  
 DETAILS AND  
 SUMMARY**

PROJECT DESIGNATION NUMBER  
 MGS-0937(31)-68646

STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
E9	46

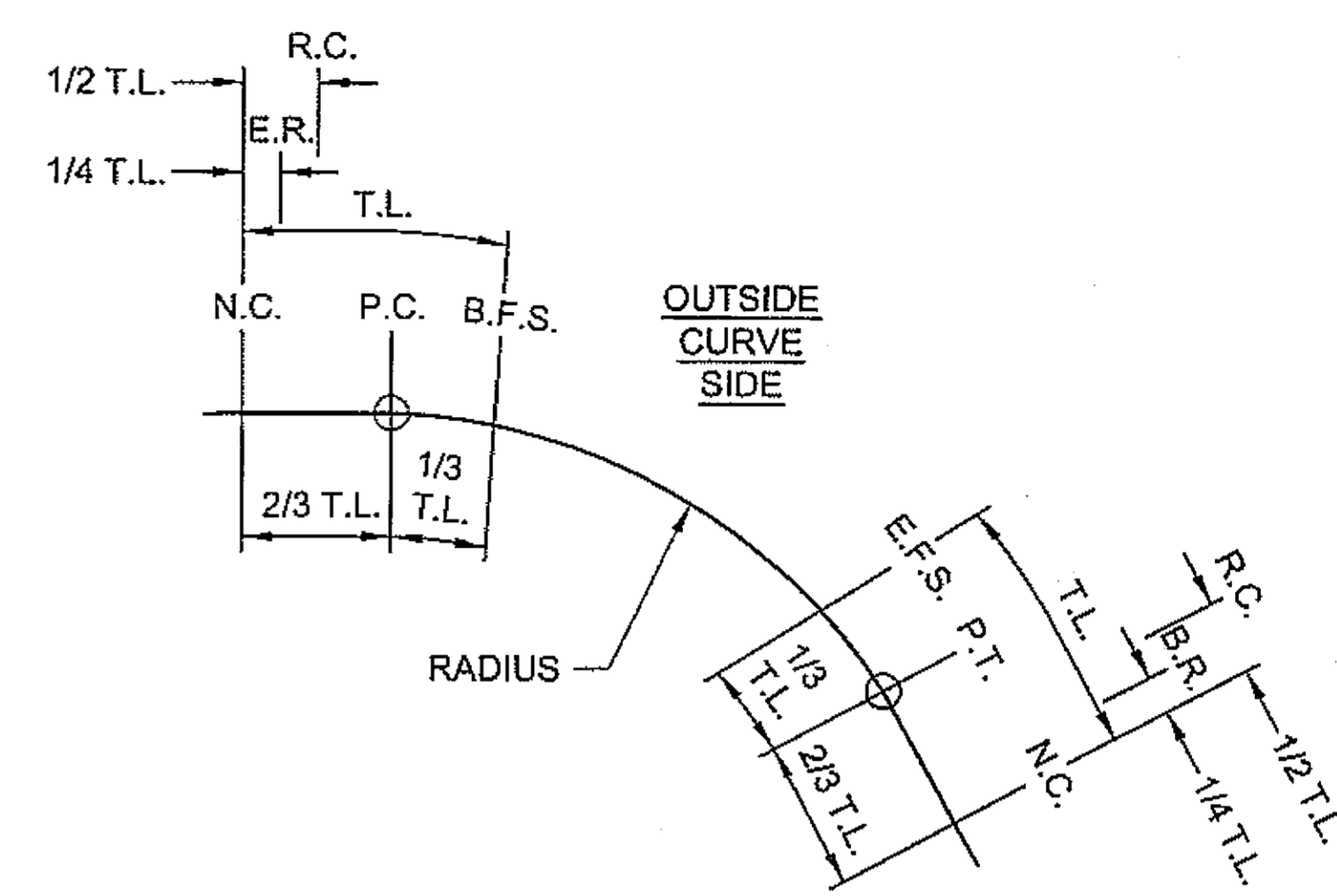
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

SUPERELEVATION SUMMARY							
AS-BUILT "L" CURVE INFORMATION						NEW SUPERELEVATION INFORMATION	
CURVE NO.	DIRECTION	P.C. STATION	P.T. STATION	RADIUS (FT.)	LENGTH (FT.)	E RATE, MAX. (%)	TRANSITION LENGTH (FT.)
1	LEFT	844+24.25	848+15.92	1432.39	391.67	5.2	150
2	RIGHT	855+47.35	864+86.91	2864.79	938.75	4.0	150
3	RIGHT	900+22.70	916+10.50	5729.58	1012.80	2.0	150
4	RIGHT	927+84.77	932+51.27	2864.79	461.11	4.0	150
5	LEFT	942+66.92	965+22.00	11459.16	2251.34	2.0	150
6	RIGHT	1008+68.80	1026+99.90	2546.48	1832.96	4.0	150
7	LEFT	1101+65.56	1108+00.56	5729.58	635.00	2.0	150
8	RIGHT	1111+05.05	1118+57.24	5729.58	750.00	2.0	150
9	RIGHT	1138+34.09	1149+65.85	5729.58	1133.33	2.0	150
*10	LEFT	1187+29.58	**1190+00.41	1432.39	270.83	5.2	150
	LEFT	**1190+00.41	1213+86.60	1909.86	2413.82	4.5	150
11	RIGHT	1221+60.80	1229+13.30	1432.39	752.50	5.2	150
12	LEFT	1234+13.66	***1245+00.00	2291.83	2133.33	4.1	150

\* SEE NOTE 3  
 \*\* P.C.C.  
 \*\*\* E.O.P., NOT END OF CURVE

**LAYOUT NOTES:**

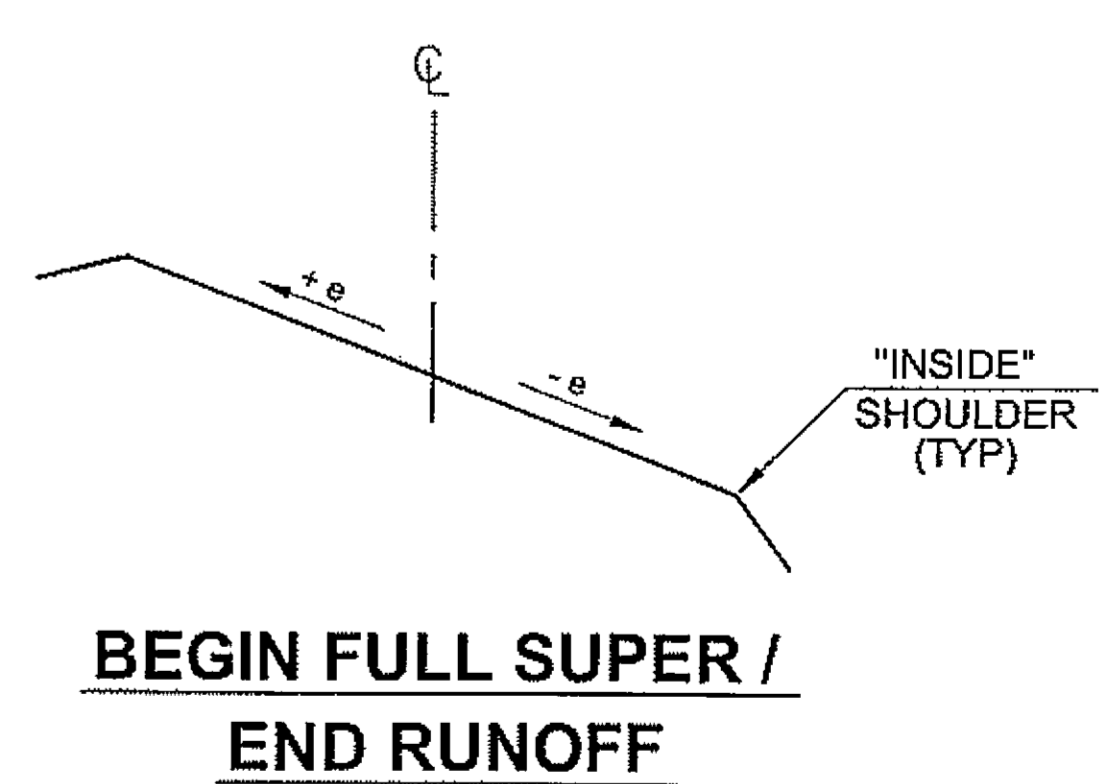
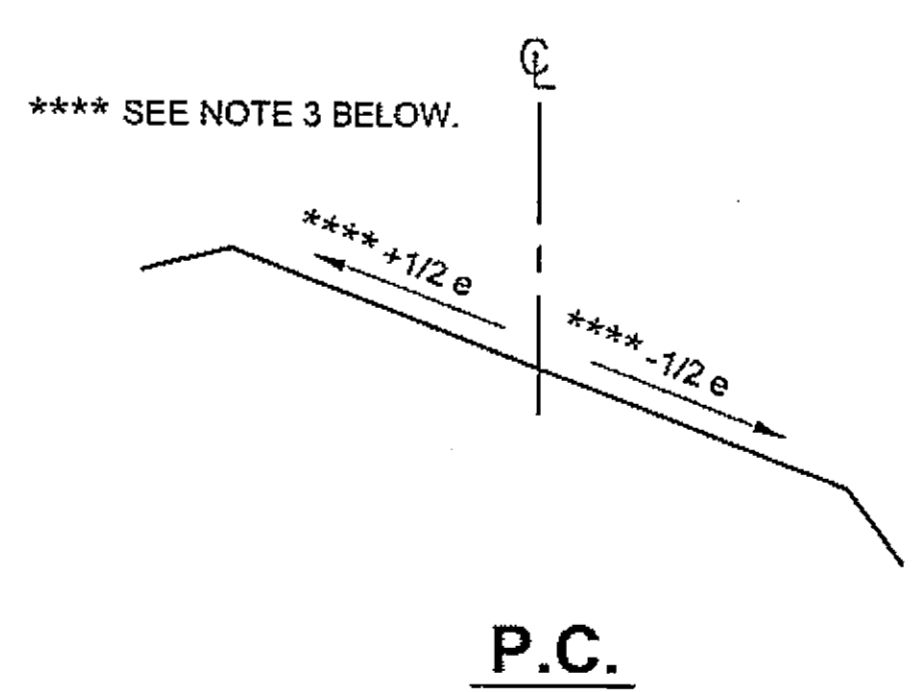
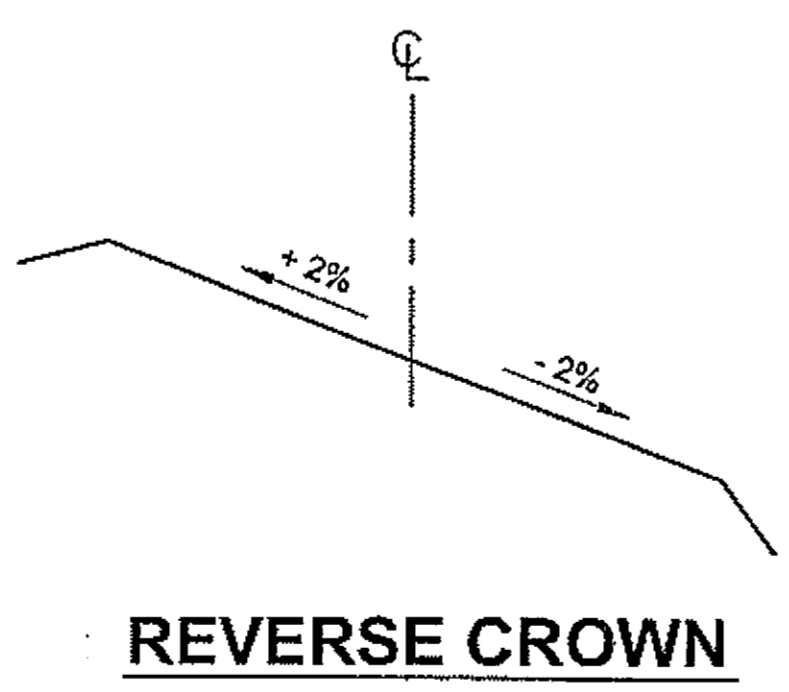
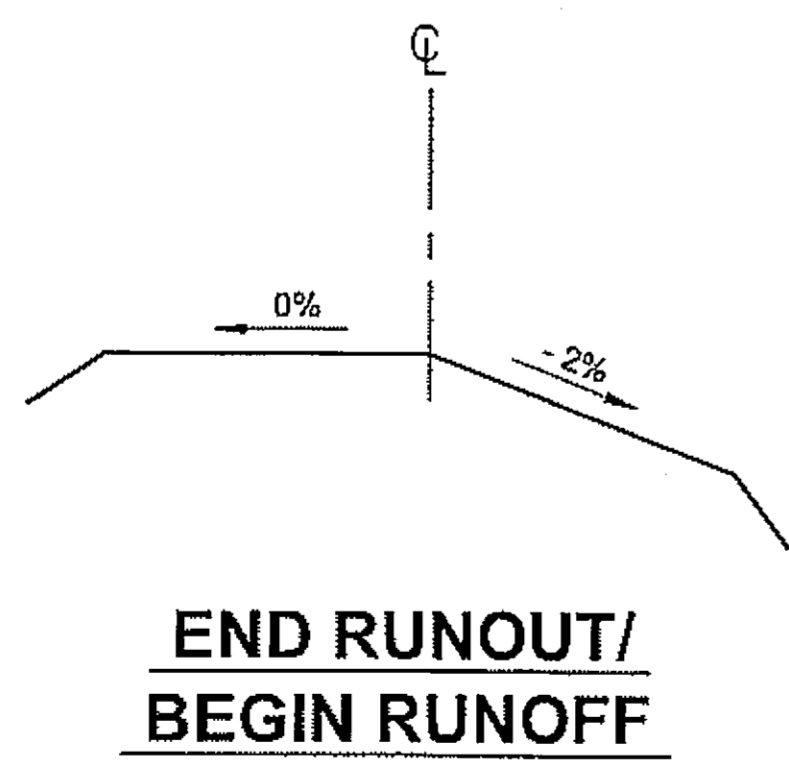
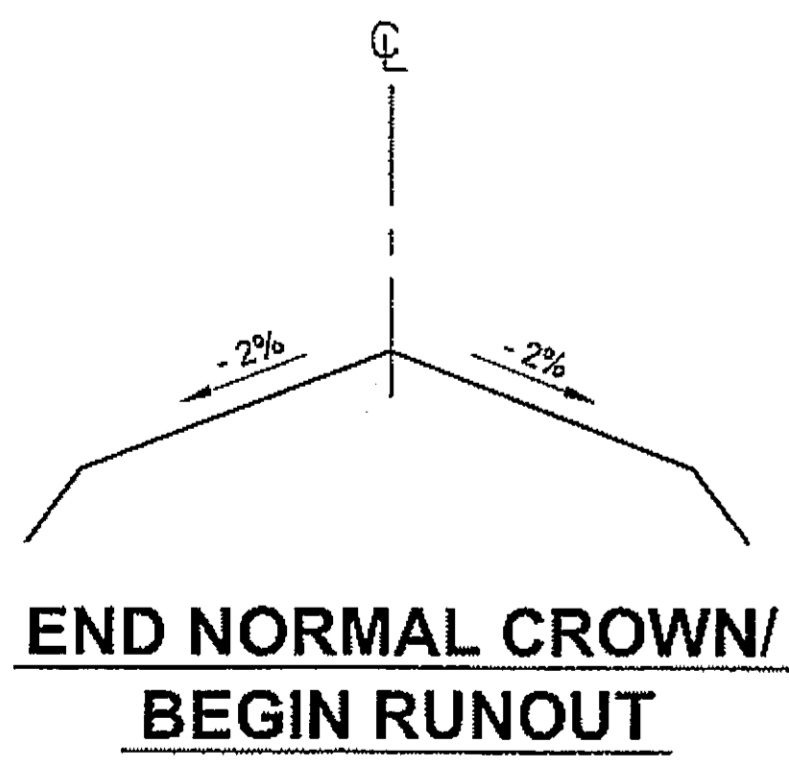
- STATIONING OF P.C.'S AND P.T.'S IN TABLE IS APPROXIMATE AND BASED ON EXISTING AS-BUILTS. IT IS CONTRACTOR'S RESPONSIBILITY TO BEST FIT THE EXISTING CURVES TO THE IN-SITU ROADWAY, THEN APPLY SUPERELEVATION CROSS SLOPES ACCORDINGLY.
- UNLESS OTHERWISE DIRECTED SUPERELEVATION RATE AND TRANSITION LENGTHS SHALL BE AS NOTED IN TABLE ABOVE AND APPLIED AS SHOWN IN LAYOUT DETAIL. IT HAS BEEN ASSUMED THAT SUPERELEVATION SHALL BE APPLIED BY ROTATING THE ROADWAY TYPICAL ABOUT THE CENTERLINE, UNLESS OTHERWISE DIRECTED.
- CURVE #10 IS A COMBINATION OF TWO CURVES WITH DIFFERENT RADIUS LENGTHS. BETWEEN P.C. 1187+29.58 AND P.O.C. 1190+00.41 THE RADIUS IS 1432.39 FT. WITH "e" AT 5.2%. BETWEEN P.O.C. 1190+00.41 AND P.T. 1213+86.60 THE RADIUS IS 1909.86 FT. WITH "e" AT 4.5%. TRANSITION FROM "e"=5.2% AT P.O.C. 1190+00.41 TO "e"=4.5% AT P.O.C. 1191+00.41.
- SEE STANDARD DRAWING I-81.00, CASE II FOR ADDITIONAL INFORMATION.



**SUPERELEVATION LAYOUT AT HORIZONTAL CURVES**

**DEFINITIONS:**

- T.L. = TRANSITION LENGTH = 150' (ALL CURVES)
- P.C. = POINT CURVATURE (BEGIN CURVE STATION)
- P.T. = POINT TANGENCY (END CURVE STATION)
- B.R. = BEGIN RUNOUT STATION
- E.R. = END RUNOUT STATION
- N.C. = NORMAL CROWN STATION
- R.C. = REVERSE CROWN STATION
- B.F.S. = BEGIN FULL SUPERELEVATION STATION
- E.F.S. = END FULL SUPERELEVATION STATION



**ILLUSTRATION NOTES:**

- SUPERELEVATION APPLICATION ILLUSTRATED IS FOR CURVE DIRECTION TO THE RIGHT. SAME APPLICATION EXCEPT MIRROR IMAGE FOR CURVE TO LEFT.
- ILLUSTRATION SHOWS FIRST HALF OF CURVE. FOR SECOND HALF OF CURVE REVERSE ORDER.
- ONE HALF OF e MAX OR 2%, WHICHEVER IS GREATER.

e = SUPERELEVATION RATE, MAX.

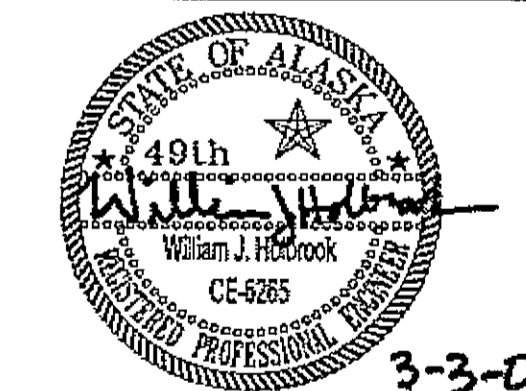
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
 AND SOUTH MITKOF ISLAND TERMINAL PAVING  
 PROJECT NO. MGS-0937(31) - 68646

**SUPERELEVATION RATES & TRANSITION LENGTHS**

**PLAN LEGEND**

CHECKED BY: J. HEUMANN



DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

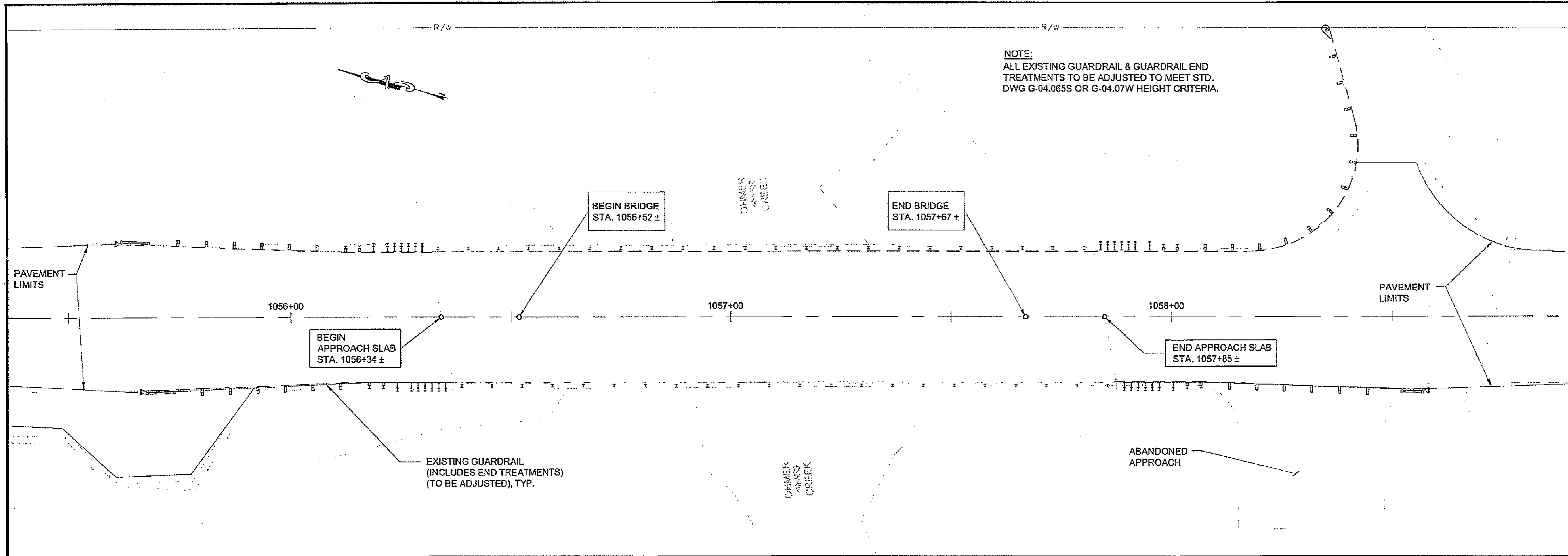
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 SOUTHEAST REGION  
 PSG-SOUTH MITKOF HIGHWAY  
 UPGRADE (PHASE II) AND SOUTH  
 MITKOF ISLAND TERMINAL PAVING  
 PROJECT NO. 68646

**SUPERELEVATION RATES & TRANSITION LENGTHS**

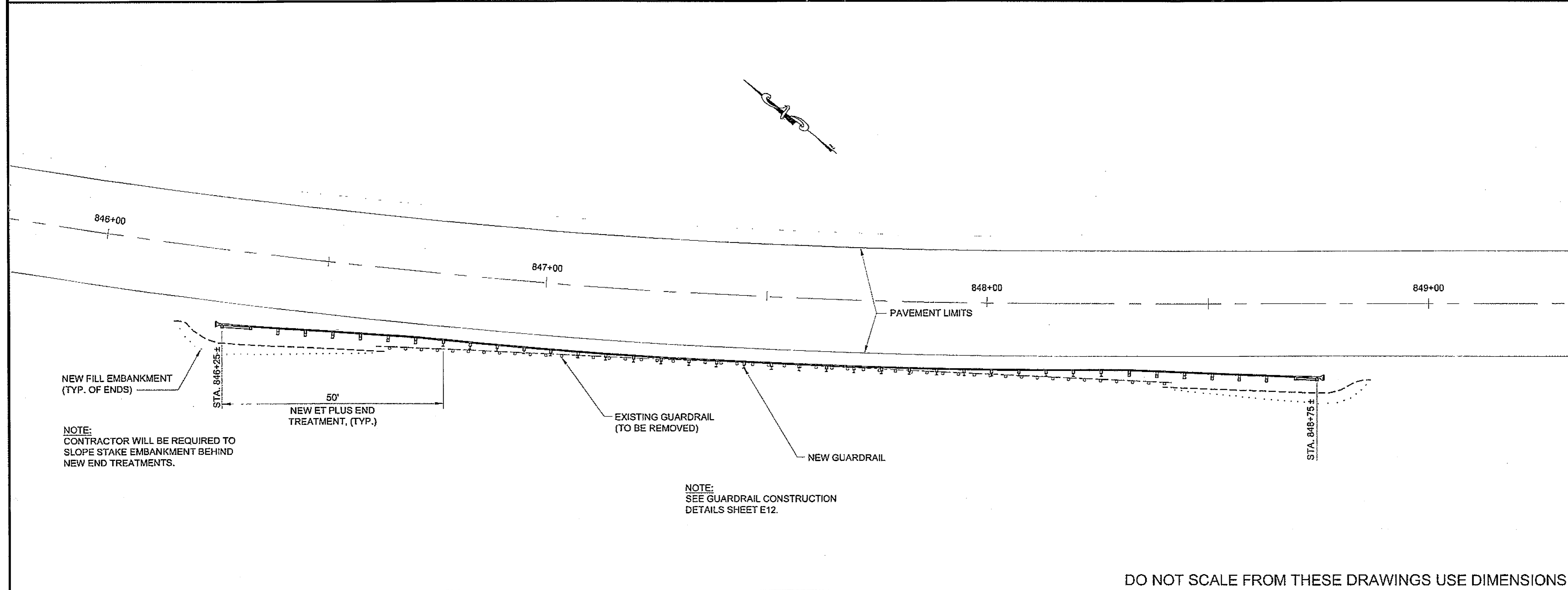
PROJECT DESIGNATION NUMBER

MGS-0937(31)-68646

STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
E10	46



**NOTE:**  
ALL EXISTING GUARDRAIL & GUARDRAIL END TREATMENTS TO BE ADJUSTED TO MEET STD. DWG G-04.065S OR G-04.07W HEIGHT CRITERIA.



**NOTE:**  
CONTRACTOR WILL BE REQUIRED TO SLOPE STAKE EMBANKMENT BEHIND NEW END TREATMENTS.

**NOTE:**  
SEE GUARDRAIL CONSTRUCTION DETAILS SHEET E12.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH:  
Q:\PSG\68646\PLANSET\68646\_E11\_GUARDRAIL\_PLANZ.DWG

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TAB: E11 Friday, July 29, 2005 11:27:44 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

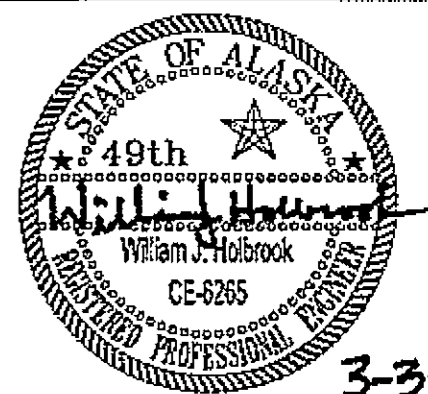
No.	DATE	DESCRIPTION

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
AND SOUTH MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. MGS-0937(31) ~ 68646

**GUARDRAIL PLAN**

**PLAN LEGEND**

CHECKED BY: J. HEUMANN



DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION  
PSG-SOUTH MITKOF HIGHWAY  
UPGRADE (PHASE II) AND SOUTH  
MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. 68646

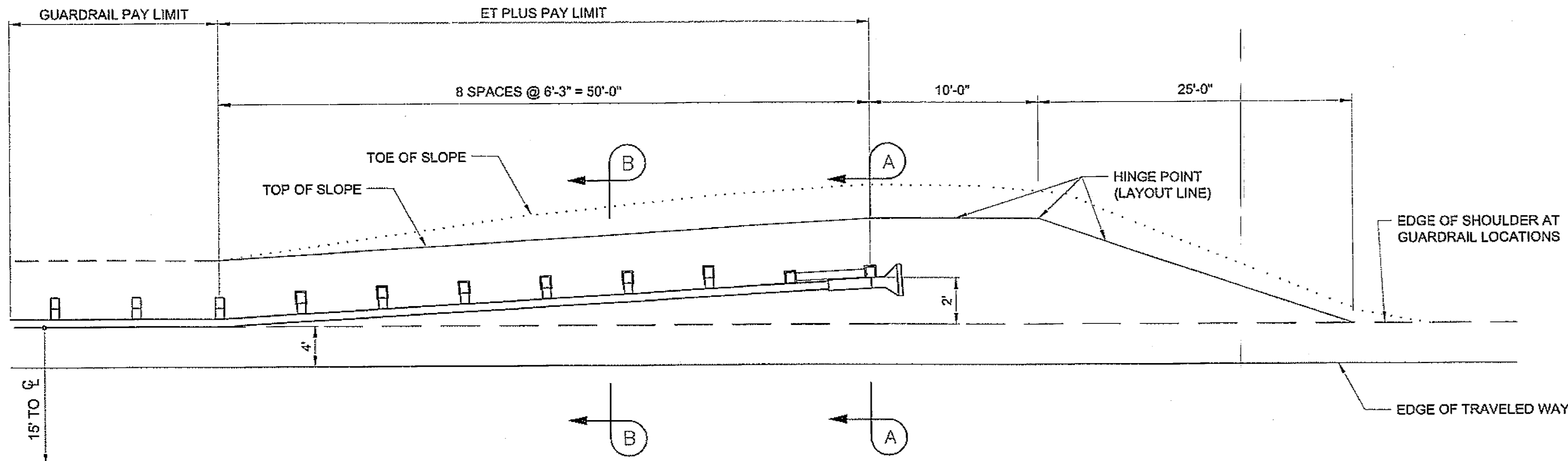
**GUARDRAIL PLAN**

PROJECT DESIGNATION NUMBER

MGS-0937(31)-68646

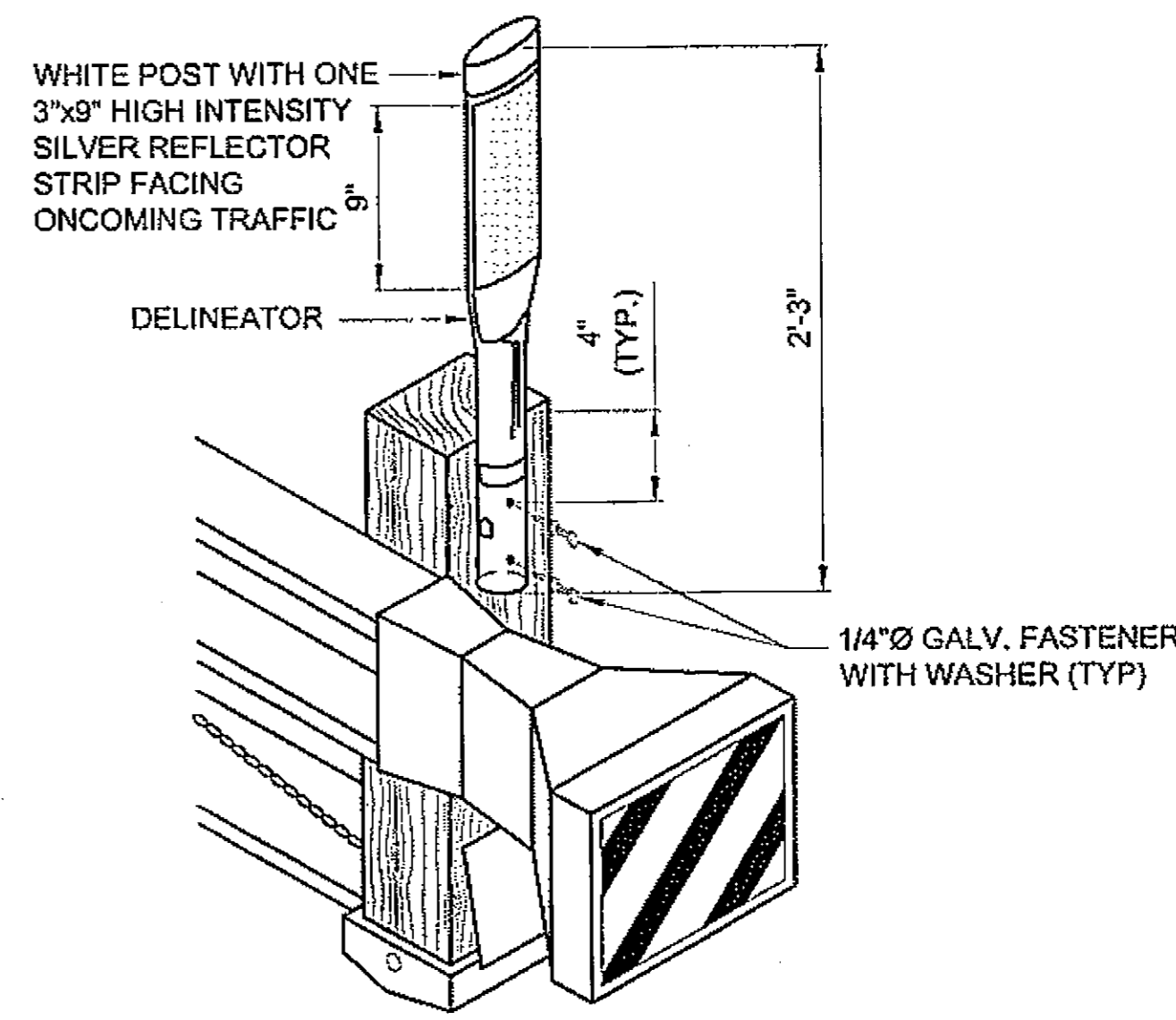
STATE	YEAR
ALASKA	2008

SHEET NUMBER	TOTAL SHEETS
E11	46



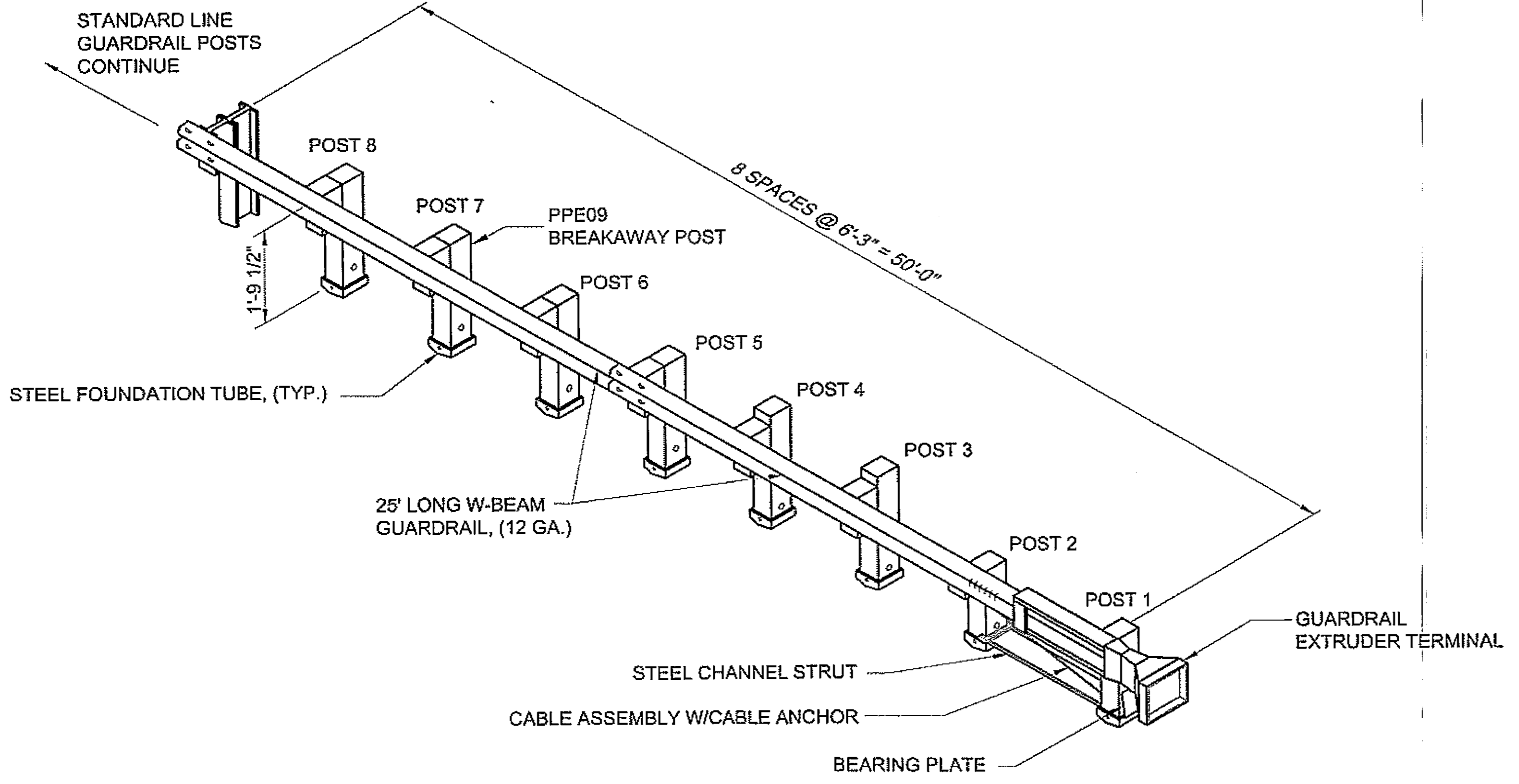
- NOTES:**
1. INSTALLATION AND MATERIALS PER ET-PLUS (FORMERLY ET-2000) MANUFACTURER RECOMMENDATION, DIRECTION AND SUPPLY.
  2. SEE STANDARD DRAWING G-20.10 FOR ADDITIONAL INFORMATION.

**ET-PLUS LAYOUT PLAN**  
NO SCALE

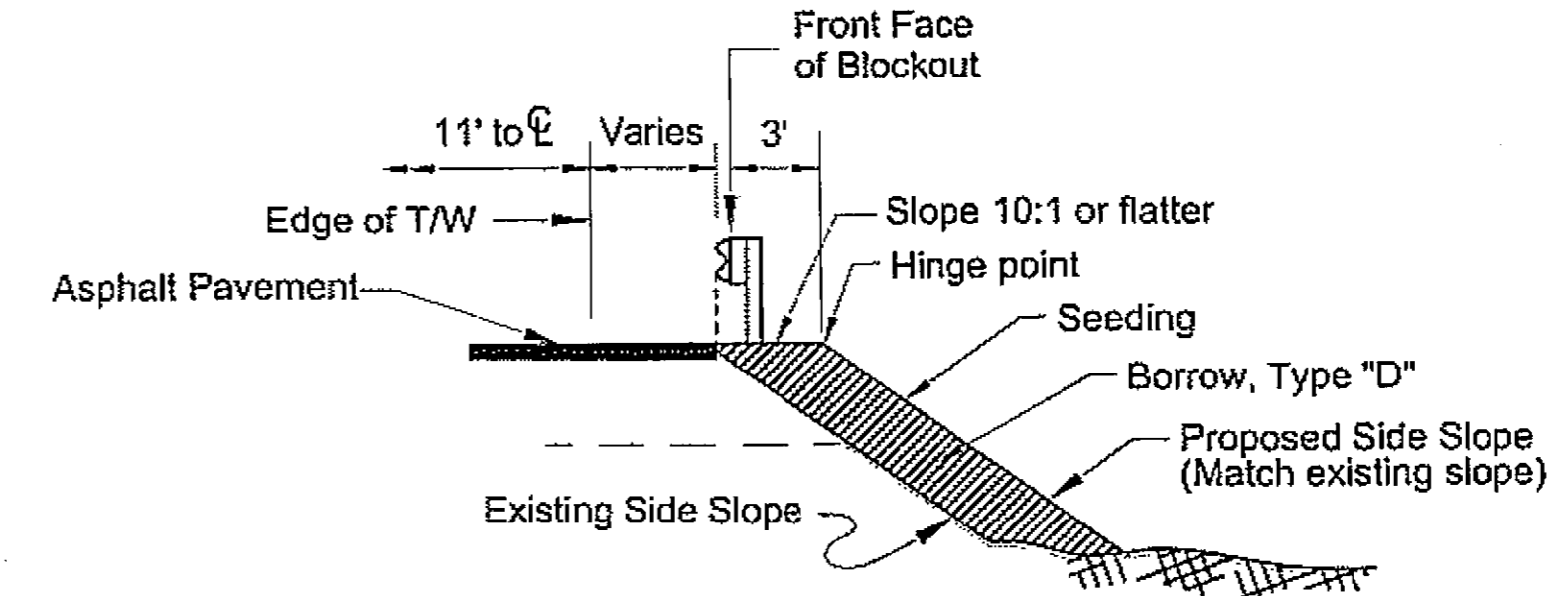


- DELINEATOR NOTES:**
1. EACH ET PLUS GUARDRAIL END SHALL HAVE ONE DELINEATOR.
  2. DELINEATOR SHALL HAVE WHITE REFLECTIVE SHEETING.
  3. STEEL POST GUARDRAIL SHALL BE PRE-DRILLED PRIOR TO SECURING DELINEATOR WITH SELF-TAPPING SCREWS.
  4. DELINEATOR SHALL BE SUBSIDIARY TO ITEM 606(11).

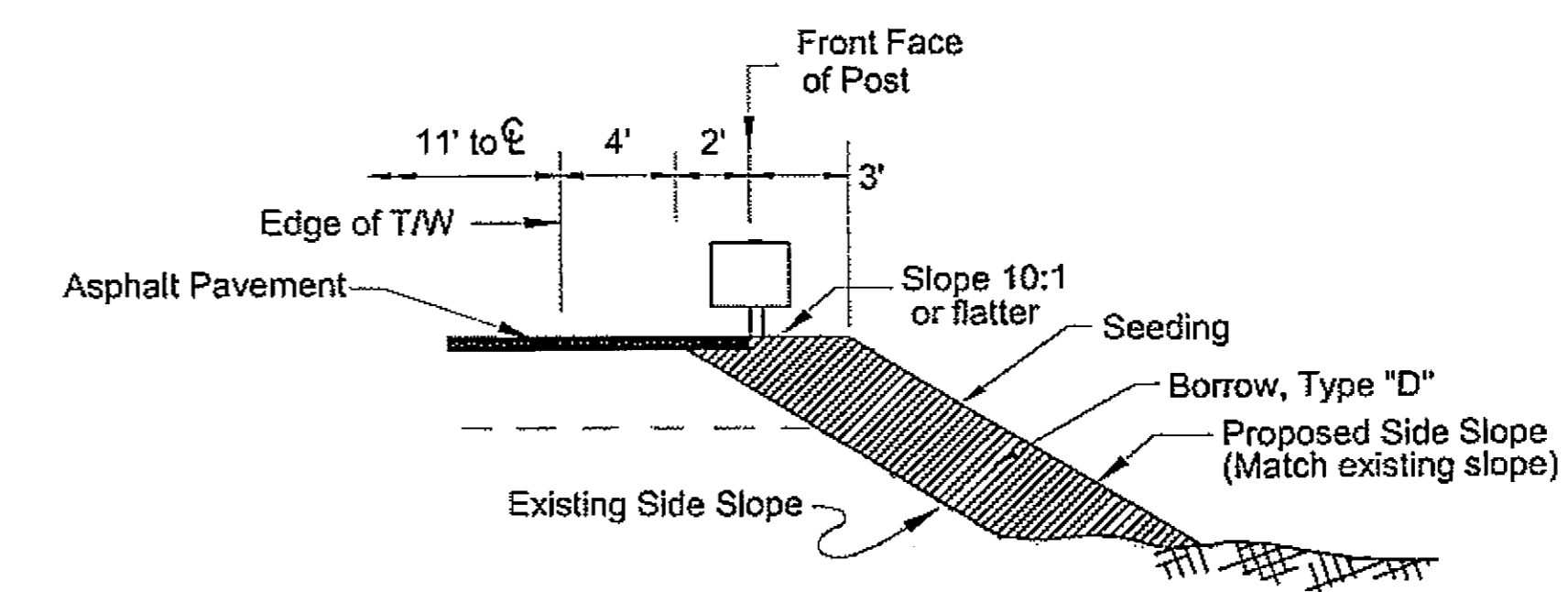
**FLEXIBLE GUARDRAIL DELINEATOR**  
NO SCALE



**ET PLUS TERMINAL DETAILS**  
NO SCALE



**SECTION B-B**  
NO SCALE



**SECTION A-A**  
NO SCALE

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PATH: D:\PSG\68646\PLANS\ET68646\_E12\_ETPLUS DET.DWG

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TAB: E12 Friday, July 29, 2005 11:27:44 AM

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
AND SOUTH MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. MGS-0937(31) ~ 68646

**ET PLUS  
GUARDRAIL DETAILS**

**PLAN LEGEND**

CHECKED BY: J. HEUMANN

DESIGNED BY: B. HOLBROOK

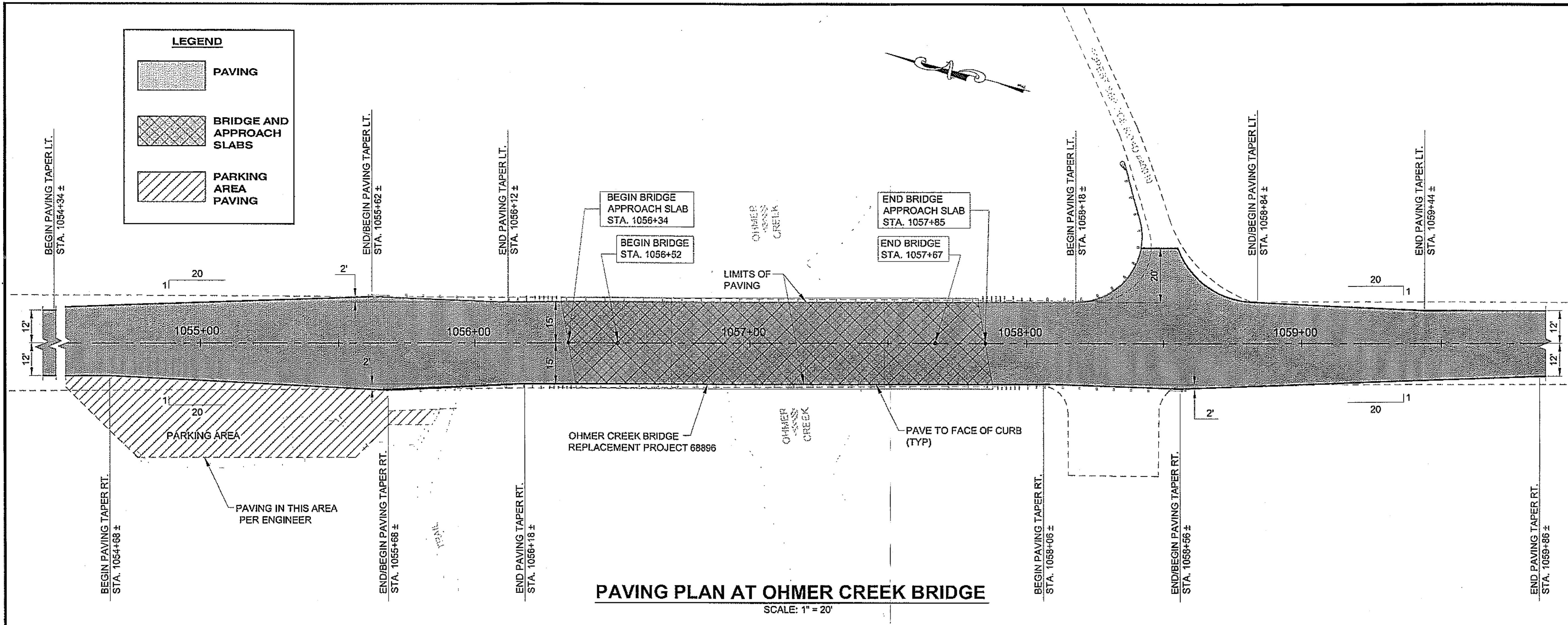
DRAWN BY: N. GEARY

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION

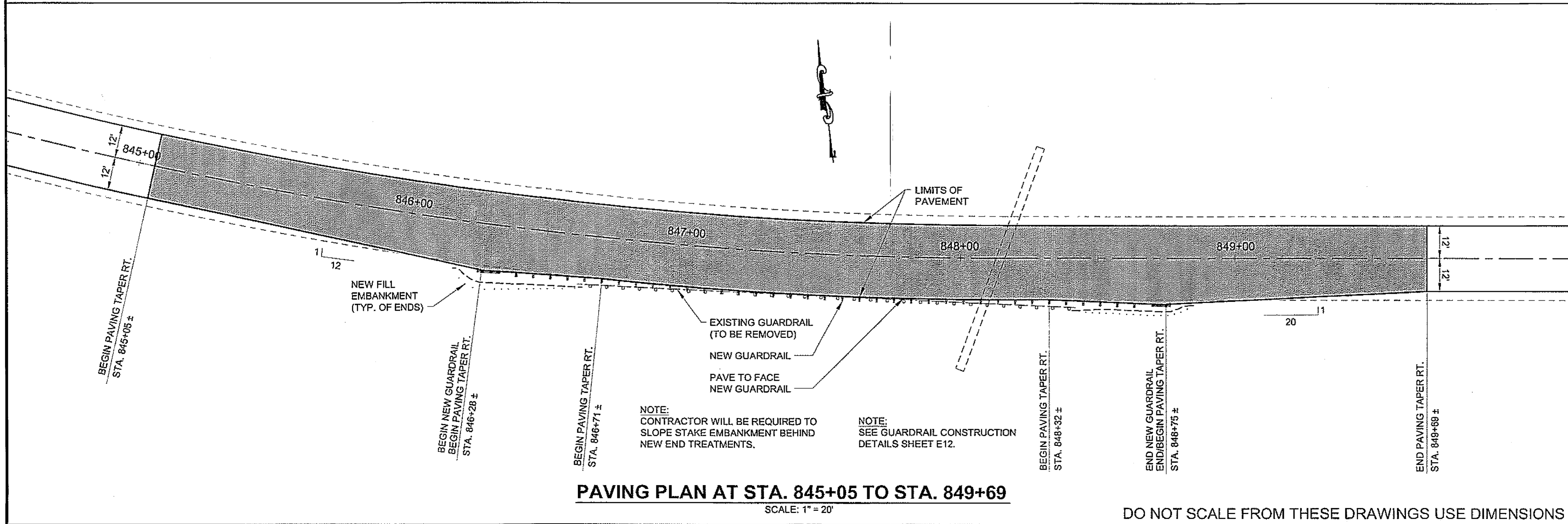
PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II) AND SOUTH MITKOF ISLAND TERMINAL PAVING PROJECT NO. 68646

**ET PLUS  
GUARDRAIL DETAILS**

PROJECT DESIGNATION NUMBER	
MGS-0937(31)-68646	
STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
E12	46



**PAVING PLAN AT OHMER CREEK BRIDGE**  
SCALE: 1" = 20'



**PAVING PLAN AT STA. 845+05 TO STA. 849+69**  
SCALE: 1" = 20'

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH:  
Q:\PSG\68846\PLANSET\68846\_E13\_ESCP BRIDGE  
SITE.DWG

DRODGE  
TAB: E13 Friday, July 29, 2005 11:27:44 AM

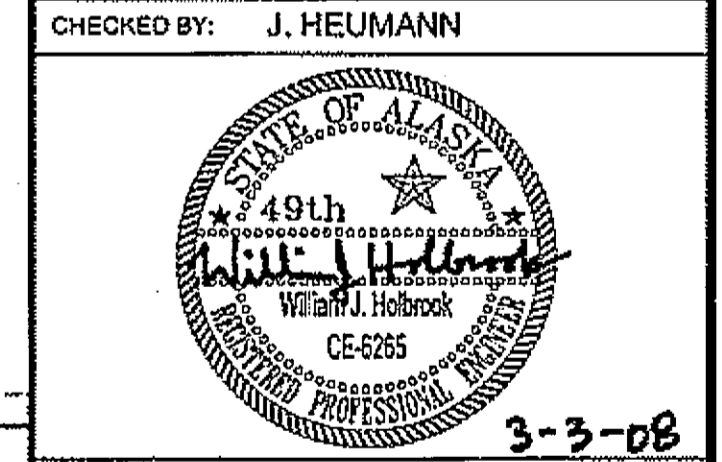
ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
AND SOUTH MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. MGS-0937(31) ~ 68646

**PAVING PLAN AT  
OHMER CREEK BRIDGE**

PLAN LEGEND

CHECKED BY: J. HEUMANN



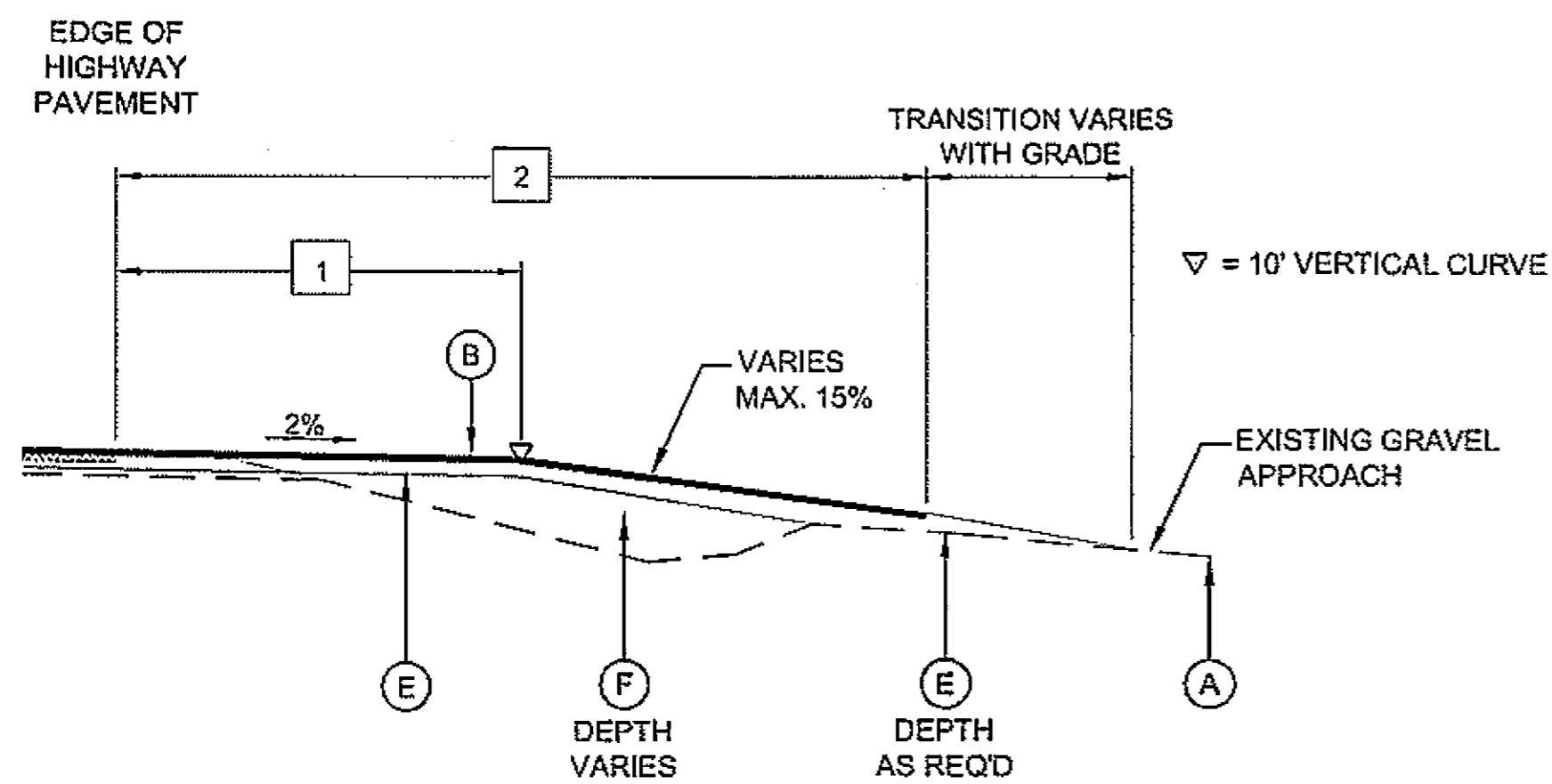
DESIGNED BY: B. HOLBROOK  
DRAWN BY: N. GEARY

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION

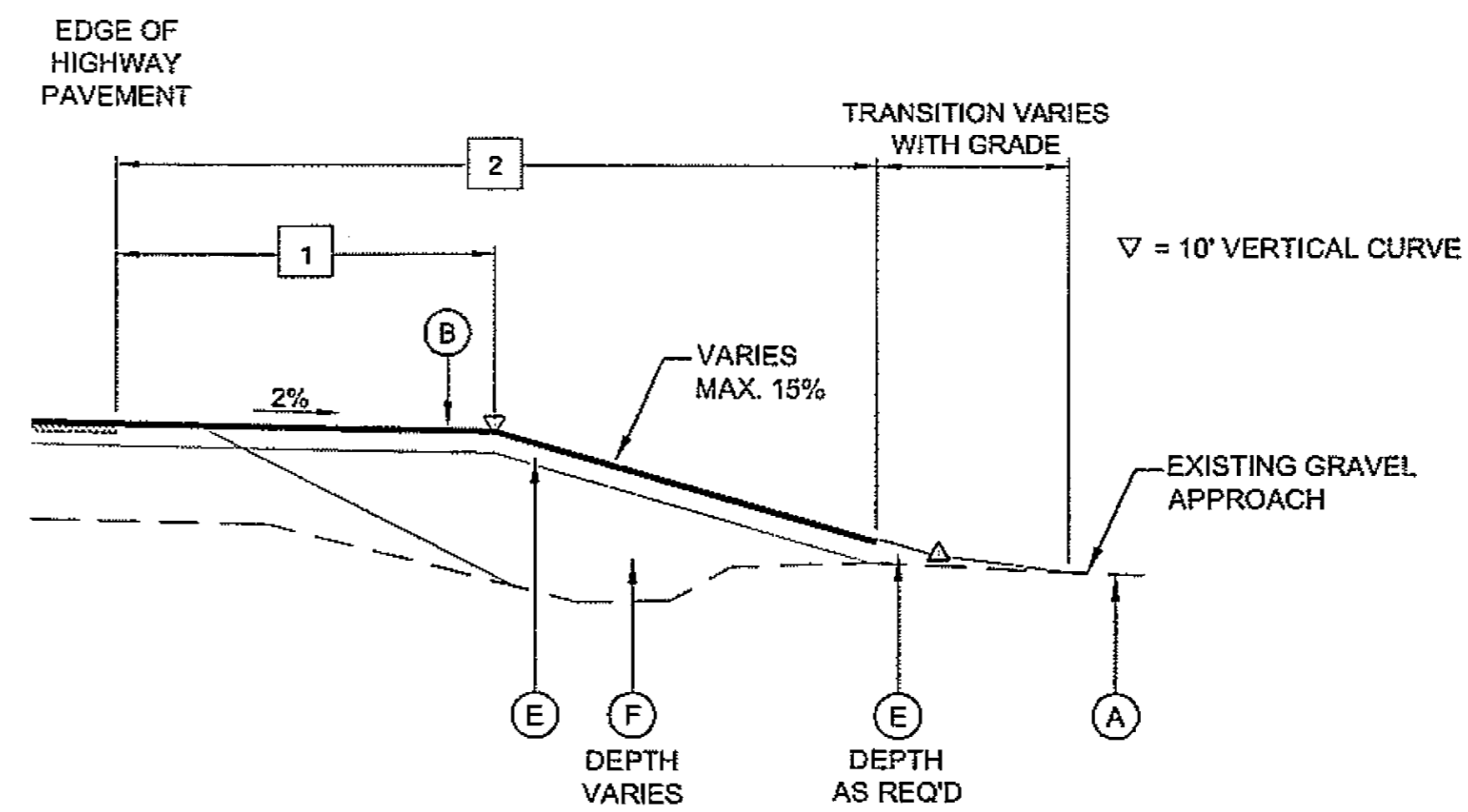
PSG-SOUTH MITKOF HIGHWAY  
UPGRADE (PHASE II) AND SOUTH  
MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. 68646

**PAVING PLAN AT  
OHMER CREEK  
BRIDGE**

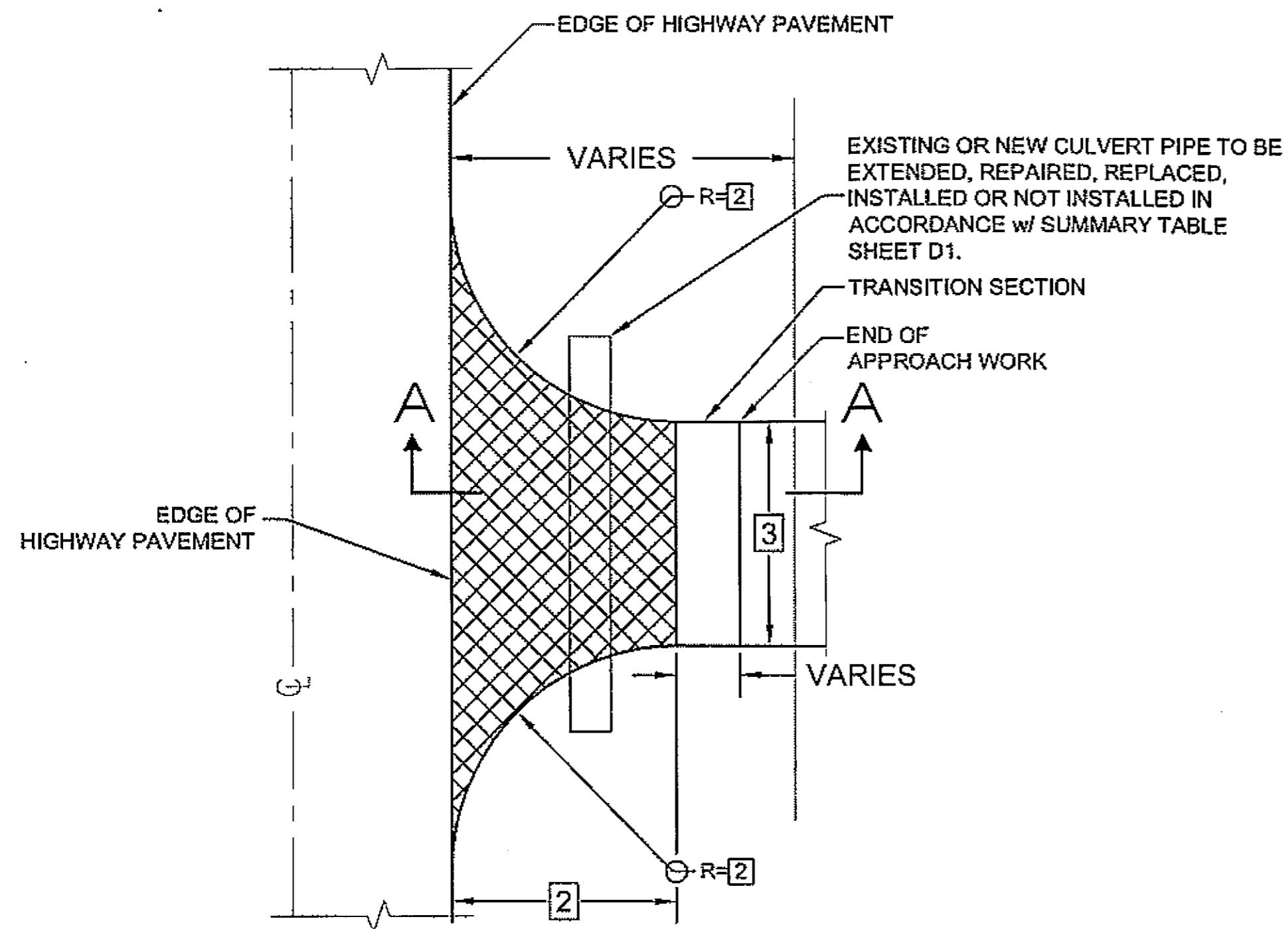
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MGS-0937(31)-68646	
STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
E13	46



**SECTION A-A**  
(STANDARD TYPICAL SECTION)



**SECTION A-A**  
(RAISED TYPICAL SECTION)



**PLAN**  
**TYPICAL APPROACH**

**COMMERCIAL PAVING**

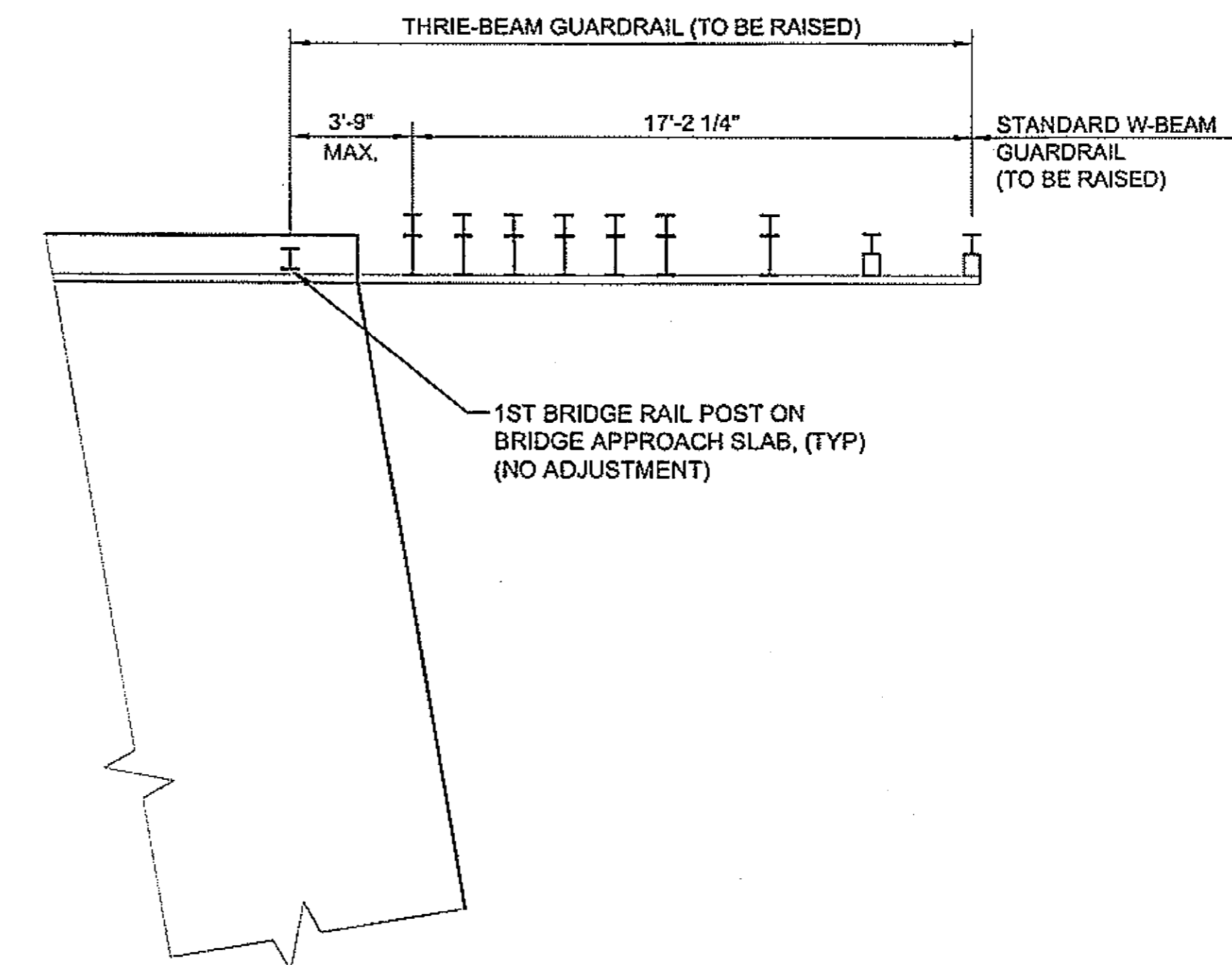
- 1 30' LANDING
- 2 40' OR TO ROW LINE, WHICHEVER IS LESS
- 3 MATCH EXISTING WIDTH, 34' MAX.

**RESIDENTIAL PAVING**

- 1 10' LANDING
- 2 20' OR TO ROW LINE, WHICHEVER IS LESS
- 3 MATCH EXISTING WIDTH, 20' MAX.

**LEGEND**

- (A) EXISTING GROUND
- (B) 2" ASPHALT CONCRETE PAVEMENT, TYPE II, CLASS B
- (E) 3" AGGREGATE BASE, "D-1"
- (F) SELECT MATERIAL, TYPE "D"
- (G) SEEDING
- (H) W-BEAM GUARDRAIL
- (I) GEOTEXTILE, SEPARATION FABRIC
- (J) DITCH RECONDITIONING
- (K) REMOVING AND DISPOSING OF GUARDRAIL
- (L) RECONDITIONING



**PLAN**  
**THRIE-BEAM / GUARDRAIL**  
**ADJUSTMENT LIMITS**  
**AT OHMER CREEK BRIDGE**

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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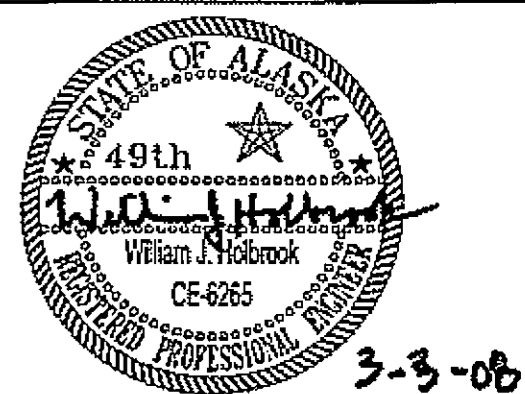
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
AND SOUTH MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. MGS-0937(31) - 68646

**APPROACH**  
**DETAILS**

**PLAN LEGEND**

CHECKED BY: J. HEUMANN



DESIGNED BY: B. HOLBROOK

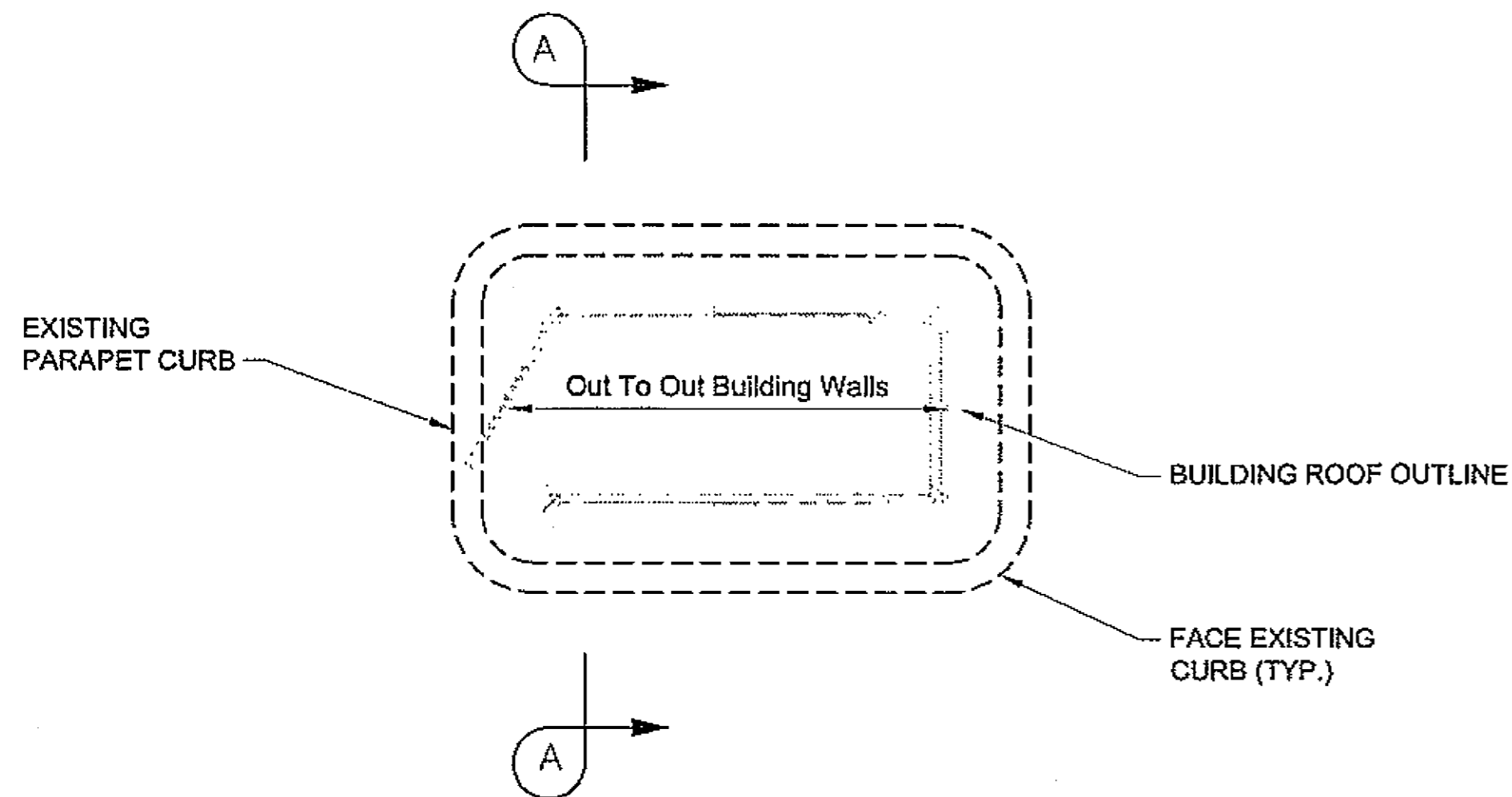
DRAWN BY: N. GEARY

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION  
PSG-SOUTH MITKOF HIGHWAY  
UPGRADE (PHASE II) AND SOUTH  
MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. 68646

**APPROACH**  
**DETAILS**

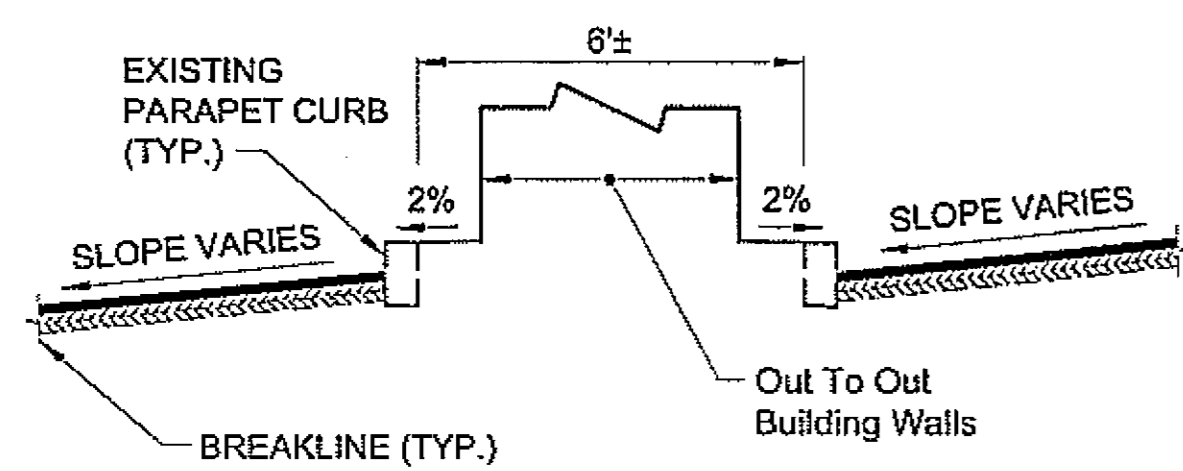
PROJECT DESIGNATION NUMBER	
MGS-0937(31)-68646	
STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
E14	46





**SECURITY STATION / TICKET BOOTH PLAN**

N.T.S.



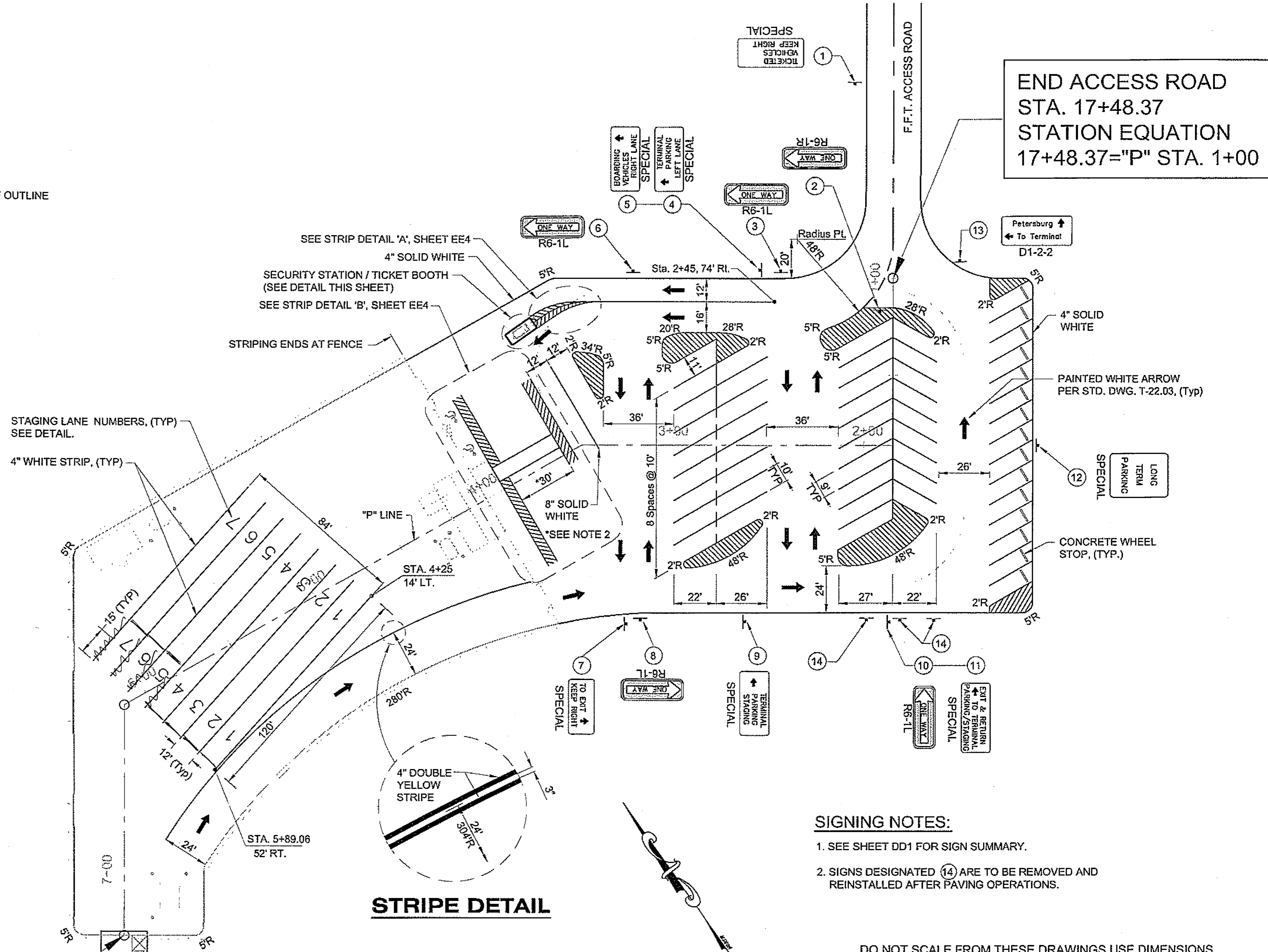
**SECTION A-A**

N.T.S.

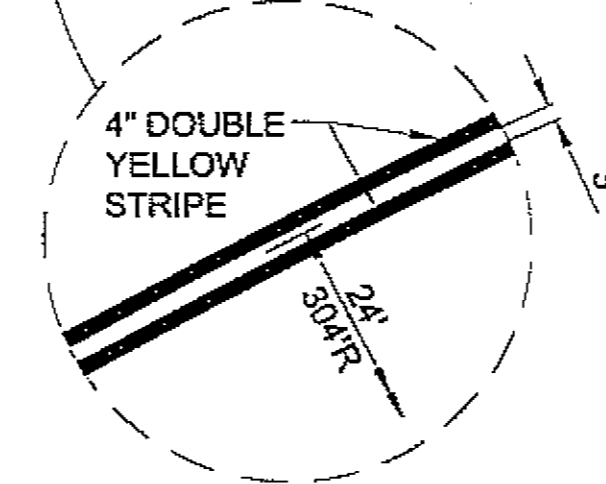
**STRIPING NOTES:**

1. ALL ISLANDS SHALL BE 8" WIDE DIAGONAL STRIPE ORIENTED 45° UP & TOWARDS ADJACENT PREDOMINANT TRAFFIC TRAVEL DIRECTION. EDGE (BORDER) STRIPE SHALL BE 4" WHITE.
2. TEMPORARY TICKETING TRAILER LOCATED OUTSIDE FENCE SCHEDULED TO REMAIN AT THIS TIME. ADJUST STRIPING IN VICINITY OF TRAILER PER ENGINEER INSTRUCTIONS.

STA. "P" 7+31.43  
START TRESTLE  
APPROACH.



**STRIPE DETAIL**



**SIGNING NOTES:**

1. SEE SHEET DD1 FOR SIGN SUMMARY.
2. SIGNS DESIGNATED (14) ARE TO BE REMOVED AND REINSTALLED AFTER PAVING OPERATIONS.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: J. HELMANN

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
DESIGN & ENGINEERING SERVICES DIVISION - SOUTHEAST REGION

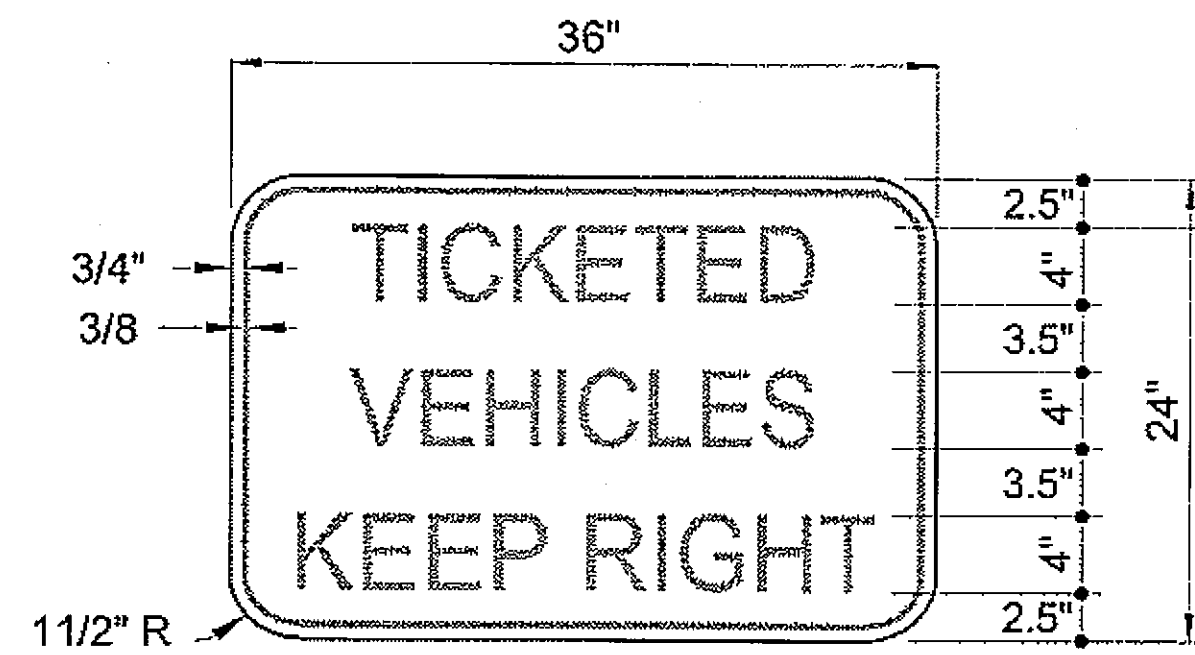
PSG - SOUTH MITKOFF HIGHWAY UPGRADE (PHASE II) & S. MITKOFF ISLAND TERMINAL PAVING PROJECT #68646

TERMINAL STAGING / PARKING AREA SIGNING & STRIPING PLAN

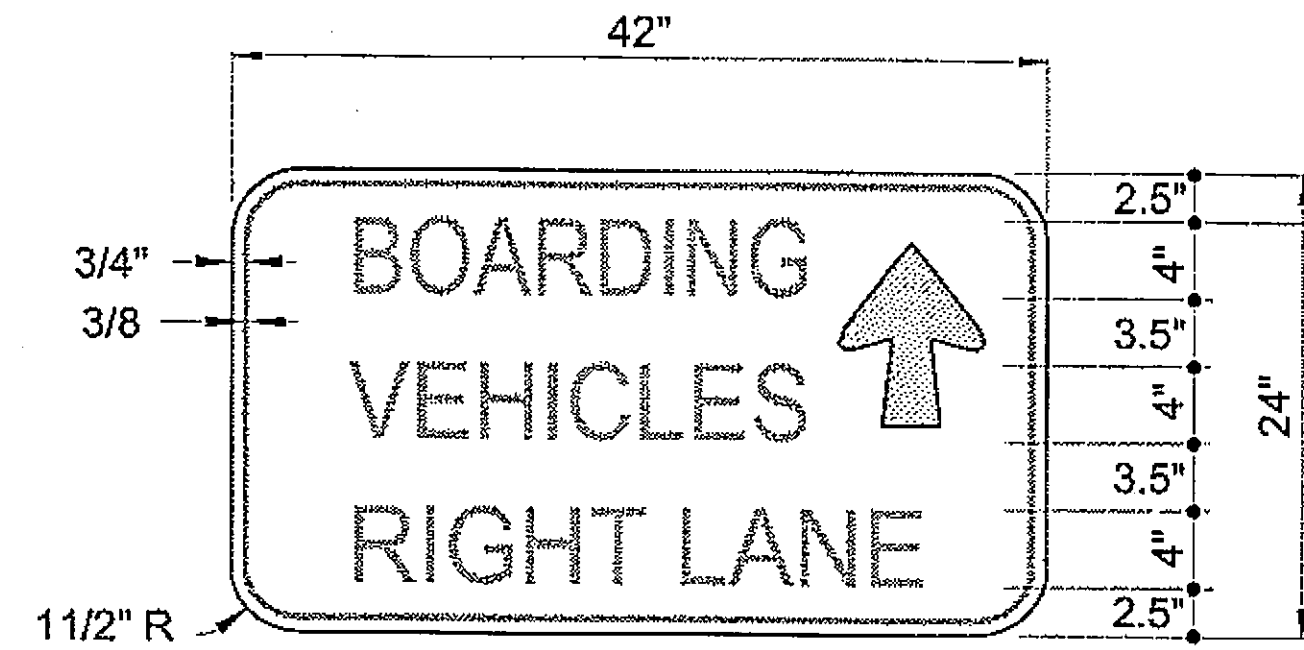
DESIGNED BY: W. HOLBROOK  
DRAWN BY: N. GEARY

PATH: O:\PSG\68646\PLANSET\68646\_EE2\_STRIPING PLAN2.DWG  
TAB: EE2 Friday, July 29, 2005 11:27:44 AM WJHOLBROOK

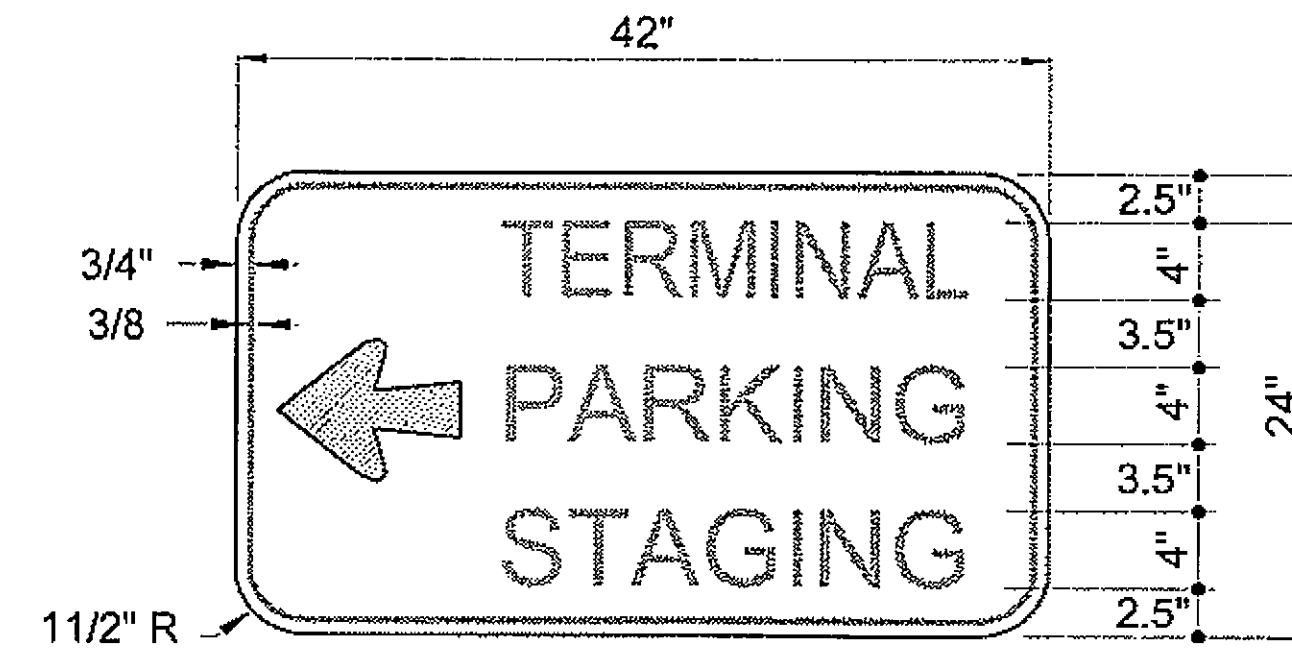
REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			MGS-000S(31)-68646	2008	EE2	46



1 SPECIAL SIGN  
DETAIL



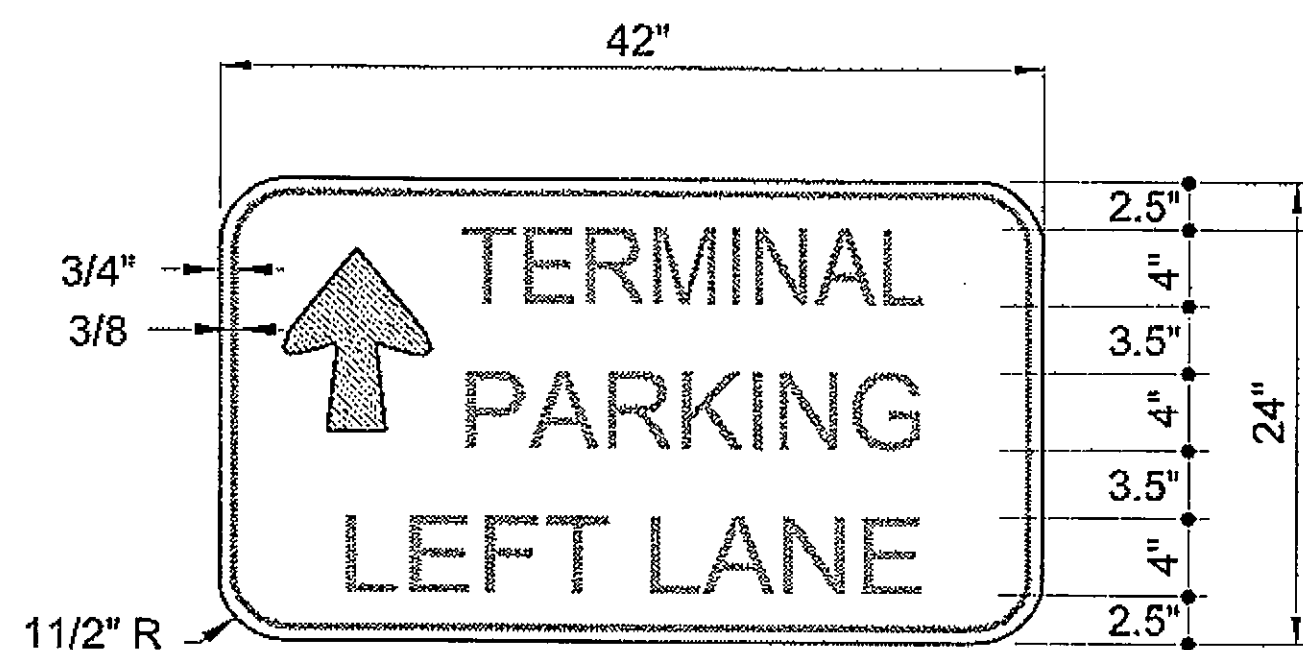
5 SPECIAL SIGN  
DETAIL



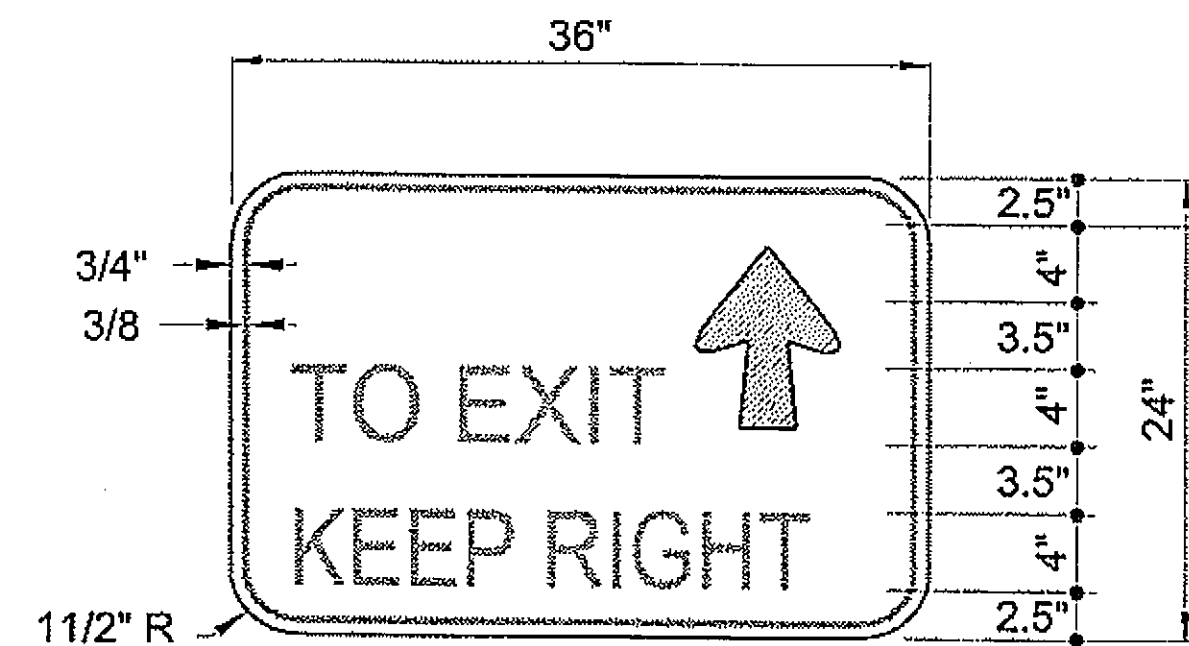
9 SPECIAL SIGN  
DETAIL

**SPECIAL SIGN NOTES:**

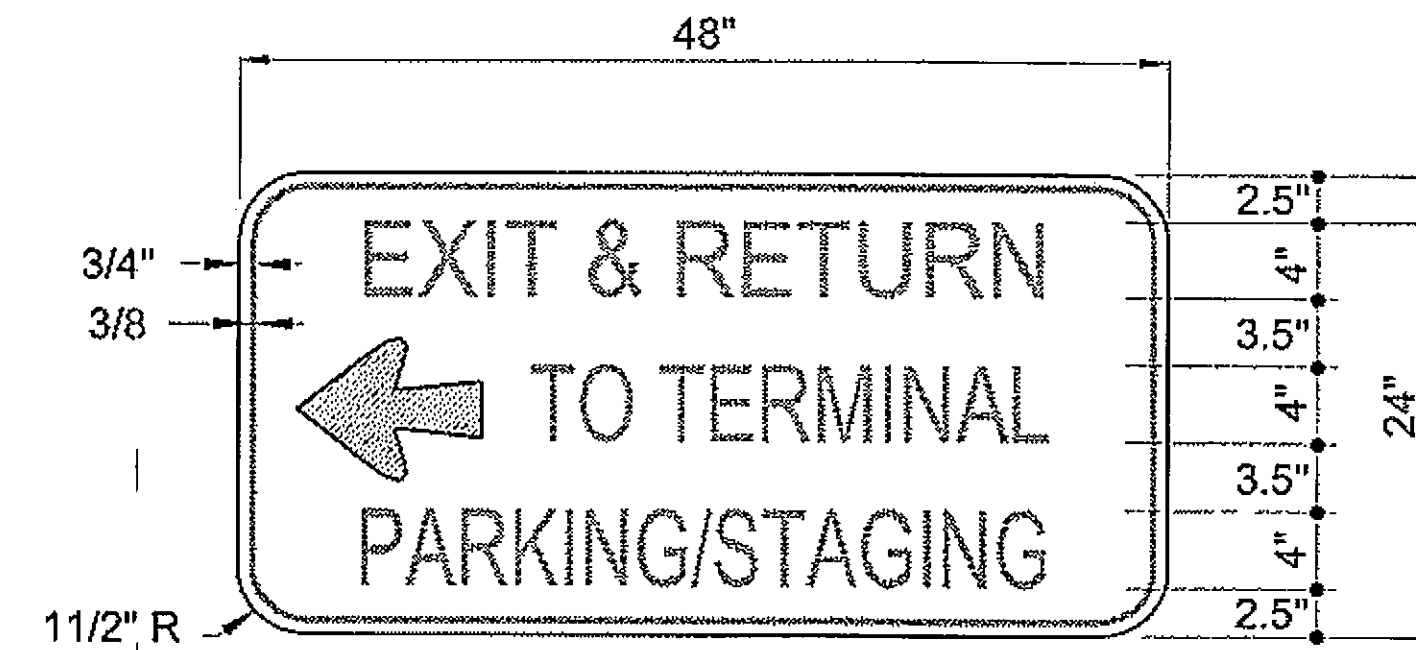
1. ALL SPECIAL SIGNS BORDER, LEGEND AND LETTERING ARE GREEN WITH BACKGROUND WHITE.
2. CENTER TEXT ON ALL SIGNS.



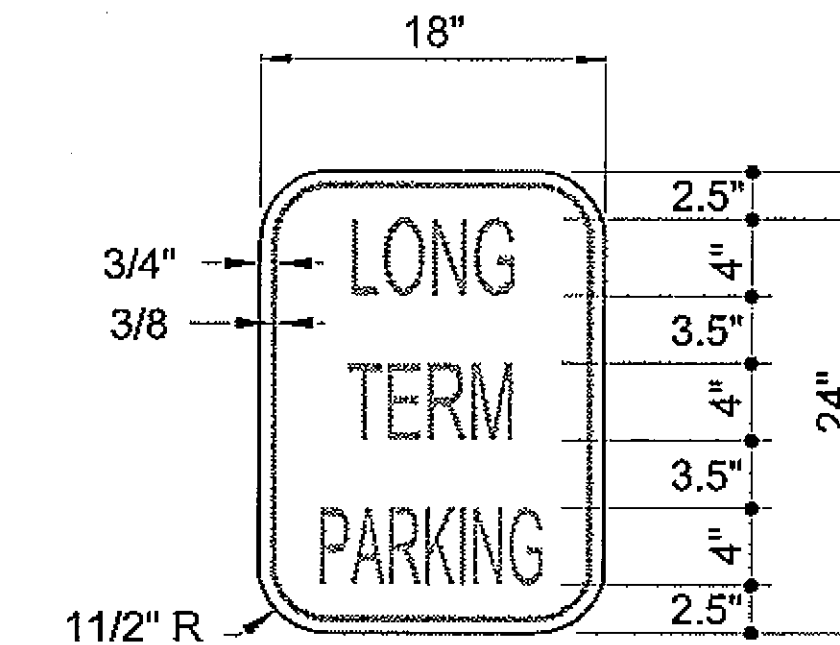
4 SPECIAL SIGN  
DETAIL



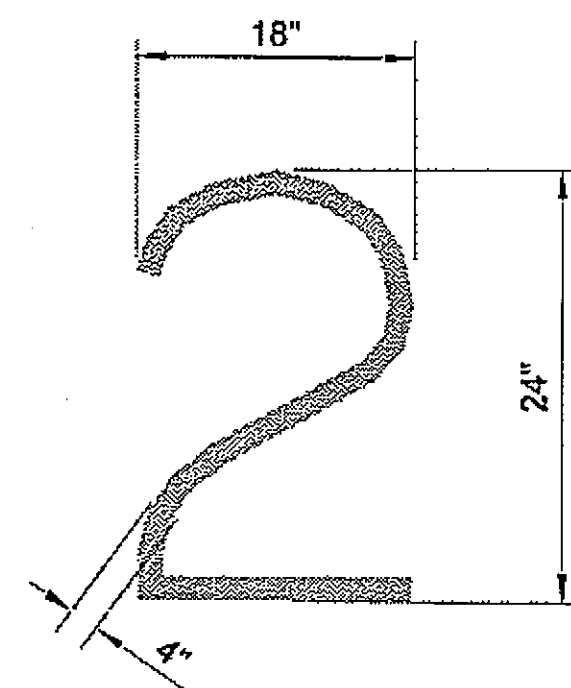
7 SPECIAL SIGN  
DETAIL



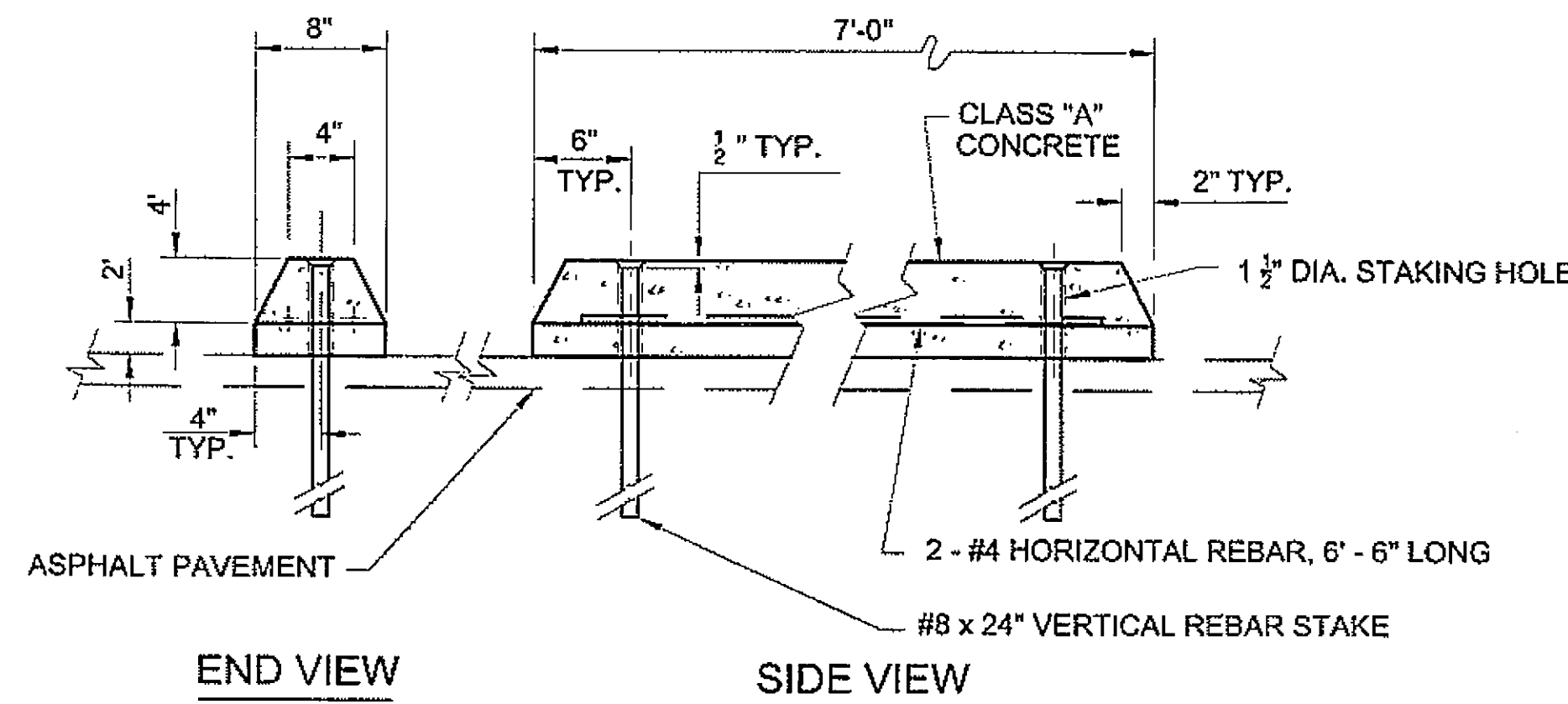
11 SPECIAL SIGN  
DETAIL



12 SPECIAL SIGN  
DETAIL



DETAIL  
TYPICAL LANE NUMBERING



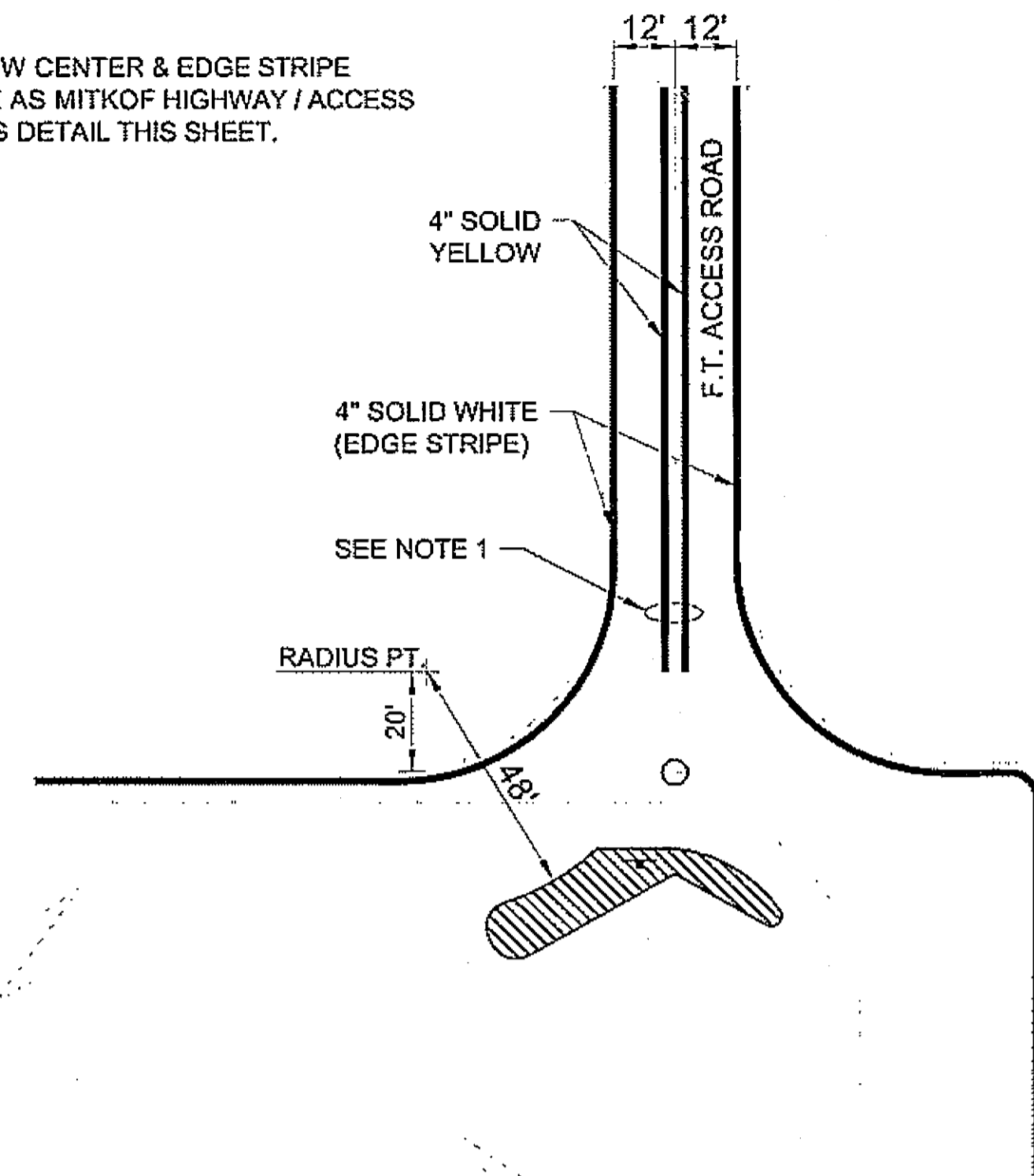
DETAIL  
WHEEL STOP

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

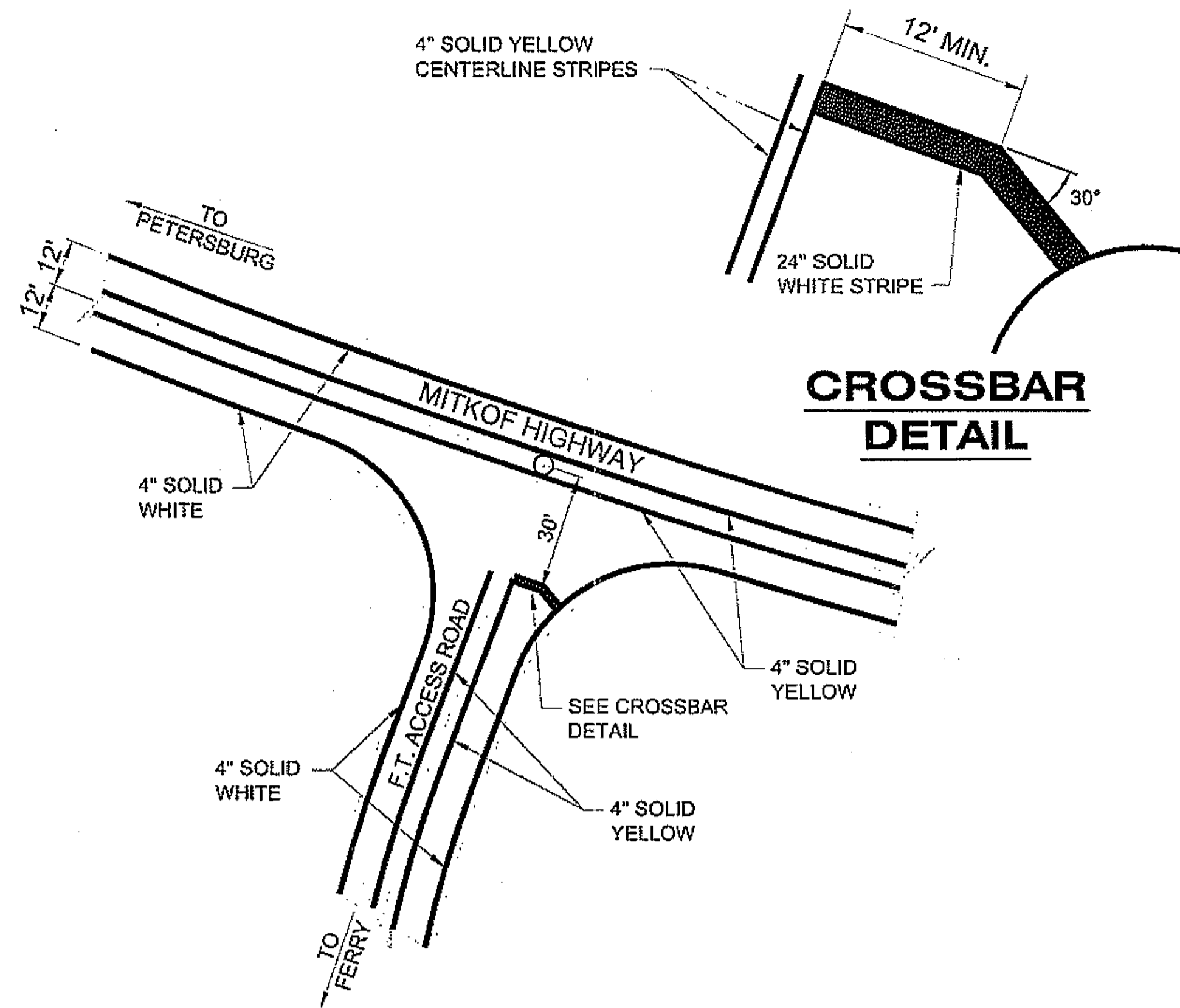
CHECKED BY: J. HEUMANN 		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES DESIGN & ENGINEERING SERVICES DIVISION - SOUTHEAST REGION	
DESIGNED BY: W. HOLBROOK DRAWN BY: N. GEARY		PSG - SOUTH MITKOFF HIGHWAY UPGRADE (PHASE II) & S. MITKOF ISLAND TERMINAL PAVING PROJECT #68646	
PATH: Q:\PSG\68646\PLANSET\68646_EE2_STRIPING_PLAN2.DWG TAB: EE3 Friday, July 29, 2005 11:27:44 AM		GEAR, NATE	
REVISIONS NO. DATE DESCRIPTION		PROJECT DESIGNATION MGS-00S(31)-68646	YEAR 2008
		SHEET NO. EE3	TOTAL SHEETS 46

**NOTES:**

1. DOUBLE YELLOW CENTER & EDGE STRIPE SPACING SAME AS MITKOF HIGHWAY / ACCESS ROAD STRIPING DETAIL THIS SHEET.



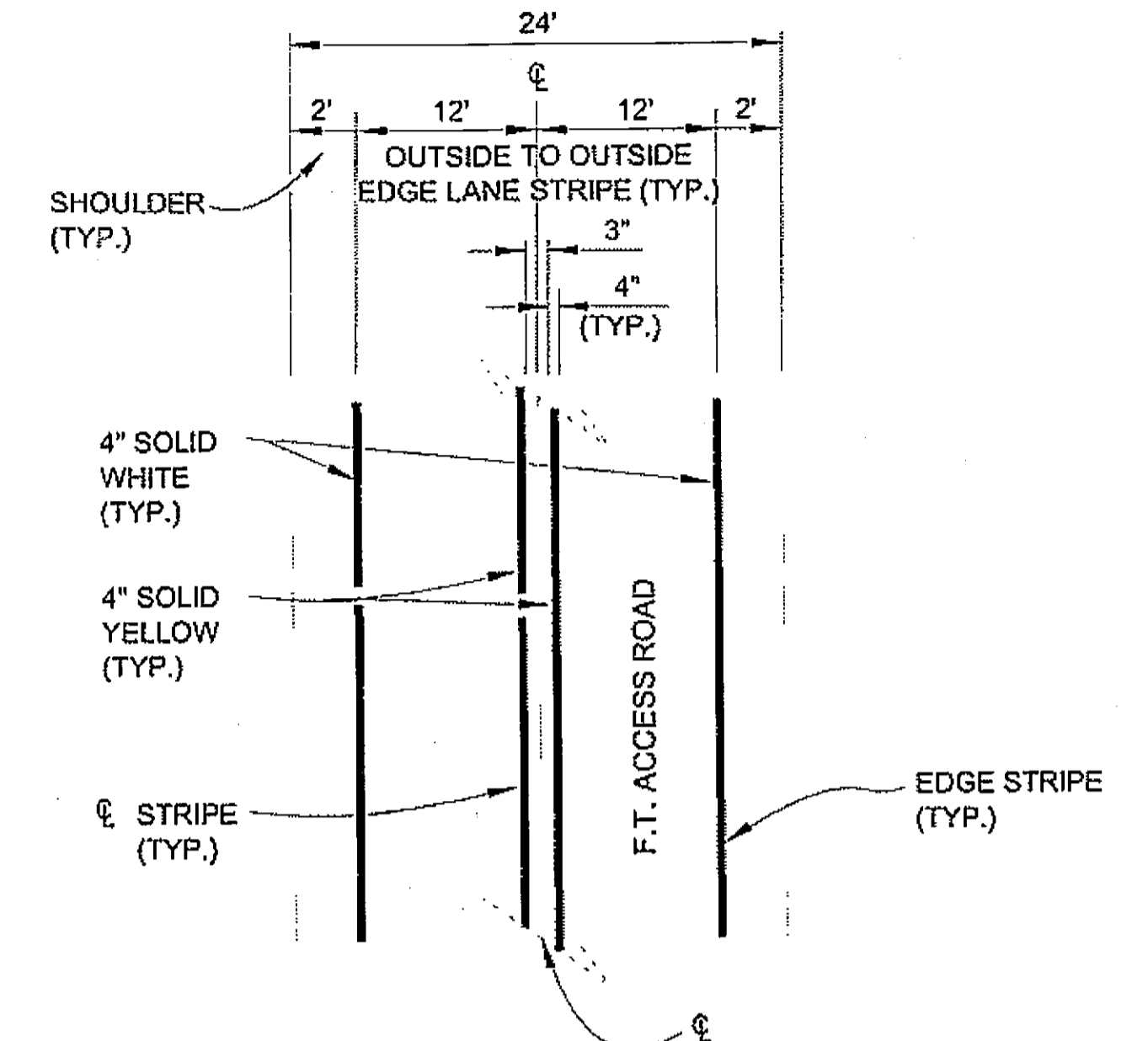
**TERMINAL PARKING / FERRY ACCESS ROAD INTERSECTION STRIPING PLAN**  
N.T.S.



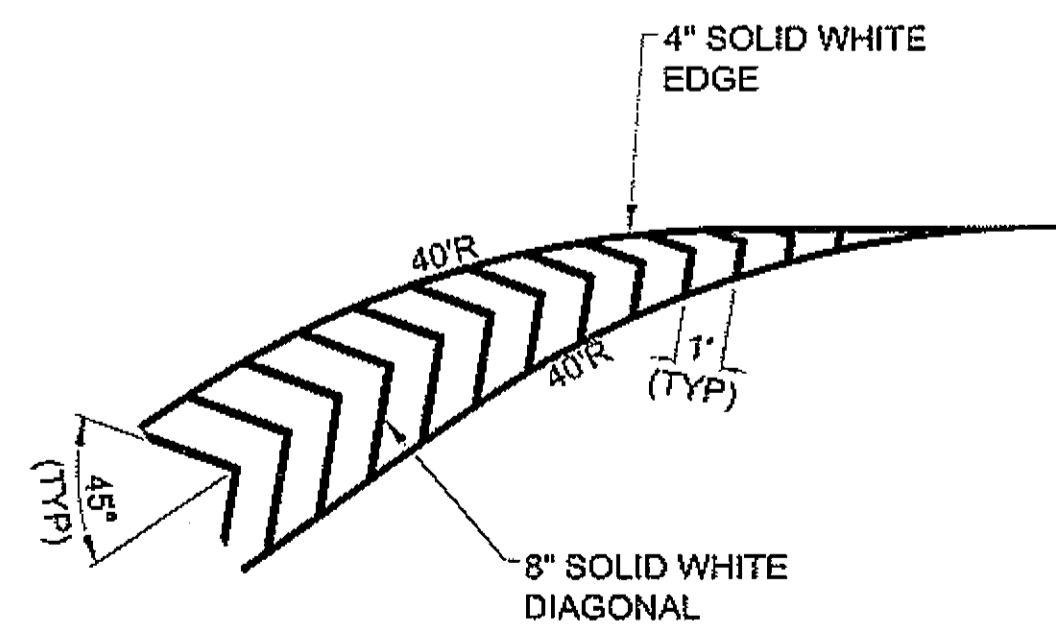
**MITKOF HIGHWAY / S. MITKOF FERRY TERMINAL ACCESS ROAD INTERSECTION STRIPING PLAN**  
N.T.S.

**STRIPING NOTES**

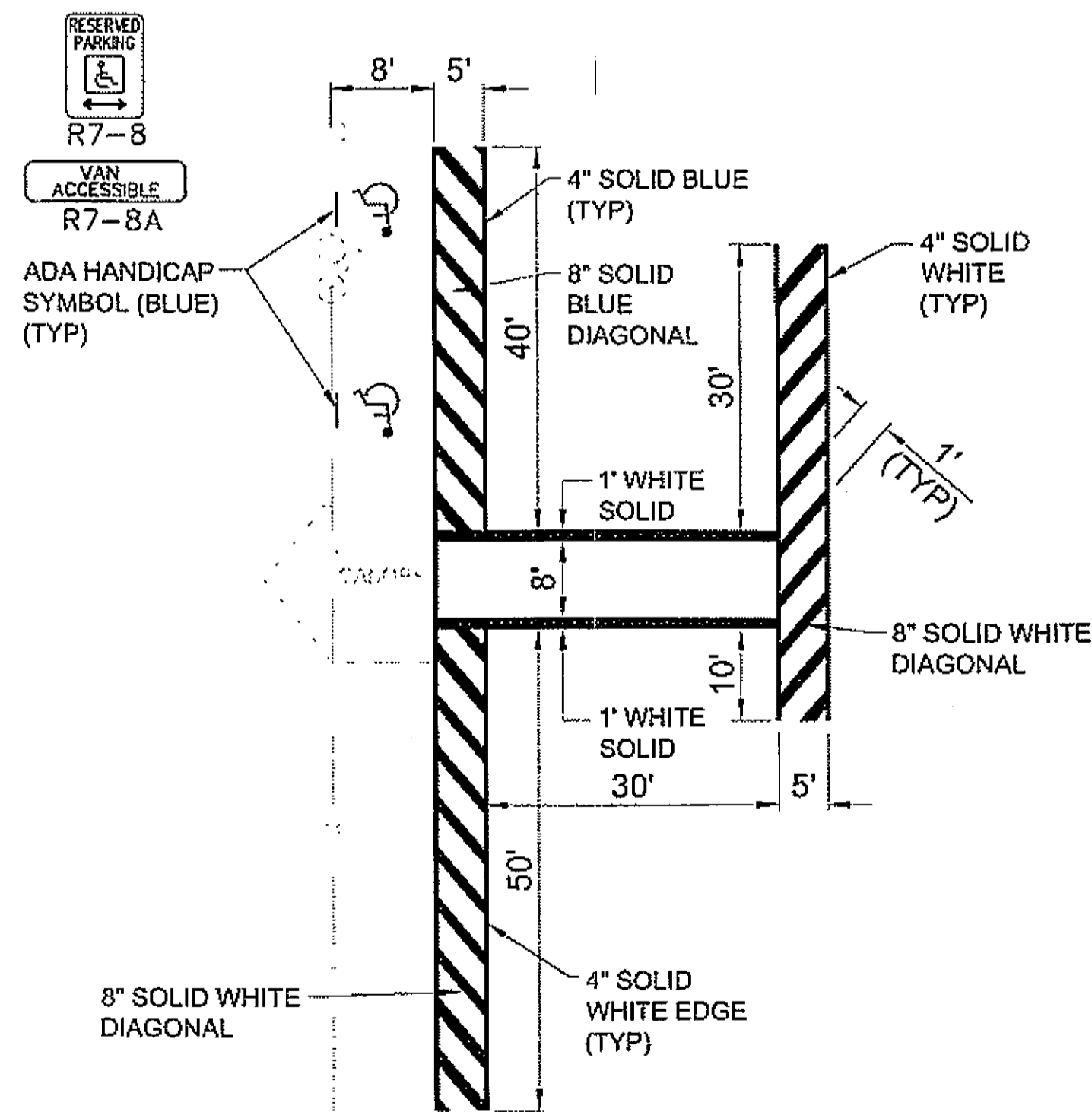
1. TYPICAL NO PASSING ZONE STRIPING SHOWN. ENGINEER SHALL DETERMINE PASSING ZONE AREAS.
2. LAYOUT AND STRIPE PASSING ZONE AREAS PER STANDARD DRAWING T-21.01 AND AS DIRECTED.
3. ALL PAINT MARKINGS SHALL BE PER STD.-DWG T-21.01



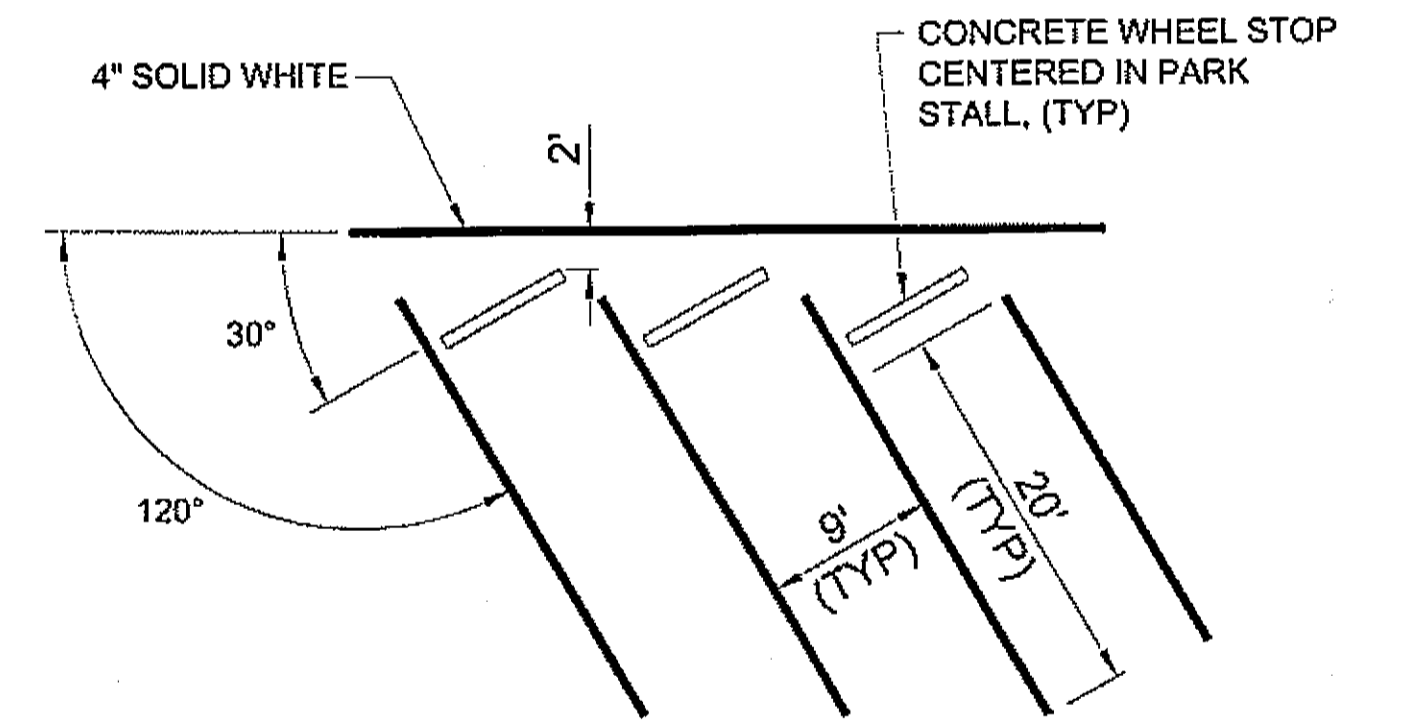
**MITKOF HIGHWAY / FERRY TERMINAL ACCESS ROAD STRIPING DETAILS**  
N.T.S.



**STRIP DETAIL 'A'**  
N.T.S.

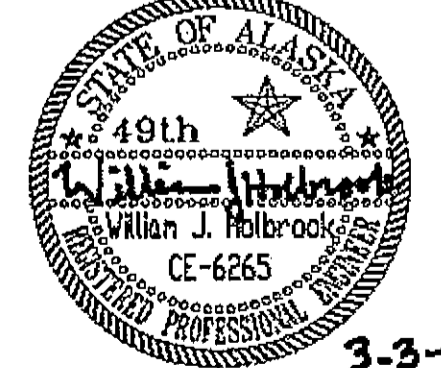


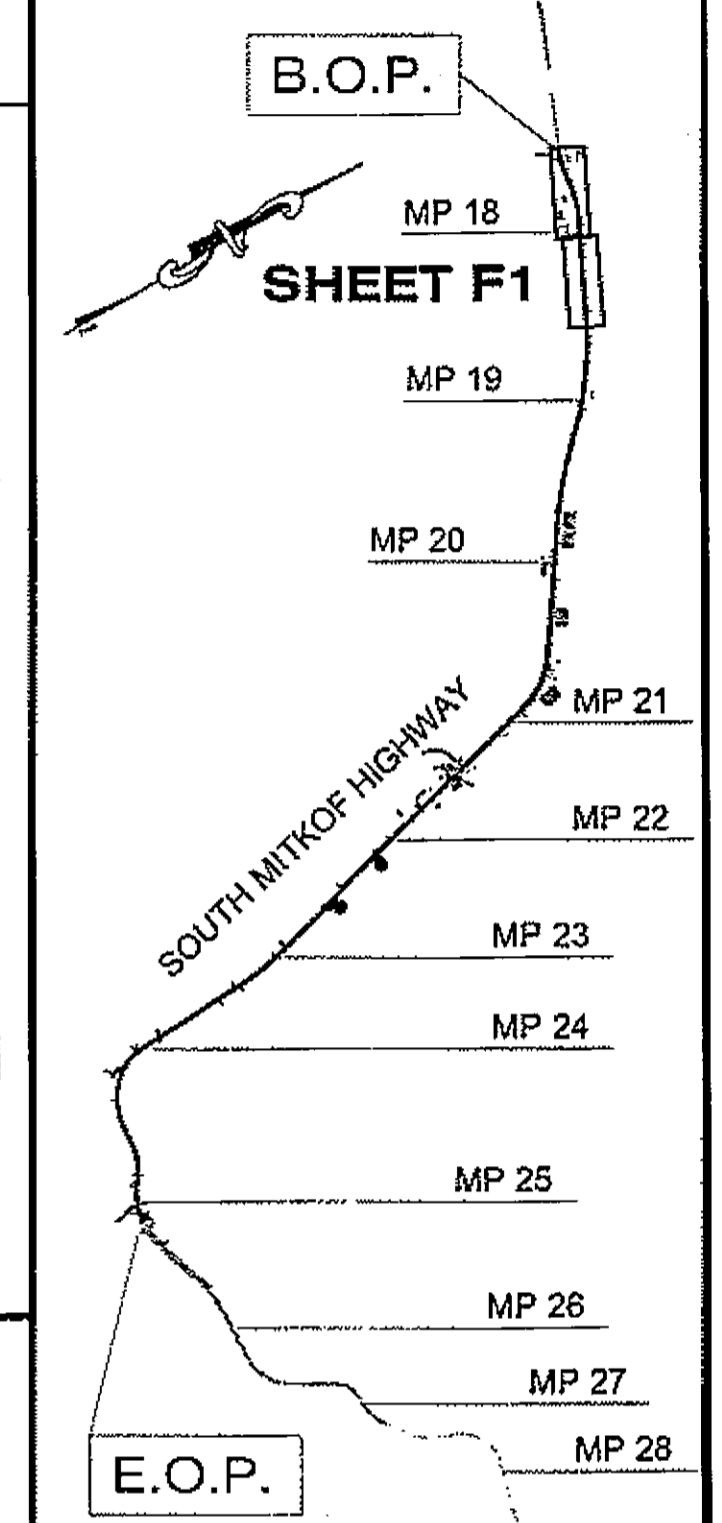
**STRIP DETAIL 'B'**  
N.T.S.



**LAYOUT AT EDGE ROW TYPICAL WHEEL STOP**  
N.T.S.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: J. HEUMANN 		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES DESIGN & ENGINEERING SERVICES DIVISION - SOUTHEAST REGION									
DESIGNED BY: W. HOLBROOK DRAWN BY: N. GEARY		PSG - SOUTH MITKOF HIGHWAY UPGRADE (PHASE II) & S. MITKOF ISLAND TERMINAL PAVING PROJECT #68646 MISCELLANEOUS SIGNING & STRIPING DETAILS									
PATH: Q:\PSG\68646\PLANS\EE2_STRIPING PLAN2.DWG TAB: EE4 Friday, July 29, 2005 11:27:44 AM GEARY, NATE		PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS						
<table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		NO.	DATE	DESCRIPTION				MGS-000S(31)-68646	2008	EE4	46
NO.	DATE	DESCRIPTION									



**PLAN LEGEND**

CHECKED BY: J. HEUMANN  
  
 DESIGNED BY: B. HOLBROOK  
 DRAWN BY: N. GEARY

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 SOUTHEAST REGION  
 PSG-SOUTH MITKOF HIGHWAY  
 UPGRADE (PHASE II) AND SOUTH  
 MITKOF ISLAND TERMINAL PAVING  
 PROJECT NO. 68646

**LAYOUT/ESCP  
 PLAN VIEWS**

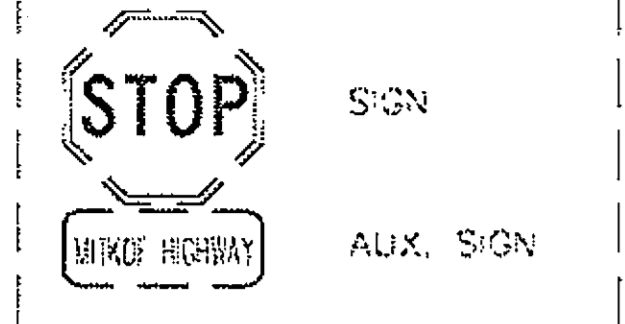
PROJECT DESIGNATION NUMBER	
MGS-0937(31)-68646	
STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
F1	46

**SIGN WORK (TYP.)  
 PREVIOUSLY COMPLETED  
 (NOT IN CONTRACT)**

**NOTE:**  
 THERE ARE TEMPORARY BENCH MARKS (TBM) WITH ESTABLISHED ELEVATIONS ON 2000' CENTERS AND CENTERLINE REFERENCE STAKES ON WOOD LATH ON 100' CENTERS AT 20'-22' OFFSET FROM CENTERLINE FOR THE LENGTH OF PROJECT. SEE SECTION 642 FOR FURTHER DESCRIPTION. SURVEY BOOKS WILL BE AVAILABLE AT PROJECT ENGINEER'S OFFICE.

**NOTES:**  
 1.) FOR DESCRIPTION OF PIPE, DITCH & STREAM WORK SEE CULVERT PIPE EXTENSION, REPAIR OR REPLACEMENT, AND FISH ENHANCEMENT SUMMARY SHEET D1.  
 2.) SILT FENCE NOT SHOWN ON PLAN FOR CLARITY. SEE DETAIL SHEET E6.

**SIGNING LEGEND:**



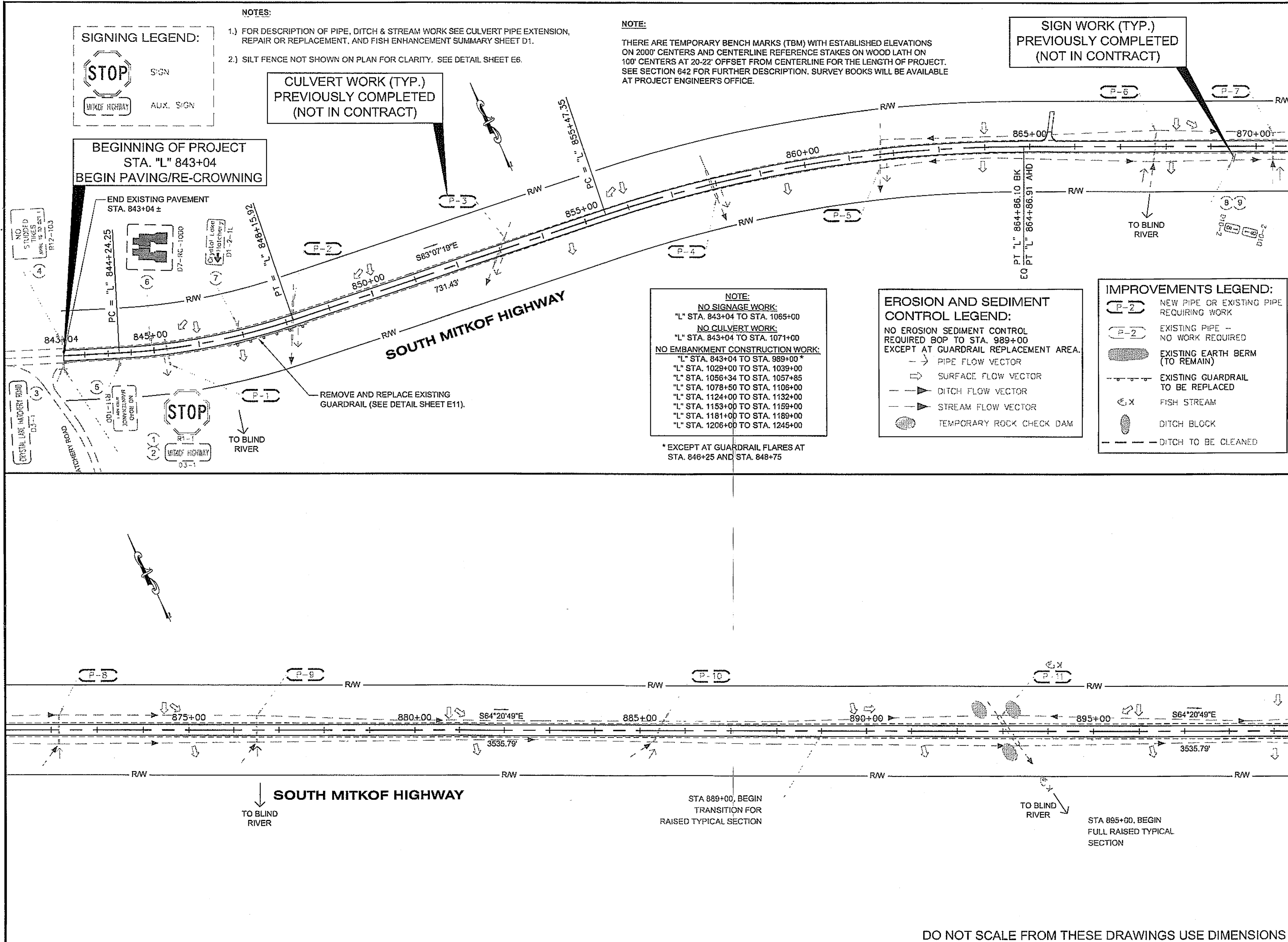
**CULVERT WORK (TYP.)  
 PREVIOUSLY COMPLETED  
 (NOT IN CONTRACT)**

**BEGINNING OF PROJECT  
 STA. "L" 843+04  
 BEGIN PAVING/RE-CROWNING**

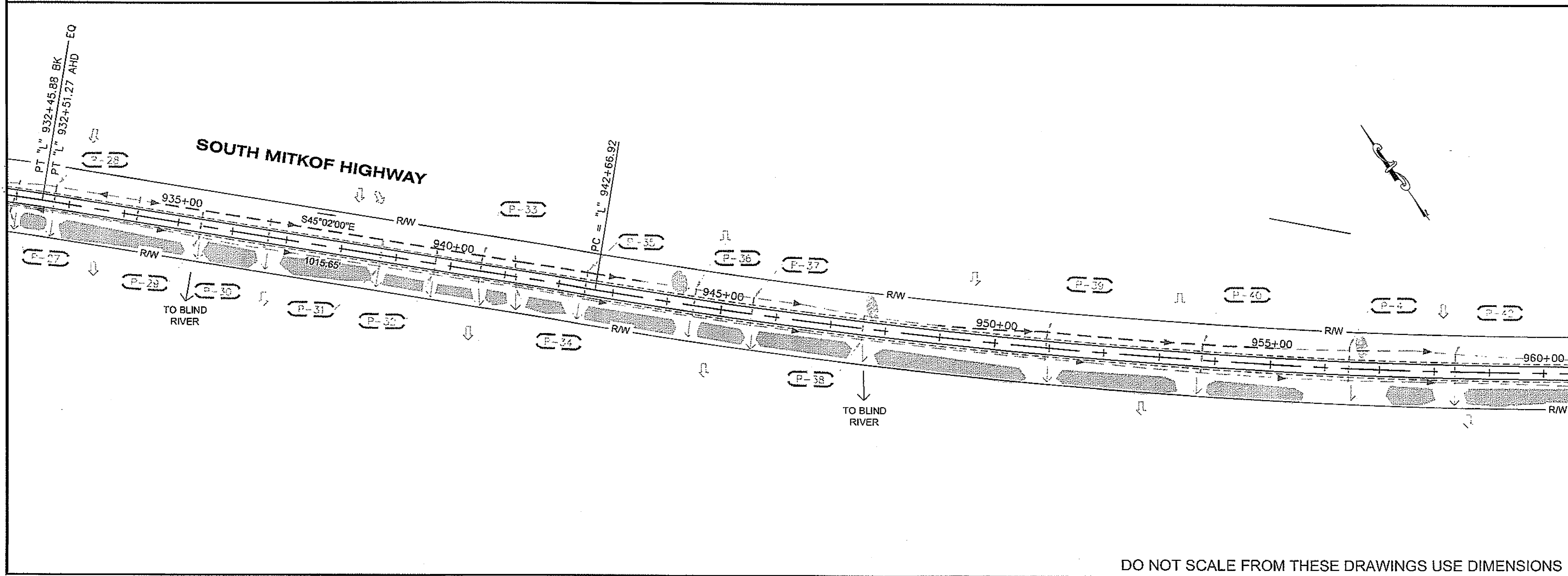
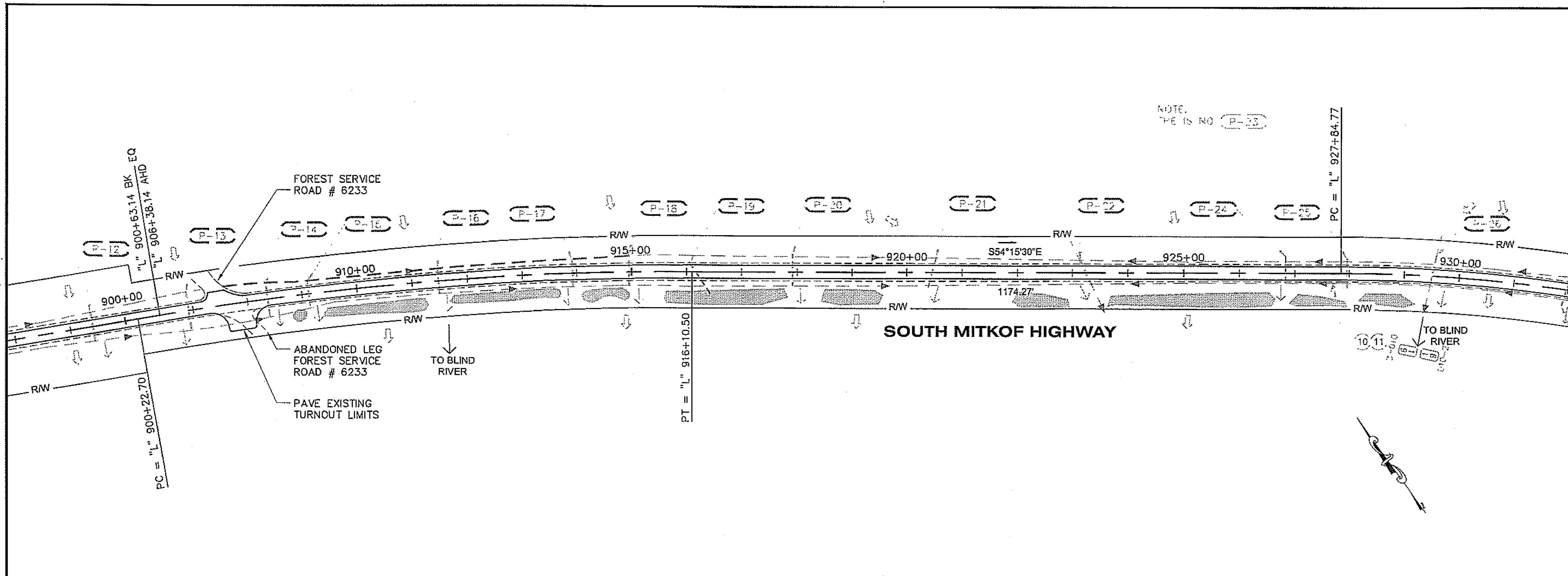
**NOTE:**  
 NO SIGNAGE WORK:  
 "L" STA. 843+04 TO STA. 1085+00  
 NO CULVERT WORK:  
 "L" STA. 843+04 TO STA. 1071+00  
 NO EMBANKMENT CONSTRUCTION WORK:  
 "L" STA. 843+04 TO STA. 989+00 \*  
 "L" STA. 1029+00 TO STA. 1039+00  
 "L" STA. 1056+34 TO STA. 1057+85  
 "L" STA. 1078+50 TO STA. 1106+00  
 "L" STA. 1124+00 TO STA. 1132+00  
 "L" STA. 1153+00 TO STA. 1159+00  
 "L" STA. 1181+00 TO STA. 1189+00  
 "L" STA. 1206+00 TO STA. 1245+00  
 \* EXCEPT AT GUARDRAIL FLARES AT STA. 846+25 AND STA. 848+75

**EROSION AND SEDIMENT CONTROL LEGEND:**  
 NO EROSION SEDIMENT CONTROL REQUIRED BOP TO STA. 989+00 EXCEPT AT GUARDRAIL REPLACEMENT AREA.  
 - -> PIPE FLOW VECTOR  
 ⇨ SURFACE FLOW VECTOR  
 - -> DITCH FLOW VECTOR  
 - -> STREAM FLOW VECTOR  
 ● TEMPORARY ROCK CHECK DAM

**IMPROVEMENTS LEGEND:**  
 (P-2) NEW PIPE OR EXISTING PIPE REQUIRING WORK  
 (P-2) EXISTING PIPE - NO WORK REQUIRED  
 ● EXISTING EARTH BERM (TO REMAIN)  
 - - - EXISTING GUARDRAIL TO BE REPLACED  
 < X FISH STREAM  
 ● DITCH BLOCK  
 - - - DITCH TO BE CLEANED



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH:  
Q:\PSG\68646\PLANSET\68646\_F1-3\_PLAN.PAR.DWG

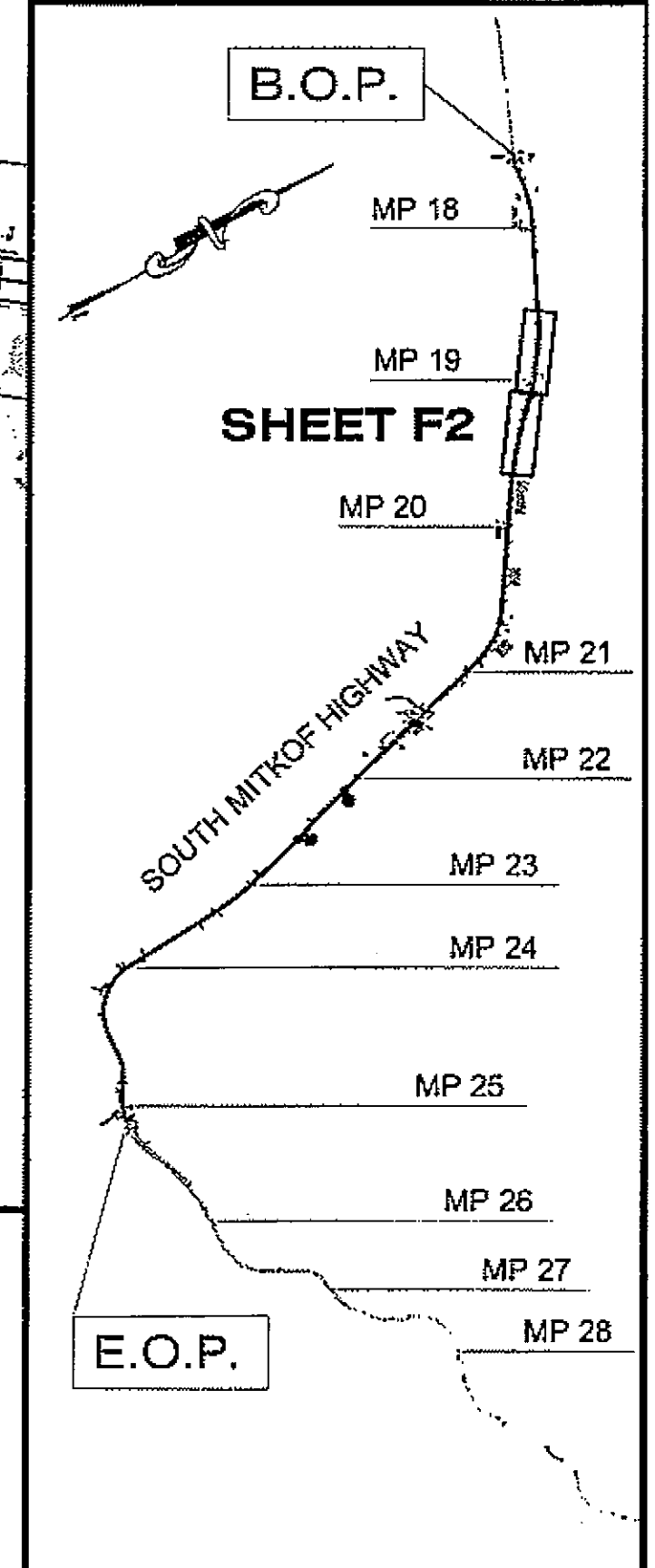
DRDODGE  
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APPENDUM NUMBER

ATTACHMENT NUMBER

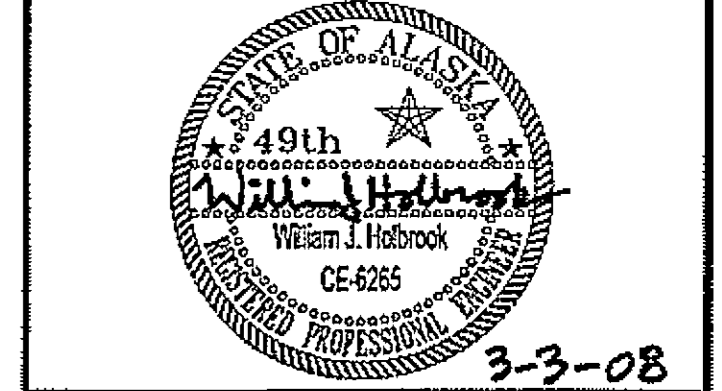
RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: J. HEUMANN



DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION

PSG-SOUTH MITKOF HIGHWAY  
UPGRADE (PHASE II) AND SOUTH  
MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. 68646

LAYOUT/ESCP  
PLAN VIEWS

PROJECT DESIGNATION NUMBER	
MGS-0937(31)-68646	
STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
F2	46

HYDRAULIC SUMMARY P-43		
CULVERT SIZE 24" HDPE (___ GA. THICKNESS) WITH 0 (INLET) TO 0.58' IMBEDDED DEPTH SMOOTH - BORE INNER LINING		
DRAINAGE AREA =	0.01 SQ. MI.	
LENGTH	50.0	
INVERT ELEVATIONS	28.2' (INLET)	27.2' (OUTLET)
DESIGN FREQUENCY	DESIGN FLOWS (CFS)	DESIGN HIGHWATER ELEVATION (FT.)
Q <sub>24</sub>	12	XX
CAPACITY @ Hw/D=1.0	12 CFS	
PURPOSE: STREAM CHANNEL CROSSING WITH FISH PASSAGE PREVENTION PROVISIONS.		
WORK WINDOW	6 / 15 to 9 / 15	

HYDRAULIC SUMMARY P-44		
CULVERT SIZE 24" HDPE (___ GA. THICKNESS) WITH 0 (INLET) TO 0.58' IMBEDDED DEPTH SMOOTH - BORE INNER LINING		
DRAINAGE AREA =	0.01 SQ. MI.	
LENGTH	49.0	
INVERT ELEVATIONS	27.2' (INLET)	26.2' (OUTLET)
DESIGN FREQUENCY	DESIGN FLOWS (CFS)	DESIGN HIGHWATER ELEVATION (FT.)
Q <sub>24</sub>	12	XX
CAPACITY @ Hw/D=1.0	12 CFS	
PURPOSE: STREAM CHANNEL CROSSING WITH FISH PASSAGE PREVENTION PROVISIONS.		
WORK WINDOW	6 / 15 to 9 / 15	

PATH: G:\PSG\6646\PLANSET\68646\_F1-3\_PLAN P&P.DWG

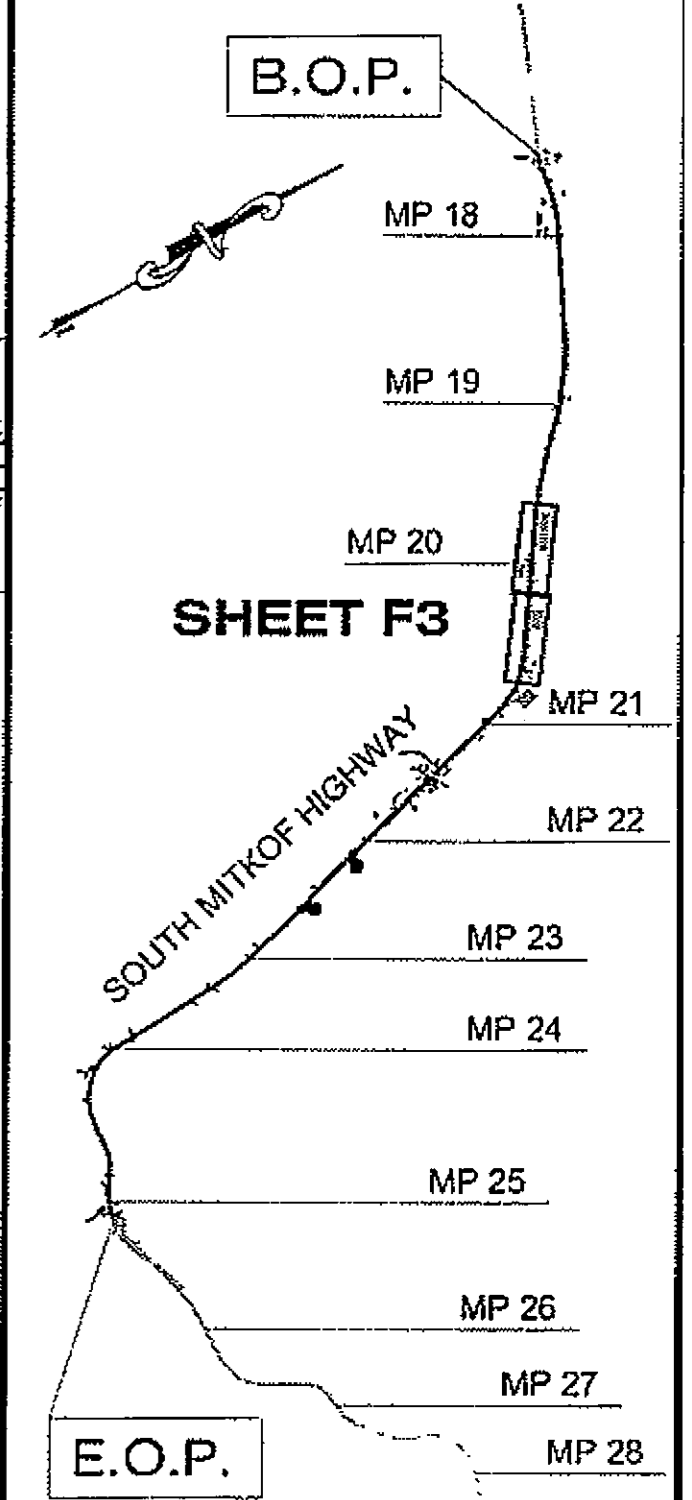
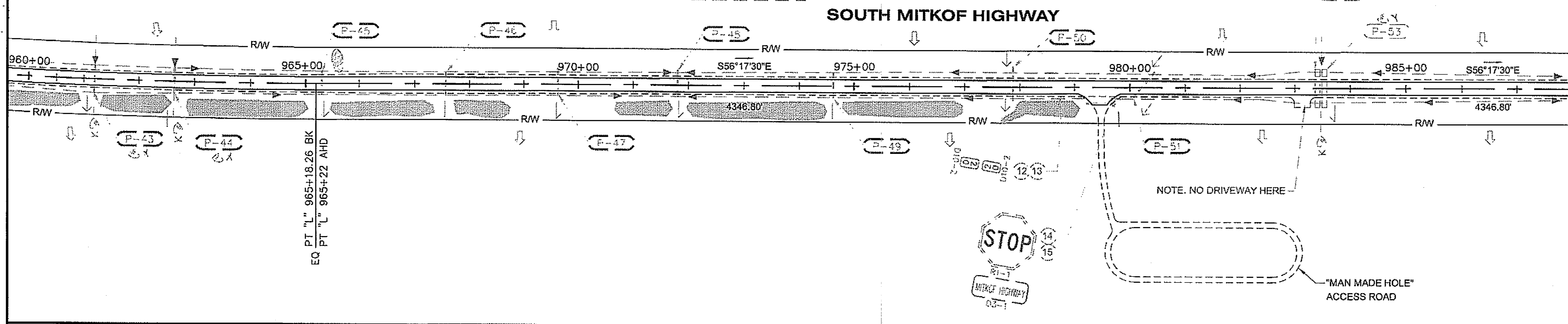
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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

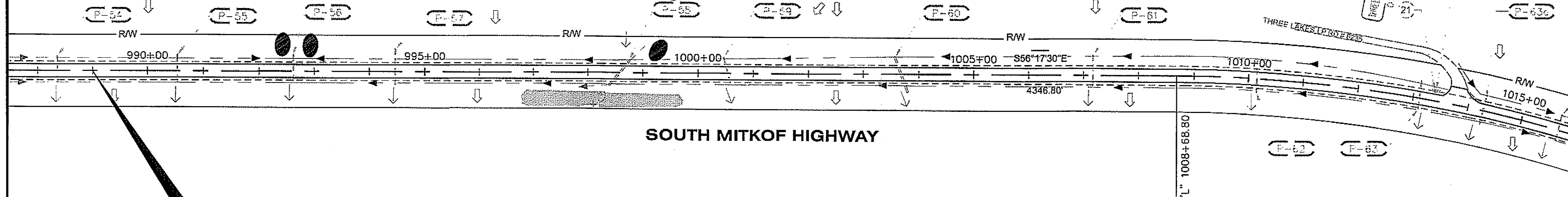


HYDRAULIC SUMMARY P-58		
CULVERT SIZE 36" CAP (___ GA. THICKNESS) WITH 1.2' IMBEDDED DEPTH ANNULAR CORRUGATIONS (3" x 1" PREFERRED)		
DRAINAGE AREA =	0.025 SQ. MI.	
LENGTH	59.0	
INVERT ELEVATIONS	33.6' (INLET)	32.1' (OUTLET)
DESIGN FREQUENCY	DESIGN FLOWS (CFS)	DESIGN HIGHWATER ELEVATION (FT.)
Q <sub>24</sub>	24	XX
CAPACITY @ Hw/D=0.8	35 CFS	
PURPOSE: STREAM CHANNEL CROSSING WITH FISH PASSAGE PROVISIONS.		
WORK WINDOW	6 / 15 to 9 / 15	

**EROSION AND SEDIMENT CONTROL LEGEND:**

- PIPE FLOW VECTOR
- ⇨ SURFACE FLOW VECTOR
- DITCH FLOW VECTOR
- STREAM FLOW VECTOR
- TEMPORARY ROCK CHECK DAM

**NOTE:**  
ADJUST EXISTING (PREVIOUSLY INSTALLED) SIGN HEIGHTS AT THREE LAKES LOOP ROAD INTERSECTION.



"L" STA. 989+00  
BEGIN EMBANKMENT  
CONSTRUCTION/END  
RE-CROWNING

CHECKED BY: J. HEUMANN

DESIGNED BY: B. HOLBROOK  
DRAWN BY: N. GEARY

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION

PSG-SOUTH MITKOF HIGHWAY  
UPGRADE (PHASE II) AND SOUTH  
MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. 68646

**LAYOUT/ESCP  
PLAN VIEWS**

PROJECT DESIGNATION NUMBER	
MGS-0937(31)-68646	
STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
F3	46

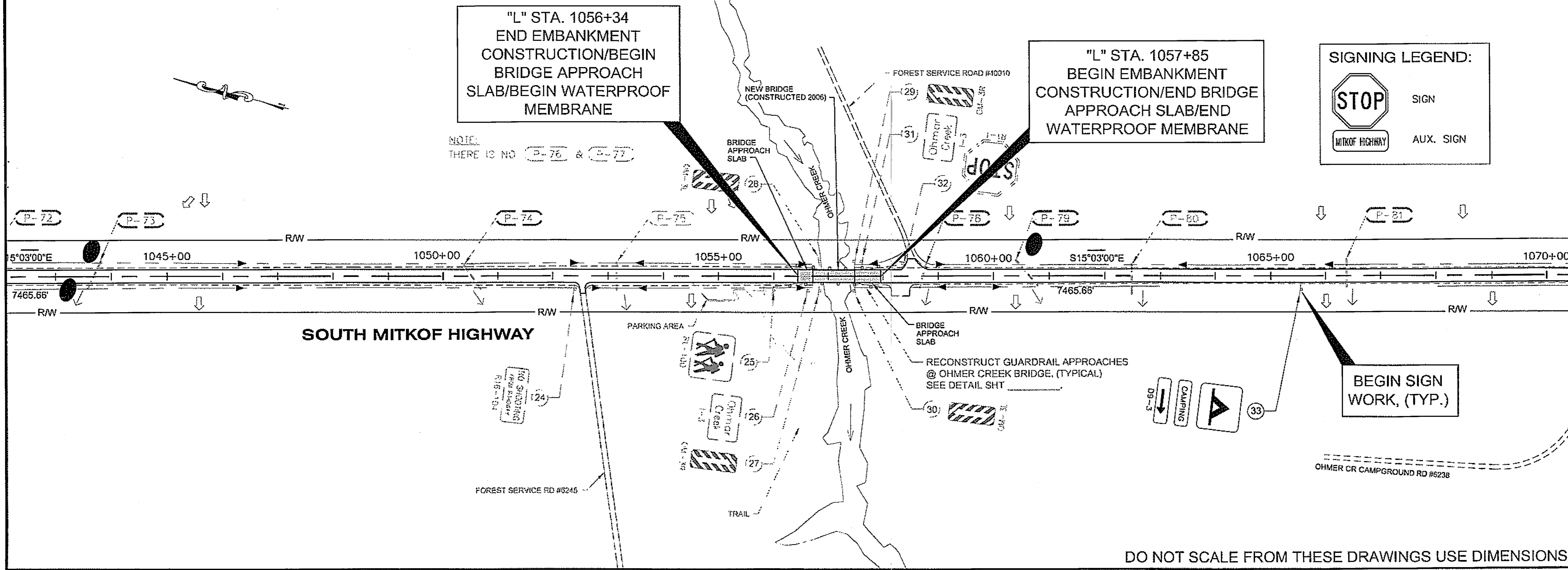
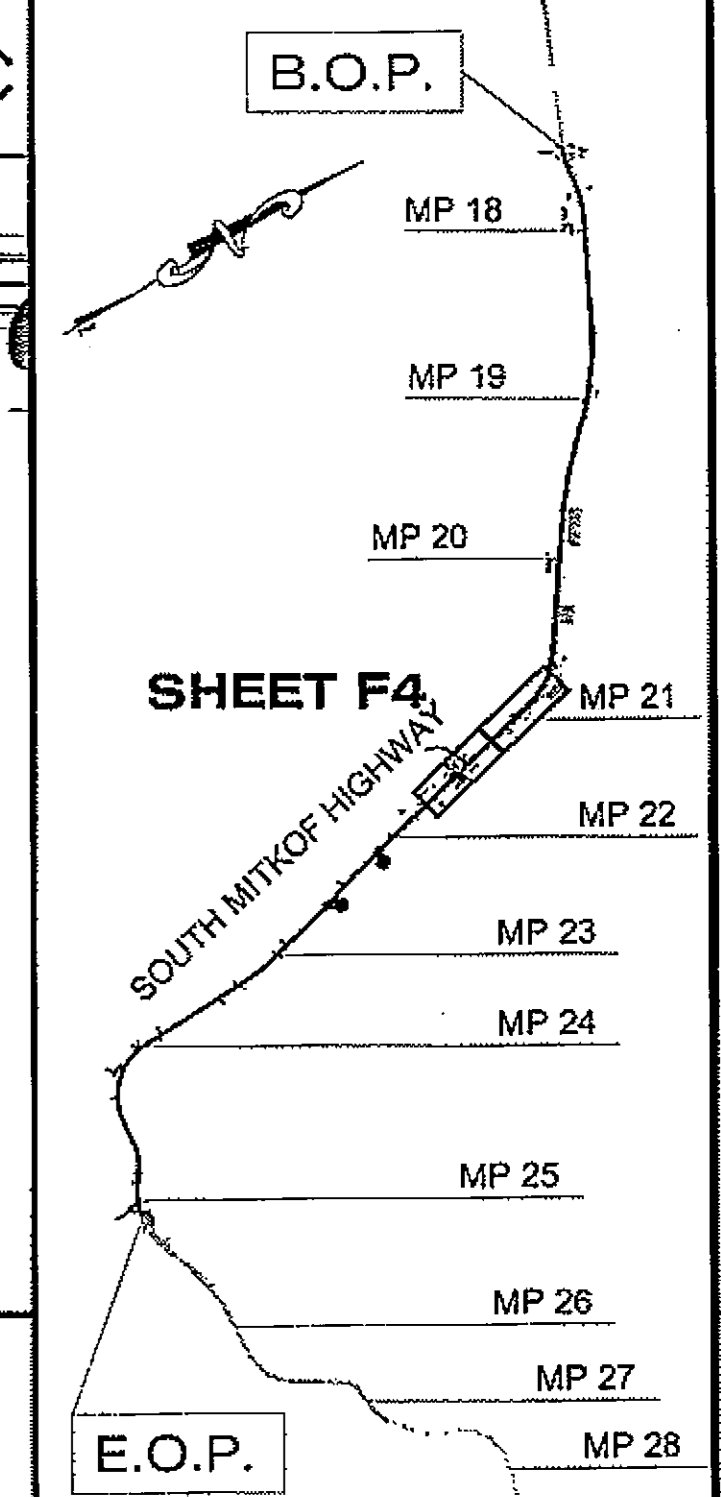
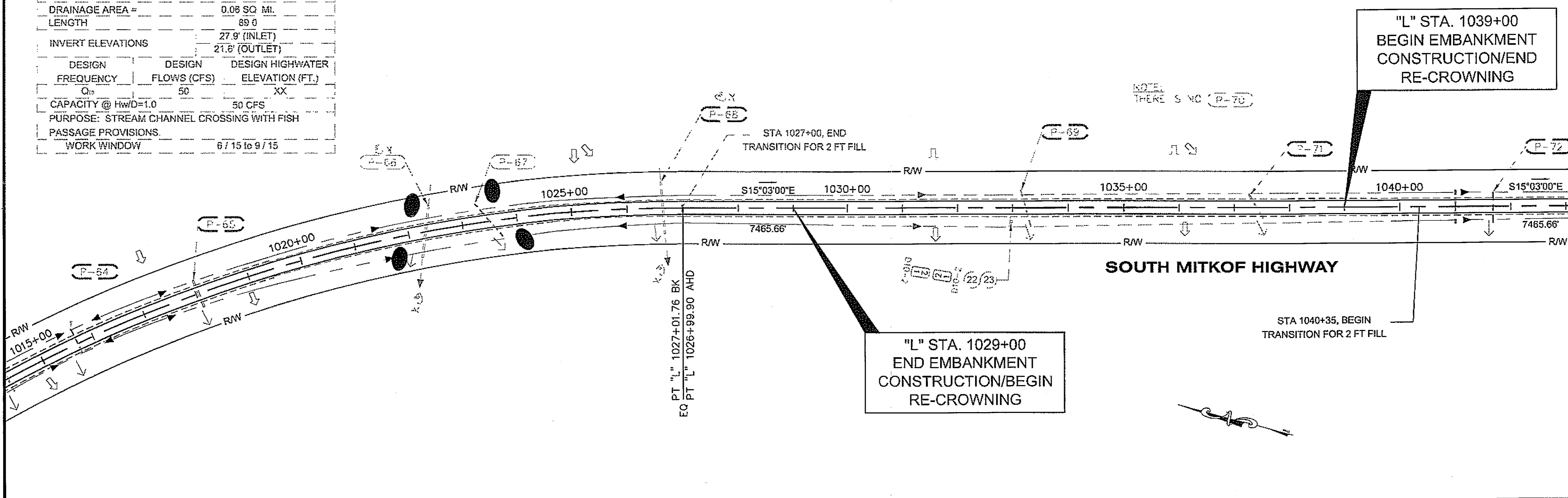
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

**HYDRAULIC SUMMARY P-68**  
 CULVERT SIZE 42" CAP ( 1 GA. THICKNESS)  
 WITH 1' IMBEDDED DEPTH  
 ANNULAR CORRUGATIONS (3" x 1" PREFERRED)

DRAINAGE AREA =	0.09 SQ. MI.
LENGTH	89.0
INVERT ELEVATIONS	27.9' (INLET) 21.8' (OUTLET)
DESIGN FREQUENCY	DESIGN FLOWS (CFS) 50
DESIGN HIGHWATER ELEVATION (FT.)	XX
CAPACITY @ HWD=1.0	50 CFS
PURPOSE:	STREAM CHANNEL CROSSING WITH FISH PASSAGE PROVISIONS.
WORK WINDOW	6/15 to 9/15

PATH: G:\PSG\68646\PLANSET\68646\_F1-4\_PLAN.P6P.DWG  
 ORDDODGE  
 TAB: F4 Friday, July 28, 2005 11:27:44 AM

RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: J. HEUMANN

DESIGNED BY: B. HOLBROOK  
 DRAWN BY: N. GEARY

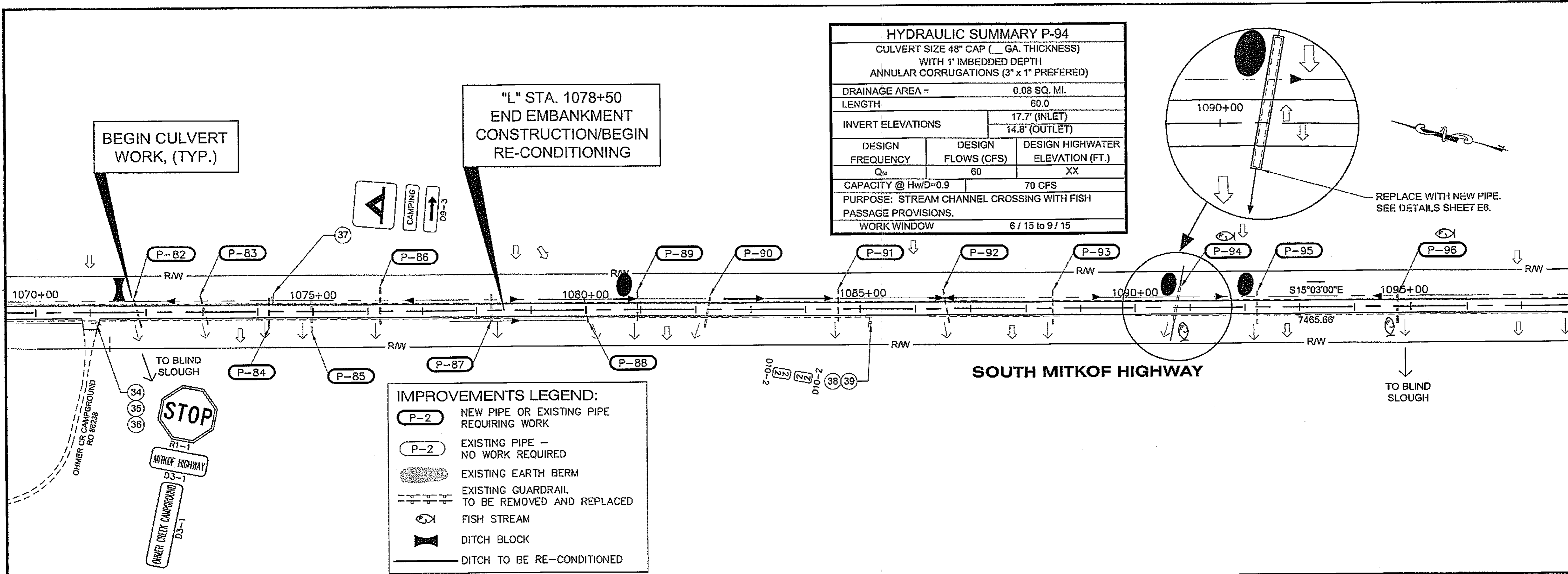
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 SOUTHEAST REGION

PSG-SOUTH MITKOF HIGHWAY  
 UPGRADE (PHASE II) AND SOUTH  
 MITKOF ISLAND TERMINAL PAVING  
 PROJECT NO. 68646

LAYOUT/ESCP  
 PLAN VIEWS

PROJECT DESIGNATION NUMBER	
MGS-0937(31)-68646	
STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
F4	46

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

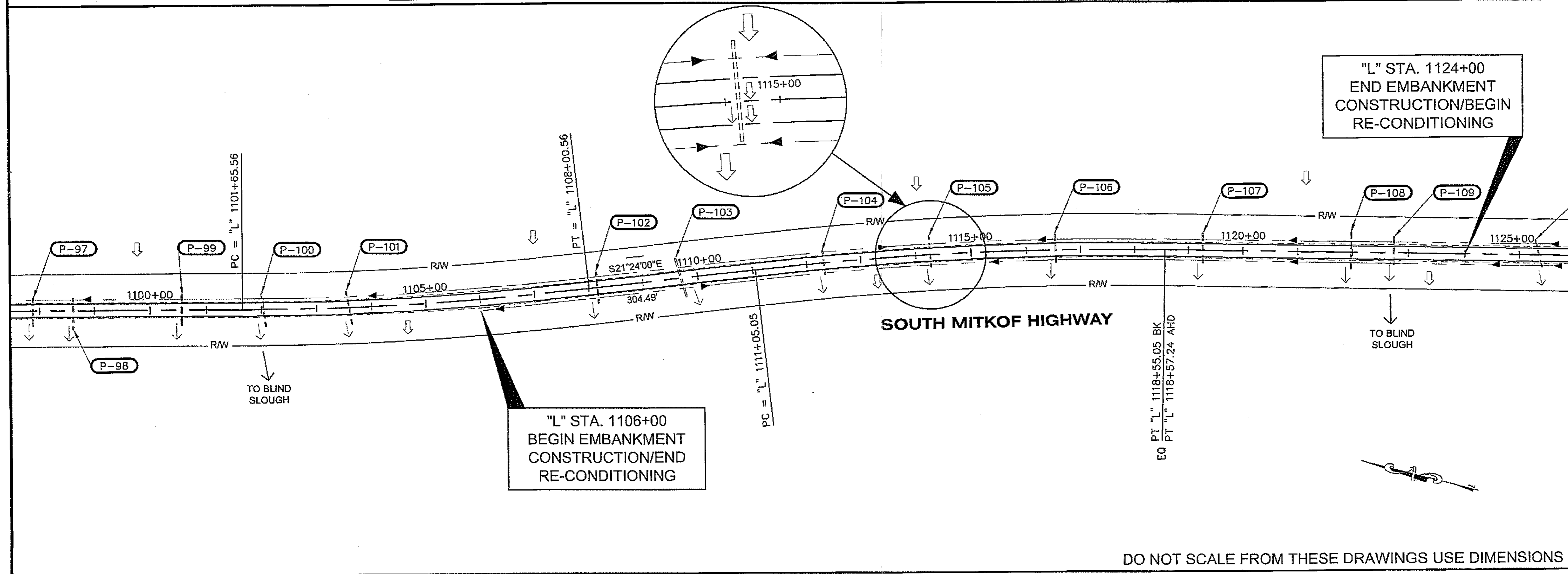


**HYDRAULIC SUMMARY P-94**  
 CULVERT SIZE 48" CAP ( GA. THICKNESS)  
 WITH 1" IMBEDDED DEPTH  
 ANNULAR CORRUGATIONS (3" x 1" PREFERRED)

DRAINAGE AREA =		0.08 SQ. MI.
LENGTH		60.0
INVERT ELEVATIONS		17.7' (INLET) 14.8' (OUTLET)
DESIGN FREQUENCY	DESIGN FLOWS (CFS)	DESIGN HIGHWATER ELEVATION (FT.)
$Q_{50}$	60	XX
CAPACITY @ Hw/D=0.9		70 CFS
PURPOSE: STREAM CHANNEL CROSSING WITH FISH PASSAGE PROVISIONS.		
WORK WINDOW		6 / 15 to 9 / 15

**IMPROVEMENTS LEGEND:**

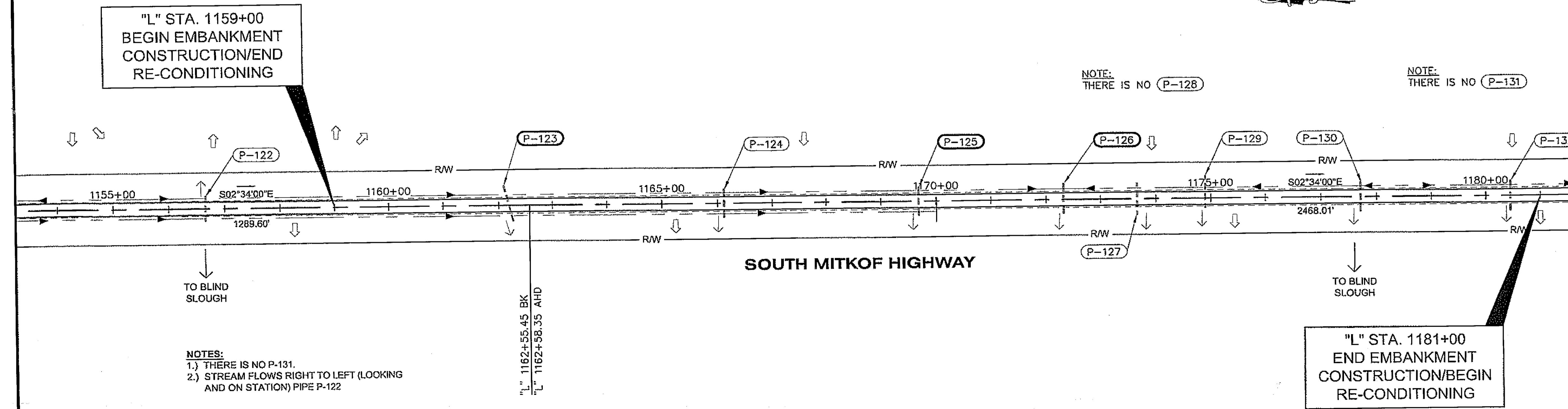
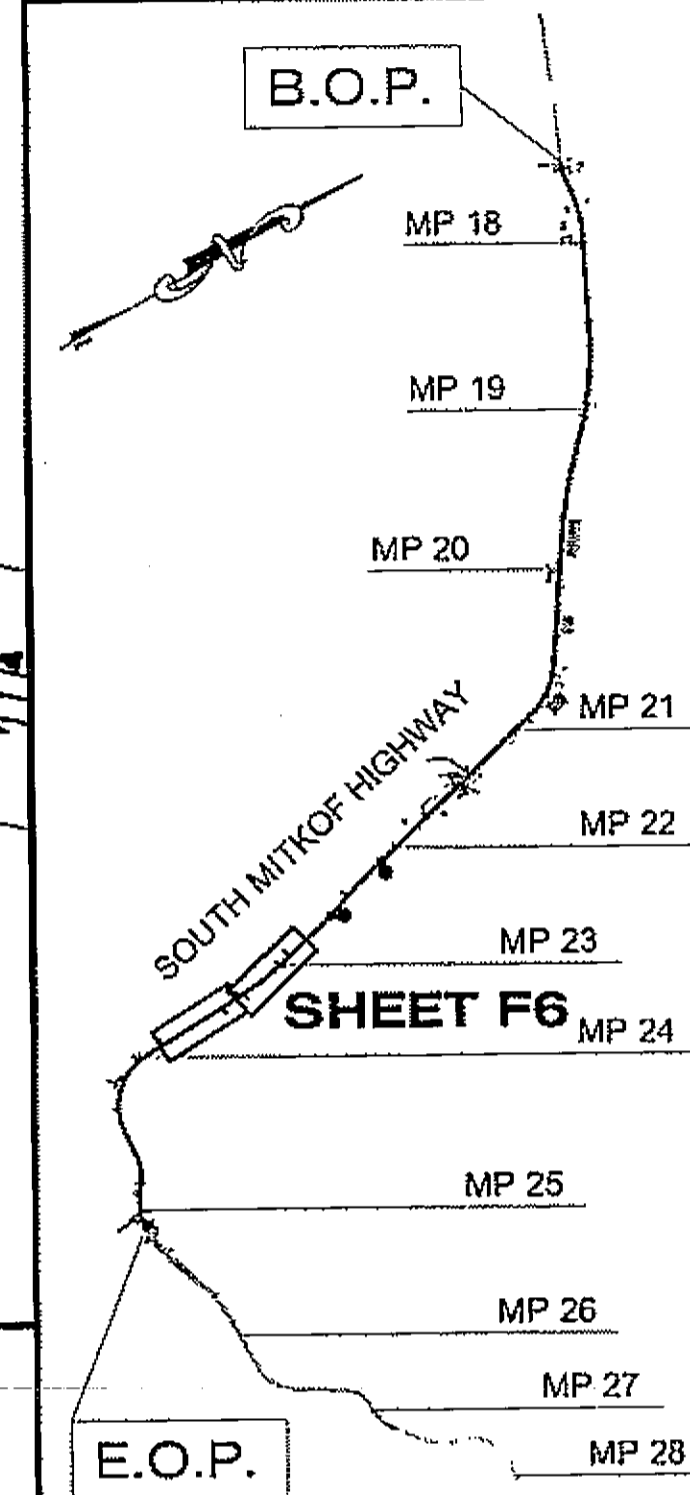
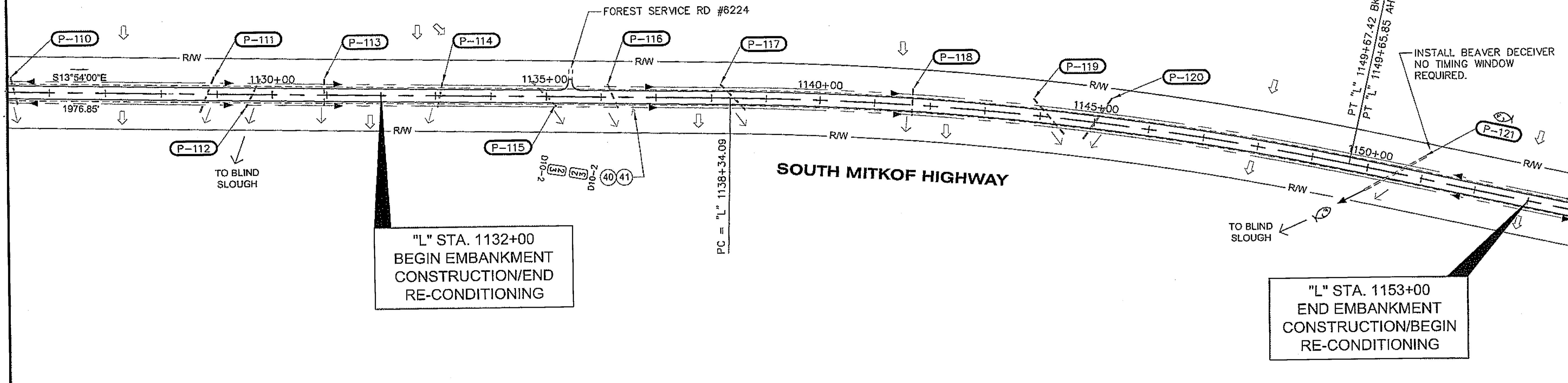
- NEW PIPE OR EXISTING PIPE REQUIRING WORK
- EXISTING PIPE - NO WORK REQUIRED
- EXISTING EARTH BERM
- EXISTING GUARDRAIL TO BE REMOVED AND REPLACED
- FISH STREAM
- DITCH BLOCK
- DITCH TO BE RE-CONDITIONED



PATH: Q:\PSG\68646\PLANSET\68646\_F1-5\_PLAN\_P&P.DWG  
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 ADDENDUM NUMBER  
 ATTACHMENT NUMBER  
 RECORD OF REVISIONS  
 No. DATE DESCRIPTION  
 B.O.P.  
 MP 18  
 MP 19  
 MP 20  
 MP 21  
 MP 22  
 MP 23  
 MP 24  
 MP 25  
 MP 26  
 MP 27  
 MP 28  
 E.O.P.  
**SHEET F5**  
 SOUTH MITKOF HIGHWAY  
 PLAN LEGEND  
 CHECKED BY: J. HEUMANN  
  
 DESIGNED BY: B. HOLBROOK  
 DRAWN BY: N. GEARY  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 SOUTHEAST REGION  
 PSG-SOUTH MITKOF HIGHWAY  
 UPGRADE (PHASE II) AND SOUTH  
 MITKOF ISLAND TERMINAL PAVING  
 PROJECT NO. 68646  
**LAYOUT/ESCP  
 PLAN VIEWS**  
 PROJECT DESIGNATION NUMBER  
 MGS-0937(31)-68646  

STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
F5	46

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PLAN LEGEND

CHECKED BY: J. HEUMANN

DESIGNED BY: B. HOLBROOK  
 DRAWN BY: N. GEARY

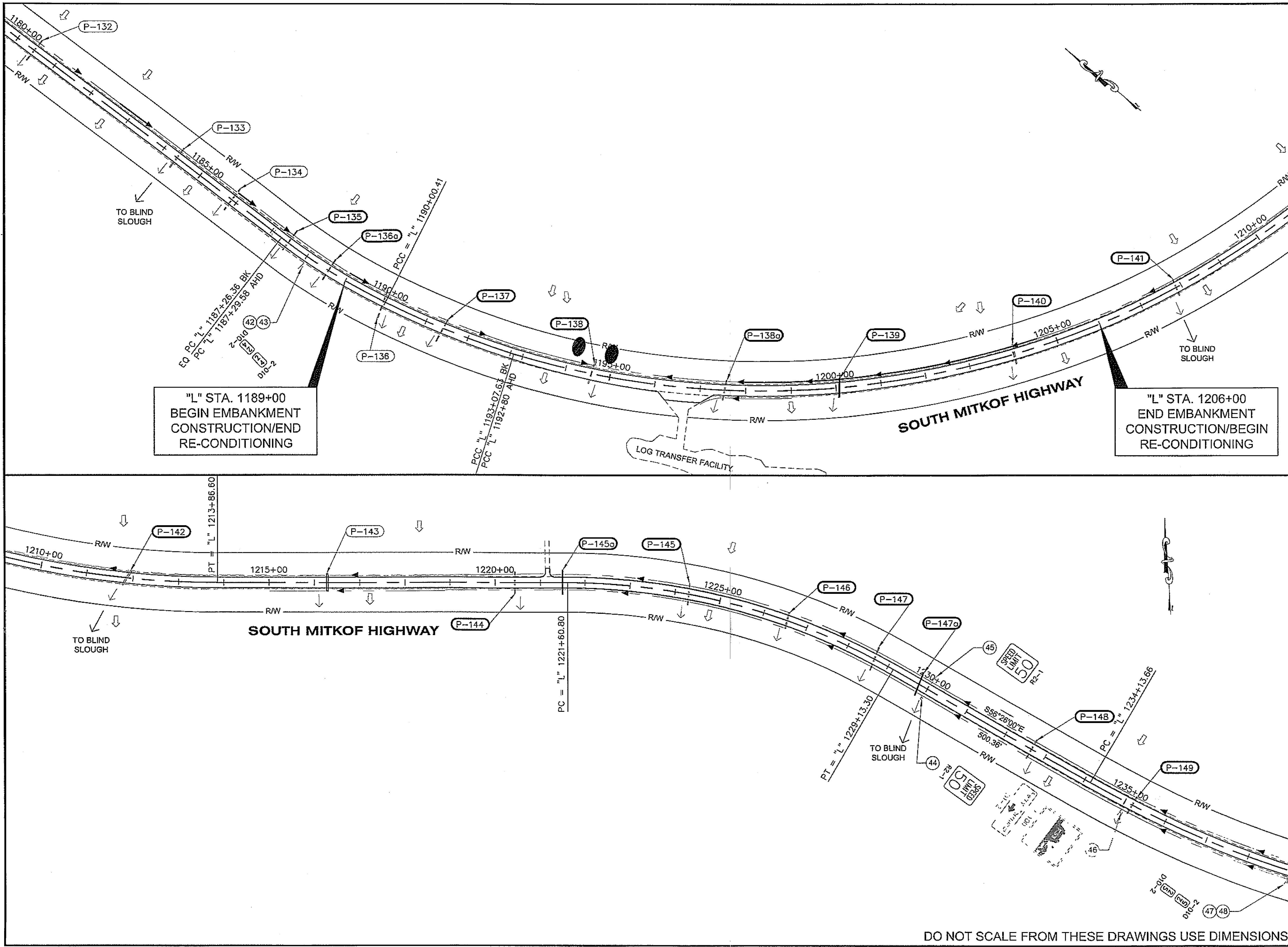
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 SOUTHEAST REGION  
 PSG-SOUTH MITKOF HIGHWAY  
 UPGRADE (PHASE II) AND SOUTH  
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 PROJECT NO. 68646

LAYOUT/ESCP  
 PLAN VIEWS

PROJECT DESIGNATION NUMBER	
MGS-0937(31)-68646	
STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
F6	46

NOTES:  
 1.) THERE IS NO P-131.  
 2.) STREAM FLOWS RIGHT TO LEFT (LOOKING AND ON STATION) PIPE P-122

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



"L" STA. 1189+00  
BEGIN EMBANKMENT  
CONSTRUCTION/END  
RE-CONDITIONING

"L" STA. 1206+00  
END EMBANKMENT  
CONSTRUCTION/BEGIN  
RE-CONDITIONING

PATH:  
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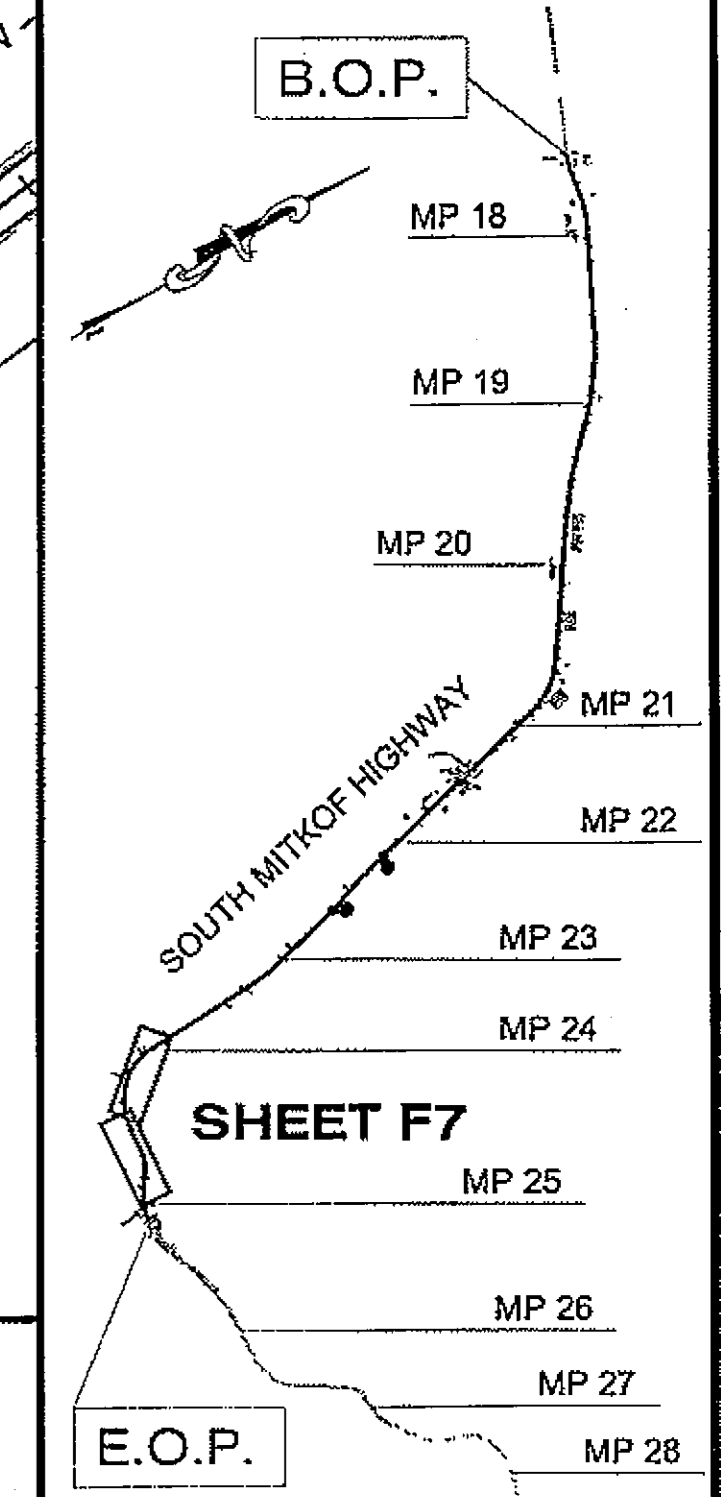
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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



**PLAN LEGEND**

CHECKED BY: J. HEUMANN

DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

3-3-08

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION

PSG-SOUTH MITKOF HIGHWAY  
UPGRADE (PHASE II) AND SOUTH  
MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. 68646

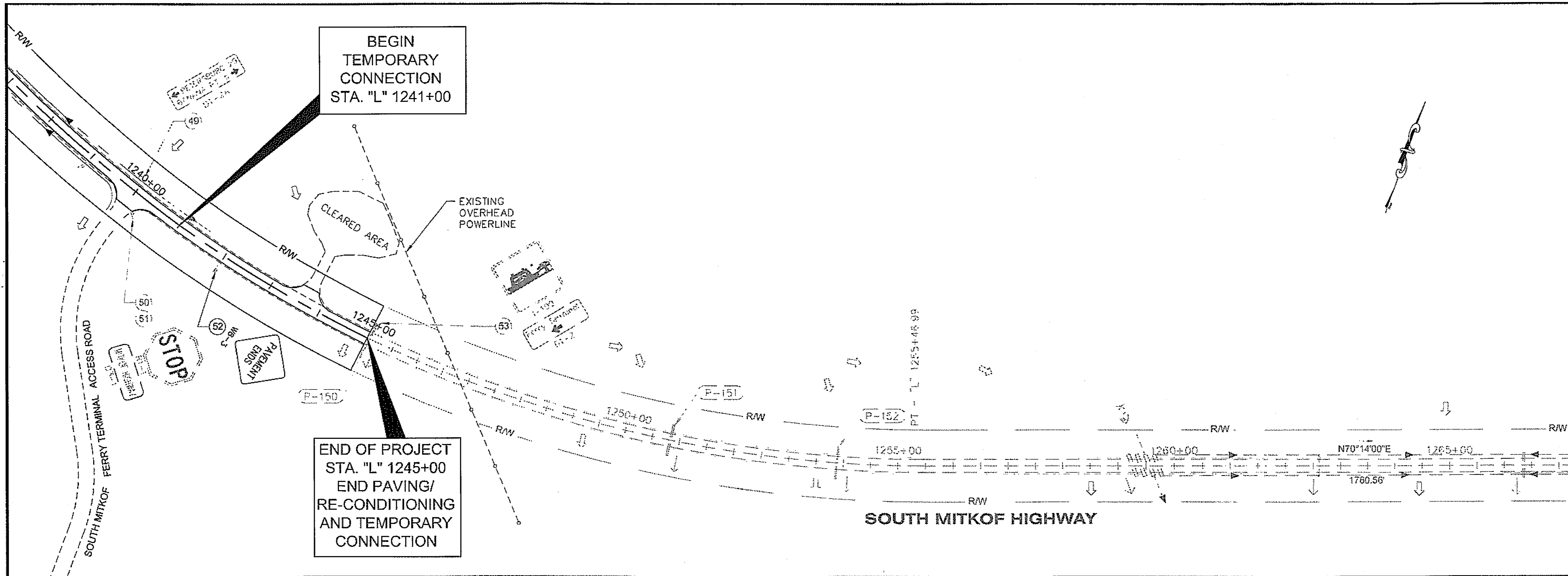
**LAYOUT/ESCP  
PLAN VIEWS**

PROJECT DESIGNATION NUMBER

MGS-0937(31)-68646

STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
F7	46

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



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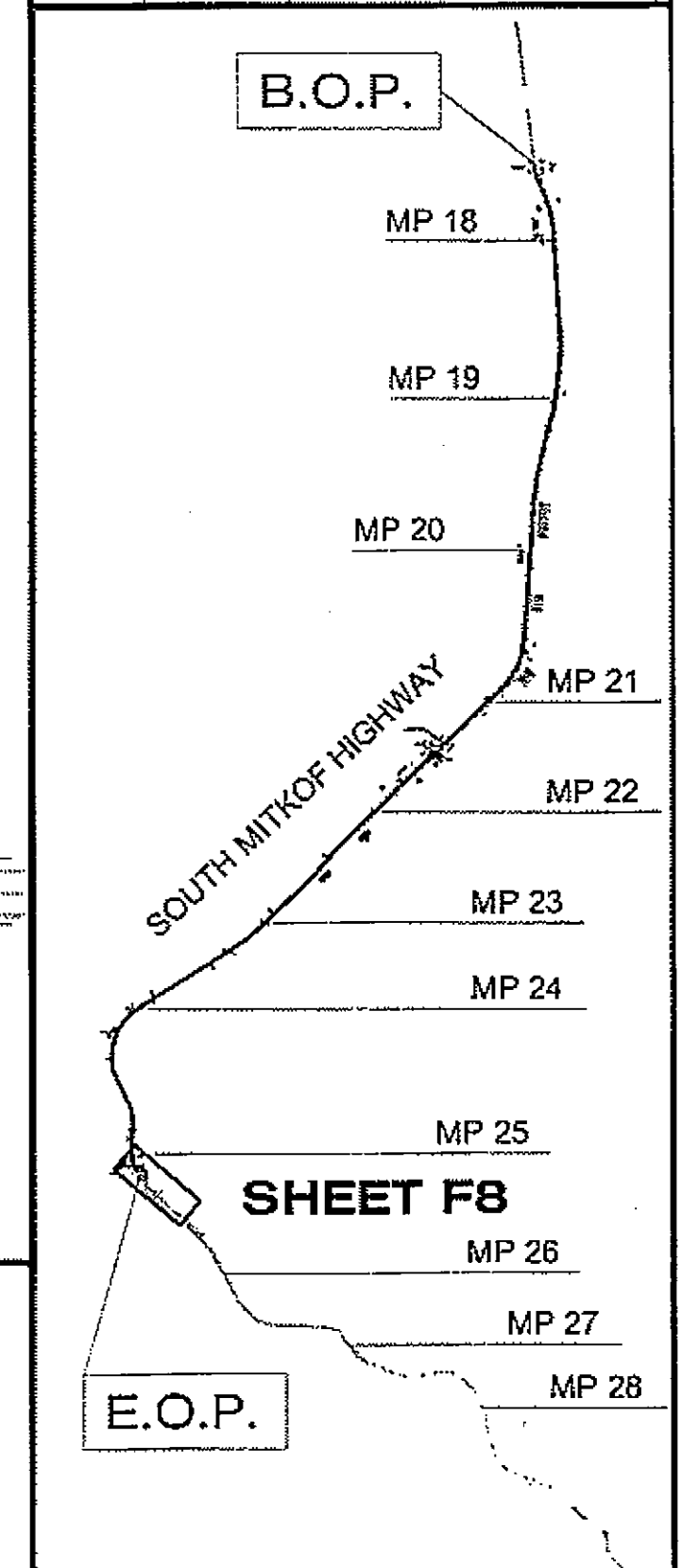
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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: J. HEUMANN

DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 SOUTHEAST REGION

PSG-SOUTH MITKOF HIGHWAY  
 UPGRADE (PHASE II) AND SOUTH  
 MITKOF ISLAND TERMINAL PAVING  
 PROJECT NO. 68646

**LAYOUT/ESCP  
 PLAN VIEWS**

PROJECT DESIGNATION NUMBER

MGS-0937(31)-68646

STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
F8	46

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

### Traffic Control Notes:

- IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME BUT NOT ALL OF THE TRAFFIC CONTROL CONFIGURATIONS THAT WILL BE REQUIRED BY THIS PROJECT. TRAFFIC CONTROL PLANS FOR CONFIGURATIONS NOT COVERED BY THIS TCP SHALL BE DEVELOPED AND SUBMITTED FOR APPROVAL PRIOR TO USE.
- A MINIMUM OF ONE LANE SHALL BE MAINTAINED AT ALL TIMES, THROUGH ALL WORK AREAS.
- TWO LANES SHALL BE MAINTAINED AT ALL TIMES IN NON-WORK AREAS AND DURING NON-WORKING HOURS. WRITTEN APPROVAL IS REQUIRED FOR ANY DEVIATION.
- TRAFFIC LANES SHALL BE A MINIMUM OF 10' WIDE.
- CONSTRUCTION SIGNING SHALL BE IN PLACE ONLY WHEN THE CONDITIONS EXIST FOR WHICH THE SIGNS ARE INTENDED.
- TEMPORARY PAVEMENT MARKINGS WILL BE REQUIRED AS DESCRIBED IN SECTION 643-3.09 OF THE SPECIFICATIONS.
- CHANNELIZATION DEVICES WILL BE LIT IN ACCORDANCE WITH THE ALASKA TRAFFIC MANUAL IF USED AT NIGHT.
- KEEP THE PUBLIC INFORMED OF CONSTRUCTION ACTIVITIES THROUGH THE USE OF THE LOCAL NEWS MEDIA. NEWS RELEASES SHALL BE APPROVED PRIOR TO THEIR RELEASE. NEWS RELEASES WILL BE REQUIRED BUT NOT LIMITED TO, THE ONSET OF WORK, PAVING, AND CHANGES IN THE LANE CONFIGURATIONS.
- IF VEHICLE STOP TIME EXCEEDS FIVE MINUTES, WORK ZONE OR WORK HOURS WILL HAVE TO BE ADJUSTED.
- FLAGGERS SHALL BE IN RADIO CONTACT WITH ONE ANOTHER.
- PATCH ALL SURFACE DEFECTS WITH AGGREGATE BASE COURSE MATERIAL IMMEDIATELY AFTER FINISHING CULVERT WORK IN THESE AREAS. THE AGGREGATE BASE COURSE MATERIAL IN THESE AREAS SHALL BE MAINTAINED UNTIL THE SUCCEEDING COURSE IS LAID.

**LEGEND**

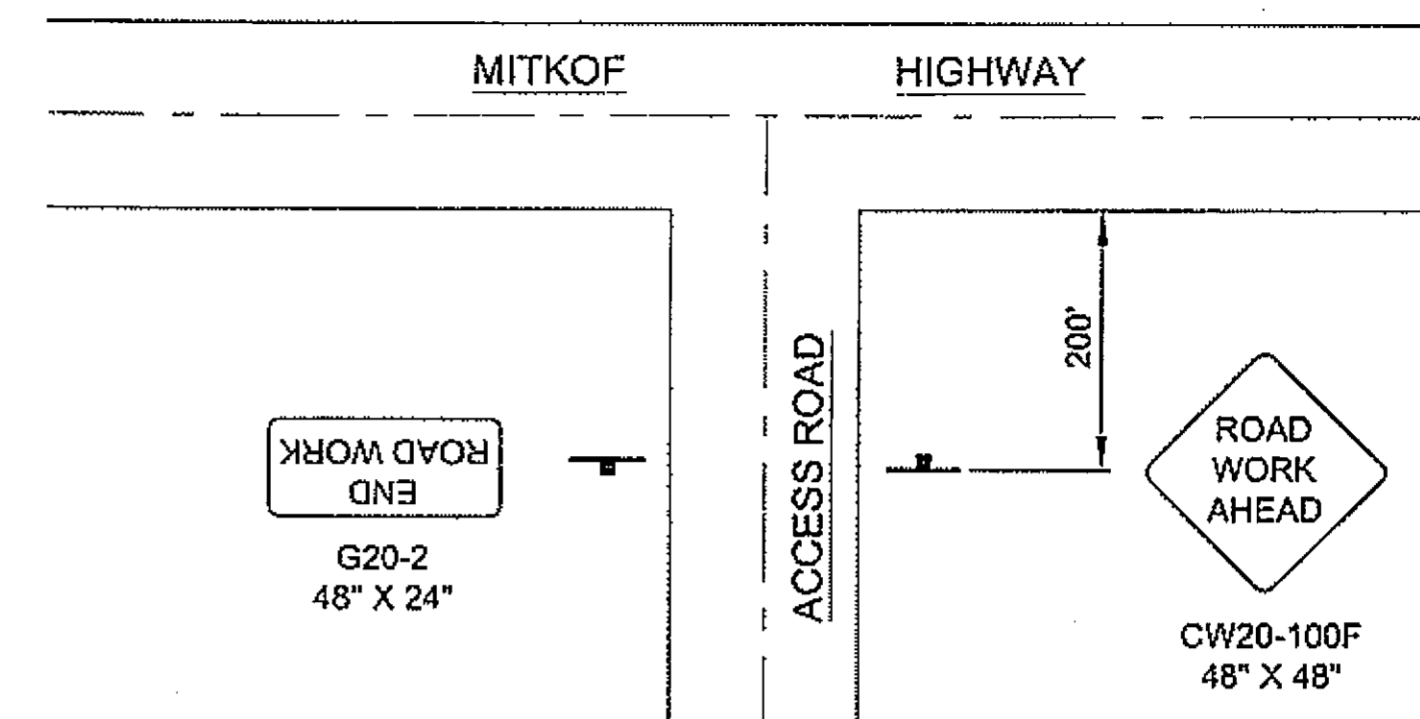
- SIGN
- ----- CONE
- ----- DRUM
- ||||| ----- TYPE III BARRICADE
- ----- FLAGGING STATION

**WHERE**

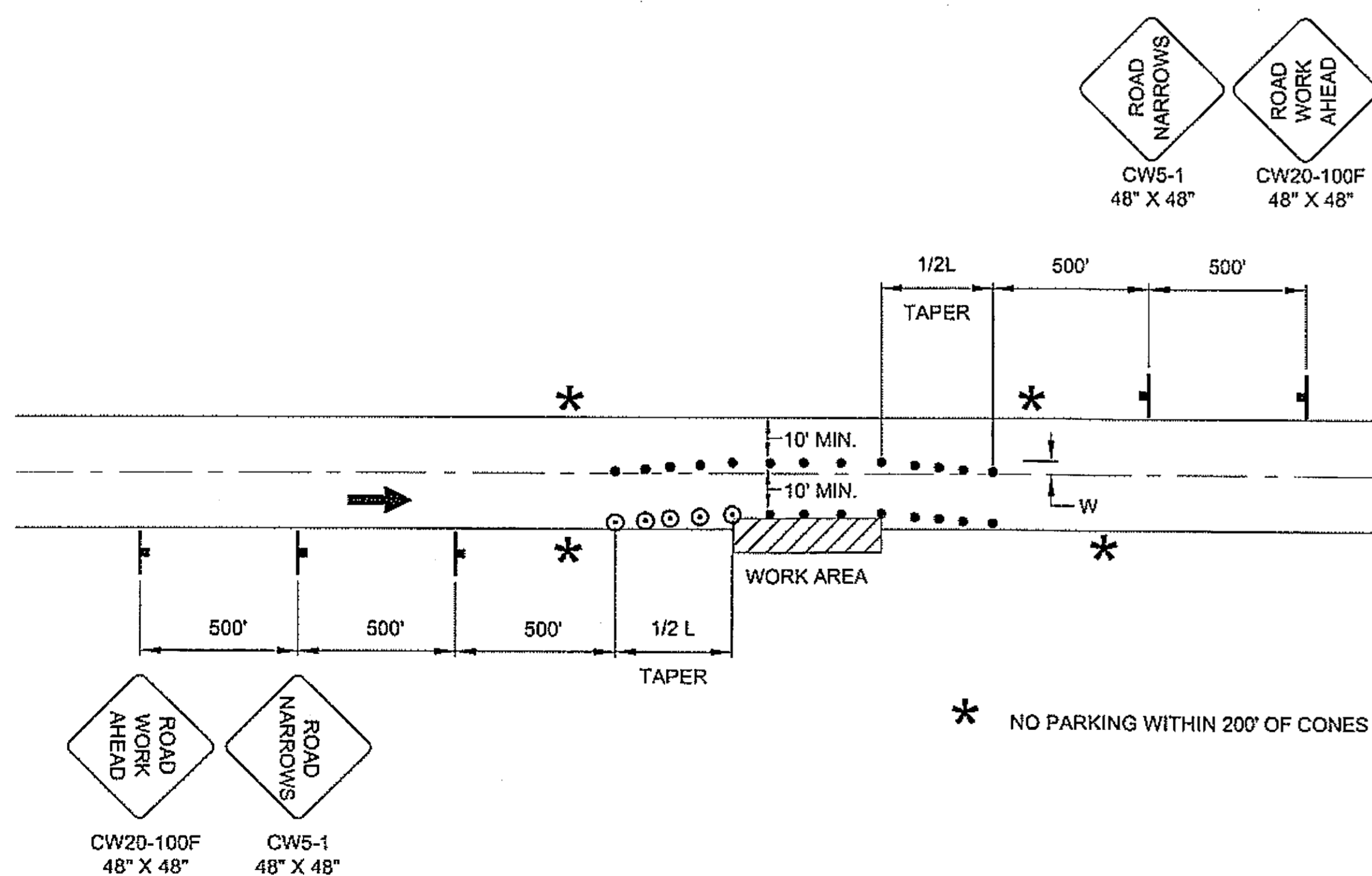
L = LENGTH OF TAPER  
W = WIDTH OF OFFSET  
S = SPEED (mph)  
L = WS for 45 mph or Greater  
L =  $\frac{WS^2}{60}$  for 40 mph or Less

**TCP TABLE SETUP**

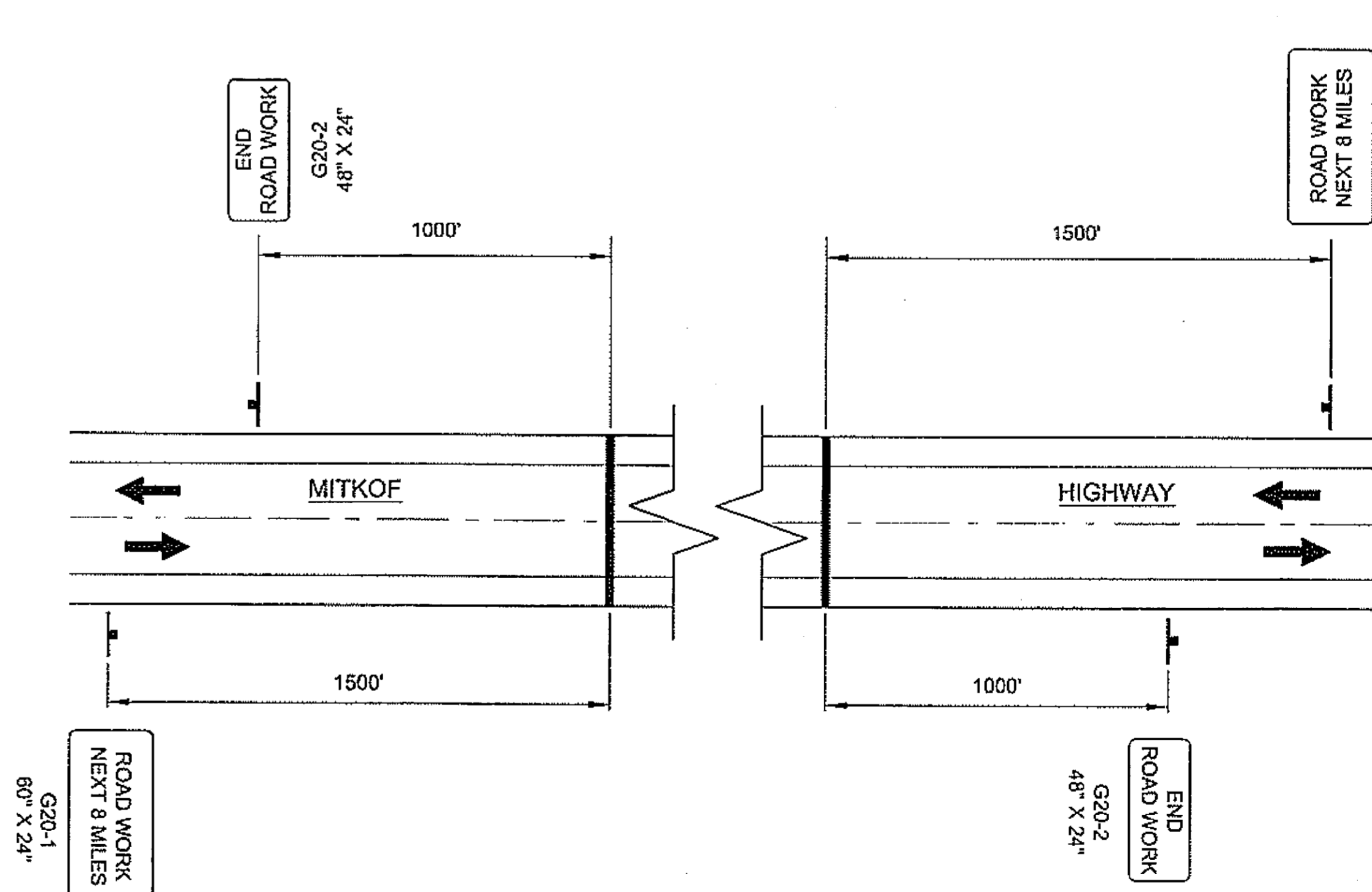
SPEED (MILES PER HOUR)	BUFFER/LENGTH (FT.)	CONE/DRUM SPACING (FT.)
20	115	20
25	155	25
30	200	30
35	250	35
40	305	40
45	360	45
50	425	50
55	495	55
60	570	60
65	645	65



**Permanent Construction Signing**



**Roadway Encroachment**



**Permanent Construction Signing**

PATH: G:\PSG\68646\PLANSET\68646\_H1-2\_TRAFFIC CONT.DWG

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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

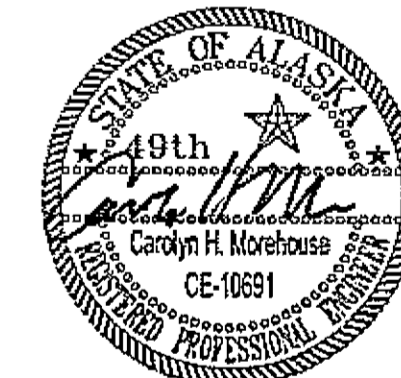
No.	DATE	DESCRIPTION

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
AND SOUTH MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. MGS-0937(31) ~ 68646

**TRAFFIC CONTROL PLAN**

**PLAN LEGEND**

CHECKED BY: W. HOLBROOK



DESIGNED BY: M. LUKSHIN

DRAWN BY: N. GEARY

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION  
PSG-SOUTH MITKOF HIGHWAY  
UPGRADE (PHASE II) AND SOUTH  
MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. 68646

**TRAFFIC CONTROL PLAN**

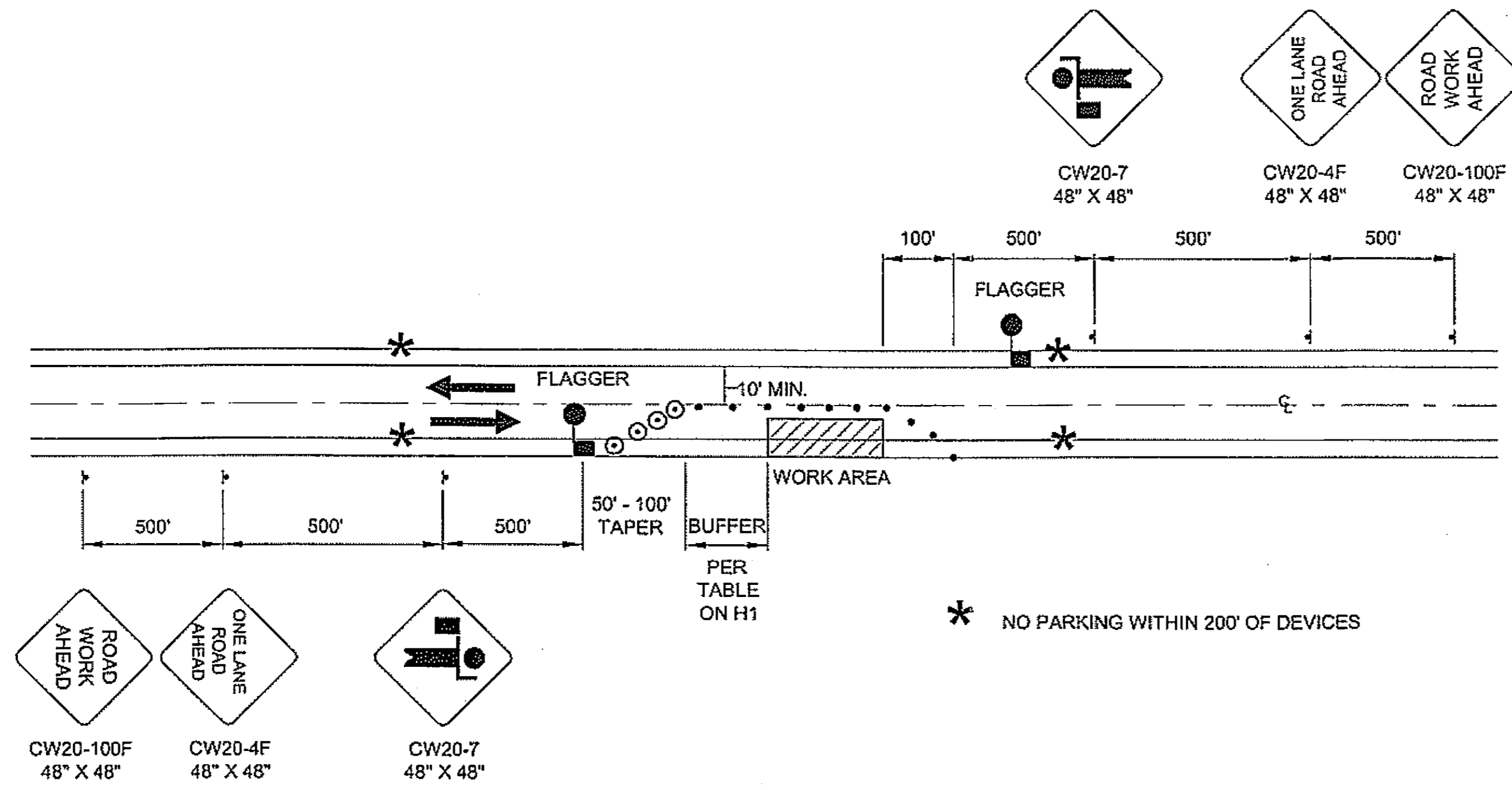
PROJECT DESIGNATION NUMBER

MGS-0937(31)-68646

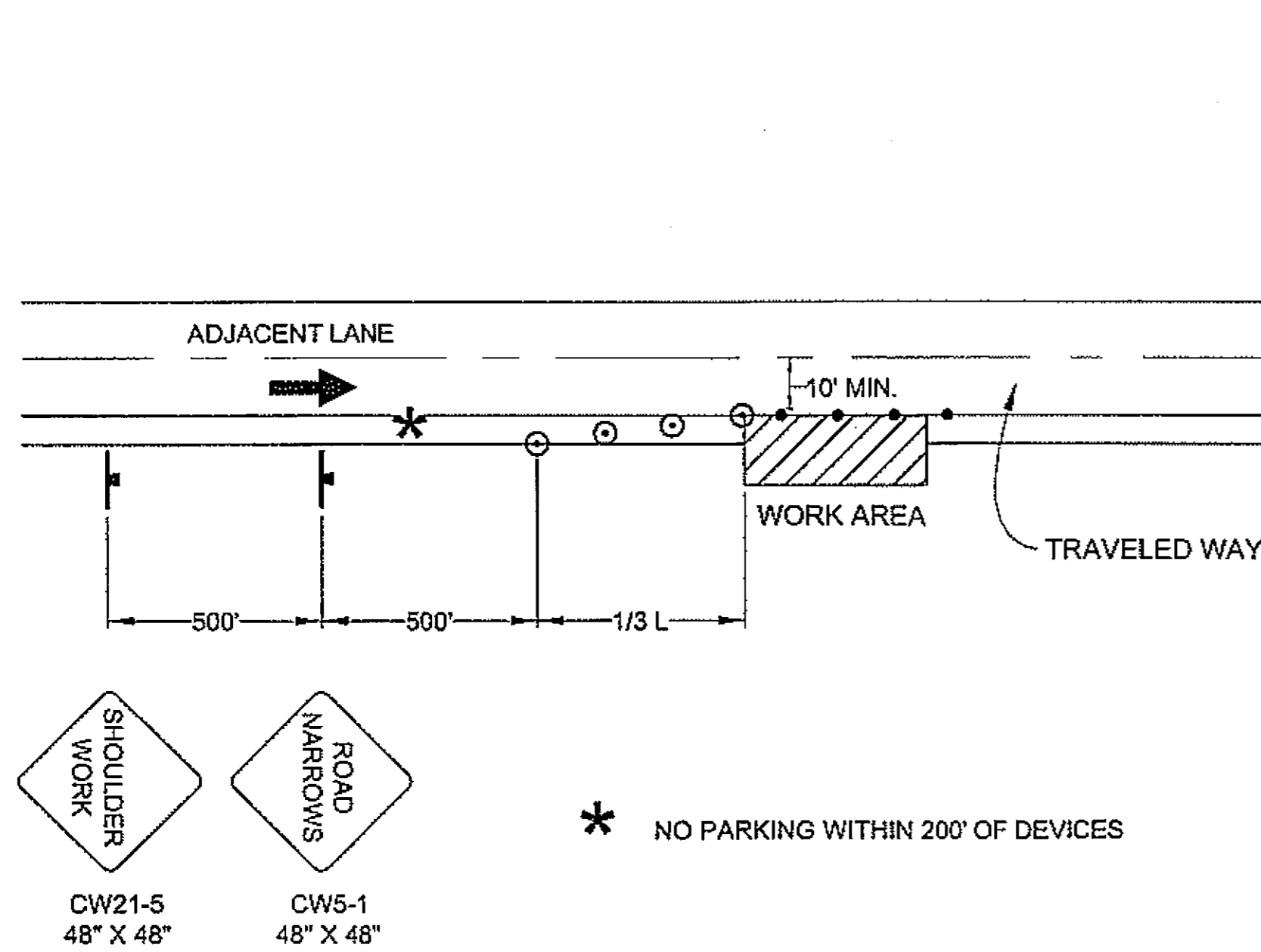
STATE	YEAR
ALASKA	2008

SHEET NUMBER	TOTAL SHEETS
H1	46

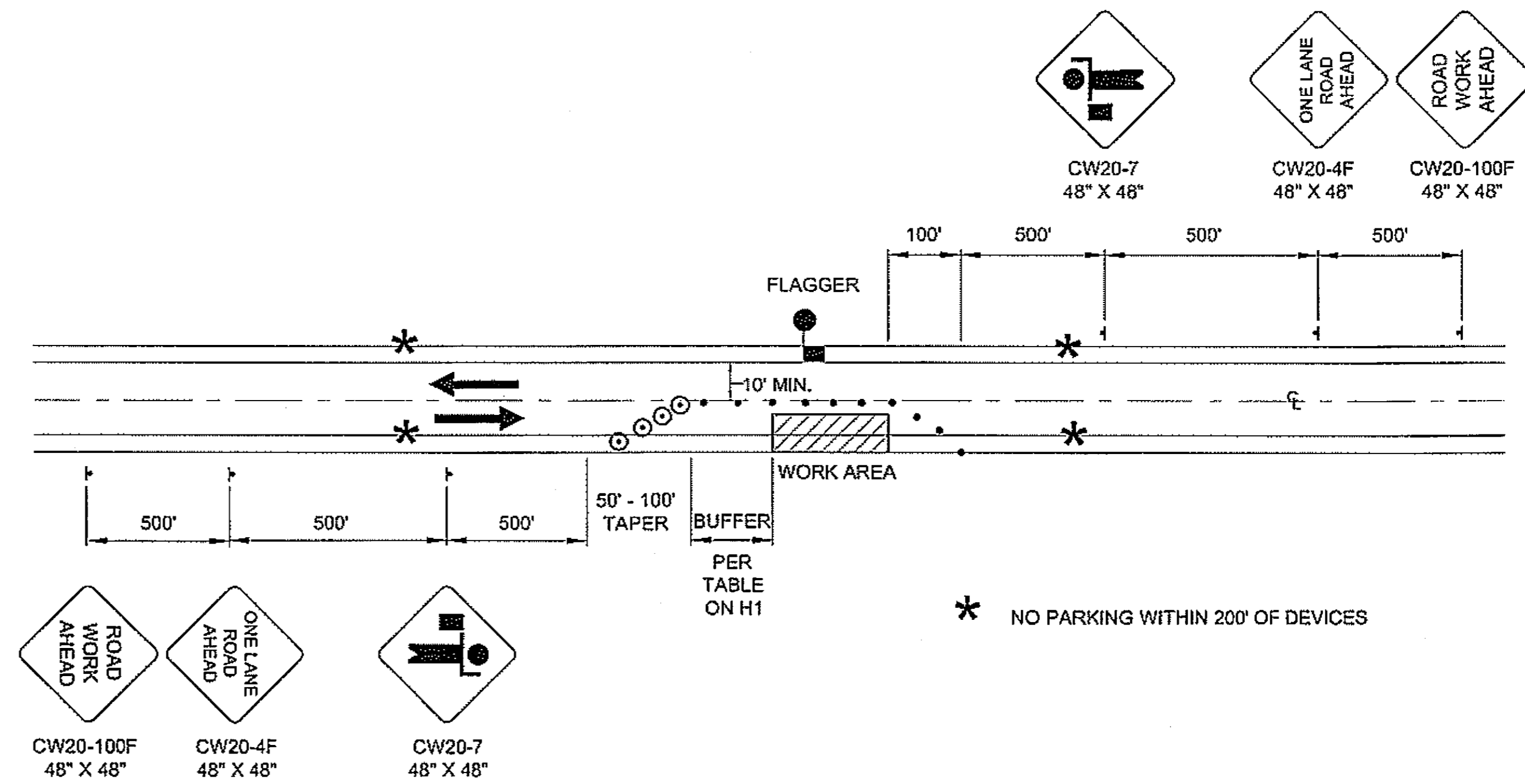
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**TWO LANE ROAD - SINGLE LANE CLOSURE  
DOUBLE FLAGGER**



**SHOULDER WORK**



**TWO LANE ROAD - SINGLE LANE CLOSURE  
SINGLE FLAGGER**

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PATH: Q:\PSG\68646\PLANSET\68646\_H1-2\_TRAFFIC CONTL.DWG

DROODGE

TAB: H2 Friday, July 29, 2005 11:27:44 AM

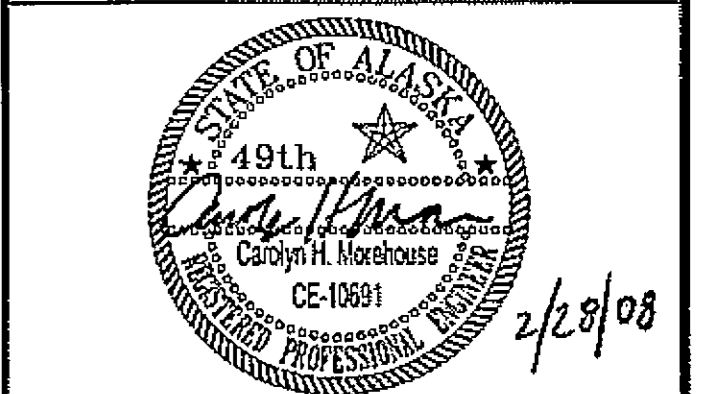
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ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
AND SOUTH MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. MGS-0937(31) ~ 68646

**TRAFFIC CONTROL PLAN**

**PLAN LEGEND**

CHECKED BY: W. HOLBROOK



DESIGNED BY: M. LUKSHIN

DRAWN BY: N. GEARY

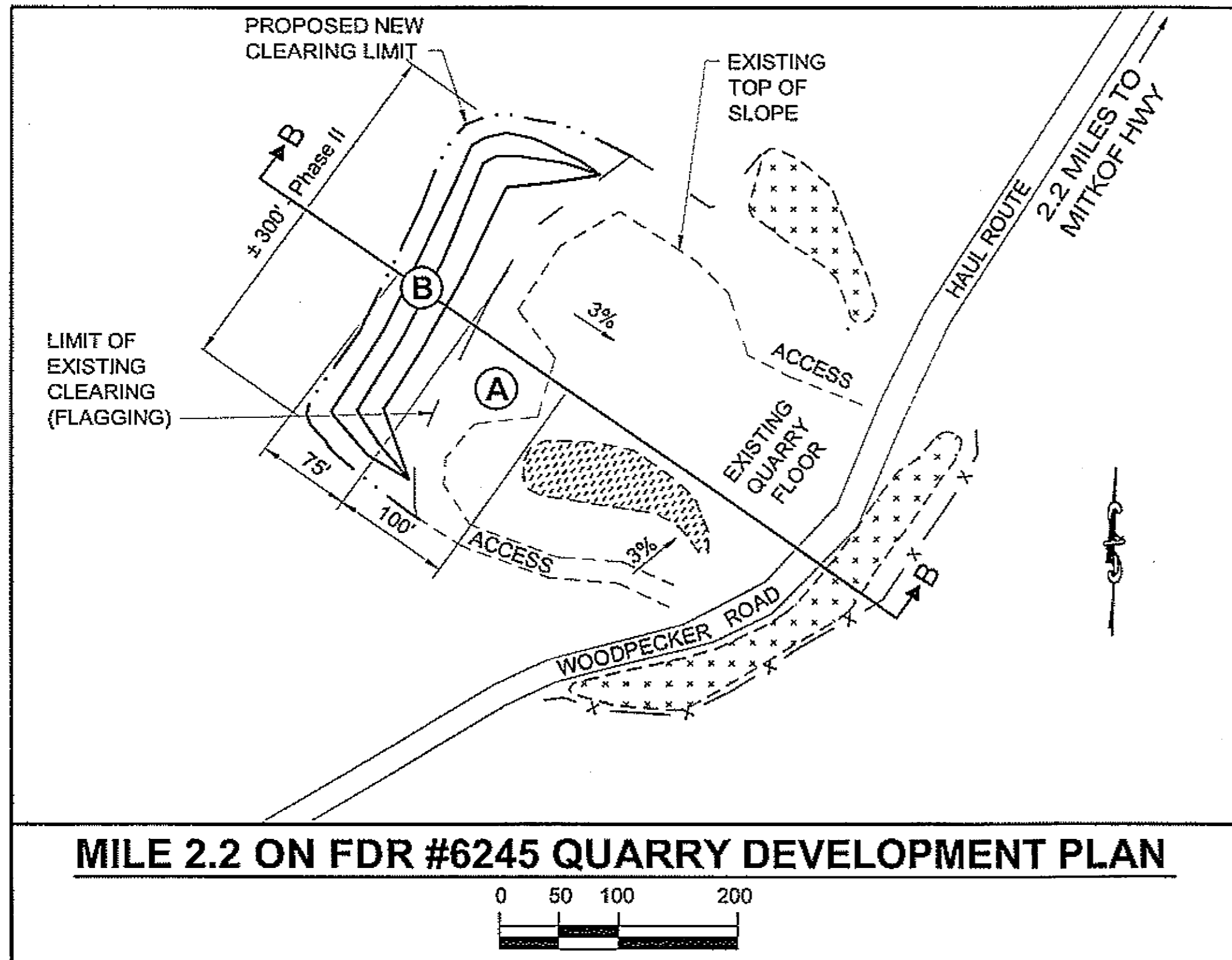
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION  
PSG-SOUTH MITKOF HIGHWAY  
UPGRADE (PHASE II) AND SOUTH  
MITKOF ISLAND TERMINAL PAVING  
PROJECT NO. 68646

**TRAFFIC CONTROL  
PLAN**

PROJECT DESIGNATION NUMBER

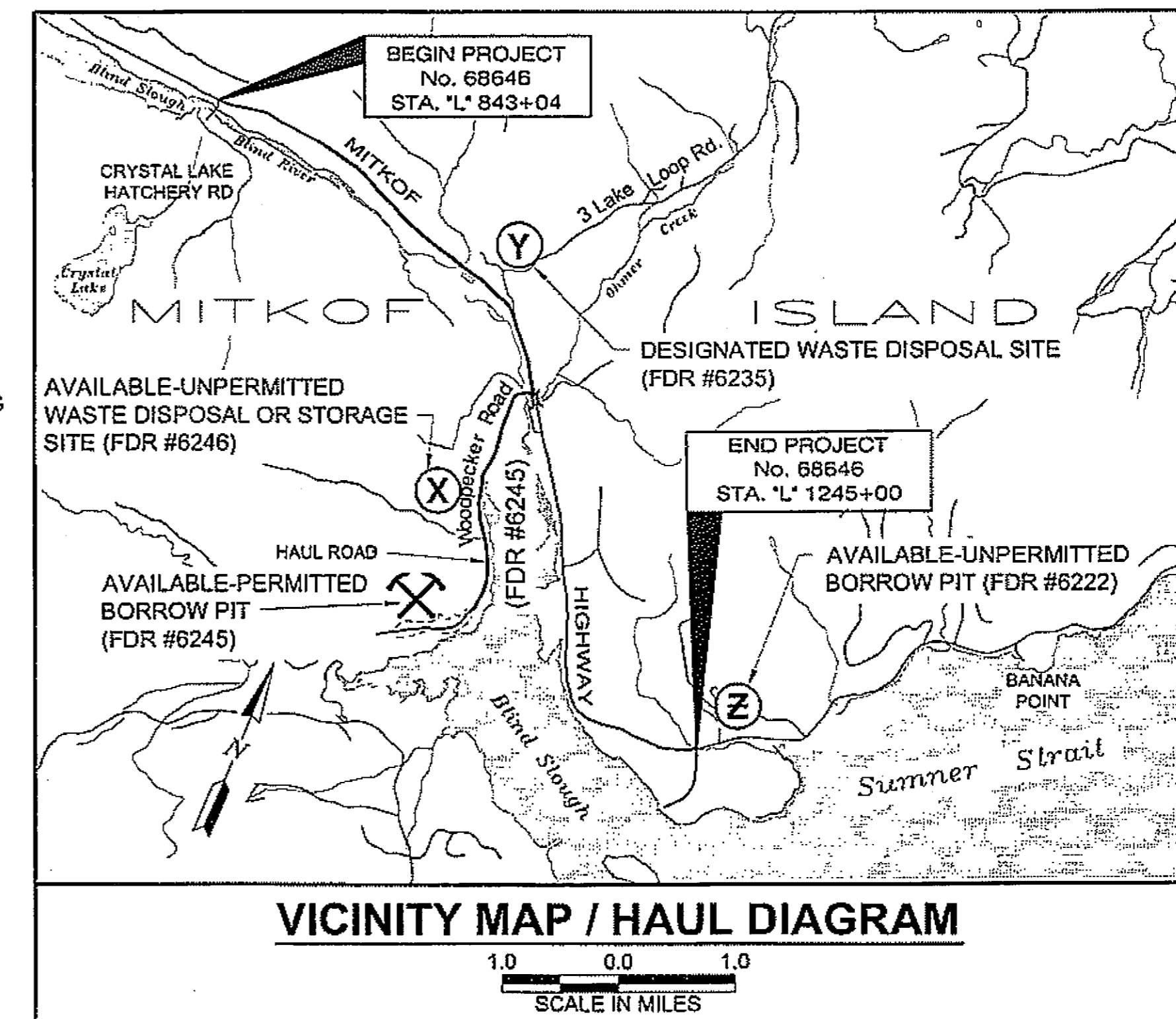
MGS-0937(31)-68646

STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
H2	46



**LEGEND:**

- WASTE AREA FROM PREVIOUS PROJECTS
- EXISTING USFS AGGREGATE STOCKPILE (SEE DEVELOPMENT PLAN NOTE 2.)
- PREVIOUSLY PERMITTED 140'x100', 10,000 CU. YD. MINING AREA FOR DOT/PF South Mitkof Highway Project - Phase I
- PERMITTED 300'x75', 45,000 CU. YD. MINING AREA FOR DOT/PF South Mitkof Highway Project - Phase II
- MILE 2.2 ON FDR #6245 USFS QUARRY (DESCRIBED THIS SHEET.)
- MILE 0.1 ON FDR #6246 USFS QUARRY (SEE DEVELOPMENT PLAN NOTE 14.)
- MILE 20.2 ON FDR #6235 USFS QUARRY (SEE DEVELOPMENT PLAN NOTE 14.)
- MILE 0.5 ON FDR #6222 DNR QUARRY (SEE SPECIALS SECTION 106.)



**DEVELOPMENT PLAN:**

1. ALL MERCHANTABLE TIMBER WILL BE REMOVED FROM ROCK PRODUCTION AREAS LIMBED AND STOCK PILED AT APPROVED LOCATIONS. SEE SECTION 106 FOR ADDITIONAL REQUIREMENTS.
2. PROTECT EXISTING PROCESSED ROCK STOCKPILES LOCATED WITHIN THE QUARRY FROM CONTAMINATION, OR USE THIS MATERIAL IN PROJECT AND REPLACE WITH NEWLY CRUSHED MATERIAL, MEETING SAME SPECIFICATIONS.
3. REMOVE ALL OVERBURDEN TO SOLID ROCK FOR A MINIMUM DISTANCE OF 10' FROM THE WORKING FACE. NO OVERBURDEN SHALL BE PLACED IN ACTIVE STREAMS. RETAIN 50' UNDISTURBED BUFFER BETWEEN ROAD AND WORK AREA.
4. SLOPE THE CUT BANK OF THE OVERBURDEN TO THE NATURAL ANGLE OF REPOSE BUT IN NO CASE STEEPER THAN 1:1.
5. WITHIN THE CLEARING LIMITS:
  - \* MAXIMUM STUMP HEIGHT SHALL BE 12".
  - \* STABLE TREES UP TO 6" dbh NEED NOT BE CUT IF THEY WILL NOT INTERFERE WITH BACK SLOPE STABILITY.
  - \* STUMPS AND BRUSH MAY BE LEFT IN PLACE, EXCEPT THAT ALL STUMPS THAT PROTRUDE FROM EXCAVATED BANKS OR THAT HAVE THE POTENTIAL TO BECOME DISLODGED AT ANY LATER DATE SHALL BE REMOVED.
6. DISPOSE OF ALL OVERBURDEN, CLEARING, MERCHANTABLE TIMBER AND GRUBBING DEBRIS AT APPROVED LOCATIONS.
7. FELL ALL DEAD TREES AND SNAGS WHICH ARE SUFFICIENTLY TALL TO REACH THE WORK AREA.
8. LEAVE THE QUARRY IN A NEAT, ORDERLY AND WELL-DRAINED CONDITION. REMOVE ALL OVERHANGS AND LOOSE ROCK.
9. ACCESS RAMPS TO THE UPPER LEVELS SHALL BE CONSTRUCTED AND SHALL BE LOCATED AS APPROVED BY THE ENGINEER. SAID RAMPS SHALL REMAIN AS FIXED FEATURES PROVIDING PERMANENT ACCESS TO THE UPPER LEVELS UNLESS RELOCATION IS AUTHORIZED.
10. NO MORE THAN 5% BY VOLUME OF OVERSIZE MATERIAL (IN EXCESS OF 3' AVERAGE DIMENSION) REMAINING FROM BLASTING ASSOCIATED WITH THIS PROJECT SHALL BE LEFT IN THE QUARRY. BREAK DOWN ANY OVERSIZE ROCK OVER THIS VOLUME AND UTILIZE IN THIS PROJECT OR STOCKPILE AT QUARRY. NO OFF SITE DISPOSAL OF OVERSIZE MATERIAL SHALL BE ALLOWED. SEE SECTION 106 FOR MORE DETAIL.
11. PROVISIONS FOR FUTURE QUARRY DEVELOPMENT ACCESS WILL BE PROVIDED.
12. HAUL WILL NOT BE ALLOWED BEYOND DESIGNATED PROJECT LIMITS UNLESS OTHERWISE APPROVED.
13. WASTE/OVERBURDEN GENERATED BY CONTRACTOR MINING ACTIVITIES AT THIS QUARRY SHALL BE DISPOSED OF ONLY AT DESIGNATED SITE AT MILE 20.2 FDR #6235 OR POTENTIALLY AVAILABLE SITE AT MILE 0.1 FDR #6246, AT CONTRACTOR'S EXPENSE.
14. THE FOLLOWING PREVIOUSLY MINED USFS QUARRY SITES ARE AVAILABLE WASTE/OVERBURDEN DISPOSAL LOCATIONS PENDING USFS APPROVAL OF CONTRACTOR PREPARED WASTE DISPOSAL PLAN. CONTACT RUSS BEERS, USFS (PHONE 907-772-5940) FOR DISPOSAL PLAN REQUIREMENTS.
  1. MILE 0.1 ON FDR #6246.
  2. MILE 20.2 ON FDR #6235.

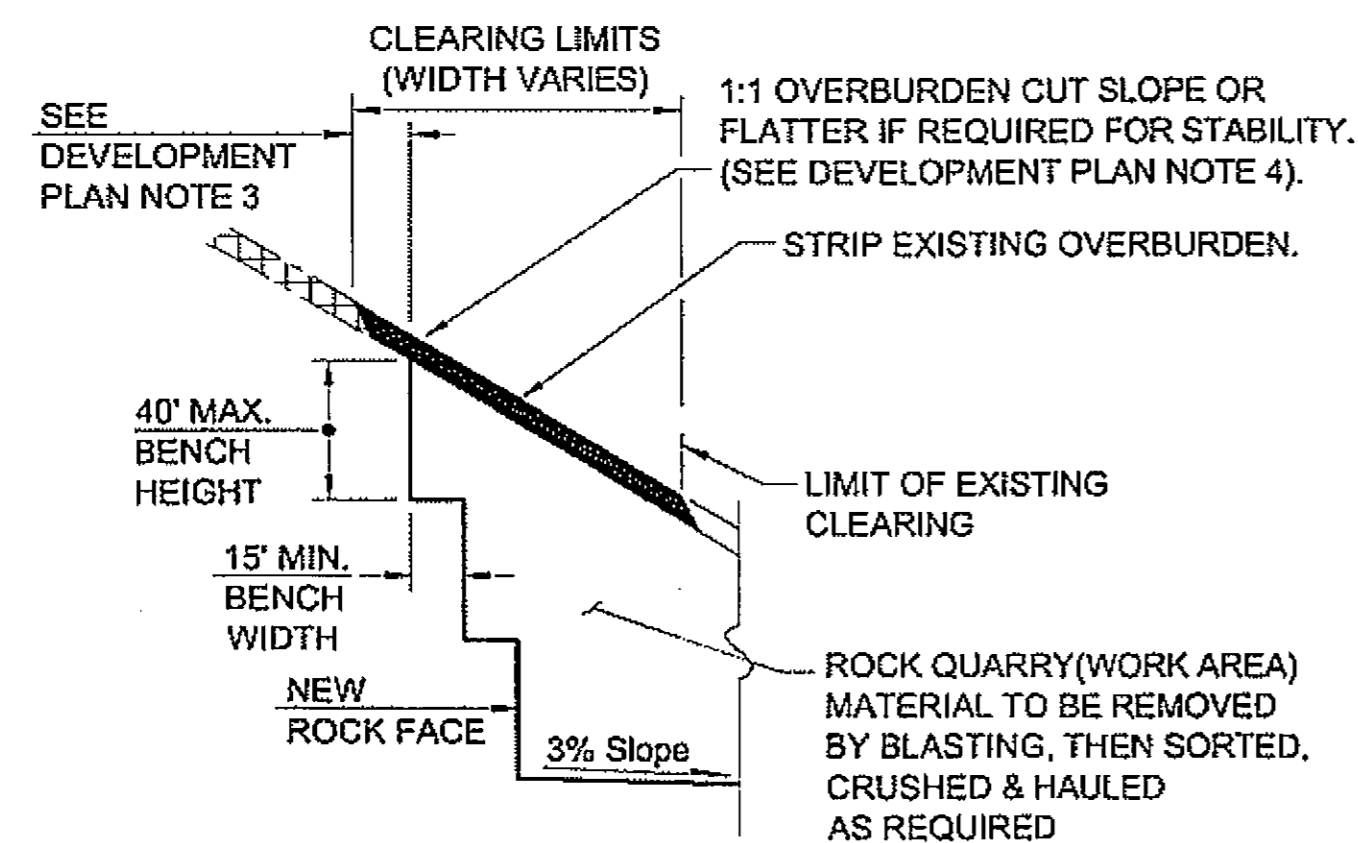
**BLASTING PLAN:**

1. BLASTING PLAN SHALL BE SUBMITTED BY CONTRACTOR 2 WEEKS PRIOR TO SCHEDULED USE FOR APPROVAL BY ENGINEER AND USFS.
2. A TEST SHOT OF 1300 TO 2600 CUBIC YARDS IS REQUIRED AT THE QUARRY SITE. RESULTS TO BE EVALUATED AND VERIFIED BY ENGINEER AND USFS PRIOR TO APPROVAL FOR PRODUCTION BLASTING.

**REHABILITATION PLAN:**

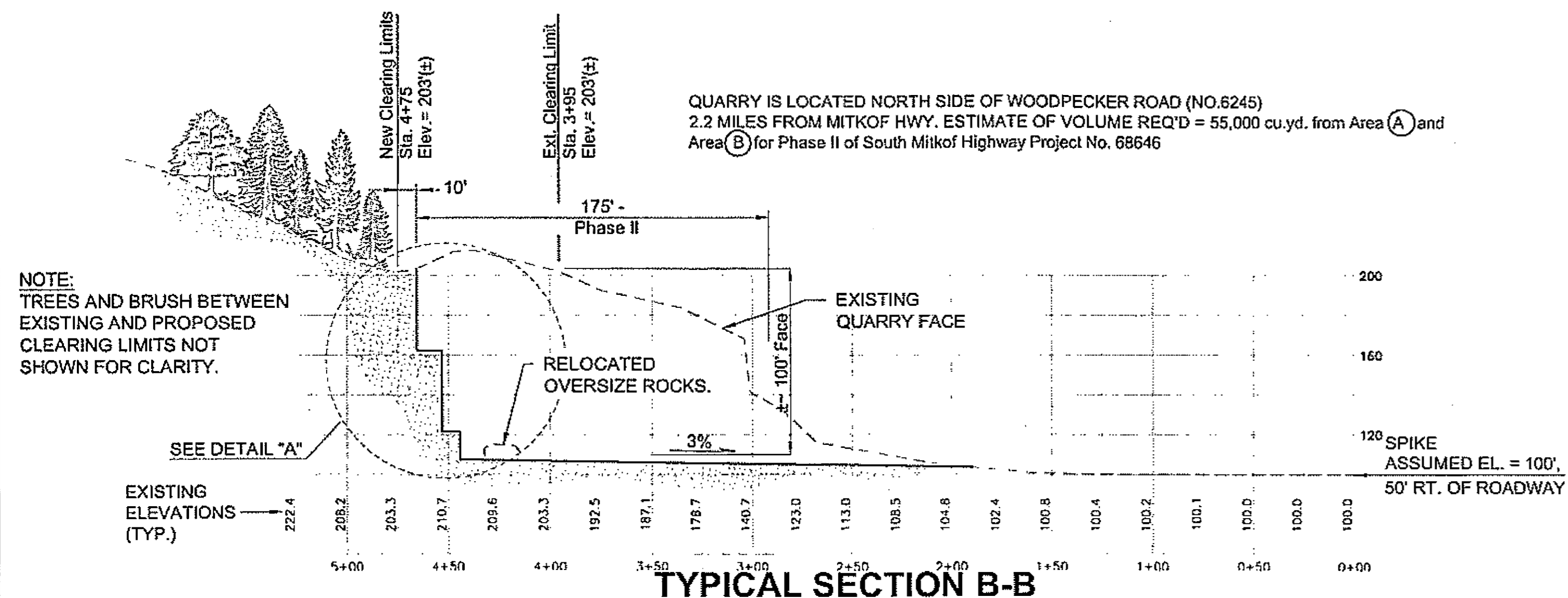
1. ACCESS TO THE PIT FOR FUTURE USE SHALL BE RETAINED BUT RESTRICTED BY PLACING 500 LB. MINIMUM BOULDERS ACROSS PIT ACCESS POINTS.
2. ALL VEGETATED COVER DISTURBED AREAS WILL BE SEEDED AND FERTILIZED IN ACCORDANCE WITH SECTION 618. FOR WASTE DISPOSAL SITES, SEE CONTRACTUAL AGREEMENTS FOR SHAPING, FERTILIZING AND SEEDING REQUIREMENTS AT THOSE LOCATIONS.
3. SEE USFS MEMORANDUM OF AGREEMENT WITH DOT&PF FOR PERMIT CONDITIONS TO BE MET FOR REHABILITATION AND CLEANUP OF PIT.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



**ROCK EXCAVATION DETAIL "A"**

NO SCALE



**TYPICAL SECTION B-B**

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 TAB:R1 Friday, July 29, 2005 11:27:44 AM  
 ADDENDUM NUMBER  
 ATTACHMENT NUMBER  
 RECORD OF REVISIONS  

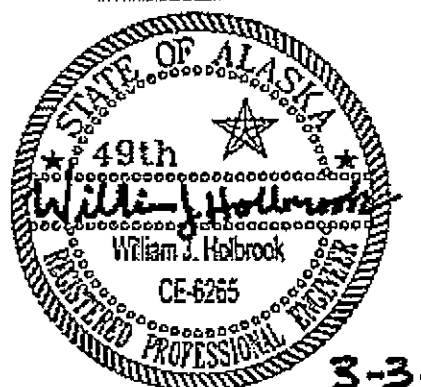
No.	DATE	DESCRIPTION

PSG-SOUTH MITKOF HIGHWAY UPGRADE (PHASE II)  
 AND SOUTH MITKOF ISLAND TERMINAL PAVING  
 PROJECT NO. MGS-0937(31) ~ 68646

**MILE 2.2 ON FDR #6245  
 USFS QUARRY  
 DEVELOPMENT PLAN**

**PLAN LEGEND**

CHECKED BY: J. HEUMANN



DESIGNED BY: B. HOLBROOK

DRAWN BY: N. GEARY

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 SOUTHEAST REGION  
 PSG-SOUTH MITKOF HIGHWAY  
 UPGRADE (PHASE II) AND SOUTH  
 MITKOF ISLAND TERMINAL PAVING  
 PROJECT NO. 68646

**MILE 2.2 ON FDR #6245  
 USFS QUARRY  
 DEVELOPMENT PLAN**

PROJECT DESIGNATION NUMBER	
MGS-0937(31)-68646	
STATE	YEAR
ALASKA	2008
SHEET NUMBER	TOTAL SHEETS
R1	46