WILLIAMSPORT-PILE BAY ROAD SPOT REPAIR
STP-0001(349) / 51651

DESCRIPTION OF WORK: This federally funded project will consist of drainage repairs, culvert installation and replacement, erosion protection, 12" grade raise, roadway widening with turnouts, ditching, and signing along the Williamsport-Pile Bay Road from MP 3 to MP 9. Work will also include re-decking of the Four Mile Creek and Timberline Creek bridges.

The existing bridges within the project limits at Four Mile Creek (MP 4.15) and at Timberline Creek (MP 7.64) are currently rated for 3 ton live loads, and will not be strong enough to support heavy construction equipment. Fords exist adjacent to the bridges at each stream crossing; however, the Contractor **may not** run construction equipment through these fords without securing all necessary permits from the relevant resource agencies and permission from the landowners. The Contractor will need to confirm the load ratings of any other bridges used during the course of the project.

No material sites will be provided for this project. All material sources will be the responsibility of the Contractor.

The Williamsport – Pile Bay road is not maintained year round and is used only during summer (snowfree) months. Contract road maintenance is performed by Ray Williams (Anchor Point (winter) 907-235-8360, Pile Bay (summer) 907-571-1596).

Barge access to Williamsport is dependent on high tides for adequate water depth. This may restrict shipping to the highest tides each month and will require a landing craft or barge with a shallow draft. Also there is limited public access and storage at the Williamsport barge landing.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

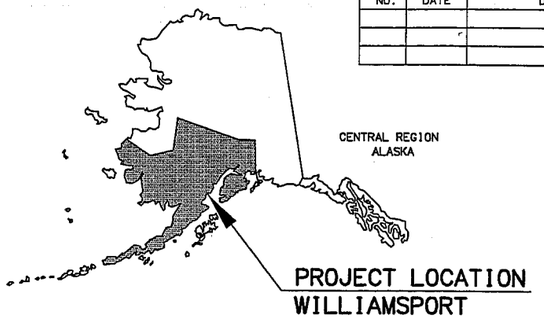
PROPOSED HIGHWAY PROJECT

WILLIAMSPORT-PILE BAY ROAD SPOT REPAIR
STP-0001(349)/51651

GRADING AND DRAINAGE

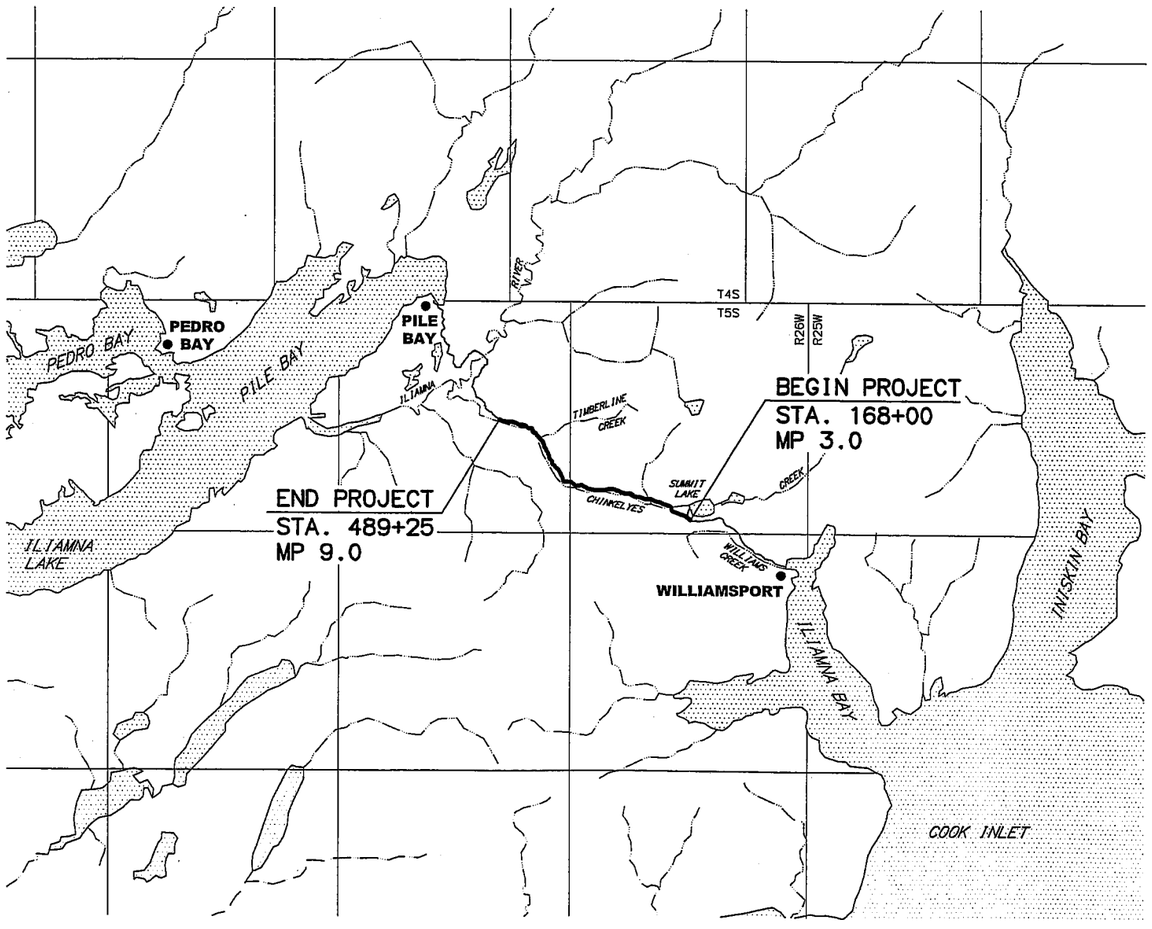
REVISIONS		
NO.	DATE	DESCRIPTION

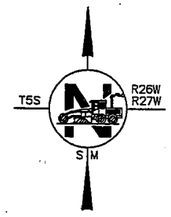
YEAR	STATE	PROJECT DESIGNATION	SHEET NO.	TOTAL SHEETS
2007	ALASKA	STP-0001(349)/51651	A1	47
ROUTE: 074000		MILEPOINT 3.0 TO 9.0		



INDEX	
SHEET NO.	DESCRIPTION
A1 - A3	TITLE, LEGEND, LANDMARKS
B1 - B3	TYPICAL SECTIONS
C1	ESTIMATE OF QUANTITIES
D1 - D8	SUMMARIES
E1 - E16	DETAILS
H1 - H4	TRAFFIC SIGNING
J1 - J2	TRAFFIC CONTROL SHEETS
Q1 - Q6	EROSION AND SEDIMENT CONTROL
N1 - N4	BRIDGE STRUCTURES

DESIGN DESIGNATION	
ROUTE:	115952
A.D.T. 2004	ASSUME <50
V. (MPH)	ASSUME 25





THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

C-04.12
D-01.02, D-04.21, D-07.00, D-14.10, D-30.01*
S-00.10, S-05.01, S-30.03

* AS MODIFIED HEREIN

PRELIMINARY PLAN
CENTRAL DISTRICT
DATE 8-16-07

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES

STATE OF ALASKA 49TH JUDY D. DOUGHERTY CE 8823 REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA 49TH JOHN R. LINNELL CE 9488 REGISTERED PROFESSIONAL ENGINEER

APPROVED:

REGIONAL PRE-CONSTRUCTION ENGINEER DATE

CONCUR:

DIRECTOR, CONSTRUCTION & OPERATIONS DATE

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

CONSTRUCTION PROJECT MANAGER DATE

DRAWING LOCATION
H:\Staff\Engineering\VSumners\Land Projects 2004\Willansport-t\dwg\Title_WPB.dwg

DATE	TIME	LAYOUT	SCALE	XREFS	DESIGNED BY	
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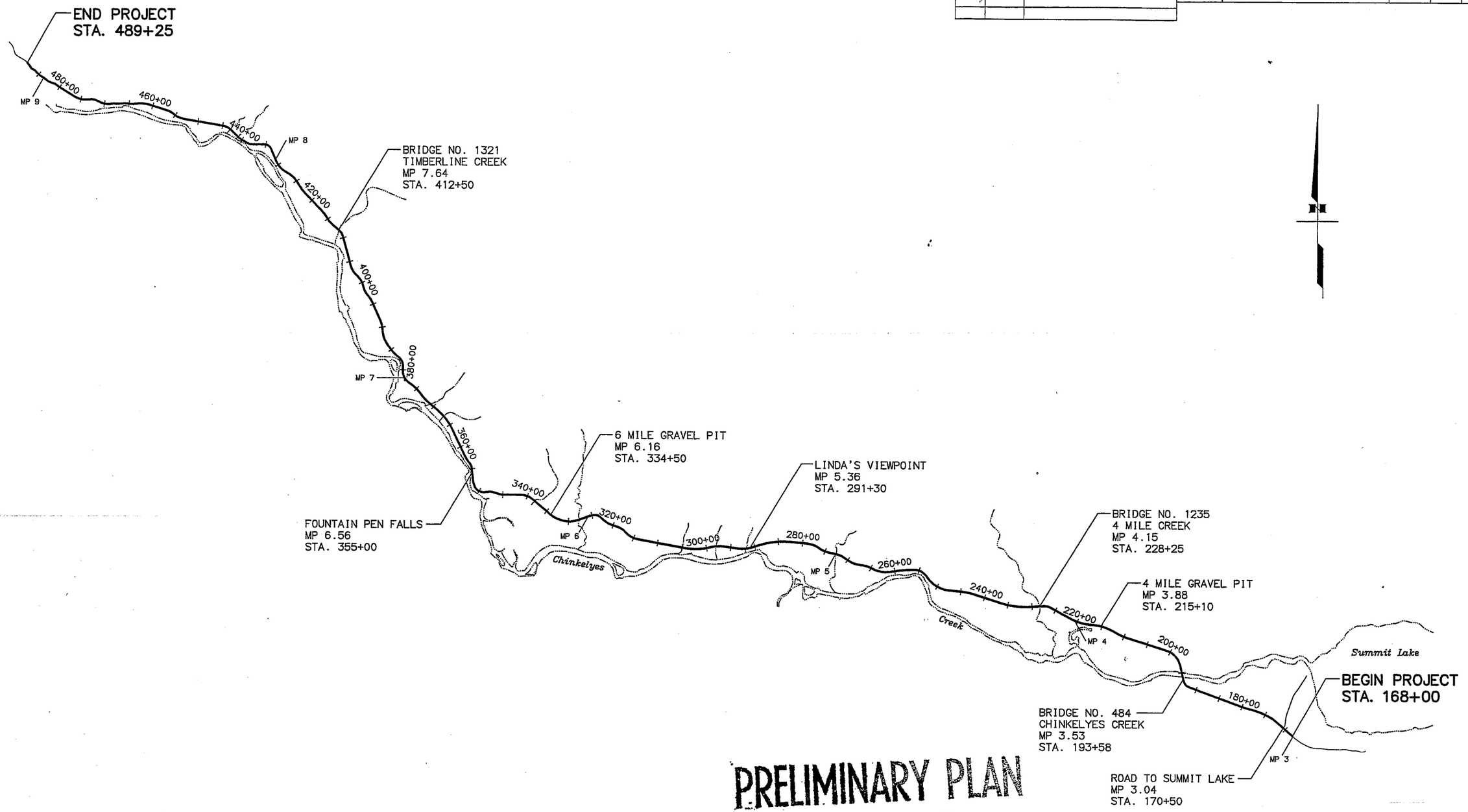
ADT					CHECKED BY	
					DRAFTED BY	PL/VS

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION					
			ALASKA	STP-0001(349)/51651	2007	A3	A3



PRELIMINARY PLAN
CENTRAL DISTRICT
DATE 8-16-07

NOTE: ALL PITS NOTED ARE PRIVATELY OWNED SOURCES. CONTRACTOR MUST NEGOTIATE ROYALTY USE WITH OWNER(S). AK DOT&PF DOES NOT WARRANT AVAILABILITY/QUANTITY/QUALITY OF SOURCES NOTED.

STATE OF ALASKA
49TH
CHRISTOPHER L. POST
CE 11253
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

WILLIAMSPORT-PILE BAY ROAD SPOT REPAIR

LANDMARK LOCATIONS

DESIGNED BY	VS
CHECKED BY	
DRAFTED BY	
XREFS	NONE
SCALE	1:5
LAYOUT	A3
DATE	8/16/2007
TIME	2:59:33 PM ADT
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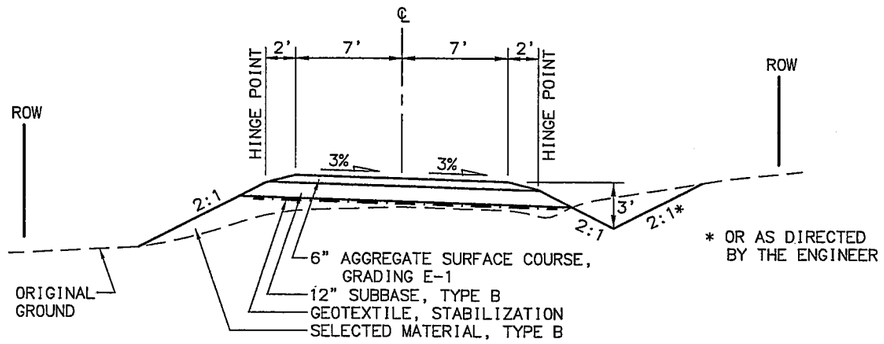
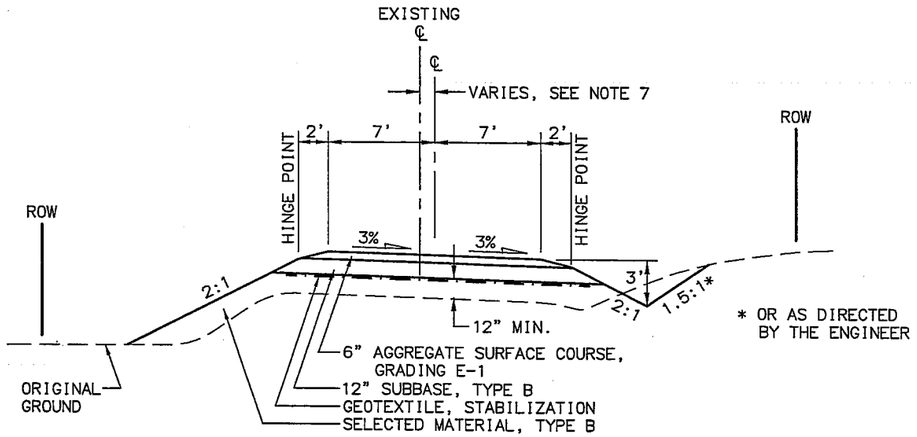
REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION					
			ALASKA	STP-0001(349)/51651	2007	B1	B3



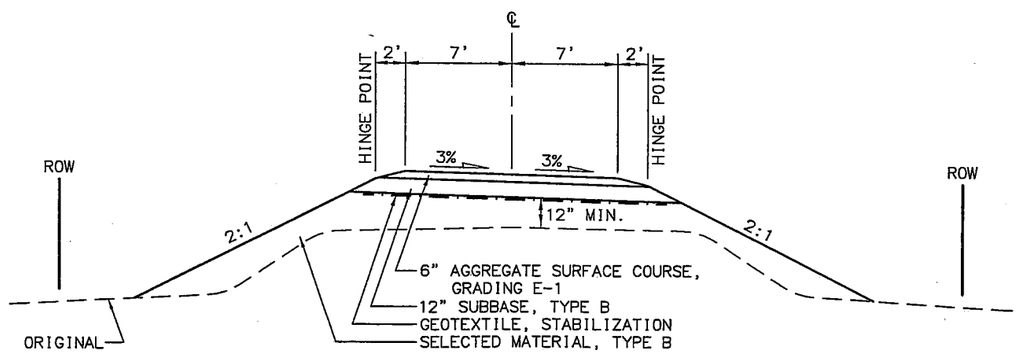
WILLIAMSPORT-PILE BAY ROAD

STA. 168+00 TO STA. 489+25



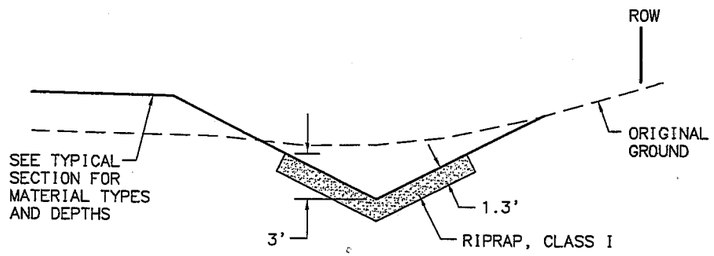
GRADE RAISE

STA. 297+50 TO STA. 298+50
STA. 455+25 TO STA. 457+25
STA. 463+00 TO STA. 464+00



GRADE RAISE

STA. 448+00 TO STA. 452+00



DITCH LINING

NOTE: INSTALL DITCH LINING WHERE DITCH GRADE EXCEEDS 5%.

GENERAL NOTES:

1. THE STATIONING FOR THIS PROJECT IS BASED ON GPS TRACKING AND IS APPROXIMATE. STATIONING IS INTENDED ONLY TO PROVIDE GENERAL GUIDANCE FOR LOCATING PROJECT FEATURES. SPECIFIC INSTALLATIONS WILL REQUIRE FIELD ADJUSTMENT.
2. THE HORIZONTAL ALIGNMENT IS THE APPROXIMATE CENTERLINE OF THE EXISTING ROAD OR AS DIRECTED BY THE ENGINEER.
3. THE CONTRACTOR SHALL PLACE SEEDING ON ALL NEW CUT AND FILL SLOPES AND AREAS DISTURBED BY CONSTRUCTION ACTIVITIES, OR AS DIRECTED BY THE ENGINEER.
4. ALL CONSTRUCTION ACTIVITIES SHALL BE DONE WITHIN THE RIGHT-OF-WAY LIMITS. RIGHT OF WAY IS 50' FROM CENTER OF THE EXISTING ROADWAY.
5. CLEARING AND GRUBBING SHALL OCCUR WHEREVER THERE IS EARTH WORK OR AS DIRECTED BY THE ENGINEER. THE CLEARING AND GRUBBING LIMIT SHALL EXTEND 10 FEET BEYOND FILL OR CUT SLOPE OR TO THE ROW, WHICHEVER IS LESS.
6. IN WETLAND AREAS, NO CLEARING, GRUBBING OR SOIL DISTURBANCE IS AUTHORIZED BEYOND THE SLOPE LIMITS UNLESS OTHERWISE SHOWN ON THE PLANS.
7. SHIFT ROAD CENTERLINE AS DIRECTED BY THE ENGINEER TO AVOID PLACING FILL INTO WETLANDS.
8. END STABILIZATION GEOTEXTILE 1' FROM FACE OF EMBANKMENT.
9. FOR ALL HEADWALLS, USE CLASS A CONCRETE.

PRELIMINARY PLAN
CENTRAL DISTRICT
DATE 8-16-07

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

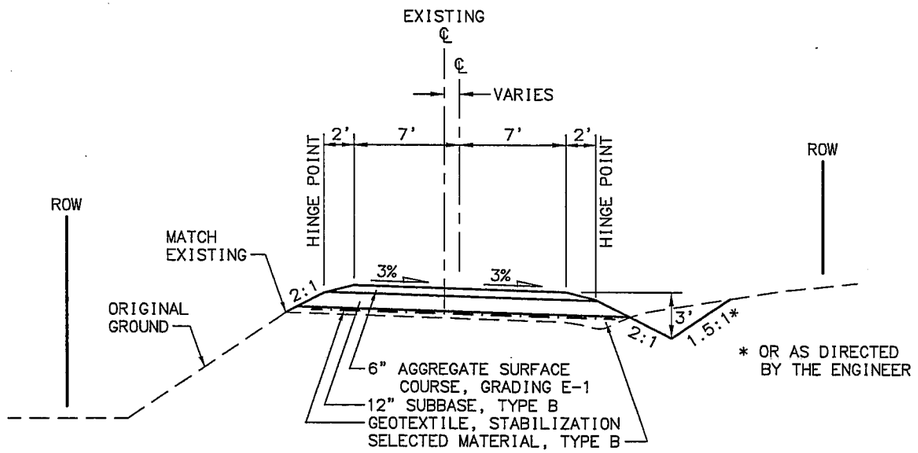
WILLIAMSPORT-PILE BAY ROAD SPOT REPAIR

TYPICAL SECTIONS

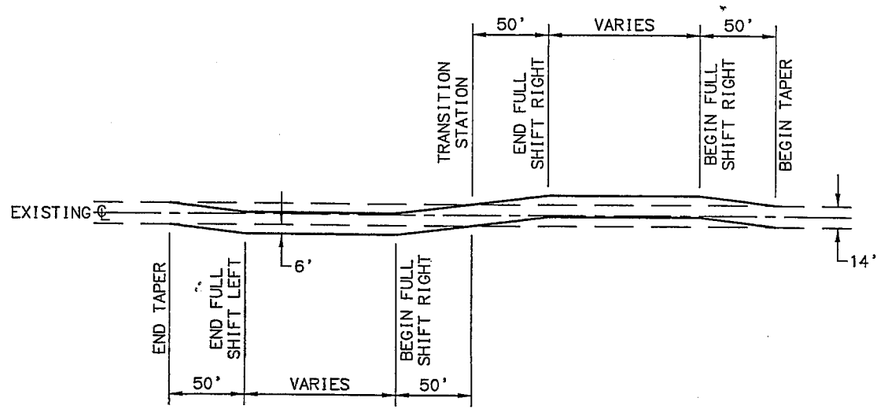
STATE OF ALASKA 49TH
CHRISTOPHER L. POST CE 11253 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY VS
CHECKED BY
DRAFTED BY
XREFS NONE
SCALE 1:5
LAYOUT B1
DATE 8/16/2007 TIME 2:07:56 PM ADT
DRAWING LOCATION H:\Staff\Engineering\VSunners\Land Projects 2004\Williamsport\dwg\Typ_WPB.dwg

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION					
			ALASKA	STP-0001(349)/51651	2007	B2	B3



ROAD SHIFT



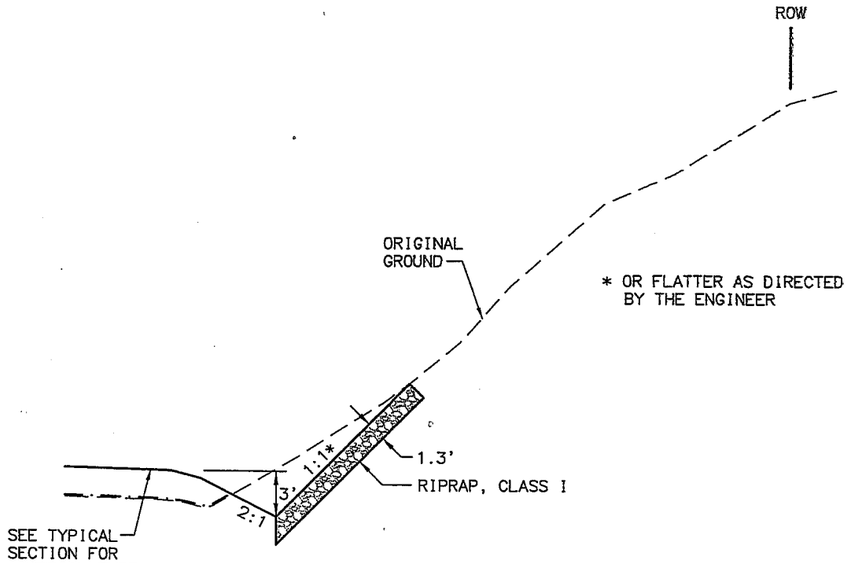
ROAD SHIFT DETAIL

PLAN VIEW

ROAD SHIFT SUMMARY

MP	STATION*	REMARKS
4.03 TO 4.09	220+00 TO 224+75	HOLD RIGHT EDGE FULL SHIFT LEFT
4.59 TO 4.79	251+00 TO 262+00	HOLD LEFT EDGE FULL SHIFT RIGHT
5.0 TO 5.04	272+75 TO 274+70	HOLD RIGHT EDGE FULL SHIFT LEFT
5.28 TO 5.39	287+25 TO 293+20	HOLD LEFT EDGE FULL SHIFT RIGHT @ CULVERT
5.39	293+20	TRANSITION [SEE ROAD SHIFT DETAIL]
5.4 TO 5.41	294+50 TO 295+50	OVER CULVERT BE AT FULL LEFT SHIFT/ALIGNED BACK ON GRADE
5.46 TO 5.61	297+20 TO 306+00	HOLD LEFT EDGE FULL SHIFT RIGHT
5.78 TO 5.83	314+25 TO 317+40	HOLD LEFT EDGE FULL SHIFT RIGHT
5.88 TO 6.0	320+10 TO 326+00	HOLD RIGHT EDGE FULL SHIFT LEFT
6.25 TO 6.4	399+00 TO 347+00	HOLD LEFT EDGE FULL SHIFT RIGHT @ CULVERT
6.4	347+00	TRANSITION [SEE ROAD SHIFT DETAIL]
6.4 TO 6.43	347+00 TO 348+30	HOLD RIGHT EDGE FULL SHIFT LEFT
6.52 TO 6.65	352+80 TO 359+90	HOLD LEFT EDGE FULL SHIFT RIGHT
6.88 TO 7.0	373+00 TO 378+20	HOLD RIGHT EDGE FULL SHIFT LEFT
7.04 TO 7.11	380+70 TO 384+50	HOLD LEFT EDGE FULL SHIFT RIGHT
7.46 TO 7.51	403+00 TO 405+50	HOLD RIGHT EDGE FULL SHIFT LEFT
7.94 TO 7.98	428+50 TO 429+90	HOLD RIGHT EDGE FULL SHIFT LEFT
8.12 TO 8.21	438+40 TO 442+50	HOLD LEFT EDGE FULL SHIFT RIGHT
8.44 TO 8.48	455+25 TO 457+00	HOLD RIGHT EDGE FULL SHIFT LEFT
8.59 TO 8.62	462+50 TO 464+40	HOLD RIGHT EDGE FULL SHIFT LEFT, END @ CULVERT
8.64 TO 8.71	465+00 TO 469+20	HOLD LEFT EDGE FULL SHIFT RIGHT [BEDROCK]

* STATION RANGE DENOTES FULL SHIFT AND DOES NOT INCLUDE TAPERS.



ROCK BLANKET

NOTE: INSTALL ROCK BLANKET WHERE CUT SLOPE EXCEEDS 1.5:1.

PRELIMINARY PLAN

CENTRAL DISTRICT
DATE 8-16-07

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

WILLIAMSPORT-PILE BAY ROAD
SPOT REPAIR

TYPICAL SECTIONS

STATE OF ALASKA * 49TH * CHRISTOPHER L. POST CE 11253 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY VS
CHECKED BY
DRAFTED BY
XREFS NONE
SCALE 1:5
LAYOUT B2
DATE 8/16/2007
TIME 2:07:56 PM
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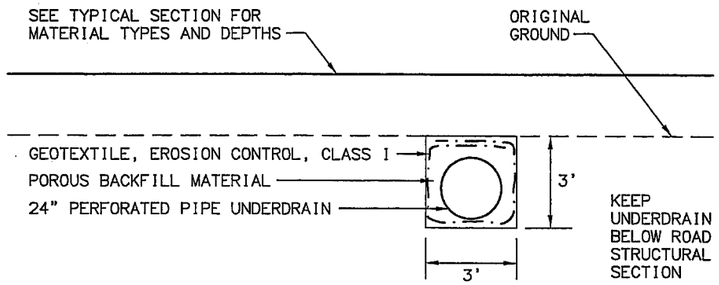
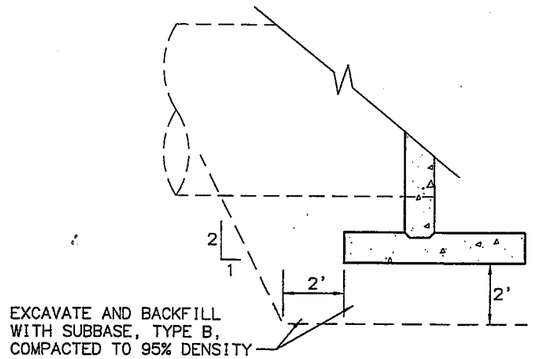
REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION					
			ALASKA	STP-0001(349)/51651	2007	B3	B3

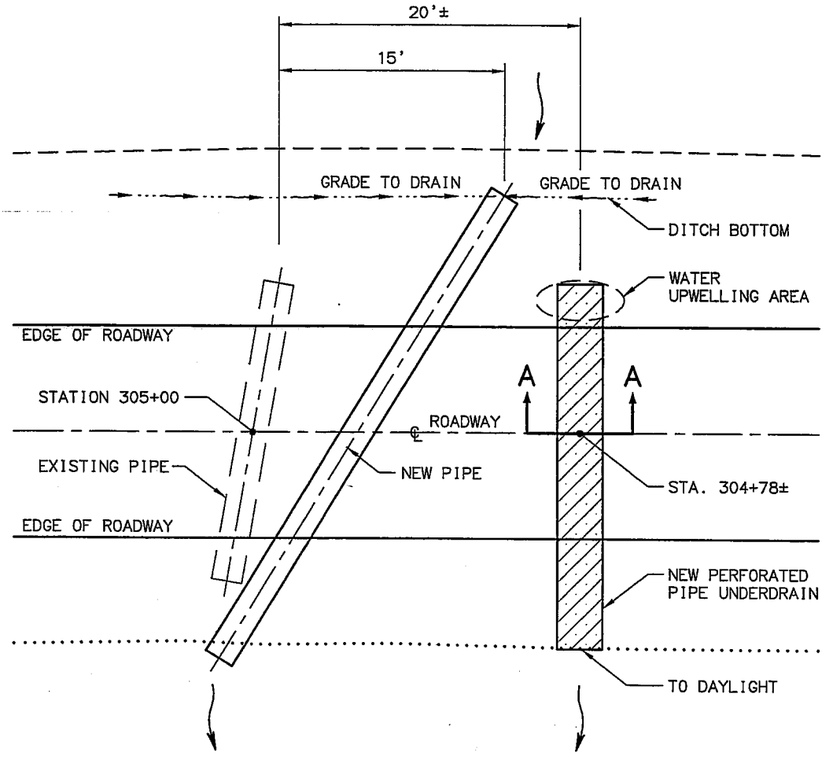


PERFORATED PIPE UNDERDRAIN SECTION A-A

STA. 304+78±

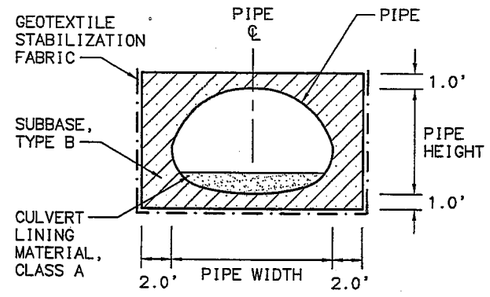


HEADWALL EXCAVATION AND BACKFILL



PERFORATED PIPE UNDERDRAIN

STA. 304+78



CULVERT DETAIL

LIMITS FOR CULVERT BEDDING AND CULVERT LINING MATERIAL, CLASS A

INSTALL CULVERT LINING MATERIAL, CLASS A AS SHOWN IN PIPE INSTALLATION DETAILS

WRAP GEOTEXTILE STABILIZATION FABRIC UP SIDES TO TOP OF CULVERT BEDDING MATERIAL.

PRELIMINARY PLAN

CENTRAL DISTRICT

DATE 8-16-07

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

WILLIAMSPORT-PILE BAY ROAD SPOT REPAIR

TYPICAL SECTIONS

STATE OF ALASKA 49TH CHRISTOPHER L. POST CE 11253 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY PL/VS
CHECKED BY
DRAFTED BY
XREFS NONE
SCALE 1:5
LAYOUT B3
DATE 8/16/2007
TIME 2:07:56 PM ADT
DRAWING LOCATION H:\Staff\Engineering\VSummers\Land Projects 2004\Williamsport-t\dwg\Typ_WPB.dwg

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION					
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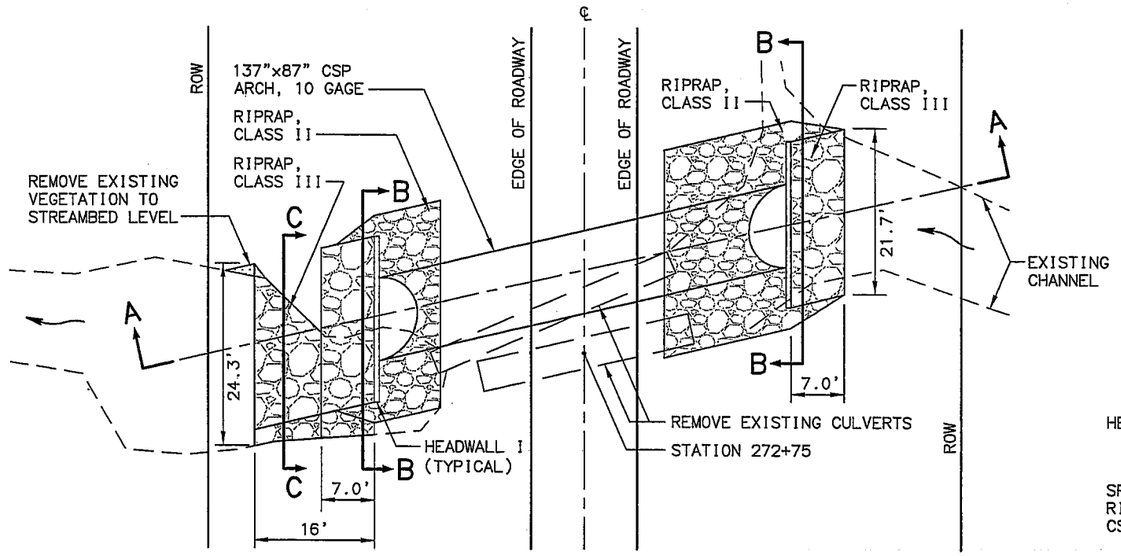
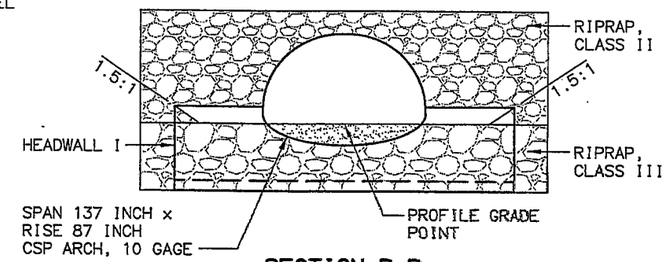
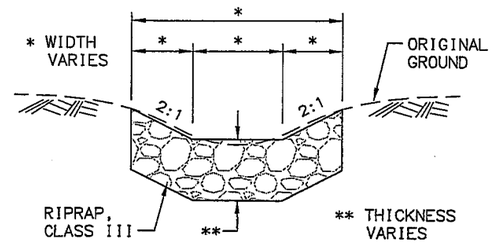


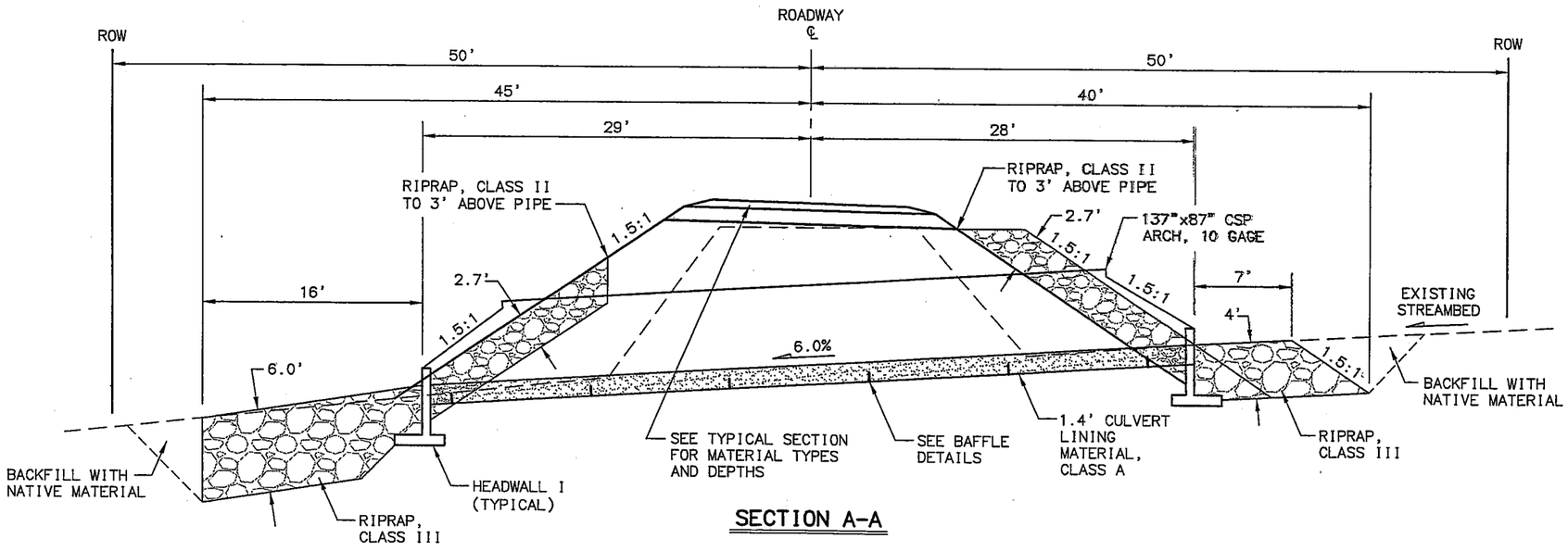
PLAN



SECTION B-B



SECTION C-C



SECTION A-A

NOTES:

1. PLACE THE INLET INVERT 1.4' BELOW THE STREAMBED.
2. WRAP THE EMBANKMENT RIPRAP AROUND ENDS OF HEADWALL USING 2:1 SLOPE TOWARDS THE PIPE TO PREVENT HEADWALL FLANKING.

HYDROLOGIC AND HYDRAULIC SUMMARY			
DRAINAGE AREA = 1.1 SQUARE MILES			
EXCEEDANCE PROBABILITY	2%	1%	REGULATORY FLOOD
RETURN PERIOD	50 YEAR (Q_{50})	100 YEAR (Q_{100})	N/A
DESIGN DISCHARGE	235 C.F.S.	290 C.F.S.	N/A
DESIGN HIGH WATER ELEVATION	5.6 FEET ABOVE CULVERT INLET INVERT	6.1 FEET ABOVE CULVERT INLET INVERT	N/A
ANTICIPATED ADDITIONAL BACKWATER AT (Q_{100}) = 0.0 FEET			

PRELIMINARY PLAN
CENTRAL DISTRICT
DATE 8-16-07

STATE OF ALASKA
PAUL A. JANKE
CE 3947
49TH
REGISTERED PROFESSIONAL ENGINEER

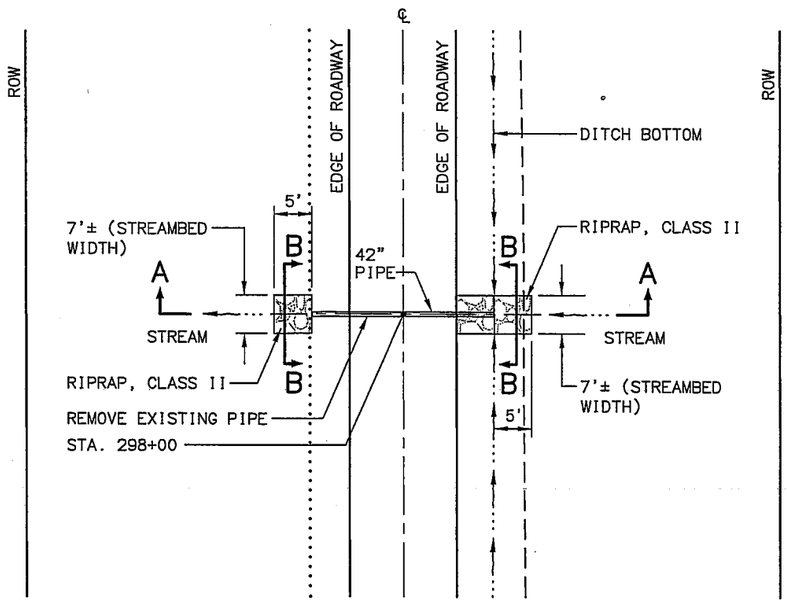
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

WILLIAMSPORT-PILE BAY ROAD
SPOT REPAIR

PIPE INSTALLATION DETAIL
MP 5.0
STATION 272+75

DRAWING LOCATION H:\Staff\Engineering\VSummers\Land Projects 2004\Williamsport\dwg\Culverts_WPB.dwg
DATE 8/16/2007
TIME 11:41:47 AM ADT
LAYOUT MP5.0
SCALE 1:5
XREFS NONE
DESIGNED BY VS
CHECKED BY
DRAFTED BY

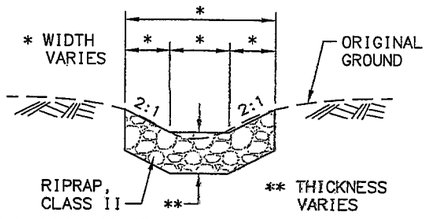
REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION					
			ALASKA	STP-0001(349)/51651	2007	E4	E16



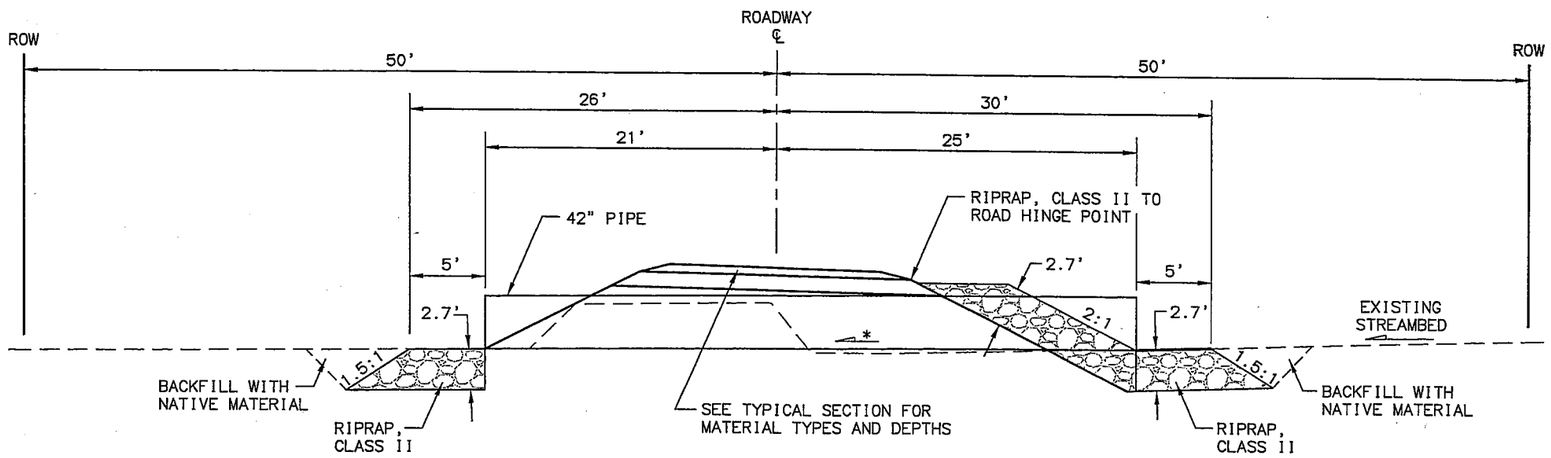
PLAN

NOTE:

1. ROAD SHIFTED RIGHT.



SECTION B-B



SECTION A-A

PRELIMINARY PLAN

CENTRAL DISTRICT
DATE 8-16-07

*MATCH EXISTING STREAM

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

WILLIAMSPORT-PILE BAY ROAD
SPOT REPAIR

PIPE INSTALLATION DETAIL
MP 5.49
STATION 298+00

STATE OF ALASKA
49TH
PAUL A. JANKE
CE 3947
REGISTERED PROFESSIONAL ENGINEER

DRAWING LOCATION
H:\Staff\Engineering\VSumners\Land Projects 2004\Williansport\dwg\Culverts_WPB.dwg

DATE	TIME	LAYOUT	SCALE	XREFS	DESIGNED BY	CHECKED BY	DRAFTED BY
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REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION					
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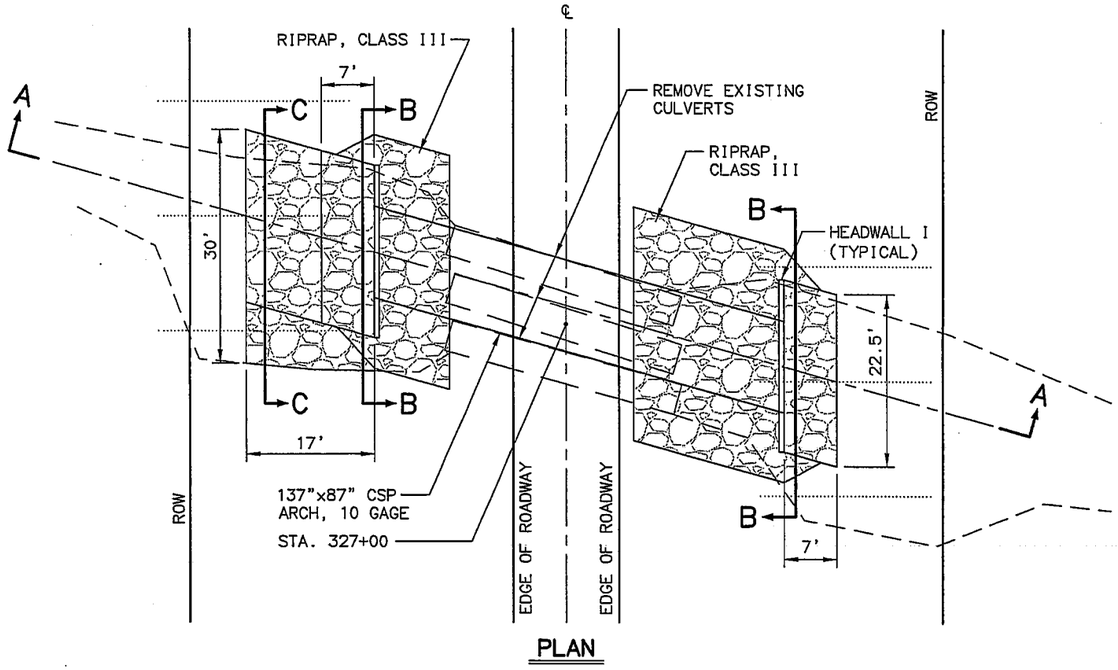
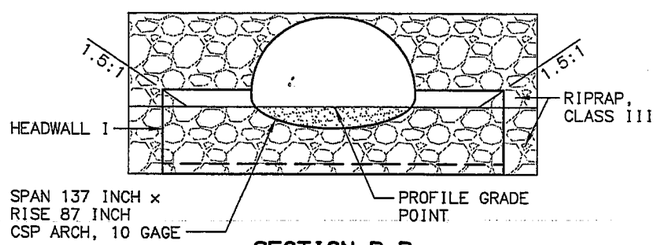


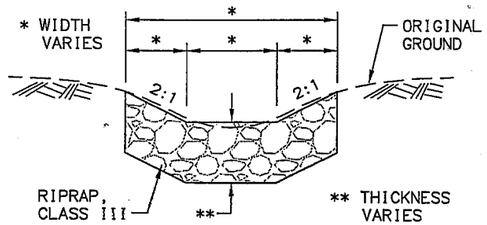
PLAN

NOTES:

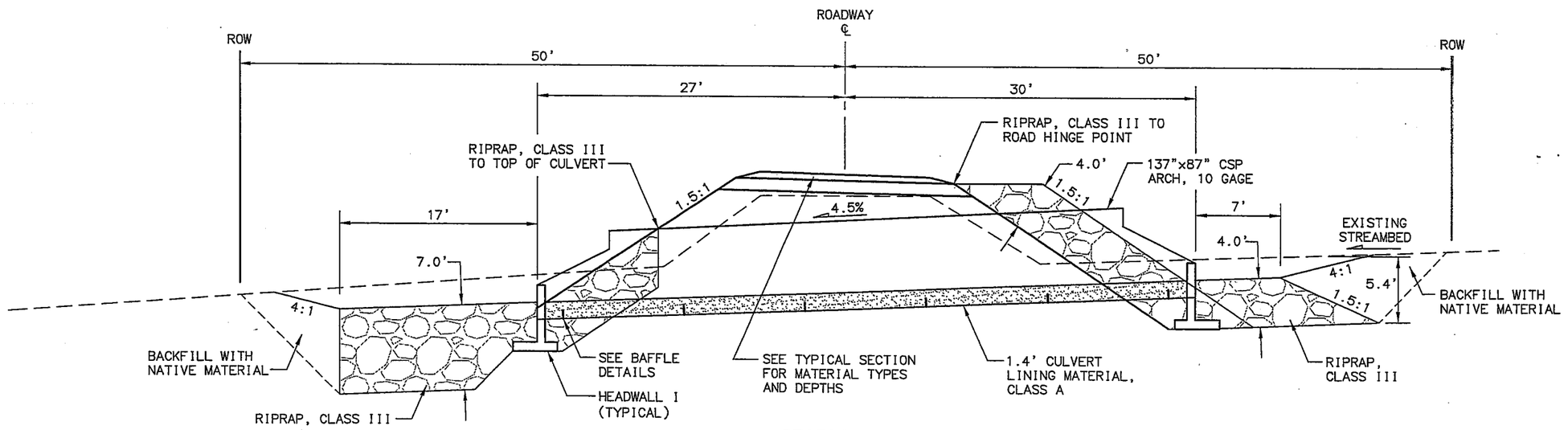
1. PLACE THE INLET INVERT 3.2' BELOW THE EXISTING LEFT (LOOKING DOWNSTREAM) CULVERT INLET INVERT.
2. WRAP THE EMBANKMENT RIPRAP AROUND ENDS OF HEADWALL USING 2:1 SLOPE TOWARDS THE PIPE TO PREVENT HEADWALL FLANKING.



SECTION B-B



SECTION C-C



SECTION A-A

HYDROLOGIC AND HYDRAULIC SUMMARY			
DRAINAGE AREA = 1.4 SQUARE MILES			
EXCEEDANCE PROBABILITY	2%	1%	REGULATORY FLOOD
RETURN PERIOD	50 YEAR (Q_{50})	100 YEAR (Q_{100})	N/A
DESIGN DISCHARGE	305 C.F.S.	376 C.F.S.	N/A
DESIGN HIGH WATER ELEVATION	6.3 FEET ABOVE CULVERT INLET INVERT	7.0 FEET ABOVE CULVERT INLET INVERT	N/A
ANTICIPATED ADDITIONAL BACKWATER AT (Q_{100}) = 0.0 FEET			

PRELIMINARY PLAN

CENTRAL DISTRICT
DATE 8-16-07

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

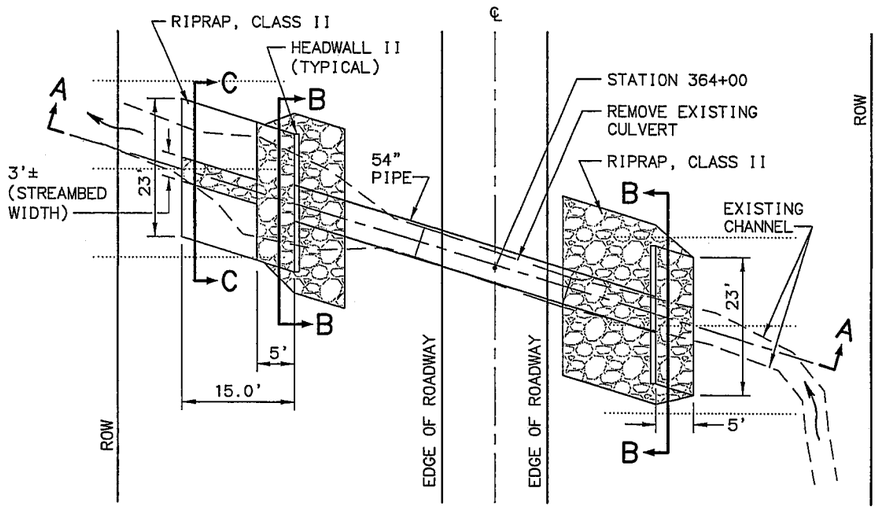
WILLIAMSPORT-PILE BAY ROAD
SPOT REPAIR

PIPE INSTALLATION DETAIL
MP 6.02
STATION 327+00

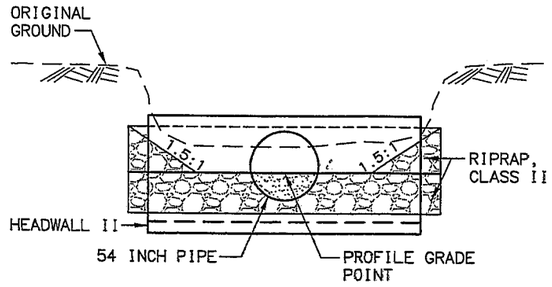
STATE OF ALASKA 49TH
PAUL A. JANKE
CE 3947
REGISTERED PROFESSIONAL ENGINEER

DRAWING LOCATION H:\Staff\Engineering\VSumners\Land Projects 2004\Williamsport\dwg\Culverts_WPB.dwg
DATE 8/16/2007
TIME 11:41:47 AM ADT
LAYOUT MP6.02
SCALE 1:5
XREFS NONE
DESIGNED BY
CHECKED BY
DRAFTED BY VS

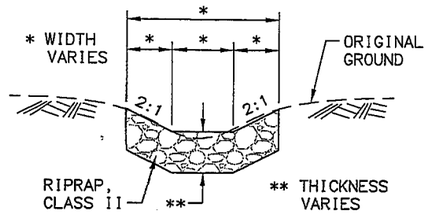
REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION	ALASKA	STP-0001(349)/51651	2007	E7	E16



PLAN



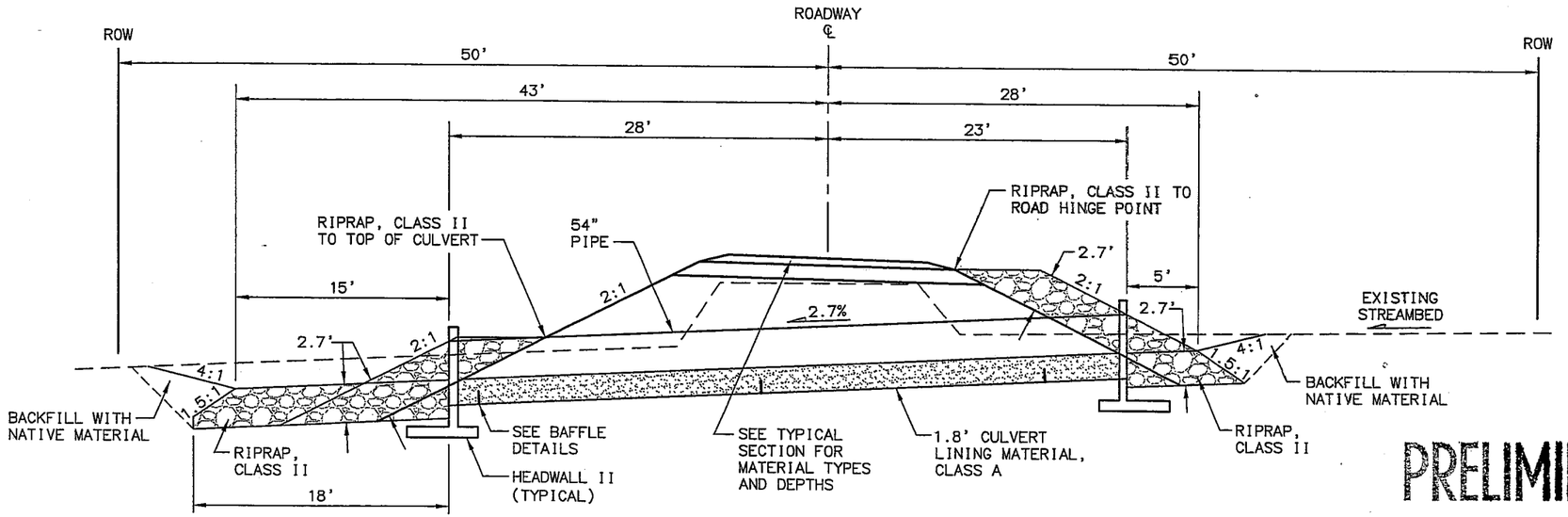
SECTION B-B



SECTION C-C

NOTES:

1. PLACE THE INLET INVERT 3.3' BELOW THE INLET INVERT OF THE EXISTING CULVERT.
2. WRAP THE EMBANKMENT RIPRAP AROUND ENDS OF HEADWALL USING 2:1 SLOPE TOWARDS THE PIPE TO PREVENT HEADWALL FLANKING.



SECTION A-A

HYDROLOGIC AND HYDRAULIC SUMMARY			
DRAINAGE AREA = 0.3 SQUARE MILES			
EXCEEDANCE PROBABILITY	2%	1%	REGULATORY FLOOD
RETURN PERIOD	50 YEAR (Q_{50})	100 YEAR (Q_{100})	N/A
DESIGN DISCHARGE	53 C.F.S.	66 C.F.S.	N/A
DESIGN HIGH WATER ELEVATION	4.9 FEET ABOVE CULVERT INLET INVERT	5.3 FEET ABOVE CULVERT INLET INVERT	N/A
ANTICIPATED ADDITIONAL BACKWATER AT (Q_{100}) = 0.0 FEET			

PRELIMINARY PLAN

CENTRAL DISTRICT
DATE 8-16-07

STATE OF ALASKA
PAUL A. JANKE
CE 3947
REGISTERED PROFESSIONAL ENGINEER

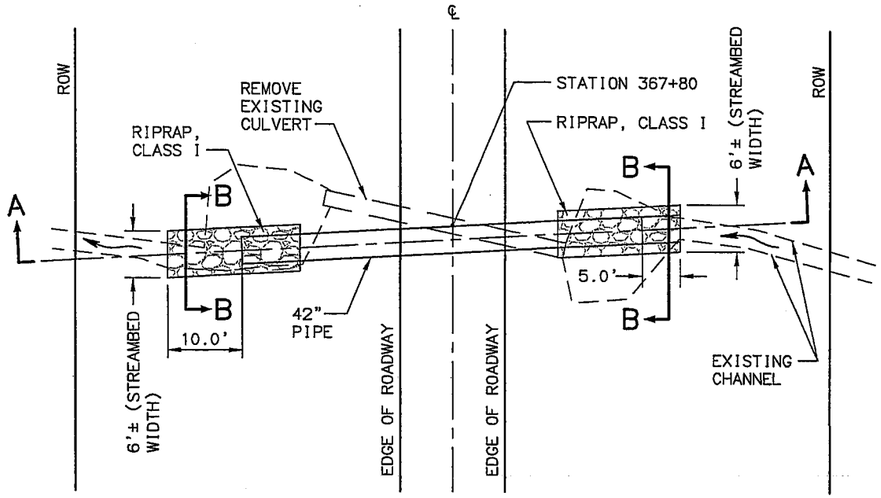
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

WILLIAMSPORT-PILE BAY ROAD
SPOT REPAIR

PIPE INSTALLATION DETAIL
MP 6.72
STATION 364+00

DESIGNED BY MW
CHECKED BY
DRAFTED BY VS/PL
XREF'S NONE
SCALE 1:5
LAYOUT MP6.72
DATE 8/16/2007
TIME 1141:47 AM ADT
DRAWING LOCATION H:\Staff\Engineering\VSummers\Land Projects 2004\Williansport\dwg\Culverts_WPB.dwg

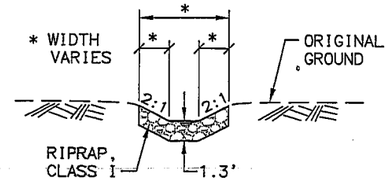
REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION	ALASKA	STP-0001(349)/51651	2007	E9	E16



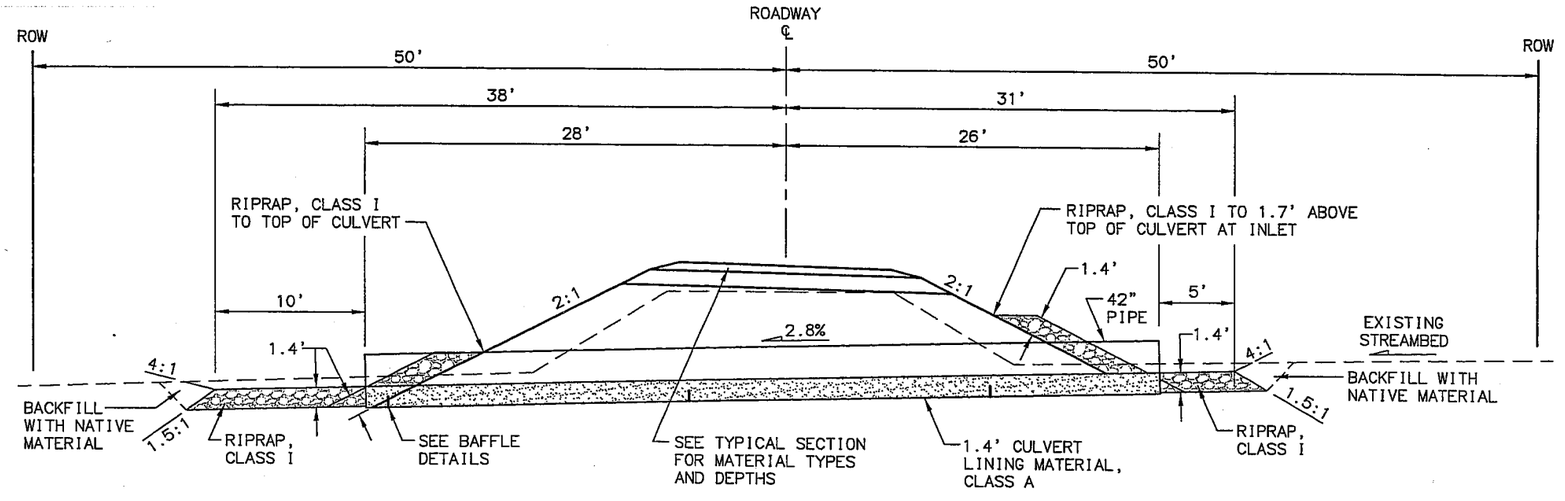
PLAN

NOTES:

1. PLACE THE INLET INVERT 2.0' BELOW THE INLET INVERT OF THE EXISTING CULVERT.
2. BACKFILL RIPRAP IN THE STREAM CHANNEL WITH CULVERT LINING MATERIAL.



SECTION B-B



SECTION A-A

PRELIMINARY PLAN

CENTRAL DISTRICT
DATE 8-16-07

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

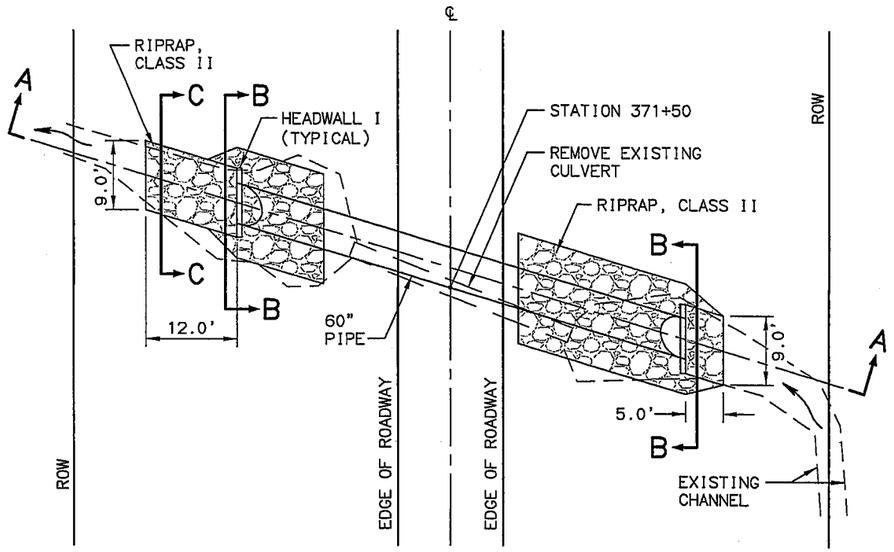
WILLIAMSPORT-PILE BAY ROAD
SPOT REPAIR

PIPE INSTALLATION DETAIL
MP 6.8
STATION 367+80

STATE OF ALASKA
49TH
PAUL A. JANKE
CE 3947
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY MW
CHECKED BY
DRAFTED BY VS/PL
XREFS NONE
SCALE 1:5
LAYOUT MP6.8
DATE 8/16/2007 TIME 11:41:47 AM ADT
DRAWING LOCATION H:\Staff\Engineering\VSumners\Land Projects 2004\Williansport-t\dwg\Culverts_WPB.dwg

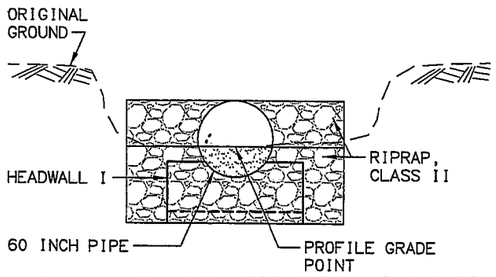
REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION					
			ALASKA	STP-0001(349)/51651	2007	E11	E16



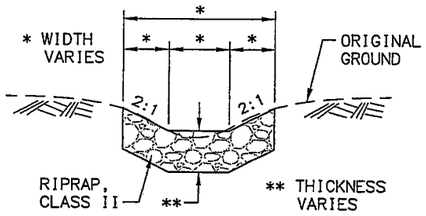
PLAN

NOTES:

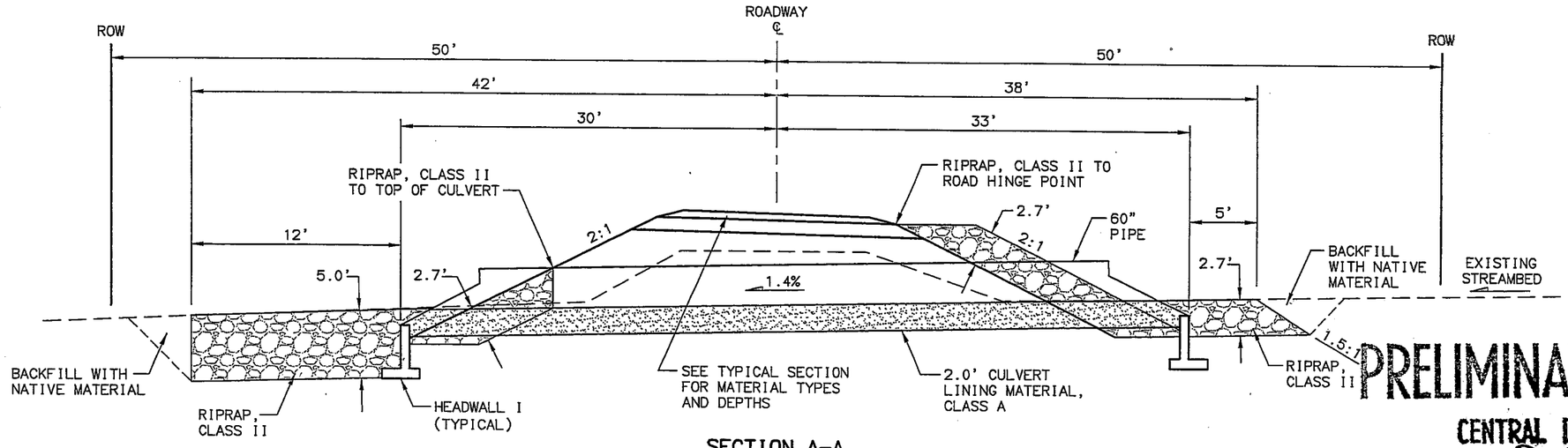
1. PLACE THE INLET AND OUTLET INVERTS 2.0' BELOW THE STREAMBED.
2. FILL VOIDS IN RIPRAP IN THE STREAM CHANNEL WITH CULVERT LINING MATERIAL.



SECTION B-B



SECTION C-C



SECTION A-A

PRELIMINARY PLAN

CENTRAL DISTRICT
DATE 8-16-07

HYDROLOGIC AND HYDRAULIC SUMMARY			
DRAINAGE AREA = 0.3 SQUARE MILES			
EXCEEDANCE PROBABILITY	2%	1%	REGULATORY FLOOD
RETURN PERIOD	50 YEAR (Q_{50})	100 YEAR (Q_{100})	N/A
DESIGN DISCHARGE	53 C.F.S.	66 C.F.S.	N/A
DESIGN HIGH WATER ELEVATION	5.3 FEET ABOVE CULVERT INLET INVERT	5.7 FEET ABOVE CULVERT INLET INVERT	N/A
ANTICIPATED ADDITIONAL BACKWATER AT (Q_{100}) = 0.0 FEET			

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

WILLIAMSPORT-PILE BAY ROAD
SPOT REPAIR

PIPE INSTALLATION DETAIL
MP 6.86
STATION 371+50

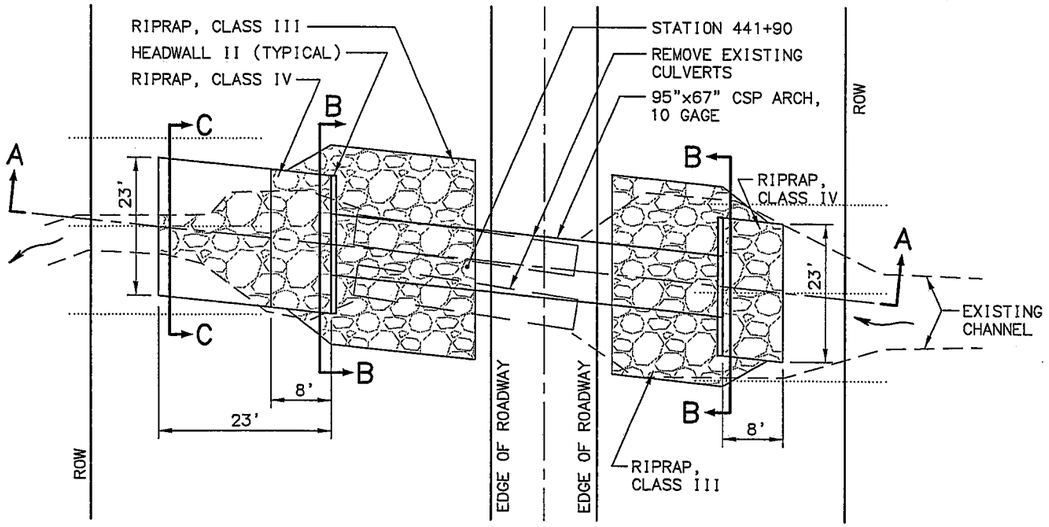
STATE OF ALASKA
49TH
PAUL A. JANKE
CE 3947
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY VW
CHECKED BY
DRAFTED BY VS/PL
XREFS NONE
SCALE 1:5
LAYOUT MP6.86
DATE 8/16/2007
TIME 11:41:47 AM ADT
DRAWING LOCATION H:\Staff\Engineering\VSumners\Land Projects 2004\Williamsport\dwg\Culverts_WPB.dwg

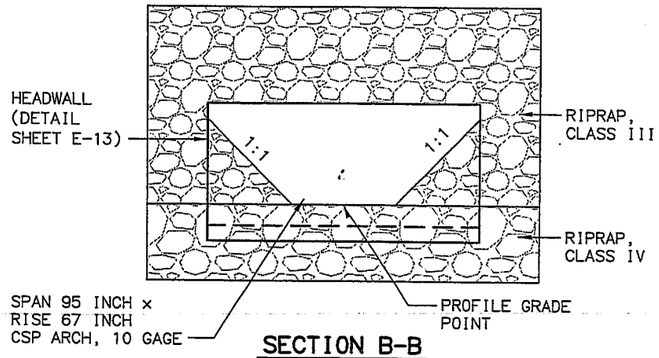
REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION					
			ALASKA	STP-0001(349)/51651	2007	E12	E16

NOTES:

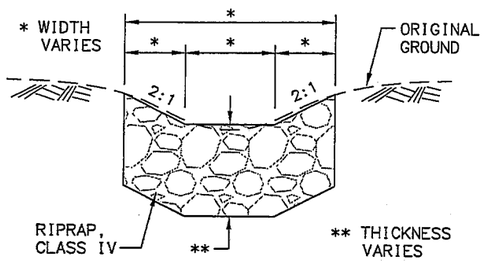
1. PLACE THE INLET INVERT 2.0' BELOW THE STREAMBED.
2. PLACE THE OUTLET INVERT ON STREAM BED.
3. CONSTRUCT HEADWALL PER SHEET E13.
4. WRAP THE EMBANKMENT RIPRAP AROUND ENDS OF HEADWALL USING 2:1 SLOPE TOWARDS THE PIPE TO PREVENT HEADWALL FLANKING.



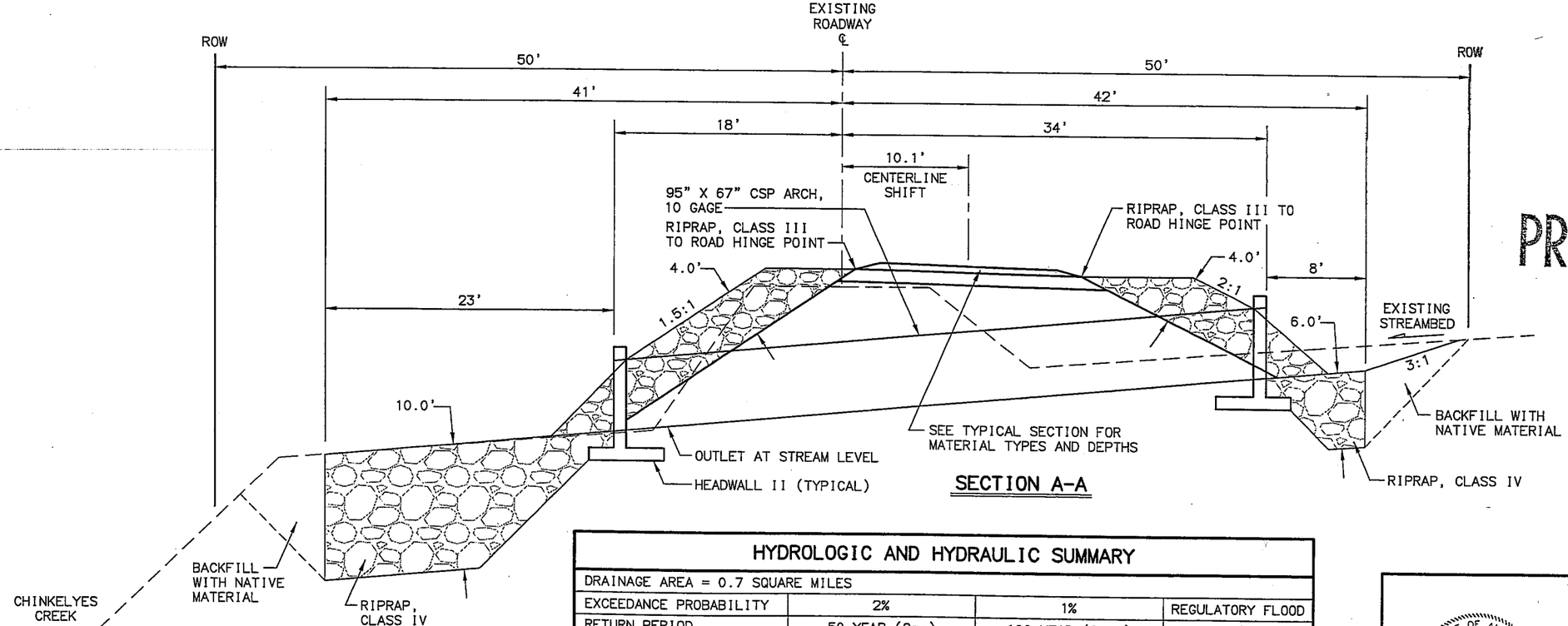
PLAN



SECTION B-B



SECTION C-C



SECTION A-A

HYDROLOGIC AND HYDRAULIC SUMMARY

DRAINAGE AREA = 0.7 SQUARE MILES			
EXCEEDANCE PROBABILITY	2%	1%	REGULATORY FLOOD
RETURN PERIOD	50 YEAR (Q_{50})	100 YEAR (Q_{100})	N/A
DESIGN DISCHARGE	161 C.F.S.	199 C.F.S.	N/A
DESIGN HIGH WATER ELEVATION	4.0 FEET ABOVE CULVERT INLET INVERT	4.7 FEET ABOVE CULVERT INLET INVERT	N/A
ANTICIPATED ADDITIONAL BACKWATER AT (Q_{100}) = 0.0 FEET			

PRELIMINARY PLAN

CENTRAL DISTRICT
DATE 8-16-07

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

WILLIAMSPORT-PILE BAY ROAD
SPOT REPAIR

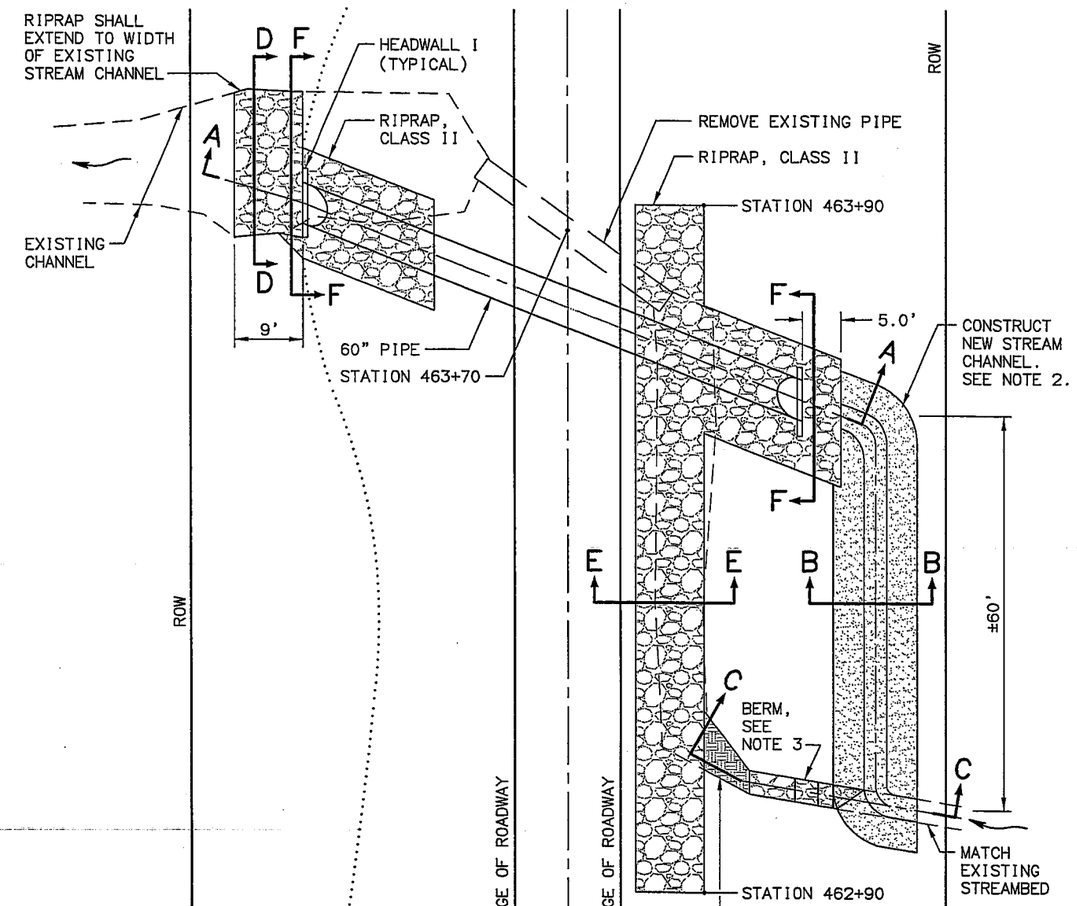
PIPE INSTALLATION DETAIL
MP 8.2
STATION 441+90

STATE OF ALASKA 49TH PAUL A. JANKE CE 3947 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY KW
CHECKED BY
DRAFTED BY VS/PL
XREFS NONE
LAYOUT MP8.2
SCALE 1:5
DATE 8/16/2007
TIME 11:41:47 AM ADT
DRAWING LOCATION H:\Staff\Engineering\VSumners\Land Projects 2004\Williansport\dwg\Culverts_WPB.dwg

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION					
			ALASKA	STP-0001(349)/51651	2007	E14	E16

DESIGNED BY MW
CHECKED BY VS/PL
DRAFTED BY
XREFS NONE
SCALE 1:5
LAYOUT MP8.61
DATE TIME
8/16/2007 11:41:47 AM ADT
DRAWING LOCATION H:\Staff\Engineering\VSumners\Land Projects 2004\Williansport\dwg\Culverts_WPB.dwg

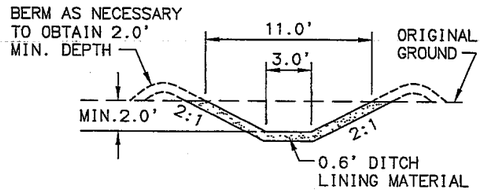


PLAN

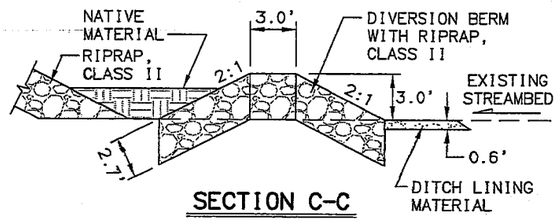
NOTES:

1. PLACE THE INLET INVERT 2.1' BELOW THE EXISTING INLET INVERT.
2. REALIGN THE UPSTREAM CHANNEL AWAY FROM THE ROAD AS MUCH AS POSSIBLE WITHIN THE EXISTING RIGHT OF WAY.
3. USE CLASS II RIPRAP TO CONSTRUCT A BERM TO DIRECT WATER FROM THE EXISTING STREAM INTO THE NEW CHANNEL.

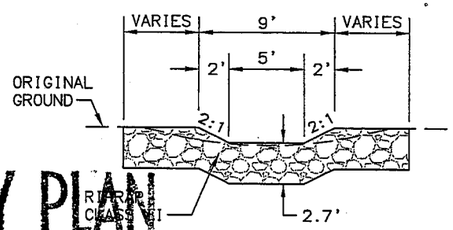
HYDROLOGIC AND HYDRAULIC SUMMARY			
DRAINAGE AREA = 0.3 SQUARE MILES			
EXCEEDANCE PROBABILITY	2%	1%	REGULATORY FLOOD
RETURN PERIOD	50 YEAR (Q_{50})	100 YEAR (Q_{100})	N/A
DESIGN DISCHARGE	70 C.F.S.	86 C.F.S.	N/A
DESIGN HIGH WATER ELEVATION	5.5 FEET ABOVE CULVERT INLET INVERT	5.9 FEET ABOVE CULVERT INLET INVERT	N/A
ANTICIPATED ADDITIONAL BACKWATER AT (Q_{100}) = 0.0 FEET			



SECTION B-B



SECTION C-C



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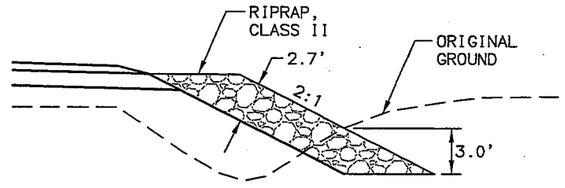

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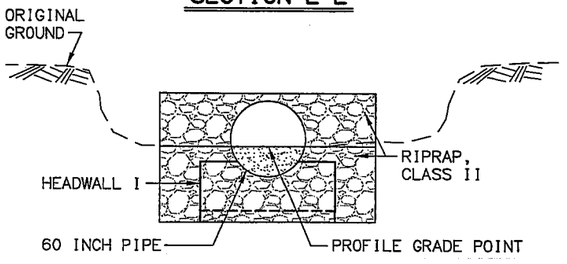

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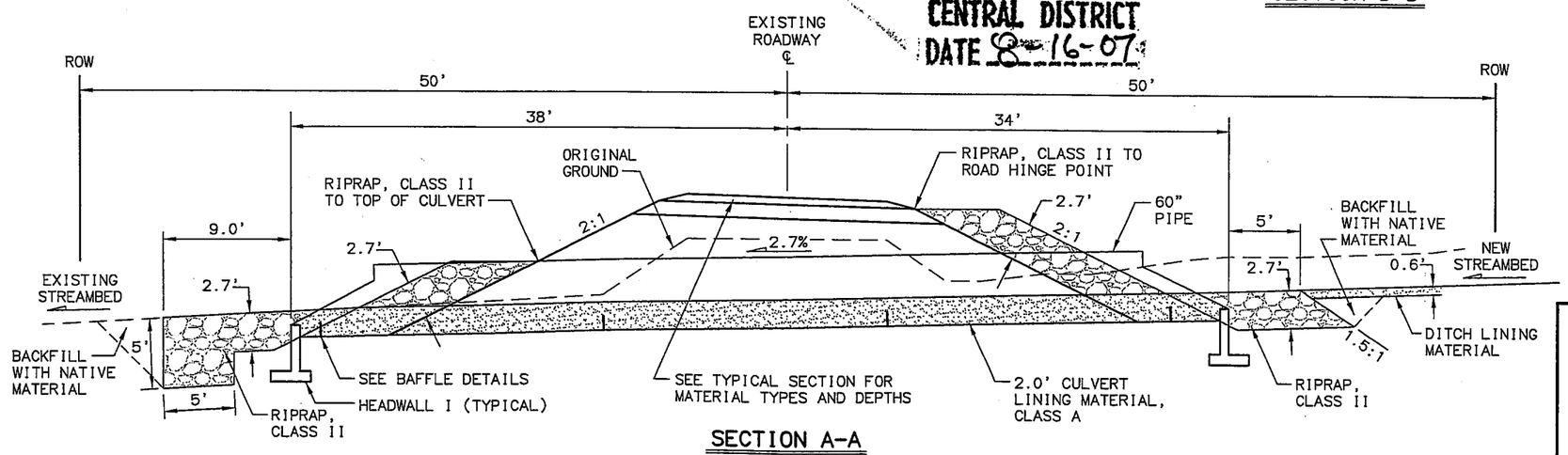


SECTION A-A

PRELIMINARY PLAN
CENTRAL DISTRICT
DATE 8-16-07

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

WILLIAMSPORT-PILE BAY ROAD SPOT REPAIR

PIPE INSTALLATION DETAIL MP 8.61 STATION 463+70

STATE OF ALASKA
49TH
PAUL A. JANKE
CE 3947
REGISTERED PROFESSIONAL ENGINEER

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION					
			ALASKA	STP-0001(349)/51651	2007	Q4	Q6

DESIGNED BY VS
CHECKED BY
DRAFTED BY

XREFS NONE

SCALE 1:5

LAYOUT Q4

TIME 10:33:25 AM ADT

DATE 6/27/2007

DRAWING LOCATION
H:\Staff\Engineering\VSumners\Land Projects 2004\Williamsport-t\dwg\ESC_WPB.dwg

END PROJECT
STA. 489+25

736

MP 9.08
24"x30' CULVERT

MP 8.94
24"x30' CULVERT

MP 8.91
24"x48' CULVERT

MP 8.84
24"x34' CULVERT

MP 8.81
24"x34' CULVERT

MP 8.77
24"x32' CULVERT

MP 8.71
24"x48' CULVERT

MP 8.66
24"x36' CULVERT

MP 8.62
24"x36' CULVERT

MP 8.61
60"x76' CULVERT
FISH STREAM

MP 8.47
24"x40' CULVERT

MP 8.45
24"x40' CULVERT

MP 8.45
WETLAND

MP 8.6
WETLAND

MP 8.25
30"x46' CULVERT

MP 8.2
95"x67"x69' CULVERT
FISH STREAM

MP 8.09
42"x36' CULVERT

MP 8.0
24"x30' CULVERT

MP 7.97
36"x36' CULVERT

MP 7.95
WETLAND

MP 7.91
24"x34' CULVERT

MP 7.84
24"x30' CULVERT

MP 7.71
24"x30' CULVERT

MP 7.64
TIMBERLINE
BRIDGE

MP 7.49
WETLAND

MP 7.5
24"x36' CULVERT

MP 7.4
24"x32' CULVERT

MP 7.38
24"x30' CULVERT

MP 7.33
36"x36' CULVERT

MP 7.28
24"x46' CULVERT

MP9
MP8

480+00
460+00
440+00
420+00
400+00

Chinketuyes Creek

1000
500
1500

MATCH LINE STA. 390+00

PRELIMINARY PLAN

CENTRAL DISTRICT
DATE 8-16-07

STATE OF ALASKA
49TH
CHRISTOPHER L. POST
CE 11253
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

WILLIAMSPORT-PILE BAY ROAD
SPOT REPAIR

EROSION AND SEDIMENT CONTROL
OVERVIEW

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
No.	DATE	DESCRIPTION					
			ALASKA	STP-0001(349)/51651	2007	Q5	Q6

MATCH LINE STA. 390+00

MP 7.15
24"x30' CULVERT

MP 7.09
24"x34' CULVERT

MP 7.08
WETLAND

MP 6.9
24"x36' CULVERT

MP 7.07
24"x34' CULVERT

MP 7.04
24"x50' CULVERT

MP 7

MP 6.9
WETLAND

MP 6.8
42"x53' CULVERT
FISH STREAM

MP 6.86
60"x66' CULVERT
FISH STREAM

MP 6.72
54"x48' CULVERT
FISH STREAM

MP 6.56
24"x36' CULVERT

MP 6.47
24"x34' CULVERT

MP 6.31
24"x36' CULVERT

MP 6.29
24"x36' CULVERT

MP 6.22
24"x30' CULVERT

MP 6.13
42"x36' CULVERT

Chinkelyes Creek

MP 6.02
137"x87"x82'
CULVERT

MP 6.24
36"x36' CULVERT

MP 6.29
24"x36' CULVERT

MP 6

MP 5.98
24"x38' CULVERT

MP 5.85
24"x30' CULVERT

MP 5.84
24"x36' CULVERT

MP 5.81
24"x42' CULVERT

MP 5.77
24"x48' CULVERT

MP 5.75
30"x32' CULVERT

MP 5.97
36"x34' CULVERT

MP 5.9
24"x34' CULVERT

MP 5.88
24"x34' CULVERT

MP 5.9
WETLAND

MP 5.57
30"x36'
CULVERT

MP 5.56
42"x46' CULVERT

MP 5.49
42"x46' CULVERT

MP 5.42
42"x38' CULVERT

MP 5.7
24"x30' CULVERT

MP 5.68
24"x30' CULVERT

MP 5.63
24"x34' CULVERT

MP 5.6
24"x36' CULVERT

MP 5.52
24"x36' CULVERT

MP 5.5
24"x36' CULVERT

MP 5.37
42"x48'
CULVERT

MP 5.27
24"x36' CULVERT

MP 5

MP 5.02
WETLAND

MP 5.18
42"x36' CULVERT

MP 5.11
42"x38' CULVERT

MP 5.0
128"x83"x84'
CULVERT

MP 4.95
24"x30'
CULVERT

Chinkelyes

MATCH LINE STA. 265+00

1054

1000

500

1500

1000

500

380+00

360+00

340+00

320+00

300+00

280+00

PRELIMINARY PLAN

CENTRAL DISTRICT
DATE 8-16-07

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

WILLIAMSPORT-PILE BAY ROAD
SPOT REPAIR

EROSION AND SEDIMENT CONTROL
OVERVIEW

STATE OF ALASKA
49TH
CHRISTOPHER L. POST
CE 11253
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY VS
DRAWN BY
CHECKED BY
DRAFTED BY

XREFS
NONE

SCALE
1:5

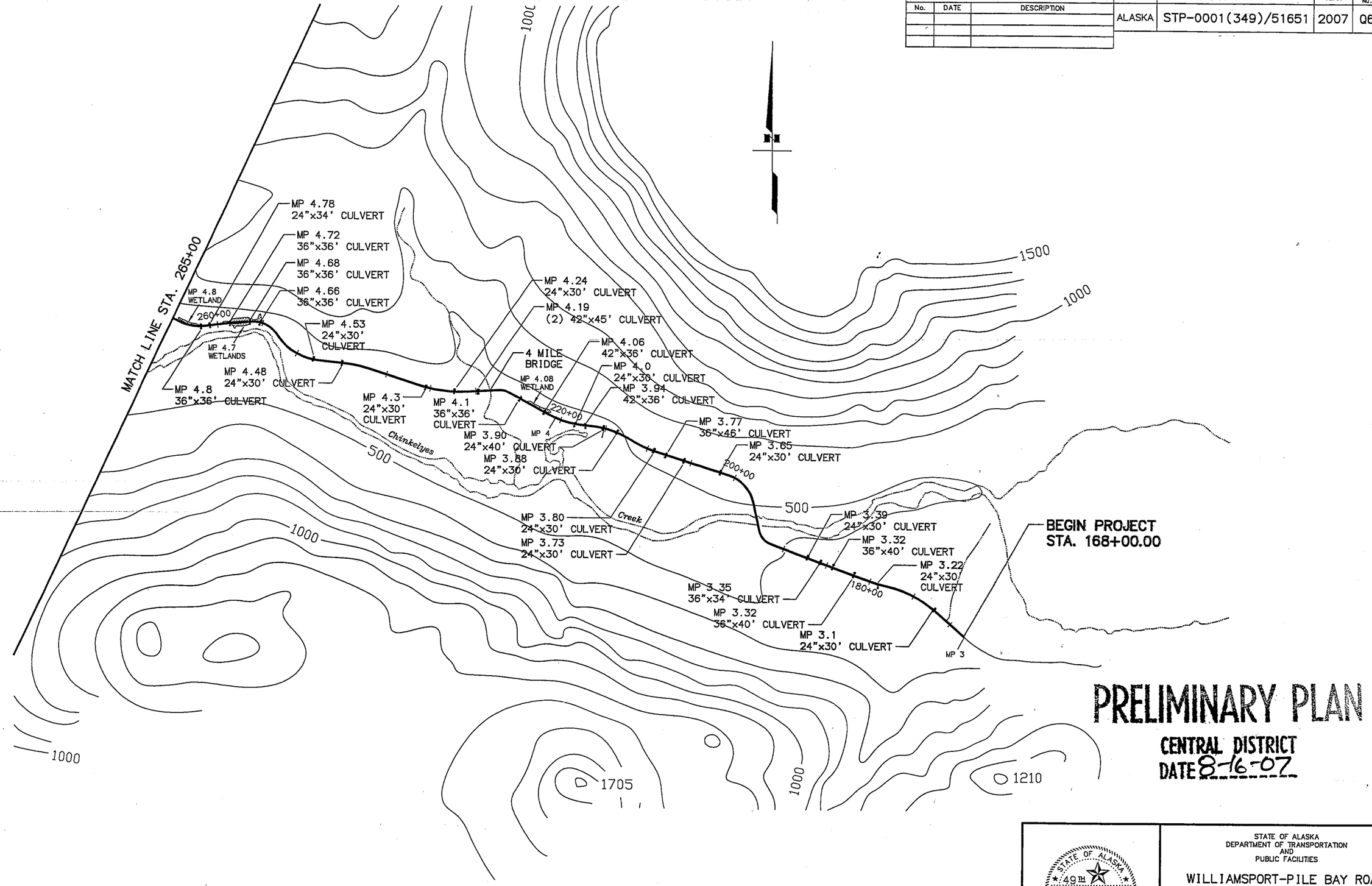
LAYOUT
Q5

DATE 6/27/2007
TIME 10:33:25 AM ADT

DRAWING LOCATION
H:\Staff\Engineering\VSumners\Land Projects 2004\Williamsport\dwg\ESC_VPB.dwg

REVISIONS		
No.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	STP-0001(349)/51651	2007	Q6	Q6



PRELIMINARY PLAN

CENTRAL DISTRICT
DATE 8-16-07

DRAWING LOCATION	DATE	TIME
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DESIGNED BY	VS
CHECKED BY	
DRAFTED BY	

XREFS
NONE

SCALE
1:5

LAYOUT
Q6

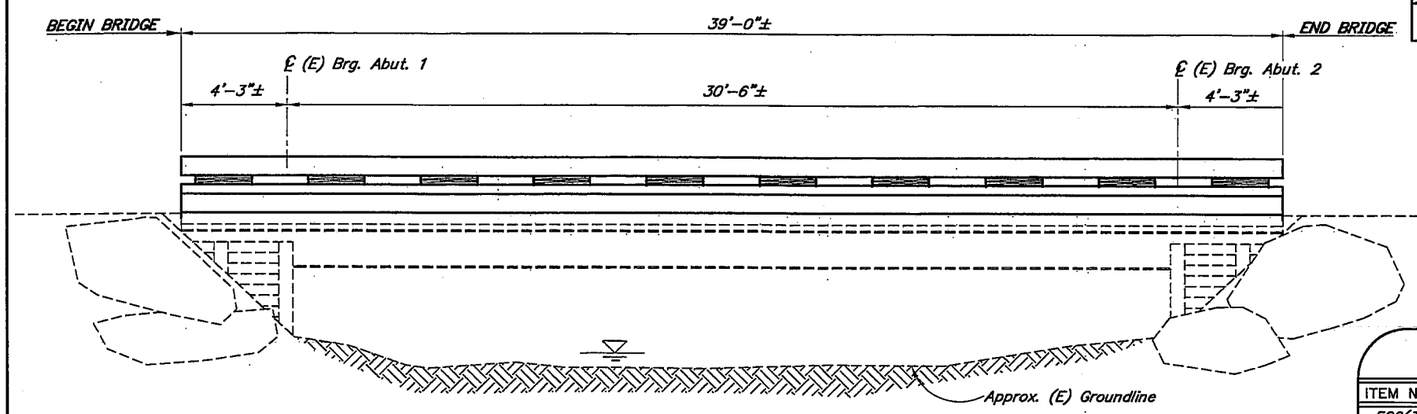
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

STATE OF ALASKA
49TH
CHRISTOPHER L. POST
CE 11253
REGISTERED PROFESSIONAL ENGINEER

WILLIAMSPORT-PILE BAY ROAD
SPOT REPAIR

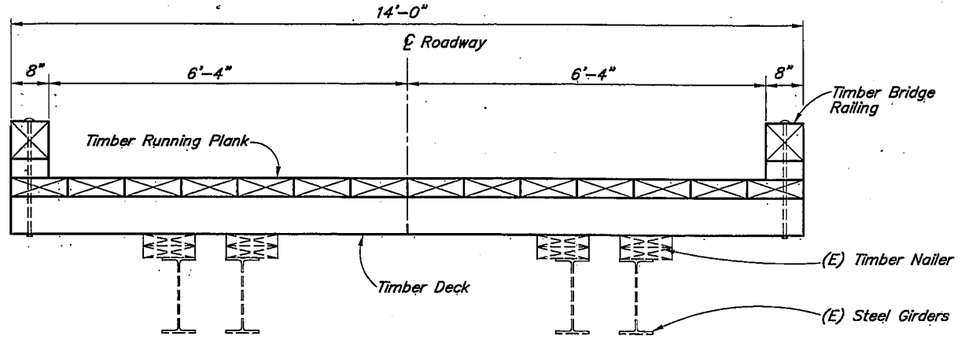
EROSION AND SEDIMENT CONTROL
OVERVIEW

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	STP-0001(349)/51651	2007	N1	N4



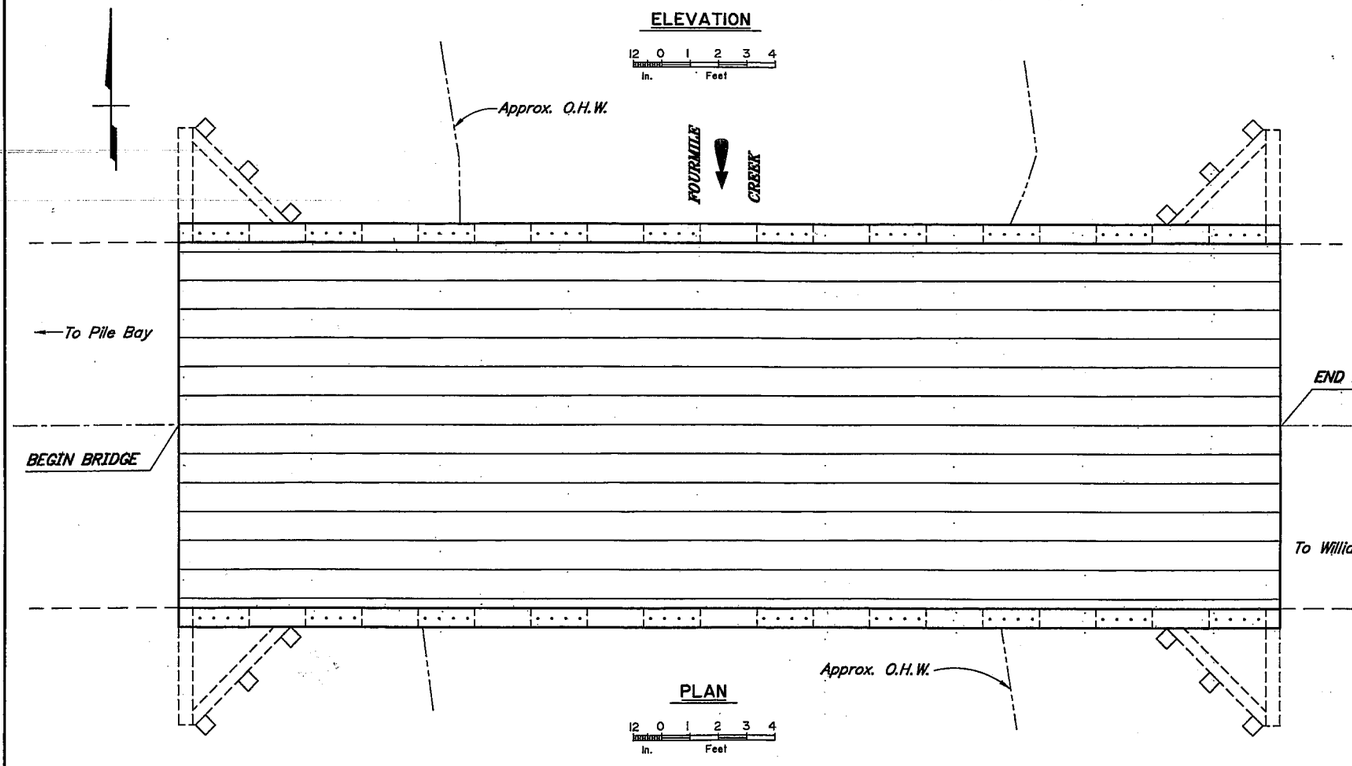
ELEVATION

12 0 1 2 3 4
In. Feet



TYPICAL SECTION

12 6 0 1 2 3
In. Feet



PLAN

12 0 1 2 3 4
In. Feet

BRIDGE BASIS OF ESTIMATE

ITEM NO.	ITEM	PAY UNIT	ESTIMATING UNIT	SUBST.	SUPERST.	TOTAL
506(3)	Treated Timber	MBM	MBM	–	4.475	4.475
506(4)	Untreated Timber	MBM	MBM	–	2.184	2.184
507(5)	Timber Bridge Railing	LF	LF	–	78.0	78.0

Item numbers are for reference only. Quantities shown are not necessarily the pay quantities nor the total quantity of the particular item.

BRIDGE DRAWING INDEX

TITLE	DWG. NO.
GENERAL LAYOUT	1
MISCELLANEOUS DETAILS	2

REHABILITATION

PRELIMINARY PLAN
CENTRAL DISTRICT
DATE 8-16-07

NOTES:
(E) = Existing
----- = Existing
——— = Proposed
O.H.W. = Ordinary High Water

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

DESIGNED BY: Todd Boris	CHECKED: Travis Arndt	LAYOUT BY: Todd Boris	CHECKED BY: Travis Arndt
DRAWN BY: C. Anderson (Cathy Anderson)	CHECKED: Todd Boris	SPECIFICATIONS BY: Todd Boris	P'S & E COMPARED: Todd Boris
QUANTITIES BY: Todd Boris	CHECKED: Travis Arndt	APPROVAL RECOMMENDED BY: Richard Pratt	

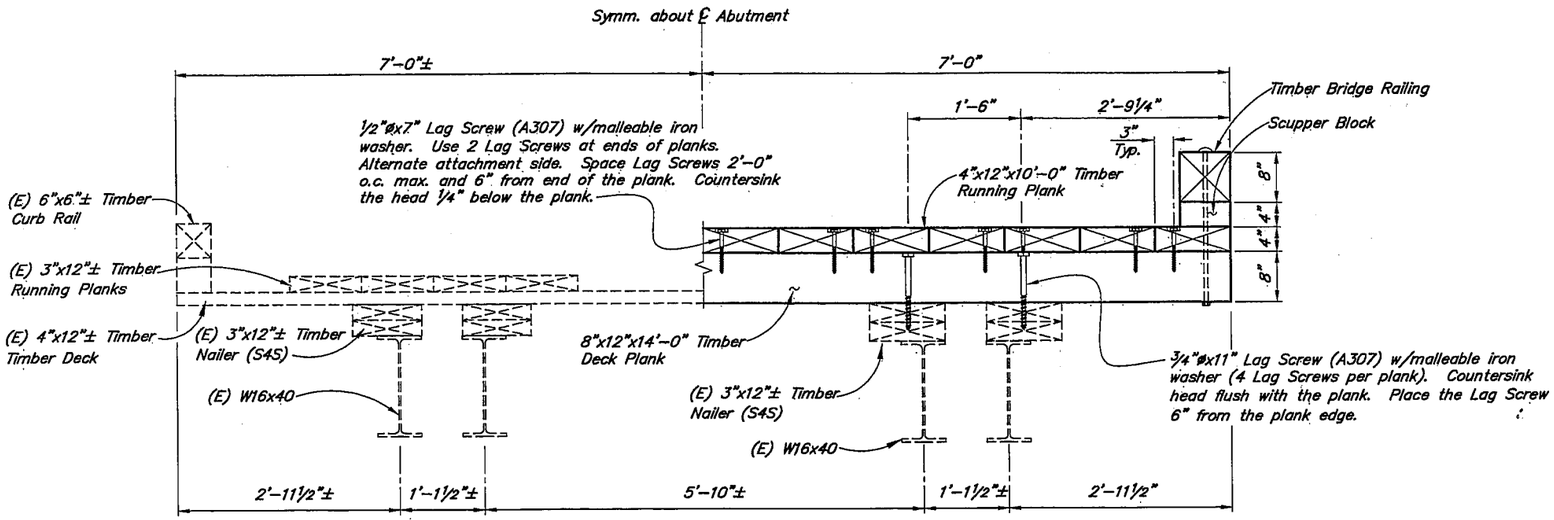
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH
Travis W. Arndt
No. CE 10605
REGISTERED PROFESSIONAL ENGINEER

FOURMILE CREEK BRIDGE
WILLIAMSPORT – PILE BAY ROAD
GENERAL LAYOUT

BRIDGE NO. 1235
DWG. NO. 1

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	STP-0001(349)/51651	2007	N2	N4

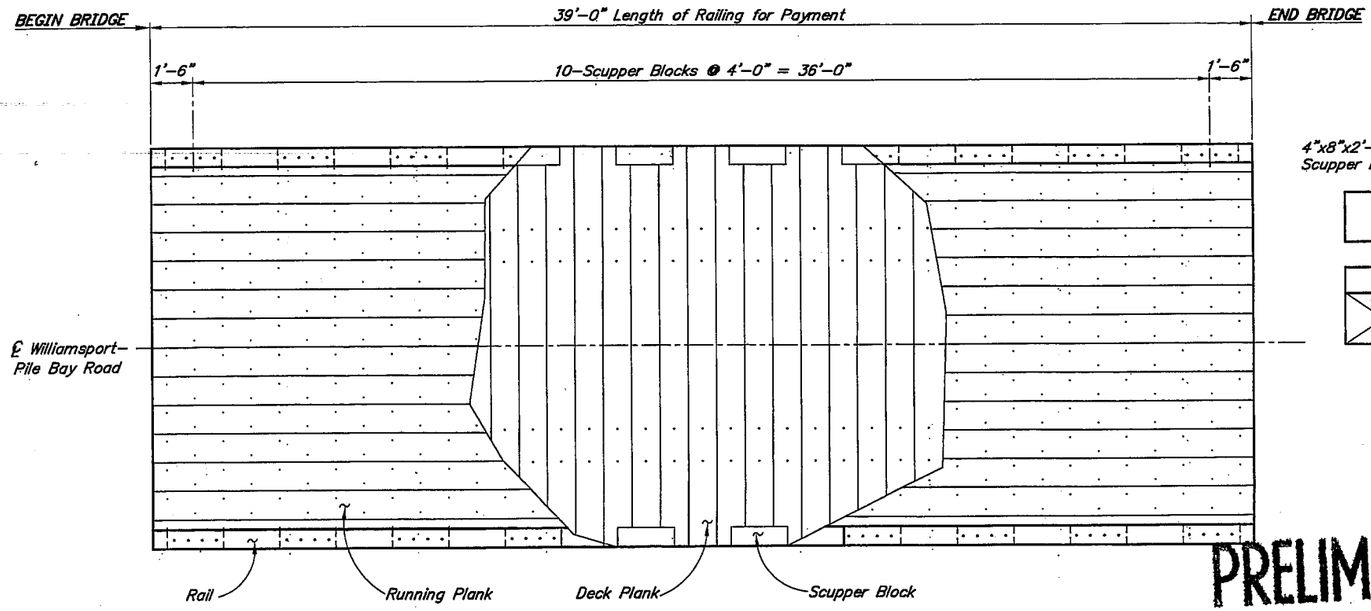


EXISTING

TYPICAL SECTION

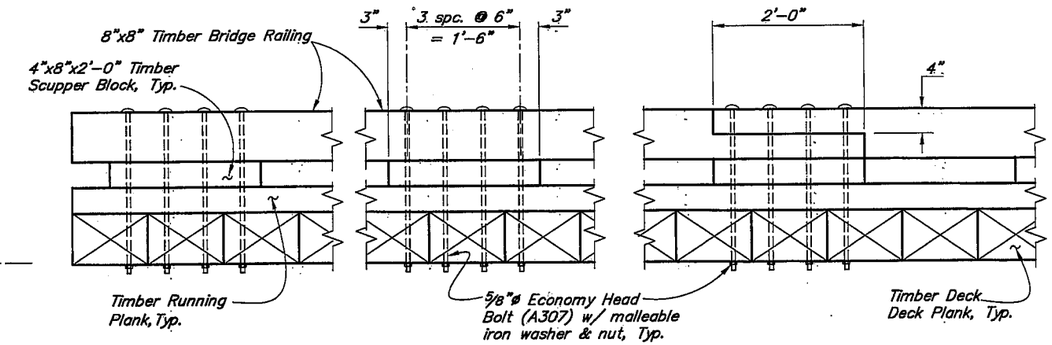
PROPOSED

12 6 0 1 2
in. Feet



DECK PLAN

12 0 1 2 3 4
in. Feet



END

TYPICAL SCUPPER BLOCK

TYPICAL SPLICE

CURB RAIL ELEVATION

6 0 1 2
in. Feet

GENERAL NOTES

DESIGN:.....AASHTO Standard Specification for Highway Bridges, 17th Edition.

LIVE LOAD:...HS 10

TIMBER:.....Use full sawn treated Douglas Fir, No. 1 or better timber unless otherwise noted.
Use full sawn untreated Douglas Fir, No. 3 or better timber for Running Planks

NOTES:

(E) = Existing

- - - - - = Existing

——— = Denotes new Construction

Make Curb Rail continuous over 2 Scupper Blocks, Min.

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

PRELIMINARY PLAN
CENTRAL DISTRICT
DATE 8-16-07

DESIGNED BY: Todd Boris	CHECKED: Travis Arndt
DRAWN BY: C. Anderson (Cathy Anderson)	CHECKED: Todd Boris
QUANTITIES BY: Todd Boris	CHECKED: Travis Arndt

REHABILITATION

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH — Travis W. Arndt No. CE 10805 — REGISTERED PROFESSIONAL ENGINEER

FOURMILE CREEK BRIDGE

WILLIAMSPORT – PILE BAY ROAD

MISCELLANEOUS DETAILS

BRIDGE NO. 1235

DWG. NO. 2