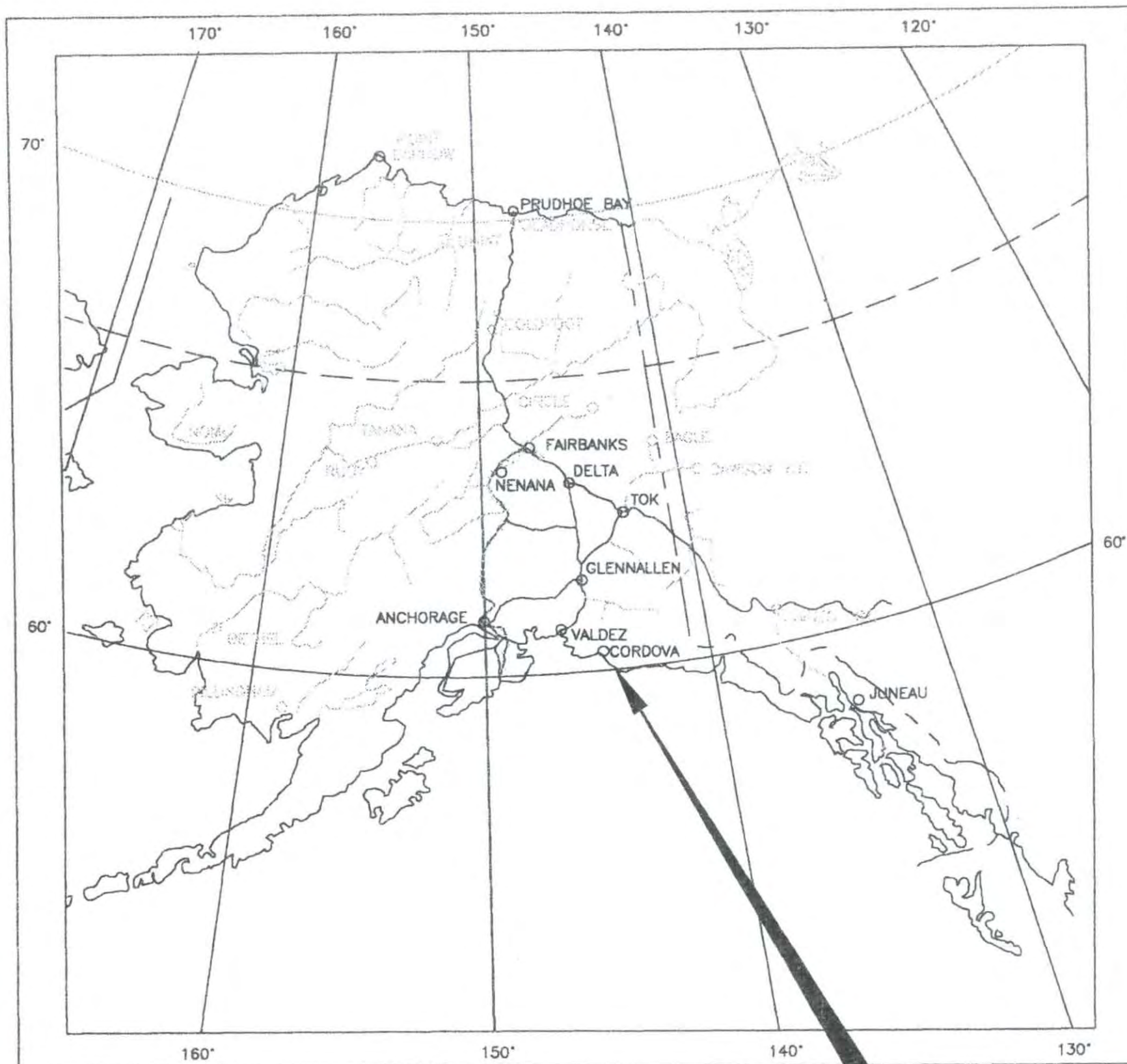


V:\Valdez\76787 CRH FLOOD 06\04 PS&E\06 Final PS&E\Plans\76787a01so-SHT 1 TITLE
Mon, 21/Nov/11 03:47pm



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

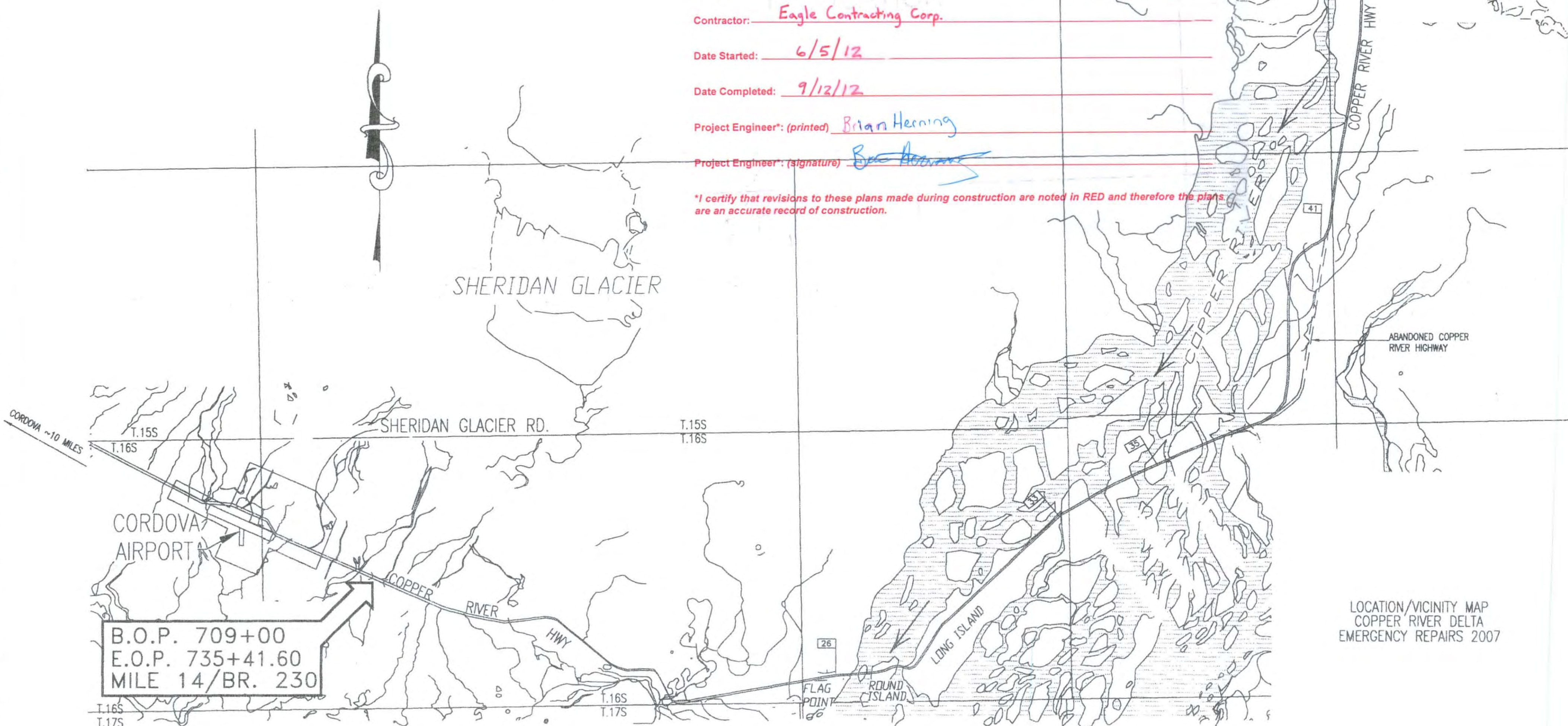
PROPOSED HIGHWAY PROJECT
ER-0081(2) / 76787
COPPER RIVER HIGHWAY
FLOODING PERMANENT REPAIRS (OCT. 06)

AS-BUILT PLANS

PROJECT LOCATION

Initials: BA Date: 11/27/11
Contractor: Eagle Contracting Corp.
Date Started: 6/5/12
Date Completed: 9/12/12
Project Engineer: (printed) Brian Herring
Project Engineer: (signature) Brian Herring

*I certify that revisions to these plans made during construction are noted in RED and therefore the plans are an accurate record of construction.



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ER-0081(2)/76787	2011	1	7
CDS ROUTE: 210000		MILEPOINT: 14.780 TO 36.245		

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	ESTIMATE OF QUANTITIES / SUMMARIES
3	ROADWAY TYPICAL SECTIONS
4	ARMORED EMBANKMENT PROFILE
5	RIPRAP DETAILS
6	BRIDGE 230 PLAN / ESCP 1
7	ESCP NOTES

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

A-1

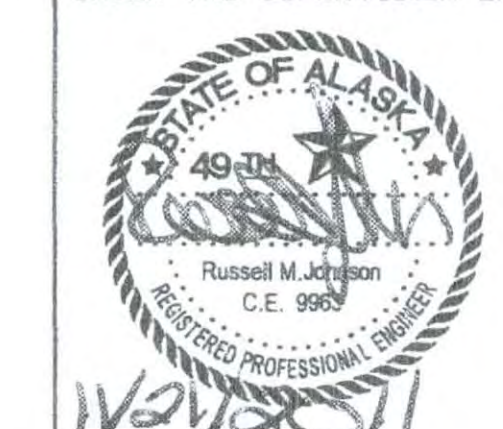
DESIGN DESIGNATIONS

ADT (2010)	NA
ADT (2030)	NA
DHV	16%
T	13%
D	35% - 65%
V	50 MPH
DESIGN EAL'S (2020)	NA

PROJECT SUMMARY

WIDTH OF PAVEMENT	NA
LENGTH OF GRADING	3,641 FT.
LENGTH OF PAVING	NA
LENGTH OF PROJECT	3,641 FT.

PLANS DEVELOPED BY:
S. Oswald
UNDER THE SUPERVISION OF:



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

APPROVED BY: [Signature] DATE: 11/22/11
Donet Brown, P.E.
Preconstruction Engineer.
ACCEPTED FOR CONSTRUCTION: [Signature] DATE: 11/23/11
Steve Titus, P.E.
Regional Director, Northern Region

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Tue, 22/Nov/11 08:25am

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	ER-0081(2)/76787	2011	2	7
CDS ROUTE: 210000		MILEPOINT: 14.780 TO 36.245		

FINAL ESTIMATE OF QUANTITIES			
ITEM NO.	PAY ITEM	UNIT	QUANTITY
301 (1)	AGGREGATE BASE COURSE, GRADING E-1	TON	4,512 4,475.71
611 (2-I)	RIPRAP, CLASS I (MODIFIED)	TON	4,200 3,862.17
611 (2-II)	RIPRAP, CLASS II	TCN	4,200 2,922.85
611 (2-III)	RIPRAP, CLASS III	TON	4,500 4,653.59
631 (2)	GEOTEXTILE, EROSION CONTROL, CLASS I	SQUARE YARD	11,200 10,378
640 (1)	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQ'D
640 (4)	WORKER MEALS AND LODGING, OR PER DIEM	LUMP SUM	ALL REQ'D
641 (1)	EROSION SEDIMENT, AND POLLUTION CONTROL ADMINISTRATION	LUMP SUM	ALL REQ'D
641 (3)	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL	LUMP SUM	ALL REQ'D
641 (4)	TEMPORARY EROSION SEDIMENT, AND POLLUTION CONTROL ADDITIVES	CONTINGENT SUM	ALL REQ'D
641 (6)	WITHHOLDING	CONTINGENT SUM	ALL REQ'D
642 (1)	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQ'D
643 (2)	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQ'D
643 (25)	TRAFFIC CONTROL	CONTINGENT SUM	ALL REQ'D
644 (1)	FIELD OFFICE	LUMP SUM	ALL REQ'D
644 (2)	FIELD LABORATORY	LUMP SUM	ALL REQ'D
644 (6)	VEHICLES	LUMP SUM	ALL REQ'D

GENERAL NOTES:

- ALL UNCLASSIFIED EXCAVATION WILL BE CONSIDERED SUBSIDIARY TO OTHER ITEMS WORK.
- EXCAVATED MATERIAL UNSUITABLE FOR EMBANKMENT WILL BE DISPOSED OF AT A CONTRACTOR FURNISHED LOCATION. HANDLING AND DISPOSAL WILL BE CONSIDERED SUBSIDIARY TO OTHER ITEMS.
- SLOPE SHAPING FOR RIPRAP PLACEMENT IS SUBSIDIARY TO OTHER ITEMS.

SURFACING SUMMARY							
LOCATION			LENGTH FEET	DEPTH INCHES	WIDTH FEET	AGGREGATE BASE GRADING E-1	REMARKS
LOC.	BEGIN STATION	END STATION				TONS	
MP 14	709+00	712+00	300	4	44	337	
MP 14	712+00	721+00	900	10	44	2555	BR 230 - ARMORED EMB.
MP 14	721+00	735+41	1441	4	44	1620	BR 230 - WEST
TOTALS			2641			4512	

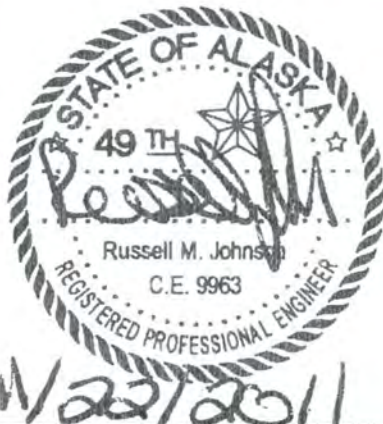
RIPRAP SUMMARY							
LOCATION			NEW RIPRAP				REMARKS
LOC.	BEGIN STATION	END STATION	CLASS I (MOD)	CLASS II	CLASS III	CLASS IV	
			TONS	TONS	TONS	TONS	
MP 14	"C" 0+00	9+00			4500		DIKE "C"
MP 14	712+00	721+00	4,200	4,200			
	RIPRAP	TOTALS	4,200	4,200	4,500		

ESTIMATING FACTORS			
ITEM #	DESCRIPTION	FACTOR	UNITS
301(1)	AGGREGATE BASE COURSE, GRADING E-1	2	TONS / CUBIC YARD
611(2-I)	RIPRAP, CLASS I (MODIFIED)	1.70	TONS / CUBIC YARD
611(2-II)	RIPRAP, CLASS II	1.70	TONS / CUBIC YARD
611(2-III)	RIPRAP, CLASS III	1.70	TONS / CUBIC YARD

AS-BUILT PLANS

INITIALS EH DATE 11/27/12

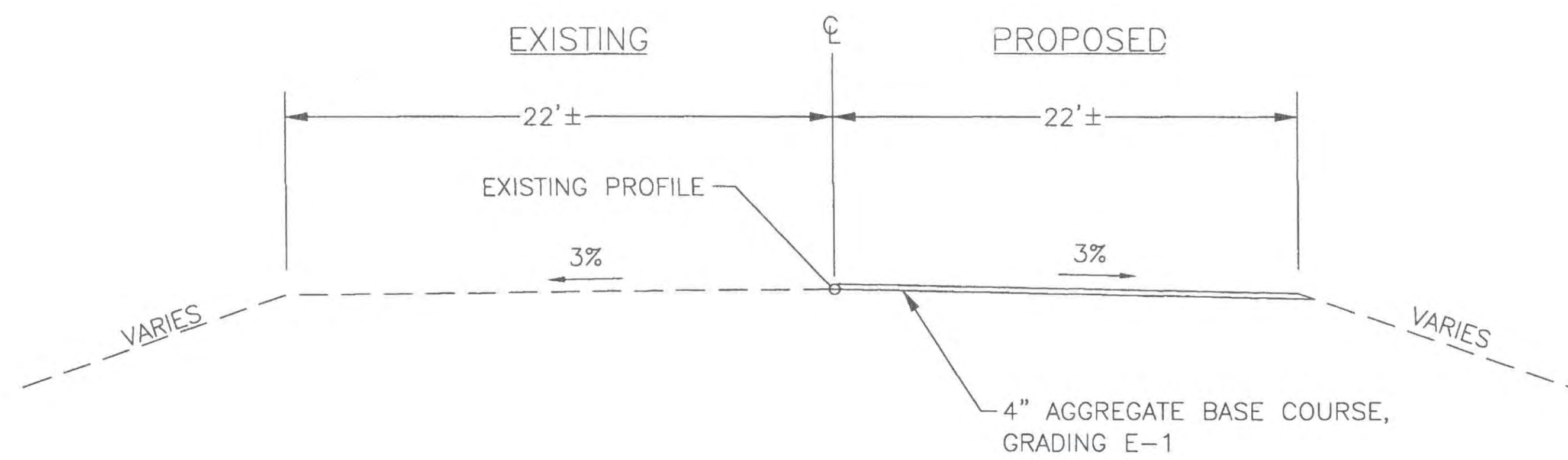
ESTIMATE OF QUANTITIES
SUMMARIES



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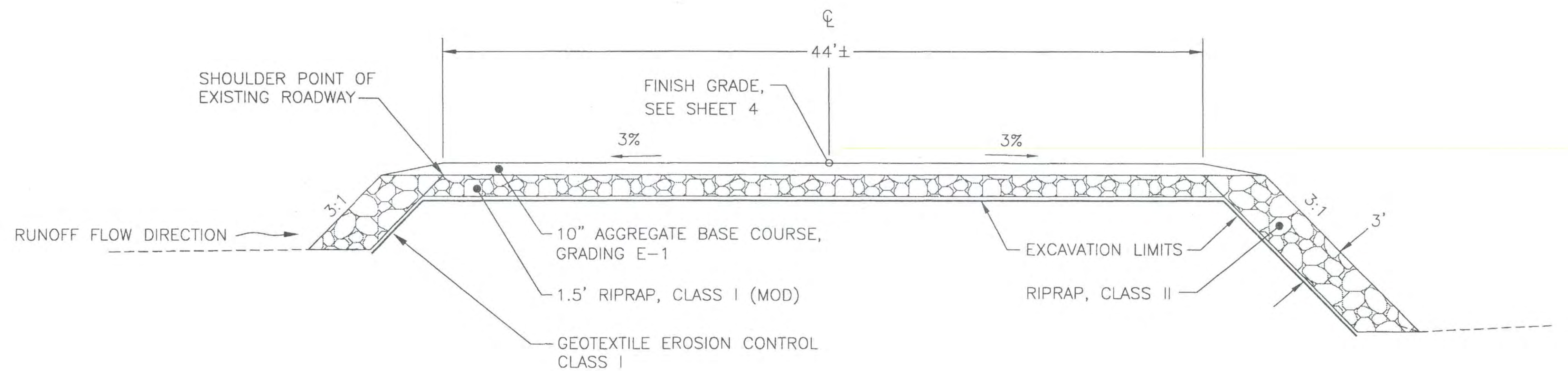
Mon, 21/Nov/11 03:55pm

76787A02	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
	ALASKA	ER-0081(2)/76787	2011	3	7
	CDS ROUTE: 210000		MILEPOINT: 14.780 TO 36.245		



TYPICAL SECTION

STA. 709+00 TO 712+00
STA. 721+00 TO 735+41.60



ARMORED EMBANKMENT TYPICAL

STA 712+00 TO 721+00

AS-BUILT PLANS

INITIALS BA DATE 11/29/12

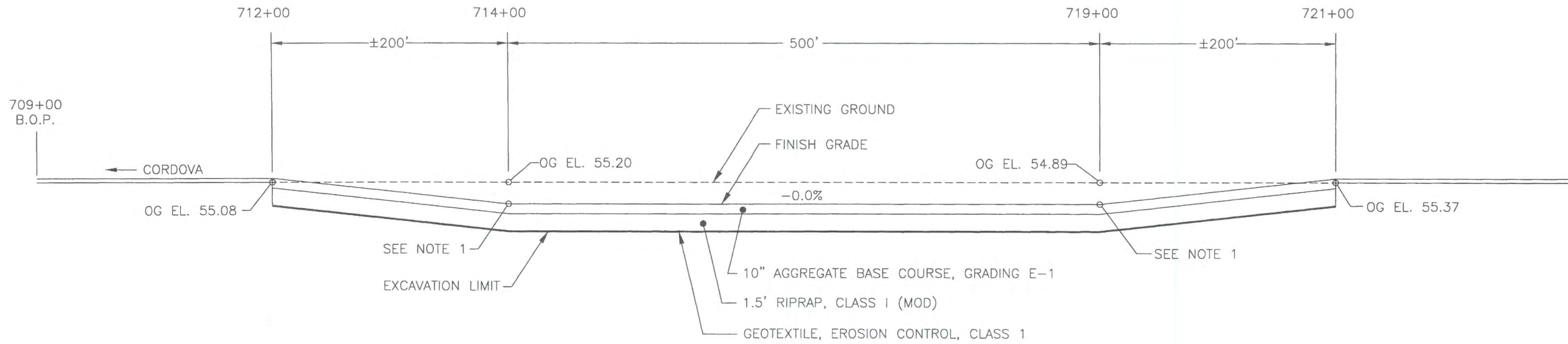
ROADWAY TYPICAL SECTIONS



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Mon, 21/Nov/11 03:56pm

76787A03	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
	ALASKA	ER-0081(2)/76787	2011	4	7
	CDS ROUTE: 210000		MILEPOINT: 14.780 TO 36.245		



ARMORED EMBANKMENT PROFILE

STA. 712+00 TO 721+00

ARMORED EMBANKMENT NOTES:

1. CONTRACTOR SHALL SET THE VERTICAL ELEVATION TO BE 6 INCHES BELOW THE LOWEST ELEVATION OF SHERIDAN GLACIER BRIDGE'S (230) CONCRETE SUPERSTRUCTURE.
2. ORIGINAL GROUND ELEVATIONS MAY VARY.
3. VERTICAL ELEVATIONS BASED ON THE RECORD OF SURVEY COPPER RIVER HIGHWAY MP 14 TO MP 16, DATED 10/31/08 AKDOT&PF TOPOGRAPHIC SURVEY.

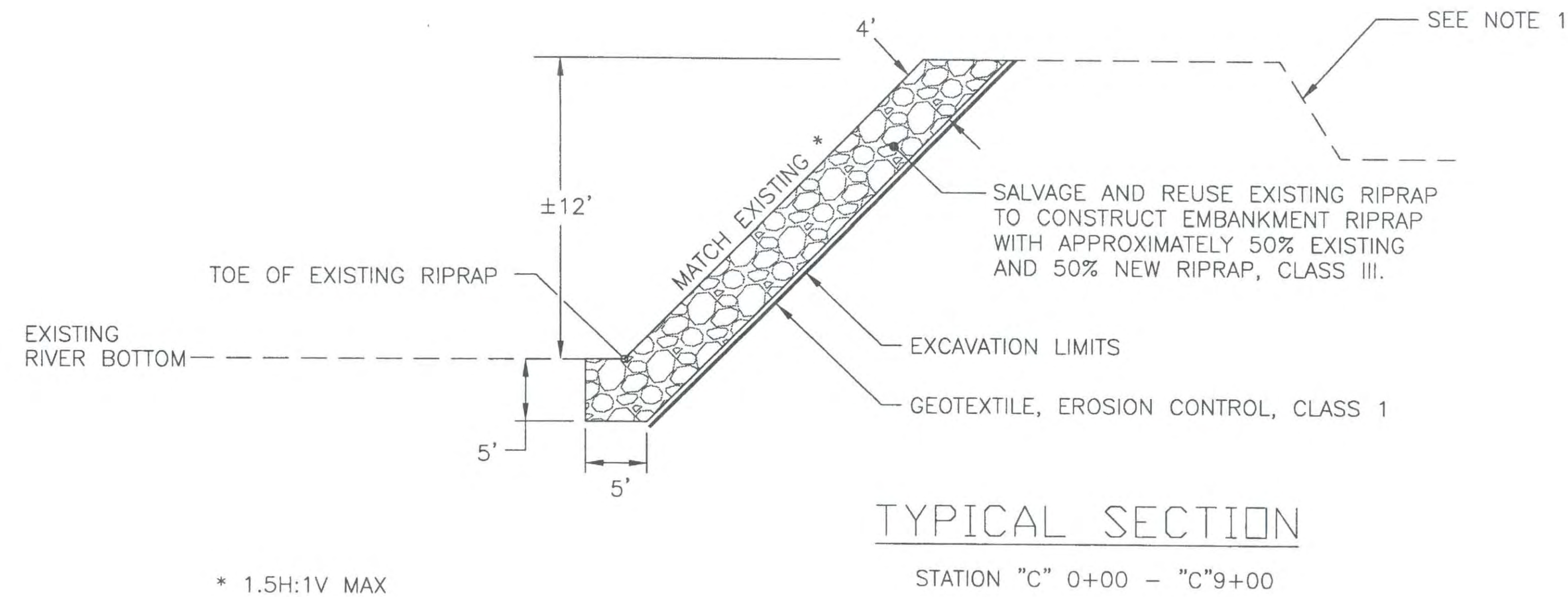
AS-BUILT PLANS

INITIALS BH DATE 11/29/12

ARMORED EMBANKMENT PROFILE



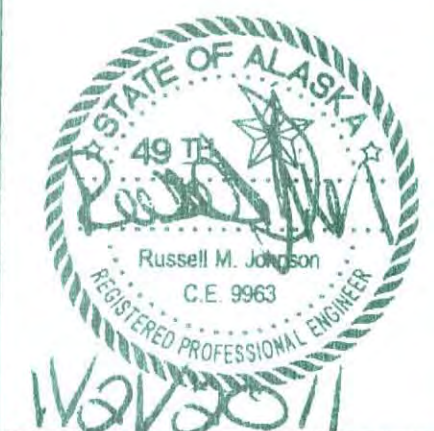
76787A05	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
	ALASKA	ER-0081(2)/76787	2011	5	7
	CDS ROUTE: 210000		MILEPOINT: 14.780 TO 36.245		

**DIKE "C" NOTES:**

1. MAINTAIN THE EXISTING WIDTH AND ELEVATION OF DIKE "C". IF NEEDED USE SELECTED MATERIAL, TYPE B TO RE-ESTABLISH WIDTH AND ELEVATION AFTER RIPRAP PLACEMENT. ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED FOR THIS WORK ARE SUBSIDIARY TO 611 SERIES PAY ITEMS.

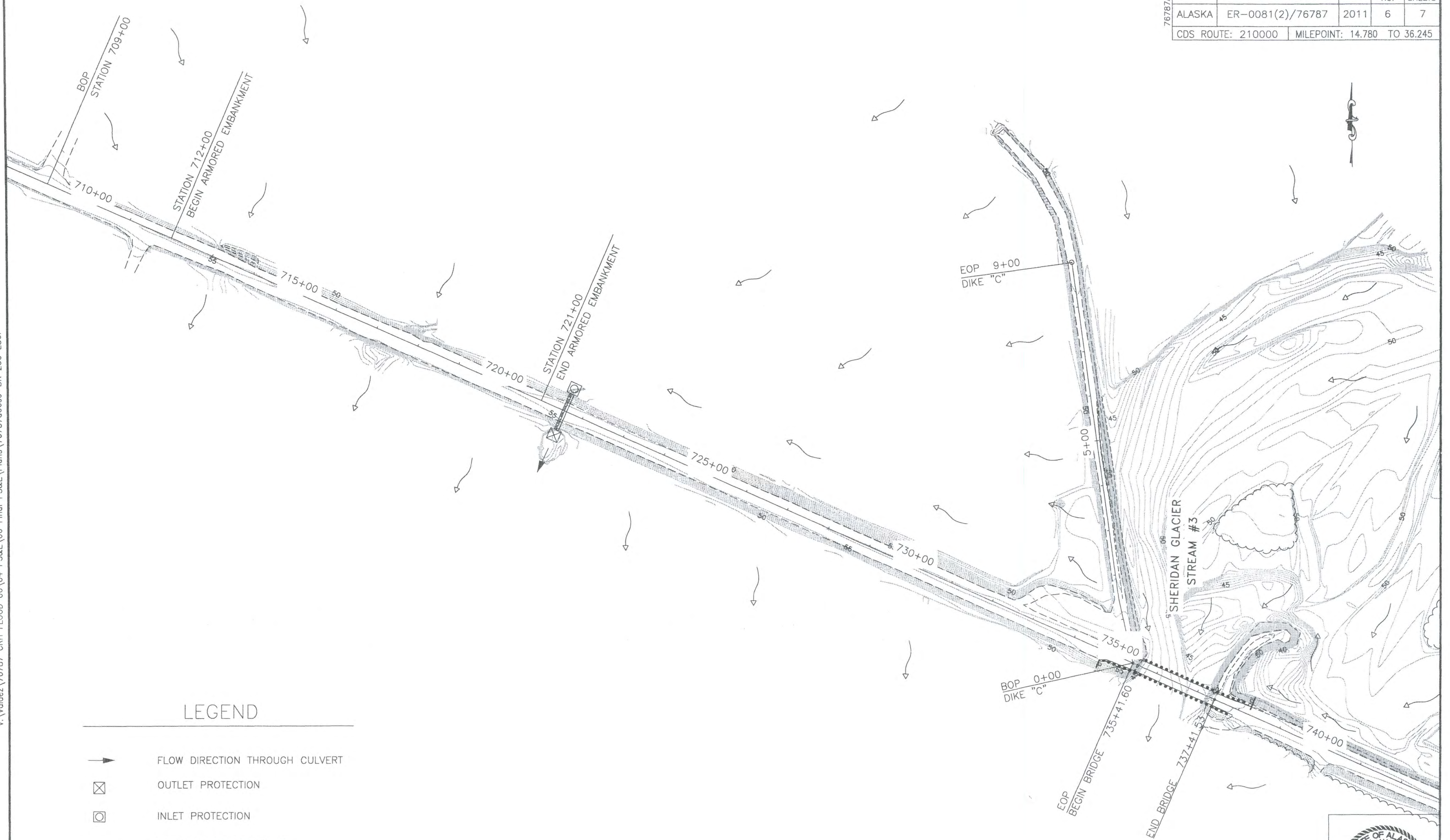
AS-BUILT PLANSINITIALS BH DATE 11/29/12

RIPRAP DETAILS



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76787A05	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
	ALASKA	ER-0081(2)/76787	2011	6	7
	CDS ROUTE: 210000		MILEPOINT: 14.780 TO 36.245		



LEGEND

- FLOW DIRECTION THROUGH CULVERT
- ☒ OUTLET PROTECTION
- ☐ INLET PROTECTION
- ↘ RUNOFF FLOW DIRECTION
- TEMPORARY WORK AREA

AS-BUILT PLANS

INITIALS BH DATE 11/29/12

BRIDGE 230 PLAN / ESCP 1



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Mon, 21/Nov/11 04:00pm

GENERAL NOTES:

- SWPPP SHALL BE DEVELOPED USING INFORMATION PROVIDED AND IN COMPLIANCE WITH ALL APPLICABLE PERMITS, INCLUDING:
 - SPECIAL PROVISION 641
 - ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEMS (APDES) CONSTRUCTION GENERAL PERMIT (CGP)
 - DEPARTMENT ACQUIRED PERMITS (APPENDIX A) AND CONTRACTOR ACQUIRED PERMITS
 - ESCP PLAN SHEETS
- THE CONTRACTOR WILL PROVIDE EROSION AND SEDIMENT CONTROL (ESC) MEASURES IN ACCORDANCE WITH THEIR SWPPP. THE ENGINEER MAY REQUIRE ADDITIONAL ESC MEASURES AS FIELD CONDITION DICTATE.
- THE CONTRACTOR SHALL MAINTAIN SWPPP DOCUMENTS AS DESCRIBED IN SPEC SECTION 641.
- EROSION AND SEDIMENT CONTROLS SHOWN ON THE PLAN SHEETS ARE AS DESCRIBED IN THE ALASKA STORM WATER GUIDE, JUNE 2009.

COPPER RIVER RIPRAP NOTES:

- SEE CONTRACT SPECIAL PROVISIONS 611 FOR RIPRAP PLACEMENT REQUIREMENTS.
- AT NO TIME WILL EMBANKMENT BE LEFT EXPOSED TO THE EROSION FORCES OF THE COPPER RIVER, OTHER THAN WHAT CAN BE COMPLETED IN THAT DAY'S 24 HOUR SHIFT.
- THE PLACEMENT OF ALL RIPRAP SHALL BE TIMED IN ACCORDANCE WITH ALASKA DEPARTMENT OF FISH AND GAME TITLE 16 PERMITS AND SEASONAL LOW WATER.
- WHERE RIPRAP IS TO BE KEYED IN BELOW OHW (ORDINARY HIGH WATER) PROVIDE FLOATING SILT CURTAIN OR PERMIT AUTHORITY FROM DEC, ADF&G AND COE FOR SHORT TERM WATER QUALITY EXCEEDANCE PER 18 AAC 70.200

SITE DESCRIPTION:

- PROJECT INCLUDES: SURFACING AND RIPRAP REPAIR.
- PROJECT AREA 13 ACRES (NOT INCLUDING MATERIAL SITES).
- AREA DISTURBED: 1.78 ACRES
- PROBABLE MAXIMUM PRECIPITATION FOR 2 YEAR, 24 HOUR STORM (SEE CONTRACT APPENDIX C, CLIMATE DATA).
- NAME(S) OF RECEIVING WATERS: COPPER RIVER AND GULF OF ALASKA
- IMPAIRED WATERS: NONE OF RECEIVING WATERS ARE ON LIST.
- RUN-OFF COEFFICIENTS: SEE TABLE BELOW.
- SOILS CONSIST OF ALLUVIAL SILTS, SANDS AND GRAVELS.

AVAILABLE MATERIAL SITES: UNKNOWN

TYPE OF SURFACE	RUNOFF COEFFICIENT (C)
PAVED	0.7 - 0.9
GRAVEL ROADWAY OR SHOULDERS	0.4 - 0.6
CUT, FILL SLOPES	0.5 - 0.7
GRASSED AREAS	0.1 - 0.7
RESIDENTIAL	0.3 - 0.7
WOODS	0.1 - 0.3
CULTIVATED	0.2 - 0.6

NOTES:

FROM HYDRAULIC CIRCULAR #12, "DRAINAGE OF HIGHWAY PAVEMENTS", MARCH 1984, PAGE 12. FOR FLAT SLOPES AND/OR PERMEABLE SOILS, USE LOWER VALUE. FOR STEEP SLOPES AND/OR IMPERMEABLE SOILS, USE HIGHER VALUES

LEGEND:

- FLOW DIRECTION THROUGH CULVERT
- ☒ OUTLET PROTECTION
- ⊙ INLET PROTECTION
- ↪ RUNOFF FLOW DIRECTION
- TEMPORARY WORK AREA

76787A05	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
	ALASKA	ER-0081(2)/76787	2011	7	7
	CDS ROUTE: 210000		MILEPOINT: 14.780 TO 36.245		

AS-BUILT PLANS

INITIALS BH DATE 11/29/12

ESCP NOTES



11/29/12