



THE STATE
of **ALASKA**
GOVERNOR MIKE DUNLEAVY

Department of Fish and Game

HABITAT SECTION
Southcentral Regional Office

333 Raspberry Road
Anchorage, Alaska
Main: 907.267.2342
Fax: 907.267.2499

FISH HABITAT PERMIT FH26-II-0044

ISSUED: March 26, 2026
EXPIRES: Life of Structure

Copper River Watershed Project
Attn: Kirsti Jurica
PO Box 1560
Cordova, AK 99574

RE: Culvert Replacement
Unnamed Stream (Water Body No. 212-10-10020-2019-3005)
Section 17, T 16 S, R 1 W, CRM
Location: 60.48425 N, 145.43221 W
ADF&G Culvert No. 20100469

Dear Kirsti Jurica:

Pursuant to the Anadromous Fish Act at AS 16.05.871(b), the Alaska Department of Fish and Game (ADF&G) Habitat Section has reviewed your proposal to replace a culvert at milepost 13.7 on the Copper River Highway.

Project Description

You propose to replace two 60-inch diameter culverts with a 8-foot, 5-inch wide and 6-foot, 3-inch high aluminum box culvert to improve fish passage and hydraulic connectivity across the Copper River Highway (Sheet C15). The new 70-foot long culvert will be installed at a gradient of less than 0.5% percent and the invert will be buried 2.5 - 3.5 feet below the existing streambed. The culvert will be backfilled with a mix of course and fine material sized to remain stable at high flow in a v-shaped channel (Sheet C11). Class I rip rap will be used to construct two rock clusters within the culvert and for scour protection at the inlet and outlet.

Prior to construction, cofferdams will be installed upstream and downstream of the project area to isolate the work area. A temporary diversion channel will be constructed to direct flow around the work area through the existing culvert(s). Fish stranded in the work area after cofferdams are installed will be captured and relocated to the stream channel upstream or

downstream of the work area in accordance with a valid Aquatic Resource Permit. The stream is expected to be diverted for about 15 days.

Disturbed streambanks upstream and downstream of the culvert will be re-constructed using rip rap, salvaged organic material, and vegetative mats (Sheet C-10). Voids in rip rap will be filled with salvaged soil and covered with topsoil and native seed mix.

The Alaska Department of Transportation and Public Facilities (ADOT&PF) will assume responsibility for maintenance of the culvert after installation and this permit will be transferred to ADOT&PF at that time.

Anadromous Fish Act

Water Body No. 212-10-10020-2019-3005 has been specified as being important for the spawning, rearing, or migration of anadromous fishes pursuant to AS 16.05.871(a). The water body provides habitat for coho salmon.

In accordance with AS 16.05.871(d), your project is approved subject to the project description, the permit terms, and the following stipulations.

1. In-water work in the flowing water of the creek shall be completed between June 1 and August 15 unless otherwise authorized by the Habitat Section.
2. The new culvert shall be installed and maintained to accommodate the efficient passage and movement of fish both upstream and downstream.
3. Work areas shall be isolated from the flowing waters of the creek at all times during construction. The stream reach downstream of the culvert installation shall be supplied with a constant flow of clean water sufficient to support the aquatic life in the stream and maintain fish passage downstream of the work area.
4. Dewatering or bypass pump intakes structure shall be surrounded by a properly sized and screened structure when used in areas which may support fish. The screen mesh shall not exceed 1/8th inch, and the water velocity at the screen surface shall not exceed 0.5 feet per second.
5. A plan for diversion, construction sequencing, and stranded fish rescue shall be submitted to the Habitat Section a minimum of 2 weeks prior to construction for review and approval.

Permit Terms

This letter constitutes a permit issued under the authority of AS 16.05.871 and must be retained on site during project activities. Please be advised that this determination applies only to activities regulated by the Habitat Section; other agencies also may have jurisdiction under their respective authorities. This determination does not relieve you of your responsibility to secure other permits; state, federal, or local. You are still required to comply with all other applicable laws.

You are responsible for the actions of contractors, agents, or other persons who perform work to accomplish the approved project. For any activity that significantly deviates from the approved

plan, you shall notify the Habitat Section and obtain written approval in the form of a permit amendment before beginning the activity. Any action that increases the project's overall scope or that negates, alters, or minimizes the intent or effectiveness of any provision contained in this permit will be deemed a significant deviation from the approved plan. The final determination as to the significance of any deviation and the need for a permit amendment is the responsibility of the Habitat Section. Therefore, we recommend you consult the Habitat Section immediately before considering any deviation from the approved plan.

You shall give an authorized representative of the state free and unobstructed access to the permit site, at safe and reasonable times, for the purpose of inspecting or monitoring compliance with any provision of this permit. You shall furnish whatever assistance and information the authorized representative reasonably requires for monitoring and inspection purposes.

In addition to the penalties provided by law, this permit may be terminated or revoked for failure to comply with its provisions or failure to comply with applicable statutes and regulations. You shall mitigate any adverse effect upon fish or wildlife, their habitats, or any restriction or interference with public use that the commissioner determines was a direct result of your failure to comply with this permit or any applicable law.

You shall indemnify, save harmless, and defend the department, its agents, and its employees from any and all claims, actions, or liabilities for injuries or damages sustained by any person or property arising directly or indirectly from permitted activities or your performance under this permit. However, this provision has no effect if, and only if, the sole proximate cause of the injury is the department's negligence.

You may appeal this permit decision relating to AS 16.05.871 in accordance with the provisions of AS 44.62.330-630.

Please direct questions about this permit to Habitat Biologist Megan Marie at 267-2342 or megan.marie@alaska.gov.

Sincerely,

Doug Vincent-Lang
Commissioner



By Ken Bouwens
Southcentral Regional Supervisor

Enclosures: Sheets C10, C11, and C15

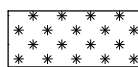
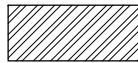



Email cc:


AWT, Cordova
A. Ott, ADF&G
J. Botz, ADF&G
B. Blain, ADF&G
ARP Coordinator, ADF&G
ADNR SCRO Permitting
ADNR Water Use
D. Adamczak, ADOT&PF
J. Rypkema, ADEC
USACE Regulatory
K.Clark, USFS Cordova
City of Cordova

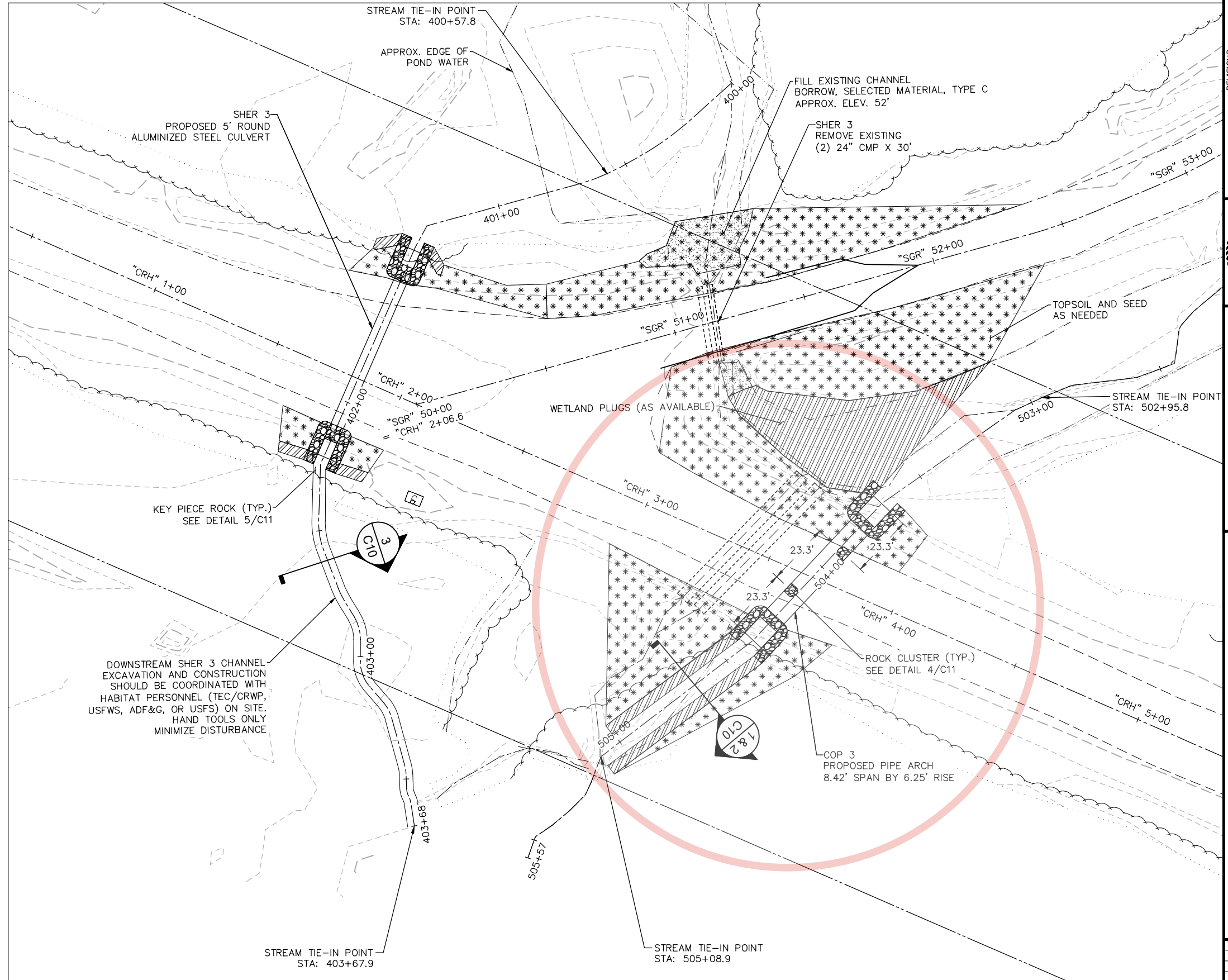
NOTES:

1. VEGETATIVE MAT OR WETLAND PLUGS SHALL BE PLACED ON DISTURBED AREAS ALONG CHANNEL MARGINS AS SHOWN ON THE PLANS.
2. ADDITIONAL VEGETATIVE MAT OR WETLAND PLUGS SHALL BE PLACED ON DISTURBED AREAS OUTSIDE THE BANK MARGINS TO THE EXTENT AVAILABLE. DAMAGED, THIN, AND DEAD VEGETATIVE MAT NOT MEETING REQUIREMENTS FOR BANK CONSTRUCTION MAY BE USED OUTSIDE THE BANK MARGINS.
3. COORDINATE WITH HABITAT PERSONNEL (TEC/CRWP, USFWS, ADF&G, OR USFS) TO IDENTIFY SOURCE AREAS FOR VEGETATIVE MAT AND PRIORITY AREAS WITHIN THE AREA OF DISTURBANCE TO RECEIVE EXCESS VEGETATIVE MAT OR WETLAND PLUGS.
4. TOPSOIL, SEED, AND MULCH SHALL BE USED FOR ALL REMAINING DISTURBED AREAS.
5. REFER TO SPECIFICATION SECTION 690 FOR ADDITIONAL BANK REVEGETATION INFORMATION.

SITE REVEGETATION

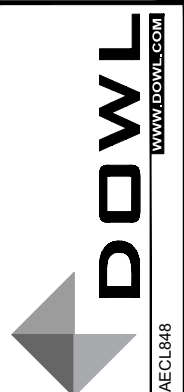
-  ORGANIC SOILS AND VEGETATIVE MAT, AS AVAILABLE
TOPSOIL, SEED, AND MULCH AS NEEDED
-  WATERWAY BANK REVEGETATION AND PROTECTION
VEGETATIVE MAT OR WETLAND PLUGS
-  WATERWAY BED FILL
-  RIPRAP
-  BORROW, SELECTED MATERIAL, TYPE C

 COP3 FH26-II-0044



1 SHER3 REVEGETATION PLAN
C15

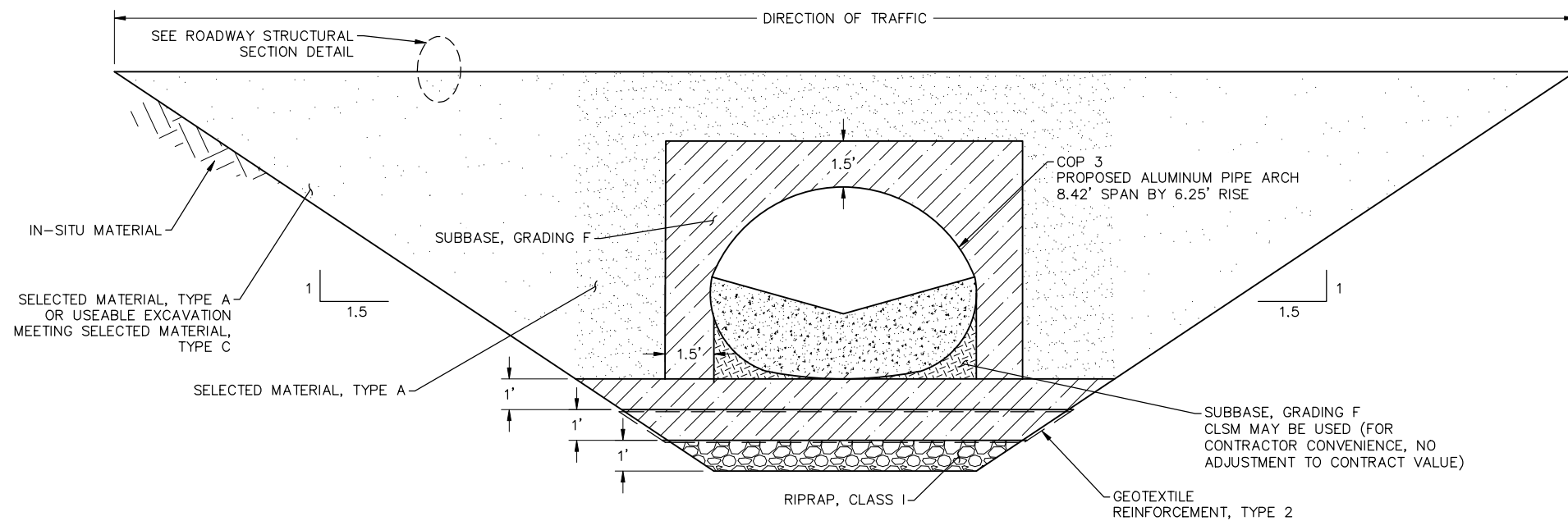
REV	DATE	DESCRIPTION



CORDOVA FISH PASSAGE IMPROVEMENTS
COP 3 & SHER 3
REVEGETATION PLAN
CORDOVA, ALASKA

PROJECT	1162.63781.01
DATE	JANUARY 2026
© DOWL 2026	
SHEET	
C15 OF C16	

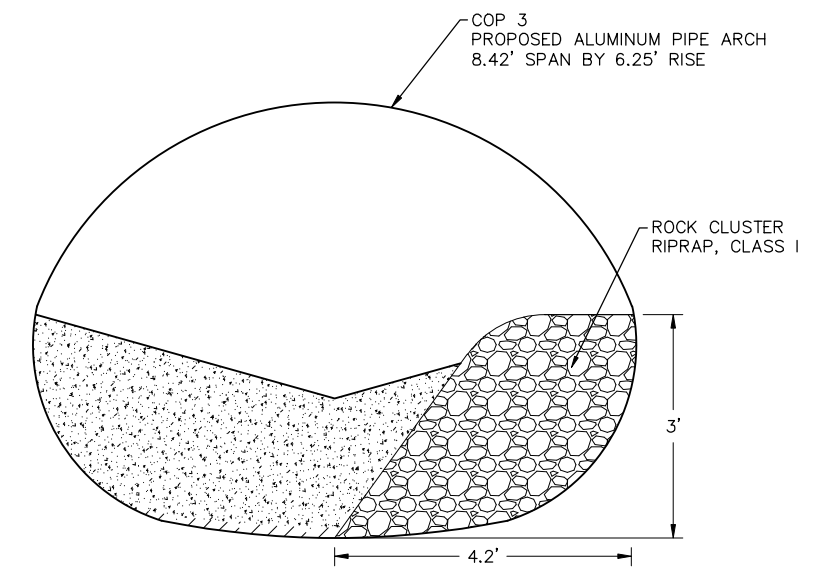
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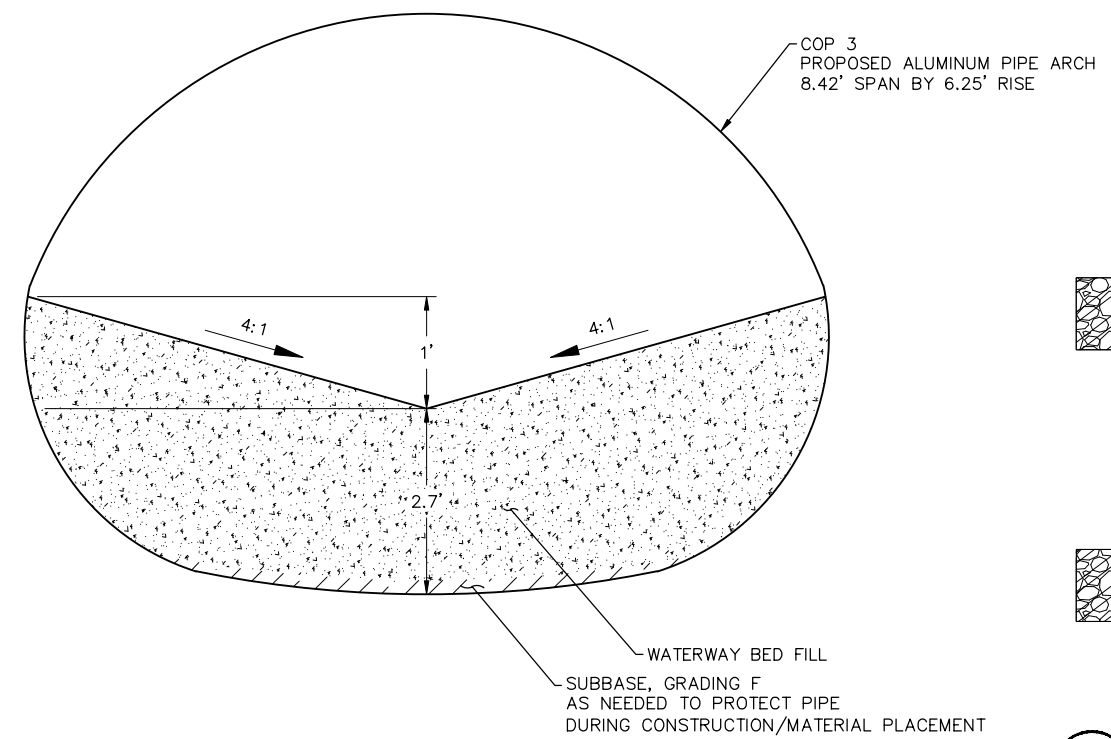
1
C11 TYPICAL CULVERT TRENCH SECTION
NTS

NOTES:

1. GEOTEXTILE REINFORCEMENT, TYPE 2 SHALL BE PLACED BETWEEN RIPRAP, CLASS I AND SUBBASE, GRADING F, AND PLACED BETWEEN EACH ONE-FOOT LAYER OF SUBBASE, GRADING F BENEATH CULVERT INVERT.
2. FOR QUANTITY ESTIMATION PURPOSES, NO USABLE EXCAVATION WAS ASSUMED AND EMBANKMENT QUANTITIES WERE CALCULATED USING SELECTED MATERIAL, TYPE A.
3. MINIMUM ALLOWABLE COVER FOR PIPE ARCH CULVERT IS 2.0'.



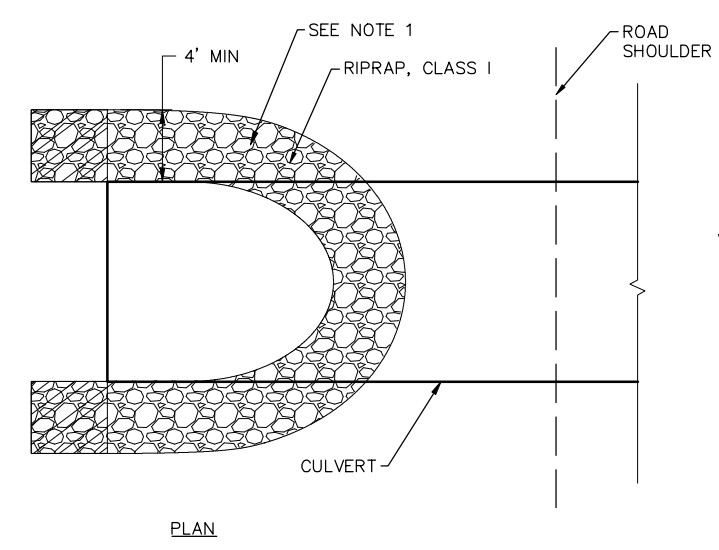
4
C11 CULVERT SECTION AT ROCK CLUSTER
NTS



2
C11 TYPICAL CULVERT INFILL SECTION
NTS

NOTES:

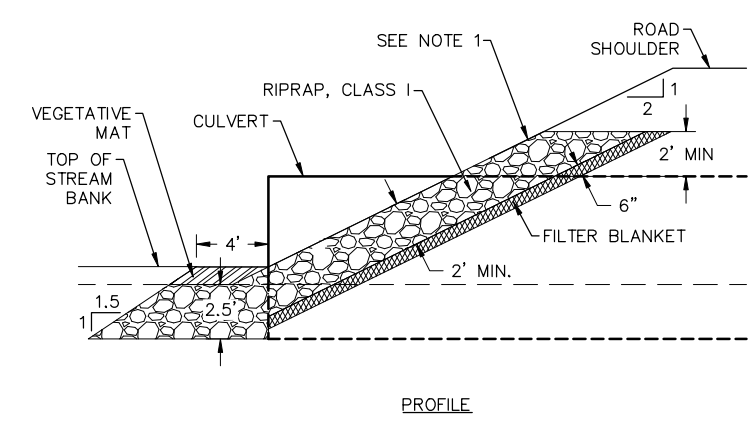
1. MIX MATERIAL FOR WATERWAY BED FILL TO ACHIEVE A WELL GRADED MIXTURE.
2. FILL VOIDS IN FOR WATERWAY BED FILL AND WASH FINES IN AFTER PLACEMENT.
3. PLACEMENT AND SHAPE OF WATERWAY BED FILL TO BE COORDINATED WITH HABITAT PERSONNEL (TEC/CRWP, USFWS, ADF&G, OR USFS) ON SITE.



3
C11 RIPRAP SLOPE PROTECTION SECTION
NTS

NOTES:

1. FILL VOIDS IN RIPRAP SLOPE PROTECTION WITH SELECTED MATERIAL, TYPE A OR C, OR USABLE EXCAVATION MEETING SELECTED MATERIAL, TYPE C.
2. PLACE SALVAGED ORGANIC TOPSOIL AND SEED ON SURFACE OF PLACED RIPRAP PER SPECIFICATION SECTIONS 611-3.01 AND 620-3.01.
3. PLACE VEGETATIVE MAT OVER TOE OF RIPRAP SLOPE PROTECTION.



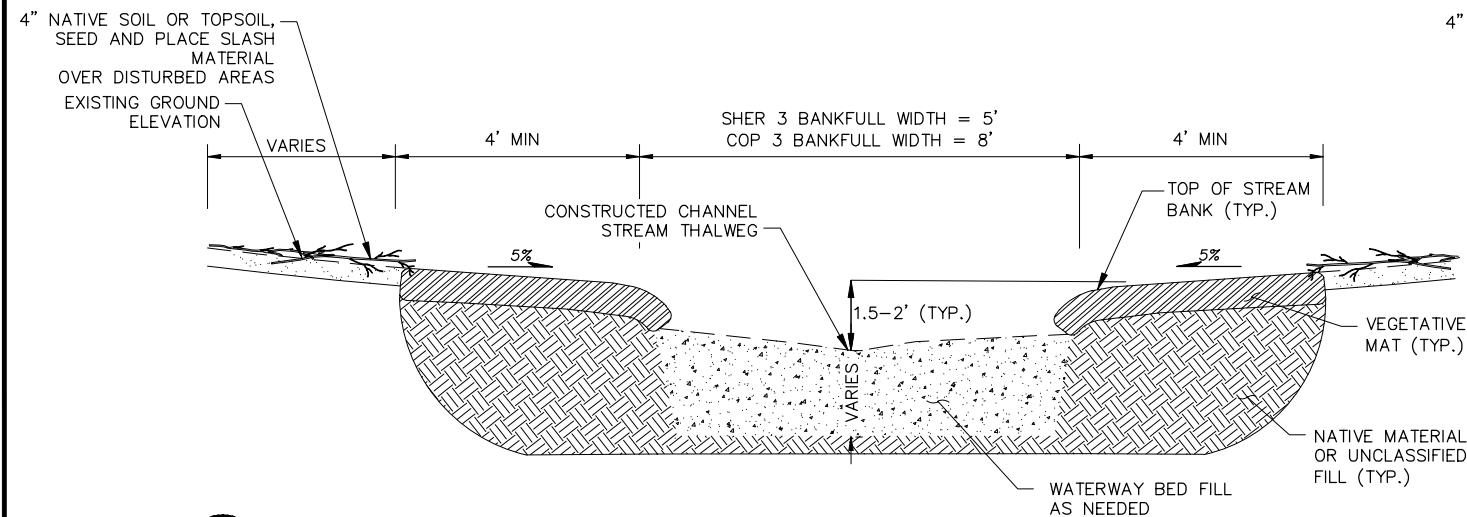
REV	DATE	DESCRIPTION	BY

STATE OF ALASKA
49th
Held R. Holland
CE 128079
REGISTERED PROFESSIONAL ENGINEER

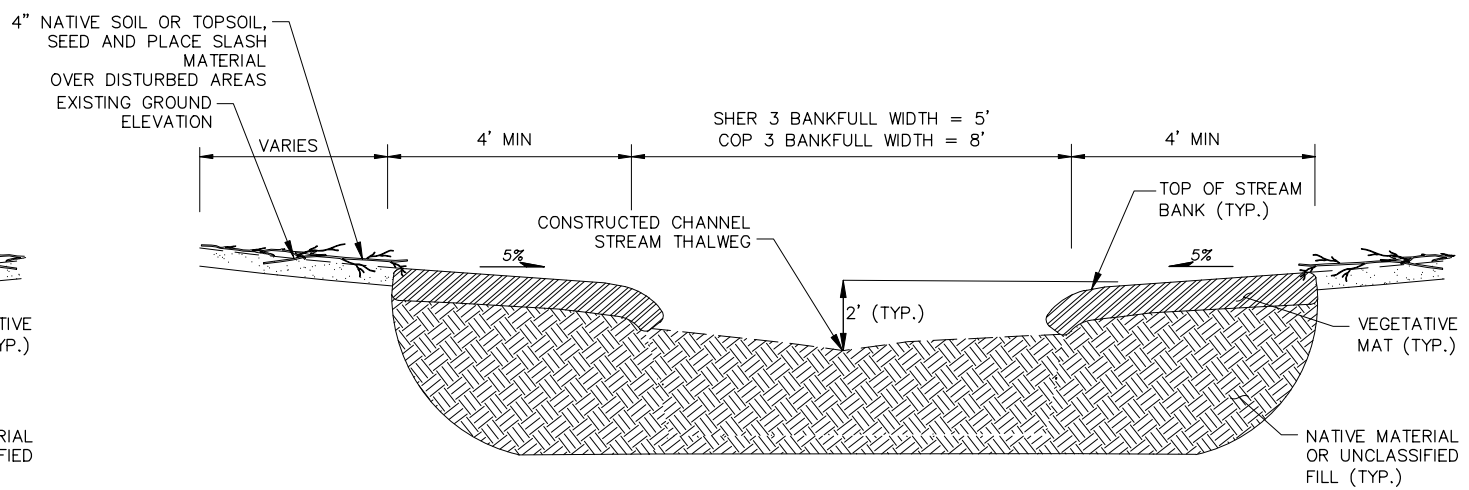
DOWL
WWW.DOWL.COM
AECL848

CORDOVA FISH PASSAGE IMPROVEMENTS
COP 3 & SHER 3
COP3 - STREAM SECTIONS AND DETAILS
CORDOVA, ALASKA

C:\dowl_pw\0412512\SC20-CH-DR-63781-COP3-SHER3-UPDATE_1.dwg PLOT DATE 2026-01-29 16:27 SAVED DATE 2026-01-29 16:24 USER: rholland



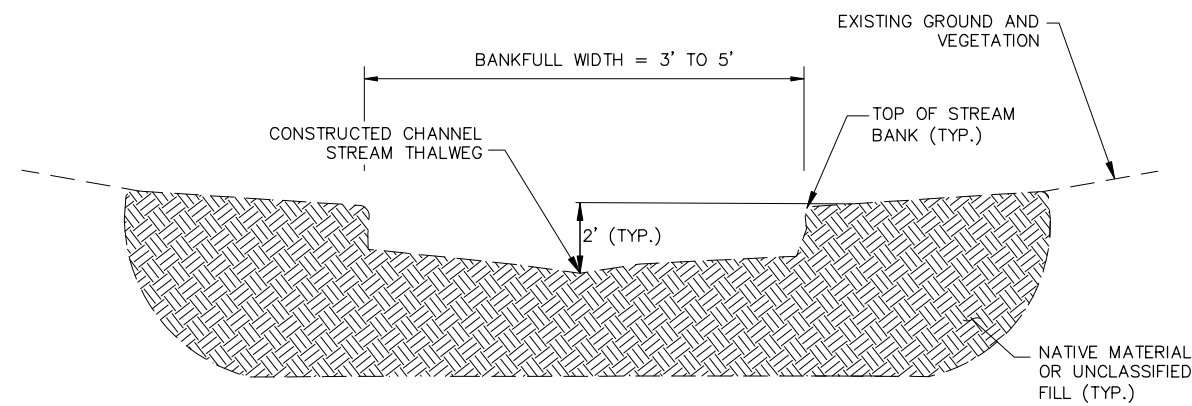
1
C10 NTS
CONSTRUCTED BANK - VEGETATIVE MAT/CONSTRUCTED CHANNEL



2
C10 NTS
CONSTRUCTED BANK - VEGETATIVE MAT

NOTES:

1. SALVAGED VEGETATIVE MAT MUST HAVE A THICKNESS OF 6 TO 12 INCHES AND BE SOURCED FROM THE DISTURBED AREA OR LOCAL AREA COORDINATED WITH TEC/CRWP AND USFWS.
2. GRADE TO STREAM THALWEG SHOWN IN PROFILE ON C6 AND C7.
3. IF FILL REQUIRED TO CONSTRUCT CHANNEL TO DIMENSIONS SHOWN, USE WATERWAY BED FILL MATERIAL.
4. PLACEMENT OF WATERWAY BED FILL MATERIAL FOR CONSTRUCTED BANK DETAIL IS SUBSIDIARY TO PAY ITEM 690.2001.0000 WATERWAY BED FILL.
5. TAPER BANKS AND TIE INTO EXISTING BANKS UPSTREAM AND DOWNSTREAM, AS DIRECTED BY THE ENGINEER.
6. CONSTRUCT BANKS AS SHOWN ONLY WHERE REQUIRED TO RESTORE DISTURBED AREAS. IN-SITU VEGETATION MAY REMAIN IF UNDISTURBED BY CHANNEL EXCAVATION ACTIVITIES.



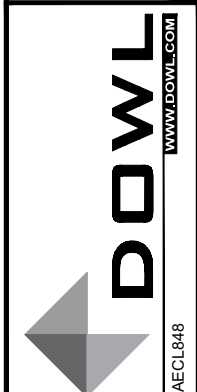
3
C10 NTS
SHER 3 CONSTRUCTED BANK - DOWNSTREAM EXCAVATION

NOTES:

1. HAND TOOLS ONLY FOR DOWNSTREAM SHER 3 CHANNEL EXCAVATION AND CONSTRUCTION. NO HEAVY EQUIPMENT TO REDUCE DISTURBANCE.
2. VEGETATIVE MAT MAY BE USED TO STABILIZE BANKS.
3. ADDITIONAL DOWNSTREAM HABITAT FEATURES SHALL BE COORDINATED WITH HABITAT PERSONNEL ONSITE AND SHALL BE PAID UNDER ITEM 647.2030.0000 EXCAVATOR.

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REV	DATE	DESCRIPTION	BY



CORDOVA FISH PASSAGE IMPROVEMENTS
COP 3 & SHER 3
STREAM DESIGN DETAILS
CORDOVA, ALASKA

PROJECT	1162.63781.01
DATE	JANUARY 2026
© DOWL 2026	
SHEET	
C10 OF C16	