

P:\Projects\DG0159\ENVEA-GSTV5.dwg 2009-12-15

VICINITY MAP

Sec 5,6,8,9

T40S, R 59E

Copper River Meridian, Alaska

**STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES**

**PROJECT No 68287
GUSTAVUS AIRPORT RUNWAY
SAFETY AREA IMPROVEMENTS**

Gustavus, Alaska

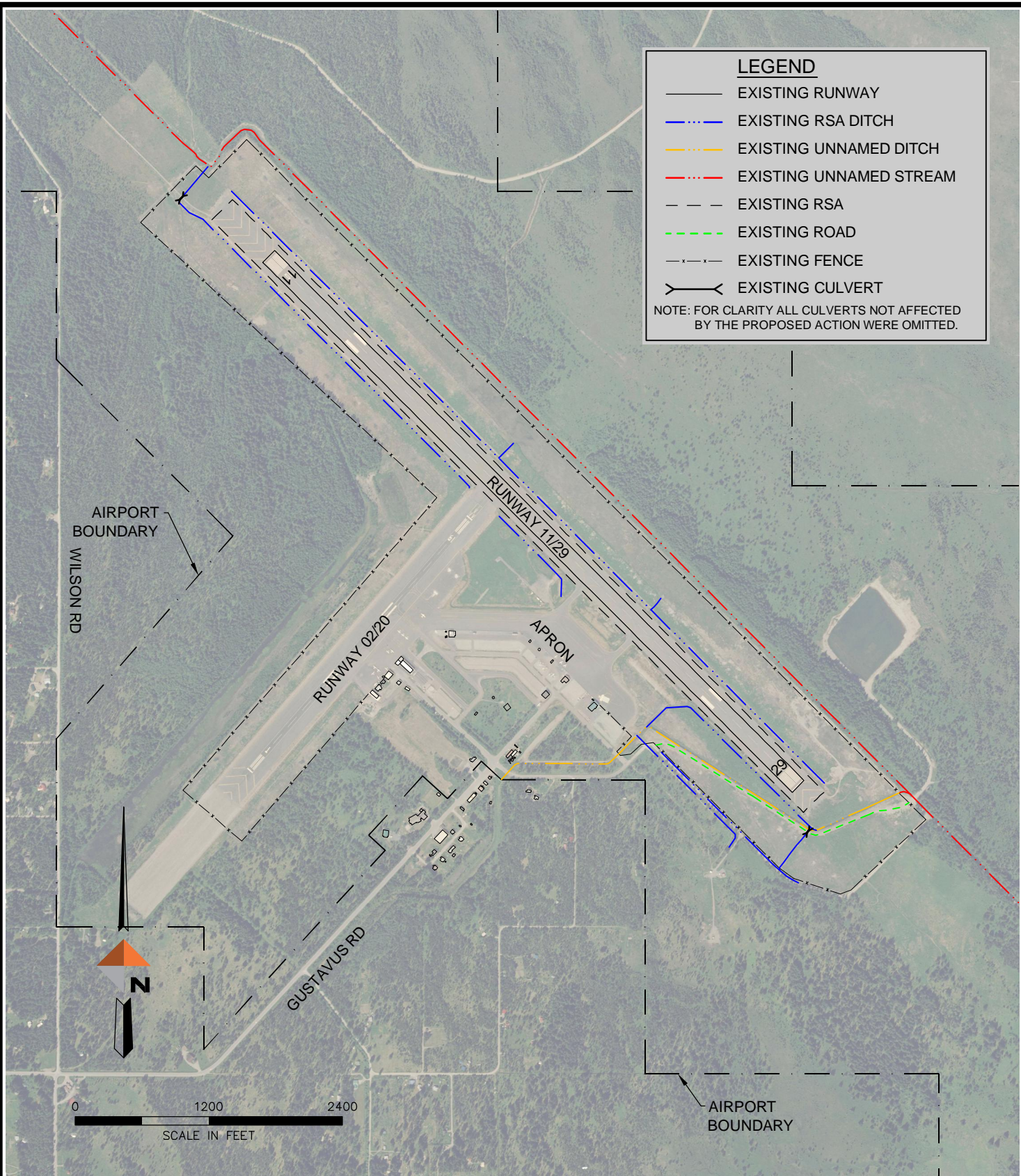
DATE: 12/15/2009

FIGURE 1

LEGEND

- EXISTING RUNWAY
- EXISTING RSA DITCH
- EXISTING UNNAMED DITCH
- EXISTING UNNAMED STREAM
- - - EXISTING RSA
- - - EXISTING ROAD
- - - EXISTING FENCE
- x—x— EXISTING CULVERT

NOTE: FOR CLARITY ALL CULVERTS NOT AFFECTED BY THE PROPOSED ACTION WERE OMITTED.



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EXISTING CONDITIONS

Sec 5,6,8,9

T40S, R 59E

Copper River Meridian, Alaska



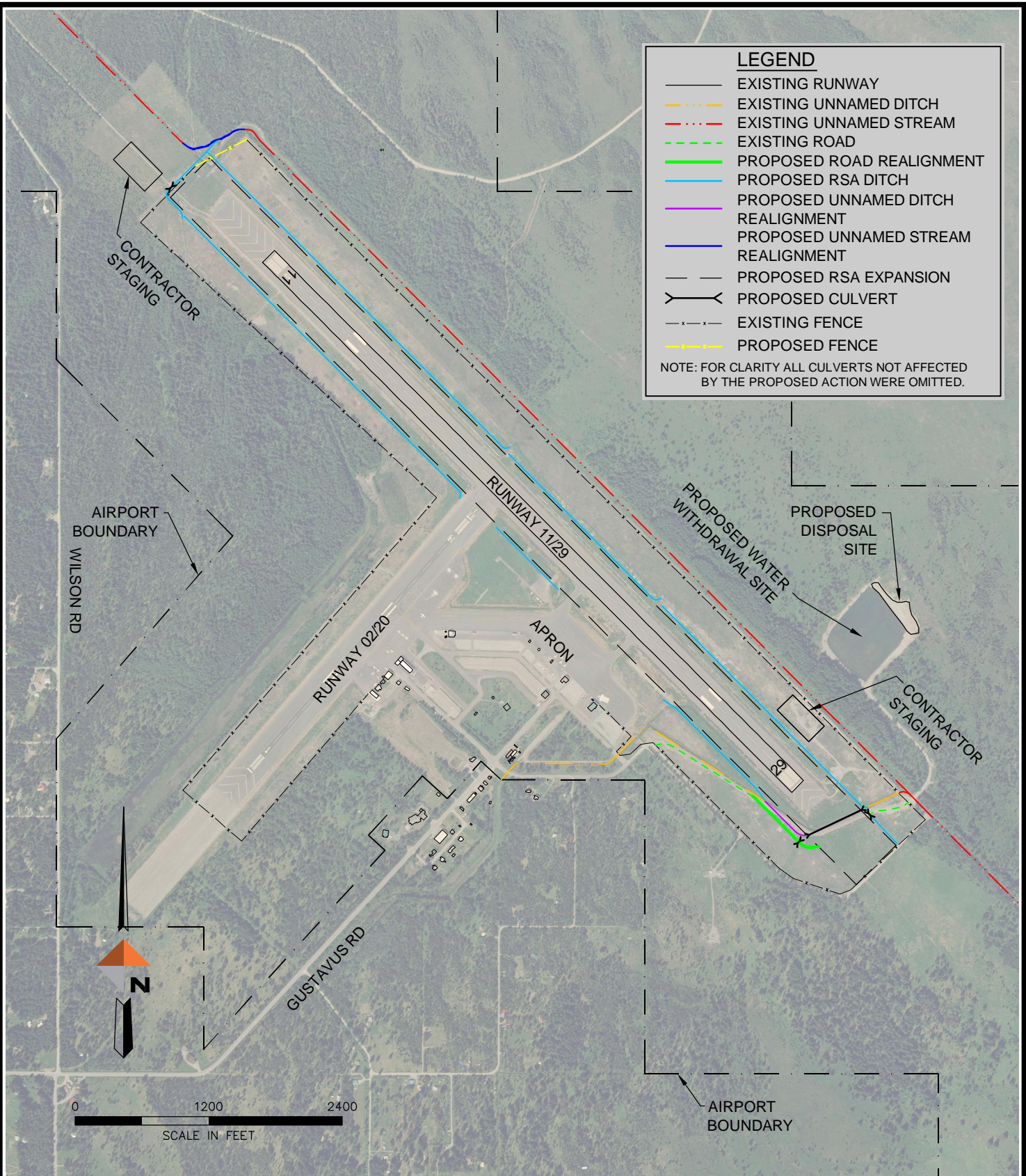
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Gustavus, Alaska

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FIGURE 2



LEGEND

- EXISTING RUNWAY
- - - EXISTING UNNAMED DITCH
- · - · EXISTING UNNAMED STREAM
- - - EXISTING ROAD
- - - PROPOSED ROAD REALIGNMENT
- - - PROPOSED RSA DITCH
- - - PROPOSED UNNAMED DITCH REALIGNMENT
- - - PROPOSED UNNAMED STREAM REALIGNMENT
- - - PROPOSED RSA EXPANSION
- ⌒ PROPOSED CULVERT
- x - x EXISTING FENCE
- - - PROPOSED FENCE

NOTE: FOR CLARITY ALL CULVERTS NOT AFFECTED BY THE PROPOSED ACTION WERE OMITTED.

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PROPOSED ACTION

Sec 5,6,8,9

T40S, R 59E

Copper River Meridian, Alaska



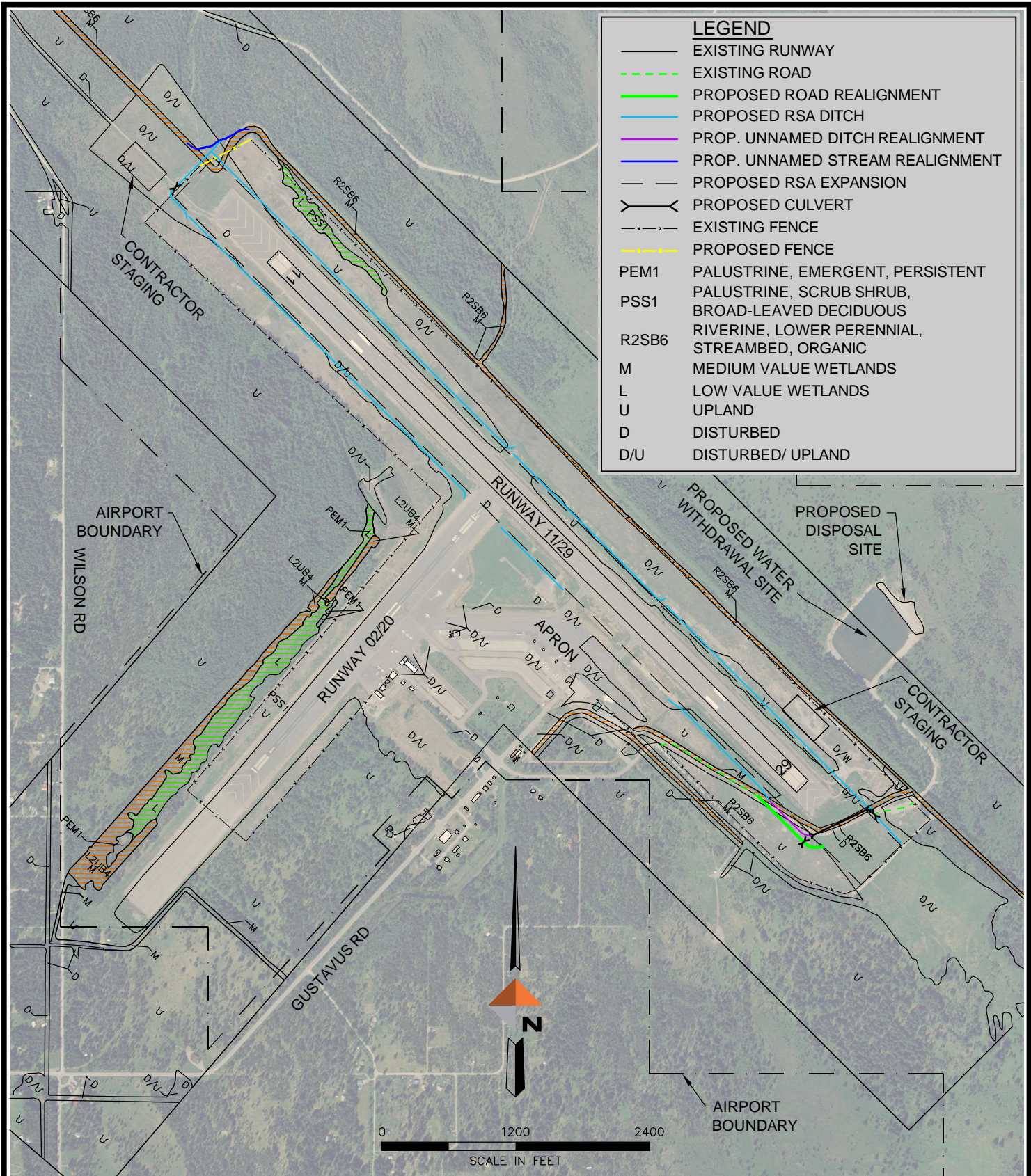
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FIGURE 3



LEGEND

	EXISTING RUNWAY
	EXISTING ROAD
	PROPOSED ROAD REALIGNMENT
	PROPOSED RSA DITCH
	PROP. UNNAMED DITCH REALIGNMENT
	PROP. UNNAMED STREAM REALIGNMENT
	PROPOSED RSA EXPANSION
	PROPOSED CULVERT
	EXISTING FENCE
	PROPOSED FENCE
PEM1	PALUSTRINE, EMERGENT, PERSISTENT
PSS1	PALUSTRINE, SCRUB SHRUB, BROAD-LEAVED DECIDUOUS
R2SB6	RIVERINE, LOWER PERENNIAL, STREAMBED, ORGANIC
M	MEDIUM VALUE WETLANDS
L	LOW VALUE WETLANDS
U	UPLAND
D	DISTURBED
D/U	DISTURBED/ UPLAND

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WETLAND CLASSES

Sec 5,6,8,9

T40S, R 59E

Copper River Meridian, Alaska



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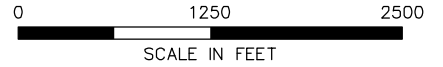
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FIGURE 4

AREAS D & E

R2UB2
FILL IN WATERS OF THE U.S.



EXISTING CULVERT

AREA C

R4SB
SEE SHEET 5
FOR IMPACTS

PEM1D
(NO IMPACTS)

R2UB2
FISH STREAM
(UNNAMED STREAM #144-23-10199)

PROJECT SUMMARY OF IMPACT TO WATERS OF THE U.S.

FOR AREAS A,B,C,D, & E SEE SHEETS 3 AND 5

NOTE: NET STREAM LOSS IS 125 L.F., NET DITCH LOSS IS 360 L.F.

AREA	RUNWAY END	FILL IN THE WATERS OF THE U.S.	COWARDIN CLASSIFICATION	LOSS OR GAIN OF STREAM LENGTH (L.F.)	FILL IN WATERS OF THE U.S. (CY)	FILL IN WATERS OF THE U.S. (ACRES)
A	29	LOSS OF EXISTING DITCH	R5US2	625	2000	0.49
B	29	GAIN OF REALIGNED DITCH	R5US2	+710	N/A	N/A
C	11	LOSS OF EXISTING DITCH	R4SB	445	650	0.34
D	11	LOSS OF EXISTING FISH STREAM (#114-23-10199)	R2UB2	543	1400	0.24
E	11	GAIN OF REALIGNED FISH STREAM (#114-23-10199)	R2UB2	+418	N/A	N/A
TOTAL PROJECT IMPACTS TO THE WATERS OF THE U.S.					4050	1.07

TO ICY PASSAGE

R5US2

AREAS A&B

FILL IN WATERS OF THE U.S. SEE SHEET 3

EXISTING CULVERTS

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Wetlands and Waters of the U.S.

Sec 5,6,8,9

T40S, R 59E

Copper River Meridian, Alaska







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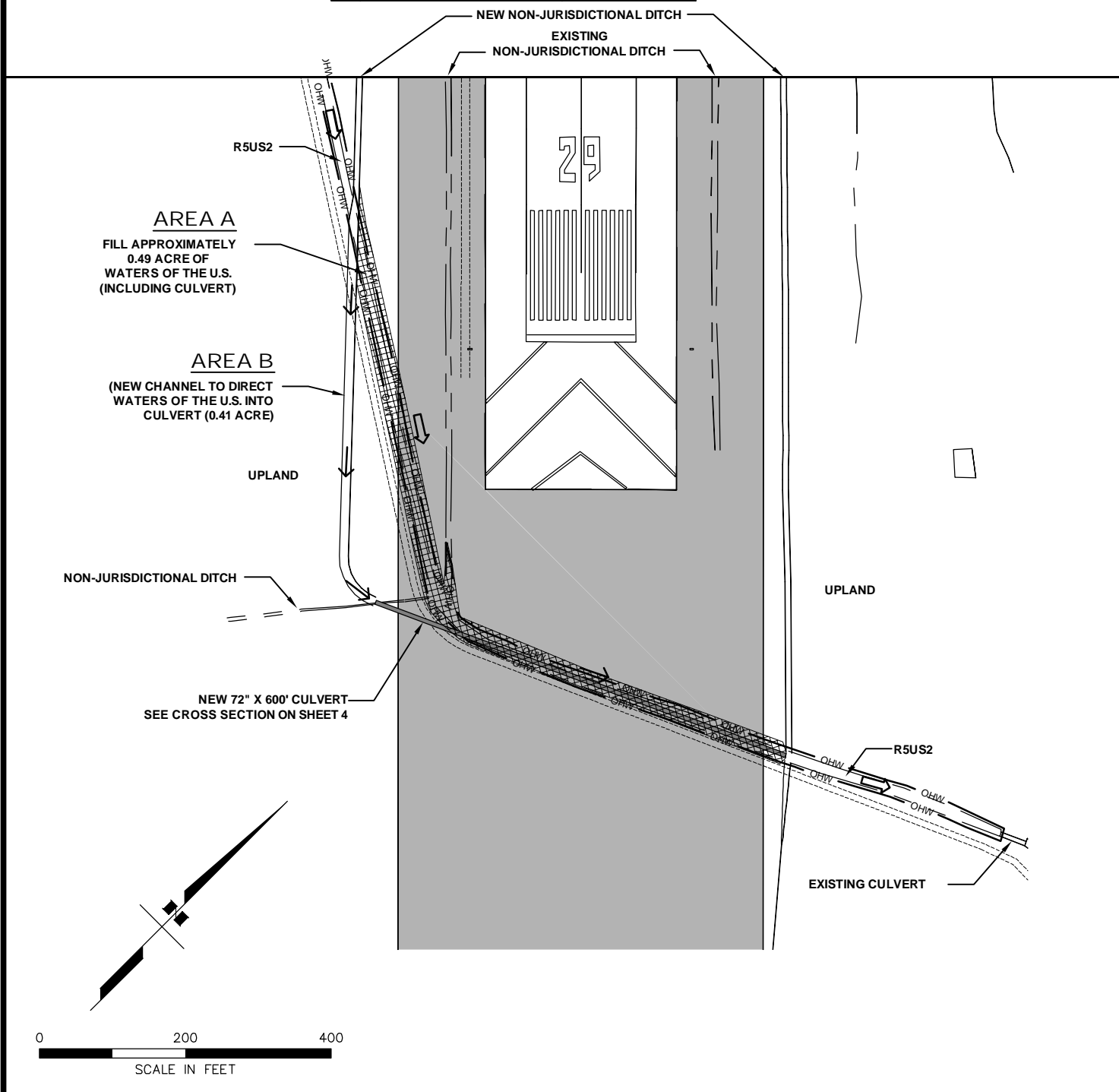
DATE: 02/08/2011

FIGURE 5

-  EXISTING FLOW DIRECTION
-  PROPOSED FLOW DIRECTION
-  FILL IN WATERS OF THE U.S.
-  RSA EXPANSION AREA
- OHW-** ORDINARY HIGH WATER

IMPACTED CHANNEL	
SHEET SUMMARY	
A	FILL IN WATERS OF THE U.S.
	2,000 CY
	0.49 ACRE
625 LINEAR FEET	

CONSTRUCTED CHANNEL	
SHEET SUMMARY	
B	NEW CHANNEL DIRECTING WATERS OF THE U.S.
	+0.41 ACRE
+710 LINEAR FEET	



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 Sec 5,6,8,9
 T40S, R 59E
 Copper River Meridian, Alaska



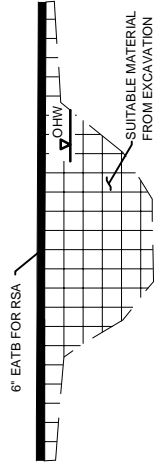
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 GUSTAVUS AIRPORT RUNWAY
 SAFETY AREA IMPROVEMENTS

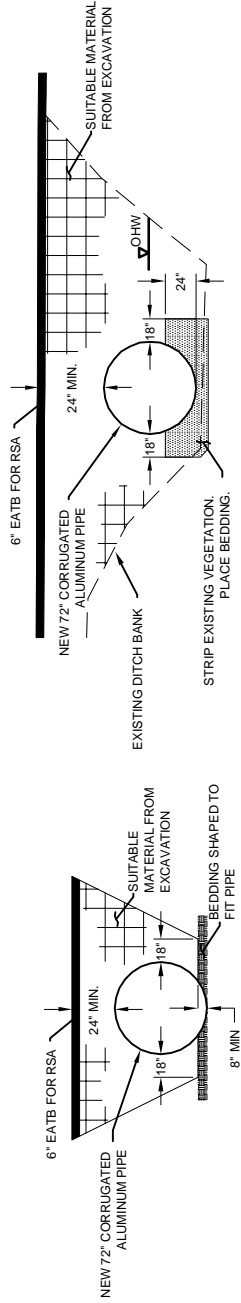
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DATE: 02/08/2011

FIGURE 6

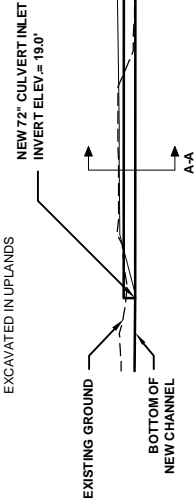


**TYPICAL SECTION OF EXISTING DITCH UNDER
RSA EXPANSION AREA AT RUNWAY END 29**

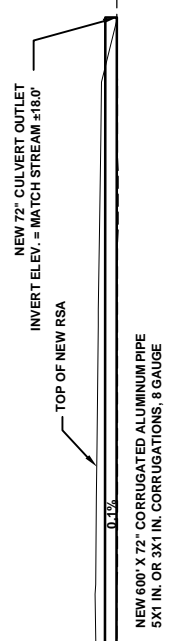


SECTION A-A

NOTE: THIS SECTION
EXCAVATED IN UPLANDS



SECTION B-B



NEW 72" X 600' CULVERT PROFILE AND SECTION

Culvert Profile and Section
Sec 5,6,8,9
T40S, R 59E
Copper River Meridian, Alaska








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PROJECT No 68287
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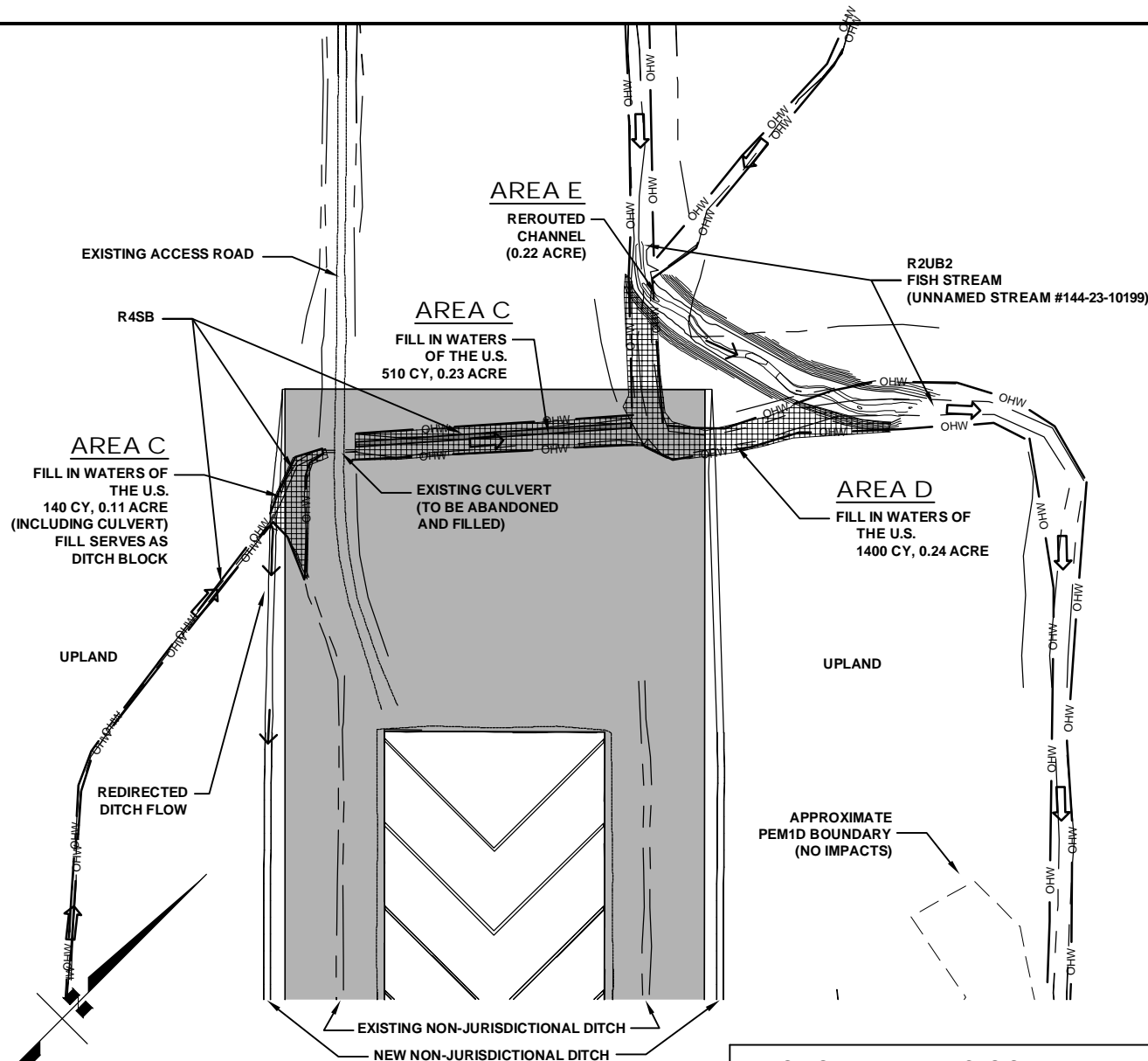
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FIGURE 7

-  EXISTING FLOW DIRECTION
-  PROPOSED FLOW DIRECTION
-  FILL IN WATERS OF THE U.S.
-  RSA EXPANSION AREA
-  -OHW- ORDINARY HIGH WATER

IMPACTED CHANNEL		
SHEET SUMMARY		
C & D	FILL IN WATERS OF THE U.S.	2,050 CY
		0.58 ACRE
		988 LINEAR FEET

CONSTRUCTED CHANNEL	
SHEET SUMMARY	
REROUTED CHANNEL DIRECTING WATERS OF THE U.S.	+0.22 ACRE +418 LINEAR FEET



AREA C
FILL IN WATERS OF THE U.S.
140 CY, 0.11 ACRE
(INCLUDING CULVERT)
FILL SERVES AS DITCH BLOCK

AREA C
FILL IN WATERS OF THE U.S.
510 CY, 0.23 ACRE

AREA E
REROUTED CHANNEL
(0.22 ACRE)

AREA D
FILL IN WATERS OF THE U.S.
1400 CY, 0.24 ACRE



FISH STREAM IMPACTS SUMMARY	
FISH STREAM LENGTH LOST	543 LINEAR FT
FISH STREAM LENGTH GAINED IN REROUTED CHANNEL	418 LINEAR FT
NET FISH STREAM LENGTH LOST	125 LINEAR FT

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FIGURE 8