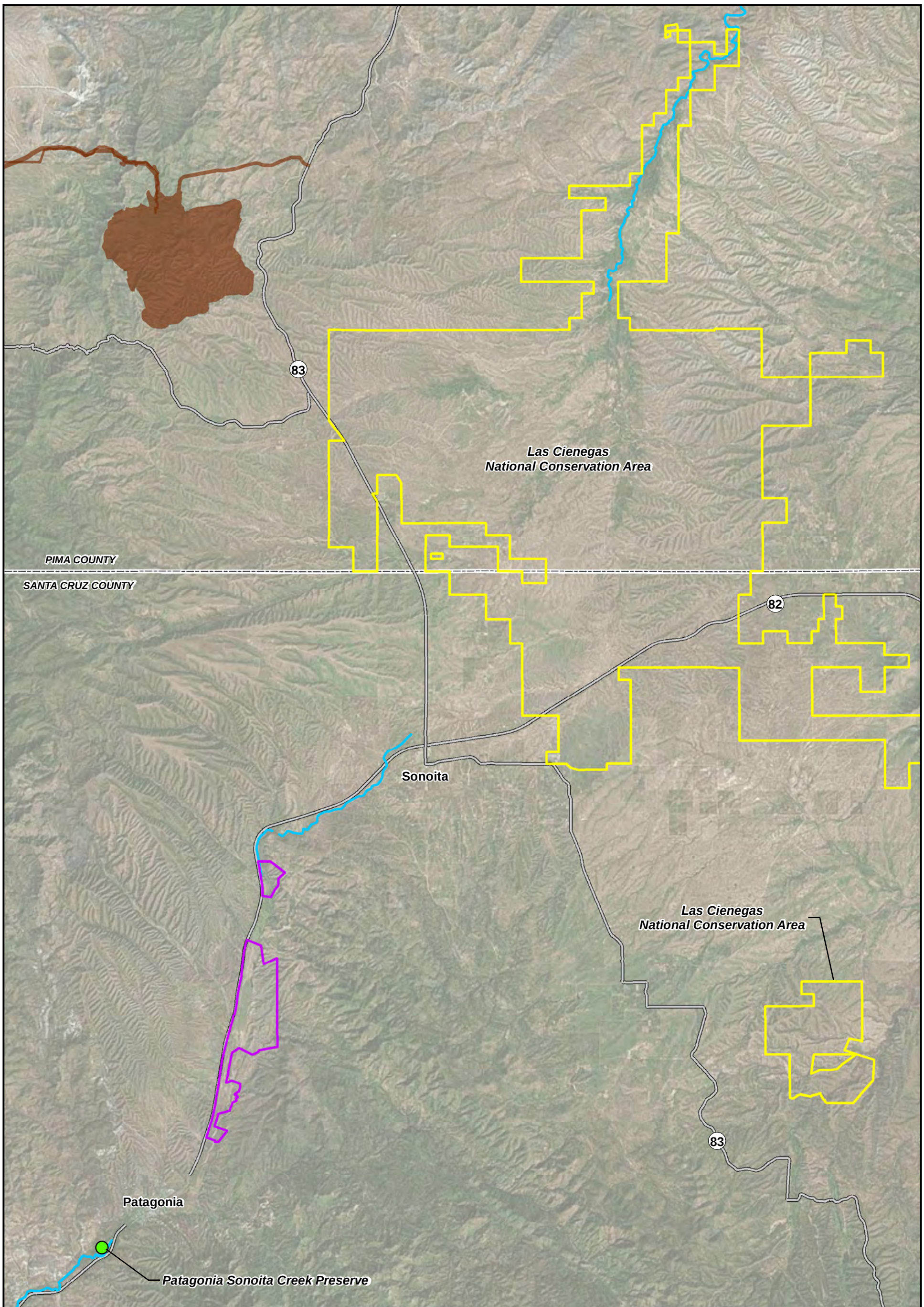


Pima & Santa Cruz Counties, Arizona,
Data Source: ALRIS & BLM
Photo Source: ArcGIS Online NAIP 2015 Orthophoto

Legend

- Rosemont Copper Project
- Sonoita Creek Ranch
- Perennial Stream (ALRIS)

N

0 5,000 10,000 Feet

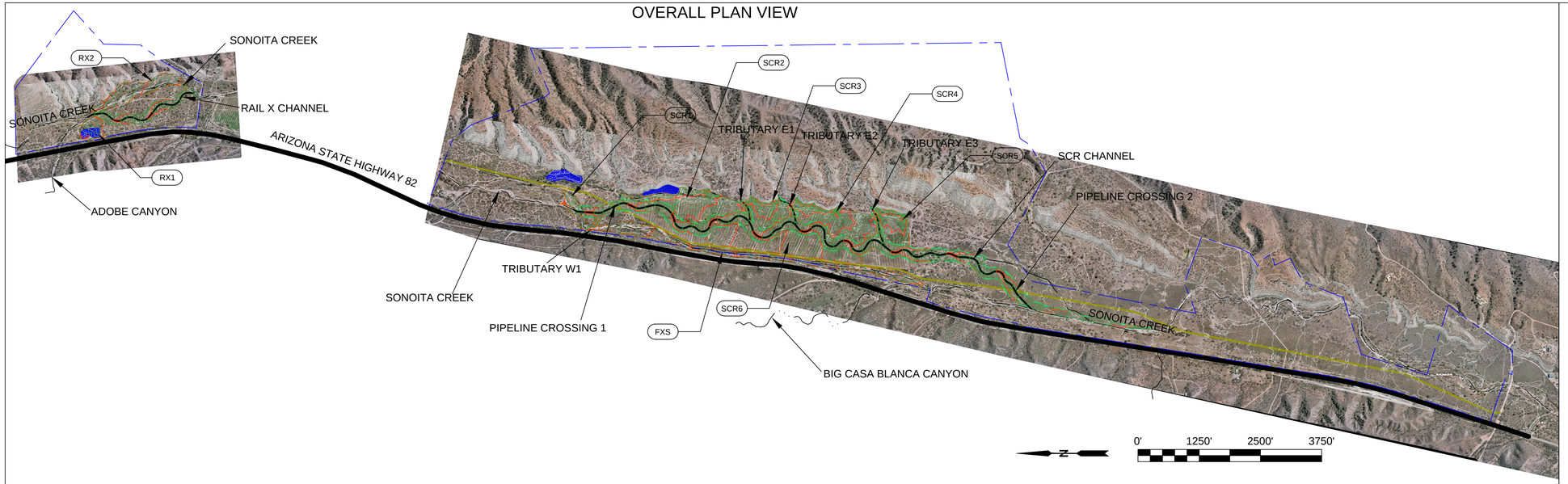
ROSEMONT COPPER COMPANY

Rosemont Project HMMP
September 12, 2017

SONOITA CREEK RANCH SETTING
Figure 7

CORPS FILE NO. SPL-2008-00816-MB

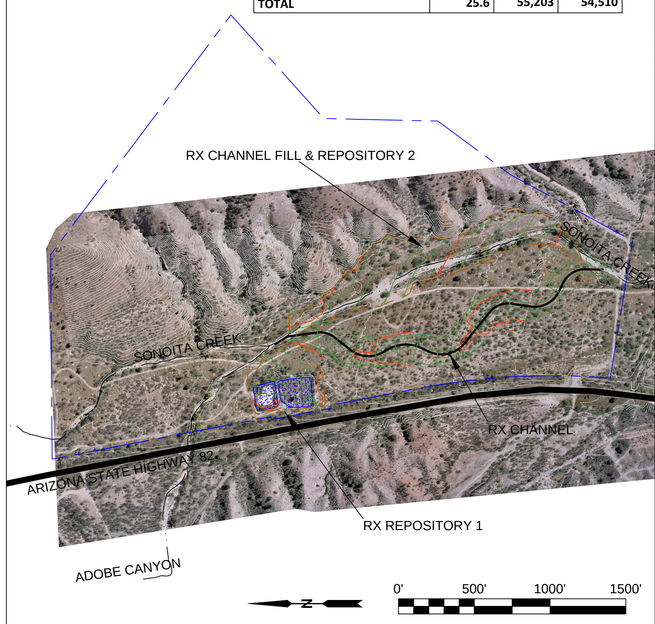
OVERALL PLAN VIEW



- EXISTING INDEX CONTOUR (25-FT INTERVAL)
- EXISTING INTERMEDIATE CONTOUR (5-FT INTERVAL)
- PROPOSED INDEX CONTOUR (25-FT INTERVAL)
- PROPOSED INTERMEDIATE CONTOUR (5-FT INTERVAL)
- EXISTING EPHEMERAL DRAINAGE
- PROPOSED CHANNEL ALIGNMENT
- GAS PIPELINE ALIGNMENT
- CHANNEL EXCAVATION BOUNDARY
- SOIL REPOSITORY/ROAD BOUNDARY
- ARIZONA STATE HIGHWAY 82
- PROPERTY BOUNDARY
- POND
- SCR 1 SOIL REPOSITORY ID

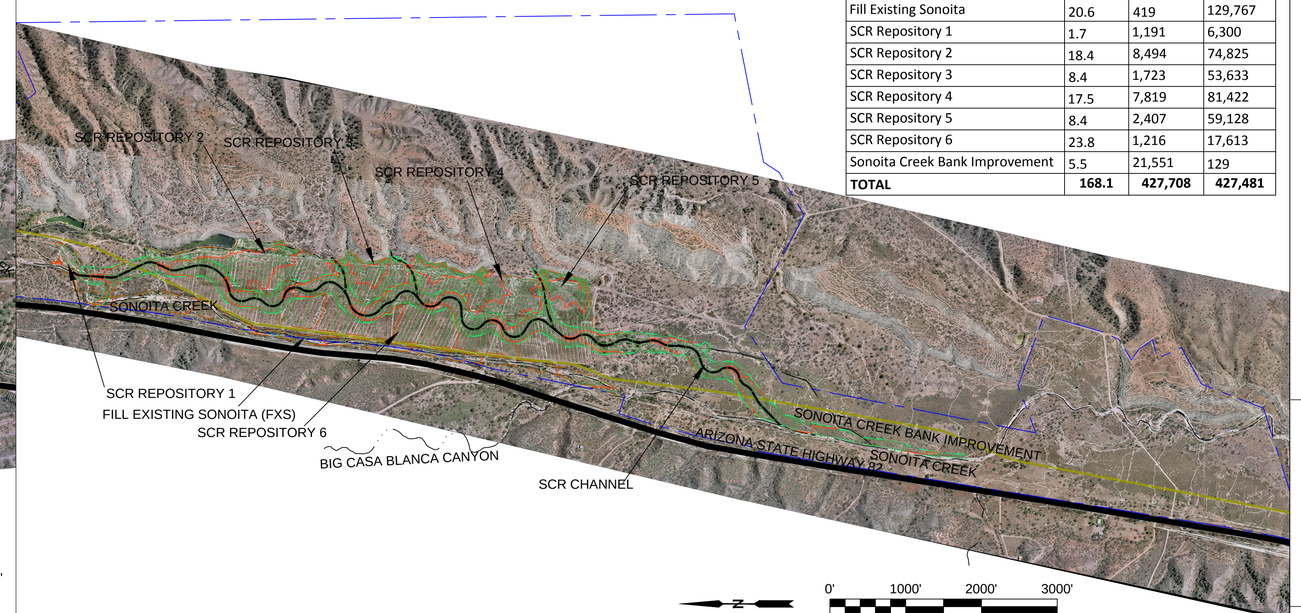
RAIL X CONSTRUCTION VOLUMES & AREAS

Design Feature	Area (ac)	Cut (C.Y.)	Fill (C.Y.)
RX Channel	10.5	52,925	6
RX Repository 1	4.1	2,086	9,359
RX Channel Fill & Repository 2	11.0	192	45,145
TOTAL	**25.6**	**55,203**	**54,510**



SCR CONSTRUCTION VOLUMES & AREAS

Design Feature	Area (ac)	Cut (C.Y.)	Fill (C.Y.)
SCR Channel	59.6	367,885	2,962
Tributary W1	0.9	2,159	1,429
Tributary E1	0.8	3,227	64
Tributary E2	1.0	2,669	208
Tributary E3	1.5	6,948	1
Fill Existing Sonoita	20.6	419	129,767
SCR Repository 1	1.7	1,191	6,300
SCR Repository 2	18.4	8,494	74,825
SCR Repository 3	8.4	1,723	53,633
SCR Repository 4	17.5	7,819	81,422
SCR Repository 5	8.4	2,407	59,128
SCR Repository 6	23.8	1,216	17,613
Sonoita Creek Bank Improvement	5.5	21,551	129
TOTAL	**168.1**	**427,708**	**427,481**



PREPARED BY:

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SEAL

SONOITA CREEK MITIGATION PROJECT

REFERENCES		REFERENCES	
DWG. NO.	TITLE	DWG. NO.	TITLE

REVISIONS						
NO.	BY	CKD	APP	CLIENT	DATE	DESCRIPTION

REVISIONS						
NO.	BY	CKD	APP.	CLIENT	DATE	DESCRIPTION

HUDBAY

ROSEMONT PROJECT

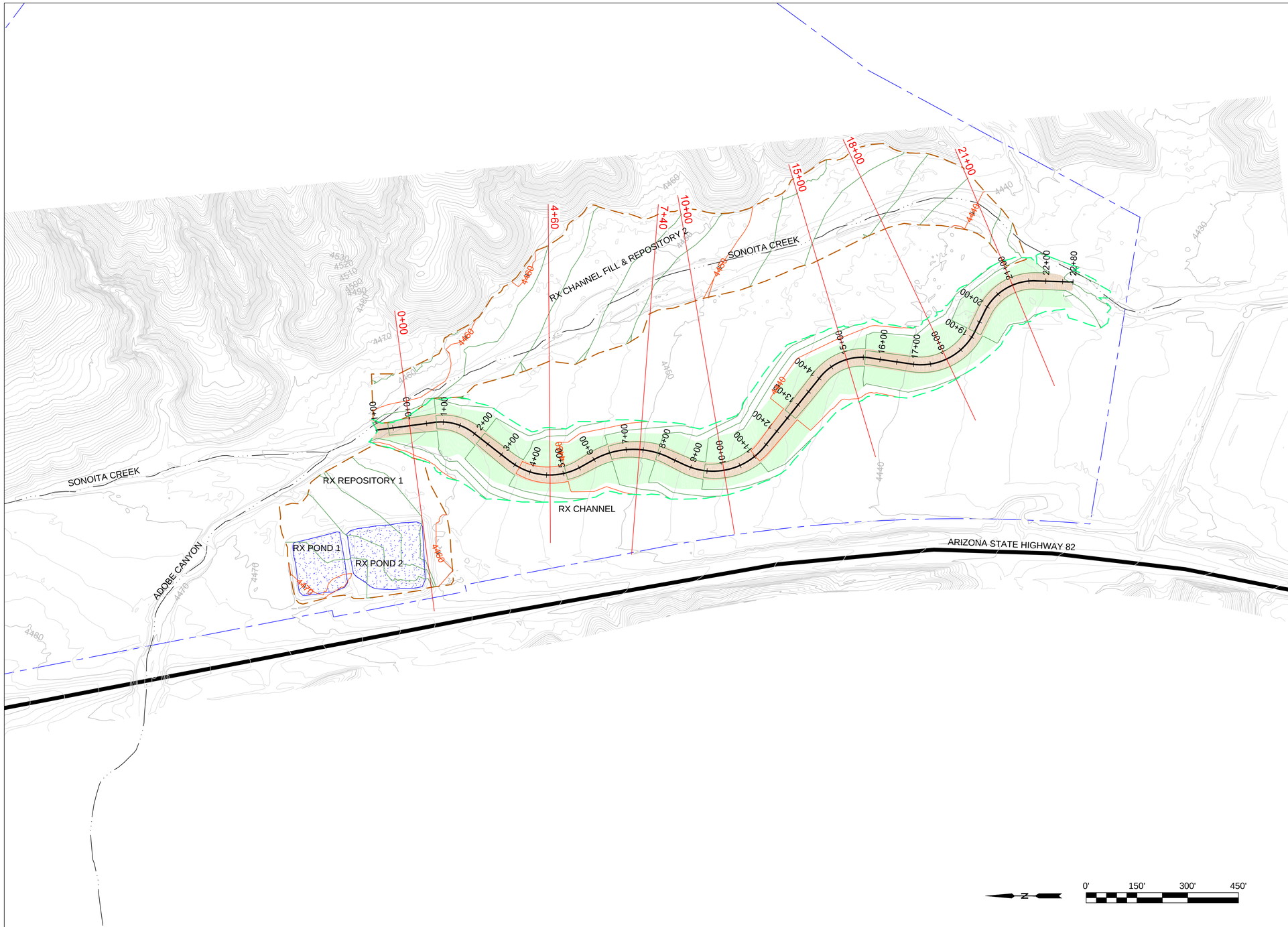
PROJECT OVERVIEW & CONSTRUCTION VOLUMES

NOT FOR CONSTRUCTION

CONTRACTOR DWG. NO. WET 3

DWG. NO.

REVISION | DATE 09/08/17



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EXISTING INTERMEDIATE CONTOUR (2-FT INTERVAL)
PROPOSED INDEX CONTOUR (10-FT INTERVAL)
PROPOSED INTERMEDIATE CONTOUR (2-FT INTERVAL)
EXISTING EPHEMERAL DRAINAGE
PROPOSED CHANNEL ALIGNMENT
0+40 CROSS SECTION
CHANNEL EXCAVATION BOUNDARY
SOIL REPOSITORY BOUNDARY
ARIZONA STATE HIGHWAY 82
PROPERTY BOUNDARY
CHANNEL TERRACE
ACTIVE CHANNEL
POND

NOTES:
SEE RX CHANNEL & REPOSITORY CROSS SECTION SHEETS 2 AND 3 FOR PLOTTED CROSS SECTIONS.

PREPARED BY:

Water & Earth TECHNOLOGIES

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SONOITA CREEK MITIGATION PROJECT

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ROSEMONT PROJECT

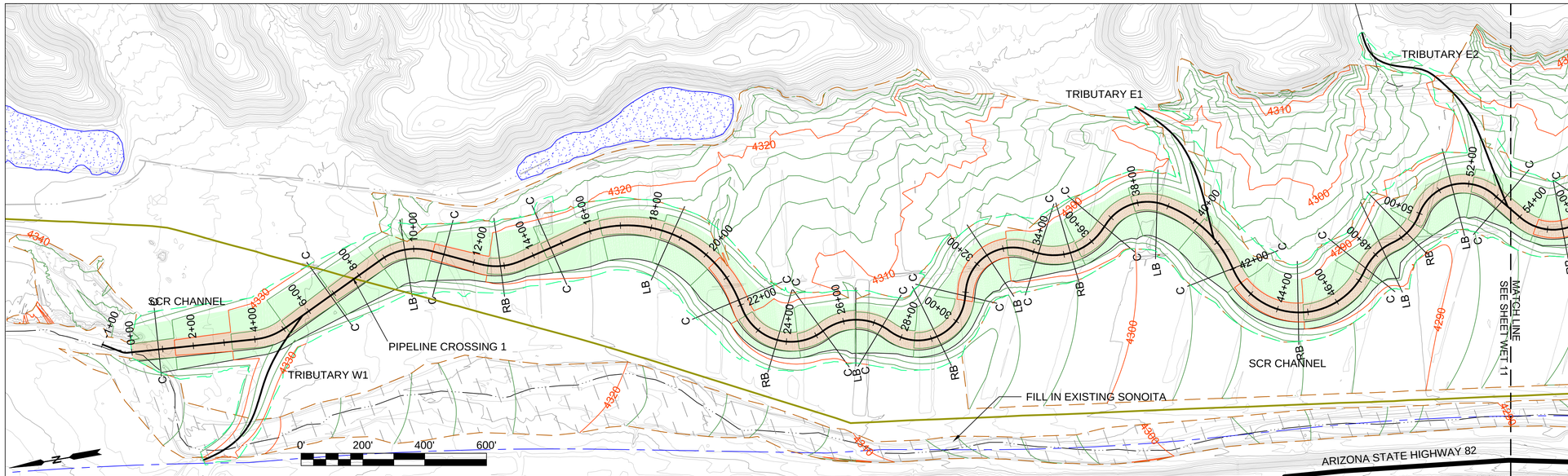
RX CHANNEL
& REPOSITORY CROSS
SECTION SHEET 1

NOT FOR CONSTRUCTION

CONTRACTOR DWG. NO.
WET 7

DWG. NO.

REVISION | DATE
09/08/17



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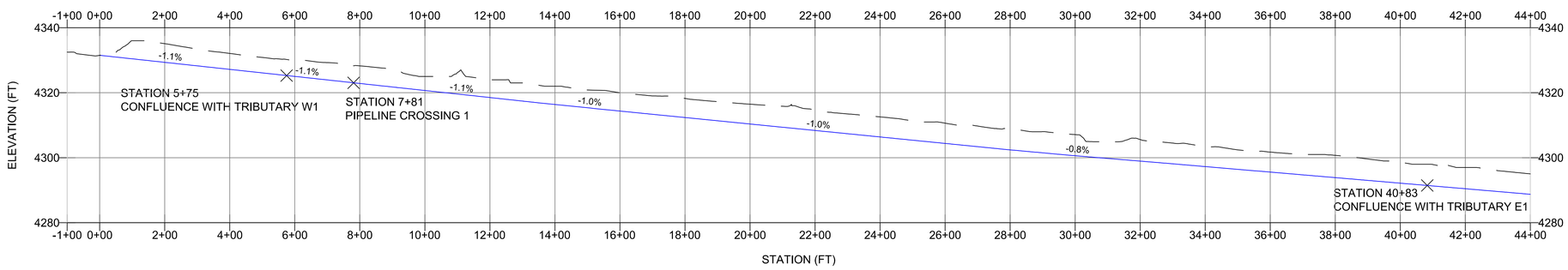
EXISTING INTERMEDIATE CONTOUR (2-FT INTERVAL)
PROPOSED INDEX CONTOUR (10-FT INTERVAL)
PROPOSED INTERMEDIATE CONTOUR (2-FT INTERVAL)
PROPOSED CHANNEL EXCAVATION LIMIT
PROPOSED SOIL REPOSITORY BOUNDARY
PROPOSED CHANNEL ALIGNMENT WITH STATIONS
GAS PIPELINE ALIGNMENT
POND
EXISTING DITCH
EXISTING GRADE PROFILE
PROPOSED FINAL GRADE PROFILE
EXISTING EPHEMERAL DRAINAGE
AZ STATE HIGHWAY 82
PROPERTY BOUNDARY
RB TYPICAL RIGHT BEND CROSS SECTION
C—C TYPICAL CENTERED CROSS SECTION
LB TYPICAL LEFT BEND CROSS SECTION
CHANNEL TERRACE
ACTIVE CHANNEL
FILL IN EXISTING SONOITA CREEK

SCR CHANNEL PROFILE



NOTES

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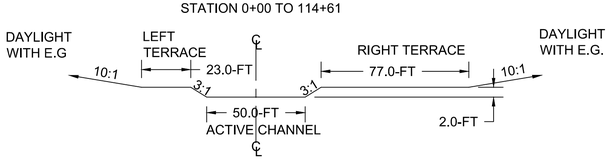
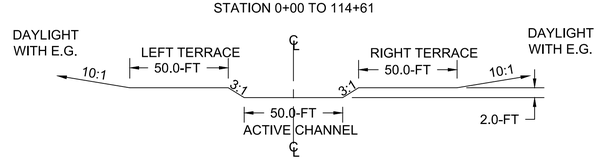
10. WHERE IT BECOMES NECESSARY TO FILL GREATER THAN 1.5-FT DEEP WITHIN THE CHANNEL EXCAVATION BOUNDARY, THEN FILL SHALL BE COMPACTED IN LOOSE LIFTS NOT EXCEEDING 1-FT DEEP AND COMPACTED TO 95% OF A STANDARD PROCTOR (ASTM D698).

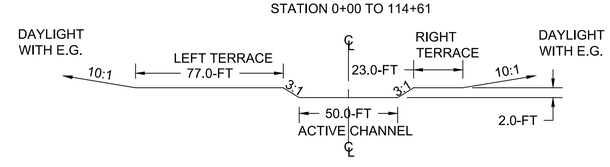
SCR CHANNEL
RIGHT BEND SECTION
STATION 0+00 TO 114+61



SCR CHANNEL
CENTERED SECTION
STATION 0+00 TO 114+61



SCR CHANNEL
LEFT BEND SECTION
STATION 0+00 TO 114+61



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Fort Collins, CO 80524
(970) 225-6080
www.wetec.us

SEAL

SONOITA CREEK MITIGATION PROJECT

REFERENCES		REFERENCES	
DWG. NO.	TITLE	DWG. NO.	TITLE

REVISIONS						
NO.	BY	CKD	APP	CLIENT	DATE	DESCRIPTION

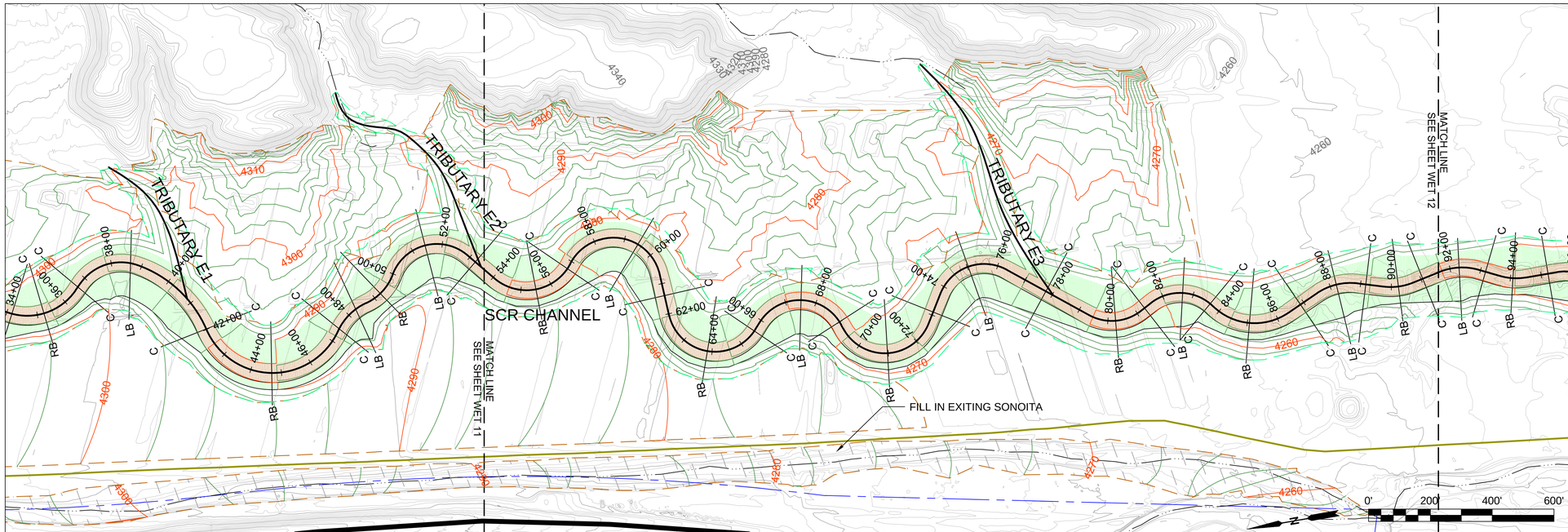
REVISIONS						
NO.	BY	CKD	APP.	CLIENT	DATE	DESCRIPTION

HUDBAY
ROSEMONT PROJECT

SCR CHANNEL
PLAN & PROFILE WITH TYPICAL CHANNEL CROSS SECTIONS 1

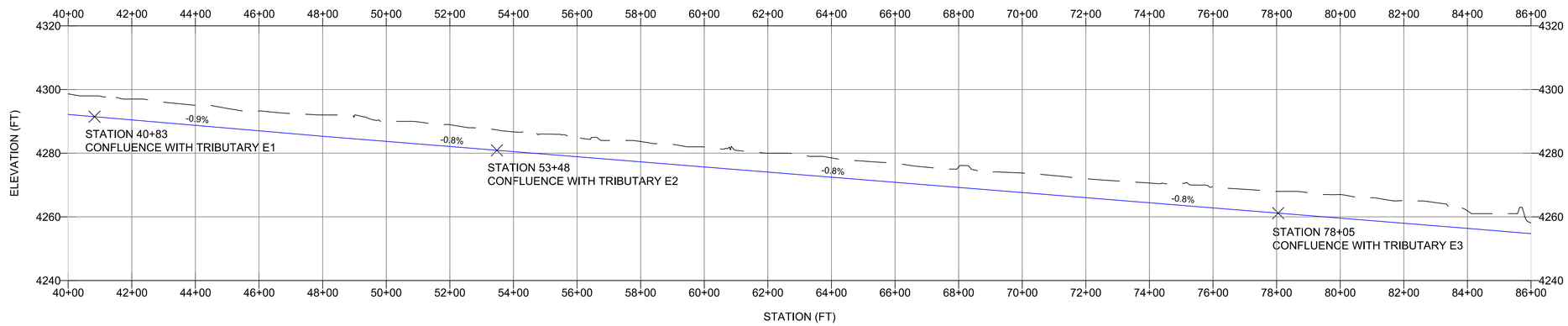
NOT FOR CONSTRUCTION

CONTRACTOR DWG. NO. WET 10
DWG. NO.
REVISION
DATE 09/08/17



EXISTING INDEX CONTOUR (10-FT INTERVAL)
EXISTING INTERMEDIATE CONTOUR (2-FT INTERVAL)
PROPOSED INDEX CONTOUR (10-FT INTERVAL)
PROPOSED INTERMEDIATE CONTOUR (2-FT INTERVAL)
PROPOSED CHANNEL EXCAVATION LIMIT
PROPOSED SOIL REPOSITORY BOUNDARY
PROPOSED CHANNEL ALIGNMENT WITH STATIONS
GAS PIPELINE ALIGNMENT
EXISTING GRADE PROFILE
PROPOSED FINAL GRADE PROFILE
EXISTING EPHEMERAL DRAINAGE
AZ STATE HIGHWAY 82
PROPERTY BOUNDARY
RB TYPICAL RIGHT BEND CROSS SECTION
C—C TYPICAL CENTERED CROSS SECTION
LB TYPICAL LEFT BEND CROSS SECTION
CHANNEL TERRACE
ACTIVE CHANNEL
FILL IN EXISTING SONOITA CREEK

SCR CHANNEL PROFILE



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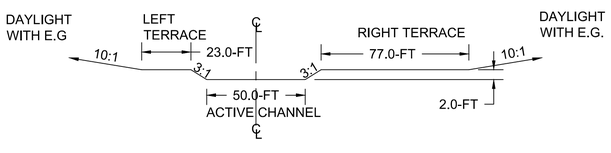
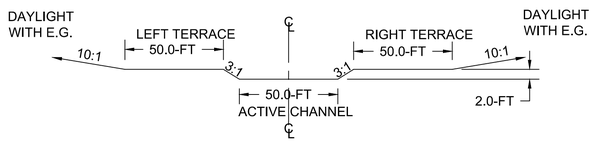
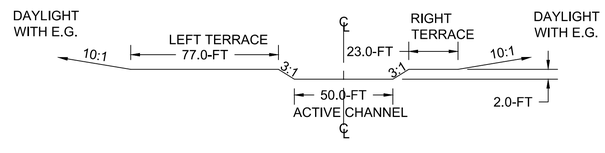
SCR CHANNEL
RIGHT BEND SECTION
STATION 0+00 TO 114+61



SCR CHANNEL
CENTERED SECTION
STATION 0+00 TO 114+61



SCR CHANNEL
LEFT BEND SECTION
STATION 0+00 TO 114+61



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SEAL

SONOITA CREEK MITIGATION PROJECT

REFERENCES		REFERENCES	
DWG. NO.	TITLE	DWG. NO.	TITLE

REVISIONS						
NO.	BY	CKD	APP	CLIENT	DATE	DESCRIPTION

REVISIONS						
NO.	BY	CKD	APP.	CLIENT	DATE	DESCRIPTION

HUDBAY

ROSEMONT PROJECT

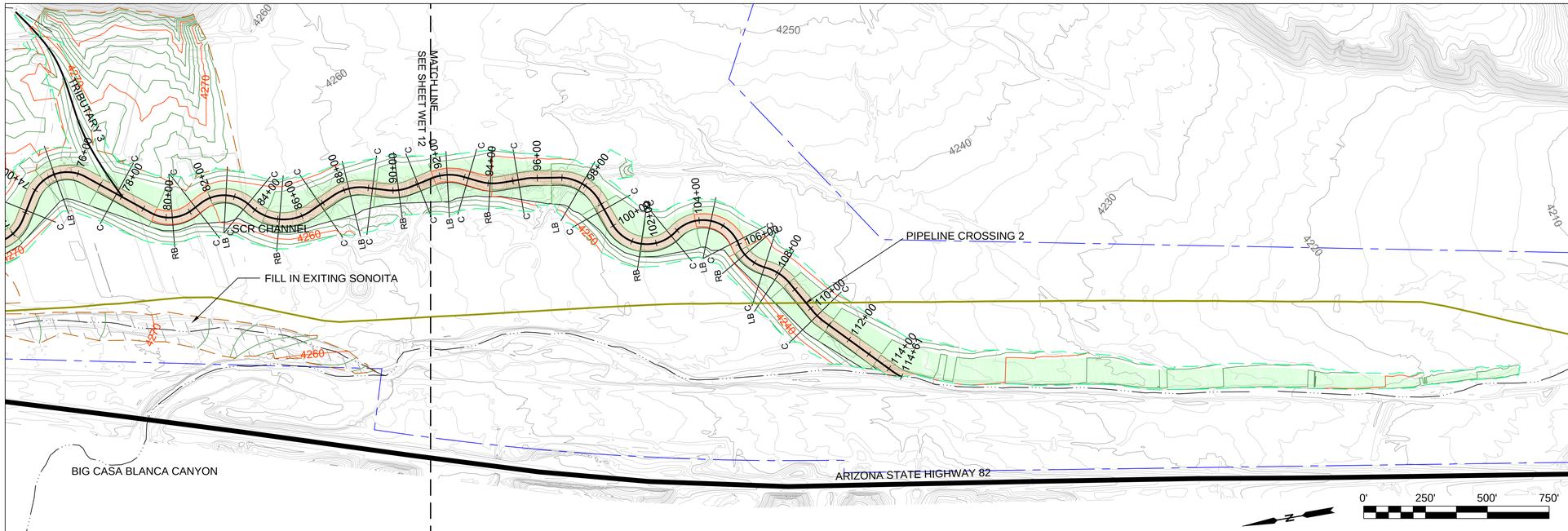
SCR CHANNEL
PLAN & PROFILE WITH TYPICAL CHANNEL CROSS SECTIONS 2

NOT FOR CONSTRUCTION

CONTRACTOR DWG. NO. WET 11

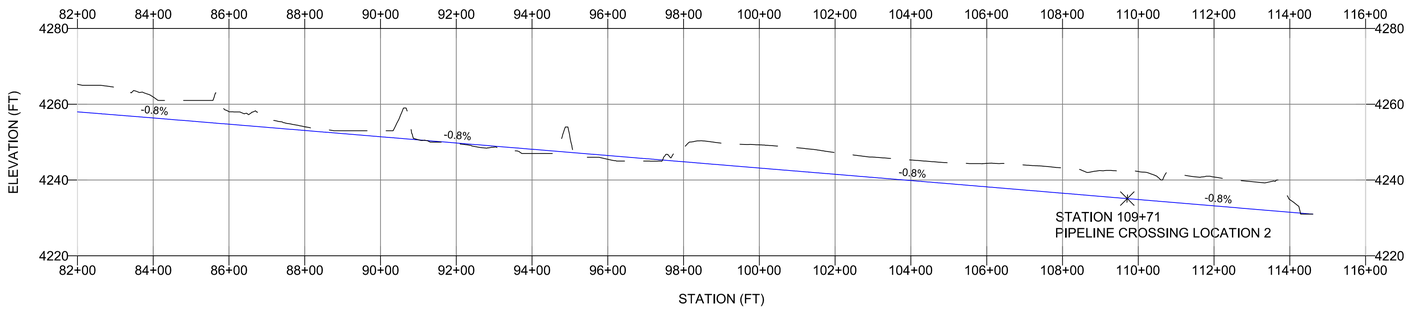
DWG. NO.

REVISION | DATE 09/08/17



EXISTING INDEX CONTOUR (10-FT INTERVAL)
EXISTING INTERMEDIATE CONTOUR (2-FT INTERVAL)
PROPOSED INDEX CONTOUR (10-FT INTERVAL)
PROPOSED INTERMEDIATE CONTOUR (2-FT INTERVAL)
PROPOSED CHANNEL EXCAVATION LIMIT
PROPOSED SOIL REPOSITORY BOUNDARY
PROPOSED CHANNEL ALIGNMENT WITH STATIONS
GAS PIPELINE ALIGNMENT
EXISTING GRADE PROFILE
PROPOSED FINAL GRADE PROFILE
EXISTING EPHEMERAL DRAINAGE
AZ STATE HIGHWAY 82
PROPERTY BOUNDARY
RB TYPICAL RIGHT BEND CROSS SECTION
C—C TYPICAL CENTERED CROSS SECTION
LB TYPICAL LEFT BEND CROSS SECTION
CHANNEL TERRACE
ACTIVE CHANNEL
FILL IN EXISTING SONOITA CREEK

SCR CHANNEL PROFILE



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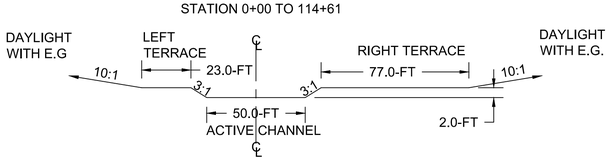
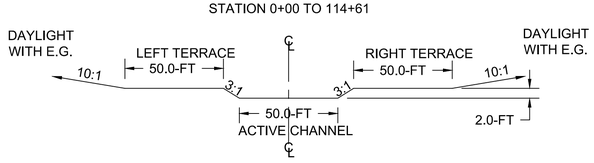
SCR CHANNEL
RIGHT BEND SECTION
STATION 0+00 TO 114+61



SCR CHANNEL
CENTERED SECTION
STATION 0+00 TO 114+61



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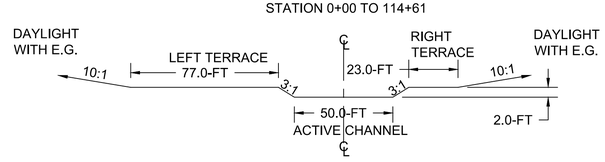
LEFT BEND SECTION
STATION 0+00 TO 114+61



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SONOITA CREEK MITIGATION PROJECT

REFERENCES		REFERENCES	
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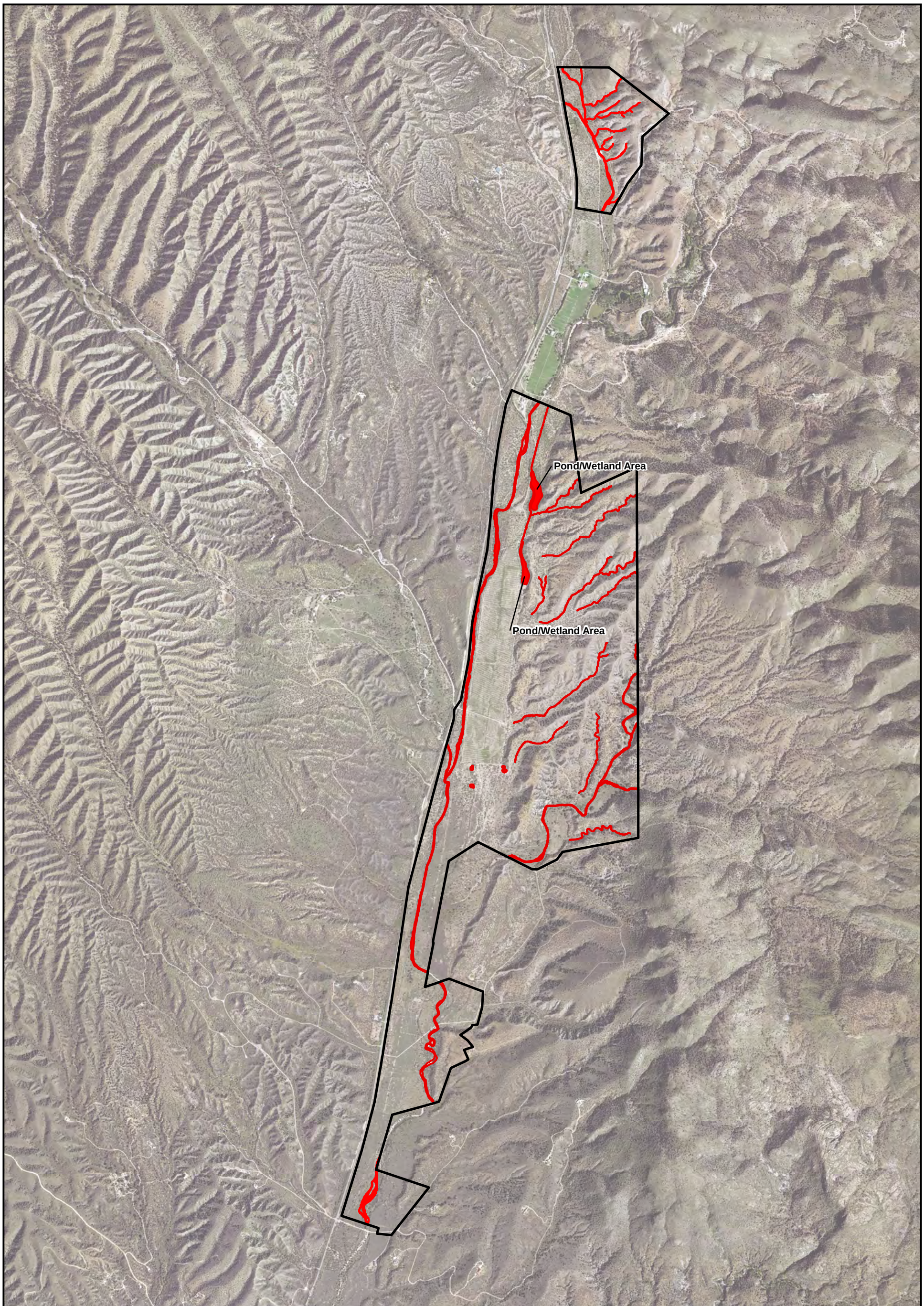
REVISIONS						
NO.	BY	CKD	APP.	CLIENT	DATE	DESCRIPTION

HUDBAY
ROSEMONT PROJECT

SCR CHANNEL
PLAN & PROFILE WITH TYPICAL
CHANNEL CROSS SECTIONS 3

NOT FOR CONSTRUCTION

CONTRACTOR DWG. NO. WET 12
DWG. NO.
REVISION
DATE 09/08/17



T21S, R16E, Portions of Sections 3, 4, 9, 16, 20, 21, 28, 29, 32, & 33.
Santa Cruz County, Arizona
Photo Source: 2015 USDA NAIP Orthophoto

Legend

- Sonoita Creek Ranch
- Potential Waters of the United States

N

0 1,200 2,400 Feet

ROSEMONT COPPER COMPANY

Rosemont Project HMMP
September 12, 2017

SONOITA CREEK RANCH
EXISTING CONDITIONS
Figure 10

CORPS FILE NO. SPL-2008-00816-MB