
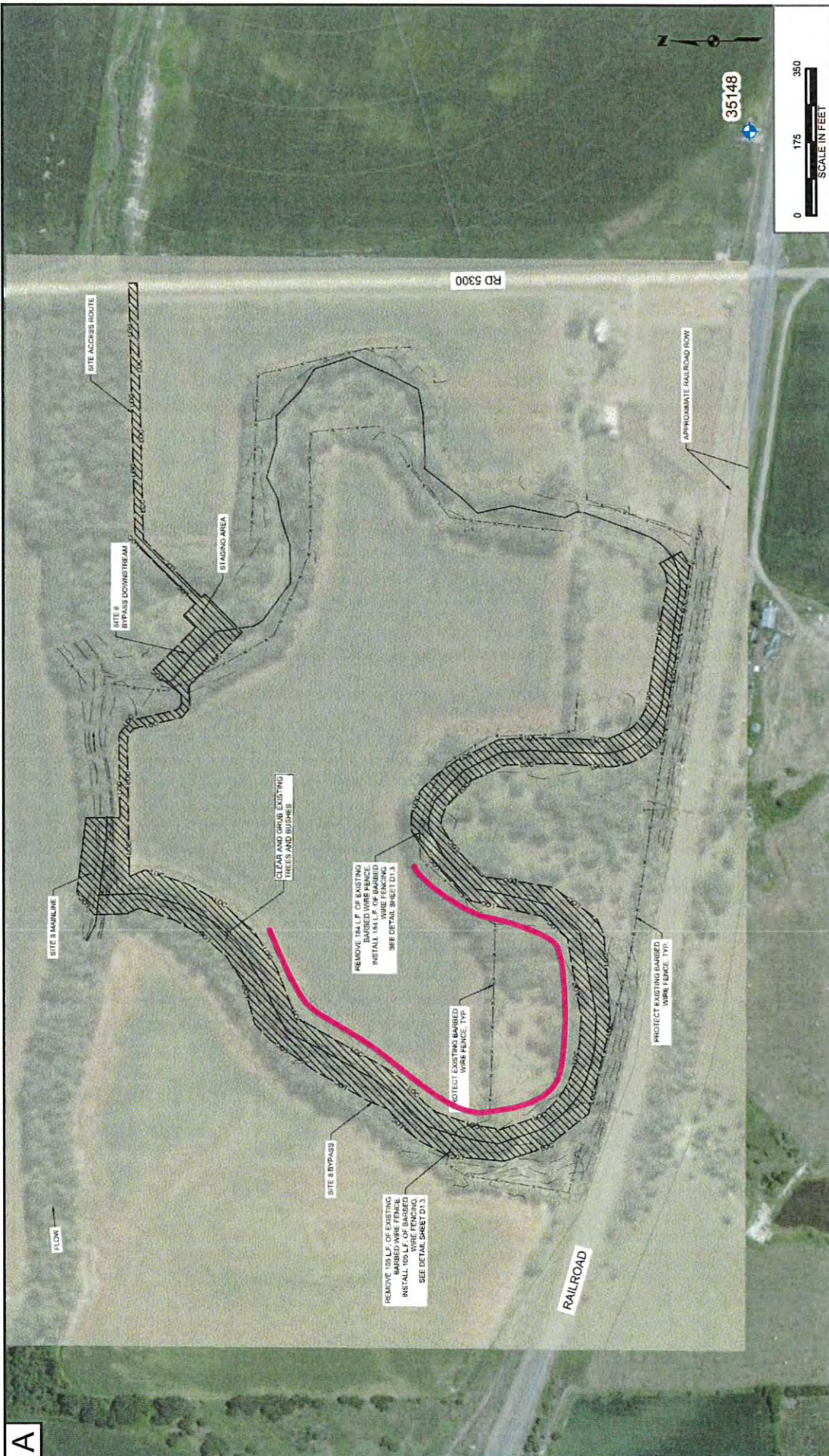


ITEM # 7

ENGINEER'S OPINION OF PROBABLE COST - 90% DESIGN					
Project Name: Little Blue NRD Recharge Projects Final Design and Construction			Date Prepared: October 3, 2018		
Project Location: Davenport, NE					
JEO Project No. 180304.00					
ESTIMATE OF QUANTITIES					
Item #	Description	Unit	Quantity	Unit Price	Total
<b>GROUP A - SITE 1C</b>					
1.	Mobilization	LS	1	\$5,000.00	\$5,000
2.	Clearing and Grubbing	LS	1	\$1,000.00	\$1,000
3.	Topsoil Conservation	LS	1	\$500.00	\$500
4.	Earthwork Measured in Embankment (Established Quantity)	CY	143	\$15.00	\$2,145
5.	Excavation, Established Quantity	CY	633	\$15.00	\$9,495
6.	Seeding, Type A	ACRE	0.1	\$5,000.00	\$500
7.	Seeding, Type B	ACRE	0.3	\$5,000.00	\$1,500
8.	Rock Riprap, Gradation 2	TONS	802	\$75.00	\$60,150
9.	Straw Wattle	LF	130	\$3.00	\$390
Construction Subtotal Site 1C					\$80,680
<b>Total Opinion of Construction Cost - Group A</b>					<b>\$80,680</b>
<b>GROUP B - SITE 1B</b>					
1.	Mobilization	LS	1	\$9,000.00	\$9,000
2.	Clearing and Grubbing	LS	1	\$5,000.00	\$5,000
3.	Topsoil Conservation	LS	1	\$500.00	\$500
4.	Earthwork Measured in Embankment (Established Quantity)	CY	48	\$15.00	\$720
5.	Excavation, Established Quantity	CY	5,227	\$15.00	\$78,406
6.	Seeding, Type A	ACRE	0.4	\$5,000.00	\$1,850
7.	Seeding, Type B	ACRE	2.2	\$5,000.00	\$11,150
8.	Rock Riprap, Gradation 1	TONS	72	\$75.00	\$5,400
9.	36" CMP Culvert	LF	186	\$64.00	\$11,904
10.	36" CMP Flared End Section	EA	2	\$500.00	\$1,000
11.	36" CMP Flap Gate	EA	2	\$380.00	\$760
12.	Gravel Surface Course	TONS	84	\$30.00	\$2,532
13.	Straw Wattle	LF	460	\$3.00	\$1,380
Construction Subtotal Site 1B					\$129,610
<b>Total Opinion of Construction Cost - Group B</b>					<b>\$129,610</b>
<b>GROUP C - SITE 8</b>					
1.	Mobilization	LS	1	\$15,000.00	\$15,000
2.	Clearing and Grubbing	LS	1	\$5,000.00	\$5,000
3.	Topsoil Conservation	LS	1	\$500.00	\$500
4.	Earthwork Measured in Embankment (Established Quantity)	CY	289	\$15.00	\$4,335
5.	Excavation, Established Quantity	CY	3,465	\$15.00	\$51,975
6.	Seeding, Type A	ACRE	0.4	\$5,000.00	\$2,200
7.	Seeding, Type B	ACRE	6.2	\$5,000.00	\$31,100
8.	Rock Riprap, Gradation 1	TONS	72	\$75.00	\$5,400
9.	Rock Riprap, Gradation 2	TONS	472	\$75.00	\$35,400
10.	36" CMP Culvert	LF	102	\$64.00	\$6,528
11.	36" CMP Flared End Section	LF	2	\$500.00	\$1,000
12.	36" CMP Flap Gate	EA	2	\$380.00	\$760
13.	Gravel Surface Course	TONS	53	\$30.00	\$1,579
14.	Straw Wattle	LF	700	\$3.00	\$2,100
15.	Remove Fence	LF	289	\$13.00	\$3,757
16.	Barbed Wire Fence, 4 Strands	LF	394	\$6.00	\$2,364
Construction Subtotal Site 8					\$169,000
<b>Total Opinion of Construction Cost - Group C</b>					<b>\$169,000</b>
<b>GROUP D - SITE 36</b>					
1.	Mobilization	LS	1	\$6,500.00	\$6,500
2.	Clearing and Grubbing	LS	1	\$5,000.00	\$5,800
3.	Topsoil Conservation	LS	1	\$1,000.00	\$1,000
4.	Earthwork Measured in Embankment (Established Quantity)	CY	237	\$15.00	\$3,555
5.	Excavation, Established Quantity	CY	507	\$15.00	\$7,605
6.	Seeding, Type A	ACRE	0.3	\$5,000.00	\$1,600
7.	Seeding, Type B	ACRE	1.8	\$5,000.00	\$9,200
8.	Straw Wattle	LF	330	\$3.00	\$990
9.	Rock Riprap, Gradation 2	TONS	604	\$75.00	\$45,300
10.	36" CMP Culvert	LF	118	\$64.00	\$7,552
11.	Remove Fence	LF	20	\$13.00	\$260
12.	Barbed Wire Fence, 4 Strands	LF	20	\$6.00	\$120
Construction Subtotal Site 36					\$89,490
<b>Total Opinion of Construction Cost - Group D</b>					<b>\$89,490</b>
Construction Subtotal - All Groups					\$468,780
<b>Total Opinion of Construction Cost - All Groups</b>					<b>\$468,780</b>

JEO Consulting Group Inc.'s (JEO) Opinions of Probable Cost provided for herein are to be made on the basis of JEO's experience and qualifications and represent JEO's best judgment. However, since JEO has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, JEO cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from Opinions of Probable Cost prepared by JEO. Prepared 10/3/2018



A

Well ID 214039  
 Proposed Well Install Area  
 (Dependent on Site Access)

THE ORIGINAL VERSION OF THIS DRAWING IS IN COLOR. BLACK AND WHITE COPIES MAY NOT ACCURATELY DEPICT CERTAIN INFORMATION.  
 NOTICE: THIS DRAWING HAS BEEN PREPARED UNDER THE DIRECTION OF A PROFESSIONAL AND SHOULD NOT BE ALTERED WITHOUT THE WRITTEN CONSENT OF WSP USA INC.



WSP USA INC.  
 8 PINE TREE DRIVE  
 ST PAUL, MN 55112  
 TEL: +1 612 489 4468

Drawn: 11/27/2018  
 Revision: 1/16/2019  
 Source: Esri, DeLorme, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, AeroGRID, IGN, and the GIS User Community

GROUNDWATER RECHARGE  
 AND OXBOW RECONNECTION PROJECT  
 PREPARED FOR  
 LITTLE BLUE NATURAL RESOURCES DISTRICT

FIGURE 1

SITE 8  
 PROPOSED AREA FOR MONITORING WELL INSTALL

0 175 350  
 SCALE IN FEET

35148

RD 5300

RAILROAD

APPROXIMATE RAILROAD ROW

SITE ACCESS ROUTE

SITE 8 BYPASS DOWNSTREAM

STAGING AREA

CLEAR AND GRUB EXISTING  
 TREES AND BUSHES

REMOVE 184 L.F. OF EXISTING  
 BARBED WIRE FENCE  
 INSTALL 184 L.F. OF BARBED  
 WIRE FENCING  
 SEE DETAIL SHEET D1.3

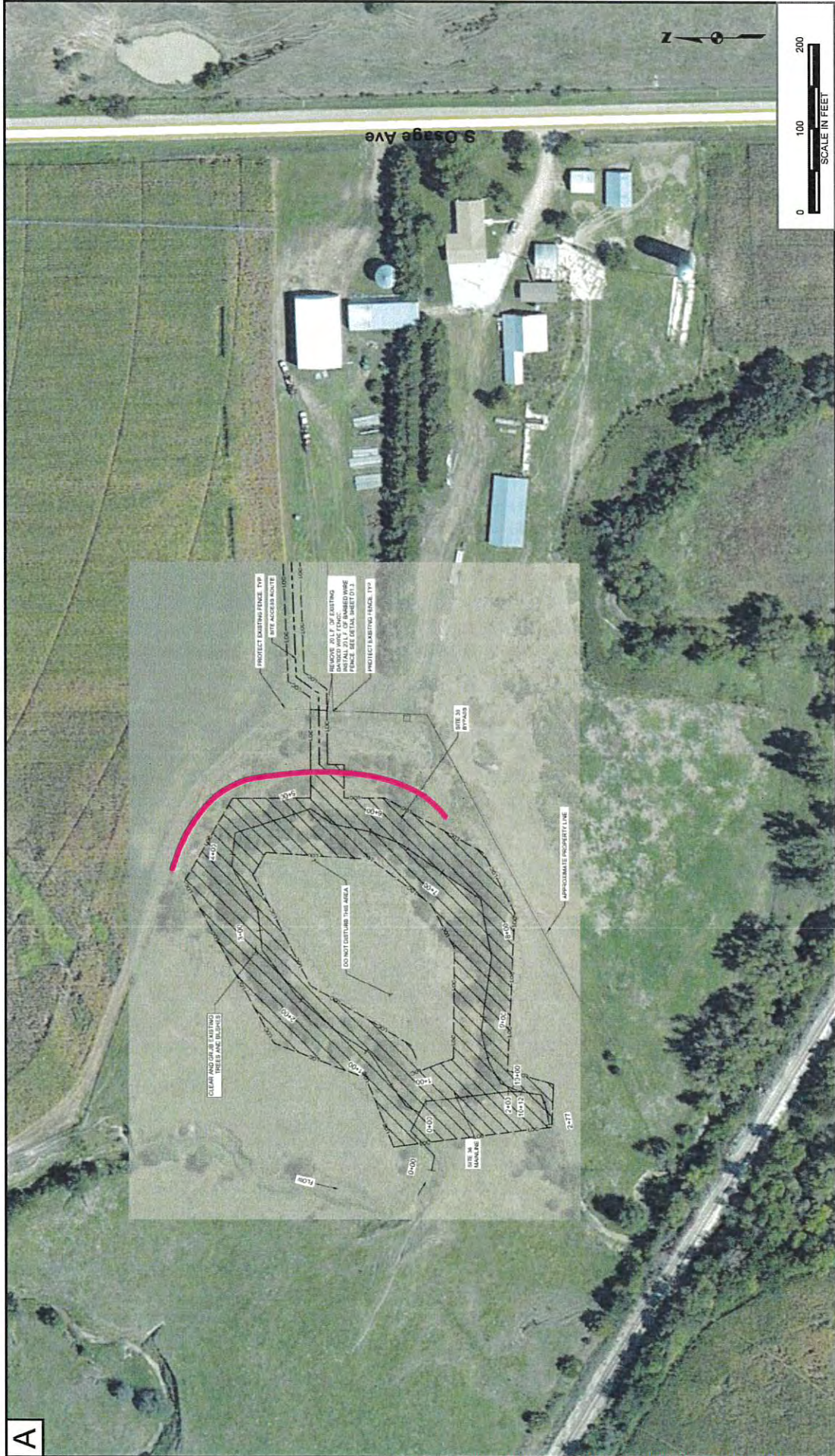
REMOVE 184 L.F. OF EXISTING  
 BARBED WIRE FENCE  
 INSTALL 184 L.F. OF BARBED  
 WIRE FENCING  
 SEE DETAIL SHEET D1.3

PROTECT EXISTING BARBED  
 WIRE FENCE, TYP.

PROTECT EXISTING BARBED  
 WIRE FENCE, TYP.

FLOW





A

Well  
 214039 Well ID  
 Proposed Well Install Area  
 (Dependent on Site Access)

NOTICE: THIS DRAWING HAS BEEN PREPARED UNDER THE DIRECTION OF A PROFESSIONAL. DO NOT ALTER THIS DOCUMENT IN ANY WAY WITHOUT THE WRITTEN CONSENT OF WSP USA INC.



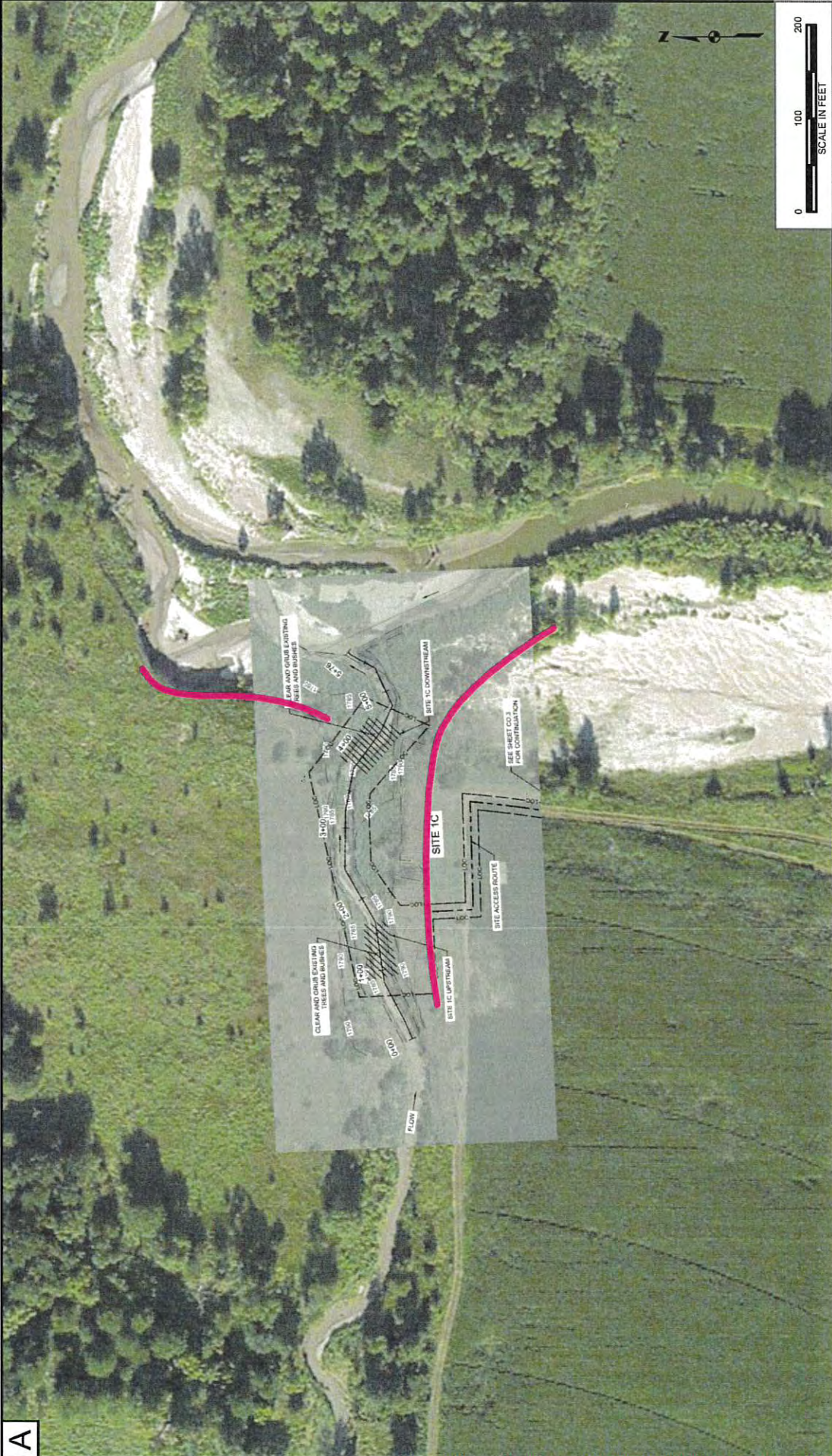
GROUNDWATER RECHARGE  
 AND OXBOW RECONNECTION PROJECT  
 PREPARED FOR  
 LITTLE BLUE NATURAL RESOURCES DISTRICT

FIGURE 2

SITE 36  
 PROPOSED AREA FOR MONITORING WELL INSTALL

Drawn: 11/29/2018  
 Group Layer Create... Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

A



Well ID

214039

Proposed Well Install Area  
(Dependent on Site Access)

THE ORIGINAL VERSION OF THIS DRAWING IS IN COLOR. BLACK AND WHITE COPIES MAY NOT ACCURATELY DEPICT CERTAIN INFORMATION.

NOTICE: THIS DRAWING HAS BEEN PREPARED UNDER THE DIRECTION OF A PROFESSIONAL. DO NOT ALTER THIS DOCUMENT IN ANY WAY WITHOUT THE WRITTEN CONSENT OF WSP USA INC.



WSP USA INC.  
8 PINE TREE DRIVE  
SUITE 200  
MARIETTA, GA 30067  
TEL: +1 678 488 1465

### GROUNDWATER RECHARGE AND OXBOW RECONNECTION PROJECT

PREPARED FOR  
LITTLE BLUE NATURAL RESOURCES DISTRICT

FIGURE 3

SITE 1C  
PROPOSED AREA FOR MONITORING WELL INSTALL

Drawn: 11/28/2018  
Source Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

