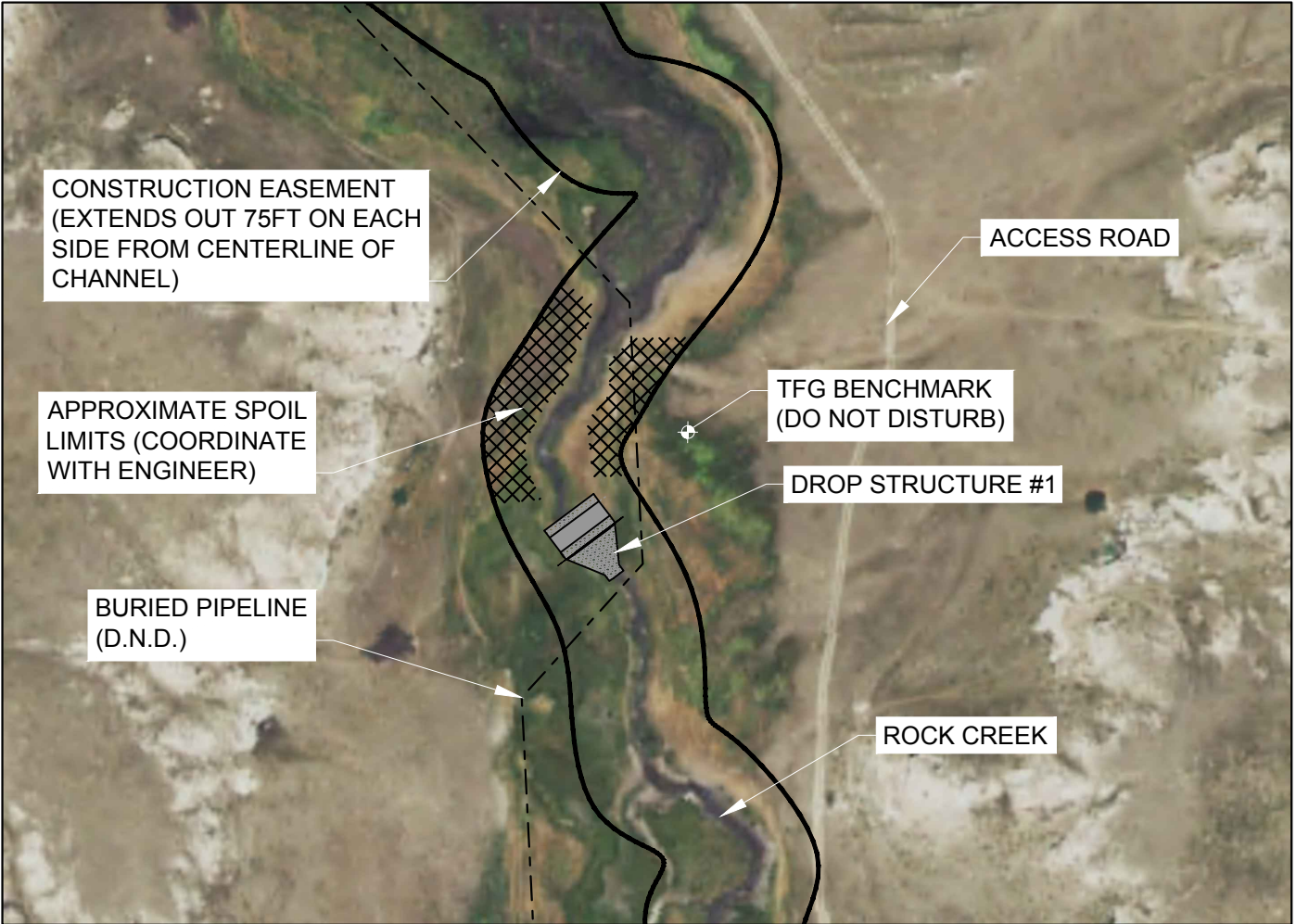
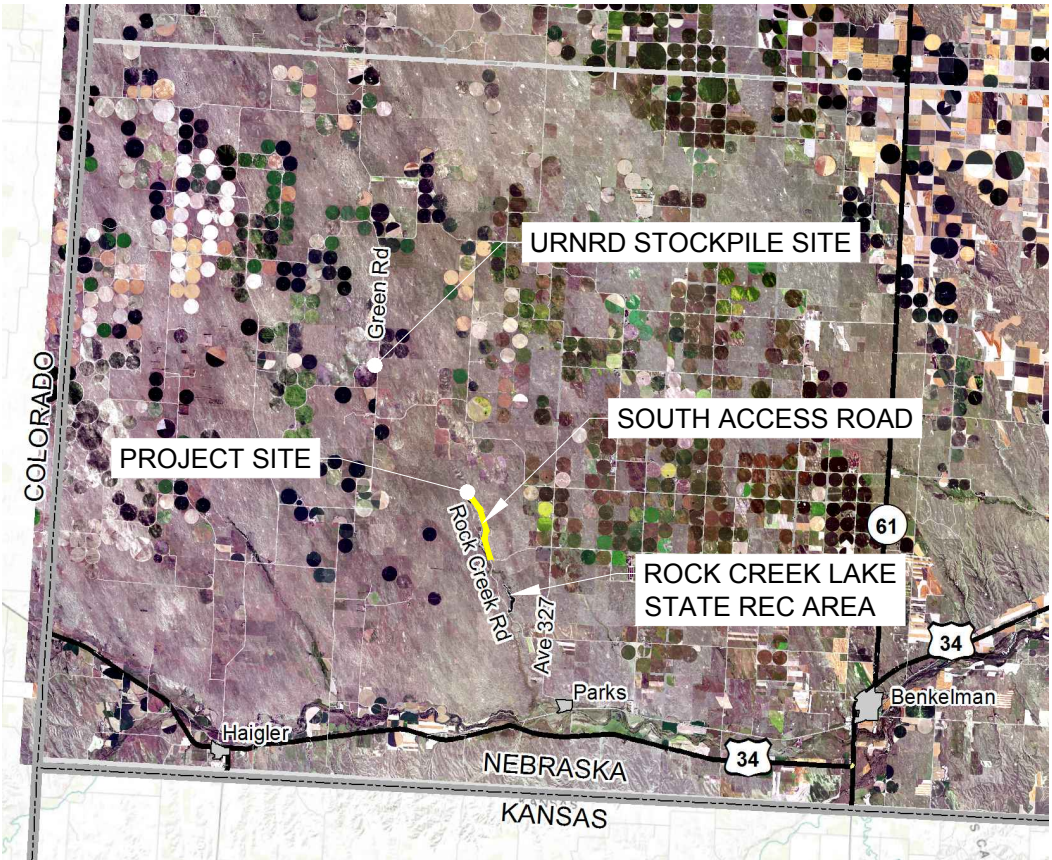


UPPER REPUBLICAN NRD
ROCK CREEK DROP STRUCTURE #1
DUNDY COUNTY, NEBRASKA

SHT #	
1	COVER
2	GENERAL NOTES / SCHEDULE OF QUANTITIES
3	PLAN AND PROFILE
4	DETAIL 1
5	DETAIL 2



SITE MAP



VICINITY MAP

PRIOR TO CONSTRUCTION:

CALL : 811 FOR LOCATION OF UNDERGROUND TELEPHONE, ELECTRIC, GAS MAINS, CABLE, WATER, STORM SEWER, AND SANITARY SEWER UTILITIES. NOTE: EXISTING UNDERGROUND AND OVERHEAD UTILITIES AND DRAINAGE STRUCTURES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE, THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS THE RESPONSIBILITY OF THE INDIVIDUAL CONTRACTORS TO EXACTLY LOCATE AND PROTECT EACH EXISTING UTILITY BEFORE AND DURING ACTUAL CONSTRUCTION.



TFG BENCHMARK			
NORTHING	EASTING	ELEVATION	DESCRIPTION
114,339.12	1,141,135.36	3,287.20	REBAR

NEBRASKA STATE PLANE COORDINATES NAD83, NAVD88



GENERAL CONSTRUCTION NOTES:

- DIAL BEFORE YOU DIG. CALL 1-800-331-5666 FOR LOCATION OF UNDERGROUND TELEPHONE, ELECTRIC, GAS MAINS, CABLE, AND LOCAL UTILITIES.
- A PERMANENT EASEMENT EXTENDS OUT 75 FEET ON EACH SIDE OF THE CENTERLINE OF THE CHANNEL. ALL WORK SHALL BE PERFORMED WITHIN THE LIMITS OF THE PERMANENT EASEMENT. CONTRACTOR SHALL NOT DISTURB AREAS OUTSIDE THESE LIMITS. THE CONTRACTOR ALSO MAY ACCESS AND EGRESS THE CONSTRUCTION SITE AT TWO LOCATIONS PROVIDED BY THE URNRD (REFER TO COVER SHEET).
- LOCATE AND PRESERVE ALL PROJECT CONTROL POINTS.
- INSTALL CONSTRUCTION SEDIMENT AND EROSION CONTROL MEASURES PRIOR TO CONSTRUCTION AND MAINTAIN THROUGHOUT THE COMPLETION OF THE PROJECT, AS REQUIRED TO PROTECT STREAM AND IDENTIFIED SENSITIVE AREAS.
- AREA FOR SPOIL/BORROW SHALL BE FINISH GRADED SO THAT THE MAXIMUM SLOPE IS NO STEEPER THAN 5:1. SPOIL SHALL BE PLACED IN WHERE INDICATED ON SHEET 1. EXISTING TERRAIN AND DRAINAGE PATTERNS SHALL BE MAINTAINED TO THE MAXIMUM EXTENT PRACTICAL. TERRACES SHALL BE CONSTRUCTED EVERY 100 FEET OF SLOPE DISTANCE (MIN.) IN SPOIL/BORROW AREAS.
- TEMPORARY STREAM CROSSINGS AND CONSTRUCTION/HAUL ROADS TO BE REMOVED AT THE COMPLETION OF THE PROJECT. ALL AREAS SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS.
- THE BROKEN CONCRETE RIPRAP AND #2 CRUSHED CONCRETE WILL BE SUPPLIED BY THE URNRD AT NO CHARGE. THE MATERIAL IS STOCKPILED ABOUT 8 MILES NORTHWEST OF THE CONSTRUCTION SITE. ACCESS TO THE SITE MAY BE OBTAINED FROM THE SOUTH. THE HAUL DISTANCE USING SOUTH ACCESS ROAD IS ABOUT 30 MILES. IT IS RECOMMENDED THAT THE CONTRACTOR VIEW THE HAUL ROUTE BEFORE BIDDING ON THE PROJECT.
- CONCRETE RUBBLE LOCATED WITHIN THE PROJECT SITE SHALL BE REMOVED AND SALVAGED. SALVAGED MATERIAL THAT MEETS THE SPECIFIED GRADATION OF THE MATERIALS SPECIFICATION SHALL BE USED UNDER BID ITEM 7. SUITABLE MATERIAL SHALL BE REASONABLY WELL GRADED FROM LARGEST TO SMALLEST, AND SHALL BE SIZED SUCH THAT NO INDIVIDUAL PIECE WILL HAVE A VOLUME GREATER THAN 3.5 CUBIC FEET, NO MORE THAN 10 PERCENT OF THE RIPRAP PIECES SHALL HAVE A VOLUME OF LESS THAN 30 CUBIC INCHES, FIFTY PERCENT OF THE RIPRAP SHALL BE COMPOSED OF PIECES WITH A VOLUME LESS THAN 1,220 CUBIC INCHES, AND EACH PIECE SHALL HAVE NO DIMENSION GREATER THAN TIMES ITS LEAST DIMENSION. REBAR AND UNSUITABLE MATERIAL SHALL BE DISPOSED OF AT THE URNRD'S STOCKPILE LOCATION OR OTHER APPROVED OFFSITE LOCATION.

SEEDING / PROTECTION NOTES:

- DISTURBED CHANNEL BANKS SHALL BE SEEDED WITH A HIGH PLAINS RDB MIXTURE AND PROTECTED WITH EROSION CONTROL BLANKET.
- SPOIL AREAS, HAUL ROADS AND OTHER DISTURBED AREAS WITH A MAXIMUM SLOPE NO STEEPER THAN 5:1 SHALL BE SEEDED WITH A HIGH PLAINS FORESLOPE, DITCH AND BACKSLOPE (RDB) MIXTURE AND MULCHED.

HIGH PLAINS RDB MIXTURE

Species	Minimum Purity (percent)	Lbs. of PLS/acre
Canada wildrye * – Mandan, Nebraska native	85	4
Slender wheatgrass	85	4
Thickspike wheatgrass – Critana	85	4
Western wheatgrass – Arriba, Barton, Flintlock, Rodan, Rosana	85	4
Little bluestem – Camper, Cimarron, Pastura, Nebraska native	60	2.5
Blue grama – NE, KS, CO, MN, SD	30	0.75
Buffalograss – Bison, Cody, Sundancer, Texoka	80	2
Sideoats grama – Butte, El Reno, Pierre	75	4
Sand dropseed (Sporobolus cryptandrus)	90	0.3
Purple prairie clover – inoculated	90	1
Blue flax (Linum lewisii)	85	1.5
Rocky Mountain bee plant (Cleome semulata)	85	0.5
Upright prairie coneflower (Ratibida columnifera)	85	1
Mexican red hat (Ratibida columnifera, red)	85	1
Oats or wheat (wheat in the fall)	90	14

PLS (pure live seed) is a term used in the seed industry to describe the percentage of a quantity of seed that will germinate. It is a tool for comparing the quality of seed lots.

SCHEDULE OF QUANTITIES

BID ITEM	ACTIVITY	UNIT	QUANTITY
1	MOBILIZATION / DEMOBILIZATION	LS	1
2	CONSTRUCTION STAKING	LS	1
3	EXCAVATION	CY	1,062
4	EXCAVATION DISPOSAL	CY	1,062
5	GRAVEL, IN PLACE	TON	25
6	#2 CRUSHED CONCRETE BASE, IN PLACE	CY	28
7	BROKEN CONCRETE RIPRAP OVER FILTER FABRIC, IN PLACE	CY	465
8	REMOVE AND SALVAGE BROKEN CONCRETE RIPRAP	CY	230
9	STEEL SHEET PILE, IN PLACE	SF	1,710
10	REMOVE AND SALVAGE PIPE CULVERT	LS	1
11	SEEDING	AC	1.0
12	EROSION CONTROL BLANKET	SY	356

DETAIL / SECTION SYMBOL:



- 1 - DETAIL / SECTION NO.
- 2 - SHEET NO. DETAIL / SECTION IS REFERENCED ON
- 3 - SHEET NO. DETAIL / SECTION IS DRAWN ON

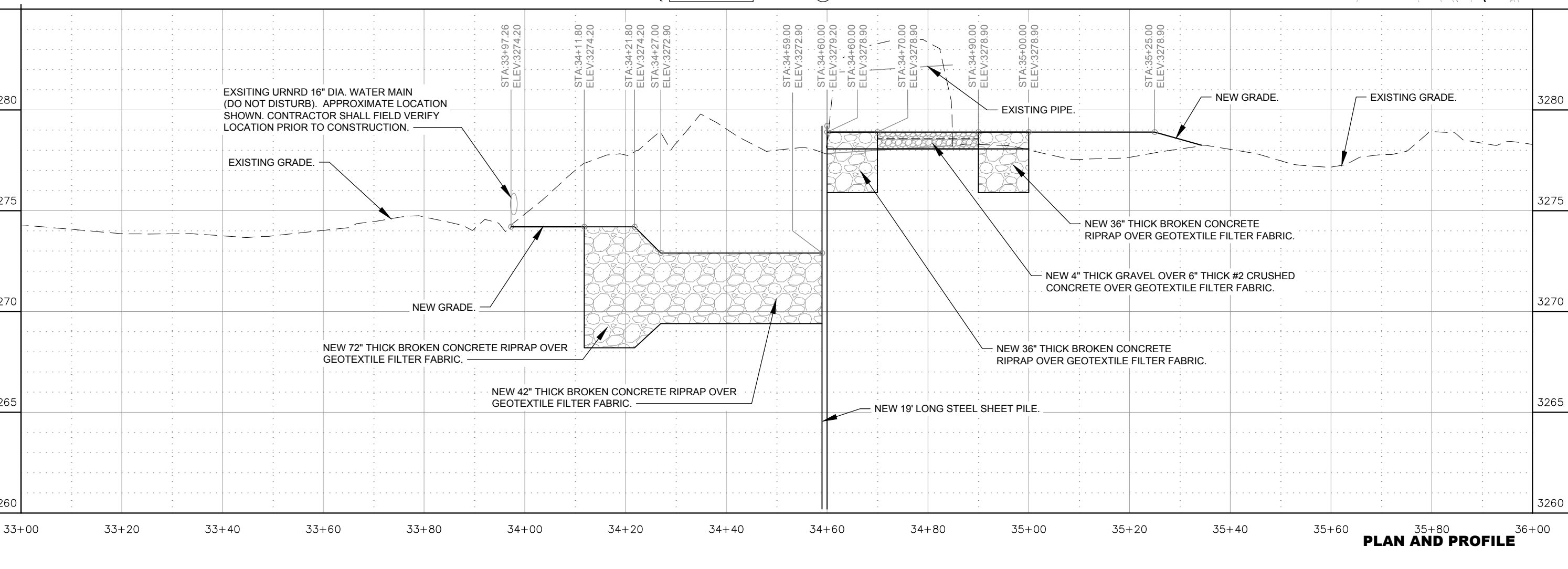
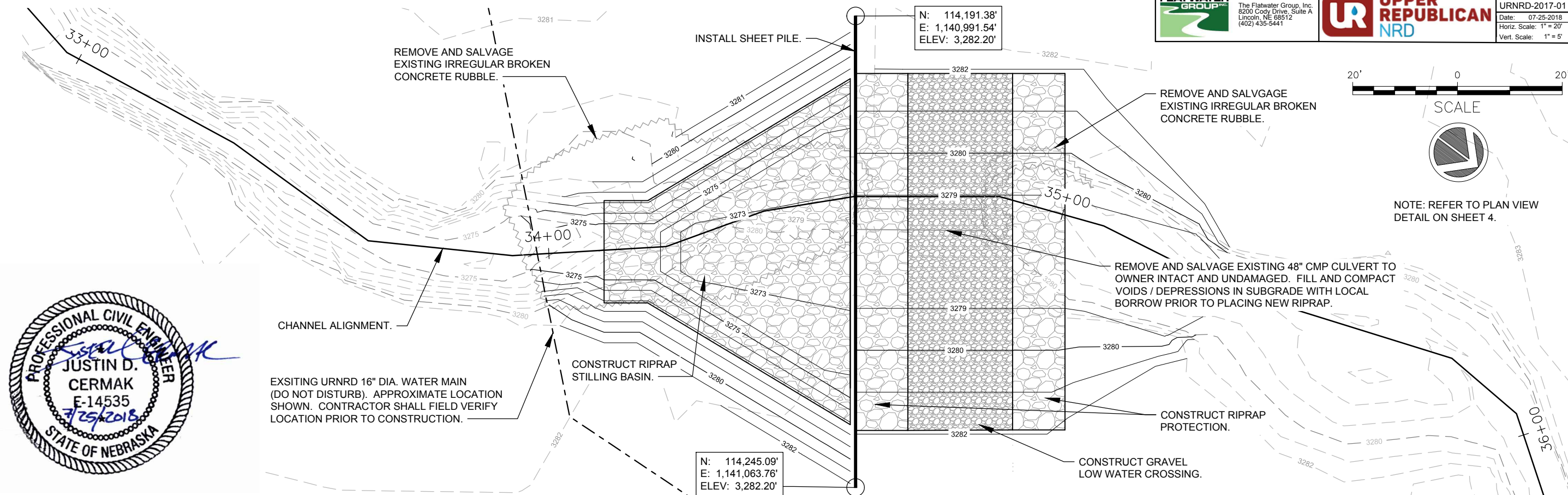




The Flatwater Group, Inc.
8200 Cody Drive, Suite A
Lincoln, NE 68512
(402) 435-5441



PROJECT NO.	SHEET NO.
URNRD-2017-01	3
Date: 07-25-2018	Drawn: STAFF
Horiz. Scale: 1" = 20'	Checked: RJK
Vert. Scale: 1" = 5'	Approved: JDC





DETAIL1

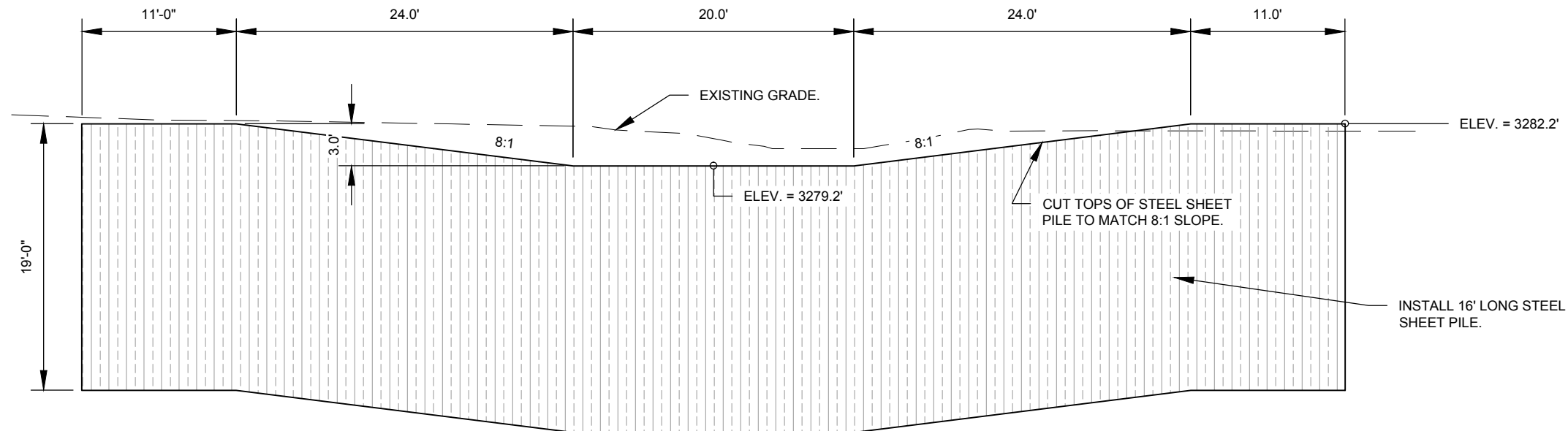


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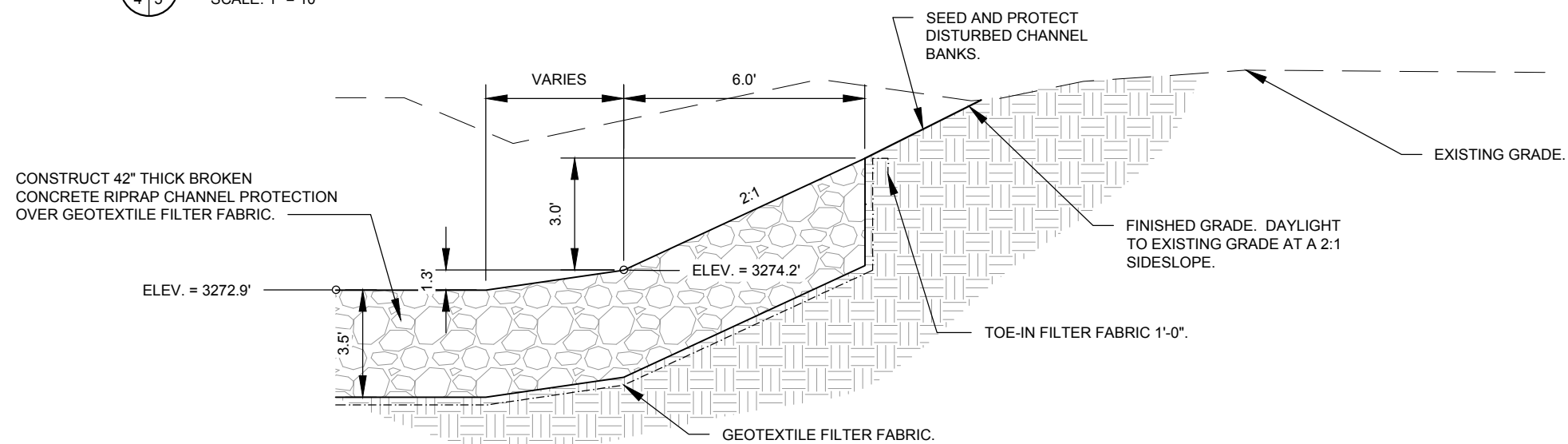


**UPPER
REPUBLICAN
NRD**

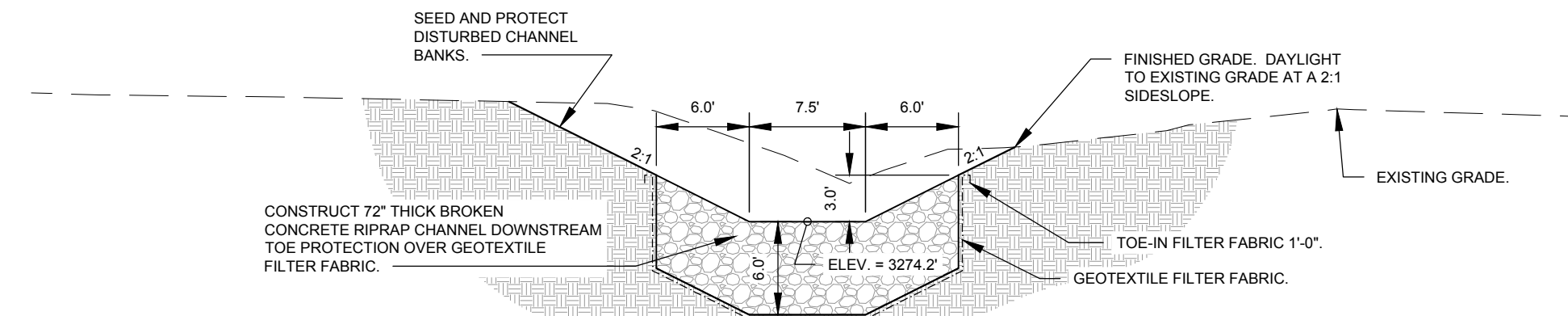
PROJECT NO.	SHEET NO.
URNRD-2017-01	5
Date: 07-25-2018	Drawn: STAFF
Scale: AS SHOWN	Checked: RJK
	Approved: JDC



1 SECTION THROUGH SHEET PILE
SCALE: 1" = 10'



2 SECTION THROUGH STILLING BASIN
SCALE: 1" = 5'



3 SECTION THROUGH DOWNSTREAM CHANNEL PROTECTION
SCALE: 1" = 10'



DETAIL2