

# RED WILLOW PRODUCTION COMPANY: NORTH CARRACAS 32-4 7F-3

SURFACE LOCATION: 96' FSL & 411' FWL

SECTION 7, T-32-N, R-4-W, N.M.P.M., ARCHULETA COUNTY, COLORADO. GROUND LEVEL ELEVATION: 6160'

PILOT HOLE BOTTOM HOLE LOCATION: 1615' FNL, 678' FWL

SECTION 18, T-32-N, R-4-W, N.M.P.M., ARCHULETA COUNTY, COLORADO.

LATERAL #1 BOTTOM HOLE LOCATION: 200' FSL, 777' FWL

SECTION 19, T-32-N, R-4-W, N.M.P.M., ARCHULETA COUNTY, COLORADO.

LATERAL #2 BOTTOM HOLE LOCATION: 200' FSL, 1920' FEL

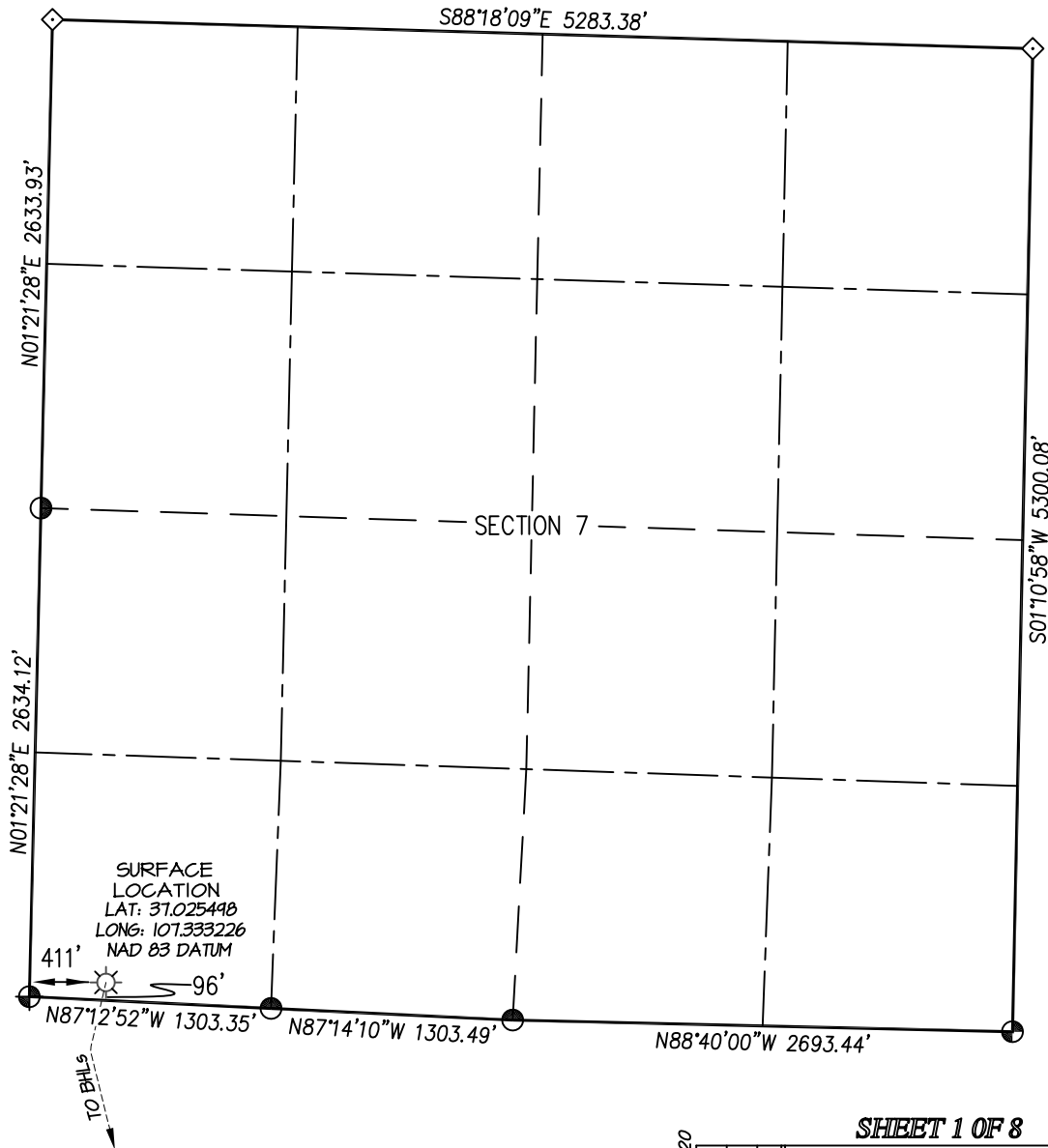
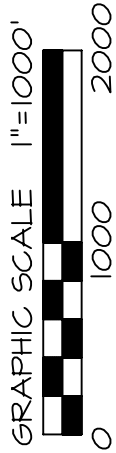
SECTION 24, T-32-N, R-5-W, N.M.P.M., ARCHULETA COUNTY, COLORADO.

LATERAL #3 BOTTOM HOLE LOCATION: 200' FSL, 292' FWL

SECTION 24, T-32-N, R-5-W, N.M.P.M., ARCHULETA COUNTY, COLORADO.

LATERAL #4 BOTTOM HOLE LOCATION: 974' FNL, 423' FEL

SECTION 23, T-32-N, R-5-W, N.M.P.M., ARCHULETA COUNTY, COLORADO.



⊕ and ⊙ denote found 3-1/4" B.L.M. aluminum cap.  
◇ denotes single proportion calculated position.

## NOTE:

SEE SHEET 8 OF 8 FOR COORDINATE TABLE,  
SURVEY NOTES, AND SURVEYOR'S CERTIFICATE.

SHEET 1 OF 8

REVISED: 10/21/20

SURVEYED: 10/16/20

DRAWN BY: K.R.

CHECKED BY: K.R.

FILE NO. RWI 32 MP 3 JOB NO. RWI 32

PREPARED FOR:

RED WILLOW PRODUCTION CO.

**NORTHSTAR**  
SURVEYING & MAPPING, INC.

768 County Rd. 308  
DURANGO, CO. 81303  
(970) 385-0851

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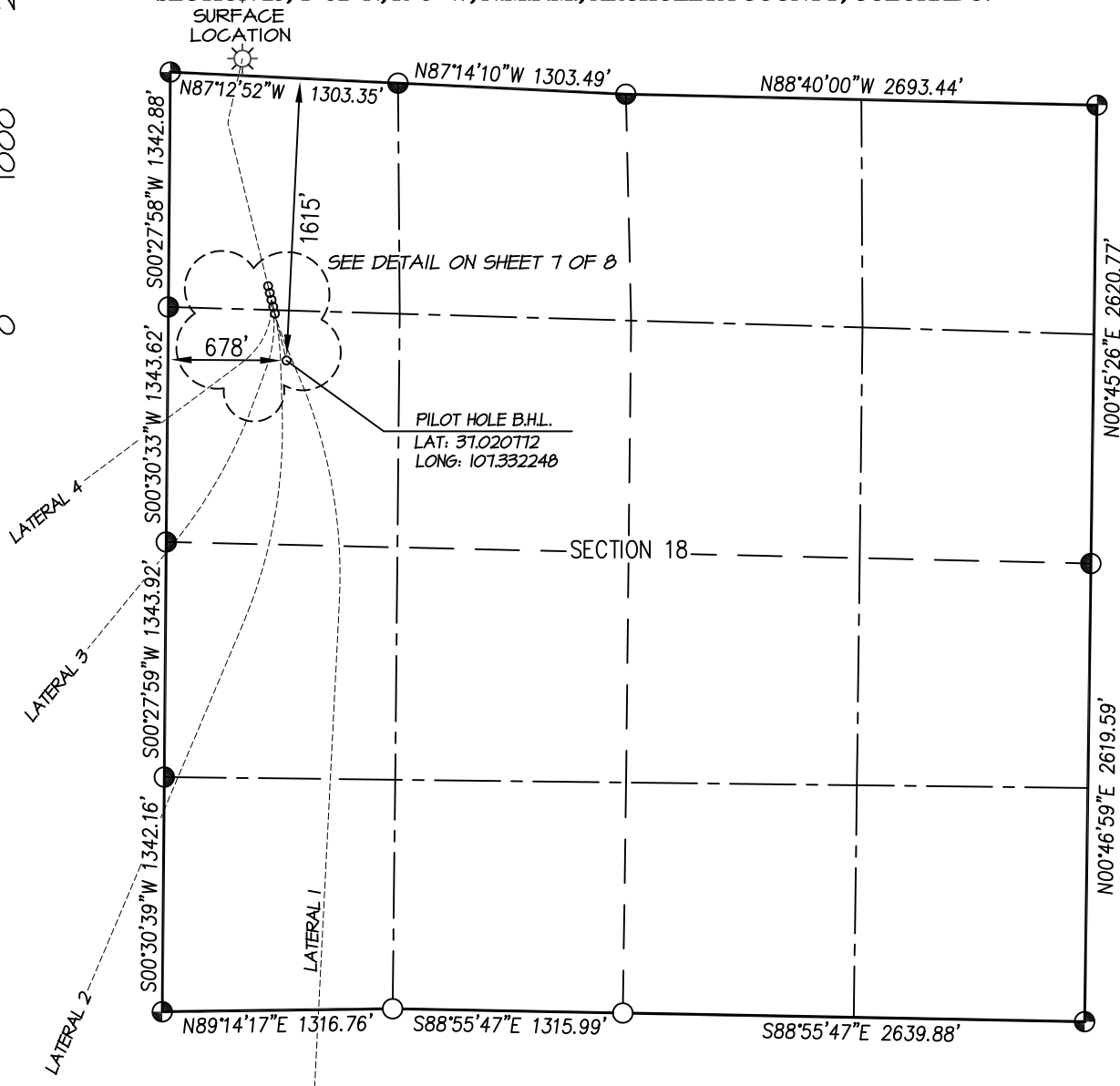
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○ denotes single proportion  
calculated position - no monument  
found or set.

## NOTE:

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SURVEY NOTES, AND SURVEYOR'S CERTIFICATE.

SHEET 2 OF 8

REVISED: 10/21/20

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CHECKED BY: K.R. FILE NO. RWI 32 MP 3 JOB NO. RWI 32

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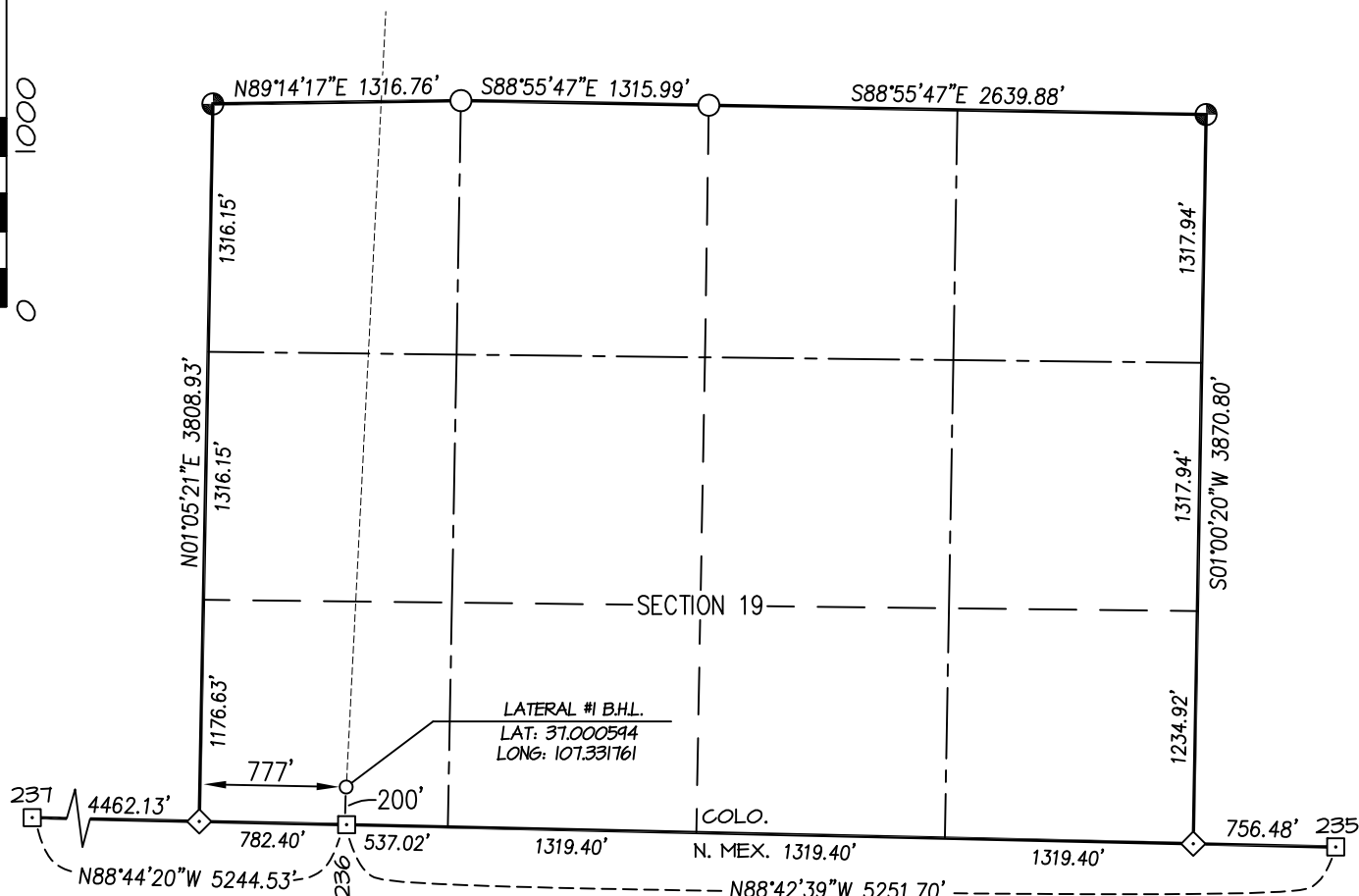
SECTION 24, T-32-N, R-5-W, N.M.P.M., ARCHULETA COUNTY, COLORADO.

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⊕ and ⊙ denote found 3-1/4" B.L.M.  
aluminum cap unless otherwise noted.

□ denotes found State Line mile monument

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calculated position - no monument  
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NOTE:

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SURVEY NOTES, AND SURVEYOR'S CERTIFICATE.

SHEET 3 OF 8

PREPARED FOR:

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REVISED: 10/21/20

SURVEYED: 10/16/20

DRAWN: 10/17/20

CHECKED BY: K.R.

FILE NO. RW132

DRAWN BY: K.R.

CHECKED BY: K.R.

FILE NO. RW132

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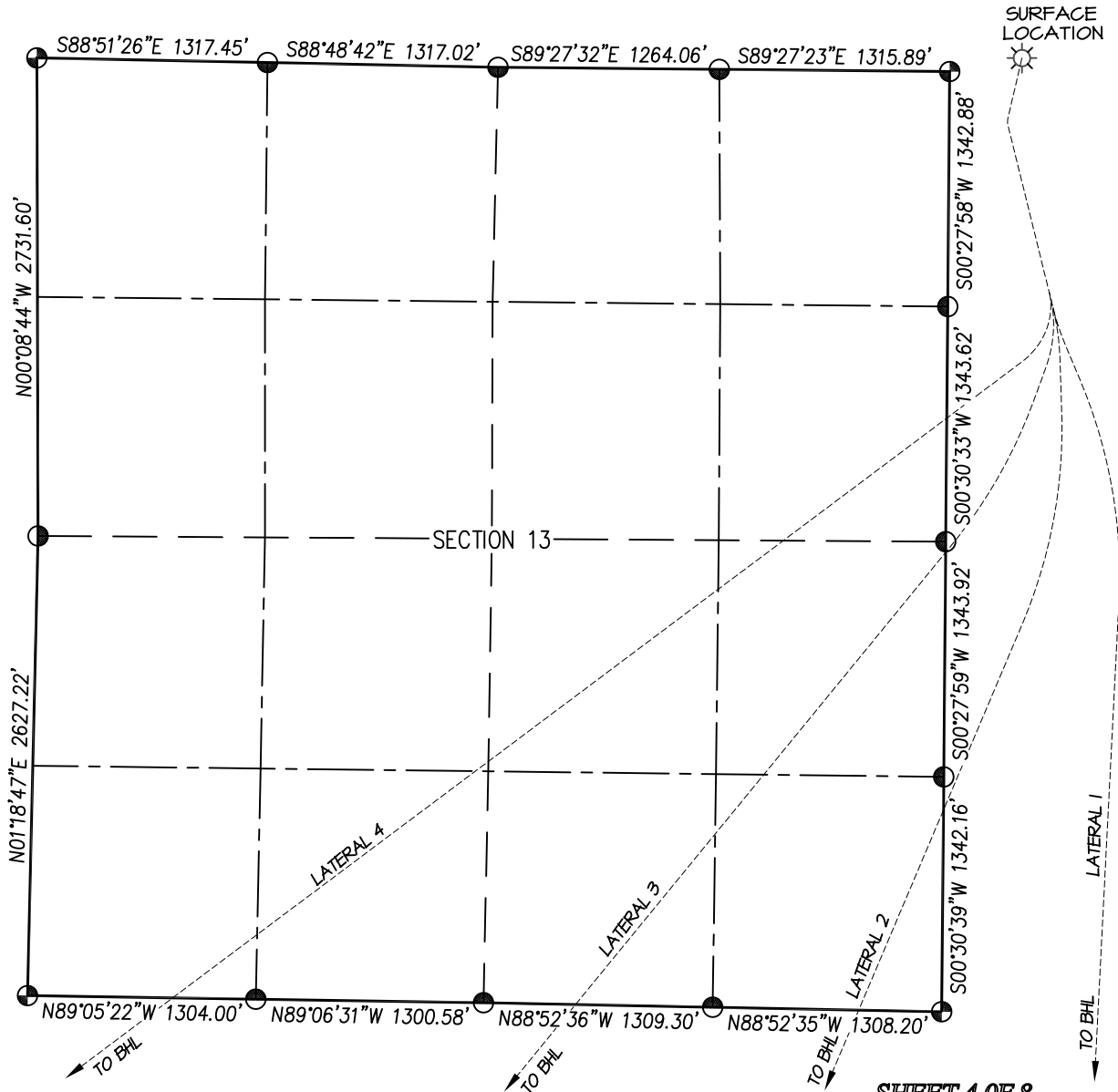
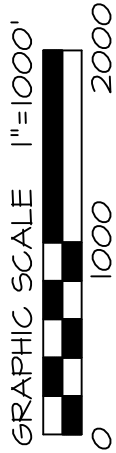
SECTION 24, T-32-N, R-5-W, N.M.P.M., ARCHULETA COUNTY, COLORADO.

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SECTION 23, T-32-N, R-5-W, N.M.P.M., ARCHULETA COUNTY, COLORADO.



SHEET 4 OF 8

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SURVEY NOTES, AND SURVEYOR'S CERTIFICATE.

REVISED: 10/21/20	SURVEYED: 10/16/20
DRAWN BY: K.R.	CHECKED BY: K.R.
FILE NO. RWI 32 MP 3 JOB NO. RWI 32	

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***SURFACE LOCATION: 96' FSL & 411' FWL***

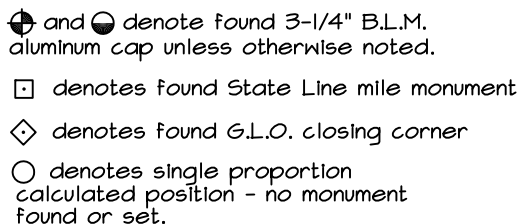
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SEE SHEET 8 OF 8 FOR COORDINATE TABLE,  
SURVEY NOTES, AND SURVEYOR'S CERTIFICATE.

REVISÉ: 10/21/20

DRAWN BY: K.R.	SURVEYED: 10/16/20
CHECKED BY: K.R.	DRAWN: 10/17/20
FILE NO RW132WP3	JOB NO RW132

RED WILLOW PRODUCTION CO.

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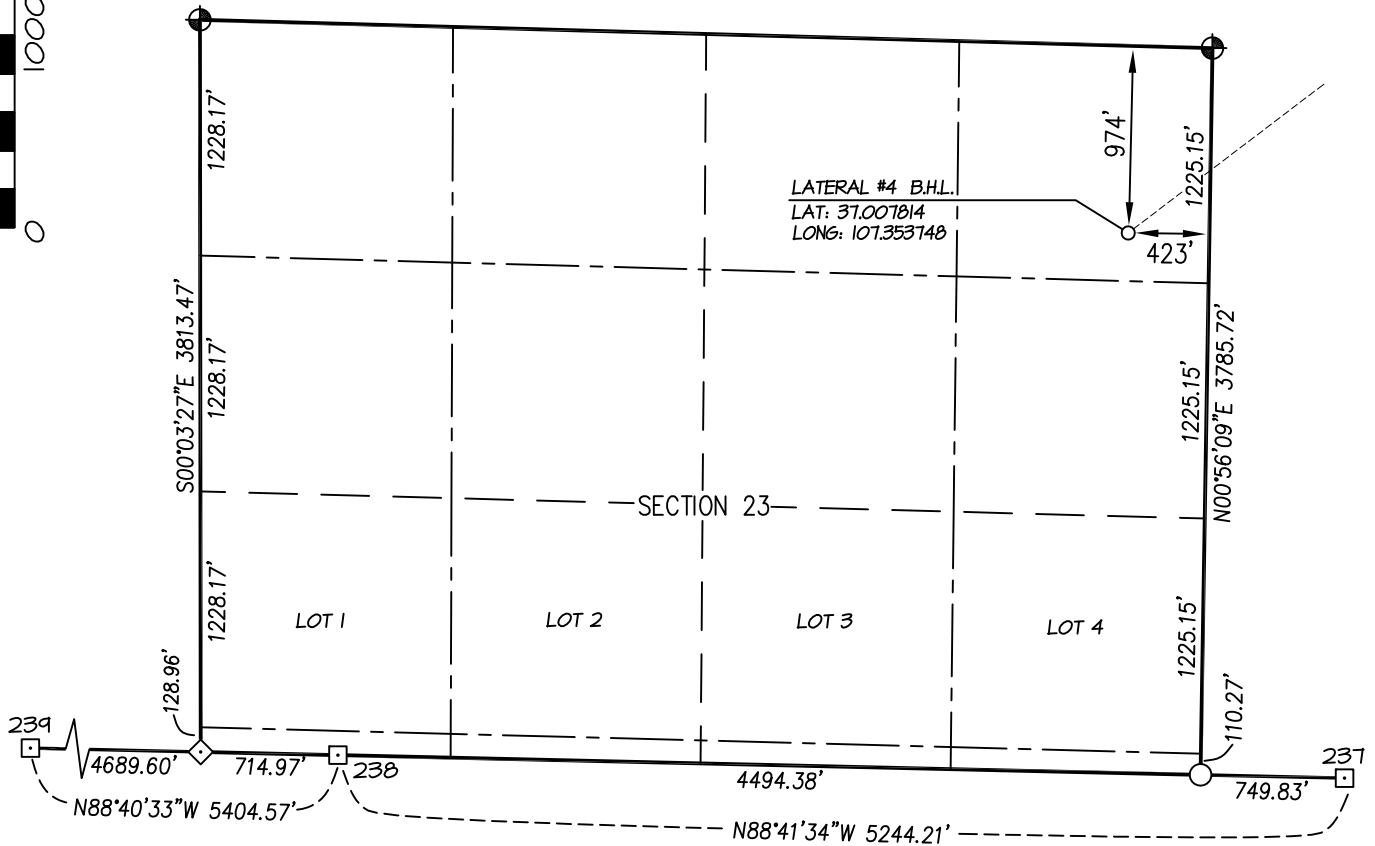
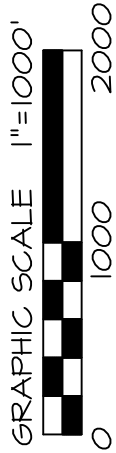
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SHEET 6 OF 8

REVISED: 10/21/20

SURVEYED: 10/16/20

DRAWN: 10/17/20

CHECKED BY: K.R.

FILE NO. RW132

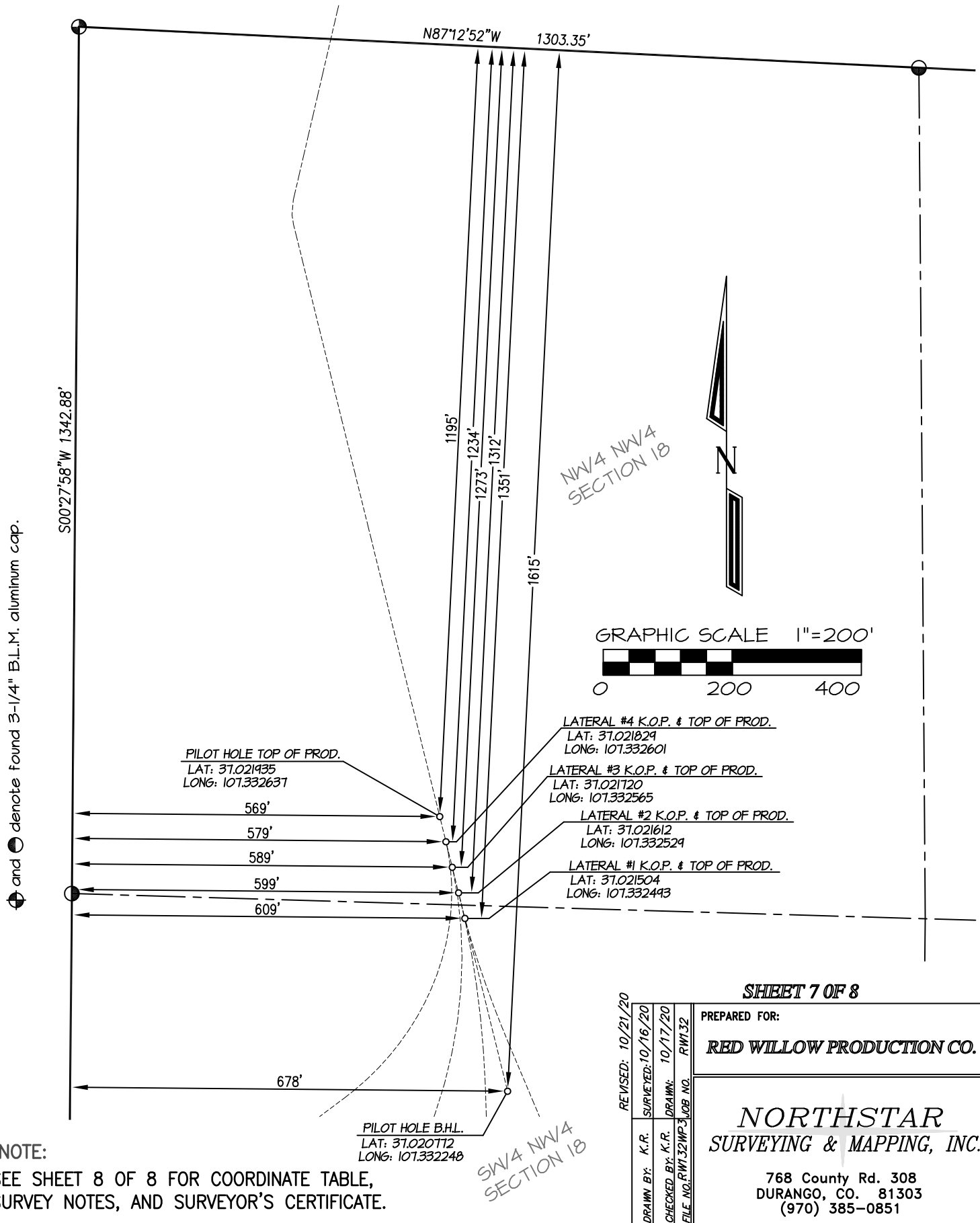
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**PILOT & LATERAL KICKOFF/TOP OF PRODUCTION DETAIL**



**SHEET 7 OF 8**

REVISED: 10/21/20  
 SURVEYED: 10/16/20  
 DRAWN BY: K.R.  
 CHECKED BY: K.R.  
 FILE NO.: RW132MP3 JOB NO. RW132

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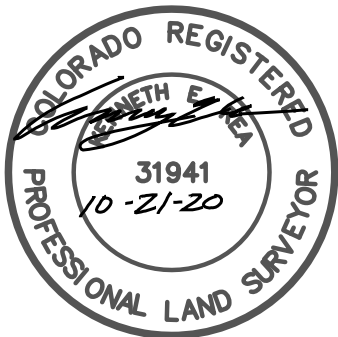
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**SECTION 7, T-32-N, R-4-W, N.M.P.M., ARCHULETA COUNTY, COLORADO. GROUND LEVEL ELEVATION: 6160'**

NORTH CARRACAS 32-4 7F-3	CSZ NAD '83	NAD '83	TIES	SEC/TWP/RNG
SURFACE HOLE LOCATION	N (Y) = 1,135,910.84' E (X) = 2,464,828.04'	LAT: 37.025498°N LONG: 107.333226°W	FSL = 96' FWL = 411'	SECTION 7, T-32-N, R-4-W
PILOT HOLE - TOP OF PRODUCTION	N (Y) = 1,134,610.36' E (X) = 2,464,974.59'	LAT: 37.021935°N LONG: 107.332637°W	FNL = 1195' FWL = 569'	SECTION 18, T-32-N, R-4-W
PILOT HOLE - BOTTOM HOLE LOCATION	N (Y) = 1,134,184.83' E (X) = 2,465,079.71'	LAT: 37.020772°N LONG: 107.332248°W	FNL = 1615' FWL = 678'	SECTION 18, T-32-N, R-4-W
PROPOSED TOP OF PRODUCTION & KOP LATERAL #1	N (Y) = 1,134,452.63' E (X) = 2,465,013.55'	LAT: 37.021504°N LONG: 107.332493°W	FNL = 1351' FWL = 609'	SECTION 18, T-32-N, R-4-W
PROPOSED BOTTOM HOLE LOCATION LATERAL #1	N (Y) = 1,126,836.28' E (X) = 2,465,077.77'	LAT: 37.000594°N LONG: 107.331761°W	FSL = 200' FWL = 777'	SECTION 19, T-32-N, R-4-W
PROPOSED TOP OF PRODUCTION & KOP LATERAL #2	E (X) = 2,465,003.77' N (Y) = 1,134,492.22'	LAT: 37.021612°N LONG: 107.332529°W	FNL = 1312' FWL = 599'	SECTION 18, T-32-N, R-4-W
PROPOSED BOTTOM HOLE LOCATION LATERAL #2	N (Y) = 1,126,895.67' E (X) = 2,462,381.39'	LAT: 37.000612°N LONG: 107.340996°W	FSL = 200' FEL = 1920'	SECTION 24, T-32-N, R-5-W
PROPOSED TOP OF PRODUCTION & KOP LATERAL #3	N (Y) = 1,134,531.82' E (X) = 2,464,993.99'	LAT: 37.021720°N LONG: 107.332565°W	FNL = 1273' FWL = 589'	SECTION 18, T-32-N, R-4-W
PROPOSED BOTTOM HOLE LOCATION LATERAL #3	N (Y) = 1,126,962.84' E (X) = 2,459,381.41'	LAT: 37.000633°N LONG: 107.351271°W	FSL = 200' FWL = 292'	SECTION 24, T-32-N, R-5-W
PROPOSED TOP OF PRODUCTION & KOP LATERAL #4	N (Y) = 1,134,571.41' E (X) = 2,464,984.21'	LAT: 37.021829°N LONG: 107.332601°W	FNL = 1234' FWL = 579'	SECTION 18, T-32-N, R-4-W
PROPOSED BOTTOM HOLE LOCATION LATERAL #4	N (Y) = 1,129,591.38' E (X) = 2,458,709.99'	LAT: 37.007814°N LONG: 107.353748°W	FNL = 974' FEL = 423'	SECTION 23, T-32-N, R-5-W

NOTES:

1. WELL LOCATION FOOTAGE CALLS MEASURED PERPENDICULAR TO SECTION LINES.
2. WELL GPS OBSERVATION PERFORMED BY KENNY REA ON 10/16/2020 - PDOP VALUE = 1.80
3. BEARINGS & DISTANCE SHOWN ARE FIELD MEASURED UNLESS OTHERWISE NOTED.
4. ALL MEASURED DISTANCES SHOWN ARE GRID DISTANCE WITH NO SCALE FACTOR APPLIED.
5. BEARINGS ARE BASED ON THE NORTH AMERICAN DATUM OF 1983, COLORADO SOUTH STATE PLANE COORDINATE SYSTEM, ZONE 0503.
6. ELEVATION IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (GEOID18).



I, KENNETH E. REA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THE WELL LOCATION SHOWN ON THIS PLAT IS ACCURATELY PLOTTED FROM FIELD NOTES OF ACTUAL SURVEYS MADE UNDER MY DIRECT SUPERVISION, AND THAT THIS PLAT IS NOT A LAND SURVEY PLAT OR IMPROVEMENT SURVEY PLAT, AND THAT IT IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OF FENCE, BUILDING, OR OTHER FUTURE IMPROVEMENT LINES.

REVISED: 10/21/20

SURVEYED: 10/16/20  
DRAWN BY: K.R.  
CHECKED BY: K.R.  
FILE NO. RW132MP.3 JOB NO. RW132

**SHEET 8 OF 8**

PREPARED FOR:

**RED WILLOW PRODUCTION CO.**

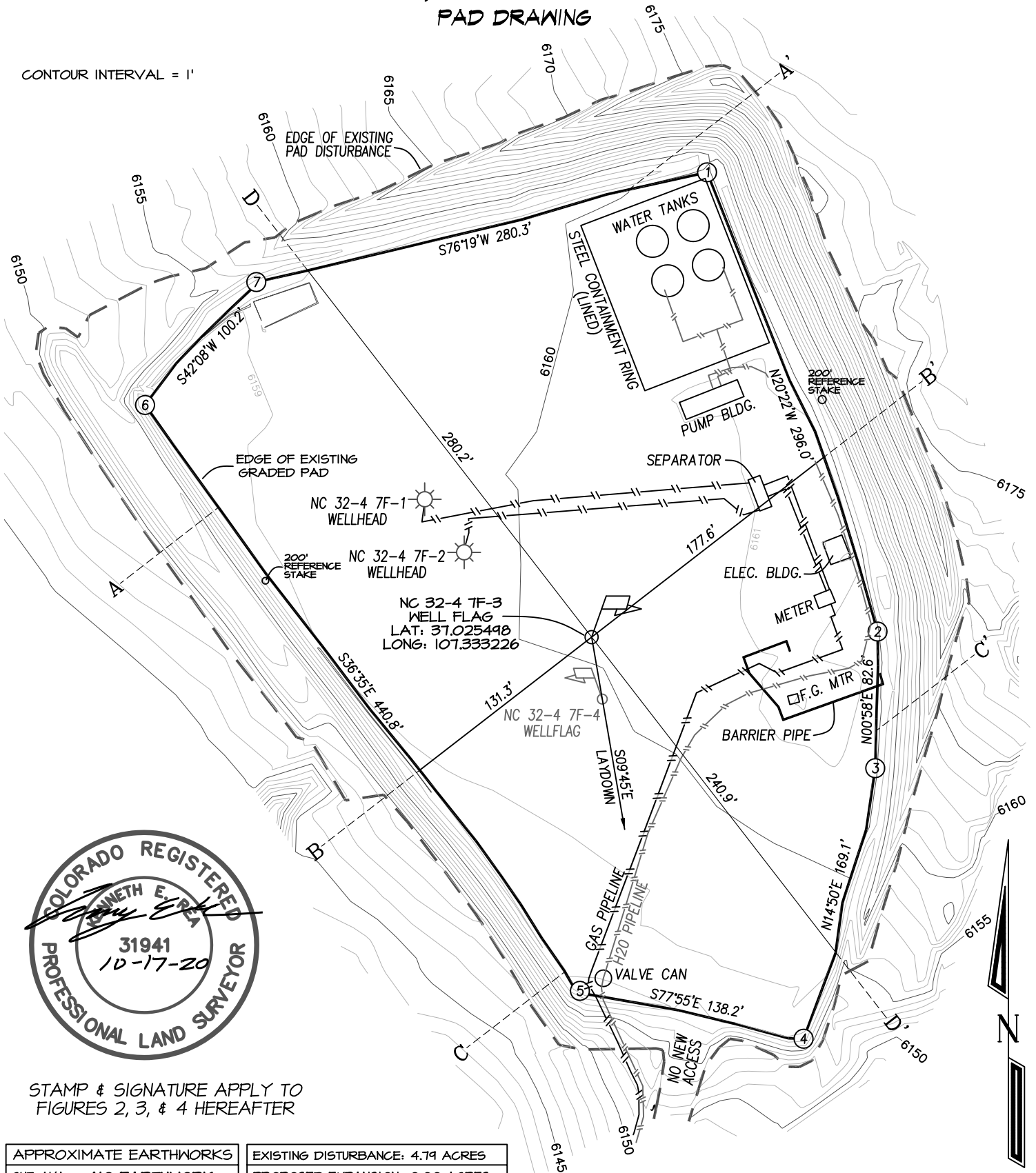
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**97' FSL, 411' FWL, SECTION 7, T-32-N, R-4-W, N.M.P.M.,**  
**ARCHULETA COUNTY, CO. GROUND LEVEL ELEVATION: 6160'**  
**PAD DRAWING**

CONTOUR INTERVAL = 1'



STAMP & SIGNATURE APPLY TO  
 FIGURES 2, 3, & 4 HEREFTER

APPROXIMATE EARTHWORKS	
CUT: N/A	<b>NO EARTHWORK</b>
FILL: N/A	<b>OR NEW DISTURBANCE</b>
TOPSOIL: N/A	<b>REQUIRED</b>
NET EXPORT: 0 CUBIC YARDS	

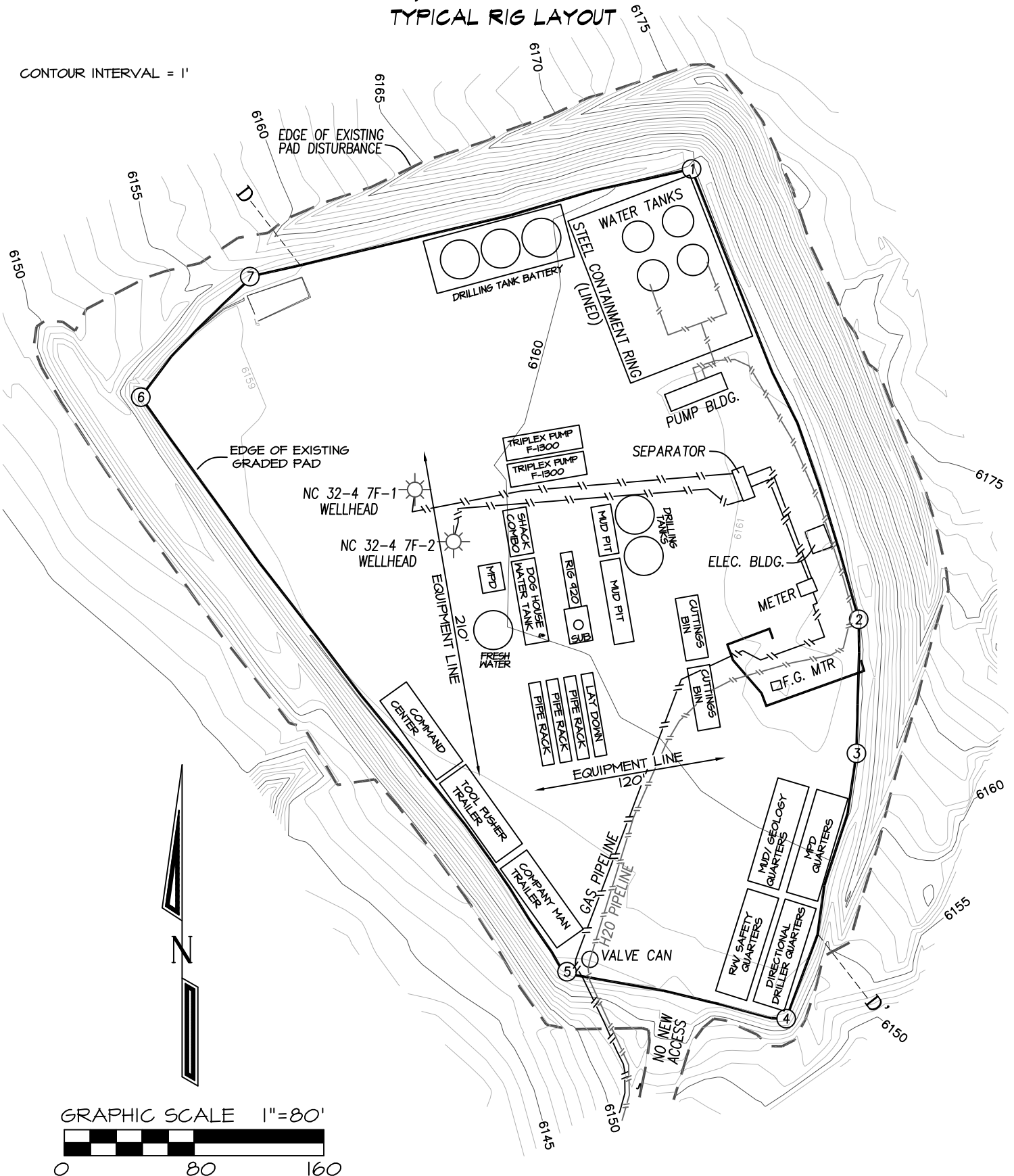
EXISTING DISTURBANCE: 4.79 ACRES
PROPOSED EXPANSION: 0.00 ACRES
LEVEL PAD SIZE: 3.28 ACRES
TOTAL DISTURBED AREA: N/A
PERMITTED AREA: N/A

**FIGURE 1**



**RED WILLOW PRODUCTION COMPANY: NORTH CARRACAS 32-4 7F-3**  
**97' FSL, 411' FWL, SECTION 7, T-32-N, R-4-W, N.M.P.M.,**  
**ARCHULETA COUNTY, CO. GROUND LEVEL ELEVATION: 6160'**  
**TYPICAL RIG LAYOUT**

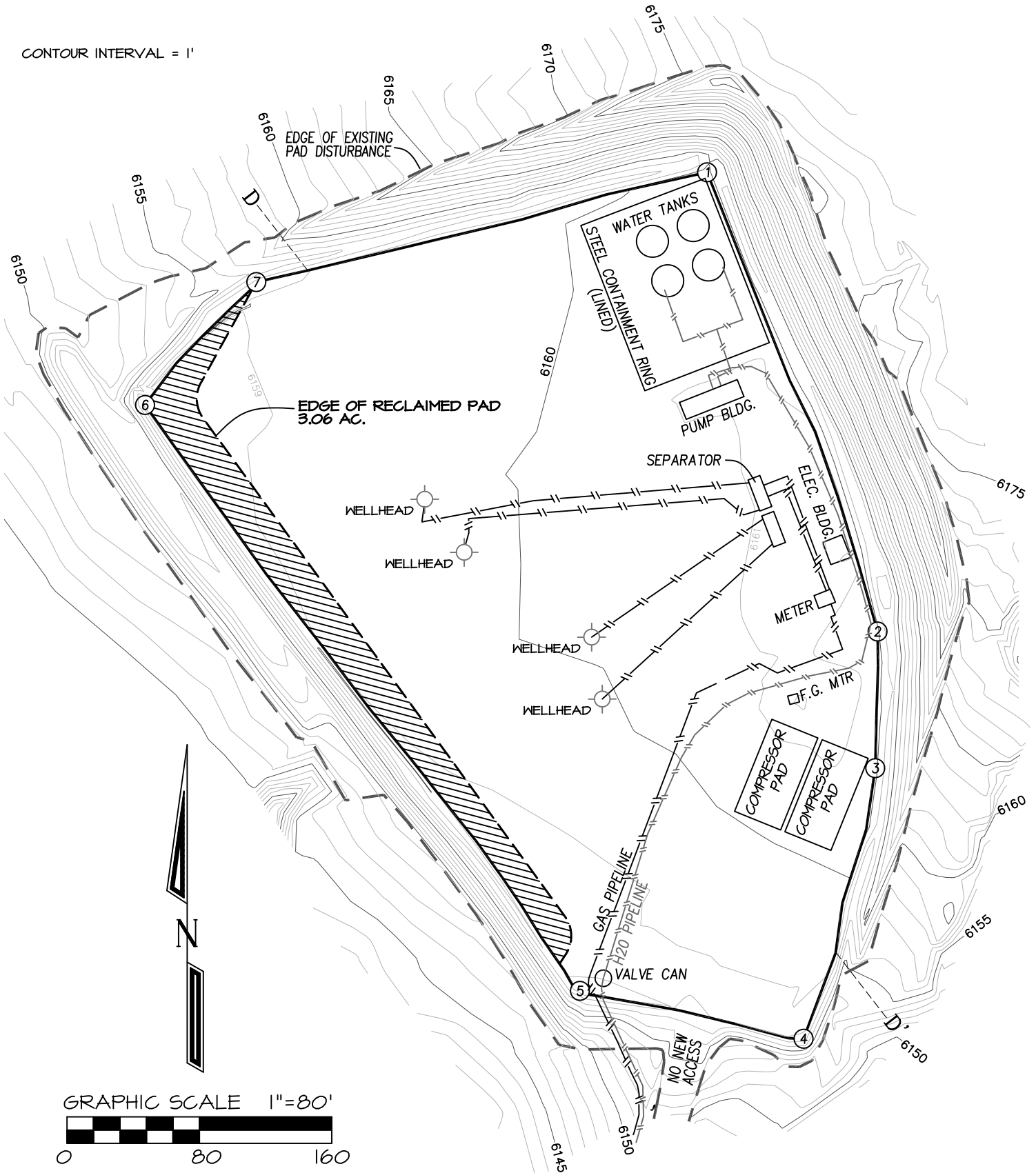
CONTOUR INTERVAL = 1'



**FIGURE 2**

**RED WILLOW PRODUCTION COMPANY: NORTH CARRACAS 32-4 7F-3**  
**97' FSL, 411' FWL, SECTION 7, T-32-N, R-4-W, N.M.P.M.,**  
**ARCHULETA COUNTY, CO. GROUND LEVEL ELEVATION: 6160'**  
**FACILITY LAYOUT & RECLAMATION**

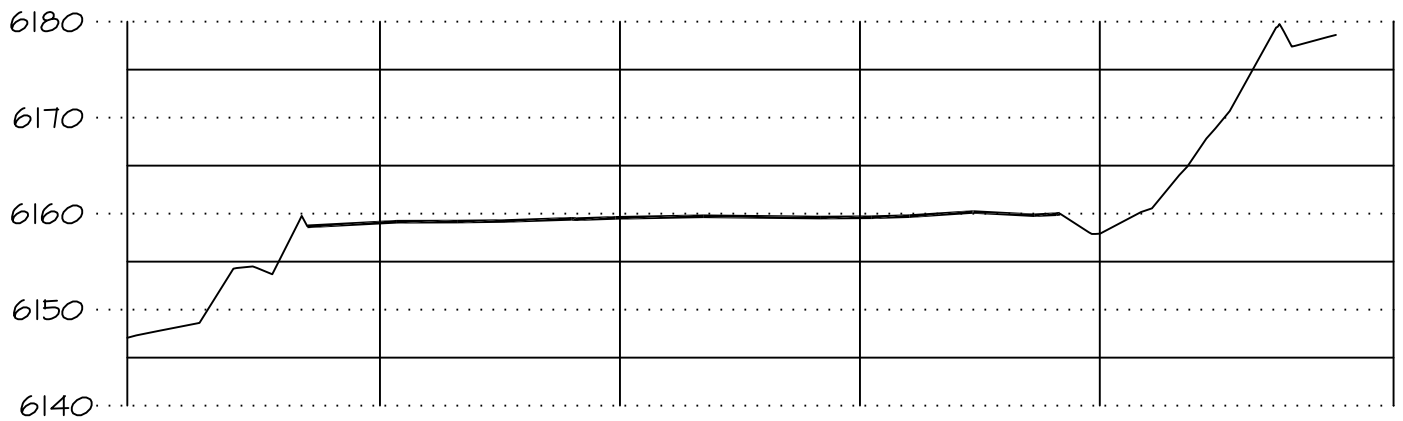
CONTOUR INTERVAL = 1'



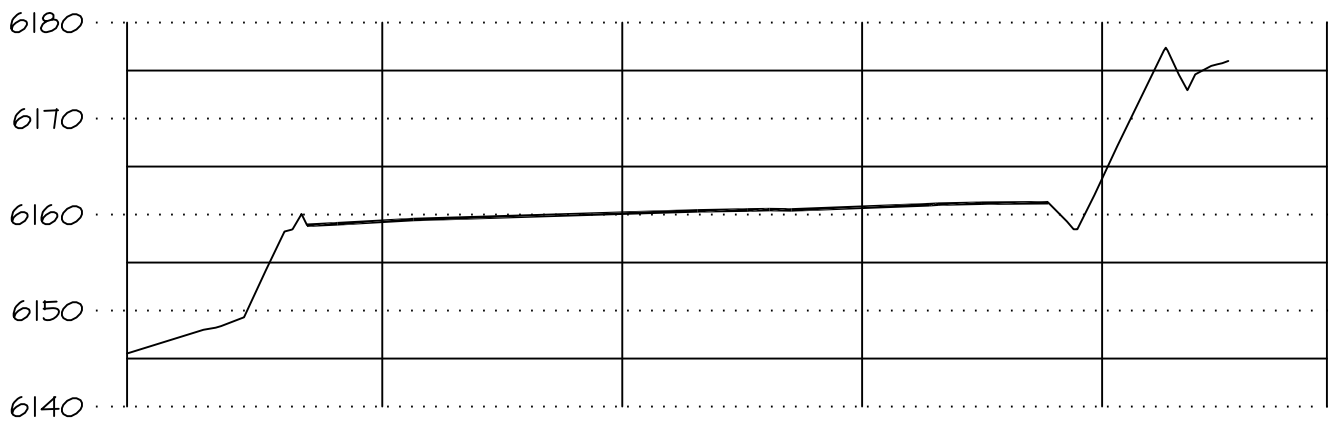
**FIGURE 3**

**RED WILLOW PRODUCTION COMPANY: NORTH CARRACAS 32-4 7F-3**  
**97' FSL, 411' FWL, SECTION 7, T-32-N, R-4-W, N.M.P.M.,**  
**ARCHULETA COUNTY, CO. GROUND LEVEL ELEVATION: 6160'**  
**PAD CROSS SECTION DETAIL**

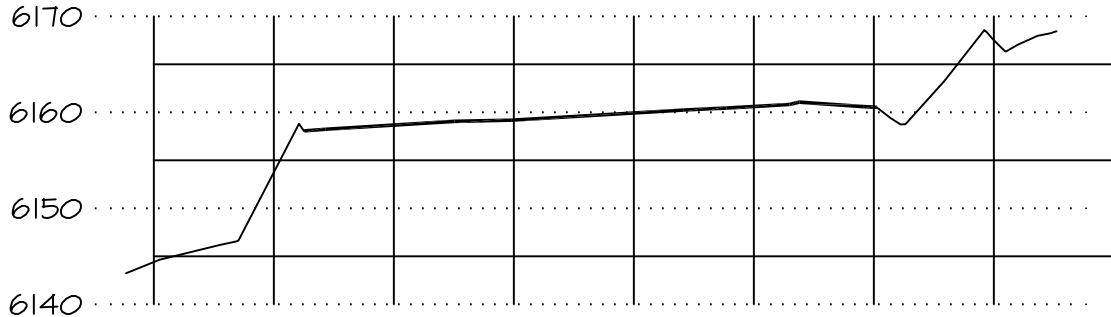
ELEV. A-A'



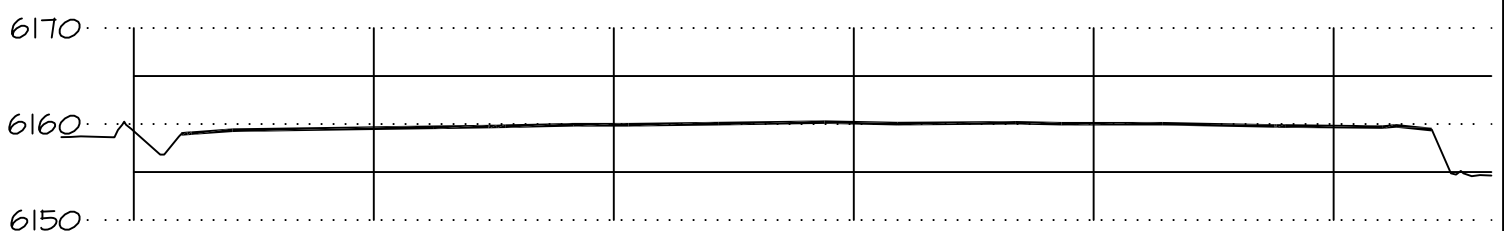
ELEV. B-B'



ELEV. C-C'



ELEV. D-D'



VERTICAL SCALE: 1" = 20' / HORIZONTAL SCALE: 1" = 60'

**FIGURE 4**

DATE DRAWN: 10/30/17

NORTHSTAR SURVEYING & MAPPING, INC.

FILE NORW132CFB

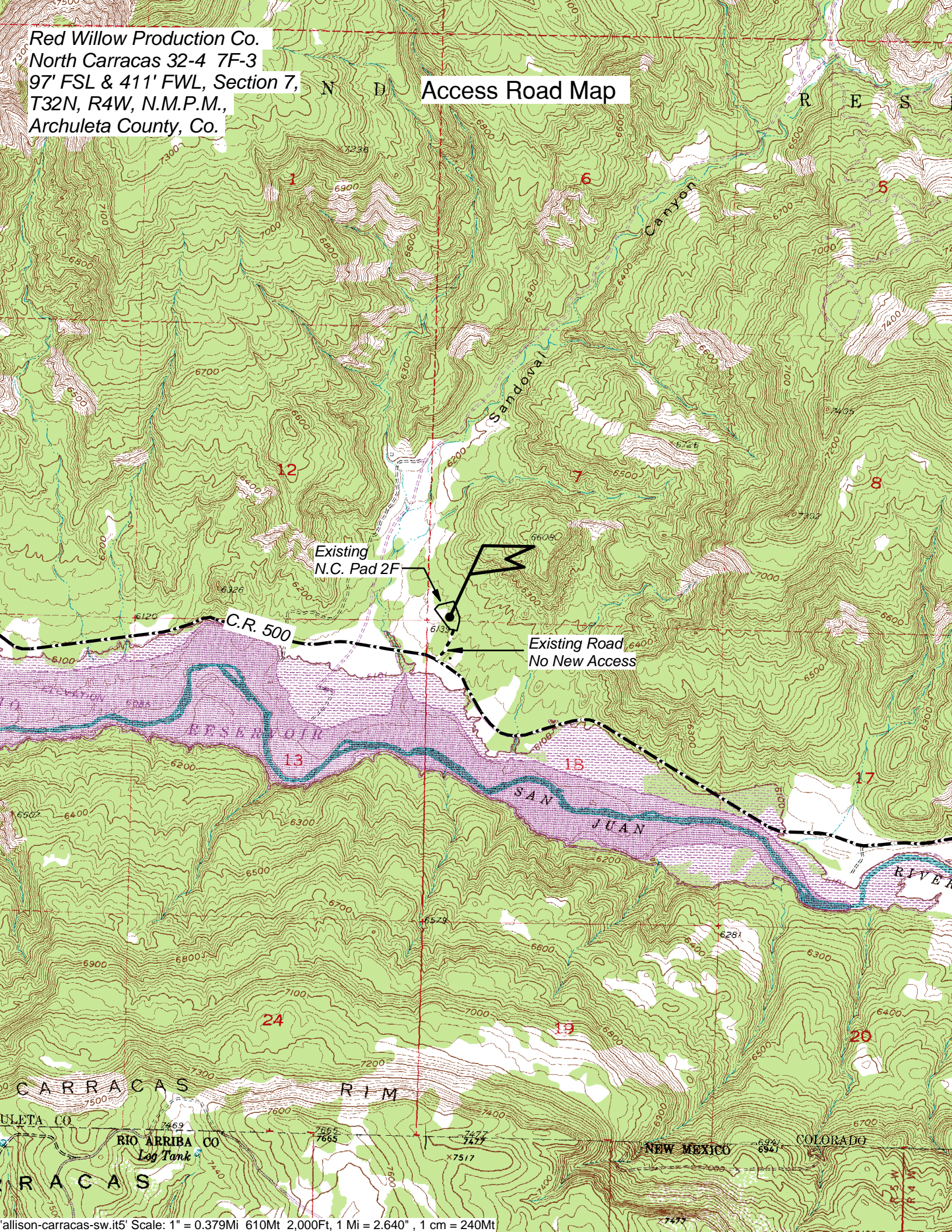
DRAWN BY: K.R.

CHECKED BY: K.R.



Red Willow Production Co.  
North Carracas 32-4 7F-3  
97' FSL & 411' FWL, Section 7,  
T32N, R4W, N.M.P.M.,  
Archuleta County, Co.

## Access Road Map





*Red Willow Production Company*  
**North Carracas 32-4 7F-3**  
96' FSL, 411' FWL, Section 7, T32N, R4W, Archuleta County, Co.



Looking North



Looking East



Looking South



Looking West



Access at Well Location



Access at Road

All photos taken on 10/16/2020

**Directions from the Intersection of State Highway 172 & State Highway 151 in Ignacio, CO**

**to Red Willow Production Company: North Carracas 32-4 7F-3**

**96' FSL & 411' FWL, Section 7, T32N, R4W, N.M.P.M., Archuleta County, CO.**

From the Intersection of State Highway 172 & State Highway 151 in Ignacio, CO. travel East on State Hwy 151 for 19.7 miles;

Go right (East) for on Archuleta County Road #500 for 6.7 miles;

Go left (North) following existing road for 0.1 miles to existing North Carracas Pad 2F well location.