

March 2024

Rule 34 Registration: Volume 2
Legion Water Services, LLC
Hamon RF & Containment
Section 7, T20S, R34E, Lea County

- *C-147 Form*
- *Stamped Design Drawings & Avian Deterrent*
- *Recently Approved Plans for Design/Construction, O&M, Closure*



View south from near the center of the Recycling Facility and Containments area showing the stabilized sand dunes and nature of vegetation.

Prepared for:
Legion Water Services, LLC
Denver, Colorado

Prepared by:
R.T. Hicks Consultants, Ltd.
901 Rio Grande NW F-142
Albuquerque, New Mexico

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Since 1996

March 7, 2024

Ms. Leigh Barr
EMNRD - Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505
Via E-Mail

Ms. Victoria Venegas
NMOCD - District 2
811 S. First St.
Artesia, NM 88210
Via E-Mail

RE: Legion Water Services LLC - Hamon Recycling Facility and Containment
In-ground Containment Registration
Section 7, T20S, R34E, Lea County

Dear Ms. Barr and Ms. Venegas:

On behalf of Legion Water Services, LLC, (Legion) R.T. Hicks Consultants Ltd. prepared this C-147 *registration* for the above-referenced project. Legion anticipates that construction will commence in March 2024. Produced water will flow into the containments no sooner than 3 weeks thereafter.

This submission is modified from our previous registration for the Hamon RF and Containment dated February 2024 by changing the owner of the of the containment from Avant Operating, LLC (Avant) to Legion Water Services, LLC. The shareholders of Avant and Legion are the same. The wells served by the Hamon RF and Containment are owned by Avant. Thus, the C-147 Box 4 shows that bonding is compliant with 19.15.8 NMAC because the containment serves only wells owned or operated by the owners of the containment.

Volume 1 of the package contains:

- This letter
- Siting criteria demonstration for the in-ground containment with Legion Water Services shown in the header. Avant Natural Resources was changed to Legion Water Services in the Plates

Volume 2 includes:

- C-147 Form to register the in-ground containment for Legion Water Services,
- Stamped Design Drawings that remain labeled Avant Natural Resources,
- Recently Approved Plans for Design/Construction, O&M, Closure

This submission refers to the following elements that some OCD reviewers have considered variances for in-ground containments:

1. OCD has previously approved an equivalency demonstration written by experts for 40-mil HDPE secondary liner. We maintain that the language of the Rule is clear, and a variance is not required.
2. OCD has approved the proposed Avian Protection Plan (Bird-X Mega Blaster Pro) for other containments. Thus, the plan meets the requirement of the rule that the

March 7, 2024

Page 2

- “otherwise protective of wildlife, including migratory birds” and a variance is not required.
3. Using the proposed deer fence in lieu of a 4-strand barbed wire fence is not a variance. Because feral pigs, javelina and deer are present in the area, a tall game fence is required to comply with Section 19.15.34.12 D.1 of the Rule. The specification for fencing provided in 19.15.34.12 D.2 contradicts D.1 because pigs will move beneath the lower strand of a 4-foot high barbed wire fence and deer will jump over. Thus, compliance with D.2 results in a violation of D.1. We maintain that compliance with D.1 is the critical component of the Rule and operators need not be required to submit a variance request to follow Best Management Practices and comply with the Rule. Nevertheless, Avant will attach 4 strands of barbed wire to the game fence if required by OCD.

Legion will upload the registration package to OCD via the OCD.Online portal. In compliance with 19.15.34.10 of the Rule, Legion provided the C-147 to the surface owner and proof of this notification will also be uploaded to the portal.

If you have any questions or concerns regarding this permit or the attached C-147, please contact me. As always, we appreciate your work ethic and diligence.

Sincerely,
R.T. Hicks Consultants

A handwritten signature in black ink, appearing to read "Randall T. Hicks".

Randall T. Hicks, PG
Principal

Copy: Legion Water Services
Cascade Services

C-147

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-147
Revised April 3, 2017

Recycling Facility and/or Recycling Containment

Type of Facility: ☒ Recycling Facility ☒ Recycling Containment*
Type of action: ☐ Permit ☒ Registration
☐ Modification ☐ Extension
☐ Closure ☐ Other (explain) _____

* At the time C-147 is submitted to the division for a Recycling Containment, a copy shall be provided to the surface owner.

Be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.

Operator: Legion Water Services LLC OGRID #: 332392
Address: 1515 Wynkoop Street Suite 700 Denver, CO 80202
Facility or well name (include API# if associated with a well): Hamon Reuse Facility & IN-GROUND CONTAINMENT #1
OCD Permit Number: 1RF-519 (For new facilities the permit number will be assigned by the district office)
U/L or Qtr/Qtr: L, K, M, N, and O Section: 7 Township: 20S Range: 34E County: Lea
Surface Owner: ☐ Federal ☐ State ☒ Private ☐ Tribal Trust or Indian Allotment

2.

☒ **Recycling Facility:**
Location of (if applicable): Latitude: 32.58527 Longitude: -103.60545 approximately (NAD83)
Proposed Use: ☒ Drilling* ☒ Completion* ☒ Production* ☒ Plugging*
**The re-use of produced water may NOT be used until fresh water zones are cased and cemented*
☐ Other, requires permit for other uses. Describe use, process, testing, volume of produced water and ensure there will be no adverse impact on groundwater or surface water.
☒ Fluid Storage
☒ Above ground tanks ☒ Recycling containment ☐ Activity permitted under 19.15.17 NMAC explain type _____
☐ Activity permitted under 19.15.36 NMAC explain type: _____ ☐ Other explain _____
☐ For multiple or additional recycling containments, attach design and location information of each containment
☐ **Closure Report (required within 60 days of closure completion):** ☐ Recycling Facility Closure Completion Date: _____

3.

☒ **Recycling Containment:**
☐ Annual Extension after initial 5 years (attach summary of monthly leak detection inspections for previous year)
Center of Recycling Containment (if applicable) Latitude: 32.58527 Longitude: -103.60545 approx. (NAD83)
☐ For multiple or additional recycling containments, attach design and location information of each containment
☒ Lined ☐ Liner type: Thickness 60 mil pri. and 40 mil sec. See Attached Engineer Drawings ☐ LLDPE ☒ HDPE ☐ PVC ☐ Other
☐ String-Reinforced
Liner Seams: ☒ Welded ☐ Factory ☐ Other Volume: bbl See Attachment Drawings and Plans Dimensions ____
☐ Recycling Containment Closure Completion Date: _____

4.

Bonding:

- ☐ Covered under bonding pursuant to 19.15.8 NMAC per 19.15.34.15(A)(2) NMAC (These containments are limited to only the wells owned or operated by the owners of the containment.)
- ☒ Bonding in accordance with 19.15.34.15(A)(1). Amount of bond \$ See Estimate (work on these facilities cannot commence until bonding amounts are approved)
- ☒ Attach closure cost estimate and documentation on how the closure cost was calculated.

5.

Fencing:

- ☐ Four-foot height, four strands of barbed wire evenly spaced between one and four feet
- ☒ Alternate. Please specify: Game Fence.

6.

Signs:

- ☒ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
- ☐ Signed in compliance with 19.15.16.8 NMAC

7.

Variances:

Justifications and/or demonstrations that the proposed variance will afford reasonable protection against contamination of fresh water, human health, and the environment.

Check the below box only if a variance is requested:

- ☐ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval. If a Variance is requested, include the variance information on a separate page and attach it to the C-147 as part of the application.
- If a Variance is requested, it must be approved prior to implementation.***

8.

Siting Criteria for Recycling Containment

Instructions: The applicant must provide attachments that demonstrate compliance for each siting criteria below as part of the application. Potential examples of the siting attachment source material are provided below under each criteria.

General siting**Ground water is less than 50 feet below the bottom of the Recycling Containment.**

NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells **Plates 1-2 Volume 1**

☐ Yes ☒ No
☐ NA

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.

☐ Yes ☒ No
☐ NA

- Written confirmation or verification from the municipality; written approval obtained from the municipality **Plate 3**

Within the area overlying a subsurface mine.

☐ Yes ☒ No

- Written confirmation or verification or map from the NM EMNRD-Mining and Minerals Division **Plate 4**

Within an unstable area.

☐ Yes ☒ No

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; topographic map **Plate 5**

Within a 100-year floodplain. FEMA map **Plate 6**

☐ Yes ☒ No

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

☐ Yes ☒ No

- Topographic map; visual inspection (certification) of the proposed site **Plate 7**

Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

☐ Yes ☒ No

- Visual inspection (certification) of the proposed site; aerial photo; satellite image **Plate 8**

Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application. **Plates 1 and 7**

☐ Yes ☒ No

- NM Office of the State Engineer - iWATERS database search; visual inspection (certification) of the proposed site

Within 500 feet of a wetland. **Plate 9**

☐ Yes ☒ No

- US Fish and Wildlife Wetland Identification map; topographic map; visual inspection (certification) of the proposed site

9.

Recycling Facility and/or Containment Checklist:

Instructions: Each of the following items must be attached to the application. Indicate, by a check mark in the box, that the documents are attached.


- ☒ Design Plan - based upon the appropriate requirements.
- ☒ Operating and Maintenance Plan - based upon the appropriate requirements.
- ☒ Closure Plan - based upon the appropriate requirements.
- ☒ Site Specific Groundwater Data -
- ☒ Siting Criteria Compliance Demonstrations --
- ☒ Certify that notice of the C-147 (only) has been sent to the surface owner(s)

10.

Operator Application Certification:

I hereby certify that the information and attachments submitted with this application are true, accurate and complete to the best of my knowledge and belief.

Name (Print): BRADEN HARRIS Title: LEGION WATER SERVICES

Signature:  Date: 3/28/24
e-mail address _____ Telephone: (406) 600-3310

11. OCD Representative Signature: Victoria Venegas Approval Date: 04/19/2024

Title: Environmental Specialist OCD Permit Number: 1RF-519

- ☒ OCD Conditions _____
- ☒ Additional OCD Conditions on Attachment _____

RECYCLING CONTAINMENT DESIGN DRAWINGS

AVIAN DETERRENT SYSTEM

HAMON RECYCLE FACILITY

AVANT NATURAL RESOURCES

SECTION 7, TOWNSHIP 20 SOUTH, RANGE 34 EAST N.M.P.M.
LEA COUNTY, NEW MEXICO

32°35'6.74"N, 103°36'20.22"W
32.585205°, -103.605615°

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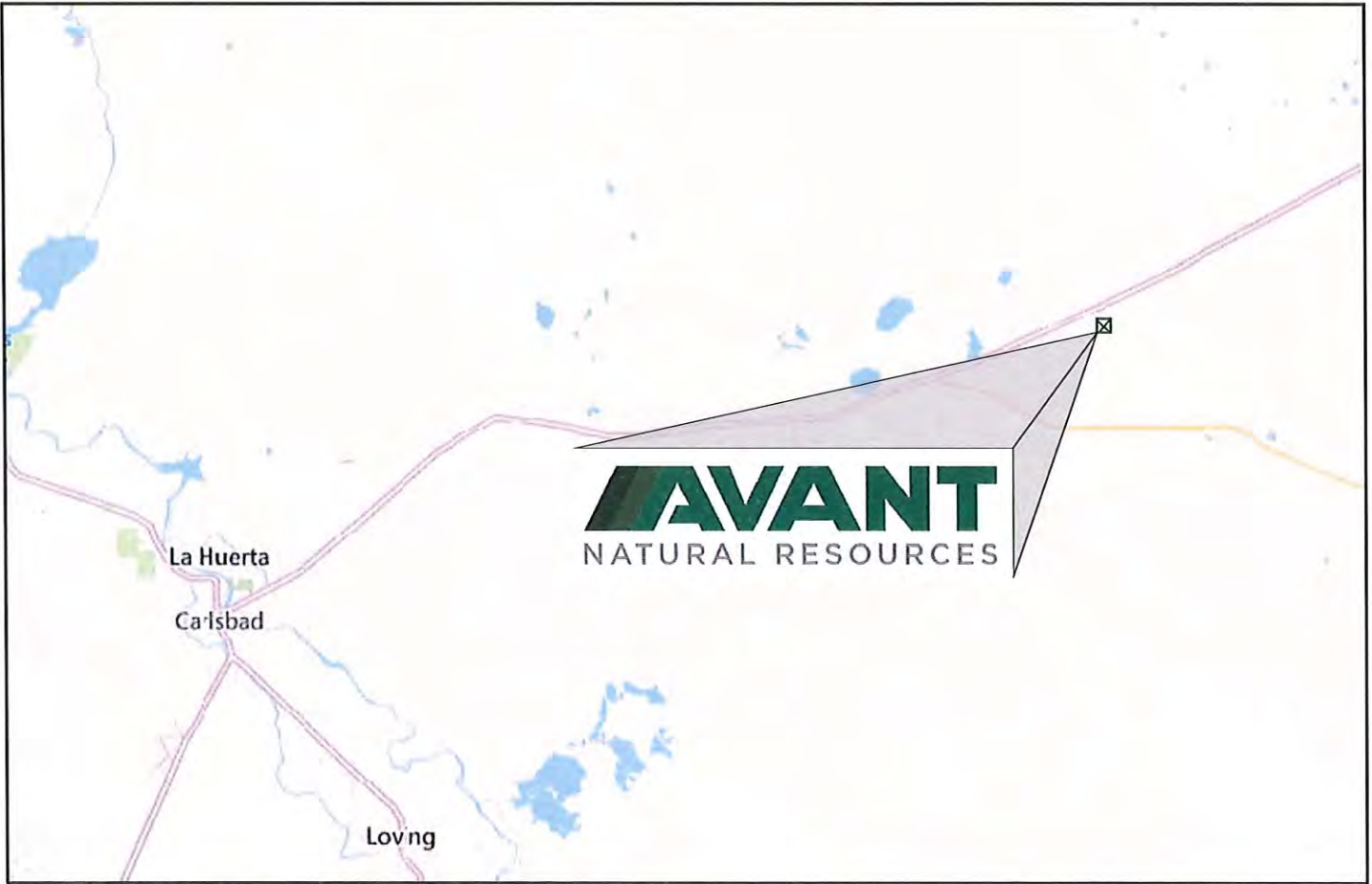
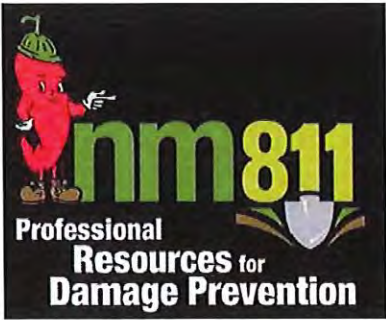


INDEX TO DRAWINGS 11X17

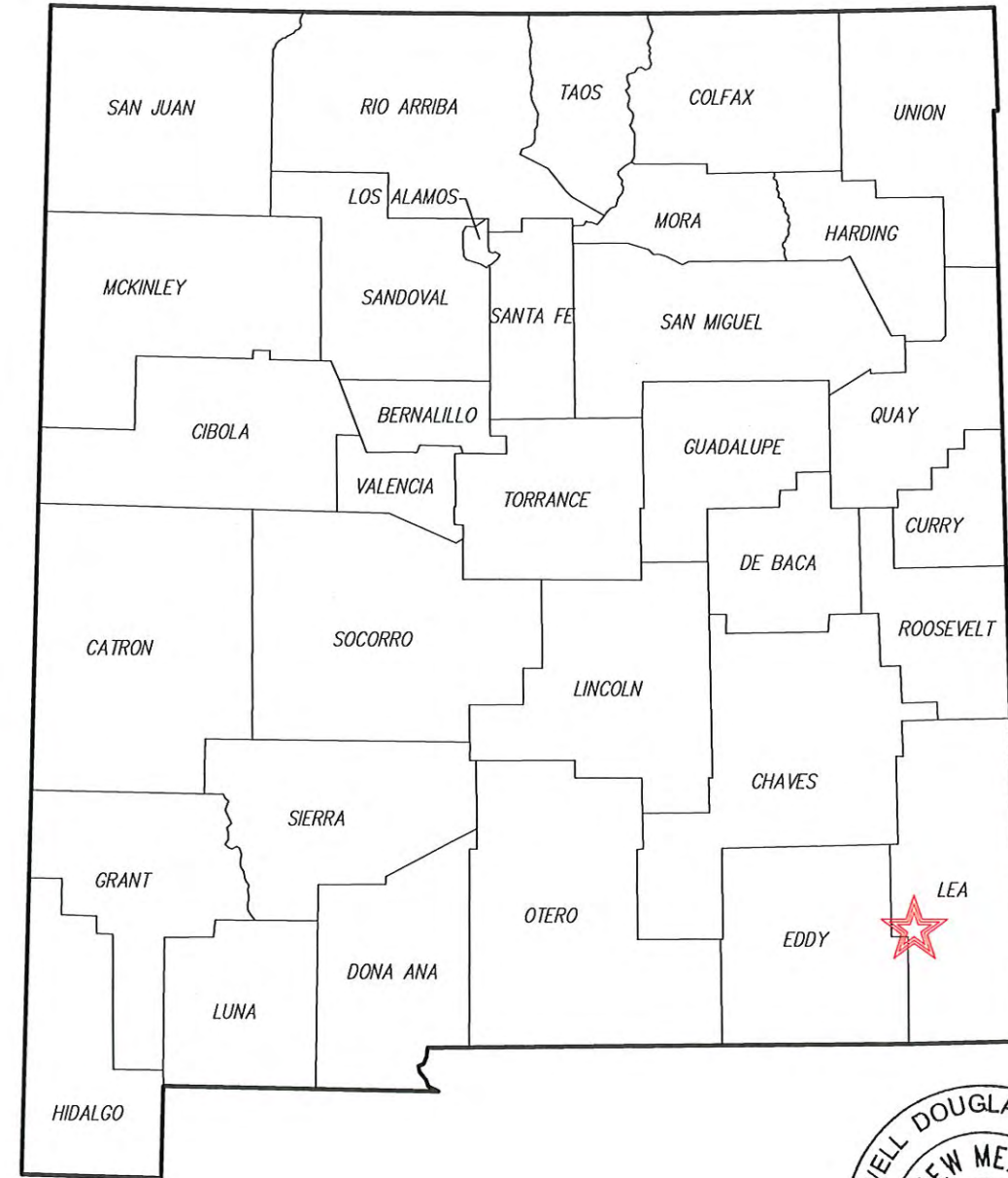
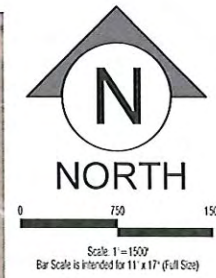
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2.	PROJECT LOCATION
3.	EXISTING SITE FEATURES
4.	SITE PLAN
5.	PIT CAPACITY
6.	CROSS SECTIONS
7.	CROSS SECTIONS
8.	SUMP DETAILS
9.	LINER DETAILS
10.	FENCE AND RUB SHEET PLAN
11.	FENCE DETAILS

CONTACTS

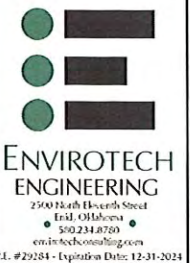
BOBBJO CRAIN - CASCADE SERVICES- (210) 632-8670
ENVIROTECH ENGINEERING & CONSULTING - ISAIAH IRBY, EIT (580)-234-8780
(DESIGN ENGINEER)
ENVIROTECH ENGINEERING & CONSULTING - MITCHELL RATKE, EIT (580)-234-8780
(DESIGN ENGINEER)
ENVIROTECH ENGINEERING & CONSULTING - DOUG SCHRANTZ PE (580)-234-8780
(SUPERVISING ENGINEER)



2500 N. Eleventh Street Enid, OK 73701 • 580.234.8780 • envirotechconsulting.com
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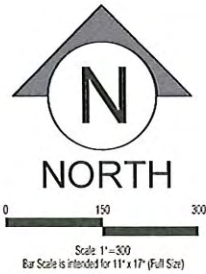
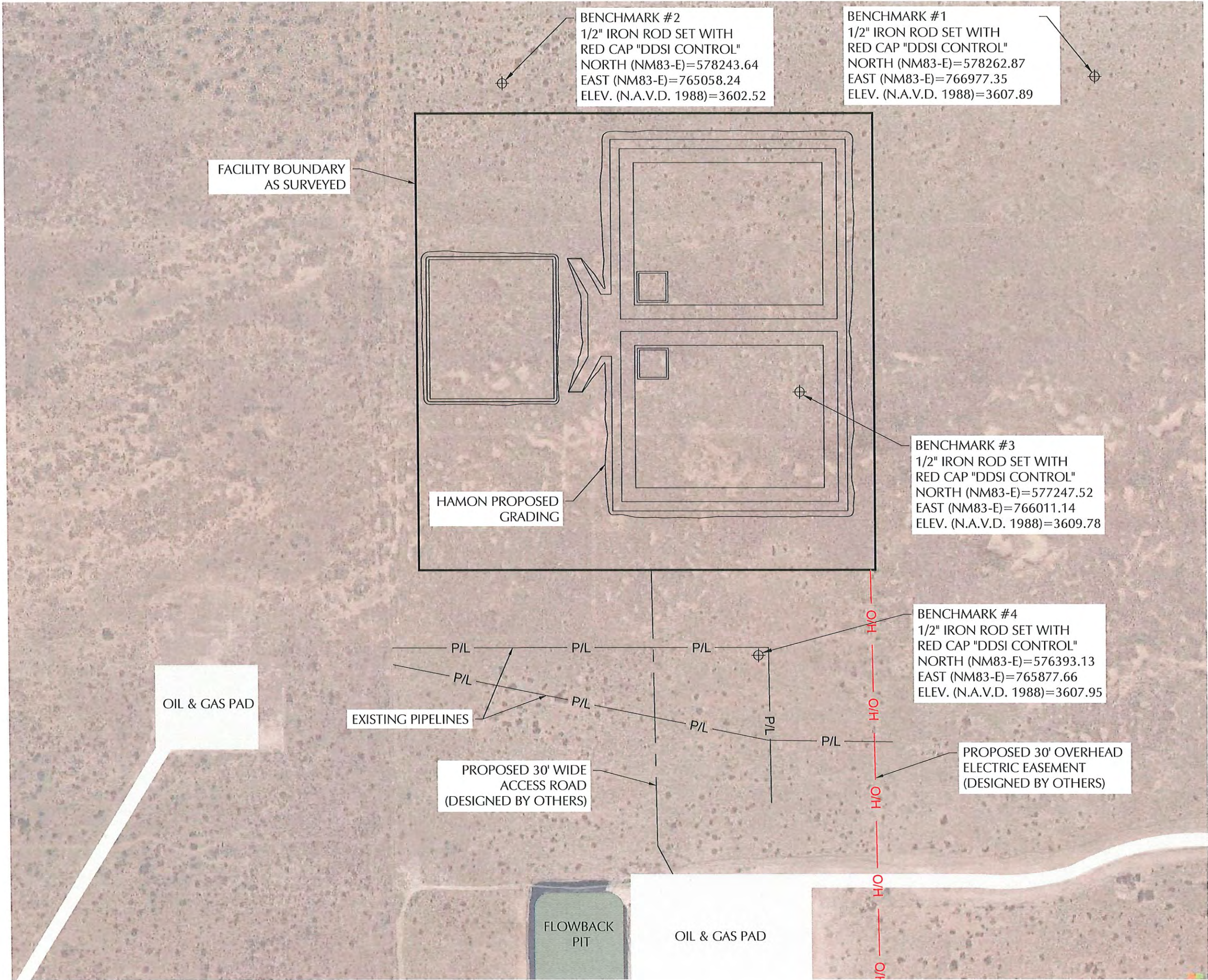
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NO.	DATE	DESCRIPTION

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PROJECT LOCATION
HAMON RECYCLE FACILITY
AVANT NATURAL RESOURCES
SECTION 7, TOWNSHIP 20 S., RANGE 34 E., N.M.P.M.,
LEA COUNTY, NEW MEXICO

DATE:	FEBRUARY 13, 2024
SCALE:	1"=1500'
DESIGNED BY:	I. IRBY
DRAWN BY:	I. IRBY
CHECKED BY:	D. SCHRANTZ
PROJECT NO.	024035-00
SHEET NO.	



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Tulsa, Oklahoma
74103
enrotech.com
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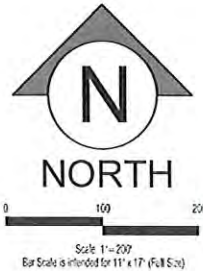
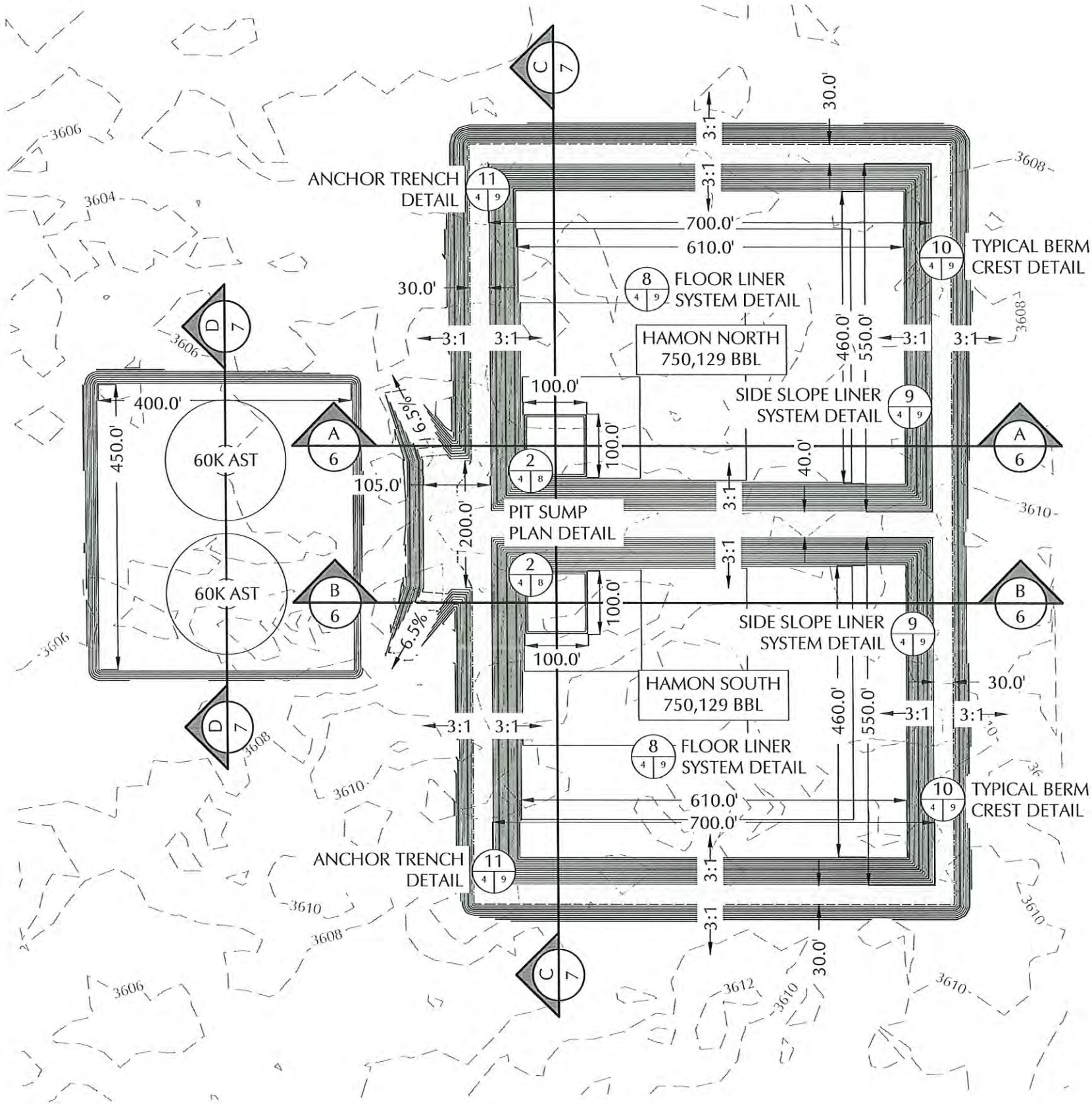
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EXISTING SITE FEATURES
HAMON RECYCLE FACILITY
AVANT NATURAL RESOURCES
SECTION 7, TOWNSHIP 20 S, RANGE 34 E, N.M.P.M.
LEA COUNTY, NEW MEXICO

DATE:	FEBRUARY 13, 2024
SCALE:	1"=300'
DESIGNED BY:	I. IRBY
DRAWN BY:	I. IRBY
CHECKED BY:	D. SCHRANTZ
PROJECT NO.	024035-00
SHEET NO.	3 OF 11



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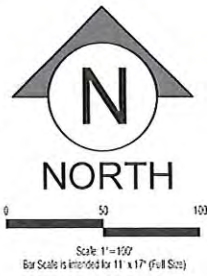
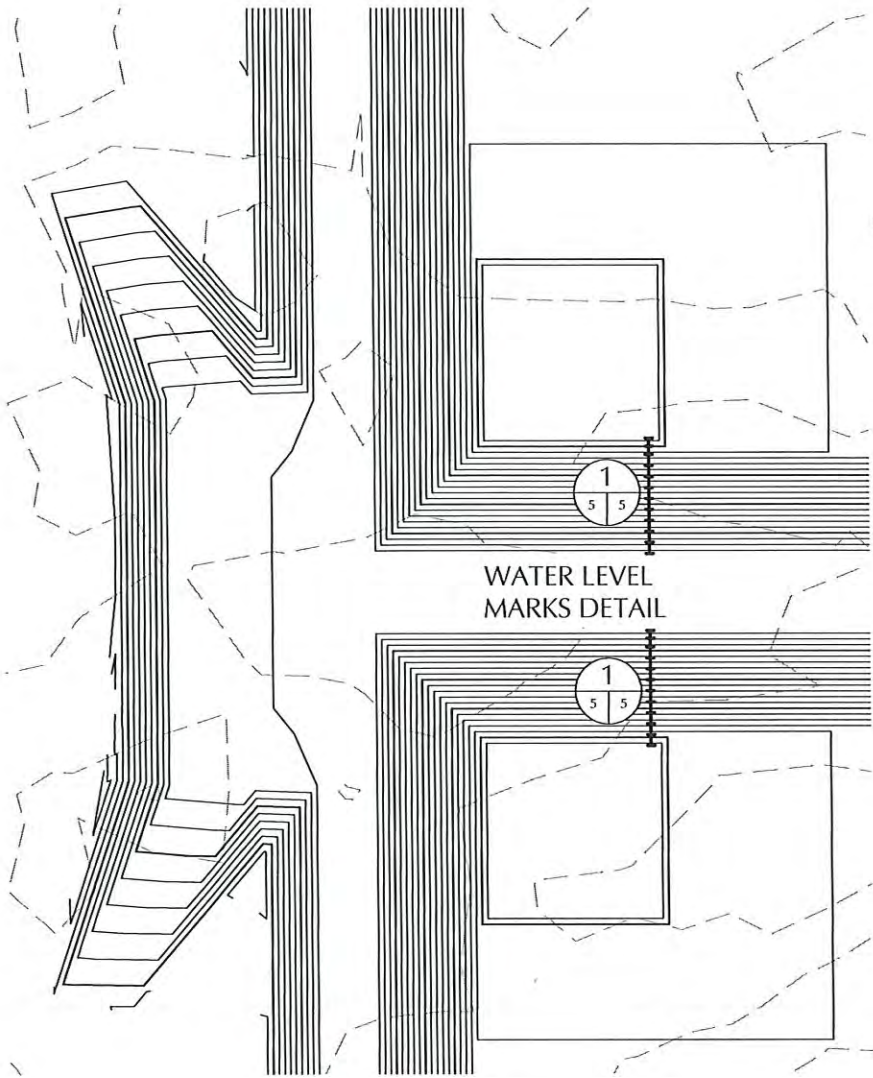
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SITE PLAN
HAMON RECYCLE FACILITY
AVANT NATURAL RESOURCES
SECTION 7, TOWNSHIP 20 S, RANGE 34 E, N.M.P.M.
LEA COUNTY, NEW MEXICO

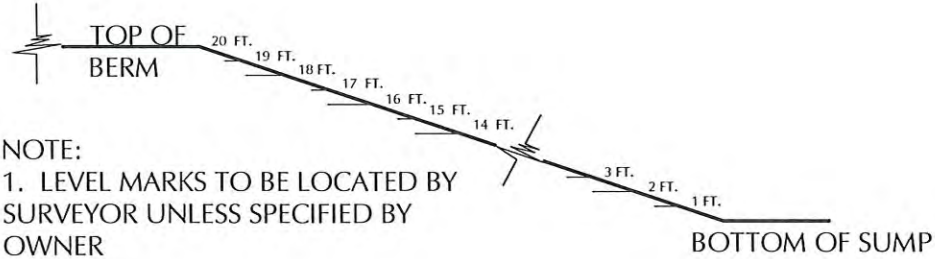
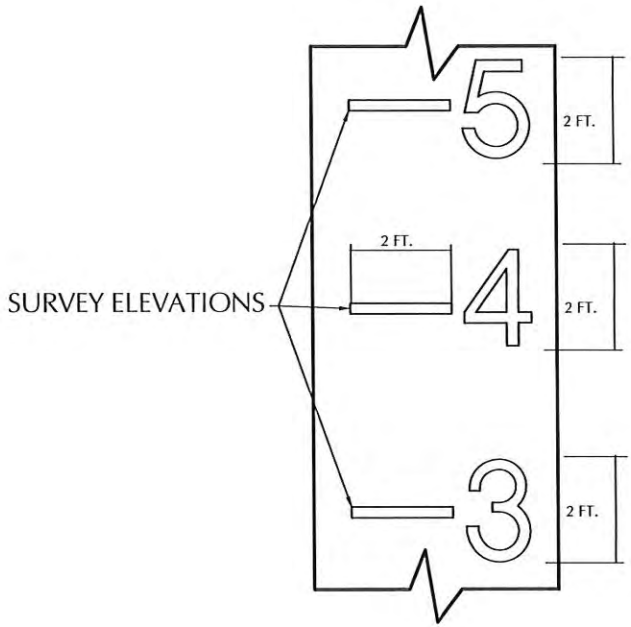
DATE:	FEBRUARY 13, 2024
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DESIGNED BY:	I. IRBY
DRAWN BY:	I. IRBY
CHECKED BY:	D. SCHRANTZ
PROJECT NO.	024035-00
SHEET NO.	4 OF 11



OWNER SITE NAME	AVANT NATURAL RESOURCES HAMON RECYCLE FACILITY		
	TOP FB	BOTTOM	MAX LIQ. LEVEL
LAGOON FEATURES	3		3
SIDE SLOPE RATIO	20.0		17.0
MAX DEPTH (FT)	700	610	682
LAGOON TOP WIDTH (FT)	550	460	532
LAGOON TOP LENGTH (FT)			
MAX TOTAL VOL (FT3)	5,332,818		4,211,394
MAX TOTAL VOL (BBL)	949,876		750,129

	FREEBOARD
	MAXIMUM CAPACITY
	STORAGE VOLUME
	FLOOR
	SUMP

ELEVATION	LAGOON LIQ DEPTH	REMAINING STORAGE	REMAINING STORAGE VOL	REMAINING STORAGE	REMAINING STORAGE	PERCENT OF TOTAL VOL	VOL IN LAGOON	VOL IN LAGOON	VOL IN LAGOON	VOL IN LAGOON	PERCENT OF TOTAL VOL
FT	FT	FT	FT3	GAL	BBL	%	FT3	GAL	BBL	AC-FT	%
3618.5	20.0	0.0	-	-	-	0%	5,332,818	39,894,811	949,876	122.42	100%
3617.5	19.0	1.0	592,898	2,851,840	67,901	7%	4,951,607	37,042,972	881,976	113.67	93%
3616.5	18.0	2.0	1,174,245	5,648,118	134,479	14%	4,577,823	34,246,694	815,397	105.09	86%
3615.5	17.0	3.0	1,744,152	8,389,373	199,747	21%	4,211,394	31,505,438	750,129	96.68	79%
3614.5	16.0	4.0	2,302,733	11,076,144	263,718	28%	3,852,248	28,818,667	686,159	88.44	72%
3613.5	15.0	5.0	2,850,098	13,708,969	326,404	34%	3,500,313	26,185,842	623,472	80.36	66%
3612.5	14.0	6.0	3,386,359	16,288,387	387,819	41%	3,155,517	23,606,424	562,058	72.44	59%
3611.5	13.0	7.0	3,911,629	18,814,936	447,975	47%	2,817,788	21,079,875	501,902	64.69	53%
3610.5	12.0	8.0	4,426,020	21,289,156	506,885	53%	2,487,055	18,605,656	442,992	57.09	47%
3609.5	11.0	9.0	4,929,643	23,711,583	564,562	59%	2,163,244	16,183,228	385,315	49.66	41%
3608.5	10.0	10.0	5,422,611	26,082,758	621,018	65%	1,846,284	13,812,053	328,858	42.38	35%
3607.5	9.0	11.0	5,905,035	28,403,219	676,267	71%	1,536,104	11,491,593	273,609	35.26	29%
3606.5	8.0	12.0	6,377,028	30,673,503	730,322	77%	1,232,630	9,221,308	219,555	28.30	23%
3605.5	7.0	13.0	6,838,701	32,894,150	783,194	82%	935,792	7,000,661	166,682	21.48	18%
3604.5	6.0	14.0	7,290,166	35,065,699	834,898	88%	645,517	4,829,112	114,979	14.82	12%
3603.5	5.0	15.0	7,731,536	37,188,687	885,445	93%	361,733	2,706,124	64,432	8.30	7%
3602.5	4.0	16.0	8,060,747	38,772,194	923,147	97%	150,063	1,122,618	26,729	3.44	3%
3601.5	3.0	17.0	8,217,963	39,528,401	941,152	99%	48,979	366,410	8,724	1.12	1%
3600.5	2.0	18.0	8,266,621	39,762,445	946,725	100%	17,694	132,366	3,152	0.41	0%
3599.5	1.0	19.0	8,281,257	39,832,847	948,401	100%	8,283	61,964	1,475	0.19	0%
3598.5	0.0	20.0	8,294,140	39,894,811	949,876	100%	-	-	-	-	0%



- NOTE:
1. LEVEL MARKS TO BE LOCATED BY SURVEYOR UNLESS SPECIFIED BY OWNER
 2. MARKS TO BE MADE BY AN EXTRUSION WELDER USING BLACK FILAMENT (OR WHITE FILAMENT ON BLACK LINER).
 3. MARKS SHOULD BEGIN AT THE TOP OF BERM AND CONTINUE TO THE BOTTOM OF THE SUMP. (TOP OF BERM SHOULD READ 20-FT, BOTTOM OF SUMP +1-FT SHOULD READ 1-FT)
 4. REFERENCE PIT CAPACITY TABLES FOR ACCURATE ELEVATIONS

WATER LEVEL MARKS DETAIL
NOT TO SCALE

PROFESSIONAL ENGINEER
NEW MEXICO
29284
ROWELL DOUGLAS SCHRANTZ

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CASCADE SERVICES

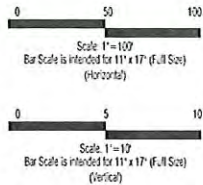
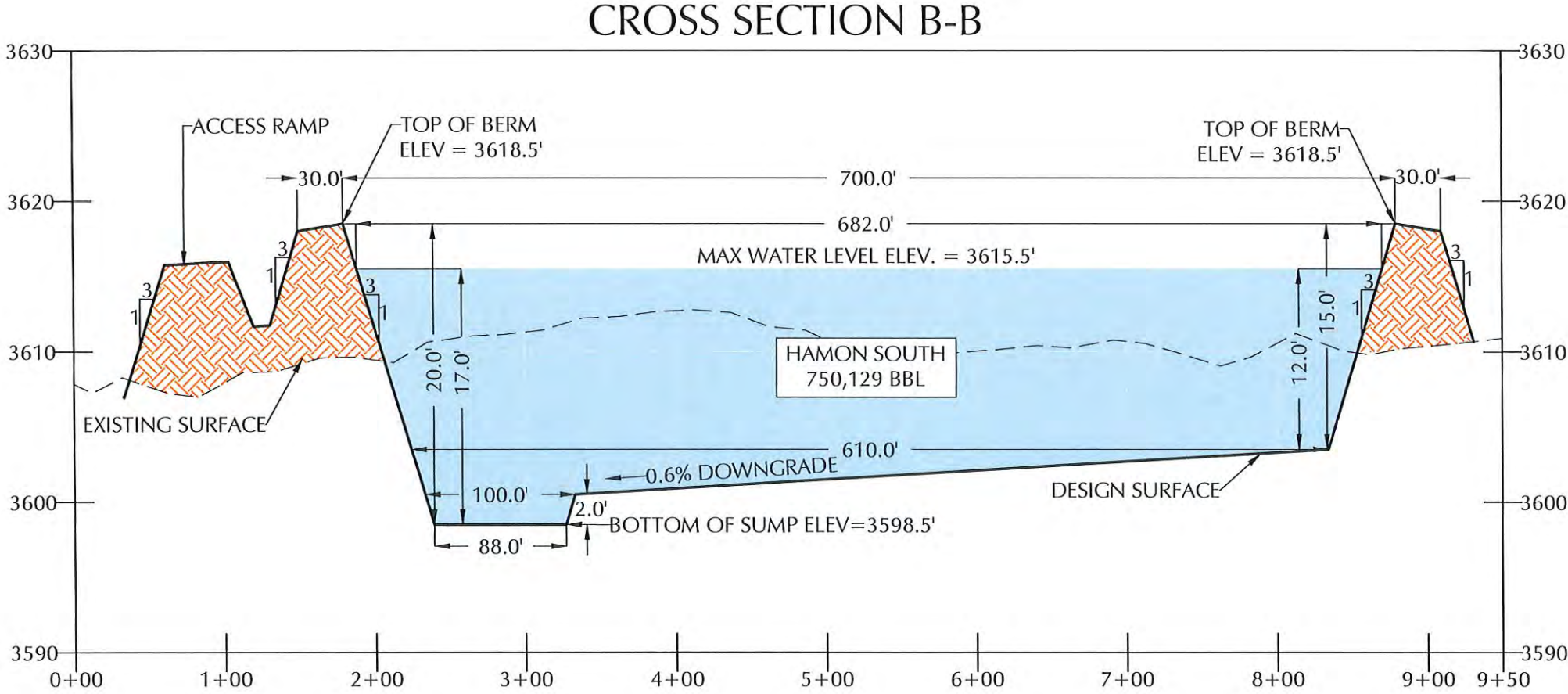
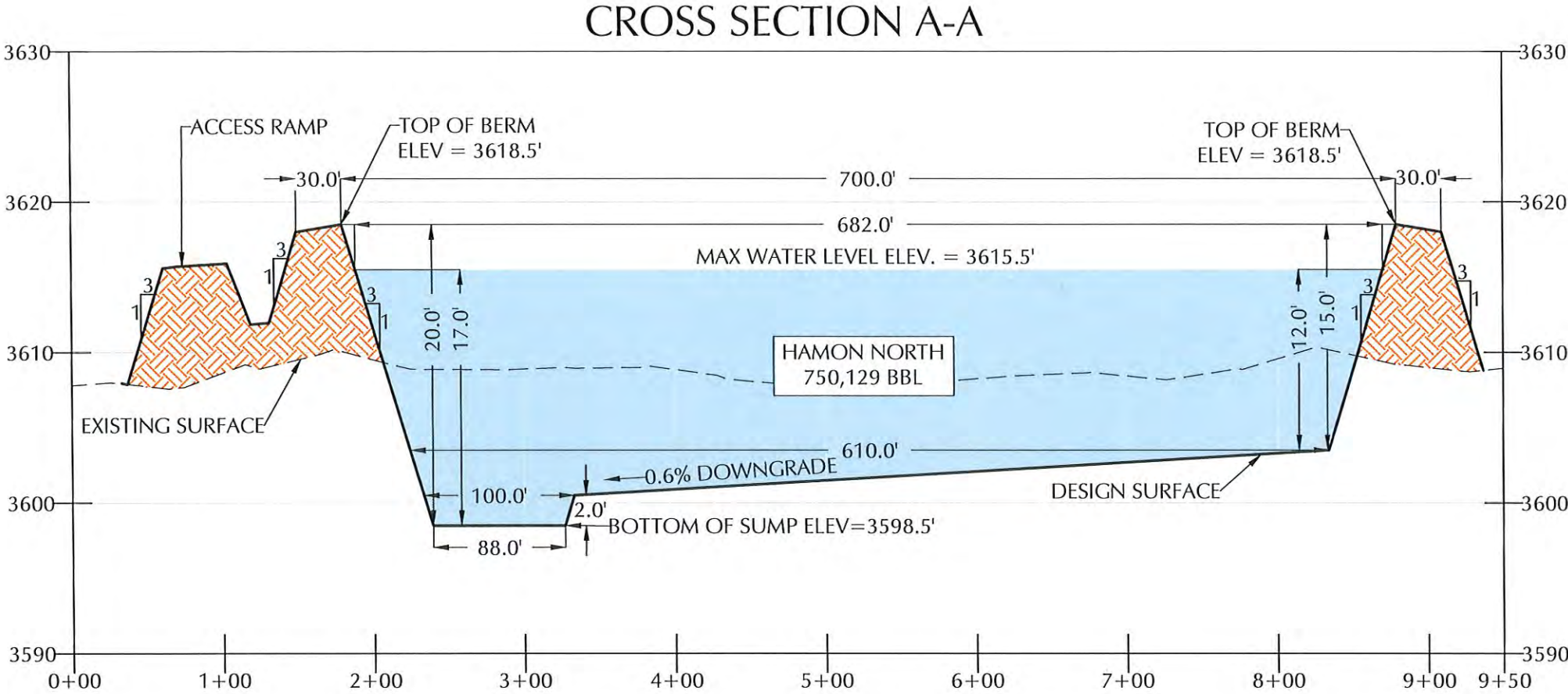
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AVANT
NATURAL RESOURCES

PIT CAPACITY
HAMON RECYCLE FACILITY
AVANT NATURAL RESOURCES
SECTION 7, TOWNSHIP 20 S, RANGE 34 E, N.M.P.M.
LEA COUNTY, NEW MEXICO

DATE: FEBRUARY 13, 2024
SCALE: 1"=100'
DESIGNED BY: I. IRBY
DRAWN BY: I. IRBY
CHECKED BY: D. SCHRANTZ
PROJECT NO. 024035-00
SHEET NO. 5 OF 11



ENVIROTECH
ENGINEERING
2500 North Elwood Street
Tulsa, Oklahoma
74104
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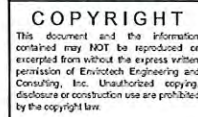
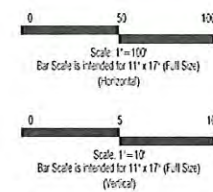
AVANT
NATURAL RESOURCES



DEVELOPED IN
CONJUNCTION WITH
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SERVICES

CROSS SECTIONS
HAMON RECYCLE FACILITY
AVANT NATURAL RESOURCES
SECTION 7, TOWNSHIP 20 S., RANGE 34 E., N.M.P.M.
LEA COUNTY, NEW MEXICO

DATE:	FEBRUARY 13, 2024
SCALE:	VERT 1" = 10' HORIZ 1" = 100'
DESIGNED BY:	I. IRBY
DRAWN BY:	I. IRBY
CHECKED BY:	D. SCHRANTZ
PROJECT NO.	024035-00
SHEET NO.	6 OF 11



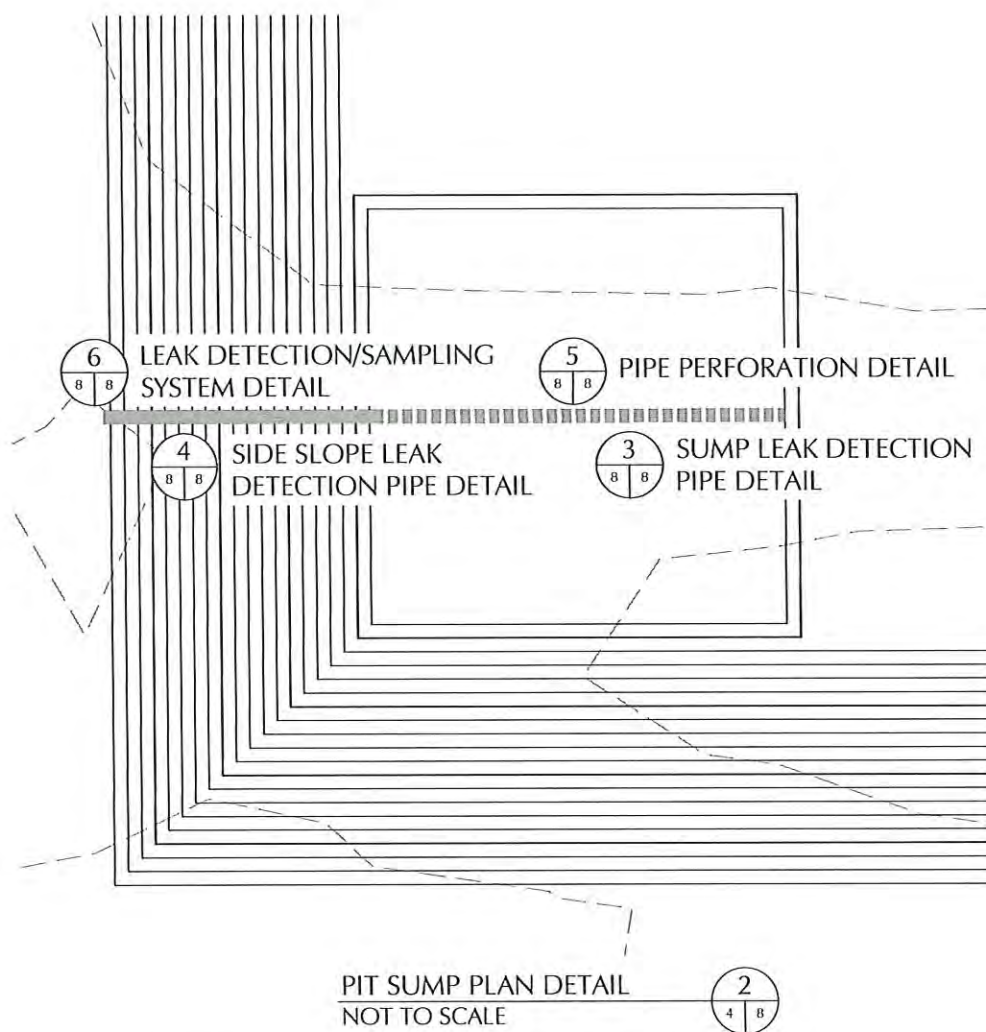


CROSS SECTIONS
HAMON RECYCLE FACILITY
AVANT NATURAL RESOURCES
SECTION 7, TOWNSHIP 20 S, RANGE 34 E, N.M.P.M.
LEA COUNTY, NEW MEXICO

DATE:	FEBRUARY 13, 2021
SCALE:	VERT 1" = 10' HORIZ 1" = 10'
DESIGNED BY:	I. IRB
DRAWN BY:	I. IRB
CHECKED BY:	D. SCHRANTZ
PROJECT NO.	024035-0
SHEET NO.	7 OF 1



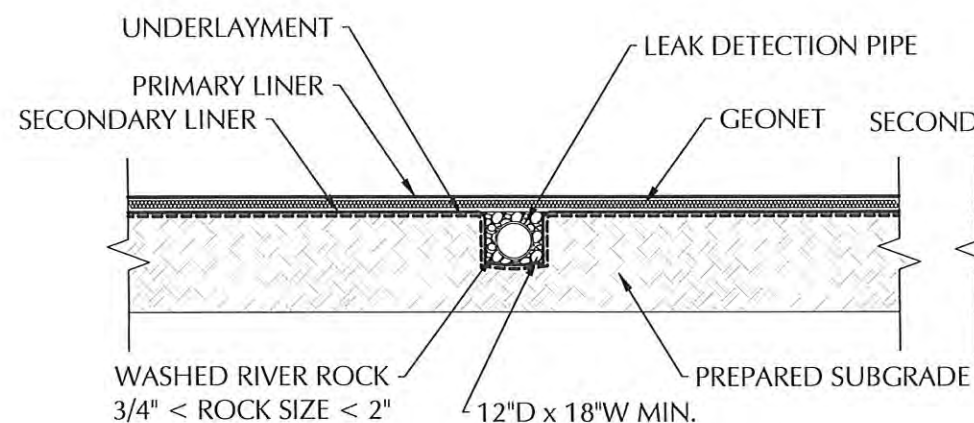
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NOTES:

1. PERFORATED PIPE TO EXTEND THE FULL LENGTH OF SUMP (APPROX. 88-LF)

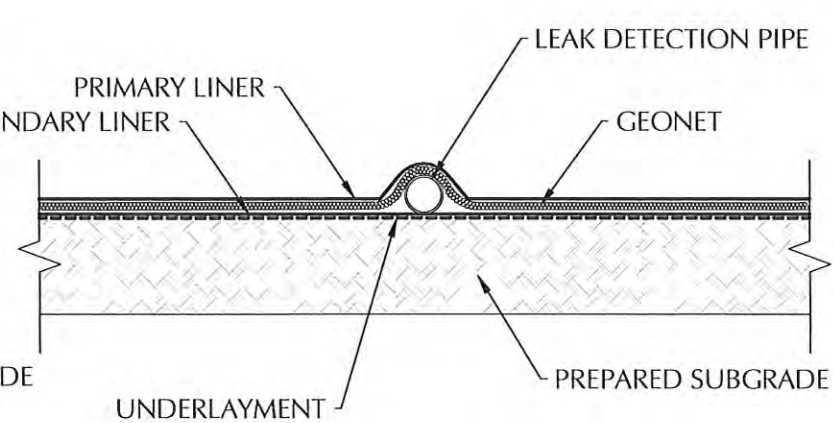
PROPOSED PIT REFERENCE TABLE	
<u>DETAIL</u>	<u>DESCRIPTION</u>
PRIMARY LINER	60-MIL HDPE LINER
LEAK DETECTION	200-MIL GEONET
SECONDARY LINER	40-MIL HDPE LINER
UNDERLAYMENT	8 OZ GEOTEXTILE
SUMP	3598.50-ft ELEVATION
BERM (ROAD CREST)	DESIGN ELEV. 3618.50-ft - RD CREST 30'-40'
LEAK DETECTION PIPING	6-in DR11 PERFORATED HDPE PIPE LEAK DETECTION PIPE



SUMP LEAK DETECTION PIPE DETAIL

NOT TO SCALE

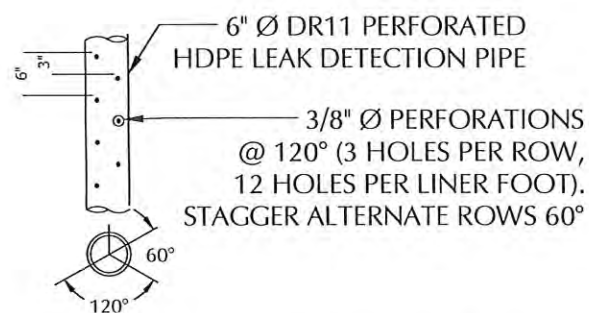
3
8 8



SIDE SLOPE LEAK DETECTION PIPE DETAIL

NOT TO SCALE

4
8 8

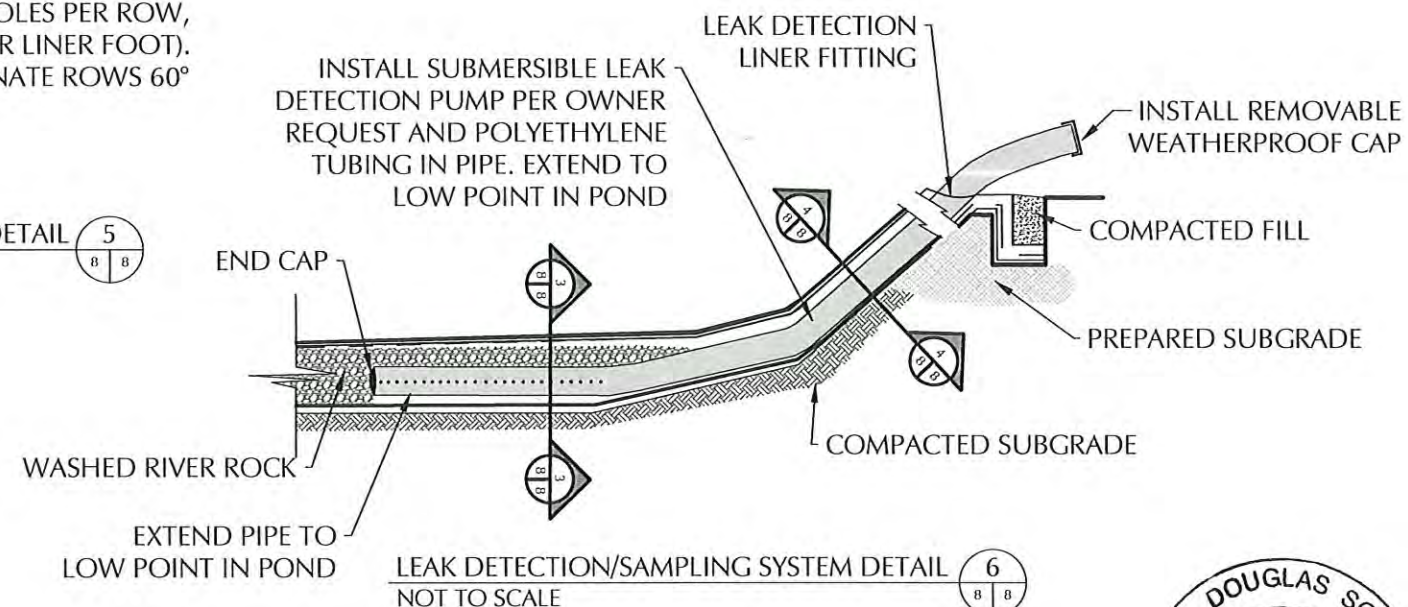


PIPE PERFORATION DETAIL

NOT TO SCALE

5

8 8



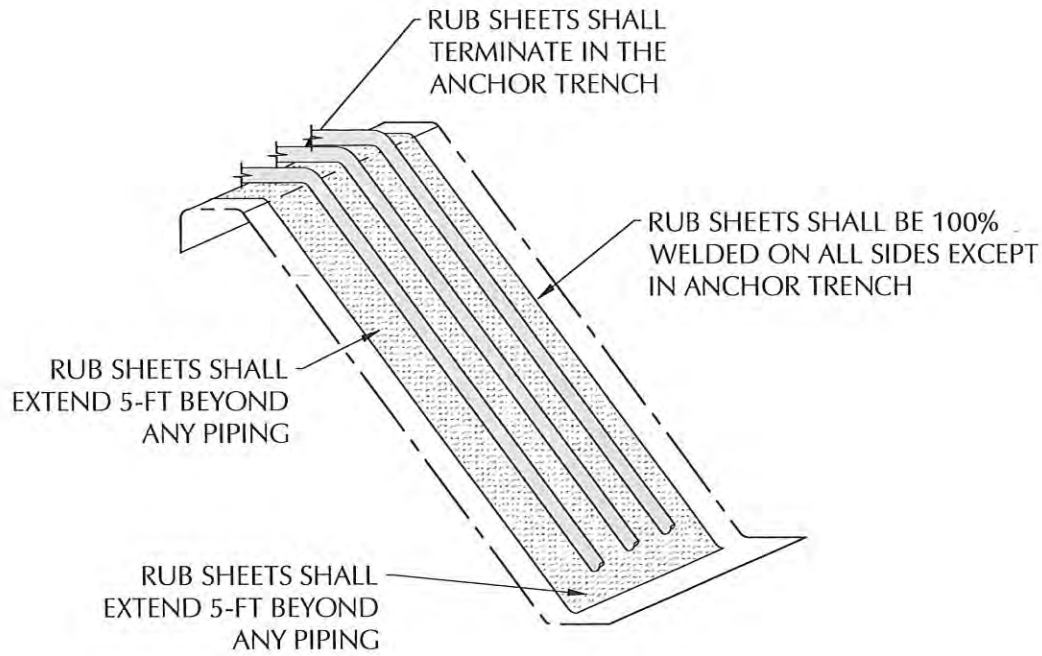
LEAK DETECTION/SAMPLING SYSTEM DETAIL (6)
NOT TO SCALE (8 8)

- NOTES:

1. LEAK DETECTION SYSTEM TO BE INSTALLED AT TIME OF INITIAL CONSTRUCTION PER OWNER INSTRUCTION
2. PERFORATED PIPE TO BE ALONG THE BOTTOM OF THE POND. SOLID PIPE ON THE SIDE SLOPE.
3. CONSTRUCT COMPACTED SUBGRADE TO 95% STANDARD PROCTOR AS PER ASTM D-698.
4. EXTEND 60 MIL. RUB SHEET 1.0-FT PAST TOP OF SHOULDER OF SUMP.
5. WASH RIVER ROCK SHALL BE 3/4" MIN. & 2" MAX.

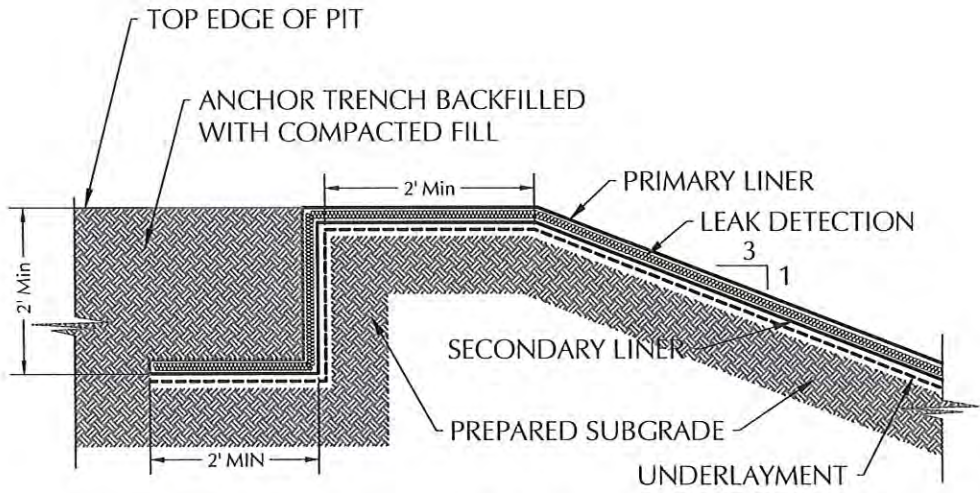


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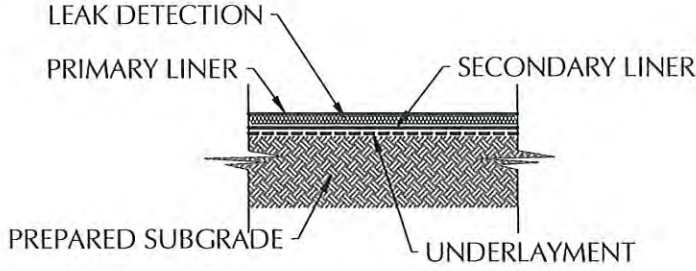
RUB SHEET DETAIL
Not to Scale

7
10 9



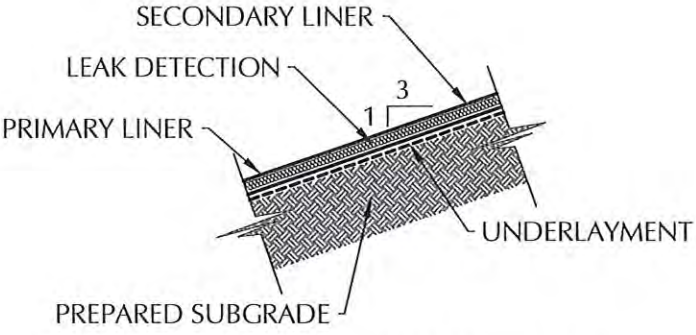
ANCHOR TRENCH DETAIL
NOT TO SCALE

11
4 9



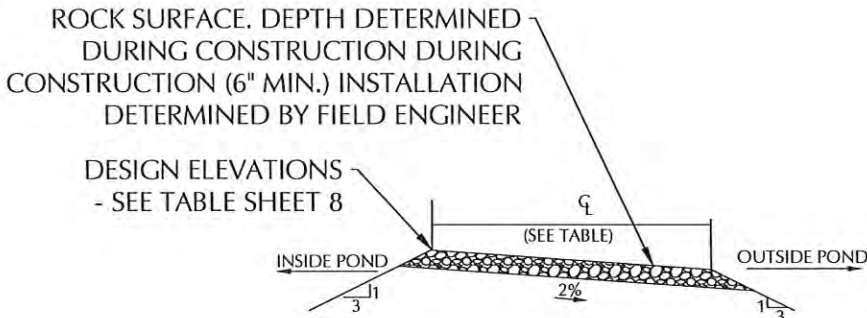
FLOOR LINER SYSTEM DETAIL
NOT TO SCALE

8
4 9



SLOPE LINER SYSTEM DETAIL
NOT TO SCALE

9
4 9



BERM CREST DETAIL
NOT TO SCALE

10
4 9

- GENERAL NOTES:
1. SEE REFERENCE TABLES SHEET 8 FOR LINER SPECIFICATIONS
 2. PREPARED SUBGRADE MEANS COMPACTED SMOOTH SUBGRADE FREE OF ROCK, ROOTS, WOOD DEBRIS, CONCRETE RUBBLE AND ANY SHARP OBJECTS THAT MIGHT PUNCTURE THE HDPE LINER.
 3. ALL INTERIOR SLOPES AND TOP OF BERMS TO BE SMOOTH DRUM ROLLED.
 4. ALL EMBANKMENT SLOPES SHALL HAVE A RATIO OF 3:1, COMPACTED EARTH EMBANKMENTS TO BE CONSTRUCTED WITH 8 INCH (MAXIMUM LOOSE LIFTS), COMPACTED TO 6-IN AT 95% STANDARD PROCTOR DENSITY (ASTM D698), AND MOISTURE CONDITIONS TO -2% TO +2% OPTIMUM MOISTURE (ASTM D698)
 5. PERFORM GEOTECHNICAL ANALYSIS ON EXISTING SOIL TO CONFIRM SOIL IS SUITABLE FOR USE IN THE BERM.
 6. LINER SHALL BE PROTECTED WITH A NONWOVEN GEOTEXTILE IF ROCK OR OTHER ANGULAR MATERIALS WITH A DIMENSION GREATER THAN 3/4-IN ARE PRESENT



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NO.	DATE	DESCRIPTION

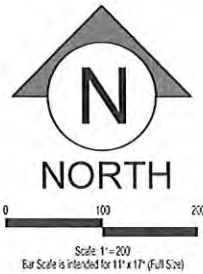
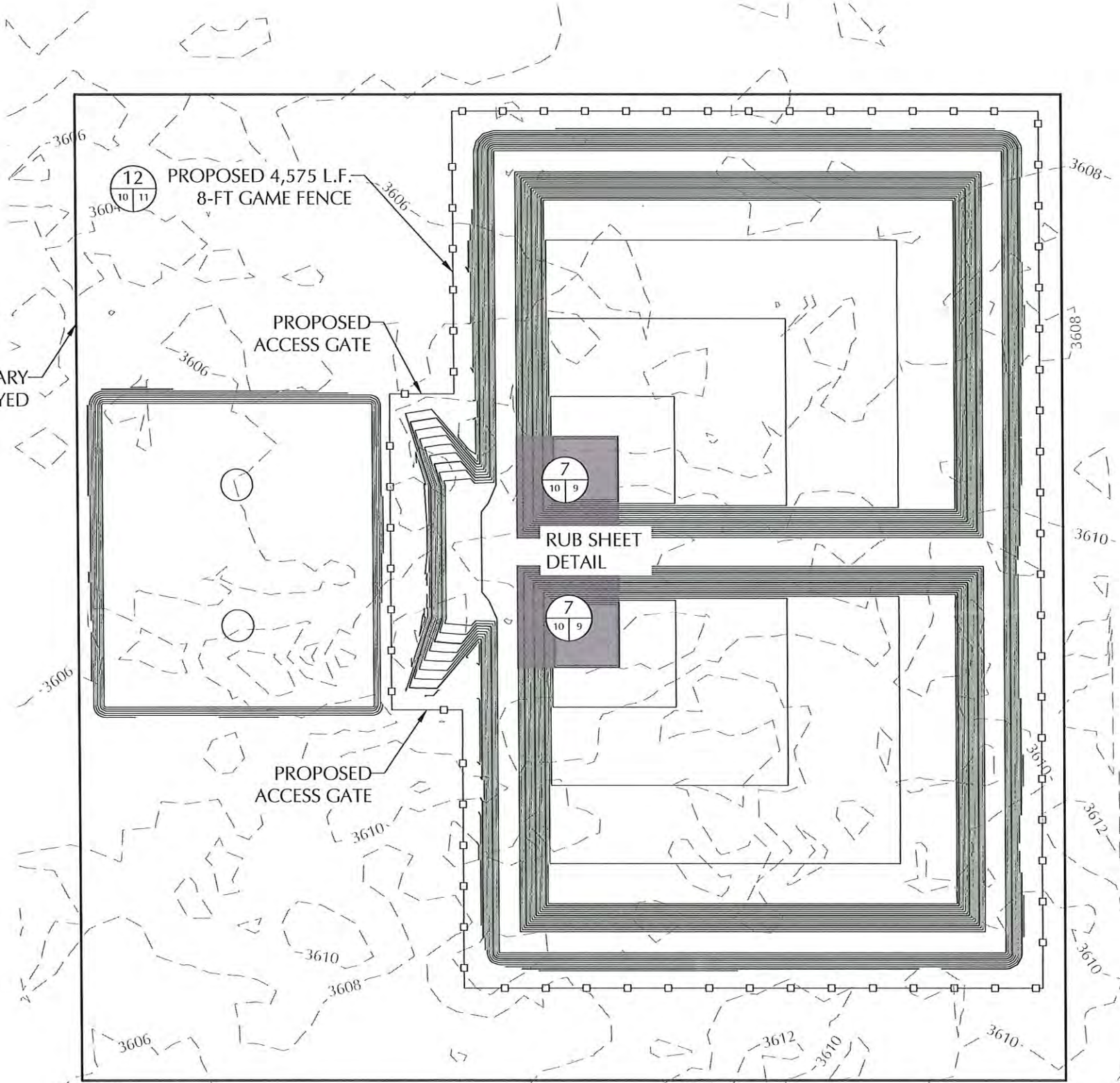


LINER DETAILS
HAMON RECYCLE FACILITY
AVANT NATURAL RESOURCES
SECTION 7, TOWNSHIP 20 S, RANGE 34 E, N.M.P.M.
LEA COUNTY, NEW MEXICO

DATE:	FEBRUARY 13, 2024
SCALE:	NOT TO SCALE
DESIGNED BY:	I. IRBY
DRAWN BY:	I. IRBY
CHECKED BY:	D. SCHRANTZ
PROJECT NO.	024035-00
SHEET NO.	9 OF 11

60-MIL HDPE TEXTURED
RUB SHEET

FACILITY BOUNDARY
AS SURVEYED



**ENVIROTECH
ENGINEERING**
2500 South Harvard Street
Tulsa, Oklahoma
580.234.8700
envirotechconsulting.com
P.L. #292541 - Expiration Date: 12-31-2024

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NO.	DATE	DESCRIPTION

AVANT
NATURAL RESOURCES

- NOTES:
1. RUB SHEETS SHALL BE WHITE OR BLACK 60 MIL HDPE TEXTURED LINER ON TOP OF BLACK PRIMARY LINER
 2. RUB SHEETS SHALL BE EXTRUSION WELDED 100%, VACUUM TESTED 100% AND INCLUDED IN LENGTH OF SEAMS FOR DESTRUCTIVE SAMPLE FREQUENCY.
 3. RUB SHEETS SHALL EXTEND UP THE SLOPE AND BE BURIED IN THE ANCHOR TRENCH WITH PRIMARY AND SECONDARY LINERS.
 4. ALL RUB SHEET LOCATION AND DIMENSIONS SHALL BE VERIFIED AGAINST THE PIPING CONTRACTORS PLANS.



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FENCE AND RUB SHEET PLAN
HAMON RECYCLE FACILITY
AVANT NATURAL RESOURCES
SECTION 7, TOWNSHIP 20 S, RANGE 34 E, N.M.P.M.
LEA COUNTY, NEW MEXICO

DATE:	FEBRUARY 13, 2024
SCALE:	1"=200'
DESIGNED BY:	I. IRBY
DRAWN BY:	I. IRBY
CHECKED BY:	D. SCHRANTZ
PROJECT NO.	024035-00
SHEET NO.	10 OF 11

EFFECTIVE WIDE-AREA BIRD CONTROL!

Mega Blaster PRO sonic bird repeller covers 30 acres!



Mega Blaster PRO uses intermittent distress calls to create a "danger zone" that frightens infesting birds away for good.

PREDATOR cries help scare all the birds.



- NEMA Rated Case
- Crystal-Clear Digital Sounds

- Laughing Gull
- Ring-Billed Gull
- Herring Gull
- California Gull
- Black-Headed Gull
- Glaucous-Winged Gull
- Double Crested Cormorant
- Marsh Hawk

**Perfect for Landfills, Airfields, Fish Farms,
Farm Fields or any multi-acre facility.**

Our most powerful system features two high-output amplifiers that drive our specially-designed 20 speaker tower. The intense sound output covers up to 30 acres (12 hectares).

It features solid-state electronics mounted inside a NEMA-type control box, suitable for most any application.

The generating unit mounts easily to a post or pole using the included hardware. The unit comes pre-recorded in four different configurations for the most common bird infestations.

Choose any or all of the 8 sounds, including predators to give the birds even more of a sense of danger. Customize by choosing volume and silent time between sounds.

Mega Blaster PRO

Complete system includes the generating unit with two built-in high-output amplifiers, 20-speaker tower with audio cables, 40 watt solar panel, battery clips and all mounting hardware.

CONFIGURATIONS AVAILABLE:

- Agricultural
MEGA-AG
- Crow / Raven
MEGA-CROW
- Woodpecker
MEGA-WP
- Marine / Gull
MEGA-MAR



The Bird Control 'X'-Perts

NOTE: This unit is capable of sound output up to 125 decibels. **HEARING PROTECTION IS RECOMMENDED.**

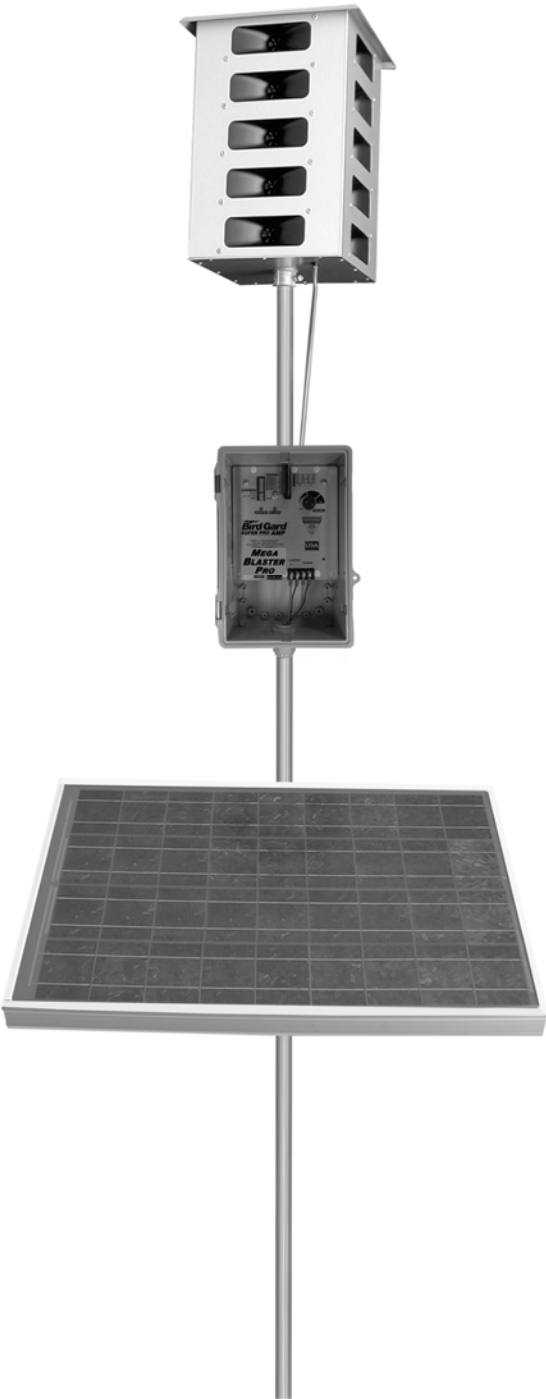


MEGA BLASTER PRO



User's Manual

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Solar Panel	5
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Overview

The Bird-X Mega Blaster Pro utilizes the innate power of the natural survival instincts of birds to effectively repel them. Digital recordings of distressed and alarmed birds, along with the sounds made by their natural predators are broadcast through high fidelity weather-resistant speakers over the top of areas. This action triggers a primal fear and flee response. Pest birds soon relocate to where they can feed without feeling threatened.

Your Bird-X Mega Blaster Pro system consists of:

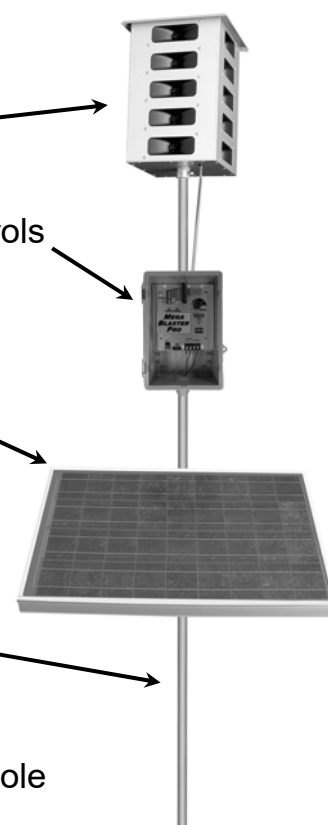
20-Speaker Tower broadcasts the bird sounds

Control Unit produces the bird sounds and contains all operational controls

Solar Panel recharges the 12-volt deep cycle battery

Items needed but not included:

- (1) **Mounting Pole or Mast** tall enough to raise the 20-Speaker Tower at least 5 feet above the top of the areas, trees or other obstructions
- (1) **12-volt Deep Cycle Battery** (RV/Marine) Group 27 or larger wet cell
- (1) **T-Post** or similar (Optional) may be needed to support the mounting pole
- (1) **Bailing Wire or zip-tie** (Optional) to secure the Mounting Pole to the T-Post



CAUTION: THE MEGA BLASTER PRO IS CAPABLE OF PRODUCING SOUNDS UP TO 125 DECIBELS. PROPER HEARING PROTECTION MUST BE WORN ANYTIME THE UNIT IS TURNED ON.



Bird Control Management Guidelines

An active bird control management program is a key to successfully repelling pest birds. Bird feeding patterns may take several days or weeks to break. Follow all suggestions for maximum effectiveness. Read all instructions prior to installation.

For best results:

- **It is extremely important to fully protect your entire area from birds.** Any areas not fully protected will allow birds to begin feeding at the fringes of the sound coverage. They will soon become bolder and learn the sounds are nothing to fear. This will cause the effectiveness to diminish. Complete Bird-X product coverage forces birds to leave the area entirely.
- Install the Mega Blaster Pro unit at least two weeks before birds are attracted to your area. It is much easier to keep birds away before they have found a food source than it is to repel them once they have developed a feeding pattern.
- Most birds begin feeding from the perimeter of an area. Place Mega Blaster Pro units so the sound protection covers past the edges of the area.
- Birds will often use tall trees for roosting and observation. If birds are in bordering trees it is necessary to position the units so the sound protection covers the trees as well.
- Mount the 20-Speaker Tower at least five feet above trees, areas and structures for maximum coverage. The higher the better. Sound will disperse or reflect off structures or foliage. Mount control unit out of direct sun, if possible.
- When first installed, run Mega Blaster Pro units at FULL volume and on SHORT time off periods. This ensures maximum "bird stress" and creates a hostile environment.
- Watch for changes in bird activity and adjust the location of your Mega Blaster Pro unit if needed.
- **Check the battery and unit settings often to insure continuous bird control. Be certain that the system is not turned down or has a dead battery. Field hands or harvesters may turn down the volume.**
- Changing settings and switches often helps to prevent bird habituation. Periodically change the switch settings of the eight sounds (turning them ON or OFF). NEVER turn OFF the distress calls of the target birds you are trying to repel and always keep at least one predator bird sound turned ON.
- If different bird species enter the protected area and begin causing damage contact us immediately for an updated Sound Recording Card designed to repel the new invading birds.
- Remember that the Mega Blaster Pro system is a management tool, and should be used as part of your overall bird control strategy, sometimes in conjunction with other bird control techniques and devices.

Be aware that under extreme drought or other adverse conditions, birds will disregard all deterrents and risks in order to survive

R.K. FROBEL & ASSOCIATES
Consulting Engineers

Technical Memorandum: 40-mil HDPE as Alternative Secondary Liner System for In Ground Recycling Containment Facilities
NMAC 19.15.34.12 A

I have investigated the suitability of application for 40 mil HDPE geomembrane as an equivalent secondary liner to 30 mil scrim reinforced LLDPE (LLDPEr) in the application for In Ground Recycling Containment facilities. *In summary, it is my professional opinion that the specified 40 mil HDPE geomembrane will provide a secondary liner system that is equal to or better than 30 mil scrim reinforced LLDPEr and will provide the requisite protection of fresh water, public health and the environment for many years when engineering design provides requisite site/soil/slope preparation and when used in concert with requisite primary liners and drainage layers.*

It is understood that the lining system under discussion is composed of a 60 mil HDPE Primary liner, geonet drainage layer and a 40 mil HDPE Secondary liner. *In consideration of the secondary lining system application, size of impoundment and depth, design details as well as the chemical nature of typical processed water, it is my professional opinion that the 40 mil HDPE geomembrane will provide the requisite barrier against processed water loss and will function effectively as a secondary liner.*

The following are discussion points that hopefully will exhibit the equivalency of a 40 mil HDPE secondary liner to that of a 30 mil LLDPEr.

The nature and formulation of the 40 mil HDPE resin is the same as the Primary 60 mil HDPE. The major difference is that the 40 mil HDPE is lower in thickness (more flexible and less puncture resistant). However, in covered conditions, HDPE will resist aging and degradation and remain intact for many decades. In fact, a secondary liner of 40 mil HDPE will outlast an exposed 60 mil HDPE liner. According to the Geosynthetic Research Institute (GRI) study on lifetime prediction (GRI Paper No. 6), the half life of HDPE (GRI GM 13) exposed is > 36 years and the half-life of HDPE covered or buried is greater than 100 years. It is understood that in order to ensure compliance of materials, the primary 60 mil HDPE to be used must meet or exceed GRI GM 13 Standards. Likewise, the secondary liner that is not exposed to the same environmental and chemical conditions must meet or exceed GRI GM 13 for non-reinforced HDPE. Adhering to the minimum requirements of the GRI Specifications, 40 mil HDPE when used as a secondary liner will be equally as protective as the primary 60 mil HDPE liner (reference: www.geosynthetic-institute.org/grispecs) and equally as protective as a 30 mil scrim reinforced LLDPEr liner.

Durability of Geomembranes is directly affected by exposure conditions. Buried or covered geomembranes are not affected by the same degradation mechanisms (UV, Ozone, Chemical, Stress, Temperature, etc) as are fully exposed geomembranes. In this regard, the secondary liner material and thickness can be much less robust than the fully exposed primary liner which in this case is 60 mil HDPE. This is also the case for

R.K. FROBEL & ASSOCIATES
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landfill lining systems where the secondary geomembrane in a bottom landfill cell may be 40 mil HDPE.

Thermal Fusion Seaming Requirements. Thermal seaming and QC seam test requirements for geomembranes are product specific and usually prescribed by the sheet manufacturer. Dual wedge thermal fusion welding is commonly used on HDPE and QC testing by air channel (ASTM D 5820) is fully acceptable and recognized as an industry standard. In this regard, there should be no exception requirement for seaming and QC testing as both the Primary and Secondary geomembranes are HDPE. This is fully covered in comprehensive specifications for both the Primary and Secondary geomembranes (Reference: www.ASTM.org/Standards).

Potential for Leakage through the Primary and Secondary Liners. Leakage through geomembrane liners is directly a function of the height of liquid head above any hole or imperfection. The geonet drainage media provides immediate drainage to a low point or sump and thus no hydrostatic head or driving gradient is available to push leakage water through a hole in the secondary liner. In this regard, secondary geomembrane materials can be (and usually are) much less in thickness and also polymer type. Hydraulic Conductivity through the 40 mil HDPE liner material is extremely low due to the polymer type, structure and crystallinity and exceeds requirements of EPA SW-846 Method 9090A.

Chemical Attack. Chemical attack to polymeric geomembranes is directly a function of type of chemical, temperature and exposure time. Again, the HDPE Primary provides the chemically resistant liner and is QC tested to reduce potential defects or holes. If there is a small hole, the geonet drain takes any leakage water immediately to the sump for extraction. Thus, exposure time is very limited on a secondary liner in addition to low temperature, little volume and virtually no head pressure. In this regard, a chemically resistant geomembrane material such as 40 mil HDPE can be specified for the secondary and is a fully acceptable alternate to 30 mil scrim reinforced LLDPEr.

Mechanical Properties Characteristics. Geomembranes of different polymer and/or structure (i.e., reinforced vs non-reinforced) cannot be readily compared using such characteristics as tensile stress/strain, tear, puncture and polymer requirements. For a 40 mil HDPE liner material to function as a Secondary liner it should meet or exceed the manufacturers minimum requirements for Density, Tensile Properties, Tear, Puncture as well as other properties such as UV resistance. The sheet material must also meet or exceed GRI GM 13 minimum requirements. *In this regard, a 40 mil HDPE will be equivalent to a 30 mil LLDPEr as a secondary liner for the conditions listed below:*

- *The subgrade or compacted earth foundation will be smooth, free of debris or loose rocks, dry, unyielding and will support the lining system.*
- *The side slopes for the containment shall be equal to or less than 3H:1V.*
- *The physical properties and condition of the subgrade or liner foundation*

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- (i.e., density, slope, moisture) will be inspected and certified by a Professional Engineer that it meets or exceeds specification requirements.
- Immediately prior to installation, the installation contractor shall inspect and sign off on the subgrade conditions that they meet or exceed the HDPE manufacturer and installers requirements.
 - A protective geotextile will be placed on the finished and accepted subgrade between subgrade and the 40 mil HDPE Secondary liner.
 - A 200 mil geonet will be placed over the 40 mil HDPE Secondary Liner.
 - A 60 mil HDPE Primary liner will be placed over the 200 mil geonet drainage layer.

If you have any questions on the above technical memorandum or require further information, give me a call at 720-289-0300 or email geosynthetics@msn.com

Sincerely Yours,

RK Frobel

Ronald K. Frobel, MSCE, PE



References:

NMAC 19.15.34.12 A DESIGN AND CONSTRUCTION SPECIFICATIONS FOR A RECYCLING CONTAINMENT

Geosynthetic Research Institute (GRI) Published Standards and Papers 2017
www.geosynthetic-institute.org

ASTM Geosynthetics Standards 2017
www.ASTM.org/Standards

DESIGN/CONSTRUCTION PLAN

Design and Construction Plan In Ground Containments

This plan addresses construction of the earthen containments.

Magrym Engineers is providing the design of the containment and their plans are presented in this submission.

Dike Protection and Structural Integrity

The design and operation provide for the confinement of produced water, prevention of releases and prevention of overtopping due to wave action or rainfall. Additionally, the design prevents run-on of surface water as the containment is surrounded by an above-grade levee (a berm) and/or diversion ditch (between the levee and the soil stockpile) to prevent run-on of surface water.

Stockpile Topsoil

Where topsoil is present, prior to constructing containment, the operator will strip and stockpile the topsoil for use as the final cover or fill at the time of closure.

Signage

The operator will place an upright sign no less than 12 inches by 24 inches with lettering not less than two inches in height in a conspicuous place on the fence surrounding the containment. The sign is posted in a manner and location such that a person can easily read the legend. The sign will provide the following information:

- the operator's name,
- the location of the site by quarter-quarter or unit letter, section, township and range, and
- emergency telephone numbers

Fencing

The operator will provide for a fence to enclose the recycling containment in a manner that deters unauthorized wildlife and human access. As specified in the design drawings, the operator will employ a chain-link or game fence. If required by the District Office, the operator will add four-strands of barbed wire to comply with the text of the Rule. Because feral pigs, javelina and deer are present in the area, a chain link or game fence is required in order to comply with Section 19.15.34.12 D.1 of the Rule because pigs will move beneath the lower strand of a 4-strand, 4-foot high barbed wire fence and deer will jump over. However, 19.15.34.12 D.2 requires "a four-foot fence that has at least four strands of barbed wire evenly spaced in the interval between one foot and four feet above ground level". Therefore, a barbed wire specification will be added to the game fence to avoid a variance if required by the OCD District Office.

19.15.34.12 A Design and Construction Specifications

(1). The operator shall design and construct a recycling containment to ensure the confinement of produced water, to prevent releases and to prevent overtopping due to wave action or rainfall.
(8). The operator of a recycling containment shall design the containment to prevent run-on of surface water. The containment shall be surrounded by a berm, ditch or other diversion to prevent run-on of surface water

19.15.34.12 B. Prior to constructing containment, the operator shall strip and stockpile the topsoil for use as the final cover or fill at the time of closure

19.15.34.12 C. Signs.

The operator shall post an upright sign no less than 12 inches by 24 inches with lettering not less than two inches in height in a conspicuous place on the fence surrounding the containment. The operator shall post the sign in a manner and location such that a person can easily read the legend. The sign shall provide the following information: the operator's name, the location of the site by quarter-quarter or unit letter, section, township and range, and emergency telephone numbers

19.15.34.12 D. Fencing

(1) The operator shall fence or enclose a recycling containment in a manner that deters unauthorized wildlife and human access and shall maintain the fences in good repair. The operator shall ensure that all gates associated with the fence are closed and locked when responsible personnel are not onsite.
(2) Recycling containments shall be fenced with a four-foot fence that has at least four strands of barbed wire evenly spaced in the interval between one foot and four feet above ground level.

Design and Construction Plan In Ground Containments

As stated in the O&M plan, the operator will ensure that all gates associated with the fence are closed and locked when responsible personnel are not onsite.

Netting and Protection of Wildlife

The perimeter game/chain-link fence will be effective in excluding stock and most terrestrial wildlife. If requested by the surface owner, the game fence can include a fine mesh from the base to 1 foot above the ground to exclude the small reptiles (e.g. dune sagebrush lizard).

The recycling containment will be protective of wildlife, including migratory birds through the implementation of an Avian Protection Plan, routine inspections and the perimeter fence.

The avian protection plan includes the use of a Bird-X Mega Blaster Pro¹ as a primary hazing program for avian species. The device will be equipped with sounds suitable for the Permian Basin environment. In addition to this sonic device, staff will routinely inspect the containment for the presence of avian species and, if detected, will use a blank cartridge or shell in a handgun, starter pistol or shotgun as additional hazing. Decoys of birds of prey may be placed on the game fence and other roosts around the open water to provide additional hazing.

The O&M plan calls for the operator to inspect for and, within 30 days of discovery, report the discovery of dead migratory birds or other wildlife to the appropriate wildlife agency and to the division district office in order to facilitate assessment and implementation of measures to prevent incidents from reoccurring.

Earthwork

The containment will have a properly constructed foundation and interior slopes consisting of a firm, unyielding base, smooth and free of rocks, debris, sharp edges or irregularities to prevent the liner's rupture or tear. Geotextile is required under the liner when needed to reduce localized stress-strain or protuberances that otherwise may compromise the liner's integrity.

This volume provides the stamped drawings for the containment with the following design/construction specifications:

- a) levee has inside grade no steeper than two horizontal feet to one vertical foot (2H: 1V).

19.15.34.12 E Netting.

The operator shall ensure that a recycling containment is screened, netted or otherwise protective of wildlife, including migratory birds. The operator shall on a monthly basis inspect for and, within 30 days of discovery, report the discovery of dead migratory birds or other wildlife to the appropriate wildlife agency and to the division district office in order to facilitate assessment and implementation of measures to prevent incidents from reoccurring.

19.15.34.12 A

(2) A recycling containment shall have a properly constructed foundation and interior slopes consisting of a firm, unyielding base, smooth and free of rocks, debris, sharp edges or irregularities to prevent the liner's rupture or tear. Geotextile is required under the liner when needed to reduce localized stress-strain or protuberances that otherwise may compromise the liner's integrity...

Design and Construction Plan In Ground Containments

- b) levee outside grade is no steeper than three horizontal feet to one vertical foot (3H: 1V)
- c) top of the levee is wide enough to install an anchor trench and provide adequate room for inspection and maintenance.
- d) The containment floor design calls for a slope toward the sump in the corner(s).

Liner and Drainage Geotextile Installation

The containment has a primary (upper) liner and a secondary (lower) liner with a leak detection system appropriate to the site's conditions.

The primary (upper) liner is a geomembrane liner composed of an impervious, synthetic material that is resistant to ultraviolet light, petroleum hydrocarbons, salts and acidic and alkaline solutions. It is 60-mil HDPE. The secondary liner is specified in the design drawings and is 40-mil HDPE or thicker and is equivalent to 30-mil LLDPE (in accordance with a previously approved variance) Liner compatibility meets or exceeds a subsequent relevant publication to EPA SW-846 method 9090A.

The recycling containment design has a leak detection system between the upper and lower geomembrane liners of 200-mil geonet to facilitate drainage. The leak detection system consists of a properly designed drainage and collection and removal system placed above the lower geomembrane liner in depressions and sloped to facilitate the earliest possible leak detection. The containment floor design calls for a slope toward the sump in the corner(s) of the containment, as shown in the design drawings. This slope combined with the highly transmissive geonet drainage layer provide for rapid leak detection.

The liners and drainage material will be installed consistent with the Manufacturer's specifications. In addition to any specifications of the Manufacturer, protocols for liner installation include measures to:

- i. minimizing liner seams and orient them up and down, not across, a slope of the levee.
- ii. use factory-welded seams where possible.
- iii. use field seams in geosynthetic material that are thermally seamed and prior to field seaming, overlap liners four to six inches.
- iv. minimize the number of field seams and comers and irregularly shaped areas.
- v. provide for no horizontal seams within five feet of the

19.15.34.12 A

(2) ...The operator shall construct the containment in a levee with an inside grade no steeper than two horizontal feet to one vertical foot (2H:1V). The levee shall have an outside grade no steeper than three horizontal feet to one vertical foot (3H:1V). The top of the levee shall be wide enough to install an anchor trench and provide adequate room for inspection and maintenance.

19.15.34.12 A

(3) Each recycling containment shall incorporate, at a minimum, a primary (upper) liner and a secondary (lower) liner with a leak detection system appropriate to the site's conditions.

19.15.34.12 A

(4) All primary (upper) liners in a recycling containment shall be geomembrane liners composed of an impervious, synthetic material that is resistant to ultraviolet light, petroleum hydrocarbons, salts and acidic and alkaline solutions. All primary liners shall be 30-mil flexible PVC, 45-mil LLDPE string reinforced or 60-mil HDPE liners. Secondary liners shall be 30-mil LLDPE string reinforced or equivalent with a hydraulic conductivity no greater than 1×10^{-9} cm/sec. Liner compatibility shall meet or exceed the EPA SW-846 method 9090A or subsequent relevant publications.

19.15.34.12 A

(7) The operator of a recycling containment shall place a leak detection system between the upper and lower geomembrane liners that shall consist of 200-mil geonet or two feet of compacted soil with a saturated hydraulic conductivity of 1×10^{-5} cm/sec or greater to facilitate drainage. The leak detection system shall consist of a properly designed drainage and collection and removal system placed above the lower geomembrane liner in depressions and sloped to facilitate the earliest possible leak detection.

19.15.34.12 A

(5) The operator of a recycling containment shall minimize liner seams and orient them up and down, not across, a slope of the levee. Factory welded seams shall be used where possible. The operator shall ensure field seams in geosynthetic material are thermally seamed. Prior to field seaming, the operator shall overlap liners four to six inches...

Design and Construction Plan In Ground Containments

- slope's toe.
- vi. use qualified personnel to perform field welding and testing.
- vii. avoid excessive stress-strain on the liner
- viii. The edges of all liners are anchored in the bottom of a compacted earth-filled trench that is at least 18 inches deep

At points of discharge into the lined earthen containment the pipe configuration effectively protects the liner from excessive hydrostatic force or mechanical damage during filling.

The design shows that at any point of discharge into or suction from the recycling containment, the liner is protected from excessive hydrostatic force or mechanical damage. External discharge or suction lines do not penetrate the liner.

Pumping from the containment to hydraulic fracturing operations is the responsibility of stimulation contractors. Typically, lines are permanently placed in the containment with floats attached to prevent damage to the liner system. The containment may be equipped with permanent HDPE stinger (supported by a sacrificial liner or geotextile) for withdrawal of fluid if the owner deems necessary during operations.

Leak Detection and Fluid Removal System Installation

The leak detection system, contains the following design elements

- a. The 200-mil HyperNet Geonet drainage material between the primary and secondary liner that is sufficiently permeable to allow the transport of fluids to the observation ports (Appendix A).
- b. The containment floor is sloped towards the monitoring riser pipe to facilitate the earliest possible leak detection of the containment bottom. A pump may be placed in the observation port to provide for fluid removal.
- c. Piping will withstand chemical attack from any seepage, structural loading from stresses and disturbances from overlying water, cover materials, equipment operation or expansion or contraction (see Appendix A).

19.15.34.12 A

(5) ...The operator shall minimize the number of field seams and corners and irregularly shaped areas. There shall be no horizontal seams within five feet of the slope's toe. Qualified personnel shall perform field welding and testing.

19.15.34.12 A

(3) The edges of all liners shall be anchored in the bottom of a compacted earth-filled trench. The anchor trench shall be at least 18 inches deep.

19.15.34.12 A

(6) At a point of discharge into or suction from the recycling containment, the operator shall insure that the liner is protected from excessive hydrostatic force or mechanical damage. External discharge or suction lines shall not penetrate the liner.

OPERATIONS AND MAINTENANCE PLAN

CLOSURE PLAN

Operation and Maintenance Plan In Ground Containments

Overview

The operator will operate and maintain the lined earthen containment to contain liquids and solids (blow sand and minimal precipitates from the produced water) and maintain the integrity of the liner system in a manner that prevents contamination of fresh water and protects public health and the environment as described below. The purpose of the lined earthen containment is to facilitate recycling, reuse and reclamation of produced water derived from oil and gas wells. During periods when water for E&P operations is not needed, produced water will discharge to injection wells or to a pipeline for transfer to another recycling facility. The containment will not be used for the disposal of produced water or other oilfield waste.

The operation of the containment is summarized below.

- A. Produced water generated from nearby oil and gas wells is delivered to a treatment system located as indicated in the C-147.
- B. Unless specified in the transmittal letter, after treatment, the produced water discharges into the containment.
- C. When required, produced water is removed from the containment for E&P operations. At this time, produced water will be used for drilling beneath the freshwater zones (beneath surface casing), for well stimulation (e.g. hydraulic fracturing) and other E&P uses as approved by OCD.
- D. Whenever the maximum fluid capacity of the containment is reached, treatment and discharge to the containment ceases (see Freeboard and Overtopping Plan, below).
- E. The operator will keep accurate records and shall report monthly to the division the total volume of water received for recycling, with the amount of fresh water received listed separately, and the total volume of water leaving the facility for disposition by use on form C-148 (see attached example).
- F. The operator will maintain accurate records that identify the sources and disposition of all recycled water that shall be made available for review by the division upon request.

19.15.34.10 D

Recycling containments may not be used for the disposal of produced water or other oilfield wastes.

19.15.34.9 E

The operator of a recycling facility shall keep accurate records and shall report monthly to the division the total volume of water received for recycling, with the amount of fresh water received listed separately, and the total volume of water leaving the facility for disposition by use on form C-148.

19.15.34.9 F

The operator of a recycling facility shall maintain accurate records that identify the sources and disposition of all recycled water that shall be made available for review by the division upon request.

Operation and Maintenance Plan In Ground Containments

- G. The containment shall be deemed to have ceased operations if less than 20% of the total fluid capacity is used every six months following the first withdrawal of produced water for use. The operator will report cessation of operations to the appropriate division district office. The appropriate division district office may grant an extension to this determination of cessation of operations not to exceed six months.

The operation of the lined earthen containment will follow the mandates listed below:

1. The operator will not discharge into or store any hazardous waste (as defined by 40 CFR 261 and NMAC 19.15.2.7.H.3) in the containments.
2. If the containment's primary liner is compromised above the fluid's surface, the operator will repair the damage or initiate replacement of the primary liner within 48 hours of discovery or seek an extension of time from the division district office.
3. If the primary liner is compromised below the fluid's surface, the operator will remove all fluid above the damage or leak within 48 hours of discovery, notify the division district office and repair the damage or replace the primary liner.
4. If any penetration of the containment liner is confirmed by sampling of fluid in the leak detection system (see Monitoring, Inspection, and Reporting Plan; below), the operator will:
 - a. Begin and maintain fluid removal from the leak detection/pump-back system,
 - b. Notify the district office within 48 hours (phone or email) of the discovery,
 - c. Identify the location of the leak, and
 - d. Repair the damage or, if necessary, replace the containment liner.
5. The operator will install, or maintain on site, an oil absorbent boom or other device to contain an unanticipated release and the operator will remove any visible layer of oil from the surface of the recycling containment.
6. The operator will report releases of fluid in a manner consistent with NMAC 19.15.29
7. The containment will be operated to prevent the collection of surface water run-on.

19.15.34.13 C

A recycling containment shall be deemed to have ceased operations if less than 20% of the total fluid capacity is used every six months following the first withdrawal of produced water for use. The operator must report cessation of operations to the appropriate division district office. The appropriate division district office may grant an extension to this determination of cessation of operations not to exceed six months.

19.15.34.13 B

(4) If the containment's primary liner is compromised above the fluid's surface, the operator shall repair the damage or initiate replacement of the primary liner within 48 hours of discovery or seek an extension of time from the division district office.

(5) If the primary liner is compromised below the fluid's surface, the operator shall remove all fluid above the damage or leak within 48 hours of discovery, notify the division district office and repair the damage or replace the primary liner.

19.15.34.13 B

(7) The operator shall install, or maintain on site, an oil absorbent boom or other device to contain an unanticipated release.

(1) The operator shall remove any visible layer of oil from the surface of the recycling containment.

19.15.34.8 A

(6) All releases from the recycling and re-use of produced water shall be handled in accordance with 19.15.29 NMAC.

Operation and Maintenance Plan In Ground Containments

8. The operator will maintain the containment free of miscellaneous solid waste or debris.
9. The operator will maintain at least three feet of freeboard for the containment and will use a free-standing staff gauge to allow easy determination of the required 3-foot of freeboard.
10. As described in the design/construction plan, the injection or withdrawal of fluids from the containment is accomplished through hardware that prevents damage to the liner by erosion, fluid jets or impact from installation and removal of hoses or pipes.
11. The operator shall ensure that all gates associated with the fence are closed and locked when responsible personnel are not onsite.
12. The operator will maintain the fences in good repair.

Monitoring, Inspection, and Reporting Plan

The operator will inspect the recycling containment and associated leak detection systems weekly while it contains fluids. The operator shall maintain a current log of such inspections and make the log available for review by the division upon request.

Weekly inspections consist of:

- reading and recording the fluid height of staff gauges,
- recording any evidence that the pond surface shows visible oil,
- visually inspecting the containment's exposed liners
- checking the leak detection system for any evidence of a loss of integrity of the primary liner.
- inspect diversion ditches and berms around the containment to check for erosion and collection of surface water run-on.
- inspect the leak detection system for evidence of damage or malfunction and monitor for leakage.

As stated above, if a liner's integrity is compromised, or if any penetration of the liner occurs, then the operator will take appropriate action within 48 hours, based on if above or below water surface, as noted above.

19.15.34.13

(6) The containment shall be operated to prevent the collection of surface water run-on.

19.15.34.13 B

(2) The operator shall maintain at least three feet of freeboard at each containment.

19.15.34.13 B

(3) The injection or withdrawal of fluids from the containment shall be accomplished through a header, diverter or other hardware that prevents damage to the liner by erosion, fluid jets or impact from installation and removal of hoses or pipes.

19.15.34.12 D

(1) The operator shall fence or enclose a recycling containment in a manner that deters unauthorized wildlife and human access and shall maintain the fences in good repair. The operator shall ensure that all gates associated with the fence are closed and locked when responsible personnel are not onsite.

19.15.34.13 A

The operator shall inspect the recycling containment and associated leak detection systems weekly while it contains fluids. The operator shall maintain a current log of such inspections and make the log available for review by the division upon request.

Operation and Maintenance Plan In Ground Containments

Monthly, the operator will:

- A. Inspect the containment for dead migratory birds and other wildlife. Within 30 days of discovery, report the discovery of dead migratory birds or other wildlife to the appropriate wildlife agency and to the division district office in order to facilitate assessment and implementation of measures to prevent incidents from reoccurring.
- B. Report to the division the total volume of water received for recycling, with the amount of fresh water received listed separately, and the total volume of water leaving the facility for disposition by use on form C-148.
- C. Record sources and disposition of all recycled water.

The operator will maintain a log of all inspections and make the log available for the appropriate Division district office's review upon request. An example of the log is attached to this section of the permit application.

Freeboard and Overtopping Prevention Plan

The method of operation of the containment allows for maintaining freeboard with very few potential problems. When the capacity of the containment is reached (3-feet of freeboard), the discharge of produced water ceases and the produced water generated by nearby oil and gas wells is managed by an injection well(s).

If rising water levels suggest that 3-feet of freeboard will not be maintained, the operator will implement one or more of the following options:

- I. Cease discharging produced water to the containment.
- II. Accelerate re-use of the produced water for purposes approved by the Division.
- III. Transfer produced water from the containment to injection wells.

The reading of the staff gauge typically occurs daily when treatment operations are ongoing and weekly when discharge to the containment is not occurring.

19.15.34.12 E

The operator shall on a monthly basis inspect for and, within 30 days of discovery, report the discovery of dead migratory birds or other wildlife to the appropriate wildlife agency and to the division district office in order to facilitate assessment and implementation of measures to prevent incidents from reoccurring.

19.15.34.9 E

The operator of a recycling facility shall keep accurate records and shall report monthly to the division the total volume of water received for recycling, with the amount of fresh water received listed separately, and the total volume of water leaving the facility for disposition by use on form C-148.

19.15.34.9 F

The operator of a recycling facility shall maintain accurate records that identify the sources and disposition of all recycled water that shall be made available for review by the division upon request.

Operation and Maintenance Plan In Ground Containments

Protocol for Leak Detection Monitoring, Fluid Removal and Reporting

As shown in Appendix A, the leak detection system includes a monitoring system. Any fluid released from the primary liner will flow to the collection sump, where fluid level monitoring is possible at the monitoring riser pipe associated with the leak detection system.

Staff may employ a portable electronic water level meter to determine if fluid exists in the monitoring riser pipe. Obtaining accurate readings of water levels in a sloped pipe beneath a containment can be a challenge. An electrician's wire snake may be required to push the probe to the bottom of the port and the probe may be fixed in a 2-inch pipe "dry housing" to avoid false readings due to water condensation on the pipe. There are many techniques to determine the existence of water in the sumps – including low flow pumps and a simple small bailer affixed to an electrician's snake. The operator will use the method that works best for this containment.

If seepage from the containment into the leak detection system is suspected by a positive fluid level measurement, the operator will:

1. Re-measure fluid levels in the monitoring riser pipe on a daily basis for one week to determine the rate of seepage.
2. Collect a water sample from the monitoring riser pipe to confirm the seepage is produced water from the containment via electrical conductivity and chloride measurements.
3. Notify NMOCD of a confirmed positive detection in the system within 48 hours of sampling (initial notification).
4. Install a pump into the monitoring riser pipe sump to continually (manually on a daily basis or via automatic timers) remove fluids from the leak detection system into the containment until the liner is repaired or replaced.
5. Dispatch a liner professional to inspect the portion of the containment suspected of leakage during a "low water" monitoring event.
6. Provide NMOCD a second report describing the inspection and/or repair within 20 days of the initial notification.

Operation and Maintenance Plan In Ground Containments

If the point of release is obvious from a low water inspection, the liner professional will repair the loss of integrity. If the point of release cannot be determined by the inspection, the liner professional will develop a more robust plan to identify the point(s) of release. The inspection plan and schedule will be submitted to OCD with the second report. The operator will implement the plan upon OCD approval.

Closure Plan In Ground Containments

Overview

After operations cease, the operator will remove all fluids within 60 days and close the containment within six months from the date the operator ceases operations from the containment for use.

The operator shall substantially restore the impacted surface area to

- a. the condition that existed prior to the construction of the recycling containment or
- b. to a condition imposed by federal, state trust land or tribal agencies on lands managed by those agencies as these provisions govern the obligations of any operator subject to those provisions,

The surface owner will impose a closure design that conforms to their needs for the site. The operator understands that a variance will be submitted to OCD to allow for any alternative closure protocol.

Excavation and Removal Closure Plan – Protocols and Procedures

The containment is expected to hold a small volume of solids, the majority of which will be windblown sand and dust with some mineral precipitates from the water

1. The operator will remove all liquids from the containment and either:
 - a. Dispose of the liquids in a division-approved facility, or
 - b. Recycle, reuse or reclaim the water for reuse in drilling and stimulation.
2. The operator will close the recycling containment by first removing all fluids, contents and synthetic liners and transferring these materials to a division approved facility.
3. After the removal of the containment contents and liners, soils beneath the containment will be tested by collection of a five-point (minimum) composite sample which includes stained or wet soils, if any, and that sample shall be analyzed for the constituents listed in Table I of 19.15.34.14.
4. After review of the laboratory results:
 - a. If any contaminant concentration is higher than the parameters listed in Table I, additional delineation may be required, and the operator must receive approval before proceeding with closure.

19.15.34.14 A

Once the operator has ceased operations, the operator shall remove all fluids within 60 days and close the containment within six months from the date the operator ceases operations from the containment for use.

19.15.34.14 E

The operator shall substantially restore the impacted surface area to the condition that existed prior to the construction of the recycling containment.

19.15.34.14 G

The re-vegetation and reclamation obligations imposed by federal, state trust land or tribal agencies on lands managed by those agencies shall supersede these provisions and govern the obligations of any operator subject to those provisions, provided that the other requirements provide equal or better protection of fresh water, human health and the environment.

19.15.34.14 B

The operator shall close a recycling containment by first removing all fluids, contents and synthetic liners and transferring these materials to a division approved facility.

19.15.34.14 C

The operator shall test the soils beneath the containment for contamination with a five-point composite sample which includes stained or wet soils, if any, and that sample shall be analyzed for the constituents listed in Table I below.

19.15.34.14 C

(1) If any contaminant concentration is higher than the parameters listed in Table I, the division may require additional delineation upon review of the results and the operator must receive approval before proceeding with closure.

Closure Plan In Ground Containments

- b. If all contaminant concentrations are less than or equal to the parameters listed in Table I, then the operator will proceed to
- backfill with non-waste containing, uncontaminated, earthen material - Or
 - undertake an alternative closure process pursuant to a variance request after approval by OCD.

Reclamation and Re-vegetation

- The operator will reclaim the containment's location to a safe and stable condition that blends with the surrounding undisturbed area.
- Topsoils and subsoils shall be replaced to their original relative positions and contoured so as to achieve erosion control, long-term stability and preservation of surface water flow patterns.
- The disturbed area shall then be reseeded in the first favorable growing season following closure of a recycling containment.

Closure Documentation

Within 60 days of closure completion, the operator shall submit a closure report on form C-147, including required attachments, to document all closure activities including sampling results and the details on any backfilling, capping or covering, where applicable. The closure report shall certify that all information in the report and attachments is correct and that the operator has complied with all applicable closure requirements and conditions specified in division rules or directives.

The operator shall notify the division when reclamation and re-vegetation are complete. Specifically the notice will document that all ground surface disturbing activities at the site have been completed, and a uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent (50%) of pre-disturbance levels and a total percent plant cover of at least seventy percent (70%) of pre-disturbance levels, excluding noxious weeds.

19.15.34.14 C

(2) If all contaminant concentrations are less than or equal to the parameters listed in Table I, then the operator can proceed to backfill with non-waste containing, uncontaminated, earthen material.

19.15.34.14 E

Once the operator has closed the recycling containment, the operator shall reclaim the containment's location to a safe and stable condition that blends with the surrounding undisturbed area. Topsoils and subsoils shall be replaced to their original relative positions and contoured so as to achieve erosion control, long-term stability and preservation of surface water flow patterns. The disturbed area shall then be reseeded in the first favorable growing season following closure of a recycling containment.

19.15.34.14 D

Within 60 days of closure completion, the operator shall submit a closure report on form C-147, including required attachments, to document all closure activities including sampling results and the details on any backfilling, capping or covering, where applicable. The closure report shall certify that all information in the report and attachments is correct and that the operator has complied with all applicable closure requirements and conditions specified in division rules or directives.

19.15.34.14 H

The operator shall notify the division when reclamation and re-vegetation are complete.

19.15.34.14 F

Reclamation of all disturbed areas no longer in use shall be considered complete when all ground surface disturbing activities at the site have been completed, and a uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent (50%) of pre-disturbance levels and a total percent plant cover of at least seventy percent (70%) of pre-disturbance levels, excluding noxious weeds.

March 2024

Rule 34 Registration: Volume 1
Legion Water Service LLC
Hamon RF & Containment
Section 7, T20S, R34E, Lea County

- *Transmittal Letter & Closure Cost Estimate*
- *Siting Criteria Demonstration with Plates & Appendices*



View south from near the center of the Recycling Facility and Containments area showing the stabilized sand dunes and nature of vegetation.

Prepared for:
Avant Operating LLC
Denver, Colorado

Prepared by:
R.T. Hicks Consultants, Ltd.
901 Rio Grande NW F-142
Albuquerque, New Mexico

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Since 1996

March 29, 2024

Ms. Leigh Barr
EMNRD - Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505
Via E-Mail

Ms. Victoria Venegas
NMOCD - District 2
811 S. First St.
Artesia, NM 88210
Via E-Mail

RE: Legion Water Services LLC - Hamon Recycling Facility and Containment
In-ground Containment Registration
Section 7, T20S, R34E, Lea County

Dear Ms. Barr and Ms. Venegas:

On behalf of Legion Water Services, LLC, (Legion) R.T. Hicks Consultants Ltd. revised the previously submitted C-147 *registration* for the above-referenced project. Construction is underway and produced water will flow into the containments soon after mid-April. The revision consists of inclusion of a closure cost estimate and modifying the previously-submitted C-147.

Volume 1 of the package contains:

- This letter
- The Closure Cost Estimate
- Siting criteria demonstration for the in-ground containment with Legion Water Services shown in the header. Avant Natural Resources was changed to Legion Water Services in the Plates

Volume 2 includes:

- C-147 Form to register the in-ground containment for Legion Water Services,
- Stamped Design Drawings that remain labeled Avant Natural Resources,
- Recently Approved Plans for Design/Construction, O&M, Closure

This submission refers to the following elements that some OCD reviewers have considered variances for in-ground containments:

1. OCD has previously approved an equivalency demonstration written by experts for 40-mil HDPE secondary liner. We maintain that the language of the Rule is clear, and a variance is not required.
2. OCD has approved the proposed Avian Protection Plan (Bird-X Mega Blaster Pro) for other containments. Thus, the plan meets the requirement of the rule that the “otherwise protective of wildlife, including migratory birds” and a variance is not required.
3. Using the proposed deer fence in lieu of a 4-strand barbed wire fence is not a variance. Because feral pigs, javelina and deer are present in the area, a tall game

March 29, 2024

Page 2

fence is required to comply with Section 19.15.34.12 D.1 of the Rule. The specification for fencing provided in 19.15.34.12 D.2 contradicts D.1 because pigs will move beneath the lower strand of a 4-foot high barbed wire fence and deer will jump over. Thus, compliance with D.2 results in a violation of D.1. We maintain that compliance with D.1 is the critical component of the Rule and operators need not be required to submit a variance request to follow Best Management Practices and comply with the Rule. Nevertheless, Avant will attach 4 strands of barbed wire to the game fence if required by OCD.

Legion will upload the registration package to OCD via the OCD.Online portal. In compliance with 19.15.34.10 of the Rule, Legion provided the C-147 to the surface owner and proof of this notification will also be uploaded to the portal.

If you have any questions or concerns regarding this permit or the attached C-147, please contact me. As always, we appreciate your work ethic and diligence.

Sincerely,
R.T. Hicks Consultants

A handwritten signature in black ink, appearing to read "Randall T. Hicks".

Randall T. Hicks, PG
Principal

Copy: Legion Water Services
Cascade Services

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Since 1996

HAMMOND IN-GROUND CONTAINMENTS

Financial Assurance Cost Estimate

Attached is the cost estimate for reclamation of the Hammond recycling in-ground containments. s.

The cost of closure sampling and analysis is estimated at \$1725 (sampling) plus \$2,700 (laboratory cost) to “test the soils beneath the containment for contamination with a five-point composite sample which includes stained or wet soils, if any, and that sample shall be analyzed for the constituents listed in Table I” of Rule 34.

RT Hicks Consultants will assist with the sampling as necessary and prepare the Closure Report for the site. Total closure costs associated with the sampling are estimated at \$7500. The cost estimates from Cascade Services (attached) and from RT Hicks Consultants are presented below.

Cascade Services

<i>All work elements required by Rule 34</i>	<i>\$1,039,243.32</i>
--	-----------------------

RT Hicks Consultants

Preparation of sampling results and closure report	7500.00
--	---------

Total for all Closure Activities

\$1,046,743.32

The reclamation must meet terms set forth in the surface lease agreement with the landowner, who received a copy of the registration.

Please contact Randall Hicks if you have any questions concerning this closure cost estimate.

Cascade Services, LLC

www.cascadeservicesllc.com

**Estimate****ADDRESS**

Braydon Harris
Legion Water Services

ESTIMATE 1510
DATE 03/14/2024
EXPIRATION DATE 04/14/2024

CUSTOMER PROJECT NAME

Hamon Closure

DATE	DESCRIPTION	QTY	RATE	AMOUNT
	<p>Civil Construction</p> <p>This is pricing a package to reclaim the twin 750K pond cells Mobilize equipment to site. Existing Ponds estimated dimensions (2) 610' x 460' floor (2) 700' x 550' outside to outside 17' top of wall Average 18' deep 3:1 slopes Dirt reclaim of pond consist of- Bury all material (Caliche, Gypsum, Sand, ect.) below ground level, backfill pond area with uncontaminated soil from pond walls. Pond area will be reclaimed to natural elevations and water flow patterns. All stockpiled strippings will be put down last to ensure ground has been completely returned to native design.</p>	1	403,589.00	403,589.00
	<p>Civil Construction</p> <p>Environmental soil sampling This will include digging 6 sample locations for each containment. One composite sample from 0-4 feet below surface and one discrete sample from each location at 4.25 feet Cost include trip, labor, materials, and laboratory testing</p>	1	1,725.00	1,725.00
	<p>Civil Construction</p> <p>Environmental Soil testing Before earthwork can begin the soil must be tested for contamination in case of liner leakage. Cost include trip, labor, materials, and laboratory testing of 18 tests.</p>	1	2,700.00	2,700.00

Questions? Email AR@cascadeservicesllc.com

Page 1 of 2

Civil Construction	Broadcast seeding of pond area Seed will be a native mix for Lea County NM Includes purchase of seed mix and placement	1	3,000.00	3,000.00
Fence	Fence removal and disposal Fence estimated at 4,575 ft per pond This includes removal of all posts, braces, wire, fabric, gates, and hardware.	1	24,389.32	24,389.32
Civil Construction	Remove and dispose of all four layers out of both pits	3,552,000	0.17	603,840.00

If pumping is needed due to weather conditions, a \$350 daily fee will be charged on final invoice.

This estimate does not include tax. Tax may be added based on agreement terms and installation location. unless customer provides a valid tax exemption document.

Questions? Email AR@Cascadeservicesllc.com

SUBTOTAL	1,039,243.32
TAX	0.00
TOTAL	\$1,039,243.32

Accepted By

Accepted Date

SITING CRITERIA DEMONSTRATION

SITING CRITERIA (19.15.34.11 NMAC)
LEGION WATER SERVICES LLC – HAMON RF & CONTAINMENTS

Distance to Groundwater

Plate 1, Plate 2, and the discussion below demonstrates that groundwater (fresh water as defined by NMOCD Rules) at the Hamon RF & Containments (the Site) is greater than 100 feet beneath the area of interest.

Plate 1 is a topographic map that shows:

1. The Site in which the containments will be placed identified by the blue stippled polygon.
2. Water wells from the OSE database as a blue triangle inside colored circles. OSE wells are often mislocated in the WATERS database as older wells are plotted in the center of the quarter, quarter, quarter, of the Section Township and Range. Additionally, the OSE database can include locations of proposed wells (i.e., permit applications). We provide no depth to water data for the OSE wells as these data do not represent static water levels and are often misleading. Some locations in the OSE database plotted on Plate 1 are permits and several are dry holes.
3. Water wells from the USGS database as large triangles color-coded to the formation from which the well draws water. Depth to water and the date of measurement are presented in the Plate.
4. Water wells, which are not documented in the public databases but were identified by field inspection or other published reports as colored squares (Misc. well database).

Plate 2 is an area topographic and geologic map that shows:

1. The recycling containment area identified by the blue stippled polygon with the surface elevation noted.
2. Water wells measured by the USGS, the year of the measurement and the calculated elevation of the groundwater surface.
3. Water wells measured by professionals and documented in published reports or by staff of Hicks Consultants (Misc.).

Hydrogeology

As shown in Plate 2, the Triassic Upper Chinle Formation (T(r)cu) crops out in the western area of the map and the Tertiary Ogallala Formation crops out in the southwestern corner. The surface geology at the containment site is Quaternary eolian and piedmont deposits (Qe/Qp).

Four driller's logs of relatively decent quality are in the NM OSE database around the Hamon RF location. From closest to the Hamon site to farthest from, these are described briefly below and presented in Appendix Well logs.

- CP-750 is about 1700 feet east and is a dry hole that describes alluvial material to 65 feet underlain by clay and sandstone bedrock that is typical of the Chinle. This boring is 1700 feet east of the site and the log indicates a dry hole to 320 feet.
- CP-1860 is about 2 miles due west and indicates this boring did not encounter water to a total depth of 55 feet. There is no well log in the OSE database at this time, but the plugging report is dated 9/13/2023, thus a log may not be uploaded.
- CP-1865 #1 & #2 are about 2.2 and 1.8 miles northwest of the Hamon RF location, respectively. Both are dry monitoring wells with a total depth of 105 feet. From 21 feet

SITING CRITERIA (19.15.34.11 NMAC)
LEGION WATER SERVICES LLC – HAMON RF & CONTAINMENTS

to total depth the log describes sandy red clay, which is probably the Chinle, and blue clay that is also typical of driller's descriptions of the Chinle.

- CP 748 (about 1.25 miles north) is also a dry hole to a depth of 280 feet. The log shows unsaturated sand to 36 feet that is underlain by Chinle lithology, which at this location is dominantly clay.

The data permit a conclusion that the alluvium and caliche overlying the Chinle Formation in the area around the Hamon RF site is unsaturated. The water bearing units of the Chinle are deep and confined (artesian).

Groundwater Data

Plate 2 presents groundwater elevation data closest to the Hamon RF & containments. Two data points are about 1.5 miles southwest of the Hamon site: Misc-121, which was gauged by Hicks Consultants in 2019 and USGS-15528. In our field and aerial image search, we found no evidence of the USGS well at the listed latitude/longitude in the database. We are convinced at the Misc-121 is the same well as USGS-15528. Information from the USGS database for USGS-15528 is presented in the Well Log Appendix and shows that for the period of record (1968-1976) four of five depth to water measurements are between 400 and 450 feet below surface (groundwater elevation of 3250-3200). The 1976 USGS measurement is less than 200 feet below surface. Because the Hicks Consultants measurement is 30-feet higher than the USGS data, we contend our 2019 measurement is correct and the most recent USGS measurement (1976) is erroneous. The USGS database states the total depth of this well is 676 feet and draw water from the basal Chinle – the Santa Rosa Sandstone.

USGS-15148 is slightly less than 1.5 miles southwest of the Hamon RF site. Depth to groundwater in this well range from 128 feet to 132 feet during the 30 years of record – except for one measurement (see Appendix Well Logs and USGS Data). We believe this measurement is valid.

In our field survey of 2022, we could not locate USGS-15121 (2 miles west), but historic aerial imagery on Google Earth contains evidence that a well in this area is probable. The groundwater elevation is like the 2019 measurement of Misc-121, and we believe the sole reading at this location is valid.

USGS-15411 lies about 4.25 miles west of the Hamon RF & containments and is a shallow well in saturated alluvium. Saturated alluvium within one mile of Laguna Gatuña is not surprising. Groundwater perched on the clay of the Chinle within closed basins and playas is common. We did not use the data from this well (which is also Misc-120) in our evaluation of depth to groundwater at the Site.

As indicated above, the driller's log for CP-750 (1990) states the boring was a dry hole to 320 feet. This observation is supported by the measurements on Plate 1 for Misc-121 and USGS-15121. However, data from USGS-15148 do not support the driller's observations. We suggest that the boring did not detect sufficient groundwater to service cattle, but some small volume of groundwater may be present at this location.

SITING CRITERIA (19.15.34.11 NMAC)
LEGION WATER SERVICES LLC – HAMON RF & CONTAINMENTS

We relied upon the most recent data measured by the USGS, published data, and measurements by Hicks Consultants to create Plate 2. Water level data from the OSE database rely upon observed water levels by drillers during the completion of the water well. The OSE dataset provides some useful data in certain areas but were not used to generate groundwater elevations for these Plates. Based upon our field surveys and examination of Google Earth images, we are confident that the wells shown on Plate 2 are close to the plotted points.

Plate presents data that we know are accurate to the best of our knowledge, except where noted above. We employed the most recent data available, and we conclude:

- Localized, thin, unconfined groundwater zones exist in some closed depressions of the area, such as Laguna Gatuña. The lateral extent of these groundwater zones that are perched upon underlying Chinle Formation clay units is limited to the area of the depression.
- The uppermost groundwater zone beneath the Hamon RF and containments resides in thin sandstones of the Chinle or in the basal unit, the Santa Rosa Sandstone
- Alluvium overlying the Chinle around the Hamon RF & containments is dry, as is the upper 100+ feet of the Chinle.
- Saturated units within the Chinle beneath the Hamon RF & containments are confined.
- The elevation of confined groundwater beneath the Hamon RF & containments is higher than 3282 but lower than 3511 feet ASL.
- The most conservative estimate of depth to groundwater beneath the AST containments is more than (3610-3511=) 99 feet.
- The dry hole (CP-750) to 320 feet provides an alternative estimate of depth to water, but the boring is plugged and evaluating this estimate is not worthwhile.

Distance to Municipal Boundaries and Fresh Water Fields

Plate 3 demonstrates that the Hamon RF & containments are not within incorporated municipal boundaries or within defined municipal fresh water well fields covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.

- The closest municipality is Monument, approximately 18 east.
- The closest mapped public wells belong to the Monument Water Users Coop. These municipal supply wells are about 19 miles distant, north of Monument.
- The NMED database of water supply systems show an active site about 9 miles north. A well and storage tank appear on Google Earth, thus this location may support a public water supply.

Distance to Subsurface Mines

Plate 4 and our general reconnaissance of the Harmon RF & containments demonstrate that the nearest mines are caliche pits. This location is not within an area overlying a subsurface mine.

- A reclaimed caliche pit is less than 1 mile east-northeast (see Plate 8)
- An abandoned caliche pit is about 1 ¼ miles southwest.

SITING CRITERIA (19.15.34.11 NMAC)
LEGION WATER SERVICES LLC – HAMON RF & CONTAINMENTS

Distance to High or Critical Karst Areas

Plate 5 shows the Hamon RF & containments are not within mapped zone of high or critical Karst with respect to BLM mapped areas.

- The proposed containments are located within a “low” potential karst area.
- The nearest “high” or “critical” potential karst area is located approximately 12 miles southwest of the proposed containments.
- We observed no evidence of solution voids or unstable ground near the site during the field inspection.

Distance to 100-Year Floodplain

Plate 6 demonstrates that the Hamon RF & Containments are within Zone D as designated by the Federal Emergency Management Agency with respect to the Flood Insurance Rate 100-Year Floodplain.

- FEMA describes the location as an area with possible but undetermined flood hazards. No flood hazard analysis has been conducted.
- Our field inspection and examination of the topography permits a conclusion that the location is not within any floodplain and has low risk for flooding.
- The nearest mapped flood hazard is about 23 miles west and is associated with Hackberry Lake.

Distance to Surface Water

Plate 7 shows the closest surface water body, a Lake/Pond, plots about 2 mile north of the Hamon RF & containments.

- This mapped lake is a small intermittent lake in an area probably underlain by caliche that shows evidence of solution subsidence.
- The site visit and photographs demonstrate that the recycling project area is not within 300 feet of a continuously flowing watercourse or 200-feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark) or spring.

Distance to Permanent Residence or Structures

Plate 8 and the site visit demonstrates that the location is not within 1000 feet from an occupied permanent residence, school, hospital, institution, church, or other structure in existence at the time of initial application.

- The nearest structures are the fresh water frac pond, a well pad and lease roads.
- No residences or other structures are in the area.

Distance to Non-Public Water Supply

Plates 1 and 7 demonstrate that the Hamon RF & containments are not within 500 horizontal feet of a spring or fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.

- Plate 1 shows the locations of all area water wells, active or plugged.
- There are no domestic water wells located within 1,000 feet of the area of interest.
- No springs were identified within the mapping area (see Plate 7)

SITING CRITERIA (19.15.34.11 NMAC)
LEGION WATER SERVICES LLC – HAMON RF & CONTAINMENTS

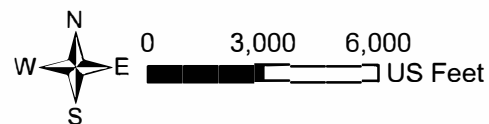
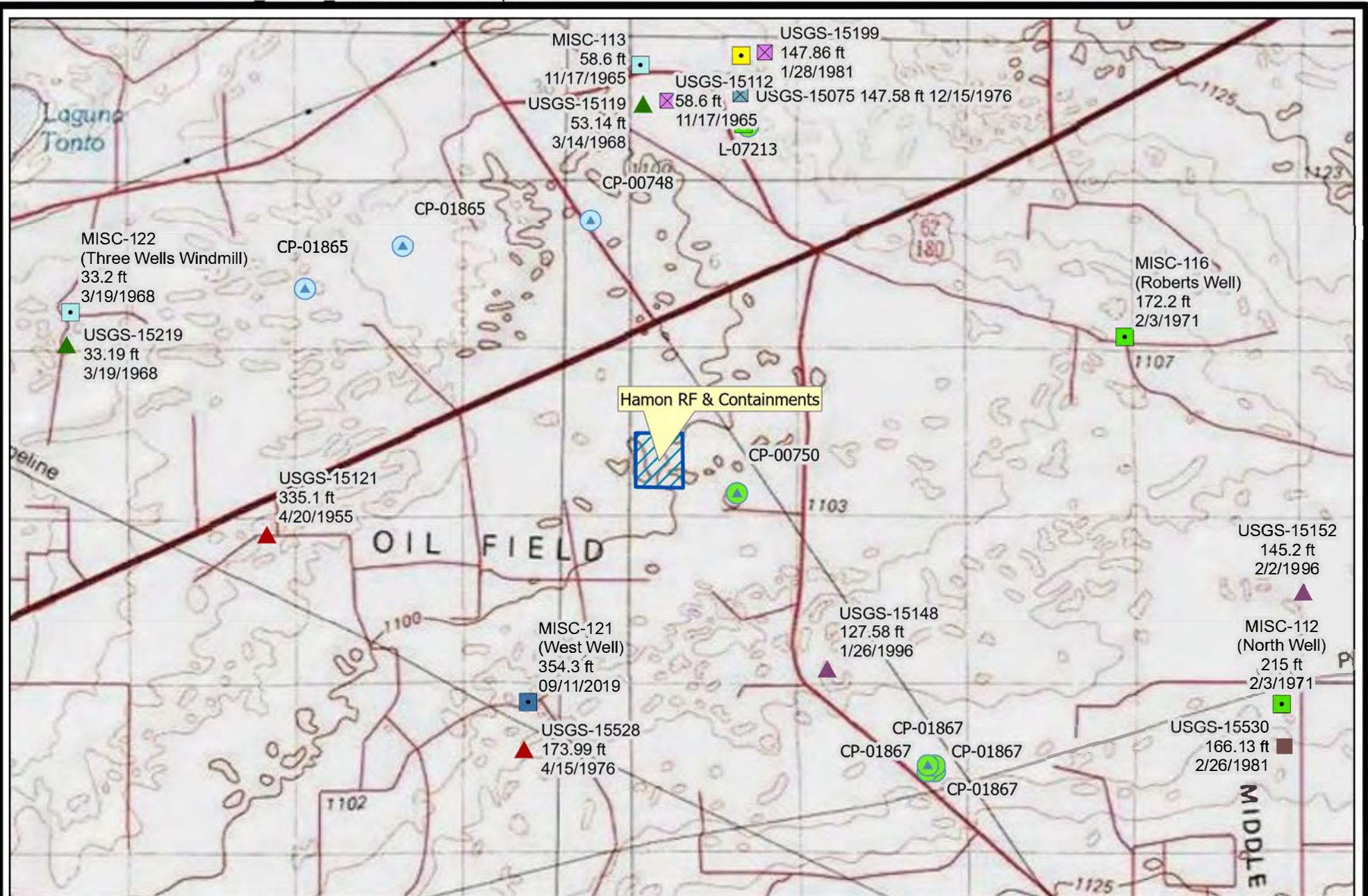
Distance to Wetlands

Plate 9 demonstrates the Hamon RF & Containments are not within 500 feet of mapped wetlands using the USA database.

- The nearest mapped wetland is the first version of the fresh water frac pond that occupied the northern area of the pond shown in Plate 8
- Other wetlands in the USA database shown on Plate 9 appear to be frac ponds or livestock tanks .

PLATES

P:\CascadeAvantHamon\Avant Hamon RF&Containments.aprx



R.T. Hicks Consultants, Ltd
 901 Rio Grande Blvd NW Suite F-142
 Albuquerque, NM 87104
 Ph: 505.266.5004

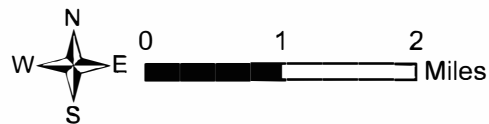
Nearby Wells and Borings with Depth to Water

Plate 1

Legion Water Services- Hamon RF & Containments

January 2024

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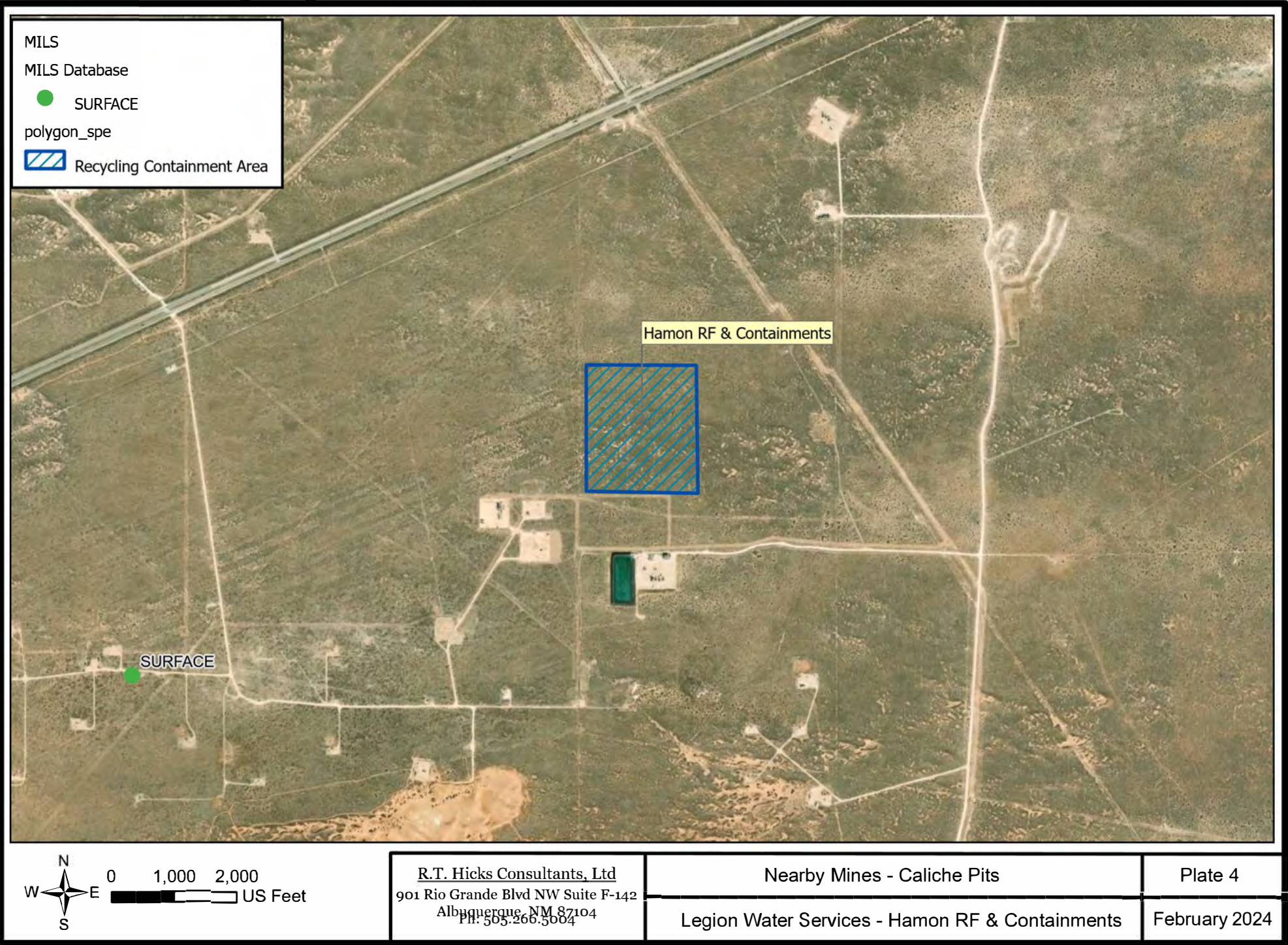
R.T. Hicks Consultants, Ltd
901 Rio Grande Blvd NW Suite F-142
Albuquerque, NM 87104
Ph: 505.266.5004

Groundwater Elevation & Geology
USGS and MISC Data
Legion Water Services- Hamon RF & Containments

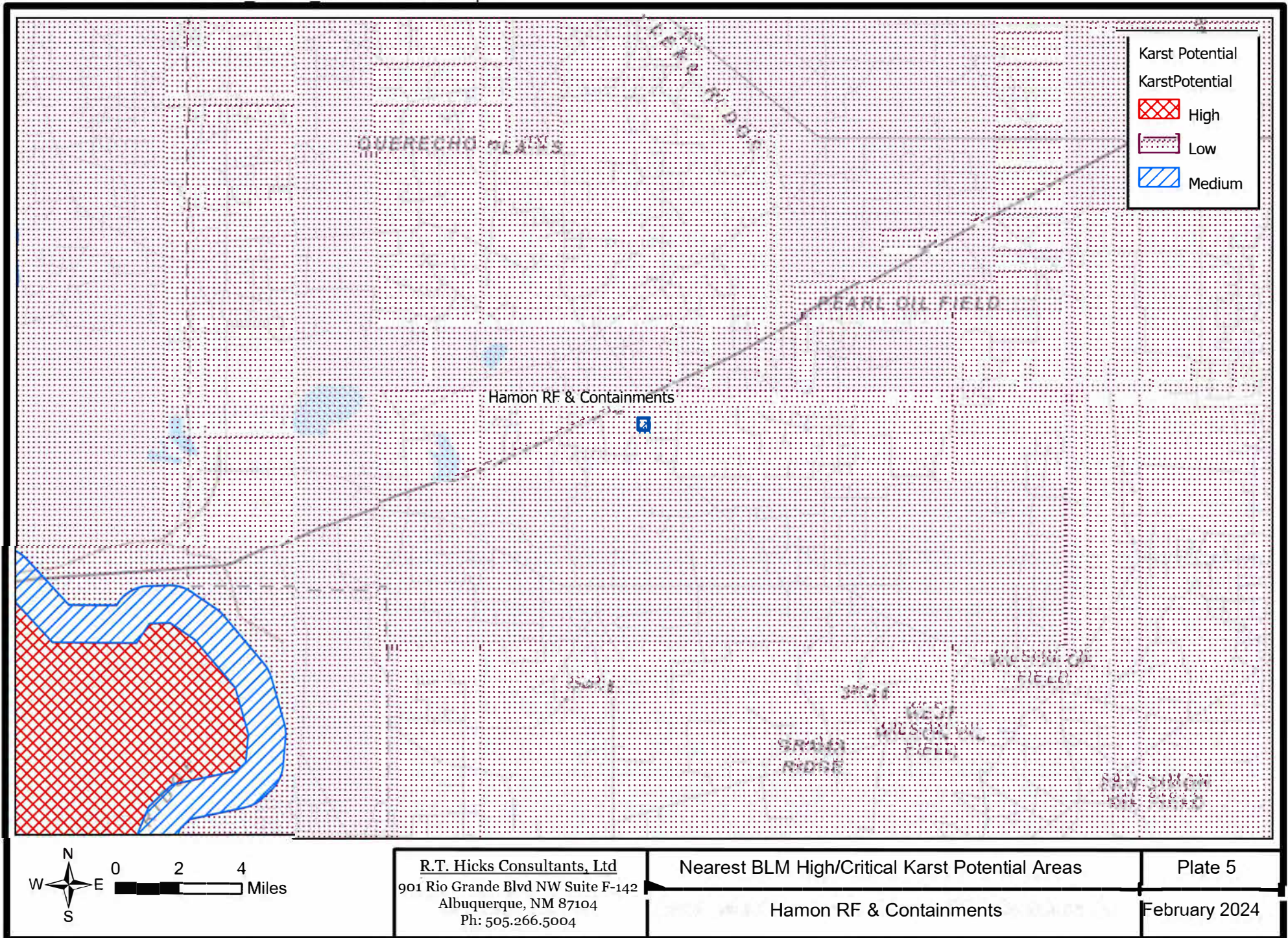
Plate 2
January 2024

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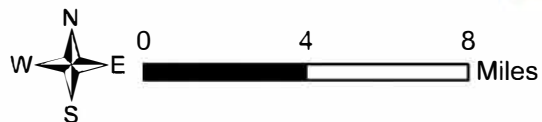
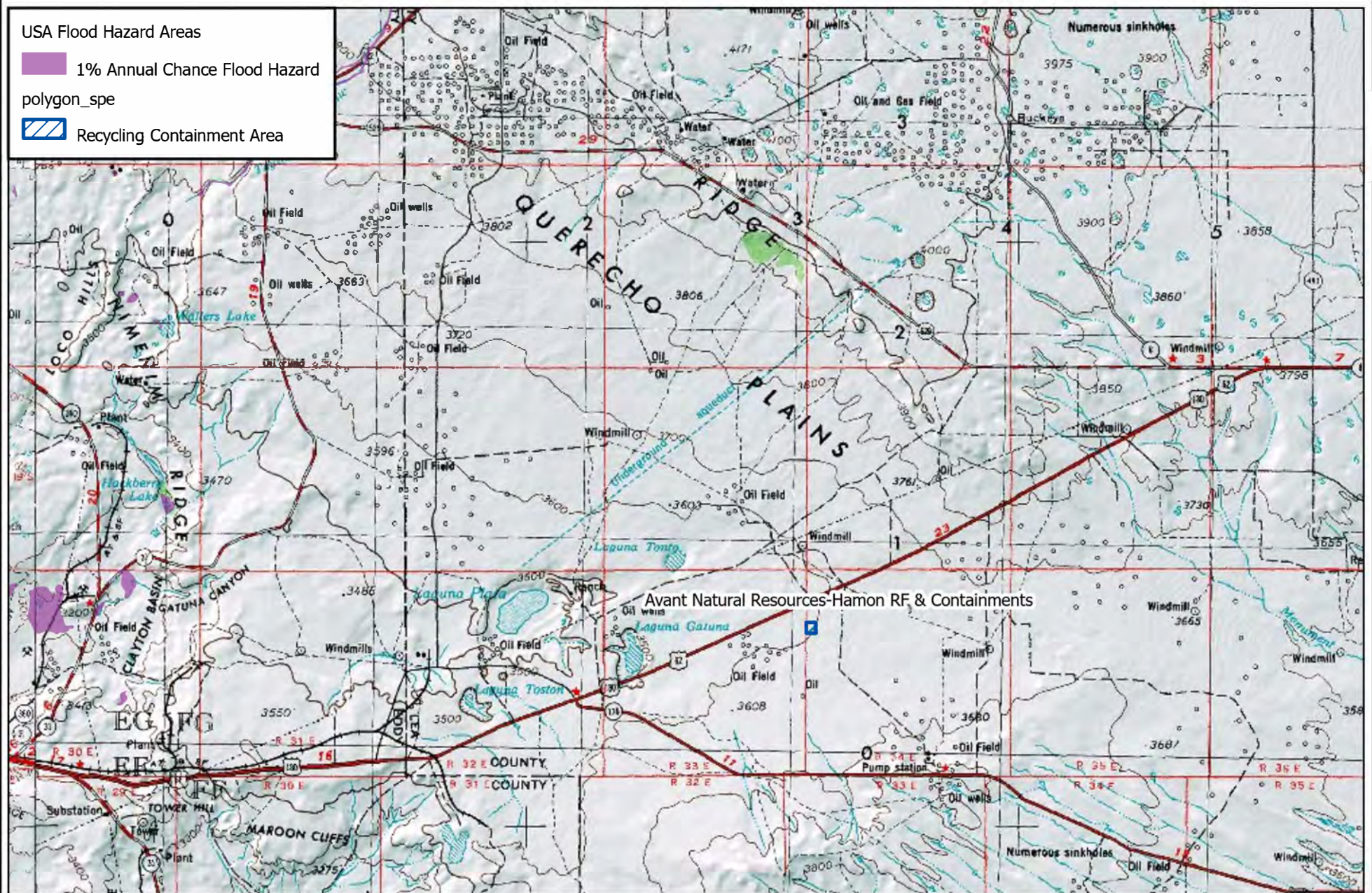


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USA Flood Hazard Areas

polygon_spe

 Recycling Containment Area

R.T. Hicks Consultants, Ltd
901 Rio Grande Blvd NW Suite F-142
Albuquerque, NM 87104
Ph: 505.266.5004

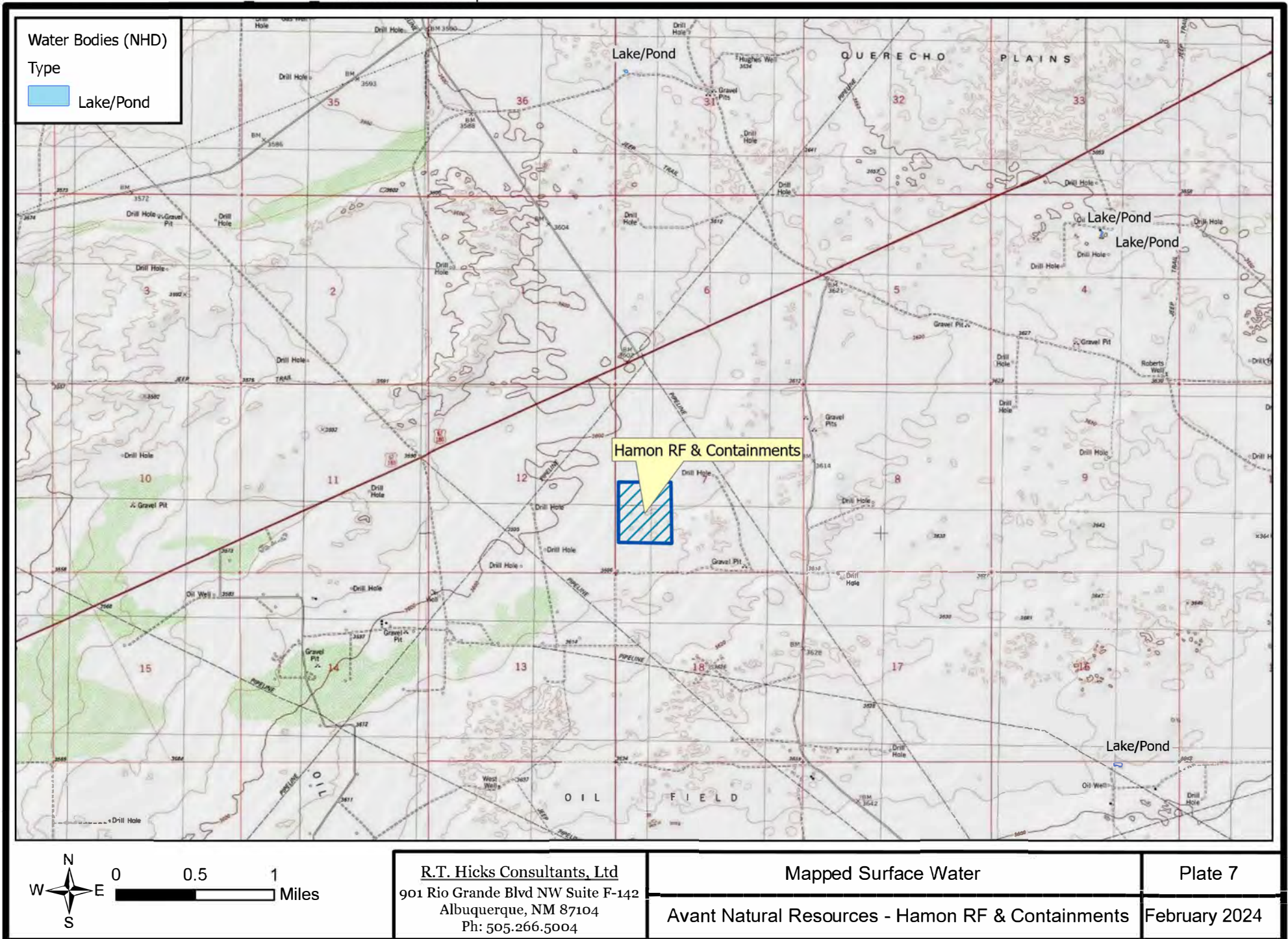
FEMA Mapped Flood Zones

Plate 6

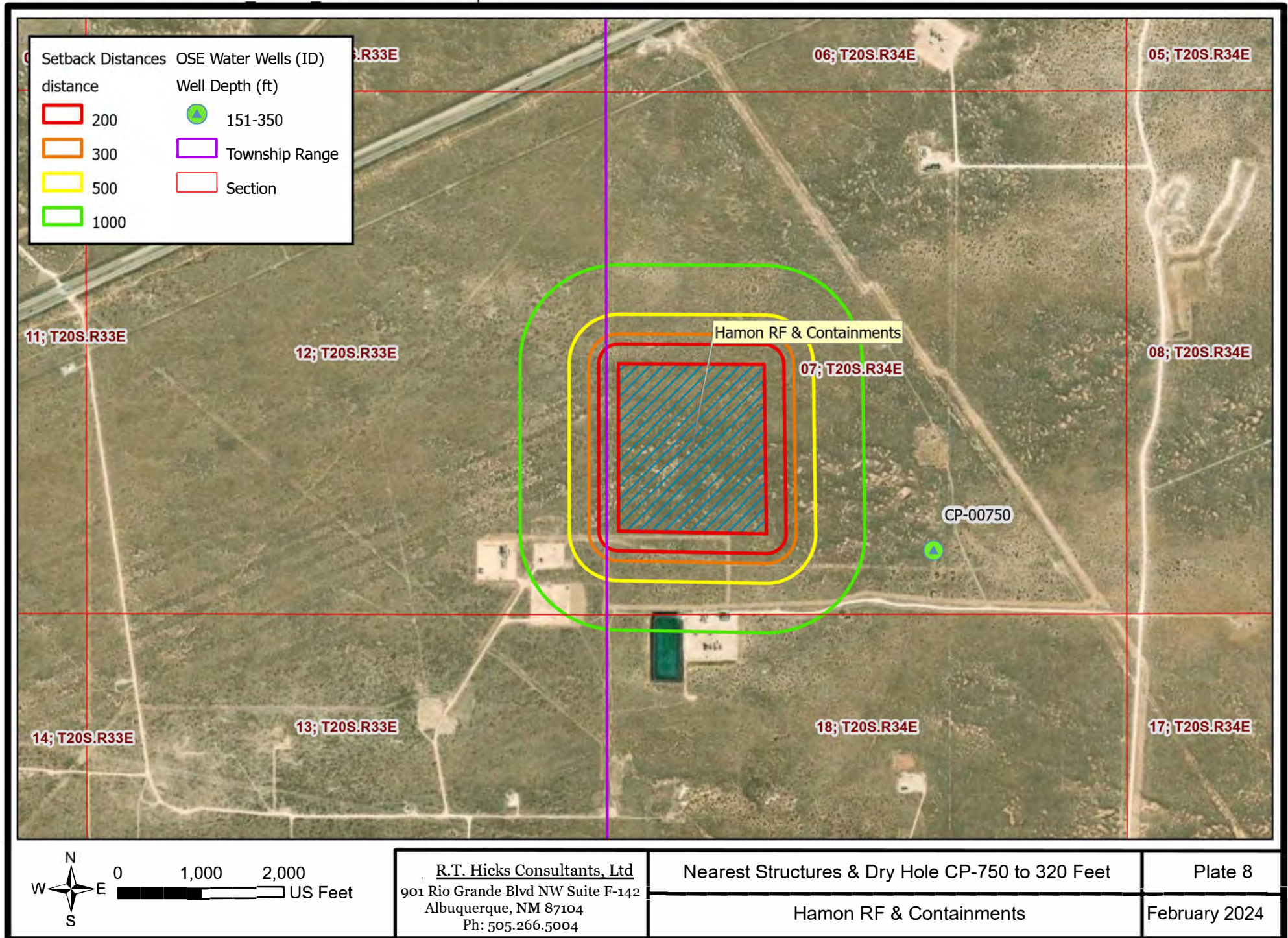
Legion Water Services - Hamon RF & Containments

February 2024

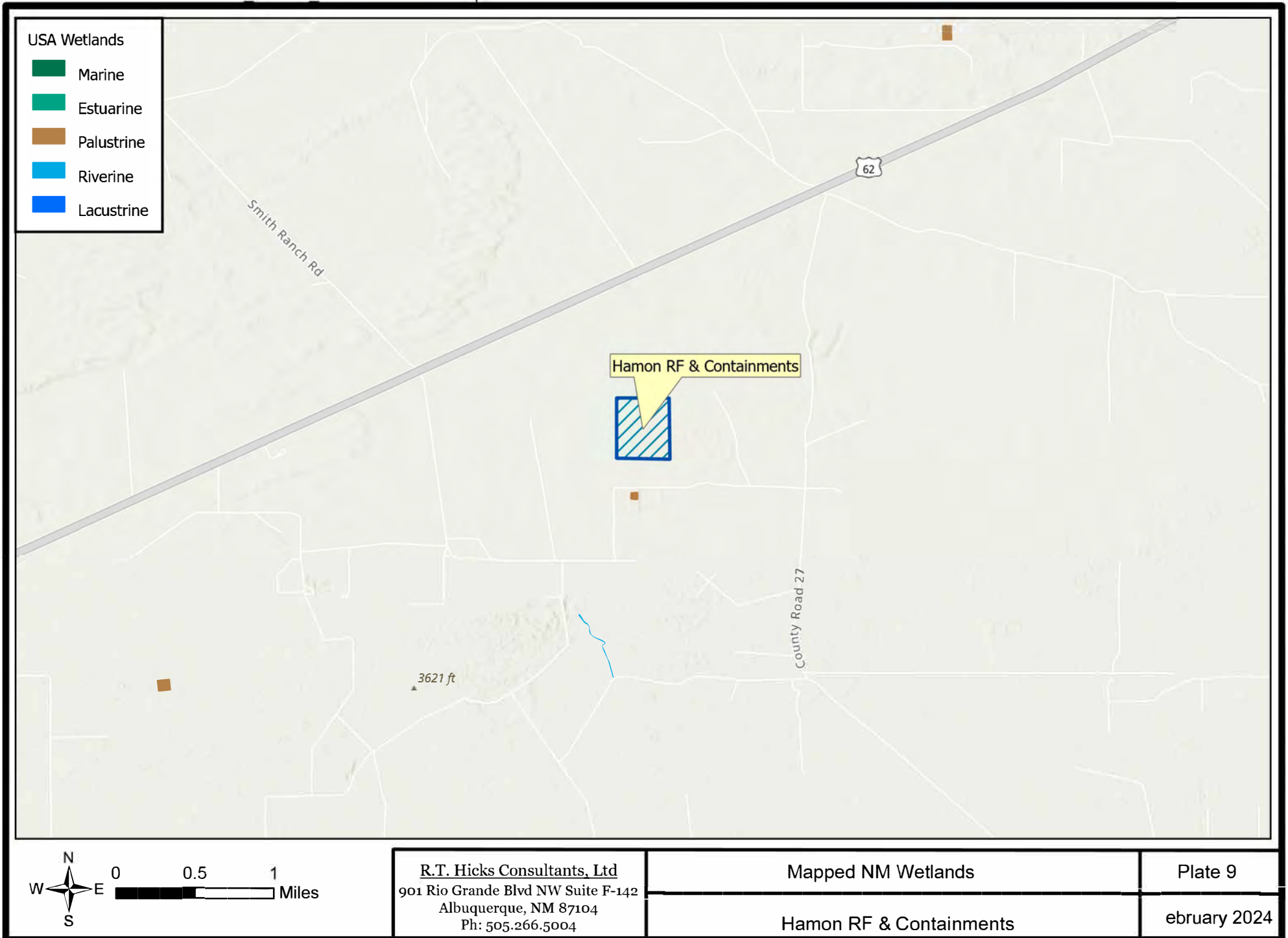
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WELL LOGS AND USGS DATA

Revised June 1972

STATE ENGINEER OFFICE
WELL RECORD

475954

Section 1. GENERAL INFORMATION

(A) Owner of well TXO Prod. Owner's Well No. _____
Street or Post Office Address c/o Glenn's Water Well Service,
City and State P.O. Box 692 Tatum, N.M. 88267

Well was drilled under Permit No. CP-750 and is located in the:
a. _____ ¼ _____ ¼ SW ¼ SE ¼ of Section 7 Township 20-S. Range 34-E. N.M.P.M.
b. Tract No. _____ of Map No. _____ of the _____
c. Lot No. _____ of Block No. _____ of the _____
Subdivision, recorded in _____ County.
d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in
the _____ Grant.

(B) Drilling Contractor Glenn's Water Well Service, Inc. License No. WD 421
Address P.O. Box 692 Tatum, N.M. 88267
Drilling Began 6/20/90 Completed 6/20/90 Type tools rotary Size of hole 7 7/8 in.
Elevation of land surface or _____ at well is _____ ft. Total depth of well 320 ft.
Completed well is ☒ shallow ☐ artesian. Depth to water upon completion of well _____ ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
			dry hole	26
				AM 8 29

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				

Section 5. PLUGGING RECORD

Plugging Contractor _____
Address _____
Plugging Method well was plugged with dirt
Date Well Plugged _____
Plugging approved by: _____
State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received July 26, 1990 Quad _____ FWL _____ FSL _____
File No. CP-750 Use OLD Location No. 20.34.7.4300

Section 6. LOG OF HOLE

Depth in Feet		Thickness in Feet	Color and Type of Material Encountered
From	To		
0	6	6	sand
6	16	10	caleche
16	20	4	sand
20	22	2	rock (soft)
22	32	10	sand
32	65	33	sandy clay
65	102	37	red clay
102	107	5	blue sand rock
107	118	11	brown shale
118	127	9	blue sand rock
127	130	3	brown shale
130	154	24	blue sand rock
154	159	5	limestone hard
159	178	19	red clay
178	191	13	brown shale
191	210	19	red clay
210	235	25	brown shale
235	278	43	brown shale (some light blue)
278	295	17	purple shale (some light blue)
295	306	11	yellow and blue clay
306	320	14	red clay

SEALING & RECORDS
DIVISION
APR 16 2024 10:00 AM

Section 7. REMARKS AND ADDITIONAL INFORMATION

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.


Driller

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled. For record, only Section 1(a) and Section 5 need be completed.

Revised June 1972

STATE ENGINEER OFFICE
WELL RECORD

475940

Section 1. GENERAL INFORMATION

(A) Owner of well Grace Drilling Co. Owner's Well No. _____
Street or Post Office Address P.O. Box 13480
City and State Odessa, TX 79768 '91 III 5 AM 10 47

Well was drilled under Permit No. CP 748 and is located in the STATE ENGINEER OFFICE
a. NE $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$ of Section 1 Township 20 Range 33E N.M.P.M. SANTA FE NEW MEXICO
b. Tract No. _____ of Map No. _____ of the _____
c. Lot No. _____ of Block No. _____ of the _____
Subdivision, recorded in _____ County.
d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in
the _____ Grant.

(B) Drilling Contractor West Texas Water Well Service License No. WK 1184
Address 3432 W. University Odessa, TX 79764
Drilling Began 6-1-90 Completed 6-2-90 Type tools Air rotary Size of hole 8 3/4 in.
Elevation of land surface or _____ at well is _____ ft. Total depth of well _____ ft.
Completed well is ☐ shallow ☐ artesian. Depth to water upon completion of well _____ ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
NO	CASING							

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				

Section 5. PLUGGING RECORD

Plugging Contractor West Texas Water Well Service
Address _____
Plugging Method Pumped grout - neat cement
Date Well Plugged 6-2-90
Plugging approved by: _____

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

State Engineer Representative

FOR USE OF STATE ENGINEER ONLY

Date Received June 19, 1991
Quad _____ FWL _____ FSL _____
File No. CP-748 Use OWD Location No. 20.33.1.24144

— 44 —

STATE DEPT. OFFICE
RCSNELL NEW MEXICO
JUN 19 AM 10:29

No casing was instaled

Robert E. Collis
Driller

Released to Imaging: 4/19/2024 11:30:20 AM



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

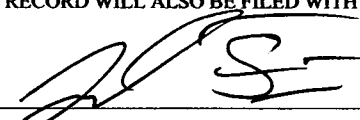
OSE DTI JUL 22 2021 PM 2:05

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD1 CP-1865		WELL TAG ID NO.		OSE FILE NO(S). CP-01865			
	WELL OWNER NAME(S) BTA OIL PRODUCERS, LLC				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 104 S PECOS ST				CITY MIDLAND			
					STATE TX			
					ZIP 79701			
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE		MINUTES 32	SECONDS 36	N		
		LONGITUDE		-103	37	54	W	
* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84								
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE LEA SECTION 2 TOWNSHIP 20S RANGE 33E								
2. DRILLING & CASING INFORMATION	LICENSE NO. WD-1753		NAME OF LICENSED DRILLER JACOB FRIESSEN			NAME OF WELL DRILLING COMPANY VANGURD		
	DRILLING STARTED 2-8-21		DRILLING ENDED 2-8-21		DEPTH OF COMPLETED WELL (FT) 105	BORE HOLE DEPTH (FT) 105	DEPTH WATER FIRST ENCOUNTERED (FT) 0	
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) 0		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	-1	99	4.5	BLANK PVC	THREAD 2.375	2	.187	
	99	105	4.5	SCREEN PVC	THREAD 2.375	2	.187	.02
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
	0	99	4.5	GROUT	8	POURED		
	99	105	4.5	SILICA SAND	.5	POURED		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 04/30/19)

FILE NO. C-1865	POD NO. 1	TRN NO. 686912
LOCATION 20S-33E-02	2-3-4	WELL TAG ID NO. NA
		PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)	
	FROM	TO					
	0	1	1	TOPSOIL	Y	✓ N	
	1	21	20	SAND	Y	✓ N	
	21	81	61	SANDY RED CLAY	Y	✓ N	
	81	105	24	BLUE CLAY	Y	✓ N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input checked="" type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:				TOTAL ESTIMATED WELL YIELD (gpm): 0.00		
	5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
		MISCELLANEOUS INFORMATION:					
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: PETE LOEWEN							
6. SIGNATURE	BY SIGNING BELOW, I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED WELL. I ALSO CERTIFY THAT THE WELL TAG, IF REQUIRED, HAS BEEN INSTALLED AND THAT THIS WELL RECORD WILL ALSO BE FILED WITH THE PERMIT HOLDER WITHIN 30 DAYS AFTER THE COMPLETION OF WELL DRILLING.						
	 SIGNATURE OF DRILLER / PRINT SIGNEE NAME				JACOB FRIESSEN 7-13-21 DATE		

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 04/30/2019)	
FILE NO. C-1865	POD NO. 1	TRN NO. 686912	
LOCATION 705-33F-02 2-3-4	WELL TAG ID NO. NA	PAGE 2 OF 2	



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

OSE DTI JUL 22 2021 PM 2:05

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD2 CP-1865		WELL TAG ID NO.		OSE FILE NO(S). CP-01865			
	WELL OWNER NAME(S) BTA OIL PRODUCERS, LLC				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 104 S PECOS ST				CITY MIDLAND	STATE TX	ZIP 79701	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 35	SECONDS 59 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE -103	38	30.4 W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE LEA SECTION 2 TOWNSHIP 20S RANGE 33E								
2. DRILLING & CASING INFORMATION	LICENSE NO. WD-1753		NAME OF LICENSED DRILLER JACOB FRIESSEN			NAME OF WELL DRILLING COMPANY VANGUARD		
	DRILLING STARTED 2-8-21	DRILLING ENDED 2-8-21	DEPTH OF COMPLETED WELL (FT) 105	BORE HOLE DEPTH (FT) 105	DEPTH WATER FIRST ENCOUNTERED (FT) 0			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 0			
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	-1	99	4.5	BLANK PVC	THREAD 2.375	2	.187	
	99	105	4.5	SCREEN PVC	THREAD 2.375	2	.187	.02
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
	0	99	4.5	GROUT	8	POURED		
	99	105	4.5	SILICA SAND	.5	POURED		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 04/30/19)

FILE NO. C-1865	POD NO. 2	TRN NO. 686912
LOCATION 20S-33E-02 3.1-B	WELL TAG ID NO. NA	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

FOR USE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 04/30/2019)	
FILE NO. C-1865	POD NO. 2	TRN NO. 686912	
LOCATION 205-33E-02	3-1-3	WELL TAG ID NO. NA	PAGE 2 OF 2



WELL PLUGGING PLAN OF OPERATIONS



NOTE: A Well Plugging Plan of Operations shall be filed with and accepted by the Office of the State Engineer prior to plugging. This form may be used to plug a single well, or if you are plugging multiple monitoring wells on the same site using the same plugging methodology.

Alert! Your well may be eligible to participate in the Aquifer Mapping Program (AMP)-NM Bureau of Geology geoinfo.nmt.edu/resources/water/cgmn/ if within an area of interest and meets the minimum construction requirements, such as there is still water in your well, and the well construction reflected in a well record and log is not compromised, contact AMP at 575-835-5038 or -6951, or by email ambg-waterlevels@nmt.edu, prior to completing this prior form. Showing proof to the OSE that your well was accepted in this program, may delay the plugging of your well until a later date.

I. FILING FEE: There is no filing fee for this form.

II. GENERAL / WELL OWNERSHIP: ☐ Check here if proposing one plan for multiple monitoring wells on the same site and attaching WD-08m

Existing Office of the State Engineer POD Number (Well Number) for well to be plugged: CP-1980-POD1

Name of well owner: Select Water Solutions, LLC

Mailing address: 1502 E GREENE ST County: Eddy

City: Carlsbad State: NM Zip code: 88220

Phone number: 575-200-7551 E-mail: tbricker@selectenergy.com

III. WELL DRILLER INFORMATION:

Well Driller contracted to provide plugging services: Vision Resources, Jason Maley

New Mexico Well Driller License No.: 1833 Expiration Date: 10/07/2023

IV. WELL INFORMATION: ☐ Check here if this plan describes method for plugging multiple monitoring wells on the same site and attach supplemental form WD-08m and skip to #2 in this section.

Note: A copy of the existing Well Record for the well(s) to be plugged should be attached to this plan.

1) GPS Well Location: Latitude: 32 deg, 34 min, 56.18 sec
Longitude: 103 deg, 38 min, 25.32 sec, NAD 83

2) Reason(s) for plugging well(s):

No water is present.

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3) Was well used for any type of monitoring program? no If yes, please use section VII of this form to detail what hydrogeologic parameters were monitored. If the well was used to monitor contaminated or poor quality water, authorization from the New Mexico Environment Department may be required prior to plugging.

4) Does the well tap brackish, saline, or otherwise poor quality water? No If yes, provide additional detail, including analytical results and/or laboratory report(s): N/A

5) Static water level: no water feet below land surface / feet above land surface (circle one)

6) Depth of the well: 55 feet

- 7) Inside diameter of innermost casing: 2 inches.
- 8) Casing material: PVC
- 9) The well was constructed with:
☐ an open-hole production interval, state the open interval: _____
☒ a well screen or perforated pipe, state the screened interval(s): 50 - 55 feet
- 10) What annular interval surrounding the artesian casing of this well is cement-grouted? None
- 11) Was the well built with surface casing? no If yes, is the annulus surrounding the surface casing grouted or otherwise sealed? N/A If yes, please describe:

N/A
- 12) Has all pumping equipment and associated piping been removed from the well? yes If not, describe remaining equipment and intentions to remove prior to plugging in Section VII of this form.

V. DESCRIPTION OF PLANNED WELL PLUGGING: ☐ If plugging method differs between multiple wells on same site, a separate form must be completed for each method.

Note: If this plan proposes to plug an artesian well in a way other than with cement grout, placed bottom to top with a tremie pipe, a detailed diagram of the well showing proposed final plugged configuration shall be attached, as well as any additional technical information, such as geophysical logs, that are necessary to adequately describe the proposal. Attach a copy of any signed OSE variance to this plugging plan.

Also, if this planned plugging plan requires a variance to 19.27.4 NMAC, attach a detailed variance request signed by the applicant.

- 1) Describe the method by which cement grout shall be placed in the well, or describe requested plugging methodology proposed for the well:

Temporary PVC casing will be removed and approximately 4.7 Cubic feet bentonite chips will be placed in well.
- 2) Will well head be cut-off below land surface after plugging? No well head will be installed.

VI. PLUGGING AND SEALING MATERIALS:

Note: The plugging of a well that taps poor quality water may require the use of a specialty cement or specialty sealant. Attach a copy of the batch mix recipe from the cement company and/or product description for specialty cement mixes or any sealant that deviates from the list of OSE approved sealants.

- 1) For plugging intervals that employ cement grout, complete and attach Table A.
- 2) For plugging intervals that will employ approved non-cement based sealant(s), complete and attach Table B.
- 3) Theoretical volume of grout required to plug the well to land surface: DNA
- 4) Type of Cement proposed: DNA
- 5) Proposed cement grout mix: DNA gallons of water per 94 pound sack of Portland cement.
- 6) Will the grout be: DNA batch-mixed and delivered to the site
DNA mixed on site

- 7) Grout additives requested, and percent by dry weight relative to cement:

Grout not planned.

- 8) Additional notes and calculations:

VII. ADDITIONAL INFORMATION: List additional information below, or on separate sheet(s):

72 hours after drilling, the well (32.582273, -103.640367) will be checked for the presence of water. If water is present the NMOSE and NMOCD will be notified for guidance on possible conversion to monitor well. If no water is present the well will be plugged according to NMOSE Well Plugging Handbook, Appendix A, Permit Condition 6E. Within 20 days of well plugging, driller will submit Well Plugging Record WD-11 to NMOSE. The maximum period of time for completion of the operation will be 30 days.

VIII. SIGNATURE:

I, Timsan Bricker, say that I have carefully read the foregoing Well Plugging Plan of Operations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Engineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well Plugging Plan of Operations and attachments are true to the best of my knowledge and belief.

Timsan Bricker

Digitally signed by Timsan Bricker
Date: 2023.09.13 08:14:02 -06'00'

9/13/2023

Signature of Applicant

Date

IX. ACTION OF THE STATE ENGINEER:

This Well Plugging Plan of Operations is:

☒ Approved subject to the attached conditions.
☐ Not approved for the reasons provided on the attached letter.

Witness my hand and official seal this 2nd day of October, 2023.

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Mike A. Hamman, P.E., New Mexico State Engineer

By: Samantha Davis

Water Resources Professional II

WD-08 Well Plugging Plan
Version: March 07, 2022
Page 3 of 5

TABLE A - For plugging intervals that employ cement grout. Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of grout placement (ft bgl)	Does Not Apply (DNA)	DNA	DNA
Bottom of proposed interval of grout placement (ft bgl)	DNA	DNA	DNA
Theoretical volume of grout required per interval (gallons)	DNA	DNA	DNA
Proposed cement grout mix gallons of water per 94-lb. sack of Portland cement	DNA	DNA	DNA
Mixed on-site or batch-mixed and delivered?	DNA	DNA	DNA
Grout additive 1 requested	DNA	DNA	DNA
Additive 1 percent by dry weight relative to cement	DNA	DNA	DNA
Grout additive 2 requested	DNA	DNA	DNA
Additive 2 percent by dry weight relative to cement	DNA	DNA	DNA

TABLE B - For plugging intervals that will employ approved non-cement based sealant(s). Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of sealant placement (ft bgl)	1-ft. Fill to one-ft below ground surface. Top 1-ft will be filled with soil backfill.		Zero feet below grade.
Bottom of proposed sealant of grout placement (ft bgl)	Bottom 55.0-ft. 0-20': Pour from surface 20 to 55': Tremie in bentonite chips.		
Theoretical volume of sealant required per interval (gallons)	Under a 100 gallons of water/enough to be adequate for hydrating the bentonite		
Proposed abandonment sealant (manufacturer and trade name)	Wyoming Bentonite		

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STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

ROSWELL

1900 West Second St.
Roswell, New Mexico 88201
Phone: (575) 622-6521
Fax: (575) 623- 8559

Applicant has identified a well, listed below, to be plugged.
Vision Resources, Jason Maley (WD-1833) will perform the plugging.

Permittee: Select Water Solutions, LLC
NMOSE Permit Number: CP-1980-POD1

NMOSE File	Casing diameter (inches)	Well depth (feet bgl)	Approximate static water level (feet bgl)	Latitude	Longitude
CP-1980-POD1	2 inch	55'	Unknown	32° 35' 56.18"	103° 38' 25.32"

Specific Plugging Conditions of Approval for Well located in Lea County.

1. Water well drilling and well drilling activities, including well plugging, are regulated under 19.27.4 NMAC, which requires any person engaged in the business of well drilling within New Mexico to obtain a Well Driller License issued by the New Mexico Office of the State Engineer (NMOSE). Therefore, the firm of a New Mexico licensed Well Driller shall perform the well plugging.
2. Ground Water encountered: The total theoretical volume of sealant required for abandonment of the 2-inch diameter (I.D.) casing is approximately 8.9 gallons. Total minimum volume of necessary sealant shall be calculated upon sounding the actual pluggable depth of well, which is estimated at 55 feet below ground surface (b.g.s.).
3. Dry Hole: The total Theoretical volume of sealant required for abandonment of soil boring well is approximately 1.6 gallons. Total minimum volume of necessary sealant shall be calculated upon sounding the actual pluggable depth of well, which is estimated at 10 feet.
4. **Ground Water encountered:** Bentonite chips are the approved sealant. When bentonite Pellets are added above static water level, a minimum of 5-gallons of fresh water shall be added to the borehole per 50-lb of bentonite Pellets.
5. **Dry Hole:** (a) Drill cuttings up to ten feet of land surface. (b) 10 feet to 0 feet – Bentonite Chips. The bentonite shall be hydrated separately with its required increments of water.

6. Placement of the sealant within the wells shall be by tremie pipe extending to near well bottom and kept below top of the slurry column as the well is plugged from bottom-upwards in a manner that displaces the standing water column. The tremie shall be incrementally removed to retain the tremie bottom a limited distance above the top of the rising column of chips throughout the plugging process.
7. Any open annulus encountered surrounding the casing shall also be sealed by the placement of the approved sealant. When plugging shallow wells with no construction or environmental concerns, and if the well record on a well to be plugged shows a proper 20-foot annular seal, a plugging plan can propose the use of clean fill material to a nominal 30 feet bgs, then placing an OSE approved sealant to surface. Lacking that information, we would require an excavation of at least 2-feet which shall then be filled in its entirety with sealant to surface.
8. Should the NMED, or another regulatory agency sharing jurisdiction of the project authorize, or by regulation require a more stringent well plugging procedure than herein acknowledged, the more-stringent procedure should be followed. This, in part, includes provisions regarding pre-authorization to proceed, contaminant remediation, inspection, pulling/perforating of casing, or prohibition of free discharge of any fluid from the borehole during or related to the plugging process.
9. NMOSE witnessing of the plugging of the non-artesian well will not be required.
10. Any deviation from this plan must obtain an approved variance from this office prior to implementation.
11. A Well Plugging Record itemizing actual abandonment process and materials used shall be filed with the State Engineer within 30 days after completion of well plugging. For the plugging record, please resurvey coordinate location for well and note coordinate system for GPS unit. Please attach a copy of these plugging conditions.

The NMOSE Well Plugging Plan of Operations is hereby approved with the aforesaid conditions applied.

Witness my hand and seal this 2nd day of October, 2023



Mike A. Hamman, P.E. State Engineer

By: _____

Samantha Davis
Water Resources Professional II



STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
ROSWELL

Mike A. Hamman, P.E.
State Engineer

DISTRICT II
1900 West Second St.
Roswell, New Mexico 88201
Phone: (575) 622-6521
Fax: (575) 623-8559

October 02, 2023

Select Water Solutions, LLC
1502 E Greene St
Carlsbad, NM 88220

RE: Well Plugging Plan of Operations for well no. CP-1980-POD1

Greetings:

Enclosed is your copy of the Well Plugging Plan of Operations for the above referenced well subject to the attached Conditions of Approval. The proposed method of operation is found to be acceptable and in accordance with the Rules and Regulations Governing Well Driller Licensing; Construction, Repair and Plugging of Wells 19.27.4 NMAC adopted June 30, 2017 by the State Engineer. subject to the attached Conditions of Approval.

Within 30 days after the well is plugged, the well driller is required to file a complete plugging record with the OSE and the permit holder.

Sincerely,

A handwritten signature in blue ink, appearing to read "Samantha Davis", written over a horizontal line.

Samantha Davis
Water Resources Professional II

USGS 323335103370601 20S.33E.24.12411 AKA USGS-15528

Lea County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°33'35", Longitude 103°37'06"

NAD27

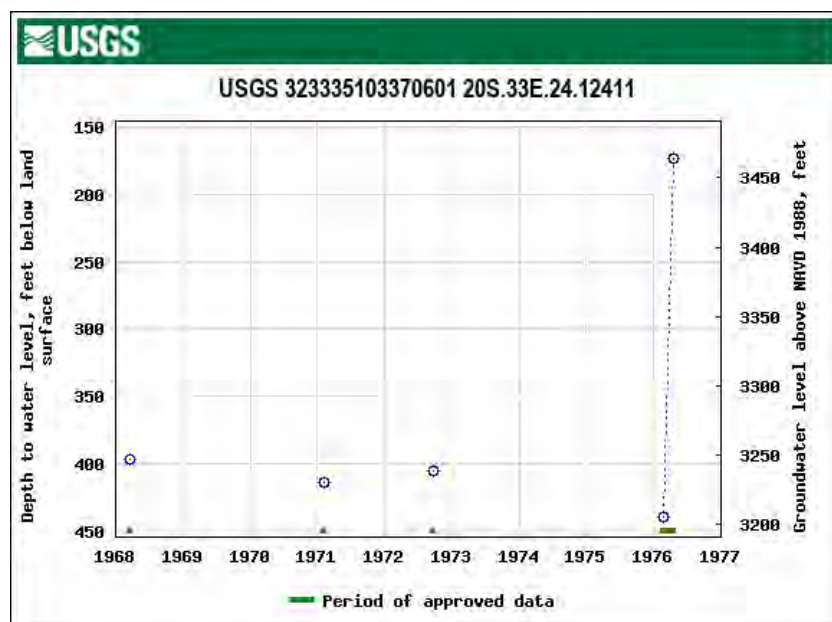
Land-surface elevation 3,641 feet above

NAVD88

The depth of the well is 676 feet below land surface.

This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Santa Rosa Sandstone (231SNRS) local aquifer.

**USGS 323345103351101 20S.34E.17.33442 AKA USGS-15148**

Lea County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°34'00", Longitude 103°35'14"

NAD27

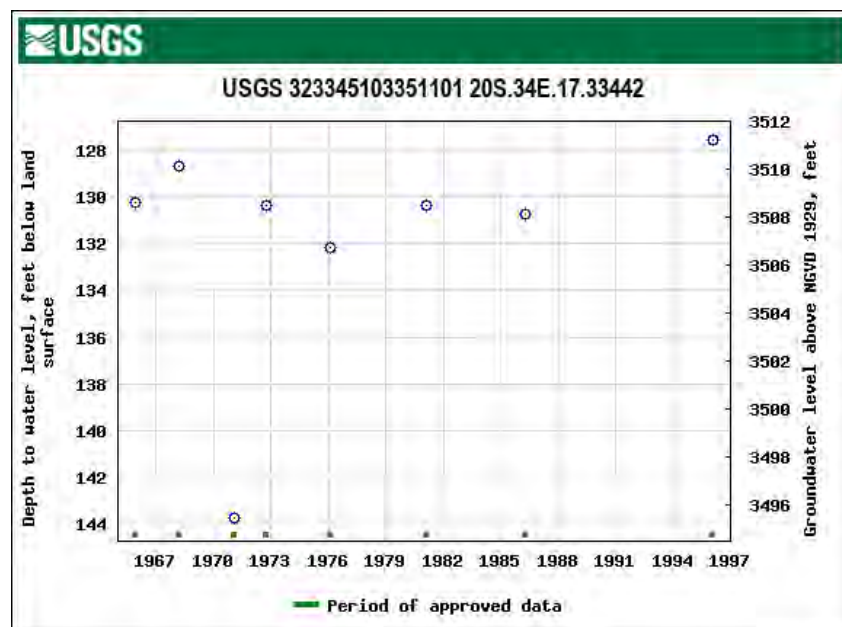
Land-surface elevation 3,639.00 feet above

NGVD29

The depth of the well is 160 feet below land surface.

This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Chinle Formation (231CHNL) local aquifer.



USGS 323442103384101 20S.33E.15.22143 AKA USGS-15121

Lea County, New Mexico

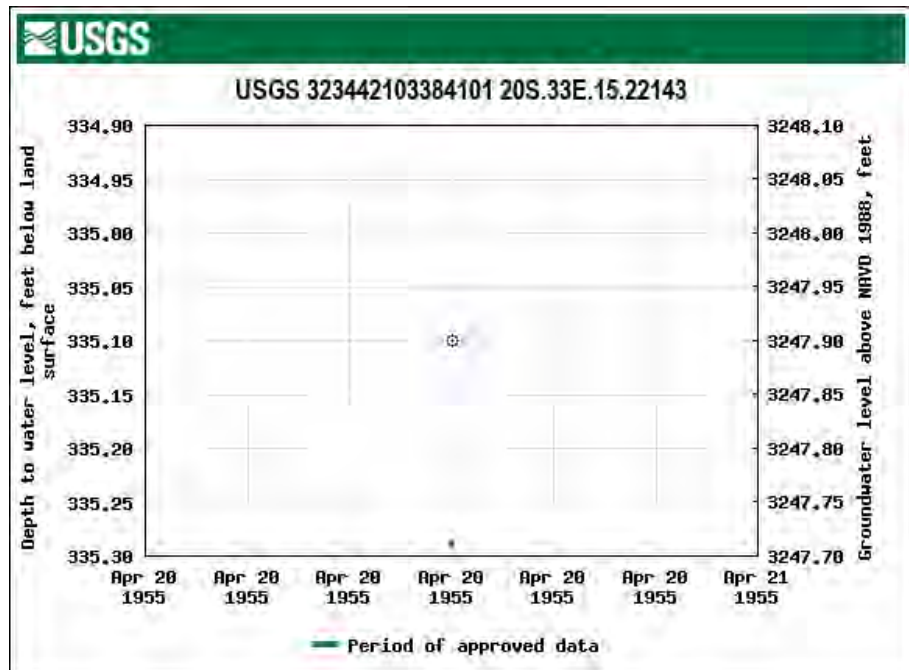
Hydrologic Unit Code 13060011

Latitude 32°34'42", Longitude 103°38'41"
NAD27

Land-surface elevation 3,583 feet above
NAVD88

This well is completed in the Other aquifers
(N9999OTHER) national aquifer.

This well is completed in the Santa Rosa
Sandstone (231SNRS) local aquifer.

**USGS 323341103403501 20S.33E.20.22224 AKA USGS-15411**

Lea County, New Mexico

Hydrologic Unit Code 13060011

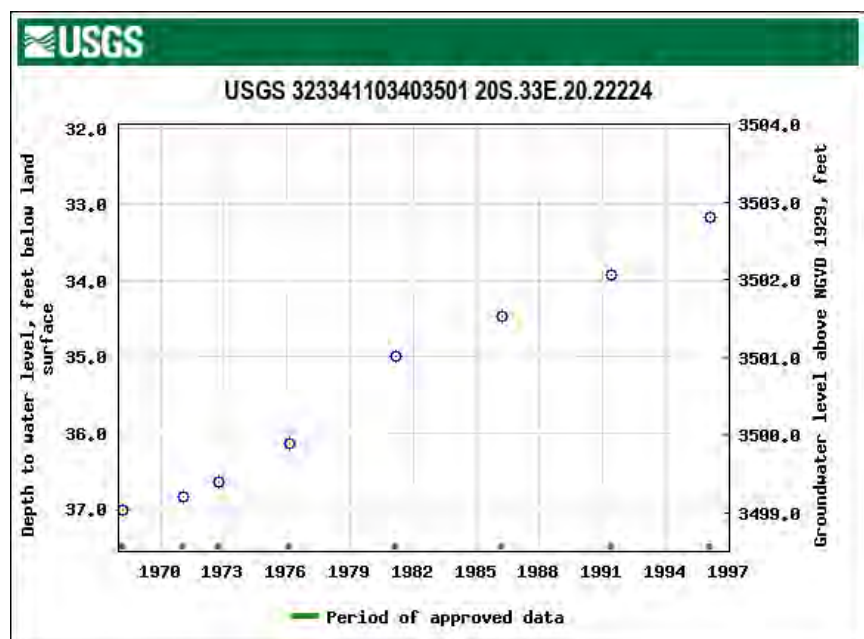
Latitude 32°33'55", Longitude 103°40'38"
NAD27

Land-surface elevation 3,536.00 feet above
NGVD29

The depth of the well is 52 feet below land
surface.

This well is completed in the Other aquifers
(N9999OTHER) national aquifer.

This well is completed in the Alluvium, Bolson
Deposits and Other Surface Deposits
(110AVMB) local aquifer.



SITE PHOTOGRAHS

SITE PHOTOGRAPHS – AVANT HAMON RF & CONTAINMENTS



SP1- View west from the center of the proposed recycling facility and containments.



SP2 – View south from the northeast corner of the proposed facility.

SITE PHOTOGRAPHS – AVANT HAMON RF & CONTAINMENTS



SP3 – View south from the northwest corner of the proposed facility.



SP4 – View south from southeast corner showing fresh water frac pit south of the proposed RF and containments.

Venegas, Victoria, EMNRD

From: Venegas, Victoria, EMNRD
Sent: Friday, April 19, 2024 11:18 AM
To: sarah@avantnr.com; 'Bobbijo Crain'; r@rthicksconsult.com
Subject: 1RF-519 - HAMON REUSE FACILITY & IN-GROUND CONTAINMENT FACILITY ID [fVV2405337536]
Attachments: C-147 1RF-519 - HAMON REUSE FACILITY & IN-GROUND CONTAINMENT FACILITY ID [fVV2405337536] 04.19.2024.pdf

1RF-519 - HAMON REUSE FACILITY & IN-GROUND CONTAINMENT FACILITY ID [fVV2405337536]

Good morning Ms. Ferreyros.

NMOCD has reviewed the recycling containment permit application and related documents, submitted by [332392] Legion Water Services, LLC on April 16, 2024, for 1RF-519 - HAMON REUSE FACILITY & IN-GROUND CONTAINMENT FACILITY ID [fVV2405337536] in Unit Letter L, Section 07, Township 20S, Range 34E, Lea County, New Mexico. [332392] Legion Water Services, LLC requested variances from 19.15.34 NMAC for 1RF-519 - HAMON REUSE FACILITY & IN-GROUND CONTAINMENT FACILITY ID [fVV2405337536].

The form C-147 and related documents for 1RF-519 - HAMON REUSE FACILITY & IN-GROUND CONTAINMENT FACILITY ID [fVV2405337536] is approved with the following conditions of approval:

- The purpose of this permit is for oil and gas activities regulated under the NMAC 19.15.34.3 STATUTORY AUTHORITY: 19.15.34 NMAC is adopted pursuant to the Oil and Gas Act, Paragraph (15) of Section 70-2-12(B) NMSA 1978, which authorizes the division to regulate the disposition of water produced or used in connection with the drilling for or producing of oil and gas or both and Paragraph (21) of Section 70-2-12(B) NMSA 1978 which authorizes the regulation of the disposition of nondomestic wastes from the exploration, development, production or storage of crude oil or natural gas.
- 1RF-519 - HAMON REUSE FACILITY & IN-GROUND CONTAINMENT FACILITY ID [fVV2405337536] is approved for five years of operation from the date of permit application.
- 1RF-519 - HAMON REUSE FACILITY & IN-GROUND CONTAINMENT FACILITY ID [fVV2405337536] permit expires on April 16, 2029. If [332392] Legion Water Services, LLC wishes to extend operations for the past five years period, an annual permit extension request must be submitted using an OCD form C-147 through OCD Permitting by March 16, 2029.
- 1RF-519 - HAMON REUSE FACILITY & IN-GROUND CONTAINMENT FACILITY ID [fVV2405337536] consists of two (2) inground containments of 750,129.00 bbl each. The total fluid capacity of 1RF-519 - HAMON REUSE FACILITY & IN-GROUND CONTAINMENT FACILITY ID [fVV2405337536] is 1,500,258.00 BBL.
- The total closure cost estimated of 1RF-519 - HAMON REUSE FACILITY & IN-GROUND CONTAINMENT FACILITY ID [fVV2405337536] in the amount of \$1,046,743.32, meets the requirements of NMAC 19.15.34.15.A. The financial assurance should be mailed to Oil Conservation Division; Bonding and Compliance; 1220 South St Frances Drive; Santa Fe, NM 87505.
- [332392] Legion Water Services, LLC shall construct, operate, maintain, close, and reclaim 1RF-519 - HAMON REUSE FACILITY & IN-GROUND CONTAINMENT FACILITY ID [fVV2405337536] in compliance with NMAC 19.15.34 NMAC.
- [332392] Legion Water Services, LLC shall notify OCD, through OCD Permitting, when construction of 1RF-519 - HAMON REUSE FACILITY & IN-GROUND CONTAINMENT FACILITY ID [fVV2405337536] commences.
- [332392] Legion Water Services, LLC shall notify NMOCD through OCD Permitting when recycling operations commence and cease at 1RF-519 - HAMON REUSE FACILITY & IN-GROUND CONTAINMENT FACILITY ID [fVV2405337536].

- A minimum of 3-feet freeboard must be maintained at 1RF-519 - HAMON REUSE FACILITY & IN-GROUND CONTAINMENT FACILITY ID [fVV2405337536] at all times during operations.
- If less than 20% of the total fluid capacity is utilized every six months, beginning from the first withdrawal, operations of the 1RF-519 - HAMON REUSE FACILITY & IN-GROUND CONTAINMENT FACILITY ID [fVV2405337536] is considered ceased and a notification of cessation of operations should be sent electronically to OCD Permitting. A request to extend the cessation of operation, not to exceed six months, may be submitted using a C-147 form through OCD Permitting. If after that 6-month extension period, the 1RF-519 - HAMON REUSE FACILITY & IN-GROUND CONTAINMENT FACILITY ID [fVV2405337536] is not utilized at a minimum of 20% fluid capacity, no additional extensions would be granted, and the operator would be directed to remove all fluids and proceed with the closure requirements.
- [332392] Legion Water Services, LLC will maintain a liquid level in the containment that is at least equal to the weight of the liner plus 20%. [332392] Legion Water Services, LLC may maintain a higher liquid level if they choose.
- [332392] Legion Water Services, LLC shall submit monthly reports of recycling and reuse of produced water drilling fluids, and liquid oil field waste on OCD form C-148 via OCD Permitting even if there is zero activity.
- [332392] Legion Water Services, LLC shall inspect the recycling containment and associated leak detection systems weekly while it contains fluids. The operator shall maintain a current log of such inspections and make the log available for review by the division upon request as per 19.15.34.13.A.
- [332392] Legion Water Services, LLC shall comply with 19.15.29 NMAC Releases in the event of any release of produced water or other oil field waste at 1RF-519 - HAMON REUSE FACILITY & IN-GROUND CONTAINMENT FACILITY ID [fVV2405337536].

Please note that if in the future [332392] Legion Water Services, LLC wishes to add an AST to this permit, a modification request and Form C-147 must be submitted to OCD Permitting along with the required documentation, an updated closure cost and variances specific to the ASTs, for consideration and review by OCD.

Please reference number 1RF-519 - HAMON REUSE FACILITY & IN-GROUND CONTAINMENT FACILITY ID [fVV2405337536] in all future communications.

Regards,

Victoria Venegas • Environmental Specialist

Environmental Bureau

EMNRD - Oil Conservation Division

506 W. Texas Ave. Artesia, NM 88210

(575) 909-0269 | Victoria.Venegas@emnrd.nm.gov

<https://www.emnrd.nm.gov/ocd/>



District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 334097

CONDITIONS

Operator: Legion Water Services, LLC 1515 Wynkoop Street Denver, CO 80202	OGRID: 332392
	Action Number: 334097
	Action Type: [C-147] Water Recycle Long (C-147L)

CONDITIONS

Created By	Condition	Condition Date
vvenegas	• 1RF-519 - HAMON REUSE FACILITY & IN-GROUND CONTAINMENT FACILITY ID [fVV2405337536] is approved for five years of operation from the date of permit application. • 1RF-519 - HAMON REUSE FACILITY & IN-GROUND CONTAINMENT FACILITY ID [fVV2405337536] permit expires on April 16, 2029. If [332392] Legion Water Services, LLC wishes to extend operations for the past five years period, an annual permit extension request must be submitted using an OCD form C-147 through OCD Permitting by March 16, 2029. • [332392] Legion Water Services, LLC shall construct, operate, maintain, close, and reclaim 1RF-519 - HAMON REUSE FACILITY & IN-GROUND CONTAINMENT FACILITY ID [fVV2405337536] in compliance with NMAC 19.15.34 NMAC	4/19/2024