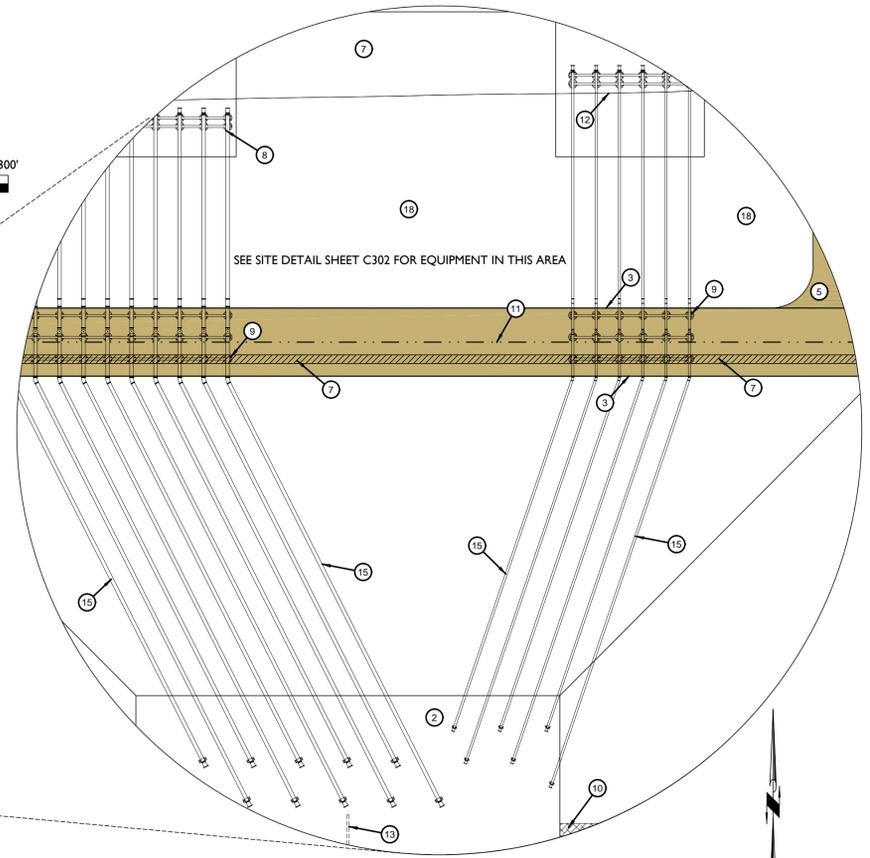
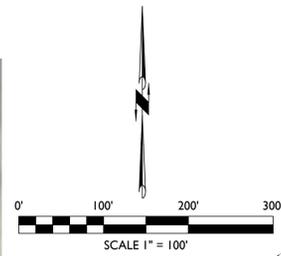
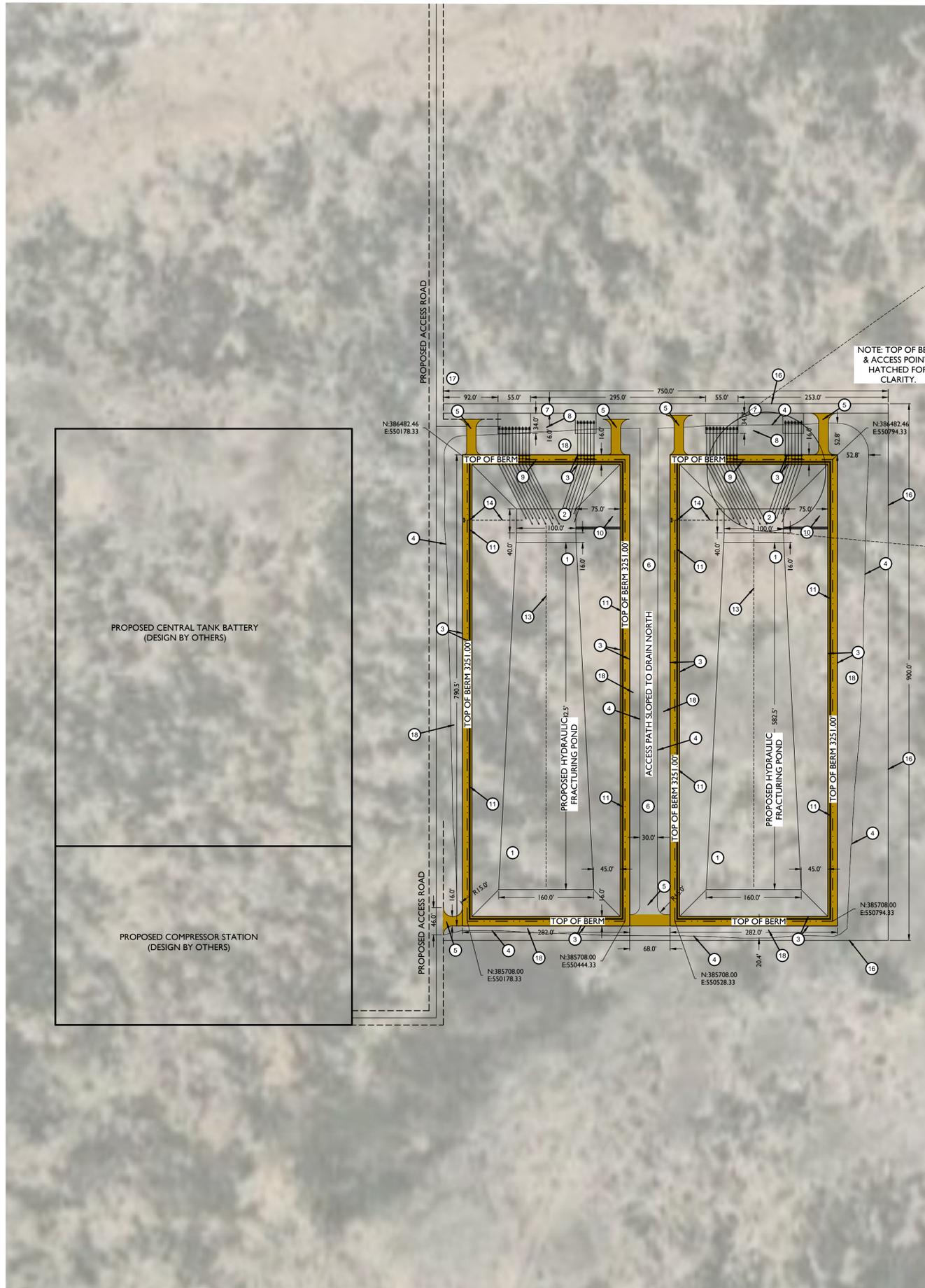
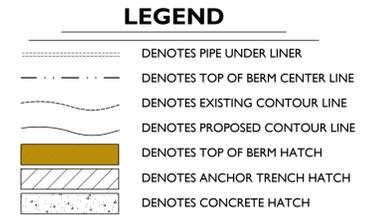


**Appendix 7 – Section 10 Recycling Containment
Engineering Drawings**

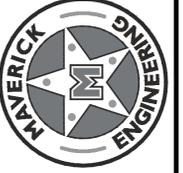


- ### SITE PLAN NOTES
1. PROPOSED HYDRAULIC FRACTURING POND. PROPOSED HYDRAULIC FRACTURING POND. LINER IS TO BE WEIGHTED DOWN PERIODICALLY AS NECESSARY TO PREVENT LINER FROM BILLOWING IN THE WIND IF THE POND IS EMPTY. WEIGHTS ARE TO BE APPROVED BY CHEVRON MCBU AND WILL BE NON-DESTRUCTIVE TO THE LINER. INSTALL 80 MIL RUB SHEETS UNDER ALL WEIGHTS.
 2. PROPOSED SUMP PIT.
 3. PROPOSED TOP OF BERM AND INSPECTION ROAD, 16 FT. WIDTH.
 4. ANTICIPATED TOE OF BERM, GRADES BACK TO EXISTING GROUND OR ACCESS ROAD IN BETWEEN THE PONDS.
 5. ACCESS RAMP TO TOP OF BERM INSPECTION ROAD.
 6. ACCESS ROAD BETWEEN PONDS.
 7. PROPOSED ANCHOR TRENCH. SEE DETAIL 5, SHEET C400.
 8. PROPOSED PIPE MANIFOLD FOR COMPLETION. SEE SITE DETAILS SHEET C301.
 9. PROPOSED CONCRETE FOOTING. SEE SITE DETAILS SHEET C301.
 10. PROPOSED PERSONNEL EMERGENCY EGRESS ROUTE. CONTRACTOR TO INSTALL ROPE LADDER FOR FULL WALL LENGTH. ALL COMPONENTS OF THE ROPE LADDER ARE TO BE MARINE / WATER PROOF AND UV RESISTANT. PROPOSED ANCHOR TRENCH. THE TOP OF THE ROPE LADDER IS TO BE FIRMLY ANCHORED IN THE ANCHORING TRENCH ALONG THE TOP OF THE BERM.
 11. PROPOSED TOP OF BERM CENTERLINE.
 12. PROPOSED PIPE MANIFOLD FOR DRILLING. SEE SITE DETAILS SHEET C301 & C302.
 13. PROPOSED LEAK DETECTION COLLECTION LATERAL. SEE DETAIL 7, SHEET C400.
 14. PROPOSED LEAK DETECTION RISER AND SAMPLE PORT. SEE DETAIL 1, SHEET C303.
 15. INSTALL 80 MIL HDPE RUB SHEETS UNDER ALL PIPING INTO AND OUT OF THE POND.
 16. INSTALL AN 8' TALL GAME FENCE PER CHEVRON MCBU STANDARDS. THE FENCE IS TO HAVE A 2' SILT FENCE AND KEYED IN BASE TO PREVENT BURROWING ANIMALS. THERE IS TO BE A LIFE RING SAFETY DEVICE INSTALLED AT THE GATE ENTRANCE AND OPPOSITE SIDE OF THE POND FROM SAID ENTRANCE. SEE MCBU STANDARDS FOR MORE INFORMATION.
 17. INSTALL POND INFORMATION SIGN LISTING OPERATOR NAME, PLSS LOCATION & EMERGENCY TELEPHONE AND ANY OTHER INFORMATION AS REQUIRED BY CHEVRON. LETTERS ARE TO BE 2" TALL MINIMUM.
 18. INSTALL LANDLOK 450 TRM ON THE OUTSIDE OF THE BERM SLOPES TO STABILIZE THEM VS. EROSION. SEE TYPICAL MANUFACTURER'S DETAILS ON SHEET C404.



Know what's below.
Call before you dig.

MAVERICK ENGINEERING
 1909 West Wall Street, Suite "K"
 Midland, Texas 79701 FIRM: F-15089
 Tel: (432) 262-0999 Fax: (432) 262-0989
 www.Maverick-Eng.com

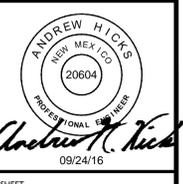


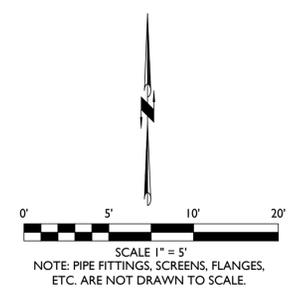
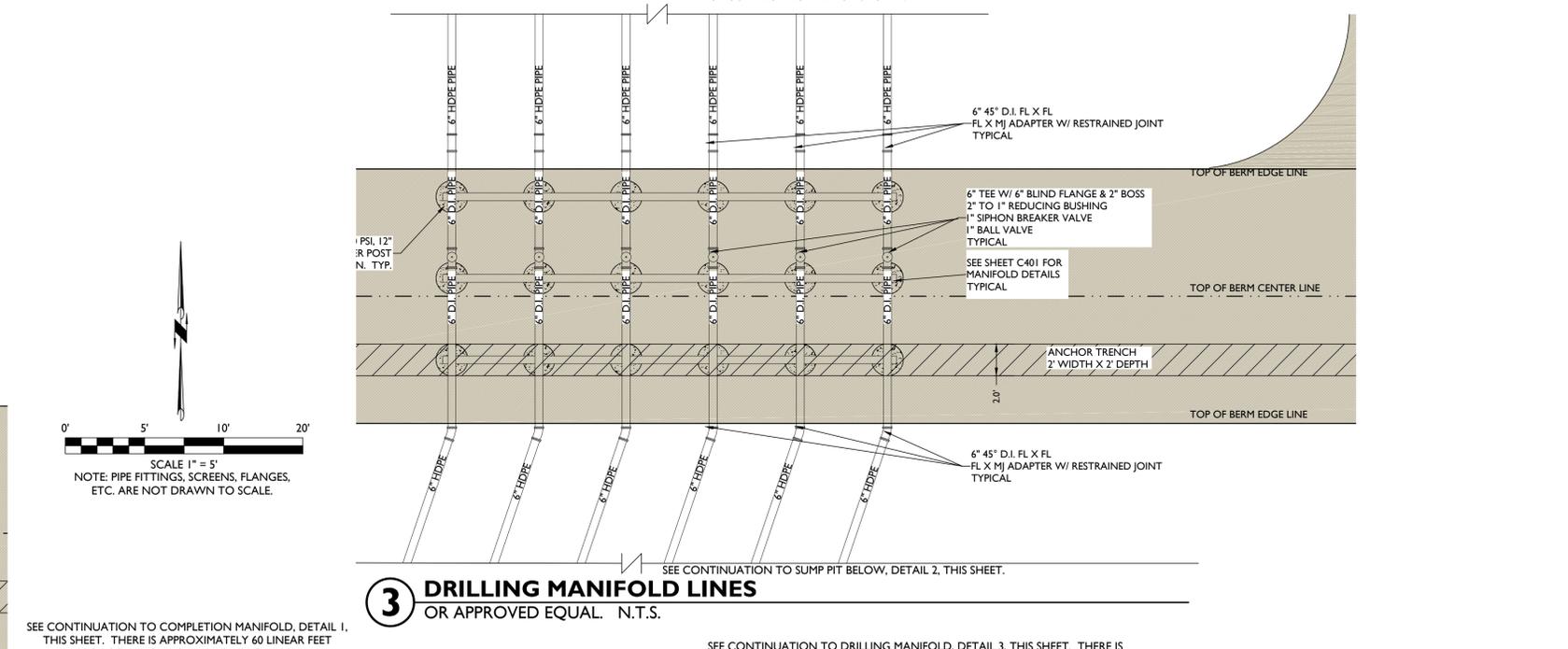
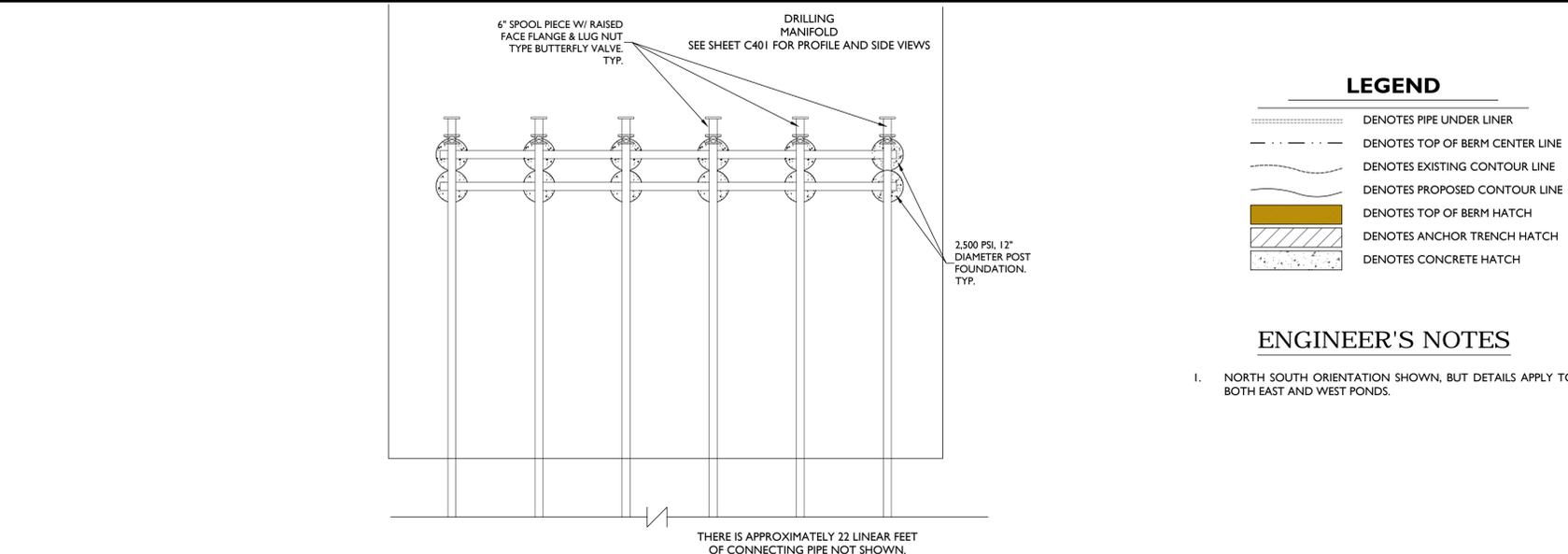
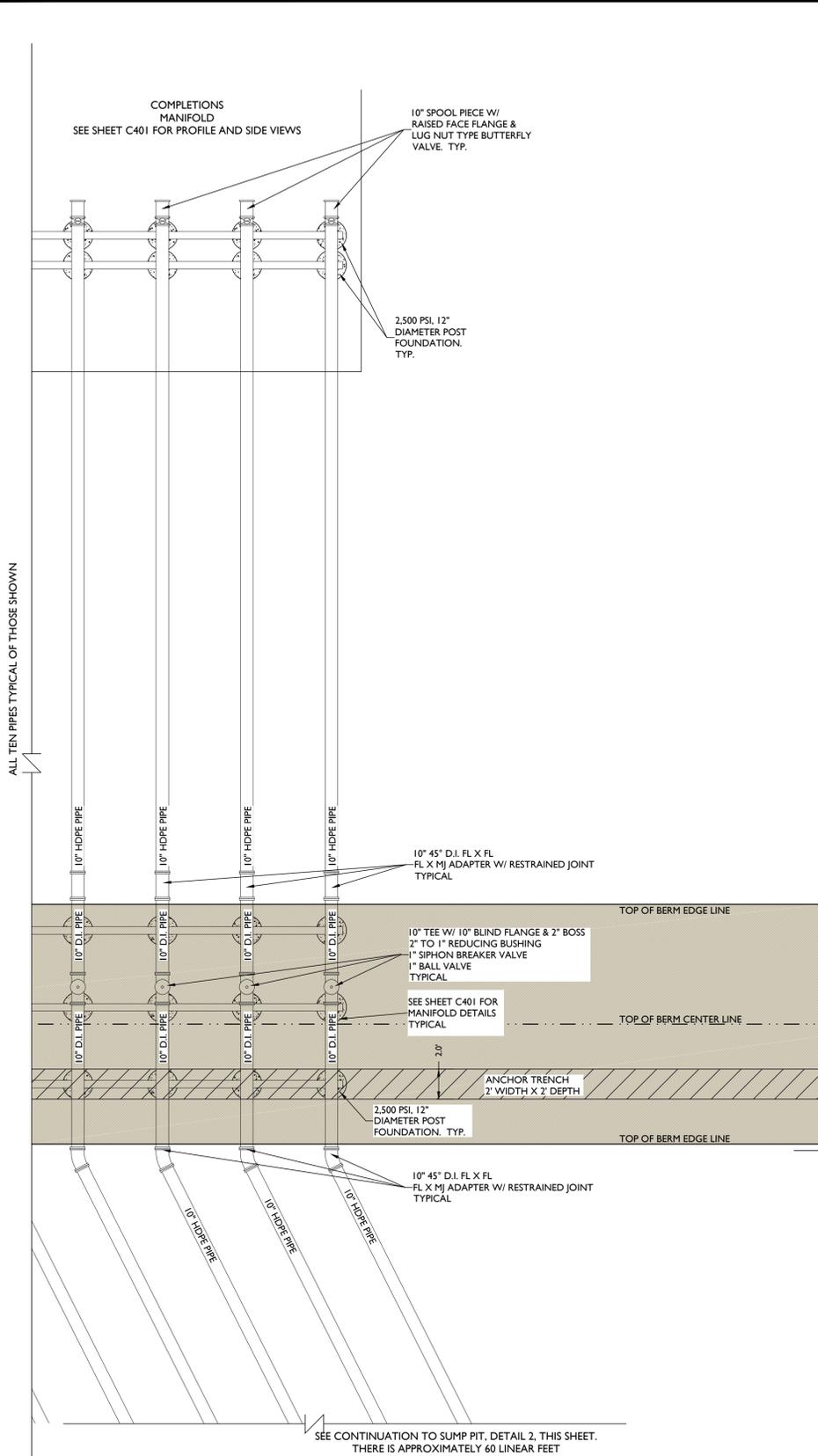
DATE	BY	APPR.	RET.
09-24-16	AMH		
	RET		

REVISIONS	DATE	BY	APPR.	RET.
BIDDING SET				

DRAWN BY: AMH	RET
CHECKED BY: AMH	RET
APPROVED BY: AMH	RET
DATE: 09/21/2016	RET
JOB: 162007	RET

SITE PLAN EAST
CHEVRON HYDRAULIC FRACTURING PONDS
 HH50 8 & HH50 10
 EDDY COUNTY, NEW MEXICO





LEGEND

- DENOTES PIPE UNDER LINER
- - - DENOTES TOP OF BERM CENTER LINE
- ~ ~ ~ DENOTES EXISTING CONTOUR LINE
- DENOTES PROPOSED CONTOUR LINE
- DENOTES TOP OF BERM HATCH
- DENOTES ANCHOR TRENCH HATCH
- DENOTES CONCRETE HATCH

ENGINEER'S NOTES

1. NORTH SOUTH ORIENTATION SHOWN, BUT DETAILS APPLY TO BOTH EAST AND WEST PONDS.

DATE	09-24-16
APPR.	RET
BY	AMH
REVISIONS	BIDDING SET
Δ	
DRAWN BY:	AMH
CHECKED BY:	RET
APPROVED BY:	AMH
DATE:	09/21/2016
JOB:	162007

SITE PLANE EQUIPMENT DETAIL VIEW

CHEVRON HYDRAULIC FRACTURING PONDS

HH50 8 & HH50 10

EDDY COUNTY, NEW MEXICO

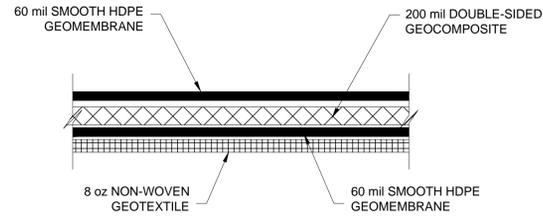
ANDREW HICKS
NEW MEXICO
20604
PROFESSIONAL ENGINEER

09/24/16

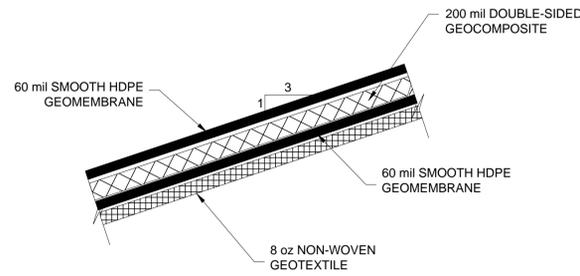
SHEET **C302** OF 13

MAVERICK ENGINEERING

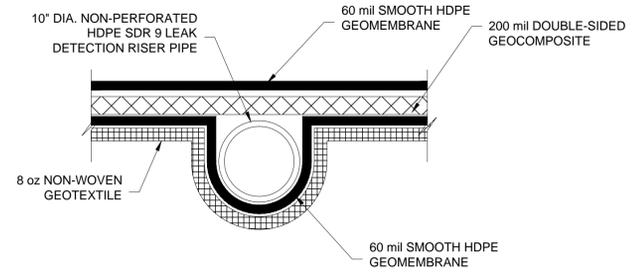
1909 West Wall Street, Suite 1K
Midland, Texas 79701 FIRM: F-15089
Tel: (432) 262-0999 Fax: (432) 262-0989
www.Maverick-Eng.com



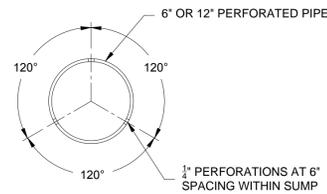
1 CHEVRON STANDARD BOTTOM LINER
OR APPROVED EQUAL. N.T.S.



2 CHEVRON STANDARD SIDE SLOPE LINER
OR APPROVED EQUAL. N.T.S.

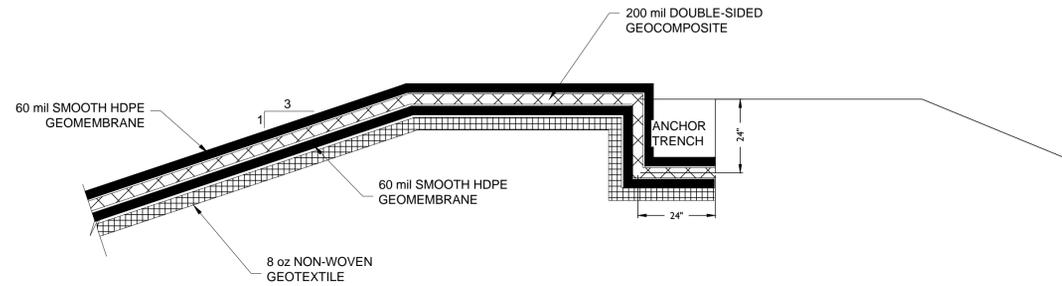


3 CHEVRON STANDARD SUMP RISER TRENCH
OR APPROVED EQUAL. N.T.S.

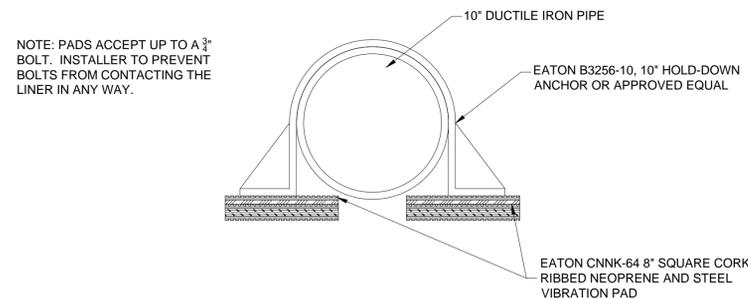


NOTE: PRE-FABRICATED PERFORATED PIPE WILL ALSO BE ACCEPTABLE.

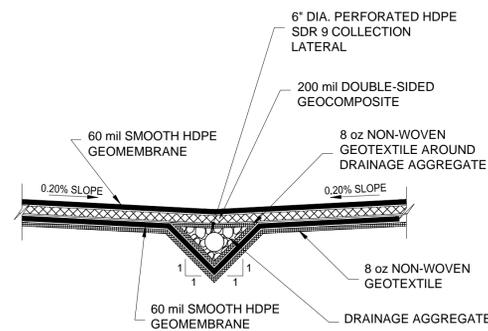
4 TYPICAL PIPE PERFORATIONS
OR APPROVED EQUAL. N.T.S.



5 CHEVRON STANDARD LINER ANCHOR
OR APPROVED EQUAL. N.T.S.

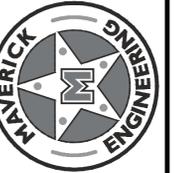


6 TYPICAL PIPE SHOE / LINER PROTECTOR
OR APPROVED EQUAL. N.T.S.



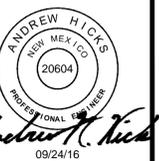
7 TYPICAL COLLECTION TRENCH
OR APPROVED EQUAL. N.T.S.

MAVERICK ENGINEERING
1909 West Wall Street, Suite "K"
Midland, Texas 79701 FIRM: F-15089
Tel: (432) 262-0999 Fax: (432) 262-0989
www.Maverick-Eng.com



DATE	09-24-16
APPR.	RET
BY	APH
REVISIONS	BIDDING SET
Δ	
DRAWN BY:	AMH
CHECKED BY:	RET
APPROVED BY:	AMH
DATE:	09/21/2016
JOB:	162007

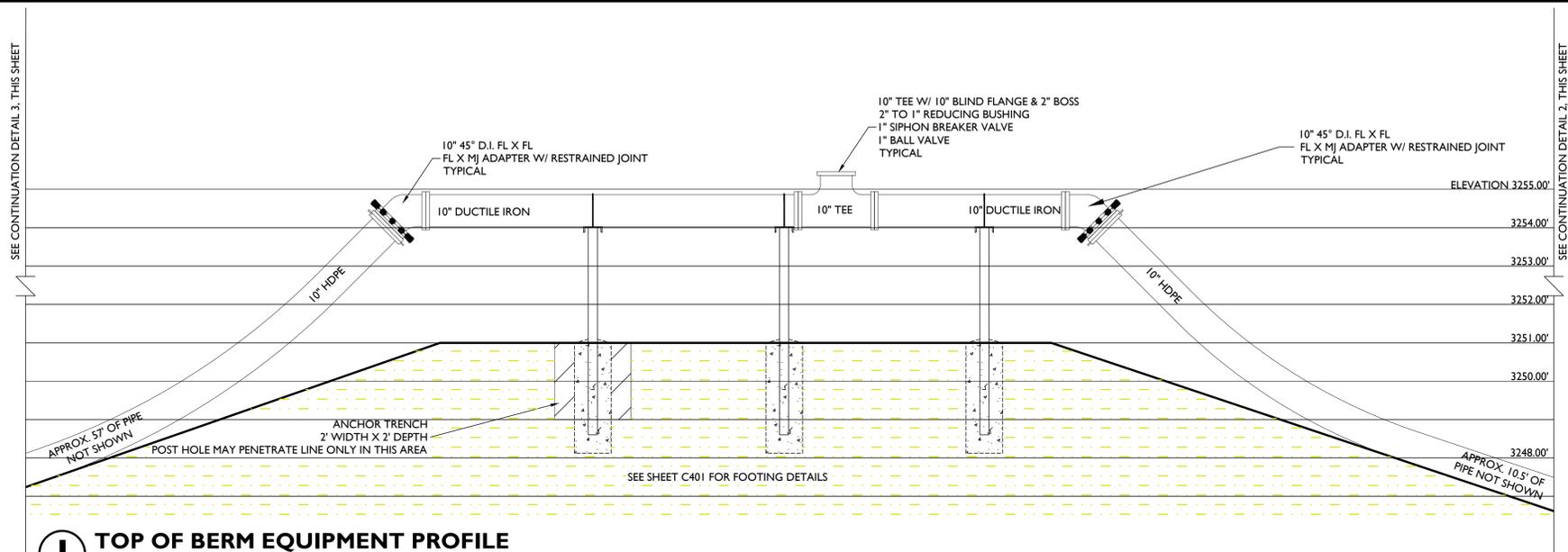
LINER DETAILS
CHEVRON HYDRAULIC FRACTURING PONDS
HH50 8 & HH50 10
EDDY COUNTY, NEW MEXICO



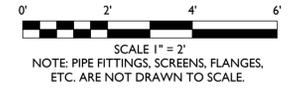
ENGINEER'S NOTES

1. DETAILS 1 THROUGH 5 & 7 ARE AS PROVIDED TO MAVERICK ENGINEERING AS CHEVRON STANDARD DETAILS. THE DETAILS HAVE BEEN RENUMBERED AND ARRANGED FOR PRESENTATION. ANY SIGNIFICANT MODIFICATIONS WILL BE NOTED AS RECOMMENDED MODIFICATIONS TO THE STANDARD DETAIL.

F:\2016 WR\162007-CARCON INDUSTRIES-CHEVRON NM HAYHUST 1\DRAWINGS\CONSTRUCTION DRAWINGS\162007 C402 SITE PLAN & DETAILS.DWG
 © COPYRIGHT 2016 ALL RIGHTS RESERVED

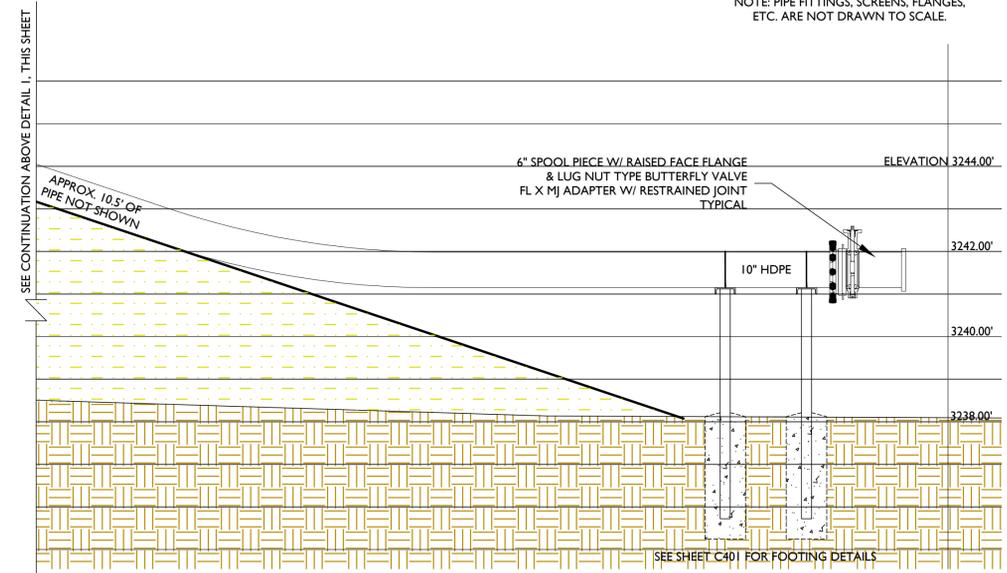


1 TOP OF BERM EQUIPMENT PROFILE
 OR APPROVED EQUAL. N.T.S.

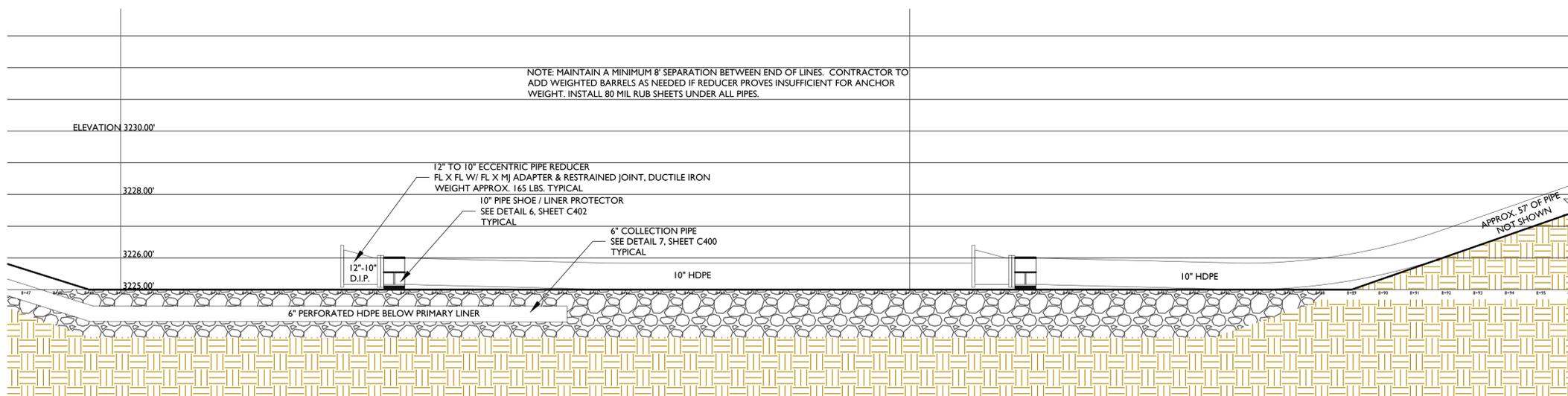


LEGEND

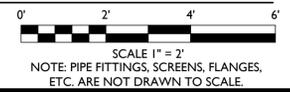
- DENOTES 60 MIL LINER
- DENOTES 200 MIL GEONET
- DENOTES 8 OZ GEOTEXTILE
- DENOTES BERM HATCH
- DENOTES EXISTING GROUND HATCH
- DENOTES CONCRETE HATCH



2 MANIFOLD SIDE PROFILE
 OR APPROVED EQUAL. N.T.S.

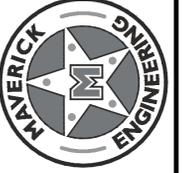


3 SUMP PIT PROFILE VIEW
 OR APPROVED EQUAL. N.T.S.



- ENGINEER'S NOTES**
- ONLY 10" LINES TYPICAL OF THE COMPLETION MANIFOLD ARE SHOWN, BUT THE SAME DETAILS APPLY TO 6" DRILLING MANIFOLD LINES, CORRECTED TO THE CORRESPONDING SIZE. THE DRILLING MANIFOLD 6" LINES WOULD USE AN 8" TO 6" REDUCER IN PLACE OF THE 12" TO 10", LIKE SIZED VALVES, ETC. THE TEE AT THE APEX OF THE RUN WOULD BE A 6" TEE, BUT THE BALL VALVE AND SIPHON BREAKER WOULD REMAIN AS 1".
 - ALL INTAKE LINES ARE TO BE SCREENED ON THE END TO PREVENT DEBRIS FROM ENTERING AND DAMAGING THE PUMPS.
 - PUMP SIZING, PLACEMENT, AND DESIGN BY OTHERS.
 - ELEVATIONS SHOWN APPLY TO THE EAST POND SITE, BUT THE SAME RELATIVE ELEVATIONS ARE THE SAME FOR THE WEST POND.

MAVERICK ENGINEERING
 1905 West Wall Street, Suite 1K
 Midland, Texas 79701 FIRM: F-15089
 Tel: (432) 262-0999 Fax: (432) 262-0989
 www.Maverick-Eng.com

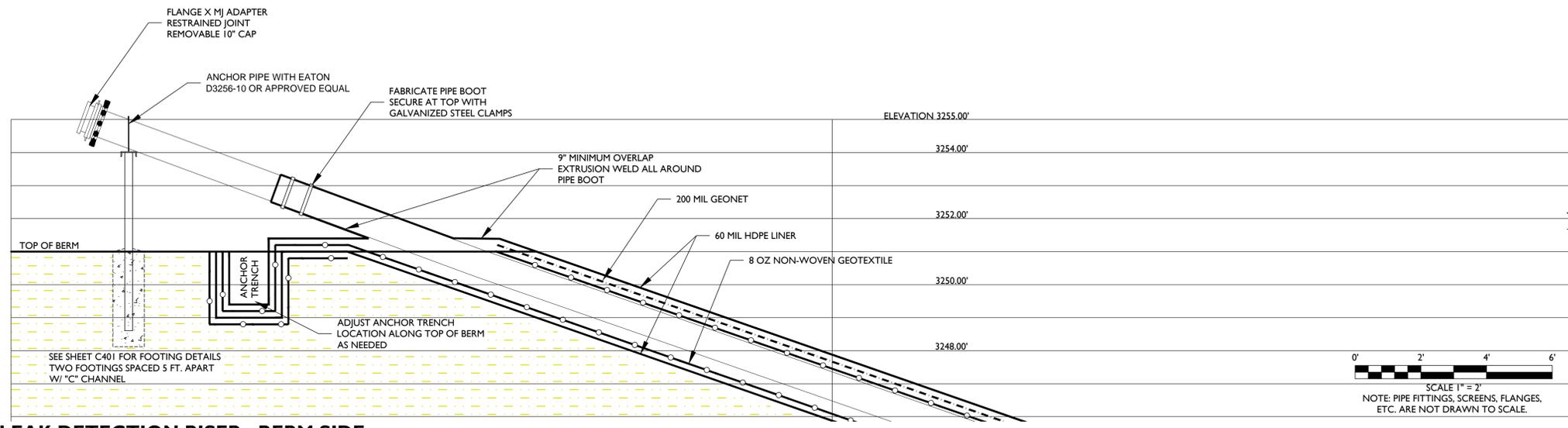


DATE	BY	APPR.	RET.	REVISIONS
09/24/16	AMH			BIDDING SET
	RET			
	AMH			
09/21/2016				
162007				

TRANSFER PIPE DETAILS
CHEVRON HYDRAULIC FRACTURING PONDS
 HH50 8 & HH50 10
 EDDY COUNTY, NEW MEXICO

ANDREW HICKS
 NEW MEXICO
 20604
 PROFESSIONAL ENGINEER

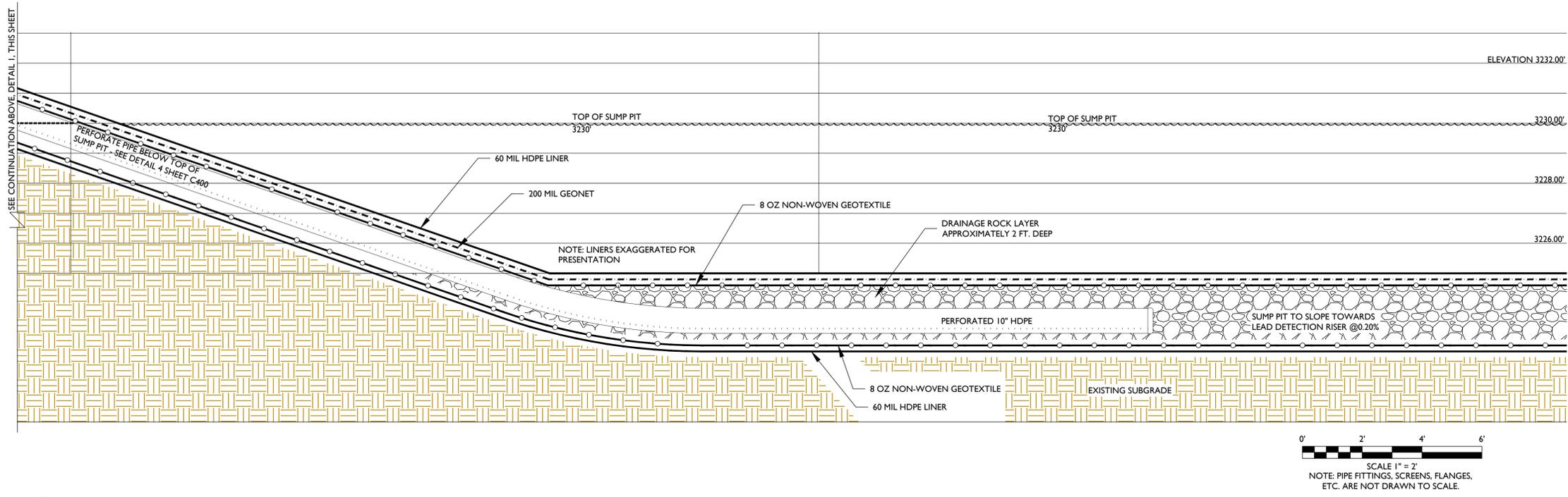
 09/24/16
 SHEET **C402** OF 13



LEGEND

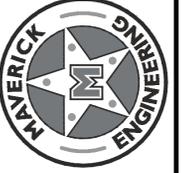
	DENOTES 60 MIL LINER
	DENOTES 200 MIL GEONET
	DENOTES 8 OZ GEOTEXTILE
	DENOTES BERM HATCH
	DENOTES EXISTING GROUND HATCH
	DENOTES CONCRETE HATCH

1 LEAK DETECTION RISER - BERM SIDE
OR APPROVED EQUAL. N.T.S.



2 LEAK DETECTION RISER - SUMP SIDE
OR APPROVED EQUAL. N.T.S.

MAVERICK ENGINEERING
1909 West Wall Street, Suite 1K
Midland, Texas 79701 FIRM: F-15089
Tel: (432) 262-0999 Fax: (432) 262-0989
www.Maverick-Eng.com



DATE	BY	REVISIONS
09/24/16 <td>AMH <td>BIDDING SET</td> </td>	AMH <td>BIDDING SET</td>	BIDDING SET
09/29/16 <td>AMH <td>CLIENT REVISIONS</td> </td>	AMH <td>CLIENT REVISIONS</td>	CLIENT REVISIONS
160007 <td>AMH <td></td> </td>	AMH <td></td>	

LEAK DETECTION DETAILS
CHEVRON HYDRAULIC FRACTURING PONDS
HH-50 8 & HH-50 10
EDDY COUNTY, NEW MEXICO

ANDREW HICKS
NEW MEXICO
20604
PROFESSIONAL ENGINEER
Andrew Hicks
09/29/16
SHEET **C403** OF 13

ADDENDA SUMMARY

- 9/29/16 LINER DETAILS CHANGED TO REFLECT CORRECT LAYERS.

ENGINEER'S NOTES

- ELEVATIONS SHOWN APPLY TO THE EAST POND SITE, BUT THE SAME RELATIVE ELEVATIONS ARE THE SAME FOR THE WEST POND.

F:\2016 WR\162007-CARCON INDUSTRIES-CHEVRON NM HAYHURST 1\DRAWINGS\CONSTRUCTION DRAWINGS\162007 C403 SITE PLAN & DETAIL.DWG © COPYRIGHT 2016 ALL RIGHTS RESERVED

