

JOINT PUBLIC NOTICE

April 16, 2018

United States Army
Corps of Engineers
New Orleans District
Attn: Regulatory Branch
7400 Leake Avenue
New Orleans, Louisiana 70118

State of Louisiana
Department of Environmental Quality
Attn: Water Quality Certification Sec.
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

Project Manager: James W. Little, Jr.
(225) 342-3099 / fax: (225) 342-9439
James.little@usace.army.mil
Permit Application Number:
MVN-2017-01106-WII

Project Manager:
Elizabeth Hill
(225) 219-3225 / fax: (225) 219-3156
WQC Application Number:
WQC 180303-03

Interested parties are hereby notified that a permit application has been received by the New Orleans District of the U.S. Army Corps of Engineers pursuant to: [] Section 10 of the Rivers and Harbors Act of March 3, 1899 (30 Stat. 1151; 33 USC 403); and/or [] Section 404 of the Clean Water Act (86 Stat. 816; 33 USC 1344).

The application has also been mailed to the Louisiana Department of Environmental Quality, for a Water Quality Certification (WQC) in accordance with statutory authority contained in Louisiana Revised Statute 30:2074 A(3), and provisions of Section 401 of the Clean Water Act (P.L. 95-17).

ACCESS ROAD, WELLPADS AND APPURTENT STRUCTURES TO DRILL TWO BRINE WELLS IN ASSUMPTION PARISH

NAME OF APPLICANT: Texas Brine Company, LLC, c/o Miller Engineers & Associates, Inc., Attn: Mr. Joel J. Miller, 601 Main Street, Franklin, Louisiana 70538.

LOCATION OF WORK: In Assumption Parish, North 30.014856, West -91.126731, located south of Louisiana Highway 70, near Grand bayou, Louisiana, as shown on the attached vicinity map.

CHARACTER OF WORK: Clear, grade, fill and/or excavate and construct an access road and two 375 feet by 400 feet drill pads. Widen existing roadways by 32 feet and install pipe racks, supports and footings, all to support drilling a brine well. Approximately 339 cubic yards of native material will be excavated and hauled offsite, approximately 322 cubic yards of native material will be excavated and placed onsite, approximately 65,568 cubic yards of sand material, approximately 2,259 cubic yards of crushed stone/gravel material and approximately 219 cubic yards of cement will be required for construction activities. Approximately 7.16 acres of jurisdictional wetlands would be impacted by project implementation. The applicant proposes to purchase compensatory mitigation acres at CEMVN approved mitigation banks in the area.

The comment period for the Department of the Army Permit and the Louisiana Department of Environmental Quality WQC will close **20 days** from the date of this joint public notice. Written comments, including suggestions for modifications or objections to the

proposed work, stating reasons thereof, are being solicited from anyone having interest in this permit and/or this WQC request and must be submitted so as to be received before or by the last day of the comment period. Letters concerning the Corps of Engineers permit application must reference the applicant's name and the Permit Application Number, and be forwarded to the Corps of Engineers at the address above, **ATTENTION: REGULATORY BRANCH.** Individuals or parties may request an extension of time in which to comment on the proposed work by writing, faxing, or e-mailing the Corps of Engineers Project Manager listed above. Any request must be specific and substantively supportive of the requested extension, and received by this office prior to the end of the initial comment period. The Section Chief will review the request and the requestor will be promptly notified of the decision to grant or deny the request. If granted, the time extension will be continuous to the initial comment period and, inclusive of the initial comment period, will not exceed a total of 30 calendar days. Letters concerning the Water Quality Certification must reference the applicant's name and the WQC Application number and be mailed to the Louisiana Department of Environmental Quality at the address above.

The application for this proposed project is on file with the Louisiana Department of Environmental Quality and may be examined during weekdays between 8:00 a.m. and 4:30 p.m. Copies may be obtained upon payment of costs of reproduction.

Corps of Engineers Permit Criteria

The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

The U.S. Army Corps of Engineers is soliciting comments from the public, federal, state, and local agencies and officials, Indian Tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the U.S. Army Corps of Engineers to determine whether to make, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

The New Orleans District is unaware of properties listed on the National Register of Historic Places near the proposed work. The possibility exists that the proposed work may damage or destroy presently unknown archeological, scientific, pre-historical, historical sites, or data. Issuance of this public notice solicits input from the State Archeologist and State Historic Preservation Officer regarding potential impacts to cultural resources.

Based on the South Louisiana **Standard Local Operating Procedure for Endangered Species (SLOPES)**, as signed on October 22, 2014, between the U.S. Army Corps of Engineers, New Orleans District and the U.S. Fish and Wildlife Service, the proposed project was evaluated under the determination key on 2 April 2018 and it has been determined that the proposed activity will have a “No Effect” for any of the species.

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The applicant's proposal may result in the destruction or alteration of **7.16** acres of EFH utilized by various life stages of red drum and penaeid shrimp. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or federally managed fisheries in the Gulf of Mexico. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

If the proposed work involves deposits of dredged or fill material into navigable waters, the evaluation of the probable impacts will include the application of guidelines established by the Administrator of the Environmental Protection Agency. Also, a certification that the proposed activity will not violate applicable water quality standards will be required from the Department of Environmental Quality, before a permit is issued.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

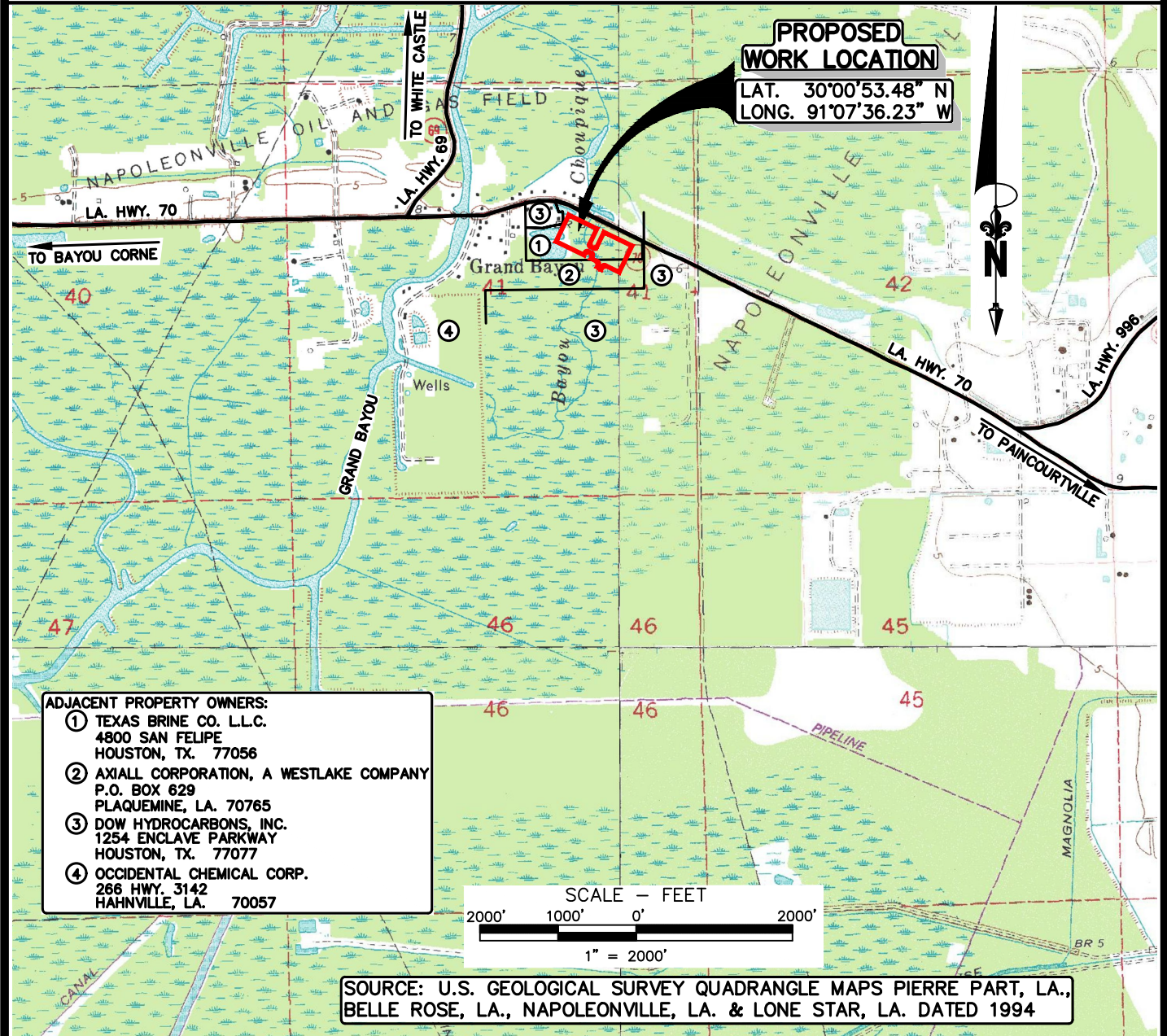
The applicant has certified that the proposed activity described in the application complies with and will be conducted in a manner that is consistent with the Louisiana Coastal Resources Program. The Department of the Army permit will not be issued unless the applicant received approval or a waiver of the Coastal Use Permit by the Department of Natural Resources.

You are requested to communicate the information contained in this notice to any other parties whom you deem likely to have interest in the matter.

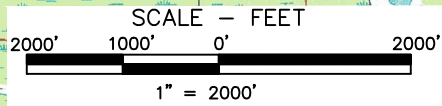
John M. Herman
Chief, Central Evaluation Section
Regulatory Branch

Enclosure

ASSUMPTION PARISH, LOUISIANA
SECTION 41, T12S-R13E



- ADJACENT PROPERTY OWNERS:**
- ① TEXAS BRINE CO. L.L.C.
4800 SAN FELIPE
HOUSTON, TX. 77056
 - ② AXIALL CORPORATION, A WESTLAKE COMPANY
P.O. BOX 629
PLAQUEMINE, LA. 70765
 - ③ DOW HYDROCARBONS, INC.
1254 ENCLAVE PARKWAY
HOUSTON, TX. 77077
 - ④ OCCIDENTAL CHEMICAL CORP.
266 HWY. 3142
HAHNVILLE, LA. 70057



SOURCE: U.S. GEOLOGICAL SURVEY QUADRANGLE MAPS PIERRE PART, LA., BELLE ROSE, LA., NAPOLEONVILLE, LA. & LONE STAR, LA. DATED 1994

NOTE:
THESE DRAWING WERE PREPARED SOLELY FOR ACQUISITION OF REGULATORY PERMITS AND DO NOT REPRESENT ENGINEERING OR CONSTRUCTION PLANS. PROPERTY LINES SHOWN ARE FROM COMPILED DATA ACQUIRED FROM ASSESSOR RECORDS AND DO NOT REPRESENT A BOUNDARY SURVEY.

THIS DRAWING WAS PREPARED SOLELY FOR USE BY TEXAS BRINE CO. L.L.C. IN CONJUNCTION WITH THE SPECIFIC PROJECT DESIGNATED IN THE TITLE BLOCK. USE FOR ANY OTHER PURPOSE, OR USE BY ANY OTHER PARTY SHALL BE AT USER'S SOLE RISK WITHOUT ANY LIABILITY TO MILLER ENGINEERS & ASSOCIATES.

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* SEE SHEET 12 OF 12 FOR GENERAL NOTES AND REFERENCES.



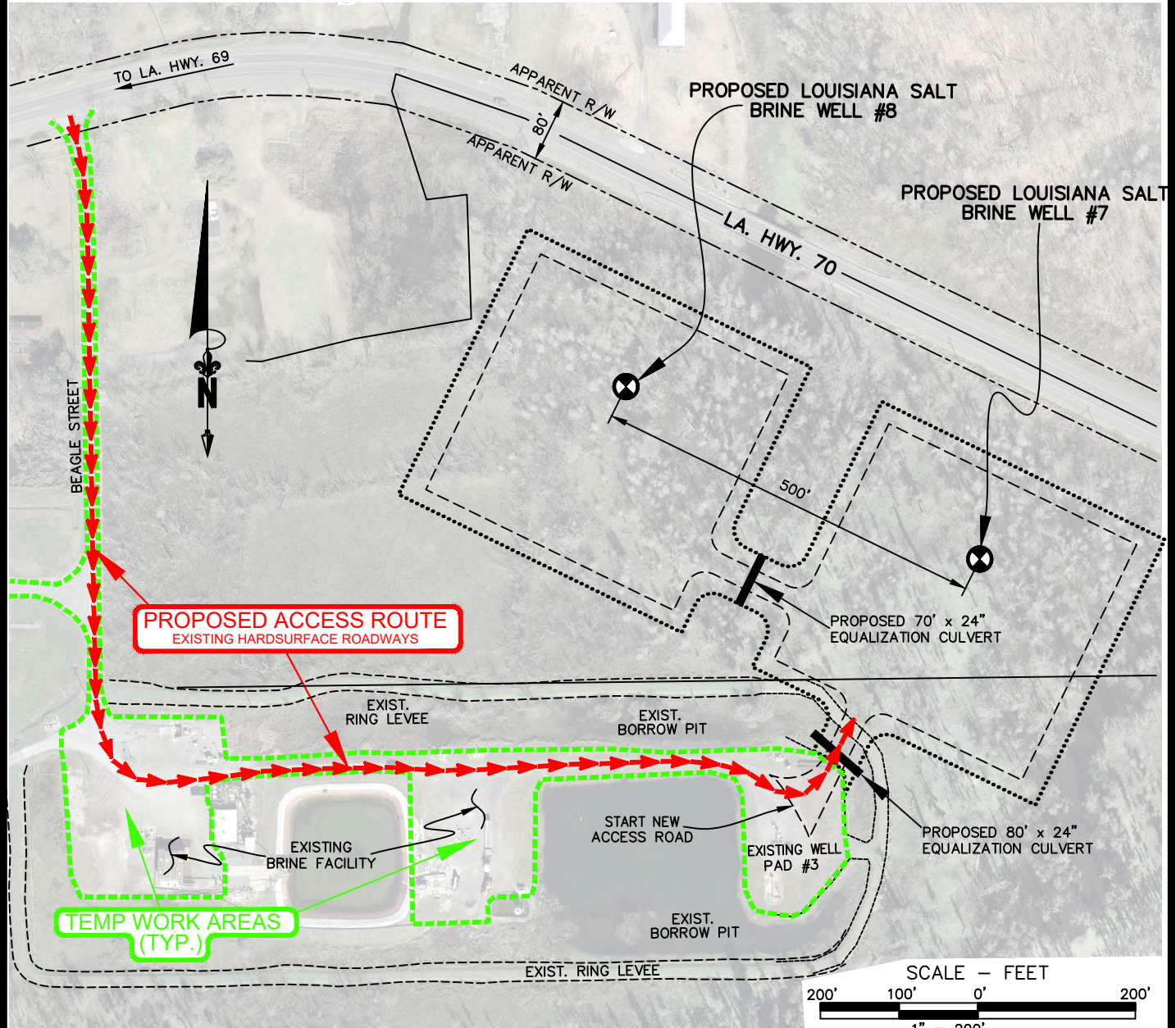
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JOEL J. MILLER
LA. LICENSE NO. 29638

TEXAS BRINE COMPANY, LLC

PERMIT APPLICATION
FOR
PROPOSED BRINE WELL PADS & ACCESS ROAD
VICINITY MAP
 ASSUMPTION PARISH, LOUISIANA
 M.E. & A. DWG. NO. 13681, SHEET 1 OF 12

REV.	DATE	DESCRIPTION	DRAWN	CHKD.	APPD.
1	10-3-17	REVISED FOR REVIEW	R.E.K.	J.J.M.	J.J.M.

ASSUMPTION PARISH, LOUISIANA
SECTION 41, T12S-R13E



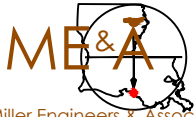
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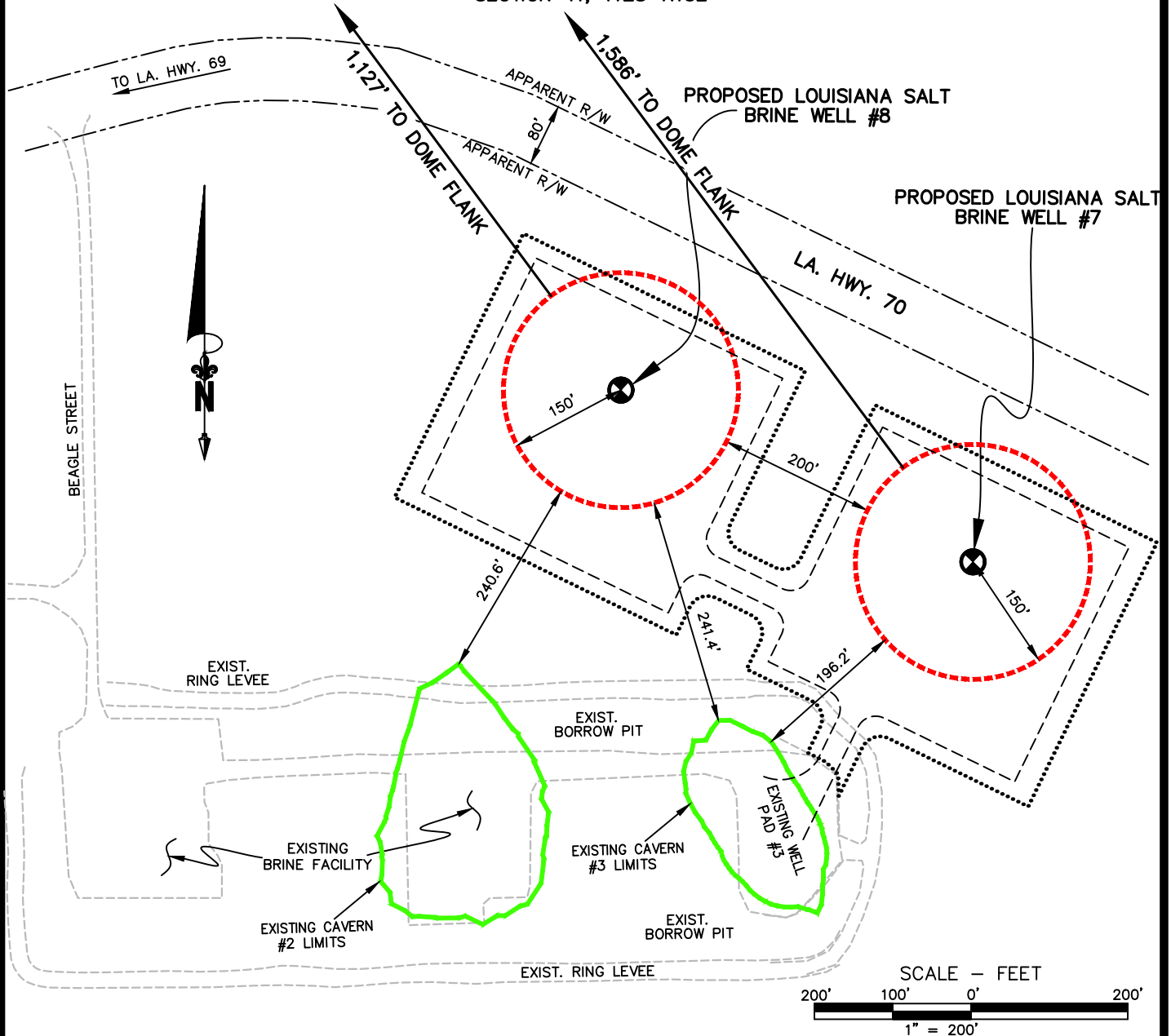
**TEXAS BRINE
COMPANY, LLC**

PERMIT APPLICATION
FOR
PROPOSED BRINE WELL PADS & ACCESS ROAD
PROPOSED ACCESS ROUTE
& TEMP. WORK AREAS
ASSUMPTION PARISH, LOUISIANA

REV.	DATE	DESCRIPTION	DRAWN	CHKD.	APPD.
1	10-3-17	REVISED FOR REVIEW	R.E.K.	J.J.M.	J.J.M.

M.E. & A. DWG. NO. 13681, SHEET 2 OF 12

ASSUMPTION PARISH, LOUISIANA
SECTION 41, T12S-R13E



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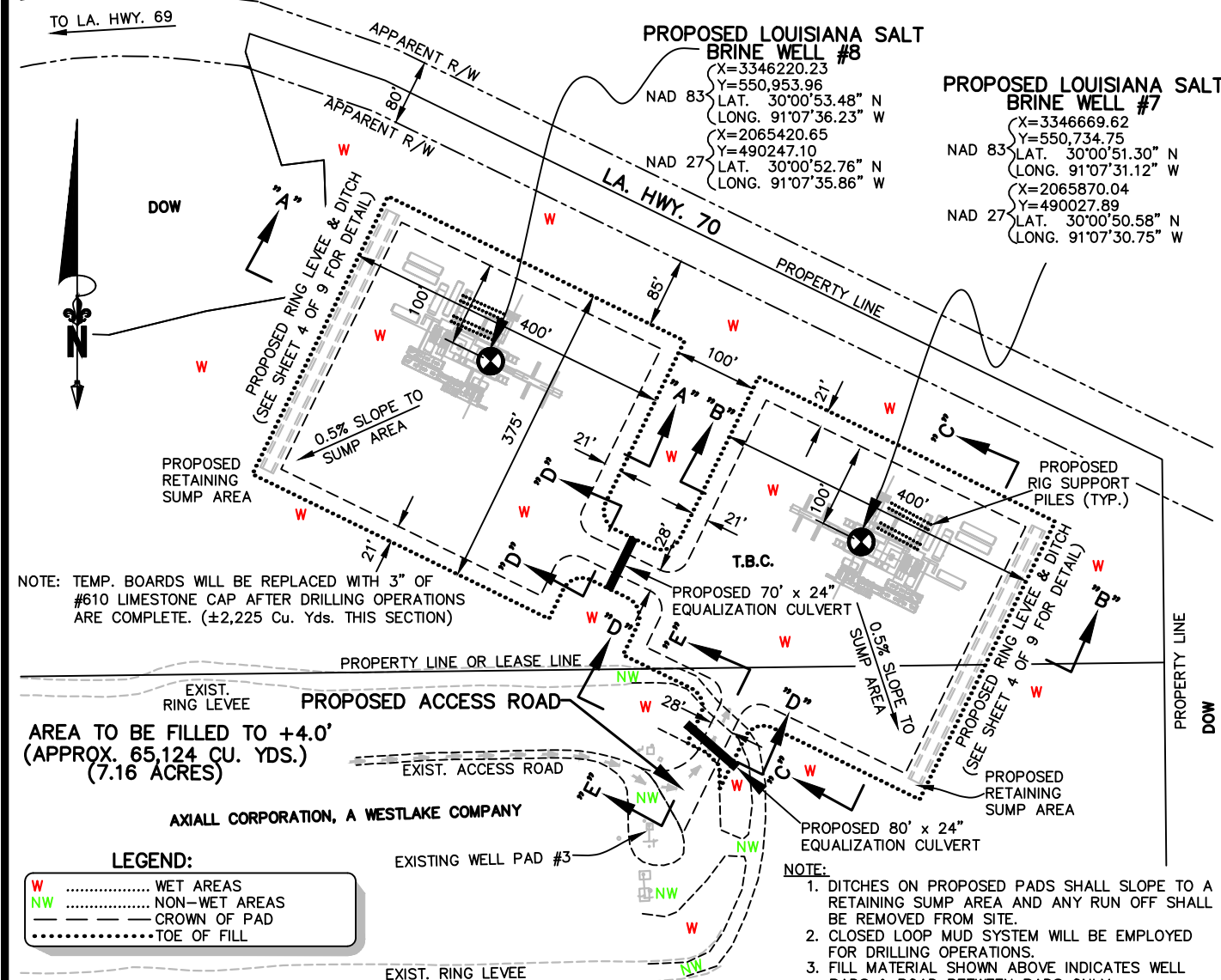
TEXAS BRINE COMPANY, LLC

PERMIT APPLICATION
FOR
PROPOSED BRINE WELL PADS & ACCESS ROAD
PROPOSED CAVERN LAYOUT
ASSUMPTION PARISH, LOUISIANA

M.E. & A. DWG. NO. 13681, SHEET 3 OF 12

REV.	DATE	DESCRIPTION	DRAWN	CHKD.	APPD.
2	10-25-17	REVISED TO SHOW FOOTPRINT	R.E.K.	J.J.M.	J.J.M.

ASSUMPTION PARISH, LOUISIANA
SECTION 41, T12S-R13E



PROPOSED LOUISIANA SALT BRINE WELL #7
 X=3346669.62
 Y=550,734.75
 NAD 83 LAT. 30°00'51.30" N
 LONG. 91°07'31.12" W
 X=2065870.04
 Y=490027.89
 NAD 27 LAT. 30°00'50.58" N
 LONG. 91°07'30.75" W

PROPOSED LOUISIANA SALT BRINE WELL #8
 X=3346220.23
 Y=550,953.96
 NAD 83 LAT. 30°00'53.48" N
 LONG. 91°07'36.23" W
 X=2065420.65
 Y=490247.10
 NAD 27 LAT. 30°00'52.76" N
 LONG. 91°07'35.86" W

NOTE: TEMP. BOARDS WILL BE REPLACED WITH 3" OF #610 LIMESTONE CAP AFTER DRILLING OPERATIONS ARE COMPLETE. (±2,225 Cu. Yds. THIS SECTION)

AREA TO BE FILLED TO +4.0'
(APPROX. 65,124 CU. YDS.)
(7.16 ACRES)

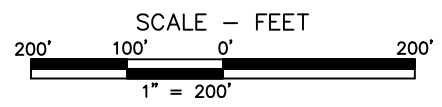
LEGEND:

- W WET AREAS
- NW NON-WET AREAS
- - - - - CROWN OF PAD
- TOE OF FILL

NOTE:

1. DITCHES ON PROPOSED PADS SHALL SLOPE TO A RETAINING SUMP AREA AND ANY RUN OFF SHALL BE REMOVED FROM SITE.
2. CLOSED LOOP MUD SYSTEM WILL BE EMPLOYED FOR DRILLING OPERATIONS.
3. FILL MATERIAL SHOWN ABOVE INDICATES WELL PADS & ROAD BETWEEN PADS ONLY.

NOTE: APPROX. (7.16) ACRES OF WETLAND IMPACTED ON THIS SHEET.



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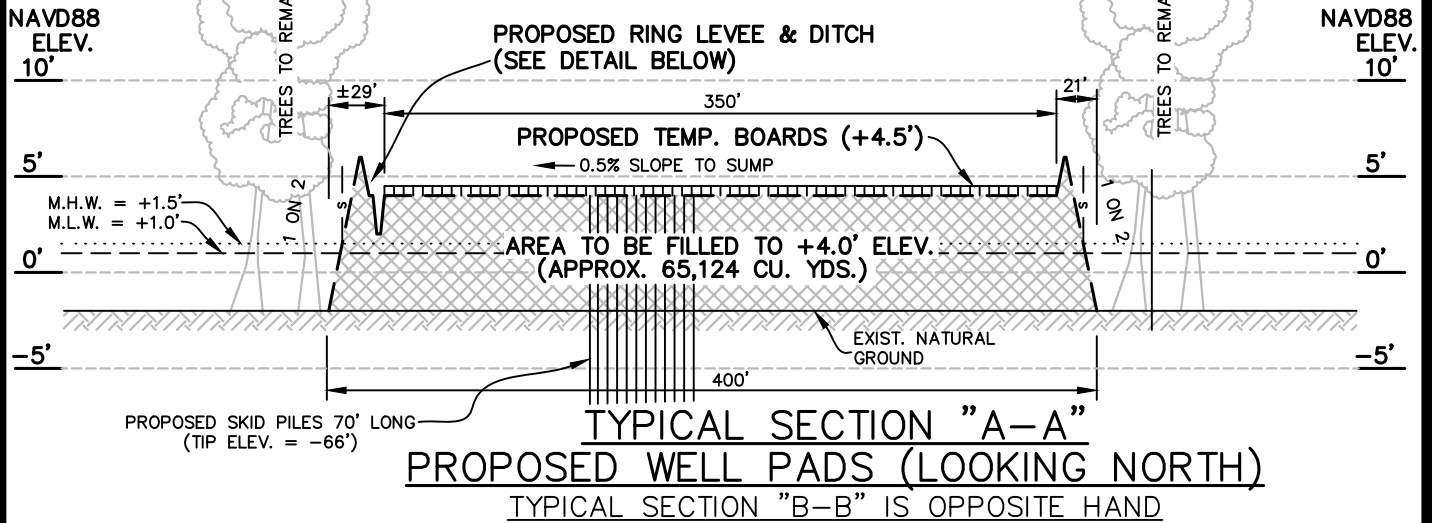
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TEXAS BRINE COMPANY, LLC
PERMIT APPLICATION
FOR
PROPOSED BRINE WELL PADS & ACCESS ROAD
PLAN VIEW
PROPOSED WELL PADS
 ASSUMPTION PARISH, LOUISIANA
 M.E. & A. DWG. NO. 13681, SHEET 4 OF 12

REV.	DATE	DESCRIPTION	DRAWN	CHKD.	APPD.
1	10-3-17	REVISED FOR REVIEW	R.E.K.	J.J.M.	J.J.M.

ASSUMPTION PARISH, LOUISIANA
SECTION 41, T12S-R13E



TYPICAL SECTION "A-A"
PROPOSED WELL PADS (LOOKING NORTH)
TYPICAL SECTION "B-B" IS OPPOSITE HAND



NOTES:

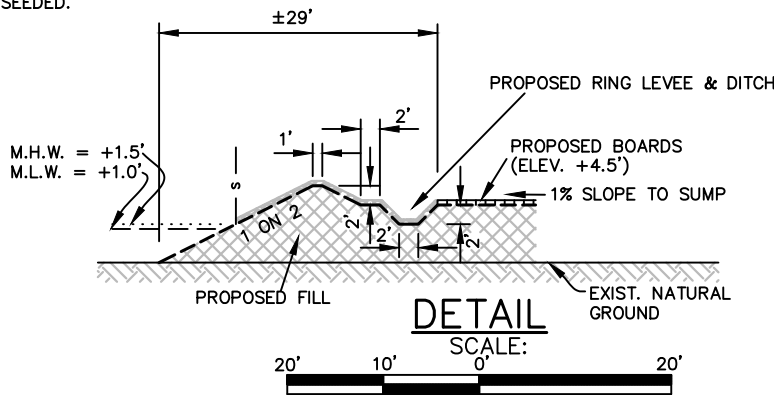
1. DITCHES ON PROPOSED PAD SHALL SLOPE TO A RETAINING SUMP AREA AND ANY RUN OFF SHALL BE REMOVED FROM SITE.
2. SUMP, DITCHES & RING LEVEE ARE TEMPORARY FOR DRILLING OPERATIONS AND REMOVED AFTER COMPLETION OF DRILLING.
3. EROSION CONTROL BLANKET SHALL BE INSTALLED ON SLOPES TO CONTROL EROSION AND SLOPES WILL BE HYDRO-SEEDED.

NOTE:

APPROX. 2,259 CU. YDS OF #610 LIMESTONE REQ'D. FOR PADS AFTER DRILLING OPERATIONS ARE COMPLETE.

LEGEND:

- SILT FENCING
- EROSION CONTROL BLANKET



DETAIL

SCALE:

NOTE:

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COMPANY, LLC**

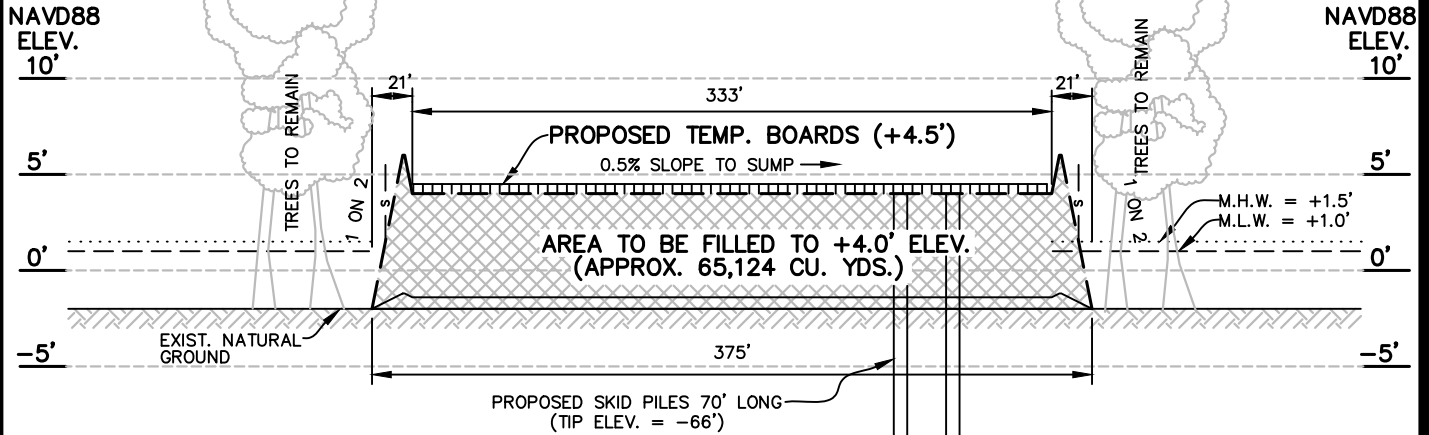
PERMIT APPLICATION
FOR
**PROPOSED BRINE WELL PADS & ACCESS ROAD
TYPICAL SEC. "A" & "B"**
PROPOSED WELL PADS

ASSUMPTION PARISH, LOUISIANA

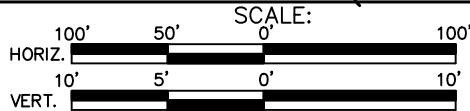
M.E. & A. DWG. NO. 13681, SHEET 5 OF 12

REV.	DATE	DESCRIPTION	DRAWN	CHKD.	APPD.
1	10-3-17	REVISED FOR REVIEW	R.E.K.	J.J.M.	J.J.M.

ASSUMPTION PARISH, LOUISIANA
SECTION 41, T12S-R13E



TYPICAL SECTION "C-C"
PROPOSED WELL PADS (LOOKING WEST)



LEGEND:
SILT FENCING 5'

NOTE:
APPROX. 2,259 CU. YDS OF #610 LIMESTONE
REQ'D. FOR PADS AFTER DRILLING
OPERATIONS ARE COMPLETE.

- NOTE:**
1. SUMP, DITCHES & RING LEVEE ARE TEMPORARY FOR DRILLING OPERATIONS AND REMOVED AFTER COMPLETION OF DRILLING.
 2. EROSION CONTROL BLANKET SHALL BE INSTALLED ON SLOPES TO CONTROL EROSION AND SLOPES WILL BE HYDRO-SEEDED.

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**TEXAS BRINE
COMPANY, LLC**

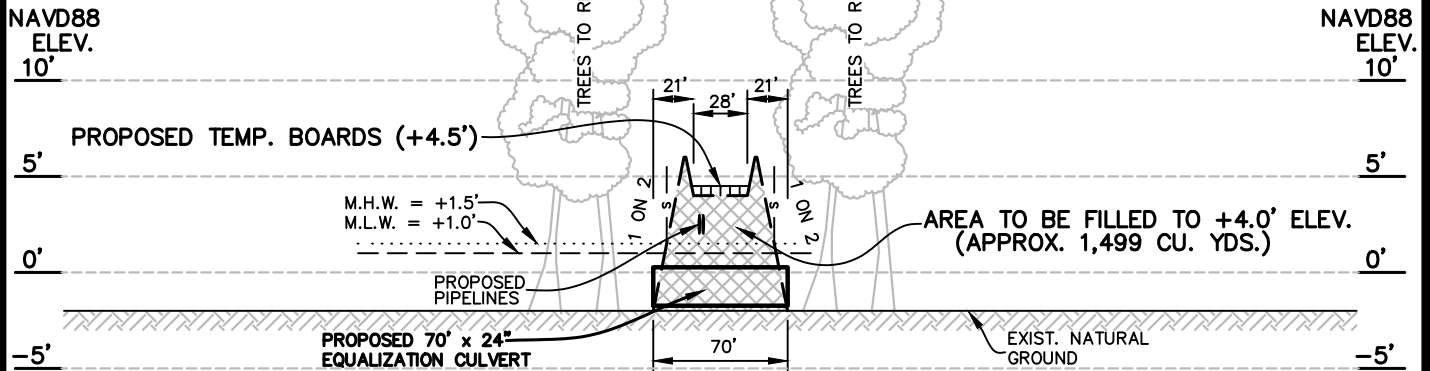
PERMIT APPLICATION
FOR
PROPOSED BRINE WELL PADS & ACCESS ROAD
TYPICAL SEC. "C-C"
PROPOSED WELL PADS

ASSUMPTION PARISH, LOUISIANA

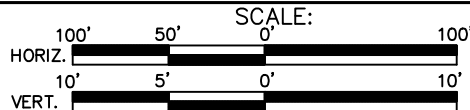
M.E. & A. DWG. NO. 13681, SHEET 6 OF 12

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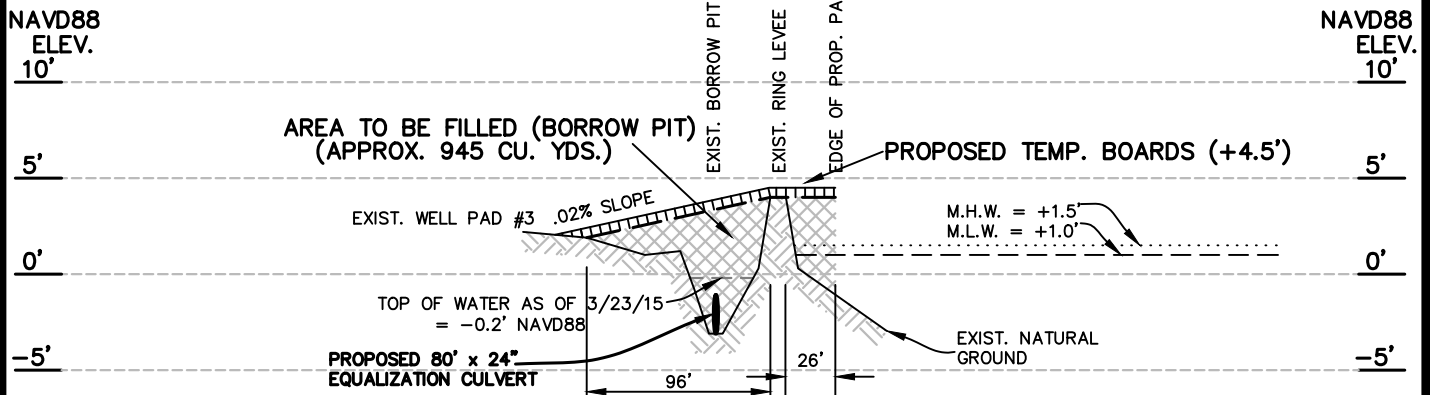
ASSUMPTION PARISH, LOUISIANA
SECTION 41, T12S-R13E



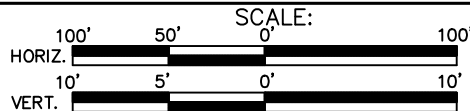
TYPICAL SECTION "D-D"
PROPOSED WELL PAD CROSS OVER



LEGEND:
SILT FENCING S



TYPICAL SECTION "E-E"
CROSSING BORROW PIT & RING LEVEE



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**TEXAS BRINE
COMPANY, LLC**

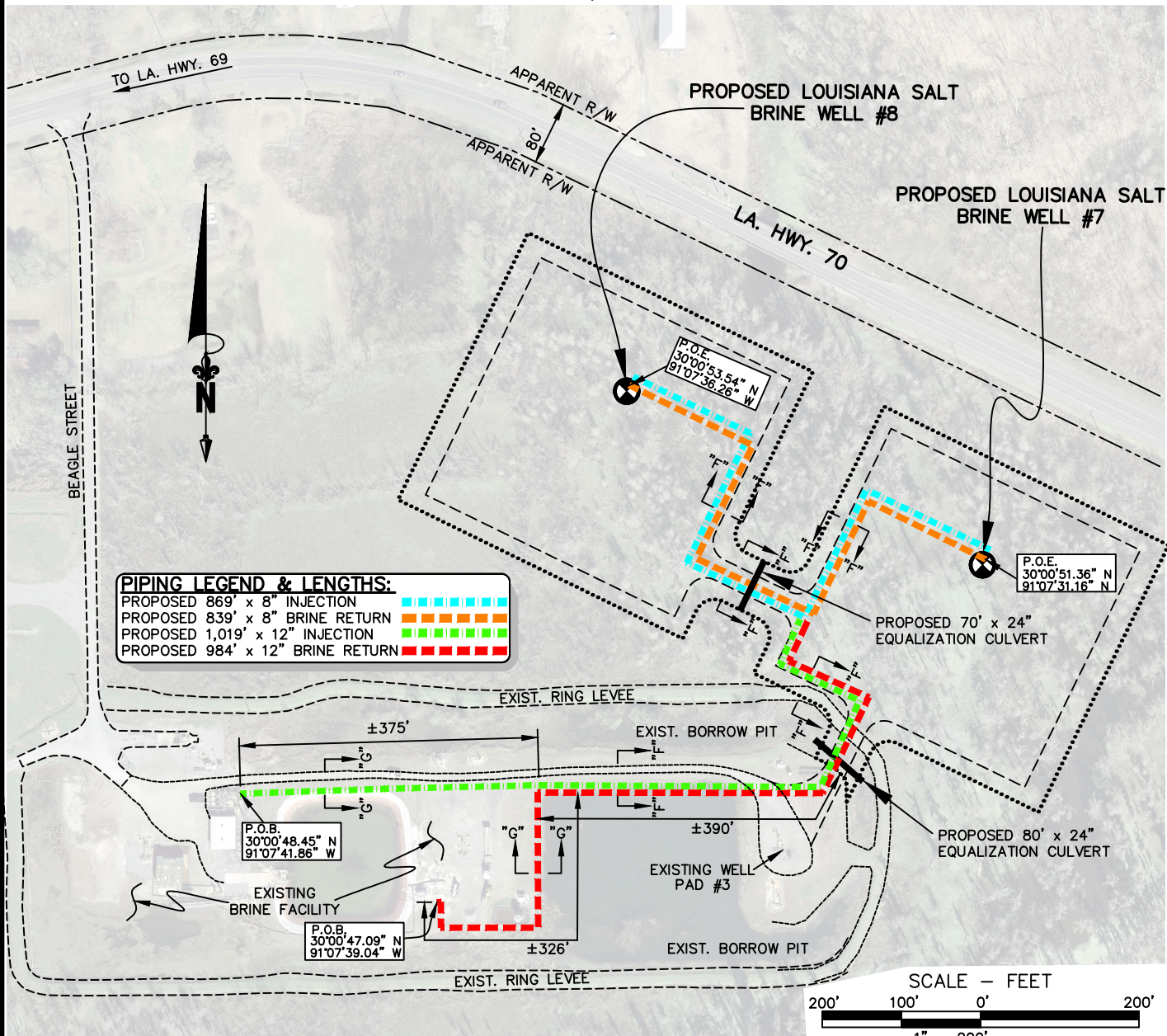
PERMIT APPLICATION
FOR
PROPOSED BRINE WELL PADS & ACCESS ROAD
TYPICAL SEC. "D" & "E"
PROPOSED WELL PADS

ASSUMPTION PARISH, LOUISIANA

M.E. & A. DWG. NO. 13681, SHEET 7 OF 12

REV.	DATE	DESCRIPTION	DRAWN	CHKD.	APPD.
1	10-3-17	REVISED FOR REVIEW	R.E.K.	J.J.M.	J.J.M.

ASSUMPTION PARISH, LOUISIANA
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* SEE SHEET 12 OF 12 FOR GENERAL NOTES AND REFERENCES.

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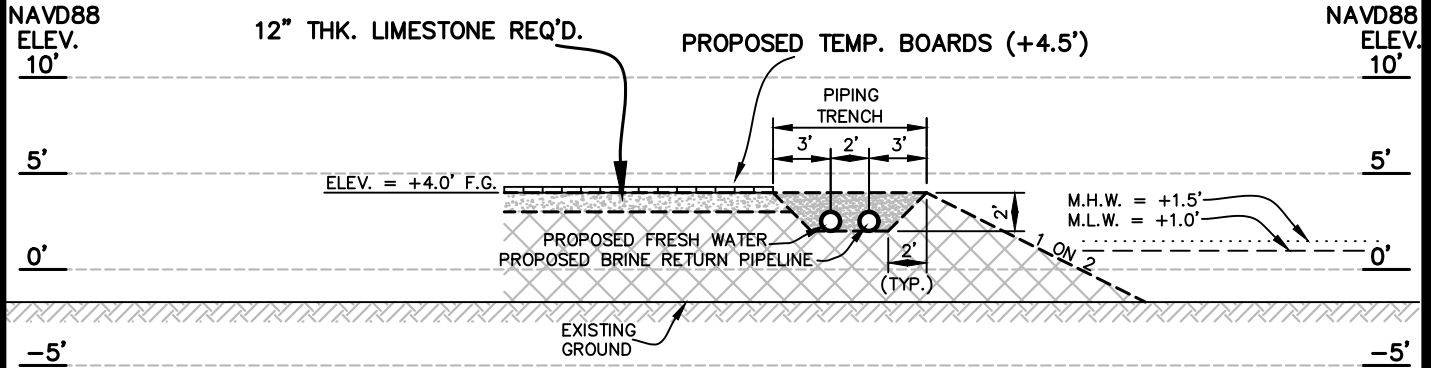
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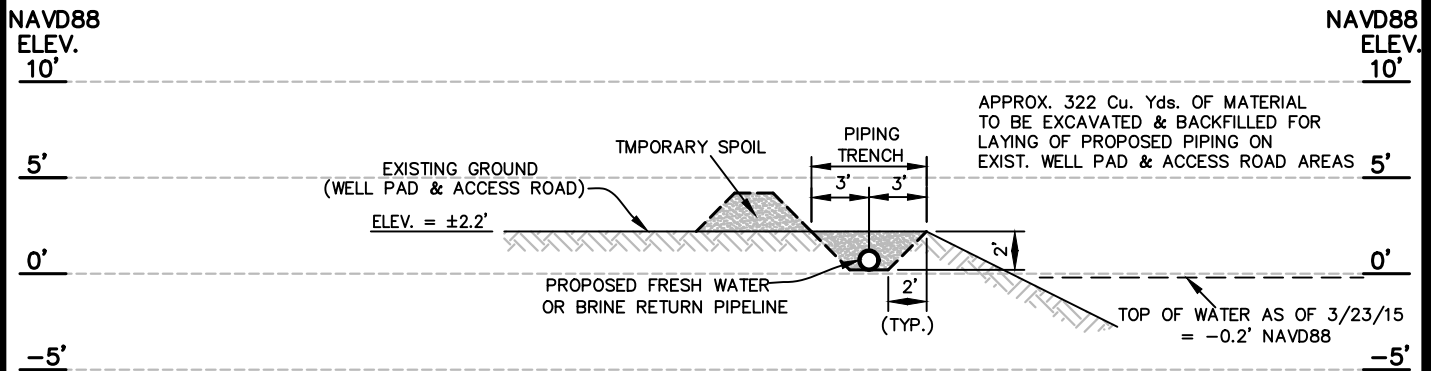
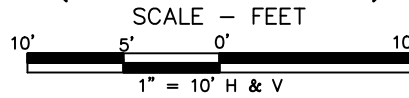

TEXAS BRINE COMPANY, LLC
 PERMIT APPLICATION
 FOR
PROPOSED BRINE WELL PADS & ACCESS ROAD
PROPOSED PIPING LAYOUT
 ASSUMPTION PARISH, LOUISIANA
 M.E. & A. DWG. NO. 13681, SHEET 8 OF 12

REV.	DATE	DESCRIPTION	DRAWN	CHKD.	APPD.
2	10-25-17	REVISED TO SHOW P.O.B. / P.O.E. LAT. & LONG.	R.E.K.	J.J.M.	J.J.M.

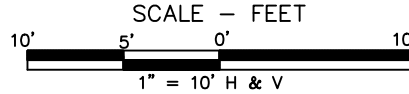
ASSUMPTION PARISH, LOUISIANA
SECTION 41, T12S-R13E



TYPICAL SECTION "F-F" FOR DUAL PIPING
(8" & 12" LINES)



TYPICAL SECTION "G-G" FOR SINGLE PIPING
(12" LINES)



APPROX. 322 Cu. Yds. OF MATERIAL
TO BE EXCAVATED & BACKFILLED FOR
LAYING OF PROPOSED PIPING ON
EXIST. WELL PAD & ACCESS ROAD AREAS

NOTE:

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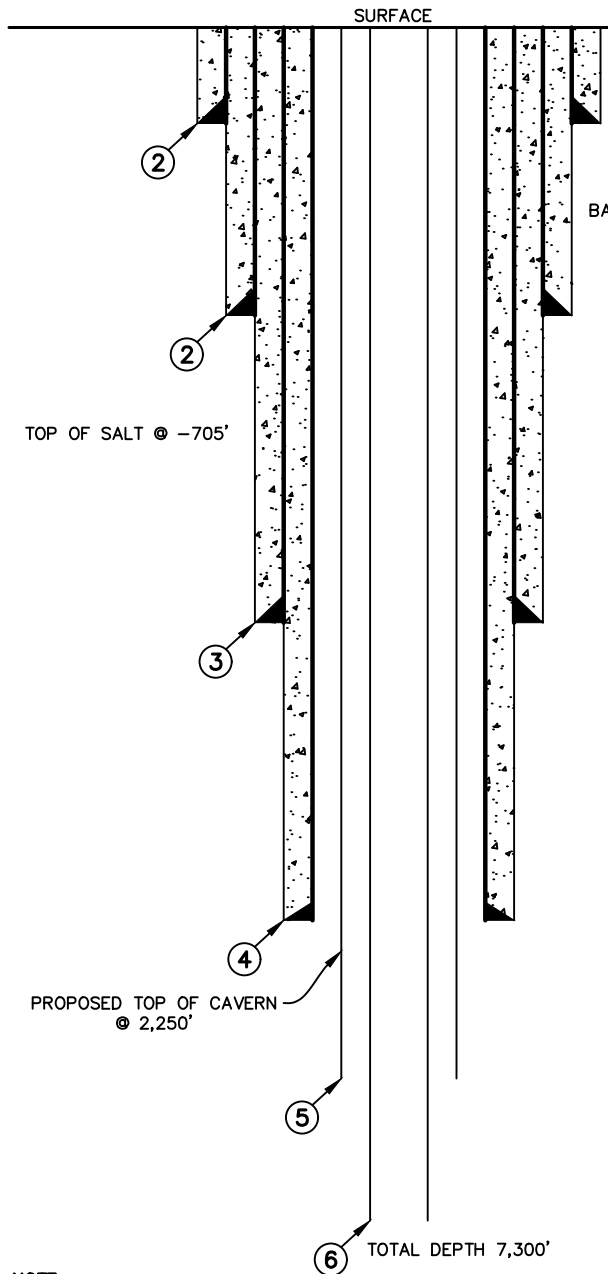
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TEXAS BRINE COMPANY, LLC
 PERMIT APPLICATION
 FOR
PROPOSED BRINE WELL PADS & ACCESS ROAD
TYPICAL SEC. "F" & "G"
PROPOSED 8" & 12" PIPING
 ASSUMPTION PARISH, LOUISIANA

REV.	DATE	DESCRIPTION	DRAWN	CHKD.	APPD.
1	10-3-17	REVISED FOR REVIEW	R.E.K.	J.J.M.	J.J.M.

ASSUMPTION PARISH, LOUISIANA
SECTION 41, T12S-R13E



NOTE: ALL DEPTHS REFERENCED TO GROUND LEVEL.

CASING INFORMATION				
LABEL	1	2	3	4
TYPE	DRIVE	SURFACE	INTERMEDIATE	PRODUCTION
OD	36"	30"	20"	16"
WT	1"	1"	0.635"	0.575"
ID	34"	28"	18.730"	14.85"
WEIGHT	374.15 lb/ft	310.01 lb/ft	133 lb/ft	97 lb/ft
GRADE	X-56	X-56	J/K-55	HCO-125
HOLE SIZE	40"	36"	26"	22"
DEPTH SET	300'	600'	1,000'	2,100'
TOC	NA	SURFACE (CIRCULATION)	SURFACE (CIRCULATION)	SURFACE (CIRCULATION)
VOLUME	NA	LEAD: sx TAIL: sx TOP OUT: sx	LEAD: sx TAIL: sx TOP OUT: sx	LEAD: sx TAIL: sx TOP OUT: sx
% EXCESS	NA	BASED ON OPEN HOLE CALIPER LOG PLUS AN AMOUNT TBD TO ENSURE RETURNS TO SURFACE	BASED ON OPEN HOLE CALIPER LOG PLUS AN AMOUNT TBD TO ENSURE RETURNS TO SURFACE	BASED ON OPEN HOLE CALIPER LOG PLUS AN AMOUNT TBD TO ENSURE RETURNS TO SURFACE

TUBING INFORMATION		
LABEL	5	6
TYPE	OUTER HANGING STRING	INNER HANGING STRING
OD	13 3/8"	9 5/8"
WT	0.480"	0.395"
ID	12.415"	8.835"
DRIFT ID	12.250"	8.679"
COD	14.375"	10.625"
WEIGHT	68.1b/ft	40 lb/ft
GRADE	J-55	J-55
HOLE SIZE	17 1/2"	17 1/2"
DEPTH SET	3,650'	7,250'

NOTE:
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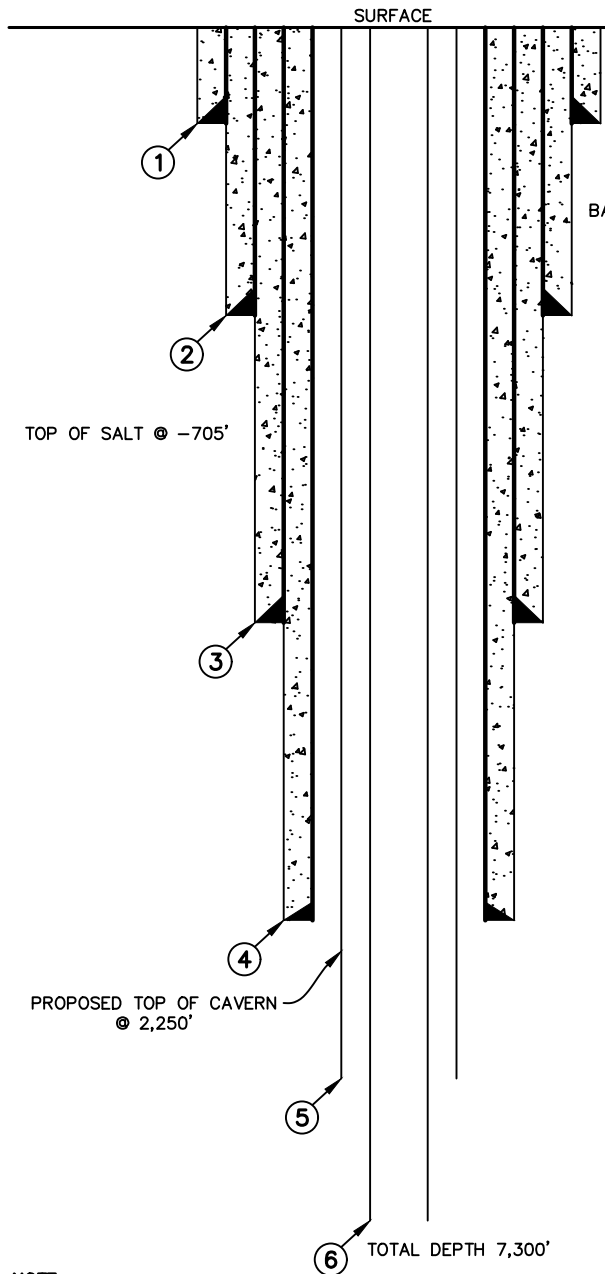
**TEXAS BRINE
COMPANY, LLC**

PERMIT APPLICATION
FOR
**PROPOSED BRINE WELL PADS & ACCESS ROAD
BELOW GROUND DETAIL
FOR BRINE WELL #7**
ASSUMPTION PARISH, LOUISIANA

REV.	DATE	DESCRIPTION	DRAWN	CHKD.	APPD.
1	10-3-17	REVISED FOR REVIEW	R.E.K.	J.J.M.	J.J.M.

M.E. & A. DWG. NO. 13681, SHEET 10 OF 12

ASSUMPTION PARISH, LOUISIANA
SECTION 41, T12S-R13E



NOTE: ALL DEPTHS REFERENCED TO GROUND LEVEL.

CASING INFORMATION				
LABEL	1	2	3	4
TYPE	DRIVE	SURFACE	INTERMEDIATE	PRODUCTION
OD	36"	30"	20"	16"
WT	1"	1"	0.635"	0.575"
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DEPTH SET	300'	600'	1,000'	2,100'
TOC	NA	SURFACE (CIRCULATION)	SURFACE (CIRCULATION)	SURFACE (CIRCULATION)
VOLUME	NA	LEAD: sx TAIL: sx TOP OUT: sx	LEAD: sx TAIL: sx TOP OUT: sx	LEAD: sx TAIL: sx TOP OUT: sx
% EXCESS	NA	BASED ON OPEN HOLE CALIPER LOG PLUS AN AMOUNT TBD TO ENSURE RETURNS TO SURFACE	BASED ON OPEN HOLE CALIPER LOG PLUS AN AMOUNT TBD TO ENSURE RETURNS TO SURFACE	BASED ON OPEN HOLE CALIPER LOG PLUS AN AMOUNT TBD TO ENSURE RETURNS TO SURFACE

TUBING INFORMATION		
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TYPE	OUTER HANGING STRING	INNER HANGING STRING
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TEXAS BRINE
COMPANY, LLC

PERMIT APPLICATION
FOR
**PROPOSED BRINE WELL PADS & ACCESS ROAD
BELOW GROUND DETAIL
FOR BRINE WELL #8**
ASSUMPTION PARISH, LOUISIANA

REV.	DATE	DESCRIPTION	DRAWN	CHKD.	APPD.
1	10-3-17	REVISED FOR REVIEW	R.E.K.	J.J.M.	J.J.M.

M.E. & A. DWG. NO. 13681, SHEET 11 OF 12

**ASSUMPTION PARISH, LOUISIANA
SECTION 41, T12S-R13E**

NOTES:

NORTH ARROW AND GRID COORDINATES REFER TO THE LOUISIANA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE (NORTH AMERICAN DATUM OF 1983 (NAD 83)). BASED ON RTK GPS OBSERVATIONS.

ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM (N.A.V.D. 88). BASED ON RTK GPS OBSERVATIONS.

DISTANCES IN FEET BY HORIZONTAL MEASUREMENT.

PARISH, SECTION, TOWNSHIP, AND RANGE SCALED FROM REFERENCED U.S.C & G.S. QUADRANGLES, PIERRE PART, BELLE ROSE, NAPOLEONVILLE & LONE STAR, LA. 1994.

PROPOSED EXCAVATION LOCATIONS AND DIMENSIONS ARE APPROXIMATE BASED ON DATA PROVIDED AXIALL

SURVEY PARTY CHIEF: KEVIN PICHOFF

DATE OF SURVEY: MARCH 20, 2015 & MARCH 23, 2015

SUMMARY OF CONSTRUCTION EQUIPMENT

DESCRIPTION	QUANTITY
AMPHIBIOUS TRACK EXCAVATOR (60' REACH) (FOR CHIPPING)	1
TANDEM & TRACTOR TRAILER DUMP TRUCKS (ACCESS RD & PAD FILL)	5
BULL DOZER/GRADER (ACCESS RD & PAD CONSTRUCTION)	1
LAND BASED DRILLING RIG	1
1/2 TON & 3/4 TON CREW TRUCKS (CONSTRUCTION & DRILLING SUPPORT)	3

PIPING LEGEND & LENGTHS:

PROPOSED 869' x 8" INJECTION	
PROPOSED 839' x 8" BRINE RETURN	
PROPOSED 1,019' x 12" INJECTION	
PROPOSED 984' x 12" BRINE RETURN	
PROPOSED 150' x 24" EQUALIZATION CULVERT	

SUMMARY OF ESTIMATED QUANTITIES

TOTAL SAND VOLUME = 65,124 CU. YDS. (FILL) (WELL PADS)
TOTAL SAND VOLUME = 1,499 CU. YDS. (FILL) (CROSSOVER)
TOTAL SAND VOLUME = 945 CU. YDS. (FILL) (BORROW PIT & RING LEVEE)
TOTAL SAND VOLUME = 67,568 CU. YDS. (ENTIRE PROJECT)
TOTAL #610 LIMESTONE VOLUME = 2,259 CU. YDS. (FILL)
TOTAL WETLANDS (PERMANENT) IMPACTED = 7.16 AC.
TOTAL EXCAVATION & BACKFILL FOR PROPOSED PIPING = 322 CU. YDS.
TOTAL LENGTH OF SILT FENCING = ±3,162'
TOTAL EROSION CONTROL BLANKET = ±8,432 SQ. YDS.
TREATED TIMBER RIG SUPPORT PILES (70' LONG) = 96 TOTAL
TOTAL CEMENT FOR DRILL HOLE = 219 CU. YDS.
TOTAL EXCAVATION FOR DRILL HOLE = 339 CU.YDS.

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TEXAS BRINE
COMPANY, LLC

PERMIT APPLICATION
FOR
PROPOSED BRINE WELL PADS & ACCESS ROAD
**GENERAL NOTES
AND REFERENCES**

ASSUMPTION PARISH, LOUISIANA

M.E. & A. DWG. NO. 13681, SHEET 12 OF 12

REV.	DATE	DESCRIPTION	DRAWN	CHKD.	APPD.
1	10-3-17	REVISED FOR REVIEW	R.E.K.	J.J.M.	J.J.M.