

JUN 08 2015

DEPARTMENT OF THE ARMY PERMIT

Permittee: Helis Oil & Gas Company, LLC

Permit No.: MVN-2013-2952-EOO

Issuing Office: New Orleans District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

**PROJECT DESCRIPTION:** Clear, grade, excavate, and deposit fill for a guard facility, three bypass roads, a well pad, and appurtenances to install and service a vertical exploratory test well, in accordance with the drawings attached in eight sheets dated January 15, 2014.

**PROJECT LOCATION:** North of Interstate 12 and east of LA Highway 1088, abutting the west side of Log Cabin Road, in Saint Tammany Parish, Louisiana.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on **June 30, 2020**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least 1 month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

**Special Conditions: Page 4**

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

( ) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

- a. You fail to comply with the terms and conditions of this permit.
- b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
- c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

*Timothy Roche (agent)*  
(PERMITTEE)

*x 6/8/15*  
(DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

*Michael V. Farabee*

*June 8, 2015*  
(DATE)

Michael V. Farabee, Chief, Eastern Evaluation Section

for Richard L. Hansen, District Commander

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

\_\_\_\_\_  
(TRANSFEE)

\_\_\_\_\_  
(DATE)

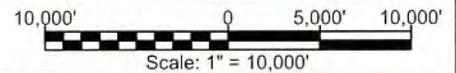
## **Special Conditions: MVN-2013-2952-EOO**

7. Issuance of this permit confirms that the US Army Corps of Engineers, New Orleans District, Regulatory Branch (CEMVN) has been provided with written notification from Ecosystem Investment Partners that the permittee has contracted for 16.7 acres of pine flatwoods/savannah mitigation credits at the Mossy Hill Wetland Mitigation Bank. Ecosystem Investment Partners has assumed responsibility for completing the mitigation in accordance with the Mossy Hill Wetland Mitigation Banking Instrument and has recorded the allocation of the mitigation required by this permit in the Regulatory In-lieu fee and Bank Information Tracking System (RIBITS).
8. If the authorized project requires any additional work not expressly permitted herein, the permittee must apply for an amendment to this authorization.
9. The permittee shall employ siltation controls around all construction sites that require earthwork (clearing, grading, dredging and/or deposition of fill material) such that eroded material is prevented from entering adjacent wetlands and/or waterways.
10. Ring levees shall be degraded by restoring the material with which they were built into the areas from which it was removed, and the areas leveled to as near pre-project conditions as practicable within 30 days after abandonment of the well.
11. All fills associated with the bypass roads and the drill site shall be degraded when the site is abandoned. Fill areas shall be restored to as near pre-project conditions as practicable.
12. Broken boards and other extraneous construction materials shall be removed from the site when the well site is abandoned by the permittee. All plastic sheeting shall be removed from areas of the roadway and pad from which the boards are removed.
13. All discharges associated with drilling and production activities will be handled in a manner consistent with applicable Federal, state, and local laws and guidelines.
14. Many local governing bodies have instituted laws and/or ordinances in order to regulate dredge and/or fill activities in floodplains to assure maintenance of floodwater storage capacity and avoid disruption of drainage patterns that may affect surrounding properties. Your project involves dredging and/or placement of fill, therefore, you must contact the local municipal and/or parish governing body regarding potential impacts to floodplains and compliance of your proposed activities with applicable local floodplain ordinances, regulations or permits.
15. Prior to commencing work on the project, the permittee must obtain all approvals necessary from the State of Louisiana and Saint Tammany Parish.



NOTE:  
THE CONTENTS OF THESE PLANS ARE INTENDED  
EXCLUSIVELY FOR THE PURPOSE OF OBTAINING  
ENVIRONMENTAL COMPLIANCE PERMITS

VICINITY MAP



## HELIS OIL & GAS COMPANY, L.L.C.

PROPOSED DRILLSITE & STRUCTURES

Eads Poitevent No. 1 Well

Section 34, T7S-R12E

St. Tammany Parish, Louisiana



Lafayette New Orleans Houston  
135 Regency Sq. Lafayette, LA 70508  
Ph. 337-237-2200 Fax. 337-232-3299  
[www.fenstermaker.com](http://www.fenstermaker.com)

DRAWN BY: TSM

REVISED: 3/14/2014

DATE: 1/15/2014

PROJ. MGR.: RLL

08/28/2014

SHEET 1 OF 8 SHEETS

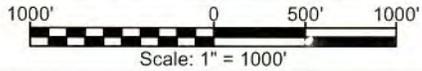
09/05/2014

FILENAME: T:\2013\2130980\DWG\ENVIRONMENTAL\Poitevent COE 082814.dwg



NOTE:  
 THE CONTENTS OF THESE PLANS ARE INTENDED  
 EXCLUSIVELY FOR THE PURPOSE OF OBTAINING  
 ENVIRONMENTAL COMPLIANCE PERMITS

PROJECT PLAN VIEW



**HELIS OIL & GAS COMPANY, L.L.C.**

**PROPOSED DRILLSITE & STRUCTURES**

*Eads Poitevent No. 1 Well*

Section 34, T7S-R12E

St. Tammany Parish, Louisiana



Lafayette New Orleans Houston  
 135 Regency Sq. Lafayette, LA 70508  
 Ph. 337-237-2200 Fax. 337-232-3299  
[www.fenstermaker.com](http://www.fenstermaker.com)

DRAWN BY: TSM

REVISED: 3/14/2014

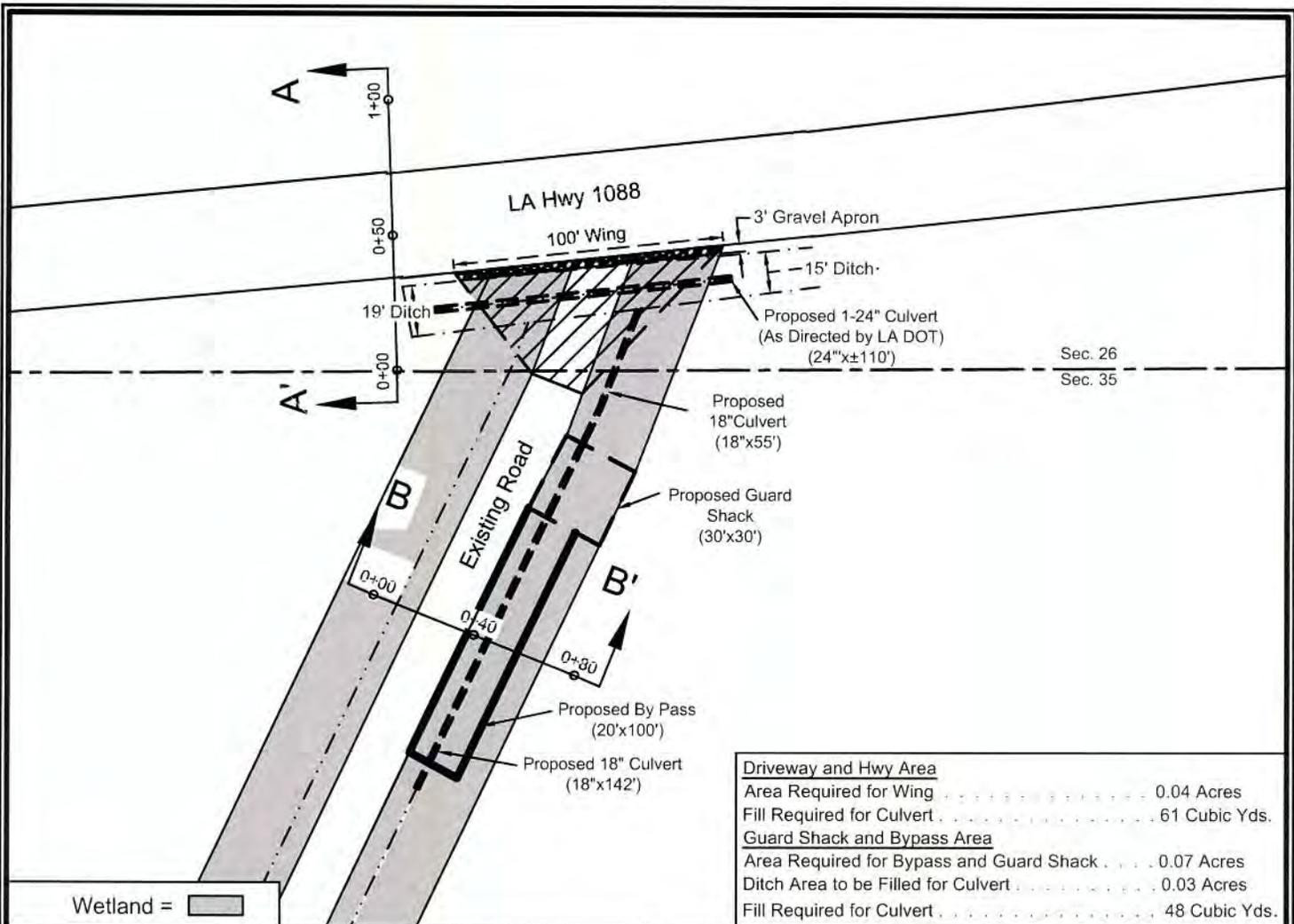
DATE: 1/15/2014

PROJ. MGR.: RLL

08/28/2014

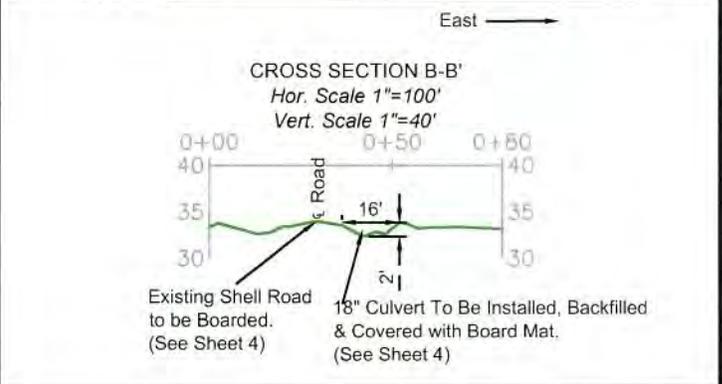
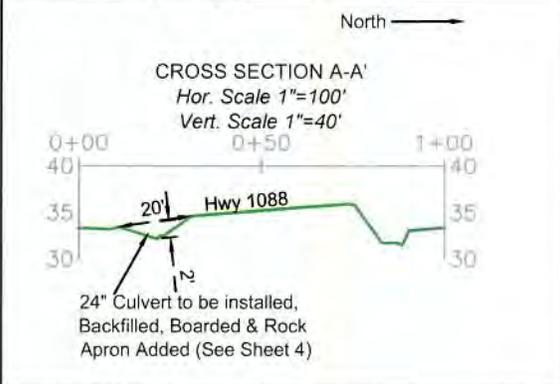
SHEET 2 OF 8 SHEETS

FILENAME: T:\2013\2130980\DWG\ENVIROMENTAL\Poitevent COE 082814.dwg



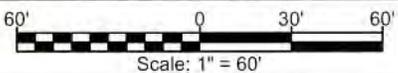
<b>Driveway and Hwy Area</b>	
Area Required for Wing	0.04 Acres
Fill Required for Culvert	61 Cubic Yds.
<b>Guard Shack and Bypass Area</b>	
Area Required for Bypass and Guard Shack	0.07 Acres
Ditch Area to be Filled for Culvert	0.03 Acres
Fill Required for Culvert	48 Cubic Yds.

Wetland =



NOTE:  
THE CONTENTS OF THESE PLANS ARE INTENDED EXCLUSIVELY FOR THE PURPOSE OF OBTAINING ENVIRONMENTAL COMPLIANCE PERMITS

PLAN VIEW DRIVEWAY, GUARD SHACK & BYPASS



**HELIS OIL & GAS COMPANY, L.L.C.**  
PROPOSED DRILLSITE & STRUCTURES  
*Eads Poitevent No. 1 Well*  
Section 34, T7S-R12E  
St. Tammany Parish, Louisiana



Lafayette New Orleans Houston  
135 Regency Sq. Lafayette, LA 70508  
Ph. 337-237-2200 Fax. 337-232-3299  
[www.fenstermaker.com](http://www.fenstermaker.com)

DRAWN BY: TSM

REVISED: 3/14/2014

DATE: 1/15/2014

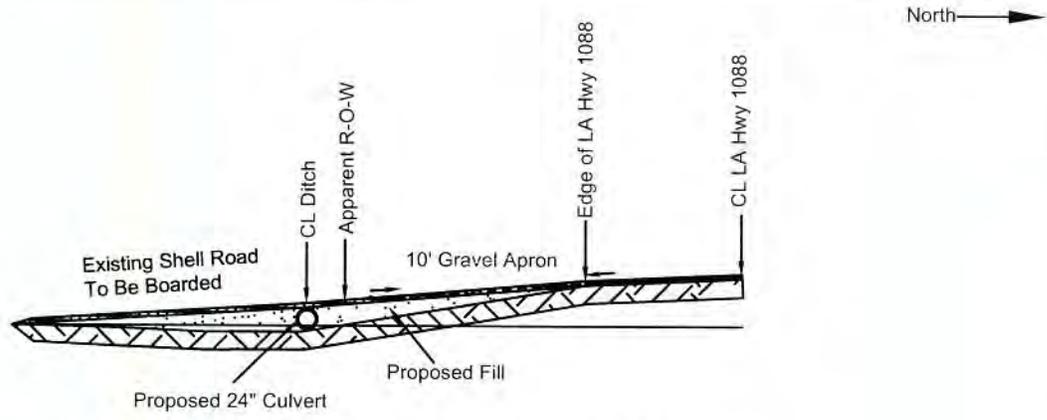
PROJ. MGR.: RLL

08/28/2014

SHEET 3 OF 8 SHEETS

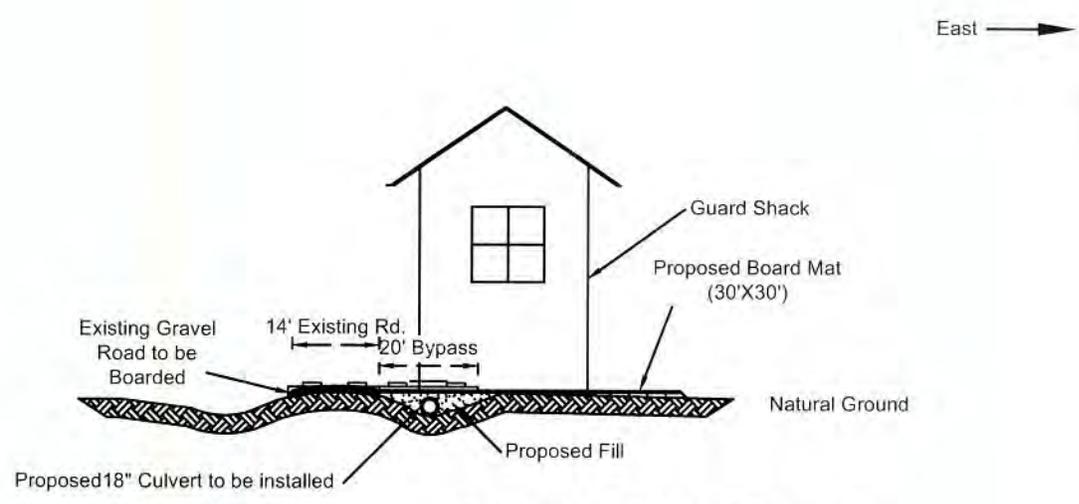
09/05/2014

FILENAME: T:\2013\2130980\DWG\ENVIRONMENTAL\Poitevent COE 082814.dwg



**TYPICAL DRIVEWAY WITH CULVERT INSTALLATION**

No Scale



**TYPICAL BYPASS, GUARD SHACK & CULVERT INSTALLATION**

No Scale

Culvert to be installed in ditch, filled and covered with Boarded Mat or Boarded Bypass.

NOTE:  
THE CONTENTS OF THESE PLANS ARE INTENDED EXCLUSIVELY FOR THE PURPOSE OF OBTAINING ENVIRONMENTAL COMPLIANCE PERMITS

**HELIS OIL & GAS COMPANY, L.L.C.**

PROPOSED DRILLSITE & STRUCTURES

*Eads Poitevent No. 1 Well*

Section 34, T7S-R12E

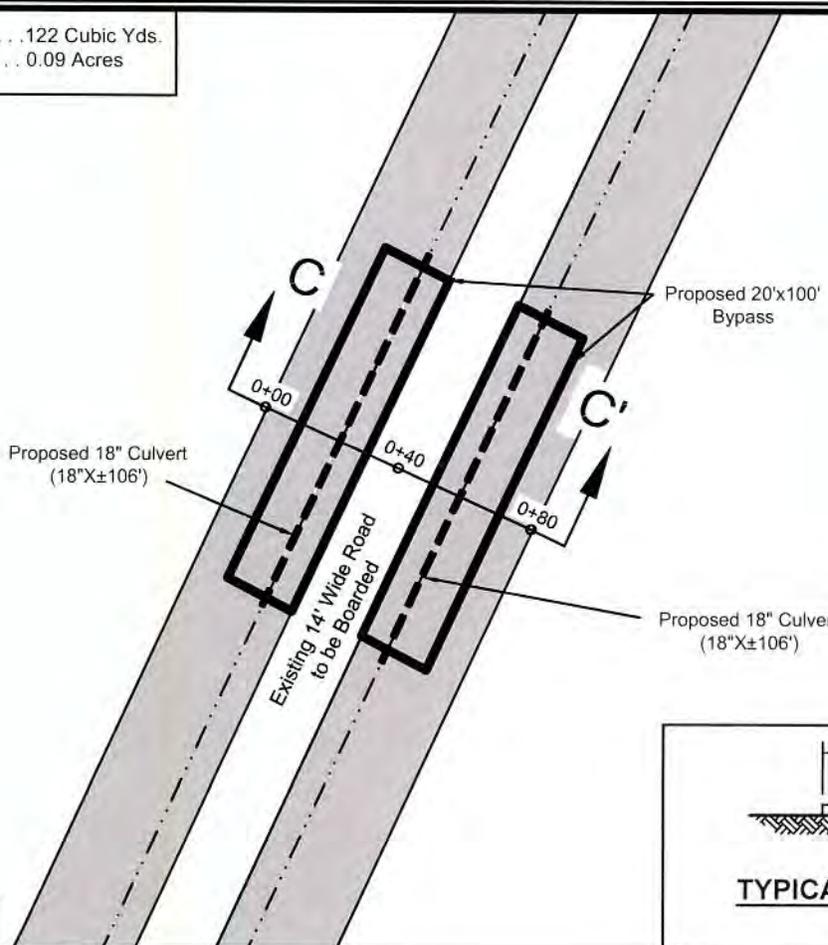
St. Tammany Parish, Louisiana



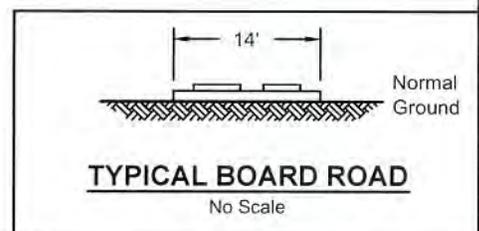
Lafayette New Orleans Houston  
135 Regency Sq. Lafayette, LA 70508  
Ph. 337-237-2200 Fax. 337-232-3299  
[www.fenstermaker.com](http://www.fenstermaker.com)

DRAWN BY: TSM	REVISED: 3/14/2014	DATE: 1/15/2014
	08/28/2014	
PROJ. MGR.: RLL	09/05/2014	SHEET 4 OF 8 SHEETS
FILENAME: T:\2013\2130980\DWG\ENVIRONMENTAL\Poitevent COE 082814.dwg		

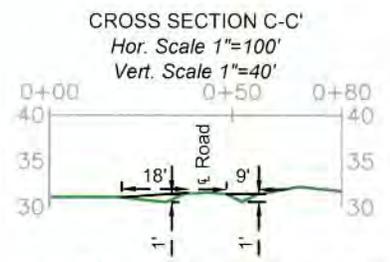
Fill Required for Culverts. . . . . 122 Cubic Yds.  
 Area Required for Culverts. . . . . 0.09 Acres



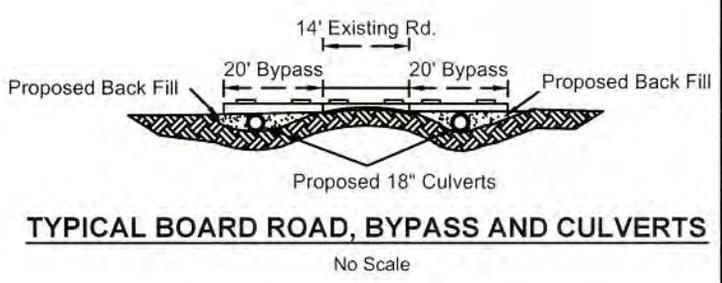
Wetland =



East →

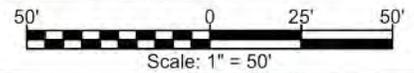


18" Culvert To Be Installed on the East and West Side of the Exist Road, Backfilled & Covered with Board Mat for Bypass (20'X100') Existing Road to be Boarded.



NOTE:  
 THE CONTENTS OF THESE PLANS ARE INTENDED EXCLUSIVELY FOR THE PURPOSE OF OBTAINING ENVIRONMENTAL COMPLIANCE PERMITS

PLAN VIEW BYPASS



**HELIS OIL & GAS COMPANY, L.L.C.**  
 PROPOSED DRILLSITE & STRUCTURES  
*Eads Poitevent No. 1 Well*  
 Section 34, T7S-R12E  
 St. Tammany Parish, Louisiana



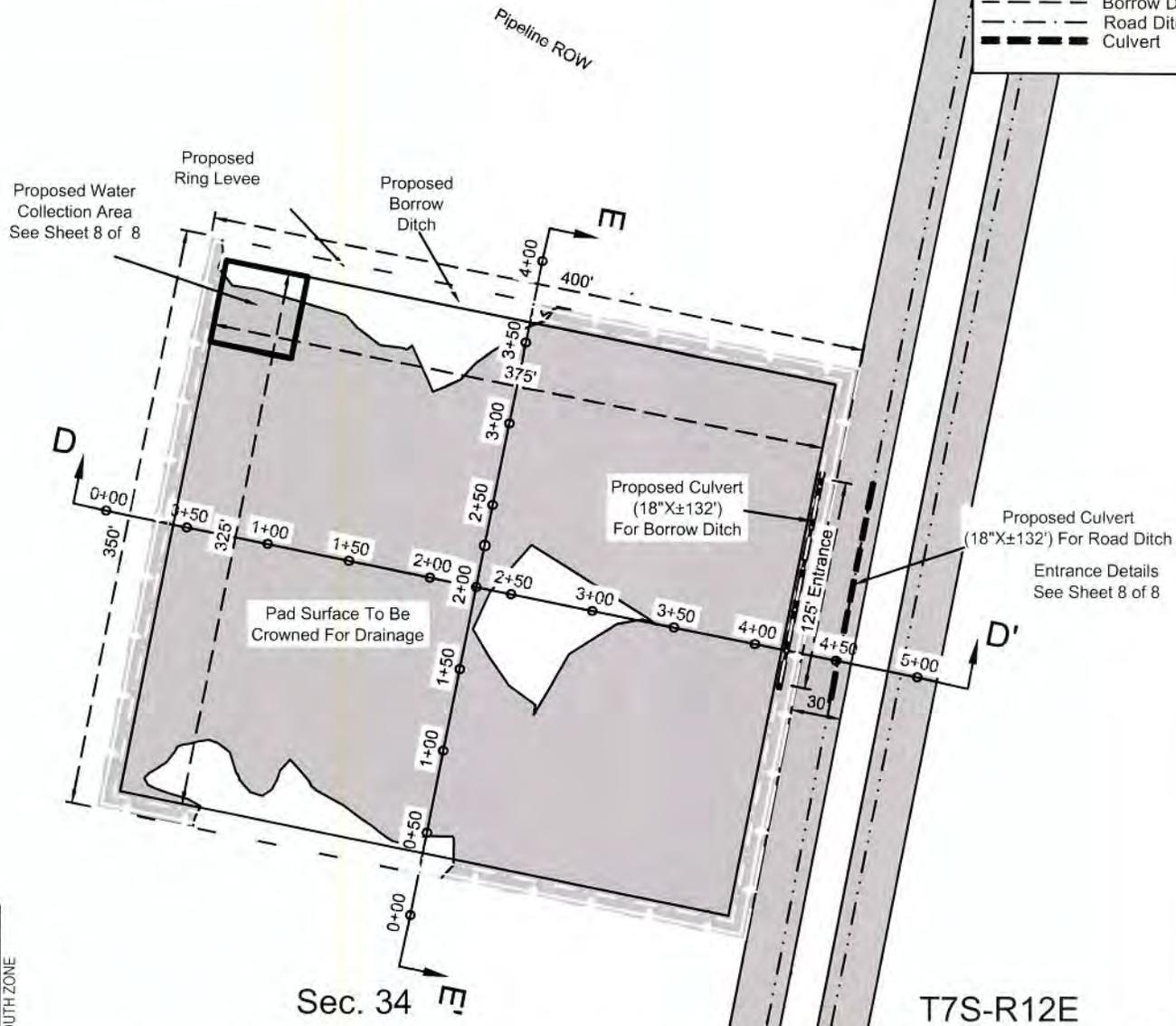
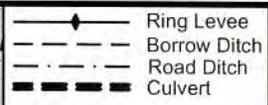
Lafayette New Orleans Houston  
 135 Regency Sq. Lafayette, LA 70508  
 Ph. 337-237-2200 Fax. 337-232-3299  
[www.fenstermaker.com](http://www.fenstermaker.com)

DRAWN BY: TSM  
 PROJ. MGR.: RLL

REVISED: 3/14/2014  
 08/28/2014  
 09/05/2014

DATE: 1/15/2014  
 SHEET 5 OF 8 SHEETS

FILENAME: T:\2013\2130980\DWG\ENVIROMENTAL\Poitevent COE 082814.dwg

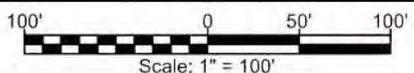


Excavation/Fill Required for Borrow Ditch/Ring Levee	492 Cubic Yds.
Fill Required for Drill Pad	10,776 Cubic Yds.
Fill Required for Entrance	1,500 Cubic Yds.
Area Required for Entrance	0.09 Acres
Wetland =  Wetland Area	2.81 Acres



NOTE:  
THE CONTENTS OF THESE PLANS ARE INTENDED  
EXCLUSIVELY FOR THE PURPOSE OF OBTAINING  
ENVIRONMENTAL COMPLIANCE PERMITS

PLAN VIEW PAD AREA



# HELIS OIL & GAS COMPANY, L.L.C.

PROPOSED DRILLSITE & STRUCTURES  
Eads Poitevent No. 1 Well  
Section 34, T7S-R12E  
St. Tammany Parish, Louisiana



Lafayette New Orleans Houston  
135 Regency Sq. Lafayette, LA 70508  
Ph. 337-237-2200 Fax. 337-232-3299  
[www.fenstermaker.com](http://www.fenstermaker.com)

DRAWN BY: TSM

REVISED: 3/14/2014

DATE: 1/15/2014

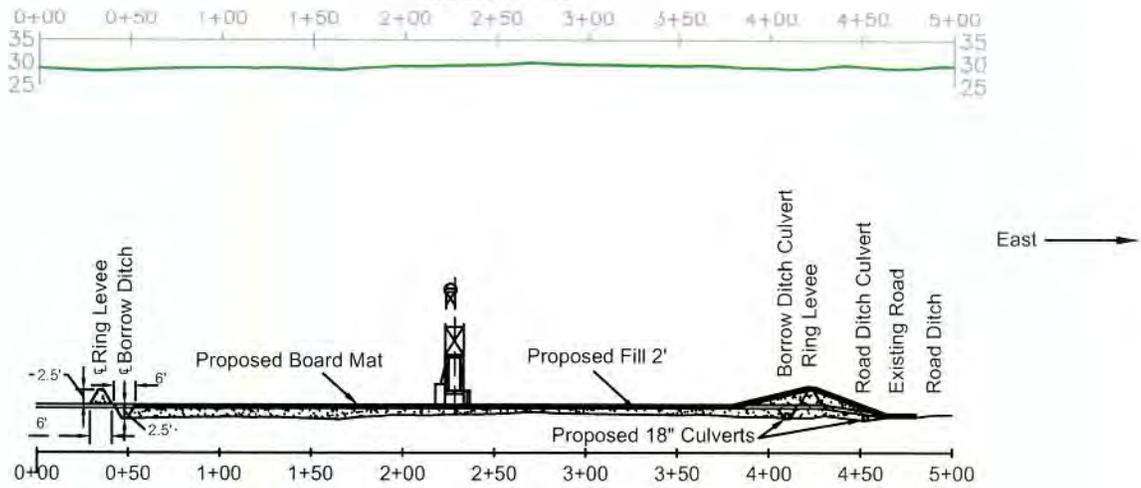
PROJ. MGR.: RLL

08/28/2014

SHEET 6 OF 8 SHEETS

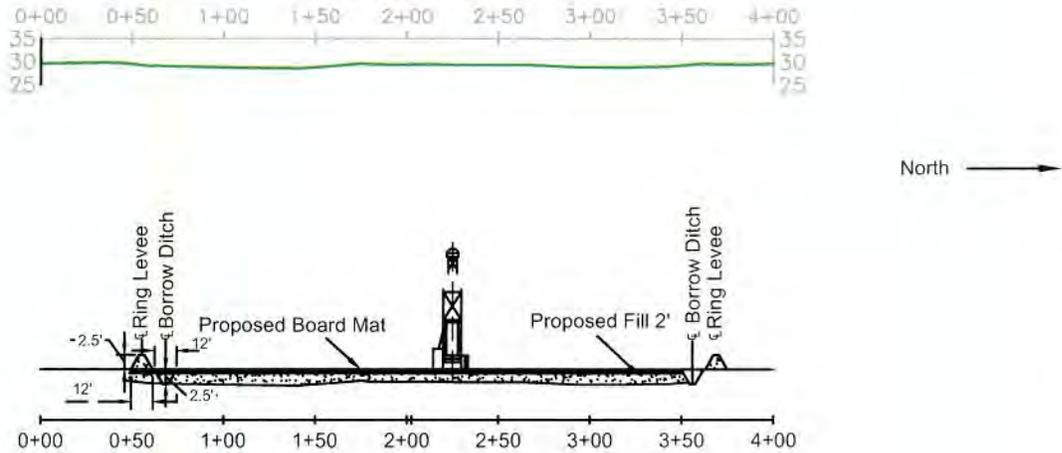
FILENAME: T:\2013\2130980\DWG\ENVIRONMENTAL\Poitevent COE 082814.dwg

CROSS SECTION D-D'  
 Hor. Scale 1"=100'  
 Vert. Scale 1"=40'



**TYPICAL CROSS-SECTION OF DRILLSITE D-D'**  
 No Scale

CROSS SECTION E-E'  
 Hor. Scale 1"=100'  
 Vert. Scale 1"=40'



**TYPICAL CROSS-SECTION OF DRILLSITE E-E'**  
 No Scale

NOTE:  
 THE CONTENTS OF THESE PLANS ARE INTENDED  
 EXCLUSIVELY FOR THE PURPOSE OF OBTAINING  
 ENVIRONMENTAL COMPLIANCE PERMITS

**HELIS OIL & GAS COMPANY, L.L.C.**  
 PROPOSED DRILLSITE & STRUCTURES  
 Eads Poitevent No. 1 Well  
 Section 34, T7S-R12E  
 St. Tammany Parish, Louisiana



Lafayette New Orleans Houston  
 135 Regency Sq. Lafayette, LA 70508  
 Ph. 337-237-2200 Fax. 337-232-3299  
[www.fenstermaker.com](http://www.fenstermaker.com)

DRAWN BY: TSM

PROJ. MGR.: RLL

FILENAME: T:\2013\2130980\DWG\ENVIRONMENTAL\Poitevent COE 082814.dwg

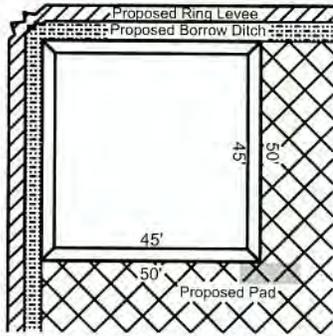
REVISED: 3/14/2014

08/28/2014

09/05/2014

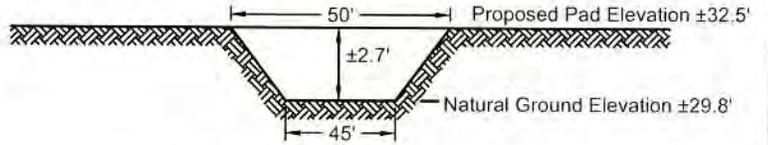
DATE: 1/15/2014

SHEET 7 OF 8 SHEETS



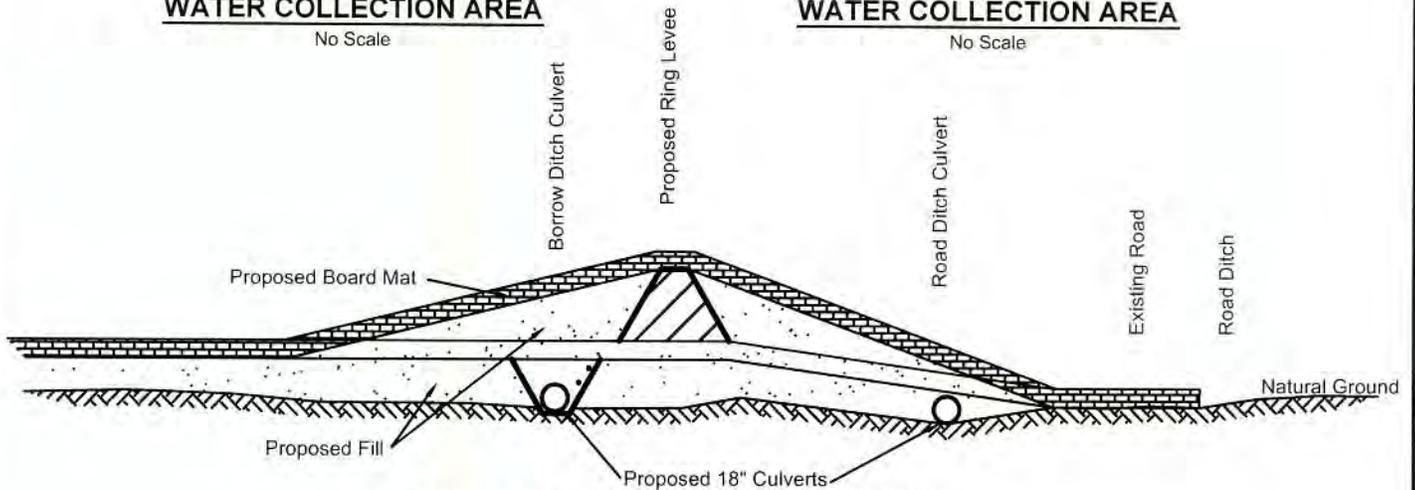
**PLAN VIEW OF TYPICAL WATER COLLECTION AREA**

No Scale



**PROFILE OF TYPICAL WATER COLLECTION AREA**

No Scale



**PROFILE OF TYPICAL PAD ENTRANCE**

No Scale

**NOTES:**

1. Material for drillsite levees will be taken from within the leveed perimeter.
2. Closure procedures, including onshore land treatment and/or offsite disposal of mud pit contents and other drilling residues, shall be conducted in accordance with appropriate Federal and State Regulations.
3. In order to ensure the safety of all parties, the permittee shall contact the Louisiana ONE CALL System (1-800-272-3020), a minimum of 48 hours prior to the commencement of any excavation (Digging, Dredging, Jetting, etc.) or demolition activity.

**NOTES - DRY HOLE SCENARIO**

1. The boards will be removed from the access road and drill pad.
2. The drill site and ring levees will be degraded within 90 days following abandonment. The levee material will be deposited, to the maximum extent practicable, into the borrow areas from which the material was excavated and the area will be leveled to as near pre-project conditions as practicable.
3. The drill pad site will be allowed to naturally re-vegetate.

DISCLAIMER: At this time, C.H. Fenstermaker & Associates, LLC has not performed nor was asked to perform any type of engineering, hydrological modeling, flood plain, or "No Rise" certification analyses, including but not limited to determining whether the project will impact flood hazards in connection with federal/FEMA, state, and/or local laws, ordinances and regulations. Accordingly, Fenstermaker makes no warranty or representation of any kind as to the foregoing issues, and persons or entities using this information shall do so at their own risk.

NOTE:  
THE CONTENTS OF THESE PLANS ARE INTENDED EXCLUSIVELY FOR THE PURPOSE OF OBTAINING ENVIRONMENTAL COMPLIANCE PERMITS

**HELIS OIL & GAS COMPANY, L.L.C.**

**PROPOSED DRILLSITE & STRUCTURES**

*Eads Poitevent No. 1 Well*

Section 34, T7S-R12E

St. Tammany Parish, Louisiana



Lafayette New Orleans Houston  
135 Regency Sq. Lafayette, LA 70508  
Ph. 337-237-2200 Fax. 337-232-3299  
[www.fenstermaker.com](http://www.fenstermaker.com)

DRAWN BY: TSM

REVISED: 3/14/2014

DATE: 1/15/2014

PROJ. MGR.: RLL

08/28/2014

SHEET 8 OF 8 SHEETS

FILENAME: T:\2013\2130980\DWG\ENVIRONMENTAL\Poitevent COE 082814.dwg