



REPLY TO  
ATTENTION OF:

DEPARTMENT OF THE ARMY  
U.S. ARMY ENGINEER DISTRICT, MOBILE DISTRICT  
P.O. BOX 2288  
MOBILE, ALABAMA 36628-0001

December 22, 2015

CESAM-RD-M  
PUBLIC NOTICE NO. SAM-2004-02428-DJS

JOINT PUBLIC NOTICE SAM-2004-2484-DJS

U.S. ARMY CORPS OF ENGINEERS

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF POLLUTION CONTROL

MISSISSIPPI DEPARTMENT OF MARINE RESOURCES

**PROPOSED DREDGING AND WETLAND FILL FOR THE ADDITION OF  
LIQUEFACTION AND EXPORT CAPABILITIES AT THE EXISTING GULF LNG  
TERMINAL FACILITY IN JACKSON COUNTY, MISSISSIPPI**

TO WHOM IT MAY CONCERN:

This District has received an application for a Department of the Army permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344). Please communicate this information to interested parties.

APPLICANT: **Gulf LNG Liquefaction Company, LLC ("GLLC") and  
GULF LNG Energy, LLC ("GLE")  
Attention: Mr. Michael J. Varagona  
569 Brookwood Village, Suite 749  
Birmingham, Alabama 35209**

AGENT: **CH2M HILL  
Attention: Mr. Doug Baughman  
6600 Peachtree Dunwoody Road  
Building 400, Suite 600  
Atlanta, Georgia 30328**

WATERWAY: **The proposed project is located in open waters and wetlands adjacent to the Mississippi Sound and Bayou Casotte at 125 Industrial Road, Pascagoula, Jackson County, Mississippi (Latitude 30.322428, Longitude -88.503169).**

PROPOSED WORK: **The applicants, GLLC and GLE, propose to fill 35.6 acres of wetlands, 1.06 acres of open water (0.91 acres of permanent fill and 0.15 acres of temporary fill during construction), and dredge approximately 200,000 cubic yards of material from the Mississippi Sound associated with the Gulf LNG Liquefaction Project ("Project"). The Project will add liquefaction and export capabilities to GLE's existing Gulf LNG Terminal ("Terminal") located in Jackson County, Mississippi. The Project**

facilities will allow liquefaction of domestic natural gas delivered by pipeline, storage of the liquefied natural gas (LNG) in the Terminal's existing LNG storage tanks, and loading of the stored LNG into LNG carriers via the Terminal's existing marine berthing facility. The Terminal will retain its current capability to receive, store, regasify, and deliver natural gas into the interstate pipeline system, as originally constructed, thereby making the Terminal bi-directional in terms of LNG import and export. The proposed project would be constructed on the existing Terminal site and on adjacent lands to be acquired. Additional offsite areas would be required for Project staging, warehouse yards, contractor offices, and parking. The Federal Energy Regulatory Commission (FERC) is the lead Federal agency for this project. For additional details on the Project, please visit the FERC Online website, [elibrary.ferc.gov/idmws/docket\\_search.asp](http://elibrary.ferc.gov/idmws/docket_search.asp), and enter "CP15-521" for the Docket Number.

Impacts requiring Department of the Army authorization can be categorized in three parts: Project Facilities, Construction Support Areas (CSAs), and Marine Offloading Facilities.

**PROJECT FACILITIES:** The Project would require the filling of 28.0 acres of tidally-influenced marsh wetlands for construction of the new Project facilities. Of the total area of wetlands proposed to be filled, 9.0 acres are wetlands previously utilized as compensatory mitigation for construction of the existing facility. The project facilities would include two liquefaction trains, required support utilities and infrastructure, and administrative building and parking. In addition to the proposed fill, the applicant would install a flare system on a single open lattice tower structure at the southeast corner of the Terminal site. The flare system would be provided to dispose of excess gases associated with maintenance, startup/shutdown, and upset plant activities and conditions. The total height of the proposed flare structure is 430 feet (above ground level) with an overall height of 433 feet above mean sea level.

**CONSTRUCTION SUPPORT AREAS (CSAs):** Completion of the work would require use of six CSAs in the vicinity of the Terminal. These areas would be utilized for Project staging, warehouse yards, contractor offices, and parking. CSA 5 would require the filling of 7.6 acres of low quality freshwater wetlands.

**MARINE OFFLOADING FACILITIES (MOFs):** The proposed work also includes the creation of two MOFs. The MOFs would be utilized for receipt of construction materials and equipment by barge. The proposed work would require an initial dredging of up to 100,000 cubic yards of material for the creation of each MOF. Each MOF would be dredged and maintained to a depth of -12 feet mean sea level (MSL). The North MOF dredge area is approximately 1,100 feet long and 280 feet wide. The South MOF dredge area is approximately 820 feet long by 250 feet wide. Within the North MOF, approximately 0.91 acres of open water and 0.03 acres of wetlands would be filled for construction of a T-shaped dock. The North MOF structure would extend approximately 305 feet into the waterway. At the South MOF, approximately 0.15 acres of open water and 0.18 acres of wetlands would be filled for construction of the dock. The South MOF structure would extend 75 feet into the waterway. All fill material would be contained by vertical sheet pile. The North MOF is proposed as a permanent structure while the South MOF would only be used during construction and dismantled after construction

is complete. Although silt loads are expected to be light, maintenance dredging of the MOFs is proposed throughout the construction period. It is expected that up to 10,000 cubic yards of material may be deposited per year and that dredging may occur on irregular cycles as determined necessary. All dredged material is proposed for disposal in a USACE-approved, state-operated disposal site designated for beneficial use. No dredging will occur within the limits of the Bayou Casotte Navigation Channel.

**MITIGATION:** As compensatory mitigation for the unavoidable impacts associated with the Project, the applicant proposes compensatory mitigation in the form of marsh creation and mitigation bank credits. To offset impacts to 7.6 acres of low quality freshwater wetlands impacted at CSA 5, the applicant proposes to purchase in-kind mitigation bank credits from a USACE-approved mitigation bank servicing the project area. To compensate for impacts to tidally influenced marsh, the applicant proposes to create approximately 50 acres of salt marsh south of the project site. The proposed marsh creation is intended to compensate for the direct impacts to 28.0 acres of coastal wetlands as well as impacts associated with utilization of a previous mitigation site. The applicant proposes to utilize "A Regional Guidebook for Applying the Hydrogeomorphic Approach to Assessing the Functions of Tidal Fringe Wetlands Along the Mississippi and Alabama Gulf Coast" (HGM) to determine mitigation required and mitigation success. Utilizing HGM as well as a temporal loss factor and risk factor, the applicant has determined approximately 50 acres of marsh creation would adequately off-set the proposed impacts.

The applicant has applied for certification from the State of Mississippi in accordance with Section 401(a)(1) of the Clean Water Act. Upon completion of the required advertising and public comment review, a determination relative to certification will be made. The applicant has applied for coastal zone consistency from the State of Mississippi Department of Marine Resources in accordance with the State Coastal Zone Management Program.

This public notice is being distributed to all known interested persons in order to assist in developing facts on which a decision by the U.S. Army Corps of Engineers can be based. For accuracy and completeness of the record, all data in support of or in opposition to the proposed work should be submitted in writing setting forth sufficient detail to furnish a clear understanding of the reasons for support or opposition.

The decision whether to issue a permit will be based on an evaluation of the probable impact 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, consideration of property ownership and, in general, the needs and welfare of the people.

The Corps 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 Corps to determine whether to issue, 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 the 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.

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.

Evaluation of the probable impacts involving deposits of dredged or fill material into waters of the United States will include the application of guidelines established by the Administrator of the U.S. Environmental Protection Agency.

FERC is the lead Federal agency for this project responsible for ensuring compliance with the National Historic Preservation Act. For comments related to Section 106 of the National Historic Preservation Act, please reference **“CP15-521” for the Docket Number** at the following link: [elibrary.ferc.gov/idmws/docket\\_search.asp](http://elibrary.ferc.gov/idmws/docket_search.asp).

FERC is the lead Federal agency for this project responsible for ensuring compliance with the Endangered Species Act. For comments related to the Endangered Species Act, please reference **“CP15-521” for the Docket Number** at the following link: [elibrary.ferc.gov/idmws/docket\\_search.asp](http://elibrary.ferc.gov/idmws/docket_search.asp).

FERC is the lead Federal agency for this project responsible for ensuring compliance with the Magnuson Stevens Fishery Conservation and Management Act. For comments related to the Magnuson-Stevens Fishery Conservation and Management Act, please reference **“CP15-521” for the Docket Number** at the following link: [elibrary.ferc.gov/idmws/docket\\_search.asp](http://elibrary.ferc.gov/idmws/docket_search.asp).

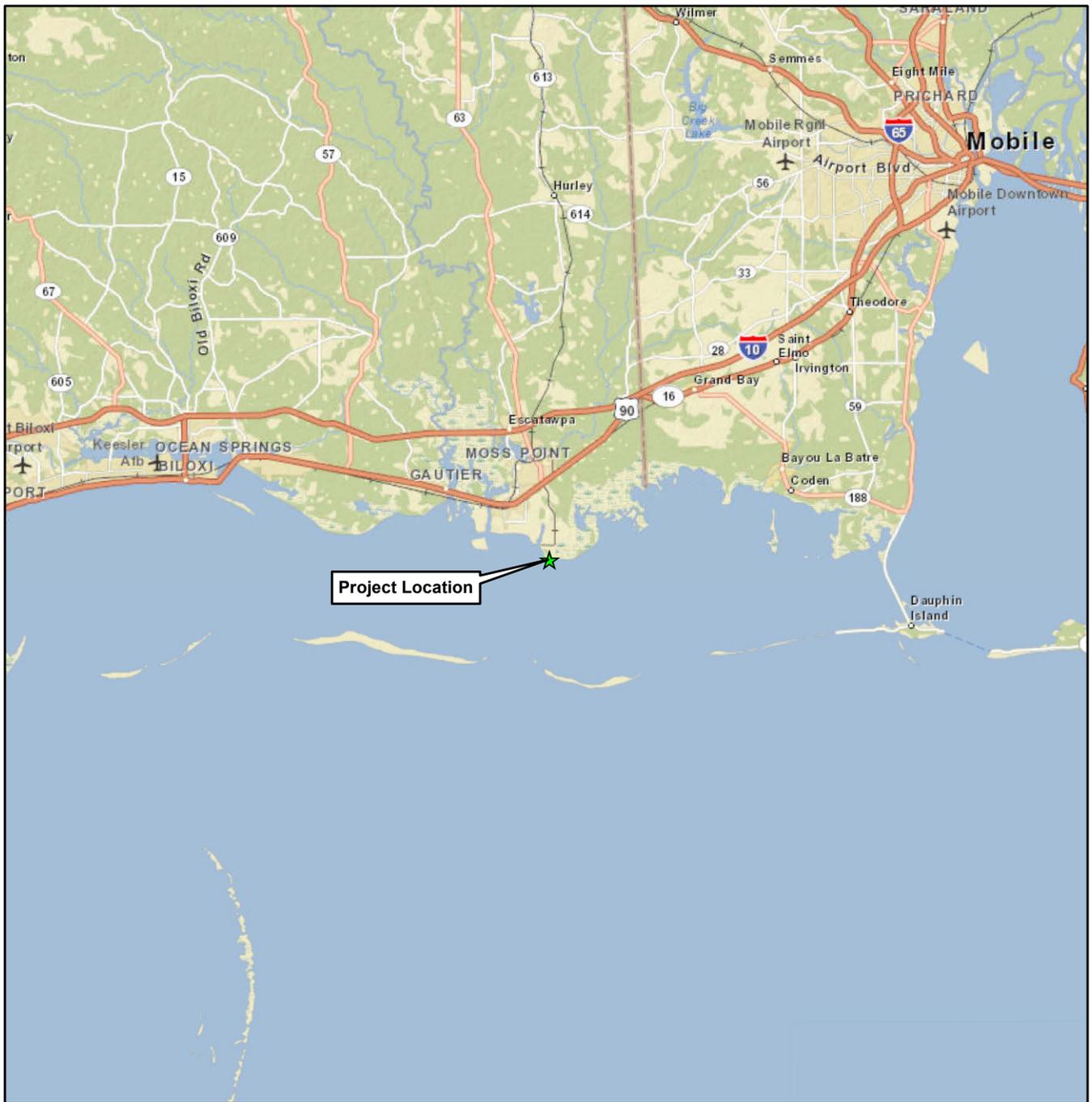
Correspondence concerning this Public Notice should refer to Public Notice Number SAM-2004-02484-DJS and should be directed to the District Engineer, U.S. Army Engineer District, Mobile, Post Office Box 2288, Mobile, Alabama 36628-0001, Attention: South Mississippi Branch, with a copy to the Mississippi Department of Environmental Quality, Office of Pollution Control, Post Office Box 10385, Jackson, Mississippi 39289, and the Mississippi Department of Marine Resources, 1141 Bayview Avenue, Suite 101, Biloxi, Mississippi 39530, in time to be received within **30 days** of the date of this public notice.

If you have any questions concerning this publication, you may contact the project manager for this application, Mrs. Allison F. Monroe ([allison.f.monroe@usace.army.mil](mailto:allison.f.monroe@usace.army.mil)), phone (251) 690-3228. Please refer to the above Public Notice number.

For additional information about our Regulatory Program, please visit our website at: [www.sam.usace.army.mil](http://www.sam.usace.army.mil) and please take a moment to complete our customer satisfaction survey while you're there. Your responses are appreciated and will allow us to improve our services.

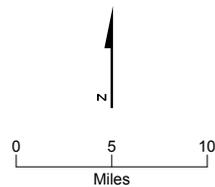
MOBILE DISTRICT  
U.S. Army Corps of Engineers

Enclosures



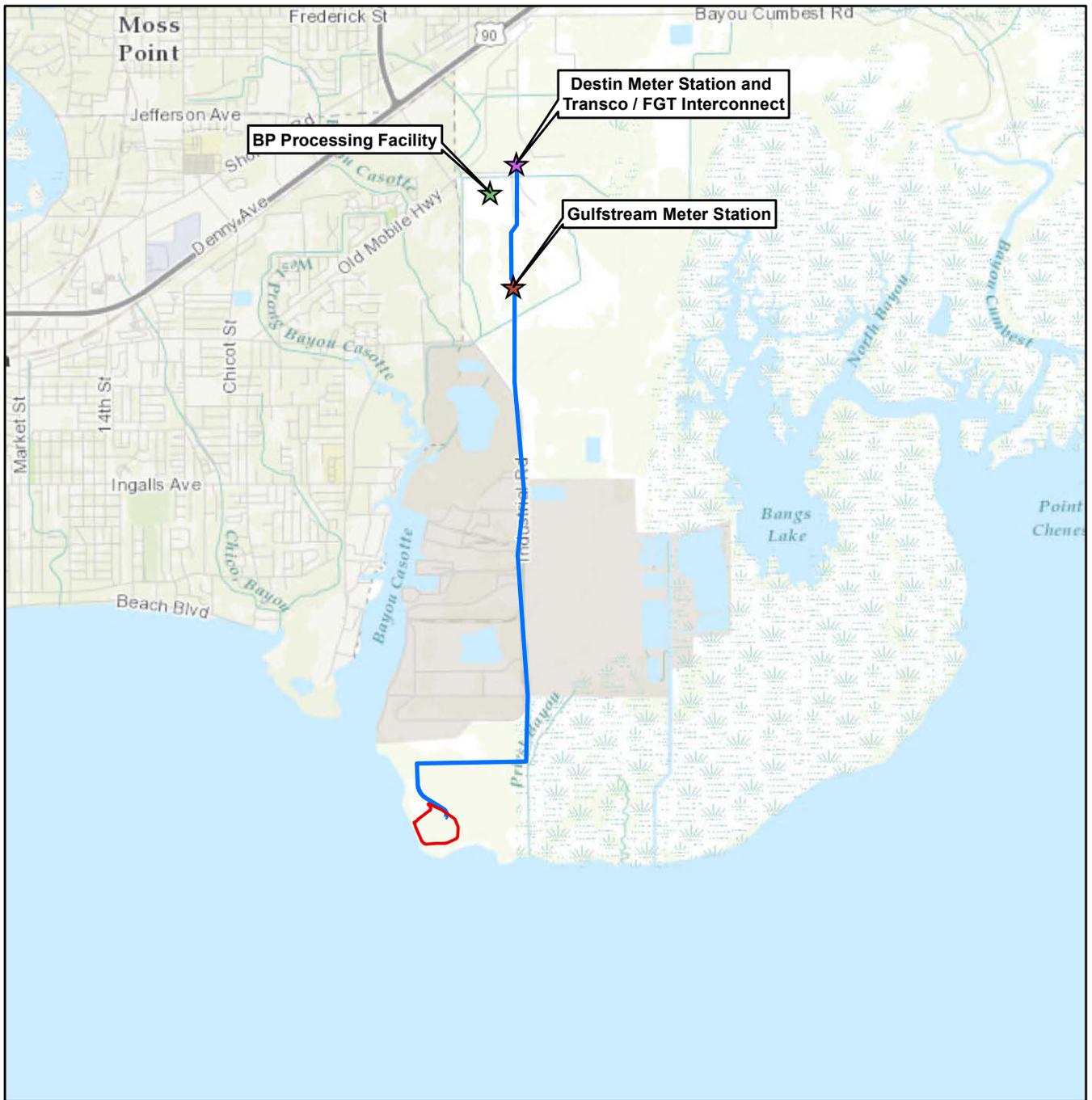
**Legend**

★ Project Location



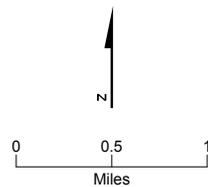
**Figure 1**  
**Project Location**  
 Gulf LNG Liquefaction Project  
 Gulf LNG Liquefaction Company, LLC  
 Jackson County, Mississippi

Notes:  
 1. Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, IPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013  
 2. Sources: Esri, TomTom, Department of Commerce, Census Bureau, U.S. Department of



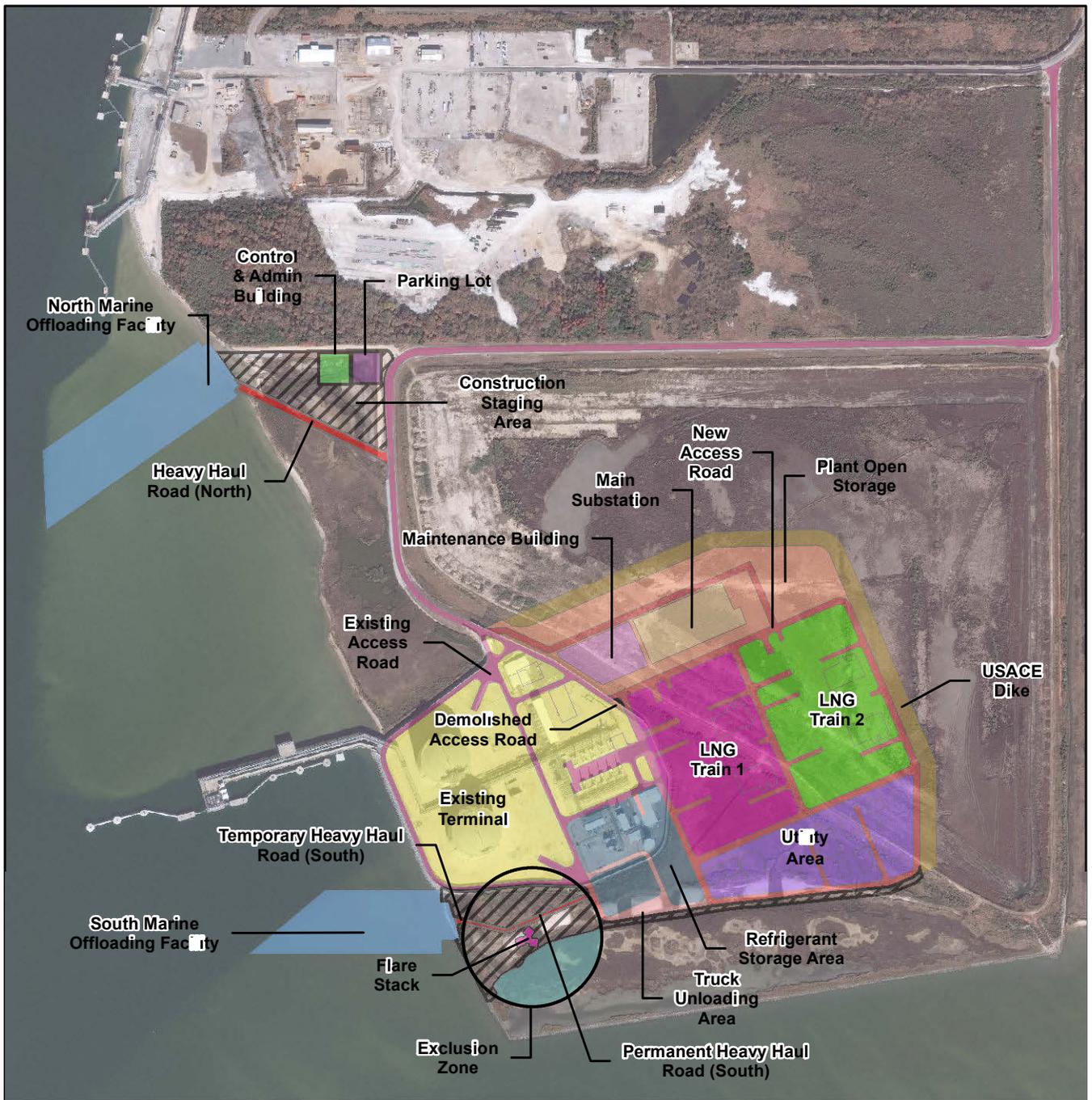
**Legend**

- ★ BP Processing Facility
- ★ Destin Meter Station and Transco / FGT Interconnect
- ★ Gulfstream Meter Station
- Existing Gulf LNG Pipeline
- Existing Gulf LNG Terminal Footprint



**Figure 2**  
**Project Overview Map - Existing Infrastructure**  
 Gulf LNG Liquefaction Project  
 Gulf LNG Liquefaction Company, LLC  
 Jackson County, Mississippi

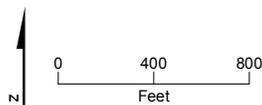
Notes:  
 1. Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, IPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013  
 2. Sources: Esri, TomTom, Department of Commerce, Census Bureau, U.S. Department of



**Legend**

- |                           |                            |
|---------------------------|----------------------------|
| Construction Staging Area | Maintenance Building       |
| Control & Admin Building  | Marine Offloading Facility |
| Demolished Access Road    | Meter Station              |
| Exclusion Zone            | New Access Road            |
| Existing Access Road      | Parking Lot                |
| Existing Terminal         | Plant Open Storage         |
| Flare Stack               | Refrigerant Storage Area   |
| Heavy Haul Road           | Truck Unloading Area       |
| LNG Train 1               | USACE Dike                 |
| LNG Train 2               | Utility Area               |
| Main Substation           |                            |

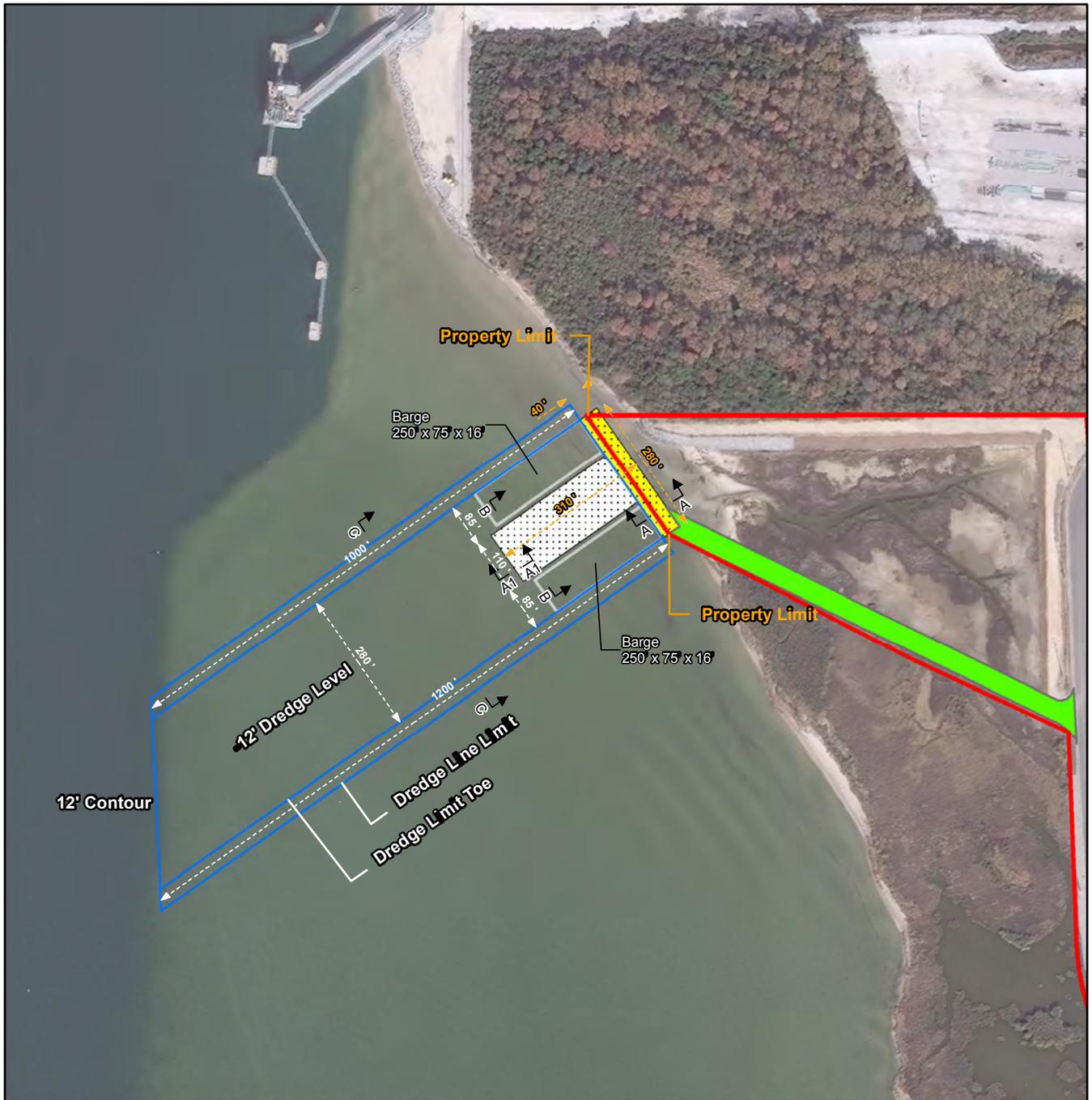
Notes:  
 1. Sources: Digital Globe Satellite Imagery; 11/29/2014.



PROJECT LOCATION

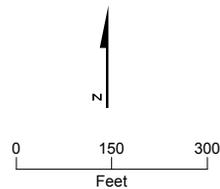


**Figure 3**  
**Project Facilities**  
 Gulf LNG Liquefaction Project  
 Gulf LNG Liquefaction Company, LLC  
 Jackson County, Mississippi



**Legend**

- Proposed Project Boundary
- North Heavy Haul Road
- Proposed Area of New Fill/Construction for Dock
- Proposed Area of New Fill/Construction for Bulkhead



PROJECT LOCATION

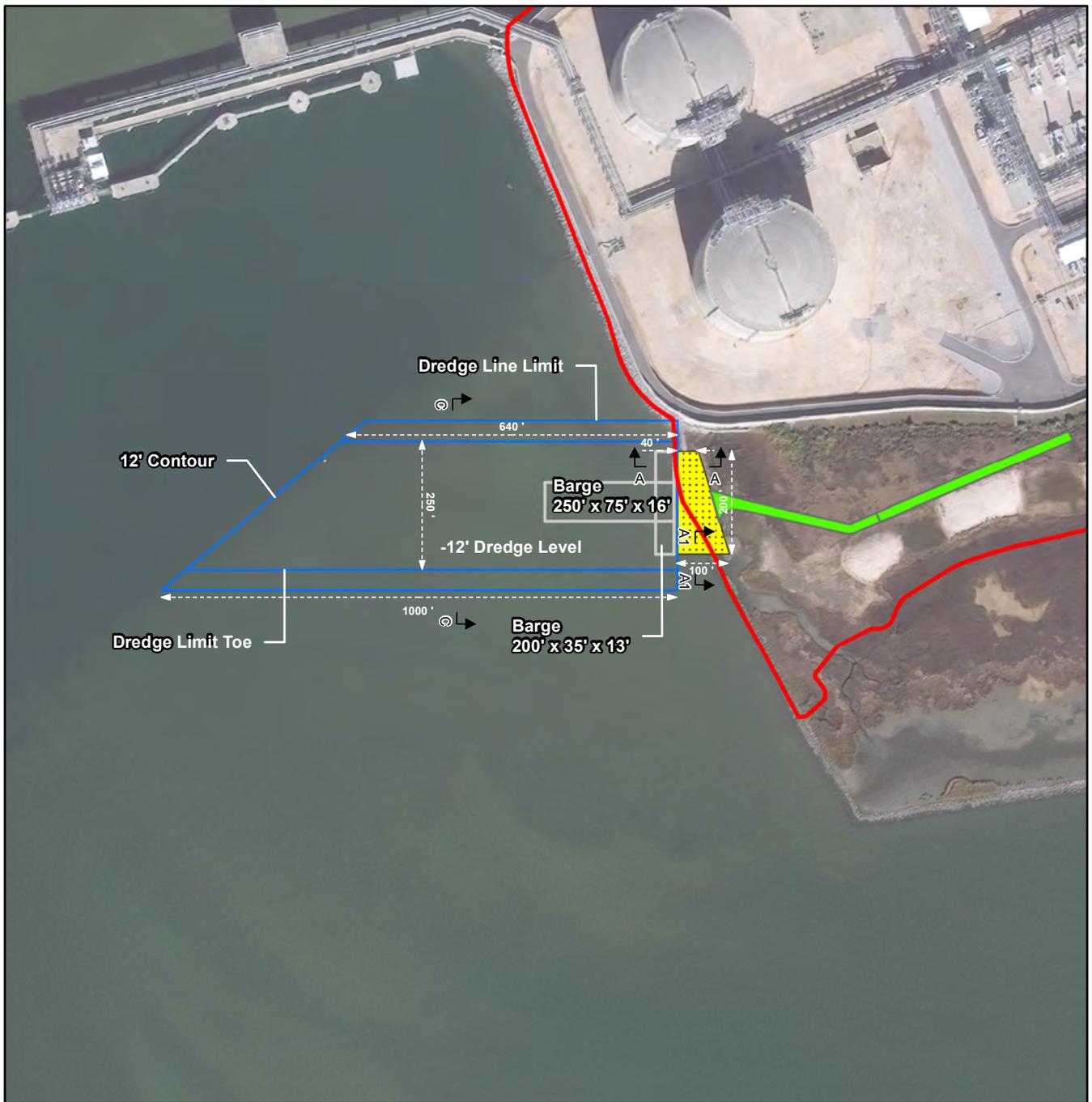


**Notes:**

1. Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013
2. Sources: Digital Globe Satellite Imagery; 11/29/2014.
3. Design details provided by KBR drawing CV-AAA-G10-001.

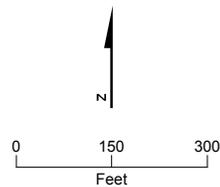
**Figure 4**  
**North MOF**

Gulf LNG Liquefaction Project  
Gulf LNG Liquefaction Company, LLC  
Jackson County, Mississippi



**Legend**

- Proposed Project Boundary
- South Heavy Haul Road
- Proposed Area of New Fill/Construction for Bulkhead



PROJECT LOCATION



**Notes:**

1. Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013
2. Sources: Digital Globe Satellite Imagery; 11/29/2014.
3. Design details provided by KBR drawing CV-AAA-G10-002.

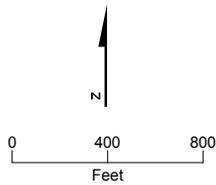
**Figure 5**  
**South MOF**

Gulf LNG Liquefaction Project  
Gulf LNG Liquefaction Company, LLC  
Jackson County, Mississippi



**Legend**

- Site Boundary
- North Marsh Mitigation Area
- South Marsh Mitigation Area

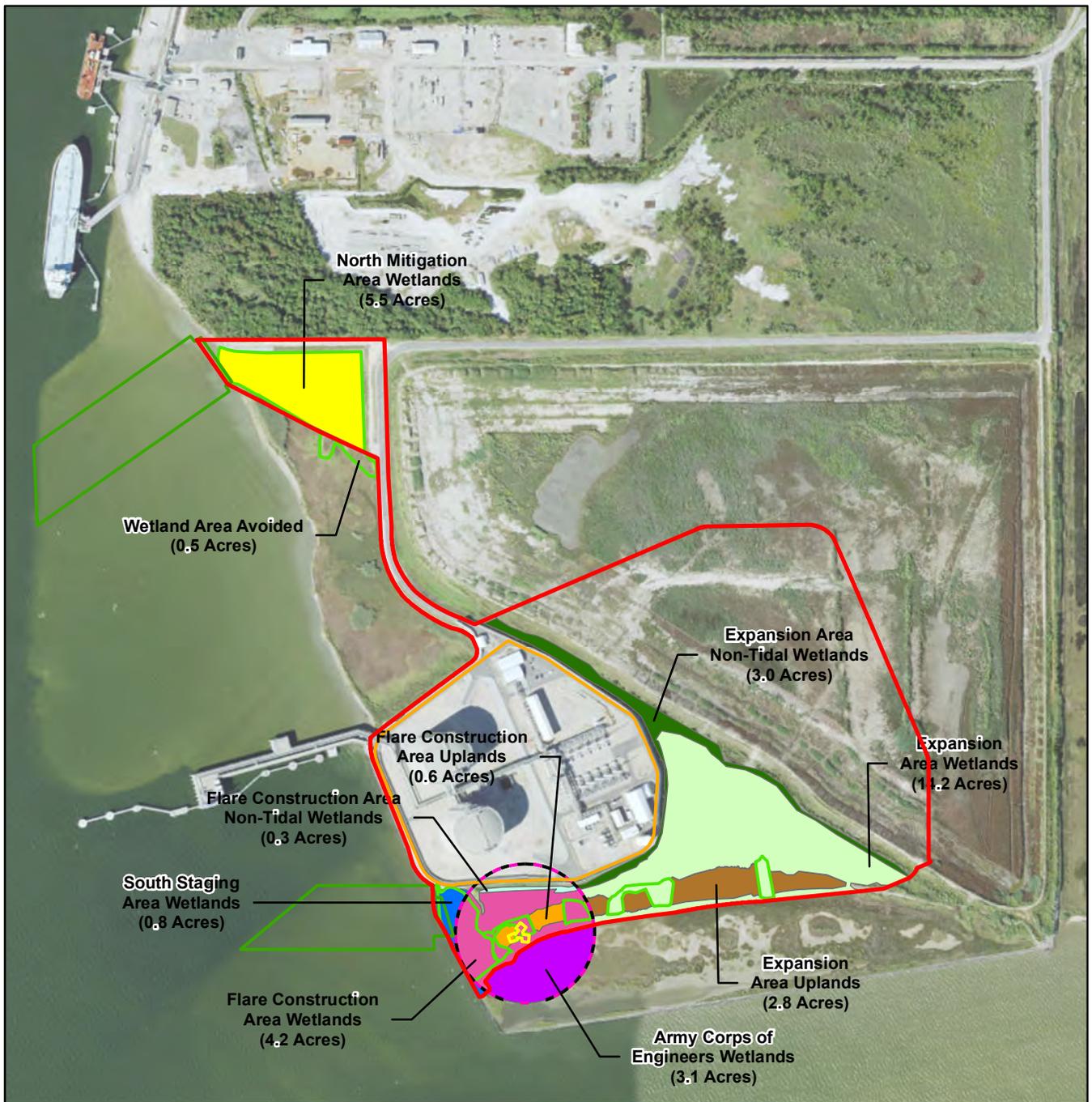


- Notes:
1. Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013
  2. Sources: Digital Globe Satellite Imagery; 11/29/2014.

PROJECT LOCATION



**Figure 7**  
**Gulf LNG Existing Mitigation Areas**  
 Gulf LNG Liquefaction Project  
 Gulf LNG Liquefaction Company, LLC  
 Jackson County, Mississippi



PROJECT LOCATION

### Legend

- |  |                                       |
|--|---------------------------------------|
| Army Corps of Engineers Wetlands           | Existing Mitigation Areas (9.5 Acres) |
| Expansion Area Non-Tidal Wetlands          | Existing Terminal Facilities          |
| Expansion Area Wetlands                    | Exclusion Zone                        |
| Expansion Area Uplands                     | Flare Systems                         |
| Flare Construction Area Non-Tidal Wetlands | Marine Offloading Facility            |
| Flare Construction Area Uplands            | Proposed Project Boundary             |
| Flare Construction Area Wetlands           |                                       |
| North Mitigation Area Wetlands             |                                       |
| South Staging Area Wetlands                |                                       |

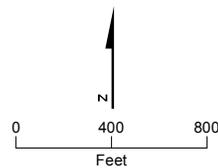


**Figure 8**  
**Project Site and Wetland Impacts**

Gulf LNG Liquefaction Project  
Gulf LNG Liquefaction Company, LLC  
Jackson County, Mississippi

Notes:

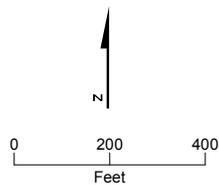
- Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, IPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013
- Sources: ESRI Aerial Online Service; April 12, 2010.





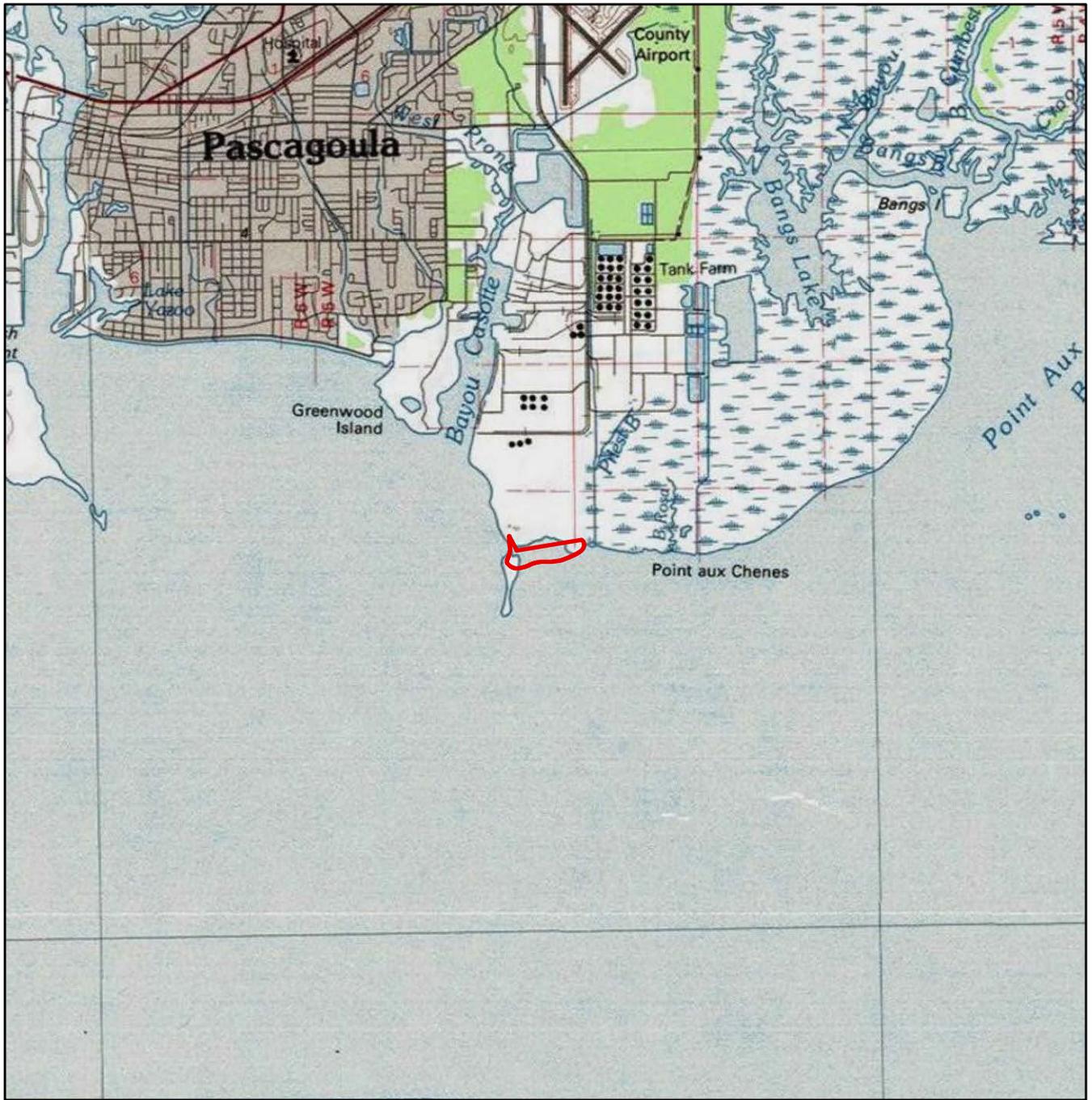
**Legend**

-  Wetlands
-  Site Boundary



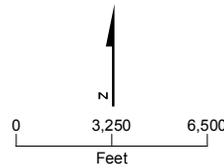
**Figure 9**  
**CSA 5 – Chevron Property**  
**Wetland Survey**  
 Gulf LNG Liquefaction Project  
 Gulf LNG Liquefaction Company, LLC  
 Jackson County, Mississippi

Notes:  
 1. Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, IPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013  
 2. [http://services.arcgisonline.com/arcgis/rest/services/World\\_Imagery](http://services.arcgisonline.com/arcgis/rest/services/World_Imagery)



**Legend**

 Proposed Mitigation Site Boundary



Notes:  
 1. Sources: ESRI USGS Online Service; Pascagoula North, 1983.

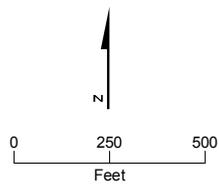
**Figure 19, Proposed Mitigation Site USGS Quadrangle**

Gulf LNG Liquefaction Project: Mitigation Plan  
 Gulf LNG Liquefaction Company, LLC  
 Jackson County, Mississippi



**Legend**

- Potential Mitigation Site
- Potential Tidal Marsh Restoration
- Rip Rap Shoreline Protection



**Notes:**

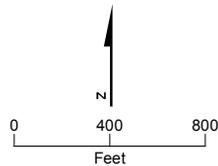
1. Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013
2. Sources: ESRI Aerial Online Service; April 12, 2010.
3. <http://mapping.co.jackson.ms.us/jacksoncountyflexwebmap/>

**Figure 5**  
**Proposed Mitigation**  
**Gulf LNG Terminal (South) Site**  
 Gulf LNG Liquefaction Project  
 Gulf LNG Liquefaction Company, LLC  
 Jackson County, Mississippi



**Legend**

- Proposed Monitoring Well/Tidal Gauge Locations and Vegetation Plots
- Proposed Water Chemistry and Biotic Monitoring Locations
- Proposed Grade Control Monitoring Location
- Rip Rap Shoreline Protection
- Potential Tidal Marsh Restoration
- Proposed Mitigation Site Boundary



Notes:  
 1. Sources: Digital Globe Satellite Imagery; 11/29/2014.

PROJECT LOCATION



**Figure 21, Proposed Mitigation Site Monitoring Locations**

Gulf LNG Liquefaction Project: Mitigation Plan  
 Gulf LNG Liquefaction Company, LLC  
 Jackson County, Mississippi