

Alternatives Analysis

Based on the project purpose and need, GTP identified the Golden Triangle area (Port Arthur / Beaumont / Orange), as the primary focus area for the alternatives review. GTP identified this region because it is centrally located along the Texas and Louisiana Gulf Coast and provides direct access to the Texas/Louisiana markets by way of the Gulf Intracoastal Waterway. Further, the expansion of the existing industrial base in Port Arthur created an immediate need for rail and terminal services in the Golden Triangle area.

The criteria below were used to identify potential project sites in the Golden Triangle area.

- Access to Main Line Rail Service - The project area must be located in close proximity to main line rail service for efficient receipt of crude via rail tankcars.
- Access to Navigable Water - The project area must be located in close proximity to navigable water for efficient shipment to locations along Gulf Coast via barge.
- Zoning - The project area must be located in an area considered acceptable for industrial use.
- Availability on the Market – The project area must be available for purchase.

Using the above criteria, GTP conducted a search of available properties from 2006 – 2009. During the property search, three potential project sites were identified as alternatives; the Port Arthur Business Park, the Port of Port Arthur, and the GTO property. In compliance with Section 404(b)(1) Guidelines, the three project alternatives were reviewed to determine the least environmentally damaging practicable alternative. Infrastructure and location, i.e. logistical considerations, were considered paramount in determining practicability. See alternative analysis site maps.

No Action Alternative

The no action alternative involves after-the-fact permit denial. Under this scenario, the railroad system and supporting infrastructure would be removed and the wetland habitat restored. This alternative does not fulfill the intended project purpose and need.

Offsite Alternative 1

Offsite Alternative 1 (ALT #1) is an approximate 45-acre undeveloped parcel located at the City of Port Arthur Business Park on West Port Arthur Road (Texas State Highway 93 - Spur) in Port Arthur, Texas. At the time of site selection, ALT #1 was available for purchase and zoned by the City of Port Arthur for industrial use.

Access to main line rail service for ALT #1 is immediately east of the property, adjacent to West Port Arthur Road. Despite the close proximity of the rail line, which is serviced by UPRR, construction of a rail connection would require crossing of heavily traveled, four-lane highway. UPRR was unwilling to consider construction of such a connection

due to safety concerns. Lack of connecting rail infrastructure for ALT #1 makes project construction at the site impractical.

ALT #1 is not located directly next to a navigable waterway accessible to barge traffic; it is however, in close proximity to potential barge terminal locations along both Taylor Bayou (approximately 5 miles) and the Gulf Intracoastal Waterway (GIWW) (approximately 7 miles). Despite the close proximity, utilization of a barge terminal not directly adjacent to the property is not logistically efficient as this would create the need for two offloading and loading locations (barge-truck and truck-rail) rather than just one (barge-rail). Additional offloading and loading points creates added potential for transloading incidents and creates additional costs associated with the overall transport. Because the property does not have direct access to navigable water, locating the project at the ALT #1 property is not practicable.

A review of the National Wetlands Inventory (NWI) map indicates the presence of herbaceous wetlands (41.3 acres) within the ALT #1 site. Given the relative size of the mapped wetland areas in comparison to the overall size of the site, it is likely ALT #1 wetlands would be impacted if a successful project could be constructed. However, as detailed above, construction of the project at this location is not practicable.

2.3 Offsite Alternative 2

Offsite Alternative 2 (ALT #2) is an approximate 50-acre undeveloped parcel located along the GIWW at the Port of Port Arthur in Port Arthur, Texas. At the time of site selection, ALT #2 was available for purchase and zoned by the City of Port Arthur for industrial use.

Direct access to main line rail service, provided by Kansas City Southern Railroad, is available for ALT #2. The access to main line rail service would allow unit trains to arrive directly at the site for rail-barge transloading activities. However, due to the size and shape of the available parcel, there is not adequate space to construct additional rail trackage. The trackage is needed to provide rail tankcar storage and space for switching activities essential to operating efficient transloading services that meet the project make the project impracticable at this site.

ALT #2 is located directly on the GIWW, an ideal location for the required marine access necessary for a successful project. However, due to the configuration of the property and the available waterway frontage, the Port of Port Arthur could offer only two barge docks at this location. A two-barge minimum would restrict the volume of crude that could be moved such that project goals would not be met. If adjacent parcels of land could be utilized for additional barge space, the project would be sustainable at this location. However, the surrounding areas are heavily developed and expansion of the ALT #2 site and therefore development of ALT #2 is not practicable.

A review of the NWI map for ALT #2 indicates the presence of herbaceous wetlands (14.9 acres), scrub/shrub wetlands (0.5 acres) and forested wetlands (5.0 acres). Given

the relative size of the mapped wetland areas in comparison to the overall size of the site, it is likely ALT #2 wetlands would be impacted if a successful project could be constructed. However, as detailed above, construction of the project at this location is not practicable.

Onsite Alternative 1 (Preferred Alternative)

Onsite Alternative 1, the preferred alternative (P-ALT), is an approximate 250-acre parcel located within GTO near Port Arthur, Texas. The parcel is a former chemical plant with historic remnants of the industrial development located on more than half of the property. At the time of site selection, P-ALT was available for purchase as a part of a larger property sale. The site is located just outside of the City of Port Arthur in an area acknowledged by the city for industrial use.

P-ALT has access to main line rail service via an abandoned rail spur connecting to an adjacent UPRR main line. Redevelopment of the infrastructure provides a direct connection between the site and UPRR service. Utilization of the undeveloped property allows adequate room for construction of additional trackage required for efficient rail tankcar storage and switching activities. No other alternative has direct connectivity to, or minimum available space for, the required railroad infrastructure.

P-ALT is located directly on Taylor Bayou, a traditional navigable water, with direct connection to the GIWW. The site provides the space to accommodate up to four barges for transloading activities. While four-barge terminal is sufficient to meet the current and projected needs, there is also available space to accommodate up to nine barges should project needs increase in the future. No other alternative is located such that direct connectivity to adequate barge docks is provided.

Finally, impacts to undeveloped wetlands are significantly minimized at the P-ALT site by utilizing the footprint of previously developed areas for construction of the project. Though ALT #1 and ALT #2 are significantly smaller in size than P-ALT, they lack the required infrastructure and location requirements necessary for a successful project. P-ALT is the only available property in the Golden Triangle area that could be developed to satisfy the project goals in a practicable manner. P-ALT is the least environmentally damaging practicable alternative.



ALT. SITE 1
CITY OF PORT ARTHUR BUSINESS PARK
APPROXIMATELY 45 AC.





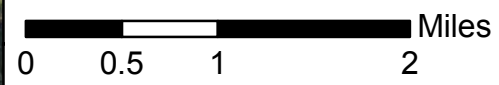
PROJECT SITE
GT OMNIPOINT RAILROAD SYSTEM EXPANSION
691.7 AC.



ALT. SITE 2
PORT OF PORT ARTHUR
APPROXIMATELY 50 AC.



 PROJECT BOUNDARY
 ALTERNATE SITES



NOTE: THIS MAP WAS PREPARED FOR TOPOGRAPHIC PURPOSES ONLY AND IS NOT A PROPERTY BOUNDARY SURVEY AND AS SUCH DOES NOT COMPLY WITH THE MOST RECENT "STANDARDS OF PRACTICE FOR PROPERTY BOUNDARY SURVEYS" AS ADOPTED BY THE LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD.

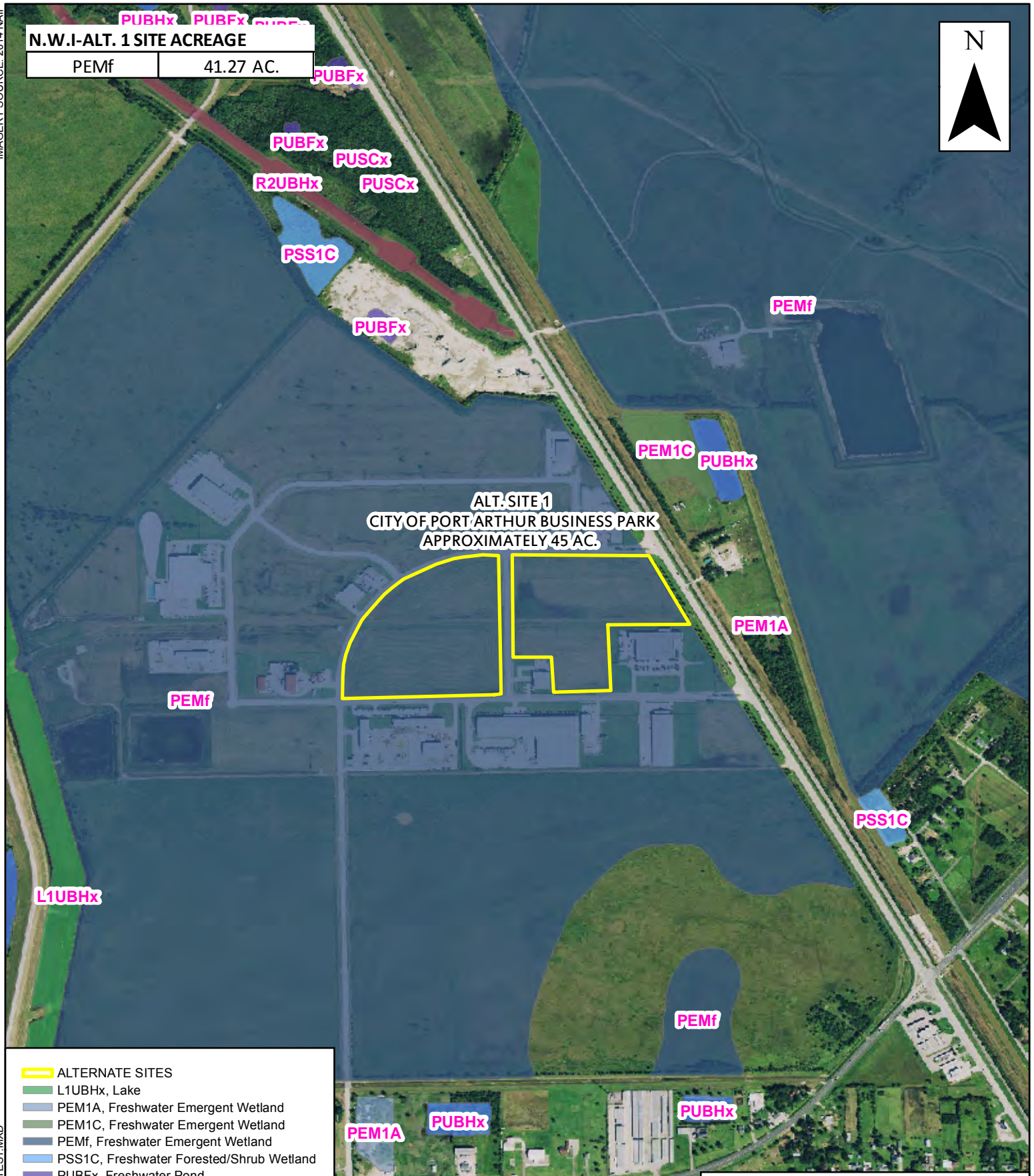


GOLDEN TRIANGLE PROPERTIES, LLC
OVERVIEW MAP OF PROJECT AND ALTERNATE SITES
GT OMNIPOINT RAILROAD SYSTEM EXPANSION PROJECT
JEFFERSON COUNTY, TEXAS

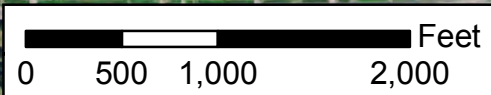
DRAWN BY: JNIII	SHEET: 1
CHECKED BY: WCC	SCALE: AS SHOWN
APPROVED BY: MT	DATE: 3/29/2016
REVISION BY:	JOB NO.: 12339-00
GIS FILE: ALTERNATE_SITES_OV.MXD	

IMAGERY SOURCE: 2014 NAIP

N.W.I-ALT. 1 SITE ACREAGE	
PEMf	41.27 AC.



- ALTERNATE SITES
- L1UBHx, Lake
- PEM1A, Freshwater Emergent Wetland
- PEM1C, Freshwater Emergent Wetland
- PEMf, Freshwater Emergent Wetland
- PSS1C, Freshwater Forested/Shrub Wetland
- PUBFcx, Freshwater Pond
- PUBHcx, Freshwater Pond
- PUSCcx, Other
- R2UBHcx, Riverine



NOTE: THIS MAP WAS PREPARED FOR TOPOGRAPHIC PURPOSES ONLY AND IS NOT A PROPERTY BOUNDARY SURVEY AND AS SUCH DOES NOT COMPLY WITH THE MOST RECENT "STANDARDS OF PRACTICE FOR PROPERTY BOUNDARY SURVEYS" AS ADOPTED BY THE LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD.

G:\1233900\MAPS\ALTERNATE_SITES1.MXD

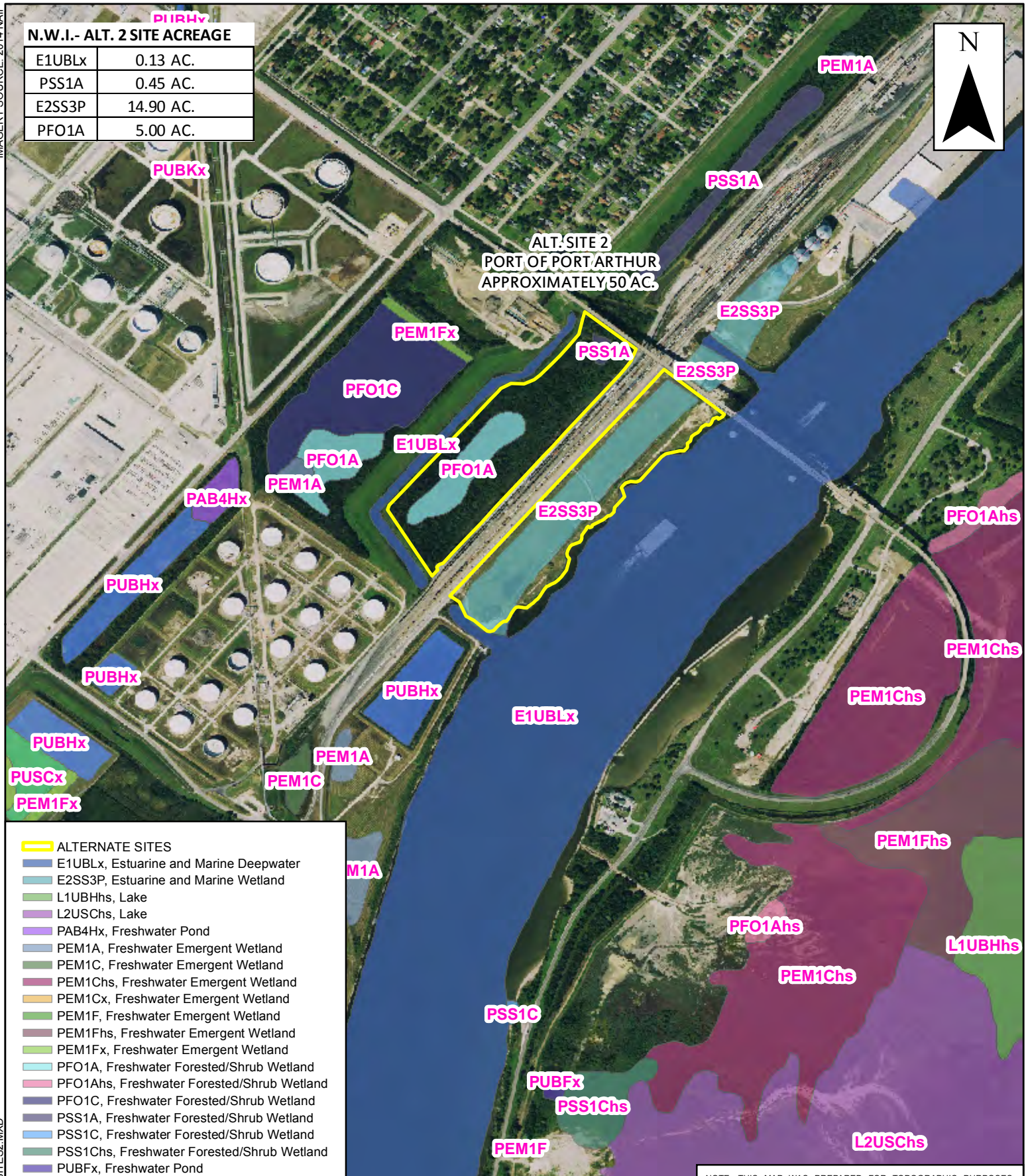


GOLDEN TRIANGLE PROPERTIES, LLC
 ALTERNATE SITE 1-CITY OF PORT ARTHUR BUSINESS PARK
 NWI MAP
 GT OMNIPOINT RAILROAD SYSTEM EXPANSION PROJECT
 JEFFERSON COUNTY, TEXAS

DRAWN BY: JNIII	SHEET: 2
CHECKED BY: WCC	SCALE: AS SHOWN
APPROVED BY: MT	DATE: 3/29/2016
REVISION BY:	JOB NO.: 12339-00
GIS FILE: ALTERNATE_SITES1.MXD	

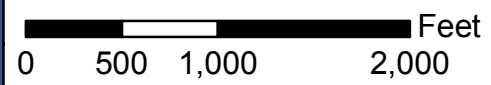
PIIRHy
N.W.I.- ALT. 2 SITE ACREAGE

E1UBLx	0.13 AC.
PSS1A	0.45 AC.
E2SS3P	14.90 AC.
PFO1A	5.00 AC.



- ▬ ALTERNATE SITES
- ▬ E1UBLx, Estuarine and Marine Deepwater
- ▬ E2SS3P, Estuarine and Marine Wetland
- ▬ L1UBHhs, Lake
- ▬ L2USChs, Lake
- ▬ PAB4Hx, Freshwater Pond
- ▬ PEM1A, Freshwater Emergent Wetland
- ▬ PEM1C, Freshwater Emergent Wetland
- ▬ PEM1Chs, Freshwater Emergent Wetland
- ▬ PEM1Cx, Freshwater Emergent Wetland
- ▬ PEM1F, Freshwater Emergent Wetland
- ▬ PEM1Fhs, Freshwater Emergent Wetland
- ▬ PEM1Fx, Freshwater Emergent Wetland
- ▬ PFO1A, Freshwater Forested/Shrub Wetland
- ▬ PFO1Ahs, Freshwater Forested/Shrub Wetland
- ▬ PFO1C, Freshwater Forested/Shrub Wetland
- ▬ PSS1A, Freshwater Forested/Shrub Wetland
- ▬ PSS1C, Freshwater Forested/Shrub Wetland
- ▬ PSS1Chs, Freshwater Forested/Shrub Wetland
- ▬ PUBFx, Freshwater Pond
- ▬ PUBHx, Freshwater Pond
- ▬ PUBKx, Freshwater Pond
- ▬ PUSCcx, Other

NOTE: THIS MAP WAS PREPARED FOR TOPOGRAPHIC PURPOSES ONLY AND IS NOT A PROPERTY BOUNDARY SURVEY AND AS SUCH DOES NOT COMPLY WITH THE MOST RECENT "STANDARDS OF PRACTICE FOR PROPERTY BOUNDARY SURVEYS" AS ADOPTED BY THE LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD.



GOLDEN TRIANGLE PROPERTIES, LLC
 ALTERNATE SITE 2-PORT OF PORT ARTHUR
 NWI MAP
 GT OMNIPORT RAILROAD SYSTEM EXPANSION PROJECT
 JEFFERSON COUNTY, TEXAS

DRAWN BY: JNIII	SHEET: 3
CHECKED BY: WCC	SCALE: AS SHOWN
APPROVED BY: MT	DATE: 3/29/2016
REVISION BY:	JOB NO.: 12339-00
GIS FILE: ALTERNATE_SITES2.MXD	