



**FREEPORT REACH CHANNEL  
IMPROVEMENT PROJECT**

**MARINE GEOTECHNICAL SITE  
INVESTIGATION**

**MARINE COMMUNICATION PLAN & PROCEDURES  
FOR POSITIONING THE LIFT BOAT**

**August 30, 2019**

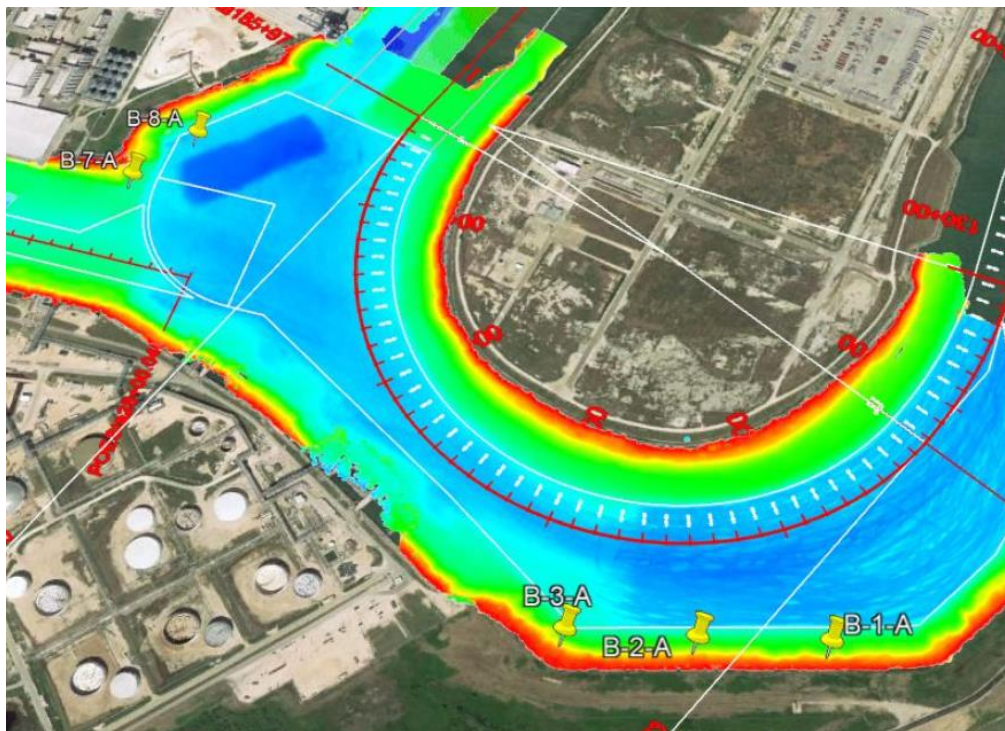
**1 INTRODUCTION**

This document details the communication process between the Lift Boat drilling vessel and support vessel involved in the delivery of the marine geotechnical ground investigation, and the marine authorities.

The planned marine field operations are for our Client HDR in coordination with the Port of Freeport and USACE. The boring program is to collect geotechnical data for the design and construction of the channel widening project. The current boring program, is as follows:

- Bend Easing Area: Three (3) nearshore geotechnical soil borings will be drilled to a depth of 100 feet each below existing mudline. (See image below)
- Turning Notch Area: Two (2) nearshore geotechnical soil borings will be drilled to a depth of 30 feet each below existing mudline. (See image below)

The drilling works will be conducted from the lift boat Gary Chiasson supported by the crew vessel. Drilling and sampling will be undertaken on a 24-hour operational basis with 2 x 12-hour shifts. All project personnel involved with the works will live in the onboard accommodations.



1.1 VESSELS

*Primary Vessel:*



***Lift Boat Gary Chiasson***

The marine Entrance Channel field operations will be conducted from the lift boat L/B Gary Chiasson, a Class 150 Lift Boat contracted through EBI Lift Boats. The L/B Gary Chiasson is a Three-legged self-elevating platform with twin 3406B Caterpillar diesel engines, 2 100kw generators, length 79ft, beam 45ft and draft of 6ft with three 150ft legs with hydraulic rack and pinion lifting mechanism. The L/B has two cranes 50-ton main crane with a 80ft boom and 25-ton auxiliary crane with a telescoping with 56ft to 100ft of boom. Facilities aboard the L/B Gary Chiasson consist of 2214 sqft. work deck, galley mess room, birthing for 26 including plus 6 crew bunking. The onboard tankage will accommodate for 6000 gallons of fuel and 6000 gallons of potable water. The maximum working depth is 120ft with a 10ft air gap.



**M/V Gladys D Supply / Crew Boat**

The M/V Gladys D is owned and operated by Freeport Launch Service Inc. and will be the support / crew vessel to support the Gary Chiasson. The vessel will be birthed at the Freeport Launch Service Dock and have a one hours response for call out if required. The Gladys D has a 90' overall length and 21' beam and 4.5' light draft. It is a Coast Guard inspected vessel certified to carry up to 18 passengers with a clear deck of 53 by 19' to accommodate personnel transfer with a personnel basket. The vessel is fitted with three GM 12V71 engines capable of a maximum cruising speed of 18 knots.

***All vessels to keep a radio listening watch on VHF Ch16 and Ch14.***

**2 MOVING AND POSITIONING OF THE LIFT BOAT (L/B)**

The L/B is self-propelled and will be equipped with an onboard FUGRO OARS® positioning system (Office Assisted Remote System) to enable positioning through Starfix high precision dual frequency GPS at the borehole locations with Fugro's Positioning Service.

The L/B will position at the individual boring locations independently and without the assistance of third-party vessels.

The regularity of lift boat moves will depend on boring performance with some borings requiring additional time to drill due to increased depth or geology. Shallower borings will take approximately 12 hours to complete with one to two moves in a 24-hour period. The deeper borings will take up to 24 hours to complete so the lift boat will move approximately once in a 24-hour period.

The key to safe marine operations will be the timely and concise communication between the Lift Boat / Fugro work site and the relevant authorities. The following communication procedure has been constructed to ensure this:

Daily:

07:00-08:00hrs – The Fugro Project Manager or the Captain of the Geophysical Vessel or L/B will contact the Brazos Pilot Association (BPA) on the below 24/7 number and discuss plans for the forthcoming 24 hours. Borehole completion schedules and the forthcoming borehole location moves will be communicated to BPA so that they are aware of the following 24 hours of operations.

Note – Also, we realize schedules may change overnight (weather, unforeseen schedule changes, channel incidents, etc.) so prior to the lift boats final move out to these locations, the Captain or Site Manger will ensure a second confirmation call is undertaken with the BPA's office to ensure the window of access has not changed, see Moving / Positioning below.

***Moving / Positioning at a Boring Location:***

Prior to moving the lift boat from one boring location (completed) to a new boring location the Fugro Site Manager or the Captain of the L/B will contact BPA on the below number and inform them of the impending lift boat move. This call will be undertaken 1 hour prior to the actual move of the lift boat. The Fugro Site Manager or the Captain will request an update on channel traffic to ensure no conflict and will request permission to move the lift boat.

Once the L/B is positioned at the new boring location the Fugro Project Manager or the Captain of the will contact BPA to inform them that the L/B is on location (stating boring number) and ready to commence drilling operations. An approximate time for the completion of the boring will also be supplied however, this time estimate is subject to change depending on the actual drilling progress and may require an update.



<b>Contact List and Phone numbers</b>				
<b>OFFSHORE / SITE OPERATIONS</b>				
<b>Title</b>	<b>Name</b>	<b>Direct (Office)</b>	<b>Mobile</b>	<b>Email</b>
Lift Boat	Gary Chiasson		504-493-6038	N/A
Fugro Site Manager (On the L/B)	Jeff Borden	409-351-3312	409-679-3340	jborden@fugro.com
Drilling Supervisor (Onboard)	Don Edwards	N/A	832-331-0051	N/A
Fugro Project HSE Advisor	Jason Kervin	713-369-5419	281-216-2181	j.kervin@fugro.com
Freeport Launch Service	John Hoss	979-233-8044	979-236-4635	John.hoss@freeportlaunch.com
Brazos Pilot Association	Operations	979-233-1120	N/A	office@brazospilots.com
USCG Galveston Sector	Petty Officer John Thompson	281464-4848		John.p.thompson@uscg.mil
<b>ONSHORE</b>				
Freeport Port Authority	Jason Hull	979-233-2667 (ext 4322)		hull@portfreeport.com
HDR Inc.	Scott Marr	713-576-3565	832-372-9961	Scott.marr@hdrinc.com
HDR Inc.	Jason Foltyn	713-576-3570	832-210-4238	Jason.foltyn@hdrinc.com
HDR Inc.	Bryce Burkett	734-332-6322	225-241-2944	Bryce.burkett@hdrinc.com
Fugro Project Manager (Houston)	Bob Mosher	360-592-1178	281-658-9841	bmosher@fugro.com
Fugro Exploration Service Line Director, Americas	Steve Williams	713-346-4047	832-322-2944	sv.williams@fugro.com
Fugro Nearshore Service Line Manager	Leo Chagas	713-369-5649	832-792-4645	leonardo.chagas@fugro.com
Fugro Marine Survey Line Manager Coastal and Water Resource	Paul Laverty	337-268-3133	713-562-6555	p.laverty@fugro.com
Elevating Boats Inc. Marine Manager	Tony Sevin	985-580-7942	985-688-8934	tsevin@ebi-inc.com
Fugro QHSSE Supervisor	Jim Daigle	713-369-5509	281-682-7057	Jdaigle@fugro.com
Fugro HSE Manager Americas	Gerard Plauche	337-268-3395	337-247-8024	gplauche@fugro.com