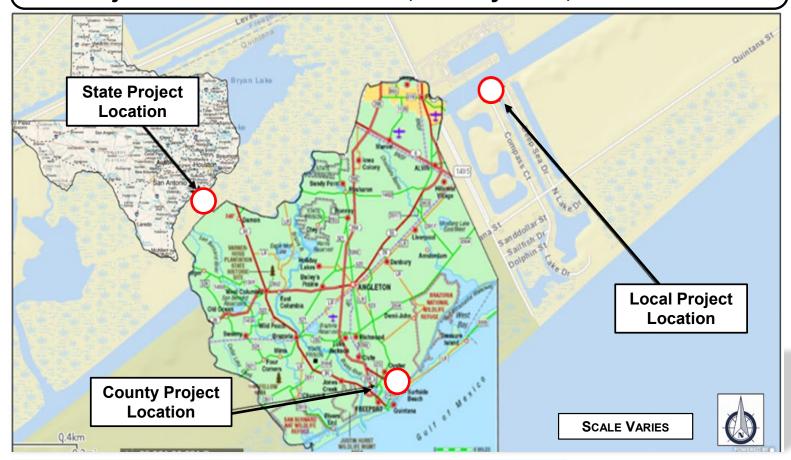
### **ILLUSTRATION #1**

**Project Location – State View, County View, Local View** 





APPLICANT:

BRAZOS PILOTS ASSOCIATION
2502 Deep Sea Drive, Freeport, TX 77542

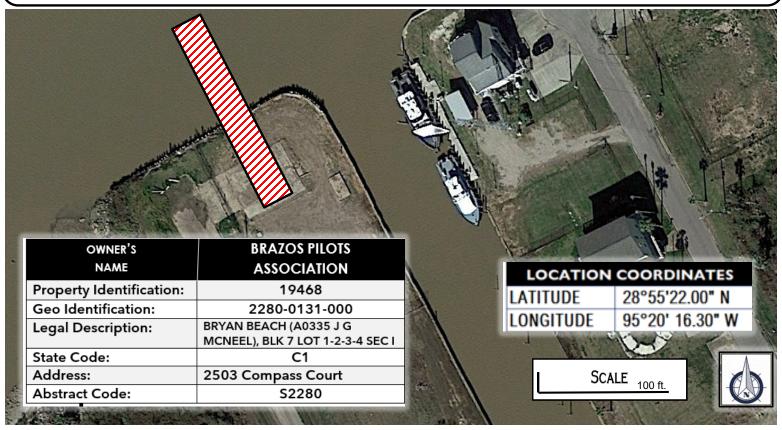
PROJECT NAME:
Permit Application New Boat Slip

SURVEY EQUIPMENT:
Odom© Echotrac II Echosounder
AtlasLink© GNSS Smart Antenna
Hypack© 2022 Survey Software
Lowrance© HD Live Sonar



### **ILLUSTRATION#7**

### On-Site Alternative #I - New East Dock With Maintenance Slip





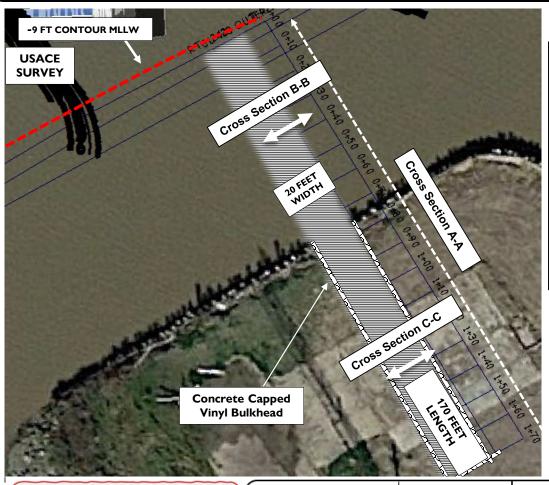
APPLICANT:
BRAZOS PILOTS ASSOCIATION
2502 Deep Sea Drive, Freeport, TX 77542

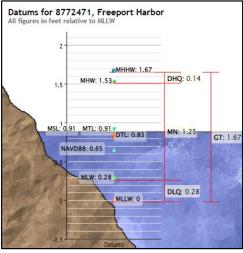
PROJECT NAME: Permit Application -New Boat Slip SURVEY EQUIPMENT:
Odom© Echotrac II Echosounder
AtlasLink© GNSS Smart Antenna
Hypack© 2022 Survey Software
Lowrance© HD Live Sonar



### **ILLUSTRATION #19**

### **Preferred Alternative- Project Dimensions**





NOTE: All vertical data is North American Vertical Datum of 1988 (NAVD88). Station No. 8772471.

SCALE

50 ft.

IMAGE INFORMATION	
DATE:	Jan-22
SOURCE:	Google Earth





APPLICANT:
BRAZOS PILOTS ASSOCIATION
2502 Deep Sea Drive, Freeport, TX 77542

PROJECT NAME: Permit Application -New Boat Slip SURVEY EQUIPMENT:
Odom® Echotrac II Echosounder
AtlasLink® GNSS Smart Antenna
Hypack® 2022 Survey Software
Lowrance® HD Live Sonar

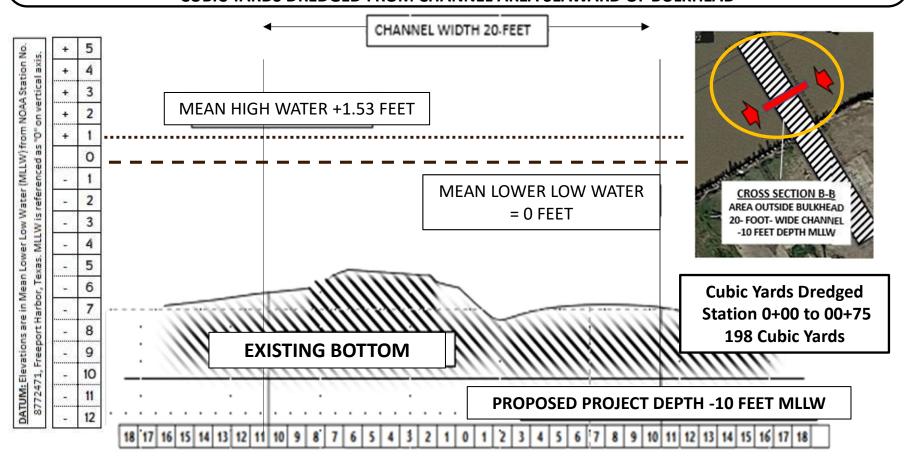






# **SUPPLEMENTARY ILLUSTRATION #26**

REPLACES ILLUSTRATION #21 — CROSS SECTION B-B
CUBIC YARDS DREDGED FROM CHANNEL AREA SEAWARD OF BULKHEAD





PREPARED FOR:
BRAZOS PILOTS ASSOCIATION
2502 Deep Sea Drive
Freeport, TX 77542

JOB NAME:
PERMITTING NEW MAINTENANCE SLIP
Compass Court, Quintana Island, TX

Capt. Billy Burns, Capt. Dan Blanton

PFRMIT # SWG-2003-00516

#### SURVEY EQUIPMENT:

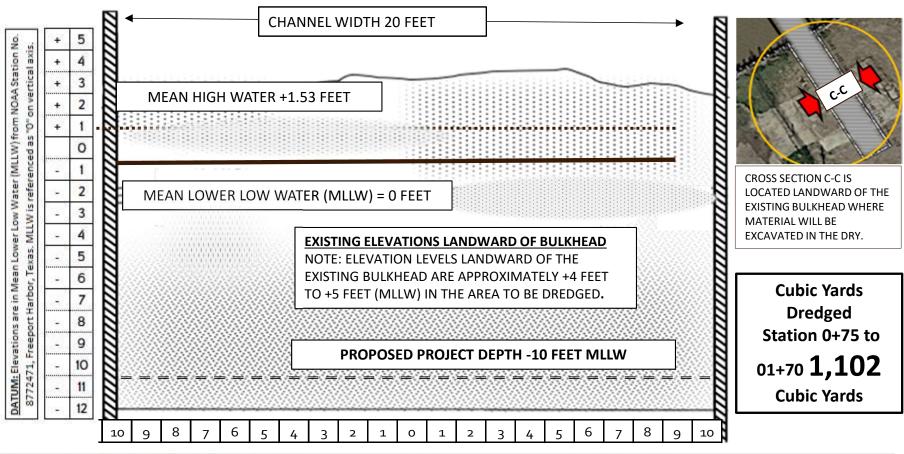
- Odom Echotrac Echosounder
- Lowrance HDS Sonar
- Atlas Link© GNSS Smart Antenna
- Hypack© 2022 Software



# REVISED

# **SUPPLEMENTARY ILLUSTRATION #27**

REPLACES ILLUSTRATION #21 — CROSS SECTION C-C
CUBIC YARDS DREDGED FROM CHANNEL AREA LANDWARD OF BULKHEAD





#### PREPARED FOR:

BRAZOS PILOTS ASSOCIATION 2502 Deep Sea Drive Freeport, TX 77542

#### JOB NAME:

PERMITTING NEW MAINTENANCE SLIP Compass Court, Quintana Island, TX Capt. Billy Burns, Capt. Dan Blanton

PFRMIT # SWG-2003-00516

#### SURVEY EQUIPMENT:

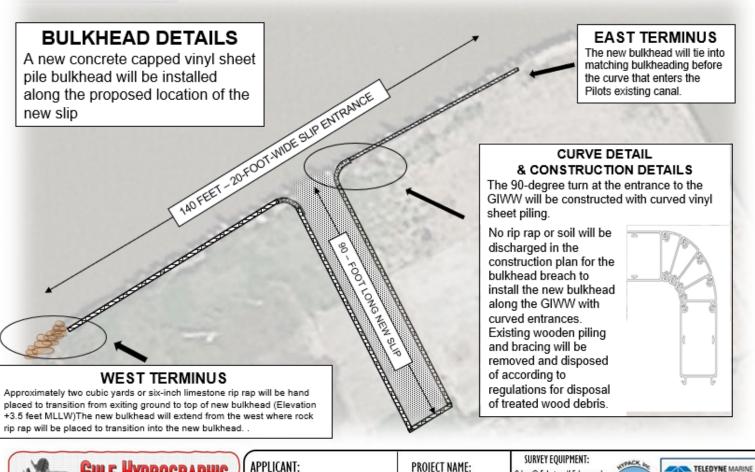
- Odom Echotrac Echosounder
- Lowrance HDS Sonar
- Atlas Link© GNSS Smart Antenna
- Hypack© 2022 Software



## **SUPPLEMENTARY ILLUSTRATION #29**

#### **NEW BULKHEAD PLAN VIEW**

CONSTRUCTION DISCHARGES, CURVE DETAIL





APPLICANI:
BRAZOS PILOTS ASSOCIATION

2502 Deep Sea Drive, Freeport, TX 77542

PROJECT NAME:
Permit Application New Boat Slip

SURVEY EQUIPMENT:
Odom® Echotrac II Echosounder
AtlasLink® GNSS Smart Antenna
Hypack® 2022 Survey Software
Lowrance® HD Live Sonar



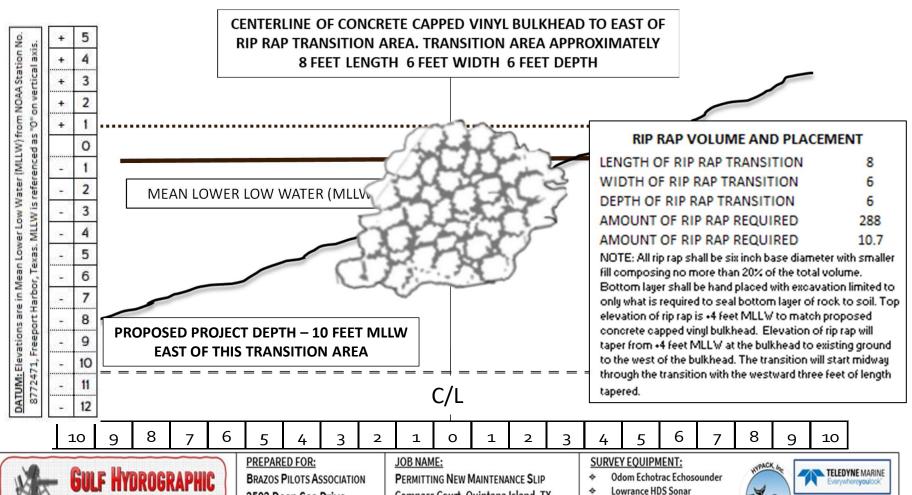


PERMIT # SWG-2003-00516



# **ILLUSTRATION #28**

### **CROSS SECTION D-D** TRANSITION AREA WEST END OF NEW CONCRETE CAPPED VINYL BULKHEAD





2502 Deep Sea Drive Freeport, TX 77542

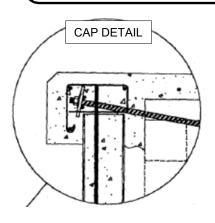
Compass Court, Quintana Island, TX Capt. Billy Burns, Capt. Dan Blanton

- Atlas Link® GNSS Smart Antenna
- Hypack© 2022 Software



## **SUPPLEMENTARY ILLUSTRATION #30**

#### NEW CONCRETE CAPPED VINYL BULKHEAD CROSS SECTION



TIE ROD PLACE 12" OFF CENTER, 15 DEGREE MAXIMUM ANGLE

DEAD MAN BLOCK DETAIL

#### **NEW CONCRETE CAPPED VINYLE SHEET PILING**

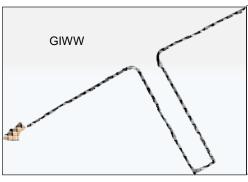
NEW BULKHEAD WILL BE INSTALLED AS SHOWN ON SUPPLEMENTAL ILLUSTRATION #29. THE BULKHEAD TO BE INSTALLED ACCORDING TO MANUFACTURERS' INSTRUCTIONS AND EXISTING SITE CONDITIONS.

(4) #5 REBAR

#3 STIRRUPS 12 " OC FOR 2 FEET ON EACH SIDE OF TIEBACK. 24 INCH OC ELSEWHERE

(2) #5 X 24" BEHIND TIE ANCHOR

1/2 INCH X 6 X 6 PLATE WITH NUT AND WASHER



CONCRETE CAPPED VINYL BULKHEAD WILL BE PLACED SEAWARD OF THE EXISTING WOODEN PILE AND BEAM BULKHEAD. THE NEW BULKHEAD WILL EXTEND FROM THE WEST TERMINUS AND EXTEND EASTWARD TO THE NEW SLIP (ALSO WITH CONCRETE CAPPED VINYL SHEET PILE). ON THE EAST SIDE OF THE NEW SLIP THE NEW BULKHEAD WILL BE CONSTRUCTED IN FRONT OF THE EXISTING BULKHEAD AND EXTEND EASTWARD WHERE IT TIES INTO AN EXISTING CONCRETE CAPPED VINYL BULKHEAD IN THE CANAL CURRENTLY USED BY THE PILOTS.



APPLICANT:
BRAZOS PILOTS ASSOCIATION
2502 Deep Sea Drive, Freeport, TX 77542

PROJECT NAME:
Permit Application New Boat Slip

SURVEY EQUIPMENT:
Odom® Echotrac II Echosounder
AtlasLink® GNSS Smart Antenna
Hypack® 2022 Survey Software
Lowrance® HD Live Sonar



# **NEW ILLUSTRATION #10**

#### REPLACES ILLUSTRATION #10 — UPLAND CONFINED AND BENEFICIAL USE SITES QUINTANA ISLAND







APPLICANT: **BRAZOS PILOTS ASSOCIATION** 

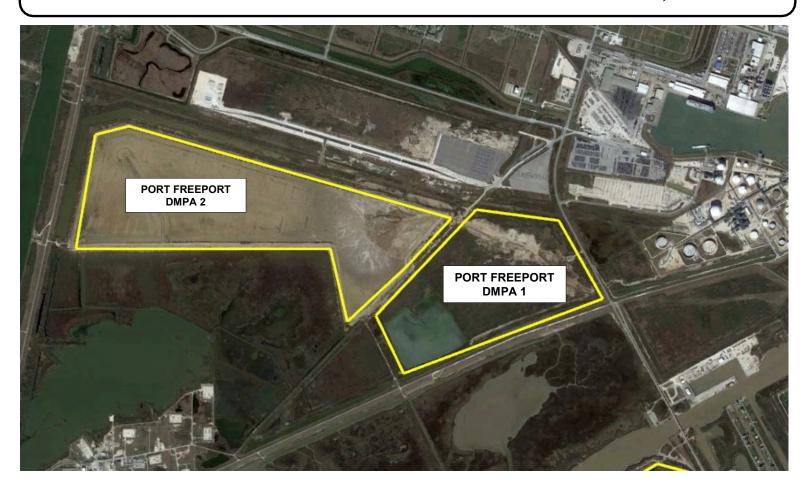
PROJECT NAME: Permit Application -2502 Deep Sea Drive, Freeport, TX 77542 **New Boat Slip** 

SURVEY EQUIPMENT: Odom® Echotrac II Echosounder AtlasLink@ GNSS Smart Antenna Hypack@ 2022 Survey Software Lowrance@ HD Live Sonar



## **NEW ILLUSTRATION #11**

### REPLACES ILLUSTRATION #11 — UPLAND CONFINED DMPAS SITES FREEPORT, TX





APPLICANT:

BRAZOS PILOTS ASSOCIATION
2502 Deep Sea Drive, Freeport, TX 77542

PROJECT NAME:
Permit Application New Boat Slip

SURVEY EQUIPMENT:
Odom© Echotrac II Echosounder
AtlasLink© GNSS Smart Antenna
Hypack© 2022 Survey Software
Lowrance© HD Live Sonar





**USACE** Received:

10 October 2022