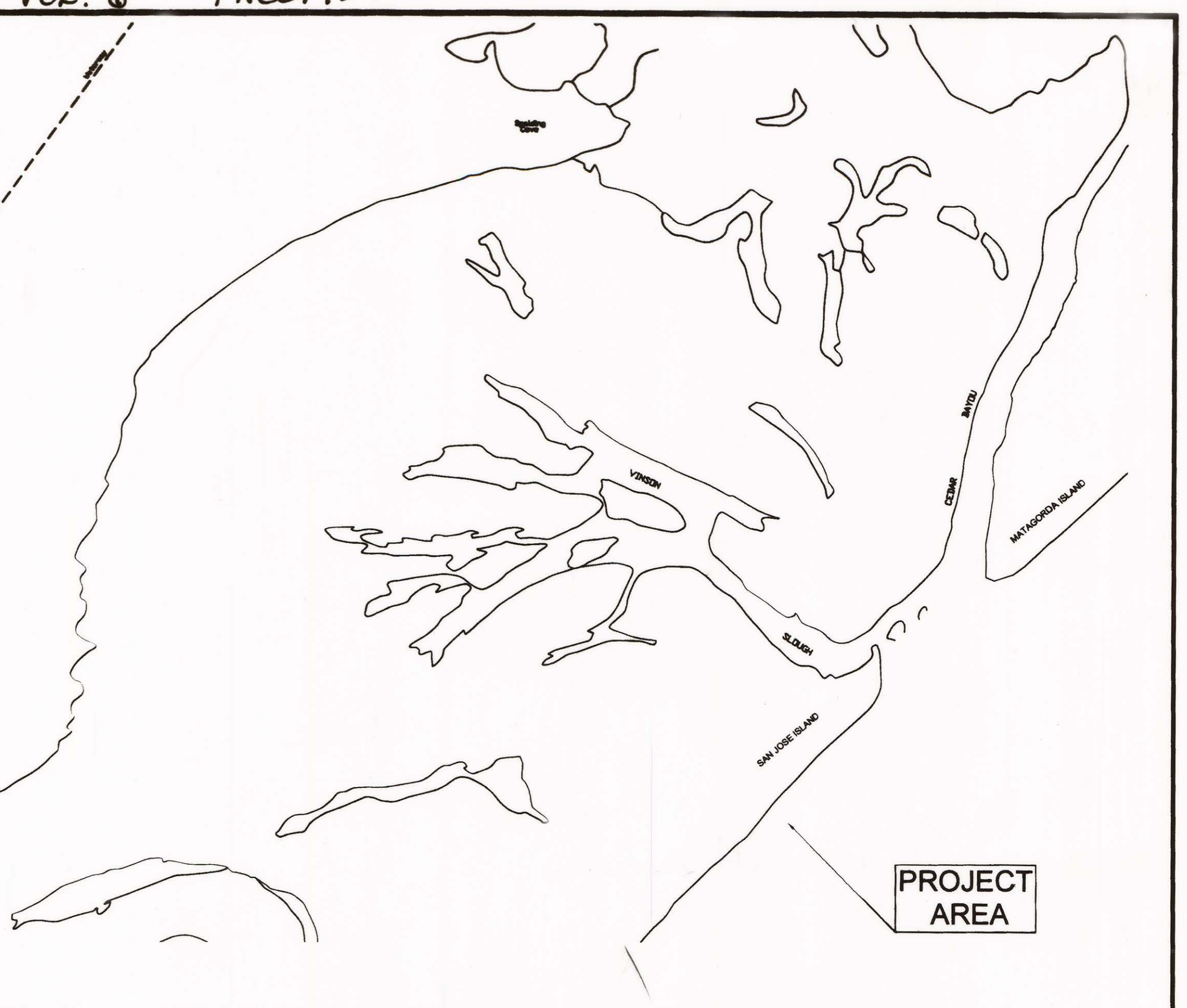


NGS MON. "HORNEY"
N(Y): 13,227,029.55
E(X): 2,667,246.79

VICINITY MAP



COASTAL BOUNDARY SURVEY

BEING THE LITTORAL BOUNDARY OF THE SHORELINE OF THE GULF OF MEXICO ALONG SAN JOSE ISLAND SOUTHWEST OF CEDAR BAYOU OUT OF THE JAMES POWER AND JAMES W. HEWETSON ABSTRACT NOS. 1 AND 234, AND ADJACENT STATE LAND TRACTS NOS. 775, 776, AND 786, ARANSAS COUNTY, TEXAS

SCALE 1" = 800 FEET (288 VARAS) JULY 10-25, 2012



NOTES:

- 1. BEARINGS AND COORDINATES, SHOWN HEREON, ARE GRID, BASED ON THE TEXAS COORDINATE SYSTEM, SOUTH CENTRAL ZONE (4205), NORTH AMERICAN DATUM OF 1983 AS DEFINED BY ARTICLE 21.070 OF THE NATURAL RESOURCE CODE OF THE STATE OF TEXAS.
2. HORIZONTAL CONTROL WAS ESTABLISHED USING GPS STATIC AND RTK METHODS ON LOCAL CONTROL POINTS FROM A PREVIOUS SURVEY OF CEDAR BAYOU. NGS CONTROL MONUMENT "HORNEY" WAS RECOVERED AND COORDINATES UPDATED. GPS STATIC DATA WAS COLLECTED ON "HORNEY" AND AN OPUS SOLUTION PROCESSED TO CHECK COORDINATES. NGS CONTROL MONUMENT "BITE" WAS RECOVERED AND HORIZONTAL COORDINATES UPDATED USING THE UPDATED LOCATION OF "HORNEY". PUBLISHED COORDINATES FOR "BITE" AND "HORNEY" CHECK TO WITHIN APPROXIMATELY 0.5 FEET.
3. VERTICAL CONTROL WAS CHECKED USING GPS STATIC AND RTK METHODS. FURTHER CHECKS WERE COMPLETED USING TEMPORARY TIDE GAUGE INSTALLATIONS IN MESQUITE AND CARLOS BAYS. VERTICAL DATUM IS NAVD83.
4. THE CONVERGENCE ANGLE AT "BITE" IS 1'02"13.0".
5. THE COMBINED SCALE FACTOR AT "BITE" IS 1'00007568.
6. DISTANCES ARE GRID, IN U.S. SURVEY FEET, WITH CORRESPONDING VARA VALUES SHOWN IN PARENTHESIS.
7. TO CONVERT GRID DISTANCES TO SURFACE, DIVIDE BY A COMBINED SCALE FACTOR FOR THIS PROJECT OF 1.00007977.
8. THE LITTORAL BOUNDARY WAS ESTABLISHED AT MEAN HIGHER HIGH WATER, ELEVATION 1.06 FEET NAVD83 FOR MITIGATION SITE, PER TIDAL DATUM ESTABLISHED AT TCOON GAUGE AT COPANO, 87745131. GULF OF MEXICO MEAN HIGHER HIGH WATER WAS DETERMINED TO BE 1.25 FEET NAVD83.
9. VERTICAL DATA WAS TRANSFERRED VIA RTK GPS MEASUREMENTS FROM CONTROL ESTABLISHED ON NGS MONUMENTS "BITE" AND "HORNEY".
10. THE PROJECT MAPPING ANGLE IS 1'02"13.0".
11. ABSTRACTS ARE SHOWN GRAPHICALLY FOR IDENTIFICATION PURPOSES ONLY AND ARE NOT SPECIFICALLY TIED TO THE SUBJECT BOUNDARY.
12. SEE FIELD SURVEY REPORT BY NAIMSMITH MARINE SERVICES, INC. DATED AUGUST 7, 2012.
13. EROSION RESPONSE ACTIVITY SURFACE LEASE NO. SL20110048. A) PROJECT SITE - THE DREDGING AND EXCAVATION OF STATE-OWNED LANDS, IN ACCORDANCE WITH U.S. ARMY CORPS OF ENGINEERS PERMIT SWG-2007-00813, AND B) - SPOIL PLACEMENT/BEACH NOURISHMENT SITE - THE PLACEMENT OF SPOIL MATERIAL IN CONJUNCTION WITH BEACH NOURISHMENT ON STATE-OWNED LANDS, IN ACCORDANCE WITH U.S. ARMY CORPS OF ENGINEERS PERMIT SWG-2007-00813.

NOTICE:

This survey was performed in accordance with Section 33.136, Natural Resources Code, for the purpose of evidencing the location of the shoreline in the area depicted in this survey as that shoreline existed before commencement of erosion response activity, as required by Chapter 33, Natural Resources Code. The line depicted on this survey fixes the shoreline for the purpose of locating a shoreline boundary, subject to movement landward as provided by Section 33.136, Natural Resources Code.
I, J. L. Brundrett, Jr., Registered Professional Land Surveyor and duly Licensed County Surveyor of Aransas County, Texas, and for the State of Texas, hereby certify that the foregoing map represents a survey of the littoral boundary, made in the field according to law, by me and/or under my direct control and supervision, with the field personnel stated, utilizing methodology approved by the Surveying Division of the Texas General Land Office, that, except as shown hereon, there are no areas of artificial fill or build-up, within the limits of this survey; that except as shown hereon, there are no retaining walls, bulkheads or other structures along or immediately landward of the subject boundary and that this map is correct and in accordance with Chapter 21 of the Texas Natural Resources Code.
Surveyed July 10-25, 2012

J. L. Brundrett, Jr.
Aransas County Surveyor
Registered Professional Land Survey No. 2133



Survey Personnel:
James M. Naimsmith, RPLS, LSLS
Seth Gambill

FILING NOTICE:

This Coastal Boundary Survey Plat is being filed in the Plat Records of Aransas County, Texas, as a public record as required by Section 33.136, Natural Resources Code.

COUNTY CLERK CERTIFICATION:

State of Texas
County of Aransas
I, Peggy L. Friebele, Clerk of the County Court, and for Aransas County, Texas, do hereby certify that the foregoing instrument of writing dated the 10th day of JULY A.D., 2012, with its certificate of authentication was filed for record in my office this 5th day of FEBRUARY A.D., 2014 at 2:38 o'clock P.M. and duly recorded the 5th day of FEBRUARY A.D., 2014, at 2:38 o'clock P.M. in the Plat Records of Aransas County, Texas, in Volume 6, Page 127.
Witness my hand and seal of the County Court, in and for Aransas County, Texas, at office in Rockport, Texas, the day and year last written above.

By: Peggy L. Friebele
Peggy L. Friebele
Deputy



Clerk's File No. 333653

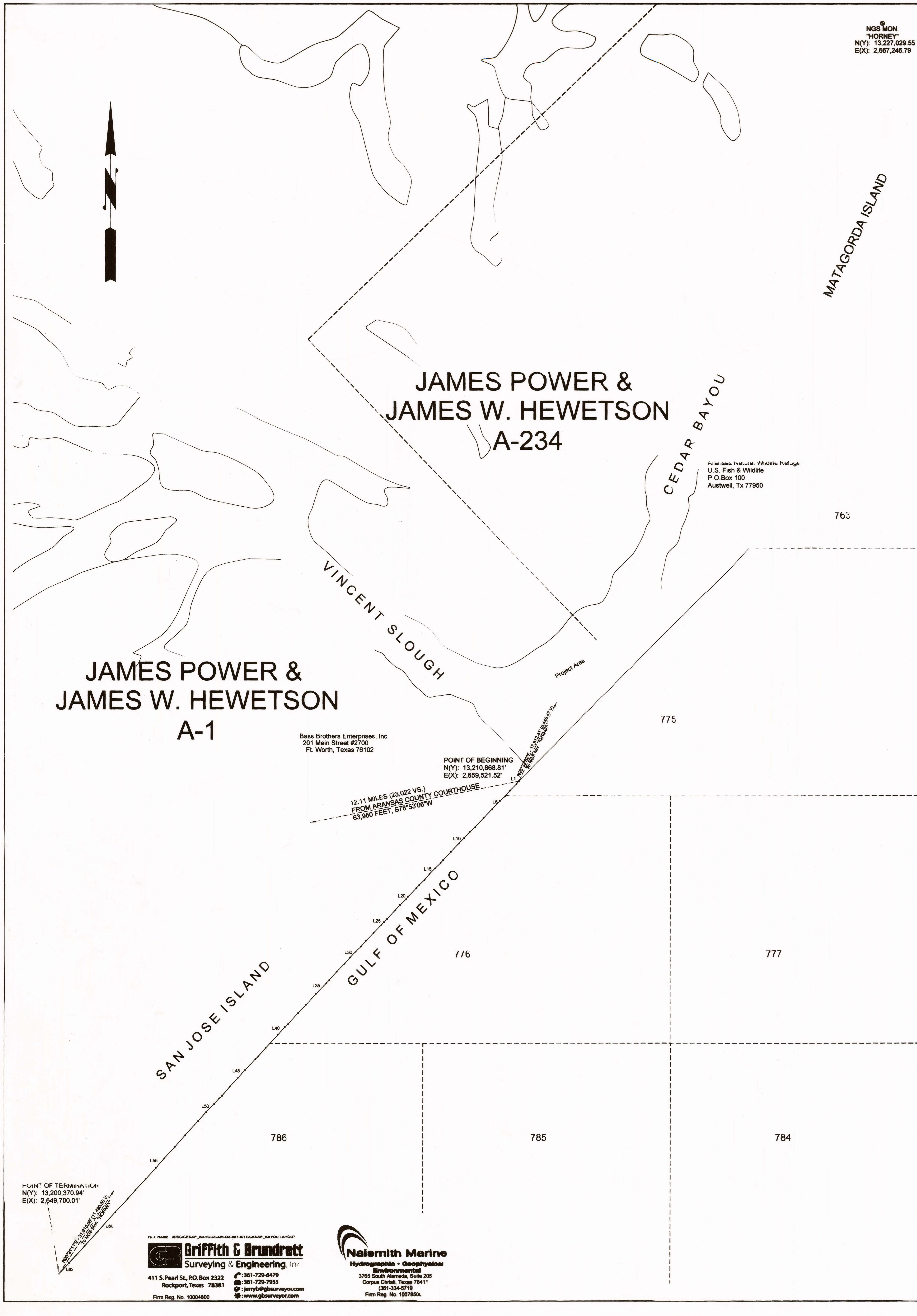
FIELD NOTE DESCRIPTION GULF OF MEXICO SHORELINE

FIELD NOTE: A PORTION OF THE LITTORAL BOUNDARY ALONG THE SHORELINE OF THE GULF OF MEXICO ADJACENT TO THE MOUTHS OF CEDAR BAYOU AND VINCENT SLOUGH AND THE SHORES OF SAN JOSE ISLAND, JAMES POWER AND JAMES W. HEWETSON ABSTRACT NOS. 1 AND 234, AND ADJACENT STATE LAND TRACTS OF THE GULF OF MEXICO NOS. 775, 776, AND 786, ARANSAS COUNTY, TEXAS, AND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:
BEGINNING at Grid Coordinates North (Y) = 13,210,868.82 (4,755,912.86 varas), East (X) = 2,659,521.81 (957,427.85 varas), Texas Coordinate System, South Central Zone, NAD83, a point on the mean higher high water of said Gulf of Mexico at contour 1.25 feet NAVD83, from whence NGS monument "HORNEY" bears North 25°32'52" East a grid distance of 17,912.41 feet (6,448.47 varas);
THENCE, in a Southwesterly direction with the mean higher high water along the Gulf of Mexico shown in Tabular Format labeled "Gulf of Mexico Mean Higher High Water-Cedar Bayou Project" the following courses and distances:

GULF OF MEXICO MEAN HIGHER HIGH WATER CEDAR BAYOU PROJECT

Table with 6 columns: Line No., Bearing, Distance, Line No., Bearing, Distance. Contains 18 rows of survey data.

THENCE, to the POINT OF TERMINATION with Grid Coordinates North (Y) = 13,200,370.94 (4,752,133.54 varas), East (X) = 2,649,700.01 (953,862.00 varas) and from whence NGS Monument "HORNEY" bears North 33°21'11" East a grid distance of 31,915.08 feet (11,490.00 varas).



TEXAS GENERAL LAND OFFICE
Aransas County Surveyor
File Date 07/10/12 by R. S. ...

Briffith & Brundrett Surveying & Engineering, Inc. and Naimsmith Marine Hydrographists + Geophysicists. Includes contact information for both firms.



**Surveying Division
Coastal Boundary Survey Approval**

Project: Cedar Bayou – Gulf Beach nourishment/Dredge material placement

Project No: SL20110048 (GLO)
SWG-2007-00813 (COE)

Project Manager: Amy Nuñez, Lower Coast Regional Manager
Texas General Land Office

Surveyor: J. L. Brundrett, RPLS, Aransas County Surveyor

Description: Being a Coastal Boundary Survey, dated July 10 thru 25, 2012, by J. L. Brundrett Jr, Registered Professional Land Surveyor, and duly elected Surveyor of Aransas County, delineating the line of Mean Higher High Water along the western shore of the Gulf of Mexico and State of Texas Submerged Land Tracts 775, 776 and 786, same line being a portion of the littoral boundary of the James Power and James W. Hewetson Survey, Abstract 1. The survey is associated with and in support of Gulf beach nourishment, via dredge material placement, authorized under Texas General Land Office lease No. SL20110048 as well as US Army Corps of Engineers permit No. SWG-2007-00813 and is located on the easterly shore of San Jose Island, extending southwesterly approximately 2.7 miles, from the confluence of Cedar Bayou and Vinson Slough, at coordinates N28° 02' 32.9", W96° 52' 24.9" WGS84. A copy of the survey plat is recorded in Volume 6, at Page 129, Plat Records of Aransas County.

A Coastal Boundary Survey for the above-referenced project has been reviewed and accepted; upon completion of public notice requirements, the survey will be filed in the Texas General Land Office, Archives and Records, in accordance with provisions of the *Texas Natural Resources Code*, Chapter 33.136.

Approved:

Signed: _____

David H. P. L.
Surveying Division

Jul. 29 2014
Date

Approval Filed as:

Tex. Nat. Res. Code Article 33.136 Aransas County, Sketch No. 11

TEXAS GENERAL LAND OFFICE
Art. 33.136, Natural Resources Code
Co. ARANSAS, Sketch No. 11
File Date 04/24/2018 by K. Schreiber

Stephen F. Austin Building • 1700 North Congress Avenue • Austin, Texas 78701-1495

Post Office Box 12873 • Austin, Texas 78711-2873

512-463-5001 • 800-998-4GLO

www.glo.state.tx.us

Naismith Marine Services, Inc.

3765 South Alameda, Suite 205
Corpus Christi, Texas 78411
(361) 945-0248 www.naismithmarine.com



August 7, 2012

Griffith and Brundrett

Field Survey for MHHW Determination

Gulf of Mexico at Cedar Bayou, Mesquite Bay, and Carlos Bay Texas

Scope of Work

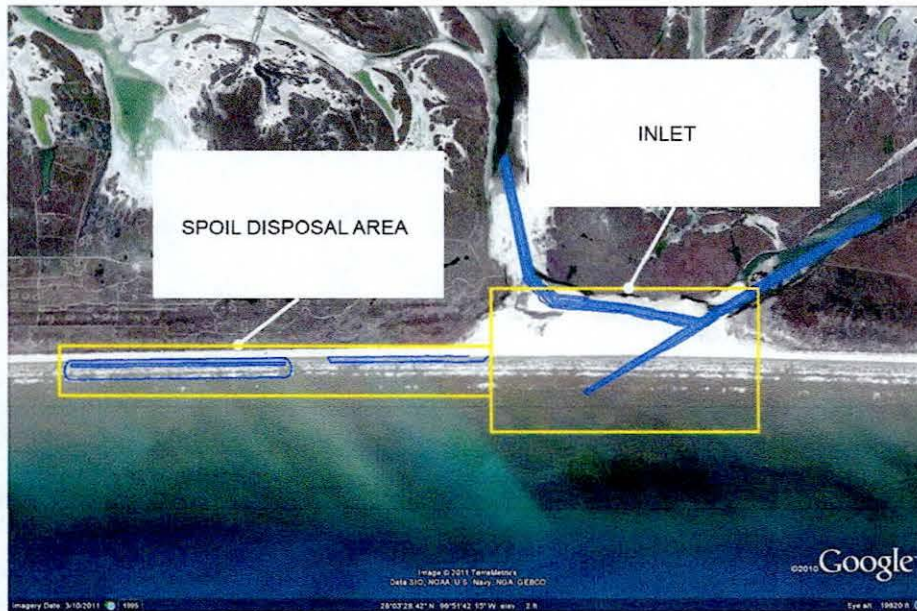
The following scope of work is in support of a coastal boundary survey.

- A temporary tide gauge was established in Mesquite Bay to determine the tidal datums.
- A temporary tide gauge was established in Carlos Bay to determine the tidal datums.
- The NOAA tide gauge at Bob Hall Pier, Corpus Christi, and Pleasure Pier (historical) in Galveston was used to interpolate tidal datums on the Gulf of Mexico side of the project.
- A field survey was completed to measure the State Littoral Boundary for approximately 14,000 feet of shoreline at the mitigation site on Carlos Bay at Bludworth Island.
- A field survey was completed to measure the State Littoral Boundary for approximately 18,000 feet of shoreline on the gulf side of the proposed Cedar Bayou inlet dredging project.



Mitigation Site (Image from CHE)

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Proposed Gulf Inlet (Image from CHE)

Texas State Coastal Boundary Survey

The survey was performed in accordance with the Section 33.136, Natural Resources Code, for the purpose of evidencing the location of the shoreline in the area depicted in this survey as that shoreline existed before commencement of erosion response activity. The line depicted on the survey fixes the shoreline for the purpose of locating a shoreline boundary, subject to erosion landward as approved by section 33.136. An initial discussion with the survey division of the GLO was completed to determine if there are any other issues at the site. An on the ground survey was then completed to determine the boundary. The appropriate lines calculated and a preliminary sketch compiled.

Control

Horizontal control was established using GPS Static and RTK methods on local control points from a previous survey of Cedar Bayou. NGS control monument Horney was recovered and coordinates updated. GPS static data was collected on Horney and an OPUS solution processed to check coordinates. NGS control monument Bite was recovered and horizontal coordinates updated using the updated location of Horney. Published coordinates for Bite and Horney checked to within approximately 0.5 feet.

Vertical control was checked using GPS Static and RTK methods. Further checks were completed using temporary tide gauge installations in Mesquite and Carlos Bays. Horizontal Datum for this project is **NAD 83 (North American Datum of 1983)**; projection is **Texas South Central Zone, US Survey feet**. Vertical Datum is **NAVD88**.

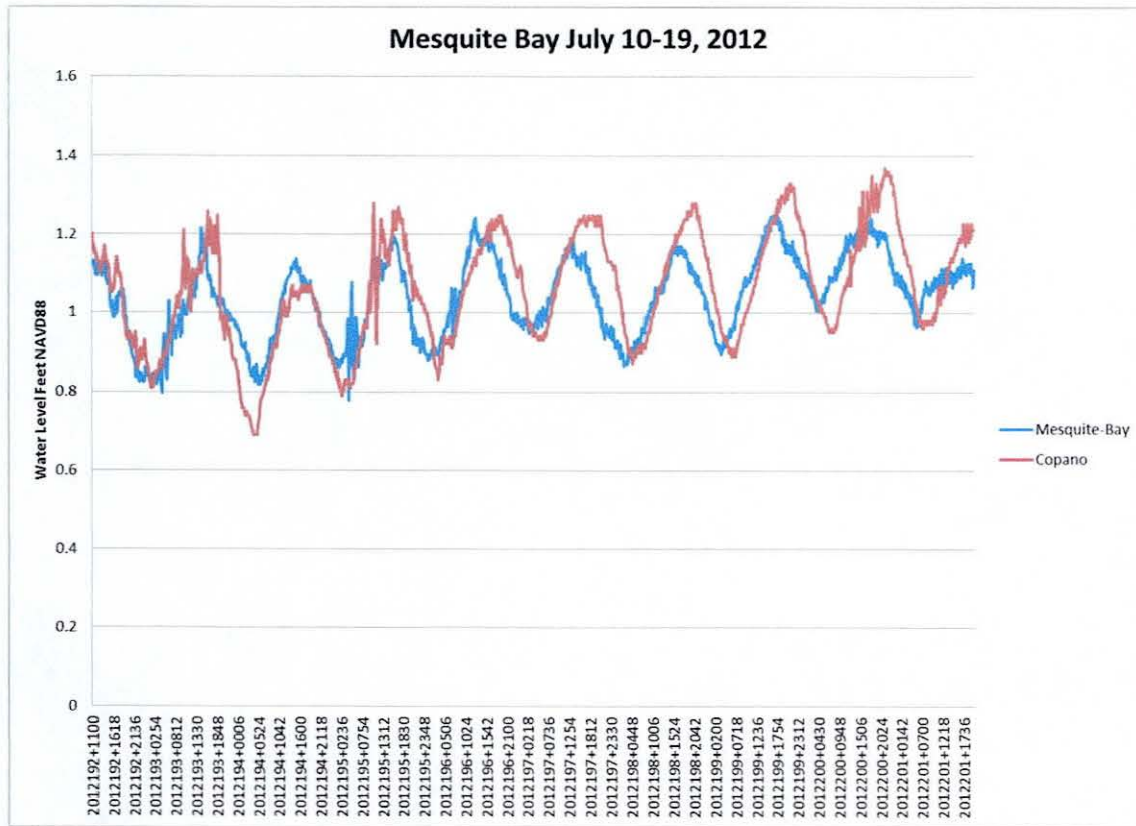
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File Date 04/24/2018 by K. Schreiber

Control Points:

		North	East	Elev.	
Bite	PID:AN2317	13,244,117.30	2,650,622.70	5.37	NGS Monument
Horney	PID:AN2308	13,227,029.55	2,667,246.79	6.88	NGS Monument

MHHW determination

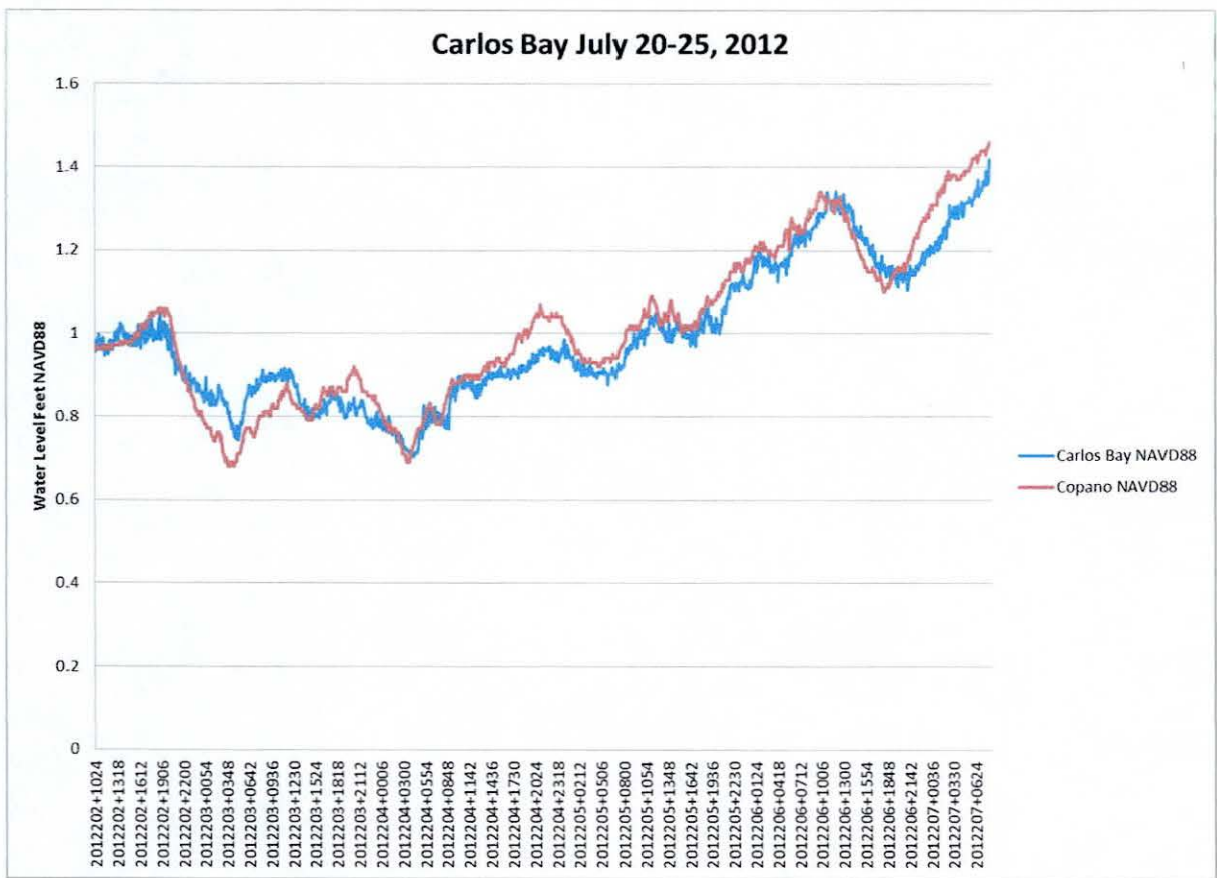
Mesquite Bay: Water level data, collected at 6 minute intervals, was downloaded from a temporary tide gauge and corrected for barometric pressure and salinity. The MHHW level was transferred using the Modified Range Ratio Method from the TCOON gauge at Copano, 87745131. The elevation of the tide gauge was measured relative to project control and checked by transferring mean tide level from the TCOON gauge at Copano. Computed MHHW = **0.99 NAVD88**



Plot of Tide Data Collected in Mesquite Bay

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 File Date 04/14/2018 by K. Schreiber

Carlos Bay: Water level data, collected at 6 minute intervals, was downloaded from a temporary tide gauge and corrected for barometric pressure and salinity. The MHHW level was transferred using the Modified Range Ratio Method from the TCOON gauge at Copano, 87745131. The elevation of the tide gauge was measured relative to project control and checked by transferring mean tide level from the TCOON gauge at Copano. Computed MHHW = **1.06 NAVD88 (same as the station at Copano)**. This elevation is used for the MHHW determination at the Mitigation site.



Plot of Tide Data Collected in Carlos Bay

Gulf of Mexico: Tidal datums at the NOAA tide station Corpus Christi at Bob Hall Pier and historical tidal datums at the NOAA tide station in Galveston on Pleasure pier were interpolated relative to current NAVD88 vertical datum. The computed tidal datum was checked against the NOAA tide station at Port O'Connor with an estimated dampening effect due to the station at Port O'Connor being inland of the Gulf of Mexico. Computed MHHW = **1.25 NAVD88**

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Equipment

Water Level: Solinst Levellogger Edge, Model 3001, Serial No. 2010048

Barometric Pressure: TCOON Gauges at Copano and Seadrift

Salinity: Mission Aransas National Estuarine Research Reserve (MANERR) Station #1 in Mesquite Bay

GPS-RTK – Hemisphere S320

Conventional Survey equipment as required

Reference: NOAA Special Publication NOS CO-OPS 2: COMPUTATIONAL TECHNIQUES FOR TIDAL DATUMS HANDBOOK, 2003

Thank you for the opportunity to provide these services.

James M. Naismith

James M. Naismith, RPLS, LSLs

Naismith Marine Services, Inc.

jim@naismithmarine.com

TEXAS GENERAL LAND OFFICE
Art. 33.136, Natural Resources Code
Co. ARANSAS, Sketch No. 11
File Date 04/24/2018 by K. Schreiber

sponse activity, but may not claim any additional land as a result of accretion, reliction, or avulsion resulting from the erosion response activity.

For a copy of this survey or more information on this matter, contact Bill O'Hara, Director of the Survey Division, Texas General Land Office by phone at (512) 463-5212, email bill.o'hara@glo.texas.gov, or fax (512) 463-5223.

TRD-201400978

Larry L. Laine
Chief Clerk/Deputy Land Commissioner
General Land Office
Filed: March 4, 2014

◆ ◆ ◆
Notice of Approval of Coastal Boundary Survey

Pursuant to §33.136 of the Texas Natural Resources Code, notice is hereby given that Jerry Patterson, Commissioner of the General Land Office, approved a coastal boundary survey described as follows:

Cedar Bayou-Gulfside

Being a Coastal Boundary Survey, dated July 10 through July 25, 2012, by J. L. Brundrett Jr., Registered Professional Land Surveyor, and duly elected Surveyor of Aransas County, delineating the line of Mean Higher High Water along the western shore of the Gulf of Mexico and State of Texas Submerged Land Tracts 775, 776 and 786, same line being a portion of the littoral boundary of the James Power and James W. Hewetson Survey, Abstract 1. The survey is associated with and in support of Gulf beach nourishment, via dredge material placement, authorized under Texas General Land Office lease No. SL20110048 as well as US Army Corps of Engineers permit No. SWG-2007-00813 and is located on the easterly shore of San Jose Island, extending southwesterly approximately 2.7 miles, from the confluence of Cedar Bayou and Vinson Slough, at coordinates N28° 02' 32.9", W96° 52' 24.9" WGS84. A copy of the survey plat is recorded in Volume 6, at Page 129, Plat Records of Aransas County.

Cedar Bayou-Bludworth Island

Being a Coastal Boundary Survey, dated July 10 through July 25, 2012, by J. L. Brundrett Jr., Registered Professional Land Surveyor, and duly elected Surveyor of Aransas County, delineating the line of Mean Higher High Water, along the western shore of Carlos and Mesquite Bays and State of Texas Submerged Land Tracts 2, 4, 8 (Carlos Bay) and 9 (Mesquite Bay), same line being a portion of the littoral boundary of the F. M. Davis Survey, Abstract 336 and the B. L. Bludworth Survey, Abstract 41. The survey is associated with and in support of seagrass habitat creation along the eastern shore of Bludworth Island, authorized under Texas General Land Office lease No. SL20110048 and US Army Corps of Engineers permit No. SWG-2007-00813, extending approximately 2.3 miles southwesterly and 3000' feet northerly from Cedar Point at coordinates N28° 08' 38.1", W96° 53' 59.0" WGS84. A copy of the survey plat is recorded in Volume 6, at Page 128, Plat Records of Aransas County.

This survey is intended to provide pre-project baseline information related to an erosion response activity on coastal public lands. An owner of uplands adjoining the project area is entitled to continue to exercise littoral rights possessed prior to the commencement of the erosion response activity, but may not claim any additional land as a result of accretion, reliction, or avulsion resulting from the erosion response activity.

For a copy of this survey or more information on this matter, contact Bill O'Hara, Director of the Survey Division, Texas General Land Office

by phone at (512) 463-5212, email bill.o'hara@glo.texas.gov, or fax (512) 463-5223.

TRD-201400979

Larry L. Laine
Chief Clerk/Deputy Land Commissioner
General Land Office
Filed: March 4, 2014

◆ ◆ ◆
Notice of Approval of Coastal Boundary Survey

Pursuant to §33.136 of the Texas Natural Resources Code, notice is hereby given that Jerry Patterson, Commissioner of the General Land Office, approved a coastal boundary survey described as follows:

Cedar Bayou-Gulfside

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This survey is intended to provide pre-project baseline information related to an erosion response activity on coastal public lands. An owner of uplands adjoining the project area is entitled to continue to exercise littoral rights possessed prior to the commencement of the erosion response activity, but may not claim any additional land as a result of accretion, reliction, or avulsion resulting from the erosion response activity.

For a copy of this survey or more information on this matter, contact Bill O'Hara, Director of the Survey Division, Texas General Land Office by phone at (512) 463-5212, email bill.o'hara@glo.texas.gov, or fax (512) 463-5223.

TRD-201400980

Larry L. Laine
Chief Clerk/Deputy Land Commissioner
General Land Office
Filed: March 4, 2014

◆ ◆ ◆
Office of the Governor

Crime Stoppers Assistance Fund Solicitation

The Criminal Justice Division (CJD) of the Governor's Office is soliciting grant applications to support certified Crime Stoppers organizations in Texas during the state fiscal year 2015 grant cycle.

Purpose: The purpose of the Crime Stoppers Assistance funding is to enhance and assist the community's efforts in solving serious crimes.

Available Funding: State funding is authorized for these projects under Article 102.013, Texas Code of Criminal Procedure, which designated CJD as the funds administering agency. The source of funding is

TEXAS GENERAL LAND OFFICE
Art. 33.136, Natural Resources Code
Co. ARANSAS, Sketch No. 11
File Date 04/24/2018 by K. Schreiber