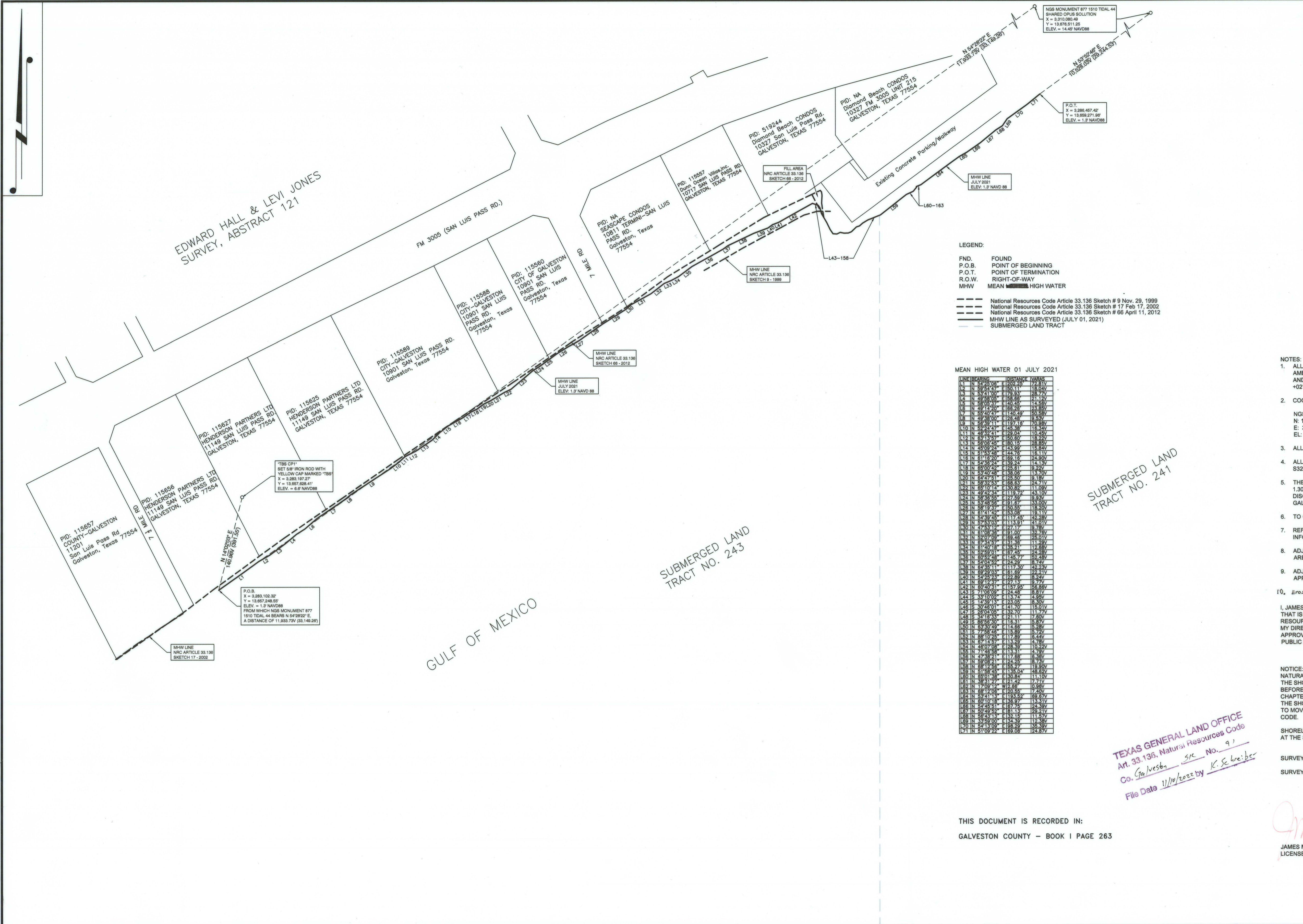


10/18/2022 - P:\21-2021\2021_0502\DWG2_MEANHIGHWATER2021.0502_GALVESTON SEAWALL_MHW_REV1.DWG



LEGEND:
FND. FOUND
P.O.B. POINT OF BEGINNING
P.O.T. POINT OF TERMINATION
R.O.W. RIGHT-OF-WAY
MHW MEAN HIGH WATER

--- National Resources Code Article 33.136 Sketch # 9 Nov. 29, 1999
--- National Resources Code Article 33.136 Sketch # 17 Feb. 17, 2002
--- National Resources Code Article 33.136 Sketch # 66 April 11, 2012
--- MHW LINE AS SURVEYED (JULY 01, 2021)
--- SUBMERGED LAND TRACT

MEAN HIGH WATER 01 JULY 2021

Table with columns: STATION, NAD83 ELEVATION, NAVD88 ELEVATION. Lists stationing from 10+00 to 14+00 with corresponding elevations.

SUBMERGED LAND TRACT NO. 241

SUBMERGED LAND TRACT NO. 243

GULF OF MEXICO

TEXAS GENERAL LAND OFFICE
Art. 33.136, Natural Resources Code
Co. Galveston, S.C. No. 91
File Date 11/10/2022 by K. Seiber

THIS DOCUMENT IS RECORDED IN:
GALVESTON COUNTY - BOOK 1 PAGE 263

- NOTES:
1. ALL COORDINATES REFER TO THE TEXAS COORDINATE SYSTEM, SOUTH CENTRAL ZONE (#4204), NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT), US FEET. ALL BEARINGS ARE LAIBERT GRID BEARINGS AND ALL DISTANCES GRID. THE COMBINED SCALE FACTOR IS 0.9998705 AND CONVERGENCE ANGLE IS +02' 03" 44.83".
2. COORDINATES AND ELEVATIONS ARE BASED ON NGS MONUMENT:
NGS MONUMENT '877 1510 TIDAL 44' (SHARED OPUS SOLUTION)
N: 13,676,511.25
E: 3,310,080.49
EL: 14.45 NAVD88
3. ALL OTHER MONUMENTS ARE REFERENCED AS MEASURED AND SHOWN HEREON.
4. ALL POSITIONS AND ELEVATIONS RECORDED USING SURVEY GRADE, RTK GPS, EQUIPMENT: HEMISPHERE S320 AND/OR TRIMBLE R8/10.
5. THE LITTORAL BOUNDARY IS BASED ON THE MEAN HIGH WATER (MHW) CONTOUR. MHW ELEVATION OF 1.30' NAVD88 IS REFERENCED TO THE HISTORIC NOAA TIDE GAUGE AT PLEASURE PIER, WHICH WAS DISCONTINUED AND PERMANENTLY REMOVED ON JULY 20, 2011, AND THE NOAA TIDE GAUGE AT THE GALVESTON BAY ENTRANCE (8771341)
6. TO CONVERT FEET TO VARAS MULTIPLY BY 0.36.
7. REFERENCE ACCOMPANYING REPORT CONTAINING FIELD NOTES DATED JULY 2021 FOR ADDITIONAL INFORMATION.
8. ADJACENT LOTS AND STREETS ARE SHOWN GRAPHICALLY FOR IDENTIFICATION PURPOSES ONLY AND ARE NOT SPECIFICALLY TIED TO SUBJECT BOUNDARY.
9. ADJACENT OWNER INFORMATION IS BASED ON ONLINE MAP DATA FROM GALVESTON COUNTY CENTRAL APPRAISAL DISTRICT.
10. Erosion Response Work: Beach Nourishment, CEPR Project No. 1615 administered by GLO

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.

SHORELINE SURVEY OF MEAN HIGH WATER ALONG THE GULF OF MEXICO AT THE SOUTHWEST END OF SEAWALL BLVD.
SURVEYED: JULY 01, 2021
SURVEY PERSONNEL: JIM NAISMITH, JAKE PRIJETT, VINNI MAGNI, CLAY COTTLE, & DANIEL WILLIS

Professional seals and signatures for James M. Naismith, Licensed State Land Surveyor.

NOTES table with columns for REV. NO., REV. DATE, REV. DESCRIPTION, REV. BY.

Table with columns for REV. NO., REV. DATE, REV. DESCRIPTION, REV. BY.

T.B. Baker Smith logo and contact information: 3854 FM 1069, Aransas Pass, TX 78336.

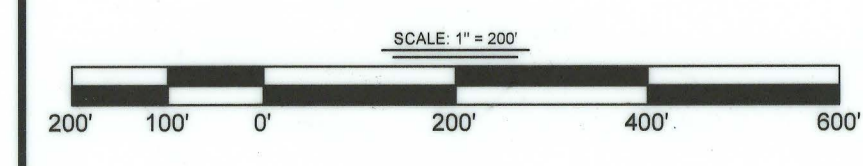
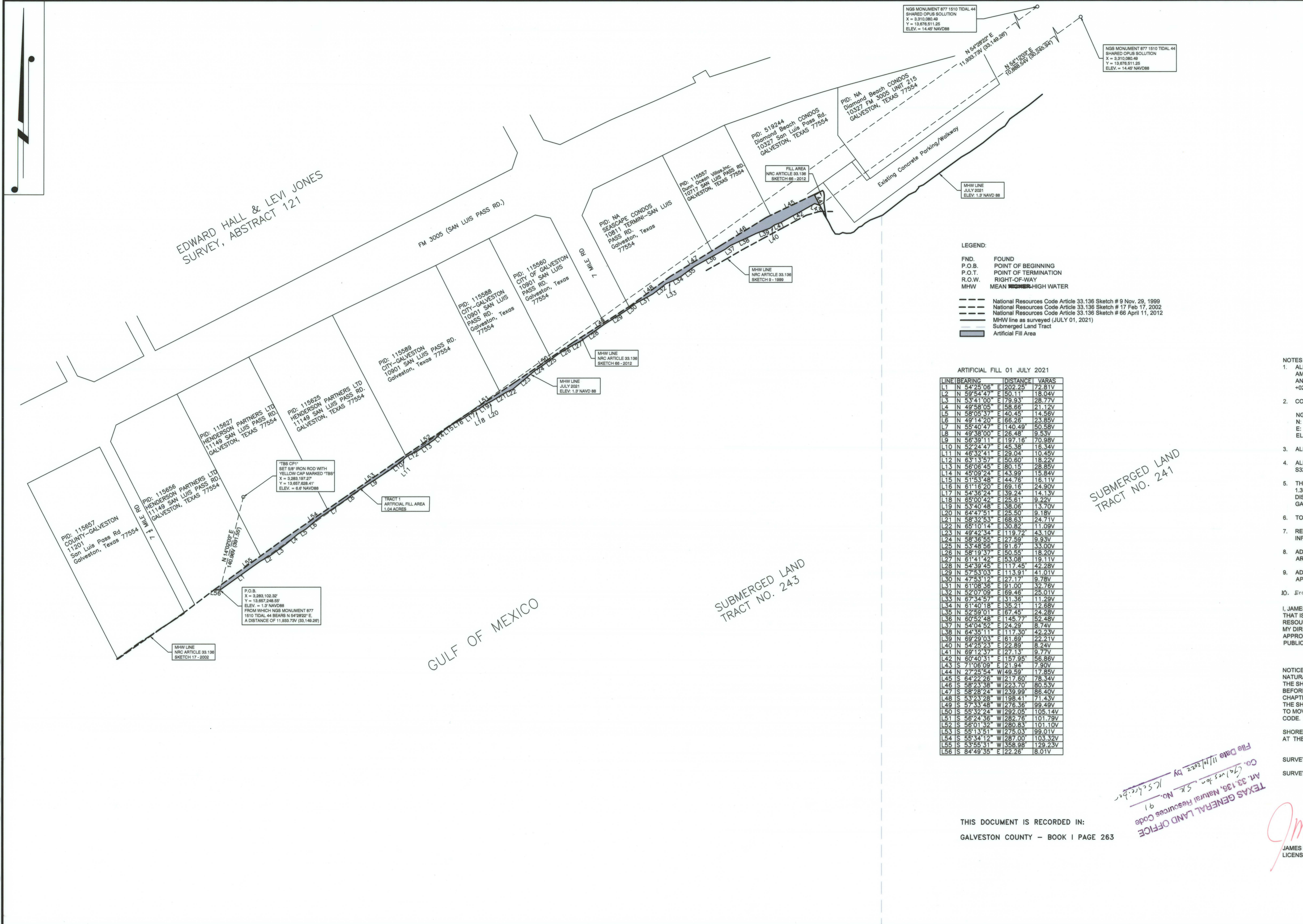


Table with columns for DRAWN BY, DATE, APPROVED BY, JOB NO., DRAWING NAME, PROJECT, GRID UNITS, SHEET NO.

COASTAL BOUNDARY SURVEY HDR ENGINEERING, INC. BEING THE LITTORAL BOUNDARY ALONG THE MEAN HIGH WATER (MHW) LINE OF THE GULF OF MEXICO AT THE SOUTHWEST END OF SEAWALL BLVD. BEING A PORTION OF THE SOUTHERLY BOUNDARY LINE OF THE EDWARD HALL & LEVI JONES SURVEY, ABSTRACT NO. 121, AND SAME BEING THE NORTHERLY BOUNDARY LINE OF THE GULF OF MEXICO AND SUBMERGED LAND TRACT NO.'S 243 & 241, GALVESTON COUNTY, TEXAS.



VICINITY MAP
NOT TO SCALE

- LEGEND:
- FND. FOUND
 - P.O.B. POINT OF BEGINNING
 - P.O.T. POINT OF TERMINATION
 - R.O.W. RIGHT-OF-WAY
 - MHW MEAN HIGH WATER
 - National Resources Code Article 33.136 Sketch # 9 Nov. 29, 1999
 - National Resources Code Article 33.136 Sketch # 17 Feb. 17, 2002
 - National Resources Code Article 33.136 Sketch # 66 April 11, 2012
 - MHW line as surveyed (JULY 01, 2021)
 - Submerged Land Tract
 - Artificial Fill Area

ARTIFICIAL FILL 01 JULY 2021

LINE	BEARING	DISTANCE	VARIAS
L1	N 54°25'06"	172.81V	
L2	N 59°54'47"	18.04V	
L3	N 53°41'00"	28.77V	
L4	N 49°58'05"	21.12V	
L5	N 58°05'37"	14.56V	
L6	N 49°14'20"	23.85V	
L7	N 55°40'47"	50.58V	
L8	N 49°38'00"	9.43V	
L9	N 56°39'11"	70.98V	
L10	N 52°24'47"	16.34V	
L11	N 46°32'41"	10.45V	
L12	N 63°13'57"	18.22V	
L13	N 56°06'45"	28.85V	
L14	N 45°09'22"	15.84V	
L15	N 51°53'28"	16.11V	
L16	N 61°16'20"	24.90V	
L17	N 54°36'24"	14.13V	
L18	N 65°00'42"	9.22V	
L19	N 53°40'48"	13.70V	
L20	N 64°47'51"	9.18V	
L21	N 58°32'53"	24.71V	
L22	N 55°10'14"	11.09V	
L23	N 49°42'34"	43.10V	
L24	N 58°36'55"	9.93V	
L25	N 53°48'56"	33.00V	
L26	N 58°19'37"	18.20V	
L27	N 61°41'42"	19.11V	
L28	N 54°39'45"	42.28V	
L29	N 57°53'03"	41.01V	
L30	N 47°53'12"	9.78V	
L31	N 61°08'38"	32.76V	
L32	N 52°07'09"	25.01V	
L33	N 67°34'57"	11.29V	
L34	N 61°40'18"	12.68V	
L35	N 52°59'01"	24.28V	
L36	N 60°52'48"	52.48V	
L37	N 54°04'52"	8.74V	
L38	N 64°39'11"	42.73V	
L39	N 69°29'03"	22.21V	
L40	N 54°25'23"	8.24V	
L41	N 69°12'37"	9.77V	
L42	N 67°40'51"	56.86V	
L43	N 71°08'09"	7.90V	
L44	N 27°25'54"	17.85V	
L45	N 64°29'28"	78.24V	
L46	N 58°23'58"	80.23V	
L47	N 58°28'24"	86.40V	
L48	N 53°23'28"	71.43V	
L49	N 57°43'48"	99.49V	
L50	N 55°32'24"	105.14V	
L51	N 56°24'36"	101.79V	
L52	N 56°01'32"	101.10V	
L53	N 55°13'51"	99.01V	
L54	N 55°34'12"	103.32V	
L55	N 53°55'31"	129.23V	
L56	N 64°49'55"	8.01V	

SUBMERGED LAND TRACT NO. 241

SUBMERGED LAND TRACT NO. 243

GULF OF MEXICO

- NOTES:
- ALL COORDINATES REFER TO THE TEXAS COORDINATE SYSTEM, SOUTH CENTRAL ZONE (#4204), NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT), US FEET. ALL BEARINGS ARE LAMBERT GRID BEARINGS AND ALL DISTANCES GRID. THE COMBINED SCALE FACTOR IS 0.99986706 AND CONVERGENCE ANGLE IS +02° 03' 44.83".
 - COORDINATES AND ELEVATIONS ARE BASED ON NGS MONUMENT:
 - NGS MONUMENT 877 1510 TIDAL 44' (SHARED OPUS SOLUTION)
 - N: 13,676,511.25
 - E: 3,310,080.49
 - EL: 14.45 NAVD88
 - ALL OTHER MONUMENTS ARE REFERENCED AS MEASURED AND SHOWN HEREON.
 - ALL POSITIONS AND ELEVATIONS RECORDED USING SURVEY GRADE, RTK GPS. EQUIPMENT: HEMISPHERE S320 AND/OR TRIMBLE R810.
 - THE LITTORAL BOUNDARY IS BASED ON THE MEAN HIGH WATER (MHW) CONTOUR. MHW ELEVATION OF 1.30' NAVD88 IS REFERENCED TO THE HISTORIC NOAA TIDE GAUGE AT PLEASURE PIER, WHICH WAS DISCONTINUED AND PERMANENTLY REMOVED ON JULY 20, 2011, AND THE NOAA TIDE GAUGE AT THE GALVESTON BAY ENTRANCE (8771341)
 - TO CONVERT FEET TO VARAS MULTIPLY BY 0.36.
 - REFERENCE ACCOMPANYING REPORT CONTAINING FIELD NOTES DATED JULY 2021 FOR ADDITIONAL INFORMATION.
 - ADJACENT LOTS AND STREETS ARE SHOWN GRAPHICALLY FOR IDENTIFICATION PURPOSES ONLY AND ARE NOT SPECIFICALLY TIED TO SUBJECT BOUNDARY.
 - ADJACENT OWNER INFORMATION IS BASED ON ONLINE MAP DATA FROM GALVESTON COUNTY CENTRAL APPRAISAL DISTRICT.
 - Erosion Response Work: Beach Nourishment. C&P&A Project No. IG15 administered by GLO
- I, JAMES M. NAISMITH, HEREBY STATE THAT THIS DRAWING REPRESENTS A SURVEY THAT IS CORRECT; IN ACCORDANCE WITH SECTION 21.042 TEXAS NATURAL RESOURCES CODE, WAS MADE ACCORDING TO LAW; WAS MADE IN THE FIELD UNDER MY DIRECT CONTROL, AND SUPERVISION; WAS MADE UTILIZING METHODOLOGY APPROVED BY THE GLO; AND IS RECORDED IN BOOK I, PAGE 263 OF THE OFFICIAL PUBLIC RECORDS OF GALVESTON COUNTY, TEXAS.

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.

SHORELINE SURVEY OF MEAN HIGH WATER ALONG THE GULF OF MEXICO AT THE SOUTHWEST END OF SEAWALL BLVD.

SURVEYED: JULY 01, 2021

SURVEY PERSONNEL: JIM NAISMITH, JAKE PRIJETT, VINNI MAGNI, CLAY COTTLE, & DANIEL WILLIS

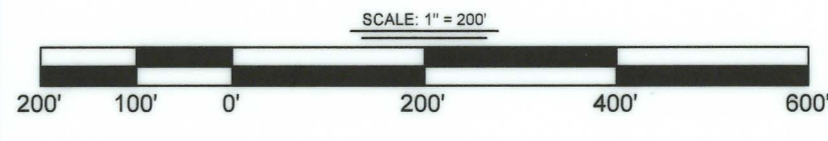


THIS DOCUMENT IS RECORDED IN:
GALVESTON COUNTY - BOOK I PAGE 263

FILED
DATE 7/22/2021 BY [Signature]
Clerk of Galveston County
Galveston, Texas

NOTES:

01	8/17/22	GENERAL GLO REVISIONS	TB
REV. NO.	REV. DATE	REV. DESCRIPTION	REV. BY



DRAWN BY:	SEM	APPROVED BY:	JMN
DATE:	7/22/2021	JOB NO.:	2021.0502
DRAWING NAME: 2021.0502_GALVESTON SEAWALL_FILL_REV1.DWG			
PROJECTION: TEXAS SOUTH CENTRAL ZONE GEO. DATUM: NAD83 (2011) VERT. DATUM: NAVD88 GRID UNITS: US SURVEY FEET			
SHEET NO.:	1	OF	1

BUILD UP/ FILL AREA
HDR ENGINEERING, INC.

BUILDUP/FILL AREA MAP TO ACCOMPANY COASTAL BOUNDARY SURVEY OF A PORTION OF THE SOUTHERLY BOUNDARY LINE OF THE EDWARD HALL AND LEVI JONES SURVEY, ABSTRACT NO. 121, AND SAME BEING THE NORTHERLY BOUNDARY LINE OF THE GULF OF MEXICO AND SUBMERGED TRACT NO. S 243 AND 241, GALVESTON COUNTY, TEXAS



TEXAS GENERAL LAND OFFICE
GEORGE P. BUSH, COMMISSIONER

Surveying Division
Coastal Boundary Survey

Project: Dellanera Park Beach Nourishment, Submerged Tracts 241 & 243, Galveston Co.

Project No: CEpra Project No. 1615 (administered by GLO)

Project Manager: Thomas Durnin, Project Manager/Coastal Planner, Coastal Resources Program, Texas General Land Office


Surveyor: James Naismith, Licensed State Land Surveyor

Description: Coastal Boundary Survey, by James Naismith, Licensed State Land Surveyor, dated October 25, 2022, Being the littoral Boundary along the Mean High Water (MHW) line of the Gulf of Mexico at the Southwest end of Seawall Blvd., being a portion of the southerly boundary line of the Edward Hall and Levi Jones Survey, Abstract No. 121, and same being the northerly boundary line of the Gulf of Mexico and Submerged Land Tract No.'s 241 and 243, Galveston County, Texas. The coordinates of its mid-point being, 29°14'28.71"N, 94°52'15.23"W WGS84. A copy of the survey has been recorded in Book I, Page 263, Galveston County Surveyors Records in the Galveston County Engineers Office

A Coastal Boundary Survey for the above-referenced project has been reviewed and accepted by Surveying Services; 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.

by:

Signed:


David Klotz, RPLS, LSLs
Surveying Services

11/9/2022
Date

Filed as:

Tex.Nat.Res.Code Article 33.136 Galveston County, Sketch No. 91

TEXAS GENERAL LAND OFFICE
Art. 33.136, Natural Resources Code
Co. Galveston, SK No. 91
File Date 11/10/2022 by K. Schreiber

David Klotz

From: Jim Naismith, RPLS, LSLs <Jim.Naismith@tbsmith.com>
Sent: Wednesday, November 2, 2022 12:42 PM
To: David Klotz
Cc: Travis Buaas; David Holmes; Mark Neugebauer; Jake Rodrigue, P.L.S.; Allen Kerley, P.L.S., RPLS
Subject: [EXTERNAL] RE: Dellanera Park Beach

Hi Dave,

Yes, you have my permission to make the corrections and add the erosion response info. Thanks for updating it!

Have a great day,
Jim



James M. Naismith, RPLS, LSLs
Senior Solutions Lead
Technology & Innovation Group
361.799.7502 | Direct
361.263.7854 | Mobile
Jim.Naismith@tbsmith.com
www.tbsmith.com



T. BAKER SMITH, LLC
A CENTURY OF SOLUTIONS



Texas Registered Professional Land Surveyor No. 4828
TBPLS Firm No. 101102-01

TEXAS GENERAL LAND OFFICE
Art. 33.136, Natural Resources Code
Co. Galveston, SK No. 91
File Date 11/10/2022 by K. Schreiber

From: David Klotz <David.Klotz@GLO.TEXAS.GOV>
Sent: Wednesday, November 2, 2022 12:39 PM
To: Jim Naismith, RPLS, LSLs <Jim.Naismith@tbsmith.com>
Cc: Travis Buaas <Travis.Buaas@GLO.TEXAS.GOV>; David Holmes <David.Holmes@GLO.TEXAS.GOV>; Mark Neugebauer <Mark.Neugebauer@GLO.TEXAS.GOV>
Subject: Dellanera Park Beach

Jim. We received the recorded CBS for the Dellanera Park Beach area adjacent to the west terminus of the Galveston seawall. While logging it in I was looking it over and noticed a couple of things.

1. It doesn't have a note referencing the CEpra Number or the erosion response.
2. "MHW = Mean Higher High Water" appears in the legend.

I believe, with your permission, we can cross out the Higher to make it Mean High Water, and I can write the Cepra/Erosion Response on the face of the survey. I think you will have to send me an email stating that this is okay for me to interline and I can have it archived with the CBS.

Thanks Dave.

David (Dave) Klotz, RPLS, LSLS
Asst. Chief Surveyor
Texas General Land Office
1700 N Congress Ave.
Suite 131
Austin, Texas 78701

Mailing Address:
P.O.Box 12873
Austin, Texas 78711-2873

Phone: 512/463-5107
e-mail: David.Klotz@glo.texas.gov
web: <http://www.glo.texas.gov>
Texas Professional Surveying Firm No. 101598-00

This email has been scanned for email related threats and delivered safely by Mimecast.
For more information please visit <http://www.mimecast.com>

CAUTION: This email originated from OUTSIDE of the Texas General Land Office. Links or attachments may be dangerous. Please be careful clicking on any links or opening any attachments.

10-01-22

T. Baker Smith, LLC
www.tbsmith.com
(31) 334-5719
FIRM #10194575



JULY 2021

BUILD UP/FILL AREA REPORT TO ACCOMPANY COASTAL BOUNDARY SURVEY OF A PORTION OF THE SOUTHERLY BOUNDARY LINE OF THE EDWARD HALL AND LEVI JONES SURVEY, ABSTRACT NO. 121, AND SAME BEING THE NORTHERLY BOUNDARY LINE OF THE GULF OF MEXICO AND SUBMERGED LAND TRACT No.'s 243 AND 241, GALVESTON COUNTY, TEXAS.

This report accompanies a map of survey dated JULY 2021



Figure 1: Gulf of Mexico shoreline within surveyed area facing East

TEXAS GENERAL LAND OFFICE
Art. 33.136, Natural Resources Code

Co. GALVESTON, Sk No. 91

HDR-GALVESTON_SEAWALL, Page 1

File Date 11/10/2022 by K. Schreiber

07022 (6)

All survey work was performed using survey grade RTK GPS base and rover: Hemisphere S320, and/or Trimble R8/R10 receivers. The survey was conducted July 01, 2021.

SURVEY CONTROL: One NGS survey marker was used as primary control: "877 1510 TIDAL 44" (N: 13,676,511.25, E: 3,310,080.49, EL: 14.45' NAVD88), shared OPUS solution, and one secondary control point set: "TBS CP1" (N: 13,657,628.41, E: 3,283,197.27 EL: 6.6') 5/8" iron rod set with yellow cap "TBS".

	Northing	Easting	Elevation
NGS BENCHMARKS			
NGS Monument 877 1510 Tidal 44 (Shared OPUS Solution)	13,676,511.25	3,310,080.49	14.45'
"TBS CP1", 5/8" iron rod set with yellow cap "TBS"	13,657,628.41	3,283,197.27	6.6'

Table 1: NGS benchmarks used as primary & secondary control for the survey. Datum is NAD 83 (2011), South Central Zone, Texas Coordinate System (US Feet). Orthometric heights referenced to NAVD88 datum (Geoid 18).



Figure 2: NGS benchmark "877 1510 TIDAL 44" (N: 13,676,511.25, E: 3,310,080.49, EL: 14.45' NAVD88) Shared OPUS Solution



Figure 3: 5/8" iron rod set with yellow cap "TBS" (N: 13,657,628.41, E: 3,283,197.27, EL: 6.6' NAVD88)

STATE OWNERSHIP BOUNDARY: As referenced to this survey, the elevation of MHW on the Gulf of Mexico shoreline is 1.3 feet (datum is NAVD88) The tide gauge is referenced to the historic NOAA tide gauge at "Pleasure Pier" which was discontinued and permanently removed on July 20, 2011, and the NOAA tide gauge at the Galveston Bay entrance (8771341).

EXISTING FILL: There is apparent existing artificial fill in that portion of the current survey area where the previously established MHW/littoral boundary line (NRC Article 33.136 Sketch 66, 2012) is landward of the current (July 2021) MHW line, said area of artificial fill being described by metes and bounds as follows:

TRACT 1 - BUILD UP / AREA FILL

FIELD NOTES for the boundary of a 1.04 acre tract of land, being an area of Build Up / Artificial Fill lying between the current (July, 2021) MHW line and the MHW line/littoral boundary established by Galveston County NRC Article 33.136 Sketch 66 coastal boundary survey performed in 2012, along the Gulf of Mexico shoreline. Being the southerly boundary of the Edward Hall and Levi Jones Survey, and being a part of Gulf of Mexico State Tracts 243 and 241 in Galveston County, Texas. Distances, bearings, and coordinates are grid, North American Datum of 1983 (2011 Adjustment), South Central Zone (4204) of the Texas Coordinate System;

Beginning on the MHW (Mean High Water) line, West of the Galveston Sea Wall (N: 13,657,248.55', E: 3,283,102.32', EL: 1.3' NAVD 88) from which a 5/8" Iron Rod with yellow cap "TBS" set for secondary control "TBS CP1" (N: 13,657,628.41', E: 3,283,197.27', EL: 6.6' NAVD88) bears N14°02'03" E a distance of 140.96V (391.55').



Thence along the Gulf of Mexico shoreline and said MHW line, the following courses and distances:

N 54°25'06" E a distance of 72.81V (202.25');
N 59°54'47" E a distance of 18.04V (50.11');
N 53°41'00" E a distance of 28.77V (79.93');
N 49°58'05" E a distance of 21.12V (58.66');
N 58°05'37" E a distance of 14.56V (40.45');
N 49°14'20" E a distance of 23.85V (66.26');
N 55°40'47" E a distance of 50.58V (140.49');
N 49°38'00" E a distance of 9.53V (26.48');
N 56°39'11" E a distance of 70.98V (197.16');
N 52°24'47" E a distance of 16.34V (45.38');
N 46°32'41" E a distance of 10.45V (29.04');
N 63°13'57" E a distance of 18.22V (50.60');
N 56°06'45" E a distance of 28.85V (80.15');
N 45°09'24" E a distance of 15.84V (43.99');
N 51°53'48" E a distance of 16.11V (44.76');
N 61°16'20" E a distance of 24.90V (69.16');
N 54°36'24" E a distance of 14.13V (39.24');
N 65°00'42" E a distance of 9.22V (25.61');
N 53°40'48" E a distance of 13.70V (38.06');
N 64°47'51" E a distance of 9.18V (25.50');
N 58°32'53" E a distance of 24.71V (68.63');
N 65°10'14" E a distance of 11.09V (30.82');
N 49°42'34" E a distance of 43.10V (119.72');
N 58°36'55" E a distance of 9.93V (27.59');
N 53°48'56" E a distance of 33.00V (91.67');
N 58°19'37" E a distance of 18.20V (50.55');
N 61°41'42" E a distance of 19.11V (53.08');
N 54°39'45" E a distance of 42.28V (117.45');
N 57°53'03" E a distance of 41.01V (113.91');
N 47°53'12" E a distance of 9.78V (27.17');
N 61°08'36" E a distance of 32.76V (91.00');
N 52°07'09" E a distance of 25.01V (69.46');
N 67°34'57" E a distance of 11.29V (31.36');
N 61°40'18" E a distance of 12.68V (35.21');
N 52°59'01" E a distance of 24.28V (67.45');
N 60°52'48" E a distance of 52.48V (145.77');
N 54°04'52" E a distance of 8.74V (24.29');
N 64°35'11" E a distance of 42.23V (117.30');
N 69°29'03" E a distance of 22.21V (61.69');
N 54°25'23" E a distance of 8.24V (22.89');
N 69°12'37" E a distance of 9.77V (27.13');
N 60°40'31" E a distance of 56.86V (157.95');

S 71°06'09" E a distance of 7.90V (21.94') to the westerly edge of a fill area as described in Galveston County NRC Article 33.136 Sketch 66, 2012, from which NGS Monument "877 1510 TIDAL 44" (N: 13,676,511.25, E: 3,310,080.49, EL: 14.45' NAVD88), bears N 54°12'03" E a distance of 10,888.54V (30,245.94').

Thence N 27°25'54" W with said westerly edge of the aforementioned fill area, a distance of 17.85V (49.59') to the MHW line as established by Galveston County NRC Article 33.136 Sketch 66, 2012;

Thence with said MHW (Galveston County NRC Article 33.136 Sketch 66, 2012), the following courses and distances:

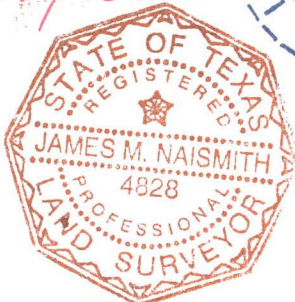
- S 64°22'26" W a distance of 78.34V (217.60');
- S 58°23'38" W a distance of 80.53V (223.70');
- S 58°28'24" W a distance of 86.40V (239.99');
- S 53°23'28" W a distance of 71.43V (198.41');
- S 57°33'48" W a distance of 99.49V (276.36');
- S 55°32'24" W a distance of 105.14V (292.05');
- S 56°24'36" W a distance of 101.79V (282.76');
- S 56°01'32" W a distance of 101.10V (280.83');
- S 55°13'51" W a distance of 99.01V (275.03');
- S 55°34'12" W a distance of 103.32V (287.00');
- S 53°55'31" W a distance of 129.23V (358.98');

Thence S 84°49'35" E, departing said MHW (Galveston County NRC Article 33.136 Sketch 66, 2012), a distance of 8.01V (22.26'); back to the **Point of Beginning**, containing 1.04 acres, more or less.

JMA

 James M. Naismith, RPLS, LSLs

10/25/2022



T. Baker Smith, LLC

www.tbsmith.com

(31) 334-5719

FIRM #10194575



COASTAL BOUNDARY SURVEY, JULY 2021

Being the littoral Boundary along the Mean High Water (MHW) line of the Gulf of Mexico at the Southwest end of Seawall Blvd., being a portion of the southerly boundary line of the Edward Hall and Levi Jones Survey, Abstract No. 121, and same being the northerly boundary line of the Gulf of Mexico and Submerged Land Tract No.'s 243 and 241, Galveston County, Texas.



Figure 1: Gulf of Mexico shoreline within surveyed area facing East

This report accompanies a map of survey dated July 2021.

TEXAS GENERAL LAND OFFICE

Art. 33.136, Natural Resources Code

Co. Galvesta, S/K No. 91

HDR-GALVESTON_SEAWALL, Page 1

File Date 11/10/2022 by K. Schreiber



Figure 2: Typical Gulf of Mexico shoreline within surveyed area



Figure 3: Typical Gulf of Mexico along Galveston Seawall within survey area

All survey work was performed using survey grade RTK GPS base and rover: Hemisphere S320 and/or Trimble R8/R10 Receivers. The survey was conducted July 01, 2021.

SURVEY CONTROL: One NGS survey marker was used as primary control: "877 1510 TIDAL 44" (N: 13,676,511.25, E: 3,310,080.49, EL: 14.45' NAVD88), shared OPUS solution, and one secondary control point set: "TBS CP1" (N: 13,657,628.41, E: 3,283,197.27 EL: 6.6') 5/8" iron rod set with yellow cap "TBS".

	Northing	Easting	Elevation
NGS BENCHMARKS			
NGS Monument 877 1510 Tidal 44 (Shared OPUS Solution)	13,676,511.25	3,310,080.49	14.45'
"TBS CP1", 5/8" iron rod set with yellow cap "TBS"	13,657,628.41	3,283,197.27	6.6'

Table 1: NGS benchmarks used as primary & secondary control for the survey. Datum is NAD 83 (2011), South Central Zone, Texas Coordinate System (US Feet). Orthometric heights referenced to NAVD88 datum (Geoid 18).



Figure 4: NGS benchmark "877 1510 TIDAL 44"
(N: 13,676,511.25, E: 3,310,080.49, EL: 14.45' NAVD88) Shared OPUS Solution



Figure 5: 5/8" iron rod set with yellow cap "TBS" (N: 13,657,628.41, E: 3,283,197.27, EL: 6.6' NAVD88)

The Littoral Boundary is based on the Mean High Water (MHW) contour. MHW elevation of 1.3' NAVD88 is referenced to the historic NOAA Tide Gauge at Pleasure Pier, which was discontinued and permanently removed on July 20, 2011, and the NOAA tide gauge at the Galveston Bay Entrance (8771341).

FIELD NOTES for the littoral boundary of the Mean High Water line at the Southwest end of Seawall Blvd., being a portion of the southerly boundary of the Edward Hall and Levi Jones Survey, Abstract No. 121, and same being the northerly boundary line of the Gulf of Mexico and Submerged Land Tracts No.'s 243 and 241, Galveston Texas. Distances, bearings, and coordinates are grid, North American Datum of 1983 (2011 Adjustment), South Central Zone (4204) of the Texas Coordinate System;

Beginning on the MHW (Mean High Water) line, West of the Galveston Sea Wall (N: 13,657,248.55, E: 3,283,102.32', EL: 1.3' NAVD 88) from which a 5/8" Iron Rod with yellow cap "TBS" set for secondary control "TBS CP1" (N: 13,657,628.41, E: 3,283,197.27 EL: 6.6' NAVD88) bears N14°02'03" E a distance of 140.96V (391.55').

Thence along the Gulf of Mexico shoreline and said MHW line, the following courses and distances:


- N 54°25'06" E a distance of 72.81V (202.25');
- N 59°54'47" E a distance of 18.04V (50.11');
- N 53°41'00" E a distance of 28.77V (79.93');
- N 49°58'05" E a distance of 21.12V (58.66');
- N 58°05'37" E a distance of 14.56V (40.45');



N 49°14'20" E a distance of 23.85V (66.26');
N 55°40'47" E a distance of 50.58V (140.49');
N 49°38'00" E a distance of 9.53V (26.48');
N 56°39'11" E a distance of 70.98V (197.16');
N 52°24'47" E a distance of 16.34V (45.38');
N 46°32'41" E a distance of 10.45V (29.04');
N 63°13'57" E a distance of 18.22V (50.60');
N 56°06'45" E a distance of 28.85V (80.15');
N 45°09'24" E a distance of 15.84V (43.99');
N 51°53'48" E a distance of 16.11V (44.76');
N 61°16'20" E a distance of 24.90V (69.16');
N 54°36'24" E a distance of 14.13V (39.24');
N 65°00'42" E a distance of 9.22V (25.61');
N 53°40'48" E a distance of 13.70V (38.06');
N 64°47'51" E a distance of 9.18V (25.50');
N 58°32'53" E a distance of 24.71V (68.63');
N 65°10'14" E a distance of 11.09V (30.82');
N 49°42'34" E a distance of 43.10V (119.72');
N 58°36'55" E a distance of 9.93V (27.59');
N 53°48'56" E a distance of 33.00V (91.67');
N 58°19'37" E a distance of 18.20V (50.55');
N 61°41'42" E a distance of 19.11V (53.08');
N 54°39'45" E a distance of 42.28V (117.45');
N 57°53'03" E a distance of 41.01V (113.91');
N 47°53'12" E a distance of 9.78V (27.17');
N 61°08'36" E a distance of 32.76V (91.00');
N 52°07'09" E a distance of 25.01V (69.46');
N 67°34'57" E a distance of 11.29V (31.36');
N 61°40'18" E a distance of 12.68V (35.21');
N 52°59'01" E a distance of 24.28V (67.45');
N 60°52'48" E a distance of 52.48V (145.77');
N 54°04'52" E a distance of 8.74V (24.29');
N 64°35'11" E a distance of 42.23V (117.30');
N 69°29'03" E a distance of 22.21V (61.69');
N 54°25'23" E a distance of 8.24V (22.89');
N 69°12'37" E a distance of 9.77V (27.13');
N 60°40'31" E a distance of 56.86V (157.95');
S 71°06'09" E a distance of 8.81V (24.48');
S 33°10'02" E a distance of 4.95V (13.74');
S 14°39'13" E a distance of 8.30V (23.05');
S 30°46'01" E a distance of 15.01V (41.70');
S 26°04'05" E a distance of 11.77V (32.70');
S 34°16'33" E a distance of 7.60V (21.11');
S 86°56'30" E a distance of 5.87V (16.31');
N 63°30'49" E a distance of 5.28V (14.66');
S 77°58'46" E a distance of 5.72V (15.89');

N 88°10'25" E a distance of 6.44V (17.89');
 N 67°14'57" E a distance of 4.78V (13.29');
 N 46°07'08" E a distance of 10.22V (28.39');
 N 71°46'58" E a distance of 4.79V (13.31');
 N 47°38'21" E a distance of 6.36V (17.68');
 N 59°08'21" E a distance of 8.73V (24.25');
 N 68°12'56" E a distance of 19.90V (55.27');
 N 51°58'45" E a distance of 48.62V (135.04');
 N 65°01'38" E a distance of 11.10V (30.84');
 N 38°31'27" E a distance of 7.71V (21.42');
 N 17°09'12" W a distance of 0.96V (2.66');
 N 68°12'06" E a distance of 7.40V (20.55');
 N 53°41'13" E a distance of 69.67V (193.52');
 N 60°10'18" E a distance of 13.31V (36.97');
 N 54°45'51" E a distance of 24.39V (67.75');
 N 50°49'52" E a distance of 29.21V (81.13');
 N 56°43'13" E a distance of 11.57V (32.15');
 N 33°59'00" E a distance of 12.38V (34.39');
 N 54°13'09" E a distance of 35.39V (98.29');

Thence N 51°09'22" E a distance of 24.87V(69.08') to the Point of Termination (N: 13,659,271.96, E: 3,286,457.42, EL: 1.3' NAVD88), from which NGS monument "877 1510 TIDAL 44" (N: 13,676,511.25, E: 3,310,080.49, EL: 14.45' NAVD88) bears N 53°52'46" E a distance of 10,528.03V (29,244.53').


 James M. Naismith, RPLS, LSLs

10/25/2022

