





GENERAL LAND OFFICE

JERRY PATTERSON, COMMISSIONER

Surveying Division Coastal Boundary Survey Approval

Project:	Pine Gully Restoration, Harris County SL 20100062 (Texas General Land Office)					
Project No:						
Project Manager:	Jeffrey Davis, TGLO Regional Director, Upper Coast					
Surveyor:	Gary C. Bowes, Licensed State Land Surveyor					
Description:	Coastal Boundary Survey, dated January 6, 2011, togeth Survey, dated December 07, 2010, conducted by Mr. Sic Land Surveyor. Survey depicts littoral boundary line of t					

Coastal Boundary Survey, dated January 6, 2011, together with an associated Fill Survey, dated December 07, 2010, conducted by Mr. Sidney Bouse, Licensed State Land Surveyor. Survey depicts littoral boundary line of the Ritson Morris Survey, Abstract 52, along both banks of Pine Gully, from Todville Road to Galveston Bay, adjacent to and south of Pine Gully Park, Harris 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:

Survey Division

March 15 2011 Date

Approval Filed as:

Sketch Tex. Nat. Res. Code Article 33.136, Harris County Report No. 14

TEXAS GENERAL LAND OFFICE Art. 33.136, Natural Resources Code Co. <u>Herris</u>, <u>Ketch No. 14</u> File Date <u>OG/21/2018</u> by <u>R. Kertyc</u>

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Survey Report for the COASTAL BOUNDARY SURVEY of Pine Gully Restoration, GLO SL20100062, USACE Permit# SWG-2009-01192, Galveston Bay Foundation, Moffatt & Nichol Job No. 6321-00, Ritson Morris Survey A-52, Harris County, Seabrook, Harris County, Texas January 6, 2011

I conducted a Coastal Boundary Survey for the Pine Gully Restoration Project, USACE Permit# SWG-2009-01192, Galveston Bay Foundation, Moffatt & Nichol Job No. 6321-00 in the Ritson Morris Survey A-52, Harris County, Seabrook, Harris County, Texas on January 6, 2011, as authorized by Larry Wise, Moffatt & Nichol in my official capacity as a Licensed State Land Surveyor of the State of Texas.

HISTORY

The Ritson Morris Survey A-52, Harris County, Texas was originally surveyed by Lute Ingramm. I see no survey date on the English Translation of the field notes (6-159), but the land was Titled to Ritson Morris on November 14, 1832.

CONSTRUCTION

Topographic data was collected on site between November 9, 2010 through January 6, 2011 by Sidney Bouse together with Kyle Rodriguez, Tommy Metcalfe and Trey Hall. Pine Gully is a very dynamic shoreline, and the final data collected on January 6, 2011 is the only data actually used for the 33-136 Survey boundary. The survey is tied to NGS Monument HGCSD 53 PID 5664 for Horizontal control. The Tidal Datum for the survey are tied to the Morgans Point Tx Station ID#8770613 based on the 3 year series April 2001- March 2004 with a tidal Epoch 1983-2001 utilizing Morgan Pt 3 Use 1973 VM# 11215, PID AW1555. Morgan Pt 3 Use 1973 has been transferred to the site using Trimble RTK with fixed height rods with multiple occupations for checks. The elevation of the Mean Higher High Water was transferred to the shoreline and the map dated January 6, 2011 reflects the results of this survey.

The Fill Survey is a part of this 33-136 survey. Part of this survey requires me to locate the original littoral boundary. Using aerial photography from 1944, I have scaled from Todville road to the apparent shoreline as seen on the 1944 aerial. Using that scaled distance as my best evidence of the original littoral boundary, I find the line to fall approximately along the current -2' contour line of Galveston Bay. The distance shown on the attached Fill Survey map reflects this construction.

I hereby certify that the attached survey was surveyed according to law in the field on above dates.

Sidney Bouse, LSLS Registered Professional Land Surveyor No. 5287 LSLS P.O. Box 2742 Crystal Beach, Texas 77554 (409) 684-6400 sid@surveygalveston.com

10-1545 Survey Report for Pine Gully.dox



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Art.	33.136,	Natural	Resources	Code
Co.	Harris		Ketch No. 11	1
File	Data 06	/21/201B	by R. Kart	ye

Mean Higher High Water Line 1 COASTAL BOUNDARY SURVEY of Pine Gully Restoration GLO SL 20100062, Seabrook, Harris County, Texas January 6, 2011

Being a portion of the Mean Higher High Water Line along Galveston Bay out of the Ritson Morris League, A-52, Harris County, Texas, and also being along Pine Gully Park, Seabrook, Texas, and being more particularly described by metes and bounds as follows: BEGINNING at the said Mean Higher High Waterline of Galveston Bay, along the Northerly shoreline of Pine Gully and the Southerly line of the Seabrook Park with beginning State Plane Coordinates, Texas South Central Zone, Grid Coordinates of N: 13784082.61', E: 3241523.46' Combine scale factor of 0.999873162 and Convergence of $1^{\circ}57'46.10102''$ and being N $41^{\circ}42'43''E$, a distance of 12565.61' (4523.6 varas) from HGCSD 53 NGS PID 5664; THENCE along the said Mean Higher High waterline of Pine Gully the following courses and distances; L1 S 61°28'54" W, A Distance Of 7.38 feet (2.7)varas; L2 Thence N 65°30'10" W, A Distance Of 41.40 feet (14.9)varas; L3 Thence S 74°51'26" W, A Distance Of 70.93 feet (25.5)varas; L4 Thence S 59°48'38" W, A Distance Of 96.53 feet (34.8)varas; L5 Thence S 54°07'22" W, A Distance Of 84.99 feet (30.6)varas; L6 Thence N 57°55'56" W, A Distance Of 51.09 feet (18.4)varas; L7 Thence N 67°03'00" W, A Distance Of 51.57 feet (18.6)varas; L8 Thence N 55°24'06" W, A Distance Of 35.00 feet (12.6)varas; L9 Thence N 39°14'57" W, A Distance Of 48.46 feet (17.4)varas; L10 Thence N 66°40'54" W, A Distance Of 55.83 feet (20.1)varas; L11 Thence N 52°02'30" W, A Distance Of 61.30 feet (22.1)varas; L12 Thence N 47°10'52" W, A Distance Of 80.77 feet (29.1)varas; L13 Thence N 62°10'23" W, A Distance Of 63.06 feet (22.7)varas; L14 Thence N 57°02'52" W, A Distance Of 143.54 feet (51.7)varas; L15 Thence N 68°40'22" W, A Distance Of 26.41 feet (9.5)varas; L16 Thence N 66°30'16" W, A Distance Of 34.12 feet (12.3)varas; L17 Thence N 50°33'20" W, A Distance Of 81.85 feet (29.5)varas; L18 Thence N 35°53'27" W, A Distance Of 46.37 feet (16.7)varas; L19 Thence N 17°09'52" W, A Distance Of 24.04 feet (8.7)varas; L20 Thence N 12°25'02" E, A Distance Of 40.00 feet (14.4)varas; L21 Thence N 04°47'50" W, A Distance Of 17.14 feet (6.2)varas; L22 Thence N 04°54'41" W , A Distance Of 111.60 feet(40.2)varas to a point on the Southerly line of Pine Gully Drive and to the point of termination coordinates of N: 13784609.31', E: 3240617.44'.

This description is part of "Coastal Boundary Survey of Pine Gully Restoration, GLO SL20100062. This description is accompanied by "Fill Survey along Pine Gully Restoration, GLO SL 20100062", Survey Report and two (2) additional descriptions that comprise the balance of the Coastal Boundary under this scope of work.

Sidney Bouse LSLS Coastal Surveying of Texas, Inc.

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Mean Higher High Water Line 2 COASTAL BOUNDARY SURVEY of Pine Gully Restoration GLO SL 20100062, Seabrook, Harris County, Texas January 6, 2011

Being a portion of the Mean Higher High Water Line along Galveston Bay out of the Ritson Morris League, A-52, Harris County, Texas, and also being along Pine Gully Park, Seabrook, Texas, and being more particularly described by metes and bounds as follows: BEGINNING at the said Mean Higher High Waterline of Galveston Bay, along the Northerly shoreline of Pine Gully and the Southerly line of the Seabrook Park with beginning State Plane Coordinates, Texas South Central Zone, Grid Coordinates of N: 13784190.21', E: 3239509.10' Combine scale factor of 0.999873199 and Convergence of 1°57'34.949" and being N 33°46'46"E, a distance of 11414.82' (4109.3 varas) from HGCSD 53 NGS PID 5664; THENCE along the said Mean Higher High waterline of Pine Gully the following courses and distances; L23 N 53°32'08" E, A Distance Of 45.19 feet (16.3)varas; L24 Thence S 71°10'15" E, A Distance Of 74.10 feet (26.7)varas; L25 Thence N 68°30'09" E, A Distance Of 38.45 feet (13.8)varas; L26 Thence N 74°36'45" E, A Distance Of 62.07 feet (22.3)varas; L27 Thence S 75°39'58" E, A Distance Of 58.40 feet (21.0)varas; L28 Thence N 72°42'00" E, A Distance Of 38.41 feet (13.8)varas; L29 Thence N 62°32'54" E, A Distance Of 34.14 feet (12.3)varas; L30 Thence S 79°18'13" E, A Distance Of 22.99 feet (8.3)varas; L31 Thence N 84°17'46" E, A Distance Of 25.24 feet (9.1)varas; L32 Thence N 72°07'14" E, A Distance Of 42.92 feet (15.5)varas; L33 Thence N 09°49'31" W, A Distance Of 10.78 feet (3.9)varas; L34 Thence N 88°41'55" E, A Distance Of 18.54 feet (6.7)varas; L35 Thence N 48°33'23" E, A Distance Of 38.36 feet (13.8)varas; L36 Thence N 23°28'58" E, A Distance Of 73.36 feet (26.4)varas; L37 Thence N 67°42'24" E, A Distance Of 63.86 feet (23.0)varas; L38 Thence N 66°06'28" E, A Distance Of 47.52 feet (17.1)varas; L39 Thence N 58°12'26" E, A Distance Of 57.10 feet (20.6)varas; L40 Thence N 53°33'26" E, A Distance Of 48.50 feet (17.5)varas; L41 Thence N 57°03'03" E, A Distance Of 78.61 feet (28.3)varas; L42 Thence N 67°25'02" E, A Distance Of 65.78 feet (23.7)varas; L43 Thence N 89°50'36" E, A Distance Of 31.14 feet (11.2)varas; L44 Thence S 74°53'14" E, A Distance Of 150.21 feet (54.1)varas; L45 Thence S 75°17'36" E, A Distance Of 35.96 feet (12.9)varas; L46 Thence S 62°19'39" E, A Distance Of 41.08 feet (14.8)varas; L47 Thence S 65°10'17" E, A Distance Of 38.21 feet (13.8)varas; L48 Thence N 82°18'01" E, A Distance Of 2.49 feet (0.9)varas; L49 Thence N 07°54'16" E, A Distance Of 49.73 feet (17.9)varas; L50 Thence N 06°59'50" W, A Distance Of 17.82 feet (6.4)varas; L51 Thence N 08°46'39" W, A Distance Of 54.74 feet (19.7)varas; L52 Thence N 00°19'32" W, A Distance Of 58.34 Feet (21.0) varas to a point on the Southerly line of Pine Gully Drive and to the point of termination with coordinates of N: 13784618.31', E: 3240595.21'.

This description is part of "Coastal Boundary Survey of Pine Gully Restoration, GLO SL20100062.

This description is accompanied by "Fill Survey along Pine Gully Restoration, GLO SL 20100062", Survey Report and two (2) additional descriptions that comprise the balance of the Coastal Boundary under this scope of work.

Sidney Bouse LSLS Coastal Surveying of Texas, Inc.

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TEXAS GENERAL LAND OFFICE Art. 33.136, Natural Resources Code Co. Harris, Sketch No. 14 File Date 06/21/2018: by R. Kurtye



Mean Higher High Water Line 3 COASTAL BOUNDARY SURVEY of Pine Gully Restoration GLO SL 20100062, Seabrook, Harris County, Texas January 6, 2011

Being a portion of the Mean Higher High Water Line along Galveston Bay out of the Ritson Morris League, A-52, Harris County, Texas, and also being along Pine Gully Park, Seabrook, Texas, and being more particularly described by metes and bounds as follows:

BEGINNING at the said Mean Higher High Waterline of the Southerly shoreline of Pine Gully with beginning State Plane Coordinates, Texas South Central Zone, Grid Coordinates of N: 13784125.33', E: 3239501.25' Combine scale factor of 0.999873185 and Convergence of 1°57'34.893" and being N 33°55'42"E, a distance of 11356.58' (4088.4 varas) from HGCSD 53 NGS PID 5664; THENCE along the said Mean Higher High waterline of Pine Gully the following courses and distances;

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	L56	Thence N	61°49'09"	Е,	А	Distance	Of	37.53	feet	(13.5)varas;			
	L57	Thence N	69°17'21"	E,	А	Distance	Of	46.15	feet	(16.6) varas;			
	L58	Thence N	79°52'31"	E,	А	Distance	Of	128.55	5 feet	(46.3) varas;			
	L59	Thence N	74°18'21"	E,	А	Distance	Of	106.38	3 feet	(38.3) varas;			
	L60	Thence N	55°50'05"	Ε,	А	Distance	Of	66.66	feet	(24.0) varas;		щΦ	
	L61	Thence N	47°13'36"	Ε,	А	Distance	Of	56.46	feet	(20.3) varas;		08	
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Sidney Bouse LSLS Coastal Surveying of Texas, Inc.

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File Date 06/21/2018 by R. Kent

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