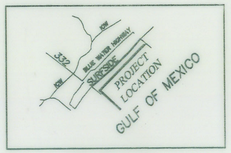
Survey of the MEAN HIGHER HIGH WATER line of part of the Southerly shoreline of the Frederick J. Calvit Survey, Abstract 51 and the Branch T. Archer Survey, Abstract 9, Brazoria County, Texas, and said line being more particularly described as follows;

COMMENCING at NGS Monument WELL RESET (Y=13,549,140.01 feet) and X= 3,155,892.27 feet);
Thence S08°06'53" E, a distance of 1540.39 feet (554.5 V) to the said MEAN HIGHER HIGH WATER line of the GULF OF MEXICO and the POINT OF BEGINNING (Y=13,547,615.05 feet and
X= 3,158,109.71 feet);
THENCE along the said Mean Higher High Water line the following courses and distances:

LINE TABLE			
LINE	BEARING	FEET (GRID)	VARAS
L1	N42°26'25"E	123.89	44.5
L2	N39°27'03"E	349.80	125.9
L3	N41°14'23"E	113.54	40.9
L4	N39°25'28"E	176.90	63.7
L5	N39°44'38"E	183.64	66.1
L6	N38°28'13"E	151.09	54.4
L7	N38°50'47"E	139.34	50.2
L8	N39°36'43"E	155.16	55.9
L9	N39°37'07"E	134.84	48.5
L10	N40°43'28"E	158.89	57.2
L11	N37°46'33"E	120.11	43.2
L12	N40°58'48"E	150.92	54.3
L13	N40°08'50"E	141.45	50.9
L14	N41°35'18"E	121.57	43.8
L15	N41°22'02"E	146.78	52.8
L16	N39°31'37"E	184.18	66.3
L17	N41°54'47"E	133.48	48.1
L18	N41°21'24"E	112.95	40.7
L19	N42°37'30"E	143.15	51.5
L20	N43°44'54"E	134.01	48.2
L21	N40°23'48"E	134.36	48.4
L22	N42°37'54"E	132.84	47.8
L23	N38°18'33"E	175.71	63.3
L24	N38°01'20"E	107.32	38.6
L25	N41°55'42"E	179.54	64.6
L26	N41°38'28"E	144.19	51.9
L27	N43°51'08"E	161.52	58.1
L28	N42°14'48"E	126.72	45.6
L29	N44°33'07"E	160.54	57.8
L30	N42°09'40"E	160.52	57.8
L31	N43°37'48"E	131.35	47.3
L32	N42°45'51"E	146.31	52.3
L33	N43°59'04"E	119.44	43.0
L34	N42°31'58"E	130.54	47.0
L35	N41°56'37"E	105.84	38.1
L36	N45°45'09"E	139.21	50.1
L37	N47°27'07"E	118.61	42.7
L38	N37°49'07"E	106.31	38.3
L39	N32°32'53"E	103.37	37.2
L40	N37°15'27"E	96.28	34.7
L41	N40°59'27"E	111.78	40.2
L42	N42°24'07"E	146.84	52.8
L43	N42°43'40"E	100.81	36.3
L44	N42°00'19"E	121.17	43.6
L45	N42°52'04"E	169.22	60.9
L46	N42°51'37"E	113.07	40.7
L47	N40°28'18"E	125.89	45.3
L48	N41°38'47"E	92.00	33.1
L49	N42°54'56"E	150.79	54.3
L50	N41°37'32"E	159.95	57.6
L51	N44°15'48"E	218.27	78.6
L52	N43°02'30"E	200.24	72.1
L53	N42°57'03"E	184.73	66.5
L54	N44°04'02"E	166.82	60.0
L55	N43°28'59"E	161.55	58.2
L56	N43°44'43"E	163.87	59.0
L57	N44°08'38"E	207.98	74.9
L58	N43°58'24"E	189.98	68.4
L59	N44°10'36"E	180.59	65.0
L60	N43°13'38"E	138.74	49.9
L61	N45°29'58"E	223.05	80.3
L62	N44°24'48"E	224.49	80.8
L63	N44°18'37"E	194.79	70.1
L64	N44°03'21"E	210.35	75.7
L65	N44°33'08"E	218.10	78.5
L66	N44°15'52"E	184.46	66.4
L67	N43°40'21"E	205.18	73.9
L68	N45°38'04"E	171.13	61.6
L69	N44°18'36"E	223.63	80.5
L70	N44°33'50"E	128.42	46.2
L71	N45°32'27"E	209.91	75.6
L72	N45°08'44"E	224.12	80.7
L73	N44°23'30"E	147.43	53.1
L74	N44°47'19"E	236.86	85.3
L75	N48°12'08"E	178.58	64.3
L76	N44°21'30"E	158.74	57.1
L77	N44°29'57"E	157.58	56.7
L78	N44°28'54"E	181.86	65.5
L79	N44°19'38"E	120.87	43.5
L80	N44°12'05"E	146.19	52.6
L81	N45°02'38"E	205.51	74.0
L82	N44°11'52"E	183.66	66.1
L83	N44°41'02"E	253.19	91.1
L84	N45°24'50"E	198.21	71.4
L85	N45°27'53"E	244.74	88.1
L86	N46°14'46"E	124.72	44.9
L87	N44°04'45"E	162.27	58.4
L88	N46°57'35"E	138.39	49.8
L89	N44°22'29"E	208.08	74.9
L90	N45°32'22"E	172.49	62.1
L91	N45°37'57"E	190.82	68.6
L92	N45°16'15"E	169.98	61.2
L93	N46°41'31"E	225.22	81.1
L94	N45°35'28"E	224.28	80.7



VICINITY MAP
(NOT TO SCALE)

GRAPHIC SCALE

600 0 300 600 1200 2400

(IN FEET)
1 inch = 600 ft.

"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."

R. H. BARROW A– 639
(AS OCCUPIED)

Branch T. Archer A– 9
Titled November 18, 1830

Frederick J. Calvit A– 51
Titled December 8, 1830

TEXAS GENERAL LAND OFFICE
Art. 33.136, Natural Resources Code
County BRAZORIA, Sk. No. 4
File Date 5-12-2003 by D.J.H.
See Report file in box

GRID Y:13558786.278
GRID X:3166553.346
LATITUDE: N28°58'41.267"
LONGITUDE: W95°15'07.067"

Tidal Datum at FREEPORT, DOW BARGE CANAL, Texas
National Ocean Service Station ID: 8772440 based on:

LENGTH OF SERIES: 5 YEARS
TIME PERIOD: January 1990– December 1994
TIDAL EPOCH: 1960–1978
CONTROL TIDE STATION: N/A

NOTES:

1.) ALL COORDINATES REFER TO THE STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE, AS DEFINED BY ARTICLE 21.071 OF THE NATURAL RESOURCES CODE OF THE STATE OF TEXAS, 1983 DATUM (1993 ADJUSTMENT).

2). CONTROL MONUMENT: WELL RESET
NGS PID AM0410
NORTH 4,129,786.135 (m)
EAST 961,917.889 (m)
SCALE FACTOR = 0.99988536
CONVERGENCE = + 1 49 09.7.

3). ALL DISTANCES ARE GRID DISTANCES.

APRIL 21, 2003

I hereby certify that the above described property was surveyed in the field according to law by me on the above referenced date, and that the above map together with dimensions and coordinates is true and correct as of the above date.

COASTAL SURVEYING OF TEXAS

Sidney Bouse

Sidney Bouse
Licensed State Land Surveyor
Registered Professional Land Surveyor No. 5287
email: sid@surveygalveston.com

Line Shown was surveyed on the ground April 21, 2003
Field Personnel: Sidney Bouse
Andy Bouse

LICENSED STATE LAND SURVEYOR
T E X A S

TBM 1– TOP OF 8" PIPE W/CONCRETE ––MHHW EL. 8.48'
TBM 2– CENTER OF PARK WALKWAY ––MHHW EL. 7.90'
TBM 3– EAST END OF RCP ––MHHW EL. 5.35'

STATION 8772440
FREEPORT, DOW BARGE CANAL

2440–A 1980 NOS VM# 864
2440–B 1980 NOS VM# 871
2440–C 1980 NOS VM# 872
2440–D 1980 NOS VM# 873

COASTAL SURVEYING OF TEXAS
8917 HARBORSIDE DRIVE PH (409) 740-1517
GALVESTON, TX. 77553 FAX (409) 740-0377
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"SERVING GALVESTON COUNTY OVER 50 YEARS"

MEAN HIGHER HIGH WATER
Survey of part of the Southerly shoreline of the
Frederick J. Calvit SURVEY, Abstract 51
and the Branch T. Archer Survey, Abstract 9
Brazoria County, Texas

03-0358.SLS

counter 80120

BRAZORIA COUNTY N.R.C. ART. 33.136 SKETCH 4
See Report in box.

SURVEYORS REPORT ON THE
MEAN HIGHER HIGH WATER LINE SURVEY OF PART OF THE
SOUTHERLY SHORELINE OF THE FREDERICK J. CALVIT SURVEY,
ABSTRACT 51 AND THE BRANCH T. ARCHER SURVEY, ABSTRACT 9
BOTH OF BRAZORIA COUNTY, TEXAS

I surveyed the line of Mean Higher High Water of part of the Southerly shoreline of the Frederick J. Calvit Survey, Abstract 51 and the Branch T. Archer Survey, Abstract 9 of Brazoria County, Texas, as authorized by Peter Ravella, Coastal Management Director, Coastal Technology Corpoation and in my capacity as Licensed State Land Surveyor for the State of Texas.

Brazoria County NRC ART. 33.136 Sketch 1

HISTORY

The Frederick J. Calvit Survey originally encompassed One League of land surveyed by Thomas H. Borden and Titled out of Mexico though the State of Coahuila and Texas on December 8, 1830 as found in the GLO Spanish Collection Box 16, Folder No. 1, with the English Translation of the field notes in English Translation No. 594 with original filed notes in Field Book 7, Page 276 in the Archives and Records Division of the General Land Office, Austin, Texas.

The Branch T. Archer Survey originally encompassed One League of land surveyed by Thomas H. Borden and Titled out of Mexico though the State of Coahuila and Texas on November 18, 1832 as found in the GLO Spanish Collection Box 17, Folder No. 12, with the English Translation of the field notes in English Translation No. 90 in the Archives and Records Division of the General Land Office, Austin, Texas.

CONSTRUCTION

An Act to adapt the Common Law of England was approved on January 20, 1840. The Littoral State boundary of land granted prior to this date must be surveyed according to the Spanish and Mexican Civil Laws and is determined to be along the Mean Higher High Water Line. Lands granted after this date are to be located along the Mean High Water Line as required under current Common Law.

The elevation of the Mean Higher High Water line on this project site was established. The FREEPORT, DOW BARGE CANAL, TEXAS (NOS Station Id: 8772440) Tidal Benchmarks 2440-A, 2440-B, 2440-C and 2440-D were occupied and tied to NGS monument Well Reset (NGS PID AM0410) utilizing Trimble RTK with 2 Meter fixed height poles. The published Mean

Counter 80122

Higher High Water elevation from NOS Tide Gauge FREEPORT was then transferred to the shoreline of the Gulf of Mexico and is as described on the attached survey.

Three site temporary benchmarks were established on the project site as shown on said attached survey.

The Frederick J. Calvit Survey East boundary line was called to the "right margin of Oyster Creek". The Branch T. Archer Survey West boundary line was called to the "left margin of the creek called Oyster Creek". Under the Mexican Civil Law, a river or creek was considered property of the Sovereign if it was a perennial or continuously flowing body of water. Oyster Creek was considered a perennial creek. Currently, Oyster Creek does not flow directly into the Gulf of Mexico. The flow has been diverted along the Intracoastal Waterway and then into the Gulf of Mexico through the Dow Diversionary Canal. The abandoned bed of Oyster Creek has subsequently filled to the point of the adjacent properties. NOTE: This Section 33.136 Natural Resources Code Survey does not purport to determine the current ownership or extents of the original bed of Oyster Creek or the adjoining owners. This survey only locates the Mean Higher High Water line of the Gulf of Mexico.

Sidney Bouse
Licensed State Land Surveyor
RPLS 5287

counter 80123