

LEAGUE CITY REFERENCE MARK LC FLOOD 1

Units of Measure:
Horizontal Datum:

U.S. Survey Feet
NAD83(2011)

Project Zone:
Vertical Datum:

Texas South Central 4204
NAVD88

Geoid Model Used:
Reference Marker Type:

GEOID18
Brass Disk in Concrete

Latitude:
Longitude:
Ellipsoid:

29° 29' 38.78642" N
95° 09' 24.61703" W
-66.72 (-20.336 m)

Geoid:
Elevation:

-88.66 (-27.023 m)
21.94 (6.687 m)

Northing:

13747281.45 (4190179.765 m)

Easting:

3190814.21 (972562.116 m)

Convergence:

1° 52' 58"

Grid Scale Factor:

0.99986709

Combined Factor:

0.99987028

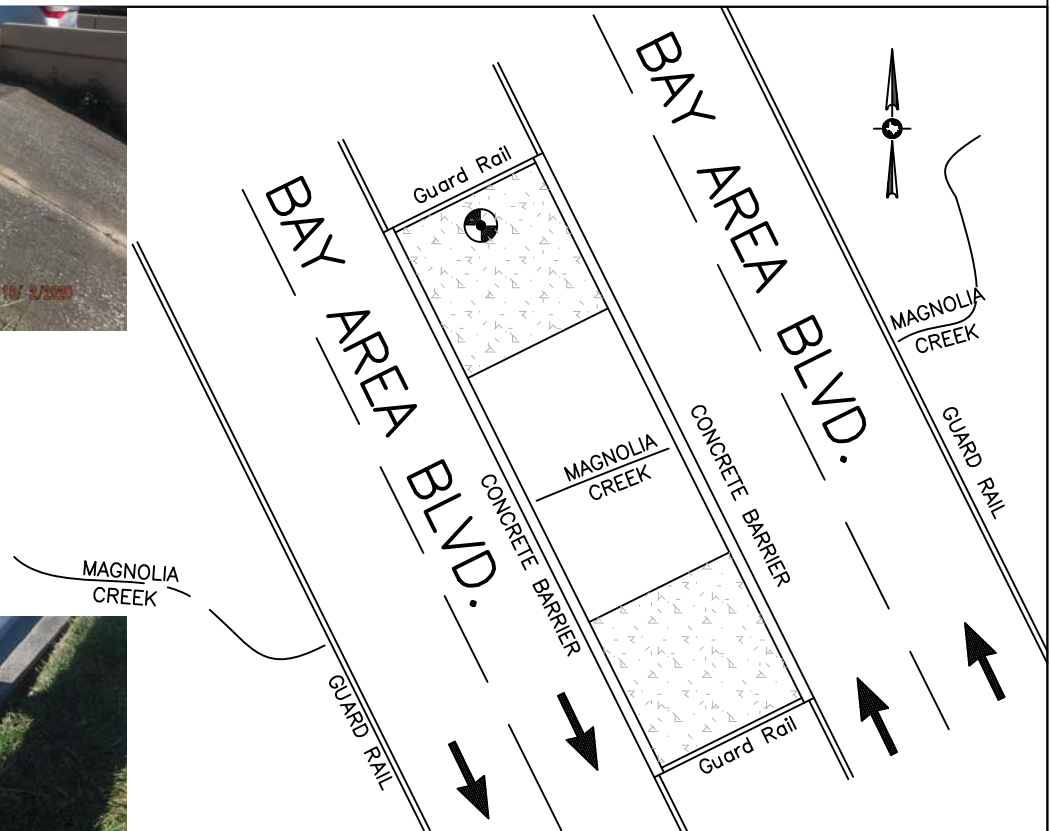


Survey Method: Multiple GPS Static Observation
Established By: High Tide Land Surveying, LLC
Date of GPS Campaign: 09/27/2020 - 10/05/2020

Notes: This reference mark was established using procedures outlined by NOAA for use in the OPUS Projects post processing application. This point was observed on 2 separate occasions and three dimensionally constrained to the COH2 Continuously Operating Reference Station.

To Reach Reference Mark

Mark is set in concrete on North Bank of Magnolia Creek at the intersection of Bay Area Boulevard in the median just on the inside of the Guard Rail.



NOT TO SCALE

LEAGUE CITY REFERENCE MARK LC FLOOD 2

Units of Measure: U.S. Survey Feet
Horizontal Datum: NAD83(2011)

Project Zone: Texas South Central 4204
Vertical Datum: NAVD88

Geoid Model Used: GEOID18
Reference Marker Type: Brass Disk in Concrete



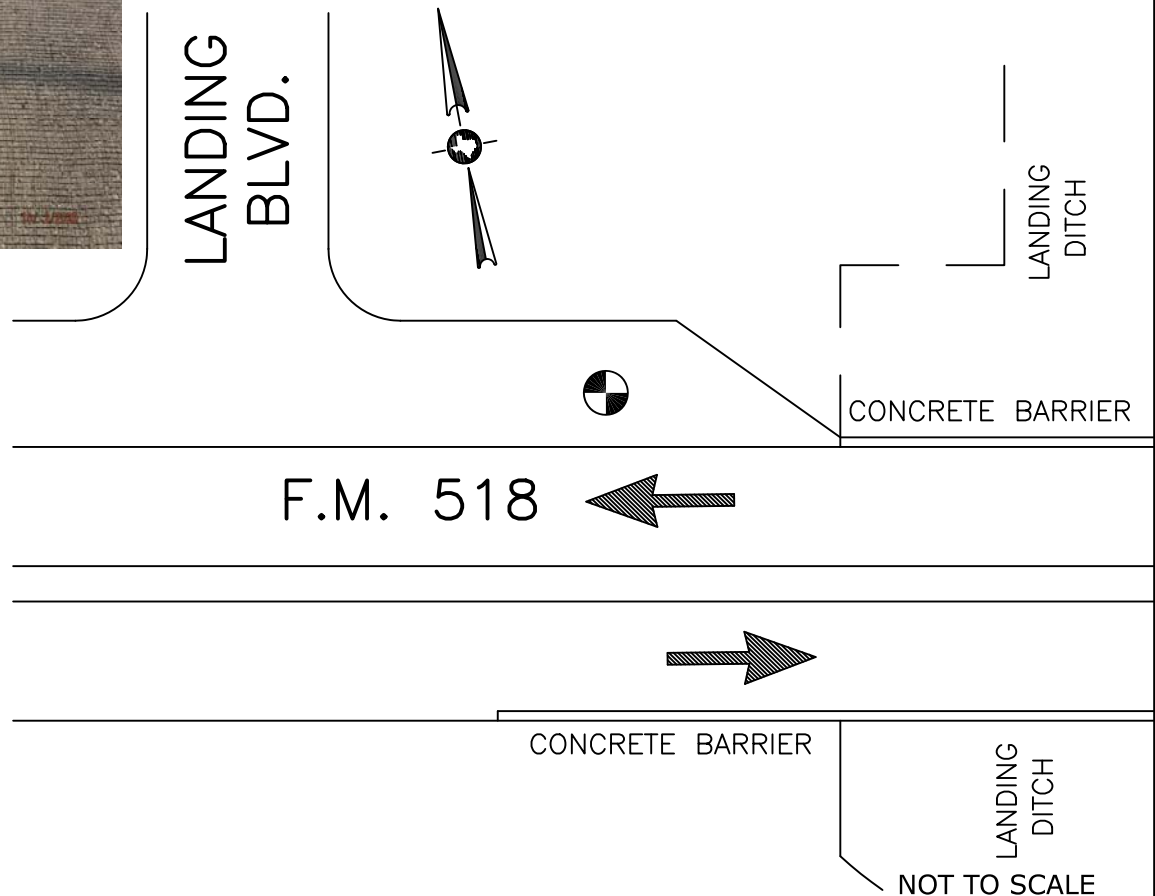
Latitude: 29° 30' 02.95820" N
Longitude: 95° 07' 28.16220" W
Ellipsoid: -68.37 (-20.839 m)
Geoid: -88.64 (-27.018 m)
Elevation: 20.27 (6.179 m)
Northing: 13750061.05 (4191026.991 m)
Easting: 3201018.00 (975672.237 m)
Convergence: 1° 53' 55"
Grid Scale Factor: 0.99986742
Combined Factor: 0.99987069

Survey Method: Multiple GPS Static Observation
Established By: High Tide Land Surveying, LLC
Date of GPS Campaign: 09/27/2020 - 10/05/2020

Notes: This reference mark was established using procedures outlined by NOAA for use in the OPUS Projects post processing application. This point was observed on 2 separate occasions and three dimensionally constrained to the COH2 Continuously Operating Reference Station.

To Reach Reference Mark

Mark is set on the North side of F.M. 518 just East of the intersection of Landing Boulevard on the West side of the bridge over the drainage ditch.



LEAGUE CITY REFERENCE MARK LC FLOOD 3

Units of Measure:
Horizontal Datum:

U.S. Survey Feet
NAD83(2011)

Project Zone:
Vertical Datum:

Texas South Central 4204
NAVD88

Geoid Model Used:
Reference Marker Type:

GEOID18
Brass Disk in Concrete

Latitude:
Longitude:
Ellipsoid:

29° 27' 05.90133" N
95° 04' 59.65068" W
-76.80 (-23.410 m)

Geoid:
Elevation:

-88.38 (-26.938 m)
11.57 (3.528 m)

Northing:
Easting:

13732624.87 (4185712.431 m)
3214731.57 (979852.143 m)

Convergence:

1° 55' 08"

Grid Scale Factor:

0.99986531

Combined Factor:

0.99986899



Survey Method: Multiple GPS Static Observation
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Date of GPS Campaign: 09/27/2020 - 10/05/2020

Notes: This reference mark was established using procedures outlined by NOAA for use in the OPUS Projects post processing application. This point was observed on 2 separate occasions and three dimensionally constrained to the COH2 Continuously Operating Reference Station.

To Reach Reference Mark

Mark is located on North edge of Borden Gully Drive, just to the West of it's termination into Hughes Lane.



NOT TO SCALE

LEAGUE CITY REFERENCE MARK LC FLOOD 4

Units of Measure:
Horizontal Datum:

U.S. Survey Feet
NAD83(2011)

Project Zone:
Vertical Datum:

Texas South Central 4204
NAVD88

Geoid Model Used:
Reference Marker Type:

GEOID18
Brass Disk in Concrete

Latitude:
Longitude:
Ellipsoid:
Geoid:
Elevation:
Northing:
Easting:
Convergence:
Grid Scale Factor:
Combined Factor:

29° 28' 38.64033" N
95° 04' 26.11136" W
-72.30 (-22.037 m)
-88.47 (-26.967 m)
16.17 (4.930 m)
13742085.89 (4188596.155 m)
3217380.38 (980659.500 m)
1° 55' 24"
0.99986632
0.99986978

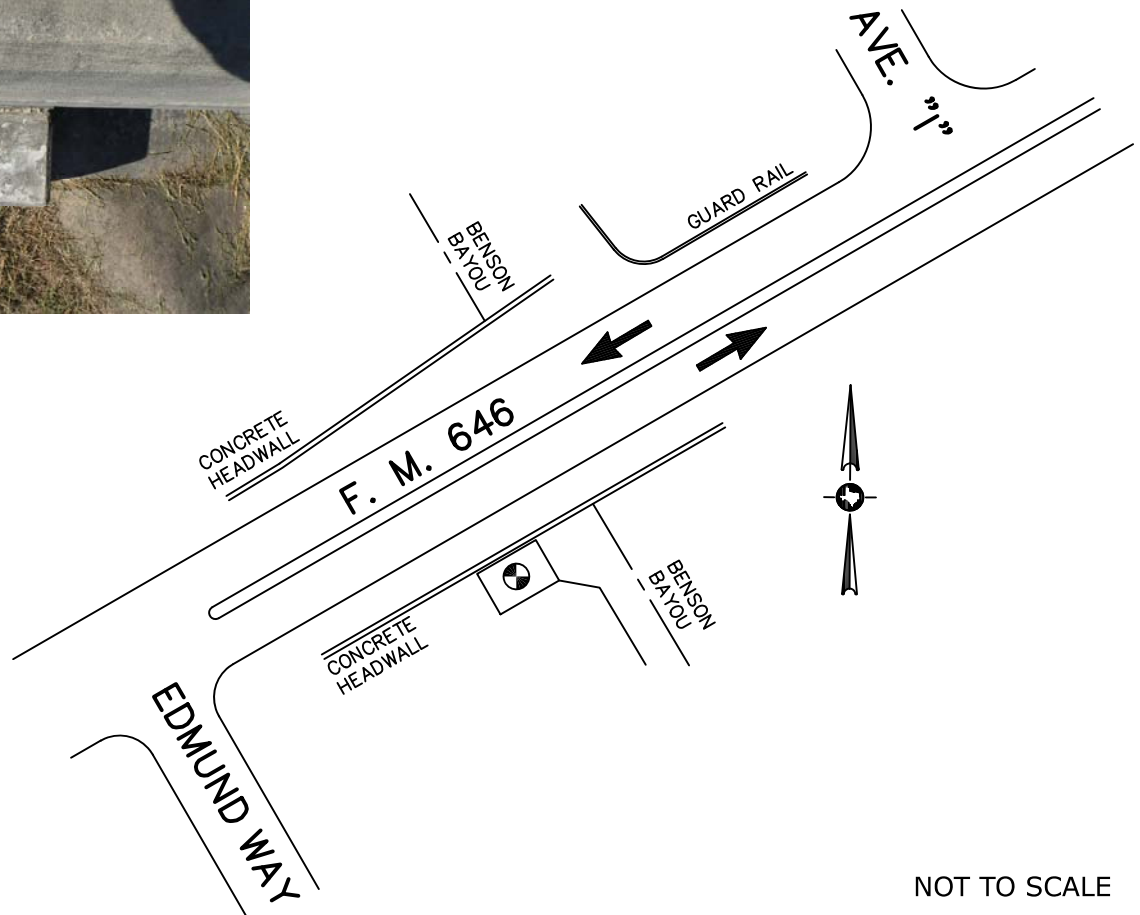


Survey Method: Multiple GPS Static Observation
Established By: High Tide Land Surveying, LLC
Date of GPS Campaign: 09/27/2020 - 10/05/2020

Notes: This reference mark was established using procedures outlined by NOAA for use in the OPUS Projects post processing application. This point was observed on 2 separate occasions and three dimensionally constrained to the COH2 Continuously Operating Reference Station.

To Reach Reference Mark

Mark is located in bridge abutment on South side of F.M. 646, and West of Benson Bayou, just to the East of Edmund Way.



NOT TO SCALE

LEAGUE CITY REFERENCE MARK LC FLOOD 5

Units of Measure:
Horizontal Datum:

U.S. Survey Feet
NAD83(2011)

Project Zone:
Vertical Datum:

Texas South Central 4204
NAVD88

Geoid Model Used:
Reference Marker Type:

GEOID18
Brass Disk in Concrete

Latitude:
Longitude:
Ellipsoid:

29° 31' 20.82540" N
95° 04' 47.07953" W
-76.60 (-23.349 m)

Geoid:
Elevation:

-88.67 (-27.026 m)
12.06 (3.677 m)

Northing:

13758395.79 (4193567.425 m)

Easting:

3214979.30 (979927.651 m)

Convergence:

1° 55' 14"

Grid Scale Factor:

0.99986858

Combined Factor:

0.99987225

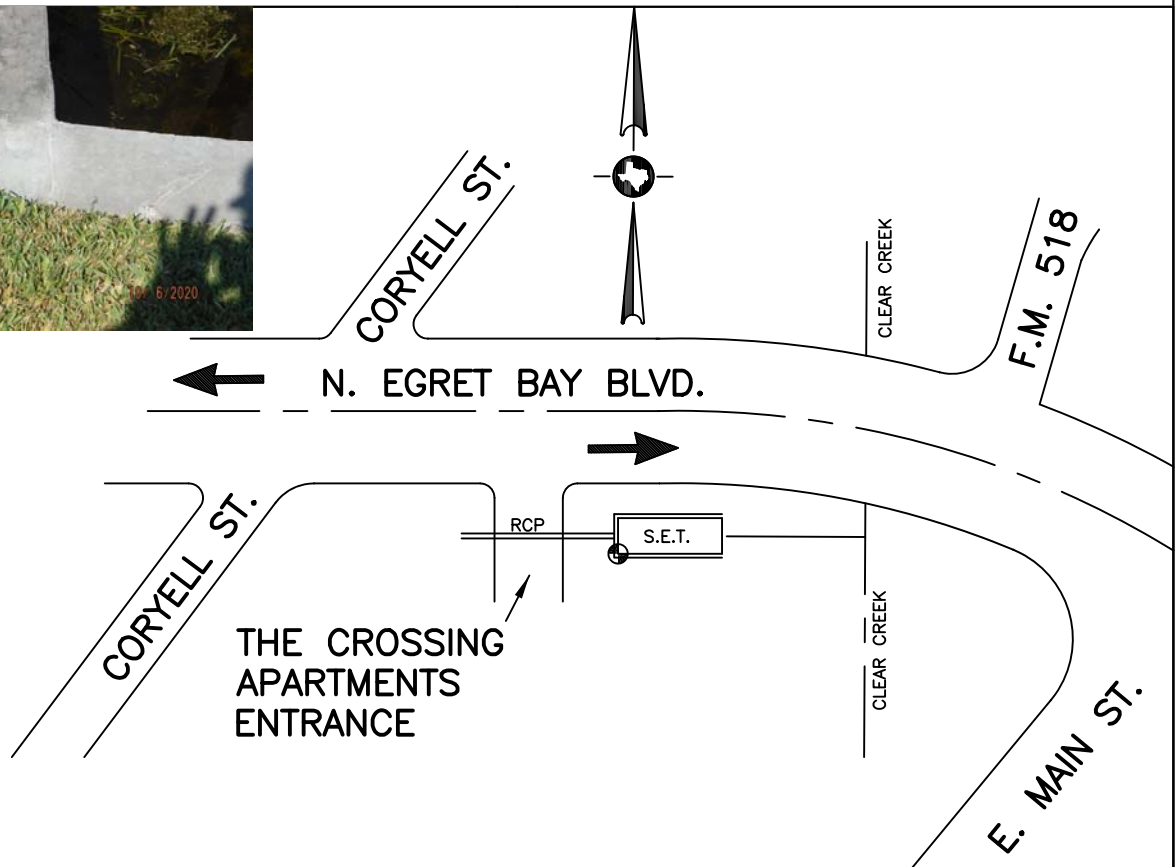


Survey Method: Multiple GPS Static Observation
Established By: High Tide Land Surveying, LLC
Date of GPS Campaign: 09/27/2020 - 10/05/2020

Notes: This reference mark was established using procedures outlined by NOAA for use in the OPUS Projects post processing application. This point was observed on 2 separate occasions and three dimensionally constrained to the COH2 Continuously Operating Reference Station.

To Reach Reference Mark

Mark is located in the Southwest corner of a Safety End Treatment on the Southside of Egret Bay Boulevard just to the East of the entrance to The Crossing Apartments.



NOT TO SCALE

LEAGUE CITY REFERENCE MARK LC FLOOD 6

Units of Measure:
Horizontal Datum:

U.S. Survey Feet
NAD83(2011)

Project Zone:
Vertical Datum:

Texas South Central 4204
NAVD88

Geoid Model Used:
Reference Marker Type:

GEOID18
Brass Disk in Concrete

Latitude:
Longitude:
Ellipsoid:
Geoid:
Elevation:
Northing:
Easting:
Convergence:
Grid Scale Factor:
Combined Factor:

29° 29' 33.23014" N
95° 01' 15.55930" W
-74.56 (-22.725 m)
-88.48 (-26.968 m)
13.92 (4.243 m)
13748165.48 (4190449.220 m)
3234023.68 (985732.389 m)
1° 56' 58"
0.99986701
0.99987058



Survey Method: Multiple GPS Static Observation
Established By: High Tide Land Surveying, LLC
Date of GPS Campaign: 09/27/2020 - 10/05/2020

Notes: This reference mark was established using procedures outlined by NOAA for use in the OPUS Projects post processing application. This point was observed on 2 separate occasions and three dimensionally constrained to the COH2 Continuously Operating Reference Station.

To Reach Reference Mark

Mark is located on South Side of F.M. 646, to the East of Gum Bayou, at the Southeast corner of the concrete footing for the traffic barrier for the bridge over Gum Bayou.

