

**NOTICE OF SPECIAL MEETING
CITY OF SOUTH PADRE ISLAND
SHORELINE TASK FORCE**

NOTE: *One or more members of the City of South Padre Island City Council may attend this meeting; if so, this statement satisfies the requirements of the OPEN MEETINGS ACT.*

NOTICE IS HEREBY GIVEN THAT THE SHORELINE TASK FORCE OF THE CITY OF SOUTH PADRE ISLAND, TEXAS, WILL HOLD A SPECIAL MEETING ON:

MONDAY, FEBRUARY 5, 2018
3:00 P.M. AT THE MUNICIPAL BUILDING,
CITY COUNCIL CHAMBERS, 2ND FLOOR
4601 PADRE BOULEVARD, SOUTH PADRE ISLAND, TEXAS


1. Call to Order.
2. Pledge of Allegiance.
3. Public Comments and Announcements: *This is an opportunity for citizens to speak to Task Force relating to agenda or non-agenda items. Speakers are required to address the Shoreline Task Force at the podium and give their name before addressing their concerns. [Note: State law will not permit the Shoreline Task Force to discuss debate or consider items that are not on the agenda. Citizen Comments may be referred to City Staff or may be placed on the agenda of a future Shoreline Task Force meeting]*
4. Approval of the January 29, 2018 special meeting minutes.
5. Discussion and possible action to recommend to City Council a City Sponsored Dune Ridge Construction Permit for Isla Del Sol Condominiums Home Owners Association (HOA) 600 Padre Boulevard, South Padre Island Texas. (Hill)
6. Adjournment

DATED THIS THE 2TH DAY OF FEBRUARY 2018


Susan Hill, City Secretary

I, THE UNDERSIGNED AUTHORITY, DO HEREBY CERTIFY THAT THE ABOVE NOTICE OF MEETING OF THE SHORELINE TASK FORCE OF THE CITY OF SOUTH PADRE ISLAND, TEXAS IS A TRUE AND CORRECT COPY OF SAID NOTICE AND THAT I POSTED A TRUE AND CORRECT COPY OF SAID NOTICE ON THE BULLETIN BOARD AT CITY HALL/MUNICIPAL BUILDING ON **FEBRUARY 2, 2018** AT/OR BEFORE **3:00 P.M.** AND REMAINED SO POSTED CONTINUOUSLY FOR AT LEAST 72 HOURS PRECEDING THE SCHEDULED TIME OF SAID MEETING.




Susan Hill, City Secretary

THIS FACILITY IS WHEELCHAIR ACCESSIBLE, AND ACCESSIBLE PARKING SPACES ARE AVAILABLE. REQUESTS FOR ACCOMMODATIONS OR INTERPRETIVE SERVICES MUST BE MADE 48 HOURS PRIOR TO THIS MEETING. PLEASE CONTACT BUILDING OFFICIAL, DAVID TRAVIS; ADA DESIGNATED RESPONSIBLE PARTY AT (956) 761-8103.

**CITY OF SOUTH PADRE ISLAND
SHORELINE TASKFORCE **SPECIAL**
MEETING
AGENDA REQUEST FORM**

MEETING DATE: 2/5/2017

NAME & TITLE: Brandon Hill, Shoreline Director

DEPARTMENT: Shoreline department

ITEM

Approval of January 29, 2017 regular meeting minutes.

ITEM BACKGROUND

BUDGET/FINANCIAL SUMMARY

None

COMPREHENSIVE PLAN GOAL

LEGAL REVIEW

Sent to Legal:

YES: _____

NO: _____

Approved by Legal:

YES: _____

NO: _____

Comments:

RECOMMENDATIONS/COMMENTS

<p style="text-align: center;">MINUTES CITY OF SOUTH PADRE ISLAND SHORELINE TASK FORCE</p>

MONDAY, JANUARY 29, 2017

I. Call to Order.

The Shoreline Task Force of the City of South Padre Island, Texas held a special meeting on Monday, January 29, 2017, at the Municipal Complex Building, 2nd Floor, 4601 Padre Boulevard, South Padre Island Texas. Chairman Neil Rasmussen, called the meeting to order at 3:00 p.m. A quorum was present: Task Force Members Virginia Guillot, Norma Trevino, and Troy Giles were present at the meeting; Stormy Wall, Kerry Schwartz, and Thoren Thorbjørnsen were not present.

City staff members present were: Shoreline Management Director Brandon Hill, and Shoreline Program Coordinator Jose Manuel Aguilar, City Manager Susan Guthrie, and Assistant City Manager Darla Jones.

II. Pledge of Allegiance.

Mr. Neil Rasmussen led the Pledge of Allegiance.

III. Public Comments and Announcements.

No public comments were heard.

IV. Approval of January 15, 2017 regular meeting minutes.

Task Force Member Troy Giles made a motion to approve the January 15, 2018 meeting minutes, seconded by Norma Trevino. The motion passed unanimously

V. Discussion and possible action to recommend to Texas General Land Office modifications to the existing Beach and Dune Permit (GLO ID# BDSPI-17-0068a) for 6800 Padre Boulevard South Padre Island Texas. (Hill)

Task Force Member Virginia Guillot made a motion to recommend to the Texas General Land Office modifications to existing Beach and Dune Permit (GLO ID# BDSPI-17-0068a) for 6800 Padre Boulevard South Padre Island Texas, seconded by Norma Trevino. The motion passed unanimously

VI. Discussion and possible action to recommend to Texas General Land Office a Beach and Dune Permit for Regency Condominiums 1816 Gulf Boulevard South Padre Island Texas. (Hill)

Task Force Member Troy Giles made a motion to recommend to the Texas General Land Office a Beach and Dune Permit for Regency Condominiums 1816 Gulf Boulevard South Padre Island Texas, seconded by Virginia Guillot. The motion passed unanimously.

VII. Discussion and possible action regarding the replacement and/or maintenance of beach access walkover handrails.

Task Force Member Troy Giles made a motion to recommend the replacement and/or maintenance of beach access walkover handrails using polymer coated 2x4 wooden handrails, seconded by Norma Trevino. The motion passed unanimously.

VIII. Adjournment

There being no further business, Task Force Chairman Neil Rasmussen adjourned the meeting at 3:17 p.m.

Jose Aguilar, Program Coordinator

Neil Rasmussen, Taskforce Chairman

**CITY OF SOUTH PADRE ISLAND
SHORELINE TASKFORCE **SPECIAL**
MEETING
AGENDA REQUEST FORM**

MEETING DATE: 2/5/2017

NAME & TITLE: Brandon Hill, Shoreline Director

DEPARTMENT: Shoreline department

ITEM

Discussion and possible action to recommend to City Council a City Sponsored Dune Ridge Construction Permit for Isla Del Sol Condominiums Home Owners Association (HOA) 600 Padre Boulevard South Padre Island Texas. (Hill)

ITEM BACKGROUND

CITY SPONSORED DUNE RIDGE CONSTRUCTION PERMITS.

A. The City endorses the concept of City-sponsored activities to alter existing dune shape and size where a complete dune ridge construction plan has been reviewed and approved by the City. In the event that a specific property owner wishes to alter dunes seaward of their retaining wall, that property owner may present a plan to City staff that includes the pertinent items and information as necessary to completely understand and review the application. Once complete, staff will forward the plan to the Shoreline Task Force, who will in turn provide a recommendation to the City Council for review and consideration. The City Council will determine if the City wishes to approve and sponsor such activity.

B. The City may approve and/or sponsor dune ridge construction activities only if it finds as a fact, after a full investigation, that the particular project as proposed, meets the criteria below. Failure to meet any one of these criteria will result in a finding of material weakening or material damage and the City shall not approve the application for the dune ridge construction activity as proposed.

(1) the height of the existing dune(s) is/are greater than fifteen feet (15') above sea level;

(2) an affirmative demonstration can be made that substantial dunes would likely form naturally in the area of the proposed dune ridge construction project;

(3) the project demonstrates equal or better protection with the proposed dune ridge construction plan;

(4) the adjacent littoral property owner(s) provide written consent for the proposed dune ridge construction project;

(5) the adjacent littoral property is in compliance with previously issued and approved Beach and Dune permits;

(6) the City shall ensure that all sand seaward of the Historic Building Line (or in the case of Lots 1,2,3 & 4 of Block 156,PBX,seaward of the retaining wall) remains in the beach/dune system;

(7) the height of the altered dunes seaward of the Historic Building Line (or in the case of Lots 1,2,3 & 4 of Block 156,PBX,seaward of the retaining wall) can be no lower than ten feet (10') above sea level;

(8) the altered dune(s) must be vegetated with indigenous dune vegetation and watered to stabilize the dune(s); and

(9) the project shall not restrict or interfere with the public's access to the beach or use of the beach at normal high tide.

C. If the City Council approve and sponsor such activity, the City will forward the plan, with appropriate and pertinent information and the expected time frame from beginning of the project to completion, to the General Land Office and the Office of the Attorney General for their review and approval. These state agencies shall have fifteen (15) working days from receipt of the proposed dune ridge construction application to review, and provide comments to the City.

BUDGET/FINANCIAL SUMMARY

None

COMPREHENSIVE PLAN GOAL

LEGAL REVIEW

Sent to Legal:

YES: _____

NO: _____

Approved by Legal:

YES: _____

NO: _____

Comments:

RECOMMENDATIONS/COMMENTS

NORRISLEAL

ENGINEERING WATER

Firm Registration No. F-14803

807 Brazos
Austin, TX 78701
512.473.8288

1222 E. Tyler Ave
Harlingen, TX 78550
956.423.7409

January 22, 2018

Brandon Hill
Shoreline Director
City of South Padre Island
4601 Padre Boulevard
South Padre Island, TX 78597

RE: Isla Del Sol Condominium Beach and Dune Application

Dear Mr. Hill,

Isla Del Sol Condominium has requested NorrisLeal to assist in the submittal of the attached Beach and Dune Application. Attached please find two checks in the amount of \$180 for Staff Approved applications and \$300 for City Council Approved applications. We believe this application is complete and complies with the City of South Padre Island code of ordinances Chapter 22. These proposed improvements will meet the needs of the City's dune improvement goals as well as the needs for the Isla Del Sol property owners.

We request for SPI to perform their review of the project submittal. We humbly request assistance in finding a property that can accept the surplus sand and a South Padre Island volunteer sponsored planting event to help with the dune re-vegetation at Isla Del Sol.

Thank you again for your staffs' efforts and we look forward to your comments. Should you require any additional information please let me know.

Sincerely,



Jose Leal, PE
Senior Project Manager

Cc: Isla Del Sol



Beach & Dune Application

City of South Padre Island
4801 Padre Blvd.
South Padre Island, TX 78597
Phone: (956) 761-3044
Fax: (956) 761-3898

Site for Proposed Work

Legal Description: Tracts 9 & 10, Padre Beach Acres Physical Address: 600 Padre Boulevard

Property Owner Information

Applicant / Agent for Owner

Name: Isla Del Sol Condominium Association
Mailing Address: PO Box 2392
City: South Padre Island State: Texas
Zip: 78597 Country: United States
Phone Number: 956-761-2649
Fax Number: 956-761-4251
E-Mail Address: rnpr@aol.com

Name: Jose Leal
Mailing Address: 1222 East Tyler
City: Harlingen State: Texas
Zip: 78550 Country: United States
Phone Number: 956-423-7409
Fax Number: 956-423-7482
E-Mail Address: jose.leal@norrisleal.com

I / We, owners of the above-mentioned property, authorize the applicant stated above, to act in my behalf in order to acquire a Beach and Dune permit for the construction proposed below. (owner initials here JLP)

Owner(s) Signature(s): [Signature]
Date: 1/24/2018

Applicant Signature: [Signature]
Date: 1/24/18

Project Description

Describe with as much as detail as possible, the construction proposed. If more room is needed, please include an additional page. Include the number of habitable units, amenities, swimming pools, fences, kinds of fences, whether footings and/or retaining walls will be installed, and locations of proposed landscaping and parking.

This is a dune ridge construction project located on the east side of the historic building line of tracts 9 & 10, Padre Beach Acres Subdivision. Property is also known as

Isla Del Sol Condominiums. The owner is requesting that the existing 15 plus feet dunes be lowered to 10 feet. The owner proposes to lower the existing dune to 10 feet and provide a continuous dune base of up to 250 feet east of the historic building line using the top available sand to fill the voids as much as possible. This will provide a better protection with the proposed dune ridge construction.

See Exhibit A-E for additional information.

Total Square Footage of Footprint of Habitable Structure: 0
Total Area of Impervious Surface (i.e. retaining walls, walkways, drives, patios, etc.): 0
Percentage Impervious Surface [(impervious surface / habitable footprint) * 100]: 0

Please Note: the percentage of impervious surface cannot exceed 5% in an eroding area.

Approximate Duration of Construction: 60 days

Financial Plan for the Removal of All Hard Structures

All properties which are allowed to build retaining walls on their property are allowed to do so with the condition that a financial plan for the removal of the retaining wall is submitted to the Public Works Department of the City of South Padre Island. Removal of the retaining wall at the owner's expense may be required if/once the retaining wall comes into regular contact with wave action for twenty (20) out of thirty (30) consecutive days. The City accepts the submission of a Retaining Wall Covenant, or other financial guarantee, insuring the removal of the retaining wall if the required conditions are met.

Type of Plan Submitted: _____ N/A _____ Date Submitted: _____

Drainage

Describe the impact that the proposed construction will have on the natural drainage pattern on the site and adjacent lots.

- ☒ No change in the drainage on site.
- ☐ The proposed construction will change the grading and the drainage on the subject property. (An explanation will be required detailing where the water will drain.)

Explanation / Other Information: _____

Impacts to Beach / Dune System

Answer each question as completely as possible in narrative form.

1. What damage will this proposed construction have on the dune vegetation located at the project site?

- ☐ No damage to dune vegetation whatsoever.
- ☒ The proposed construction will impact 60 % of the dune vegetation site. (An explanation of the "impact" will be required.)
- ☐ The proposed construction will require the removal and relocation of _____ % of the dune vegetation on site. (The submission of a mitigation plan will be required.)

Explanation / Other Information: Proposed construction will effect the current vegetation due to lowering of the dune by moving or covering dune vegetation.

2. How will the proposed construction alter the dune size/shape at the project site?

- ☐ No change to dune size/shape whatsoever.
- ☒ The proposed construction will change 67 % of the size/shape of dunes on site. (Details will be required.)
- ☐ The proposed construction will require the removal and relocation of _____ % of the dunes on site. (The submission of a mitigation plan will be required.)

Explanation / Other Information: Dunes will be lowered and leveled to 10 feet.

3. How will the proposed construction change the hydrology of the dunes at the project site?

- ☐ No change to dune hydrology whatsoever.
- ☐ The proposed construction will impact dune hydrology on site. (Details will be required.)

Explanation / Other Information: N/A

4. Describe alternatives to the proposed construction or method of construction which will cause fewer or no adverse effects on dunes and dune vegetation.

No adverse effects to the dunes are expected. The dune leveling and lowering will provide a continuous dune which will improve the existing dune. Dune vegetation will be mitigated as required and therefore any adverse effect is eliminated or minimized.

5. Describe alternatives to the proposed construction or method of construction which will cause fewer or no adverse impairment to beach access.

This project will not cause any adverse impairment to the beach access.

Mitigation Plan

Describe the methods which you will use to avoid, minimize, mitigate and/or compensate for any adverse effects on dunes or dune vegetation.

Explanation / Other Information: See Exhibit A Through E

Financial Plan for Dune Mitigation:

If required by the City Council, a financial guarantee (irrevocable letter of credit or a performance bond, etc.) may be necessary to insure the mitigation of dunes/dune vegetation takes place as proposed and required of the applicant.

Type of Plan Submitted: N/A

Date of Submission: N/A

Checklist of Additional Required Application Information

An accurate map, plat or site plan showing:

- ☒ 1. Legal description of the property (lot, block, subdivision) and the immediately adjoining property.
- ☐ 2. Location of all existing structures - including the habitable and inhabitable structures, swimming pools, decks, fences, parking areas, landscape areas, etc.
- ☐ 3. Location of the Historical Building Line on the subject property and the extension of the line on the properties immediately adjoining the subject property to the north and to the south.
- ☐ 4. Location and elevation of existing retaining walls - both on the subject property and those properties immediately adjoining the subject property to the north and to the south.
- ☐ 5. Location of proposed structure(s) - if proposing the construction of a retaining wall, please also include the proposed elevation of the retaining wall.
- ☐ 6. Location of proposed driveways, parking areas (showing the # of proposed parking spaces) and landscape areas.
- ☐ 7. Location of all existing and proposed beach access paths and/or dune walkovers.
- ☐ 8. Location and extent of any man-made vegetated mounds, restored dunes, fill activities, or any other pre-existing human modifications on the tract.
- ☐ 9. Topographical survey of the site identifying all elevations, existing contours of the project area (including dunes and scales) and the proposed contours of the final grade.

Other required application information:

- ☒ 1. A grading and layout plan showing proposed contours for the final grade.
- ☐ 2. The floor plan(s) and elevation(s) of the structure proposed to be constructed or expanded.
- ☒ 3. Photographs of the site which clearly show the current location of the vegetation line & existing dunes on the tract within the last 6 months.
- ☐ 4. Copy of the Flood Rate Map showing the location of the subject property. (FEMA.GOV - Map Search)
- ☐ 5. Copy of the Historical Erosion Rate Map as determined by the University of Texas at Austin, Bureau of Economic Geology. (beg.utexas.edu)
- ☒ 6. Application Fee of \$180 for Staff Approved applications and \$300 for City Council Approved applications.

Your application is not complete unless all information requested above is submitted.

Application submissions require only three (3) copies of the complete information plus a digital copy.

BEACH AND DUNE APPLICATION
EXHIBIT A
Isla Del Sol Condominiums
600 Padre Boulevard

Lowering of Dunes at Isla Del Sol

This proposed project will lower dunes that are from 15 feet to 11 feet by leveling them to a continuous 10-foot elevation. Exhibit B shows existing area and approximate contours east of the historic building line for Isla del Sol. Exhibit C shows the proposed table top elevation of 10 feet up to 250 feet from the Historic Building line. The lowering to 10 feet will not have an adverse effect on the dunes. The City South Padre Island (SPI) requires dunes up to 200 feet from the historic building line seaward. The owner proposes to go an additional 50 feet and have a continuous dune to ensure an improvement of the existing dune. Dune lowering activities will be in coordination with SPI City employees to ensure proper placement of sand.

Dune Hydrology

There will be no change in dune hydrology.

Mitigation Plan to Dune Vegetation

The impacted vegetation will be re-vegetated and watered to assist in plant growth as required by SPI. SPI has agreed to provide assistance in a City sponsored volunteer replanting activity of the owner provided plants. We propose to protect the area with sand fencing and signage. We propose to place four (4) signs, one on the north and south sides and two (2) on the east (seaward) side, one at each corner. This will ensure work is performed as per City of South Padre Island requirements. The re-vegetation area required is approximately 27,000 square feet.

Estimated quantities for this project:

Approximate Quantity of sand needed to fill low areas: **1205 CY**

Approximate Quantity of sand available on site to fill: **1205 CY**

Approximate Quantity of sand to be moved from the site: **0 CY**

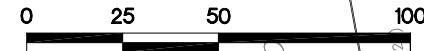
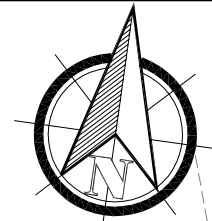
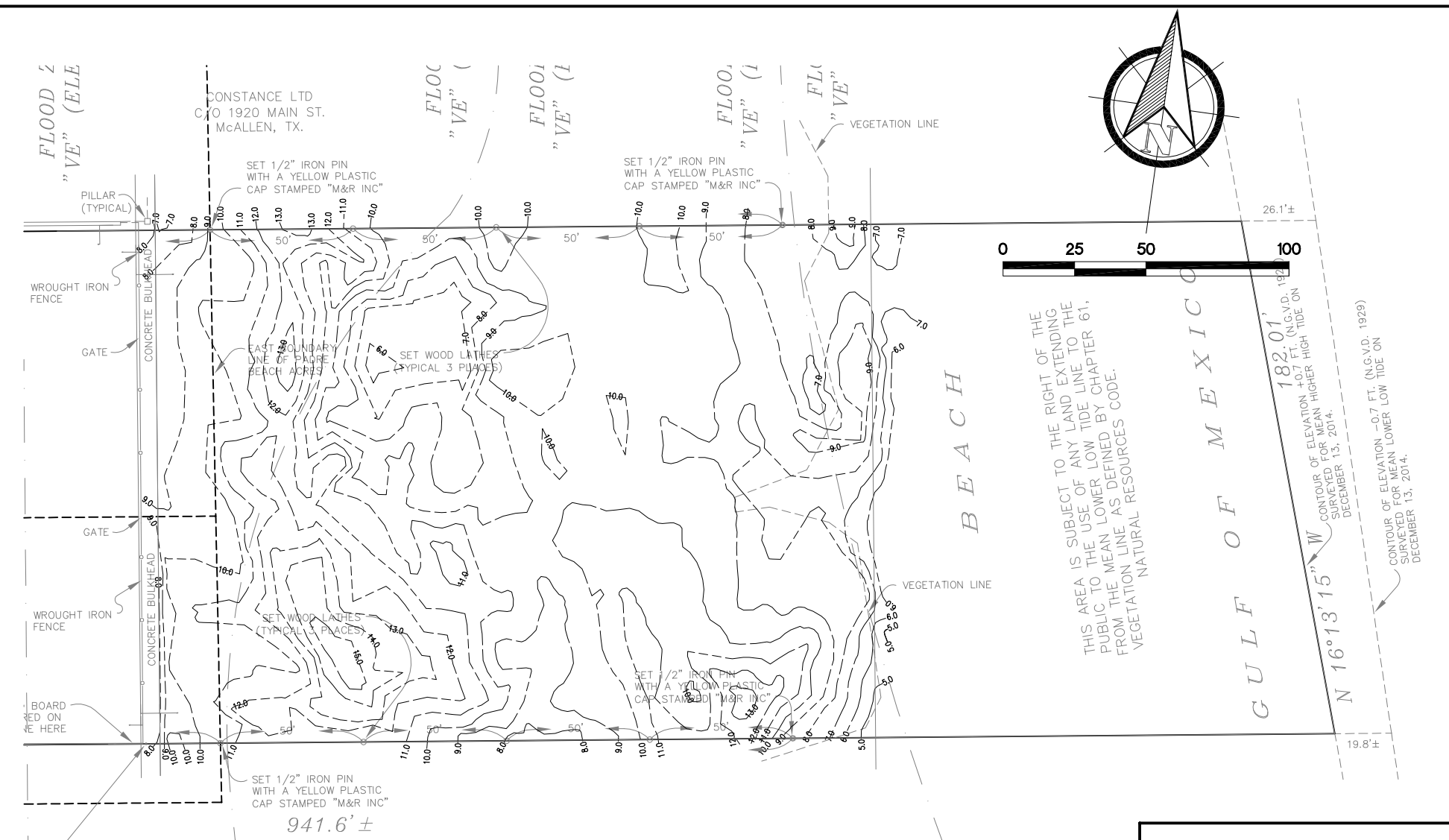
Attachments:

Exhibit B-Existing Contours

Exhibit C-Proposed Table Top Elevation

Exhibit D-Dune Typical Cross-Section

Exhibit E-Isla Del Sol Pictures



THIS AREA IS SUBJECT TO THE RIGHT OF THE PUBLIC TO THE USE OF ANY LAND EXTENDING FROM THE MEAN LOWER LOW TIDE LINE TO THE VEGETATION LINE AS DEFINED BY CHAPTER 61, NATURAL RESOURCES CODE.

GULF OF MEXICO

182.01'±
 CONTOUR OF ELEVATION +0.7 FT. (N.G.V.D. 1929) SURVEYED FOR MEAN HIGHER HIGH TIDE ON DECEMBER 13, 2014.
 N 16°13'15" W
 CONTOUR OF ELEVATION -0.7 FT. (N.G.V.D. 1929) SURVEYED FOR MEAN LOWER LOW TIDE ON DECEMBER 13, 2014.
 19.8'±

NOTE:

1. ELEVATIONS ARE APPROXIMATE.
2. SOURCE OF ELEVATIONS SHOWN ARE AS FOLLOWS:
 a. CITY OF SOUTH PADRE ISLAND – SHORELINE DEPARTMENT
3. ACTUAL BOUNDARY SURVEY NOT PREFORMED

EXHIBIT "B"
 EXISTING CONTOURS

NORRISLEAL
 ENGINEERING WATER

Firm Registration No. F-14803

1222 E. Tyler, Suite C (956) 423-7409
 P.O. Box 2544
 Harlingen, TX 78551 www.norrisleal.com

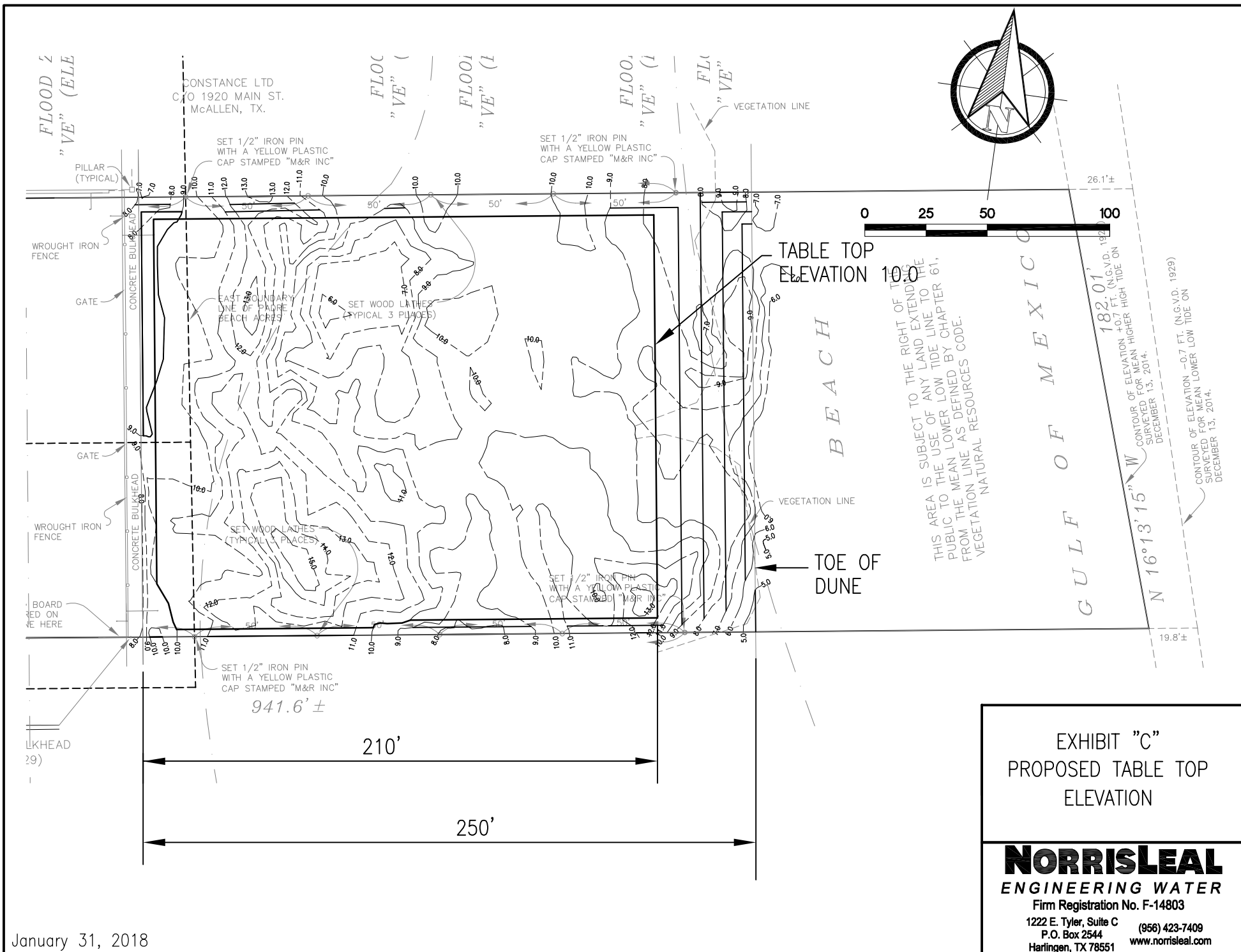
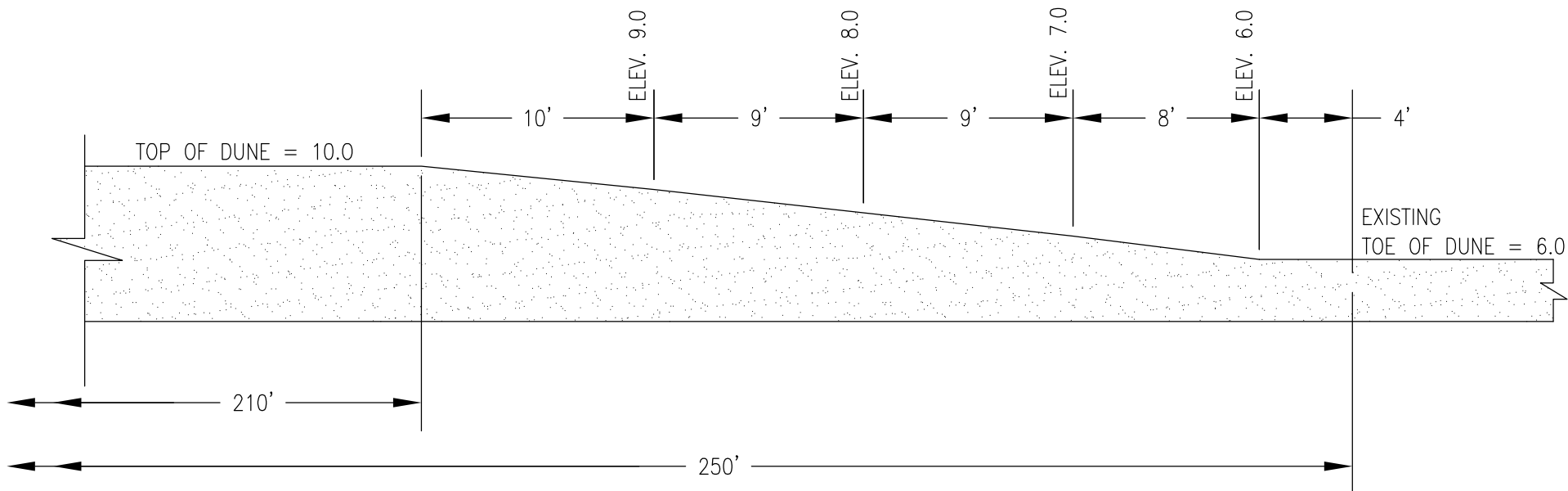


EXHIBIT "C"
PROPOSED TABLE TOP
ELEVATION

NORRISLEAL
ENGINEERING WATER
Firm Registration No. F-14803
1222 E. Tyler, Suite C (956) 423-7409
P.O. Box 2544 Harlingen, TX 78551 www.norrisleal.com

January 31, 2018



TYPICAL SECTION

SCALE: N.T.S.

NOTES:

1. SAND ABOVE ELEVATION 10 FEET:
 - A. CUT - 1205 C.Y.
 - B. FILL - 1205 C.Y.
 - C. TO BE RELOCATED - 0 C.Y.

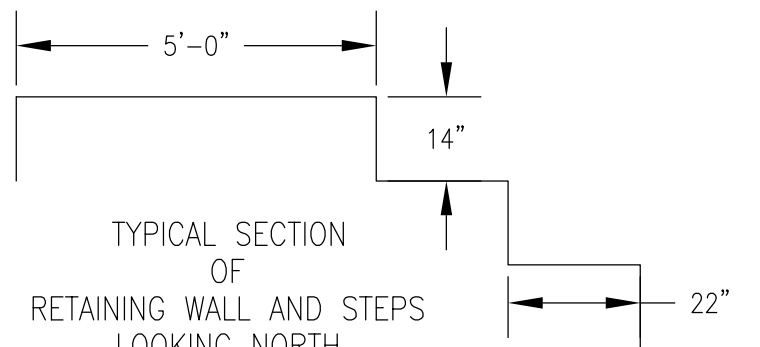


EXHIBIT "D"
DUNE TYPICAL
CROSS-SECTION

ISLA DEL SOL CONDOMINIUMS
600 PADRE BOULEVARD
SOUTH PADRE ISLAND, TEXAS

NORRISLEAL
ENGINEERING WATER

Firm Registration No. F-14803

1222 E. Tyler, Suite C (956) 423-7409
P.O. Box 2544
Harlingen, TX 78551 www.norrisleal.com



Looking West



Retaining wall looking South



Retaining wall looking North



Looking South



Looking North



Looking East (north half)



Looking East

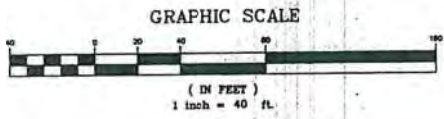
PADRE BOULEVARD
(100 FT. R.O.W.)

PADRE BOULEVARD
(R.O.W. VARIES)

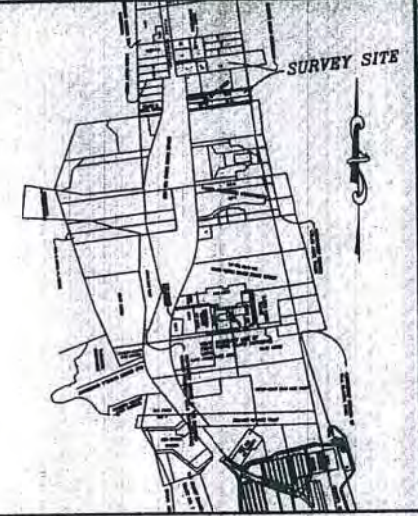
PADRE BOULEVARD
(R.O.W. VARIES)

The undersigned hereby certifies that the survey described hereon was made on the ground on 12-13-14 that the only improvements on the ground are as shown; that there are no visible encroachments, visible overlappings, apparent conflicts, or visible easements, except as shown hereon. THIS CERTIFICATION IS ONLY VALID WITH AN ORIGINAL SIGNATURE AND IF THE DRAWING CONTAINS NO ERASURES OR ADDITIONS.

E.H. MEJIA
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 3900



MERIDIAN OF PADRE BEACH ACRES SUBDIVISION



VICINITY MAP

TRACT 6

TRACT 7

TRACT 8 FRANKIE PLAZA OWNERS ASSOCIATION
706 PADRE BLVD.
SPL. TX.

TRACT 9

TRACT 10

FRANKIE INVESTMENTS LTD
P. O. BOX 2108
SPL. TX.

TRACT 2
0.24 ACRE
(10,374 SQ. FT.)

TRACT 1
3.81 ACRE
(166,124 SQ. FT.)

FLOOD ZONE
"X" (ELEV. 13)

FLOOD ZONE
"VE" (ELEV. 13)

FLOOD ZONE
"VE" (ELEV. 14)

FLOOD ZONE
"VE" (ELEV. 14)

FLOOD ZONE
"VE" (ELEV. 16)

BEACH

GULF OF MEXICO

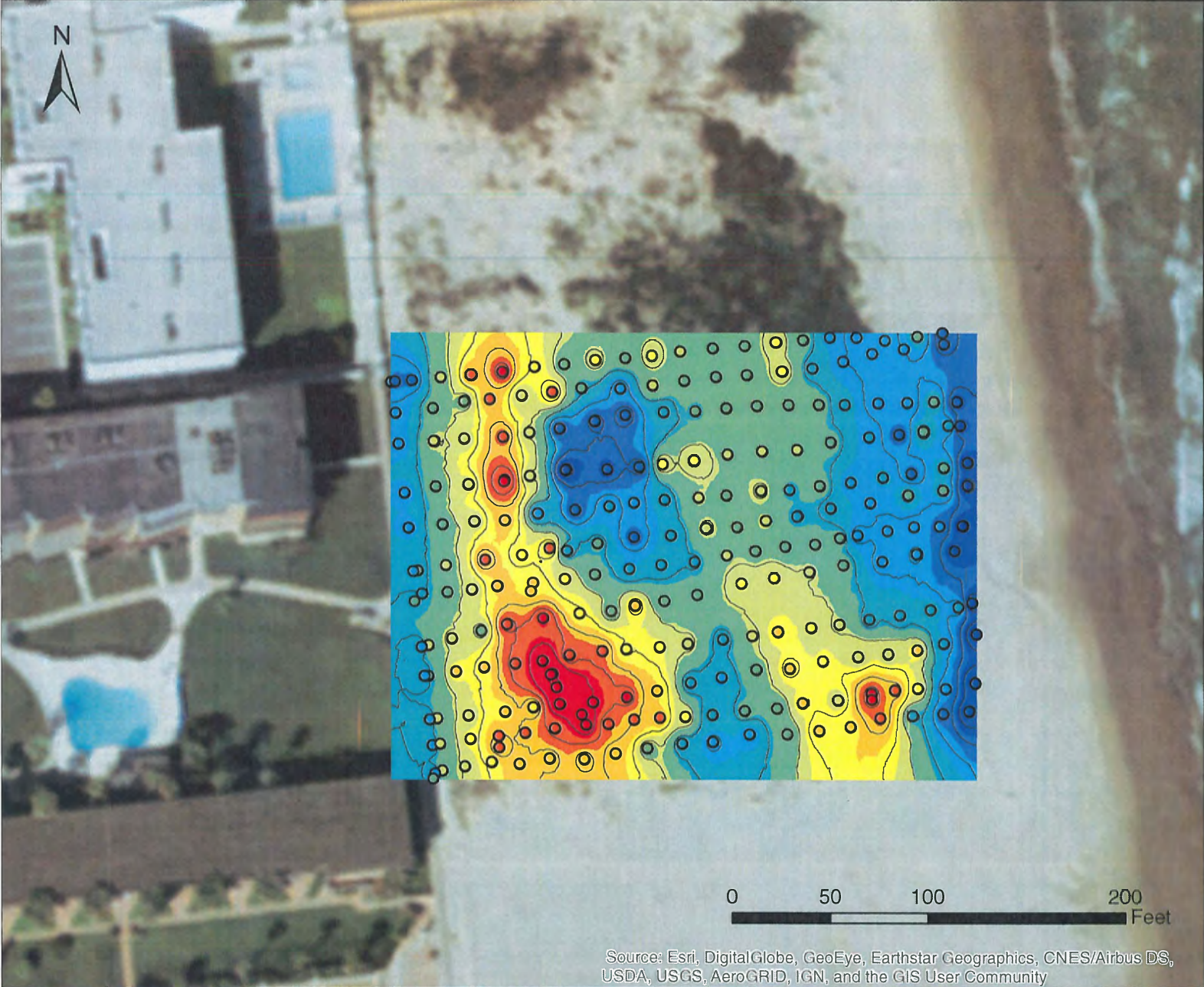
- NOTES:
- 1) THIS TRACT LIES IN FLOOD ZONES "AE" (ELEV. 8), "X" (ELEV. 13), "VE" (ELEV. 14) AND "VE" (ELEV. 16), AS SHOWN, PER F.I.A. FLOOD INSURANCE RATE MAP OF COMMUNITY NO. 480115, PANEL NO. 0001 D, REVISED MARCH 9, 1999.
 - 2) MONUMENTATION FOUND ALONG THE EAST RIGHT-OF-WAY LINE OF PADRE BOULEVARD (PARK ROAD NO. 100) WAS USED AS THE BASIS OF BEARING.

BOUNDARY
SURVEY OF
4.05 ACRES OUT OF TRACTS 9 AND 10, PADRE BEACH ACRES
SUBDIVISION, CITY OF SOUTH PADRE ISLAND, CAMERON COUNTY,
TEXAS, ACCORDING TO THE MAP RECORDED IN VOLUME 14,
PAGE 33, MAP RECORDS OF CAMERON COUNTY, TEXAS.

SCALE: 1" = 40'
SURVEYED FOR:

ISLA DEL SOL
HOMEOWNERS
ASSOCIATION

Mejia & Rose, Incorporated
Engineering Surveying
T.B.P.E. Reg. No. F-002670
T.B.P.L.S. Reg. No. 10023900
1643 West Price Road (956) 544-3022
P.O. Box 3761 Brownsville, Texas 78520
Fax (956) 544-3068
email: mandrinc@comcast.net
G.F. NO. N/A JOB NO. 19372
B.TROUBRIDGE

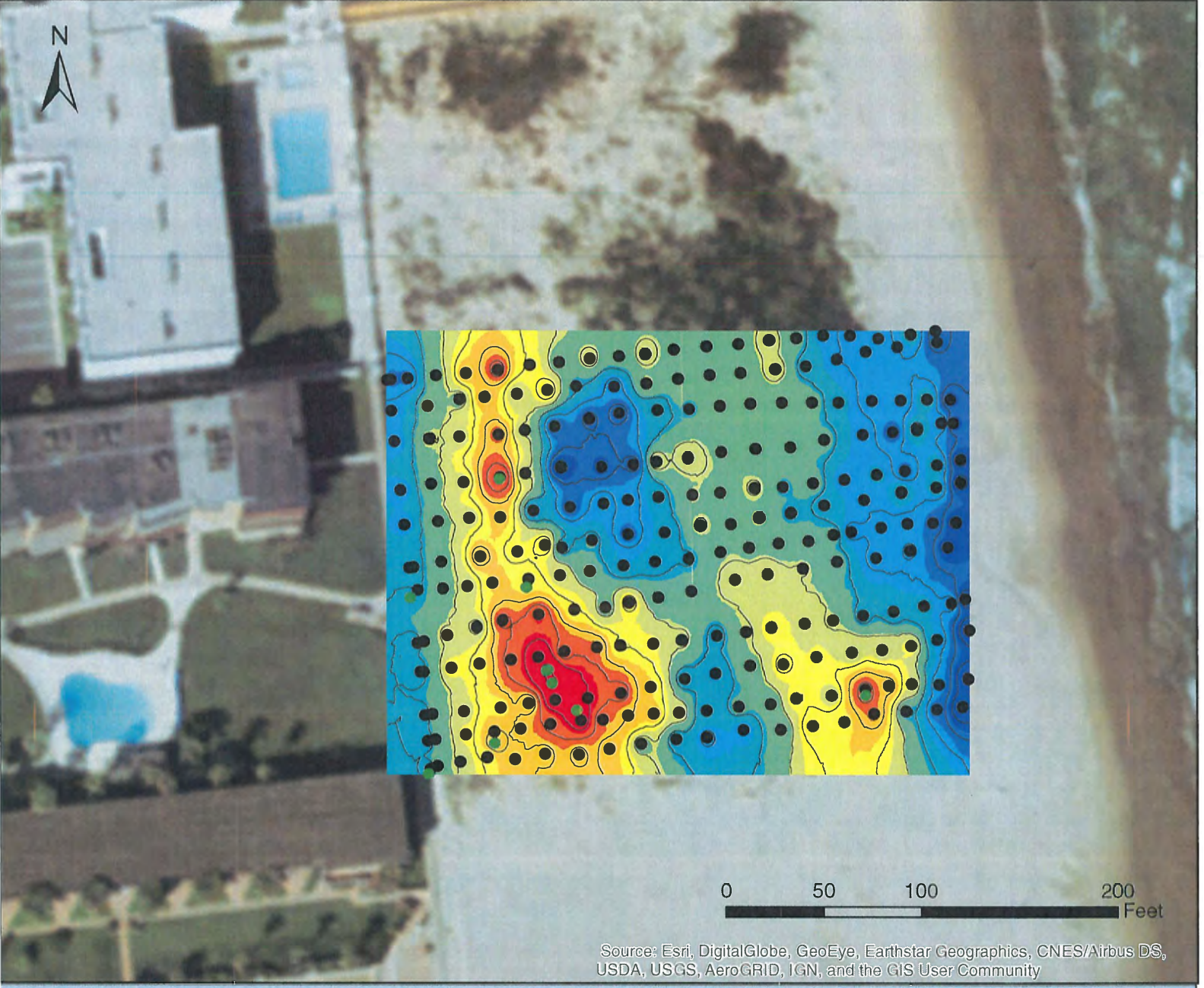


Points_Merge 1/22,25/2018 elevation

- 4.621445 - 5.959483
- 5.959484 - 7.208290
- 7.208291 - 8.210418
- 8.210419 - 8.998058
- 8.998059 - 9.690044
- 9.690045 - 10.316757
- 10.316758 - 11.024842
- 11.024843 - 11.822728
- 11.822729 - 13.320656
- 13.320657 - 15.276638

Idw_Merged_Points <VALUE>





Points_Merge

- 1/22/2018
- 1/25/2018

Points_Merge elevation

- 4.621445 - 5.959483
- 5.959484 - 7.208290
- 7.208291 - 8.210418
- 8.210419 - 8.998058
- 8.998059 - 9.690044
- 9.690045 - 10.316757
- 10.316758 - 11.024842
- 11.024843 - 11.822728
- 11.822729 - 13.320656
- 13.320657 - 15.276638

Idw_Merged_Points <VALUE>

- 4.627699852 - 6.588614094
- 6.588614095 - 7.548210425
- 7.548210426 - 8.424363596
- 8.424363597 - 9.175352029
- 9.17535203 - 9.884618883
- 9.884618884 - 10.63560732
- 10.63560733 - 11.47003891
- 11.47003892 - 12.42963524
- 12.42963525 - 13.63956105
- 13.63956106 - 15.26670265























