



# FLORIDA DEPARTMENT OF Environmental Protection

Northwest District  
160 W. Government Street, Suite 308  
Pensacola, Florida 32502

Rick Scott  
Governor  
Carlos Lopez-Cantera  
Lt. Governor  
Noah Valenstein  
Secretary

## **Permittee/Authorized Entity:**

City of Pensacola  
c/o Keith Wilkins  
222 W Main Street  
Pensacola, Florida 32502  
[kwilkins@cityofpensacola.com](mailto:kwilkins@cityofpensacola.com)

## **Pensacola Bay Living Shoreline – Greenshore II Site**

## **Authorized Agent:**

Mick Garrett  
HDR, Inc.  
25 West Cedar Street, Suite 200  
Pensacola, Florida 32502  
[Mick.Garrett@hdrinc.com](mailto:Mick.Garrett@hdrinc.com)

## **Environmental Resource Permit State-owned Submerged Lands Authorization – Granted**

## **U.S. Army Corps of Engineers Authorization – Separate Corps Authorization Required**

Escambia County  
Permit No.: 0366603-001-EI/17

**Permit Issuance Date: November 14, 2018**  
**Permit Construction Phase Expiration Date: November 14, 2023**

# **Consolidated Environmental Resource Permit and Sovereignty Submerged Lands Authorization**

**Permittee/Grantee:** City of Pensacola

**Permit No:** 0366603-001-EI/17

## **PROJECT LOCATION**

The activities authorized by this permit and sovereignty submerged lands authorization are located in Pensacola Bay, along Bayfront Parkway from approximately S 9<sup>th</sup> Ave to Muscogee Wharf in Pensacola, Florida 32502, in Section 46, Township 02 South, Range 30 West in Escambia County, at Latitude 30°24'41.45" North / Longitude 87°12'11.13" West.

## **PROJECT DESCRIPTION**

The permittee is authorized to create approximately 3.5-acres of oyster reef habitat and 9.2-acres of saltmarsh habitat for the establishment of a habitat-rich shoreline restoration and enhancement project within Pensacola Bay, a Class III Florida Waterbody, Prohibited for Shellfish Harvesting Area. Those activities include the placement of approximately 103,000 cubic yards of sand in the saltmarsh restoration area, below the MHWL, to support native vegetative plantings and the construction of breakwaters waterward of the marsh and tidal channels to attenuate wave energy. There will be 6 oyster reefs/breakwaters spanning approximately 2,870 linear feet. Sediments will be sourced from one upland and one submerged borrow area. Sediments from the submerged borrow area shall be hydraulically dredged and shall be limited to the area and depths detailed in the attached exhibits. Authorized activities are depicted on the attached exhibits.

## **AUTHORIZATIONS**

### **Pensacola Bay Living Shoreline – Greenshores II Site**

#### Environmental Resource Permit

The Department has determined that the activity qualifies for an Environmental Resource Permit. Therefore, the Environmental Resource Permit is hereby granted, pursuant to Part IV of Chapter 373, Florida Statutes (F.S.), and Chapter 62-330, Florida Administrative Code (F.A.C.).

#### Sovereignty Submerged Lands Authorization

The activity is located on sovereignty submerged lands owned by the State of Florida. It therefore also requires authorization from the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees), pursuant to Article X, Section 11 of the Florida Constitution, and Section 253.77, F.S. As staff to the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees) under Sections 253.002, F.S., the Department has determined that the activity qualifies for and requires a Letter of Consent, as long as the work performed is located within the boundaries as described and is consistent with the terms and conditions herein.

During the term of this Letter of Consent you shall maintain satisfactory evidence of sufficient upland interest as required by paragraph 18-21.004(3)(b), F.A.C. If such interest is terminated or the Board of Trustees determines that such interest did not exist on the date of issuance of this Letter of Consent, this Letter of Consent may be terminated by the Board of Trustees at its sole option. If the Board of Trustees terminates this Letter of Consent, you agree not to assert a claim or defense against the Board of Trustees arising out of this Letter of Consent.

### Federal Authorization

Your proposed activity as outlined on your application and attached drawings **does not qualify** for federal authorization pursuant to the State Programmatic General Permit and a **SEPARATE permit** or authorization **shall be required** from the U.S. Army Corps of Engineers (Corps). You must apply separately to the Corps using the federal application form (ENG 4345). More information about Corps permitting may be found online in the Jacksonville District Regulatory Division Sourcebook. **Failure to obtain Corps authorization prior to construction could subject you to federal enforcement action by that agency.**

Authority for review – an agreement with the Corps entitled “Coordination Agreement Between the U. S. Army Corps of Engineers (Jacksonville District) and the Florida Department of Environmental Protection, or Duly Authorized Designee, State Programmatic General Permit,” Section 10 of the Rivers and Harbor Act of 1899, and Section 404 of the Clean Water Act.

### Coastal Zone Management

Issuance of this authorization also constitutes a finding of consistency with Florida’s Coastal Zone Management Program, as required by Section 307 of the Coastal Zone Management Act.

### Water Quality Certification

This permit also constitutes a water quality certification under Section 401 of the Clean Water Act, 33 U.S.C. 1341.

### Other Authorizations

You are advised that authorizations or permits for this activity may be required by other federal, state, regional, or local entities including but not limited to local governments or municipalities. This permit does not relieve you from the requirements to obtain all other required permits or authorizations.

The activity described may be conducted only in accordance with the terms, conditions and attachments contained in this document. Issuance and granting of the permit and authorizations herein do not infer, nor guarantee, nor imply that future permits, authorizations, or modifications will be granted by the Department.

## **PERMIT / SOVEREIGNTY SUBMERGED LANDS CONDITIONS**

The activities described must be conducted in accordance with:

- **The Specific Conditions**
- **The General Conditions**
- **The Special Consent Conditions**
- **The General Conditions for Sovereignty Submerged Lands Authorization**
- **The limits, conditions and locations of work shown in the attached drawings**
- **The term limits of this authorization**

You are advised to read and understand these conditions and drawings prior to beginning the authorized activities, and to ensure the work is conducted in conformance with all the terms, conditions, and drawings herein. If you are using a contractor, the contractor also should read and understand these conditions and drawings prior to beginning any activity. Failure to comply with these conditions, including any mitigation requirements, shall be grounds for the

Department to revoke the permit and authorization and to take appropriate enforcement action. Operation of the facility is not authorized except when determined to be in conformance with all applicable rules and this permit and sovereignty submerged lands authorization, as described.

**SPECIFIC CONDITIONS – ADMINISTRATIVE/EMERGENCIES**

1. The construction phase expires at 11:59 p.m. on the date indicated on the cover page of this permit.
2. For emergencies involving a serious threat to the public health, safety, welfare, or environment, the emergency telephone contact number is (800) 320-0519 (State Warning Point). The Department telephone number for reporting nonthreatening problems or system malfunctions is (850) 595-0663, day or night.
3. The mailing address for submittal of forms for the “Construction Commencement Notice” or other correspondence is FDEP, SLERP, 160 W. Government Street, Pensacola, Florida, 32502-5740.

**SPECIFIC CONDITIONS – PRIOR TO ANY CONSTRUCTION**

4. Prior to construction, floating turbidity screens shall be placed around an individual breakwater section as shown on sheet 11 of the attached drawings. The turbidity curtain shall be moved to the next breakwater section and the process repeated once water quality within the screened area is within 29 NTUs of background.
5. Prior to marsh construction, a floating turbidity screen will be deployed around a marsh section as shown on sheet 12 of the attached drawings. The turbidity curtain shall be moved to the next marsh section and the process repeated once water quality within the screened area is within 29 NTUs of background.

**SPECIFIC CONDITIONS – CONSTRUCTION ACTIVITIES**

6. If the approved permit drawings and/or narrative conflict with the Specific Conditions, then the Specific Conditions shall prevail.
7. Construction equipment shall not be repaired or refueled in wetlands or elsewhere within waters of the state.
8. Any damage to wetlands outside of the authorized impact areas as a result of construction shall be immediately reported to the Department at (850)595-8300 and repaired by reestablishing the pre-construction elevations and replanting vegetation of the same species, size, and density as that in the adjacent areas. The restoration shall be completed within 30 days of completion of construction, and the Department shall be notified of its completion within that same 30-day period.
9. All wetland areas or water bodies which are adjacent to the specific limits of construction authorized by this permit shall be protected from erosion, sedimentation, siltation, scouring, excess turbidity or dewatering.
10. The contractor shall be responsible for ensuring that turbidity control devices are inspected daily and maintained in good working order so that there are no violations of state water quality

standards outside of the construction area. The contractor will perform water quality monitoring outside of the turbidity screens during the duration of construction. Monitoring within the screened area will only occur prior to removal of turbidity curtains.

11. The following measures shall be taken immediately by the permittee when turbidity levels within waters of the State surrounding the project site, exceed 29 NTUs above background:

- a. Immediately cease work contributing to the water quality violation.
- b. Modify the work procedures responsible for the violation, install additional turbidity containment devices and repair non-functioning turbidity containment devices.
- c. Notify the Department within 24 hours of the time the violation is first detected.

12. All watercraft associated with construction shall operate only within waters of sufficient depth so as to preclude bottom scouring and/or prop dredging.

13. Restoration/shoreline activities shall only occur at the locations identified on the attached drawings.

14. The breakwaters shall be constructed in accordance with the dimensions shown on the enclosed permit drawings.

15. The breakwaters shall not be placed where or in a manner in which they present a hazard to navigation or public safety.

16. "Riprap" used for the construction of breakwaters shall consist of unconsolidated boulders, rocks, or clean concrete rubble with no exposed reinforcing rods or similar protrusions. The riprap shall be free of sediment, debris and toxins or otherwise deleterious substances.

17. The two borrow areas depicted in the attached drawings shall provide the material necessary to raise the elevation in the saltmarsh creation area. No other sources of sediment materials are authorized.

18. Dredging of Borrow Area 1 shall be limited to the dimensions shown on the attached drawings.

19. Planting of saltmarsh species shall occur after the breakwaters have been established and the sand has been graded to the appropriate elevations.

#### **GENERAL CONDITIONS FOR INDIVIDUAL PERMITS**

The following general conditions are binding on all individual permits issued under chapter 62-330, F.A.C., except where the conditions are not applicable to the authorized activity, or where the conditions must be modified to accommodate project-specific conditions.

1. All activities shall be implemented following the plans, specifications and performance criteria approved by this permit. Any deviations must be authorized in a permit modification in accordance with Rule 62-330.315, F.A.C. Any deviations that are not so authorized may subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S.

2. A complete copy of this permit shall be kept at the work site of the permitted activity during the construction phase, and shall be available for review at the work site upon request by the Agency staff. The permittee shall require the contractor to review the complete permit prior to beginning construction.
3. Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be installed immediately prior to, and be maintained during and after construction as needed, to prevent adverse impacts to the water resources and adjacent lands. Such practices shall be in accordance with the *State of Florida Erosion and Sediment Control Designer and Reviewer Manual* (Florida Department of Environmental Protection and Florida Department of Transportation June 2007), and the *Florida Stormwater Erosion and Sedimentation Control Inspector's Manual* (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008), which are both incorporated by reference in subparagraph 62-330.050(9)(b)5., F.A.C., unless a project-specific erosion and sediment control plan is approved or other water quality control measures are required as part of the permit.
4. At least 48 hours prior to beginning the authorized activities, the permittee shall submit to the Agency a fully executed Form 62-330.350(1), "Construction Commencement Notice," [October 1, 2013], which is incorporated by reference in paragraph 62-330.350(1)(d), F.A.C., indicating the expected start and completion dates. A copy of this form may be obtained from the Agency, as described in subsection 62-330.010(5), F.A.C. If available, an Agency website that fulfills this notification requirement may be used in lieu of the form.
5. Unless the permit is transferred under Rule 62-330.340, F.A.C., or transferred to an operating entity under Rule 62-330.310, F.A.C., the permittee is liable to comply with the plans, terms and conditions of the permit for the life of the project or activity.
6. Within 30 days after completing construction of the entire project, or any independent portion of the project, the permittee shall provide the following to the Agency, as applicable:
  - a. For an individual, private single-family residential dwelling unit, duplex, triplex, or quadruplex – "Construction Completion and Inspection Certification for Activities Associated With a Private Single-Family Dwelling Unit" [Form 62-330.310(3)]; or
  - b. For all other activities – "As-Built Certification and Request for Conversion to Operational Phase" [Form 62-330.310(1)].
  - c. If available, an Agency website that fulfills this certification requirement may be used in lieu of the form.
7. If the final operation and maintenance entity is a third party:
  - a. Prior to sales of any lot or unit served by the activity and within one year of permit issuance, or within 30 days of as- built certification, whichever comes first, the permittee shall submit, as applicable, a copy of the operation and maintenance documents (see sections 12.3 thru 12.3.3 of Volume I) as filed with the Department of State, Division of Corporations and a copy of any easement, plat, or deed restriction needed to operate or maintain the project, as recorded with the Clerk of the Court in the County in which the activity is located.
  - b. Within 30 days of submittal of the as- built certification, the permittee shall submit "Request for Transfer of Environmental Resource Permit to the Perpetual Operation Entity" [Form 62-330.310(2)] to transfer the permit to the operation and maintenance

entity, along with the documentation requested in the form. If available, an Agency website that fulfills this transfer requirement may be used in lieu of the form.

8. The permittee shall notify the Agency in writing of changes required by any other regulatory agency that require changes to the permitted activity, and any required modification of this permit must be obtained prior to implementing the changes.

9. This permit does not:

- a. Convey to the permittee any property rights or privileges, or any other rights or privileges other than those specified herein or in Chapter 62-330, F.A.C.;
- b. Convey to the permittee or create in the permittee any interest in real property;
- c. Relieve the permittee from the need to obtain and comply with any other required federal, state, and local authorization, law, rule, or ordinance; or
- d. Authorize any entrance upon or work on property that is not owned, held in easement, or controlled by the permittee.

10. Prior to conducting any activities on state-owned submerged lands or other lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund, the permittee must receive all necessary approvals and authorizations under Chapters 253 and 258, F.S. Written authorization that requires formal execution by the Board of Trustees of the Internal Improvement Trust Fund shall not be considered received until it has been fully executed.

11. The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities that may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any project authorized by the permit.

12. The permittee shall notify the Agency in writing:

- a. Immediately if any previously submitted information is discovered to be inaccurate; and
- b. Within 30 days of any conveyance or division of ownership or control of the property or the system, other than conveyance via a long-term lease, and the new owner shall request transfer of the permit in accordance with Rule 62-330.340, F.A.C. This does not apply to the sale of lots or units in residential or commercial subdivisions or condominiums where the stormwater management system has been completed and converted to the operation phase.

13. Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the project or activities to ensure conformity with the plans and specifications authorized in the permit.

14. If any prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, work involving subsurface disturbance in the immediate vicinity of such discoveries shall cease. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section, at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Such subsurface work shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and notification shall be provided in accordance with Section 872.05, F.S.

15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under Rule 62-330.201, F.A.C., provides otherwise.

16. The permittee shall provide routine maintenance of all components of the stormwater management system to remove trapped sediments and debris. Removed materials shall be disposed of in a landfill or other uplands in a manner that does not require a permit under Chapter 62-330, F.A.C., or cause violations of state water quality standards.

17. This permit is issued based on the applicant's submitted information that reasonably demonstrates that adverse water resource-related impacts will not be caused by the completed permit activity. If any adverse impacts result, the Agency will require the permittee to eliminate the cause, obtain any necessary permit modification, and take any necessary corrective actions to resolve the adverse impacts.

18. A Recorded Notice of Environmental Resource Permit may be recorded in the county public records in accordance with subsection 62-330.090(7), F.A.C. Such notice is not an encumbrance upon the property.

#### **SPECIAL CONSENT CONDITIONS**

1. The applicant agrees to indemnify, defend and hold harmless the Board of Trustees and the State of Florida from all claims, actions, lawsuits and demands in any form arising out of the authorization to use sovereignty submerged lands or the applicant's use and construction of structures on sovereignty submerged lands. This duty to indemnify and hold harmless will include any and all liabilities that are associated with the structure or activity including special assessments or taxes that are now or in the future assessed against the structure or activity during the period of the authorization.

2. Failure by the Board of Trustees to enforce any violation of a provision of the authorization or waiver by the Board of Trustees of any provision of the authorization will not invalidate the provision not enforced or waived, nor will the failure to enforce or a waiver prevent the Board of Trustees from enforcing the unenforced or waived provision in the event of a violation of that provision.

3. Applicant binds itself and its successors and assigns to abide by the provisions and conditions set forth in the authorization. If the applicant or its successors or assigns fails or refuses to comply with the provisions and conditions of the authorization, the authorization may be terminated by the Board of Trustees after written notice to the applicant or its successors or assigns. Upon receipt of such notice, the applicant or its successors or assigns will have thirty (30) days in which to correct the violations. Failure to correct the violations within this period will result in the automatic revocation of this authorization.

4. All costs incurred by the Board of Trustees in enforcing the terms and conditions of the authorization will be paid by the applicant. Any notice required by law will be made by certified mail at the address shown on page one of the authorization. The applicant will notify the Board of Trustees in writing of any change of address at least ten days before the change becomes effective.



5. This authorization does not allow any activity prohibited in a conservation easement or restrictive covenant that prohibits the activity.

**GENERAL CONDITIONS FOR SOVEREIGNTY SUBMERGED LANDS  
AUTHORIZATION**

Any use of sovereignty submerged lands is subject to the following general conditions, which are binding upon the applicant and are enforceable under Chapter 253, F.S.

1. Sovereignty submerged lands may be used only for the specified activity or use. Any unauthorized deviation from the specified activity or use and the conditions for undertaking that activity or use will constitute a violation. Violation of the authorization will result in suspension or revocation of the applicant's use of the sovereignty submerged lands unless cured to the satisfaction of the Board of Trustees.
2. Authorization under Rule 18-21.005, F.A.C., conveys no title to sovereignty submerged lands or water column, nor does it constitute recognition or acknowledgment of any other person's title to such land or water.
3. Authorizations under Rule 18-21.005, F.A.C., may be modified, suspended or revoked in accordance with its terms or the remedies provided in Sections 253.04, F.S. and Chapter 18-14, F.A.C.
4. Structures or activities will be constructed and used to avoid or minimize adverse impacts to resources.
5. Construction, use, or operation of the structure or activity will not adversely affect any species which is endangered, threatened or of special concern, as listed in Rules 68A-27.003, 68A-27.004, and 68A-27.005, F.A.C.
6. Structures or activities will not unreasonably interfere with riparian rights. When a court of competent jurisdiction determines that riparian rights have been unlawfully affected, the structure or activity will be modified in accordance with the court's decision.
7. Structures or activities will not create a navigational hazard.
8. Structures will be maintained in a functional condition and will be repaired or removed if they become dilapidated to such an extent that they are no longer functional.
9. Structures or activities will be constructed, operated, and maintained solely for water dependent purposes.
10. The applicant agrees to indemnify, defend and hold harmless the Board of Trustees and the State of Florida from all claims, actions, lawsuits and demands in any form arising out of the authorization to use sovereignty submerged lands or the applicant's use and construction of structures on sovereignty submerged lands. This duty to indemnify and hold harmless will include any and all liabilities that are associated with the structure or activity including special assessments or taxes that are now or in the future assessed against the structure or activity during the period of the authorization.

11. Failure by the Board of Trustees to enforce any violation of a provision of the authorization or waiver by the Board of Trustees of any provision of the authorization will not invalidate the provision not enforced or waived, nor will the failure to enforce or a waiver prevent the Board of Trustees from enforcing the unenforced or waived provision in the event of a violation of that provision.

12. Applicant binds itself and its successors and assigns to abide by the provisions and conditions set forth in the authorization. If the applicant or its successors or assigns fails or refuses to comply with the provisions and conditions of the authorization, the authorization may be terminated by the Board of Trustees after written notice to the applicant or its successors or assigns. Upon receipt of such notice, the applicant or its successors or assigns will have thirty (30) days in which to correct the violations. Failure to correct the violations within this period will result in the automatic revocation of this authorization.

13. All costs incurred by the Board of Trustees in enforcing the terms and conditions of the authorization will be paid by the applicant. Any notice required by law will be made by certified mail at the address shown on page one of the authorization. The applicant will notify the Board of Trustees in writing of any change of address at least ten days before the change becomes effective.

14. This authorization does not allow any activity prohibited in a conservation easement or restrictive covenant that prohibits the activity.

## **NOTICE OF RIGHTS**

### FLAWAC Review

The applicant, or any party within the meaning of Section 373.114(1)(a) or 373.4275, F.S., may also seek appellate review of this order before the Land and Water Adjudicatory Commission under Section 373.114(1) or 373.4275, F.S. Requests for review before the Land and Water Adjudicatory Commission must be filed with the Secretary of the Commission and served on the Department within 20 days from the date when this order is filed with the Clerk of the Department.

### Judicial Review

Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S. by filing a Notice of Appeal pursuant to Florida Rules of Appellate Procedure 9.110 and 9.190 with the Clerk of the Department in the Office of General Counsel (Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000) and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within 30 days from the date this action is filed with the Clerk of the Department.

Thank you for applying to the Submerged Lands and Environmental Resource Permit Program. If you have any questions regarding this matter, please contact Ryan Godwin at the letterhead address, at (850)595-0559, or at [Ryan.Godwin@FloridaDEP.gov](mailto:Ryan.Godwin@FloridaDEP.gov)

**EXECUTION AND CLERKING**

Executed in Orlando, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



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For Kimberly R. Allen  
Permitting Program Administrator

KRA:rg

**Attachment:**

Exhibit 1, Project Drawings and Design Specs., 12 pages

Copies of 62-330 forms may be obtained at:

<https://floridadep.gov/water/submerged-lands-environmental-resources-coordination/content/forms-environmental-resource>

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy clerk hereby certifies that this document and all attachments were sent on the filing date below to the following listed persons:

Kimberly R. Allen, DEP, [Kim.Allen@FloridaDEP.gov](mailto:Kim.Allen@FloridaDEP.gov)  
DEP, Office of General Counsel, [agency\\_clerk@FloridaDEP.gov](mailto:agency_clerk@FloridaDEP.gov)  
Pearce Barrett, DEP, [Pearce.Barrett@dep.state.fl.us](mailto:Pearce.Barrett@dep.state.fl.us)  
U.S. Army Corps of Engineers, [Terry.S.Hayes@usace.army.mil](mailto:Terry.S.Hayes@usace.army.mil),  
[Stephen.W.Andrews@usace.army.mil](mailto:Stephen.W.Andrews@usace.army.mil)  
Escambia County, [jtkirsche@myescambia.com](mailto:jtkirsche@myescambia.com), [bdbane@myescambia.com](mailto:bdbane@myescambia.com)

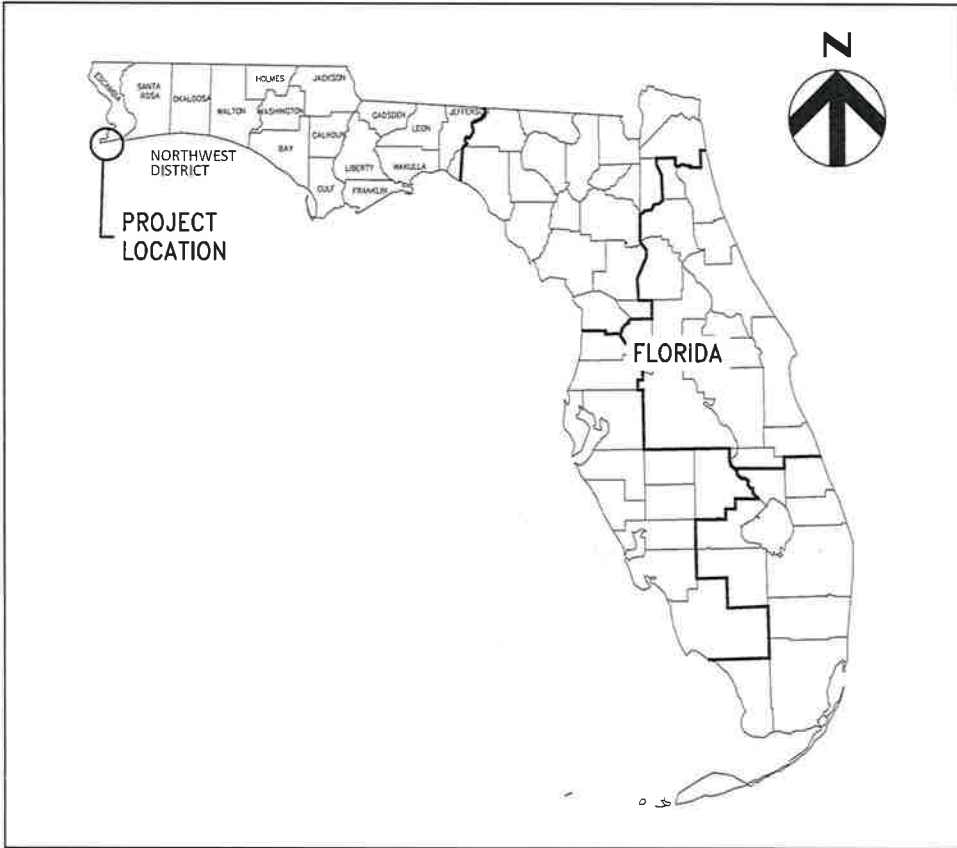
**FILING AND ACKNOWLEDGMENT**

FILED, on this date, pursuant to Section 120.52, F.S., with the designated Department Clerk, receipt of which is hereby acknowledged.



Syed Shabbir Azher Rizvi  
Clerk

November 14, 2018  
Date



VICINITY MAP

SCALE: N.T.S.



LOCATION MAP

SCALE: N.T.S.

**NOTE:**

1. THIS DOCUMENT SHALL NOT BE USED FOR BIDDING OR CONSTRUCTION PURPOSES.



PENSACOLA BAY LIVING SHORELINE  
PROJECT - GREENSHORES II SITE

SHEET TITLE  
LOCATION MAPS



PROJECT NUMBER  
10023870  
PROJECT MANAGER  
MICK GARRETT  
DATE  
07-05-2018

REFERENCE SHEET  
REFERENCE DOCUMENT  
EXHIBIT NUMBER  
01

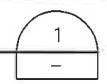




- NOTES:**
1. THIS DOCUMENT SHALL NOT BE USED FOR BIDDING OR CONSTRUCTION PURPOSES.
  2. AERIAL PHOTOGRAPH SHOWN WAS OBTAINED FROM STATE OF FLORIDA ORTHOS, ESCAMBA COUNTY 2016, VIA ESRI'S ARGIS ONLINE DATED APRIL 2016.

**PARCEL OWNERSHIP MAP**

SCALE: 0 250' 500'



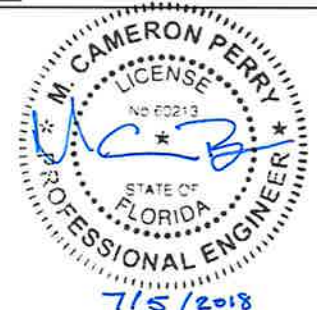
- NOTE:**
1. AREAS BETWEEN PARCELS ARE PLATTED AS STREETS AND ARE ALSO CITY OF PENSACOLA PROPERTY.

- LEGEND:**
- CITY OF PENSACOLA OWNED PARCELS
  - NON-CITY OF PENSACOLA OWNED PARCEL



PENSACOLA BAY LIVING SHORELINE  
PROJECT - GREENSHORES II SITE

SHEET TITLE  
**PARCEL OWNERSHIP MAP**



PROJECT NUMBER  
10023870

PROJECT MANAGER  
MICK GARRETT

DATE  
07-05-2018

REFERENCE SHEET

REFERENCE DOCUMENT

EXHIBIT NUMBER  
02





- NOTES:**
1. THIS DOCUMENT SHALL NOT BE USED FOR BIDDING OR CONSTRUCTION PURPOSES.
  2. AERIAL PHOTOGRAPH SHOWN WAS OBTAINED FROM STATE OF FLORIDA ORTHOS, ESCAMBIA COUNTY 2016, VIA ESRI'S ARGIS ONLINE DATED APRIL 2016.

**EXISTING CONDITIONS**

SCALE: 0 250' 500'



- LEGEND:**
- 5- MAJOR CONTOUR
  - MINOR CONTOUR



PENSACOLA BAY LIVING SHORELINE  
PROJECT - GREENSHORES II SITE

SHEET TITLE  
**EXISTING CONDITIONS**



PROJECT NUMBER  
10023870

PROJECT MANAGER  
**MICK GARRETT**

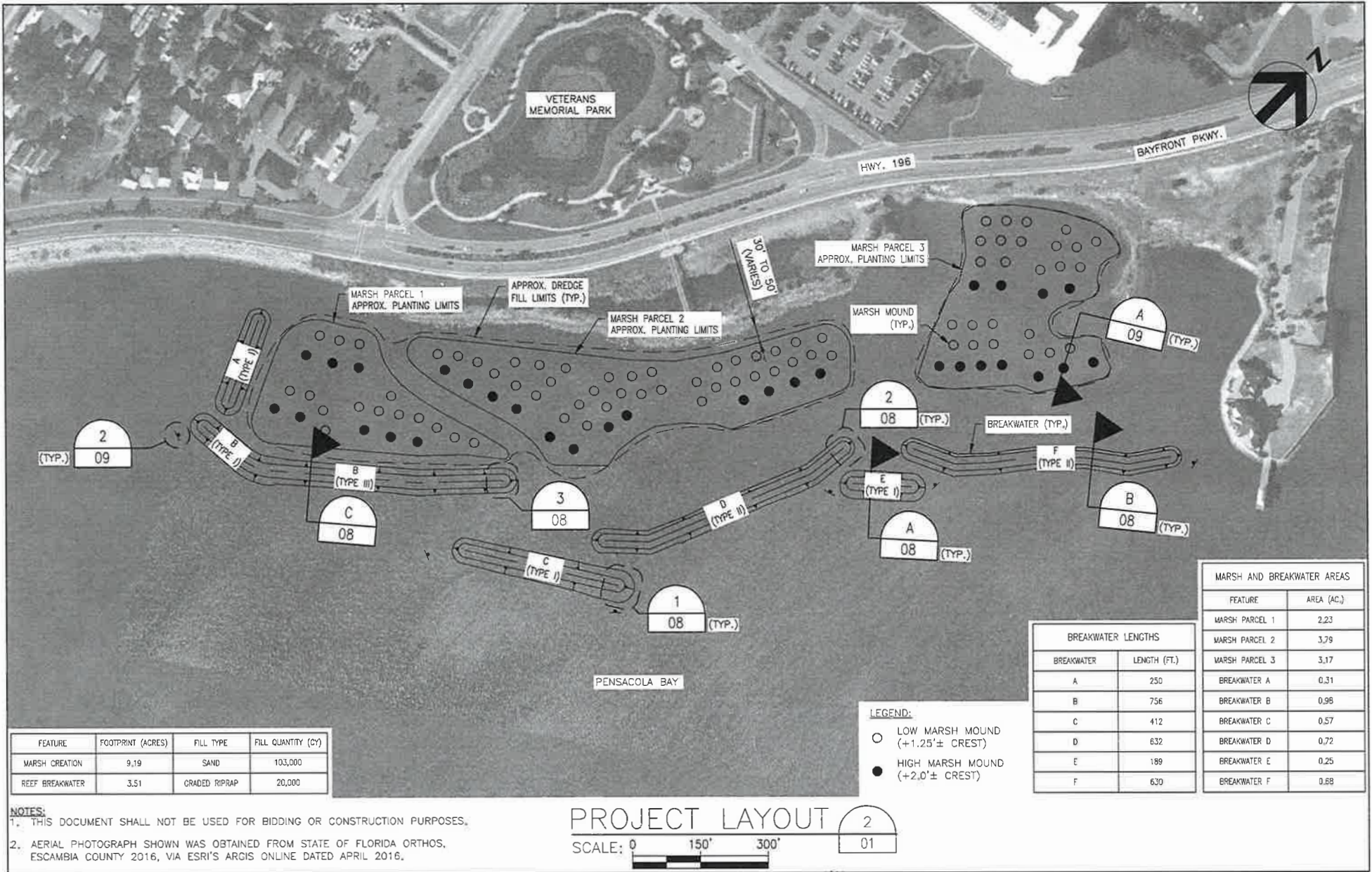
DATE  
07-05-2018

REFERENCE SHEET

REFERENCE DOCUMENT

EXHIBIT NUMBER  
03





FEATURE	FOOTPRINT (ACRES)	FILL TYPE	FILL QUANTITY (CY)
MARSH CREATION	9.19	SAND	103,000
REEF BREAKWATER	3.51	GRADED RIPRAP	20,000

- NOTES:**
- THIS DOCUMENT SHALL NOT BE USED FOR BIDDING OR CONSTRUCTION PURPOSES.
  - AERIAL PHOTOGRAPH SHOWN WAS OBTAINED FROM STATE OF FLORIDA ORTHOS, ESCAMBIA COUNTY 2016, VIA ESRI'S ARGIS ONLINE DATED APRIL 2016.

**PROJECT LAYOUT** 2  
 SCALE: 0 150' 300' 01

- LEGEND:**
- LOW MARSH MOUND (+1.25'± CREST)
  - HIGH MARSH MOUND (+2.0'± CREST)

BREAKWATER LENGTHS	
BREAKWATER	LENGTH (FT.)
A	250
B	756
C	412
D	632
E	189
F	630

MARSH AND BREAKWATER AREAS	
FEATURE	AREA (AC.)
MARSH PARCEL 1	2.23
MARSH PARCEL 2	3.79
MARSH PARCEL 3	3.17
BREAKWATER A	0.31
BREAKWATER B	0.98
BREAKWATER C	0.57
BREAKWATER D	0.72
BREAKWATER E	0.25
BREAKWATER F	0.88



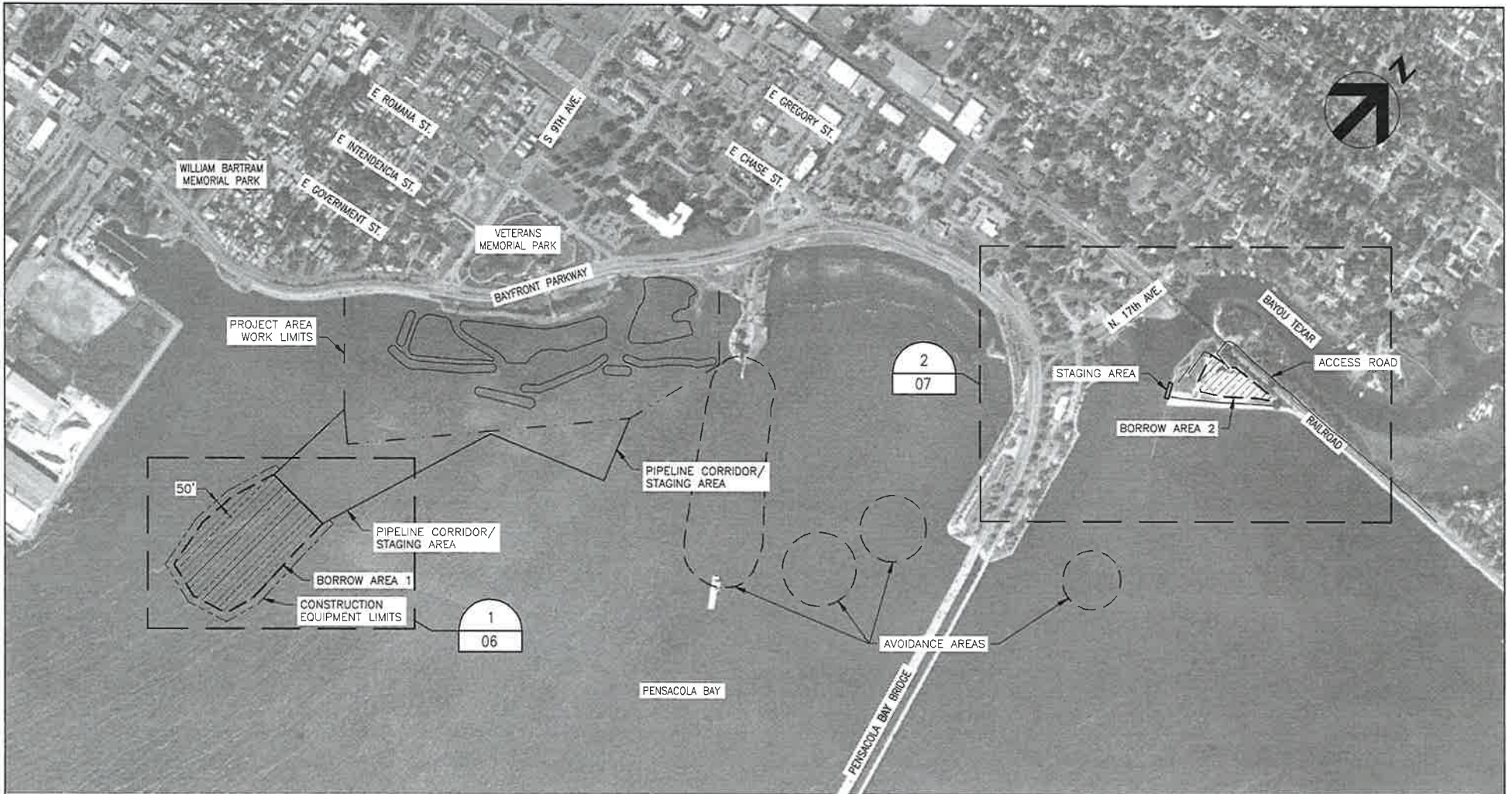
PENSACOLA BAY LIVING SHORELINE  
 PROJECT - GREENSHORES II SITE  
 SHEET TITLE  
**PROJECT LAYOUT**



PROJECT NUMBER  
 10023870  
 PROJECT MANAGER  
 MICK GARRETT  
 DATE  
 07-05-2018

REFERENCE SHEET  
 REFERENCE DOCUMENT  
 EXHIBIT NUMBER  
 04





**BORROW AREAS AND ACCESS ROUTES**

SCALE: 0 500' 1,000'

1  
06

**NOTES:**

1. THIS DOCUMENT SHALL NOT BE USED FOR BIDDING OR CONSTRUCTION PURPOSES.
2. AERIAL PHOTOGRAPH SHOWN WAS OBTAINED FROM STATE OF FLORIDA ORTHOS, ESCAMBA COUNTY 2016, VIA ESRI'S ARGIS ONLINE DATED APRIL 2016.



**PENSACOLA BAY LIVING SHORELINE  
PROJECT - GREENSHORES II SITE**

SHEET TITLE  
**BORROW AREAS AND ACCESS ROUTES**



PROJECT NUMBER  
10023870

PROJECT MANAGER  
MICK GARRETT

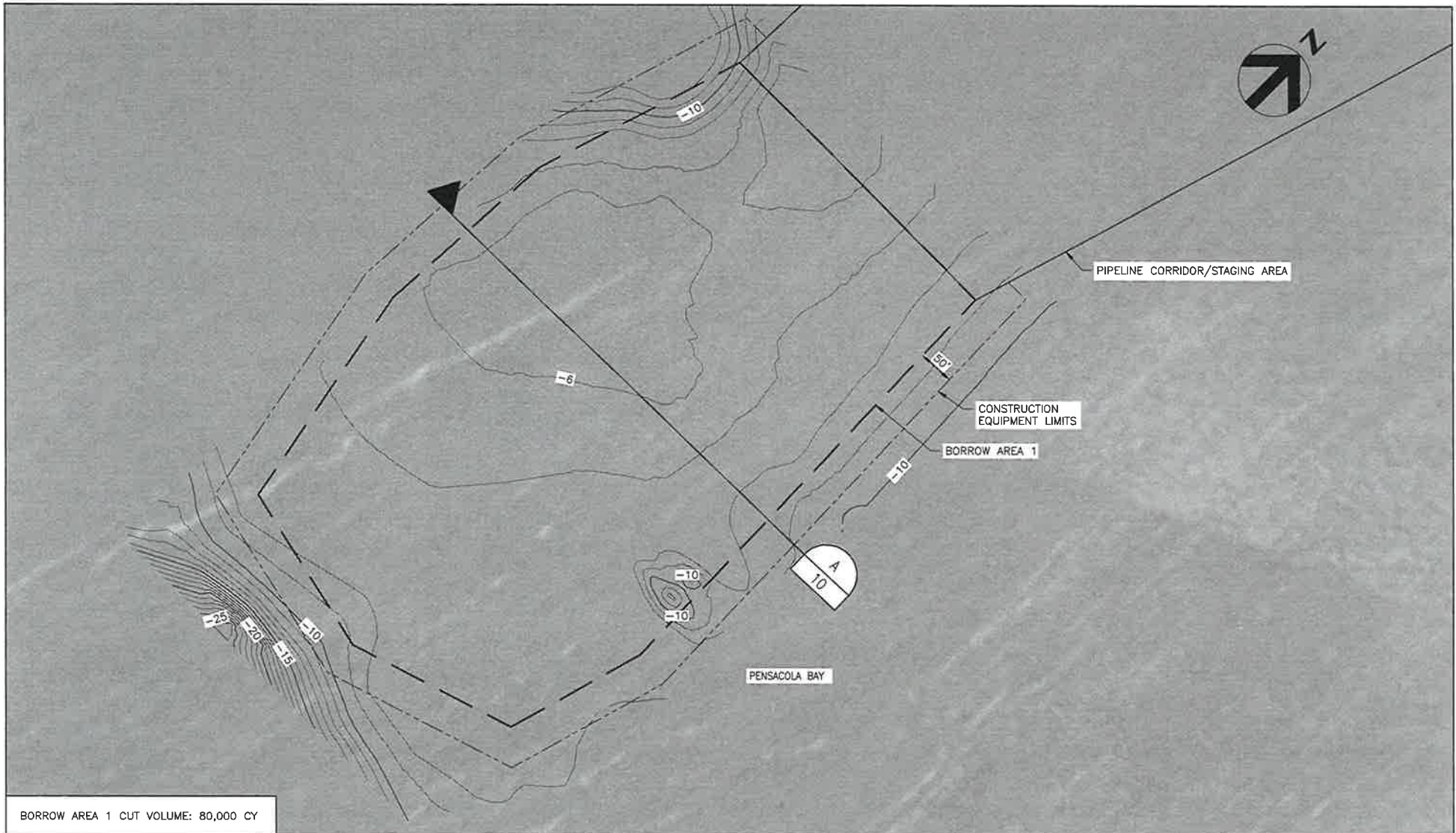
DATE  
07-05-2018

REFERENCE SHEET

REFERENCE DOCUMENT

EXHIBIT NUMBER  
05





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**ENLARGED BORROW AREA 1**

SCALE: 0 100' 200'

1  
05

**LEGEND:**

— -10 — MAJOR CONTOUR

— — — MINOR CONTOUR



**PENSACOLA BAY LIVING SHORELINE  
PROJECT - GREENSHORES II SITE**

SHEET TITLE  
**ENLARGED BORROW AREA 1**



PROJECT NUMBER  
10023870

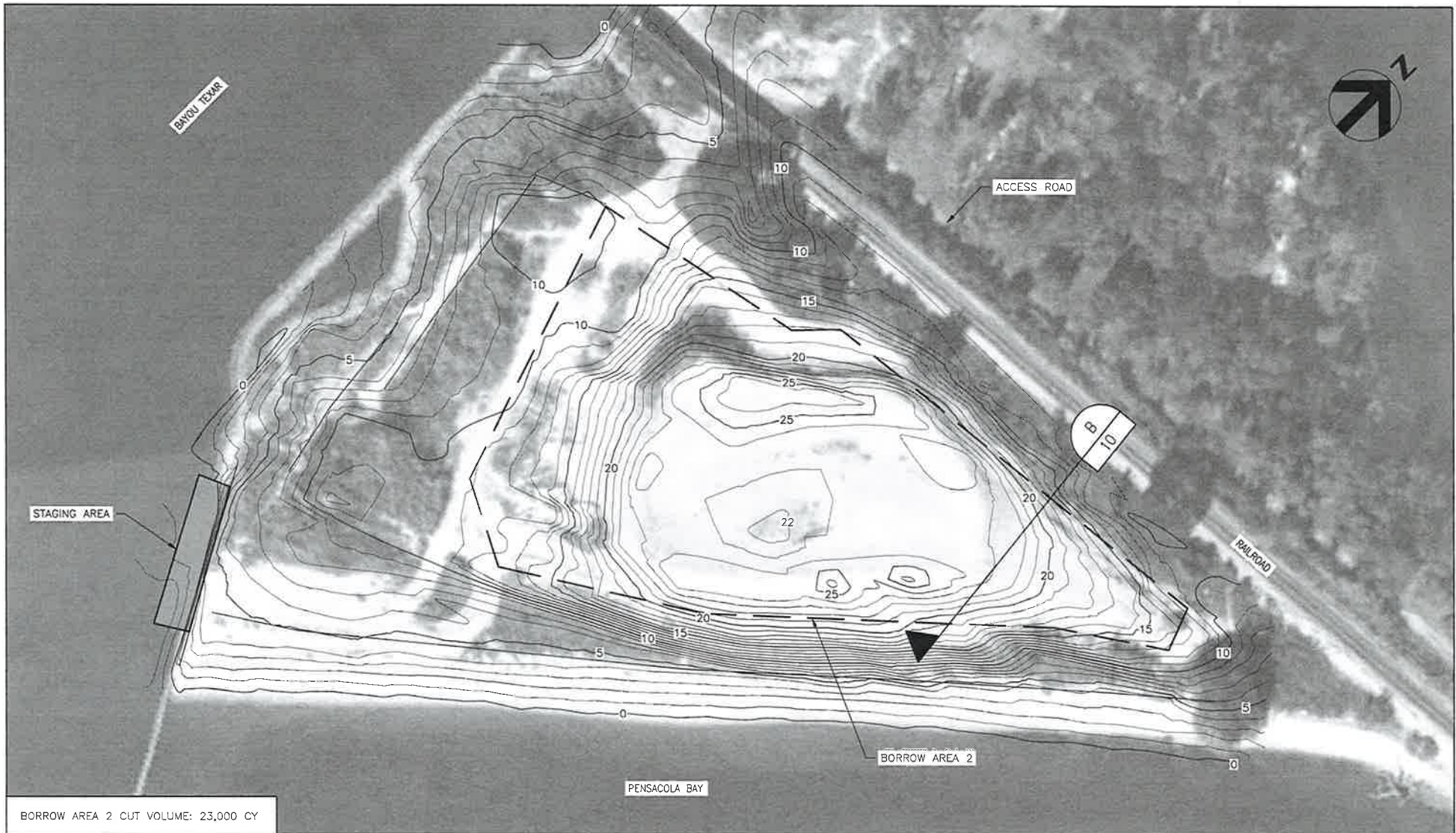
PROJECT MANAGER  
**MICK GARRETT**

DATE  
07-05-2018

REFERENCE SHEET

REFERENCE DOCUMENT

EXHIBIT NUMBER  
06



- NOTES:**
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## ENLARGED BORROW AREA 2

SCALE: 0 50' 100'



**LEGEND:**  
 -5 — MAJOR CONTOUR  
 — MINOR CONTOUR



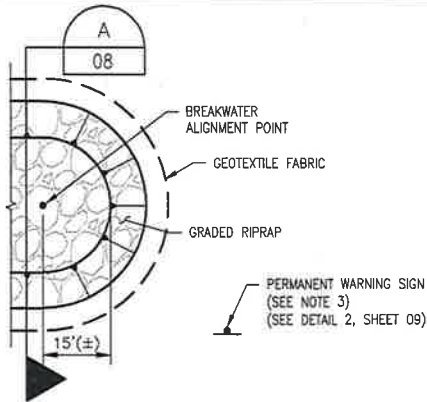
PENSACOLA BAY LIVING SHORELINE  
 PROJECT - GREENSHORES II SITE  
 SHEET TITLE  
**ENLARGED BORROW AREA 2**



PROJECT NUMBER  
 10023870  
 PROJECT MANAGER  
 MICK GARRETT  
 DATE  
 07-05-2018

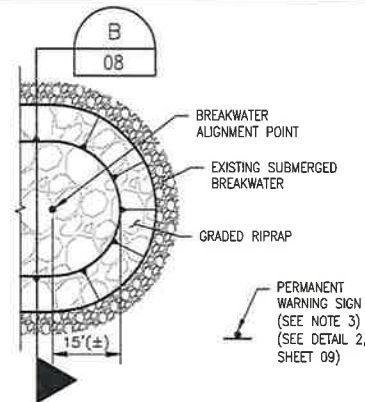
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 REFERENCE DOCUMENT  
 EXHIBIT NUMBER  
 07





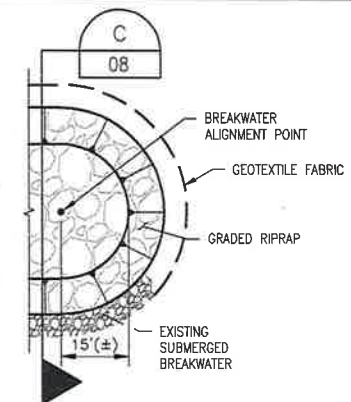
TYPICAL PLAN - BREAKWATER TYPE I END

SCALE: NOT TO SCALE



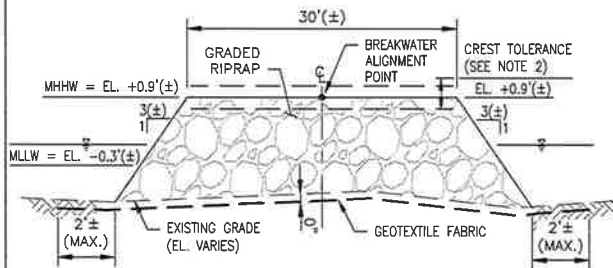
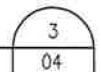
TYPICAL PLAN - BREAKWATER TYPE II - END

SCALE: NOT TO SCALE



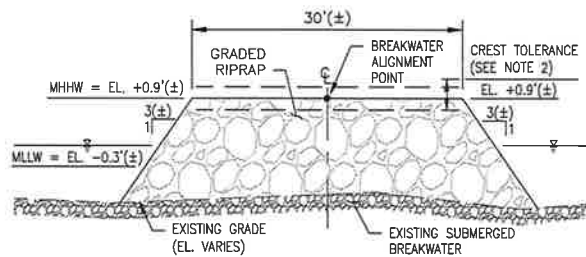
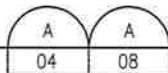
TYPICAL PLAN - BREAKWATER TYPE III - NORTH END

SCALE: NOT TO SCALE



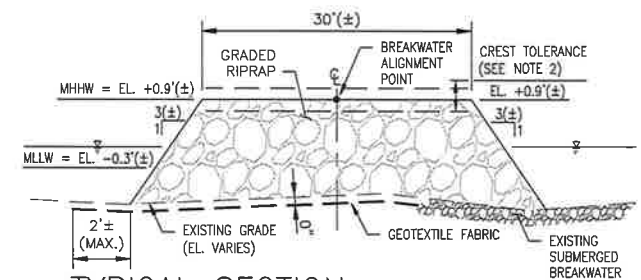
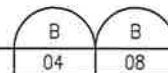
TYPICAL SECTION - BREAKWATER TYPE I

SCALE: NOT TO SCALE



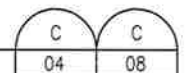
TYPICAL SECTION - BREAKWATER TYPE II

SCALE: NOT TO SCALE



TYPICAL SECTION - BREAKWATER TYPE III

SCALE: NOT TO SCALE



GRR GRADATION - ASTM 6092 R-700 (MODIFIED)	
STONE SIZE (LBS)	% OF STONE SMALLER
1500	100
700	50 - 100
300	15 - 50
60	5 - 15

BREAKWATER CLASSIFICATIONS	
BREAKWATER	TYPE
A	I
B	I/II
C	I
D	II
E	I
F	II

**NOTES:**

- THIS DOCUMENT SHALL NOT BE USED FOR BIDDING OR CONSTRUCTION PURPOSES.
- ALL SURVEYED CREST ELEVATION POINTS SHALL BE BETWEEN +0.4 FT(±) AND +1.4 FT(±). THE AVERAGE ELEVATION FOR ANY GIVEN 100 FT SEGMENT OF THE BREAKWATER SHALL BE BETWEEN +0.6 FT(±) AND 1.2 FT(±).
- LOCATION OF PERMANENT WARNING SIGNS SHOWN HEREIN ARE FOR ILLUSTRATION ONLY. SIGNS SHALL BE LOCATED AS SHOWN ON EXHIBIT SHEET 04 AND WILL BE APPROXIMATELY 30 FT. FROM TOE OF PROPOSED BREAKWATER.

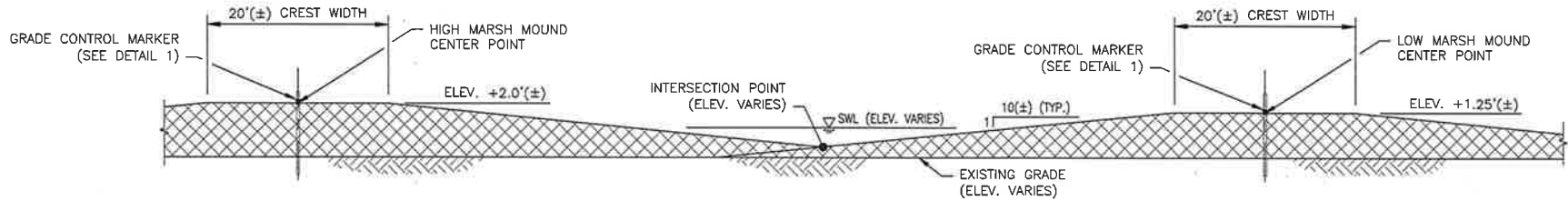


PENSACOLA BAY LIVING SHORELINE PROJECT - GREENSHORES II SITE  
SHEET TITLE  
TYPICAL SECTIONS AND DETAILS 1

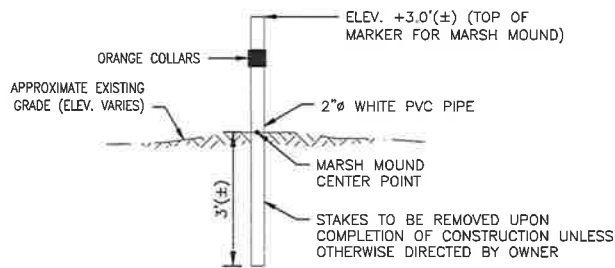


PROJECT NUMBER  
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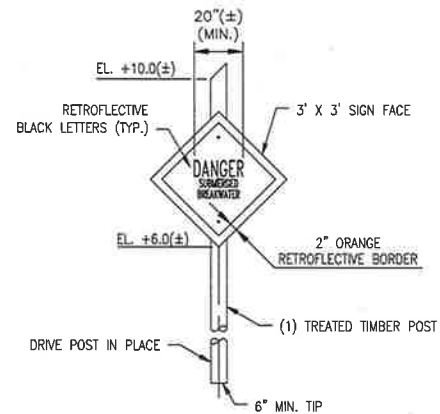
REFERENCE SHEET  
REFERENCE DOCUMENT  
EXHIBIT NUMBER  
08



TYPICAL SECTION - MARSH MOUNDS A  
04  
SCALE: NOT TO SCALE



TYPICAL DETAIL -  
GRADE CONTROL MARKER 1  
09  
SCALE: NOT TO SCALE



TYPICAL DETAIL - PERMANENT WARNING SIGN 2  
04  
SCALE: NOT TO SCALE

**NOTE:**  
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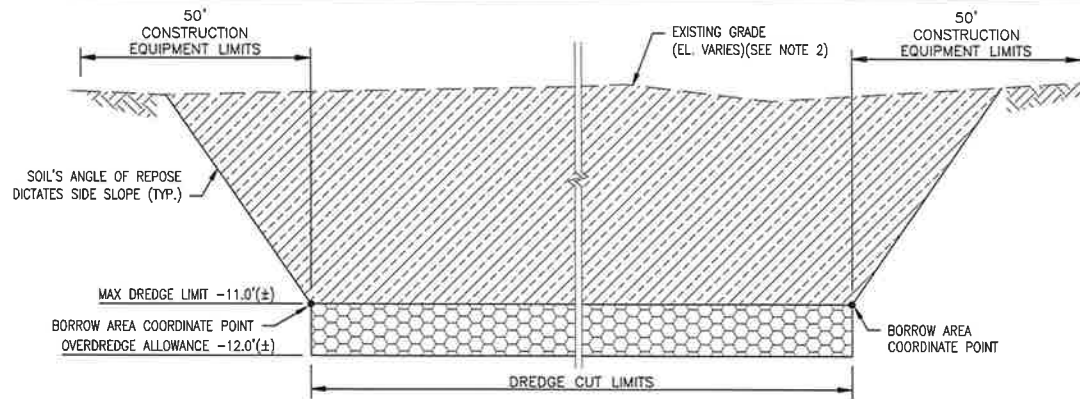


PENSACOLA BAY LIVING SHORELINE  
PROJECT - GREENSHORES II SITE  
SHEET TITLE  
TYPICAL SECTIONS AND DETAILS 2



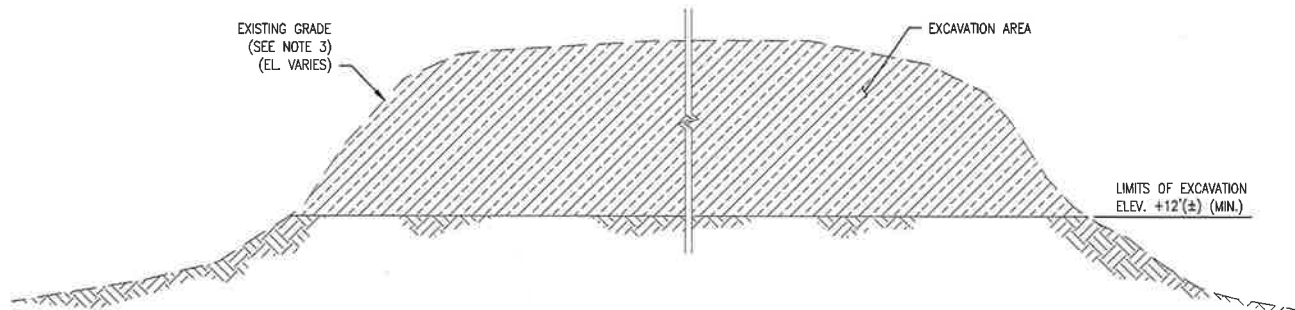
PROJECT NUMBER  
10023870  
PROJECT MANAGER  
MICK GARRETT  
DATE  
07-05-2018

REFERENCE SHEET  
REFERENCE DOCUMENT  
EXHIBIT NUMBER  
09



TYPICAL CROSS SECTION – BORROW AREA 1

SCALE: NOT TO SCALE



TYPICAL CROSS SECTION – BORROW AREA 2

SCALE: NOT TO SCALE



NOTES:

1. THIS DOCUMENT SHALL NOT BE USED FOR BIDDING OR CONSTRUCTION PURPOSES.
2. REFER TO EXHIBIT SHEET 06 FOR BORROW AREA 1 ELEVATION CONTOURS.
3. REFER TO SHEET 07 FOR BORROW AREA 2 ELEVATION CONTOURS.



SHEET TITLE  
TYPICAL SECTIONS AND DETAILS 3

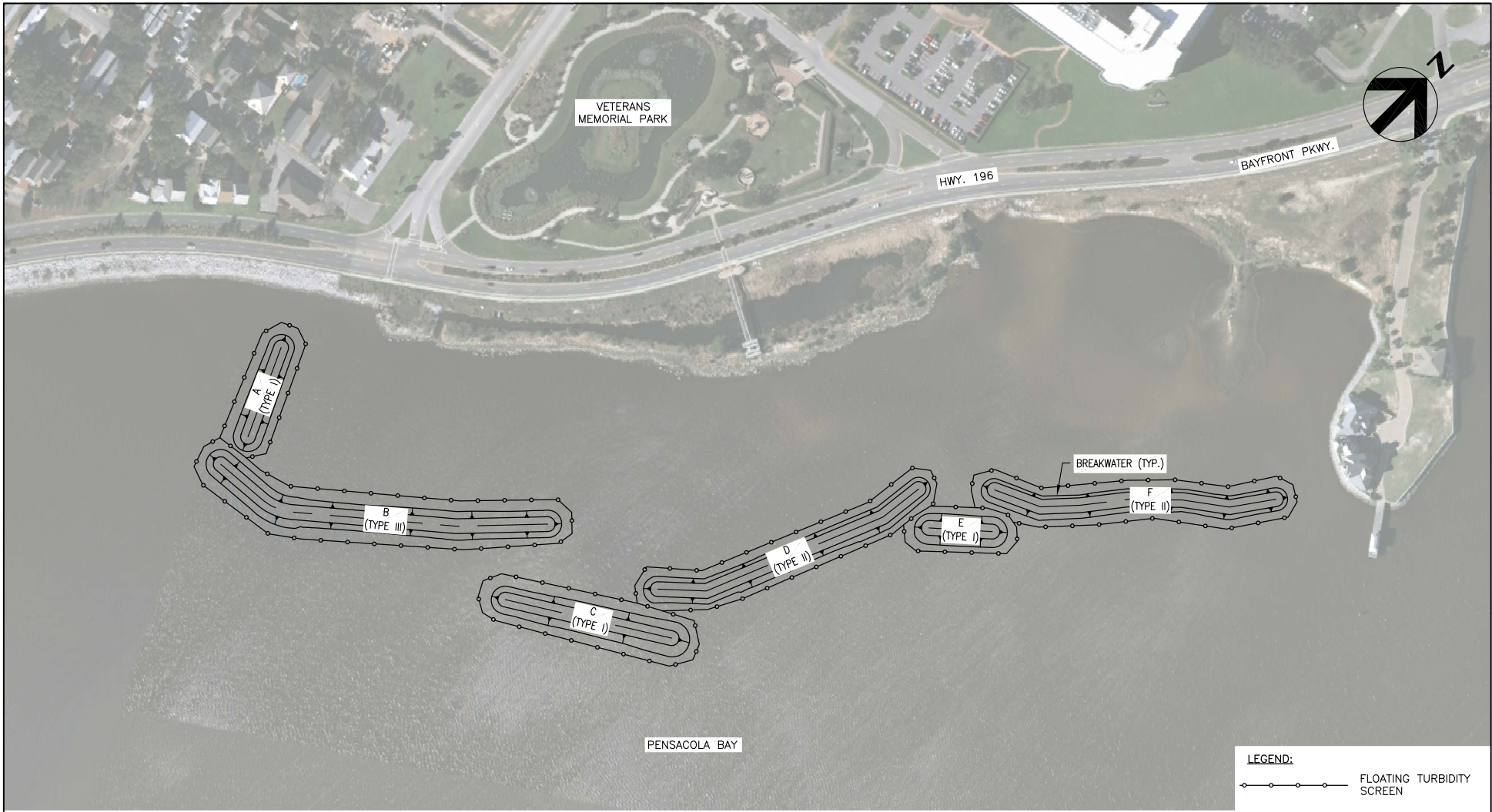
PENSACOLA BAY LIVING SHORELINE  
PROJECT - GREENSHORES II SITE



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DATE  
07-05-2018

REFERENCE SHEET  
  
REFERENCE DOCUMENT  
  
EXHIBIT NUMBER  
10





- NOTES:**
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  3. FLOATING TURBIDITY SCREENS WILL BE INSTALLED PRIOR TO CONSTRUCTION OF EACH BREAKWATER SECTION. UPON COMPLETION OF EACH BREAKWATER SECTION, TURBIDITY SCREENS WILL BE MOVED WHEN WATER QUALITY WITHIN SCREENED AREA IS LESS THAN 29 NTUS ABOVE BACKGROUND. TURBIDITY SCREENS WILL THEN BE PLACED FOR NEW SECTION OF BREAKWATER.

## TURBIDITY CONTROL – BREAKWATER CONSTRUCTION



**LEGEND:**  

 FLOATING TURBIDITY SCREEN



**PENSACOLA BAY LIVING SHORELINE  
PROJECT - GREENSHORES II SITE**

SHEET TITLE  
**TURBIDITY CONTROL - BREAKWATER CONSTRUCTION**

PROJECT NUMBER  
**10023870**

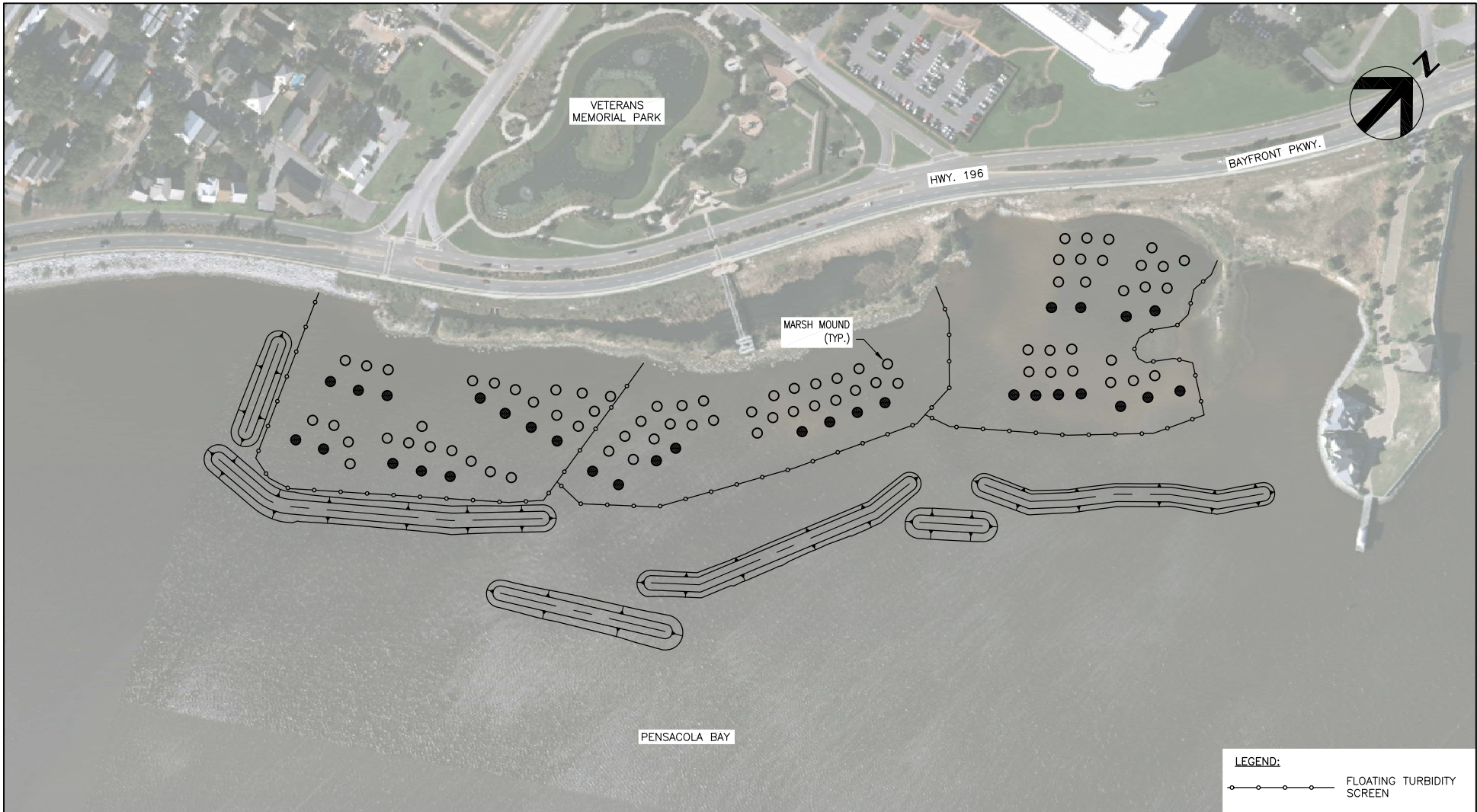
PROJECT MANAGER  
**MICK GARRETT**

DATE  
**09-24-2018**

REFERENCE SHEET

REFERENCE DOCUMENT

EXHIBIT NUMBER  
**11**

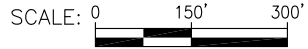


**LEGEND:**

—○—○—○— FLOATING TURBIDITY SCREEN

- NOTES:**
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  2. AERIAL PHOTOGRAPH SHOWN WAS OBTAINED FROM STATE OF FLORIDA ORTHOS, ESCAMBIA COUNTY 2016, VIA ESRI'S ARGIS ONLINE DATED APRIL 2016.
  3. FLOATING TURBIDITY SCREENS WILL BE INSTALLED PRIOR TO CONSTRUCTION OF SECTIONS OF MARSH. UPON COMPLETION OF MARSH SECTIONS, TURBIDITY SCREENS WILL BE MOVED WHEN WATER QUALITY WITHIN SCREENED AREA IS LESS THAN 29 NTUS ABOVE BACKGROUND. TURBIDITY SCREENS WILL THEN BE PLACED FOR NEW SECTION OF MARSH.

# TURBIDITY CONTROL – MARSH CONSTRUCTION



**PENSACOLA BAY LIVING SHORELINE  
PROJECT - GREENSHORES II SITE**

SHEET TITLE  
**TURBIDITY CONTROL - MARSH CONSTRUCTION**

PROJECT NUMBER  
**10023870**

PROJECT MANAGER  
**MICK GARRETT**

DATE  
**09-24-2018**

REFERENCE SHEET

REFERENCE DOCUMENT

EXHIBIT NUMBER  
**12**