

Figure 1
Location of Proposed Recipient Sites

temperature is extremely hot or cold, a backhoe will be used to excavate the burrow. Only an experienced backhoe operator will be used for this activity, with an experienced biologist providing oversight throughout the entire operation.

Since gopher tortoises are susceptible to cold stress, tortoises will be captured and/or relocated only on days when the overnight low temperature is forecast to be above 50 degrees F, and the two consecutive overnight lows are also forecast to exceed 50 degrees F. This three-day window of milder overnight temperatures will allow the relocated tortoises to settle into the recipient site.

Tortoises will be placed individually in clean plastic bins, to avoid the potential spread of Upper Respiratory Tract Disease (URTD). Additionally, all processing equipment will be cleaned with a 10% bleach solution between uses and biologists will sanitize their hands between each tortoise handled or use a pair of sterile disposable gloves for each tortoise. Bins will be properly washed and sanitized after tortoises are released.

Tortoises will be measured and permanently marked using the existing CCAFS scute drilling method. Blood samples will be taken for analysis of URTD from 10 tortoises or 25% (whichever is greater) of the total number of tortoises captured. Since the relocation will be performed within CCAFS boundaries under the existing blanket permit, the results of these analyses will not be required prior to release of the tortoises. Blood samples will be drawn from the brachial vein by an experienced biologist, using a 25-gauge needle and monoject syringe. Blood will be immediately transferred to lithium heparin separator tubes and placed in a refrigerator overnight for plasma separation. Plasma will be transferred to small sample tubes via pipette and frozen at minus 20 degrees C until shipment to the University of Florida for analysis.

Commensals

All commensals encountered during bucket trapping or backhoe operations will be relocated safely out of the project area. In accordance with the existing gopher tortoise relocation permit, no more than one eastern indigo snake or 10 each of Florida mice and gopher frogs may be relocated. If additional specimens of these species are encountered, the capture operation will be suspended and the FWCC office contacted for instructions. A list of all commensals observed and their disposition will be provided in a final report.

Data Dissemination/Reporting

All information related to the tortoise relocation will be entered into a GIS database and a short report completed describing the relocation activity. This report will consist of: donor and recipient site description, capture method, date, turtle identification number, morphometrics, general health, maps showing point of capture and release points and a list of all commensals observed and their

disposition. A copy of all reports will be submitted to the 45 CES/CEV office within 30 days in accordance with Air Force- FWCC permit required reporting.

Construction Contractor Awareness/Compliance

All personnel involved with the USCOE construction project will be briefed regarding the protected status of the gopher tortoise and will be provided with interpretive posters to aid in the identification of tortoises that may wander into the construction and staging areas. Personnel will be instructed to cease operations and contact USCOE and ESC biologists to remove any tortoises that enter the work area. Personnel will be instructed to inspect the construction and staging areas daily to ensure all tortoises threatened by activities have been removed.

List of Preparers

Jane Provancha
Keitha Dattilo-Bain
Angy Chambers
Alexis Alicea
Vincent Greenwade
Kristina Herpich

APPENDIX E – AF FORM 813

Rec'd ESC 11-15-01

ESC 0110-5

REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS

Report Control Symbol
RCS:

INSTRUCTIONS: Section I to be completed by Proponent; Sections II and III to be completed by Environmental Planning Function. Continue on separate sheets as necessary. Reference appropriate item number(s).

SECTION I - PROPONENT INFORMATION

1. TO (Environmental Planning Function)
45 CES/CEV; Patrick AFB

2. FROM (Proponent organization and functional address symbol)
CANAVERAL PORT AUTHORITY

2a. TELEPHONE NO.
(407)
783-7831

3. TITLE OF PROPOSED ACTION
SAND-TIGHTENING OF THE NORTH JETTY AT CANAVERAL HARBOR

4. PURPOSE AND NEED FOR ACTION (Identify decision to be made and need date) (Need date: 1/15/02)
The purpose of this project is to reduce dredging requirements and navigational hazards. (See Page 2)

5. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES (DOPAA) (Provide sufficient details for evaluation of the total action.)
This project will sand-tighten, elevate, and extend the North jetty. (See Page 2)

6. PROPONENT APPROVAL (Name and Grade)
KEVIN R. BODGE, Ph.D., P.E.
(For Canaveral Port Authority)

6a. SIGNATURE


6b. DATE
10 OCT 2001

SECTION II - PRELIMINARY ENVIRONMENTAL SURVEY. (Check appropriate box and describe potential environmental effects including cumulative effects.) (+ = positive effect; 0 = no effect; - = adverse effect; U = unknown effect)

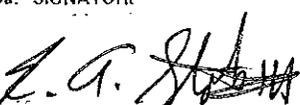
	+	0	-	U
7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND USE (Noise, accident potential, encroachment, etc.) 120 day +/- construction-related activity in remote area		X		
8. AIR QUALITY (Emissions, attainment status, state implementation plan, etc.)		X		
9. WATER RESOURCES (Quality, quantity, source, etc.)				X
10. SAFETY AND OCCUPATIONAL HEALTH (Asbestos/radiation/chemical exposure, explosives safety quantity-distance, etc.)		X		
11. HAZARDOUS MATERIALS/WASTE (Use/storage/generation, solid waste, etc.)				X
12. BIOLOGICAL RESOURCES (Wetlands/floodplains, flora, fauna, etc.)				X
13. CULTURAL RESOURCES (Native American burial sites, archaeological, historical, etc.)				X
14. GEOLOGY AND SOILS (Topography, minerals, geothermal, Installation Restoration Program, seismicity, etc.)	X			
15. SOCIOECONOMIC (Employment/population projections, school and local fiscal impacts, etc.)		X		
16. OTHER (Potential impacts not addressed above.)		X		

SECTION III - ENVIRONMENTAL ANALYSIS DETERMINATION

17. PROPOSED ACTION QUALIFIES FOR CATEGORICAL EXCLUSION (CATEX) # _____ ; OR
 PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED.

18. REMARKS
11/6/01-ww R²
If scope of proposed work changes, it must be re-evaluated by ESC (321-853-6824).
See Page 3 for continued remarks.

19. ENVIRONMENTAL PLANNING FUNCTION CERTIFICATION (Name and Grade)
E. ALEXANDER STOKES III, REM, GS-14
Chief, Environmental Flight

19a. SIGNATURE


19b. DATE
13 Nov 01

See attached sheets.

E. ALEXANDER STOKES III, REM, GS-1A
Chief, Environmental Flight

4. Purpose and Need for Action (cont'd)

This action is necessary because extensive sand is transported from the beach north of the north jetty into the navigation channel of Canaveral Harbor. The transported sand contributes to sand shoaling at the entrance of the Harbor and the Trident Basin which significantly increases navigational hazards. This project should serve to significantly reduce sand shoaling and improve navigational reliability.

5. Description of the Proposed Action and the Alternatives (cont'd)

This federal project, for which plans and specifications will be prepared by the U.S. Army Corps of Engineers (COE), has been anticipated to occur between June 2002 and March 2003. Construction is specifically projected to take place during sea turtle nesting season (1 May – October 31). The proposed work is intended to permanently replace the interim sand-tightening structure installed at the north jetty by the Corps in 1998 as a demonstration project (see attached 813 approved 2/6/96 for background information), as well as extend the jetty seaward by 300 ft. The goal of this project is to decrease the substantial transport and shoaling of sand into the Harbor and Trident Basin that, in turn, should reduce maintenance dredging requirements and navigational hazards.

Specifically, the proposed work will: 1.) remove the interim sand-tightening structure at the north jetty by expelling the sand from the geotextile tube barriers (550-ft of sand-filled tubes); 2.) sand-tighten and elevate 940-ft of the existing rock jetty using rock boulders and geogrid/geotextile barrier and; 3.) extend the jetty seaward by 300-ft using steel sheetpile and rock armor. Figures (1-4) illustrating the work are attached. It is anticipated that the majority, or all, of the work will be constructed by land-based equipment (front-loader and back-hoe). The seaward jetty extension will be constructed by track-mounted crane and back-hoe. Construction access to the site will be principally (or solely) by land-based equipment. Access is required through CCAFS and along existing dirt roads seaward of the Trident Basin East Spoil Area. A temporary work area on the beach adjacent to the north jetty will be required for staging and stockpiling. See Figure 2 for proposed staging site. Additionally, stabilization and hardening of the access road and route may be necessary for support of heavy equipment and materials.

This north jetty sand-tightening and extension project is expected to increase retention of sand north of the jetty that will be available for future sand bypass projects. Sand previously lost through the littoral system will become available for downdrift beach renourishment projects, thereby decreasing offshore dredging requirements.

ALTERNATIVES:

No Action: One alternative is to not perform the proposed sand-tightening at the north jetty. Elimination of this project would leave the jetty in its current state. Sand would continue to move into the Harbor and need dredging in order to maintain a navigable path for commercial ships as well as U.S. Navy submarines and other warships.

18. Remarks (cont'd)

Based on real property documents obtained from the SGS real property office, it appears that the Port Authority has a perpetual easement with the Air Force for the north jetty area; however, it is not clear how far this easement line extends northward. If the COE plans any work on CCAFS land that is not covered under this easement, or any other real property document, coordination with the AF real property office will be required. If additional real property documents are required, an Environmental Baseline Survey or waiver will be required. Real property issues should be forwarded to Mr. Robert Fowler (45 CES/CEL) at 321-853-0917.

CCAFS is located in an area that is in attainment for all criteria air pollutants; therefore, a conformity determination is not required.

This project may require a Dredge and Fill Permit. Please coordinate with Florida Department of Environmental Protection (FDEP) for this and any other relevant permits. Ensure that all permits are filed and associated monitoring requirements fulfilled. Specific attention should be given to turbidity issues. Turbidity concerns are raised with the placement of new jetty materials using heavy equipment, the removal (and placement) of the sand within the existing geotextile tubes, and excavation of sand from the base of the existing jetty to accommodate new geotextile fabric and rocks.

The project area is known to accumulate ocean-borne debris. Garbage found beyond existing geotextile tubes should be removed and appropriately disposed of before subsequent jetty extension. There may be some items that are considered hazardous. Disposal of waste material must be completed in accordance with 45 SW OPLAN 19-14. Additionally, management of hazardous waste must be completed in accordance with 40 CFR 260-279. All Air Force hazardous waste is to remain on the installation and will be shipped off-site by the Air Force under their EPA identification number. Hazardous waste questions should be forwarded to the Environmental Support Contractor (ESC), Hazardous Waste Section at 321-853-6988 (Mr. Dan Phillips).

Consultation with United States Fish and Wildlife Service (FWS) would be required to address potential impacts to threatened and endangered sea turtles (nesting adult, juvenile and hatchlings) and Southeastern beach mice (*Peromyscus polionotus*

niveiventris) found on land, and possibly manatees (*Trichechus manatus*), in the water. Consultation should include the Air Force, as the landowner. Consultation with the National Marine Fisheries Service (NMFS) would be required to address potential impacts to threatened and endangered sea turtles found in the water. Potential impacts to sea turtles may include: nesting within construction zone and staging area; becoming trapped within equipment or jetty construction materials; being crushed by equipment or jetty materials etc. Three species of sea turtles (*Caretta caretta*, *Chelonia mydas*, and *Dermochelys coriacea*) actively lay nests and hatch out on the CCAFS beach (1 May to 31 October). Impacts to sea turtles will be reduced significantly if the proposed construction schedule is revised such that work occurs outside of nesting season. The EA should discuss other viable time frames. Juvenile green turtles (*Chelonia mydas*) are known to reside within the Trident Basin and have been found in the Canaveral Harbor and along the south jetty (accidental line catches by fisherman). Juvenile greens may also use the north jetty year-round. Trapping completed in an area north of the proposed project area did confirm the presence of the threatened Southeastern beach mouse. Potential impacts to the beach mouse include destruction of habitat within the proposed construction and staging zone as well as possible injury or death due to construction equipment and/or jetty construction materials.

The sea turtle nesting season begins May 1 and extends until October 31. To reduce adverse impacts to threatened and endangered sea turtles from artificial lighting operated on CCAFS, all exterior lighting utilized during night operations for this project must be in accordance the 45th Space Wing Instruction 32-7001, *Exterior Lighting Management*, dated 26 Jul 00.

The area just north of the existing north jetty is a regular roosting area for a variety of protected birds, including wood storks, which are Federally listed as a threatened species. Personnel must ensure these birds are allowed to leave the area without harassment prior to daily start of work. Additionally, migratory birds (including the least tern) have been known to nest on CCAFS beaches. A nesting survey will be required prior to start of the project.

The access area for the project may support gopher tortoises (*Gopherus polyphemus*), a State listed Species of Special Concern. All tortoises/burrows located in the project area will require a survey. Please contact ESC at 321-853-6822 (Ms. Angy Chambers) at least 60 days prior to project initiation (and use of access route) for survey scheduling. Costs may be incurred if tortoises need to be relocated.

Before digging, an Excavation permit will be required. To obtain an excavation permit, contact SGS Mission Support, Excavation Administrator, at 321-861-4453. Additionally, an Air Force Form 103, BCE Work Clearance Request, will be required. Contact the Cape Superintendent for guidance on the use of AF Form 103.

Prior experience with armoring projects has demonstrated that large staging areas are necessary. The aerial image (Figure 2) depicted a fairly small, active staging area (approx. 400 ft²) on the beach away from beach vegetation. A separate land-based staging area, preferably outside of beach mouse and gopher tortoise habitat, should be identified and used for long-term project stockpiling. The COE should discuss site location options as soon as possible with all appropriate parties. If it is determined that the temporary, active staging area proposed on the beach needs to be larger, dune vegetation should be protected. If vegetation destruction is unavoidable, the area must be restored with native dune plantings. Vegetation permanently removed for jetty extension boulder placement does not have to be replaced. The active, beach staging area will need to be graded to natural beach profile conditions upon project completion. - EA

Areas of access road stabilization must be pre-approved by ESC (321-853-6824) to ensure that natural resource impacts are reduced. The use of gravel would be acceptable for stabilization. Additionally, if native vegetation is destroyed during access road stabilization and beach access, it must be restored (natives).

According to the Department of the Army's "Canaveral Harbor, Florida, Plans for Sand Bypass System" dated 19 September 1994 (D.O. File No. II- 36,702), a potentially significant cultural resource site defined as Cape 3 may be located within the proposed seaward jetty extension area. Ensure that the appropriate guidelines are met for protection of this potential resource (i.e., in 1994 a 150-ft radius around the resource was expected as a protection buffer).

If the project is not completed within one year of this environmental analysis, the project will require re-evaluation by the Environmental Support Contractor at 321- 853-6824.

The proposed project has the potential to adversely impact CCAFS environmental attributes and does not qualify for a Categorical Exclusion (CATEX), as defined in 32 CFR 989, Appendix B. Therefore, an Environmental Assessment will be required.

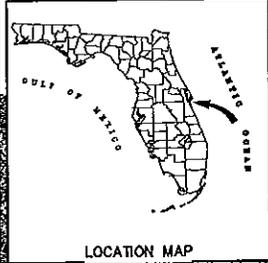
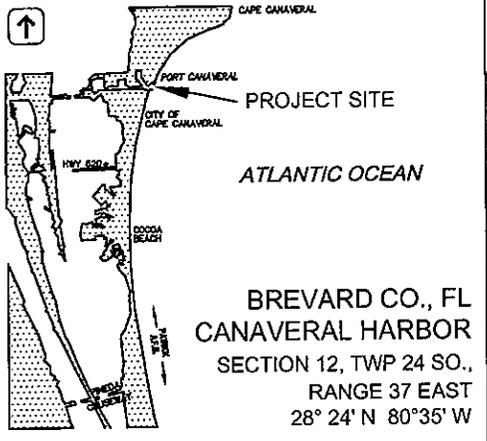
Attached Environmental Compliance Checklist applies to this AF Form 813.

Environmental Compliance Checklist

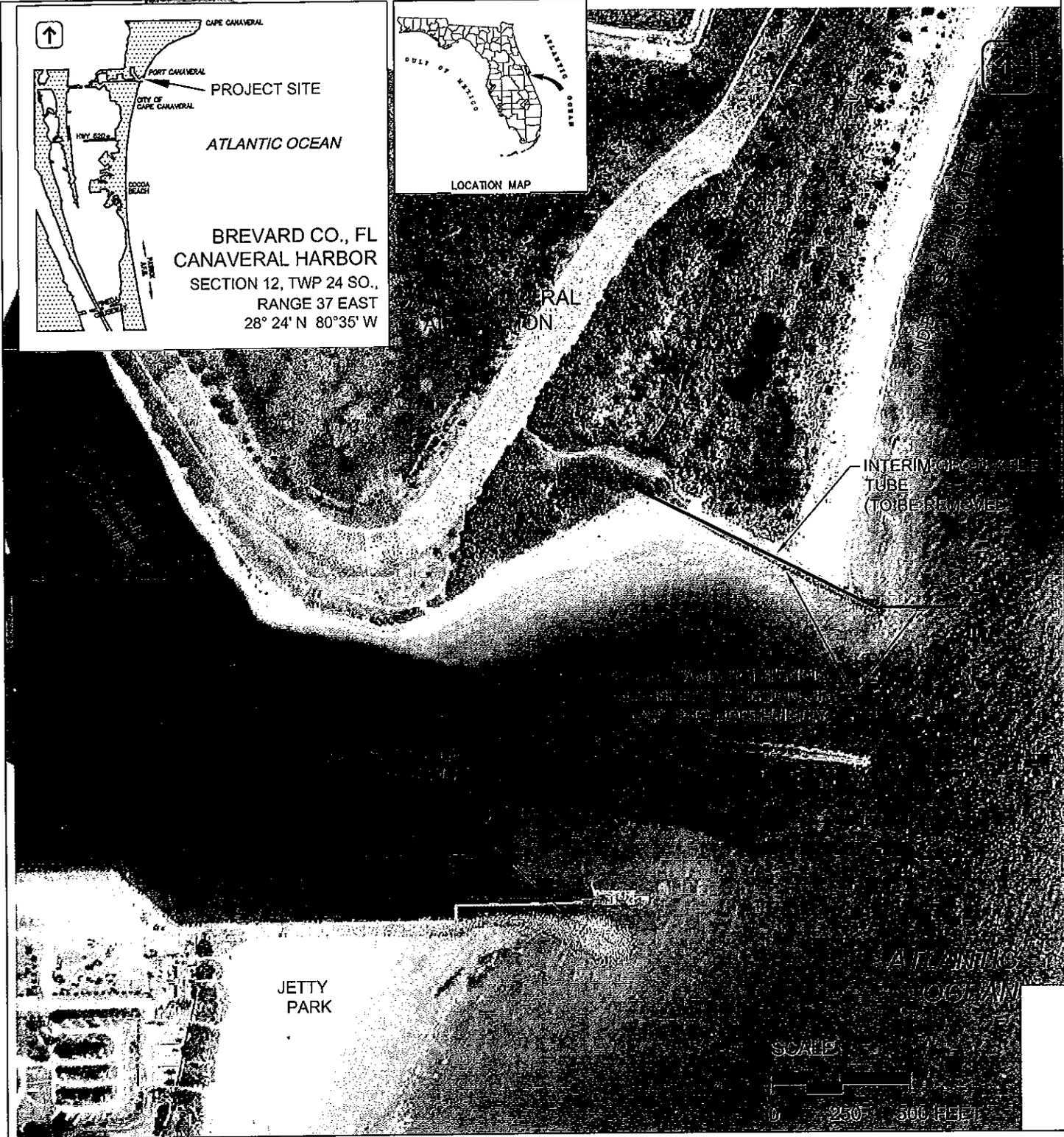
Project Number: ESC 0110-5 Project Name: Sand-tightening of the North Jetty at Canaveral Harbor, CCAFS, FL.

Compliance Permits Required	Action Required				Significant Dates		Certification Of Compliance Required	
	From AF Form 813		From Design Review		Application Submitted To CEV	Permit Issued	Yes	No
	Yes	No	Yes	No				
Env. Resource	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
NPDES	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Dom. Wastewater	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Ind. Wastewater	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Potable Water	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Air Emissions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Hazardous Waste	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Dredge & Fill (Fed.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Dewatering	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Solid Waste	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Animal Trapping	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Other:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Natural Resources Threatened and Endangered Species	From AF Form 813		From Design Review		Consultation Submitted	Response Received	Action Required	
	Yes	No	Yes	No			Yes	No
Consultation Req'd	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Comments	FWS: Sea turtles, beach mice, manatees; NMFS: Sea turtles offshore							
Cultural Resources	From AF Form 813		From Design Review		Consultation Submitted	Response Received	Action Required	
	Yes	No	Yes	No			Yes	No
Consultation Req'd	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Comments								
Asbestos-containing Materials (ACM)	Yes	No	N/A	Date	Comments			
Survey Performed for ACM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
ACM Identified in Survey	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
ACM Removal in Project Specs.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
FDEP Notified	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
CEV Notified of Project Completion	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
Comments								
Lead-Based Paint	Yes	No	N/A	Date	Comments			
Survey Performed for LBP	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
LBP Identified in Survey	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
LBP Requirements in Proj. Specs.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
CEV Notified of Project Completion	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
Comments								
EIAP/NEPA Documentation	Yes	No	N/A	Date	Comments			
Env. Assessment Required	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
Env. Impact Statement Required	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
CZM Notification	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
FONSI Signed	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
Comments								
Installation Restoration Program (IRP)	Yes	No	N/A	Date	Comments			
IRP Site Involved	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
Comments								

ESC Form T1-c-3, 6/01



BREVARD CO., FL
 CANAVERAL HARBOR
 SECTION 12, TWP 24 SO.,
 RANGE 37 EAST
 28° 24' N 80° 35' W



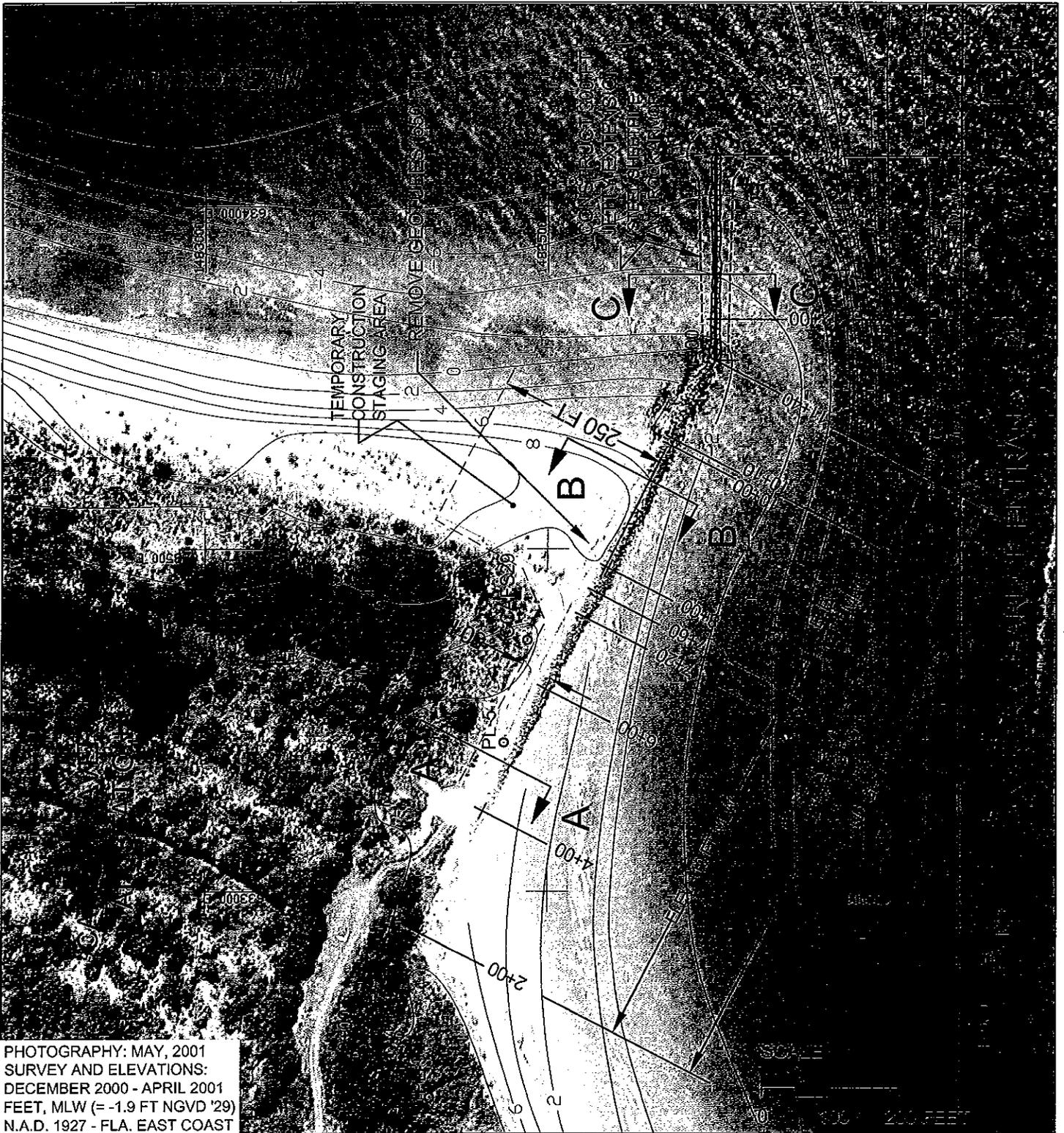
PHOTOGRAPHY: MAY 29, 2001



olsen
 associates, inc.
 4438 Herschel Street
 Jacksonville, FL 32210
 (904) 387-6114
 (Fax) 384-7368

CANAVERAL PORT AUTHORITY
 NORTH JETTY PERMANENT SAND TIGHTENING
 VICINITY MAP
 FIGURE 1

DATE:	APPROVED	REVISION	DATE:
			10/01/01
			DRAWN BY:
			S.H.
			SHEET
			1 OF 4



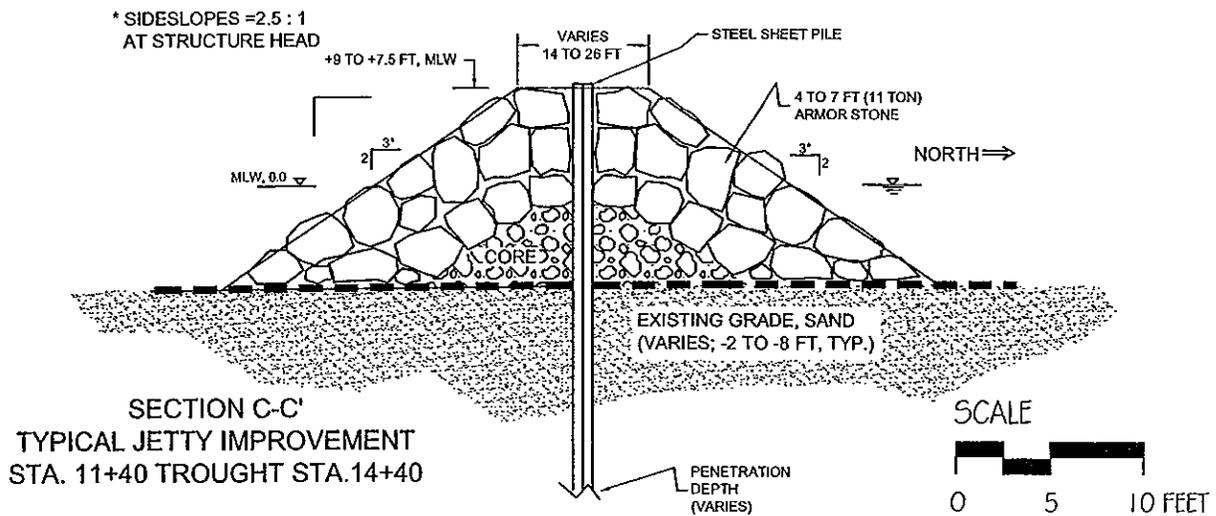
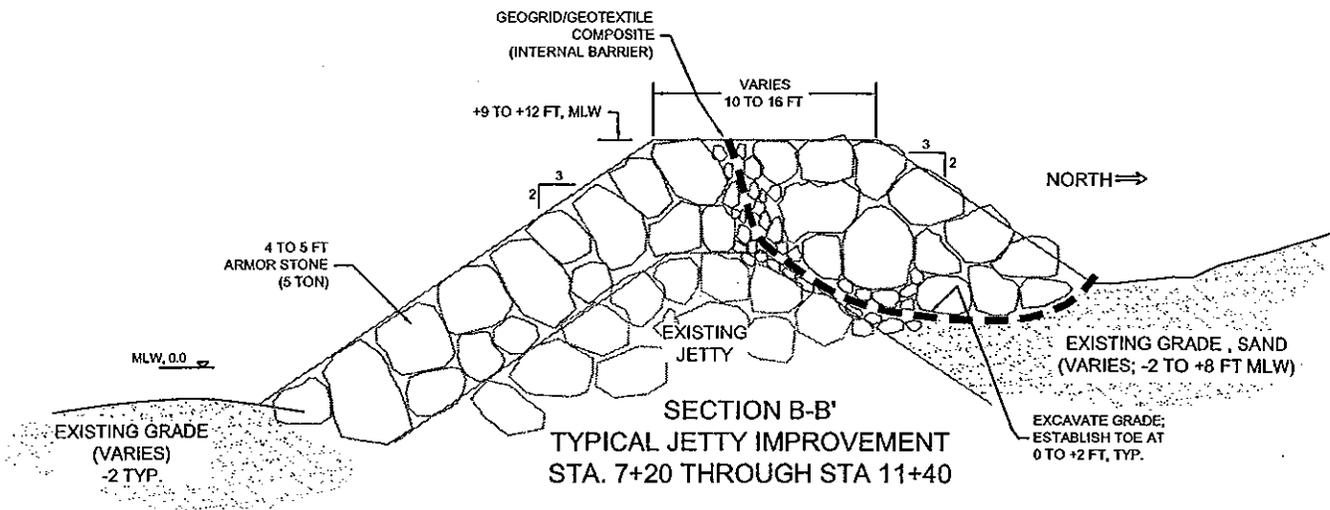
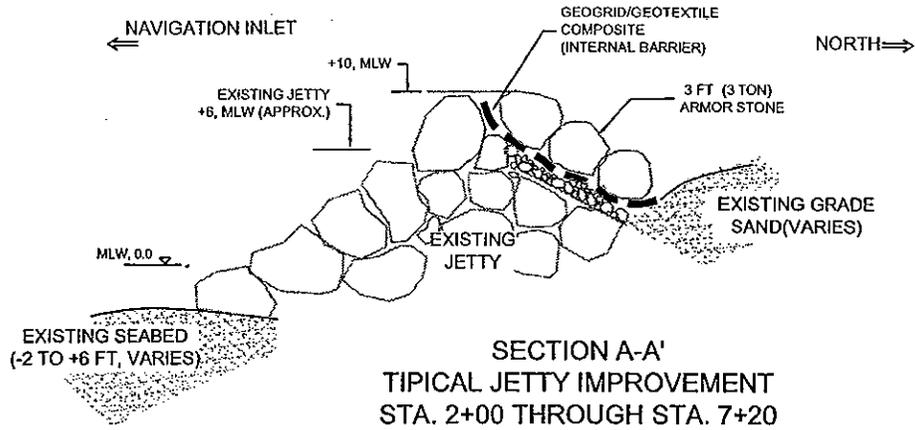
PHOTOGRAPHY: MAY, 2001
 SURVEY AND ELEVATIONS:
 DECEMBER 2000 - APRIL 2001
 FEET, MLW (= -1.9 FT NGVD '29)
 N.A.D. 1927 - FLA. EAST COAST



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 Jacksonville, FL. 32210
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 (Fax) 384-7368

CANAVERAL PORT AUTHORITY
 NORTH JETTY PERMANENT SAND TIGHTENING
 PLAN OF IMPROVEMENT
 FIGURE 2

DATE:	APPROVED	REVISION	DATE:
			10/01/01
			DRAWN BY: S.H.
			SHEET 2 OF 4



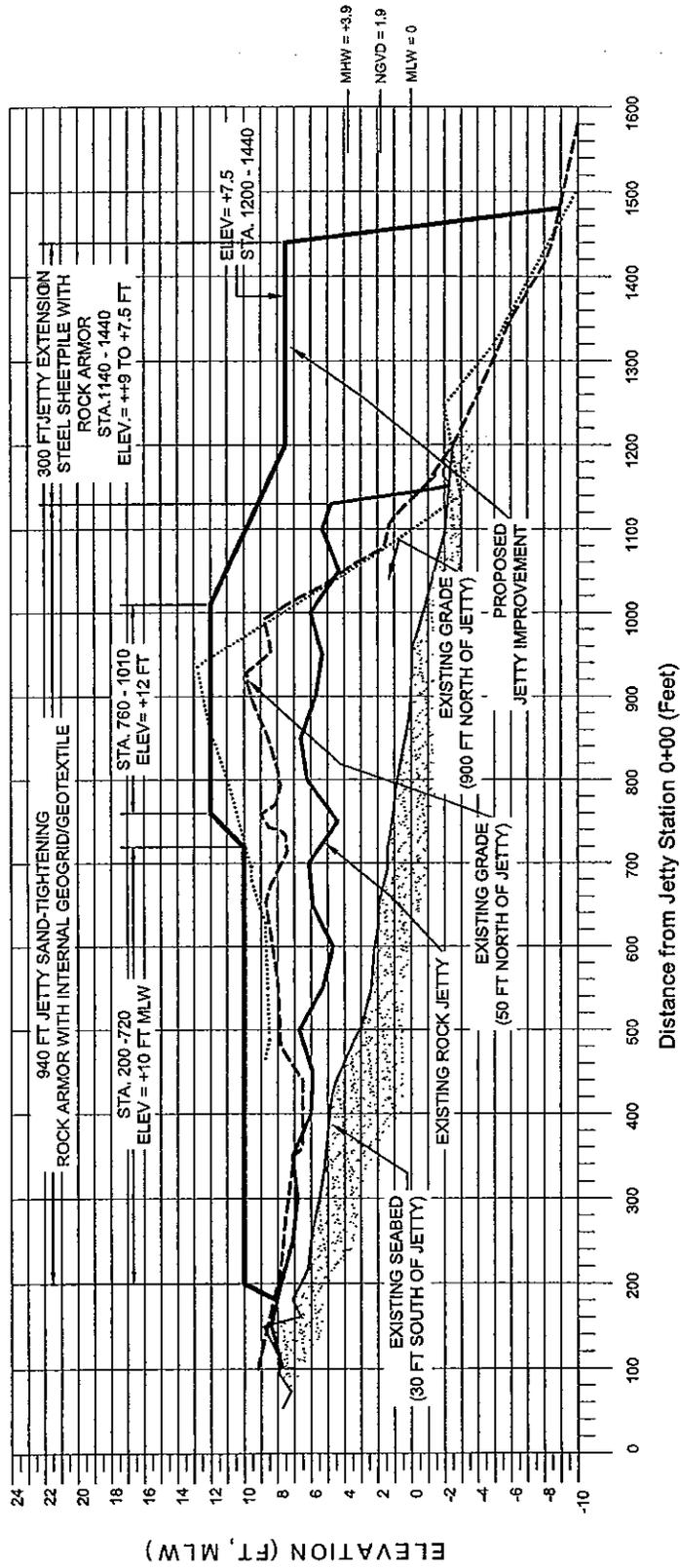
NOT FOR PURPOSES OF CONSTRUCTION



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Jacksonville, FL. 32210
(904) 387-6114
(Fax) 384-7368

CANAVERAL HARBOR, NORTH JETTY
PERMANENT SAND TIGHTENING
NORTH JETTY CROSS-SECTIONS
FIGURE 3

DATE:	APPROVED	REVISION	DATE:
			10/01/01
			DRAWN BY: SH
			SHEET 3 of 4



NOT FOR PURPOSES OF CONSTRUCTION



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CANAVERAL HARBOR, NORTH JETTY
 PERMANENT SAND TIGHTENING
NORTH JETTY - ELEVATION VIEW
 FIGURE 4

DATE:	APPROVED	REVISION	DATE:
			10/01/01
			DRAWN BY: SH
			SHEET 4 OF 4

JOHNSON CONTROLS

Inter-Office Correspondence

RECEIVED

MAR 8 1996

Olsen Associates, Inc.

Date FEB 29 1996

Subject APPROVED FORM 813

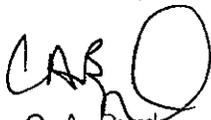
From Superintendent, Environmental, MU LBS 5050

To Lorraine Guise, Environmental Coordinator

Attached is a signed, approved copy of AF Form 813, proposed by your office, requesting construction, renovation, or repair project(s) on Air Force owned property.

Assure that any stipulations listed in Block 18 are completed.

Refer any questions or comments to Mr. C. A. Byrd at 853-6544


C. A. Byrd

MD/ns/853-6576/FAX 853-6361

Attachment:

WON 153773 Sand Tightening of the North Jetty at Canaveral Harbor

cc: Bob Samsel, LBS 6380
Jon Schils, 45 CES/CECR

9/15

COPY

Interim (geotextile tube)
sand tightening
project

REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS

Report Control Symbol
RCS: WON 153773

INSTRUCTIONS: Section I to be completed by Proponent; Sections II and III to be completed by Environmental Planning Function. Continue on separate sheets as necessary. Reference appropriate item number(s).

SECTION I - PROPONENT INFORMATION

1. TO (Environmental Planning Function)
45 CES/CEV; Patrick AFB

2. FROM (Proponent organization and functional address symbol)
CANAVERAL PORT AUTHORITY

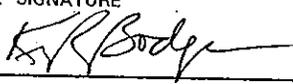
2a. TELEPHONE NO.
(407)
783-7831

3. TITLE OF PROPOSED ACTION
SAND-TIGHTENING OF THE NORTH JETTY AT CANAVERAL HARBOR

4. PURPOSE AND NEED FOR ACTION (Identify decision to be made and need date)
USAF AUTHORIZATION FOR CONSTRUCTION ACCESS ACROSS CCAS LAND AND POSSIBLE USE OF 650 C.Y. OF BEACH SAND FOR PROJECT CONSTRUCTION. JAN. 31, 1995.

5. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES (DOPAA) (Provide sufficient details for evaluation of the total action.)
SEE ATTACHMENT A

6. PROPONENT APPROVAL (Name and Grade)
KEVIN R. BODGE, Ph.D., P.E.
(For Canaveral Port Authority)

6a. SIGNATURE


6b. DATE
12/19/95

SECTION II - PRELIMINARY ENVIRONMENTAL SURVEY. (Check appropriate box and describe potential environmental effects including cumulative effects.) (+ = positive effect; 0 = no effect; - = adverse effect; U = unknown effect)

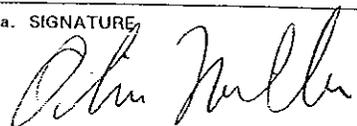
	+	0	-	U
7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND USE (Noise, accident potential, encroachment, etc.) Brief (10day +/-) construction-related activity in remote area		X		
8. AIR QUALITY (Emissions, attainment status, state implementation plan, etc.) Same as 7, above		X		
9. WATER RESOURCES (Quality, quantity, source, etc.) See attachment B		X		
10. SAFETY AND OCCUPATIONAL HEALTH (Asbestos/radiation/chemical exposure, explosives safety quantity-distance, etc.) N/A		X		
11. HAZARDOUS MATERIALS/WASTE (Use/storage/generation, solid waste, etc.) N/A		X		
12. BIOLOGICAL RESOURCES (Wetlands/floodplains, flora, fauna, etc.) See attachment B		X		
13. CULTURAL RESOURCES (Native American burial sites, archaeological, historical, etc.) See attachment B		X		
14. GEOLOGY AND SOILS (Topography, minerals, geothermal, Installation Restoration Program, seismicity, etc.) See attachment B	X			
15. SOCIOECONOMIC (Employment/population projections, school and local fiscal impacts, etc.) N/A		X		
16. OTHER (Potential impacts not addressed above.)		X		

SECTION III - ENVIRONMENTAL ANALYSIS DETERMINATION

17. PROPOSED ACTION QUALIFIES FOR CATEGORICAL EXCLUSION (CATEX) # A2, 3, 7 : OR
 PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED.

18. REMARKS
The proposed sand-tightening of the North Jetty at the Port Canaveral Harbor would occur within previously authorized easements held by the Canaveral Port Authority. The area consists of recent sand and shell deposits that fluctuate in elevation seasonally. No establishment of dune vegetation has occurred in the project area. Natural dune vegetation is in close proximity to the project area and must be protected. All (Continued)

19. ENVIRONMENTAL PLANNING FUNCTION CERTIFICATION (Name and Grade)
Oliver C. Miller GM-14

19a. SIGNATURE


19b. DATE
2/6/96

Form 813
Page 2
WON 153773

dune areas must be delineated and avoided by the project contractor. The coastal dunes in the project vicinity are prime habitat for the federally protected threatened southeastern beach mouse (Peromyscus polionotus niveiventris).

Beaches in the project area also support low to moderate nesting densities of loggerhead sea turtles (Caretta caretta) and an occasional green sea turtle (Chelonia mydas) nest. No construction activities are authorized during the primary sea turtle nesting season (15 May - 1 November). The project proponent must consult with the U.S. Fish and Wildlife Service, Endangered Species Field Station in accordance with the Endangered Species Act.

Installation of the sand-tightening longard tubes will require a dredge and fill permit from the U.S. Army Corps of Engineers and Florida Department of Environmental Protection (FDEP). In addition, a permit for construction activities seaward of the coastal construction control line must be obtained from the FDEP.

Petroleum products and other hazardous materials or wastes must be managed in accordance with the 45 SW Oplan 19-14 (Petroleum Products and Hazardous Waste Management Plan).

The proposed action will not significantly affect the human environment and qualifies for a categorical exclusion in accordance with AFI 32-7062 (Attachment 2, para A2.3.7).

No site plan required.
Attached Environmental Checklist Applies.
Attached Drawings Apply.

MAM/ns/26 Jan 95

Sand-Tightening of the Canaveral Harbor North Jetty

Proponent and Local Sponsor: Canaveral Port Authority
Construction Agency: U.S. Army Corps of Eng., Jacksonville District
Co-Sponsor: State of Florida, Dept. of Environmental Protection

Description of Work.

The proposed activity seeks to provide an interim sand tightening of the north jetty at Port Canaveral. The purpose of the work is to reduce chronic losses of sand from the adjacent north shoreline to the ship channel. This will reduce maintenance dredging requirements and also benefit the littoral system by retaining sand upon the north beach for future bypassing to the beach south of the inlet. Presently, sand is transported over and through the low, porous rock jetty and into the navigation channel. The resultant shoaling poses an increased hazard to navigation (including U. S. Navy Trident Submarine activity supported by CCAS) and increased frequency of requisite maintenance dredging.

The proposed work consists of two 70-inch diameter, 300-ft long, sand-filled geotextile tubes (e.g., Longard Tubes), placed adjacent to the north jetty and located about 30 ft north thereof. The tubes will overlap by about 30 ft, resulting in a total sand-tightened length of about 570 ft extending to the approximate seaward end of the existing rock jetty. Three 50-ft long, 40-inch diameter tubes will be placed alongside the larger tubes to augment stability. The tubes will be placed upon a geotextile fabric. The 650 c.y. of sand utilized to fill the tubes will be excavated from the beach adjacent to the north jetty, or will be trucked to the site from an approved upland source containing beach compatible material. In the former case, sand will be scraped from the surface (8" to 12") across a 225 ft x 125 ft area located wholly upon the sandy beach between the vegetation line and the waterline. Upon replacement or removal of the tubes by the Corps at the end of the project's useful life, the fill sand will be discharged to the beach at the project site. A similar project at Port Canaveral's south jetty in 1993 (Dept. of the Army Permit 199300243 (IP-MN) and DER Permit 052229809) successfully resulted in the impoundment of 40,000 cy/yr of sand which would have otherwise been lost from the beach south of the inlet and deposited within the inlet. The proposed work is an element of the Port Canaveral Inlet Management Plan.

Item 9. Water Resources

Impacts to water resources shall be limited to those associated with temporary construction-related turbidity. At a similar project constructed at Amelia Island, Nassau County, FL, this past summer, average and maximum construction-related turbidity exceeded background measurements by less than 5 NTU and 8 NTU, respectively. During construction of the similar, 500-ft long Longard Tube project at Canaveral Harbor's south jetty in 1993, the average measured turbidity during the 6-day construction period was 7.4 NTU above background; maximum turbidity was measured as 16 NTU above background. These levels are well below the State limit of 29 NTU above background.

All sediment will be pumped into the geotextile tubes using a hopper, and will be native beach sand or (if an approved upland source is used) will contain less than 9% fine sediments. Turbidity exceeding or approaching State standards is not anticipated. No adverse impacts to water resources are anticipated.

Item 12. Biological Resources

Construction access and activity shall be limited to sandy areas which feature minimum (or no) existing vegetation. Impacts to existing fauna and flora are therefore anticipated to minimal.

Item 13. Cultural Resources

Cultural resources surveys conducted by the U. S. Army Corps of Engineers for the Canaveral Harbor Sand Bypass Project, and by Morgan & Eklund, Inc. for the landward extension of the sand bypass project, indicated no presence of resources of potential cultural significance in the vicinity of the work area.

Item 14. Geology and Soils

The project's intent is to reduce chronic losses of sand from the adjacent north shoreline to the ship channel. This will reduce maintenance dredging requirements and also benefit the littoral system by retaining sand upon the north beach for future bypassing to the beach south of the inlet. As such, the project represents an improved method by which sand (soil) resources are managed at the federal inlet.

For further questions regarding the proposed project, contact Dr. Kevin R. Bodge, Olsen Associates, Inc., Jacksonville, FL (904) 387-6114.



CAPE CANAVERAL AIR FORCE STATION

PROPOSED LONGARD TUBE SAND-TIGHTENING OF NORTH JETTY (570 FT, APPROX.)

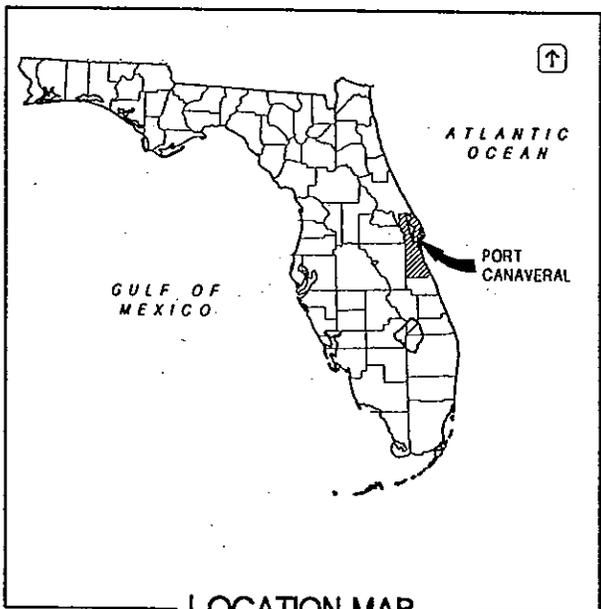
PORT CANAVERAL NORTH JETTY (EXISTING)

PORT CANAVERAL ENTRANCE
FLOOD → EBB ←

ATLANTIC OCEAN

PORT CANAVERAL SOUTH JETTY (EXISTING)

JETTY PARK



LOCATION MAP

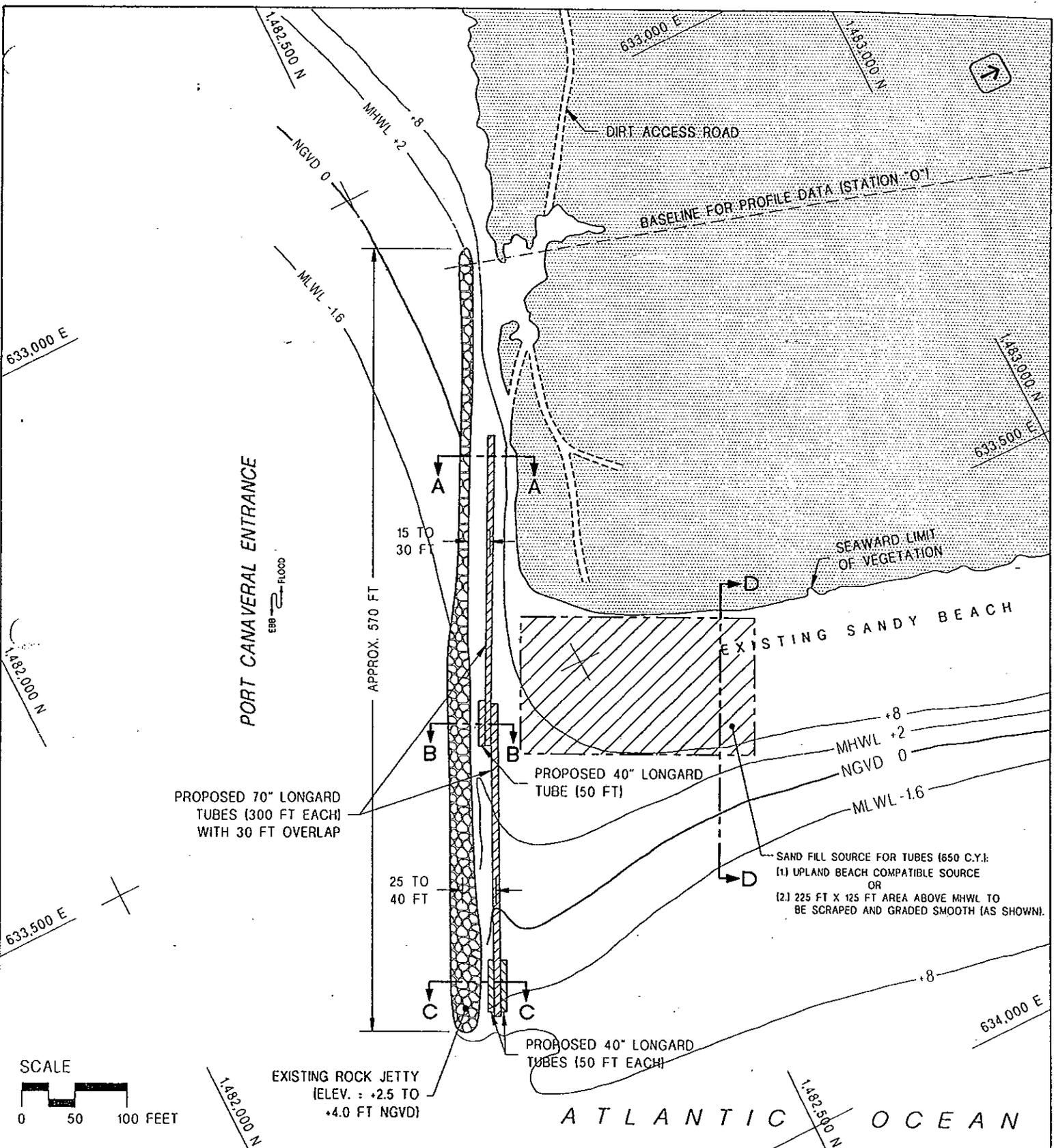


olsen
associates, inc.
4438 Herschel Street
Jacksonville, FL. 32210
(904) 387-6114
(Fax) 384-7368

CANAVERAL HARBOR
NORTH JETTY LONGARD TUBE SAND-TIGHTENING

LOCATION MAP

DATE:	APPROVED	REVISION	DATE:
			6/13/95
			DRAWN BY:
			M.R.L.
			SHEET
			1 OF 4

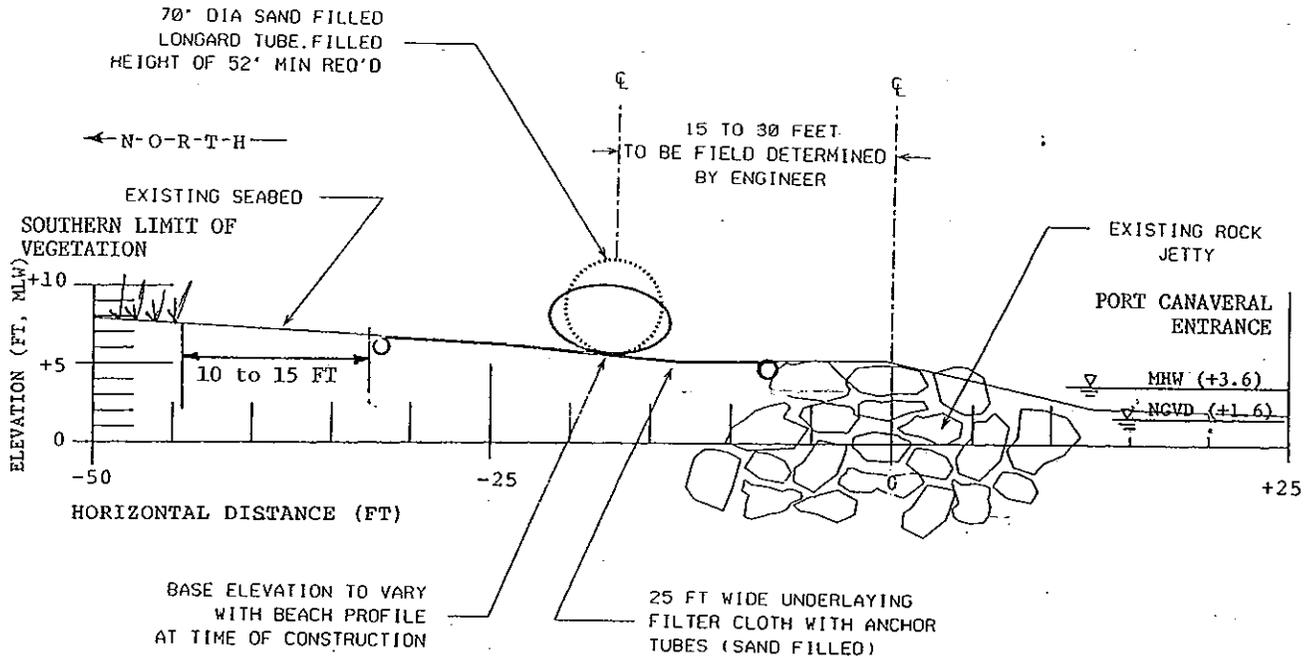


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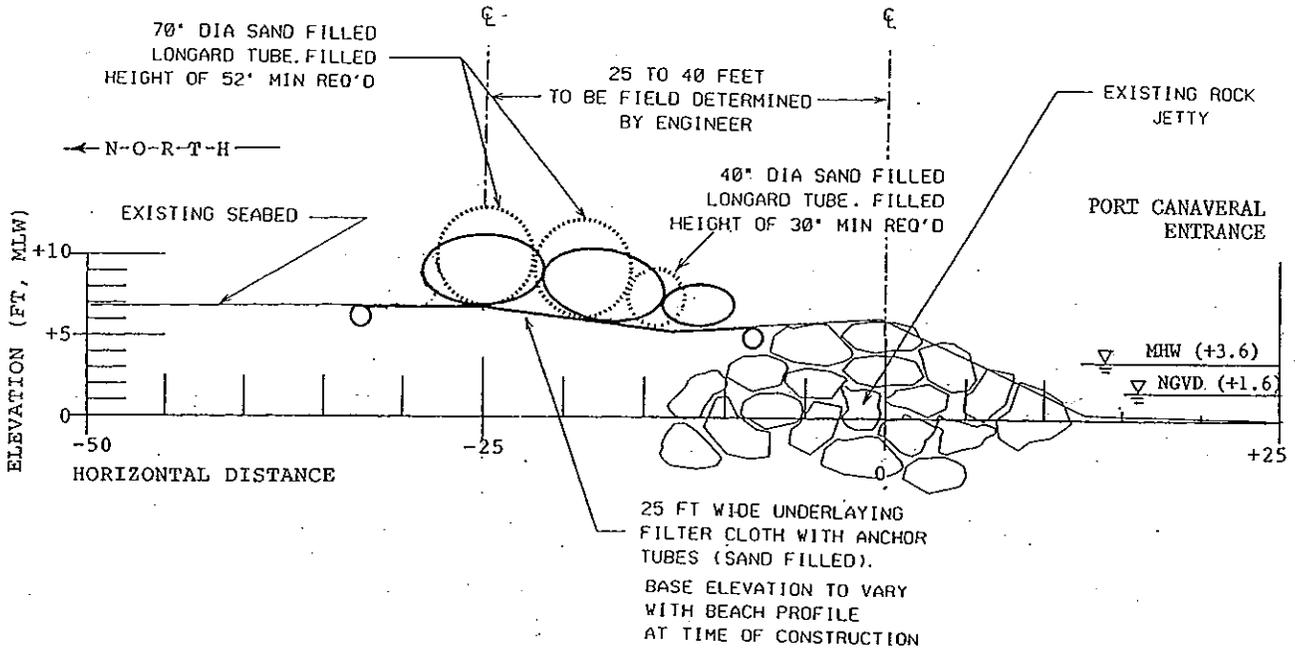
CANAVERAL HARBOR
NORTH JETTY LONGARD TUBE SAND-TIGHTENING

PLAN VIEW

DATE: 9/27/95	APPROVED KRB	REVISION fill source	DATE: 6/13/95
			DRAWN BY: M.R.L.
			SHEET 2 of 4



SECTION A-A (LANDWARD END)



SECTION B-B (OVERLAP)



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 Coastal Engineering
 4438 Herechel Street
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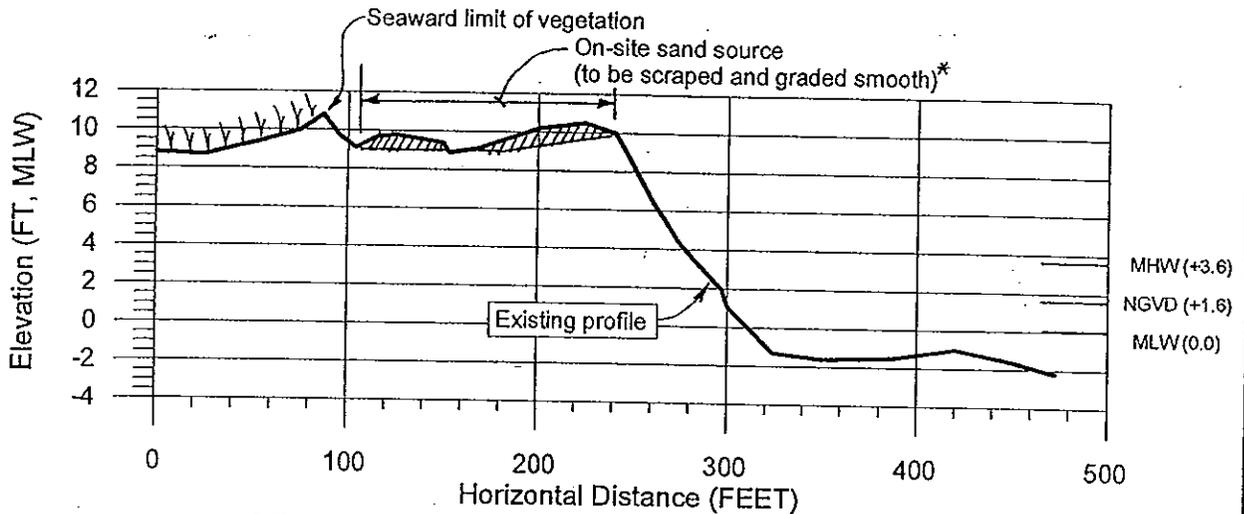
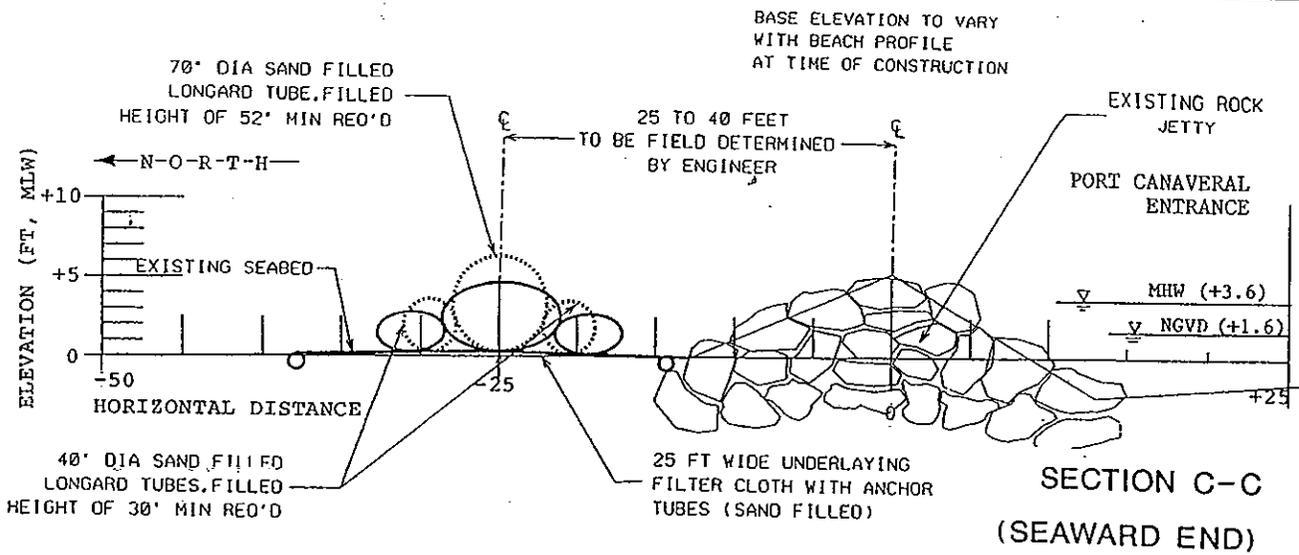
CANAVERAL HARBOR
 NORTH JETTY LONGARD TUBE SAND-TIGHTENING

SECTION VIEWS

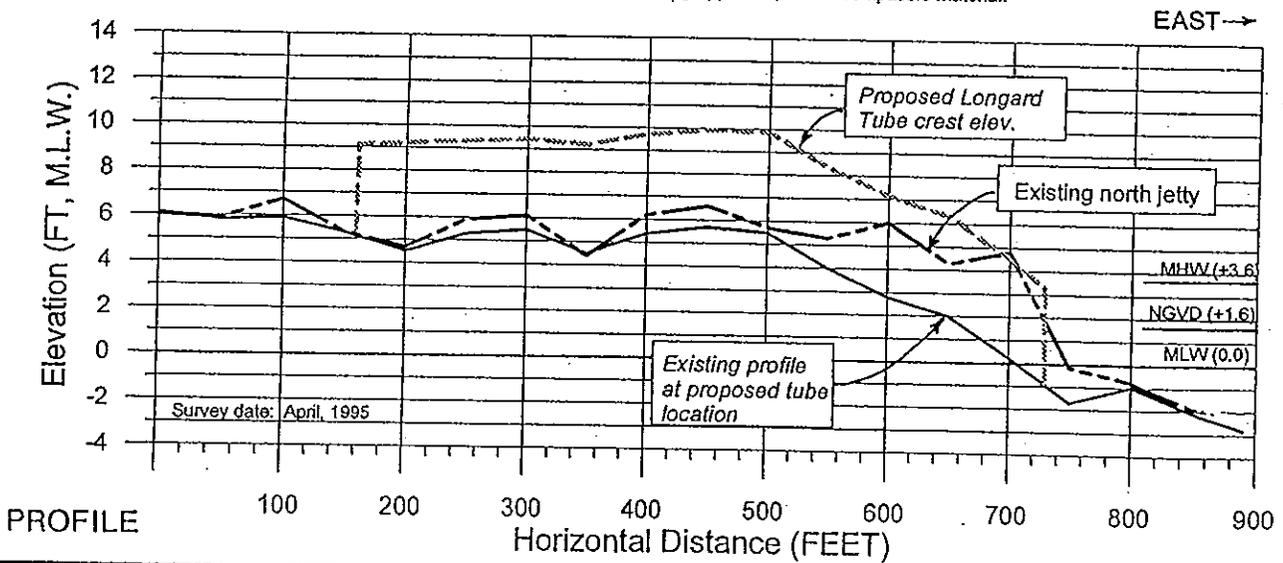
Date:
 6/13/95

Drawn By:
 K. R.B. /E.H.

Sheet:
 3 of 4



*[Note: Tubes may alternatively be filled from an upland source containing approved, beach compatible material.]



olsen
 associates, Inc.
 Coastal Engineering
 4438 Harachel Street
 Jacksonville, FL 32210
 (904) 387-6114
 (Fax) 384-7358

CANAVERAL HARBOR
 NORTH JETTY LONGARD TUBE SAND-TIGHTENING

SECTION & PROFILE VIEWS

Revised 9/27/95

Date:
6/13/95
 Drawn By:
K.R.B./E.H.
 Sheet:
4 of 4

Project Number: WON 153773

Project Name: SAND-TIGHTENING OF THE NORTH JETTY AT CANAVERAL HARBOR

Environmental Compliance Checklist

HARBOR

Permit Type	Permits Required				Significant Dates		Certif. of Comp Req'd (Y/N)
	From AF Form 813		From Design Review		Application Submitted to CEV	Permit Issued	
	Yes	No	Yes	No			
Stormwater		X					
NPDES		X					
Wastewater		X					
Ind. Wastewater		X					
Potable Water		X					
Air Emissions		X					
Haz. Waste		X					
Dredge & Fill (State)	X						
Dredge & Fill (Fed.)	X						
Dewatering		X					
Solid Waste		X					
Animal Trapping		X					
*Other:	X						

*** COASTAL CONSTRUCTION (FDEP)**

Natural Resources (Threatened and Endangered Species):

Consultation Required: Yes No
 Consultation Completed: Yes No N/A
 Mitigation Required: Yes No N/A
 Comments: CONSULTATION MUST BE INITIATED BY CANAVERAL PORT AUTHORITY / ARMY CORPS OF ENGINEERS.

Cultural Resources:

Consultation Required: Yes No
 Consultation Completed: Yes No N/A
 Action Required: Yes No N/A
 Comments: N/A

Asbestos:

Survey Performed for ACM: Yes No N/A
 ACM Identified in Survey: Yes No N/A
 ACM Removal Included in Project Specs: Yes No N/A
 Date Notification Made to CEV on Project Completion: Yes No N/A
 Comments:

Environmental Impact Analysis Process (EIAP):

Environmental Assessment Required: Yes No
 Date Finding of No Significant Impact (FONSI) Signed: Yes No N/A
 Comments: CATEX A-2.3.7

Installation Restoration Program (IRP):

IRP Site Involved: Yes No
 Comments:

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K3-JACKSONVILLE DISTRICT
 LABOR COST DISTRIBUTION BY ORGNIZATION
 For WORK Dates as of 08/2002

ORG CODE WORK ITEM	DESCRIPTION EMPLOYE NAME	HOURS TYPE	CURRENT MONTH		YEAR TO DATE	
			HOURS	DOLLARS	HOURS	DOLLARS
K3K0B00	PD ENVIRONMENTAL BRANCH					
001TNZ	PALM BEACH O&M E&D PD-E					
	GREENE, LINDA L	REG	0.00	\$0.00	8.00	\$311.18
		O/T	0.00	\$0.00	0.00	\$0.00
		HOL	0.00	\$0.00	0.00	\$0.00
	TOTAL	REG	0.00	\$0.00	8.00	\$311.18
	TOTAL	O/T	0.00	\$0.00	0.00	\$0.00
	TOTAL	HOL	0.00	\$0.00	0.00	\$0.00
	001TNZ Total:		0.00	\$0.00	8.00	\$311.18

K3K0B00	PD ENVIRONMENTAL BRANCH	REG	0.00	\$0.00	8.00	\$311.18
		O/T	0.00	\$0.00	0.00	\$0.00
		HOL	0.00	\$0.00	0.00	\$0.00
=====						
K3K0BA0	PD ENVIRON COORD SECTION					
001TNZ	PALM BEACH O&M E&D PD-E					
	BROOKS, CATHERINE	REG	35.25	\$2,389.91	374.75	\$24,129.67
		O/T	0.00	\$0.00	0.00	\$0.00
		HOL	0.00	\$0.00	0.00	\$0.00
	TOTAL	REG	35.25	\$2,389.91	374.75	\$24,129.67
	TOTAL	O/T	0.00	\$0.00	0.00	\$0.00
	TOTAL	HOL	0.00	\$0.00	0.00	\$0.00
	001TNZ Total:		35.25	\$2,389.91	374.75	\$24,129.67

K3K0BA0	PD ENVIRON COORD SECTION	REG	35.25	\$2,389.91	374.75	\$24,129.67
		O/T	0.00	\$0.00	0.00	\$0.00
		HOL	0.00	\$0.00	0.00	\$0.00
=====						
K3K0BD0	ATLANTIC COAST SECTION					
001TNZ	PALM BEACH O&M E&D PD-E					
	BOOTHBY, REA N	REG	0.00	\$0.00	56.50	\$4,450.29
		O/T	0.00	\$0.00	0.00	\$0.00
		HOL	0.00	\$0.00	0.00	\$0.00
	JORDAN, TRACEY L	REG	0.00	\$0.00	46.00	\$2,578.49
		O/T	0.00	\$0.00	0.00	\$0.00

K3-JACKSONVILLE DISTRICT
 LABOR COST DISTRIBUTION BY ORGNIZATION
 For WORK Dates as of 08/2002

ORG CODE WORK ITEM	DESCRIPTION EMPLOYEE NAME	HOURS TYPE	CURRENT MONTH		YEAR TO DATE	
			HOURS	DOLLARS	HOURS	DOLLARS
		HOL	0.00	\$0.00	0.00	\$0.00
	LANG, JR, WILLIAM J	REG	6.00	\$440.70	8.00	\$587.61
		O/T	0.00	\$0.00	0.00	\$0.00
		HOL	0.00	\$0.00	0.00	\$0.00
	MCADAMS, JAMES J	REG	8.00	\$794.44	68.00	\$6,282.64
		O/T	0.00	\$0.00	0.00	\$0.00
		HOL	0.00	\$0.00	0.00	\$0.00
	MILLER, MATTHEW J	REG	.00	\$0.00	16.00	\$1,103.06
		O/T	.00	\$0.00	0.00	\$0.00
		HOL	0.00	\$0.00	0.00	\$0.00
	STODOLA, PAUL E	REG	11.00	\$621.47	21.00	\$1,176.54
		O/T	0.00	\$0.00	0.00	\$0.00
		HOL	0.00	\$0.00	0.00	\$0.00
	TOTAL	REG	25.00	\$1,856.61	215.50	\$16,178.63
	TOTAL	O/T	0.00	\$0.00	0.00	\$0.00
	TOTAL	HOL	0.00	\$0.00	0.00	\$0.00
	001TNZ Total:		25.00	\$1,856.61	215.50	\$16,178.63

K3K0BD0	ATLANTIC COAST SECTION	REG	25.00	\$1,856.61	215.50	\$16,178.63
		O/T	0.00	\$0.00	0.00	\$0.00
		HOL	0.00	\$0.00	0.00	\$0.00

K3K0BE0	GULF COAST SECTION					
001TNZ	PALM BEACH O&M E&D PD-E					
	DUGGER, KENNETH R	REG	.00	\$0.00	14.00	\$1,242.80
		O/T	.00	\$0.00	0.00	\$0.00
		HOL	0.00	\$0.00	0.00	\$0.00
	KARCH, PAUL J	REG	.00	\$0.00	20.00	\$1,299.96
		O/T	.00	\$0.00	0.00	\$0.00
		HOL	0.00	\$0.00	0.00	\$0.00
	TOTAL	REG	0.00	\$0.00	34.00	\$2,542.76
	TOTAL	O/T	0.00	\$0.00	0.00	\$0.00
	TOTAL	HOL	0.00	\$0.00	0.00	\$0.00

K3-JACKSONVILLE DISTRICT
 LABOR COST DISTRIBUTION BY ORGNIZATION
 For WORK Dates as of 08/2002

ORG CODE WORK ITEM	DESCRIPTION EMPLOYEE NAME	HOURS TYPE	CURRENT MONTH		YEAR TO DATE	
			HOURS	DOLLARS	HOURS	DOLLARS
001TNZ Total:			0.00	\$0.00	34.00	\$2,542.76

K3K0BE0	GULF COAST SECTION	REG	0.00	\$0.00	34.00	\$2,542.76
		O/T	0.00	\$0.00	0.00	\$0.00
		HOL	0.00	\$0.00	0.00	\$0.00
=====						
Report Grand Totals		REG	60.25	\$4,246.52	632.25	\$43,162.24
		O/T	0.00	\$0.00	0.00	\$0.00
		HOL	0.00	\$0.00	0.00	\$0.00
=====						

 *** END OF REPORT - 21-AUG-2002 - 10:46 - SID K3CEFMP1 ***
