

Port Canaveral Inlet Management Plan Implementation

**Florida Beach Management Funding Assistance Program
Local Government Funding Request
Inlet Projects Application
FY 2023 – 2024**

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Canaveral Port Authority**

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LOCAL SPONSOR:

Canaveral Port Authority

Port Canaveral Inlet Management Plan Implementation

**Florida Beach Management Funding Assistance Program
Local Government Funding Request
FY 2023 – 2024**

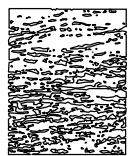
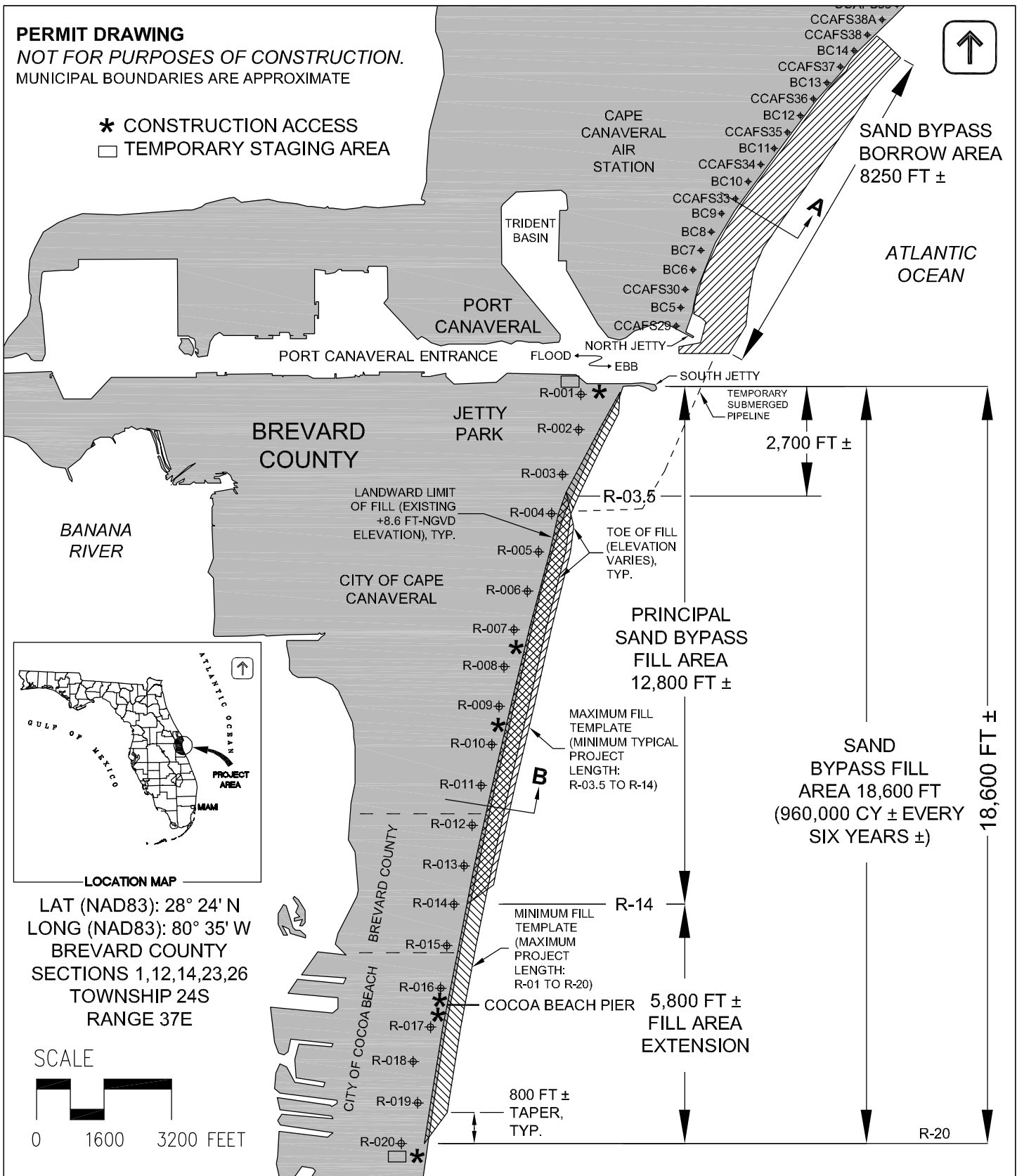
Attachment

Figure 1: Location Map (Question 2 & 4)

PERMIT DRAWING

NOT FOR PURPOSES OF CONSTRUCTION.
MUNICIPAL BOUNDARIES ARE APPROXIMATE

- * CONSTRUCTION ACCESS
- TEMPORARY STAGING AREA



olsen
associates, inc.
2618 Herschel Street
Jacksonville, FL. 32204
(904) 387-6114
COA 0000-3491

CANAVERAL PORT AUTHORITY
CANAVERAL HARBOR SAND BYPASS PROJECT
CAPE CANAVERAL, FLORIDA
GENERAL PLAN

DATE:	APPROVED:	REVISION:	DATE:
			12/1/2014
			DRAWN BY:
			ML
			SHEET
			1 of 16

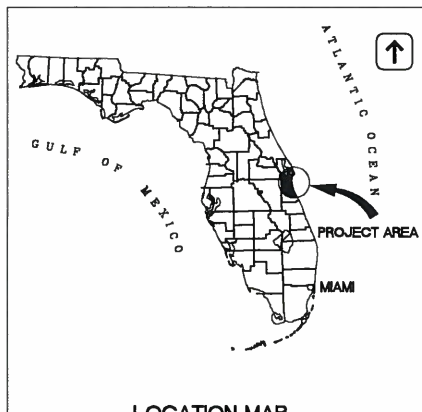
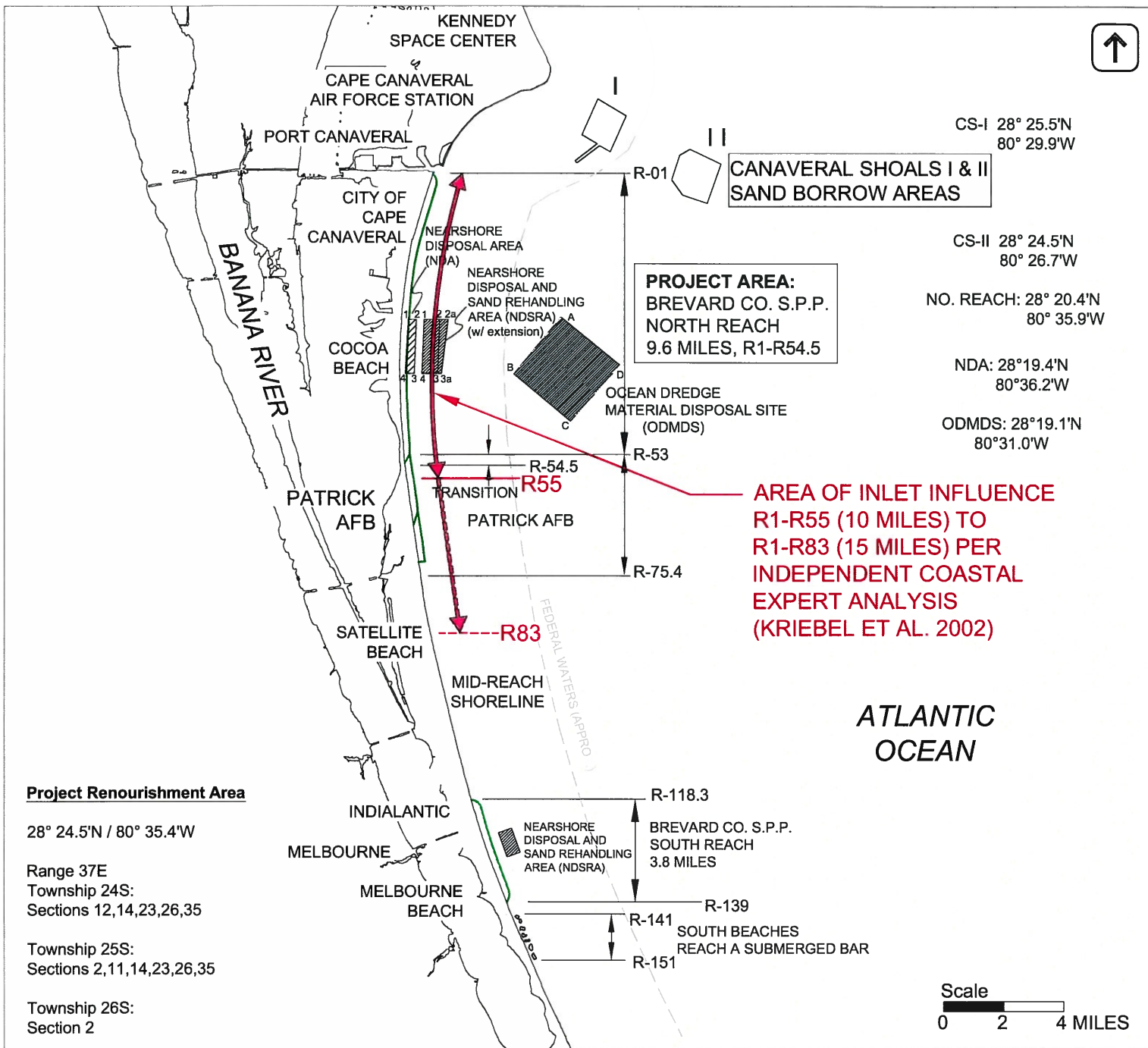
0220629-005-JC (Brevard) - Permit Issued June 12, 2015, Exp. 6/12/2030

Port Canaveral Inlet Management Plan Implementation

**Florida Beach Management Funding Assistance Program
Local Government Funding Request
FY 2023 – 2024**

Attachment

Figure 2: Vicinity Map (Question 2 & 4)

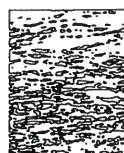


NDA - ft NAD83	
Easting	Northing
1 783,837	1,455,365
2 785,237	1,455,365
3 784,887	1,445,865
4 783,337	1,445,865

NDSRA - ft NAD83	
Easting	Northing
1 786,587	1,455,364
2 789,337	1,455,364
2a 790,841	1,455,364
3 788,987	1,445,864
3a 789,638	1,445,864
4 786,237	1,445,864

ODMDS - ft NAD83	
Easting	Northing
A 810,734	1,455,819
B 802,376	1,445,788
C 812,416	1,437,446
D 821,139	1,447,378

PERMIT DRAWINGS. NOT
FOR CONSTRUCTION.



olsen
 associates, inc.
 2618 Herschel Street
 Jacksonville, FL 32204
 (904) 387-6114
 COA No. 3491

BREVARD COUNTY, FL
SHORE PROTECTION PROJECT - NORTH REACH

VICINITY MAP

DATE: REVISION:

DATE: **03/14/14**

DRAWN BY:
ML

SHEET
 1 OF 21

Port Canaveral Inlet Management Plan Implementation

**Florida Beach Management Funding Assistance Program
Local Government Funding Request
FY 2023 – 2024**

Attachment

Figure 3: Critically Eroded Areas (Question 4)

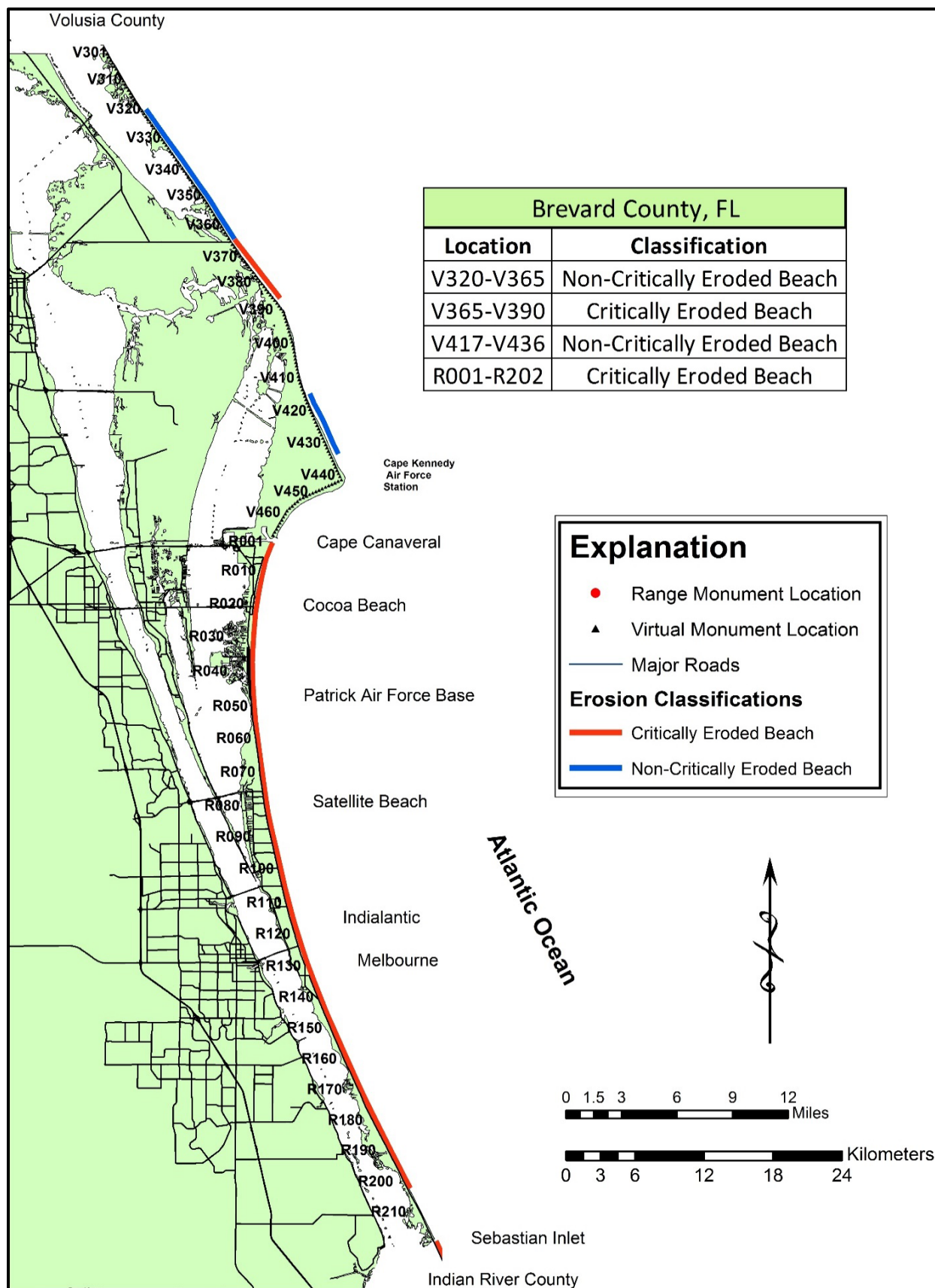


Figure 3. Critically eroded shoreline within Brevard County.

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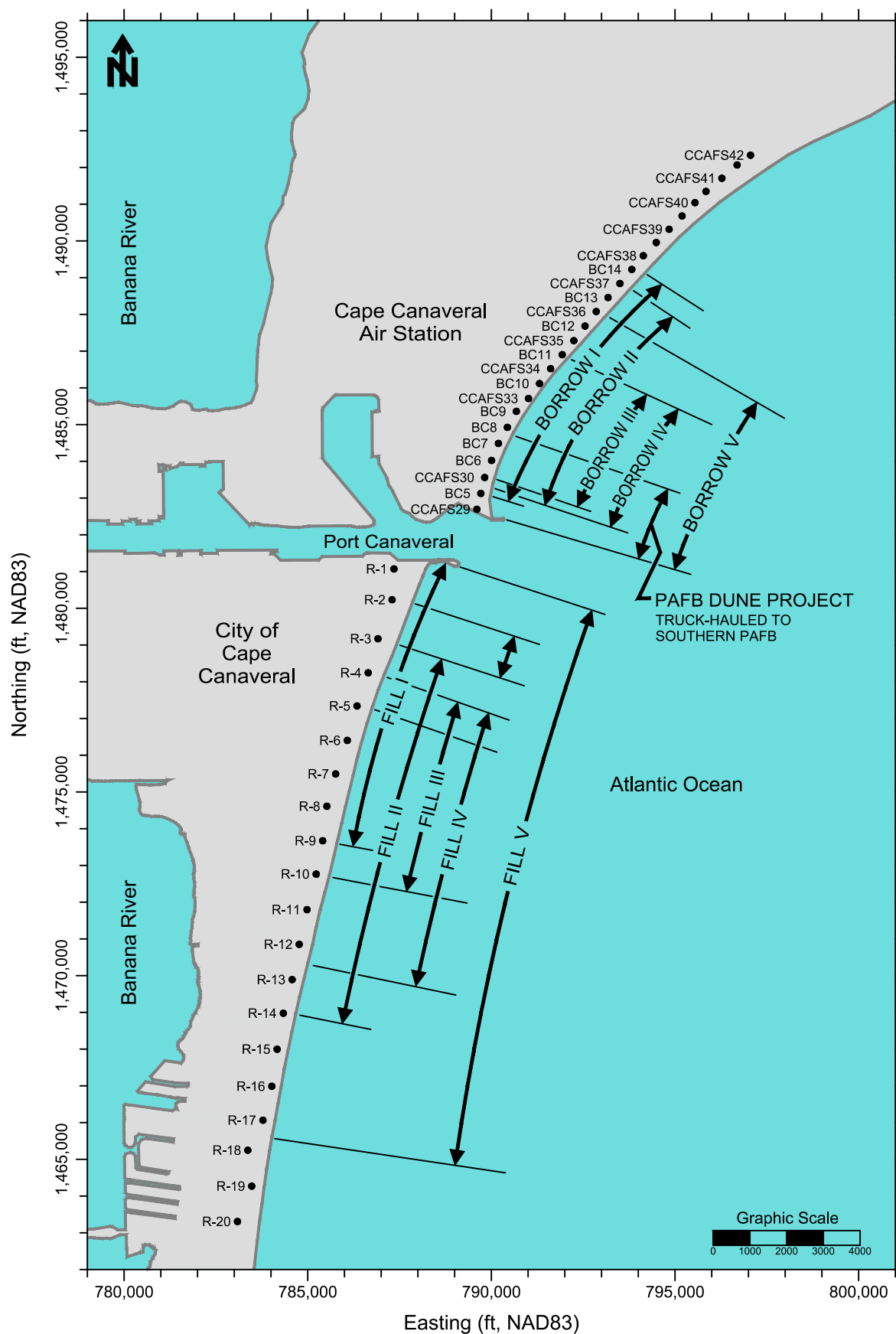
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Canaveral Harbor Bypassing Quantities to Date with Figure

Canaveral Harbor Sand Bypassing Quantities, to-date, since project inception in January 1995:

- *1995 Phase I Sand Bypassing (SB-I)*
1,277,500 cy dredged north of the inlet
956,800 cy placed south of the inlet
- *1998 Phase II Sand Bypassing (SB-II)*
1,034,500 cy dredged north of the inlet
1,035,400 cy placed south of the inlet
- *2007 Phase III Sand Bypassing (SB-III)*
761,000 cy dredged north of the inlet
750,000 cy placed south of the inlet
- *2010 Phase IV Sand Bypassing (SB-IV)*
715,150 cy dredged north of the inlet
683,100 cy placed south of the inlet
- *2011 Dune Repair at Patrick Air Force Base (PAFB Bypass I)**
51,050 cy dredged north of the inlet
51,050 cy placed south of the inlet in southern PAFB
- *2014 Dune Repair at Patrick Air Force Base (PAFB Bypass II)**
17,000 cy dredged north of the inlet
17,000 cy placed south of the inlet in southern PAFB
- *2017-18 Dune Repair at Patrick Air Force Base (PAFB Bypass III)**
25,000 cy dredged north of the inlet
25,000 cy placed south of the inlet in southern PAFB
- *2018-19 Phase V Sand Bypassing (SB-V)*
1,364,942 cy dredged from north of the inlet and placed south of the inlet from R1-R18

*Constructed and paid by the 45th Space Wing, USAF, separate from Canaveral Harbor Federal Sand Bypass Project



Port Canaveral Inlet Management Plan Implementation

**Florida Beach Management Funding Assistance Program
Local Government Funding Request
FY 2023 – 2024**

Attachment

**Project Cooperation Agreement between Department of the Army and
Canaveral Port Authority**

PROJECT COOPERATION AGREEMENT

BETWEEN

THE DEPARTMENT OF THE ARMY

AND

THE CANAVERAL PORT AUTHORITY

FOR CONSTRUCTION OF THE

CANAVERAL HARBOR PROJECT

SAND BYPASS SYSTEM AND JETTY EXTENSION

THIS AGREEMENT is entered into this 28th day of March, 1994, by and between the DEPARTMENT OF THE ARMY (hereinafter the "Government"), acting by and through the Assistant Secretary of the Army (Civil Works), and THE CANAVERAL PORT AUTHORITY (hereinafter the "Local Sponsor"), acting by and through its Board of Commissioners.

WITNESSETH, THAT:

WHEREAS, construction of modifications to the existing navigation project at Canaveral Harbor to provide for navigation improvements, including a sand transfer system and jetty extension, was authorized by Section 101 of the River and Harbor Act of 1962, approved 23 October 1962, Public Law 87-874;

WHEREAS, all of the modifications authorized by the above referenced Act of Congress except the sand transfer system and the jetty extension have been constructed under the terms of a Resolution passed by the Local Sponsor dated January 10, 1963 and a consolidating Section 221 Agreement dated 21 November 1985;

WHEREAS, the Government and the Local Sponsor desire to enter into a Project Cooperation Agreement for construction of the sand bypass system and jetty extension at Canaveral Harbor, Florida (hereinafter referred to as the "Project");

WHEREAS, Section 101 of the River and Harbor Act of 1962, Public Law 87-874, specifies the cost-sharing requirements applicable to the Project;

WHEREAS, Section 221 of the Flood Control Act of 1970, Public Law 91-611, as amended, provides that the construction of any water

resources project by the Secretary of the Army shall not be commenced until each non-Federal interest has entered into a written agreement to furnish its required cooperation for the project;

WHEREAS, the Government and Local Sponsor have the legal authority and capability to perform as hereinafter set forth and intend to cooperate in cost-sharing and financing of the construction of the Project in accordance with the terms of this Agreement.

NOW, THEREFORE, the Government and the Local Sponsor agree as follows:

ARTICLE I - DEFINITIONS AND GENERAL PROVISIONS

For purposes of this Agreement:

a. The term "general navigation features of the Project" shall mean the transfer of littoral material from north of the Canaveral Harbor entrance channel to south of the entrance channel and the sand tightening and extension of the south jetty by 500 feet, all as generally described in the "Canaveral Harbor, Florida, Sand Bypass System General Re-evaluation Report with Environmental Assessment", dated December 1992 (revised October 1993), and approved by the Chief of Engineers on March 16, 1994.

b. The term "total cost of construction of the general navigation features" shall mean all costs incurred by the Local Sponsor and the Government directly related to construction of the general navigation features of the Project. Such costs shall include, but not necessarily be limited to: all continuing planning and engineering costs incurred after October 1, 1985; all advanced engineering and design costs; all preconstruction engineering and design costs; engineering and design costs during construction; actual construction costs, including the costs of relocations not performed by or on behalf of the Local Sponsor; supervision and administration costs; and the costs of contract dispute settlements or awards; but shall not include the value of lands, easements, rights-of-way, dredged material disposal areas, relocations performed by or on behalf of the Local Sponsor, non-Federal dredging of public or private channels and berthing areas, and aids to navigation.

c. The term "period of construction" shall mean the time from the advertisement of the first construction contract to the time the District Engineer for the Jacksonville District certifies in writing to the Local Sponsor that construction of the general navigation features of the Project is complete. The Government shall furnish to the Local Sponsor copies of the Government's Written Notice of Acceptance of Completed Work furnished to contractor(s) for all contracts for the general

navigation features of the Project.

d. The term "highway" shall mean any highway, thoroughfare, roadway, street, or other public road or way.

e. The term "relocations" shall mean the preparation of plans and specifications for, and the accomplishment of, all alterations, modifications, lowering or raising in place, and/or new construction related to, but not limited to, existing: railroads (excluding existing railroad bridges and approaches thereto), highways (excluding existing highway bridges and approaches thereto), and other bridges, pipelines, public utilities (such as municipal water and sanitary sewer lines, telephone lines, and storm drains), aerial utilities, cemeteries, and other facilities, structures, and improvements determined by the Government to be necessary for the construction, operation, and maintenance of the Project.

f. The term "fiscal year" shall mean one fiscal year of the Government. The Government fiscal year begins on October 1 and ends on September 30.

g. The term "functional portion of the Project" shall mean a completed portion of the Project as determined by the District Engineer in writing to be suitable for tender to the Local Sponsor to operate and maintain in advance of completion of the entire Project. To be suitable for tender, the Government must determine that the completed portion of the Project can function independently and for a useful purpose, although the balance of the Project is not complete.

h. The term "betterment" shall mean the design and construction of a Project feature accomplished on behalf of, or at the request of, the Local Sponsor in accordance with standards that exceed the standards that the Government would otherwise apply for accomplishing the design and construction of the Project.

ARTICLE II - OBLIGATIONS OF THE GOVERNMENT AND LOCAL SPONSOR

a. The Government, subject to receiving funds appropriated by the Congress of the United States, shall expeditiously construct the general navigation features of the Project (including construction, modification, or relocation of existing railroad and highway bridges, and approaches thereto), applying those procedures usually followed or applied in Federal projects, pursuant to Federal laws, regulations, and policies. The Local Sponsor shall be afforded the opportunity to review and comment on all contracts, including relevant plans and specifications, prior to the issuance of invitations for bids. Before initial construction of the Project can proceed, the Local Sponsor must

concur in writing with issuance of the invitation for bids for the first construction contract. To the extent possible, the Local Sponsor thereafter also will be afforded the opportunity to review and comment on all modifications and change orders prior to the issuance to the contractor of a Notice to Proceed. In those cases where providing notice to the Local Sponsor of the required contract modifications or change orders is not possible prior to issuance of Notice to Proceed, such notification will be provided after the fact at the earliest date possible. The Government will, in good faith, consider the comments of the Local Sponsor, but award of contracts, modifications or change orders, and performance of all work on the Project (whether the work is performed under contract or by Government personnel), shall be exclusively within the control of the Government.

b. The Government shall operate and maintain the general navigation features of the Project.

c. The Local Sponsor shall provide and maintain, at its own expense, all Project features other than those for general navigation.

d. The Local Sponsor shall provide to the Government all lands, easements, and rights-of-way, including suitable dredged material disposal areas, and perform, or assure performance of, all relocations determined by the Government to be necessary for construction, operation, or maintenance of the Project.

e. The Local Sponsor may request the Government to acquire lands, easements, or rights-of-way, or perform relocations on behalf of the Local Sponsor. Such services as the Government may elect to provide shall be performed in accordance with terms or conditions of separate agreements and all such work shall be paid for by the Local Sponsor in advance of the Government incurring any financial obligation therefor.

f. The Local Sponsor may request the Government to accomplish betterments. The Local Sponsor will be solely responsible for any increase in costs resulting from the betterments, and all such increased costs will be paid for by the Local Sponsor in advance of the Government incurring any financial obligation therefor.

g. No Federal funds may be used to meet the Local Sponsor's obligations under this Agreement unless the expenditure of such funds is expressly authorized by statute as verified in writing by the Federal granting agency.

ARTICLE III - LANDS, RELOCATIONS, AND PUBLIC LAW 91-646

a. The Government shall provide, in coordination with the Local Sponsor, a written description of the anticipated real estate requirements for the Project. Thereafter, the Local Sponsor shall furnish all lands, easements, and rights-of-way, including suitable dredged material disposal areas, as may be determined by the Government in that description, or in any subsequent description coordinated with the Local Sponsor, to be necessary for the construction, operation, and maintenance of the Project, and shall furnish to the Government evidence supporting the Local Sponsor's legal authority to grant rights-of-entry to such lands. The necessary lands, easements, and rights-of-way for the Project may be provided incrementally for each construction contract. All lands, easements, and rights-of-way determined by the Government to be necessary for work to be performed under a construction contract must be furnished prior to the advertisement of that construction contract.

b. The Local Sponsor shall provide, or pay to the Government the cost of providing, all retaining dikes, wasteweirs, bulkheads, and embankments, including all monitoring features and stilling basins, that may be required at any dredged material disposal areas required for the construction, operation, and maintenance of the Project.

c. The Government shall provide, in coordination with the Local Sponsor, a written description of the anticipated relocation requirements for the Project. Thereafter, the Local Sponsor shall accomplish or arrange for the accomplishment of at no cost to the Government all relocations of highways, railroads, storm drains, and other facilities, structures, and improvements determined by the Government to be necessary for the construction, operation, and maintenance of the general navigation features of the Project. The necessary relocations for the Project may be accomplished incrementally for each construction contract. All relocations determined by the Government to be necessary for work to be performed under a construction contract must be accomplished prior to the advertisement of that construction contract.

d. Upon notification from the Government, the Local Sponsor shall perform or assure performance of all necessary relocations of pipelines, cables, and other utilities. Nothing in this Agreement shall be deemed to affect the ability of the Local Sponsor to seek compensation from other non-Federal entities for costs it incurs under this paragraph. For projects authorized to be constructed to depths greater than 45 feet, the costs of necessary relocations shall be shared equally between the Local Sponsor and the owner of the affected utility.

e. The Local Sponsor shall comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended by Title IV of the Surface Transportation and Uniform Relocation Assistance Act of 1987 (Public Law 100-17), and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way, and performing relocations for construction, operation, and maintenance, of the Project, and shall inform all affected persons of applicable benefits, policies, and procedures in connection with said Act.

ARTICLE IV - CONSTRUCTION PHASING AND MANAGEMENT

a. To provide for consistent and effective communication, the Local Sponsor and the Government shall, prior to the advertisement of the first construction contract, appoint representatives to coordinate on all facets of Project development, including Project design, scheduling, plans, specifications, real estate requirements, award of contracts, contract modifications and change orders, contract costs, claims and other related matters.

b. These representatives shall generally oversee the Project construction and shall be identified as the Project Coordination Team. They shall meet regularly during the period of construction and will be informed of all changes in total project costs. The Project Coordination Team shall make recommendations concerning construction as it deems are warranted to the Government, including suggestions to avoid potential sources of dispute.

c. The Government shall, in good faith, consider the recommendations of the Project Coordination Team on all matters relating to construction and anticipated requirements for operation, maintenance, repair, replacement, and rehabilitation of the Project. The Government, having the legal authority and responsibility for construction of the Project, has discretion to accept, reject, or modify the recommendations of such representatives.

ARTICLE V - DISPUTES

Before any party to this Agreement may bring suit in any court concerning an issue relating to this Agreement, such party must first seek in good faith to resolve the issue through negotiation or other forms of nonbinding alternative dispute resolution mutually acceptable to the parties.

ARTICLE VI - OPERATION, MAINTENANCE, REPAIR, REPLACEMENT, AND
REHABILITATION (OMRR&R)

a. The Local Sponsor shall operate, maintain, repair, replace, and rehabilitate all Project features other than the general navigation features of the Project in accordance with regulations or directions prescribed by the Government.

b. The Government shall operate and maintain the general navigation features of the Project.

c. The Local Sponsor hereby gives the Government a right to enter, at reasonable times and in a reasonable manner, upon land that the Local Sponsor owns or controls for access to the Project for the purpose of inspection, and, if necessary, for the purpose of completing, operating, maintaining, repairing, replacing, or rehabilitating the Project. If an inspection shows that the Local Sponsor for any reason is failing to fulfill the Local Sponsor's obligations under this Agreement without receiving prior written approval from the Government, the Government will send a written notice to the Local Sponsor. If after 30 calendar days from receipt of notice, the Local Sponsor continues to fail to perform, then the Government shall have the right to enter, at reasonable times and in a reasonable manner, upon lands the Local Sponsor owns or controls for access to the Project for the purpose of completing, operating, maintaining, repairing, replacing, or rehabilitating the Project. No completion, operation, maintenance, repair, replacement, or rehabilitation by the Government shall operate to relieve the Local Sponsor of responsibility to meet the Local Sponsor's obligations as set forth in this Agreement, or to preclude the Government from pursuing any other remedy as law or equity to assure faithful performance pursuant to this Agreement.

ARTICLE VII - RELEASE OF CLAIMS

The Local Sponsor shall hold and save the Government free from all damages arising from the construction, operation, maintenance, repair, replacement, and rehabilitation of the Project and any Project-related betterments including damages from erosion of the ocean shore, except for damages due to the fault or negligence of the Government or the Government's contractors.

ARTICLE VIII - MAINTENANCE OF RECORDS

Within 60 days of the date of this Agreement, the Government and the Local Sponsor shall develop procedures for keeping books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to this Agreement to the extent and in

such detail as will properly reflect such incurred costs and expenses. The Government and the Local Sponsor shall maintain such books, records, documents, and other evidence in accordance with these procedures and for a minimum of three years after completion of construction of the Project and resolution of all relevant claims arising therefrom, and shall make available at their offices at reasonable times, such books, records, documents, and other evidence for inspection and audit by authorized representatives of the parties to this Agreement.

ARTICLE IX - FEDERAL AND STATE LAWS

In the exercise of the Local Sponsor's rights and obligations under this Agreement, the Local Sponsor agrees to comply with all applicable Federal and State laws and regulations, including Section 601 of the Civil Rights Act of 1964, Public Law 88-352, and Department of Defense Directive 5500.11 issued pursuant thereto, as well as Army Regulations 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army".

ARTICLE X - RELATIONSHIP OF PARTIES

The Government and the Local Sponsor act in an independent capacity in the performance of their respective functions under this Agreement, and neither is to be considered the officer, agent, or employee of the other.

ARTICLE XI - OFFICIALS NOT TO BENEFIT

No member of, or delegate to, the Congress, or resident commissioner, shall be admitted to any share or part of this Agreement, or to any benefit that may arise therefrom.

ARTICLE XII - COVENANT AGAINST CONTINGENT FEES

The Local Sponsor warrants that no person or selling agency has been employed or retained to solicit or secure this Agreement upon agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Local Sponsor for the purpose of securing business. For breach or violation of this warranty, the Government shall have the right to annul this Agreement without liability, or, in the Government's discretion, to add to the Agreement or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

ARTICLE XIII - TERMINATION OR SUSPENSION

a. If at any time the Local Sponsor fails to fulfill its obligations under this Agreement, the Assistant Secretary of the Army (Civil Works) shall terminate this Agreement or suspend work under this Agreement until the Local Sponsor is in compliance, unless the Assistant Secretary of the Army (Civil Works) determines that continuation of work on the Project is in the interest of the United States or is necessary in order to satisfy agreements with any other non-Federal interests in connection with the Project.

b. If the Government fails to receive annual appropriations in amounts sufficient to meet Project expenditures for the then-current or upcoming fiscal year, the Government shall so notify the Local Sponsor. After 60 calendar days either party may elect without penalty to terminate this Agreement pursuant to this Article or to defer future performance under this Agreement; however, deferral of future performance under this Agreement shall not affect existing obligations or relieve the parties of liability for any obligation previously incurred. In the event that either party elects to terminate this Agreement pursuant to this Article or Article XIV.c. of this Agreement, both parties shall conclude their activities relating to the Project and proceed to a final accounting. In the event that either party elects to defer future performance under this Agreement pursuant to this Article, such deferral shall remain in effect until such time as the Government receives sufficient appropriations or until either the Government or the Local Sponsor elects to terminate this Agreement.

ARTICLE XIV - HAZARDOUS SUBSTANCES

a. After execution of this Agreement and upon direction by the Government, the Local Sponsor shall perform, or cause to be performed, such investigations for hazardous substances as are determined necessary by the Government or the Local Sponsor to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC 9601-9675, on lands necessary for Project construction, operation, and maintenance.

b. In the event it is discovered through an investigation for hazardous substances or other means that any lands, easements, rights-of-way, or disposal areas to be acquired or provided for the Project contain any hazardous substances regulated under CERCLA, the Local Sponsor and the Government shall provide prompt notice to each other, and the Local Sponsor shall not proceed with the acquisition of lands, easements,

rights-of-way, or disposal areas until mutually agreed.

c. The Government and the Local Sponsor shall determine whether to initiate construction of the Project, or if already in construction, to continue with construction of the Project, or to terminate construction of the Project for the convenience of the Government in any case where hazardous substances regulated under CERCLA are found to exist on any lands necessary for the Project. Should the Government and the Local Sponsor determine to proceed or continue with construction after considering any liability that may arise under CERCLA, the Local Sponsor shall be responsible, as between the Government and the Local Sponsor, for any and all necessary clean up and response costs, to include the costs of any studies and investigations necessary to determine an appropriate response to the contamination. Such costs shall not be considered a part of total cost of construction of the general navigation features as defined in this Agreement. In the event the Local Sponsor fails to provide any funds necessary to pay for clean up and response costs or to otherwise discharge the Local Sponsor's responsibilities under this paragraph upon direction by the Government, the Government may either terminate or suspend work on the Project or proceed with further work as provided in Article XIII of this Agreement.

d. The Local Sponsor and the Government shall consult with each other under Article IV of this Agreement to assure that responsible parties bear any necessary clean up and response costs as defined in CERCLA. Any decision made pursuant to Article XIV.c. of this Agreement shall not relieve any party from any liability that may arise under CERCLA.

e. To the maximum extent practicable, the Local Sponsor shall perform its responsibilities under this Agreement, including the dredging of berthing areas or access channels, and operation and maintenance of any required disposal facilities, in a manner so that liability will not arise under CERCLA.

ARTICLE XV - NOTICES

a. All notices, requests, demands, and other communications required or permitted to be given under this Agreement shall be deemed to have been duly given if in writing and delivered personally, given by prepaid telegram, or mailed by first-class (postage pre-paid), registered, or certified mail, as follows:

If to the Local Sponsor:

Port Director
Canaveral Port Authority
P.O. Box 267
Cape Canaveral, Florida 32920-0267

If to the Government:

District Engineer
U.S. Army Corps of Engineers
Jacksonville District
P.O. Box 4970
Jacksonville, Florida 32232-0019

b. A party may change the address to which such communications are to be directed by giving written notice to the other party in the manner provided in this Article.

c. Any notice, request, demand, or other communication made pursuant to this Article shall be deemed to have been received by the addressee at such time as it is either personally delivered or seven calendar days after it is mailed, as the case may be.

ARTICLE XVI - CONFIDENTIALITY

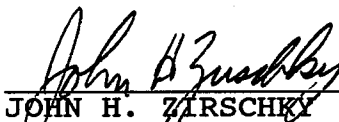
To the extent permitted by the laws governing each party, the parties agree to maintain the confidentiality of exchanged information when requested to do so by the providing party.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, which shall become effective upon the date it is signed by the Assistant Secretary of the Army (Civil Works).

THE DEPARTMENT OF THE ARMY

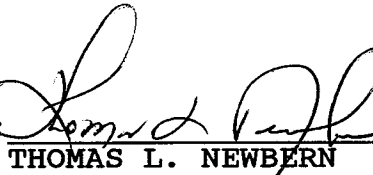
CANAVERAL PORT AUTHORITY

BY:


JOHN H. ZIRSCHKY

Acting Assistant Secretary of
the Army (Civil Works)

BY:


THOMAS L. NEWBERN

Chairperson
Board of Commissioners

DATE:

3/28/94

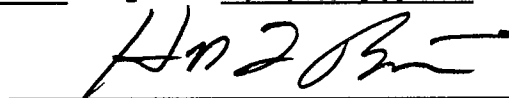
DATE:

3/23/94

CERTIFICATE OF AUTHORITY

I, Harold T. Bistline, do hereby certify that I am the principal legal officer of the Canaveral Port Authority, that the Canaveral Port Authority is a legally constituted public body with full authority and legal capability to perform the terms of the Agreement between the Department of the Army and the Canaveral Port Authority in connection with the Project, and to pay damages, if necessary, in the event of the failure to perform, in accordance with Section 221 of Public Law 91-611, and that the persons who have executed this Agreement on behalf of the Canaveral Port Authority have acted within their statutory authority.

IN WITNESS WHEREOF, I have made and executed this certification this 23 day of March 1994.



Harold T. Bistline
Attorney
Canaveral Port Authority

CERTIFICATION REGARDING LOBBYING

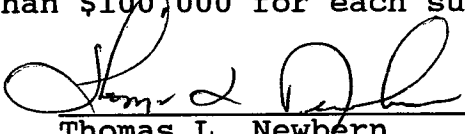
The undersigned certifies, to the best of his or her knowledge and belief that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.


Thomas L. Newbern
Chairperson
Board of Commissioners
Canaveral Port Authority

DATE: 3/23/94

CERTIFICATION OF LEGAL REVIEW

The Project Cooperation Agreement for the sand bypass system and south jetty sand tightening and extension at Canaveral Harbor, Florida, between the Department of the Army and the Canaveral Port Authority has been fully reviewed by the Office of Counsel, U.S. Army Engineer District, Jacksonville and is legally sufficient.


Assistant District Counsel

Port Canaveral Inlet Management Plan Implementation

**Florida Beach Management Funding Assistance Program
Local Government Funding Request
FY 2023 – 2024**

Attachment

Project Cost Effectiveness Analysis (Question 10)

Port Canaveral Inlet Management Plan

Sand Bypass Construction Costs, and Cost Effectiveness of using Inlet Sand.

Kevin R. Bodge, PhD, PE / Olsen Associates, Inc.
27 July 2022



Canaveral Harbor Sand Bypass Project (Costs).

The following describes the anticipated costs of sand bypassing at Canaveral Harbor, extrapolated from the most recent construction and monitoring costs associated with the project, and forecast to the next anticipated construction event in 2024-2025.

Sand Bypass V (SB-V) was constructed in November 2018 – May 2019. It dredged 1,405,200 cubic yards from the bypass area shoreline 1.6 miles north of the inlet [pay volume] and placed 1,298,400 cy [template measure] along the shoreline within 3.3 miles south of the inlet. SB-V was constructed 9 years after the prior SB-IV event in 2019, and so its objective was to transfer 9 years of the current sand bypass target value of 156,000 cy/yr; i.e., about 1,404,000 cy.

The SB-V construction contract was awarded by the Corps of Engineers to Norfolk Dredging in fall 2018. The contract bid & award cost (excluding a one-time \$250K cost to excavate a new pipeline trench across the inlet seabed) was \$17,571,560 for 1,340,000 cy dredging; consisting of \$5,710,000 for mobilization (M/D) plus total all-in unit cost of \$8.85/cy for sand. Additive construction costs included the Corps' engineering design, surveys, and construction administration (ED/SA) – estimated as 12%, or \$2,108,500 – which also included 3 years of environmental monitoring and beach profile surveys. All of these construction costs -- \$5,710,000 M/D + \$2,108,500 ED/SA + \$8.85/cy – are 100% federal and part of the Canaveral Harbor federal navigation project.

Non-federal costs include permitting, contributions to design/plans, permit-compliance QC monitoring, year 1-2-3 tilling, engineering monitoring reports, and other portions of permit-required environmental and physical monitoring that is not otherwise conducted by the Corps. For SB-V, these amount to about \$60,000/year non-federal cost – or about \$180K for construction plus \$180K for annual monitoring thereafter, for a typical 6-year project cycle.

In a 6-year project cycle, construction of the next bypass event, SB-VI, is anticipated in winter 2024/25. The 2018/19 project costs are inflated to 2024/25 per the following: The CPI-U increased by 17.6% from June 2018 to June 2022, plus ~8% projected increase to June 2024, for a total of +25.6% from 2018/19 to 2024/25. Projected construction and monitoring costs for the next sand bypass event (SB-VI) in a 6-year cycle since SB-V, with a nominal bypass quantity of 6 yrs x 156,000 cy/yr = 936,000 cy, is therefore as follows, in 2024/25 values. Contingency (normally 15% to 20%) is not included.

Sand Bypass VI (2024/25 Values)

Mobilization (M/D); Lump Sum	\$ 7,170,000	
Sand Transfer; 936,000 cy @ \$11.12	\$ 10,408,000	
Corps' ED/SA; 12%	\$ 2,109,000	
CPA Pre/Post/Yr-1/QC Monitoring	\$ 226,000	
Sub-Total Construction:	\$ 19,913,000	
CPA Yr-2 thru Yr-5 Monitoring	\$ 226,000	
Total, Constrxn & Monitrg	\$ 20,139,000	[\$21.516/cy]

Sand Sources Other than Sand Bypassing (Costs).

The only other viable – and routinely implemented – sand source for beach renourishment along the Canaveral Sand Bypass project shoreline is traditional hopper dredge placement from the Canaveral Shoals II offshore borrow area. This activity has been conducted five prior times as part of the Brevard County Federal Shore Projection Project (SPP) North Reach segment. The SPP overlaps the Sand Bypass placement area along R1-R20. The SPP uses offshore sand to replace historical and acute storm-induced losses that are not addressed by the authority of the Sand Bypass navigation project.

The North Reach segment was most recently renourished in April 2021, with sand placement along its southern one-third length. The Corps contract was awarded to Great Lakes Dredge & Dock Co. This was a stand-alone contract for the North Reach only; it was not joined with the South Reach or Mid Reach or Patrick AFB. The bid award was \$10,458,430 – comprised of \$4,990,000 M/D plus \$11.57 total all-in cost for 472,526 cy of offshore sand. Additive to this was the Corps' costs (~11%) for ED/SA. Like Canaveral Sand Bypassing, the construction and Corps' costs for the North Reach are all 100% federal. Historically, there has been little to net difference in placed sand costs between the north end and south end of the SPP-North Reach project. Non-federal costs include those for design, construction QC, monitoring and tilling – by Brevard County – similar to those tasks conducted by CPA for sand bypass: about \$65,000/year.

The 2020/21 North Reach SPP costs are inflated to 2024/25 values per the following: CPI-U increase of 14.9% from June 2020 to June 2022, plus ~8% projection to June 2024, for a total increase of 22.9% from 2020/21 to 2024/25. These values are then applied to the projected size of the Sand Bypass VI event in 2024/25 as follows. Again, contingency cost (15% to 20%) is not included.

Alt. use of Canaveral Shoals II sand (2024/25 Values)

Mobilization (M/D); Lump Sum	\$ 6,132,700	
Sand Transfer; 936,000 cy @ \$14.22	\$ 13,309,900	
Corps' ED/SA; 11%	\$ 2,138,700	
CPA Pre/Post/Yr-1/QC Monitoring	\$ 239,600	
Sub-Total Construction:	\$ 21,820,900	
CPA Yr-2 thru Yr-5 Monitoring	\$ 239,600	
Total, Constrxn & Monitrg	\$ 22,060,500	[\$23.569/cy] - Neglects cost of maint. dredging

So, on a total cost basis for a 2024/25 bypass, or placement, of 936,000 cy in a 6-year cycle, including mobilization and monitoring, and with no contingency valuation, the unit cost of the Sand Bypass project is \$21.516/cy versus \$23.569/cy for use of Canaveral Shoals II. The values are similar, though Sand Bypass is less by about 9% -- but this does **not** consider the increased overall cost of Inlet Management when one considers the maintenance dredging requirements that are obviated by conducting Sand Bypass. See below. ¹

It is also importantly noted that use of an offshore sand source in lieu of sand bypass would increase the overall *net* cost of the offshore sand source by 60+% – because of the added cost of maintenance dredging at the inlet that will occur from the *lack* of sand bypassing. Timely sand bypassing minimizes the quantity of sand that falls into the navigation channel (ideally by 156,000 cy/yr), and it reduces the frequency of maintenance dredging requirements (historically from annual to biannual events). Maintenance dredge frequency is typically driven by shoaling at the inlet entrance, between the jetties. And, importantly, sand bypassing keeps State sand resources on the shorelines, rather than dumping it offshore (or marginally nearshore) from routine maintenance dredging of the inlet entrance channel.

¹ Note that if the dredge mobilization for the offshore sand source (i.e., North Reach) was shared with another shoreline segment (say, SPP South Reach or Patrick AFB), it would reduce the overall cost of offshore sand to be approximately equal to that of the bypass sand, more or less, though *neglecting* the increased cost of inlet maintenance dredging.

The Corps' current 2022 maintenance dredge contract at Port Canaveral is \$11.70/cy plus \$1,015,000 for M/D. In the absence of sand bypassing, the cost to maintenance-dredge an additional 156,000 cy/yr and to mobilize a clamshell dredge every, say, 1.5 years (versus 2 years), over a 6-year bypass cycle, is therefore: $(156,000 \text{ cy} \times \$11.70) \times 6 \text{ yrs} + (\$1,015,000) \times 2 \text{ extra mobilizations} = \$12,981,200$. Inflated to probable 2024/25 values – by ~8% from 2022 to 2024, per above – the approximate added cost of maintenance dredging in 6 years from the lack of sand bypassing = \$14,020,000.

So, when the added cost of maintenance dredging is also considered (in lieu of timely sand bypassing), the total cost of using an alternate offshore sand – *versus* sand bypassing – in a 6-year cycle of 156,000 cy/yr – is actually:

Cost of Canaveral Shoals II sand placed in lieu of Sand Bypass	= \$ 22,060,500
Cost of Increased Maintenance Dredging in lieu of Sand Bypass	= <u>\$ 14,020,000</u>
Total (for 6-year horizon; qty = 936,000 cy)	= \$ 36,080,500
	[\$38.55 / cy]

That is, the net cost of the inlet sand is about 0.558 times the cost of the offshore sand, when the overall added cost of maintenance dredging (from lack of sand bypassing) is appropriately considered.

Per the “cost-effectiveness” criteria in LGFR; this equates to:

$$[1 - (\$21.516 / \$38.55)] \times 15 = 6.6 \text{ points.}$$

Since essentially all of these costs – described above – are 100% federal, the comparisons between scenarios are like-to-like. That is, in these comparative scenarios, the Corps of Engineers pays 100% of the construction contract costs and the majority share of construction-related and monitoring costs for Sand Bypass, North Reach renourishment, and Maintenance Dredging activities at Port Canaveral inlet. In recent conversations between the Corps, Canaveral Port Authority, and Olsen Associates, the cost relationships described above have been actively discussed – very specifically including the importance of considering the costs and frequency of maintenance dredging relative to sand bypassing operations at Canaveral Harbor.

Port Canaveral Inlet Management Plan Implementation

**Florida Beach Management Funding Assistance Program
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Attachment

Local Funding Resolution (Question 15)

***Resolution for Local Funds from the Canaveral Port Authority
Commission will be provided to the Department by 5-October-2022.
It will be signed at the September commission meeting.***