

DEPARTMENT OF THE ARMY

US ARMY CORPS OF ENGINEERS SOUTH ATLANTIC DIVISION 60 FORSYTH STREET SW, ROOM 10M15 ATLANTA, GA 30303-8801

CESAD-RBT 26 September 2011

MEMORANDUM FOR COMMANDER, JACKSONVILLE DISTRICT (CESAJ-EN-Q/STEPHEN C. DUBA)

SUBJECT: Approval of the Review Plan for Periodic Nourishment Documents for St. Johns County Shore Protection Project, St. Johns County, Florida

1. References:

- a. Memorandum, CESAJ-EN-Q, 13 September 2011, Subject: Approval of the Review Plan for Periodic Nourishment Implementation Documents for St. Johns County Shore Protection Project, St. Johns County, Florida (Enclosure).
 - b. EC 1165-2-209, Civil Works Review Policy, 31 January 2010.
 - c. WRDA 2007 H. R. 1495 Public Law 110-114, 8 November 2007.
- 2. The enclosed Review Plan for Periodic Nourishment Documents for St. Johns County Shore Protection Project dated 15 April 2011 submitted by reference 1.a, has been reviewed by this office and is approved in accordance with reference 1.b.
- 3. We concur with the conclusion of the District Chief of Engineering that Type II Independent External Peer Review (Type II IEPR) is not required for this rehabilitation/renourishment of the St. Johns County Shore Protection Project. The primary basis for the concurrence that a Type II IEPR is not required is that the failure or loses of the beach fill does not pose a significant threat to human life. We also concur with the conclusion that Agency Technical Review (ATR) is not required on this periodic renourishment effort since the design duplicates previous editions of the Plans and Specification that have been successfully used in the past.
- 4. The District should take steps to post the Review Plan to its web site and provide a link to CESAD-RBT. Before posting to the web site, the names of Corps/Army employees should be removed.
- 5. The SAD point of contact is Mr. James Truelove, CESAD-RBT, 404-562-5121.

CHRISTOPHER T. SMITH, P.E.

Chief, Business Technical Division

Encl



DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT CORPS OF ENGINEERS P.O. BOX 4970 JACKSONVILLE, FLORIDA 32232-0019

CESAJ-EN-Q

13 September 2011

MEMORANDUM FOR Commander, South Atlantic Division (CESAD-RBT)

SUBJECT: Approval of Review Plan for Periodic Nourishment Implementation Documents for St. Johns County Shore Protection Project, St. Johns County, Florida

- 1. References.
 - a. EC 1165-2-209, Civil Works Review Policy, 31 January 2010
 - b. WRDA 2007 H. R. 1495 Public Law 110-114, 08 Nov 07
- 2. I hereby request approval of the enclosed Review Plan and concurrence with the conclusion that Agency Technical Review (ATR) and Type II Independent External Peer Review (IEPR) of this project are not required. The ATR and Type II IEPR determinations were based on the EC 1165-2-209 Risk Informed Decision Process as presented in the Review Plan. Approval of this plan is for the Periodic Nourishment Implementation Documents. The Review Plan complies with applicable policy, provides District Quality Control and has been coordinated with the CESAD. It is my understanding that non-substantive changes to this Review Plan, should they become necessary, are authorized by CESAD.
- 3. The district will post the CESAD approved Review Plan to its website and provide a link to the CESAD for its use. Names of Corps/Army employees are withheld from the posted version, in accordance with guidance.

FOR THE COMMANDER:

Encl

STEPHEN C. DUBA, P.E. Chief, Engineering Division

REVIEW PLAN

For Periodic Nourishment Plans and Specifications

For St. Johns Shore Protection Project

St. Johns County, Florida

Jacksonville District

12 August 2011

THE INFORMATION CONTAINED IN THIS REVIEW PLAN IS DISTRIBUTED SOLELY FOR THE PURPOSE OF PREDISSEMINATION PEER REVIEW UNDER APPLICABLE INFORMATION QUALITY GUIDELINES. IT HAS NOT BEEN FORMALLY DISSEMINATED BY THE U.S. ARMY CORPS OF ENGINEERS, JACKSONVILLE DISTRICT. IT DOES NOT REPRESENT AND SHOULD NOT BE CONSTRUED TO REPRESENT ANY AGENCY DETERMINATION OR POLICY.



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1. PURPOSE AND REQUIREMENTS

a. Purpose. This Review Plan defines the scope and level of review activities for the St. Johns County Shore Protection Project. The review activities consist of District Quality Control (DQC). The project is in the Periodic Nourishment Phase and the related documents are Plans and Specifications (P&S) and a Design Documentation Report (DDR). Upon approval, this review plan will be included into the Project Management Plan as an appendix to the Quality Management Plan.

b. References.

- (1). EC 1165-2-209, Civil Works Review Policy, 31 January 2010
- (2). ER 1110-1-12, Engineering and Design Quality Management, 21 Jul 2006
- (3). Project Management Plan, St. Johns County BEC, 113172, 20 March 2008
- c. Requirements. This review plan was developed in accordance with EC 1165-2-209, which establishes an accountable, comprehensive, life-cycle review strategy for Civil Works products by providing a seamless process for review of all Civil Works projects from initial planning through design, construction, and Operation, Maintenance, Repair, Replacement and Rehabilitation (OMRR&R). The EC provides the procedures for ensuring the quality and credibility of U.S. Army Corps of Engineers (USACE) decision, implementation, and operations and maintenance documents and other work products. The EC outlines three levels of review: District Quality Control, Agency Technical Review, and Independent External Peer Review. Refer to the EC for the definitions and procedures for the three levels of review.
- **d.** Review Management Organization (RMO). The South Atlantic Division is designated as the RMO. The RMO is responsible for managing the review activities described in this Review Plan.

2. PROJECT INFORMATION AND BACKGROUND

The project area is comprised of 2.5 miles of Atlantic Ocean shoreline beginning approximately 2.7 miles south of the St. Augustine Inlet and extending south. The project area includes the southern portion of Anastasia State Park and the northern portion of the City of St. Augustine Beach, extending from Florida Department of Environmental Protection (DEP) monument 139 to 151. The project was authorized by the WRDA 1986. The authorized project provided for a protective beach with 60-foot-wide berm at an elevation of 12 feet MLW along 2.5 miles, beginning approximately 2.7 miles south of the St. Augustine Inlet.

Initial fill of the project was completed in January 2003 with placement of approximately 3.7 million cubic yards of material from 600 ft north of R-139 south to approximately 600 ft south of R-151 at a construction cost of \$15,600,000. The State of Florida extended the federal nourishment project approximately 0.9 miles north into Anastasia State Park to monument T-132. The state portion also included dune construction along the entire length of the nourishment in Anastasia State Park, including the one-mile state portion of the total project and the one-mile federal portion that lies in the park. The St. Augustine Inlet ebb shoal was used as the borrow area for the project.

In 2005, approximately 2.8 million cy was placed between R-137 and R-151. This placement was greater than the average renourishment volume of 1,625,000 cubic yards, which is based on the historical erosion rate of the project area as calculated in the 1998 General Reevaluation Report from data ranging from 1974 to 1995. The additional losses are attributed to initial equilibration of the profile following the initial fill. It is anticipated that future erosion rates will more closely approximate the historical erosion rate. Thus the 1,625,000 cubic yards of periodic nourishment every 5 years will continue to be used for future events.

The periodic renourisment addressed by the subject P&S will use the same ebb shoal borrow area that was used for the construction of the project and the first renourishment that was completed in 2005. The sand sources will also include the St. Augustine Harbor Navigation Project Inlet and portions of the Intracoastal Waterway in the vicinity of the inlet. All dredging areas have been dredged in the past and used the same beach placement areas.

3. DISTRICT QUALITY CONTROL

District Quality Control (DQC) activities for engineering products are stipulated in ER 1110-1-12, Engineering & Design Quality Management and EC 1165-2-209. DQC will be performed on the P&S and DDR.

4. AGENCY TECHNICAL REVIEW

a. Risk Informed Decision on Appropriate Level of Review

The EC 1165-2-209 for review policy directs the Project Delivery Team (PDT) to make a risk informed decision regarding ATR (Para 15). Review of the answers to the following questions from Para 15.b indicate that ATR is not warranted since the project areas have been dredged in the past with the same methods and means as envisioned for the subject P&S..

- (1) Does it include any design (structural, mechanical, hydraulic, etc)? Yes. The design duplicates previous editions of P&S that have been used successfully in the past.
- (2) Does it evaluate alternatives? No.
- (3) Does it include a recommendation? No.
- (4) Does it have a formal cost estimate? Yes, an Independent Government Estimate for the contract.
- (5) Does it have or will it require a NEPA document? Yes. The project uses existing Environmental Assessments and State of Florida Water Quality Certificates.
- (6) Does it impact a structure or feature of a structure whose performance involves potential life safety risks? No. There is no life safety risk associated with this dredging project.
- (7) What are the consequences of non-performance? The St. Johns County Shore Protection Project will miss a renourishment opportunity and delayed funding will impact the renourishment cycle.
- (8) Does it support a significant investment of public monies? Yes.
- (9) Does it support a budget request? No. The project implements appropriated funds.
- (10) Does it change the operation of the project? No.
- (11) Does it involve ground disturbances? Yes, dredging and beach placement are in areas that have been disturbed in accordance with authorized purposes in the past.
- (12) Does it affect any special features, such as cultural resources, historic properties, survey markers, etc, that should be protected or avoided? No. All project areas have appropriate clearances.

- (13) Does it involve activities that trigger regulatory permitting such as Section 404 or stormwater/NPDES related actions? Yes, however the project uses existing Environmental Assessments and Water Quality Certificates.
- (14) Does it involve activities that could potentially generate hazardous wastes and/or disposal of materials such as lead based paints or asbestos? No.
- (15) Does it reference use of or reliance on manufacturers' engineers and specifications for items such as prefabricated buildings, playground equipment, etc? No.
- (16) Does it reference reliance on local authorities for inspection/certification of utility systems like wastewater, stormwater, electrical, etc? No.
- (17) Is there or was there expected to be any controversy surrounding the Federal action associated with the work product? No.

5. INDEPENDENT EXTERNAL PEER REVIEW

- **a. General.** EC 1165-2-209 provides implementation guidance for both Sections 2034 and 2035 of the Water Resources Development Act (WRDA) of 2007 (Public Law (P.L.) 110-114). The EC addresses review procedures for both the Planning and the Design and Construction Phases (also referred to in USACE guidance as the Feasibility and the Pre-construction, Engineering and Design Phases). The EC defines Section 2035 Safety Assurance Review (SAR), Type II Independent External Peer Review (IEPR). The EC also requires Type II IEPR be managed and conducted outside the Corps of Engineers.
- **b. Type I Independent External Peer Review (IEPR) Determination.** A Type I IEPR is associated with decision documents. No decision documents are addressed/covered by this Review Plan.
- **c. Type II Independent External Peer Review (IEPR) Determination (Section 2035).** This shore protection project does not trigger WRDA 2007 Section 2035 factors for Safety Assurance Review (termed Type II IEPR in EC 1165-2-209) and therefore, a review under Section 2035 is not required. The factors in determining whether a review of design and construction activities of a project is necessary as stated under Section 2035 along with this review plans applicability statement follow.
 - (1) The failure of the project would pose a significant threat to human life.

This project will perform a periodic nourishment that will re-establish a beach. The beach is designed to protect structures through its sacrificial nature and is continually monitored and renourished in accordance with program requirements and constraints. Failure or loss of the beach fill will not pose a significant threat to human life.

In addition, the prevention of loss of life within the project area from hurricanes and severe storms is via public education about the risks, warning of potential threats and evacuations before hurricane landfall.

(2) The project involves the use of innovative materials or techniques.

This project will utilize methods and procedures used by the Corps of Engineers on other similar works.

(3) The project design lacks redundancy.

The beach fill design is in accordance with the USACE Coastal Engineering Manual. The manual does not employee the concept of redundancy for beach fill design.

(4) The project has a unique construction sequencing or a reduced or overlapping design construction schedule.

This project's construction does not have unique sequencing or a reduced or overlapping design. The installation sequence and schedule has been used successfully by the Corps of Engineers on other similar works.

6. MODEL CERTIFICATION AND APPROVAL

This Shore Protection Project does not use any engineering models that have not been approved for use by USACE.

7. BUDGET AND SCHEDULE

a. Project Milestones.

Completion of Intermediate Submittal – Sep 11

District Quality Control - Sep-Oct11

8. POINTS OF CONTACT

Per guidance, the names of the following individual will not be posted on the Internet with the Review Plan. Their titles and responsibilities are listed below.

Jacksonville District POCs:

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