



REPLY TO
ATTENTION OF

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

13 JUN 2013

CESAD-RBT

MEMORANDUM FOR COMMANDER, JACKSONVILLE DISTRICT (CESAJ-EN-QC/
LAUREEN A. BOROCHANER)

SUBJECT: Approval of the Review Plan for the Flood Control and Coastal Emergency (FCCE) Nourishment Plans and Specifications and Design Documentation Report, for the Beach Erosion Control Project, Broward County (Segment II), Florida

1. References:

a. Memorandum, CESAJ-EN-QC, 28 March 28 2013, subject: Approval of the Review Plan for Beach Renourishment 2014, Plans and Specifications with Design Documentation Report, for Beach Erosion Control Project, Broward County, Florida (Enclosure).

b. EC 1165-2-214, Civil Works Review, 15 December 2012.

2. The enclosed Review Plan for the FCCE Nourishment Implementation Documents for Broward County Beach Erosion Control Project submitted by reference 1.a, has been reviewed by this office. As a result of this review, minor changes were coordinated with your staff. The enclosed Review Plan with the coordinated changes incorporated is hereby approved in accordance with reference 1.b above.

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 FCCE nourishment effort. The primary basis for the concurrence that a Type II IEPR is not required is the determination that the failure or loss of this beach nourishment effort does not pose a significant threat to human life.

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. Subsequent significant changes to this Review Plan, should they become necessary, will require new written approval from this office.

5. The SAD point of contact is Mr. James Truelove, CESAD-RBT, 404-562-5121.

DONALD E. JACKSON, JR.
COL (P), EN
Commanding

Encl



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

REPLY TO
ATTENTION OF

CESAJ-EN-QC

March 28, 2013

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

SUBJECT: Approval of Review Plan for Beach Renourishment 2014, Plans and Specifications with Design Documentation Report, for Beach Erosion Control Project, Broward County, Florida

1. References.


- a. EC 1165-2-214, Civil Works Review Policy, 15 December 2012
- b. WRDA 2007 H. R. 1495 Public Law 110-114, 08 November 2007

2. I hereby request approval of the enclosed Review Plan and concurrence with the conclusion that Type II Independent External Peer Review (IEPR) of this project is not required. The Type II IEPR determination is based on the EC 1165-2-214 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 for an Agency Technical Review (ATR) 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 will be withheld from the posted version, in accordance with guidance.

FOR THE COMMANDER:

Encl


for LAUREEN A. BOROCHANER, P.E.
Chief, Engineering Division

PROJECT REVIEW PLAN

BROWARD COUNTY SEGMENT II

BEACH EROSION CONTROL AND HURRICANE PROTECTION PROJECT

BROWARD COUNTY, FLORIDA

Jacksonville District

March 2013

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.



**US Army Corps
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1. PURPOSE AND REQUIREMENTS

a. Purpose

This Review Plan defines the scope and level of review activities for the Segment II Broward County Shore Protection Project. The review activities consist of a District Quality Control (DQC) effort and an Agency Technical Review (ATR). An Independent External Peer Review (IEPR) is not recommended by this review plan. The project is in the Periodic Nourishment Phase and the documents for review are Plans and Specifications (P&S) and a Design Documentation Report (DDR). The scope of work consists of the renourishment of Segment II of the Broward County Shore Protection Project. Upon approval, this review plan will be included into the Project Management Plan as an appendix to the Quality Management Plan.

b. References

- (1). ER 1110-2-1150, Engineering and Design for Civil Works Projects, 31 August 1999
- (2). ER 1110-1-12, Engineering and Design Quality Management, 31 March 2011
- (3). FCA 1968, WRDA 1974, and WRDA of 1986 (Project Authorization)
- (4). EC 1165-2-214, Civil Works Review, 15 December 2012
- (5). Project Management Plan, Dade County BEC, 113170

c. Requirements

This review plan was developed in accordance with EC 1165-2-214, 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 for the ATR Review effort identified in this review plan.

2. PROJECT INFORMATION

a. Project Location and Name

Broward County, Segment II, Florida Shore Protection Project. Broward County is located 23 miles north of Miami Beach on the southeastern coast of Florida. This segment of the Federal project for Broward County consists of 5.08 miles of Atlantic Ocean shoreline from Hillsboro Inlet south to Port Everglades Inlet. The segment is located on a barrier island entirely within Broward County. The municipalities within the segment include Pompano Beach, Sea Ranch Lakes, Lauderdale-by-the-Sea, and Fort Lauderdale.

b. Project Authorization

The project was authorized by Section 301 of the River and Harbor Act of 1965, Public Law 89-298. The Project was authorized in accordance with the recommendations of the Chief of Engineers. The Chief of Engineers recommended that authority be granted to permit construction of the project by local interests, if they so desire, with subsequent reimbursement of the Federal share. The non-Federal sponsor initially constructed the project in 1970, and renourishment was performed in 1983 with reimbursement of the Federal share pursuant to the authorization. Section 506(a)(1) of the Water Resources Development Act of 1996 provided for the Secretary to carry out periodic beach

nourishment for the project for a period of fifty (50) years from the date of initiation of construction. Section 311 of the 1999 Water Resources Development Act, Public Law 106-53, modified the Broward County shore protection project to authorize the Secretary, on execution of a contract to construct the project, to reimburse the non-Federal interest for the Federal share of the cost of pre-construction, engineering and design for the project, if the Secretary determines that the work is compatible with and integral to the project. The project limits run from Florida Department of Environmental Protection (DEP) monument R-25 to R-85; however only R-26 to R-53 was constructed. A General Reevaluation Report was approved May 2004 and provides for periodic nourishment for Broward County Segment II from R-25 to R-53. An approved Preliminary Investigation Report (PIR) authorizes this Flood Control and Coastal Emergency (FCCE) nourishment.

c. Current Project Description

This project will partially nourish 5.1 miles of critically eroded shoreline immediately south of Hillsboro Inlet or between Florida Department of Environmental Protection (FDEP) Range Monuments R-26 to R-53. The goal of this project is to bring the beach to pre-storm condition or restore the project to a state that it can adequately function. The project beach has a berm elevation of +7.4 feet, NAVD88. The sand source for the project will come from an upland source and will be trucked haul to the disposal location. The upland source will be selected by the Contractor meeting criteria required in the specifications. The selection of upland borrows for the sand source is discussed in the 2013 LRR. Project work also includes endangered species and vibration monitoring.

3. DISTRICT QUALITY CONTROL

District Quality Control and Quality Assurance activities for the project documents (DDR and P&S) are stipulated in ER 1110-1-12, Engineering & Design Quality Management. The subject project DDR and P&S will be prepared by the Jacksonville District using ER 1110-1-12 procedures and undergo DQC.

4. AGENCY TECHNICAL REVIEW

a. Risk Informed Decision on Appropriate Level of Review

In accordance with EC 1165-2-214, Para 15, the review policy directs the Project Delivery Team (PDT) to make a risk informed decision regarding the effectiveness of an Agency Technical Review (ATR). Review of the answers to the following questions from Para 15.b indicate that an ATR is warranted because the sand source has changed requiring additional design and analysis.

- (1). Does it include any design (structural, mechanical, hydraulic, etc)?
Yes. The design duplicates a previous edition of P&S that have been used successfully in the past; however the sand source and method of material transport will be different.
- (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 will be developed.
- (5). Does it have or will it require a NEPA document?
Yes. The project uses an existing Environmental Assessment and requires a State of Florida Water Quality Certificate.
- (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 renourishment beach fill is a sacrificial fill section. Failure or non-performance of the nourishment would not in itself pose any safety issues as project monitoring triggers its replacement such that the project function is maintained.
- (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 an existing Environmental Assessment and we are obtaining the Water Quality Certificate.
- (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.*

b. Agency Technical Review Scope.

Agency Technical Review (ATR) is undertaken to "ensure the quality and credibility of the government's scientific information" in accordance with EC 1165-2-214 and ER 1110-1-12. An ATR will be performed on the P&S & DDR pre-final submittals.

ATR will be conducted by individuals and organizations that are external to the Jacksonville District. The ATR Team Leader is a Corps of Engineers employee outside the South Atlantic Division. The required disciplines and experience are described below.

ATR comments are documented in the DrCheckssm model review documentation database. DrCheckssm is a module in the ProjNetsm suite of tools developed and operated at ERDC-CERL (www.projnet.org). At the conclusion of ATR, the ATR Team Leader will prepare a Review Report that summarizes the review. The report will consist of the ATR Certification Form from EC 1165-2-214 and the DrCheckssm printout of the closed comments.

c. ATR Disciplines.

As stipulated ER 1110-1-12, ATR members will be sought from the following sources: regional technical specialists (RTS); appointed subject matter experts (SME) from other districts; senior level experts from other districts; Center of Expertise staff; experts from other USACE commands; contractors; academic or other technical experts; or a combination of the above. The ATR Team will be comprised of the following disciplines; knowledge, skills and abilities; and experience levels.

Geotechnical Engineering and Engineering Geology. The team member should be a registered professional. Team Member needs to possess a minimum of 7 years experience with geologic and geotechnical analyses that are used to support the development of Plans and Specifications for navigation and shore protection projects with rock structures.

Civil Engineering/Dredging Operations. The team member should be a registered professional engineer with 7 years of dredging operations and/or civil/site work project experience that includes dredging and disposal operations, embankments, groins, channels, revetments and shore protection project features.

ATR Team Leader. The ATR Team Leader will be from outside SAD and should have a minimum of 15 years of experience with Navigation and/or Shore Protection Projects. ATR Team Leader may be a co-duty to one of the review disciplines.

5. INDEPENDENT EXTERNAL PEER REVIEW

a. General.

EC 1165-2-214 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.

a. Type I Independent External Peer Review (IEPR) Determination.

A Type I IEPR is associated with decision documents. No decision documents are addressed or covered by this Review Plan. A Type I IEPR is not applicable to the implementation documents covered by this Review Plan.

b. 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 and therefore, the District Engineering Chief does not recommend that Type II IEPR review under Section 2035 and/or EC 1165-2-214 be performed. The factors as stated under Section 2035 and EC 1165-2-214 are used in determining whether a review of design and construction activities. These factors and its applicability to this project follow.

- (1). The failure of the project would pose a significant threat to human life.
This project will perform periodic nourishment that will re-establish an authorized beach section. 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 standard 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 employ the concept of redundancy for beach fill design.

- (4). The project has 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.

- Complete Pre-Final Submittals: *21 May 2013*
- District Quality Control: *22 May 2013 – 24 May 2013*
- ATR Review: *28 May 2013 – 17 Jun 2013*
- BCOE Review: *02 Jul 2013 – 09 Jul 2013*
- Advertisement: *01 Jul 2013 – 31 Jul 2013*

b. ATR Estimated Cost. \$10,000

8. POINTS OF CONTACT

Jacksonville District points of contact names, titles, and responsibilities are listed below.

Per guidance, the names of the following individual points of contact will not be posted on the Internet with the Review Plan.