



DEPARTMENT OF THE ARMY
NORTH ATLANTIC DIVISION, CORPS OF ENGINEERS
FORT HAMILTON MILITARY COMMUNITY
GENERAL LEE AVENUE, BLDG 301
BROOKLYN, NY 11252-6700

DEC 14 2012

REPLY TO
ATTENTION OF:

CENAD-RBT

MEMORANDUM FOR Commander, Philadelphia District, ATTN: CENAP-EC (Mr. Tranchik),
Wanamaker Building, 100 Penn Square East, Philadelphia, PA 19107-3390

SUBJECT: Review Plan Approval for Implementation Document, Ecosystem Restoration,
Lower Cape May Meadows – Cape May Point, NJ

1. References:

a. E-Mail, CENAP-DP-CW (Mr. Master), 4 Dec 12, subject: NAP Review Plans

b. EC 1165-2-209 Change 1, Water Resources Policies and Authorities – Civil Works
Review Policy, 31 Jan 12

2. The enclosed Review Plan for the Implementation Document, Ecosystem Restoration, Lower Cape May Meadows – Cape May Point, NJ has been prepared in accordance with Reference 1.b. Initial construction for the project was completed in 2007, and included placement of approximately 1.0 million cubic yards of beach sand. The current work is for renourishment in three areas.

3. NAD Business Technical Division is the Review Management Organization (RMO) for the Agency Technical Review (ATR). Initial analysis indicates that Independent External Peer Review is not required since the project does not involve potential hazards which pose a significant threat to human life. However, a more detailed risk assessment needs to be completed to verify the determination.

4. The enclosed Review Plan for Implementation Document, Ecosystem Restoration, Lower Cape May Meadows – Cape May Point, NJ is approved. The Review Plan is subject to change as circumstances require, consistent with study development under the Project Management Business Process. Subsequent revisions to this Review Plan or its execution will require new written approval from this office.


5. In accordance with Reference 1.b, Appendix B, Paragraph 5, this approved Review Plan shall be posted on your district website for public review and comment. The plan will also be posted on NAD's website for review and comment.

CENAD-RBT

SUBJECT: Review Plan Approval for Implementation Document, Ecosystem Restoration,
Lower Cape May Meadows – Cape May Point, NJ

6. The Point of Contact in Business Technical Division for this action is Alan Huntley,
347-370-4664 or Alan.Huntley@usace.army.mil.

Encl
as



KENT D. SAVRE
Colonel, EN
Commanding

CF (w/ encl):
CEMP-NAD (C. Shuman)
CENAD-DP-CW (F. Master)
CENAD-PD-X (L. Cocchieri)

REVIEW PLAN

Implementation Documents

Ecosystem Restoration Lower Cape May Meadows – Cape May Point New Jersey

Periodic Nourishment 2012

Philadelphia District

4 December 2012

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, PHILADELPHIA DISTRICT. IT DOES NOT REPRESENT AND SHOULD NOT BE CONSTRUED TO REPRESENT ANY AGENCY DETERMINATION OR POLICY.



**US Army Corps
of Engineers** ®

1. PURPOSE AND REQUIREMENTS

a. Purpose. This Review Plan defines the scope and level of review activities for the Lower Cape May Meadows – Cape May Point Ecosystem Restoration Project. The review activities consist of District Quality Control (DQC) and Agency Technical Review (ATR). The project is in the Periodic Nourishment Phase, and the related documents are Implementation Documents that consist of Plans and Specifications (P&S).

b. References.

- (1) ER 1110-2-1150, Engineering and Design for Civil Works Projects, 31 Aug 1999
- (2) ER 1110-1-12, Engineering and Design Quality Management, 21 Jul 2006
- (3) WRDA 1999 (Project Authorization)
- (4) EC 1165-2-209, Civil Works Review Policy, 31 January 2010

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 Peer Review. Refer to the EC for the definitions and procedures for the three levels of review.

d. Review Management Organization (RMO). The North Atlantic Division is designated as the RMO.

2. PROJECT INFORMATION AND BACKGROUND

The project was authorized by the Water Resource Development Act of 1999 (Public Law 106-53). The project function and features are established in the *Lower Cape May Meadows – Cape May Point Feasibility Study* (USACE, 1998). In this report, the function and features include (1) a protective beach berm and storm dune along two miles of Lower Cape May Meadows; (2) ecosystem restoration features to include reestablishing flow in Meadows tract, pond creation, phragmites control, and creation of other wetland features; (3) periodic nourishment of the restored beach and such adjacent shoreline as needed and justified for the life of the project (note that federal participation expires in 2054); and (4) extensive multiyear beach performance monitoring.

Initial construction of the project took place from Fall 2004 to Spring 2007. The project resulted in the placement of approximately 1 million cubic yards of beach quality sand obtained from an offshore borrow. The project fill limits extend from the western end of the City of Cape May (3rd Ave terminal groin) through The Nature Conservancy's Cape May Migratory Bird Refuge, and Cape May Point State Park, into the first four groin

compartments in the Borough of Cape May Point. The Feasibility Study estimated renourishment at 650,000 cy every 4 years. The project has had partial renourishments in 2009 (70,000 cy) and 2011 (360,000 cy) with the quantities limited by available funding.

Current Project

The proposed project is to renourish three hotspots in the project area: (1) Area 1 – the western end of City of Cape May (Cove Beach), (2) Area 2 – from the western end of Cape May Point State Park to first groin in the Borough of Cape May Point, and (3) Area 3 – the 4th groin compartment in the Borough of Cape May Point.

The beach fill material will come from an offshore borrow area about 6.8 miles southeast of the project.

3. DISTRICT QUALITY CONTROL

District Quality Control and Quality Assurance activities for implementation documents (P&S) are stipulated in ER 1110-1-12, Engineering & Design Quality Management. The subject project P&S will be prepared by the Philadelphia District using NAP procedures and will undergo DQC. DQC Certification will be verified by the Agency Technical Review Team.

4. AGENCY TECHNICAL REVIEW

a. Scope. Agency Technical Review (ATR) is undertaken to "ensure the quality and credibility of the government's scientific information" in accordance with EC 1165-2-209 and ER 1110-1-12. An ATR will be performed on the P&S pre-final submittals.

ATR will be conducted by individuals and organizations external to Philadelphia District. The ATR Team Leader is a Corps of Engineers Project Manager external to North 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 and the DrCheckssm printout of the closed comments.

b. 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) ; senior level experts; Center of Expertise staff; 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. Experience needs to encompass geologic and geotechnical analyses that are used to support the development of Plans and Specifications for shore protection projects.

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

NEPA Compliance. The team member should have experience in NEPA compliance activities and preparation of Environmental Assessments and Environmental Impact Statements for navigation or shore protection projects.

ATR Team Leader. The ATR Team Leader will be from outside the North Atlantic Division and should have 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 1165-2-209 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. A Type I IEPR is not applicable to the implementation documents 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 Type II IEPR review under Section 2035 and/or EC 1165-2-209 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 and EC 1165-2-209 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 employ 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 Beach Erosion Control 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 (DRAFT) – TBD

ATR – TBD

BCOE – TBD

Advertisement – TBD

- b. ATR Estimated Cost. The ATR will be conducted as noted above. It is envisioned that each reviewer will be afforded 24 hours review plus 4 hours for coordination. It is envisioned that the ATR Leader will be 16 hours. The estimated ATR cost range is \$5,000-10,000.

8. POINT 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.

Philadelphia District POCs:

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