



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, MOBILE DISTRICT
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CESAM-EN

14 April 2020

MEMORANDUM FOR Commander, U.S. Army Engineer Division, South Atlantic (CESAD-RBT), 60 Forsyth Street SW, Room 10M15, Atlanta, GA 30303

SUBJECT: Approval of the Review Plan for the Harrison County Dune Restoration Phase II Project, Harrison County, Mississippi

1. References:

a. Department of Defense Appropriations Act, Public Law 109-148 dated 30 December 2005.

b. Engineering Circular (EC) 1165-2-217, Water Resources Policies and Authorities Review Policy for Civil Works, 20 February 2018.

2. I hereby request approval of the enclosed Review Plan for the Harrison County Dune Restoration Phase II Project and concurrence with the conclusion that a Safety Assurance Review/Type II Independent External Peer Review (IEPR) of the subject project is not required. The Review Plan complies with applicable policy, provides for District Quality Control (DQC), Agency Technical Review (ATR), Biddability, Constructability, Operability, Environmental and Sustainability (BCOES) Review, and has been coordinated with SAD. It is my understanding that non-substantive changes to this Review Plan, should they become necessary, are authorized by SAD.

3. District will post the approved Review Plan to its website and provide a link to the SAD for its use. Names of Corps/Army employees will be withheld from the posted version, in accordance with guidance.

4. Point of Contact is Joseph M. Black, P.E., Engineering Technical Lead, CESAM-EN-H, (251) 694- 3853 or Joseph.M.Black@usace.army.mil

SEBASTIEN P. JOLY
COL, EN
Commanding

REVIEW PLAN

HARRISON COUNTY DUNE RESTORATION PHASE 2 HARRISON COUNTY, MS

Mobile District

April 2020

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**US Army Corps
of Engineers®
Mobile District**

REVIEW PLAN

HARRISON COUNTY DUNE RESTORATION PHASE 2 HARRISON COUNTY, MS

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HARRISON COUNTY DUNE RESTORATION PHASE 2

HARRISON COUNTY, MS

1. PURPOSE AND NEED

This Review Plan defines the scope and level of review activities for the Rehabilitation efforts for the Harrison County Beach Shoreline Protection & Harrison County Beach Dune Restoration Project, Harrison County, Mississippi. Review activities consist of District Quality Control (DQC) and Agency Technical Review (ATR), and Biddability, Constructability, Operability, Environmental, and Sustainability (BCOES) Review. The project is in the Pre-Construction, Engineering, and Design (PED) Phase. The related documents for review consist of Plans and Specifications (P&S) and the Design Documentation Report (DDR). The Review Management Organization (RMO) is the South Atlantic Division.

2. DESCRIPTION OF PROJECT

The Harrison County Mississippi Beach Erosion Control Project (also known as Harrison County Beach Shoreline Protection Project) was constructed in 1952, under authority of Section 2 of the River and Harbor Act approved 3 July 1930, as amended and supplemented. This project was federally designed and constructed to protect the seawall, U.S. Highway 90, and underground utilities against wave attack from a 45-year storm. The Harrison County Beach Dune Restoration Project was constructed in 2011, under authority of Public Law 110-28, dated 25 May 2007. This project consisted of the planting of approximately 625,000 dune grasses over the 26 miles of shoreline from the Biloxi Inlet on the east and Henderson Point on the west (Figures 1 & 2) to restore the dune systems, which were destroyed by Hurricane Katrina. Five different species of grasses (sea oats, bitter panic grass, Gulf bluestem, maritime marsh elder, and salt hay) were planted along the project. Additionally, fencing was installed perpendicular to the beach and extended into the water at various locations in an attempt to promote accretion on certain sections of the beach.



This follow on project to the Dune Restoration Project proposes to further enhance dune propagation through installation of sand fencing and planting of approximately 260,500 dune grasses along areas of the reach to allow natural accretion of sand for further dune development. The planting and fencing locations will be identified during PED and will not impact the work completed in 2011.



Figure 1: Eastern Project Limits



Figure 2: Western Project Limits

3. DESCRIPTION OF WORK FOR REVIEW

PED Phase shall consist of developing plans and specifications for the further enhancement of the Harrison County, Mississippi, dune restoration project. Work products to be reviewed include the plans, specifications, and DDR, which will illustrate and define the specific locations for the planting of approximately 260,500 dune grasses and installation of sand fencing over the 26 miles of shoreline from the Biloxi Inlet on the east and Henderson Point on the west in an effort to further reduce the windblown deposition of sand onto U.S. Highway 90. Care will be taken to ensure that the project completed in 2011 will not be impacted, and work will not be performed within the original project footprint.

4. BACKGROUND

Harrison County Beach Dune Restoration Project was federally designed and constructed to provide an increase in the overall stability of the Harrison County Beach Shoreline Protection Project by providing reserves of sand that act as a buffer to resist erosive events and reduce the amount of wind-blown sand leaving the project. Furthermore, the dune system provides a secondary hurricane storm damage reduction benefit by absorbing surge and wave energy along its profile. In addition, the vegetated dunes were designed to provide foraging and roosting habitats for various shore and migratory birds, including species of special concern such as piping plovers and least terns. As discussed in the Project Information Report (PIR), dated September 2013, these dunes are critical in providing habitat for these nesting shorebirds and reducing the amount of windblown sand that is transported onto the adjacent highway (U.S. Highway 90).

5. PROJECT DELIVERY TEAM

The Project Delivery Team (PDT) is comprised of those individuals involved directly in the development of the implementation documents. The individual contact information and disciplines of the District PDT are included in Attachment 1 of this document.

6. LEVELS OF REVIEW

This Review Plan (RP) describes the levels of review and the anticipated review process for the various documents to be produced. All levels of review are addressed in this RP: District Quality Control (DQC), Agency Technical Review (ATR), Biddability, Constructability, Operability, Environmental, and Sustainability (BCOES), Independent External Peer Review (IEPR), and policy and legal compliance.

7. DISTRICT QUALITY CONTROL

All documents to be produced will undergo District Quality Control (DQC). DQC is the review of basic science and engineering work products focused on fulfilling the project quality requirements defined in the PMP. DQC will be managed by Mobile District (SAM) in accordance with ER 1110-1-12, Engineering & Design Quality Management; ECB 2016-9, Civil

Works Review; EC 1165-2-217, Civil Works Review Policy; and the District Quality Management Plan. The DQC will include quality checks and reviews, supervisory reviews, and PDT reviews. The DQC review will be completed prior to submitting documents for ATR. Documentation of the DQC review as contained in DrChecks will be certified prior to the ATR showing that DQC activities were sufficient and documented.

8. AGENCY TECHNICAL REVIEW

All documents produced as part of this effort will undergo Agency Technical Review (ATR) to ensure consistency with established criteria, guidance, procedures, and policy. The ATR will assess whether the analyses presented are technically correct and comply with published Corps guidance. The ATR will also ensure that the P&S and DDR are consistent with the approved/authorized plan.

The ATR team will consist of individuals that represent the significant disciplines involved in the accomplishment of the work. ATR will be managed within the Corps and conducted by senior USACE personnel outside of the SAM that are not involved in the day to day production of the project. DrChecks review software will be used to document all ATR comments, responses, and associated resolutions accomplished throughout the review process. The documents to be reviewed are the Final version of the P&S and DDR. The PDT will evaluate comments in DrChecks and revise materials as necessary. The ATR leader will be from outside the MSC and must complete a statement of technical review for all final products and final documents. By signing the ATR certification, the district leadership certifies policy compliance of the document and that the DQC activities were sufficient and documented.

An ATR team site visit will not be required. Photographs and requested additional project information will be provided in order to ensure a thorough and complete ATR of the project is performed.

Disciplines Required for Review. At a minimum, the following disciplines will be represented on the ATR team. All technical engineering ATR members shall be certified in the Corps of Engineers Reviewer Certification and Access Program (CERCAP) system.

Discipline	Required Expertise
ATR Lead	The ATR Team Leader shall be a professional outside SAD with experience in preparing Civil Works documents and conducting ATRs and shall have a minimum of 5 years of experience with shore protection projects. The ATR lead may also serve as one of the review disciplines in addition to the team leader duties.
Coastal Hydraulics	The team member should have a minimum of 5 years of experience in coastal beach re-nourishment and erosion control design.

Environmental Specialist	The team member should have a minimum of 5 years of experience with environmental evaluation and compliance requirements, pursuant to national environmental statutes (NEPA), section 404 of the Clean Water Act (CWA), applicable executive orders and other Federal planning requirements. Experience with coastal projects and State of Florida environmental requirements is also beneficial.
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9. BIDDABILITY, CONSTRUCTABILITY, OPERABILITY, ENVIRONMENTAL, AND SUSTAINABILITY REVIEW

The value of a BCOES review is based on minimizing problems during the construction phase through effective checks performed by knowledgeable, experienced personnel prior to advertising for a contract. BCOES requirements must be emphasized throughout the planning and design processes for all programs and projects. This will help to ensure that the government's contract requirements are clear, executable, and readily understandable by private sector bidders or proposers. It will also help ensure that the construction may be done efficiently and in an environmentally sound manner, and that the construction activities and projects are sufficiently sustainable. Effective BCOES reviews of design and contract documents will reduce risks of cost and time growth, unnecessary changes and claims, as well as support safe, efficient, sustainable operations and maintenance by the facility users and maintenance organization after construction is complete. A BCOES Review will be conducted for this project at the Final Design Phase. BCOES will be managed by the Mobile District with team members from Mobile District (SAM).

10. INDEPENDENT EXTERNAL PEER REVIEW

Independent External Peer Review (IEPR) is the most independent level of review and is applied in cases that meet certain criteria where the risk and magnitude of the proposed project are such that a critical examination by a qualified team outside of the USACE is warranted. This project is in the implementation phase; thus, the Type I IEPR is not required.

Based on criteria contained in EC 1165-2-217, the District Chief of Engineering, as the Engineer-In-Responsible-Charge, does not recommend a Type II IEPR Safety Assurance Review (SAR). The nature of the rehabilitation is to place sand back on the beach, commensurate with prior re-nourishments. Paragraph 12.h.3.f of the EC states, “a beach re-nourishment project that does not affect life safety does not require a SAR.” The Federal action is not justified by life safety, and project failure would not pose a significant threat to human life. Innovative materials or novel engineering methods will not be used. Redundancy, resiliency, or robustness are not required for design. Also, the project has no unique construction sequencing, or a reduced or overlapping design construction schedule.

11. REVIEW MANAGEMENT ORGANIZATION

It is the responsibility of the Review Management Organization (RMO) to develop and prepare a “charge” to the reviewer. SAD is the RMO for this project, and SAM will assist with the development of the “charge.” The purpose of agency reviews throughout the project life cycle, including ATR and policy compliance and legal reviews, generally, is to ensure that the appropriate problems and opportunities are addressed as well as assure that accurate cost, scheduling, and associated risks are presented.

12. POLICY AND LEGAL COMPLIANCE

The National Environmental Policy Act (NEPA) compliance is required for the construction of this project. This includes consideration of no adverse impacts to the environment. NEPA documentation will be prepared and coordinated prior to the preparation of P&S. DQC and ATR augment and complement the policy review processes by addressing compliance with pertinent published Army policies, particularly policies on analytical methods and the presentation of findings in decision documents. The SAM Office of Counsel reviews all contract actions for legal sufficiency in accordance with Engineer Federal Acquisition Regulation Supplement 1.602-2 responsibilities. The subject implementation documents and supporting environmental documents will be reviewed for legal sufficiency prior to advertisement.

13. MODEL CERTIFICATION AND APPROVAL

N/A – No modeling was required.

14. REVIEW SCHEDULE AND COSTS

The total cost for DQC review is estimated to be \$20,000. The total cost for the ATR is estimated to be approximately \$24,000. The documents to be reviewed and scheduled dates for reviews are as follows:

Milestone	Review	Schedule Dates
100% Unreviewed P&S and DDR	DQC	11 May 2020
Final P&S and DDR	ATR	30 July 2020

15. PUBLIC PARTICIPATION

The RP will be made accessible to the public through the Mobile District website link <http://www.sam.usace.army.mil/>.

16. MAJOR SUBORDINATE COMMAND (MSC) APPROVAL

The MSC (Division Commander) is responsible for approving the RP as prepared by the Mobile District. Approval is provided by the MSC Commander. The Commander's approval reflects team input as to the appropriate scope and level of review for the implementation documents. Like the PMP, the RP is a living document and may change as the project progresses. Changes in the RP should be approved by following the process used for initially approving the plan. In all cases, the MSC will review decisions on the level of review and any changes made in updates to the project.

ATTACHMENT 1 – TEAM ROSTER

Product Delivery Team Members

Discipline (POC)	Name	Office/Agency
Project Manager	Patrick O'Connor	CESAM-PM-CM
Engineering Technical Lead (ETL)	Joseph Black	CESAM-EN-H
Hydraulic/Coastal Engineer	Elizabeth Godsey	CESAM-EN-HH
Hydraulic/Coastal Engineer Intern	Allison Fitzgerald	CESAM-EN-HH
CADD Tech	James Gibson	CESAM-EN-HH
Cost Estimators	Jay Caldwell	CESAM-EN-TC
Environmental Specialists	Angelia Lewis	CESAM-PD-EC
Specifications Engineer	Marie Klusman	CESAM-EN-TS
Civil Engineer (Operations/Construction)	Barry Dailey	CESAM-OP
Sponsor	Charles Loftis	Director, Harrison County Sand Beach Department

ATTACHMENT 3 - ACRONYMS AND ABBREVIATIONS

<u>Term</u>	<u>Definition</u>	<u>Term</u>	<u>Definition</u>
AFB	Alternative Formulation Briefing	NED	National Economic Development
ASA(CW)	Assistant Secretary of the Army for Civil Works	NER	National Ecosystem Restoration
ATR	Agency Technical Review	NEPA	National Environmental Policy Act
BCOES	Biddability, Constructability, Operability Environmental, and Sustainability	O&M	Operation and maintenance
CAP	Continuing Authorities Program	OMB	Office and Management and Budget
CSDR	Coastal Storm Damage Reduction	OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation
DPR	Detailed Project Report	OEO	Outside Eligible Organization
DQC	District Quality Control/Quality Assurance	OSE	Other Social Effects
DX	Directory of Expertise	PCX	Planning Center of Expertise
EA	Environmental Assessment	PDT	Project Delivery Team
EC	Engineer Circular	PAC	Post Authorization Change
EIS	Environmental Impact Statement	PMP	Project Management Plan
EO	Executive Order	PL	Public Law
ER	Ecosystem Restoration	QMP	Quality Management Plan
FDR	Flood Damage Reduction	QA	Quality Assurance
FEMA	Federal Emergency Management Agency	QC	Quality Control
FRM	Flood Risk Management	RED	Regional Economic Development
FSM	Feasibility Scoping Meeting	RMC	Risk Management Center
GRR	General Reevaluation Report	RMO	Review Management Organization
HQUSACE	Headquarters, U.S. Army Corps of Engineers	RTS	Regional Technical Specialist
IEPR	Independent External Peer Review	SAR	Safety Assurance Review
ITR	Independent Technical Review	SEIS	Supplemental Environmental Impact Statement
LRR	Limited Reevaluation Report	USACE	U.S. Army Corps of Engineers
MSC	Major Subordinate Command	WRDA	Water Resources Development Act