

REVIEW PLAN

UPPER LONG BEACH CANAL PHASE 5 HARRISON COUNTY, MS

Mobile District

October 2020

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Mobile District**

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UPPER LONG BEACH CANAL PHASE 5 HARRISON COUNTY, MS

1. PURPOSE AND NEED

This Review Plan defines the scope and level of review activities for the Bankline Stabilization and Access Improvement efforts for the Upper Long Beach Canal Phase 5 Project, Harrison County, Mississippi. Review activities consist of District Quality Control (DQC), Agency Technical Review (ATR), and Biddability, Constructability, Operability, Environmental, and Sustainability (BCOES) reviews. 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 Upper Long Beach Canal Phase 5 Project objectives are to address issues related to slope stability, vehicular accessibility, and bank stabilization along the Long Beach Canal in the area southwest (downstream) of N. Harvest Lane stretching to Espy Ave. Previous work completed during phases 1 – 4 of the Long Beach Canal project have included the removal of sediment and debris, filling depressed areas of the canal with soil, repairing side slopes, constructing approximately 11 drainage outfall structures, repairing a channel slope failure upstream of the Espy Ave bridge, extending gabion protection, as well as installing turf reinforcement mats, erosion control mattresses, and rip rap for anchoring gabion mattresses.

The Upper Long Beach Canal Phase 5 project propose is to further improve upon the previous completed work in the area shown on Figure 1.

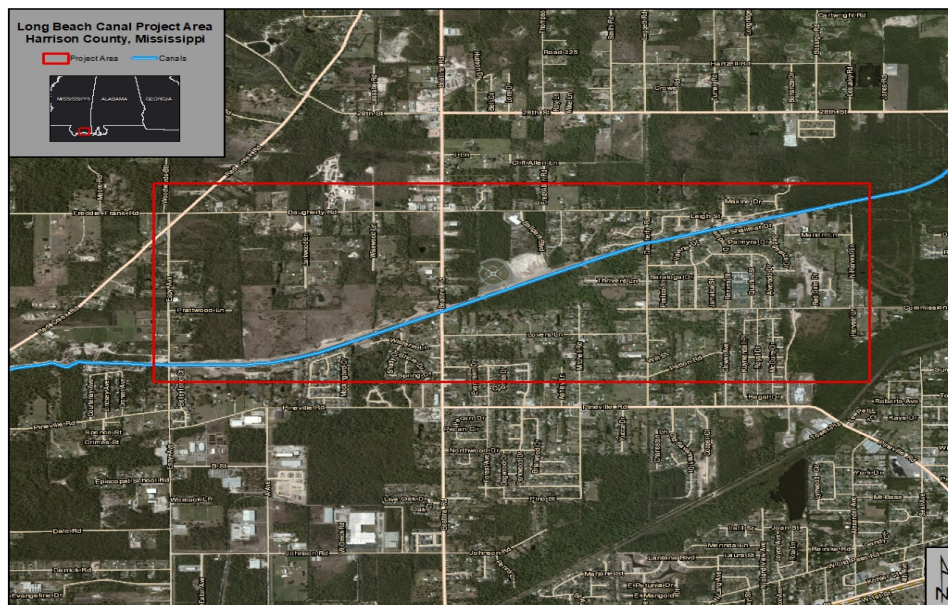


Figure 1: Upper Long Beach Canal Phase 5 project area.

3. DESCRIPTION OF WORK FOR REVIEW

The implementation phase shall consist of developing plans, specifications, and the Design Documentation Report (DDR) for the further enhancement of the Long Beach Canal project in Harrison County, Mississippi. Work products to be reviewed include the plans, specifications, and DDR, which will illustrate and define the specific locations for addressing slope stabilization issues and improvements to accessibility for maintenance activities in areas where existing drainage outfall points to the canal have led to erosion affecting vehicular access and resulting in sediment deposit accretion within the canal.

4. BACKGROUND

Businesses and residences of Long Beach, Mississippi, within the city Canal 2 floodplain historically have been plagued by flooding problems, but the deposit of sediment and windblown trees and other debris in Canal 2 during Hurricane Katrina exacerbated drainage problems and led to heavy damages. To address this problem along with many others along coastal Mississippi, Congress directed the U.S. Army Corps of Engineers in the Department of Defense Appropriations Act, 2006 (P.L. 109-148) 30 December 2005 to:

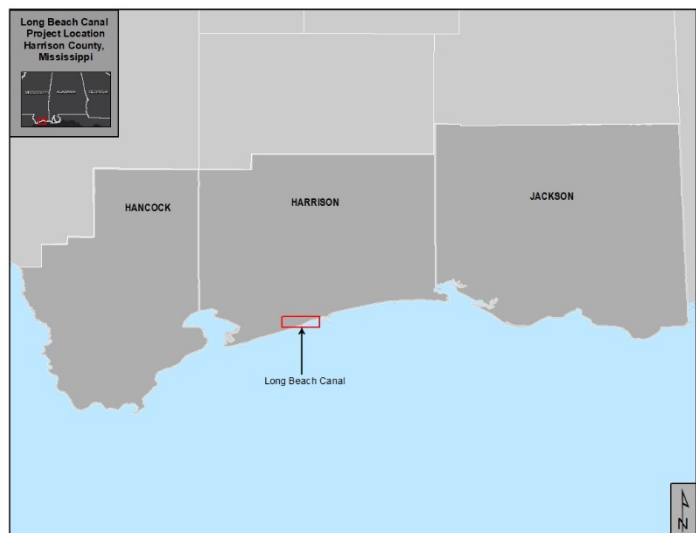


Figure 2: Upper Long Beach Canal project location.

“conduct an analysis and design for comprehensive improvements or modifications to existing improvements in the coastal area of Mississippi in the interest of hurricane and storm damage reduction, prevention of saltwater intrusion, preservation of fish and wildlife, prevention of erosion, and other related water resource purposes at full Federal expense; Provided further, that the Secretary shall recommend a cost-effective project, but shall not perform an incremental benefit-cost analysis to identify the recommended project, and shall not make project recommendations based upon maximizing net national economic development benefits; Provided further, that interim recommendations for near term improvements shall be provided within 6 months of enactment of this act with final recommendations within 24 months of this enactment.”

Under the provided authorization, the Mississippi Coastal Improvement Program (MsCIP) was initiated and included the development of fifteen improvement projects along the coast of Mississippi, one of which was the Long Beach Canal Flood Damage Reduction Project. A project vicinity location map is shown in Figure 2.

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), and policy and legal compliance. An IEPR, will not be required for these implementation documents; the risk informed decision will be explained later in the Review Plan.

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 DrChecksSM will be certified prior to the ATR. The DQC documentation will be provided to the ATR Team, so the ATR Team can confirm 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. DrChecksSM 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 the DDR. The PDT will evaluate comments in DrChecksSM and revise design documents 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, reviewers and the district leadership certify policy compliance of the documents 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 extensive experience with bank line stabilization and erosion control projects. The ATR lead may also serve as one of the review disciplines in addition to the team leader duties.
Civil Engineer	A senior civil engineer with bank stabilization, erosion control, and vehicle access design experience. Professional licenses and 10 years design experience are preferred.
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 Mississippi environmental requirements is also beneficial.

9. INDEPENDENT EXTERNAL PEER REVIEW

a. General.

EC 1165-2-217 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, respectively). The EC defines Section 2035 Safety Assurance Review (SAR) as a Type II Independent External Peer Review (IEPR). The EC requires Type II IEPR be conducted outside USACE.

b. Type I Independent External Peer Review Determination.

A Type I IEPR is primarily associated with decision documents. A Type I IEPR is not applicable to the implementation documents covered by this RP.

c. Type II Independent External Peer Review Determination.

This project does not trigger WRDA 2007 Section 2035 factors for Safety Assurance Review (termed Type II IEPR in EC 1165-2-217). Therefore, a review under Section 2035 is not required. The factors in determining whether a review of design and construction activities of a project are necessary as stated under Section 2035, along with this RP's applicability statements, follow:

- (1) Failure of the project would pose a significant threat to human life.

Failure of the project would not pose a threat to human life. Placement of the bank stabilization measures would address hydraulic changes that are affecting erosion. These measures would not transfer or transform risk up or downstream of the project area.

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

This project will utilize methods and techniques used by the USACE on other similar projects.

- (3) The project design lacks redundancy.

There is no need for redundant design features for the bank stabilization measures since no risks to life safety are involved.

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

The project does not have or pose unique sequencing or a reduced or overlapping design. The construction methods and procedures have been used successfully by the USACE on other similar works.

Based on the discussion above, the District Chief of Engineering, as the Engineer-In-Responsible-Charge, does not recommend a Type II IEPR Safety Assurance Review of the P&S and DDR. If the project scope is changed, this determination will be reevaluated.

10. 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).

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 is required.

14. REVIEW SCHEDULE AND COSTS

The total cost for DQC review is estimated to be \$7,500. The total cost for the ATR is estimated to be approximately \$7,500. The documents to be reviewed and scheduled dates for reviews are as follows:

Milestone	Review	Schedule Dates
100% Unreviewed P&S and DDR	DQC	9 Nov 2020

Final P&S and DDR	ATR	6 Jan 2021
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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	Joshua Blevins	CESAM-PM-CM
Engineering Technical Lead (ETL)	Chris Marr	CESAM-EN-HH
Civil Site Engineer	James DeFalco	CESAM-EN-GC
Hydraulics and Hydrology Engineer	Marshall Hayden	CESAM-EN-HH
Geotechnical Engineer	Tom Powers	CESAM-EN-GG
CADD Tech	Stewart Turner	CESAM-EN-HH
Cost Estimators	Mike Trimble	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-GW
Civil Engineer (Operations/Surveying)	Nick Stafford	CESAM-OP-GW
Sponsor	Joe Culpepper	Director, Long Beach Public Works

ATTACHMENT 2 - APPROVED REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number

ATTACHMENT 3 - ACRONYMS AND ABBREVIATIONS

Term	Definition	Term	Definition
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