



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

CESAD-RBT

28 October 2019

MEMORANDUM FOR Commander, Jacksonville District, 701 San Marco Boulevard,
Jacksonville, Florida 32207

SUBJECT: Approval of the Review Plan for Bal Harbour Beach Erosion Control and Hurricane Protection Project, Miami-Dade County, Florida

1. References:

a. Memorandum, CESAJ-EN-Q, subject as above.

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

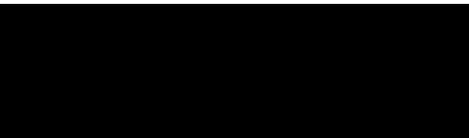
2. The Review Plan (RP) for the Bal Harbour Beach Erosion Control and Hurricane Protection Project submitted by the Jacksonville District via reference 1.a. noted above has been reviewed by South Atlantic Division (SAD) and is hereby approved in accordance with reference 1.b.

3. The South Atlantic Division Office shall be the Review Management Organization for this project.

4. SAD concurs with the District's RP recommendation that outlines the requirements for District Quality Control (DQC), Agency Technical Review (ATR), and Biddability, Constructability, Operability, Environmental and Sustainability (BCOES) Review, and the conclusion that a Safety Assurance Review/Type II Independent External Peer Review is not required. Documents to be reviewed include the Plans and Specifications and the Design Documentation Report (DDR).

5. The District should take steps to post the approved RP to its website and provide a link to CESAD-RBT. Before posting to the website, the names of Corps/Army employees should be removed. Subsequent significant changes to this RP, such as scope or level of review changes, should they become necessary, will require new written approval from this office.

6. The SAD point of contact is [REDACTED].



Major General, USA
Commanding



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8915

CESAJ-EN-Q

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

SUBJECT: Approval of Review Plan for the Bal Harbour Beach Erosion Control and Hurricane Protection Project, Miami-Dade County, Florida

1. References.

- a. Engineering Circular (EC) 1165-2-217, Review Policy for Civil Works, 20 Feb 18.
- b. Flood Control Act of 1946, Public Law 79-526, 24 Jul 46.

2. I hereby request approval of the enclosed Review Plan for the Bal Harbour Beach Erosion Control and Hurricane Protection Project, Miami-Dade County, Florida and concurrence with the conclusion that a Type II Independent External Peer Review (IEPR) of the subject project is not required. The recommendation not to perform a Type II IEPR is based on the EC 1165-2-217 Risk Informed Decision Process as presented in the Review Plan. The Review Plan complies with applicable policy, provides for Agency Technical Review, 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.

4. If you have any questions regarding the information in this memo, please feel free to contact me or contact [REDACTED].

Encl

[REDACTED]
COL, EN
Commanding

PROJECT REVIEW PLAN

For

**Preconstruction, Engineering and Design Phase
Implementation Documents**

For

**Bal Harbour Beach Erosion Control and
Hurricane Protection Project
(Suppl. Contract C)**

Miami-Dade County, Florida

Project P2 number: 113082

Jacksonville District

August 2019



**US Army Corps
of Engineers**®

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.

TABLE OF CONTENTS

| | |
|--|-----------|
| 1. PURPOSE AND REQUIREMENTS | 1 |
| a. Purpose | 1 |
| b. References | 1 |
| c. Requirements | 1 |
| d. Review Plan Approval and Updates | 1 |
| e. Review Management Organization..... | 1 |
| 2. PROJECT INFORMATION | 2 |
| a. Project Location | 2 |
| b. Project Authorization..... | 3 |
| c. Project Description..... | 3 |
| d. Public Participation | 3 |
| e. In-Kind-Contributions by Project Sponsor..... | 3 |
| f. Civil Works Cost Engineering Mandatory Center of Expertise Review and Certification..... | 3 |
| 3. DISTRICT QUALITY CONTROL | 5 |
| 4. AGENCY TECHNICAL REVIEW | 6 |
| a. Risk Informed Decision on Appropriate Level of Review | 6 |
| b. Agency Technical Review Scope. | 6 |
| c. ATR Disciplines. | 6 |
| 5. BIDDABILITY, CONSTRUCTABILITY, OPERABILITY, ENVIRONMENTAL, AND SUSTAINABILITY REVIEW | 8 |
| 6. INDEPENDENT EXTERNAL PEER REVIEW | 9 |
| a. General..... | 9 |
| b. Type I Independent External Peer Review Determination..... | 9 |
| c. Type II Independent External Peer Review Determination (Section 2035)..... | 9 |
| 7. POLICY AND LEGAL COMPLIANCE | 10 |
| 8. MODEL CERTIFICATION AND APPROVAL | 11 |
| 9. PROJECT DELIVERY TEAM DISCIPLINES | 12 |
| 10. BUDGET AND SCHEDULE | 13 |
| a. Project Milestones. | 13 |
| b. ATR Cost. | 13 |

ATTACHMENT A - Approved Review Plan Revisions

ATTACHMENT B - Partial List of Acronyms and Abbreviations

ATTACHMENT C - ATR Report Outline and Completion of Agency Technical Review Form

1. PURPOSE AND REQUIREMENTS

a. Purpose

This Review Plan (RP) for the Supplemental Contract C - Bal Harbour segment of the Miami-Dade County, Florida, Beach Erosion Control and Hurricane Protection Project (BEC&HP), will help ensure a quality-engineering project is developed by the U.S. Army Corps of Engineers (USACE) in accordance with EC 1165-2-217, "Review Policy for Civil Works." As part of the Project Management Plan (PMP), this RP establishes an accountable, comprehensive, life-cycle review strategy for Civil Works products and lays out a value added process and describes the scope of review for the current phase of work. The EC outlines five general levels of review: District Quality Control/Quality Assurance (DQC), Agency Technical Review (ATR), Biddability, Constructability, Operability, Environmental, and Sustainability (BCOES) Review, Independent External Peer Review (IEPR), and Policy and Legal Compliance Review. This RP will be provided to the Project Delivery Team (PDT), and the DQC, ATR, and BCOES Teams. The technical review efforts addressed in this RP, DQC and ATR, are to augment and complement the policy review processes. The District Chief of Engineering has assessed that the life safety risk of this project is not significant; therefore, a Type II IEPR/Safety Assurance Review (SAR) will not be required, see Paragraph 6. Any levels of review not performed in accordance with EC 1165-2-217 will require documentation in the RP of the risk-informed decision not to undertake that level of review.

b. References

- (1). EC 1165-2-217, Review Policy for Civil Works, 20 February 2018
- (2). ER 1110-1-12, Engineering and Design Quality Management, 31 March 2011
- (3). ER 415-1-11, Biddability, Constructability, Operability, Environmental, and Sustainability (BCOES) Review, 1 January 2013
- (4). 02611 – SAJ Quality Control of In-House Products: Civil Works PED, 4 December 2017
- (5). 02612 – SAJ Quality Assurance Outsourced (AE) Engineering Products: Civil Works PED
- (6). 02710 – SAJ Preparation and Submittal of Civil Works Review Plans
- (7). Project Management Plan for the Rio Puerto Nuevo Project

c. Requirements

This RP was developed in accordance with EC 1165-2-217, 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 USACE decision, implementation, and operations and maintenance documents and other work products.

d. Review Plan Approval and Updates

The South Atlantic Division (SAD) Commander is responsible for approving this RP. The Commander's approval reflects vertical team input as to the appropriate scope and level of review. Like the PMP, the RP is a living document and may change as the project progresses. The Jacksonville District (SAJ) is responsible for keeping the RP up to date. Minor changes to the RP since the last SAD Commander's approval will be documented in Attachment A. Significant changes to the RP (such as changes to the scope and/or level of review) should be re-approved by the SAD Commander following the process used for initially approving the plan. The latest version of the RP, along with the Commander's approval memorandum, will be posted on the SAJ's webpage. The latest RP will be provided to SAD.

e. Review Management Organization

SAD is designated as the Review Management Organization (RMO). The RMO, in cooperation with the vertical team, will approve the ATR team members. SAJ will assist SAD with management of the ATR and development of the charge to reviewers.

2. PROJECT INFORMATION

a. Project Location

Miami-Dade County is located along the southeast coast of Florida, and contains the city of Miami. Broward County (Ft Lauderdale) lies to the north, and Monroe County (Florida Keys) lies to the south of Miami-Dade County. The Miami-Dade County shoreline extends along two barrier island segments and three smaller islands, each of which is separated from the mainland and the city of Miami by Biscayne Bay. The barrier islands vary in width from about 0.2 to 1.5 miles, with an average width of about 0.5 miles. Elevations along the entire coastal region (and much of the mainland) are low, generally less than 10 feet. Along the coastal region, elevations are generally the highest along the coastline, sloping gradually downward toward the bay.

Bal Harbour is located on the southernmost barrier island in Miami-Dade County, and is bounded by Government Cut to the south and Bakers Haulover Inlet to the north. This barrier island contains the communities of (proceeding from north to south) Bal Harbour, Surfside, and Miami Beach. The Village of Bal Harbour extends along 0.85 mile of the Atlantic shorefront between FDEP Range monuments R-27 to R-31.5. The shoreline along the Village of Bal Harbour is fully developed, primarily with oceanfront hotels and condominiums.

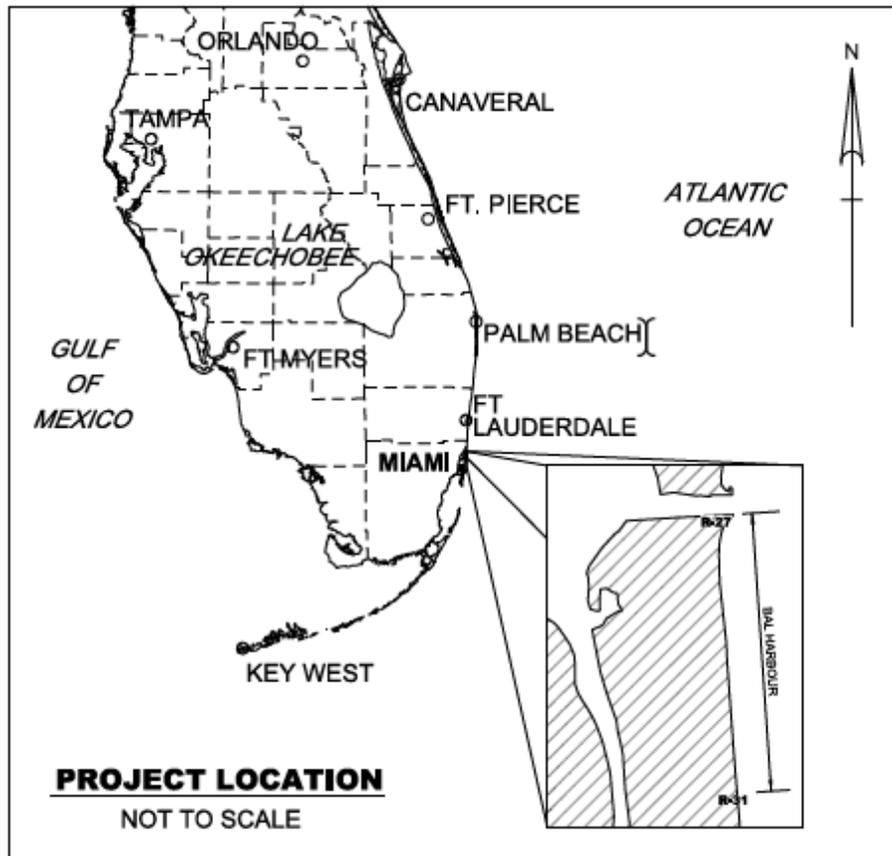


Figure 1: Project Map

b. Project Authorization

The Beach Erosion Control and Hurricane Protection Project (BEC & HP) for Dade County, Florida, was authorized by the Flood Control Act of 1968. In addition, Section 69 of the 1974 Water Resources Development Act (Public Law 93-251) included the initial construction by non-Federal interests of the 0.85-mile segment along Bal Harbour Village, immediately south of Bakers Haulover Inlet. The authorized project, as described in House Document 335/90/2 (reference 1a), provided for the construction of a protective and recreational beach and a protective dune for 9.3 miles of shoreline between Government Cut and Bakers Haulover Inlet (encompassing Miami Beach, Surfside, and Bal Harbour) and for the construction of a protective and recreational beach along the 1.4 miles of shoreline at Haulover Beach Park.

The Beach Erosion Control and Hurricane Protection Project for Dade County, Florida, North of Haulover Beach Park, was authorized by the Supplemental Appropriations Act of 1985 and the Water Resources Development Act (Public Law 99-662) of 1986. This authorization provides for modification of the authorized 1968 Beach Erosion Control and Hurricane Protection Project for Dade County, Florida, to provide for the following:

- a) The construction of a protective beach along a reach of shore extending 2.4 miles through Sunny Isles, and for periodic nourishment of this area.
- b) The extension of the period of Federal participation in the cost of nourishing the existing Dade County Beach Erosion Control and Hurricane Project from 10 years to the 50-year period of economic analysis for the project.

c. Project Description

This project will nourish eroded shoreline along the town of Bal Harbour. The project beach has a maximum berm elevation of +6.6 feet, NAVD88, and a minimum berm elevation no less than +6.1 feet, NAVD88. The project is located along 0.85 miles of Atlantic Ocean coastline between FDEP range monuments R-27 to R-31.5. The berm crest is based off of the Erosion Control Line (ECL) and is offset 240 feet perpendicular from the ECL with a foreshore slope of 1 Vertical on 11 Horizontal to tie into existing grade. Renourishment of this project will require approximately 260,000 cubic yards of in-place fill sand. The sand source for the project will be from Baker's Haulover Inlet, Baker's Haulover flood shoal in the IWW, as well as truck haul as needed to complete the template.

d. Public Participation

The SAJ's Corporate Communications Office continually keeps the public informed on SAJ projects and activities. There are no controversial concerns, planned activities, public participation meetings, or workshops that could generate issues needing provision to review teams. The project RP will be posted on the SAJ's webpage. Any comments or questions regarding the RP will be addressed by SAJ.

e. In-Kind-Contributions by Project Sponsor

There are no in-kind sponsor contributions related to the P&S and DDR that will affect this RP or related reviews.

f. Civil Works Cost Engineering Mandatory Center of Expertise Review and Certification

The cost related documents associated with this contract do not require external peer review or certification. Therefore, no additional review requirements will be executed by the Cost

Engineering Mandatory Center of Expertise (MCX) for the implementation documents addressed by this RP.

3. DISTRICT QUALITY CONTROL

a. Requirements

All implementation documents (including supporting data, analyses, environmental compliance documents, etc.) shall undergo a DQC. A DQC is an internal review process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the PMP. DQC will be performed on P&S and DDR in accordance with SAJ's Engineering Division Quality Management System (EN QMS). The EN QMS 02611 defines DQC as the sum of two reviews, Discipline Quality Check and Review (DQCR) and Product Quality Control Review (PQCR).

b. Documentation

DQCRs occur during the design development process and are carried out as a routine management practice by each discipline. Checklists are utilized by each discipline to facilitate the review and to document the DQCR review comments. Certification of the DQCR is signed by the Branch Chief certifying that all design analyses and products have been completed in accordance with the EN QMS process prior to release from the Branch.

The PQCR shall ensure consistency and effective coordination across all disciplines and shall assure the overall coherence and integrity of the products. Review comments and responses for this review will be documented in DrCheckssm. The PQCR shall be QC certified by the Engineering Technical Lead (ETL), all applicable Section and Branch Chiefs, and the Division Chief. This PQCR certification signifies that all DQCR Certifications are complete, as well as the PQCR.

4. AGENCY TECHNICAL REVIEW

a. Risk Informed Decision on Appropriate Level of Review

PED phase implementation documents are being prepared for the project. Therefore, an ATR of the P&S and DDR documents will be required.

b. ATR Scope.

ATR is undertaken to "ensure the quality and credibility of the government's scientific information" in accordance with EC 1165-2-217 and ER 1110-1-12.

ATR will be conducted by individuals and organizations that are external to SAJ. The ATR Team Leader will be a USACE employee outside SAD. 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 the ATR, the ATR Team Leader will prepare an ATR Review Report that summarizes the review. An outline for an ATR Review Report is in Attachment C. The report will include at a minimum the Charge to Reviewers, ATR Certification Form from EC 1165-2-217, and the DrCheckssm printout of the comments.

c. ATR Disciplines.

As stipulated ER 1110-1-12, ATR members will be sought from the following sources: regional technical specialists (RTS); subject matter experts (SME) certified in CERCAP; 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.

ATR Team Leader. The ATR Team Leader shall have experience with shore protection projects and have performed ATR Team Leader duties in the past. ATR Team Leader may also serve as a co-duty to one of the review disciplines.

Geotechnical Engineering and Engineering Geology. The team member shall be a registered professional and should have a minimum of 10 years of experience. Experience shall encompass geologic and geotechnical analyses that are used to support the development of Plans and Specifications for shore protection projects.

Civil/Coastal Engineering. The team member shall be a registered professional engineer and have 5 or more years of experience with beach nourishment projects and/or civil/site work. Related project construction experience is desired.

Environmental Engineering. The team member shall be a registered professional engineer with 5 years of experience in dredging and placement of tidally influenced and river dredging work projects. Experience should include dredging and disposal operations, embankments, channels, revetments, and navigation project features. 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.

Hydraulic Engineering. The team member should be a registered professional engineer with 5 years of experience in tidally influenced and river dredging work projects. Experience should include dredging and disposal operations, embankments, channels, revetments, and navigation project features.

5. 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 review requirements must be emphasized throughout the planning and design processes for all programs and projects, including during planning and design. 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. Requirements and further details are stipulated in ER 1110-1-12, ER 415-1-11, and 08550-SAJ, BCOES Reviews.

6. INDEPENDENT EXTERNAL PEER REVIEW

a. General.

EC 1165-2-217 provides guidance for the implementation of IEPR according to 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 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 (Section 2035).

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 the applicability statements for this Review Plan are as follows:

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

Failure of the project would not pose a threat to human life. The project consists of the placement of sand along eroded beaches.

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

This project does not involve the use of innovative materials or techniques.

- (3) The project design lacks redundancy.

The U.S. Army Corps of Engineers, Jacksonville District, has successfully designed dozens of projects of similar scope throughout the coast of Florida, including the Bal Harbour Shore Protection Project located in Miami- Dade County.

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

This project's construction sequence and schedule have been used successfully by the Corps of Engineers on this and other similar works. Construction schedules do not have unique sequencing and activities are not reduced or overlapped.

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.

7. POLICY AND LEGAL COMPLIANCE

The SAJ 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. Once approved, SAJ will post the approved RP on the SAJ web site for viewing by the public.

8. MODEL CERTIFICATION AND APPROVAL

The project does not use any engineering models that have not been approved for use by USACE.

9. PROJECT DELIVERY TEAM DISCIPLINES

| Discipline/Expertise |
|-----------------------------|
| Project Manager |
| Project ETL |
| Geotechnical Engineering |
| Geology |
| Civil/Coastal Engineering |
| Hydraulic Engineering |
| Environmental Engineering |
| Geomatics & Survey |

Table 1: PDT Disciplines

10. BUDGET AND SCHEDULE

a. Project Milestones.

| Task | Date |
|---------------------|---------------------|
| DQCR | 10/21/19 – 10/30/19 |
| PQCR/DQC* | 10/30/19 – 12/3/19 |
| ATR Review | 12/3/19 – 1/17/19 |
| ATR Certification | 1/17/20 |
| BCOES Review | 12/4/19 – 2/14/20 |
| BCOES Certification | 2/14/20 |

Table 2: Project Schedule Milestones

b. ATR Cost.

Funds will be budgeted to execute ATR and schedule as outlined above. It is envisioned that each reviewer will be afforded 24 hours review plus 8 hours for coordination. The estimated cost range is \$30,000 - \$35,000.

11. POINTS OF CONTACT

| Title | Organization | Phone |
|-----------------|--------------|------------|
| Quality Manager | CESAD-RBT | [REDACTED] |
| Review Manager | CESAJ-EN-Q | [REDACTED] |

Table 3: Review Plan Point of Contacts

ATTACHMENT A: APPROVED REVIEW PLAN REVISIONS

| Revision Date | Description of Change | Page / Paragraph Number |
|----------------------|------------------------------|--------------------------------|
| | | |
| | | |
| | | |
| | | |
| | | |

Table 4: Review Plan Revisions

ATTACHMENT B: PARTIAL LIST OF ACRONYMS AND ABBREVIATIONS

| <u>Acronyms</u> | <u>Defined</u> |
|-----------------|---|
| AFB | Alternatives Formulation Briefing |
| ATR | Agency Technical Review |
| BCOES | Biddability, Constructability, Operability, Environmental, and Sustainability Review |
| BFWC | Big Fishweir Creek |
| CAP | Continuing Authorities Program |
| CERCAP | Corps of Engineers Reviewer Certification and Access Program |
| CY | Cubic Yards |
| DDR | Design Documentation Report |
| DQC | District Quality Control |
| DQCR | Discipline Quality Control Review |
| EA | Environmental Assessment |
| EC | Engineering Circular |
| ER | Engineering Regulation |
| ERDC-CERL | Engineer Research and Development Center – Construction Engineering Research Laboratory |
| ESA | Endangered Species Act |
| ETL | Engineering Technical Lead |
| EV | Emergent Vegetation |
| FDEP | Florida Department of Environmental Protection |
| FONSI | Findings of No Significant Impacts |
| FSCA | Feasibility and Cost Sharing Agreement |
| FY | Fiscal Year |
| GRR | General Reevaluation Report |
| IEPR | Independent External Peer Review |
| LPP | Locally Preferred Plan |
| MCX | Mandatory Center of Expertise |
| MLLW | Mean Low Low Water |
| MSC | Major Subordinate Command |
| NAS | National Academy of Sciences |
| NEPA | National Environmental Policy Act |
| ODMDS | Ocean Dredged Material Disposal Site |
| OMB | Office of Management and Budget |
| OMRR&R | Operation, Maintenance, Repair, Replacement and Rehabilitation |
| P&S | Plans and Specifications |
| PED | Preconstruction Engineering and Design |
| PDT | Project Delivery Team |

| <u>Acronyms</u> | <u>Defined</u> |
|-----------------|---|
| PM | Project Manager |
| PMP | Project Management Plan |
| PPA | Project Partnering Agreement |
| PQCR | Product Quality Control Review |
| QA | Quality Assurance |
| QCP | Quality Control Plan |
| QMP | Quality Management Plan |
| QMS | Quality Management System |
| RMC | Risk Management Center |
| RMO | Review Management Organization |
| RP | Review Plan |
| RTS | Regional Technical Specialist |
| SAD | South Atlantic Division Office |
| SAJ | South Atlantic Jacksonville District Office |
| SAR | Safety Assurance Review (also referred as Type II IEPR) |
| SAV | Submerged Aquatic Vegetation |
| SME | Subject Matter Expert |
| USACE | U.S. Army Corps of Engineers |
| WRDA | Water Resources and Development Act |

Table 5: Abbreviations

Attachment C

**Bal Harbour
Beach Erosion Control & Hurricane Protection Project**

Miami-Dade County, Florida

Review of Plans and Specifications (P&S) and the Design Documentation Report (DDR)

ATR REPORT OUTLINE:

- 1. Introduction:**
- 2. Project Description:**
- 3. ATR Team Members:**
 - ATR Team Leader.**
 - Geotechnical Engineering and Engineering Geology.**
 - Civil Engineering.**
 - Environmental Engineering.**
 - Hydraulic Engineering.**
- 4. ATR Objective:**
- 5. Documents Reviewed:**
- 6. Findings and Conclusions:**
- 7. Unresolved Issues:**

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the Preconstruction, Engineering and Design Phase Implementation for Bal Harbour, Beach Erosion Control and Hurricane Protection Project, Miami-Dade County, Florida, including the design documents, plans and specifications, and DDR. The ATR was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-217 and ER 1110-1-12. During the ATR, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of: assumptions, methods, procedures, and material used in analyses, alternatives evaluated, the appropriateness of data used and level obtained, and reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing US Army Corps of Engineers policy. The ATR also assessed the District Quality Control (DQC) documentation and made the determination that the DQC activities employed appear to be appropriate and effective. All comments resulting from the ATR have been resolved and the comments have been closed in DrCheckssm.

NAME
ATR Team Leader

Date

Engineering Technical Lead
CESAJ-EN-DW

Date

Review Management Office Representative
CESAD-RBT

Date

CERTIFICATION OF AGENCY TECHNICAL REVIEW

Significant concerns and the explanation of the resolution are as follows: [Describe the major technical concerns and their resolution.](#)

As noted above, all concerns resulting from the ATR of the project have been fully resolved.

Chief, Engineering Division
SAJ-EN

Date