



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

15 JUN 2016

CESAD-RBT

MEMORANDUM FOR COMMANDER, JACKSONVILLE DISTRICT

SUBJECT: Approval of Review Plan for Preconstruction, Engineering and Design Phase Implementation Documents for Contract 8A of the C-111 Project Modifications to the Central and Southern Florida Project, Miami-Dade County, Florida

1. References:

a. Memorandum, CESAJ-EN-Q, 12 May 2016, subject: Approval of Review Plan for Preconstruction, Engineering and Design Phase Implementation Documents for Contract 8A of the C-111 Project Modifications to the Central and Southern Florida Project, Miami-Dade County, Florida (Encl).

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

2. The enclosed subject Review Plan (RP) submitted by the Jacksonville District via reference 1.a has been reviewed by this office and is hereby approved in accordance with reference 1.b above.

3. We concur with the determination of the District Chief of Engineering and conclusion in the RP that a Type II Independent External Peer Review (IEPR) is not required on the Design Documentation Report and Plans and Specification for the internal flow way berms on this ecosystem restoration project. The primary basis for our concurrence is that the failure or loss of the features associated with this project effort will not pose a significant threat to human life.

4. The District should take steps to post the RP 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 RP, such as scope or level of review changes, should they become necessary, will require new written approval from this office.

CESAD-RBT

SUBJECT: Approval of Review Plan for Preconstruction, Engineering and Design
Phase Implementation Documents for Contract 8A of the C-111 Project Modifications to
the Central and Southern Florida Project, Miami-Dade County, Florida

5. The SAD point of contact is

[REDACTED]

Encl

[REDACTED]

Brigadier General, USA
Commanding

CF:

[REDACTED]



REPLY TO
ATTENTION OF

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

CESAJ-EN-Q

12 May 2016

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

SUBJECT: Approval of Review Plan for Preconstruction, Engineering, and Design Phase Implementation Documents for Contract 8A of the C-111 Project Modifications to the Central and Southern Florida Project, Miami-Dade County, Florida

1. References.

- a. EC 1165-2-214, Civil Works Review, 15 Dec 12
- b. WRDA 1996, PL 104-303, 12 Oct 96 (Project Authorization)

2. I hereby request approval of the enclosed Review Plan and concurrence with the conclusion that a Type II Independent External Peer Review (IEPR) of the subject project is not required. The recommendation to exclude Type II IEPR is based on the EC 1165-2-214 Risk Informed Decision Process as presented in the Review Plan. The Review Plan defines the scope and level of review activities for the Engineering Documentation Report (EDR), provides Agency Technical Review, complies with applicable policy, 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


Chief, Engineering Division

PROJECT REVIEW PLAN

For

Preconstruction, Engineering and Design Phase Implementation Documents

For

C-111 South Dade Project Modifications to the C&SF Project Contract 8A Miami-Dade County, Florida

Project P2 number: 114796

Jacksonville District

May 2016



**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.

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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 defines the scope and level of review activities for the implementation documents for Contract 8A of the C-111 South Dade Project Modifications to the Central and Southern Florida (C&SF) Project, Miami-Dade County, Florida. As discussed below, the review activities consist of a District Quality Control (DQC) effort, an Agency Technical Review (ATR), and a Biddability, Constructability, Operability, Environmental, and Sustainability (BCOES) Review. Also as discussed below, an Independent External Peer Review (IEPR) is not recommended. The project is in the Pre-Construction, Engineering and Design (PED) phase. The implementation documents to be reviewed are Plans and Specifications (P&S) and a Design Documentation Report (DDR). Upon approval, this review plan will be included into the Project Management Plan for this project 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). EC 1165-2-214, "Civil Works Review", 15 December 2012
- (4). SAJ EN QMS 02611, "SAJ Quality Control of In-House Products: Civil Works PED", 21 November 2011
- (5). Enterprise Standard (ES) 08025, "Government Construction Quality Assurance Plan and Project/Contract Supplements"
- (6). Enterprise Standard (ES) 08026, "Three Phase Quality Control System"
- (7). Project Management Plan, Canal 111 (C-111) South Dade, FL, P2 Number: 114796
- (8). C&SF Project Final Integrated General Reevaluation Report and Environmental Impact Statement for Canal 111 (C-111) South Dade County, Florida, May 1994
- (9). Environmental Assessment, Canal 111 (C-111) Basin, South Dade County, Florida, May 2012
- (10). Finding of No Significant Impact, Expansion of the C-111 Detention Area and Associated Features Environmental Assessment, South Dade County, Florida, 06 June 2012
- (11). Engineering Documentation Report, C-111 South Dade Contract 8, July 2015

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 five levels of review: District Quality Control (DQC), Agency Technical Review (ATR), and an Independent External Peer Review (IEPR), Policy and Legal Review and a Biddability, Constructability, Operability, Environmental, and Sustainability (BCOES) Review.

d. Review Plan Approval and Updates

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

e. Review Management Organization

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

2. PROJECT INFORMATION

a. Project Location and Background

The project is located in southern Miami-Dade County, which is in southeastern Florida (Figure 1). It is situated within the C-111 basin, consisting primarily of abandoned agricultural lands in the Homestead/Florida City area. The project adjoins Everglades National Park (ENP) to the west and discharges water to the eastern panhandle of ENP, Florida Bay, Manatee Bay, and Barnes Sound.

The purpose of the C-111 South Dade Project is restoration of the ecosystem in Taylor Slough and the eastern panhandle of ENP that were affected by the construction of the flood control project in the C-111 Basin, while preserving the pre-project level of flood damage reduction for the agricultural activities in the C-111 basin.

In 1994, the C&SF Project Final Integrated General Reevaluation Report and Environmental Impact Statement for Canal-111 (C-111) South Dade County, Florida (1994 GRR/EIS) was completed as a result of the continued project design and reformulation efforts to reconcile the desires of the non-Federal sponsor, stakeholders, and the legislative directive from the Everglades National Park Protection and Expansion Act of 1989 to "take all measures which are feasible and consistent with the purposes of the (C-111) South Dade project to protect natural values associated with the ENP".

In May 2012, an Environmental Assessment (EA) was completed which updated the National Environmental Policy Act (NEPA) document of the 1994 GRR/EIS. This updated EA included the evaluation of design refinements to the original 1994 GRR/EIS, including the expansion of the existing S-332B Northern Detention Area (NDA) and associated features. Based on the information presented in the EA, a Finding of No Significant Impact (FONSI) for the Expansion of the C-111 Detention Area and Associated Features was signed in June 2012. An EDR was completed in July 2015 to document the final design of the expansion of the existing S-332B NDA and associated features, including structural refinements made to the design since the Recommended Plan from the 1994 GRR/EIS. The EDR documented changes in design and costs from the authorizing 1994 C-111 GRR/EIS and documented changes in design from the

2012 EA decision document, which addressed formulation and NEPA analysis of the northern expansion of the C-111 Detention Area. Construction of the NDA and associated features will be completed under C-111 South Dade Construction Contract 8, which was awarded in October 2015.

The project features in the plans, specifications, and DDR for the Contract 8A C-111 South Dade Project reflect the design refinements as documented in the 2016 Modifications to the North and South Detention Areas EA, with scheduled FONSI signature in May 2016.

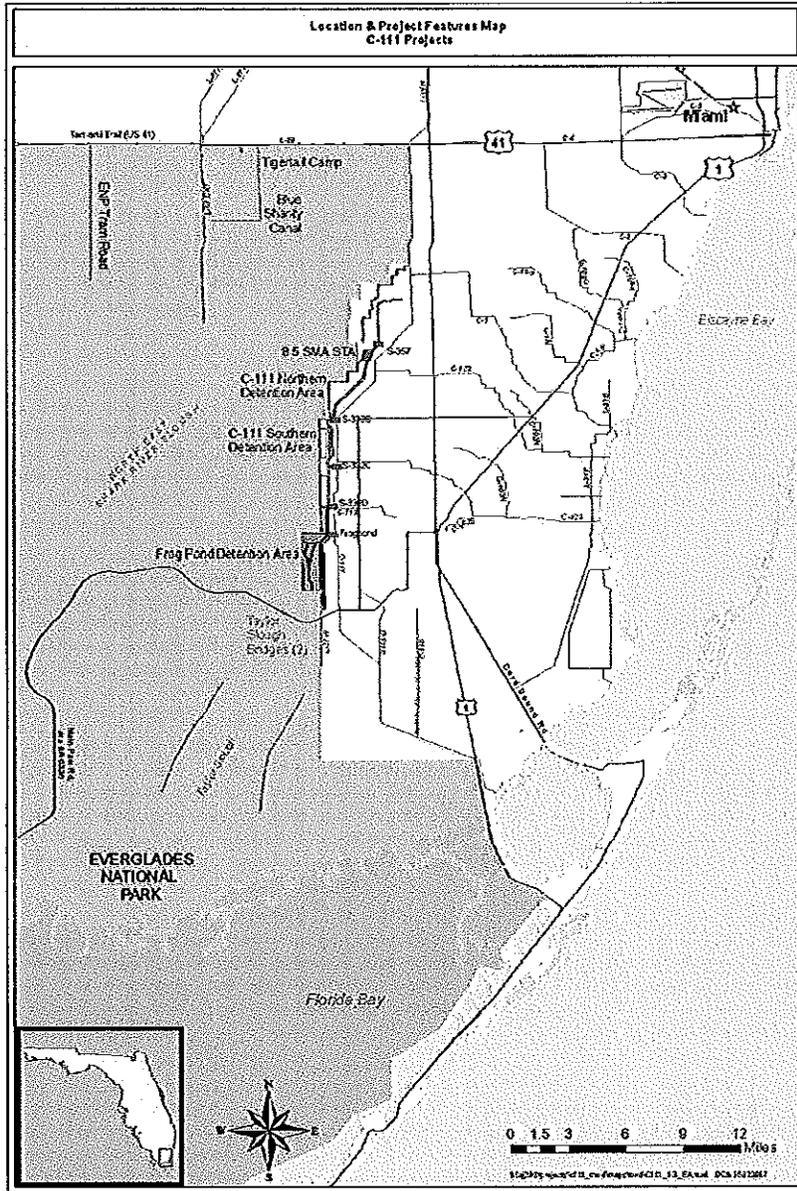


Figure 1: Project Location

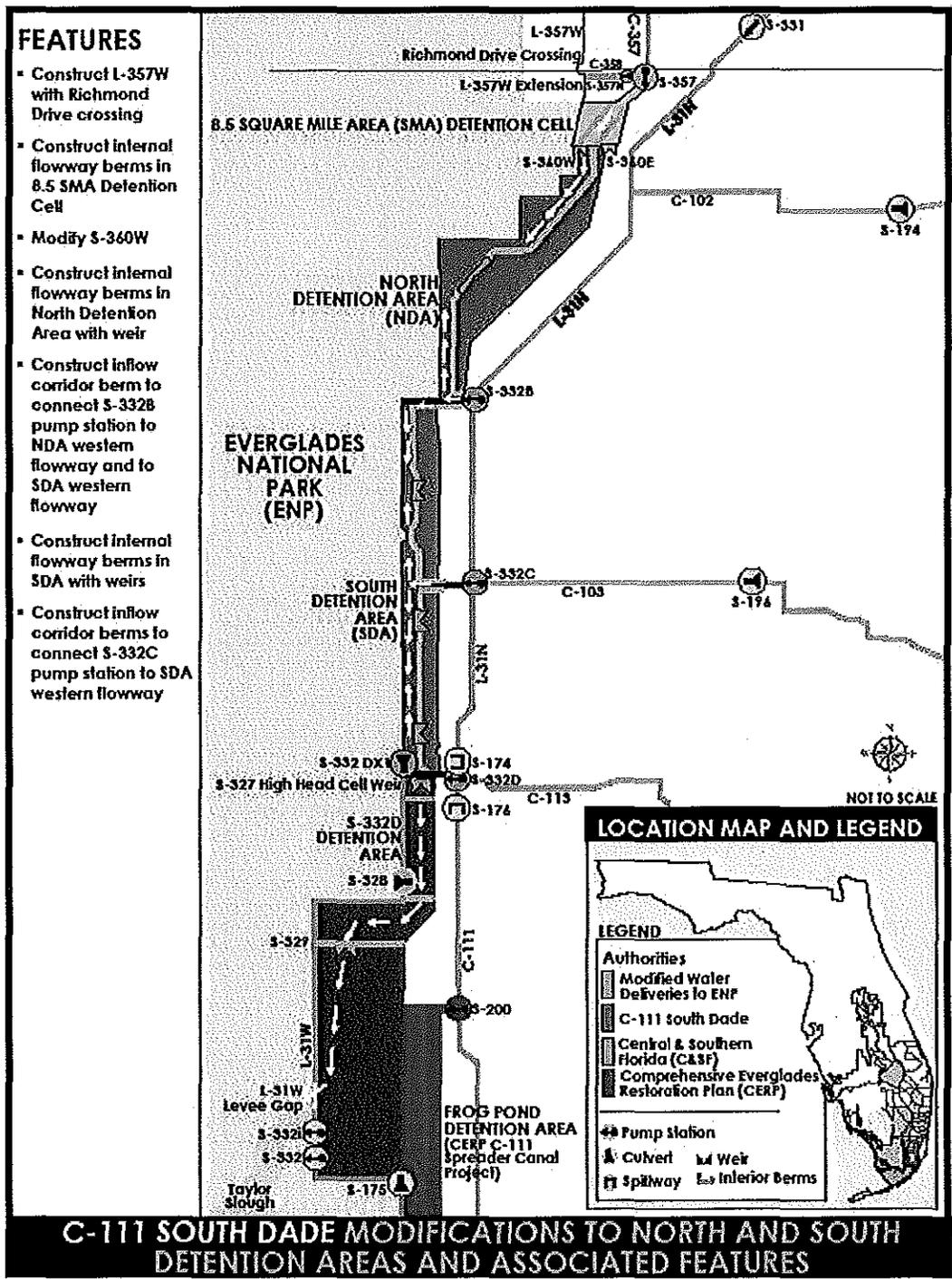
The C-111 South Dade project has been constructed in phases using several construction contracts. The majority of the contract features have already been constructed shown in Table 1.

Table 1: C-111 South Dade Contract 1-8 Project Features

Contract #	Features	Constructed	Transferred
Contract #1	S-332D	Construction Physically Complete: 1996	Feature Transferred to SFWMD for O&M: 1996
Contract #2	C-111 Spoil Mound Removal	Construction Physically Complete: 1996	Feature Transferred to SFWMD for O&M: 1996
Contract #3	Taylor Slough Bridge	Construction Physically Complete: 1999	Feature Transferred to ENP: 1999
Contract #4	ISOP S-332B Pump Station S-332B Western Detention Area & Weir Corrugated Discharge Pipes	Construction Physically Complete: 2000	Feature Transferred to SFWMD for O&M: 2010
Contract #4a	S-332D/Engine Replacement	Construction Physically Complete: 2001	N/A
Contract #5	IOP Emergency S-332C Pump Station S-332C Detention Area S-332C Corrugated Discharge Pipes S-332B Partial NDA (215 acres) S-332B Split Corrugated Discharge Pipes Partial Connector between S-332B and S-332C Detention Areas Tieback Levee from L31W to West Detention Area S-332D High Head Cell & Weir	Construction Physically Complete: 2003	Feature Transferred to SFWMD for O&M: 2010
Contract #6	S-331 Command & Control Facility Design/Build	Construction Physically Complete: 2009	Feature Transferred to SFWMD for O&M: 2010
Contract #7	S-332D Tieback Levee South (SDA East Levee) L-31W Tieback Levee South (SDA West Levee) Remove S-332B Southern Levee Remove S-332C EW Detention Area Levees Complete North/South Connector Levees of SDA S-332DX1	Construction Physically Complete: 2009	Feature Transferred to SFWMD for O&M: 2010
Contract #8	North Detention Area	Notice to Proceed (NTP) issued in December 2015	N/A

The features being addressed in the plans, specifications, and DDR covered by this review plan are shown in Figure 2. Features include:

- Construction of internal flowway berms within the 8.5 SMA detention cell and modification to the S-360W weir to allow water to flow from the 8.5 SMA detention cell to North Detention Area (NDA).
- Construction of the NDA and South Detention Area (SDA) internal flow way berms including connection to the S332B/C pump stations
- Construction of the Richmond Drive crossing of the L-357W levee



FEATURES

- Construct L-357W with Richmond Drive crossing
- Construct internal flowway berms in 8.5 SMA Detention Cell
- Modify S-360W
- Construct internal flowway berms in North Detention Area with weir
- Construct inflow corridor berm to connect S-332B pump station to NDA western flowway and to SDA western flowway
- Construct internal flowway berms in SDA with weirs
- Construct inflow corridor berms to connect S-332C pump station to SDA western flowway

Figure 2: Project Features

b. Project Authorization

The ENP-South Dade Conveyance Canals Project was authorized by PL 90-483, Flood Control Act of 1968. The Act authorized modifications to the existing Central and Southern Flood Control Project as authorized by the 1948 Flood Control Act and 1962 Flood Control Act in the interest of improved conservation and distribution of available water and extended flood protection. The applicable portion of the 1968 Act is:

"The project for Central and Southern Florida, authorized by the Flood control Act of June 30, 1948, is further modified in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 101, Ninetieth Congress, and in accordance with House Document Numbered 369, Ninetieth Congress."

The C-111 South Dade Project modifications to the C&SF Project were authorized by Section 316 of the Water Resources Development Act (WRDA) of 1996 (Public Law 843, 104th Congress):

SEC. 316. CENTRAL AND SOUTHERN FLORIDA, CANAL 111.

(a) IN GENERAL. - The project for Central and Southern Florida, authorized by section 203 of the Flood Control Act of 1948 (62 Stat. 1176) and modified by section 203 of the Flood Control Act of 1968 (82 Stat. 740-741), is modified to authorize the Secretary to implement the recommended plan of improvement contained in a report entitled "Central and Southern Florida Project, Final Integrated General Reevaluation Report and Environmental Impact Statement, Canal 111 (C-111), South Dade County, Florida", dated May 1994, including acquisition by non-Federal interests of such portions of the Frog Pond and Rocky Glades area as are needed for the project.

(b) COST SHARING. -

(1) FEDERAL SHARE. - The Federal share of the cost of implementing the plan of improvement shall be 50 percent.

(2) SECRETARY OF INTERIOR RESPONSIBILITY. - The Secretary of the Interior shall pay 25 percent of the cost of acquiring such portions of the Frog Pond and Rocky Glades areas as are needed for the project. The amount paid by the Secretary of the Interior shall be included as part of the Federal share of the cost of implementing the plan.

(3) OPERATION AND MAINTENANCE. - The non-Federal share of operation and maintenance costs of the improvements undertaken pursuant to this section shall be 100 percent; except that the Federal Government shall reimburse the non-Federal interest with respect to the project 60 percent of the costs of operating and maintaining pump stations that pump water into Taylor Slough in the Everglades National Park.

c. Public Participation

The Jacksonville District Corporate Communications Office continually keeps the affected public informed on Jacksonville District projects and activities. There are no planned activities, public participation meetings or workshops that could generate issues needing provision to

review teams. The approved review plan will be posted on the Jacksonville District Internet. Any comments or questions regarding the review plan will be addressed by the Jacksonville District.

d. In-Kind-Contributions by Project Sponsor

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

e. Civil Works Cost Engineering Mandatory Center of Expertise Certification

The cost related documents associated with the P&S and DDR and the associated contract do not require external peer review or certification by the Cost Engineering Mandatory Center of Expertise (MCX).

3. DISTRICT QUALITY CONTROL

District Quality Control and Quality Assurance activities for DDRs and P&S are stipulated in ER 1110-1-12, Engineering & Design Quality Management and SAJ EN QMS 02611. The subject project DDR and P&S will be prepared by the Jacksonville District using ER 1110-1-12 procedures and will undergo District Quality Control. SAJ EN QMS 02611 defines DQC as the sum of two reviews, Discipline Quality Control Review (DQCR) and Product Quality Control Review (PQCR). Product Quality Control Review Certification is the DQC Certification and will precede ATR.

4. AGENCY TECHNICAL REVIEW

a. Risk Informed Decision on Appropriate Level of Review

PED phase implementation documents for Contract 8A are being prepared, and an ATR of the P&S and DDR documents will be undertaken.

b. Agency Technical Review Scope.

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. Per EC 1165-2-214, ATR is mandatory for all implementation documents. The ATR of the P&S will be conducted by individuals and organizations that are external to the Jacksonville District. The ATR Team Leader will be 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 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 1165-2-214, 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 Members/Disciplines	Expertise Required
ATR Lead	The ATR lead should be a senior professional with extensive experience in conducting ATRs. The lead should also have the necessary skills and experience to lead a virtual team through the ATR process. The ATR lead may also serve as the reviewer for a specific discipline.
Civil Engineering	The team member should be a registered professional engineer with a minimum of 5 years of experience in civil/site work. Related construction experience is also desired.
Geotechnical Engineering	The geotechnical team member should be a registered professional engineer with a minimum of 5 years of experience that includes seepage and embankment stability analysis and design.
Hydrology and Hydraulics	The hydrology and hydraulics team member should be a registered professional engineer with a minimum of 5 years of experience that includes detention/retention areas, embankments, weirs and flow way modeling and design.

d. Documentation of ATR.

DrChecks review software will be used to document all ATR comments, responses and associated resolutions accomplished throughout the review process. Comments should be limited to those that are required to ensure adequacy of the product. The four key parts of a quality review comment will normally include:

- (1) The review concern – identify the product’s information deficiency or incorrect application of policy, guidance, or procedures;
- (2) The basis for the concern – cite the appropriate law, policy, guidance, or procedure that has not be properly followed;
- (3) The significance of the concern – indicate the importance of the concern with regard to its potential impact on the plan selection, recommended plan components, efficiency (cost), effectiveness (function/outputs), implementation responsibilities, safety, Federal interest, or public acceptability; and
- (4) The probable specific action needed to resolve the concern – identify the action(s) that the reporting officers must take to resolve the concern.

In some situations, especially addressing incomplete or unclear information, ATR team members may seek clarification in order to then assess whether further specific concerns may exist. The ATR documentation in DrChecks will include the text of each ATR concern, the PDT response, a brief summary of the pertinent points in any discussion, including any vertical team coordination (the vertical team includes the district, RMO, MSC, and

HQUSACE); and the agreed upon resolution. If an ATR concern cannot be satisfactorily resolved between the ATR team and the PDT, it will be elevated to the vertical team for further resolution in accordance with the policy issue resolution process described in either ER 1110-1-12 or ER 1105-2-100, Appendix H, as appropriate. Unresolved concerns can be closed in DrChecks with a notation that the concern has been elevated to the vertical team for resolution.

At the conclusion of each ATR effort, the ATR team will prepare a Review Report summarizing the review. Review Reports will be considered an integral part of the ATR documentation and shall:

- Identify the document(s) reviewed and the purpose of the review;
- Disclose the names of the reviewers, their organizational affiliations, and include a short paragraph on both the credentials and relevant experiences of each reviewer;
- Include the charge to the reviewers;
- Describe the nature of their review and their findings and conclusions;
- Identify and summarize each unresolved issue (if any); and
- Include a verbatim copy of each reviewer's comments (either with or without specific attributions), or represent the views of the group as a whole, including any disparate and dissenting views.

ATR may be certified when all ATR concerns are either resolved or referred to the vertical team for resolution and the ATR documentation is complete. The ATR Lead will prepare a Statement of Technical Review certifying that the issues raised by the ATR team have been resolved (or elevated to the vertical team). A Statement of Technical Review should be completed, based on work reviewed to date, for the draft report, and final report. A sample Statement of Agency Technical Review is included in Attachment C.

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. Biddability, constructability, operability, environmental, and sustainability 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 SAJ EN QMS 08550.

6. 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.

b. Type I Independent External Peer Review (IEPR) 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 Review Plan.

c. Type II Independent External Peer Review (IEPR) Determination (Section 2035).

This project does not trigger WRDA 2007 Section 2035 factors for Safety Assurance Review (termed Type II IEPR in EC 1165-2-214) and 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 review plans applicability statements follow.

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

The primary purpose of this project is ecosystem restoration. However, the 1994 GRR included a planning objective to maintain the pre-existing 40% Standard Project Flood level of flood mitigation afforded by the Central and Southern Florida Project for the C-111 Basin. Thus C-111 South Dade Project contains features and operations to prevent increased flood risks in private lands east of Everglades National Park (ENP) as a result of aquatic ecosystem restoration components. Construction of the features are not expected to produce significant risks to public safety. The East Coast Protective Levee (L-31N) provides redundant protection to the east of the project area. Because this project does not involve significant threat to human life/safety assurance, this criteria is not applicable.

- (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 project features are not complex in nature and do not employ the concept of redundancy.

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

The construction schedule for this project does not have unique sequencing, and activities are not reduced or overlapped. The construction methods associated with this project have been used successfully many times by the Corps of Engineers on other similar projects.

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.

7. POLICY AND LEGAL COMPLIANCE

The Jacksonville District 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.

8. MODEL CERTIFICATION AND APPROVAL

No engineering models are being used to prepare the documents covered by this review plan.

9. PROJECT DELIVERY TEAM DISCIPLINES

PDT Disciplines
Project Manager
Planning Technical Lead (PTL)
Engineering Technical Lead (ETL)
Civil Site Design
Engineering Cost
Engineering Hydrology
Engineering Hydraulic Design
Planning Environmental
Planning Cultural Resources
Real Estate Acquisition
Office of Counsel

10. BUDGET AND SCHEDULE

a. Schedule.

Milestone	Task	Start Date	End Date
CW310	Draft P&S complete	29 October 2015	4 April 2016
	DQCR	18 March 2016	28 March 2016
	PQCR/DQC*	4 April 2016	22 April 2016
	ATR Review	25 April 2016	06 May 2016
	ATR Certification	23 May 2016	25 May 2016
	BCOES	24 May 2016	7 June 2016
CW320	BCOES Certification	30 June 2016	30 June 2016
CW400	Advertisement	14 July 2016	15 August 2016

* SAJ EN QMS 02611 defines DQC as the sum of DQCR and PQCR.

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 \$25,000 - \$35,000.

ATTACHMENT A: APPROVED REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number

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
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
EC	Engineering Circular
ER	Engineering Regulation
EA	Environmental Assessment
ERDC-CERL	Engineer Research and Development Center – Construction Engineering Research Laboratory
ESA	Endangered Species Act
ETL	Engineering Technical Lead
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
PM	Project Manager
PMP	Project Management Plan

<u>Acronyms</u>	<u>Defined</u>
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
SAJ	South Atlantic Jacksonville District Office
SAD	South Atlantic Division Office
SAR	Safety Assurance Review (also referred as Type II IEPR)
SME	Subject Matter Expert
USACE	U.S. Army Corps of Engineers
WRDA	Water Resources and Development Act

Attachment C

ATR Report Outline and COMPLETION OF AGENCY TECHNICAL REVIEW

**C-111 South Project Modifications to the C&SF Project
Contract 8A
Miami-Dade County, Florida**

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

ATR REPORT OUTLINE (Unneeded items, such as ATR Team Member Disciplines that are not identified as needed in the Review Plan, shall be deleted from the ATR Report.)

1. Introduction:
2. Project Description:
3. ATR Team Members:
ATR Team Leader
Civil Engineering
Geotechnical Engineering
Hydrology and Hydraulics
4. ATR Objective:
5. Documents Reviewed:
6. Findings and Conclusions:
7. Unresolved Issues:

Enclosures:

1. ATR Statement of Technical Review
2. ATR Comments (DrChecks)
3. Project Review Plan
4. Charge to Reviewers
5. Certification of District Quality Control Review

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the C-111 South Dade Project Modifications to the C&SF Project, Contract 8A, Miami-Dade County, Florida, including the design documents, plans and specifications and DDR. ATR was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-214 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 DrChecks.

NAME
ATR Team Leader

Date

NAME
Project Manager

Date

NAME
Review Management Office Representative

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.

NAME
Chief, Engineering Division
SAJ-EN

Date