

Prepared by:  
Memphis District  
Mississippi Valley Division



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## Osceola Harbor Extension, AR Sec. 107

### Feasibility Report with Integrated NEPA document Review Plan

September 2025

**Date of RMO Endorsement of Review Plan:**

**Date of MSC Approval of Review Plan:**

**Date of IEPR Exclusion Approval:** NA

**Has the Review Plan changed since RMO Endorsement?** NA

**Date of Last Review Plan Revision:** NA

**Date of Review Plan web posting:** NA

See Appendix 1: Review Plan Change Log

#### Signatures

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# 1 Overview

## 1.1 Purpose of Review Plan

This Review Plan (RP) defines the scope and level of review for the planning decision document developed for Osceola Harbor Extension, AR Sec. 107. The scope and level of review required is based upon a preliminary assessment of the magnitude of project risks (ER 1165-2-217, Civil Works Review Policy), as well as project model user coordination to comply with CECW-P memo (28 July 2023), *Model Coordination for Civil Works Planning*.

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 risk-informed, value-added process providing the scopes of review for the current phase of work.

## 1.2 References

- Engineer Regulation (ER) 1165-2-217, Civil Works Review Policy, 2 Sep 2024
- ER 1105-2-103: Policy for Conducting Civil Works Planning Studies, 7 Nov 2023, which supersedes ER 1105-2-100, Chapters 1,2, and 3, dated 22 Apr 2000
- Engineer Circular (EC) 1105-2-412, Assuring Quality of Planning Models, 31 March 2011
- Planning Bulletin 2013-02, Assuring Quality of Planning Models, 31 Mar 2013
- CECW-P Memorandum, Model Coordination for Civil Works Planning Studies, 28 Jul 2023
- “Model Coordination and Model User Documentation” form (request from appropriate Planning Center of Expertise (PCX))
- Enterprise Standard (ES) 081010, Software Validation for the Hydrology, Hydraulics and Coastal Community of Practice (HH&C CoP)
- ER 5-1-11, Management—U.S. Army Corps of Engineers (USACE) Business Process, 31 Jul 2018
- ER 1110-2-1150, Engineering and Design for Civil Works Projects, 31 Aug 1999
- Director's Policy Memorandum, 2018-05, Improving Efficiency and Effectiveness in USACE Civil Works Project Delivery (Planning Phase and Planning Activities), 03 May 2018
- Director of Civil Works Memorandum, Delegation of Model Certification, 11 May 2018
- Director's Policy Memorandum 2019-01, Policy and Legal Compliance Review, 09 Jan 2019
- Office of Management and Budget, Final Information Quality Bulletin for Peer Review, Federal Register Vol. 70, No. 10, 14 Jan 2004, pp 264-267
- Engineering Pamphlet (EP) 1105-2-61, Planning Feasibility and Post Authorization Study Procedures and Report Processing Requirements, 1 Jul 2023.
- Engineering Pamphlet (EP) 1105-2-58, Continuing Authorities Program, 01 March 2019.
- Director's Policy Memorandum FY2020, Continuing Authorities Program (CAP), Feasibility Process Changes, 3 September 2020.
- CECG (25-50a), Delegation of Authority – Continuing Authorities Program (CAP) Approval Level for Section 14, Section 103, Section 107, Section 204, Section 205, Section 206, Section 208 and Section 1135 Decision Documents, 27 June 2024.

## 1.3 Review Management Organization

The Review Management Organization (RMO) is the designated USACE organization overseeing quality reviews by reviewing and endorsing the RP. The Mississippi Valley Division is the RMO for this project. The RMO's roles and responsibilities are outlined in ER 1165-2-217.

#### 1.4 Designated Points of Public Contact for Review Plan Questions or Comments

- District: Project Manager, 901-691-0825
- Major Subordinate Command (MSC): DST, (601) 634-7644
- Review Management Organization (RMO): Planning Deputy, 601-634-5869

#### 1.5 Levels of Review of Planning Decision Documents

All planning products are subject to the conduct and completion of District Quality Control (DQC) and Agency Technical Review (ATR), and a smaller sub-set may be subject to Independent External Peer Review (IEPR). Both planning models and engineering models used in planning decision documents must meet requirements regarding both model users and model certification or approval for use in the planning study. Table 1 summarizes the reviews to be performed for this project. The details of each are provided in later sections of this RP.

Any required review that will not be performed for this study is documented in the appropriate section of this RP, explaining the risk-informed decision not to undertake that review.

Table 2 summarizes the anticipated deliverables/work products that are expected to be reviewed during the project development and the schedule for their delivery. Table 2 also includes the timing and sequence of the reviews (including deferred reviews) and anticipated costs. The specific expertise required for the teams and other relevant information are identified in later sections of this RP covering each facet of review.

***Table 1. Study Required Coordination and Review***

| <b>TYPE OF REVIEW</b>                      | <b><u>Included</u></b> | <b><u>LOCATION OF DISCUSSION IN RP</u></b> |
|--------------------------------------------|------------------------|--------------------------------------------|
| Model User Coordination                    | No                     | Section 3                                  |
| Model Approval/Certification Review        | No                     | Section 3                                  |
| District Quality Control (DQC)             | Yes                    | Section 4                                  |
| Agency Technical Review (ATR)              | Yes                    | Section 5                                  |
| Interim Stage Work Product ATR             | No                     | Section 5                                  |
| Policy and Legal Compliance Review (P&LCR) | Yes                    | Section 6                                  |
| Independent External Peer Review           | No                     | Section 7/ Appendix 2                      |
| Public Review                              | Yes                    | Section 8                                  |

#### 1.6 Required Review Team Expertise

Table 3 identifies the specific technical discipline and expertise required for the members of each review team. In most cases, the team members will be senior professionals in their respective fields. In general, the technical disciplines identified will be the same for the DQC and ATR teams.

Each ATR team member will be certified to conduct ATR by their community of practice. To serve as an Engineering and Construction reviewer on an ATR Team, USACE personnel must be listed in the Corps of Engineers Reviewer Certification and Access Program (CERCAP).

## 1.7 Required Disclaimer on Documents Distributed Outside the Government

For information distributed for review to non-governmental organizations, the following disclaimer will be placed on documents:

“This information is distributed solely for the purpose of pre-dissemination review under applicable information quality guidelines. It has not been formally disseminated by USACE. It does not represent and should not be construed to represent any agency determination or policy.”

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**Table 2 Schedule and Costs of Reviews Overview**

**Review Management Organization Coordination & Participation:** The RMO will participate in milestone meetings, in-progress reviews, issue resolutions, and review of this RP.

| PRODUCT TO UNDERGO REVIEW                                                                                    | Review Level             | Site Visit | Start Date  | End Date    | Estimated Cost | Complete |
|--------------------------------------------------------------------------------------------------------------|--------------------------|------------|-------------|-------------|----------------|----------|
| Feasibility Report with integrated NEPA Document                                                             | DQC                      | NO         | 11 AUG 2025 | 29 AUG 2025 | \$20,000       | No       |
| Feasibility Report with integrated NEPA Document                                                             | District Legal Review    | NO         | 2 SEP 2025  | 10 SEP 2025 | NA             | No       |
|                                                                                                              | Public                   | n/a        | 15 SEP 2025 | 15 OCT 2025 | NA             | No       |
|                                                                                                              | ATR                      | NO         | 15 SEP 2025 | 20 OCT 2025 | \$15,000       | No       |
|                                                                                                              | P&LCR                    | NO         | 15 SEP 2025 | 20 OCT 2025 | \$0            | No       |
| Feasibility Report Package<br>Formal DQC and ATR will only be performed one time consistent with CAP policy. | MSC Final Package Review | NO         | 05 NOV 2025 | 10 DEC 2025 | \$0            | No       |

The Final Report Package will include documents completed during the review process, e.g. letters from agencies, letter form sponsor, documentation of water quality permits, certified cost.

**Table 3 Review Teams – Disciplines and Expertise**

| Discipline/Role          | Expertise                                                                                                                                                                                                                                                                                  | DQC | ATR |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|
| DQC Team Lead            | Extensive experience preparing Civil Works decision documents and leading DQC. The lead may serve as a DQC reviewer for a specific discipline (planning, economics, environmental, etc.).                                                                                                  | Yes | No  |
| ATR Team Lead            | Professional with extensive experience preparing Continuing Authorities Program Feasibility Reports and conducting ATR. Skills to manage a virtual team through an ATR. The lead may serve on the ATR team for a specific discipline (such as planning, economics, or environmental work). | No  | Yes |
| Plan Formulation         | Skilled water resources planner knowledgeable in CAP and the application of SMART principle to problem solving. Certified to perform agency technical review for plan formulation.                                                                                                         | Yes | Yes |
| Economics                | Experience with applying theory, methods and tools used in the economic evaluation of CAP Section 107 Navigation (shallow draft) projects. Certified to perform agency technical review for economics                                                                                      | Yes | Yes |
| Environmental Compliance | Experience with environmental evaluation and compliance requirements, national environmental laws and statutes, applicable Executive Orders, and other planning requirements. Certified to perform agency technical review for environmental compliance.                                   | Yes | No  |
| Cultural Resources       | Experience with cultural resource survey methods, area of potential effects, National Historic Preservation Act Section 106, and state and federal laws pertaining to American Indian Tribes.                                                                                              | Yes | No  |
| Cost Engineering         | Experience using cost estimation software; working knowledge of dredging for shallow draft harbors.                                                                                                                                                                                        | Yes | Yes |
| Civil Design or Geotech  | Experience preparing appendices for planning reports. 1 ATR from one of these disciplines.                                                                                                                                                                                                 | Yes | Yes |
| Hydraulic Engineering    | Experience in large river systems and assessing dredging needs.                                                                                                                                                                                                                            | Yes | No  |

|             |                                                                                                                                            |     |    |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------|-----|----|
| Real Estate | Certified by the Real Estate CoP to perform technical review. Experience in Navigation Servitude determinations and policy for Navigation. | Yes | No |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------|-----|----|

## 2 Project Background

### 2.1 Project Name

Osceola Harbor Extension, AR Sec. 107

### 2.2 Location

Osceola, Mississippi County, Arkansas



*Figure 1 Osceola Harbor Location*

### 2.3 Study Authority

Section 107 of the River and Harbor Act of 1960, as amended.

### 2.4 Sponsor

City of Osceola, Arkansas

### 2.5 Authorized Project Purpose(s)

Navigation

### 2.6 Project Area Description

Osceola Harbor is located at the downstream end of a secondary channel that creates Lake NEARK on the right descending bank of the Mississippi River at River Mile 785. It is in Osceola, Mississippi County, Arkansas.

The Osceola Harbor channel was authorized under Section 107 of the River and Harbor Act of 1960, (Public Law 86-645). The detailed study report was submitted to the Chief of Engineers with 1st endorsement on June 26, 1970. The 1975 Water Resources Development in Arkansas Report by USACE Southwestern Division outlined the planned improvements:

The harbor at Osceola will be improved by construction of a channel 250 feet wide and 9 feet deep beginning at the downstream end of the harbor channel and extending upstream 6,500 feet to the old chute through Island No. 30, to Mile 785.4 AHP, with a 250-foot-radius turning basin at the upstream end. A 97-acre flood-free industrial park will be developed by the city of Osceola. The first phase of development will provide a levee constructed by local interests to protect the industrial area from flooding until the second stage of development will utilize dredged material to raise the elevation of the area to above the project flood flow line. Local interests will be responsible for construction of all necessary bulkheads and dikes, prior to dredging to contain the dredge material. Construction began in fiscal year 1975.

### 2.7 Problem Statement

- *Increased Barge Traffic:* The growth of the steel industry in Mississippi County, Arkansas, has significantly increased barge traffic, straining the existing harbor infrastructure.
- *Insufficient Harbor Capacity:* The current harbor is operating at full capacity, with Poinsett Rice and Grain handling approximately 500,000 tons of grain annually, leaving no room for additional traffic. A critical need exists to stage approximately 100 barges upstream of the existing grain dock, requiring roughly 15-16 acres of staging area (considering standard barge dimensions of 195ft x 35ft).
- *Limited Maneuverability:* The addition of two new steel mills downstream has increased tonnage by approximately 2.4 million tons, resulting in a critical lack of maneuverability and increased transportation costs.
- *Harbor Overcrowding:* The new Hybar rebar plant, with its planned loading and offloading facility, will add approximately 350,000 to 400,000 tons of scrap steel and 100,000 to 150,000 tons of steel annually, further exacerbating overcrowding within the harbor and adjacent main channel.
- *Impeded Industry Operations:* This overcrowding threatens to impede the working rate of local industries, potentially causing significant economic impacts to the community.
- *Logistic Inefficiencies:* The current infrastructure cannot efficiently accommodate barge movements, resulting in logistic inefficiencies, increased costs, and reduced productivity for harbor users.

## 2.8 Future With and Without Project Conditions

If no action is taken, cargo from the area that could be shipped on the river will instead be shipped on trucks and by rail. This will increase shipping costs for that cargo.

## 2.9 Project Goals and Objective

For the Osceola Harbor Extension, the study planning objective for over the 50-year period of analysis is to enhance harbor operational efficiencies. This will be achieved by improving logistics and reducing transportation costs for harbor operators, specifically by addressing the current constraint of empty barges – a situation worsened by the co-location of the turning basin and cargo transfer operations. This objective aims to quantify the economic benefits of increased efficiencies through transportation cost savings.

## 2.10 Types of Potential Measures/Alternatives Being Considered:

| Measure                                                       | Potential Benefit                                                      | Discussion                                                                                                                                                                                                                                                                                       | Decision |
|---------------------------------------------------------------|------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| Widening harbor                                               | Would create more space to maneuver barges.                            | Only lands within navigation servitude can be used; there is limited non-fast land. The right bank of the harbor has industrial infrastructure. The left bank is the edge of a Mississippi River Island. These islands are ecologically valuable. Ecological losses t would have to be mitigated | Screened |
| Lengthen the harbor 3000 feet as examined in the 1971 Report  | Would allow enough room to stage 100 barges, (approximately 17 acres). | All of the land lies within navigation servitude. The Extension will not cause any environmental impacts that require mitigation. Meets the objectives and does not violate constraints.                                                                                                         | Retained |
| Lengthen the harbor less than 3000 feet.                      | Would relieve some congestion in the harbor.                           | Would not provide enough room for 100 barges. A smaller extension wouldn't meaningfully improve operational efficiency or address the core congestion issues, even building upon the existing authorized infrastructure.                                                                         | Screened |
| Utilize Mississippi River for making tows and staging barges. | Would relieve some congestion in the harbor.                           | The harbor lies on an outside bend and there is a dike field on the opposite bank. Making                                                                                                                                                                                                        | Screened |

|                                                               |  |                                                                                                                |          |
|---------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------|----------|
|                                                               |  | tows or staging barges in this area would create a traffic hazard. Channel is too narrow and velocity is high. |          |
| Open Water Placement consistent with Existing Harbor Dredging |  | Would require no additional cost.                                                                              | Retained |
| Upland Placement                                              |  | Upland disposal was done in the past.                                                                          | Retained |

## 2.11 Estimated Project Costs:

The cost of Construction with design, and contract supervision and administration is expected to be between \$5 and \$7 million.

## 2.12 Risk Identification:

ER 1165-2-217 requires review plans document relevant study risk and related issues, including key assumptions and any constraints, in enough detail to support the decisions on the appropriate level of review and types of expertise to be represented on the various review teams.

| <b>Risk</b> | <b>Action</b>                                                                                                                                                                                     | <b>Level</b> | <b>Likelihood</b> | <b>Mitigation</b>                                                                                                                                                                                                                                                                        |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Scope       | Scope, schedule and budget assumes only two action alternatives will be analyzed in detail. If more viable action alternatives are found it would extend the time and cost to complete the study. | Medium       | Unlikely          | Seek Vertical alignment early on if moderately viable alternatives are proposed to be eliminated from detailed analysis to ensure that limited # of alternatives, as proposed, is acceptable; therefore, the RMO and vertical team will not require analysis of additional alternatives. |
| Scope       | Unexpected policy changes could delay completion if new requirements are implemented or if policy changes create uncertainty.                                                                     | Medium       | Likely            | PDT will stay informed on policy and seek clarifications as needed and respond as quickly as possible to new requirements.                                                                                                                                                               |
| Other       | Delay in providing cost-share funds                                                                                                                                                               | Low          | Very Unlikely     | NFS has indicated readiness to provide and a slight delay in processing the payments will not affect the PDT labor funding.                                                                                                                                                              |

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|                   |                                                                                                                                                                                      |        |          |                                                                                                                                                          |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Environ<br>mental | Any land-based activities that would require tree-clearing during construction may require bat surveys that are not planned during the study and have a narrow window for completion | Medium | Unlikely | If any viable alternatives with tree clearing are identified, the PDT will work with USFWS and bat contractor to get surveys done by mid-Aug is possible |
| Cost              | Costs will have to be updated if initial and final estimates are in 2 different FYs.                                                                                                 | Low    | Likely   | Include time in schedule.                                                                                                                                |

The following questions were used to assess relevant study risks and inform decisions on the level of review and expertise on review teams:

- Will the study likely be challenging? If so, how so? No, the study scope is limited. This is a proposed extension of an existing harbor that is in generally good condition with no known O&M issues, regulatory issues, etc.
- Is the project likely to be justified by life safety or is the study or project likely to involve significant life safety concerns? No, this is a shallow draft harbor. Construction would be similar to activities that already occur as part of O&M Dredging. No new sources of risk are likely.
- Is the project expected to have more than negligible adverse impacts on scarce or unique tribal, cultural, or historic resources? If so, what are the anticipated impacts? No, the area has been surveyed and there are no known resources which may be impacted.
- Is the project expected to have substantial adverse impacts on fish and wildlife species and their habitat prior to the implementation of mitigation measures? If so, describe the impacts? No. the project is limited to extending the existing harbor channel. There are no T&E issues and the requirement to use non-fast land eliminated any alternative that would include tree clearing.

### 2.13 Current Project Milestone Schedule

| ACTIVITY                                  | SCHEDULED   | ACTUAL      |
|-------------------------------------------|-------------|-------------|
| Federal Interest Determination            | 14 NOV 2024 | 14 NOV 2024 |
| Feasibility Cost Share Agreement Executed | 09 APR 2025 | 04 APR 2025 |
| Tentatively Selected Plan Milestone (TSP) | 23 JUL 2025 |             |
| Release Draft Report to Public            | 15 SEP 2025 |             |
| Final Report Transmittal                  | 05 NOV 2025 |             |
| Report Approval                           | 10 DEC 2025 |             |

### 3 Model User Coordination and Model Approval/Certification Reviews

#### 3.1 Objectives of Reviews

**Model User Coordination:** PDT members using models (planning and engineering) for Civil Works planning studies must comply with CECW-P Memorandum, *Model Coordination for Civil Works Planning Studies* (28 Jul 2023) to ensure cross-functional coordination on model identification, to ensure appropriateness and proper application of planning and engineering models to be used in the study, and to confirm that assigned modelers possess the requisite knowledge and experience required to efficiently and effectively complete Civil Works feasibility study modeling tasks. Model user(s) must coordinate with the appropriate PCX or engineering functional chief for model selection and application.

- For engineering models used during feasibility, ER 1165-2-218, ER 1110-2-1150, and ES 08101 are the controlling guidance.
- Guidance on the quality assurance for planning models is contained in EC 1105-2-412, *Assuring Quality of Planning Models*, which mandates the use of certified or approved models for all planning activities to ensure the models are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions.

**Model Reviews: Approval/Certification:** Approval or certification of planning model(s) will not be needed for this study/project; therefore, review for model approval or certification will not be required. EP 1105-2-58 states, “Model Certification. Approval of planning models is not required for CAP projects, but planners should utilize certified models if they are available.”

#### 3.2 Documentation

**Model User Coordination Review:** Prior to initiation of work, District personnel will be identified and validated by functional chief/supervisor to ensure identification of personnel are properly selected, trained and resourced for the work assigned. Documentation to comply with CECW-P Memorandum, *Model Coordination for Civil Works Planning Studies* (28 Jul 2023) must be included as part of the RP submittal to the RMO and MSC.

#### 3.3 Models to Be Used in the Study/Project

Table 4 lists the planning models that may be used to develop the decision document. Table 5 lists the engineering models that may be used to develop the decision document.

**Table 4. Planning Models, Tools, and Data.**

|                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Model Name</b>                                                            | RECONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Version</b>                                                               | NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Model Status</b>                                                          | Certified                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Discipline Using the Model</b>                                            | Economics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Brief model description and how it will be used in the study/project:</b> | RECONS incorporates a mapping function that allows users to see the economic impact region for 1500 different impact models. It also provides information about the demographic and economic characteristics of these areas. This added information provides a greater understanding for assessing the economic impact estimates as well as the economic significance of USACE activities. RECONS allows users to produce word document and spreadsheet reports of the results of different analyses, including a comprehensive assortment of tables. |

**Table 5. Engineering Models, Tools, and Data.**

|                                                                              |                                 |
|------------------------------------------------------------------------------|---------------------------------|
| <b>Model Name</b>                                                            | MII or MCACES Second Generation |
| <b>Version</b>                                                               | v4.4.4                          |
| <b>Model Status</b>                                                          | Certified                       |
| <b>Discipline Using the Model</b>                                            | Cost Engineering                |
| <b>Brief model description and how it will be used in the study/project:</b> | For cost estimating.            |

## 4 Project Delivery Team & District Quality Control

Prior to District Quality Control (DQC), the report and supporting documentation should undergo a Project Delivery Team (PDT) review. District Quality Control (DQC) is an internal USACE review covering basic science and engineering work products and fulfills the project quality requirements of the Project Management Plan (PMP). DQC will be performed continuously and managed by the Memphis District. The DQC Reviews will consist of informal quality checks and more formal project stage reviews.

- **Project Delivery Team:** The PDT will review the report and supporting documentation.
- **Informal Quality Checks:** Informal quality checks will be performed by supervisors or peers not actively involved with project delivery. The informal quality checks reviews will not have a formal schedule or a formal team but will be performed throughout the life of a project and documented, as appropriate.
- **Independent District Quality Control:** The DQC will be performed by peers not actively involved with the project delivery and will be performed prior to all ATRs.

### 4.1 Objectives of Reviews

- Read entire report and appendices and provide editorial comments for clarity and readability.
- Evaluate the correct applications of methods, validity of assumptions, adequacy of basic data, correctness of calculations, completeness of documentation, and compliance with guidance and standards.
- Check all computations and graphics by having the reviewer place a highlight (e.g., “red dot”) on each annotation and/or number indicating concurrence with the correctness of the information shown.

### 4.2 Required Review Team Expertise

Table 3 identifies the review team expertise required for the project.

- **PDT Reviews.** PDT Reviews will be performed by team members actively involved in project delivery. The PDT has been assigned an Engineering Technical Lead in accordance with ER 5-1-11. The PDT members and disciplines are shown in Section 9 of this RP.
- **Independent DQC Reviews.** Independent DQC reviews will be performed by reviewers NOT actively involved in the project delivery. The independent DQC team has been assigned a DQC Review Lead in accordance with ER 1165-2-217. See Appendix 3 of this RP for the Team Roster.

### 4.3 Documentation

All DQC reviews will be performed and documented in accordance with ER 1165-2-217. Documentation of DQC will follow the District Quality Manual and the MSC Quality Management Plan. DrChecks<sup>SM</sup> will be used for documentation of DQC comments for project stage reviews. The DQC certification template for project DQC will follow the sample certification sheet found in ER 1165-2-217. Documentation of completed DQC will be provided to the MSC, RMO, and the ATR Team Lead. All DQC comments and their resolutions from all DQC Reviews will be provided to the ATR Team so that the ATR Team can determine whether an adequate DQC was performed.

#### **4.4 Schedule and Estimated Costs**

Although DQC is performed continuously, Table 2 identifies the project stage review requirements and approximate cost of each DQC review.

#### **4.5 District Quality Control Checklist**

The DQC Review Lead will confirm the following before completing DQC Certification. By signing off on completion of DQC, the DQC reviewer is assuming the same level of responsibility as the author.

##### **General Issues**

1. Has the PDT Review been completed?
2. Was the allotted time for DQC in the review plan adhered to?
3. Has the DQC Team verified the information presented in the current study checklist (pre-AMM, pre-TSP, Final Report) is accurate?
4. Is the identified problem well understood?
5. Are the risks and uncertainties properly characterized?
6. Has an appropriate array of alternatives been considered that could solve the problem?
7. Does the TSP solve the problem?
8. Are the implementation risks appropriately considered?
9. Are the proposed construction methods appropriate?
10. Are the schedules and cost estimates reliable (comprehensive, well-documented, accurate, and credible)?
11. What is the risk of potential cost and schedule growth?
12. Are there lessons learned that need to be considered?
13. Does the product comply with USACE criteria and policy requirements including environmental compliance requirements?
14. If applicable, has life-safety risk been appropriately assessed?
15. Are the methods used to develop analyses and conclusions clearly and fully presented to ensure transparency, if applicable?

##### **Items for Verification**

1. Are the assumptions, methods, procedures, computations (including quantities), and materials used in the analyses consistent with the project purpose or decisions being made?
2. Is the array of alternatives considered comprehensive?
3. Are the methods used to develop analyses and conclusions clearly and fully presented?
4. Are the data, level of data, assumptions, and safety risk based on deterministic criteria and risk-informed decision-making information appropriate?
5. Are the results compared to project purpose in compliance with applicable laws and USACE policies reasonable?
6. Correctness of Calculations – For each discipline, ensure correctness of the information on each annotation, computation, and model input parameter.
7. Correctness, accuracy, and clarity of graphic/plan presentation – For each discipline, ensure correctness of information shown on graphics (e.g., dimension, elevation, notes, or references).

## 5 Agency Technical Review

Agency Technical Review (ATR) is undertaken to ensure the quality and credibility of USACE scientific and technical information is consistent with the ER 1165-2-217 and the responsible MSC's Quality Management Plan. ATR is mandatory for all draft and final decision documents and most implementation products.

The ATR of work products and reports will also cover any necessary NEPA documents, other environmental compliance products including deferred environmental commitments during implementation, any in-kind contributions/services provided by local sponsors or their A-Es, and other supporting documents.

### 5.1 Objectives of Review

- Perform a comprehensive review of PDT conclusions to ensure that the results and decisions are clearly supported by the information presented and in compliance with current USACE policy and procedures.
- Assess adequacy of DQC to ensure proper and effective DQC has been conducted by reviewing the work products, DQC documentation, and the signed DQC certification. Work products that are of poor quality or appear to have inadequate DQC may be returned with no action.
- Validate key PDT decisions and identify important issues, concerns, and lessons learned.
- Perform Cost Engineering review.

### 5.2 Required Review Team Expertise

ATR is conducted outside the District with an ATR Lead from outside the MSC to remove unintended bias of the District/Division. Table 3 identifies the ATR review team expertise required for the project. See Appendix 3 of this RP for the ATR Team Roster.

### 5.3 Documentation

Documentation of ATR meet the requirements of ER 1165-2-217. This includes the four-part comment structure, three-part response structure, and the use of DrChecks<sup>SM</sup>. The ATR lead will complete an ATR Summary Report, a Statement of Technical Review, and ATR Certification for the draft decision documents and supporting analyses, certifying that review issues have been resolved or elevated. ATR will be certified when all concerns are resolved or referred to the vertical team and when ATR documentation is complete. Documentation of completed ATR will be provided to the MSC and RMO. The ATR cost reviewer will provide the cost certification for this project.

### 5.4 Agency Technical Review Schedule and Estimated Costs

Each ATR should build upon all prior cycles of review of any work product. Each ATR iteration should address only incremental changes and additions to documents and analyses addressed in prior ATR reviews, unless the ATR team determines that certain subjects warrant revisiting due to other changes. Table 2 outlines the schedule and costs for ATR for this study.

## **6 Policy and Legal Compliance Review**

Policy and legal compliance review (P&LCR) of draft and final planning decision documents is delegated to the MSC (see Director's Policy Memorandum 2018-05 and Director's Policy Memorandum 2019-01). The P&LCR culminates in determination whether report recommendations and the supporting analyses and coordination comply with law and policy, and warrant approval by the home MSC Commander.

### **6.1 Objectives of Review**

- Provide advice and support to PDT and decision makers.
- Ensure national consistency in policy compliance.
- Help guide the PDT through project development and the completion of policy and legally compliant documents.
- Identify policy and legal issues as early as possible.
- Provide impartial and unbiased recommendations, advice, and support to decision makers.
- Review Project Guidance Memorandum (PGM)

### **6.2 Required Review Team Expertise**

The P&LCR team will be a single team of policy and legal experts drawn from MSC, PCX, and other review resources as needed to take full advantage of USACE's breadth of experience and to enhance knowledge management. With input from MSC functional leaders, the MSC Chief of Planning and Policy is responsible for establishing a competent interdisciplinary P&LCR team for the project.

A representative from the Office of Counsel will be assigned to participate in reviews. Members may participate from the District, MSC, or HQ. The MSC Chief of Planning and Policy will coordinate membership and participation with the office chiefs. See Appendix 3 of this RP for the Team Roster.

### **6.3 Documentation**

The input from the P&LCR team should be documented in a Memorandum for Record (MFR) produced for each engagement with the team including milestone meetings, in-progress reviews, team meeting, etc. The MFR should be distributed to all meeting participants.

Teams may choose to capture some of the policy review input in a risk register, as appropriate. These items should be highlighted at future meetings until the issues are resolved. Any key decisions on how to address risk or other considerations should be documented in an MFR.

Each participating Office of Counsel will determine how to document legal review input. In some cases, legal review input may be captured in the MFR for a particular meeting or milestone. In other cases, a separate legal memorandum may be used to document the input from the Office of Counsel.

### **6.4 Schedule and Estimated Costs**

No project funding will be used to fund the P&LCR team. See Table 2 for the schedule.

## 7 Independent External Peer Review

Independent External Peer Review (IEPR) is the most independent level of review conducted on project studies and only is applied in cases that meet certain criteria where the uncertainties, risk, and magnitude of the proposed project are such that a critical examination by a qualified team outside of USACE is warranted.

IEPR Determination: IEPR will not be performed for the study/project as determined by Figure 6.1 of ER 1165-2-217, which provides a flowchart for decision-making on conducting an IEPR and is incorporated by reference. Appendix 2 provides the project-specific risk-informed assessment on the IEPR determination.

## 8 Public Review

**Public Review of the Review Plan:** This RP will be posted on the District's website. Public comments on the scope of reviews, technical disciplines involved, schedules, and other considerations may be submitted to the District for consideration. If the comments result in a change to the RP, an updated RP will be posted to the District's website.

**Public Review of the draft planning decision document:** Additional public review will occur when the report with integrated NEPA document is released for public and agency comment.

## Appendix 1: Review Plan Change Log

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

## Appendix 2: Risk-Informed IEPR Assessment

### Project Name: Osceola Harbor Extension, AR Section 107

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**IEPR Determination:** Based on the Risk Informed IEPR Assessment below, it was determined that Osceola Harbor Extension, AR Section 107 will *not conduct* IEPR.

The Project is under CAP Authority.

It does not include an EIS.

It is under \$200 Million.

The Chief has not determined the project is controversial. The District does not expect any controversy.

The Governor has not requested an IEPR.