DEPARTMENT OF THE ARMY
NORTH ATLANTIC DIVISION, US ARMY CORPS OF ENGINEERS
FORT HAMILTON MILITARY COMMUNITY
BROOKLYN, NEW YORK 11252-6700

REPLY TO
ATTENTION OF

DEC 14 2012

CENAD-PD-PP

MEMORANDUM FOR Commander, New England District, ATTN: CENAE-EP-PS

SUBJECT: Review Plan Approval for Portsmouth Harbor and Piscataqua River Navigation Improvement Project, Maine and New Hampshire Feasibility Study

1. The attached Review Plan for the subject study has been prepared in accordance with EC 1165-2-209, Civil Works Review Policy.

2. The Review Plan has been coordinated with the Deep Draft Navigation Planning Center of Expertise of the South Atlantic Division, which is the lead office to execute this plan. For further information, contact Mr. Bernard Moseby at 251-694-3884. The review plan does not include independent external peer review, as it was deemed not required by Headquarters, U.S. Army Corps of Engineers.

3. I hereby approve this Review Plan, which is subject to change as study circumstances require, consistent with study development under the Project Management Business Process. Subsequent revisions to this Review Plan or its execution will require new written approval from this office.

Encl
as

KENT D. SAVRE
Colonel, EN
Commanding

PORTSMOUTH HARBOR AND PISCATAQUA RIVER NAVIGATION IMPROVEMENT PROJECT GENERAL INVESTIGATION FEASIBILITY STUDY

REVIEW PLAN

NEW ENGLAND DISTRICT

MSC Approval Date: Review Plan approved January 11, 2008
Last Revision Date: December 11, 2012

US Army Corps
of Engineers ®

PORTSMOUTH HARBOR AND PISCATAQUA RIVER
NAVIGATION IMPROVEMENT PROJECT
GENERAL INVESTIGATION
FEASIBILITY PHASE

REVIEW PLAN

TABLE OF CONTENTS

1. PURPOSE AND REQUIREMENTS

a. Purpose.

This Review Plan is for the Portsmouth Harbor and Piscataqua River Navigation Improvement Project, General Investigation (GI), Feasibility Study. The purpose of the plan is to ensure the quality and credibility of assessments and solutions for the navigation improvement investigation and potential project. The plan defines the review process and team members.

b. References.

(1) Engineering Circular (EC) 1165-2-209, Civil Works Review Policy, 31 Jan 2010
(2) EC 1105-2-412, Assuring Quality of Planning Models, 31 Mar 2011
(3) Engineering Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006
(4) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007
(5) Project Management Plan, Portsmouth Harbor and Piscataqua River, Navigation Improvement Project, Feasibility Study and Environmental Compliance dated April 2006.

c. Requirements.

This review plan was developed in accordance with EC 1165-2-209, 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 outlines four general levels of review: District Quality Control/Quality Assurance (DQC), Agency Technical Review (ATR), Independent External Peer Review (IEPR), and Policy and Legal Compliance Review. In addition to these levels of review, decision documents are subject to cost engineering review and certification (per EC 1165-2-209) and planning model certification/approval (per EC 1105-2-412).

2. REVIEW MANAGEMENT ORGANIZATION

The RMO is responsible for managing the overall peer review effort described in this Review Plan. The RMO is the National Deep Draft Navigation Planning Center of Expertise (DDN-PCX).

3. STUDY INFORMATION

a. Decision Document.

Authorized Name: Portsmouth Harbor and Piscataqua River Navigation Improvement Project, Maine and New Hampshire

The Portsmouth Harbor and Piscataqua River Navigation Improvement Project Feasibility Study is sponsored by the Pease Development Authority, New Hampshire. The documents to be reviewed are the Feasibility Report, NEPA document (Environmental Assessment and FONSI), and appendices.

The scope of the Portsmouth Harbor and Piscataqua River feasibility study and NEPA documentation included problem identification, alternatives formulation, alternatives analysis, engineering design, cost estimates, environmental assessment, economic cost-benefit assessment, and identification of the recommend plans of improvement and determination of Federal interest. It is envisioned that if justified, the Corps process will lead to Congressional authorization and appropriations necessary to construct the project.

The Corps review process includes review of technical aspects of the decision document, NEPA documents and their constituent analyses through an approach called "Agency Technical Review" (ATR). ATR is a critical examination by a qualified person or team that was not involved in the day-to-day work of the investigation. In general, current Corps policy for decision documents to be approved at Headquarters is that the PCX be involved in establishing the review plan and review team, and that reviews be conducted by Corps specialists outside of the performing District. In some special cases where the risk and/or magnitude of the project are high an independent external peer review maybe be recommended (IEPR). Independent external peer review refers to review conducted outside of the Corps of Engineers.

b. Study/Project/Description.

The Piscataqua River forms a portion of the state boundary between Maine and New Hampshire. Portsmouth Harbor, located at the mouth of the river, is about 45 miles northeast of Boston Harbor, Massachusetts. The existing Federal project includes a 35-foot deep channel, generally 400 feet wide, extending from deep water in Portsmouth Harbor to a point approximately 6.2 miles upstream. The existing project as modified by WRDA86 also includes: widening the bends at several locations; a 1,000 foot emergency maneuvering area between the Memorial and Maine-New Hampshire lift bridges; channel widening upstream of the Maine-New Hampshire Bridge; a 950-foot wide turning basin upstream of Boiling Rock; and an 850-foot wide turning basin at the head of the project.

Study of the existing Portsmouth Harbor and Piscataqua River navigation project was directed by Section 437 of the Water Resources Development Act of 2000 (WRDA 2000), as quoted below.

"The Secretary shall conduct a study to determine the feasibility of modifying the project for navigation, Portsmouth Harbor and Piscataqua River, Maine and New Hampshire, authorized by section 101 of the River and Harbor Act of 1962 (76 Stat. 1173) and modified by section 202(a) of the Water Resources Development Act of 1986 (100 Stat.4095), to increase the authorized width of turning basins in the Piscataqua River to 1,000 feet."

The existing width of the upper turning basin is too narrow for efficient and safe handling of existing and future commerce. This portion of the existing Federal project consists of an 850-foot wide turning basin 35-foot deep at the head of the deep draft channel. In accordance with the limited purpose of the Congressional language, the feasibility study will focus on evaluating alternative measures to widen the turning basin to improve navigational efficiency and safety.

The state of New Hampshire, Pease Development Authority is the local Sponsor. A Feasibility Cost Sharing Agreement (FCSA) was executed on 12 June 2006, and provides for 50-50 cost sharing of all feasibility study costs. The Sponsor's goal is to evaluate turning basin improvement options and select the plan that maximizes the commercial capability of the upper portion of the navigation channel.

c. Factors Affecting the Scope and Level of Review.

The study is expected to be a straightforward navigation improvement project at an existing turning basin at the head of navigation, it is not novel and is not precedent setting, and does not have significant economic, environmental or social impacts. The magnitude of the improvement project is relatively low (under $15,000,000) and the risk associated with the study assessments and predictions is low

1. Novel subject matter? No.

2. Controversial subject matter? No

3. Precedent setting? No

4. Unusually significant interagency interest? No

5. Unusually significant economic, environmental, and social effects to the nation? No

d. In-Kind Contributions. No in-kind products anticipated.

4. DISTRICT QUALITY CONTROL (DQC)

All decision documents (including supporting data, analyses, environmental compliance documents, etc.) shall undergo District Quality Control (DQC). DQC is an internal review

process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the Project Management Plan (PMP). The home district shall manage DQC. Documentation of DQC activities is required and should be in accordance with the Quality Manual of the District and the home MSC.

Initial Quality Control (DQC) review is handled within the Section or Branch at New England District performing the work, and by contractors submitting the results of specific field investigations and reports. Additional DQC is performed by the project delivery team (PDT) during the course of the feasibility plan formulation and evaluation process, and during preparation and assembling the draft and final Feasibility Report and NEPA documents. These District level internal checks of engineering, technical, and scientific methodology applied, computations, and assessment are standard operating procedure and normally conducted by Section Chiefs and Team Leaders at NAE.

5. AGENCY TECHCINAL REVIEW

ATR is mandatory for all decision documents (including supporting data, analyses, environmental compliance documents, etc.). The objective of ATR is to ensure consistency with established criteria, guidance, procedures, and policy. The ATR will assess whether the analyses presented are technically correct and comply with published USACE guidance, and that the document explains the analyses and results in a reasonably clear manner for the public and decision makers. ATR is managed within USACE by the designated RMO and is conducted by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. ATR teams will be comprised of senior USACE personnel and may be supplemented by outside experts as appropriate. The ATR team lead will be from outside the home MSC.

a. Products to Undergo ATR.

The ATR process includes review of draft investigations of existing conditions, and determination of the without-project condition, formulation of alternative plans data and assumptions and the engineering, economic, environmental and social assessments. Real estate aspects of proposed alternatives is expected to be minimal and will not require review unless scope of real estate requirements change.

The ATR team reviewed the draft feasibility report and NEPA documents for the Alternative Formulation Briefing. The ATR team will also review to final documents prior to submittal to the Civil Works Review Board.

b. Required ATR Team Expertise.

Team member selections is coordinated with the DDN-PCX to select a qualified ATR team that has experience with navigation studies.

ATR Team Members/Disciplines
ATR Lead (May be responsible for review of one of following disciplines in addition to ATR lead)
Plan Formulation
Economics
Environmental Resources
Coastal Engineering
Geotechnical Engineering
Cost Engineering

c. 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, comments may seek clarification to assess whether further specific concerns may exist.

It is suggested that the ATR documentation in DrChecks 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 AFB, draft report, and final report. A sample Statement of Technical Review is included in Attachment 2.

6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

IEPR may be required for decision documents under certain circumstances. IEPR is the most independent level of review, and is applied in cases that meet certain criteria where the risk and magnitude of the proposed project are such that a critical examination by a qualified team outside of USACE is warranted. A risk-informed decision, as described in EC 1165-2-209, is made as to whether IEPR is appropriate. IEPR panels will consist of independent, recognized experts from outside of the USACE in the appropriate disciplines, representing a balance of areas of expertise suitable for the review being conducted. There are two types of IEPR:

- Type I IEPR. Type I IEPR reviews are managed outside the USACE and are conducted on project studies. Type I IEPR panels assess the adequacy and acceptability of the economic and environmental assumptions and projections, project evaluation data, economic analysis, environmental analyses, engineering analyses, formulation of alternative plans, methods for integrating risk and uncertainty, models used in the evaluation of environmental impacts of proposed projects, and biological opinions of the project study. Type I IEPR will cover the entire decision document or action and will address all underlying engineering, economics, and environmental work, not just one aspect of the study. For decision documents where a Type II IEPR (Safety Assurance Review) is anticipated during project implementation, safety assurance shall also be addressed during the Type I IEPR per EC 1165-2-209.

- Type II IEPR. Type II IEPR, or Safety Assurance Review (SAR), are managed outside the USACE and are conducted on design and construction activities for hurricane, storm, and flood risk management projects or other projects where existing and potential hazards pose a significant threat to human life. Type II IEPR panels will conduct reviews of the design and construction activities prior to initiation of physical construction and, until construction activities are completed, periodically thereafter on a regular schedule. The reviews shall consider the adequacy, appropriateness, and acceptability of the design and construction activities in assuring public health safety and welfare.

a. Decision on IEPR

An IEPR exclusion request was granted February 8, 2011 by HQUASCE. See Attachment 4.

7. POLICY AND LEGAL COMPLIANCE REVIEW

All decision documents will be reviewed throughout the study process for their compliance with law and policy. Guidance for policy and legal compliance reviews is addressed in Appendix H, ER 1105-2-100. These reviews culminate in determinations that the recommendations in the reports and the supporting analyses and coordination comply with law and policy, and warrant approval or further recommendation to higher authority by the home MSC Commander. DQC and ATR augment and complement the policy review processes by addressing compliance with pertinent published Army policies, particularly policies on analytical methods and the presentation of findings in decision documents.

8. COST ENGINEERING DIRECTORY OF EXPERTISE (DX) REVIEW AND CERTIFICATION

All decision documents shall be coordinated with the Cost Engineering DX, located in the Walla Walla District. The DX will assist in determining the expertise needed on the ATR team and Type I IEPR team (if required) and in the development of the review charge(s). The DX will also provide the Cost Engineering DX certification. The RMO is responsible for coordination with the Cost Engineering DX.

9. MODEL CERTIFICATION AND APPROVAL

EC 1105-2-412 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. Planning models, for the purposes of the EC, are defined as any models and analytical tools that planners use to define water resources management problems and opportunities, to formulate potential alternatives to address the problems and take advantage of the opportunities, to evaluate potential effects of alternatives and to support decision making. The use of a certified/approved planning model does not constitute technical review of the planning product. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC, ATR, and IEPR (if required).

EC 1105-2-412 does not cover engineering models used in planning. The responsible use of well-known and proven USACE developed and commercial engineering software will continue and the professional practice of documenting the application of the software and modeling results will be followed. As part of the USACE Scientific and Engineering Technology (SET) Initiative, many engineering models have been identified as preferred or acceptable for use on Corps studies and these models should be used whenever appropriate. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC, ATR, and IEPR (if required).

a. Planning Models. Economic benefits calculation for the study will be done in an excel spreadsheet. This single use excel spreadsheet will be approved through a technical review process. EC 1105-2-412, Section 8e states " that for a single use or study specific model developed by the Corps the PCX will implement the model approval process through technical review rather than through a separate certification process."

b. Engineering Models. No engineering models are anticipated to be used in the development of the decision document.

10. REVIEW SCHEDULES AND COSTS

b. ATR Schedule and Cost.

AFB Review : April 2013; ~$20,000

Final Document Review: August 2013, ~$20,000

11. PUBLIC PARTICIPATION

A Public Notice on the availability of the draft Feasibility Report and Environmental Assessment will be issued and mailed to interested and appropriate individuals, organizations, and corporations once approval for release has been obtained from the vertical team.

12. REVIEW PLAN APPROVAL AND UPDATES

The North 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 for the decision document. Like the PMP, the Review Plan is a living document and may change as the study progresses. The home 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 3. Significant changes to the Review Plan (such as changes to the scope and/or level of review) should 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, should be posted on the Home District's webpage. The latest Review Plan should also be provided to the RMO and home MSC.

13. REVIEW PLAN POINTS OF CONTACT

Public questions and/or comments on this review plan may be directed to the following points of contact:

Richard Heidebrecht, New England District, Planning Branch, 978-318-8737
Lawrence Cocchieri, Deputy Director, Coastal Storm Damage Reduction-PCX, 347-370-4571
Bernard Moseby, Deep Draft Navigation Center of Expertise, 251-694-3884

ATTACHMENT 1: TEAM ROSTERS

Bernard Moseby	RMO- POC	SAD, DDN-PCX
Lawrence Cocchieri	MSC	NAD
Catherine Shuman	RIT	HQUASCE

PDT		
Richard Heidebrecht	Study/Project Manager	CENAE-EP-PN
Mark Habel	Navigation Team Leader	CENAE-EP-PN
Robert Meader	Design Engineer	CENAE-EP-DC
Mike Remy	Cost Engineer	CENAE-EP-DE
John Winkelman	Coastal Engineer	CENAE-EP-WM
Erik Matthews	Geology/Geotechnical	CENAE-EP-GG
Edmund O'Leary	Economist	CENAE-EP-VC
Catherine Rogers	Environmental	CENAE-EP-VE
Marcos Paiva	Cultural Resources	CENAE-EP-VC
Phil Nimeskern	Marine Analysis Unit	CENAE-R-P

ATR		
TBD	Economics	
TBD	Plan Formulation	
TBD	Environmental	
TBD	Geotechnical/Geology	
TBD	Navigation	
TBD	Cost	

ATTACHMENT 2: SAMPLE STATEMENT OF TECHNICAL REVIEW FOR DECISION DOCUMENTS

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the *<type of product>* for *<project name and location>*. The ATR was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-209. 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[sm].

SIGNATURE _____ _____

Name Date
ATR Team Leader
Office Symbol/Company

SIGNATURE _____ _____

Name Date
Project Manager
Office Symbol

SIGNATURE _____ _____

Name Date
Review Management Office Representative
Office Symbol

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.

SIGNATURE _____ _____

Name Date
Chief, Engineering Division
Office Symbol

SIGNATURE _____ _____

Name Date
Chief, Planning Division
Office Symbol

[1] Only needed if some portion of the ATR was contracted

ATTACHMENT 3: REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number
11-Dec-2012	Review Plan updated to comply with model Review Plan format and content. Boilerplate from model Review Plan inserted into Review Plan. The IEPR exclusion memorandum has been attached to the Review Plan. Sections on model certification and approval were added to the review plan.	

ATTACHMENT 4: IEPR EXCLUSION REQUEST APPROVAL

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF

CEMP-NAD

FEB 8 2011

MEMORANDUM FOR Commander, U.S. Army Corps of Engineers, North Atlantic Division (ATTN: CENAD-DE)

SUBJECT: Request for Independent External Peer Review (IEPR) Exclusion for Portsmouth Harbor & Piscataqua River, NH.

1. HQUSACE has reviewed the IEPR exclusion request for the Portsmouth Harbor & Piscataqua River, NH Project. Based on applicable laws and policy, this project study is not subject to peer review as it does not meet any of the mandatory requirements. The project has a cost estimate of less than $45 million; does not represent a threat to health and safety; is not controversial; and has not had a request for IEPR from the Governor of an affected State or the head of a Federal or state agency.

2. Approval of the exclusion request was based on the following information. The existing project consists of a 35-foot deep and 400-foot wide channel for a distance of about six miles, with two turning basins. The proposed project consists of expanding the upper-most turning basin from 800 feet to between 1000 and 1200 feet. The formulation of this project is not based on novel methods and does not present complex challenges for interpretation or conclusions that are likely to change prevailing practices. Precedent-setting methods or models were not used in the evaluation. The total cost ranges from $10-14 million. No significant adverse environment impacts are expected from the dredging and disposal and an Environmental Impact Statement (EIS) is not required.

3. Questions or concerns should be directed to Mr. Peter Luisa, Deputy Chief, North Atlantic Division Regional Integration Team, at 202-761-5782.

FOR THE COMMANDER:

STEVEN L. STOCKTON, P.E.
Director of Civil Works