



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
PACIFIC OCEAN DIVISION, U.S. ARMY CORPS OF ENGINEERS
FORT SHAFTER, HAWAII 96858-5440

CEPOD-PDC

30 October 2012

MEMORANDUM FOR COMMANDER ALASKA ENGINEER DISTRICT (CEPOA-PM-C-PL/LORRAINE CORDOVA), P.O. BOX 6898, JBER, AK 99506-0898

SUBJECT: Review Plan Approval for the Craig Harbor, Craig, Alaska, Feasibility Report.

1. References:

a. Engineering Circular 1165-2-209, Civil Works Review Policy, 31 January 2010, and Change 1, 31 January 2012.


b. Review Plan for the Craig Harbor, Craig, Alaska, Feasibility Report, Alaska District, U.S. Army Corps of Engineers, 30 October 2012.

2. IAW reference 1.a., the enclosed Review Plan (reference 1.b.) was coordinated with the Small Boat Harbor Planning Sub-Center of Expertise (SBH-PSCX) in the Alaska District of the Pacific Ocean Division, which is the lead office to execute this Review Plan. For further information, contact the SBH-PSCX at 907-753-5619. The Review Plan includes Type I Independent External Peer Review.

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

4. The point of contact for this memorandum is Mr. Russell Iwamura, Senior Economist, Civil Works Integration Division, at 808-835-4625 or email Russell.K.Iwamura@usace.army.mil.

Encl



GREGORY J. GUNTER
Colonel, EN
Acting Commander

10/10/10

REVIEW PLAN

CRAIG HARBOR, CRAIG, ALASKA FEASIBILITY REPORT

Alaska District

**MSC Approval Date: 30 October 2012
Last Revision Date: None**



**US Army Corps
of Engineers®**

REVIEW PLAN
CRAIG HARBOR, CRAIG, ALASKA
FEASIBILITY REPORT

TABLE OF CONTENTS

1. PURPOSE AND REQUIREMENTS	1
2. STUDY INFORMATION	3
3. DISTRICT QUALITY CONTROL (DQC).....	4
4. AGENCY TECHNICAL REVIEW (ATR).....	5
5. INDEPENDENT EXTERNAL PEER REVIEW (IEPR).....	7
6. MODEL CERTIFICATION AND APPROVAL.....	9
7. REVIEW SCHEDULES AND COSTS.....	9
8. POLICY AND LEGAL COMPLIANCE REVIEW	10
9. PUBLIC PARTICIPATION	10
10. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION.....	10
11. REVIEW PLAN APPROVAL AND UPDATES	10
12. REVIEW PLAN POINTS OF CONTACT	11
ATTACHMENT 1: TEAM ROSTERS.....	12
ATTACHMENT 2: COMPLETION OF AGENCY TECHNICAL REVIEW.....	14
ATTACHMENT 3: REVIEW PLAN REVISIONS.....	15
Revision Date	15
Description of Change	15
Page / Paragraph Number.....	15
ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS.....	16

1. PURPOSE AND REQUIREMENTS

a. **Purpose.** This Review Plan defines the scope and level of peer review for the Craig Harbor, Craig, Alaska, feasibility report.

b. **References.**

- (1) Engineering Circular (EC) 1165-2-209, Civil Works Review Policy, 31 Jan 2010 and Change 1, dated 31 Jan 2012
- (2) EC 1105-2-412, Assuring Quality of Planning Models, 31 Mar 2011
- (3) Engineering Regulation (ER) 1110-1-12, Quality Management, 21 July 2006, Change 1, 30 Sep 2006, and Change 2, 31 Mar 2011
- (4) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007
- (5) Craig Harbor feasibility study Project Management Plan
- (6) Alaska District (POA) Quality Management Plan, CEPOA-QMP-001, Jan 2010
- (7) Pacific Ocean Division (POD) Quality Management Plan, December 2010

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) and Value Management Plan requirements in the PMBP REF 8023G and the ER 11-1-321, Change 1.

- (1) District Quality Control/Quality Assurance (DQC). All decision documents (including supporting data, analyses, environmental compliance documents, etc.) shall undergo 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). POA shall manage DQC. Documentation of DQC activities is required and should be in accordance with the Quality Manual of POA and POD.
- (2) Agency Technical Review (ATR). 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 U.S. Army Corps of Engineers (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 a designated Risk Management Organization (RMO) and is conducted by a qualified team from outside the Alaska 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. To assure independence, the leader of the ATR team shall be from outside POD.

- (3) 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 is generally for decision documents and Type II is generally for implementation products.
 - (a) 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 an biological opinions of the project study. Type I IEPR will cover the entire decision document or action and will address all the 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.
 - (b) 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.
- (4) Cost Engineering Review and Certification. All decision documents shall be coordinated with the Cost Engineering Directory of Expertise (DX), located in the Walla Walla District. The DX, or in some circumstances regional cost personnel that are pre-certified by the DX, will conduct the cost ATR. The DX will provide certification of the final total project cost.
- (5) Model Certification/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. 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. Engineering models are also subject to DQC, ATR, and IEPR.

2. STUDY INFORMATION

- a. **Decision Document.** It is anticipated that a Feasibility Report and Environmental Assessment/Finding of No Significant Impact will be prepared for Craig Harbor, Craig, Alaska. The primary objective for the study is to determine the feasibility of providing increased moorage for commercial and recreational activity at Craig. The feasibility study will be the basis for a Chief of Engineers Report that will be provided to Congress with a request for construction authorization. An Environmental Assessment and accompanying Finding of No Significant Impact (FONSI) is anticipated to accompany this document unless the study reveals that an Environmental Impact Statement and Record of Decision is needed and will be prepared for National Environmental Policy Act (NEPA) documentation, along with the feasibility report document.
- b. **Study/Project Description.** The City of Craig is a community of approximately 1,400 located on Craig Island near Prince of Wales Island, and approximately 55 air miles northwest of Ketchikan. There is a federally recognized tribe, the Craig Community Association, at Craig. The economy is based on commercial fishery and logging activities, and a growing recreational sightseeing industry. There are 227 slips available for permanent and transient vessels distributed between the North and South Cove harbors and the city dock (12 slips). In 2003 there were 123 vessels on the waiting list for moorage. These vessels are accommodated by allowing rafting of up to 10 vessels deep from existing facilities. During storms these rafted vessels cause damage to other vessels, floats, and docks. The rafting also results in overcrowding, delays to commercial fishing vessels, and inefficient harbor operations. The City of Craig, Alaska is the non-Federal sponsor. The General Investigations study is authorized by the U.S. House of Representatives Public Works Committee Resolution for Rivers and Harbors in Alaska, adopted 2 December 1970. The Water Resources Development Act (WRDA) 1986 Section 905(b) reconnaissance report provides a recommendation to further determine the feasibility of providing navigation improvements for Craig, Alaska.

- c. **Factors Affecting the Scope and Level of Review.** This section discusses the factors affecting the risk informed decisions on the appropriate scope and level of review. Assumptions are as follows:

- There may be impacts due to the large amounts of eelgrass in the harbor area. However, a floating breakwater is expected for this project and may not impact eelgrass beds.
- The project likely does not involve a significant threat to human life/safety, however it will likely provide some incidental safety benefits in the form of a Harbor of Refuge.
- The project is likely to have interagency interest due to eelgrass in the area.
- The project report is not likely to contain influential scientific information or be a highly influential scientific assessment.
- The information in the decision document will likely not be based on novel methods, involve the use of innovative materials or techniques, present complex challenges for interpretation, contain precedent-setting methods or models, or present conclusions that are likely to change prevailing practices.
- The estimated final cost range for the project is between \$15 - \$30 million. If costs approach the \$45 million mark, the level of review could change.
- There is no request by the Governor of Alaska or an affected state for a peer review by independent experts.

- d. **In-Kind Contributions.** Products and analyses provided by non-Federal sponsors as in-kind services are subject to DQC, ATR, and IEPR. The in-kind products and analysis to be provided by the non-Federal sponsor will be determined when we discuss study scope and budget with the City. It is anticipated that the in-kind contributions will consist of labor to gather data and organize meetings, attend PDT meetings, and review interim products.

3. DISTRICT QUALITY CONTROL (DQC)

- a. **Documentation of DQC.** Review comments, evaluations (responses to comments), and response/action taken (for each comment) from the DQC of the Feasibility Study will be available in a spreadsheet format developed by POA, titled "POA Civil Works DQC Comments" or some comparable tool. The DQC Lead will prepare a study report checklist confirming that all the required elements of the report/document are complete, consistent, and technically sufficient to support the findings and recommendations.
- b. **Required DQC Expertise.** The Alaska District DQC process requires that the DQC team be composed of appropriate personnel, including technical chiefs and persons not directly associated with the PDT in the detailed preparation of the document. The team will include the following chiefs: Planning, Environmental, and Hydraulics & Hydrology. DQC members should include, as a minimum, the following members: cost engineer (with expertise in estimating costs for breakwater projects), geotechnical specialist, hydraulic design engineer (with expertise in designing breakwaters), economist (with expertise in small boat harbor data gathering and analysis) and an environmental specialist (with expertise in NEPA compliance and evaluation of impacts on marine species).

4. AGENCY TECHNICAL REVIEW (ATR)

- a. **Products to Undergo ATR.** ATR will be performed on the Draft Report (including NEPA and supporting documentation) and Final Report (including NEPA and supporting documentation).
- b. **Required ATR Team Expertise.** The purpose of the ATR is to ensure the work product is consistent with established guidance, procedures, criteria, and policy. Members of the ATR team will be from outside the Alaska District, with the ATR Lead from outside POD. Members of the ATR team will reflect expertise of PDT members. It is anticipated that the ATR team will consist of 5-8 persons, (depending upon actual availability of specific persons at the time of the review and how the Cost Engineering Directory of Expertise (DX) handles the cost engineering review). The study’s required value engineering study will be handled as part of the ATR. One reviewer can serve on the ATR team to cover more than one discipline, provided they have the appropriate expertise in their background. The ATR team members’ expertise required for this study is provided below.

ATR Team Members/Disciplines	Expertise Required
ATR Lead	The ATR lead should be a senior professional with extensive experience in preparing Civil Works decision documents and conducting ATR. The lead should also have the necessary skills and experience to lead a virtual team through the ATR process. Typically, the ATR lead will also serve as a reviewer for a specific discipline (such as planning, economics, environmental resources, etc).
Planning	The planning reviewer should be a senior water resources planner with extensive experience in the Corps planning process and be knowledgeable of current Corps policies and guidance. He/she should be familiar with navigation projects, in particular small boat harbor projects involving the use of breakwaters and other energy reduction measures.
Economics	The economics reviewer should be experienced in economic evaluation of civil works small boat harbor navigation projects.
Environmental Resources	The environmental reviewer should be experienced in coastal ecosystems, the influence of construction of breakwaters and other energy attenuation measures on aquatic plants and species and the National Environmental Policy Act (NEPA) process and analysis procedures. The reviewer should also be experienced in cultural and tribal aspects of Corps navigation projects.
Hydraulic (Coastal) Engineering	The hydraulic engineering reviewer will be an expert in the field of coastal hydraulics and have a thorough understanding of analyses of winds, waves, currents, hydrodynamic-salinity, small boat harbor design, and breakwater construction. A registered professional engineer is recommended.

Geotechnical Engineering	The geotechnical engineering reviewer shall have experience in the characterization of bottom sediments identified lying under proposed marine structures and the design and construction of breakwater structures. A registered professional engineer is recommended.
Value Engineering Team Lead	The value engineering reviewer should be familiar with Corps policies and procedures for value engineering activities associated with civil works projects. Coordination will be required with the Alaska District Value Engineering Officer regarding required activities and certifications. The Lead should employ additional Value Engineering Team members, as appropriate, to prepare the Value Engineering Report.
Cost Engineering	The cost engineering reviewer will be familiar with cost estimating for small boat harbor projects using the Microcomputer Aided Cost Engineering System (MCACES) model and preparation of an MII Cost Estimate. The reviewer will be a Certified Cost Technician, Certified Cost Consultant, or Certified Cost Engineer. Coordination with the Cost Engineering DX will be required for their approval of the selected cost engineering reviewer and to obtain Cost Engineering DX certification of the cost estimate.
Real Estate	The real estate reviewer will be experienced in Federal civil works real estate law, policy, and guidance, development of Real Estate Plans for civil works studies, particularly in regards to application of navigational servitude.

The ATR team members for this study and a brief description of their credentials will be included in Attachment 1 once they are identified.

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, a commenter 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 Alaska District, RMO, POD, 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 Technical Review is included in Attachment 2.

5. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

- a. **Decision on IEPR.** At this point in the study, a Type I IEPR on the decision document is assumed. As the study progresses, a risk-informed decision on doing a Type I IEPR will be made once more information on the project is available. At this point a floating breakwater is envisioned so impacts to eelgrass around the island may be minimal.

The proposed project does not meet the criteria for conducting Type II IEPR described in Paragraph 2 of Appendix D of EC 1165-2-209, because:

- the Federal action is not justified by life safety and failure of the project will not pose a significant threat to human life;

- the project does not involve the use of innovative materials or techniques where the engineering is based on novel methods, it does not present complex challenges for interpretations, does not contain precedent-setting methods or models, and does not present conclusions that are likely to change prevailing practices;
- the project design does not require redundancy, resiliency, or robustness; and
- the project does not have unique construction sequencing or a reduced or overlapping design construction schedule.

b. Products to Undergo Type I IEPR. Type I IEPR will be performed for the entire decision document (including supporting documentation), at the draft report stage.

c. Required Type I IEPR Panel Expertise. This section provides an estimate of the number of Type I IEPR panel members and the types of expertise that should be represented on the panel. This is a draft based on what is known at this time. The Outside Eligible Organization (OEO) will determine the final participants on the panel.

IEPR Panel Members/Disciplines	Expertise Required
Economics	The economics panel member should be experienced in economic evaluation of civil works small boat harbor navigation projects.
Environmental	The environmental panel member should be experienced in coastal ecosystems, the influence of construction of breakwaters and other energy attenuation measures on aquatic plants and species and the National Environmental Policy Act (NEPA) process and analysis procedures. The reviewer should also be experienced in cultural and tribal aspects of Corps navigation projects.
Hydraulic (Coastal) Engineering	The hydraulic engineering reviewer will be an expert in the field of coastal hydraulics and have a thorough understanding of analyses of winds, waves, currents, hydrodynamic-salinity, small boat harbor design, and breakwater construction. A registered professional engineer is recommended.
Geotechnical Engineering	The geotechnical engineering reviewer shall have experience in the characterization of bottom sediments identified lying under proposed marine structures and the design and construction of breakwater structures. A registered professional engineer is recommended.

The Type I IEPR panel members for this study and a brief description of their credentials will be included in Attachment 1 once they are identified.

d. Documentation of Type I IEPR. The IEPR panel will be selected and managed by an Outside Eligible Organization (OEO) per EC 1165-2-209, Appendix D. Panel comments will be compiled by the OEO and should address the adequacy and acceptability of the economic,

engineering and environmental methods, models, and analyses used. IEPR comments should generally include the same four key parts as described for ATR comments in Section 4.c above. The OEO will prepare a final Review Report that will accompany the publication of the final decision document and shall:

- 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; 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.

The final Review Report will be submitted by the OEO no later than 60 days following the close of the public comment period for the draft decision document. USACE shall consider all recommendations contained in the Review Report and prepare a written response for all recommendations adopted or not adopted. The final decision document will summarize the Review Report and USACE response. The Review Report and USACE response will be made available to the public, including through electronic means on the internet.

6. MODEL CERTIFICATION AND APPROVAL

- a. **Planning Models.** The following planning models are anticipated to be used in the development of the decision document: none.
- b. **Engineering Models.** The following engineering models are anticipated to be used in the development of the decision document:

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study
Micro-computer Aided Cost Engineering System (MCACES) 2 nd Generation (MII)	The MCACES/MII construction cost estimating software, developed by Building Systems Design Inc., is a tool used by cost engineers to develop and prepare all Civil Works cost estimates. Using the features in this system, cost estimates are prepared uniformly allowing cost engineering throughout USACE to function as one virtual cost engineering team.
STWAVE	Coastal wave forecasting model.

7. REVIEW SCHEDULES AND COSTS

- a. **ATR Schedule and Cost.** The ATR schedule and cost will be further identified after scoping with the sponsor, however, it is currently estimated that ATRs will be conducted on In-Progress Review documents, the draft report, and the final report. The ATR schedule will be determined after scoping with the sponsor. The total estimated cost for the ATRs is \$150,000.

- b. **Type I IEPR Schedule and Cost.** The estimated schedule for a Type I IEPR will be determined during scoping with the sponsor. At this point, the total estimated cost for IEPR is \$250,000.
- c. **Model Certification/Approval Schedule and Cost.** There are no planning models anticipated for use in the study.

8. 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 POD 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.

9. PUBLIC PARTICIPATION

Any public comments received will be provided to the ATR and IEPR review teams. All future revisions to the Review Plan and any minor updates will be posted to the Alaska District webpage. Public review of the draft decision document will begin a couple months after the completion of the ATR process, following review and approval by POD to conduct public review. If required, the review period for the EIS will last 30 days. A public meeting will be conducted during the ATR/VE review. Comments received during the public comment period for the draft report will not be available to the ATR/VE team as part of their review. Public comments will be reviewed, addressed, and incorporated as appropriate into the final draft report.

10. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The RMO is responsible for managing the overall peer review effort described in this Review Plan. The RMO for decision documents is typically either a Planning Center of Expertise (PCX) or the Risk Management Center (RMC), depending on the primary purpose of the decision document. The RMO for the peer review effort described in this Review Plan is the Small Boat Harbor Planning Sub-Center of Expertise (SBH-PSCX) in Anchorage, AK in coordination with the Deep Draft Navigation PCX (DDN-PCX) in Mobile, AL.

The RMO will coordinate with the Cost Engineering Directory of Expertise (DX) to conduct ATR of cost estimates, construction schedules and contingencies.

11. REVIEW PLAN APPROVAL AND UPDATES

The POD Commander is responsible for approving this Review Plan. The Commander's approval reflects vertical team input (involving the Alaska District, POD, 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 Alaska District is responsible for keeping the Review Plan up to date. Minor changes to the review plan since the last POD Commander approval are documented in Attachment 3. Significant changes to the Review Plan (such as changes to the scope and/or level of review) will be re-approved by the POD 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 Alaska District webpage. The latest Review Plan will also be provided to the RMO and POD.

12. REVIEW PLAN POINTS OF CONTACT

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

- PDT Plan Formulator (POA), Ronnie Barcak, (907) 753-5755
- PDT Project Manager (POA), Lorraine Cordova, (907) 753-2672
- POD Senior Economist, Russell Iwamura, (808) 835-4625,
- SBH-PSCX Dep. Director (POA), Bruce Sexauer, (907) 753-5619,

ATTACHMENT 1: TEAM ROSTERS

Craig Harbor, Craig, Alaska Feasibility Report PDT

The Craig Navigation Feasibility Project Delivery Team is comprised of the following individuals:

Project Manager	Lorraine Cordova
Plan Formulator	Ronnie Barcak
Coastal Engineer	Robert Tedrick
Geotechnical Engineer	John Rajek
Cost Engineer	Al Arruda
Environmental Resources	Keith Gordon
Economist	Andria Werning
Archaeologist	Erin Laughlin
Real Estate Specialist	Katherine Rivers
Office of Counsel	Robert Stolzman

Craig Harbor, Craig, Alaska Feasibility Report DQC Team

The Craig Navigation Feasibility District Quality Control Team is comprised of the following individuals:

Ch, Planning	Bruce Sexauer	POA
Ch, Hydraulics & Hydrology	Ken Eisses	POA
Ch, Environmental	Mike Salyer	POA
Civil Works Editor	Diane Walters	POA
Value Engineering	Donald Tybus	POA
Local Sponsor	Brian Templin	City of Craig

Craig Harbor, Craig, Alaska Feasibility Report ATR Team

The Craig Navigation Feasibility Project Delivery ATR Team is comprised of the following individuals:

SBH-PSCX Coordinator	Forest Brooks	SBH-PSCX, Alaska District
ATR Lead/Economist	TBD	TBD District
Plan Formulation	TBD	TBD District
Environmental/NEPA	TBD	TBD District
Coastal Engineering	TBD	TBD District
Geotechnical	TBD	TBD District
Value Engineering Lead	TBD	TBD District
Value Engineering Team	TBD	TBD District
Value Engineering Team	TBD	TBD District
Value Engineering Team	TBD	TBD District
Cost Engineering & VET	TBD	TBD District
Cost Engineering DX	Jim Neubauer	CE-DX, Walla Walla District
Real Estate	TBD	TBD District

Craig Harbor, Craig, Alaska Feasibility Report Vertical Team

The Craig Navigation Feasibility Project Delivery Vertical Team is composed of the following individuals:

POA, Project Manager
POA, Technical Lead
POA, Chief Planning
POA, Chief Project Management Branch
POD, Civil Works Planning Team Leader
POD, Senior Economist
HQ POD RIT, Civil Deputy
HQ POD RIT, Civil Works Planner

Lorraine Cordova
Ronnie Barcak
Bruce Sexauer
Steve Boardman
Linda Hihara-Endo
Russell Iwamura
Sharon Wagner
Andy Miller

ATTACHMENT 2: COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the <type of product> for Craig Harbor, Craig, Alaska. 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 DrCheckssm.

SIGNATURE

Name

ATR Team Leader

Office Symbol/Company

Date

SIGNATURE

Lorraine Cordova

Project Manager

CEPOA-PM-C-PD

Date

SIGNATURE

Name

Architect Engineer Project Manager¹

Company, location

Date

SIGNATURE

Name

Review Management Office Representative

Office Symbol

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.

SIGNATURE

David Frenier

Chief, Engineering Division

CEPOA-EN

Date

SIGNATURE

Steve Boardman

Chief, Project Management Branch

CEPOA-PM-C-PD

Date

¹ Only needed if some portion of the ATR was contracted

ATTACHMENT 3: REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number

ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS

<u>Term</u>	<u>Definition</u>	<u>Term</u>	<u>Definition</u>
ASA(CW)	Assistant Secretary of the Army for Civil Works	NED	National Economic Development
ATR	Agency Technical Review	NER	National Ecosystem Restoration
CSDR	Coastal Storm Damage Reduction	NEPA	National Environmental Policy Act
DPR	Detailed Project Report	O&M	Operation and maintenance
DQC	District Quality Control/Quality Assurance	OMB	Office and Management and Budget
DX	Directory of Expertise	OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation
EA	Environmental Assessment	OEO	Outside Eligible Organization
EC	Engineer Circular	OSE	Other Social Effects
EIS	Environmental Impact Statement	PCX	Planning Center of Expertise
EO	Executive Order	PDT	Project Delivery Team
ER	Engineer Regulation	PAC	Post Authorization Change
FDR	Flood Damage Reduction	PMP	Project Management Plan
FEMA	Federal Emergency Management Agency	PL	Public Law
		QMP	Quality Management Plan
FSM	Feasibility Scoping Meeting	QA	Quality Assurance
GRR	General Reevaluation Report	QC	Quality Control
HQUSACE	Headquarters, U.S. Army Corps of Engineers	RED	Regional Economic Development
IEPR	Independent External Peer Review	RMC	Risk Management Center
ITR	Independent Technical Review	RMO	Review Management Organization
LRR	Limited Reevaluation Report	ROD	Record of Decision
MSC	Major Subordinate Command	RTS	Regional Technical Specialist
		SAR	Safety Assurance Review
		USACE	U.S. Army Corps of Engineers
		WRDA	Water Resources Development Act