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

REPLY TO
ATTENTION OF

17 JAN 2013

CEPOD-PDC

MEMORANDUM FOR COMMANDER HONOLULU ENGINEER DISTRICT (CEPOH-EC-T/JUSTIN GOO), BUILDING 230, FORT SHAFTER, HI 96858-5440

SUBJECT: Review Plan Approval for the Laupahoehoe Small Boat Harbor Operations and Maintenance Repair Project Plans and Specifications Package, Island of Hawaii, Hawaii

1. References:

a. Engineering Circular 1165-2-214, Civil Works Review, 15 December 2012.

b. Policy Memorandum #1, HQ USACE, CECW-P, 19 January 2011, subject: Continuing Authority Program Planning Process Improvements.

c. Review plan for the Laupahoehoe Small Boat Harbor Operations and Maintenance Repair Project Plans and Specifications Package, Island of Hawaii, Hawaii, Honolulu District, U.S. Army Corps of Engineers.

2. The enclosed review plan (reference 1.c.) for the Laupahoehoe Small Boat Harbor, Island of Hawaii, Hawaii, Operations and Maintenance Repair Project Plans and Specifications Package was prepared IAW references 1.a. and 1.b. The Pacific Ocean Division Civil Works Integration Division is the lead office to execute this review plan. This plan does not include Type II 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 revisions to this review plan or its execution will require new written approval from this office.

4. POC for this memorandum is Mr. Russell Iwamura, Senior Economist, Civil Works Integration Division, (808) 835-4625, or email, Russell.K.Iwamura@usace.army.mil.

Encl

GREGORY J. GUNTER
Colonel, EN
Acting Commander

REVIEW PLAN

LAUPAHOEHOE SMALL BOAT HARBOR
OPERATIONS AND MAINTENANCE (O&M) REPAIR PROJECT
ISLAND OF HAWAII, HAWAII
PLANS AND SPECIFICATIONS PACKAGE

Continuing Authorities Program (CAP)
For
Section 107 Projects

U.S. Army Corps of Engineers, Honolulu District

MSC Approval Date: 17 January 2013
Last Revision Date: 1 March 2013

US Army Corps
of Engineers ®

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REVIEW PLAN

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OPERATIONS AND MAINTENANCE (O&M) REPAIR PROJECT
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1. PURPOSE AND REQUIREMENTS

a. Purpose. This Review Plan defines the scope and level of peer review for the Laupahoehoe Small Boat Harbor (SBH) Operations and Maintenance (O&M) Repair Project, Island of Hawaii, Hawaii, Section 107 plans and specifications package.

Section 107 of the Rivers and Harbors Act of 1960, as amended, is one of the legislative authorities within the Continuing Authorities Program (CAP) under which the Secretary of the Army, acting through the Chief of Engineers, is authorized to plan, design, and implement certain types of water resources projects without additional project specific congressional authorization. CAP projects are water resource related projects of smaller scope, cost, and complexity than typical U.S. Army Corps of Engineers (USACE) civil works projects which require specific authorization by Congress. Under the delegated authority of Section 107, USACE is authorized to plan, design and construct navigation projects without project specific congressional authorization.

Additional information on this program can be found in Engineer Regulation (ER) 1105-2-100, Planning Guidance Notebook, Appendix F, Amendment #2, 31 January 2007.

b. Applicability. This Review Plan was developed following the USACE Pacific Ocean Division (POD) Model Review Plan (MRP), dated May 2011. The POD MRP is applicable to those Section 107 project documents that do not require an Independent External Peer Review (IEPR).

c. References.

1) Engineer Circular (EC) 1165-2-209, Civil Works Review Policy, 31 January 2010 and Change 1, 31 January 2012.

2) Director of Civil Works Policy Memorandum #1, CAP Planning Process Improvements, 19 January 2011.

3) EC 1105-2-412, Assuring Quality of Planning Models, 31 March 2010.

4) ER 1110-1-12, Quality Management, 30 September 2006.

5) ER 1105-2-100, Planning Guidance Notebook, Appendix F, CAP, Amendment #2, 31 January 2007.

6) Laupahoehoe SBH O&M Repair Project Management Plan (PMP), 26 September 2012 (draft).

7) USACE POD Quality Management Plan, December 2010.

8) USACE Honolulu District (POH) Civil Works Review Policy (ISO CEPOH-C_12203), 1 November 2010.

d. Requirements. This Review Plan was developed in accordance with EC 1165-2-209, 31 January 2010, and Change 1, 31 January 2012, and the Director of Civil Works Policy Memorandum #1, 19 January 2011, which establishes an accountable, comprehensive, and life-cycle review strategy for Civil Works CAP products by providing a seamless process for review of all Civil Works projects. The EC outlines four general levels of review: District Quality Control (DQC)/Quality Assurance, Agency Technical Review (ATR), IEPR, and Policy and Legal Compliance Review. In addition to these levels of review, CAP implementation documents may be subject to cost engineering review and certification (per EC 1165-2-209), Director of Civil Works Policy Memorandum #1 and the Value Management Plan requirements in the Project Management Business Process Reference 8023G and ER 11-1-321, Change 1.

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The RMO is responsible for managing the overall peer review effort described in this review plan. The POD is the RMO for the O&M program. The POD will coordinate and approve the review plan and manage the ATR.

Upon approval by the POD, the POH will post the approved review plan on its public website. A copy of the approved review plan (and any updates) will be provided to the SBH Planning Center of Expertise (PCX) to keep the PCX apprised of requirements and review schedules.

3. PROJECT INFORMATION

a. Implementation Document. The O&M repair plans and specifications will be prepared in accordance with ER 1105-2-100, Appendix F, Amendment #2, 31 January 2007. National Environmental Policy Act (NEPA) documentation will be prepared with the plans and specifications package. Based on initial analysis, the POH has determined that a categorical exclusion will apply to this project.

b. Authority. Laupahoehoe SBH was authorized under Section 107 of the Rivers and Harbors Act of 1960, as amended. The proposed repair project is being conducted under the USACE Civil Works O&M program.

c. Non-Federal Sponsor. The non-Federal sponsor is the County of Hawaii.

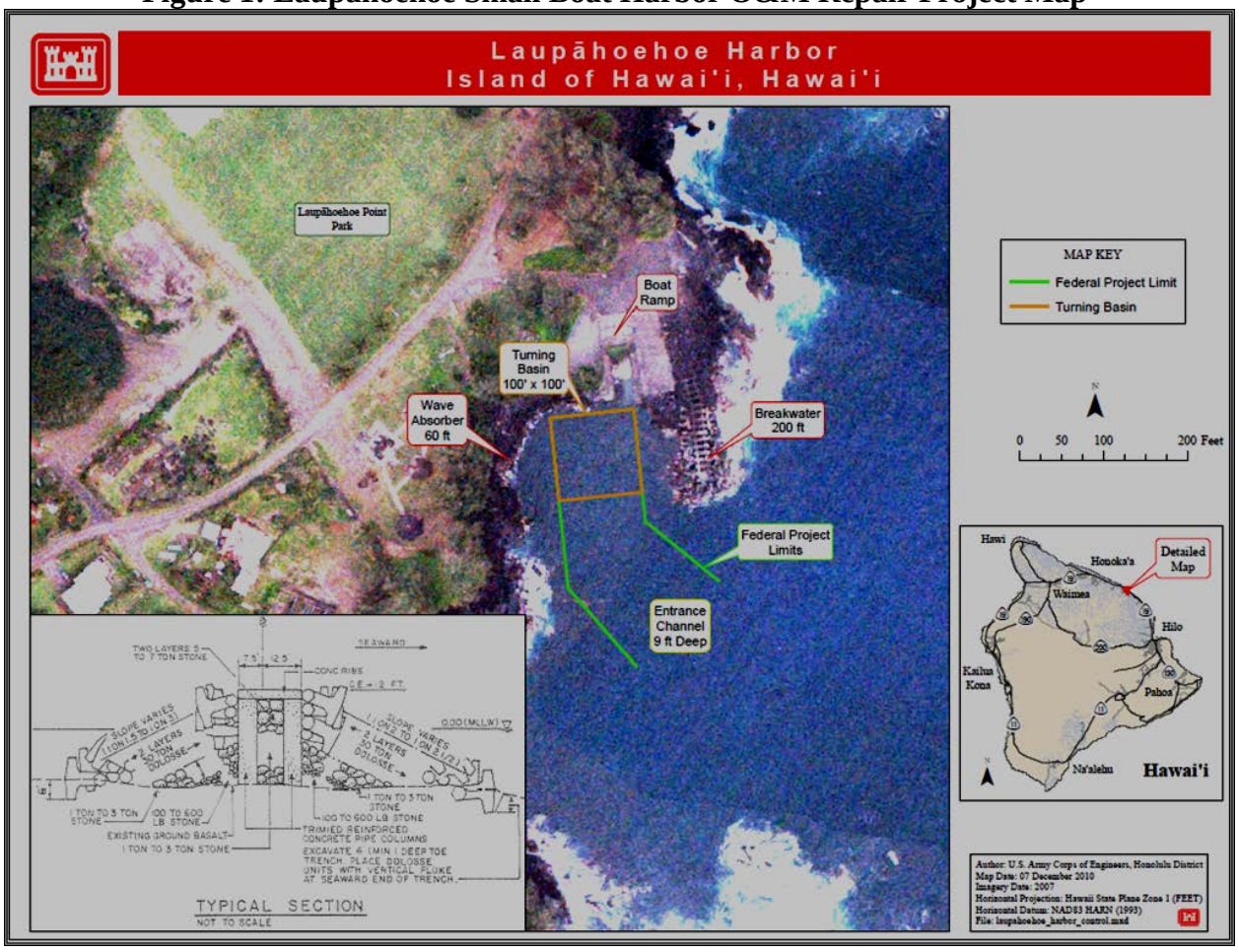
d. Project Location. The project is located on the north east side of the island of Hawaii, Hawaii (See Figure 1).

e. Project Background. The originally authorized project was completed in 1988 at a total cost of $3.7 million. The project consists of a breakwater, wave absorber, entrance channel, and turning basin. In 1990, USACE removed a rock shelf adjacent to the seaward edge of the turning basin and placed revetment stones to improve navigational safety. This additional work was completed at a cost of $235,000.

f. Project Description. Civil Works O&M work plan funds were received in Fiscal Year 2012 to develop a design to rehabilitate the breakwater and wave absorber. The breakwater and wave

absorber were found to permit increased wave transmission through the years. In the event that estimated breakwater repair costs exceed $8 million, a major rehabilitation report will be initiated, and efforts to pursue repair as regular maintenance will be stopped.

Figure 1: Laupahoehoe Small Boat Harbor O&M Repair Project Map



g. In-Kind Contributions. Products and analyses provided by non-Federal sponsors as in-kind services are subject to DQC and ATR, similar to any products developed by USACE. As an O&M project, the work is 100% federally funded. There are no in-kind contributions.

4. DISTRICT QUALITY CONTROL (DQC)

All implementation documents (including supporting data, analyses, environmental compliance documents, etc.) shall undergo DQC prior to ATR. DQC is an internal review process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the PMP. The POH shall manage the DQC process. Documentation of DQC activities is required and should be in accordance with the POH and POD Quality Manuals.

a. Documentation of DQC. Consistent with the POH Quality Manual, DQC will be documented using the POH DQC review table. When all comments have been addressed and back checked, the DQC lead will sign a DQC certification in compliance with the POH Quality Manual. The DQC comments and responses will be provided for the ATR team at each review.

b. Products to Undergo DQC. The following products will be subject to DQC:

- Plans and Specifications Package; and,
- Categorical Exclusion Documentation.

c. Required DQC Expertise. The following expertise is needed for DQC:

Table 1: DQC Required Expertise

DQC Team Members/Disciplines	Expertise Required
DQC Lead	The DQC Lead should be a senior professional, preferably with experience in preparing plans and specifications for the Civil Works O&M repair program as it relates to Section 107 projects.
Environmental Resources	The Environmental reviewer should be a NEPA expert. They should have working knowledge of Civil Works O&M projects, NEPA categorical exclusions, and Clean Water Act (CWA) Section 404 exemptions. The environmental reviewer also needs to have experience with Section 7 Endangered Species Act (ESA) consultations and Essential Fish Habitat (EFH) consultations under the Magnuson-Stevens Act.
Coastal Engineering/Geotechnical Engineering	The Coastal Engineer should be a senior professional with experience in navigation, and small boat harbor O&M repair activities.
Civil/Structural Engineering	The Civil/Structural Engineer should be a senior professional with experience in navigation, and small boat harbor O&M repair activities.
Cost Engineering	The Cost Engineering reviewer will have experience in preparing cost estimates for navigation and small boat harbor O&M repair projects.
Construction	The Construction reviewer will have experience in implementing construction contracts for navigation and small boat harbor O&M repair projects.

5. AGENCY TECHNICAL REVIEW (ATR)

ATR is mandatory for all implementation 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. Additionally, 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 POD, the designated RMO, and is conducted by a qualified team from outside the POH 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 POD.

a. Products to Undergo ATR. ATR will be performed throughout the study in accordance with the POH and POD Quality Management Plans. Because this project is relatively discrete with limited complexities, the Project Delivery Team (PDT) anticipates an ATR is only necessary for the draft plans and specification package. Depending on the outcome of the ATR, POH, and POD may determine that an additional ATR is needed on the final plans and specifications package. Product to undergo ATR includes draft plans and specifications package.

b. Required ATR Team Expertise. The following ATR expertise is required for this project. Where possible, ATR team members will address multiple disciplines and emphasis. The PM will work with the POD, vertical team and other appropriate centers of expertise to identify the final make-up of the ATR team and identify the ATR team leader. Once identified, the ATR team members for this study and a brief description of their credentials will be added in Attachment 1.

Table 2: ATR Required Expertise

ATR Team Members/Disciplines	Expertise Required
ATR Lead	The ATR Lead should be a senior professional, preferably with experience in preparing plans and specification packages for Section 107 O&M repair projects and conducting an 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 coastal engineering, environmental resources, etc). The ATR Lead must be from outside the POD.
Environmental Resources	The Environmental reviewer should be a NEPA expert. They should have working knowledge of Civil Works O&M projects, NEPA categorical exclusions, and CWA Section 404 exemptions. The environmental reviewer also needs to have experience with Section 7 ESA consultations and EFH consultations under the Magnuson-Stevens Act.
Coastal Engineering/Geotechnical Engineering	The Coastal Engineer should be a senior professional with experience in navigation, and small boat harbor

ATR Team Members/Disciplines	Expertise Required
	O&M repair activities.
Civil/Structural Engineering	The Civil/Structural Engineer should be a senior professional with experience in navigation, and small boat harbor O&M repair activities.

c. Documentation of ATR. DrChecks[sm] 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:

- The review concern – identify the product's information deficiency or incorrect application of policy, guidance, or procedures;

- The basis for the concern – cite the appropriate law, policy, guidance, or procedure that has not been properly followed;

- 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

- 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 where information is incomplete or unclear information, comments may seek clarification in order to then assess whether further specific concerns may exist.

The ATR documentation in DrChecks[sm] 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 POH, POD, and possibly the SBH-PCX 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 ER 1110-1-12. Unresolved concerns can be closed in DrChecks[sm] 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 sample Statement of Technical Review is included in Attachment 2.

6. INDEPENDENT EXTERNAL PEER REVIEW

IEPR may be required for decision and implementation documents under certain circumstances. IEPR is the most independent level of review and is applied 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 to assess whether an IEPR is appropriate. IEPR panels will consist of independent, recognized experts from outside of the USACE in the appropriate disciplines. The IEPR panel will represent 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 by an Outside Eligible Organization (OEO) external to 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.

  All CAP projects are excluded from Type I IEPR, except Section 205 and Section 103 or those projects that include an EIS or meet the mandatory triggers for Type I IEPR as stated in EC 1165-2-209. Exclusions from Type I IEPR for Section 205 and Section 103 projects will be approved on a case by case basis by the POD Commander, based upon a risk informed decision process as outlined in EC 1165-2-209 and may not be delegated.

  This CAP project was originally authorized under Section 107 of the Rivers and Harbors Act. No EIS is required and none of the other mandatory triggers for a Type I IEPR are met, therefore Type I IEPR is not required.

- Type II IEPR. Type II IEPR, or Safety Assurance Review (SAR), is managed by the Risk Management Center (RMC) and is 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.

  For Sections 14, 107, 111, 204, 206, 208, and 1135 documents prepared under this POD MRP, Type II IEPR is not anticipated to be required in the design and implementation phase, but this will need to be verified and documented in the review plan prepared for the design and implementation phase of the project.

  This project, as a small boat harbor repair, does not involve the construction of hurricane, storm or flood risk management measures and does not pose a significant threat to human life. Therefore, a Type II IEPR is not required.

7. POLICY AND LEGAL COMPLIANCE REVIEW

All documents will be reviewed throughout the study process for their compliance with law and policy. 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.

8. MODEL CERTIFICATION AND APPROVAL

The approval of planning models under EC 1105-2-412 is not required for CAP projects. The POD Commander is responsible for assuring models for all planning activities are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions. Planning models 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 problems and take advantage of the opportunities, to evaluate potential effects of alternatives and support decision making. 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).

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 Initiative, many engineering models have been identified as preferred or acceptable for use on USACE 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. As an O&M repair project, there are no planning models necessary to develop the plans and specifications package.

b. Engineering Model. The following engineering models are anticipated to be used in the development of the plans and specifications package.

Table 3: Engineering Model and Approval Status

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study	Approval Status
Microcomputer Aided Cost Engineering System (MCACES) 2nd 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 USACE 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.	Cost Engineering MCX Required Model

9. REVIEW SCHEDULES AND COSTS

a. ATR Schedule and Cost. The ATRs for this study will be accomplished in accordance with the cost and schedule in the PMP. As of the approval date of this Review Plan, the ATRs of the various documents are scheduled as follows:

- Draft Plans and Specifications Package: February 2013.
- Estimated Cost: $5,000.

10. PUBLIC PARTICIPATION

State and Federal resource agencies may be invited to participate in the review of plans and specifications as it relates to environmental permitting requirements. The PDT will keep the non-Federal sponsor and public informed of key progress as appropriate. Agencies with regulatory review responsibilities will be contacted for coordination as required by applicable laws and procedures. The ATR team will be provided with copies of public and agency comments associated with the permitting process.

11. REVIEW PLAN APPROVAL AND UPDATES

The POD Commander is responsible for approving this review plan and ensuring that use of the POD CAP MRP is appropriate for the specific project covered by the plan. The review plan is a living document and may change as the study progresses. The POH is responsible for keeping the review plan up to date. Minor changes to the review plan since the last POD 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 following the process used for initially approving the plan. Significant changes may result in the POD determining that use of the POD CAP MRP is no longer appropriate. In these cases, a project specific review plan will be prepared and approved in accordance with EC 1165-2-209 and Director of Civil Works Policy Memorandum #1. The latest version of the review plan, along with the POD Commander's approval memorandum, will be posted on the POH's webpage.

12. REVIEW PLAN POINTS OF CONTACT

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

Honolulu District
Ms. Nani Shimabuku
O&M Program Manager
U.S. Army Corps of Engineers, Honolulu District
Programs and Project Management Division
Civil and Public Works Branch
Building 230, Room 307
Fort Shafter, HI 96858-5440
Telephone: (808) 835-4030

Review Management Organization/Pacific Ocean Division
Mr. Russell Iwamura
Economist
U.S. Army Corps of Engineers, Pacific Ocean Division
Building 525, CEPOD-PDC
Fort Shafter, HI 96858-5440
Telephone: (808) 835-4625

ATTACHMENT 2: SAMPLE STATEMENT OF TECHNICAL REVIEW FOR DECISION DOCUMENTS

COMPLETION OF AGENCY TECHNICAL REVIEW

The 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 and Director of Civil Works Policy Memorandum #1. 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 USACE policy. The ATR also assessed the 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 (home district)
Office Symbol

SIGNATURE _____ _____

Name Date
Architect Engineer Project Manager[1]
Company, location

SIGNATURE _____ _____

Name Date
Review Management Office Representative
Office Symbol

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

CERTIFICATION OF AGENCY TECHNICAL REVIEW (CONT'D)

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 (home district)
Office Symbol

SIGNATURE _____ _____

Name Date
Chief, Planning Division (home district)
Office Symbol

ATTACHMENT 3: REVIEW PLAN REVISIONS

Table 6: Review Plan Revisions

REVISION DATE	DESCRIPTION OF CHANGE	PAGE / PARAGRAPH NUMBER
1 March 2013	Removal of Cost Engineering Discipline from ATR Team (E-mail from Cost MCX stated that Cost MCX participation is not required on the ATR Team)	6/Paragraph B
1 March 2013	Removal of Cost Engineering Mandatory Center of Expertise (MCX) Review and Certification Requirement (E-mail from Cost MCX stated that Cost MCX participation is not required on the ATR Team)	8/Paragraph 8
1 March 2013	Update of ATR Team	11/Table 5

ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS

Table 7: Standard Acronyms and Abbreviations

TERM	DEFINITION	TERM	DEFINITION
ATR	Agency Technical Review	NEPA	National Environmental Policy Act
CAP	Continuing Authorities Program	O&M	Operations & Maintenance
CWA	Clean Water Act	OEO	Outside Eligible Organization
DQC	District Quality Control/Quality Assurance	PCX	Planning Center of Expertise
ESA	Endangered Species Act	PDT	Project Delivery Team
EC	Engineer Circular	PMP	Project Management Plan
ER	Engineer Regulation	POD	U.S. Army Corps of Engineers, Pacific Ocean Division
HQUSACE	Headquarters, U.S. Army Corps of Engineers	POH	U.S. Army Corps of Engineers, Honolulu District
IEPR	Independent External Peer Review	RMC	Risk Management Center
MCX	Mandatory Center of Expertise	RMO	Review Management Organization
MRP	Model Review Plan	USACE	U.S. Army Corps of Engineers
MSC	Major Subordinate Command		