



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

CENAD-PSD-PP

DEC 15 2010

MEMORANDUM FOR Chief, Civil Integration Division, ATTN: CENAD-PD-CID-S

SUBJECT: Review Plan Approval for Slack Brook, Leominster, Massachusetts, Section 14
Emergency Streambank Erosion Protection Project, Review Plan

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 Coastal Storm Damage Reduction Planning Center of Expertise of the North Atlantic Division, which is the lead office to execute this plan. For further information, contact Mr. Larry Cocchieri at 347-370-4571. The Review Plan does not include independent external peer review, as this is not required for Continuing Authorities Program Section 14 projects.
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

for Joseph R. Vietri
Chief, Planning & Policy Division
Programs Directorate

PS7
RECEIVED
15 Dec 2010

Continuing Authorities Program
Section 14, Flood Control Act of 1946, as amended
Emergency Streambank and Shoreline Protection Projects

DECISION DOCUMENT REVIEW PLAN

Consistent with the National Programmatic Review Plan Model

*Exchange Street, Emergency Streambank Protection, Slack Brook, Leominster,
Massachusetts*

New England District

DEC 15 2010

MSC Approval Date: ~~Pending~~ Last Revision Date: 'none'



US Army Corps
of Engineers ®

DECISION DOCUMENT REVIEW PLAN
Consistent with the National Programmatic Review Plan Model

Section 14, Flood Control Act of 1946, as amended
Emergency Streambank and Shoreline Protection Decision Documents

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1. PURPOSE AND REQUIREMENTS

- a. **Purpose.** This Review Plan defines the scope and level of peer review for the [Slack Brook, Leominster, Massachusetts](#) Emergency Streambank and Shoreline Protection project decision document developed under **Section 14**, Flood Control Act of 1946, as amended.

Section 14 of the Flood Control Act 1946, as amended, authorizes the US Army Corps of Engineers (USACE) to study, design and construct emergency streambank and shoreline works to protect public services including (but not limited to) streets, bridges, schools, water and sewer lines, National Register sites, and churches from damage or loss by natural erosion. It is a Continuing Authorities Program (CAP) which focuses on water resource related projects of relatively smaller scope, cost and complexity. Traditional USACE civil works projects are of wider scope and complexity and are specifically authorized by Congress. The Continuing Authorities Program is a delegated authority to plan, design, and construct certain types of water resource and environmental restoration projects without specific Congressional authorization. The Federal share of costs for any one **Section 14** project may not exceed \$1,500,000.

- b. **Applicability.** This review plan is based on the model National Programmatic Review Plan for **Section 14** project decision documents, which is applicable to projects that do not require Independent External Peer Review (IEPR), as defined in ER 1165-2-209 Civil Works Review Policy. A project does not require IEPR if ALL of the following specific criteria are met:

- The project does not involve a significant threat to human life/safety assurance;
- The total project cost is less than \$45 million;
- There is no request by the Governor of an affected state for a peer review by independent experts;
- The project does not require an Environmental Impact Statement (EIS),
- The project is not likely to have significant economic, environmental, and/or social effects to the Nation;
- The project/study is not likely to have significant interagency interest;
- The project/study is not likely highly controversial;
- The decision document is not likely to contain influential scientific information or be a highly influential scientific;
- The information in the decision document or proposed project design is not likely to 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; and
- The project has not been deemed by the USACE Director of Civil Works or Chief of Engineers to be controversial nature.

If any of the above criteria are not met, the model National Programmatic Review Plan is not applicable and a study specific review plan must be prepared by the home district, coordinated with the Flood Risk Management Planning Center of Expertise (FRM-PCX) and approved by the home Major Subordinate Command (MSC) in accordance with EC 1165-2-209.

Applicability of the model National Programmatic Review Plan for a specific project is determined by the home MSC. If the MSC determines that the model plan is applicable for a specific study, the

MSC Commander may approve the plan (including exclusion from IEPR) without additional coordination with the FRM-PCX or Headquarters, USACE. The initial decision as to the applicability of the model plan should be made no later than the Federal Interest Determination milestone (as defined in Appendix F of ER 1105-2-100, F-10.e.1) during the feasibility phase of the project. In addition, the home district and MSC should assess at the Alternatives Formulation Briefing (AFB) whether the initial decision on the use of the model plan is still valid or if a project specific review plan should be developed based on new information. If a project specific review plan is required, it must be approved prior to execution of the Feasibility Cost Sharing Agreement (FCSA) for the study.

This review plan does not cover implementation products. A review plan for the design and implementation phase of the project will be developed prior to approval of the final decision document in accordance with EC 1165-2-209.

c. 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, xxx 2010
- (3) Engineering Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006
- (4) ER 1105-2-100, Planning Guidance Notebook, Appendix F, Continuing Authorities Program, Amendment #2, 31 Jan 2007
- (5) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007

d. Requirements. This programmatic 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).

- (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). 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 Major Subordinate Command (MSC).
- (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 US 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 Review Management Organization (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.

For decision documents prepared under the model National Programmatic Review Plan, the leader of the ATR team shall be from outside the home district, but may be from within the home MSC.

- (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 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.

For decision documents prepared under the model National Programmatic Review Plan, Type I IEPR is not required.

- (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.

For **Section 14** projects developed under the model National Programmatic Review Plan, Type II IEPR is not required.

- (4) 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.

- (5) 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.

For decision documents prepared under the model National Programmatic Review Plan, Regional cost personnel that are pre-certified by the DX will conduct the cost estimate ATR. The DX will provide the Cost Engineering DX Certification.

- (6) 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 (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. The use of engineering models is also subject to DQC, ATR, and IEPR (if required).

For decision documents prepared under the model National Programmatic Review Plan, use of existing certified or approved planning models is encouraged. Where uncertified or unapproved model are used, approval of the model for use will be accomplished through the ATR process. The ATR team will apply the principles of EC 1105-2-412 during the ATR to ensure the model is theoretically and computationally sound, consistent with USACE policies, and adequately documented. If specific uncertified models are identified for repetitive use within a specific district or region, the appropriate PCX, MSC(s), and home District(s) will identify a unified approach to seek certification of these models.

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The RMO is responsible for managing the overall peer review effort described in this review plan. The RMO for **Section 14** decision documents is the home MSC. The MSC will coordinate and approve the review plan and manage the ATR. The home District 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 Flood Risk Management Planning Center of Expertise (FRM-PCX) to keep the PCX apprised of requirements and review schedules.

3. STUDY INFORMATION

- a. **Decision Document.** The [Slack Brook, Leominster, Massachusetts](#) decision document will be prepared in accordance with ER 1105-2-100, Appendix F. The approval level of decision documents (if policy compliant) is the home MSC. An Environmental Assessment (EA) will be prepared along with the decision document.
- b. **Study/Project Description.** This study was prepared under the continuing authority contained in Section 14 of the 1946 Flood Control Act (as amended). The Section 14 authority allows the U.S. Army Corps of Engineers to participate in the planning and construction of economically justified stream bank erosion control projects in situations where public facilities are threatened, in partnership with a local sponsor (the City of Leominster, Massachusetts). The Project Delivery Team's objective was to provide an assessment of emergency stream bank protection alternatives designed to stabilize approximately 500 feet of riverbank along Slack Brook in Leominster, Massachusetts.

The site is located along the right bank of Slack Brook adjacent to Exchange Street. The slope is approximately 20 to 25 feet high from the edge of the stream to the level of Exchange Street. The subsurface material exposed on the slope is a dense till ranging in size from silt to large rocks and a few boulders. There are some large cut rectangular stone in the channel most likely from the stone dam just upstream. Groundwater emergence from the slope was observed about 10 to 15 feet above the toe of the slope. The slope is heavily vegetated in some spots and bare in others where the toe of the slope has been scoured or sloughed. Erosion at the project site is being caused by scouring of the lower stream bank materials by the high volume and velocity of the water in Slack Brook during periods of heavy rainfall and runoff. Additionally, there are areas where the exposed slope is soft from groundwater seepage out of the slope which leaves the potential for minor sloughing due to weakened materials.

Environmental factors weighed heavily on the choices for the proposed solution. Within the stream, the stones and boulders eroded from the slope have created many riffles and pools which need to be disturbed as little as possible. Vegetation on the slope and at the top of the bank provides varying percentages of cover for habitat within the project limits; therefore, protecting as many trees at the top of the slope and providing vegetation along the slope is very important.

The most likely alternative involves placement of a gabion wall base along the bank to stabilize the base of the slope and protect it from scouring during high flows in Slack Brook. The upper portion of the gabion wall will include a vegetated exterior. The gabions are considered the best alternative for scour protection as they require the least amount of excavation into the actual stream and maximize the environmental considerations. The gabion wall provides structural stability and scour protection at the toe of the slope. Existing stones and boulders at the base of the slope that are moved for construction will be placed back along the toe of the gabions. Where necessary, the upper slope will be backfilled and planted to provide vegetative cover. Where possible, trees on the upper slope will not be disturbed.

Constructability is also a concern as the stream is very narrow and there is little to no space for construction equipment and access to the bottom of the slope is difficult. Therefore, a crane will most likely have to be utilized to lower the construction materials and equipment to the bottom of the slope. Temporary closure of one lane of Exchange Street may be required during construction.

To the extent possible, any excavated materials shall be used as backfill within the limits of the project.

Several alternatives were considered during the plan formulation effort, comparing how effective they are in meeting objectives. A without project 'No action' condition was evaluated to determine impacts to the area and the community. Without permanent erosion protection, the riverbank will continue to erode which will eventually threaten the integrity and eventually close Exchange Street. Alternative methods of riverbank stabilization investigated include: the placement of vertical steel sheet piling; a gabion wall to stabilize the base of the slope; rock filled timber cribs; a combination of stone revetment, a vertical sheet piling and bioengineering; precast modular retaining walls with stone protection at the toe. With the exception of the gabion wall, all methods investigated were found to be either not physically viable or cost prohibitive. The approximate cost for the potentially recommended plan is \$500,000.

c. Factors Affecting the Scope and Level of Review.

Use of the Model Programmatic Review plan was determined to be appropriate for the Slack Brook Project given the limited scope and lack of complexity typical of most Section 14 projects. No significant economic, environmental or social effects are anticipated and the project will satisfy its NEPA requirements through an EA/FONSI. The project will prevent further erosion of the existing Streambank through the construction of gabion wall and vegetation which does not pose a significant threat to human life/safety. The project is not controversial given the limited nature of the project and the fact that all attempts will be made to limit the placement of fill in the river. The project does not contain any influential scientific information nor is it based on novel or innovative methods.

d. 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. *No in-kind products are anticipated.*

4. DISTRICT QUALITY CONTROL (DQC)

The decision document for the Slack Brook project will be completed following the standard New England District quality control procedures. Any significant issues and/or concerns will be summarized and provided to the ATR for consideration in performing their review.

5. AGENCY TECHNICAL REVIEW (ATR)

a. Products to Undergo ATR. ATR will be performed throughout the study in accordance with the District and MSC Quality Management Plans. The ATR shall be documented and discussed at the AFB milestone. Certification of the ATR will be provided prior to the District Commander signing the final report. Products to undergo ATR include [the fact sheet decision document and the Environmental Assessment](#).

b. Required ATR Team Expertise.

ATR Team Members/Disciplines	Expertise Required
ATR Lead	The ATR lead should be a senior professional with experience in

	preparing Section 14 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 will be a senior water resources planner with experience in Section 14 riverine projects. The overall objective for the reviewer will be to verify that the decision document and EA is completed consistent with established policies and procedures and that all assumptions are clearly justified and valid. The Planning reviewer will serve as the ATR Lead.
Economics	Not required
Environmental Resources	The Environmental Resources reviewer will be a senior environmental planner with experience completing NEPA documents for Section 14 projects.
Cultural Resources	Not required
Hydrology	Not required
Hydraulic Engineering	The hydraulic engineering reviewer will have a thorough understanding of streambank protection methods as well as flow-related causes of bank erosion.
Coastal Engineering	Not required
Geotechnical Engineering	The geotechnical engineering reviewer will have a thorough understanding of streambank protection methods as well as flow-related causes of bank erosion.
Civil Engineering	Not required
Structural Engineering	Not required
Electrical/Mechanical Engineering	Not required
Cost Engineering	The cost engineering reviewer will be certified by the Cost DX.
Construction/Operations	Not required
Real Estate	Not required
Hazardous, Toxic and Radioactive Waste (HTRW)	Not required

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 in order to then assess whether further specific concerns may exist.

The ATR documentation in DrChecks will include the text of each ATR concern, the PDT response, a brief summary of the pertinent points in any discussion, including any vertical team coordination (the vertical team includes the district, RMO, MSC, and HQUSACE), and the agreed upon resolution. If an ATR concern cannot be satisfactorily resolved between the ATR team and the PDT, it will be elevated to the vertical team for further resolution in accordance with the policy issue resolution process described in either ER 1110-2-12 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 prior to the District Commander signing the final report. A sample Statement of Technical Review is included in Attachment 2.

6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

- a. Decision on IEPR.** Based on the information and analysis provided in paragraph 3(c) of this review plan, the project covered under this plan is excluded from IEPR because it does not meet the mandatory IEPR triggers and does not warrant IEPR based on a risk-informed analysis. If any of the criteria outlined in paragraph 1(b) are not met, the model National Programmatic Review Plan is not applicable and a study specific review plan must be prepared by the home district, coordinated with the Flood Risk Management Planning Center of Expertise (FRM-PCX) and approved by the home Major Subordinate Command (MSC) in accordance with EC 1165-2-209.
- b. Products to Undergo Type I IEPR.** Not applicable.

c. **Required Type I IEPR Panel Expertise.** Not Applicable.

d. **Documentation of Type I IEPR.** Not Applicable.

7. MODEL CERTIFICATION AND APPROVAL

8. **Planning Models.** The following planning models are anticipated to be used in the development of the decision document: *None*.

a. **Engineering Models.** *The following engineering models are anticipated to be used in the development of the decision document: None*

9. REVIEW SCHEDULES AND COSTS

a. **ATR Schedule and Cost.** **The schedule for the ATR to commence will be 31 August 2010. The ATR will conclude 8 Sept 2010. The estimated cost of the ATR is less \$5,000.**

b. **Type I IEPR Schedule and Cost.** Not applicable.

c. **Model Certification/Approval Schedule and Cost.** For decision documents prepared under the model National Programmatic Review Plan, use of existing certified or approved planning models is encouraged. Where uncertified or unapproved model are used, approval of the model for use will be accomplished through the ATR process. The ATR team will apply the principles of EC 1105-2-412 during the ATR to ensure the model is theoretically and computationally sound, consistent with USACE policies, and adequately documented. If specific uncertified models are identified for repetitive use within a specific district or region, the appropriate PCX, MSC(s), and home District(s) will identify a unified approach to seek certification of these models. *Not applicable*.

10. PUBLIC PARTICIPATION

State and Federal resource agencies may be invited to participate in the study covered by this review plan as partner agencies or as technical members of the PDT, 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 copies of public and agency comments. *The NEPA document Public Notice is scheduled to be released on 20 Sept 2010. Both Federal and State agency and public input of the document will be solicited over a 30-day comment period.*

11. REVIEW PLAN APPROVAL AND UPDATES

The home MSC Commander is responsible for approving this review plan and ensuring that use of the Model Programmatic Review Plan 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 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. Significant changes may result in the MSC Commander determining

that use of the Model Programmatic Review Plan is no longer appropriate. In these cases, a project specific review plan will be prepared and approved in accordance with EC 1165-2-209. The latest version of the review plan, along with the Commanders' approval memorandum, will be posted on the home district'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:

- [*Rob Russo, Project Manager, New England District - CENAE-EP, \(978\) 318-8553*](#)
- [*Add title and phone number for the point of contact\(s\) at the home MSC*](#)

ATTACHMENT 1: TEAM ROSTERS

NOTE: Attachment 1 should include rosters and contact information for the PDT, ATR team, and MSC. The credentials and years of experience for the ATR team should also be included when available. DELETE THIS TEXT BOX BEFORE FINALIZING THE REVIEW PLAN.

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 DrCheckssm.

SIGNATURE _____ Date _____
Name
ATR Team Leader
Office Symbol/Company

SIGNATURE _____ Date _____
Name
Project Manager
Office Symbol

SIGNATURE _____ Date _____
Name
Architect Engineer Project Manager¹
Company, location

SIGNATURE _____ Date _____
Name
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 _____ Date _____
Name
Chief, Engineering Division
Office Symbol

SIGNATURE _____ Date _____
Name
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

NOTE: Revisions to the Review Plan since it was last approved by the MSC Commander should be documented in Attachment 3. Significant changes (such as a change in the level or scope of review) require re-approval by the MSC Commander following the process used for initially approving the plan. DELETE THIS TEXT BOX BEFORE FINALIZING THE REVIEW PLAN.

ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS

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