DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DIVISION, GREAT LAKES AND OHIO RIVER
CORPS OF ENGINEERS
550 MAIN STREET
CINCINNATI, OH 45202

CELRD-PD

28 Dec 12

MEMORANDUM FOR Commander, Buffalo District

SUBJECT: Review Plan for the Presque Isle Shoreline Erosion Control Project, Erie, Pennsylvania, Construction General, Beach Nourishment.

1. The attached Review Plan (RP) for the Presque Isle Shoreline Erosion Control project was presented to the Great Lakes and Ohio River Division for approval in accordance with EC 1165-2-209 "Civil Works Review" dated 31 January 2010.

2. The project is designed to maintain the beaches of Presque Isle State Park by conducting a cost-effective and efficient beach nourishment program that protects the peninsula from erosion, does not cause health and safety concerns to neighboring residents, sustains growth of Gull Point, and has a positive impact on the Piping Plover habitat. Initial construction consisted of 58 offshore rubblemound breakwaters, each 150 feet long with a 350 foot gap between structures and the placement of an estimated 560,000 tons of sand along 5.5 miles of beach paralleling the breakwaters, to provide a protective berm with a minimum 75 foot crest width and crest elevation of 10 feet above low water datum. The Local Cooperation Agreement included a provision for "authorized beach nourishment," defined as a period of "50 years after completion of initial construction, the annual placement of approximately 38,000 cubic yards of sand from behind the 58 breakwaters along 5.5 miles of shoreline." Beach nourishment is required to maintain the protective berm at the minimum design 60 foot crest width and crest elevation of 10 feet above low water datum.

3. The MSC has reviewed the attached RP and concurs that it describes the scope of review for work phases and addresses all appropriate levels of review consistent with the requirements described in EC 1165-2-209.

4. I concur with the recommendations and approve the enclosed RP for the Presque Isle Shoreline Erosion Control Project.

5. The District is requested to post the RP to its website. Prior to posting, the names of all individuals identified in the RP should be removed.

6. If you have any questions or need additional information, please contact Dr. Hank Jarboe, CELRD-PDS-P, at (513) 684-6050.

Encl

Margaret W. Burcham
MARGARET W. BURCHAM
Brigadier General, USA
Commanding

DEPARTMENT OF THE ARMY
BUFFALO DISTRICT, CORPS OF ENGINEERS
1776 NIAGARA STREET
BUFFALO, NEW YORK 14207-3199

REPLY TO
ATTENTION OF

CELRB-PM-PL

02 November 2012

MEMORANDUM FOR Commander, U.S. Army Division, Great Lakes and Ohio River, ATTN: CELRD-CM (Ms. Pauline Thorndike), 550 Main Street RM 10-524, Cincinnati, OH 45202-3222

SUBJECT: District Transmittal Letter – Review Plan for Presque Isle Shoreline Erosion Control Project – Construction General (CG) - Beach Nourishment

1. The enclosed Review Plan (RP) is presented for approval.

2. Presque Isle Peninsula is located at Erie Harbor, Erie, Pennsylvania. The project is designed to maintain the beaches of Presque Isle State Park by conducting annual beach nourishment (sand placement and removal) to reduce the risk of erosion, sustain growth of Gull Point, and benefit the habitat of the Piping Plover.

3. The review plan contained herein has undergone District Quality Control (DQC) review by CELRB-PM-PA/Mr. Douglas Gorecki, PMP. It has been determined by Mr. Gorecki that the review plan is technically correct and policy compliant. I recommend approval of the review plan.

2. The point of contact for this subject is Douglas Gorecki at (716) 879-4415 or Douglas.J.Gorecki@usace.army.mil.

Encl

David Romano, PMP
Chief, Planning Branch

IMPLEMENTATION REVIEW PLAN

Project Title: **Presque Isle Shoreline Erosion Control Project Construction General (CG)**

Project No.: **141971**

Location: **Presque Isle State Park**
Erie, Pennsylvania

MSC Approval Date: **Pending**

Last Revision Date: **None**

US Army Corps of Engineers®
Buffalo District

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1. PURPOSE AND REQUIREMENTS

a. Purpose. This review plan defines the scope and level of peer review for the Presque Isle Shoreline Erosion Control Project – Construction General (CG). The purpose of this review plan is to define the requirements, procedures, and specific details regarding performance of routine beach nourishment in accordance with the 1989 Local Cooperation Agreement between the Department of the Army and the Commonwealth of Pennsylvania for the Shoreline Protection Project at Presque Isle Peninsula, Erie Harbor, Erie, Pennsylvania, as amended.

b. Applicability. This review plan is referred to as an "Implementation Review Plan" since the project is in construction, and only involves construction. Based upon the risk-informed decision of the Project Delivery Team (PDT), developed and implemented by the Buffalo District, the Presque Isle Shoreline Erosion Control Project requires only District Quality Control (DQC). Given the nature of this project, Agency Technical Review (ATR) or Independent External Peer Review (IEPR) are not applicable.

c. References.

(1) Engineering Circular (EC) 1165-2-209, Civil Works Review Policy, 31 Jan 2012
(2) EC 1105-2-412, Assuring Quality of Planning Models (31 Mar 2010
(3) Engineering Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006
(4) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007
(5) Project Management Plan for Presque Isle Beach Nourishment

d. Requirements. This review plan was developed in accordance with EC 1165-2-209, which establishes an accountable, comprehensive, life-cycle review strategy for Civil Works products by providing a seamless process for review of all Civil Works projects from initial planning through design, construction, and operation, maintenance, repair, replacement and rehabilitation (OMRR&R). The EC outlines four general levels of review: District Quality Control/Quality Assurance (DQC), Agency Technical Review (ATR), Independent External Peer Review (IEPR), and Policy and Legal Compliance Review. In addition to these levels of review, decision documents are subject to cost engineering review and certification (per EC 1165-2-209) and planning model certification/approval (per EC 1105-2-412).

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The RMO is responsible for managing the overall peer review effort described in this review plan. Great Lakes and Ohio River Division is the RMO for the Presque Isle Beach Nourishment project. The MSC will coordinate and approve the review plan and manage ATR. Buffalo District will post the approved review plan on its public website.

3. STUDY INFORMATION

a. Decision Document. Not Applicable.

b. Study/Project Description. Section 501(a) of the Water Resources Development Act of 1986, Public Law 99-662, authorized construction of the shoreline protection project at Presque Isle Peninsula, Erie, Pennsylvania. A final Environmental Impact Statement (EIS) for the project was filed with the U.S. Environmental Protection Agency on March 20, 1981.

The project is designed to maintain the beaches of Presque Isle State Park by conducting a cost-effective and efficient beach nourishment program that protects the peninsula from erosion, does not cause health and safety concerns to neighboring residents, sustains growth of Gull Point, and has a positive impact on the Piping Plover habitat.

Initial construction consisted of 58 offshore rubblemound breakwaters, each 150 feet long with a 350 foot gap between structures and the placement of an estimated 560,000 tons of sand along 5.5 miles of beach paralleling the breakwaters, to provide a protective berm with a minimum 75 foot crest width and crest elevation of 10 feet above low water datum.

The Local Cooperation Agreement (LCA) included a provision for "authorized beach nourishment," defined as a period of "50 years after completion of initial construction, the annual placement of approximately 38,000 cubic yards of sand from behind the 58 breakwaters along 5.5 miles of shoreline." Beach nourishment is required to maintain the protective berm at the minimum design 60 foot crest width and crest elevation of 10 feet above low water datum.

The specific work, services, and products provided include:

- Conduct beach nourishment annually through 2042 that includes redistribution of tombolo sand and purchase placement of new sand to maintain the beaches;
- Annual monitoring to determine the long-term stability of the peninsula and measure success of the project; and
- Supervision and Administration (S&A) of contracts.

c. Factors Affecting the Scope and Level of Review. Quality checks and reviews occur during the development process and are carried out as a routine management practice. Quality checks may be performed by staff responsible such as supervisors, work leaders, team leaders, designated individuals from the senior staff, or other qualified personnel. However, to assure independence the checks and reviews will not be performed by the same people who performed the original work, including managing/reviewing the work in the case of

contracted efforts. All DQC efforts will include the necessary expertise to address compliance with published Corps policy. This project does require DQC and will conform to LRD Regional Business Process Manual Document# 0504 – QC/QA Procedures for Civil Works.

The PDT has determined that this project does not require ATR or IEPR because:

- No design work is required (structural, mechanical, hydraulic, etc.);
- No alternatives are evaluated;
- There are no impacts to a structure or feature of a structure whose performance involves potential life safety risks;
- The consequences of non-performance are minimal;
- The operation of the project is not changed;
- The project does not involve ground disturbance;
- There are no activities that could potentially generate hazardous wastes or disposal of materials;
- The project does not rely on any manufacturers' engineers and specifications;
- The project does not require reliance on local authorities for inspection/certification of utility systems;
- 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/study is not likely to involve significant public dispute as to the size, nature, or effects of the project;
- The project/study is not likely to involve significant public dispute as to the economic or environmental cost or benefit of the project;
- The information in the decision document or anticipated 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;
- The project design is not anticipated to require redundancy, resiliency, and/or robustness, unique construction sequencing, or a reduced or overlapping design construction schedule; and
- There are no other circumstances where the Chief of Engineers or Director of Civil Works determines Type I IEPR is warranted.

4. DISTRICT QUALITY CONTROL (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). Buffalo District shall manage DQC activities and records in accordance with the LRD Regional Business Process Manual.

5. AGENCY TECHNICAL REVIEW (ATR)

ATR is mandatory for all decision and 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, and that the document explains the analyses and results in a reasonably clear manner for the public and decision makers. ATR is managed within USACE by the designated RMO and is conducted by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. ATR teams will be comprised of senior USACE personnel and may be supplemented by outside experts as appropriate. The ATR team lead will be from outside the home MSC.

a. Products to Undergo ATR. ATR will be performed on decision and implementation documents in accordance with EC 1165-2-209, District and MSC Quality Management Plans and the LRD Regional Business Process Manual.

b. Required ATR Team Expertise. Expertise required for ATR is determined by the PDT when the need for ATR is identified and is based upon the scope of the review 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 been 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.

6. INDEPENDENT EXTERNAL PEER REVIEW

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

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

- Type II IEPR. Type II IEPR, or Safety Assurance Review (SAR), are managed outside the USACE and are conducted on design and construction activities for hurricane, storm, and flood risk management projects or other projects where existing and potential hazards pose a significant threat to human life. Type II IEPR panels will conduct reviews of the

design and construction activities prior to initiation of physical construction and, until construction activities are completed, periodically thereafter on a regular schedule. The reviews shall consider the adequacy, appropriateness, and acceptability of the design and construction activities in assuring public health safety and welfare.

a. Decision on IEPR. Based on the information and analysis provided in the preceding paragraphs 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

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. POLICY AND LEGAL COMPLIANCE REVIEW

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

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

All decision documents shall be coordinated with the Cost Engineering DX, located in the Walla Walla District. Regional cost personnel that are pre-certified by the DX will conduct the cost engineering ATR. The DX will provide the Cost Engineering DX certification. The RMO will coordinate with the Cost Engineering DX on the selection of the cost engineering ATR team member.

9. MODEL CERTIFICATION AND APPROVAL

Not Applicable. No planning or engineering models are used in support of the Presque Isle Shoreline Erosion Control Project.

10. REVIEW SCHEDULES AND COSTS

a. ATR Schedule and Cost. ATR schedules and costs are determined by the PDT when the need for ATR is identified and are based upon the scope of the review required and available funding.

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

c. Model Review Schedule and Cost. Not applicable.

11. PUBLIC PARTICIPATION

State and Federal resource agencies may be invited to participate in development of documents related to 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.

12. REVIEW PLAN APPROVAL AND UPDATES

The home MSC Commander is responsible for approving this review plan and ensuring that the Implementation 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. The latest version of the review plan, along with the Commanders' approval memorandum, will be posted on the home district's webpage.

13. REVIEW PLAN POINTS OF CONTACT

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

Michael Asquith
Buffalo District Project Manager
716-879-4352
Michael.Asquith@usace.army.mil

ATTACHMENT 1: TEAM ROSTERS

Name	Role	Office Symbol CELRB-	Phone 716-879-	Email @usace.army.mil	Responsibilities
Michael Asquith, P.E.	Project Management	PM-PM	4352	Michael.Asquith	Leads PDT and provides overall coordination. Primary USACE interface for customer and stakeholders. Identifies, plans, monitors, and controls project activities in support of USACE and customer/stakeholder requirements
Andrew Hannes	Environmental Analysis	PM-EA	4437	Andrew.Hannes	Preparation of Environmental Assessment and related documents in accordance with the requirements of NEPA
Marty Wargo	Supervisory Biologist	PM-EA	716-879-4116	Martin.P.Wargo	Review and Approval of NEPA documents (except FONSI approval)
Frank Lewandowski, P.E.	Civil/Structural Engineering	TD-DS	4242	Frank.T.Lewandowski	Technical expertise for civil and structural engineering, project design.
Weston Cross	Geotechnical Engineering	TD-DC	4175	Weston.P.Cross	Technical expertise for coastal and geotechnical engineering
Michael Mohr, P.E.	Coastal Engineering	TD-DC	4168	Michael.C.Mohr	Technical expertise for coastal and geotechnical engineering

ATTACHMENT 2:

SAMPLE STATEMENT OF TECHNICAL REVIEW

<u>STATEMENT OF TECHNICAL REVIEW</u>
Presque Isle Shoreline Erosion Control Project – Construction General (CG)
P2# 141971
[Product Type]
[Date]

COMPLETION OF DISTRICT QUALITY CONTROL REVIEW

The District Quality Control Review (DQC) has been completed for the *[product type & short description of item]* for **Presque Isle Shoreline Erosion Control Project – Construction General (CG)**. The DQC Review was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-209. During the DQC Review, 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 DQC Review included documentation of DQC activities employed and comment resolution. All comments resulting from the DQC Review have been resolved and the comments have been closed.

_____ _____
Michael Mohr, P.E. Date
Coastal Engineer, CELRB-TD-DC
DQC Team Leader

_____ _____
Michael Asquith, P.E. Date
Buffalo District Project Manager, CELRB-PM-PM

_____ _____
David Romano, PMP Date
Chief, Planning Branch
CELRB-PL
Review Management Organization Representative

Presque Isle Shoreline Erosion Control Project – Construction General (CG)
P2# 141971
[Product Type]
[Date]

CERTIFICATION OF DISTRICT QUALITY CONTROL REVIEW

Significant concerns and the explanation of the resolution are as follows:

No major technical concerns were identified. Minor technical clarifications were resolved to the satisfaction of the reviewers. All concerns resulting from the DQC Review of the project have been fully resolved.

_____ _____

Thomas Bender, P.E. Date
Chief, Design Branch CELRB-TD-D
Technical Services Division

_____ _____

David Romano, PMP Date
Chief, Planning Branch CELRB-PM-PL
Programs and Project Management Division

ATTACHMENT 3: REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number

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