

REVIEW PLAN

Corpus Christi Ship Channel, Texas
La Quinta Ship Channel Extension Deepening Project
Section 204(f) Federal Assumption of Maintenance
Feasibility Report

U.S. Army Corps of Engineers Galveston District

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1. PURPOSE AND REQUIREMENTS

a. **Purpose.** This Review Plan defines the scope and level of peer review for the [Corpus Christi Ship Channel, Texas; La Quinta Ship Channel Extension Deepening Project; Section 204\(f\) Federal Assumption of Maintenance; Feasibility Report.](#)

b. References

- (1) Engineering Circular (EC) 1165-2-209, Civil Works Review Policy, [Change #1 31 Jan 2012](#)
- (2) EC 1105-2-412, Assuring Quality of Planning Models, 31 Mar 2011
- (3) EC 1105-2-410, Review of Decision Documents, 22 Aug 2008
- (4) Engineering Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006
- (5) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007
- (6) [Project Workplan for Corpus Christi Ship Channel, Texas; La Quinta Ship Channel Extension Deepening Project; Section 204\(f\) Federal Assumption of Maintenance; 18 March 2012](#)
- (7) [Corpus Christi Ship Channel, Texas; Channel Improvement Project; Volume 1; Final Feasibility Report and Final Environmental Impact Statement; April 2003](#)
- (8) [Corpus Christi Ship Channel; La Quinta Channel Extension; Limited Re-evaluation Report; February 2010](#)
- (9) [SWG-2006-00515 \(Section 10/404 Permit for Non-Federal Construction\); 30 June 2011](#)

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) (although certification of costs estimates will not be required for this project) 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. 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 Deep Draft Navigation PCX \(DDNPCX\)](#).

The RMO will coordinate with the Cost Engineering Directory of Expertise (DX) to ensure the appropriate expertise is included on the review teams to assess the adequacy of cost estimates, construction schedules and contingencies. [This is a single purpose study. Thus, no additional PCXs will be utilized. This project does not involve life safety issues. Thus, the RMC will not have a role in the review.](#)

3. STUDY INFORMATION

- a. **Decision Document.** The Corpus Christi Ship Channel, Texas; La Quinta Ship Channel Extension Deepening Project; Section 204(f) Federal Assumption of Maintenance will result in a decision document that is a Feasibility Report. The purpose of the Feasibility Report is to determine whether it is in the Federal Government's interest to assume operation and maintenance of the La Quinta Ship Channel Extension Deepening Project. The level of approval for the decision document is ASA (CW). Congressional authorization is not required. An Environmental Assessment that focuses on the La Quinta Channel Extension Deepening Project will be prepared along with the Feasibility Report.
- b. **Study/Project Description.** The Federally authorized 1.4 mile La Quinta Ship Channel Extension Project is currently under construction. The authorized project depth is -39 feet Mean Low Tide (MLT), which is six feet less than that of the existing La Quinta Ship Channel (which was constructed and maintained by USACE to -45 feet MLT by a 1968 Congressional Authorization). The Port of Corpus Christi Authority (PCCA) received a USACE Section 10/404 permit (SWG-2006-00515 in September of 2006 that mirrored the Federally authorized extension of the La Quinta Ship Channel and then the permit was amended in June 2011, authorizing additional dredging to deepen the 1.4 mile La Quinta Ship Channel Extension to -45 feet MLT. Construction of the Federal project to dredge the La Quinta Ship Channel Extension to -39 feet was initiated in November 2011 and is expected to be complete in the spring of 2013. PCCA is conducting a feasibility study for Federal assumption of maintenance of the permitted deepening to -45 feet. The study authority is Section 204(f) of WRDA 1986, amended 1990. The physical deepening to -45 feet by PCCA would not be initiated until receiving approval of Federal assumption of maintenance from ASA (CW). This is a single-purpose study (deep draft navigation). Multiple dredge depths are being evaluated, including depths of -40, -41, -42, -43, -44, and -45 feet. The non-Federal sponsor is PCCA. Figure 1 displays the vicinity map for the La Quinta Channel Extension.

The Galveston District is in the process of converting all vertical datums used in navigation projects to reference Mean Lower Low Water (MLLW). The new MLLW reference is intended to indicate the average minimum tidal depth expected in the water bodies. While the District has not yet made determinations concerning the new reference elevations for Corpus Christi Bay, project elevations will eventually need to be adjusted in accordance with the new standards. Although the reference datum change would change the labeled value of the project bottom elevation, it is not expected to change the physical elevation of the channel.

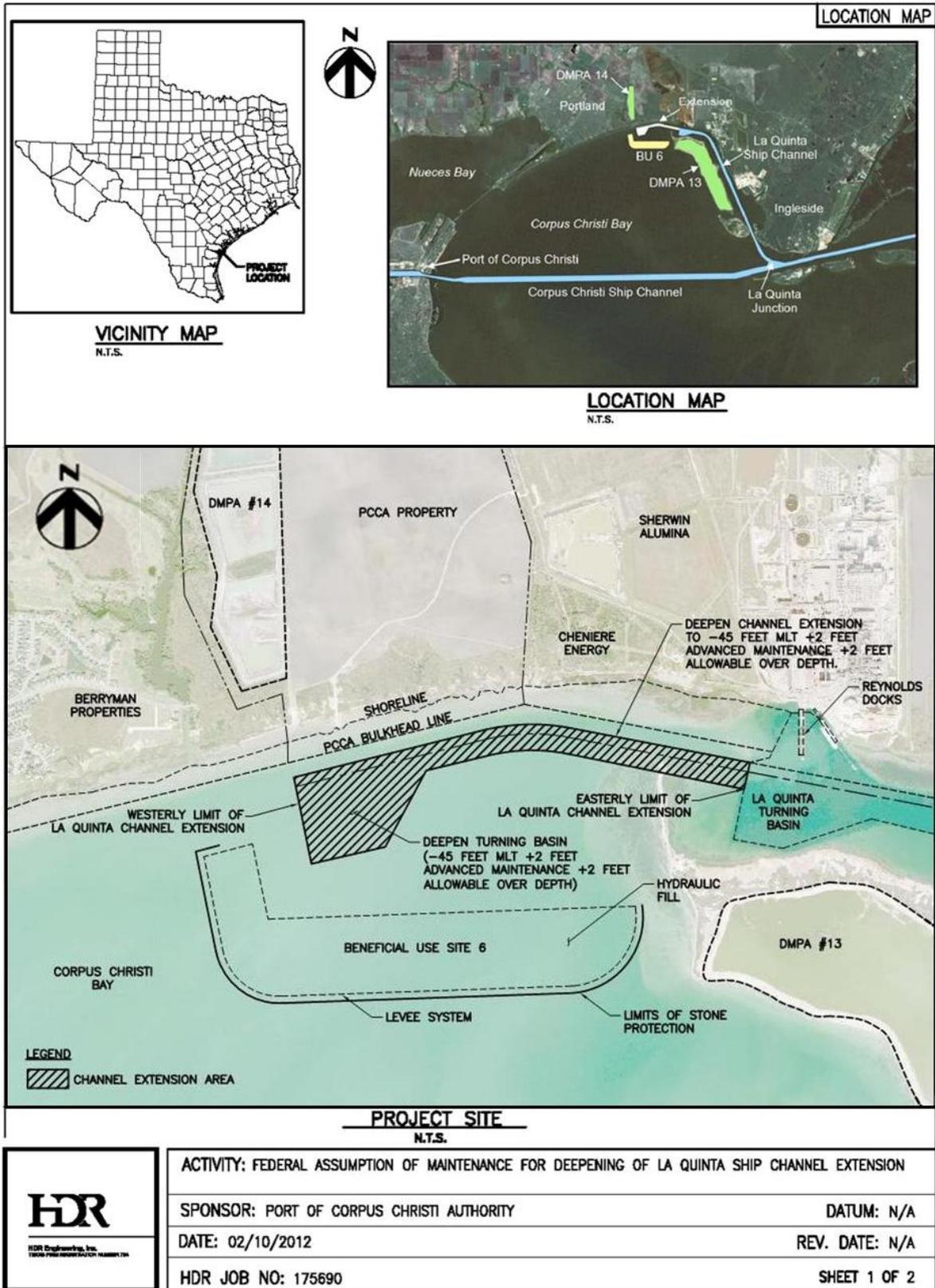


Figure 1 – La Quinta Channel Extension Vicinity Map

c. Factors Affecting the Scope and Level of Review.

- *This is a study to assess the feasibility of assuming maintenance of the permitted non-Federal deepening of a Federal deep draft navigation channel. The non-Federal construction is a simple dredging project, which will be accomplished via industry standard methodologies and therefore should be considered by USACE as routine. The local sponsor is requesting assumption of maintenance. Maintenance dredging is also a well-known practice which should be considered routine. There are no technical, institutional or social challenges associated with the project.*
- *All aspects of the project are routine. Financial risks include those associated with price fluctuations for construction and maintenance dredging.*
- *The project does not pose a threat to life or safety.*
- *There is no request by the Governor of an affected state for a peer review by independent experts.*
- *The project is a minor deepening of an already authorized Federal project (which underwent extensive environmental and social analysis during the Environmental Impact Statement process). The physical construction of the project is within the construction footprint of the Federal project and is therefore unlikely to result in significant public dispute.*
- *The cost of the non-Federal deepening will be paid entirely by the local sponsor. The additional average annual maintenance cost associated with deepening from -39 feet to -45 feet is \$579,660. Thus, the project is unlikely to involve significant public dispute for economic reasons. The construction footprint of the non-Federal deepening is within the footprint of the Federal project and therefore will not result in any additional environmental effects. Thus, the project is unlikely to involve significant public dispute for environmental reasons.*
- *This is a routine dredging project that relies on well established standard practices. The project will not utilize new innovative materials, present complex challenges for interpretation, or present conclusions that are likely to change prevailing practices.*
- *This is a routine dredging project that is not anticipated to require redundancy, resiliency, unique construction sequencing, or a reduced or overlapping schedule.*

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 analyses to be provided by the non-Federal sponsor include:

- (1) *Corpus Christi Ship Channel, Texas; La Quinta Ship Channel Extension Deepening Project; Section 204(f) Federal Assumption of Maintenance; Feasibility Report*
- (2) *Supporting Appendices including:*
 - (i) *Engineering Appendix*
 - (ii) *Real Estate Plan*
 - (iii) *Economic Benefits Analysis*
 - (iv) *Environmental Assessment*
 - (v) *Relative Sea Level Rise Report*

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). The home district shall manage DQC. Documentation of DQC activities is required and should be in accordance with the Quality Manual of the District and the home MSC.

Documentation of DQC. DQC is the review of basic science and engineering work products focused on fulfilling the project quality requirements. It is managed by the Galveston District and may be conducted by staff in the home district as long as they are not doing the work involved in the study. Basic quality control tools will include quality checks and reviews and supervisory reviews. The Galveston District will be responsible for a complete reading of the report to assure the overall integrity of the report, technical appendices and the recommendations before approval by the District Commander.

Two DQC reviews are planned for this project. One DQC of the draft report will be conducted once the draft report is submitted in its entirety. This review will be completed within 3 weeks. The DQC of the draft report is scheduled to commence on April 2, 2012. A second DQC will be conducted for the final report once it is submitted in its entirety. This review will also be completed within 3 weeks. The second DQC is scheduled to commence on October 1, 2012.

- a. **Products to Undergo DQC.** Products to undergo DQC include: 1) Feasibility Report, 2) Engineering Appendix, 3) Real Estate Plan, 4) Economic Benefits Analysis, 5) Environmental Assessment, and 6) Relative Sea Level Rise Report.
- b. **Required DQC Expertise.** Expertise required to conduct DQC includes: 1) Coastal Deep Draft Planning, 2) Coastal Deep Draft Economics, 3) Environmental Resources, 4) Real Estate, 5) Engineering Design, and 6) Cost Estimating. See Attachment 1, Team Rosters.

5. 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 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.** Products to undergo ATR include: 1) Feasibility Report, 2) Engineering Appendix, 3) Real Estate Plan, 4) Economic Benefits Analysis, 5) Environmental Assessment, 6) Relative Sea Level Rise Report, and 7) Project Cost Estimate.
- b. **Required ATR Team Expertise.** Expertise required to conduct DQC includes: 1) Coastal Deep Draft Planning, 2) Coastal Deep Draft Economics, 3) Environmental Resources, 4) Real Estate, 5) Engineering Design, 6) Cost Estimating, and 7) Construction/Operations with experience in dredged material quantities and frequency. See Attachment 1, Team Rosters.

ATR Team Members/Disciplines	Expertise Required
ATR Lead	<u><i>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. The ATR lead may also serve as a reviewer for a specific discipline (such as planning, economics, environmental resources, etc).</i></u>
Planning	<u><i>The Planning reviewer should be a senior water resources planner with experience in coastal deep draft navigation.</i></u>
Economics	<u><i>The economics reviewer should be an economist with experience in coastal deep draft navigation.</i></u>
Environmental Resources	<u><i>The environmental resources reviewer should be a reviewer with experience in coastal deep draft navigation.</i></u>
Engineering Design	<u><i>The engineering design reviewer should be a reviewer with experience in coastal deep draft navigation.</i></u>
Cost Estimating	<u><i>The cost estimating reviewer should be a reviewer with experience in coastal deep draft navigation.</i></u>
Construction/Operations	<u><i>The reviewer needs experience with dredge material quantities and frequency.</i></u>
Real Estate	<u><i>The real estate reviewer should be a reviewer with experience in coastal deep draft navigation.</i></u>

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 1110-1-12 or ER 1105-2-100, Appendix H, as appropriate. Unresolved

concerns can be closed in DrChecks with a notation that the concern has been elevated to the vertical team for resolution.

At the conclusion of each ATR effort, the ATR team will prepare a Review Report summarizing the review. Review Reports will be considered an integral part of the ATR documentation and shall:

- Identify the document(s) reviewed and the purpose of the review;
- Disclose the names of the reviewers, their organizational affiliations, and include a short paragraph on both the credentials and relevant experiences of each reviewer;
- Include the charge to the reviewers;
- Describe the nature of their review and their findings and conclusions;
- Identify and summarize each unresolved issue (if any); and
- Include a verbatim copy of each reviewer's comments (either with or without specific attributions), or represent the views of the group as a whole, including any disparate and dissenting views.

ATR may be certified when all ATR concerns are either resolved or referred to the vertical team for resolution and the ATR documentation is complete. The ATR Lead will prepare a Statement of Technical Review certifying that the issues raised by the ATR team have been resolved (or elevated to the vertical team). A Statement of Technical Review should be completed, based on work reviewed to date, for the AFB, draft report, and final report. A sample Statement of Technical Review is included in Attachment 2.

6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

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

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

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

Decision on IEPR. Due consideration was given to Paragraph 15 of EC 1165-2-209 as well as Appendix D of the same EC. The total project costs for this project are estimated to be under \$10 million. Further, we do not anticipate that other criteria, such as public safety concerns, significant controversy, a high level of complexity, and significant economic, environmental and social effects to the nation, innovative solutions, or life safety issues will trigger the requirement for IEPR. Lastly, the project does not include an Environmental Impact Statement (EIS) and falls within the footprint of the currently maintained federal channel. Type I IEPR is currently anticipated at this time for the subject Feasibility Report, however, the determination on the need for an IEPR will be further evaluated as the study progresses and as additional information and results of analyses becomes available.

Mandatory IEPR Criteria

According to EC 1165-2-209, Type I IEPR is mandatory if any of the following are true:

- a. Project is a significant threat to human life.
- b. Where the estimated total cost of the project, including mitigation costs, is greater than \$45 million.
- c. Where the Governor of an affected State requests a peer review by independent experts.
- d. Where the Director of Civil Works (DCW) or the Chief of Engineers (CE) determines that the project study is controversial due to significant public dispute over either the size, nature, or effects of the project or the economic or environmental costs or benefits of the project.
 - The proposed project is not a significant threat to human life.
 - The estimated total cost of the project is less than \$10 million, far less than \$45 million.
 - A peer review has not been requested by a Governor of an affected State.
 - This project has not resulted in disputes over the size, nature, or effects of the project. Thus, the DCW and CE have not determined that the study is controversial.

Criteria for Eligibility for IEPR Exclusion

According to EC 1165-2-209, a project study may be excluded from Type I IEPR in cases where none of the above criteria are met (which is the case for this project) and:

- a. It does not include an EIS, and the DCW or the CE determines that the project:
- b. Is not controversial; and
- c. Has no more than negligible adverse impacts on scarce or unique tribal, cultural, or historic resources;
- d. Has no substantial adverse impacts on fish and wildlife species and their habitat prior to the implementation of mitigation measures; and

- e. Has, before implementation of mitigation measures, no more than a negligible adverse impact on a species listed as endangered or threatened species under the Endangered Species Act of 1973 or the critical habitat of such species designated under such Act;

OR

If the project study:

- f. Involves only the rehabilitation or replacement of existing hydropower turbines, lock structures, or flood control gates within the same footprint and for the same purpose as an existing water resources project; or
- g. Is for an activity for which there is ample experience within the USACE and industry to treat the activity as being routine; AND
- h. Has minimal life safety risk;

OR

- i. If the project study does not include an EIS and is a project study pursued under the CAP Program.
- j. An EIS is not a requirement under Section 204(f) for Federal assumption of maintenance, and was not required when this proposed work was coordinated and approved during the Section 10/404 permitting process. The Individual Permit was issued under an Environmental Assessment and Statement of Findings. The project is routine and is not controversial. The Section 10/404 permit determined that the project has no effect on scarce or unique tribal, cultural, or historic resources. The deepening project has no adverse impacts on fish and wildlife species and their habitat (minor deepening of -39 foot project to -45 feet). No mitigation is required for the proposed deepening. The Section 10/404 permit determined that the project has no impact on species listed as endangered or threatened under the Endangered Species Act of 1973 or their habitat.

- This is a simple dredging project that includes deepening of an existing Federal project from -39 feet to -45 feet. Therefore, the study is for an activity for which there is ample experience within the USACE and industry to treat the activity as being routine.
- In summary, the study meets two of the three criteria for eligibility for an exclusion from IEPR.
- The local sponsor is requesting an exclusion from Type II IEPR because the project does not include design or construction activities for hurricane, storm, or flood risk management projects.
- This is request for Federal assumption of maintenance of a routine channel improvements project (minor deepening of Federal channel). The project does not pose a threat to safety or human life.
- This is a routine dredging project that does not involve the use of innovative materials or techniques. Current industry methodological standards will be implemented, with no precedent-setting or practice-changing methods, models, or conclusions
- The project does not require redundancy, resiliency, and/or robustness.

- [The project does not have unique construction sequencing or a reduced or overlapping design construction schedule.](#)

Products to Undergo Type I IEPR. [Products to undergo IEPR include: 1\) Feasibility Report, 2\) Engineering Appendix, 3\) Real Estate Plan, 4\) Economic Benefits Analysis, 5\) Environmental Assessment, 6\) Relative Sea Level Rise Report, and 7\) Project Cost Estimate.](#)

Required Type I IEPR Panel Expertise. [Expertise required to conduct IEPR includes: 1\) Coastal Deep Draft Planning, 2\) Coastal Deep Draft Economics, 3\) Environmental Resources, 4\) Real Estate, 5\) Engineering Design, 6\) Cost Estimating, and 7\) Construction/Operations with experience in dredged material quantities and frequency.](#)

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.d 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.

7. POLICY AND LEGAL COMPLIANCE REVIEW

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

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

All decision documents shall be coordinated with the Cost Engineering DX, located in the Walla Walla

District. The DX will assist in determining the expertise needed on the ATR team and Type I IEPR team (if required) and in the development of the review charge(s). Certification of the estimates for new work construction and maintenance dredging will not be required. In lieu of certification of the estimates, the DX will assign a reviewer on the ATR team with conducting a review of the estimates for reasonableness and general accuracy. The RMO is responsible for coordination with the Cost Engineering DX.

9. MODEL CERTIFICATION AND APPROVAL

EC 1105-2-412 mandates the use of certified or approved models for all planning activities to ensure the models are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions. Planning models, for the purposes of the EC, are defined as any models and analytical tools that planners use to define water resources management problems and opportunities, to formulate potential alternatives to address the problems and take advantage of the opportunities, to evaluate potential effects of alternatives and to support decision making. The use of a certified/approved planning model does not constitute technical review of the planning product. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC, ATR, and IEPR (if required).

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

- a. **Planning Models.** The following planning 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	Certification / Approval Status
<u>David Miller and Associates Economic Benefit Analysis, Version 1</u>	<u>This model will be utilized to model economic benefits from transportation costs savings associated with the ability for larger ships to enter the La Quinta Ship Channel Extension. The model will rely heavily on USACE's updated Vessel Cost Database for Container Vessels.</u>	<u>To be approved for one time use.</u>

- b. **Engineering Models.** The following engineering models are anticipated to be used in the development of the decision document: No engineering models will be utilized for this study.

10. REVIEW SCHEDULES AND COSTS

- a. **ATR Schedule and Cost.** One ATR is scheduled to occur after completion of the first DQC review. The ATR is scheduled to take four weeks for review and two weeks for sponsor revisions and close-out of comments. The ATR is scheduled to commence on May 15, 2012. It is assumed that all significant issues will be resolved during the first ATR and that no significant report revisions will be made thereafter. A second ATR is not expected to be necessary due to the simplicity and routine nature of

the project. USACE's cost to conduct the ATR is estimated to be \$3.5K for the DDNPCX Initiation Fee for ATR and approximately \$15K for the ATR process.

b. Type I IEPR Schedule and Cost. TBD

c. Model Certification/Approval Schedule and Cost. Review of the economic model/spreadsheets by the Galveston District commenced in April 2012. Official review by the Deep Draft PCX was initially scheduled to commence on May 15, 2012 as part of the ATR. However, the Deep Draft PCX was to begin a preliminary review of the model/spreadsheets on or before April 15, 2012 (after model review plan had been completed). Official review by the Deep Draft PCX did not commence until October 26, 2012. Comments from the Deep Draft PCX were received by the Sponsor on November 7 and 8, 2012. Sponsor responses and model revisions were submitted to the Deep Draft PCX on November 14, 2012. A teleconference was held on November 28, 2012 between the Sponsor, Galveston District, Southwestern Division, and Deep Draft PCX. The model is currently under revision as a result of discussions during the November 28, 2012 teleconference. A revised model and updated responses are scheduled for submittal to the Deep Draft PCX on December 7, 2012. Responses are scheduled to be back-checked by the Deep Draft PCX in DrChecks within one week of receiving the revised model and responses. The Deep Draft PCX will provide an endorsement of the model following the completed back-check. Approval for one time use from the Office of Water Project Review is scheduled to occur during the first available review panel meeting subsequent to the PCX's endorsement of the model.

Cost of the model certification/approval process is estimated to be \$12.5K.

11. PUBLIC PARTICIPATION

An Environmental Assessment specifically addressing the proposed action of assuming Federal maintenance of the La Quinta Channel Extension and Deepening Project for the 50-year period of analysis must be prepared. This Environmental Assessment must address all impacts not addressed in previous NEPA coordination (listed under 1b(6) and 1b(8) References) and update all required agency coordination.

An initial public notice describing the Government's consideration of the request for assumption of maintenance will be issued by the Galveston District Commander in March 2012.

12. REVIEW PLAN APPROVAL AND UPDATES

The Southwestern Division Commander is responsible for approving this Review Plan. The Commander's approval reflects vertical team input (involving district, MSC, RMO, and HQUSACE members) as to the appropriate scope and level of review for the decision document. Like the PMP, the Review Plan is a living document and may change as the study progresses. The home district is responsible for keeping the Review Plan up to date. Minor changes to the review plan since the last MSC Commander approval are documented in Attachment 3. Significant changes to the Review Plan (such as changes to the scope and/or level of review) should be re-approved by the MSC Commander following the process used for initially approving the plan. The latest version of the Review Plan, along with the Commanders' approval memorandum, should be posted on the Home District's webpage. The latest Review Plan should also be provided to the RMO and home MSC.

13. REVIEW PLAN POINTS OF CONTACT

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

- [James Worthington; Project Manager; 409-766-3094](#)
- [Robert Heiny, Chief, Planning Section, 409766-3992](#)
- [Cheryl Jaynes; Planning Lead; 409-766-3804](#)
- [Sam Arrowood; SWD Liaison; 469-487-7069](#)
- [Bernard Moseby, DDNPCX, 251-694-3884](#)

ATTACHMENT 1: TEAM ROSTERS

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 [Feasibility Report](#) for [the Corpus Christi Ship Channel, Texas; La Quinta Ship Channel Extension Deepening Project; Section 204\(f\) Federal Assumption of Maintenance project](#). 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

[Name](#)
Project Manager
[Office Symbol](#)

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

[Name](#)
Chief, Engineering Division
[Office Symbol](#)

Date

SIGNATURE

[Name](#)
Chief, Planning Division
[Office Symbol](#)

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

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
CSDR	Coastal Storm Damage Reduction	O&M	Operation and maintenance
DPR	Detailed Project Report	OMB	Office and Management and Budget
DQC	District Quality Control/Quality Assurance	OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation
DX	Directory of Expertise	OEO	Outside Eligible Organization
EA	Environmental Assessment	OSE	Other Social Effects
EC	Engineer Circular	PCX	Planning Center of Expertise
EIS	Environmental Impact Statement	PDT	Project Delivery Team
EO	Executive Order	PAC	Post Authorization Change
ER	Ecosystem Restoration	PMP	Project Management Plan
FDR	Flood Damage Reduction	PL	Public Law
FEMA	Federal Emergency Management Agency	QMP	Quality Management Plan
FRM	Flood Risk Management	QA	Quality Assurance
FSM	Feasibility Scoping Meeting	QC	Quality Control
GRR	General Reevaluation Report	RED	Regional Economic Development
Home District/MSD	The District or MSD responsible for the preparation of the decision document	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