DEPARTMENT OF THE ARMY
SOUTHWESTERN DIVISION, CORPS OF ENGINEERS
1100 COMMERCE STREET, SUITE 831
DALLAS TX 75242-1317

REPLY TO
ATTENTION OF

CESWD-RBT

05 DEC 2012

MEMORANDUM FOR Commander, Ft. Worth District

SUBJECT: Review Plan (RP) for Colorado River Flood Control Project, Wharton, Texas

1. Reference EC 1165-2-209, Civil Works Review Policy, 31 Jan 2010; and Change 1, 31 Jan 2012.

2. The attached RP is hereby approved for design work that will be performed by the Ft. Worth District. This is a new project and the RP mentions construction reviews as part of the required Safety Assurance Reviews; however, the plan focuses on the design phase only as it is not certain when funding will be received for construction work. This RP has been reviewed and coordinated with the Risk Management Center.

3. The point of contact for this action is Michael Jordan at Michael.Jordan@usace.army.mil or office phone 469-487-7035.

Encl

THOMAS W. KULA
Brigadier General, USA
Commanding

REVIEW PLAN

28 November 2012

Colorado River Flood Control Project
Wharton, Texas

Design Phase

Fort Worth District
Fort Worth, Texas

MSC Approval Date: 5 Dec 2012

REVIEW PLAN

Lower Colorado Flood Control Project
Wharton, Texas
Design Phase

TABLE OF CONTENTS

1. PURPOSE AND REQUIREMENTS

a. Purpose. This Review Plan defines the scope and level of peer review for Colorado River Flood Control Project, Wharton, Texas, Design Phase.

b. References

(1) Engineering Circular (EC) 1165-2-209, Civil Works Review Policy, Change #1, 31 Jan 2010
(2) EC 1105-2-412, Assuring Quality of Planning Models, 31 Mar 2011
(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) *PMP for study*
(6) *Interim feasibility report and Integrated Environmental Assessment –Final December 2006*
(7) *PED-Design Agreement, Signed 11 July 2007*

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

(1) District Quality Control (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). Basic quality control tools include a Quality management Plan providing for seamless review, quality checks and reviews, supervisory reviews, Project Delivery Team (PDT) reviews, etc. It is managed in the home district. Quality checks may be performed by staff responsible for the work, such as supervisors, work leaders, team leaders, designated individuals from the senior staff, or other qualified personnel. However, they should not be performed by the same people who performed the original work, including managing/reviewing the work in the case of contracted efforts.

(2) Agency Technical Review (ATR). ATR is an in-depth review, managed within USACE, and conducted by a qualified team outside of the home district that is not involved in the day-to-day production of the project/product. The purpose of this

review is to ensure the proper application of clearly established criteria, regulations, laws, codes, principles and professional practices. The ATR team reviews the various work products and assure that all the parts fit together in a coherent whole. ATR teams will be comprised of senior USACE personnel, preferably recognized subject matter experts with the appropriate technical expertise such as regional technical specialists (RTS), and may be supplemented by outside experts as appropriate. To assure independence, the leader of the ATR team shall be from outside the home MSC.

(3) Independent External Peer Review (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. For clarity, IEPR is divided into two types, Type I is generally for decision documents and Type II is generally for implementation documents.

A Type II IEPR (SAR) shall be conducted on design and construction activities for hurricane and storm risk management and flood risk management projects, as well as other projects where potential hazards pose a significant threat to human life. This applies to new projects and to the major repair, rehabilitation, replacement, or modification of existing facilities. External panels will review the design and construction activities prior to initiation of physical construction and periodically thereafter until construction activities are completed. The review shall be on a regular schedule sufficient to inform the chief of Engineers on the adequacy, appropriateness, and acceptability of the design and construction activities for the purpose of assuring that good science, sound engineering, and public health, safety and welfare are the most important factors that determine a project's fate.

2. PROJECT INFORMATION

a. Decision Document. The Lower Colorado River Flood Control Project, Wharton, Texas, Design Phase. This Design Documentation Report (DDR) presents the design of features necessary to reduce flood damages caused by localized storm events, Colorado River flood events, and overflow and backwater impacts from the Colorado River on Caney Creek, Baughman Slough, and Peach Creek to the City of Wharton. The primary purpose of this project is to implement the Recommended Plan identified in the Interim Feasibility Report and Integrated Environmental Assessment (USACE – Dec 2006).

b. Wharton County is bounded by Colorado County, Austin County, Fort Bend County, Brazoria County, Matagorda County, and Jackson County. It encompasses an area of 1,095 square miles. The city of Wharton, Texas, is located near the center of the county and is the county seat of Wharton County. The City of Wharton lies approximately 55 miles southwest of Houston, 142 miles from Austin, 173 miles from San Antonio, and 200 miles from Corpus Christi and is bounded by U.S. Highway 59 to the west and the Colorado River to the south.

c. The authority for this study of the Colorado River and tributaries is contained in the following congressional authorizations:

***Flood Control Act, approved June 22, 1936*:** *"Section 6. The Secretary of War is hereby authorized and directed to use preliminary examinations and, surveys for flood control at the following named localities .....Colorado River, Texas above the county line between Coke and Runnels Counties .... Lower Colorado River, Texas."*

Resolution by the Committee on Commerce, United States Senate, Adopted August 4, 1936: *"Resolved by the Committee on Commerce of the United States Senate, that the board of Engineers for Rivers and Harbors created under Section 3 of the River and Harbor Act, approved June 13, 1902, be and is hereby, requested to review the reports on Colorado River, Texas, submitted in House Document Number 361, Seventy-first Congress, second sessions, and previous reports, with a view to determining if improvement in the interest of commerce and flood control is advisable at the present time."*

River and Harbor Act, Approved August 26, 1937: *"Section 4. The secretary of War is hereby authorized and directed to cause preliminary examinations and surveys to be made at the following named localities....Colorado River, and its tributaries, Texas, with a view to its improvements in the interest of navigation and flood control."*

River and Harbor act, Approved March 2, 1945: *"Section 6. The Secretary of War is herby authorized and directed to cause preliminary examinations and surveys to be made at the following named localities....Colorado River."*

d. The project is located in the floodplain of the Colorado River in the city of Wharton, Texas. The city of Wharton is located approximately 55 miles southwest of the city of Houston, Texas. The community is located between the Colorado River and Baughman Slough (a tributary to Peach Creek). Caney Creek is an ephemeral creek that meanders through the city. During flood events, the Colorado River overflows into Caney Creek, Baughman Slough, and Peach Creek. The city of Wharton is subject to flooding from the Colorado River, Caney Creek, and Baughman Slough.

e. Authorities for conducting studies within the Colorado River Basin of Texas have been in place since the mid-1930. The applicable Congressional Study Authorization is; Resolution by the Committee on Commerce, United States Senate, adopted August 4, 1936. River and Harbor Act, approved August 26, 1937, River and Harbor Act.

Interim Feasibility Report and Integrated Environmental Assessment; Final document signed in December 2006 and a Design Agreement Between the Department of the Army and Lower Colorado River Authority was signed on 11 July 2007 for the Design for the Lower Colorado River Authority, Phase I. The total project consists of four phases totaling 38,445 feet in length. This review plan focus is for Phase 1 design only. Other phases will be added as funding is made available. Phase I plans and specifications consist of 4 reaches totaling 11,345 linear feet of earthen levee and three sump areas approximately 72 acres in size for mitigation. Reach 1 (CR-1) consists of 3,570 linear feet, Reach 2 (CR-2) - 5,230 of linear feet, Reach 3 (CR-3) – 1,350

linear feet and Reach 4 (CR) – 1,195 of linear feet. (See ATTACHMENT A for reaches and ATTACHMENT B for project area map).

The project total cost of $33,032,000, with an estimated Federal cost of $21,474,000 and an estimated non-Federal cost of 11,558,000. On 25 January 2006, Assistant Secretary of the Army (Civil Works) signed credit eligibility under Section 104 of the WRDA of 1986; providing credit eligibility for the construction of improvements to Santa Fe Ditch to Alleviate significant flood damages to the City of Wharton.

3. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The RMO is responsible for managing the overall peer review effort described in this Review Plan. The RMO for design and construction documents is the Southwestern Division office.

4. DISTRICT QUALITY CONTROL (DQC)

DQC is internal review process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the Project Management Plan (PMP) and Plans, Engineering and Design (PED). Basic quality control tools include a Quality Management Plan providing for seamless review, quality checks and reviews, supervisory reviews, and Project Delivery Team (PDT) reviews throughout the life of the project. DQC efforts will include the necessary expertise to address compliance with published Corps policy.

5. AGENCY TECHNICAL REVIEW (ATR)

a. General. ATR will be managed and performed outside the Fort Worth District. The Louisville District will conduct the ATR and will be managed by the SWD. The RMO shall coordinate with the Risk Management Center and ensure that a review team with appropriate independence and expertise is assembled and a cohesive and comprehensive review is accomplished. The ATR shall ensure that the product is consistent 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 the results in a reasonably clear manner for the public and decision makers.

b. Products for Review: The ATR team will be reviewing the 65% and 95% Phase I Design Documentation Report Update and the Plans and specifications.

c. Required ATR Team Expertise: ATR team will be comprised of technical expertise outside the Fort Worth District. The disciplines represented on the ATR team will reflect the significant disciplines involved in the planning, engineering, design, and construction effort. These disciplines include civil, structural, geotechnical, hydrology and hydraulics, cost engineering. To assure independence, the leader of the ATR team is from outside of the Fort Worth District. A list of the ATR members and disciplines is provided in ATTACHMENT 2. The chief criterion for being a member of the ATR team is expert knowledge of the technical discipline and relevant experience.

d. 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, ASA (CW)/USACE 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 actions(s) that must take to resolve the concern.

In some situations especially when addressing incomplete or unclear information, comments may seek further 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 coordination, and lastly the agreed upon resolution. The ATR team will prepare a Review Report which includes a summary of each unresolved issue; and there will be raised to the vertical team for resolution. Review Reports will be considered an integral part of the ATR documentation.

ATR may be certified when all ATR concerns are either resolved or referred to HQUSACE for resolution and the ATR documentation is complete. Certification of ATR should be completed, based on work reviewed to date, for the draft and final report. SEE ATTACHMENT 2.

6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

a. General. Type II IEPR's are conducted in accordance with the guidance promulgated in EC 1165-2-209. In accordance with EC 1165-2-209 a Type II IEPR (SAR) shall be conducted on design and construction activities for flood risk management projects where potential hazards pose a significant threat to human life. WRDA 2007, Section 2035, Safety Assurance Review, requires a review of the design and construction activities prior to initiation of physical construction and periodically thereafter until construction activities are completed. This review will be on a regular schedule sufficient to inform the Chief of Engineers on the adequacy, appropriateness, and acceptability of the design and construction activities for the purpose of assuring public health, safety and welfare. SAR's will be conducted on 100% Plans and Specifications (P&S) and intermittently throughout the construction phase of 1, 2, 3, and 4. The purposes of the SAR is to ensure that good science, sound engineering, and public health, safety and welfare are the most important factors that determine a project's fate. The SAR shall focus on whether the assumptions made for hazard remain valid as additional knowledge is gained and the state-of-the-art evolves. Additionally, the SAR team shall advise whether findings during construction of project features reflect the assumptions made during design and adequately address redundancy, robustness, and resiliency.

b. Decision on Type II IEPR. Type II IEPR (SAR) shall be conducted on all design and construction activities for this project. This RP spells out the ultimate requirements for SAR. However, as it is not certain when funds for construction will be received, SAR activities will not commence until receipt of construction funds. SAR will be conducted prior to advertising when construction for funding becomes available. Significant comments or concerns will be reconciled before advertising.

c. Products for Review. Type II will be performed on 100% Plans & Specifications, during the midpoint of the construction, and before substantial completion of construction.

d. IEPR Review Team. SAR Type II IEPR. Review Team will be established, in consultation with the Risk Management Center (RMC), through the Fort Worth District and Southwestern Division. The public, scientific or professional societies will not be asked to nominate potential reviewers. The Review Team will be selected based on their technical qualifications and experience. The Review Team is independent of USACE and free of conflicts of interests. The Review Team will be able to evaluate whether the interpretation of analysis and conclusions based on analysis are reasonable. The Review Team will be given flexibility to bring important issues to the attention of decision makers. However, the Review Team will be instructed to not make a recommendation on whether a particular alternative should be implemented, as the Chief of Engineers is ultimately responsible for the final decision on a planning or reoperations study. The Review Team may, however, offer their opinion as to whether there are sufficient analyses upon which to base a recommendation. The Review Team will have experience in design and construction of projects similar in scope to the Colorado River Flood Control Project, Wharton, Texas. The Review Team shall be registered professional engineers in the United States, or similarly credentialed in their home country. The Review Team must have an engineering degree. A Master's degree in engineering is preferable, but not required, as hands-on relevant engineering experience in the listed disciplines is more important. The Review Team shall have a minimum of 15 years experience and responsible charge of engineering work.

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). The DX will

also provide the Cost Engineering DX certification. 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.

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.

10. REVIEW SCHEDULES AND COSTS

a. DQC Schedule and Cost. The cost for DQC is broken out separately from PDT costs, however DQC will occur seamless throughout the P&S working with the A/E. Quality checks and reviews occur during the development process and are carried out as a routine management practice. Schedules for Phase I design and reviews are shown on Attachment C.

District Quality Control Review Team 65% Review			
Role	**Name**	**Hours**	**Costs**
PM -Point of Contact		40	$ 5,200.00
GeoTechnical		40	$ 4,800.00
Hydrology & Hydraulics		16	$ 2,080.00
Civil		40	$ 4,800.00
Structural		4	$ 480.00
Environmental		24	$ 2,880.00
Real Estate		TBD	
Cost Estimating		40	$ 3,040.00
	TOTAL	**244**	**$ 27,760.00**

District Quality Control Review Team 95% Review			
Role	**Name**	**Hours**	**Costs**
PM -Point of Contact		32	$ 4,160.00
GeoTechnical		32	$ 3,584.00
Hydrology & Hydraulics		16	$ 2,080.00
Civil		32	$ 4,160.00
Structural		8	$ 1,040.00
Environmental		24	$ 1,920.00
Plans & Specifications		32	$ 3,584.00
Real Estate		TBD	
Cost Estimating		32	$ 2,432.00
	TOTAL	**208**	**$ 22,960.00**

District Quality Control Review Team Corrected Final Review			
Role	**Name**	**Hours**	**Costs**
PM -Point of Contact		8	$ 1,040.00
GeoTechnical		8	$ 8,896.00
Hydrology & Hydraulics		8	$ 1,040.00
Civil		8	$ 1,040.00
Structural		8	$ 1,040.00
Environmental		8	$ 640.00
Plans & Specifications		8	$ 896.00
Real Estate		TBD	
Cost Estimating		8	$ 608.00
	TOTAL	**64**	**$ 15,200.00**

b. ATR Schedule and Cost. The estimated cost for Phase I is:

Agency Technical Control Review Team 65% Review			
Role	**Name**	**Hours**	**Costs**
PM -Point of Contact			$ 2,500.00
GeoTechnical			$ 4,000.00
Hydrology & Hydraulics			$ 2,500.00
Civil			$ 2,500.00
Environmental			$ 2,500.00
Structural			$ 2,500.00
Real Estate		TBD	
Cost Estimating			$ 4,000.00
	TOTAL	**0**	**18,000.00**

Agency Technical Review Team 95% Review			
Role	**Name**	**Hours**	**Costs**
PM -Point of Contact			$ 2,500.00
GeoTechnical			$ 4,000.00
Hydrology & Hydraulics			$ 2,500.00
Civil			$ 2,500.00
Environmental			$ 2,500.00
Structural			TBD
Real Estate			TBD
Cost Estimating			$ 4,000.00
	TOTAL	**0**	**18,000.00**

C. IEPR Schedule and Cost - The SAR will be conducted prior to advertising when construction for funding becomes available. It not certain when funds for construction will be received and therefore the SAR activities will not commence until that time.

IEPR Review Milestones		
Activity	**Milestones**	**Costs**
100% P&S	TBD	TBD
Construction Midpoint	TBD	TBD

INDEPENDENT EXTERNAL PEER REVIEW TEAM

(1) Geotechnical Engineer will be a recognized expert in the field of geotechnical engineering analysis, design and construction of levees with extensive experience in subsurface investigations, soil mechanics, seepage and slope stability evaluations, erosion protection design, and construction and earthwork construction.

(2) Civil Engineer with extensive experience in the design, layout, and construction of flood control structures. The Civil Engineer must demonstrate knowledge regarding levees, interior drainage facilities, earthwork, concrete placement, design of access roads, and relocation of underground utilities. The Civil Engineer must be familiar with USACE regulations and building codes.

(3) Engineering Geologist shall be a senior-level person with extensive experience in the type of work being performed. The Engineering Geologist shall be proficient in assessing seepage, exploration and testing, grouting, and instrumentation. The Engineering Geologist shall be experienced in the design of cutoff walls and must be knowledgeable in designs and materials for cutoff walls. The Engineering Geologist shall have a working knowledge of all applicable USACE design criteria.

(4) Hydraulic Engineer with extensive experience in the analysis and design of levees. The Hydraulic Engineer must have performed work in hydrologic analysis and design of hydraulic structures. In addition, at least one of the expert reviewers shall have recent and relevant

experience on projects similar to Colorado River Flood Control Project, Wharton, Texas verifying the constructability of the proposed designs.

USACE will approve the panel members selected by the AE. USACE may only disapprove a selected panel member if the member does not meet the objective criteria established in this SOW.

11. 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 will be incorporated as the project progresses. Significant changes to the Review Plan (such as changes to the scope and/or level of review) will be re-approved by the MSC Commander following the process used for initially approving the plan and recorded on the cover sheet. 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 will also be provided to the RMO, RMC and the ATR team.

12. REVIEW PLAN POINTS OF CONTACT

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

	817-886-1590	Fort Worth District
	469-487-7035	Southwestern Division
	502-315-6360	Louisville District

ATTACHMENT 2: TEAM ROSTERS

District Quality Control Review Team			
Role	**Name**	**Telephone**	**Office**
PM -Point of Contact		817-886-1590	CESWF-PM-C
GeoTechnical		817-886-1707	CESWF-EC-DG
Hydrology & Hydraulics		817-886-1683	CESWF-EC-HH
Civil		817-886-1674	CESWF-EC-DC
Structural		817-886-1806	CESWF-EC-DC
Environmental		817-886-1719	CESWF-PER-EE
Plans & Specifications		817-886-1816	CESWF-EC-AC
Cost Estimating		817-886-1912	CESWF-EC-AC

Agency Technical Review Team			
Role	**Name**	**Telephone**	**Office**
ATR-Lead		502-315-6360	CELRL-ED-TC

GeoTechnical		502-315-6439	CELRL-ED-TG
Hydrology & Hydraulics		502-315-6458	CELRL-ED-TH
Civil		502-315-6360	CELRL-ED-TC
Environmental		502-315-6900	CELRL-PM-P
Real Estate		469-487-7039	CESWD-PDR
Cost Estimating		502-315-6320	CELRL-ED-MC

ATTACHMENT 3:

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the Colorado River Flood Control Project, Wharton Texas. 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 DrChecks[sm].

_____ _____

, P.E. **Date**

SWD Levee Safety Program Manager
SWD Review Manager

_____ _____

Date

SWF Project Manager

CERTIFICATION OF AGENCY TECHNICAL REVIEW

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

(*Describe the major technical concerns, possible impact and resolution)*

As noted above, all concerns resulting from the agency technical review of the Colorado River Flood Control Project, Wharton, Texas (DDR?P&S) have been fully resolved.

_____ _____

, P.E. Date

Chief, Civil Section, CELRL-ED-TC
ATR Team Leader

ATTACHMANT A