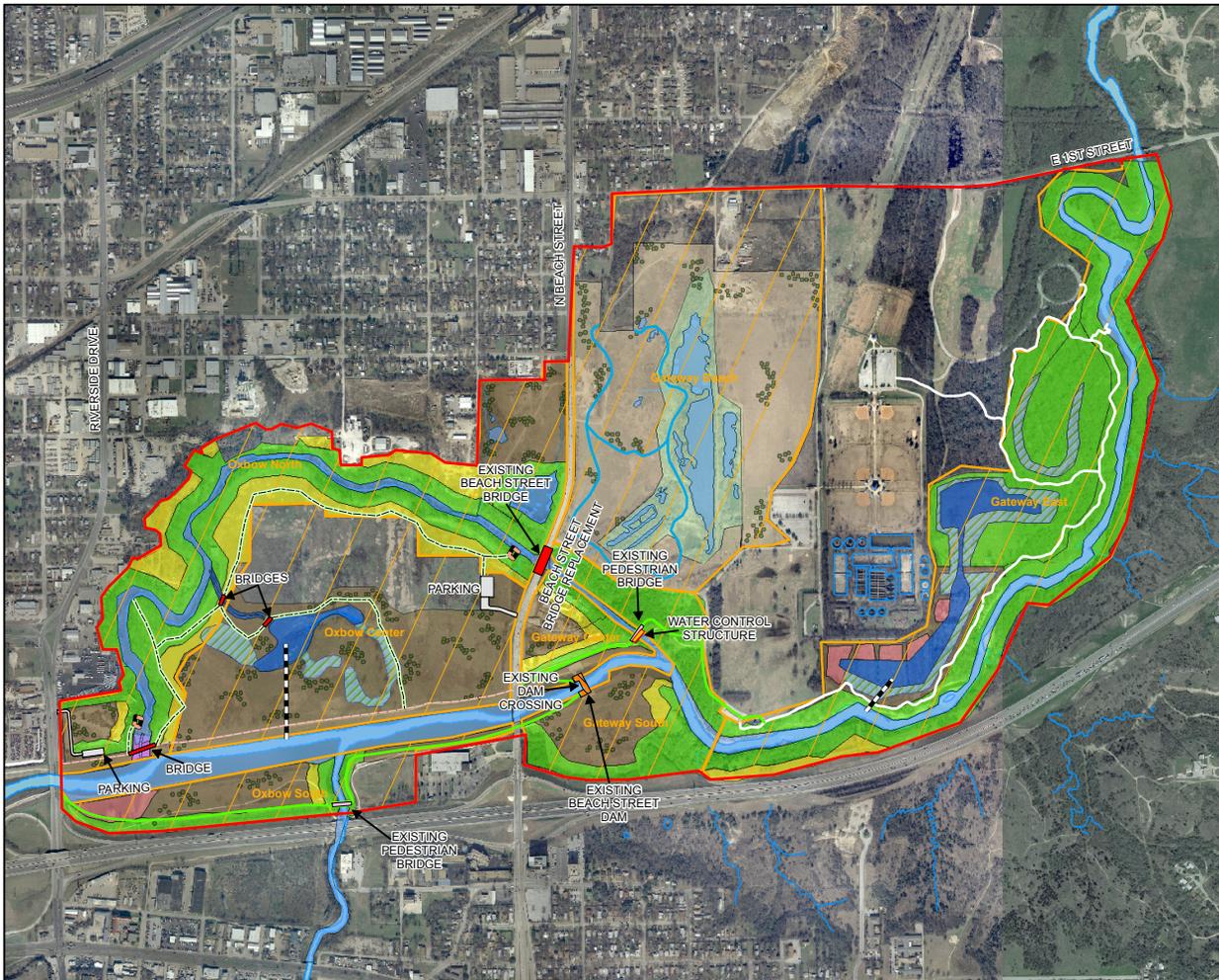


Project Report

Figure 1-2
Riverside Oxbow Ecosystem
Restoration Project



- Legend**
- ORIGINAL STUDY AREA BOUNDARY
 - STUDY AREA ZONE BOUNDARIES
 - BRIDGE
 - STREAMS
 - PLAN FEATURES
 - MAINTENANCE ACCESS
 - WETLAND PUMP
 - TXDOT TRAIL
 - EQUESTRIAN TRAIL
 - EXISTING TRAIL
 - EXISTING TRAIL TO BE REBUILT
 - PROPOSED TRAIL
 - PROPOSED TREES
 - EXISTING WATER
 - NEW LAKES
 - PLUG/CHANNEL VEGETATION
 - RIPARIAN WOODLANDS
 - RIPARIAN BUFFER
 - WET SOIL MANAGEMENT
 - WETLAND
 - NATIVE GRASSLANDS



0 500 1,000 2,000 Feet

Aerial Photography Date: January 2005



US Army Corps
of Engineers
Fort Worth District

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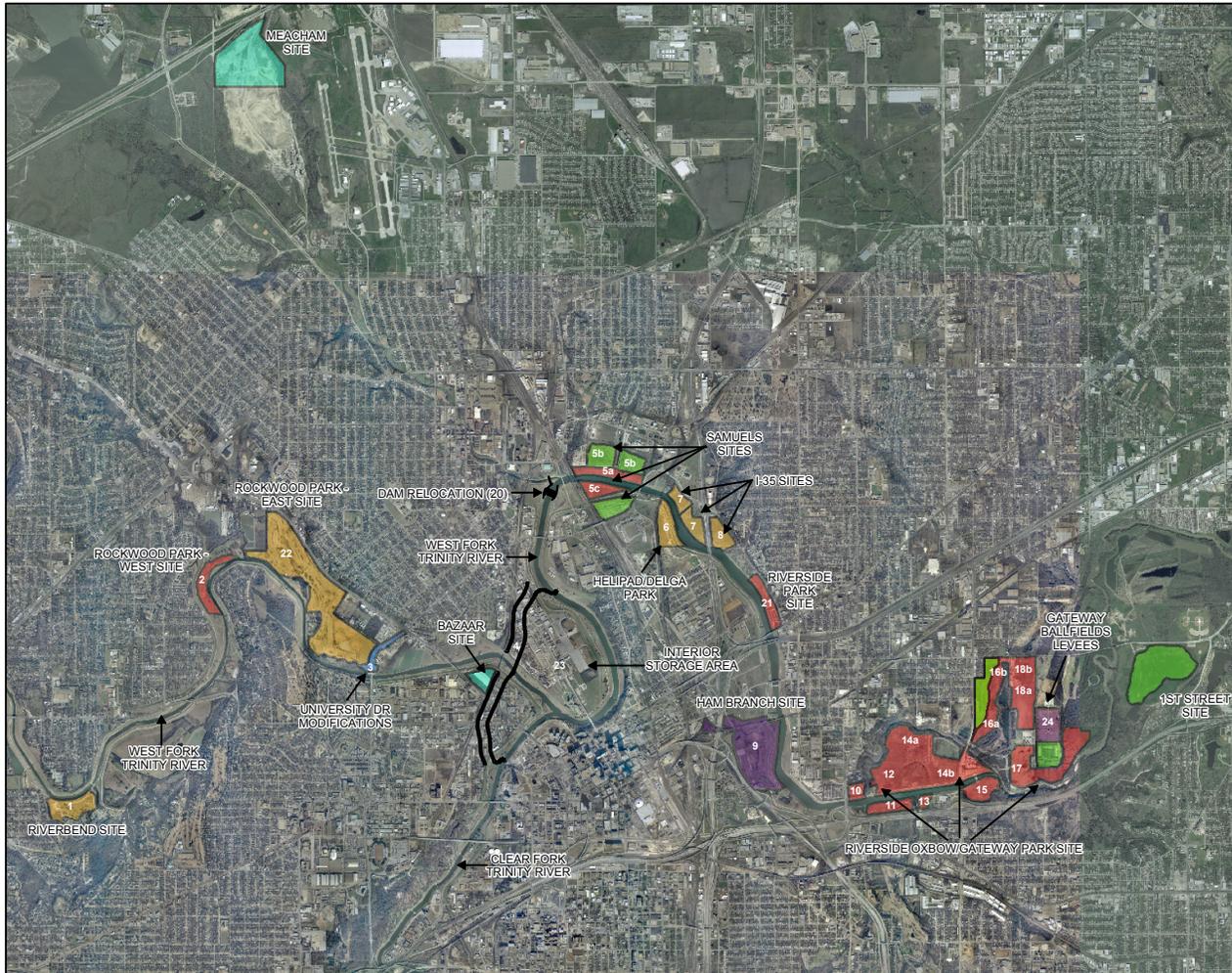
Figure 1-3
Recommended
Valley Storage Plan

Legend

-  BYPASS CHANNEL
-  VALLEY STORAGE SITE - CUT
-  VALLEY STORAGE SITE - FILL
-  VALLEY STORAGE SITE - LEVEE MODIFICATIONS
-  VALLEY STORAGE SITE - ROADWAY RAISE (NO CHANGE - FROM CENTRAL CITY EIS)
-  VALLEY STORAGE SITE - CONTINGENCY
-  VALLEY STORAGE SITE - POTENTIAL FILL SITE (NO CHANGE - FROM CENTRAL CITY EIS)

0 1,750 3,500 7,000 Feet

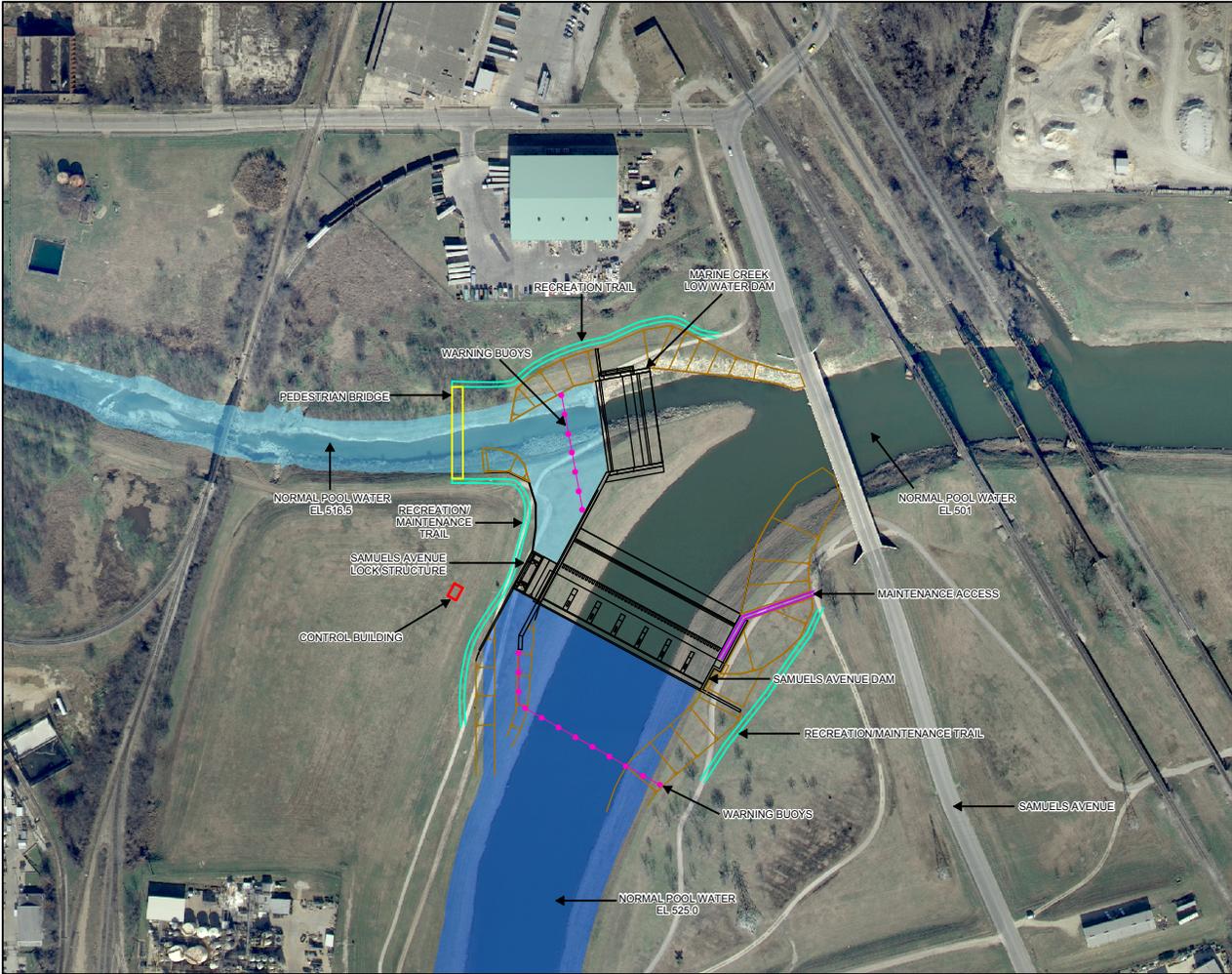
Aerial Photography Date: January 2005



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**Figure 1-4
Proposed Samuels Avenue
Dam Location and Features**



Legend

-  STRUCTURAL COMPONENTS
-  CHANNEL GRADING
-  RELOCATED TRAIL



0 100 200 400 Feet

Aerial Photography Date: January 2005



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Project Report

Figure 1-5
Modified Central City Project

Legend

-  BYPASS CHANNEL
-  ROAD IMPROVEMENT
-  PEDESTRIAN BRIDGE
-  VALLEY STORAGE SITE
-  ECOSYSTEM RESTORATION AREA
-  AQUATIC HABITAT MITIGATION AREA
-  TRINITY UPTOWN AREA

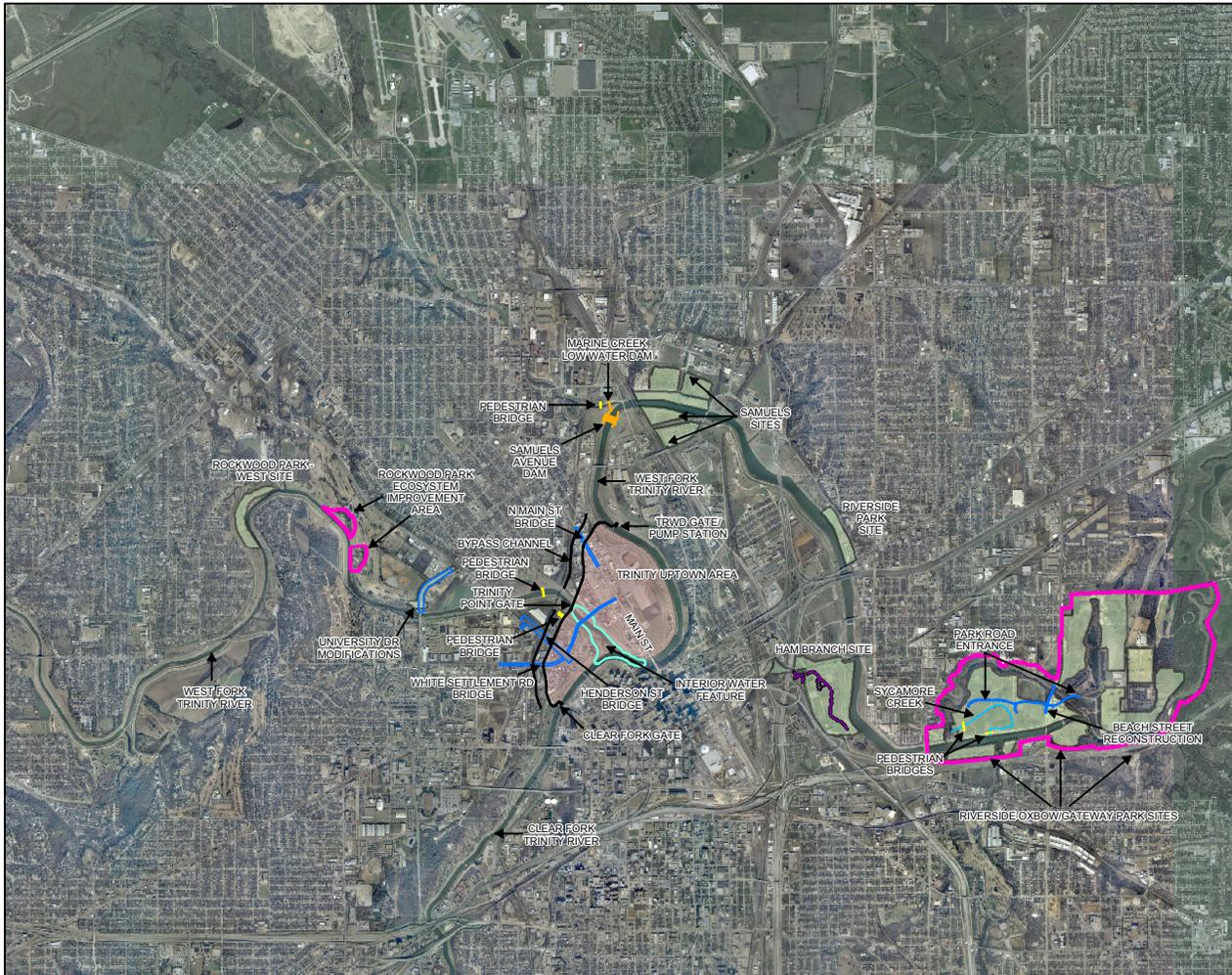


0 1,750 3,500 7,000 Feet

Aerial Photography Date: January 2005



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CHAPTER 2 – MODIFIED CENTRAL CITY PROJECT IMPLEMENTATION

Corps Project of Modified Central City Project

The Environmental Impact Statement for the Central City project evaluated the entire Central City Project as well as anticipated privately funded Trinity Uptown Features. Supplement No. 1 to the Final EIS for the Central City Project (SEIS) evaluated the effects of modifying the Central City Project to accommodate alternative valley storage mitigation sites and to modify the location of the Samuels Avenue dam site. The SEIS, by reference to the FEIS incorporated those features of the approved Central City Project that would not change with the Modified Central City Project. Both the EIS and SEIS focused on technical soundness, which is dominated by hydrology and hydraulic concerns, and comprehensively evaluated the functionality of the hydraulic system and associated habitat development and recreation components.

P.L. 108-447 authorizes the Secretary to undertake the Central City River project “as generally described in the Trinity River Master Plan, dated April 2003.” The authorization further states that the undertaking is not to exceed a total cost of \$220,000,000. Therefore, the Corps Component of the Central City Project is limited by the authorization to a cost not exceeding \$220,000,000

As approved in the original Project Report, the elements comprising the Corps Project were selected with emphasis on the flood control and hydraulic aspects of the Central City project and developed a fully-functioning hydraulic (flood control) system. Because of cost changes resulting from both the reformulation and changed external conditions, this Modified Project Report presents a Modified Corps Project of the Central City Project. The approved Corps Project included the bypass channel, isolation gates, Samuels Avenue Dam, most real estate, business and property owner relocations and soft costs associated with these features. (Soft costs include activities such as planning, design, survey and testing, legal support, program management and construction oversight.) Also included in the Corps Project was all hydraulic (valley storage) and environmental mitigation required for the Central City project, and all cultural resources mitigation excepting mitigation of impacts to buried archeological resources that may be discovered in conjunction with project features other than those include in the Corps project. The Modified Corps Project includes the bypass channel, two isolation gates, real estate, business and property owner relocations and soft costs associated with these features. The Modified Corps Project also includes all required hydraulic mitigation (valley storage), and the full complement of required ecological and cultural mitigation activities required for the Modified Project. The Samuels Avenue Dam and the Trinity Point isolation gate would be constructed at full local expense as required features prior to Corps of Engineers approval to modify the existing levee system.

As described in the original EIS and Project Report, the bypass channel would be approximately 30 feet below the existing grade and is approximately 8,400 feet long and 300 feet wide between the top of levees. The bypass channel would extend from the Clear Fork downstream of West Seventh Street to the West Fork, intersecting the West Fork approximately 2,600 feet upstream of the existing confluence with the Clear Fork. The channel would continue to the northeast and rejoin the West Fork 8,500 feet downstream of the existing confluence with the Clear Fork.

Water levels in the bypass channel and adjacent waterways would be controlled by a dam with crest gates. The original dam site would be located on the West Fork of the Trinity River just east of Samuels Avenue Bridge and would include adjustable gates designed to open downward, thus

lowering the crest to allow major flood events to pass. The site for the dam recommended in this Modified Project Report is on the main stem of the West Fork of the Trinity River just upstream of the confluence with Marine Creek. This dam site is still referred to as the Samuels Avenue dam due to its proximity to the Samuels Avenue Bridge. The modified dam site is located approximately 1,750 feet downstream of Northside Drive, immediately upstream from the confluence of Marine Creek. The crest would be at 524.3 feet NGVD and is designed to maintain the normal water pool level elevation of approximately 525 NGVD. Based on hydraulic modeling, the dam was sized to operate with seven 48-foot wide and 18-foot high gates. The gate width was chosen as the maximum reasonable width, enhancing the hydraulic capacity, while providing reasonably operable gates. The recommended structure would incorporate low flow conduits 4-foot wide by 6-foot high located at the base of three piers to minimize the use of the large flood gates and to simplify operations. As with the original Central City Project, three isolation gates would be located upstream at the confluence of the bypass channel and the Clear Fork, at the midpoint of the bypass channel and the West Fork confluence, and downstream at the confluence of the bypass channel and the West Fork. These gates are designed to protect the interior area east of the bypass channel from flood flows.

The major difference between the Modified Central City Project and approved Central City Project is in location of valley storage sites required to compensate for the required valley storage. With the original project, three general areas would provide 5,250 acre-feet of valley storage, along the West Fork of the Trinity River upstream of the project area primarily in the Riverbend site but also along University Drive, and in the vicinity and slightly downstream of the Samuels Avenue Dam. The recommended modified plan for valley storage consists of 6 site locations that were identified as locally preferred valley storage sites, along with 5 contingency valley storage sites. The University Drive and Samuels Avenue valley storage sites will be retained with the Modified Central City Project. The remainder of the recommended modified sites, with the exception of Rockwood Park West, are located downstream of the core of the Central City Project area in the Ham Branch, Riverside Park, Riverside Oxbow, and Gateway Park areas. It is not currently anticipated that any of the contingency sites would be required but they are discussed and disclosed in the SEIS in case they are needed following the PED phase of the project. The primary valley storage sites of the modified plan are projected to achieve up to 5,431 acre-feet of valley storage, based on the current planning level hydraulic analyses.

The definition of the "Corps Project", either approved or modified, does not include certain features or activities that would normally be required to be included to ensure that the project is fully functional. Specifically, utility relocations, demolition, and the clean-up of substances regulated by RCRA and CERCLA will be accomplished by the project sponsor as a local cost. The Project Cooperation Agreement will be prepared such that these items become a base condition which must be in place before or concurrent with construction of affected sections of the Corps Project.

Likewise, to ensure that the Corps Project does not adversely impact major traffic arterials within the City of Fort Worth, construction by the Texas Department of Transportation (TxDOT) of new bridges where North Main and Henderson Streets would intersect the bypass channel will also be considered base conditions in the PCA (PPA, WRDA 2007). Definition of these bridges for the purpose of the base conditions includes acquisition of real estate as well as standard "soft" costs. As approved in the original Project Report, specific parameters in the phasing of these base conditions with construction of the bypass channel, or other elements of the Corps Project, will be developed during the early stages of the design phase and will be described and be a provision in the PCA (PPA, WRDA 2007).

Features of the broader Central City project (original or modified), which are not included in the Corps Project include the White Settlement Bridge and local street improvements (excepting the raising of University Drive, which is required for valley storage mitigation), recreation components, most ecosystem improvements, the pump station, and the interior water feature, as well as architectural enhancements of the gates and the real estate interests and soft costs

associated with these features. As outlined here, the base conditions for the Corps Project are excluded from the definition of the cost shared Corps Project.

In addition to the existing base conditions, the PCA (PPA, WRDA 2007) for the Modified Central City Project will reflect two additional base condition features. These features are necessary to complete the project goals, but are excluded from the cost shared Corps Project due to cost considerations and will be constructed entirely at local expense. The additional base conditions include construction of Samuels Avenue Dam and the Trinity Point Gate.

Policy Adjustments

The Corps Project of the recommended Modified Central City Project is not consistent with policy, since the project was authorized by Congress based upon a local plan that was not evaluated for economic justification. As such, the Corps Project is not eligible for inclusion in the Army Civil Works annual budget requests and implementation will be limited to the work that can be accomplished within funds provided by Congress. The Design agreement and the PCA (PPA, WRDA 2007) will include language to this effect.

Because of the unique authorization and the implementation considerations resulting from the collaborative implementation of the project, a number of items related to the project require adjustments to standard Corps policies or procedures. These adjustments generally fall into two categories: those that are not the normal process or policy, but have been agreed to through development of implementation guidance for the project authorization; and those that were approved via the original Project Report. The policy adjustments described in the original project report are summarized below.

Unique Aspects of the Project Authorization

Features relating to the special provisions of the authorization that were agreed upon during collaborative implementation of the original Central City project include:

- a. The Corps Project has a cost cap of \$220 million. Because Section 116 includes language stating that the Corps Project is authorized at a cost “not to exceed” \$220,000,000, cost increases under Section 902 of WRDA 1986 do not apply.
- b. Cost-sharing requirements are not based on a percentage but are specified at a Federal (Corps of Engineers) cost of \$110 million and \$110 million non-Federal. Since the Corps Project is not eligible for inclusion in the Army Civil Works annual budget requests, the Federal participation will be limited to the amount appropriated.
- c. Plan formulation – The project was authorized by Congress based upon a local plan that has not been evaluated for economic justification in accordance with the Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies. As a result, economic justification and National Economic Development (NED) plan formulation analysis are not required and were not conducted.
- d. Sponsor work-in-kind credit in advance of the PCA (PPA, WRDA 2007) is authorized subject to the Secretary’s determination that the work is integral to the project. Sponsor acquired real estate and the cost of other work that is integral to the project for which credit is sought will be determined and documented in detail in the PCA (PPA, WRDA 2007) submittal.

Items Specifically Approved Via the Original Project Report

The second category of non-standard implementation issues includes those items specifically approved via the Original Project Report:

- a. Due to the Congressional authorization of the project, a preliminary design phase was performed in conjunction with the development of the Draft Environmental Impact Statement (DEIS) instead of more traditional Reconnaissance and Feasibility Phase design studies. This modified procedure is consistent with the provisions of Paragraph 6 as contained in ER 1110-2-1150 Engineering and Design for Civil Works Projects and forms the basis of addressing the project's technical soundness. Additional design work expected to be performed under the Design agreement, and the mechanisms by which the Corps will ensure that technical soundness will be maintained therein are addressed in Chapter Three.
- b. If the state Water Quality Certificate process does not mature as quickly as PCA (PPA, WRDA 2007) development, Corps policy will be accepted, allowing the PCA (PPA, WRDA 2007) to be signed subject to the inclusion of language requiring the certificate to be in hand prior to construction start on features affecting waters of the United States. The intent is to minimize the Sponsor's work in advance of the PCA (PPA, WRDA 2007) and to likewise minimize any risk/exposure they may have therewith. In addition, timely execution of the PCA (PPA, WRDA 2007) allows for prompt initiation of construction as design packages mature, at least for those features to be constructed "in the dry." In no case, however, would construction start on an element affecting a water of the United States prior to receiving State clearance under the Clean Water Act.
- c. The Tarrant Regional Water District will obtain up to 87.59 acres if needed for the Corps Project from its current owner, the City of Fort Worth, and "donate" these lands to the project without seeking credit for their value. These lands would be used for the construction of the bypass channel, valley storage, and aquatic mitigation. Lands already owned by the sponsor will be provided to the project.
- d. Certain other costs and activities that would normally be required to be included in the project cost-accounting will be provided by the Sponsor as local costs. These items will become "base conditions" to be defined in the PCA (PPA, WRDA 2007) as required prior or concurrent with construction on appropriate components of the Corps Project. Items in this category include:
 - Construction of the North Main Street and Henderson Bridges (to be funded by the Federal Highway Administration through the Texas Department of Transportation.), defined as acquisition of real estate, engineering, design, and other "soft costs"
 - All HTRW Cleanup of project lands to include investigations, design and remediation of CERCLA and RCRA governed materials. (Sponsor voluntarily agrees that ALL HTRW remediation/cleanup will be local costs in deference to the project cost cap imposed by the authorization.)
 - All demolition required for project lands.
 - Utility relocations
 - Once the Corps Project of the Central City Project has been completed, the existing levee system is no longer needed to provide flood protection. The existing levees, within the project footprint, may be removed in order to advance the urban design framework developed in the Trinity River Vision Master Plan. Congress has provided authority for

such modifications through both the authorizing language for the Central City project and in USC 33-408 which provides for such modifications upon recommendation of the Chief of Engineers and approved by the Assistant Secretary of the Army for Civil Works (ASA (CW)).

Delegation of the authority to permit modifications to the existing Fort Worth Floodway (within the Central City project footprint) was granted by the ASA (CW) to the Fort Worth District Engineer through approval of the original Project Report.

Items Requiring Approval/Affirmation via the Modified Project Report

The Modified Project Report adds two new base conditions due to the cost constraints of the authorized project. These additional base conditions will be reflected in the PCA (PPA, WRDA 2007), and will require that the Samuels Avenue Dam and the Trinity Point Gate be constructed at local expense prior to any modification of the existing Fort Worth Floodway that compromises its integrity relative to passage of the Standard Project Flood.

Project Implementation

Initial Work

Initial work for the Modified Central City Project including geotechnical investigations, design work, real estate acquisition and site preparation will proceed as described in the original Project Report.

Construction Schedule

Major work packages and the general construction sequencing of the project have been reviewed based on both the Base Conditions and the advances in design that have occurred since the original Project Report. In general, the construction will proceed in the following order:

- Roads and bridges/ Interior Bypass Channel
- Development of the valley storage sites
- Bypass Channel Tie-ins
- University Drive
- Isolation Gates
- Samuels Avenue Dam
- Marine Creek Low Water Dam
- Interior Water Feature and Connector

A preliminary sequence of construction for the Central City Project has been established based on assumptions that environmental assessments, land acquisition, permitting, and funding activities will not adversely impact the schedule. The draft sequence includes eight basic segments described generally in the original Project Report. Actual contract packages, construction contract size, and specific timing will be developed in more detail as the project detailed design progresses. Compliance with the archeological mitigation components of the Programmatic Agreement will be included in each construction segment. Construction of the

features included in the Ham Branch aquatic mitigation site can be constructed virtually at any time in the construction sequence; the current plan envisions this activity to proceed as soon as the PCA (PPA, WRDA 2007) is signed.

Follow On Activities

Once the Corps Project of the Modified Central City Project has been completed, the existing levee system is no longer needed to provide flood protection. The existing levees, within the project footprint, may therefore be removed in order to advance the urban design framework developed in the Trinity River Vision Master Plan. This activity is not included (or costed) in either the Corps of Engineers project or the overall Central City Project but is expected to be achieved by private party interests. As has been stated, authorization and delegation of the authority to permit modifications to the existing Fort Worth Floodway (within the Central City project footprint) was granted by the Secretary to the District Engineer through the approval of the original Project Report.

Real Estate Requirements

Summary of Lands, Easements and Rights of Way (LER)

The Modified Central City Project consists of revising the original Central City project to incorporate features of the Riverside Oxbow Ecosystem Restoration project including the use of publicly-owned lands for valley storage mitigation. The Real Estate requirements for acquisition of LER's have subsequently been revised to incorporate these modifications with the previously approved original Central City Project. As noted, one of the main revisions includes a reduction in the acreage of private land required for valley storage mitigation.

The real estate requirements for the Modified Central City Project and the Corps Project subset are discussed in this section. Table 2-1 summarizes the overall acreages required for the two original projects compared to the new Modified Central City Project. Table 2-2 summarizes the portions of LER's which are included in the Corps Project. Drawings depicting the LER requirements and properties to be acquired are included in Appendix B.

The acreages presented in Table 2-1 are based on two sources of data. The original Central City property acreages are based on Geographical Information System (GIS) boundaries as provided by the Tarrant Appraisal District (TAD). Property appraisal reports were prepared by James K. Norwood, MAI, ARA in 2004 for the original Central City project however these reports did not include property already owned by the Tarrant Regional Water District (TRWD). Discrepancies exist between the TAD GIS boundary acreages and the property appraisal reports. In some cases, the acreage values contained in the property appraisal report are lower than the TAD acreage values therefore the acreages presented in the table reflect the more conservative acreages.

The original Riverside Oxbow acreages are based on Appendix D- Real Estate Plan (REP) included in the Riverside Oxbow Ecosystem Restoration Project Interim Feasibility Study. A Gross Appraisal dated May 24, 2002, prepared by James K. Norwood, MAI, ARA, supported this plan. Acreages for the original Riverside Oxbow project are based on the table and values in the Feasibility Study REP.

The Modified Central City Project acreages are based on the compiling of the two sources of data and removing those properties no longer included in the combined project. Furthermore, property added to the project was included based on TAD GIS boundaries and ownership data. All of the acreages are based on the best available information at this time with the more conservative TAD data taking precedent.

**Table 2-1
Project Comparison
Lands, Easements, and Rights of Way (acres)**

	Original Central City		Original Riverside Oxbow		Modified Central City	
	Land	Easement	Land	Easement	Land	Easement
Total LER Required	787.10	12.49	680.08		1069.69	24.99
Portion of LER owned by City of Fort Worth	92.90	0.19	309.19		348.28	0.19
Portion of LER owned by TRWD	240.76	0.00	131.61		322.18	8.19
Portion of LER owned by TxDOT	0.00	0.00	1.58		1.58	1.90
Portion of LER owned by Tarrant Co	0.72	0.00			0.72	0.00
Portion of LER owned to be Acquired	452.72	12.30	237.71		396.93	14.71

The Corps of Engineers' participation for construction on the Central City project is defined in P.L. 108-447 and cap the Federal Cost of the Corps portion of the project at \$110,000,000 and a total project cost of \$220,000,000 project. The acreages presented in Table 2-2 are the LER requirement for the construction of the Corps Project as defined previously in this Project Report.

**Table 2-2
Corps Project
Lands, Easements, and Rights of Way (acres)**

	Corps Component Modified Central City	
	Lands	Easements
Total LER Required	838.21	9.10
Portion of LER owned by City of Fort Worth	325.66	0.00
Portion of LER owned by TRWD	229.68	6.12
Portion of LER owned by TxDOT	1.58	1.90
Portion of LER owned by Tarrant Co	0.00	0.00
Portion of LER owned to be Acquired	281.29	1.08

The bypass channel will include an element of public access. Therefore, it is desirable to acquire fee on the majority of the lands required in perpetuity. A large area along the east side of the bypass channel will be filled and re-graded. Potentially, portions of this area will be needed only on a temporary basis. The above acreages include these fill/grade areas. As project design progresses, a detailed analysis will be required to assess property-by-property impacts, based on construction, operational and maintenance requirements along with potential HTRW issues. In the meantime, a temporary work easement estate is included for possible use as required. Public roads within the bypass channel footprint must also be addressed from a real estate standpoint. For those roads which will remain, the non-Federal sponsor will need to acquire fee subject to the road right of way. For the road segments to be closed the sponsor will acquire fee and the rights of the road operator and the public for use of the roadways will be extinguished. These lands are not affected by the formulation of the Modified Central City Project.

No Federally-owned land is included within the LER required for the Project nor are there any non-standard estates proposed. Public lands required for the Modified Central City Project which is already owned by either TRWD, the sponsor, or the City of Fort Worth will be provided to the project by the sponsor. The sponsor will not seek credit toward their non-Federal share, effectively defining the value of these lands as local costs. The private lands required for the Modified Central City project will be provided by the sponsor and the sponsor will seek credit toward their share.

The previous Riverside Oxbow REP indicated that a determination had been made that the previous environmental restoration project had sufficient nexus to navigation with the flood control mission of the Fort Worth Floodway Project to invoke Government's power under navigational servitude. There is no navigational servitude within the project LER. The Trinity River is considered navigable up to Beach Street in Fort Worth.

The real estate required for the Corps Project subset of the Modified Central City Project includes 229.68 acres of land currently owned by TRWD, 325.66 acres of land currently owned by the City of Fort Worth, and a 1.58 acre tract of property at the Oxbow owned by Texas Turnpike Authority. As previously stated, these lands, which are already owned by local sponsors, will be provided to the project by the owning entities at no cost to the project. The TRWD previously received local cooperation credit for their lands when the original Fort Worth Floodway was built, therefore no credit toward the non-Federal share of the Modified Central City Project is allowed. The non-Federal sponsor, TRWD will acquire (if needed) from the Texas Turnpike Authority that portion of the 1.58 tract as required, but has voluntarily chosen not to seek credit for the value of these properties toward the required match. This constitutes a change from standard Corps LER crediting policy requiring an approved adjustment. Local sponsors are also currently working on acquisition of 281.29 acres of private lands that are required for the Modified Central City Project. The local sponsors will seek credit for costs associated with these acquisitions toward their local cooperation share of the overall project costs.

Included in the Corp Project portion of the Modified Central City project is the construction of the Ham Branch aquatic mitigation and valley storage mitigation site. Construction of this site will require additional lands consisting of a Permanent Easement as well as a Temporary Easement over approximately 9.10 acres of which TRWD has an existing easement on 6.12 acres. The remainder includes 1.90 acres currently owned by Texas Department of Transportation and 1.08 acres owned by private entities. The lands identified are for construction of the bypass channel and valley storage mitigation within the Modified Central City Project and are required for flood control purposes but will also be utilized for aquatic mitigation and ecosystem restoration.

Relocations under the Uniform Act

Lands involving relocations under the Uniform Act are located in the Bypass Channel which are part of the approved Central City Project and remain under the Modified Central City project. There are no landlord, business, or residential displacements associated with the revised valley storage sites or any other Corps components of the Modified Central City Project. Relocations under the Uniform Act are not affected by the formulation of the Modified Central City Project.

Baseline Cost Estimate for Real Estate

The real estate cost estimate for the Corps Component of the Modified Central City project is \$37,649,301. Property values included in the cost estimate are based on two Mass Appraisals prepared for the TRWD by James K. Norwood, MAI, ARA for the original Central City project. The appraisal for the Bypass Channel is dated November 16, 2004, and the appraisal for the Valley Storage Mitigation Areas is dated December 9, 2004. The appraisal reports were reviewed by Fort Worth District Review Appraiser. An administrative change to these appraisals was prepared by Fort Worth District Staff, as of December 22, 2005 to estimate the value for the Corps Project. The Property Values for the original Riverside Oxbow REP were based on a gross

appraisal dated May 24, 2002, prepared by James K. Norwood, MAI, ARA, and approved by the Fort Worth District. An administrative change to the land values for the original Riverside Oxbow properties was made to increase the estimate from 2002 to 2005. An administration change was then made to both the original Central City and Riverside Oxbow land values to increase the estimates from 2005 to 2007 using a 6% annual rate on lands. All land values were predicated on the assumption that the lands are free of hazardous, toxic or radiological wastes, in accordance with Real Estate Policy Guidance Letter No. 1 – Appraisal of Lands Containing Hazardous and Toxic Wastes. Costs for relocations of persons and businesses under the Uniform Act are based on a report prepared for TRWD by Pinnacle Consulting Management Group, Inc., dated February 2, 2005 which was previously prepared for the original Central City project. This report was previously reviewed by Fort Worth District Real Estate Staff. Additional relocations are not required under the Modified Central City project. Estimates are presented in the standard Code of Accounts from the MCACES Models Database, October 1994.

Utility and Facility Relocations

Because of the extensive urban development in the project area, there are numerous utility and facility impacts. Details and design criteria for these can be found in the Civil/Structural Appendices to the Final SEIS (Appendix C) and Final EIS (Appendix C).

State and local statutes require that service providers provide uninterrupted utility service. The estimated cost of the utility relocations associated with the bypass channel portion of the Modified Central City project is approximately \$18 million in 2007 dollars. These costs have not been included within the definition of the Corps Project because non-Federal interests will, in compliance with existing statutes, perform all utility relocations as a local cost. These relocations will be considered as prerequisite to or conducted concurrently with construction activities. These items will also be listed as articles of local cooperation in the PCA (PPA, WRDA 2007). Because these relocations are to be accomplished outside the Corps Project and are a matter of agreement between the City of Fort Worth (the non-Federal entity responsible for this activity within the Project Management Plan) and individual utility providers, no Federal assessment of compensability has been prepared.

Excavation of the valley storage mitigation sites will necessitate the minor adjustment of several utilities which is incidental to the site work. The estimates cost of the utility relocations is included in the site work costs of each site and are considered part of the Corps Project. The relocations are shown in the Civil/ Structural Appendices to the Final SEIS (Appendix C).

The Corps project will affect public facilities, most notably, roads. The original Central City Project included four major transportation components which were retained in the Modified Project including three new bridges where existing arterials will be bisected by the bypass channel (North Main Street, Henderson Street, and White Settlement Road) and an extension of White Settlement Road, including a new bridge across the Interior Water Feature. The North Main Street Bridge and the Henderson Street Bridge have been authorized for Federal Transportation funds through the Federal Highway Administration and \$12.8 million in initial funding was included in that agency's FY06 appropriation. (P.L. 109-59, Section 1702). In addition, several minor roadway improvements will be needed to provide local access. The original Riverside Oxbow Project included the replacement of the Beach Street Bridge between the Riverside Oxbow and Gateway Park areas and relocation of the park entrance to the south which were both retained in the Modified Central City project. These costs have not been included within the definition of the Corps project because non-Federal interests will construct these facilities as a local cost.

White Settlement Road currently stops at its intersection with Henderson Street and does not cross the West Fork of the Trinity River. The extension of White Settlement Road to North Main, as proposed in the original Central City Project, would provide adequate access/egress to the core areas of Trinity Uptown as future land use intensification occurs, but is not part of the current street grid. Accordingly, the White Settlement Extension Bridge is not a facility relocation issue. If, in fact, the White Settlement Extension Bridge was not constructed, traffic could be re-routed to the new Henderson Street Bridge, and traffic flow patterns would assume a manner similar to the existing White Settlement-Henderson Street intersection. The lands required for construction of this extension are either publicly-owned or will be acquired for the Henderson Street Bridge construction. No additional non-residential properties or compensable interests will be affected.

Project Costs and Cost-Sharing

The approved Central City Project was estimated in 2005 dollars and did not include escalation to the mid-point of construction. For general comparison purposes only a Modified Central City Project cost was developed using the same 2005 MCACES and data base also without escalation. The Project First Cost from the March 2006 Project Report and the Modified Project in 2005 dollars are shown in Table 2-3.

Table 2-3
Project First Cost (January 2005 Dollars)
Original Central City and Modified Project

Feature	Central City Project Estimate	Modified Central City Project Estimate
Property and Landowner Relocation	\$ 95,000,000	\$ 82,400,000
Relocations (Utilities and Demolition)	\$ 33,000,000	\$ 33,000,000
Valley Storage Mitigation	\$ 17,000,000	\$ 79,600,000
Dams (Samuels Avenue & Marine Creek)	\$ 35,500,000	\$ 47,300,000
Fish and Wildlife (Ecosystem)	\$ 6,600,000	\$ 10,500,000
Roads and Bridges	\$ 64,000,000	\$ 71,100,000
Levees and Floodwalls (Bypass Channel)	\$ 39,600,000	\$ 39,600,000
Pumping Station (Stormwater)	\$ 4,900,000	\$ 4,900,000
Recreational Facilities	\$ 13,100,000	\$ 19,300,000
Flood Control and Diversion Structures	\$ 35,200,000	\$ 35,200,000
HTRW	\$ 25,000,000	\$ 25,000,000
Design Survey, Testing, Legal Fees	\$ 8,000,000	\$ 8,700,000
Planning, Engineering, Design and Permitting	\$ 24,000,000	\$ 26,700,000
Program Management	\$ 17,500,000	\$ 17,500,000
Construction Management	\$ 16,700,000	\$ 18,200,000
Total	\$ 435,000,000	\$ 519,000,000

In order to more accurately assess the Modified Project and the Corps Project and pursuant to recent CECW-CE Memorandum and Bulletin the PDT initiated an update to the estimate for the Modified Project based upon the draft guidance for the "Application of Cost Risk Analysis Methods to Develop Contingencies". A new MII cost estimate in 2007 dollars was prepared based upon the modifications and additions to the approved plan and a Risk Model developed following the draft guidance document, Cost and Schedule Risk Analysis Process, dated August 2007. The new estimate and risk analysis was reviewed by the Walla Walla District CENWW-ED-C and comments and revisions were incorporated into the updated total project cost estimate.

The new estimate for the Modified Project has been increased due to a number of factors including updating to a new base year (2007), updated to the latest MII software and data base, risk based contingencies development and escalation to the mid-point of construction. The new estimate is summarized in Table 2-4.

**Table 2-4
Modified Central City Total First Project Cost
(Price Level Date: October 2007)**

FEATURE DESCRIPTION (CWBS)	First Project Cost 2007 Dollars w/Contingency	Full Funded Project Cost Escalated Dollars
Lands and Damages	\$ 96,750,000	\$ 102,100,000
Relocations	\$ 43,010,000	\$ 46,200,000
Reservoirs (Valley Storage)	\$ 51,406,000	\$ 60,146,000
Dams	\$ 51,195,000	\$ 62,695,000
Fish and Wildlife Facilities	\$ 12,210,000	\$ 14,280,000
Roads, Railroads and Bridges	\$ 82,558,000	\$ 94,088,000
Levees and Floodwalls	\$ 52,785,000	\$ 62,215,000
Pumping Plants	\$ 6,420,000	\$ 8,460,000
Recreation Facilities	\$ 24,178,000	\$ 30,958,000
Flood Control and Diversion Structures	\$ 45,488,000	\$ 58,848,000
Cultural Resource Preservation	\$ 1,240,000	\$ 1,360,000
Planning, Engineering, and Design	\$ 48,300,000	\$ 48,300,000
Construction Management	\$ 48,030,000	\$ 48,030,000
HTRW	\$ 33,170,000	\$ 35,770,000
TOTALS	\$ 596,740,000	\$ 673,450,000

The new estimate for the Modified Project served as the base for the development of costs for the Corps Project. Consistent with the original Corps Project the emphasis is on the flood control/hydraulic aspect to develop a functioning hydraulic (flood control) system. Features and components of the original Corps Project were identified during the development process and cost estimate process. The Corps Project under the Modified Central City Project includes the bypass channel, two isolation gates, most real estate, business and property owner relocations and soft cost associated with these features. All valley storage sites and mitigation quantities are included as part of the Corps Project. The updated MII Cost Estimate for the Modified Project with escalation and contingencies and Corps Project with escalation and contingencies are shown in Table 2-5. Itemization of these costs is further shown in Table 2-8.

**Table 2-5
Modified Central City and Corps Project
(Price Level Date: October 2007)**

FEATURE DESCRIPTION (CWBS)	Modified Central City Project First Costs	
	\$673M Project with Escalation	\$673M Project with Escalation
Lands and Damages	\$ 102,100,000	\$ 37,650,000
Relocations	\$ 46,200,000	\$ -
Reservoirs (Valley Storage)	\$ 60,146,000	\$ 60,146,000
Dams	\$ 62,695,000	\$ -
Fish and Wildlife Facilities	\$ 14,280,000	\$ 390,000
Roads, Railroads and Bridges	\$ 94,088,000	\$ -
Levees and Floodwalls	\$ 62,215,000	\$ 62,215,000
Pumping Plants	\$ 8,460,000	\$ -
Recreation Facilities	\$ 30,958,000	\$ -
Flood Control and Diversion Structures	\$ 58,848,000	\$ 39,579,000
Cultural Resource Preservation	\$ 1,360,000	\$ 1,360,000
Planning, Engineering, and Design	\$ 48,300,000	\$ 12,310,000
Construction Management	\$ 48,030,000	\$ 6,350,000
HTRW	\$ 35,770,000	\$ -
TOTALS	\$ 673,450,000	\$ 220,000,000

All major flood control functional features associated with the bypass channel and valley storage are included in the Corps Project. However, there are several differences in the components of the Corps Project for the Modified Project. These are required primarily due to the increase cost of excavation for valley storage and the limitation of funding in the authorization language. The Samuels Avenue Dam and one isolation gate have been removed and considered additional base conditions. In accordance with the authorizing language, cost-sharing will be \$110 million Federal by the Corps and \$110 million non-Federal. Because Section 116 includes language stating that the Corps Project is authorized at a cost "not to exceed \$220,000,000", cost increases under Section 902 do not apply. Accordingly, the project cost estimate includes an allowance for inflation. Table 2-6 presents a comparison of only the Corps Project from the original Central City Project to the Corps Project from the Modified Project.

Similar to the original Central City Project the cost estimate for the Corps Project shown in Table 2-5 does not include all the standard post-feasibility cost that one would expect. Notably, HTRW cleanup (both CERCLA and RCRA regulated materials), demolition, and utility relocations are omitted. Utility relocations were previously discussed on page 14. ER1165-2-132 defines HTRW to be those items regulated under CERCLA and states as follows:

*"For cost-shared projects, the local sponsor shall be responsible for ensuring that the development and execution of Federal, State, and/or local requirements for HTRW response actions are accomplished at 100 per cent **non-project** cost. No cost-sharing credit will be given for the cost of response items."* (paragraph. 6.b.(1))

Exclusion of CERCLA clean-up costs from the project cost-estimate is in full compliance with this guidance. Although RCRA regulated materials are usually project costs and are cost-shared, the TRWD has agreed to voluntarily bear the full expense of any response actions necessary for both CERCLA and RCRA regulated materials. The sponsor likewise proposes to voluntarily assume demolition as a local cost.

Table 2-6
Comparison of Corps Project First Costs
(Original Project – Price Level Date: January 2005)
(Modified Project – Price Level Date: October 2007)

FEATURE DESCRIPTION (CWBS)	ORIGINAL CENTRAL CITY \$220M CORPS PROJECT WITH ESCALATION	MODIFIED CENTRAL CITY \$220M CORPS PROJECT WITH ESCALATION
Lands and Damages ⁽¹⁾	\$ 61,068,000	\$ 37,650,000
Relocations	\$ -	\$ -
Reservoirs (Valley Storage) ⁽²⁾	\$ 14,758,000	\$ 60,146,000
Dams ⁽³⁾	\$ 40,666,000	\$ -
Fish and Wildlife Facilities ⁽⁴⁾	\$ 2,740,000	\$ 390,000
Roads, Railroads and Bridges	\$ -	\$ -
Levees and Floodwalls ⁽⁵⁾	\$ 41,168,000	\$ 62,215,000
Pumping Plants	\$ -	\$ -
Recreation Facilities	\$ -	\$ -
Flood Control and Diversion Structures ⁽⁶⁾	\$ 35,411,000	\$ 39,579,000
Cultural Resource Preservation ⁽⁷⁾	\$ 1,033,000	\$ 1,360,000
Survey, Testing & Legal Fees ⁽⁸⁾	\$ 2,857,000	\$ -
Program Management ⁽⁸⁾	\$ 4,794,000	\$ -
Planning, Engineering, and Design ⁽⁹⁾	\$ 9,338,000	\$ 12,310,000
Construction Management ⁽¹⁰⁾	\$ 6,167,000	\$ 6,350,000
HTRW	\$ -	\$ -
TOTALS	\$ 220,000,000	\$ 220,000,000

⁽¹⁾ Reduced valley storage property acquisition costs; reduced relocation cost; removed property acquisition assistance cost

⁽²⁾ Increase valley storage excavation costs

⁽³⁾ Samuels Avenue Dam is now considered a base condition

⁽⁴⁾ Reduced environmental impacts and mitigation costs

⁽⁵⁾ Increase based upon new estimate, refined costs and contingency escalation

⁽⁶⁾ Trinity Point Gate now considered base condition, increase based upon new estimate, refined costs and contingency escalation

⁽⁷⁾ Increase due to revised contingency and escalation

⁽⁸⁾ Cost reallocated Planning Engineering & Design, and local based on CTR comments

⁽⁹⁾ Includes partial cost previously estimated under survey, testing and legal fees

⁽¹⁰⁾ Increase due to revised contingency and escalation

Estimated annual Operation and Maintenance costs, as well as annualized replacement and rehabilitation costs have been developed for the Modified Project and are compared to the original Central City costs in Table 2-7.

**Table 2-7
Estimated Operations and Maintenance Cost Summary**

Area	Description	Central City Project Cost	Modified Central City Project Cost
Bypass Channel	Soft Edge	\$ 60,466	\$ 60,466
	Hard Edge	\$ 91,000	\$ 91,000
Assets	Samuels Dam, Marine Creek Lock, Isolation Gates, & Storm Pump Station	\$ 84,875	\$102,900
Valley Storage Mitigation/Ecosystem Improvements	Riverside/Gateway	\$ 20,102	\$17,590
Total Annual Estimate O&M Cost		\$ 256,443	\$271,960

Project Financing

The overall Central City project will be financed from a variety of Federal and local sources. In addition to funding for the Corps Project, Federal Funds have been appropriated through the Department of Transportation for design and construction of the North Main and Henderson Street bridges

Local funds are being provided through a variety of sources. In addition to the project sponsor for the Corps Project, the Tarrant Regional Water District, local partners include the City of Fort Worth and Tarrant County. These entities have committed funds from current and future bond elections, operating revenues and in-kind services to aspects of the Central City project outside the Corps project. In addition, the City of Fort Worth, the Tarrant County College District, Tarrant County, Hospital District and TRWD have dedicated revenues from the Trinity River Vision Tax Increment Financing (TIF) District to fund both Corps and non-Corps components of the Central City Project. The \$110,000,000 in non-Federal funds to match the Federal funds for the Corps project would come from TRWD, City of Fort Worth, Tarrant County, and the other Local Partners. No Federal program funds are included in the non-Federal financing of the Corps Project. The non-Federal contribution will take the form of credit for LERRD's, credit for permitting and legal fees (if needed), and cash as needed to reach \$110 million. As previously discussed, credit for LERRD's will be limited to those required for the Corps project, excluding land currently owned by TRWD and previously credited for the existing floodway and City-owned lands for which TRWD voluntarily chooses to not seek credit. The TRWD will be the project sponsor and will fund their portion of the project through the Design Agreement and Project Cooperation Agreement. The contribution from the Local Partners has been approved by the City of Fort Worth via the financing plan approved in January 2006. These funds will be contributed to the project by the Sponsor through a local agreement between the TIF and the Sponsor.

**Table 2-8
Cost Estimate – Modified Corps Project with M-II Cross Reference**

M-II, CWBS Feature	Cost (\$)	Basis of Cost and Linkage to Full M-II \$672M Plan	Responsible Party	Form of Contribution
01.0 Lands & Damages				
01.1 Property Acquisition	\$ 26,570,000	M-II Estimate Item 1.1.1 10, Property costs from TRWD Appraisal based on required properties	Sponsor	Credit for LERRD's
01.2 Property Relocations	\$ 4,620,000	M-II Estimate Item 1.1.2 15 Estimate, Relocation cost from TRWD Relocation Consultant based on required properties	Sponsor	Credit for LERRD's
Subtotal	\$ 31,190,000			
Contingency	\$ 4,260,000			
Escalation	\$ 2,200,000			
Total Lands & Damages	\$ 37,650,000			
03.0 Reservoirs (Valley Storage)				
03.1 Samuels Avenue Sites	\$ 5,320,000	M-II Estimate Item 1.2.1.1 05	Shared	See Note (1) below
03.2 University Drive	\$ 3,950,000	M-II Estimate Item 1.2.1.2 10	Shared	See Note (1) below
03.3 Ham Branch	\$ 820,000	M-II Estimate Item 1.2.3 15	Shared	See Note (1) below
03.4 Riverside Park	\$ 2,380,000	M-II Estimate Item 1.2.1.4 20	Shared	See Note (1) below
03.5 Rockwood Park - West	\$ 1,580,000	M-II Estimate Item 1.2.1.5 25	Shared	See Note (1) below
03.6 Riverside Oxbow/Gateway	\$ 29,220,000	M-II Estimate Item 1.2.1.6 30	Shared	See Note (1) below
Subtotal	\$ 43,270,000			
Contingency	\$ 8,136,000			
Escalation	\$ 8,740,000			
Total Reservoirs	\$ 60,146,000			

Note:

(1) Will be Determined Based upon Construction Contract Components, Annual Federal Appropriations, and Local Sponsor Requirements for Non-Federal Share.

Table 2-8
Cost Estimate – Modified Corps Project with M-II Cross Reference

M-II, CWBS Feature	Cost (\$)	Basis of Cost and Linkage to Full M-II \$672M Plan	Responsible Party	Form of Contribution
06.0 Fish and Wildlife Facilities				
06.1 Ham Branch	\$ 300,000	M-II Estimate Item 1.3.1 15	Shared	See Note (1) below
Subtotal	\$ 300,000			
Contingency	\$ 30,000			
Escalation	\$ 60,000			
Total Fish and Wildlife Facilities	\$ 390,000			
11.0 Levees and Floodwalls				
11.1 Bypass Channel – North	\$ 18,580,000	M-II Estimate Item 1.4.1	Shared	See Note (1) below
11.2 Bypass Channel - South	\$ 22,540,000	M-II Estimate Item 1.4.2	Shared	See Note (1) below
Subtotal	\$ 41,120,000			
Contingency	\$ 11,665,000			
Escalation	\$ 9,430,000			
Total Levees and Floodwalls	\$ 62,215,000			
15.0 Flood Control and Diversion Structures (Isolation Gates)				
15.1 Clear Fork Gate	\$ 11,780,000	M-II Estimate Item 1.5.1 05	Shared	See Note (1) below
15.2 TRWD Gate	\$ 12,920,000	M-II Estimate Item 1.5.2 15	Shared	See Note (1) below
Subtotal	\$ 24,700,000			
Contingency	\$ 5,919,000			
Escalation	\$ 8,960,000			
Total Flood Control and Diversion Structures	\$ 39,579,000			

Note:

(1) Will be Determined Based upon Construction Contract Components, Annual Federal Appropriations, and Local Sponsor Requirements for Non-Federal Share..

Table 2-8
Cost Estimate – Modified Corps Project with M-II Cross Reference

M-II, CWBS Feature	Cost (\$)	Basis of Cost and Linkage to Full M-II \$672M Plan	Responsible Party	Form of Contribution
18.0 Cultural Resource Preservation				
18.1 Cultural Resource Preservation	\$ 1,110,000	M-II Estimate Item 1.6 18	Shared	Federal or Sponsor Cash
Subtotal	\$ 1,110,000			
Contingency	\$ 130,000			
Escalation	\$ 120,000			
Total Cultural Resources Preservation	\$ 1,360,000			
30.0 Planning, Engineering and Design				
30.1 Planning, Engineering and Design	\$ 11,100,000	M-II Estimate Item 1.7 30	Shared	See Note (1) below
Subtotal	\$ 11,100,000			
Contingency	\$ 1,210,000			
Escalation	\$ 0			
Total Planning, Engineering and Design	\$ 12,310,000			
31.0 Construction Management				
31.1 Construction Management	\$ 6,080,000	M-II Estimate Item 1.8 31	Shared	See Note (1) below
Subtotal	\$ 6,080,000			
Contingency	\$ 270,000			
Escalation	\$ 0			
Total Construction Management	\$ 6,350,000			
Grand Total	\$220,000,000			

Note:

(1) Will be Determined Based upon Construction Contract Components, Annual Federal Appropriations, and Local Sponsor Requirements for Non-Federal Share.

Table 2-9 indicates the overall project expenses for the Modified Central City Project as derived from the construction schedule to reflect anticipated cash flow constraints. Features of the Corps project and their sequencing, as well as their financial requirements, are shown as well as other components of the Central City project, include base conditions for the PCA (PPA, WRDA 2007) (utilities relocations, demolition, HTRW cleanup, Samuels Avenue Dam, Trinity Point Gate, and the North Main and Henderson Street bridges). These base conditions will be financed by Federal Highways (bridges), TRWD, the City of Fort Worth, Tarrant County and the Tax Increment Financing District (utility relocations, demolition, and HTRW.) Table 2-10 identifies the anticipated funding source for the Modified Project for each year of project construction. (For comparative purposes, counterparts of these tables for the original Central City Project are contained in the Central City Project Report as Tables 1-7 and 1-8).

**Table 2-9
Overall Project First Costs – Modified Central City Project
Includes Contingency and Escalation**

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
Corps Project												
1.0 Lands and Damages	\$6,352,000	\$22,584,000	\$8,704,000									\$37,640,000
3.0 Reservoirs (Valley Storage)		\$1,134,000	\$11,826,000	\$13,423,500	\$19,822,000	\$5,904,500		\$3,528,800	\$4,491,200			\$60,130,000
6.0 Fish and Wildlife Facilities		\$390,000										\$390,000
11.0 Levees and Floodwalls					\$7,845,010	\$32,972,710	\$18,513,420	\$2,758,860				\$62,090,000
15.0 Flood Control and Diversion Structures								\$15,347,000	\$19,750,000	\$4,403,000		\$39,500,000
18.0 Cultural Resource Preservation		\$408,000	\$952,000									\$1,360,000
30.0 Planning, Engineering, and Design	\$1,255,000	\$2,510,000	\$2,510,000	\$2,510,000	\$2,510,000	\$1,255,000						\$12,550,000
31.0 Construction Management	\$226,000	\$802,000	\$712,000	\$473,000	\$895,000	\$1,191,000	\$549,000	\$642,000	\$719,000	\$131,000		\$6,340,000
Corps Project Total	\$7,833,000	\$27,828,000	\$24,704,000	\$16,407,000	\$31,072,000	\$41,323,000	\$19,062,000	\$22,277,000	\$24,960,000	\$4,534,000	\$0	\$220,000,000

**Table 2-9
Overall Project First Costs – Modified Central City Project
Includes Contingency and Escalation (Cont.)**

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
Other Modified Central City Components												
1.0 Lands and Damages	\$8,436,000	\$38,670,000	\$17,344,000									\$64,450,000
2.0 Relocations (Utilities)		\$9,108,000	\$27,213,200	\$9,868,800								\$46,190,000
4.0 Dams							\$16,367,140	\$31,235,000	\$14,867,860			\$62,470,000
6.0 Fish and Wildlife Facilities			\$4,071,120	\$4,389,540	\$3,801,840	\$1,627,500						\$13,890,000
8.0 Roads, Railroads and Bridges			\$7,469,250	\$40,768,450	\$33,332,640	\$3,794,660	\$858,700	\$526,300		\$6,798,300	\$511,700	\$94,060,000
13.0 Pumping Plants								\$1,593,270	\$4,560,630	\$2,276,100		\$8,430,000
14.0 Recreation Facilities				\$3,770,000	\$790,000	\$3,955,480	\$6,132,840	\$5,241,880	\$2,113,440	\$3,611,760	\$5,274,600	\$30,890,000
15.0 Flood Control and Diversion Structures								\$8,832,000	\$9,600,000	\$768,000		\$19,200,000
30.0 Planning, Engineering, and Design	\$3,575,000	\$7,150,000	\$7,150,000	\$7,150,000	\$7,150,000	\$3,575,000						\$35,750,000
31.0 Construction Management	\$1,036,000	\$5,867,000	\$6,889,000	\$7,220,000	\$4,657,000	\$1,152,000	\$2,868,000	\$5,824,000	\$3,824,000	\$1,652,000	\$711,000	\$41,700,000
33.0 HTRW	\$1,687,200	\$4,716,600	\$14,244,830	\$11,630,530	\$3,490,840							\$35,770,000
Remaining Central City Components - Sub-Total	\$14,734,000	\$65,512,000	\$84,381,000	\$84,800,000	\$53,222,000	\$14,105,000	\$26,227,000	\$53,250,000	\$34,966,000	\$15,106,000	\$6,497,000	\$452,800,000
Total Project Cost	\$22,567,000	\$93,340,000	\$109,085,000	\$101,207,000	\$84,294,000	\$55,428,000	\$45,289,000	\$75,527,000	\$59,926,000	\$19,640,000	\$6,497,000	\$672,800,000

Federal and Non-Federal Responsibilities

The Central City project is a large community-based project, with multiple Federal and local agencies involved. Each of the agencies will bring critical technical expertise in their respective areas to contribute to the successful construction of this complicated and diverse project. In general, the overall Central City project will be managed as a singular entity with a common Project Delivery Team. Corps of Engineers support to the project (real estate, design, HTRW, etc.) will be funded in two streams; those activities associated with the Corps Project will be funded with COE project funds, while Corps support to Central City project elements outside the Corps project would be funded through a separate reimbursable work agreement. Other third party agreements integral to the overall project execution include an agreement between the TRWD and the Tax Increment Financing District to implement use of TIF funds as part of the non-Federal contribution to the Corps project, and cost sharing agreements between the City and TxDOT relative to the transportation improvements associated with the Central City Project.

Reimbursable Work for Other Agencies

Certain activities related to the non-Corps components of the Central City project will require design review to assure conformity with the Modified Corps Project. As discussed in the original Project Report, a Support Agreement would be executed to cover Corps assistance to local governments on non-Corps components of the Central City project. As the Project Management Plan for the design and construction phase becomes more mature and the specific nature of services anticipated to be provided under an Intergovernmental Cooperation Act-type agreement are defined, the Project Team will prepare and submit appropriate documentation for the required approvals.

Table 2-10
Anticipated Funding Source for Modified Central City Project by Year of Project Construction

Year	Total Project Cost	Corps Project	Other Components
2008	\$ 22,920,000	\$ 7,809,000	\$ 15,111,000
2009	\$ 93,529,000	\$ 27,786,000	\$ 65,743,000
2010	\$ 110,052,000	\$ 24,660,000	\$ 85,392,000
2011	\$ 101,846,000	\$ 16,358,000	\$ 85,488,000
2012	\$ 84,574,000	\$ 31,041,000	\$ 53,533,000
2013	\$ 55,665,000	\$ 41,369,000	\$ 14,296,000
2014	\$ 44,890,000	\$ 19,102,000	\$ 25,788,000
2015	\$ 74,739,000	\$ 22,322,000	\$ 52,417,000
2016	\$ 59,428,000	\$ 25,010,000	\$ 34,418,000
2017	\$ 19,412,000	\$ 4,543,000	\$ 14,869,000
2018	\$ 6,395,000	\$ -	\$ 6,395,000
TOTAL	\$ 673,450,000	\$ 220,000,000	\$ 453,450,000

If reimbursement for this non-construction technical assistance is to be provided by federal, non-DoD agency, then the performance is authorized under the Economy Act 10 USC 3036(d). This type agreement would be required if the concept for real estate oversight between Federal Highways and the Corps for support to the non-Corps components does, in fact, mature.

Pre-Construction Engineering and Design

Design Agreement

The design phase of the Modified Corps Project is being conducted via a Design Agreement (model Design Agreement under Section 105(c) of PL 99-662) with Tarrant Regional Water District. In accordance with the model, work performed under the Design Agreement will be initially cost-shared at 75% Federal/25% non-Federal, and ultimately at the rate required for project cost-sharing in accordance with the PCA (PPA, WRDA 2007). Design work will proceed under the PED until such time as all issues related to the PCA (PPA, WRDA 2007) are resolved and it is executed. Subsequent design work will be performed under that agreement. The current expectation is that the PCA (PPA, WRDA 2007) would be ready for signature in Fiscal Year 08. The FY06 PED activities, including initial H&H modeling; portions of the civil, structural, and geotechnical design; design of the aquatic mitigation area; and real estate oversight are conducted under the Design Agreement with out-year design work conducted under the PCA (PPA, WRDA 2007).

Design Integration

Integration of design for all features of the Modified Central City project will proceed as described in the original Project Report, with the Fort Worth District, USACE, as the lead agency. Fort Worth District will review design documents for compliance with regulations on all activities associated with the Central City Project. Tarrant Regional Water District (TRWD) will be the cost share sponsor, and be responsible for coordination of any non-Federal funding sources associated with the non-Corps Project's segment. USACE will coordinate with TRWD on public input and community support issues associated with other relevant agencies such as The Texas Department of Transportation (TXDOT), the City of Fort Worth, local business owners and Tarrant County, to name a few of the partners in this endeavor.

Construction

Project Cooperation Agreement

Prior to commencement of construction, the non-Federal sponsor must enter into a binding agreement with the Government, the Project Cooperation Agreement (PCA), or as referenced in the 2007 WRDA, Project Partnership Agreement (PPA). The PCA (PPA, WRDA 2007) is an agreement setting forth the obligations of each party. The PCA (PPA, WRDA 2007) for the Corps Project is expected to be non-standard. Language must be developed to fully define the base conditions and the required coordination mechanisms. The planning, testing, design, and remediation of CERCLA and RCRA hazardous substances as Base Conditions will require modification to the CERCLA provisions in the standard PCA (PPA, WRDA 2007). Additionally, if State Water Quality Certification is not received by the time the PCA (PPA, WRDA 2007) is negotiated, the PCA (PPA, WRDA 2007) would need to include a condition that the Water Quality Certification will in fact be obtained prior to start of construction on any feature requiring a discharge into waters of the United States.

In accordance with language provided in Section 116, it is possible that the sponsor may be seeking credit for work prior to execution of the PCA (PPA, WRDA 2007). The intent of the project team is to minimize this phase of project execution. If such credit is determined to be appropriate, it will be documented in detail in the PCA (PPA, WRDA 2007) submittal.

The PCA (PPA, WRDA 2007) will also reflect the need to phase construction contracts to match funds available on an annual basis, as the project will not be included in the President's annual budget requests.

Local interests must agree to meet the requirements for non-Federal responsibilities, as summarized below and in future legal documents.

- a. Provide \$110 million as further specified below:
 - (1) Provide 25 percent of design costs for the Corps Project in accordance with the terms of a design agreement.
 - (2) Provide, during the first year of construction, any additional funds needed to cover the non-federal share of design costs, as will be defined in the PCA (PPA, WRDA 2007).
 - (3) Provide any work in kind credit to be sought under Section 116, if determined to be applicable
 - (4) Provide all lands, easements, and right-of-ways, including suitable borrow and dredged or excavated material disposal areas, and perform or assure the performance of all relocations determined by the Government to be necessary for the construction, operation, and maintenance of the Corps project. The Sponsor will voluntarily seek waiver of credit for 87.59 acres of land they will acquire from the City of Fort Worth.
 - (5) Provide or pay to the Government the cost of providing all retaining dikes, waste weirs, bulkheads, and embankments, including all monitoring features and stilling basins, that may be required at any dredged or excavated material disposal areas required for the construction, operation, and maintenance of the Corps Project, and
 - (6) Provide, during construction including monitoring and adaptive management, any additional cash payment as necessary to make its total contribution equal to \$110 million.
- b. Ensure that the base conditions defined in the PCA (PPA, WRDA 2007) are provided prior to or concurrent with construction start of affected increments or segments of the Corps project. Base conditions include utility relocation, investigations/design/cleanup/remediation of RCRA and CERCLA regulated substances, required demolition of structures on affected lands, and the construction, real estate, and design of the North Main Street and Henderson Street Bridges, Samuels Avenue Dam and the Trinity Point Gate. Modification to the standard CERCLA provisions of the PCA (PPA, WRDA 2007) will be required to accommodate the base condition.
- c. For so long as the project remains authorized, operate, maintain, repair, replace, and rehabilitate the completed project, or functional portion of the project, including mitigation features, at no cost to the Government, in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and State laws and any specific directions prescribed by the Federal Government
- d. Give the Government a right to enter, at reasonable times and in a reasonable manner, upon property which the local sponsor owns or controls for access to the project for the purpose of inspecting, completing, operating, maintaining, repairing, replacing, or rehabilitating the project.
- e. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended, and Section 103 of the Water Resources Development Act of 1986, Public Law 99-662, as amended, and Water Resources Development Act of 2007, Public Law 110-114, which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until the non federal sponsor

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- has entered into a written agreement to furnish its required cooperation for the project or separable element.
- f. Hold and save the United States free from all damages arising for the construction, operation, maintenance, repair, replacement, and rehabilitation of the project and any project related betterments, except for damages due to the fault or negligence of the United States or its contractors.
 - g. Keep and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of 3 years after completion of the accounting for which such books, records, documents, or other evidence is required, to the extent and in such detail as will properly reflect total project costs, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 Code of Federal Regulations (CFR) Section 33.20.
 - h. Perform, or cause to be performed, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, 42USC 9601-9675) and the Resource Conservation and Recovery Act (RCRA, 42USC 6901) that may exist in, on, or under lands, easements or right-of-ways that the Federal Government determines to be required for construction, operation, and maintenance of the project. However, for lands that the Federal Government determines to be subject to the navigation servitude, only the Federal Government shall perform such investigations unless the Federal Government provides the Non-Federal sponsor with prior specific written direction, in which case the Non-Federal Sponsor shall perform such investigations in accordance with such written direction; Modification to the standard CERCLA provisions of the PCA (PPA, WRDA 2007) will be required to accommodate the base condition.
 - i. Assume, as between the Federal Government and the Non-Federal sponsor complete financial responsibility for all necessary cleanup and response costs of any RCRA and CERCLA regulated materials located in, on, or under lands, easements, or right-of-ways that the Government determines necessary for the construction, operation, or maintenance of the project. Modification to the standard CERCLA provisions of the PCA (PPA, WRDA 2007) will be required to accommodate the base condition.
 - j. Agree, as between the Federal Government and the Non-Federal Sponsor, that the Non-Federal Sponsor shall be considered the operator of the project for the purpose of CERCLA and RCRA liability, and to the maximum extent practicable, operate, maintain, repair, replace, and rehabilitate the project and otherwise perform its obligations in a manner that will not cause liability to arise under RCRA and CERCLA. Modification to the standard CERCLA provisions of the PCA (PPA, WRDA 2007) will be required to accommodate the base condition.
 - k. Prevent obstructions or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) which might interfere with the proper functioning of the project, hinder operation and maintenance, or reduce the benefits of the project.
 - l. Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public law 91-646, as amended by title IV of the Surface Transportation and Uniform Relocation Assistance Act of 1987 (Public Law 100-17), and the Uniform Regulations contained in 49 CFR part 24, in acquiring lands, easements, and right-of-ways, and performing relocations for construction, operation, and
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- maintenance of the project, and inform all affected persons of applicable benefits, policies, and procedures in connection with said act.
- m. Comply with all applicable Federal and State laws and regulations, including Section 601 of the Civil Rights Act of 1964, Public Law 88-352, and Department of Defense Directive 5500.11 issued pursuant thereto, as well as Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army".
 - n. Do not use funds from other Federal programs, including any non-Federal contribution required as a matching share, to meet the non-Federal obligations for the project unless the Federal agency providing the Federal portion of such funds verifies in writing that the expenditure of such funds for such purpose is authorized.
 - o. Maintain open access to any recreation features located on project lands. Access must be open and available to all members of the public on equal terms.
 - p. Obtain all necessary water rights for the operation of the project.

Construction Contracts

Once the PCA (PPA, WRDA 2007) is executed, a set of plans and specifications completed, an Authorization of Entry and Certification of Title are provided by TRWD, and the Fort Worth District Real Estate Division has certified real estate availability, multiple construction contracts will be solicited and advertised as provided for in the PCA (PPA, WRDA 2007). Construction contracts will be acquired and managed in the same fashion as described in the original Project Report.