

# Trinity Lakes Project Supplemental Agreement

Trinity River Corridor Project Committee



CH2MHILL



February 5, 2008

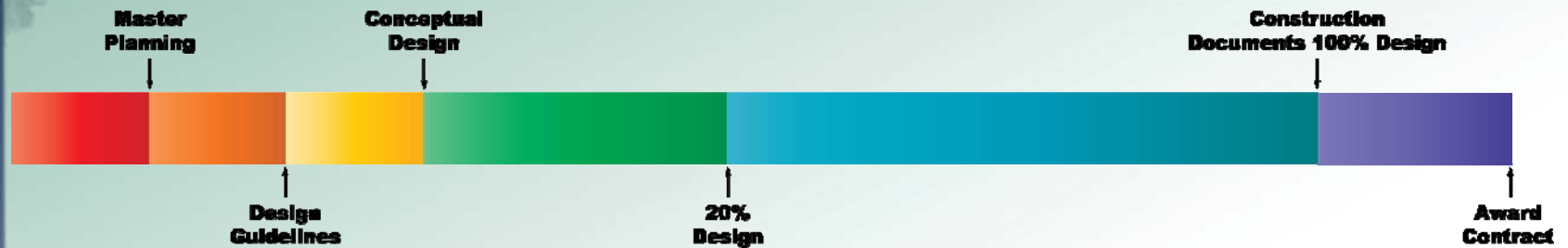




# Purpose

- Summarize the existing Trinity Lakes design contract and the proposed scope and fee changes
- Target is City Council approval for the contract supplemental agreement on February 13, 2008

# Phases of a Project




- **Master Planning** – Defines area, strategic concepts (e.g. BVP)
- **Design Guidelines** – Defines design intent, performance criteria, enforceable standards
- **Conceptual Design** – Approximately 5% of overall design effort, alternative evaluation, technical memoranda, sketches
- **20% Design (i.e. schematic design)** – Sufficient documentation of design to support EIS process. Includes plan views, key elevations and sections to show geometry, sustainability, flood-proofing
- **Construction Documents** – Biddable documents including plans, sections, elevations and specifications



# Background

- Existing Trinity Lakes Design Contract Summary
  - Contract was awarded on November 8, 2006 to CH2M HILL
  - CH2M HILL is the prime contractor
  - Wallace Roberts & Todd and LopezGarcia Group are major project partners
  - Contract Value - \$9.6 million
  - Funding Source – 1998 Trinity River Bond Funds
    - ✓ \$6.1 million from “Chain of Lakes”
    - ✓ \$3.5 million from “Trinity Parkway”
  - MWBE Participation - 37.5%
  - Sylvan to DART Bridge, Levee-to-Levee
  - Period-of-service (November 2006 to July 2008)



# Background - Original Project Strategy

- - Existing Contract Covers:
  - Provide branding and design guidelines to set the identity and look of the Trinity River Corridor
  - Conceptual Design (5%): Park access, park circulation, boating strategy, public art, lake isthmus, lighting, water features
  - Topographic Surveying for Dallas Floodway
  - Schematic Design (20%): Reunion Overlook, plazas, promenade, and softscape
  - Construction Documents (100%) for portion of floodway from Sylvan to DART: river relocation, utilities, interior drainage outfalls, fast-track overlook
- - Future Phases Not Currently Under Contract
  - Complete the design for the construction of the lakes, park features, Reunion Overlook, and public access/trails
  - Initiate design for the floodway that is upstream of Sylvan
    - River relocation
    - West Dallas Lake and playing fields
  - Complete design for the floodway that is upstream of Sylvan

## Summary of Existing Contract Elements

Project Elements (* - Sylvan to DART only)	5% Design	20% Design	100% Design
* Utility Relocations		X	X
* Bridge Pier Modifications		X	
* Interior Drainage Outfalls		X	X
* River Relocation		X	X
* Fast Track Overlook		X	X
* Downtown Lakes Features			
West Dallas Lake / Fields			
* Urban Lake Promenade		X	
* Continental Bridge			
Softscape and Play Areas		X	
* Reunion Overlook		X	
Park Access & Circulation	X		

X - defined as being in existing contract  
for area between Sylvan to DART



# What has Changed?

- WRDA (Water Resources Development Act) passed in November 2007 included the Dallas Floodway Project
  - \$298 Million of Federal authorizations for Corps to cost share construction of the BVP and interior drainage along levees
  - 2006 Bond Program for interior drainage along levees can now be leveraged with WRDA to fully fund the BVP
  - All construction for the WRDA Project, which is now the BVP and the interior drainage projects, must follow the ongoing Environmental Impact Statement by the Corps that is due in December 2010
  - Corps has a more demanding independent review process for EIS which increases timeline.
- Due to Katrina in 2005, the Corps has taken a more active role in the review of proposed changes to existing Corps' projects (e.g. Dallas Floodway)
  - The Corps strengthen its' review process ("Section 408") on October 27, 2006 that requires involvement of the Assistant Secretary of the Army in Washington D.C.
  - Although design criteria for projects involving levees have not changed, the Corps has taken a closer look at proposed projects, which resulted in a revised Trinity Parkway alignment (3c)



# What is the WRDA Project for Dallas?

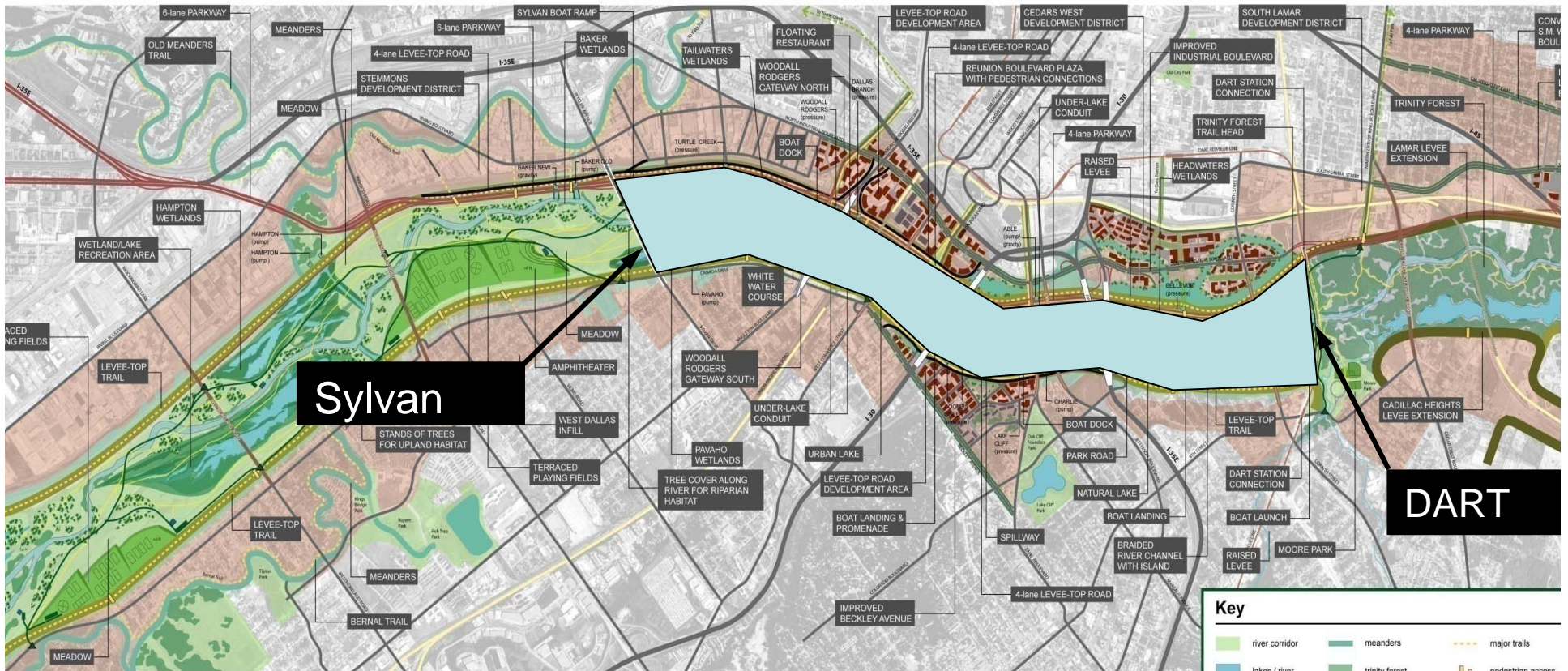
- The WRDA Project for Dallas is comprised of most elements of the Balanced Vision Plan, in addition to, interior drainage facilities adjacent to the Dallas Floodway
  - The \$194 Million component of the WRDA project includes the downtown lakes and associated features, Urban Lake promenade, river relocation, West Dallas Lake, trails, playing fields, wetlands, levee raise, ATSF railroad bridge modification, trees, storm water culvert extensions, utilities, park roads, and parking.
  - The \$265 Million component of the WRDA project includes interior drainage facilities adjacent and along both sides of the Dallas Floodway. The major elements include new pump stations at Baker, Able, and Hampton along the East Levee, and Pavaho and Delta along the West Levee. Additional sump improvements along both sides of the Dallas Floodway, including some trash screens for pump stations, are included.



# Response to Changes

- Supplement the existing contract
  - ✓ Expand project area for design to include Sylvan to the confluence of the West Fork and Elm Fork
  - ✓ Meet the needs for the Corps' EIS by producing required 20% designs on elements of the BVP not covered by existing contract
  - ✓ Produce 100% design for the river relocation, bridge pier modification, and utility relocations that can start immediately after the Corps' EIS process is completed

# Primary Corridor Area for the Existing Contract



and Vision Plan for the TRINITY RIVER CORRIDOR Dallas, Texas

Chan Krieger & Associates Hargreaves Associates TDA, Incorporated

is Based on Optimization for Flood Control, Ecosystem Restoration, and Recreation

CDM

March 22, 2004





# Overview of Contract Amendments

- Sylvan to Confluence of Elm Fork – West Fork
  - River Relocation (100% Design)
  - West Dallas Lake and Playing Fields (20% Design)
  - Utility Relocations (100% Design)
  - Bridge Pier Modifications (100% Design)
- Provide Support for Corps' EIS
  - 2-D Sediment Transport Modeling
  - BVP (20% Design)
  - Corps' EIS Review / Input
- Additional Initiative in Dallas Floodway
  - Continental Bridge (5% Design)



# River Relocation (100% Design)

- Construction Documents
  - Relocate four additional miles of the river from Sylvan to the confluence of the West Fork / Elm Fork
  - Perform 2-dimensional sediment transport modeling of the river (confluence to DART) to better assess the land forming features, sustainability of the river channel, and impact of sediment on the linear park
  - This amendment item is necessary to meet the requirements of the Draft WRDA EIS for the Corps to enhance sustainability of the river channel and the linear park.
  - Total design cost for this overall amendment is \$1,296,000

# River Relocation



Very large tree deposited by high water

Over 12" deep silt deposit

TRINITY RIVER SILT DEPOSIT STUDY - JULY 2007  
Trammell Crowe Park, West Fork Trinity River downstream of Elm Fork confluence, 3700 Sylvan Avenue.

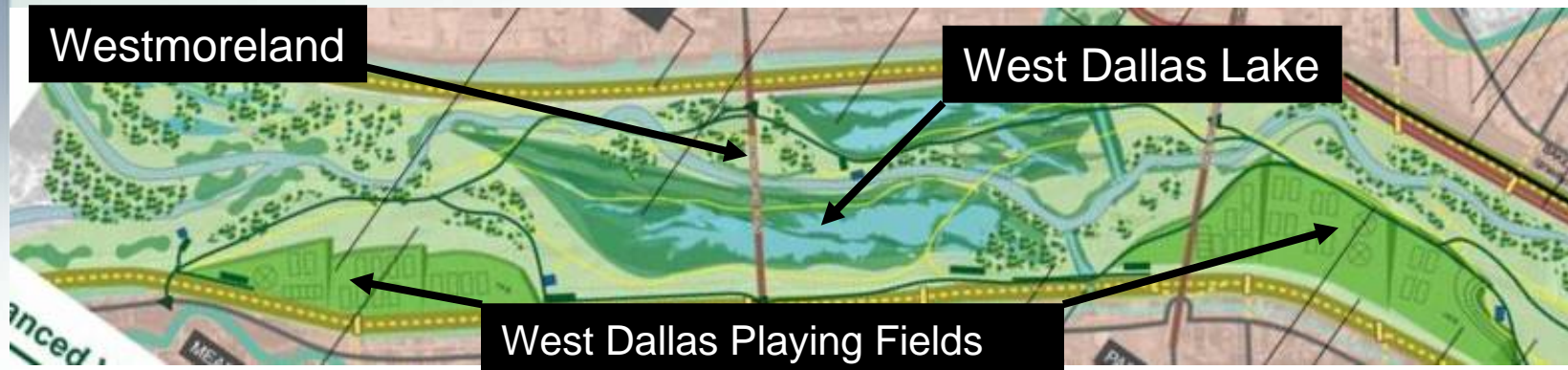
Deposition Concerns

Bank Stability



# West Dallas Lake and Playing Fields (20% Design)

- Schematic Design (20%)
  - Deliver a design for a neighborhood lake similar in design and function to Crow Lake.
  - Program the park to include lake features, access, and park capacities.
  - Hold two (2) public meetings with community members to present the design concept and solicit feedback.
  - Define the boundaries of excavation for the Trinity Parkway project and meet the requirements of the Draft WRDA EIS.
  - Total design cost for this overall amendment is \$707,000





## Utility Relocations (100% Design)

- Deliver Design and Construction Documents
  - Provide the Corps with 20% design documents for City utilities upstream of Sylvan, the 60-inch sanitary line near IH-35, and a water line at Corinth for their EIS
  - Deliver 100% design documents for all City utilities within the BVP limits of the Dallas Floodway to be altered or moved
  - Coordinate with franchise utilities to ensure that their design and relocations are compatible with the BVP schedule
  - Total design cost for this amendment is \$845,000



## Bridge Pier Modifications (100% Design)

- Deliver Design and Construction Documents
  - Provide to the Corps 20% design for bridge pier assessments, scour analysis, and modifications upstream of Sylvan
  - Provide to the Corps 20% design for bridge pier assessments, scour analysis
  - Deliver 100% design for all necessary bridge pier modifications within the BVP limits of the Dallas Floodway to serve the river relocation and new lakes
  - Total design cost for this amendment is \$728,000



## 2-D Sediment Transport Modeling

- Modeling
  - Provide Corps 2-D sediment transport modeling to ensure sustainability of the realigned Trinity River
    - Degree of meanders
    - Channel geometry
    - Vegetation plan for channel banks
    - Strategy for protective berm between Urban/Natural Lakes and Trinity River
- Provides These Benefits
  - Gives better understanding of magnitude of channel erosion and bank-protection
  - Assists with determining magnitude of floodplain sediment deposition
  - Assists with design decisions for lake and berm design to interact with varying river levels



## BVP 20% Design

- The following are new 20% design submittals for the Corps' EIS that are part of this contract supplemental agreement:
  - Urban / Natural Lake features such as outfall channel to river, lakes protective berm, isthmus, water features, edge treatments for lakes, water delivery system, eco-restorers
  - West Dallas Lake and Playing Fields
  - Vehicular Pedestrian and Circulation Plan
  - Softscape and Play Areas (upstream of Sylvan)

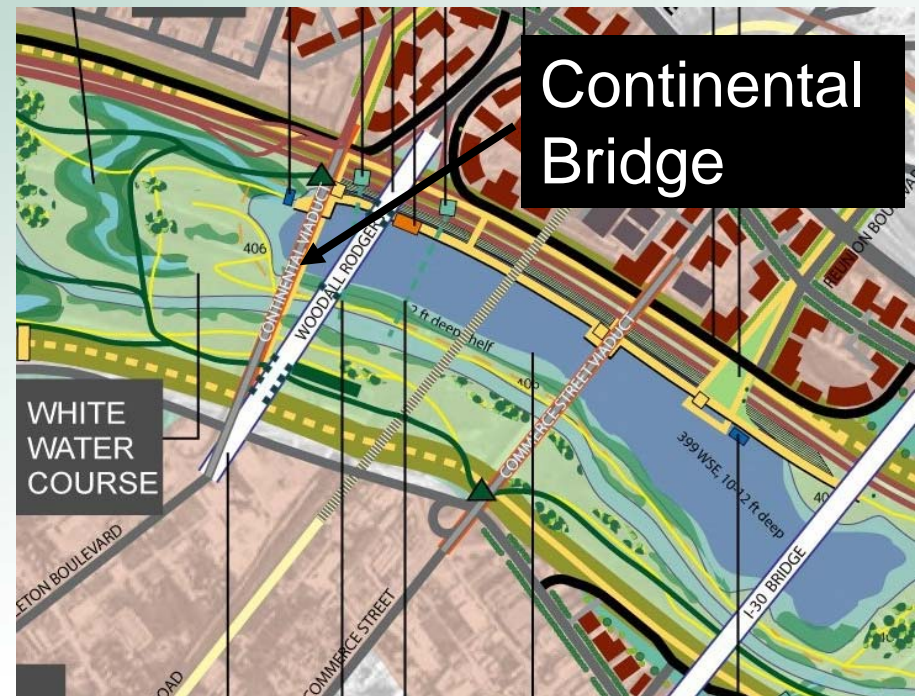


## Corps' EIS Review / Input

- Provide review and input to the Corps for their Draft EIS that is due in November 2009 and their Final EIS that is due in December 2010
- Provide input to the Corps on regulatory permitting as part of their EIS

# Continental Bridge (5% Design)

- Provide a pedestrian-friendly amenity in the Corridor that can serve public events
- Solicit stakeholder input and develop three 5% design concepts based on low, medium and high level of build-out for features
- Develop a range of concepts from gateways and landscaping to a “Punta Vecchio” design for the bridge
- Focus on architectural concepts featuring the bridge as gathering area and economic generator
- Amendment Value = \$285,000



# Estimated Construction Costs

2008 Dollars	
WRDA 2007 Project	\$194M*
Continental Bridge	\$5M - \$40M*
Reunion Overlook	\$5M - \$20M*
<b>Total Construction Costs</b>	<b>\$254M*</b>

\* These costs are preliminary and will change once final design concepts are selected

## Summary of Proposed Contract Elements

Project Elements	5% Design	20% Design	100% Design
Utility Relocations		X, Y	X, Y
Bridge Pier Modifications		X, Y	X, Y
Interior Drainage Outfalls		X	X
River Relocation		X, Y	X, Y
Fast Track Overlook		X	X
Downtown Lakes features		Z	
West Dallas Lake / Fields		Y	
Urban Lake Promenade		X	
Continental Bridge		Y	
Softscape and Play Areas		X, Y	
Reunion Overlook		X	
Park Access & Circulation	X	Y, Z	

X - defined as being in existing contract for area between Sylvan to DART

Y - defined as being in contract amendment for area between Sylvan and the confluence

Z - defined as being in contract amendment for area between Sylvan to DART

# Special Services

	Existing Contract	Proposed Amendment	Total Proposed Amended Contract
<b>Special Services</b>			
Branding	\$ 221,619.00	\$ 32,962.00	\$ 254,581.00
Design Guidelines	\$ 1,648,775.20	\$ 54,790.00	\$ 1,703,565.20
Peer Review	\$ 249,140.00	\$ (67,700.00)	\$ 181,440.00
2-D Modeling of River	\$ -	\$ 591,473.00	\$ 591,473.00
Morphological Assessment of River	\$ 156,908.80	\$ 238,512.00	\$ 395,420.80
Water Quality Modeling	\$ 313,741.84	\$ 100,000.00	\$ 413,741.84
Permitting Assistance	\$ 241,460.00	\$ 322,750.00	\$ 564,210.00
Project Management(Prorata Share)	\$ 386,858.87	\$ 581,470.60	\$ 968,329.47
Geotech	\$ 40,722.24	\$ 88,543.00	\$ 129,265.24
Stakeholder Communication/Public Outreach	\$ 141,397.00	\$ 216,634.00	\$ 358,031.00
<b>Subtotal Special Services</b>	<b>\$ 3,400,622.95</b>	<b>\$ 2,159,434.60</b>	<b>\$ 5,560,057.55</b>

# Design Services

Design Services	Existing Contract	Proposed Amendment	Total Proposed Amended Contract
Project Management	\$ 781,730.63	\$ 1,693,890.40	\$ 2,475,621.03
Surveying	\$ 1,069,858.38	\$ 258,075.00	\$ 1,327,933.38
Utility Relocation	\$ 127,111.36	\$ 747,220.00	\$ 874,331.36
Interior Outfalls	\$ 653,352.84	\$ -	\$ 653,352.84
River Design	\$ 867,412.46	\$ 816,437.00	\$ 1,683,849.46
Lakes Design (Existing Contract-Mass Grading Only)	\$ 458,651.08	\$ -	\$ 458,651.08
20% Level Lakes Design		\$ 434,148.00	\$ 434,148.00
20% Design West Dallas Lake	\$ -	\$ 470,549.00	\$ 470,549.00
Fast Track Overlook	\$ 66,000.00	\$ -	\$ 66,000.00
Park Features	\$ 1,837,805.00	\$ 1,142,229.00	\$ 2,980,034.00
Bridge Pier Modifications	\$ 355,333.60	\$ 728,129.00	\$ 1,083,462.60
	\$ -		
<b>Subtotal Design Services</b>	<b>\$ 6,217,255.35</b>	<b>\$ 6,290,677.40</b>	<b>\$ 12,507,932.75</b>
<b>Design Fees as a % of Construction (\$254M)</b>	<b>2.4%</b>	<b>2.5%</b>	<b>4.9%</b>
<b>Total</b>	<b>\$ 9,617,878.30</b>	<b>\$ 8,450,112.00</b>	<b>\$ 18,067,990.30</b>

# Contract Supplemental Agreement Summary

- Period of Performance extends from July 2008 to December 2010 (Corps' completion date for EIS ROD)
- MWBE Percentages – 33.9% for this amendment

Advanced Design in Support of EIS	\$2,677,813
Design for Sylvan to confluence	\$5,243,161
Continental Bridge	\$ 529,141
Supplemental Agreement Total*	\$8,450,115

\* \$1.1M of the \$8.4M total is anticipated costs that possibly may not be needed (in whole or in part) as determined by the City, which includes renderings, utility easements, bridge pier modifications, and project website. Depending upon analysis and assessments that are part of this contract supplemental agreement, any costs that are found to be not needed will remain unspent with this contract and will be deleted as part of the next contract supplemental agreement.



# Contract Supplemental Agreement Funding Sources

The following are the funding sources to be used for this Trinity Lakes Design supplemental agreement contract:

1998 Trinity River Bond Funds (from “Chain of Lakes”)	\$7,157,739.16
2006 Bond Funds; Flood Protection and Storm Drainage Facilities Fund (for drainage outfalls)	\$ 653,352.84
Dallas Water Utilities Capital Construction Funds; for utility relocations / modifications	\$ 639,020.00
	<hr/>
Total Fee Cost to amend contract:	\$8,450,112.00

# MWBE Participation

MWBE Consultant	Existing Contract	% of Total	Amendment	% of Total	Total Amended Contract	% of Total
Lopez Garcia Group HFDB30364Y0407	\$3,187,230	33.1%	\$2,790,420	33.0%	\$5,977,650	33.1%
Foster CM Group BMMB28507N0906	\$216,000	2.2%	\$50,000	0.6%	\$266,000	1.5%
ARS Engineers, Inc. IMDB30147Y0307	\$151,445	1.6%	\$0	0%	\$151,445	0.8%
Bowman-Melton WFDB31286Y0707	\$50,000	0.5%	\$0	0%	\$50,000	0.3%
APM	\$0	0%	\$25,000	0.3%	\$25,000	0.1%
Consumer and Market Insights	\$0	0%	\$25,000	0.3%	\$25,000	0.1%
<b>Totals</b>	<b>\$3,604,675</b>	<b>37.5%</b>	<b>\$2,890,420</b>	<b>34.2%</b>	<b>\$6,495,095</b>	<b>35.9%</b>

# Future Design Fees

Phase	Fee for Special Services and Studies	Design Fee	Total Fee	% of Construction (Design Fee)
Existing Contract	\$3.4M	\$6.2M	\$9.6M	2.4%
Proposed Supplemental Agreement	\$2.2M	\$6.3M	\$8.5M	2.5%
Anticipated Future Design Amendments*	\$0M	<b>\$11.0M</b>	\$11.0M	4.3%
<b>Total Fee**</b>	<b>\$5.6M</b>	<b>\$23.5M</b>	<b>\$29.1M</b>	<b>9.2%</b>

\* Based on estimated construction costs of \$254M and current project scope. Does not include bidding and construction phase services.

\*\* Includes both engineering and architectural design services



# Next Steps and Path Forward

- City Council Action - February 13, 2008
- Future Supplemental Agreement for 100% Design - January 2009
  - Lakes (West Dallas, Urban and Natural)
  - Park Features (Circulation plan, playing fields, etc.)
  - Continental Bridge
  - Reunion Overlook