

# Memorandum



CITY OF DALLAS

DATE May 18, 2007

TO Trinity River Committee Members: Ed Oakley (Chair), Pauline Medrano (Vice-Chair), Linda Koop, Angela Hunt, Steve Salazar, Dr. Maxine Thornton-Reese, Dr. Elba Garcia

SUBJECT Bond Program Project Delivery for Large Flood Management and Storm Drainage Projects

On May 21, 2007, staff will brief the Trinity River Committee on the strategy developed to deliver the large flood management and storm drainage projects funded in the 2006 Bond Program. Attached are copies of the materials for your information.

Please let me know if you have any additional questions.

A handwritten signature in black ink, appearing to read 'R. Miguez'.

Ramon F. Miguez, P.E.  
Assistant City Manager

- c: Honorable Mayor and Members of the City Council  
Mary K. Suhm, City Manager  
Thomas P. Perkins, Jr., City Attorney  
Deborah Watkins, City Secretary  
Craig Kinton, City Auditor  
Judge Jay Robinson  
Ryan S. Evans, First Assistant City Manager  
Jill A. Jordan, P.E., Assistant City Manager  
A.C. Gonzalez, Assistant City Manager  
Charles W. Daniels, Assistant City Manager  
David Cook, Chief Financial Officer  
Chandra Marshall-Henson, Assistant to the City Manager, Mayor and Council Office  
Liz Fernandez, P.E., Interim Director, Public Works and Transportation

# Bond Program Project Delivery

For

## Large Flood Management and Storm Drainage Projects



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Trinity River Committee Briefing  
May 21, 2007

# Briefing Purpose

- To present the program management strategy for delivery of Flood Management and Storm Drainage full-service projects
- To seek the Committee's approval of staff's recommended contract awards for Program Manager and Full-Service Consultant Teams proposed for June 13, 2007



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# 2006 Bond Program Summary

- **Total program \$1.35 billion**
- **Total \$334 million in Proposition No. 2 for Flood Management and Storm Drainage - compared to 2003 of \$16.4 million**
- **Proposition No. 2 includes several large, complex flood management and storm drainage projects totaling \$205 million**
  - Council Priority
  - Scheduled in first Bond sale
  - Aggressive schedules
- **\$129 million in Proposition No. 2 for other, more typical flood management and storm drainage projects**



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# 2006 Bond Program Projects: Proposition 2 – Flood Protection and Storm Drainage Facilities

## Flood Management

Levee Drainage System - Hampton-Oak Lawn Sump  
 Levee Drainage System - Pavaho Sump  
 Levee Drainage System - Pressure Sewers

## Bond Program Cost Estimates

\$48,116,510  
 \$37,778,480  
 \$14,720,921

## Storm Drainage

Middle Peaks Branch (Phase 1) to Fair Park  
 Middle Peaks Branch (Phase 2) Fair Park to Haskell  
 Mill Creek Drainage Relief System–Phase 1  
 State-Thomas @ Woodall Rodgers  
 State-Thomas @ Woodall Rodgers (Study)

\$22,340,355  
 \$12,566,450  
 \$57,688,760  
 \$11,741,960  
\$ 191,445

Costs include Design and Construction

TOTAL \$205,144,881



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# Excerpts from December 4, 2006 City Council Briefing

## Delivery Options

- **Propose to use consultant to provide Project Management**
  - Consultant will act as City's Project Manager responsible for all phases of work including coordination internally, with other agencies and the public to implement the design and construction of a project
  - Supplement current staff levels to perform job functions that city staff would ordinarily perform
- **Propose to use consultants for full-service contracts**
  - Consultant to provide industry leading experts on large pump station design and deep tunneling
- **Add additional internal staff**



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# Why Program Management and Full Service Teams?

- **Program Management**

- One consultant firm with special knowledge and expertise serving as an extension of city staff to manage the scheduling, budgets, permitting, design, construction, conduct plan reviews, conduct inspection, and coordination of several large projects and with developments associated with the Trinity River

- **Full Service Contract**

- Provide basic engineering design services including surveying, utility coordination, geotechnical engineering, and right-of-way acquisition; and, project management through construction



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# Why Program Management and Full Service Teams?

- **Program Management: The right choice for these projects**
  - One time need for specialized expertise in large Pump Stations and Tunnels
  - High risk, high price projects
  - Allows to augment city staff with highly specialized staff to meet schedule and budget demands
- **Full Service Contracts:**
  - Local technical expertise for design and construction management
  - Allows to augment city staff with highly specialized staff
  - Teams utilize local and M/WBE firms

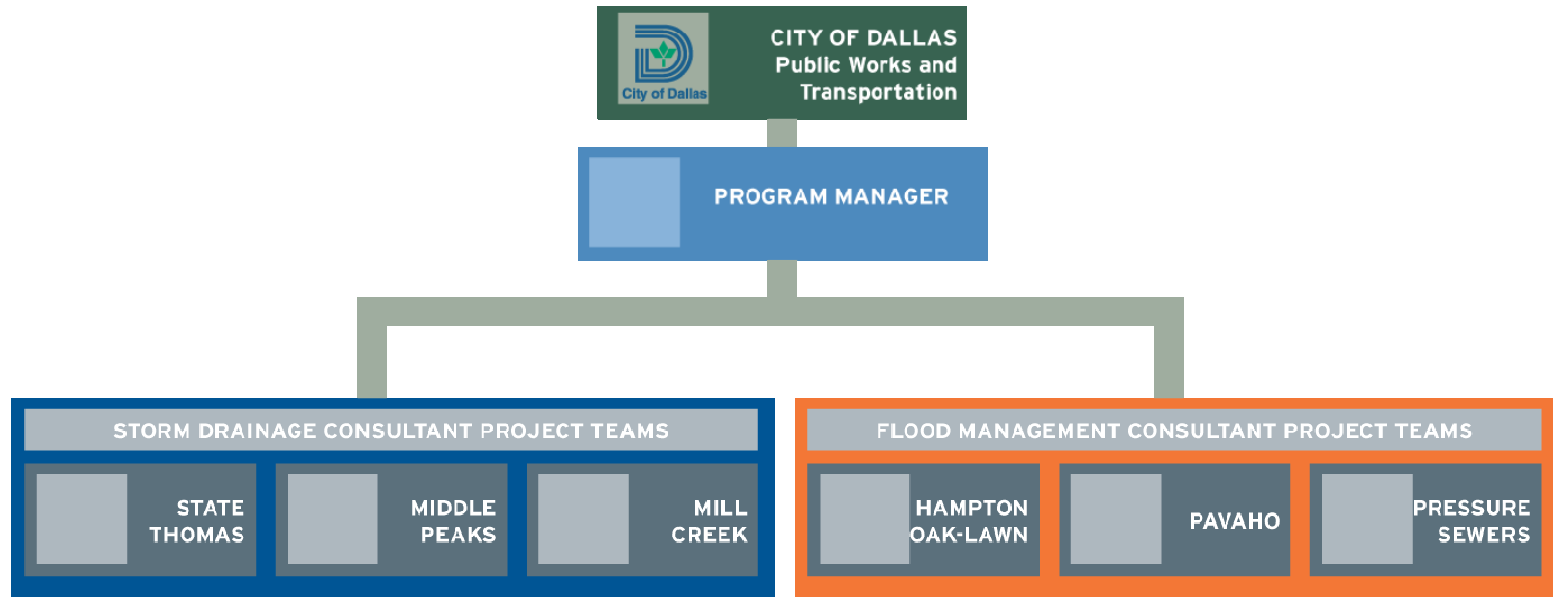


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# Program Management Approach



- **Program Manager serves as extension of staff to manage program**
- **Program Manager manages Full-Service Consultant teams from design through construction**

## **Benefits include:**

Technical expertise

Communication

Flexible Resources

One point of contact

Coordination including with other developments and projects

Consistency

Innovative project controls

Master schedule

Specialty cost estimating



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# Scope of Work for Storm Drainage Projects

- **Middle Peaks and Mill Creek Branch Drainage Relief System:**
  - 12,165 LF of 26-foot Dia. Tunnel
  - 3,000 LF of 20-foot Dia. Tunnel
  - Outlet structures, channel excavation, storm sewer improvements
  - Provides flooding relief to lower Mill Creek basin and middle Peaks Branch basin
- **State Thomas at Woodall Rodgers**
  - Study to evaluate the existing drainage system in the State Thomas area and provide recommendations for improvements.
  - Implement the recommended improvement elements identified in the Study Phase Report
  - Provides needed outfall for new drainage systems in the Uptown area



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# Scope of Work for Flood Management Projects

- **Hampton-Oak Lawn Sump Levee Drainage System:**
  - To protect a large part of the Design District and Stemmons Corridor area from 100-year flood behind east levee
  - Construct new 700,000 GPM pump station at Baker plant
  - Rehab existing “New Baker” pump station, decommission “Old Baker” pump station
- **Pavaho Sump Levee Drainage System:**
  - To protect residential area from 100-year flood behind west levee
  - Replace existing pump station with a new pump station
  - Add 130,000 GPM additional pumping capacity



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# Scope of Work for Flood Management Projects

- **Levee Drainage System Pressure Sewers:**
  - Extend Woodall Rodgers and Dallas Branch pressure sewers estimated 1,100 feet each
  - Extend Turtle Creek and Bellview pressure sewers estimated 300 feet each
  - Extensions required to take storm water to the relocated channel



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# Consultant Selection

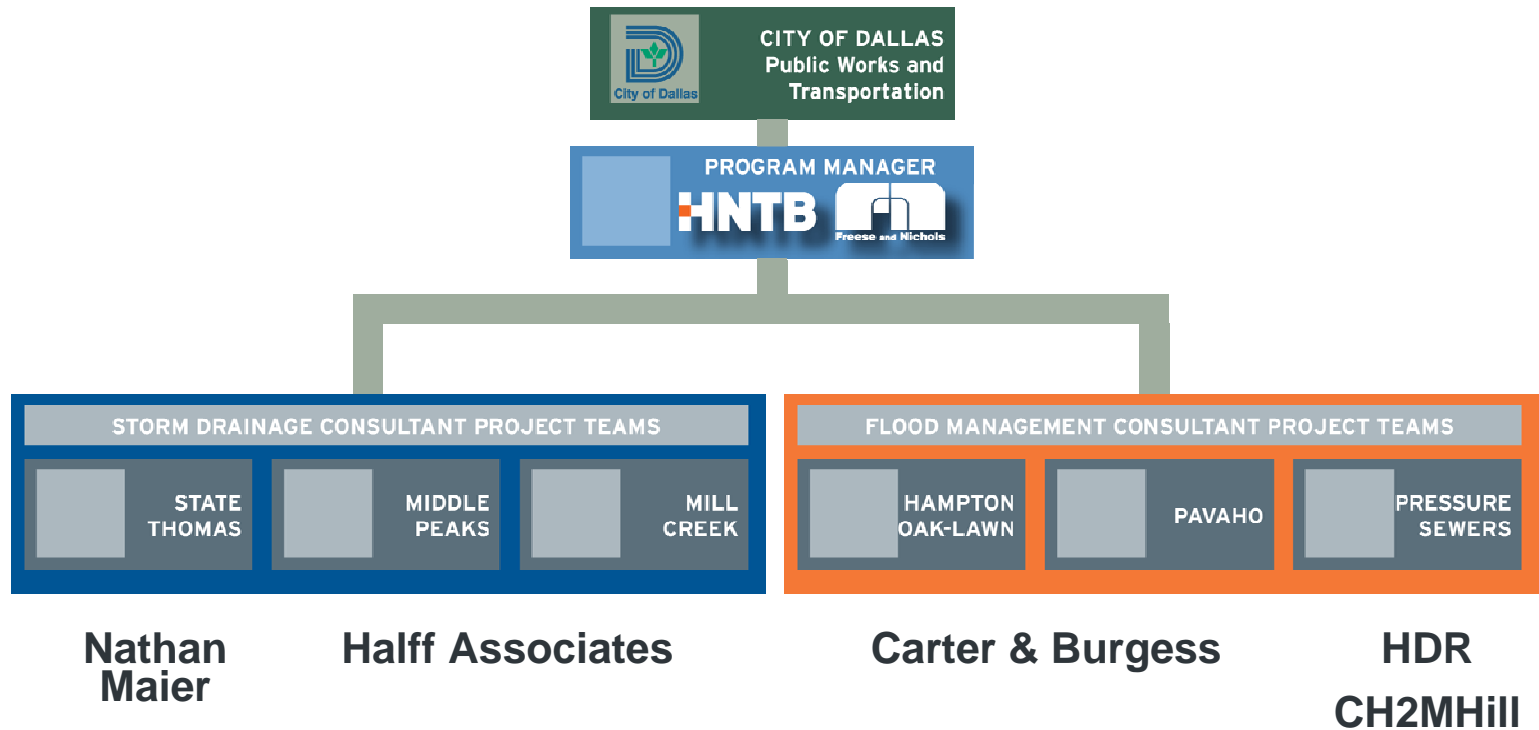
- **A qualifications based selection process in accordance with A.D. 4-5 was used to determine the most qualified consultant firms for these projects**
  - Firms submitted Statements of Qualification and proposals
  - A diverse committee of city staff was assembled to review consultant submittals
  - A rating system was established to guide committee members
  - Firms were selected



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# Program Management Team for 2006 Bond Program: Proposition 2 Large Flood Management and Storm Drainage



**Program Management Team and Project Consultant Teams  
will meet City of Dallas Good Faith Effort for each contract**



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# Preliminary Contract Estimates

Prime Consultant and M/WBE Team	Contract	Estimated M/WBE %
<b>HNTB: Mastek, Gupta &amp; Assoc., Jaster-Quintanilla, Keville Enterprises, Mas-TEK, Pacheco Koch, EJES</b>	Program Management	27%
<b>Halff Associates: APM &amp; Assoc., ARS Inc., Gojer-McCreary, Hayden Consultants</b>	Middle Peaks and Mill Creek Drainage	30%
<b>Carter &amp; Burgess, Inc.: Chiang Patel &amp; Yerby, APM &amp; Assoc., DAL-TECH Inc., Urban Engineers Group, Con-Real, Campos Engineering</b>	Hampton-Oak Lawn and Pavaho Pump Stations	30%
<b>Nathan D. Maier: AZB, APM, Hayden Consultants</b>	State Thomas at Woodall Rogers (Study and Full Service)	70%
<b>HDR: Jaster-Quintanilla, Urban Engineers Group, Criado &amp; Associates, and MASTEK</b>	Levee Drainage - Pressure Sewers	30%
<b>CH2M Hill: ARS, Garcia Land Data, Gupta &amp; Assoc., Metropolitan Infrastructure</b>	Levee Drainage - Pressure Sewers	30%



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# Program Preliminary Schedule

2007	2008	2009	2010	2011	2012	2013	2014
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## Hampton-Oak Lawn Sump

Design  
Construction



## Pavaho Sump

Design  
Construction



## Middle Peaks Branch

Design  
Construction



## Mill Creek Drainage Relief System

Design  
Construction



## State-Thomas @ Woodall Rodgers (Study)



## State-Thomas @ Woodall Rodgers

Design  
Construction

TBD upon completion of study phase  
TBD upon completion of study phase

## Pressure Sewers

Design  
Construction

TBD - Will be coordinated with Trinity Lakes Project

Pump material purchase



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# Next Steps

- Staff recommend contracts for Council award June 13, 2007
  - **Program Management Consultant**
    - HNTB/Freese and Nichols
  - **Hampton-Oak Lawn and Pavaho Sumps**
    - Carter & Burgess, Inc.
  - **Middle Peaks Branch and Mill Creek Drainage Relief**
    - Halff Associates
  - **State-Thomas at Woodall Rodgers Drainage Outfall (Study)**
    - Nathan D. Maier Consulting Engineers



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# Next Steps

- Staff recommends contracts for future Council award
  - **Levee Drainage System – Pressure Sewers**
    - HDR Engineering, Inc.
    - CH2M Hill
    - **Award contract later this year following coordination of scope with Trinity Lakes project**
  - **State-Thomas at Woodall Rodgers Drainage Outfall**
    - Nathan D. Maier Consulting Engineers
    - **Bond sale November 2007. Award contract following completion of Study**



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