



# IH-635 (LBJ Freeway) West Section Pre-LOI Meeting

Professional Services Contract  
Request for Letter of Interest  
Texas Turnpike Authority  
Contract Number: 86-445P5001

Dallas District Office  
August 20, 2003

8/20/03



## Agenda

- Introductions - TxDOT (TTA & Dallas District)
- Introductions - Rest of the Room
- Content: [3 upfront & 2 at the end]
  - IH 635 (LBJ Freeway) Corridor Study [35]
  - IH 635 (LBJ Freeway) West Section CDA Project [17]
  - Notice of Intent (NOI) for Letter of Interest (LOI) [7]
- Questions [1]

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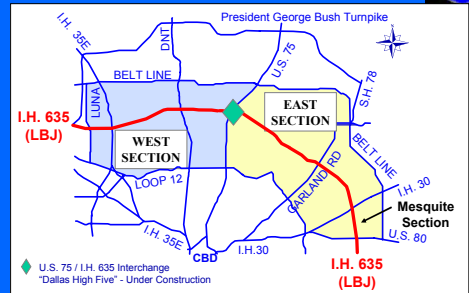
## IH-635 (LBJ Freeway) Corridor Study

2003 Texas Transportation Summit  
Presentation  
(35 slides)

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## Study Sections



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IH635-PARK CEN.  
10/6/99 7:41:24 AM

IH635-PRESTON  
10/6/99 7:39:26 AM

IH635-DNT  
10/6/99 7:59:35 AM

IH635-HARRY HINES  
10/6/99 7:59:35 AM

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<http://dfwtraffic.dot.state.tx.us/>



## The LBJ Challenge

- Balanced trip patterns (AM Peak Hour)
  - Local 20%, Origin 22%, Destination 31%, Through 27%
- Peak traffic levels for 12 hours a day
- Continued traffic growth in non-peak hours
- Increased traffic to arterial street system
- Increased frequency of incidents
- Less trip predictability and reliability

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**LBJ Public Involvement**

Planning to Improve LBJ

31

LBJ Community  
 LBJ Technical Support Team  
 LBJ Planning Advisory Committees

**LBJ Public Involvement**

Planning to Improve LBJ

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LBJ Community  
 LBJ Technical Support Team  
 LBJ Planning Advisory Committees

TxDOT, DART, NCTCOG, NTTA, County, Dallas, Farmers Branch, Garland, Mesquite, TTI

Business, Homeowner, Elected Officials, Chamber of Commerce, Commuters, Others...

Combination of the two

**West Section**

Luna Road to U.S. 75

30

8 Mainlanes + 4 Managed HOV Lanes  
 IH 35E  
 JOSEY  
 WEBB CHAPEL  
 MARSH  
 DNT  
 HILLCREST  
 US 75  
 MIDWAY  
 PRESTON  
 I.H. 635 (LBJ)  
 High Five Interchange  
 8 Mainlanes + 4 Managed HOV Lanes  
 I.H. 35E/I.H. 635 Interchange  
 8 Mainlanes + 6 Managed HOV Lanes

**West Section**

Interchange Transitions

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8 Mainlanes + 4 Managed HOV Lanes  
 8 Mainlanes + 6 Managed HOV Lanes

**West Section**

Webb Chapel to Midway

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8 Mainlanes + 6 Managed HOV Lanes  
 Cut-and-Cover Box under Frontage Roads

**West Section**

Managed HOV Tunnels

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8 Mainlanes + 6 Managed HOV Lanes  
 Mined Tunnels

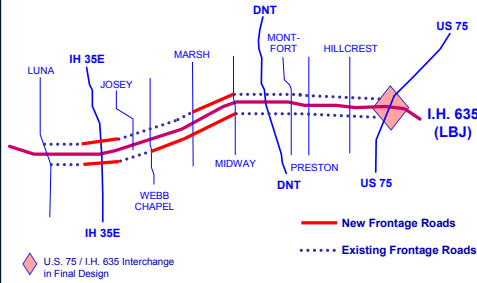
**Managed HOV Tunnels**

- Shifted south
- "Longest, Widest, Mined Auto Tunnels in U.S."
- Basic dimensions – 2 mile long by 60 feet wide



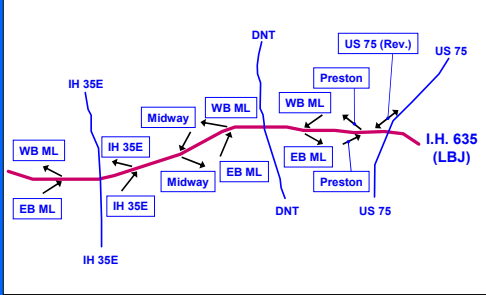
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**West Section Frontage Roads**



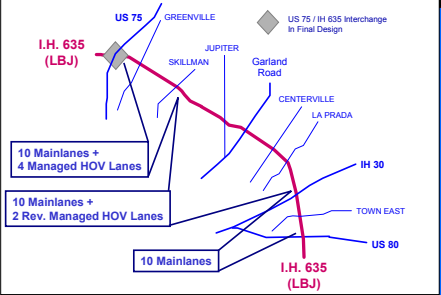
25

**Managed HOV Access Locations**



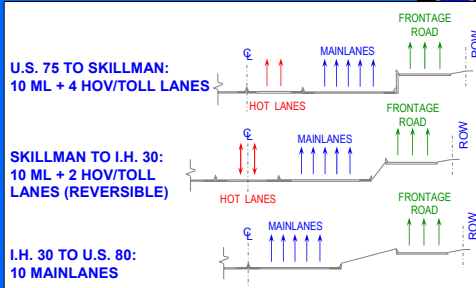
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**East Section U.S. 75 to U.S. 80**



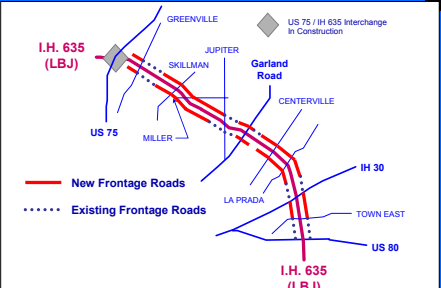
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**East Section U.S. 75 to U.S. 80**




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**East Section Frontage Roads**




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## Traffic & Revenue Study




**Phase 1** - Complete

- Annual revenue estimated at \$12 million
- Conservative analysis in line with expectations
- As expected, tolls will not fund entire HOV/Toll project
- Suggested Toll Rate Structure


	A.M.	Midday	P.M.	Night
EB Per Mile	\$0.10	\$0.10	\$0.20	\$0.10
EB Minimum	none	none	\$1.20	none
WB Per Mile	\$0.20	\$0.10	\$0.10	\$0.10
WB Minimum	\$1.20	none	none	none

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## Traffic & Revenue Study



**Phase 2** - Complete

- Extensive traffic counts for more detailed modeling
- Multiple scenarios were tested for a fully functioning date of 2015 & 2025
- Toll rate options were tested
- Opportunities and issues associated with Managed Lanes are numerous

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## Phase 2 - Scenarios




- 8 Lanes vs. 10 Lanes for the LBJ mainlanes
- HOV 2+ vs. HOV 3+ vs. All Toll
- Modified Access Locations
- Interesting range approach for 2015 / 2025
- Report is on-line now

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## Traffic and Revenue Study Range of Revenue by Scenario




1- 8 Lanes w/ 2+ HOV Free	\$16.2 Million
2- 8 Lanes w/ 3+ HOV Free	\$27.1 Million
3- Lanes w/ 2 + HOV Free	\$ 8.5 Million
4- 4 Lanes w/ 3 + HOV Free	\$16.1 Million
5- 5 Lanes w/ 2+ (Less Access)	\$16.7 Million
6- 8 Lanes w/ 3+ (Less Access)	\$24.1 Million
7- 10 Lanes w/ 2+ (Less Access)	\$ 9.4 Million
8- 10 Lanes w/ 3+ (Less Access)	\$15.2 Million
9- 8 Lanes w/ 2+ HOV Free (2025)	\$27.9 Million
10- 8Lanes w/ 3+ HOV Free (2025)	\$47.6 Million


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**Note: 10 lane scenarios are not possible with out a lane width and shoulder design exception.**

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## Traffic & Revenue Study



### Investment Grade T&R Study (July 2003 – July 2004)

- Extensive Data Collection and Mobilization
- Travel Pattern and Characteristic Surveys
- Economic Growth, Traffic and Revenue Analysis
- Model and Alternative Refinement
- Sensitivity Tests

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## Opportunities & Issues



- Multiple Access Locations
  - Park-n-Ride, Rail Stations, Mainlanes, HOV, FR
- Part of a Tunnel Facility (West Section)
- Signing
  - General Guidance, Driver Information (ITS & Pricing)
- Fare/Toll Collection Technologies
- Occupancy Detection (Manual / Automated)
- Enforcement
  - Eligibility, Toll Collection, Use of Video, Ticket by Mail
- Electronic Payment Systems Integration
  - Multiple Toll Rds.; Parking; Bus Transit; Mass Transit; Rail Transit

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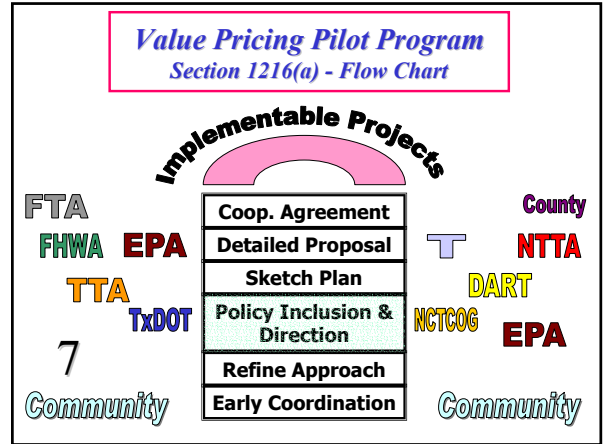


## Opportunities & Issues LBJ INTERSTATE 635

*(Continued)*

- A Regional Concept or Corridor Solution
- Opportunities for Bus Rapid Transit Network (BRT)
- Managed Lanes / BRT Impact on Real Estate Values:
  - Is it Like Rail or Highways?
- Financing Strategies for a Managed Lane Network
  - Tolls
  - Value Capture – Site Based
  - Compatible Corridor Co-uses
  - Real Estate – Area Based (TIF, Assessment Fees...)
- Utilizing Managed Lanes for
  - System / Mode Balancing
  - Transportation and Land Use Objectives

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### Value Pricing Pilot Program Regional Value Pricing Corridor Evaluation and Feasibility Study North Central Council of Governments

- ✓ Task 1 – Final Detailed Work Plan and Schedule
- ✓ Task 2 – Value Pricing Research (Tech Memo)
- Task 3 – Screening Criteria and Policies
- Task 4 – Prioritized List of Short Term Corridors
- Task 5 – Corridors for Inclusion in Mobility 2030
- Task 6 – Working Paper and Presentation
- Task 7 – Final Report and Executive Summary

Key: ✓ Complete, ➤ Ongoing, □ Future

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## Construction Costs LBJ INTERSTATE 635


*(in millions of \$'s)*

1 – Interchange (US75/I635)	\$ 262	◆
2 – Mesquite	\$ 28.9	●
3 – East	\$ 458	
4 – West (Incl I635/I35E)	\$ 961	
<b>Total</b>	<b>\$1,709.9</b>	

◆ - Under Construction  
● - Partially Funded by the City and includes \$9M for mainlane reconstruction by TxDOT.

**Note:**  
Totals do not include costs for ROW, Utilities, Engineering, Survey, Testing, and Operation & Maintenance costs for the Tunnels and ITS.

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## Project Status LBJ INTERSTATE 635

### Simple Version

- 1 Dallas High Five
  - ✓ Under Construction - Completion by Jan 2007
- 2 Mesquite Section
  - ✓ Public Hearing - May 7, 2002
  - ✓ Environmental Clearance - Sept. 6, 2002
  - ✓ Phase I Under Construction – Completion by Nov 2003
- 3 East Section
  - ✓ Public Hearing - October 10, 2002
  - ✓ Environmental Clearance – January 30, 2003
- 4 West Section
  - Public Hearing – June 5, 2003
  - Environmental Clearance – In October 2003

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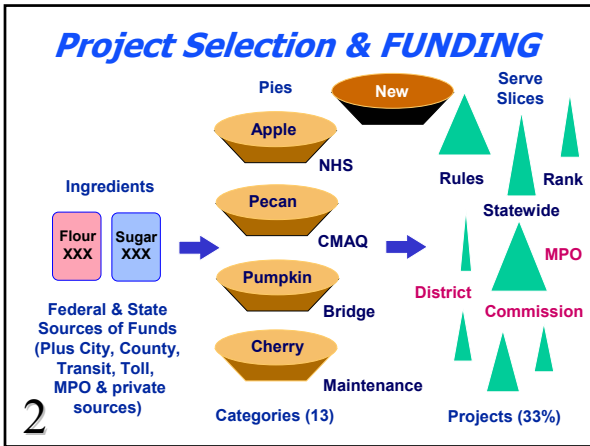


## Project Status LBJ INTERSTATE 635

### LBJ Managed HOV Lanes

1. Complete Planning for West Section – FONSI
  - Environmental Assessment w/ PH documentation
  - Access Justification
  - Mobility 2025 Administrative Update
2. Geotechnical Investigation Program - Ongoing
3. Traffic and Revenue Study Phase III – Ongoing
4. Drainage Study Hydro/Hydra 30% - Ongoing
5. Hire Procurement Engineer / Program Manager
6. Begin Comprehensive Development Agreement (CDA) Selection process – After 1
7. Complete Financial Plan – After 3
8. Complete CDA Selection Process – After 4
9. Begin/End Construction → Open Facility

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### IH 635 (LBJ Freeway) Funding Update

**Identified and Secured Funding:**

- 2003 City of Dallas Bond Election (\$10 million)
- 2001 and 2003 Federal Appropriations Acts (\$6.4 million)
- East Section Early Frontage Road (\$5.3 million)
- West Section Early Frontage Road (\$24.5 million)
- Mesquite Section (\$22.3 of \$28.9 million)

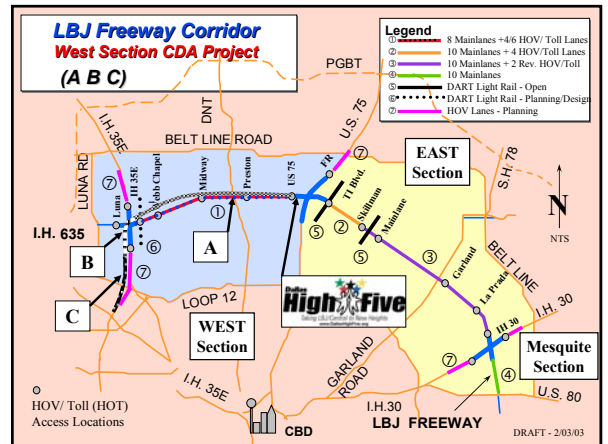
**Potential Sources of Funding:**

- NCTCOG (MPO) partnership Program
- Dallas Area Rapid Transit
- Additional Local City Participation (D, FB, G & M)
- Dallas County
- TxDOT (TTA) Revenue Bonds
- NTTA
- FHWA (Federal Categories)
- TxDOT (Federal Matching Requirements & State Categories)
- Other (Private, TIFIA Loans, ...)

**1**

### IH-635 (LBJ Freeway) West Section CDA Project

Pre-LOI Mandatory Meeting (16 slides)



### West Section CDA Project Construction Costs

<b>A</b>	West Section Tunnels and Managed Lanes	\$ 440
<b>B</b>	IH 635/ IH 35E Partial Interchange & Direct Connections	\$ 65
<b>C</b>	IH 35E / Loop 12 Direct Connections	\$ 125
<b>Total : (Construction Costs Only)</b>		<b>\$ 630</b>

### West Section Scope Definition

- Carve out a representative portion of the IH 635 (LBJ) West Section project to open up the Managed Lanes from US 75 to IH 35E. These lanes will need to connect to advance direct connections for the IH 35E interchange that will tie in with the approved connecting lanes to Loop 12 and IH 35E to the south. These Managed Lanes are to employ the use of Value Pricing by the use of tolls to help leverage funding in the bond markets.



## West Section Procurement Engineer (PcE) has 3 - Basic Roles



- Procurement of the CDA Team
  - As outlined in the NOI
- Preliminary Engineering / Early Design Tasks
  - Some initial ideas to support the RFP process
- Project Oversight & Management of the CDA
  - As outlined in the NOI

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## Procurement of the CDA Team



- Prepare CDA Procurement Documents
- Prepare CDA Selection Criteria
- Prepare CDA Draft Request for Proposal (RFP)
- Prepare CDA Evaluation Material
- Prepare CDA Final RFP
- Prepare a Project Controls Process for the CDA

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## Preliminary Engineering & Early Design Tasks



- Assist in the geotechnical investigation effort
- Assist in the T&R systems development
- Develop an Operational Schematic
- Refine Project Schematic (Metric to English)
- Confirm Tunnel Length (Short or Long)
- Update Cost Estimates
- Preliminary Ventilation Design (Jet or Closed)
- Establish "Life Safety" Needs and Committees

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## Project Oversight & Management of the CDA



- CDA Project Oversight and Management
- Identified Engineering and Other Tasks
- Project Controls
- Construction Management

**Note: These items will be more defined at a later date.**

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## West Section (Total Project Costs)

*\$ Millions - 2003*



1 Construction Costs (1)	\$ 630
2 Design Costs	\$ 30
3 Construction Management	\$ 85
4 Right-Of-Way	\$ 86
5 Utilities	\$ 28
6 CDA Procurement and T&R	\$ 8
<b>Total Project Costs</b>	<b>\$ 862</b>

Note:

- (1) Includes 125 million for the "C" section of the project which may have an ability to obtain funding from other sources.

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## West Section (Potential Funding)

*\$ Million - 2003*



1 Projected Bond Sale (2)	\$ 300 to 467
2 TxDOT Right-of-Way Account (5)	\$ 116
3 TxDOT Design (5)	\$ 38
4 Local Participation (3)	\$ 71
<b>Total Potential Funding</b>	<b>\$ 525 to 692</b>
5 FHWA, State, MPO Equity GAP(4)	\$ 337 to 170

Notes:

- (2) Represents a ranged amount at 2/3's of a possible bond sale.  
 (3) This number represents a requested amount to the adjacent Cities, County and DART at this time. No agreements have been signed.  
 (4) This does not include the MPO's (NCTCOG's) partnership program.  
 (5) These costs may need to be added to equity gap.

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## East Section Early Design Task List



- Decide on method of implementation
- Study Dallas High Five for needs
- Study East extension to Skillman LRT Station
- Confirm phasing and project definition
- Include component into T&R Study

**Note:**  
Additional cost amounts and participation identification for the East Section will be included in future updates.

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## Notice of Intent (NOI) for Letter of Interest (LOI)



Texas Turnpike Authority  
Contract Number: 86-445P5001  
(7 slides)

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## West Section NOI for LOI Key Dates



- NOI appears on the Internet Aug 8, 2003
- Ad is in the papers Aug 10, 2003
- Mandatory Pre-LOI Meeting Aug 20, 2003
- Deadline for clarifications/  
questions is 5:00 p.m. CST Aug 28, 2003
- LOI's will be accepted until  
5:00 p.m. CST Sep 12, 2003

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## West Section LOI Highlights

1 of 4



- Project Description - Covered Already
- Selection Requirements - As Listed
- Certification Requirements - As Listed
- Employment Law - As Listed
- Disadvantage Business Enterprise and/or Historically Underutilized Business Goal - As Listed
- Work Categories and the % of Work per Category - As Listed

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## West Section LOI Highlights

2 of 4



- Nonlisted Work Categories (NLC),  
description and % work
  - NLC-1 Tunnel Design (18%)
  - NLC-2 Tunnel Ventilation System (6%)
  - NLC-3 Tunnel Operational Systems Design (6%)
  - NLC-4 Tunnel Life Safety Design (5%)
  - NLC-5 Traffic and Revenue Study (3%)
- Major Work Categories
  - Schematic Development, Bridge Design, NLC-1 to NLC-5

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## West Section LOI Highlights

3 of 4




- Selection Criteria - Quick Summary Below
  - Project understanding and approach
  - Project manager...
  - Similar project related...
  - Demonstration of proficiency...early implementation...
  - Demonstration of proficiency...Ventilation Systems...
- Selection Procedure - As Listed
  - We are considering counting the LOI as 20 to 30% of the total score
- Letter of Interest Requirements - As Listed
  - First 5 pages and Remaining 5 pages + A returned work schedule

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**West Section  
LOI  
Highlights**


4 of 4

- Available Information
  - Provided CD and Paper Copy as noted
    - Project Description - Today's presentation - PDF & Powerpoint
    - West & East Section Schematic - Electronic in Metric and English
    - West & East Section Schematic - Paper in Metric
    - LBJ Managed Lanes T&R March 12, 2002 - PDF
    - Preliminary Geotechnical Design Basis March 19, 2002 - PDF
    - Geotechnical Data Report Dec. 29, 1998 - PDF
    - Planning for the IH 635 HOV/Toll Tunnels - July 2001 - PDF
    - Proposals for the transitions...April 2002 - PDF
    - LBJ Corridor Urban Design Program - PDF
    - Attachments B, C, D and F - Paper Copy & Electronic

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**West Section  
LOI  
Highlights**


5 of 5


- Deadline Date - As Listed
  - 5:00 p.m. CST on Friday, September 12, 2003
- Pre-LOI Mandatory Meeting - As Listed
  - Wednesday, August 20, 2003 beginning at 1:15 P.M. CST
- Agency Contact - As listed

**Texas Department of Transportation (TxDOT)  
Dallas District  
Attn: Mr. Matthew MacGregor, P.E.  
4477 East Highway 80  
Mesquite, Texas 75150-6643**  
or FAX to:  
**(214) 320-6117 or (214) 319-6580**

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**West Section  
Timeline & Schedule  
(Page 1 of 2)**




• Receive "Satisfactory for Further Processing"	May 2003
• Hold Public hearing (Done)	June 2003
• Process all documents (Done)	July 2003
• Begin Geotechnical Unvestigation (Underway)	June 2003
• Initiate Investment Grade T&R Study (Underway)	July 2003
• Issue NOI for Procurement Engineer	Aug 2003
• Obtain Environmental Clearance (FONSI)	Oct 2003
• Issue RFQ for CDA	Nov 2003
• NTP For Procurement Engineer	Jan 2004

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**West Section  
Timeline & Schedule  
(Page 2 of 2)**




• Receive 1st Report Data from T&R	April 2004
• Issue Draft RFP for Industry Review	April 2004
• Issue Final RFP	July 2004
• Receive & Evaluate CDA RFP's	Oct 2004
• Complete CDA Selection & Negotiations	May 2005
• Final T&R Report & Financial Plan Completed	Feb 2005
• Execute Contract & Issue Notice to Proceed for Design	June 2005
• Marketing/Approval of Bonds	Feb/June 2005
• Bond Sale	June 2005
• Issue Notice to Proceed for Construction	July 2005

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**Clarifications/Questions?**




- Please ask them today for a verbal answer.
- Ask them later in writing to:
 

**Texas Department of Transportation (TxDOT)  
Dallas District  
Attn: Mr. Matthew MacGregor, P.E.  
4477 East Highway 80  
Mesquite, Texas 75150-6643**

 or FAX to:  
**(214) 320-6117 or (214) 319-6580**
- Responses will be posted on the TTA Division website within 3 working days of the deadline for their receipt.

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**Back Up Section**

Some work with XP  
&  
Some with NT

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