# JANUARY 26, 2011 CTRMA BOARD OF DIRECTORS MEETING Summary Sheet

#### **AGENDA ITEM #4**

Manor Expressway Direct Connectors at US 183 Project Report General Briefing

**Department: Engineering** 

**Associated Costs: None** 

**Funding Source: None** 

**Board Action Required: No** 

Description of Matter: The report is a comprehensive account of the construction activities on the 290E Toll Project Direct Connectors at US 183 construction during the  $4^{th}$  quarter of 2010.

Attached documentation for reference: GEC Quarterly Progress Report

Contact for further information: Wesley M. Burford, P.E., Director of Engineering



# Manor Expressway Direct Connectors at US 183 QUARTERLY PROGRESS REPORT

No. 6 | January 2011

# **GENERAL**

The construction of the Manor Expressway Direct Connectors at US 183 continues to progress. W.W. Webber and their subcontractors maintain focus on the substructure elements of the direct connector structures, including drilled shafts, footings, columns, column capitals, and bent caps. The substructure efforts will be transitioning into superstructure construction with the setting of beams in mid to late January 2011. Roadway elements have also progressed; excavation, embankment, mechanically stabilized earth retaining walls, cast-in-place retaining walls, permanent drainage, illumination and intelligent transportation system conduit, pavement, traffic control and erosion control efforts have all been underway since the last reporting period (October 2010 Quarterly Report).



Bents 5 thru 13 on south to east direct connector [taken January 7, 2011]

A summary of construction activities under progress by W.W. Webber and its subcontractors through December 2010 includes:

#### W.W. Webber

- Constructed 46 footings to date (of 58 total)
- Constructed 67 columns to date (of 115 total)
- Constructed 18 column capitals to date (of 51 total)
- Constructed 11 bent caps (of 88 total)
- Progressed the MSE (mechanically stabilized earth) retaining wall construction at northbound to westbound direct connector approach to 90% complete
- Completed the cast-in-place retaining wall construction of RW0117
- Began erecting the MSE retaining walls at the eastbound to southbound direct connector approach
- Continued excavation and embankment for the eastbound mainlane, eastbound frontage road, and westbound frontage road pavements

#### McKinney Drilling Company

Constructed 226 bridge drilled shafts to date (of 275 total)

#### **Indus Construction**

 Continued fabricating reinforcing steel cages for footings, columns, column capitals, and bent caps

#### **EBC Construction**

 Continued installation of the permanent drainage at mainlanes and frontage road pavements and at direct connector approaches

#### F&W Electric

 Continued installation of conduits for highway illumination and intelligent transportation systems

#### **Highway Technologies**

Installed and maintained traffic control signage

#### JD Ramming

• Paved the bottom 16 inches of Hot Mix Asphalt (HMAC) on the Phase 2 westbound frontage road and on a portion of the Phase 2 Eastbound frontage road.

#### Panther Creek Transportation, Inc.

Hauled embankment (excavated subgrade on site)

#### Rice Environmental

Installed and maintained erosion control measures/devices

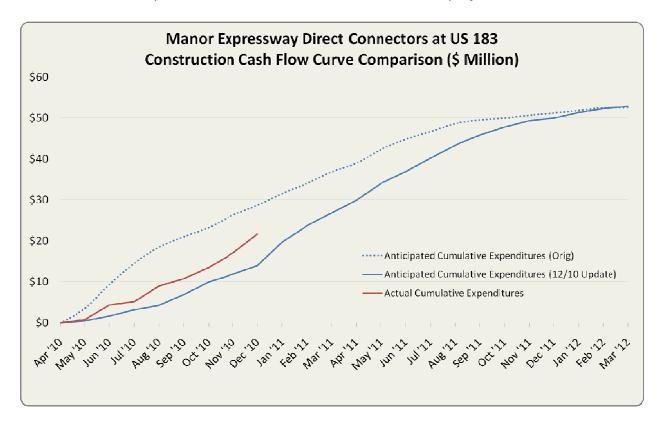
Pictures of early January 2011 construction activities are provided in Attachment A.

## **PROJECT SCHEDULE & FINANCIAL STATUS**

### **Construction Progress**

In regard to percent complete status, based on current information provided with W.W. Webber's Draw Request #8 for efforts through December 25, 2010, the project is at 40.6% complete based on actual revenue/expenditures to date as derived from the cost loaded schedule; this figure is derived by simply dividing <u>actual</u> cumulative expenditures to date by the total contract value. This compares to an anticipated completion of 54.6% based on the baseline schedule originally approved for the project and 26.2% based on the update schedule provided by W.W. Webber as part of their Draw Request #8 submittal; both of these figures are derived by dividing <u>anticipated</u> cumulative expenditures to date (also based on cost-loaded schedules) by the total contract value.

The graph below tracks and compares the anticipated cumulative expenditures against the actual cumulative expenditures related to the construction of the project.



In regard to the actual schedule status, based on W.W. Webber's Draw Request #8, the project is approximately 34 days behind schedule. General Engineering Consultant PBS&J has conducted a review of the schedule documentation provided by W.W. Webber with their Draw Request #8. The initial evaluation by the GEC schedule review personnel indicates that there are discrepancies within the schedule logic and sequencing that are likely producing this delay. PBS&J intends to coordinate closely with W.W. Webber to ensure that the schedule is accurate and can be used proactively to manage the project.

#### **Financial Status**

W.W. Webber submitted their Draw Request #8 on January 7, 2011 which included expenditures through December 25<sup>th</sup>, 2010. This request was reviewed and approved by General Engineering Consultant PBS&J on January 20, 2011; it has been forwarded to CTRMA for processing and issuance of payment.

The following summary provides the financial status of the project.

Original W.W. Webber Contract Amount:	\$	52,575,545.77
Authorized Changes (Change Order and/or Amendments):  Change Order No. 1 (1)  Change Order No. 3 (1)  Change Order No. 6 (1)  Change Order No. 8 (1)  Contractually Authorized "Over-run" Quantity Payments:	\$ \$ \$	142,122.16 10,000.00 96,000.00 182,541.99
Drilled Shafts	<u>\$</u>	312,035.30
Current Authorized Contract Amount:	<b>&gt;</b> :	53,318,245.22
Previous Total of W.W. Webber Payments: (1)	\$ :	10,793,318.21
Previous Total of W.W. Webber Payments: (1)  Amount of W.W. Webber Draw Request #6 for Oct. 2010 efforts	<b>\$</b> \$	<b>10,793,318.21</b> 2,736,723.33
	-	
Amount of W.W. Webber Draw Request #6 for Oct. 2010 efforts	\$	2,736,723.33
Amount of W.W. Webber Draw Request #6 for Oct. 2010 efforts Amount of W.W. Webber Draw Request #7 for Nov. 2010 efforts	\$ \$ \$	2,736,723.33 3,458,824.55
Amount of W.W. Webber Draw Request #6 for Oct. 2010 efforts Amount of W.W. Webber Draw Request #7 for Nov. 2010 efforts Amount of W.W. Webber Draw Request #8 for Dec. 2010 efforts	\$ \$ \$	2,736,723.33 3,458,824.55 4,683,591.57
Amount of W.W. Webber Draw Request #6 for Oct. 2010 efforts Amount of W.W. Webber Draw Request #7 for Nov. 2010 efforts Amount of W.W. Webber Draw Request #8 for Dec. 2010 efforts Total Amount Paid To-Date:	\$ \$ \$ \$	2,736,723.33 3,458,824.55 4,683,591.57 <b>21,672,457.66</b>
Amount of W.W. Webber Draw Request #6 for Oct. 2010 efforts Amount of W.W. Webber Draw Request #7 for Nov. 2010 efforts Amount of W.W. Webber Draw Request #8 for Dec. 2010 efforts  Total Amount Paid To-Date: Retainage withheld: (2)	\$ \$ \$ \$	2,736,723.33 3,458,824.55 4,683,591.57 <b>21,672,457.66</b> 0.00

**Footnotes** 

- (1) Information/data presented in October 2010 Quarterly Report.
- (2) Retainage to be withheld only after 95% of the adjusted contract price has been paid.

# **Summary of Changer Orders This Reporting Period**

There have been no additional Change Orders approved since the October 2010 Quarterly Report.

# Summary of Contractually Authorized "Over-run" Quantity Payments This Reporting Period

Although the Construction Contract executed between the Mobility Authority and W.W. Webber was structured essentially to include a "lump sum" bid, there are measures included which allow for additional payment on certain construction elements in the event that actual quantities "over-run" or exceed those contained in the construction documents. Per the

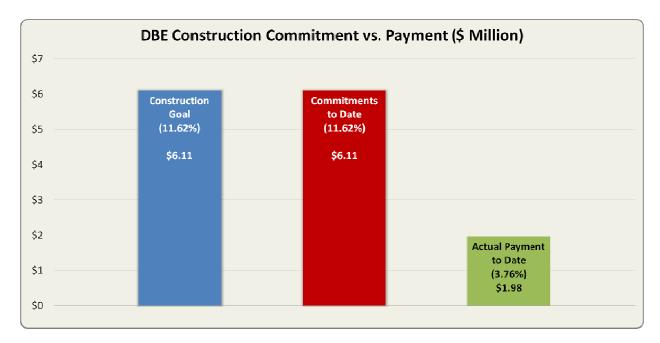
Contract, the additional payment will be based on the unit costs included as part of the W.W. Webber's initial bid. The rationale for this approach was to ensure that unreasonable risk was not placed on the Contractor such that bid prices would be abnormally high to contemplate said risk. The four construction elements which are included in this "direct pay" category include embankment, excavation, drilled shafts and flexible pavement base.

To date, the only "direct pay" element that has been exceeded is drilled shafts. As of December 25, 2010, there have been 12,035 linear feet of drilled shafts installed versus a plan quantity of 10,289 linear feet. Per the Contract, the difference of 1,746 linear feet is being paid for at the unit prices contained in the original for a total adjustment of \$312,035.30.

# **DBE STATUS**

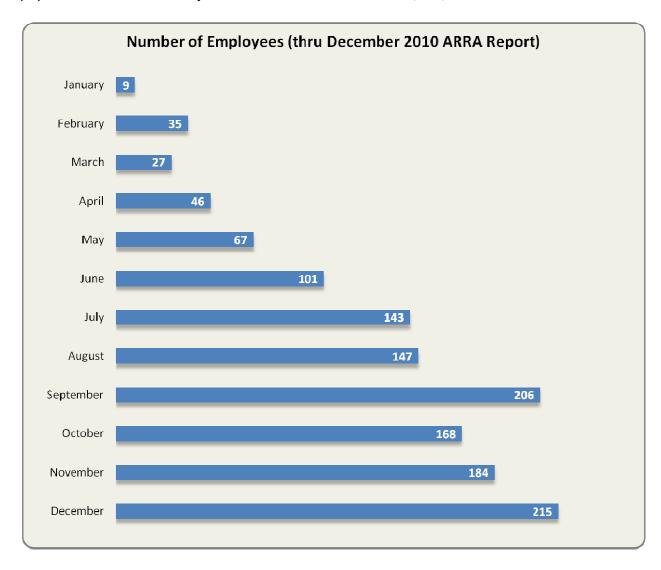
W.W. Webber is required and committed to meet the Disadvantaged Business Enterprise (DBE) goal of 11.62% for the project. The total DBE amount committed by W.W. Webber to date is \$6,109,278.42, which is 11.62% of the project total; this will include work completed by DBE subcontractors Cadit Company, Inc. [structural steel plate], Indus Construction [steel], Panther Creek Transportation, Inc. [trucking], and EBC Construction, LLC. [underground utilities and riprap].

As of December 25, 2010, W.W. Webber has submitted costs associated with DBE construction work in the amount of \$1,975,656.73 which equals approximately 3.76% to date of the contract value. It is also noted that the rate of DBE expenditure is consistent with the overall timeline of the construction (i.e., approximately 32.34% of the committed goal has been achieved within the first 33.5% of the contract time period).



# **EMPLOYMENT REPORTING STATUS**

Given that this project utilizes funds from the American Recovery and Reinvestment Act of 2009 (ARRA), the Mobility Authority must submit monthly reports documenting the expenditure of these funds as well as the associated job creation. The project **created 215 jobs** during the reporting month of December 2010. This number of jobs created includes the construction personnel and their subcontractors, construction management staff including inspectors and subconsultants, design support staff and the general engineering consultant staff. The total payroll associated with the jobs and work effort to date is \$2,532,263.22.



# PUBLIC INVOLVEMENT

The Manor Expressway project was launched with a groundbreaking ceremony attended by dignitaries and various members of the media. A Meet the Contractor was later held for the public to have a chance to speak with the project contractor, view display boards of the project, and have their questions addressed.

Ongoing outreach and response to the public has taken place through various methods. The following lists the outreached activities to date:

#### ✓ Hotline:

Over 60 calls have been received over the project's hotline (512.684.3252). Callers' inquiries have varied from questions regarding labor opportunities to information about the project itself (impacts, schedule, etc). All calls are logged as they are received.

#### ✓ Twitter:

66 updates on the project have been posted to the Manor Expressway's Twitter account (@ManorExpressway) to date.

#### ✓ Website:

Project updates are also posted on the website in an effort to help keep the public informed on lane closures and construction activities.

#### ✓ Text Messaging:

All updates regarding lane closures and detours are sent out via text message with a reference to visit the project website for further information.

#### ✓ Fmails:

Many of the businesses and organizations along 290 East prefer to receive the updates via email. As updates are posted on the website and Twitter, they are also emailed to 125 email addresses of stakeholders along the project area. A reminder that alerts may also be received via text messaging is included in each email, as another—possibly easier and faster—way for interested parties to stay informed.

#### ✓ Visits:

Visits with stakeholders who had concerns and questions include the Walnut Place Neighborhood Association, the Lutheran Church - Missouri Synod, the US Postal Service, and UPS.

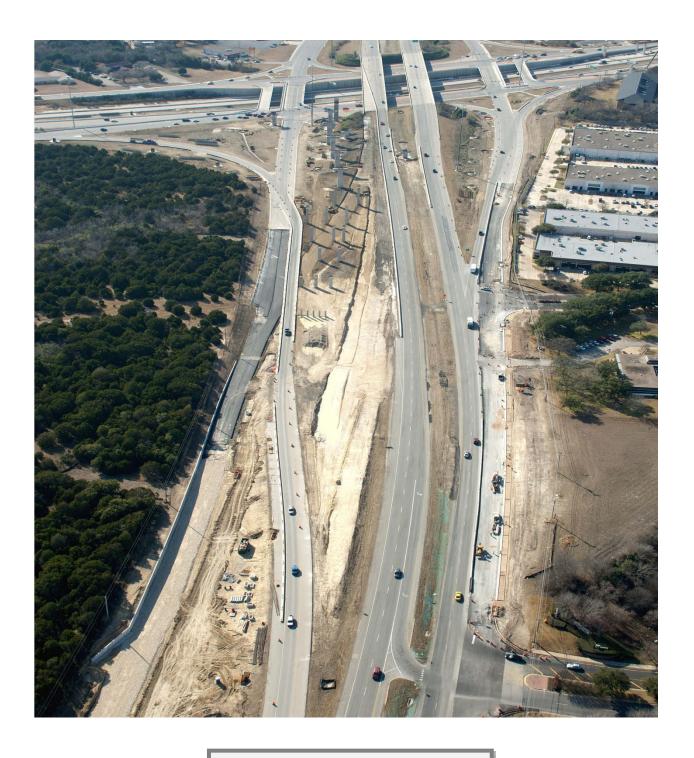
# **UPCOMING CONSTRUCTION ACTIVITIES**

The following construction activities are anticipated over the next month:

- Column construction to continue
- Column capital and bent cap construction to continue
- Concrete beam and steel girder erection will begin
- Grading and paving to continue
- Drainage system installation to continue
- MSE retaining wall construction to continue

#### **ATTACHMENT A**

Manor Expressway Project Direct Connectors at US 183
Construction Activity Pictures
January 2011



Interchange construction looking west (Taken 1/11/2011)



Interchange construction looking east (Taken 1/11/2011)



Interchange construction looking south (Taken 1/11/2011)



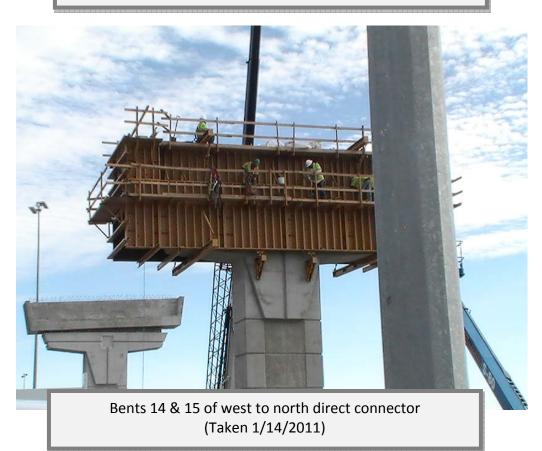
Interchange construction looking north (Taken 1/11/2011)



Bent & slope protection at west to north direct connector (Taken 1/14/2011)







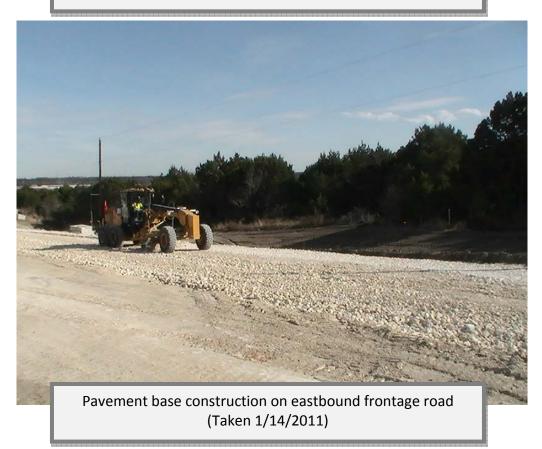


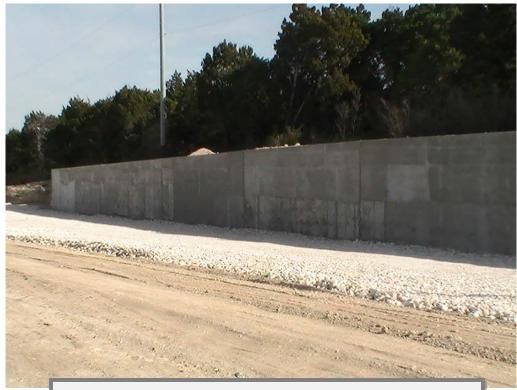
Bent 7 Column Construction of west to north direct connector (Taken 1/14/2011)





Retaining Wall 0116 & drainage construction (Taken 1/14/2011)





Retaining Wall 0117 & eastbound frontage road construction (Taken 1/14/2011)