

**MARCH 30, 2011 CTRMA BOARD OF DIRECTORS MEETING  
Summary Sheet**

**AGENDA ITEM # 8**

**Discussion and possible action on a Sustainability Design Competition for the US 290 West/SH 71 West and SH 45 Southwest projects**

**Department: Engineering**

**Associated Costs: Estimated at \$120,000**

**Funding Source: TxDOT Toll Equity Grants**

**Board Action Required: Yes**

**Description of Matter:**

**As part of the Mobility Authority's efforts to increase the overall sustainability of the program, Mobility Authority staff proposes to hold a Sustainability Design Competition for the Oak Hill Expressway (US 290W / SH 71W) and the Manchaca Expressway (SH 45SW). The goal of the competition is to solicit innovative and cost-effective sustainable features not previously considered. Staff will coordinate with TxDOT throughout the competition, ultimately blending selected sustainable elements into the NEPA processes for consideration on both projects.**

**It is estimated that the total cost of the competition for the CTRMA would be approximately \$120,000. This includes award money for the top competition winners and facilitation costs. Mobility Authority staff is seeking Board approval to Authorize this competition.**

**Attached documentation for reference:**

**Sustainability Design Competition Summary Document**

**Contact for further information:**

**Wesley M. Burford, P.E., Director of Engineering**



# CTRMA SUSTAINABILITY DESIGN COMPETITION

## INTRODUCTION

A **Sustainability Design Competition** can help to solicit innovative, “green” concepts and ideas, as well as to promote sustainability within the roadway design process. A **Low Impact Development Design Competition** was held by the **Houston Land/Water Sustainability Forum** in fall 2009/spring 2010. Using this competition as a model, the Mobility Authority plans to sponsor a sustainability design competition for two projects within the Authority’s program. This effort would likely result in the identification of cost-effective ideas not previously considered and would promote the Mobility Authority as a regional sustainability leader.

## DESIGN COMPETITION ELEMENTS

**Project(s)** – US 290 West/SH 71 West and SH 45 Southwest

**Teams** – Blend of Civil Engineers, Architects, and Landscape Architects (\$250 registration fee per team)

### **Sustainability Scope –**

- Stormwater Detention and Quality
- Low Impact Development
- Air Quality (Emissions Reduction)
- Context Sensitive Design
- Noise and Light Pollution
- Pavement Design
- Materials and Resources
- Construction Practices
- Maintenance / Operations Costs

### **Submission Requirements –**

- Part 1 – Written proposal and foam-core presentation board (submitted by all teams)
- Part 2 – PowerPoint presentation (submitted at a later date by selected finalists)

### **Judging –**

- Part 1 – Panel of judges with technical expertise reviews all submittals and selects finalists
- Part 2 – Panel of high-profile judges attends finalist presentations open to the public and selects winners

**Awards** – Cash awards given to top three teams

### **Competition/NEPA Process Timeline –**

Date (2011)	Design Competition	NEPA Process
March 30	CTRMA Board Approval	
April 1	Begin Advertising Competition	
May 1	Release RFP/ Open Registration	
June 1		Procurement Complete
July 1	Close Registration	
August 1	Team Submittals Due	
Sept 1	Finalists Announced	NTP Issued/Begin Purpose and Need
Oct 1	Final Presentations/ Awards Ceremony	<div style="text-align: center;"> </div> Identification of Alternatives

**GENERAL MEETING OF THE BOARD OF DIRECTORS  
OF THE  
CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY**

**RESOLUTION NO. 11-\_\_\_**

**Authorizing a Sustainability Design Competition for the Oak Hill Expressway  
(US290W/SH71W) and Manchaca Expressway (SH45SW) Corridors**

WHEREAS, the Central Texas Regional Mobility Authority is committed to identifying and implementing innovative, cost-effective, and sustainable roadway design features in CTRMA projects; and

WHEREAS, a proven method of encouraging and identifying innovative design measures is to sponsor a design competition; and

WHEREAS, the Executive Director has described and recommended to the Board of Directors a CTRMA Sustainability Design Competition to solicit innovative design concepts for sustainable roadways.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors approves a Sustainability Design Competition sponsored by the Central Texas Regional Mobility Authority, and authorizes the Executive Director to undertake the design competition in accordance with the competition described in his presentation to the Board of Directors.

Adopted by the Board of Directors of the Central Texas Regional Mobility Authority on the 30th day of March, 2011.

Submitted and reviewed by:

Approved:

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Andrew Martin  
General Counsel for the Central  
Texas Regional Mobility Authority

\_\_\_\_\_  
Ray A. Wilkerson  
Chairman, Board of Directors  
Resolution Number 11-\_\_\_  
Date Passed 3/30/2011

# Sustainability Design Competition

CTRMA Board of Directors Meeting  
March 30, 2011

# Overview

- **Goal:** Incorporate Sustainable Design Features into CTRMA projects
- **Method:** Hold a Sustainability Design Competition to gather ideas from the community
- **Model:** Houston Land & Water Sustainability Forum Low Impact Development Design Competition (2009/2010)
- **Result:** Coordinate with TxDOT to Blend Sustainable Features into the NEPA Process for consideration on the US 290 West/SH 71West and SH 45 Southwest Projects



CENTRAL TEXAS  
Regional Mobility Authority

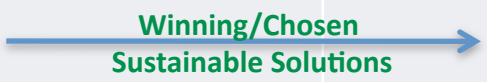
# Houston Competition

- **Project: Independence Parkway, Harris County**
- **Teams:**
  - Blend of Civil Engineers, Architects, and Landscape Architects
  - \$250 per Team Registration Fee
- **Designs Requirements:**
  - Incorporate Low Impact Development (LID) Techniques
  - Reduce Impervious Cover
  - Reduce Stormwater Pollution
  - Reduce Long Term Maintenance Costs
- **Submissions Included:**
  - Foamcore Presentation Boards
  - Electronic Submission of Design (written overview, plans, costs, etc.)
- **Judging:**
  - Part 1 - Review of Design Submissions, Finalists Selected
  - Part 2 - Finalists Made Public Presentations, Panel of Judges Chose Winners
- **Awards/Funding:**
  - \$15,000 to Winner of Each Category
  - Funded Primarily through Sponsorship

# CTRMA Sponsored Competition

- Project – US 290 West/SH 71 West and SH 45 Southwest
- Expand Scope to Include:
  - Stormwater Detention & Quality
  - Air Quality / Emissions Reductions
  - Use of Recycled/Sustainable Materials and Resources
  - Noise and Light Pollution
  - Pavement Design
  - Context Sensitive Design
  - Sustainable Construction Practices
  - Reduced Operations and Maintenance Costs
- Solicit High Profile Judges to Increase Public Awareness of Comp.
- Hold Finals Event Open to Public – Invite Public Interest Groups to Watch Presentations
- Seek Sponsorship for Funding of Awards (ASCE, AIA, Other Professional Societies)
- Partner with TxDOT to Blend Ideas into NEPA Process

# Proposed Timeline

Date (2011)	Design Competition	NEPA Process
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# Competition and NEPA Process Flowchart

