



# Release

June 1, 2007

For Immediate Release

Room 200, 155 Carlton Street  
Winnipeg, MB R3C 3H8  
Phone: (204) 945-4900  
Fax: (204) 948-2462

### **FLOODWAY ENGINEERING CONSULTING FIRMS RECOGNIZED FOR WORK ON RED RIVER FLOODWAY EXPANSION PROJECT**

#### **Both UMA Engineering Ltd. and ND LEA Engineering Receive Awards of Excellence from Consulting Engineers of Manitoba**

The Manitoba Floodway Authority (MFA) today congratulated UMA Engineering Ltd. and ND LEA Engineering for each receiving an Award of Excellence at a recent awards ceremony hosted by the Consulting Engineers of Manitoba for their work on the Red River Floodway Expansion Project.

“UMA and ND LEA have played an integral role in the floodway expansion project,” said Ernie Gilroy, CEO of the MFA. “Their technical expertise and experience in detailed design and contract administration have benefited the project and we congratulate them for being recognized by the engineering community.”

UMA Engineering Ltd. received the Award of Excellence in Innovation for their work on the twin bridges of the Trans-Canada Highway East Bridge. The project involved the replacement of the existing four-lane bridge with two new three-lane bridges over the Red River Floodway. The new bridges are approximately 3 metres (10 feet) higher than the previous bridge and include a major safety improvement with the addition of an acceleration lane on the east bound structure and a deceleration lane on the westbound structure. The project incorporated innovative technologies in the form of second-generation Steel Free Deck (SFD) slab system, which is devoid of internal steel reinforcement, and contains nominal non-metallic and corrosion resistant Glass Fibre Reinforced Polymer (GFRP) bars. The deck slab is supported by Nebraska University (NU) pre-cast pre-stressed concrete girders which are 2.0 metres high and approximately 43 metres long. This is the first time NU pre-cast, pre-stressed concrete girders have been used in Manitoba. In addition, the bridges incorporate a Structural Health Monitoring system to monitor the condition of the bridge to ensure that safety and structural integrity while the bridge is in operation.

ND LEA received the Award of Excellence in Infrastructure for their work on devising the 900 ft long moveable temporary railway detour bridge structure that is being used on various railway bridge replacement projects. The temporary railway bridge is constructed with pre-cast concrete pier blocks that are stacked and then post-tensioned to support the eleven steel railway span. As the new railway bridge is completed, the detour bridge is dismantled and, then the piers and steel decks are moved downstream and re-erected at a new bridge replacement project. This design has significantly reduced costs and the environmental impact of construction as the piers will be used a number of times rather than being demolished and reconstructed after every use.

“We congratulate both firms for their hard work on the project and we look forward to continue to work with them as the floodway project proceeds,” said Gilroy.

-30-

Contact: Ronuk Modha  
Manitoba Floodway Authority  
(204) 945-4178, (204) 945-4900, or 793-3969 (cell)