

I-96 at 36th Street: New Interchange

Context

The project location is I-96 from M-11 (28th Street) east to Thornapple River Drive, Cascade Township in Kent County.

Purpose and Description

The project will include constructing a new interchange on I-96 at 36th Street. Currently, the Kent County Road Commission is nearing completion of the extension of 36th Street. The interchange will tie into this extension. Upon completion, this new interchange will serve as the main access from I-96 to the Gerald R. Ford International Airport, relieving traffic congestion from the M-11 (28th Street)/Patterson Avenue intersection.

Public Engagement

Public engagement was accomplished through working with Cascade Township, the Kent County Road Commission, and the Grand Rapids Gateway Committee, as well as providing informational brochures.

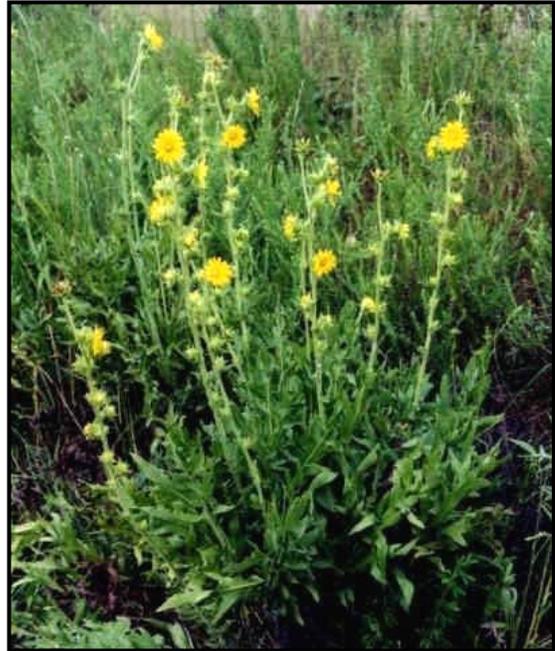
Challenges

Challenges on this project include minimizing environmental and wetland impacts, coordinating construction staging and interchange design with the local airport, and providing safe and efficient travel through this segment of I-96 throughout the two-year construction period.

Context Sensitive Solutions Approach

The alignment uses the existing terrain to accomplish the needed grade separation between the proposed ramps and the freeway. Environmental challenges include minimizing wetland and stream impacts, as well as being very environmentally sensitive. MDOT worked closely with other resource agencies, including MDEQ, US Fish and Wildlife Service, EPA, and MDNR. A 10-foot high, 20-foot.-wide, 3-sided culvert is provided to accommodate stream channel relocation and serve as a wildlife passage within the interchange. The wetland impacts of this project are being mitigated through construction of a wetland banking site several miles away. The wetland banking site is approximately 20 acres. This project only impacts just over 2 acres, leaving a majority of the wetland banking site available for future mitigation needs within the same watershed. In addition to wildlife and wetland impacts, the limits of this project contain a protected plant, the compass plant. The design of the entire project was carefully and thoughtfully done so as not to impact any of the compass plants present. This plant requires a prairie environment to thrive, so as a means to help the future propagation of the compass plant, native prairie seed mixtures will be used for some of the slope restoration areas.

An additional challenge was maintaining traffic throughout the construction period. I-96 is a major east-west route, carrying a high volume of commercial and passenger traffic. It is estimated that the project will require two years to complete. Traffic will be maintained by crossing traffic over from the eastbound roadway to the westbound roadway, and building the eastbound portion for the first season. The second season will be the mirror image of the first.



The design of the interchange aesthetics was coordinated closely with Grand Rapids Gateway Committee, which plans aesthetic schemes for the area. The aesthetic treatments for this interchange include special texturizing patterns on retaining walls and bridge piers and railings, the addition of dune-like grasses along the connector portion of the project, as well as median and slope restoration utilizing the native prairie seed mixture mentioned above.

Outcome

Construction of this project began in spring 2005. The final product will be open for all traffic movements by early fall of 2006.

Funding

This \$25 million project is funded by MDOT's Improve/Expand program.

Contact: Bart Franklin, Cost & Scheduling Engineer, Grand Rapids TSC, 616-451-3091