

Office of the City Engineer

John C. Rooney, P.E.
Assistant Commissioner of Public Works/
City Engineer



City of Racine, Wisconsin

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November 17, 2017

Legistar Item: 1118-17

To: Alderman Terry McCarthy, Chairman
Public Works and Services Committee

From: John Rooney *JCR*
Assistant Commissioner of Public Works/City Engineer

Re: Amendment No. 2 to the Three-Party Agreement Between the City of Racine, WisDOT and R.A. Smith National for State Project ID: 2260-08-00, Durand Avenue – Kearney Avenue to Sheridan Road (STH 32)

We are submitting Amendment No. 2 on the above contract. The primary reason for this amendment is to revise the Durand Avenue/Memorial Drive intersection design from a roundabout to a traffic signal. A contract time extension is not required.

The cost of this amendment is \$49,994.53 and will be funded 100% by WisDOT and credited back to the City in our SMA.

If the committee agrees, the appropriate action would be to authorize the Mayor and City Clerk to enter in the agreement.

Cc: Joy Hansche
File



**Division of Transportation
System Development**
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**Scott Walker, Governor
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September 20th, 2017

John Rooney
City of Racine
730 Washington Avenue
City of Racine, WI 53403

Dear Mr. Rooney,

The purpose of project 2260-07-00/70, STH 11 (Durand Avenue), from Kentucky Avenue to Kearney Avenue, in Racine County is to improve safety, address deteriorating pavement and storm sewer, and improve substandard pedestrian and bicycle accommodations. It is a \$2.8 Million, 0.40 mile reconstruction within the City of Racine jurisdiction with Village of Mt. Pleasant on the south side of the roadway. There is a high density of residential properties in this area as well as businesses. Within the project limits, the intersection of Durand Avenue and Memorial Avenue will be improved. A standard signal, single-lane roundabout, and two-lane roundabout have been analyzed at this location. The two-lane roundabout was the least desirable per the ICE Report due to the highest amount of additional right-of-way and excess capacity. Therefore, it is not discussed below.

There is an issue of geometrics for a single-lane roundabout matching existing roadway conditions. STH 11 is a 4-lane roadway and in order for the single lane roundabout to operate, it requires the lanes to merge from two to one which could cause a safety issue approaching the roundabout. Furthermore, the westbound traffic approaching the intersection is 3 lanes existing and modifications will be required at the STH 32 (Sheridan Rd) intersection to properly handle the additional lane-drop in a short distance.

Currently, there is conflicting support for the single-lane roundabout at the municipal-level. The Village of Mt. Pleasant has a resolution on file in support of maintaining a traditional signalized intersection. The City of Racine, who has jurisdiction of STH 11 as a connecting highway, has a resolution on file in support of the roundabout as the preferred alternative.

In the southeast quadrant of Durand Avenue and Memorial Avenue is Floyd's Towing. Floyd's Towing has 50-Ton wrecker trucks that tow full-sized semi-trucks with trailers to and from their business through this intersection. Truck turns were run for the anticipated scenario, but during real-world use, it may be challenging for these drivers to negotiate a single-lane roundabout due to its tighter constraints. Also, they are more familiar with the current signalized intersection. On a single-lane roundabout, these vehicles may or may not easily negotiate the roundabout, which will create a concern to the Wisconsin Department of Transportation (WisDOT).

For the reasons above, WisDOT recommends a standard signalized intersection at this location. The difference in construction cost between the roundabout and signalized intersection, including additional right-of-way, as well as the cost of re-design work due to this decision, will be paid by WisDOT. The re-design cost will be credited in the State Municipal Agreement (SMA).

Thank you,

Robert A. Bellin, P.E.
WisDOT Project Manager