## **Greg Minikel**

From:

Mark DeZeeuw

Sent:

Monday, March 11, 2019 1:01 PM

To:

Greg Minikel; Dan Koski

Cc:

Jeremy Walvoord

Subject:

FW: S. Rapids Road and Custer Street Signals

Attachments:

20190311104649560.pdf; 42-57 & C-S.jpg; 47 & JJ.jpg

Follow Up Flag:

Follow up Flagged

Flag Status:

FYI:

The only problem with the option that Randy shows is that the existing in pavement loop detectors will be in the wrong positions and would need to be abandon, we could use microwave detection on both side street approaches to implement the lane alignment for phase 3-8 and 7-4.

The other negative is that the right turns off of Rapids to Custer are going to be super tight, not sure if a WB-62 will fit anywhere?

From: Asman, Randy - DOT [mailto:Randy.Asman@dot.wi.gov]

Sent: Monday, March 11, 2019 10:56 AM

To: Mark DeZeeuw

Subject: RE: S. Rapids Road and Custer Street Signals

Mark,

If Custer Street is marked as a 4-lane roadway, then you might be stuck. I don't think you would want to simply restripe it so the left lane on Custer Street is a left turn only lane and the right lane would be a thru/right lane. You will end up with a negative left turn offset which is not conducive to a great safety/crash record.

If Custer Street is not marked as a 4-lane roadway, then you potentially have an option. See attached. You could repaint the sideroad approaches. Move the yellow centerline over 6' to line up the left turn lanes across from each other. Then the through lanes would not have to redirect through the intersection too.

I have attached a few locations where we have done that.

## Randy P. Asman, P.E.

WisDOT Signal / ITS Engineer Cell Phone: (920) 360-3107

If this is related to a records request, please email: dotdtsdnerecords@dot.wi.gov

From: Mark DeZeeuw [mailto:mdezeeuw@manitowoc.org]

Sent: Thursday, March 07, 2019 4:24 PM

**To:** Asman, Randy - DOT < Randy.Asman@dot.wi.gov > **Subject:** S. Rapids Road and Custer Street Signals

Hi Randy,

I would like to ask if you could give us some feedback on a problem we are having with one of our local intersections? We have been given direction by a committee to install side street left turn arrows on both approaches of Custer Street. This Street is an older two lane street that was improved to four lanes for parking on the outer lanes and at the intersection the parking was omitted and the right lanes utilized as an unmarked right turn lane while the more center lane was the unmarked left/thru combination. The centerline of both approaches are not truly aligned so using the outer lanes as through lanes causes drivers to maneuver to the left as they cross the intersection should they proceed in the right lane. This also makes for poor left turn vision alignment. You can probably look at Google Earth if you like.

The Main Street, (Rapids Road) approaches are similar four lanes although both approaches are continuous and shared thru/left and thru/right lanes. The approach from the North has detection in the shared thru/left lane with delay so that if several vehicles are in at the red long enough, it does call the left turn arrow to help clear that lane out prior to northbound green. All other approaches are currently three Ball indications only, plus actuated pedestrians. The North to East left turn is the only higher volume left turn movement, therefore the only one with the PP left turn.

My original concept, if this was to proceed, would have been to split phase the side street approaches as an alternative to the basic two phase intersection. If we install PP left turn phasing on both side street approaches, are we not potentially expecting two turning vehicles to occupy some of the same space at the same time?

It would seem that now days everyone wants to have the signals lead them everywhere, not sure how to proceed on this without making things worse, but I would like to know for sure that there is not some other alternative, or that I am not missing something here.

The correct way to improve this would be to reconstruct the street approaches with left turn lane alignment and dedicated lanes but this seems to be the improvement on the cheap thought process, and really not the way to do it.

I have no problem making minor changes, but this seems to violate basic operational safety to me.

If you cannot comment on this I understand, possibly point me to a consultant PE?

Thank you,

## Mark P. DeZeeuw

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