



DEPARTMENT OF PUBLIC WORKS



Fred Abadi, PhD, PE, Director
fabadi@ci.waukesha.wi.us

To: Board of Public Works

CC: Fred Abadi, PhD, PE, Public Works Director

From: Katie Jelacic, PE

Date: February 2, 2016

Subject: Investigate rail crossings at Prairie Avenue, Glacial Drumlin Trail, MacArthur Rd, Grandview Blvd., West Ave. and Maple Ave. to establish a Quiet Zone (Ref. Ald. Helgestad)

A quiet zone may be established if the zone is at least ½ mile in length and all public crossings have flashing lights and gates in place. In addition, they must be equipped with constant warning time devices and power-out indicators. All necessary upgrades must be completed before it can be determined whether the Quiet Zone Risk Index (QZRI) of the proposed Quiet Zone is less than or equal to the Nationwide Significant Risk Threshold (NRST).

The subject rail line (WSOR) is approximately 1.77 miles long, consisting of 6 at-grade crossings in the City and currently runs 2 trains per day. None of these six at-grade crossing have the necessary required flashing lights/or gates in place. The estimated cost of upgrading these crossings is \$1,350,000. All cost associated with establishing a Quiet Zone is the responsibility of the municipality. Although the City must pay for the upgrades, the railroad is in charge of designing and constructing these improvements.

After all the upgrades are implemented, then the Quiet Zone Risk Index (QZRI) can be calculated to see if the index is less then or equal to the Nationwide Significant Risk Threshold (NRST). If the risk is less then or equal to the NRST, then Supplementary Safety Measures (SSMs) must be implemented. Examples of these types of improvements include raised medians and channelization devices. (Similar to the improvements the City implemented for the Canadian National crossings) The estimated costs associated with these additional improvements may is approximately \$100,000.

A consultant would have to be hired to assist the Department to conduct the investigation and necessary engineering work associated with the Quiet Zone application process. This Cost is estimated at approximately \$40,000.

Therefore the total cost is approximately \$1,490,000. The Department did investigate the feasibility of establishing a quiet zone for the WSOR in 2008. However, it was determined that since there were only 2 trains per day it was not cost effective to establish a Quiet Zone. (The CN track has 32-35 trains per day)

The Department of Public Works - Engineering Division recommends that the referring Alderman discuss this project with the City Administrator during the next budget cycle.

ENGINEERING DIVISION

Paul G. Day, PE
City Engineer
130 Delafield St
Waukesha, WI 53188
262-524-3600
Fax – 262-524-3898

MUNICIPAL PARKING SERVICES

Patti Cruz
Parking Supervisor
241 South St
Waukesha, WI 53188
262-524-3622
Fax – 262-650-2573

STREETS DIVISION

300 Sentry Dr
Waukesha, WI 53186
262-524-3615
Fax – 262-524-3612

WASTEWATER TREATMENT PLANT

Jeff Harenda
WWTP Manager
600 Sentry Dr
Waukesha, WI 53186
262-524-3625
Fax – 262-524-3632

WAUKESHA METRO TRANSIT

Brian Engelking
Transit Manager
2311 Badger Dr
Waukesha, WI 53188
262-524-3594
Fax – 262-524-3646

Inventories of the At-Grade Crossings:

1. Grandview Blvd (910742F): Details per U.S. DOT Crossing Inventory Form
 - a. Existing LED Flashing Lights
 - b. No Gates
 - c. No Pavement Markings
 - d. ADT 6200 (2012)
 - e. 2 trains per day
 - f. Estimate \$250,000

2. Macarthur Rd. (391527J): Details per U.S. DOT Crossing Inventory Form
 - a. No Flashing Lights
 - b. No Gates
 - c. Existing Stop Signs
 - d. ADT 2200 (2012)
 - e. 2 trains per day
 - f. Estimate \$250,000

3. Glacial Drumlin B (At Grade) (917685T0): Details per U.S. DOT Crossing Inventory Form
 - a. No Flashing Lights
 - b. No Gates
 - c. Existing Stop Signs
 - d. Bike traffic only
 - e. 2 trains per day
 - f. Estimate \$100,000

4. Prairie Ave (177310K): Details per U.S. DOT Crossing Inventory Form
 - a. Existing LED Flashing Lights
 - b. No Gates
 - c. No Pavement Markings
 - d. ADT 9400(2012)
 - e. 2 trains per day
 - f. Estimate \$250,000

5. West Ave (177308J): Details per U.S. DOT Crossing Inventory Form

- a. Existing LED Flashing Lights
- b. No Gates
- c. No pavement markings
- d. ADT 5600 (2012)
- e. 2 trains per day
- f. Estimate \$250,000

6. Maple Ave (177307C): Details per U.S. DOT Crossing Inventory Form

- a. Existing LED flashing lights
- b. No Gates
- c. ADT 1250 (2012)
- d. 2 trains per day
- e. Estimate \$250,000