# CITY OF CHIPPEWA FALLS BOARD OF PUBLIC WORKS MEETING MINUTES MONDAY, AUGUST 8, 2016 – 5:30 PM

The Board of Public Works met in City Hall on Monday, August 8, 2016 at 5:30 PM. Present were Mayor Greg Hoffman, Director of Public Works Rick Rubenzer, Finance Manager Lynne Bauer and Alderperson Paul Olson. Absent was Darrin Senn. Assistant City Engineer Rob Krejci was also present at the meeting.

- 1. <u>Motion</u> by Bauer, seconded by Olson to approve the minutes of the July 25, 2016 Board of Public Works meeting. All present voting aye. <u>MOTION CARRIED.</u>
- 2. Assistant City Engineer Krejci presented and explained the attached memo concerning intersection control at the intersection of Coleman and Wheaton Streets. He discussed the nature of reported accidents at this intersection and warrants for all way stop conditions as set forth in the Manual for Uniform Traffic Control Devices, (MUTCD). He noted that the stop signs on Wheaton Street would have red warning LED lights to draw attention to these two new traffic control devices. He also continued that intersection control lane geometrics would be considered moving forward but that stop signs would be installed as soon as possible prior to the opening of the 2016-2017 school session. In response to Alderperson Olson's question, Mr. Krejci stated that an abbreviated intersection control evaluation did not include long range (20 year), traffic projection and that there were no known accidents at this intersection where a pedestrian had been injured.

<u>Motion</u> by Olson, seconded by Rubenzer to recommend the Common Council approve placing stop signs with red flashing LED warning lights at northbound and southbound Wheaton Street at its intersection with Coleman Street, making this intersection a fourway stop condition. In addition, that lane geometrics be analyzed at this intersection and that the two additional stop signs be placed prior to the opening of the 2016-2017 school session. All present voting aye. <u>MOTION CARRIED.</u>

- 3. **There was no action taken** on the Xcel Energy easement request at Chippewa Riverfront Phase I.
- 4. <u>Motion</u> by Adrian, seconded by Bauer to adjourn. All present voting aye. <u>MOTION</u> <u>CARRIED</u>. The Board of Public Works meeting adjourned at 6:25 P.M.

Richard J. Rubenzer, PE Secretary, Board of Public Works

# CITY OF CHIPPEWA FALLS BOARD OF PUBLIC WORKS MEETING MINUTES MONDAY, JULY 25, 2016 – 5:30 PM

The Board of Public Works met in City Hall on Monday, July 25, 2016 at 5:30 PM. Present were Mayor Greg Hoffman, Director of Public Works Rick Rubenzer, Finance Manager Lynne Bauer, Alderperson Paul Olson and Darrin Senn. Also present at the meeting were Bob Schultz, Xcel Energy Community Service Manager, Cheri Barna, Xcel Energy Siting and Land Rights Agent and Matt Miller, Xcel Energy Hydro Department.

- 1. <u>Motion</u> by Bauer, seconded by Olson to approve the minutes of the June 27, 2016 Board of Public Works meeting. All present voting aye. <u>MOTION CARRIED.</u>
- 2. Bob Schultz, Cheri Barna and Matt Miller appeared on behalf of Xcel Energy to present the attached easement proposal for Chippewa Riverfront Park. Director of Public Works Rubenzer stated that Xcel Energy staff and City of Chippewa Falls staff had met approximately two months ago and that the attached proposed Easement agreement essentially depicted what was agreed to at the meeting. Mr. Schultz gave project history. He said access to the hydro dam tailrace area was needed to maintain or repair turbines. Emergency repair or scheduled maintenance would be done by assembling a floating barge loading dock utilizing a large, (80 ton), crane. He stated that no other land access to assemble the barge system would work other that the location on the attached easement. The existing bulkhead was last used in 1994 to access the tailrace area. The bulkhead has been removed as part of the 2016 Chippewa Riverfront Park Phase I project. Scheduled maintenance of the turbines may only be needed once every thirty to fifty years depending on Federal Energy Regulating Commission, (FERC) inspection of the turbines. Matt Miller stated that there were six turbines installed or maintained in 1994 and that a FERC inspection was scheduled for 2020. When future maintenance is required, the floating barges would be transported over an approximately twelve inch thick temporary mat assembled in sections in the easement access area. Set up of the floating barge system would take approximately 4 to 7 days and once set up, the temporary mats would be removed until the maintenance of the turbines had been completed. The turbine maintenance could take six months to years to complete. At completion, the temporary mat system would be re-installed to remove the floating barge system. Ms. Barna explained the recitals, easement details and exhibits to the Board. Director of Public Works Rubenzer asked about compensation. Ms. Barna used a similar location 2014 appraisal value of \$1.70 per square foot for the approximate 0.36 easement parcel. Finance Manager Bauer asked to add additional wording to insure the City had the final say on restoration of the easement area. Mr. Senn suggested stating something about using the temporary mats in the easement itself. Director of Public Works Rubenzer said to use "Chippewa Riverfront" in "A" and "B" of the recitals. Ms. Barna will make the suggested modifications and return to Director of Public Works Rubenzer by Wednesday, after which the draft will be forwarded to City Attorney Ferg for review and comment. After additional discussion;

<u>Motion</u> by Senn, seconded by Olson to send a draft permanent access easement with Xcel Energy in Chippewa Riverfront to City Attorney Ferg for review and comment. After Attorney Ferg's review, the easement will again be considered by the Board of Public Works for a recommendation to the Common Council. All present voting aye. <u>MOTION CARRIED</u>.

- 3. Director of Public Works Rubenzer presented the attached policy recommendations from the City of Green Bay about "Children at Play", "Deaf Child Area" "Blind Child Area" and "Autistic Child Area" signs. The Board discussed circular letter 2011-18 from the Illinois Department of Transportation, an informational document from WIDOT and policies from the Wisconsin cities of Appleton, Brookfield, Eau Claire, Fitchburg, Hartland, Janesville, LaCrosse, Madison, Milwaukee, Racine and Waukesha. Consensus was that "Children at Play" signs are prohibited by the Manual of Uniform Traffic Control Devices, (MUTCD) but that Deaf Child, Blind Child and Autistic Child type signs weren't necessarily prohibited by MUTCD. Effectiveness of the Deaf, Blind and Autistic type signs has yet to be proven. A concern was listed that the City could be accused of promoting children at play in the street in the event of an accident. The Board directed Director of Public Works Rubenzer to draft a policy considering signs in the public right-of-way that incorporated;
  - 1. All signs placed the City of Chippewa Falls public street rights-of-way shall conform to the Manual of Uniform Traffic Control Devices (MUTCD).
  - 2. No new non-standard warning signs are to be installed on any City of Chippewa Falls street.
  - 3. Any existing non-standard warning signs on City of Chippewa Falls streets may be allowed to remain in place until the end of their useful life, or that their need no longer exists, i.e., the person with the disability from the residence moves or dies. End of useful life includes but is not limited to sign knockdown damage, substandard sign retro reflectivity, removal due to conflicts with improvement projects or change in conditions that make it possible to have the signs removed earlier.
  - 4. The City of Chippewa Falls City Attorney will periodically review the said sign policy.
  - 5. Any requests for exceptions to #2 above will be considered by the Board of Public Works and City Attorney and recommended to the Common Council for action.
- 4. <u>Motion</u> by Senn, seconded by Olson to adjourn. All present voting aye. <u>MOTION</u> <u>CARRIED</u>. The Board of Public Works meeting adjourned at 6:25 P.M.

Richard Rubenzer, PE Secretary, Board of Public Works

# Memo

To: Board of Public Works/Common Council

From: Chippewa Falls Engineering Office

Date: 8/8/2016

Re: Coleman St & Wheaton Street - Intersection Control

In spring of 2016 the Chippewa Falls Engineering Office evaluated intersections within its jurisdiction for high-accident rates and potential solutions. The intersection of Coleman Street and Wheaton Street which has been discussed in the past, was examined to determine potential remedies in an effort to reduce the amount of accidents that are occurring within the intersection.

The intersection is unique because of a number of factors. Both Coleman Street and Wheaton Street are consider minor arterials and both service large portions of the west hill of Chippewa Falls The intersection in proximity to a number of Chippewa Falls' schools, and these factors contribute to the intersections unique characteristics which include higher peak hour volumes, large numbers of inexperienced drivers, and pedestrian considerations.

The Chippewa Falls Engineering Office completed an abbreviated intersection control evaluation for the Wheaton and Coleman Street intersection. As mentioned before, this intersection presents a number of unique challenges that both limit and restrict potential solutions. After consideration, the Chippewa Falls Engineering Office is recommending an all-stop condition for the Coleman Street and Wheaton Street Intersection. This recommendation is based on a number of factors, including criteria based on guidance set forth in the Manual of Uniform Traffic Control Devices (MUTCD) which has been attached to this report.

While reviewing the criteria and guidance for a multi-directional stop the considerations included:

- 1. Pedestrian accommodations
- 2. Traffic Volumes (Peak Hourly School Volumes)
- 3. ADT (Average Daily Traffic)
- 4. Accident Rate/Type

After reviewing the aforementioned data the Chippewa Falls Engineering Office is recommending a multi/all way stop configuration for the Coleman Street/Wheaton Street intersection. Most of the accidents and pedestrian concerns can be addressed with this

configuration and the intersection will be closely monitored in the upcoming months to determine if further steps are necessary.

As part of the intersection control evaluation, the Chippewa Falls Engineering Office also considered intersection geometrics. With an all-stop condition there may be brief periods of queuing present at this intersection during the peak hourly times (7 AM – 9AM & 2PM – 5 PM), but these periods should be brief and queuing time should not degrade the level of service in the intersection significantly. Future improvements may be necessary is the multi-directional stop is left in place permanently. Turn lanes may be needed to accommodate traffic eastbound on Coleman Street and for the west bound turning movement from Wheaton Street to Coleman Street. Traffic patterns with the modified controls will be analyzed in the upcoming months and if further improvements are necessary additional recommendations will be made.

The Chippewa Falls Engineering Office also is recommending that the multi/all way stop signs be installed prior to the commencement of the 2016-2017 school year. Further, the Engineering Department is recommending that solar powered flashing stop signs (Approximately \$1500/Each) with appropriate advanced warning. As the driving public adjusts to conditions the flashing stop signs can be removed and replaced with regular signage to reduce potential complaints with the flashing lights.

Geometric improvements to the intersection will most likely be necessary in the future regardless of geometric configuration. Based on existing R/W width and street configuration it appears that the aforementioned necessary lane work can be accomplished with minimal R/W expansion.

Scale = 1:232Printed 08/08/2016

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Disclaimer: This map is a compilation of records as they appear in the Chippewa County Offices affecting the area shown and is to be used only for reference purposes.

- 11 Except as provided in Section 28.09, STOP signs and YIELD signs shall not be installed on different approaches to the same unsignalized intersection if those approaches conflict with or oppose each other.
- 12 Portable or part-time STOP or YIELD signs shall not be used except for emergency and temporary traffic control zone purposes.
- 13 A portable or part-time (folding) STOP sign that is manually placed into view and manually removed from view shall not be used during a power outage to control a signalized approach unless the maintaining agency establishes that the signal indication that will first be displayed to that approach upon restoration of power is a flashing red signal indication and that the portable STOP sign will be manually removed from view prior to stop-and-go operation of the traffic control signal.

#### Option:

14 A portable or part-time (folding) STOP sign that is electrically or mechanically operated such that it only displays the STOP message during a power outage and ceases to display the STOP message upon restoration of power may be used during a power outage to control a signalized approach.

15 <u>Section 9B.03</u> contains provisions regarding the assignment of priority at a shared-use path/roadway intersection.

Section 2B.05 STOP Sign (R1-1) and ALL WAY Plague (R1-3P)

#### Standard:

01 When it is determined that a full stop is always required on an approach to an intersection, a STOP (R1-1) sign (see Figure 2B-1) shall be used.

Figure 2B-1 STOP and YIELD Signs and Plaques









- 02 The STOP sign shall be an octagon with a white legend and border on a red background.
- Secondary legends shall not be used on STOP sign faces.
- 04 At intersections where all approaches are controlled by STOP signs (see Section 2B.07), an ALL WAY supplemental plaque (R1-3P) shall be mounted below each STOP sign. The ALL WAY plaque (see Figure 2B-1) shall have a white legend and border on a red background.
- 05 The ALL WAY plaque shall only be used if all intersection approaches are controlled by STOP signs.
- 06 Supplemental plaques with legends such as 2-WAY, 3-WAY, 4-WAY, or other numbers of ways shall not be used with STOP signs.

#### Support:

07 The use of the CROSS TRAFFIC DOES NOT STOP (W4-4P) plaque (and other plaques with variations of this word message) is described in Section 2C.59.

#### Guidance:

08 Plaques with the appropriate alternative messages of TRAFFIC FROM LEFT (RIGHT) DOES NOT STOP (W4-4aP) or ONCOMING TRAFFIC DOES NOT STOP (W4-4bP) should be used at intersections where STOP signs control all but one approach to the intersection, unless the only non-stopped approach is from a one-way street.

#### Option:

09 An EXCEPT RIGHT TURN (R1-10P) plaque (see Figure 2B-1) may be mounted below the STOP sign if

an engineering study determines that a special combination of geometry and traffic volumes is present that makes it possible for right-turning traffic on the approach to be permitted to enter the intersection without stopping.

#### Support:

10 The design and application of Stop Beacons are described in <u>Section 4L.05</u>.

# Section 2B.06 STOP Sign Applications

#### Guidance:

- At intersections where a full stop is not necessary at all times, consideration should first be given to using less restrictive measures such as YIELD signs (see <u>Sections 2B.08</u> and <u>2B.09</u>).
- 102 The use of STOP signs on the minor-street approaches should be considered if engineering judgment indicates that a stop is always required because of one or more of the following conditions:
  - A. The vehicular traffic volumes on the through street or highway exceed 6,000 vehicles per day;
  - B. A restricted view exists that requires road users to stop in order to adequately observe conflicting traffic on the through street or highway; and/or
  - C. Crash records indicate that three or more crashes that are susceptible to correction by the installation of a STOP sign have been reported within a 12-month period, or that five or more such crashes have been reported within a 2-year period. Such crashes include right-angle collisions involving road users on the minor-street approach failing to yield the right-of-way to traffic on the through street or highway.

## Support:

03 The use of STOP signs at grade crossings is described in <u>Sections 8B.04</u> and <u>8B.05</u>.

# Section 2B.07 Multi-Way Stop Applications

#### Support:

- Multi-way stop control can be useful as a safety measure at intersections if certain traffic conditions exist. Safety concerns associated with multi-way stops include pedestrians, bicyclists, and all road users expecting other road users to stop. Multi-way stop control is used where the volume of traffic on the intersecting roads is approximately equal.
- 02 The restrictions on the use of STOP signs described in <u>Section 2B.04</u> also apply to multi-way stop applications.

#### Guidance:

- 03 The decision to install multi-way stop control should be based on an engineering study.
- 04 The following criteria should be considered in the engineering study for a multi-way STOP sign installation:
  - A. Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.
  - B. Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.
  - C. Minimum volumes:
    - 1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and
    - 2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but
    - 3. If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the

minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.

D. Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.

#### Option:

05 Other criteria that may be considered in an engineering study include:

- A. The need to control left-turn conflicts;
- B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;
- C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and
- D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.

#### Section 2B.08 YIELD Sign (R1-2)

#### Standard:

11 The YIELD (R1-2) sign (see <u>Figure 2B-1</u>) shall be a downward-pointing equilateral triangle with a wide red border and the legend YIELD in red on a white background.

#### Support

O2 The YIELD sign assigns right-of-way to traffic on certain approaches to an intersection. Vehicles controlled by a YIELD sign need to slow down to a speed that is reasonable for the existing conditions or stop when necessary to avoid interfering with conflicting traffic.

# Section 2B.09 YIELD Sign Applications

#### Option:

- 01 YIELD signs may be installed:
  - A. On the approaches to a through street or highway where conditions are such that a full stop is not always required.
  - B. At the second crossroad of a divided highway, where the median width at the intersection is 30 feet or greater. In this case, a STOP or YIELD sign may be installed at the entrance to the first roadway of a divided highway, and a YIELD sign may be installed at the entrance to the second roadway.
  - C. For a channelized turn lane that is separated from the adjacent travel lanes by an island, even if the adjacent lanes at the intersection are controlled by a highway traffic control signal or by a STOP sign.
  - D. At an intersection where a special problem exists and where engineering judgment indicates the problem to be susceptible to correction by the use of the YIELD sign.
  - E. Facing the entering roadway for a merge-type movement if engineering judgment indicates that control is needed because acceleration geometry and/or sight distance is not adequate for merging traffic operation.

#### Standard:

- A YIELD (R1-2) sign shall be used to assign right-of-way at the entrance to a roundabout. YIELD signs at roundabouts shall be used to control the approach roadways and shall not be used to control the circulatory roadway.
- $^{03}$  Other than for all of the approaches to a roundabout, YIELD signs shall not be placed on all of the approaches to an intersection.

Section 2B.10 STOP Sign or YIELD Sign Placement

#### Standard:

101 The STOP or YIELD sign shall be installed on the near side of the intersection on the right-hand side of the approach to which it applies. When the STOP or YIELD sign is installed

at this required location and the sign visibility is restricted, a Stop Ahead sign (see <u>Section 2C.36</u>) shall be installed in advance of the STOP sign or a Yield Ahead sign (see <u>Section 2C.36</u>) shall be installed in advance of the YIELD sign.

- 102 The STOP or YIELD sign shall be located as close as practical to the intersection it regulates, while optimizing its visibility to the road user it is intended to regulate.
- 03 STOP signs and YIELD signs shall not be mounted on the same post.
- No items other than inventory stickers, sign installation dates, and bar codes shall be affixed to the fronts of STOP or YIELD signs, and the placement of these items shall be in the border of the sign.
- No items other than official traffic control signs, inventory stickers, sign installation dates, anti-vandalism stickers, and bar codes shall be mounted on the backs of STOP or YIELD signs.
- No items other than retroreflective strips (see <u>Section 2A.21</u>) or official traffic control signs shall be mounted on the fronts or backs of STOP or YIELD signs supports.

#### Guidance:

- 07 STOP or YIELD signs should not be placed farther than 50 feet from the edge of the pavement of the intersected roadway (see Drawing F in <u>Figure 2A-3</u>).
- A sign that is mounted back-to-back with a STOP or YIELD sign should stay within the edges of the STOP or YIELD sign. If necessary, the size of the STOP or YIELD sign should be increased so that any other sign installed back-to-back with a STOP or YIELD sign remains within the edges of the STOP or YIELD sign.

### Option:

Where drivers proceeding straight ahead must yield to traffic approaching from the opposite direction, such as at a one-lane bridge, a TO ONCOMING TRAFFIC (R1-2aP) plaque may be mounted below the YIELD sign.

### Support:

- 10 Figure 2A-3 shows examples of some typical placements of STOP signs and YIELD signs.
- 11 <u>Section 2A.16</u> contains additional information about separate and combined mounting of other signs with STOP or YIELD signs.

#### Guidance:

- 12 Stop lines that are used to supplement a STOP sign should be located as described in <u>Section 3B.16</u>. Yield lines that are used to supplement a YIELD sign should be located as described in <u>Section 3B.16</u>.
- 13 Where there is a marked crosswalk at the intersection, the STOP sign should be installed in advance of the crosswalk line nearest to the approaching traffic.
- 14 Except at roundabouts, where there is a marked crosswalk at the intersection, the YIELD sign should be installed in advance of the crosswalk line nearest to the approaching traffic.
- Where two roads intersect at an acute angle, the STOP or YIELD sign should be positioned at an angle, or shielded, so that the legend is out of view of traffic to which it does not apply.
- If a raised splitter island is available on the left-hand side of a multi-lane roundabout approach, an additional YIELD sign should be placed on the left-hand side of the approach.

#### Option:

- If a raised splitter island is available on the left-hand side of a single lane roundabout approach, an additional YIELD sign may be placed on the left-hand side of the approach.
- At wide-throat intersections or where two or more approach lanes of traffic exist on the signed approach, observance of the right-of-way control may be improved by the installation of an additional STOP or YIELD sign on the left-hand side of the road and/or the use of a stop or yield line. At channelized intersections or at divided roadways separated by a median, the additional STOP or YIELD