#### Wisconsin DNR Comments on the Somers Water Diversion Application

1. The maps provided as part of the application indicate that a portion of the Village, within the Lake Michigan basin, is provided water service by the City of Racine. Please clarify how water and wastewater services are provided in this area and relationship between the Village of Somers Water Utility and the Racine Waterworks.

# Response:

- The Village of Somers provides water service to residents near KR and the City of Racine provides wastewater service to the same residents. A map and the agreement between the Racine Water Utility and Village of Somers has been included in Attachment A. Some discrepancies exist between the Somers service area and the City of Racine service area. An overlay map has been included in Attachment A to assist in identifying the discrepancies listed below:
  - i The following parcels are included in the Racine service area and are NOT included in the Kenosha/Somers service area:
    - 1 56<sup>th</sup> Avenue: 82-4-222-022-0236, 82-4-222-022-0237, 82-4-222-022-0238, 82-4-222-022-0300.
  - ii The following parcels have less area in the Racine service area compared to the Kenosha/Somers service area.
    - 1 CTH KR: 82-4-222-012-0101, 82-4-222-012-0125, 82-4-222-012-0083, 82-4-222-012-0070.
    - 2 CTH KR at CTH G: 82-4-222-012-0007.
    - 3 CTH KR East of CTH G: 83-4-223-062-0200, 83-4-223-062-0104.
    - 4 East of 13<sup>th</sup> Avenue (Adjacent to Kenosha County Bike Trail): 83-4-223-061-0430.
  - iii The following parcels are not in the Racine service area and ARE included in the Kenosha/Somers service area.
    - 1 CTH G: 82-4-222-012-0021, 82-4-222-012-0025, 82-4-222-012-0030, 82-4-222-012-0035, 82-4-222-012-0041, 82-4-222-012-0270.
    - 2 CTH Y: 82-4-222-011-0493, 82-4-222-011-0494, 82-4-222-011-0485, 83-4-223-062-0245, 83-4-223-062-0250, 83-4-223-062-0220.
- 2. Provide incorporation maps and maps of subsequent annexations/attachments since 2008. <u>Response:</u>
  - Attachment B contains incorporation maps for annexations and attachments to Somers from 2008 to 2021.
- 3. The Village has indicated that the boundaries of the proposed diversion area have changed with a recent attachment to the Village. Please provide updated maps and any other updates to the diversion application affected by the additional land area, such as updated diversion request amounts. (Note below the questions on the diversion area water demand projections.) Response:
  - The proposed diversion area changed with the January 2021 Attachment, which added the following parcels: 82-4-221-131-0203, 82-4-221-131-0210, 82-4-221-131-0301, 82-4-221-131-0202.



- Attachment C contains revisions to Figures 1, 3, 4, 5, and 6 corresponding to the proposed diversion boundary change.
- Page 4, Executive Summary, diversion volume revised from 2.0 MGD (maximum day) to 2.1 MGD (maximum day).
- Page 12, Section 4.1, revised diversion volume calculation, population projection, and total diversion volume:
  - i Population west of the divide changed from 1,937 to 1,960 people.
  - ii Maximum Day Water Use changed from 2.0 MGD to 2.1 MGD.
  - iii Consumptive water use:
    - 1 30-day cumulative total for maximum daily use:
      - $a\,$  Daily consumptive use changed from 0.2 MGD to 0.21 MGD
      - b Total changed from 6.0 MG to 6.3 MG.
- Figure 3, source revised from SEWRPC to 'Amendment to the Regional Water Quality Management Plan for the Greater Kenosha Area adopted by SEWRPC September 2018, Map 1 page 3'
- 4. The Village and diversion area acreage are not consistent through the application materials. Please provide the acreage for the Village and the diversion area and provide a description of how the acreage was calculated.

# Response:

- The acreage breakdown from the Kenosha County GIS is as follows:
  - i Total Acreage within the village limits as of the January 2021 Attachment: 17,176 Acres
  - ii West of the Subcontinental Divide: 3,916 Acres
  - iii East of the Subcontinental Divide: 13,260 Acres
  - iv Total Floodplain Acreage: 1,917 Acres (this was used in water use calculations).
- Revised Section 3.4 last sentence to read: the entire Village is approximately 17,176 acres and the diversion area comprises 3,916 acres of the total.



#### B&W Response to Wisconsin Department of Natural Resources (DNR)

#### Wisconsin DNR Comments on the Somers Water Conservation and Efficiency Plan

5. Additional information on current water use trends (2015 – 2020 or most recent 5 years) including water sales total, water sales by customer class, maximum day sales, maximum to average day ratio, population served (including how the population served is estimated) and residential class per capita water use.

#### Response:

 The Water Conservation and Efficiency Plan has been revised to include a summary of annual water usage data from the Public Service Commission (PSC) reports for the entire Village of Somers. The data has been summarized and included in Attachment D. A summary of historical population and the methodology for future population estimates are also included in Attachment D.

 Identify the source of Table 2 of the water conservation and efficiency plan and provide the actual 2010 and 2020 estimated populations served and water demands.
 <u>Response:</u>

- The source of data for Table 2 has been updated. See Attachment D for a summary of the total population and estimate of population served for the entire Village of Somers.
- The water conservation and efficiency plan cites a goal of reducing the Residential Equivalent Unit metric by 10%, from a 2018 baseline of 276 to 248. Provide a brief description of the REU metric, a citation for the table of REU equivalents and the planned timeline for achieving this reduction. <u>Response:</u>
  - The residential equivalence unit (REU) metric is a means of expressing system usage in terms of an 'equivalent residential unit', or 'typical home'. In this case, the equivalent unit is 5/8-inch meter equivalents. AWWA Manual M1 Principles of Water Rates, Fees, and Charges (Page 202, Table 28-2) summarizes typical equivalents and maximum meter flow rates. Within AWWA M1, maximum meter flow rates are referenced from AWWA M6.
  - Page 19, the source listed for the 'REU Ratio' shall be revised from American Waterworks Association to the following:
    - i The REU Ratio was calculated by summing the number of meters multiplied by their respective Residential Equivalence Unit per the Village of Somers Ordinance.
  - Attachment E contains the page from the Village of Somers Ordinance summarizing the REU Ratios for each meter type and size in the Village. This attachment shall be included in the Conservation Plan Appendix 1 to supplement the appendix and clarify the source of data.
  - The timeline for achieving a 10% reduction in the REU metric coincides with the completion and implementation of the conservation measures identified in Section 3.3 of the Conservation Plan. A minimum of one year of data following the completion of the Sheridan Road Water Main Replacement project is needed for analysis prior to implementing the conservation measures to observe the effectiveness during implementation.
  - The anticipated timeline to start implementing the cost effective conservation measures is 2023. A specific schedule for implementation will be provided in the required 2023 update of the water conservation plan.



- 8. The water conservation efficiency plan indicates that water mains were intended to be replaced in 2020 (pg. 13). Provide an update on the status of these water mains replacements and a schedule or plans for replacing the referenced 1960's cast iron pipe on Sheridan Road. **Response:** 
  - The Sheridan Road water main and sanitary sewer rehabilitation project is currently underway, and the expected completion date is October of 2021.
- 9. Ch. NR 852, Wis. Admin. Code requires that PWS-3 has been implemented. Provide the URL for information on water conservation and efficiency and the Village's goals on the Village website. <u>Response:</u>
  - The revised Water Conservation and Efficiency Plan can be found under 'Water Conservation' section at the following link: <u>https://www.somers.org/news/2021/07/23/water-conservation/</u>
- 10. Ch. NR 852, Wis. Admin. Code requires that all Table 1 Conservation and Efficiency Measures (CEMs) be implemented. Confirm that the Village water conservation plan will implement PWS-4 Source Management.

# Response:

- PWS-4 is mandatory, and the village has implemented this CEM. Annual Reports to the Public Service Commission (PSC) include volumes of source water purchased from the Kenosha Water Utility (KWU).
- 11. Identify actions to partner with University of Wisconsin Parkside (UW Parkside) on water conservation and efficiency in the past and the future. Provide additional information on when the UW Parkside fixtures were updated and any information available on changes UW Parkside water use since the fixtures were updated.

# Response:

- A B&W employee met with the U.W. Parkside facility director in the summer of 2019 to discuss conservation measures taking place at the college. At that time, the facility director indicated changes were made to lawn watering practices and fixtures had been updated.
   U.W. Parkside had no further plans for any specific water reduction measures. Fixture updates include low flow shower heads, and the toilets and sinks are motion activated.
- No current Village staff is aware of the discussions that took place with U.W. Parkside prior to 2019. The current facilities director was contacted again to discuss what had taken place regarding the fixtures. The director was not present for the discussions as his employment at the college began in 2017. However, he does have records of bathroom remodels that took place around 2013-2014, which included replacing toilets, urinals, and sinks with low flow efficient fixtures in all bathrooms throughout campus.
- Data from 2006 to present day was available for review and a graph illustrating historical use over this time was included below for reference. There is no statistically significant difference between the water use in 2013-2014 and the following years 2015 through 2019.





12. The Village is required to implement Tier 3 Water Conservation under NR852.02 (3)(a), Wis. Admin. Code, and evaluate additional CEMs in addition to those provided in the Tier 2 table. (s. NR 852.06(1), Wis. Admin. Code). Choose additional CEMs to evaluate through the Alliance for Water Efficiency tool (such as showerhead replacements, toilet replacements, more frequent billing of customers, rebate programs for more efficient appliances and plumbing fixtures), report the results of the evaluation and implement any that are cost-effective.

Response:

- Attachment G includes results for the additional CEMs. Multiple revisions were made to more accurately predict costs of the conservation measures evaluated.
- All cost-effective measures are to be implemented.
- 13. Section NR 852.05(5) requires diversion applicants to have implemented cost-effective CEMs identified in Ch. NR 852, Table 2. PWS-R2 requires the Village to have a residential water management program. Please ensure that this program is implemented and available to residential customers. The Village's water conservation and efficiency plan also indicates planned future actions, such as a future meter reading system and implementing voluntary-lawn-sprinkling restrictions to implement PWS-R2. Provide a timeline for implementing these actions. Response:

• A future meter reading system shall be selected and installed to minimize manual reading of meters. At this time, no system has been selected and it is anticipated that an automatic meter reading system will be evaluated in the next two years and implementation will begin between 2026 and 2030.



• Voluntary-lawn-sprinkling restrictions shall be implemented via educational information on the Village Website under Water Conservation. Information on recommended irrigation frequency, timing, and duration will be supplied to residents to promote water conservation. The link to the information can be found below: <a href="https://www.somers.org/news/2021/07/23/water-conservation/">https://www.somers.org/news/2021/07/23/water-conservation/</a>

14. Section NR 852.07(2)(d), Wis. Admin. Code requires the Village to prepare a monitoring plan to assess the impacts of CEM implementation. To comply with this requirement, the Village must identify what data will be collected, and how the information will be used to adaptively manage the Village's water resources.

# Response:

• The Village monitoring plan consists of analyzing annual records for water use to observe trends by customer sector and number of rebate participants for each measure. When the Automatic Metering Infrastructure (AMI) system is implemented, meter records will be analyzed on an annual basis to observe water use trends and ensure the conservation measures are effectively reducing water loss.

*Please provide additional information on the AWE Tracking Tool inputs are used to determine the cost-effectiveness of different CEM's.* 

# Response:

• See input data provided in Attachment G.



### B&W Response to Wisconsin Department of Natural Resources (DNR)

#### Wisconsin DNR Comments on the Somers Water Supply Service Area Plan

15. The Village frequently references SEWRPC as the source of maps in the WSSAP. Identify the SEWRPC report and page number for each map. If the source of the map is not SEWRPC, please provide a complete reference, including a copy of the report or a website/link to the report.

### Response:

- Several sources and reference have been corrected throughout the report in addition to the following revisions to the Water Supply Service Area Plan:
- Figure 3, source revised from SEWRPC to 'Land Use Study, Village of Somers, Wisconsin dated 2018 and approved by the Village of Somers on June 14th, 2018.' (Prepared by Foth and henceforth referenced as 'Foth 2018 Land Use Study').
- Figure 4, source revised from SEWRPC to 'Amendment to the Regional Water Quality Management Plan for the Greater Kenosha Area adopted by SEWRPC September 2018, Map 1 page 3'
- Table 2, Table 3, and Table 4 revised data sources:
  - i Land Use Acreage Foth 2018 Land Use Study.
  - Water Use Estimates based on previous planning reports prepared by Baxter
    Woodman Inc. SEWRPC Report PR-052 was used as a guide in selecting water use per day per acre estimates.
- Page 6, Section 2.2 Land Use, revised last sentence to state the following:
  - i For the purposes of this Plan, the 2050 land use, as presented in the Foth 2018 Land Use Study, was used to estimate population, population density, and water demand forecasts.
- Page 13, Section 5 Water Use Forecast, revised first sentence as follows:
  - i Table 2 summarizes the water use for the entire Village based on 2050 Land Use (Foth 2018 Land Use Study) and on estimated water usage rates.
- Page 14, Table 4, revised Table 4 to separate the portion of the Village that was formerly Town of Paris that has been added to the Village in the 2021 Attachment and included in the diversion request. Added the following to table 4:
  - i Average Day Use Former Town of Paris Immediately Served = 0.08 MGD
  - ii Maximum Day Use Former Town of Paris Immediately Served = 0.14 MGD
- 16. Section 2.2 'Land use' states that "SEWRPC 2050 land use was used to estimate population, population density, and water demand forecasts." In addition, the flow tables in the WSSAP (Tables 2, 3, and 4) reference SEWRPC for the land use. It is the DNR's understanding that the '<u>A</u> <u>MultiJurisdictional Comprehensive Plan for Kenosha County: 2035</u>' (not the SEWRPC 2050 Land Use plan) is the basis for these calculations. If that is accurate, please update the sections and citations with the correct source.

#### Response:

• See response to Comment 22. The most current plan is the Foth 2018 Land Use Study that presents the 2050 land use for the Village. The study has been included in Attachment H.



17. Identify and correct the citation for Figure 3 as this land use map does not match SEWRPC's Vision 2050 land use map.

# Response:

- See response to Comment 16, the source has been corrected.
- 18. The DNR notes that the water demand coefficients used cite SEWRPC Water Supply Plan (PR 52), but the Villages demand coefficients only match SEWRPC's demand coefficients for institutional and park and recreational land uses. Describe why the Village chose a different demand coefficient from the SEWRPC Water Supply Plan (PR 52). The DNR does not require that demand estimate coefficient match the SEWRPC Water Supply Plan, but the DNR does require explanation and justification for how the water demand estimate coefficients were derived. Additionally, if the Village's residential demand coefficient use for planning purposes is different than the calculated per capita residential water use provided in the water conservation and efficiency plan, please justify this difference.

| Water Use Type           | (SEWRPC, PR52)<br>Average day<br>water use | Current Plan<br>Average day<br>Water Use | Reasons for Difference  |
|--------------------------|--|--|---|
| Residential              | 70 gpd/capita                              | 70 gpd/capita                            | No difference.  |
| Industrial               | 1,500 gpd/acre                             | 800 gpd/acre                             | Water use based on First Park 94.<br>Similar developments are expected<br>throughout the village. |
| Commercial/Institutional | 800 gpd/acre                               | 800 gpd/acre                             | n/a   |
| Other Municipal Uses     | 100 gpd/acre                               | 100 gpd/acre                             | n/a   |

SEWRPC Demand Estimates (SEWRPC, PR52)

### Response:

- See edits to the table above illustrating the current plans estimate compared to SEWRPC demand estimates from PR52.
- The residential per capita water use was revised to 70 gpd/capita as shown in the table above. This values falls in-line with SEWRPC's planning estimates. The average residential per capita water use in the village is currently 60 gpcd; however, 70 gpcd was selected for planning purposes. This accounts for potential future leakage, unexpected water use, and in general allows for slight oversizing of water supply facilities to ensure adequate water supply.
- 19. The population estimates between the reports are different and the demand numbers also do not match (1,960 people on p. 14 of the WSSAP vs. 1,937 people on p. 12 of the application). Please cite and further discuss how the population projections were developed for the WSSAP. <u>Response:</u>
  - See Comment 5, Comment 6, and Attachment D for additional information regarding population estimates.
- 20. Wis. Stat. 281.348(3)(c)4. requires a WSSAP to identify water supply options to supply water within the service area. The current plan only notes the intergovernmental agreement with Kenosha and



says no other options are viable or reviewed. Please identify additional options that are approvable under other applicable statutes and are cost-effective.

### Response:

- The option of installing groundwater wells was evaluated for serving the diversion area.
- The design well capacity would be maximum daily water use (2.0 MGD) for the diversion area. It is expected this will require three (3) wells and a water treatment plant of 2 MGD capacity.

• The value of a water treatment plant and three groundwater wells is estimated at \$20 million. This value is based on a similar project started in 2010 for the City of Elkhorn, Wisconsin. The \$20 million cost of the project is prohibitive to providing service via wells in the Division Area.

• The intergovernmental agreement between Kenosha and the Village does not allow for the Village of Somers to obtain additional water from other Great Lakes surface water suppliers. Therefore, this option is was not evaluated.

- 21. Please confirm whether the Multi-Jurisdictional Comprehensive Plan for Kenosha County: 2035 is the Village's current comprehensive plan, and whether the Village has amended the plan. Response:
  - The 2035 plan is not the most current comprehensive plan for the Village of Somers. In 2018, the Village approved the Land Use Study prepared by Foth (Foth 2018 Land Use Study) that includes a 2050 land use plan. The report can be found on the Village Website in a link on the following webpage: <u>https://www.somers.org/i-94-corridor-land-use-study-public-information-meeting-standing-room-only/</u>.
  - This land use study is included in Attachment H.



# Attachment A





# **'KR' WATER SERVICE AREA**

Kenosha/Somers Service Area Outlined with Red Border Racine KR Water Service Area Outlined with Green and Hatching.



**'KR' WATER SERVICE AREA** 





# AGREEMENT FOR THE PROVISION OF WATER TO THE RACINE WATER UTILITY BY THE TOWN OF SOMERS FOR A DESIGNATED PORTION VILLAGE OF MT. PLEASANT AREA

· . . .

This Agreement (hereinafter referred to as the "Agreement") is made and entered into on this  $12^{\text{H}}$  day of 3200% by and between the following municipalities, hereinafter collectively referred to as the "Parties":

- a) TOWN OF SOMERS, a town existing under the laws of the State of
  Wisconsin and located in Kenosha County, Wisconsin with its Town Hall at
  7511 12<sup>th</sup> Street, Somers, Wisconsin (the "Town"); and
- b) Town of Somers Water Utility, a utility owned by the Town of Somers and organized under the laws of the State of Wisconsin and located in Kenosha County, WI, with its headquarters at 7511 – 12<sup>th</sup> Street, Somers, Wisconsin (the "Town Utility"); and
- c) CITY OF RACINE, WISCONSIN, a municipal corporation organized under the laws of the State of Wisconsin, with its City Hall at 730 Washington Avenue, Racine, Wisconsin (the "City"); and
- d) CITY OF RACINE WATER UTILITY, a utility organized under the laws of the State of Wisconsin, with its main offices at 800 Center Street, Racine,
   Wisconsin (hereinafter referred to as the "Utility"); and
- e) VILLAGE OF MT. PLEASANT, a municipal corporation organized under the laws of the State of Wisconsin, with its Village Hall at 6126 Durand Avenue, Racine, Wisconsin (the "Village").

WHEREAS, the Town operates a water distribution system and purchases water on a wholesale basis from the Kenosha Water Utility; and WHEREAS, the Utility is desirous of contracting with the Town to obtain Town water to be sold by the Utility to specific residents of the Village located within a designated area of the Village, such water to be sold by the Town to the Utility on a wholesale basis, and the Utility, in turn, to sell such municipal water to such Village residents on a retail basis; and

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WHEREAS, the ultimate plan for servicing this area is by the Racine Water Utility upon extension of future transmission mains.

WHEREAS, the Parties are entering into this Agreement to provide municipal water to the residents of the Village located within the geographical area of the Village shown on Exhibit A of this Agreement.

NOW, THEREFORE, IN CONSIDERATION OF THE MUTUAL COVENANTS CONTAINED HEREIN, THE PARTIES AGREE AS FOLLOWS:

### <u>ARTICLE I</u>

# WHOLESALE PURCHASE OF WATER

1.1 <u>Wholesale Purchase of Water</u>. Pursuant to and subject to the terms and provisions of this Agreement, and the rules/regulations of the Wisconsin Public Service Commission, the Town shall sell water on a wholesale basis to the Utility. The Utility shall, on a wholesale basis, purchase water from the Town through and from the Town's municipal water distribution system to be sold by the Utility to residents/customers located within the geographical area of the Village shown on Exhibit A of this Agreement.

1.2 Quality of Water. The water provided at the master meter(s) by the Town under this Agreement shall be of the same type, purity and quality as the water provided to the other users of the Town's municipal water system. The water shall be provided at a rate of not less than <u>500</u> gallons per day minute at a pressure of at least <u>20</u> psi at the intersection of Highway KR and Meachem Road (22<sup>nd</sup> Avenue), except when unable to do so because of area wide emergencies due to natural catastrophes, equipment breakdowns or similar causes; provided, however, that following such event, water shall be supplied to the Utility in the same manner as it is provided to other users.

1.3 <u>Cost of Water</u>. The Utility shall pay to the Town the wholesale price for such water as may from time to time be determined by the Public Service Commission of the State of Wisconsin ("PSC").

1.4 <u>Time of Payment</u>. The Town shall submit to the Utility a written invoice for the water sold/purchased under this Agreement for each calendar quarter. The moneys due for a particular calendar quarter shall be based upon the readings of the Master Meter located in the vicinity of Meachem Road and Highway KR. The Utility shall construct a meter pit in which the <del>Town</del> Utility will place the master meter <del>facilities</del> equipment. The <del>Town</del> Utility shall own, install and maintain the master meter(s) facilities equipment after their installation. The moneys due for a particular calendar quarter shall be based on the readings of this Master Meter, and shall be reflected in a written invoice which the Town shall submit to the Utility by the 20<sup>th</sup> day of the month following the end of each billing period. The Utility shall pay such invoice within thirty (30) days after the date of the invoice. In the event the Utility fails to pay such an invoice, there shall be a late payment charge of 1-½% per month on the unpaid amount from the date of the invoice, except as otherwise provided by the PSC. The timeframe for billings and payment may, from time to time, be modified by mutual agreement of the Parties.

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1.5 <u>Customers Served</u>. All customers within the Service Area shall be served by the Utility. No customers within the Service Area shall be served directly by the Town.

# <u>ARTICLE II</u>

# SERVICE AREA

2.1 <u>Service Area</u>. The geographical area within the Village which shall receive municipal water service under this Agreement shall be the geographical area designated and shown on attached Exhibit A (the "Service Area"), which is incorporated herein by reference.

2.2 <u>Change in Service Area</u>. The Service Area may be changed from time to time by mutual agreement of the Parties, through an amendment to this Agreement.

# ARTICLE III

### DISTRIBUTION SYSTEM

3.1 <u>Points of Connection</u>. The water to be provided by the Town under this Agreement shall be delivered and supplied to the Utility with a single connection at a mutually agreed location, 22<sup>nd</sup> Avenue and County Hwy. K.R.)

3.2 <u>Location: Distribution Lines</u>. Distribution Lines shall be constructed and installed in the Service Area at such location(s) as the Utility may from time to time elect. The location of Distribution Lines shall be subject to the written approval of the Village, but its approval shall not be unreasonably withheld.

3.3 <u>Time of Installation</u>. Distribution Lines. The Distribution Lines shall be constructed and completed at such time(s) as the Utility elects, subject to requirements of any other existing Agreement between the Utility and the Village.

### ARTICLE IV

#### CONSTRUCTION RESPONSIBILITIES OF UTILITY

4.1 <u>Construction by Village and/or Utility</u>. As between the Parties, the Village (and/or its utility district) shall be responsible for performing the following work with respect to the construction of Distribution Lines and Related Facilities in the Service Area, including:

- a) Preparation of all required engineering plans, drawings, diagrams,
  specifications or other related documents; and
- b) Preparation of all required construction contracts, advertisements of the same for bids, and the awarding of the contract(s) to successful bidder(s); and
- Obtaining all required property rights and/or any other approvals or consents required for the construction project; and

All agreements and contracts entered into for the above purposes shall be entered into directly between the Village and the appropriate third party(ies). These services would be covered under a Developers Agreement between the Village and a third party.

4.2 <u>Approval by Utility</u>. With respect to the steps and procedures described in Section 4.1 of this Agreement, the Utility shall obtain the prior written approval of the Town (which approval shall not be unreasonably withheld) regarding the installation of any water line extensions in the Service Area.

4.3 <u>Inspection by Utility</u>. The Utility shall inspect any and all phases of any construction project(s) being performed pursuant to this Agreement. The Utility agrees to make available to the Town copies of the Utility's inspection reports as requested by the Town.

# <u>ARTICLE V</u>

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# OWNERSHIP AND OPERATION OF THE DISTRIBUTION SYSTEM

5.1 <u>Operation by the Utility</u>. Except to the extent otherwise expressly provided in this Agreement, the Utility shall, as between the Parties, be solely and exclusively responsible for the operation and administration of the Distribution System (described in Sections 3.1 through 3.2) through which the water purchased under this Agreement will be sold at retail by the Utility to the residents/customers of the Village located within the Service Area.

5.2 <u>Ownership of the Water System</u>. The Town's delivery system leading up to the Village's boundaries shall be owned by the Town. The Distribution System described in Article III shall be owned by the Utility.

As the respective owners of components of the Water System, as to their respective portions of the Water System, the Parties shall have all of the rights, entitlements, duties and obligations arising out of such ownership. This shall include, but not be limited to (i) the right to depreciate such components as may be allowed by law, and (ii) the duty to repair, replace and maintain such components.

5.3 <u>Maintenance of Balance of System</u>. The Distribution System described herein shall be connected to the rest of the Town's entire municipal water service system ("Balance of the System"). As between the Parties to this Agreement, the Town shall, at its own cost and expense, maintain in good condition and good working order the Balance of the System so that adequate and sufficient water may be provided as required under this Agreement.

# 5.4 <u>Future Connection Providing Water Through the Racine Water Utility</u>.

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Upon provision of a water piping system providing Racine Water Utility water directly to the Service Area and connection of such system to the Service Area, the following shall take place:

- a) This contract shall thereupon terminate, excepting that obligations arising under this Agreement relating to payment and other liabilities shall continue until satisfied.
- b) The Service Area shall become part of Racine's retail system.
- c) The <del>Town</del> Utility shall close the valve at the master meter installed pursuant to this Agreement and secure the valve in a closed position.
- d) The connection shall be maintained by the Utility in case of emergencies.

5.5 <u>Connections to be in Service Area</u>. Except upon expansion of the Service Area that that is the subject of this Agreement, only properties located within the Service Area described in (and/or revised pursuant to) Article II of this Agreement shall be allowed to connect to the Distribution System described in Article III of this Agreement.

5.6 <u>Emergencies</u>. Upon notice to the Town, the Town shall promptly notify the Utility of any emergency or condition, which may affect the quality or quantity of water provided to the Utility. The Utility shall promptly notify the Town of any emergencies, including, but not limited to, major fire fighting, major hydrant flushing or major water main breaks, which would affect the water pressure or other performance capabilities of the water system within the Utility. The Utility reserves the right to impose water use restrictions in the event of emergencies, consistent with water use restrictions imposed on the remainder of the Utility's Town's service area.

5.7 <u>Residential Equivalent Charges</u> – Prior to receiving retail water service from the Utility, a property owner desiring municipal water service in the Service Area established pursuant to this Agreement shall pay the Utility a residential equivalent connection charge (REC) as determined by the existing retail contract between Utility and Village.

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# ARTICLE VI

### CONTINGENT ON PSC APPROVAL

6.1 <u>Public Service Commission Approval</u>. This Agreement is contingent upon the Parties obtaining the approval of the State of Wisconsin Public Service Commission for the municipal water service system proposed to be created and established hereunder, excepting that such approval shall not be required for the provisions of section 5.8 hereof. The Parties shall jointly seek such approval from the Public Service Commission.

### ARTICLE VII

#### DEFAULT AND SPECIAL REMEDY

7.1 <u>Definition of Default</u>. A Party shall be in default of this Agreement if such Party fails to remedy or cure any failure of performance or compliance within thirty (30) days after receiving from the other Party(ies) a written notice describing such failure of performance or compliance. In the event the remedy or cure for such failure, other than the failure to pay money, is of such a nature that it cannot reasonably be completed within such thirty-day time period, then a Party shall be in default of this Agreement if such Party fails to commence the remedying/curing of such failure within thirty (30) days after receiving from the other Party(ies) written notice of the same, and then thereafter proceeding with such remedying/curing of said failure(s) with due diligence. 7.2 <u>All Remedies Available</u>. Upon default, the nondefaulting Party(ies) shall have available to it all remedies available under the law.

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### ARTICLE VIII

#### GENERAL PROVISIONS

8.1 <u>Governing Law</u>. This Agreement shall be governed, controlled, interpreted and construed by and under the laws of the State of Wisconsin.

8.2 <u>No Strict Construction</u>. The language used in this Agreement shall be deemed to be the language chosen by the Parties hereto to express their mutual intent, and the rules of strict construction will not be applied against any Party.

8.3 <u>Amendments</u>. This Agreement may be modified only by written amendment signed by all Parties.

8.4 <u>Assignment</u>. This Agreement shall not be assigned by any Party without the prior written consent of all other Parties.

8.5 <u>Notices</u>. Any notices required to be given under this Agreement by any Party to the other Parties shall be in writing, and shall be delivered to the other Parties either by (i) personal service, or by (ii) certified mail in a postpaid envelope addressed to the other Parties at the address specified on the first page of this Agreement, or to such other address as may, from time to time, be designated in writing by the Parties.

8.6 <u>Successor to Utility</u>. Utility is a utility created by City under the laws of the State of Wisconsin, and City accordingly may, should it ever so desire, change, modify and/or dissolve Utility. In the event City ever does change, modify and/or dissolve Utility such that Utility is not able to perform its duties and responsibilities under this Agreement, and in the further event City does not create a successor entity which shall perform such duties and responsibilities, then City shall perform the duties and responsibilities imposed upon Utility under this Agreement. 8.7 <u>Term of Agreement</u>. This Agreement shall become effective as of the date first stated above, and shall be implemented as of the date that the contingency contained in Section 6.1 is fulfilled. Thereafter, except as otherwise provided, this Agreement shall continue in full force and effect until the earlier of any of the following dates is attained:

1 1 1

- a) The date which is ten (10) years after the below-described date of execution of this Agreement by the Parties; or
- b) An effective termination date of this Agreement that is agreed to, in writing, by all the Parties to this Agreement; or
- c) The date that the Utility provides water to the Service Area through its own distribution system.

IN WITNESS WHEREOF, the above-named Parties, through their duly authorized

undersigned representatives, have caused this Agreement to be executed this 134

, 2006. day of

TOWN OF SOMERS By: Carol Fischer

Town Chairman

CITY OF RACINE,

Attest: Kay Golergen

**Town Clerk** 

TOWN OF SOMERS WATER UTILITY

Countersigned:

ance Director

By: Gary Becker

Mayor

barion-711a Attest: ( Janice ( Janice Johnson-Martin **City Clerk** 

CITY OF-RACINE WATER UTILITY By Alderman Ronald Hart President

Board of Waterworks, Commissioners Daniel Wright City Attorney

VILLAGE OF M LEASANT By: Michael Andreasen President Amaric Attest: Julier Edmands Village Clerk

By:

# Attachment B



# Somers - Boundaries 2008 to Present



2008 Town Limits



2012 Town Limits





2015 Village Limits (Partially Incorporated)



2016 Village Limits (Incorporated)





2021 Current Village Limits (January Attachment)



# Attachment C





Figure 1





Figure 3





Figure 4



Figure 5





Figure 6



# Attachment D



# **Historical Population**

Historical population data obtained from the Wisconsin Department of Administration (DOA) for the entire Village (and Town) of Somers is summarized in the table below. The Village of Somers partially incorporated in 2015 (fully in 2016). The estimated historical population for the entire Village is summarized below and calculated by subtracting the average population in the Town from 2006 through 2015 from the Town's annual DOA Population estimate.

| Year | Town of Somers DOA<br>Population | Village of Somers<br>Population | Estimated Historical<br>Village of Somers<br>Population <sup>2</sup> |
|------|----------------------------------|---------------------------------|--|
| 2006 | 9,389                            | -                               | 8,148  |
| 2007 | 9,361                            | -                               | 8,120  |
| 2008 | 9,452                            | -                               | 8,211  |
| 2009 | 9,516                            | -                               | 8,275  |
| 2010 | 9,597 <sup>1</sup>               | -                               | 8,356  |
| 2011 | 9,517                            | -                               | 8,276  |
| 2012 | 9,463                            | -                               | 8,222  |
| 2013 | 9,369                            | -                               | 8,128  |
| 2014 | 9,512                            | -                               | 8,271  |
| 2015 | 9,514                            | -                               | 8,273  |
| 2016 | 1,234                            | 8,462                           | 8,462  |
| 2017 | 1,225                            | 8,615                           | 8,615  |
| 2018 | 1,255                            | 8,827                           | 8,827  |
| 2019 | 1,252                            | <b>8,37</b> 1 <sup>3</sup>      | 8,371  |

Footnote:

<sup>1</sup> Population data from the 2010 Census was used in place of the DOA population Projection.

<sup>2</sup> Data prior to 2015 was estimated by subtracting the average town DOA population estimates for 2016 to 2019 from the total town and village DOA population estimate. Data after 2015 is the Village

of Somers DOA population estimate.

<sup>3</sup> Data for 2019 was obtained from the DOA's estimate for the Village of Somers in July 2019.

### Future Land Use and Projected Population

The projected population of the entire Village of Somers was estimated using future residential type land use acreage and assumptions for residents per acre for each type of land use. The following table summarizes the assumptions used in this report.


## Village of Somers - Summary of Historical and Projected Population

| Assumptions  | Low to Medium<br>Density   | Medium Density | High Density | Mixed Use |  |  |  |
|--|--|----------------|--------------|-----------|--|--|--|
| Units per Acre of<br>Residential Land<br>Use (Assumed) | 2  | 3              | 10           | 1.5       |  |  |  |
| 2018 Average<br>Persons Per<br>Household               | 2.57 Persons per household<br>Source: Based on U.S. Census Bureau Quick Facts for the Village of Somers 2018 |                |              |           |  |  |  |

The table below summarizes the total developable area by 2050 Land Use within the entire Village of Somers. Note, developable land excludes floodplains and assumes that 70% of a parcel will be developable in the future due to roads, natural areas, etc.

| 2050 Land Use                  | Area (acres) | Units / Acre | Total Estimated<br>Units | Calculated<br>Population |  |  |  |  |
|--------------------------------|--------------|--------------|--------------------------|--------------------------|--|--|--|--|
| Low to Medium<br>Density       | 1,633        | 2            | 3,266                    | 8,393                    |  |  |  |  |
| Medium Density                 | 4,303        | 3            | 12,909                   | 33,177                   |  |  |  |  |
| High Density                   | 298          | 10           | 2,979                    | 7,658                    |  |  |  |  |
| Mixed Use                      | 153          | 1.5          | 229                      | 588                      |  |  |  |  |
| Total Population (2050) 49,816 |              |              |                          |                          |  |  |  |  |

## Projected Population/Account Growth

A constant growth rate was used to estimate future village population and population served between 2019 and 2050. The growth rates vary by customer sector and are generally higher than typical growth rates in other municipalities. In 2020 a multifamily development was constructed that added 29 units to the Village. The development has already reached near maximum capacity with renters. Additional multifamily developments are currently under review or in the planning stage and are scheduled for construction late 2021. Therefore, the growth rates selected for the purpose of estimating intermediate populations between 2019 and 2050 are consistent with the current trend in the Village.

The table below summarizes the projected Village population, population served, residential and multifamily accounts, and the average daily water use (MGD) every 5 years over the planning period.

| Year | Projected<br>Village<br>Population | Residential<br>Customers<br>Served<br>(Meters) <sup>1</sup> | Multifamily<br>Customers<br>Served<br>(Meters) <sup>2</sup> | Population<br>Served | % of Total<br>Population<br>Served | Average Day<br>Demand<br>(MGD) <sup>3</sup> |
|------|------------------------------------|---|---|----------------------|------------------------------------|---|
| 2019 | 8,371                              | 1,044   | 156   | 3,942                | 38%                                | 0.36  |
| 2020 | 8,867                              | 1,262   | 174   | 4,200                | 42%                                | 0.45  |
| 2025 | 11,821                             | 1,526   | 302   | 5,877                | 69%                                | 0.63  |
| 2030 | 15,759                             | 1,845   | 524   | 8,491                | 82%                                | 0.93  |
| 2035 | 21,010                             | 2,231   | 910   | 12,670               | 89%                                | 1.42  |
| 2040 | 28,010                             | 2,231   | 1,579   | 19,489               | 94%                                | 2.27  |
| 2045 | 37,343                             | 2,697   | 2,740   | 30,801               | 98%                                | 3.88  |
| 2050 | 49,816                             | 3,266   | 4,754   | 49,816               | 100%                               | 7.08  |

Footnotes:

<sup>1</sup> 2.57 people per housing unit per the U.S. Census Bureau 2018 Statistics for the Village of Somers.

<sup>2</sup> 3.39 units per multifamily meter calculated by total multifamily acreage and units per acre.

<sup>3</sup> Average day demand was estimated from the number of accounts projected for each year based on growth rate. See 'Somers Projected Water Customer Meters' figure on page 3 of this document.





|      | A           |         | Annual Wate | r Sales (MG | iY)     |             |             | Total Salas | Total       | Non-Revo | enue Water | Percent      | Percent |           |
|------|-------------|---------|-------------|-------------|---------|-------------|-------------|-------------|-------------|----------|------------|--------------|---------|-----------|
| Year | Residential | Com     | mercial     | Industrial  | Public  | Multifamily | Other Water | Sales for   | Total Sales | Pumpage  | Authorized | Water Losses | Pumpage | Accounted |
|      | Metered     | Metered | Unmetered   | Metered     | Metered | Residential | Sales       | Resales     | (MGY)       | (MGY)    | Uses (MGY) | (MGY)        | Metered | For       |
| 2006 | 50.96       | 37.20   | 23.09       | 0.00        | 19.36   |             | 0.00        | 0.52        | 131.13      | 145.60   | 0.03       | 14.44        | 90.1%   | 90.1%     |
| 2007 | 59.94       | 40.53   | 0.05        | 0.00        | 32.81   |             | 0.31        | 0.01        | 133.64      | 163.94   | 28.44      | 1.86         | 81.5%   | 98.9%     |
| 2008 | 56.81       | 40.24   | 0.05        | 0.00        | 25.96   |             | 0.13        | 0.16        | 123.34      | 154.88   | 30.78      | 0.77         | 79.6%   | 99.5%     |
| 2009 | 54.02       | 43.54   | 0.00        | 0.00        | 28.52   |             | 3.32        | 4.32        | 133.72      | 152.16   | 0.00       | 18.44        | 87.9%   | 87.9%     |
| 2010 | 68.09       | 61.00   | 0.00        | 0.00        | 17.17   |             | 0.00        | 1.04        | 147.30      | 163.12   | 1.35       | 14.47        | 90.3%   | 91.1%     |
| 2011 | 53.58       | 54.43   | 0.00        | 0.00        | 37.51   |             | 0.00        | 0.87        | 146.38      | 162.97   | 11.34      | 5.25         | 89.8%   | 96.8%     |
| 2012 | 60.29       | 66.13   | 0.00        | 0.00        | 25.79   |             | 0.00        | 1.65        | 153.86      | 179.70   | 0.39       | 25.46        | 85.6%   | 85.8%     |
| 2013 | 50.76       | 61.25   | 0.00        | 0.00        | 37.21   |             | 0.00        | 1.13        | 150.34      | 145.19   | 0.35       | (5.50)       | 103.5%  | 103.8%    |
| 2014 | 45.35       | 44.36   | 0.00        | 0.00        | 38.36   |             | 0.00        | 1.12        | 129.19      | 144.67   | 0.17       | 15.32        | 89.3%   | 89.4%     |
| 2015 | 47.51       | 43.81   | 0.00        | 0.00        | 33.17   |             | 0.14        | 1.35        | 125.97      | 145.37   | 0.16       | 19.24        | 86.7%   | 86.8%     |
| 2016 | 52.70       | 46.54   | 0.00        | 0.00        | 36.12   |             | 1.89        | 1.63        | 138.87      | 158.84   | 0.92       | 19.05        | 87.4%   | 88.0%     |
| 2017 | 48.38       | 36.05   | 0.00        | 1.19        | 33.23   | 13.00       | 0.24        | 1.73        | 133.82      | 159.88   | 0.92       | 25.14        | 83.7%   | 84.3%     |
| 2018 | 49.46       | 26.73   | 0.00        | 2.36        | 33.12   | 29.79       | 0.33        | 1.71        | 143.50      | 188.40   | 14.79      | 30.11        | 76.2%   | 84.0%     |
| 2019 | 47.19       | 16.66   | 0.00        | 0.69        | 30.58   | 34.57       | 0.26        | 1.22        | 131.17      | 173.96   | 11.55      | 31.50        | 75.4%   | 82.0%     |

#### **VILLAGE OF SOMERS - WATER SALES AND PUMPAGE HISTORY**

Maximum value in each category=

#### Notes:

From 2000 to 2007, "Authorized System Uses" included estimated water used in flushing or used in water treatment/production/quality/maintenance, and unaccounted water as well as losses. In 2008, PSC reports were updated to document estimates of Water Loss due to main, service, and hydrant leaks/breaks. Prior to 2014, Multifamiliy Residential was reported as Commercial.

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|           |             | Num        | ber of Custo | mers   |   |       |  |
|-----------|-------------|------------|--------------|--------|---|-------|--|
| Year      | Residential | Commercial | Industrial   | Public | Multifamily<br>Residential <sup>1</sup> | Total |  |
| 2006      | 870         | 116        | 0            | 12     | -                                       | 998   |  |
| 2007      | 880         | 109        | 0            | 14     | -                                       | 1,003 |  |
| 2008      | 896         | 111        | 0            | 15     | -                                       | 1,022 |  |
| 2009      | 929         | 130        | 0            | 16     | -                                       | 1,075 |  |
| 2010      | 925         | 141        | 0            | 18     | -                                       | 1,084 |  |
| 2011      | 946         | 128        | 0            | 17     | -                                       | 1,091 |  |
| 2012      | 936         | 120        | 0            | 16     | -                                       | 1,072 |  |
| 2013      | 943         | 120        | 0            | 16     | -                                       | 1,079 |  |
| 2014      | 960         | 207        | 0            | 9      | 0                                       | 1,176 |  |
| 2015      | 959         | 205        | 0            | 9      | 0                                       | 1,173 |  |
| 2016      | 1,206       | 212        | 0            | 9      | 0                                       | 1,427 |  |
| 2017      | 967         | 152        | 2            | 8      | 66                                      | 1,195 |  |
| 2018      | 992         | 157        | 2            | 8      | 68                                      | 1,227 |  |
| 2019      | 1,005       | 69         | 2            | 8      | 156                                     | 1,240 |  |
| Footnote: |             |            |              |        |   |       |  |

## HISTORICAL NUMBER OF CUSTOMERS SERVED

 <sup>1</sup> Prior to 2014, Multifamily Residential was reported as a part of Commercial.

 I:\Crystal Lake\SOMEV\161104-Water Diversion\30-ReportStudy\Work\[WaterPumpage\_Supply\_Summary.xlsx]Customers

Maximum value in each category=



|      |                                  | Population Gallons per Capita per Day |             |            |            |        |   |                          |       |  |
|------|----------------------------------|---------------------------------------|-------------|------------|------------|--------|---|--------------------------|-------|--|
| Year | Total<br>Population <sup>1</sup> | Population<br>Served <sup>2</sup>     | Residential | Commercial | Industrial | Public | Multifamily<br>Residential <sup>3</sup> | Non-Revenue<br>Water Use | Total |  |
| 2006 | 8148                             | 2,236                                 | 62.4        | 45.6       | 0.0        | 23.7   | -                                       | 17.7                     | 149   |  |
| 2007 | 8120                             | 2,262                                 | 72.6        | 49.1       | 0.0        | 39.7   | -                                       | 36.7                     | 198   |  |
| 2008 | 8211                             | 2,303                                 | 67.6        | 47.9       | 0.0        | 30.9   | -                                       | 37.5                     | 184   |  |
| 2009 | 8275                             | 2,388                                 | 62.0        | 50.0       | 0.0        | 32.7   | -                                       | 21.2                     | 166   |  |
| 2010 | 8356                             | 2,377                                 | 78.5        | 70.3       | 0.0        | 19.8   | -                                       | 18.2                     | 187   |  |
| 2011 | 8276                             | 2,431                                 | 60.4        | 61.3       | 0.0        | 42.3   | -                                       | 18.7                     | 183   |  |
| 2012 | 8222                             | 2,406                                 | 68.7        | 75.3       | 0.0        | 29.4   | -                                       | 29.4                     | 203   |  |
| 2013 | 8128                             | 2,424                                 | 57.4        | 69.2       | 0.0        | 42.1   | -                                       | (5.8)                    | 163   |  |
| 2014 | 8271                             | 2,467                                 | 50.4        | 49.3       | 0.0        | 42.6   | -                                       | 17.2                     | 159   |  |
| 2015 | 8273                             | 2,465                                 | 52.8        | 48.7       | 0.0        | 36.9   | -                                       | 21.6                     | 160   |  |
| 2016 | 8462                             | 3,099                                 | 46.6        | 41.1       | 0.0        | 31.9   | -                                       | 17.7                     | 137   |  |
| 2017 | 8615                             | 3,060                                 | 53.3        | 32.3       | 1.1        | 29.7   | 62.0                                    | 23.3                     | 202   |  |
| 2018 | 8827                             | 3,142                                 | 53.2        | 23.3       | 2.1        | 28.9   | 137.9                                   | 39.2                     | 284   |  |
| 2019 | 8371                             | 3,942                                 | 50.1        | 11.6       | 0.5        | 21.3   | 69.7                                    | 29.9                     | 183   |  |
|      |                                  | Average                               | 59.7        | 48.2       | 0.3        | 32.3   | 89.8                                    | 23.0                     | 193.3 |  |

#### HISTORICAL PER CAPITA CONSUMPTION

Footnotes:

<sup>1</sup> Total population for the Village of Somers was estimated between 2006 and 2016 when the Village incorporated. The estimated Village population between 2006 and 2015 was estimated by subtracting the average Town population in 2016 through 2019 from the Town population between 2006 and 2015. Population data sources include Wisconsin Department of Administration and the United States Census Bureau for census years.

<sup>2</sup> Population served was estimated using residential and multi family customer meters multiplied by the average persons per household of 2.57. A weighted average of 3.39 units per multifamily account was assumed. Per Capita water use for residential and multifamily residential was estimated based on their respective population served for 2017 through 2019.

<sup>3</sup> Prior to 2014, Multifamily Residential was reported as a part of Commercial.

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Maximum Value =



## Village of Somers - Water Sales and Pumpage Summary

| Month     | Monthly | Percentage | Percentage |
|-----------|---------|------------|------------|
| Month     | (MG)    | Pumpage    | Pumpage    |
| January   | 12.59   | 7.2%       | 86.9%      |
| February  | 12.67   | 7.3%       | 87.4%      |
| March     | 12.67   | 7.3%       | 87.4%      |
| April     | 14.70   | 8.4%       | 101.4%     |
| Мау       | 13.09   | 7.5%       | 90.3%      |
| June      | 12.54   | 7.2%       | 86.5%      |
| July      | 22.19   | 12.8%      | 153.1%     |
| August    | 18.12   | 10.4%      | 125.0%     |
| September | 16.84   | 9.7%       | 116.2%     |
| October   | 12.99   | 7.5%       | 89.6%      |
| November  | 12.83   | 7.4%       | 88.5%      |
| December  | 12.74   | 7.3%       | 87.9%      |
| Total     | 173.96  | 100.0%     |            |

#### **2019 SEASONAL PUMPAGE VARIATIONS**





| Year | Average Day<br>Pumpage (MGD) | Maximum Day<br>Pumpage (MGD) | Date of Maximum<br>Day | Ratio of Maximum to<br>Average Day |  |  |  |  |  |  |  |
|------|------------------------------|------------------------------|------------------------|------------------------------------|--|--|--|--|--|--|--|
| 2006 | 0.40                         | -                            |                        | 0.00                               |  |  |  |  |  |  |  |
| 2007 | 0.45                         | -                            |                        | 0.00                               |  |  |  |  |  |  |  |
| 2008 | 0.42                         | -                            |                        | 0.00                               |  |  |  |  |  |  |  |
| 2009 | 0.42                         | -                            |                        | 0.00                               |  |  |  |  |  |  |  |
| 2010 | 0.45                         | -                            |                        | 0.00                               |  |  |  |  |  |  |  |
| 2011 | 0.45                         | -                            |                        | 0.00                               |  |  |  |  |  |  |  |
| 2012 | 0.49                         | -                            |                        | 0.00                               |  |  |  |  |  |  |  |
| 2013 | 0.40                         | -                            |                        | 0.00                               |  |  |  |  |  |  |  |
| 2014 | 0.40                         | -                            |                        | 0.00                               |  |  |  |  |  |  |  |
| 2015 | 0.40                         | 0.60                         | 15 October             | 1.49                               |  |  |  |  |  |  |  |
| 2016 | 0.44                         | 0.73                         | 29 July                | 1.68                               |  |  |  |  |  |  |  |
| 2017 | 0.44                         | 0.72                         | 15 November            | 1.64                               |  |  |  |  |  |  |  |
| 2018 | 0.52                         | 0.88                         | 15 July                | 1.70                               |  |  |  |  |  |  |  |
| 2019 | 0.48                         | 0.84                         | 15 October             | 1.75                               |  |  |  |  |  |  |  |

#### DAILY PUMPAGE VARIATIONS

#### Note

No data was available prior to 2015 for maximum daily pumpage. Note only 2018 daily maximum was not due to a water main break or hydrant flushing. Therefore, a maximum day ratio of 1.70 times average day demand was selected for the purposes of this report.

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# Attachment E



## APPENDIX "C"

(1) <u>Amount–Residential Users</u>. The Developer or individual residential users shall pay a sanitary sewer connection fee to the Village Clerk/Treasurer for each installation in the amount of Two Thousand Eight Hundred (\$2,800.00) Dollars at the time of application for the connection permit for a single-family residential dwelling or the first unit of a multi-family residential building and Two Thousand (\$2,000.00) Dollars for the second unit and One Thousand Six Hundred (\$1,600.00) Dollars for the third and each subsequent unit in multi-family buildings.

(2) <u>Amount–Non-Residential Users</u>. The Developer or owner shall pay to the Village Clerk/Treasurer as a condition of approval by the Village Board of a final plat, site plan, certified survey map, planned unit development or condominium plat a sanitary sewer connection fee of Two Thousand Eight (\$2,800.00) Dollars multiplied by the residential equivalency unit (REU) ratio for the applicable water meter size and type from the table set forth below for each buildable lot or unit included in the final plat, site plan, certified survey map, planned unit development or condominium plat. The total sanitary sewer connection fee attributable to each buildable lot or unit within the proposed non-residential use development shall be payable upon the issuance of a building permit, unless otherwise agreed by the Village and the Developer by written Development Agreement.

| Meter Size<br>(Inches)                | Meter Type   | AWWA Standards<br>Flow (GPM) | REU Ratio |
|---------------------------------------|--------------|------------------------------|-----------|
| <sup>3</sup> ⁄ <sub>4</sub> " or less | Displacement | 15                           | 1.0       |
| 1                                     | Displacement | 25                           | 1.7       |
| 1½                                    | Displacement | 50                           | 3.3       |
| 2                                     | Displacement | 80                           | 5.3       |
| 2                                     | Compound     | 80                           | 5.3       |
| 2                                     | Turbine      | 100                          | 6.7       |
| 3                                     | Compound     | 160                          | 10.7      |
| 3                                     | Turbine      | 240                          | 16.0      |
| 4                                     | Compound     | 250                          | 16.7      |
| 4                                     | Turbine      | 420                          | 28.0      |
| 6                                     | Compound     | 500                          | 33.3      |
| 6                                     | Turbine      | 920                          | 61.3      |
| 8                                     | Compound     | 800                          | 53.3      |
| 8                                     | Turbine      | 1600                         | 106.7     |
| 10                                    | Compound     | 1150                         | 76.7      |
| 10                                    | Turbine      | 2500                         | 166.7     |

# Attachment F



#### **CEM# 1 Pressure Management**

- Purpose: The purpose this measure is to monitor distribution system pressures to observe variations that may be due to leaks and manage pressures in a way that reduce the volume of water lost during a leak. This program requires the Village install automatic pressure monitoring equipment in each pressure zone. Pressure monitors will be located at the following:
  - KWU Zone 1 Fire Station No. 2
  - KWU Zone 2 Pike Creek Sewage Lift Station
  - Somers Zone (West of the Divide) Future Water Transfer Station on 18th Street
- Costs: The costs associated with pressure monitoring equipment is expected to include connections to the Village's Supervisory Controls and Data Acquisition (SCADA) system. B&W estimates approximately \$15,000 upfront cost to install meters and an additional \$5,000 after the equipment reaches its 20 year life expectancy.
- Savings: The savings from implementing this measure is estimated by the ability to detect three leaks per year, at a flow of 1,000 gallons per minute (gpm), for one hour. The one-hour duration is enough time for the leak to be detected and village staff to arrive onsite and close valves to stop the leak. The volume of water savings is approximately 180,000 gallons of water per year.

#### CEM# 2 & 3 Residential/Multifamily Surveys

- Purpose: The purpose of these measures is to provide multifamily (CEM#2) and single family (CEM#3) residential users with a water use audit survey if the customer reports a high water bill. The village will provide staff to perform an in-home inspection of sinks, faucets, toilets, showers, and plumbing to locate potential leaks. The need for the survey will be facilitated by the resident after observing a higher than average water bill in a particular month. These measures will require implementing Automatic Metering Infrastructure, which proposes to install automatic meter reading throughout the village. See description under CEM#13.
- Costs: The initial setup and marketing of the program is expected to cost approximately \$3,000. Each survey is expected to cost approximately \$1,000 for multifamily (CEM#2) and \$500 for residential (CEM#3). B&W anticipates an average of 200 surveys per year for the duration of 5 years after the program is initiated.
- Savings: The volume of water savings from implementing this measure is 4,015 gallons per year per multifamily customer and 12,373 gallons per year per residential customer.

#### CEM# 4 & 5 Residential/Multifamily Low Flow Showerhead Rebates

- Purpose: The purpose of these measures is to provide a rebate program for single family residential (CEM#4) and multifamily (CEM#5) low flow showerhead replacement. The goal is to replace older showerheads with new WaterSense low-flow showerheads. A rebate of \$20 per showerhead is consistent with other Wisconsin municipalities using these conservation measures.
- Costs: The initial setup and marketing of the program is expected to cost approximately \$1,000 for each measure. Each rebate costs the village \$20 per showerhead. B&W anticipates approximately 2 single family showerhead rebates per household and 25 households per year. B&W anticipates approximately 1 multifamily showerhead rebate per multifamily customer and 50 customers per year. Additional overhead required to process each rebate is expected to be approximately \$10 per rebate, which brings the total cost to \$30 per rebate.
- Savings: The volume of water savings from implementing these measures is 2,062 gallons per year per single family rebate and 1,898 gallons per year per multifamily rebate.



## Village of Somers - Recommendations for Conservation Programs

#### CEM# 6 & 7 Residential/Multifamily High Efficiency Toilet Rebates

- Purpose: The purpose of these measures is to provide a rebate program for single family residential (CEM#4) and multifamily (CEM#5) high efficiency toilets. The goal is to replace older high water use toilets with new WaterSense high efficiency toilets. A rebate of \$100 per toilet is consistent with other Wisconsin municipalities using these conservation measures.
- Costs: The initial setup and marketing of the program is expected to cost approximately \$1,000 for each measure. The rebate costs the village \$100 per high efficiency toilet. B&W anticipates approximately 1 toilet rebate per single family or multifamily customer and approximately 25 customers for each per year. Additional overhead required to process each rebate is expected to be approximately \$20 per rebate, which brings the total cost to \$120 per rebate.
- Savings: The volume of water savings from implementing these measures is 9,667 gallons per year per single family or multifamily rebate.

#### CEM# 8 Commercial Valve - Type Ultra Low Flush Toilet Rebate

- Purpose: The purpose of this measure is to provide a rebate program for commercial users to install high efficiency toilets. The goal is to replace older high water use toilets with new WaterSense ultra low flush toilets. A rebate of \$100 per toilet is consistent with other Wisconsin municipalities using these conservation measures.
- Costs: The initial setup and marketing of the program is expected to cost approximately \$1,000. The rebate costs the village \$100 per ultra-low flush toilet. B&W anticipates approximately 5 toilet rebates per year. Additional overhead required to process each rebate is expected to be approximately \$20 per rebate, which brings the total cost to \$120 per rebate.
- Savings: The volume of water savings from implementing this measure is 10,585 gallons per year per rebate.

#### CEM# 9 Residential Irrigation - Voluntary Sprinkling Restrictions

- Purpose: The purpose of this measure is to implement voluntary lawn sprinkling restrictions using the Village website and marketing an insert with customer bills. The end of this document provides recommendations for information to be added to the Village's website regarding voluntary irrigation measures.
- Costs: The initial setup and marketing of the program is expected to cost approximately \$1,000. There are no annual costs for the utility to implement this measure as it is voluntary.
- Savings: The volume of water savings from implementing this measure is estimated at 18,080 gallons per year per single family home.

#### CEM# 10 Residential 4.0 Washer - Multifamily Common Area

- Purpose: The purpose of this measure is to cost share with the participant to install efficient washer models in multifamily housing with a common area. The plan is to provide a cost share with a multifamily apartment complex to install an efficient washer.
- Costs: The initial setup and marketing of the program is expected to cost approximately \$2,000. B&W anticipates approximately \$500 per replacement and 10 washer replacements per year between 2023 and 2030.
- Savings: The volume of water savings from implementing this measure is estimated at 30,000 gallons per washer replacement per year.



#### CEM# 11 Water Reuse

Purpose: The purpose of this measure is to determine water savings opportunities in the operation of water supply, treatment, and distribution facilities. The Village does not own or operate the treatment facilities as it purchases water wholesale from KWU. There are no water savings opportunities through water reuse.

#### CEM# 12 Automatic Metering Infrastructure

- Purpose: The purpose of this measure is to install new Automatic Metering Infrastructure (AMI) throughout the Village. AMI entails installing meters compatible with AMI software and radio system. The AMI system would reduce the number of staff hours needed to manually read the meters on premise, allow for online billing and more frequent billing of customers, and enable customer surveys in CEM#2, CEM#3. Additional benefits of AMI include the ability of customers to compare their own water use with their neighbors to be more aware of how much water they use monthly.
- Costs: The initial setup of the program is expected to cost approximately \$800,000 total. B&W estimated the cost from a similar municipality nearby that has recently purchased an AMI system.
- Savings: No water savings are expected from installing new meters; however, installing the meters will enable the village to implement and effectively monitor the impacts of each conservation measure.

The following table summarizes the Net Present Value of each measure. Note, red indicates the measure is not cost effective and should not be implemented. Additionally, the cost/benefit ratios of the residential showerhead program for single and multifamily is too close to consider the measures as profitable for the village and should not be implemented.

| Class                | Activity Nama                          | Total         | B/C   | Prese     | nt Value    |
|----------------------|--|---------------|-------|-----------|-------------|
| Class                | Activity Name                          | NPV           | Ratio | Benefit   | Cost        |
| Utility              | Pressure Management                    | \$43,853      | 3.4   | \$62,358  | \$18,505    |
| Multi Family         | Residential Surveys, MF                | (\$3,916,428) | 0     | \$122,216 | \$4,038,644 |
| Single Family        | Residential Surveys, SF                | (\$1,644,078) | 0.2   | \$376,632 | \$2,020,710 |
| Single Family        | Residential LF Showerhead, SF          | \$3,055       | 1.1   | \$34,249  | \$31,194    |
| Multi Family         | Residential LF Showerhead, MF          | \$327         | 1     | \$31,521  | \$31,194    |
| Single Family        | Residential HE Toilets, SF             | \$93,590      | 2.3   | \$164,192 | \$70,602    |
| Multi Family         | Residential HE Toilets, MF             | \$26,376      | 1.4   | \$96,978  | \$70,602    |
| Commercial           | CII Valve-Type ULFT Rebate             | \$12,276      | 1.9   | \$25,309  | \$13,033    |
| Single Family        | Voluntary Sprinkling Restrictions, SF  | \$37,781      | 41.8  | \$38,706  | \$925       |
| Multi Family         | Residential 4.0 Washer, MF Common Area | (\$8,959)     | 0.8   | \$27,504  | \$36,464    |
| Subtotal Conservati  | Subtotal Conservation Activities       |               | 0.2   |           |             |
| Total With Program   | (\$5,856,691)                          | 0.1           |       |           |             |
| Total of Positive Me | easures                                | \$217,258     | 1.9   |           |             |



# Attachment G



## Village of Somers - AWE Conservation Tracking Tool Inputs/Results

Note: Input data was provided to the Village by Baxter & Woodman, Inc. (B&W) to assist in setting up the tool for analysis. The Village then provided results from the tool to B&W to respond to the Department of Natural Resources address comments on evaluating additional conservation measures.

## Section 1 - Common Assumptions

## **Population, Housing, and Account Forecasts**

| Population & Housing         | 2019  | 2020  | 2025  | 2030  | 2035   | 2040   | 2045   | 2050   |
|------------------------------|-------|-------|-------|-------|--------|--------|--------|--------|
| Population                   | 3,942 | 4,200 | 5,877 | 8,491 | 12,670 | 19,489 | 30,801 | 49,816 |
| Single Family Dwelling Units | 1,005 | 1,044 | 1,262 | 1,526 | 1,845  | 2,231  | 2,697  | 3,266  |
| Multi Family Dwelling Units  | 156   | 174   | 302   | 524   | 910    | 1,579  | 2,740  | 4,754  |

## **Number of Accounts**

| Single Family | 1,005 | 1,044 | 1,262 | 1,526 | 1,845 | 2,231 | 2,697 | 3,266 |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Multi Family  | 156   | 174   | 302   | 524   | 910   | 1,579 | 2,740 | 4,754 |
| Commercial    | 69    | 75    | 116   | 179   | 277   | 427   | 660   | 1,018 |
| Industrial    | 2     | 2     | 7     | 18    | 49    | 134   | 365   | 992   |
| Institutional | 8     | 8     | 11    | 15    | 20    | 27    | 35    | 47    |
| Not in use    |       |       |       |       |       |       |       |       |
| Not in use    |       |       |       |       |       |       |       |       |
| Not in use    |       |       |       |       |       |       |       |       |
| Not in use    |       |       |       |       |       |       |       |       |

## **Financial Assumptions**

| Dollar Base Year      | 2021 |
|-----------------------|------|
| Annual Inflation Rate | 2.0% |
| Nominal Interest Rate | 4.0% |

| Utility Rates in 2019 | Avera    | ge Class                          | Rate (2021 | Dollars)   | Annual Rate of Increase |        |             |        |  |  |
|-----------------------|----------|-----------------------------------|------------|------------|-------------------------|--------|-------------|--------|--|--|
|                       | Water    | Water Sewer Electricity Gas Water |            |            |                         | Sewer  | Electricity | Gas    |  |  |
|                       | (\$/Thou | (\$/Thou                          |            |            | Water Rates             | Sewer  | Electric    | Gas    |  |  |
|                       | Gal)     | Gal)                              | (\$/KWh)   | (\$/Therm) | (%/Yr)                  | Rates  | Rates       | Rates  |  |  |
| Customer Class        |          |                                   |            |            | (,,,,,,)                | (%/Yr) | (%/Yr)      | (%/Yr) |  |  |
| Single Family         | \$8.67   | \$0.00                            | \$0.00     | \$0.00     | 2.0%                    | 0.0%   | 0.0%        | 0.0%   |  |  |
| Multi Family          | \$5.73   | \$0.00                            | \$0.00     | \$0.00     | 2.0%                    | 0.0%   | 0.0%        | 0.0%   |  |  |
| Commercial            | \$6.16   | \$0.00                            | \$0.00     | \$0.00     | 2.0%                    | 0.0%   | 0.0%        | 0.0%   |  |  |
| Industrial            | \$6.21   | \$0.00                            | \$0.00     | \$0.00     | 2.0%                    | 0.0%   | 0.0%        | 0.0%   |  |  |
| Institutional         | \$5.06   | \$0.00                            | \$0.00     | \$0.00     | 0.0%                    | 0.0%   | 0.0%        | 0.0%   |  |  |



## Information Needed to Calculate Water/Energy Savings from Plumbing/Appliance Standards

|                          | Single<br>Family | Multi<br>Family |
|--------------------------|------------------|-----------------|
| Persons per household    | 2.57             | 2.57            |
| Full Baths/Dwelling Unit | 1.46             | 1.10            |
| Half Baths/Dwelling Unit | 0.56             | 0.14            |
| Dwelling Units in 1994   | 3,000            | 0               |
|                          |                  |                 |
| Population in 1990       | 1,500            |                 |

## Information Needed to Calculate Water Savings for Landscape Measures in Library

| Reference ET                        | in/yr                | 83.59       |             |
|-------------------------------------|----------------------|-------------|-------------|
| Avg Annual Rainfall                 | in/yr                | 40.00       |             |
| Effective<br>Rainfall               | %                    | 25%         |             |
| Landscape Water Requirement $(K_L)$ | t Coefficient        |             | 1           |
| Turf                                | % of ET <sub>0</sub> | 80%         |             |
| Other than turf                     | % of ET <sub>0</sub> | 0%          |             |
|                                     |                      |             |             |
|                                     |                      |             | Non         |
|                                     |                      | Residential | Residential |
| Avg Landscape Area Per Site         | ft^2                 | 14,500      | 29,000      |
| Avg Turf Area (% of Total)          | %                    | 100%        | 100%        |
| Avg Irrigation Efficiency (%)       | %                    | 50%         | 50%         |
|                                     |                      |             |             |
|                                     |                      |             | Non         |
| Irrigation Requirement              |                      | Residential | Residential |
| Turf Area                           | in/ft^2/yr           | 114         | 114         |
| Other                               | in/ft^2/yr           | 0           | 0           |
|                                     |                      |             |             |
|                                     |                      |             | Non         |
| Avg Landscape Water Use Per         | Site                 | Residential | Residential |
| Turf Area                           | Gal/Yr               | 1,028,055   | 2,056,111   |
| Other                               | Gal/Yr               | 0           | 0           |

Gal/Yr



Total

1,028,055

2,056,111

## Section 2 – Specify Demands

## **Peak Demand Season**

|                    | Begin | End   | Peak | % of |
|--------------------|-------|-------|------|------|
|                    | Date  | Date  | Days | Year |
| Peak Demand Season | 1-Jul | 1-Oct | 92   | 25%  |

## **Baseline Demand Forecast**

|                   |       |       |       |       |       |       |       |        |        | Peak Season |
|-------------------|-------|-------|-------|-------|-------|-------|-------|--------|--------|-------------|
| Annual Sales      | Units | 2019  | 2020  | 2025  | 2030  | 2035  | 2040  | 2045   | 2050   | % of Annual |
| Single Family     | MG    | 47    | 69    | 83    | 100   | 121   | 146   | 177    | 214    | 44%         |
| Multi Family      | MG    | 35    | 39    | 67    | 117   | 203   | 351   | 610    | 1,050  | 44%         |
| Commercial        | MG    | 17    | 18    | 28    | 43    | 67    | 103   | 159    | 246    | 44%         |
| Industrial        | MG    | 1     | 2     | 6     | 16    | 44    | 119   | 324    | 881    | 44%         |
| Institutional     | MG    | 31    | 35    | 47    | 62    | 83    | 110   | 146    | 195    | 44%         |
| Not in use        | MG    |       |       |       |       |       |       |        |        |             |
| Not in use        | MG    |       |       |       |       |       |       |        |        |             |
| Not in use        | MG    |       |       |       |       |       |       |        |        |             |
| Not in use        | MG    |       |       |       |       |       |       |        |        |             |
| Total Sales       | MG    | 130   | 163   | 231   | 338   | 517   | 830   | 1,416  | 2,586  | 44%         |
|                   |       |       |       |       |       |       |       |        |        |             |
| System Loss*      | MG    | 12.90 | 16.30 | 23.10 | 33.80 | 51.70 | 83.00 | 141.60 | 258.60 | 44%         |
|                   |       |       |       |       |       |       |       |        |        |             |
| System Production | MG    | 143   | 179   | 254   | 372   | 569   | 913   | 1,558  | 2,844  | 44%         |



## Adjust Baseline Demand Forecast for Future Effects of Plumbing/Appliance Standards

Adjust demand forecast for future effects of plumbing/appliance standards?

Yes

7/26/2021



## <u>Section 3 – Enter Utility Avoided Costs</u>

## **Tracking Tool Utility Avoided Cost Calculator**

## Water and Wastewater System Variable Costs (2021 Dollars)

|                     |         | Water    | Wastewater |          |  |  |
|---------------------|---------|----------|------------|----------|--|--|
|                     |         | Nominal  |            | Nominal  |  |  |
|                     |         | Increase |            | Increase |  |  |
|                     | \$/MG   | (%/yr)   | \$/MG      | (%/yr)   |  |  |
| Water purchase      | \$2,312 | 2.0%     | NA         | NA       |  |  |
| Energy              | \$0     | 0.0%     | \$0        | 0.0%     |  |  |
| Chemicals           | \$0     | 0.0%     | \$0        | 0.0%     |  |  |
| Other variable cost | \$0     | 0.0%     | \$0        | 0.0%     |  |  |
| Total               | \$2,312 | 2.0%     | \$0        | 0.0%     |  |  |

## Water System Capacity Requirements

| Maximum forecasted peak season daily use         | MGD | 13.2 |
|--|-----|------|
| Existing peak season system<br>delivery capacity | MGD | 13.2 |
| Capacity shortfall                               | MGD | 0.0  |
| Year capacity shortfall occurs                   | Yr  | 2050 |

<-Enter your system's current peak season delivery capacity. The value you enter must be equal to or larger than 0 MGD.

| Increment of peak season capacity to be added by 2054 | MGD    | 0.0 | Use model's estimate |
|---|--------|-----|----------------------|
| Estimated cost of new<br>capacity (2021 dollars)      | \$/MGD |     |                      |

# Enter Forecast of Other Avoided Costs of Reduced Water Demands Not Counted Elsewhere (2021 Dollars)

| Season          | Units | 2019 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 | 2045-2050 Ann Grwth % |
|-----------------|-------|------|------|------|------|------|------|------|------|-----------------------|
| Peak Season     | \$/MG |      |      |      |      |      |      |      |      | 0.0%                  |
| Off Peak Season | \$/MG |      |      |      |      |      |      |      |      | 0.0%                  |
| Average         | \$/MG | \$0  | \$0  | \$0  | \$0  | \$0  | \$0  | \$0  | \$0  | 0.0%                  |



## Village of Somers – AWE Conservation Tracking Tool Inputs/Results Section 4 – Define Activities

| Activity<br>ID | Activity<br>Name                                | Class            | Savings,<br>Per Unit<br>(gpy) | Savings,<br>Annual<br>Rate of<br>Decay<br>(%) | Savings,<br>Peak<br>Period<br>(% of<br>Annual<br>Savings) | Savings,<br>Useful<br>Life<br>(yrs) | Savings,<br>Participant<br>Free Riders<br>(% of<br>Participants<br>) | Utility Costs,<br>Year<br>Denominated | Utility<br>Costs,<br>Initial<br>Fixed (\$) | Utility<br>Costs,<br>Initial<br>Variable<br>(\$/unit) | Utility<br>Costs,<br>Years<br>of<br>Follow-<br>up<br>(yrs) | Utility<br>Costs,<br>Follow-<br>up Fixed<br>(\$/yr) | Utility<br>Costs,<br>Follow-up<br>Variable<br>(\$/unit/yr) | Participant<br>Costs, Year<br>Denominat<br>ed | Participant<br>Costs,<br>Initial (\$) | Participant<br>Costs, Years<br>of On-going<br>(yrs) | Participant<br>Costs, On-<br>going<br>(\$/Yr) | Participan<br>t Savings,<br>Sewer<br>(gpy) | Participant<br>Savings, Gas<br>(Therms/Gal<br>) | Participant<br>Savings,<br>Electricity<br>(KWh/Gal) | Plumbing<br>Code, Year<br>Effective | Plumbing<br>Code, Unit<br>Savings<br>(gpy) | Plumbing<br>Code,<br>Natural<br>Replacement<br>Rate NRR<br>(%) |
|----------------|---|------------------|-------------------------------|---|---|-------------------------------------|--|---------------------------------------|--|---|--|---|--|---|---------------------------------------|---|---|--|---|---|-------------------------------------|--|--|
| 1              | Pressure  | Heility          | 190.000                       | E04   | E004  | 10                                  | 0.04   | 2021                                  | \$20,000,00                                |   |  |   |  | 2016  | \$0.00                                | 0   | \$0.00  | 0.00                                       | 0.0000  | 0.0000  | 0                                   | 0  | 0.0004   |
| 1              | Residential                                     | Multi            | 180,000                       | 370   | 30%   | 10                                  | 070  | 2021                                  | \$20,000.00                                |   |  |   |  | 2010  | \$0.00                                | 0   | \$0.00  | 0.00                                       | 0.0000  | 0.0000  | 0                                   | 0  | 0.00%  |
| 2              | Surveys, MF                                     | Family           | 4,015                         | 20%   | 25%   | 5                                   | 0%   | 2021                                  | \$3,000.00                                 | \$1,000.00  |  |   |  | 2014  | \$0.00                                | 0   | \$0.00  | 4,015.00                                   | 0.0024  | 0.0000  | 0                                   | 0  | 0.00%  |
| 3              | Residential                                     | Single<br>Family | 12 373                        | 20%   | 68%   | 5                                   | 0%   | 2021                                  | \$3,000,00                                 | \$500.00  |  |   |  | 2014  | \$0.00                                | 0   | \$0.00  | 4 949 20                                   | 0.0010  | 0.0000  | 0                                   | 0  | 0.00%  |
| 4              | Residential LF<br>Showerhead,<br>SF             | Single<br>Family | 2,062                         | 0%  | 25%   | 25                                  | 0%   | 2021                                  | \$1,000.00                                 | \$30.00   |  |   |  | 2021  | \$30.00                               | 0   | \$0.00  | 2,062.00                                   | 0.0048  | 0.0000  | 1994                                | 2062.25                                    | 12.00%   |
| 5              | Residential LF<br>Showerhead,<br>MF             | Multi<br>Family  | 1,898                         | 0%  | 25%   | 25                                  | 0%   | 2021                                  | \$1,000.00                                 | \$30.00   |  |   |  | 2021  | \$30.00                               | 0   | \$0.00  | 1,898.00                                   | 0.0048  | 0.0000  | 1994                                | 1898                                       | 12.00%   |
| 6              | Residential<br>HE Toilets, SF                   | Single<br>Family | 9,667                         | 0%  | 25%   | 25                                  | 0%   | 2014                                  | \$1,000.00                                 | \$120.00  |  |   |  | 2014  | \$111.00                              | 0   | \$0.00  | 9,667.25                                   | 0.0000  | 0.0000  | 1994                                | 7859.5515<br>34                            | 4.00%  |
| 7              | Residential<br>HE Toilets,<br>MF                | Multi<br>Family  | 9,667                         | 0%  | 25%   | 25                                  | 0%   | 2014                                  | \$1,000.00                                 | \$120.00  |  |   |  | 2014  | \$111.00                              | 0   | \$0.00  | 20,267.33                                  | 0.0000  | 0.0000  | 1994                                | 16477.503<br>13                            | 4.00%  |
| 8              | CII Valve-<br>Type ULFT<br>Rebate               | Commercial       | 10,585                        | 0%  | 25%   | 25                                  | 23%  | 2021                                  | \$1,000.00                                 | \$120.00  |  |   |  | 2021  | \$350.00                              | 0   | \$0.00  | 10,585.00                                  | 0.0000  | 0.0000  | 1994                                | 10585                                      | 4.00%  |
| 9              | Voluntary<br>Sprinkling<br>Restrictions,<br>SF  | Single<br>Family | 18,080                        | 0%  | 70%   | 10                                  | 0%   | 2021                                  | \$1,000.00                                 | \$0.00  |  |   |  | 2014  | \$0.00                                | 10  | \$277.50                                      | 0.00                                       | 0.0000  | 0.0000  | 0                                   | 0  | 0.00%  |
| 10             | Residential<br>4.0 Washer,<br>MF Common<br>Area | Multi<br>Family  | 30,000                        | 0%  | 25%   | 8                                   | 0%   | 2021                                  | \$2,000.00                                 | \$500.00  |  |   |  | 2021  | \$500.00                              | 0   | \$0.00  | 30,000.00                                  | 0.0035  | 0.0036  | 2011                                | 21000                                      | 12.50%   |



## Section 5 – Enter Annual Activity

| Activity ID | Class         | Activity Name                          | 2019 | 2020 | 2021 | 2022 | 2023 |
|-------------|---------------|--|------|------|------|------|------|
| 1           | Utility       | Pressure Management                    |      |      |      |      | 1    |
| 2           | Multi Family  | Residential Surveys, MF                |      |      |      |      | 200  |
| 3           | Single Family | Residential Surveys, SF                |      |      |      |      | 200  |
| 4           | Single Family | Residential LF Showerhead, SF          |      |      |      |      | 50   |
| 5           | Multi Family  | Residential LF Showerhead, MF          |      |      |      |      | 50   |
| 6           | Single Family | Residential HE Toilets, SF             |      |      |      |      | 25   |
| 7           | Multi Family  | Residential HE Toilets, MF             |      |      |      |      | 25   |
| 8           | Commercial    | CII Valve-Type ULFT Rebate             |      |      |      |      | 5    |
| 9           | Single Family | Voluntary Sprinkling Restrictions, SF  |      |      |      |      | 5    |
| 10          | Multi Family  | Residential 4.0 Washer, MF Common Area |      |      |      |      | 10   |

## **Enter Annual Conservation Activity**

| Annual Program Overhead Cost (2021 dollars)                        | 2019 | 2020 | 2021 | 2022 | 2023  |
|--|------|------|------|------|-------|
| Enter additional program cost not included in activity definitions |      |      |      |      | 25000 |

## Section 6 - Enter GHG Emission Factor

Minimal data entered in this section. Not used.





## **<u>Results - Water Savings Summary</u>**

BAXTER

WOODM

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## **Results - Utility Revenues and Rates**









| <b>Results</b> – | <u>Utility Rev</u> | venues and | <u>l Rates</u> |
|------------------|--------------------|------------|----------------|
|                  |                    |            |                |
|                  |                    |            |                |

| Class                            | Activity Name                          |     | NPV<br>(\$) | B/C<br>Ratio |
|----------------------------------|--|-----|-------------|--------------|
| Utility                          | Pressure Management                    | \$  | 43,853      | 3.4          |
| Multi Family                     | Residential Surveys, MF                | (\$ | (3,916,428) | 0.0          |
| Single Family                    | Residential Surveys, SF                | (\$ | (1,644,078) | 0.2          |
| Single Family                    | Residential LF Showerhead, SF          | \$  | 3,055       | 1.1          |
| Multi Family                     | Residential LF Showerhead, MF          | \$  | 327         | 1.0          |
| Single Family                    | Residential HE Toilets, SF             | \$  | 93,590      | 2.3          |
| Multi Family                     | Residential HE Toilets, MF             | \$  | 26,376      | 1.4          |
| Commercial                       | CII Valve-Type ULFT Rebate             | \$  | 12,276      | 1.9          |
| Single Family                    | Voluntary Sprinkling Restrictions, SF  | \$  | 37,781      | 41.8         |
| Multi Family                     | Residential 4.0 Washer, MF Common Area | (\$ | (8,959)     | 0.8          |
| Subtotal Conservation Activities |  | (\$ | (5,352,208) | 0.2          |
| Total With Program Overhead      |  | (\$ | (5,856,691) | 0.1          |













# Attachment H



# Land Use Study

Village of Somers, WI

Adopted By Village Board - \_\_\_\_\_, 2018 Approved by the Village Plan Commission - \_\_\_\_\_, 2018

Prepared By:



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## Background

The Village of Somers engaged Foth Companies to provide a future land use planning study for the properties in the community primarily in the northwest corner along the Interstate 94 (I-94) corridor and south of County Highway KR (See study area map on the next page). The I-94 corridor has had a significant amount of development over the past decade in Wisconsin between Milwaukee and Chicago, and a new rise in development pressure now looks to occur in the next few years in light of the recently approved business Foxconn within the Village of Mount Pleasant directly north of Somers along CTH KR. Further, a cooperative boundary agreement has recently taken place between the Town of Paris, City of Kenosha, and Village of Somers along lands surrounding the I-94 corridor that have led to future land use plan and sewer service area amendment changes.

The Village has recognized that new land use planning for this study area is essential for many reasons including:

- Ensuring the future uses within the corridor are both appropriate adjacent to a major interstate freeway and other land uses to the east;
- Ensuring future uses are following area market development trends occurring along the I-94 corridor from Milwaukee to Chicago;
- Establishing a sanitary sewer service area based on anticipated future land uses;
- Establishing more opportunities for manufacturing businesses and associated supporting commercial and residential land uses appropriate in relation to an Interstate;
- Creating additional tax base and revenue for the Village;
- Ensuring that future developers and residents have a solid basis and understanding of what types of land uses are encouraged for their lands, which will result in establishing Somers as a positive and efficient community to do business within.

This study lays out a series of analyses including a current conditions assessment, market analysis, and SWOT analysis to ultimately form a series of recommendations to guide future development of the study area which includes a new recommended future land use map for Village consideration and adoption. A variety of public input was utilized as part of this study including a public informational meeting that occurred on May 1, 2018.





## **Section 1: Recommendations**

A new future land use map is recommended for adoption for the study area based on the analyses and public input formulated during the course of this study. The recommended future land use changes are outlined below along with general recommendations that pertain to the future development desires of the community.

## Future Land Use Map

The main goal of this study is to recommend new land uses for the Somers Comprehensive Land Use Map based on the current market trends, infrastructure, and development patterns of the study area. The following amendments to the *Kenosha County Multi-Jurisdictional Comprehensive Plan: 2035* are recommended to complete this goal:

- Adopt the newly proposed future land uses for the study area per the Recommended Land Use Plan Map found on the following pages. The new uses were derived by the Village to adapt to the current adopted plans for the area, market trends, and the development patterns forecasted within the study area.
- Adopt new supporting Future Land Use Plan map text under the "Community Specific Land Use Objectives and Policies" section for the Village of Somers per the following:

#### Village Town of Somers Land Use Plan Map

Map 80 shows the land use plan map for the **Village** Town of Somers to the year 2035 and beyond. The **Village** Town envisions that urban development will continue to occur within the planned sanitary sewer service area during and beyond the planning period, while the northwest portion of the Town is anticipated to remain primarily in agricultural use. Map 80 was adopted by the Town Board as the Town land use plan map when the Town Board adopted this multi-jurisdictional plan as the Town comprehensive plan. The neighborhood plans described below were also adopted as components of the **Village** Town comprehensive plan. The **Village** Town has been active in land use planning through participation in the preparation and update of a comprehensive plan for the Kenosha Urban Planning District in 1967 and 1995, respectively; and most recently by preparing neighborhood plans for most of the **Village** Town.

The Village (formally Town) Town has prepared a series of neighborhood plans to help guide urban growth. Map J-2 in Appendix J is a composite of the neighborhood plans adopted by the Village Town in 2008. The Parkside East Neighborhood Plan, shown on Map J-3, was completed in 1993, and the Lakeshore Neighborhood Plan, shown on Map J-4, was adopted in 2010. Commercial and industrial development is planned to occur primarily north of CTH S between IH 94/USH 41 and STH 31, and along the west side of STH 31. Mixed use development, consisting of a combination of residential and business uses, would occur on the east side of IH 94/USH 41 between CTH S and CTH E, within the Village Town Center/Somers hamlet, in the northern portion of the Village Town along STH 31, and at the northwest corner of the intersection of CTH E/12th Street and STH 32/Sheridan Road. Transit-oriented development is also recommended surrounding a proposed future transit station, part of the potential Kenosha-Racine-Milwaukee commuter rail service, at the intersection of CTH A/7th Street and the Union Pacific Railroad right-of-way. In addition, environmentally sensitive areas are recommended to be protected along with preserving undeveloped floodplains and providing at least a 75-foot buffer, excluding preexisting buildings and pavements within this 75-foot wide strip, around existing wetlands within the planned sewer sanitary service area, except those within areas in the southern portion of the Village Town that are part of the cooperative boundary agreement between the City of Kenosha and the Town of Somers. The recommended land uses for these cooperative boundary agreement areas reflect planned land use categories shown on the City of Kenosha land use plan map, since these areas will eventually become part of the City during the plan design period.

The northwest portion of the Town is not included within a neighborhood plan. Mostly existing zoning districts were converted to land use plan categories in this area of the Town.



The Village completed a new future land use study in 2018 that updated the future land use map for properties in the northwest portion of the community that were not formally in an adopted neighborhood planning area. The study also replaces land uses for portions of properties in the former "Kilbourn", "Kilbourn South", "Southwest", "Pike River West", "Northwest", and "Hawthorne" neighborhood plans. It should be noted that while the Kenosha County Multi-Jurisdictional Plan is for the year 2035 the I-94 corridor study plans these new land uses through the year 2050 commensurate with the Southeastern Wisconsin Regional Planning Commission (SEWRPC) land use planning period.

The updates to the Comprehensive Land Use Map as part of this study included changing a majority of the lands abutting the I-94 corridor for future Business Park uses that transition to medium density residential uses further east.

A series of planning guidance notes that the Village will use in administering new development proposals of this 2018 Land Use Study Area include the following (all developments subject to Village approval on how they meet the intent of the future land use patterns approved by the Village):

- The Kenosha Unified School District (KUSD) plans to expand school opportunities in Kenosha County as enrollment demands. The possibility for the future need of a school may be considered as follows:
  - Future Elementary School Site (Approximately 15 acres): Somewhere north of Highway E
  - Middle School Site (Approximately 40 acres): Somewhere north of Highway E
  - High School Sites: Someplace in Somers
- Commercial Supporting Uses: Application of commercial supporting developments (retail, restaurant, office, and service) may be found in areas designated for Business Park uses in the following locations:
  - Along County Highway KR (1<sup>st</sup> Street) between the Interstate 94 interchange to the west and County Highway H to the east (88<sup>th</sup> Ave)
  - $\circ$  Along CTH E (Somers Rd) between the Interstate 94 interchange to the west and 100<sup>th</sup> Ave to the east.
  - Along the north side of County Highway S (Burlington Road).

The Village acknowledges the Kenosha County Multi-Jurisdictional Plan definition of "Business/Industrial Park" future land uses. For the Village's adopted business park land uses, as part of the 2018 land use study, the Village further defines these future land uses as follows:

<u>Business/Industrial Park:</u> Allows all uses commonly found in an Industrial Park or Business Park setting consisting of large manufacturing and warehousing businesses along with the commercial and residential uses required to support the area large business uses and the associated employee base. Supporting commercial uses commonly include retail, restaurant, office, and service related developments. Civic developments promoting tourism and institutional developments may also occur. This land use plan designation may support commercial and industrial zoning districts in the Village subject to how a proposed development adheres to an overall business park setting where the development is proposed within.

Table J-9 in Appendix J provides the acres in each land use category shown on the **Village** Town land use plan map for the year 2035 and beyond. Most of the land use categories used on the **Village** Town land use plan map (see Map 80), are the same as those used on the County plan map (see Map 65), except the medium-high density residential category which is from the City of Kenosha land use plan map as discussed above. Table S-10 in Appendix S compares the land use categories used for the County and **Village** Town land use plan maps to those shown on the **Village** Town's adopted neighborhood plans and, for the portion of the **Village** Town not included in an adopted neighborhood plan, is based primarily on existing zoning districts.





## **General Recommendations**

#### Sewer Service Area

Upon formal adoption of the new Comprehensive Land Use Map changes the Village should pursue formal amendments to the Sewer Service Area as overseen by the Southeastern Wisconsin Regional Planning Commission (SEWRPC). Sewer service amendments should include the rest of the Village of Somers to ensure that future development proposal desired anywhere in the Village are not impacted by the need for future sewer amendments.

#### <u>Zoninq</u>

No specific zoning code changes are required as part of this study. However, the Village should be cognizant that future development patterns in the study area may be unorthodox and market driven. Given this, it will be important for developments to utilize, and the Village to be open to, the use of planned development zoning districts (PUD). Further, the zoning districts of the BP-1 Business Park District and the B-94 Interstate Highway 94 Special Use Business District will be important in the future implementation of developments in the study area. These zoning districts meet the same goals as the newly proposed land uses along the study area by allowing a series of industrial and commercial supporting uses all in one encompassing business park zoning district.

#### Development Design

The Village should capitalize on the development patterns and trends of the Interstate 94 corridor and pursue new business park developments that complement the community. The business park future uses proposed in this plan exist along a highly visible Interstate along three (3) high profile interchanges. The Village should explore implementing a set of design guidelines for future developments in this area so architecture and site design is completed with a purpose on the aesthetics they provide in the community. Design guidelines can allow a Village Plan Commission greater scrutiny in development approvals and lead to a higher tax base if by guiding a developer to use durable materials (i.e. masonry products) and to add architectural elements (i.e. building depths, heights, horizontal bands of materials, etc.).

#### <u>Housing</u>

The proposed land uses in this study don't employ specific areas for higher density residential land uses. However, the plan does recognize the market trend that the high job producing businesses that may be found in the future of the I-94 corridor will require alternative housing types. By this text, this study notes that higher end multi-family developments may be entertained by the Village in and around areas designated for Business Park uses in the study area.

A recommendation of this study is for the Village to be open to proposed high end multi-family developments that can directly contribute to fulfill housing needs for future employees of newly created business parks in the Village as well as those housing needs for future employees of Foxconn and suppliers. Such multi-family housing developments are common in bordering business park employment uses and directly contribute to the metrics required to bring retail and restaurant supporting uses to a given area. The multi-family uses will most likely occur along the eastern transition borders of the business park land uses identified in the study area. A few locations for future multifamily development transitions may be found in the following areas (shown as asterisks on the new future land use map proposal):

- South of CTH KR between CTH EA (west) to the train tracks (east)
- East of CTH H (88<sup>th</sup> Ave) north of CTH A (7<sup>th</sup> St)
- South of CTH A (7<sup>th</sup> St) between 100<sup>th</sup> Avenue (west) to CTH H/88<sup>th</sup> Avenue (east)
- West of 100<sup>th</sup> Avenue along the back half of identified business park uses south of CTH E
- East of 100<sup>th</sup> Avenue just north of CTH S; southwest of the Maplecrest Country Club properties



Multifamily developments take many forms and could consist of duplex/townhouse developments and/or multilevel apartment/condominium complexes. The Village should evaluate future multi-family developments on the actual need and density in which they are being proposed. The Village should also consider the amount (units) of multi-family development being developed in the overall community as to the actual need as new developers come forward. Requesting market analyses demonstrating the necessity for a proposed multi-family development should be required. Any new multi-family development proposal will require their own rezoning and/or Comprehensive Land Use Map amendment depending on the density proposed.

## **Infrastructure**

Proper sewer, water, and road infrastructure will be important to realizing the future land uses desired by this study per the following:

- Large developments, especially in the context of formulizing future business park environments, should be discouraged until public water and sewer are available.
- The Village should stay ahead of future development patterns and pre-plan required road, sewer, water, and storm infrastructure and capacities to support the land use patterns and goals set forth in this plan.
- Sewer and water service studies could take place at this time and costs recouped upon future development proposals. Such studies may be especially critical to service properties in the study area that exist directly south of future Foxconn as these properties could be the most advantageous for future commercial and industrial development in the study area.
- Look to promote regional stormwater management facilities at all times in order to maximize developable acres.

## **Development Approvals**

This study should be used to guide decision making as it relates to review of land use and development within the study area in the Village of Somers. The following development requests should be reviewed according to the provisions of this document until the recommendations of this study are formally adopted as part of new or amended Village ordinances:

- 1. Zoning district changes (i.e. rezone);
- 2. Land Use Amendments;
- 3. Minor land divisions and subdivisions; and
- 4. Substantial change of property use for commercial, industrial, or multi-family developments. A substantial change of property use for the purpose of the Land Use Study is defined as a change to the configuration or use of the property that requires Site Plan Review or a Conditional Use Permit. Any such change or addition shall conform to the standards set forth in this plan to the greatest extent possible.

#### <u>Marketing</u>

- Partner with Kenosha Area Business Alliance (KABA) on their available marketing and consulting options for the lands Somers identifies for future business park development.
- Work with the Wisconsin Economic Development Corporation (WEDC) on their available marketing options. Once property is readily marketable for future development it can be included in the WEDC "Available Sites" website.
- Work with private landowners interested in further developing their properties meeting the goals of this study to partner with local reputable and knowledgeable commercial/industrial brokerage. Have brokerage pursue targeted industries displaying all concepts/benefits/incentives of site for future commercial and industrial businesses. Look to pursue brokerage currently knowledgeable in site selection and potential suppliers to Foxconn.



## Target Industries

- Manufacturing, Transportation, and Warehousing are key underserved industries in the region that will have an increased demand as Foxconn development and associated "Wisconn Valley" begins to take shape. The absorption rate for these businesses is very high at this time and vacancy is low. A focus should key upon marketing the manufacturing industry for the I-94 Study Area.
- Underserved commercial industries for the area include specialty food stores, overall general merchandise stores, motor vehicles and parts dealers, and restaurants and other eating places. All these retail industries can serve well as commercial supporting uses for a future business park uses and should be marketed as end uses.
- Another key commercial industry that may see growth in the study area is the hospitality industry (hotels). The interstate interchanges directly in the study area do not have hotels available at this time and the influx of new businesses and a high amount of executive jobs will produce this need.

## Tax Increment Districts (TID)

With infrastructure (sewer/water) a distance from some of the future development areas in the study area it may be requested by developers to utilize TID. The Village should be open to such requests and evaluate each on their own merit on how the proposed investment benefits the future tax base of the community. Utilizing TIDs are a key economic development tool to create new business park uses that contribute to the goals and recommendations of this study. Further, the use of TIDs can set Somers development properties apart from Village neighbors if used correctly to fund infrastructure and allow developer incentives that lead to pad-ready desirable opportunities for new job producing businesses.

## <u>Schools</u>

The Kenosha Unified School District (KUSD) was consulted during the formulation of this study. KUSD has forecasted that the need for a location for schools may be required below. The future schools would only be pursued after enrollments demand. This study recommends that the *Kenosha County Multi-Jurisdictional Comprehensive Plan: 2035* "Community Specific Land Use Objectives and Policies" section for the Village of Somers is amended to reflect the possible future school site needs. Zoning and Land Use Plan amendments would simply be required once formal plans by KUSD are pursued.

Possible Future School Location Needs in Study Area:

- Elementary School Sites Approximately 15 acres each:
  - Somewhere north of Highway E
- Middle School Site Approximately 40 acres
  - Someplace north of Highway E
- High School Site
  - o Someplace in Somers

## Village Beautification/Identification

The Village should be cognizant that the study area holds the main gateways and first impressions to the Village of Somers. As developers invest in the Village for new business park uses, infrastructure (road reconstructions), and related developments the Village should in turn consider public community beautification/identification elements. The Village should encourage developers to implement such beautification efforts as part of their proposals and/or use TID monies where applicable. Beautification and identification efforts may include some of the following examples:

- Gateway signage
- Lighting/banners/flags and overall streetscaping efforts in cooperation with other Village/County/State road projects
- Working with the Wisconsin Department of Transportation (WisDOT) to have exit interchanges signs along Interstate 94 denote "Somers"


# Section 2: Current Conditions Assessment

To appropriately determine the highest and best future land uses for the study area a current conditions assessment was completed. The assessment consists of a thorough examination of the existing influences and market trends affecting land uses including current planning efforts, current land use, zoning, transportation, utilities, and environmental qualities. The assessment includes a basic market analysis of commercial and industrial industries that may be pertinent to the future of the area as well as an independent SWOT (strengths, weaknesses, opportunities, and threats) analysis of the study region.

## **Regional Context**

The Village of Somers is located in the north of Kenosha County bordering Racine County to the north, I-94 to the west, Lake Michigan to the east, and the City of Kenosha to the south. The Village has access to three (3) I-94 interchanges along the eastern border. The I-94 Corridor serves as the major transportation connection between the City of Milwaukee, the City of Chicago, their surrounding suburbs, and all places in between including the Cities of Racine and Kenosha. The corridor has experienced significant growth which will likely continue in the future with the addition of the business Foxconn which will locate directly north of Somers in the Village of Mount Pleasant in 2018.

# **Past Planning Efforts**

In April 2010 Kenosha County adopted the A Multi-Jurisdictional Comprehensive Plan for Kenosha County: 2035 that included the Village of Somers. The adopted land uses and directives from this Comprehensive Plan as described in the "Existing Adopted Land Uses" section below.

In addition, the Village of Somers recently adopted a Cooperative Boundary Agreement (CBA) with the Town of Paris and City of Kenosha. The CBA outlines future land uses, water utility, sewer service, the creation of

permanent borders, and revenue sharing. The CBA allows public utilities to be allowed to this area of Somers upon future sewer service amendments. The future land uses for the Somers CBA area are found on the Future Land Use map consisting of commercial and industrial uses west of I-94.

Lastly, previous to 2010 the Village adopted a series of neighborhood plans to guide land use decisions. Adopted neighborhood plans that have been altered by this new study include "Kilbourn", "Kilbourn South", Pike River West", and portions of "Northwest" and "Hawthorne".



### **Existing Adopted Land Uses**

The map below depicts the existing future land use plan map for the study area according to the adopted Kenosha County Multi-Jurisdictional Land Use Plan. The following is a description of the future land use categories either found directly in, or adjoining, the study area:

<u>Farmland Protection</u>: This category allows for all agricultural uses and consists primarily of parcels at least 35 acres or greater in size that contain soils suitable for agricultural production. The plan encourages continuation of agricultural activity in these areas, including dairy farming, row crops, and niche agriculture, such as orchards and organic farming.

This land use is the primary category found in the study area north of CTH E and south of CTH KR.

<u>General Agricultural and Open Land:</u> The general agricultural and open land use category would allow all agricultural uses, as well as residential development with an average density of one home for each 10.0 to 34.9 acres of land. The plan encourages continuation of agricultural related activity in this area, including dairy farming, row crops, equestrian farms, agricultural related warehousing and food processing, 8 plant nurseries,



and niche agriculture such as orchards, organic farming, and hobby farms. Open lands may include pasturelands and fallow fields.

This land use category is found in the study area for a few parcels in the study area north of CTH E and south of CTH KR. These parcels were commonly divided from "Farmland Protection" parcels in the past.

<u>Rural-Density Residential</u>: This category includes single-family homes at lot sizes or densities equating to five acres to 9.9 acres per dwelling unit. Rural-density residential land is mostly rural in character. The use of conservation subdivision design or lot-averaging techniques is encouraged to help preserve rural character in areas where rural-density residential development is allowed.

No properties in in the study area carry this land use designation at this time. However, a large area of this land use designation is found bordering the study area south of CTH A between 100<sup>th</sup> Avenue and 72<sup>nd</sup> Avenue.

<u>Suburban-Density Residential</u>: This category includes single-family homes at lot sizes or densities equating to 40,000 square feet to 4.9 acres per dwelling unit. Suburban-density residential land is neither truly urban nor rural in character. Development at this density generally precludes the provision of centralized sanitary sewer service, public water supply service, and other urban amenities if allowed in or near urban service areas and may compromise the rural character of the County if allowed in rural areas. The use of conservation subdivision design or lot-averaging techniques can also be utilized to help preserve country or rural character in areas where suburban-density residential development is allowed.

A few small properties of this land use designation are found in the very northern portion of the study area.

<u>Medium-Density Residential:</u> These uses are envisioned to occur in a variety of residential neighborhoods, located within the urban service areas of the County, providing a full complement of basic neighborhood amenities including a school, park, and shopping area. The average density of medium-density residential areas should be one home per 6,000 to 39,999 square feet of area, predominantly allowing for single family and two-family homes. This category also includes areas of existing development and small undeveloped lots at this density outside urban service areas. New areas outside urban service areas should not be developed at this density; however, small existing vacant lots may be developed if they meet the requirements of Town and County ordinances.

Medium density residential uses are currently found in the study area south of CTH E and east of the environmental corridor area.

<u>High-Density Residential:</u> These uses are envisioned to occur in a variety of residential neighborhoods, located within the urban service areas of the County, providing a full complement of basic neighborhood amenities including a school, park, and shopping area. The average density in this category would be less than 6,000 square feet per dwelling unit, allowing for single- and two-family homes and multi-family buildings.

No high density land uses are found in the current study area. However, possibilities for such uses are discussed in this study.

<u>Mixed-Use:</u> This use would include a mix of residential and compatible commercial and/or institutional uses. Parcels designated for mixed use should be developed in accordance with a development or redevelopment plan approved by the local government concerned and, in town areas, by Kenosha County. Development in this category would typically be subject to planned unit development (PUD), traditional neighborhood development (TND), transit-oriented development (TOD), or mixed use related regulations in the applicable zoning ordinance. Mixed-use areas generally include traditional downtown business districts, infill development sites, and areas adjacent to arterial streets, highways, and transit stops (bus or rail) within urban service areas of the County.

A large area of the mixed use land use designation is found in the southern portion of the study area adjoining I-94 and north of CTH S.





<u>Commercial</u>: This category includes retail stores; services, such as drycleaners, barber or beautician shops, banks, and restaurants; and offices and professional services of doctors, dentists, architects, engineers, attorneys, computer programmers, graphic artists, insurance agents, financial planners, and other similar recognized professions and consultation services. This category may also include downtown business districts, neighborhood and community shopping centers, highway and regional shopping areas, financial institutions, and medical facilities.

Commercial land uses are found adjoining I-94 along CTH E and along CTH S.

<u>Office/Professional Services</u>: This category includes a variety of business uses such as the offices and professional services of doctors, dentists, architects, engineers, attorneys, computer programmers, graphic artists, insurance agents, travel agents, financial planners, and other similar recognized professions and consultation services. This category may also include corporate headquarters, financial institutions, and medical facilities.

This land use isn't directly found in the study area. However, the intent of these types of developments is part of the "mixed use" land use category found in the southern portion of the study area.

<u>Industrial</u>: This category would accommodate manufacturing and other industrial uses, such as warehouses and outdoor storage of commercial vehicles and building materials.

A small portion of industrial land uses are found around the CTH E interstate interchange.

<u>Business/Industrial Park:</u> This category would allow a mix of office, retail, service, and industrial uses, and reflects the modern business park where a mix of office and compatible service and/or industrial uses are typically accommodated. It is anticipated that these areas would be developed in an attractive park-like setting with landscaping, consistent signage, and similar or compatible building materials and designed to present an integrated image to customers.

A small portion of the land use designation is found along CTH S in the far southeast corner of the study area. This land use is then found adjoining the study area to the east along CTH S and around CTH H where an industrial park has been built in the past decade.

<u>Governmental and Institutional:</u> The governmental and institutional land use category includes governmental and institutional buildings and grounds for which the primary function involves administration, safety, assembly, or educational purposes. This includes public and private schools, government offices, police and fire stations, libraries, cemeteries, religious institutions, hospitals, nursing homes, and similar facilities. In the City of Kenosha only, this category would also allow commercial office buildings that are not associated with a government or institutional use.

<u>Environmentally Significant Areas</u>: The Adopted land use plan looks to guide thoughtful development when around certain environmentally significant areas. The areas in particular include primary and secondary environmental corridors, isolated natural resource areas, floodplains, other conservancy lands to be preserved, and farmed and non-farmed wetlands.

The study area has a variety of these environmentally significant areas found throughout. Most of these areas are found just east of I-94 running the duration of the study area from north to south.

<u>Primary/Secondary Environmental Corridors and Isolated Natural Resources:</u> The comprehensive plan recommends substantial preservation of remaining primary and secondary environmental corridors, isolated natural resource areas, and other environmentally sensitive areas. Development within these areas should be limited to required transportation and utility facilities, compatible outdoor recreation facilities, and very low density residential development carefully designed so as to minimize the impact on natural resources. Lands proposed for urban development that contain or appear to have environmentally sensitive areas, such as primary environmental corridors or isolated wetlands, should



be field verified and staked for precise delineation of such features on the property prior to development.

<u>Other Conservancy Land to be Preserved:</u> This land use category includes woodlands, natural areas, and critical species habitat sites located outside environmental corridors and isolated natural resource areas; a significant geological site; and common open areas of residential developments, including conservation subdivisions. This category also includes portions of State-owned wildlife areas and certain nonfarmed wetlands that are outside environmental corridors and isolated natural resource areas. The preservation of these areas may provide the only available wildlife habitat in an area and lend unique character and natural diversity to the community in a manner similar to isolated natural resource areas. If natural vegetation develops on some of this open land, the re-vegetated areas may eventually be reclassified as an environmental corridor or isolated natural resource area.

Nonfarmed Wetlands Outside Environmental Corridors, Isolated Natural Resource Areas, and Other Conservancy Land to be Preserved: This category consists of primarily nonfarmed wetlands (wetlands with natural vegetation), typically less than five acres in size, that are located outside environmental corridors, isolated natural resource areas, and other conservancy lands to be preserved. These areas contain soils that are poorly drained and support wetland vegetation during years of normal or high precipitation or periods of normal or high water table. Nonfarmed wetlands five acres or larger are typically located within environmental corridors or isolated natural resource areas. This land use category also includes certain existing farmed wetlands that are located within parcels of existing or planned urban development (ranging from rural residential uses to industrial uses), where farming activities may likely cease, and the wetland will revert to natural conditions. Wetlands are regulated under State and Federal laws and County ordinances. Development of wetlands, usually requiring them to be filled, is limited. Permits to allow development in wetlands generally require "mitigation," which requires new wetlands to be created or existing degraded wetlands to be restored. Mitigation may be required on the same development site or in a different location.

<u>Farmed Wetland (Overlay)</u>: This category consists of farmed wetlands located outside of existing or planned urban or cluster developments that contain soil conditions which can support wetland vegetation; however, wetland vegetation is absent due to cultivation, use as a pasture, or other agricultural activities. Farming may continue in accordance with County and local zoning ordinances and other applicable laws. If natural vegetation develops on some of these wetlands when farming ceases, the re-vegetated areas may eventually be reclassified as part of an environmental corridor or isolated natural resource area.

# **Adopted Zoning**

The map herein shows the existing zoning for the study area. Current zoning can be characterized as largely agricultural with a few business zoning districts found along the frontage of I-94/CTH S and I-94/CTH E. A couple planned residential neighborhoods also exist along CTH S to the south and CTH KR to the north.

The study area has the following zoning districts found below. The "Primary Purpose" statement for each of these districts, as found in the adopted current code, are as follows:

<u>A-1 Agricultural Preservation District:</u> The Village Board of Trustees recognizes that the rapid conversion of farm land to urban use has led to increasing public concern over such conversion. This concern centers on the perceived loss of the local agriculture economic base, loss of agricultural land as a valuable natural resource with the attendant loss of the aesthetic and environmental values associated with that resource, and the loss of the rural lifestyle and the unique cultural heritage which emanates from that lifestyle, and the attendant high costs of providing urban services as well as resolving potential urban-rural conflicts which arise as a result of urban encroachment into rural areas. Therefore, the A-1 Agricultural



Preservation District is intended to maintain, enhance, and preserve agricultural lands historically utilized for crop production and the raising of livestock. The preservation of such agricultural lands is intended to conserve energy, prevent urban sprawl, maintain open space, retain natural systems and natural processes, control public cost, preserve the local economic base, promote local self-sufficiency, preserve the rural life-style, and maintain regional, state and national agricultural reserves. The District is further intended to prevent the premature conversion of agricultural land to scattered residential, commercial and industrial uses.

<u>A-2 General Agricultural District:</u> The A-2 General Agricultural District is intended to provide for, maintain, preserve, and enhance agricultural lands historically utilized for crop production but which are not included within the A-1 Agricultural Preservation District and which are generally best suited for smaller farm units, including truck farming, horse farming, hobby farming, orchards, and other similar agricultural related farming activity. This District is also intended to provide areas for activities normally associated with rural surroundings, such as rural estate and other existing residential development, such as existing residential development abutting town and county roads along which further development may occur as essential services become available.

<u>*R-1*</u> Rural Residential District: The *R-1* Rural Residential District is intended to provide for single-family residential development, in a predominantly rural setting, at densities not to exceed 0.2 dwelling units per developable net acre.

-Lots shall have a minimum area of five (5) acres.

-All lots shall have a frontage of not less than three hundred (300) feet in width unless located on a cul-de-sac or curve in which case the lot frontage may be reduced to one hundred fifty (150) feet of frontage provided there is at least three hundred (300) feet of width at the required building setback line.

<u>R-2 Suburban Single-Family Residential District:</u> The R-2 Suburban Single-Family Residential District is intended to provide for single-family residential development, at densities not to exceed 1.1 dwelling units per developable net acre, served by on-site soil absorption sanitary sewage systems (septic tanks) and private wells.

-Lots shall have a minimum area of forty thousand (40,000) square feet.

-All lots shall be not less than one hundred fifty (150) feet in width unless located on a cul-de-sac or curve in which case the lot frontage may be reduced to seventy-five (75) feet of frontage provided there is at least one hundred fifty (150) feet of width at the required building setback line.

<u>R-3</u> Urban Single-Family Residential District: The R-3 Urban Single-Family Residential District is intended to provide for single-family residential development, at densities not to exceed 2.2 dwelling units per developable net acre, served only by public sanitary sewage facilities.

-Lots shall have a minimum area of twenty thousand (20,000) square feet.

-All lots shall be not less than one hundred (100) feet in width unless located on a cul-de-sac or curve in which case the lot frontage may be reduced to fifty (50) feet of frontage provided there is at least one hundred (100) feet of width at the required building setback line.

<u>R-4 Urban Single-Family Residential District:</u> The R-4 Urban Single-Family Residential District is intended to provide for single-family residential development at densities not exceeding 2.9 dwelling units per developable net acre served by public sanitary sewage facilities.

-Lots shall have a minimum of fifteen thousand (15,000) square feet.

-All lots shall be not less than ninety (90) feet in width unless located on a cul-desac or curve in which case the lot frontage may be reduced to forty-five (45) feet of frontage provided there is at least ninety (90) feet of width at the required building setback line.

<u>R-7 Suburban Two-Family and Three-Family Residential District:</u> The R-7 Suburban Two-Family and Three-Family Residential District is intended to provide for two-family and three-family residential development in areas where public sanitary sewage facilities are not available, and densities do not exceed 1.1 dwelling units per developable net acre for two-family development and 1.3 dwelling units per net acre for three-family development.

-Lots shall have a minimum area of eighty thousand (80,000) square feet for a two-family dwelling, and a minimum area of one hundred thousand (100,000) square feet for a three-family home.

-All lots shall be not less than one hundred fifty (150) feet in width unless located on a cul-de-sac or curve in which case the lot frontage may be reduced to seventy-five (75) feet of frontage provided there is at least one hundred fifty (150) feet of width at the required building setback line.



<u>R-12</u> Mobile Home/Manufactured Home Park-Subdivision District: The R-12 Mobile Home/Manufactured Home Park/Subdivision Residential District is intended to provide for the location of mobile home/manufactured home parks and mobile home/manufactured home subdivisions in the residential setting that is compatible with adjacent land uses. Mobile homes are declared herein to be residential dwellings and entitled to the same protection from incompatible uses as is afforded in other residential districts. All new structures and uses and changes or additions to existing structures and uses shall be in compliance with the site plan review requirements of this ordinance (See Section 12.08-2).

-Lots in a mobile home/manufactured home park or subdivision shall have a minimum of seven thousand five hundred (7,500) square feet in area.

-All lots shall be not less than fifty (50) feet in width unless located on a cul-de-sac or curve in which case the lot frontage may be reduced to thirty (30) feet of frontage provided there is at least fifty (50) feet of width at the required building setback line.

<u>B-2 Community Business District:</u> The B-2 Community Business District is intended to provide for the orderly development of business activities, such as retail stores, office buildings and services in the Village. These "downtown" areas should be developed in a manner that would contribute to their role as the center of the community. All new structures and uses and changes or additions to existing structures and uses shall be in compliance with the site plan review requirements of this ordinance (See Section 12.08-2).

-Individual businesses served by public sanitary sewage facilities shall provide a minimum lot area of ten thousand (10,000) square feet and a minimum frontage of seventy-five (75) feet in width.

-Individual businesses served by on-site soil absorption sewage disposal system or other approved private means of sewage disposal, shall provide a minimum lot area of forty thousand (40,000) square feet and a minimum frontage of one hundred fifty (150) feet in width.

<u>B-3 Highway Business District:</u> The B-3 Highway Business District is intended to provide for the orderly and attractive grouping and appropriate business location along principal highway routes as defined in this ordinance of those businesses and customer services which are logically related to and dependent upon highway traffic and which are specifically designed to serve the needs of such traffic and businesses which generate a high volume of vehicle traffic with a corresponding demand for large parking areas. The uses intended for this District typically do not rely upon an interchange of customers with each other as do uses in the B-4 District and furthermore tend to locate in strip fashion along the highway thereby impeding traffic flow thereon with numerous access points and therefore requiring review of plans and specifications to regulate highway access and to encourage properly planned site layout and development for such individual businesses. All new structures and uses and changes or additions to existing structures and uses shall be in compliance with the site plan review requirements of this ordinance (See Section 12.08-2).

-Individual businesses served by either public sanitary sewage facilities or on-site soil absorption sewage disposal systems or other approved private means of sewage disposal, shall provide a minimum lot area of forty thousand (40,000) square feet and a minimum lot frontage of one hundred fifty (150) feet in width.

<u>M-1 Limited Manufacturing District:</u> The M-1 Limited Manufacturing District is intended to provide for manufacturing, industrial and related uses of a limited nature in size and for situations where such uses are not located in basic industrial groupings and where their relative proximity to other uses requires more restrictive regulation as to hours of operation, method of manufacturing, traffic patterns, storage of materials and products, shipment of materials and products, etc., so as to better provide for the health, safety and welfare of the public. There shall be strict compliance with the performance standards set forth in sections 12.12-1 through 12.12-4 of this ordinance. All new structures and uses and changes or additions to existing structures and uses shall be in compliance with the site plan review requirements of this ordinance (See Section 12.08-2).

-Individual industries served by public sanitary sewage facilities shall provide a minimum lot area of ten thousand (10,000) square feet and a minimum frontage of seventy-five (75) feet in width.

<u>C-1 Lowland Resource Conservancy District:</u> The C-1 Lowland Resource Conservancy District is intended to be used to prevent destruction of valuable natural or manmade resources and to protect water courses and marshes including the shorelands of navigable waters, and areas that are not naturally drained, or which are subject to periodic flooding, where development would result in hazards to health or safety or would deplete or destroy natural resources or be otherwise incompatible with public welfare.





# **Tax Incremental Districts**

No tax increment districts currently reside in the study area.

#### **Natural Features**

The study area contains a variety of areas designated as environmentally significant consisting of either primary environmental corridor, secondary environmental corridors, isolated natural resource areas, 100-year floodplains, and wetlands. The map below highlights the natural features currently found.

## Topography

The overall topography of the study is found on the natural feature map herein. The study area is predominantly flat with steep slopes found in a few areas usually adjacent to environmentally significant lands (creeks, floodplains).

### Infrastructure

#### Sewer Service Boundary

The adopted sanitary sewer area boundary only occurs in the southern area of the study area from CTH S up to CTH E. A small "island" section of the approved sewer boundary also exists that contains the "Oakdale Estates" development on the southeast corner of I-94 and CTH KR (see map herein).

A recent amendment to the adopted sewer service boundary was made for the Village of Somers and the City of Kenosha for lands west of I-94. This amendment was made as part of the implementation of the Cooperative Boundary Agreement recently approved by the Village, Coty of Kenosha, and the Town of Paris. A major recommendation of this study is to provide the future land uses desired for the areas in the study boundary that aren't currently in the adopted sanitary sewer area boundary. Requests to amend the entire Village of Somers into the adopted sewer service area boundary will then be made to the Southeastern Wisconsin Regional Planning Commission (SEWRPC).

#### Sewer

Sanitary sewer is currently found south east of the study area along CTH H where a 24" force main exists west of the First Park 94 Industrial Park. A conceptual plan on how sewer would service the study area along the western portion of the subcontinental divide is shown in the maps herein. The resulting mains would largely depend on future development proposal layouts. However, the concepts show that the entire western half of the study area can be serviced. The northeast portion of the study area, on the east half of the subcontinental divide, would be serviced from sanitary interceptors to the east. Any future development proposed in the northern portion of the study are may require temporary sewer service mains while the rest of the study area develops over the next decades. Sewer service studies will be required depending on the intensities and locations of future proposed developments throughout the study area.

#### <u>Water</u>

Public water is currently found in the Village of Somers within the First Park 94 Industrial Park southeast of the study area along CTH H. A 16" pipe exists here that upon installation of a future pump station will be able to service any portion of the study area that is west of CTH H (see future concept water map herein). Depending on future development patterns a future elevated storage tank is shown as needed somewhere in the central area of the study area around CTH E. The northeast portion of the study east of CTH H is in the Kenosha Booster Zone 1. This area would be serviced from existing water mains that currently exist along CTH E to the south.

#### <u>Storm</u>

Miscellaneous storm sewers are found throughout the study area with most drainage occurring in rural ditch sections of the roadways. A few private developments and the Wisconsin Department of Transportation (WisDOT) contain their own stormwater management features along I-94.







Future Land Use Study 2018 Village of Somers, WI



#### Transportation Network

The study area has access to three (3) of the seven (7) interchanges within Kenosha County. In addition, a frontage road (East Frontage Road (120<sup>th</sup> Ave)) provides direct access to properties adjacent to I-94 along the study area. Major west-east arterial roads within the study area include CTH KR, A, E, and S (Burlington Road). 100<sup>th</sup> Avenue serves as the main north-south arterial found in the study area.



The Southeastern Wisconsin Regional Planning Commission (SEWRPC) has adopted VISION 2050: *A Regional Land Use and Transportation Plan for Southeastern Wisconsin* relating to transportation network improvement projects that relate to Southeastern Wisconsin and the Village of Somers study area. Future forecasts and recommendations from the plan for the study area are as follows:

- Add possible future park and Ride location at the I-94 and Hwy 142/CTH S interchange.
- Add bicycle accommodations on highways when reconstructing (Along CTH KR, H, E, & S).
- Expand I-94 to eight (8) lanes. NOTE: This is occurring from 2018-2019.
- Reserve right-of-way to accommodate future improvement to 4 lanes along CTH KR, H, E, and S.
- Look to extend Lichter Road (18<sup>th</sup> St) to the west in the future.

# **Current Developments**

During the time of authoring this study a variety of important developments that have the ability to impact the future land use patterns in and around the study area are occurring as follows:

Foxconn -From 2018 to 2020 the world employment giant Foxconn will be building their 20+ million square foot electronics manufacturing facility in the Village of Mount Pleasant (In "Area 1" in inset map). The development will be located just east of Interstate 94 between the CTH KR and Hwy 11 interchanges (directly across the border from the Somers study area along CTH KR). The development is expected to create upwards of 13,000 jobs and require the need for over 100 supplier companies that may require the need to locate close to the Foxconn facility. As part of the development, utilities will initially be brought from the City of Racine out to the Further, the roadways Interstate 94 corridor area. surrounding the Foxconn facility, and other surrounding areas created for the future business park, are all scheduled for major upgrades and reconstruction. The roadways currently being designed include Braun Road, CTH KR, and Hwy 11 east of I-94. The reconstructions of the roadways will include pedestrian pathways, boulevards, and multiple lane additions from the rural cross section roadways the predominantly are found today.



An initial 13,000 employees are expected to be a part of the business. The campus of Foxconn will include approximately 20 million square feet of building.



**Road Improvements with Foxconn** – A variety of roadways surrounding the Foxconn development are being reconstructed and considerably expanded. Some of these improvements directly affect the northwest portion of the Somers study area including the following:

- CTH KR:
  - Reconstruct from two lane rural road to six (6) lane boulevard cross section (with sidewalks) from I-94 to CTH H.
  - Reconstruct from two lane rural road to four (4) lane boulevard cross section (with sidewalks) from CTH H to CTH EA/90<sup>th</sup> Street (*Note: Plans to extend four (4) lanes further east to Highways 31 and 32 may occur in not too distant future*).
  - Add four (4) traffic control lights at the following intersections of CTH KR: Wisconn Valley Way (new for Foxconn development), 100<sup>th</sup> Avenue, midway between 100<sup>th</sup> Ave and CTH H (new for Foxconn development), CTH H.
- CTH H from CTH KR to CTH A: Resurfacing in 2018
- CTH A from CTH H to East Frontage Road: Resurfacing in 2018







**Village of Mount Pleasant Land Use Planning** – In association with the Foxconn proposal the Village of Mount Pleasant recently amended their Comprehensive Land Use Plan Map for the areas directly north of the Somers Study Area along CTH KR. The new land uses are shown in the image inset herein and now depict the entire bordering area to the Village of Somers as future "Business/Industrial Park" uses.



**Interstate 94 Widening** – WisDOT is starting the widening and improvements of Interstate 94 in 2018 with a conclusion in December 2019. The improvements will widen the interstate to eight (8) lanes and will include numerous interchange improvements at CTH KR, CTH E, and Hwy 142/CTH S.

**Area Large Scale Industrial Developments** – It is important to note that a number of large scale speculation industrial developments have recently been proposed in Kenosha County in close relation to the Somers study area. These developments are believed to be coming forward in anticipation of being adequate locations for future Foxconn supplier businesses. Foxconn initially related that over 100 supplier businesses will be required upon their opening in 2020.

- <u>Stateline 94 Corporate Park:</u> 300 acres east of I-94 along CTH ML in Pleasant Prairie to include 1.87 million square feet of development potential (buildings of 716,000 SF, 105,000 SF, 391,950 SF, 600,000 SF, and 62,000 SF); TID incentives.
- <u>Land south of Uline Facility</u>: 66 acres west of I-94 just south of 38<sup>th</sup> street in the City of Kenosha to include 1 million square feet of development potential (buildings of 717,600 SF and 288,000 SF).



# **Market Analysis**

This study includes a basic market analysis to give insight on what types of land uses may be targeted for future development. The analysis include pertinent information to Somers and the surrounding region that may drive future development of the study area.

#### Market Profile

Market analysis data was collected to aid in determining the types of industries that may best serve the I-94 study area. The data was collected by centering a point at the CTH E/Interstate 94 interchange (Center point of study area) including five-, ten-, and fifteen-minute drive times. Collecting the data over multiple geographic drive times gives insight into the dynamics of the confines of the I-94 corridor itself (5 minute drive area), the immediate surrounding cities, villages, and properties adorning the I-94 corridor to the north and south (10 & 15 drive areas). The data includes statistics on consumer spending, supply



vs. demand in the marketplace, household budgeting, and various market statistics (Source: ESRI Business Analyst 2017). Lastly, CoStar Analytics were used to view the current vacancies and absorption rates of the immediate region.

| Statistic                              | 5-Minute<br>Radius | 10-Minute<br>Radius | 15-Minute<br>Radius |
|--|--------------------|---------------------|---------------------|
| 2017 Total Population                  | 987                | 26,514              | 105,347             |
| 2022 Projected Population              | 1,002              | 26,892              | 107,045             |
| 2017 Total Daytime Population          | 762                | 32,466              | 95,600              |
| Workers                                | 318                | 20692               | 42081               |
| Residents                              | 444                | 11774               | 53519               |
| 2017 Households                        | 419                | 8950                | 41341               |
| 2017 Median Household Income           | \$ 59,516          | \$ 66,904           | \$ 55,664           |
| 2022 Projected Median Household Income | \$ 70,566          | \$ 76,914           | \$ 64,244           |
| 2017 Median Home Value                 | \$239,815          | \$217,886           | \$175,756           |
| 2022 Projected Median Home Value       | \$287,500          | \$238,982           | \$193,776           |

#### General Area Demographic Characteristics

#### **Consumer Spending**

Consumer spending metrics display what the people in the area are spending their money on. An analysis of consumer spending sheds light on what industries may be most advantageous to locating close to the people of a given area. Here are a few takeaways from the current data:

- All geographic areas are consistent with primary spending on home (~30%), food (~12%), transportation (~12%), retirement (~11%), and healthcare (~8%).
- Disposable income on "food away from home" (~5%) and "entertainment and recreation" (~4.5%) lead the way after the normal spending areas are considered.



• An average of over \$5,500 per individual is spent per year on "apparel and services" and "entertainment and recreation". In the entire 15-minute drive time area this amounts to over \$50 million in money spent for these needs.

#### Retail Marketplace Profile (supply vs. demand)

The retail marketplace table (industry supply (retail sales) vs demand (retail potential)) paints a similar picture to consumer spending but shows where a need or lack of industry is found in the planning area. Such data can point to locations that are frequented heavy by the population as well as where locations are that the population may be leaving the community to spend their money. Adding a retail marketplace analysis can give a deeper insight on which industries are lacking for a region and may be the most ideal to promote in future marketing to developers. Given the expanse of the study area the following data was taken from the 15 minute drive are to give the best picture of the area market:

- All types of commercial industries see a leakage other than "electronics & appliance stores", "specialty food stores", and "nonstore retailers".
- The largest retail gaps are found in the following commercial industries:
  - o General Merchandise Stores
  - Food & Beverage Stores
  - Motor Vehicle & Parts Dealers
  - o Restaurants/Other Eating Places

#### **Business Summary**

The business summary statistics take a deeper look into the commercial and industrial businesses that are found in a geographic area. Cross referencing the amounts/types of businesses with the demand/supply analysis can truly reveal what industries may be lacking and be the most marketable for a given area. The main takeaway is the lack of manufacturing and transportation businesses in the region at this time:

- The following industries make up the bulk of the businesses throughout the 15-minute radius area:
  - Retail Trades (24.8%)
  - Finance, Insurance, Real Estate (10%)
  - Services Industry (37.2%)
- Manufacturing and Transportation industries combined currently makes up 14.8% (4 businesses) in the 5-minute radius area, 11.4% (123 businesses) in the 10-minute radius area, and only 8.5% (257 businesses) in the overall 15-minute radius area.

| Statistic                       | 5-Minute<br>Radius | 10-Minute<br>Radius | 15-Minute<br>Radius |
|---------------------------------|--------------------|---------------------|---------------------|
| Total Businesses                | 27                 | 1,077               | 3,042               |
| Total Employees                 | 469                | 23,511              | 47,050              |
| Total Population                | 987                | 26,514              | 105,347             |
| Employee/Residential Population | 48                 | 89                  | 45                  |
| Ratio (per 100 Residents)       |                    |                     |                     |



#### Absorption Rates

Area absorption rates can display the potential for fulfilling successful new developments along the study area. Absorption can tell the Village what industries may be most lucrative to market due to the demand of the particular industry in the region. Below is a collection of the absorption trends in Racine and Kenosha Counties for the retail, industrial, and office industries. The tables and background data display the following takeaways:

- Retail Industries The past two years have shown that the retail industry is a continual growing market in the region able to absorb over 50,000 sqaure feet of available space every quarter since Q2 2016. A small dip is found in Q3 2017 but the rates recovered in Q4 2017.
- Industrial Industries 2016 and 2017 each saw over 2 million square feet of absorption and the trend is believed to continue astronomically in 2018 with Foxconn and the possible supplier industries required.
- Office Industry The office industry has rather low absorption rates compared to retail and industrial. Most quarters see less than 50,000 SF of absorption with Racine County in particular at around zero square feet most quarters. The large rise in Q4 2017 is due to an office building in Kenosha County taking lease.

#### **RETAIL: Racine & Kenosha Counties**



#### **INDUSTRIAL: Racine & Kenosha Counties**



#### **OFFICE: Racine & Kenosha Counties**





#### Vacancy Rates

Another indicator of the area market is in relation to vacancy, which is the amount of unoccupied square feet of the various target industries that may be found in the region. Below is a collection of the vacancy trends in Racine and Kenosha Counties for the retail, industrial, and office industries. The tables and background data display the following takeaways:

 Retail Industries – Vacany in the area is at a low point over the past two years with only around 50,000 SF (5%) of vacancy as of Q4 2017 across both counties. The current market for retail is similar in both counties with

**RETAIL: Racine & Kenosha Counties** 



Racine County at a 5.3% vacancy rate today and Kenosha County at a 4.4% vacancy rate.

- Industrial Industries Vacancy hasn't been above the historical average of 5.91% since 2012. While dipping to around 2% in 2015 the rate currently is around 5% with only 80,000 SF of vacany as of Q4 2017. The market for industrial is largely in Kenosha County with approxaimtely 1,946,000 sqaure feet available compared to 940,000 sqaure feet in Racine County.
- Office Industry Office is consistent with the other industries staying well below the historical average of 5.91% currently at 4.7% in Q4 2017. The market for office vacancy is largely in Racine County with approximately 272,000 sqaure feet available compared to 71,000 sqaure feet in Kenosha County.





#### **Overall Q4 2017 Vacancy/Absorption Picture**

| Industry     | Q4 2017     | Inventory (SF) | Overall<br>Vacant (SF) | Vacancy Rate | Overall Absorption<br>(SF) |
|--------------|-------------|----------------|------------------------|--------------|----------------------------|
| Retail       | Racine Co.  | 14,932,085     | 796,310                | 5.3%         | 43,649                     |
|              | Kenosha Co. | 10,649,384     | 469,553                | 4.4%         | 3,108                      |
| Industrial - | Racine Co.  | 29,230,846     | 940,080                | 3.2%         | 254,136                    |
|              | Kenosha Co. | 29,246,222     | 1,946,354              | 6.7%         | -174,753                   |
| Office       | Racine Co.  | 4,870,070      | 272,307                | 5.6%         | -5,756                     |
|              | Kenosha Co. | 2,416,248      | 71,131                 | 2.9%         | 297,696                    |



#### Stakeholder Conversation

Foth conducted conversations with economic development professionals in the area in order to formulize what the development potential may be realized along the I-94 corridor in today's market along with what types of industries may be expected in the near future. The unbiased insights give further understandings into future anticipated development patterns in the coming years.

Discussion points with Kenosha Area Business Alliance (KABA):

 Much uncertainty around Foxconn development and questions about what suppliers would locate near their facility and whether these suppliers would locate on adjacent Foxconn supplier park property or need additional sites in neighboring area



- There is a lot of supply in Kenosha County looking to come online in the coming in multiple shapes/sizes
- Housing of all types will be needed (single family, multi family, condos)
- Discussion has been that industrial/distribution and major retail/commercial centers want to be as close to I-94 as possible.
- KABA is actively promoting Kenosha County area and aggressively seeking new investments and development projects. There are a couple of marketing campaigns focused on talent attraction and retail development that members of the team are involved in along with several area municipalities.
- What should local communities be doing?
  - Plan for investments in infrastructure and use of TID to offset improvements (possible incentive funds).
  - Overall, help prepare new business parks and sites.
  - Things that get the community ready for development and help save an end user time and money. *All these are viewed very favorably when KABA is competing for investment projects.*
- What has Kenosha County been seeing? What have local community investments led to?
  - See Appendix A for Kenosha County business wins and investments since 2013

Discussion points with Principals/Brokers of the Industrial and Commercial Divisions from Boerke-Cushman & Wakefield:

- Market for industrial and commercial supporting uses in flux until:
  - Foxconn breaks ground
  - New infrastructure projects begin and end
  - Foxconn supporting industries come to market and show their needs (land, occupations, infrastructure)
- Industrial and Commercial support industries are at a low vacancy and the amount of area square feet is very low given the level of development activity being forecasted along I-94 corridor between Illinois to Milwaukee.
- Standalone 3-5 acre commercial parcels hard to sell in region.
- Property owners are best suited to leave large parcels as-is that are ready to accommodate any size or type (commercial/industrial) of development.
- Most end users will result from a property that is marketed as "pad-ready" having all utilities, base grading, and regional stormwater built OR at least funded for immediate construction when developer makes proposal.
- Having parcels pad-ready allowable for multiple uses (i.e. business park uses) in the commercial and industrial industries separates parcel from most other developments in the area and is more easily marketable as it reduces timeframes for developers.



#### <u>Tax Base</u>

The 2017 Statement of Assessment for the Village of Somers is shown in the table below. Commercial uses are found to be at a consistent percentage of the overall tax base compared to similar communities in Wisconsin. The amount of industrial tax base however is fairly low.

Increasing potential for new industrial uses could aid in balancing the commercial and residential tax bases in the community. Industrial related uses can provide a tax base with a limited amount of resources that require provision in a community.

| 2017 Statement of Assessment |    |             |        |  |
|------------------------------|----|-------------|--------|--|
| Residential                  | \$ | 521,869,400 | 74.85% |  |
| Commercial                   | \$ | 160,238,200 | 22.98% |  |
| Industrial                   | \$ | 2,844,600   | 0.41%  |  |
| Other                        | \$ | 12,260,800  | 1.76%  |  |
| Total                        | \$ | 697,213,000 | 100%   |  |

#### Economic SWOT Analysis

An independent strengths, weaknesses, opportunities, and threats (SWOT) analysis was completed for the study area in relation to the future development potential.

#### Strengths (The advantages the area has)-

- Along highest travel interstate in Wisconsin
- Along three (3) interstate interchanges in Kenosha County
- All interstate interchanges receiving upgrades in 2018-2019
- Interstate 94 reconstructing to eight (8) lanes in 2018-2019
- Burlington Road (CTH S) is a main thoroughfare to City of Kenosha downtown and Lake Michigan recreation opportunities
- Employment giant Foxconn developing 20 Mil square foot campus across street from Somers along CTH KR with 13,000 projected employees
- The possible need for area to support one hundred (100) supplier businesses for Foxconn in area
- The need for new housing and commercial supporting services for Foxconn and other new businesses along corridor
- Current zoning has districts in place to support future business park land uses
- Large open tracts of land with limited grading needs available
- Many lands currently assessed as agricultural uses

#### Weaknesses (The disadvantages the area has)-

- No sewer service; sewer service hampered by subcontinental divide
- No water service; water service split between Somers and Kenosha zones
- No internal road infrastructure or designs in place to support business park uses
- Future Comprehensive Land Uses are not in place guiding industrial and/or commercial development
- Many environmental lands (wetlands, floodplains) in area
- Other pad-ready land possibilities are in the works for industrial and commercial development just north in the Village of Mount Pleasant
- Existing development restraints including Infrastructure costs
- Who is the Village of Somers?



#### Opportunities (Elements in environment that area could exploit to advantage)-

- Be the new destination for supporting businesses (industrial and commercial) to Foxconn development and Wisconn Valley (I-94 Corridor name for future array of electronics industry and support businesses)
- Clean slate: Ability to create unified (aesthetically/architecturally) future business parks at gateways to Village
- Beautify CTH KR, CTH E, and CTH S as gateways/identifiers to Somers (roadway beautification, gateway signs, etc.)
- Creation of regional stormwater areas for increased develop-ability of businesses
- Village could see increase in residential uses in area that drive commercial use need
- Future cooperation with the City of Kenosha to the south and the Village of Mount Pleasant to the north to expand commercial/industrial uses as business park gateway into Somers
- Large amount of tax base to be gained due to existing assessments as agricultural.
- Tax increment district to fund infrastructure and developer incentives.

#### Threats (Elements in environment that could cause trouble for area)-

- Foxconn support uses may benefit better from properties that are pad-ready and sewer/water serviceable
- Cost of property at all-time high and coupled with infrastructure costs in the area could pose problem
- Numerous environmental lands in area could cause development delays
- Unknowns of actual demand Wisconn Valley will have for needs in relation to industrial and commercial building sizes.
- Unknowns of actual demand Wisconn Valley will have for amount of units and types of housing.

**APPENDIX A** 

# Recent Economic Investments



# Kenosha County, December 2017

Kenosha County is experiencing a surge in development activity. Since 2013, major economic development wins in Kenosha County have accounted for:



These projects are coming from a diverse set of industries, from company headquarters to food processing to advanced manufacturing and logistics. To read more about a project or to stay up to speed on Kenosha Area development activity, visit kaba.org.



# Kenosha County



#### Jobs: 400 Investment: \$242 million Project: 500,000 SF advanced manufacturing facility

- > Largest FDI Attraction Project in State of Wisconsin History
- > Highly competitive site selection process
- > Located in the new Prairie Highlands Corporate Park



#### Jobs: 3,000 Investment: \$300+ million Project: Fulfillment & sortation center totaling 1.5MM SF

- > Fortune 50 online retailer
- > Extensive & competitive site selection process
- > Development-ready site, proximity to I-94, location & competitive package of assistance drove location decision



#### Jobs: 500 Investment: \$100+ million Project: 250,000 SF HQ campus; 1MM SF distribution

- > Project will double the size of its headquarters
- > Brings Uline's app. square footage in Kenosha County from 1.2 million in 2009 to over 2.5 million in 2017





- Jobs: 475 Investment: \$75 million Project: 1,000,000 SF distribution; 60,000 SF office space
- > Relocating its Midwest Distribution Operations from Waukegan, IL
- Brings Uline's app. employment in Kenosha County from 1,000 to 2,500 in 2017

"Manufacturing in Wiscensin is a long term competitive advantage." - Keith Smith, President, Venco Products

# Recent **Economic Investments**

# Kenosha County, December 2017





- > Growing LED lighting manufacturer looking to expand
- Chose to relocate/expand in Kenosha County after a very competitive regional site selection process
- > Site has adequate space for expansion





#### Jobs: 200 Investment: \$18.5 million Project: 160,000 SF advanced manufacturing facility

- InSinkErator is the world's largest manufacturer of food waste disposers for home and commercial use
- KABA helped assemble local financial assistance in support of the expansion project



#### Jobs: 86 Investment: \$11 million Project: 80,500 SF HQs & advanced mfg facility

- > Growing packaging manufacturer looking to relocate, expand
- Broke ground on new building which was the first development in the new Salem Business Park in western Kenosha County



#### Jobs: 96 Investment: \$42 million Project: 200,000 SF food processing facility

- > The Chicago-based high-volume commercial baker chose LakeView Corporate Park in Pleasant Prairie for the site of its expanded manufacturing operations
- > It is the second production facility for the company



#### Jobs: 100 Investment: \$25 million Project: 173,000 SF advanced manufacturing facility

- Packaging manufacturer chose to relcoate from Lake Forest, IL after a competitive regional site selection process
- > KABA helped assemble local and state financial assistance in support of the expansion project





#### Jobs: 50 + 125 after subsequent expansion Investment: \$5+ million Project: 57K SF HQs & food processing facility + 40K SF expansion

Rapidly-growing IL-based manufacturer of all natural food products needed additional space to accommodate growth; added onto facility one year later do to continued growth



#### Jobs: 88 Investment: \$75 million Project: 377,000 SF advanced manufacturing facility

- > Nation's largest private label bottled water supplier
- > Extensive & competitive site selection process
- > Went from a shovel-ready site to rolling its first bottle off the line in just 233 days





#### Jobs: 176 + 24 for HQs Investment: \$5+ million Project: 221,433 SF manufacturing facility; HQ relocation

- > Relocated some operations from Arkansas to Pleasant Prairie
- Selected WI after taking part in a site selection process that involved numerous states; chose to relocate HQs here as well six months later; expanded 2 years later added 40 jobs and 45,000 SF

"I can't imagine a better place to be situated for continued growth than here in Southeast Wisconsin."

- Kurt Penn, CEO, Good Foods Group