

**SEWER UTILITY
DISTRICT NO. 1**

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Mount Pleasant, WI
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June 17, 2021

Mr. Mike Gitter, P.E.—Interim General Manager
Racine Water and Wastewater Utility
800 Center Street, Room 227
Racine, WI 53403

Re: Request for Cost of Service Study
Chicory Road Area Sewer Improvements

Dear Mr. Gitter,

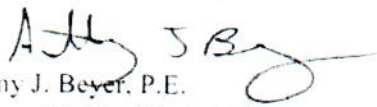
The purpose of this letter is to request that the Racine Wastewater Commission consider authorizing staff to perform a Cost of Service Study (COSS) for proposed improvements to the Chicory Road Interceptor Sewer System. This request is in accordance with Section 3.6 of the Racine Area Intergovernmental Sanitary Sewer Service, Revenue-Sharing, Cooperation and Settlement Agreement—*Provision of Unplanned Expanded Sewer Service Facilities*. The Village of Mount Pleasant wishes to expedite a proposed project in this area.

This request is based on the recently completed technical memorandum from Brown and Caldwell (attached), dated June 11, 2021, providing recommendations to alleviate capacity constraints in the Chicory Road interceptor sewer and tributary sewers. Specifically, it is requested that the COSS be prepared for Alternative 6b as presented in the referenced technical memorandum.

Please contact me if you have any questions at (262) 664-7849.

Sincerely,

Mt. Pleasant Sewer Utility District #1


Anthony J. Beyer, P.E.
Director of Public Works/Village Engineer

Encl. as Noted

Cc: Utilities Commission
Maureen Murphy
Claude Lois
John Hewitt
Linsey Weber

**Racine Water and
Wastewater Utilities**

Keith E. Haas, P.E.
General Manager



Michael L. Gitter, P.E.
Chief of Operations
Kenneth M. Scolaro, C.P.A.
Administrative Manager
Chad W. Regalia, P.E.
Chief Engineer

July 1, 2021

Mayor Cory Mason
City of Racine
730 Washington Ave.
Racine, WI 53403

SUBJECT: Mt Pleasant Unplanned Expanded Sewer Service Facility Project Request

Dear Mayor Mason:

This letter is being sent to you in accordance with the Racine Intergovernmental Sanitary Sewer Service Agreement. Attached is a copy of correspondence dated June 17, 2021 from Tony Beyer of the Village of Mount Pleasant, which requests a Cost of Service Study (COSS) related to Chicory Road Area Sewer Improvements.

Per Agreement Section 3.6 Provision of Unplanned Expanded Sewer Service Facilities.

Agreement Section 3.6 d. Cost of Service-Based Allocation. "The Wastewater Commission shall prepare or cause to be prepared an appropriate Cost of Service-Based Allocation relating to the allocation of the costs of any Unplanned Expanded Sewer Service Facilities."

Agreement Section 3.6 e. SSR Party Proposals/Limitations. "Any of the SSR Parties may propose to the Wastewater Commission that it provide Unplanned Expanded Sewer Service Facilities to one or more of the SSR Parties. The Wastewater Commission shall notify each of the Parties in writing not less than 90 days prior to deciding any such request. Each SSR Party may comment on such request by written notice to the Wastewater Commission during the notice period."

Agreement Section 3.6 f. Notice. "The Wastewater Commission shall give each Party not less than 90 days prior written notice before deciding to proceed with either the design or construction of any Unplanned Expanded Sewer Service Facilities. Each such notice shall describe what the Wastewater Commission proposes to do and why. To the extent practicable, each such notice shall describe the timing of the project, state the estimated total cost of the project, and state what portion of such total cost it estimates will be the responsibility of each SSR Party. The Wastewater Commission shall review and consider any written comments received from any of the Parties within the notice period before making its decision regarding design or construction of the project. The Wastewater Commission shall give each Party not less

than 40 days prior written notice before approving any proposed Cost of Service Study or Cost of Service-Based Allocation with respect to any such project."

Accompanying the Village request correspondence is a technical memorandum prepared by Brown and Caldwell dated June 11, 2021. It is noted in the memorandum that the Chicory Road Area Sewer Improvements project is needed to address basement backups experienced during heavy rainfall events in recent years in this neighborhood tributary. Various alternatives were explored in the Chicory Road sewer basin to determine the cause and mitigation strategies for alleviating basement backups. Given the need to address basement backups in the short term, the focus of alternatives evaluation was on conveyance and storage solutions that could be designed and constructed in a few years, as opposed to long-term Inflow and Infiltration (I/I) reduction efforts, such as sewer and manhole rehabilitation.

Brown and Caldwell used the Mike Urban model for the Chicory Road basin evaluation with a 2020 condition 5 yr/6 hr storm event as the baseline. The model was recalibrated using four flowmeters within the Chicory Road sewer basin to three rain events in 2019 and 2020, including the May 17, 2020 event known to have produced significant basement flooding in the basin. The memorandum concludes with recommendation for a total 10,500 LF conveyance 24" to 36" pipe upgrade, as well as upgrading a segment of Knoll Place pipe from 10" to 24". Total cost for this project option 6b is estimated at \$12.1M.

The downside of the conveyance upgrade only option 6b is that wet weather peak flows are not contained but rather passed downstream. Thus, the downstream conveyance will see higher flows, but also important is that the wastewater treatment plant will not experience relief from peak flows during storms. This will reduce plant response time and impact plant operations under peak flow conditions. The Village technical memorandum did review other project scenarios and another recommended plan includes 1.66 MG of storage combined with 5,000 LF of conveyance upgrade. This project option 1bb would provide containment so peak flow is not passed downstream. While more expensive, this is likely a friendlier regional solution. Total cost for this project option 1bb is estimated at \$14.3M.

The capital costs of any Unplanned Expanded Sewer Service Facilities shall be allocated to each SSR Party, which is financially participating in the provision of such expanded facilities, in proportion to its share of the new expanded capacity. The Wastewater Commission has authorized Ruckert-Mielke to prepare the COSS associated with this project request in order to provide cost shares to each SSR Party. Both project scenarios (6b and 1bb) will be reviewed for a COSS. The findings of the COSS will be distributed to all SSR Parties upon completion.

Per the Sewer Agreement references provided above, consider this letter to provide Notice under Section 3.6 f. The Commission will deliberate to consider both the project request after a 90-day comment period from the date of this letter, and to consider the COSS after a 40-day comment period of notice of the findings. Upon receiving comments or input from the SSR parties of the

Agreement, I will place these items on Commission agenda upon completion of the comment period.

Questions from your staff or engineers may be directed to my attention on behalf of the Commission.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Gitter".

Michael Gitter, P.E.
Interim General Manager

c: M.Recj
T.McCarthy
S.Sheppard
S.Powell
J.Tate II
N.Taft
P. Vornholt

Enclosure

**Racine Water and
Wastewater Utilities**

Keith E. Haas, P.E.
General Manager



Michael L. Gitter, P.E.
Chief of Operations
Kenneth M. Scolaro, C.P.A.
Administrative Manager
Chad W. Regalia, P.E.
Chief Engineer

September 7, 2021

Mayor Cory Mason
City of Racine
730 Washington Ave.
Racine, WI 53403

SUBJECT: Chicory Road Unplanned Expanded Sewer Service Facility Project COSS

Dear Mayor Mason:

This letter is being sent to you in accordance with the Racine Intergovernmental Sanitary Sewer Service Agreement. A notice was provided in correspondence dated July 1, 2021 from the Wastewater Commission, which requests a Cost of Service Study (COSS) related to Chicory Road Area Sewer Improvements. The intent of this project being to mitigate basement backups to Mount Pleasant and Racine residents living in this Chicory Road area. The project would be defined as an Unplanned Expanded Sewer Service Facility per the Sewer Agreement.

Per Agreement Section 3.6 Provision of Unplanned Expanded Sewer Service Facilities.

Agreement Section 3.6 d. Cost of Service-Based Allocation. "The Wastewater Commission shall prepare or cause to be prepared an appropriate Cost of Service-Based Allocation relating to the allocation of the costs of any Unplanned Expanded Sewer Service Facilities."

Agreement Section 3.6 e. SSR Party Proposals/Limitations. "Any of the SSR Parties may propose to the Wastewater Commission that it provide Unplanned Expanded Sewer Service Facilities to one or more of the SSR Parties. The Wastewater Commission shall notify each of the Parties in writing not less than 90 days prior to deciding any such request. Each SSR Party may comment on such request by written notice to the Wastewater Commission during the notice period."

Agreement Section 3.6 f. Notice. "The Wastewater Commission shall give each Party not less than 90 days prior written notice before deciding to proceed with either the design or construction of any Unplanned Expanded Sewer Service Facilities. Each such notice shall describe what the Wastewater Commission proposes to do and why. To the extent practicable, each such notice shall describe the timing of the project, state the estimated total cost of the project, and state what portion of such total cost it estimates will be the responsibility of each

SSR Party. The Wastewater Commission shall review and consider any written comments received from any of the Parties within the notice period before making its decision regarding design or construction of the project. The Wastewater Commission shall give each Party not less than 40 days prior written notice before approving any proposed Cost of Service Study or Cost of Service-Based Allocation with respect to any such project."

Accompanying the July 1st correspondence was a technical memorandum prepared by Brown and Caldwell dated June 11, 2021. It is noted in the memorandum that the Chicory Road Area Sewer Improvements project is needed to address basement backups experienced during heavy rainfall events in recent years in this neighborhood tributary. Various alternatives were explored in the Chicory Road sewer basin to determine the cause and mitigation strategies for alleviating basement backups.

Brown and Caldwell used the Mike Urban model for the Chicory Road basin evaluation with a 2020 condition 5 yr/6 hr storm event as the baseline. The memorandum concludes with recommendation for a total 10,500 LF conveyance 24" to 36" pipe upgrade, as well as upgrading a segment of Knoll Place pipe from 10" to 24". Total cost for this project alternative 6b is estimated at \$14.5M with contingencies.

The downside of the conveyance upgrade only alternative 6b, as requested by the Village of Mount Pleasant, is that wet weather peak flows are not contained but rather passed downstream. Thus, the downstream conveyance will see higher flows, but also important is that the wastewater treatment plant will not experience relief from peak flows during storms. This will reduce plant response time and impact plant operations under peak flow conditions. The Village technical memorandum did review other project scenarios and another recommended plan includes 1.66 MG of storage combined with 5,000 LF of conveyance upgrade. This project alternative 1bb would provide containment so peak flow is not passed downstream. While more expensive, this is likely a friendlier regional solution, especially in terms of treatment plant operation impacts. Total cost for this project alternative 1bb is estimated at \$17.1M with contingencies.

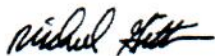
The capital costs of any Unplanned Expanded Sewer Service Facilities shall be allocated to each SSR Party which is financially participating in the provision of such expanded facilities, in proportion to its share of the new expanded capacity. The Wastewater Commission has authorized Ruckert-Mielke to prepare the draft COSS associated with this project request in order to provide cost shares to each SSR Party. Both project alternatives (6b and 1bb) were reviewed for a draft COSS and the findings are attached. In short, costs are to be attributed to two SSR Parties; Mount Pleasant and Racine, as follows.

Project Alternative	Description	Total Est Cost	% Share Mt Pleasant	% Share Racine
6b	Conveyance only	\$14.5M	72.5%	27.5%
1bb	Conveyance + Storage	\$17.1M	73.6%	26.4%

The Commission will deliberate to consider both the project request after a 90-day comment period from the date of the July 1, 2021 letter; and to consider the draft COSS after a 40-day comment period of notice of the findings from the date of this letter. Upon completion of the comment periods from the SSR parties of the Agreement, it would be my intention to place these items on Commission agenda at the October 19, 2021 Wastewater Commission meeting.

Questions from your staff or engineers may be directed to my attention on behalf of the Commission. A few points to note. First, the COSS provided here remains in draft form even if approved at the October commission meeting. Upon conclusion of project construction, the final COSS will be considered by commission for approval with actual construction costs included as part of approval of the project closeout. Second, the Utility intends to apply for a state Clean Water Fund Loan to secure financing for this project and, thus, total costs would be distributed to the specified SSR Parties over a 20-year payback period. Costs would also be reduced if the CWFL application became eligible for principal forgiveness from the state.

Sincerely,



Michael Gitter, P.E.
Interim General Manager

c: M.Reej
T.McCarthy
S.Sheppard
S.Powell
J.Tate II
N.Taft
P. Vornholt

Enclosure