



City Council
COMMITTEE OF THE WHOLE
City of Belvidere, Illinois

Alderman Sheryl Prather	Chairman Building
Alderman Natalie Mulhall	Vice-Chairman Building
Alderman Ric Brereton	Chairman Finance and Personnel
Alderman Wendy Frank	Vice -Chairman Finance and Personnel
Alderman Tom Porter	Chairman Planning & Zoning
Alderman Mike McGee	Vice-Chairman Planning & Zoning
Alderman Clayton Stevens	Chairman Public Safety
Alderman Matthew Fleury	Vice-Chairman Public Safety
Alderman Marsha Freeman	Chairman Public Works
Alderman Daniel Snow	Vice-Chairman Public Works

AGENDA

November 14, 2022
6:00 p.m.
City Council Chambers
401 Whitney Blvd., Belvidere, Illinois

Call to Order:

Roll Call:

Public Comment:

Public Forum:

Reports of Officers, Boards, and Special Committees:

1. Building, Planning & Zoning, Unfinished Business: None.
2. Building, Planning & Zoning, New Business:
 - A. Building Department - Update.

B. Planning & Zoning Department - Update.

3. Public Works, Unfinished Business: None.
4. Public Works, New Business:
 - A. Public Works – Update.
 - B. Water Model Update – Tollway South.
5. Other:
 - A. Ambulance Service.
 - B. Executive Session to discuss Litigation, either Pending or Imminent pursuant to Section 2(c)11.
 - C. ComEd Settlement.
6. Adjournment:

BELVIDERE PUBLIC WORKS

401 Whitney Boulevard

Belvidere, IL 61008

Phone 815-544-9256

Fax: 815-544-4255

Memo

To: Mayor and City Council
From: Brent Anderson, Director of Public Works
Date: November 8, 2022
Re: Water Model Update – Tollway South

With the General Mills project underway, we are receiving multiple inquiries regarding development potential along and south of Interstate 90. Our existing water model does not extend south past the tollway. In order to facilitate the orderly expansion of our water system in this area, the model needs to be updated to provide the framework of main extensions and sizing, well supply and water storage needs based on our existing land use plans.

Attached is a proposal from Strand Associates to update the water model of this area.

I would recommend approval of the proposal from Strand Associates, at a cost not-to-exceed \$12,100.00 for the southeast side water model update. This work will be paid for from line item #61-5-810-6040.



Strand Associates, Inc.®
910 West Wingra Drive
Madison, WI 53715
(P) 608.251.4843
www.strand.com

November 8, 2022

Mr. Brent Anderson, Director of Public Works
City of Belvidere
401 Whitney Boulevard
Belvidere, IL 61008

Re: South Service Area Water System Modeling

Dear Brent,

Thank you for the opportunity to provide this letter proposal to the City of Belvidere for water system modeling associated with areas of potential growth on the south side of the city. This letter presents our understanding of the project along with a proposed scope of services and fee.

Based on our recent conversation, the City is aware of development interest in certain areas south of Interstate 90 and would like to determine the extent of water system improvements needed to serve this area. The area of study is generally defined as shown in the enclosed figure. The proposed scope of services will review a conceptual layout of water main needed to serve the area and identify locations suitable for well and elevated tank sites needed to serve the area.

Scope of Services

- Review City-provided anticipated service area boundary and land use in the south service area (SSA) located south of Interstate-90.
- Develop present-day and projected full build out maximum-day demands in the SSA using City-provided planning information and historical demand trends.
- Compare the projected water demands to existing City well supply and storage facilities.
- Evaluate if additional supply or storage facilities are needed to accommodate system expansion into the SSA. Evaluate potential sizes and locations of proposed improvements based on previous siting reports and City guidance.
- Update the water model with recent water main improvements and known upcoming improvements.
- Develop conceptual water main routing and sizing in the City's existing computerized hydraulic model to serve the SSA.
- Simulate maximum-day demands with the conceptual water main for full build out in the SSA.
- Prepare recommendations for distribution system improvements based on modeled pressure and fire flow results in the SSA, including water main sizes and as-needed supply and storage locations and capacities.
- Prepare a draft report summarizing demand analysis and modeling efforts.
- Review the draft report with City to discuss results.
- Incorporate City comments, as appropriate, finalize the draft report, and submit final report to City.

Fee

Our estimated not-to-exceed fee for the above scope of services is \$12,100.

Mr. Brent Anderson
City of Belvidere
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Schedule

We have availability to begin this project immediately upon execution of an engineering services agreement. The modeling and report will be completed within 4 weeks of receiving a notice to proceed.

Please call us at 608-251-4843 with any questions.

Sincerely,

STRAND ASSOCIATES, INC.®



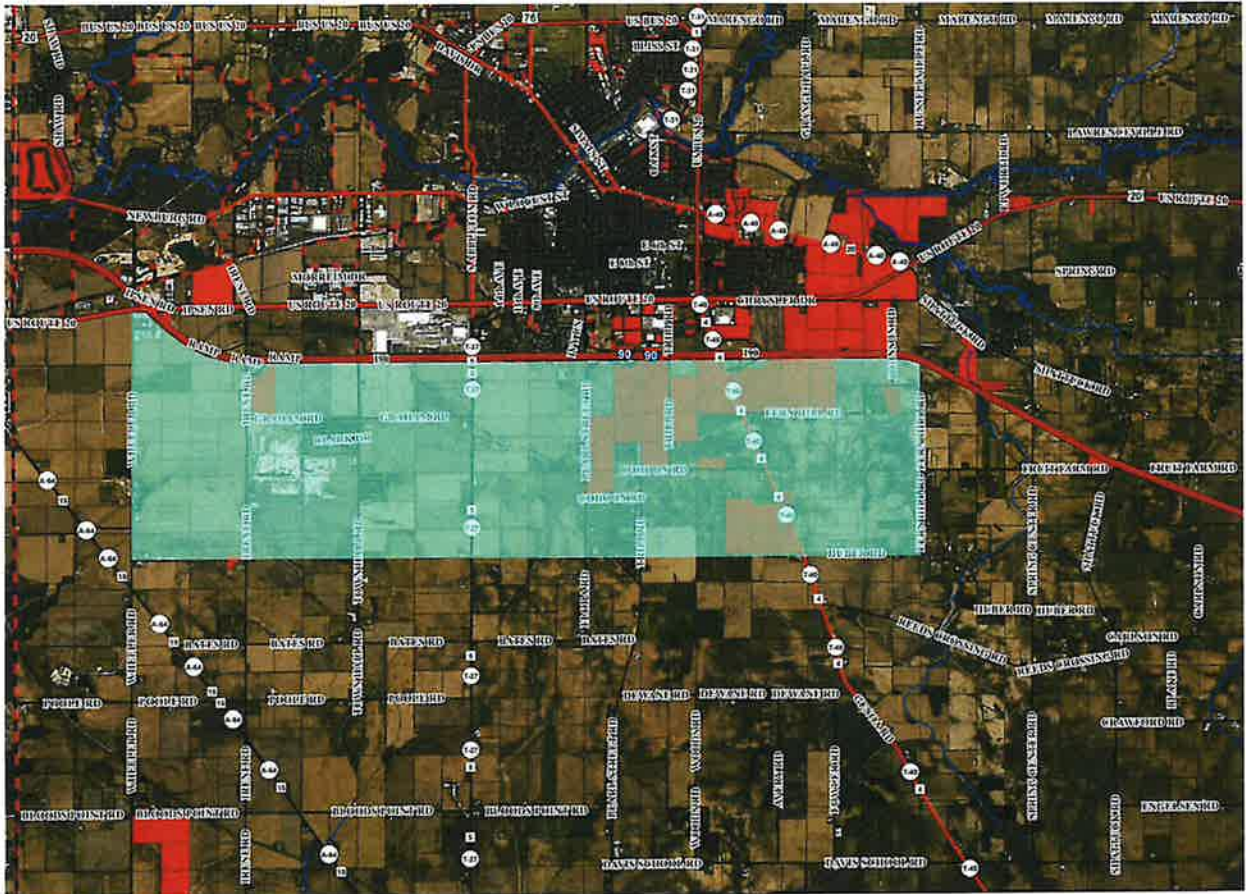
Michael J. Forslund, P.E.



Connor T. O'Rourke, P.E.

Enclosure

c: Kevin Fricke, Assistant Director of Public Works



Source: Base map provided by City of Belvidere.

SOUTH SERVICE AREA WATER MODELING

CITY OF BELVIDERE, ILLINOIS



FIGURE 1