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## MEMORANDUM

TO: Trevor Walter, PE

FROM: Tayler Thom

DATE: September 24, 2024

RE: 2024 Water CAMP Spreadsheet Use & Update Discussion  
SEH No. 173339.01.14 14.00

This memorandum describes the content, use and update needs of the City's Water CAMP spreadsheet. In 2022, the retained the services of SEH to construct an Excel spreadsheet that lists mutually agreed water system assets for implementation of the Baxter's Water System Capital Asset Management Plan (CAMP). The following describes the use and instructions to update this spreadsheet.

### **Basic Description of the City's Water CAMP Spreadsheet**

This spreadsheet will here forth be regarded as the "Water System CAMP document" and is intended to assist the City with its:

- a. Annual financial planning and budgeting,
- b. Annual work order development for asset maintenance and replacement matters, and
- c. Asset improvements tracking.

The Water System CAMP document asset groups are:

- a. Well Facilities,
- b. Water Treatment Facilities,
- c. Water Towers,
- d. Interconnect Building,
- e. Water Main Assets,
- f. Hydrant Assets, and
- g. Plastic Tees (Ongoing addition).

The Water System CAMP document will assist the City with its year-to-year budgeting process. The document provides the following information for each asset entry that:

- a. Useful life in years,
- b. Annual maintenance costs,
- c. Installed cost or replacement cost

Depending on the asset group, this spreadsheet identifies the following notable parameters for each asset entry:

- a. Asset location,
- b. Type of asset,
- c. Type of equipment associated with the asset, and
- d. Quantity of Equipment,
- e. Year of Installation,
- f. Value of Equipment,
- g. Value of Equipment including Installation,
- h. Useful Life,
- i. O&M Percentage of Total Installed Replacement Value

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- j. Current Installed Construction Value
- k. Project Replacement Value Total
- l. Original O&M Cost Per Year, and finally,
- m. Projected Yearly Expenditures or Savings

The City's Water CAMP spreadsheet is intended to be a "living document" that is updated annually as:

- a. Existing assets are:
  - i. Repaired,
  - ii. Replaced, or
  - iii. Removed from service.
- b. New assets are added to the City's infrastructure.

### **How to Use the City's Water CAMP Spreadsheet**

Execute the following steps to perform the annual water CAMP spreadsheet update:

- a. With the spreadsheet open, save the document to a new file such as 20XX Baxter Water CIP Update.xlsx to keep a record of each update.
- b. Go to the first tab called Wells.
- c. **Wells:**
  - i. Update the Annual Interest Rate that you'd like to consider, and
  - ii. Update the Current Year.
  - iii. Asset Identification
    - 1. Columns C through F provide identification of each asset within the Well asset group.
    - 2. Review each row and update the information for each asset as appropriate.
    - 3. Insert or delete rows as needed to complete updating the asset list for the Well asset group.
    - 4. When adding or deleting an asset, be sure to do so in whole row increments.
  - iv. Columns G through I and M through P
    - 1. Review each row listing the various asset items.
    - 2. Make any updates to those rows as appropriate between Columns G and I.
    - 3. Make any updates to those rows as appropriate between Columns M and P.
  - v. Projected Yearly Expenditures or Savings:
    - 1. Columns V through BO provide a schedule of the expected yearly costs that the City should consider for use in the budgeting process for the maintenance, repair & replacement costs for each asset.
    - 2. When editing Columns M between P, make a comparison with the historical expenditures the City applied on annual maintenance on each asset with the value shown in the applicable Projected Yearly Expenditures column for the previous year (Columns V through BO).
    - 3. Consider adjusting the values in Columns M through P to reflect a more accurate trend in spending on that asset.
    - 4. Be sure to recognize some assets do not require annual maintenance but maybe every other year or even every 5 years. In that case the sum of annual values should be compared against the expenditures made over similar time periods.
  - vi. Save your work on the new file.

- d. **WTP:**
- i. Verify that the Annual Interest Rate and Current year updated from your entry on the Wells sheet.
  - ii. **Asset Identification**
    1. Columns C through F provide identification of each asset within the WTP asset group.
    2. Review each row and update the information for each asset as appropriate.
    3. Insert or delete rows as needed to complete updating the asset list for the WTP asset group.
    4. When adding or deleting an asset, be sure to do so in whole row increments.
  - iii. **Columns G through N**
    1. Review each row listing the various asset items.
    2. Make any updates to those rows as appropriate between columns G through N.
  - iv. **Projected Yearly Expenditures or Savings:**
    1. Columns T through BM provide a schedule of the expected yearly costs that the City should consider using, or at least reference, in the budgeting process for the maintenance, repair & replacement costs for each asset.
    2. When editing Column N, make a comparison with the historical expenditures the City applied on annual maintenance on each asset with the value shown in the applicable Projected Yearly Expenditures column for the previous year (columns T through BM).
    3. Consider adjusting the value in Column N to reflect a more accurate trend in spending on that asset.
    4. Be sure to recognize some assets do not require annual maintenance but maybe every other year or even every 5 years. In that case the sum of annual values should be compared against the expenditures made over similar time periods.
  - v. Save your work on the new file.
- e. **Water Towers:**
- i. Verify that the Annual Interest Rate and Current year updated from your entry on the Wells sheet.
  - ii. **Asset Identification**
    1. Columns B through F provide identification of each asset within the Water Tower asset group.
    2. Review each row and update the information for each asset as appropriate.
    3. Insert or delete rows as needed to complete updating the asset list for the Water Tower asset group.
    4. When adding or deleting an asset, be sure to do so in whole row increments.
  - iii. **Columns G through I and M through P**
    1. Review each row listing the various asset items.
    2. Make any updates to those rows as appropriate between Columns G and I.
    3. Make any updates to those rows as appropriate between Columns M and P.
  - iv. **Projected Yearly Expenditures or Savings:**
    1. Columns V through BO provide a schedule of the expected yearly costs that the City should consider for use in the budgeting process for the maintenance, repair & replacement costs for each asset.
    2. When editing Columns M between P, make a comparison with the historical expenditures the City applied on annual maintenance on each asset with the value shown in the applicable Projected Yearly Expenditures column for the previous year (Columns V through BO).
    3. Consider adjusting the values in Columns M through P to reflect a more accurate trend in spending on that asset.

4. Be sure to recognize some assets do not require annual maintenance but maybe every other year or even every 5 years. In that case the sum of annual values should be compared against the expenditures made over similar time periods.
  - v. Save your work on the new file.
- f. **Interconnect Building:**
- i. Verify that the Annual Interest Rate and Current year updated from your entry on the Wells sheet.
  - ii. **Asset Identification**
    1. Columns C through F provide identification of each asset within the Interconnect Building asset group.
    2. Review each row and update the information for each asset as appropriate.
    3. Insert or delete rows as needed to complete updating the asset list for the Interconnect Building asset group.
    4. When adding or deleting an asset, be sure to do so in whole row increments.
  - iii. **Columns G through I and M through P**
    1. Review each row listing the various asset items.
    2. Make any updates to those rows as appropriate between Columns G and I.
    3. Make any updates to those rows as appropriate between Columns M and P.
  - iv. **Projected Yearly Expenditures or Savings:**
    1. Columns V through BO provide a schedule of the expected yearly costs that the City should consider for use in the budgeting process for the maintenance, repair & replacement costs for each asset.
    2. When editing Columns M between P, make a comparison with the historical expenditures the City applied on annual maintenance on each asset with the value shown in the applicable Projected Yearly Expenditures column for the previous year (Columns V through BO).
    3. Consider adjusting the values in Columns M through P to reflect a more accurate trend in spending on that asset.
    4. Be sure to recognize some assets do not require annual maintenance but maybe every other year or even every 5 years. In that case the sum of annual values should be compared against the expenditures made over similar time periods.
  - v. Save your work on the new file.
- g. **Water Mains:**
- i. Verify that the Annual Interest Rate and Current year updated from your entry on the Wells sheet.
  - ii. Data for this spreadsheet was obtained from the City's GIS database.
  - iii. **Asset Identification**
    1. Columns A through H and T through AF provide identification of each asset within the Water Main asset group.
    2. Review each row and update the information for each asset as appropriate.
    3. Insert or delete rows as needed to complete updating the asset list for the Water Main asset group.
    4. When adding or deleting an asset, be sure to do so in whole row increments.
  - iv. **Columns I through N**
    1. Review each row listing the various asset items.
    2. Make any updates to those rows as appropriate between columns I through N.

- v. Current Project Replacement Value:
    - 1. Column R provides an estimate that the City should consider using, or at least reference, in the budgeting process for the replacement cost of the various segments of water main.
    - 2. When editing Column N, make a comparison with current unit prices for water main replacement. Include reconstruction costs as would apply for the location and route of the water main asset.
  - vi. All 2023 construction projects as-built data/information, excluding the CSAH 48 & Cyress Drive project, shall be reviewed and included along with the 2024 construction as-built information for the next CAMP update.
  - vii. Save your work on the new file.
- h. **Hydrants:**
- i. Verify that the Annual Interest Rate and Current year updated from your entry on the Wells sheet.
  - ii. Asset Identification
    - 1. Columns B through E provide identification of each asset within the WTP asset group.
    - 2. Review each row and update the information for each asset as appropriate.
    - 3. Insert or delete rows as needed to complete updating the asset list for the WTP asset group.
    - 4. When adding or deleting an asset, be sure to do so in whole row increments.
  - iii. Column F
    - 1. This column is for notes from anyone reviewing and making edits to this sheet merely to track changes.
  - iv. Columns G through J
    - 1. Review each row listing the various asset items.
    - 2. Make any updates to those rows as appropriate between columns G through J.
  - v. Projected Yearly Expenditures or Savings:
    - 1. Columns P through BI provide a schedule of the expected yearly costs that the City should consider using, or at least reference, in the budgeting process for the maintenance, repair & replacement costs for each asset.
    - 2. When editing Column J, make a comparison with the historical expenditures the City applied on annual maintenance on each asset with the value shown in the applicable Projected Yearly Expenditures column for the previous year (Columns P through BI).
    - 3. Consider adjusting the value in Column N to reflect a more accurate trend in spending on that asset.
    - 4. Be sure to recognize some assets do not require annual maintenance but maybe every other year or even every 5 years. In that case the sum of annual values should be compared against the expenditures made over similar time periods.
  - i. **Plastic Tees:**
    - i. This tab has not been populated, yet.

tat  
Attachment