DUGALD OAKBANK WATER SYSTEM (DOWS)

WATER TREATMENT PLANT AND SUPPLY EXPANSION PROJECT

SPRINGFIELD
1873 - 2023
150
Proud History Exciting Future

PROJECT TEAM

PROJECT SPONSOR

MANITOBA WATER SERVICES BOARD (MWSB)

PROJECT MANAGER

RM OF SPRINGFIELD WATER AND WASTE DEPARTMENT

ENGINEERING FIRM & CONSULTANT

ASSOCIATED ENGINEERING LTD.

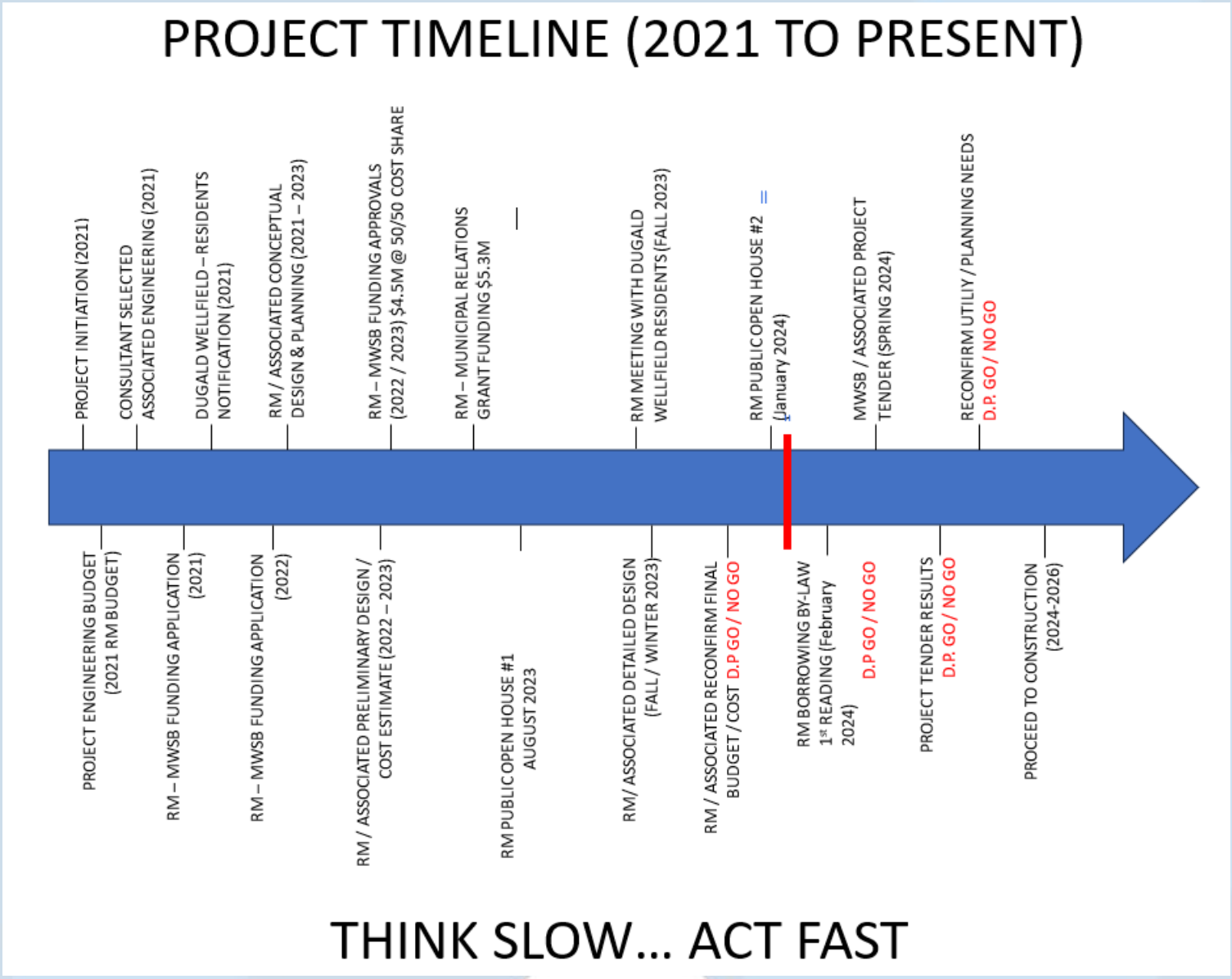
HYDROGEOLOGIST & MUNICIPAL WELL SPECIALIST

Friesen DRILLERS

SCOPE OF WORK

- Design and Construct new Dugald – Oakbank Water Treatment Plant on RM “146” Lands;
- Upgrade existing Dugald Water Treatment Plant electrical + mechanical + architectural components;
- Upgrade existing Oakbank Water Treatment Plant electrical + mechanical + architectural components;
- Upgrade existing pumps and install back up power at existing Dugald Raw Water Well Field;
- Develop new raw water wells (2-3) at the Dugald Raw Water Well Field for additional long-term water supply;
- Increase raw water pipeline capacity from Dugald Raw Water Well Field to the new Dugald - Oakbank Water Treatment Plant;
- Construct new pipeline from new WTP to Dugald and Oakbank to increase long-term water supply;
- Decommission existing Heatherdale Raw Water Well Field;

WORK AND PROGRESS TO DATE

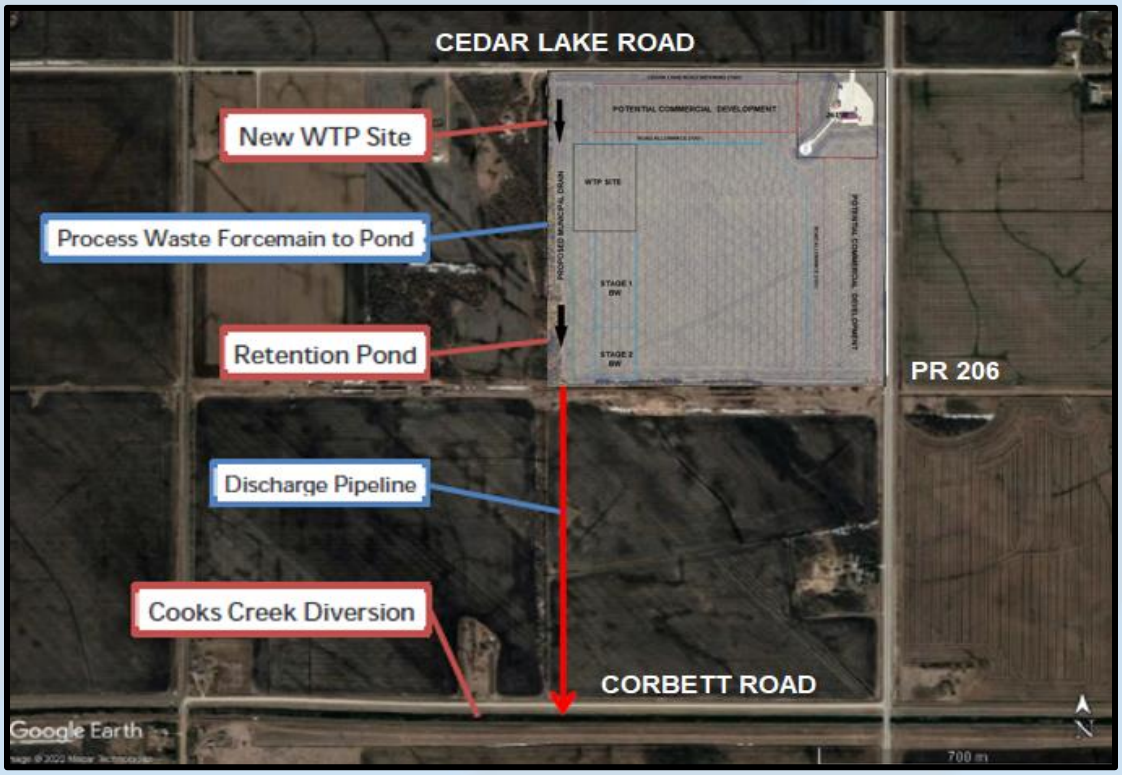


SCHEDULE OF WORK MOVING FORWARD

- Overall Project Timeline of 2-3 years from Borrowing By-Law;
    - Host Public Open Houses & Stakeholder Meetings (1-12 months);
    - Complete Engineered Drawings (1-6 months);
    - Tender Project (Spring 2024 tentative);
    - Construct RM “146” Water Treatment Plant (24 months);
    - Develop Dugald Raw Water Well Field (Expansion) (18 months);
    - Upgrade Raw Water Well Field Pipeline Capacity (12 months);
    - Construct new Dugald and Oakbank Pipeline (10 months);
    - Upgrade Oakbank Water Treatment Plant (12 months);
    - Upgrade Dugald Water Treatment Plant (12 months);
    - Decommission Heatherdale Raw Water Well Field (1 month)

DUGALD OAKBANK WATER TREATMENT PLANT AND CAPACITY

- Located at the NW Corner of the “146” RM lands located midpoint between Oakbank and Dugald;

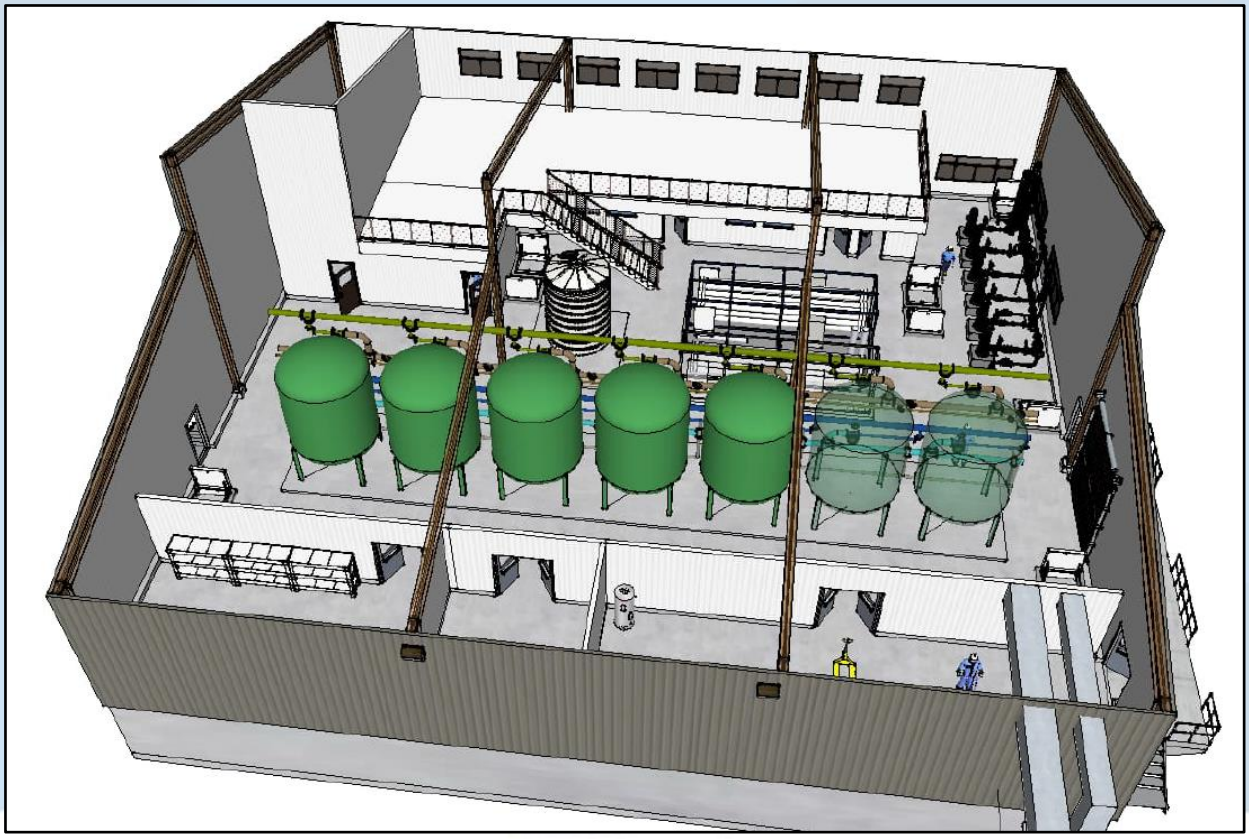


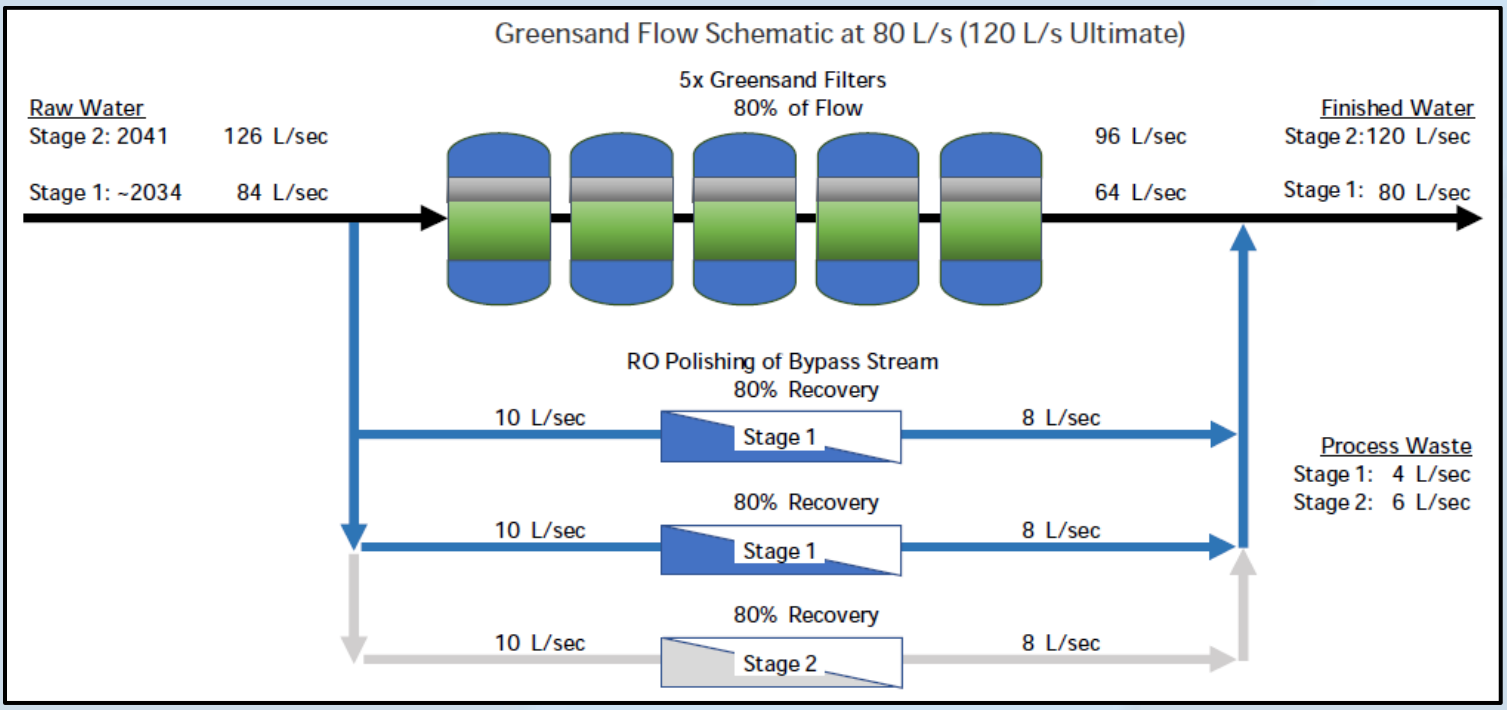
- Future additional operating capacity of the equivalent of 15,000 persons (5,200 REU) based on Development Plan growth (20-year design period);

- Raw Water Supply to come from Suthwyn Raw Water Well Field (includes future expansion);

- Decommissioning of the Heatherdale Raw Water Well Field;

- New Treatment Process Train – Greensand Filtration (Anola WTP) + Reverse Osmosis Filtration + Chlorination;





CAPITAL WATER LEVY

Paid by Developers and Residential Customers not currently connected to Utility who must / wish to connect to the system;

Current Rate (2023) - $8,000 / REU (1.0 REU = standard 3-bedroom home)

Future Rate (2024) - $8,500 / REU

Future Rates can be increased in accordance with By-Law 21-14 (Fees and Charges By-law) and Utility Needs

Based on build-out of new WTP – minimum **$44,200,000** is expected to be raised through Capital Water Levy over full capacity connections to WTP (estimated over 20-year recovery based on 5,200 REU x $8,500 / REU)

THE MANITOBA WATER SERVICES BOARD

$4.95M

Manitoba

$5.65M

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$6.237M + BORROWING

DEVELOPERS

$ CAPITAL WATER LEVIES

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PROPOSED BORROWING BREAKDOWN

Total Estimated Project Cost - $29,400,000.00

Includes Capital Construction Cost of Water Treatment Plant, design, engineering services, and project work contingency

Grants Received to Date - $10,600,000.00

Manitoba Water Services Board - **$4,950,000 (SHARED 50/50)**

Province of Manitoba Municipal Relations - **$5,650,000 (GRANT FUNDING)**

Reserve Contributions - $6,237,000.00

(Water Levy Reserve - $3,737,000 + CCBF Reserve - $1,000,000 + Regional Utility Reserve - $1,500,000)

Borrowing at Large - $12,563,000.00

Rate of Interest – 6.5% - 20-year term (estimated)

Annual Debenture payment (calculated on 2023 Taxable and Grant in Lieu Assessment) - $1,140,172.59

Future annual debenture payment amounts will be reduced by application of funds from the Capital Water Levy Reserve (from development fees collected during the development of new lots), from the Canada Community Building Fund (CCBF) Reserve and from existing water service connection customers.

The mill rate for the $1,140,173 annual debenture for $12.563m at 6.5% is **0.686.**

For a $100,000 **Residential (less than 5 or more than 5 dwellings & owner-occupied condo)** assessment – portioned at 45%, the tax will be (0.686 * $45,000)/1000 = **$30.87**

For a $100,000 **Farm** assessment – portioned at 26%, the tax will be (0.686 * $26,000)/1000 = **$17.83.**

For a $100,000 **Commercial/Industrial/Institutional** assessment – portioned at 65%, the tax will be (0.686 * $65,000)/1000 = **$44.59.**

BENEFITS OF NEW WATER TREATMENT PLANT PROJECT

- **Provide additional municipal water supply capacity to proposed / pending single family + multifamily residential subdivisions in Dugald and Oakbank (+/ 2,000 REUs);**

- **Provide additional municipal water supply capacity to existing properties in Oakbank not on current municipal water supply including current schools and care homes (over next 25 – 30 + years) and current properties looking for additional density on properties (+/- 1,000 REUs);**

- **Increase firefighting capacity to all of the RM (additional storage volume for urban and rural growth);**

- **Potential to reduce urban house insurance though expanded pipe networks (25-30 year forward looking plan);**

- **Capital improvements to existing Dugald WTP and Oakbank WTP (badly needed electrical and control needs);**

- **Reduced demand for the installation of individual private wells in urban centers (protection of aquifers);**

- **Provide municipal water supply capacity to future planned seniors' residences, RM Recreation Centre, and new schools in Dugald and Oakbank;**

- **Removal of GUDI (Groundwater Under Direct Influence) and highly sensitive source (raw) water zone (Moosenose Aquifer) to secure and protected Sandstone Aquifer (Dugald Well Field)**