

2020 ANNUAL REPORT

Engineering

March 2021



CITY OF MEADOW LAKE

Where Visions Meet, Where Adventure Begins™

Box 610, 120-1st Street East, Meadow Lake,
Saskatchewan, Canada S9X 1Y5

MAJOR ACCOMPLISHMENTS IN 2020

- ☑ 6 Grant Applications Completed
- ☑ \$3.7 M of Infrastructure Projects Delivered
- ☑ Significant Progress in Asset Management
- ☑ Risk Management Officer and Planning Section Chief role in the Pandemic EOC

GRANT APPLICATIONS

- Meadow Lake water, sanitary, and storm main improvement project under the Green Infrastructure Stream of Investing in Canada Infrastructure Program offered by the Government of Saskatchewan. This application was unsuccessful for 2020.
- Revised application for Community Centre under the Community, Culture and Recreation Stream of the Investing in Canada Infrastructure Program offered by the Government of Saskatchewan. This application was unsuccessful for 2020.
- Community walking trail project under the COVID-19 Resilience Stream Investing in Canada Infrastructure Program offered by the Government of Saskatchewan. The status of this application was still outstanding at the end of 2020.
- Asset Management Grant under the Municipal Asset Management Program offered by the Federation of Canadian Municipalities. The status of this application was still outstanding at the end of 2020.
- Two Project Applications to improve Highway #4 under the Urban Highway Connector Program offered by the Ministry of Highways. The status of this application was still outstanding at the end of 2020.

RISK MANAGEMENT OFFICER and PLANNING SECTION CHIEF ROLE

- Compiled COVID-19 safe operation protocols for Public Works tasks.
- Compiled COVID-19 safe operation protocols for Parks and Recreation tasks.
- Conducted three presentations and Q&A sessions with the Public Works Department staff to raise awareness and explain pandemic safe operating protocol.
- Conducted two presentations and Q&A sessions with the Parks and Recreation Department staff to raise awareness and explain pandemic safe operating protocol.
- Drafted protocols for secondary emergency management during ongoing pandemic.
- Worked to reopen the Lions Park campground to the contractors.
- Oversaw the function of Situation Unit Leader.
- Tested several volunteer management software.
- Developed 5 one-way sidewalk route plans for safe walkability.

ASSET MANAGEMENT

- Conducted condition, consequence and risk analysis for the road, water, sanitary and storm water systems to prioritize their renewal.
- Completed GPS Survey of:
 - 181 Catch Basins
 - 1,509 Curb stops
 - 40 Valves and Manholes
- GIS data linked with asset inventories for:
 - Sanitary mains and manholes.
 - Storm mains and manholes.
 - Water mains and valves.
 - Pavement, sidewalks, and back alleys.
- Material and equipment rates were updated in CityWide.
- Work Order process was streamlined to record costs with each work order to record the operation and maintenance cost for assets.
- Worked on a Gas Tax fund compliance report for roads, water, sanitary and storm asset classes.

INFRASTRUCTURE PROJECTS

1. 2020 Street Improvement Project.

- 300 block of 3rd St E – 116 m asphalt paving with full structure rebuild and sub-surface drainage installation.
- Gibson Cr (w) between Bridger Dr and Carl Dr - 96 m asphalt paving with full structure rebuild and sub-surface drainage installation.
- 5th St W between Stack Cr (south leg) to 9th Ave W – milling and paving
- 5th St W between 7th Ave W and 9th Ave W – spot rebuilds on 110 m pavement sections and micro-paving on other 176 m
- East service road and 9th Ave W – 1450 m length of micropaving.
- 4,944 sq.m. of utility patches and spot repairs.

Total Cost = \$1,019,557



2. Lions Park Walking Path Resurfacing

- Resurfaced approx. 2,950 m length of walking path with 30 mm pavement lift
- Placed additional 50 mm lift to the 600 m length with extremely poor pavement condition
- Replaced 5 culverts to improve drainage

Total Cost = \$125,000



3. Disaster Mitigation and Adaptation Fund Project

- Climate Lens Assessment was completed.
- Flood mapping was completed.
- Design of water and sewer pipes to replace the common trench lines on the east side was completed.
- Lift Station Project was completed
 - 3rd St E lift station was relocated to 7th Ave E and 7th St E intersection
 - Replaced 580 m of sanitary sewer pipe, replaced 8 manholes and replaced service connections of different lengths along the route.
 - Installed 670 m lengths of sanitary force main.
 - Installed 162 m of potable water main.
 - Installed two water main valve
 - Installed one hydrant
 - Installed five culverts

Total cost = \$2,211,414



4. Back Alley Drainage Improvement

- Installed 160 m lengths of storm pipe and 3 catch-basins in two back alleys with poor drainage. The back alley locations are:
 - South side of the lots on 500 block of 1st Ave W
 - East side of the lots on 200 block of 4th St W

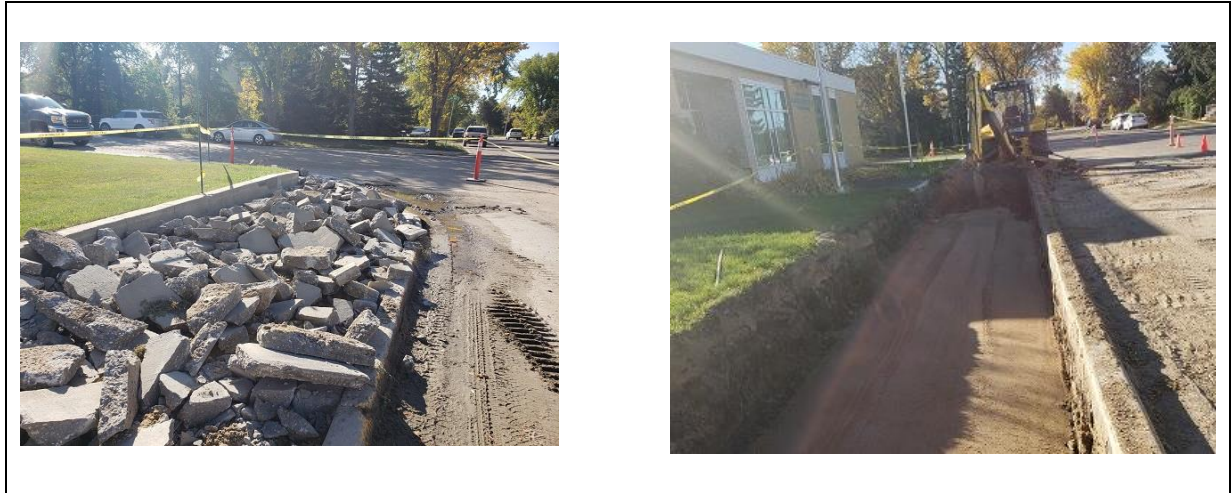
Total cost = \$26,704



5. Sidewalk and Curb Repair Project

- 43 m of vertical and rolled curb
- Approximately 130 m of sidewalk

Total cost = \$46,223



6. Hydrant Inspection and Replacement

- Completed flushing and inspection of 150 hydrants
- Replaced 5 hydrants

Total cost = \$87,937



7. Water Main Valve Replacement

- Replaced two valves with hot tap
- Replaced two other valves

Total cost = \$66,978



8. Service Pipe Replacement on Centre St and Sewer Spot Repairs

- Replaced 5 service pipes on Centre St (Public Works staff replaced 2 of these pipes).
- Replaced 5 other service pipes at different locations.
- Completed three sewer spot repairs.

Total cost = \$122,226

