



TOWN OF
PEACE RIVER
ALBERTA



ENGINEERING AND INFRASTRUCTURE DEPARTMENT ANNUAL REPORT TO COUNCIL – 2022

31 January 2023

DIRECTORS NOTES**GENERAL**

The Director of Engineering and Infrastructure reports to the Chief Administrative Officer (CAO). The Department consists of the following:

Chief Administrative Officer

Director of Engineering and Infrastructure

Administrative
Assistant

Engineer I

Planning and
Development

Public Works

Water and
Wastewater
Operations

In addition to the management of the above departments, the Director also maintains the Town's Engineering Permit to Practice with the Association of Professional Engineers and Geoscientists of Alberta (APEGA).

2022 continued to be a challenging year in terms of maintaining services in a pandemic/post-pandemic environment.

During 2022, the Director also completed work on the following initiatives:

- Capital and operating budget for 2022;
- Proposed water, sewer, storm and sanitation rates for 2022;
- Questica upgrades and implementation of the capital project module;
- Peace River Bridge construction coordination.
- Auction for surplus Public Works equipment; and
- Neptune Metering system upgrades.

The Director is currently working on the following to complete in 2023:

- Cityworks software integration;
- Bulk Water Sales Directive;
- Hydrant Maintenance Policy;
- Road Maintenance Policy;
- Water System Maintenance Directive;
- Neighbourhood Infrastructure Renewal Policy; and
- Asset Management Plan.





Engineering

ENGINEERING ADMINISTRATION

Engineering

Engineering
Administrative
Assistant

Engineering I

Manager - Planning and Development

Reception and
Administrative Support

O&M Projects

Planning Functions

Development Officer

Solid Waste
Management

Capital Projects

Downtown
Beautification Program

Development
Applications

AMSC Utilities
Coordination

Geographical
Information Systems
(GIS)

GIS Team Lead

Cemetery Operations

Vehicle Lease
Coordination

The Department employs one Administrative Assistant who handles front desk reception and administrative support for the Engineering Department. This support includes:

- Assisting the Director with financial reporting and invoice processing;
- Fleet lease agreements and vehicle tracking;
- AMSC Utilities coordination; and
- Coordination of the Solid Waste Management Contract.

HUMAN RESOURCES

Staffing has been challenging in replacing two Machine Operator 3 Leads this year.

At the end of 2021, the following open positions were vacant:

- Engineering Technologist I/II/Engineer I;
- Machine Operator 3 Lead;
- Machine Operator 1 temporary – 2 positions; and
- Facility Maintenance Worker III.

As of 31 Dec 2022 we are still missing one Machine Operator 3 Lead from the above list. As finding qualified persons for this position that also have experience in water/wastewater has proven to be a challenge, we have split the Lead positions up into Equipment Operator and Water/Wastewater Operator specialties.

Facilities maintenance also hired a new Facilities Maintenance worker this year to bring us up to full complement in that area.

For the Public Works Temporary Labourers we started with 4 staff and lost two part way through the summer. Instead of rehiring part way for these positions, administration extended the contracts of the other two positions with the remaining funding.

Engineering hired a new engineer in training (EIT) who has a degree in both civil engineering and biochemistry to replace the engineering technologist who departed in 2021.



SOLID WASTE MANAGEMENT

The Administrative Assistant assists the Director in administering the solid waste and recycling management contract.

The existing five year term contract is with GFL Environmental and expires in 2024.

GFL Environmental collects solid waste from 2096 residences weekly and transfers this waste to the Peace Regional landfill. In addition to weekly solid waste pickup, curbside recycling is also picked up once a week.



2022 had an increase in reported concerns over 2021 with 75 concerns (7.3% of total concerns) reported from residents. This included concerns around the addition of the yard waste program. Concerns were usually

resolved by GFL in the same week.

In comparison:

- In 2021 we received 49 concerns;
- In 2020 we received 65 concerns;
- in 2019 we received 114 concerns; and
- in 2018 we received 283 concerns.

As mentioned above, with the withdrawal of yard waste pickup at the Eco Centre, the Town provided a pilot program to collect yard waste at Centennial parking lot downtown. This program was well used this year with demand or emptying the two 30-yard half height bins being completed most weekdays. The status of the program for 2023 will be brought to Council for direction.

ENGINEERING SERVICES

The Department coordinates the design, tendering and construction of the Town's infrastructure from small maintenance projects to large multimillion dollar capital projects. The Department typically engages external engineering consultants and contractors for the design and construction of larger projects.

In addition to the Director, the Town hired an Engineer in Training (E.I.T) who is registered with APEGA.

The Engineer in Training is responsible for:

- Capital Project administration;
- O&M project administration;
- Technical support for other departments;
- Graphical Information Systems (GIS) Services; and
- Coordination of plan checks with other utility installations.



GEOGRAPHICAL INFORMATION SYSTEM (GIS)

The Manager of Planning and Development, along with the Town's Engineer I and the IT Systems Administrator, work to maintain and improve the Town's Geographic Information System. The GIS systems contains geolocation and infrastructure data to assist in municipal operations and capital project support.

Information and maps are also separated into a publicly available view, for the benefit of residents and local businesses, and those available to municipal Administration.

The publicly available web maps can be access on the main page of the Town's website:

<https://peacriver.maps.arcgis.com/home/index.html> The GIS is built on an ESRI ArcGIS Online system, which is industry standard.

The Graphical Information System (GIS) includes:

- Parcel Data;
- Municipal infrastructure data (road, water, sanitary sewer and storm sewer system, etc.);
- Facility information;

- Land Use Districts and related Municipal Planning Framework data (e.g., area structure plans, intermunicipal development plan areas, etc.);
- Assessment Data; and
- Ownership Information, including a layer identifying municipal, provincial and federal lands within the Town boundary.
- Operational Data (e.g., grass cutting data, emergency management data, snow clearing data, etc.)
- Points of Interest (e.g., public murals)

Public Maps and Apps

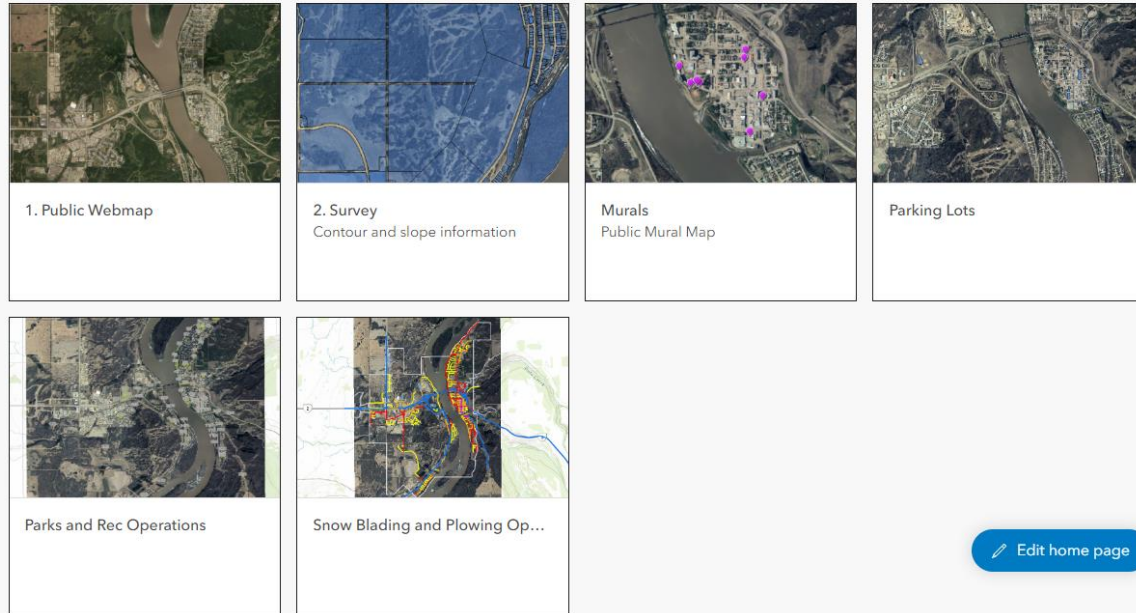


Figure 1 2022 GIS Dashboard Landing Page showing Public Maps and Apps

Internal Maps and Apps

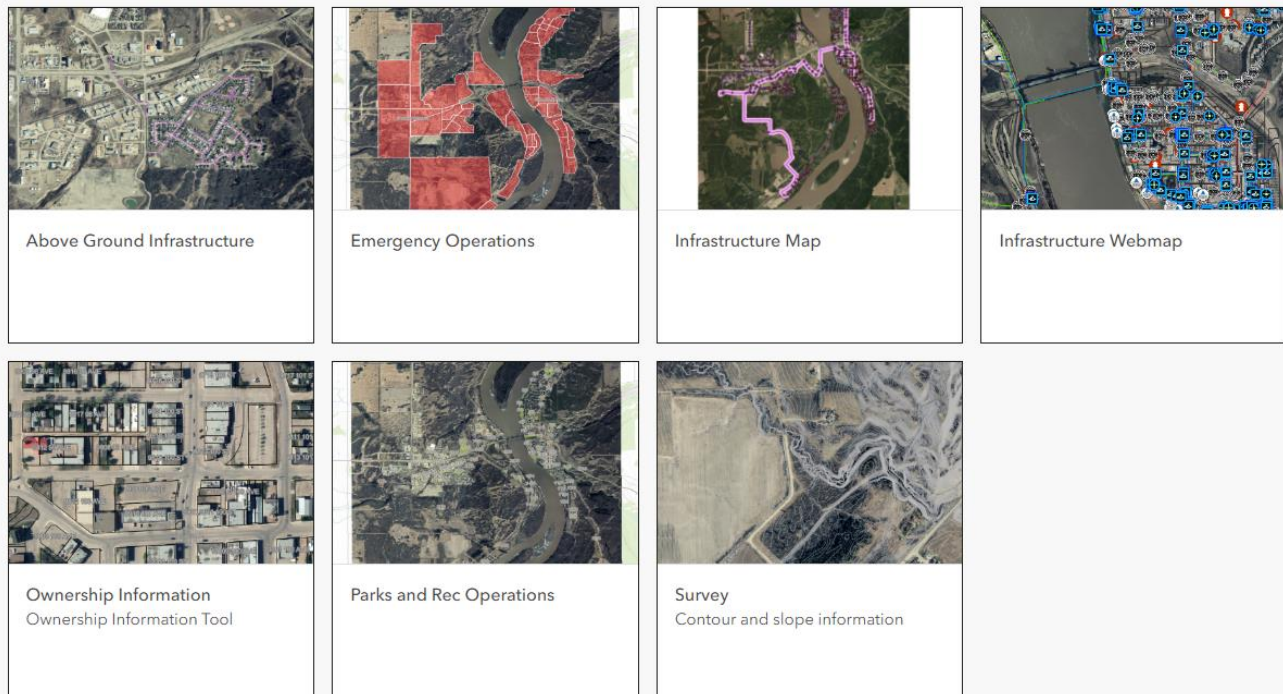


Figure 2 2022 GIS Dashboard Landing Page showing Internal Maps and Apps

In 2022, staff focused on maintaining and updating the existing online map system. The base parcel information, the ownership information and property assessments went through one update cycle. In 2023 staff will work to increase that update cycle to twice annually.

Data was acquired from BC Hydro for the dewatering well system in Lower West Peace. Staff are working to integrate the data into our system. In 2022 the Town acquired new aerial image (taken in June 2022), which provides the base imagery for all web maps. In 2022 staff added new Survey web maps that show the Town's contour and slope data.

2022 mapping projects:

- Staff are participating in the Cityworks implementation process, which has a significant relationship between online web map and the Cityworks platform.
- an update to the green space maintenance maps, which supported a new Green Space Maintenance contract process,
- data requests for the Active Transportation Plan and the Mighty Peace Tourism Association Trail project
- creating an encroachment listing
- 55+ Games mapping for the Games program
- An update to the Town of Peace River sidewalk snow removal map, to support Public Works operations

OPERATIONS AND MAINTENANCE ENGINEERING

The department coordinates operations and maintenance projects in conjunction with other departments. Where possible in-house staff are used to complete the work. Where there is a requirement for additional staffing of expertise not available within town resources outside consultants/contractors are retained.



Operating projects and tasks completed in 2022 are:

- Shaftesbury Trail speed signage review. This will be forwarded in the near future to Alberta Transportation and the solicitor General for comment to look at revising the speed zones on Shaftesbury Trail;
- Purchase of GPS RTK rover for Engineering and Public Works use;
- Compiled existing as-buils for consultant to integrate into existing infrastructure master drawing and import into the GIS system;
- Support for 101st Street Geotechnical assessment to approve barrier removal;
- Pool Hot Tub demolition project support;
- Awarded 2022 Crack Sealing tender. Project construction beginning in May 2023; and
- Structural engineering report completion for Town Hall.

Operating projects and tasks currently in progress for 2023 are:

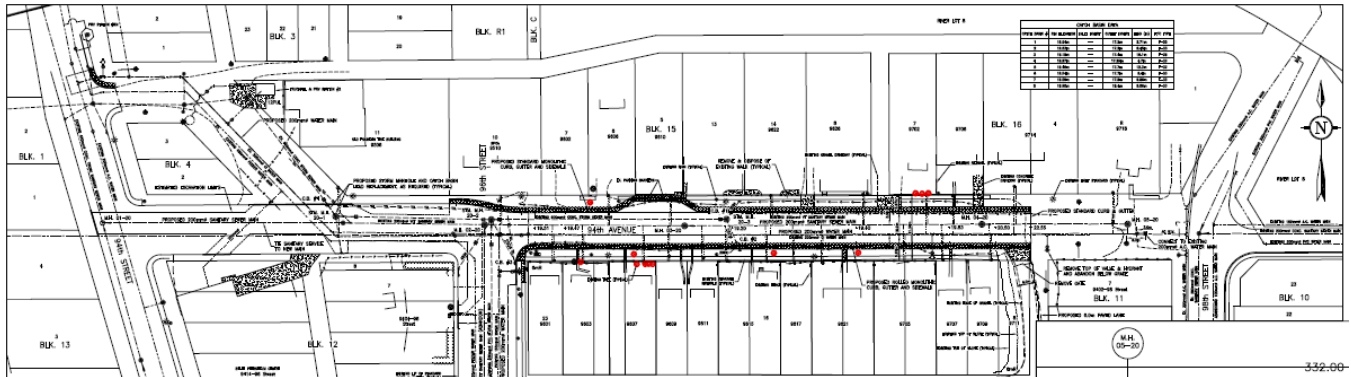
- As built and infrastructure drawing updates;
- GIS updates and Cityworks support;
- Storm sewer improvements on North side of bridge; and
- Working on Directive for resident concern requests;
- Locating town infrastructure with GPS rover and bringing data into GIS system

CAPITAL PROJECTS

The post pandemic period saw large increases in both material and labour costs posing unique challenges for our consultants and contractors in completing scheduled capital project work. Through careful planning and working with our consultants and contractors, we were able to be successful in a number of projects in 2022.

This year saw the completion of the following capital projects:

- Neighbourhood Infrastructure Renewal (NIR) Project 2022 which saw work completed on 94th Avenue downtown;



2021 Neighbourhood Renewal Program

- Design of NIR 2023 project;
- Pats Creek Storm Water Mitigation study;
- Water Treatment Plant hypochlorite tank replacements;
- Public Works Sand and Salt Shed;
- Pavement Overlay 2022;
- Sidewalk Replacement 2022;
- Peavy Mart Sidewalk 2022;
- 99th Street Slide Pile Wall Weep Installation;
- Shaftesbury Water and Sewer project;
- Lift Station No. 4 (Lower West Peace)
- Secondary Clarifier repairs;
- Bio-Solids Handling facility Remediation 2022; and
- Water Metering Radio System project.



Capital projects currently in progress are:

- Cityworks Software implementation (scheduled to online in May 2023)
- Pool Hot Tub Demolition project (completed January 2023)
- Heavy Equipment Replacement 2022 (Mini-excavator has been received, Skid Steer arriving February 2023, and new loader currently scheduled for June 2023)
- Trail system upgrades 2022. Construction starting Spring 2023.
- Hydrant Replacement Program 2022, 10 hydrants have been purchased and 2 have been installed. Remaining units to be installed as staff/contractor resources become available.



Design of Lift Station No. 7 was completed last year and was originally scheduled to be completed in 2023. Due to budget constraints this project has been deferred until 2024.

Planning and Development



PLANNING AND DEVELOPMENT DEPARTMENT

There are two staff in the Planning and Development department that deliver the following core mandates:

- Assist developers with matters pertaining to subdivision and development with a focus on customer service and acting within the administrative authority of the planning framework.
- Provide professional planning services to Town Council, Town Administration, the Municipal Planning Commission, the Subdivision and Development Appeal Board, external agencies and developers.
- Manage and maintain the municipal planning framework.

In addition, the department provides or assists in providing:

- Building Permit administration in partnership with Superior Safety Codes;
- Mount Pleasant Cemetery administration;
- Annual Health and Safety Audits in partnership with Corporate Services;
- Mapping services in partnership with Engineering and Corporate Services;
- Managing Downtown Beautification Project Implementation;
- Communication/consultation support for Engineering and Infrastructure projects;
- Processing Land Title Changes and Monthly Mobile Home Change Reports; and
- Other Corporate priorities as assigned.

PLANNING AND DEVELOPMENT MANAGER

The Manager of Planning and Development is responsible for the administration of the following activities:

- Land use planning and policy;
- Drafting amendments and updates to Land Use Bylaw (LUB);
- Subdivision applications and appeals;
- Strategic planning;
- Participating in Municipal Planning Committee (MPC) meetings;
- Providing development permit and legal agreement review for complex or unique applications;
- Providing support to engineering projects, including consultation activities, and
- Downtown beautification.

2022 included the following:

1. Land Use Bylaw

- Incremental progress was made on the Land Use Bylaw Refresh Project, due to other corporate priorities. V3 Companies of Canada was hired to assist in draft specific sections of the bylaw. Those draft sections have been received and are under review by staff.
- Processed and completed 1 Land Use Bylaw amendment applications:
 - i. A communication tower amendment to the land use bylaw was initiated and completed by staff, to ensure that the land use bylaw appropriately addresses this type of use, which is under federal jurisdiction.

2. Subdivisions

- Processed 2 subdivision applications:
 - i. 1 subdivision approved; and
 - ii. 1 subdivision reviewed and referred, decision pending in 2023;

3. Development

- Reviewed and provided advice on: Westhill Development proposal(s), Belle Center Redevelopment, KFC municipal infrastructure installation, Upland Gardens proposal, Peace River Brewing relocation.
- Encroachment Enforcement (1)
- Development permit enforcement (2)
- Reviewed and provided comment on referrals from neighbouring municipalities pursuant to the Intermunicipal Development Plans and the IDP Referral Policy:
 - i. 2 Development Permit Referrals;

4. Strategic Items

- Economic Development
 - i. Updated the Business Section of the Town of Peace River Webpage
 - ii. Drafted the Terms of Reference for the Economic Development Committee
 - iii. Drafted Strategic Plan for the Economic Development Committee
 - iv. Participated in and supported the activities of the Economic Development Committee
 - v. Drafted Business Grants Proposal and conducted related survey
- Capital projects support:
 - i. Support communication for the Shaftesbury Trail Utility Realignment
 - ii. 99th Street Trail Plan – Design support
 - iii. Biosolids Lagoon – support lease update
- Active Transportation Plan
 - i. Applied for and received Active Transportation Fund Grant
 - ii. Issued RFP and awarded project to Bunt and Associates
 - iii. Initiated project (anticipated completion in November 2023).
- Permanent extension of Temporary Outdoor Patios & Retail Space Pilot Project;
- Beautification Initiatives:
 - i. Installation of 1 new mural at The Computer Store. Mural was donated by Dave Thomas, artist;
 - ii. Installation of 5 new “quilt art” utility box wraps based on submissions from 11 local quilters, as selected by the Peace River community through a 2021 public survey process with 491 responses;
 - iii. Continued administration of the Banners of Remembrance Program;
 - iv. Coordinated with CN Rail regarding pedestrian path cover by CN trestle bridge – Cover slated for removal in spring 2023.
 - v. Purchase of 60 Holiday Street Pole Mounts to replace holiday decorations along Main Street;



Figure 3 The 5 quilt art pieces used to wrap utility boxes in 2022. The 5 art pieces were selected based on the results of a 2021 public survey with 491 responses.



Figure 4 2021 Mural: "Inner Bloom" by Dave Thomas of Flying Colours. As a thank you for the opportunities and artistic challenges the Town has presented him, Dave donated the 2022 mural to the Town.. The mural Facebook post received 258 likes and 20 positive comments.

DEVELOPMENT OFFICER

The Development Officer is responsible for the administration of the following activities:

- Development permits and appeals;
- Advising Developers and applicants on development regulations;
- Preparation of Compliance Certificates;
- Planning and Development projects as assigned by the Director of Engineering and Infrastructure;
- Drafting/Reviewing Development Agreements;
- Develop the MPC report, arrange and attend Municipal Planning Committee (MPC) meetings;
- Monthly reconciliations of the Building, Development and Cemetery accounts receivable;
- Land title downloads and changes in our Accounting system; and
- Completing ESA Phase I requests for land title files.



Through Superior Safety Codes, the Development Officer also administers building permit applications. Under our current accreditation by the Province, the Development Officer Acts as the Authority having Jurisdiction (AHJ) for administering the Safety Codes Act in respect to buildings within the Town of Peace River. Alberta Fire

Code compliance falls under the Fire Department with the Fire Chief being the AHJ.

Building Permit values as of December 31, 2022:

Type	Quantity	Value to Date
Commercial	5	\$352,400.00
Industrial		\$0
Community / Institutional	9	\$19,394,200.00
Residential	9	\$534,535.81

In 2022 the Development Officer completed the following activities:

- Completed five (5) Environmental Site Assessments Phase I;
- Created a new Encroachment Policy;
- Assisted with the Tax Assessment Notices and mail out;
- Participated in the Land Use Bylaw rewrite reviews;
- Aided in the plotting for the Senior's Games;
- Aided in the Statistical Information Reporting for 2021;
- Participated in the Town of Peace River's Structure and Compensation Focus group #3;
- Completed building portion of the Safety Codes Council Annual Internal Review for the Town's combined Building & Fire Accreditation;
- Completed a COR External Health & Safety Audit for the Town of Slave Lake;
- Finalized the Consolidation of Titles for the pool/Baytex area, including the Reserve Designation removal;
- Attended a Virtual Conference on Alternate Energy;
- Prepared an RFP for Safety Codes contract for Town's Building Accreditation and awarded 5-year contract;
- Created a New Property Owner guide to Development & Building Permits to be included with new Land Title Changes mailouts.
- Assisted with the Staff Appreciation Awards and Christmas event for staff and children.

Development Statistics	
Municipal Planning Commission meetings held	6
Compliance Certificates issued	3
Development Permit Applications processed	28
Building Permit Applications processed	23
Subdivision and Development Appeal Board hearings held	0
Subdivision Application received	2
Land Use Bylaw Amendment	1

There has been extensive background time and energy into commercial, residential, and industrial possibilities and inquiries within the Town, such as a rezoning on the west hill, the SPCA and the Belle Centre. Other significant developments for our community include the new location for Peace River Brewery, the new location for the Sagitawa Friendship Centre, Metal Recycling Plant and the Peace River Art Club.

CEMETERY OPERATIONS

The Town of Peace River operates and maintains the Mount Pleasant Cemetery located in the north end of town. The Development Officer is tasked with administration of the Cemetery. This includes plot sales, interment services coordination with local funeral homes, and cemetery planning.

In 2022 the Town had a total of 45 Internments and reserves, including 11 full burials, 18 cremation burials and 2 Columbarium interments. In addition, 9 Memory plaques were purchased and 5 placed on the Memory Wall.



Water and Wastewater Operations



Seven Water/Wastewater Operations staff operate to provide safe drinking water, and the collection and treatment of sanitary sewer wastewater for the Town. Current operations run 7 days per week. One operator is currently seconded to Public Work Operations.

The Water and Wastewater operations department looks after the following activities:

Water and Wastewater Operations

Water Operations

Wastewater Operations

WATER OPERATIONS

Water Operations is responsible for the following areas:

Water Operations

Water
Treatment Plant

Water
Reservoirs

Water Booster
Stations

Water Pressure
Reducing
Stations

Bulk Water
Station

Water Meter
Maintenance
and Operations

Our municipal drinking water systems are regulated by Alberta Environment and Parks (AEP) and operated under our water approval license. Our systems are compliant with the AEP standards and guidelines for municipal waterworks, wastewater and storm drainage systems. In order to protect our waterworks, our operators undergo continuing professional development and training to maintain their operator certifications. Continual testing of our water sources and treated water ensure that residents continue have safe, reliable potable drinking water that they rely on.

WATER TREATMENT PLANT

Originally constructed in 1983/1984 the Town has one Water Treatment Plant (WTP) located on Shaftesbury Trail. The plant went through extensive renovations completed in 2013. During an average year the Town provides approximately 1.9 million cubic metres of treated water. Rated as a Class III facility, the Shaftesbury WTP takes its raw water from the Peace River via the Raw Water Intake and pumphouse located below the Water Treatment Plant.



The upgrade in 2013 saw us moving from a sand filter technology to a PALL membrane system. The water treatment plant, in addition to its chlorination (using a sodium hypochlorite system) process, also provides fluoridisation of the water as part of its treatment process to provide quality treated water for its residents.

This year the focus has been on replacing the existing sodium hypochlorite tanks used in the chlorination process with the project wrapping up at the end of 2022 with some deficiencies remaining in early 2023.

With parts availability and long lead times becoming more of an issue, staff are identifying critical spares to ensure system continuity is maintained.

2023 will also see an engineering evaluation of the raw water intake to determine upcoming maintenance and repair of the structure.

WATER SYSTEM TRANSMISSION AND DISTRIBUTION

The Town has approximately 89km of water distribution and transmission piping ranging in age from 1940s to present day.

In 2019, Engineering began to look at providing a new water line to align with the proposed Shaftesbury sanitary sewer trunk main project to take advantage of the economies of scale to use the same trench and alignments when going through Upper West Peace. This project was completed in 2022 as part of the series of Alberta Small Communities Fund (SCF) water and sewer projects that were funded in 2014.



Also, in conjunction with the neighbourhood Infrastructure Renewal 2022 project, significant improvements were made with the installation of new isolation valving by the downtown bulk water station. Staff are now able to isolate the north and south ends of the transmission system if a water main break is encountered reducing the area needed to be shut down for repairs.

WATER RESERVOIR / BOOSTER STATIONS

The Town has four water reservoirs for potable water:

- Reservoir 365;
- Reservoir 353;
- Reservoir 400; and
- Reservoir 475.

Construction of the newest Reservoir 365 was completed in fall 2020.

The water system modeling project will be continued in 2023 to allow engineering to schedule for subsequent reservoir projects in future years, as part of the Asset Management Plan. This includes Reservoir 353 located by the RCMP station. Replacement is currently planned for 2027.



The Town has two water pressure booster stations:

- Booster Station 475; and
- North End Booster Station (not operational).

The Water Booster Pump Station 475 is located on 80th Street just north of the Westbrook subdivision. This booster station helps to maintain water pressure for water from the Water Treatment Plant to Water Reservoir 475. Adjacent to Reservoir 475 is a small reservoir which supplies water to Dixonville.

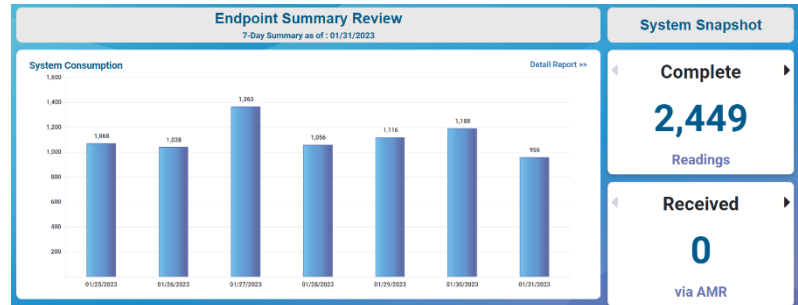
BULK WATER STATION

The bulk water station is located on 94th Street and 94th Avenue beside the old Fountain Tire building. The station is jointly maintained by Water Operations and Facilities Maintenance to provide potable bulk water to residential and commercial users on a pay for use basis.

A maintenance program to refurbish this station is underway in conjunction with the Neighbourhood Infrastructure Renewal program on 94th Avenue. The project will see the removal of the old pumps that are no longer used in the system and replacement of associated piping. Part of these refurbishments are to upgrade the billing system to allow credit and debit payments at the station. Project work is scheduled to be commissioned in February of 2023 and returning to operation in March of 2023.

WATER METER MAINTENANCE AND OPERATIONS

The Water Operations department also looks after the Town's water meters. The majority of the water meters are automated and are using the Neptune water metering software, which allows for monthly water meter reads to be automatically downloaded into our billing software.



System improvements were explored in 2018 to improve the data collection efficiency and to improve our level of service in this area. These were approved by Council for the 2020 capital budget and were completed in Spring 2022. This allows the ability to collect water meter data without having send operators to residents homes, and allow for earlier detection of high flows for residents. It also allows both Engineering and the Utility Clerk to look at daily usage and continuous consumption reports online.

WASTEWATER OPERATIONS

Wastewater Operations is responsible for the following areas:

Wastewater Operations

Wastewater Treatment Plant

Sewage Distribution Lift Stations

Sewage Drying Beds and Leachate Pond

Sanitary Sewer Transfer Station

WASTEWATER TREATMENT PLANT

The Peace River Wastewater Treatment Plant located north of Good Shepherd School was built in 1996/97 to replace the aging system of sewage lagoons on Lee Island, downstream of Bewley Island, which is visible to the north of the Peace River bridge. Town staff took over daily operations at the new plant in December of 1997 and treats approximately 1.15 million cubic metres of sanitary wastewater annually.



The plant is an extended aeration activated sludge facility. After physically removing grit, large solids and fibrous materials from the incoming wastewater stream with machinery located in the Inlet Works Building, the sewage flows into two large Aeration tanks. These tanks are where bacteria complete the task of breaking down the wastewater. Air is bubbled through the tanks by one of two 100 horsepower blowers. It is the dissolved oxygen in the wastewater that keeps the bacterial population alive.



Fournier Rotary Sludge Press

After the wastewater leaves the aeration tanks, it enters the secondary clarifier where the solids settle to the bottom. The clear water, or effluent, leaves the clarifier via a weir/trough around its perimeter, collecting in a spillway and pipe which leads to the outfall at the river.

Suspended solids in the plant effluent, and the biological oxygen demand, are monitored daily to ensure we meet Alberta Environmental Protection standards.

The only chemical used in the process is a liquid polymer that is added to the waste sludge to bind the solids together prior to dewatering in the sludge press. The dewatered sludge is then hauled to the Weberville Biosolids Facility drying beds and leachate ponds.

In 2022, the secondary clarifier repairs were completed to deal with the failed sludge raker arm assembly and the gearbox assembly. These repairs provide a little more time to schedule complete replacement of the clarifier internal assemblies that should be completed in the next three years.

Administration is also working with a consultant and Alberta Environment and Protected areas (AEP) in detailing the requirements for a second aeration and clarifier train for the WWTP to comply with AEP standards for wastewater system operation.

2022 also saw the completion of automation system replacements started in 2021.

WASTEWATER LIFT STATIONS

The Town has six sewage lift stations, three on the East Side, and three on the West Side of the river. Lift Stations Nos. 4 and 6 are Smith & Loveless underground wet/drywell stations built in the sixties and early seventies, and Lift # 6, which was built in 1992. They have recently been upgraded from air controls to modern ultrasonic control systems. Lift Station No. 1 our newest lift station being commissioned in 2016 and is comparable to Lift Station No. 2. Lift Station No. 5 is a simple underground tank system with two float-controlled submersible pumps that feed a forcemain and services a trailer court and a small industrial subdivision.

Lift Station No. 3 built in 1997, along with the new wastewater plant, has three large Flygt submersible pumps, which discharge straight to the plant. It also incorporates a vacuum truck dumping station to control and track extra sewage and prevent the dumping of contaminants into the sensitive biological wastewater treatment process.

2022 saw the replacement of Lift Station No. 4 as part of the Building Canada Small Community Fund projects.

A new Lift Station No. 7 is planned as part of this project and will be located on Shaftesbury Trail. This lift station is required to reduce the depth of the new sanitary main to allow future maintenance on the system. Lift Station No. 7 is planned for installation in 2024.

2022 also saw the PLC and SCADA equipment replacements for Lift Station No. 2 and 3 as part of the overall lift station maintenance program as replacement parts for the old equipment are no longer available.

SANITARY SEWER TRANSFER STATION

A sanitary sewer transfer station is located on 94th Street under the CN Rail bridge to provide visitors the ability to dump RV sanitary effluent, solids, and grey water into the Town's sanitary sewer system. The system is maintained by both Wastewater Operations and Public Works.

2022 saw the repair of the water service for the transfer station to assist residents in cleaning their RV systems.

Another commercial transfer station is located at Lift Station No. 3.



Sanitary Sewer Transfer Station

WASTEWATER BIOSOLIDS DRYING BEDS AND LEACHATE PONDS

The dewatered sludge from the Wastewater Plant is hauled to the Weberville Drying Beds and Leachate Ponds for dewatering and settling prior to disposal or use for agricultural and horticultural applications.

The existing sewage drying beds and leachate ponds are located on Town of Peace River property located off Weberville Road. In 2018, the facility was upgraded to include a new drying bed, storage cell and leachate pond.

2022 saw the rehabilitation of the the old drying bed, storage pond and leachate pond in compliance with AEP regulations and requirements.

This now allows the ability to use one set of cells while the other one is being cycled during annual maintenance without centrifuge operations.

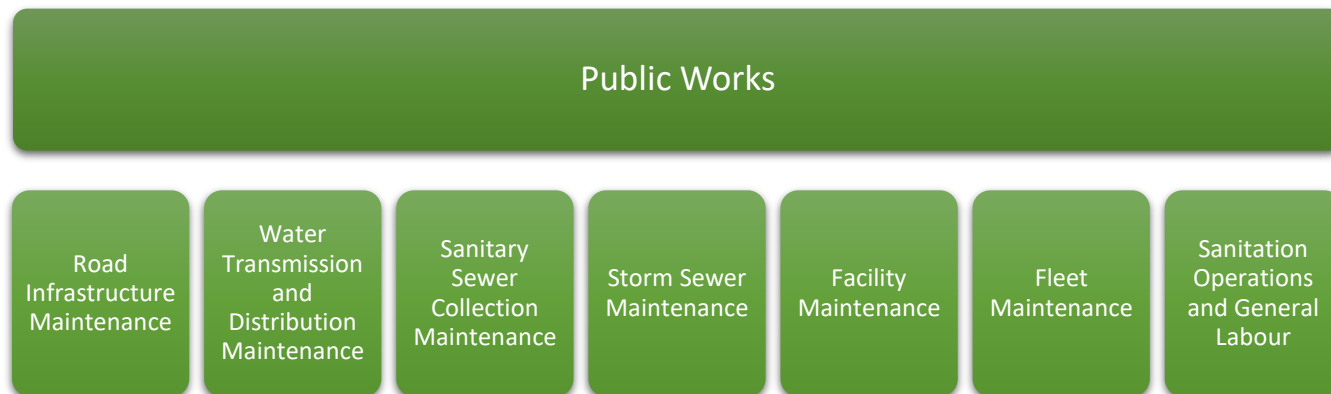


Weberville Drying Beds and Leachate Ponds

Public Works



With 17 staff, the Public Works department looks after the following activities:



2022 came with many new challenges for the Public Works Department. While COVID restrictions eased into a post-pandemic environment, staffing for available positions continued to be challenging.

Public Works are providing support for the Cityworks integration project scheduled to become operational in 2023. This software will provide a proper workorder and inventory system for the E&I department and improve in our documentation procedures.

The new Sand and Salt shed came into service in 2022 to bring the Town in compliance with environmental requirements for our operations. This also allows are sand/salt mixtures to remain dry to improve loading times and responsiveness during winter operations.

As a result of this project, Administration also completed a substantial cleanup and asset disposal of items retained in the storage yard (boneyard) located on 77th Street.

The current level of service staffing is comprised of the following:

- 3 supervisory staff;
- 1 Administrative staff;
- 11 machine operators;
- 1 Water/ Wastewater Operator; and
- 1 facility maintenance worker.

As of December 31st, there were 2 vacant positions within the department. One position was filled in January 2023 and the other position is expected to be filled in early 2023.

New for 2022 maintenance programs was a return to the storm sewer flushing program.

Summer of 2023 will see the continuance of the valve exercising, watermain flushing, hydrant flow testing and hydrant replacements.

ROADS

Public works is responsible for maintaining the Town's transportation infrastructure including:

- 58km of paved roads;
- 14km of gravel road; and
- Traffic control and crosswalks.

During summer operations, road maintenance includes:

- Pothole repair and crack sealing;
- Gravel road maintenance;
- Watermain break street repairs;
- Street sweeping;
- Dust abatement;
- Street signage;
- Line painting;
- Concrete curb and gutter repair; and
- Sidewalk repair.



During winter operations maintenance includes:

- Blading of snow routes;
- Snow removal after significant snowfall events;
- Clearing of Town Facility parking lots;
- Sidewalk clearing for Town owned facilities;
- Trail clearing of Town owned trails; and
- Salt and sanding of intersections.

As part of the capital projects for road overlays and sidewalk replacements, Administration completed repairs on sections of roads involved in 2022 water breaks and sewer line repairs.

2022 also saw a continuation of our sidewalk grinding program to reduce trip hazards on Town sidewalks. The program is scheduled to continue in 2023.

WATER DISTRIBUTION

In conjunction with the Water and Wastewater Operations department Public Works maintain 90km of water distribution piping.

The Town has eleven pressure reducing stations and 9 pressure zones established as:

East Peace River

- Pressure Zone 1 – North End;
- Pressure Zone 2 – by Reservoir 353;
- Pressure Zone 3 – Downtown;
- Pressure Zone 4 – South End 1; and
- Pressure Zone 9 – South End 2.

West Peace River

- Pressure Zone 5 – Citadel Trailer Park and Bridgeview;
- Pressure Zone 6 – Lower West Peace and Shaftesbury Estates;
- Pressure Zone 7 – Cheviot Heights;
- Pressure Zone 8 – Hwy 743/Weberville Road; and
- Pressure Zone 9– by Reservoir 353.



Additionally, Public Works is responsible for:

- Fire hydrant repairs;
- Curb cock (c.c.) repairs;
- Annual hydrant flushing and maintenance;
- Water transmission and distribution line flushing;
- Winter freeze protection (water bleeders and aquaflo devices) of residential and commercial services;
- PRV vault inspections & maintenance;
- Water main valve exercising; and
- Support for capital water projects.

In 2022, Public Works worked with the NIR and water Operations Department to install new boundary valves on 94th Street. The work was required primarily to facilitate the NIR work but also provides Public Works the ability to isolate the North and Downtown areas for water transmission.

The hydrant replacement capital project started in 2022, receiving the hydrant kits in September of 2022. To date 2 of the scheduled replacements have been completed with the remaining 8 hydrants to be completed in 2023 as staff/contractor availability becomes available.

Major new service tie-ins were completed for the Peavey Mart this year and coordination for the EQV school is ongoing.

Water line additions and replacements saw 830m of new line installed in 2022. Major replacements included the NIR program and additions were completed under the Shaftesbury Water and Sewer project.

WASTEWATER COLLECTION

In conjunction with the Water and Wastewater Operations Department, Public Works maintain 72km of sanitary sewer piping.

Additionally, Public Works is responsible for:

- Sanitary sewer line flushing;
- Sanitary manhole maintenance and repairs;
- CCTV camera inspections; and
- Support for capital sanitary sewer projects.

Major new service tie-ins were completed for the Peavey Mart this year and coordination for the EQV school is ongoing.



This year's flushing program was successful seeing us surpass our target of flushing 637m of line annually.

Wastewater line additions and replacements saw 2023m of new line installed. Major replacements included the NIR program and additions were completed under the Shaftesbury Water and Sewer project.

STORMWATER COLLECTION

In conjunction with the Water and Wastewater Operations department Public Works maintain 23km of storm sewer piping.

Included in stormwater system maintenance Public works also is responsible for:

- Culvert & drainage ditch maintenance;
- Storm sewer outfall maintenance;
- Storm water pond maintenance;
- Storm sewer flushing; and
- Storm gate operations that empty storm sewers back into the peace river basin. This work further includes spring run-off management and steaming operations.



In 2022 the Town replaced 42m of storm sewer piping. In addition, the Town worked with Peavey Marts Engineers and Contractors to tie in new stormwater collection to the Town's systems leading to the stormwater pond behind Walmart.

Public Works continues to work with Engineering to resolve the storm sewer line repairs behind Points West.

FACILITIES MAINTENANCE

The Town's Public Works department also provides base building facilities maintenance support for the Town's 14 building structures. They also coordinate outside contractors for electrical and mechanical maintenance.

In 2022, facilities maintenance completed the following activities:

- Town of Peace River Office Maintenance including lunchroom repairs due to a failed water line;
- Library Maintenance;
- Museum maintenance;
- Assisting with HVAC system repairs at the Baytex;
- Athabasca Hall Maintenance; and
- Pool maintenance including annual maintenance shutdown.



JANITORIAL

Facilities maintenance also coordinates contract janitorial services for several Town buildings including the Town Hall. They also assist other departments with cleaning supplies and equipment orders.

A three year contract is in place with Skyblue Janitorial with services started in January 2022 and running through 2025.



FLEET MAINTENANCE

The department coordinates Fleet and equipment maintenance for the over one hundred of the Town's vehicles and equipment. Vehicle maintenance includes periodic servicing and minor repairs, with larger repairs contracted out as required.

In 2019 the Town entered into a leasing option with Enterprise for the Town's ½ ton to 1-ton vehicles instead of an annual capital purchase program. This program is sponsored through RMA procurement program. The Town received:

- 2019: 2 vehicles
- 2020: 5 vehicles
- 2021: 5 vehicles
- 2022: 5 vehicles
- 2023: 7 vehicles



At the end of 2023 we will have replaced 24 of the 31 vehicles currently on our planned allocation list for town vehicles under 1 ton. The 2019 vehicles are planned to be recycled this year as part of the planned renewal cycle.

Additionally, a Heavy Equipment lease program through the RMA procurement program has been adopted with one grader being leased in 2020. In 2022 we received one mini-excavator on lease. In 2023 we will receive one new skid steer and a loader on the RMA Lease program with Caterpillar. This program allows Public Works to have a consistent replacement of part of their heavy equipment fleet.

PUBLIC SANITATION AND GENERAL LABOUR

Public Works provides:

- Utility line locating of Town infrastructure for Alberta First Call;
- Park bench and other recreation equipment installation;
- Maintenance on walking trails;
- Clearing of public sidewalks and stairways of snow and ice;
- Flooding and cleaning of ice rinks;
- Preparing Christmas displays around Town;
- Maintaining public garbage bins; and
- Cemetery support and maintenance.



Public Works provides on call after hours service for the public including facilities locating, and support for the Peace Regional Airport, Water and Wastewater, and the Fire Department.

They also assist in event control (i.e. Canada Day, Pride Parade, and Christmas Parade), installation Town banners & planters, and are responsible for the raising and lowering of Town flags.

Public Works ensures public safety through river watch during freeze up and ice break up of the Peace River. They form an intricate part of flood control and mitigation, and they maintain the Town's protective dyke system.



As a result of some challenges encountered this year with water breaks, sanitary sewer backups and other emergency repairs, work has begun on the development of a defined maintenance schedule for the Town's municipal underground infrastructure.

Appendices

APPENDIX A – STRATEGIC PLAN KEY PERFORMANCE INDICATORS

2022

Metric	Target	Total Length (m)	Target Length (m)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total YTD (m)	% Target Complete YTD
Sanitary Sewer Flushing	Clean 12% of sanitary sewer system annually	63700	637					100	100			500				700	110%
Storm Sewer Flushing	Clean 25% of storm sewer system annually	27000	6750		100	100					100					300	4%
Street Sweeping	Complete primary sweeping of asphalt roads and alleys by June	84861	84861					42430	42430			24000				108860	128%
Water Distribution System Annual Replacement	Renew 1% water distribution system annually.	80500	805						516	198	110	202	6			830	103%

Sanitary Sewer Collection System Annual Replacement	Renew 1% sanitary system collection system annually.	63700	637						1690	193	140	64					2023	318%
Storm Sewer System Annual Replacement	Renew 1% storm sewer system annually	21500	215						30		12	31					42	20%

2021 Comparable

Strategic Goal	Target	Total Length (m)	Target Length (m)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total YTD	% Target Complete YTD
Sewer Flushing	Clean 12% of sanitary sewer system annually	63,700	637	0	100	100	150	200	200	200	0	0	0	0	0	950	149%
Storm Sewer Flushing	Clean 25% of storm sewer system annually	27,000	6750	0	0	0	0	2000	5000	200	0	0	0	0	0	7,200	107%
Street Sweeping	Complete primary sweeping of asphalt roads and alleys by June	84,861	84,861	0	0	0	42500	25000	74879	2000	0	0	42500	0	0	186,879	220%

Water Distribution System Annual Replacement	Renew 1% water distribution system annually.	80,500	805	0	0	0	0	0	0	0	0	0	0	20	0	20	2%
Sanitary Sewer Collection System Annual Replacement	Renew 1% sanitary system collection system annually.	63,700	637	0	0	0	0	0	0	0	0	0	850	501	0	1,351	212%
Storm Sewer System Annual Replacement	Renew 1% storm sewer system annually	21,500	215	0	0	0	0	0	0	0	0	0	0	0	0	0	0%

2022

Strategic Goal	Target	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Running Average YTD (May-Oct)
Pothole Patching	Address 90% of reported potholes within 30 days					75.00%	100.00%	100.00%	100.00%	100.00%	0%			95%

2021 Comparable

Strategic Goal	Target	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Running Average YTD (Apr-Oct)
Pothole Patching	Address 90% of reported potholes within 30 days	0%	0%	0%	100%	100%	100%	100%	0%	0%	0%	0%	0%	100%

APPENDIX B – WATER AND WASTEWATER STATISTICS

2022

Item	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total to Date (m3)
Water Produced (m3)	167,206	150,173	170,616	163,330	170,710	163,830	163,481	158,828	149,581	152,714	162,307	166,943	1,939,719
Wastewater Treated (m3)	113,333	111,052	111,651	96,187	125,030	93,008	88,451	91,505	87,775	89,542	89,311	100,433	1,197,278
Water Produced – Wastewater Treated (m3)	53,873	39,121	58,965	67,143	45,680	70,822	75,030	67,323	61,806	63,172	72,996	66,510	742,441

2021 Comparable

Item	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total to Date (m3)
Water Produced (m3)	155,215	144,354	161,464	156,127	161,431	177,300	176,300	155,503	148,608	147,760	144,301	165,279	1,894,260
Wastewater Treated (m3)	90,470	96,608	114,863	102,060	93,589	85,510	82,428	98,921	97,522	84,768	85,936	97,547	1,130,222
Water Produced – Wastewater Treated (m3)	64,745	47,746	46,601	54,067	67,482	91,790	94,490	56,582	51,086	62,992	58,365	67,732	764,038

APPENDIX C – SOLID WASTE AND RECYCLING STATISTICS

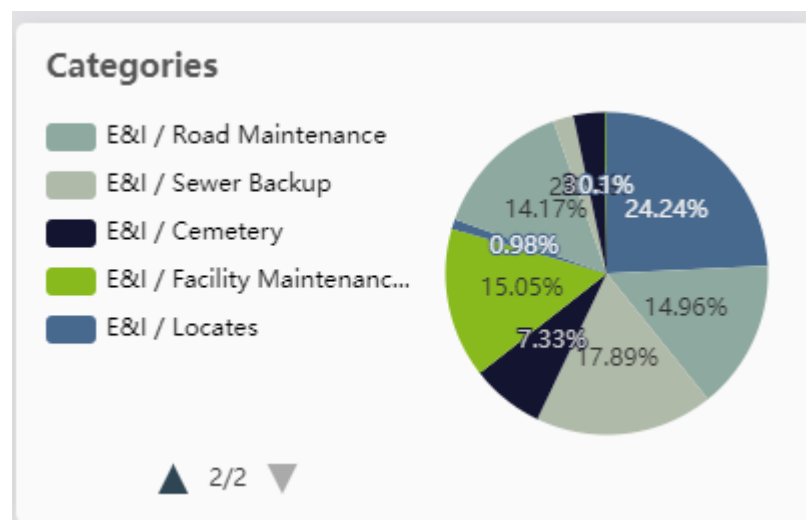
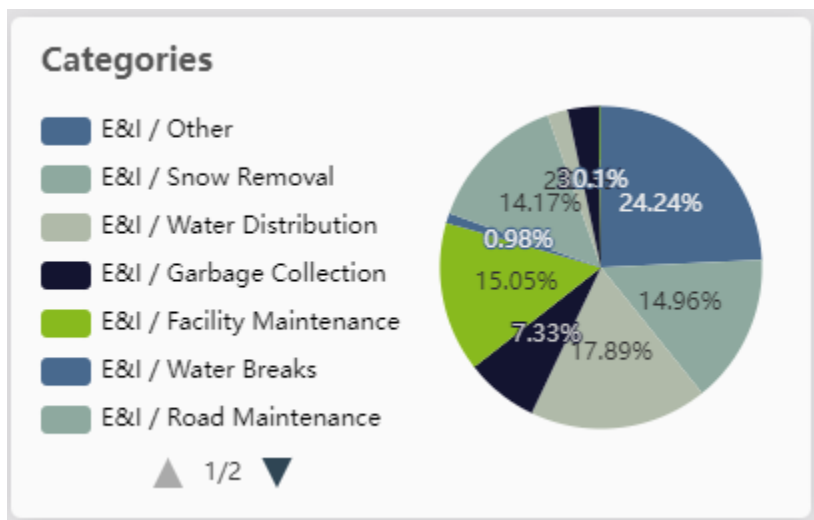
Note: Year end statistics pending.

APPENDIX D – BUILDING PERMIT VALUES UP TO 31 DEC 2022

Year	Commercial		Industrial		Institutional		Residential		Total	
	No. of Permits Issued	Value of Permits	No. of Permits Issued	Value of Permits	No. of Permits Issued	Value of Permits	No. of Permits Issued	Value of Permits	No. of Permits Issued	Value of Permits
2022	5	\$352,400	0	\$0	9	\$19,394,200	9	\$534,536	23	\$20,281,136
2021	16	\$4,490,605	0	\$0	5	\$908,000	9	\$427,000	30	\$5,825,605
2020	4	\$1,118,400	0	\$0	5	\$362,920	8	\$1,060,500	17	\$2,541,820
2019	4	\$4,311,353	2	\$412,000	12	\$2,003,244	11	\$2,730,263	33	\$9,456,859
2018	8	\$3,740,367	0	\$0	6	\$6,991,000	8	\$1,238,517	22	\$11,969,885
2017	6	\$3,648,800	1	\$253,000	9	\$22,306,000	8	\$1,513,000	24	\$27,720,800
2016	7	\$544,076	0	\$0	5	\$8,639,612	15	\$2,547,578	27	\$11,731,266
2015	14	\$7,121,449	1	\$78,750	7	\$2,948,769	28	\$3,642,100	50	\$13,791,068
2014	9	\$2,517,562	0	\$0	9	\$9,470,524	31	\$6,895,250	49	\$18,883,336
2013	12	\$19,101,905	0	\$0	5	\$3,763,000	20	\$10,628,200	37	\$33,493,105
2012	9	\$13,379,700	1	\$325,000	2	\$395,000	38	\$15,982,260	50	\$30,081,960
2011	13	\$3,006,750	0	\$0	2	\$10,014,977	34	\$11,830,692	49	\$24,852,419
2010	8	\$1,712,000	6	\$367,000	2	\$2,358,913	43	\$7,366,358	59	\$11,804,271
2009	21	\$10,012,906	2	\$77,000	1	\$100,000	45	\$6,676,500	69	\$16,866,406
2008	9	\$4,342,000	4	\$5,230,000	1	\$74,000	66	\$11,266,850	80	\$20,912,850
2007	15	\$5,255,684	5	\$1,187,565	2	\$2,100,000	57	\$12,136,500	79	\$20,679,749
2006	15	\$10,793,543	8	\$1,379,500	1	\$18,000	42	\$11,186,470	66	\$23,377,513
2005	5	\$3,922,000	6	\$870,000	5	\$11,080,793	38	\$8,452,236	54	\$24,325,029
2004	9	\$2,738,000	2	\$93,000	4	\$1,133,500	43	\$4,384,500	58	\$8,349,000
2003	8	\$5,425,657	4	\$353,200	4	\$1,740,299	26	\$1,475,100	42	\$8,994,256

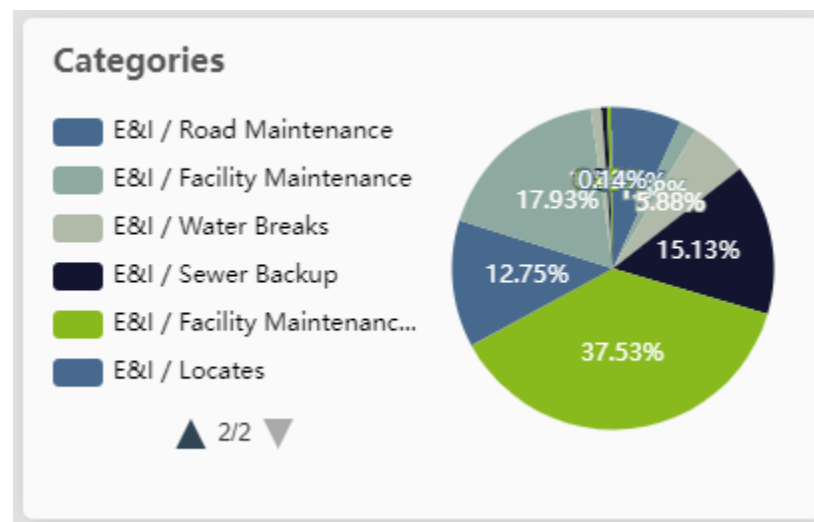
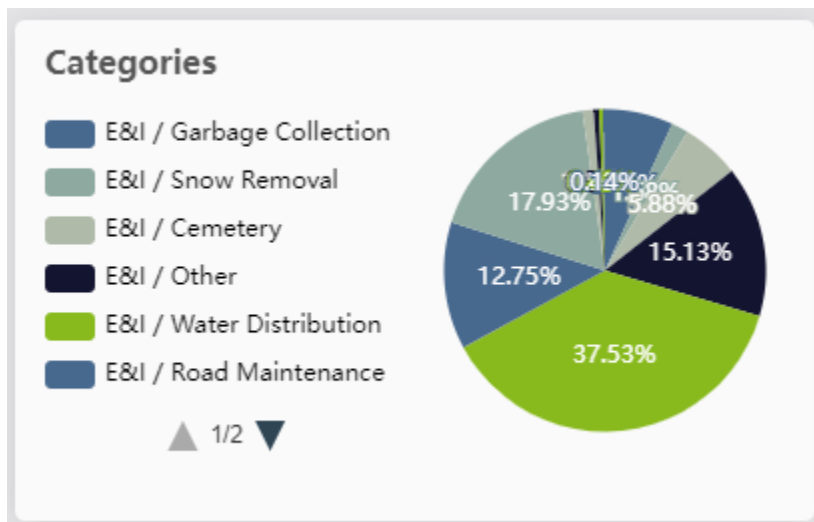
APPENDIX E – REPORTED CONCERNS AND REQUESTS FOR SERVICES

2022



Concerns Reported	1023
Concerns Closed	886
Outstanding Concerns	137

2021 Comparable



Concerns Reported	714
Concerns Closed	647
Outstanding Concerns	67