



TOWN OF  
**PEACE RIVER**  
ALBERTA



## **ENGINEERING AND INFRASTRUCTURE DEPARTMENT ANNUAL REPORT TO COUNCIL – 2021**

**31 January 2022**

**DIRECTORS NOTES****GENERAL**

The Director of Engineering and Infrastructure reports to the CAO. The Department consists of the following:

Chief Administrative Officer

Director of Engineering and Infrastructure

Administrative  
Assistant

Engineering  
Technologist

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).

2021 continued to be a challenging year in terms of maintaining services in a pandemic environment. Staffing to normal levels continued through 2021 including hiring a Machine Operator 3 Lead and Facilities Maintenance Supervisor to replace departed personnel. Part of the challenge during 2021 was in maintaining two separate crews for both Public Works and Water/Wastewater Operations in order to maintain service continuity during the pandemic peaks should one crew be exposed to the Covid-19 virus or get sick.

During 2021, the Director also completed work on the following initiatives:

- Utility rate bylaw;
- Utility system service policy;
- Biosolids dumping bylaw; and
- Off site levy updates.

The Director is currently working on the following to complete in 2022:

- 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 and  
Administrative  
Assistant

Engineering  
Technologist

Planning and Development Manager

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

This year saw the hiring of 3 new staff to fill existing vacancies while the remainder of the vacancies were filled by internal promotions.

At the end of 2021, hiring for the following open positions in the Department was underway:

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



## SOLID WASTE MANAGEMENT

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

After a competitive tender in 2020, the existing contract was awarded to GFL Environmental for a five-year term and expires in 2024.

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

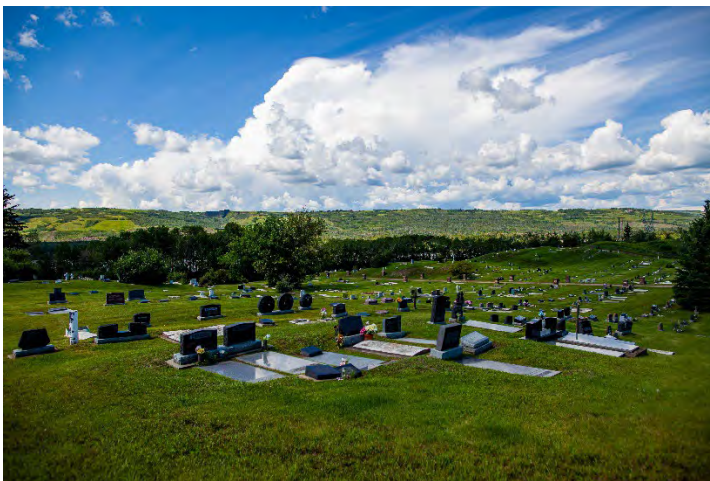


2021 was a significant improvement in contract performance with 49 concerns (6.9% of total concerns) reported from residents. Concerns were usually resolved by GFL in the same week.

In comparison:

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

## 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 2021 the Town had a total of 59 Internments and reserves, including 16 full burials, 17 cremation burials and 2 Columbarium interments. The first private Mausoleum was also placed within Mount Pleasant Cemetery this year. In addition, a Memory plaque was purchased and placed in the Memory Wall. An updated Veteran's list was created for the Rotary Club's Remembrance Day Commemoration planned for 2021.



The Cemetery Bylaw was also substantially reviewed and rewritten, with the new Bylaw No. 2082 being passed along with an updated Cemetery Fee Schedule.

## 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 employs a full time Certified Engineering Technologist (C.E.T.) who is registered with the Association of Science and Engineering Technology (ASET). In 2022 this position will be filled by an Engineer in Training (E.I.T) who is registered with APEGA.



The Engineering Technologist/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.

This position was vacant at the end of the year, and an Engineering Technologist or Junior Engineer is being recruited to fill the position. At the writing of this report we have a new Junior Engineer starting on February 14<sup>th</sup>, 2022.

## GEOGRAPHICAL INFORMATION SYSTEM (GIS)

Planning, along with the Town's Engineering Technician and Systems Administrator, maintain and have worked to expand the Town's Geographic Information System in 2021. The GIS informs a wide variety of projects and assists in many municipal operations. Information and maps are separated into a publicly available, 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.

- Operational Data (e.g., grass cutting data, emergency management data, snow clearing data, etc.)
- Points of Interest (e.g., public murals)

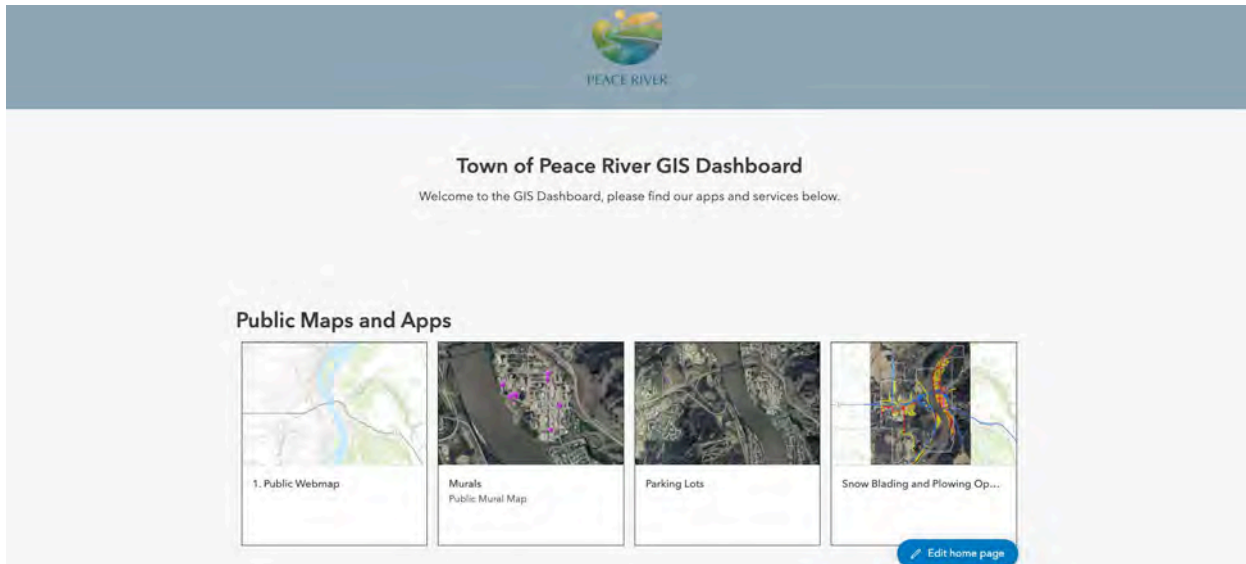


Figure 1 GIS Dashboard Landing Page showing Public Maps and Apps

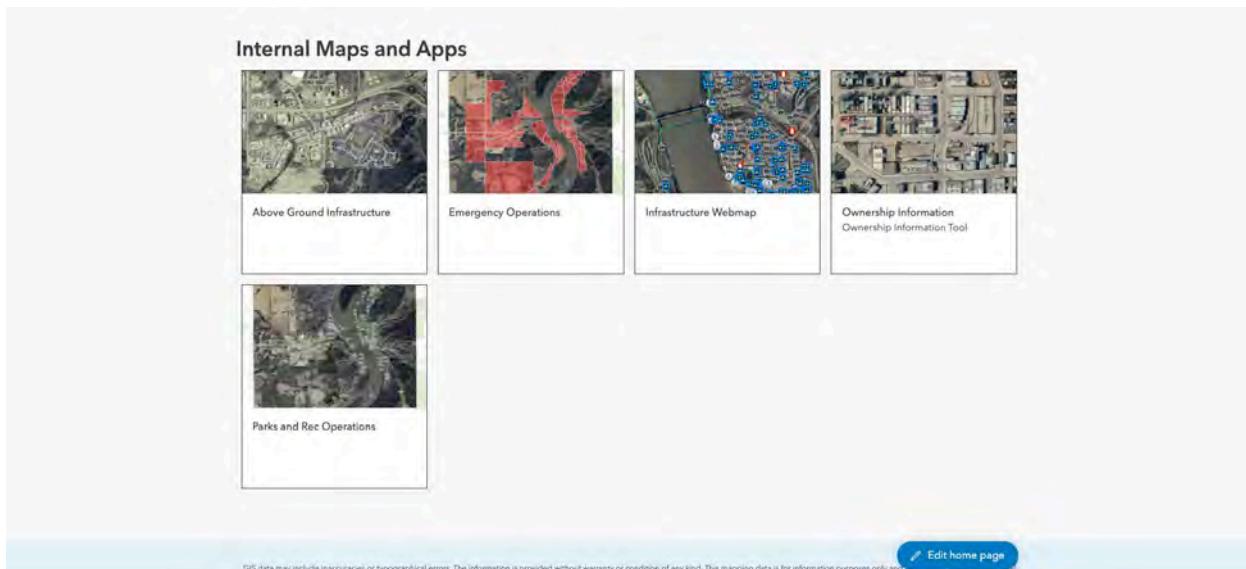


Figure 2 GIS Dashboard Landing Page showing Internal Maps and Apps

In 2021 a number of key mapping milestones were achieved. In particular, the Ownership web map, which connects the parcel information with property ownership information, was set up and published. A Sidewalk Snow Removal Map Book was developed for Public Works and Bylaw Enforcement, and the Evacuation Map was updated as part of the Emergency Management Plan project. Late 2021 a feature data and slope data purchase from Tarin Resources Ltd, based on the Peace River 2019 aerial image was completed. This data will feed into future mapping projects and inform future policy work.

## 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.

In 2021, this included engineering support for:

- Regional Pool;
- Water Treatment Plant;
- Wastewater Treatment Plant;
- Town Hall; and
- Public Works.



In 2021 the following operating projects were completed:

- Water/Wastewater SCADA system upgrades to reduce Data charges;
- Asphalt repairs for water breaks and sewer repairs;
- Pool DHWT;
- Upgraded crosswalk installations; and
- Pool shutdown maintenance.

## CAPITAL PROJECTS

The Department coordinates the design, tendering and construction of the Towns 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.

Covid-19 posed 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 2021.

This year saw the completion of the following capital projects:

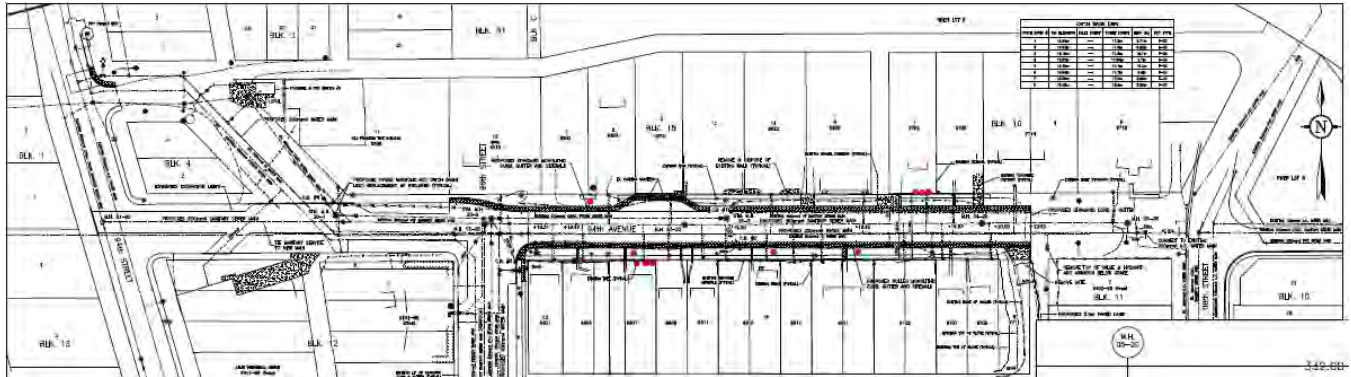
- Water Treatment Plant upgrades (PALL System portion);
- Design of Lift Station No. 7 scheduled for construction in 2023;
- Wastewater Plant aeration tank cleaning and refurbishment;
- Public Works equipment replacement (Motor Grader);
- Trailer mounted storm water trash Pump;
- Completion of pavement overlay 2021 project; and
- Completion of sidewalk replacement project 2021.





Capital projects currently in progress are:

- Town Hall Accessibility project for 2022 construction;
- Design of the 94<sup>th</sup> Avenue Neighbourhood Infrastructure Renewal project scheduled for construction in 2022. Design is also complete for 95<sup>th</sup> Avenue scheduled for construction in 2023;
- Shaftesbury Water and Sanitary Sewer System project scheduled for completion in 2022;
- Lift Station No. 4 replacement; and
- Neptune meter read system upgrade (scheduled for completion March 2022).



# Planning and Development



## PLANNING AND DEVELOPMENT DEPARTMENT

There are two staff in the Planning and Development 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.

2021 included the following:

1. Land Use Bylaw
  - The Land Use Bylaw Refresh Project was largely on hold through 2021, due to other corporate priorities.
  - Processed and completed 1 Land Use Bylaw amendment applications:
    - i. Bylaw No. 2090 to add “Manufacturing, Artisanal or Custom” to the land use bylaw, facilitating the development of the Coffee Roastery in downtown Peace River.
2. Subdivisions
  - Process 3 subdivision applications:
    - i. 2 property line adjustments (completed); and
    - ii. 1 major subdivision (did not proceed);
  - Provided feedback on several subdivision inquiries;
  - Updated Subdivision processing templates.

### 3. Development

- Reviewed and provided advice on: Peavey Mart Development, Belle Center Redevelopment, Upland Gardens proposal, Metis Housing proposal;
- Encroachment Enforcement;
- Encroachment Policy;
- Updated the Municipal Planning Commission Training Manual;
- Reviewed and provided comment on referrals from neighbouring municipalities pursuant to the Intermunicipal Development Plans and the IDP Referral Policy:
  - i. 1 Development Permit Referral;
  - ii. 2 Land Use Bylaw Amendments; and
  - iii. 2 Statutory Plan Amendments.

### 4. Strategic Items

- Shaftesbury Utility Realignment:
  - i. Managed expropriation of right-of-way process;
  - ii. Upper West Peace Area Structure Plan finalized and adopted; Included public consultation including an open house and public survey. Related Municipal Development Plan and Land Use Bylaw amendments were likewise completed;
  - iii. Support consultation and communication for the Shaftesbury Trail Utility Realignment.
- Council Orientation Package;
- Coordinating to open a new public parking area in the downtown off from River Road, across from Peace River Brewing and Board n' Barrel;
- Renewal of Temporary Outdoor Patios & Retail Space Pilot Project and extension through 2021;
- Beautification Initiatives:
  - i. Installation of 1 new mural at Peace Country Hearing;
  - i. 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 public survey process with 491 responses;
  - ii. Continued administration of the Banners of Remembrance Program;
  - ii. Planters at Imperial Parking Lot;
  - iii. Purchase of 30 Holiday Street Pole Mounts to begin replacement of decorations along Main Street;



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



Figure 4 2021 Mural: “New Beginnings” by Dave Thomas of Flying Colours, pictured with local business owner Vicky Fedoski of Peace Country Hearing Care. Based on Facebook reactions, the 2021 mural was the most popular mural installed by the Town over the last 6 years with 871 likes and 139 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, 2021:

Type	Quantity	Value to Date
Commercial	16	\$4,490,605.00
Industrial		\$0
Community / Institutional	5	\$908,000.00
Residential	9	\$427,000.00

In 2021 the Development Officer completed the following activities:

- Completed three (3) Environmental Site Assessments Phase I;
- Began developing a new Encroachment Policy;
- Assisted with the Tax Assessment Notices and mail out;
- Participated in the Land Use Bylaw rewrite review meetings;
- Updated the Development Permit form with the new Bill 489 Land and Property Tribunal Appeal section;
- Completed four (4) Outdoor Patio Project Declaration forms;
- Successful Internal Audit for our Building Accreditation from Safety Codes Council (Municipal Affairs);
- Completed a combined Building & Fire Quality Management Plan with the Fire Department for 2021 as recommended by the Safety Codes Council;
- Completed the Town of Peace River's COR Internal Health & Safety Audit;
- Finalized the Consolidation of Titles for the pool/Baytex area;
- Completed election training, worked the Municipal Election and aided in the ballot destruction; and
- Assisted in organizing a COVID Staff Appreciation Awards and Christmas event for staff and children.

Development Statistics	
Municipal Planning Commission meetings held	7
Compliance Certificates issued	3
Development Permit Applications processed	37
Building Permit Applications processed	30
Subdivision and Development Appeal Board hearings held	0
Subdivision Application received	3

There has been extensive background time and energy into commercial, residential, and industrial possibilities and inquiries within the Town. Other significant developments for our community include the new EQV School (K-12) Development Permit issued, proposed Metis 11 Unit Housing Project, and the new Peavey Mart retail store.

# 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.

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 Shaftsbury Trail. The plant went through extensive renovations completed in 2013. During an average year the Town provides approximately 1.7 million cubic metres of treated water. Rated as a Class III facility, the Shaftsbury WTP takes its raw water from the Peace River via the Raw Water 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 upgrading the PALL system including associated automation systems and replacing the existing sodium hypochlorite tanks used in the chlorination process. The PALL System upgrade was completed and we are currently working with the tank suppliers to have the three tanks replaced with a modular system in 2022.

## 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 is aimed to be complete in 2022 as part of the series of Alberta Small Communities Fund (SCF) water and sewer projects that were funded in 2014.



## 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, and demolition of the old 103<sup>rd</sup> street reservoir was complete shortly after.

The water system modeling project will be continued in 2022 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 also operates Water Booster Pump Station 475 located on 80<sup>th</sup> 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.

The Town has two water pressure booster stations:

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

## BULK WATER STATION

The bulk water station is located on 94<sup>th</sup> Street and 94<sup>th</sup> 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 planned for 2022 in conjunction with the Neighbourhood Infrastructure Renewal program on 94<sup>th</sup> Avenue. Part of these refurbishments are to upgrade the billing system to allow credit and debit payments at the station.

## 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 are currently underway with the improved system being online for Spring 2022. This will facilitate the ability to collect water meter data without having send operators to residents homes, and allow for earlier detection of high flows for residents.

## 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 2020 work began on cleaning the aeration tanks and refurbishing the air bubbler system. The work was completed in the Fall of 2021 alongside work on the secondary clarifier.

Maintenance programs for 2021 included upgrading the plant PLC and SCADA system servers and workstations to work with the current software versions.

In the spring of 2021 it was noted that the secondary clarifier skimmer arm was failing and a temporary secondary clarifier was put in place to allow investigation and repairs of the internal assembly. This work is continuing in 2022. With the current repairs to the system it will allow for proper Engineering and planning to replace the internal systems for the secondary clarifier and address some geotechnical issues that have plagued the system for a couple of years. We are also in talks with Alberta Environment and Parks on the requirement for a second clarifier to be installed.

## 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.

2018 saw the engineering started to replace Lift Station No. 4 as part of the Building Canada Small Community Fund projects with construction projected to start in 2021 and will be completed in 2022.

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 2023.

Work was also completed on integrating the controls into a functional SCADA system replacing the existing phone alarm diallers with cellular radio alarm dialers to reduce communication costs.

2022 will also see PLC and SCADA Equipment replacements for Lift Station No. 2 as part of the overall lift station maintenance program.

## SANITARY SEWER TRANSFER STATION

A sanitary sewer transfer station is located on 94<sup>th</sup> 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.



Sanitary Sewer Transfer Station

## WASTEWATER BIOSOLIDS DRYING BEDS AND LEACHATE PONDS

As mentioned above, the dewatered sludge from the Wastewater Plant is hauled to the Weberville Drying Beds and Leachate Ponds for composting for later use in 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. Engineering to rehabilitate the old drying bed, storage pond and leachate pond in 2021 with construction commencing in 2022.

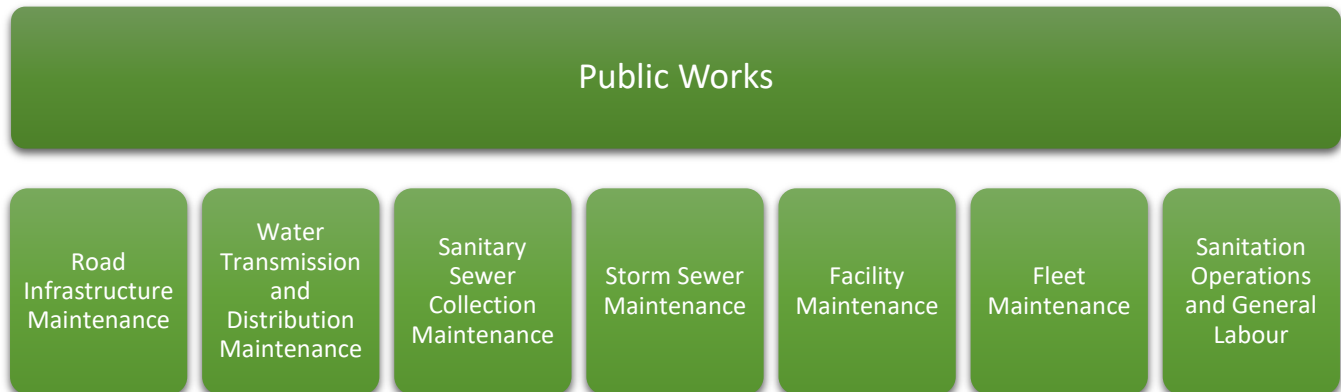


Weberville Drying Beds and Leachate Ponds

# Public Works



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



2021 came with many new challenges and opportunities for the Public Works Department. While COVID restrictions continued throughout much of the year, crews were able to address record levels of pothole patching and began a large-scale valve exercising program beginning on the north end of Town. Also new for 2021 maintenance programs was the storm sewer flushing program.

New and anticipated programs for the summer of 2022 will see the continuance of the valve exercising, along with a UDF watermain flushing program and hydrant flow testing.

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 31<sup>st</sup>, there were 4 vacant positions within the department that are expected to be filled in early 2022.

## ROADS

Public works is responsible for maintaining the Towns 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.

## WATER DISTRIBUTION

In conjunction with the Water and Wastewater Operations department Public Works maintain 89km of water distribution piping.

The Town has eleven pressure reducing stations and 9 pressures 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;
- 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.

## WASTEWATER COLLECTION

In conjunction with the Water and Wastewater Operations Department, Public Works maintain 70km of sanitary



sewer piping.

Additionally, Public Works is responsible for:

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



## 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 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.



## 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 2021, facilities maintenance completed the following activities:

- Support for new Baytex Centre;
- Support for WTP/WWTP Communications;
- Town of Peace River Office Maintenance;
- Library Maintenance;
- Athabasca Hall Maintenance;
- Water spray park maintenance; and
- Pool maintenance.



## JANITORIAL

Facilities maintenance also coordinates contract janitorial services for several Town buildings including the Town Hall and assists other departments with cleaning supplies and equipment orders. A new three year contract was tendered out in December 2021, with services commencing in January 2022.



## FLEET MAINTENANCE

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, along with Corporate services, 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 its first two vehicles in 2019 and an additional five in 2020. The Town will be phasing in the remainder of its fleet over the next five years. This includes five replacements in 2022.



Additionally, a Heavy Equipment lease program through the RMA procurement program is being explored for 2022 with leases for a new front end loader, skid steer and mini-excavator. This will allow Public Works to have a consistent replacement of their heavy equipment fleet.

## PUBLIC SANITATION AND GENERAL LABOUR

Public Works provides:

- Maintenance on walking trails;
- flooding and cleaning of ice rinks;
- preparing Christmas displays around Town;
- maintaining public garbage bins; and
- Cemetery care.



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



2021

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

## 2021

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	<b>1,894,260</b>
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	<b>1,130,222</b>
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	<b>764,038</b>

## 2020 Comparable

Item	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total to Date (m3)
Water Produced (m3)	138,278	131,975	149,959	136,750	143,547	135,192	132,614	136,940	140,429	147,157	152,379	158,758	<b>1,703,978</b>
Wastewater Treated (m3)	100,758	106,438	120,498	116,856	94,488	95,358	111,469	89,836	80,888	87,714	84,144	89,252	<b>1,177,699</b>
Water Produced – Wastewater Treated (m3)	37,520	25,537	29,461	19,894	49,059	39,834	21,145	47,104	59,541	59,443	68,235	69,506	<b>526,279</b>

## 2019 Comparable

Item	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total to Date (m3)
Water Produced (m3)	157,150	119,270	130,995	120,955	149,042	142,180	128,065	128,065	143,773	123,060	125,851	142,858	<b>1,611,264</b>
Wastewater Treated (m3)	93,767	88,515	113,606	89,888	89,819	83,650	90,807	90,807	96,929	94,665	86,512	85,443	<b>1,104,408</b>
Water Produced – Wastewater Treated (m3)	63,383	30,755	17,389	31,067	59,223	58,530	37,258	37,258	46,844	28,395	39,339	57,415	<b>506,856</b>

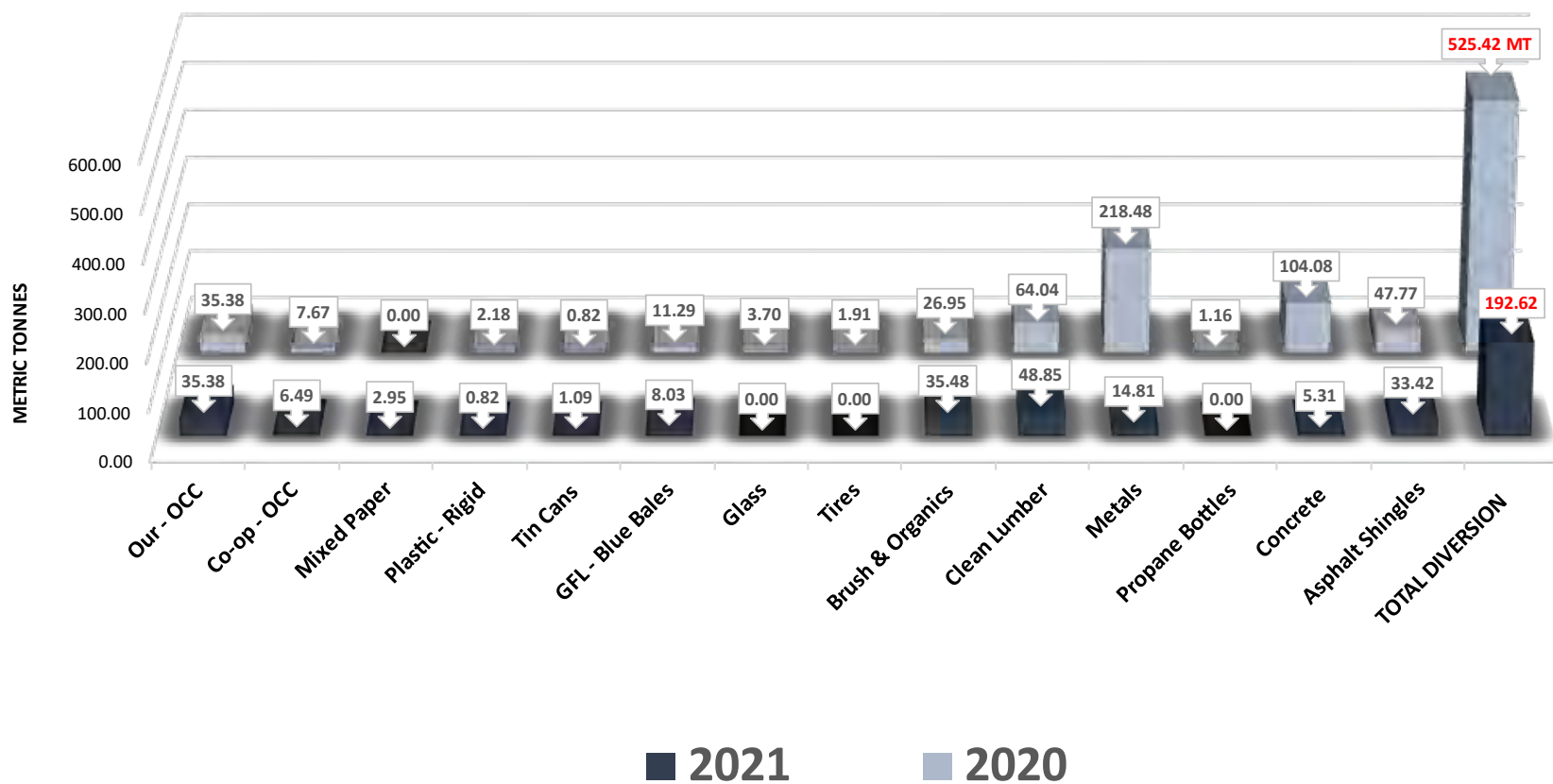
### APPENDIX C – SOLID WASTE AND RECYCLING STATISTICS

Note: Year end statistics pending.



### MONTHLY DIVERSION ITEMS COMPARISON REPORT

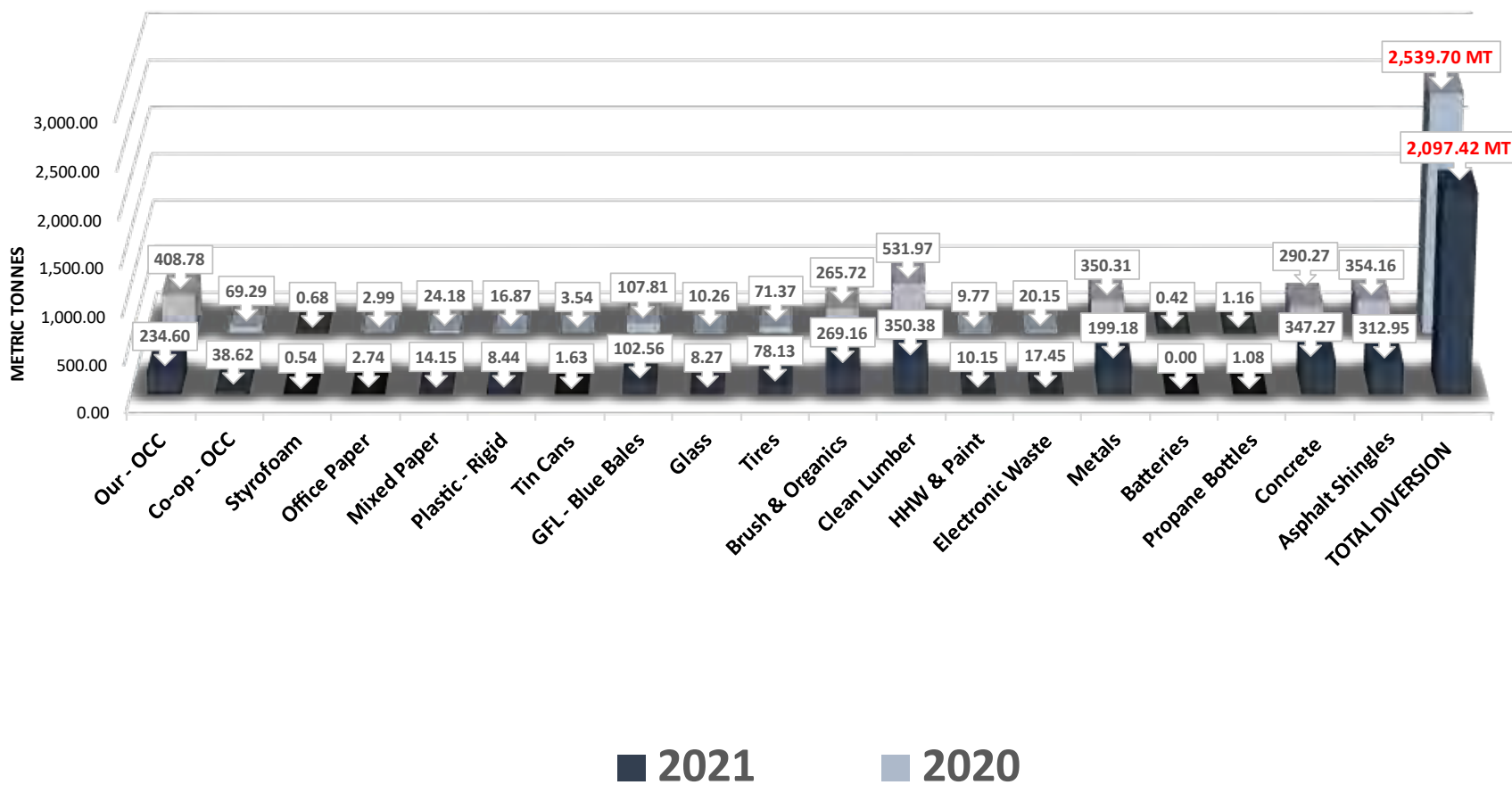
OCTOBER 2021 - **192.62 MT**







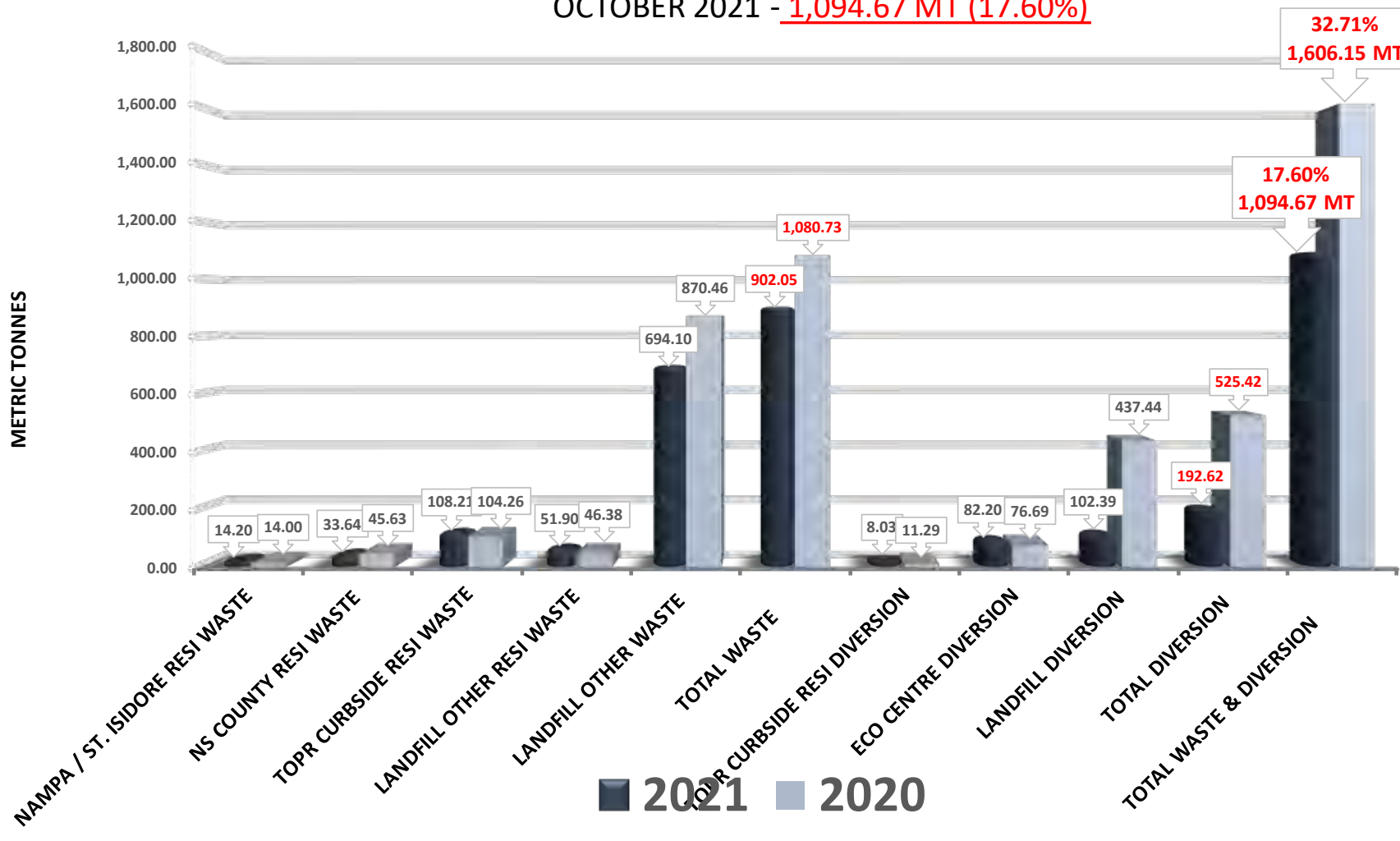
## YTD DIVERSION ITEMS COMPARISON REPORT AT OCTOBER 31ST 2021 - 2,097.42 MT





### MONTHLY TOTAL WASTE & DIVERSION COMPARISON REPORT

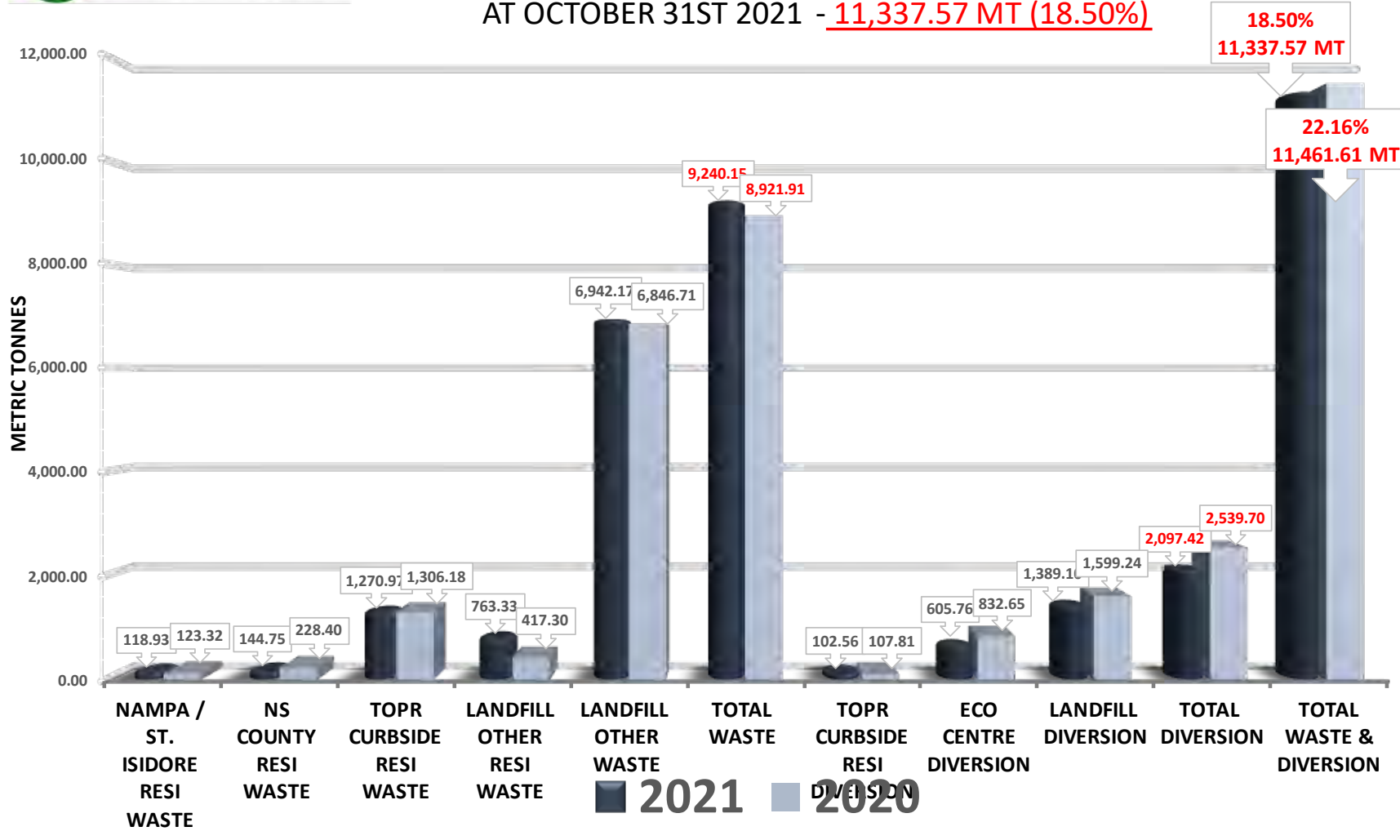
OCTOBER 2021 - 1,094.67 MT (17.60%)





### YTD TOTAL WASTE & DIVERSION COMPARISON REPORT

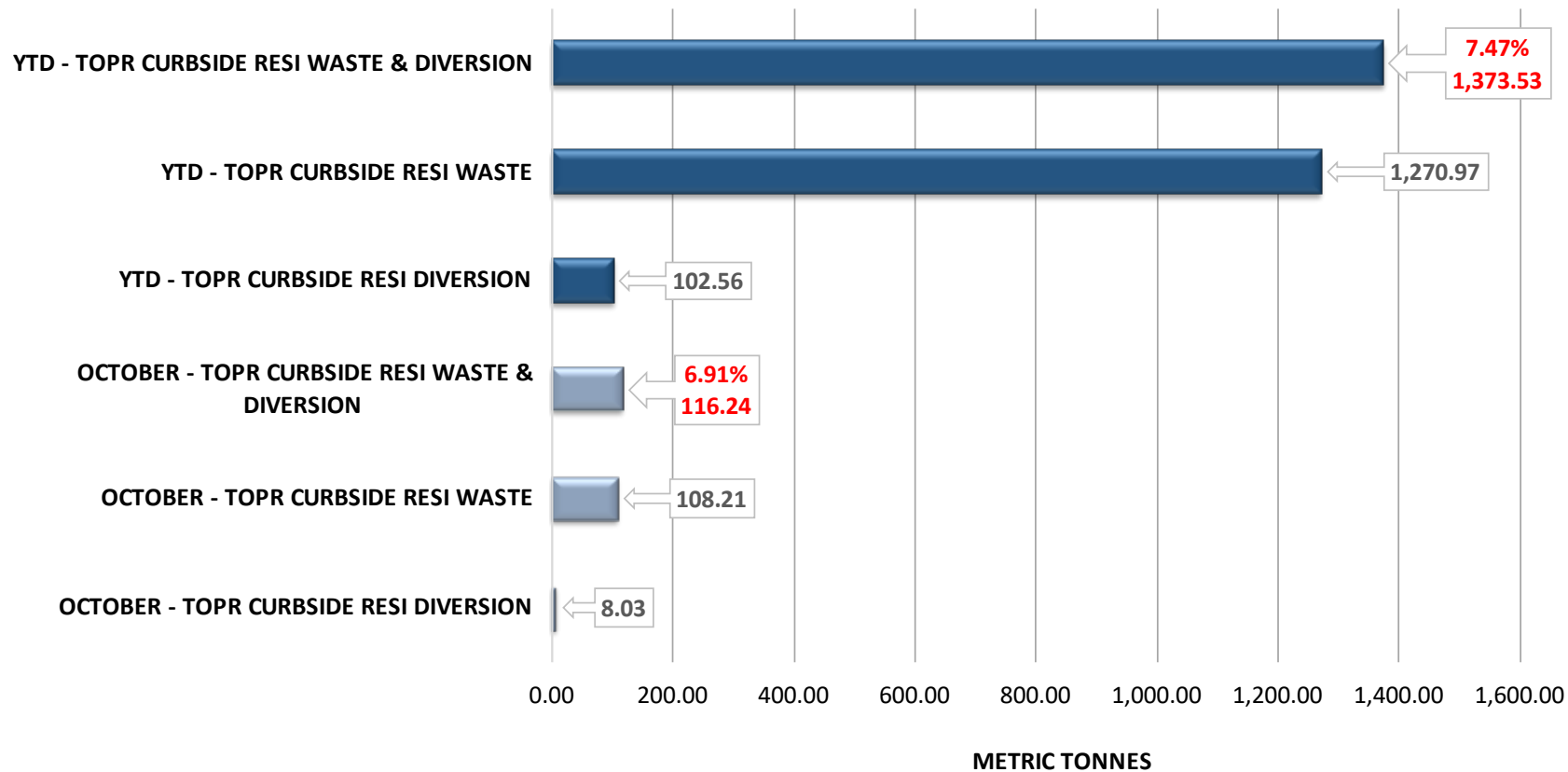
AT OCTOBER 31ST 2021 - **11,337.57 MT (18.50%)**





### TOPR CURBSIDE RESI WASTE & DIVERSION COMPARISON REPORT

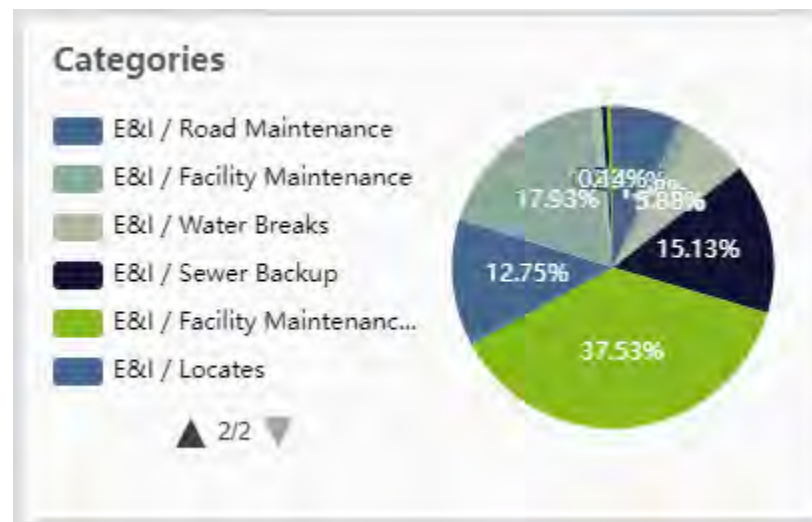
AT OCTOBER 31ST 2021 - 1,373.53 MT (7.47%)



## APPENDIX D – BUILDING PERMIT VALUES UP TO 31 DEC 2019

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
<b>2019</b>	4	\$4,311,353	2	\$412,000	12	\$2,003,244	11	\$2,730,263	<b>33</b>	<b>\$9,456,859</b>
2018	8	\$3,740,367	0	\$0	6	\$6,991,000	8	\$1,238,517	<b>22</b>	<b>\$11,969,885</b>
2017	6	\$3,648,800	1	\$253,000	9	\$22,306,000	8	\$1,513,000	<b>24</b>	<b>\$27,720,800</b>
2016	7	\$544,076	0	\$0	5	\$8,639,612	15	\$2,547,578	<b>27</b>	<b>\$11,731,266</b>
2015	14	\$7,121,449	1	\$78,750	7	\$2,948,769	28	\$3,642,100	<b>50</b>	<b>\$13,791,068</b>
2014	9	\$2,517,562	0	\$0	9	\$9,470,524	31	\$6,895,250	<b>49</b>	<b>\$18,883,336</b>
2013	12	\$19,101,905	0	\$0	5	\$3,763,000	20	\$10,628,200	<b>37</b>	<b>\$33,493,105</b>
2012	9	\$13,379,700	1	\$325,000	2	\$395,000	38	\$15,982,260	<b>50</b>	<b>\$30,081,960</b>
2011	13	\$3,006,750	0	\$0	2	\$10,014,977	34	\$11,830,692	<b>49</b>	<b>\$24,852,419</b>
2010	8	\$1,712,000	6	\$367,000	2	\$2,358,913	43	\$7,366,358	<b>59</b>	<b>\$11,804,271</b>
2009	21	\$10,012,906	2	\$77,000	1	\$100,000	45	\$6,676,500	<b>69</b>	<b>\$16,866,406</b>
2008	9	\$4,342,000	4	\$5,230,000	1	\$74,000	66	\$11,266,850	<b>80</b>	<b>\$20,912,850</b>
2007	15	\$5,255,684	5	\$1,187,565	2	\$2,100,000	57	\$12,136,500	<b>79</b>	<b>\$20,679,749</b>
2006	15	\$10,793,543	8	\$1,379,500	1	\$18,000	42	\$11,186,470	<b>66</b>	<b>\$23,377,513</b>
2005	5	\$3,922,000	6	\$870,000	5	\$11,080,793	38	\$8,452,236	<b>54</b>	<b>\$24,325,029</b>
2004	9	\$2,738,000	2	\$93,000	4	\$1,133,500	43	\$4,384,500	<b>58</b>	<b>\$8,349,000</b>
2003	8	\$5,425,657	4	\$353,200	4	\$1,740,299	26	\$1,475,100	<b>42</b>	<b>\$8,994,256</b>

## APPENDIX E – REPORTED CONCERNS AND REQUESTS FOR SERVICES – 2021



Concerns Reported	714
Concerns Closed	647
Outstanding Concerns	67

### 2020 Comparable



Concerns Reported	942
Concerns Closed	902
Outstanding Concerns	40

### 2019 Comparable



Concerns Reported	1461
Concerns Closed	1447
Outstanding Concerns	14