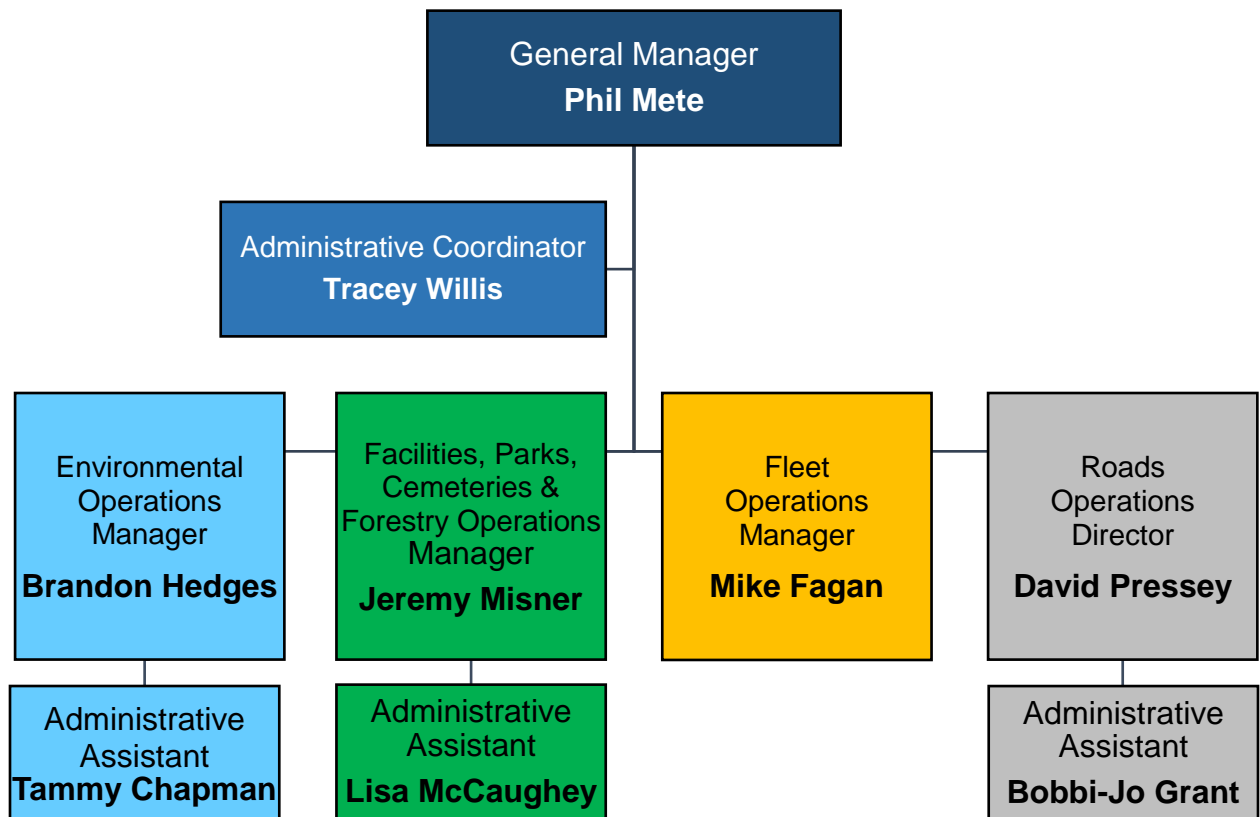




Public Works Operations 2021 Annual Report

Public Works Operations Department Management Team



The Public Works Operations management team is responsible for the overall co-ordination, supervision and administration of the affairs of the Public Works Operations department which includes:

Environmental Operations

- Water distribution
- Wastewater collection
- Urban stormwater collection
- Water treatment, transmission mains and storage facilities
- Wastewater treatment plants, lagoon facilities and forcemains
- Collection and disposal of waste and recyclable materials
- Perpetual care operations and maintenance of closed landfill sites

Facilities, Parks, Cemeteries and Forestry Operations

- Administration facility operation and maintenance
- Arenas, pools and splash pads
- Parks (playground equipment, courts, sports fields, piers, lighthouses and boat launches)
- Cemeteries
- Trails and park pathways
- Forestry (urban and rural)
- Assist community hall user groups

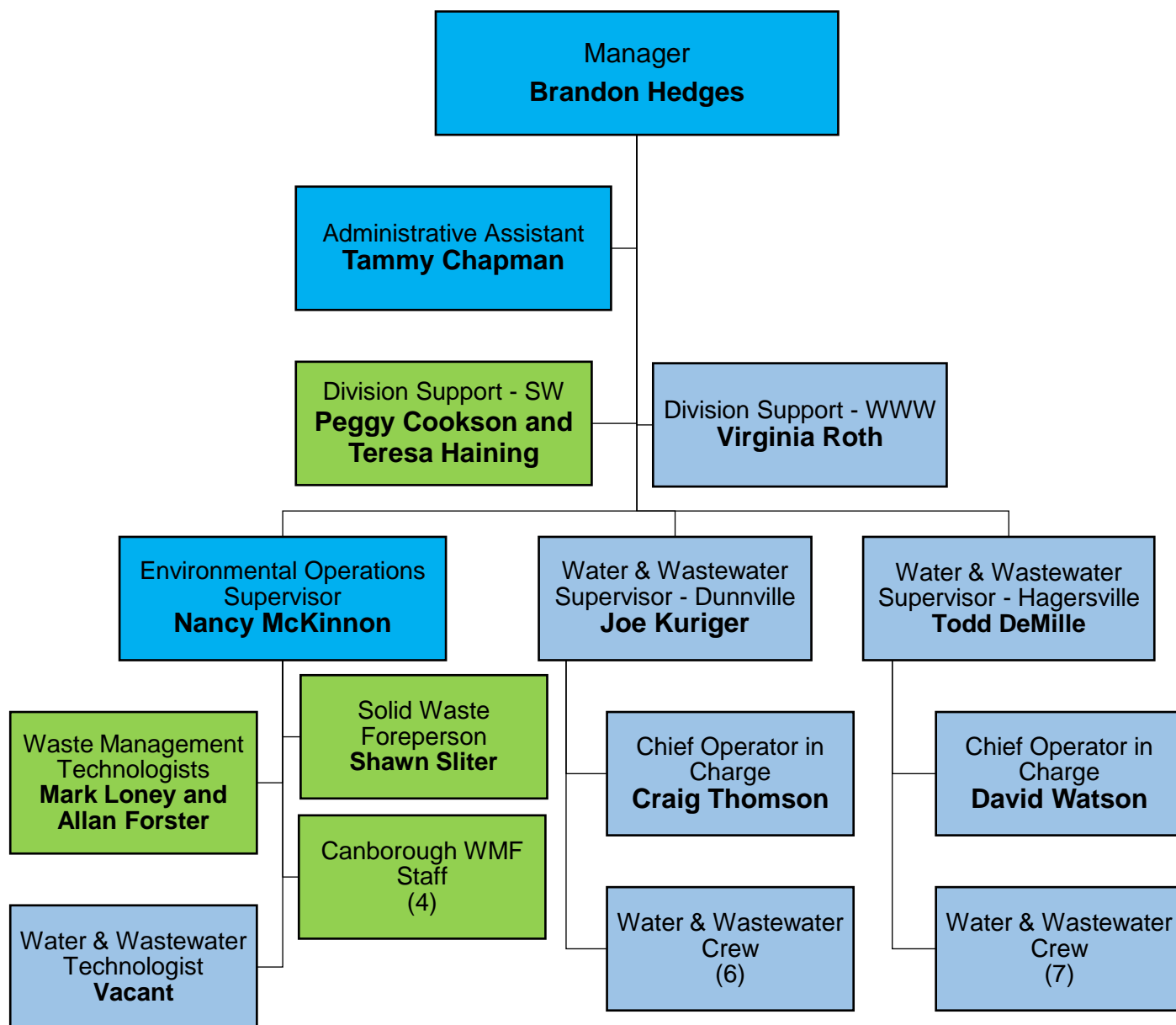
Fleet Operations

- Vehicle and equipment service, training and support
- Vehicle procurement, licensing and disposal
- Fuel procurement and depot maintenance
- Commercial motor vehicle licensing and program management

Roads Operations

- Maintain and preserve roads, roadside drainage, gravel road dust control
- Sidewalks, parking lot and street light maintenance
- Snow removal and ice clearing on roads and sidewalks

Environmental Operations



Water and Wastewater Responsibilities

Operations and maintenance of the Water Treatment and Distribution Infrastructure which includes:

- Three Drinking Water Systems:
 - Nanticoke - includes the Nanticoke Potable Water Treatment Plant (WTP) and Industrial Pump Station (IPS) (supplies raw water to Stelco and Imperial Oil), Lake Erie Industrial Park, Townsend, Jarvis and Hagersville water distribution systems and transmission mains, one Booster Station, one elevated tank (Townsend) and one standpipe (Hagersville), two Water Depot Stations (Jarvis and Hagersville).
 - Caledonia/Cayuga – supplied by City of Hamilton water, includes two reservoir/booster stations, two standpipes and two distribution systems.
 - Dunnville – includes Port Maitland intake/low lift and transmission mains which supply raw water to Port Maitland Industry (Mosaic and Innophos) and the Dunnville potable WTP, one distribution system, one standpipe and one Water Depot Station.
- The distribution systems referenced include approximately:
 - 162 kilometers of potable water distribution mains
 - 52 kilometers of potable transmission mains
 - 23 kilometers of raw water transmission mains
 - 1,014 fire hydrants
 - 1,880 isolation valves
 - 10,199 water meters.
- Administration and management of the Ontario Clean Water Agency (OCWA) WTP/IPS Operations contract – approximately \$2.1M annual value.

Operations and maintenance of the wastewater treatment and collection infrastructure which includes:

- Four mechanical wastewater treatment facilities (Caledonia, Cayuga, Hagersville and Dunnville).
- Four sewage lagoons (Oswego Park, Townsend, Jarvis and LEIP).
- Twenty pump stations and associated forcemains
- Eight wastewater collection systems
 - 162 kilometers wastewater collection mains
 - 2,307 manholes
- Administration and management of the Veolia Wastewater Treatment Plant (WWTP) contract for the operation and maintenance of the WWTP's, lagoons, pump stations and forcemains – approximately \$2.6M annual value.

Operation and maintenance of the urban roadway stormwater systems which includes:

- The towns of Caledonia, Cayuga, Dunnville, Hagersville, Jarvis, Townsend and LEIP.
- 129 kilometers of storm mains.
- A combination of 5,452 manholes and catch basins.

Associated Maintenance Programs:

- Annual water distribution main flushing, utilizing fire hydrants and valve isolation, to provide scouring velocities to clean the mains and turn water over in the system.
- Annual leak detection on all distribution system mains to detect watermain leaks through a correlation sounding procedure, minimizing lost water in the systems through service and main breaks that would otherwise go undetected.
- Annual dead end watermain flushing to maintain chlorine residuals (CL2) and good water quality in these areas.
- Water accountability through property meters, plant meters and district metering.
- Annual sanitary flushing programs to minimize potential for blockages in the systems.
- Annual Aqua Data zoom camera inspections in the sanitary and storm systems to provide snapshots of the systems identifying areas with structural deficiencies, potential for blockages and areas in need of more detailed televising and future maintenance or Capital project work.
- Annual water distribution valve operation program.
- Repairs to damaged water, sanitary and storm mains and services.
- Weekly bacteriological and CL2 residual testing in distribution systems to ensure water quality.
- Conduct water sampling and monitoring to ensure regulatory compliance and adequate water quality is maintained.

2021 Accomplishments:

- Renewed all Municipal Drinking Water Licenses.
- Continued investigative distribution system chlorine sampling to support improved water quality monitoring programs.
- Negotiated Sanitary Discharge Agreement Renewal with Gay Lea (Hewitt's Dairy).
- Completed distribution system leak detection in all distribution systems.
- McClung/Avalon development watermain commissioning, subdivision deficiency inspections, and water meter installations.
- Implemented exploratory distribution system sampling to support water distribution optimization.

- Completed cross connection control survey project.
- Facilitated ongoing negotiations with Ontario Power Generation (OPG) regarding the water intake.
- Initiated discussions with New Credit regarding water use and the existing Agreement.
- Troubleshooting issues identified at the Caledonia Reservoir due to McClung/Avalon developments impact on system and identify viable solutions.
- Completed risk assessments for County Drinking Water Systems.
- Entered into a formal agreement with Brooks Road Environmental for leachate treatment.
- Completed external audit and received accreditation for Drinking Water Quality Management Standard (DWQMS).
- Completed Ministry of the Environment, Conservation and Parks (MECP) inspections, receiving 100% rating for each distribution system (Caledonia/Cayuga, Dunnville and Nanticoke).

2022 Priorities:

- Improve available municipal servicing information available on the County's GIS System.
- Improved water accountability reporting for all drinking water systems.
- Work with Engineering Services with respect to water and sanitary main replacement projects.
- Mississaugas of the Credit First Nation Water Use Agreement Revisions/Amendments.
- Continue administration of the Sanitary Discharge Agreements with industrial customers.
- Emergency Response Training for Operations staff.
- Skills development and training for staff.
- CCTV installations at the Caledonia and Cayuga water facilities.
- Transition and manage the County's cistern program.
- Continue implementation of the Bottled Water Reduction initiative.

Solid Waste / Recycling Operations Responsibilities

Operation and maintenance of the Canborough Waste Management Facility includes:

- Weigh scales and site maintenance activities.
- Diversion Centre for metals, construction and demolition waste, shingles, bulk cardboard, textiles, tires, batteries, leaf and yard material and waste electronics.
- Re-Use Program for gently used items.
- Administration and management of Transfer Station Building and hauling contract with George Barnes & Sons where the waste and recycling from curbside collection is dropped off in separate receiving areas. Garbage is then loaded and hauled to Twin Creeks and recycling to Niagara for processing – approximately \$1.3M annual value.

Curbside collection and recycling includes:

- Administration and management of the garbage and recycling curbside collection contract with Modern Landfilling Inc. approximately \$2.2M annual value.
- Administration and management of the leaf and yard waste curbside collection contract with Grand Disposal approximately \$125k annual value (11-week program for urban centres).
- BIA, Chambers of Commerce and Board of Trade's waste bin collection.
- Curbside collection By-law.

Closed landfill operation and perpetual care maintenance includes:

- 16 closed landfills across the County which range in age and size.
- Inspected annually for various site conditions as required by the MECP.
- Enhanced monitoring required at five of the closed sites – Seneca, Sherbrooke, Oneida, Canborough and Tom Howe.
- Tom Howe – leachate management, landfill gas management (includes gas collection and flaring), site maintenance.
- Canborough – leachate management and site maintenance.
- Administration and management of Leachate hauling contract at Tom Howe and Canborough – approximately \$490k annual value.

2021 Accomplishments:

- Downtown core waste collection frequency increased for tourist season. Five additional collections added due to Nuisance, Untidy and Unsightly Land Protocol.
- January 1, 2021 Waste Electrical and Electronic Equipment (WEEE) program transitions into the Electrical and Electronic Equipment (EEE) program under the Resource Recovery and Circular Economy Act (2016). New Agreements with Producer Responsibility Organization (PRO) and haulers established.

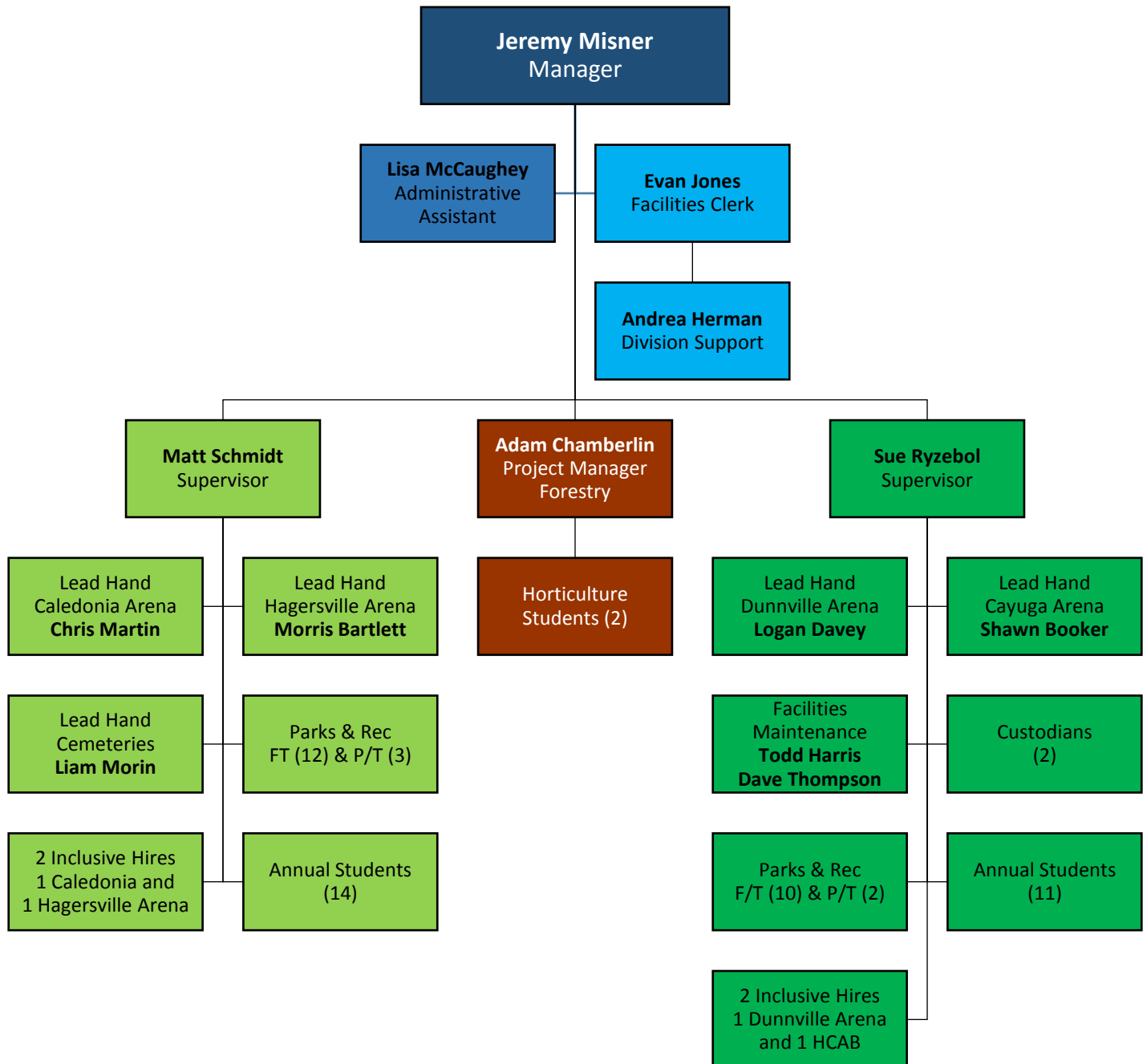
- October 1, 2021 Municipal Hazardous and Special Waste (MHSW) program transitions into the Hazardous and Special Products (HSP) program under the Resource Recovery and Circular Economy Act (2016). New Agreements with PRO and haulers established.
- MHSW and WEEE Events – one collection event was cancelled due to COVID restrictions. Two successful collection events took place and served 1,018 vehicles. \$712 was made from the WEEE event day collection.
- HSP and EEE Event – one successful collection event took place and served 439 vehicles. \$375 was made from the EEE event day collection.
- EEE Collection Bin – a \$1,275.80 donation was made to the Haldimand County Charitable Donations Committee from the bin located at the Walpole Roads yard.
- Battery collection program – collection occurred at nine Haldimand County facilities. The County donated \$815 to the Haldimand County Charitable Donations Committee from this program.
- Crime Stoppers of Haldimand and Norfolk (shredding event) and Haldimand County's (MHSW/WEEE events) partnered for the Dunnville and Hagersville locations.
- Composting – sold 39 backyard composters at a subsidized rate and also offered \$6 "all you can take" wood chips at Canborough Waste Management Facility.
- Nuisance, Untidy and Unsightly Land Protocol put into practice with 26 incidents.
- Reviewed and presented recommendation to Council to cancel the rural curbside leaf and yard waste collection program due to cost and lack of participation.
- Extended and renegotiated Niagara Region Agreement to align processing of recycling to the blue box transition date of January 1, 2024.
- Began preparation and information gathering for transitioning the Blue Box program to the Resource Productivity & Recovery Authority (RPRA); included submission of Initial Report of eligible properties.
- Contingency/emergency planning for level of service for COVID staffing impacts.
- Review and continue to collaborate with Finance and Norfolk County on options that were provided for a long-term leachate management plan (Tom Howe and Canborough).
- The AET Group conducted a two season waste composition audit of 100 residences.
- Purchased and began installation of a new tipping fee software.
- Provided two locations for emergency soil placement.

2022 Priorities:

- Explore options to enhance the leaf and yard waste collection program.
- Explore additional waste diversion initiatives.
- Develop a Closed Landfill Remediation Business Case.

- Explore a partnership with Community Development Partnerships (CDP) for waiving tipping fees for wood chips and disposal of leaf and yard waste for community groups.
- Continue to gather information, review and consider options and prepare for the transition of the Blue Box program to RPRA; this to include amending the Solid Waste By-law, promotion and education and decision making for service of ineligible properties.
- Explore and determine focus of waste composition audit.
- Continue to collaborate with Norfolk County on options that were provided for a long-term leachate management plan (Tom Howe and Canborough).
- Complete the installation of a new tipping fee software at Canborough.
- Installation of new flare system at Tom Howe.
- Complete concrete improvement projects at Canborough.
- Explore initiative of an organic waste program; includes promotion and education of food waste reduction.
- Explore options for curbside collection following the blue box transition.
- Commence site security project at the closed landfill on Peebles Street, Caledonia.
- Monitoring well installations at Sherbrooke Landfill Site.

Facilities, Parks, Cemeteries and Forestry Operations (FPCF)



Areas of Responsibility

Staff responsibilities shift with the seasons. During the winter season staff focus mainly on the arenas while supporting outdoor parks and recreational facilities. During the summer season staff focus mainly on the outdoor parks and recreational facilities while supporting the indoor operations of the arenas. In addition to the operation and maintenance of the parks and recreational facilities, staff are responsible for the operation and maintenance of various administrative buildings.

Administration Facility Maintenance

- The Facilities Maintenance staff undertake general care and maintenance of the administration buildings, community halls, libraries, museums, fire halls, and ambulance stations.

Arenas

- Facilities Parks, Cemeteries & Forestry (FPCF) staff operate and maintain the Haldimand County Community Center Arena (twin pad), Hagersville, Dunnville, and Cayuga Arenas.

Pools and Splash Pads

- FPCF staff operate and maintain the Caledonia Lions Pool and Splash Pad, Dunnville Lions Pool and Kinsmen Wading Pool, and the Hagersville Lions Pool and Splash Pad.

Parks

- FPCF staff operate and maintain 64 parks throughout the County (182 hectares). The parks are a mixture of parkland and open space. Parkland classifications consist of Community Common; Neighbourhood Parks; Community Parks; Activity Parks; Waterfront Parks; Cultural Parks; and Streetscapes. Open space parks are classified either as a Nature Park or Greenway.
 - Grounds maintenance
 - Furnishing and amenity maintenance
 - Turf maintenance for sports parks
 - Playground maintenance and repair
 - Lighting maintenance (parks and pathways)
 - Waste removal
 - Courts/sports fields
 - Piers, lighthouses and boat launches

Trail Network

- Trails and pathways have been organized based on use and location: multi-use off-road, park pathways, urban trail routes, on-road cycling routes, all-terrain

vehicle trails and other. Staff provide inspection and maintenance services to varying degrees for this trail network.

- Staff are working in conjunction with Community Development and Partnership staff to develop a trails maintenance service plan. This plan will identify and standardize the maintenance requirements for the whole of the trail network. In the event a specific user group assumes responsibility of a trail section, the user group will be required to meet the same maintenance standards.

Forestry (Urban and Rural)

- Continual management of tree maintenance contractors conducting tree removal, stump grinding, pruning; tree planting and consultants inspecting trees across the County.
- Administration and enforcement of the County's Forest Conservation By-law ensuring that private forests are managed following Good Forestry Practices, private forests aren't clear-cut and providing support for the Building and By-law Division to assess the safety of private trees under the Property Standards By-law.
- Collaboration with Planning Division to review all subdivision and site plan applications that may impact forests or County-owned trees or to ensure trees are protected or replanted if removed is necessary.
- Supervision of the horticultural student crew in the ongoing maintenance of ornamental flower and garden beds across the County and indoor tropical plants at County facilities.

Cemeteries

- Staff are responsible for care maintenance and operation of 40 cemeteries across the County. Of the total inventory, 19 sites are active with 10 of these sites having available plots for interments (Woodlawn, Caledonia, Hagersville, Cayuga, Canfield, Melick, Highbanks, Port Maitland and Diltz Road, Dunnville Riverside).
- Staff are responsible for the sales and administration of burial rights and interments, management of community enquiries, opening and closing of interments, layout of plot markers, and overall care and maintenance of all 40 cemeteries.
- Staff undertook the grass cutting for 14 of the 40 sites (Highbanks, Lowbanks, Mount Carmel, Inman Road, Diltz Road, Kirk, Canfield, Moote Road, Briggs, Woodlawn, Dunnville, Cayuga, Caledonia and Hagersville, while contracting out the grounds maintenance for the remaining sites.
- Staff undertook 126 cremations and full burials at 19 active County sites, as well as 65 rights transfers.

Grass cutting and snow removal

- Staff are responsible for the overall grounds maintenance of all of the Counties parks and recreational facilities.
- Parks and recreational facilities are maintained through the combined use of county staff and contracted services.
- In addition to parks and recreational facilities, FPCF is responsible for grass cutting at various County facilities (e.g. fire stations, water plants, roads yards, administration buildings, etc.)

Waste Collection (Parks and Trails)

- Year round waste removal services is provided by FPCF staff at numerous parks and recreational facilities.

Contracted Services

- FPCF manages a number of legislated contracted inspections/services including: asbestos; cisterns; carbon monoxide monitors; cooling tower chillers; diesel generators; elevators; emergency and exit lighting; exhaust hoods; fire extinguishers; fire panels; fire suppression and sprinkler systems; playground equipment and structural evaluations of communication towers.
- In addition to managing legislated work, FPCF manages a number of other contracted services including: architectural/engineering services; custodial; grass cutting; heating ventilation and cooling; internment/burials; leases; overhead doors; portable washrooms; refrigeration; security alarms and security cameras; snow removal.

2021 Accomplishments

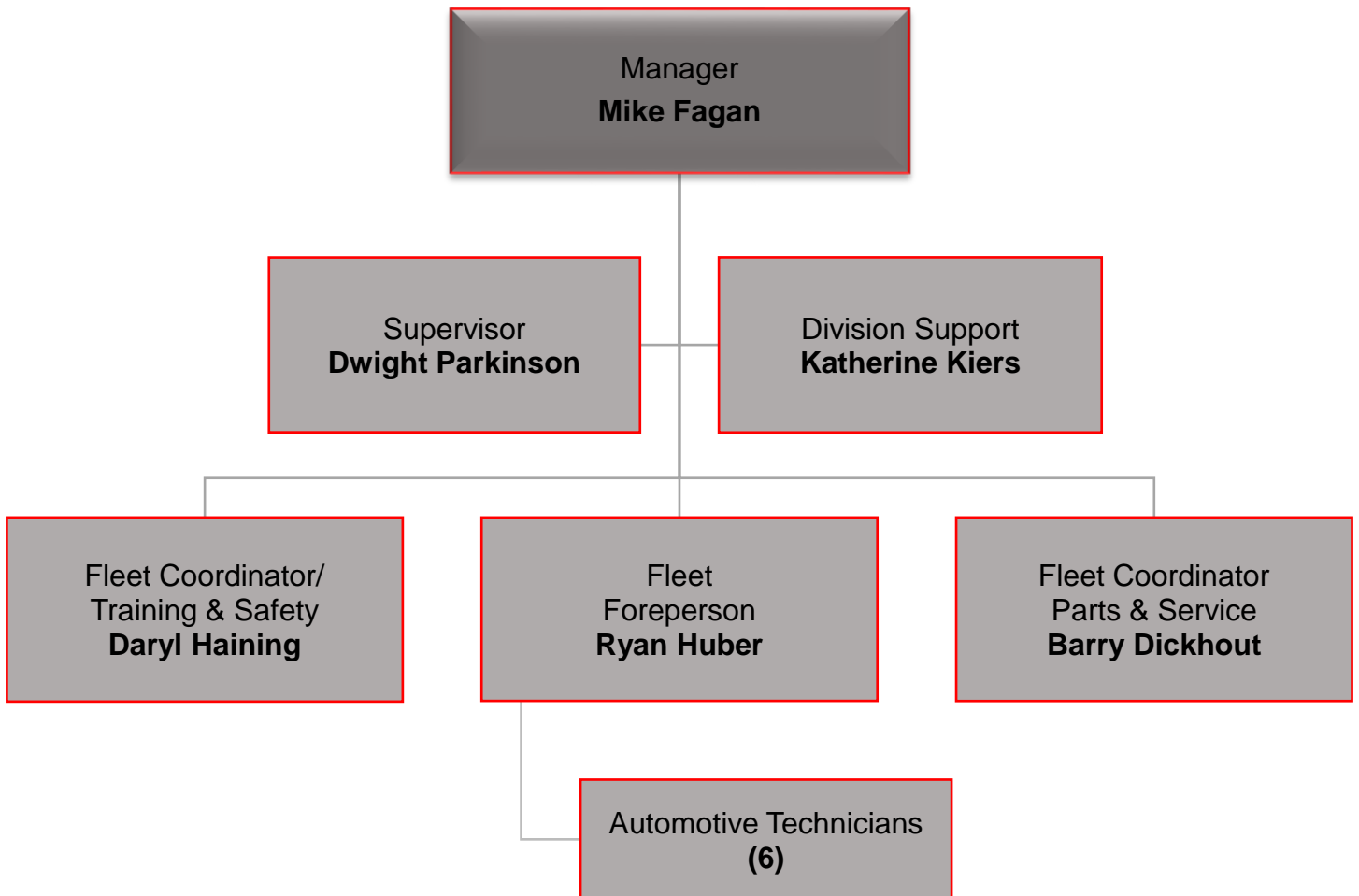
- Constructed and staffed a Vaccination Clinic for the COVID Pandemic at the Cayuga Arena.
- Ongoing management of policies and procedures at County facilities to deal with COVID pandemic, including the hiring of additional students specifically for extra enhanced cleaning.
- Enhanced coverage/care of parks, arenas and cemeteries.
- Increased grounds maintenance at various County cemeteries with enhanced cemetery crew.
- On-going commissioning and completion of warranty items at the Haldimand County Administration Building.
- Completed a preliminary engineering study on existing and potential future boat launch sites.

- Horticultural crew established to maintain select gardens throughout the County.
- Forestry stats – 2,803 trees pruned; 2,248 trees removed; 1,097 stumps removed; 106 trees planted.

2022 Priorities

- Staff assessment of future resource needs due to development.
- Staff professional development planning (succession planning).
- Trail Maintenance Program/Establish Trail Maintenance Standards.
- Increased expansion of Horticultural crew to maintain select gardens in-house (County wide).
- Commence Park and Recreational Facility Maintenance Program.
- Ongoing improvements/advancement of the Stone Orchard cemetery database.
- Enhanced staff core technical training (Certified Ice Technician (42% certified in 2021), pool training, grounds and building maintenance).
- Continued implementation of the Forest Strategy and Management Plan, focusing on administration, tree inventory, tree removal, tree pruning, forest health, tree planting, community engagement and enforcement of the Forest Conservation By-law.
- Urban canopy coverage goals (GIS).
- Secure property transfers and easements in order to take possession of the Street Barnes Cemetery.
- Establish maintenance and operational requirements for County development.
- Install water bottle filling stations at all arenas.
- Commence implementation of the Dunnville Downtown Street Trees project.

Fleet Operations



Areas of Responsibility

Vehicle and Equipment (V&E) Asset Management

Responsible to research and prepare all Capital budgets, specification documents, procurement, maintenance and disposal of all county owned vehicles and equipment (V&E). Also responsible to establish life cycles of over 485 County owned V&E including 55 CVOR regulated Commercial Motor Vehicles and 49 EMS Commercial Motor Vehicles.

The Fleet Division is also responsible to manage a “ Fleet Pool “ of V&E to assist divisions, on a short term basis, in meeting their service levels when division operated V&E are due for preventative maintenance, incur breakdowns, warranty work and increases in staff due to seasonal work.

V&E Maintenance

Establish preventative maintenance criteria to meet County requirements, adhere to the Corporate Fleet Policy and all legislated requirements such as:

- Commercial Operators Vehicle Registration (CVOR) – annual and semi-annual safety inspection standards.
- Ministry of Health (MOH) – ambulance maintenance standards confirmed by yearly on-site audits by MOH.
- National Fire Protection Association (NFPA) – fire apparatus standards, annual pump tests, annual ladder and aerial non-destructive testing.
- Ontario Highway Traffic Act (HTA).

County Fuel Supply and Depot Maintenance

Responsible for fuel procurement, inventory and operation/maintenance of five County fuel depots. Adhere to Technical Standards and Safety Authority (TSSA) standards.

Training

Provide staff initial and refresher training through internal/external resources such as fork lifts, working at heights, fuel dispensing, defensive driving, MTO Book 7, loader operation, chainsaw, load securement and CVOR legislated requirements.

The County is an authorized participant in the Ministry of Transportation (MTO) Drivers Certification Program (DCP) which grants the County the ability to provide training to upgrade and renew driver licences, air brake endorsement and on-line monitoring of staff driver licences.

Provide V&E training and ongoing monitoring as required by:

- Ontario Occupational Health and Safety Act;

- HTA - CVOR legislation – driver vehicle inspection reports, hours of service, load securement;
- Ministry of Transportation;
- TSSA; and
- County policies

Vehicle and Equipment Procurement

Fleet Operations division is responsible for preparing annual Capital V&E replacements and ten year Capital replacement forecasts. In consultation with the user groups, Fleet is responsible for specification writing, procurement of all County owned V&E, ensure vehicles are 'right sized' for efficiencies and meet the requirements of the end users. Also responsible to ensure Capital budget allocations are adhered too and all procurement processes follow County policy.

Vehicle and Equipment Disposal

As per Corporate Fleet Policy.

Maintenance and Repair of Kohler Facility and Grounds

Ongoing maintenance/repair and capital improvements.

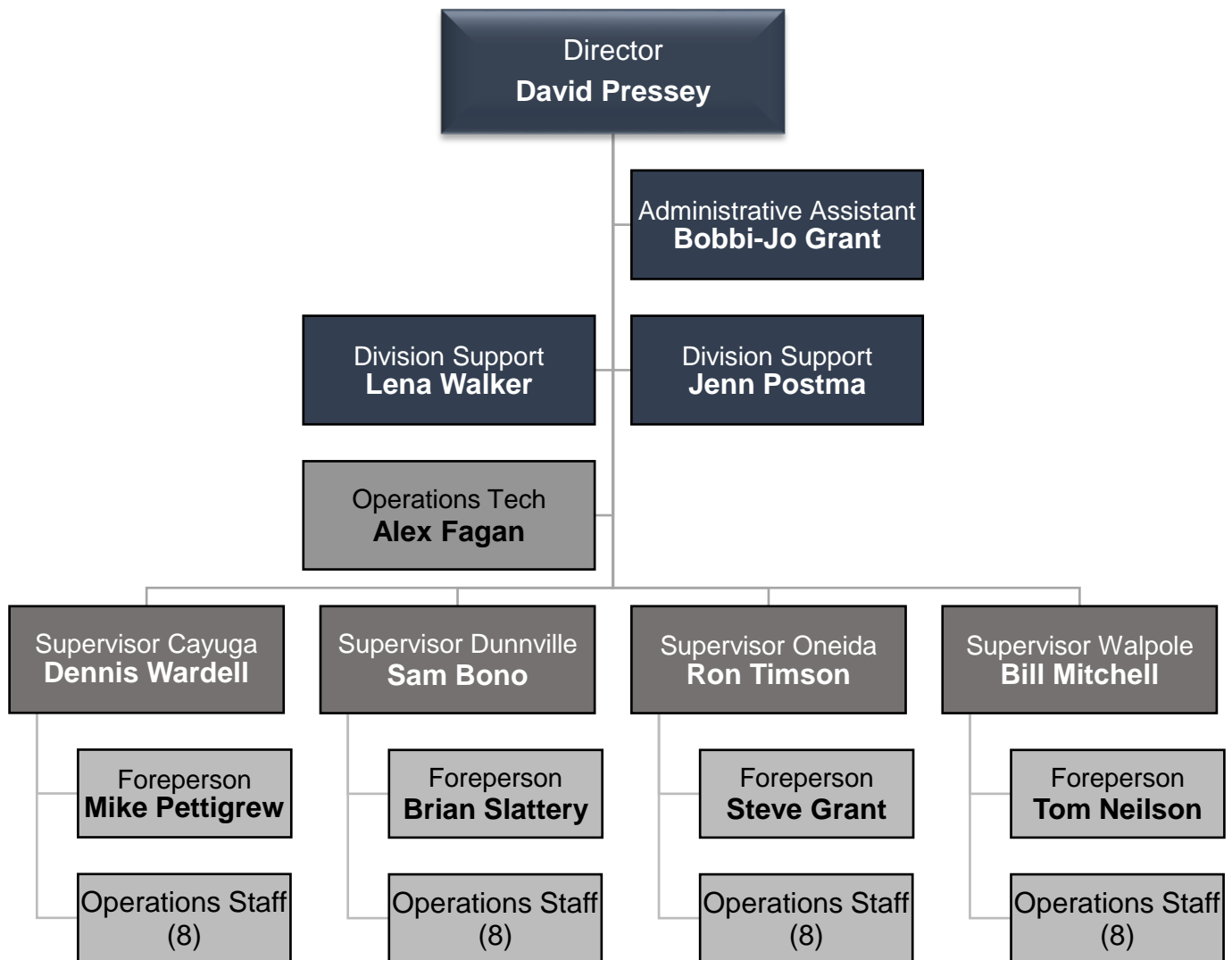
2021 Accomplishments:

- Specification writing, procurement and in-servicing of all Council approved V&E purchases in 2021 budget which includes the purchase of a new Fire aerial apparatus (delivery in May 2022) for Station 1, in-servicing of two brine trailers used for winter control anti-icing activities, two self-contained loader mounted boom mowers, one New Initiative EMS first responder vehicle and a replacement Type 111 ambulance.
- Upgrade of two County fuel depots in Kohler and Walpole yards which includes new tanks, dispensing units, nozzles and electrical upgrades (upgrades at all fuel depots now complete).
- Recruit, hire, and train new Fleet Coordinator Training and Safety.
- Successful external audit of our MTO Driver Certification Program.
- Assist BAS Team with the implementation of new maintenance management systems.
- Assist Asset Management division in the design of the Kohler garage addition and improvements to training room and office upgrades (ongoing into 2022).

2022 Priorities:

- Work with divisions to ensure all 2022 capital vehicle and equipment replacements are properly identified and 'right sized' for efficiencies and meet the requirements of the division.
- Work with Fire Division to prepare specification documents and procure two new Fire tankers and one new Fire Pumper apparatus.
- Assist Roads Operation division to implement new AVL/GPS tracking and material (salt/sand) reports on all plow trucks.
- Tender and renew County bulk fuel contract which expires in February 2023.
- Implement and train staff regarding MTO – Modernizing Ontario's Vehicle Inspection Program.
- Participate in Public Works feasibility study (North Caledonia).
- Continue to assist BAS Team with the implementation of new maintenance management system.
- Continue to assist Asset Management division in the design of the Kohler garage addition and improvements to training room and office upgrades.
- Actively participate on Vehicle Accident Review Committee.
- Specification writing, procurement and in-servicing of all Council approved V&E purchases in 2022 budget.

Roads Operations



Areas of Responsibility

General

To maintain and preserve 1,494 kilometers of public right of ways/road allowances (roads), 162 kilometers of sidewalks and eight municipal parking lots consisting of approximately 20,000 m² in asphalt surface area. The focus of the Roads Operations Division and its employees is safety, preventative maintenance and the protection of the public's investment in the transportation network system of Haldimand County. This division is responsible for road surface maintenance, roadside maintenance, and drainage maintenance. Additional responsibilities include, but are not limited to, traffic signals, street lighting, entrance culverts, cross road culverts, ditching, road grading and dust control.

Sidewalk Maintenance

The County's sidewalk maintenance program consists of sidewalk inspection and sidewalk and curb restoration on an annual basis. The sidewalk inspection program is scheduled on an annual basis with a rating criteria listing all surface deficiencies and/or trip hazards in a priority fashion. Each year a sidewalk restoration contract is planned and implemented based on inspection reports that identify all known deficiencies on a priority basis. The sidewalk restoration program is generally scheduled mid to late summer for seasonal and weather related advantages.

Roadway Maintenance Programs

- **Rural Roadside Mowing** - The Rural Roadside Mowing Program is scheduled on an annual basis and consists of cutting roadside grass with the intent to improve roadside visibility for the travelling public. Rural intersections are also cut back an additional standard again with the intent to improve site lines. The County's Rural Roadside Mowing Program schedule consists of two cuts per year. The first cut is generally scheduled in early to mid-June and the second cut is scheduled in August. The Rural Roadside Mowing Program also includes manual trimming of all safety barrier systems and traffic signs twice per season.
- **Road Surface Maintenance** - All roads in the County are inspected on a regular basis for surface deficiencies including potholes. All roads in Ontario are classed into 6 different road classes which is based on the daily traffic counts and speed limit on any given road. The frequency of road surface inspections and road surface repairs is based on the class of road. All roads within Haldimand County are inspected a minimum of once every 30 days. Street sweeping is scheduled throughout our urban areas where curbs and gutters exist. All urban roadways are swept at a minimum of once in the spring, once mid-summer and twice in the fall. Main streets and downtown cores have increased schedules.

- Roadside Drainage - The Roadside Drainage Program consists of multiple drainage activities designed to improve the overall drainage of the County's roadway network. Positive drainage of roadways improves and extends the life of the road. Roadside drainage activities consist of entrance and cross road culvert maintenance, including replacement when necessary. Other drainage activities include, reconstructive roadside ditching and ditching maintenance or ditching clean out. Roadside drainage activities are generally scheduled during the summer and fall seasons.

Streetlight Maintenance

Roads Operations Division is responsible for inspecting and correcting streetlights on County Roadways in accordance with the standards set out. The standard for the frequency of inspecting roadway streetlights to check that they are functioning, is once per calendar year, with each inspection taking place not more than 16 months from the previous inspection.

Gravel Road Maintenance

Haldimand County's gravel roads are regularly inspected throughout the year. In the spring, once the frost is out of the ground and the weather permits, all gravel roads are graded and new stone applied, if needed. The frequency of the grading is determined by the condition of the road and when grading is warranted.

Dust Control Program

The County's Dust Control Program on the gravel road network consists of calcium chloride liquid applications to control and limit airborne dust on gravel roads on an annual basis. The dust control program schedule is generally performed once in the spring and on an as need basis throughout the summer. Several factors can influence the frequency of dust control applications, including but not limited to, the amount of rainfall during a summer season, the number of vehicles travelling the road and the amount and type of winter precipitation from the previous winter season.

Winter Control – Snow Removal

The Roads Operations division is responsible for clearing snow from County-owned roadways, municipal parking lots and sidewalks in front of County property. Roads Operations are also responsible for monitoring weather forecasts and patrolling of roads. Road patrolling, weather monitoring and road operations/snow clearing services are scheduled on a 24 hours a day, 7 days a week basis during the winter season. The Winter Control Program is typically scheduled from November 15 to April 15 of the following year. Snow and ice clearing services shall be deployed as soon as practicable after staff become aware of the fact.

Snowplowing

Each roadway in Haldimand County is classed in accordance with the Ontario Minimum Maintenance Standards, a provincial regulation that sets out standards to class each road in a class of 1 through 6, based on the number of vehicles per day and the posted speed limit. Haldimand County's approved winter control service levels are planned and scheduled in accordance with this regulation on a County wide basis. For snow clearing operations, each road class has specific limits of snow accumulation and response times for snow clearing. As a result, major arterial roads are the number one priority and with higher traffic volumes, these roadways are maintained 24-hours per day during the winter control season. Typically, residential and/or rural non-priority streets and roads are cleared on a secondary deployment schedule.

Sidewalk Snow and Ice Clearing

The Roads Operation division is responsible for monitoring and completing visual observations of sidewalks throughout the County for snow accumulation of equal to or greater than 5 cm, or if ice is present on sidewalks. Snow and ice clearing services shall be deployed as soon as practicable after staff become aware of the fact. They will track and monitor snow and ice clearing operations throughout the County and forward any issues to the County By-Law Division for further follow up.

2021 Accomplishments

- Administered a Soils Management and Excess Soils procedural plan under O. Reg 406/19 and other relevant legislation.
- Initiated a Boundary Agreement review of current boundary agreements with neighbouring municipalities. Agreements to be updated, amended and formalized with neighbouring municipalities where applicable.
- Undertake a review of our current Road Patrol processes and procedures.
- Succession plan review to promote internal staff development.
- Roll out of new anti-icing trailers for winter maintenance program.
- In addition to the regular scheduled programs and responsibilities, the Roads Operations Division also received and generated 1,498 work order service requests. All work orders/service requests are investigated and completed in accordance with regular program schedules.

2022 Priorities

- Develop, tender and award new Winter Control Maintenance Contracts.

- Continue the Roads Service Model review to identify the possible impacts of accommodating the increased development and urban expansion in Caledonia.
- Implement AVL Tracking and installation of Geotab devices in all plow trucks.
- Improvements to our contract management processes and procedures.
- Optimization of operating and capital budget monitoring and reporting procedures.
- Implementation of new Mobile Work Management system.
- Continue updating all current boundary road agreements with neighbouring municipalities.
- Set up a Regulatory/Warning Sign Management program.
- Undertake a business process review for the Road Operations Permit process.
- Continue to look for program improvements and service delivery efficiencies through improved technologies and potential software applications.
- Continued implementation of replacement and new roadside safety barrier devices in accordance with priorities identified in the Roadside Safety Audit.
- Continue to look for opportunities to improve the County's sidewalk infrastructure to meet AODA requirements.