

Engineering and Capital Works Department

2021 Annual Report

Engineering and Capital Works Department

Manage the County's capital replacement and major maintenance programs to ensure long term sustainability of the County's \$950M in infrastructure.

Departmental Structure (29 staff total):

- Administration – ECW (2 staff)
- Engineering Services – ENG (13 staff)
- Water & Wastewater Engineering – WWE (8 staff)
- Facilities Capital & Asset Management – FCA (6 staff)

GM Engineering & Capital Works
Tyson Haedrich

Administrative Coordinator
Sue Flaherty

Engineering Services

Manager
Engineering Services
Kris Franklin

Business Services Assistant
Michelle Baldin

Project Manager
Municipal Infrastructure
Danielle Fletcher

Project Manager
Municipal Infrastructure
Lloyd Rollinson

Project Manager
Municipal Drains
John Van Rooy

Municipal Technologist
Jordan Higgins

Municipal Technologist
Mike Fleschhut

Engineering Technologist
Doug Reimer

Municipal Technologist
Krystina Topp

Municipal Technologist
Lucas Hunter

Transportation Engineering
Technologist
Judy Brown

Project Manager
Granular Conversion
Mark Long

Engineering Services Student
(Mohawk Coop – 8 months)

Water & Wastewater Engineering

Manager
W&WW Engineering
Phil Wilson

Project Manager
W&WW Capital
Warren Wight

Project Manager
W&WW Infrastructure
Stephanie Nolet

W&WW Engineering Technologist
Kristi-Ann Watson

W&WW Engineering Technologist
Jessica Davidson

SCADA Coordinator
Ben Howard

W&WW Engineering Technologist
Owen Felker

Project Manager
Water/Wastewater Support
Vacant (Contract)

Facilities Capital & Asset Management

Manager
Facilities Capital & Asset Management
Jeff Oakes

Project Manager
Caledonia EMS Station
Ashley Schaeffer

Project Manager
Facilities Infrastructure
Jessica Ignaszak

Facilities Technologist
Taylor Church-Lang

FCA Summer Student
(Mohawk Coop – 4 months)

Asset Management Analyst
Cindy King

2021 Challenges/Opportunities

- **Challenges**

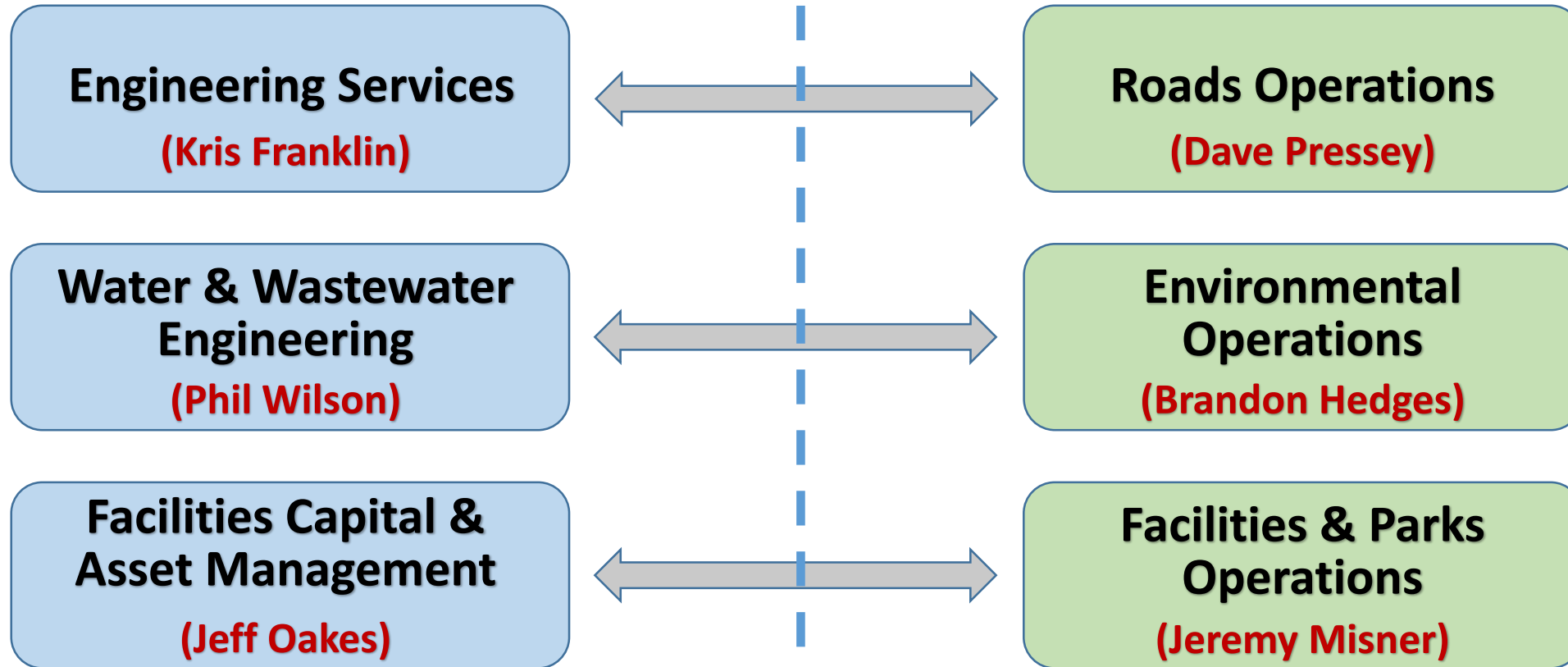
- Pandemic
- Retirements/Staff in New Positions
- Contract Pricing

- **Opportunities**

- Divisional Maturity
- New Staff Recruitment
- Indigenous Consultation

(ECW) Plan/Construct

(PWO) Operate/Maintain



Engineering Services - Responsibilities

- Road Reconstruction Program
- Hot Mix Resurfacing Program (400 km of paved rural and urban arterial roads)
- Urban Paving Program (130 km of urban local roads)
- Surface Treatment (Tar and Chip) Program (770 km of surface treated roads)
- Gravel Road Conversion Program (40 km remaining)
- Structures (Bridges and Culverts) Program (267 bridges/culverts with 3+ metre span)
- Municipal Drains Program (84 municipal drains on ten year cycle)
- Development Related Infrastructure

Engineering Services - 2021 Highlights

- Roads Needs Study (4 Year Cycle)
- Accelerated Gravel Road Conversion Program (Surface Treatment Program)
- Caledonia Urban Paving
- Haldimand Road 20/King Street/Broad Street Connecting Link Resurfacing
- Dunnville Farmers Market Paving and Landscaping Improvements
- Caledonia/Hagersville/Jarvis Subdivision Infrastructure Inspection and Approvals
- 2019/2020 Lake Erie Storm Damage Repair – Grant Funded
- Highway 3 (Talbot Street - Jarvis) Connecting Link Grant Funding Application
- Broadband Installation Municipal ROW Approvals

Engineering Services - 2022 Priorities

- Caledonia – Sanitary Collection System Upgrades
- Pedestrian Crossover Program – Year 1 of 2
- Review Development Inspection and Acceptance Processes
- Harrop Drain Reassessment
- Review Boundary Road Agreements (with Roads Operations)
- Broadband Installation Municipal ROW Approvals
- Staff Development and Mentorship

W&WW Engineering - Responsibilities

- Water Treatment and Distribution Systems (2 Plants, 5 Standpipes, 3 Booster Stations)
- Wastewater Treatment and Collection Systems (4 Plants, 4 Lagoons, 20 Pumping Stations)
- SCADA Network
- Optimization Program (with Environmental Operations)
- Long Term Servicing Plans (with Planning)
- Liaison with Industry (with Environmental Operations)
- Technical Support to other County Divisions

W&WW Engineering – 2021 Highlights

- Dunnville Water Treatment Plant Upgrades
- Jarvis to Townsend Forcemain Construction
- Grand River Assimilative Capacity Study (Caledonia WWTP)
- Norfolk/Six Nations Water Supply – Norfolk Approval of Haldimand Water Solution
- Nanticoke WWTP EA Addendum
- Servicing Strategy Development to Support Official Plan Update
- Industry
 - Port Maitland (Innophos) dedicated pumps
 - Grant funding award (\$700K) for shared pumping strategy (Stelco/Imperial Oil)

W&WW Engineering – 2022 Priorities

- Norfolk Water Supply Agreement
- Nanticoke Water Treatment Plant Rerating
- Caledonia Wastewater Treatment Plant Environmental Assessment
- Nairne Street Grand River Forcemain Construction
- Jarvis Pumping Station Commissioning
- Hagersville Master Servicing Plan (Planning)
- Imperial Oil Raw Water Line Replacement (Industry)
- Staff Development and Mentorship

FCA - Responsibilities

- Facilities Capital Program
 - Fire Halls
 - Roads Yards
 - Community Halls
 - Arenas
 - Recreation Centres
 - Libraries
- Asset Management Program
- Energy Management Program

FCA – 2021 Highlights

- Dunnville Multipurpose Building Renovations for HNHU
- Cayuga Administration Building Demolition
- Canfield Community Centre Roof Replacement
- Dunnville Roads Yard Sand Dome Roof Replacement
- New Staff Recruitment
- Ten Year Capital Budget Buildout

FCA – 2022 Priorities

- Caledonia EMS Station
- Kohler Yard Renovation
- Hagersville Active Living Centre and Library – RFP for Design
- Asset Management – Level of Service Plan
- Energy Conservation and Demand Management Plan
- Building Condition Assessments (Firehalls, Roads Yards, Libraries, Community Halls)
- Staff Development and Mentorship

Engineering & Capital Works – 2022 Priorities

- Divisional Process Integration Across Department
- Communications
- Strategic/Sustainable Infrastructure Planning
- Staff Development and Mentorship
- Succession Planning

Thank You