

ENGINEERING SERVICES

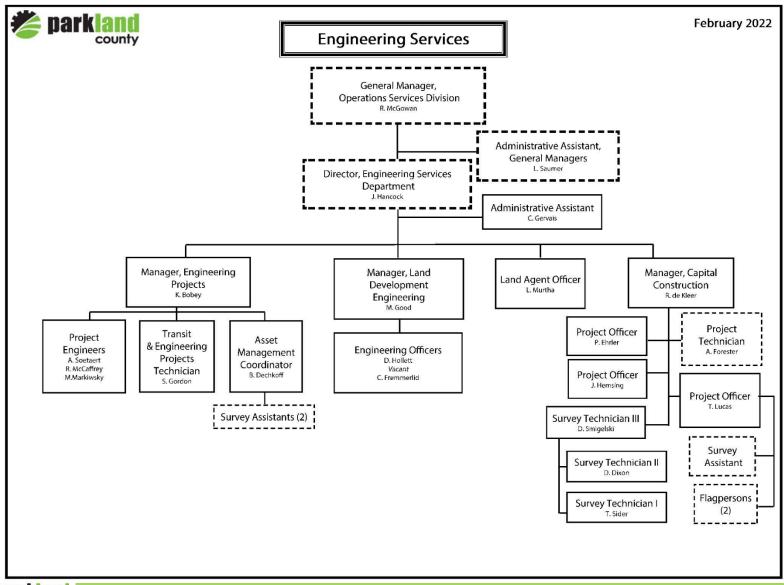
2022 DEPARTMENT OVERVIEW

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DEPARTMENT ORG STRUCTURE





2022 BUSINESS PLAN

Attached to the report and approved by Council in Fall during budget deliberations. Includes the following info:

- Department Overview
- Strategic Context
- 2021 Accomplishments
- 2022 Activities
- Longer Term Opportunities and Threats
- Key Performance Indicators



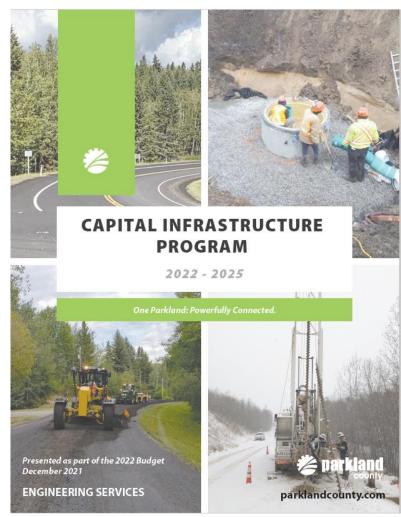
2022 WORK PLAN

Attached to the report and developed within the Department following budget approval. This is developed and approved at Director level. Includes the following info:

- Engineering's Vision, Mission and Values
- Department breakdown and areas of responsibility
- Core service areas
- Summary of annual work program and assignment of resources
- Outline of strategic documents to enhance service delivery



- 4-Year Capital Infrastructure Program development & implementation
 - Planning, Design and Construction of the following Capital Assets:
 - → Roadways
 - → Bridges
 - → Water Systems
 - → Wastewater Systems
 - → Stormwater Systems
 - Focus on rehabilitation, restoration, major repairs and preservation
 - Growth projects primarily connected to economic diversification and high return on investment scenarios





 Engineering Projects, along with managing most of the water, wastewater and storm infrastructure construction, also manages the following activities:

- Transit Service Coordination

→ Operations, Route Design, Ticket Sales, Annual Budget, Annual Bylaw Approval, Marketing, Inter-jurisdictional Service Agreements, etc.



– 3rd Party Private Utility Coordination

→ Fortis, ATCO, West Parkland Gas, Evergreen Gas, Telus, Shaw, Rogers, etc.

Regional Commissions

→ ACRWC, CRPWSC, WILD. Includes support for projects, coordination of activities, future planning, implementation of projects and initiatives, etc.

Off-Site Levy Bylaw

→ Provides support to the Annual Updates and Calibration on past years development

– CN Rail activities

→ Whistle Cessation, Track Twinning, Crossing Upgrades





- Asset Management
 - Annual roadway assessments and infrastructure review
 - →Road Rating
 - **→**CCTV
 - →Smoke Tests
 - →Sidewalk Rating
 - Review overall health of network for all asset categories including detailed review and analysis of the following:
 - → Age and lifecycle expectations
 - →Current state analysis of assets and review of deterioration rate
 - →Development of "best" treatment option with focus on long term benefit and cost efficiency
 - →Planned replacements/ restorations vs emergency repairs
 - →Balanced funding levels between asset categories
 - →Grant and Funding program eligibility



- Land Development Engineering (LDE) provides primary support for Planning and Development Services activities:
 - Provides conditions and outlines infrastructure requirements for development projects for all planning applications such as:
 - → Subdivisions, Development Permits, Development Agreements
 - Infrastructure requirements identified and conditions outlined as required for the kind, type and size of development
 - → Roads, Water, Wastewater, Storm, etc.
 - Approach permits, approvals, site inspections, construction approvals and warranty sign off
 - Engineering Design and Construction Standards
 - What's missing? Lot Grading review and approval... more on that to follow



ALL THE OTHER STUFF

- In House Survey team
 - Supporting construction activities, land activities, Assessment Department, Enforcement Services and others
- Traffic Count Program
- In-Service Road Safety Audits
- Emergency Operations Centre (EOC)
 - We provide:
 - → Leadership Support
 - → Pre-Event Resource and Activity Planning
 - → Event Support





EVEN MORE OF THE OTHER STUFF ...

- Land Purchasing and ROW Management
 - Valuations and Acquisitions for Capital Projects
 - Legal Survey Activities
 - Road Closure Applications
- Major Utility/Pipeline Work
 - Regional Commissions
 - → ACRWC, CRPWSC, WILD
 - Oil & Gas related activities
 - → Crossing agreements, right-of-way agreements, temporary work space agreements
 - TransMountain Pipeline





AND MORE ...

Major Projects Support

- Champion Pet Foods, Pinnacle Wood Pellet Plant, Amazon
- Engineering is heavily engaged in:
 - → Identification of infrastructure requirements
 - → Development of cost sharing scenarios under Major Business Attraction Program
 - → Existing System capacity analysis (water, wastewater, roads and storm)
 - → Planning and Development Approvals
 - → Infrastructure Management Planning, Design, Construction Oversight, Warranties

Oversight on Provincial Projects

 Highway 60 Overpass Design, Highway 628
 Programming, Highway 16 Access Management, Highway 16 Widening, Seasonal Construction activities.





INTERNAL COUNTY RELATIONSHIPS

We are aligned with:

- Mayor and Council
- CAO and EC Team

We work daily with:

- Planning and Development
- Roads Maintenance and Drainage
- Public Works
- Financial Services
- Procurement Services
- Safety

We are very connected to:

- Agricultural Services
- Communications Services
- Customer Service
- Economic Diversification
- Emergency Management
- Employee Services
- Enforcement Services
- Fire Services
- Information Services
- Legal Services
- Legislative Services
- Parks, Recreation and Culture
- Strategic Services



EXTERNAL RELATIONSHIPS

Regional Commissions

- Edmonton Metro Region Board (EMRB)
- Alberta Capital Region Wastewater Commission (ACRWC)
- Capital Region Parkland Water Services Commission (CRPWSC)
- West-Interlake District Water Commission (WILD)

Associations

- Acheson Business Association
- APEGA and ASET
- Consulting Engineers of Alberta (CEA)
- Alberta Construction & Heavy Roadbuilders Association (ACHRA)
- International Right of Way Association (IRWA)

Private Entities

- CN Rail
- TransALTA
- TransMountain Pipeline (TMX)

Municipal

- City of Edmonton
 Spruce Grove
- Stony PlainSturgeon County
- Strathcona County Beaumont
- City of Leduc Leduc County
- Yellowhead County
 Lac St Anne County
- St Albert Brazeau County

Provincial

- Alberta Transportation
- Alberta Environment & Parks
- Municipal Affairs
- University of Alberta

Federal

- Transport Canada
- Statistics Canada
- Fisheries & Oceans
- First Nations Paul Band, Enoch Cree Nation



TOOLS AVAILABLE

Adjacent image shows the strategic documents in place, actively being worked on, or near future.

There are several others but these are the big ones.





CAPACITY

- Engineering Services is in a position of maximum capacity
 - Able to complete the tasks assigned, but pressured with additional work
- Additional tasks, initiatives, and assignments will need to be prioritized against current planned activities
 - Level of priority will dictate the work that goes forward
 - Remember our Asset Management when considering priorities
 - Resource capacity will confirm what's possible
- The answer in Engineering is always "yes" ... how is the question.
 - Funding Availability Time Provided Resources Available Quality Expected
 - Given appropriate funding, time, resources and direction, Engineering can deliver



QUESTIONS

- Here's one for you.
 - What three (3) priorities can Engineering focus on in the next 2-3 years to meet, enhance or improve the strategic objectives of Council and the Governance and Priorities Committee



