



Request for Decision

Title	Resourcing Engineering Services Capital Planning Branch
Proposed Motion	That Council approve an increase to the 2016 Engineering Services budget of \$53,700 funded by General Operating reserve, to support the addition of a Senior Capital Project Officer and a Capital Project Officer.
Administrative Recommendation	Administration recommends this transfer of funds as it is critical to the successful execution of the Refinery Revenue Plan that is currently under development.
Previous Council Direction	None
Report	<p>Background Information</p> <ul style="list-style-type: none">• In late 2017, the Sturgeon Refinery is scheduled to become operational, resulting in a significant amount of new tax revenue for Sturgeon County to invest in infrastructure.• At the June 28, 2016, Council meeting, the approval of the 2017 Capital Infrastructure Plan identified a scope of work that takes into account this new refinery revenue starting in 2018. The Capital program has the potential to increase from approximately \$13M (2016) to \$30M (2020).• Council has expressed and confirmed priorities in the Capital Plan per Refinery Revenue Financial Plan in Retreats in May and August of 2016:<ul style="list-style-type: none">○ Maintain Current Infrastructure<ul style="list-style-type: none">▪ Rehabilitation, hard surface to hard surface▪ Proposed funding estimate of \$7.1 million in 2018 and \$5.8 million in 2019▪ Ongoing Maintenance Funding for work completed has been proposed to 2028○ New Infrastructure<ul style="list-style-type: none">▪ Gravel to Gravel or staged reconstruction and Gravel to Hard Surface▪ Proposed funding estimate of \$10.5 million starting 2019▪ Ongoing Maintenance Funding for work completed has been proposed to 2028○ Organizational Capacity<ul style="list-style-type: none">▪ Administration’s capacity must be adjusted to deliver on this expanded work plan including but not limited to project management, reporting and budget oversight.

- At the June 28, 2016, meeting, Council approved the 4-stage capital plan to bring focus and transparency to the capital planning process (Stages include Potentials; Feasibility; Design; Construction).
- Administration has developed a preliminary work program including:
 - Rehabilitation of current infrastructure including paving of 244 kms of road over 35 years, at an estimated cost of \$10.5M per year
 - New infrastructure funding to start in 2019 at \$10.5M increasing at a rate of 3% annually (factoring CPI index)
- It is important to note that new infrastructure has the same pre-engineering requirements as rehabilitation of current infrastructure.
- The challenge in preparing for this increased volume of work is to ensure that “shovel ready” projects are available for execution starting in 2018.
- To ensure the success of the refinery revenue plan and additional projects, the following resources are minimally required:
 - New Senior Capital Projects Position
 - New Capital Projects Officer
- With these changes, Engineering Services will be better positioned to meet the demands of executing on the additional refinery revenue plan, including:
 - Prioritizing projects and moving them through the 4-Stages
 - Maximizing funding (Grants / Levy / Taxes)
 - Enhanced reporting and required project & financial accountability.
- The capacity to absorb the impacts of pre-engineering work to deliver “shovel ready” projects for 2018 and beyond, based on the expanded Capital Plan is beyond current staffing levels. Typically, pre-engineering and feasibility studies and design take one-year lead time for infrastructure maintenance, and two - three years lead time for new infrastructure.
- These two positions will better position Engineering Services for this planned growth, ensuring appropriate levels of human resources are available to meet the new demands. This will be achieved by ensuring a level of capacity to meet the current and growing needs of the organization.
- Capacity related to contract management, project management, project financial reporting and construction need to be sourced in advance allowing for the overall plan to ramp-up to full capacity. Full utilization of these resources will be seen by 2019 and beyond.
- Engineering Services must also maintain its commitment in support of Economic Development (Heartland/SIP proposals) proposals; emergent Community and Regional Planning initiatives; Current Planning and Development projects, residential development deficiencies (legacies) and inspections; participation in development and evaluation of various intermunicipal projects; asset management work plans; support to Transportation Programs, as well as to provide for a level of capacity to allow for effective coverage during various absences (i.e.: illness, training and holidays)

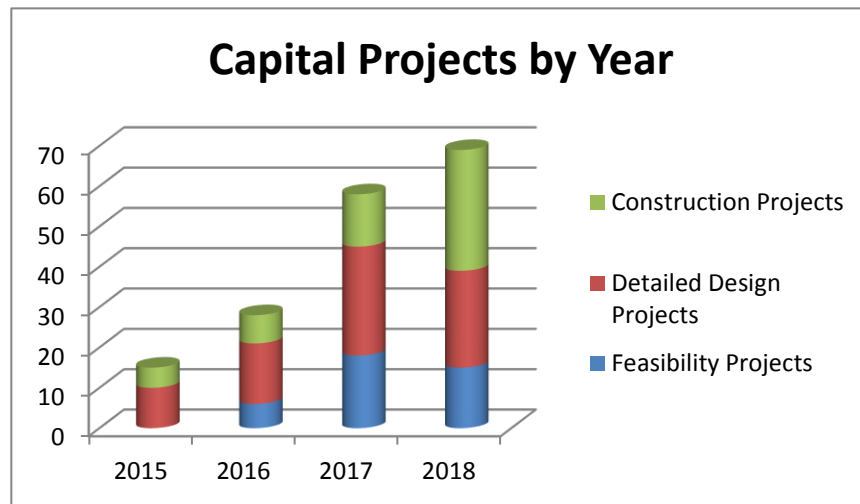
With the Refinery Revenue Financial Plan coming into effect – the number of proposed projects is set to increase from 15 projects (2015) to 69 projects (2018).

	Number of Capital Plan Projects by Year			
	2015	2016	2017	2018
Feasibility Projects		6	18*	15
Detailed Design Projects	10	15	27	24
Construction Projects	5	7	13	30
Total Projects	15	28	58	69

For 2017, there are:

- 27 Detailed Design projects being made “shovel ready” for 2018 construction.
- 13 Construction Projects proposed.
- 18 potential Feasibility stage projects that are currently unfunded for 2017 that would provide input into the 2019 Capital Plan. This is currently unfunded due to capacity issues and funding available. To ensure shovel ready projects for 2019 and beyond with the proposed Refinery Revenue Plan this will need to be addressed in 2017.

Summary of Projected Growth by year:



Summary:

Engineering Services is seeking to match organizational capacity to growing volume of projects. Unless adjustments to the current complement are made, Sturgeon County cannot reasonably take on the expanded scope of work in the Capital Plan, as reviewed with Council.

Engineering Services is taking efforts to ensure efficient and effective leadership, management and investment in organizational infrastructure, people and skills to deliver customer satisfaction and value for taxes.

Engineering Services is looking to add staff in a staged approach to maintain current service levels and achieve a level of capacity to meet growing needs of the organization with a controlled impact to the County.

To illustrate this point and for comparison purposes, in 2016, both Sturgeon County and Parkland County can be compared as follows:

	Sturgeon County		Parkland County	
	No. of Projects	Dollar Value	No. of Projects	Dollar Value
Transportation Department				
Designed Initiatives	15	\$ 1,949,806	13	\$ 3,000,000
Road Construction	6	\$ 4,505,254	11	\$ 15,200,000
Subdivision	1	\$ 400,000	5	\$ 700,000
Bridge	2	\$ 900,000	1	\$ 300,000
Storm	1	\$ 340,719	1	\$ 17,500,000
		\$ 8,095,779		\$ 36,700,000
Utilities Department				
Water	1	\$ 200,000	5	\$ 1,500,000
Wastewater	2	\$ 4,070,000	0	\$ -
		\$ 4,270,000		\$ 1,500,000
TOTAL	28	\$ 12,365,779	36	\$ 38,200,000
	2	FTE's	10	FTE's

External Communication

- None to date

Relevant Policy/Legislation/Practices:

- None

Implication of Administrative Recommendation

Strategic Alignment:

By expanding the 2017 Capital Infrastructure Plan, the Organization is finalizing the “Position for Growth” phase of the 2012-2021 Strategic Plan. Specifically:

Strong Local Governance and Regional Leadership - The 2017 Capital Infrastructure Plan allows for more consistent planning and development, fiscal stability and sustainability. Early engineering of road projects to make them “shovel-ready” will also enable the County to be better positioned for planning its capital program and readying for grant funding when opportunities arise.

Planned Growth and Prosperity - This program has factored in the planned and future industrial development within the Sturgeon Industrial Park (SIP) Alberta Industrial Heartland areas.

Maintain and Enhance Strong Communities - This program will have a positive impact on local resident’s quality of life, specifically in the areas where construction is planned.

Organizational:

As projects increase in number and in certain cases complexity, the effective management of each of them becomes relatively more significant – which will lead to a successful outcome. Thus, putting in place competent Project Management capability long before putting in place the appropriate design, engineering or construction capability is essential to success.

Other demands on the Engineering Services have been identified including increased demands from the Transportation Operations branch. Industrial development also continues to be a Council priority and support for Economic Development is also required and has required a recent shifting of priorities.

The following three assumptions have been taken into consideration:

1. Shovel Ready Projects are required for 2018.
2. Increased and new scope of work must be met.
3. Capital projects continue to be a high priority for Sturgeon County.

The benefits for the organization are as follows:

- The new senior position will ensure management controls are in place to:
 1. Facilitate corporate wide prioritization of Capital Projects;
 2. Manage the process for detailed planning;
 3. Be able to measure performance in relation to the plan and quickly report any deviations from the plan;
 4. Be able to communicate planning and performance information to all parties involved;
 5. Respond to new and increased demands by SLT for monthly project updates along with financial updates; and
 6. Have time allocated to ensure stakeholders (Council, public and other departments) are engaged to provide input into the 'Potentials' list ensuring the sustainability of the 4 stage approach.
- The new capital projects officer is essential to having a dedicated project manager to oversee projects from conception to completion. This ensures there is an understanding of the projects and that our organization can carry out these large scale projects on time, on budget and with minimal disruption to the rest of the business. For example, currently our two project managers are intertwined with day-to-day core activities such as the North Edmonton River Crossing and with other transportation requests, which results in staff being pulled in too many directions. Clear definition of roles will help provide more timely and effective customer service and ensure all stages of the project management are completed.

Financial:

- Funding required in 2016 = \$53,700 (includes: salaries + benefits, workstation, hardware, software), funded from Reserves.
- Funding required in 2017 = \$250,500 (includes: salaries + benefits), (likely funded from Reserves in 2017 and new revenues in 2018)

Alternatives Considered

Three alternatives were considered in detail and are summarized in the chart below:

	Alternative Solution # 1	Alternative Solution # 2	Alternative Solution # 3
Description	Reduce the number of Capital Projects	1 FTE and 1 Full Time Contracted Position – Funded by reserves.	Fully Contracted Capital Projects Program (Outsourcing)
Evaluation Criteria*			
Strategic Alignment	<ul style="list-style-type: none"> Aligns with Strategic goal that Sturgeon County promotes and protects the safety of people and property. 	<ul style="list-style-type: none"> Consistent with Strategic Goal that Sturgeon County is financially stable and fiscally sustainable. Could create confusion, with respect to choosing which projects should be internally managed and externally managed. 	<ul style="list-style-type: none"> Not consistent with Strategic Goal that Sturgeon County is financially stable and fiscally sustainable as cost could escalate as the supervision of the contract requires the cost of a full time contract employee position plus a profit margin.
Total Costs	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Contracted services does not allow complete control of total costs. 	<ul style="list-style-type: none"> Costs can escalate quickly as it is a fee for service and payment is required for every function of the project management function.
Organizational Impacts	<ul style="list-style-type: none"> There may be an implied thought that there is capacity to continue and deliver partially increase program, this is not the case. 	<ul style="list-style-type: none"> Positive outcome for Council and Administration. Can deliver on approved 2017 Capital Plan 	<ul style="list-style-type: none"> Currently our Engineering Design is a contracted service, having the best interest for Sturgeon County is the most important. A

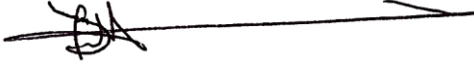


			consultant overseeing another consultant is a risk.
Constraints	<ul style="list-style-type: none"> The current Council direction is to invest in existing infrastructure. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Resource availability is a concern with contracted services. If there is a shortage, prices will inflate quickly and the ability to motivate and shorten timelines is difficult.
Risk	<ul style="list-style-type: none"> Expectations of re-investment into our Road Network Infrastructure are high. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Subject matter expertise is required to monitor external agencies that are performing design and construction supervision. The understanding of the local construction environment is not the same as a Sturgeon County employee. The risk is high with this type of service delivery model. It is advisable to always have an employee with the interests of Sturgeon County being

			the final approving authority.
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Implications of Alternatives	<p><u>Strategic Alignment:</u></p> <ul style="list-style-type: none"> Option 1 does not support the goal of positioning for growth and balancing the demand for new infrastructure while managing the investment in current assets. Option 1 does not support the goal of increased investment to address infrastructure gap of our transportation network. <p><u>Organizational:</u></p> <ul style="list-style-type: none"> Option 2 does not address cross training and increased demands of the department. Relying on external resources can result in higher costs. <p><u>Financial:</u></p> <ul style="list-style-type: none"> Option 3 will be a risk to Sturgeon County as the costs will grow as every action will require payment as outlined in their contract and the volume of work will grow with scope of work.
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Follow up Action	1. The two new positions will be filled immediately to ensure the 2017 Capital Plan can be achieved and allow for the provision of “shovel-ready” projects for 2018.
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Attachment(s)	None
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Report Reviewed by:	 Brian Hartman – Manager, Engineering Services  Stephane Labonne - General Manager, Integrated Growth  Peter Tarnawsky – County Commissioner - CAO.
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Strategic Alignment Checklist

Vision: Sturgeon County: a diverse, active community that pioneers opportunities and promotes initiative while embracing rural lifestyles.

Mission: Provide quality, cost effective services and infrastructure to meet the diverse needs of the Sturgeon County community, while improving competitiveness and sustainability.

Focus Areas	Not consistent	N/A	Consistent
Strong Local Governance and Regional Leadership			
<i>We promote consistent and accountable leadership through collaborative and transparent processes (Strategic Plan, pg. 27 MDP)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<ul style="list-style-type: none"> <i>Consistent with neighborhood role (see MDP), master plans, policies</i> 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> <i>Considers fiscal stability and sustainability</i> 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<ul style="list-style-type: none"> <i>Has a positive impact on regional and sub-regional cooperation</i> 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Respect the Natural Environment			
<i>We acknowledge the importance of a healthy environment and will minimize and monitor our impact on ecosystems (Strategic Plan, pg. 27 MDP)</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> <i>Compliance with Provincial and Federal regulations and/or legislation</i> 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> <i>Ensure effective environmental risk management</i> 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Community Identity & Spirit			
<i>We will build upon our strengths, where together we will create an inclusive, caring community (Strategic Plan, (Strategic Plan, pg. 27 MDP)</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> <i>Promotes and/or enhances residents' identification with Sturgeon County</i> 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> <i>Enhances service provision through community partnerships</i> 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> <i>Supports Sturgeon County's cultural history</i> 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Planned Growth and Prosperity			
<i>We encourage varied and integrated enterprises that enhance our strong economic base, while balancing the needs of the community and natural environment. (Strategic Plan, pg. 27 MDP)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<ul style="list-style-type: none"> <i>Does the proposal align with the Integrated Regional Growth Strategy (map/policies) pg. 26 MDP</i> 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> <i>Considers cumulative costs and long-term funding implications</i> 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<ul style="list-style-type: none"> <i>Targets growth around current or planned infrastructure</i> 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Maintain and Enhance Strong Communities			
<i>We are committed to a safe, secure community, where our residents are respected and provided with access to opportunities. (Strategic Plan, pg. 27 MDP)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<ul style="list-style-type: none"> <i>Positive impact on residents' quality of life</i> 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<ul style="list-style-type: none"> <i>Supports and promotes volunteer efforts</i> 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> <i>Provides programs and services that are accessible to all residents</i> 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Operational Excellence			
<i>We have the organizational capability to deliver consistent and defined levels of service to all stakeholders in a professional, efficient, and cost effective manner</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<ul style="list-style-type: none"> <i>Staff have the knowledge, skills and capability to perform their jobs</i> 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<ul style="list-style-type: none"> <i>Streamlines operational processes and policies</i> 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<ul style="list-style-type: none"> <i>Promotes engagement and professional interaction with stakeholders</i> 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<ul style="list-style-type: none"> <i>Considers a cost-structure which allows Sturgeon County to remain competitive within a regional, national and global context</i> 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>