

Service Squamish Initiative



Engineering and Parks



Core Service Review



Service Squamish Initiative Engineering and Parks Core Service Review Final Report

Review Period	Summer 2010
Final Report Date	
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The Engineering and Parks Department's core services review went very well. In general most people are excited about change, willing to contribute to positive change and are happy with the changes that have already taken place.

A lot of the negative comments in the review were in regards to working in a poor building. Lighting, filing areas, small spaces no showers and washrooms were all perceived negatively in the survey.

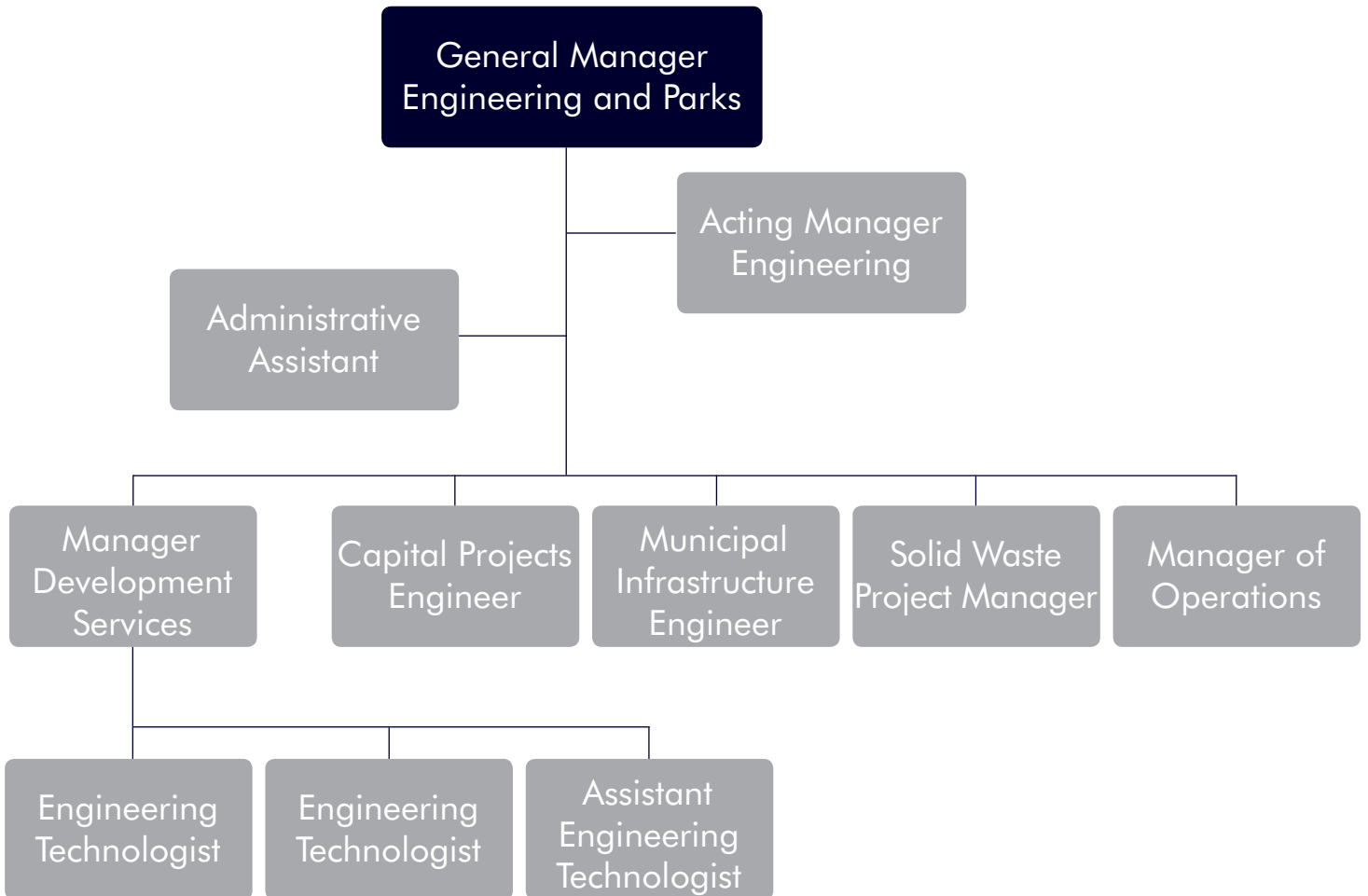
The previous organizational structure of the department was clumsy and the recommended structure changes will streamline the department. In general people want guidance and to know how they are doing in their job. This improved organizational structure will help people know where they fit and who they report to.

Although communication was noted as a negative in regards to working with other departments, it was also noted as a positive when working with the public and developers. Other core reviews have talked about inter-department communication and relationships and those improvements are already underway.

Other District-wide challenges also affect the Engineering and Parks department. Poor financial reporting systems makes tracking budgets and projects difficult. Training and professional development also need improvement. Again, the senior management team recognizes this and is implementing change now.

There are many recommendations in the process improvements section. The department has fallen behind in many areas and is not current with the latest Best Management Practices. New management in the District has started to make changes but much more is required to ensure the District stays in compliance with current rules, laws and regulations.

In summary, the Engineering and Parks department has a good group of people who, if anything, are under-utilized. Communication needs to be improved as do training opportunities to ensure that Best Management Practices are being followed. The Engineering building will be reviewed as part of the District-wide building review. Hopefully some recommendations for improving the building in the near future will be part of that outcome.

Engineering Services Organizational Structure (Current)

All of the employees in the department were interviewed and this is the summary of those findings.

Most of the personnel felt that they were allowed to reach their potential with some of that group feeling more so now with new management. A few felt that they were not permitted to reach their potential.

No performance reviews have been conducted in this department.

Most employees felt appreciated.

Most employees felt that they were compensated appropriately. One felt that we don't compare well to other organizations.

Many different responses to how to make work life better, including:

- Showers in the building
- Better filing systems
- Dedicated filing person
- Electronic filing systems
- Better, newer, more organized and bigger office space
- Better working conditions
- Education and training opportunities

Everybody had a good work/life balance

There were many wasteful functions within the department:

- Filing
- Record keeping
- Systems in place that don't work and are not used.
- Too many people need to have input on decisions
- BC – One calls
- Drawing filing system – need GIS
- Too many meetings

Where employees thought the department wasn't doing its job from the community's perspective was primarily in dealing with developers. Too slow, late hits and not customer focused were the comments.

Examples where the department thought the District is effective and efficient is with:

- Water and sewer services
- Trails
- Public Works
- Snow removal
- Front counter requests
- Courteous

Examples where the department thought the District is NOT effective and efficient is with:

- Transit
- Composting/recycling
- Turnaround times for Developers
- Finance Department
- Solid Waste Contractor

Most people feel they are getting enough direction in the performance of their duties. Some don't feel they are getting clear direction and one feels like they are getting much better direction now.

All but one felt that there are enough supervisors to provide good direction.

Most people felt that there aren't enough employees to fulfill the expectations of the public.

Most employees felt that they worked closest with the Operation's department.

All employees felt that the relationship with Operations department was functional.

If asked "to be the Department's manager" most employees would change:

- Mandatory monthly meeting
- Have a District wide AutoCAD system as well as GIS
- People need to be accountable
- Improved working space
- More staff
- Improve relationship with the Planning department
- Improve the mapping system
- Ensure all in the department were using the same software version.
- Some employees felt no change was needed.

Where this department thought District funds were being wasted was in hiring consultants and additional costs for maintaining public area landscaping.

General comments included; "it's about time something like this was done", "good mix of people", "things are running much smoother with Brian (acting General Manager) here".

Findings

Engineering has historically focused on a very limited number of core service areas including:

- Design: studies, planning and subdivision approvals
- Construction: capital, major projects and inspection
- Office Support: mapping, record keeping and administration of cemetery services

Recently, the department's functions have expanded to include the following the services:

- Solid Waste
- Transit
- GIS and mapping
- Parks

Areas identified for further improvement include long-range planning, inspections (development and capital construction), asset management and flood protection. These functions will be managed by existing staff.

Recommendations

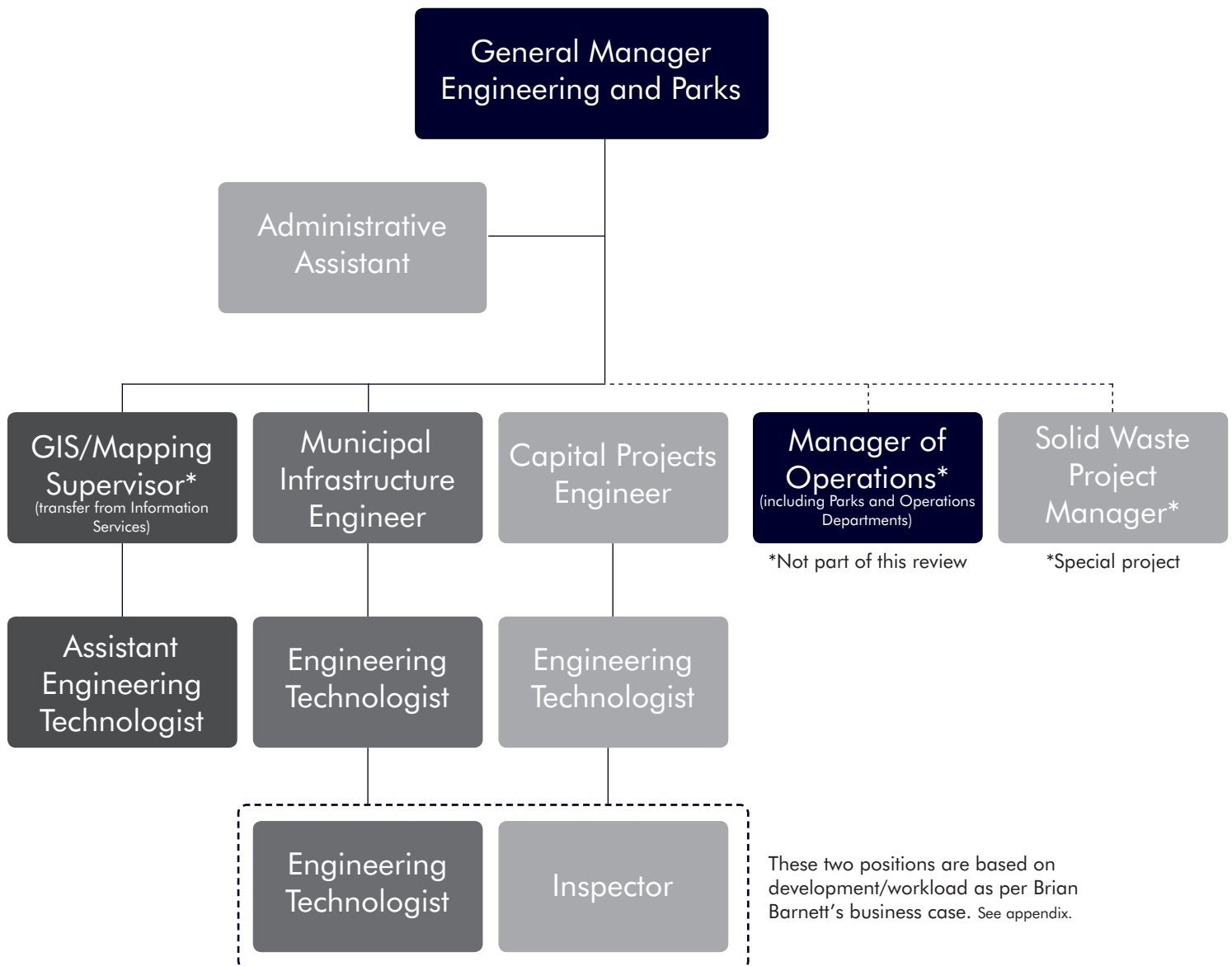
There are a number of services that could be enhanced to ensure the department delivers on its obligations summarized above.

- The creation of a full-time site inspector would enhance levels of service related to construction inspection for developments and capital projects while reducing costs associated with consulting services.
- The creation of a new GIS Supervisor position, which is underway, will enable Engineering and Parks to make essential improvements to the corporate GIS and mapping services.

Further, it has been concluded that the administration work associated with the cemetery would be better managed by Corporate Services, which could better address some of the more sensitive issues associated with this function.

Further Work Required

Engineering and Parks should work with Operations to ensure there is sufficient support provided to the utilities, parks and roads function.

Engineering Services Organizational Structure (Proposed)

Findings

There are varying opinions on morale within the department. This is due to the recent turnover of staff and the uncertainty that has resulted from Phase I of the Service Squamish Initiative. Newer employees are generally optimistic and see a bright future. Seasoned employees see positive change but are concerned with the next steps of the Service Squamish Initiative.

Overall, morale has improved significantly over the past 6 months. Staff have a more informed idea of department direction and the goal and objectives of the business unit. Work is still required to take the organization to the next level – a department in which all employees understand their roles and work in a collaborative, functional, supportive, and enjoyable atmosphere.

Performance development is a concern to staff. There is a complete lack of performance review at this time, however there have been recent discussion on opportunities to improve in this area. Employees would like to see more mentoring and training provided.

Some employees expressed concern with favouritism within the department and with the District overall. For them, this has created a difficult dynamic both in the department and in the organization.

For some, they sense a lack of direction for the department. They would like a clear vision of the departmental objectives, particularly when considering the blending of engineering and parks design and construction.

Working conditions are not optimal for all employees. Some feel there is limited space to perform the basic functions of their positions. The lack of shower facilities in the building, and the lack of running water in the north end of the building, makes working conditions less than optimal. A shower in the building would promote active lifestyles and would meet the District's objectives around sustainability for the corporation.

There is an immediate lack of "celebration" within the department. Great things are accomplished but there is limited staff recognition and recognition of a project completed within the District.

Employees feel that they are not always appreciated by the public, even when they perform exceptionally well. The lack of attention to development approvals has hindered the perspective of developers. This has been improving of late.

Recommendations

Create a formal Employee Development Program that includes key opportunities to engage and further the skills, knowledge, and abilities of employees. This program should be developed corporately by HR, and should be applicable to all departments. Consider a program that includes:

- Employee performance and development reviews on a regular and scheduled basis
- Clear employee objectives to enhance and further career advancement and, when necessary, to correct misaligned behaviours.
- Clear training objectives, aligned with the organization's leadership competencies and class specifications
- Opportunities for acting positions, within the department and within the organization
- Formal mentoring
- Supervisory mentoring

Create a "training opportunity" database that links directly with positional competencies. Celebrate successes through events, through recognizing employees, and/or through a regular way to give "kudos".

Ensure that completed projects are communicated to the public, with some fanfare around key measurables, such as budget, completion dates, and personal expertise applies to the project. Let the public know that we do a great job and are competent in the work we provide.

Ensure that developers are clear on the expectations of employees. Defend employees when we have done the right thing; apologize when we have not, and make sure that we don't do it again.

Further Work Required

Review the potential for installing a shower facility in the building. Location, budget, maintenance, control, and potential cost sharing should be addressed. This could be a significant morale booster for all staff working out of District Hall.

At the time of writing, many of the suggested improvements have been implemented. As with the other core reviews, many of the suggestions by staff are simple to implement and can be done right away at little or no costs with immediate improvements and/or cost savings.

Findings

Areas where the Engineering and Parks Department can make improvements to their department:

- Have the same working hours as Municipal Hall. This eliminates frustration with the public and developers and improves the flow of business between the two.
- Review the fire hydrant permitting process to ensure proper procedures are being followed in the field to adequately protect the District's hydrants and drinking water.
- Review how the District does project inspection and consider hiring an in-house inspector. Consultant's inspectors are expensive, lack experience and don't provide enough coverage meaning that the contractors don't get enough supervision and don't get questions answered in a timely fashion.
- Engineering should inspect construction and repair work done by District staff to ensure good record keeping as well as recording material profiles when holes are open.
- The District needs to be consistent with the contractors that work for them ensuring that best practices for construction are being followed as well as current rules and regulations being used and finally that safety is held paramount over all work done.
- Update the subdivision control bylaw.
- Change the structure of the department (see attached organizational charts).
- Improve the District's mapping. Existing mapping is not current, nor is it accurate.
- Improve the District's GIS. The existing GIS is near completion in some areas (water and sewer) but lacking in areas like drainage. The system is awkward to use, difficult to print from and the software is not owned by the District.
- The District needs to purchase GIS software that is seamless and functional.
- The District needs to hire a technician to manage the GIS system as well as train District staff.
- Improve the filing system. An electronic filing system that will allow anyone to electronically search for files is necessary. It seems that there is a lot of information but nobody knows how to find it quickly.

- Ensure fast turn around time for the public and developers. Front counter seems good, some of the follow up takes too long. District needs to review why this is happening and improve the process.
- Organize the office better and make better work stations for the employees.
- Ensure all users are on the same software platforms within the department.
- Communication within the department and with other departments needs to be reviewed and improved. Communication with Operations is improving with weekly attendance at the foremen's meetings, but work is still needed in this area.
- Succession planning needs to start in the department.
- Infrastructure improvements need to be reviewed by all departments to ensure the District is getting new products that conform to our bylaws, current BMP's, are useful and easy to maintain, cost effective and work with the District's existing infrastructure.
- The Park's component of the Engineering and Parks Department needs to have a higher profile.
- The District needs an annual sidewalk inspection program.
- The District needs an annual dyke inspection program.
- The District needs an annual bridge inspection program.
- The District needs a street occupancy program to ensure all contractors working on District land are properly insured, cover by Worksafe BC and have business licenses.
- The Engineering and Parks Department needs to be current with training for staff.
- The Engineering and Parks Department needs to ensure that it belongs to the right associations organizations to keep the department current with the latest technologies in their industry.
- The Engineering and Parks department needs to work closely with Operations to ensure that all of their operations are conforming to current rules and guidelines.
- Vehicle use, storage and allocation needs to be reviewed.
- When new developments and projects are reviewed, the Engineering and Operations areas need to assign an annual operating budget to maintain that infrastructure to ensure the level of service in Squamish is maintained.
- Building improvements would improve not only efficiencies but morale too. No running water, small spaces, poor lighting and bad layout make for a poor working environment.
- Standards for District infrastructure needs to be developed for PRV stations, lift stations, park irrigation systems, SCADA and others to ensure that Developers design infrastructure that matches what the District uses.

- The District needs to own its water and sewer computer models.
- The Engineering department needs to follow the purchasing policy.
- Need to have better fiscal controls particularly around development and project hold backs.
- Finance needs to provide better reporting to the Engineering department and there needs to be better communication between Finance and Engineering.
- Performance reviews need to be conducted for staff.
- Process reviews required in all business areas and integrated with other process reviews.

Summary of Key Findings

Although not specific to the Engineering Department, the budget and processes for completing financial transactions are fundamentally flawed and do not provide appropriate controls or meet industry best practices.

Historically, staff within the Engineering Department have not properly managed and controlled budget allocations for specific projects. Often projects are over budget and are not completed on time. This shows a lack of knowledge about project management and budget controls. Often policies and procedures have not been followed and accountability has been extremely limited.

It was found that far too often developers who are required to pay their share of service installation have not been reconciliated for long periods after the project has been completed. Therefore the District has paid for the services, is holding a letter of credit but without reconciliation, and the District is losing interest on the amount that is outstanding from the developer. However, if the deposit were in cash rather than a Letter of Credit, at least the District would be gathering interest on that money until reconciliation were achieved.

And finally, the existing fees and charges for Engineering services is outdated and needs to be reviewed to have those fees established at rates in line with actual costs. As well, the Development Cost Charges are outdated and need to be revised to current financial cost levels.

Brian Barnett has done a business case recommending that the District hire a full time field inspector to inspect capital and development work. Historically the District has hired inspectors from engineering firms like McElhanneny that are expensive and are unavailable due to travel times. To add further value to the District, the inspector could oversee work done by District operations staff ensuring that we are following our own bylaws and BMPs.

Recommendations

1. Systems should be put into place for the management and control of capital projects so they are completed on time and within the budget allocation and that a system be achieved that will allow the actual estimates used to determine the value of work to be more accurate for budget development.
2. Developers should be invoiced immediately upon completion of a project for their share of all services provided by the District.
3. The Development Cost Charges Bylaw and established rates and fees should be reviewed and updated to current and future estimated costs.
4. The Engineering Fees and Charges should be reviewed and updated to reflect actual costs plus administration costs.
5. All staff should be educated on the District Purchasing Policy and how to properly monitor and control budgets.

Further Study Required

1. Consideration should be given to restructuring the budget format to be more user friendly and accessible to allow for monthly analysis of the budget status.
2. Establishment of a better collaborative relationship between Finance and Engineering to develop systems and processes that are efficient and effective regarding financial management.
3. Increase in-house communication between Finance and Engineering at all levels of the organization, to ensure that staff have a clear understanding of the significance of the work they are doing and how it affects the others areas of the municipal operation.

Core Service Review

8. Financial/Budgeting

Account	Description	Budget	2010 YTD	Variance \$	% Remaining	2009 Actual	2008 Actual
1023110100-100	SALARIES	198,537	557,251			143,936	156,990
	Add back to show Gross Budget - see recoveries below	31,189					
	Add back to show Gross Budget - see recoveries below	182,200					
	Add back to show Gross Budget - see recoveries below	182,200					
1023110151-151	ANNUAL HOLIDAYS (TIME OFF)	-	4,595			32	-
1023110152-152	STATUTORY HOLIDAYS	-	11,575			-	-
	TOTAL SALARIES	594,126	573,422	- 20,704	-3.5%	143,729	156,990
1023110233-233	ENGINEERING CONTRACT SERVICES	-	6,037	6,037	-	2,544	10,895
1023121000-900	ENGINEERING SERVICES & STUDIES	10,030	12,058	- 5,972	-33.1%	35,555	185,055
1023121100-900	SURVEY	8,170	6,457	- 1,713	-21.0%	2,130	987
1023121211-211	TRAVEL	-	395	395	-	177	365
1023121211-900	ENGINEERING VEHICLES	22,060	19,099	- 2,961	-13.4%	20,760	13,280
1023121213-900	COMMUNICATIONS	10,100	10,200	100	1.0%	11,034	11,569
1023121239-900	ENGINEERING DRAFTING/AUTOCAD	3,230	1,191	- 2,039	-63.1%	2,952	2,724
1023121240-900	PROFESSIONAL DEVELOPMENT	7,960	1,693	- 9,653	-121.3%	-	2,089
1023121500-900	OFFICE SUPPLIES & MAINTENANCE	-	-	-	-	-	446
1023121900-900	WATER SEWER MODELING RECOVERABLE	-	6,000	6,000	-	-	-
1023121901-900	ENGINEERING WORKS RECOVERABLE	-	12,287	12,287	-	419,388	292,444
	Third Party Prorata recovery	- 31,189	-	31,189	-100.0%		
	Recovery - Pro-rata Water	- 182,200	- 157,740	24,460	-13.4%		
	Recovery - Pro-rata Sewer	- 182,200	- 157,740	24,460	-13.4%		
	TOTAL ENGINEERING COST (NET OF PRO-RATA ALLOC.)	260,887	329,972	61,885	23.1%	567,959	676,855
ASSOCIATED REVENUE							
1014320000-900	CULVERT INSPECTIONS	(5,230)	(1,180)	4,050	-77.4%		
1014327000-900	ENGINEERING COST RECOVERY		(28,194)	28,194	-	(419,388)	(292,444)
1015190000-900	MISCELLANEOUS PERMITS	(050)	(343)	506	-59.7%		
1015196000-900	ROAD ALLOWANCE/SIDEWALK ENCROACHMENT FEE	(1,010)	(1,000)	10	-1.0%		
		(7,090)	(30,717)	(23,627)	333.2%	(419,388)	(292,444)
	NET OPERATING EXPENSE	260,997	299,255	38,258	14.7%	148,571	384,411

**Memo: Inspector – Capital and Development Projects**

To: File
From: Brian Barnett
Date: October 26, 2010

Over the past several years, the District has engaged McElhanney Consulting to provide inspection services for development projects. Their charge out rate is a \$110 / hr, plus \$15 / hr for travel. We have paid McElhanney approximately \$412,000 over the past five years (\$82,000 per year) for this service.

In addition, the District utilizes consulting engineers to provide inspection services for capital projects. The hourly rate for an inspector on these projects is approximately \$100 / hr.

In comparison, many municipalities provide in-house inspection services. The benefits of a municipal inspector are that the District is:

- Able to quickly respond to site inspection requirements, without the 2-hour drive from the lower mainland.
- The District is better able to anticipate and schedule inspections because we are more familiar with construction work than the Vancouver-based consultant.
- The cost for a municipal Engineering Technician is approximately \$43 / hr, which is about 40% of the cost to out-source the work.

Based on the above points, the District is interested in establishing a municipal inspector for capital and development projects.

Regards,

Brian Barnett, PEng
General Manager of Engineering and Parks

