Re: Your request for access to information under Part II of the Access to Information and Protection of Privacy Act, 2015 [Our File #: MA/53/2016]

On June 10, 2016, the Department of Municipal Affairs received your request for access to the following records/information:

"Request:
1. All records/documentation/communication, etc. on "program" referred to in the below excerpt from the Council Minutes of the Town of PCSP of May 31, 2016.

2. Copy of record of proposed water, waste water and/or storm water projects.

3. Federal Clean Water and Waste Water Funding
The Town Manager briefed committee on a Federal funding program available through the province. The program is focused on improving drinking water and wastewater quality. The province is requesting that a list of 2 to 4 proposed water, waste water and/or storm water projects with a completion date of the end of 2018 be submitted no later than Friday May 27th. The Town Manager will advise remaining Council members of this information."

On June 14, 2016, you clarified your request to the following:

"1. Any correspondence (records) from the Dept of MA to the Town of PCSP requesting 2-4 proposals under a Federal Funding Program (referenced in the PCSP Council Minutes of May 31, 2016) since March, 2016.

2. Copies (records) of any proposals submitted from the Town of PCSP to the Province (MA?) in response to the request referenced in #1."

I am pleased to inform you that a decision has been made by the Deputy Minister of the Department to provide access to the requested information. In accordance with your request for a copy of the records, the appropriate copies have been enclosed.

Please be advised that you may ask the Information and Privacy Commissioner to review the processing of your access request, as set out in section 42 of the Act. A request to the Commissioner must be made in writing within 15 business days of the date of this letter or within a longer period that may be allowed by the Commissioner.

The address and contact information of the Information and Privacy Commissioner is as follows:

P.O. Box 8700, St. John’s, NL Canada A1B 4J6  T 709.729.6528  F 709.729.4475
Office of the Information and Privacy Commissioner
2 Canada Drive
P. O. Box 13004, Stn. A
St. John’s, NL. A1B 3V8

Telephone: (709) 729-6309
Toll-Free: 1-877-729-6309
Facsimile: (709) 729-6500

You may also appeal directly to the Supreme Court Trial Division within 15 business days after you receive the decision of the public body, pursuant to section 52 of the Act.

Please be advised that responsive records will be published following a 72 hour period after the response is sent electronically to you or five business days in the case where records are mailed to you. It is the goal to have the responsive records posted to the Office of Public Engagement's website within one business day following the applicable period of time. Please note that requests for personal information will not be posted online.

If you have any further questions, please feel free to contact me by telephone at 729-6528 or by e-mail at scottwinters@gov.nl.ca.

Sincerely,

Scott Winters
Manager of Accountability / ATIPP Coordinator
Within the next 2 months.

Sent from my BlackBerry 10 smartphone on the Bell network.

---

Hi Ian,

Since the projects have a short delivery time, how quick do you expect the approval turnaround to be?

Chris

---

Typical municipal/provincial ratios. 30% for you guys.

Ian

---

I will have a full package in today. I will e-mail a pdf and then mail or courier hard copy. Can you confirm the funding ratio please.

Chris

---

Hi Chris,

Please see comments below in red.
Hi Ian,

I know we spoke briefly on the phone about this, but if you could provide any insight in response to this e-mail it would be helpful in our discussions next week as we try to meet the submission deadline.

Chris

Hi Ian,

We will look into. Can you verify some things because I am pretty sure we had checked out projects that would qualify before and had difficulty finding some. We already have two high performing waste water treatment plants, meeting all Federal and Provincial standards. We can not improve the quality of the effluent. We asked about increasing capacity by adding the equipment for our expansion trains and that did not seem to meet the criteria. Do you think this would now fly? We also looked at the sludge side of treatment. We considered sludge dryers but the feedback was that it didn’t improve the quality. It only reduced the shipping cost. Can this be worked to fit within the criteria? How about replacement of our UV lights. The lights in our system is old and costly technology. We can replace these with more efficient units but again the quality of the effluent is not expected to be improved. Is there some way this can be rationalised?

Since this program was only announced in April and we only recently received any indication of the eligibility criteria and performance measures, I’m not sure who you would have checked out projects with. Perhaps another program? As far as I can tell, all water and wastewater infrastructure projects will be eligible under this program although there will be a preference for projects that improve water and wastewater quality. The federal allocation to NL under CWWFW is just over $70M so we are looking at projects of a little larger scope than what you suggest in the comments above. For a town the size of PCSP, I’d expect to see projects in range of $1M to $5M.

On the water side, the quality is controlled by the regional water authority. We had looked at a chlorination booster at one point but the residuals from BBBP was improved and now there is no apparent need. I am not sure what else we can do on the distribution side to improve quality.

You say distribution systems are eligible. How so? Expansion of the systems? Replacement of system components like PRVs or Booster Pumps to create better pressure curves? How about our new water metering project? We are expecting to be the first municipality in the province to be universally metered by the end of 2017. We are currently in the middle of a feasibility study for this.
New and upgrades to existing water systems appear to also be eligible. Again, we are looking a much larger projects than replacing booster pumps and PRVs. The district water metering project is a possible consideration under the water optimization category and we feel that it would likely qualify.

On storm water, is the focus again on quality? What qualifies for storm water quality improvements. We have very little storm water systems but I could name two that would benefit from detention and silt separators to reduce storm flows and improve quality of the receiving pond and stream. We have a lot of ditches in town that are susceptible to erosion that would benefit from curb/gutter and storm pipe. Would the reduction of erosion be a quality consideration?

We think that storm water retention and silt separation would certainly qualify under the program. Erosion control may not be eligible.

This funding really looks to be suited to the communities that have no sewer treatment and poor quality water. We are not in that situation but we certainly can improve and/or expand our system on different criteria if we are able to. I'd appreciate some assistance in understanding what may qualify.

This is not really true. As you have a portion of your town that does not currently have access to publicly treated water, I'd suggest that expansion of your system would certainly meet the criteria and also increase the number of people with access to water that meets the Canadian Drinking Water Guidelines.

Thanks

Chris

Chris Milley, P.Eng.
Town Manager/Engineer

1119 Thorburn Road
Portugal Cove-St. Philip's
A1M 1T6
T: 709.895.8000 ext. 262
F: 709.895.3780

From: Duffett, Ian [mailto:ianDuffett@gov.nl.ca]
Sent: May-20-16 10:00 AM
To: Chris Milley <Chris.Milley@pcsp.ca>
Subject: Clean Water and Wastewater Fund

Hi Chris,

I left you a message but many folk have started an early long weekend so I also wanted to send an email to follow up.

The Province is requesting that you provide a list of projects for consideration under the new Federal Clean Water and Wastewater Infrastructure program. We like to the Town of Portugal Cove – St. Philip’s to submit a list of 2 to 4 proposed water, wastewater and/or storm water projects. The performance criteria that have been proposed under the program would also suggest that the focus should be on improving drinking water and wastewater quality but distribution systems are certainly also eligible. Right now, the Federal government is suggesting that these project must be completed by the end of 2018 but we are trying to negotiate an extension to these timelines. So, any projects that you submit should, ideally, be able to be completed by 2018 and certainly no longer than 2019.
For each proposed project, please provide the following information **no later than Friday, May 27.**

1. Project title
2. Detailed project description including details regarding the proposed location of the project with sufficient detail to assess compliance with the limits of servicing agreement.
3. Cost estimate
4. Estimated schedule to complete

You can email the details to me directly and I’ll be sure to add to the list of projects being considered under the infrastructure funding program.

If you have any questions, please don’t hesitate to call or email.

Regards,

Ian

Ian Duffett
Director, Municipal Infrastructure and Waste Management
Department of Municipal Affairs
1st Floor, West Block, Confederation Building
PO Box 8700 St. John’s, NL A1B 4J6
Office: 709-729-7482
Email: ianduffett@gov.nl.ca
Town of Portugal Cove – St. Phillip’s

Federal Clean Water and Wastewater Infrastructure Program Consideration Proposal
Summary of Works

The Town of Portugal Cove – St. Phillip’s is currently considering three water and wastewater upgrades to their current infrastructure:

1. Water meters on all residential properties;
2. Water mains and sewage mains on Indian Meal Line, Franklyn Place, Drover Heights and water mains on Skinners Road (as well as a booster station)

**Water Meters**

The rationale for the water meter project is that the current cost of water for town residents is not equitable. All residents currently pay the same base amount, no matter if they live in a family of five or by themselves. With metering, residents will pay for what they use, encouraging moderation. It is also made possible for the Town to monitor leaks and irregularities, and through this the Town can use less water, which results in less costs and positive environmental consequences. The goal is to have water meters installed on all residential properties by the end of 2017. Meters will better enable the Town to recover operating costs. A study will be performed throughout the first year of service to determine the impact of water meters financially and on household consumption, this information will be used to then set future water rates. The **budget of this project is $1,500,000 and is scheduled to be complete by the 20th of December, 2017.** The current cost estimate of the project is $1,286,610 HST extra.

**Water and Sewer**

The water and sewer servicing projects for Indian Meal Line, Franklyn Place and Drover Heights are currently tender ready but the project was deferred once estimated costs exceeded the funded budget, resulting in a less favorable funding arrangement. These projects include the installation of high quality, tested and regulated water and sewer systems giving residents a more reliable and safer service by eliminating unregulated drinking water from potentially substandard wells. In addition, the sewer portion of the project would eliminate unknown risks associated with potentially deficient septic systems in an environmentally sensitive area near ponds and streams. The water design for Skinners Road is complete with the exception of an added booster station. During the design it was discovered that water pressure in the area was under the Provincial guidelines, and a booster station was needed to raise it to meet the provincial standard. Details on the boosting station and cost estimates are enclosed. The **total cost for these projects is estimated to be $3,077,114 (including HST)** and could be complete by July 2017.
Town of Portugal Cove – St. Phillip's Water Metering Project

Clean Water and Wastewater Consideration Proposal
Project Description

1. Background

The Town of Portugal Cove – St. Phillip's (PCSP) seeks to install water meters to all their existing residential properties that are connected to the Town’s water supply, as well as all new residential developments. The rationale being:

- Water metering is statistically proven to encourage water conservation.
- The cost of treated water is increasing.
- Metering can allow home owners the ability to gain control over their bills.
- Through conservation of treated water, the municipality will be able to reduce the total cost of providing water to residents.

Currently, the equal water tax system is not equitable for all residents because all homes pay the same amount regardless of actual usage, which differs depending on many factors. Metering household water usage the same way as electricity is an established global practice. Water is becoming a scarcer resource and sustainable ways of usage must be practiced. Metering allows for better use and better management of treated water. Leaks can be detected and addressed, trends in water use can be identified and anticipating needs for growth becomes possible and easier to plan. These savings by the Town will be transferred on to the residents.

2. Goals

- Implement water metering in all residential properties currently connected to the Town’s water supply by 2017
- Create legislative and operational frameworks to support the use of water meters.
- Develop complimentary water regulations and a supporting water meter method of service delivery
- Develop a full spectrum fee structure to address all expected situations that will generate full cost recovery for service delivery
- Develop waste water rate models that are water usage based to better inform council for future considerations
- Analyze and verify the impact that the water meters have had on consumption and financial aspects of service delivery. Publish results after a year and make recommendations for next operational stage.

3. Scope and Work Plan

There are four phases through which the project will be achieved, as shown below:
Phase 1 – Feasibility – From January 2016 to June 2016

- Research water metering projects in other municipalities
- Develop cost estimate for project and available types of meters
- First public consultation meeting
- Council motion to award work to consultant for definition of water and wastewater rate
- Develop a scoring mechanism for evaluation of advantages for water metering (i.e. environmental, sustainability, energy conservation, distribution costs, supply costs) to aid in the decision making process for all other stages
- Develop high level schedule for implementation
- Present results in public consultation meeting
- **Go/No Go Decision 1:** Decision to proceed to Planning and Design Stage based on Feasibility Stage deliverables

Phase 2 – Planning and Design: From June 2016 to October 2016

- RFP for meter installation service based feasibility findings
- Review RFP
- Decision to award contract based on proposals
- Meter contractor design and implementation plan
- Review of contractor plan
- Decision to proceed with construction

Phase 3 – Construction: From October 2016 to June 2017

- PM Overview:
  - installation of meters
  - resident communication
  - meter testing and commissioning
- Implementation of hardware/software, legislation and regulations
- Hiring of town staff

Phase 4 – Completion: From June 2017 to December 2017

- Town staff coordination with metering firm to ensure data collection and invoice generation
- Warranty review
- Training of staff
4. Key Stakeholders

<table>
<thead>
<tr>
<th>Client</th>
<th>Town of Portugal Cove – St. Phillips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town Staff</td>
<td>Chris Milley, Town Manager</td>
</tr>
<tr>
<td></td>
<td>Jeff Lawlor, Director of Economic Development, Marketing and Communications</td>
</tr>
<tr>
<td>Project Management Consultant</td>
<td>Vigilant Management Inc.</td>
</tr>
<tr>
<td></td>
<td>Grant Horwood, Director of Projects</td>
</tr>
<tr>
<td></td>
<td>John Oliveira, Jr. Project Manager</td>
</tr>
</tbody>
</table>

5. Project Milestones

<table>
<thead>
<tr>
<th>Phase</th>
<th>Milestone</th>
<th>Description</th>
<th>Responsibility</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M1</td>
<td>Public Consultation Meeting #1</td>
<td>Town Staff</td>
<td>January 2016</td>
</tr>
<tr>
<td></td>
<td>M2a</td>
<td>Approve Project Charter</td>
<td>Staff/Council</td>
<td>April 2016</td>
</tr>
<tr>
<td></td>
<td>M2b</td>
<td>Motion of Council to award work to consultant for definition of water and wastewater rate</td>
<td>Town Council</td>
<td>May 2016</td>
</tr>
<tr>
<td></td>
<td>M3</td>
<td>Public Consultation Meeting #2</td>
<td>Town Staff</td>
<td>July 2016</td>
</tr>
<tr>
<td></td>
<td>M4</td>
<td>Go/No Go Decision to proceed to Planning and Design Stage based on Feasibility Stage deliverables</td>
<td>Town Council</td>
<td>July 2016</td>
</tr>
<tr>
<td></td>
<td>M5</td>
<td>Develop and issue RFP for selection of manufacturer for turn-key solution</td>
<td>Vigilant</td>
<td>July – Oct 2016</td>
</tr>
<tr>
<td></td>
<td>M6</td>
<td>Go/No Go Decision to award contract based on proposals</td>
<td>Town Council</td>
<td>October 2016</td>
</tr>
<tr>
<td></td>
<td>M7</td>
<td>Go/No Go Decision to proceed to Construction Stage</td>
<td>Town Council</td>
<td>October 2016</td>
</tr>
<tr>
<td></td>
<td>M8</td>
<td>Implementation Start</td>
<td>Manufacturer</td>
<td>November 2016</td>
</tr>
<tr>
<td></td>
<td>M9</td>
<td>Start Meter Installation</td>
<td>Manufacturer</td>
<td>December 2016</td>
</tr>
<tr>
<td></td>
<td>M10</td>
<td>Start data collection</td>
<td>Manufacturer</td>
<td>January 2017</td>
</tr>
<tr>
<td></td>
<td>M11</td>
<td>Implementation Complete</td>
<td>Manufacturer</td>
<td>August 2017</td>
</tr>
<tr>
<td></td>
<td>M12</td>
<td>Data collection and analysis</td>
<td>Town Staff</td>
<td>Jan-Dec 2017</td>
</tr>
<tr>
<td></td>
<td>M13</td>
<td>Final adjustments based on project results</td>
<td>Town Staff</td>
<td>December 2017</td>
</tr>
<tr>
<td></td>
<td>M14</td>
<td>First Billing Cycle</td>
<td>Town Staff</td>
<td>January 2018</td>
</tr>
<tr>
<td></td>
<td>M15</td>
<td>1st Year Review and Report</td>
<td>Town Staff</td>
<td>August 2018</td>
</tr>
</tbody>
</table>
6. Budget

As per research done throughout 2015 and 2016, the project budget is estimated at $1.5 Million.

7. Constraints, Assumptions, Risks and Dependencies

<table>
<thead>
<tr>
<th>Constraints</th>
<th>Initial negative feedback from residents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Budgetary limits</td>
</tr>
<tr>
<td></td>
<td>Necessity of a long data collection period before billing can begin</td>
</tr>
<tr>
<td>Assumptions</td>
<td>Estimates and proposals will stay within budget</td>
</tr>
<tr>
<td></td>
<td>Proposal will conform to established timeline</td>
</tr>
<tr>
<td>Risks and Dependencies</td>
<td>Political change could lead to cancellation of project</td>
</tr>
<tr>
<td></td>
<td>Higher than expected resistance to installation from residents</td>
</tr>
<tr>
<td></td>
<td>High average rates in comparison to current flat rate</td>
</tr>
<tr>
<td></td>
<td>The expected savings in water consumption may not be enough to offset the cost of installing and running a meter program</td>
</tr>
</tbody>
</table>
Cost Estimates

8. Monthly Cost Report

Below is the cost report for the project divided into phases including cost for project management. This report is HST excluded.

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Level 01</th>
<th>Level 02</th>
<th>Budget</th>
<th>Actual Cost</th>
<th>Cost Variance</th>
<th>Cost Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Metering</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>Water Metering Project</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>Project Management</td>
<td>$ 5,175.00</td>
<td>$ 7,052.00</td>
<td>$ 1,877.00</td>
<td>$ 7,052.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RFP for Rate Study and Award, Estimates, PM Plan</td>
<td>$ 1,050.00</td>
<td>$ 7,052.00</td>
<td>$ 6,002.00</td>
<td>$ 7,052.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support for feasibility consultant</td>
<td>$ 2,825.00</td>
<td>$ 3,270.00</td>
<td>$ 4,600.00</td>
<td>$ 6,195.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support for Water Rate Consultant</td>
<td>$ 6,000.00</td>
<td>$ 6,000.00</td>
<td></td>
<td>$ 6,000.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop RFP for Turn Key Implementation</td>
<td>$ 6,000.00</td>
<td>$ (3,629)</td>
<td>$ 12,500.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Controls and Reporting</td>
<td>$ 8,200.00</td>
<td>$ (2,250)</td>
<td>$ 4,571.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manage Installation Process &amp; Communications</td>
<td>$ 14,750.00</td>
<td>$ (2,000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Closeout &amp; Resident feedback</td>
<td>$ 6,000.00</td>
<td>$ (2,000)</td>
<td>$ 4,000.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$ 44,100</td>
<td>$ 14,104</td>
<td>$ 7,870.00</td>
<td>$ 51,970.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase 1: Feasibility</td>
<td>$ 16,750</td>
<td>$ 14,500</td>
<td>$ 20,100.00</td>
<td>$ 20,100.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feasibility Study &amp; IFR</td>
<td>$ 3,600.00</td>
<td></td>
<td>$ 3,600.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Meeting to present final report</td>
<td>$ 20,100</td>
<td></td>
<td>$ 20,100.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase 2: Planning and Design</td>
<td>$ 10,500</td>
<td>$ 10,500</td>
<td>$ 4,000.00</td>
<td>$ 4,000.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Rate Study</td>
<td>$ 4,000.00</td>
<td></td>
<td>$ 4,000.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop Regulations</td>
<td>$ 14,500</td>
<td>$ 14,500</td>
<td></td>
<td>$ 14,500.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase 2- Planning and Design Total</td>
<td>$ 14,500</td>
<td>$ 14,500</td>
<td></td>
<td>$ 14,500.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase 3: Construction</td>
<td>$ -</td>
<td>$ 2,650.00</td>
<td>$ 1,330.00</td>
<td>$ 2,580.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refinement of scope of work with preferred proponent</td>
<td>$ 45,000.00</td>
<td></td>
<td>$ 45,000.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create Contract for Turn Key Services</td>
<td>$ 7,500.00</td>
<td></td>
<td>$ 7,500.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install Reading Systems</td>
<td>$ 7,500.00</td>
<td></td>
<td>$ 7,500.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selection of Installation Contractor</td>
<td>$ 803,750.00</td>
<td></td>
<td>$ 803,750.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review of Water Installation Plan</td>
<td>$ 21,500.00</td>
<td></td>
<td>$ 21,500.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Installation Oversight</td>
<td>$ 3,600.00</td>
<td></td>
<td>$ 3,600.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident Communication Oversight</td>
<td>$ 3,600.00</td>
<td></td>
<td>$ 3,600.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase 3- Construction Total</td>
<td>$ 978,850</td>
<td>$ 5,150.00</td>
<td>$ 964,040.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase 4: Completion</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>Data Collection</td>
<td>$ 156,000.00</td>
<td>$ 156,000.00</td>
<td>$ 156,000.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Analysis</td>
<td>$ 50,000.00</td>
<td></td>
<td>$ 50,000.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff Training</td>
<td>$ 10,000.00</td>
<td></td>
<td>$ 10,000.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase 4- Completion Total</td>
<td>$ 216,000</td>
<td>$ 216,000</td>
<td>$ 13,060.00</td>
<td>$ 1,296,610.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Metering Total</td>
<td>$ 1,273,550</td>
<td></td>
<td>$ 13,060.00</td>
<td>$ 1,296,610.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>$ 1,273,550</td>
<td>$ 14,104</td>
<td>$ 13,060.00</td>
<td>$ 1,296,610.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
9. Monthly Cost Curve

The cumulative cost as the project progresses is graphed below. Cost will begin to accumulate steadily beginning the month of December 2016.
Schedule to Complete

As seen in the table below, the 1st phase has already begun. The entire project is scheduled to be complete in December of 2017.

<table>
<thead>
<tr>
<th>WBS</th>
<th>TASK NAME</th>
<th>DURATION</th>
<th>START</th>
<th>FINISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Phase 1 – Feasibility</td>
<td>36 days</td>
<td>18 May ’16</td>
<td>06 Jul ’16</td>
</tr>
<tr>
<td>1.1</td>
<td>Feasibility Study – IFR</td>
<td>30 Days</td>
<td>18 May ’16</td>
<td>28 Jun ’16</td>
</tr>
<tr>
<td>1.2</td>
<td>Issue Final Feasibility Study</td>
<td>5 Days</td>
<td>29 Jun ’16</td>
<td>05 Jul ’16</td>
</tr>
<tr>
<td>1.3</td>
<td>Public Meeting to present final report</td>
<td>1 Day</td>
<td>06 Jul ’16</td>
<td>06 Jul ’16</td>
</tr>
<tr>
<td>2</td>
<td>Phase 2 – Planning and Design</td>
<td>70 Days</td>
<td>06 Jul ’16</td>
<td>11 Oct ’16</td>
</tr>
<tr>
<td>2.1</td>
<td>Water Rate Study</td>
<td>30 Days</td>
<td>06 Jul ’16</td>
<td>16 Aug ’16</td>
</tr>
<tr>
<td>2.2</td>
<td>Review of RFP Text</td>
<td>10 Days</td>
<td>24 Aug ’16</td>
<td>06 Sep ’16</td>
</tr>
<tr>
<td>2.3</td>
<td>Develop Regulations</td>
<td>30 Days</td>
<td>17 Aug ’16</td>
<td>27 Sep ’16</td>
</tr>
<tr>
<td>2.4</td>
<td>Proposals Evaluation &amp; Recommendation of Award</td>
<td>10 Days</td>
<td>28 Sep ’16</td>
<td>11 Oct ’16</td>
</tr>
<tr>
<td>2.5</td>
<td>Feedback Action on Public Consultation #2</td>
<td>10 Days</td>
<td>27 Jul ’16</td>
<td>09 Aug ’16</td>
</tr>
<tr>
<td>3</td>
<td>Phase 3 – Construction</td>
<td>216 Days</td>
<td>12 Oct ’16</td>
<td>09 Aug ’17</td>
</tr>
<tr>
<td>3.1</td>
<td>Refinement of Scope of Work with Preferred Proponent</td>
<td>10 Days</td>
<td>12 Oct ’16</td>
<td>25 Oct ’16</td>
</tr>
<tr>
<td>3.2</td>
<td>Create Contract for Turn-Key Services</td>
<td>12 Days</td>
<td>12 Oct ’16</td>
<td>27 Oct ’16</td>
</tr>
<tr>
<td>3.3</td>
<td>Award Implementation Contract</td>
<td>5 Days</td>
<td>02 Nov ’16</td>
<td>08 Nov ’16</td>
</tr>
<tr>
<td>3.4</td>
<td>Kick-Off Meeting with Turn-Key Provider</td>
<td>1 Day</td>
<td>09 Nov ’16</td>
<td>09 Nov ’16</td>
</tr>
<tr>
<td>3.5</td>
<td>Install Reading Systems</td>
<td>10 Days</td>
<td>10 Nov ’16</td>
<td>23 Nov ’16</td>
</tr>
<tr>
<td>3.6</td>
<td>Selection of Installation Contractor</td>
<td>10 Days</td>
<td>10 Nov ’16</td>
<td>23 Nov ’16</td>
</tr>
<tr>
<td>3.7</td>
<td>Review of Meter Installation Plan</td>
<td>2 Days</td>
<td>24 Nov ’16</td>
<td>25 Nov ’16</td>
</tr>
<tr>
<td>3.8</td>
<td>Develop and Submit Contractor’s Safety Documents</td>
<td>5 Days</td>
<td>24 Nov ’16</td>
<td>30 Nov ’16</td>
</tr>
<tr>
<td>3.9</td>
<td>Meter Installation</td>
<td>180 Days</td>
<td>01 Dec ’16</td>
<td>09 Aug ’17</td>
</tr>
<tr>
<td>3.10</td>
<td>Installation Oversight</td>
<td>180 Days</td>
<td>01 Dec ’16</td>
<td>09 Aug ’17</td>
</tr>
<tr>
<td>3.11</td>
<td>Resident Communication Oversight</td>
<td>135 Days</td>
<td>01 Dec ’16</td>
<td>07 Jun ’17</td>
</tr>
<tr>
<td>4</td>
<td>Phase 4 – Completion</td>
<td>235 Days</td>
<td>26 Jan ’17</td>
<td>20 Dec ’17</td>
</tr>
<tr>
<td>4.1</td>
<td>Data Collection</td>
<td>220 Days</td>
<td>26 Jan ’17</td>
<td>29 Nov ’17</td>
</tr>
<tr>
<td>4.2</td>
<td>Data Analysis</td>
<td>15 Days</td>
<td>30 Nov ’17</td>
<td>20 Dec ’17</td>
</tr>
<tr>
<td>4.3</td>
<td>Staff Training</td>
<td>30 Days</td>
<td>12 Oct ’17</td>
<td>22 Nov ’17</td>
</tr>
</tbody>
</table>
Schedule to Complete
Location of Project
Town of Portugal Cove – St. Phillip’s

Skinners Road Water Service
Phase 1

Drovers Heights, Franklyn Place, Indian Meal Line Water and Sewage
Phase 2

Clean Water and Wastewater Consideration Proposal
Project Description

This project consists of servicing three streets (Drover’s Heights, Franklyn Place and Indian Meal Line) with water and sewer, and servicing water Skinner’s Road with water. These projects include the installation of high quality, tested and regulated water and sewer systems giving residents a more reliable and safer service by eliminating unregulated drinking water from potentially substandard wells. In addition, the sewer portion of the project would eliminate unknown risks associated with potentially deficient septic systems in an environmentally sensitive area near ponds and streams.

Half of Skinner’s Road is currently on municipal water as a result of the water tower location. Phase 1 of this project is intended to provide water service to the remainder of Skinner’s Road. During detailed design it was determined that a boosting station is required. With the addition of a boosting station the previous funding arrangement was impacted and made the funding arrangement impracticable. As the boosting station is a requirement for this project we are including it in the funding application.

Phase 1 is designed and almost Tender ready. The only addition needed to the current design would be the boosting station. In the Study conducted by the consultant, possible locations and configurations of connection to the proposed main are shown.

Phase 2 will provide high quality treated water and sewer to a number of streets in the community that are currently serviced by unregulated and possibly substandard wells and septic systems. Indian Meal Line servicing will also allow for the loop in the municipal system which will increase performance and reliability of the water system and allow for elimination of a sewage force main and lift station.

Phase 2 was designed without major issues, and the only obstacle encountered was that the pre-tender estimates came higher than the original budget. Phase 2 is tender-ready and needs no modifications to design.

Final works could be completed by July 2017 if funding is provided and contractors are hired before October 2016.

10. Key Stakeholders

<table>
<thead>
<tr>
<th>Client</th>
<th>Town of Portugal Cove – St. Phillips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town Staff</td>
<td>Chris Milley, Town Manager</td>
</tr>
<tr>
<td>Project Management Consultant</td>
<td>Vigilant Management Inc.</td>
</tr>
<tr>
<td></td>
<td>Grant Horwood, Director of Projects</td>
</tr>
<tr>
<td></td>
<td>John Oliveira, Jr. Project Manager</td>
</tr>
</tbody>
</table>
Cost Estimate
**OPTION 2A - WATER BOOSTER PUMPING STATION AND MAIN SERVICING ALL SKINNERS ROAD**

**NOTES:** Estimate based on the supply and installation of 432m of 200mm diameter water main along Skinners Road w/ associated fittings and 26 water service laterals. Water pressure boosted through supply and installation of water booster pumping station and local domestic water main having 75mm diameter servicing all of Skinners Road. Estimate doesn't include land acquisition costs.

<table>
<thead>
<tr>
<th>SECTION</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
<th>QUANTITY</th>
<th>UNIT PRICE</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DIVISION #1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01010</td>
<td>Mobilization &amp; Demobilization</td>
<td>L.S.</td>
<td>1</td>
<td>$32,800.00</td>
<td>$32,800.00</td>
</tr>
<tr>
<td>01020</td>
<td>Cash Allowance</td>
<td>Allowance</td>
<td>1</td>
<td>$34,000.00</td>
<td>$34,000.00</td>
</tr>
<tr>
<td>01020</td>
<td></td>
<td></td>
<td></td>
<td>$2,500.00</td>
<td>$2,500.00</td>
</tr>
<tr>
<td>01500</td>
<td>Temporary Facilities</td>
<td>L.S.</td>
<td>1</td>
<td>$1,500.00</td>
<td>$1,500.00</td>
</tr>
<tr>
<td>01500</td>
<td></td>
<td>L.S.</td>
<td>1</td>
<td>$500.00</td>
<td>$500.00</td>
</tr>
<tr>
<td>01570</td>
<td>Traffic Regulations</td>
<td>Hour</td>
<td>480</td>
<td>$22.00</td>
<td>$10,560.00</td>
</tr>
<tr>
<td>01580</td>
<td>Project Sign</td>
<td>L.S.</td>
<td>1</td>
<td>$1,000.00</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>01710</td>
<td>Reinstatement and Cleaning</td>
<td>m</td>
<td>300</td>
<td>$20.00</td>
<td>$6,000.00</td>
</tr>
<tr>
<td><strong>DIVISION #2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02223</td>
<td>Excavation, Trenching &amp; Backfilling</td>
<td>Main Trench Excavation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02223</td>
<td></td>
<td>m³</td>
<td>310</td>
<td>$60.00</td>
<td>$18,600.00</td>
</tr>
<tr>
<td>02223</td>
<td></td>
<td>m³</td>
<td>2500</td>
<td>$22.00</td>
<td>$55,000.00</td>
</tr>
<tr>
<td>02223</td>
<td>Service Trench Excavation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02223</td>
<td></td>
<td>m³</td>
<td>75</td>
<td>$60.00</td>
<td>$4,500.00</td>
</tr>
<tr>
<td>02223</td>
<td></td>
<td>m³</td>
<td>800</td>
<td>$22.00</td>
<td>$17,600.00</td>
</tr>
<tr>
<td>02223</td>
<td>Imported Common Backfill</td>
<td>m³</td>
<td>200</td>
<td>$32.00</td>
<td>$6,400.00</td>
</tr>
<tr>
<td>02223</td>
<td>Granular Pipe Bedding</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02223</td>
<td></td>
<td>m³</td>
<td>665</td>
<td>$30.00</td>
<td>$19,950.00</td>
</tr>
<tr>
<td>02223</td>
<td>Supply &amp; Placement of Marking Tape</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02223</td>
<td></td>
<td>m</td>
<td>455</td>
<td>$1.50</td>
<td>$682.50</td>
</tr>
<tr>
<td>02223</td>
<td></td>
<td>m</td>
<td>725</td>
<td>$2.00</td>
<td>$1,450.00</td>
</tr>
<tr>
<td>02231</td>
<td>Scarifying &amp; Reshaping</td>
<td>Scarifying &amp; Reshaping Incl. Compaction</td>
<td>m²</td>
<td>1750</td>
<td>$1.50</td>
</tr>
<tr>
<td>02233</td>
<td>Selected Granular Base &amp; Sub Base Materials</td>
<td>Class &quot;A&quot; Granular Base</td>
<td>tonnes</td>
<td>580</td>
<td>$24.00</td>
</tr>
<tr>
<td>02434</td>
<td>Pipe Culverts</td>
<td>Supply &amp; Placement of Pipe Culvert</td>
<td>m</td>
<td>12</td>
<td>$200.00</td>
</tr>
<tr>
<td>02552</td>
<td>Hot Mix Asphalt Concrete Paving</td>
<td>Asphaltic Concrete</td>
<td>tonne</td>
<td>210</td>
<td>$140.00</td>
</tr>
<tr>
<td>02574</td>
<td>Reshaping &amp; Patching Asphalt Pavement</td>
<td>Removal of Asphalt Pavement</td>
<td>m²</td>
<td>1750</td>
<td>$8.00</td>
</tr>
<tr>
<td>02574</td>
<td></td>
<td>Patching Asphalt Pavement</td>
<td>m²</td>
<td>200</td>
<td>$55.00</td>
</tr>
<tr>
<td>02574</td>
<td></td>
<td>Cutting of Asphalt Pavement</td>
<td>m</td>
<td>1190</td>
<td>$8.00</td>
</tr>
</tbody>
</table>
Preliminary Estimate
Town of Portugal Cove - St. Philip's
Phase 1 W&S - Skinners Road
File: 2015031
November 16, 2015

Option 2a - Water Booster Pumping Station and Main Servicing All Skinners Road

Notes: Estimate based on the supply and installation of 432m of 200mm diameter water main along Skinners Road w/ associated fittings and 26 water service laterals. Water pressure boosted through supply and installation of water booster pumping station and local domestic water main having 75mm diameter servicing all of Skinners Road. Estimate doesn’t include land acquisition costs.

<table>
<thead>
<tr>
<th>SECTION</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
<th>QUANTITY</th>
<th>UNIT PRICE</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>02713</td>
<td>Water Mains</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supply &amp; Installation of Water Main</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>200 mm DI Class 52</td>
<td>m</td>
<td>432</td>
<td>$175.00</td>
<td>$75,600.00</td>
</tr>
<tr>
<td>2</td>
<td>150 mm DI Class 52</td>
<td>m</td>
<td>30</td>
<td>$145.00</td>
<td>$4,350.00</td>
</tr>
<tr>
<td>3</td>
<td>100 mm SDR-26 PVC</td>
<td>m</td>
<td>10</td>
<td>$105.00</td>
<td>$1,050.00</td>
</tr>
<tr>
<td>4</td>
<td>75 mm SDR-26 PVC</td>
<td>m</td>
<td>725</td>
<td>$80.00</td>
<td>$58,000.00</td>
</tr>
<tr>
<td></td>
<td>Supply &amp; Installation of Service Pipe to R.O.W.</td>
<td>m</td>
<td>430</td>
<td>$25.00</td>
<td>$10,750.00</td>
</tr>
<tr>
<td></td>
<td>Supply and Installation of Fittings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>End Caps/Plugs</td>
<td>Each</td>
<td>1</td>
<td>$250.00</td>
<td>$250.00</td>
</tr>
<tr>
<td></td>
<td>200 mm mm Diameter DI</td>
<td>Each</td>
<td>1</td>
<td>$100.00</td>
<td>$100.00</td>
</tr>
<tr>
<td>2</td>
<td>75mm mm Diameter PVC</td>
<td>Each</td>
<td>1</td>
<td>$100.00</td>
<td>$100.00</td>
</tr>
<tr>
<td>2</td>
<td>Bends</td>
<td>Each</td>
<td>3</td>
<td>$350.00</td>
<td>$1,050.00</td>
</tr>
<tr>
<td>3</td>
<td>100 mm diameter PVC @ 90°</td>
<td>Each</td>
<td>1</td>
<td>$200.00</td>
<td>$200.00</td>
</tr>
<tr>
<td>3</td>
<td>75 mm diameter PVC @ 90°</td>
<td>Each</td>
<td>1</td>
<td>$175.00</td>
<td>$175.00</td>
</tr>
<tr>
<td>3</td>
<td>Tees</td>
<td>Each</td>
<td>4</td>
<td>$500.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>4</td>
<td>Corporation Stop</td>
<td>Each</td>
<td>43</td>
<td>$75.00</td>
<td>$3,225.00</td>
</tr>
<tr>
<td>5</td>
<td>Curb Stop and Box</td>
<td>Each</td>
<td>42</td>
<td>$200.00</td>
<td>$8,400.00</td>
</tr>
<tr>
<td></td>
<td>Supply &amp; Install Fire Hydrants (2.1m Depth)</td>
<td>Each</td>
<td>4</td>
<td>$4,700.00</td>
<td>$18,800.00</td>
</tr>
<tr>
<td></td>
<td>Color Code Painting of Fire Hydrants</td>
<td>Each</td>
<td>4</td>
<td>$100.00</td>
<td>$400.00</td>
</tr>
<tr>
<td></td>
<td>Supply &amp; Placement of Concrete Thrust Blocks</td>
<td>m³</td>
<td>4</td>
<td>$450.00</td>
<td>$1,800.00</td>
</tr>
<tr>
<td></td>
<td>Supply &amp; Install Gate Valves Including Valve Boxes</td>
<td>Each</td>
<td>1</td>
<td>$4,700.00</td>
<td>$4,700.00</td>
</tr>
<tr>
<td></td>
<td>200 mm</td>
<td>Each</td>
<td>1</td>
<td>$4,700.00</td>
<td>$4,700.00</td>
</tr>
<tr>
<td></td>
<td>150 mm</td>
<td>Each</td>
<td>1</td>
<td>$3,600.00</td>
<td>$14,400.00</td>
</tr>
<tr>
<td></td>
<td>100 mm</td>
<td>Each</td>
<td>1</td>
<td>$3,000.00</td>
<td>$3,000.00</td>
</tr>
<tr>
<td></td>
<td>75 mm</td>
<td>Each</td>
<td>2</td>
<td>$2,500.00</td>
<td>$5,000.00</td>
</tr>
<tr>
<td></td>
<td>Swabbing of Water Main</td>
<td>m</td>
<td>432</td>
<td>$2.50</td>
<td>$1,080.00</td>
</tr>
<tr>
<td></td>
<td>200 mm DI</td>
<td>m</td>
<td>725</td>
<td>$2.50</td>
<td>$1,812.50</td>
</tr>
<tr>
<td></td>
<td>Locate, Excavate &amp; Connect to Existing 200mm End Cap</td>
<td>Each</td>
<td>1</td>
<td>$2,500.00</td>
<td>$2,500.00</td>
</tr>
<tr>
<td></td>
<td>Locate, Excavate, Connect to Existing 400mm DI Main With 100mm off 400mm Tapping Sleeve and 100mm Valve</td>
<td>Each</td>
<td>1</td>
<td>$10,000.00</td>
<td>$10,000.00</td>
</tr>
<tr>
<td>11000</td>
<td>Water Booster Pumping Station</td>
<td>LS</td>
<td>1</td>
<td>$200,000.00</td>
<td>$200,000.00</td>
</tr>
<tr>
<td></td>
<td>a. Sub-Total</td>
<td></td>
<td></td>
<td></td>
<td>$724,550.00</td>
</tr>
<tr>
<td></td>
<td>b. H.S.T. (13% of a.)</td>
<td></td>
<td></td>
<td></td>
<td>$94,191.50</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>$818,741.50</td>
</tr>
</tbody>
</table>

Page 2 of 2
## ESTIMATE - ISSUED FOR APPROVAL

**TOWN OF PORTUGAL COVE - ST. PHILIP'S**

**PHASE 2 WATER & SEWER - FRANKLYN PLACE**

**FILE: 2015033**

**DATE: March 23, 2016**

### SECTION DESCRIPTION | UNITS | QUANTITY | UNIT PRICE | TOTALS
--- | --- | --- | --- | ---
### DIVISION #1

| 01010 | Mobilization & Demobilization | L.S. | 1 | $27,000.00 | $27,000.00 |
| 01020 | Cash Allowance | Allowance | 1 | $21,000.00 | $21,000.00 |
| 01500 | Temporary Facilities | L.S. | 1 | $1,500.00 | $1,500.00 |
| 01570 | Traffic Regulations | Hour | 720 | $22.00 | $15,840.00 |
| 01580 | Project Sign | L.S. | 1 | $1,000.00 | $1,000.00 |
| 01710 | Reinstatement and Cleaning | m | 243 | $20.00 | $4,860.00 |
| 02223 | Excavation, Trenching & Backfilling | m³ | 1330 | $60.00 | $79,800.00 |
| 02231 | Scarifying & Reshaping | m² | 2400 | $1.50 | $3,600.00 |
| 02233 | Selected Granular Base & Sub Base Materials | tonnes | 656 | $24.00 | $15,744.00 |
| 02552 | Hot Mix Asphalt Concrete Paving | tonne | 210 | $140.00 | $29,400.00 |
| 02574 | Reshaping & Patching Asphalt Pavement | m² | 1670 | $8.00 | $13,360.00 |

*Page 1 of 3*
<table>
<thead>
<tr>
<th>SECTION</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
<th>QUANTITY</th>
<th>UNIT PRICE</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>02601</td>
<td>Manholes, Catch Basins, Ditch Inlets &amp; Valve Chambers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Placement of 1200mm dia. Pre-Cast Manholes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. 2.5m to 3.0m Each 4</td>
<td></td>
<td></td>
<td>$4,500.00</td>
<td>$18,000.00</td>
</tr>
<tr>
<td></td>
<td>2. 3.0m to 3.5m Each 3</td>
<td></td>
<td></td>
<td>$4,750.00</td>
<td>$14,250.00</td>
</tr>
<tr>
<td></td>
<td>3. 3.5m to 4.0m Each 1</td>
<td></td>
<td></td>
<td>$5,000.00</td>
<td>$5,000.00</td>
</tr>
<tr>
<td></td>
<td>4. 4.0m to 5.5m Each 1</td>
<td></td>
<td></td>
<td>$10,000.00</td>
<td>$10,000.00</td>
</tr>
<tr>
<td></td>
<td>Safety Landings for MHs &gt; 5.0m Deep</td>
<td>Each</td>
<td>1</td>
<td>$2,500.00</td>
<td>$2,500.00</td>
</tr>
<tr>
<td>02702</td>
<td>Pipe Sewer Construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supply &amp; Placement of Sanitary Sewer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Main Line</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. 200mm dia P.V.C. SDR35 m</td>
<td></td>
<td>322</td>
<td>$87.00</td>
<td>$28,014.00</td>
</tr>
<tr>
<td></td>
<td>2. Service Line</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. 100mm dia P.V.C. SDR28 m</td>
<td></td>
<td>133</td>
<td>$60.00</td>
<td>$7,950.00</td>
</tr>
<tr>
<td></td>
<td>Supply and Install of Tees c/w Bends</td>
<td>Each</td>
<td>17</td>
<td>$175.00</td>
<td>$2,975.00</td>
</tr>
<tr>
<td></td>
<td>Supply and Installation of End Caps</td>
<td>Each</td>
<td>17</td>
<td>$30.00</td>
<td>$510.00</td>
</tr>
<tr>
<td></td>
<td>TV Camera Inspection Services</td>
<td>Each</td>
<td>1</td>
<td>$6.00</td>
<td>$1,932.00</td>
</tr>
<tr>
<td></td>
<td>Locate, Excavate, Remove Existing End Cap and Connect to Existing Sanitary Sewer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Locate, Excavate, Install New Sanitary Service for Civic 2-6 on Existing Main</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02713</td>
<td>Water Mains</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supply &amp; Installation of Water Main</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. 150 mm DI Class 52 m</td>
<td></td>
<td>332</td>
<td>$175.00</td>
<td>$58,100.00</td>
</tr>
<tr>
<td></td>
<td>2. 150 mm DI Class 52 (pre-insulated)</td>
<td></td>
<td>11</td>
<td>$360.00</td>
<td>$3,960.00</td>
</tr>
<tr>
<td></td>
<td>Supply &amp; Installation of Service Pipe to R.O.W.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. 19mm Municipex m</td>
<td></td>
<td>133</td>
<td>$40.00</td>
<td>$5,320.00</td>
</tr>
<tr>
<td></td>
<td>Supply and Installation of Fittings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. End Caps/Plugs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. 150 mm Diameter DI Each 1</td>
<td></td>
<td>1</td>
<td>$140.00</td>
<td>$140.00</td>
</tr>
<tr>
<td></td>
<td>2. Bends</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. 150 mm diameter DI @ 11.25&quot; Each 2</td>
<td></td>
<td>2</td>
<td>$260.00</td>
<td>$520.00</td>
</tr>
<tr>
<td></td>
<td>2. 150 mm diameter DI @ 22.5&quot; Each 2</td>
<td></td>
<td>2</td>
<td>$260.00</td>
<td>$520.00</td>
</tr>
<tr>
<td></td>
<td>3. Tees</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. 150 mm off 150 mm DI Each 1</td>
<td></td>
<td>1</td>
<td>$360.00</td>
<td>$360.00</td>
</tr>
<tr>
<td></td>
<td>4. Corporation Stop</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. 19mm</td>
<td>Each</td>
<td>17</td>
<td>$125.00</td>
<td>$2,125.00</td>
</tr>
<tr>
<td></td>
<td>5. Curb Stop and Box</td>
<td>Each</td>
<td>17</td>
<td>$175.00</td>
<td>$2,975.00</td>
</tr>
<tr>
<td></td>
<td>Supply &amp; Install Fire Hydrants (2.1m Depth)</td>
<td>Each</td>
<td>3</td>
<td>$4,700.00</td>
<td>$14,100.00</td>
</tr>
<tr>
<td></td>
<td>Color Code Painting of Fire Hydrants</td>
<td>Each</td>
<td>3</td>
<td>$100.00</td>
<td>$300.00</td>
</tr>
<tr>
<td></td>
<td>Supply &amp; Placement of Concrete Thrust Blocks</td>
<td>m³</td>
<td>4</td>
<td>$450.00</td>
<td>$1,800.00</td>
</tr>
<tr>
<td></td>
<td>Supply &amp; Install Gate Valves Including Valve Boxes</td>
<td>Each</td>
<td>4</td>
<td>$2,200.00</td>
<td>$8,800.00</td>
</tr>
<tr>
<td></td>
<td>Swabbing of Water Main</td>
<td>m</td>
<td>322</td>
<td>$2.50</td>
<td>$805.00</td>
</tr>
<tr>
<td></td>
<td>Locate, Excavate, Remove End Cap &amp; Connect to Existing Main</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Locate, Excavate, Install New Sanitary Service for Civic 2-6 on Existing Main</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SECTION</td>
<td>DESCRIPTION</td>
<td>UNITS</td>
<td>QUANTITY</td>
<td>UNIT PRICE</td>
<td>TOTALS</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>-------</td>
<td>----------</td>
<td>------------</td>
<td>--------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Sub-Total  $570,967.00  
b. H.S.T. (13% of a.) $74,225.71  
Total  $645,192.71
<table>
<thead>
<tr>
<th>SECTION</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
<th>QUANTITY</th>
<th>UNIT PRICE</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DIVISION #1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01010</td>
<td>Mobilization &amp; Demobilization</td>
<td>L.S.</td>
<td>1</td>
<td>$38,800.00</td>
<td>$38,800.00</td>
</tr>
<tr>
<td></td>
<td>not greater than 5% of item a. &quot;sub-total&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>on last page</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01020</td>
<td>Cash Allowance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Contingency Amount Allowance</td>
<td>Allowance</td>
<td>1</td>
<td>$30,000.00</td>
<td>$30,000.00</td>
</tr>
<tr>
<td>2</td>
<td>Survey Equipment and Surveyor for Layout and As-Built</td>
<td>Allowance</td>
<td>1</td>
<td>$2,500.00</td>
<td>$2,500.00</td>
</tr>
<tr>
<td>3</td>
<td>Supply of Water Allowance</td>
<td>Allowance</td>
<td>1</td>
<td>$2,500.00</td>
<td>$2,500.00</td>
</tr>
<tr>
<td>4</td>
<td>Public Announcements</td>
<td>Allowance</td>
<td>1</td>
<td>$2,500.00</td>
<td>$2,500.00</td>
</tr>
<tr>
<td>01500</td>
<td>Temporary Facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Engineers Site Office</td>
<td>L.S.</td>
<td>1</td>
<td>$1,500.00</td>
<td>$1,500.00</td>
</tr>
<tr>
<td>2</td>
<td>Engineers Equipment</td>
<td>L.S.</td>
<td>1</td>
<td>$500.00</td>
<td>$500.00</td>
</tr>
<tr>
<td>01570</td>
<td>Traffic Regulations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Flagpersons Wages</td>
<td>Hour</td>
<td>960</td>
<td>$22.00</td>
<td>$21,120.00</td>
</tr>
<tr>
<td>01580</td>
<td>Project Sign</td>
<td>L.S.</td>
<td>1</td>
<td>$1,000.00</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>01710</td>
<td>Reinstatement and Cleaning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ditching</td>
<td>m</td>
<td>190</td>
<td>$20.00</td>
<td>$3,800.00</td>
</tr>
<tr>
<td>2</td>
<td>Remove and Reinstall Existing Culverts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. 900mm dia H.D.P.E.</td>
<td></td>
<td>m</td>
<td>8</td>
<td>$200.00</td>
<td>$1,600.00</td>
</tr>
<tr>
<td>b. 600mm dia C.M.P.</td>
<td></td>
<td>m</td>
<td>6</td>
<td>$160.00</td>
<td>$960.00</td>
</tr>
<tr>
<td>c. 450mm dia C.M.P.</td>
<td></td>
<td>m</td>
<td>69</td>
<td>$120.00</td>
<td>$8,280.00</td>
</tr>
<tr>
<td>d. 300mm dia C.M.P.</td>
<td></td>
<td>m</td>
<td>6</td>
<td>$80.00</td>
<td>$480.00</td>
</tr>
<tr>
<td>3</td>
<td>Supply and Placement of Topsoil</td>
<td>m²</td>
<td>270</td>
<td>$6.00</td>
<td>$1,620.00</td>
</tr>
<tr>
<td>4</td>
<td>Supply and Placement of Sods</td>
<td>m²</td>
<td>270</td>
<td>$8.00</td>
<td>$2,160.00</td>
</tr>
<tr>
<td><strong>DIVISION #2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02070</td>
<td>Sitework Demolition and Removal of Structures</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Decommission Existing Sewage Pumping Station</td>
<td>L.S.</td>
<td>1</td>
<td>$12,000.00</td>
<td>$12,000.00</td>
</tr>
<tr>
<td>02223</td>
<td>Excavation, Trenching &amp; Backfilling</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Trench Excavation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Rock</td>
<td>m³</td>
<td>1450</td>
<td>$60.00</td>
<td>$87,000.00</td>
</tr>
<tr>
<td>2</td>
<td>Common</td>
<td>m³</td>
<td>2700</td>
<td>$22.00</td>
<td>$59,400.00</td>
</tr>
<tr>
<td>Service Trench Excavation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Rock</td>
<td>m³</td>
<td>192</td>
<td>$60.00</td>
<td>$11,520.00</td>
</tr>
<tr>
<td>2</td>
<td>Common</td>
<td>m³</td>
<td>491</td>
<td>$22.00</td>
<td>$10,802.00</td>
</tr>
<tr>
<td>Imported Common Backfill</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Granular Pipe Bedding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Type 1</td>
<td>m³</td>
<td>590</td>
<td>$32.00</td>
<td>$18,880.00</td>
</tr>
<tr>
<td>2</td>
<td>Type 3</td>
<td>m³</td>
<td>460</td>
<td>$30.00</td>
<td>$13,800.00</td>
</tr>
<tr>
<td>Supply &amp; Placement of Marking Tape</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Plastic Tape</td>
<td>m</td>
<td>953</td>
<td>$1.00</td>
<td>$953.00</td>
</tr>
<tr>
<td>02231</td>
<td>Scarifying &amp; Reshaping</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scarifying &amp; Reshaping incl. Compaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>m²</td>
<td></td>
<td>1512</td>
<td>$1.50</td>
<td>$2,268.00</td>
</tr>
<tr>
<td>02233</td>
<td>Selected Granular Base &amp; Sub Base Materials</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Class &quot;A&quot; Granular Base 100mm thick</td>
<td></td>
<td>tonnes</td>
<td>363</td>
<td>$24.00</td>
<td>$8,712.00</td>
</tr>
<tr>
<td>2 Class &quot;B&quot; Granular Sub Base 200mm thick</td>
<td></td>
<td>tonnes</td>
<td>726</td>
<td>$24.00</td>
<td>$17,424.00</td>
</tr>
<tr>
<td>3 Class &quot;A&quot; Granular Shouldering 50 mm thick</td>
<td></td>
<td>tonnes</td>
<td>135</td>
<td>$24.00</td>
<td>$3,240.00</td>
</tr>
<tr>
<td>02270</td>
<td>Rip-Rap Protection</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Rip-Rap Hand Laid with Sod</td>
<td></td>
<td>m³</td>
<td>8</td>
<td>$230.00</td>
<td>$1,840.00</td>
</tr>
<tr>
<td>02434</td>
<td>Pipe Culverts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supply &amp; Placement of Pipe Culvert</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 525mm Dia HDPE DWC (320 Kpa)</td>
<td></td>
<td>m</td>
<td>3</td>
<td>$250.00</td>
<td>$750.00</td>
</tr>
<tr>
<td>SECTION</td>
<td>DESCRIPTION</td>
<td>UNITS</td>
<td>QUANTITY</td>
<td>UNIT PRICE</td>
<td>TOTALS</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>-------</td>
<td>----------</td>
<td>------------</td>
<td>--------</td>
</tr>
<tr>
<td>02547</td>
<td>Asphalt Tack Coat</td>
<td>m²</td>
<td>3430</td>
<td>$2.50</td>
<td>$8,575.00</td>
</tr>
<tr>
<td>02552</td>
<td>Hot Mix Asphalt Concrete Paving</td>
<td>tonne</td>
<td>165</td>
<td>$140.00</td>
<td>$23,100.00</td>
</tr>
<tr>
<td></td>
<td>Asphaltic Concrete</td>
<td>tonne</td>
<td>330</td>
<td>$140.00</td>
<td>$46,200.00</td>
</tr>
<tr>
<td>02574</td>
<td>Reshaping &amp; Patching Asphalt Pavement</td>
<td>m²</td>
<td>1520</td>
<td>$8.00</td>
<td>$12,160.00</td>
</tr>
<tr>
<td></td>
<td>Cutting of Asphalt Pavement</td>
<td>m²</td>
<td>700</td>
<td>$10.00</td>
<td>$7,000.00</td>
</tr>
<tr>
<td></td>
<td>Cold Planing</td>
<td>m³</td>
<td>30</td>
<td>$8.00</td>
<td>$240.00</td>
</tr>
<tr>
<td>02601</td>
<td>Manholes, Catch Basins, Ditch Inlets &amp; Valve Chambers</td>
<td>Each</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Placement of 1200mm dia. Pre-Cast Manholes</td>
<td>Each</td>
<td>2</td>
<td>$4,500.00</td>
<td>$9,000.00</td>
</tr>
<tr>
<td></td>
<td>2 3.5m to 4.0m</td>
<td>Each</td>
<td>1</td>
<td>$5,000.00</td>
<td>$5,000.00</td>
</tr>
<tr>
<td></td>
<td>3 4.0m to 4.5m</td>
<td>Each</td>
<td>3</td>
<td>$6,500.00</td>
<td>$19,500.00</td>
</tr>
<tr>
<td></td>
<td>4 5.0m to 5.5m</td>
<td>Each</td>
<td>2</td>
<td>$7,000.00</td>
<td>$14,000.00</td>
</tr>
<tr>
<td></td>
<td>Drop Manhole 5.0m to 5.5m (Double Drop MH-7844S)</td>
<td>Each</td>
<td>1</td>
<td>$9,000.00</td>
<td>$9,000.00</td>
</tr>
<tr>
<td></td>
<td>Safety Landings for MH's &gt; 5.0m Deep</td>
<td>Each</td>
<td>3</td>
<td>$2,500.00</td>
<td>$7,500.00</td>
</tr>
<tr>
<td>02702</td>
<td>Pipe Sewer Construction</td>
<td>m</td>
<td>496</td>
<td>$87.00</td>
<td>$43,152.00</td>
</tr>
<tr>
<td></td>
<td>2 100mm dia P.V.C. SDR28</td>
<td>m</td>
<td>146</td>
<td>$60.00</td>
<td>$8,760.00</td>
</tr>
<tr>
<td></td>
<td>2 100mm dia long radius bends</td>
<td>each</td>
<td>8</td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td></td>
<td>Supply and Install of Tees c/w Bends</td>
<td>Each</td>
<td>14</td>
<td>$175.00</td>
<td>$2,450.00</td>
</tr>
<tr>
<td></td>
<td>Supply and Installation of End Caps</td>
<td>Each</td>
<td>15</td>
<td>$30.00</td>
<td>$450.00</td>
</tr>
<tr>
<td></td>
<td>2 200mm P.V.C.</td>
<td>Each</td>
<td>1</td>
<td>$60.00</td>
<td>$60.00</td>
</tr>
<tr>
<td></td>
<td>TV Camera Inspection Services</td>
<td>m</td>
<td>496</td>
<td>$5.00</td>
<td>$2,480.00</td>
</tr>
<tr>
<td></td>
<td>Locate, Excavate, Core into Existing Manhole and Install new Sanitary Sewer. Plug Existing Pipe. Repair Manhole</td>
<td>Each</td>
<td>2</td>
<td>$2,500.00</td>
<td>$5,000.00</td>
</tr>
<tr>
<td></td>
<td>Reconnect existing sanitary sewer service for Civic # 1109-1115</td>
<td>Each</td>
<td>1</td>
<td>$500.00</td>
<td>$500.00</td>
</tr>
<tr>
<td></td>
<td>Reconnect existing sanitary sewer service for Civic # 1059</td>
<td>Each</td>
<td>1</td>
<td>$500.00</td>
<td>$500.00</td>
</tr>
<tr>
<td></td>
<td>Reconnect existing sanitary sewer service for Civic # 1065</td>
<td>Each</td>
<td>1</td>
<td>$500.00</td>
<td>$500.00</td>
</tr>
<tr>
<td></td>
<td>Existing Force main discharge to be plugged.</td>
<td>Each</td>
<td>1</td>
<td>$500.00</td>
<td>$500.00</td>
</tr>
<tr>
<td>02713</td>
<td>Water Mains</td>
<td>m</td>
<td>433</td>
<td>$175.00</td>
<td>$75,775.00</td>
</tr>
<tr>
<td></td>
<td>2. 200 mm DI Class 52</td>
<td>m</td>
<td>24</td>
<td>$360.00</td>
<td>$8,640.00</td>
</tr>
<tr>
<td></td>
<td>3. 150 mm DI Class 52</td>
<td>m</td>
<td>13</td>
<td>$330.00</td>
<td>$4,290.00</td>
</tr>
<tr>
<td></td>
<td>Supply &amp; Installation of Service Pipe to R.O.W.</td>
<td>m</td>
<td>122</td>
<td>$40.00</td>
<td>$4,880.00</td>
</tr>
<tr>
<td></td>
<td>Supply and Installation of Fittings</td>
<td>Each</td>
<td>1</td>
<td>$175.00</td>
<td>$175.00</td>
</tr>
<tr>
<td></td>
<td>2. Bends</td>
<td>Each</td>
<td>7</td>
<td>$350.00</td>
<td>$2,450.00</td>
</tr>
<tr>
<td></td>
<td>3. Tees</td>
<td>Each</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SECTION</td>
<td>DESCRIPTION</td>
<td>UNITS</td>
<td>QUANTITY</td>
<td>UNIT PRICE</td>
<td>TOTALS</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>-------</td>
<td>----------</td>
<td>------------</td>
<td>--------</td>
</tr>
<tr>
<td>1</td>
<td>150 mm off 200 mm DI</td>
<td>Each</td>
<td>3</td>
<td>$400.00</td>
<td>$1,200.00</td>
</tr>
<tr>
<td>2</td>
<td>200 mm off 200 mm DI</td>
<td>Each</td>
<td>1</td>
<td>$500.00</td>
<td>$500.00</td>
</tr>
<tr>
<td>4.</td>
<td>Corporation Stop</td>
<td>Each</td>
<td>14</td>
<td>$125.00</td>
<td>$1,750.00</td>
</tr>
<tr>
<td>5.</td>
<td>Curb Stop and Box 19mm</td>
<td>Each</td>
<td>14</td>
<td>$175.00</td>
<td>$2,450.00</td>
</tr>
<tr>
<td></td>
<td>Supply &amp; Install Fire Hydrants (2.1m Depth)</td>
<td>Each</td>
<td>3</td>
<td>$4,700.00</td>
<td>$14,100.00</td>
</tr>
<tr>
<td></td>
<td>Color Code Painting of Fire Hydrants</td>
<td>Each</td>
<td>3</td>
<td>$100.00</td>
<td>$300.00</td>
</tr>
<tr>
<td></td>
<td>Supply &amp; Placement of Concrete Thrust Blocks</td>
<td>m³</td>
<td>4</td>
<td>$450.00</td>
<td>$1,800.00</td>
</tr>
<tr>
<td></td>
<td>Supply &amp; Install Gate Valves Including Valve Boxes 150 mm</td>
<td>Each</td>
<td>3</td>
<td>$2,900.00</td>
<td>$8,700.00</td>
</tr>
<tr>
<td></td>
<td>Swabbing of Water Main 200 mm</td>
<td>m</td>
<td>457</td>
<td>$2.50</td>
<td>$1,142.50</td>
</tr>
<tr>
<td></td>
<td>Locate, Excavate, Remove End Cap &amp; Connect to Existing System 150 mm</td>
<td>Each</td>
<td>2</td>
<td>$2,500.00</td>
<td>$5,000.00</td>
</tr>
<tr>
<td></td>
<td>Reconnect Existing Water Service for Civic 1109/1115</td>
<td>Each</td>
<td>1</td>
<td>$500.00</td>
<td>$500.00</td>
</tr>
<tr>
<td>a.</td>
<td>Sub-Total</td>
<td></td>
<td></td>
<td></td>
<td>$814,599.50</td>
</tr>
<tr>
<td>b.</td>
<td>H.S.T. (13% of a.)</td>
<td></td>
<td></td>
<td></td>
<td>$105,897.94</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$920,497.44</td>
</tr>
</tbody>
</table>
### SECTION DESCRIPTION

#### DIVISION #1

**01010** Mobilization & Demobilization
- not greater than 5% of item a. "sub-total" on last page
- L.S. 1 $29,200.00 $29,200.00

**01020** Cash Allowance
- Allowance 1 $22,500.00 $22,500.00
- Contingency Amount 1 $2,500.00 $2,500.00
- Survey Equipment and Surveyor for Layout and As-Built Allowance 1 $2,500.00 $2,500.00
- Supply of Water Allowance 1 $2,500.00 $2,500.00
- Public Announcements Allowance 1 $2,500.00 $2,500.00

**01500** Temporary Facilities
- Engineers Site Office L.S. 1 $1,500.00 $1,500.00
- Engineers Equipment L.S. 1 $500.00 $500.00

**01560** Environmental Requirements
- Silt Fence m 50 $20.00 $1,000.00

**01570** Traffic Regulations
- Flagpersons Wages Hour 720 $22.00 $15,840.00

**01580** Project Sign
- L.S. 1 $1,000.00 $1,000.00

**01710** Reinstatement and Cleaning
- Ditching m 227 $20.00 $4,540.00
- Remove and Replace Existing Culverts m 12 $250.00 $3,000.00
- Supply and Placement of Topsoil m² 300 $6.00 $1,800.00
- Supply and Placement of Sods m² 300 $8.00 $2,400.00

#### DIVISION #2

**02223** Excavation, Trenching & Backfilling
- Main Trench Excavation
  - Rock m³ 1200 $60.00 $72,000.00
  - Common m³ 1840 $22.00 $40,480.00
- Service Trench Excavation
  - Rock m³ 225 $60.00 $13,500.00
  - Common m³ 410 $22.00 $9,020.00
- Imported Common Backfill m³ 1080 $32.00 $34,560.00
- Granular Pipe Bedding
  - Type 1 m³ 544 $32.00 $17,408.00
  - Type 3 m³ 395 $30.00 $11,850.00
- Supply & Placement of Marking Tape
  - Plastic Tape m 849 $1.00 $849.00

**02231** Scarifying & Reshaping
- Scarifying & Reshaping Incl. Compaction m² 3075 $1.50 $4,612.50

**02233** Selected Granular Base & Sub Base Materials
- Class "A" Granular Base 100mm thick tonnes 740 $24.00 $17,760.00
- Class "A" Granular Shoulder 50 mm thick tonnes 50 $24.00 $1,200.00

**02270** Rip-Rap Protection
- Rip-Rap Hand Laid with Sod m³ 3 $230.00 $690.00

**02552** Hot Mix Asphalt Concrete Paving
- Asphaltic Concrete tonne 300 $140.00 $42,000.00
<table>
<thead>
<tr>
<th>SECTION</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
<th>QUANTITY</th>
<th>UNIT PRICE</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>02574</td>
<td>Reshaping &amp; Patching Asphalt Pavement</td>
<td>m²</td>
<td>3902</td>
<td>$8.00</td>
<td>$31,216.00</td>
</tr>
<tr>
<td>02601</td>
<td>Manholes, Catch Basins, Ditch Inlets &amp; Valve Chambers</td>
<td>m²</td>
<td>123</td>
<td>$10.00</td>
<td>$1,230.00</td>
</tr>
<tr>
<td>02702</td>
<td>Pipe Sewer Construction</td>
<td>m</td>
<td>428</td>
<td>$87.00</td>
<td>$37,236.00</td>
</tr>
<tr>
<td>02713</td>
<td>Water Mains</td>
<td>m</td>
<td>411</td>
<td>$162.00</td>
<td>$66,582.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>m</td>
<td>23</td>
<td>$330.00</td>
<td>$7,590.00</td>
</tr>
<tr>
<td></td>
<td>Supply &amp; Placement of Sanitary Sewer</td>
<td>m</td>
<td>428</td>
<td>$6.00</td>
<td>$2,568.00</td>
</tr>
<tr>
<td></td>
<td>Supply and installation of Tees c/w Bends</td>
<td>Each</td>
<td>16</td>
<td>$175.00</td>
<td>$2,800.00</td>
</tr>
<tr>
<td></td>
<td>Supply and installation of End Caps</td>
<td>Each</td>
<td>16</td>
<td>$30.00</td>
<td>$480.00</td>
</tr>
<tr>
<td></td>
<td>TV Camera Inspection Services</td>
<td>m</td>
<td>428</td>
<td>$2.50</td>
<td>$1,052.00</td>
</tr>
<tr>
<td></td>
<td>Locate, Excavate, Install New Pre-Cast Manhole Over Existing Sewer</td>
<td>Each</td>
<td>1</td>
<td>$2,000.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td></td>
<td>Swabbing of Water Main</td>
<td>Each</td>
<td>4</td>
<td>$360.00</td>
<td>$1,440.00</td>
</tr>
<tr>
<td></td>
<td>Supply &amp; Installation of Fittings</td>
<td>Each</td>
<td>1</td>
<td>$300.00</td>
<td>$300.00</td>
</tr>
<tr>
<td></td>
<td>Reducer</td>
<td>Each</td>
<td>1</td>
<td>$300.00</td>
<td>$300.00</td>
</tr>
<tr>
<td></td>
<td>Bends</td>
<td>Each</td>
<td>5</td>
<td>$1,300.00</td>
<td>$6,500.00</td>
</tr>
<tr>
<td></td>
<td>150 mm diameter Di @ 11.25°</td>
<td>Each</td>
<td>5</td>
<td>$1,300.00</td>
<td>$6,500.00</td>
</tr>
<tr>
<td></td>
<td>150 mm diameter Di @ 22.5°</td>
<td>Each</td>
<td>5</td>
<td>$1,300.00</td>
<td>$6,500.00</td>
</tr>
<tr>
<td></td>
<td>150 mm diameter Di @ 45°</td>
<td>Each</td>
<td>1</td>
<td>$780.00</td>
<td>$780.00</td>
</tr>
<tr>
<td></td>
<td>150 mm diameter Di @ 90°</td>
<td>Each</td>
<td>1</td>
<td>$260.00</td>
<td>$260.00</td>
</tr>
<tr>
<td></td>
<td>Tees</td>
<td>Each</td>
<td>4</td>
<td>$1,440.00</td>
<td>$1,440.00</td>
</tr>
<tr>
<td></td>
<td>150 mm off 150 mm Di</td>
<td>Each</td>
<td>16</td>
<td>$2,000.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td></td>
<td>Corporation Stop</td>
<td>Each</td>
<td>16</td>
<td>$2,000.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td></td>
<td>Curb Stop and Box</td>
<td>Each</td>
<td>16</td>
<td>$2,000.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td></td>
<td>Supply &amp; Install Fire Hydrants (2.1m Depth)</td>
<td>Each</td>
<td>3</td>
<td>$14,100.00</td>
<td>$14,100.00</td>
</tr>
<tr>
<td></td>
<td>Color Code Painting of Fire Hydrants</td>
<td>Each</td>
<td>3</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td></td>
<td>Supply &amp; Placement of Concrete Thrust Blocks</td>
<td>m³</td>
<td>7</td>
<td>$3,150.00</td>
<td>$3,150.00</td>
</tr>
<tr>
<td></td>
<td>Supply &amp; Install Gate Valves Including Valve Boxes</td>
<td>Each</td>
<td>6</td>
<td>$13,200.00</td>
<td>$13,200.00</td>
</tr>
<tr>
<td></td>
<td>Swabbing of Water Main</td>
<td>Each</td>
<td>4</td>
<td>$1,052.00</td>
<td>$1,052.00</td>
</tr>
<tr>
<td>SECTION</td>
<td>DESCRIPTION</td>
<td>UNITS</td>
<td>QUANTITY</td>
<td>UNIT PRICE</td>
<td>TOTALS</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------------------------------</td>
<td>-------</td>
<td>----------</td>
<td>------------</td>
<td>--------</td>
</tr>
<tr>
<td></td>
<td>Locate, Excavate &amp; Connect to Existing System</td>
<td>Each</td>
<td>1</td>
<td>$2,500.00</td>
<td>$2,500.00</td>
</tr>
</tbody>
</table>

a. Sub-Total                                  $612,994.00  
b. H.S.T. (13% of a.)                         $79,689.22  
Total                                         $692,683.22
Schedule to Complete