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EWV 12-58

**REPORT TO CORE AREA LIQUID WASTE MANAGEMENT COMMITTEE
MEETING OF WEDNESDAY, AUGUST 22, 2012**

**SUBJECT PROGRAM MANAGEMENT CONSULTING SERVICES WORK PROGRAM
AND FEES - CORE AREA WASTEWATER TREATMENT PROGRAM**

ISSUE

To approve the interim Program Management and Technical Services work program and fees.

BACKGROUND

At its meeting of June 10, 2009, the Core Area Liquid Waste Management Committee (CALWMC) approved Stantec Consulting as the firm to provide multi-year Program Management and Technical Services for the Core Area Wastewater Treatment Program (CAWTP). The Capital Regional District (CRD) subsequently entered into a long-term contract with Stantec to provide these services through to December 2016. This contract prohibits Stantec from participating in the CAWTP procurement process as a member of a proponents team or as a prime or sub-consultant for design services.

At the August 8, 2012 meeting, CRD staff presented a summary of the six-month plan activities. Item 3 of the summary, "Commence indicative design, detailed planning and procurement activities for the overall program" was identified as being on the program critical path to meet the completion dates established in the Contribution Agreements. The attached work plan in Appendix A provides a breakdown of tasks and fees to the end of January 2013. The total estimated fee to January 31, 2013 is \$3,360,125.

The majority of this fee is for technical services to develop the indicative design and performance specifications for the McLoughlin Point facility. The indicative design will provide enough information to potential proponents to show that a wastewater treatment plant with a capacity of 108 million litres/day can be built on the site, providing assurance to potential bidders that a solution exists. As part of this exercise, additional data will be gathered to make available to the bidders, such as topographic survey, geotechnical investigations, sea floor investigations for the harbour crossing and outfall. This will allow the bidders to explore alternative solutions and innovation expeditiously, while still meeting the required performance specifications.

The other main component of the fee is for program management functions to further develop the Program Definition, initiation of procurement activities and other items relating to environment, property, communications, consultation and approvals. The work includes preparing the Program Implementation Plan and the Program Management Plan for Commission approval. As well, detailed processes and procedures as to how the program will be implemented and controlled will be developed in various areas, such as; scope, cost and schedule control, risk management, procurement and commitments, contract administration and document control.

ALTERNATIVES

1. That the Core Area Liquid Waste Management Committee recommend to the Capital Regional District Board an increase of \$3,360,125 to Stantec Consulting's existing contract.
2. That the Core Area Liquid Waste Management Committee defer the award of an increase to Stantec Consulting's existing contract at this time.

FINANCIAL IMPLICATIONS

The fee increase for Stantec Consulting is included in the overall Core Area Wastewater Treatment Program budget. There is sufficient budget remaining in the capital component provided by loan authorization Bylaws No. 3072, 3461 and 3615.

CONCLUSION

There are numerous activities that need to commence for the implementation phase of the CAWTP. The services of a Program Manager are required for the duration of the project to assist CRD staff in completing the numerous activities that need to be undertaken to advance the program to meet the completion date of March 31, 2018.

The fee estimate provided in Appendix A is within the overall CAWTP and there are sufficient funds in existing loan authorizations to cover these costs in the immediate future.

RECOMMENDATION

That the Core Area Liquid Waste Management Committee recommend to the Capital Regional District Board:
An increase of \$3,360,125 to Stantec Consulting's existing contract.



Tony Brcic, P.Eng
Project Manager
Core Area Wastewater Treatment Project



J.A. (Jack) Hull, P.Eng, MBA
Interim Project Director
Core Area Wastewater Treatment Project



Kelly Daniels
Chief Administrative Officer
Concurrence

TB:hr

Attachments: 1

Capital Regional District Core Area Wastewater Treatment Program

An aerial rendering of a wastewater treatment plant facility. The facility is situated on a rocky, elevated terrain. It features several large rectangular basins, a central building complex with multiple wings, and a network of pipes and walkways. The surrounding landscape is rugged with sparse vegetation and some trees. The rendering is presented in a dark, high-contrast style.

Program Management & Indicative Design Interim Work Plan

August 2012



Stantec

Stantec Consulting Ltd.
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August 13, 2012
File: 111799000

Capital Regional District
625 Fisgard Street
Victoria, BC V8W 2S6

Attention: Mr. Tony Brcic, P.Eng.
Project Manager, Core Area Wastewater Treatment Program

Dear Tony:

Reference: Core Area Wastewater Treatment Program
Program Management / Indicative Design Services

As part of our continuing work on the CAWTP, Stantec has prepared this proposal for services to end of January 2013 at which time it is anticipated that the Commission will have been established and further work scopes will be submitted to the Commission for their approval. This proposal outlines the work plan and provides a fee estimate for each of the identified work tasks for this interim period.

Once you have had the opportunity to review the submission, we would be pleased to meet with you to discuss the upcoming work plan in detail.

Sincerely,

STANTEC CONSULTING LTD.

Reno A. Fiorante, P.Eng.
Vice President, Water
reno.fiorante@stantec.com

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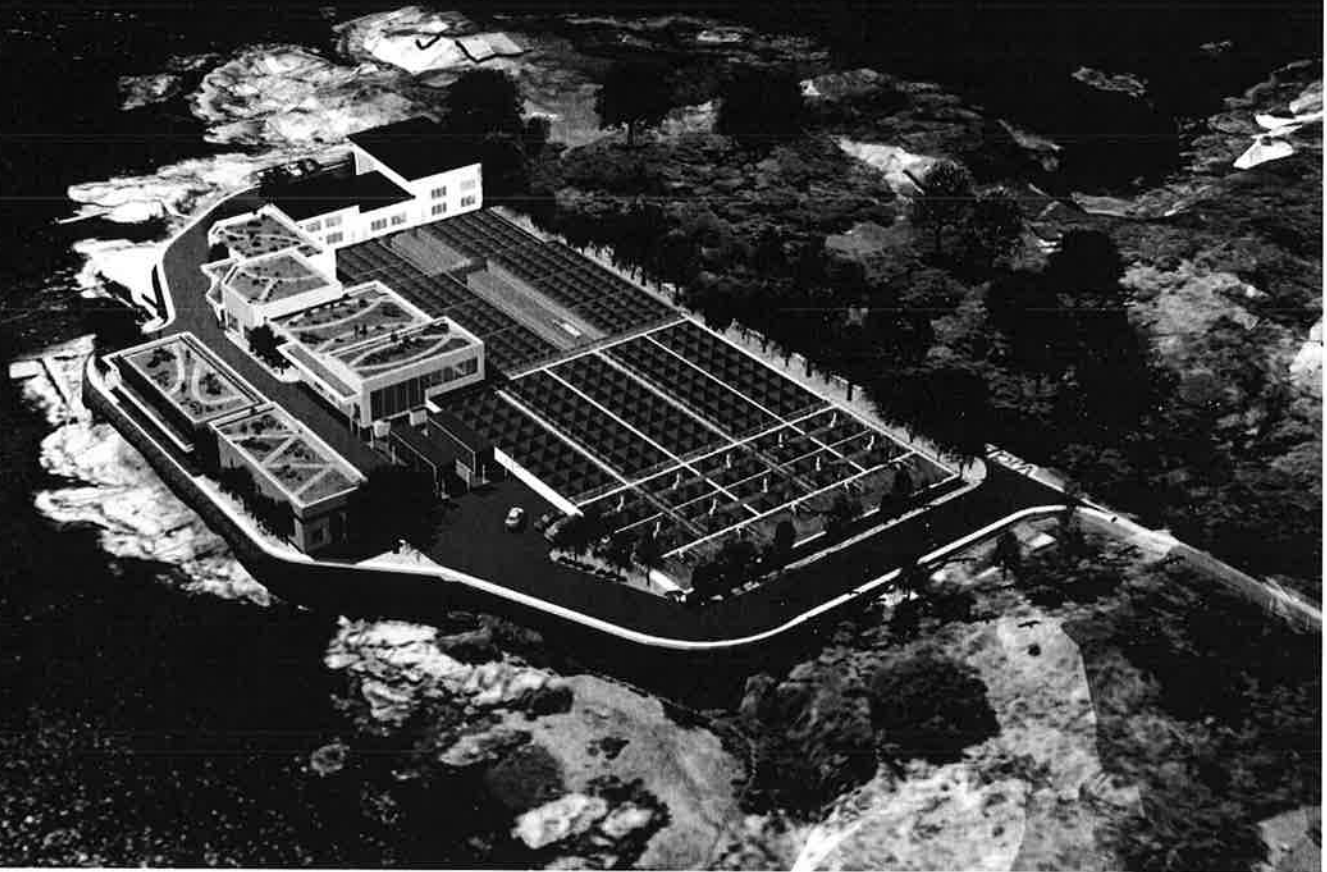
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Section 1 Introduction

1.1 Background

In 2009 Stantec was selected under a qualifications based selection process to provide multi-year program management and technical planning services for the **Core Area Wastewater Treatment Program (CAWTP)**. The first phase of the project involved Project Definition to define the major components of the system, estimated costs, the business case and the procurement approach. This phase of the project was completed in 2011.

In July 2012 the Province of British Columbia and the Government of Canada announced funding for the CAWTP. The CRD is now in a position to proceed with the implementation phase of the project. During this phase, Stantec will be providing overall program management and will be preparing indicative design documents to enable contractors to tender the project. The approved program includes a mix of alternative project delivery and conventional project delivery.

The major facilities for the CAWTP include a new liquid train wastewater treatment plant at McLoughlin Point, a biosolids treatment Energy Centre at Hartland Landfill, pumping station and headworks upgrades at Clover Point and Macaulay Point, a storage facility in East Saanich, crossing of Victoria Harbour with a major pipeline / tunnel, and related conveyance facilities. The overall program budget is \$ 782.7 million, down from the original estimate of \$ 1.2 billion.

For this program, Stantec will be the prime consultant leading the Program Management and indicative design aspects of the project. Stantec will work as an integrated team with CRD staff to deliver this project.

The CAWTP is a complex project which requires input from senior professionals. High quality procurement and indicative design documents are required to ensure the successful delivery of the project by 2018.

The funding agreement for the Project was in place as of July 2012. It is necessary to immediately commence preliminary work in a number of areas in order that key critical path dates, such as completion of the McLoughlin WWTP RFP in April/May 2013 to commissioning of the project in 2017.

A great deal of work for the CAWTP Project is required to be undertaken by CRD staff and the Program Management consultant prior to the establishment of the commission (anticipated to be established as early as the end of 2012).

This work includes:

- Planning commencing on several fronts simultaneously.
- Program Management Functions including the further development of Program Definition, initiation of Procurement activities and other items relating to environmental, property, communications consultation and approvals.
- Engineering functions including tasks such as indicative design, survey and geotechnical scoping work for the McLoughlin WWTP site including the outfall and harbour crossing, program wide issues such as establishing Design Criteria, utility coordination, system wide Integrated Automation Master Plan, CAD and Design Standards.
- Preparation of Pre-qualification document to shortlist potential bidders for the McLoughlin site (to be approved by the Commission prior to issuance).
- Prepare McLoughlin WWTP RFP for review by the Commission and subsequent issuance in April/May 2013.
- Commence planning for biosolids facilities.
- Preparation of Program Implementation Plan and Program Management Plan – the earlier approved technical papers and documents and the funding Business Plan are high level planning documents. These need to be driven down to more detailed planning and execution documents.
- Based on industry best practices, the principles of PMBOK (PMI's Book of Knowledge) and the Province of BC's CAMF – prepare detailed processes and procedures as to how the program will be implemented and controlled and include areas such as scope, cost and schedule control, risk management, procurement and commitments, contract administration and document control.
- Commencement of the retention of advisors such as Procurement, Fairness, Legal and Financial Contract awards will follow the Commission's final approval.

This submission presents the Stantec work plan and budget estimates to take the project through the initial phases of the indicative design and procurement stage up to the point when the Commission is established. A budget is provided for work to January 31, 2013. Services for the balance of the preliminary phases of the Project, construction, commissioning and close out phases will be defined at a later date once construction schedules are finalized and the Commission is in place and, for their consideration.



Section 2 Project Team

2.1 Team Organization

The same project team that led the Project Definition Phase of the CAWTP will continue on with the project. Each team member brings project familiarity and overall, the team is in a position to fast track the project procurement. A brief profile of our core project team is provided below. This team will be augmented by program management and technical support specialists as required to execute the project and meet scheduling.

Dave Walker

Role: Program Manager

Dave Walker will be the designated Program Manager for the CAWTP. Dave led the project definition phase of the CRD project. Dave is well qualified to fulfill this role having served as Program Director for the Ottawa Carleton, Robert O. Pickard Environmental Centre (ROPEC) project which is the largest such project in Canada delivered using a program management approach. Dave also served as Program Manager for high profile fast track projects for the \$880 million Vancouver Convention Centre Expansion Project and the \$1.2 billion Translink Millennium Line Skytrain Project. Both of these projects involved dealing with multiple government agencies and municipal jurisdictions on controversial project issues. Dave brings over 36 years of experience to the project with the last 15 years in British Columbia providing program management services for many major capital projects throughout BC. Dave also has experience working with Partnerships BC, municipal, provincial and federal politicians. He has experience delivering projects with all forms of project delivery including P3, construction management and conventional delivery.

Keith Dove

Role: Program Controls Manager

Keith Dove will serve as the Program Controls Manager working with Dave Walker, and will provide program monitoring, controls, reporting on the project and support to the program procurement. Keith has 30 years experience as a program management specialist and provided project controls on the \$345 million expansion of the Ottawa Carleton ROPEC Plant. Keith has been providing program management services throughout the project definition phase of the CRD project.

Steve Fleck, P. Eng. MBA

Role: Program Management Specialist

Steve Fleck is Vice President for Program Management and leads Stantec's P3 initiatives. He is well qualified to fulfill this role, having been the Project Manager for the \$400 million Seymour Capilano Filtration Project and Capilano Pump Station projects, delivered on budget during a highly inflated construction economy. He provided Program Management for two major secondary wastewater treatment plants for pulp mills on the west coast and is currently Stantec's corporate P3 Practice Lead.

Margaret Huggan

Role: Project Coordinator

Margaret Huggan will be a Coordinator, Contract Administrator and Document Management Specialist on the project. She was in a similar role for the Skytrain Millennium Line and the Annacis and Lulu Islands Wastewater Treatment Plants.

Reno Fiorante, P.Eng.

Role: Technical Manager

Reno Fiorante will be the Technical Manager for the CAWTP. Reno has 28 years experience in the design and management of wastewater treatment projects in Canada and the USA. Reno served as technical manager for the Project Definition Phase of the CRD project. He also served as PM for the Metro Vancouver Lions Gate WWTP Site Assessment Feasibility Study. He was the Project Manager for plant expansions for the Whistler BNR plant, the Kelowna BNR plant, and the Nogales WWTP. The Whistler and Kelowna plants were designed using a sustainable design philosophy and resource recovery for biosolids and liquid treatment streams. He served as Technical Manager for the design of the Seymour Capilano Filtration Plant, a project which includes many sustainable design features including the largest wastewater recycle facility in Canada and one of the largest geothermal fields in North America. He has been involved in 10 projects delivered using design build and brings a wealth of insight into procurement using alternative project delivery. Most recently, he served as design manager for an \$85 million water treatment plant in San Francisco which was delivered using design build.

Steve Krugel, P.Eng.

Role: Biosolids Specialist / Advisor

Steve Krugel is a Senior Vice President at Brown and Caldwell. For the CAWTP project, he will serve as the biosolids specialist and provide input into the reuse options. Steve has been involved in numerous wastewater projects in the US Pacific Northwest which have faced many of the same public and technical

challenges that will be encountered on the CAWTP. He was the Project Manager for the \$600 million Annacis and Lulu Island Secondary Upgrade completed by ABR Joint Venture. Steve was the lead for the Biosolids Management Plan for the CRD which was completed during the project definition phase of the project.

Steve recently served as Deputy Project Manager for King County, Washington's new \$540 million Brightwater WWTP project, which is combining MBR membrane technology with an innovative chemically enhanced primary treatment (CEPT) scheme into a unique split stream treatment system on a constrained site in a sensitive location. He led the technology evaluations and the development of the CEPT technology. This project is currently under construction. Steve has led and advised on a multitude of projects focused on biosolids resource recovery and digester gas use. He has an extensive background in the design of biosolids treatment facilities across North America and is a recognized expert in enhanced digester design.

Steve Wilson, P.Ag.

Role: Biosolids Lead

Steve Wilson is a Biosolids Lead with Brown and Caldwell. Steve was involved in preparing the Biosolids Master Plan for Metro Vancouver and he was also extensively involved in the preparation of the Biosolids Master Plan for CRD. He has experience with beneficial reuse of biosolids and carbon footprint assessment of new and emerging biosolids technologies. Steve served as a consultant on the Biosolids Master Plan for the Resort Municipality of Whistler, which uses co-composting to dispose of organic wastes and biosolids.

Charlie Alix, P.E.

Role: Biosolids Specialist

Charlie Alix is a Biosolids Specialist with Stantec with more than 30 years experience. He has been involved in public and private sector biosolids projects. His experience includes anaerobic digestion projects, composting, co-composting, lime stabilization and odour control. Charlie recently provided his expertise on the Edmonton Biosolids Master Plan which evaluated a number of biosolids processing technologies. He has also been involved in several projects in California where he has assessed alternative biosolids treatment strategies.

Dr. Rob Simm, PhD, P.Eng.

Role: Senior Process Specialist & Liquid Treatment Lead

Dr. Rob Simm will be a Senior Process Specialist on the project and will be involved in the indicative design for the liquid train treatment system. Rob recently was involved in reviewing innovative wastewater treatment technologies for the Winnipeg South End WWTP and the Red Deer Regional Plant. Rob is currently involved in the demonstration scale evaluation of a phosphorus recovery plant in Edmonton. He lead the process design of a nitrogen removal plant in Nogales, Arizona and has evaluated upgrading options for the 800 ML/d Toronto Ashbridges Bay Plant. Rob was also involved in the evaluation of MBR technology for a proposed 40 ML/d membrane BNR plant for the City of Kamloops and completed process modeling and design for the conversion of the Whistler plant to BNR. Rob serves as a member of the WERF nutrient removal committee and is an invited speaker at many conferences throughout the USA and Canada. Rob will spend 40% of his time on the CAWTP.

Dr. Bob Dawson, PhD, P.Eng.

Role: Senior Process Specialist

Dr. Bob Dawson will assume the role of Senior Process Specialist for this project. Bob has been a resident of Victoria since 1978 and understands the local issues and challenges of the CRD wastewater treatment program. Dr. Dawson has over 40 years experience in environmental engineering specializing in planning and design of wastewater treatment plants. He has participated in the design of over 70 plants with capacities as large as 800 ML/d for cities across Canada including Edmonton, Calgary, Red Deer, Kelowna, Saskatoon, Regina, Winnipeg, Toronto as well as major projects in the USA and internationally. He served as a specialist consultant to the province for review of Integrated Resource Recovery options for the Capital Regional District in Victoria. Of particular relevance to the CAWTP project was Dr. Dawson's involvement as technical project manager in the Iona Island and Lions Gate Facility plans which included technology review of treatment technologies, conveyance and transmission between plant sites, developing plans for biosolids management and planning the timing of interim and full secondary treatment. Similarly, as technical director for Stantec on the Calgary Master Plan Studies, Bob had a major role in recommending the choice of BNR treatment technology at a time when BNR was an emerging technology, at the two existing plants

Joe Uglevich, P.E.

Role: Odour Control Lead

Joe Uglevich is an odour control specialist with Stantec and will lead the odour control aspects of the project. Joe has an extensive background in developing cost effective odour control strategies for wastewater treatment facilities, conveyance systems, and pumping stations. He served as project manager for the \$50 million City of Toronto Humber treatment plant odour control and process improvements project. He was also design manager for the City of Toronto's \$150 million Ashbridges Bay WWTP expansion which included major odour control facilities for this 800 ML/d plant which is located adjacent to residential development. Joe has published a number of articles on odour control and is a recognized expert in the field. He has often been called in to trouble shoot problems with non performing odour control systems and is known for developing cost effective odour treatment solutions specifically designed for the odour producing compounds at a particular location.

Henrik Kristiansen, P.Eng.

Role: Geotechnical Lead

Henrik Kristiansen is a Stantec geotechnical engineer with 18 years experience in the geotechnical and foundation design for major infrastructure projects in the lower mainland. Henrik served as a geotechnical engineer for the Seymour Capilano Filtration Plant, the Golden Ears Bridge, and the South Fraser Perimeter Road. He has experience in the design of facilities in soft soils with high water tables and is very familiar with seismic design requirements for foundations. Henrik was also a committee member on the Greater Vancouver region task force for "*Geotechnical Design Guidelines for Building on Liquefiable Sites in accordance with NBC 2005*" from 2004 to 2007. Henrik has been involved in the initial geotechnical evaluations completed as part of the project definition phase for CRD.

Al Ghanam, P.Eng.

Role: Conveyance Systems Lead

Al Ghanam is a senior engineer based out of Stantec's Victoria office with extensive experience in conveyance system design. Al has been involved in the design of utilities and conveyance systems at a number of locations including Sooke, Campbell River, North Saanich and Langford.

Paul Pai, P.Eng.

Role: Process Mechanical Design Specialist

Paul Pai will be involved in the preparation of indicative design drawings and performance specifications for the McLoughlin plant. Paul played a major role in the preparation of designs for the Mc Loughlin Plant and led the cost estimating stage of the project.

Paul Blanchard, P.Eng.

Role: Electrical and Instrumentation Lead

Paul Blanchard has over 35 years experience as a senior electrical and instrumentation engineer. He was the lead controls engineer for the Seymour Capilano Filtration Project and he has completed the design of electrical and control systems for major wastewater treatment plants in Nogales, Missoula, Helena and Vernon. Paul is a senior specialist on the Computerized Data Acquisition Control System (CDACS) Wastewater Treatment Plant Migration Study for Metro Vancouver's 5 area wastewater treatment plants.

Gilbert Cote, P.Eng.

Role: Senior Project Engineer

Gilbert Cote is a senior engineer with Stantec with experience in the design of wastewater treatment facilities. Gilbert completed the reclaimed water assessment for the CRD project in Victoria and he also served as a senior project engineer on the Iona and Lions Gate Facility Plan. Gilbert was responsible for the completion of two studies on District heating for the central downtown core of Victoria and for the University of Victoria. Both of these projects involved case studies of major buildings in the service areas and completion of a financial life cycle and TBL model to determine the feasibility of implementation of heat recovery from effluent. He was also involved in assessing integrated resource recovery options for solid waste / biosolids for the CRD projects.

Dean Richards, P.Ag.

Role: Contaminated Sites Lead

Dean Richards is an environmental scientist with extensive experience in remediation of contaminated sites. Most recently, he was responsible for the environmental risk assessment for two treatment plant sites for the Capital Regional District's Wastewater treatment program. Solutions were developed to address these risks to support the conceptual design phase. Recommendations were made to the CRD with regards to due diligence and cost estimates to fulfill the requirements of a Certificate of Compliance under the British Columbia Contaminated Sites Regulation (BC CSR). Dean will continue on in his role to support the remediation of the McLoughlin WWTP site.

Ray Chan, P.Eng.

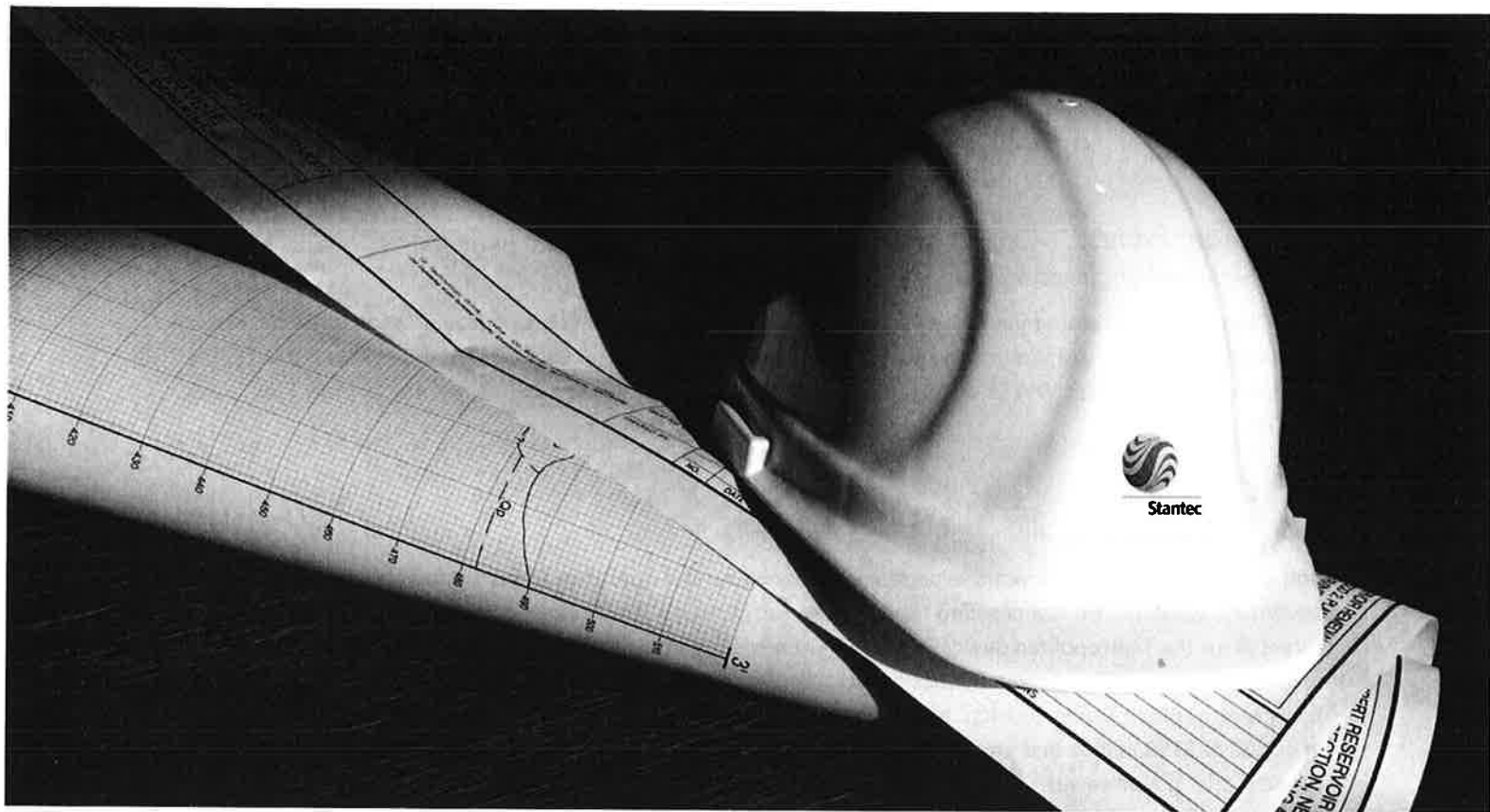
Role: Structural Engineering Lead

Ray Chan is a structural engineer with 30 years experience in the design of diverse structures for major treatment plants in British Columbia and Alberta. He was the structural engineer for the Kelowna WWTP, the Vernon WWTP, Whistler WWTP and served as structural quality control engineer for the Calgary Pine Creek WWTP.

Bob Campbell, P.E.

Role: Operations Specialist

Bob Campbell has over 35 years experience in managing and operating large wastewater conveyance and treatment systems. He is a certified level 4 operator. Prior to joining Stantec, Bob served as the Executive Director for the Metropolitan Sewer District of Greater Cincinnati. Bob has also served as Executive Director of the Little Blue Valley Sewer District in Jackson County, Missouri, and as Director of Planning for the St. Louis Metropolitan Sewer District. He has managed a staff of over 600 individuals with an operating budget in excess of \$150 million and an annual capital program in excess of \$132 million. Bob was responsible for all aspects of a major sewer utility in Hamilton County, Ohio and a stormwater program within the City of Cincinnati. Bob served as an operational specialist on the CRD Wastewater Treatment Program and he also served as a commissioning and training specialist for the recent expansion of the City of Kelowna wastewater treatment plant. Bob will work with the discipline engineers to ensure the operational aspects are addressed in the preparation of the indicative design documents.



Section 3 Work Plan and Task Order Estimates

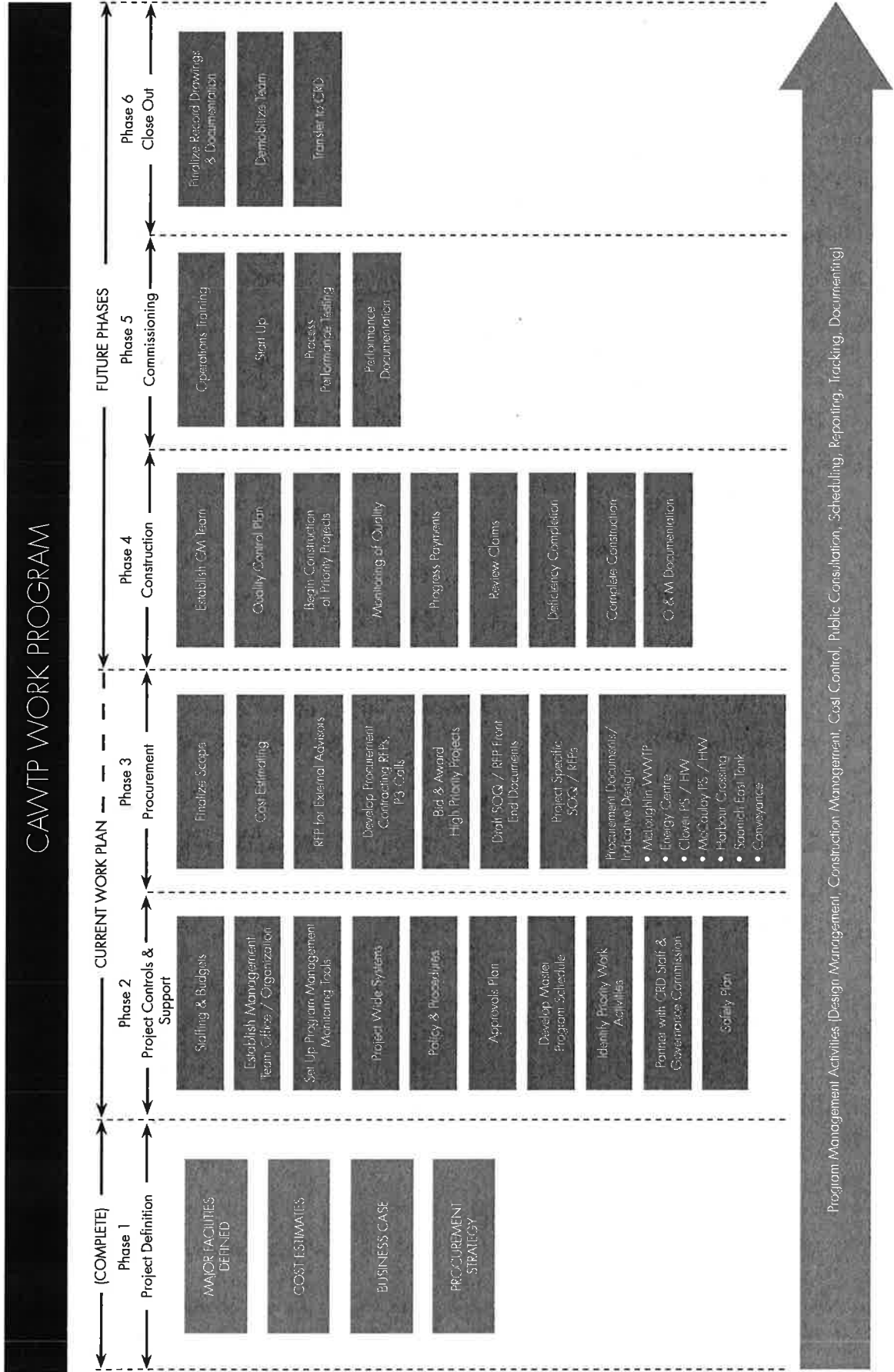
3.1 Work Structure

Our overall work plan for the project has been developed in six phases as shown in **Figure 3.1**. The work phases are as follows:

- Phase 1 – Project Definition (mostly complete)
- Phase 2 – Project Controls & Support
- Phase 3 – Procurement
- Phase 4 – Construction
- Phase 5 – Commissioning
- Phase 6 - Close Out

Under each phase there are a number of work activities which must be completed. We have prepared our work plan in a task order format for ease of reference. The task orders define the major scope items, deliverables and fee estimate for the defined scope. Since the project is at the early stages, there are scope items that cannot be defined until further work is completed. Task orders have been prepared for the interim works until January 31, 2013. The work tasks for phases 4 through 6 will be prepared at a later date once construction schedules and durations are more defined following procurement.

Figure 3.1: Work Plan



3.2 Fee Basis

We propose to undertake the work on a time and disbursement basis in accordance with our current professional services agreement for the project. Budgets for additional scope items will be provided on a Task Order basis for review by CRD prior to undertaking the work. The fee includes a flat rate disbursement at 5%. A budget of \$50,000 has been allocated for travel, sustenance and major printing. PMO office lease expenses are not included in the budget.

3.3 Fee Estimate Summary

The major tasks are summarized as follows. Details of the scope of work are included in the work task orders at the end of this section. With a project of this magnitude, there will be unforeseen work items that arise. Work Task 309 provides an allowance for undefined services to cover unforeseen items as they arise.

TASK ORDER	ESTIMATED FEE to Jan 31/13(\$)
Task 301 – PMO Program Management	\$ 254,100
Task 302 – Procurement	\$ 267,750
Task 303 – Project Definition	\$ 257,250
Task 304 – Approvals	\$ 75,600
Task 305 – Property Related Services	\$ 50,400
Task 306 – Communications & Reporting	\$ 56,700
Task 307 – Other Project Wide Services	\$ 34,125
Task 308 – Engineering / Indicative Design Documents	\$ 2,286,900
Task 309 – Undefined Support Services Allowance	\$ 27,300
Major Disbursements	\$ 50,000
TOTAL INTERIM ESTIMATED FEE (to Jan. 31, 2013)	\$ 3,360,125

A detailed description of the scope included in each task order is included at the end of this Section.

WORK TASK ORDER

PROJECT NO. _____ AREA: _____ TASK NO. 301

SUBJECT: PMO Program Management REVISION NO. _____

DESCRIPTION:

Program and project management services required to support the CAWTP Project. include:

- Develop PMO staffing requirements and budgets.
- Prepare detailed project organization chart for PMO office with CRD staff incorporated.
- Create Roles and Responsibility Matrix for the entire Program including a Program Organization Structure, Roles and Responsibilities, Levels of Authority, Internal Communication Protocol, etc.
- Develop PMO Budget.
- Draft policies/procedures for PMO including Code of Conduct and Conflict of Interest.
- Establish Project systems - Accounting/Cost Control/Reporting, Document Control, Web-Based Project Collaboration.
- Establish timeline etc. to undertake the recruitment and hiring of Operations Manager for the McLoughlin WWTP.
- Meeting attendance.

DELIVERABLES:

CAPITAL COST CHANGE: (PREPARE SEPARATE ESTIMATE SHEET IF SPACE BELOW INSUFFICIENT)

DESCRIPTION	MATERIAL	LABOUR	INDIRECTS	TOTAL

CAPITAL DISPOSITION: Responsibility by Client Shift to/from Contingency
 Revise Estimate to Complete Increase Capital Cost (Out of Project Scope)

OVERALL TOTAL _____

SERVICES COST CHANGE: (REFER TO SEPARATE PCN SUMMARY ESTIMATE SHEET ATTACHED) IF APPLICABLE, LIST DOCUMENTS IMPACTED ON SEPARATE SHEET

DESCRIPTION	DEPT.	AREA	ACT.	WORK HOURS	COST		
					SERVICES	EXPENSES	TOTAL
Program Management				1,600	242,000	12,100	\$ 254,100
TOTAL SERVICES COST ESTIMATE				1,600	242,000	12,100	\$ 254,100

FEE TERMS: Lump Sum TM OTHER – Increase to contract value – same commercial terms

ENGINEERING COST DISPOSITION: Budget Shift Increase Budget

SCHEDULE CHANGE (EXTENSION / CONTRACTION)

DESCRIPTION OF EFFECT ON:

- | | |
|--------------------------|-----|
| 1. ENGINEERING SCHEDULE | N/A |
| 2. PROCUREMENT SCHEDULE | N/A |
| 3. CONSTRUCTION SCHEDULE | N/A |

WORK TASK ORDER

ORIGINATOR

RAF / DW

DATE

APPROVAL

PROJECT MANAGER

DATE

CLIENT PROJECT MANAGER

DATE

WORK TASK ORDER

PROJECT NO. _____ AREA: _____ TASK NO. 302

SUBJECT: Procurement REVISION NO. _____

DESCRIPTION:

Program and project management services required to support the Procurement component of the CAWTP Project include:

- Develop scope of services/RFP's for Program Advisors – procurement, legal, financial, fairness commissioner and review teams.
- Develop scope of services/RFP's for Program specialist consultants - survey, geotechnical, property, environment, communications and public consultations.
- Negotiate with current program consultants - Westland (environment), Stantec (program management and engineering) and Associated (Craigflower) et.al.
- Prepare draft commercial front end documents for DBB, DB, and DBFO contract documents.
- Prepare SOQ/RFQ Solicitation Documents.
- Prepare RFP documents for Conveyance Systems DBB.
- Prepare RFP for engineering or design and construction services for Saanich East Attenuation Tank DBB.
- Commence preparation of procurement documents for McLoughlin Point DB.
- Prepare standard procurement documents - contracts/purchase order/standard terms and conditions.

DELIVERABLES:

CAPITAL COST CHANGE: (PREPARE SEPARATE ESTIMATE SHEET IF SPACE BELOW INSUFFICIENT)

DESCRIPTION	MATERIAL	LABOUR	INDIRECTS	TOTAL

CAPITAL DISPOSITION: Responsibility by Client Shift to/from Contingency
 Revise Estimate to Complete Increase Capital Cost (Out of Project Scope)

SERVICES COST CHANGE: (REFER TO SEPARATE PCN SUMMARY ESTIMATE SHEET ATTACHED)
 IF APPLICABLE, LIST DOCUMENTS IMPACTED ON SEPARATE SHEET

DESCRIPTION	DEPT.	AREA	ACT.	WORK HOURS	COST		
					SERVICES	EXPENSES	TOTAL
Engineering				500	75,000	3,750	\$ 78,750
Program Management				1,200	180,000	9,000	\$ 189,000
TOTAL SERVICES COST ESTIMATE				1,700	255,000	12,750	\$ 267,750

WORK TASK ORDER

FEE TERMS: Lump Sum TM OTHER – Increase to contract value – same commercial terms

ENGINEERING COST DISPOSITION: Budget Shift Increase Budget

OVERALL TOTAL _____

SCHEDULE CHANGE (EXTENSION / CONTRACTION)

DESCRIPTION OF EFFECT ON:

- | | |
|--------------------------|-----|
| 1. ENGINEERING SCHEDULE | N/A |
| 2. PROCUREMENT SCHEDULE | N/A |
| 3. CONSTRUCTION SCHEDULE | N/A |

ORIGINATOR DW / RAF DATE _____

APPROVAL

PROJECT MANAGER _____ DATE _____

CLIENT PROJECT MANAGER _____ DATE _____

WORK TASK ORDER

PROJECT NO. _____ AREA: _____ TASK NO. 303

SUBJECT: Project Definition REVISION NO. _____

DESCRIPTION:

Project management and technical services required to support the Project Definition component of the CAWTP Project include:

- Continue to develop the Program Schedule and develop an overall Master Program Schedule.
- Continue to develop the Program Cash Flow analysis/report.
- Develop the Program (including procurement) Work Breakdown Structure (WBS) and coding system.
- Develop Operations input - CRD or consultant/contractor.
- Develop/maintain Program Risk Management Plan.
- Draft PIP - Project Implementation Plan.
- Draft PMP - Project Management Plan.
- Draft PCP - Project Communication Plan (Internal).
- Develop Control Budget - Baseline Budget for WBS.
- Finalize cost estimate and prepare a Program of Requirements Cost Estimate Report.

DELIVERABLES:

CAPITAL COST CHANGE: (PREPARE SEPARATE ESTIMATE SHEET IF SPACE BELOW INSUFFICIENT)

DESCRIPTION	MATERIAL	LABOUR	INDIRECTS	TOTAL

CAPITAL DISPOSITION: Responsibility by Client Shift to/from Contingency
 Revise Estimate to Complete Increase Capital Cost (Out of Project Scope)

SERVICES COST CHANGE: (REFER TO SEPARATE PCN SUMMARY ESTIMATE SHEET ATTACHED)
 IF APPLICABLE, LIST DOCUMENTS IMPACTED ON SEPARATE SHEET

DESCRIPTION	DEPT.	AREA	ACT.	WORK HOURS	COST		
					SERVICES	EXPENSES	TOTAL
Engineering				400	60,000	3,000	\$ 63,000
Program Management				1,150	185,000	9,250	\$ 194,250
TOTAL SERVICES COST ESTIMATE				1,550	245,000	12,250	\$ 257,250

FEE TERMS: Lump Sum TM OTHER – Increase to contract value – same commercial terms

ENGINEERING COST DISPOSITION: Budget Shift Increase Budget

OVERALL TOTAL _____

WORK TASK ORDER

SCHEDULE CHANGE (EXTENSION / CONTRACTION)

DESCRIPTION OF EFFECT ON:

- | | | |
|--------------------------|-----|-------|
| 1. ENGINEERING SCHEDULE | N/A | _____ |
| 2. PROCUREMENT SCHEDULE | N/A | _____ |
| 3. CONSTRUCTION SCHEDULE | N/A | _____ |

ORIGINATOR	RAF	DATE	_____
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APPROVAL

PROJECT MANAGER	_____	DATE	_____
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CLIENT PROJECT MANAGER	_____	DATE	_____
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WORK TASK ORDER

PROJECT NO. _____ AREA: _____ TASK NO. 304

SUBJECT: Approvals REVISION NO. _____

DESCRIPTION:

Approvals includes assistance with obtaining regulatory approvals related to the Ministry of Environment, Department of Fisheries and Oceans, Environment Canada, Navigable Waters, Railways and CEAA. The CEAA work is in a support role only as CRD has engaged Westland Resources for the CEAA.

DELIVERABLES:

Background information to assist CRD to obtain approvals necessary for construction and operation of facilities.

CAPITAL COST CHANGE: (PREPARE SEPARATE ESTIMATE SHEET IF SPACE BELOW INSUFFICIENT)

DESCRIPTION	MATERIAL	LABOUR	INDIRECTS	TOTAL

CAPITAL DISPOSITION: Responsibility by Client Shift to/from Contingency
 Revise Estimate to Complete Increase Capital Cost (Out of Project Scope)

SERVICES COST CHANGE: (REFER TO SEPARATE PCN SUMMARY ESTIMATE SHEET ATTACHED)
 IF APPLICABLE, LIST DOCUMENTS IMPACTED ON SEPARATE SHEET

DESCRIPTION	DEPT.	AREA	ACT.	WORK HOURS	COST		
					SERVICES	EXPENSES	TOTAL
Engineering				320	48,000	2,400	\$ 50,400
Program Management				140	24,000	1,200	\$ 25,200
TOTAL SERVICES COST ESTIMATE				460	72,000	3,600	\$ 75,600

FEE TERMS: Lump Sum TM OTHER – Increase to contract value – same commercial terms

ENGINEERING COST DISPOSITION: Budget Shift Increase Budget

OVERALL TOTAL

SCHEDULE CHANGE (EXTENSION / CONTRACTION)

DESCRIPTION OF EFFECT ON:

- 1. ENGINEERING SCHEDULE N/A
- 2. PROCUREMENT SCHEDULE N/A
- 3. CONSTRUCTION SCHEDULE N/A

ORIGINATOR RAF DATE _____

APPROVAL

PROJECT MANAGER _____ DATE _____

CLIENT PROJECT MANAGER _____ DATE _____

WORK TASK ORDER

PROJECT NO. _____ AREA: _____ TASK NO. 305
 SUBJECT: Property Related Services REVISION NO. _____

DESCRIPTION:

Property related issues will include dealing with local communities where facilities are located for rezoning applications, approvals, assistance in obtaining right of ways for conveyance and / or facilities, assistance to CRD in property purchase and preparation of site renderings of facilities to assist in public consultation.

DELIVERABLES:

Rezoning applications, right of way requirement plans, site renderings

CAPITAL COST CHANGE: (PREPARE SEPARATE ESTIMATE SHEET IF SPACE BELOW INSUFFICIENT)

DESCRIPTION	MATERIAL	LABOUR	INDIRECTS	TOTAL

CAPITAL DISPOSITION: Responsibility by Client Shift to/from Contingency
 Revise Estimate to Complete Increase Capital Cost (Out of Project Scope)

SERVICES COST CHANGE: (REFER TO SEPARATE PCN SUMMARY ESTIMATE SHEET ATTACHED)
 IF APPLICABLE, LIST DOCUMENTS IMPACTED ON SEPARATE SHEET

DESCRIPTION	DEPT.	AREA	ACT.	WORK HOURS	COST		
					SERVICES	EXPENSES	TOTAL
Engineering				150	24,000	1,200	\$ 25,200
Program Management				150	24,000	1,200	\$ 25,200
TOTAL SERVICES COST ESTIMATE				300	48,000	2,400	\$ 50,400

FEE TERMS: Lump Sum TM OTHER – Increase to contract value – same commercial terms

ENGINEERING COST DISPOSITION: Budget Shift Increase Budget

OVERALL TOTAL

SCHEDULE CHANGE (EXTENSION / CONTRACTION)

DESCRIPTION OF EFFECT ON:

- 1. ENGINEERING SCHEDULE N/A
- 2. PROCUREMENT SCHEDULE N/A
- 3. CONSTRUCTION SCHEDULE N/A

ORIGINATOR RAF DATE _____

APPROVAL

PROJECT MANAGER _____ DATE _____

CLIENT PROJECT MANAGER _____ DATE _____

WORK TASK ORDER

PROJECT NO. _____ AREA: _____ TASK NO. 306
 SUBJECT: Communications and Reporting REVISION NO. _____

DESCRIPTION:

A Communications and Reporting Plan will be prepared covering the entire project. The work will involve developing the communications plan and reporting format for the project. The Startec team will work with the CRD communications staff in developing the communications plan for the public. Other stakeholders where communication will be important include the Victoria and Vancouver Construction Associations, local community associations and First Nations.

Throughout the project regular reporting is proposed to communicate the progress of the project to the CRD project manager. This will include the status of progress on task orders, schedule and budget updates.

DELIVERABLES:

Communications Plan, Regular Reports

CAPITAL COST CHANGE: (PREPARE SEPARATE ESTIMATE SHEET IF SPACE BELOW INSUFFICIENT)

DESCRIPTION	MATERIAL	LABOUR	INDIRECTS	TOTAL

CAPITAL DISPOSITION: Responsibility by Client Shift to/from Contingency
 Revise Estimate to Complete Increase Capital Cost (Out of Project Scope)

SERVICES COST CHANGE: (REFER TO SEPARATE PCN SUMMARY ESTIMATE SHEET ATTACHED)
 IF APPLICABLE, LIST DOCUMENTS IMPACTED ON SEPARATE SHEET

DESCRIPTION	DEPT.	AREA	ACT.	WORK HOURS	COST		
					SERVICES	EXPENSES	TOTAL
Engineering				200	30,000	1,500	\$ 31,500
Program Management				140	24,000	1,200	\$ 25,200
TOTAL SERVICES COST ESTIMATE				340	54,000	2,700	\$ 56,700

FEE TERMS: Lump Sum TM OTHER – Increase to contract value – same commercial terms

ENGINEERING COST DISPOSITION: Budget Shift Increase Budget

OVERALL TOTAL

SCHEDULE CHANGE (EXTENSION / CONTRACTION)

DESCRIPTION OF EFFECT ON:

- 1. ENGINEERING SCHEDULE N/A
- 2. PROCUREMENT SCHEDULE N/A
- 3. CONSTRUCTION SCHEDULE N/A

WORK TASK ORDER

ORIGINATOR

RAF _____

DATE _____

APPROVAL

PROJECT MANAGER

DATE _____

CLIENT PROJECT MANAGER

DATE _____

WORK TASK ORDER

PROJECT NO. _____ AREA: _____ TASK NO. 307

SUBJECT: Other Project Wide Services REVISION NO. _____

DESCRIPTION:

This task involves providing support to the CRD on project wide support items. These items include:

- Support with respect to governance and assistance in identifying suitable candidates for the commission
- Reviewing funding agreement and coordination of procurement documents to support requirements of the funding agencies.
- Coordination of CEEA
- Technical input into the overall LWMP Amendment
- Assistance in final negotiations with Imperial Oil regarding McLoughlin purchase.
- Assessment of McLoughlin Remediation Strategy for Commission Decision on purchase.

DELIVERABLES:

Communications Plan, Regular Reports

CAPITAL COST CHANGE: (PREPARE SEPARATE ESTIMATE SHEET IF SPACE BELOW INSUFFICIENT)

DESCRIPTION	MATERIAL	LABOUR	INDIRECTS	TOTAL

CAPITAL DISPOSITION: Responsibility by Client Shift to/from Contingency
 Revise Estimate to Complete Increase Capital Cost (Out of Project Scope)

SERVICES COST CHANGE: (REFER TO SEPARATE PCN SUMMARY ESTIMATE SHEET ATTACHED)
 IF APPLICABLE, LIST DOCUMENTS IMPACTED ON SEPARATE SHEET

DESCRIPTION	DEPT.	AREA	ACT.	WORK HOURS	COST		
					SERVICES	EXPENSES	TOTAL
Engineering				160	24,000	1,200	25,200
Program Management				40	8,500	425	8,925
TOTAL SERVICES COST ESTIMATE				200	32,500	1,625	\$ 34,125

FEE TERMS: Lump Sum TM OTHER – Increase to contract value – same commercial terms

ENGINEERING COST DISPOSITION: Budget Shift Increase Budget

OVERALL TOTAL _____

WORK TASK ORDER

SCHEDULE CHANGE (EXTENSION / CONTRACTION)

DESCRIPTION OF EFFECT ON:

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|--------------------------|-----|-------|
| 1. ENGINEERING SCHEDULE | N/A | _____ |
| 2. PROCUREMENT SCHEDULE | N/A | _____ |
| 3. CONSTRUCTION SCHEDULE | N/A | _____ |

ORIGINATOR	RAF	_____	DATE	_____
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APPROVAL

PROJECT MANAGER	_____	DATE	_____
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CLIENT PROJECT MANAGER	_____	DATE	_____
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WORK TASK ORDER

PROJECT NO. _____ AREA: _____ TASK NO. 308
 SUBJECT: Engineering / Indicative Design Documents REVISION NO. _____

DESCRIPTION:

This task involves commencement of engineering work necessary for the preparing of indicative design documents to support the overall procurement of the Mc Loughlin WWTP, and harbour crossing. The partial work plan to January 31, 2013 includes:

- Completion of surveys at the McLoughlin site and harbour crossing. Legal surveys will be by others.
- Develop geotechnical scope for McLoughlin site. Subsurface testing is part of future investigation.
- Establish project wide CADD and Design Standards.
- Development of design criteria for the McLoughlin WWTP and harbour crossings.
- Preparation of Indicative Design Drawings / Performance Specifications for the McLoughlin WWTP.
- System wide SCADA and Automation Master Plan.
- Site architectural design criteria / performance specifications.
- Sustainability performance specifications and triple bottom line proposal evaluation criteria.
- External Utility Co-ordination with BC Hydro, Fortis and Telus.
- Meeting attendance to review indicative design and documents.

DELIVERABLES:

Drawings, specifications, reports, technical memoranda

CAPITAL COST CHANGE: (PREPARE SEPARATE ESTIMATE SHEET IF SPACE BELOW INSUFFICIENT)

DESCRIPTION	MATERIAL	LABOUR	INDIRECTS	TOTAL

CAPITAL DISPOSITION: Responsibility by Client Shift to/from Contingency
 Revise Estimate to Complete Increase Capital Cost (Out of Project Scope)

WORK TASK ORDER

SERVICES COST CHANGE:

(REFER TO SEPARATE PCN SUMMARY ESTIMATE SHEET ATTACHED)
 IF APPLICABLE, LIST DOCUMENTS IMPACTED ON SEPARATE SHEET

DESCRIPTION	DEPT.	AREA	ACT.	WORK HOURS	COST		
					SERVICES	EXPENSES	TOTAL
Surveys				830	125,000	6,250	\$ 131,250
Geotechnical Scoping				700	105,000	5,250	\$ 110,250
Cadd and Design Standards				750	75,000	3,750	\$ 78,750
Design Criteria				400	60,000	3,000	63,000
McLoughlin Indicative Design / Specifications				8,000	1,200,000	60,000	\$ 1,260,000
Harbour Crossing Indicative Design / Performance Specifications				670	100,000	5,000	\$ 105,000
System Wide SCADA Master Plan / Specifications				1,330	200,000	10,000	\$ 210,000
McLoughlin Outfall Modeling				400	60,000	3,000	\$ 63,000
Site Architecture Design Criteria / Performance Specifications				800	120,000	6,000	\$ 126,000
Sustainability performance specifications and triple bottom line proposal evaluation criteria				320	48,000	2,400	\$ 50,400
External Utility Coordination				265	40,000	2,000	\$ 42,000
Meeting attendance for reviews				300	45,000	2,250	\$ 47,250
TOTAL SERVICES COST ESTIMATE				14,765	2,178,000	108,900	\$ 2,286,900

FEE TERMS:

Lump Sum

TM

OTHER – Increase to contract value – same commercial terms

ENGINEERING COST DISPOSITION:

Budget Shift

Increase Budget

WORK TASK ORDER

OVERALL TOTAL _____

SCHEDULE CHANGE (EXTENSION / CONTRACTION)

DESCRIPTION OF EFFECT ON:

- | | |
|--------------------------|-----|
| 1. ENGINEERING SCHEDULE | N/A |
| 2. PROCUREMENT SCHEDULE | N/A |
| 3. CONSTRUCTION SCHEDULE | N/A |
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ORIGINATOR

RAF

DATE _____

APPROVAL

PROJECT MANAGER

DATE _____

CLIENT PROJECT MANAGER

DATE _____

WORK TASK ORDER

PROJECT NO. _____ AREA: _____ TASK NO. 309
 SUBJECT: Undefined Support Services Allowance REVISION NO. _____

DESCRIPTION:

Program and project management, engineering and other technical services required to support undefined as requested services in regard to CAWTP Project include:

- Various undefined services to respond to requests as approved by the CRD

DELIVERABLES:

CAPITAL COST CHANGE: (PREPARE SEPARATE ESTIMATE SHEET IF SPACE BELOW INSUFFICIENT)

DESCRIPTION	MATERIAL	LABOUR	INDIRECTS	TOTAL

CAPITAL DISPOSITION: Responsibility by Client Shift to/from Contingency
 Revise Estimate to Complete Increase Capital Cost (Out of Project Scope)

SERVICES COST CHANGE: (REFER TO SEPARATE PCN SUMMARY ESTIMATE SHEET ATTACHED)
 IF APPLICABLE, LIST DOCUMENTS IMPACTED ON SEPARATE SHEET

DESCRIPTION	DEPT.	AREA	ACT.	WORK HOURS	COST		
					SERVICES	EXPENSES	TOTAL
Program Management				150	26,000	1,300	\$ 27,300
TOTAL SERVICES COST ESTIMATE				150	26,000	1,300	\$ 27,300

FEE TERMS: Lump Sum TM OTHER – Increase to contract value – same commercial terms

ENGINEERING COST DISPOSITION: Budget Shift Increase Budget

OVERALL TOTAL

SCHEDULE CHANGE (EXTENSION / CONTRACTION)

DESCRIPTION OF EFFECT ON:

- | | |
|--------------------------|-----|
| 1. ENGINEERING SCHEDULE | N/A |
| 2. PROCUREMENT SCHEDULE | N/A |
| 3. CONSTRUCTION SCHEDULE | N/A |

ORIGINATOR _____ RAF _____ DATE _____

WORK TASK ORDER

APPROVAL

PROJECT MANAGER

DATE

CLIENT PROJECT MANAGER

DATE

