

## MINUTES OF MEETING

<b>File:</b> D-15043.00	<b>Sheet:</b> 1 of 4	<b>Date:</b> July 20, 2017	<b>Time:</b> 10:00 AM
<b>Subject</b> Duteau Creek WTP UV Upgrade – Pre-Tender Meeting			
<b>Location</b> Duteau Creek Water Treatment Plant 1014 Whitevale Road Lavington, BC, V1B 3E7		<b>Minutes By:</b> Lean Lauron	
<b>Persons Present</b>		<b>Organisation</b>	<b>Copy Received</b>
Sandy Edwards		RDNO	
Stephen Horsman		Opus	
Lean Lauron		Opus	
Kian Djavid		CEWE Infrastructure	
Neil Brooks		Acres Enterprises	
Brad Chapman		Chapman Mechanical Ltd.	
Jeff Dale		Chapman Mechanical Ltd.	
Jeff Chipchase		Carver Construction	
Aidan Docherty		Maple Reinders Inc.	
Mason Van Vliet		Maple Reinders Inc.	
Scott Wilson		Houle Electric	
<b>Item</b>	<b>Discussion and Action</b>	<b>By Whom</b>	<b>By When</b>
<b>1</b>	<b>Civil</b>		
<b>1</b>	<b>Introduction</b>		
1.1	Owner: Regional District of North Okanagan <ul style="list-style-type: none"> <li>• Sandy Edwards – Water Treatment Manager</li> <li>• John Lord – Project Engineer</li> <li>• Dustin Heidt – Chief Water Supply and Treatment Operator</li> <li>• Corey Hartwig – Electrician / Instrumentation</li> </ul>		
1.2	Contract Administrator/Consultants <ul style="list-style-type: none"> <li>• Opus – Stephen Horsman</li> <li>• Opus – Lean Lauron</li> </ul>		
<b>2</b>	<b>Review of Tender Documents</b>		
2.1	Contract is standard CCDC 2 Contract <ul style="list-style-type: none"> <li>• Lump sum price</li> <li>• Bid Bond, Performance Bond and Labour and Materials Bond.</li> <li>• Schedule A is the sum total of the lump sum <ul style="list-style-type: none"> <li>○ Broken down by division</li> <li>○ Inclusive of Schedule B (Provisional Items) and Schedule C (Schedule of Values)</li> </ul> </li> <li>• Liquidated damages are defined in Section 00800.</li> </ul>		

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2.2	Provisional Bid Items <ul style="list-style-type: none"> <li>• Listed in Schedule B (Section 00410)</li> <li>• Price should include all overhead cost for the scope of work</li> <li>• The owner may elect to remove any provisional items from the scope of work</li> <li>• Provisional Bid Items Include:                             <ul style="list-style-type: none"> <li>○ Orthophosphate System</li> <li>○ Redundant UPS Battery Bank</li> <li>○ UPS Battery Monitoring</li> <li>○ 1200mm Isolation Butterfly Valve at Reservoir Outlet</li> <li>○ Roof Mounted Light Tubes</li> </ul> </li> </ul>		
2.3	Information Documents – Appendix A and B <ul style="list-style-type: none"> <li>• Geotechnical Reports – Cascade Geotechnical Ltd.</li> <li>• UV Supply Contract and Shop Drawings – Wedeco</li> <li>• UV Supplier responsibilities will be outlined in the documents</li> </ul>		
<b>3</b>	<b>Schedule</b>		
3.1	Tender Close – August 10, 2017. 2 pm at Regional District of North Okanagan Office		
3.2	8 Month Construction Period		
3.3	UV Equipment Delivery Date – December 2017		
3.4	Substantial Performance Date – March 31, 2018		
3.5	Total Performance Date – April 30 2018		
3.7	Project is grant funded with a completion date set at March 31, 2019, however alternate completion will be considered if they add value to the RDNO. Contractors may propose alternate completion dates as set out in the Instructions to Tenders.		
<b>4</b>	<b>Review of Project Scope</b>		
4.1	UV Disinfection Facility		
4.11	Construction of UV Treatment Building <ul style="list-style-type: none"> <li>• New building offset 10m from the treated water reservoir.</li> <li>• Tie-in to exiting 1200mm HDPE pipe at the outlet of the reservoir and at the inlet to the treated water chamber.</li> <li>• The UV outlet chamber inside the building is a pressurize concrete conduit operating at 10 psi.</li> <li>• Constrained to property line. Contractor to retain own Geotech, as required to ensure integrity of temporary and finished slopes.</li> <li>• New MCC, inline UPS, and building power.</li> <li>• Tie-in fire alarm system to existing panel.</li> <li>• Provide RJB5 to connect control system to the existing Plant Control System.</li> <li>• Reinstate all disturbed surfaces.</li> <li>• Contractor is responsible for locating existing utilities before any tie-ins.</li> </ul>		
4.2	Hypochlorite \ Reservoir Building		

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4.21	<p>Work Inside existing Sodium Hypochlorite building.</p> <ul style="list-style-type: none"> <li>• Install new Sodium Hypochlorite system inside the existing hypochlorite storage and dosing area to chlorinate downstream of the UV building.</li> <li>• Remove existing Irrigation Sodium Hypochlorite Pump Skid and attached items. Remove and reinstate the equipment mounted to the existing irrigation hypochlorite dosing skid.</li> <li>• New pump skid to include four-pumps and provision for a temporary connection of the existing hypochlorite irrigation pump.</li> <li>• Retain existing hypochlorite irrigation flow meter and support for temporary connection of irrigation pump.</li> <li>• New post-UV dosing system will tie-in to the existing manual dosing line directed to the treated water chamber.</li> <li>• New skid to tie-into existing supply header.</li> <li>• Remove and relocated existing analyzers 395, 396a, 396 and panel mount in UV Building.</li> <li>• Route power and communication feeders through hypochlorite room and direct to new buried duct bank around the back of the reservoir. Provide new cable tray and break out through existing floor slab.</li> </ul>		
4.3	Existing WTP Building		
4.31	<ul style="list-style-type: none"> <li>• Connect to existing MCC and feed UV building using spare conduits to the existing hypochlorite building.</li> <li>• Install detuned capacitor bank inside existing WTP electrical room.</li> <li>• Connect communication and controls to existing Plant Control System.</li> <li>• Terminate new fibre lines into existing patch panel.</li> </ul>		
4.4	Programming		
4.41	<ul style="list-style-type: none"> <li>• Program RJB5 PLC and integrate with Plant control system</li> <li>• Modifications to RJB4 controls for new post-UV dosing</li> <li>• Integration of Owner Supplied UV LCPs. poop</li> <li>• Control Narratives will be issued as an addendum for               <ul style="list-style-type: none"> <li>○ Post UV dosing,</li> <li>○ orthophosphate dosing, and</li> <li>○ UV system</li> </ul> </li> </ul>		
<b>5</b>	<b>Owner Supplied Materials</b>		
5.1	Contractor is responsible for coordinating the delivery, receiving, handling and storing the UV equipment.		
5.2	Contractor is responsible for the installation of the Owner's Supplied UV Equipment.		
5.3	Contractor to provide support and coordinate the testing and commissioning of the UV equipment as part of the overall facility commissioning.		
5.4	Contractor responsible for coordinating the UV Supplier for integrating the UV reactors with the plant control system.		

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5.5	Details and information of the UV equipment are provided in Appendix B.		
<b>6</b>	<b>Permits</b>		
6.1	Consultant will be responsible for Environmental, Health and Building Permits.		
6.2	Contractor responsible for Business license, Soil disposal, Hauling, etc. All construction related permits need to be obtained by the Contractor at their expense.		
<b>7</b>	<b>Work Sequencing</b>		
7.1	Detailed requirements for the Work Sequence are provided in Section 01121.		
7.2	UV Building <ul style="list-style-type: none"> <li>• The water treatment plant will be active throughout construction.</li> <li>• Providing full access to WTP personnel is paramount.</li> </ul>		
7.3	UV Building – Tie-ins <ul style="list-style-type: none"> <li>• Low demand season <ul style="list-style-type: none"> <li>○ From October to March.</li> <li>○ Irrigation shutoff is September 15, 2017</li> <li>○ 6 hour shutdown will be permitted to complete the tie-ins.</li> </ul> </li> </ul>		
<b>8</b>	<b>Laydown Areas and Site Trailer</b>		
8.1	Future Filtration Plant area may be used for equipment laydown and storage.		
8.2	Contractor to have site trailer with provision for parking is required.		
8.3	Site trailer will be used to have a place for drawings and construction meetings. Provide space for resident engineer to work when on-site.		
<b>9</b>	<b>Question and Answer</b>		
9.1	<b>Questions:</b> Is the Owner looking after the commissioning of the Owner Supplied Equipment? <b>Answer:</b> The contractor is intended to support commissioning of the Equipment And coordinate the overall commissioning of the facility. UV Supplier’s scope of work and responsibilities will be issued in an addendum.		
9.2	<b>Question:</b> Does RDNO accept fax tender amendments? <b>Answer:</b> Yes. Opus to update Instructions to Tenderers with fax info.		
9.3	<b>Question:</b> Is there any specification for the roofing system. <b>Answer:</b> Architectural requirements are specified in the drawings		
9.4	<b>Question:</b> Is the Contractor responsible for bonding the UV Equipment. <b>Answer:</b> The UV Equipment is Owner Supplied so the Contractor is not responsible for carrying the cost of the UV equipment Supplier in their bonding.		

## Sign-in Sheet

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Name	Organization	Contact No.	Email
Kim David	Centre Infrastructure		
Neil Parsons.	ARCIS ENTERPRISES.		
BRAD CHAPMAN	CHARMAN MEECH LTD		
JEFF DALE	" "		
JEFF CHAPMAN	CAVENDISH CONSTRUCTION		
Aidan Docherty	Maple Reinders		
Mason Van Alst	Maple Reinders		
Sandy Edwards	RPN O		
Scott Wilson	HOWE ELECTRIC		