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**TOWN OF EASTEND  
WTP, RAW WATER RESERVOIR & INTAKE UPGRADES**

BCL File #103.02-7B  
October 9, 2020

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**General Progress to Date**

In September, project progress included:

- Completed the top slab, pony wall, curb, and equipment pad concrete pours.
- Completed the hydrostatic leakage test on both reservoir chambers.
- Completed the framing and exterior sheathing of the exterior walls.
- Roof truss construction was underway at the time of inspection.
- Completed the remaining reservoir and river intake structural work (top slabs).
- Completed the reservoir intake structure except for the grating yet to be installed.
- Completed the air scour line to both structures (as per Change Order).
- Continued to complete the earthwork for the raw water reservoir. Excavation quantities were not included on this progress payment but will be surveyed and processed next month.

During the next work period (month), construction is expected to include final closeup of the building envelope and backfilling of the reservoirs. Earthwork for the earthen reservoir will continue leading up to installation of the liner material before winter.

**Progress Certificate**

Progress No. 5 is certified and represents work completed to September 30, 2020. Westridge Construction Ltd. is eligible for payment in the amount of \$344,574.98.

Westridge provided their required WCB clearance and Statutory Declaration paperwork along with their invoice.

Payment in the amount of \$34,491.99 should also be made to the holdback trust account, as required by the Builder's Lien Act. Total holdback to date should be \$234,231.72 plus taxes.

**Construction Schedule**

An updated construction schedule was provided by Westridge on August 5, 2020. Based on the submission, Westridge appears to still be on schedule.

**Testing**

Since the last report, concrete tests were completed on the top slab and pony walls of the reservoir. All concrete testing received to date meets or exceeds the specifications. An updated summary is appended.

### Shop Drawings

Westridge has provided 48 shop drawing submittals to date and all have been reviewed and returned.

Shop drawings that have been reviewed since the last project engineer's report are:

Transmittal	Description	Status
49	HDPE Liner	Reviewed & Returned
50	Spray Foam Insulation	Reviewed & Returned
51	Overhead Door	Reviewed & Returned

### Photos



Exterior framing and sheathing is completed; truss construction at right.



Exterior walls and door, window and louvre openings framed in.



Grating frame, curbs, pump sleeves and access hatches.



Dry pit access frames.



Generator set and air compressor equipment pads.



Reservoir intake pumphouse with top slab incl. access hatches, gooseneck vent.



River intake pumphouse.



Reservoir intake structure (grating yet to install) with air scour / hot water line.



Earth moving from bottom of pond to build up berms.

Prepared by: Matthew Feige, P.Eng.

Cylinder Number	Date Cast	Date Taken	Third Party Tester	Location	Measured Slump	Measured Air	Compressive Strength (MPa)			Required Strength (MPa)	Additional Comments		
							7 Day	28 Day	56 Day				
50743	2020-06-19	2020-06-26	Clifton	Base Slab - Pits	90 mm	1.6%	30.9			35	88.3% of design at 7 days - Good.		
50744	2020-06-19	2020-07-17							42.4				Passed. Very high.
50745	2020-06-19	2020-07-17							46.7				Passed. Very high.
50746	2020-06-19	2020-08-14											
50747	2020-06-19	2020-06-26	Clifton	Base Slab - SW Corner	90 mm	1.6%	32.2			35	92% of design at 7 days - High, but good.		
50748	2020-06-19	2020-07-17							45.6				Passed. Very high.
50749	2020-06-19	2020-07-17							43.1				Passed. Very high.
50750	2020-06-19	2020-08-14											
50751	2020-06-19	2020-06-26	Clifton	Base Slab - West Side Corner	100 mm	1.4%	28.8			35	82.3% of design at 7 days - Good.		
50752	2020-06-19	2020-07-17							40.2				Passed. Somewhat high.
50753	2020-06-19	2020-07-17							42.2				Passed. Somewhat high.
50754	2020-06-19	2020-08-14											
50755	2020-06-19	2020-06-26	Clifton	Base Slab - NW Corner	60 mm (before Super P was added)	1.8%	30.2			35	86.3% of design at 7 days - Good.		
50756	2020-06-19	2020-07-17							41.0				Passed. Somewhat high.
50757	2020-06-19	2020-07-17							45.1				Passed. Very high.
50758	2020-06-19	2020-08-14											
50759	2020-06-19	2020-06-26	Clifton	Base Slab - South Centre	75 mm (before Super P was added)	1.7%	32.1			35	91.7% of design at 7 days - High, but good.		
50760	2020-06-19	2020-07-17							44.6				Passed. Very high.
50761	2020-06-19	2020-07-17							42.9				Passed. Somewhat high.
50762	2020-06-19	2020-08-14											
51207	2020-07-13	2020-07-20	Clifton	North Four (4) Columns	75 mm (before Super P was added)	1.7%	25.7			35	73.4% of design at 7 days - Good.		
51208	2020-07-13	2020-08-10											
51209	2020-07-13	2020-08-01											
51191	2020-07-14	2020-07-21	Clifton	Walls - North and Northeast Corner	80 mm	6.0%	26.7			35	76.3% of design at 7 days - Good.		
51192	2020-07-14	2020-08-11							35.9				Passed. Good strength.
51193	2020-07-14	2020-08-11										41.2	Passed. Good strength.
51194	2020-07-14	2020-09-08										40.1	Passed. Good strength.
51195	2020-07-14	2020-07-21	Clifton	Walls - South and Southwest Corner	50 mm (before Super P was added)	5.5%	25.7			35	73.4% of design at 7 days - Good.		
51196	2020-07-14	2020-08-11							38.4				Passed. Good strength.
51197	2020-07-14	2020-08-11										40.7	Passed. Good strength.
51198	2020-07-14	2020-09-08										41.6	Passed. Good strength.
51199	2020-07-14	2020-07-21	Clifton	Walls - East	70 mm	5.2%	21.3			35	60.9% of design at 7 days - Bit low, will monitor.		
51200	2020-07-14	2020-08-11							32.3				92.3%. Passed the +/- 3.5MPa criteria.
51201	2020-07-14	2020-08-11										35.1	Passed at 56 days - good.
51202	2020-07-14	2020-09-08										35.2	Passed at 56 days - good.
51203	2020-07-14	2020-07-21	Clifton	Walls - South and Southwest Corner	90 mm	1.8%	20.2			35	57.7% of design at 7 days - Low, will monitor..		
51204	2020-07-14	2020-08-11							29.1				83.1%. Monitor at 56 day breaks.
51205	2020-07-14	2020-08-11										31.7	90.6%. Passed the spec criteria.
51206	2020-07-14	2020-09-08											Hold until 112 days (Nov. 3)
51325	2020-07-14	2020-07-21	Clifton	Columns	Not tested	Not tested.	14.6			35	Suspected too high of air content led to low strength. Contractor indicated that they were going to remove these columns and re-pour.		
51326	2020-07-14	2020-08-11										18.1	
51327	2020-07-14	2020-08-11										17.7	
51360	2020-07-14	2020-07-21	Clifton	Columns	Not tested	Not tested.	31.3			35	89.4% of design at 7 days - High, but good.		
51361	2020-07-14	2020-08-11											
51362	2020-07-14	2020-08-11											
51521	2020-07-27	2020-08-04	Clifton	Columns	Not tested	Not tested.	32.4			35	92.6% of design at 7 days - High, will monitor.		
51522	2020-07-27	2020-08-25											
51523	2020-07-27	2020-08-25											

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51360	2020-07-27	2020-08-05	Clifton	Columns	Not tested	Not tested.	31.5			35	90% of design at 7 days - High, but good.	
51361	2020-07-27	2020-08-25										
51362	2020-07-27	2020-08-25										
51725	2020-08-06	2020-08-17	Clifton	Columns - Replacement of 51325-51327 pour.	Not tested	Not tested.	30.0			35	85.7% of design at 7 days - Very good.	
51726	2020-08-06	2020-09-03							38.8			Passed. Good strength.
51727	2020-08-06	2020-09-03							39.2			Passed. Good strength.
52408	2020-09-08	2020-09-15	Clifton	Top Slab - Southwest Corner	90 mm	2.0%	30.2			35	86.3% of design at 7 days - Very good.	
52409	2020-09-08	2020-10-06							43.3			Passed. Good strength.
52410	2020-09-08	2020-10-06							42.7			Passed. Good strength.
52411	2020-09-08	2020-11-03										
52412	2020-09-08	2020-09-15	Clifton	Top Slab - Centre of North Portion	90 mm	2.0%	31.6			35	90.3% of design at 7 days - Good.	
52413	2020-09-08	2020-10-06							44.8			Passed. Good strength.
52414	2020-09-08	2020-10-06							43.3			Passed. Good strength.
52415	2020-09-08	2020-11-03										
52416	2020-09-08	2020-09-15	Clifton	Top Slab - Centre of Slab	70 mm	2.0%	32.6			35	93.1% of design at 7 days - High, but good.	
52417	2020-09-08	2020-10-06							46.7			Passed. Good strength.
52418	2020-09-08	2020-10-06							46.1			Passed. Good strength.
52419	2020-09-08	2020-11-03										
52420	2020-09-08	2020-09-15	Clifton	Top Slab - In Front of Loading Dock	110 mm	1.5%	30.8			35	88% of design at 7 days - Good.	
52421	2020-09-08	2020-10-06							42.7			Passed. Good strength.
52422	2020-09-08	2020-10-06							41.6			Passed. Good strength.
52423	2020-09-08	2020-11-03										
52645	2020-09-14	2020-09-26	Clifton	Pony Walls	90 mm	6.0%	29.2			35	83.4% of design at 7 days - Good.	
51361	2020-09-14	2020-10-12										
51362	2020-09-14	2020-10-12										