





PORT COQUITLAM COMMUNITY CENTRE

Owner's Representative Progress Report #32

November 2019



TABLE OF CONTENTS

| ITEM | | Page No. |
|------|---|----------|
| 1.0 | INTRODUCTION | 1 |
| 2.0 | EXECUTIVE SUMMARY | 1 |
| 3.0 | PROJECT SCOPE | 1 |
| 4.0 | PROJECT TEAM | 2 |
| 5.0 | DESIGN AND APPROVALS STATUS | 3 |
| 6.0 | PROCUREMENT & CONTRACT ADMINISTRATION | 5 |
| 7.0 | PROJECT BUDGET | 7 |
| 8.0 | PROJECT SCHEDULE | 9 |
| 9.0 | QUALITY ASSURANCE AND QUALITY CONTROL | 10 |
| 10.0 | SAFETY AND ENVIRONMENTAL | 11 |
| 11.0 | AREAS OF CONCERN AND OUTSTANDING ISSUES | 11 |

APPENDICES

- Appendix 1 Port Coquitlam Community Recreation Centre Complex Owner's Schedule: December 16th 2019 Update
- Appendix 2 Progress Photographs: November 30, 2019
- Appendix 3 Site Inspection Reports: November 2019
- Appendix 4 Certificate of Payment No.35: December 10, 2019
- Appendix 5 Project Dashboard: November 30, 2019
- Appendix 6 Architecture 49 Letter of Construction Conformance December 6, 2019
- Appendix 7 Architecture 49 Site Report #59 November 22, 2019
- Appendix 8 Owners Meeting Minutes #22
- Appendix 9 Mechanical and Geotechnical Field Reports November 2019



1.0 INTRODUCTION

Tango Management ("Tango") has been engaged by the City of Port Coquitlam ("Owner") to provide Owner's Representative Services for the design and construction of a new Community Centre in Port Coquitlam, BC ("Project").

Tango is pleased to submit its Monthly Progress Report #32 to the Owner. This report represents a summary of key project activities and issues that occurred up to November 30, 2019.

This report is for the sole and confidential use and reliance of the Owner. Tango, its directors, staff, sub-consultants or agents do not make any representation or warranty as to the factual accuracy of the information provided to us on behalf of the Owner, their Contractors, their sub-contractors or agents, upon which this report is based. This report shall not be reproduced or distributed to any party other than the recipients outlined above, without the express permission of Tango. Any use of this report which a third party makes, or any reliance on or decisions made based on it, are the responsibility of such third parties. Tango accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

Any advice, opinions or recommendations within this report should be read and relied upon only in the context of this report as a whole. The contents of this report do not provide legal, insurance or tax advice or opinion.

2.0 EXECUTIVE SUMMARY

During November 2019 numerous meetings, co-ordination, procurement, design and construction activities have taken place. Phase 1C pool construction is ongoing. Abatement and demolition of the library and existing arenas is complete. Based on the information contained in this Monthly Progress Report #32 and during this reporting period, Tango believes the Project can be completed by the Substantial Performance Date of October 31, 2021 for the Project Budget of \$132,100,000, provided the current critical path milestone dates can be achieved as per schedule.

3.0 PROJECT SCOPE

The project scope involves a phased replacement and addition to the Port Coquitlam Recreation Complex, Wilson Centre and Terry Fox Library. This scope will provide a vibrant community hub with three sheets of ice, an indoor leisure pool, new fitness facilities, a new library, a spacious outdoor plaza, and underground parking. The size of the new facility with be 205,000 SQF.



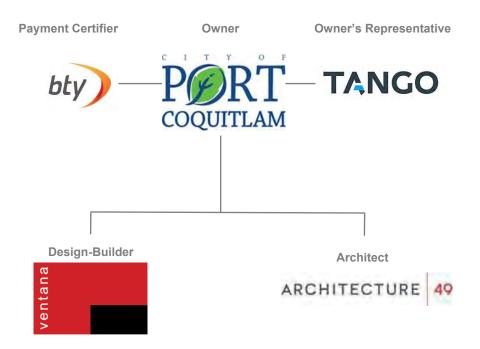


4.0 PROJECT TEAM

The following team members have been appointed to the Project:

| Owner | City of Port Coquitlam |
|------------------------|----------------------------------|
| Owner's Representative | Tango Management |
| Design-Builder | Ventana Construction (POCO) Corp |
| Architect | Architecture 49 |
| Civil Engineer | Hub Engineering |
| Structural Engineer | BMZ |
| Mechanical Engineer | WSP Canada |
| Electrical Engineer | Smith & Anderson |
| Payment Certifier | BTY Group |

City of Port Coquitlam Community Recreation Complex Project Team





5.0 DESIGN AND APPROVALS STATUS

Conceptual Design

Conceptual design is complete. Please refer to our Pre-Construction Due Diligence Report (v1.2), dated October 24, 2016 for comments on the Conceptual Design.

Schematic Design

Schematic design is complete. Please refer to our Pre-Construction Due Diligence Report (v1.2), dated October 24, 2016 for comments on the Schematic Design.

Design Development & Working Drawings and Construction Documents

The Design-Builder is developing design packages in phases. These include design packages for Building Permits, Tendering and Issued for Construction.

Below is an updated summary of the key design milestone submissions, as per the revised project schedule - updated December 16, 2019:

| Drawing Package | Planned Date | Actual Date | Status | Comments |
|------------------------------|--------------|-------------|----------|----------------------|
| Ground Works / Piling | (1ABC) | | | |
| BP Submission | 24-Feb-17 | 13-Apr-17 | Complete | Construction Ongoing |
| IFT Drawings | 24-Feb-17 | 6-Apr-17 | Complete | Construction Ongoing |
| IFC Drawings | 10-Apr-17 | 18-Aug-17 | Complete | Construction Ongoing |
| Phase 1ABC - Structure | e | | | |
| IFT Drawings (F/R/C) | 31-Aug-17 | 6-Oct-17 | Complete | Construction Ongoing |
| IFC Drawings (F/R/C) | 26-Oct-17 | 12-Dec-17 | Complete | Construction Ongoing |
| IFT Drawings (S/Steel) | 19-Oct-17 | 19-Dec-17 | Complete | Construction Ongoing |
| IFC Drawings (S/Steel) | 30-Nov-17 | 10-Jan-18 | Complete | Construction Ongoing |
| Phase 1ABC Balance of | f Design | | | |
| BP Submission | 14-Jul-17 | 28-Sep-17 | Complete | Construction Ongoing |
| IFT Drawings | 5-Oct-17 | 3-Oct-17 | Complete | Construction Ongoing |
| IFC Drawings | 16-Nov-17 | 31-Jan-18 | Complete | Construction Ongoing |
| Phase 2ABC - Design | | | | |
| BP Submission | 19-Jan-18 | 1-Jul-19 | Complete | Construction Ongoing |
| IFT Drawings | 18-Mar-18 | 23-Sep-19 | Complete | Construction Ongoing |
| IFC Drawings | 12-Jul-18 | 19-Sep-19 | Complete | Construction Ongoing |



5.0 Design and Approval Status (continued)

Permits / Regulatory Approvals

The following Building Permits have been issued for the construction works:

| Regulatory Approval | Planned Date | Award Date | Status | Comments |
|-------------------------|--------------|-------------------|---------|----------|
| Conservation Permit | 1-Mar-17 | | Awarded | |
| Phase 1ABC Ground Works | 24-Feb-17 | 19-Apr-17 | Awarded | BP011873 |
| Phase 1ABC Full BP | 28-Sep-17 | 11-Oct-17 | Awarded | BP011897 |
| Phase 2ABC Full BP | 18-Mar-18 | 11-Oct-17 | Awarded | BP011897 |

A Development Permit was issued on August 18, 2017.

An Environmental Conservation Development Permit was scheduled to be issued to the Design-Builder on March 1, 2017. We understand this has now been issued.

A Building Permit (BP011822) was issued to the Design-Builder on October 17, 2017. This Building Permit covers all phases of the Project. The Design-Builder will continue to submit design submissions in phases to the Owner, as per the design schedule.

The following permits were issued to the Owner during the Occupancy process for Phase 1AB:

- Health Permit: Concessions and Lounge Food Services;
- · Refrigeration Plant Permit;
- · Electrical Permit; and
- Elevator Permits.

An Interim Occupancy Permit was issued by the City's Building Department on August 19, 2019 for the first phase of the Project.

An Interim Occupancy Permit was issued by the City's Building Department on October 16, 2019 for Phase 1C (excluding the Aquatic Centre).

The Design-Builder has applied for an abatement and demolition permit for Phase 2. We understand that this has been issued.



6.0 PROCUREMENT & CONTRACT ADMINISTRATION

Procurement Summary

We understand that procurement and tendering is ongoing. The Design-Builder has confirmed that we will not be receiving a detailed procurement schedule, as part of their monthly reporting. The Design-Builder has included a summary of the trades awarded to date in their monthly progress report, dated December 16, 2019:

Bulk and detailed excavation Phases 1ABC; Glazing; Piling Phases 1ABC; Roofing;

Mechanical and Electrical; Metal Decking;

Refrigeration; Pump / Place / Finish;

Formwork Phases 1AB; Structural Steel; Reinforcement Phases 1ABC; Soil Anchors;

Cladding; Insulated Metal Panels;

Steel Stud; Paint;
Doors & Hardware; Flooring;

Tile; Dasher Boards; Rink Slabs: Overhead Doors:

Public Address; Washroom Accessories, Partitions,

& Lockers.;

Millwork; Fireplace;

Concrete Polishing; Pool Specialities;

Countertops; Sports Flooring & Equipment;
Asphalt; Ph2 – Bulk Ex and Excavation;
Ph2 Formwork; Ph2 – Concrete Reinforcing; and

Ph2 Structural Steel.

Furniture, Fixtures and Equipment (FF&E) Procurement

A Master Procurement Schedule has been developed that identifies all items with vendors, lead-in times, delivery and installation details. We are coordinating with the Design-Builder to ensure all enabling works and infrastructure requirements get incorporated into the design. An FF&E Coordination follow up meeting was held on August 10, 2017, that finalized the draft list. We submitted a revised FF&E list to the Design-Builder on October 18, 2017 for review and coordination. Final feedback was received on October 12, 2018.

Final points of clarification have been worked through and coordinated in-line with the Design-Builder's schedule.



6.0 Procurement & Contract Administration (continued)

We are finalizing the procurement of the FFE packages with the Owner. The following packages have been awarded:

- AV Systems PJS Systems Inc.
- Video Wall System Sapphire Sound Inc.
- Library Shelving & Furniture Jonathan Morgan and Company Ltd.
- Furniture Staples Business Advantage.
- Fitness Equipment Life Fitness, Fitness Town Commercial & Johnson Health Tech. Canada.

FFE installation has commenced and is ongoing in line with the Project Schedule.

Project Coordination / Meeting

The Owner's Meeting #22 was held on December 19, 2019.

Please refer to Appendix 8 of this Monthly Progress Report for a copy of the Owner's Meeting Minutes #22.

Owner Request for Information (RFI)

- Number of RFI's issued 162
- Number of RFI's Closed 150
- Number of RFI's Open 11



7.0 PROJECT BUDGET

Project Budget Summary

The Project Budget is summarized below:

| A Design and Construction | Dollar Value |
|---|---------------|
| 1 Design-Builder Pre Contract Costs | \$983,000 |
| 2 Design-Builder Contract Price | \$116,717,000 |
| 3 Approved Changes | \$8,831,864 |
| 4 Current (Revised) Contract Price | \$125,548,864 |
| 5 Work Certified as Completed (Base Contract) | \$83,468,085 |
| 6 Current Cost to Complete (Base Contract) | \$42,080,779 |
| 7 Lien Holdback (Base Contract) | \$7,846,809 |
| 8 Lien Holdback Released | -\$5,179,895 |
| B Non-Contract Costs | \$8,989,031 |
| C Total Project Budget | \$135,520,895 |
| 9 Capital Utility Budget | \$3,420,895 |
| C Total Project Budget (Revised) | \$132,100,000 |

The Design and Construction Budget was prepared by the Design-Builder and forms part of their CCDC14 Design - Build Stipulated Price Contract (2013).

Payment Certification

BTY Group, the Payment Certifier has issued Certificate of Payment No. 35 dated December 10, 2019, which certifies the current payment due to the Design-Builder, under the terms of the Design-Build Contract ("DBC") for the period ending November 30, 2019.

In summary, the current payment liabilities of the Owner are:

| Item | Dollar Value |
|---|--------------|
| Current Net | \$957,361 |
| Current GST (5.0%) | \$47,868 |
| Total Current Payable to the Design-Builder | \$1,005,229 |
| Total Current Builders Lien Holdback | \$2,666,914 |

Please refer to Appendix 4 of this report for a copy of Certificate of Payment No. 35.



7.0 Project Budget (continued)

Change Order Management

A summary of the approved Change Orders relative to the Project Budget between the Owner and the Design-Builder up to November 30, 2019 is as follows:

| CO# | Description | Dollar Value | Contingency Allocation |
|-----|---|--------------|------------------------------------|
| 1 | Bonding Requirements | \$1,800,000 | Project Contingency |
| 2 | Temporary Power to Site | \$34,751 | Project Contingency |
| 3 | Floor Area Changes | \$1,003,236 | Project Contingency |
| 5 | Additional Back-Up Power | \$90,713 | Project Contingency |
| 7 | Card Readers and Key Pads | \$16,698 | Project Contingency |
| 8 | Library User Group Changes | \$86,287 | Project Contingency |
| 9 | Accessible Washroom Emergency Alert | \$28,204 | Project Contingency |
| 10 | Auto Door Openers | \$55,440 | Project Contingency |
| 11 | Daycare - Card Readers & Alarms | \$9,834 | Project Contingency |
| 12 | Additional CCTV | \$24,024 | Project Contingency |
| 14 | Added Door Security | \$88,364 | Project Contingency |
| 17 | Terry Fox Display Cases | \$4,950 | Project Contingency |
| 20 | Exterior Building Signage | \$57,618 | Project Contingency |
| 21 | Phase 1 Millwork Re-Design Services | \$7,975 | Project Contingency |
| 24 | RCMP Panic Buttons | \$8,375 | Project Contingency |
| 25 | Splash Park Recirc Design | \$13,640 | Project Contingency |
| 32 | Temporary Referee Change Rooms | \$15,525 | Project Contingency |
| | SUB-TOTAL | \$3,345,634 | |
| 15 | Scoreboard Credit | -\$42,760 | FF&E |
| | SUB-TOTAL | -\$42,760 | |
| 4 | Off Site Design Services | \$269,998 | Off Sites / Capital Utility Budget |
| 6 | Additional Off Site Design Services | \$55,875 | Off Sites / Capital Utility Budget |
| 13 | Offsite Scope of Work (Phase 1A) | \$1,698,500 | Off Sites / Capital Utility Budget |
| 16 | Offsite Isolation Valves | \$37,711 | Off Sites / Capital Utility Budget |
| 18 | Offsite Scope of Work (Phase 1B) | \$2,900,900 | Off Sites / Capital Utility Budget |
| 19 | Hydro conduit relation at Kingsway | \$110,674 | Off Sites / Capital Utility Budget |
| 22 | Offsite Storm Change @ Kingsway and Kelly | \$49,500 | Off Sites / Capital Utility Budget |
| 23 | Bonding and Insurance Scope for Offiste Awarded | \$161,936 | Off Sites / Capital Utility Budget |
| 26 | Offsite Telus and Shaw Redline IFCs | \$53,162 | Off Sites / Capital Utility Budget |
| 27 | Manhole Extension | \$73,801 | Off Sites / Capital Utility Budget |
| 28 | Kelly Sanitary | \$26,985 | Off Sites / Capital Utility Budget |
| 29 | Kingsway Sanitary Conflict | \$60,745 | Off Sites / Capital Utility Budget |
| 30 | Watermain Kelly and Mary Hill | \$17,954 | Off Sites / Capital Utility Budget |
| 31 | Kelly Watermain extension | \$11,249 | Off Sites / Capital Utility Budget |
| | CUD TOTAL | \$5,528,990 | |
| | SUB-TOTAL | \$5,528,990 | |



7.0 Project Budget (continued)

Project Contingency

Design and Construction Contingency – The design and construction contingency is being managed by the Design-Builder and forms part of the DBC. Any changes to the Design and Construction Budget will have been a result of an Owner originated Change Order.

Claims Management

There were no formal claims that we are aware of during this reporting period.

8.0 PROJECT SCHEDULE

Construction Progress (November End 2019)

We conducted detailed site inspections on November 5, 12, 19 & 26, 2019. At the time of the inspections the status of work can be summarized as follows:

- Phase 1A: Participant Ice: Minor deficiencies and final staff training is ongoing.
- Phase 1B: Leisure Ice and Library: Minor deficiencies and final staff training is ongoing.
- Phase 1C Aquatic and Fitness Centre, All Age and Admin Areas: Pool tiling, testing and fitout is ongoing. Fitness Centre minor deficiencies and staff training are ongoing.

We received a copy of the Design-Builder's updated schedule – "Port Coquitlam Community Recreation Complex – Owner's Schedule: December 16th 2019 - Update".

The critical path activity runs through the earthworks, foundations and parkade structure, followed by hard and soft landscaping activities, and Phase 2ABC Occupancy.

This schedule forecasts that Rink 1 will be available last summer / early fall 2021; the large multipurpose room, gymnasium and daycare will be available early fall 2021, followed by the parkade and external sports courts in late fall 2021.

The Design-Builder is reporting a one (1) month delay to the start of the piling, caused by geotechnical issues encountered during bulk excavation. They are also reporting that this delay does not impact their Substantial Performance Date and that they absorbed this in their hard landscaping schedule activity.

We will continue to monitor the schedule very closely, focusing on the critical path activities and any associated risks that may impact Substantial Performance.

Please refer to Appendix 2 of this report for progress photographs recording construction activities during November 2019.



8.0 Project Schedule (continued)

Monthly Look Ahead

During December 2019, the following key construction activities are scheduled (based on "Port Coquitlam Community Recreation Complex – Owner's Schedule: December 16th2019 - Update".

Phase 1ABC – Rinks 2&3, Library and Div 9

- o Close out Construction Deficiencies; and
- Complete final staff training;

Phase 1C – Aquatics and Fitness Area

- o Fitness Centre Complete all construction activities and staff training;
- o Aquatics Continue with pool tile;
- o Aquatics Complete pool finishes; and
- Aquatics Commence Commissioning.

Phase 2

- o Complete make-safe and demolition;
- o Continue Phase 2ABC bulk excavation; and
- Commence Phase 2ABC pile driving.

9.0 QUALITY ASSURANCE & QUALITY CONTROL

Construction Inspection & Monitoring

The Design-Builder is implementing a Quality Assurance and Quality Control (QAQC) program through the design and construction of the project. We are working closely with the Design-Builder and provide random audits of that program, review and opine on independent testing, physically review the quality of the construction activities, identify key inspections and tests that are completed, witness critical construction activities and collaborate with the Design-Builder to ensure optimum quality is achieved and maintained at all stages of the project.

We received a copy of Architect 49's Letter of Construction Conformance, dated December 6, 2019. The Lead Consultant has confirmed that the works on site are progressing generally in accordance with the IFC drawings, specifications and building permits issued to date. A copy of the Letter of Assurance is included in Appendix 6 of this report

We did not receive a copy of BMZ's Construction Review during this reporting period from the Design-Builder.

We did not receive a copy of Smith and Anderson's Job Report during this reporting period from the Design-Builder.

We received a copy of WSP's Mechanical and Plumbing Field Report #24, dated November 28, 2019 during this reporting period from the Design-Builder. Actions have been notified to be remedied by the Design-Builder.



9.0 Quality Assurance & Quality Control (continued)

We received copies of Thurber Engineering's Field Review Reports #6&7, dated November 14, 2019 & November 18, 2019. The Geotechnical Engineer has identified deficiencies, which the Design-Builder is correcting in a timely manner.

Please refer to Appendix 8 of this report for copies of the aforementioned mechanical and geotechnical field reports.

We performed multiple site inspections during October 2019 to witness and monitor the progress of the works. Please refer to Appendix 3 of this report for copies of the Site Inspection Reports for this reporting period. Please refer to historic monthly progress reports for commentary on various QAQC inspection and monitoring activities, relative to specific reporting periods.

10.0 SAFETY AND ENVIRONMENTAL

No incidents were reported during this reporting period.

11.0 AREAS OF CONCERN & OUTSTANDING ISSUES

In general, all issues and actions raised within meetings and communications during November 2019 have been addressed or remain ongoing as part of the forthcoming design, procurement and construction phases.

The Design-Builder has re-scheduled the Phase 2 scope of work. The timely completion of the earthworks, foundations and package structure is critical in order for the Substantial Performance date of October 15, 2021 to be achieved.



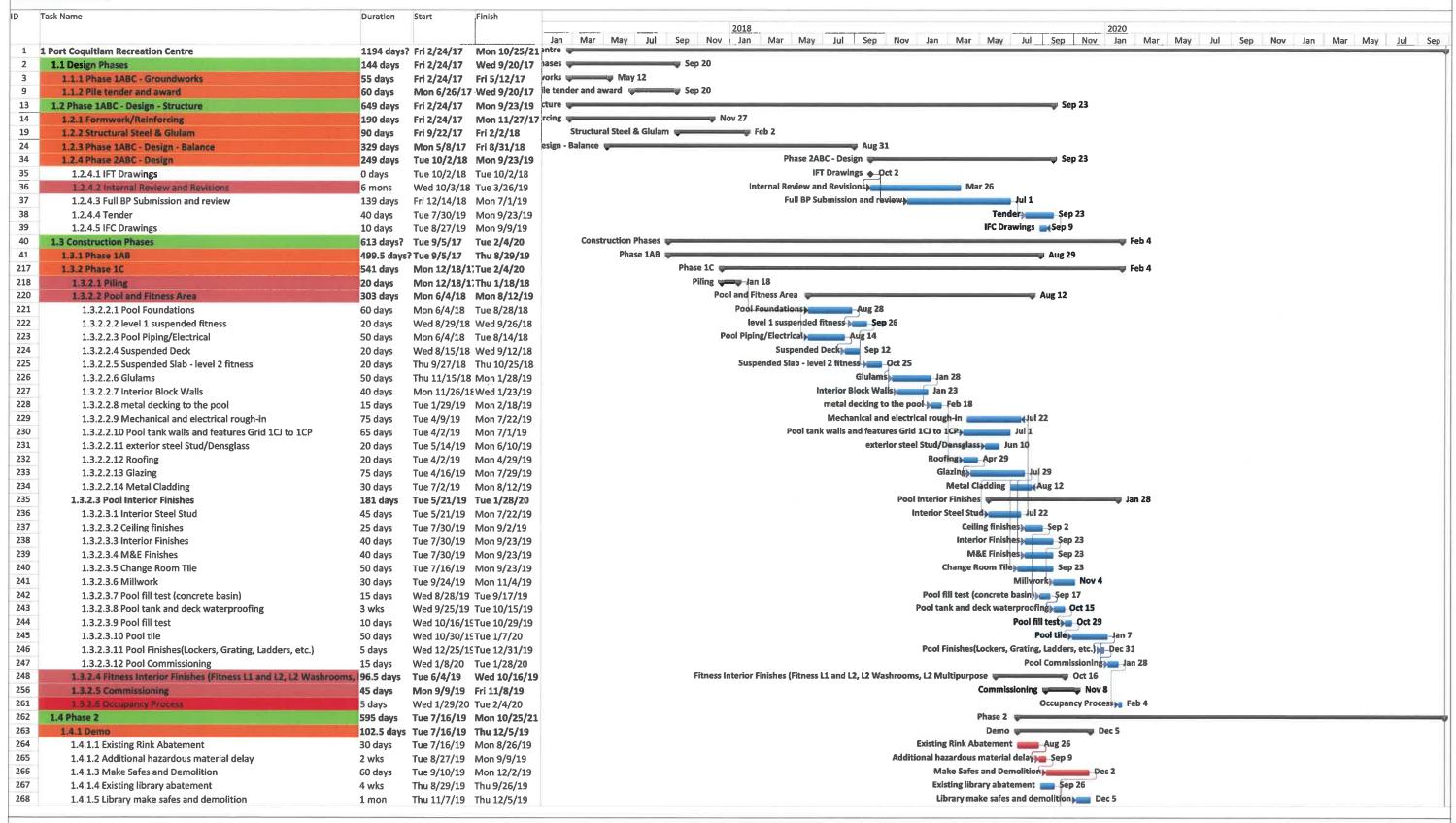
APPENDIX 1

Port Coquitlam Community Recreation Centre Complex – Owner's Schedule: December 16th 2019 - Update

PORT COQUITLAM COMMUNITY RECREATION COMPLEX - OWNER'S SCHEDULE

December 16th 2019 - Update

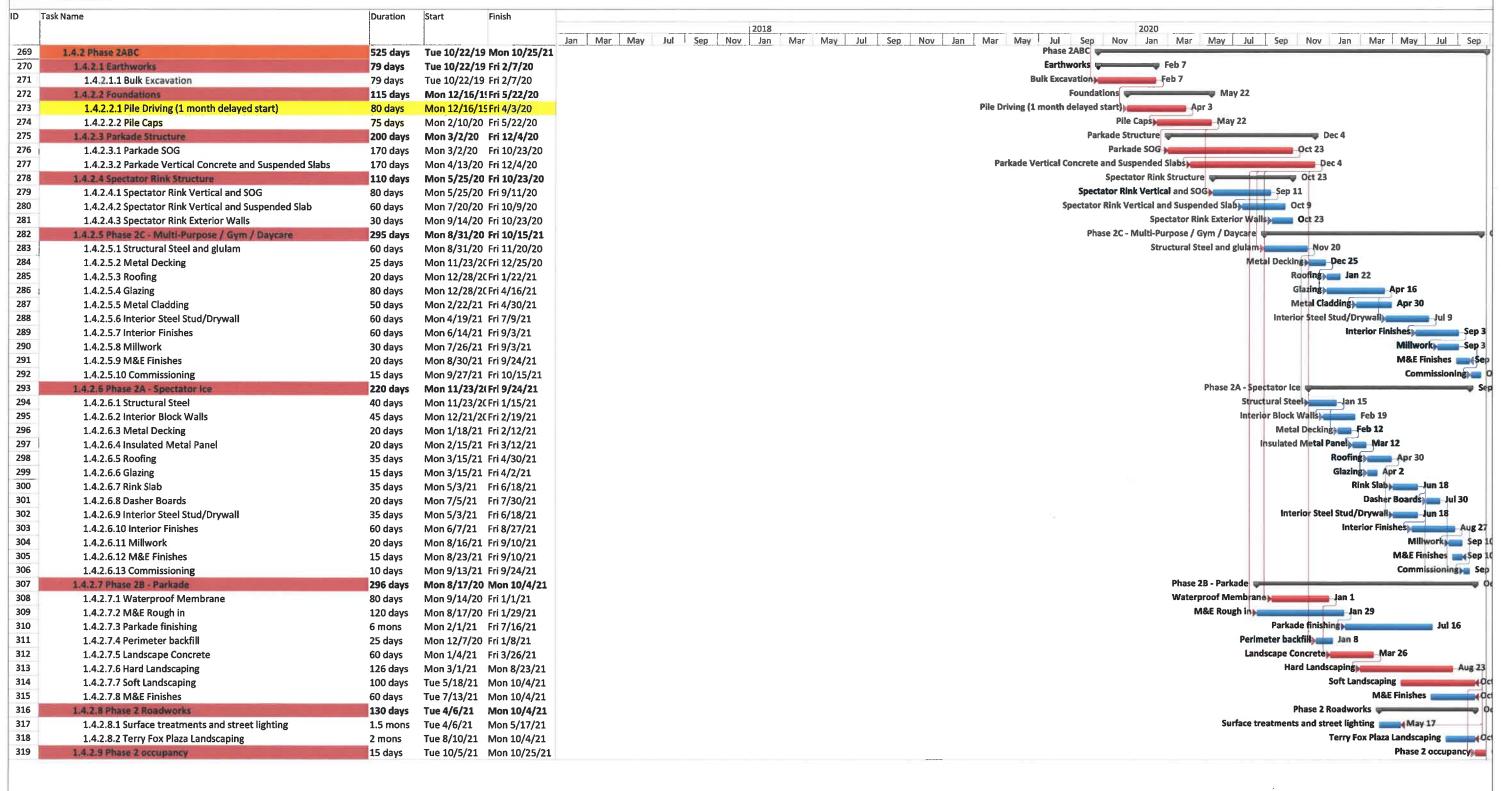
Ventana Construction Corporation 3875 Henning Dr. || Burnaby, BC || V5C 6N5 Office 604.291,9000 Fax 604.291,9992 Web VentanaConstruction.com



ventana

PORT COQUITLAM COMMUNITY RECREATION COMPLEX - OWNER'S SCHEDULE December 16th 2019 - Update

Ventana Construction Corporation 3875 Henning Dr. || Burnaby, BC || V5C 6N5 Office 604.291,9000 Fax 604.291,9992 Web VentanaConstruction.com

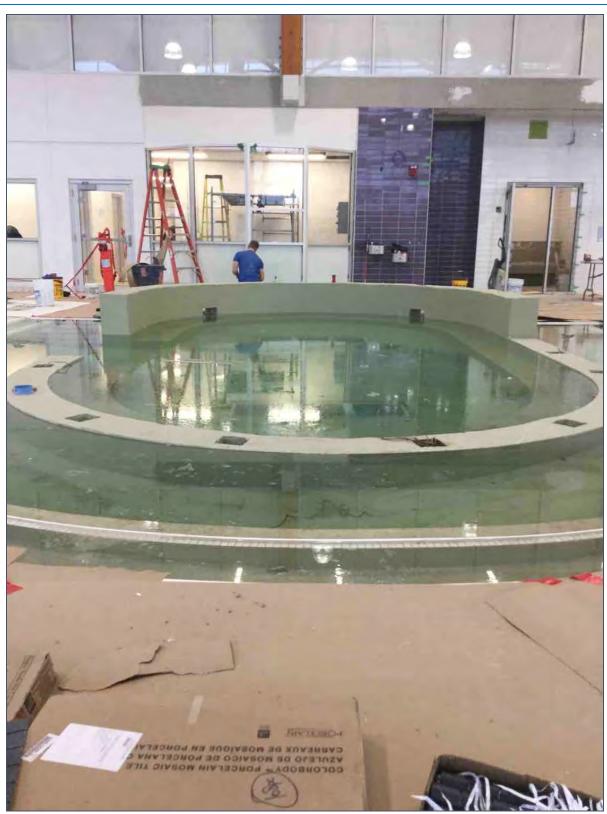




APPENDIX 2

Progress Photographs – November 2019





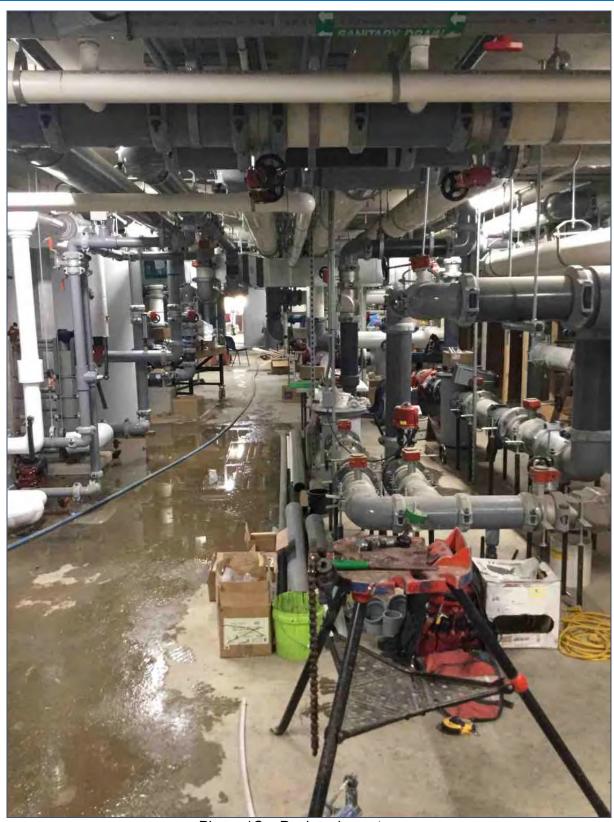
Phase 1C - Hot tub water testing





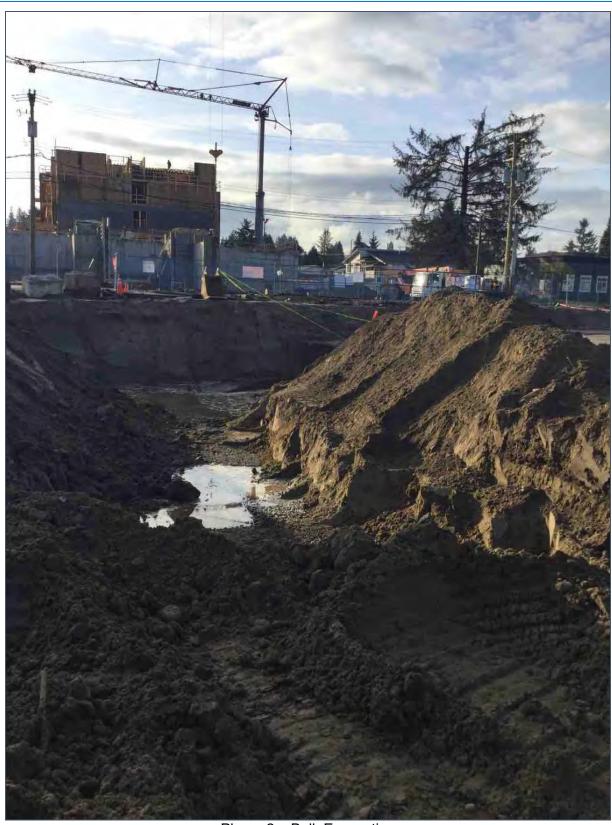
Phase 1C – Dryer install in universal changeroom





Phase 1C – Pool equipment room





Phase 2 – Bulk Excavation





Phase 2 – Bulk excavation



APPENDIX 3

Site Inspection Reports: November 2019

Project: PCCC

Reporting Date: 2019-11-05
Prepared By: Alun Lewis



TANGO

| | | | | Trade Contractor' | s | | |
|-----------------|---|-------------------|---|------------------------|----|-------------------|----|
| Superintendents | 1 | Demolition | 6 | Waterproofing | | Painting | |
| Engineers | | Site Work | 8 | Scaffolding | | Misc. Specialties | 1 |
| Office Staff | | Landscaping | | Spray Insul/Fire Proof | | Cleaners | |
| CSO / First Aid | | Paving | | Caulking/Firestopping | | Plumbing | 6 |
| Carpenters | | Concrete Formwork | 1 | Roofing | | Mechanical | |
| Labourers | | Rink prep / conc | | Doors & Hardware | | Refrigeration | |
| Operators | | Reinforcing Steel | | Windows/Glazing | 3 | Sprinklers | |
| | | Structural Steel | | Exterior Cladding | | Electrical | 4 |
| | | Metal Decking | | SS/Drywall | | Controls | |
| | | Masonry | | Drywall Taper | | Pool Piping | |
| | | Rough Carpentry | | Resilient Tile | | | |
| | | Finish Carpentry | | Ceramic Tile | 13 | Tango's Subtotal | |
| | | Millwork | | Elevator | | Trade's Subtotal | 42 |
| | | | | | | SITE TOTAL | |

JOB DELAYS OR POSSIBLE DELAYS:

Reporting against VCC Oct 17th schedule

- 239 M&E finishes Swimsuit drier & hand driers to be installed in changerooms
- 240 Changeroom tile Areas of floor tiling to complete in changerooms and rooms to W end
- 241 Millwork Toilet cubicles and HC seats to be installed to changerooms
- 243 Pool & deck waterproofing Thickset being placed to decks ahead of waterproofing
- 254 & 255 Multipurpose soft move in & jandover Number of deficiencies outstanding by Ventana
- 269 Library demo Ahead of schedule

No tiling allowance for steam room & sauna

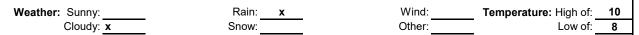
QAQC

As previously noted and discussed with Ventana

| | GENERAL COMMENTS: (Job progress-schedule items started, not started etc.) | | | | |
|----------------|--|--|--|--|--|
| | | Comments | | | |
| Demolition | 6 | 2AB - Demo of green arena and offices area | | | |
| Site work | 8 | 2AB - Excavation to prepare for piling. Over excavation and install pile for water pumping to SW | | | |
| | | corner of project. Over excavation to solid ground (VCC stated Geotech engineer had requested) | | | |
| Glazing | 3 | 1C - Install frames to S elevation of pool | | | |
| Ceramic tiling | 13 | 1C - Prep for gutter install around hot tub. Thick set to pool deck and aroudn hot tub. Tiling infills | | | |
| | | around pool deck. Tiling and grouting to pool | | | |
| Plumbing | 5 | 1C - Pool piping to pool equipment room. Connect deck drains under pool deck | | | |
| | 1 | 1C - Insulation to pipes in unversal changeroom | | | |
| Electrical | 4 | 1C - Install hand driers to changerooms. Wiring to pool equipment room | | | |
| Concrete | 1 | 1C - Sacking to head of CMU opening at washer / dryer location | | | |
| Specialties | 1 | 1C - Install HC drop seats to universal changerooms | | | |

Project: PCCC

Reporting Date: 2019-11-12
Prepared By: Alun Lewis



TANGO

| | | | | Trade Contractor's | s | | |
|-----------------|---|-------------------|----|------------------------|----|-------------------|----|
| Superintendents | 1 | Demolition | 7 | Waterproofing | | Painting | 1 |
| Engineers | | Site Work | 10 | Scaffolding | | Misc. Specialties | 1 |
| Office Staff | | Landscaping | | Spray Insul/Fire Proof | | Cleaners | |
| CSO / First Aid | | Paving | | Caulking/Firestopping | | Plumbing | 4 |
| Carpenters | | Concrete Formwork | | Roofing | | Mechanical | |
| Labourers | | Rink prep / conc | | Doors & Hardware | | Refrigeration | |
| Operators | | Reinforcing Steel | | Windows/Glazing | 3 | Sprinklers | |
| | | Structural Steel | | Exterior Cladding | | Electrical | 4 |
| | | Metal Decking | | SS/Drywall | | Controls | |
| | | Masonry | | Drywall Taper | | Pool Piping | |
| | | Rough Carpentry | | Resilient Tile | | | |
| | | Finish Carpentry | | Ceramic Tile | 13 | Tango's Subtotal | |
| | | Millwork | | Elevator | | Trade's Subtotal | 43 |
| | | | | | | SITE TOTAL | |
| | | | | | | | |

JOB DELAYS OR POSSIBLE DELAYS:

Reporting against VCC Oct 17th schedule

- 239 M&E finishes Swimsuit drier & hand driers to be completed in universal changerooms
- 240 Changeroom tile Areas of floor tiling to complete in changerooms and rooms to W end
- 241 Millwork Toilet cubicles and HC seats to be installed to changerooms
- 243 Pool & deck waterproofing Thickset being placed to decks ahead of waterproofing
- 254 & 255 Multipurpose soft move in & jandover Number of deficiencies outstanding by Ventana
- 269 Library demo Ahead of schedule

No tiling allowance for steam room & sauna

QAQC

As previously noted and discussed with Ventana

Problem with hot tub water test, after hydra-ban. Test held for 36 hours, then dropped 18mm, then held again for 12 hours. Reviewed the area with Matt (VCC) & Jakub (tile setter) and the possible issue may be along the N side of the hot tub. The higher curb was placed later (no water stop or key way was used here) and there are two holes through the wall, to allow water to get to the gutter. The bottom of these holds is the leve Iteh watr finally stayed at, after dropping. It appears only the primer has been applied to the wall and not the hydra-ban at the gutter frame. As the wall is radiused, the gutter frame is facetted, there are some gaps behind the frame. Possible the water held for 36 hours and something dissolved / moved from the weight of the water and a hairline crack has appeared in the cold joint of the curb, where the hydra-ban has not been applied. Discussed filling hot tub to first bench and leaving for 24 hours, then upto the underside of the holes through the N curb wall and leaving for 24 hours. If no water loss, then tile setter is going to obtain a caulking that can be used underwater and caulk the rear of the gutter frame. Once complete and dry, the hot tub to be filled to final level and left for 48 hours.

| | GENER/ | AL COMMENTS: (Job progress-schedule items started, not started etc.) |
|----------------|--------|---|
| | | Comments |
| Demolition | 7 | 2AB - Demo of green arena & library slabs |
| Site work | 10 | 2AB - Fill & compact SW corner of site, from the over-excavation area. Bulk excavation to |
| | | parkade grade for piling to commence, through area of blue arena |
| Glazing | 3 | 1C - Install frames to S elevation of pool |
| Ceramic tiling | 13 | 1C - Thickset being applied to pool deck. Deck tiling to SW corner and commence base up walls |
| | | Pool tilin to floors and walls of both lap & leisure tanks. See note above re:QA/QC |
| Painting | 1 | 1C - Paint touch ups to changerooms walls |
| Specialties | 1 | 1C - Install of cubicles and HC seating & grab bars to univsersal changerooms |
| Plumbing | 4 | 1C - Pool piping in pool equipment room |
| Electrical | 4 | 1C - Wiring to electrical panels and controls programming of lighting |

Project: PCCC

Reporting Date: 2019-11-19
Prepared By: Alun Lewis



TANGO

| | Trade Contractor's | | | | | | |
|-----------------|--------------------|-------------------|---|------------------------|----|-------------------|----|
| Superintendents | 1 | Demolition | 5 | Waterproofing | | Painting | |
| Engineers | | Site Work | 9 | Scaffolding | | Misc. Specialties | 5 |
| Office Staff | | Landscaping | | Spray Insul/Fire Proof | 2 | Cleaners | |
| CSO / First Aid | | Paving | | Caulking/Firestopping | | Plumbing | 5 |
| Carpenters | | Concrete Formwork | | Roofing | | Mechanical | |
| Labourers | | Rink prep / conc | | Doors & Hardware | | Refrigeration | |
| Operators | | Reinforcing Steel | | Windows/Glazing | 2 | Sprinklers | |
| | | Structural Steel | | Exterior Cladding | | Electrical | 4 |
| | | Metal Decking | | SS/Drywall | | Controls | 1 |
| | | Masonry | | Drywall Taper | | Pool Piping | |
| | | Rough Carpentry | | Resilient Tile | | | |
| | | Finish Carpentry | | Ceramic Tile | 11 | Tango's Subtotal | |
| | | Millwork | | Elevator | | Trade's Subtotal | 44 |
| | | | | | | SITE TOTAL | |

JOB DELAYS OR POSSIBLE DELAYS:

Reporting against VCC Oct 17th schedule

- 240 Changeroom tile Areas of floor tiling to complete to locker plinths, staff corridor & male & female changerooms onto pool decks
- 241 Millwork Toilet cubicles and HC seats to be installed to changerooms
- 243 Pool & deck waterproofing Hydra ban being placed to pool decks
- 254 & 255 Multipurpose soft move in & handover Number of deficiencies outstanding by Ventana
- 269 Library demo Completed ahead of schedule
- 272 Bulk excavation (2A) Ongoing and additional areas of over-excavation being identified and dealt with
- 273 Piling (2A) Not commenced due to items above. Approx delay expected to be 2 weeks. New start date Dec 02

No tiling allowance for steam room & sauna

QAQC

As previously noted and discussed with Ventana

VCC believe issue with hot tub was a hand rail pocket. Pocket has has more hydra-ban installed and hot tub will be tested again this week

| | GENERA | AL COMMENTS: (Job progress-schedule items started, not started etc.) |
|-------------------|--------|---|
| | | Comments |
| Demolition | 5 | 2ABC - Sorting materials from green arena and office area demo works |
| Site work | 5 | 2ABC - Over excavation around main reception area and area to N of blue arena. Organics and |
| | | poor soile conditions encountered. Geotec Eng on site, reviewing over-ex areas as work |
| | | progresses |
| Piling | 4 | 2ABC - Site prep works (awaiting commencement due to over-ex works) |
| Glazing | 2 | 1C - Install glass to S elevation of pool openings |
| Ceramic tile | 11 | 1C - Tiling to pool (slab & walls). Prep works to pool deck and changeroom floors. Commence |
| | | tiling to steam room walls |
| Lockers | 2 | 1C - Install and adjustment of lockers to universal changeroom |
| Toilet Partitions | 3 | 1C - Install toilet partitions and hardware to universal changeroom |
| Plumbing | 5 | 1C - Pool piping install through sure tanks and in pool equipment room |
| Controls | 1 | 1C - Programming of chemical mixers |
| Electrical | 4 | 1C - Wiring for lighting to pool equipment room & pulling wires to electrical panels in parkade |
| | | electrical room |
| Insulation | | 1C - Spray insulation to underside fo suspended main floor slab in boiler room |

Project: PCCC

Reporting Date: 2019-11-26
Prepared By: Alun Lewis



TANGO

| | | | | Trade Contractor's | | | |
|-----------------|---|-------------------|---|------------------------|---|-------------------|----|
| Superintendents | 1 | Demolition | 5 | Waterproofing | | Painting | |
| Engineers | | Site Work | 7 | Scaffolding | | Misc. Specialties | 1 |
| Office Staff | | Landscaping | | Spray Insul/Fire Proof | | Cleaners | |
| CSO / First Aid | | Paving | | Caulking/Firestopping | | Plumbing | 4 |
| Carpenters | | Concrete Formwork | | Roofing | | Mechanical | |
| Labourers | | Rink prep / conc | | Doors & Hardware | | Refrigeration | |
| Operators | | Reinforcing Steel | 7 | Windows/Glazing | | Sprinklers | |
| | | Structural Steel | | Exterior Cladding | | Electrical | 3 |
| | | Metal Decking | | SS/Drywall | | Controls | 1 |
| | | Masonry | | Drywall Taper | | Pool Piping | |
| | | Rough Carpentry | | Resilient Tile | | | |
| | | Finish Carpentry | | Ceramic Tile | 9 | Tango's Subtotal | |
| | | Millwork | | Elevator | | Trade's Subtotal | 37 |
| | | | | | | SITE TOTAL | |

JOB DELAYS OR POSSIBLE DELAYS:

Reporting against VCC Oct 17th schedule

- 240 Changeroom tile Areas of floor tiling to complete to locker plinths, staff corridor & male & female changerooms onto pool decks
- 241 Millwork Toilet cubicles and HC seats to be installed to changerooms
- 254 & 255 Multipurpose soft move in & handover Number of deficiencies outstanding by Ventana
- 268 Library demo Completed ahead of schedule
- 271 Bulk Ex (2ABC) Over excavation works adding additional time to this item. At present, VCC reporting 2 weeks, although additional areas of over-ex noted on site today
- 273 Pile driving (2ABC) Not commenced & 2 weeks late at this stage

QAQC

As previously noted and discussed with Ventana

VCC stated hot tub is no longer losing water. Survey team are scheduled for this evening to carry out final survey

Occupancy sensor in H/C changeroom in universal changerooms, is palced behind the H/C lift / bench. Need to relocate

Thought needs to be provided into the location of the H/C lift / bench controller, due to issues in other 1C H/C washroom already handed over

Geotech on site during over excavation works

Rope holders (6 locations) have been missed while forming and will be cut into the walls and placed by the tiling contractor

| | GENER | AL COMMENTS: (Job progress-schedule items started, not started etc.) |
|---------------|-------|--|
| | | Comments |
| Demolition | 5 | 2AC - Demo foundations and break slab |
| Excavation | 7 | 2BC - Over excavation to NW corner of 2C and to the S side of 2B. Removal of clean material |
| | | off site |
| Rebar | 7 | 2 - Prefab pile cage rebar |
| Ceramic tile | 9 | 1C - Skimming edge install to lap pool and S side of leisure pool. Place form and thickset to SW |
| | | corner of lazy river / lesiure pool to obtain fall and no standing water. Wall tiling to lazy river. |
| | | Locker plinth tile install to universal changeroom |
| H/C equipment | 1 | 1C - Install H/C lift / bench (see note above in QA/QC) |
| Plumbing | 4 | 1C - Plumb lines into chemical mixers in pool equipment room. Install pool piping in pool |
| | | equipment room |
| Electrical | 3 | 1C - Wiring of electrical panels to parkade electrical room |
| Controls | 1 | 1C - Controls programming |



APPENDIX 4

Certificate of Payment No.35: December 10, 2019

CERTIFICATE OF PAYMENT: No. 35 (Progress Claim 36)



PROJECT:City of Port Coquitlam Community CentreFILE:3 - 9308LOCATION:2150 Wilson Ave, Port Coquitlam, BCINSPECTION DATE:03-Dec-19CERTIFICATE DATE:10-Dec-19

OwnerDesign-BuilderThe City of Port CoquitlamVentana Construction (Poco) Corp.2580 Shaughnessy St3875 Henning Dr.Port Coquitlam, BC V3C 3G3Burnaby, BC V5C 6N5Attention: Ms. Kristen DixonAttention: Mr. Andrew Cameron

| | | | Contract Price | Change orders | Revised Contract Price |
|--|-------------------------|-----------------|-----------------------------|---------------|----------------------------|
| Total Contract Amount | | | \$ 116,717,000 | \$ 8,831,863 | \$ 125,548,863 |
| PAYMENT CALCULATION | Gross Amount to Date | Previous Period | Gross Amount This Period | Holdback | Net Payment This Period |
| Total Work Completed | \$ 83,468,085 | \$ 82,404,351 | \$ 1,063,734 | \$ 106,373 | \$ 957,361 |
| Total Work Completed | \$ 83,468,085 | \$ 82,404,351 | \$ 1,063,734 | \$ 106,373 | \$ 957,361 |
| Add: Holdback Released | \$ 5,179,895 | (5,179,895) | \$ 0 | \$ 0 | \$ 0 |
| Current Net Payable | | | \$ 1,063,734 | \$ 106,373 | \$ 957,361 |
| Plus GST (5.0%) on Net Payable | | | | | \$ 47,868 |
| Total Current Payable Amount | | | | | \$ 1,005,229 |
| Holdback Retained to Date (incl. this Certificate) | | | | | \$ 2,666,913 |
| Total GST Paid to Date (incl. this Certificate) | | | | | \$ 3,790,059 |
| PROJECT COST TO COMPLETE | | | | | \$ 42,080,779 |

This is to Certify that, for the Port Coquitlam Community Centre, a payment of \$1,005,229 (incl. GST) will be due to the Design Builder after the City of Port Coquitlam's Representative has given approval for payment for work completed during the period ending November 30, 2019. As per the Builder's Lien Act, a 10% holdback has been deducted amounting to \$106,373. The total holdback retained to date is \$2,666,913 and the total GST paid to date is \$3,790,059 (not including the pre-payment costs). The Adjusted Project Cost to Complete is \$42,080,779 (Not incl. GST & holdback).

| CERTIFIED BY: | REVIEWED BY: |
|-------------------------|-----------------------------|
| Myn | hal the |
| Per: Neil Murray, MRICS | Per: Rob Wilson, MRICS, PQS |
| Associate Director | Director |

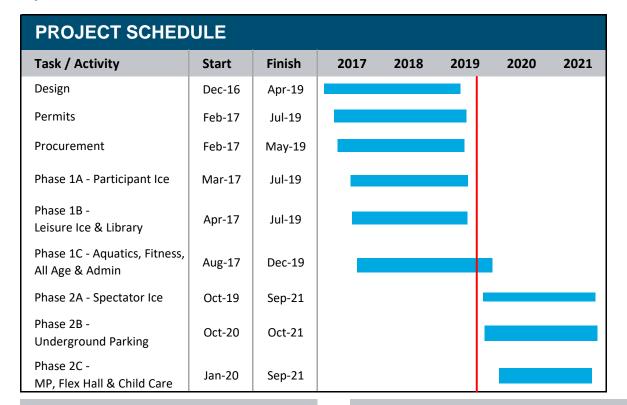


APPENDIX 5

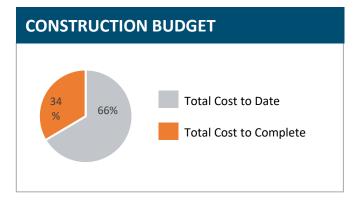
Project Dashboard - November 30, 2019

PROJECT DASH BOARD

Updated: 2019-11-30



PORT TANGO

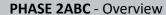






PHASE 1C - Overview









APPENDIX 6

Architecture 49 Letter of Construction Conformance: December 6, 2019



Architecture49 Inc. 270 - 1075 West Georgia Vancouver BC V6E 3C9

т 1.604.736.5329 г 1.604.736.1519

architecture49.com

December 6, 2019

Tango Management Group 2288 Manitoba Street Vancouver, BC V5Y 4B5

Attention: Lewis Reilly, Director

Ireilly@tangomanagment.ca

Reference: Port Coquitlam Community Centre, Port Coquitlam, BC

To Whom It May Concern:

We reviewed the project on site on November 14th 2019, and, via photographs, site visits, consultant site/field observation reports, contractor/sub-contractor inspection reports (if provided) and, ongoing correspondence with the site supervisor to date, to the best of our knowledge, the work is progressing generally in conformance with the project IFC drawings, specifications and building permits issued to date.

Attached are consultant reports for the month of November 2019.

Sincerely,

ARCHITECTURE49 INC.

Stella Muslet

Stella Nicolet, Architect AIBC, AAA, AIA, LEED AP BD+C, CCCA, CCA Managing Principal



APPENDIX 7

Architecture 49 Site Report #59 - November 22, 2019

ARCHITECTURE 49

SITE REPORT

Mention of the items listed below shall constitute written notification to the Contractor that such items must be rectified or carried out as soon as practical to bring them in accordance with the contract drawings, approved shop drawings and/or specifications. Unless specifically noted to the contrary, this work shall be carried out as part of the contract price and at no additional cost to the owner. This shall not be construed as relieving the Contractor of the responsibility of making all work complete, accurate and in conformance with the drawings and specifications. The Contractor is responsible for the safety in and about the job site.

| DATES: | Site Visit: Thursday, 2019-11-14 | Report Issued: 2019-11-22 | |
|---------------------|--|---------------------------|--|
| PROJECT: | PROJECT: Port Coquitlam Community Recreation Complex | | |
| ADDRESS: | 2150 Wilson Ave, Port Coquitlam, BC | | |
| BUILDING PERMIT #: | BUILDING PERMIT #: Permit No.: BP-011897 | | |
| GC CONTACT INFO: | Project Manager: Joseph Lenz - 778-628-3942 Proj Coordinator: Tallon O'Neill - 604-785-0176 Lead Site Superintendent: Jerry Brouwer – 778-255-4001 | | |
| REPORT BY: | Architecture49 – Adam Chambers | # Pages in Report: 48 | |
| REVIEWED BY: | Stella Nicolet | | |
| VISIT REQUESTED BY: | Ventana Construction (POCO) Corporation | | |
| ATTENDEES: | Architecture49 – Adam Chambers, Ruth Morrison Time on Site: 1:45am – 4:30pm | | |
| WEATHER: | Temp: 9°C Mark Applicable: Sunshine X & Cloudy X Rain Snow | | |

DISTRIBUTION:

Ventana Construction (PoCo) Corp, VCC:

Andrew Cameron, <u>acameron@ventanaconstruction.com</u> Joseph Lenz, <u>ilenz@ventanaconstruction.com</u>

Tallon O'Neill, toneill@ventanaconstruction.com

Jerry Brouwer, jbrouwer@ventanaconstruction.com
Jayson Piesche, jpiesche@ventanaconstruction.com

Matt Fraser, mfraser@ventanaconstruction.com

Michael McLeod, mmcleod@ventanaconstruction.com

Tango Management Group, TMG:

Lewis Reilly, <u>Ireilly@tangomanagement.ca</u>

Architecture49 Inc, A49:

Stella Nicolet, stella.nicolet@architecture49.com
Simon Mellor, simon.mellor@architecture49.com
Antonio Rigor, antonio.rigor@architecture49.com
Ruth Morrison, ruth.morrison@architecture49.com

Note: Item # prefix indicates report number.

OBSERVATIONS

| ITEM | DESCRIPTION | ACTION |
|------|--|--------|
| | General Notes/Observations: | |
| | Where no "ACTION" tagged in column to right, general observations are noted. References to <i>north</i>, <i>south</i>, <i>east</i>, <i>west</i> - dictated by the "Drawing Sheet Plan North". Site work appears in general compliance with the construction documents; unless noted otherwise. Health and site safety measures observed to be in place. | |
| | | |

| ITEM | DESCRIPTION | ACTION | | |
|------|---|--------|--|--|
| 59.0 | Items Viewed/Noted: | | | |
| | Continued leak testing in Hot Tub. Pool tile installation and grouting in progress. Pool deck sloping and waterproofing in progress. Demolition of existing community centre underway. Demolition of existing library underway. Bulk excavation for phase 2 of the community centre has started. | | | |
| | The photos per categories noted here below and found on the following pages indicate observations made on site. | | | |
| | Photo Reference: 59.1 BUILDING EXTERIOR 59.2 BUILDING INTERIOR 59.3 ROOF | | | |
| | VCC to provide Third Party Inspection Report as per specification. Previously requested in Site Report 53. 59.4 Miscellaneous Items: | VCC | | |
| | | | | |

SITE REPORT

ISSUES TO RESOLVE:

(Not to circumvent RFI process)

Previous Report Items:

- Deficiency Report July 19, 2019 #6 Shower in 1B115B
- Deficiency Report July 19, 2019 #100 Rink Sprung Corners
- Deficiency Report July 19, 2019 #102 Rink Perimeter Seal
- Deficiency Report July 19, 2019 #160 Power Operable windows in public corridor
- Deficiency Report July 19, 2019 #211 Provide wall protection and corner guards
- Deficiency Report July 19, 2019 #238 Repair paint on mechanical screen support
- Deficiency Report July 19, 2019 #244 Protected exposed membrane from UV
- 53.1.01. #296 Exterior Rebar interference with future landscaping at south entrance.
- 55.1.01. #319 Exterior Fix holes in west facing glulam beam and areas where the glulam has been damaged.
- 55.1.02. #320 Exterior Repair & make good stained west facing glulam beam.
- 55.2.10. #331 Interior Repair Holes and Seams in the foil face membrane of the sauna. Reviewed on Oct 28, additional work needs to take place.
- 55.2.15. #336 Interior Concrete Edge at Level 2 glazing between pool and fitness centre to be repaired. Reviewed on Nov. 14, work is in progress.
- 55.2.19. #343 Interior Phase 1 Skate Lobby Resilient Tile Flooring Repairs.
- 56.2.06. #350 Interior Fire Separation of Parkade Level Vestibule at Stair 3.
 Advised by VCC that this work is in progress.
- 57.1.02. #387 Glulam Column Chipped.
- 57.1.05. #417 Repair and Make Good Glulam Column.
- 57.2.03. #381 Seal around Pipe Penetration.
- 57.2.08. #386 Close Gap at Stair.
- 57.2.09. #389 Glulam Column Abrasion.
- 57.2.10. #418 Staining on Glulam.
 - Confirm that the Owner is okay with current condition.
- 57.2.27. #406 Repair and Make Good Gaps between Guardrail and Concrete Slab.
- 58.2.05 #431 Glass Elevator Pinch Hazard.
 - Clear caulking has been applied to the edge of the stainless steel on the doors. Situation to be reviewed to determine if pinching still persists.
- 58.3.03 #429 Missing Roof Anchors
- 58.3.04 #432 Expansion Joint Cover Staining

This Report Items:

• -

159-00406-02 - POCO REC CENTRE

Site Observation Report

| Report Generated | Nov 20, 2019 at 4:13 PM |
|----------------------------|--|
| by | Adam Chambers |
| Message | Issue Detail |
| Total items in this report | 7 |
| Sorted By | Title (ascending) |
| Filtered on | Status (Open) Subtype (Action Required, Deficiency, Observation) Created (from 2019-11-13 to 2019-11-20) |

Contents

| #435 59.1.01 - Pool Slider Door Sill Waterproofing | 3 |
|---|----|
| #440 59.1.02 - Pool Slider Door Installation | 4 |
| #433 59.2.01 - Pool Depth Marker - Deck Level | 5 |
| #434 59.2.02 - Steam Pipe Penetrations | 6 |
| #436 59.2.03 - Pool Tiling Progress | 7 |
| #437 59.4.01 - Phase 2 Excavation Progress | 9 |
| #438 59.4.02 - Community Centre Demolition Progress | 10 |

#435 59.1.01 - Pool Slider Door Sill Waterproofing

OPEN

Created Nov 14, 2019

Due Date

Type / Subtype Observation / Observation

Location P1C > Exterior > Wall > Pool South

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture49

Issue Owner Adam Chambers Architecture49

Assignee

Description VCC to provide A49 with photo of Alsan application before door sill install.



IMG_0588.JPG - Nov 15, 2019 11:26 AM - Adam Chambers

#440 59.1.02 - Pool Slider Door Installation

OPEN

Created Nov 15, 2019

Due Date

Type / Subtype Observation / Observation

Location P1C > Exterior > Wall > Pool South

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture 49

Issue Owner Adam Chambers Architecture49

Assignee

Description







#433 59.2.01 - Pool Depth Marker - Deck Level

OPEN

Created Nov 14, 2019

Due Date

Type / Subtype Observation / Observation

Location P1C > Level 1 > 1C139 - POOL

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture49

Issue Owner Adam Chambers Architecture49

Assignee

Description



IMG_157377086555139.jpeg - Nov 14, 2019 02:34 PM - Adam Chambers

#434 59.2.02 - Steam Pipe Penetrations

OPEN

Created Nov 14, 2019

Due Date

Type / Subtype Observation / Observation

Location P1C > Level 1 > 1C140 - STEAM ROOM

Root Cause

Checklist Source

Reference Drawing

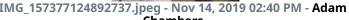
Creator Adam Chambers Architecture49

Issue Owner Adam Chambers Architecture49

Assignee

Description Pipe are 6" out from wall







#436 59.2.03 - Pool Tiling Progress

OPEN

Created Nov 14, 2019

Due Date

Type / Subtype Observation / Observation

Location P1C > Level 1 > 1C139 - POOL

Root Cause

Checklist Source

Reference Drawing

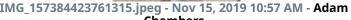
Creator Adam Chambers Architecture49

Issue Owner Adam Chambers Architecture49

Assignee

Description















IMG_157377521982049.jpeg - Nov 14, 2019 03:47 PM - Adam Chambers

#437 59.4.01 - Phase 2 Excavation Progress

OPEN

Created Nov 14, 2019

Due Date

Type / Subtype Observation / Observation

Location

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture49

Issue Owner Adam Chambers Architecture49

Assignee

Description



IMG_157377571873286.jpeg - Nov 14, 2019 03:55 PM - Adam Chambers



IMG_157377571822934.jpeg - Nov 14, 2019 03:55 PM - Adam Chambers

#438 59.4.02 - Community Centre Demolition Progress

OPEN

Created Nov 14, 2019

Due Date

Type / Subtype Observation / Observation

Location

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture49

Issue Owner Adam Chambers Architecture49

Assignee

Description





SITE REPORT

ISSUES RESOLVED:

(Since last Report)

- Deficiency Report July 19, 2019 #182 Install resettable code locks
- Deficiency Report July 19, 2019 #262 Provide Full Height Backer Panel on Dasher Board Ends
- 54.2.11. #313 Interior Fire-stopping at Stair 3 Bulkhead
 - o Resolved with 57.2.37. #419
- 55.3.01. #340 Roof Gaps to be repaired.
- 56.2.10. #354 Interior Grout underneath Mullion to be Repaired and Made Good
- 56.2.13. #359 Interior Column Finish to be repaired.
- 56.2.27. #376 Interior Pool Change Room Paint Colour Termination.
- 57.1.03. #388 Cracked Masonry Mortar.
- 57.1.04. #416 Seal Around Door Frame.
- 57.2.02. #380 Gypsum Board End to be finished.
- 57.2.15. #394 Seal around Ductwork.
- 57.2.17. #396 Remove Tape from Fire Rating Label.
- 57.2.18. #397 Review and touch up Fire Stopping.
- 57.2.19. #398 Repair or Make Good Rubber Base.
- 57.2.20. #399 Rubber Base Exposed End.
- 57.2.21. #400 Complete Flooring Install.
- 57.2.23. #402 Cracked Glulam Column.
- 57.2.30. #409 Bent Ceiling Grid.
- 57.2.37. #419 Fire Stopping Missing at Exterior of Bulkhead at Stair 3.
- 57.2.38. #420 Fire Stopping Missing at Top of Concrete Wall in Stair 3.
- 57.2.39. #421 Fire Stopping Missing at Base of Wall around Electrical Closet.
- 58.2.04 #426 Door Slider Falling
- 58.3.01 #427 Clean Rust and Debris
- 58.3.02 #428 Roof Fastener Abrasions

159-00406-02 - POCO REC CENTRE

Issues Resolved Report

| Report Generated | Nov 20, 2019 at 4:14 PM |
|----------------------------|---|
| by | Adam Chambers |
| Message | Issue Detail |
| Total items in this report | 22 |
| Sorted By | Title (descending) |
| Filtered on | Status (Work completed) Subtype (Action Required, Deficiency, Observation) |

Contents

| #262 Provide Full Height Backer Panel on Dasher Board ends | 3 |
|---|----|
| #182 Install resettable code locks. | 4 |
| #428 58.3.02 - Roof Fastener Abrasions | 5 |
| #427 58.3.01 - Clean Rust and Debris | 6 |
| #426 58.2.04 - Door Slider Falling | 8 |
| #421 57.2.39 - Fire Stopping Missing at Base of Wall around Electrical Closet | 9 |
| #420 57.2.38 - Fire Stopping Missing at Top of Concrete Wall in Stair 3 | 11 |
| #419 57.2.37 - Fire Stopping Missing at Exterior of Bulkhead at Stair 3 | 12 |
| #409 57.2.30 - Bent Ceiling Grid | 14 |
| #402 57.2.23 - Cracked Glulam Column | 15 |
| #400 57.2.21 - Complete Flooring Install | 16 |
| #399 57.2.20 - Rubber Base Exposed End | 18 |
| #398 57.2.19 - Repair or Make Good Rubber Base | 19 |
| #397 57.2.18 - Review and touch up Fire Stopping | 20 |
| #396 57.2.17 - Remove Tape from Fire Rating Label | 21 |
| #394 57.2.15 - Seal around Ductwork | 22 |
| #380 57.2.02 - Gypsum Board End to be Finished. | 24 |
| #416 57.1.04 - Seal around Door Frame | 26 |
| #388 57.1.03 - Cracked Masonry Mortar | 28 |
| #376 56.2.27 - Int - Pool Change Room Paint Colour Termination | 30 |
| #359 56.2.13 - Int - Column Finish to be Repaired | 31 |
| #354 56.2.10 - Int - Grout Underneath Mullion to be Repaired and Made Good | 32 |

#262 Provide Full Height Backer Panel on Dasher Board ends.



Created Jul 22, 2019

Due Date

Type / Subtype Action Required / Deficiency

Location Rink 2 & 3

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture49

Issue Owner Adam Chambers Architecture49

Assignee

Description Provide full height backer panel on dasher board ends between player and penalty boxes, typical.



IMG_157384430095546.jpeg - Nov 15, 2019 10:58 AM - Adam Chambers



IMG_20190711_135521.jpg - Jul 22, 2019 03:54 PM - Adam Chambers

#182 Install resettable code locks.



Created Jul 15, 2019

Due Date

Type / Subtype Action Required / Deficiency

Location P1C > Level 1 > 1C108 - GAME ROOM

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture49

Issue Owner Adam Chambers Architecture49

Assignee

Description



IMG_157377322105582.jpeg - Nov 14, 2019 03:13 PM - Adam Chambers



IMG_156323143273970.jpeg - Jul 15, 2019 03:57 PM - Adam Chambers

#428 58.3.02 - Roof Fastener Abrasions



Created Oct 28, 2019

Due Date

Type / Subtype Action Required / Action Required

Location P1C > Exterior > Roof

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture49

Issue Owner Adam Chambers Architecture49

Assignee

Description Advised by vcc that roofer has reviewed and no issue



IMG_157228746166936.jpeg - Oct 28, 2019 11:31 AM - Adam Chambers



IMG_157228746161306.jpeg - Oct 28, 2019 11:31 AM - Adam Chambers

#427 58.3.01 - Clean Rust and Debris



Created Oct 28, 2019

Due Date

Type / Subtype Action Required / Action Required

Location P1C > Exterior > Roof > Dehumidifier

Root Cause

Checklist Source

Reference Drawing

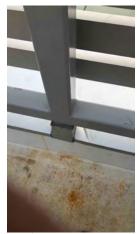
Creator Adam Chambers Architecture49

Issue Owner Adam Chambers Architecture49

Assignee

Description











IMG_157228694718353.jpeg - Oct 28, 2019 11:22 AM - Adam Chambers

#426 58.2.04 - Door Slider Falling



Created Oct 28, 2019

Due Date

Type / Subtype Action Required / Action Required

Location P1C > Level 1 > 1C123 - FITNESS STUDIO

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture49

Issue Owner Adam Chambers Architecture49

Assignee

Description



IMG_157377188313687.jpeg - Nov 14, 2019 02:51 PM - Adam Chambers



IMG_157228551196142.jpeg - Oct 28, 2019 10:58 AM - Adam Chambers

#421 57.2.39 - Fire Stopping Missing at Base of Wall around Electrical Closet



Created Oct 09, 2019 Due Date

Type / Subtype Action Required / Action Required

Location P1C > Level 2 > 1C225 - ELECTRICAL CLOSET

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture 49

Issue Owner Adam Chambers Architecture49

Assignee

Description











IMG_0312.JPG - Oct 09, 2019 03:09 PM - Adam Chambers

#420 57.2.38 - Fire Stopping Missing at Top of Concrete Wall in Stair 3



Created Oct 09, 2019

Due Date

Type / Subtype Action Required / Action Required

Location P1C > Level 2 > S1C3 - STAIR 1C3

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture 49

Issue Owner Adam Chambers Architecture49

Assignee

Description A49 advised VCC to review the firestopping installation for proper installation, as some of the flutes appear to be sunken.

OFFICIAL RESPONSE

VCC has advised that the fire stopping was installed appropriately.

By Adam Chambers - Nov 19, 2019 03:45 PM Architecture49







IMG_0335.JPG - Oct 09, 2019 03:08 PM - Adam Chambers

#419 57.2.37 - Fire Stopping Missing at Exterior of Bulkhead at Stair 3



Created Oct 09, 2019

Due Date

Type / Subtype Action Required / Action Required

Location P1C > Level 2 > S1C3 - STAIR 1C3

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture 49

Issue Owner Adam Chambers Architecture49

Assignee

Description







IMG_157377242005647.jpeg - Nov 14, 2019 03:00 PM - Adam Chambers







IMG_0283.JPG - Oct 09, 2019 03:08 PM - Adam Chambers

#409 57.2.30 - Bent Ceiling Grid



Created Oct 09, 2019

Due Date

Type / Subtype Action Required / Action Required

Location P1C > Level 2 > 1C200 - CIRCULATION (Outside Area Manager Office)

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture49

Issue Owner Adam Chambers Architecture49

Assignee

Description



IMG_157377263201399.jpeg - Nov 14, 2019 03:03 PM - Adam Chambers



IMG_0332.JPG - Oct 09, 2019 12:20 PM - Adam Chambers

#402 57.2.23 - Cracked Glulam Column



Created Oct 09, 2019

Due Date

Type / Subtype Action Required / Action Required

Location P1C > Level 2 > 1C220 - SMALL MULTIPURPOSE (Column on GL 1C-5)

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture 49

Issue Owner Adam Chambers Architecture49

Assignee

Description Review crack with Structural and repair as required.



IMG_0321.JPG - Oct 09, 2019 12:20 PM - Adam Chambers



IMG_0322.JPG - Oct 09, 2019 12:20 PM - Adam Chambers

#400 57.2.21 - Complete Flooring Install



Created Oct 09, 2019 Due Date

Type / Subtype Action Required / Action Required

Location P1C > Level 2 > 1C220 - SMALL MULTIPURPOSE

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture 49

Issue Owner Adam Chambers Architecture49

Assignee

Description Complete the installation and seam welding of flooring.











IMG_0317.JPG - Oct 09, 2019 12:19 PM - Adam Chambers

#399 57.2.20 - Rubber Base Exposed End



Created Oct 09, 2019

Due Date

Type / Subtype Action Required / Action Required

Location P1C > Level 2 > 1C200 - CIRCULATION (Entrance to 1C223)

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture 49

Issue Owner Adam Chambers Architecture49

Assignee

Description Provide corrective measure to reduce chance rubber base gets peeled off wall at exposed end.



IMG_157377291368938.jpeg - Nov 14, 2019 03:08 PM - Adam Chambers



IMG_0316.JPG - Oct 09, 2019 12:19 PM - Adam Chambers

#398 57.2.19 - Repair or Make Good Rubber Base



Created Oct 09, 2019

Due Date

Type / Subtype Action Required / Action Required

Location P1C > Level 2 > 1C200 - CIRCULATION (Outside Door to Sports Medicine space.)

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture 49

Issue Owner Adam Chambers Architecture49

Assignee

Description



IMG_157377294310961.jpeg - Nov 14, 2019 03:09 PM - Adam Chambers



IMG_0314.JPG - Oct 09, 2019 12:19 PM - Adam Chambers

#397 57.2.18 - Review and touch up Fire Stopping



Created Oct 09, 2019

Due Date

Type / Subtype Action Required / Action Required

Location P1C > Level 2 > 1C225 - ELECTRICAL CLOSET

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture49

Issue Owner Adam Chambers Architecture49

Assignee

Description



IMG_157377255110894.jpeg - Nov 14, 2019 03:02 PM - Adam Chambers



IMG_0311.JPG - Oct 09, 2019 12:19 PM - Adam Chambers

#396 57.2.17 - Remove Tape from Fire Rating Label



Created Oct 09, 2019

Due Date

Type / Subtype Action Required / Action Required

Location P1C > Level 2 > 1C225 - ELECTRICAL CLOSET

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture49

Issue Owner Adam Chambers Architecture49

Assignee

Description



IMG_157377253243786.jpeg - Nov 14, 2019 03:02 PM - Adam Chambers



IMG_0310.JPG - Oct 09, 2019 12:19 PM - Adam Chambers

#394 57.2.15 - Seal around Ductwork



Created Oct 09, 2019

Due Date

Type / Subtype Action Required / Action Required

Location P1C > Level 2 > 1C237 - STORAGE (All duct penetrations)

Root Cause

Checklist Source

Reference Drawing

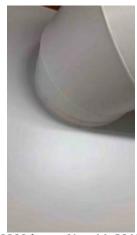
Creator Adam Chambers Architecture 49

Issue Owner Adam Chambers Architecture49

Assignee

Description Seal around duct penetrations.











IMG_0305.JPG - Oct 09, 2019 12:18 PM - Adam Chambers

#380 57.2.02 - Gypsum Board End to be Finished.



Created Oct 04, 2019

Due Date

Type / Subtype Action Required / Action Required

Location P1C > Level 1 (Outside Entry to Fitness Centre)

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture49

Issue Owner Adam Chambers Architecture49

Assignee

 ${\it Description}~$ Exposed gypsum board end to be finished.



IMG_157377216389189.jpeg - Nov 14, 2019 02:56 PM - Adam Chambers



IMG_0256.JPG - Oct 08, 2019 10:33 AM - Adam Chambers



IMG_0257.JPG - Oct 08, 2019 10:33 AM - Adam Chambers

#416 57.1.04 - Seal around Door Frame



Created Oct 09, 2019

Due Date

Type / Subtype Action Required / Action Required

Location P1C > Exterior > Wall > Pool/Fitness West (Door S1C3A)

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture49

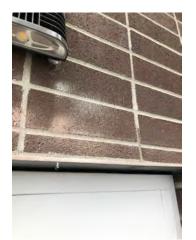
Issue Owner Adam Chambers Architecture49

Assignee

Description







IMG_0346.JPG - Oct 09, 2019 12:21 PM - Adam Chambers



IMG_0345.JPG - Oct 09, 2019 12:21 PM - Adam Chambers

#388 57.1.03 - Cracked Masonry Mortar



Created Oct 09, 2019

Due Date

Type / Subtype Action Required / Action Required

Location P1C > Exterior > Wall > Pool/Fitness West (Behind the Glulam Columns at GL's 1C-1 &

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture49

Issue Owner Adam Chambers Architecture49

Assignee

Description Repair and make good cracked masonry mortar.







IMG_157377164903202.jpeg - Nov 14, 2019 02:47 PM - Adam Chambers



IMG_0276.JPG - Oct 09, 2019 12:16 PM - Adam Chambers

#376 56.2.27 - Int - Pool Change Room Paint Colour Termination



Created Oct 02, 2019

Due Date

Type / Subtype Action Required / Action Required

Location P1C > Level 1 > 1C125 - CORRIDOR (Entrance to Male and Female Change Rooms)

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture 49

Issue Owner Adam Chambers Architecture49

Assignee

Description Continue paint EP9 around end of block wall to meet with current edge of EP6.

PHOTOS



IMG_0229.JPG - Oct 02, 2019 04:54 PM - Adam Chambers

#359 56.2.13 - Int - Column Finish to be Repaired



Created Oct 02, 2019

Due Date

Type / Subtype Action Required / Action Required

Location P1C > Level 1 > 1C123 - FITNESS STUDIO (West side of room)

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture 49

Issue Owner Adam Chambers Architecture49

Assignee

Description Concrete repair to column is cracking. Repair and make good.



IMG_157377194336447.jpeg - Nov 14, 2019 02:52 PM - Adam Chambers



IMG_0194.JPG - Oct 02, 2019 04:56 PM - Adam Chambers

#354 56.2.10 - Int - Grout Underneath Mullion to be Repaired and Made Good



Created Oct 02, 2019

Due Date

Type / Subtype Action Required / Action Required

Location P1C > Level 1 > 1C121 - WEIGHT ROOM LEVEL 1 (Exterior wall between GL's 1C-5 and

Root Cause

Checklist Source

Reference Drawing

Creator Adam Chambers Architecture49

Issue Owner Adam Chambers Architecture49

Assignee

Description Grout underneath mullion to be repaired and made good.









IMG_157228526555378.jpeg - Oct 28, 2019 10:54 AM - Adam Chambers



IMG_0184.JPG - Oct 02, 2019 04:56 PM - Adam Chambers



IMG_0183.JPG - Oct 02, 2019 04:56 PM - Adam Chambers

SITE REPORT

END OF ARCHITECTURAL SITE OBSERVATION REPORT #59

Prepared by:

ARCHITECTURE 49

Adam Chambers, B.Arch.Sc Building Technologist

City of Port Coquitlam Community Centre Project Owner's Representative - Monthly Progress Report #32 November 30, 2019



APPENDIX 8

Owner's Meeting Minutes #22

Ventana Construction (POCO) Corp.

3875 Henning Dr. Burnaby, BC V5C 6N5

Office 604.291.9000 Fax 604.291.9992 Web VentanaConstruction.com

Date Issued 2019-11-27

Project Port Coquitlam Community Recreation Complex, 2150 Wilson Ave, Port Coquitlam

Meeting Owners Meeting Minutes #22

Meeting Held On 2019-11-19

Present:

| Lewis Reilly | City of Port Coquitlam | POCO | 604.927.5411 | Ireilly@tangomanagement.ca |
|-----------------|--|------|--------------|------------------------------------|
| Lori Bowie | City of Port Coquitlam | POCO | 604.927.5411 | bowiel@portcoquitlam.ca |
| Jerry Brouwer | Ventana Construction (Poco) Corporation | VCC | 604.291.9000 | jbrouwer@ventanaconstruction.com |
| Joseph Lenz | Ventana Construction (Poco) Corporation | VCC | 604.291.9000 | jlenz@ventanaconstruction.com |
| Tallon O'Neill | Ventana Construction (Poco) Corporation | VCC | 604.291.9000 | TONeill@ventanaconstruction.com |
| Copies To: | | | | |
| Kristen Dixon | City of Port Coquitlam | POCO | 604.927.5411 | dixonk@portcoquitlam.ca |
| Alun Lewis | Tango Managment | TM | 604.734.6416 | alewis@tangomanagement.ca |
| John Bowser | Tango Managment | TM | 604.734.6416 | bowser@tangomanagement.ca |
| Andrew Cameron | Ventana Construction (Poco) Corporation | VCC | 604.291.9000 | acameron@ventanaconstruction.com |
| Dan Marsolais | Ventana Construction (Poco) Corporation | VCC | 604.291.9000 | dmarsolais@ventanaconstruction.com |
| Haley Hartley | Ventana Construction (Poco) Corporation | VCC | 604.291.9000 | hhartley@ventanaconstruction.com |
| Lloyd Froome | Ventana Construction (Poco) Corporation | VCC | 604.291.9000 | Ifroome@ventanaconstruction.com |
| Matt Fraser | Ventana Construction (Poco) Corporation | VCC | 604.291.9000 | mfraser@ventanaconstruction.com |
| Marco Bordignon | Ventana Construction Corporation | VCC | 604.291.9000 | mbordignon@ventanaconstruction.com |

Old Business

DESCRIPTION ACTION BY REQUIRED BY

1.01 SAFETY

22.1 VCC to forward worksafe reports to POCO/Tango

VCC 2019-11-29

1.02 DESIGN

22.1 Revised landscape, play structure, cross-fit, amphitheater, and community garden drawings were issued to POCO/Tango. POCO is still reviewing cross-fit. VCC to forward cross-fit court dimensions.

VCC, POCO

1.04 SCHEDULE

22.1 **P1C**:

- P1ABC (includes fitness spaces) are occupied.
- Aquatics occupancy is on track for Feb 4, 2020.
- M&E work is limited to pool mechanical room.
- Pool change rooms will be substantially complete Nov 29/19.
- South pool sliders nearly complete.
- SE pool deck leak was rectified.

P2:

- Earthworks unknown soil conditions causing delay.
- New piling start date to be communicated to POCO Currently the date is Dec 2/19.
- Demo works to be completed Nov 26/19. Currently demo contractor is removing last of foundation concrete.

1.05 CITY/STAKE HOLDERS MEETING

| 1.05 CII | 1/51 ARE HULDERS MEETING | | |
|----------|--|------|------------|
| 22.1 | The next stake holder meeting will be held Nov 27/19. VCC to advise if stakeholders can review pool change room during the meeting. | VCC | 2019-11-26 |
| 22.2 | VCC to review prize basket for fitness opening Dec 12/19. | VCC | - |
| 1.07 OFF | | | |
| 17.1 | VCC/POCO held a meeting Jan 14/19 to review phase 2 approval and phase 1 traffic management plans. VCC to forward pricing for overnight work and creating a temporary roadway. | POCO | 2019-05-14 |

Meeting 21- POCO to provide direction on surface treatment and street lighting post-coordination with POCO's engineer.

Meeting 22 -POCO / Quantum coordination meeting was held; Hub drawings due Nov 20/19.

22.1 Phase 2 off-sites design requires a meeting. VCC to coordinate.

8.01 FFE P1C

21.1 Tango to forward video - wall spec's. TM 2019-05-14

8.03 FT. DRESSING RM.

22.1 VCC to refine M&E rough-in cost; such that it is inclusive to slab

elevation only. VCC noted CO cost would reduce in value.

9.01 OWNER RFI'S

22.1 POCO/Tango to RFI occupant load calculations for fitness L2 studio.

| 10 02 TR | EEE REMOVAL | | |
|----------|---|------|---|
| 10.02 | | | |
| 17.1 | VCC to review milled wood completion with Silverback Jan 21st. Post review- VCC to advise of potential uses of wood. | Info | - |
| | Meeting 19- VCC to confirm the two tree types and sizes which were removed mistakenly. | | |
| | Meeting 21- VCC to forward the tree list. | | |
| | Meeting 22 - All trees have been removed and remaining stumps. | | |
| 11.03 OV | WNER DELIVERABLES | | |
| 17.1 | Snooker Task Lighting: POCO to provide VCC with the snooker task lighting specs. VCC to review revised layout with A49 and send to POCO (Lori). | Info | - |
| | Meeting 18- VCC is working with Electrical contractor for a equal alternate to the spec the City provided and will advise. | | |
| | Meeting 21- VCC is awaiting response from Nightingale. | | |
| 17.01 PH | IASE 2 CITY PARKING | | |
| 22.1 | POCO (Kristen) to adivse on design and VCC will implement. | POCO | - |
| 18.01 DE | MO/ABATEMENT WILSON CENTRE & LIBRARY | | |
| 22.1 | Additional vermiculite identified in Wilson centre (North), and is being reviewed with BTY. | | - |
| 19.02 PA | RKING COUNT | | |
| 22.1 | VCC advised that there is a potential of 65 spots at library parking. | Info | - |
| 19.04 OV | WNER SUPPLIED WASHROOM ACCESSORIES | | |

19.1 VCC to provide an itemized list of owner supplied washroom accessories

22.1 POCO to review with Rana if pool change room accessories are

ready for install.

21.01 DEFICIENCIES

that VCC will be installing.

VCC

POCO

22.1 Deficiency items were discuss:

- Speaker protection
- Dasherboard configuration
- Wallet lockers in P1A to be reviewed
- MP room bypass sliding doors
- Library / Fitness alarm doors not wired properly
- MP room and lounge; lino is bubbling and flooring is cracking.
 VCC noted this will continuously be re-mediated until completely rectified.

| New Bu | siness | | |
|-----------|--|-----------|-------------|
| | DESCRIPTION | ACTION BY | REQUIRED BY |
| 22.01 PO | OL FILL TEST | | |
| 22.1 | The pool test results were discussed, VCC to close Owner RFI 145. Tango confirmed results were received/approved/accepted. | VCC | - |
| 22.02 RE | CEPTION HEAT | | |
| 22.1 | Tango to RFI the heat at reception. | ТМ | - |
| 22.03 FA | CILITY FUNCTIONALITY | | |
| 22.1 | Fitness Mirror doors to be reviewed. | | - |
| 22.2 | MP room doors to be reviewed. | | - |
| 22.3 | P2 design review, user group list to be distributed and reviewed. | | - |
| 22.04 RIN | NK 1 & 2 GLAZING | | |
| 22.1 | Light transmittance; VCC to forward sun study or provide confirmation on transmittance values. | VCC | - |
| 22.05 CP | TED STUDY | | |
| 22.1 | CPTED study to be forwarded to POCO. | | - |

These minutes are believed to be a true and accurate record of all items discussed. Any errors and/or omissions should be reported, in writing, to Ventana Construction (POCO) Corp. as soon as possible.

Recorded by:

Ventana Construction (POCO) Corp.

Tallon O'Neill

City of Port Coquitlam Community Centre Project Owner's Representative - Monthly Progress Report #32 November 30, 2019



APPENDIX 9

Mechanical & Geotechnical Field Reports



MECHANICAL AND PLUMBING FIELD REPORT

| DATE: | November 28, 2019 | FR NO.: | MP.24 |
|--------------|-----------------------------------|--------------|---------------------------------|
| Contractor | Ventana Construction | FROM: | Steve Elmes/Seann Caldwell |
| ATTN: | Haley Hartley | | WSP Canada Inc. |
| | HHartley@ventanaconstruction.com | | 840 Howe Street |
| Mechanical: | Omega Mechanical Ltd. | | Vancouver BC |
| ATTN: | Mitch Kelly/Nick Sciankowy | | V6Z 2A9 |
| EMAIL: | mitch@omegamechanical.com | | |
| PROJECT: | Port Coquitlam Recreation Complex | PROJECT NO.: | 159-00406-02 |
| ATTACHMENTS: | | LOCATION: | 2150 Wilson Ave, Port Coquitlam |

Distributed to:

| \boxtimes | Omega Mechanical LTD. | Attn: | Gary Martin/Kyle Parhar | Email: | gmartin@omegamechanical.ca |
|-------------|-----------------------|-------|-------------------------|--------|----------------------------|
| | | | | | |

Date of Inspection: November 28, 2019 Weather: Sunny Temperature: 2 °C

General Note: Strike-thru items are completed or fully addressed and will be deleted in the next report. General (Work Reviewed):

- 1. Plumbing piping and rough-ins installed in 1C to date.
- 2. Mechanical piping and HVAC in 1C to date.

Work in Progress:

- 1. Pool area mechanical
- 2. Commissioning
- 3. Air balancing
- 4. Insulation of piping

Observations:

- 1.Mechanical and plumbing components to-date are installed as per contract documents. 2.Fabric air duct is installed in pool area.
- 3. Plumbing fixtures are installed.

1000-840 Howe Street Vancouver, BC, Canada V6Z 2M1

FIELD REPORT

- 4. Pool deck drains are installed
- 5. Ceiling grilles and sprinklers are installed

Information or Action Required:

- 1. Submit pipe pressure test reports for Consultant Records.
- 2. Maintain record as-built redline drawings on site.
- 3. Provide guards for thermostats in arenas.
- 4. Provide a report on damages and proposed rectification to rooftop unit RTU-1.
- 5. Provide commissioning reports for all mechanical equipment.
- 6. Provide air and water balancing reports.
- 7. Provide final version of O&M Manuals for approval.
- 8. Provide training to City
- 9. Provide guards on thermostats in public areas.
- 10. Provide duct balancing dampers on branch ducts from heat pumps such as HP-18, HP-38, HP-40. This is in addition to the integral grille dampers.
- 11. Increase heat intensity on arena infrared heaters
- 12. Correct warping of infrared deflectors.
- 13. Infrared deflectors require repositioning to allow heat to be directed down to spectators.
- 14. Plumbing fixtures in pool area require caulking and cleaning.
- 15. Rather than a bypass for boilers, remove boiler pumps P-20 and P-21 and replace with pipe.
- 16. Remove protective covers on floor drains
- 17. Complete foot bath systems

Issued by the Consultant:

| Seann Caldwell, P.Eng. | Solfe | November 28, 2019 |
|------------------------|-----------|-------------------|
| Name and Title | Signature | Date |

U:\15\159-00406-00 PoCo Rec Center\5 CONSTRUCTION\3 Field Reports\Mechanical Reports\Inspection\Mechanical Field Report - Inspection 17- Phase 1AB&C.docx



THURBER ENGINEERING LTD.

Suite 900 - 1281 West Georgia Street

Vancouver, BC V6E 3J7 Phone: (604) 684-4384 Fax: (604) 684-5124 Email: tdajani@thurber.ca **FIELD REVIEW REPORT NO.:006**

THURBER FILE NO.: 24160

| FIELD REVIEW REPORT D | | | Date: November 14, 2019 | | | | |
|--|--|------------------------------------|---|--|--|--|--|
| TO: Ventana Construction Corporation | | ATTENTION: Tallon O'Neill, Ventana | | | | | |
| PROJECT NAME: Port Coquitlam Community Recreation Complex – Phase 2 | | | | | | | |
| CONTRACTOR: Ventana Construction C | orporation | THURBER FILE NO.: 24160 | | | | | |
| PURPOSE OF FIELD REVIEW: Subgrad | e Inspection and Test pit investigat | ion to investi | gate suitability of on-site material. | | | | |
| REFERENCE DRAWING / DOCUMENTS | REFERENCE DRAWING / DOCUMENTS: Plan View of Pile Layout (Dwg.PL-001) | | | | | | |
| THURBER PERSONNEL ON SITE: Tareq Dajani (TFD) Jordan Lummis (JL) | CLIENT/CONTRACTOR PERSON SITE: Jayson & Jerry (Ventana) Jeff & Justin (Hall Constructors) | NEL ON | TIME ON SITE: 8:00 to 5:00 WEATHER: Cloudy, 11°C | | | | |

ACTIVITIES/OBSERVATIONS:

General

- 1. Per Thurber's recommendations, excavation work is continuing in the parkade area to remove unsuitable in-situ material under the slab-on-grade and around the foundation system. Our recommendations require the removal of the unsuitable material to a maximum depth of 2.3 m below the underside of the pile cap, unless a granular subgrade is encountered at a shallower depth, and replacement with approved structural fill.
- 2. To date, the earthworks contractor, Hall Constructors (Hall), is continuing subgrade preparation and fill placement at the southwest corner of the site where they had excavated an area measuring approximately 20 m by 60 m and ranging in depth between 2 m and 3 m below original grade. We understand that the footprint of the excavation extends 1 m beyond the footprint of the pile caps along the south and west edge of the parkade structure.
- 3. As directed by Ventana, Hall excavated the ground to a depth of 1 m below the access ramp area, which is located west of the Parkade area. We understand that the purpose of the subexcavation at the ramp area is to provide a working platform for the piling crane. Thurber's recommendations for the parkade area (Item 1 above) are not applicable for the access ramp area.

Subgrade Inspection

4. Thurber approved the subgrade of an additional area, north of the area that was approved on November 12, 2019 and extending to about the south edge of the Phase 1 structure (see attachment). The subgrade at the base of the excavation comprised native SAND and GRAVEL to sandy GRAVEL with trace silt.

Fill Placement and Compaction

- 5. As mentioned in Item 9 in FRR 004 (November 8, 2019) and Item 1 in FRR 005 (November 12, 2019), the third lift of fill that was placed on November 8, 2019 did not pass the compaction testing on November 12, 2019 due to relatively high moisture content readings. We understand that the fill was re-compacted between November 12 and 14, 2019. This fill was tested today, and the measured dry densities averaged 2,003 kg/m³ at moisture content between 7.0% and 8.4%, which meets project specifications (see attached FDR 006-1).
- 6. A single lift of Sand and Gravel material was placed on the approved subgrade. The lift was placed over a portion of the approved subgrade to level out the sloping ground. The lift varied between 150 mm and 400 mm in thickness and was compacted using a 12-ton CAT CS533E vibratory smooth roller compactor. The density test results (see attachment) indicate that the moisture content was between 5.1% and 6.7% across the full thickness of the fill and the measured dry densities varied between 2,130 kg/m³ and 2,235 kg/m³ (average of 2,178 kg/m³) (see attached FDR 006-2).
- 7. A lift comprising river sand fill was placed across the whole approved subgrade area, over the sand and gravel fill (refer to above Item 6) at the west portion of the approved subgrade area and over native subgrade material at the east portion. The density test results (see attachments) indicate that the moisture content was between 8.0% and 8.6% across the full thickness of the fill, which was 450 mm thick, and the measured dry densities varied between 1,994 kg/m³ and 2,030 kg/m³ (see attached FDR 006-3).
- 8. Following the placement of the fill in Item 6, the fill across the whole footprint of the excavation was at the same level/height.
- 9. A third lift was placed across most of the excavation that extended from the north end of the excavation up to the well point

THURBER ENGINEERING LTD.

Report To: Ventana Construction Corporation

File No.: 24160



Field Review Report No.: 006 Date: November 14, 2019 Page 1 of 5 location (approximately 15 m to 20 m away from the south end of the excavation). The fill comprised river sand and the lift thickness was about 450 mm. This lift was compacted three different times with multiple tests completed. The measured dry density values in half of the tests were around 1,890 kg/m³, which does not meet project specifications, and the moisture content readings were between 10% and 12% which is well above optimum for the river sand (see attached FDR 006-4). Ventana and Hall were advised that the material did not pass our compaction testing. Thurber was advised that this material will be left in place to drain.

INSTRUCTIONS/RECOMMENDATIONS:

10. Following up on Item 9, the third lift did not pass the compaction testing due to the high moisture content. Compaction and retesting of this lift is planned for November 18, 2019.

PHOTOS:



Photo 1 – Looking south. Approved subgrade area (Item 3). [photo taken by JAL and dated 20191114]

THURBER ENGINEERING LTD.

Report To: Ventana Construction Corporation

File No.: 24160



Field Review Report No.: 006 Date: November 14, 2019 Page 2 of 5 PHOTOS:



Photo 2 – A lift of Sand and Gravel placed over the west portion of the approved subgrade area. The lift varied in thickness to level out the sloping subgrade (Item 5).

[photo taken by JAL and dated 20191114]

THURBER ENGINEERING LTD.

Report To: Ventana Construction Corporation

File No.: 24160



Field Review Report No.: 006 Date: November 14, 2019 Page 3 of 5



Photo 3 – Second lift placed across the approved subgrade area (Item 6). The base of the entire is now flat (Item 7). [photo taken by JAL and dated 20191114]



Photo 4 – During compaction of the last lift of fill (Item 9). The lift extended from the north of the excavation up to the well point near the southwest edge of the of the excavation.

[photo taken by JAL and dated 20191114]

THURBER ENGINEERING LTD.

Report To: Ventana Construction Corporation

File No.: 24160



Field Review Report No.: 006 Date: November 14, 2019 Page 4 of 5



Photo 5 – Testing of third lift. [photo taken by JAL and dated 20191114]



Photo 6 – Recompacting of third lift for the second time. [photo taken by JAL and dated 20191114]

Copies to: Report By: Jordan Lummis, E.I.T. Reviewed by Project Engineer: Chris Weech, P.Eng.

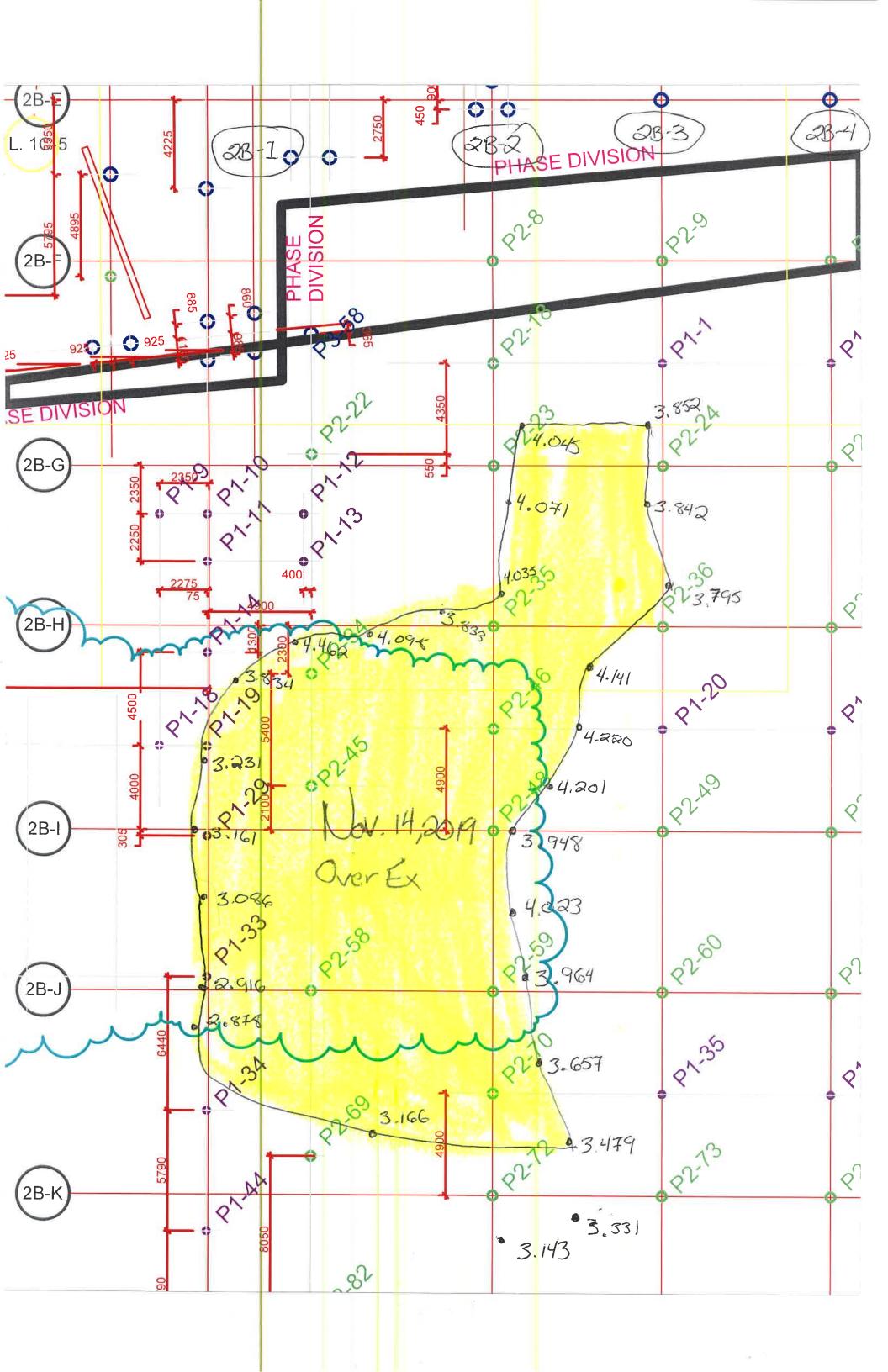
THURBER ENGINEERING LTD.

Report To: Ventana Construction Corporation

File No.: 24160



Field Review Report No.: 006 Date: November 14, 2019 Page 5 of 5





FIELD DENSITY REPORT

| ATTENTION: | Tallon O'Neill | FILE NO.: | 24160 | CONTRACTOR: | Hall Construction |
|------------|----------------------------------|--------------|-------------------|---------------|--|
| PROJECT: | | _ | | | |
| TROUBET. | Port Coquitlam Recreation Centre | REPORT DATE: | November 20, 2019 | AREA: | Excavation – South End (Refer to Item 5 in FRR 006) |
| | | REPORT NO.: | FDR 006-1 | SOIL TYPE: | SAND, trace gravel to gravelly, trace silt (River Sand Fill) |
| | | | | SPECIFICATION | : 95% Modified Proctor Maximum Dry Density |
| CLIENT: | Ventana Construction Corporation | DATE TESTED: | November 14, 2019 | | |
| CC: | | TESTED BY: | JAL | | |

| FIELD | LOCATION | ELEV. & COMPACTION | LEV. & COMPACTION PROC | | FIELD | | | LABORATORY | | PERCENT PROCTOR DENSITY | |
|-------------|---|---|------------------------|----------------------------|------------------------|-----------------------------|--|--|----------------------------|----------------------------|--|
| TEST NO. | | | . NO. | Moisture Content (%) | Estimated Oversize (%) | Nuclear Dry Density (kg/m³) | Proctor Density (kg/m ³) | Corrected for Field Oversize (kg/m³) | Field Compaction (%) | Specified (%) | |
| 1 | SW corner of Excavation Test completed lift surface Probe Depth = 250 mm | | | 11.3 | (1.3) | 2004 | (48 44) | (48 332) | (1.3) | | |
| 2 | Middle – West End of Excavation Test completed 150 mm below surface Probe Depth = 250 mm | Re-testing of 3 rd lift placed on November 8, 2019 | | 7.0 | 5-10 | 2005 | 1986 (9.5 mm minus) | 2040 | >95% | 95% | |
| 3 | Probe Depth = 250 mm Middle – South end of Excavation Test completed 150 mm below surface Probe Depth = 250 mm | | | 8.4 | | 2003 | | | | | |

FIELD METHOD: ASTM D-2922 / NUCLEAR LABORATORY METHOD: ASTM D1557

COMMENTS: Oversize refers to proportion retained on the 9.5 mm sieve. The tests show compaction generally meets project specifications.

The results are for the sole use of the designated client only. This report constitutes a testing service only and does not represent any interpretation or opinion regarding the specification compliance or material suitability. Engineering interpretation will be provided by Thurber upon request.

Per: Jordan Lummis



FIELD DENSITY REPORT

| ATTENTION: | Tallon O'Neill | FILE NO.: | 24160 | CONTRACTOR: | Hall Construction |
|------------|----------------------------------|--------------|-------------------|---------------|---|
| PROJECT: | Port Coquitlam Recreation Centre | REPORT DATE: | November 20, 2019 | AREA: | West Excavation – North End (Refer to Items 4 & 6 in FRR 006) |
| | - | REPORT NO.: | FDR 006-2 | SOIL TYPE: | SAND and Gravel to Gravely Sand (Structural Fill) |
| | | _ | | SPECIFICATION | I: 95% Modified Proctor Maximum Dry Density |
| CLIENT: | Ventana Construction Corporation | DATE TESTED: | November 14, 2019 | | |
| CC: | | TESTED BY: | JAL | • | |

| FIELD | LOCATION | ELEV. & COMPACTION | PROC | | FIELD | | LAE | ORATORY | PERCI PROCTOR I | |
|-------------|---|---|-------|----------------------------|------------------------|-----------------------------------|-------------------------------|--|----------------------------|---------------|
| TEST NO. | | | . NO. | Moisture Content (%) | Estimated Oversize (%) | Nuclear Dry Density (kg/m³) | Proctor Density (kg/m³) | Corrected for Field Oversize (kg/m³) | Field Compaction (%) | Specified (%) |
| 1 | SW corner of Excavation Test completed from lift surface Probe Depth = 250 mm | | | 5.7 | | 2120 | | | | |
| 2 | Middle – West End of Excavation Test completed from lift surface Probe Depth = 250 mm | 1 st lift | | 5.5 | | 2107 | | | | |
| 3 | NW corner of Excavation Test completed from lift surface Probe Depth = 200 mm | | | 5.4 | | 2130 | | | | |
| 4 | SW corner of Excavation Test completed from lift surface Probe Depth = 200 mm | | | 5.1 | | 2195 | | | | |
| 5 | Middle – West End of Excavation Test completed from lift surface Probe Depth = 150 mm | 1 st lift (after re-compaction) | | 6.7 | | 2235 | | | | |
| 6 | Middle – East End of Excavation Test completed from lift surface Probe Depth = 250 mm | | | 5.9 | | 2154 | | | | |

| FIELD METHOD: | ASTM D-2922 / NUCLEAR | LABORATORY METHOD: | |
|---------------|--|--------------------|--|
| COMMENTS: | The tests generally meet project specifications. | | |

The results are for the sole use of the designated client only. This report constitutes a testing service only and does not represent any interpretation or opinion regarding the specification compliance or material suitability. Engineering interpretation will be provided by Thurber upon request.

| Per:_ | Jordan Lummis | |
|-------|---------------|--|
| | | |



CC:

FIELD DENSITY REPORT

| ATTENTION: | Tallon O'Neill | FILE NO.: | 24160 | CONTRACTOR: | Hall Construction |
|------------|----------------------------------|--------------|-------------------|----------------|--|
| PROJECT: | Port Coquitlam Recreation Centre | REPORT DATE: | November 20, 2019 | AREA: | Excavation – North End (Refer to Items 4 & 7 in FRR 006) |
| | · | REPORT NO.: | FDR 006-3 | SOIL TYPE: | SAND, trace gravel to gravelly, trace silt (River Sand Fill) |
| | _ | | | SPECIFICATION: | 95% Modified Proctor Maximum Dry Density |
| CLIENT: | Ventana Construction Cornoration | DATE TESTED: | November 14, 2019 | | |

JAL

TESTED BY:

| FIELD TEST | LOCATION | ELEV. & COMPACTION | PROC. | | FIELD | | LA | BORATORY | PERCE PROCTOR I | | |
|---------------|--|--|-------|----------------------------|------------------------------|--------------------------------|--|---|----------------------------|---------------|--|
| NO. | | | NO. | Moisture Content (%) | Estimated Oversize (%) | Nuclear Dry Density (kg/m³) | Proctor Density (kg/m ³) | Corrected for Field Oversize (kg/m³) | Field Compaction (%) | Specified (%) | |
| 1 | SW corner of Excavation Test completed from lift surface Probe Depth = 250 mm | | | 8.5 | | 1962 | | | 93.4% | | |
| 2 | SE corner of Excavation Test completed from lift surface Probe Depth = 300 mm | | | 7.6 | | 2040 | | | >95% | | |
| 3 | Middle of Excavation Test completed from lift surface Probe Depth = 300 mm | 2 nd lift | | 8.9 | 10-20 | 1942 | 1986 (9.5 mm minus) 2100 | 2100 | | 92.5% | |
| 4 | NE corner of Excavation Test completed from lift surface Probe Depth = 300 mm | | | 8.4 | | 2040 | | | >95% | | |
| 5 | NW corner of Excavation Test completed from lift surface Probe Depth = 300 mm | 2 nd lift (after re-compaction) | | 8.5 | | 2010 | | | >95% | 95% | |
| 6 | Middle – North End of Excavation Test completed from lift surface Probe Depth = 300 mm | | | 8.4 | | 2030 | | | | | |
| 7 | Middle of Excavation Test completed from lift surface Probe Depth = 300 mm | | | 8.0 | | 1999 | | | 95% | | |
| 8 | SW corner of Excavation Test completed from lift surface Probe Depth = 300 mm | | | 8.6 | - | 1994 | | | | | |

| FIELD METHOD: | ASTM D-2922 / NUCLEAR | LABORATORY METHOD: | ASTM D1557 | |
|---------------|---|--------------------|------------|--|
| COMMENTS: | Oversize refers to proportion retained on the 9.5 mm sieve. The tests show compaction generally meets project specifications. | | | |

The results are for the sole use of the designated client only. This report constitutes a testing service only and does not represent any interpretation or opinion regarding the specification compliance or material suitability. Engineering interpretation will be provided by Thurber upon request.



FIELD DENSITY REPORT

| ATTENTION: | Tallon O'Neill | _ FILE NO.: | 24160 | CONTRACTOR: | Hall Construction |
|------------|----------------------------------|--------------|-------------------|----------------|--|
| PROJECT: | Port Coquitlam Recreation Centre | REPORT DATE: | November 20, 2019 | AREA: | Excavation – North End (Refer to Item 9 in FRR 006) |
| | • | REPORT NO.: | FDR 006-4 | SOIL TYPE: | SAND, trace gravel to gravelly, trace silt (River Sand Fill) |
| | | _ | | SPECIFICATION: | 95% Modified Proctor Maximum Dry Density |

CLIENT: Ventana Construction Corporation DATE TESTED: November 14, 2019

CC: TESTED BY: JAL

| FIELD | LOCATION | ELEV. & | PROC | | FIELD | | LAB | ORATORY | PERCI PROCTOR I | | |
|-------------|--|--|-------------|----------------------------|------------------------|-----------------------------------|--|--|----------------------------|---------------|------|
| TEST NO. | | COMPACTI ON | . NO. | Moisture Content (%) | Estimated Oversize (%) | Nuclear Dry Density (kg/m³) | Proctor Density (kg/m ³) | Corrected for Field Oversize (kg/m³) | Field Compaction (%) | Specified (%) | |
| 1 | Middle - South of Excavation Test completed from lift surface (Probe Depth = 300 mm) | | | 10.0 | | 1890 | | | 94% | | |
| 2 | SW corner of Excavation Test completed from lift surface (Probe Depth = 300 mm) | 3 rd lift | | 11.6 | <5 | 1900 | | 2010 | 95% | | |
| 3 | Middle of Excavation Test completed from lift surface (Probe Depth = 300 mm) | | | 11.1 | | 1885 | | | 94% | | |
| 4 | NW corner of Excavation Test completed from lift surface (Probe Depth = 300 mm) | | | 10.2 | 5-10 | 1986 | | 2040 | >95% | | |
| 5 | Middle – North End of Excavation Test completed from lift surface (Probe Depth = 300 mm) | 3 rd lift (additional compaction) | (additional | | 9.8 | <5 | 1881 | 1986 | 2010 | 94% | 95% |
| 6 | Middle – West End of Excavation Test completed from lift surface (Probe Depth = 300 mm) | | | , | | 10.4 | 10-20 | 2033 | (9.5 mm minus) | 2100 | >95% |
| 7 | Middle – East End of Excavation Test completed from lift surface (Probe Depth = 300 mm) | | | 10.8 | 10-20 | 2010 | | 2100 | 79370 | | |
| 8 | Middle of Excavation Test completed from lift surface (Probe Depth = 250 mm) | 3 rd lift | | 10.1 | 5-10 | 1986 | | 2040 | >95% | | |
| 9 | NW corner of Excavation Test completed from lift surface (Probe Depth = 300 mm) | (additional compaction) | | 11.1 | 3-10 | 1942 | | 2040 | 95% | | |
| 10 | NE corner of Excavation Test completed from lift surface (Probe Depth = 300 mm) | compaction) | | 11.8 | <5 | 1892 | | 2010 | 94% | | |

FIELD METHOD: ASTM D-2922 / NUCLEAR LABORATORY METHOD: ASTM D1557

COMMENTS: Oversize refers to proportion retained on the 9.5 mm sieve. The tests show compaction did not consistently meet project specifications. Compaction and retesting of this lift is planned for November 18, 2019.

The results are for the sole use of the designated client only. This report constitutes a testing service only and does not represent any interpretation or opinion regarding the specification compliance or material suitability. Engineering interpretation will be provided by Thurber upon request.

| Per: | Jordan Lummis | |
|------|---------------|--|
| | | |



THURBER ENGINEERING LTD.

Suite 900 – 1281 West Georgia Street

Vancouver, BC V6E 3J7 Phone: (604) 684-4384 Fax: (604) 684-5124 Email: tdajani@thurber.ca **FIELD REVIEW REPORT NO.:007**

THURBER FILE NO.: 24160

| FIELD REVIEW | Date: November 18, 2019 | | | | | | |
|---|-------------------------------------|---|--|--|--|--|--|
| TO: Ventana Construction Corporation | | ATTENTION: Tallon O'Neill, Ventana | | | | | |
| PROJECT NAME: Port Coquitlam Community Recreation Complex – Phase 2 | | | | | | | |
| CONTRACTOR: Ventana Construction C | orporation | THURBER FILE NO.: 24160 | | | | | |
| PURPOSE OF FIELD REVIEW: Subgrade Inspection and Test pit investigation to investigate suitability of on-site material. | | | | | | | |
| REFERENCE DRAWING / DOCUMENTS | 6: Plan View of Pile Layout (Dwg.Pl | L-001) | | | | | |
| THURBER PERSONNEL ON SITE: Jordan Lummis (JL) | | TIME ON SITE: 10:30 to 4:30 WEATHER: Overcast and rainy, 8°C | | | | | |

ACTIVITIES/OBSERVATIONS:

General

- 1. Per Thurber's recommendations, excavation work is continuing in the parkade area to remove unsuitable in-situ material under the slab-on-grade and around the foundation system. Our recommendations require the removal of the unsuitable material to a maximum depth of 2.3 m below the underside of the pile cap, unless a granular subgrade is encountered at a shallower depth, and replacement with approved structural fill.
- 2. To date, the earthworks contractor, Hall Constructors (Hall), has:
 - a. Completed the subgrade preparation at the southwest corner of the site where they had excavated an area measuring approximately 20 m by 60 m and ranging in depth between 2 m and 3 m below original grade. We understand that the footprint of the excavation extends 1 m beyond the footprint of the pile caps along the south and west edge of the parkade area. Fill placement is still on-going.
 - b. Sub-excavated to 1 m depth below the access ramp area, which is located west of the parkade area. We understand that the purpose of the subexcavation at the ramp area is to provide a working platform for the piling crane. Thurber's recommendations for the parkade area (Item 1 above) are not applicable for the access ramp area.

Fill Placement and Compaction

- 3. As mentioned in Items 9 and 10 in FRR 006 (November 14, 2019), a lift of river sand fill was placed on November 14, 2019 that extended from the north end of the excavation up to the well point location. The lift did not pass the compaction testing and Thurber was advised that the compaction and retesting of this lift is planned for November 18, 2019. After recompaction today, the measured dry densities ranged from 1,921 kg/m³ to 2148 kg/m³ at moisture contents between 6.2% and 10.7%. Based on the density test results, the lift was approved (see attached FDR 007-1).
- 4. A lift of river sand fill was placed at the south end of the excavation, across an area measuring about 20 m by 20 m (this area was about 450 mm below the rest of the excavation refer to Items 8 and 9 in FRR 006). The lift measured 450 mm in thickness and compacted using a 12-ton CAT CS533E vibratory smooth roller compactor. Upon visual assessment, the material was found to be saturated. Hall was advised that the material would not pass compaction testing. Thurber was informed that the material will be left in place to drain. It should be noted that prior to placement of the fill, all standing water and saturated material were scraped off and the surface was compacted and tested (moisture content of 7.9% and a dry density of 2,148 kg/m³) (see attached FDR 007-1).
- 5. A single lift of river sand fill was placed along the complete footprint of the ramp access area (west of parkade area). The lift was about 450 mm thick and was compacted using the 12-ton roller compactor.

INSTRUCTIONS/RECOMMENDATIONS:

6. Following up on Item 4, the lift that was placed at the south end of the excavation did not pass the compaction testing. Compaction and retesting of the lift will be completed at a later date.

THURBER ENGINEERING LTD.

Report To: Ventana Construction Corporation

File No.: 24160



Field Review Report No.: 007 Date: November 18, 2019 Page 1 of 4 PHOTOS:

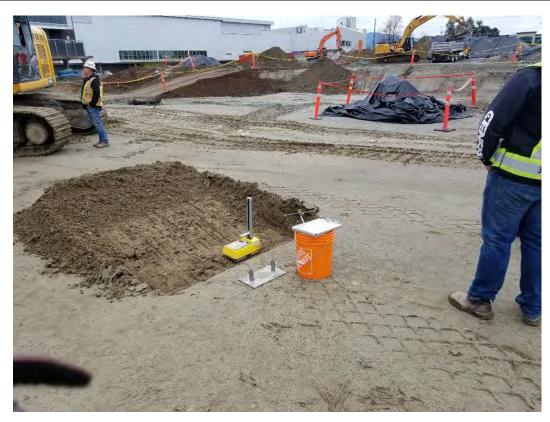


Photo 1 – Compaction testing of fill placed on November 14, 2019 (Item 3). [photo taken by JAL and dated 20191118]



Photo 2 – Removal of standing water and saturated material along south end of excavation (Item 4). [photo taken by JAL and dated 20191118]

THURBER ENGINEERING LTD.

Report To: Ventana Construction Corporation

File No.: 24160



Field Review Report No.: 007 Date: November 18, 2019 Page 2 of 4



Photo 3 – Compaction of the disturbed surface prior to fill placement (Item 4). [photo taken by JAL and dated 20191118]



Photo 4 – Compaction of river sand fill at south end of excavation (Item 4). [photo taken by JAL and dated 20191118]

THURBER ENGINEERING LTD.

Report To: Ventana Construction Corporation

File No.: 24160



Field Review Report No.: 007 Date: November 18, 2019 Page 3 of 4



Photo 5 – Fill placement for the access ramp (Item 5). [photo taken by JAL and dated 20191118]

Copies to:

Report By: Jordan Lummis, E.I.T.

Reviewed by Project Engineer: Chris Weech, P.Eng.

THURBER ENGINEERING LTD.

Report To: Ventana Construction Corporation

File No.: 24160



Field Review Report No.: 007 Date: November 18, 2019 Page 4 of 4



CC:

FIELD DENSITY REPORT

| ATTENTION: | Tallon O'Neill | FILE NO.: | 24160 | CONTRACTOR: | Hall Construction |
|------------|----------------------------------|--------------|-------------------|---------------|--|
| PROJECT: | | _ | | | |
| r ROJECT. | Port Coquitlam Recreation Centre | REPORT DATE: | November 21, 2019 | AREA: | Excavation – South End (Refer to Items 3 & 4 in FRR 007) |
| | | REPORT NO.: | FDR 007-1 | SOIL TYPE: | SAND, trace gravel to gravelly, trace silt (River Sand Fill) |
| | | _ | | SPECIFICATION | N: 95% Modified Proctor Maximum Dry Density |
| CLIENT: | Ventana Construction Corporation | DATE TESTED: | November 18, 2019 | | |

| FIELD | LOCATION | ELEV. & | PROC. | | FIELD | | LAF | BORATORY | PERCE PROCTOR I | | | | | | |
|-------------|--|--|------------|-------------|------------|------------|---------------------------|----------|----------------------------|------------------------------|--------------------------------|-------------------------------|--|----------------------------|---------------|
| TEST NO. | | COMPACTION | COMPACTION | COWIFACTION | COMPACTION | COMPACTION | COMI ACTION | NO. | Moisture Content (%) | Estimated Oversize (%) | Nuclear Dry Density (kg/m³) | Proctor Density (kg/m³) | Corrected for Field Oversize (kg/m³) | Field Compaction (%) | Specified (%) |
| 1 | Middle – West End of Excavation (near well point) Test completed lift surface Probe Depth = 300 mm | Re-testing of 3 rd lift placed on November 14, 2019 | | 10.7 | <5 | 1921 | | 2010 | >95% | | | | | | |
| 2 | Middle – West End of Excavation (near well point) Test completed 150 mm below surface Probe Depth = 300 mm | (refer to Item 3 in FRR 007) | | 9.0 | 10-20 | 2085 | 1986 (9.5 mm minus) | 2100 | 79370 | 95% | | | | | |
| 4 | South end of Excavation Test completed 150 mm below surface Probe Depth = 300 mm | Compaction of surface before placement of additional fill (Item 4 in FRR 007) | | 7.9 | 20-30% | 2148 | | 2160 | >95% | | | | | | |

FIELD METHOD: ASTM D-2922 / NUCLEAR LABORATORY METHOD: ASTM D1557

JAL

COMMENTS: Oversize refers to proportion retained on the 9.5 mm sieve. The tests show compaction generally meets project specifications.

TESTED BY:

The results are for the sole use of the designated client only. This report constitutes a testing service only and does not represent any interpretation or opinion regarding the specification compliance or material suitability. Engineering interpretation will be provided by Thurber upon request.

Per: Jordan Lummis