

WELLINGTON OUTDOOR AQUATIC FACILITY

TOWNSHIP OF WELLINGTON NORTH

Wellington, Ontario



DESIGN REPORT

OCTOBER 5, 2023



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- Elevations 2.5
- Renderings 2.6

DESIGN BRIEFS | 3 ◀ 20

- Pool Design Brief 3.1
- Mechanical Design Brief 3.2
- Electrical Design Brief 3.3

COST ESTIMATE | 4 ◀ 35

architects Tillmann Ruth Robinson inc.
PRIME CONSULTANT / ARCHITECT

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26 Soho Street, Suite 202 Toronto, ON M5T 1Z7 T. 416.595.2876
www.atrr.ca

1. EXECUTIVE SUMMARY

The Township of Wellington North is embarking on a new Outdoor Aquatic Facility. The new state-of-the-art pool will create an exciting community amenity that will replace an existing and decommissioned pool in Mount Forest.

The proposed location, adjacent to the existing recreational complex, will help contribute to creating a synergistic recreation and social hub for the community.

The new pool will provide an accessible beach entry, lap swimming, a diving tank, and a kids' play area, as well as areas for swim lessons and aquafit classes. Activities can be observed from new shaded social areas on the deck, as well as spectator seating areas.

The new bathhouse will include fully accessible shower and change room facilities as well as staffing and guard areas.

The following documents represent the completion of the Design Development phase of this project.

Along with the architectural drawings, we have also included mechanical and electrical design briefs and associated drawings. The pool tank is also described within the following pages.

Additionally, we have engaged Marshall & Murray as cost consultant to complete the Class 'C' pricing, included in Section 4 of this document.



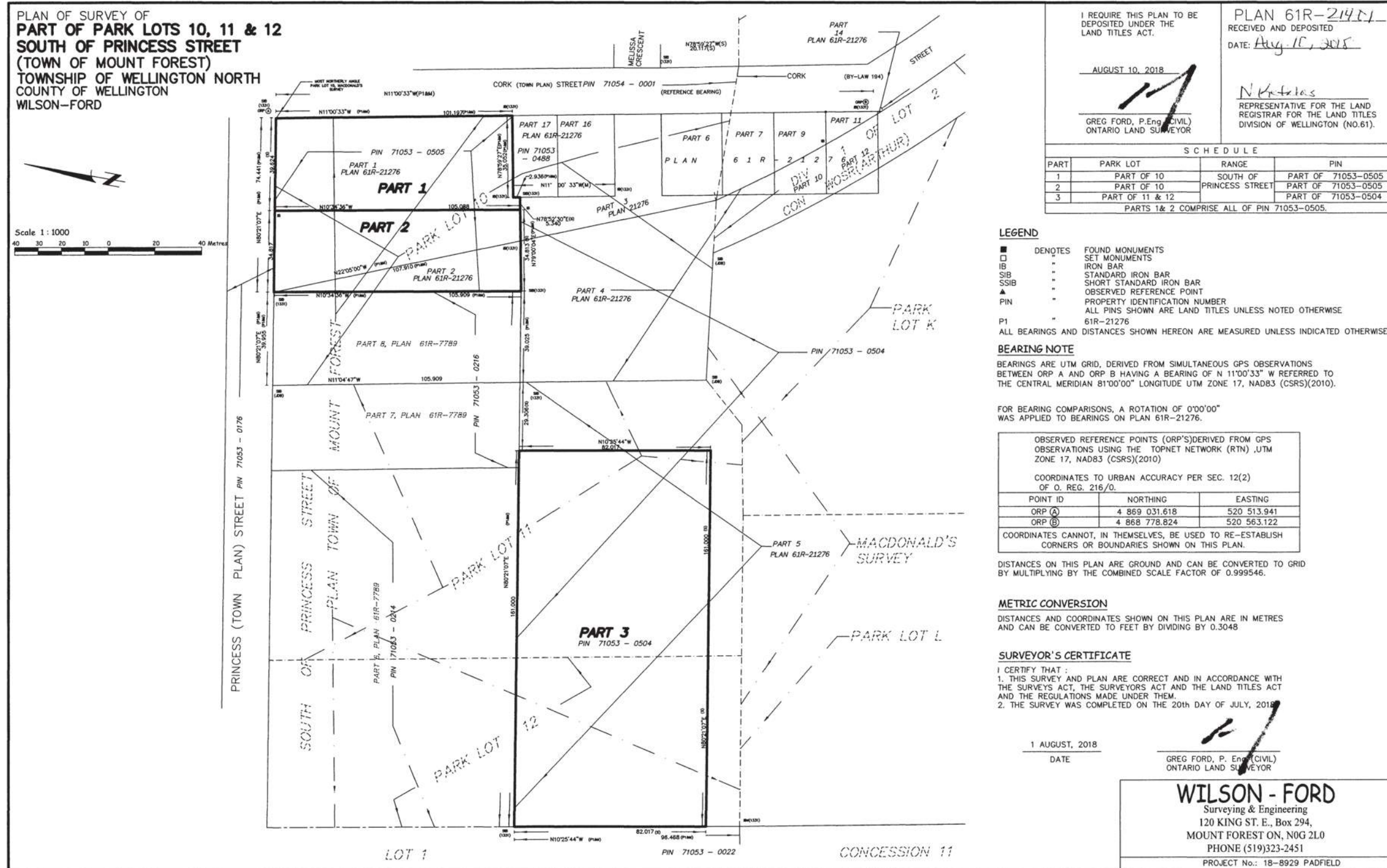
Pool looking North



Looking South

2. DESIGN DRAWINGS

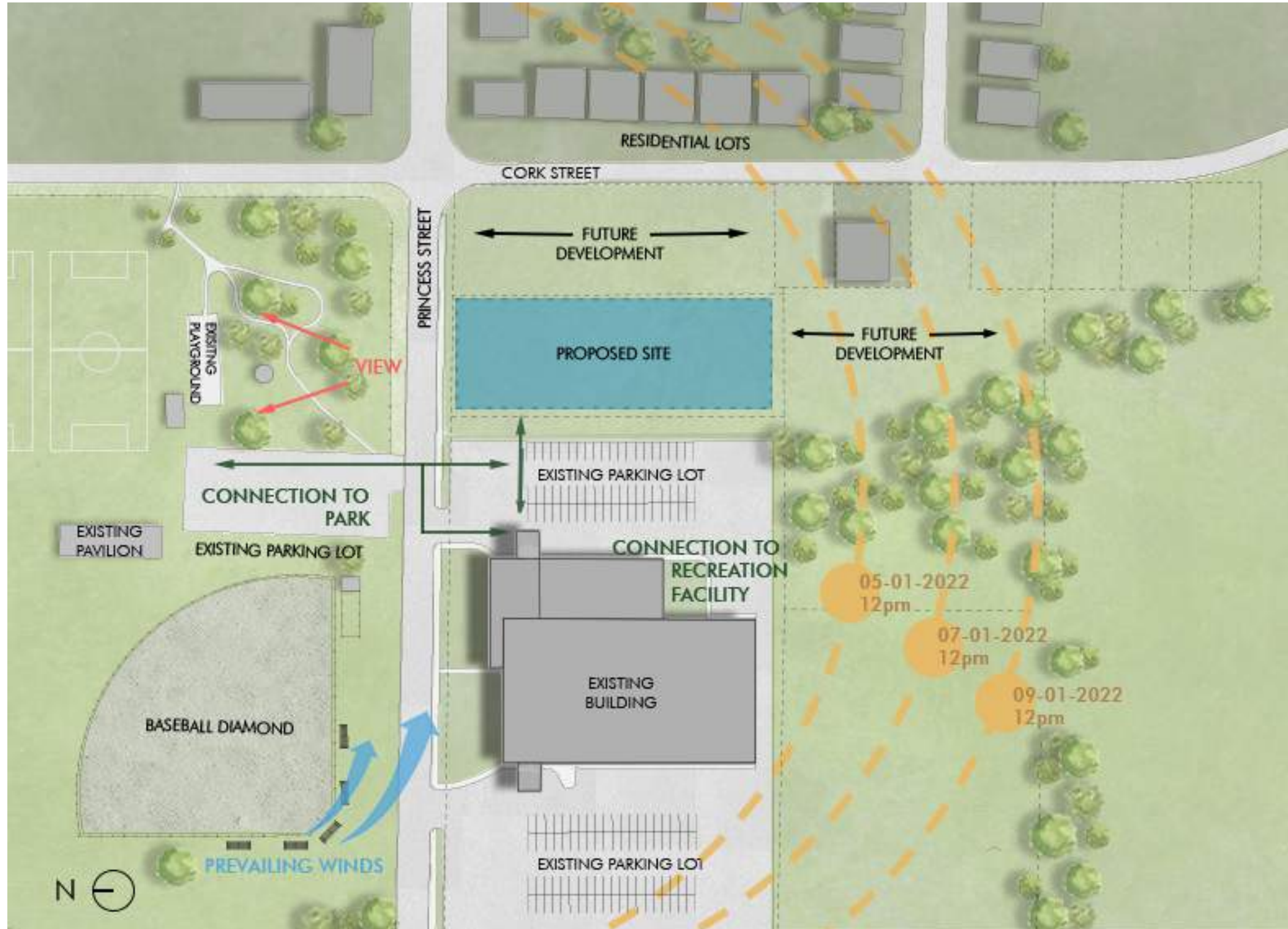
2.1 SITE PLAN/SURVEY



2. DESIGN DRAWINGS

CONTINUED

2.2 SITE ASSESSMENT



2. DESIGN DRAWINGS

CONTINUED

2.2 SITE/CONTEXT PLAN

SITE LEGEND

<p>— — — — — PROPERTY LINE</p> <p>- CF - CONSTRUCTION FENCE (CHAIN LINK OR WELDED WIRE PANELS)</p> <p>- sf - SILT FENCE</p> <p>■ NOT IN CONTRACT</p> <p>○ EXISTING TREE TO REMAIN (REFER TO LANDSCAPE)</p> <p>○ PROPOSED NEW TREE (REFER TO LANDSCAPE)</p> <p>○ TREE PROTECTION ZONE (REFER TO ARBORIST REPORT)</p> <p>▼ BUILDING ENTRY/EXIT</p> <p>■ NEW CAST IN PLACE CONCRETE</p> <p>■ NEW SOD</p>	<p>— — — — — EXISTING FENCE TO REMAIN</p> <p>— — — — — NEW DECORATIVE METAL FENCE</p> <p>■ EX.CB EXISTING CATCH BASIN TO REMAIN AS IS (REFER TO SITE SERVICES DRAWINGS)</p> <p>□ CB NEW CATCH BASIN (REFER TO SITE SERVICES DRAWINGS)</p> <p>○ EX.MH EXISTING MANHOLE TO REMAIN AS IS (REFER TO SITE SERVICES DRAWINGS)</p> <p>○ MH NEW MANHOLE (REFER TO SITE SERVICES DRAWINGS)</p> <p>■ EX.LS EXISTING LIGHT STANDARD TO REMAIN AS IS (REFER TO ELECTRICAL)</p> <p>■ LS NEW LIGHT STANDARD (REFER TO ELECTRICAL)</p> <p>⊗ 268.266 NEW ELEVATION MARKET</p>
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SITE NOTES

1. ALL SERVICES SHOWN ARE FOR INFORMATION ONLY. EXISTING SERVICE LOCATION ARE THE BE SITE VERIFIED BY GENERAL CONTRACTOR PRIOR TO CONSTRUCTION.
2. REPLACE ALL EXISTING CONCRETE SIDEWALKS, CURBS, ROAD AND GRASSED AREAS DAMAGED DURING CONSTRUCTION TO AS FOUND CONDITION. THIS INCLUDES CITY PROPERTY.
3. REFER TO AND COORDINATE WITH SITE SERVICES, LANDSCAPE, POOL, STRUCTURAL, ELECTRICAL AND MECHANICAL DRAWINGS AND SPECIFICATIONS. ALL DRAWINGS ARE TO BE READ IN CONJUNCTION.
4. REFER TO DRAWINGS A-201, FOR LOCATION OF EXITS AT GRADE.
5. EXTENT OF NEW SIDEWALKS, PATHS, CURBS AND ROADWAYS ARE INDICATED FOR COORDINATION PURPOSES ONLY. REFER TO SITE SERVICES DRAWINGS FOR LOCATIONS.
6. WALKS/ CURB RAMPS: CONCRETE WALKS SHALL HAVE NON-SLIP BROOM FINISH.
7. ENTIRE BUILDING SITE TO BE SODDED TO TOP OF SLOPE UNLESS OTHERWISE NOTED.
8. BUILDING ENTRY SERVES AS FIRE FIGHTER'S ENTRANCE TO THE BUILDING, AND IS A BARRIER FREE MAIN ENTRY.
9. ALL SITE SIGNAGE TO BE DESIGNED TO CITY OF WELLAND STANDARDS.
10. REFER TO CIVIL FOR SEDIMENT CONTROL REQUIREMENTS.
11. REFER TO LANDSCAPE FOR TREE PROTECTION REQUIREMENTS.

KEY PLAN N.T.S.

SITE DATA

EXISTING SITE PLAN INFORMATION DERIVED FROM PARTIAL PLAN OF SURVEY AND TOPOGRAPHY. PREPARED BY MTE ONTARIO LAND SURVEYORS LTD. FILE NUMBER No. 48899-300 SRI(L), DATED MAY 14 2021.

PARTIAL PLAN OF SURVEY AND TOPOGRAPHY OF LOTS 31 TO 46, LOTS 98 TO 114, LOTS 177 TO 193, AND LOTS 245, PART OF LOT 30 AND 246, PART OF LOTS 249 TO 261, PART OF DOMINION STREET AND PART OF ROXBOROUGH STREET AND PART OF ROXBOROUGH STREET AND REGISTERED PLAN NO. 947 CITY OF WELLAND REGIONAL MUNICIPALITY OF NIAGARA

ADDRESS:
405 MEMORIAL PARK DRIVE, WELLAND, ONTARIO

SITE PLAN

SCALE: 1:750

SITE PLAN

SCALE: 1:200

Wellington Outdoor Aquatic Facility
CLIENT PROJECT NO. 2476-21

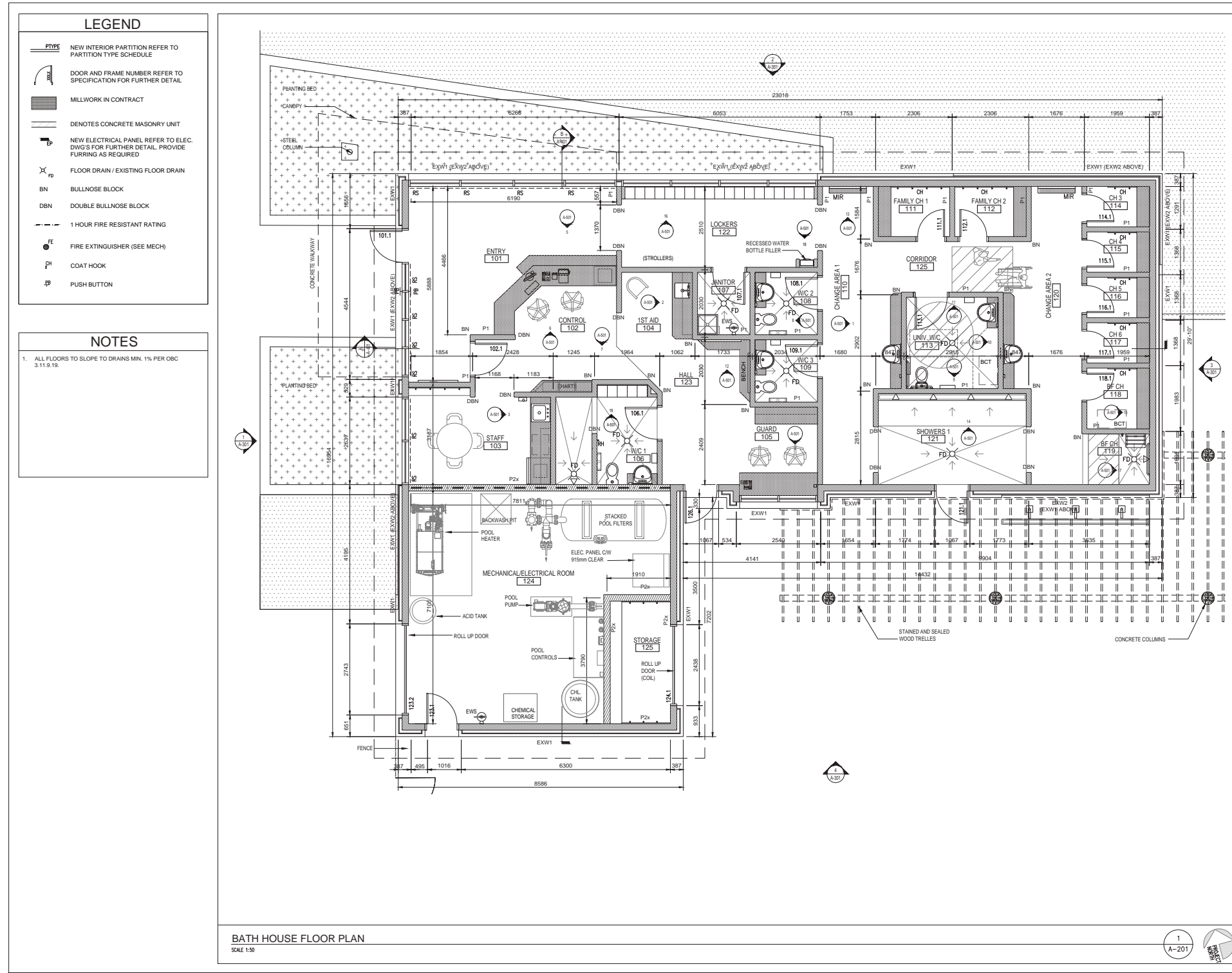
tillmann architects ruth robinson


THE INFORMATION CONTAINED ON THIS DRAWING WAS PREPARED BY ARCHITECTS TILLMANN RUTH ROBINSON INC. AND IS PROTECTED BY COPYRIGHT. REPRODUCTION BY ANY MEANS OF THE INFORMATION CONTAINED ON THIS DRAWING, IN WHOLE OR IN PART IS EXPRESSLY FORBIDDEN WITHOUT THE WRITTEN PERMISSION OF ARCHITECTS TILLMANN RUTH ROBINSON INC.		
NO.	ISSUED FOR	DATE
DRAWING TITLE:		
SITE PLAN		
DATE: July 04, 2023	SCALE: 2476-21	PROJECT NO: 2476-21
DRAWN: LAR	CHECKED: SM	COMP. FILE NO.:
DRAWING NO:		
A-101		

2. DESIGN DRAWINGS


CONTINUED

2.3 FLOOR PLAN (BATHHOUSE)





Wellington Outdoor Aquatic Facility
CLIENT PROJECT NO. 2476-21



NO.	ISSUED FOR	DATE

DRAWING TITLE:
FLOOR PLAN



DATE: October 02, 2023	SCALE: 1:50	PROJECT NO.: 2476-21
DRAWN: LJR	CHECKED: SM	COMP. FILE NO.:
DRAWING NO.: A-201		

File Date: Monday, October 02, 2023
Plotted by: Lucas Riggs
Filename: S:\2476-21 Wellington Outdoor Aquatic Facility\2.3 Production\2.3 Bathing Drawings\A-201.dwg

2. DESIGN DRAWINGS

CONTINUED

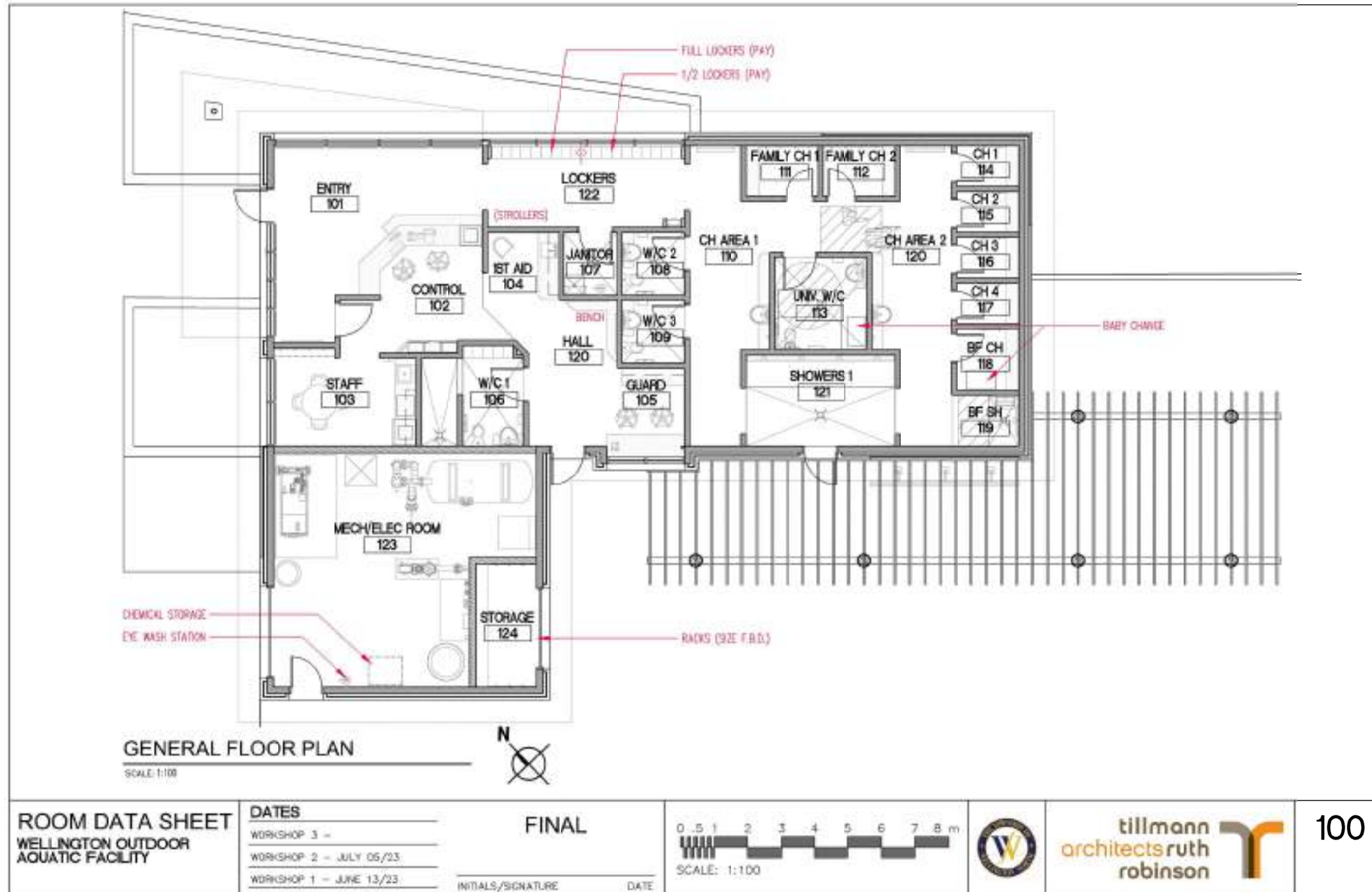
2.4 ROOM INFORMATION SHEETS (BATHHOUSE)

 <p>WELLINGTON OUTDOOR AQUATIC FACILITY</p>		<p>ROOM DATA SHEETS</p> <hr/> <p>100 GENERAL FLOOR PLAN</p> <p>101 ENTRY</p> <p>102 CONTROL</p> <p>103 STAFF</p> <p>104 FIRST AID</p> <p>105 GUARD</p> <p>106 W/C 1</p> <p>107 JANITOR</p>	
ROOM DATA SHEET	<p>DATES</p> <p>WORKSHOP 3 – _____</p> <p>WORKSHOP 2 – JULY 05/23</p> <p>WORKSHOP 1 – JUNE 13/23</p>	<p>FINAL</p> <p>_____ INITIALS/SIGNATURE</p> <p>_____ DATE</p>	 <p>000</p>

2. DESIGN DRAWINGS

CONTINUED

2.4 ROOM INFORMATION SHEETS



2. DESIGN DRAWINGS

CONTINUED


2.4 ROOM INFORMATION SHEETS

DRAWING LEGEND			CONTROL																																										
ARCHITECTURAL	<ul style="list-style-type: none"> NEW MILKWORK GWB GYPSUM WALL BOARD PT PAINT RSF RESILIENT SHEET FLOORING SC SEALS CONCRETE ACT ACOUSTIC CEILING TILE PWC PROTECTIVE WALL COVERING CG CORNER GUARD MIR MIRROR TB TACK BOARD WB WHITEBOARD RS ROLLER SHADES 			ROOM NO. 101 ROOM SIZE: 22.9m ² FUNCTION: ENTRY ANTICIPATED OCCUPANT LOAD: 10																																									
	MECHANICAL / ELECTRICAL			<ul style="list-style-type: none"> FD FLOOR DRAIN RO OUTLET RECEPTACLE PO POWER RECEPTACLE (OVER COUNTER) UC POWER RECEPTACLE (UNDER COUNTER) GF POWER RECEPTACLE (GROUND FAULT INTERRUPTER) DO DATA OUTLET VO VOICE OUTLET DA/NO DATA/NOISE OUTLET CO CABLE OUTLET NR NR PS PUSH BUTTON 	FINISHES WALL FINISH: PAINTED BLOCK FLOOR FINISH: EPOXY (EP) WALL BASE: EPOXY CEILING FINISH: PAINT GYP/STAIN WD MILKWORK FINISH: SOLID SURFACE/PLUM COMMENTS:																																								
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	ELECTRICAL LIGHT LEVEL: FIXTURE TYPE: RECESSED DOWNLIGHT SWITCHING: COMMENTS:		ROOM DATA SHEET WELLINGTON OUTDOOR AQUATIC FACILITY																																										
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		101																																											

2. DESIGN DRAWINGS

CONTINUED

2.4 ROOM INFORMATION SHEETS

DRAWING LEGEND																				
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<p>FINAL</p>		<p>INITIALS/SIGNATURE _____</p> <p>DATE _____</p>																		
		<p>102</p>																		

CONTROL

ROOM NO: 102 ROOM SIZE: 11.3m²

DUCTWORK CONTROL

ANTICIPATED OCCUPANT LOAD: 2

FINISHES

WALL FINISH: PAINTED BLOCK

FLOOR FINISH: SHEET VINYL (RS)

WALL BASE: RUBBER

CEILING FINISH: PAINT GYP/STAIN WD

MILLWORK FINISH: PLAM/SOLID SURFACE

COMMENTS:

DOORS AND ACCESS

EP PASSAGE SET CR CARD READER

KL KEYS LOCK ES ELECTRIC STRIKE

TAG	DOOR TYPE
102-1	NARROW LIGHT WITH MD RAILS

MECHANICAL

TEMPERATURE:

HUMIDITY:

SEPA FILTER:

REHUMIDIFICATION:

AIR CHANGES/HR:

COMMENTS:

FIRE PROTECTION

SPRINKLER HEAD TYPE: CONCEALED

COMMENTS:

ELECTRICAL

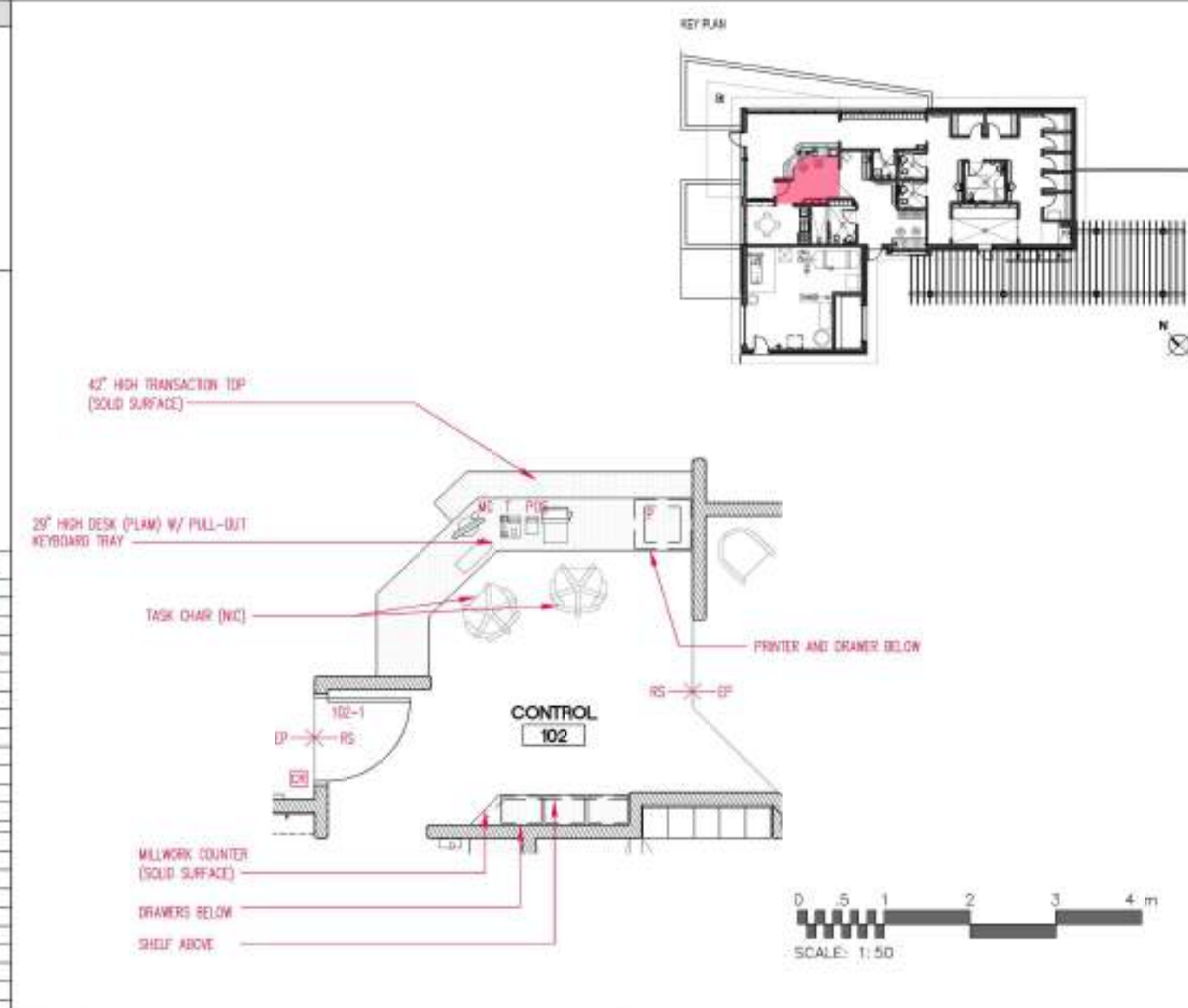
LIGHT LEVEL:

FIXTURE TYPE: RECESSED DOWNLIGHT

DIMMING:

SWITCHING:

COMMENTS:



2. DESIGN DRAWINGS

CONTINUED

2.4 ROOM INFORMATION SHEETS

DRAWING LEGEND		KEY PLAN	STAFF																																										
<p>ARCHITECTURAL</p> <ul style="list-style-type: none"> NEW MILKWORK GWB EPS/WALL BOARD PT PAINT RSP RESILIENT SHEET FLOORING SC SEALED CONCRETE ACT ACOUSTIC CEILING TILE PWC PROTECTIVE WALL COVERING CC CORNER CHAIR MIR MIRROR TB TACK BOARD WB WHITEBOARD RS ROLLER SHADES 	<p>Mechanical / Electrical</p> <ul style="list-style-type: none"> FD FLOOR DRAIN OR OUTLET RECEPTACLE PR POWER RECEPTACLE (OVER COUNTER) PLC POWER RECEPTACLE (UNDER COUNTER) PIF POWER RECEPTACLE (GROUND FAULT INTERRUPTER) DO DATA OUTLET NO NOISE OUTLET DN DATA/NOISE OUTLET CO CABLE OUTLET WI WI WP WP PB PUSH BUTTON 				<p>STAFF</p> <p>ORG. NO.: 103 ROOM SIZE: 11.8m²</p> <p>FUNCTION: STAFF</p> <p>ANTICIPATED OCCUPANCY LOAD: 4 - 6</p>																																								
<p>EQUIPMENT LIST</p> <table border="1"> <thead> <tr> <th>TAG</th> <th>EQUIPMENT</th> <th>QTY.</th> </tr> </thead> <tbody> <tr> <td>CM</td> <td>COFFEE MAKER (NIC)</td> <td>1</td> </tr> <tr> <td>FR</td> <td>COMPACT FRIDGE (NIC)</td> <td>1</td> </tr> <tr> <td>MW</td> <td>MICROWAVE (NIC)</td> <td>1</td> </tr> <tr> <td></td> <td>ROUND TABLE (NIC)</td> <td>1</td> </tr> <tr> <td></td> <td>CHAIRS (NIC)</td> <td>4</td> </tr> <tr> <td>WP</td> <td>WALL PICTURE (NIC)</td> <td>1</td> </tr> </tbody> </table>	TAG	EQUIPMENT	QTY.		CM	COFFEE MAKER (NIC)	1	FR	COMPACT FRIDGE (NIC)	1	MW	MICROWAVE (NIC)	1		ROUND TABLE (NIC)	1		CHAIRS (NIC)	4	WP	WALL PICTURE (NIC)	1	<p>FINISHES</p> <ul style="list-style-type: none"> WALL FINISH: PAINTED BLOCK FLOOR FINISH: SHEET VINYL (RS) WALL BASE: RUBBER CEILING FINISH: PAINT GYP MILKWORK FINISH: SOLID SURFACE <p>COMMENTS:</p>	<p>DOORS AND ACCESS</p> <ul style="list-style-type: none"> PS PASSAGE SET CR CARD READER KL KEYPAD LOCK ES ELECTRIC STRIKE <table border="1"> <thead> <tr> <th>TAG</th> <th>DOOR TYPE</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>	TAG	DOOR TYPE																			
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2. DESIGN DRAWINGS

CONTINUED

2.4 ROOM INFORMATION SHEETS

DRAWING LEGEND

ARCHITECTURAL	NEW MILLWORK GWB GYPSUM WALL BOARD PT PAINT RSF RESILIENT SHEET FLOORING SC SEALED CONCRETE ACT ACOUSTIC CEILING TIE PWC PROTECTIVE WALL COVERING CG CORNER BOARD MIR MIRROR TB TACK BOARD WB WHITEBOARD RS ROLLER SHADES																																	
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TAG	EQUIPMENT	QTY.																																
	CHAIR (NIC)	1																																
NOTES																																		

KEY PLAN

0 0.5 1 2 3 4 m
SCALE: 1:50

FIRST AID

ROOM NO. 104 ROOM SIZE 4.2m²
FUNCTION FIRST AID
ANTICIPATED OCCUPANT LOAD

FINISHES

WALL FINISH: PAINTED BLOCK
FLOOR FINISH: CONC EPOXY (EP)
WALL BASE: EPOXY
CEILING FINISH: PAINT GYP
MILLWORK FINISH: SOLID SURFACE
COMMENTS:

DOORS AND ACCESS

P PASSAGE SET	CR CARD READER
N NEEDED LOCK	ES ELECTRIC STRIKE

TAG	DOOR TYPE

MECHANICAL

TEMPERATURE:
HUMIDITY:
HEPA FILTER:
PRESSURIZATION:
AIR CHANGES/HR:
COMMENTS:

FIRE PROTECTION

SMOKER HEAD TYPE: CONCEALED
COMMENTS:

ELECTRICAL

LIGHT LEVEL:
FITTURE TYPE: RECESSED DOWNLIGHT
DIMMING:
SWITCHING:
COMMENTS:

ROOM DATA SHEET
WELLINGTON OUTDOOR
AQUATIC FACILITY

DATES
WORKSHOP 3 —
WORKSHOP 2 — JULY 05/23
WORKSHOP 1 — JUNE 13/23

FINAL


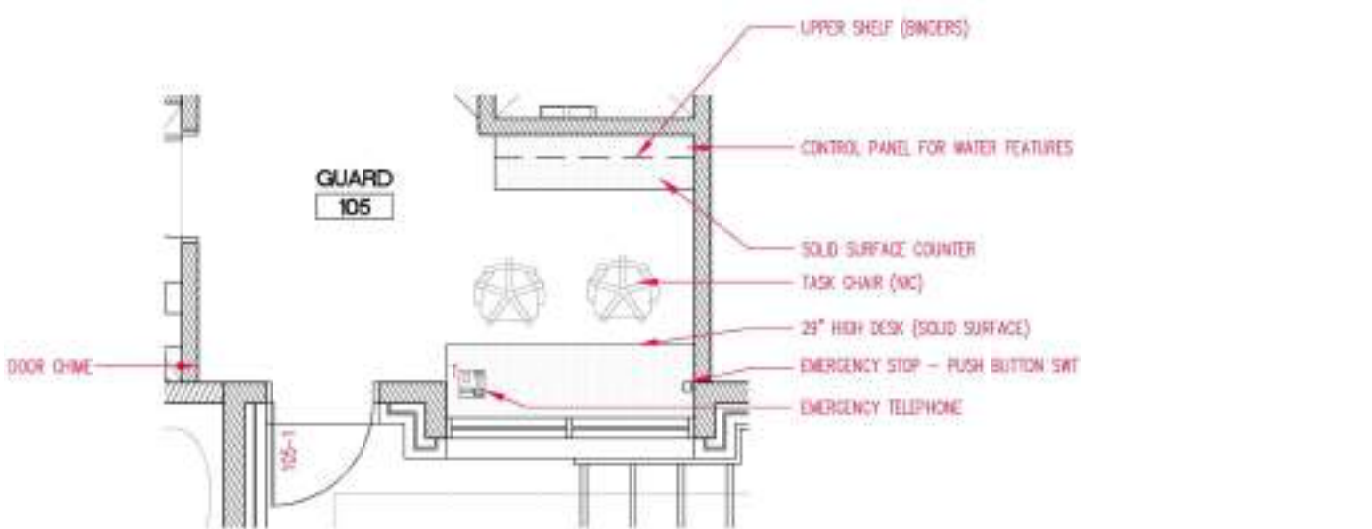


INITIALS/SIGNATURE _____ DATE _____

104

2. DESIGN DRAWINGS

CONTINUED

2.4 ROOM INFORMATION SHEETS

DRAWING LEGEND				GUARD		
ARCHITECTURAL	NEW MILLWORK			ROOM NO. 107 ROOM SIZE: 11.6m ² FUNCTION: GUARD ANTICIPATED OCCUPANT LOAD: 2	FINISHES	
	GWB EPSOM WALL BOARD			WALL FINISH: PAINTED BLOCK FLOOR FINISH: CONC EPOXY (EP) WALL BASE: EPOXY CEILING FINISH: PAINT GYP/STAIN MD MILLWORK FINISH: SOLID SURFACE COMMENTS:	DOORS AND ACCESS	
	PT PAINT			MECHANICAL TEMPERATURE: HUMIDITY: HEPA FILTER: PRESSURIZATION: AIR CHANGES/HR: COMMENTS:	[PS] PASSAGE SET [CR] CARD READER [KL] KEYS LOCK [ES] ELECTRIC STRIKE TAG DOOR TYPE 105-1 FULL GLASS DOOR (ALUM)	
MECHANICAL / ELECTRICAL	FD FLOOR DRAIN			FIRE PROTECTION		
	OR OUTLET RECEPTACLE			ELECTRICAL LIGHT LEVEL: FIXTURE TYPE: RECESSED DOWNLIGHT DIMMING: SWITCHING: COMMENTS:		
	OC OVER COUNTER POWER RECEPTACLE					
UC UNDER COUNTER POWER RECEPTACLE						
EQUIPMENT LIST	CFI POWER RECEPTACLE (GROUND FAULT INTERRUPTER)		UPPER SHELF (SINGERS) CONTROL PANEL FOR WATER FEATURES SOLID SURFACE COUNTER TASK CHAIR (WC) 29" HIGH DESK (SOLID SURFACE) EMERGENCY STOP - PUSH BUTTON SWT EMERGENCY TELEPHONE			
	DOOR CHIME		[WLP] WALK [EP] EPOXY			
	DOOR CHIME		SCALE: 1:50 			
NOTES	DATA OUTLET					
	VOX VOICE OUTLET					
	DATA/VOICE OUTLET					
ROOM DATA SHEET WELLINGTON OUTDOOR AQUATIC FACILITY			DATES WORKSHOP 3 - WORKSHOP 2 - JULY 05/23 WORKSHOP 1 - JUNE 13/23	FINAL INITIALS/SIGNATURE _____ DATE _____		105

2. DESIGN DRAWINGS

CONTINUED

2.4 ROOM INFORMATION SHEETS

DRAWING LEGEND		
ARCHITECTURAL		
	NEW MILLWORK	
	GWB GYPSUM WALL BOARD	
	PT PAINT	
	RSF RESILIENT SHEET FLOORING	
	SC SCALED CONCRETE	
	ACT ACOUSTIC CEILING TILE	
	PWC PROTECTIVE WALL COVERING	
	CG CORNER GUARD	
	MR MIRROR	
	TB TACK BOARD	
	WB WHITEBOARD	
	RS ROLLER SHADDS	
MECHANICAL / ELECTRICAL		
	FD FLOOR DRAIN	
	OR OUTLET RECEPTACLE	
	OC POWER RECEPTACLE (OVER COUNTER)	
	UC POWER RECEPTACLE (UNDER COUNTER)	
	GFI POWER RECEPTACLE (GROUND FAULT INTERRUPTER)	
	DO DATA OUTLET	
	VO VOICE OUTLET	
	DVO DATA/VOICE OUTLET	
	CO CABLE OUTLET	
	MR MIRROR	
	PB PUSH BUTTON	
EQUIPMENT LIST		
TAG	EQUIPMENT	QTY.
NOTES		
ROOM DATA SHEET		
WELLINGTON OUTDOOR AQUATIC FACILITY		
DATES		
WORKSHOP 3 - _____		
WORKSHOP 2 - JULY 05/23		
WORKSHOP 1 - JUNE 13/23		
INITIALS/SIGNATURE		DATE
FINAL		
		106

WASHROOM 1	
PROG. NO. 106	ROOM SIZE 2.0m ²
FUNCTION: WASHROOM AND SHOWER	
ANTICIPATED OCCUPANT LOAD: 1	
FINISHES	
WALL FINISH:	EPOXY BLOCK
FLOOR FINISH:	EPOXY (EP)
WALL BASE:	EPOXY
CEILING FINISH:	EPOXY
MILLWORK FINISH:	SOLID SURFACE
COMMENTS:	
DOORS AND ACCESS	
	PS PASSAGE SET
	CR CARD READER
	KL KEYED LOCK
	ES ELECTRIC STRIKE
TAG	DOOR TYPE
106-1	SLAB (FLUSH) DOOR
MECHANICAL	
TEMPERATURE:	
HUMIDITY:	
HEPA FILTER:	
PRESSURIZATION:	
AIR CHANGES/HR:	
COMMENTS:	
FIRE PROTECTION	
SPRINKLER HEAD TYPE: CONCEALED	
COMMENTS:	
ELECTRICAL	
LIGHT LEVEL:	
FIXTURE TYPE: RECESSED DOWNLIGHT	
DIMMING:	
SWITCHING:	
COMMENTS:	

2. DESIGN DRAWINGS

CONTINUED

2.4 ROOM INFORMATION SHEETS

<p>DRAWING LEGEND</p> <table border="0"> <tr> <td>NEW MILLARY</td> <td></td> </tr> <tr> <td>DWB EPSOM WALL BOARD</td> <td></td> </tr> <tr> <td>PT PAINT</td> <td></td> </tr> <tr> <td>RSF RESILIENT SHEET FLOORING</td> <td></td> </tr> <tr> <td>SC SEALED CONCRETE</td> <td></td> </tr> <tr> <td>ACT ACOUSTIC CEILING TILE</td> <td></td> </tr> <tr> <td>PWC PROTECTIVE WALL COVERING</td> <td></td> </tr> <tr> <td>CG CORNER GUARD</td> <td></td> </tr> <tr> <td>MIR MIRROR</td> <td></td> </tr> <tr> <td>TB TACK BOARD</td> <td></td> </tr> <tr> <td>WB WHITEBOARD</td> <td></td> </tr> <tr> <td>RS ROLLER SHADES</td> <td></td> </tr> </table>	NEW MILLARY		DWB EPSOM WALL BOARD		PT PAINT		RSF RESILIENT SHEET FLOORING		SC SEALED CONCRETE		ACT ACOUSTIC CEILING TILE		PWC PROTECTIVE WALL COVERING		CG CORNER GUARD		MIR MIRROR		TB TACK BOARD		WB WHITEBOARD		RS ROLLER SHADES		<p>MECHANICAL / ELECTRICAL</p> <table border="0"> <tr> <td>FLOOR DRAIN</td> <td></td> </tr> <tr> <td>OUTLET RECEPTACLE</td> <td></td> </tr> <tr> <td>POWER RECEPTACLE (OVER COUNTER)</td> <td></td> </tr> <tr> <td>POWER RECEPTACLE (UNDER COUNTER)</td> <td></td> </tr> <tr> <td>POWER RECEPTACLE (GROUND FAULT INTERRUPTER)</td> <td></td> </tr> <tr> <td>DATA OUTLET</td> <td></td> </tr> <tr> <td>VOICE OUTLET</td> <td></td> </tr> <tr> <td>DATA/VOICE OUTLET</td> <td></td> </tr> <tr> <td>CABLE OUTLET</td> <td></td> </tr> <tr> <td>MIR</td> <td></td> </tr> <tr> <td>PUSH BUTTON</td> <td></td> </tr> </table>	FLOOR DRAIN		OUTLET RECEPTACLE		POWER RECEPTACLE (OVER COUNTER)		POWER RECEPTACLE (UNDER COUNTER)		POWER RECEPTACLE (GROUND FAULT INTERRUPTER)		DATA OUTLET		VOICE OUTLET		DATA/VOICE OUTLET		CABLE OUTLET		MIR		PUSH BUTTON		<p>KEY PLAN</p>	<p>JANITOR</p> <p>ROOM NO: 107 ROOM SIZE: 2.9m²</p> <p>ELECTRICAL: JANITOR</p> <p>ANTICIPATED OCCUPANT LOAD:</p>
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<p>NOTES</p>	<p>MECHANICAL</p> <p>TEMPERATURE:</p> <p>HUMIDITY:</p> <p>HEPA FILTER:</p> <p>PRESSURIZATION:</p> <p>AIR CHANGES/HR:</p> <p>COMMENTS:</p>	<p>DOORS AND ACCESS</p> <p>PASSAGE SET</p> <p>KEYED LOCK</p> <p>CARD READER</p> <p>ELECTRIC STRIKE</p> <table border="1"> <thead> <tr> <th>TAG</th> <th>DOOR TYPE</th> </tr> </thead> <tbody> <tr> <td>107-1</td> <td>SLAB (FLUSH) DOOR</td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </tbody> </table>	TAG	DOOR TYPE	107-1	SLAB (FLUSH) DOOR																																											
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		<p>ELECTRICAL</p> <p>LIGHT LEVEL:</p> <p>EXCISE TYPE: RECESSED DOWNLIGHT</p> <p>DIMMING:</p> <p>SWITCHING:</p> <p>COMMENTS:</p>	<p>tillmann architects ruth robinson</p>	<p>107</p>																																													

2. DESIGN DRAWINGS

CONTINUED

2.5 ELEVATIONS - NORTH, SOUTH, EAST AND WEST

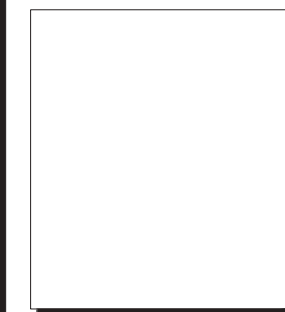
NORTH ELEVATION
SCALE 1:75

EAST ELEVATION
SCALE 1:75

SOUTH ELEVATION
SCALE 1:75

WEST ELEVATION
SCALE 1:75

Wellington Outdoor Aquatic Facility
CLIENT PROJECT NO. 2478-21



tillmann architects ruth robinson

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NO.	ISSUED FOR	DATE

DRAWING TITLE:
EXTERIOR ELEVATIONS

DATE: July 05, 2023	SCALE: 1:75	PROJECT NO.:
DRAWN: LJR	CHECKED: SWR	2478-21
DRAWING NO.:	COMP. FILE NO.:	

A-301

2. DESIGN DRAWINGS

CONTINUED

2.6 RENDERINGS



Pool looking North

2. DESIGN DRAWINGS

CONTINUED

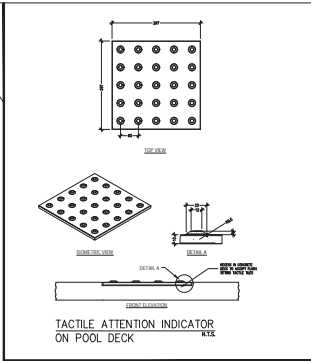
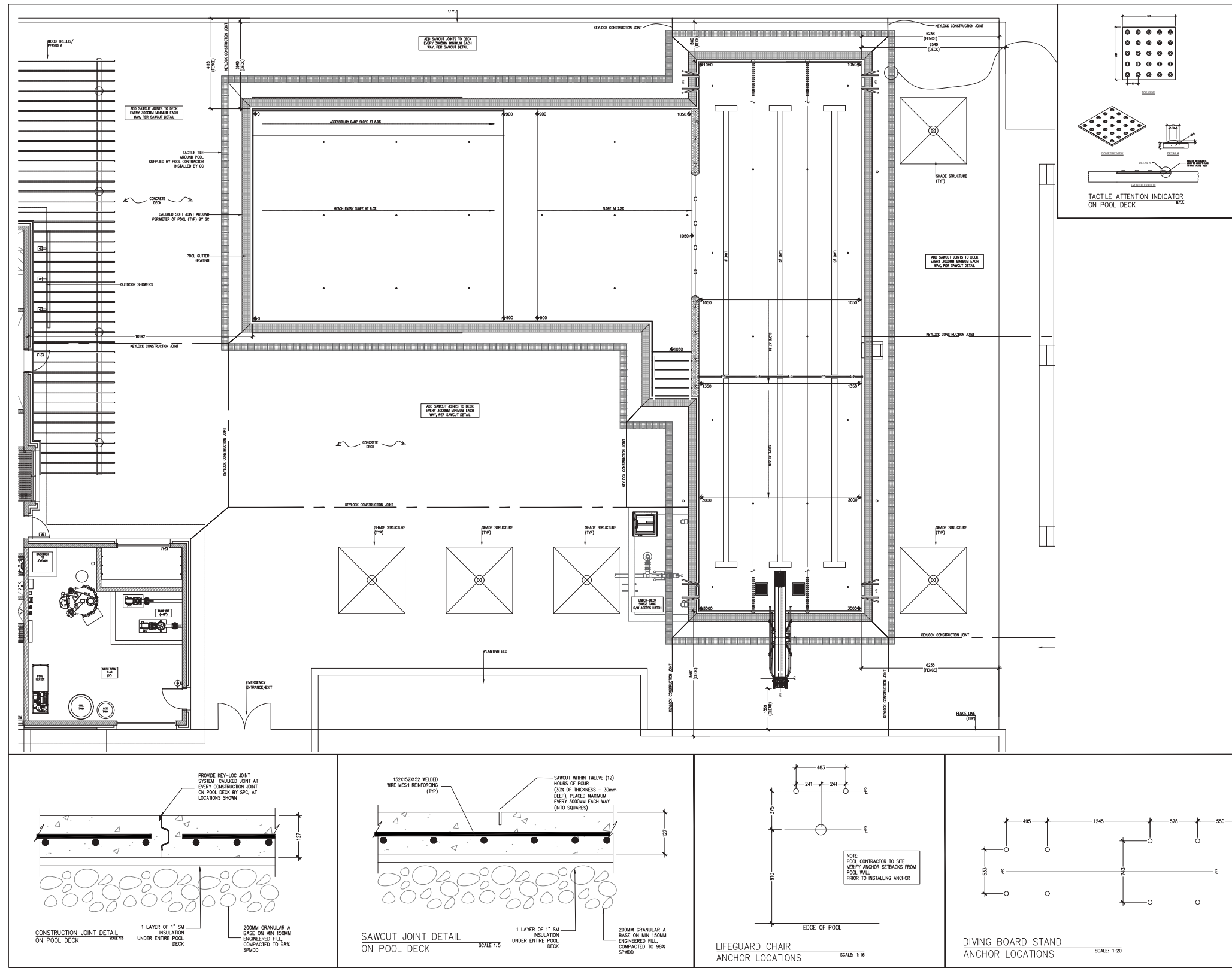
2.6 RENDERINGS



Looking South

3. DESIGN BRIEFS

3.1 POOL DESIGN BRIEF



Wellington Outdoor Aquatic Facility
CLIENT PROJECT NO. 2476-21

AQUA PLANS
aquatic consultants inc.

tillmann
architects ruth
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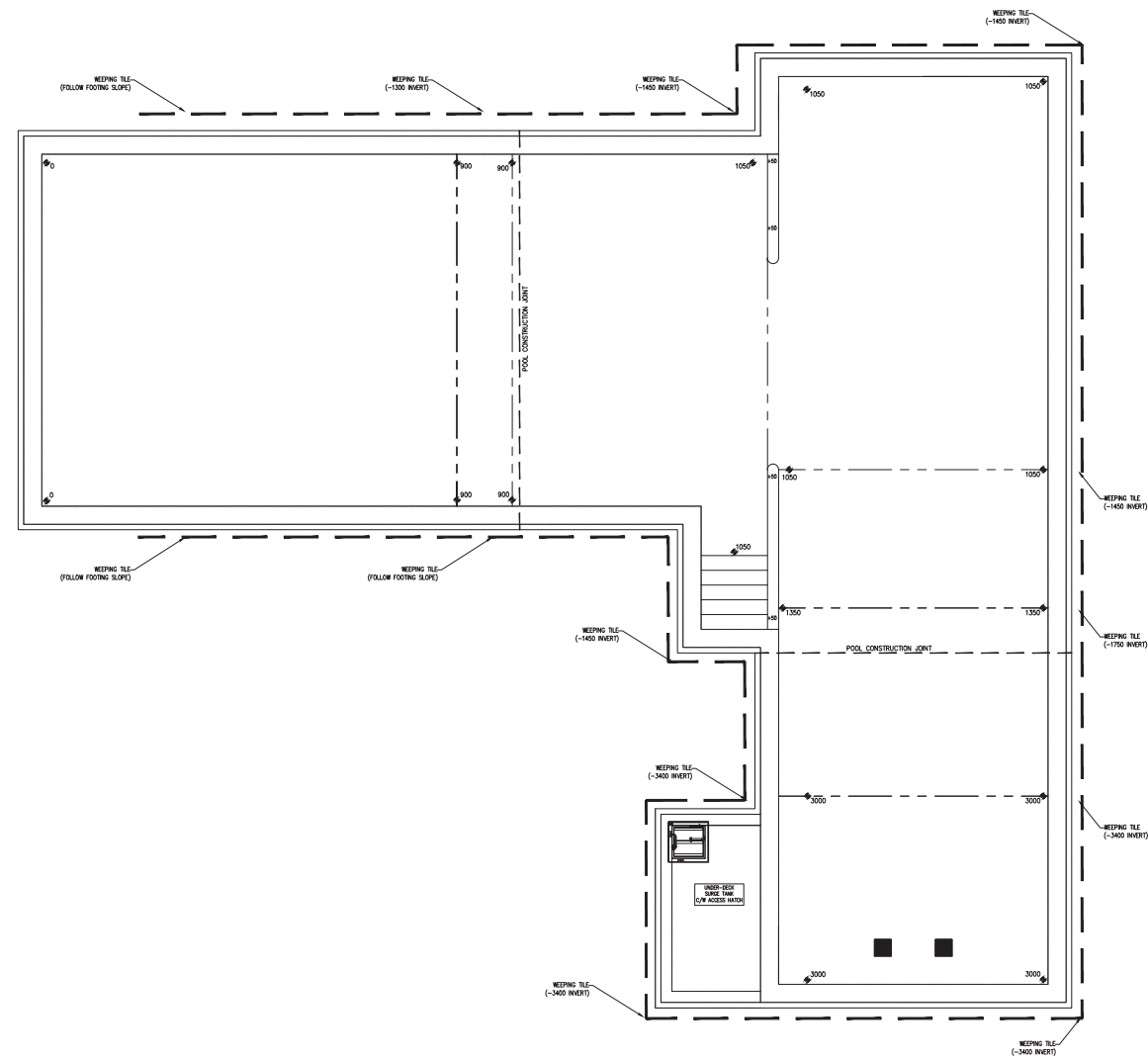
NO.	ISSUED FOR	DATE

NO. ISSUED FOR DATE
DRAWING TITLE:
POOL SITE PLAN

DATE: 08-01-23 SCALE: AS SHOWN PROJECT NO: 023030
DRAWN: LB CHECKED: MS COMP. FILE NO.:
DRAWING NO:
PL1.0

3. DESIGN BRIEFS

CONTINUED



Wellington Outdoor
Aquatic Facility
CLIENT PROJECT NO. 2476-21

AQUA PLANS
aquatic consultants Inc.

tillmann
architects ruth
robinson

Filename: I:\Projects\VA - Current\Mount Forest (Wellington North)\Dwg\POOL Mount Forest - ALL SHEETS.dwg
 Plotted by: Lee Bottoms
 Plot Date: September 1, 2023

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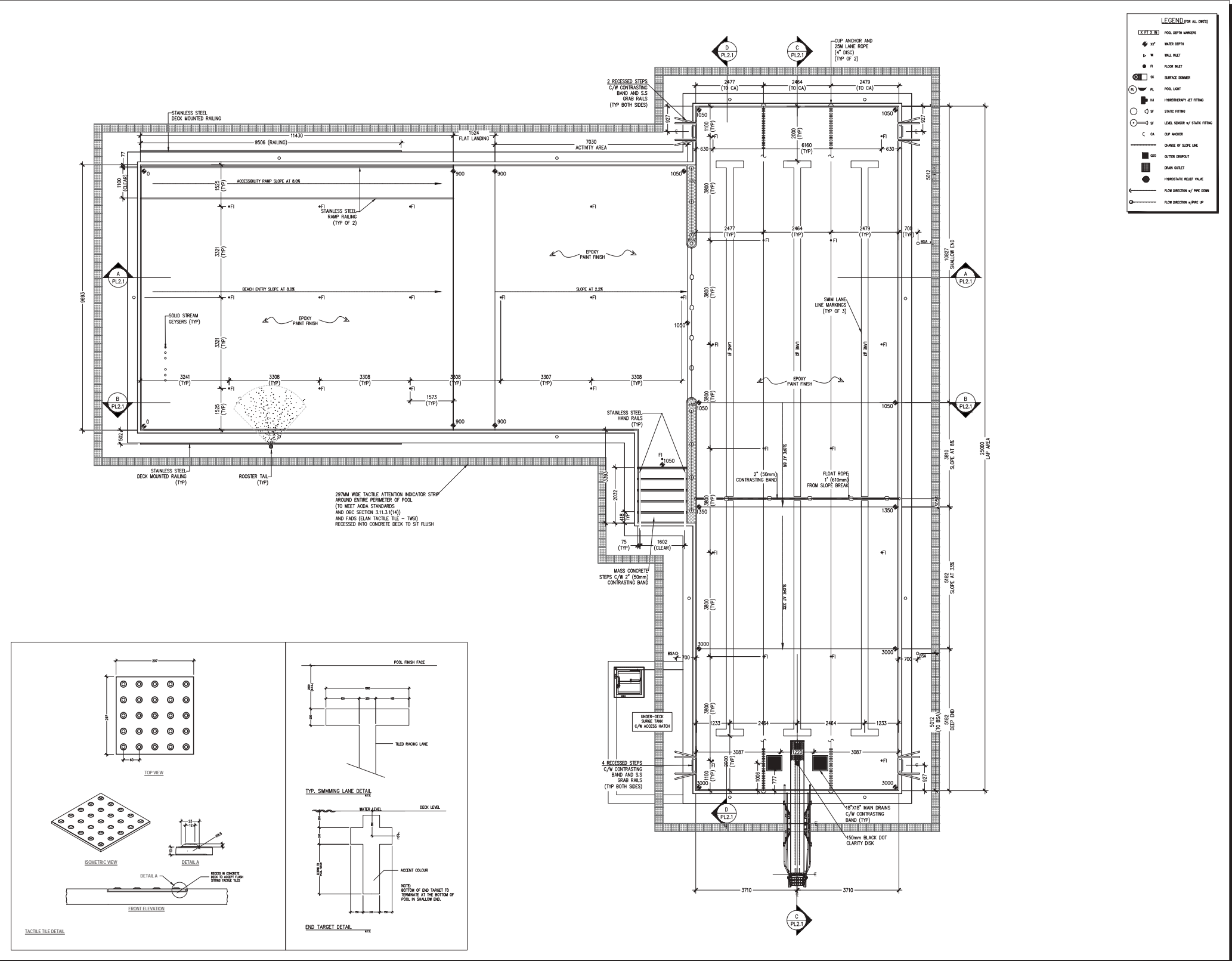
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POOL CONCRETE LAYOUT

DATE: 08-01-23	SCALE: 1:50	PROJECT NO: 023030
DRAWN: LB	CHECKED: MS	COMP. FILE NO.:
DRAWING NO: PL1.1		

3. DESIGN BRIEFS

CONTINUED



Wellington Outdoor Aquatic Facility
 CLIENT PROJECT NO. 2476-21

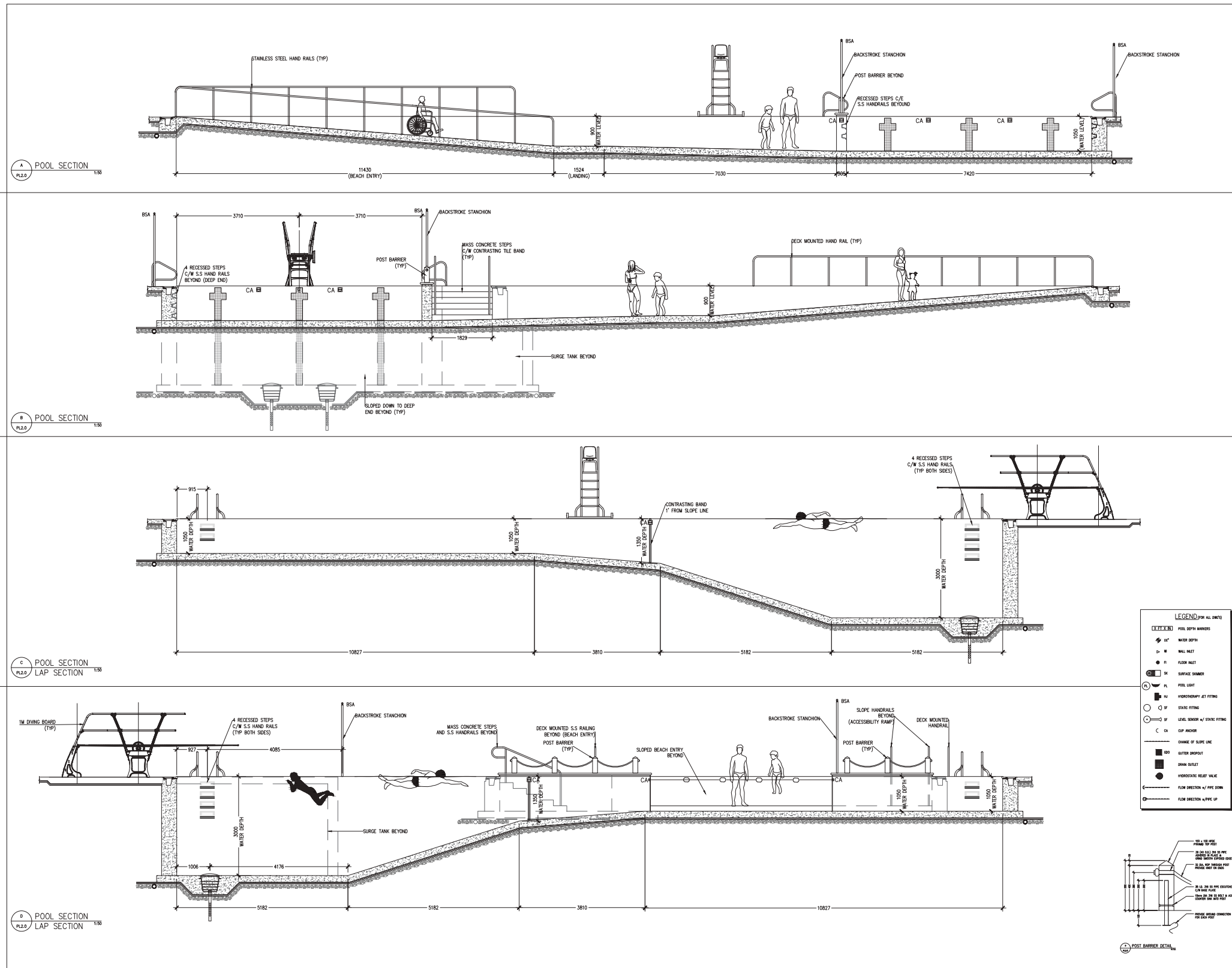


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NO.	ISSUED FOR	DATE
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DATE: 08-01-23	SCALE: 1:60	PROJECT NO: 023030
DRAWN: LB	CHECKED: MS	COMP. FILE NO.:
DRAWING NO: PL2.0		

3. DESIGN BRIEFS

CONTINUED



Wellington Outdoor Aquatic Facility
CLIENT PROJECT NO. 2476-21

AQUA PLANS
aquatic consultants Inc.

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NO. ISSUED FOR DATE

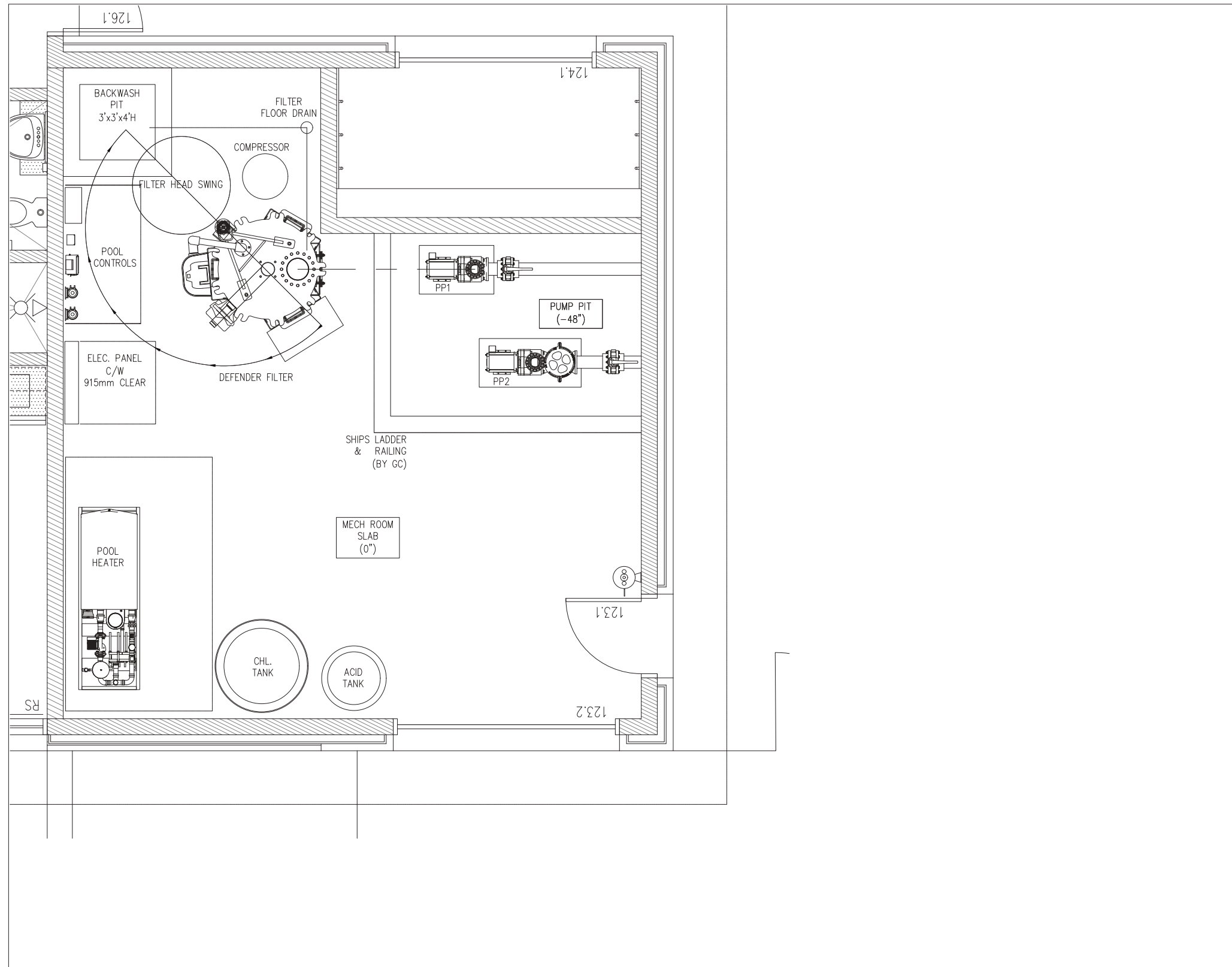
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POOL SECTIONS

DATE: 08-01-23 SCALE: 1:50 PROJECT NO: 023030
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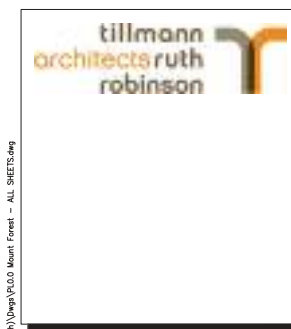
DRAWING NO:
PL2.1

3. DESIGN BRIEFS

CONTINUED



Wellington Outdoor
Aquatic Facility
CLIENT PROJECT NO. 2476-21



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NO.	ISSUED FOR	DATE

Prepared by: Lee Bottema
DRAWING TITLE:
**POOL MECH.
ROOM LAYOUT**

DATE: 08-01-23	SCALE: 1:20	PROJECT NO: 023030
DRAWN: LB	CHECKED: MS	COMP. FILE NO.:
DRAWING NO: PL5.0		

3. DESIGN BRIEFS

3.2 MECHANICAL DESIGN BRIEF

INTRODUCTION

DESCRIPTION

- A proposed Group A Division 2 pool and change room construction located in Mount Forest, Ontario.
- The building will be approximately 260 square metres (SM) or 2800 square feet (SF) above grade and one story tall. The exterior or pool area is approximately 1393 square meters (SM) or 15000 square feet (SF). Approximate building height is 3.7 metres (12 feet) from average grade to the floor of the roof level.

DESIGN STANDARDS

GENERAL

- Mechanical systems shall be designed and installed to maximize usable space within the building while maintaining optimum service clearances for maintenance and repair.
- All equipment and materials shall be designed and installed in a neat and orderly fashion. In finished areas all mechanical systems shall be concealed unless specifically exposed as part of the architectural design.

LEED/ENERGY CONSERVATION

- The project shall not follow LEED process.

CODES AND STANDARDS

Mechanical systems shall be in accordance with applicable codes and standards including, but not limited to:

- Authorities Having Jurisdiction (local building department requirements, local fire department requirements, local by-laws)
- National:
 - Air Conditioning and Refrigeration Institute (ARI)
 - American National Standards Institute (ANSI)
 - American Standard for Testing and Materials (ASTM)
 - American Society of Mechanical Engineers (ASME)
 - American Society of Heating Refrigeration and Air Conditioning Engineers (ASHRAE):

- Canadian/American Air Balance Council (CAABC)
 - Canadian Standards Association (CSA):
 - Model National Energy Code for Buildings (MNECB)
 - Natural Gas Utilization Code
 - National Fire Protection Association (NFPA)
 - Sheet Metal and Air Conditioning Contractors National Association (SMACNA)
- Ontario
 - Ontario Building Code (OBC)
 - Ontario Fire Code (OFC)
 - Ontario Electrical Safety Code
 - Operating Engineers Act

OUTDOOR DESIGN CONDITIONS

The sizing of mechanical systems shall be based on the outdoor air conditions shown in the following table:

	DRY BULB DEG.C (DEG.F)	WET BULB DEG.C (DEG.F)	
Cooling	29.0 (84.2)	23.0 (73.4)	OBC 2.5%
Heating	-24.0 (-11.2)		OBC 1%

VENTILATION FOR ACCEPTABLE INDOOR AIR

Ventilation to meet acceptable indoor air quality shall be in accordance with ASHRAE Standard 62 and the applicable building code.

Specific minimum outdoor air (OA) ventilation rates are identified in the following table and are equal to the sum of a per person rate and per SM (SF) rate:

	L/s (CFM) Per Person	L/s-SM (CFM/SF)	Minimum OA-ACH	Comment
Office	2.4 (5)	0.3 (0.06)		
Change Rooms / Lockers	0 (0)	0.47 (1.0)		

INDOOR DESIGN CONDITIONS

The indoor space conditions shall be in accordance with the following table:

	SUMMER		WINTER	
	Temp. Deg.C. (Deg.F)	Relative Humidity Note 1	Temp. Deg.C. (Deg.F)	Relative Humidity
Office, First, Aid, Staff, Guard and Control	22.2 (72) +/-1 Deg.C.	60% +/- 5%	Not Controlled (Seasonal facility)	
WC, Shower, Change Rm, Lockers and Entry	Not Controlled - Ventilation Only		Not Controlled (Seasonal facility)	
Mechanical Rm	Not Controlled - Ventilation Only		10 (50) +/-1 Deg.C.	

NOISE DESIGN CRITERIA

All mechanical systems and components shall be designed and installed with attention to reducing sound and vibration levels to meet noise criteria and provide a space that is comfortable, acoustically, for the occupants.

Noise levels due to mechanical equipment, duct work, grilles, registers, terminal devices, and diffusers shall be design not to exceed the recommended ASHRAE limit listed below for the areas indicated:

	NC (low)	NC (high)	Comments
Office	30	35	
Property Line		45	

The identified noise criteria resulting from the operation of mechanical systems assumes a finished room with all the final architectural finishes (e.g. ceilings and floor finishes) and furniture in place.

HVAC

GENERAL

The heating, ventilation and air conditioning (HVAC) design

and installation shall conform to current applicable codes and standards and shall be sized by recognized computation procedures referenced in ASHRAE.

HEATING SYSTEMS

No heating (seasonal facility) except for mechanical room; a ceiling hung unit heater will be utilized to maintain temperature of the mechanical room at 10 deg C during winter.

COOLING SYSTEMS

The Office/First Aid Room/Staff room shall be provided with a split unit, complete with ceiling concealed ducted evaporator and rooftop air-cooled condenser with a nominal capacity of 2 Tons (7.0 kW). Split units shall be Mitsubishi, Daikin, or LG.

The remainder of the facility will be unconditioned, seasonal space with ventilation systems only.

MISCELLANEOUS SYSTEMS

- New separate washroom exhaust systems shall be provided for the washroom groups. The make-up shall be transferred from the adjacent corridors and intake louvers. The capacity of the exhaust fan will be approximately 1,500 cfm (710 L/s) with a 2 Hp fan motor.
- An exhaust fan shall be provided in the mechanical/chlorine room. Capacity of the fan will be approx. 471 L/s (1,000 cfm) with a 2 Hp fan motor.

NOISE AND VIBRATION CONTROL

All mechanical equipment shall be equipped with vibration isolation control measures to reduce the transfer of vibration generated noise into the building structure.

HVAC SYSTEMS INSULATION

Insulation for HVAC systems shall be in accordance with ASHRAE 90.1.

3. DESIGN BRIEFS

CONTINUED

PLUMBING AND DRAINAGE

▶ GENERAL

The Plumbing System shall conform to the Ontario Building Code (OBC).

All exterior site services shall be provided under the "Site Works" division or "Civil" contract. Scope of work for this Division shall end at 1500 mm (59 inch).

Above floor storm drains, sanitary drains and vents, 65 mm (2-1/2 inch) and larger shall be cast iron.

Above floor sanitary drains and vents, 50 mm (2 inch) and smaller shall be hard temper DWV copper drainage tubing.

Buried storm piping within the building shall be PVC.

Buried sanitary piping within the building shall be PVC.

Domestic water piping shall be copper type L.

Valves shall be Crane or equal of type and construction to suit service and working pressures.

For all services 50 mm (2 inch) and smaller 4,136 kPa (600 psig) WOG ball valves shall be used.

▶ STORM SYSTEMS

A complete system of roof drains and storm drainage piping shall be provided.

A series of pool deck drains, spaced at approximately every 15 m (50 ft) will be located around the pool and connected to the storm system.

▶ SANITARY SYSTEMS

A complete system of plumbing fixtures and sanitary drainage and vent piping shall be provided.

New above grade drains shall be collected and drained by gravity to site sanitary sewers.

A local sanitary sump in the pool mechanical room will be constructed to accept pool drain down will be provided. This drain down will be sized to accommodate the required flow of the pool 12 hour drain down requirement. The facility sanitary drain will be based on this volume flow.

▶ PLUMBING FIXTURES

The following plumbing fixtures are anticipated for the project:

	Group	Description	Comments
W-1	Water Closet	Wall mounted, electronic flush valve	
W-2	Water Closet	Wall mounted, barrier free, electronic flush valve	
L-1	Lavatory	Counter mounted, semi-recessed electronic "no touch" 100 mm (4 inch)centre set	
JS-1	Janitor Sink	Precast floor mounted, faucet with hose set	
SH-1	Shower	Pressure balanced mixing valve, floor or trench drain. Push button / metered	
SH-2	Shower	Pressure balanced mixing valve, barrier free with three fixed showerheads mounted at different heights with diverter valve, floor drain. Fold down bench	
Add exterior shower description			
DF-1	Drinking Fountain	Wall mounted, barrier free, non-refrigerated with bottle filter.	

Refer to Architectural section for description of washroom accessories. All washroom fixtures specified shall be AODA compliant.

Plumbing fixtures shall be water conserving type. Minimum (Refer to LEED/ENERGY CONSERVATION) baseline requirements:

	Metric	Imperial	Comments
Water Closets	4.8 Litres per flush	1.28 Gallons per flush	
Lavatories (Public)	1.5 LPM @ 414 kPa	0.4 GPM @ 60 psig	
Showerheads	7.6 LPM @ 550 kPa	2.0 GPM @ 80 psig	

▶ DOMESTIC COLD WATER

A 65 mm (2½ inch) domestic water service shall be brought into the facility for domestic water and Pool. The domestic water shall be isolated from the municipal water supply by approved back flow prevention devices.

Domestic water will be distributed to all plumbing fixtures throughout the facility.

1. A master thermostatic mixing valve will be provided with dedicated DHW distribution to the shower.

▶ DOMESTIC HOT WATER

Domestic hot water shall be generated for the shower and washroom areas using two gas fired water heater storage tanks.

1. Tank for main building shall be 450 Litre (119 gallons) electric and capable of 300 GPH recovery.

A replaceable bladder expansion tank suitable for domestic hot water shall be installed on the domestic hot water system to accommodate thermal expansion.

▶ NATURAL GAS

A low pressure natural gas metering station shall be provided. Natural gas shall be distributed to the pool heater/boiler room and miscellaneous unit heaters. All gas piping shall be schedule 40. Piping 64 mm (2-1/2 inch) and larger shall be welded. All gas piping shall be painted yellow in its entirety including concealed areas.

▶ INSULATION

Insulation for plumbing systems shall be in accordance with ASHRAE 90.1.

All exposed insulation shall be complete with PVC jacket or canvas lagging suitable for painting.

POOL WATER SYSTEMS

▶ GENERAL

Please refer to the documents provided by Aqua-Plans Inc. for pool system documentation.

FIRE PROTECTION AND LIFE SAFETY SYSTEMS

▶ GENERAL

The Fire Protection System shall conform to the Ontario Building Code (OBC).

The facilities will not be sprinklered.

▶ PORTABLE FIRE EXTINGUISHERS

General areas including offices shall be covered by water type extinguishers. Mechanical rooms, electrical rooms and similar spaces shall be provided with chemical fire extinguishers.

AIR AND WATER BALANCING

All air and water systems shall be balanced prior to building turn-over. Balancing reports shall be submitted for review by the consultant and owner.

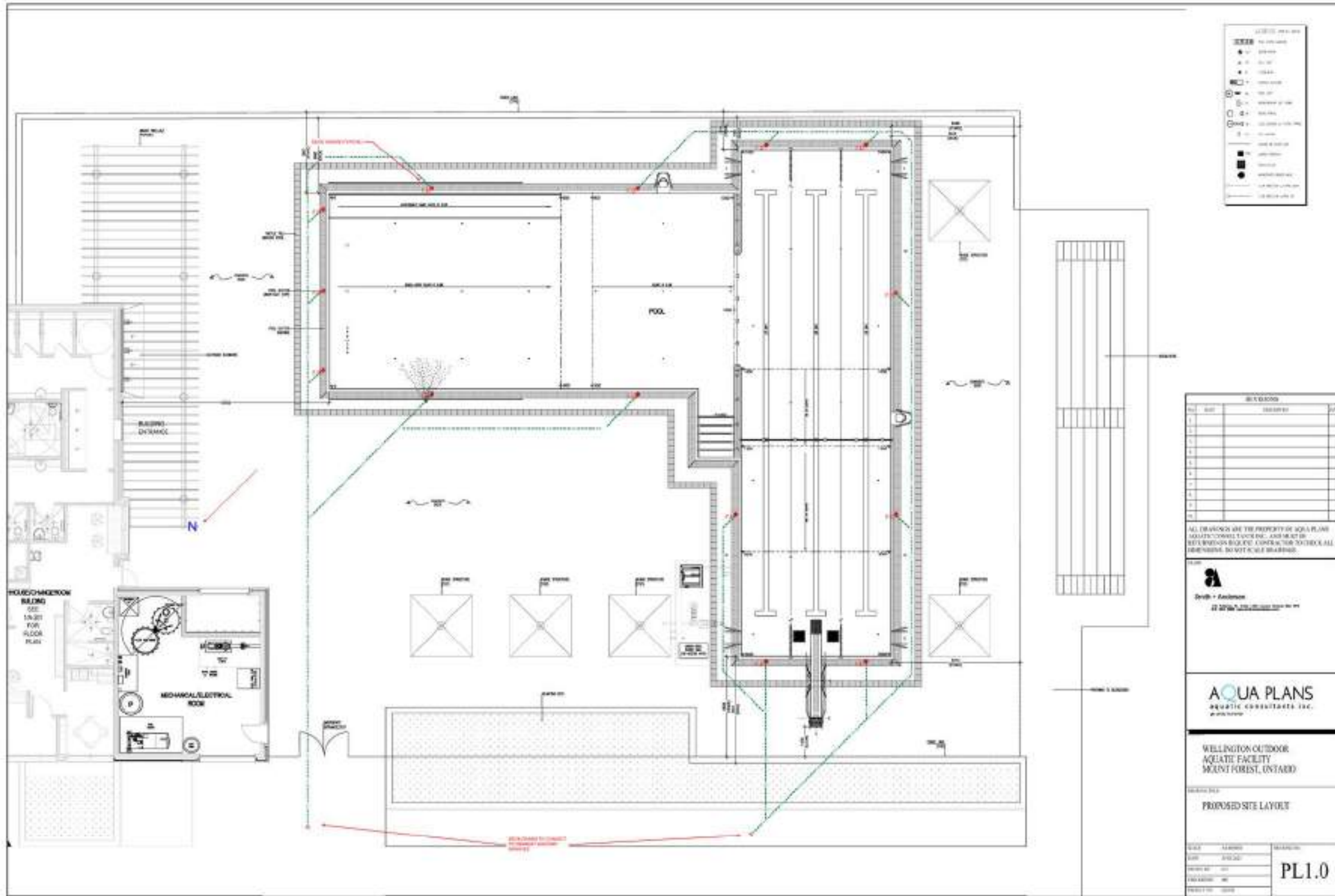
COMMISSIONING

▶ CONTRACTOR COMMISSIONING

Contractor shall perform equipment testing (piping, duct work) and obtain sign-offs, equipment start-up and check sheet (with manufacturers), arrange for training on equipment (provided to owner) and coordinate with independent commissioning agent.

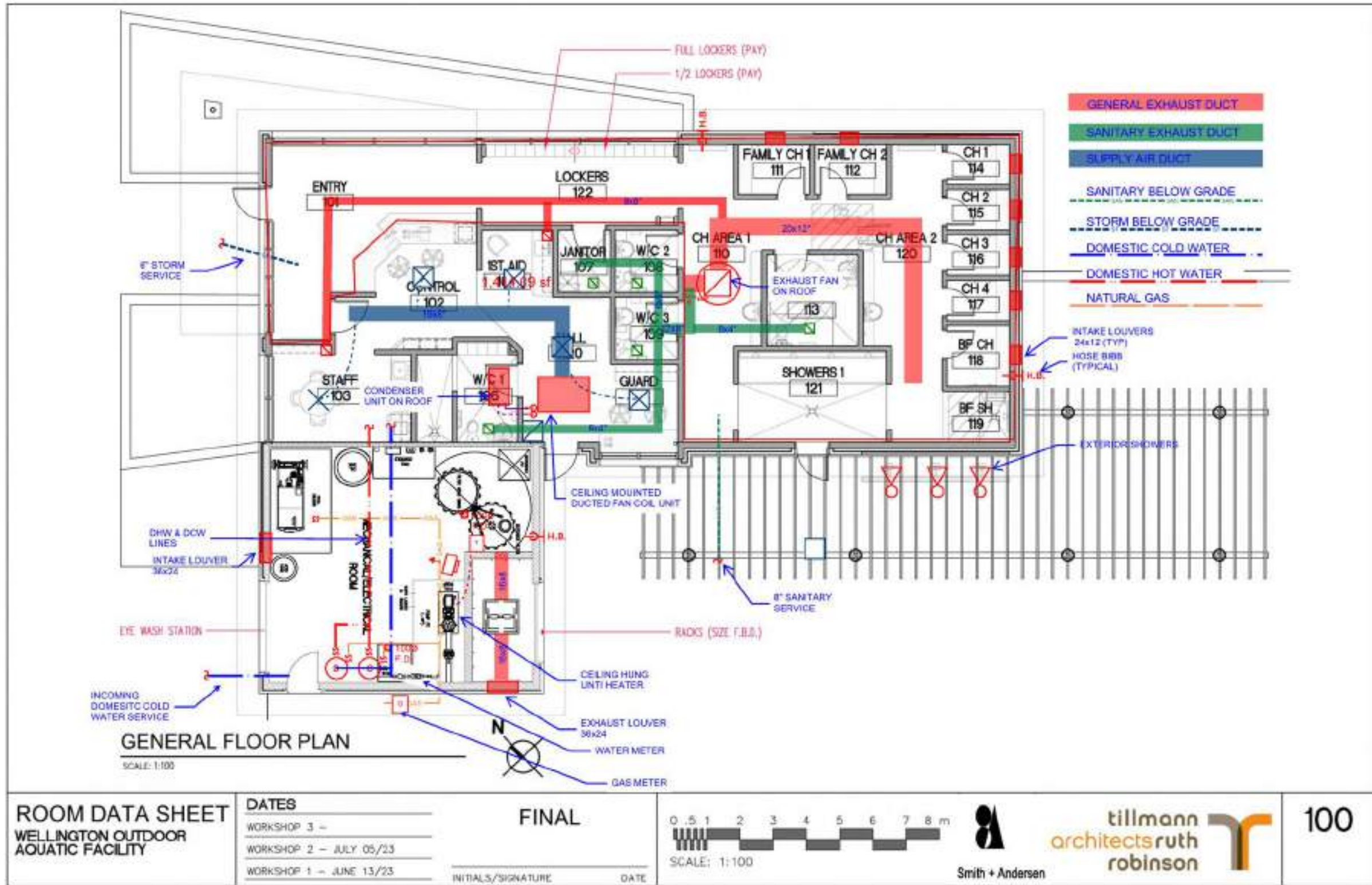
3. DESIGN BRIEFS

CONTINUED



3. DESIGN BRIEFS

CONTINUED



3. DESIGN BRIEFS

CONTINUED

3.3 ELECTRICAL DESIGN BRIEF

INTRODUCTION

A proposed Group A Division 2 construction located in Mount Forest, Welland, ON.

The facility is to be operated by City of Welland.

The facility is comprised of the bathhouse/changeroom building and exterior pool area:

- Bathhouse/changeroom building is to be approximately 260 square meters, including showers, change rooms, guard/first aid/control area, and mechanical/electrical room for pool mechanical and electrical services.
- Exterior pool area is to be approximately 1400 square meters, including pool, outdoor showers, and shade structures.

The facility includes the following unique features:

- Outdoor pool with dive stand and pool laps.

DESIGN STANDARDS

The Electrical systems will be designed in accordance with the current edition of the following Codes and Standards:

- Ontario Building Code
- Ontario Electrical Safety Code
- National Fire Protection Authority (NFPA)
- Ontario Fire Code
- Local Ordinances and Authorities
- Institute of Electrical and Electronic Engineers (IEEE) standards
- Illumination Engineering Society (IES) Standards
- ASHRAE 90.1 "Energy Standard for Buildings Except Low-Rise Residential Buildings"

NORMAL POWER DISTRIBUTION

The local distribution authority is Wellington North Power Inc.

A new incoming service will be provided at 100A, 600V, 3 phase, 4 wire.

The primary utility feeders will come from a new pole mounted

transformer on hydro pole P721 on the north side of Princess St. This transformer will be supplied and installed by the utility.

The primary feeder could run in a ductbank under the road, or overhead across the street. This will be further coordinated with Wellington North Power.

A 7-jaw meter base will be provided on the exterior of the mechanical/electrical room, to utility requirements.

Our design will be based on power density calculations as required by the Ontario Electrical Safety Code (OESC) rule 8-210 for 'othertypes of occupancies' and OBC for lighting power densities.

Main electrical room will be located in the bathhouse/changeroom building.

The primary distribution voltage, throughout the facility will be 600V and 120/208V.

Main electrical room will have a 1-hour fire rating.

All electrical equipment is to be sprinkler proof.

All electrical conductors are to be copper. All equipment to be copper bus.

FIRE ALARM

No fire alarm system is required for this building.

LIGHTING

High efficiency luminaires will be provided as per the recommendations of the IES.

Lighting will be designed to OBC requirements.

Primary interior lighting will be provided by LED luminaires.

Luminaires in outdoor parking area are to provide 22 lux average at driving areas with a uniformity of 3:1 (avg./min.) and 10 lux minimum with a uniformity of 4:1 (avg./min.) at the parking and pedestrian areas. Accessible parking spots and accessible path of travel from accessible parking to building entrance to have an average of 50 lux with a uniformity of 3:1 (avg./min.). Maximum/minimum uniformity will be 15:1.

Washrooms/change rooms will be finished and contain recessed/

surface mounted luminaires appropriate for their environment, designed to 250 lux.

Shower area luminaires are to be LED surface mounted linear fixtures or down lights with lenses, suitable for wet environments.

Service rooms will be lit with chain hung, LED luminaires.

Emergency lighting will be provided to meet building code and will be provided in mechanical/electrical service rooms. Battery packs will be installed in main mechanical/electrical room and exit corridors and exit paths from the change rooms and the guard office.

Exterior lighting will be complete with shielding to ensure glare control and light trespass to passers by and neighbouring properties. Full cut-off LED luminaires to ensure illumination with no spillage of light above the horizontal plane or onto adjacent properties.

The facility is considered not to be operating at night and thus, pool night time lighting is not considered for this project.

Emergency lighting will be provided by battery packs with remote heads throughout. Remote heads are to be provided in public areas and all required exit paths.

Battery units will be provided in mechanical/electrical room as supplementary lighting for emergency purpose.

Exit lights will be energy efficient LED type.

LIGHTING CONTROL

A low voltage lighting control system will be provided for the facility, including LV switches, occupancy sensors, photo sensors and time-clocks.

Washrooms, storage rooms, and any other areas with transient occupancy will be provided with ceiling or wall mounted occupancy sensors.

Exterior lighting shall be automatically controlled capable of turning off exterior lighting when sufficient daylight is available or when the lighting is not required during night time hours.

Motion sensor to be PIR, Ultrasonic or a combination sensor with a capability to add slaves. These will be optional wall mounted in small rooms and ceiling mounted in all other areas.

Mechanical and electrical room lighting shall be controlled by standard wall switches.

METERING

Metering will be provided via the main meter from the local distribution company.

No digital metering network (i.e. submetering) is anticipated for this project.

GROUNDING SYSTEM

An AC grounding system with new main ground electrode that will consist of a minimum of four 3m ground rods spaced 3m apart and connected to the main electrical ground bus located in the main electrical room with two separate #3/0AWG ground connections. The grounding system for the building will be provided connecting each typical electrical room to the main grounding system in the main electrical room in a radial connection. A ground bar will be provided in each electrical room. All transformer neutrals will be connected to the grounding bar and a common cable connected back to the system ground.

Grounding will be provided following IEEE 1100 and Electrical Code Section 10 standards.

2 grounding loops for the pool will be provided – one for the lower portion (below pool water level) and one for the upper portion. The loops will be interconnected via #6 AWG minimum copper conductor.

EMI CONSIDERATIONS

All wiring will be in conduit and routing of power cables will be selected to minimize the effect of magnetic fields on other equipment.

COMMUNICATIONS

A 4'x8' communications backboard will be provided in the mechanical/electrical room. A 2" conduit will be provided from the mechanical/electrical room to the property line. Cap and stake at property line.

27mm (1") conduit drops from accessible ceiling space to a single gang box will be provided. Conduit shall be provided from each data outlet back to the main communications backboard.

3. DESIGN BRIEFS

CONTINUED

SECURITY SYSTEM

Exact security requirements to be confirmed with client.

Rough in conduit and junction box system will be provided for the security system by the Electrical Contractor. All electronic devices and installation will be provided by others.

All security devices will be connected as per the security consultant's drawings. Infrastructures will be installed by electrical contractor to support this.

Door contacts, electric strikes, magnetic locks, and security cameras will be roughed in by the electrical division as directed by the Owner.

CO-ORDINATION OF MECHANICAL AND ELECTRICAL AND OTHERS

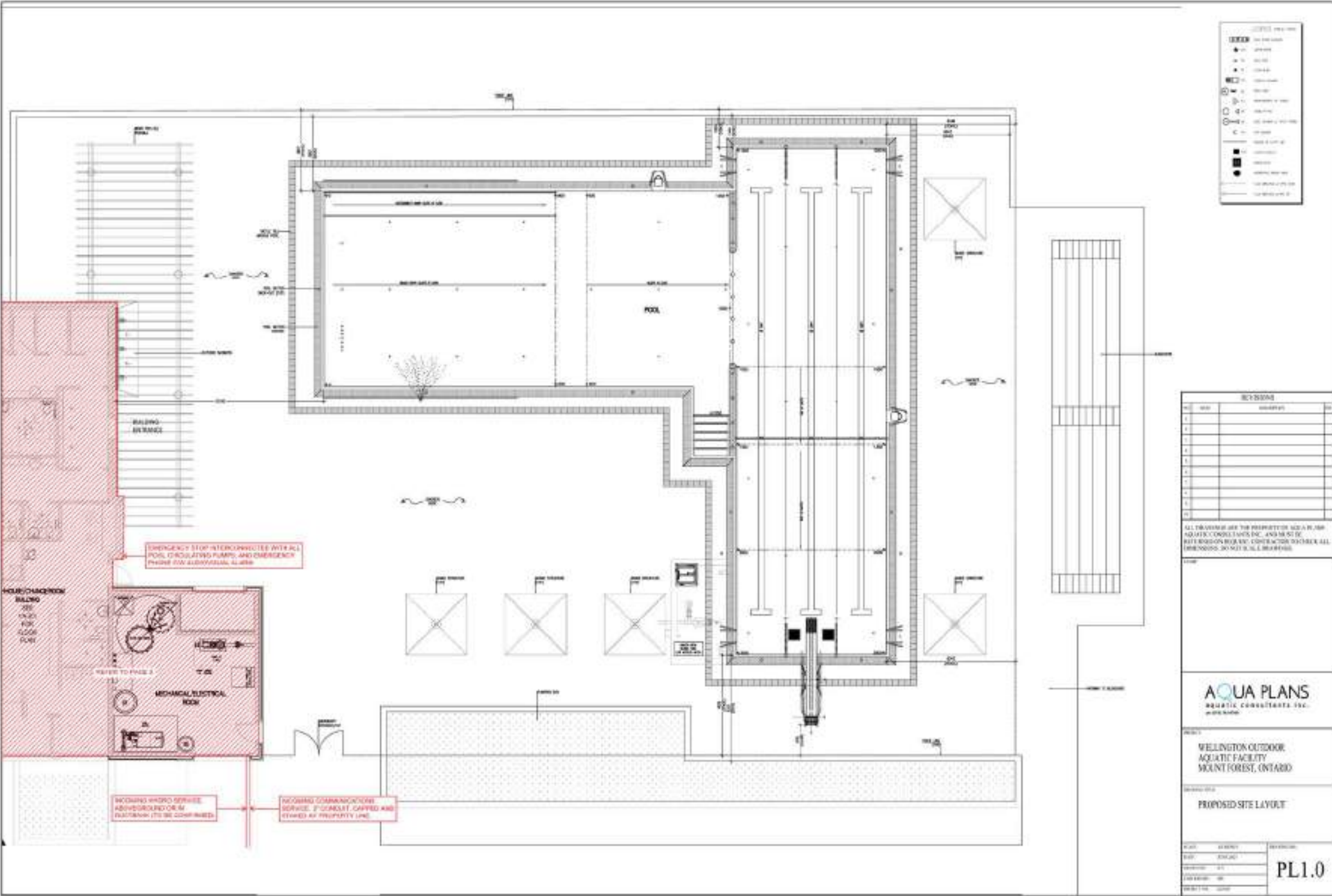
All starters and power wiring shall be by the electrical division except for units with starters as part of a package or for VFDs.

All power wiring shall be by the Electrical contractor including power wiring from variable speed drives to motors. VFDs to be mounted on or near the equipment and VFD cable will be run from the VFD drive to the motor with no disconnect between them.

All control wiring and controls shall be by Mechanical contractor. The Electrical contractor will provide 15A, 120V, 1 phase circuits at designated panels and they will be terminated in a junction box near the respective electrical panels. The Mechanical/Controls contractor is required to extend the 120V circuits to all of their respective equipment.

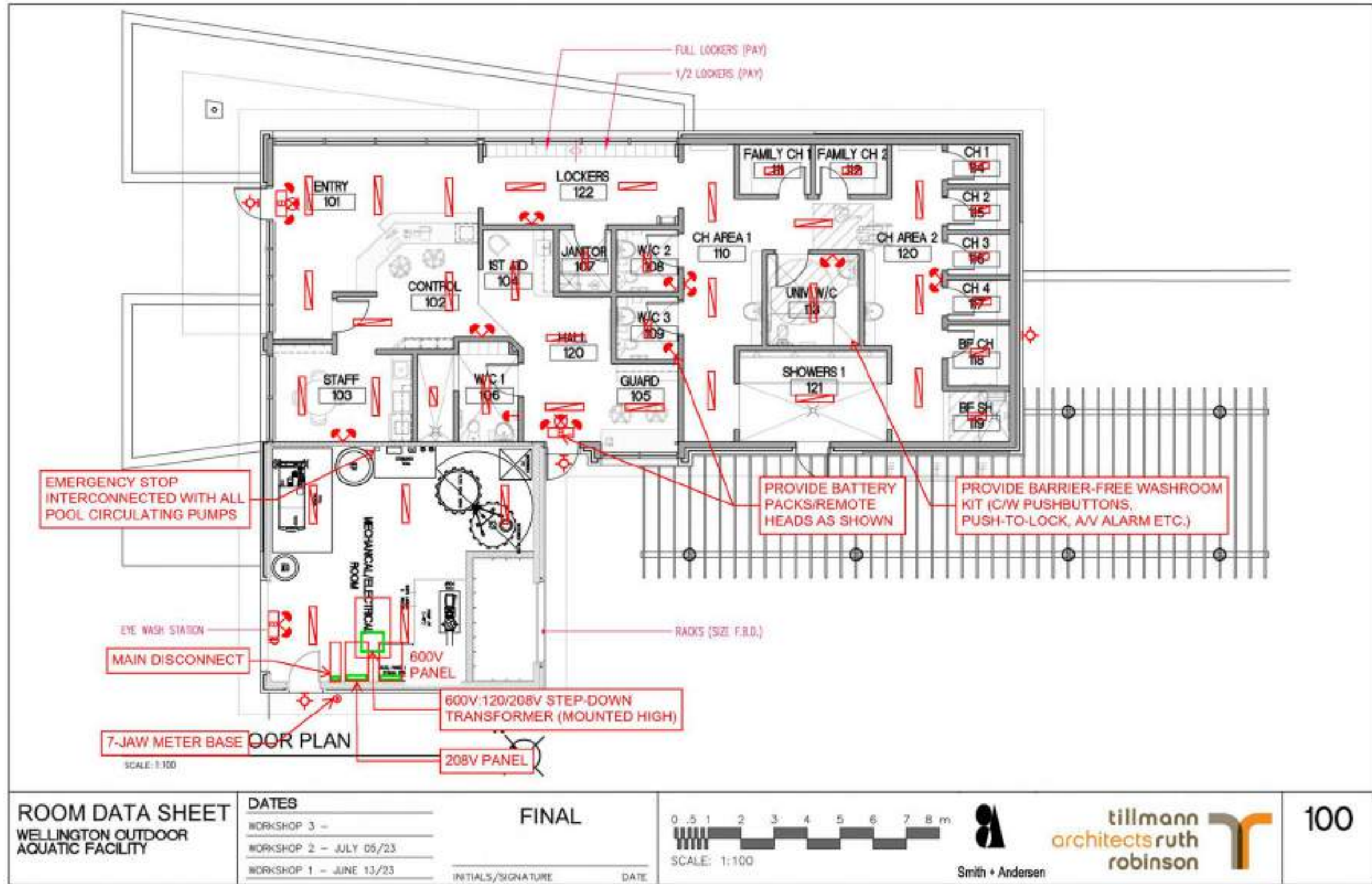
3. DESIGN BRIEFS

CONTINUED



3. DESIGN BRIEFS

CONTINUED



4. COST ESTIMATE



WELLINGTON NORTH
NEW OUTDOOR POOL & AQUATIC FACILITY
Mount Forest, Ontario

CLASS "C" ESTIMATE "R1"

prepared for:

TILLMAN RUTH ROBINSON ARCHITECTS
200 Queens Ave - Suite 200
London, Ontario
N6A 1J3

prepared by:

MARSHALL & MURRAY INCORPORATED
625 Wellington Street
London, Ontario
N6A 3R8

October 4, 2023

L2461/1/Class C/8/Outdoor Pool & Change Room R1.xlsx

Quantity Surveyors and Development Consultants
625 Wellington Street, London, Ontario N6A 3R8 Tel: (519) 433-3908 Fax: (519) 433-9453
Suite 414, 120 Carlton Street, Toronto, Ontario M5A 4K2 Tel: (416) 928-1993 Fax: (416) 928-0895
1379 Bank Street, Suite 301, Ottawa, Ontario K1H 8N3 Tel: (613) 230-3115 Fax: (613) 230-4091
E-mail: main@marshallmurray.com Website: www.marshallmurray.com



October 4, 2023

TILLMAN RUTH ROBINSON ARCHITECTS
200 Queens Ave - Suite 200
London, Ontario
N6A 1J3

Attention: **Mr. Scott Robinson**

Re: **WELLINGTON NORTH - NEW OUTDOOR POOL & AQUATIC FACILITY -
Mount Forest, Ontario**

Dear Scott,

Please find enclosed a copy of our Class "C" Estimate "R1" for the above note project for your review and comment.

If you have any questions or require further information, please do not hesitate to contact our office.

Yours truly,

MARSHALL & MURRAY INC.

Stephen Cahill
Cost Consultant

Colleen Pollock, PQS, GSC
Senior Cost Consultant

Quantity Surveyors and Development Consultants
625 Wellington Street, London, Ontario N6A 3R8 Tel: (519) 433-3908 Fax: (519) 433-9453
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4. COST ESTIMATE

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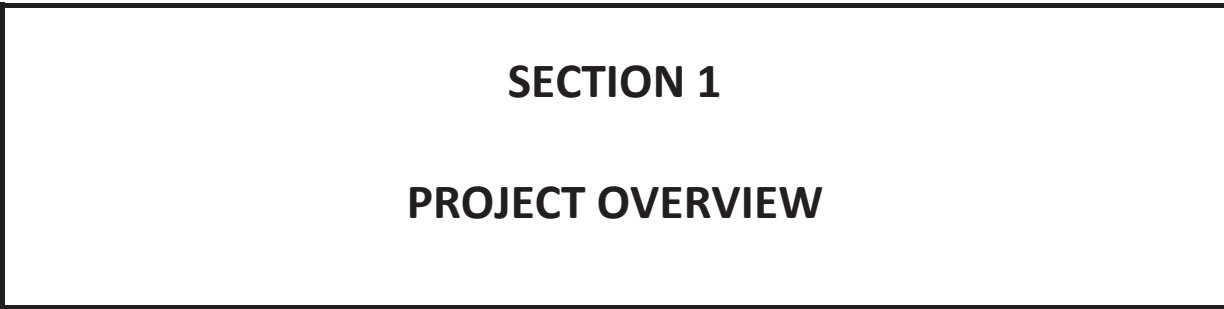
WELLINGTON NORTH
NEW OUTDOOR POOL & AQUATIC FACILITY
Mount Forest, Ontario

October 4, 2023
CLASS "C" ESTIMATE "R1"

CLASS "C" ESTIMATE "R1"

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4. COST ESTIMATE

CONTINUED

WELLINGTON NORTH
NEW OUTDOOR POOL & AQUATIC FACILITY
Mount Forest, Ontario

October 4, 2023
CLASS "C" ESTIMATE "R1"

a) EXECUTIVE SUMMARY

This report prepared by Marshall & Murray Inc. is classified as a Class "C" Estimate "R1".

Marshall & Murray Inc. were retained to provide a realistic **Total Projected Construction Cost** budget for the redevelopment at Wellington North.

The project is located in Mount Forest, Ontario.

The proposed redevelopment would consist of a new addition of an aquatic change room facility, outdoor pool and associated sitework.

The proposed redevelopment is being designed by Tillman Ruth Robinson Architects Inc.

The estimate presented here is based on the drawings received from the design team, meetings, and oral information.

The **Total Projected Construction Cost** is estimated at: **\$5,372,860**

The above amount excludes Separate and Alternate prices. A detailed breakdown of the amount can be found in the following Section 1b).

This estimate is priced in October 2023 dollars. Escalation during construction has been included in the estimate. Projected escalation to time of tender is identified separately if requested.

We are currently experiencing a very active construction market which could result in bids varying greatly from our indicated amount due to lack of bidders, escalating material costs and lack of suppliers holding prices or delivery dates.

This estimate has been priced, based on a standard CCDC 2 – Stipulated Sum Contract. It does not include for any additional costs associated with the Alternate Financing Procurement method.

The construction cost includes all labour, materials, plant, sub-contractors' overheads and profit, and the general contractor's overheads and profit.

Please review the exclusions as noted in Section 1 k) Exclusions to Construction Cost.

If you have any questions or require further information, please do not hesitate to contact our office.

Stephen Cahill
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WELLINGTON NORTH
NEW OUTDOOR POOL & AQUATIC FACILITY
Mount Forest, Ontario

October 4, 2023
CLASS "C" ESTIMATE "R1"

b) PROJECTED CONSTRUCTION COST SUMMARY

DESCRIPTION	CLASS "D" ESTIMATE			"DRAFT" CLASS "C" - Sept 19			CLASS "C" ESTIMATE "R1"		
	GFA	COST/SF	AMOUNT	GFA(SF)	COST/SF	AMOUNT	GFA(SF)	COST/SF	AMOUNT
A. NEW OUTDOOR POOL & AQUATIC FACILITY									
1.0 NEW BUILD	2,873	628.10	1,804,525	2,942	669.94	1,970,966	2,942	640.86	1,885,414
NEW AQUATIC FACILITY	2,873	628.10	1,804,525	2,942	669.94	1,970,966	2,942	640.86	1,885,414
2.0 OTHER ASSOCIATED COSTS			3,473,956			3,541,970			3,487,446
SITE DEVELOPMENT / LANDSCAPING			3,473,956			3,541,970			3,487,446
ABNORMAL SOIL CONDITIONS / CONTAMINATED SOIL			EXCLUDED			EXCLUDED			EXCLUDED
PREMIUM TIME / AFTER-HOURS WORK			EXCLUDED			EXCLUDED			EXCLUDED
CONSTRUCTION PHASING			EXCLUDED			EXCLUDED			EXCLUDED
LEED CERTIFICATION			EXCLUDED			EXCLUDED			EXCLUDED
SIGNAGE & WAYFINDING			EXCLUDED			EXCLUDED			EXCLUDED
MOVING COSTS			EXCLUDED			EXCLUDED			EXCLUDED
MARKET / SUPPLY CHAIN CONDITIONS			EXCLUDED			EXCLUDED			EXCLUDED
ART INSTALLATION			EXCLUDED			EXCLUDED			EXCLUDED
3.0 ESCALATION			0			0			0
ESCALATION TO TIME OF TENDER (ALLOW 10.0% P.A.)			EXCLUDED			EXCLUDED			EXCLUDED
TOTAL NEW OUTDOOR POOL & AQUATIC FACILITY	2,873	1,837.27	\$5,278,481	2,942	1,873.87	\$5,512,936	2,942	1,826.26	\$5,372,860
ANCILLARY COSTS (PROFESSIONAL FEES, PERMITS, TAXES, ETC.)			EXCLUDED			EXCLUDED			EXCLUDED
FURNISHINGS AND EQUIPMENT			EXCLUDED			EXCLUDED			EXCLUDED
LOCATION FACTOR			EXCLUDED			EXCLUDED			EXCLUDED
SCOPE CONTINGENCY			EXCLUDED			EXCLUDED			EXCLUDED
POST CONTRACT CONTINGENCY (ON CONSTRUCTION)			EXCLUDED			EXCLUDED			EXCLUDED
TOTAL PROJECT COST			5,278,481			5,512,936			5,372,860

4. COST ESTIMATE

CONTINUED

WELLINGTON NORTH
NEW OUTDOOR POOL & AQUATIC FACILITY
Mount Forest, Ontario

October 4, 2023
CLASS "C" ESTIMATE "R1"

c) METHOD OF MEASUREMENT

This estimate has been prepared by measurement of quantities from the drawings received from the design team, Tillman Ruth Robinson Architects Inc.

Unit costs, allowances, and contingencies were applied to these quantities to reflect market conditions and provide a realistic budget based on comparable projects with similar size and scope of works.

d) GROSS FLOOR AREA

NEW CHANGE ROOM	273	M2	2,942 SF
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e) PRICING

This estimate is priced in October 2023 dollars expecting 3-6 qualified competitive General Contractors and Sub-Contractors. Bids will vary due to fluctuating market conditions, proprietary product vendors, lack or surplus bidders and bidder's perception of risk.

We are unable at this time to determine the projected construction cost implications due to the Coronavirus COVID-19 but have included any allowances for this impact if any.

We are currently experiencing a very active construction market which could result in bids varying greatly from our indicated amount due to lack of bidders, escalating material costs and lack of suppliers holding prices or delivery dates.

f) TAXES

The Harmonized Sales Tax (H.S.T.) is excluded.

g) MECHANICAL AND ELECTRICAL COSTS

Mechanical and Electrical Costs included in this estimate were based on information provided by the Consultants.

h) SITE SERVICES

This includes allowances for mechanical, electrical, civil site services, soft, and hard landscaping.

i) CONTINGENCY

At this stage of the project, a 6.0% design contingency has been allowed. This is to cover unknown details in design and construction, layout variations and material selections but excludes any scope increases.

WELLINGTON NORTH
NEW OUTDOOR POOL & AQUATIC FACILITY
Mount Forest, Ontario

October 4, 2023
CLASS "C" ESTIMATE "R1"

j) GENERAL REQUIREMENTS AND FEES

General Requirements - General Contractors Overhead is taken at:	12.0%
Fee - General Contractors Profit is taken at:	4.0%

k) EXCLUSIONS TO CONSTRUCTION COST

- | | |
|------------------------------------|----------------------------------------|
| - Phasing | - Abnormal Soil Conditions |
| - Price Escalation | - Contaminated Soil |
| - Soft Costs | - Project Management |
| - Professional and Design Fees | - Harmonized Sales Tax (H.S.T.) |
| - Furniture and Loose Equipment | - Inspection and Testing |
| - Development Charges and Levies | - Post Contract Contingencies |
| - Financing Costs | - Window Drapes/Curtains, and Art Work |
| - Relocation Costs | - Premium Labour |
| - Market volatility | - Project Scope Contingency |
| - Escalation to Time of Tender | - Winter heat to shell construction |
| - COVID-19 / Pandemic Impact Costs | - Asbestos Abatement |

l) STATEMENT OF PROBABLE COSTS

This estimate represents a professional opinion of the probable costs for this project. Marshall & Murray Incorporated cannot guarantee that the actual project cost will not vary from this opinion.

m) ONGOING COST CONTROL

The project is still within the early stages of design and thus the full scope and design specifications have not been clearly determined. The estimate makes assumptions for all elements not clearly defined on the drawings. These assumptions are listed within the detailed estimate.

To alleviate a portion of the risk, a design and pricing contingency allowance has been included to accommodate for future design tweaks. However if there is a significant amount of design changes as the project progresses, they could result in an increase in cost that cannot be covered by the design and pricing contingency allowance. At this stage we consider the risk high, and would request that the design team review and provide comment with regards to the design detail included within the estimate.

We recommend that the estimate contained herein be reviewed thoroughly by the project team. Any comments or suggestions should be forwarded as soon as possible. We also recommend that further estimates be prepared once a firm design has been established.

4. COST ESTIMATE

CONTINUED

WELLINGTON NORTH
NEW OUTDOOR POOL & AQUATIC FACILITY
Mount Forest, Ontario

October 4, 2023
CLASS "C" ESTIMATE "R1"

n) DOCUMENTS LIST

The following list of drawings was received from Tillman Ruth Robinson Architects Inc.
The noted drawings were used to complete Marshall and Murray's Class "C" Estimate "R1".

	<u>Printed / Revision Date</u>	<u>Date Received</u>
Architectural		
A000	Site plan July 4, 2023	September 1, 2023
A001	Gen notes & symbols July 4, 2023	September 1, 2023
A002	Assemblies July 4, 2023	September 1, 2023
A001	Proposed floor plan July 4, 2023	September 1, 2023
A101	Site plan July 4, 2023	September 1, 2023
A201	Floor plan September 1, 2023	September 1, 2023
A202	Trellis plan July 4, 2023	September 1, 2023
A301	Exterior elevations July 4, 2023	September 1, 2023
A401	Building section July 4, 2023	September 1, 2023
A501	Interior elevations July 4, 2023	September 1, 2023
A601	Reflected ceiling plan July 4, 2023	September 1, 2023
A701	Room finish plan July 4, 2023	September 1, 2023
Mechanical		
	Mechanical brief - R1 August 25, 2023	September 1, 2023
	Mechanical plans (2 no.) July, 2023	September 1, 2023
Electrical		
	Electrical brief - R1 August 25, 2023	September 1, 2023
	Electrical plans (2 no.) July, 2023	September 1, 2023
	Lighting cut sheets	September 1, 2023

SECTION 2

CHANGE ROOM ADDITION

4. COST ESTIMATE

CONTINUED

WELLINGTON NORTH
NEW OUTDOOR POOL & AQUATIC FACILITY
Mount Forest, Ontario

October 4, 2023
CLASS "C" ESTIMATE "R1"

NEW AQUATIC FACILITY CHANGE ROOM

FILE: L2461/1/Class C/8/Outdoor Pool & Change Room R1.xlsx

Description	Qty	Unit	Rate	Amount
A3 EXTERIOR ENCLOSURE				
A31 Walls Below Grade				
				nil
A32 Walls Above Grade				
1.0 Brick veneer - W1 - 90mm brick veneer - 25mm airspace - 90mm rigid insulation - self adhered vapour barrier - 190mm CMU	1,355	sf	61.00	82,631
2.0 Stone Veneer - W1* - 90mm stone veneer - 25mm airspace - 90mm rigid insulation - self adhered vapour barrier - 190mm CMU	394	sf	71.00	27,988
3.0 Corrugated metal siding - W2 - corrugated metal panel - z-girt system - 25mm airspace - 90mm rigid insulation - self adhered vapour barrier - 190mm CMU	498	sf	51.00	25,375
4.0 Signage to exterior cladding		allow		2,500
5.0 Lintels, caulking, flashing, tie-in to existing		allow		8,000
Total A32 Walls Above Grade	2,246	sf		146,494
A33 Windows & Entrances				
1.0 Insulated hollow metal doors c/w hardware	1	#	2,700.00	2,700
2.0 Glazed aluminum entrance doors c/w hardware	3	#	3,500.00	10,500
3.0 Overhead doors - solid panel w. auto opener - 9' 0" x 8' 0" - 8' 0" x 8' 0"	1 1	# #	12,500.00 10,000.00	12,500 10,000
4.0 Aluminum windows	277	sf	100.00	27,680
5.0 Supports, caulking, flashing, etc.		allow		3,500
Total A33 Windows & Entrances	277	sf		66,880
A34 Roof Covering				
1.0 Metal standing seam roof	3,624	sf	35.75	129,558
2.0 Gutters and downspouts		allow		1,500
3.0 Flashing, tie-ins, anchors, etc.		allow		6,000
Total A34 Roof Covering	3,624	sf		137,058

WELLINGTON NORTH
NEW OUTDOOR POOL & AQUATIC FACILITY
Mount Forest, Ontario

October 4, 2023
CLASS "C" ESTIMATE "R1"

NEW AQUATIC FACILITY CHANGE ROOM

FILE: L2461/1/Class C/8/Outdoor Pool & Change Room R1.xlsx

Description	Qty	Unit	Rate	Amount
A3 EXTERIOR ENCLOSURE				
A35 Projections				
1.0 Wood look canopy (including steel columns & footing)	310	sf	200.00	62,000
2.0 Prefinished vented metal soffit to u/s of roof	682	sf	75.00	51,134
3.0 Flashing, caulking, tie-in to existing		allow		5,500
Total A35 Projections	310	sf		118,634
B1 PARTITIONS & DOORS				
B11 Partitions				
1.0 Block partitions - P1 - 140mm block - P2x - 190mm block	3,133 490	sf sf	22.00 20.00	68,934 9,793
2.0 Drywall partitions		allow		5,000
3.0 Glazing		allow		2,500
4.0 Lintels, supports, caulking, firestopping		allow		4,000
Total B11 Partitions	3,623	sf		90,227
B12 Doors				
1.0 Fibreglass doors with a paint finish set within a painted frame	13	lvs	800.00	10,400
2.0 Fully glazed aluminum door c/w hardware				nil
3.0 Extra / over for: - finish hardware - fire rating - glazing - automatic door operators - card readers, door closers, kick plates etc	13 3 1	# # #	1,800.00 300.00 350.00	23,400 900 350
		allow		7,500
		allow		2,500
4.0 Supports, misc. finish hardware		allow		2,500
Total B12 Doors	13	#		47,550

4. COST ESTIMATE

CONTINUED

WELLINGTON NORTH
NEW OUTDOOR POOL & AQUATIC FACILITY
Mount Forest, Ontario

October 4, 2023
CLASS "C" ESTIMATE "R1"

NEW AQUATIC FACILITY CHANGE ROOM

FILE: L2461/1/Class C/B/Outdoor Pool & Change Room R1.xlsx

Description	Qty	Unit	Rate	Amount
B2 FINISHES				
B21 Floor Finishes				
1.0 Sealed concrete	548	sf	3.50	1,918
2.0 Epoxy flooring	1,145	sf	10.00	11,450
3.0 Vinyl Composite Tile	747	sf	6.50	4,856
4.0 Porcelain tile to storage (Pool area by pool vendors)				By others
5.0 Bases				
- epoxy cove base	454	lf	14.00	6,356
- rubber base	228	lf	3.50	798
6.0 Special finishes, patterns, etc.		allow		1,250
Total B21 Floor Finishes	2,440	sf		26,628
B22 Ceiling Finishes				
1.0 Gypsum board ceiling	2,473	sf	10.00	24,730
2.0 Cement board ceiling	258	sf	12.00	3,096
3.0 Feature wood ceiling	33	sf	50.00	1,650
4.0 Moisture resistant ceiling board		allow		2,500
5.0 Drywall bulkheads		allow		1,200
6.0 Special finishes, patterns, etc.		allow		1,200
Total B22 Ceiling Finishes	2,764	sf		34,376
B23 Wall Finishes				
1.0 Paint block walls	8,699	sf	2.50	21,748
2.0 Ceramic tile - Backsplash		allow		1,000
3.0 Special finishes, patterns, etc.		allow		1,200
Total B23 Wall Finishes	8,699	sf		23,948

WELLINGTON NORTH
NEW OUTDOOR POOL & AQUATIC FACILITY
Mount Forest, Ontario

October 4, 2023
CLASS "C" ESTIMATE "R1"

NEW AQUATIC FACILITY CHANGE ROOM

FILE: L2461/1/Class C/B/Outdoor Pool & Change Room R1.xlsx

Description	Qty	Unit	Rate	Amount
B3 FITTINGS & EQUIPMENT				
B31 Fittings & Fixtures				
1.0 Entry/ vestibule				
- recessed aluminum grille		allow		3,000
2.0 Shower/ Change area				
- double tier lockers	19	#	350.00	6,650
- coat hooks to shower area	6	#	55.00	330
- paper towel dispenser	2	#	275.00	550
- soap dispenser	2	#	75.00	150
- mirror	6	#	300.00	1,800
- solid surface countertop (2 no.) w. backsplash	19.0	ft	200.00	3,800
- solid surface countertop (2 no.)	7.4	ft	150.00	1,107
- grab bars	1	#	275.00	275
- grab bars 'L-shape'	1	#	450.00	450
- fold down shower seat	1	#	500.00	500
3.0 Change room (4 no.)				
- benches/millwork to change room	16	ft	100.00	1,600
- coat hooks	8	#	55.00	440
- mirror	4	#	300.00	1,200
4.0 Family change room (2 no.)				
- benches/millwork to change room	10	ft	100.00	990
- coat hooks	8	#	55.00	440
- baby change tables				nil
- mirror	2	#	300.00	600

4. COST ESTIMATE

CONTINUED

WELLINGTON NORTH
NEW OUTDOOR POOL & AQUATIC FACILITY
Mount Forest, Ontario

October 4, 2023
CLASS "C" ESTIMATE "R1"

NEW AQUATIC FACILITY CHANGE ROOM

FILE: L2461/1/Class C/B/Outdoor Pool & Change Room R1.xlsx

Description	Qty	Unit	Rate	Amount
B3 FITTINGS & EQUIPMENT				
B31 Fittings & Fixtures (Cont'd)				
5.0 BF change room (1 no.)				
- benches/millwork to change room	6	ft	100.00	600
- coat hooks	1	#	55.00	55
- mirror	1	#	300.00	300
6.0 Universal WR				
- toilet tissue dispenser	1	#	85.00	85
- soap dispenser	1	#	75.00	75
- paper towel dispenser	1	#	275.00	275
- tilted mirror	1	#	325.00	325
- sanitary napkin disposal	1	#	110.00	110
- sanitary napkin dispenser (OSCI)	1	#	50.00	50
- coat hooks	1	#	55.00	55
- solid surface countertop	3.0	ft	150.00	443
- privacy divider	1	#	400.00	400
- baby change table	1	#	550.00	550
- wall shelf	1	#	250.00	250
- grab bars	3	#	275.00	825
- grab bars 'L-shape'	1	#	450.00	450
7.0 Washroom (2 no.)				
- toilet tissue dispenser	2	#	85.00	170
- soap dispenser	2	#	75.00	150
- paper towel dispenser	2	#	275.00	550
- mirror	2	#	300.00	600
- sanitary napkin disposal	2	#	110.00	220
- coat hooks	2	#	55.00	110
- solid surface countertop	7.0	ft	150.00	1,044
8.0 Staff Washroom				
- prefabricated shower stall				nil
- shower curtain and rod				nil
- double tier lockers	5	#	350.00	1,750
- toilet tissue dispenser	1	#	85.00	85
- soap dispenser	1	#	75.00	75
- paper towel dispenser	1	#	275.00	275
- mirror	1	#	300.00	300
- sanitary napkin disposal	1	#	110.00	110
- coat hooks	1	#	55.00	55
- solid surface countertop	3.0	ft	150.00	443
9.0 Janitor room				
- mop rack and shelf		allow		300

WELLINGTON NORTH
NEW OUTDOOR POOL & AQUATIC FACILITY
Mount Forest, Ontario

October 4, 2023
CLASS "C" ESTIMATE "R1"

NEW AQUATIC FACILITY CHANGE ROOM

FILE: L2461/1/Class C/B/Outdoor Pool & Change Room R1.xlsx

Description	Qty	Unit	Rate	Amount
B3 FITTINGS & EQUIPMENT				
B31 Fittings & Fixtures (Cont'd)				
10.0 Guard/ Staff/ First Aid				
- whiteboards	2	#	250.00	500
- two tier custom desk millwork w. cabinets	1	#	6,500.00	6,500
- first aid locker/ equipment				nil
- lower cabinetry - plastic laminate	24.0	ft	275.00	6,606
- upper cabinetry - plastic laminate	5.0	ft	200.00	1,000
- upper shelves	17.6	ft	120.00	2,112
- solid surface countertop	7.7	ft	150.00	1,154
11.0 Mechanical & electrical room				nil
12.0 Pool storage room				
- coat hooks	6	#	55.00	330
13.0 Signage and wayfinding		allow		3,000
14.0 Blinds				Excluded
15.0 Various fittings, fixtures, millwork and specialty components not specifically detailed on the current drawings		allow		3,000
Total B31 Fittings & Fixtures	2,942	m²		59,167
B32 Equipment				by owner
B33 Conveying Systems				nil

4. COST ESTIMATE

CONTINUED

WELLINGTON NORTH
NEW OUTDOOR POOL & AQUATIC FACILITY
Mount Forest, Ontario

October 4, 2023
CLASS "C" ESTIMATE "R1"

NEW AQUATIC FACILITY CHANGE ROOM

FILE: L2461/1/Class C/8/Outdoor Pool & Change Room R1.xlsx

Description	Qty	Unit	Rate	Amount
C1 MECHANICAL				
C11 Plumbing & Drainage				
PLUMBING FIXTURES:				
1.0	4	#	1,650.00	6,600
2.0	6	#	1,450.00	8,700
3.0	2	#	850.00	1,700
4.0	1	#	1,600.00	1,600
5.0	5	#	1,300.00	6,500
6.0	3	#	2,500.00	7,500
7.0	1	#	2,800.00	2,800
8.0	1	#	800.00	800
9.0				nil
TOTAL - PLUMBING FIXTURES			\$36,200	
			\$12.30 /sf	
DOMESTIC HOT AND COLD WATER				
10.0	3	#	650.00	1,950
11.0	3	#	250.00	750
12.0	2	#	10,000.00	20,000
13.0	1	#	3,640.00	3,640
14.0	1	#	1,600.00	1,600
15.0	1	#	2,200.00	2,200
16.0	1	#	3,800.00	3,800
17.0	3	#	1,400.00	4,200
18.0	3	#	1,600.00	4,800
19.0				nil
20.0				60,400
21.0				15,100
TOTAL - DOMESTIC HOT AND COLD WATER			\$118,440	
			\$40.26 /sf	
SANITARY WASTE AND VENT				
22.0	8	#	375.00	3,000
23.0	2	#	450.00	900
24.0				nil
25.0	14	#	1,200.00	10,000
26.0				nil
27.0	1	#	10,000.00	10,000
28.0	1	#	1,400.00	1,400
29.0				45,200
30.0				nil
31.0				nil
TOTAL - SANITARY WASTE AND VENT			\$70,500	
			\$23.96 /sf	
STORM				
32.0	3	#	450.00	1,350
33.0				nil
34.0				10,500
35.0				2,100
36.0				nil
TOTAL - STORM			\$13,950	
			\$4.74 /sf	

WELLINGTON NORTH
NEW OUTDOOR POOL & AQUATIC FACILITY
Mount Forest, Ontario

October 4, 2023
CLASS "C" ESTIMATE "R1"

NEW AQUATIC FACILITY CHANGE ROOM

FILE: L2461/1/Class C/8/Outdoor Pool & Change Room R1.xlsx

Description	Qty	Unit	Rate	Amount
C1 MECHANICAL				
NATURAL GAS				
37.0		allow		12,000
TOTAL - NATURAL GAS			\$12,000	
			\$4.08 /sf	
DEMOLITION				
TOTAL - DEMOLITION			nil	
			- /sf	
MISCELLANEOUS				
38.0				2,600
39.0				by pool supplier
40.0				20,500
TOTAL - MISCELLANEOUS			\$23,100	
			\$7.85 /sf	
Total C11 Plumbing & Drainage	2,942	sf		274,190
C12 Fire Protection				
1.0	2,942	sf	0.60	1,765
Total C12 Fire Protection	2,942	sf		1,765
C13 HVAC				
AIR HANDLING UNITS AND DUCTWORK				
1.0				nil
2.0	2	#		5,000
3.0				33,600
4.0	19	#	90.00	1,710
5.0				5,400
6.0				nil
7.0	1	#	16,500.00	16,500
8.0	1	#	5,500.00	5,500
9.0	9	#	320.00	2,880
10.0				nil
TOTAL - AIR HANDLING UNITS & DUCTWORK			\$70,590	
			\$23.99 /sf	
EXHAUST AND VENTILATION				
TOTAL - EXHAUST AND VENTILATION			incl.	
			- /sf	
LIQUID HEAT TRANSFER				
TOTAL - LIQUID HEAT TRANSFER			nil	
			\$0.00 /sf	

4. COST ESTIMATE

CONTINUED

WELLINGTON NORTH
NEW OUTDOOR POOL & AQUATIC FACILITY
Mount Forest, Ontario

October 4, 2023
CLASS "C" ESTIMATE "R1"

NEW AQUATIC FACILITY CHANGE ROOM

FILE: L2461/1/Class C/8/Outdoor Pool & Change Room R1.xlsx

Description	Qty	Unit	Rate	Amount
C1 MECHANICAL				
BALANCING				
11.0	Balancing			2,500
12.0	Verification			1,500
13.0	Labour for Mechanical Contractor to coordinate with commissioning agent			2,000
TOTAL - BALANCING			\$6,000	
			<u>\$2.04 /sf</u>	
SILENCING/VIBRATION ISOLATION				
14.0				nil
TOTAL - SILENCING/VIBRATION ISOLATION			nil	
			<u>\$0.00 /sf</u>	
MOTOR CONTROL & MECHANICAL WIRING				
TOTAL - MOTOR CONTROL & MECHANICAL WIRING			By electrical	
			<u>\$0.00 /sf</u>	
MISCELLANEOUS				
15.0	Identification			672
16.0	Cranage/haulage			8,000
17.0	Pool mechanical and heater c/w interconnecting piping		by pool supplier	
18.0	Seismic restraint			nil
19.0	Miscellaneous fitments, rentals, as built, etc			6,800
TOTAL - MISCELLANEOUS			\$15,472	
			<u>\$5.26 /sf</u>	
Total C13 HVAC	2,942	sf		92,062
C14 Controls				
1.0	Controls to area	allow		20,400
Total C14 Controls	2,942	sf		20,400

C2 ELECTRICAL

C21 Service & Distribution

1.0	Normal power distribution	1	#	24,000.00	24,000
2.0	Emerg distribution				nil
3.0	Mechanical (motor) wiring c/w pool equipment	1	sum	15,000.00	15,000
4.0	Miscellaneous distribution				
	- hydro metering cabinet in separate W/P enclosure, W/M	1	#	1,000.00	1,000
	- testing, inspection & commissioning	1	sum	2,000.00	2,000
	- arc flash hazard analysis	1	#	2,000.00	2,000
	- short circuit & co-ordination study	1	#	2,000.00	2,000
Total C21 Service & Distribution	2,942	sf			46,000

WELLINGTON NORTH
NEW OUTDOOR POOL & AQUATIC FACILITY
Mount Forest, Ontario

October 4, 2023
CLASS "C" ESTIMATE "R1"

NEW AQUATIC FACILITY CHANGE ROOM

FILE: L2461/1/Class C/8/Outdoor Pool & Change Room R1.xlsx

Description	Qty	Unit	Rate	Amount	
C2 ELECTRICAL					
C22 Lighting, Devices & Heating					
1.0	Lighting including exit & emerg lights, LED				
	- L1	29	#	575.00	16,675
	- L2	12	#	550.00	6,600
	- X4, 1x12w single remote emerg LV lighting heads, W/M	3	#	300.00	900
	- X3, 2x12w dual remote emerg LV lighting heads, W/M	6	#	325.00	1,950
	- X2, 1x360w emerg battery pack c/w Integral dual LV lighting heads, W	3	#	650.00	1,950
2.0	Switching c/w occupancy sensors				
	- LV single pole, W/M	6	#	200.00	1,200
	- LV single pole, W/M, waetherproof	2	#	200.00	400
	- LV 3way, W/M	2	#	250.00	500
	- 1200sf dual technology occupancy sensor (PIR & ultrasonic), W/M	8	#	300.00	2,400
	- 2000sf dual technology occupancy sensor (PIR & ultrasonic) c/w intelligent slave power pack, C/M	8	#	375.00	3,000
3.0	Receptacles				
	- duplex, W/M	16	#	350.00	5,600
	- duplex, C/M	2	#	350.00	700
	- GFCI, W/M	12	#	350.00	4,200
	- quad, W/M	4	#	350.00	1,400
	- 20a housekeeping, W/M	4	#	450.00	1,800
	- GFCI, W/M, weatherproof	2	#	450.00	900
4.0	Equipment hard wired power connections				
	- electrical no touch faucet c/w 50va 120v/24vac TX in ceiling space	6	#	200.00	1,200
	- electrical no touch flush valve c/w 50va 120v/24vac TX in ceiling space	4	#	200.00	800
	- electrical no touch shower c/w 50va 120v/24vac TX in ceiling space	2	#	200.00	400
	- barrier free motorized door operator c/w pushbuttons, C/M	2	#	400.00	800
	- electronic trap seal primer, F/M	3	#	400.00	1,200
	- 1.5kw hot air hand dryer c/w pushbutton, W/M	2	#	350.00	700
	- 1.5kw hot air hair dryer, W/M	2	#	350.00	700
	- remote emergency shut-off mushroom pushbutton, latching type	1	#	650.00	650
	- BAS mechanical controls c/w 50va 120v/24vac TX in ceiling space	2	#	275.00	550
5.0	Electrical resistance heating, connections only				
	- 5.00kw gas fired unit heater GFH-1 c/w built-in non-programmable electrical thermostat, W/M	1	#	500.00	500
Total C22 Lighting, Devices & Heating	2,942	sf			57,675

4. COST ESTIMATE

CONTINUED

WELLINGTON NORTH
NEW OUTDOOR POOL & AQUATIC FACILITY
Mount Forest, Ontario

October 4, 2023
CLASS "C" ESTIMATE "R1"

NEW AQUATIC FACILITY CHANGE ROOM

FILE: L2461/1/Class C/B/Outdoor Pool & Change Room R1.xlsx

Description	Qty	Unit	Rate	Amount
C2 ELECTRICAL				
C23 Systems & Ancillaries				
1.0				excluded
2.0				
- Telecommunications, conduit only				
- 1voice & 2data, W/M	1	#	150.00	150
- 2data, W/M	3	#	150.00	450
3.0				
- Telecommunications, Cat6 FT6 multipair plenum rated cabling				
- voice, R/M	1	#	300.00	300
- data, R/M	14	#	300.00	4,200
- 48port patch panel in data rack, R/M	1	#	750.00	750
- PDU unit & UPS equipment, modem, network switch, etc.				by others
- network audit after completion	1	sum	500.00	500
4.0				
- Wireless communications, power only				
- Wi-Fi network access points, C/M	3	#	300.00	900
- PoE wireless router, C/M				by owner
5.0				
- CATV system, conduit only				
- CATV outlet, W/M	1	#	200.00	200
6.0				
- Barrier-free universal washroom flashing unit	1	#	2,000.00	2,000
7.0				
- Intrusion control system	1	sum	5,000.00	5,000
8.0				
- Door access control system, conduit & power only				
- proximity card reader, unsecured side, W/M	3	#	125.00	375
- electric strike, D/M	3	#	125.00	375
- electro-magnetic door holder, D/M	4	#	125.00	500
- door open-detect contact, D/M	4	#	125.00	500
- door bell c/w step-down transformer, C/M	3	#	125.00	375
- power assisted pushbutton, W/M	3	#	125.00	375
- infra-red egress motion detector, W/M	3	#	125.00	375
- security junction box, C/M	3	#	150.00	450
- door power & security controller on secure side, C/M	3	#	500.00	1,500
9.0				by others
10.0				
- CCTV system, power & conduit only				
- indoor CCTV camera, indoor fixed, W/M	4	#	500.00	2,000
- outdoor CCTV camera, indoor PTZ, W/M	2	#		see site
11.0				by others
12.0				
- Cable tray, main conduit, hangers & support channels,				
- 305x305x205mm EMT power pull box, C/M	1	#	200.00	200
et805x305x205mm EMT power pull box, C/M,	1	#	250.00	250
lockable	8	#	200.00	1,600
- EZ path fire rated pathway, W/M	1	sum	1,500.00	1,500
- various conduit, sleeves & channel support, etc.				
13.0				nil

WELLINGTON NORTH
NEW OUTDOOR POOL & AQUATIC FACILITY
Mount Forest, Ontario

October 4, 2023
CLASS "C" ESTIMATE "R1"

NEW AQUATIC FACILITY CHANGE ROOM

FILE: L2461/1/Class C/B/Outdoor Pool & Change Room R1.xlsx

Description	Qty	Unit	Rate	Amount
C2 ELECTRICAL				
C23 Systems & Ancillaries (Cont'd)				
13.0				excluded
14.0				
- Secondary grounding & bonding system	2,942	sf	1.00	2,942
15.0				by general
16.0				
- Testing & inspection	1	sum	2,000.00	2,000
17.0				
- Labour for commissioning agent	1	sum	1,000.00	1,000
18.0				nil
- Seismic & vibration restraints				
19.0				
- Miscellaneous fitments, fire stops, rentals, etc.	1	sum	5,000.00	5,000
20.0				
- Job start up & close out	1	sum	15,017.00	15,017
Total C23 Systems & Ancillaries	2,942	sf		51,549

D1 SITE WORK

D11 Site Development	separate
D12 Mechanical Site Services	separate
D13 Electrical Site Services	separate

D2 ANCILLARY WORK

D21 Demolition	nil
D22 Alterations	nil
D23 Cash Allowances	nil

4. COST ESTIMATE

CONTINUED

WELLINGTON NORTH NEW OUTDOOR POOL & AQUATIC FACILITY Mount Forest, Ontario		ELEMENTAL COST COMPARISON		October 4, 2023 CLASS "C" ESTIMATE "R1"		
NEW AQUATIC FACILITY CHANGE ROOM						
FILE: L2461/1/Class C/Outdoor Pool & Change Room R1.xlsx						
ELEMENT/Sub Element	Class C - Sep 19, 2023		Elemental Amount		VARIANCE	
	Sub-total	Total	Sub-total	Total	Amount	%
A SHELL		\$707,819		\$707,819	\$0	0.00%
A1 SUBSTRUCTURE		\$145,774	\$145,774	\$145,774	\$0	0.00%
A11 Foundations	\$145,774		\$145,774		\$0	
A112 Special Foundations	nil		nil		\$0	
A12 Basement Excavation	nil		nil		\$0	
A2 STRUCTURE		\$92,979	\$92,979	\$92,979	\$0	0.00%
A21 Lowest Floor Construction	\$26,507		\$26,507		\$0	
A22 Upper Floor Construction	nil		nil		\$0	
A222 Stair Construction	nil		nil		\$0	
A23 Roof Construction	\$66,472		\$66,472		\$0	
A3 EXTERIOR ENCLOSURE		\$469,067	\$469,067	\$469,067	\$0	0.00%
A31 Walls Below Grade	nil		nil		\$0	
A32 Walls Above Grade	\$146,494		\$146,494		\$0	
A33 Windows & Entrances	\$66,880		\$66,880		\$0	
A34 Roof Covering	\$137,058		\$137,058		\$0	
A35 Projections	\$118,634		\$118,634		\$0	
B INTERIORS		\$281,895	\$281,895	\$281,895	\$0	0.00%
B1 PARTITIONS & DOORS		\$137,777	\$137,777	\$137,777	\$0	0.00%
B11 Partitions	\$90,227		\$90,227		\$0	
B12 Doors	\$47,550		\$47,550		\$0	
B2 FINISHES		\$84,951	\$84,951	\$84,951	\$0	0.00%
B21 Floor Finishes	\$26,628		\$26,628		\$0	
B22 Ceiling Finishes	\$34,376		\$34,376		\$0	
B23 Wall Finishes	\$23,948		\$23,948		\$0	
B3 FITTINGS & EQUIPMENT		\$59,167	\$59,167	\$59,167	\$0	0.00%
B31 Fittings & Fixtures	\$59,167		\$59,167		\$0	
B32 Equipment	nil		nil		\$0	
B33 Conveying Systems	\$0		\$0		\$0	
C SERVICES		\$613,218	\$543,641	\$543,641	-\$69,577	-11.35%
C1 MECHANICAL		\$388,417	\$388,417	\$388,417	\$0	0.00%
C11 Plumbing & Drainage	\$274,190		\$274,190		\$0	
C12 Fire Protection	\$1,765		\$1,765		\$0	
C13 HVAC	\$92,062		\$92,062		\$0	
C14 Controls	\$20,400		\$20,400		\$0	
C2 ELECTRICAL		\$224,801	\$155,224	\$155,224	-\$69,577	-30.95%
C21 Service & Distribution	\$53,000		\$46,000		-\$7,000	
C22 Lighting, Devices & Heating	\$61,350		\$57,675		-\$3,675	
C23 Systems & Ancillaries	\$110,451		\$51,549		-\$58,902	
NET BUILDING COST - EXCL. SITE & ANCILLARY	\$1,602,933	\$1,602,933	\$1,533,356	\$1,533,356	-\$69,577	-4.34%
D SITE		\$0	\$0	\$0	\$0	#DIV/0!
D1 SITE WORK		\$0	\$0	\$0	\$0	#DIV/0!
D11 Site Development	nil		nil		\$0	
D12 Mechanical Site Services	nil		nil		\$0	
D13 Electrical Site Services	nil		nil		\$0	
D2 ANCILLARY WORK		\$0	\$0	\$0	\$0	#DIV/0!
D21 Demolition	nil		nil		\$0	
D22 Alterations	nil		nil		\$0	
D23 Cash Allowances	nil		nil		\$0	
NET BUILDING COST - EXCLUDING GENERAL REQUIREMENTS	\$1,602,933	\$1,602,933	\$1,533,356	\$1,533,356	-\$69,577	-4.34%
Z GENERAL REQUIREMENTS		\$256,469	\$245,337	\$245,337	-\$11,132	-4.34%
Z1 GENERAL REQUIREMENTS & FEE		\$256,469	\$245,337	\$245,337	-\$11,132	-4.34%
Z11 General Requirements (%)	\$192,352		\$184,003		-\$8,349	
Z12 Fee (%)	\$64,117		\$61,334		-\$2,783	
TOTAL CONSTR. ESTIMATE - EXCL. ALLOWANCES	\$1,859,402	\$1,859,402	\$1,778,693	\$1,778,693	-\$80,709	-4.34%
Z2 ALLOWANCES		\$111,564	\$106,722	\$106,722	-\$4,843	-4.34%
Z21 Design & Pricing (%)	\$111,564		\$106,722		-\$4,843	
Z22 Escalation Allowance (%)	\$0		\$0		\$0	
Z23 Construction Allowance (%)	\$0		\$0		\$0	
TOTAL CONSTRUCTION ESTIMATE - EXCL. TAXES	\$1,970,966	\$1,970,966	\$1,885,414	\$1,885,414	-\$85,552	-4.34%
HARMONIZED SALES TAX		\$0	\$0	\$0	\$0	#DIV/0!
Harmonized Sales Tax	\$0		\$0		\$0	
TOTAL CONSTRUCTION ESTIMATE		\$1,970,966	\$1,885,414	\$1,885,414	-\$85,552	-4.34%
	Area (sf)	2,942	Area (sf)	2,942		
	/sf	\$669.94	/sf	\$640.86		

SECTION 3

SITE WORK

4. COST ESTIMATE

CONTINUED

WELLINGTON NORTH NEW OUTDOOR POOL & AQUATIC FACILITY Mount Forest, Ontario		ELEMENTAL COST SUMMARY SITE WORK			October 4, 2023 CLASS "C" ESTIMATE "R1"		GFA : N/A m²	
FILE: L2461/1/Class C/B/Outdoor Pool & Change Room R1.xlsx								
ELEMENT/Sub Element	Ratio to GFA	Elemental Cost		Elemental Amount		Rate/m²		
		Quantity	Unit Rate	Sub-total	Total	Sub-Total	Total	%
A SHELL								
A1 SUBSTRUCTURE								
A11 Foundations				separate				
A112 Special Foundations				separate				
A12 Basement Excavation				separate				
A2 STRUCTURE								
A21 Lowest Floor Construction				separate				
A22 Upper Floor Construction				separate				
A222 Stair Construction				separate				
A23 Roof Construction				separate				
A3 EXTERIOR ENCLOSURE								
A31 Walls Below Grade				separate				
A32 Walls Above Grade				separate				
A33 Windows & Entrances				separate				
A34 Roof Covering				separate				
A35 Projections				separate				
B INTERIORS								
B1 PARTITIONS & DOORS								
B11 Partitions				separate				
B12 Doors				separate				
B2 FINISHES								
B21 Floor Finishes				separate				
B22 Ceiling Finishes				separate				
B23 Wall Finishes				separate				
B3 FITTINGS & EQUIPMENT								
B31 Fittings & Fixtures				separate				
B32 Equipment				separate				
B33 Conveying Systems				separate				
C SERVICES								
C1 MECHANICAL								
C11 Plumbing & Drainage				separate				
C12 Fire Protection				separate				
C13 HVAC				separate				
C14 Controls				separate				
C2 ELECTRICAL								
C21 Service & Distribution				separate				
C22 Lighting, Devices & Heating				separate				
C23 Systems & Ancillaries				separate				
NET BUILDING COST - EXCLUDING SITE & ANCILLARY								
D SITE & ANCILLARY WORK					\$2,836,244			81.3%
D1 SITE WORK					\$2,836,244			81.3%
D11 Site Development	0.00	0 m2	0.00	\$2,620,496				
D12 Mechanical Site Services	0.00	0 m2	0.00	\$110,000				
D13 Electrical Site Services	0.00	0 m2	0.00	\$105,748				
D2 ANCILLARY WORK					\$0			0.0%
D21 Demolition	0.00	0 m2	0.00					
D22 Alterations	0.00	0 m2	0.00	separate				
D23 Cash Allowances	0.00	0 m2	0.00	separate				
NET BUILDING COST - EXCLUDING GENERAL REQUIREMENTS				\$2,836,244	\$2,836,244			81.3%
Z GENERAL REQUIREMENTS					\$453,799			13.0%
Z1 GENERAL REQUIREMENTS & FEE					\$453,799			13.0%
Z11 General Requirements (%)		12.0%		\$340,349				
Z12 Fee (%)		4.0%		\$113,450				
TOTAL CONSTRUCTION ESTIMATE - EXCLUDING ALLOWANCES				\$3,290,043	\$3,290,043			94.3%
Z2 ALLOWANCES					\$197,403			5.7%
Z21 Design & Pricing (%)		6.0%		\$197,403				
Z22 Escalation Allowance (%)		0.0%		\$0				
Z23 Construction Allowance (%)		0.0%		\$0				
TOTAL CONSTRUCTION ESTIMATE - EXCLUDING TAXES				\$3,487,446	\$3,487,446			100.0%
HARMONIZED SALES TAX					\$0			
Harmonized Sales Tax				0.0%	\$0			
TOTAL CONSTRUCTION ESTIMATE					\$3,487,446			

WELLINGTON NORTH
NEW OUTDOOR POOL & AQUATIC FACILITY
Mount Forest, Ontario

October 4, 2023
CLASS "C" ESTIMATE "R1"

SITE WORK

FILE: L2461/1/Class C/B/Outdoor Pool & Change Room R1.xlsx

Description	Qty	Unit	Rate	Amount
D1 SITE WORK				
D11 Site Development				
1.0 Clear & grub site		allow		6,500
2.0 Removals				
- sod/ topsoil	20,431	sf	2.50	51,078
- curbs	38	lf	50.00	1,920
- existing asphalt		allow		5,000
- misc items		allow		1,000
3.0 Earthwork		allow		17,000
4.0 Concrete walkway	2,260	sf	13.00	29,380
- extra over for tactile plates				1,000
5.0 Light-duty asphalt to building entrance	159	sf	6.00	954
6.0 Concrete curbs	38	lf	35.00	1,338
7.0 Concrete planter walls	375	lf	38.00	14,250
8.0 New decorative metal fence	420	lf	75.00	31,500
- new metal gate in metal fence		allow		2,000
9.0 Bleachers				35,000
10.0 Custom wood trellis		allow		40,000
11.0 Signage		allow		2,000
12.0 Shade structures		allow		65,000
13.0 Shower wall		allow		15,000
14.0 Pool accessories and equipment				Excluded
15.0 Outdoor leisure pool & pool deck		allow		2,200,000
- earthworks: excavation, removal, backfill, drainage				
- concrete supply, place, forming pool foundations & substructure				
- concrete supply, place, forming slab on grade (pool & pool deck)				
- finishes to pool and pool deck				
- mechanical, electrical & chemical equipment				
- pool accessories, deck, maintenance and safety equipment				
- chemical treatments & testing				
16.0 Diving board		allow		10,000
17.0 Lifeguard chairs (2no.)		allow		6,000
18.0 Landscaping				
- planting medium	1,644	sf	4.00	6,576
- flora to new plant beds		allow		4,500
- trees		allow		5,000
- sod		allow		8,500
- planter walls				nil

4. COST ESTIMATE

CONTINUED

WELLINGTON NORTH
NEW OUTDOOR POOL & AQUATIC FACILITY
Mount Forest, Ontario

October 4, 2023
CLASS "C" ESTIMATE "R1"

SITE WORK

FILE: L2461/1/Class C/8/Outdoor Pool & Change Room R1.xlsx

Description	Qty	Unit	Rate	Amount
D1 SITE WORK				
D11 Site Development (Cont'd)				
19.0		Miscellaneous siteworks not shown / identified	allow	10,000
20.0		Grading, repairs to adjacent/existing, soil control, temporary barriers, etc.	allow	50,000
Total D11 Site Development				2,620,496
D12 Mechanical Site Services				
1.0		Demolition	allow	5,000
2.0		Domestic/fire water	allow	30,000
3.0		Sanitary	allow	40,000
4.0		Storm	allow	25,000
5.0		Irrigation		nil
6.0		Snow melting		nil
7.0		Natural gas		by utility
8.0		City charges		excluded
9.0		Miscellaneous fitments, inspection, flushing, locates		10,000
Total D12 Mechanical Site Services				110,000
D13 Electrical Site Services				
1.0		Hydro charges (dip pole, 75kva TX, HV primary cables c/w terminations)	1 sum	20,000.00
2.0		Hydro pole c/w pole guys, cross arms & 28kv class insulators		by hydro
3.0		HV 28kv U/G copper 3#2/0 Cu primary cables, TR-XLPE 90, PVC jacket from existing hydro pole to 75kva primary TX		by hydro
4.0		28kv 600a full loadbreak interrupter switches c/w fused cut-outs & lighting arrestors, pole mounted		existing
5.0		75kva 28kv->347/600v 60hz oil filled pad mounted transformer c/w terminations of primary & secondary cables		by hydro

WELLINGTON NORTH
NEW OUTDOOR POOL & AQUATIC FACILITY
Mount Forest, Ontario

October 4, 2023
CLASS "C" ESTIMATE "R1"

SITE WORK

FILE: L2461/1/Class C/8/Outdoor Pool & Change Room R1.xlsx

Description	Qty	Unit	Rate	Amount
6.0		4#3 + #6g overhead lines from 75kva oil filled primary TX to 100a 347/600v entrance switch	50 m	125.00
7.0		1#53mm type DB II PVC comms ductbank, sand encased sloped c/w prefabricated spacers, 2x6" yellow warning tape & pullstring, native backfill, bellow & above 150x500mm sand bedding, min 10mpa concrete, from existing hydro pole to IT room	50 m	150.00
8.0		Copper & fibre backbone cabling from existing hydro pole to IT room	1 sum	8,000.00
9.0		Light standards c/w base, U/G feeder, grounding & luminaries, LED - L2, 1x79w 20LEDbar, 6.12m steel pole	4 #	8,000.00
10.0		Wall mounted outdoor luminaries, LED - L3, 1x19w 20LEDbar, 254mm x 350mm, wall mounted	4 #	1,000.00
11.0		Outdoor lighting standards & wallpacks controls	1 sum	2,000.00
12.0		CCTV system, conduit & power only - outdoor CCTV camera c/w heater, PTZ, W/M	2 #	1,500.00
13.0		Power, data & EMT conduit to outdoor electronic sign, W/M		excluded
14.0		Power, data & U/G schedule4 conduit to outdoor electronic sign, P/M		excluded
15.0		Power & U/G schedule4 conduit to outdoor GFCI receptacles, P/M		excluded
16.0		Secondary grounding grid for aquatic pool c/w grounding test	1 sum	7,500.00
17.0		Testing & inspection	1 sum	2,000.00
18.0		Miscellaneous fitments, firestops, rentals, etc.	1 sum	5,000.00
19.0		Job start up & close out	1 sum	8,498.00
Total D13 Electrical Site Services				105,748

D2 ANCILLARY WORK

D21 Demolition	nil
D22 Alterations	nil
D23 Cash Allowances	nil

4. COST ESTIMATE

CONTINUED

WELLINGTON NORTH NEW OUTDOOR POOL & AQUATIC FACILITY Mount Forest, Ontario		ELEMENTAL COST COMPARISON SITE WORK		October 4, 2023 CLASS "C" ESTIMATE "R1"		
ELEMENT/Sub Element	Cass C - Sep 19, 2023		CLASS "C" ESTIMATE "R1"		VARIANCE	
	Sub-total	Total	Sub-total	Total	Amount	%
A SHELL						
A1 SUBSTRUCTURE						
A11 Foundations	separate		separate			
A112 Special Foundations	separate		separate			
A12 Basement Excavation	separate		separate			
A2 STRUCTURE						
A21 Lowest Floor Construction	separate		separate			
A22 Upper Floor Construction	separate		separate			
A222 Stair Construction	separate		separate			
A23 Roof Construction	separate		separate			
A3 EXTERIOR ENCLOSURE						
A31 Walls Below Grade	separate		separate			
A32 Walls Above Grade	separate		separate			
A33 Windows & Entrances	separate		separate			
A34 Roof Covering	separate		separate			
A35 Projections	separate		separate			
B INTERIORS						
B1 PARTITIONS & DOORS						
B11 Partitions	separate		separate			
B12 Doors	separate		separate			
B2 FINISHES						
B21 Floor Finishes	separate		separate			
B22 Ceiling Finishes	separate		separate			
B23 Wall Finishes	separate		separate			
B3 FITTINGS & EQUIPMENT						
B31 Fittings & Fixtures	separate		separate			
B32 Equipment	separate		separate			
B33 Conveying Systems	separate		separate			
C SERVICES						
C1 MECHANICAL						
C11 Plumbing & Drainage	separate		separate			
C12 Fire Protection	separate		separate			
C13 HVAC	separate		separate			
C14 Controls	separate		separate			
C2 ELECTRICAL						
C21 Service & Distribution	separate		separate			
C22 Lighting, Devices & Heating	separate		separate			
C23 Systems & Ancillaries	separate		separate			
NET BUILDING COST - EXCLUDING SITE						
D SITE		\$2,880,587		\$2,836,244	-\$44,343	-1.5%
D1 SITE WORK		\$2,880,587		\$2,836,244	-\$44,343	-1.5%
D11 Site Development	\$2,620,496		\$2,620,496		\$0	
D12 Mechanical Site Services	\$110,000		\$110,000		\$0	
D13 Electrical Site Services	\$150,091		\$105,748		-\$44,343	
D2 ANCILLARY WORK		\$0		\$0	\$0	#DIV/0!
D21 Demolition	\$0		\$0		\$0	
D22 Alterations	separate		separate		\$0	
D23 Cash Allowances	separate		separate		\$0	
NET BUILDING COST - EXCLUDING GENERAL REQUIREMENTS	\$2,880,587	\$2,880,587	\$2,836,244	\$2,836,244	-\$44,343	-1.5%
Z GENERAL REQUIREMENTS CONTINGENCIES		\$460,894		\$453,799	-\$7,095	-1.5%
Z1 GENERAL REQUIREMENTS & FEE		\$460,894		\$453,799	-\$7,095	-1.5%
Z11 General Requirements (%)	\$345,670		\$340,349		-\$5,321	
Z12 Fee (%)	\$115,223		\$113,450		-\$1,774	
TOTAL CONSTRUCTION ESTIMATE - EXCLUDING CONTINGENCIES	\$3,341,481	\$3,341,481	\$3,290,043	\$3,290,043	-\$51,438	-1.5%
Z2 ALLOWANCES		\$200,489		\$197,403	-\$3,086	-1.5%
Z21 Design & Pricing (%)	\$200,489		\$197,403		-\$3,086	
Z22 Escalation Contingency (%)	\$0		\$0		\$0	
Z23 Construction Contingency (%)	\$0		\$0		\$0	
TOTAL CONSTRUCTION ESTIMATE - EXCLUDING TAXES	\$3,541,970	\$3,541,970	\$3,487,446	\$3,487,446	-\$54,524	-1.5%
HARMONIZED SALES TAX		\$0		\$0	\$0	#DIV/0!
Harmonized Sales Tax	\$0		\$0		\$0	
TOTAL CONSTRUCTION ESTIMATE		\$3,541,970		\$3,487,446	-\$54,524	-1.5%

SECTION 4 SCOPE OF WORK DRAWING

4. COST ESTIMATE

CONTINUED

