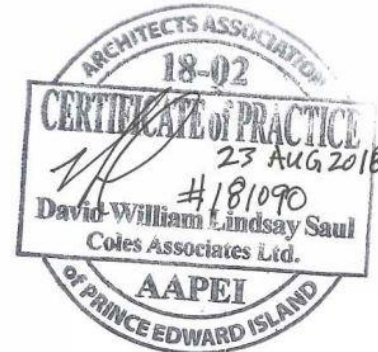
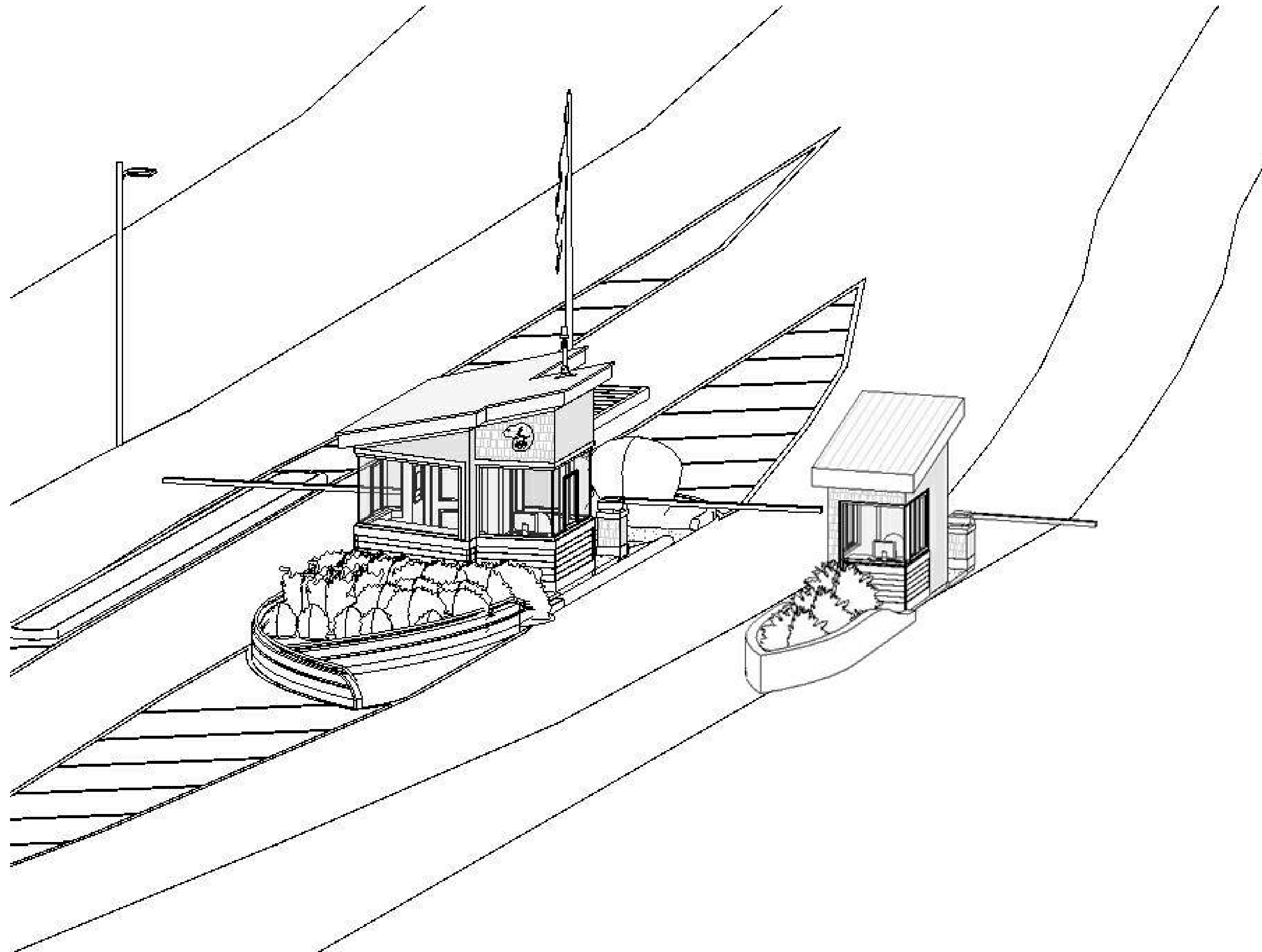
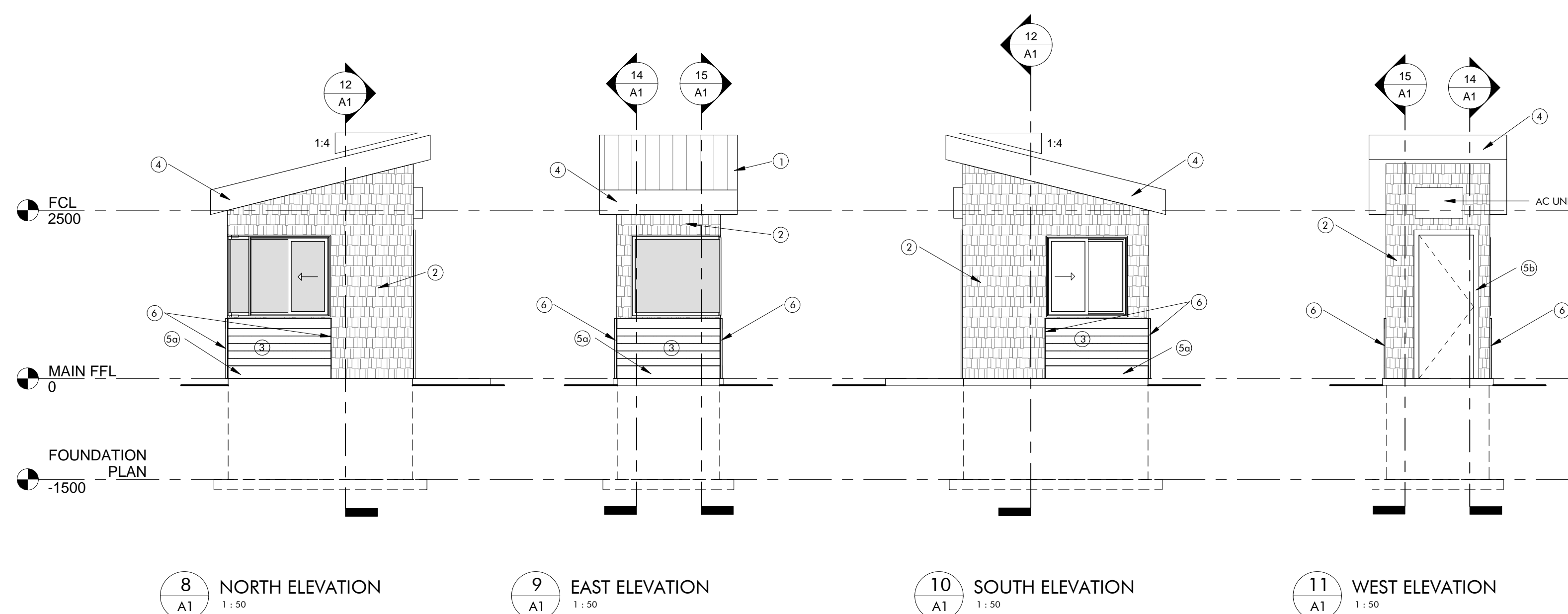
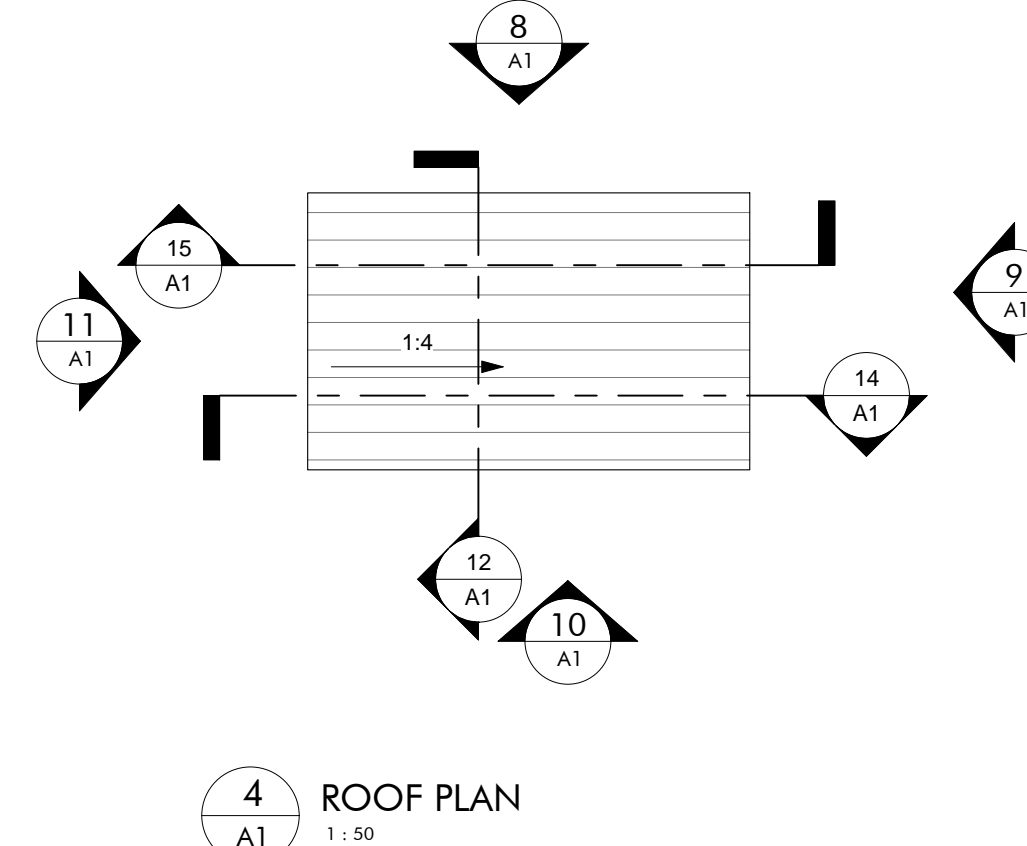
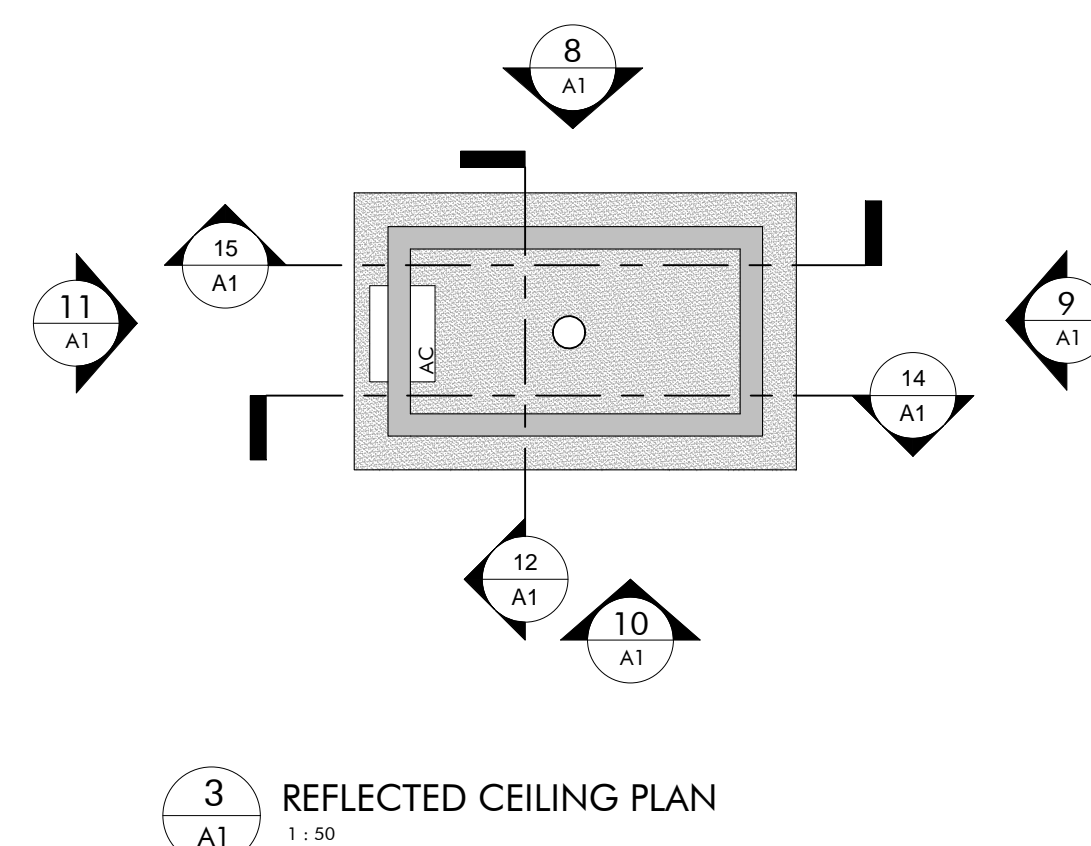


PARKS CANADA AGENCY

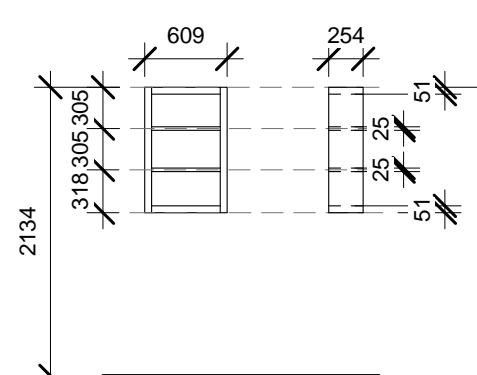
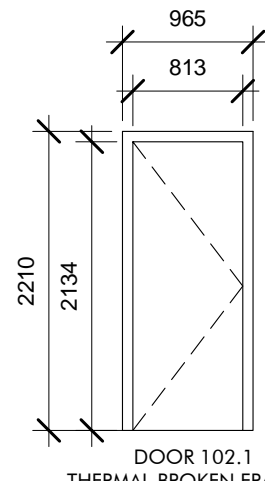
PARKS CANADA ENTRANCES & KIOSKS GRAHAM'S LANE



revisions	date
drawing	project
PARKS CANADA AGENCY ENTRANCES & KIOSKS GRAHAM'S LANE CAVENDISH, PE	
drawing	dessin
COVER PAGE	
designed K.M.	conçu
date AUG. 16, 2018	
drawn K.M.	dessiné
date AUG. 16, 2018	
approved W.S.	approuvé
date AUG. 16, 2018	
tender	soumission
PWOSC Project Manager Administrateur de projets TPSCG	
project number	no. du projet
181090	
drawing no	no. du dessin
A0	



DOOR 102.1 HARDWARE SCHEDULE					
3	EA	HINGE	5881 114X102MM NRP	630	IVE
1	EA	STOREROM LOCK	19080GD 17A	626	SCF
1	EA	OH STOP	905	630	GLY
1	EA	SURFACE CLOSER	4040XP-LONG	689	LCN
1	EA	MTG PLT	4040XP-18R	689	LCN
1	SET	WEATHERSTRIP	W-14 x door width x (2) door height	628	KNC
1	EA	DOOR SCHEDULE	W-245 x by door width	628	KNC
1	EA	THRESHOLD	CT - 39 x by door width	627	KNC



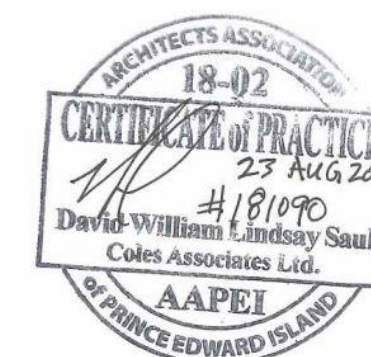
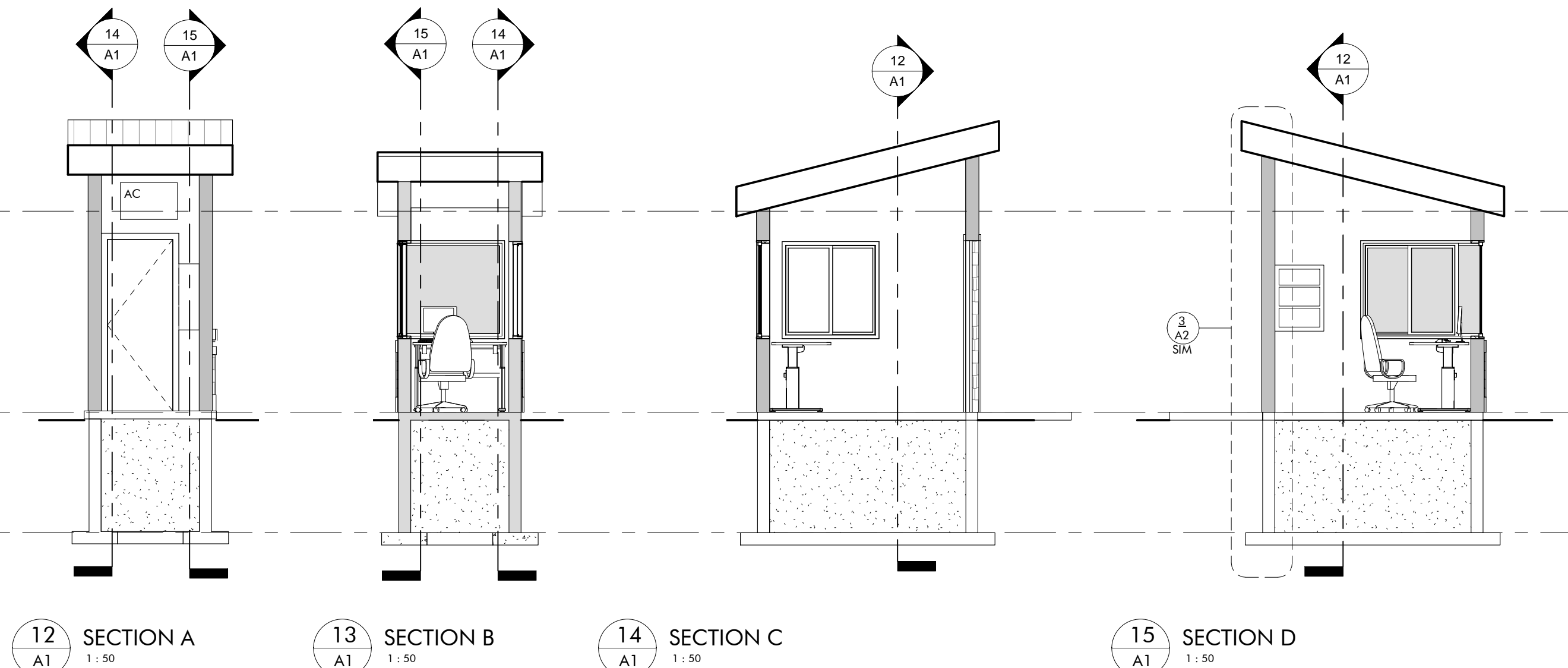
WALL SCHEDULE		
TYPE	DESCRIPTION	REMARKS
W1	.EXTERIOR CEDAR FINISH (REFER TO ELEVATIONS) .CEDAR BREATHER .CONTINUOUS NOVAVAPR AIR BARRIER .12.5mm EXTERIOR PLYWOOD SHEATHING .38mm x 150mm WOOD STUDS AT 16" O.C. .8-20 BATT INSULATION .10mil POLY VAPOUR .16mm GYPSUM WALL BOARD PAINTED	

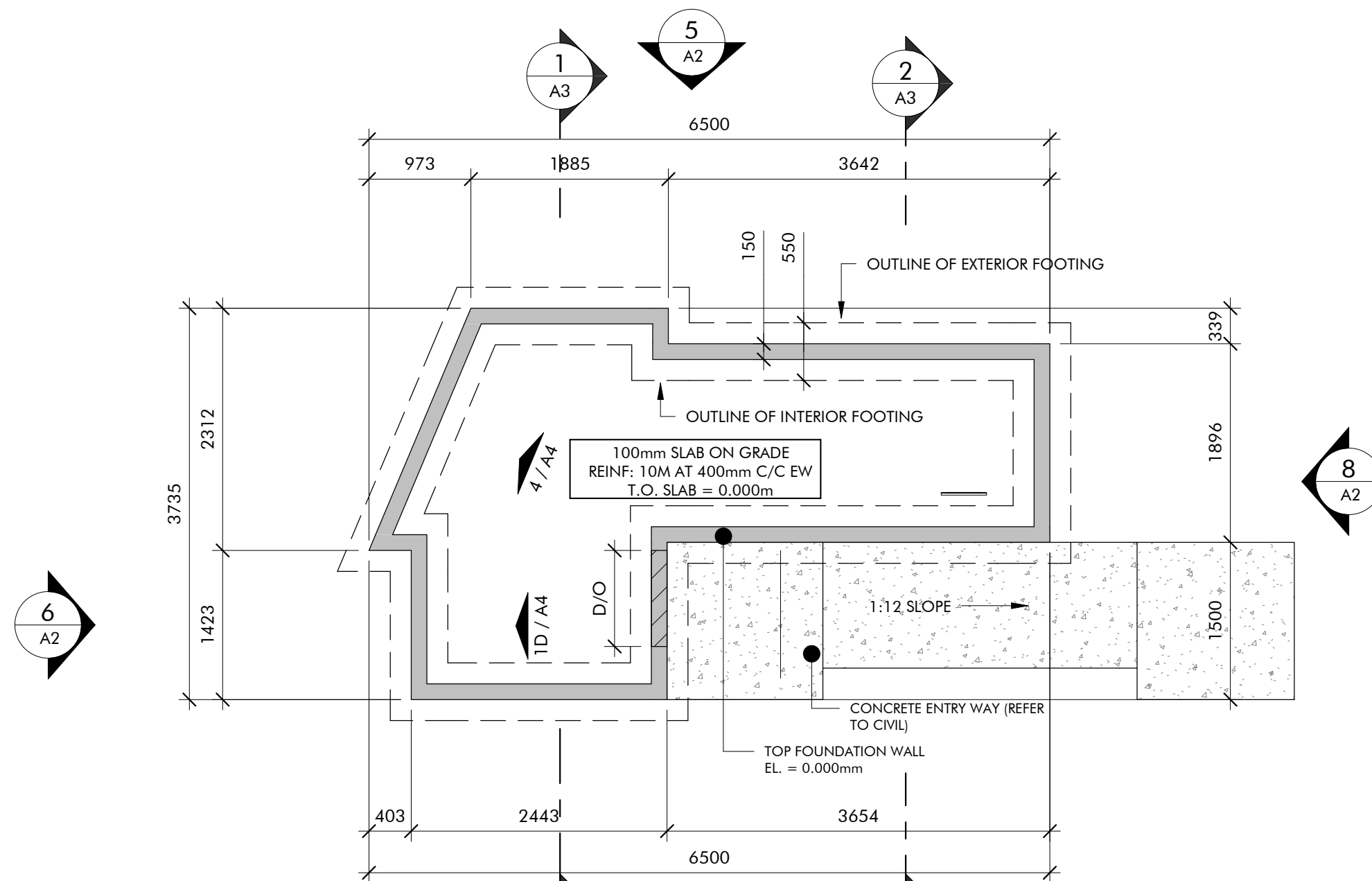
ROOF TYPE SCHEDULE		
TYPE	DESCRIPTION	REMARKS
R1	-VICWEST METAL ROOFING: PROFILE TRADITION 100-4 COLOR - REGENT GRAY #56082 -PEEL AND STICK NON-PERMEABLE MEMBRANE -5/8" PLYWOOD SHEATHING -38mm x 200mm WOOD RAFTER -R-20 BATT INSULATION -10mil POLYVAPOUR BARRIER -16mm Gypsum Wall Board Painted	

FLOOR TYPE SCHEDULE		
TYPE	DESCRIPTION	REMARKS
F1	.CERAMIC TILE FLOOR .100mm REINFORCED CONCRETE SLAB .10mm POLY VAPOUR BARRIER (TAPED AND SEALED) .100mm GLASS GRAVEL COMPACTED TO 100% SPMD .APPROVED UNDISTRIBUTED FILL OR 300mm STRUCTURAL FILL COMBATED TO 100% SPMD.	

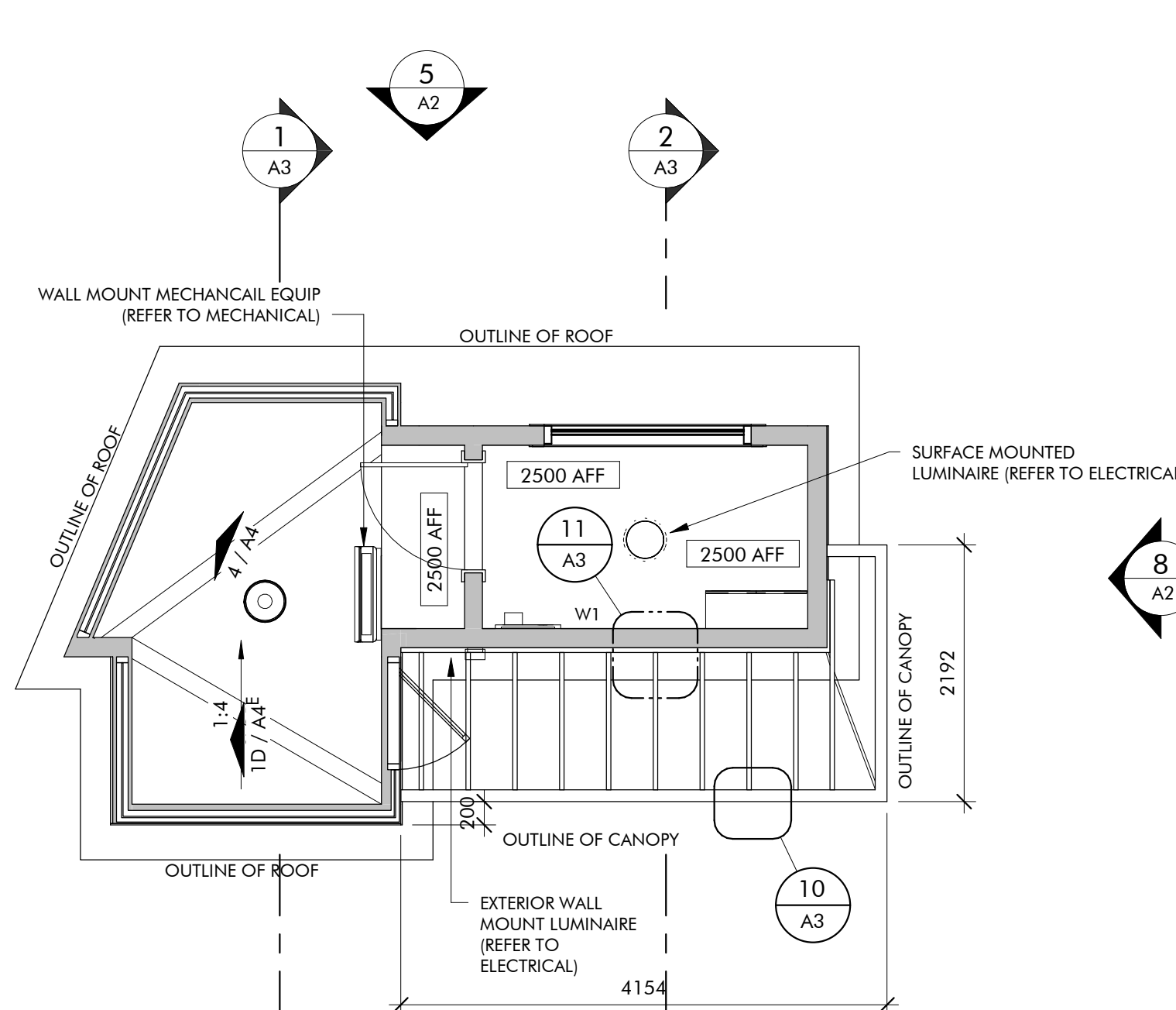
FLOOR PLAN NOTES:

- 1 ALL PENETRATIONS IN RATED PARTITIONS AND/OR FLOOR ASSEMBLIES
2 FOR PLUMBING, DUCTING OR ELECTRICAL RUNS ARE TO BE SEALED.
3 FIRE STOP IN ACCORDANCE WITH WALL AND/OR FLOOR TYPES. SUBMIT
4 ULC DETAILS AND MATERIALS DURING SHOP DRAWING PROCESS FOR
5 REVIEW PRIOR TO INSTALLATION.
6 PROVIDE 5/8" WATERPROOF GWR AROUND ALL TUBS/SHOWERS.
7 VENT ALL FANS TO OUTSIDE AIR THROUGH VENT C/W HOOD.
8 DOORS, FRAMES AND HARDWARE TO MATCH WALL FIRE RESISTANCE RATING.

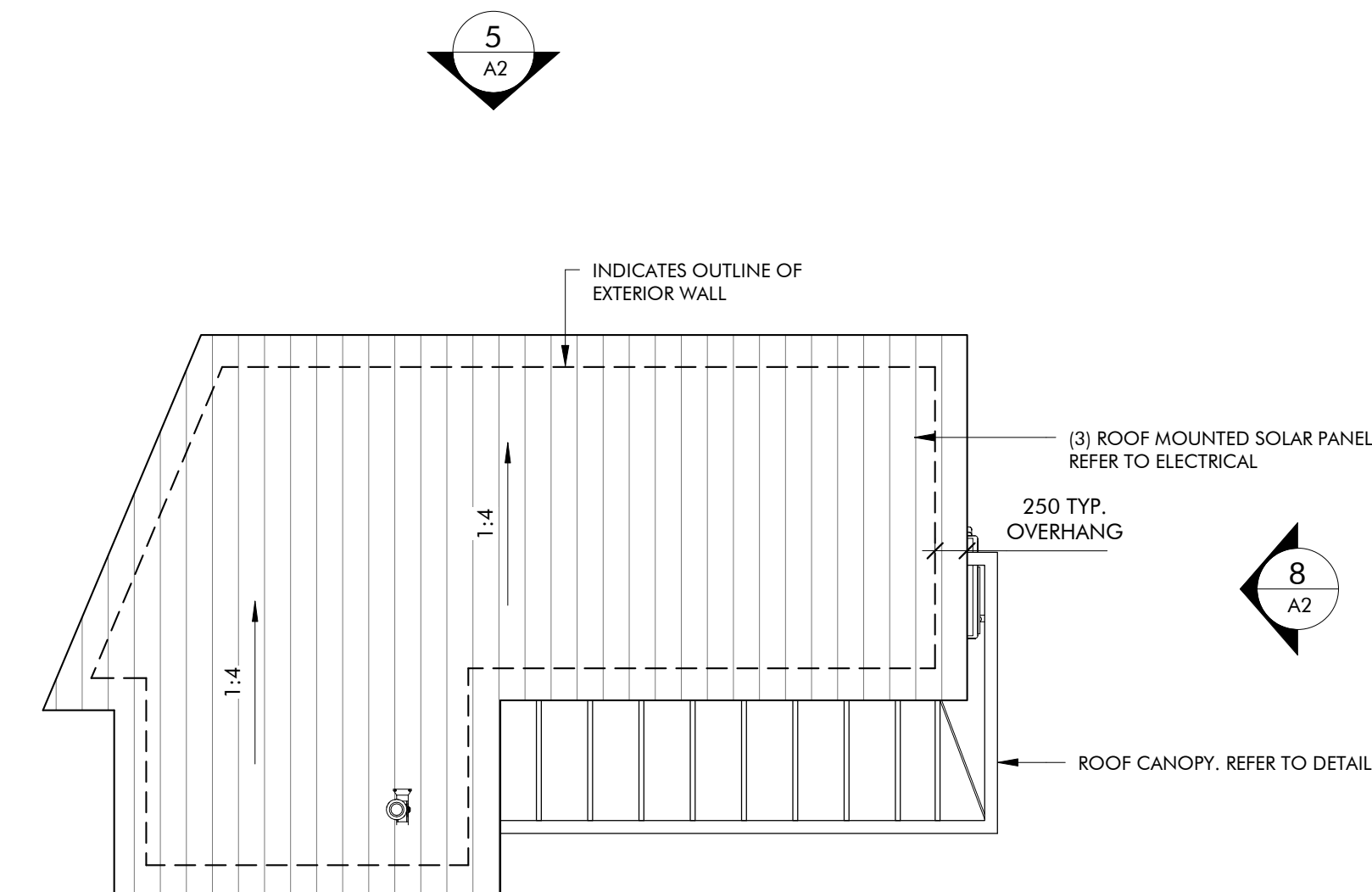
PWGSC B
(2004)



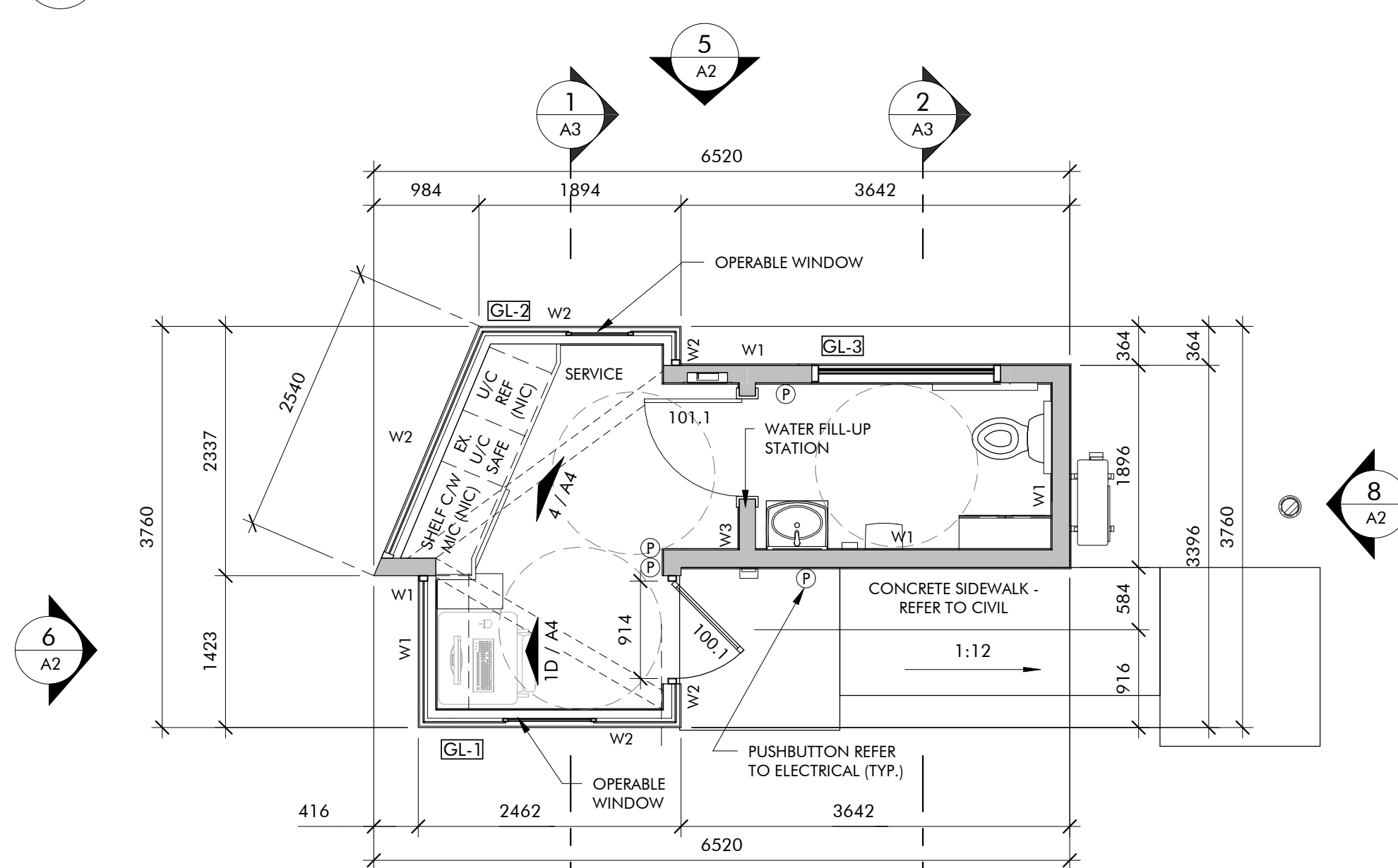
1 FOUNDATION PLAN
1:50



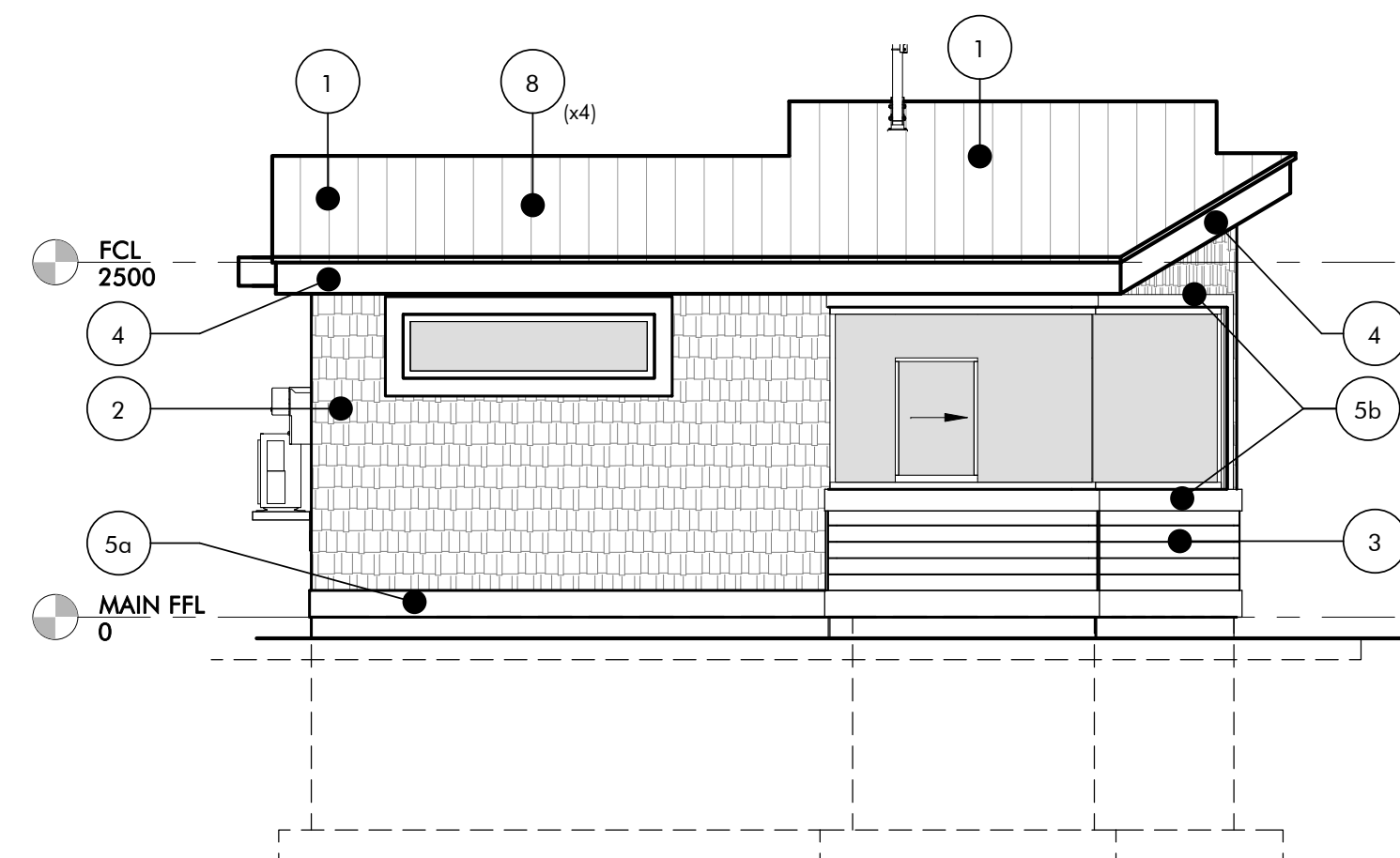
3 REFLECTED CEILING PLAN
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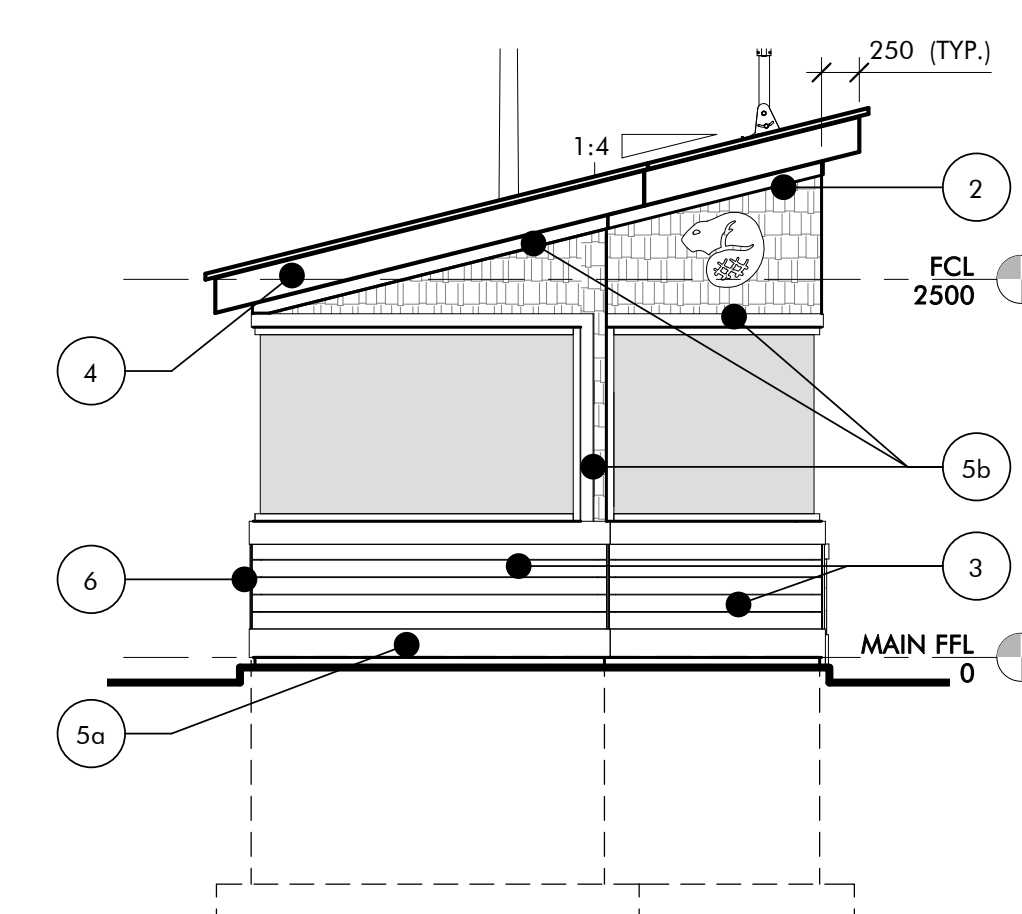
4 ROOF PLAN
1:50



2 MAIN FLOOR PLAN
1:50



5 SOUTH ELEVATION
1:50



6 EAST ELEVATION
1:50

LEGEND

	NEW PARTITION (REFER TO FLOOR PLAN FOR WALL TYPE)
	DOOR TAG
	WALL TAG
	1 HR FIRE RESISTANCE RATING (REFER TO WALL SCHEDULE)
	2 HR FIRE RESISTANCE RATING (REFER TO WALL SCHEDULE)
	BARRIER FREE PUSHBUTTON

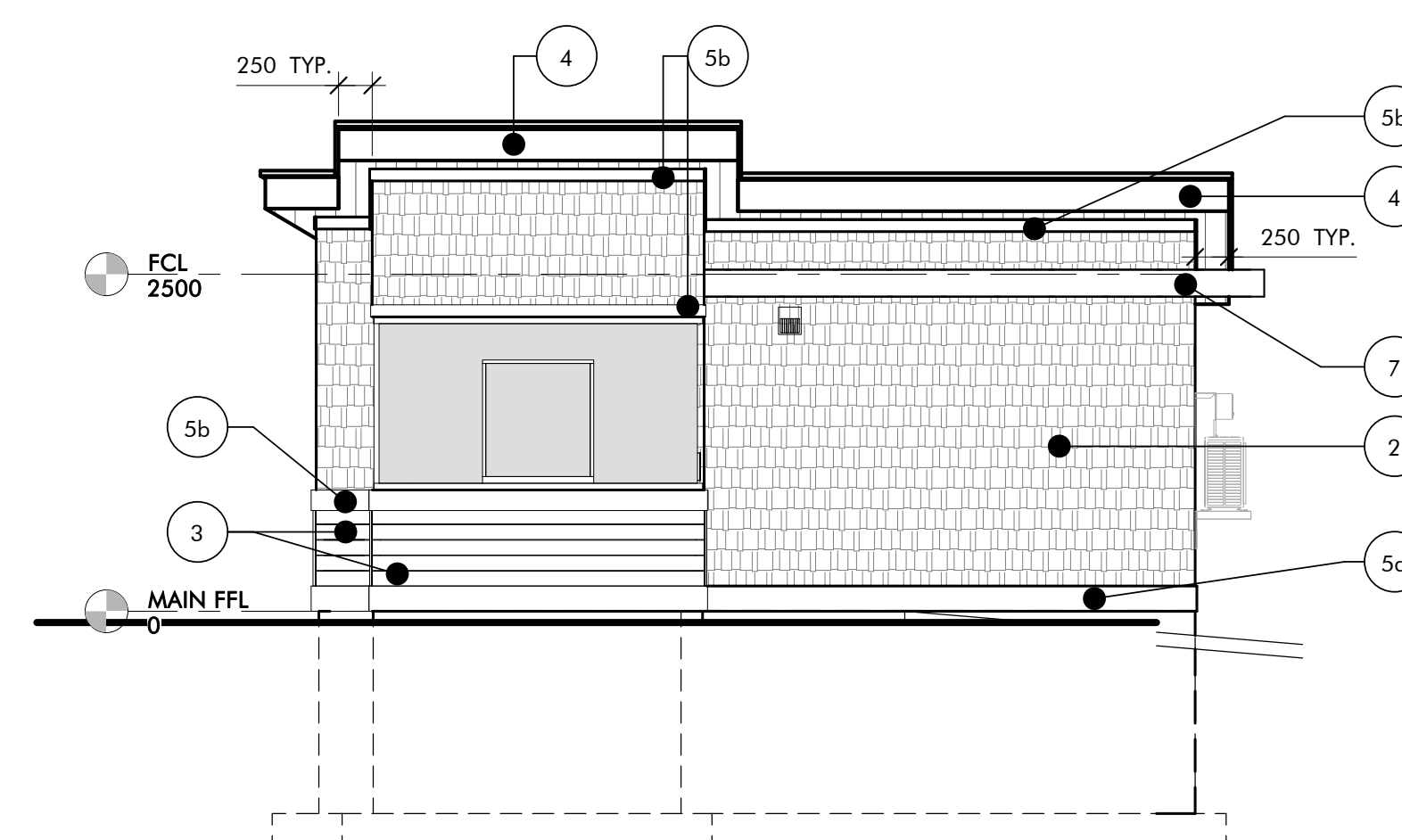
FLOOR PLAN NOTES

- ALL PENETRATIONS IN RATED PARTITIONS AND/OR FLOOR ASSEMBLIES FOR PLUMBING, DUCTING OR ELECTRICAL RUNS ARE TO BE SEALED. FIRE STOP IN ACCORDANCE WITH WALL AND/OR FLOOR TYPES. SUBMIT ULC DETAILS AND MATERIALS DURING SHOP DRAWING PROCESS FOR REVIEW PRIOR TO INSTALLATION.
- VENT ALL FANS TO OUTSIDE AIR THROUGH VENT C/W HOOD.
- DOORS, FRAMES AND HARDWARE TO MATCH WALL FIRE RESISTANCE RATING.

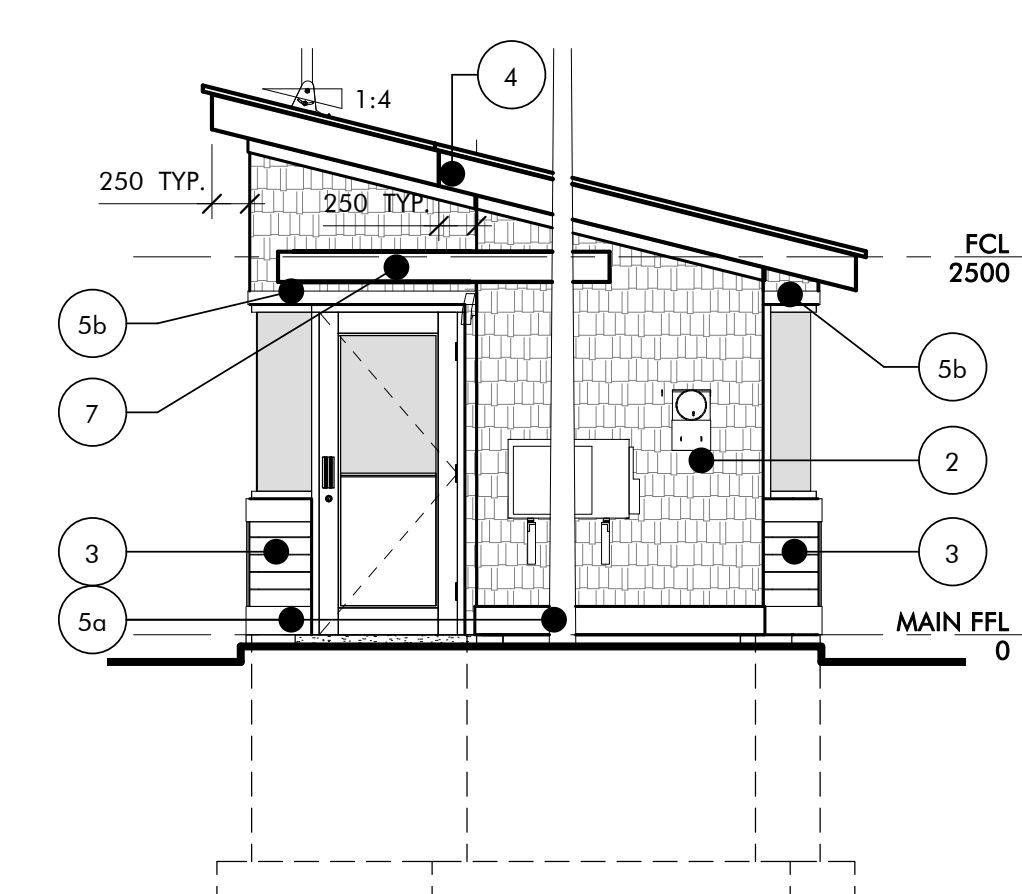
WALL SCHEDULE		
TYPE	DESCRIPTION	REMARKS
W1	- EXTERIOR CEDAR FINISH (REFER TO ELEVATIONS) - CEDAR BREATHER - CONTINUOUS NOVAWRAP AIR BARRIER - 12.5mm EXTERIOR PLYWOOD SHEATHING - 38mm x 150mm WOOD STUDS AT 16" O.C. - R20 BATT INSULATION - 10mil POLY VAPOUR - 16mm GYPSUM WALL BOARD PAINTED	
W2	- EXTERIOR WOOD SIDING (REFER TO ELEVATIONS) - 19mm x 64mm WOOD STRAPPING - CEDAR BREATHER - CONTINUOUS NOVAWRAP AIR BARRIER - 12.5mm EXTERIOR PLYWOOD SHEATHING - 38mm x 150mm WOOD STUDS AT 16" O.C. - R20 BATT INSULATION - 10mil POLY VAPOUR - 16mm GYPSUM WALL BOARD PAINTED	
W3	- 16mm GYPSUM WALL BOARD - PAINTED - 38mm x 150mm WOOD STUD - 16mm GYPSUM WALL BOARD - PAINTED	

ROOF TYPE SCHEDULE		
TYPE	DESCRIPTION	REMARKS
R1	- VICWEST METAL ROOFING; PROFILE: TRADITION 100-4 COLOR: REGENT GRAY #56082 - PEEL AND STICK NON-PERMEABLE MEMBRANCE - 5/8" PLYWOOD SHEATHING - 38mm x 200mm WOOD RAFTER - R20 BATT INSULATION - 10mil POLYVAPOUR BARRIER - 16mm GYPSUM WALL BOARD PAINTED	

FLOOR TYPE SCHEDULE		
TYPE	DESCRIPTION	REMARKS
F1	- CERAMIC TILE FLOOR - 100mm REINFORCED CONCRETE SLAB - 10mil POLYVAPOUR BARRIER (TAPERED AND SEALED) - 100mm CLASS GRAVEL COMPACTED TO 100% SPMD - APPROVED UNDISTURBED FILL OR 300mm STRUCTURAL FILL COMPACTED TO 100% SPMD	

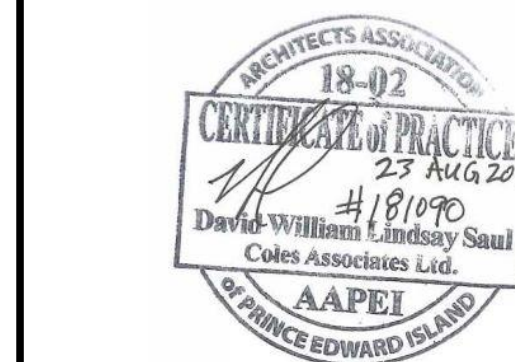


7 NORTH ELEVATION
1:50



8 WEST ELEVATION
1:50

ELEVATION MATERIAL LEGEND	
1	VICWEST METAL ROOFING; PROFILE: TRADITION 100-4 COLOR: REGENT GRAY #56082
2	MAIBEC PREFINISHED CEDAR SHINGLE: MAIBEC TRADITIONAL COLOR: BAR HARBOUR NATURAL
3	MAIBEC PREFINISHED WOOD SIDING: MAIBEC BRUSHED MODERN COLOR - MAIBEC 001, ULTRA WHITE
4	250mm MAIBEC WOOD FASCIA: COLOR - BRUSHED 001, ULTRA WHITE
5a	200mm MAIBEC WOOD FROST BOARD: COLOR - BRUSHED 001, ULTRA WHITE
5b	150mm MAIBEC WOOD TRIM: COLOR - BRUSHED 001, ULTRA WHITE
6	PREFINISHED METAL OUTSIDE CORNER - MAIBEC
7	CANOPY - REFER TO DETAILS
8	BLACK ALUMINUM SIGNAGE (BY OWNER)



revisions

project

PARKS CANADA
AGENCY ENTRANCES &
KIOSKS GRAHAM'S
LANE CAVENDISH, PE

dessin

PLANS AND
ELEVATIONS
(LARGE KIOSK)

designed R.C.P. / K.M. conçu

date AUG. 16, 2018

drawn R.C.P. / K.M. dessiné

date AUG. 16, 2018

approved W.S. approuvé

date AUG. 16, 2018

Tender Soumission

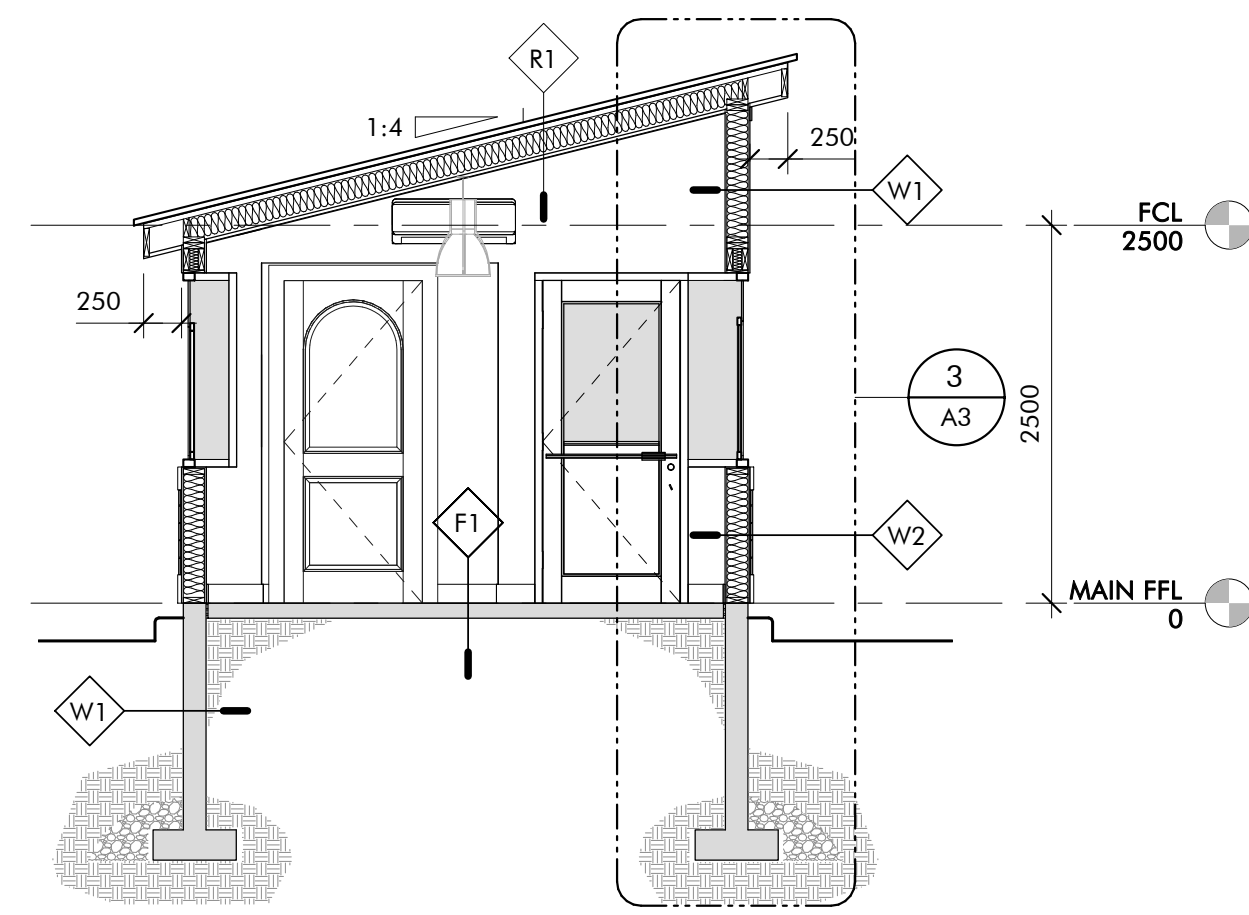
PWGSC Project Manager Administrateur de projets TPWGC

project number no. du projet

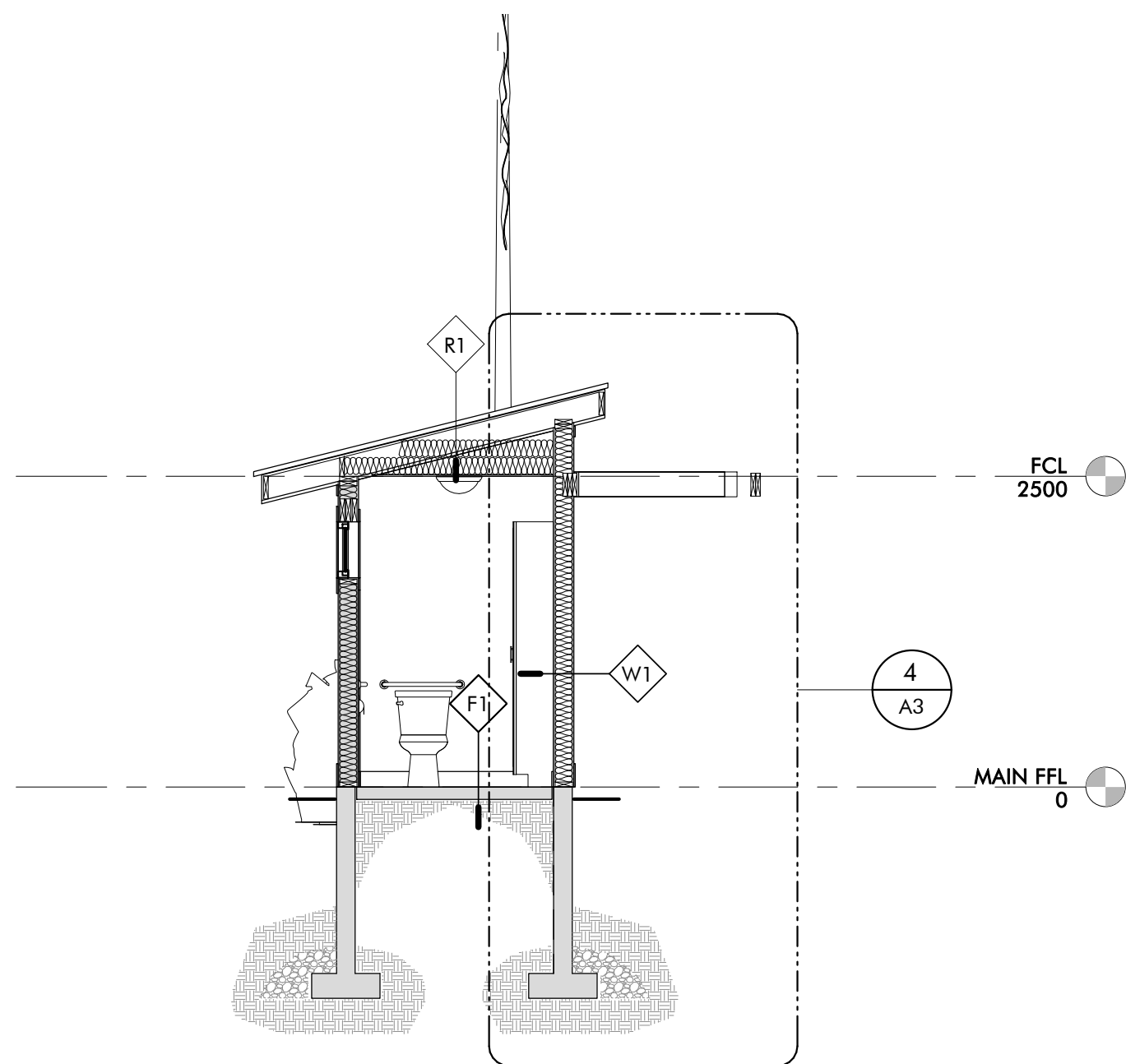
181090

drawing no. no. du dessin

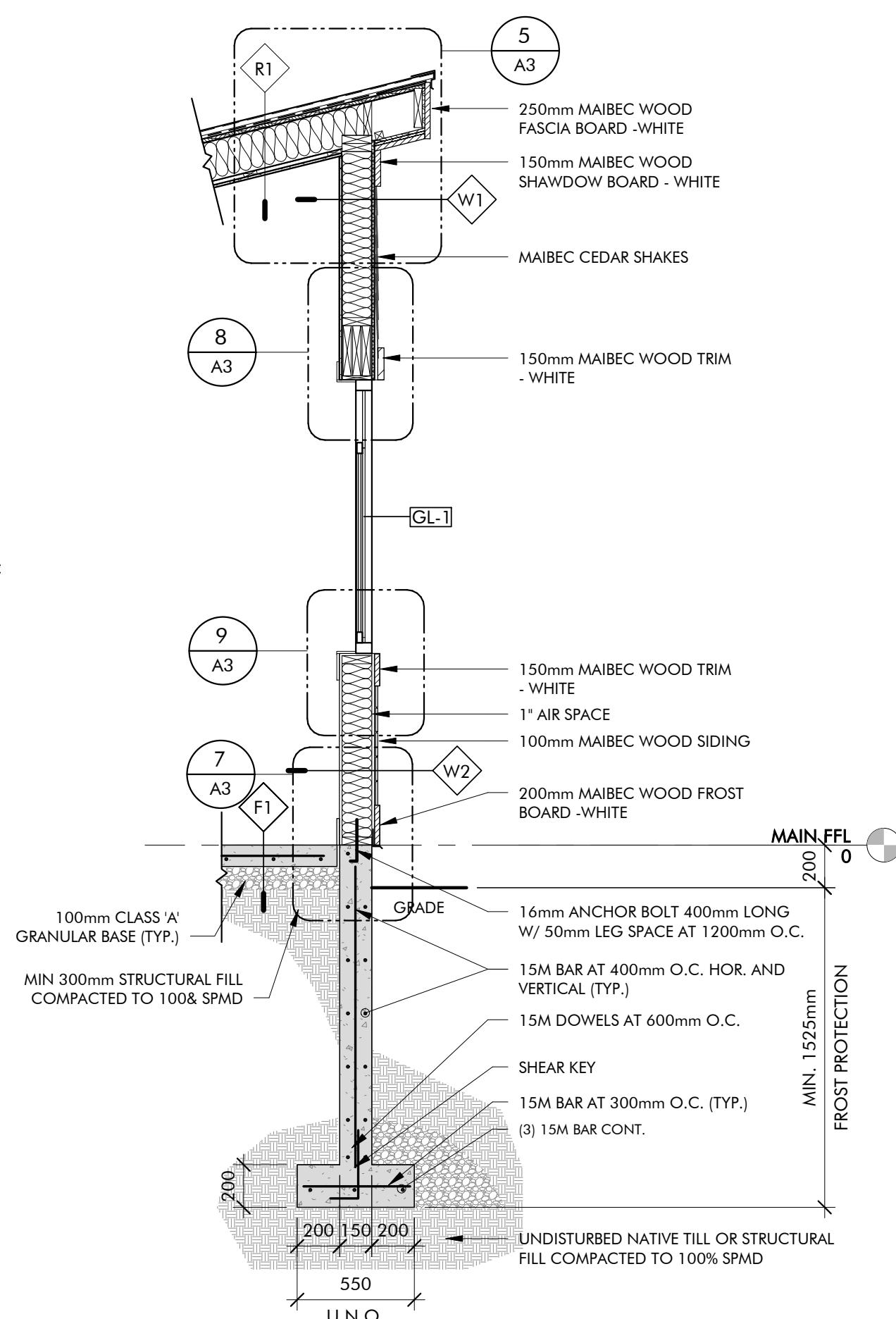
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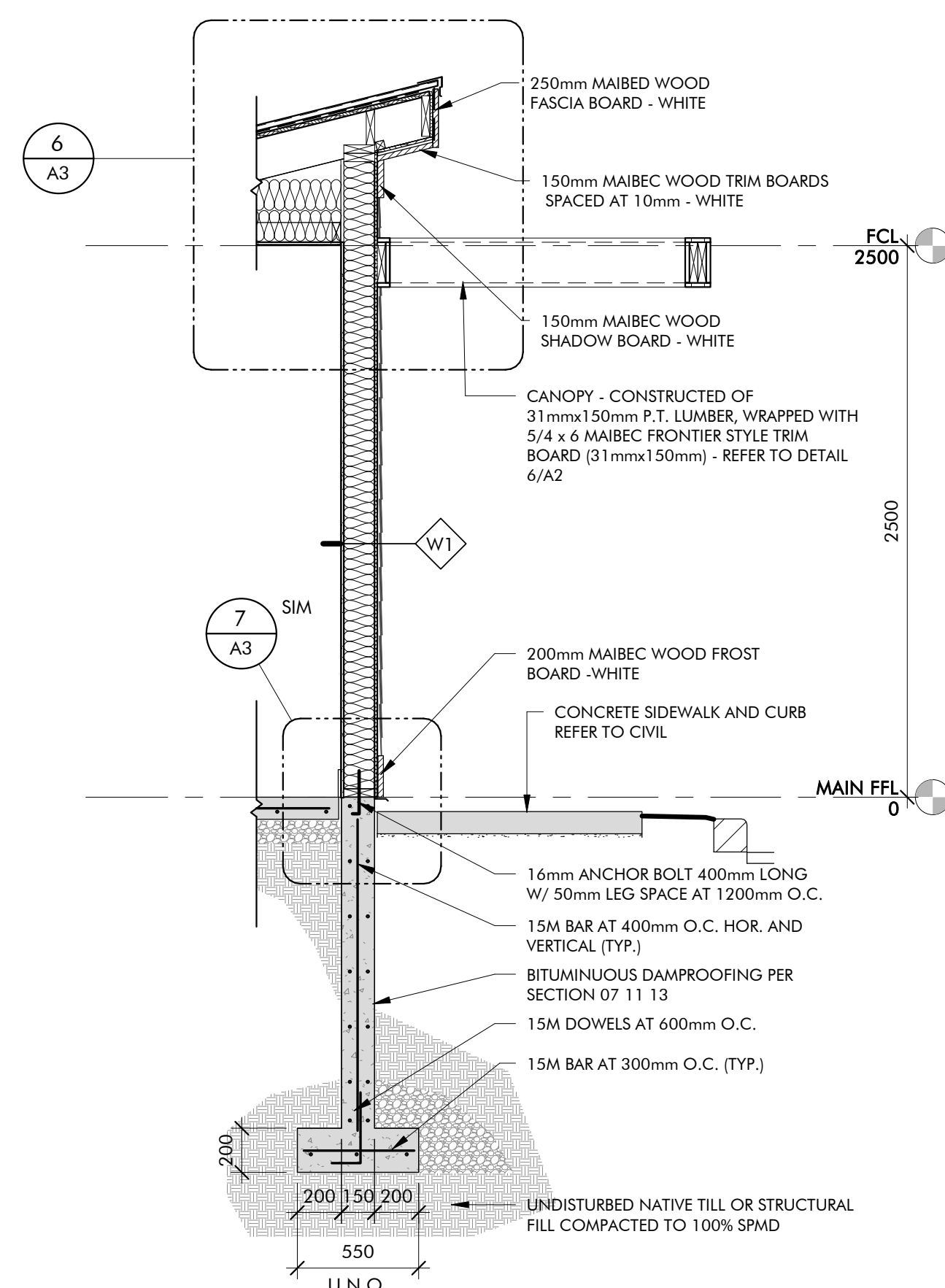
1 SECTION A
1:50



2 SECTION B
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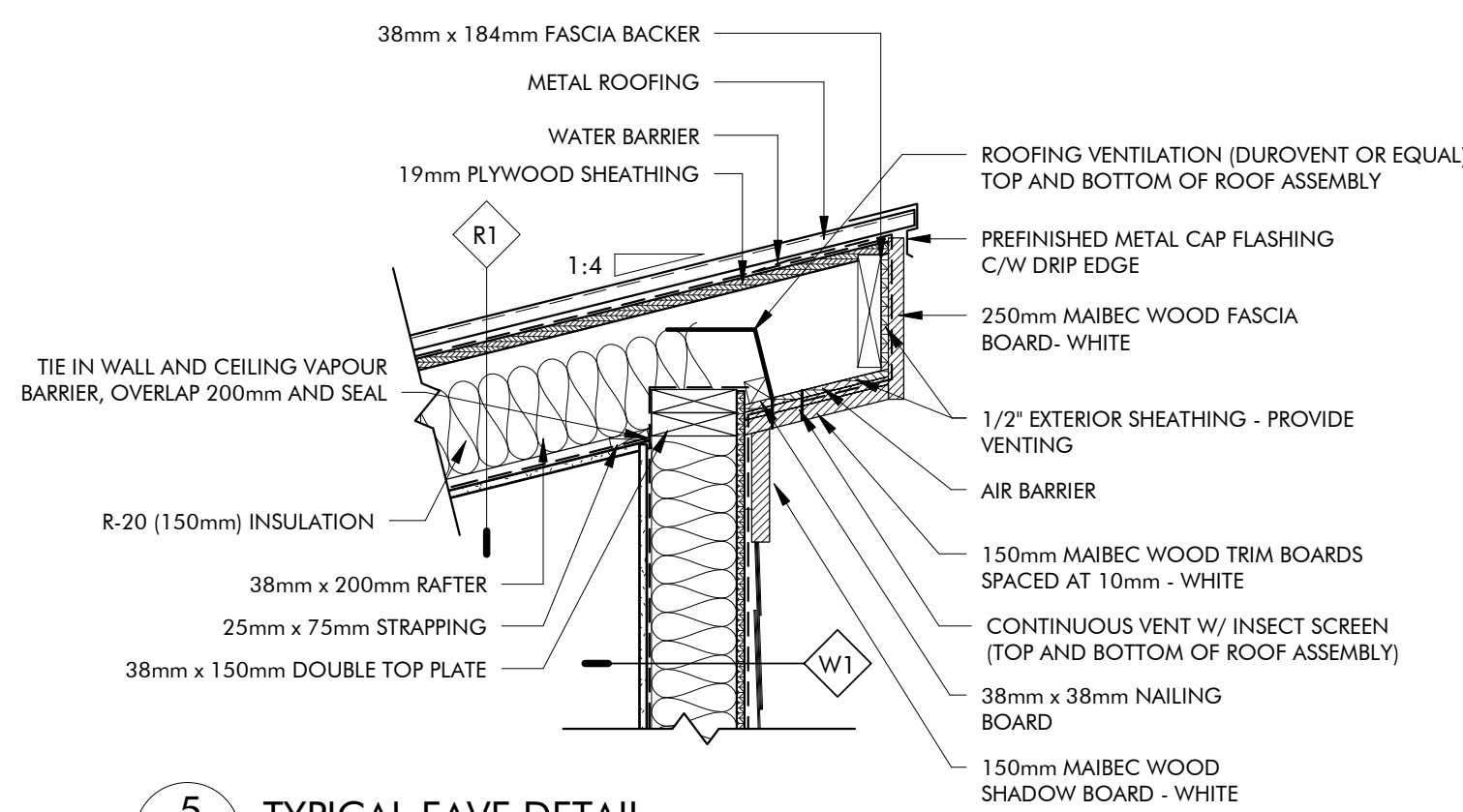
3 WALL SECTION A
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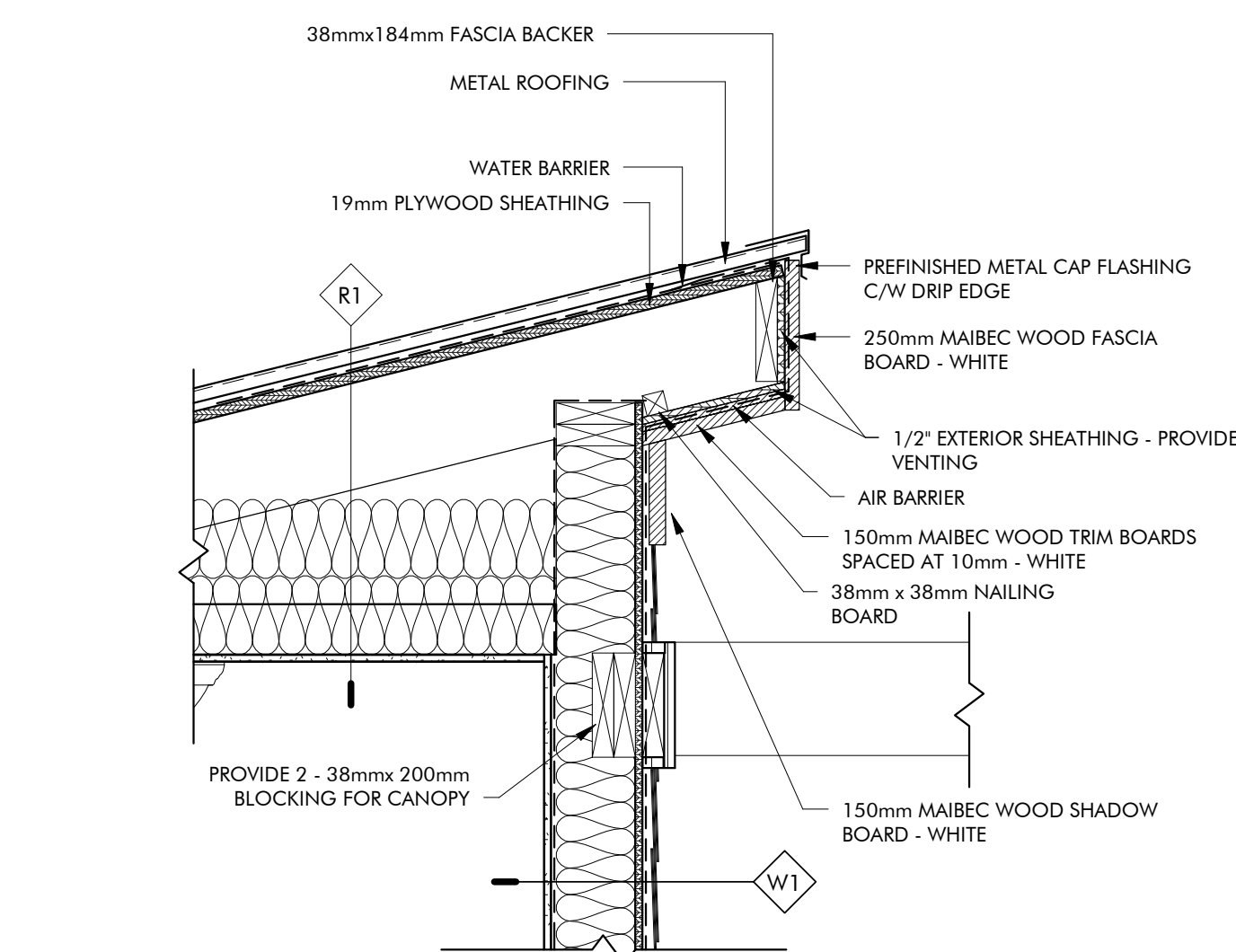
4 WALL SECTION B
1:25

WALL SCHEDULE		
TYPE	DESCRIPTION	REMARKS
W1	- EXTERIOR CEDAR FINISH (REFER TO ELEVATIONS) - CEDAR BREATHER - CONTINUOUS NOVAVRAP AIR BARRIER - 12.5mm EXTERIOR PLYWOOD SHEATHING - 38mm x 150mm WOOD STUDS AT 16" O.C. - R20 BATT INSULATION - 10mil POLY VAPOUR - 16mm GYPSUM WALL BOARD PAINTED	
W2	- EXTERIOR WOOD SIDING (REFER TO ELEVATIONS) - 19mm x 64mm WOOD STRAPPING - CEDAR BREATHER - CONTINUOUS NOVAVRAP AIR BARRIER - 12.5mm EXTERIOR PLYWOOD SHEATHING - 38mm x 150mm WOOD STUDS AT 16" O.C. - R20 BATT INSULATION - 10mil POLY VAPOUR - 16mm GYPSUM WALL BOARD PAINTED	
W3	- 16mm GYPSUM WALL BOARD - PAINTED - 38mm x 150mm WOOD STUD - PAINTED - 16mm GYPSUM WALL BOARD - PAINTED	

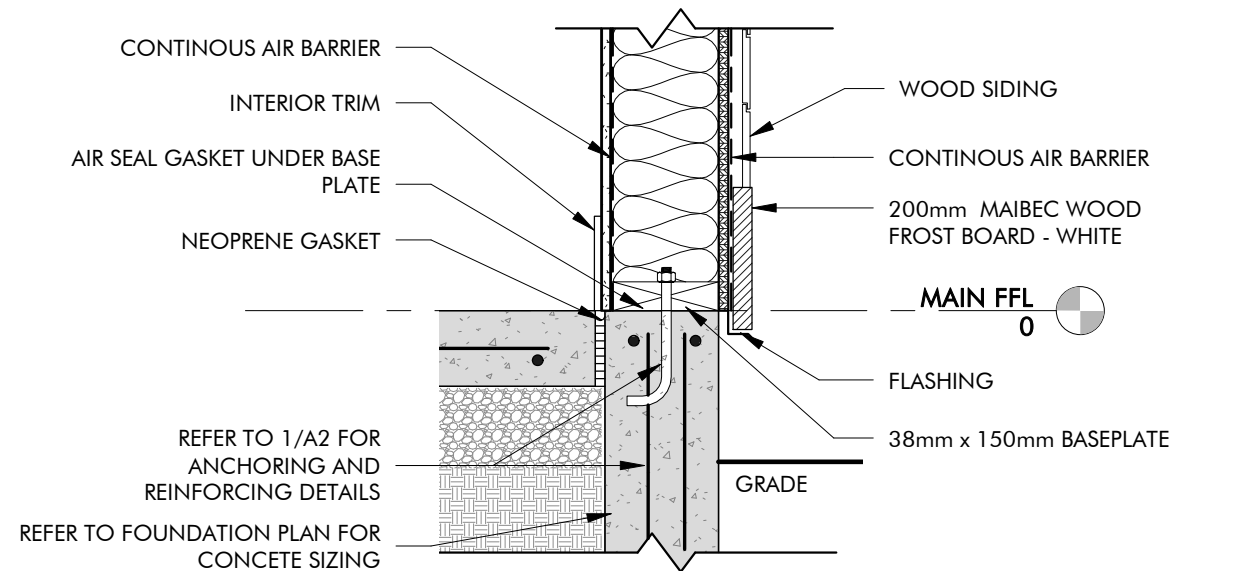
ROOF TYPE SCHEDULE		
TYPE	DESCRIPTION	REMARKS
R1	- VICWEST METAL ROOFING: PROFILE-TRADITION 100-4 COLOR-REGENT GRAY #56082 - PEEL AND STICK NON-PERMEABLE MEMBRANE - 5/8" PLYWOOD SHEATHING - 38mm x 200mm WOOD RAFTER - R20 BATT INSULATION - 10mil POLY VAPOUR BARRIER - 16mm GYPSUM WALL BOARD PAINTED	
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TYPE	DESCRIPTION	REMARKS
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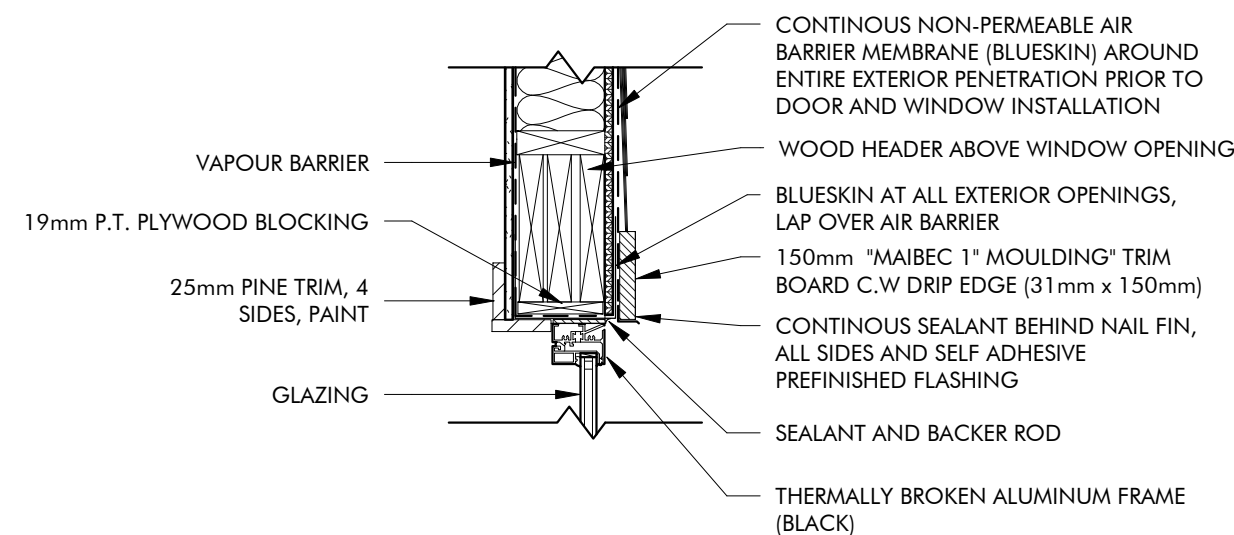
5 TYPICAL EAVE DETAIL
1:12



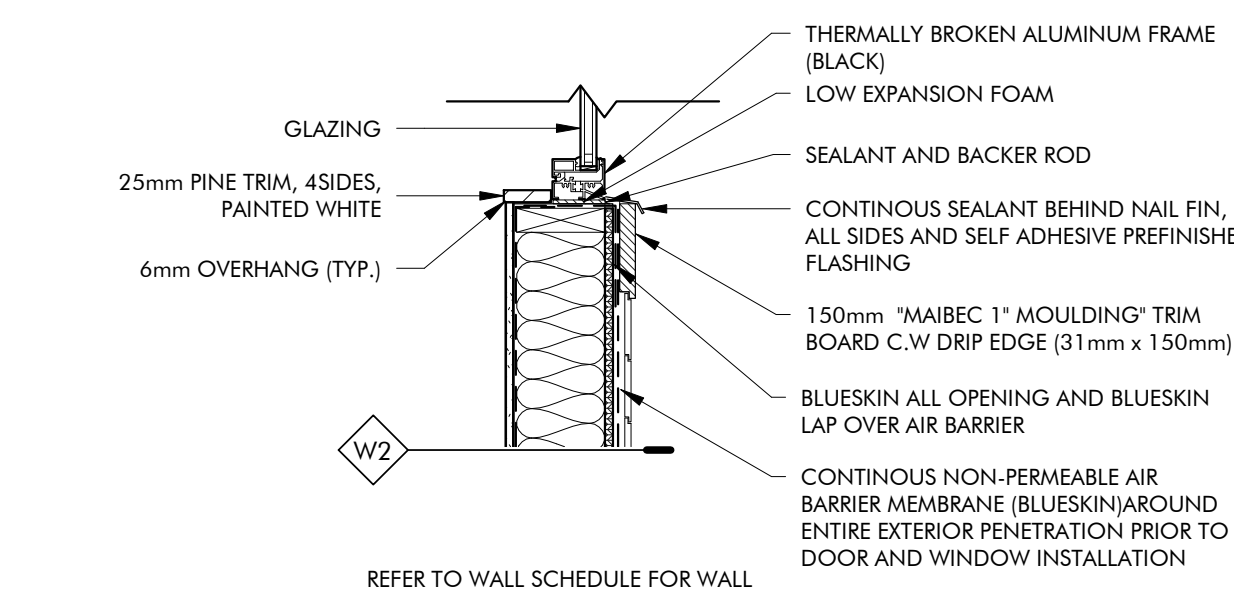
6 EAVE DETAIL #2
1:12



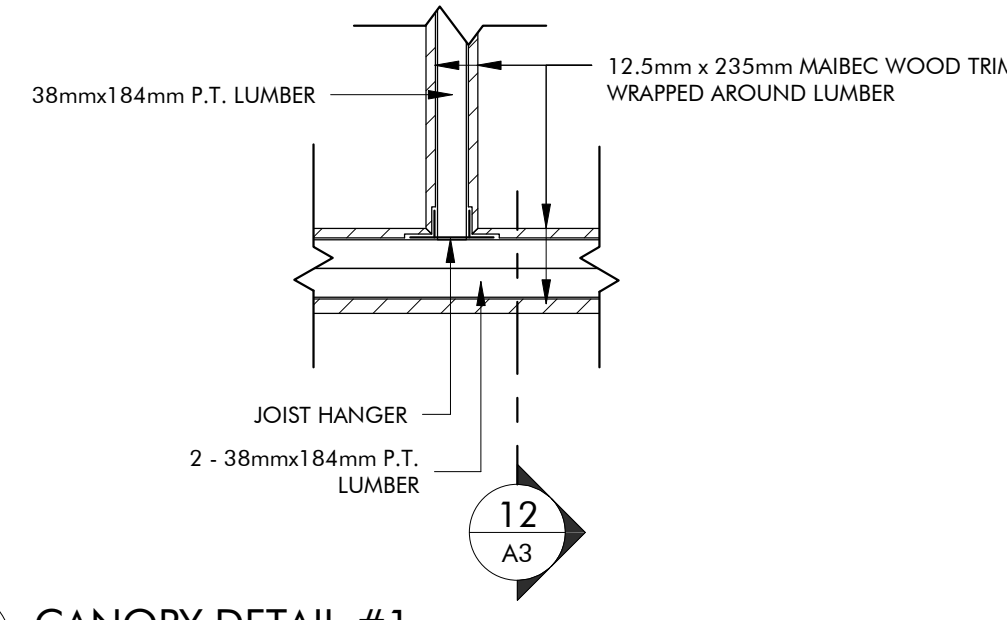
7 WALL TO FOUNDATION DETAIL
1:10



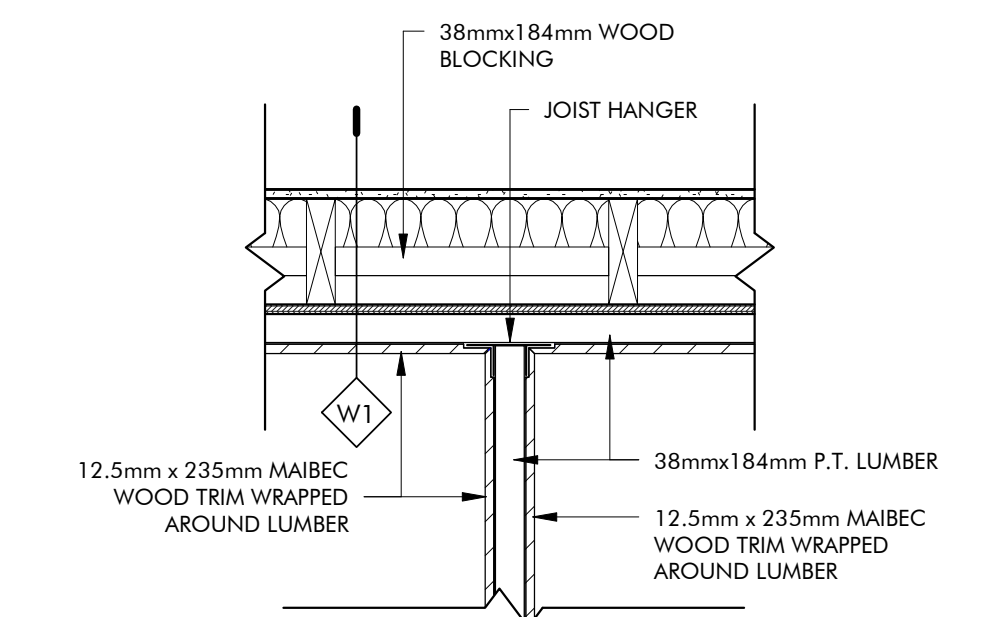
8 WINDOW HEAD DETAIL
1:12



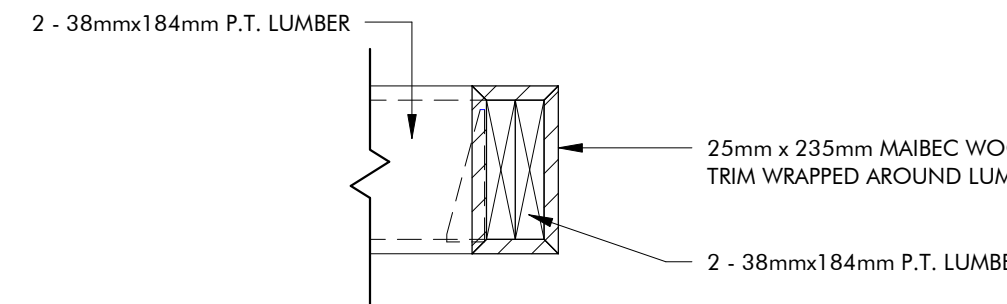
9 WINDOW SILL DETAIL
1:12



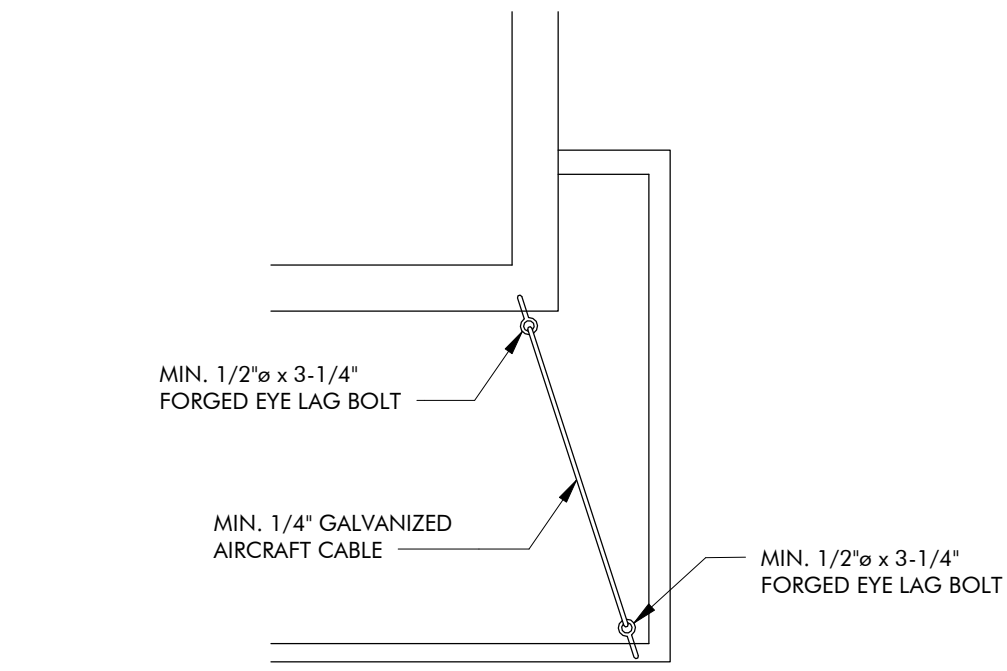
10 CANOPY DETAIL #1
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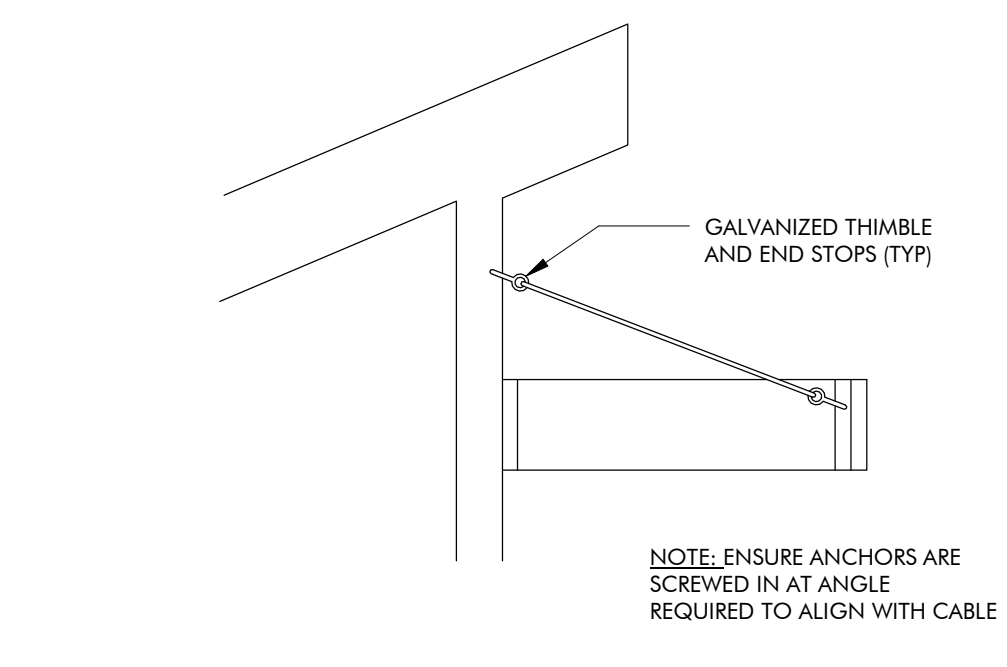
11 CANOPY DETAIL #2
1:10



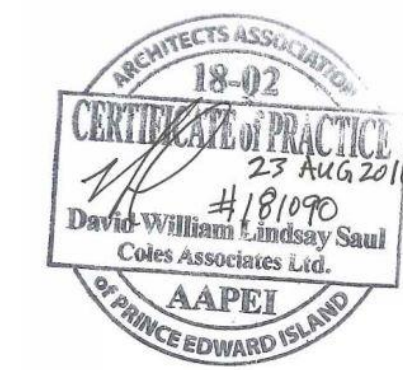
12 CANOPY SECTION #1
1:10



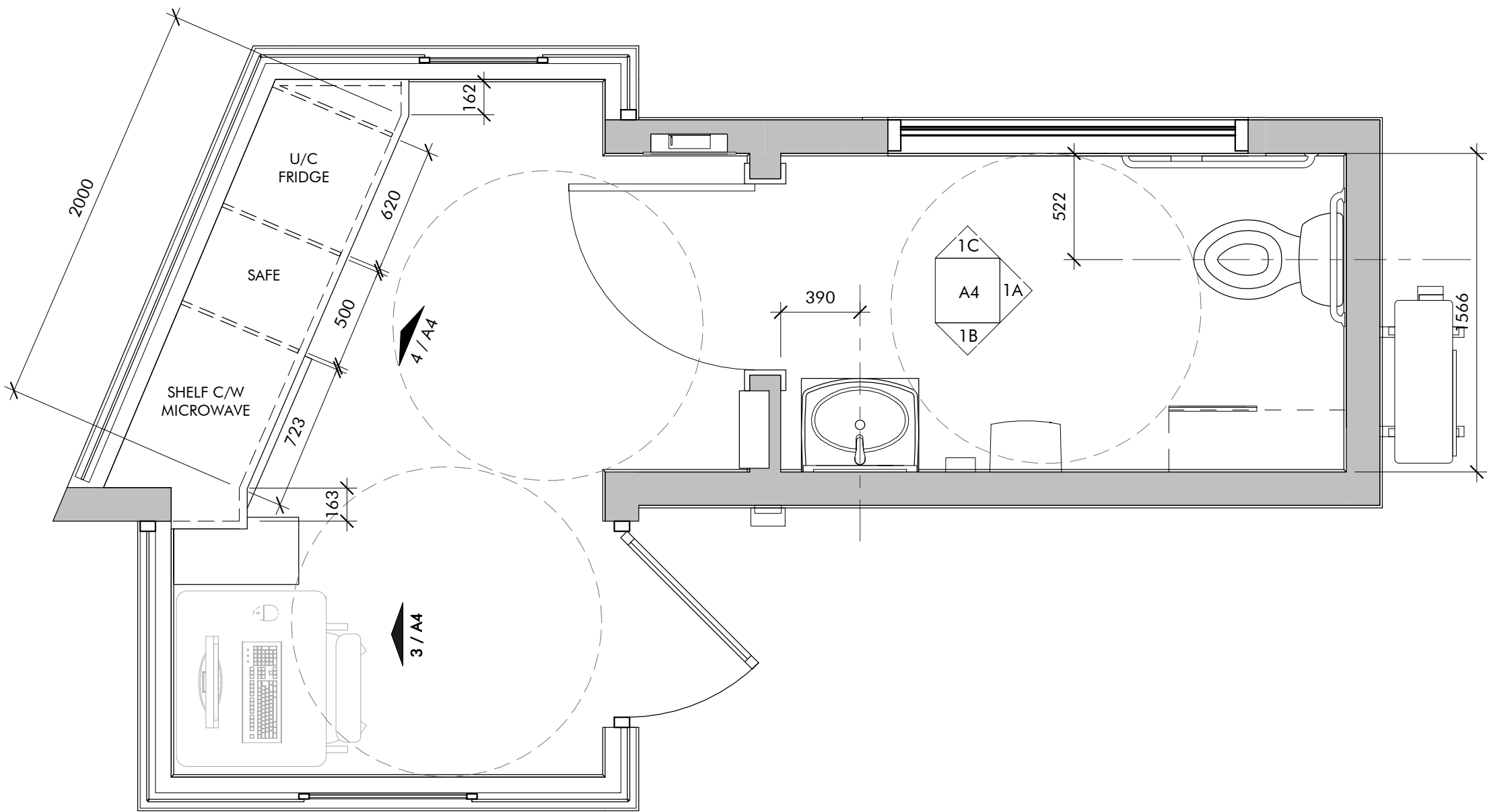
13 CANOPY DETAIL 1
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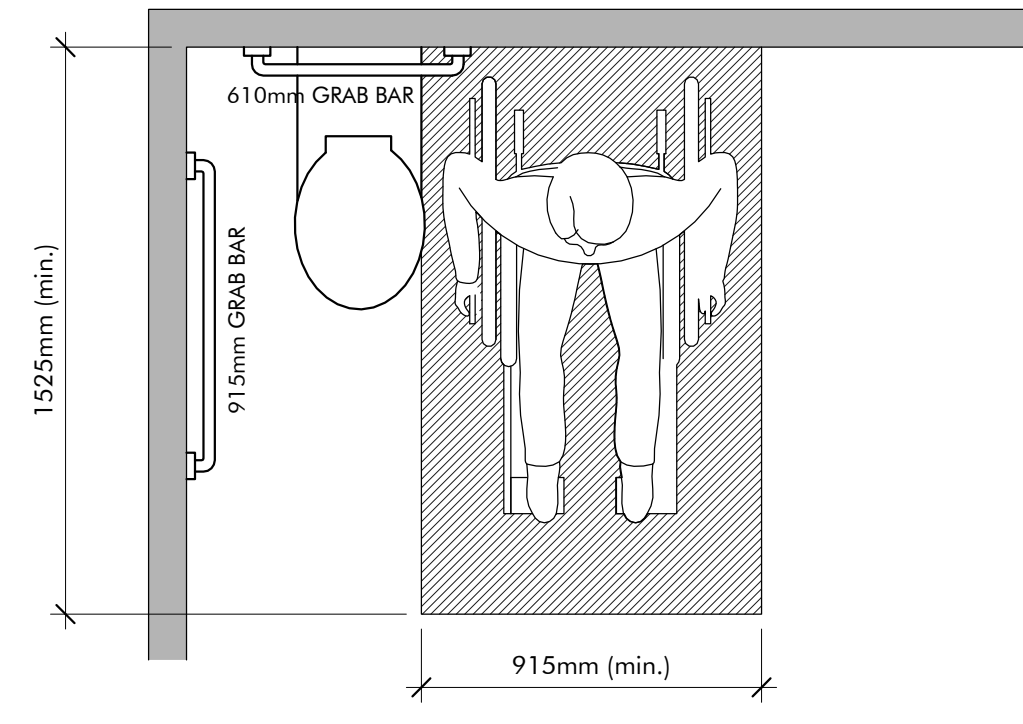
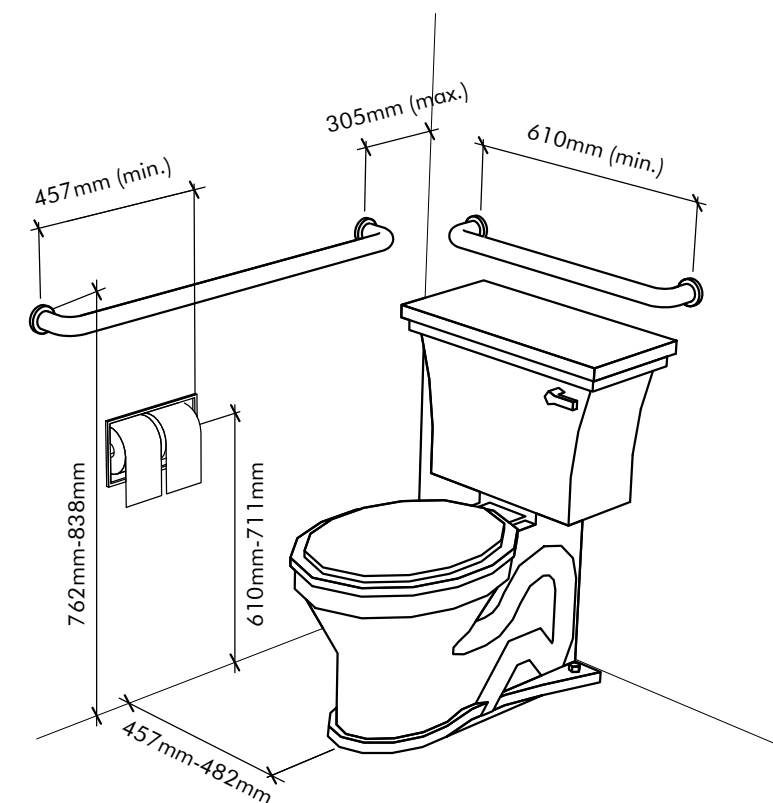
14 CANOPY DETAIL 2
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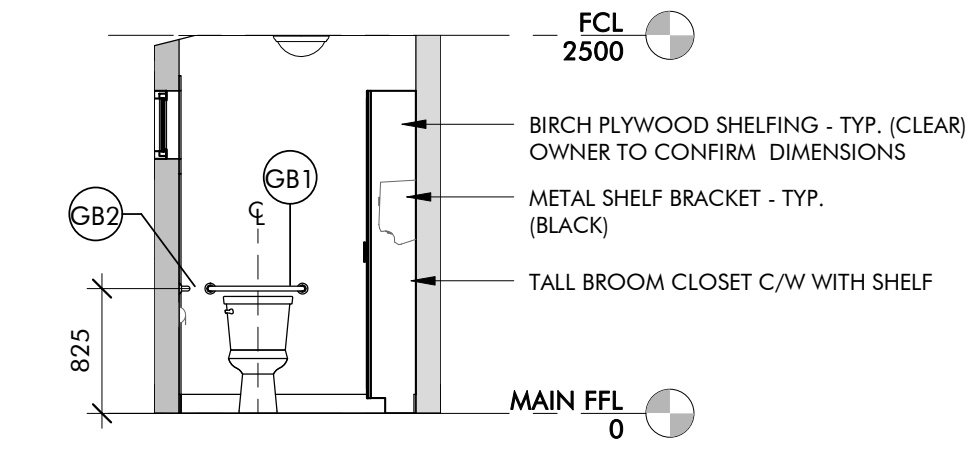
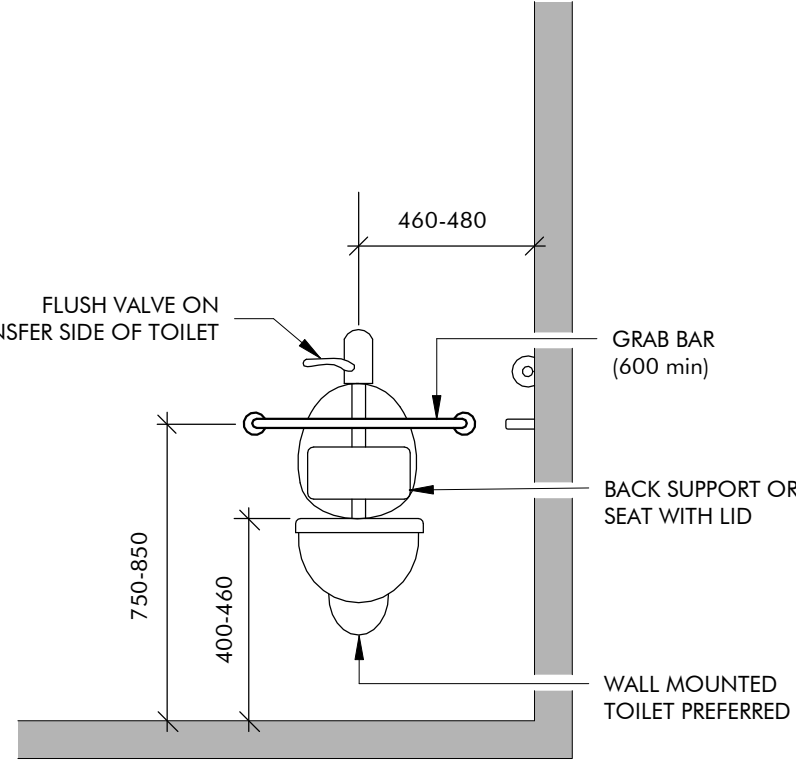
revisions	date
drawing	project
PARKS CANADA AGENCY ENTRANCES & KIOSKS GRAHAM'S LANE CAVENDISH, PE	
drawing	dessin
BUILDING SECTIONS, WALL SECTIONS AND DETAILS	
designed	R.C.P. / K.M. conçu
date	AUG. 16, 2018
drawn	R.C.P. /K.M. dessiné
date	AUG. 16, 2018
approved	W.S. approuvé
date	AUG. 16, 2018
Tender	Submission
PWOSC Project Manager	Administrateur de projets TPSCG
project number	no. du projet
181090	
drawing no	no. du dessin
A3	



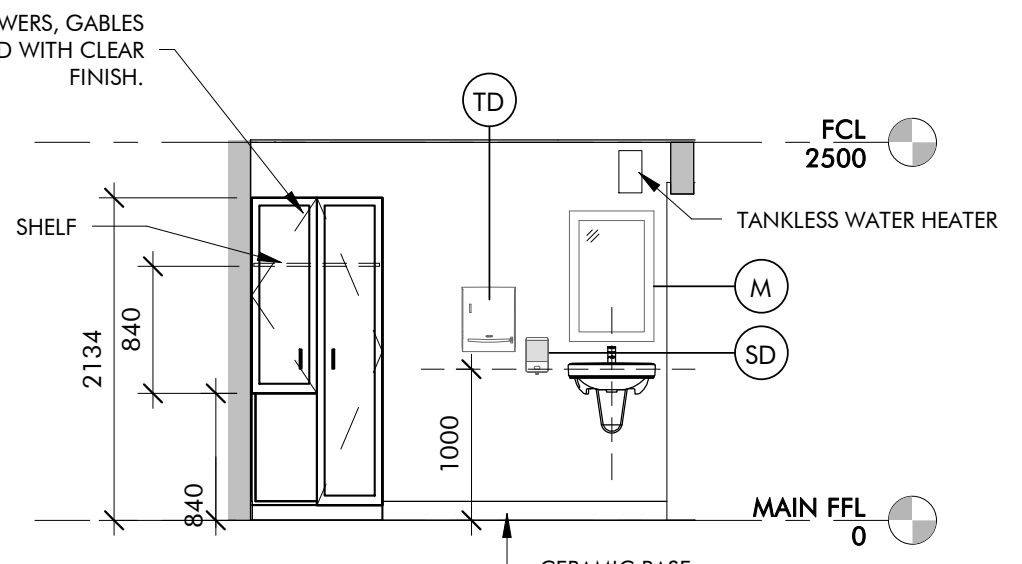
2 CSA BARRIER FREE WASHROOM DETAILS
1:20



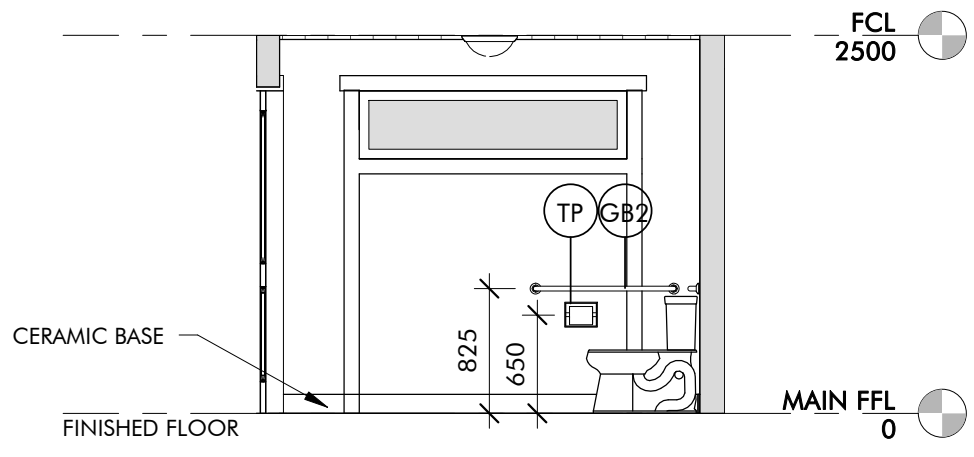
NOTE:
ALL ACCESSORIES TO BE SUPPLIED AND INSTALLED AS PER CSA 651-12.



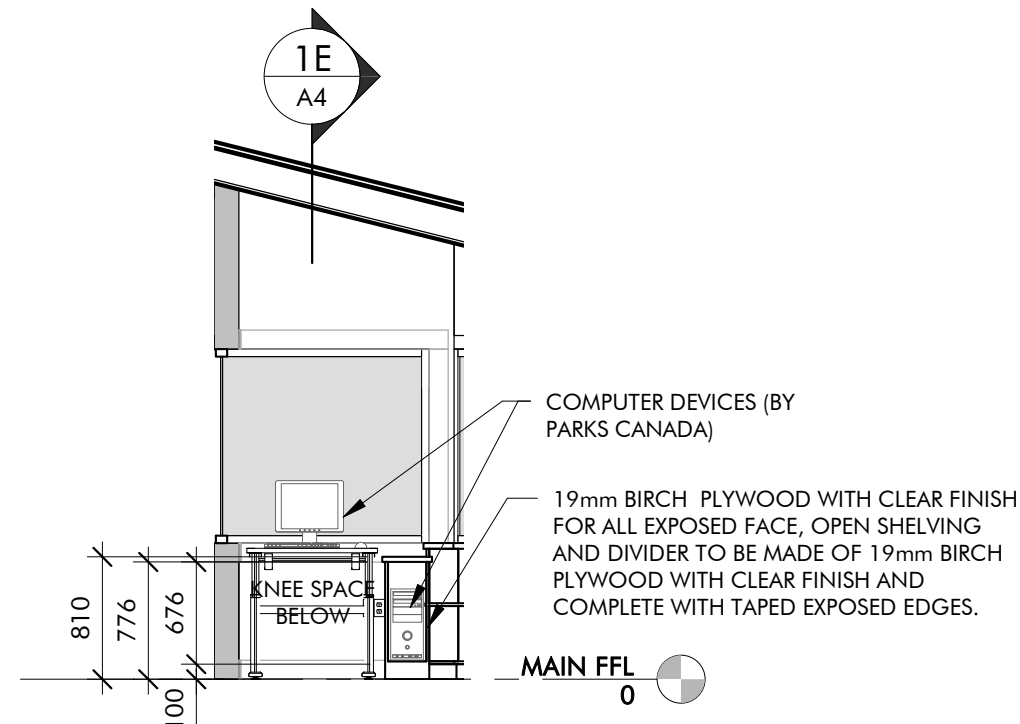
1A BATHROOM ELEVATION 'A'



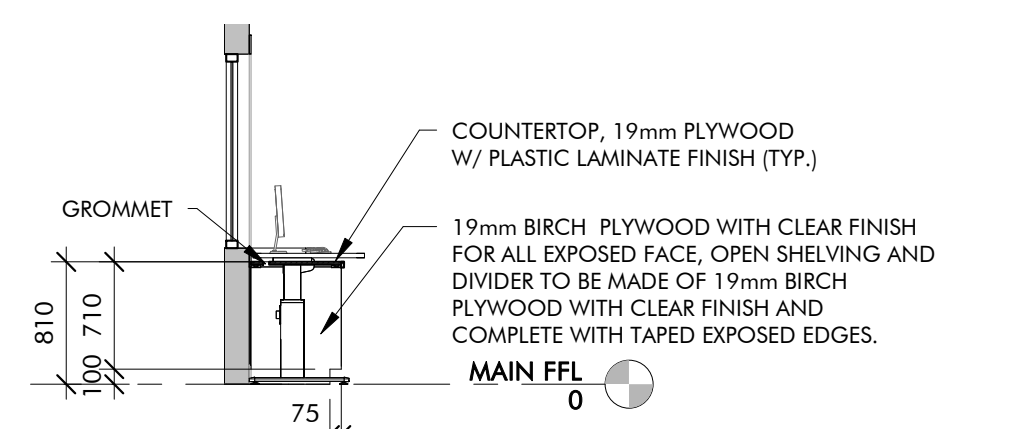
1B BATHROOM ELEVATION 'B'



1C BATHROOM ELEVATION 'C'



1D WORKSTATION ELEVATION 1

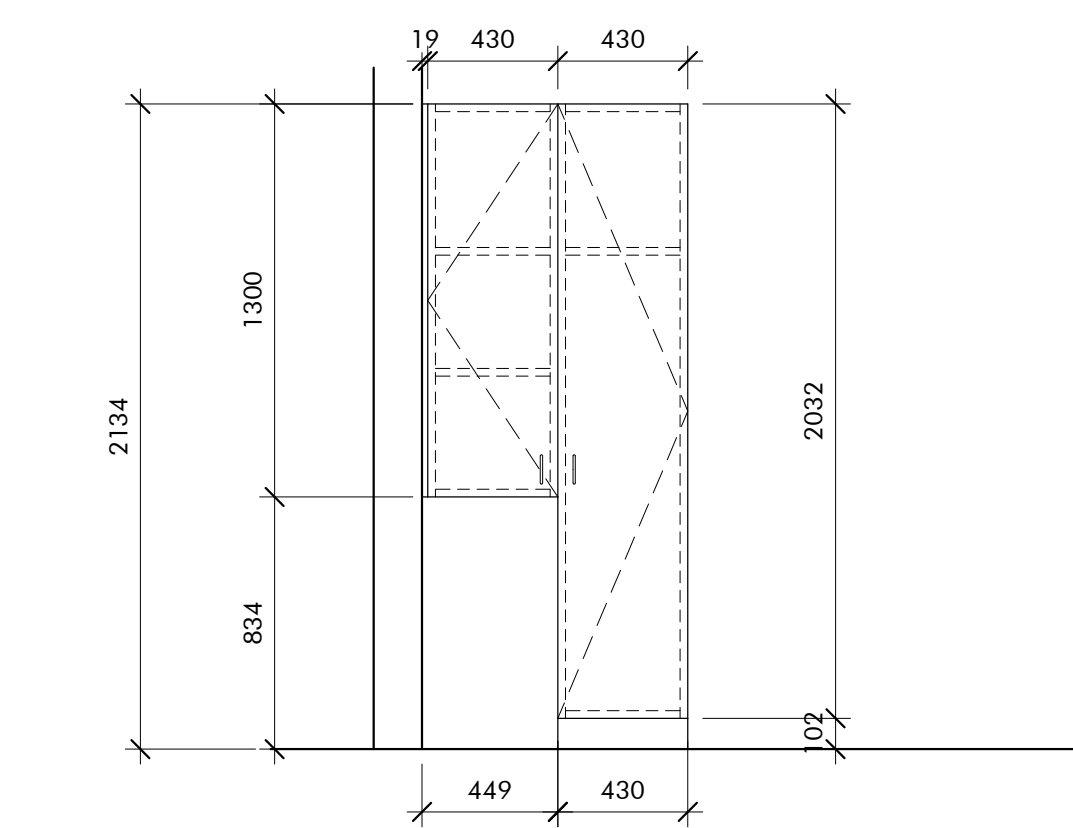


1E WORKSTATION SECTION

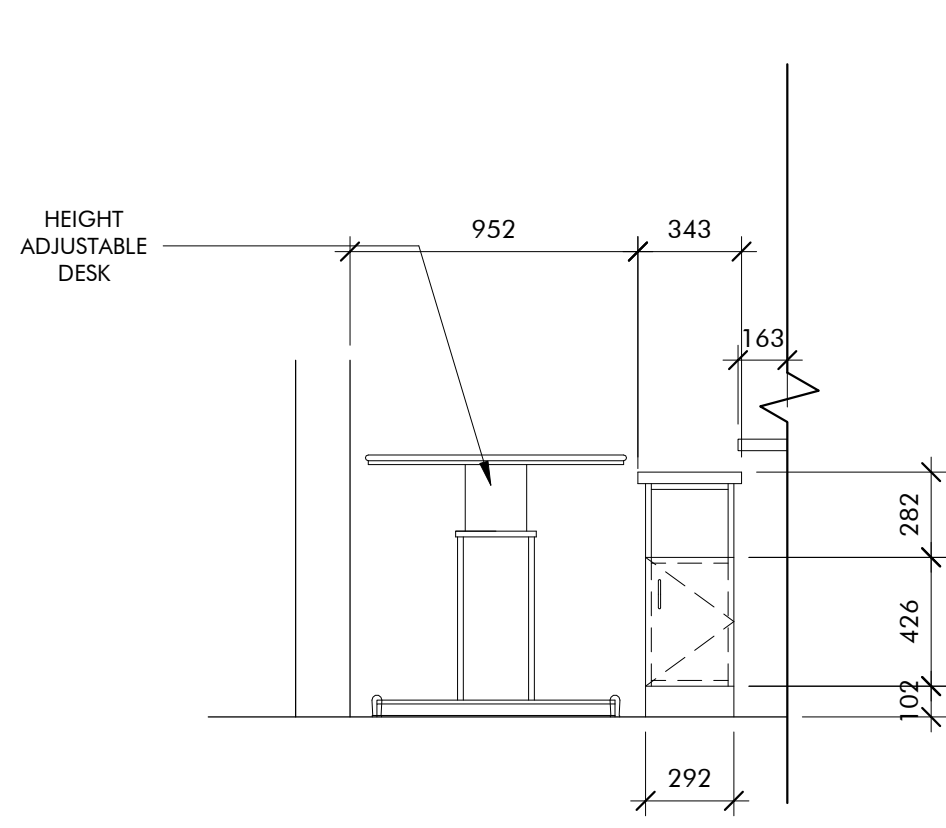
- CASEWORK NOTES**
- CABINETS INTERIOR: TYPICAL: 19mm PLYWOOD, (WHITE) NO EXPOSED EDGES
 - CABINET DOORS, DRAWERS, GABLES & EXPOSED SHELVES: TYPICAL: 19mm PLYWOOD WITH PLASTIC LAMINATE.
 - COUNTERTOP: 19mm PLYWOOD WITH PLASTIC LAMINATE. REFER TO MILLWORK DRAWINGS.
 - STANDARDS FOR SHELVES TO BE RECESSED.
 - HARDWARE AS PER SPECIFICATIONS
 - USE ONLY FULL PLAM SHEETS WHERE POSSIBLE.
 - PROVIDE FULL WIDTH 19mm PLYWOOD DIVIDERS (HORIZONTALLY) BETWEEN EACH DRAWER.

ACCESSORIES LEGEND		
SYMBOL	DESCRIPTION	MOUNTING HEIGHT
GB1	610mm GRAB BAR	750mm-850mm
GB2	914mm GRAB BAR	750mm-850mm
M	MIRROR	BASE = 1000mm MAX
PD	PAPER TOWEL DISPENSOR	1000mm
SD	SOAP DISPENSOR	1000mm
TP	TOILET PAPER DISPENSOR	1000mm

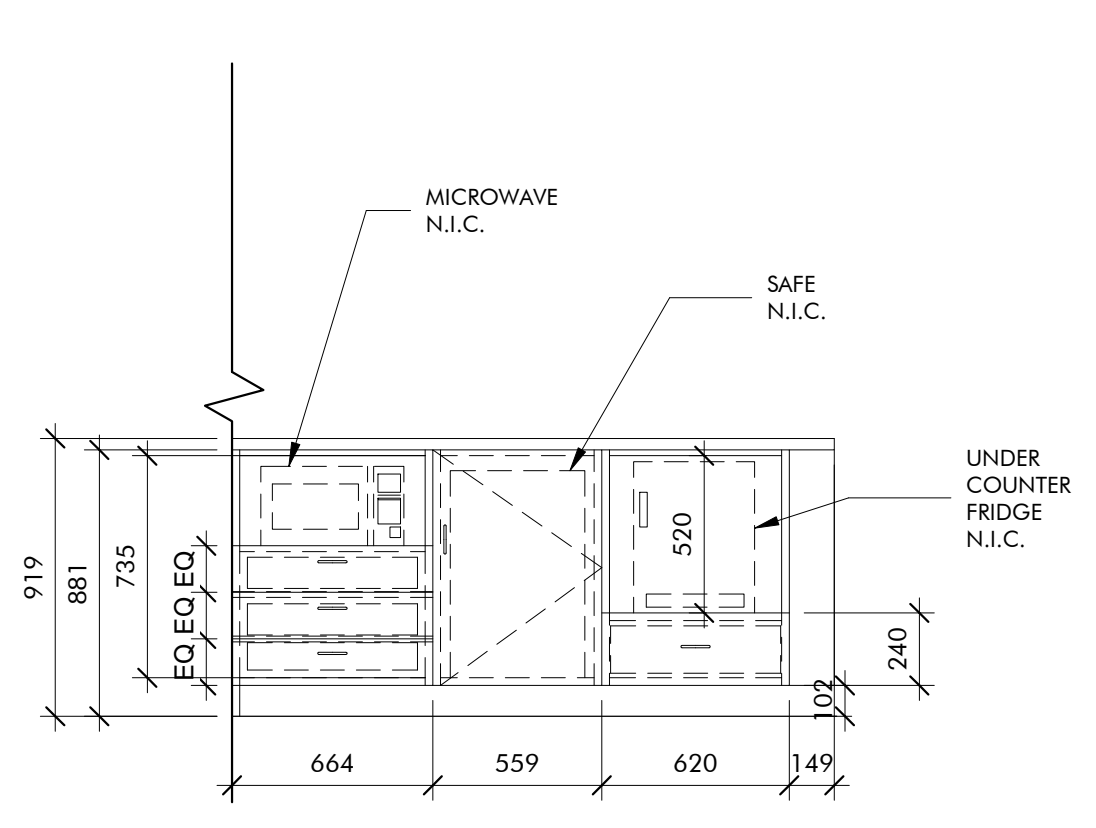
(XX) - "XX" = SYMBOL
NOTE:
CONFIRM ALL ACCESSORIES COMPLY WITH CSA STANDARDS PRIOR TO INSTALLATION.



SHELF ELEVATION



3 MILLWORK ELEVATION 1
1:25

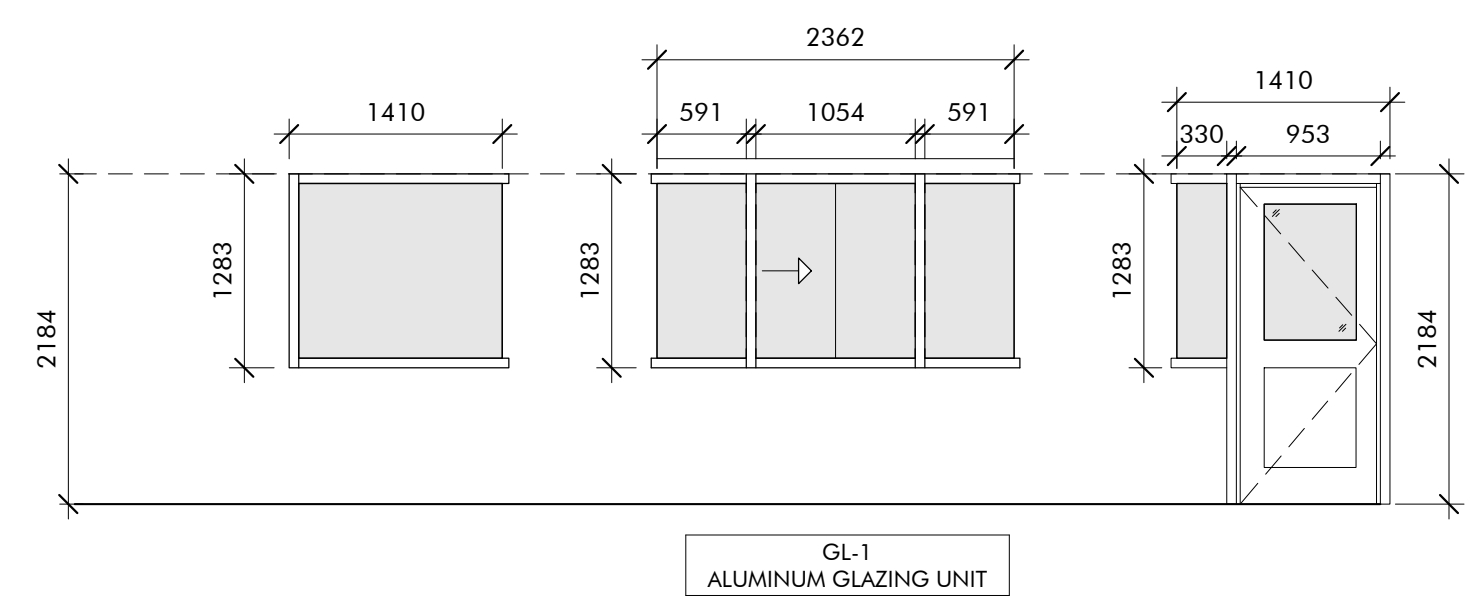


4 MILLWORK ELEVATION 2
1:25

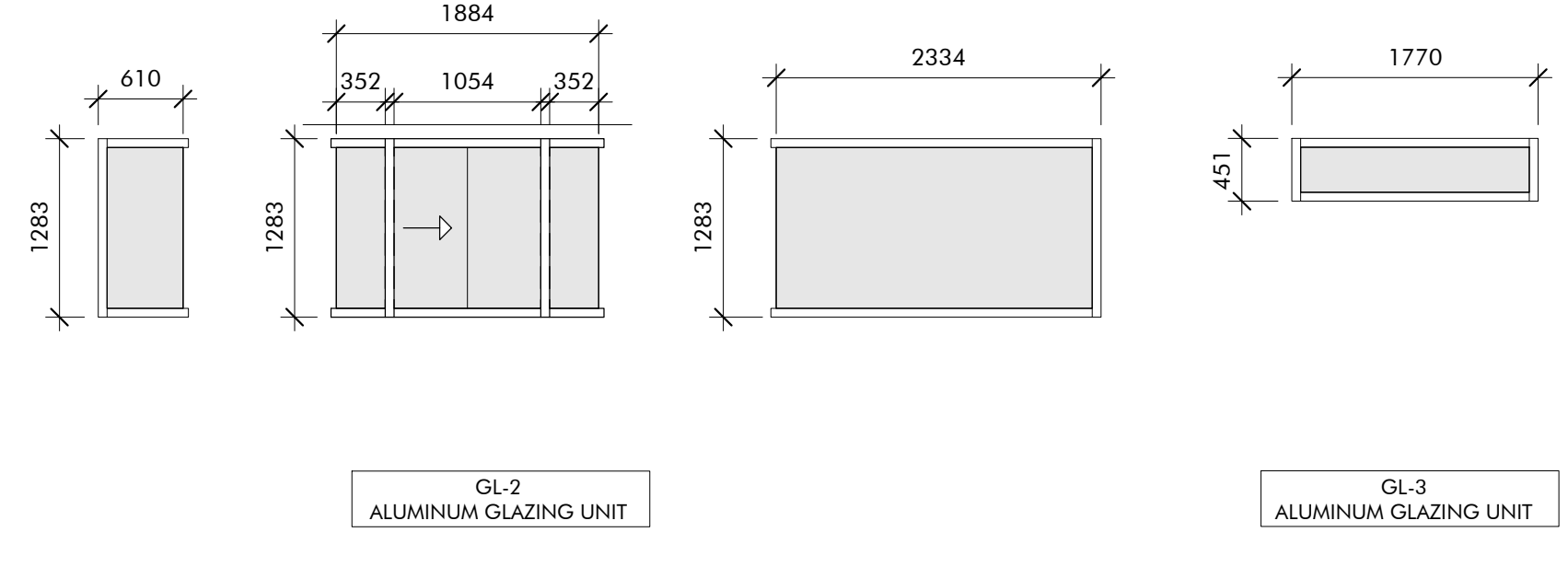
ROOM FINISH SCHEDULE												
ROOM NO.	ROOM NAME	FLOOR			WALLS						CEILINGS	
		MAT.	FIN.	BASE	NORTH		EAST		SOUTH		WEST	
100	WORKSTATION	CT	CT	CT	GWB	PT	GWB	PT	GWB	PT	GWB	PT
101	BATH	CT	CT	CT	GWB	PT	GWB	PT	GWB	PT	GWB	PT

ROOM FINISH ABBREVIATIONS			
FLOOR		WALL	
ABBR		ABBR	
CT	CERAMIC TILE	PT	PAINT
		GWB	GYPSUM WALL BOARD - PAINTED

DOOR SCHEDULE AND FRAME SCHEDULE									
DOOR NO.	TYPE	WIDTH (mm)	HEIGHT (mm)	DOOR			FRAME		
				THICKNESS (mm)	MATERIAL	FINISH	GLASS TYPE	MATERIAL	FINISH
100.1	D-1	914	2134	51	ALUM	ANOD	GL-1	ALUM-TB	PT
101.1	D-2	914	2134	35	WD	PT		WD	PT
102.1	D-3	813	2134	51	FIBREGLASS	PT		WD	PT



GL-1 GLAZING UNIT ELEVATION

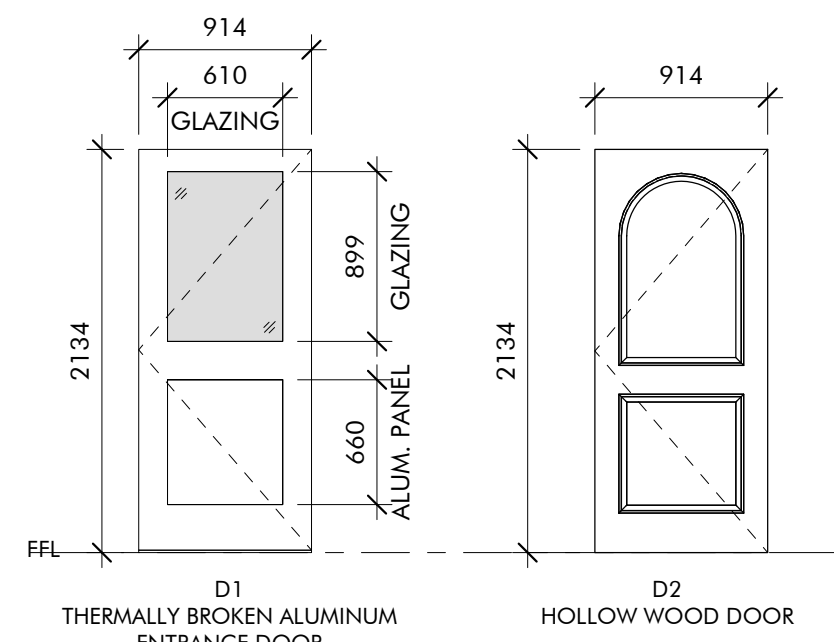


GL-2 GLAZING UNIT ELEVATION

GL-3 GLAZING UNIT ELEVATION

DOOR & FRAME SCHEDULE ABBREVIATIONS	
ALUM	ALUMINUM
ANOD	ANODIZED
GL-I	INSULATED
GL-T	TEMPERED GLASS - CLEAR
PS	PRESS STEEL
PS-TB	PRESS STEEL - THERMALLY BROKEN
PT	PAINT

- D1 HARDWARE:
CONTINUOUS HINGE
MS LOCK W/ CYLINDER AND THUMBTURN
AUTO-CLOSER (BESAM)
8 1/2" OFFSET PULL HANDLE (1" DIAMETER)
TUBULAR PUSH BAR (1" DIAMETER)
SWEEPS
DOME FLOOR STOP
6 1/2" THERMAL THRESHOLD



DOOR ELEVATIONS



revisions
drawing
PARKS CANADA
AGENCY ENTRANCES &
KIOSKS GRAHAM'S
LANE CAVENDISH, PE

drawing
WINDOW &
DOOR
SCHEDULES,
ELEVATIONS
AND MILLWORK

designed R.C.P. / K.M. congu
date AUG. 16, 2018
drawn R.C.P. / K.M. dessin
date AUG. 16, 2018
approved W.S. approuv
date AUG. 16, 2018
Tender Soumission
PWGSC Project Manager Administrateur de projets TPSCG
project number no. du projet
181090
drawing no no. du dessin
A4

LEGEND	
	EXISTING ASPHALT
	NEW ASPHALT
	EXISTING ROAD MARKINGS
	NEW ROAD MARKINGS
	EXISTING GRAVEL PATH
	TOP OF BANK
	EXISTING FENCE
	NEW FENCE
	EXISTING BUILDING OUTLINE
	EXISTING CULVERT
	EXISTING GRADE
	PROPOSED GRADE
	EXISTING FLAG POLE
	EXISTING WELL
	EXISTING TRAFFIC LIGHT
	EXISTING FLASHING AMBER
	EXISTING WOODEN POST
	EXISTING POWER POLE
	EXISTING LIGHT POST
	NEW ASPHALT FINISH
	NEW CAST IN PLACE CONCRETE
	LANDSCAPED FINISH

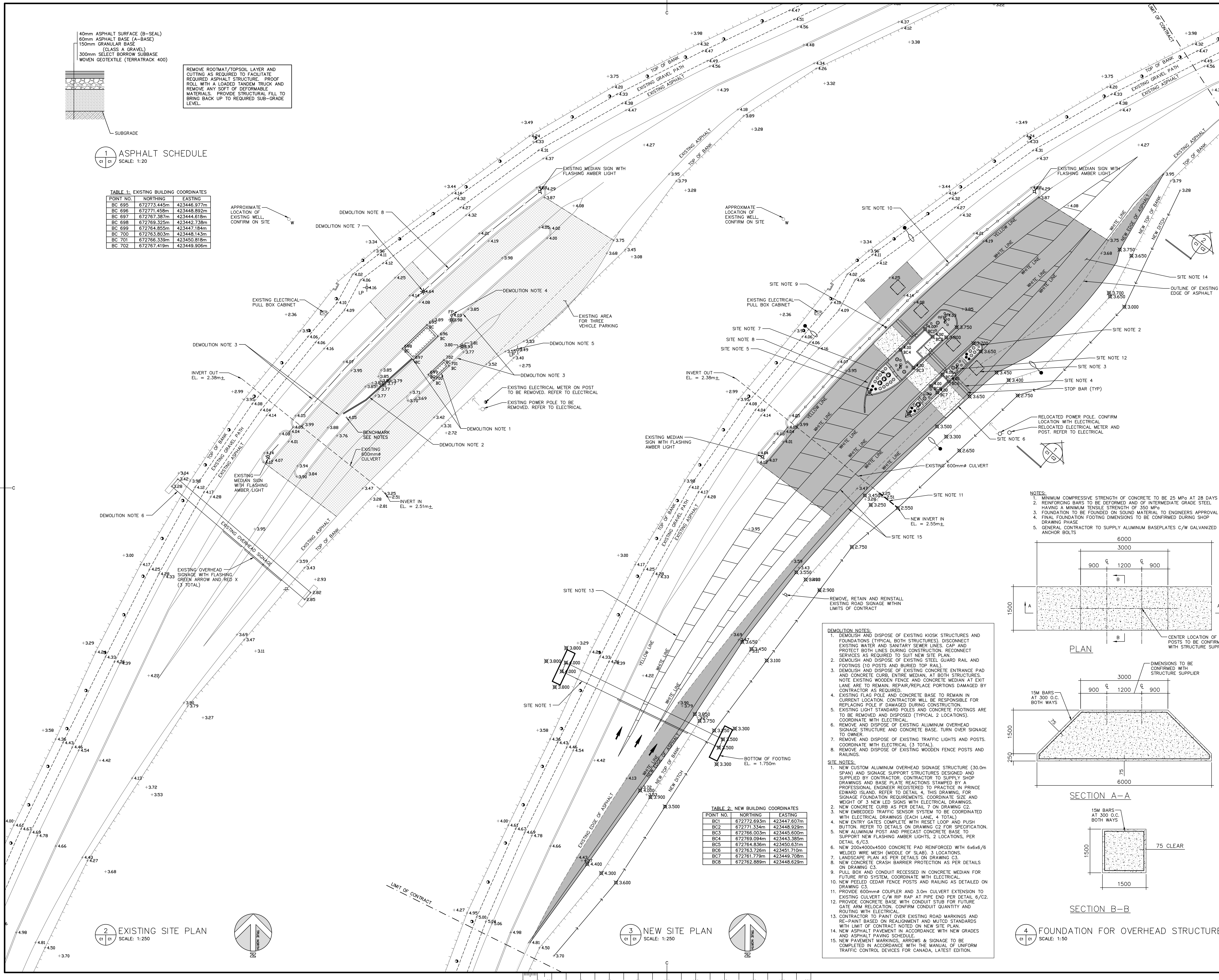


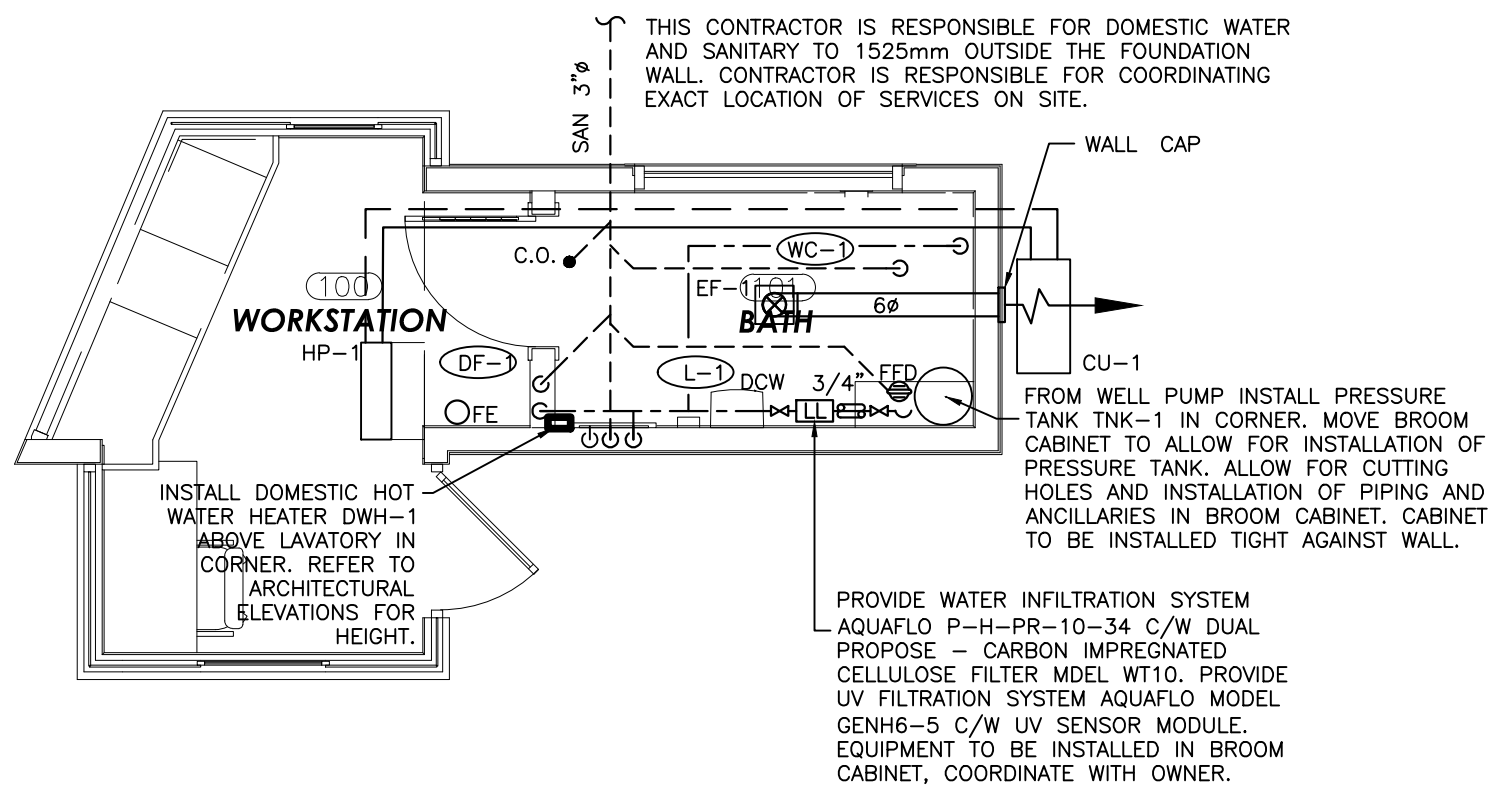
0	ISSUED FOR TENDER	08/23/2018
revisions		date

project
**PARKS CANADA AGENCY
ENTRANCES & KIOSKS
GRAHAM'S LANE
CAVENDISH, PE**

drawing
**EXISTING SITE PLAN,
NEW SITE PLAN,
DETAILS & NOTES**

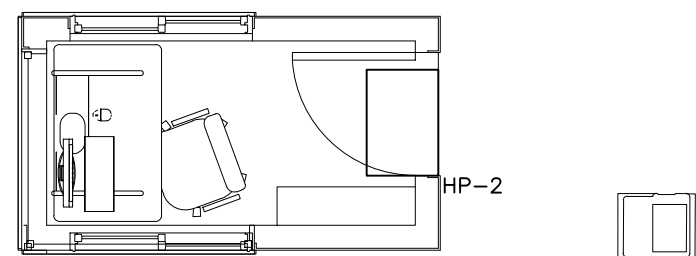
designed SPM, E.I.T.	conçu
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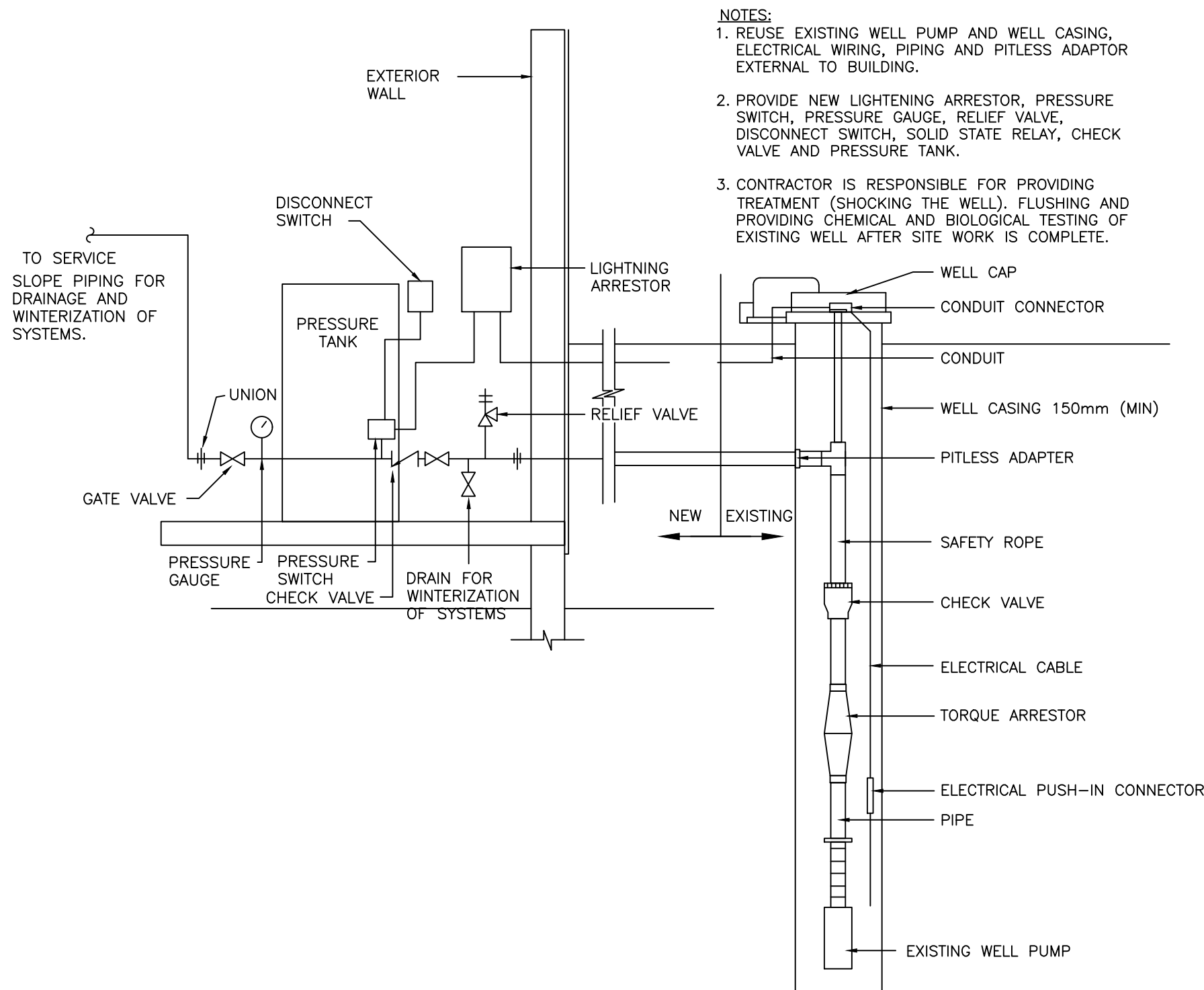
MECHANICAL PLAN LARGE KIOSK

SCALE : 1:50



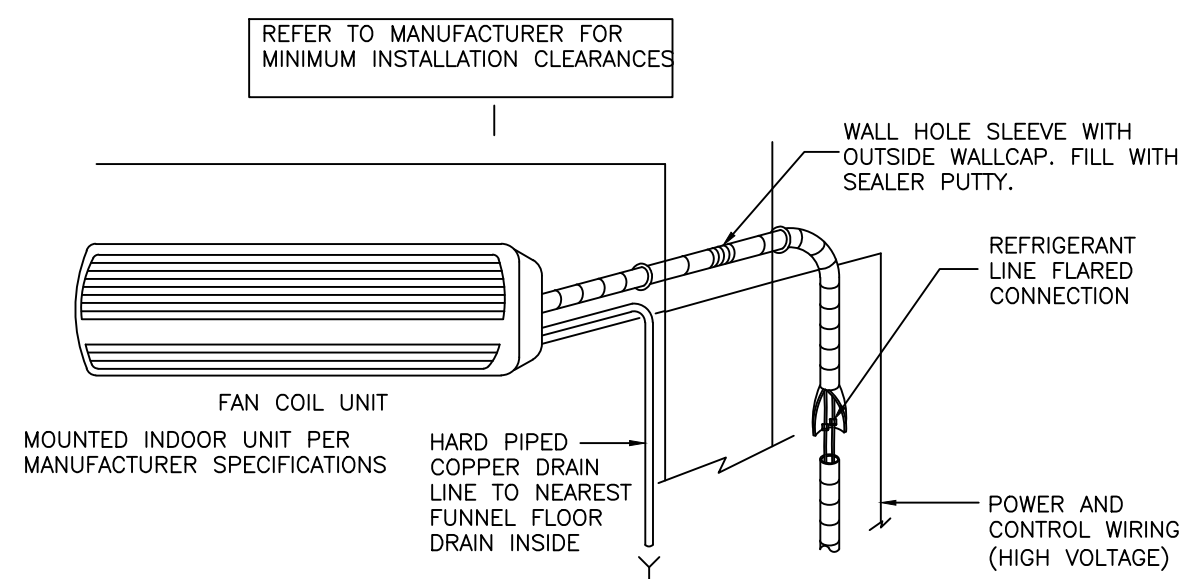
MECHANICAL PLAN SMALL KIOSK

SCALE : 1:50



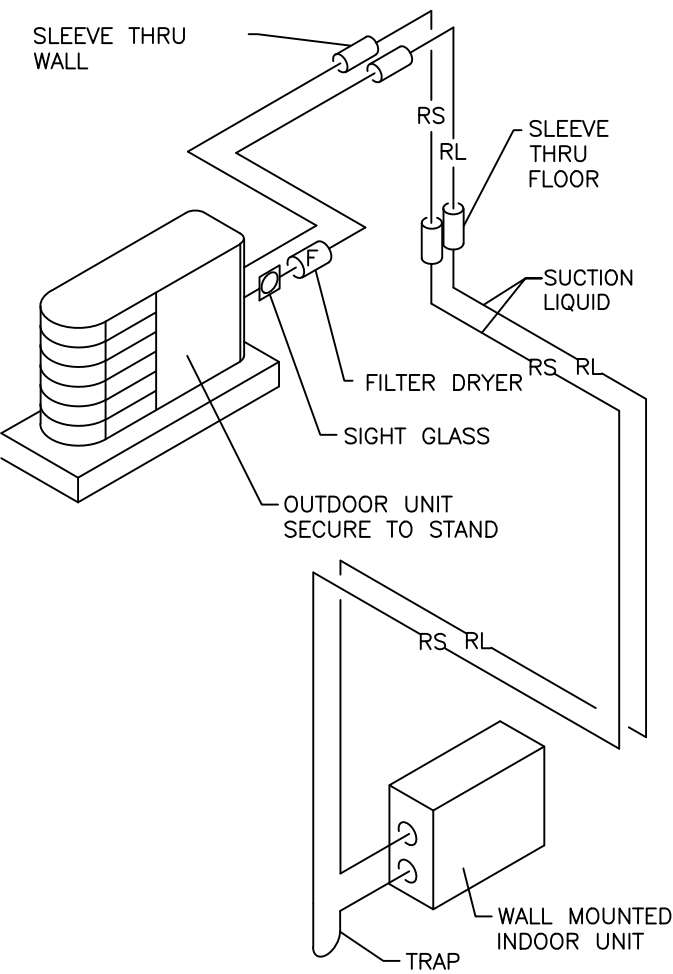
DETAIL EXISTING SUBMERSIBLE WELL PUMP CAVENDISH

SCALE : N.T.S.



MINI SPLIT INDOOR DETAIL

SCALE : N.T.S.



MINI SPLIT PIPING DETAIL

SCALE : N.T.S.

INSULATE AND SUPPORT ALL REFRIGERANT LINES AS PER MANUFACTURERS RECOMMENDATIONS. PIPING TO BE INSTALLED FOR EVAPORATOR UNITS UNDER THIS CONTRACT. REFER TO MANUFACTURER FOR MAXIMUM REFRIGERANT LINE LENGTH

TYP. CONDENSER UNIT ON SUPPORT FRAME. INSTALL UNIT PER MANUFACTURER SPECIFICATIONS

MINI SPLIT HEAT PUMP SYSTEM TO BE INSTALLED ACCORDING TO ALL APPLICABLE NATIONAL AND LOCAL ELECTRICAL, MECHANICAL AND BUILDING CODES

MINI SPLIT HUNG CONDENSOR DETAIL

SCALE : N.T.S.

EXPANSION TANK SCHEDULE							
MARK	MAKE	MODEL	VOLUME LITRES	ACCEPT. LITRES	DIMENSIONS (mm)	CONNECTIONS	REMARKS
ET-1	AMTROL	WX-202	76	43	813 381	NPS 1	WELL PRESSURE TANK

HEAT PUMP UNIT SCHEDULE							
UNIT NO.	MANUFACTURER	MODEL	LOCATION	SUPPLY FAN		ELECTRIC MCA AMPS	ELECTRICAL DATA
				LPS	ESP (in. w.c.)		
HP-1	FUJITSU	ASU9RLS3	WORKSTATION	231	-	2.6	14.4
CU-1		AOU9RLS3H					
HP-2	FRIGIDAIRE	FFRH022R1	WORKSTATION	127	-	2.3	12

PLUMBING FIXTURE SCHEDULE		
TYPE	DESCRIPTION	STANDARD OF ACCEPTANCE
L-1	WASHROOM LAVATORIES	AMERICAN STD LUCERNE BARRIER FREE WALL HUNG LAVATORY, MODEL 0355.912 C/W WALL HANGER AND MOEN 82785MF15 1" FAUCET. NO EXCEPTIONS
W-1	WATER CLOSETS	AMERICAN STD. CHAMPION BARRIER FREE WATER CLOSET MODEL 211AA 154. C/W "EVERCLEAN" AND AMERICAN STANDARD 5325.010.020 WHITE SEAT WITH COVER. NO EXCEPTIONS
DF-1	BOTTLE FILLING STATION	EKLAY EZH20 MODEL EMASM, C/W MOUNTING FRAME. NO EXCEPTIONS

EXHAUST FAN SCHEDULE

TAG	MANUF.	MODEL	LOCATION	AIRFLOW (CFM)	E.S.P. Pd	FAN RPM	POWER	ELECT	COMMENTS
EF-1	PANASONIC	FV-05-11VSK1	BATH	100	100	-	0.27 A	120V/1/60	CEILING FAN WITH INTEGRAL BACKDRAFT DAMPER. PROVIDE WALL CAP.

DOMESTIC WATER HEATER SCHEDULE

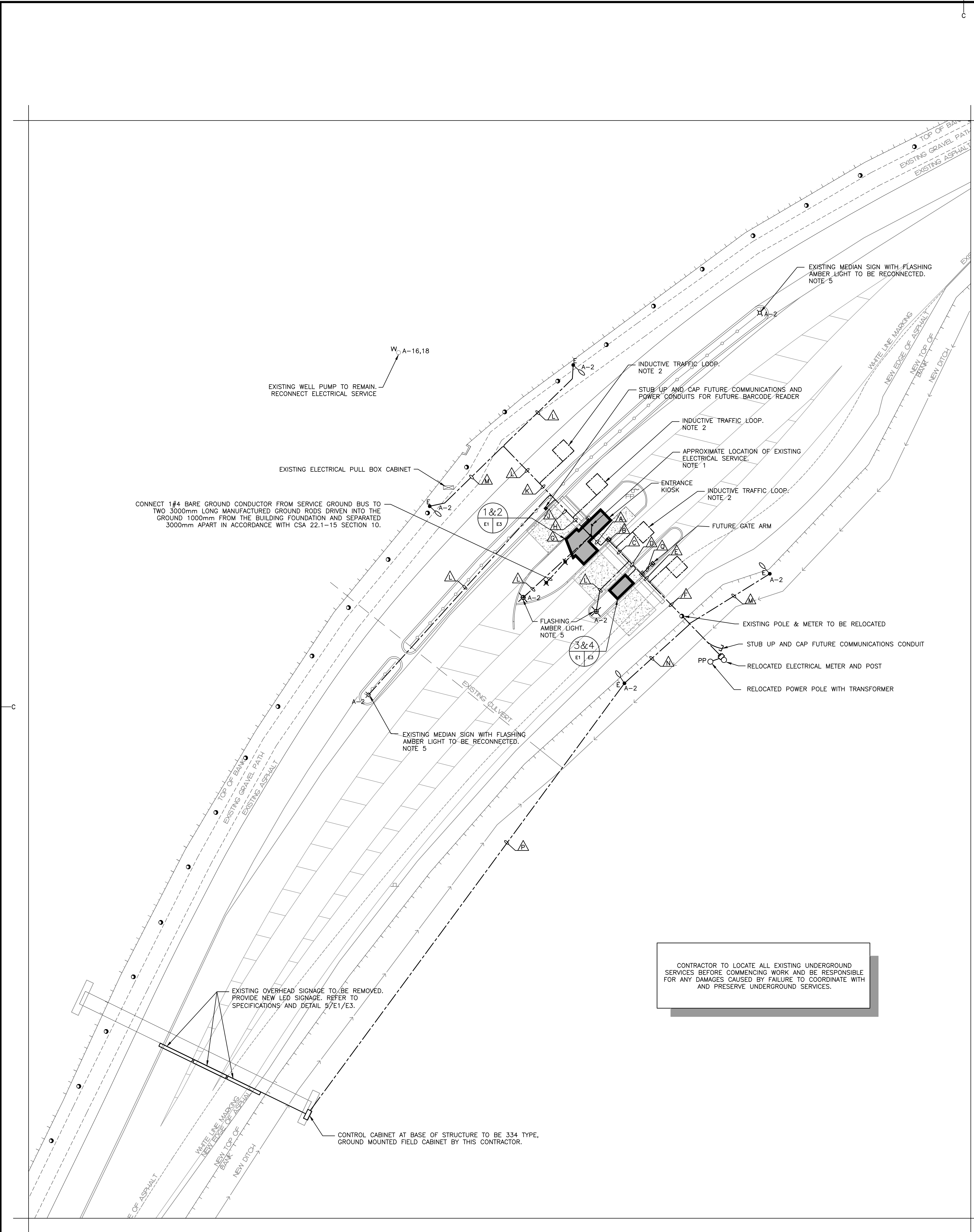
TAG	MANUF.	MODEL	CAP. (L)	RECOVERY @ 56C RISE (LPH)	kW	ELECT.	COMMENTS
DWH-1	BRADFORD WHITE	M-1-WH6UGSS	23	26	1.5	120V/1PH/60	MOUNT NEAR CEILING HEIGHT C/W WALL MOUNTING BRACKETS, BOTTOM DRAIN

GENERAL NOTES:

1. GENERAL
 - 1.1. SCOPE OF WORK
 - 1.1.1. THE WORK SHALL INCLUDE THE FURNISHING OF ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY FOR THE INSTALLATION OF THE MECHANICAL SYSTEMS AS INDICATED.
 - 1.1.2. STENCIL OVER FINAL FINISH ONLY
 - 1.2. COOPERATION WITH OTHER TRADES
 - 1.2.1. CONTRACTOR MUST COORDINATE CLOSELY WITH ALL OTHER TRADES AND WITH EXISTING SERVICES AS CEILING SPACE WILL BE LIMITED IN SOME PLACES.
 - 1.3. EXAMINATION OF SITE
 - 1.3.1. BEFORE TENDERING, EXAMINE THE SITE AND THE LOCAL CONDITIONS AFFECTING THE WORK OF THIS CONTRACT. NO ALLOWANCE WILL BE MADE FOR ANY EXPENSE INCURRED THROUGH FAILURE TO MAKE THIS EXAMINATION.
 - 1.4. PERMITS, FEES AND CERTIFICATES
 - 1.4.1. SUPPLY FOR, OBTAIN, AND PAY FOR ALL PERMITS AND INSPECTIONS REQUIRED.
 - 1.5. INSTALLATION AND COMMISSIONING OF EQUIPMENT
 - 1.5.1. MANUFACTURER'S INSTRUCTIONS SHALL BE MADE AVAILABLE TO BOTH THE INSTALLING TRADESMEN AND THE ON-SITE INSPECTOR PRIOR TO INSTALLATION OF EQUIPMENT. THESE INSTRUCTIONS ARE TO BE READ, UNDERSTOOD AND CLOSELY FOLLOWED. FAILURE TO ABIDE BY THIS REQUIREMENT WILL PROVIDE JUSTIFICATION FOR THE ENGINEER TO REQUIRE REMOVAL AND RE-INSTALLATION.
 - 1.5.2. ENSURE THAT ALL SAFETY DEVICES AND OTHER SIGNIFICANT ACCESSORIES ARE IN PLACE AND OPERABLE BEFORE STARTING MAJOR PIECES OF EQUIPMENT. AS PART OF THE COMMISSIONING PROCESS ACCESSORIES ARE TO BE CHECKED, CALIBRATED AND ADJUSTED AS NECESSARY TO ENSURE SAFE OPERATION.
 - 1.5.3. FOLLOW MANUFACTURER'S INSTRUCTIONS IN DETAIL IN ESTABLISHING COMMISSIONING PROCEDURE.
 - 1.6. DEMONSTRATION OF COMPLETE SYSTEMS
 - 1.6.1. AT THE CONCLUSION OF THE JOB, THE CONTRACTOR SHALL REVIEW AND DEMONSTRATE TO THE OWNER ALL EQUIPMENT AND THEIR RESPECTIVE FUNCTIONS AND OPERATION. SUCH DEMONSTRATION SHALL BE PROVIDED FOR SUCH REASONABLE PERIODS OF TIME AS THE COMPLEXITY OF THE JOB WARRANTS, AND AS APPROVED BY THE ENGINEER. SUCH REVIEW AND DEMONSTRATION SHALL BE MADE BY AN AUTHORIZED REPRESENTATIVE OF THE CONTRACTOR, FULLY KNOWLEDGEABLE OF THE PROJECT, ITS INSTALLATION AND OPERATION.
 - 1.7. FINAL INSPECTION
 - 1.7.1. PRIOR TO SUBSTANTIAL COMPLETION AND FINAL INSPECTION OF THE PROJECT, CONTRACTOR WILL INSPECT THE PROJECT, PROVIDE A MECHANICAL DEFICIENCY LIST, PROVIDE CONFIRMATION THAT ALL ITEMS ON THE LIST HAVE BEEN CORRECTED, PROVIDE THE OPERATION AND MAINTENANCE MANUALS, PROVIDE THE RECORD DRAWINGS, BALANCING REPORTS AND PROVIDE THE DEMONSTRATION OF THE COMPLETED MECHANICAL SYSTEMS.
 - 1.7.2. ALL OF THE ABOVE MUST BE COMPLETED PRIOR TO THE FINAL INSPECTION BY THE ENGINEER AND SUBSTANTIAL COMPLETION OF THE MECHANICAL SYSTEMS.
 - 1.8. SHOP DRAWINGS
 - 1.8.1. CONTRACTOR TO SUBMIT TWO (2) SETS OF SHOP DRAWINGS AND PRODUCT DATA FOR ENGINEER'S REVIEW.
 - 1.9. OPERATION AND MAINTENANCE MANUAL
 - 1.9.1. CONTRACTOR TO PROVIDE MAINTENANCE MANUALS FOR ALL EQUIPMENT INSTALLED, THREE (3) COPIES ORGANIZED IN 8 1/2" x 11" BINDERS TO BE PROVIDED.
 - 1.10. RECORD DRAWINGS
 - 1.10.1. CONTRACTOR TO PROVIDE AS-BUILT RECORD DRAWINGS.
 - 1.11. IDENTIFICATION
 - 1.11.1. PROVIDE ON EACH PIECE OF EQUIPMENT A METAL NAMEPLATE, MECHANICALLY FASTENED WITH RAISED OR RECESSED LETTERS.
 - 1.11.2. DUCT IDENTIFICATION:
 - 1.11.2.1. USE 2" HIGH BLACK STENCILED LETTERS WITH DIRECTIONAL FLOW ARROW
 - 1.11.2.2. STENCIL OVER FINAL FINISH ONLY
 - 1.11.2.3. IDENTIFY MEDIUM IN PIPING WITH MARKERS OR STENCILS SHOWING NAME AND SERVICE INCLUDING TEMPERATURE, PRESSURE, AND DIRECTIONAL FLOW ARROWS WHERE RELEVANT.

- 1.12. STANDARDS OF ACCEPTANCE
 - 1.12.1. ALL EQUIPMENT MANUFACTURERS LISTED FORM THE STANDARD OF ACCEPTANCE FOR THE EQUIPMENT REQUIRED. ALTERNATE EQUIPMENT MAY BE SUBSTITUTED ONLY AFTER RECEIVING APPROVED EQUAL STATUS FROM ENGINEER DURING TENDER PROCESS ONLY. PROVIDE SHOP DRAWINGS ON ALL MAJOR EQUIPMENT PRIOR TO ORDERING ANY EQUIPMENT. IF ALTERNATE EQUIPMENT IS APPROVED BY ENGINEER ALL COSTS ASSOCIATED WITH ANY REQUIRED MODIFICATIONS, CHANGES, ETC TO USE THE ALTERNATE EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
 - 1.13. CLEANING AND FINAL ADJUSTMENT
 - 1.13.1. BALANCE AND ADJUST ALL SYSTEMS AND EACH PIECE OF EQUIPMENT TO OPERATE EFFICIENTLY.
 - 1.14. CUTTING AND PATCHING
 - 1.14.1. ALL CUTTING AND PATCHING WILL BE THE RESPONSIBILITY OF THIS CONTRACTOR.
 - 1.15. EXCAVATION AND BACKFILLING
 - 1.15.1. ALL EXCAVATION AND BACKFILLING WILL BE THE RESPONSIBILITY OF THIS CONTRACTOR.
 - 1.16. PROTECTION OF OPENINGS
 - 1.16.1. PROTECT EQUIPMENT, SYSTEM OPENINGS INCLUDING ROUGH-IN PLUMBING FROM DIRT, DUST AND OTHER FOREIGN MATERIALS WITH MATERIALS COMPATIBLE TO THE SYSTEM.
2. INSULATION
 - 2.1. PIPING
 - 2.1.1. PROVIDE 1" INSULATION TO ALL PIPING, VALVES AND FITTINGS FOR ALL HEATING WATER AND DOMESTIC COLD AND HOT WATER.
 - 2.1.1.1. STANDARD OF ACCEPTANCE:
 - 2.1.1.1.1. RIGID PIPE: MANSION ALEY K APT, OWENS CORNING, OWENS CORNING VAPORLOCK, MANVILLE MICRO LOK, KNAUF
 - 2.1.2. APPLY INSULATION AFTER REQUIRED TESTS HAVE BEEN COMPLETED AND APPROVED BY ENGINEER. INSULATION AND SURFACES SHALL BE CLEAN AND DRY WHEN INSTALLED AND DURING APPLICATION OF ANY FINISH.
 - 2.1.3. INSULATION IS NOT REQUIRED FOR:
 - 2.1.3.1. CHROME-PLATED PIPING, FLANGES AND VALVE BONNETS ON DOMESTIC HOT AND COLD WATER SERVICES, EXCEPT AS REQUIRED BY CODE
 - 2.1.3.2. SANITARY DRAINAGE PIPING
 - 2.2. DUCTWORK
 - 2.2.1. PROVIDE 1" THICK FIBERGLASS DUCT INSULATION c/w FACTORY APPLIED FOIL SCORIM-KRAFT VAPOR JACKET ON ALL EXHAUST DUCTWORK 10 FT IN FROM EXTERIOR WALL.
3. PLUMBING
 - 3.1. GENERAL
 - 3.1.1. ALL WORK TO BE COMPLETED IN ACCORDANCE WITH NBC, CPC, AND AUTHORITIES HAVING JURISDICTION. PIPING TO BE INSTALLED TO ALLOW FOR COMPLETE DRAINAGE AND WINTERIZATION OF SYSTEMS.
 - 3.2. PIPING
 - 3.2.1. SANITARY PIPING TO BE PVC PLASTIC, SLOPED AT 1/8" TO 1"-0".
 - 3.2.1. DRAINAGE AND VENTS - TYPE L COPPER
 - 3.2.2. WATER ABOVE GRADE - TYPE L COPPER
 - 3.3. HANGERS
 - 3.3.1. GLEYS TYPE WITH THREADED RODS.
 - 3.4. SPECIALTIES
 - 3.4.1. FUNNEL FLOOR DRAINS
 - 3.4.1.1. ZURN #ZNA518F
 - 3.4.2. FROST PROOF HOSE BIB
 - 3.4.2.1. ZURN #Z1321

- 3.5. VALVES
 - 3.5.1. DOMESTIC WATER - JENKINS FIG. 901A OR FIG. 902A
- 3.6. WATER SUPPLY WELL
 - 3.6.1. GENERAL
 - 3.6.1.1. REUSE EXISTING WELL, WELL PUMP AND CASING.
 - 3.6.2. PERMITS AND CERTIFICATES
 - 3.6.2.1. PROVIDE ALL PERMITS, CERTIFICATES AND CONFORM TO ALL REGULATIONS IN PROVIDING AND FITTING UP THE WELL.
 - 3.6.3. REPORTS
 - 3.6.3.1. ON COMPLETION OF WORK, SUBMIT TO ENGINEER REPORT CONTAINING:
 - 3.6.3.1.1. RESULTS OF TESTING OF WATER SAMPLE FOR SUSPENDED SOLIDS, CHEMICALS AND BACTERIOLOGICAL CONTENT.
4. HEATING
 - 4.1. MINI-SPLIT HEAT PUMP
 - 4.1.1. PER SCHEDULE - INSTALLED PER MANUFACTURER'S INSTRUCTION.
 - 4.2. BASEBOARD HEATERS
 - 4.2.1. BY DIVISION 26
5. VENTILATION
 - 5.1. GENERAL
 - 5.1.1. ALL DUCTWORK AND HANGERS SHALL BE CONSTRUCTED TO SMACNA STANDARDS BASED ON 2" SP. IN DUCTS. DUCTWORK TO BE SEALED TO SMACNA CLASS "A" STANDARDS.



GENERAL LEGEND	
	LIGHT LINEWEIGHT INDICATES EXISTING TO REMAIN
	HEAVY LINEWEIGHT INDICATES NEW WORK
	UNDERGROUND WIRING
	WIRING UP
	WIRING DOWN
	CONDUIT STUB
	GROUND ROD
A-10g INDICATES CIRCUIT #10 IN PANEL 'A'	
o- INDICATES LUMINAIRE SWITCHING FOR LIGHTING CIRCUITS	
GENERAL SUB SCRIPTS	
4x - INDICATES NEMA 4x ENCLOSURE	

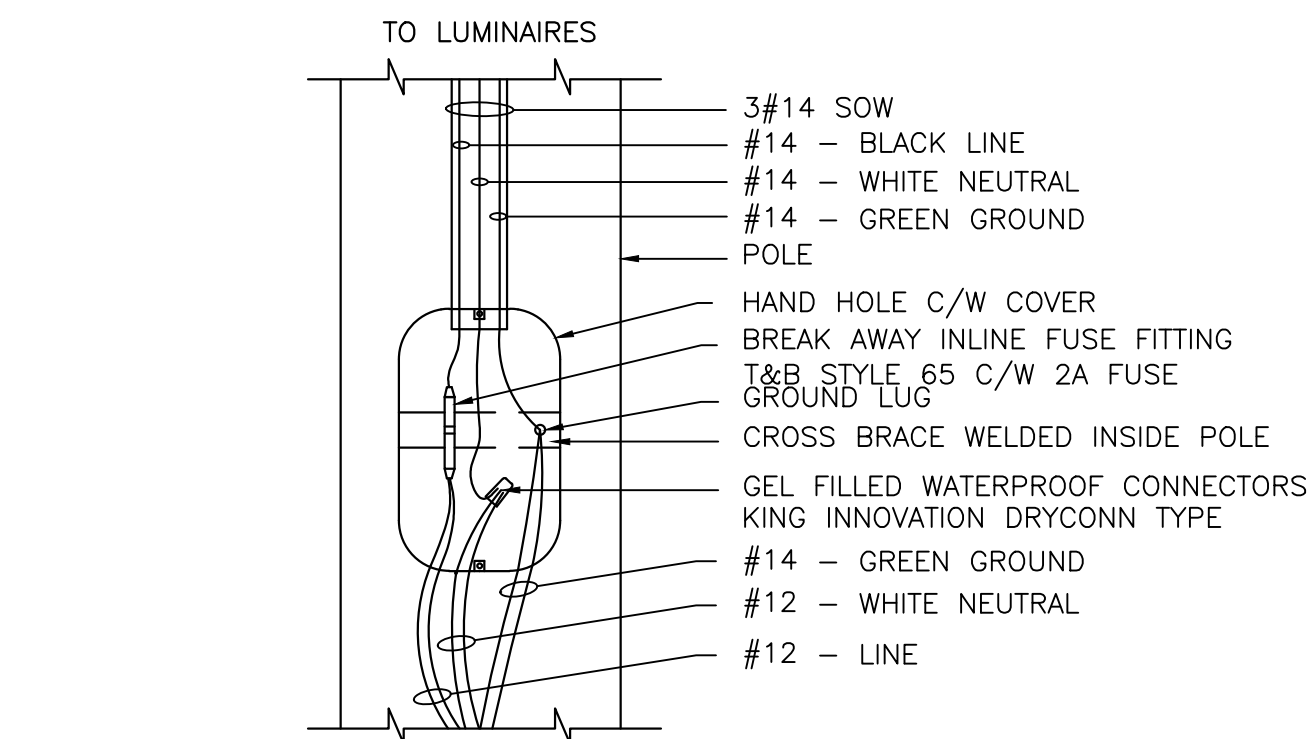
ELECTRICAL LEGEND	
	DUPLEX RECEPTACLE
	QUAD RECEPTACLE
	JUNCTION BOX, 100mm x 100mm x 50mm OR AS INDICATED
RECEPTACLE SUB SCRIPTS:	
20 - INDICATES CSA TYPE 5-20R	
WP - INDICATES RECEPTACLE GFCI C/W WEATHER PROOF WHILE IN-USE COVER	
G - INDICATES GFI RECEPTACLE	
	ELECTRICAL PANEL, RECESSED MOUNTED 'A' INDICATES PANEL DESIGNATION
	SINGLE PHASE MOTOR
	DISCONNECT SWITCH
	DIRECT CONNECTION
	PULL BOX
	JUNCTION BOX, 100mm x 100mm x 50mm OR AS INDICATED
	UTILITY METER
	LUMINAIRE, SUSPENDED OR SURFACE MOUNTED # - INDICATES TYPE IN LUMINAIRE SCHEDULE
	LUMINAIRE, WALL MOUNTED # - INDICATES TYPE IN LUMINAIRE SCHEDULE
	LUMINAIRE, POLE MOUNTED F - INDICATES TYPE IN LUMINAIRE SCHEDULE
	SINGLE POLE SWITCH
	PIR OCCUPANCY SENSOR WALL SWITCH, 120V
	PHOTOCELL
	POWER ASSISTED DOOR PUSH BUTTON
	POWER ASSISTED DOOR OPENER
	TELECOMMUNICATIONS MAIN GROUND BUS

LIGHT STANDARD DETAIL NOTES:

- CONTRACTOR MAY USE CAMPBELL'S CONCRETE PRECAST CONCRETE BASE: CAT #C19-0.
- CONCRETE TO BE 5000 PSI AT 28 DAYS.

DETAIL: LIGHTING STANDARD (TYPICAL)

SCALE : N.T.S.

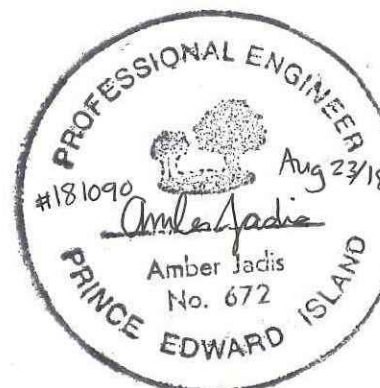


DETAIL: SITE LIGHTING POLE HAND HOLE

SCALE : N.T.S.

NOTES:

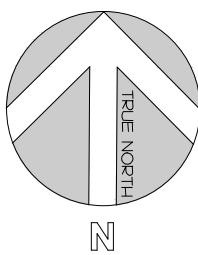
- PULL BACK AND RECONNECT EXISTING INCOMING POWER CABLING FROM OLD KIOSK LOCATION TO NEW KIOSK.
- PREFORMED, 1.8m x 1.8m, HIGH TEMPERATURE RATED INDUCTIVE LOOP FOR PERMANENT INSTALLATION UNDER ASPHALT C/W 15 OR 30m LEAD WIRE AS REQUIRED. INTERNATIONAL ROAD DYNAMICS INC. IS AN APPROVED MANUFACTURER. INSTALL AS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- GROUP UNDERGROUND CONDUITS TO MINIMIZE CUTTING AND PATCHING OF ASPHALT.
- REMOVE ALL REDUNDANT WIRING INCLUDING WIRING TO REMOVED THREE (3) TRAFFIC LIGHTS AND TWO (2) LIGHT STANDARDS.
- FLASHING AMBER LIGHTS TO BE SUPPLIED AND INSTALLED BY ELECTRICAL CONTRACTOR. LIGHT TO BE 203mm DIAMETER C/W YELLOW UV STABILIZED, POLYCARBONATE HOUSING AND VISOR, AND FLASH/MIN 1 POLE, FLASHER MODULE. STANDARD OF ACCEPTANCE TO BE: FORTRAN #P2LY400abc + FLA480 FLASHER MODULE.



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project PARKS CANADA AGENCY ENTRANCES & KIOSKS GRAHAM'S LANE CAVENDISH, PE
drawing design

ELECTRICAL
SITE PLAN & DETAILS

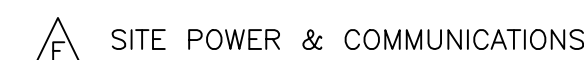
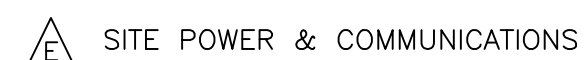
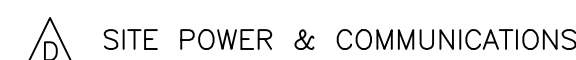
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date August 15, 2018
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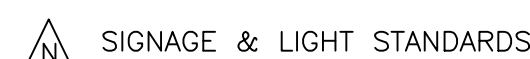
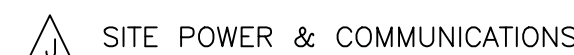
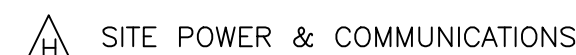
ELECTRICAL SITE PLAN

SCALE : 1:250

0m 5m 10m 15m 20m 25m



-  SITE POWER & COMMUNICATIONS

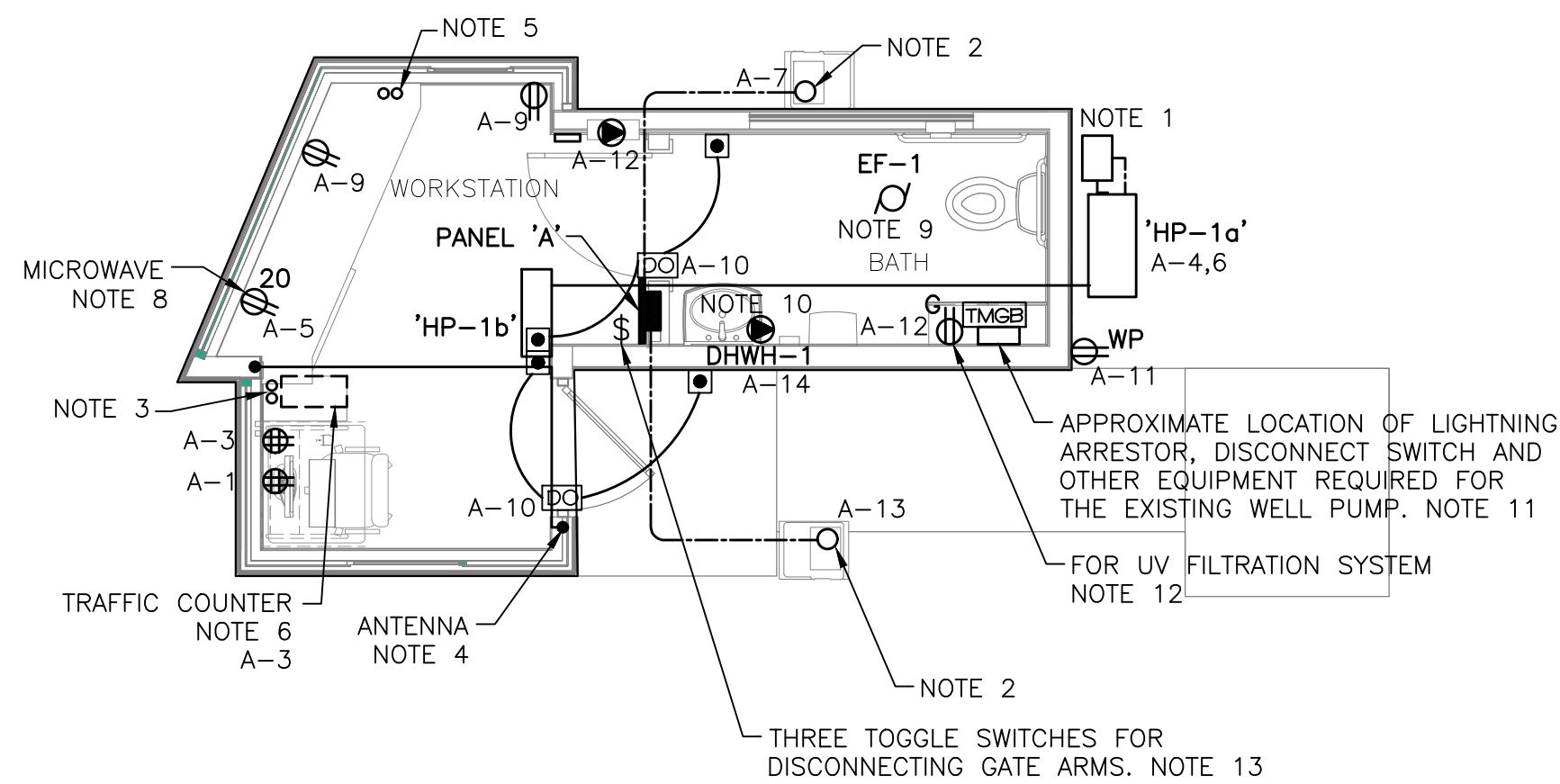


PANEL 'A'													
DESIGNATION	LOAD		P	BKR	CIRCUIT		BKR	P	LOAD		DESIGNATION		
	A	B			A	B			A	B			
RECEPTACLES – DESK	240		1	15	1	A	2	15	1	330		LIGHTING	
RECEPTACLES – DESK		240	1	15	3	B	4	20	2		1728	HP–1a	
MICROWAVE	1000		1	15	5	A	6				1728		
GATE ARM		1176	1	20	7	B	8	15	1			SPARE	
RECEPTACLES	500		1	15	9	A	10	15	1	100		DOOR OPERATOR	
EXTERIOR RECEPTACLES		120	1	15	11	B	12	15	1		200	WATER FOUNTAIN & UV LIGHT	
GATE ARM	1176		1	15	13	A	14	20	1	1500		DHWH–1	
GATE ARM		1176	1	15	15	B	16	15	2		600	WELL PUMP	
LED SIGN	1350		1	30	17	A	18				600		
LED SIGN		1350	1	30	19	B	20			15	1		
LED SIGN	1350		1	30	21	A	22	15	1			SPARE	
						23	B	24	15	1		SPARE	
HP–2	1440		1	15	25	A	26	15	1			SPARE	
SMALLER KIOSK – LIGHTS + POWER		500	1	15	27	B	28						
SMALLER KIOSK – SPARE			1	15	29	A	30						
PHASE LOADS:	7056	4562							4258	2528			
TOTAL PHASE LOADS:	11314	7090							SUPPLY: 120/240V, 1ø, 3w				
TOTAL LOADS:	18404	(*) INDICATES LOCKING BREAKER							MAINS: 60 MB, BOTTOM FED				
									NUMBER OF CIRCUITS: 30				
CURRENT AT 240V/1PH:	77A								MOUNTING: RECESSED				
NOTE: PANEL TO BE SERVICE ENTRANCE RATED													

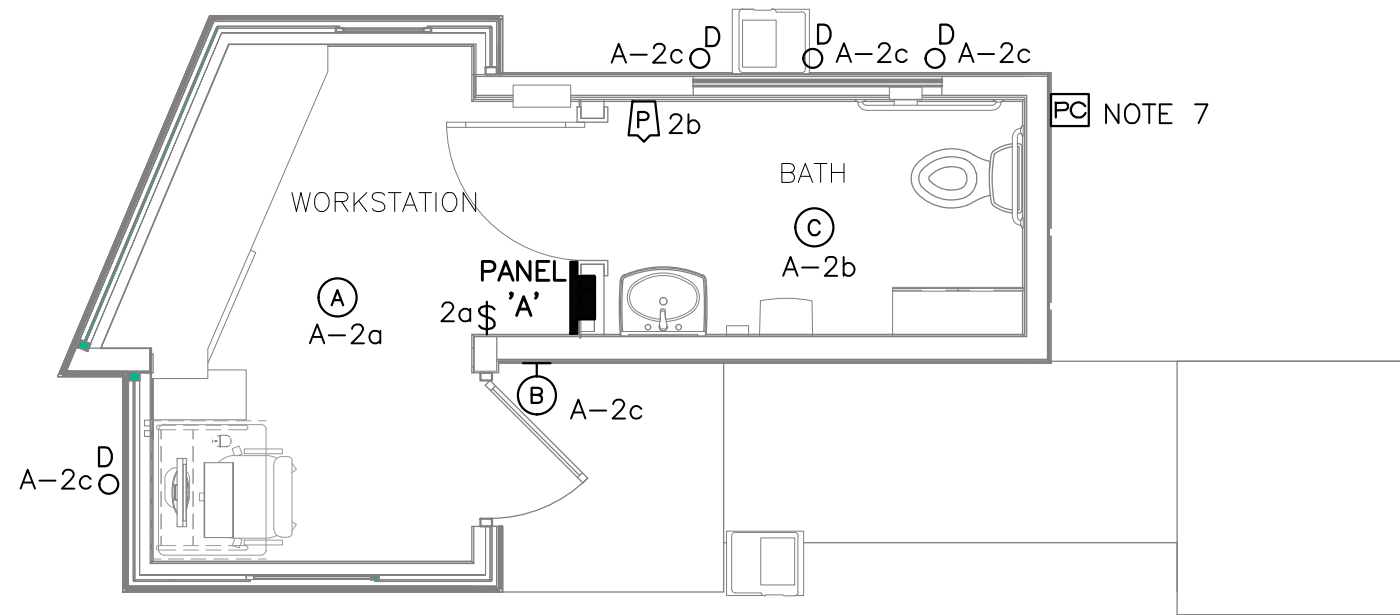
DEMAND CALCULATION				
BASIC LOAD CALCULATION – REFERENCING CEC 22.1-15 8-202 AND 8-210 (a)				
REFERENCING CEC 22.1-15 TABLE 14				
DESIGNATION	AREA (m²)	TYPE OF OCCUPANCY	W/m²	DEMAND %
OFFICE	15.4	OFFICE	50	100%
-	-	-	-	-
SPECIAL LOAD CALCULATION – REFERENCING CEC 22.1-15 8-210 (b), AND 62-118 (5)				
DESIGNATION	TOTAL LOAD (W)		DEMAND %	TOTAL DEMAND (W)
HP-1,DHWH-1, EF-1, WELL PUMP	7596		75%	5697
LED SIGNS	1800		100%	1800
TOTAL BASIC DEMAND (W)				770
TOTAL SPECIAL DEMAND (W)				7497
REFERENCING CEC 22.1-15 8-210	TOTAL ELECTRIC DEMAND (W)			8267
MINIMUM SERVICE ENTRANCE AT 240V, 1 PHASE				35A
x 1.25% SPARE CAPACITY				43A
NOTE: IN ACCORDANCE WITH CEC 22.1-15 8-106(4) DEMAND CALCULATION ARE BASED ON SUMMER TIME OPERATION GIVEN THAT COOLING LOAD IS LARGER THAN THE HEATING LOAD AND THE BUILDING IS ONLY OPERATIONAL IN THE SUMMER MONTHS.				

- NOTES:
- HP-1 REQUIRES 230V, SINGLE PHASE, 2.6 KW POWER. INSTALL 2#12 TECK TO DISCONNECT SUPPLIED WITH OUTDOOR UNIT. WALL PATCHING AND SEALING TO BE COORDINATED WITH AND COMPLETED BY THE GENERAL CONTRACTOR. RUN EXTERIOR TECK CABLE ADJACENT TO LINES ON MECHANICAL LINE SUPPORTS.
 - STUB UP TWO 27mm RIGID PVC CONDUITS FOR GATE ARM. ONE CONDUIT TO CONTAIN 2c#12, 1#14 RW90 AND TERMINATE AT PANEL 'A'. OTHER CONDUIT TO BE FOR FUTURE HARDWIRED COMMUNICATIONS. GATE ARM TO OPERATE WITH REMOVE CONTROL. REFER TO MANUFACTURER'S INSTRUCTIONS FOR SIZE, LOCATION AND CONNECTION OF RESET LOOP.
 - PROVIDE TWO EMPTY 27mm CONDUITS C/W PULL CORDS, FROM PANEL A, EMBEDDED IN CONCRETE FLOOR AND STUBBED UP UNDER THE DESK AT LOCATION SHOWN. ADDITIONAL CONDUITS AND WIRING PROVIDING POWER FOR THE TRAFFIC COUNTING SYSTEM AND RECEPTACLES A-1 AND A-3 SHALL FOLLOW THE SAME ROUTE.
 - ANTENNA AND CABLE SUPPLIED BY PARKS CANADA AND INSTALLED BY ELECTRICAL CONTRACTOR. ANTENNA CABLE TO BE RUN IN 16mm EMT CONDUIT IN CEILING SPACE AND WITHIN THE WALL, DOWN TO THE UNDERSIDE OF THE DESK. LEAVE 1.5m SLACK CABLE COILED AND SECURED TO THE UNDERSIDE OFF THE DESK.
 - PROVIDE TWO EMPTY 27mm CONDUITS C/W PULL CORDS, FROM PANEL A, EMBEDDED IN CONCRETE FLOOR AND STUBBED UP IN VOID MILLWORK SPACE AT THE LOCATION SHOWN. ADDITIONAL CONDUITS AND WIRING PROVIDING POWER FOR THE FRIDGE AND MICROWAVE SHALL FOLLOW THE SAME ROUTE.
 - TRAFFIC RECORDING SYSTEM CAPABLE OF INDEPENDENTLY MONITORING FOUR LANES OF TRAFFIC AND STORING AT LEAST ONE YEAR OF TRAFFIC STATISTICS. TRAFFIC RECORDING SYSTEM TO BE HARDWIRED TO A 15A/1P CIRCUIT AND PROVIDE A 1.8m LONG USB CABLE. TRAFFIC RECORDING SYSTEM TO BE MOUNTED IN MILLWORK UNDER THE DESK. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS. STANDARD OF ACCEPTANCE TO BE INTERNATIONAL ROAD DYNAMICS INC. TRS RACK 11.
 - ALL EXTERIOR LIGHTS TO BE CONTROLLED BY PHOTOCELL. PHOTOCELL TO BE TEMPERATURE COMPENSATED, THERMAL TYPE, INTERMATIC #K4251 OR APPROVED EQUAL.
 - CONFIRM MOUNTING HEIGHT ON SITE PRIOR TO ROUGH-IN.
 - NEW 120V, SINGLE PHASE, 0.27A EXHAUST FAN. WIRE WITH 2#12, 1#14 IN 16mmC TO CIRCUIT A-2 THROUGH WALL MOUNTED OCCUPANCY SENSOR.
 - NEW 120V, SINGLE PHASE, 1.5KW DHWH-1. WIRE WITH 2#12, 1#14 IN 16mmC TO CIRCUIT A-14.
 - EXTEND AND RECONNECT EXISTING WIRING FROM CIRCUIT A-16,18 TO WELL PUMP AND ASSOCIATED EQUIPMENT. REFER TO DETAIL 1/M1/M1 FOR ADDITIONAL INFORMATION. CONFIRM EXACT LOCATION OF EQUIPMENT BEFORE STARTING ELECTRICAL ROUGH-IN. CONCEAL EQUIPMENT WITHIN MILLWORK.
 - CONFIRM MOUNTING HEIGHT OF RECEPTACLE WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN. CONCEAL WITHIN CABINET.
 - PROVIDE THREE SINGLE POLE, DECORA TOGGLE SWITCHES TO CONTROL GATE ARM POWER. SWITCHES TO BE LABELED AS FOLLOWS:

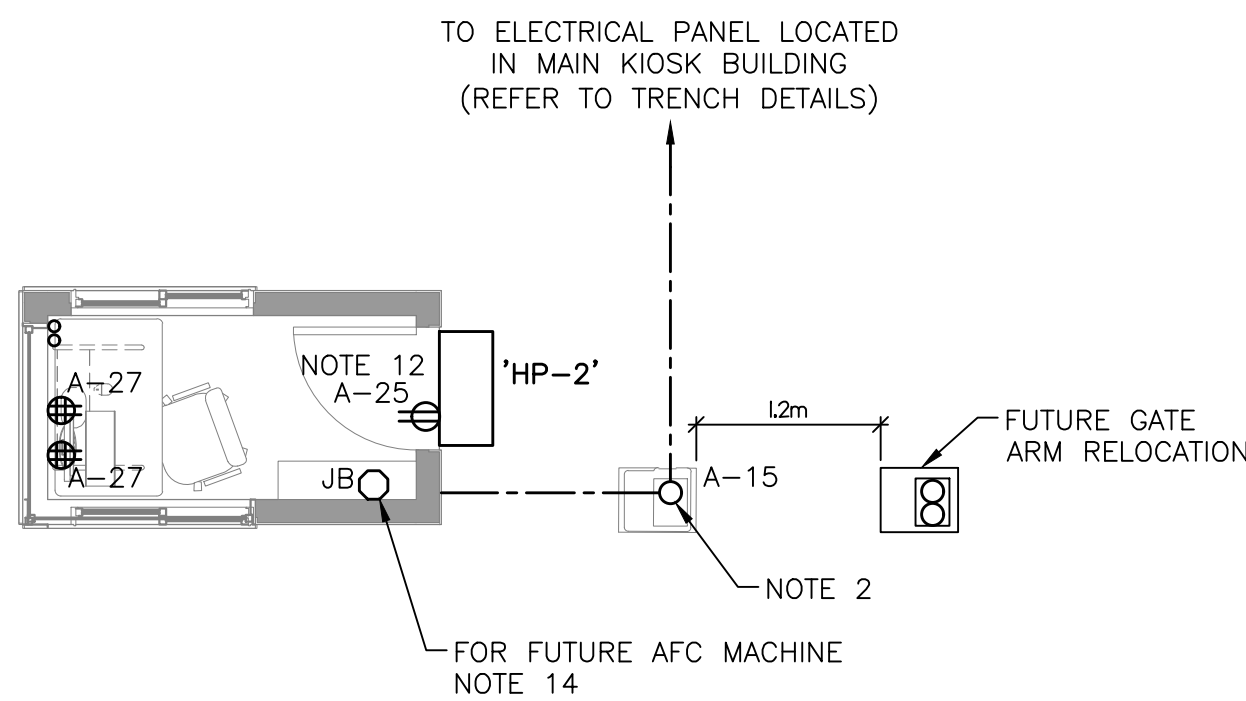
GATE ARM EAST
GATE ARM MID
GATE ARM WEST
 - PROVIDE JUNCTION BOX AND TWO (2) 27mm RIGID PVC CONDUITS RECESSED IN THE WALL AT 610mm AFF FOR FUTURE AFC MACHINE.



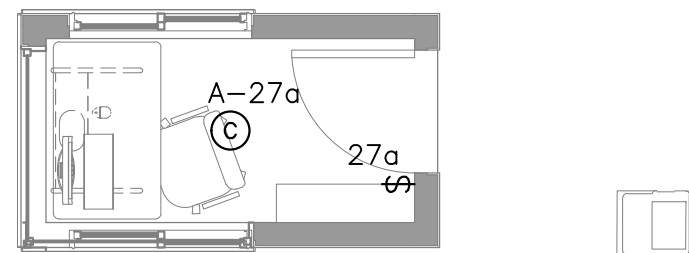
FLOOR PLAN – POWER 1
SCALE : 1:50
0m 1m 2m 3m 4m 5m



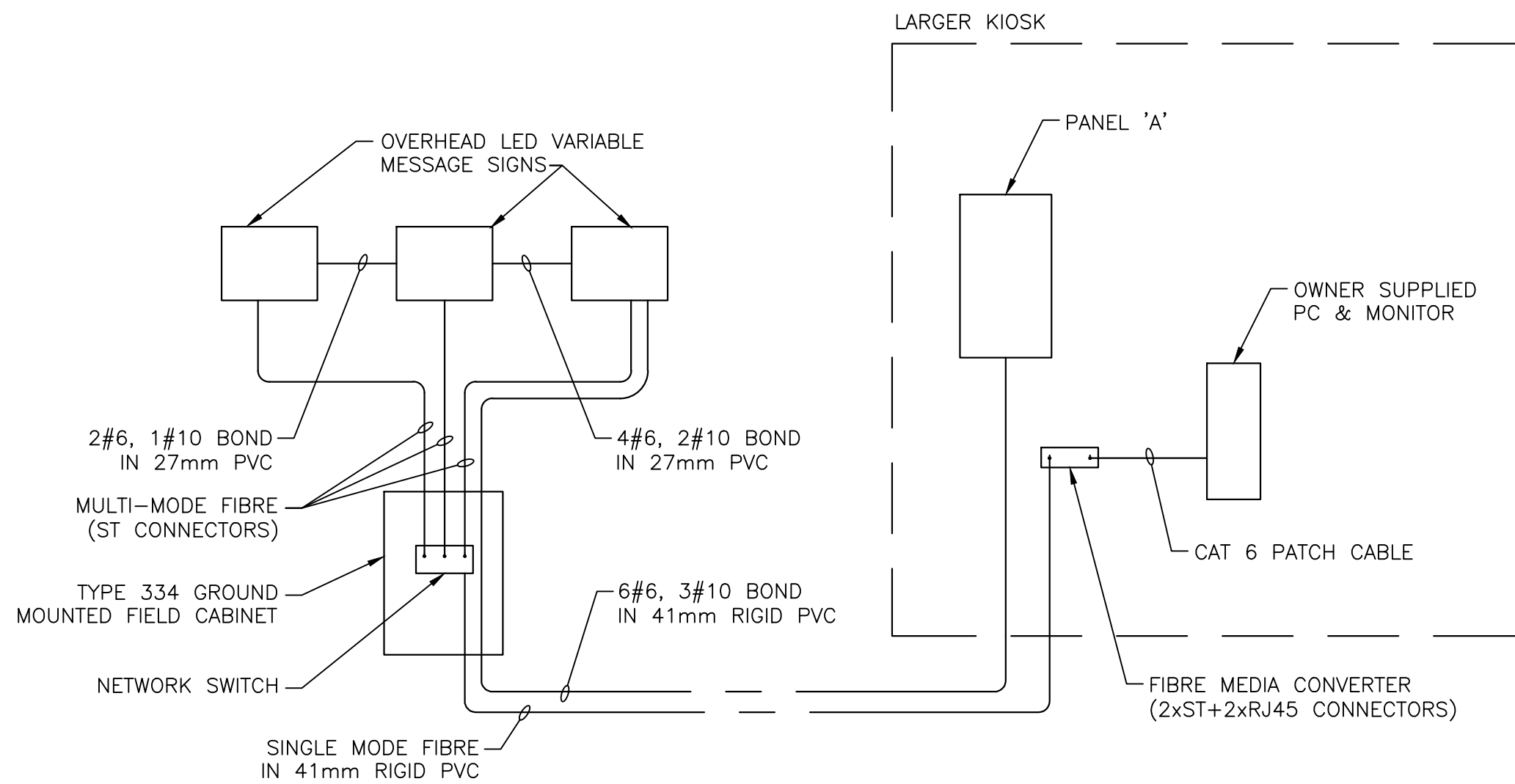
FLOOR PLAN – LIGHTING 2
SCALE : 1:50
0m 1m 2m 3m 4m 5m



FLOOR PLAN – POWER 3
SCALE : 1:50
0m 1m 2m 3m 4m 5m



FLOOR PLAN – LIGHTING 4
SCALE : 1:50
0m 1m 2m 3m 4m 5m



LED VARIABLE MESSAGE SIGNS WIRING DIAGRAM 5
SCALE : N.T.S.
E1 E3