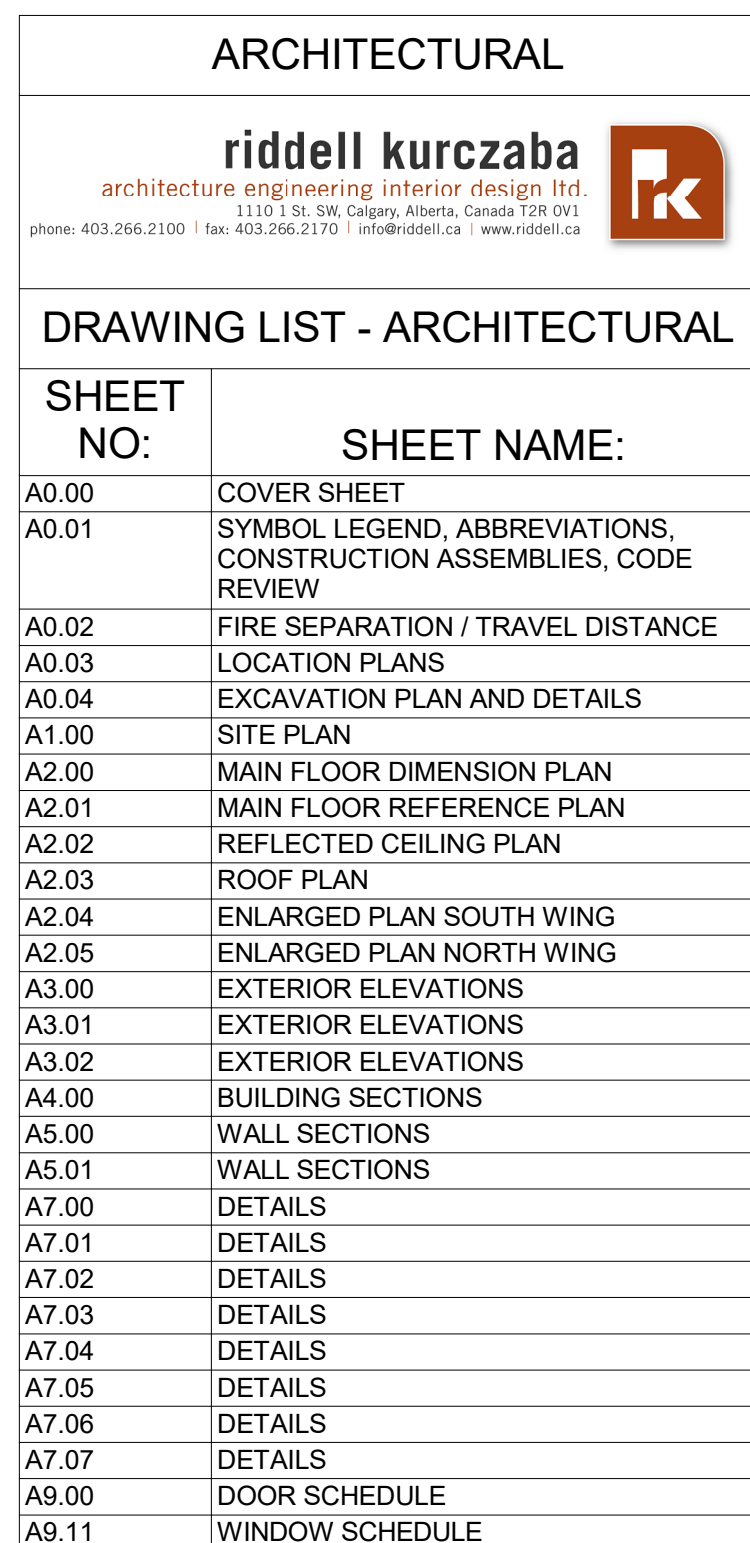







# ROGERS PASS WASHROOM FACILITY AND DAY USE AREA




<h1 style="text-align: center;">STRUCTURAL</h1> <div style="text-align: center;">  <p><b>rjc</b> Engineers</p> </div> <p><b>STRUCTURAL</b> Suite #204,110 12 Ave SW Calgary , AB T2R 0G7</p>	
<h2 style="margin: 0;">DRAWING LIST - STRUCTURAL</h2>	
<p><b>SHEET</b> <b>NO:</b></p>	<p><b>SHEET NAME:</b></p>
S-000	COVERSHEET
S-100	GENERAL NOTES AND TYPICAL DETAILS
S-101	GENERAL NOTES AND TYPICAL DETAILS
S-102	GENERAL NOTES AND TYPICAL DETAILS
S-103	GENERAL NOTES AND TYPICAL DETAILS
S-104	GENERAL NOTES AND TYPICAL DETAILS
S-201	FRAMING PLANS
S-202	ROOF FRAMING PLANS
S-301	SECTION AND DETAILS
SD presentation	Unamed

 <div style="display: inline-block; vertical-align: middle; margin-left: 10px;"> <h1 style="margin: 0;">MECHANICAL</h1> <p style="margin: 0;">innovative. sustainable.</p> </div>	
<p><b>MECHANICAL</b>          Suite #204.110 12 Ave SW Calgary, AB T2R 0G7</p>	
<h2>DRAWING LIST - MECHANICAL</h2>	
<p><b>SHEET NO.:</b></p>	<p><b>SHEET NAME:</b></p>
M0	MECHANICAL LEGEND
M0S1	MECHANICAL SITE PLAN
M1	FLOOR PLAN - DRAINAGE LAYOUT
M2	FLOOR PLAN - PLUMBING LAYOUT
M3	FLOOR PLAN - H.V.A.C LAYOUT
M4	FLOOR PLAN - HYDRONIC LAYOUT
M5	MECHANICAL DETAILS
M6	MECHANICAL SCHEDULES

<p style="text-align: center;"><b>ELECTRICAL</b></p> <div style="display: flex; align-items: center; justify-content: center;">  <div style="margin-left: 20px;"> <p><b>EMBE</b></p> <p><i>Innovative. Sustainable.</i></p> </div> </div> <p><b>ELECTRICAL</b>  Suite #204, 110 12 Ave SW Calgary, AB T2R 0G7</p>	
<h2 style="margin: 0;">DRAWING LIST - ELECTRICAL</h2>	
<p><b>SHEET NO:</b></p>	<p><b>SHEET NAME:</b></p>
E0	ELECTRICAL LEGEND
E0S1	ELECTRICAL SITE PLAN
E1	FLOOR PLAN - LIGHTING
E2	FLOOR PLAN - POWER AND AUXILIARY
E3	ELECTRICAL SCHEDULES
E4	ELECTRICAL DETAIL S

<p><b>LANDSCAPE</b></p> <p>#204, 337 - 17th Avenue SW, Calgary, AB T2S 0A5</p>	
<p><b>NAVAGRAH</b> landscape architecture + urban design</p>	
<p><b>DRAWING LIST - LANDSCAPE</b></p>	
<p><b>SHEET NO:</b></p>	<p><b>SHEET NAME:</b></p>
L-1	LAYOUT PLAN
L-2	PLANTING PLAN
L-3	SECTIONS

<h1 style="margin: 0;">CIVIL</h1>	
<p><b>CIVIL ENGINEERING SOLUTIONS INC.</b></p>	
<p><b>CIVIL</b>          Suite #204, 110 12 Ave SW Calgary, AB T2R 0G7</p>	
	
<h2 style="margin: 0;">DRAWING LIST - CIVIL</h2>	
<p><b>SHEET NO:</b></p>	<p><b>SHEET NAME:</b></p>
C-1	SITE EX & POST SERVICING PLAN
C-2	SITE GRADING PLAN
C-3	SITE OVERLAND AND DRAINAGE PLAN
C-4	DETAILS

INDEX	
DRAWING LIST - INDEX	
SHEET NO:	SHEET NAME:
I-1	OVERALL UTILITIES PLAN

INTERIOR	
DRAWING LIST - INTERIOR	
SHEET NO:	SHEET NAME:
ID1.00	MAIN FLOOR FINISHES PLAN
ID1.01	ENLARGED WASHROOM PLAN AND ELEVATIONS
ID1.02	ENLARGED BARRIER FREE WASHROOM PLAN AND ELEVATIONS
ID1.03	INTERIOR ELEVATIONS
ID1.04	INTERIOR ELEVATIONS
ID1.05	INTERIOR ELEVATIONS

5	ISSUED FOR TENDER	12-14-18
4	ISSUED FOR 99%	10-26-18
3	ISSUED FOR 90%	08-20-18
2	ISSUED FOR 80%	05-31-18
1	ISSUED FOR 30%	03-28-18
Revision / Revision	Description / Description	Date / Date



Project title/Titre du projet

**ROGERS PASS WASHROOM  
FACILITY AND DAY USE  
AREA**

Approved by/Approuvé par AMINA OYAKHLOME
Designed by/Concept par PETER SCHULZ
Drawn by/Dessiné par FOLA OLAWOYIN
Project Manager/Administrateur de Projets ANDREW OOSTING
Architectural and Engineering Resources Manager/ Ressources Architectural et de Directeur d'ingénierie
Client / client <b>Parks Canada</b>
Drawing title / Titre du dessin

Project No. / No. du project	Sheet / Feuille	Revision no. / La Révision no.
CAI 752	A0.00	5

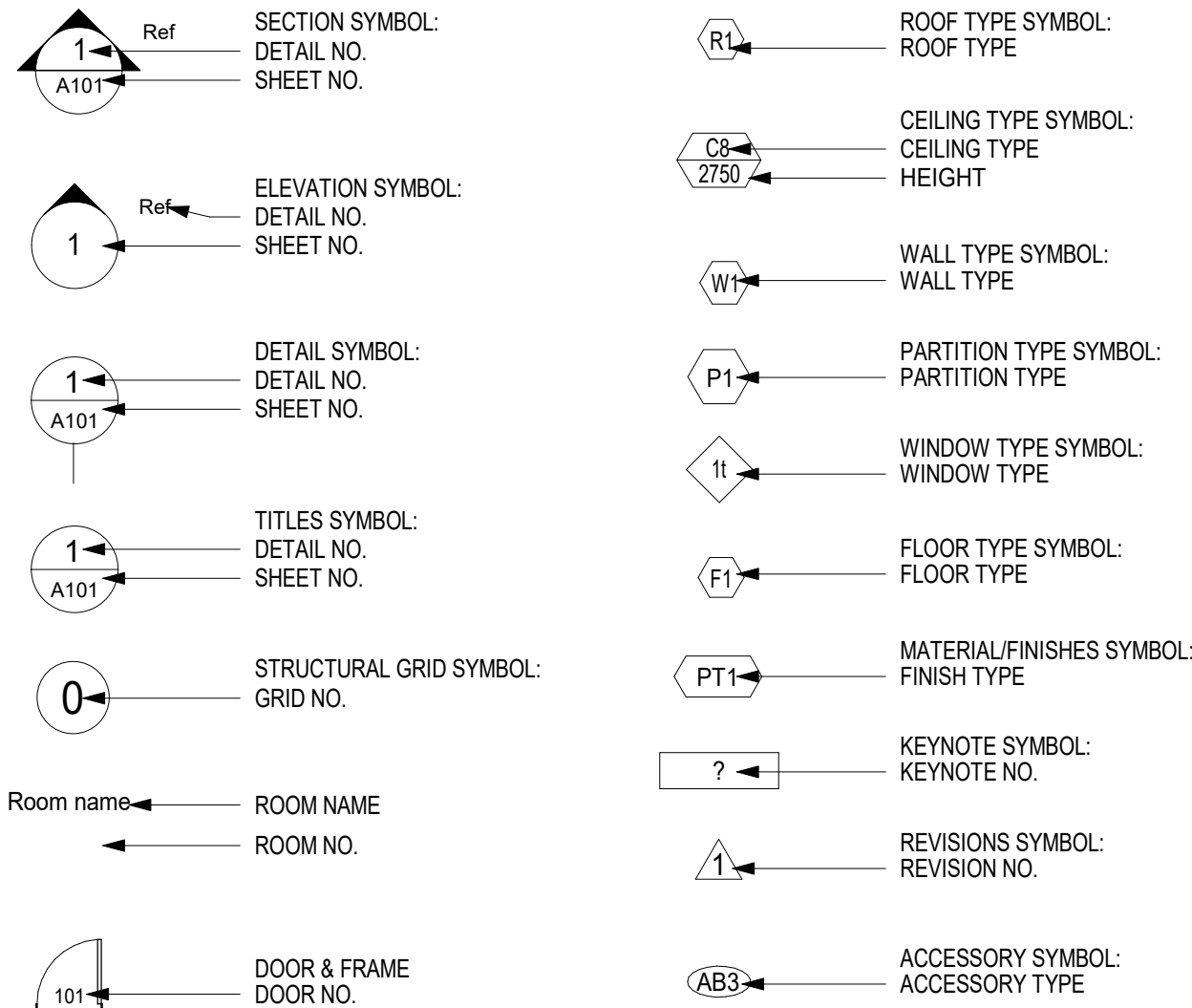




GENERAL NOTES

1. ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE NATIONAL BUILDING CODE 2015, THE NATIONAL FIRE CODE 2015, THE OCCUPATIONAL HEALTH & SAFETY ACT, AND ANY OTHER AUTHORITIES HAVING JURISDICTION.
2. THESE DRAWINGS & SPECIFICATIONS SHALL BE READ IN CONJUNCTION WITH THE NOTES ON THE DRAWINGS. ARCHITECTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH DRAWINGS BY ELECTRICAL, MECHANICAL AND STRUCTURAL ENGINEERING CONSULTANTS.
3. REPORT ALL DISCREPANCIES BETWEEN MECHANICAL, ELECTRICAL, STRUCTURAL AND THE ARCHITECT'S DRAWINGS TO THE OWNER PRIOR TO PROCEEDING WITH WORK.
4. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, EXISTING AND NEW CONDITIONS AND REPORT ALL NON - CONFORMANCE TO THE OWNER, PRIOR TO CONSTRUCTION.
5. ALL SUBCONTRACTORS MUST FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS PRIOR TO SUBMITTING THEIR QUOTATION, AND OTHERWISE OBTAIN FOR THEMSELVES ANY INFORMATION REQUIRED TO SUBMIT A FIRM QUOTATION.
6. THE GENERAL CONTRACTOR WILL BE RESPONSIBLE TO REGULATE AND ENFORCE LOCAL FIRE CODES AND BUILDING CODES AS SET FORTH BY LOCAL JURISDICTIONS FOR THE DURATION OF CONSTRUCTION.
7. ALL ARCHITECTURAL COMPONENTS WILL BE ENGINEERED AND INSTALLED BY THE RESPECTIVE SUPPLIERS & TRADES SO AS TO CONFORM WITH REQUIRED ANCHORAGE AND SEISMIC RESTRAINT AS PER ALL LOCAL CODES.
8. VERTICAL FACE OF HOUSEKEEPING PAD TO BE PAINTED YELLOW.
9. ALL DIMENSIONS TO FACE OF STUD UNLESS NOTED OTHERWISE.
10. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
11. MAINTAIN DISTANCE OF 150mm FROM DOOR R.O. TO THE WALL PERPENDICULAR TO DOOR OPENING FOR ALL INTERIOR DOORS.

DRAWING SYMBOLS LEGEND:



ABBREVIATIONS

ABOVE FINISHED FLOOR	AFF	MAN HOLE	MH
ALBERTA BUILDING CODE 2006	ABC	MASONRY OPENING	MO
ALUMINUM	ALUM	MAXIMUM	MAX.
ARCHITECTURAL	ARCH	MECHANICAL	MECH.
BARRIER FREE ACCESS	BFA	MEDIUM DENSITY FIBREBOARD	MDF
BOTH WAYS	B/W	METAL	MTL
BOTTOM	BOT	MISCELLANEOUS	MISC.
BOTTOM OF BUILDING	B/O	MINIMUM	MIN.
BLDG	BLDG	NATURAL	NAT.
CARPET	CP	NOT APPLICABLE	N/A
CAST IN PLACE	C.I.P.	NOT IN CONTRACT	N.I.C.
CEILING	C/L	NOT TO SCALE	N.T.S.
CENTRE LINE	C/L	NUMBER	NO.
CENTRE TO CENTRE	C/C	ON CENTRE	OC
CERAMIC TILE	CT	ORIENTED STRAND BOARD	OSB
COLUMN	COL	OUT TO OUT	O/O
COMPLETE WITH	C/W	OUTSIDE DIAMETER	O.D.
CONCRETE	CONC	OVERHEAD	OH.
CONTINUOUS	CONT	PAINT	PT
CORRIDOR	CORR	PLYWOOD	PLY
CURTAIN WALL	CW	POLYETHYLENE	POLY.
		PRECAST CONCRETE	PC, CONC.
		PREFINISHED	PREFIN.
		PROPERTY LINE	PL
DETAIL(S)	DET	RAIN WATER LEADER	R.W.L.
DIMENSIONS	DIM	REINFORCING	REIN.
DIAMETER	DIA	REQUIRED	REQ.
DOWN	DN	REVISION	REV.
DWGS	DWGS	RIGHT OF WAY	R.W.
		ROUGH OPENING	R.O.
EACH	EA		
ELEVATION	EL / ELEV	SIMILAR	SIM.
ELECTRICAL	ELEC	SPECIFICATIONS	SPEC.
EQUAL	EQ.	STAINLESS STEEL	S.S.
EXISTING	EXIST.	STANDARD	STD
EXTERIOR	EXT	STEEL	ST
EXTERIOR INSULATION	EFIS	STEEL STUD	SS
FINISH SYSTEM		STORAGE	STOR.
FACE OF FINISH	F/O	TEMPERED	TEMP.
FIRE RATED	FIN	TEMPERED LAMINATED GLASS	TLG.
FIRE RESISTANCE RATING	FR	TOP OF TYPICAL	T/O TYP.
FLOOR	FLR	UNLESS OTHERWISE	UNO
FLOOR DRAIN	FD	UNDERSIDE	UIS
FOOTING	FTG	UNDERWRITERS	
		LABORATORIES OF CANADA	U.L.C.
GALVANIZED	GALV	VAPOUR BARRIER	V.B.
GAUGE	GL	VERTICAL	VERT.
GLAZING	GL		
GRADE	GRD	WATER CLOSET	WC
GROUND FLOOR	GF	WATERPROOF	WP
GYPSUM WALL BOARD	GWB	WALL TILE	WT
GEODETIC	GEO.	WOOD	WD
INTERIOR	INT.		
JANITOR	JAN.		
LAVATORY	LAV.		

ASSEMBLIES

EXTERIOR WALL			
W1	UPPER WALL		<u>EXTERIOR WALL</u>  NOTE: EXTERIOR FINISHES - REFER TO ELEVATION FOR MATERIAL AND COLOUR SEE ELEVATION FOR HEIGHT VARIATION REFER TO DRAWING 1 & 2 ON A7.00 FOR SYSTEM ASSEMBLY  UPPER WALL: BEVELED SIDING, SHIPLAP JOINT WOOD PLANKS BUILDING PAPER 15.5 mm THK EXTERIOR GRADE PLYWOOD SHEATHING 152 mm DEEP THERMAL SPACER VERTICAL APPLICATION c/w 25 mm DEEP VERTICAL Z-GIRT FASTENING TO LINE-UP W/ VERTICAL WOOD STUD 2 LAYERS OF 76 mm THK SEMI-RIGID MINERAL FIBRE INSULATION R-VALUE:24.0 2-PLY BUILDING PAPER 15.5 mm THK. EXTERIOR GRADE PLYWOOD SHEATHING 38 mm x 140 mm WOOD STUDS SPACED @ 400 mm O.C. BATT INSULATION IN STUDS CAVITY R-VALUE: 21.0 6mil POLYETHYLENE VAPOUR BARRIER 16 mm THK GYPSUM WALL BOARD  LOWER WALL: ROCK VENEER MORTAR, BOND COAT MORTAR, SCRATCH COAT AIR BARRIER AS REQUIRED 16 mm THK EXTERIOR GRADE CEMENT BOARD 152 mm DEEP GALV. STEEL VERTICAL Z-GIRT SPACING TO LINE-UP w/ WOOD STUDS 2 LAYERS OF 76 mm THK SEMI-RIGID MINERAL FIBRE INSULATION R-VALUE:24.0 2-PLY BUILDING PAPER 15.5 mm THK. EXTERIOR GRADE PLYWOOD SHEATHING 38 mm x 140 mm WOOD STUDS SPACED @ 400 mm O.C. BATT INSULATION IN STUDS CAVITY R-VALUE: 21.0 6mil POLYETHYLENE VAPOUR BARRIER 16 mm THK GYPSUM WALL BOARD
	LOWER WALL		
W2			<u>EXTERIOR WALL</u>  EXTERIOR FINISHES - REFER TO ELEVATION FOR MATERIAL AND COLOUR STANDING SEAM METAL WALL PANEL (24ga) 0.61 mm THK W/ GALVALUME COATING NON-PENETRATING THERMAL CLIPS w/ THERMAL PADS 2 LAYERS OF 76 mm THK SEMI-RIGID MINERAL FIBRE INSULATION R-VALUE: 24.0 2-PLY BUILDING PAPER 15.5 mm THK. EXTERIOR GRADE PLYWOOD SHEATHING 38 mm x 140 mm WOOD STUDS SPACED @ 400 mm O.C. BATT INSULATION IN STUDS CAVITY R-VALUE:21.0 6mil POLYETHYLENE VAPOUR BARRIER 16 mm THK GYPSUM WALL BOARD
<b>NOTE:</b> REFER TO STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS ALONG EXTERIOR WALL.			
PARTITION WALL			
GENERAL WALL	P1		<u>PARTITION WALL</u>  16 mm GYPSUM BOARD 38x89mm WOOD STUDS @ 400mmO.C. 16 mm GYPSUM BOARD
	P2		<u>PARTITION WALL</u>  16 mm GYPSUM BOARD TWO ROWS 38x89mm WOOD STUDS STAGGERED @ 400mmO.C CLEAR WIDTH 241mm (OUT TO OUT OF STUDS) 16 mm GYPSUM BOARD
PLUMBING WALL	P3		<u>PLUMBING WALL</u>  16 mm MILDEW RESISTANT GYPSUM BOARD (WASHROOM SIDE) 38x140mm WOOD STUDS @ 400mmO.C
RATED WALL	P4		<u>1HR FRR-BASED ON UL U333</u>  16 mm "TYPE X" GYPSUM BOARD TO ACCEPT PAINT 38x140mm WOOD STUDS SPACED @ 400mmO.C 16 mm TYPE X GYPSUM BOARD TO ACCEPT PAINT
	P4a		<u>1HR FRR-BASED ON UL U333</u>  16 mm "TYPE X" GYPSUM BOARD TO ACCEPT PAINT TWO ROWS 38x89mm WOOD STUDS STAGGERED @ 400mmO.C CLEAR WIDTH 241mm (OUT TO OUT OF STUDS) 16 mm "TYPE X" GYPSUM BOARD TO ACCEPT PAINT
ROOF			
R1			HYBRID ROOF SYSTEM: STANDING SEAM METAL ROOF PANEL (24ga) 0.61mm THK WITH GALVALUME COATING NON-PENETRATING THERMAL CLIPS INSTALLED ON NEOPRENE BEARING PLATES, SPACING AS DETERMINED BY ENGINEER SYNTHETIC NON-WOVEN GEOTEXTILE LAYER, DRAINAGE MAT 1 LAYER OF 127mm THK HIGH DENSITY UNCOATED MINERAL FIBRE INSULATION BOARD (R-VALUE: 21.5) 1 LAYER OF 102mm THK POLYISOCYANURATE RIGID FOAM INSULATION BOARD (R-VALUE=22.5) 3mm P&S SBS A/B MEMBRANE 89mm DEEP COMMERCIAL GRADE WOOD T&A PLANK DECKING 15.5mm DOUGLAS FIR PLYWOOD 203mm x 305mm SOLID WOOD RAFTER
FLOOR			
F1			250mm THK REINFORCED CONCRETE SLAB ON GRADE AS PER STRUCTURAL 10ml POLY VAPOUR BARRIER COMPACT GRANULAR FILL (THICKNESS AS PER STRUCTURAL) (SLOPE SLAB TOP TO TRENCHES / FLOOR DRAINS WHERE REQUIRED / INDICATED ALL FLOOR DRAIN COVERS TO FINISH SMOOTH TO ADJACENT FLOOR FINISHES)
F2			125mm THK REINFORCED CONCRETE SLAB ON GRADE AS PER STRUCTURAL INFILL SLAB ALONG MECHANICAL CHASE 10ml POLY VAPOUR BARRIER COMPACT GRANULAR FILL (THICKNESS AS PER STRUCTURAL) (SLOPE SLAB TOP TO TRENCHES / FLOOR DRAINS WHERE REQUIRED / INDICATED ALL FLOOR DRAIN COVERS TO FINISH SMOOTH TO ADJACENT FLOOR FINISHES)
CEILING			
C1			38mm THK x 89mm SOLID WOOD CEILING HANGERS 1 LAYER OF GYPSUM BOARD REFER TO RCP FOR HEIGHT VARIATIONS
			OPEN TO U/S OF ROOF STRUCTURE

2015 NATIONAL BUILDING CODE OVERVIEW

GENERAL DESCRIPTION & REQUIREMENTS		
MAJOR OCCUPANCIES	GROUP A DIVISION 2 (Part 3) 3.2.2.25	
OCCUPANCY CLASSIFICATIONS	ASSEMBLY	
BUILDING AREA	BUILDING AREA - 319m² + COLUMNADE - 97.54m2 = 416.54 m²	
NUMBER OF STOREYS	1	
CONSTRUCTION TYPE	COMBUSTIBLE	
STRUCTURAL FIRE-RESISTANCE REQUIREMENTS		
FLOOR ASSEMBLY	NO RATING REQUIRED	
LOADBEARING WALLS &COLUMNS	NO RATING REQUIRED	
ROOF ASSEMBLY	NO RATING REQUIRED	
FIRE ALARM & SUPPRESSION SYSTEMS		
AUTOMATIC SPRINKLER SYSTEM	NOT REQUIRED	
FIRE ALARM SYSTEM	NOT REQUIRED	
STANDPIPE SYSTEM	NOT REQUIRED	
EGRESS AND EXITING		
MAXIMUM TRAVEL DISTANCE	30 m	
NUMBER OF EXITS	AT LEAST 2 EXITS ARE REQUIRED (INDEPENDENT OF EACH OTHER)	
OCCUPANT LOAD	1 PER WASHROOM - TOTAL OF 17 PERSONS	
	44 m² OF ASSEMBLY SPACE WITH FIXED SEATS - 0.75 m2 PER PERSON = 59 PERSONS	
	MAXIMUM 76 PERSONS	
BARRIER-FREE DESIGN		
ENTRANCES	50% OF ALL ENTRANCES ARE REQUIRED TO BE BARRIER FREE.	
PATH OF TRAVEL	920 mm MINIMUM	
DOORS	POWER OPERATED DOORS ARE NOT REQUIRED BUT WILL BE PROVIDED CLEAR DOOR WIDTH OF 800 mm MINIMUM	
WASHROOMS	1500 MM DIAMETER TURNING CIRCLE INSIDE ROOM CLEAR DOOR WIDTH OF 850 MM DIMENSION FROM CENTERLINE OF WATER CLOSET TO SIDE WALL: BETWEEN 460 mm - 480 mm WATER CLOSET CLEARANCE: HAVE A CLEAR FLOOR SPACE AT LEAST 900 mm WIDE THAT IS PARALLEL AND ADJACENT TO THE OPEN SIDE OF THE WATER CLOSET GRAB BARS REQUIRED AS PER SENTENCE 3.8.3.8 (2)	
INTERIOR FIRE SEPARATIONS		
ROOM/ SPACE	FIRE-RESISTANCE RATING OF FIRE SEPARATION	FIRE-PROTECTION RATING OF CLOSURE
ROOMS CONTAINING FUEL-FIRED APPLIANCES	1 HR	45 MIN
ELECTRICAL ROOMS	1 HR	45 MIN
JANITOR'S ROOM	45 MIN	45 MIN

riddell architect ltd.

1110 - 1st. Street SW. - Calgary, Alberta, Canada T2R 0V1  
tele: 403.266.2100 | fax: 403.266.2170 | info@riddell.ca | www.riddell.ca

5	ISSUED FOR TENDER	12-14-18
4	ISSUED FOR 99%	10-26-18
3	ISSUED FOR 90%	08-20-18
2	ISSUED FOR 60%	05-31-18
1	ISSUED FOR 30%	03-28-18

Revision / Revision	Description / Description	Date / Date
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Client / client

Project title/Titre du projet

ROGERS PASS WASHROOM  
FACILITY AND DAY USE  
AREA

Approved by/Approuve par AMINA OYAKHILOME
Designed by/Concept par PETER SCHULZ
Drawn by/Dessiné par PIO DAYAWON
Project Manager/Administrateur de Projets ANDREW OOSTING
Architectural and Engineering Resources Manager/ Ressources Architectural et de Directeur d'ingénierie
Client / client <b>Parks Canada</b>
Drawing title / Titre du dessin

SYMBOL LEGEND, ABBREVIATIONS,  
CONSTRUCTION ASSEMBLIES, CODE  
REVIEW

Project No. / No. du project CAI 752	Sheet / Feuille A0.01	Revision no. / La Révision no. 5
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1	ISSUED FOR TENDER	12-15-18
Revision / Revision	Description / Description	Date / Date

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**ROGERS PASS  
WASHROOM AND DAY  
USE AREA**

Approved by/Approuve par
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Designed by/Concept par	
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Drawn by/Dessine par	
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Project Manager/Administrateur de Projets
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Author

Client / client
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Parks Canada

Drawing title / Titre du dessin
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OVERALL UTILITIES PLAN

SCALE: 1:300

Project No. / No. du project  CAI 752	Sheet / Feuille  I - 1	Revision no. / La Révision no.  1
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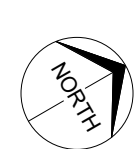
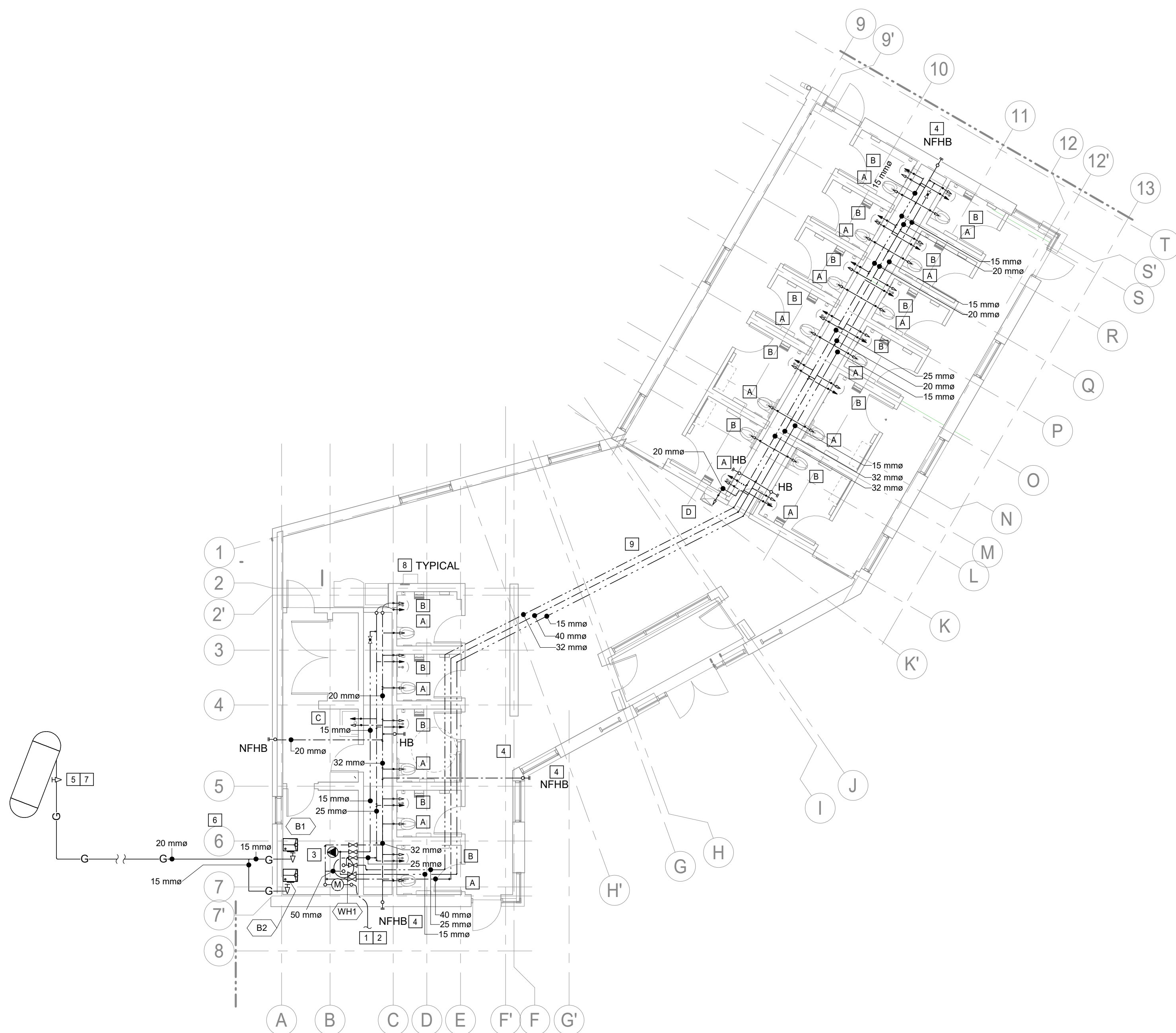
EMBE CONSULTING ENGINEERS  
SUITE 204, 110 12th AVENUE, S.W.  
CALGARY, AB, T2R 0G7  
403-460-2277  
info@embeconsulting.ca

#### GENERAL NOTES

1. BIDDING CONTRACTORS ARE TO REVIEW ALL ARCHITECTURAL, MECHANICAL, ELECTRICAL, CIVIL AND STRUCTURAL DRAWINGS PRIOR TO SUBMITTING TENDER PRICE.
2. LOCATIONS OF EXISTING SERVICES ARE APPROXIMATE, VERIFY ON SITE.
3. CONTRACTOR TO ENGAGE STRUCTURAL ENGINEER TO VERIFY ALL SEISMIC REQUIREMENTS FOR PIPE AND DUCT HANGING METHODS.
4. WHERE DISCREPANCIES ARE FOUND, CONTACT ENGINEER IN WRITING PRIOR TO SUBMITTING PRICE.
5. PLUMBING LINES ETC. ARE SHOWN DIAGRAMMATICALLY, FINAL LOCATIONS, ROUTING ETC. TO BE CO-ORDINATED ON SITE.
6. PROVIDE TRAP SEALER FOR ALL FLOOR AND HUB DRAINS.
7. EXTEND SANITARY VENT LINE FROM FIXTURES AS PER NATIONAL AND LOCAL PLUMBING CODES.
8. ALL FLOOR MOUNTED MECHANICAL EQUIPMENT TO BE MOUNTED ON 100mm HOUSE KEEPING PAD.
9. CONTRACTOR TO PROVIDE LAPTOP IN MECHANICAL ROOF TO FACILITATE COMMISSIONING/ MAINTENANCE.
10. CONTRACTOR TO ENSURE ALL MECHANICAL EQUIPMENT SHALL BE RATED TO PERFORM AT HIGH ELEVATION.

#### PLUMBING NOTES

- 1 APPROXIMATE LOCATION OF INCOMING 100mmø DCW LINE. CONTRACTOR TO CONFIRM EXACT LOCATION ON SITE.
- 2 EXTEND 100mmø JOINLESS PEX UNDER SLAB TO WATER METER IN MECHANICAL ROOM.
- 3 EXTEND 40mmø CW, 25mmø HW AND 15mmø RECIRC LINE TO SOUTH WING WASHROOM AND EXTEND 40mmø CW, 32mmø HW AND 15mmø RECIRC LINE TO NORTH WING WASHROOM.
- 4 EXTEND 20mmø CW TO NON-FREEZE HOSE BIBB. NFHB TO BE 914mm A.F.F. COORDINATE WITH ARCHITECT. NON-FREEZE HOSE BIBB TO BE JAY-R SMITH 55090QT OR EQUIVALENT.
- 5 APPROXIMATE LOCATION OF 500 GALLON PROPANE GAS TANK C/W REGULATOR TO BE SUPPLIED AND INSTALLED BY CONTRACTOR AS PART OF THIS CONTRACT. ENSURE TANK HAS 10FT CLEARANCE FROM BUILDING AND PROPERTY LINE. CONTRACTOR TO CONFIRM EXACT REQUIRED EQUIPMENT WITH THE SUPPLIER BEFORE SUBMITTING BID. ENSURE TANK IS RATED FOR HIGH ALTITUDE OPERATION AS PER CSA B149.2-15.
- 6 EXTEND 20mmø GAS LINE FROM PROPANE TANK TO BOILERS C/W GAS COCK. CONFIRM PIPE SIZE BASED ON THE EXACT LENGHT OF THE GAS PIPE ON SITE. GAS PIPE FROM PROPANE TANK TO THE BUILDING TO BE BURIED UNDERGROUND. CONFIRM UNDERGROUND DEPTH OF THE PIPE AND DETAIL WITH SUPPLIER.
- 7 PROPANE TANK TO BE LOCATED 38FT (11582mm) FROM THE BUILDING. CONTRACTOR TO COORDINATE WITH LANDSCAPING FOR EXACT LOCATION OF THE TANK ON SITE.
- 8 PROVIDE ZURN MODEL 1260XL, WADE 4481 OR APPROVED EQUIVALENT WATER HAMMER ARRESTOR AT CW AND HW BRANCHES SERVING THE FIXTURES.
- 9 COORDINATE WITH PCA FOR PIPE INSULATION COLOR WHERE THE PIPE IS EXPOSED TO PUBLIC AREA.

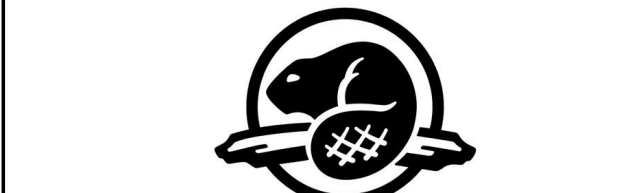


01 FLOOR PLAN - PLUMBING LAYOUT  
M2 1 : 100

8	ADDENDUM #1	19-01-24
7	ISSUED FOR TENDER	18-12-13
6	99% REVIEW	18-10-26
5	99% REVIEW	18-10-19
4	99% REVIEW	18-10-03
3	90% REVIEW	18 08 17
2	60% REVIEW	18 06 08
1	30% REVIEW	18 03 23

Revision / Revisión	Description / Description	Date / Date
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Client / client



Parks Canada  
Parcs Canada

Project title/Titre du projet

## ROGERS PASS WASHROOM FACILITY AND DAY USE AREA

Approved by/Approuve par  
MB

Designed by/Concept par  
DL

Drawn by/Dessine par  
DL

Project Manager/Administrateur de Projets

Architectural and Engineering Resources Manager/  
Ressources Architectural et de Directeur d'ingénierie

Client / client  
Parks Canada

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FLOOR PLAN - PLUMBING LAYOUT

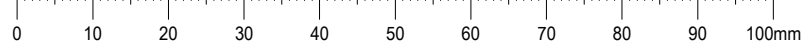
Project No. / No. du  
project

CAI 752

Sheet / Feuille  
M2

Revision no. /  
La Révision  
no.





EMBE CONSULTING ENGINEERS

SUITE 204, 110 12th AVENUE, S.W.

CALGARY, AB, T2R 0G7

403-460-2277

info@embeconsulting.ca

MANIFOLD IN-FLOOR HEATING SCHEDULE

AREA	273 m2
TOTAL HEATING CAPACITY	107.7 MJ/Hr
TOTAL WATER FLOW	0.67 L/S
OUTPUT	89.31 MJ/Hr
NUMBER OF LOOPS	10
AVERAGE LENGHT OF LOOP	90.09 m
PIPE SIZE/LOOP	15 mm
AVERAGE WATER FLOW PER LOOP	0.06 L/S
PRESSURE DROP	21.82 kPa
PIPE SPACING	300 mm O.C.

GAS EQUIPMENT SCHEDULE

EXTEND 2"Ø GAS LINE FROM PROPANE TANK TO BOILERS. SIZING BASED ON 100FT LENGTH TO FURTHEST EQUIPMENT.

GAS LOAD SIZE: 1,000 CFH

GAS EQUIPMENT LOAD: 860 CFH

BOILER B1	110 CFH
BOILER B2	110 CFH
TOTAL LOAD	220 CFH
	220,000 BTUH

EXPANSION TANK SCHEDULE

TAG	MANUFACTURER	MODEL	VOLUME	REMARKS
EX1	AMTROL TACO OR APPROVED EQUIVALENT	AX-20V, CBX42-125 OR APPROVED EQUIVALENT	41.3 L	861 KPA OPERATING PRESSURE. ENSURE EQUIPMENT IS RATED FOR HIGH ALTITUDE OPERATION

HOT WATER HEATER UNIT SCHEDULE

TAG	LOCATION	MANUFACTURER	MODEL	CAPACITY	BTU/HR INPUT	REMARKS
WH1	MECH ROOM	TRIANGLE TUBE OR APPROVED EQUIVALENT	SMART 80 OR APPROVED EQUIVALENT	253 LT	INDIRECT	INSTALL ON HOUSE KEEPING PADS. SEE BOILER SCHEMATIC FOR PIPING. ENSURE EQUIPMENT IS RATED FOR HIGH ALTITUDE OPERATION.

BOILER UNIT SCHEDULE

TAG	LOCATION	MANUFACTURER	MODEL	GAS (kJ/Hr)	HEATING CAPACITY (kJ/Hr)	ELECTRICAL (V/PH/Hz)	REMARKS
B1	MECH ROOM	LOCHINVAR, VISSMAN OR APPROVED EQUIVALENT	WHL111, B2HB 35-125 OR APPROVED EQUIVALENT	116056.143	107615.69	120/1/60	WALL MOUNTED CW LP GAS KIT. PROVIDE LOW WATER CUT-OFF SWITCH AND FLOW SWITCH. COORDINATE WITH STRUCTURAL FOR HANGING BOILERS TO THE WALL. ENSURE EQUIPMENT IS RATED FOR HIGH ALTITUDE OPERATION.
B2	MECH ROOM	LOCHINVAR, VISSMAN OR APPROVED EQUIVALENT	WHL111, B2HB 35-125 OR APPROVED EQUIVALENT	116056.143	107615.69	120/1/60	WALL MOUNTED CW LP GAS KIT. PROVIDE LOW WATER CUT-OFF SWITCH AND FLOW SWITCH. COORDINATE WITH STRUCTURAL FOR HANGING BOILERS TO THE WALL. ENSURE EQUIPMENT IS RATED FOR HIGH ALTITUDE OPERATION.

HRV SCHEDULE

TAG	LOCATION	MANUFACTURER	MODEL	SUPPLY AIR FLOW (L/S)	SUPPLY E.S.P (Pa)	ELECTRICAL (V/PH/Hz)	REMARKS
HRV1	CEILING SPACE	VANEE, ALDES OR APPROVED EQUIVALENT	6LC, H650-F1-EC OR APPROVED EQUIVALENT	283.0 L/s	124	115/1/60, 5.7A, 640W	PROVIDE 7 DAY PROGRAMMABLE THERMOSTAT. MOUNT HORIZONTAL IN CEILING SPACE. PROVIDE ALUMINIUM CORE CW AUTOMATIC RECIRC DEFROST CYCLE. DRAIN CONDENSATE TO NEAREST DRAIN. PROVIDE ACCESS AS PER MANUFACTURER'S RECOMMENDATION. PROVIDE HRV CONTROLLER. HRV TO RUN CONTINUOUSLY.
HRV2	CEILING SPACE	VANEE, ALDES OR APPROVED EQUIVALENT	6LC, H650-F1-EC OR APPROVED EQUIVALENT	283.0 L/s	124	115/1/60, 5.7A, 640W	PROVIDE 7 DAY PROGRAMMABLE THERMOSTAT. MOUNT HORIZONTAL IN CEILING SPACE. PROVIDE ALUMINIUM CORE CW AUTOMATIC RECIRC DEFROST CYCLE. DRAIN CONDENSATE TO NEAREST DRAIN. PROVIDE ACCESS AS PER MANUFACTURER'S RECOMMENDATION. PROVIDE HRV CONTROLLER. HRV TO RUN CONTINUOUSLY.

PUMP SCHEDULE

TAG	SERVICE	MANUFACTURER	MODEL	FLOW (L/S)	HEAD (kPa)	MOTOR POWER	ELECTRICAL (V/PH/Hz)	REMARKS
P1	BOILER INJECTION PUMP	GRUNDFOS, TACO OR APPROVED EQUIVALENT	UPS-32-40 F, 2400-40 OR APPROVED EQUIVALENT	1.021	29.98	102W	115/1/60	3 SPEED, INLINE, WET ROTOR CIRCULATOR. CONTROLLED BY BOILER CONTROLLER. SET PUMP ON MEDIUM SPEED.
P2	BOILER INJECTION PUMP	GRUNDFOS, TACO OR APPROVED EQUIVALENT	UPS-32-40 F, 2400-40 OR APPROVED EQUIVALENT	1.021	29.98	102W	115/1/60	3 SPEED, INLINE, WET ROTOR CIRCULATOR. CONTROLLED BY BOILER CONTROLLER. SET PUMP ON MEDIUM SPEED.
P3	IN-FLOOR HEATING PUMP	GRUNDFOS, TACO OR APPROVED EQUIVALENT	UPS-32-80 F, 2400-10 OR APPROVED EQUIVALENT	0.67	45	160W	115/1/60	MAINTAIN CONSTANT PRESSURE. SET PRESSURE SETPOINT TO 15FT OF HEAD FOR COMMISSIONING.
P4	IN-FLOOR HEATING STANDBY PUMP	GRUNDFOS, TACO OR APPROVED EQUIVALENT	UPS-32-80 F, 2400-10 OR APPROVED EQUIVALENT	0.67	45	160W	115/1/60	MAINTAIN CONSTANT PRESSURE. SET PRESSURE SETPOINT TO 15FT OF HEAD FOR COMMISSIONING.
P5	DOMESTIC WATER HEATER INJECTION PUMP	GRUNDFOS, TACO OR APPROVED EQUIVALENT	UPS-32-80 F, 2400-10 OR APPROVED EQUIVALENT	0.30	45	152W	115/1/60	INLINE WET ROTOR CIRCULATOR. PROVIDE TEKMAR 150 CONTROLLER TO MAINTAIN DISCHARGE TEMPERATURE SETPOINT ON WATER HEATER. SET AT MEDIUM SPEED.
P6	DOMESTIC WATER HEATER STANDBY PUMP	GRUNDFOS, TACO OR APPROVED EQUIVALENT	UPS-32-80 F, 2400-10 OR APPROVED EQUIVALENT	0.30	45	152W	115/1/60	INLINE WET ROTOR CIRCULATOR. PROVIDE TEKMAR 150 CONTROLLER TO MAINTAIN DISCHARGE TEMPERATURE SETPOINT ON WATER HEATER. SET AT MEDIUM SPEED.
P7	DOMESTIC WATER RECIRC PUMP	GRUNDFOS, TACO OR APPROVED EQUIVALENT	UP 15-18B5, 006-BC4 OR APPROVED EQUIVALENT	0.18	29.98	85W	115/1/60	INLINE CIRCULATOR CW/ TIMER AND AQUASTAT. SET AT MEDIUM SPEED

PLUMBING FIXTURE SCHEDULE

TAG	FIXTURE	MANUFACTURER	CAT. #	MODEL	ACCESSORIES	TRIM/SUPPLIES	TRAP	DRAIN	VENT	CW	HW
A	WALL HUNG WATER CLOSET (ADA)	AMERICAN STANDARD, TOTO OR APPROVED...	2856.128	AFWALL MILLENIUM FLOWISE, 381mm HEIGHT, 1.28 Gpf, ELONGATED SEAT, FLUSHOMETER MANUAL FLUSH VALVE, ADA COMPLIANT, MODEL 3461.001	SOLID PLASTIC, OPEN FRONT, WHITE SEAT, BOLTS, NUTS AND CAPS, FLEXIBLE HOSE CW/ STOPS ON SUPPLIES	MANUAL FLUSH VALVE AMERICAN STANDARD MODEL 6047.121	INTEGRAL	75	38	25	-
B	WALL HUNG LAVATORY	AMERICAN STANDARD, TOTO OR APPROVED EQUIVALENT	0955.000	MURRO UNIVERSAL DESIGN WALL-HUNG LAVATORY, HOLES ON 102mm CENTERS, ADA COMPLIANT	KNEE GUARD 0059 020, STOPS ON ALL SUPPLIES	TOTO TEL105 SERIES CW/ ECOPOWER, CONTROL MODULE AND MIXING VALVE. ENSURE CONTROL MODULE IS INSTALLED RECESSED.	P-TRAP	40	32	15	15
C	MOP SINK	FIAT, KINDRED OR APPROVED EQUIVALENT	MSB-2424	MOLDED-STONE MOP SERVICE BASSIN	STAINLESS STEEL DRAIN, STAINLESS STEEL BUMPER GUARDS	CRANE 830AA WALL MOUNTED CW PAIL HOOK, VACUUM BRAKER, HOSE CONNECTION, 1200mm HOSE	P-TRAP	75	40	15	15
D	WATER FOUNTAIN	ELKAY, HAWS OR APPROVED EQUIVALENT	EZS8WSSK	115/1/60, 5A FLA, 370W, c/w bottle filling station. Stops on supplies	STOPS ON SUPPLIES	N/A	P-TRAP	40	32	20	20

CONFIRM ALL PLUMBING FIXTURES WITH ARCHITECT, OWNER AND INTERIOR DESIGNER.

GRILLE/ DIFFUSER SCHEDULE

GRILLE/DIFFUSER TYPE → ← NECK SIZE OR GRILLE SIZE

← AIR FLOW (L/S)

TYPE S1	- EH PRICE MODEL 520/F/A/B12 (FINISH: ALUMINUM )
TYPE R1	- EH PRICE MODEL 510D/F/A/B12 (FINISH: WHITE)
TYPE L1	- WESTVENT SF-430W, STEEL, 100mm WEATHER PROOF BLADE (FINISH: BY ARCHITECT)

PROVIDE DAMPERS FOR EXHAUST GRILLES

PROVIDE ALL DIFFUSERS AND GRILLES WITH INSECT SCREEN THAT CAN BE EASILY CLEANED AND REPLACED.

PROVIDE MOUNTING KITS FOR T-BAR AND DRYWALL WHERE REQUIRED

CONTRACTOR TO PROVIDE ACCESS PANELS WHERE BALANCING DAMPERS ARE INACCESSIBLE. CONTRACTOR TO CONFIRM LOCATION OF ACCESS PANEL WITH GC PRIOR TO INSTALLATION.

CONFIRM WITH ARCHITECT.

8	ADDENDUM #1	19-01-24
7	ISSUED FOR TENDER	18-12-13
6	99% REVIEW	18-10-26
5	99% REVIEW	18-10-19
4	99% REVIEW	18-10-03
3	90% REVIEW	18 08 17
2	60% REVIEW	18 06 08
1	30% REVIEW	18 03 23

Revision / Revision	Description / Description	Date / Date
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Client / client



Parks Canada

Parcs Canada

Project title/Titre du projet

ROGERS PASS WASHROOM FACILITY AND DAY USE AREA

Approved by/Approuve par

MB

Designed by/Concept par

DL

Drawn by/Dessine par

DL

Project Manager/Administrateur de Projets

Architectural and Engineering Resources Manager/ Ressources Architectural et de Directeur d'ingénierie

Client / client

Parks Canada

Drawing title / Titre du dessin

MECHANICAL SCHEDULES

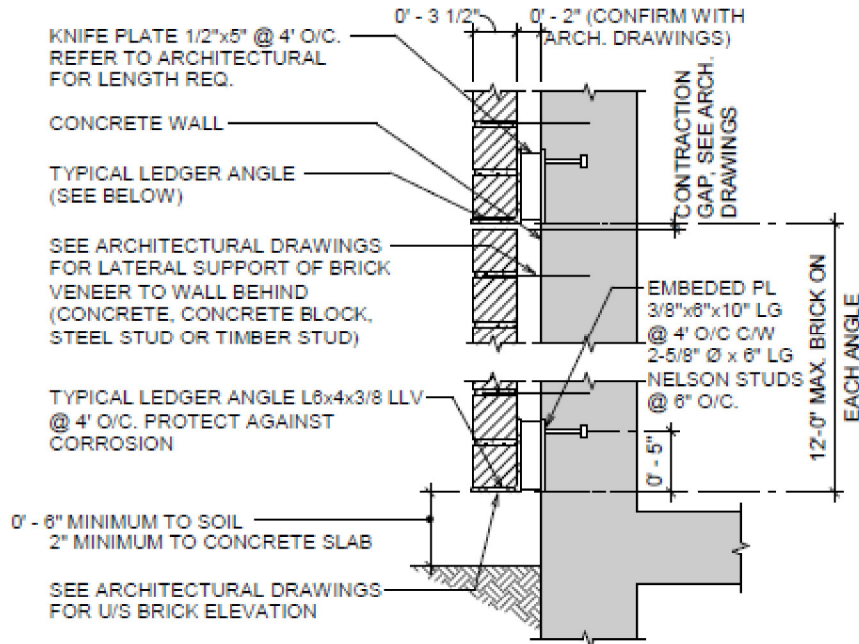
Project No. / No. du project	Sheet / Feuille	Revision no. / La Revision no.
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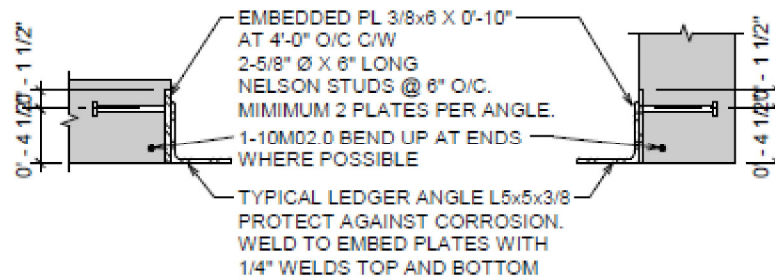
M6

## ARCHITECTURAL BRICK VENEER (U.N.O.)

- SEE ARCHITECTURAL DRAWINGS FOR BRICK VENEERS. UNLESS NOTED OTHERWISE 3 1/2" BRICK VENEERS SHALL BE SUPPORTED AT BOTTOM BY DIRECT BEARING ON CONCRETE SLAB OR CORBEL (IF SHOWN ON STRUCTURAL DRAWINGS) OR ON A STEEL LEDGER ANGLE (SEE BELOW).



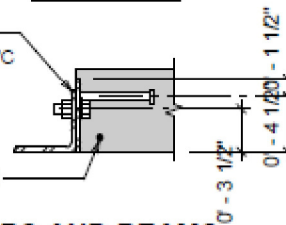
### AT WALLS



### AT SLABS

### AT BEAMS

EMBEDDED PL 3/8x6 X 0'-10" AT 4'-0" O/C C/W 2-5/8" Ø X 6" LONG NELSON STUDS AT 8" O/C AND 2-3/4" Ø GALVANIZED A307 BOLTS AT 5 1/2" O/C. TACKWELD BOLT HEAD TO WASHER, AND WASHER TO EMBEDDED PLATE. MINIMUM 2 PLATES PER ANGLE 1-10M02.0 BEND UP AT ENDS WHERE POSSIBLE



### ALTERNATE DETAIL AT SLABS AND BEAMS

- CORROSION PROTECTION OF LEDGER ANGLES SHALL BE HOT-DIP GALVANIZING. AFTER WELDING GRIND SMOOTH ALL WELDS. AFTER WELDING OR BOLTING THE ANGLE IN PLACE, COAT ALL NON-GALVANIZED STEEL (EXPOSED PORTION OF EMBED PLATES, WELDS AND BOLT HEADS) WITH GALVA-CON.
- SEE ARCHITECTURAL DRAWINGS FOR BRICK SUPPORTS IN CASES DIFFERENT THAN THE GENERIC EXAMPLES SHOWN ABOVE. SHOP DRAWINGS SHOWING ALL STEEL SUPPORTS FOR BRICK VENEER SHALL BE SUBMITTED FOR REVIEW.