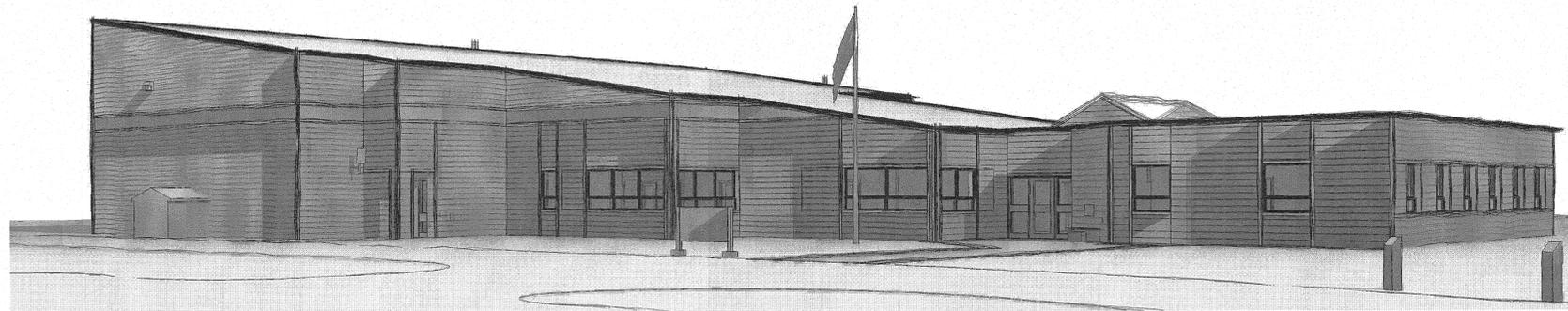
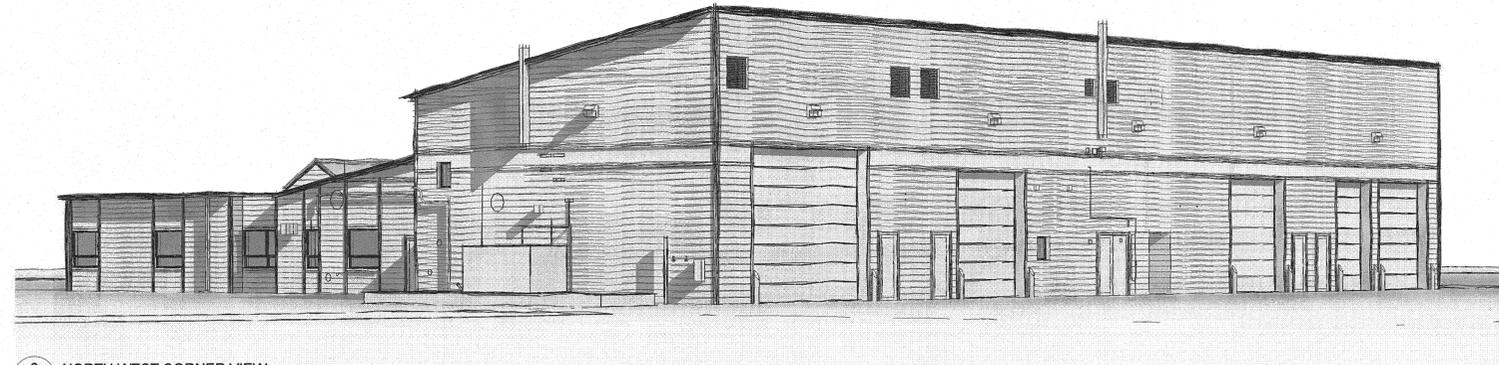


# PUKASKWA PARK ADMINISTRATION BUILDING REPAIRS AND UPGRADES PHASE 2



1 SOUTH EAST CORNER VIEW  
A1



2 NORTH WEST CORNER VIEW  
A1

**ARCHITECT:**

ARCHITECTURE | 49  
1269 PREMIER WAY, THUNDER BAY,  
ONTARIO, CANADA P7B 0A3  
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**MECHANICAL ENGINEER:**

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LIST OF DRAWINGS

SHEET NUMBER	DRAWING TITLE
<b>ARCHITECTURAL</b>	
A1	TITLE SHEET
A2	GENERAL ARRANGEMENT SITE PLAN & NEW MAIN ENTRANCE PLAN
A3	SITE DETAILS
A4	CONSTRUCTION ASSEMBLIES, NBC MATRIX
A5	DEMOLITION PLAN AND ELEVATIONS
A6	MAIN FLOOR PLAN
A7	BUILDING ELEVATIONS
A8	WALL SECTIONS
A9	SECTION DETAILS
A10	PLAN DETAILS
A11	WINDOW SCHEDULE AND DETAILS
A12	DOOR SCHEDULE AND DETAILS
A13	ALTERNATIVE #1 RIGID INSULATION
<b>MECHANICAL</b>	
M1	MECHANICAL RENOVATIONS PLAN AND NOTES
M2	SYSTEM RENOVATIONS SCHEMATICS, DETAILS AND NOTES
<b>ELECTRICAL</b>	
E1	CONSTRUCTION NOTES
E2	INTERIOR POWER PLAN
E3	EXTERIOR POWER PLAN
E4	EXTERIOR LIGHTING PLAN
E5	LIGHTING DETAILS
E6	LIFE SAFETY PLAN

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03		
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revision		date

Do not scale drawings.  
Verify all dimensions and conditions on site and  
immediately notify the engineer of all discrepancies.

A B C	A	Detail No.
	B	No. du détail
	C	drawing no. - where detail required dessin no. - où détail exigé

project title  
titre du projet  
Ontario  
PUKASKWA NATIONAL PARK  
ADMINISTRATION BUILDING  
REPAIR AND UPGRADES PHASE 2

drawing title  
titre du dessin  
TITLE SHEET

drawn by  
dessiné par MAH

designed by  
conc par ML

approved by  
approuvé par TJA

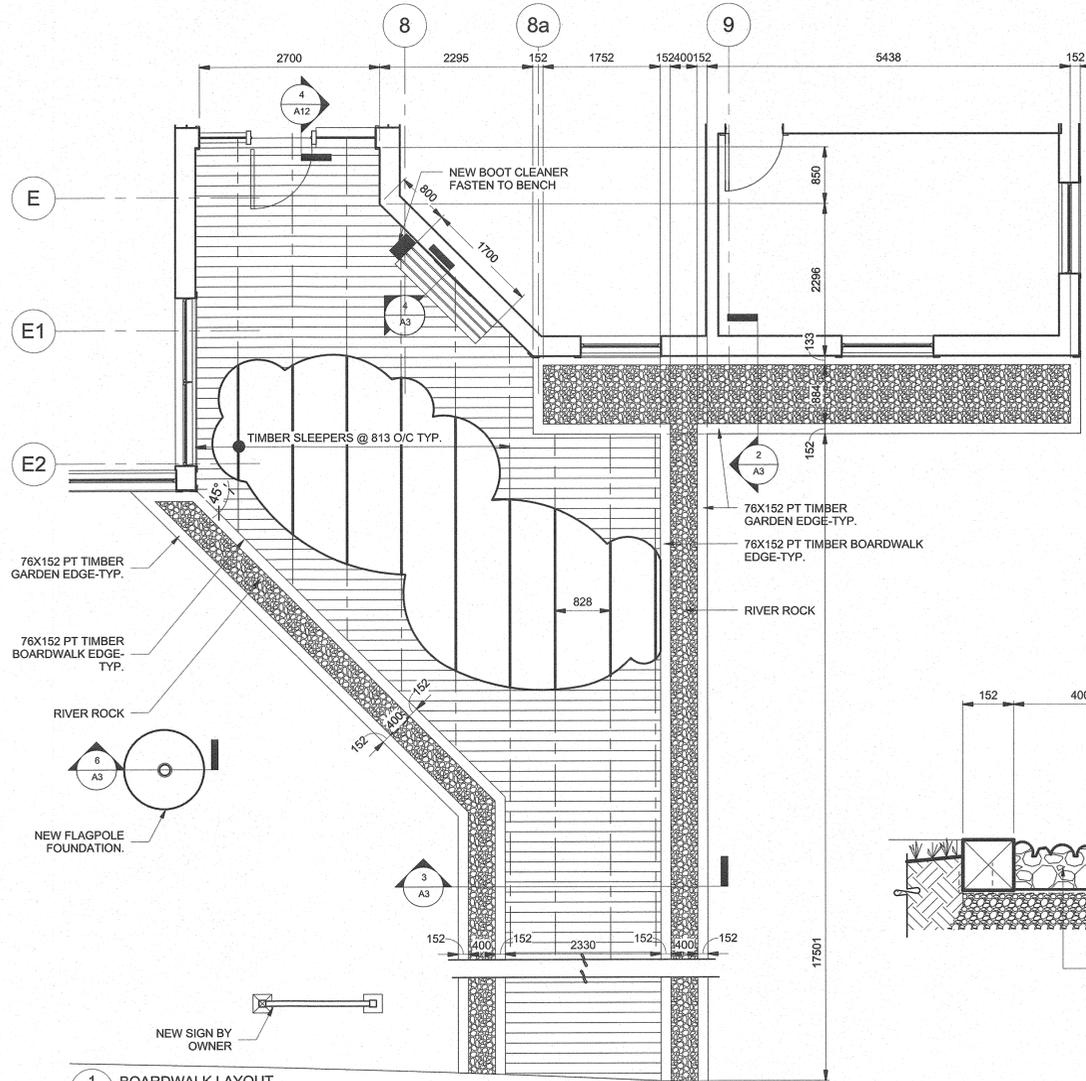
tender submission  
TENDER  
project manager  
administrateur de projets

project date  
date du projet 2017/01/27

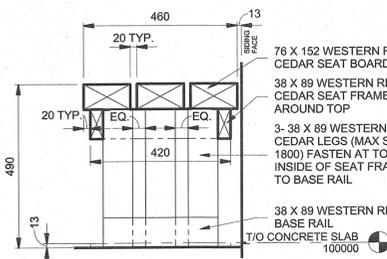
project no.  
no. du projet 151-06165-06

drawing no.  
dessiné no. A1





1 BOARDWALK LAYOUT  
A3 1:50 ALTERNATIVE NO. 4

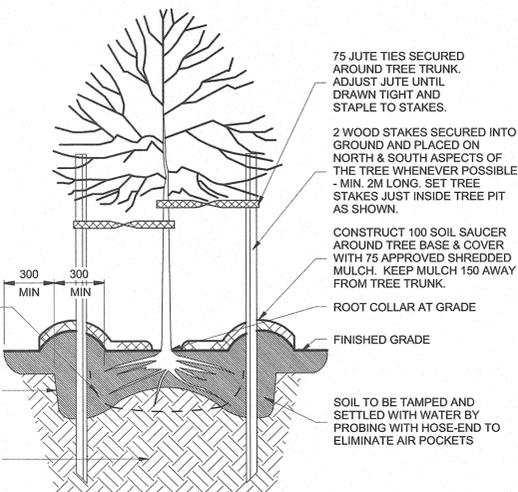


4 BENCH SECTION - END VIEW  
A3 1:10 ALTERNATIVE NO. 4

IF ROOTS ARE CONTAINED IN A BURLAP SACK, CUT AND REMOVE TOP 1/2 OF BURLAP & WIRE BASKET FROM ROOTBALL INCLUDING ALL TIE ROPE

SCARIFY, IRRIGATE AND FERTILIZE THE INSIDE OF THE TREE PIT PRIOR TO PLANTING

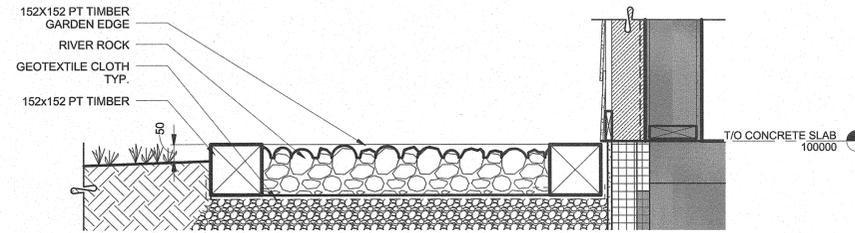
BOTTOM OF ROOT SYSTEM TO SIT ON COMPACTED SUBGRADE CARE SHOULD BE TAKEN TO AVOID EXCESSIVE SETTLEMENT OF ROOTS FOLLOWING PLANTING



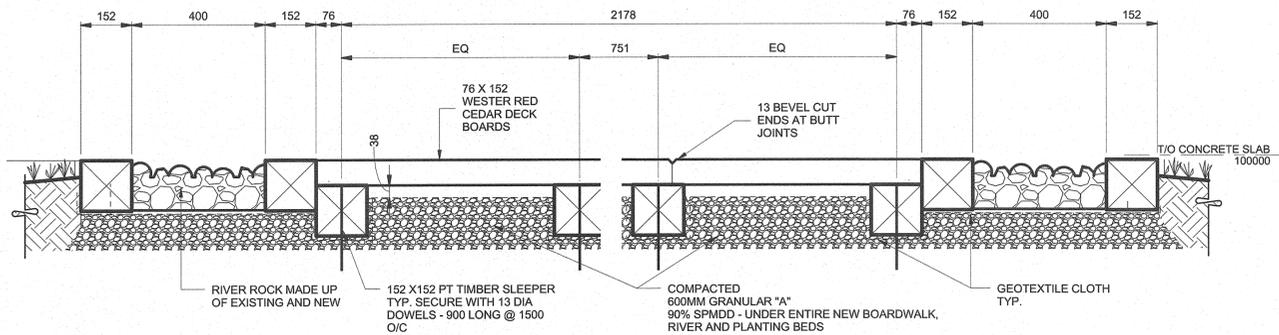
5 TREE PLANTING DETAIL  
A3 1:20 ALTERNATIVE NO. 4

**ALTERNATIVE NO. 4**

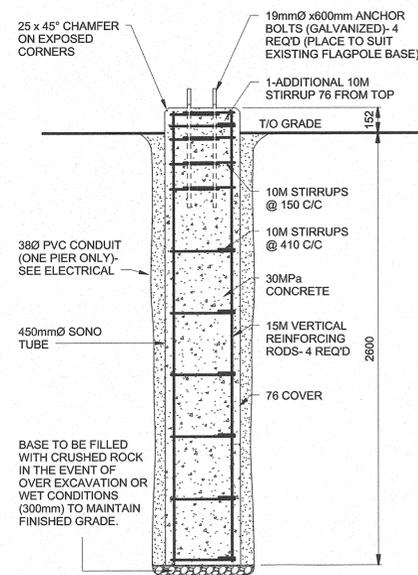
- THE REMOVAL OF EXISTING WALWAY BOARDWALK AND CONCRETE WALKWAY FROM BUILDING TO ROAD
- INSTALLATION OF NEW BOARDWALK C/W ADJACENT ROCK BEDS
- REMOVAL OF 2 EXISTING BENCHES
- INSTALLATION OF 2 NEW BENCH
- INSTALLATION OF 2 NEW TREES
- THE REMOVAL OF POSTS ALONG THE ROADWAY
- THE REMOVAL OF 2 EXISTING BUT ABANDONED LIGHT POST FOUNDATIONS IN THE FRONT LAWN AREA
- REMOVAL OF THE EXISTING SIGN FOUNDATION - RETURN SIGN TO OWNER
- INSTALLATION OF NEW BOOT CLEANER



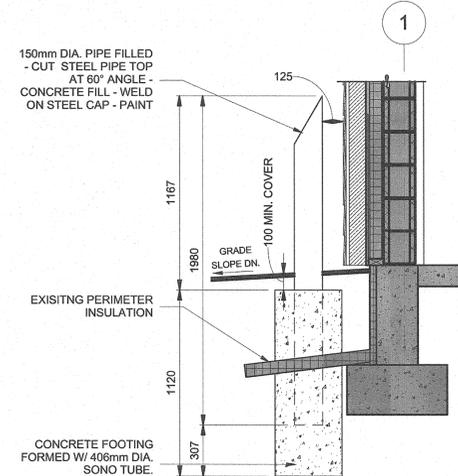
2 PLANTING BED DETAIL  
A3 1:10 ALTERNATIVE NO. 4



3 BOARDWALK DETAIL  
A3 1:10 ALTERNATIVE NO. 4



6 FLAGPOLE BASE DETAIL  
A3 1:20



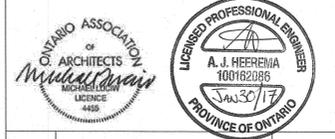
7 BOLLARD DETAIL  
A3 1:20



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B	drawing no. - where detail required
B	dessin no. - ou détail exigé
C	drawing no. - where detailed
C	dessin no. - ou détaillé

project title / titre du projet

Ontario  
PUKASKWA NATIONAL PARK  
ADMINISTRATION BUILDING  
REPAIR AND UPGRADES PHASE 2

**SITE DETAILS**

drawn by / dessiné par	JDJ
designed by / conçu par	ML
approved by / approuvé par	TJA

tender submission / soumission de projet  
TENDER / TENDRE

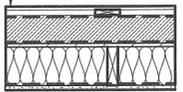
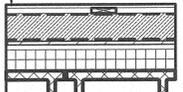
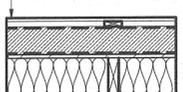
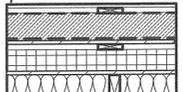
project date / date du projet  
2017/01/27

project no. / no. du projet  
151-06165-06

drawing no. / dessiné no.  
A3

### WALL TYPES

NOTE: REFER TO FLOOR PLAN FOR RATED WALL LOCATIONS. WALL ASSEMBLIES TO BE RATED ONLY IN LOCATIONS INDICATED ON FLOOR PLAN.  
FOR WOOD STRAPPING, #10 WOOD SCREWS (152 LG), 2 PER STUD OR STRAPPING WHERE RUNNING PERPENDICULAR AND @ 203 O/C WHERE RUNNING PARALLEL. UNLESS NOTED OTHERWISE

TYPE	ASSEMBLY	NOTES
E1	<p><b>FIBER CEMENT BOARD (PLANK, PANEL, TRIM)</b> 19 x 89 VERT. WOOD STRAPPING @ 406 O/C (MATCH EXIST STUDS) WEATHER RESISTANT BARRIER 100 WOOD FIBER INSULATION BOARD (R14.5) AIR BARRIER 13 PLYWOOD SHEATHING (EXISTING) R-24 BATTS TO FILL CAVITY (EXISTING) 38 x 140 WOOD STUDS @ 400 O/C (EXISTING) VAPOUR BARRIER (EXISTING) 16 GYPSUM BOARD (EXISTING)</p> 	
E2	<p><b>FIBER CEMENT BOARD (PLANK, PANEL, TRIM)</b> 19 x 89 VERT. WOOD STRAPPING @ 406 O/C (MATCH EXIST STRAPPING) WEATHER RESISTANT BARRIER 100 WOOD FIBER INSULATION BOARD (R14.5) AIR BARRIER 13 PLYWOOD SHEATHING (EXISTING) WOOD STRAPPING (EXISTING) 75 RIGID INSULATION (EXISTING) VAPOUR BARRIER (EXISTING) 190 CMU (EXISTING)</p> 	SEE DETAILS 1, 2 & 4 ON SHEET A9
E3	<p><b>FIBER CEMENT BOARD (PLANK, PANEL, TRIM)</b> 19 x 89 VERT. WOOD STRAPPING @ 406 O/C (MATCH STUDS) WEATHER RESISTANT BARRIER 100 WOOD FIBER INSULATION BOARD (R14.5) AIR BARRIER 13 PLYWOOD SHEATHING R-24 BATTS TO FILL CAVITY 38 x 140 WOOD STUDS @ 406 O/C VAPOUR BARRIER 16 GYPSUM BOARD</p> 	
E4	<p><b>FIBER CEMENT BOARD (PLANK, PANEL, TRIM)</b> 19 x 89 VERT. WOOD STRAPPING @ 406 O/C (MATCH EXIST STUDS) WEATHER RESISTANT BARRIER 100 WOOD FIBER INSULATION BOARD (R14.5) AIR BARRIER 13 PLYWOOD SHEATHING (EXISTING) WOOD STRAPPING (EXISTING) 75 RIGID INSULATION (EXISTING) 16 PLYWOOD SHEATHING (EXISTING) 38 x 140 WOOD STUDS @ 400 O/C (EXISTING) 16 PLYWOOD SHEATHING (EXISTING)</p> 	

### ABBREVIATIONS

AFB	ABOVE FINISHED FLOOR
B.F.	BARrier FREE
BH	BLOCK HEATER
B/S	BOTH SIDES
BLK	BLOCK
C/C	CENTRE TO CENTRE
CT	CERAMIC TILE
CW	COMPLETE WITH
CONC.	CONCRETE
CONT.	CONTINUOUS
DWG	DRAWING
EL/ELEV	ELEVATION
F.A.R.	FIRE ACCESS ROUTE
FEC	FIRE EXTINGUISHER CABINET
FND.	FOUNDATION
FOS	FACE OF STUD
GALV.	GALVANIZED
G.L.	GRID LINE
GWG	GEORGIAN WIRE GLASS
GYP	GYPSUM BOARD
I/F	INSIDE FACE
MAX.	MAXIMUM
MDF	MEDIUM DENSITY FIBER
MECH.	MECHANICAL
MIN.	MINIMUM
NIC	NOT IN CONTRACT
OSB	ORIENTED STRAND BOARD
PTD	PAINTED
P.LAM	PLASTIC LAMINATE
PLYWD	PLYWOOD
PT	PRESSURE TREATED
RD	ROOF DRAIN
RWL	RAIN WATER LEADER
S.S.	STAINLESS STEEL
SUSP.	SUSPENDED
T&G	TONGUE AND GROOVE
TB AL	THERMALLY BROKEN ALUMINUM
TBHM	THERMALLY BROKEN HOLLOW METAL
TDP	THERMO-FUSED DECORATIVE PANEL
THK.	THICK
T/O	TOP OF
T.O.C.	TOP OF CONCRETE
TYP.	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UNDSIDE	UNDERSIDE
VCT	VINYL COMPOSITE TILE
W	WITH
W/C	WATER CLOSET
WR	WASHROOM

### SYMBOLS

	CONSTRUCTION ASSEMBLY
	WINDOW TYPE
	MATERIAL FINISHES NOTE
	CEILING TYPE AND ELEVATION
	DOOR TYPE
	REVISION NUMBER/LETTER
	CONSTRUCTION NOTE
	MAIN ENTRANCE ARROW
	NORTH ARROW

Name of Practice:		Building Code Reference																																																								
<b>ARCHITECTURE   49</b> 1269 PREMIER WAY, THUNDER BAY, ONTARIO, CANADA P7B 0A3 T. (807) 625-6700   F. (807) 623-4491 WWW.ARCHITECTURE49.COM Certificate of Practice No.: 5312		References are to Division B unless noted (A) for Division A or (C) for Division C																																																								
<b>Name of Project:</b> PUKASKWA NATIONAL PARK ADMINISTRATION BUILDING REPAIRS AND UPGRADES PHASE 2 <b>Location:</b> Pukaskwa National Park, Hwy 627 Via Hatlie Cove, Heron Bay, ON		Part 1 Part 2 Part 3 Part 9 <input checked="" type="checkbox"/> Part 1 <input checked="" type="checkbox"/> Part 2 <input checked="" type="checkbox"/> Part 3 <input checked="" type="checkbox"/> Part 9																																																								
<b>Item</b>		<b>Building Code Reference</b>																																																								
1	Project Description <input type="checkbox"/> Change of Use <input checked="" type="checkbox"/> New <input type="checkbox"/> Addition <input checked="" type="checkbox"/> Alteration	11.1 to 11.4	1.1.2. [A] 1.1.2. [A] & 9.10.1.3																																																							
2	Major Occupancy(ies) <b>Group D</b>		3.1.2.1(1) 9.10.2.																																																							
3	Building Area (m <sup>2</sup> ) Existing <b>1500m<sup>2</sup></b> New _____ Total <b>1500m<sup>2</sup></b>		1.4.1.2. [A] 1.4.1.2. [A]																																																							
4	Gross Area Existing <b>1500m<sup>2</sup></b> New _____ Total <b>1500m<sup>2</sup></b>		1.4.1.2. [A] 1.4.1.2. [A]																																																							
5	Number of Storeys Above Grade <b>1</b> Below Grade _____		1.4.1.2. [A] & 3.2.1.1. 1.4.1.2. [A] & 9.10.4.																																																							
6	Number of Streets / Fire Fighter Access <b>1</b>		3.2.2.10. & 3.2.5. 9.10.20.																																																							
7	Building Classification		3.2.2.20.-83. 9.10.2.																																																							
8	Sprinkler System Proposed <input type="checkbox"/> entire building <input type="checkbox"/> selected compartments <input type="checkbox"/> selected floor areas <input type="checkbox"/> basement <input type="checkbox"/> in lieu of roof rating <input checked="" type="checkbox"/> not required		3.2.2.20.-83. 9.10.8.2. 3.2.1.5. 3.2.2.17. INDEX INDEX																																																							
9	Standpipe required <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		3.2.9. N/A																																																							
10	Fire Alarm required <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		3.2.4. 9.10.18.																																																							
11	Water Service / Supply is adequate <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		3.2.5.7. N/A																																																							
12	High Building <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		3.2.6. N/A																																																							
13	Construction Restrictions <input type="checkbox"/> Combustible permitted <input type="checkbox"/> Non-combustible required <input checked="" type="checkbox"/> Both		3.2.2.20.-83. 9.10.6.																																																							
Actual Construction <input type="checkbox"/> Combustible <input type="checkbox"/> Non-combustible <input checked="" type="checkbox"/> Both																																																										
14	Mezzanine(s) Area m <sup>2</sup> <b>N/A</b>		3.2.1.1.(3)-(6). 9.10.4.1.																																																							
15	Occupant Load based on Basement Occupancy <b>N/A</b> Load <b>N/A</b> persons 1st Floor Occupancy <b>D</b> Load <b>---</b> persons 2nd Floor Occupancy <b>N/A</b> Load <b>N/A</b> persons Additional floors added at bottom.		3.1.17. 9.9.1.3.																																																							
16	Barrier-free Design <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Explain) _____		3.8. 9.5.2.																																																							
17	Hazardous Substances <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		3.3.1.2. & 3.3.1.20. 9.10.1.3.(4)																																																							
18	Required Fire Resistance Rating (FRR) Horizontal Assemblies FRR (Hours) Floors <b>NONE</b> Hours <b>N/A</b> Roof <b>NONE</b> Hours <b>N/A</b> Mezzanine <b>N/A</b> Hours <b>N/A</b> FRR of Supporting Members Floors <b>N/A</b> Hours <b>N/A</b> Roof <b>N/A</b> Hours <b>N/A</b> Mezzanine <b>N/A</b> Hours <b>N/A</b>	Listed Design No. or Description (SG-2)	3.2.2.20.-83. & 3.2.1.4. 9.10.8. 9.10.9.																																																							
19	Spatial Separation - Construction of Exterior Walls		3.2.3. 9.10.14.																																																							
<table border="1"> <thead> <tr> <th>Wall</th> <th>Area of EBF (m<sup>2</sup>)</th> <th>L.D. (m)</th> <th>L/H or H/L</th> <th>Permitted Max. % of Openings</th> <th>Proposed % of Openings</th> <th>FRR (Hours)</th> <th>Listed Design or Description</th> <th>Comb Const</th> <th>Comb Constr. Nonc. Cladding</th> <th>Non-Comb Constr.</th> </tr> </thead> <tbody> <tr> <td>North</td> <td>N/A</td> <td>N/A</td> <td>&lt;3:1</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>NO</td> <td>NO</td> <td>NO</td> </tr> <tr> <td>South</td> <td>N/A</td> <td>N/A</td> <td>&gt;10:1</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> <tr> <td>East</td> <td>N/A</td> <td>N/A</td> <td>3:1 TO 10:1</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> <tr> <td>West</td> <td>N/A</td> <td>N/A</td> <td>3:1 TO 10:1</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table>		Wall	Area of EBF (m <sup>2</sup> )	L.D. (m)	L/H or H/L	Permitted Max. % of Openings	Proposed % of Openings	FRR (Hours)	Listed Design or Description	Comb Const	Comb Constr. Nonc. Cladding	Non-Comb Constr.	North	N/A	N/A	<3:1	N/A	N/A	N/A	N/A	NO	NO	NO	South	N/A	N/A	>10:1	N/A	East	N/A	N/A	3:1 TO 10:1	N/A	West	N/A	N/A	3:1 TO 10:1	N/A																				
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South	N/A	N/A	>10:1	N/A	N/A	N/A	N/A	N/A	N/A	N/A																																																
East	N/A	N/A	3:1 TO 10:1	N/A	N/A	N/A	N/A	N/A	N/A	N/A																																																
West	N/A	N/A	3:1 TO 10:1	N/A	N/A	N/A	N/A	N/A	N/A	N/A																																																
20	Plumbing Fixture Requirements Male/Female Count @ 50 %/ 50 % except as noted otherwise Basement: Occupancy <b>N/A</b> Occupancy <b>N/A</b> 1st Floor: Occupancy <b>N/A</b> Occupancy <b>N/A</b> 2nd Floor: Occupancy <b>N/A</b> Occupancy <b>N/A</b>	Occupant Load BC Table Number Fixtures Required Fixtures Provided	Building Code Reference <input checked="" type="checkbox"/> Part 3 <input type="checkbox"/> Part 9																																																							
21	Other (describe):																																																									

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- CONTRACTOR TO COORDINATE WITH ALL TRADES TO COMPLETE THE WORK WITHOUT INTERRUPTING PARKS CANADA OPERATIONS.
- AS PER THE SCOPE OF WORK OUTLINED, THE EXTERIOR ENVELOPE OF THE BUILDING IS TO BE EXTENDED APPROXIMATELY 150mm. THIS WILL REQUIRE EXTERIOR PENETRATIONS BE EXTENDED (I.E. ELECTRICAL WIRING, CONDUIT/PIPING, DUCT WORK, ETC.) ANY EXTERIOR RUN PIPING/CONDUIT IS TO BE SUPPORTED AND CONCEALED IN THE BUILDING ENVELOPE. ANY PULL BOXES, ELBOWS, ACCESS POINTS TO BE ACCESSIBLE VIA INSULATED ACCESS DOOR.
- ANY EXTERIOR EQUIPMENT TO BE REMOVED /RE-INSTALLED AS REQUIRED DURING THE SCOPE OF WORK.

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**PUKASKWA NATIONAL PARK ADMINISTRATION BUILDING REPAIR AND UPGRADES PHASE 2**  
Ontario

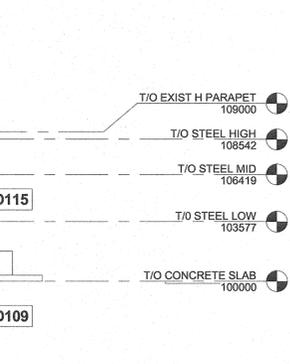
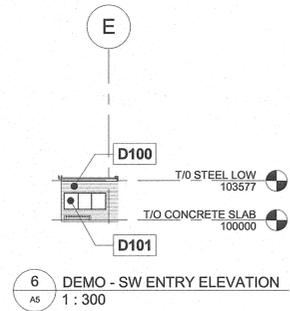
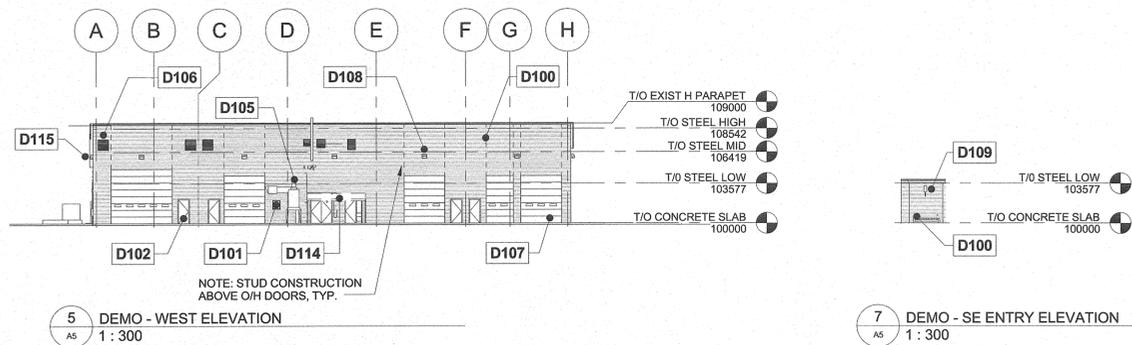
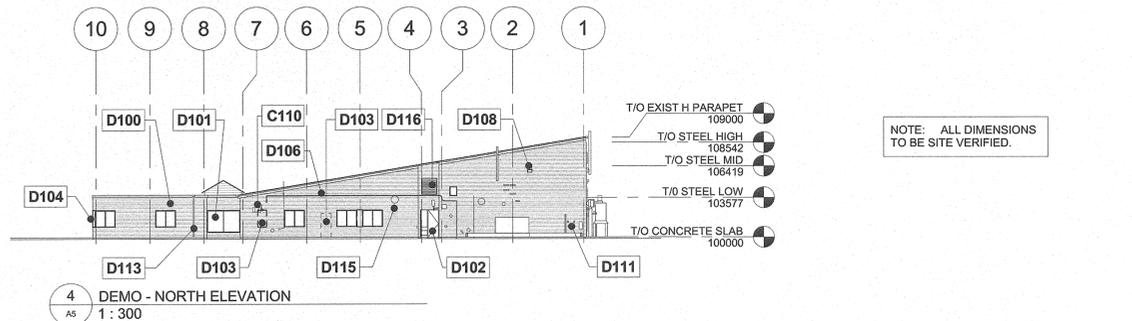
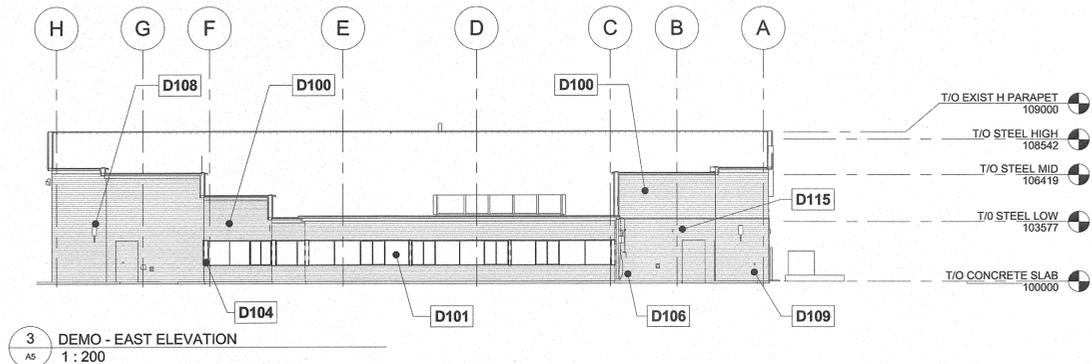
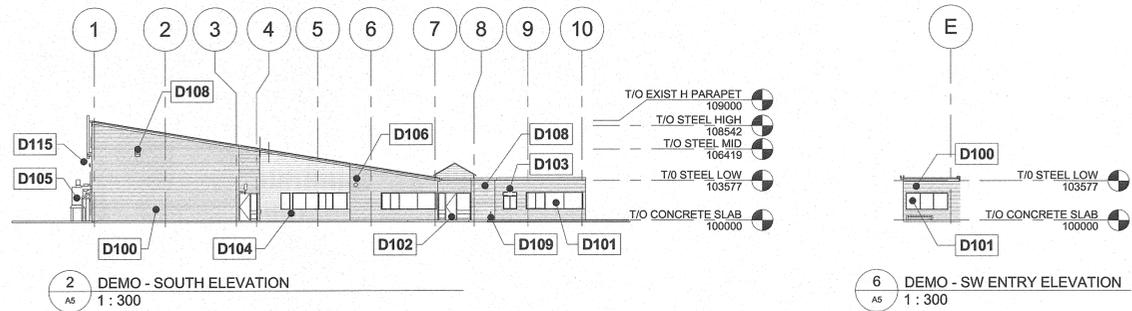
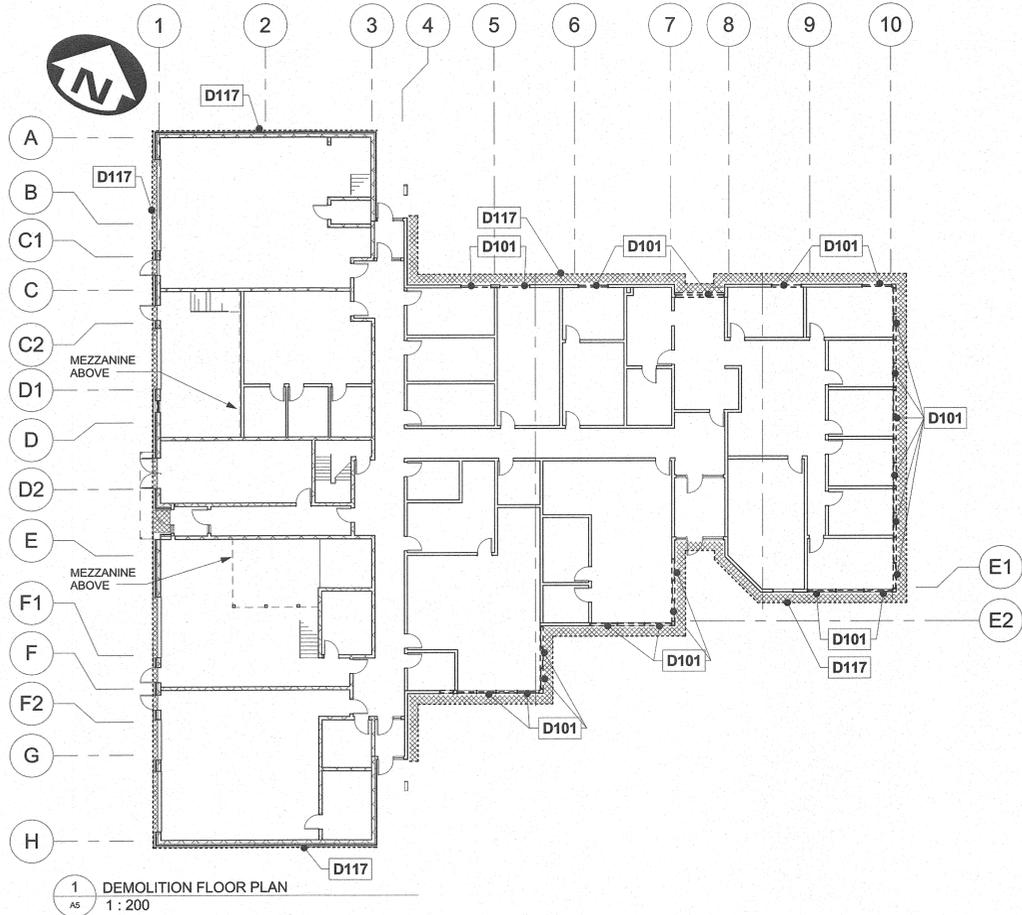
drawing title  
titre du dessin  
**CONSTRUCTION ASSEMBLIES NBC MATRIX**

drawn by dessiné par	MAH	
designed by conc par	ML	
approved by approuvé par	TJA	
tender soumission	TENDER	project manager administrateur de projets

project date  
date du projet  
**2017/01/27**

project no.  
no. du projet  
**151-06165-06**

drawing no.  
dessiné no.  
**A4**



NOTE: ALL DIMENSIONS TO BE SITE VERIFIED.

1 DEMOLITION FLOOR PLAN  
AS 1:200

2 DEMO - SOUTH ELEVATION  
AS 1:300

3 DEMO - EAST ELEVATION  
AS 1:200

4 DEMO - NORTH ELEVATION  
AS 1:300

5 DEMO - WEST ELEVATION  
AS 1:300

7 DEMO - SE ENTRY ELEVATION  
AS 1:300

DEMOLITION NOTES

NOTE	DESCRIPTION
D100	REMOVE EXISTING SIDING UP TO EXISTING BUILDING SHEATHING; REPAIR/REPLACE DAMAGED SHEATHING AS REQUIRED
D101	REMOVE EXISTING EXTERIOR WINDOWS
D102	REMOVE EXISTING PEDESTRIAN DOORS (O/H DOORS TO REMAIN) EXTERIOR DOORS - REPLACE AS NOTED ON SHEETS A1, A7 AND A12
D103	REMOVE PORTION OF WALL TO CONSTRUCT OPENING FOR WINDOW OR DOOR
D104	EXISTING PREFIN. ALUMINUM PANEL TO BE REMOVED
D105	DUST COLLECTOR TO BE REMOVED, REFER TO MECHANICAL
D106	ALL MECHANICAL ITEMS (UNLESS OTHERWISE NOTED) TO BE RE-LOCATED TO NEW WALL ASSEMBLY, REFER TO MECHANICAL
D107	EXISTING OVERHEAD STEEL DOORS TO REMAIN; REPLACE SEALS
D108	ALL EXISTING EXTERIOR LIGHTING TO BE REMOVED AND REPLACED WITH NEW; REFER TO ELECTRICAL
D109	ALL EXISTING EXTERIOR RECPTACLES TO BE REMOVED AND REUSED; REFER TO ELECTRICAL
D111	REMOVE AND SALVAGE EXISTING HOOKS FOR RE-USE
D113	REMOVE EXISTING DOWNSPOUT AND STORE FOR RE-USE
D114	REMOVE EXISTING WOOD FRAME SHINGLED CANOPY
D115	OWNER TO SPECIFY WHICH EQUIPMENT, HARDWARE AND COMMUNICATION SYSTEMS ON EXTERIOR WALLS TO BE RELOCATED OR ABANDONED
D116	GRILLE TO BE REMOVED, REFER TO MECHANICAL - INFILL WALL WITH E3 CONSTRUCTION
D117	ASBESTOS REMOVAL LOCATIONS - SEE DETAILS

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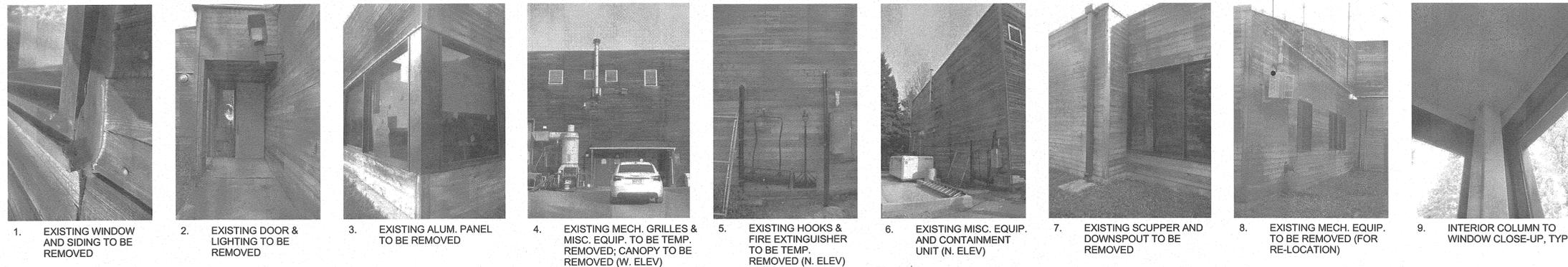
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C	drawing no. - where detailed

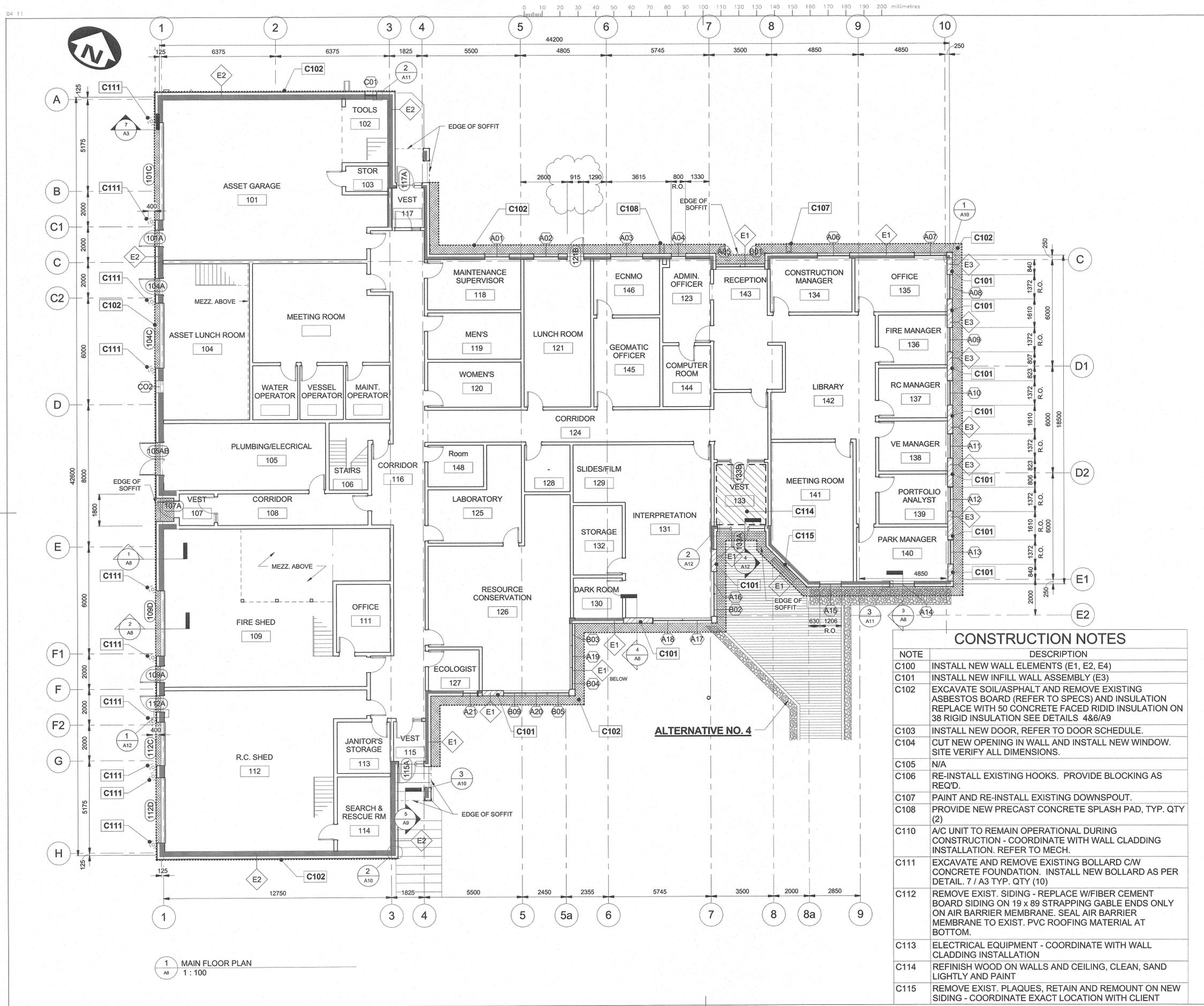
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Pukaskwa National Park Administration Building Repair and Upgrades Phase 2  
Ontario

DEMOLITION PLAN AND ELEVATIONS

drawn by dessiné par	MAH	
designed by conc par	ML	SM for NL
approved by approuvé par	TJA	
tender submission	TENDER	project manager administrateur de projets
project date date du projet	2017/01/27	
project no. no. du projet	151-06165-06	
drawing no. dessiné no.	A5	



1. EXISTING WINDOW AND SIDING TO BE REMOVED  
2. EXISTING DOOR & LIGHTING TO BE REMOVED  
3. EXISTING ALUM. PANEL TO BE REMOVED  
4. EXISTING MECH. GRILLES & MISC. EQUIP. TO BE TEMP. REMOVED; CANOPY TO BE REMOVED (W. ELEV)  
5. EXISTING HOOKS & FIRE EXTINGUISHER TO BE TEMP. REMOVED (N. ELEV)  
6. EXISTING MISC. EQUIP. AND CONTAINMENT UNIT (N. ELEV)  
7. EXISTING SCUPPER AND DOWNSPOUT TO BE REMOVED  
8. EXISTING MECH. EQUIP. TO BE REMOVED (FOR RE-LOCATION)  
9. INTERIOR COLUMN TO WINDOW CLOSE-UP, TYP.



1 MAIN FLOOR PLAN  
1 : 100



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A	Detail No.
B	No. du détail
B	drawing no. - where detail required
B	dessin no. - ou détail exigé
C	drawing no. - where detailed
C	dessin no. - ou détaillé

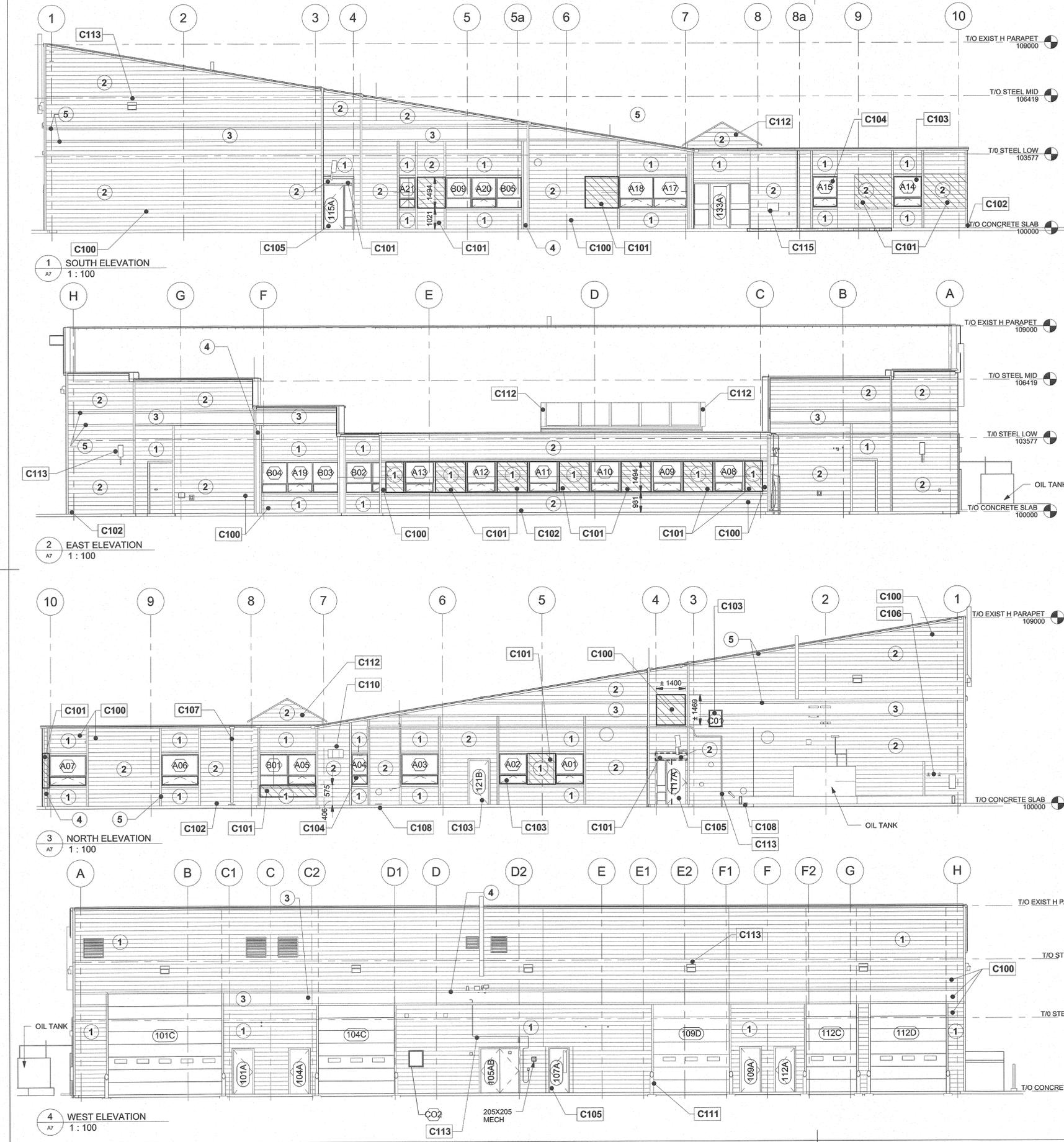
project title  
titre du projet  
Pukaskwa National Park Administration Building  
Ontario  
REPAIR AND UPGRADES PHASE 2

drawing title  
titre du dessin  
MAIN FLOOR PLAN  
AND PLAN DETAILS

drawn by dessiné par	MAH	
designed by conc. par	ML	
approved by approuvé par	TJA	
tender submission	TENDER	project manager administrateur de projets

project date date du projet	2017/01/27
project no. no. du projet	151-06165-06
drawing no. dessiné no.	A6

NOTE	DESCRIPTION
C100	INSTALL NEW WALL ELEMENTS (E1, E2, E4)
C101	INSTALL NEW INFILL WALL ASSEMBLY (E3)
C102	EXCAVATE SOIL/ASPHALT AND REMOVE EXISTING ASBESTOS BOARD (REFER TO SPECS) AND INSULATION REPLACE WITH 50 CONCRETE FACED RIGID INSULATION ON 38 RIGID INSULATION SEE DETAILS 4&6/A9
C103	INSTALL NEW DOOR, REFER TO DOOR SCHEDULE.
C104	CUT NEW OPENING IN WALL AND INSTALL NEW WINDOW. SITE VERIFY ALL DIMENSIONS.
C105	N/A
C106	RE-INSTALL EXISTING HOOKS. PROVIDE BLOCKING AS REQ'D.
C107	PAINT AND RE-INSTALL EXISTING DOWNSPOUT.
C108	PROVIDE NEW PRECAST CONCRETE SPLASH PAD, TYP. QTY (2)
C110	A/C UNIT TO REMAIN OPERATIONAL DURING CONSTRUCTION - COORDINATE WITH WALL CLADDING INSTALLATION. REFER TO MECH.
C111	EXCAVATE AND REMOVE EXISTING BOLLARD C/W CONCRETE FOUNDATION. INSTALL NEW BOLLARD AS PER DETAIL. 7 / A3 TYP. QTY (10)
C112	REMOVE EXIST. SIDING - REPLACE W/FIBER CEMENT BOARD SIDING ON 19 x 89 STRAPPING GABLE ENDS ONLY ON AIR BARRIER MEMBRANE. SEAL AIR BARRIER MEMBRANE TO EXIST. PVC ROOFING MATERIAL AT BOTTOM.
C113	ELECTRICAL EQUIPMENT - COORDINATE WITH WALL CLADDING INSTALLATION
C114	REFINISH WOOD ON WALLS AND CEILING, CLEAN, SAND LIGHTLY AND PAINT
C115	REMOVE EXIST. PLAQUES, RETAIN AND REMOUNT ON NEW SIDING - COORDINATE EXACT LOCATION WITH CLIENT



**MATERIAL FINISHES LEGEND**

TYPE	DESCRIPTION
1	FIBER CEMENT PLANK LAP SIDING, BEADED CEDARMILL - "WOODSTOCK BROWN"
2	FIBER CEMENT PLANK LAP SIDING, BEADED CEDARMILL - "SANDSTONE BEIGE"
3	FIBER CEMENT BOARD PANEL - "LIGHT MIST"
4	FIBER CEMENT BOARD PANEL - "SANDSTONE BEIGE"
5	FIBER CEMENT TRIM - "ARCTIC WHITE"

**ELEVATION LEGEND**

	NEW INFILL WALL ASSEMBLY
--	--------------------------

**CONSTRUCTION NOTES**

NOTE	DESCRIPTION
C100	INSTALL NEW WALL ELEMENTS (E1, E2, E4)
C101	INSTALL NEW INFILL WALL ASSEMBLY (E3)
C102	EXCAVATE SOIL/ASPHALT AND REMOVE EXISTING ASBESTOS BOARD (REFER TO SPECS) AND INSULATION REPLACE WITH 50 CONCRETE FACED RIDID INSULATION ON 38 RIGID INSULATION SEE DETAILS 4&6/A9
C103	INSTALL NEW DOOR, REFER TO DOOR SCHEDULE.
C104	CUT NEW OPENING IN WALL AND INSTALL NEW WINDOW. SITE VERIFY ALL DIMENSIONS.
C105	N/A
C106	RE-INSTALL EXISTING HOOKS. PROVIDE BLOCKING AS REQ'D.
C107	PAINT AND RE-INSTALL EXISTING DOWNSPOUT.
C108	PROVIDE NEW PRECAST CONCRETE SPLASH PAD, TYP. QTY (2)
C110	A/C UNIT TO REMAIN OPERATIONAL DURING CONSTRUCTION - COORDINATE WITH WALL CLADDING INSTALLATION. REFER TO MECH.
C111	EXCAVATE AND REMOVE EXISTING BOLLARD C/W CONCRETE FOUNDATION. INSTALL NEW BOLLARD AS PER DETAIL. 7 / A3 TYP. QTY (10)
C112	REMOVE EXIST. SIDING - REPLACE W/FIBER CEMENT BOARD SIDING ON 19 x 89 STRAPPING GABLE ENDS ONLY ON AIR BARRIER MEMBRANE. SEAL AIR BARRIER MEMBRANE TO EXIST. PVC ROOFING MATERIAL AT BOTTOM.
C113	ELECTRICAL EQUIPMENT - COORDINATE WITH WALL CLADDING INSTALLATION
C114	REFINISH WOOD ON WALLS AND CEILING, CLEAN, SAND LIGHTLY AND PAINT
C115	REMOVE EXIST. PLAQUES, RETAIN AND REMOUNT ON NEW SIDING - COORDINATE EXACT LOCATION WITH CLIENT

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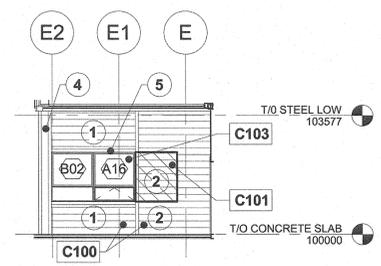
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B	No. du détail
C	drawing no. - where detail required / dessin no. - où détail exigé
D	drawing no. - where detailed / dessin no. - où détaillé

project title / titre du projet: PUKASKWA NATIONAL PARK ADMINISTRATION BUILDING REPAIR AND UPGRADES PHASE 2 Ontario

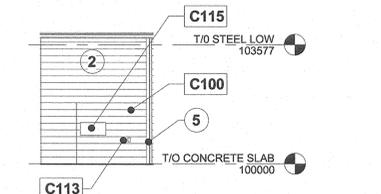
drawing title / titre du dessin: BUILDING ELEVATIONS

drawn by / dessiné par: MAH  
 designed by / conçu par: ML  
 approved by / approuvé par: TJA  
 tender submission / soumission de soumission: TENDER  
 project manager / administrateur de projets: [Signature]

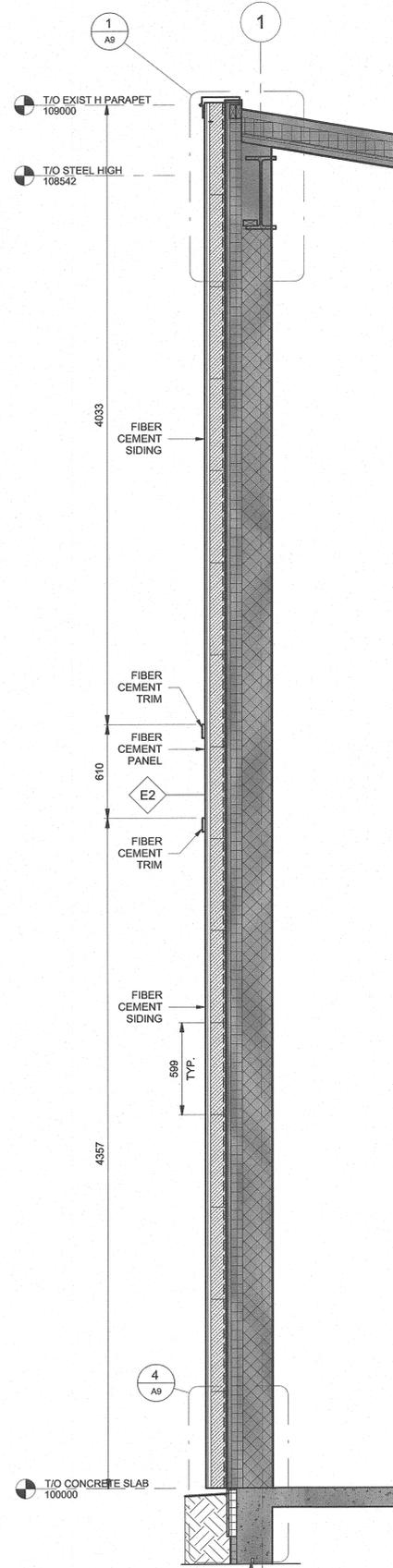
project date / date du projet: 2017/01/27  
 project no. / no. du projet: 151-06165-06  
 drawing no. / dessin no.: A7



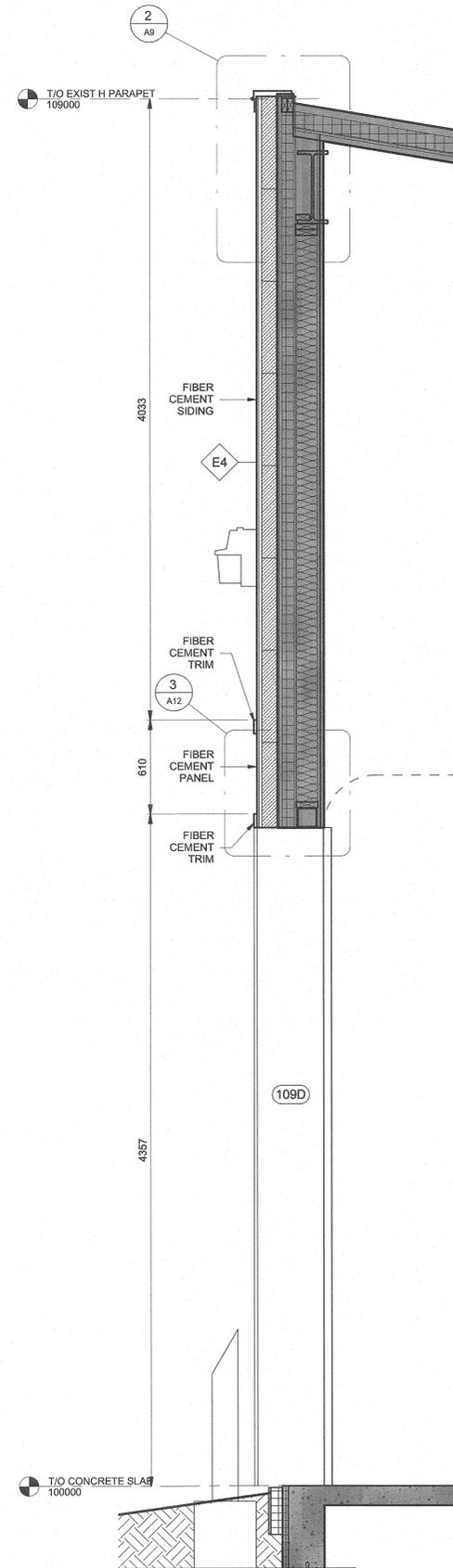
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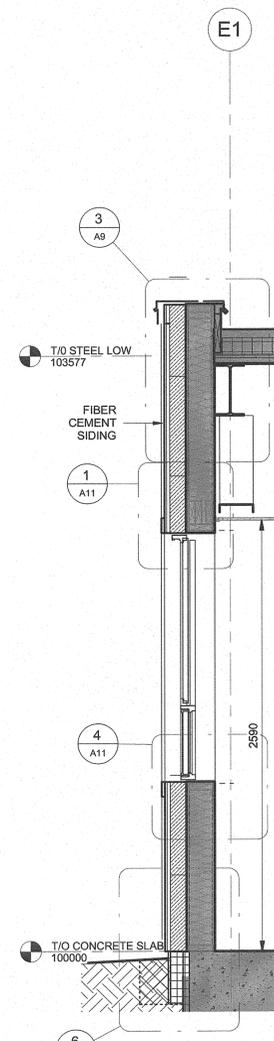
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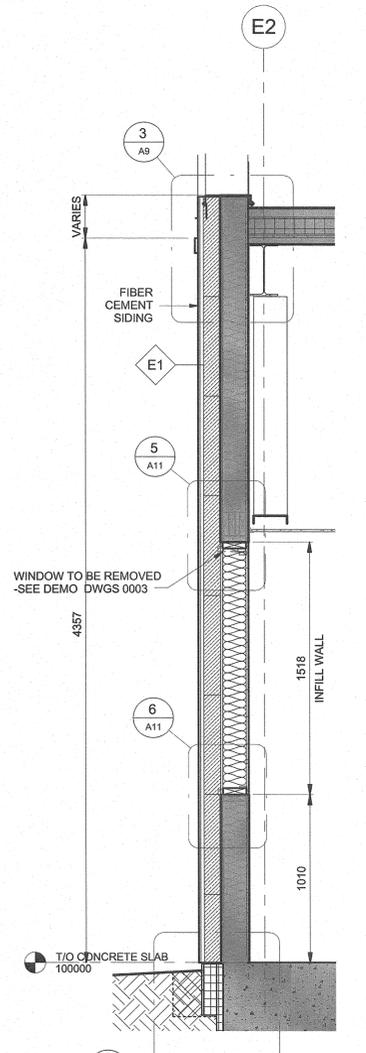
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1 : 20



2 WALL SECTION - FRAME WALL ABOVE O/H DOOR  
1 : 20



3 WALL SECTION - FRAME WALL  
1 : 20



4 WALL SECTION - INFILL WALL  
1 : 20

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project title / titre du projet: Ontario  
PUKASKWA NATIONAL PARK ADMINISTRATION BUILDING REPAIR AND UPGRADES PHASE 2

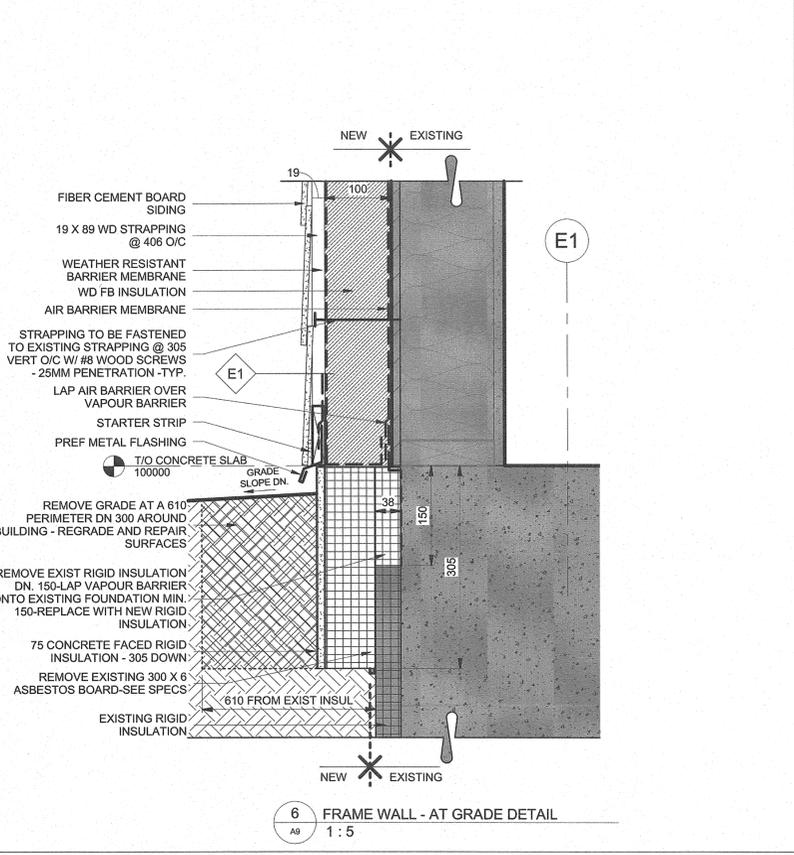
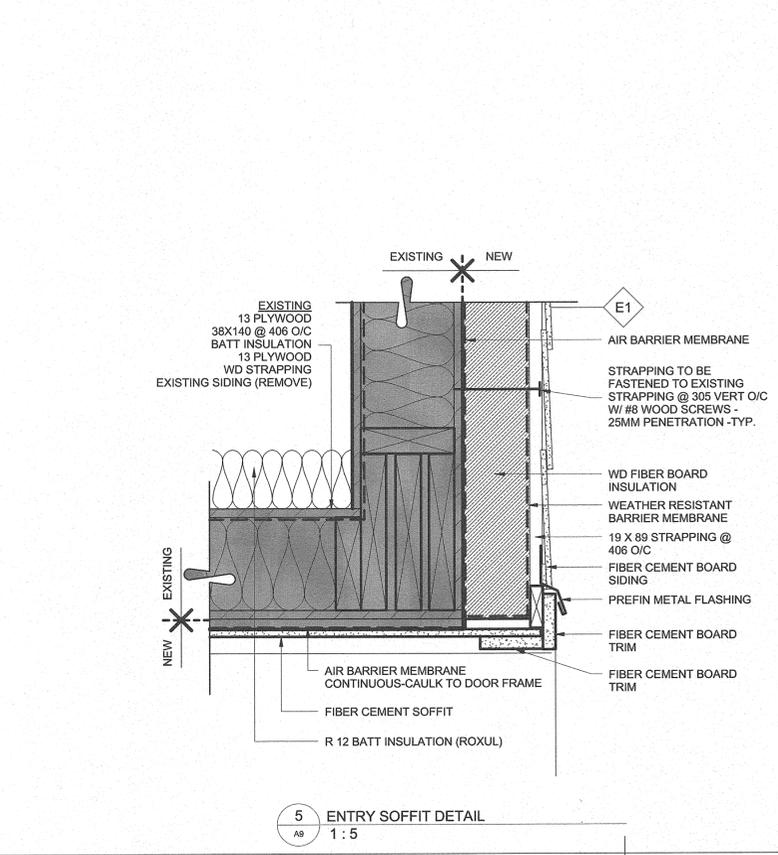
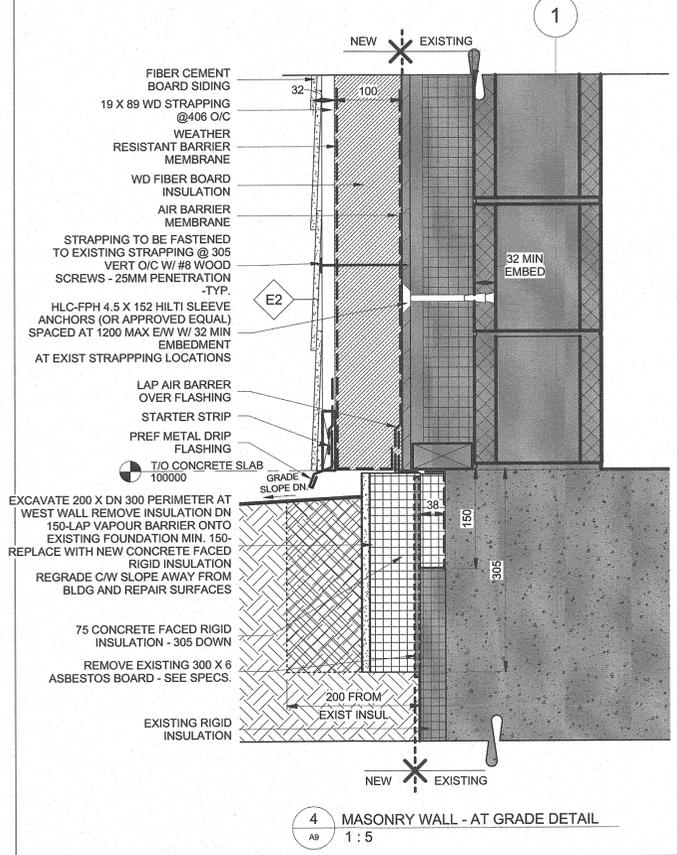
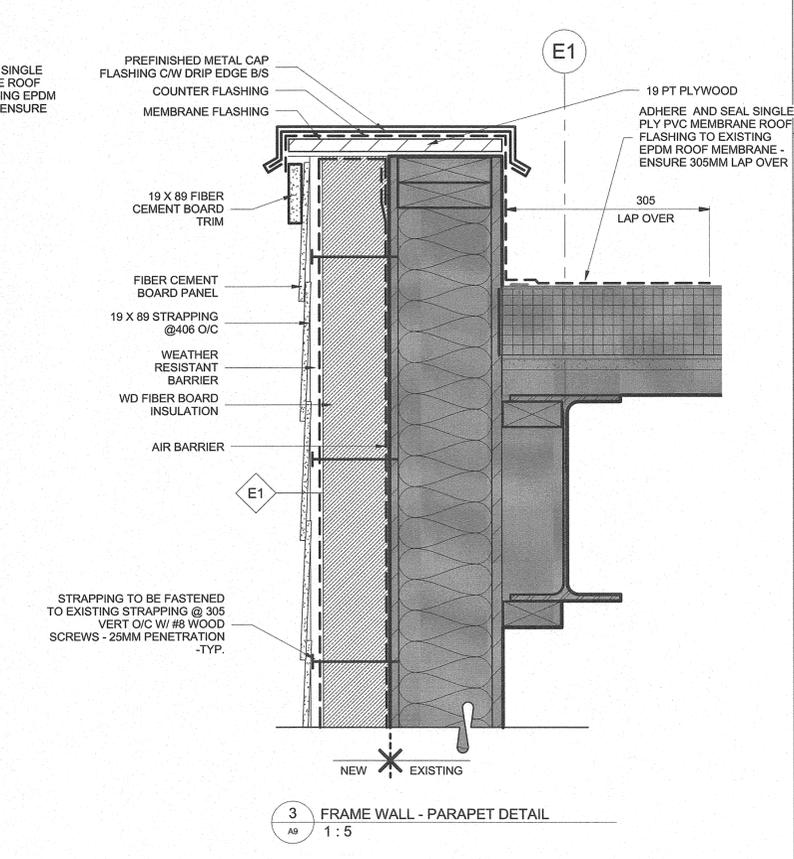
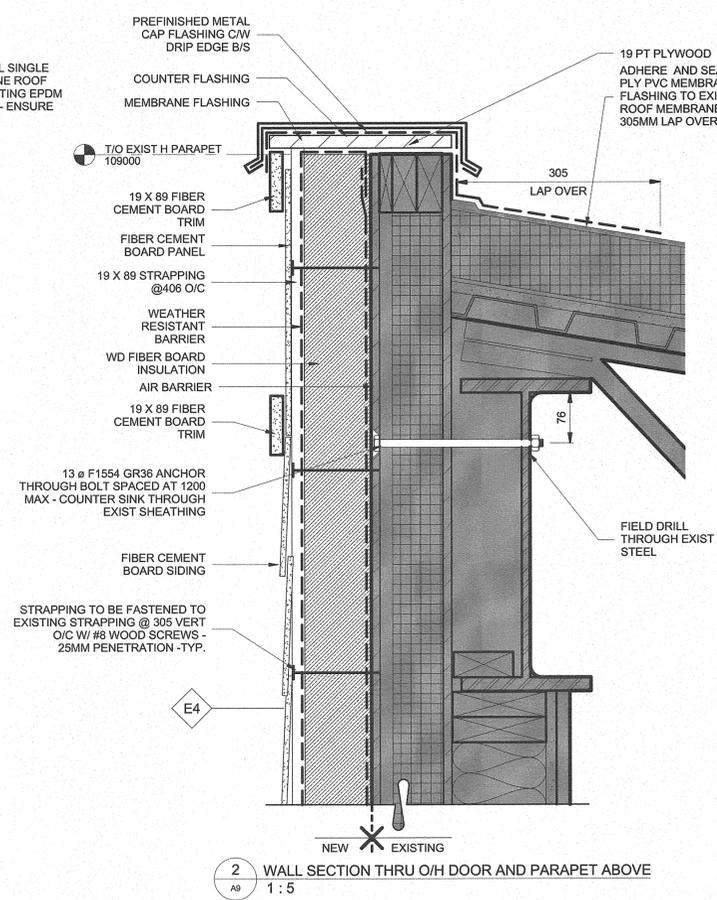
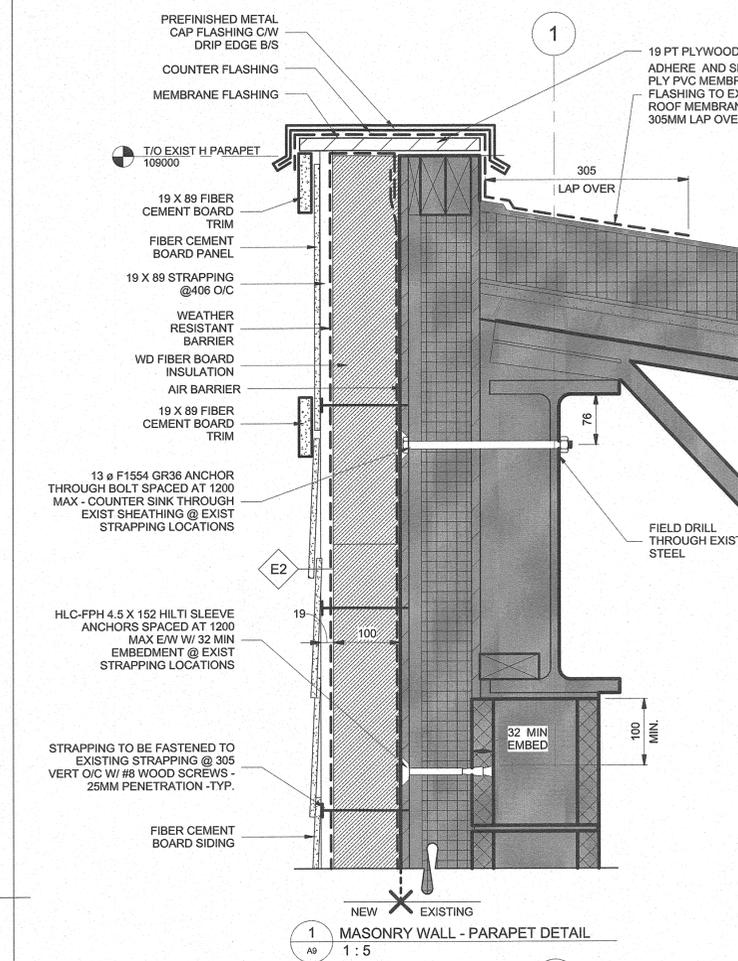
drawing title / titre du dessin: WALL SECTIONS

drawn by / dessiné par: JDJ  
designed by / conçu par: ML  
approved by / approuvé par: TJA  
tender submission / soumission: TENDER  
project manager / administrateur de projets

project date / date du projet: 2017/01/27

project no. / no. du projet: 151-06165-06

drawing no. / dessin no.: A8



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	dessin no. - où détail exigé
	drawing no. - where detailed
	dessin no. - où détaillé

project title  
 titre du projet

Ontario  
 PUKASKWA NATIONAL PARK  
 ADMINISTRATION BUILDING  
 REPAIR AND UPGRADES PHASE 2

drawing title  
 titre du dessin  
 SECTION DETAILS

drawn by  
 dessiné par  
 JDU

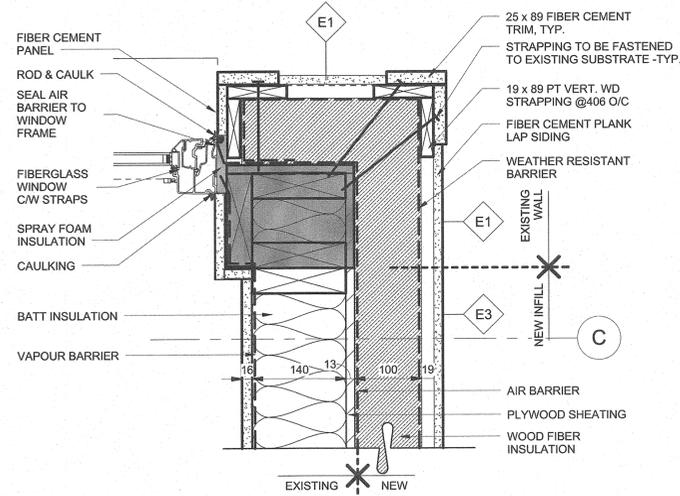
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approved by  
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 TSA

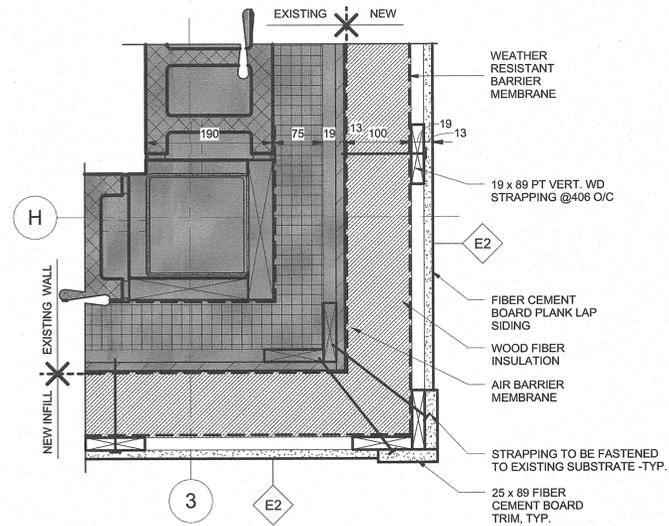
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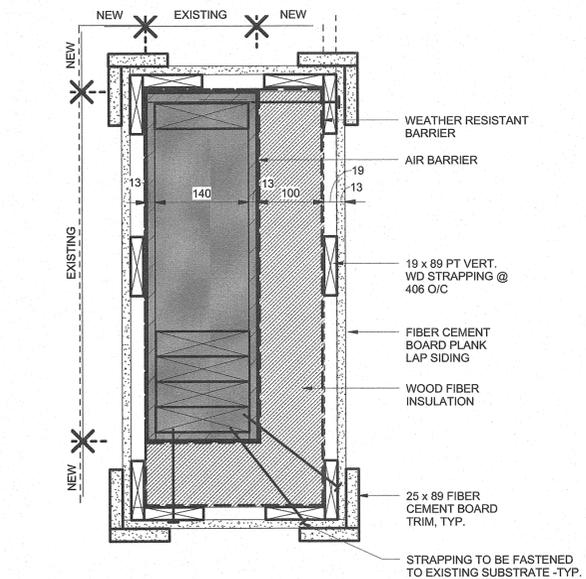
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 no. du projet  
 151-06165-06  
 drawing no.  
 dessin no.  
 A9



1 OUTSIDE CORNER - FRAME WALL  
A10 1:5



2 OUTSIDE CORNER - MASONRY WALL  
A10 1:5



3 COLUMN DETAIL  
A10 1:5



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REPAIR AND UPGRADES PHASE 2

drawing title  
titre du dessin  
PLAN DETAILS

drawn by dessiné par	JDJ		project manager administrateur de projets
designed by conçu par	ML		
approved by approuvé par	TSA		
tender soumission	TENDER		

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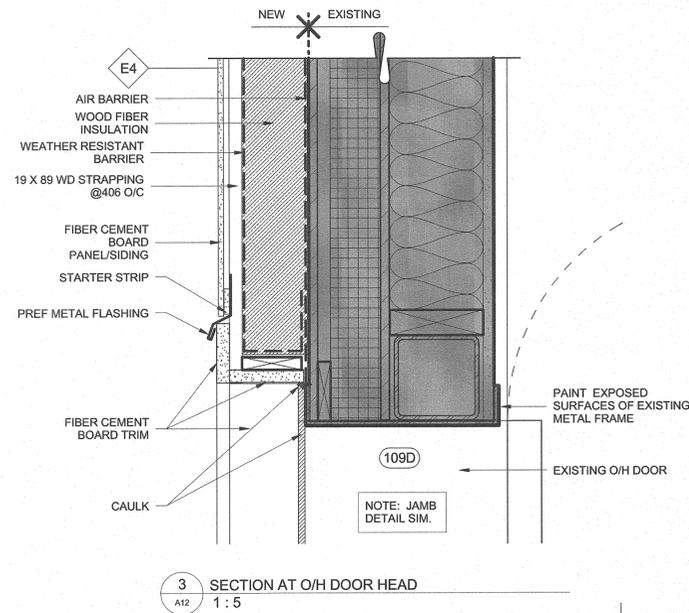
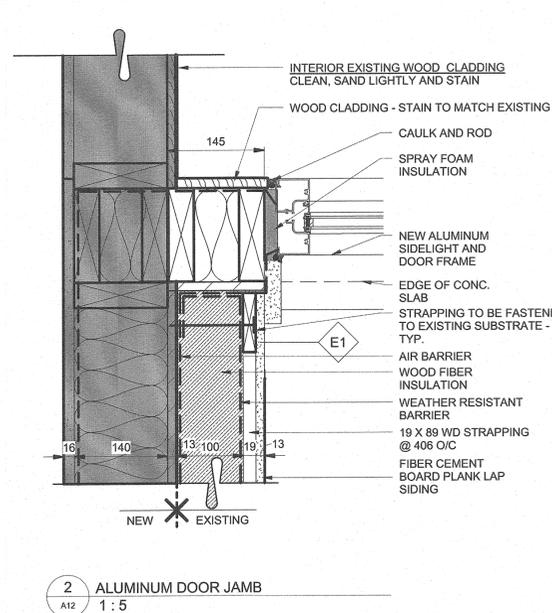
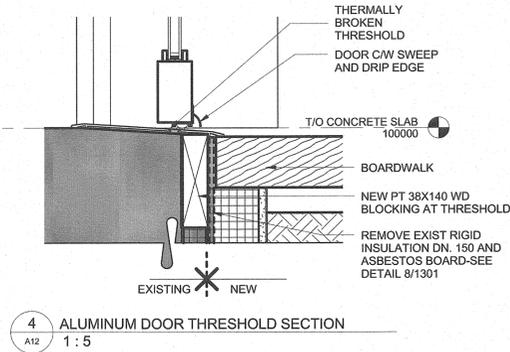
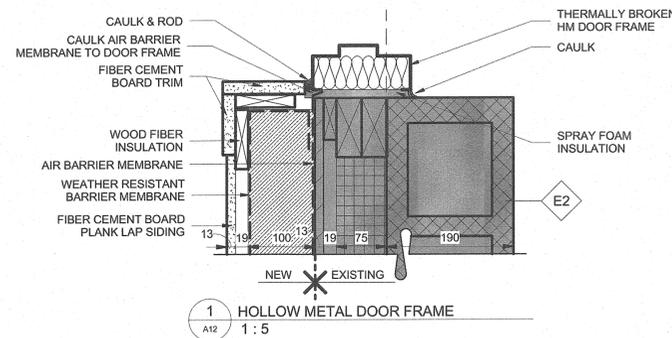
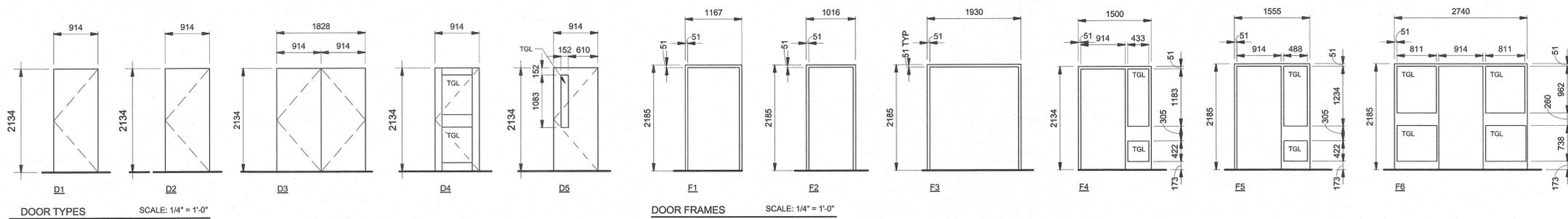
drawing no.  
dessiné no.  
A10



### DOOR SCHEDULE

DOOR NO.	DOOR				FRAME			CONSTRUCTION NOTES	NOTES
	DOOR SIZE	TYPE	MATERIAL	FINISH	TYPE	MATERIAL	FINISH		
101A	914 W x 2134 H	D2	HM INSUL	PTD	F2	TBHM	PTD	INSTALL DOOR AND FRAME INTO EXISTING OPENING.	1
101C	5486 W x 4878 H	N/A	N/A	N/A	N/A	N/A	N/A	OVERHEAD DOOR TO REMAIN AS IS; PROVIDE NEW GASKETS, SEALS AND WEATHERSTRIPPING	
104A	914 W x 2134 H	D2	HM INSUL	PTD	F2	TBHM	PTD	INSTALL DOOR AND FRAME INTO EXISTING OPENING.	1
104C	3658 W x 4268 H	N/A	N/A	N/A	N/A	N/A	N/A	OVERHEAD DOOR TO REMAIN AS IS; PROVIDE NEW GASKETS, SEALS AND WEATHERSTRIPPING	
105AB	1828 W x 2134 H	D3	HM INSUL	PTD	F3	TBHM	PTD	INSTALL DOORS AND FRAME INTO EXISTING OPENING.	1
107A	914 W x 2134 H	D5	HM INSUL	PTD	F2	TBHM	PTD	INSTALL DOOR AND FRAME INTO EXISTING OPENING.	1
109A	914 W x 2134 H	D2	HM INSUL	PTD	F2	TBHM	PTD	INSTALL DOOR AND FRAME INTO EXISTING OPENING.	1
109D	3658 W x 4268 H	N/A	N/A	N/A	N/A	N/A	N/A	OVERHEAD DOOR TO REMAIN AS IS; PROVIDE NEW GASKETS, SEALS AND WEATHERSTRIPPING	
112A	914 W x 2134 H	D2	HM INSUL	PTD	F2	TBHM	PTD	INSTALL DOOR AND FRAME INTO EXISTING OPENING.	1
112C	2438 W x 4268 H	N/A	N/A	N/A	N/A	N/A	N/A	OVERHEAD DOOR TO REMAIN AS IS; PROVIDE NEW GASKETS, SEALS AND WEATHERSTRIPPING	
112D	3658 W x 4268 H	N/A	N/A	N/A	N/A	N/A	N/A	OVERHEAD DOOR TO REMAIN AS IS; PROVIDE NEW GASKETS, SEALS AND WEATHERSTRIPPING	
115A	914 W x 2134 H	D1	HM INSUL	PTD	F4	TBHM	PTD	INSTALL DOOR AND FRAME INTO EXISTING OPENING.	
117A	914 W x 2134 H	D1	HM INSUL	PTD	F4	TBHM	PTD	INSTALL DOOR AND FRAME INTO EXISTING OPENING.	
121B	914 W x 2134 H	D2	HM INSUL	PTD	F2	TBHM	PTD	INSTALL DOOR INTO NEW FRAMING.	1
133A	914 W x 2134 H	D4	ALUMINUM	PTD	F6	TB AL	PTD	INSTALL DOOR AND FRAME INTO EXISTING OPENING.	1
133B	914 W x 2134 H	D4	ALUMINUM	PTD	F6	AL	PTD	INSTALL DOOR AND FRAME INTO EXISTING OPENING.	1

**SCHEDULE NOTES:**  
1. ALL DIMENSIONS TO BE SITE VERIFIED



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**ARCHITECTURE 49**

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A	Detail No.
B	No. du détail
C	drawing no. - where detail required dessin no. - ou détail existe
	drawing no. - where detailed dessin no. - ou détaillé

project title  
titre du projet  
Ontario  
PUKASKWA NATIONAL PARK  
ADMINISTRATION BUILDING  
REPAIR AND UPGRADES PHASE 2

drawing title  
titre du dessin  
**DOOR SCHEDULE & DETAILS**

drawn by  
dessiné par MAH

designed by  
conc par M.L. *S.M. For M.L.*

approved by  
approuvé par TJA

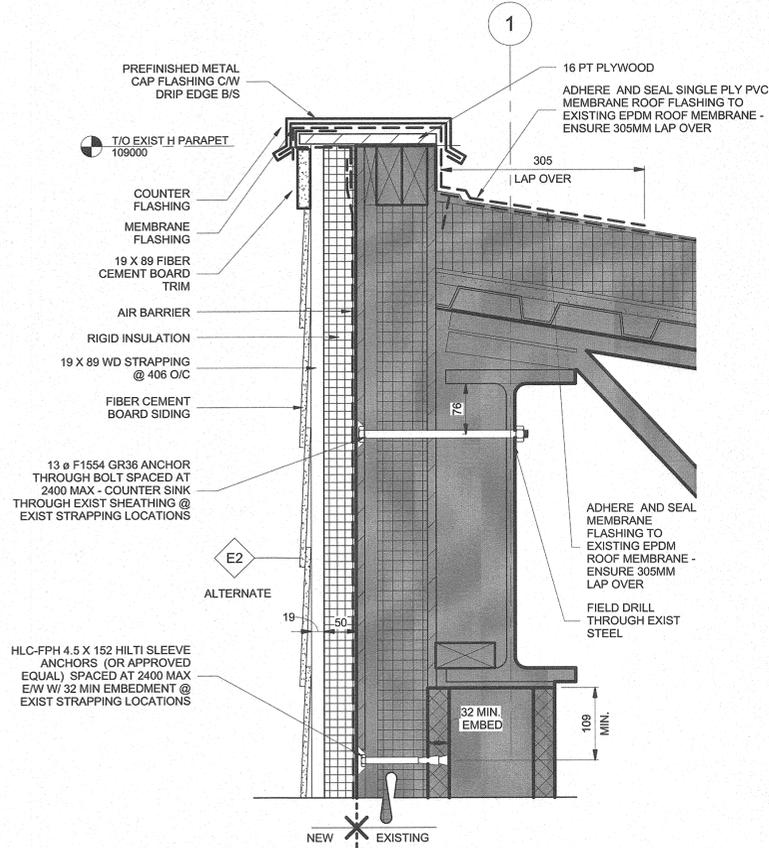
tender submission  
TENDER

project manager  
administrateur de projets

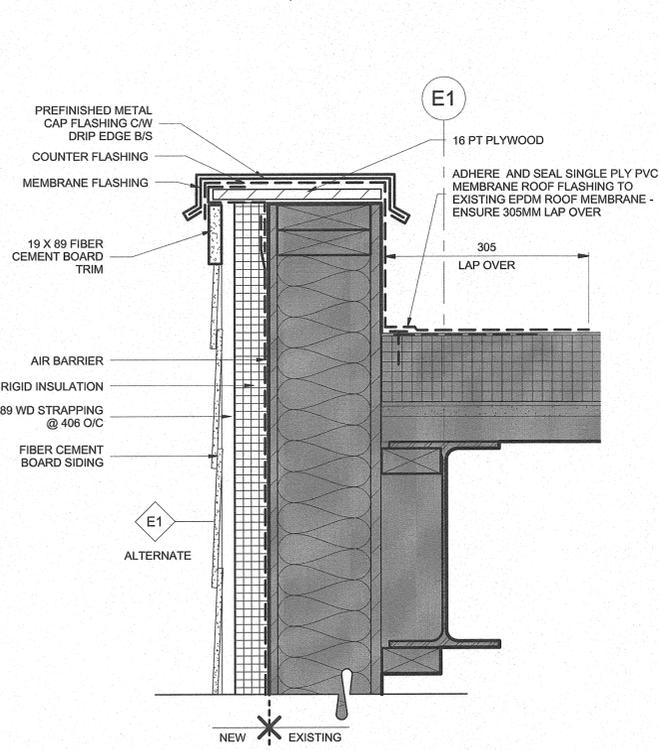
project date  
date du projet 2017/01/27

project no.  
no. du projet 151-06165-06

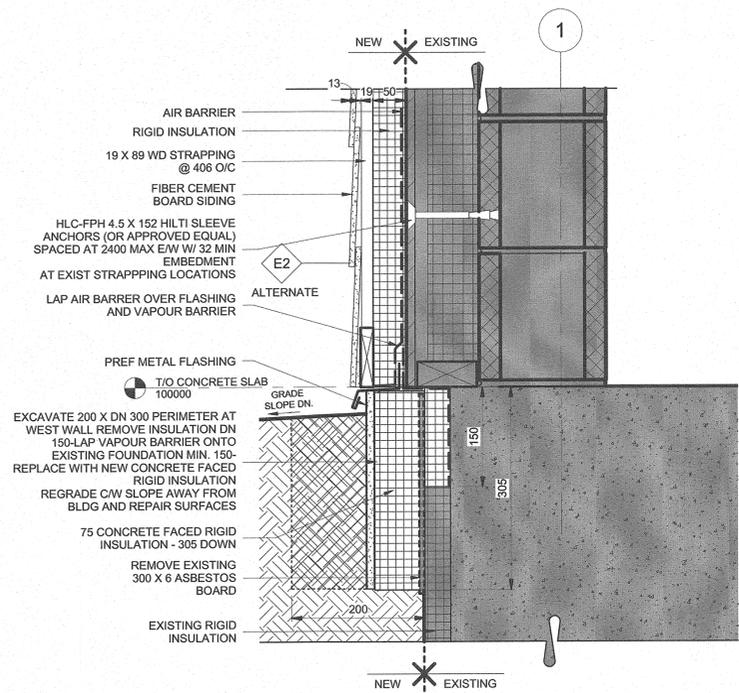
drawing no.  
dessiné no. A12



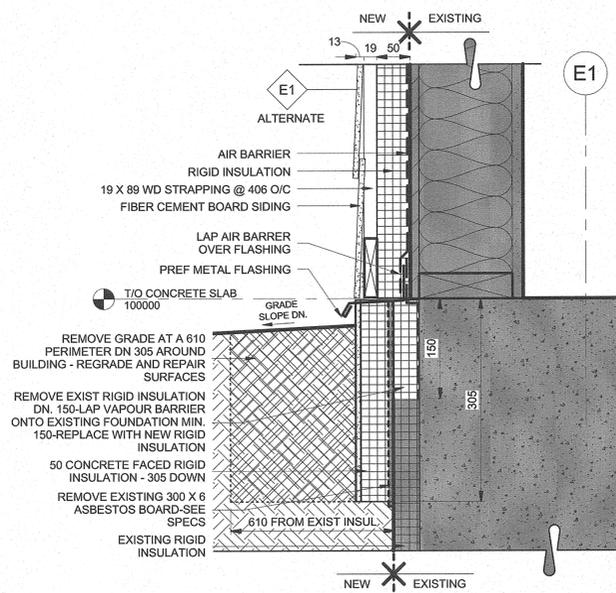
1 MASONRY WALL - Parapet Detail RIGID  
A13 1:5



3 FRAME WALL - Parapet Detail RIGID  
A13 1:5



2 MASONRY WALL - at Grade Detail RIGID  
A13 1:5



4 FRAME WALL - at Grade Detail RIGID  
A13 1:5

**ALTERNATIVE NO. 1**

INSULATION ALTERNATE: RIGID INSULATION (EXTRUDED POLYSTYRENE) - SEE SPECIFICATIONS

**WALL TYPES ALTERNATIVE NO. 1**

NOTE: REFER TO FLOOR PLAN FOR RATED WALL LOCATIONS. WALL ASSEMBLIES TO BE RATED ONLY IN LOCATIONS INDICATED ON FLOOR PLAN.  
FOR WOOD STRAPPING, #10 WOOD SCREWS (152 LG), 2 PER STUD OR STRAPPING WHERE RUNNING PERPENDICULAR AND @ 203 O/C WHERE RUNNING PARALLEL. UNLESS NOTED OTHERWISE

TYPE	ASSEMBLY	NOTES
E1	NEW FIBER CEMENT BOARD (PLANK, PANEL, TRIM) 19 x 89 VERT. WOOD STRAPPING @ 406 O/C (MATCH EXIST STUDS) 50 RIGID INSULATION (R10) AIR BARRIER 13 PLYWOOD SHEATHING (EXISTING) R-24 BATTS TO FILL CAVITY (EXISTING) 38 x 140 WOOD STUDS @ 400 O/C (EXISTING) VAPOUR BARRIER (EXISTING) 16 GYPSUM BOARD (EXISTING)	
E2	NEW FIBER CEMENT BOARD (PLANK, PANEL, TRIM) 19 x 89 VERT. WOOD STRAPPING @ 406 O/C (MATCH EXIST STRAPPING) 50 RIGID INSULATION (R10) AIR BARRIER 13 PLYWOOD SHEATHING (EXISTING) WOOD STRAPPING (EXISTING) 75 RIGID INSULATION (EXISTING) AIR BARRIER (EXISTING) 190 CMU (EXISTING)	SEE DETAILS 1,2 & 4 ON SHEET A9
E3	NEW FIBER CEMENT BOARD (PLANK, PANEL, TRIM) 19 x 89 VERT. WOOD STRAPPING @ 406 O/C (MATCH STUDS) 50 RIGID INSULATION (R10) AIR BARRIER 13 PLYWOOD SHEATHING R-24 BATTS TO FILL CAVITY 38 x 140 WOOD STUDS @ 406 O/C VAPOUR BARRIER 16 GYPSUM BOARD	
E4	NEW FIBER CEMENT BOARD (PLANK, PANEL, TRIM) 19 x 89 VERT. WOOD STRAPPING @ 406 O/C (MATCH EXIST STUDS) 50 RIGID INSULATION (R10) AIR BARRIER 13 PLYWOOD SHEATHING (EXISTING) WOOD STRAPPING (EXISTING) 75 RIGID INSULATION (EXISTING) 16 PLYWOOD SHEATHING (EXISTING) 38 x 140 WOOD STUDS @ 400 O/C (EXISTING) 16 PLYWOOD SHEATHING (EXISTING)	



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A	Detail No. - du detail
B	drawing no. - where detail required
C	drawing no. - where detailed

project title  
titre du projet  
Pukaskwa National Park Administration Building Repair and Upgrades Phase 2  
Ontario

drawing title  
titre du dessin  
ALTERNATIVE #1 SECTIONS

drawn by  
dessiné par  
designed by  
conçue par  
approved by  
approuvé par  
tender submission  
soumission de projet  
project manager  
administrateur de projet

project date  
date du projet  
project no.  
no. du projet  
drawing no.  
dessiné no.  
2016/01/27  
151-06165-06  
A13

**1. GENERAL**

CONFORM TO THE GENERAL CONDITIONS OF THE CONTRACT.

REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

COORDINATE WORK WITH ALL OTHER TRADES. EXAMINE ALL PROJECT DRAWINGS BEFORE PROCEEDING WITH THE WORK.

ELECTRICAL EQUIPMENT IS SHOWN NOT TO SCALE (N.T.S.) ON DRAWINGS.

IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO COORDINATE WITH THE GENERAL CONTRACTOR OF ANY CONFLICTS BETWEEN THE TRADES AT NO ADDITIONAL COST TO PARKS CANADA AGENCY (PCA).

DIVISION OF WORK TO BE PERFORMED BY THE GENERAL CONTRACTOR.

PROVIDE ALL MATERIALS AND DEVICES, ALL LABOUR AND TOOLS, AS WELL AS ANY MISCELLANEOUS MATERIALS REQUIRED TO COMPLETE ALL SYSTEMS SHOWN ON THE DRAWINGS RENDERING A COMPLETE AND OPERATING INSTALLATION.

SCHEDULE AND PERFORM THE WORK TO MEET THE COMPLETION SCHEDULE AS SET OUT BY THE GENERAL CONTRACTOR.

CHANGES TO THE WORK: AUTHORIZED BY CHANGE ORDER, SIGNED BY PCA'S REPRESENTATIVE.

ENSURE THAT ALL ELECTRICAL EQUIPMENT SUPPLIED BY OTHER TRADES IS SUITABLE FOR THE RESPECTIVE VOLTAGE.

MAINTAIN PHASE SEQUENCE AND COLOUR CODING.

WHERE VISIBLE, PROVIDE EMT CONDUITS AND BOXES FOR ALL LOW VOLTAGE WIRING SYSTEMS. WIREMOLD (PAINTED TO MATCH) TO BE USED IN ALL PUBLIC SPACES.

PROVIDE BRANCH CIRCUIT BREAKERS AS REQUIRED. PROVIDE POWER REQUIREMENTS, RECEPTACLES AND POWER TO ALL MECHANICAL, ELECTRICAL AND B.A.S. SYSTEMS AS REQUIRED. CO-ORDINATE WITH ALL TRADES.

ALL ELECTRICAL WORK SHALL BE PERFORMED BY LICENSED ELECTRICIANS HOLDING A VALID CERTIFICATE OF QUALIFICATION.

INSTALLATION SHALL COMPLY WITH THE LATEST VERSIONS OF THE ONTARIO ELECTRICAL SAFETY CODE, THE ONTARIO BUILDING CODE, AND ALL OTHER APPLICABLE CODES AND REGULATIONS.

CONTRACTOR TO PAY ALL FEES TO OBTAIN REQUIRED APPROVALS AND INSPECTION CERTIFICATES THROUGHOUT THE CONSTRUCTION.

DO NOT REDUCE THE STANDARDS ESTABLISHED BY THE DRAWINGS AND SPECIFICATIONS BY APPLYING ANY OF THE CODES REFERRED TO HEREIN.

CONTRACTOR TO COORDINATE WITH ALL TRADES TO COMPLETE THE WORK WITHOUT INTERRUPTING PARKS CANADA OPERATIONS.

AS PER THE SCOPE OF WORK OUTLINED, THE EXTERIOR ENVELOPE OF THE BUILDING IS TO BE EXTENDED APPROXIMATELY 6". THIS WILL REQUIRE EXTERIOR PENETRATIONS BE EXTENDED (I.E. ELECTRICAL WIRING, CONDUIT/PIPING, DUCT WORK, ETC.) ANY EXTERIOR RUN PIPING/CONDUIT IS TO BE SUPPORTED AND CONCEALED IN THE BUILDING ENVELOPE, ANY PULL BOXES, ELBOWS, ACCESS POINTS TO BE ACCESSIBLE VIA INSULATED ACCESS DOOR.

ANY EXTERIOR EQUIPMENT TO BE REMOVED /RE-INSTALLED AS REQUIRED DURING THE SCOPE OF WORK.

**1. TEMPORARY FACILITIES AND WASTE DISPOSAL**

PROVIDE TEMPORARY POWER AND LIGHTING AS REQUIRED BY THE GENERAL CONTRACTOR FOR CONSTRUCTION. CONTRACTOR SHALL ARRANGE TO PAY FOR TEMPORARY SERVICES AND FEES FOR ANY REQUIRED TEMPORARY SERVICE PERMITS.

PROVIDE TEMPORARY STORAGE AS REQUIRED FOR ELECTRICAL CONSTRUCTION EQUIPMENT AND MATERIALS.

PARKING SHALL BE ARRANGED WITH PCA.

REMOVE ALL CONSTRUCTION WASTE FROM SITE.

APPLY WASTE MANAGEMENT FOR REDUCTION, RECYCLING, AND REUSE.

**3. SUBMITTALS**

IF CONFLICTS ARE FOUND BETWEEN DRAWINGS OR BETWEEN THESE DOCUMENTS AND SITE CONDITIONS, INFORM CONSULTANT.

COMPLETE COPIES OF SHOP DRAWINGS SHALL BE SUBMITTED TO THE CONSULTANT FOR REVIEW BEFORE WORK COMMENCES. SHOP DRAWINGS TO CONSIST OF ALL EQUIPMENT TO BE INSTALLED.

CHANGES TO THE CONTRACT RESULTING FROM UNFORESEEN SITE CONDITIONS, OR CHANGES REQUIRED BY ANY AND ALL AUTHORITIES HAVING JURISDICTION SHALL BE SUBMITTED TO THE CONSULTANT FOR APPROVAL.

ONE (1) FULL SIZE SET OF "RECORD DRAWINGS" AND SPECIFICATIONS SHALL BE MARKED AND SUBMITTED TO THE CONSULTANT. RECORD CHANGES TO THE DESIGN; INDICATE FINAL EQUIPMENT LOCATIONS; SKETCH ROUTES OF RACEWAYS AND LOCATION OF JUNCTION BOXES AND RISERS, MARK DEVICE ADDRESSES, ZONES AND PARTITIONS FOR ELECTRONIC SAFETY AND SECURITY SYSTEMS. IN "RECORD SPECIFICATIONS" MARK UP CHANGES TO FUNCTIONAL SPECIFICATIONS AND SEQUENCE OF OPERATIONS.

CERTIFICATE OF INSPECTION AND APPROVAL FROM ALL AUTHORITIES HAVING JURISDICTION SHALL BE SUBMITTED TO THE CONSULTANT.

TEST RESULTS SHALL BE SUBMITTED TO THE CONSULTANT.

SUBMIT OPERATING AND MAINTENANCE (O&M) DOCUMENTS TO PCA AND CONSULTANT.

**4. GENERAL PRODUCT REQUIREMENTS**

ALL MATERIAL SHALL BE COMMERCIAL GRADE, NEW, WITHOUT DEFECT AND CSA APPROVED UNLESS OTHERWISE NOTED. AS INDICATED ON THE LAYOUT DRAWINGS.

ALL ELECTRICAL FITTINGS, SUPPORTS, BOXES ETC., SHALL BE GALVANIZED OR PAINTED FINISH OVER CORROSION RESISTANT PRIMER.

IN ALL AREAS: WIRING SHALL BE CONCEALED IN WALL AND DEVICES SHALL BE MOUNTED RECESSED IN WALL AND CEILING SURFACES. OBTAIN CONSULTANT APPROVAL OTHERWISE.

MOUNTING HEIGHTS FOR DEVICES AS SPECIFIED.

PROVIDE VAPOUR BARRIER BOXES FOR ELECTRICAL BOXES THAT PENETRATE INTO EXTERIOR WALLS.

ALL 120V/208V INDOOR BRANCH CIRCUIT WIRING MINIMUM: #12AWG COPPER, TYPE T90 OR EQUIVALENT.

ALL POWER FEEDERS TO BE AC90 OR R90 COMPLETE WITH CONDUIT.

**4. GENERAL PRODUCT REQUIREMENTS (CONTINUED)**

INSTALL INSULATED GREEN BONDING CONDUCTOR IN ALL EMT CONDUIT.

ARMoured CABLE, AC90: ACCEPTABLE FOR EQUIPMENT DROPS WHERE CONDUIT IS IMPRACTICAL AS APPROVED BY CONSULTANT. CABLES BETWEEN LIGHTING FIXTURES TO BE AC90.

CONNECTION TO MOTORS: FLEXIBLE CONDUIT, LIQUID-TIGHT IN WET LOCATIONS.

CABLES SHALL BE RATED FT6 WHERE INSTALLED IN AIR RETURN PLENUM SPACES AND ARE NOT TOTALLY ENCLOSED. CABLES SHALL BE RATED FT4 OTHERWISE.

RACEWAYS SHALL BE RIGID, GALVANIZED STEEL WHERE EXPOSED TO MECHANICAL INJURY OR DAMP LOCATIONS, AND EMT IN ALL OTHER LOCATIONS.

SAFETY SWITCHES: QUICK-MAKE, QUICK BREAK, VOIDABLE COVER INTERLOCK, LOCKABLE IN "OFF" POSITION, FUSED.

PANELBOARDS: COMPLETE WITH BRANCH CIRCUIT BREAKERS, THERMAL-MAGNETIC TRIP, BOLT-ON FIELD INTERCHANGEABLE.

PROVIDE SPARE PARTS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS

**5. GENERAL EXECUTION REQUIREMENTS**

IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO COORDINATE WITH THE GENERAL CONTRACTOR OF ANY CONFLICTS BETWEEN SUB TRADES AT NO ADDITIONAL COST TO PCA.

PROVIDE APPROPRIATE ACCESSORIES TO COMPLETE THE INSTALLATION INCLUDING, BUT NOT LIMITED TO FASTENINGS, SUPPORTS, CONNECTORS, SEALANTS.

CUT, PATCH AND MAKE GOOD TO LEAVE WORK IN FINISHED CONDITION. DO NOT CUT LOAD-BEARING STRUCTURAL MEMBERS.

ALL SUB-GRADE CABLING TO BE TECK 90 OR EQUIVALENT. NO CONDUIT TO BE USED BELOW GRADE. NO EXCEPTION.

BOND ALL EQUIPMENT.

PROVIDE EXPANSION COUPLINGS WHERE RACEWAY CROSSES BUILDING CONTROL JOINTS.

CLEAN CONDUIT OF OBSTRUCTIONS BEFORE PULLING WIRE.

PROVIDE KNOCK-OUT PLUGS AND COVER PLATES TO COVER OPENINGS ON BOXES AND PANELS.

INSTALLATION SHALL BE CARRIED OUT IN SUCH MANNER THAT THE FIRE RATING OF THE STRUCTURE IS MAINTAINED, INCLUDING RECESSED FIXTURES.

PROVIDE FIRE AND SMOKE SEALS FOR ALL PENETRATIONS THROUGH WALL, FLOOR AND ROOF ASSEMBLIES.

PROVIDE RATED FIRE-STOPPING FOR ALL PENETRATIONS THROUGH FIRE-RESISTANCE RATED WALL, FLOOR AND ROOF ASSEMBLIES.

ALL NON-POWER CABLES RUN THROUGH THE CEILING SPACE SHALL BE INSTALLED WITH J-HOOKS OR SECURED TO STRUCTURE SO THAT THE CABLES ARE SUPPORTED ABOVE THE CEILING TILES. CABLES AND CONDUIT SHALL NOT BE SUPPORTED FROM MECHANICAL PIPING OR DUCTWORK.

COMMUNICATION CABLES SHALL NOT BE RUN OVER OR IN DIRECT PROXIMITY TO LIGHTING FIXTURES, MOTORS, MAGNETS, OR ELECTRICAL JUNCTION BOXES.

ROUTE EMERGENCY LIGHTING WIRING INDEPENDENT OF CONDUCTORS, RACEWAYS, AND BOXES USED FOR OTHER CIRCUITS.

PROVIDE INSTRUCTIONS FOR EMERGENCY UNIT EQUIPMENT IN ACCORDANCE WITH NATIONAL BUILDING CODE.

IN FINISHED AREAS, ELECTRICAL BOXES AND PANELS SHALL BE RECESSED AND WIRING OR CONDUIT SHALL BE CONCEALED.

INSTALL RACEWAY AND EQUIPMENT PLUMB, SQUARE AND STRAIGHT WITH RESPECT TO BUILDING LINES.

PROVIDE COMPLETE, CLEARLY LEGIBLE PANEL DIRECTORY MOUNTED INSIDE THE DOOR OF EACH ELECTRICAL PANEL.

CLEARLY IDENTIFY ALL NEW DISTRIBUTION PANELS, DISCONNECTS, AND CONTACTORS WITH LAMACOID LABELS.

PROVIDE LABELS ON ELECTRICAL DISTRIBUTION EQUIPMENT TO WARN PERSONS OF POTENTIAL ELECTRIC SHOCK AND ARC FLASH HAZARDS.

ALL RECEPTACLES SHALL BE IDENTIFIED WITH A PERMANENT, TYPE-WRITTEN LABEL INSTALLED ON THE COVER PLATE, INDICATING SOURCE PANEL AND BRANCH CIRCUIT NUMBER.

CONTRACTOR SHALL REPAIR OR PAY FOR ALL DAMAGE TO THE BUILDING INCURRED BY THE WORK OF THIS DIVISION.

**6. FIRE ALARM & DETECTION SYSTEM NOTES**

INSTALL TO CAN/ULC-S524 AND THE ONTARIO BUILDING CODE. TEST AND VERIFY TO CAN/ULC-S536 AND CAN/ULC-S537.

FIRE ALARM JUNCTION BOXES SHALL BE OF A RED COLOUR.

MAINTAIN 450MM (MIN.) DISTANCE BETWEEN ANY CEILING FIRE ALARM SPOT DETECTOR AND SUPPLY AND/OR EXHAUST AIR DUCTS.

SUBMIT DOCUMENTATION REQUIRED BY CAN/ULC-S524 PARAGRAPH 3.5.1 - 2 COPIES TO CONSULTANT.

SUBMIT AS-BUILT MARKUPS ON FULL SIZE DRAWINGS PROVIDED BY CONSULTANT, SHOWING ANY CHANGES TO ZONING, DEVICE LOCATIONS, AND RISER DIAGRAM.

PERFORM FIRE ALARM VERIFICATION. FIRE ALARM VERIFICATION TO BE PERFORMED BY PCA'S PREFERRED VERIFICATION COMPANY.

PCA'S PREFERRED VERIFICATION COMPANY TO PERFORM ROUGH-IN INSPECTION WITH REPORT ISSUED TO CONSULTANT.

FIRE ALARM DESIGN TO BE VERIFIED BY PCA'S PREFERRED VERIFICATION COMPANY AND REPORT SUBMITTED TO CONSULTANT.

**7. COMMISSIONING**

TEST THE ELECTRICAL INSTALLATION FOR PROPER AND SAFE OPERATION IN ACCORDANCE WITH THE INTENT OF THE DRAWINGS.

INSTRUCT PCA OR PCA'S REPRESENTATIVE IN OPERATION OF SYSTEMS.

"RECORD DRAWINGS" TO BE SUBMITTED TO THE CONSULTANT.



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project title  
titre du projet

Ontario  
PUKASKWA NATIONAL PARK  
ADMINISTRATION BUILDING  
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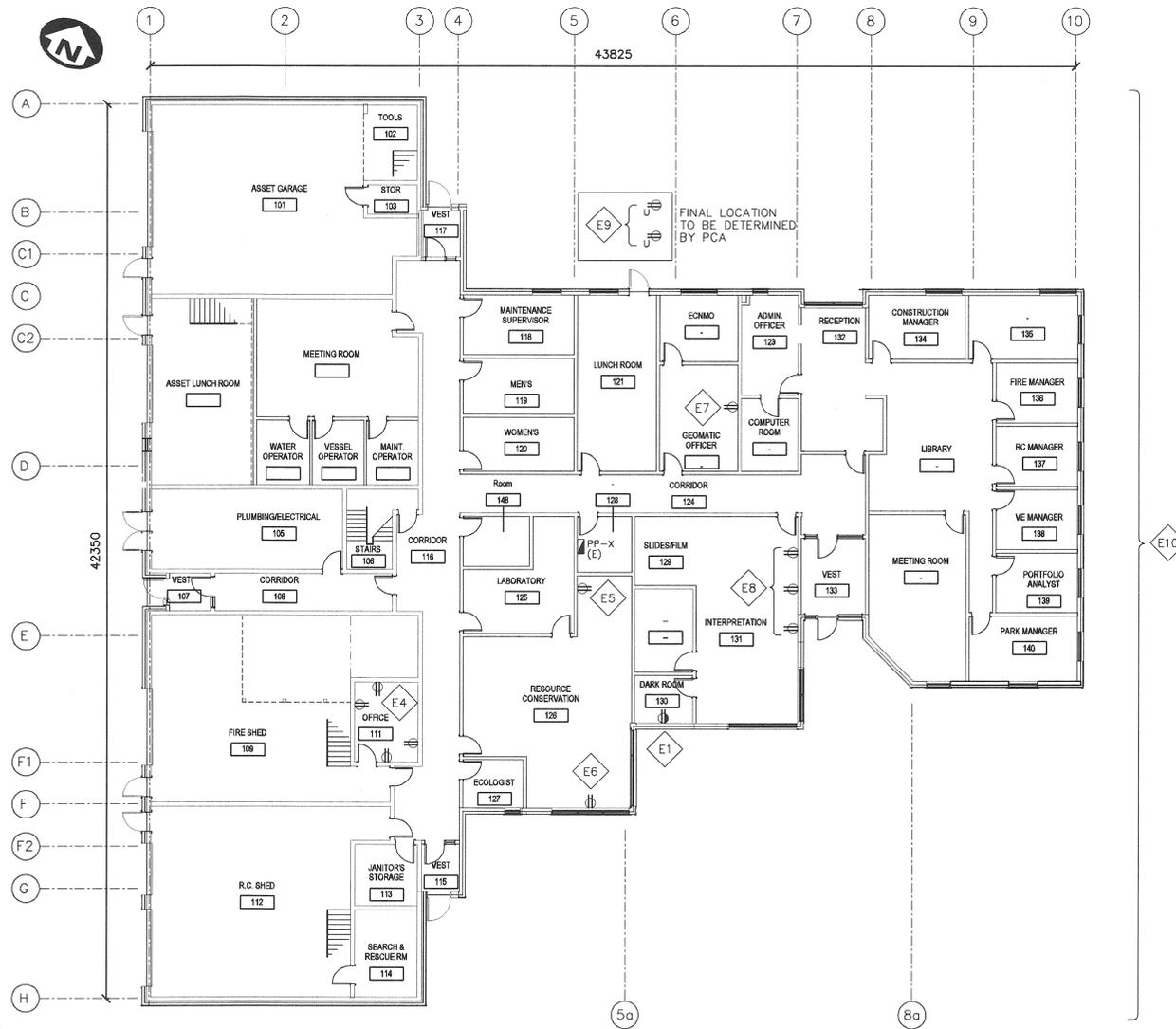
drawing title  
titre du dessin  
**CONSTRUCTION NOTES**

drawn by dessiné par	LMT <i>LMT</i> For LMT	project manager administrateur de projets
designed by conc par	KJW <i>KJW</i>	
approved by approuvé par	TJA <i>TJA</i>	
tender soumission	TENDER	

project date  
date du projet  
2017/01/27

project no.  
no. du projet  
151-06165-06

drawing no.  
dessiné no.  
E1



**INTERIOR POWER PLAN**  
SCALE: 1:150

**INTERIOR POWER PLAN NOTES**

**GENERAL:**

- REFER TO MECHANICAL DRAWINGS 5000 - 5001 FOR ADDITIONAL SCOPE OF WORK. PERFORM ALL TASKS REQUIRED, AS OUTLINED ON DRAWING 5000 TO COMPLETE A FULLY OPERATIONAL SYSTEM.
- (E) DENOTES EXISTING DEVICE/EQUIPMENT.
- ALL SUB-GRADE CABLING TO BE TECK 90 OR EQUIVALENT. NO CONDUIT TO BE USED BELOW GRADE. NO EXCEPTION.
- DEMOLITION WORK: REMOVE ALL WIRING/CONDUIT BACK TO CIRCUIT BREAKER AND MARK CIRCUIT AS SPARE ON CIRCUIT DIRECTORY.

- E1 CONTRACTOR TO SUPPLY AND INSTALL COUNTERTOP RECEPTACLE IN DARK ROOM 130. WIRING TO BE RECESSED AND FISHED DOWN THE WALL. RECEPTACLE TO BE POWERED FROM DEDICATED 15A CIRCUIT LOCATED IN PP-X IN COMPUTER ROOM 128. CONFIRM FINAL LOCATION OF RECEPTACLE WITH PARKS CANADA AGENCY (PCA). (WORK ORDER E4).
- E2 (NOTE NOT USED)
- E3 (NOTE NOT USED)
- E4 CONTRACTOR TO REMOVE EXISTING TRACK STYLE RECEPTACLES AND REPLACE WITH FOUR (4) RECEPTACLES. RECEPTACLES TO BE POWERED BY EXISTING RECEPTACLE CIRCUIT. RECEPTACLES TO BE INSTALLED IN METALLIC IVORY WIREMOLD. CONFIRM FINAL LOCATIONS WITH PCA. (WORK ORDER E9).
- E5 CONTRACTOR TO SUPPLY AND INSTALL ONE (1) RECEPTACLE BEHIND WORK DESK. WIRING TO BE RECESSED AND FISHED DOWN WALL. RECEPTACLE TO BE POWERED BY EXISTING RECEPTACLE LOCATED OPPOSITE ON EAST WALL. CONFIRM FINAL LOCATION WITH PCA. (WORK ORDER E5).
- E6 CONTRACTOR TO SUPPLY AND INSTALL ONE (1) DEDICATED RECEPTACLE ON THE STRUCTURAL COLUMN. RECEPTACLE TO BE POWERED BY A DEDICATED 15A CIRCUIT FROM PP-X, AND INSTALLED IN METALLIC IVORY WIREMOLD FROM THE CEILING TO 450mm A.F.F. (WORK ORDER E5).
- E7 CONTRACTOR TO SUPPLY AND INSTALL ONE (1) RECEPTACLE BEHIND PHOTOCOPIER. WIRING TO BE RECESSED AND FISHED DOWN THE WALL. RECEPTACLE TO BE POWERED BY A DEDICATED 15A CIRCUIT FROM PP-X. (WORK ORDER E5).
- E8 CONTRACTOR TO REMOVE EXISTING TRACK STYLE RECEPTACLES AND REPLACE WITH THREE (3) RECEPTACLES. RECEPTACLES TO BE POWERED BY EXISTING RECEPTACLE CIRCUIT. RECEPTACLES TO BE INSTALLED IN METALLIC IVORY WIREMOLD. CONFIRM FINAL LOCATIONS WITH PCA. (WORK ORDER E5).
- E9 CONTRACTOR TO PROVIDE ADDITIONAL TWO (2) 20A RECEPTACLES IN LUNCH ROOM 121. WIRING TO BE RECESSED AND FISHED DOWN THE WALL. RECEPTACLES TO BE POWERED BY TWO (2) 20A BREAKERS FROM PP-X. CONFIRM FINAL LOCATIONS WITH PCA. (WORK ORDER E5).
- E10 ELECTRICAL CONTRACTOR TO COORDINATE WITH OTHER TRADES TO COMPLETE ALL TASKS AND WORK ORDERS OUTLINED IN 5000 SERIES DRAWINGS.
- E11 (NOTE NOT USED)

**INTERIOR POWER DEVICE SCHEDULE**

ITEM	DESCRIPTION	MANUF./CAT. No.
⊕(E)	EXISTING 15A/20A 120V DUPLEX RECEPTACLE	EXISTING
⊕	15A, 120V, 5-15R, IVORY, SELF-GROUNDING COMMERCIAL GRADE DUPLEX RECEPTACLE, STAINLESS STEEL PLATE COVER, REGULAR STYLE	LEVITON TBR15-1
⊕	20A, 120V, 5-20R, IVORY, SELF-GROUNDING COMMERCIAL GRADE DUPLEX RECEPTACLE, STAINLESS STEEL PLATE COVER, REGULAR STYLE	LEVITON 7599-1
⊕	15A, 120V, 5-15R, IVORY, SELF-GROUNDING, SELF-TESTING COMMERCIAL GRADE GFCI RECEPTACLE, STAINLESS STEEL PLATE COVER, REGULAR STYLE	LEVITON 7899-SGI

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Ontario  
**PUKASKWA NATIONAL PARK  
ADMINISTRATION BUILDING  
REPAIR AND UPGRADES PHASE 2**

drawing title  
titre du dessin  
**INTERIOR POWER PLAN**

drawn by  
dessiné par  
LMT *[Signature]* For LMT

designed by  
conc par  
KJW *[Signature]*

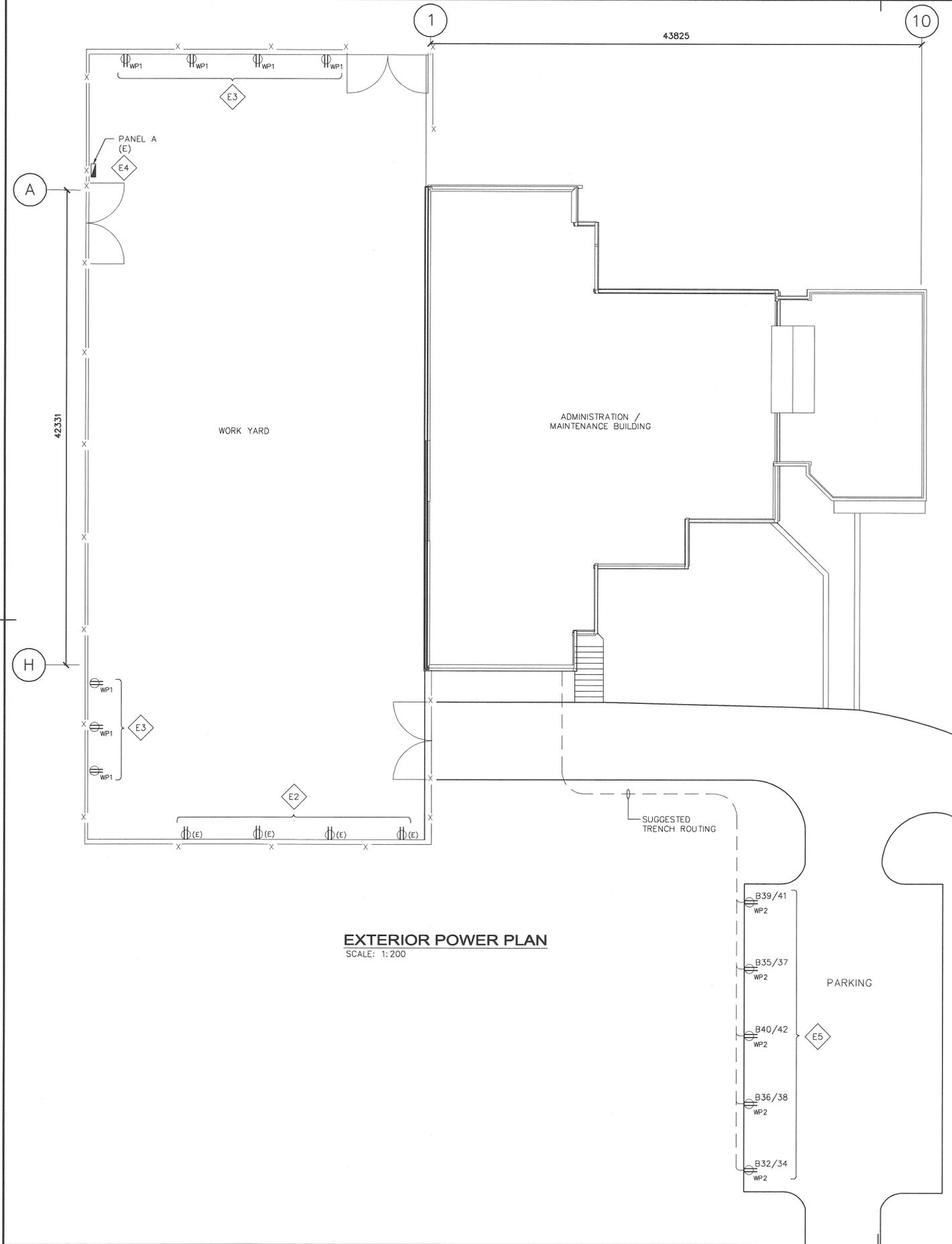
approved by  
approuvé par  
TJA *[Signature]*

tender submission  
projet manager  
administrateur de projets  
**TENDER**

project date  
date du projet  
**2017/01/27**

project no.  
no. du projet  
**151-06165-06**

drawing no.  
dessiné no.  
**E2**



**EXTERIOR POWER PLAN NOTES**

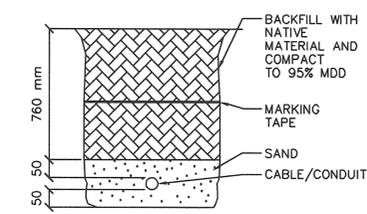
**GENERAL:**

- (E) DENOTES EXISTING DEVICE/EQUIPMENT.
- ALL SUB-GRADE CABLING TO BE TECK 90 OR EQUIVALENT. NO CONDUIT TO BE USED BELOW GRADE. NO EXCEPTION.

- ◊ E1 (NOTE NOT USED)
- ◊ E2 CONTRACTOR TO REMOVE EXISTING EXTERIOR RECEPTACLE C/W CONDUIT AND WIRING TO POWER PANEL A. CONDUIT TO BE SEALED AT GRADE, AT BOTH PANEL A, AND AT EACH POST. (WORK ORDER E11).
- ◊ E3 CONTRACTOR TO REPAIR EXISTING ABOVE GROUND CONDUIT/BOX AS REQUIRED. RECEPTACLE TO BE REPLACED WITH NEW SPLIT, 15A, 120V IPLC RECEPTACLE AS SPECIFIED. RECEPTACLES TO BE PROGRAMMED AS PER PARKS CANADA AGENCY (PCA) INSTRUCTIONS. IPLC PROGRAMMER TO BE ORDERED FOR RECEPTACLE COMMISSIONING. (WORK ORDER E11).
- ◊ E4 CONTRACTOR TO SUPPLY AND REPLACE EXISTING EXTERIOR PP-A C/W EXTERIOR CABINET. REFER TO DEVICE SCHEDULE FOR PANEL SPECIFICATIONS. CONTRACTOR TO CONFIRM PANEL AND CIRCUIT SPECIFICATIONS. (WORK ORDER E2).
- ◊ E5 CONTRACTOR TO SUPPLY AND REPLACE FIVE (5) SPLIT BLOCK HEATER RECEPTACLES LOCATED IN PARKING LOT. CONTRACTOR TO SUPPLY/INSTALL CONDUIT/CABLE AS REQUIRED FROM PP-B TO PARKING LOT. ASPHALT CUTTING/PATCHING IS REQUIRED. CONTRACTOR TO CONFIRM EXISTING CIRCUIT USED, AND PROVIDE AS-BUILT RECORD DRAWINGS. (NO WORK ORDER).

**EXTERIOR POWER DEVICE SCHEDULE**

ITEM	DESCRIPTION	MANUF./CAT. No.
☑	POWER PANEL, 42 CIRCUIT, 100A MAIN BREAKER, 120/208V, 3 PHASE, 4 WIRE, NEMA 3R RATED, LOCKABLE, PANEL DIRECTORY HOLDER, PANEL TO BE INSTALLED C/W WEATHER PROOF CABINET. <b>EXISTING CIRCUIT COUNT:</b> 15A 1P 10kA - 11 15A 2P 10kA - 12 20A 2P 10kA - 1 30A 2P 10kA - 1	GENERIC
⊕(E)	EXISTING 15A/20A 120V DUPLEX RECEPTACLE	EXISTING
⊕ WP	15A, 120V, 5-15R, WHITE, SELF-GROUNDING, SELF-TESTING COMMERCIAL GRADE GFCI RECEPTACLE, C/W HEAVY DUTY WHILE-IN-USE COVER	LEVITON GFWR1-W C/W RED DOT CKMUV
⊕ WP1	15A, 120V, 5-15R, SPLIT REGULAR IPLC RECEPTACLE, C/W HEAVY DUTY WHILE-IN-USE COVER	IPLC M210-15 C/W RED DOT CKMUV
⊕ WP2	15A, 120V, 5-15R, SPLIT REGULAR IPLC RECEPTACLE, C/W HEAVY DUTY WHILE-IN-USE COVER. RECEPTACLE TO BE INSTALLED C/W 8" X 8" POST INSTALLED 2.0m IN THE GROUND AND 1.0m ABOVE GROUND.	IPLC M210-15 C/W RED DOT CKMUV



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project title  
titre du projet  
**Ontario**  
PUKASKWA NATIONAL PARK  
ADMINISTRATION BUILDING  
REPAIR AND UPGRADES PHASE 2

drawing title  
titre du dessin  
**EXTERIOR POWER PLAN**

drawn by  
dessiné par **LMT** *SAM For LMT*

designed by  
conc par **KJW** *KJW*

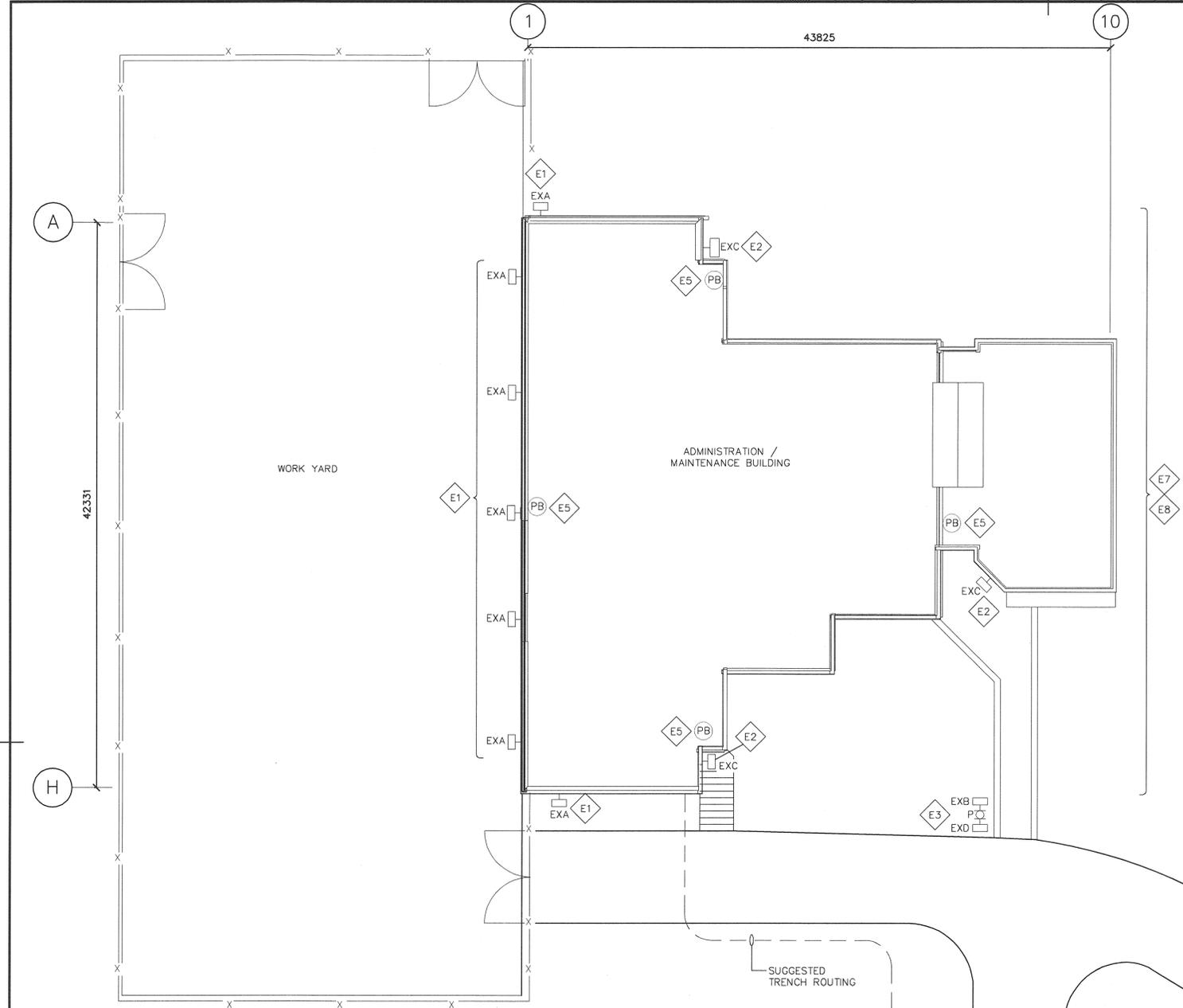
approved by  
approuvé par **TJA** *TJA*

tender submission **TENDER** project manager  
administrateur de projets

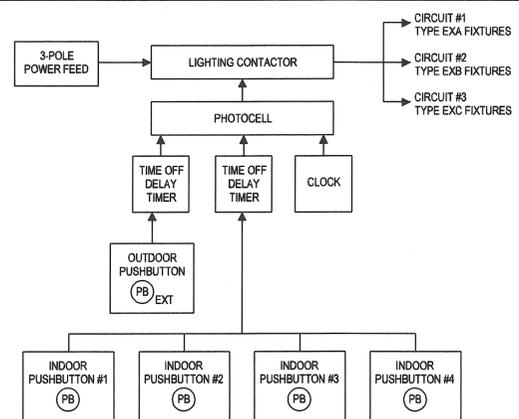
project date  
date du projet **2017/01/27**

project no.  
no. du projet **151-06165-06**

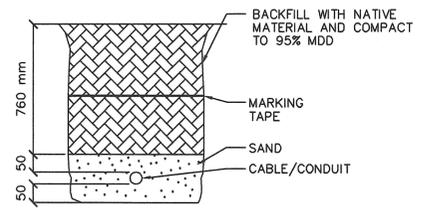
drawing no.  
dessiné no. **E3**



**EXTERIOR LIGHTING PLAN**  
SCALE: 1:200



**EXTERIOR LIGHTING CONTROL WIRING BLOCK DIAGRAM**  
SCALE: N.T.S.



**TYP. TRENCH DETAIL**  
SCALE: N.T.S.

**EXTERIOR LIGHTING CONTROL SCOPE OF WORK**

- POWER SOURCE:**
- ALL EXTERIOR LIGHTING TO BE POWERED BY 3-POLE, 15A BREAKER FROM THE LIGHTING PANEL LOCATED IN MECHANICAL ROOM 201.
  - 3-POLE LIGHTING CONTACTOR (120VAC COIL) C/W ON/OFF/AUTO SELECTOR SWITCH LOCATED IN MECHANICAL ROOM 201 TO BE USED TO CONTROL ALL EXTERIOR LIGHTING.
- LIGHTING CONTROL:**
- ALL EXTERIOR LIGHTING TO BE CONTROLLED BY A COMBINATION OF MASTER PHOTOCELL, DIGITAL CLOCK, TIME OFF DELAY TIMERS AND INTERIOR/EXTERIOR MOMENTARY CONTACT PUSHBUTTONS.
  - LIGHTING CONTACTOR - EATON OR EQUIVALENT
  - PHOTOCELL - INTERMATIC EK4436SM
  - TIME OFF DELAY TIMER, 15 MIN. - 60 MIN. RANGE - OMRON DIN RAIL MOUNT
  - CLOCK - INTERMATIC, T103P (ON) 6:00 A.M. - 9:00 A.M.; (ON) 4:00 P.M. - 7:00 P.M. - CONFIRM WITH PARKS CANADA AGENCY (PCA).
- ENCLOSURE:**
- CONTACTOR, TIMERS, MECHANICAL CLOCK TO BE LOCATED INSIDE A WALL MOUNT, HINGED, LOCKABLE CABINET
  - ENCLOSURE - HAMMOND

**EXTERIOR LIGHTING PLAN NOTES**

- GENERAL:**
- ALL EXTERIOR LIGHTING TO BE POWERED BY NEW 3-POLE, 120V LIGHTING CONTACTOR LOCATED IN PLUMBING/ELECTRICAL ROOM 105. INTERIOR AND EXTERIOR PUSHBUTTONS TO ACTIVATE ALL EXTERIOR LIGHTING.
  - ALL WIRING TO BE RECESSED OR INSTALLED IN WIREMOLD PAINTED TO MATCH.
  - LOW VOLTAGE LOGIC TO BE ADDED THROUGHOUT BUILDING AND PARKING LOT. SEE CONTROL LOGIC/BLOCK DIAGRAM.
  - ALL SUB-GRADE CABLING TO BE TECK 90 OR EQUIVALENT. NO CONDUIT TO BE USED BELOW GRADE. NO EXCEPTION.
- ◊ E1 CONTRACTOR TO REMOVE EXISTING LIGHT FIXTURE TYPE 'EXA', AND REPLACE WITH SEVEN (7) LIGHT FIXTURES AS SPECIFIED IN LIGHTING SCHEDULE. MOUNT NEW FIXTURES AT 6000mm ABOVE GRADE.
  - ◊ E2 CONTRACTOR TO REMOVE EXISTING LIGHT FIXTURE TYPE 'EXC', AND REPLACE WITH THREE (3) LIGHT FIXTURES AS SPECIFIED IN LIGHTING SCHEDULE. MOUNT NEW FIXTURES AT 3200mm ABOVE GRADE.
  - ◊ E3 CONTRACTOR TO SUPPLY AND INSTALL TWO (2) TYPE 'EXB' FIXTURES, MOUNTED ON LIGHT POLE.
  - ◊ E4 CONTRACTOR TO SUPPLY AND INSTALL OUTDOOR NEMA 4X RATED PUSHBUTTON C/W 8"x8" PRESSURE TREATED POST WITH 2.0M BELOW GRADE AND 2.5M ABOVE GROUND. PUSHBUTTON TO BE INSTALLED AT 1.25M A.F.G. C/W 200mm W X 300mm H OUTDOOR RATED GREEN LAMACOID LABEL "PRESS BUTTON TO ACTIVATE EXTERIOR LIGHTING".
  - ◊ E5 CONTRACTOR TO SUPPLY AND INSTALL INDOOR PUSHBUTTON C/W 100MM W X 200MM H GREEN LAMACOID LABEL "PRESS BUTTON TO ACTIVATE EXTERIOR LIGHTING". PUSHBUTTON TO BE RECESSED.
  - ◊ E6 (NOTE NOT USED)
  - ◊ E7 CONTRACTOR TO PERFORM COMPLETE INTERIOR LIGHTING MAINTENANCE C/W REPLACING BURNT OUT LAMPS, FAILED BALLASTS AND DAMAGED SOCKETS. (WORK ORDER E15).
  - ◊ E8 CONTRACTOR TO INSTALL PUSHBUTTONS AS SHOWN TO CREATE AN EMPLOYEE INTERACTIVE LIGHTING CONTROL SYSTEM. REFER TO LIGHTING CONTROL LOGIC AND CONTROL BLOCK DIAGRAM.

**EXTERIOR LIGHTING SCHEDULE**

ITEM	DESCRIPTION	MANUF./CAT. No.
EXA	LED FLOOD LIGHT, WALL MOUNT, 120V, 85W, 800mA DRIVER, 3000K COLOUR TEMPERATURE, WIDE DISTRIBUTION, BRONZE FINISH C/W WALL MOUNT ADAPTER	McGRAW-EDISON GALLEON SERIES GLEON-AF-02-E1-T4W-BZ-ADJA-WM-8030-800
EXB	LED FLOOD LIGHT, SLIPFITTER MOUNT, 120V, 85W, 800mA DRIVER, 3000K COLOUR TEMPERATURE, FORWARD THROW DISTRIBUTION, BRONZE FINISH C/W SLIPFITTER ADAPTER	McGRAW-EDISON GALLEON SERIES GLEON-AF-02-E1-T4FT-BZ-ADJS-8030-800
EXC	LED WALL MOUNT, 120V, 67W, 1.2A DRIVER, 3000K COLOUR TEMPERATURE, BRONZE FINISH	McGRAW-EDISON GALLEON SERIES GWC-AC-01-LED-E1-SL4-BZ-8030-1200
EXD	LED FLOOD LIGHT, SLIPFITTER MOUNT, 120V, 124W, 800mA DRIVER, 3000K COLOUR TEMPERATURE, FORWARD THROW DISTRIBUTION, BRONZE FINISH C/W SLIPFITTER ADAPTER	McGRAW-EDISON GALLEON SERIES GLEON-AF-03-E1-T4FT-BZ-ADJS-8030-800
OP	ROUND STEEL POLE, 6" SHAFT SIZE, 15'-0" HEIGHT, SQUARE BASE, DARK BRONZE FINISH C/W 3-1/2" POLE TOP MOUNTING TENON AND STEEL POLE TOP MOUNTING BRACKET (2 STUBS AT 180°)	EATON RSS-6-A-15-S-F-3-2 C/W 101-A23
PB	INTERIOR PUSHBUTTON LIGHT CONTROL MOUNTED ON WALL C/W LAMACOID LABEL. PUSHBUTTON TO BE MOMENTARY CONTACT, GREEN MUSHROOM HEAD. (SEE NOTE 5).	EATON C/W STAINLESS STEEL COVER PLATE
PB EXT	EXTERIOR PUSHBUTTON LIGHT CONTROL MOUNTED ON 8" X 8" POST C/W LAMACOID LABEL. SINGLE HOLE PUSHBUTTON ENCLOSURE C/W 30mm MOMENTARY CONTACT PUSHBUTTON, WATERTIGHT / OIL TIGHT, CORROSION RESISTANT, NEMA 4X RATED, GREEN MUSHROOM HEAD. (SEE NOTE 4).	HAMMOND PJ 744 P221 EATON PUSHBUTTON

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project title  
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**Ontario**  
PUKASKWA NATIONAL PARK  
ADMINISTRATION BUILDING  
REPAIR AND UPGRADES PHASE 2

drawing title  
titre du dessin  
**EXTERIOR LIGHTING PLAN**

drawn by  
dessiné par  
LMT *LMT For LMT*

designed by  
conc par  
KJW *KJW*

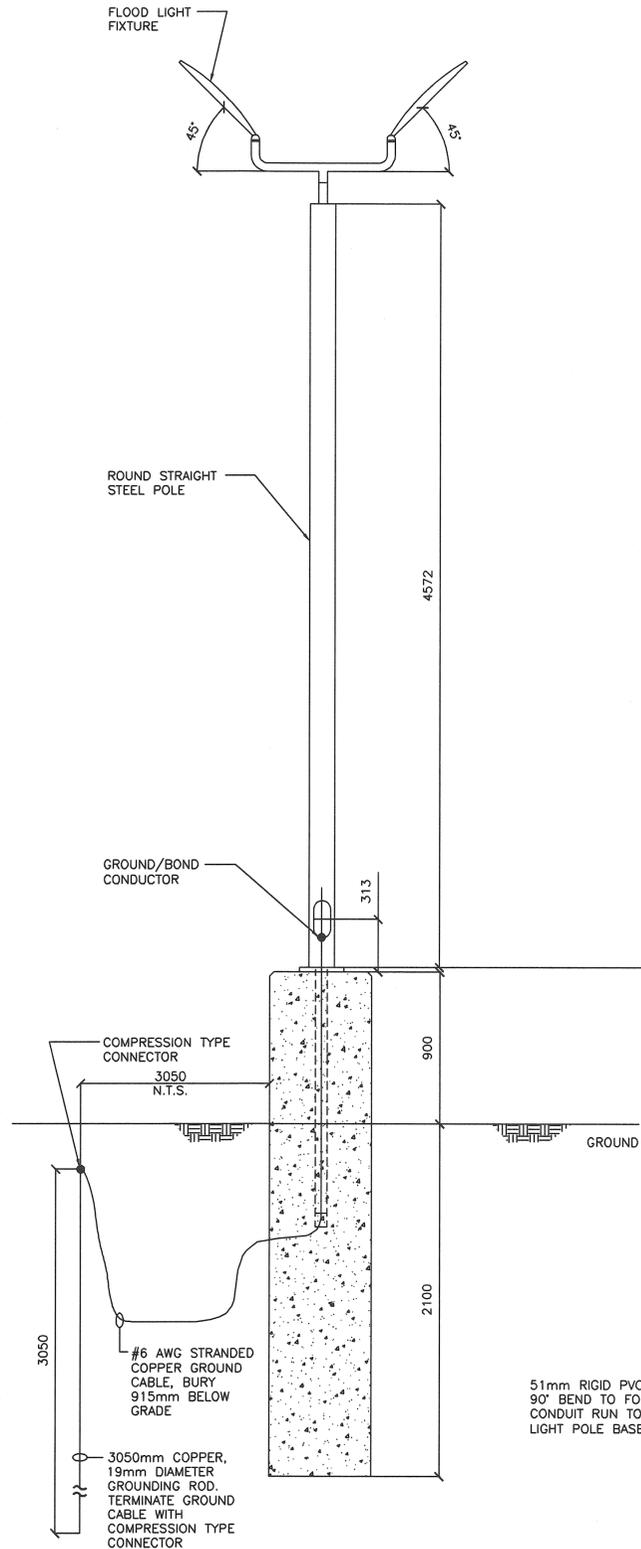
approved by  
approuvé par  
TJA *TJA*

tender  
soumission  
**TENDER**

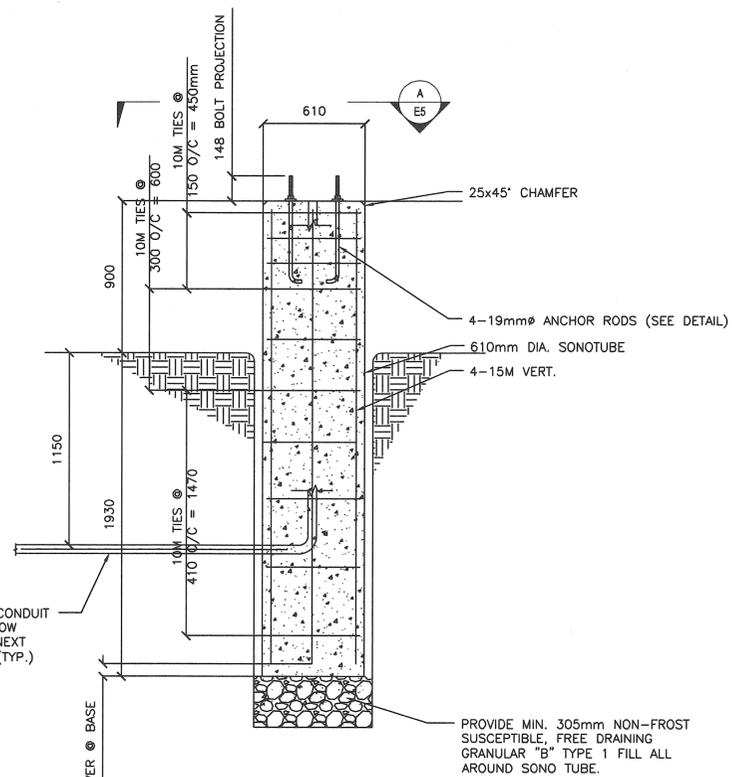
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no. du projet  
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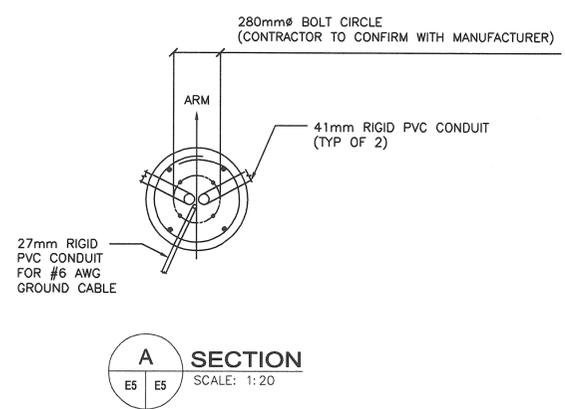
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dessiné no.  
**E4**



**LIGHT POLE (TYP)**  
SCALE: 1:20



**LIGHT POLE BASE - DETAIL 1**  
SCALE: 1:20



**A SECTION**  
SCALE: 1:20

**LIGHTING DETAIL NOTES**

**GENERAL:**

- ALL SUB-GRADE CABLING TO BE TECK 90 OR EQUIVALENT. NO CONDUIT TO BE USED BELOW GRADE. NO EXCEPTION.

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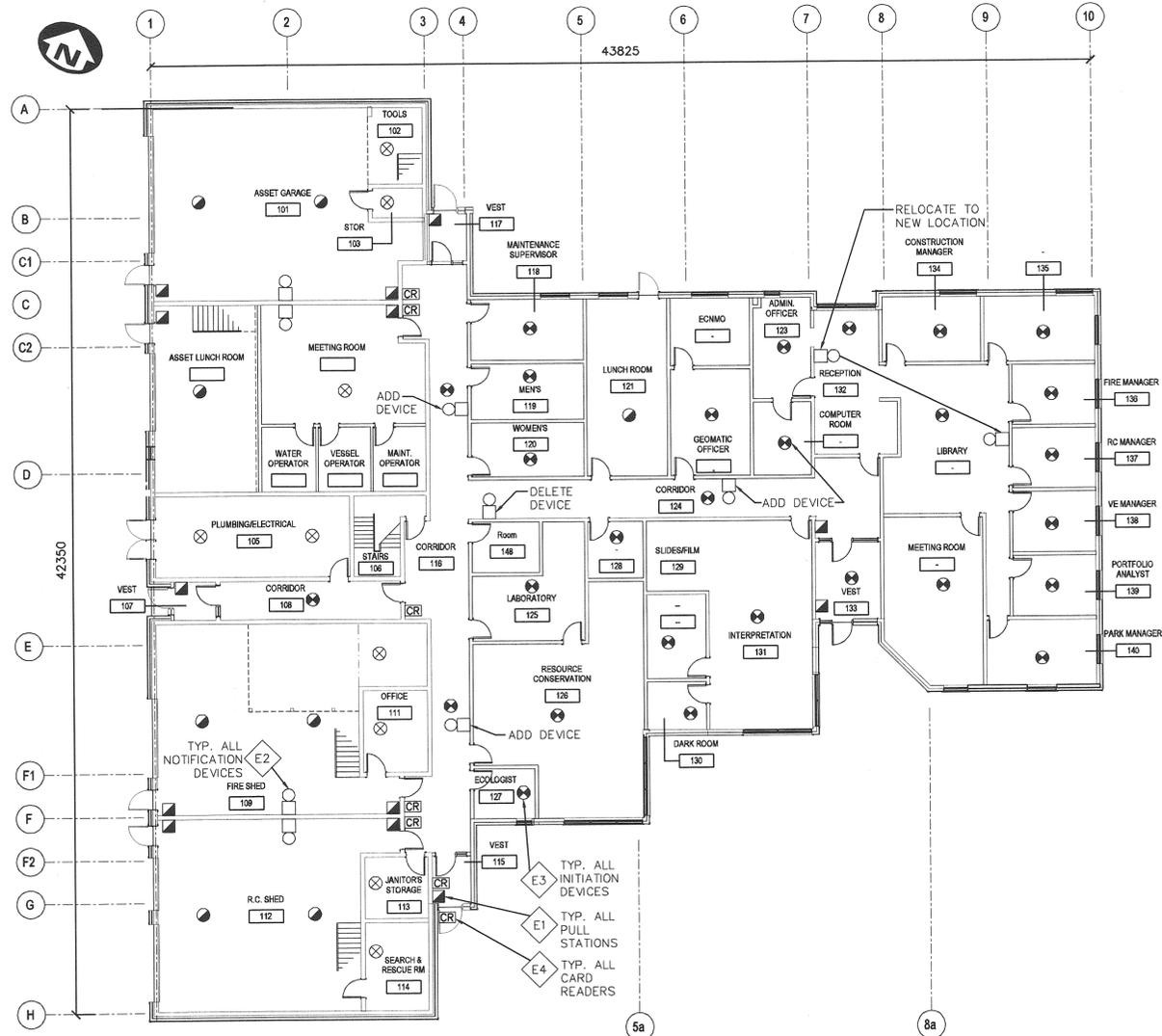
drawing title / titre du dessin: **LIGHTING DETAILS**

drawn by / dessiné par	LMT	<i>LMT For LMT</i>
designed by / conçu par	KJW	<i>KJW</i>
approved by / approuvé par	TJA	<i>TJA</i>
tender soumission	TENDER	project manager / administrateur de projets

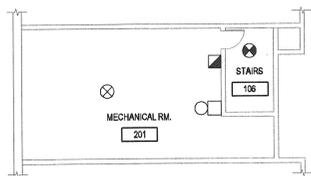
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project no. / no. du projet: 151-06165-06

drawing no. / dessiné no.: E5



**LIFE SAFETY PLAN**  
SCALE: 1:150



**LIFE SAFETY MECH. RM. / MEZZANINE PLAN**  
SCALE: 1:150

**LIFE SAFETY PLAN NOTES**

GENERAL:

- CONTRACTOR TO COORDINATE WITH PARKS CANADA AGENCY (PCA) TO ACHIEVE A 4-ZONE AUTOMATED DIRECT CALLOUT TO THE LOCAL FIRE DEPARTMENT AND MONITORING COMPANY.
- CONTRACTOR TO VERIFY ALL SPECIFICATIONS AND PRODUCTS TO CONFIRM OPERATION AND INSTALLATION COMPATIBILITY.
- E1 CONTRACTOR TO SUPPLY AND REPLACE EXISTING PULL STATION WITH NEW PULL STATION AS SPECIFIED C/W TAMPER-PROOF COVER. RELOCATE SIGNAGE NEXT TO PULL STATIONS TO MAKE SPACE FOR TAMPER-PROOF COVER.
- E2 CONTRACTOR TO SUPPLY AND REPLACE ALL EXISTING FIRE ALARM NOTIFICATION BELLS WITH NEW HORN/STROBE COMBINATION NOTIFICATION DEVICES AS SPECIFIED. REFER TO LIFE SAFETY PLAN FOR ADDITIONAL SCOPE OF WORK. STROBE SYNCHRONIZATION MODULES TO BE ADDED TO FACP AS REQUIRED. CONTRACTOR TO CONFIRM AMPACITY IS AVAILABLE IN NOTIFICATION CIRCUIT. ALL NEW HORN/STROBE DEVICES AND CABLING TO BE RECESSED.
- E3 CONTRACTOR TO SUPPLY AND REPLACE EXISTING FIRE SPOT DETECTORS WITH NEW HEAT/SMOKE CONVENTIONAL DETECTORS AS SPECIFIED. REFER TO LIFE SAFETY PLAN FOR ADDITIONAL SCOPE OF WORK.
- E4 CONTRACTOR TO DE-COMMISSION AND REMOVE ACCESS CONTROL PANEL, CARD READERS AND ALL RELATED HARDWARE AND ASSOCIATED WIRING. REFER TO LIFE SAFETY PLAN FOR CARD READER LOCATIONS.

**LIFE SAFETY SCHEDULE**

ITEM	DESCRIPTION	MANUF./CATALOG No.
⊗	EXISTING CONVENTIONAL FIRE SPOT SMOKE DETECTOR	EXISTING
⊗	CONVENTIONAL PHOTOELECTRIC SPOT SMOKE DETECTOR	NOTIFIER C2W-BA
⊗	EXISTING SPOT SMOKE DETECTOR	EXISTING
⊗	CONVENTIONAL PHOTOELECTRIC/ THERMAL SPOT SMOKE DETECTOR	NOTIFIER C2WT-BA
●	EXISTING HEAT DETECTOR	EXISTING
●	CONVENTIONAL HEAT DETECTOR, 135°F FIXED TEMPERATURE AND RATE OF RISE	NOTIFIER 5451 C/W B401B
□	EXISTING NOTIFICATION 6" BELL	EXISTING
□	NOTIFICATION HORN/STROBE RED BILINGUAL DEVICE C/W RED WALL TRIM	NOTIFIER P2R-B1 C/W BBS-2A
■	EXISTING CONVENTIONAL INITIATING PULL STATION	EXISTING
■	CONVENTIONAL SINGLE STAGE RED BILINGUAL MANUAL PULL STATION. TO BE INSTALLED C/W TAMPER-PROOF COVER.	NOTIFIER N-MPS-SC C/W STL INC. STI-1200
CR	EXISTING ACCESS CONTROL CARD READER	EXISTING

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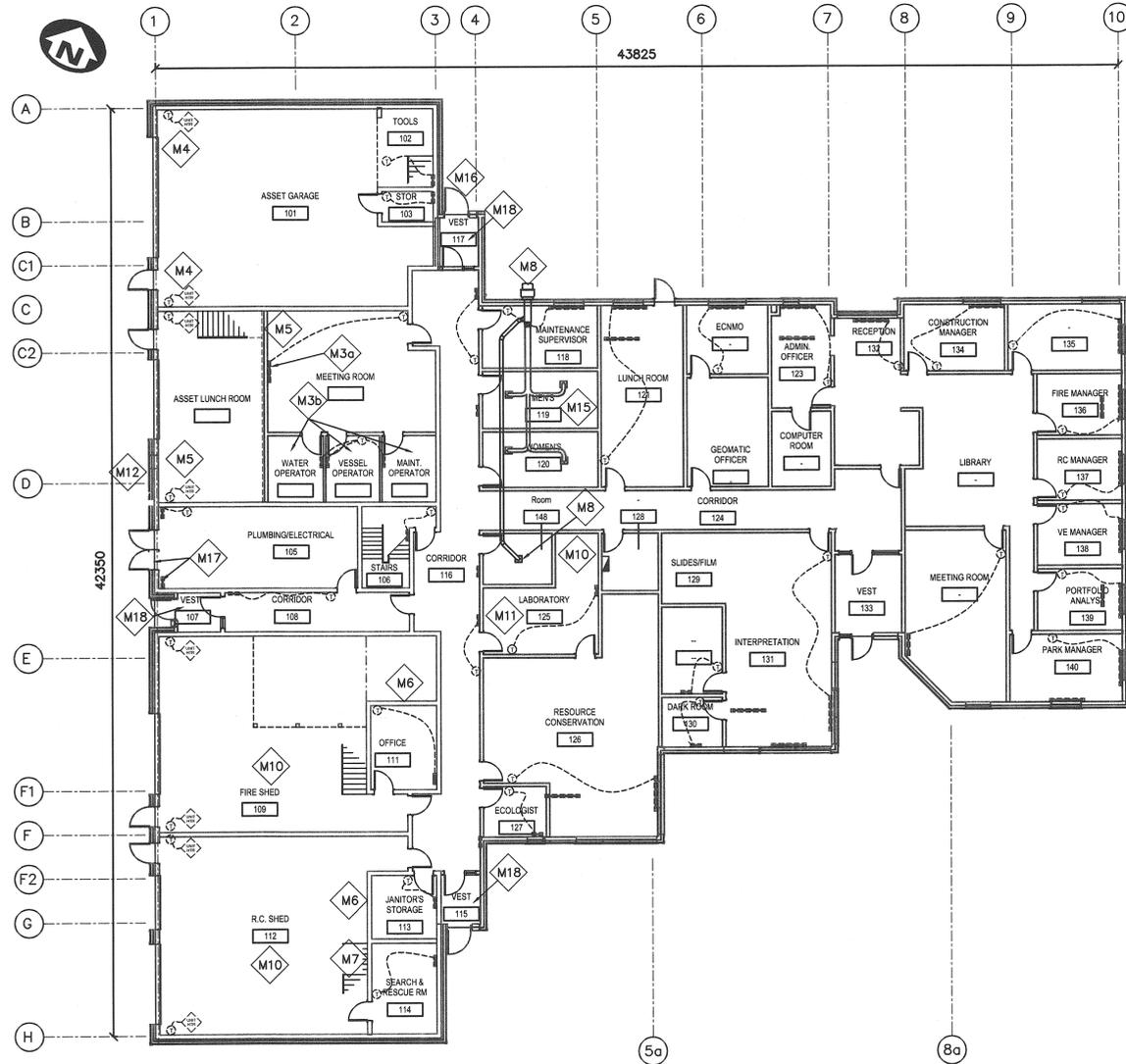
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drawn by / dessiné par: LMT *[Signature]*  
designed by / conçu par: KJW *[Signature]*  
approved by / approuvé par: TJA *[Signature]*  
tender soumission: TENDER project manager / administrateur de projets

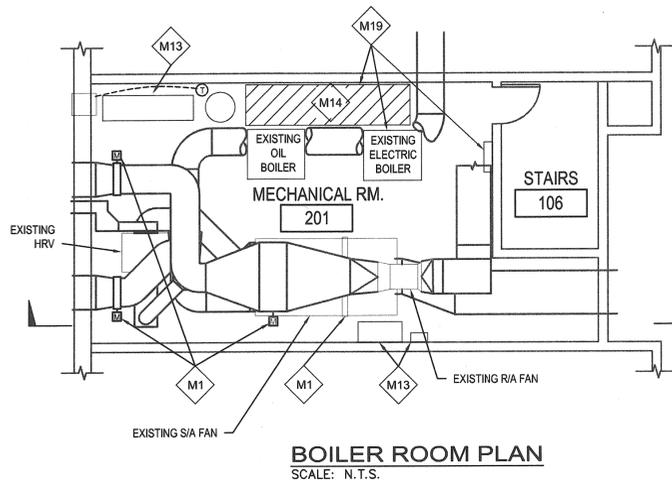
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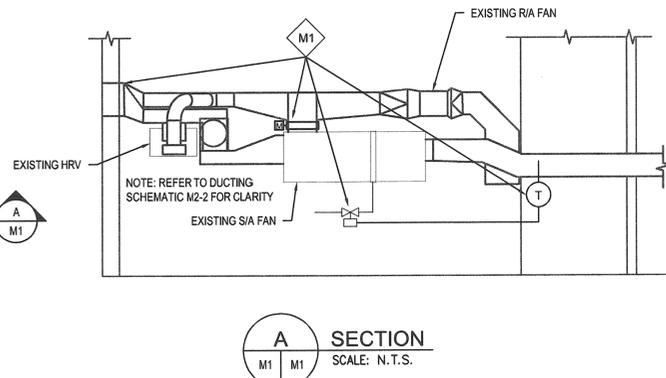
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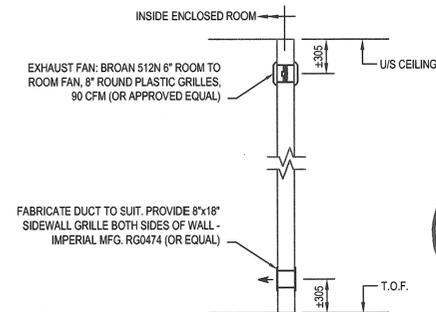
**MAIN FLOOR PLAN**  
SCALE: 1:150



**BOILER ROOM PLAN**  
SCALE: N.T.S.



**A SECTION**  
SCALE: N.T.S.



**DETAIL M1-1**  
SCALE: N.T.S.

**MECHANICAL CONSTRUCTION PLAN NOTES**

- M1 INSPECT AND REPLACE DAMPERS (IF REQUIRED). INSTALL NEW LOW VOLTAGE ACTUATORS ON DAMPERS. INSTALL NEW TEMPERATURE SENSOR AND TRANSMITTER IN S/A DUCT. REPLACE EXISTING GLYCOL COIL. INSTALL NEW LOW VOLTAGE MODULATING CONTROL VALVE IN COIL GLYCOL SUPPLY LINE. INSTALL NEW CIRCUIT SETTER BALANCING VALVE IN COIL GLYCOL RETURN LINE. INSTALL NEW CONTROL SYSTEM TO REGULATE S/A TEMPERATURE AT ADJUSTABLE SET POINT. NEW CONTROL VALVE MODULATES OPEN/CLOSED TO SATISFY S/A TEMP SENSOR. WHEN OUTDOOR TEMPERATURE IS BELOW 18°C DAMPERS MODULATE TO MINIMUM SET POINT. WHEN TEMPERATURE IS ABOVE 18°F DAMPERS MODULATE FULLY OPEN. ENSURE ALL DUCTING FROM WALL LOUVERS TO FAN AND HRV IS INSULATED. SEE SYSTEM SCHEMATIC - DETAIL M2-2.
- M2 BUILDING WIDE: INSPECT AND REPLACE FINNED TUBE RADIATOR AS REQUIRED. INSTALL NEW LOW VOLTAGE ELECTRIC CONTROL VALVE AND CIRCUIT SETTER BALANCING VALVE. REPLACE EXISTING THERMOSTAT WITH NEW LOW VOLTAGE UNIT TO SUIT NEW CONTROL VALVE. RE-BALANCE HYDRONIC SYSTEM TO SUIT.
- M3a INSTALL NEW FINNED TUBE RADIATOR (3400 BTU), CABINET, LOW VOLTAGE CONTROL VALVE AND CIRCUIT SETTER BALANCING VALVE. THERMOSTAT TO BE LOCATED IN MEETING ROOM BY LIGHT SWITCH.
- M3b INSTALL NEW FINNED TUBE RADIATOR (1000 BTU), CABINET, LOW VOLTAGE CONTROL VALVE AND CIRCUIT SETTER BALANCING VALVE. THERMOSTAT TO BE LOCATED IN OFFICE 2 BY LIGHT SWITCH.
- M4 INSTALL NEW CO SENSORS IN MECHANICS SHOP. SERVICE EXISTING FANS TO ENSURE RELIABLE OPERATION. INSTALL CONTROLLER TO OPERATE EXHAUST FAN AND S/A FAN TO PROVIDE MAKE-UP AIR WHEN EXHAUST FAN IS ENERGIZED.
- M5 REMOVE EXHAUST FAN AND DUCTING FROM CARPENTRY SHOP. REPAIR WALL PENETRATIONS TO MATCH EXISTING. ENSURE EXTERIOR WALL PENETRATION IS WEATHER TIGHT.
- M6 ADD EXHAUST FAN AND WALL TRANSFER GRILL TO ENCLOSED STORAGE ROOMS IN SHOPS. SEE DETAIL M1-1
- M7 ADD EXHAUST FAN AND WALL TRANSFER GRILL TO S.A.R. ROOM. SEE DETAIL M1-1
- M8 CHANGE EXHAUST FAN TO INCREASE FLOW AND TIE IN EXHAUST FROM ACCESSIBLE WASHROOM. SEE DETAIL M2-3
- M9 BUILDING WIDE: RE-BALANCE ALL AIR SYSTEMS (S/A, R/A, E/A) AT COMPLETION OF ALL RENOVATION WORK
- M10 PROVIDE SEPARATE QUOTE TO SUPPLY AND INSTALL DUCTLESS FUME HOOD. SENTRY AIR SYSTEMS 24\"/>
- M11 REPLACE WATER SUPPLY PLUMBING FOR LAB SINK BACK TO HEADERS AND ENSURE NO CARBON STEEL OR CAST IRON.
- M12 REMOVE DUST COLLECTOR AND RELATED DUCTING, SUPPORT STEEL AND ELECTRICAL. REPAIR EXTERIOR WALL AS REQUIRED AND ENSURE WEATHER TIGHT.
- M13 REMOVE OLD COMPRESSOR AND ANY RELATED ELECTRICAL AND CONTROL AS REQUIRED. ALL EQUIPMENT REMOVED TO BE RETURNED TO PCA.
- M14 REMOVE OLD EXPANSION TANK ABOVE BOILERS (NOW REDUNDANT)
- M15 REMOVE FLUSH TANKS, REDUNDANT EQUIPMENT AND PLUMBING FROM CEILING SPACE.
- M16 REMOVE REDUNDANT EXTERIOR GRILLES. REPAIR EXTERIOR WALL AND ENSURE WEATHER TIGHT. COORDINATE WORK WITH SIDING CONTRACTOR.
- M17 RELOCATE AIR VENT FROM DOOR TO WALL AS NOTED. PROVIDE AIR DAM AT FLOOR.
- M18 REPLACE EXISTING VESTIBULE CEILING MOUNTED FAN FORCED CONVERTOR CABINETS IN KIND AND RELOCATE TO FLOOR LEVEL.
- M19 REPLACE EXISTING ELECTRIC BOILER WITH NEW OIL FIRED BOILER. EXISTING ELECTRIC BOILER, RELATED WIRING AND CONTROL TO BE COMPLETELY REMOVED. NEW BOILER SHALL BE BURNHAM V9A c/w BECKET BURNER TO MATCH EXISTING. CONTRACTOR TO PROVIDE NEW OIL SUPPLY/ RETURN LINES AS REQUIRED AND PROVIDE NEW COMBINED BOILER BREECHING AND CHIMNEY. BOILER TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS AND IN CONJUNCTION WITH CAN/CSA B139 AND TSSA GUIDELINES. ALL EXISTING HYDRONIC PUMPS TO BE REMOVED AND RETURNED TO PCA. NEW PIPING AND PUMPS TO BE INSTALLED PER HYDRONIC SYSTEM SCHEMATIC - DETAIL M2-1

**GENERAL NOTES:**

1. COORDINATE ALL EXTERIOR MECHANICAL WORK WITH SIDING CONTRACTOR. ENSURE ALL MECHANICAL PENETRATION WORK IS COMPLETED PRIOR TO SIDING BEING REPLACED.
2. MECHANICAL CONTRACTOR TO REMOVE MECHANICAL ITEMS (GRILLES, LOUVRES, ETC) PRIOR TO BUILDING EXTERIOR UPGRADES AND RE-INSTALL, OR REPLACE AS REQUIRED, AFTER NEW EXTERIOR SIDING IS INSTALLED.
3. EXISTING EXTERIOR RAIN WATER LEADERS (2 LOCATIONS) TO BE EXTENDED AS REQUIRED TO SUIT NEW EXTERIOR FINISH OF BUILDING. EXISTING BRONZE LEADER NOZZLES TO BE SALVAGED AND RE-INSTALLED.
4. APPROXIMATE LOCATIONS OF EXISTING THERMOSTATS ILLUSTRATED. CONTRACTOR TO LOCATE NEW THERMOSTATS USING INDUSTRY BEST PRACTICE GUIDELINES.
5. FOR NEW EQUIPMENT SPECIFICATIONS AND SEQUENCES OF OPERATION SEE DRAWING M2.
6. CONTRACTOR TO COORDINATE WITH ALL TRADES TO COMPLETE THE WORK WITHOUT INTERRUPTING PARKS CANADA OPERATIONS.
7. AS PER THE SCOPE OF WORK OUTLINED, THE EXTERIOR ENVELOPE OF THE BUILDING IS TO BE EXTENDED APPROXIMATELY 6\"/>
- 8. ANY EXTERIOR EQUIPMENT TO BE REMOVED /RE-INSTALLED AS REQUIRED DURING THE SCOPE OF WORK. CONTRACTOR TO ENSURE ALL DUCTWORK IS SEALED. REFER TO PROJECT SPECIFICATIONS. PROVIDE SEPARATE PRICING FOR DUCTWORK PRESSURE TESTING.

Public Works and  
Government Services Canada  
Architectural and Engineering Services  
Ontario Region  
Travaux publics et  
Services gouvernementaux Canada  
Services d'architecture et de génie  
Région de l'Ontario



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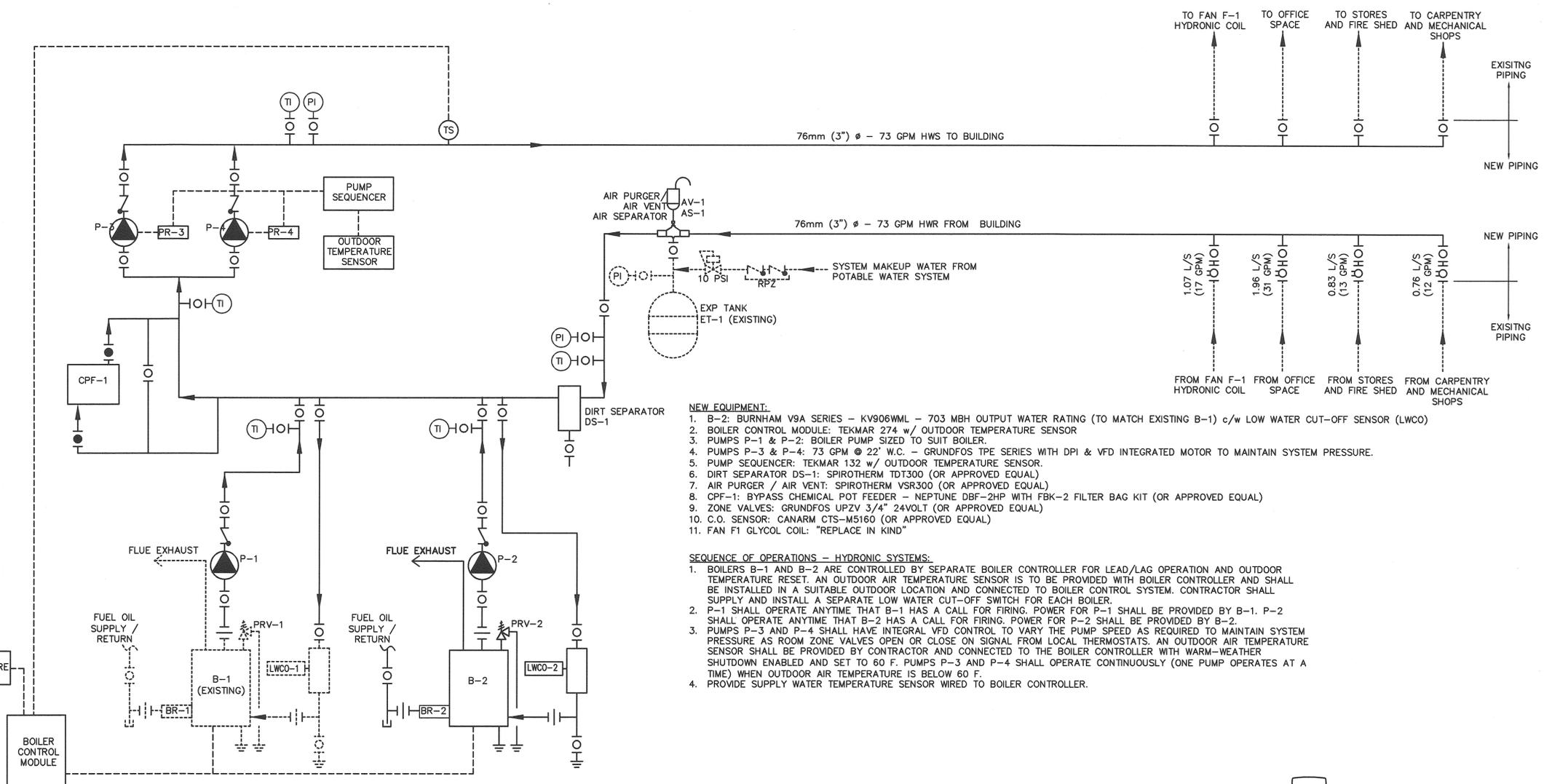
A B C	A Detail No. No. du détail
	B drawing no. - where detail required dessin no. - où détail exigé
	C drawing no. - where detailed dessin no. - où détaillé

project title  
titre du projet  
**PUKASKWA NATIONAL PARK  
ADMINISTRATION BUILDING  
REPAIR AND UPGRADES PHASE 2**  
Ontario

drawing title  
titre du dessin  
**MECHANICAL  
RENOVATION PLAN AND NOTES**

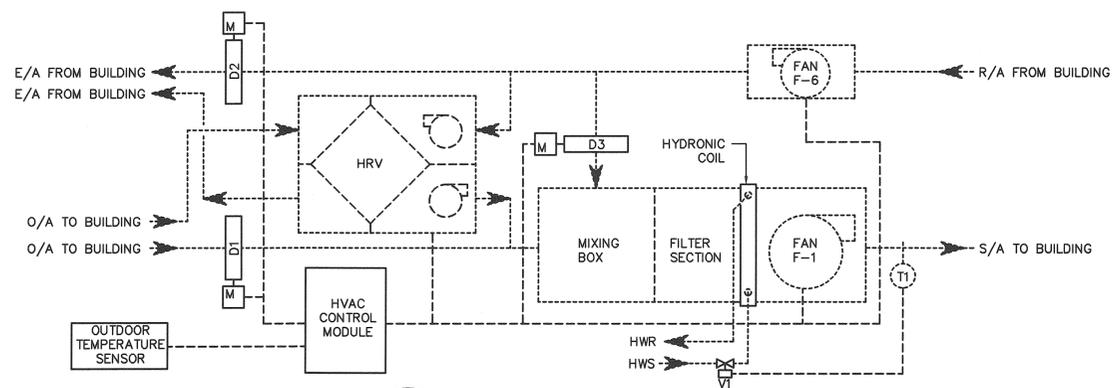
drawn by dessiné par	SvT	
designed by conçu par	CPB	
approved by approuvé par	TJA	
tender soumission	TENDER	project manager administrateur de projets
project date date du projet	2017/01/27	
project no. no. du projet	151-06165-06	
drawing no. dessiné no.	M1	





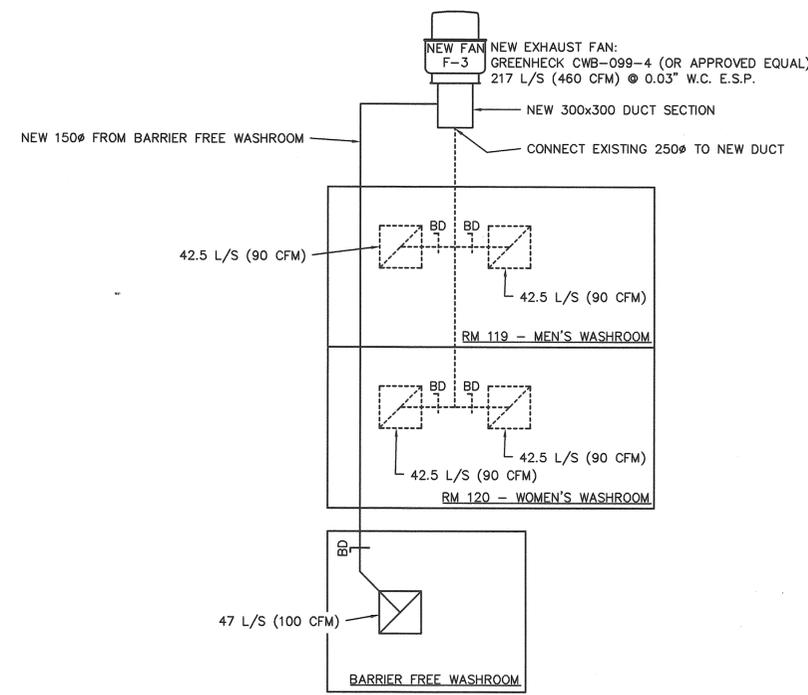
- NEW EQUIPMENT:**
- B-2: BURNHAM V9A SERIES - KV906WML - 703 MBH OUTPUT WATER RATING (TO MATCH EXISTING B-1) c/w LOW WATER CUT-OFF SENSOR (LWCO)
  - BOILER CONTROL MODULE: TEKMAR 274 w/ OUTDOOR TEMPERATURE SENSOR
  - PUMPS P-1 & P-2: BOILER PUMP SIZED TO SUIT BOILER
  - PUMPS P-3 & P-4: 73 GPM @ 22' W.C. - GRUNDFOS TPE SERIES WITH DPI & VFD INTEGRATED MOTOR TO MAINTAIN SYSTEM PRESSURE.
  - PUMP SEQUENCER: TEKMAR 132 w/ OUTDOOR TEMPERATURE SENSOR
  - DIRT SEPARATOR DS-1: SPIROTHERM DT300 (OR APPROVED EQUAL)
  - AIR PURGER / AIR VENT: SPIROTHERM VSR300 (OR APPROVED EQUAL)
  - CPF-1: BYPASS CHEMICAL POT FEEDER - NEPTUNE DBF-2HP WITH FBK-2 FILTER BAG KIT (OR APPROVED EQUAL)
  - ZONE VALVES: GRUNDFOS UPZV 3/4" 24VOLT (OR APPROVED EQUAL)
  - C.O. SENSOR: CANARM CTS-M5160 (OR APPROVED EQUAL)
  - FAN F1 GLYCOL COIL: "REPLACE IN KIND"
- SEQUENCE OF OPERATIONS - HYDRONIC SYSTEMS:**
- BOILERS B-1 AND B-2 ARE CONTROLLED BY SEPARATE BOILER CONTROLLER FOR LEAD/LAG OPERATION AND OUTDOOR TEMPERATURE RESET. AN OUTDOOR AIR TEMPERATURE SENSOR IS TO BE PROVIDED WITH BOILER CONTROLLER AND SHALL BE INSTALLED IN A SUITABLE OUTDOOR LOCATION AND CONNECTED TO BOILER CONTROL SYSTEM. CONTRACTOR SHALL SUPPLY AND INSTALL A SEPARATE LOW WATER CUT-OFF SWITCH FOR EACH BOILER.
  - P-1 SHALL OPERATE ANYTIME THAT B-1 HAS A CALL FOR FIRING. POWER FOR P-1 SHALL BE PROVIDED BY B-1. P-2 SHALL OPERATE ANYTIME THAT B-2 HAS A CALL FOR FIRING. POWER FOR P-2 SHALL BE PROVIDED BY B-2.
  - PUMPS P-3 AND P-4 SHALL HAVE INTEGRAL VFD CONTROL TO VARY THE PUMP SPEED AS REQUIRED TO MAINTAIN SYSTEM PRESSURE AS ROOM ZONE VALVES OPEN OR CLOSE ON SIGNAL FROM LOCAL THERMOSTATS. AN OUTDOOR AIR TEMPERATURE SENSOR SHALL BE PROVIDED BY CONTRACTOR AND CONNECTED TO THE BOILER CONTROLLER WITH WARM-WEATHER SHUTDOWN ENABLED AND SET TO 60 F. PUMPS P-3 AND P-4 SHALL OPERATE CONTINUOUSLY (ONE PUMP OPERATES AT A TIME) WHEN OUTDOOR AIR TEMPERATURE IS BELOW 60 F.
  - PROVIDE SUPPLY WATER TEMPERATURE SENSOR WIRED TO BOILER CONTROLLER.

**M2-1 HYDRONIC SYSTEM SCHEMATIC**  
 SCALE: N.T.S.



**M2-2 FAN F-1 / F-6 SYSTEM SCHEMATIC**  
 SCALE: N.T.S.

- SEQUENCE OF OPERATIONS - FAN F-1/F-6 SYSTEM:**
- FANS F-1 & F-6 TO OPERATE CONTINUOUSLY WHILE BUILDING IS OCCUPIED.
  - WHEN OUTDOOR TEMPERATURE IS ABOVE 15°C (59°F): DAMPER D1 & D2 OPEN FULLY AND DAMPER D3 MODULATES FULLY CLOSED. HRV REMAINS IN STANDBY.
  - WHEN OUTDOOR TEMPERATURE IS BELOW 15°C (59°F): DAMPER D1 & D2 MODULATE FULLY CLOSED AND DAMPER D3 OPENS FULLY. HRV IS ENERGIZED TO PROVIDE MINIMUM OUTDOOR AIR REQUIREMENTS FOR BUILDING AND PROTECT HEATING COIL FROM FREEZING.
  - WHEN OUTDOOR TEMPERATURE IS BELOW HEATING SYSTEM SET-POINT VALVE V1 MODULATES TO MAINTAIN S/A TEMPERATURE BASED ON SET-POINT OF TEMPERATURE SENSOR T1.



**M2-3 BATHROOM EXHAUST SYSTEM MODIFICATION**  
 SCALE: N.T.S.

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 Ontario  
**PUKASKWA NATIONAL PARK ADMINISTRATION BUILDING REPAIR AND UPGRADES PHASE 2**

drawing title  
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**MECHANICAL RENOVATION PLAN AND NOTES**

drawn by dessiné par	SVT	
designed by conçu par	CPB	
approved by approuvé par	TJA	
tender soumission	TENDER	project manager administrateur de projets

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 dessin no.  
 M2

