LIST OF DRAWINGS - LISTE DES DESSINS

100 SITING / EMPLACEMENT

200 STRUCTURAL / STRUCTURE

300 ARCHITECTURAL / ARCHITECTURE

COVER, GENERAL NOTES & KEY PLAN

400 MECHANICAL / MÉCANIQUE

LEGENDS, ABBREVIATIONS, GENERAL NOTES AND DRAWING LIST

500 ELECTRICAL / ÉLECTRIQUE

ELECTRICAL SCOPE, GENERAL NOTES, LEGENDS AND DRAWING LIST

600 CIVIL / CIVIL

REMOVALS

700 COMMUNICATION / COMMUNICATION

ELECTRICAL NEW WORK - TELECOMMUNICATIONS FLOOR PLAN & DETAILS

800 SECURITY / SÉCURITÉ

900 INTERIOR DESIGN / CONCEPTION INTÉRIEUR

DATE	
GUILBEAU, CHRISTOPHER 0986 2026.05.28 10:57:13 -04'00' Chris Guilbeau, Project Manager	
ST JOHN, STEVEN 376 Digitally signed by ST. JOHN, STEVEN 376 Date: 2026.06.01 06:49:28 -04'00' Steve St. John, Chief Fire Inspector	DC / NO. – CIC NO. KN229975
SANTOS, FERNANDO 989 Digitally signed by SANTOS, FERNANDO 989 Date: 2026.06.02 11:04:44 -04'00' Fernando Santos, Engineering Officer	PROJECT NO. – PROJET NO. 50047845
	JOB NO. K-B35-2508/3

0049-B082
MCNAUGHTON BARRACKS

Address | Adresse
KINGSTON
City | Ville
ONTARIO
Province | Province

Canada

UNCLASSIFIED - NON CLASSIFIÉ

Government of Canada / Gouvernement du Canada

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GENERAL STRUCTURAL NOTES

1. STRUCTURAL DESIGN IS IN ACCORDANCE WITH THE 2024 OBC (ONTARIO BUILDING CODE).
2. THIS IS A METRIC PROJECT. UNLESS OTHERWISE NOTED, ALL LENGTHS ARE IN MILLIMETERS.
3. REVIEW STRUCTURAL DRAWINGS IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS. REPORT DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.
4. COORDINATE ALL OPENINGS, SLEEVES, AND EMBEDDED ITEMS IN THE STRUCTURE WITH ALL OTHER CONTRACT DOCUMENTS. REPORT ANY ITEMS THAT ARE IN CONFLICT BEFORE PROCEEDING WITH THE WORK.
5. VERIFY EXISTING DIMENSIONS AND CONDITIONS ON SITE PRIOR TO CONSTRUCTION.
6. THE REVISION COLUMN INDICATES THE INTENDED USE OF THESE DRAWINGS. DO NOT CONSTRUCT FROM THESE DRAWINGS UNLESS MARKED "ISSUED FOR CONSTRUCTION".
7. DO NOT USE INFORMATION ON THESE DRAWINGS FOR ANY OTHER PROJECTS.
8. DO NOT SCALE THESE DRAWINGS.
9. FOLLOW TYPICAL DETAILS SHOWN ON DRAWINGS, UNLESS OTHERWISE NOTED. TYPICAL DETAILS SHOW STRUCTURAL INTENT RATHER THAN ACTUAL PROJECT CONDITIONS. (NOTE THAT TYPICAL DETAILS ARE NOT ALWAYS REFERENCED ON PLAN.)
10. SECTIONS, DETAILS, AND STATEMENTS NOTED AS "TYP." OR "TYPICAL" SHALL CONVEY THAT CONDITIONS ARE LIKE OR SIMILAR IN THE STRUCTURE.
11. PROVIDE REASONABLE NOTICE (NOT LESS THAN 24 HOURS) PRIOR TO CONCEALING ANY WORK THAT REQUIRES INSPECTION, REVIEW, OR TESTING. SCHEDULE THIS WORK TO OCCUR DURING NORMAL BUSINESS HOURS.
12. PERIODIC FIELD REVIEW OF A REPRESENTATIVE SAMPLE OF THE STRUCTURAL WORK DESIGNED BY JP2G WILL BE UNDERTAKEN TO AS CERTAIN GENERAL CONFORMANCE WITH THE STRUCTURAL DRAWINGS AND SPECIFICATIONS. THESE REVIEWS DO NOT REPLACE THE CONTRACTOR'S RESPONSIBILITY FOR QUALITY CONTROL AND QUALITY ASSURANCE.
13. UNLESS INDICATED OTHERWISE ON THESE DRAWINGS, ALL ELECTRICAL AND MECHANICAL EQUIPMENT INCLUDING PIPES, DUCTS, CONDUITS, AND MECHANICAL UNITS TO BE CHECKED FOR SEISMIC BRACING REQUIREMENTS AS PER CSA-S832. SEISMIC RISK REDUCTION OF OPERATIONAL AND FUNCTIONAL COMPONENTS (OFCs) OF BUILDINGS. SEISMIC BRACING IS TO BE PROVIDED, AS INDICATED IN THE STANDARD, DESIGNED IN ACCORDANCE WITH NBCC 4.1.8.18

SHOP DRAWINGS

1. SUBMIT FOR REVIEW ALL SHOP DRAWINGS REQUIRED BY THESE DRAWINGS AND SPECIFICATIONS:
   - 1.1 CONCRETE MIX DESIGN
   - 1.2 CONCRETE REINFORCEMENT (REBAR)
   - 1.3 CONCRETE JOINT SEALANT AND FILLER MATERIAL
   - 1.4 FRAMING & WOOD CONNECTORS
   - 1.5 WOOD SCREWS, NAILS, AND STRUCTURAL SCREWS
   - 1.6 EPOXY ADHESIVE
2. REVIEW OF SHOP DRAWINGS IS ON A SAMPLING BASIS, FOR GENERAL CONFORMITY WITH STRUCTURAL CONTRACT DOCUMENTS. IT IS NOT A DETAILED CHECK AND MUST NOT BE CONSTRUED AS RELIEVING THE CONTRACTOR OF RESPONSIBILITY FOR MAKING THE WORK ACCURATE AND IN CONFORMITY WITH THE CONTRACT DOCUMENTS.
3. REVIEW OF SHOP DRAWINGS DOES NOT IMPLY ANY CHANGE IN DCC REPRESENTATIVE'S RESPONSIBILITIES RELATED TO DESIGN OF SPECIFIC ITEMS AS OUTLINED BY THE SPECIFICATIONS.
4. REVIEW OF A SPECIFIC COMPONENT ON NON-STRUCTURAL SHOP DRAWINGS (COMPONENTS ENGINEERED BY OTHERS) DOES NOT INCLUDE REVIEW OF THE ASSEMBLY OF WHICH THE ITEM MAY BE A COMPONENT.
5. ALLOW A MINIMUM OF **10** ***(TEN)*** WORKING DAYS FOR REVIEW OF EACH SUBMISSION OF SHOP DRAWINGS. ALLOW MORE TIME WHEN LARGE QUANTITIES OF SHOP DRAWINGS ARE SUBMITTED. SUBMIT IN GENERAL CONFORMITY WITH THE SEQUENCE OF CONSTRUCTION INTENDED.
6. MAKE CORRECTIONS REQUIRED BY PREVIOUS REVIEW BEFORE RESUBMITTING DRAWINGS. CLEARLY INDICATE ALL CHANGES AND ADDITIONS TO PREVIOUS SUBMISSION. DO NOT ADD NEW DETAILS TO DRAWINGS WHICH HAVE BEEN STAMPED AS REVIEWED OR NOTED.
7. AFTER REVIEW, THE DRAWINGS WILL BE STAMPED AND RETURNED TO SHOW ONE OF THE FOLLOWING:

NOT REVIEWED	SHOWS WORK WHICH IS NOT WITHIN THE SCOPE OF STRUCTURAL CONSULTING SERVICES.
REVIEWED	CONTRACTOR APPEARS TO HAVE INTERPRETED THE CONTRACT DOCUMENTS CORRECTLY AND THE DCC REPRESENTATIVE HAS NO SPECIFIC COMMENT OR NOTES.
NOTED	THE CONTRACTOR SHALL ADDRESS THE NOTES FROM THE DCC REPRESENTATIVE PRIOR TO CONSTRUCTION. SUBMIT FINAL RECORD PRINT.
REVISE & RESUBMIT	ADDRESS COMMENTS AND RESUBMIT FOR REVIEW PRIOR TO FABRICATION.

8. SUBMIT ENGINEER SEALED SHOP DRAWINGS WHEN REQUIRED BY SPECIFICATIONS. SHOP DRAWINGS NOT STAMPED, SIGNED, AND DATED WILL BE MARKED "RESUBMIT" AND RETURNED WITHOUT BEING REVIEWED.
9. DO NOT COMMENCE FABRICATION UNTIL RETURNED SHOP DRAWINGS HAVE BEEN EXAMINED.
10. PROVIDE FINAL RECORD DRAWINGS AFTER ALL CORRECTIONS ARE MADE.

DEMOLITION/ DECONSTRUCTION OF STRUCTURES

1. THESE NOTES ARE APPLICABLE FOR ANY NEW OPENINGS IN THE ROOF STRUCTURE, OR ANY OTHER DEMOLITION WORK
2. PRIOR TO START OF DEMOLITION/ DECONSTRUCTION WORK, SUBMIT:
   - 2.1. A SURVEY OF ADJACENT BUILDING ELEMENTS DESIGNATED TO REMAIN WHICH DOCUMENTS PRE-EXISTING DEFECTS.
   - 2.2. DEMOLITION/ DECONSTRUCTION PLAN IDENTIFYING MEANS AND METHODS OF DECONSTRUCTION WORK AND SPECIFICALLY ADDRESSING THE STRUCTURAL INTEGRITY AND STABILITY OF THE BUILDING COMPONENTS TO REMAIN
3. DEMOLITION/ DECONSTRUCTION OF STRUCTURAL ELEMENTS TO BE UNDERTAKEN BY A QUALIFIED CONTRACTOR IN ACCORDANCE WITH ALL PREVAILING LEGISLATION, CODES AND STANDARDS. DESIGNATED SUBSTANCES AND HAZARDOUS MATERIALS ARE ASSUMED PRSEENT IN THE PROJECT SCOPE AREA, AINCLUDING BUT NOT LIMITED TO: PAINTED FINISHES CONTAINING LEAD, MERCURY ASSOCIATED WITH LIGHTING, AND SILICA ASSOCIATED WITH CONCRETE. REFER TO SPECIFICATION SECTION 01 35 43 ENVIRONMENTAL PROTECTION FOR MORE DETAILS
4. IF MATERIALS RESEMBLING HAZARDOUS SUBSTANCES ARE ENCOUNTERED, STOP WORK, TAKE PREVENTATIVE MEASURES AND NOTIFY THE DCC REPRESENTATIVE. DO NOT PROCEED UNTIL WRITTEN INSTRUCTIONS HAVE BEEN RECEIVED.
5. PROVIDE TEMPORARY WORKS REQUIRED IN ORDER TO MAINTAIN THE STABILITY OF THE BUILDING ELEMENTS AND STRUCTURES DESIGNATED TO REMAIN.
6. PREVENT DEBRIS AND MATER FROM BLOCKING MEANS OF EGRESS.
7. STOCKPILING OF THE MATERIAL ON SITE IS NOT PERMITTED.
8. DISPOSE OF MATERIAL IN ACCORDANCE WITH PREVAILING CODES AT LICENSED FACILITIES. DESIGNATED SUBSTANCES AND HAZARDOUS WASTE WILL BE DISPOSED OF IN ACCORDANCE WITH SPECIFICATION SECTION 01 35 43 ENVIRONMENTAL PROTECTION.
9. DEMOLITION MAY UTILIZE ANY LEGAL MEANS OR METHODS PERMITTED INCLUDING HYDRAULIC OR MECHANICAL TECHNIQUES, HOWEVER IMPLOSION USING EXPLOSIVES IS NOT PERMITTED.
10. UPON COMPLETION OF THE PROJECT LEAVE THE WORK SITE CLEAN AND FREE OF DEBRIS.
11. MAKE GOOD ALL EXISTING WORK DISTURBED BY DEMOLITION OR DECONSTRUCTION PROCEDURES.

TEMPORARY SHORING

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW DRAWINGS, CONTRACT DOCUMENTS, AND SITE CONDITIONS TO DETERMINE TEMPORARY SHORING REQUIREMENTS PRIOR TO START OF WORK.
2. CONTRACTOR TO ASSUME ALL COSTS ASSOCIATED WITH TEMPORARY SHORING: DESIGN (TO BE DESIGNED BY OTHERS, WHERE APPLICABLE), PERMITTING / APPROVALS, AND EXECUTION
3. ALL TEMPORARY WORKS SHALL BE DESIGNED AND REVIEWED BY A PROFESSIONAL ENGINEER RETAINED BY THE CONTRACTOR, LICENSED IN ONTARIO
4. THESE DRAWINGS SHOW THE COMPLETED STRUCTURE ONLY. TEMPORARY WORKS AND AREAS OF ADJACENT STRUCTURE WHICH MAY REQUIRE SHORING, FOR WHICH THE CONTRACTOR IS RESPONSIBLE AND WHICH MAY BE REQUIRED FOR EXECUTION OF THE PROJECT MAY NOT BE INDICATED ON DRAWINGS.
5. CONSTRUCTION LOADS ON THE PERMANENT STRUCTURE SHALL NOT EXCEED DESIGN LOADS ON DRAWINGS.
6. TEMPORARY SHORING MUST KEEP ALL PARTS OF THE STRUCTURE DESIGNATED TO REMAIN STRUCTURALLY STABLE (PLUMB, LEVEL, ALIGNED WHERE APPLICABLE) DURING CONSTRUCTION

DESIGN LOADS

1. THE VALUES FOR CLIMATIC DATA USED IN THE DETERMINATION OF DESIGN LOADS HAVE BEEN OBTAINED FROM THE 2015 NBCC FOR THE SPECIFIC LOCATION OF **KINGSTON, ONTARIO**
2. DEAD LOAD (DL) IS THE SELF WEIGHT OF THE STRUCTURE PLUS THE SUPERIMPOSED DEAD LOAD.
3. GRAVITY LOADS ARE SHOWN ON PLANS. LIVE LOAD REDUCTION HAS NOT BEEN USED.
4. UNLESS OTHERWISE NOTED, DESIGN LOADS SHOWN ARE SPECIFIED (UNFACTORED) LOADS, TO BE USED FOR ULS DESIGN.
5. FOR POINT LOADS, IF ONLY ONE LOAD IS GIVEN, CONSIDER IT LIVE LOAD.
6. DEAD:

SELF WEIGHT OF ROOFTOP MECHANICAL UNITS (DEAD LOAD)		
	OPERATING WEIGHT AS REPORTED BY MANUFACTURER	SELF-WEIGHT FOR STRUCTURAL ANALYSIS (INCLUDING CURB)
DOAS - 1	2.2 KN (490 LBS)	3.0 KN (670 LBS)
OU - 1	1.0 KN (225 LBS)	1.4 KN (325 LBS)

7. EXISTING ROOF SELF-WEIGHT FOR STRUCTURAL DESIGN:

CAP SHEET:	0.10 KPa
BASE SHEET:	0.05 KPa
STARTER SHEET:	0.05 KPa
FIBERGLASS MAT/ FIBERGLASS PAPER:	0.05 KPa
RIGID INSULATION:	0.30 KPa
PEEL AND STICK VAPOR BARRIER:	0.05 KPa
ROLL ON VAPOUR BARRIER:	0.05 KPa
18MM OSB SHEATHING:	0.15 KPa
ALLOWANCE FOR SUSPENDED SERVICES STRUCTURE (TRUSSES):	0.15 KPa
ALLOWANCE FOR SUSPEDED M&E SERVICES:	0.25 KPa
ALLOWANCE FOR ARCHITECTURAL OR OTHER SUSPENDED WORK:	0.50 KPa
TOTAL STRUCTURAL DEAD LOAD FOR DESIGN:	1.70 KPa

8. SNOW:

Is (ULS) = 1.0 Is (SLS) = 0.9 **[BUILDING IS NORMAL IMPORTANCE]**
CHARACTERISTIC ROOF DIMENSIONS:
ROOF: L = 24m, W = 11.3m, Lc = 17.3m
Ss = 2.1 kPA, Sr = 0.4 **kPa**
γs= 3.1 KN/m3
ROOF SLOPE = 1.2 deg. (1:48), Cs = 1.0
EXPOSED: NO, Cw = 1.0
Cb =1.0
BASIC SNOW LOAD: **2.08 KPa** (ON ROOF)

9. SEISMIC

SEISMIC SITE CLASSIFICATION: D (ASSUMED)

Sa(0.2)=0.374, Sa(0.5)=0.37, Sa(1.0)= 0.226, Sa(2.0)=0.11, PGA= 0.207
Ie = 1.0 (NORMAL IMPORTANCE)
TYPE OF SFRS: NAILED SHEAR WALL: WOOD-BASED PANEL Rd = 3.0, Ro = 1.7
SEISMIC DESIGN PARAMETERS (ADDITION ONLY)
V = 2 Sι(0.2)IeW/ 3RdRo = 0.027W
W = 78 KN

NEW MECHANICAL UNITS
COMPONENT CATEGORY: 11 MACHINERY, FIXTURES, EQUIPMENT AND TANKS (INCLUDING CONENTS) THAT ARE RIGID AND RIGIDLY CONNECTED
Cp = 1.00, Ar = 1.00, Rp = 1.25
hx = 10.35m, hn = 9.75m
Ax = 1 + 2hx/hn = 3.12
Sp = CpArAx/Rp = 2.50
Vp = 0.3Sι(0.2)IeSpWp = 0.280Wp

LATERAL LOADS ON THE BUILDING AS A WHOLE ARE RESISTED BY THE EXISTING SEISMIC FORCE RESISTING SYSTEM (SFRS) OF THE BUILDING AND CONVEYED DIRECTLY TO THE BUILDING FOUNDATION. THE CHANGE IN LATERAL LOADING DUE TO SEISMIC FORCES AS A RESULT OF THE NEW MECHANICAL UNIT ON THE BUILDING IS NEGLIGIBLE AND WITHIN THE ALLOWANCE FOR MECHANICAL EQUIPMENT, AND DOES NOT REQUIRE ADDITIONAL REINFORCEMENT OF THE SFRS.

CONCRETE

1. CONCRETE PERFORMANCE SPECIFICATION AS OUTLINED IN CAN/CSA A23.1. THE CONTRACTOR AND THE CONCRETE SUPPLIER TO MEET ALL CERTIFICATION, DOCUMENTATION, AND QUALITY CONTROL REQUIREMENTS.
2. THE CONTRACTOR AND THE CONCRETE SUPPLIER ARE TO ENSURE THAT THE PLASTIC AND HARDENED MIX PROPERTIES MEET SITE -THE REQUIREMENTS FOR PLACING, FINISHING, AND ACHIEVING THE SPECIFIED PERFORMANCE REQUIREMENTS.
3. THE CONCRETE SUPPLIER TO MUST BE CERTIFIED BY THE CONCRETE ONTARIO TECHNICAL COMMITTEE.
4. UNLESS NOTED OTHERWISE:
   - 4.1 CEMENT TO BE PORTLAND CEMENT TYPE GU UNLESS OR REQUIRED BY EXPOSURE CLASS.
   - 4.2 CONCRETE TO BE NORMAL DENSITY .
   - 4.3 NOMINAL SIZE OF COURSE AGREGATE TO BE 20 (3/4").
5. PERFORMANCE REQUIREMENTS FOR CONCRETE TO BE IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

STRUCTURAL ELEMENT	COMPRESSIVE STRENGTH (MPA) 28 DAYS	EXPOSURE CLASS	REMARKS
FOOTINGS	25	N	
FOUNDATION WALLS	30	F1	
SLAB-ON-GRADE (INTERIOR, HEATED)	30	F1	
LEAN CONCRETE, MUDSLABS	10	N	
EXTERIOR HOUSEKEEPING PADS	35	C1	

NOTES:
1. WHERE EXPOSURE CLASS IS NOTED 'N / F2', USE F-2 EXPOSURE CLASS FOR PERIMETER AND EXTERIOR NON INSULATED ELEMENTS, AND FOR ELEMENTS IN INTERIOR UNHEATED SPACES, WHICH ARE SUSCEPTIBLE TO FREEZING. USE N EXPOSURE CLASS FOR ELEMENTS PROTECTED FROM FREEZING.

6. REFER TO CAN/CSA A23.1 FOR PERFORMANCE REQUIREMENTS ASSOCIATED WITH EACH OF THE SPECIFIED EXPOSURE CLASS. (IE. THE MAXIMUM WATER/CEMENT RATIO, MINIMUM COMPRESSIVE STRENGTH, AIR CONTENT, CURING REQUIREMENTS, CHLORIDE ION PENETRABILITY, AND ALTERNATE CEMENT TYPE TO MEET THE REQUIREMENTS FOR THE NOTED EXPOSURE CLASS.)
7. PROVIDE A MINIMUM OF 24 HOURS NOTICE TO THE DCC REPRESENTATIVE PRIOR TO CLOSING FORMS OR CASTING CONCRETE TO ALLOW FOR REINFORCING STEEL REVIEW.
8. PLACE CONCRETE IN A MANNER TO AVOID SEGREGATION. VIBRATE ALL CONCRETE.
9. IMPLEMENT COLD WEATHER CONCRETING METHODS IN ACCORDANCE WITH CAN/CSA-A23.1.. PROTECT CONCRETE FROM FREEZING. DO NOT PLACE CONCRETE AGAINST FROZEN GROUND.
10. IMPLEMENT HOT WEATHER CONCRETING METHODS IN ACCORDANCE WITH CAN/CSA-A23.1.PROTECT CONCRETE FROM EXCESSIVE HEAT AND DRYING.

BACKFILL

1. MATERIALS
   - 1.1. THE GRANULAR BACKFILL TO BE INSTALLED MUST MEET ONTARIO PROVINCIAL STANDARD SPECIFICATIONS. BACKFILL MUST BE FREE OF SHALE OR ANY OTHER MATERIAL POTENTIALLY CAUSING SWELLING.
   - 1.2. UNLESS OTHERWISE SPECIFIED ON PLANS, GRANULAR FOUNDATION MUST CONSIST OF A MINIMUM OF 300MM (12") GRANULAR A CRUSHED STONE
2. BACKFILL OPERATIONS AND COMPACTION
   - 2.1. BACKFILL LIFTS 300MM (12") THICK AFTER COMPACTION, UNLESS OTHERWISE SPECIFIED
   - 2.2. BACKFILL FOUNDATION WALLS, AFTER THE CONSTRUCTION OF FLOORS, OR WHEN APPLICABLE, ON BOTH SIDES OF THE WALLS SIMULTANEOUSLY, SO AS TO AVOID MOVEMENT OF THE WALLS DURING WORK OR THE APPLICATION OF UNFORESEEN LOADS
   - 2.3. DEGREE OF COMPACTION: 95% SPMDD REQUIRED FOR GRANULAR A OR B. MAINTAIN OPTIMUM MOISTURE CONTENT IN BACKFILL MATERIAL TO ACHIEVE THE COMPACTION DENSITY REQUIRED
   - 2.4. ACCEPTANCE OF BACKFILL MATERIALS, DEGREE OF COMPACTION, AND OTHER GEOTECHNICAL SPECIFICATIONS MUST BE PERFORMED BY A GEOTECHNICAL ENGINEER.
3. COMPACTION OF BACKFILL EMPLOYING HEAVY VIBRATION TO BE DONE AFTER HOURS.
4. BACKFILL MATERIAL MUST BE IN ACCORDANCE WITH SPECIFICATION SECTION 01 35 43 ENVIRONMENTAL PROTECTION

CONCRETE REINFORCEMENT

1. REINFORCEMENT TO CONFORM TO THE FOLLOWING STANDARDS:
   - 1.1 DEFORMED BARS - CAN/CSA G30.18, GRADE 400W, -. WHERE REBAR IS SHOWN TO BE WELDED USE GRADE 400W.
   - 1.2 WELDED WIRE FABRIC - ASTM A185/A185M.
2. BARS MARKED CONTINUOUS TO BE TERMINATED IN STANDARD HOOKS AT ENDS WHICH EXTEND TO FAR FACE OF ELEMENT AND SPLICED USING CLASS B LAPS.
3. ALL REBAR HOOKS TO BE STANDARD LENGTH 90° OR 180° HOOKS. REBAR LENGTHS LISTED ON DRAWINGS DO NOT INCLUDE THE HOOK LENGTH. REFER TO RISC MANUAL OF STANDARD PRACTICE FOR STANDARD HOOKS.
4. WHERE TWO BARS OF DIFFERENT SIZE ARE LAPPED, THE SPLICE LENGTH SHALL BE EQUAL TO THE SMALLER BAR'S CLASS BLAP SPLICE UNLESS NOTED OTHERWISE.
5. PROVIDE ADDITIONAL SUPPORT BARS AS REQUIRED TO PREVENT MOVEMENT OF REINFORCEMENT DURING CONSTRUCTION AND WHEN PLACING CONCRETE.
6. PROVIDE SUFFICIENT SUPPORT TO MAINTAIN SPECIFIED CONCRETE COVER.
7. ALL REINFORCING TO BE CLEAN, FREE OF LOOSE SCALE, OIL, DIRT, RUST, AND ANY OTHER SUBSTANCE THAT MAY AFFECT BONDING CAPACITY.
8. MINIMUM CLEAR CONCRETE COVER TO REINFORCEMENT CLOSEST TO THE SURFACE TO BE AS TABULATED BELOW UNLESS NOTED OTHERWISE ON THE DRAWINGS:

STRUCTURAL ELEMENT	INTERIOR (UP TO 2H FIRE RATING)	EXPOSED
BOTTOM OF FOOTINGS, FOUNDATIONS CAST AGAINST EARTH (WITHOUT FORMWORK)	--	75 (3")
FORMED SIDES OF FOOTINGS, TOP OF FOOTINGS	--	50 (2")
FOUNDATION WALL	--	50 (2")
TOP OF SLAB	50 (2")	--
BOTTOM OF SLAB	50 (2")	--

NOTES:
1. EXPOSED MEANS IN DIRECT CONTACT WITH EARTH AND/OR WEATHER, OR IN UNHEATED AREAS
2. LARGEST COVER REQUIRED GOVERNS
3. FOR WALLS AND COLUMNS IN VEHICLE ACCESSIBLE AREAS HAVING A MEMBRANE OR SEALER EXTENDING AT LEAST 150 (4") ABOVE TOP OF FLOOR, THE CONCRETE COVER LISTED FOR EXPOSED AREAS WITH NO VEHICLE ACCESS MAY BE USED.

9. DOWELLING AND EPOXY ADHESIVE
   WHERE EPOXY ADHESIVE FOR THE PURPOSES OF SECURING REBAR DOWELS INTO CONCRETE IS SHOWN, PROVIDE ONE OF THE FOLLOWING PRODUCTS, APPLIED AS PER MANUFACTURER'S RECOMMENDATIONS:
   - 9.1 HY-200 BY HILTI
   - 9.2 AC100+ GOLD BY DEWALT
   - 9.3 SIKA ANCHORFIX-3001 BY SIKA

FOUNDATIONS

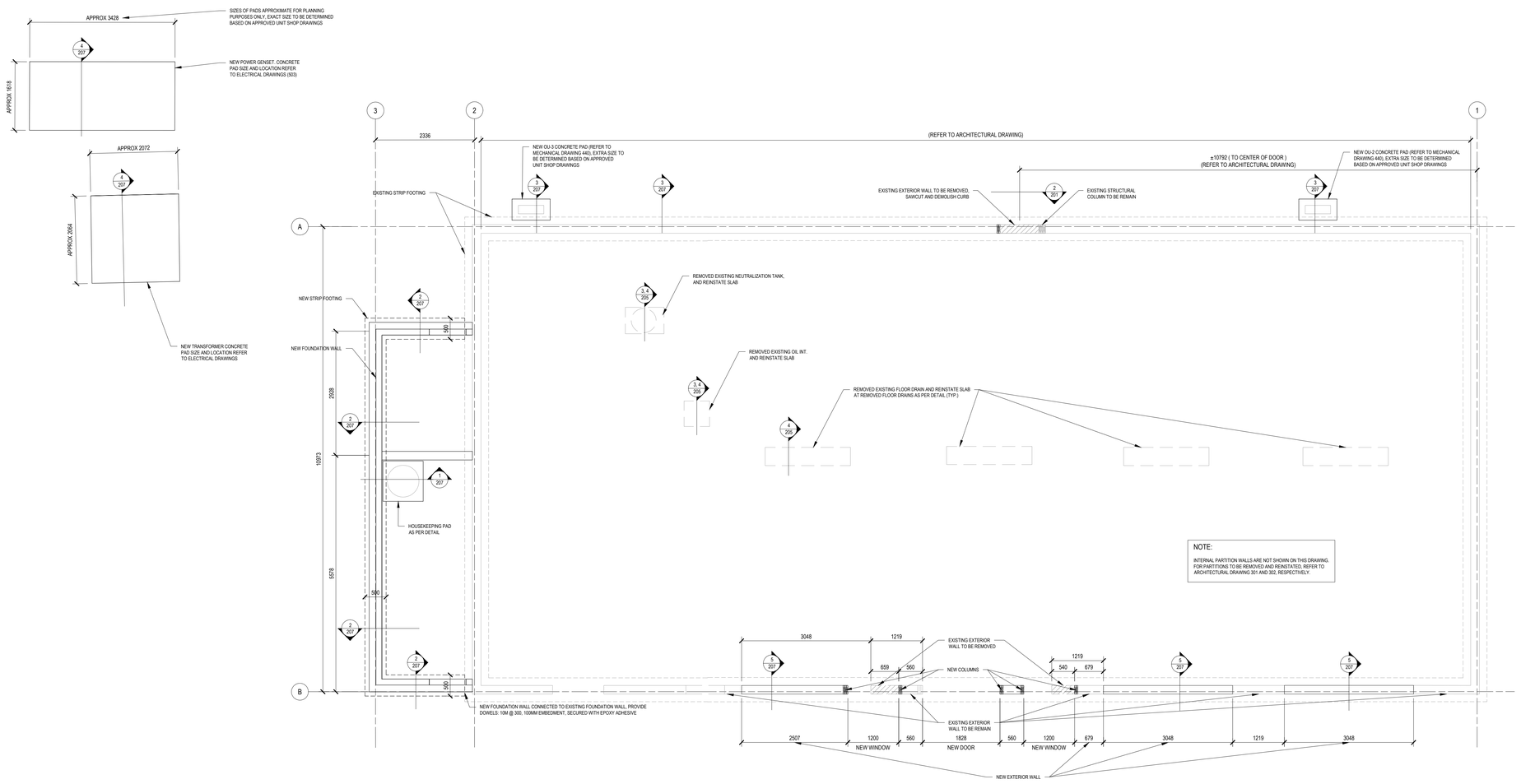
1. REFER REFER TO EXISTING BUILDING'S AS-BUILT DRAWINGS (DATED MAY 27, 2005) FOR EXPECTED LOCATION OF NATIVE BEDROCK (BEDROCK DEPTH APPROX. 440 BELOW EXISTING TOP OF SLAB, FLAT ORIENTATION). IF EXISTING CONDITIONS DEVIATE FROM THIS, CONTRACTOR WILL BE RESPONSIBLE FOR:
   - 1.1. ADAPT NEW FOUNDATION DESIGN ACCORDINGLY TO SUIT CONDITIONS (SEE FOOTINGS FOR NEW ADDITION NOTES)
   - 1.2. RETAIN A GEOTECHNICAL ENGINEER TO EVALUATE BEARING CAPACITY IF FOUNDATION IS FOUNDED ON UNSOUND ROCK WITHOUT FOOTING, OR IF BEDROCK IS NOT PRESENT.
2. THE ASSUMED FOOTING BEARING RESISTANCE:
   - ULS (ULTIMATE LIMIT STATES DESIGN): **300 KPa**
   - SLS (SERVICEABILITY LIMIT STATES DESIGN): **200 KPa**
3. IF BEARING SURFACE DEVIATES FROM SOUND BEDROCK, GEOTECHNICAL ENGINEER, TO BE RETAINED BY CONTRACTOR, TO APPROVE BEFORE CONSTRUCTING. BEARING SURFACE TO BE APPROVED BY THE GEOTECHNICAL ENGINEER OR DCC REPRESENTATIVE PRIOR TO CONSTRUCTING FOOTINGS.
4. THE MINIMUM FROST PROTECTION DISTANCE FROM FINISHED GRADE TO UNDERSIDE OF FOOTINGS, IF NOT SUPPORTED ON BEDROCK TO BE NOT LESS THAN:
   - FOR PERIMETER FOOTINGS ADJACENT TO HEATED AREAS: 1500
5. UNLESS OTHERWISE NOTED, CENTRE FOOTINGS AND PIERS UNDER CENTRE OF COLUMNS ABOVE. WHERE THERE ARE NO COLUMNS ABOVE, CENTER UNDER WALLS OR GRADE BEAMS.
6. PRIOR TO EXCAVATION, LOCATE ALL EXISTING UNDERGROUND SERVICES.
7. THE LINE OF SLOPE BETWEEN ADJACENT EXCAVATIONS FOR FOOTINGS OR TRENCHES SHALL NOT EXCEED A RISE OF 1 IN A RUN OF 2.
8. PROTECT FOOTINGS, WALLS, SLABS-ON-GRADE AND ADJACENT SOIL AGAINST FREEZING AND FROST ACTION AT ALL TIMES DURING CONSTRUCTION. DO NOT POUR CONCRETE AGAINST FROZEN EARTH.
9. DO NOT USE EARTH FORMS UNLESS APPROVED IN WRITING. FOR ELEMENTS CAST AGAINST SOIL, INSTALL BOTTOM STEEL OF CONCRETE STRUCTURAL ELEMENT TO OBTAIN 75MM (3") CONCRETE COVER.
10. UNLESS OTHERWISE NOTED, LAP ALL HORIZONTAL GRADE BEAM REINFORCING WITH CLASS B LAPS. CARRY CONTINUOUSLY THROUGH PILE CAPS WHERE APPLICABLE.
11. DO NOT BACKFILL AGAINST WALLS RETAINING EARTH UNTIL ELEMENTS PROVIDING LATERAL SUPPORT, INCLUDING SLABS ON GRADE AND SUSPENDED LEVELS, ARE COMPLETED AND CONCRETE HAS CURED 28 DAYS MINIMUM, OTHERWISE CONTRACTOR IS TO PROVIDE A TEMPORARY SHORING DESIGN SEALED BY AN ENGINEER.
12. FOR ELEMENTS THAT ARE TO BE BACKFILLED ON BOTH SIDES, PLACE BACKFILL SIMULTANEOUSLY ON BOTH SIDES SUCH THAT HEIGHTS DO NOT VARY BY MORE THAN 400 (1'-4") FROM ONE SIDE TO THE OTHER.

FOOTINGS FOR NEW ADDITION

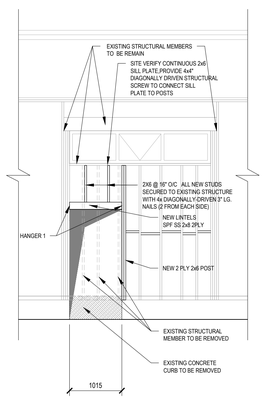
1. ELEVATION (DEPTH) OF NEW FOOTINGS TO BE COORDINATED & DECIDED AS FOLLOWS:
   - 1.1. FOR TENDERING/ COSTING PURPOSES, ASSUME A BOTTOM OF FOUNDATION/FOOTING DEPTH OF 1500. REGARDLESS OF ACTUAL CONDITIONS, THE DEPTH OF THE FOUNDATION/FOOTING NEED NOT EXCEED 1500 FOR FROST PROTECTION PURPOSES.
   - 1.2. SEE ORIGINAL AS-BUILT DRAWINGS OF EXISTING BUILDING FOR EXPECTED ELEVATION OF BEDROCK AND EXPECTED ELEVATION OF BOTTOM OF EXISTING FOOTING. EXISTING BUILDING FOOTINGS ARE EXPECTED TO BE SUPPORTED ON BEDROCK.
   - 1.3. ELEVATION OF BOTTOM OF FOOTING IS TO MATCH ELEVATION OF BEDROCK, OR ELEVATION OF EXISTING FOOTING, WHICHEVER IS DEEPER, UP TO A MAXIMUM DEPTH OF 1500.
   - 1.4. IF DEPTH OF BEDROCK EXCEEDS DEPTH OF EXISTING FOOTING, EXTEND EXCAVATION AWAY FROM BASE OF ORIGINAL FOOTING DOWN AT 1:1 SLOPE TO REQUIRED THE DEPTH, TO AVOID UNDERMINING EXISTING FOOTING.
2. DESIGN OF FOOTINGS & FOUNDATION TO ADHERE TO THE FOLLOWING, DEPENDING ON AS-FOUND CONDITIONS UPON EXCAVATION TO THE INTENDED DEPTH:
   - 2.1. FOR FLAT, SOUND BEDROCK: FOOTING MAY BE OMITTED. FOUNDATION WALL SUPPORTED DIRECTLY ON (CAST AGAINST) BEDROCK WITHOUT ADDITIONAL SUPPORT.
   - 2.2. FOR GENTLY SLOPED (< 10DEG. SLOPE), SOUND BEDROCK: FOOTING MAY BE SUBSTITUTED WITH A 10MPA LEAN-CONCRETE MUD SLAB TO FLATTEN THE AREA.
   - 2.3. FOR FRACTURED BEDROCK (< 10DEG. SLOPE): FOOTING MAY BE SUBSTITUTED WITH A 10MPA LEAN-CONCRETE MUD SLAB TO A MINIMUM DEPTH OF 250 (10").
   - 2.4. FOR SIGNIFICANTLY SLOPED BEDROCK (> 10DEG. SLOPE), PROVIDE VERTICAL DOWELS CENTERED IN THE FOUNDATION WALL, SPACED AT 405 (16"), DOWELS TO BE 15M BARS WITH 305 (12") EMBEDMENT IN BEDROCK, SECURED WITH EPOXY ADHESIVE, WITH 610 (24") EMBEDMENT IN CONCRETE.
   - 2.5. IF BEDROCK IS NOT ENCOUNTERED: PROVIDE A FOOTING AS SHOWN ON DETAIL 2/007, SUPPORTED ON A 305 (12") ENGINEERED PAD: GRANULAR A, COMPACTED TO 100% SPMDD.
3. DEVIATION FROM THE ABOVE ONLY UPON APPROVAL BY GEOTECHNICAL ENGINEER.

WOOD FRAMING

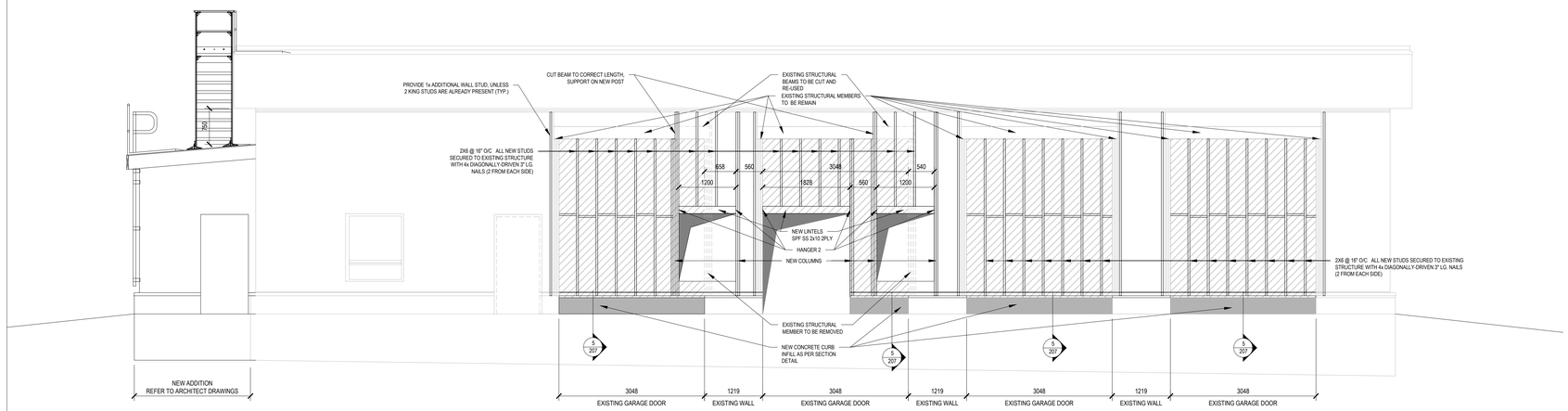
1. UNLESS NOTED OTHERWISE, ALL WOOD FRAMING DETAILS TO BE IN ACCORDANCE WITH PART ***(4)*** OF OBC 2024.
2. WOOD STRUCTURE TO BE ASSEMBLED IN DRY CONDITIONS.
3. USE ONLY SEASONED LUMBER (MOISTURE CONTENT < 15%)
4. DIMENSIONAL LUMBER: USE ONLY ***NO.2+*** GRADE, SPF (SPRUCE-PINE-FIR), UNLESS INDICATED OTHERWISE
5. LAMINATED VENEER LUMBER (LVL): PROVIDE MEMBERS OF SIZES SHOWN (OR LARGER), OF GRADE & SPECIES AS SHOWN (OR BETTER)
6. PRESSURE TREATED WOOD (PT):
   - 6.1. ALL OF THE FOLLOWING WOOD COMPONENTS ARE TO BE PRESSURE TREATED:
     NONE
   - 6.2. ALL CUT ENDS AND PENETRATIONS OF PRESSURE TREATED WOOD MEMBERS ARE TO BE COATED WITH A WOOD PRESERVATIVE OR SEALER
7. WOOD CONNECTORS: SEE WOOD CONNECTOR NOTES.
8. WOOD BOLTS: ASTM A307
9. SCREWS:
   - 9.1. WHERE FASTENING WOOD CONNECTORS AND WOOD CONNECTOR MANUFACTURER CALLS FOR SPECIFIC SCREWS, PROVIDE SCREWS AS REQUIRED.
   - 9.2. WHERE "WOOD SCREWS" ARE INDICATED, PROVIDE STANDARD #12 OR #14 WOOD SCREWS OF THE REQUIRED LENGTH. UNLESS INDICATED OTHERWISE OR WOULD RESULT IN EXPOSED SCREW, SCREW LENGTH = 3x THICKNESS OF HEAD-SIDE MEMBER.PRE-DRILL WOOD SCREWS.
   - 9.3. WHERE "STRUCTURAL SCREWS" ARE INDICATED, PROVIDE
     - 9.3.1 MANUFACTURER-RATED SHEAR CAPACITY OF MIN. 1.5 KN (350 LBS)/SCREW
     - 9.3.2 MANUFACTURER-RATED WITHDRAWAL (PULL-OUT) CAPACITY OF MIN. 2.2 KN (500 LBS)/SCREW
     - 9.3.3 COATED WITH DURABLE, CORROSION RESISTANT FINISH DESIGNED FOR USE IN TREATED LUMBER APPLICATIONS
     - 9.3.4 DESIGNED FOR INTERIOR OR EXTERIOR USE
     - 9.3.5 MADE OF HARDENED STEEL
     - 9.3.6 PROVIDE PRODUCT INFORMATION AS SHOP DRAWING FOR REVIEW AND APPROVAL
   - 9.4. WHERE "LAG SCREWS" ARE INDICATED, PROVIDE MACHINE THREADED (NOT CAST-THREADED). PREDRILL PRIOR TO LAG SCREW INSTALLATION.
   - 9.5. PRE-DRILL IFAS RECOMMENDED BY SCREW FABRICATOR.
10. NAILS: CSA B111, CSA G40.21, ALL NAILS TO BE COMMON NAILS AND FOLLOW COMMON NAIL LENGTHS AND SHANK DIAMETERS. SUBSTITUTION OF COMMON NAILS WITH POWER DRIVEN NAILS OF THE SAME LENGTH AND DIAMETER IS ACCEPTABLE. SUBSTITUTION OF POWER DRIVEN NAILS OF SMALLER DIAMETER MUST BE APPROVED IN WRITING BY ENGINEER PRIOR TO USE. POWER DRIVEN NAILS NOT TO BE OVER-DRIVEN INTO WOOD OR SHEATHING.
11. HOT DIP GALVANIZING: ASTM A123/A123M, MINIMUM ZINC COATING OF 610 g/m². FOR ALL STEEL TIMBER CONNECTION COMPONENTS, UNLESS NOTED OTHERWISE.
12. PROTECT ALL WOOD PRODUCTS FROM THE ELEMENTS AS REQUIRED TO MAINTAIN THEIR INTEGRITY
13. PROVIDE ALL ERECTION BRACING REQUIRED TO KEEP THE STRUCTURE STABLE AND IN ALIGNMENT DURING CONSTRUCTION.
14. MEMBER SIZES INDICATED ON DRAWINGS ARE A MINIMUM AND MAY BE INCREASED AS REQUIRED TO MEET DESIGN WITHOUT DETERRING FROM ORIGINAL DESIGN INTENT.
15. NOTCHING AND DRILLING OF FRAMING MEMBERS THAT DO NOT CONFORM TO PART ***4*** OF THE REFERENCED BUILDING CODE MUST BE REVIEWED BY THE ENGINEER RESPONSIBLE FOR THOSE FRAMING MEMBERS. SIGNIFICANT NOTCHES CONFORMING TO PART ***4*** MAY BE REVIEWED AND REJECTED IF THEY COMPROMISE THE STRUCTURAL INTEGRITY.
16. UNLESS OTHERWISE NOTED, ALL COMPONENTS OF BUILT UP MEMBERS TO BE CONTINUOUS FOR FULL SPAN. DO NOT SPLICE OR USE BUTT JOINTS.
17. UNLESS O



1 / 201 ADDITION FOUNDATION AND WALL FRAMING PLAN AND EXTERIOR HOUSEKEEPING PAD LAYOUT - NEW WORK
SCALE: 1:50



2 / 201 PARTIAL NORTH ELEVATION - NEW WORK
SCALE: 1:50



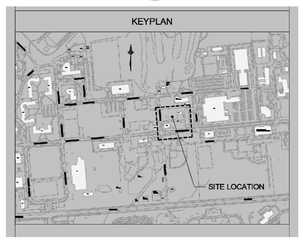
3 / 201 SOUTH ELEVATION - NEW WORK
SCALE: 1:50

National Defence / Défense nationale

Headquarters
Quartier général

SITE NORTH

KEYPLAN



NO.	DATE	REVISION	APPR.
5	2026/05/25	ISSUED FOR TENDER	T.P
4	2026/03/30	ISSUED FOR 100% SUBMISSION	T.P
3	2025/12/09	RE-ISSUED FOR 99% SUBMISSION	T.P
2	2025/10/21	ISSUED FOR 99% REVIEW	T.P
1	2025/07/22	ISSUED FOR 60% REVIEW	T.P

LICENSED PROFESSIONAL ENGINEER
T. PLESNIK
100540746
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

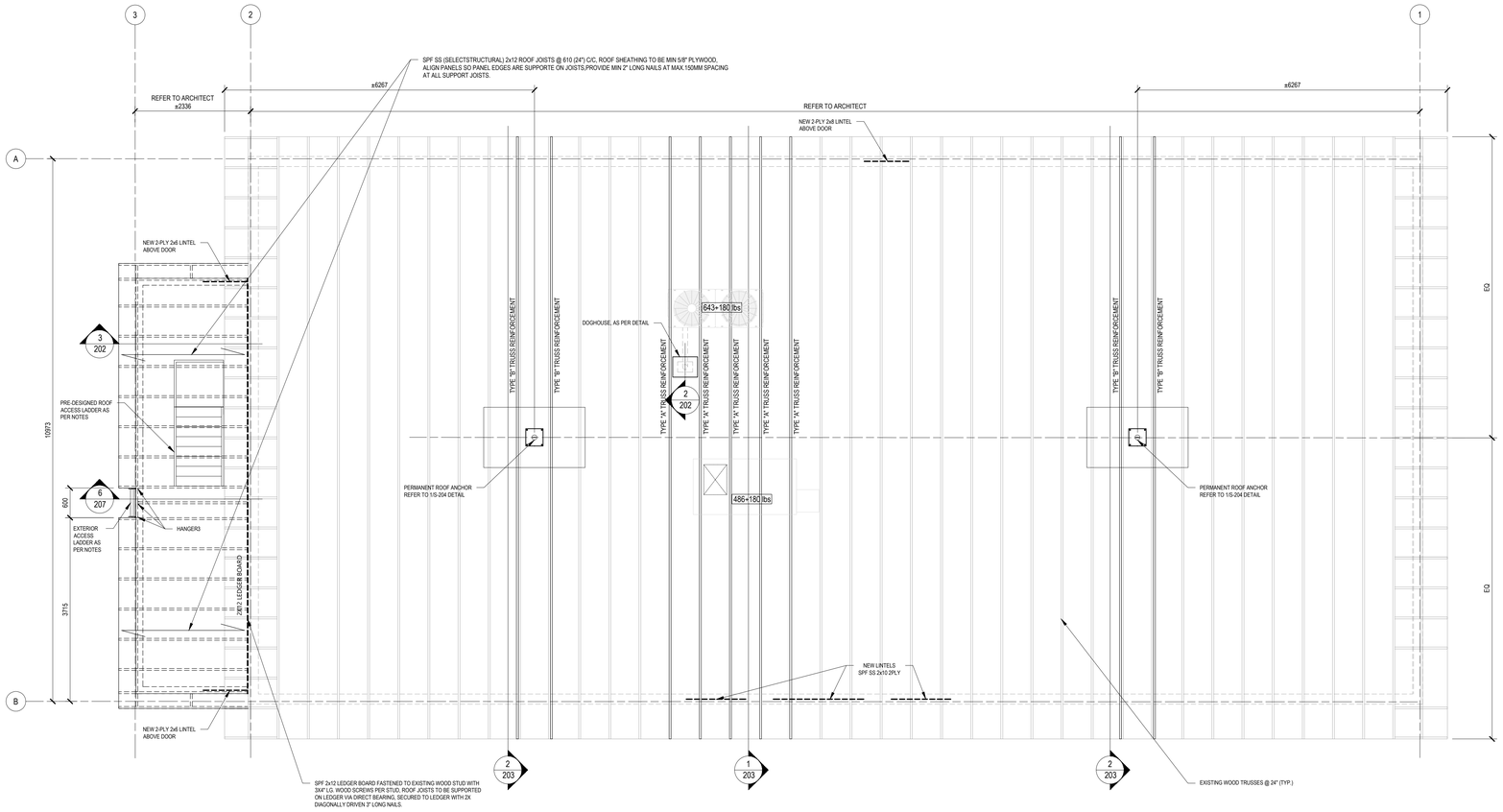
TRADE - MÉTIER
STRUCTURAL

DATE
2026/05/25

SUBJECT - SUJET
ADDITION FOUNDATION PLAN AND SECTIONS, EXTERIOR HOUSEKEEPING PAD LAYOUT AND SOUTH ELEVATION - NEW WORK

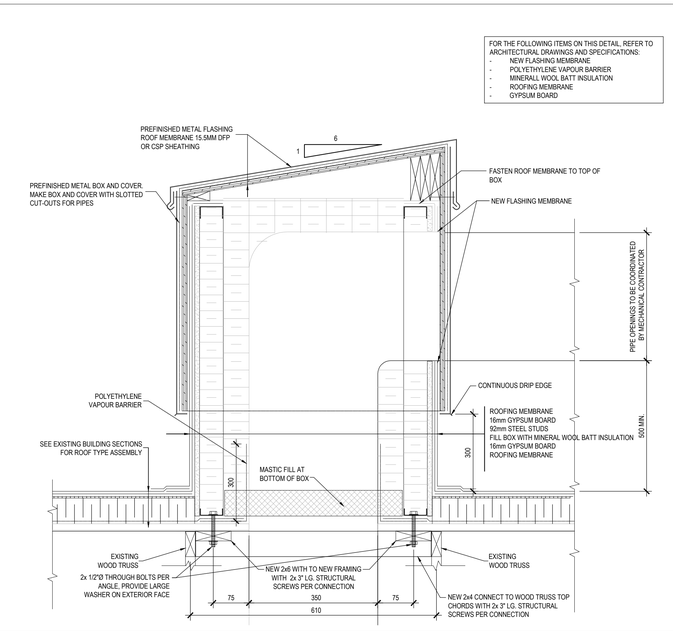
PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: T. P		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: Y. H		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: T.P	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 - 201	

Canada



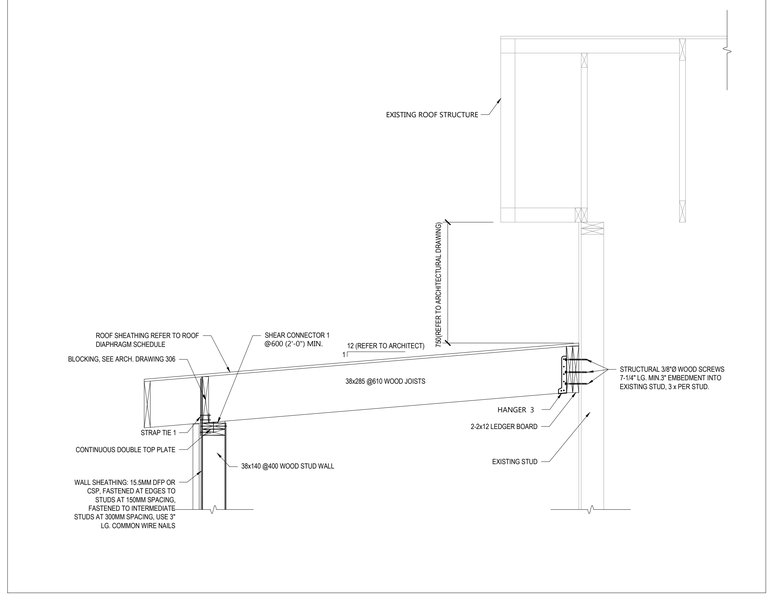
ROOF FRAMING LAYOUT - NEW WORK

202 SCALE: 1:50



DOGHOUSE FRAMING DETAIL - NEW WORK

2 / 202 SCALE: 1:10



ADDITION ROOF SECTION - NEW WORK

3 / 202 SCALE: 1:16

ROOF DIAPHRAGM SCHEDULE

MINIMUM NOMINAL PANEL THICKNESS (mm)	NAIL DIAMETER (mm)	NAIL LENGTH (mm)	MINIMUM NOMINAL WIDTH OF FRAMING MEMBER (mm)	NAIL SPACING AT PANEL EDGE (mm)
15.5 THK. DFP (DOUGLAS FIR PLYWOOD) OR CSP (CANADIAN SOFTWOOD PLYWOOD) STRUCTURAL PANEL	3.33	64	38[2]	100

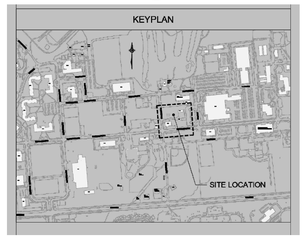
NOTES:
1. USE COMMON WIRE NAILS.
2. SPACE NAILS 300mm ON CENTER ALONG INTERMEDIATE FRAMING MEMBERS.
3. FRAMING AT ADJOINING PANEL EDGES SHALL BE 64mm NOMINAL (OR BUILT-UP COMPOSED OF 2-38mm NOMINAL WITH FRAMING MEMBERS CONNECTED TO TRANSFER THE FACTORED SHEAR FORCE) OR WIDER AND NAILS SHOULD BE STAGGERED.
4. SHEATHING PANEL SIZE OF 2400mm x 1200mm IS ASSUMED.
5. DIAPHRAGM IS BLOCKED DIAPHRAGM. (PANEL EDGES ARE FASTENED TO FRAMING)

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LICENSED PROFESSIONAL ENGINEER
T. PLESNIK
100540746
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

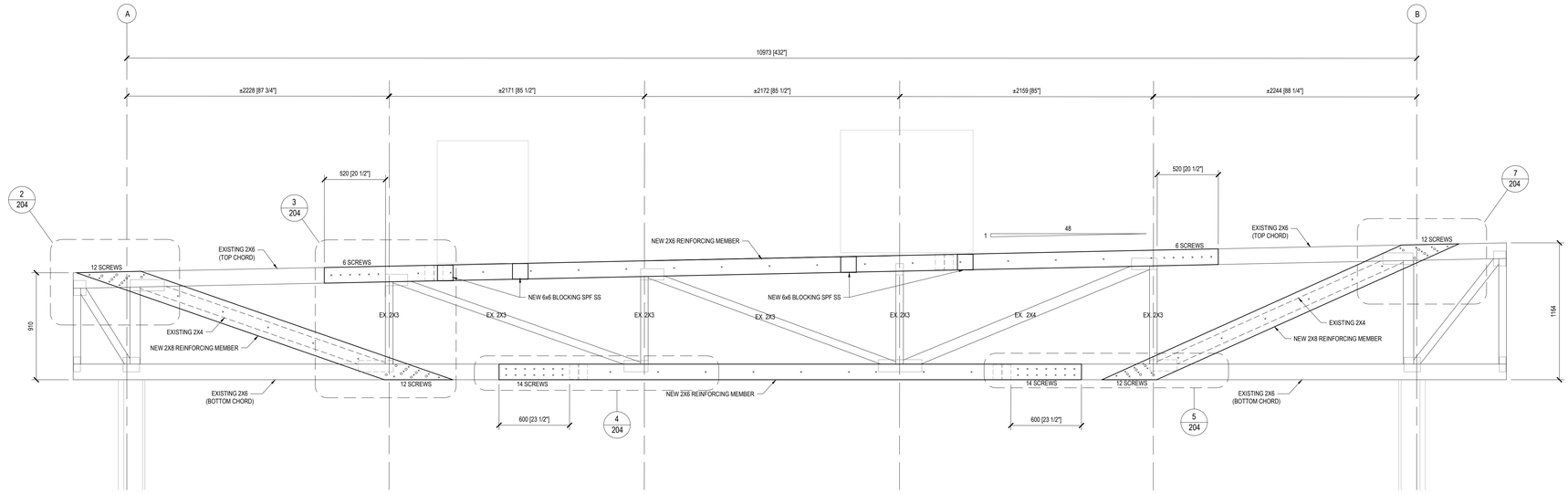
TRADE - MÉTIER
STRUCTURAL

DATE
2026/05/25

SUBJECT - SUJET
ROOF FRAMING PLAN AND SECTIONS - NEW WORK

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: T. P		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: Y. H		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: T.P	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 - 202	

Canada

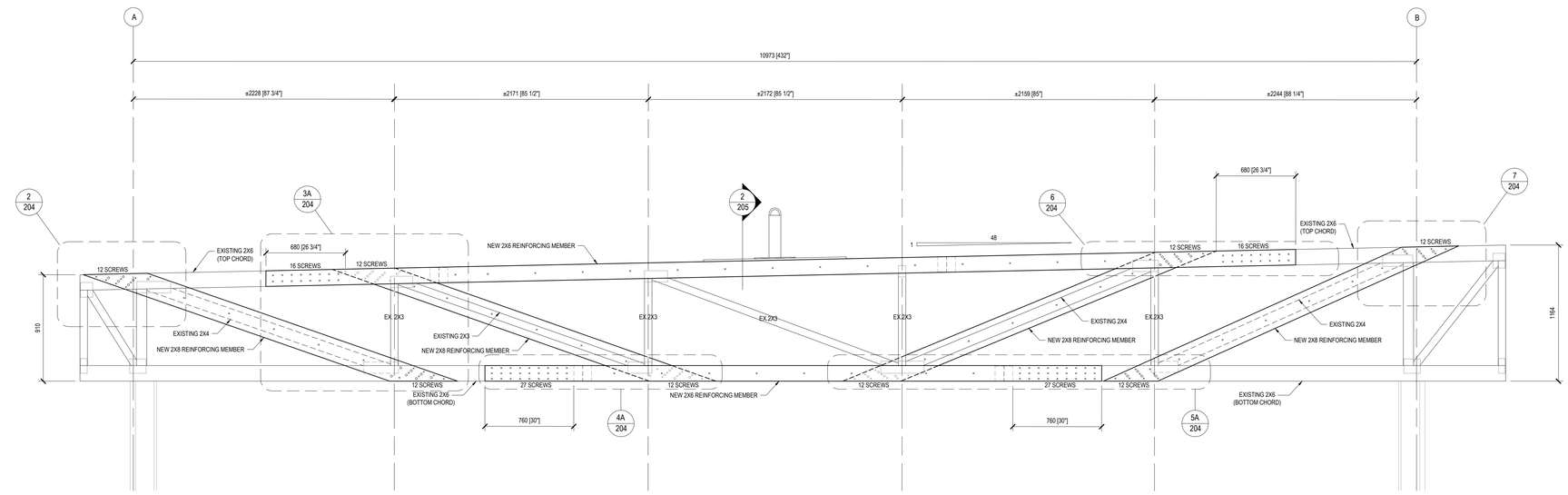


NOTE:

ALL NEW FASTENERS TO SECURE REINFORCEMENT AS PER THIS DRAWING TO BE: NO. 12 WOOD SCREWS, 3" LONG

1 / 203 ROOF TRUSS REINFORCING ELEVATION - "TYPE A" - FOR NEW MECHANICAL UNIT

SCALE: 1:20



NOTE:

ALL NEW FASTENERS TO SECURE REINFORCEMENT AS PER THIS DRAWING TO BE: NO. 12 WOOD SCREWS, 3" LONG

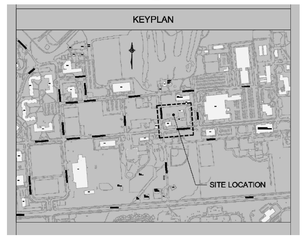
2 / 203 ROOF TRUSS REINFORCING ELEVATION - "TYPE B" - FOR PERMANENT ROOF ANCHOR

SCALE: 1:20

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Headquarters
Quartier général





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LICENSED PROFESSIONAL ENGINEER
T. PLESNIK
100540746
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

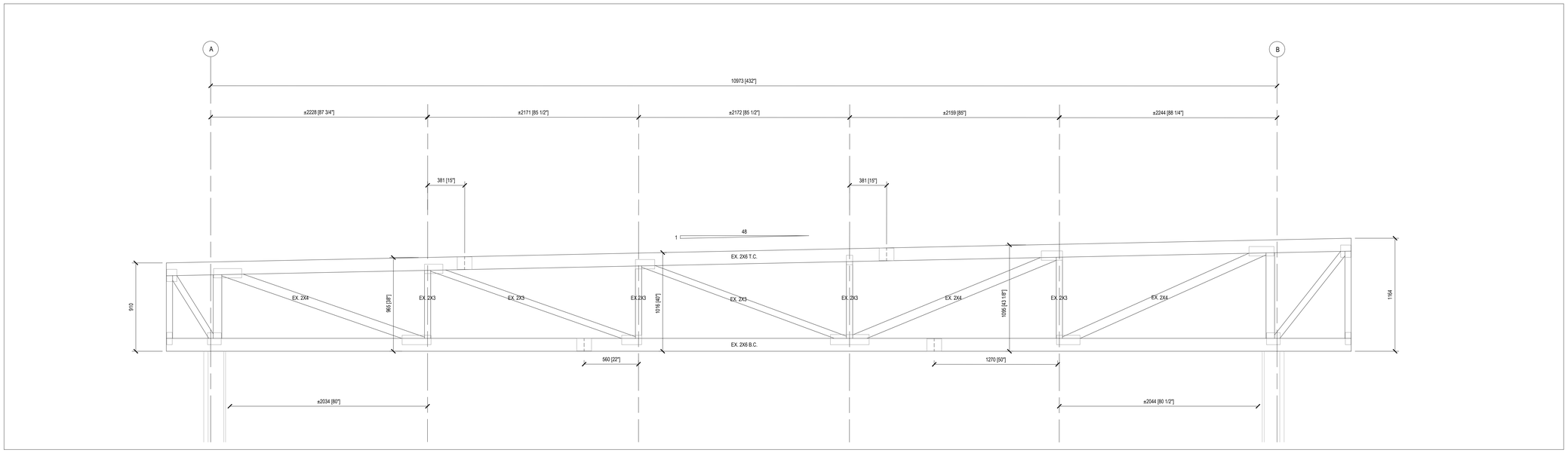
TRADE - MÉTIER
STRUCTURAL

DATE
2026/05/25

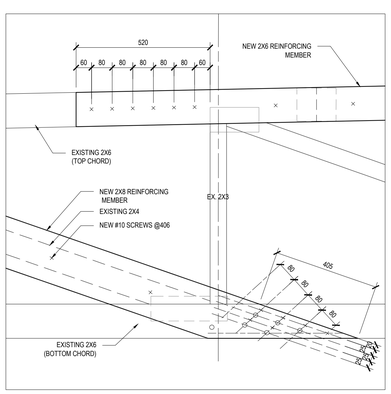
SUBJECT - SUJET
ROOF TRUSS REINFORCING ELEVATIONS

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: T. P		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: Y. H		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: T.P	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 - 203	

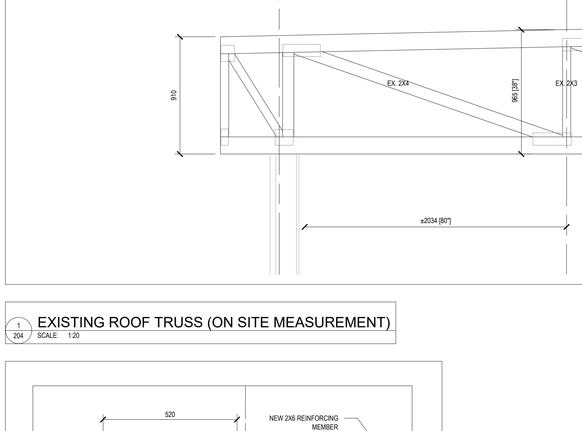
Canada



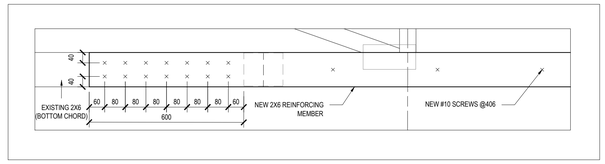
1 / 204 EXISTING ROOF TRUSS (ON SITE MEASUREMENT)
SCALE: 1:20



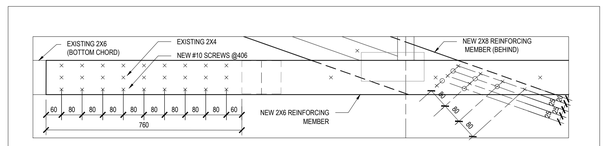
3 / 204 TRUSS REINFORCING DETAIL - NEW WORK
SCALE: 1:10



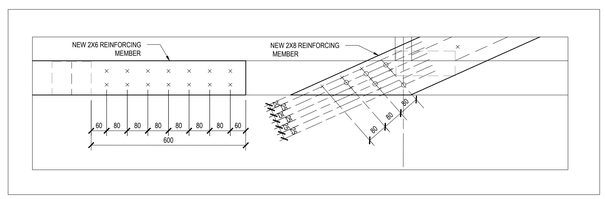
3A / 204 TRUSS REINFORCING DETAIL - NEW WORK
SCALE: 1:10



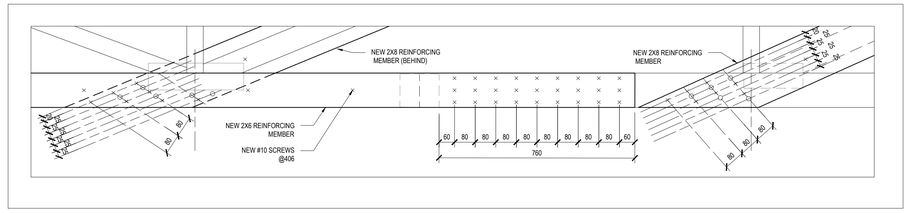
4 / 204 TRUSS REINFORCING DETAIL - NEW WORK
SCALE: 1:10



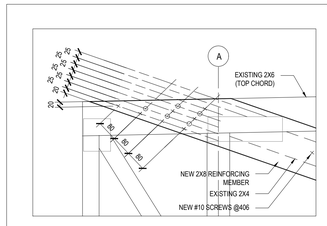
4A / 204 TRUSS REINFORCING DETAIL - NEW WORK
SCALE: 1:10



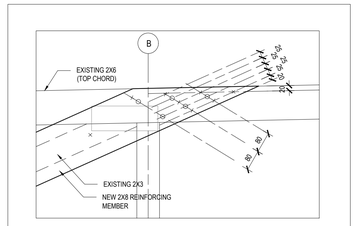
5 / 204 TRUSS REINFORCING DETAIL - NEW WORK
SCALE: 1:10



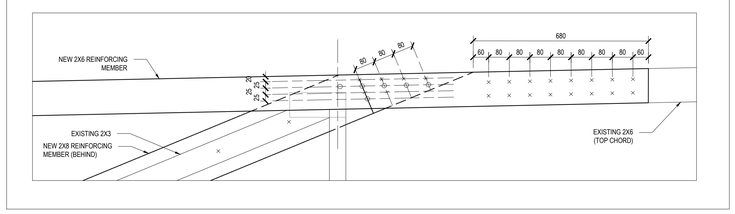
5A / 204 TRUSS REINFORCING DETAIL - NEW WORK
SCALE: 1:10



2 / 204 TRUSS REINFORCING DETAIL - NEW WORK
SCALE: 1:10



7 / 204 TRUSS REINFORCING DETAIL - NEW WORK
SCALE: 1:10



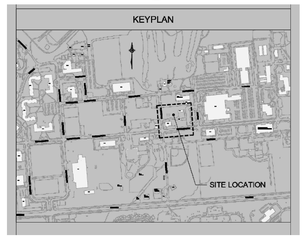
6 / 204 TRUSS REINFORCING DETAIL - NEW WORK
SCALE: 1:10

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Quartier général

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LICENSED PROFESSIONAL ENGINEER
T. PLESNIK
100540746
2026/05/26
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

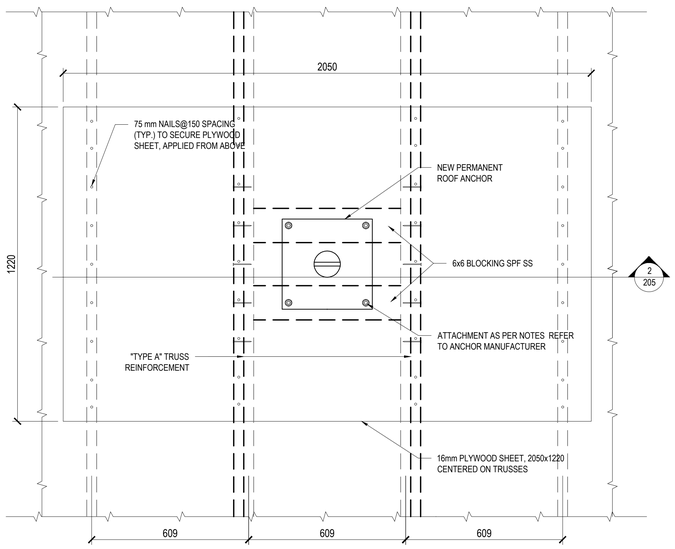
TRADE - MÉTIER
STRUCTURAL

DATE
2026/05/25

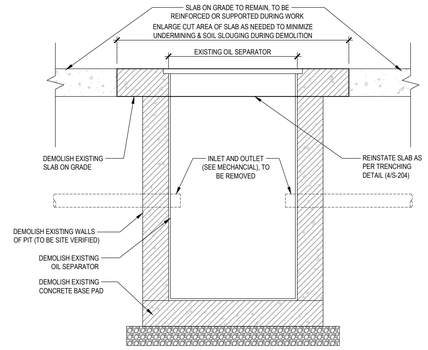
SUBJECT - SUJET
EXISTING ROOF TRUSS ELEVATION &
NEW REINFORCING SECTIONS AND DETAILS

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ T. P		DES OFF/AGENT CONCEPT X.X.
DRAWN/DESSINÉ Y. H		SECT HD/CHEF SECT X.X.
CHECKED/VÉRIFIÉ T.P	CFFM/DSIFC X.X.	DES MGR/GEST CONCEPT X.X.
COORDINATION X.X.	REVIEWED - REVU Reviewed	
PF NUMBER 500478454	DWG. NO. - DESSIN NO. K-B35-2508/3 - 204	

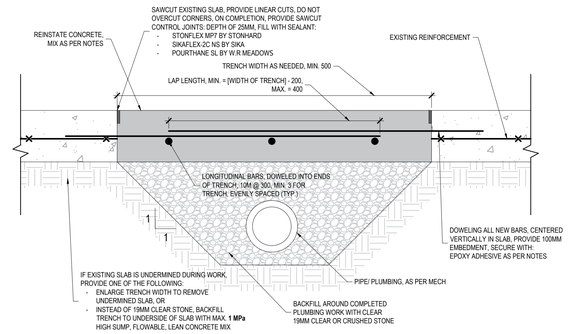
Canada



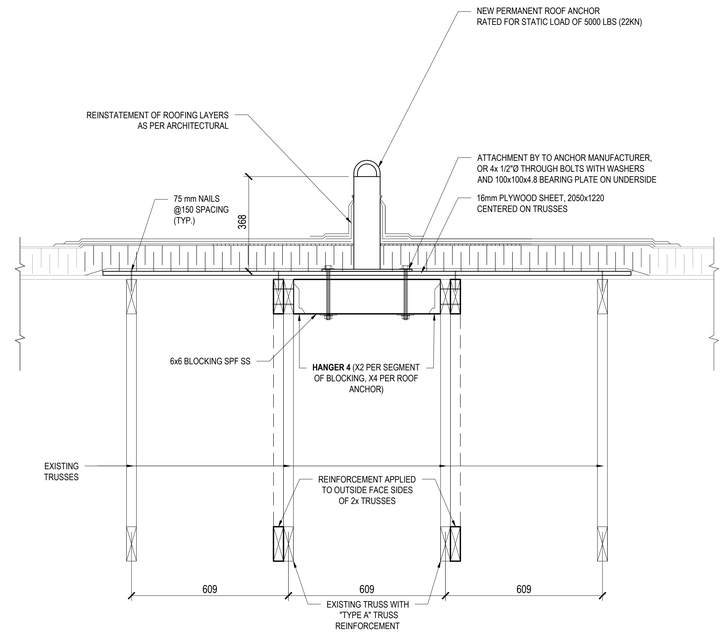
1 205 PERMANENT ANCHOR DETAIL PLAN VIEW - NEW WORK
SCALE: 1:10



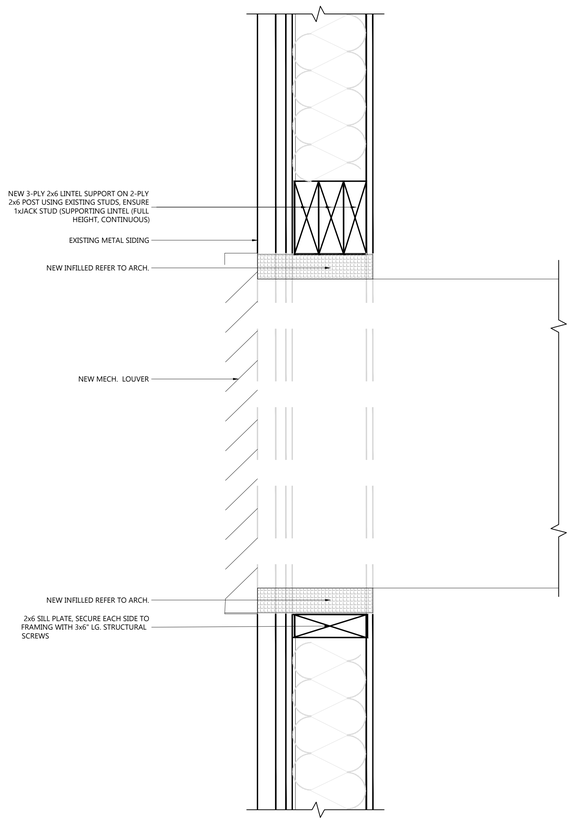
3 205 EXISTING OIL SEPARATOR, STRUCTURAL DEMOLITION SECT. (TYP.)
SCALE: 1:10



4 205 TYPICAL TRENCHING DETAIL
SCALE: 1: 5



2 205 PERMANENT ANCHOR SECTION - NEW WORK
SCALE: 1:10

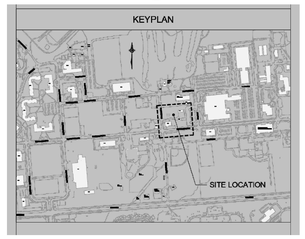


5 205 TYPICAL LOUVER SECTION DETAIL
SCALE: 1: 5

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Headquarters
Quartier général





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5	2026/05/25	ISSUED FOR TENDER	T.P
4	2026/03/30	ISSUED FOR 100% SUBMISSION	T.P
3	2025/12/09	RE-ISSUED FOR 99% SUBMISSION	T.P
2	2025/10/21	ISSUED FOR 99% REVIEW	T.P
1	2025/07/22	ISSUED FOR 60% REVIEW	T.P



SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

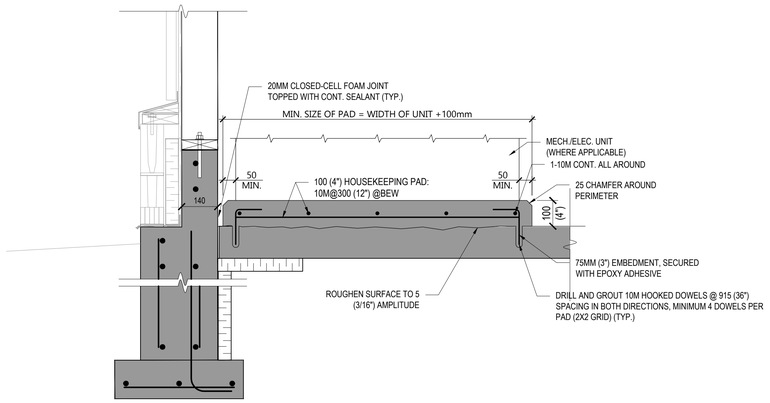
PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

TRADE - MÉTIER: STRUCTURAL
DATE: 2026/05/25

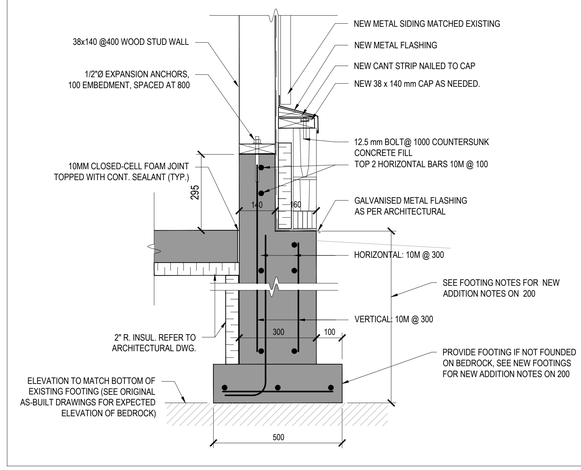
SUBJECT - SUJET
ROOF PERMANENT ANCHOR PLAN DETAIL AND SECTION - NEW WORK

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DRAWN/DESSINÉ: Y. H		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: T.P	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 - 205	

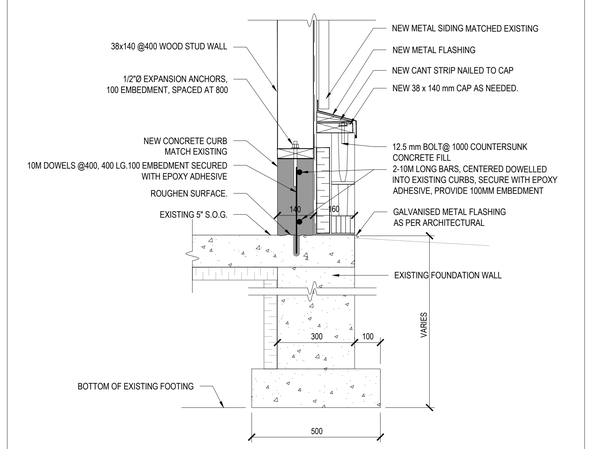
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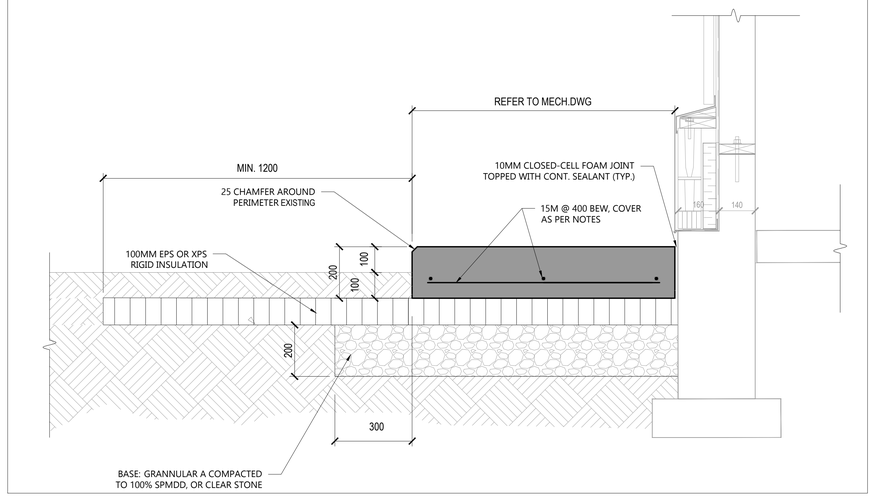
1 / 207 DHWT-1 HOUSEKEEPING PAD SECTION - NEW WORK
SCALE: 1:10



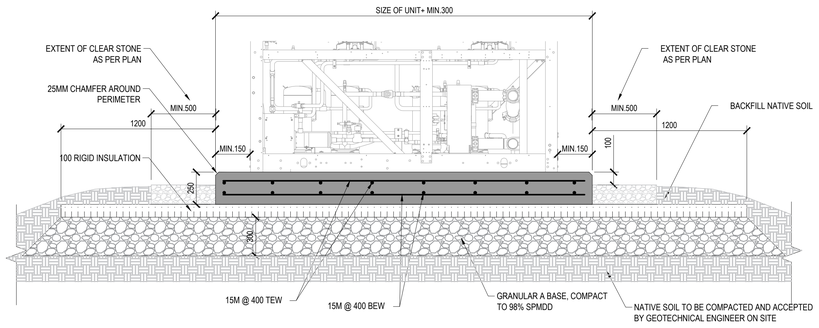
2 / 207 ADDITION FOUNDATION SECTION - NEW WORK
SCALE: 1:10



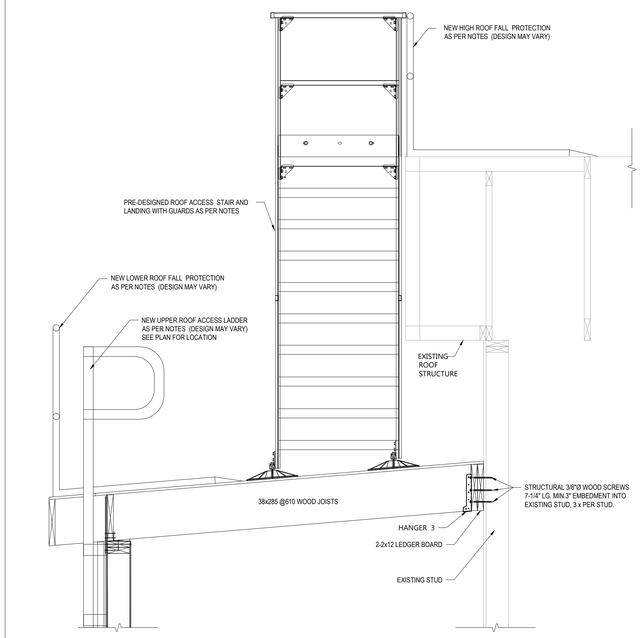
5 / 207 EXISTING GARAGE DOOR FOUNDATION SECTION - NEW WORK
SCALE: 1:10



3 / 207 OU-2 CONCRETE PAD SECTION - NEW WORK
SCALE: 1:10



4 / 207 EXTERIOR HOUSEKEEPING PAD SECTION - NEW WORK
SCALE: 1:20



6 / 207 ADDITION ROOF SECTION (AT ROOF LADDER) - NEW WORK
SCALE: 1:16

ROOF LADDER, STAIR, AND FALL PROTECTION NOTES

1. THESE NOTES ARE APPLICABLE TO THE FOLLOWING:

   1.1 ROOF LADDER (WALL MOUNTED, ACCESS FROM GROUND TO NEW LOWER ROOF ON TOP OF NEW ADDITION),
   1.2 STAIR AND LANDING WITH GUARDS TO UPPER ROOF (OF EXISTING BUILDING, FROM LOWER ROOF OF NEW ADDITION, ROOF MOUNTED),
   1.3 OTHER FALL PROTECTION (BARRIER) (ON NEW LOWER ROOF AND EXISTING UPPER ROOF)

   ALL OF THE ABOVE ARE TO CONSIST OF PRE-ENGINEERED, PRE-FABRICATED PRODUCTS FROM ONE OF THE FOLLOWING MANUFACTURERS:

   - MIRO INDUSTRIES
   - SKYLINE GROUP
   - NVENT CADDY

   IT IS NOT REQUIRED TO USE THE SAME MANUFACTURER FOR ALL COMPONENTS, HOWEVER ALL CONNECTED COMPONENTS MUST BE COMPATIBLE.

2. ALL WORK TO ADHERE TO NBCC 4.1.5.14, AND O.REG. 213/91

3. ROOF LADDER TO BE ATTACHED TO NEW WOOD FRAMING. ADJUST LOCATION OF FRAMING OR PROVIDE BLOCKING AS NEEDED TO BEST SUIT MANUFACTURER'S SUPPORT/ ANCHORAGE REQUIREMENTS.

4. STAIR AND LANDING WITH GUARDS TO UPPER ROOF TO BE PLACED ON LOWER ROOF, TO BE MODULAR SYSTEM WITH ADJUSTABLE LEGS,TO PROVIDE ACCESS WITHOUT MODIFICATION OF ANY PART OF THE EXISTING UPPER ROOF (FRAMING, WATERPROOFING, OR ROOFING) IF MANUFACTURER MANDATES ATTACHMENT TO UPPER ROOF, PROVIDE ALL ASSOCIATED WORK, INCLUDING REVIEW OF EXISTING FRAMING, REINFORCEMENT OF EXISTING FRAMING (EG, BLOCKING, BRACING WITHIN EXISTING ROOF STRUCTURE), WATERPROOFING AT ATTACHMENT POINTS

5. SUBMIT LAYOUT OF NEW WORK, AND ALL PRODUCT INFORMATION AS SHOP DRAWING SUBMITTAL(S) FOR REVIEW AND APPROVAL. SELF-WEIGHT OF ASSEMBLY TO BE INCLUDED AS PART OF SUBMITTALS.

6. LAYOUT AND EXTENTS OF ROOF-MOUNTED BARRIER (GUARDRAIL) IS NOT SHOWN ON DRAWINGS. PROVIDE ROOF-MOUNTED BARRIERS ON NEW LOWER ROOF AND EXISTING UPPER ROOF AS NEEDED.

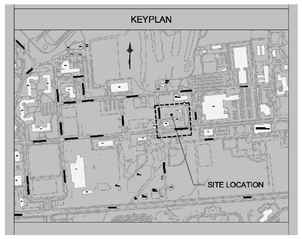
7. PROVIDE CONFIGURATION OF COMPONENTS SUITABLE TO SUFFICIENTLY PROTECT A WORKER TO ACCESS THE UPPER ROOF'S NEW PERMANENT ROOF ANCHOR WITHOUT ADDITIONAL TIE OFF POINTS

8. ALL COMPONENTS TO BE SUITABLE FOR CONTINUOUS, EXTERIOR USE. ALL METAL COMPONENTS TO BE ALUMINUM, GALVANIZED STEEL, OR STAINLESS STEEL

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1	2025/07/22	ISSUED FOR 60% REVIEW	T.P

LICENSED PROFESSIONAL ENGINEER
T. PLESNIK
100540746
May 25/2026
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

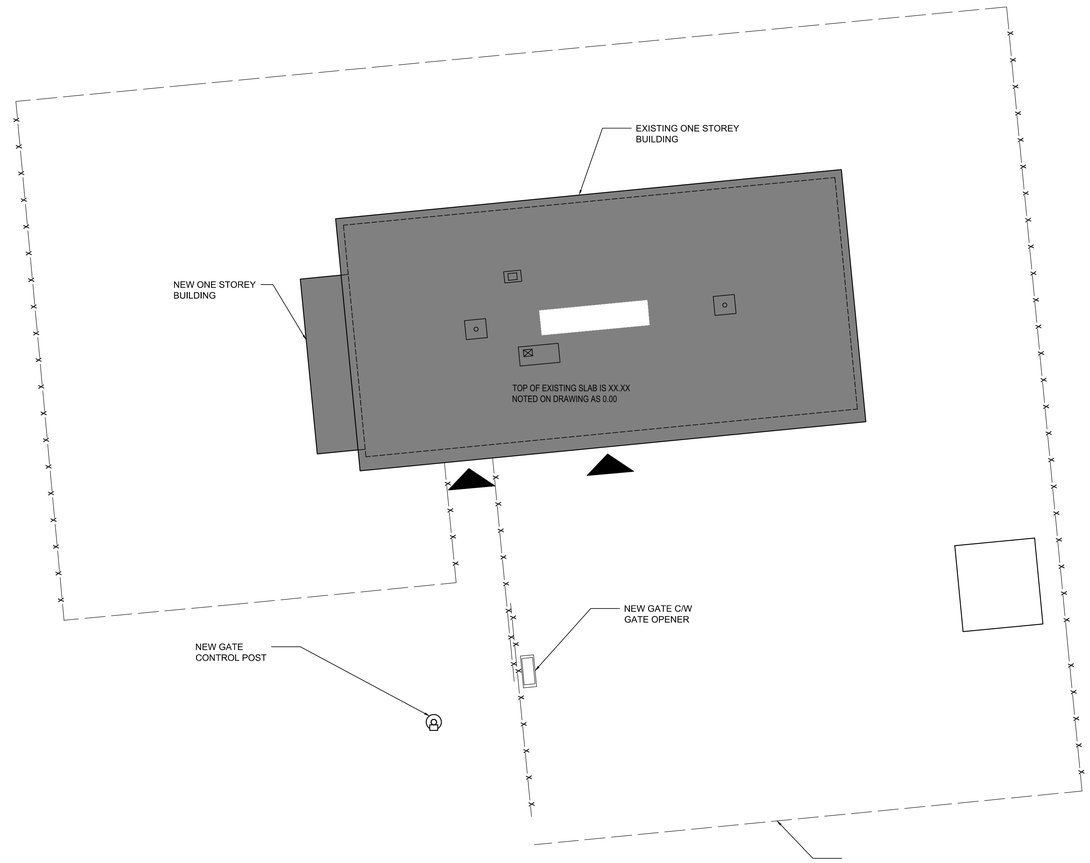
TRADE - MÉTIER
STRUCTURAL

DATE
2026/05/25

SUBJECT - SUJET
ADDITION FOUNDATION SECTIONS AND EXTERIOR HOUSEKEEPING PAD SECTION - NEW WORK

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: T. P		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: Y. H		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: T.P	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 - 207	

Canada



1
301 SITE PLAN
SCALE: 1:125

WALL TYPE W1:

- AIR BARRIER
- 13 mm OSB SHEATHING
- 38 x 140 mm WOOD STUD @ 406 O.C. c/w
- FIBREGLASS INSULATION
- POLY VAPOUR BARRIER
- 13 mm GYPSUM WALL BOARD

WALL TYPE W2:

- METAL SIDING
- 19 x 64 mm WOOD FURRING @ 406 mm O.C.
- AIR BARRIER
- 13 mm OSB SHEATHING
- 38 x 140 mm STUD @ 406 O.C.
- FIBREGLASS INSULATION
- POLY VAPOUR BARRIER
- 13 mm GYPSUM WALL BOARD

WALL TYPE W3:

- METAL SIDING
- 19 x 64 mm WOOD FURRING @ 406 mm O.C.
- 19 mm WOOD STRAPPING
- 38 mm POLYISOCYANURATE SHEATHING BOARD
- 13 mm OSB SHEATHING
- 38 x 140 mm STUD @ 406 O.C.
- FIBREGLASS INSULATION
- POLY VAPOUR BARRIER
- 13 mm GYPSUM WALL BOARD

WALL TYPE P1:

- 13 mm GYPSUM WALL BOARD
- 140 mm WOOD STUD @ 406 O.C. c/w
- FIBREGLASS INSULATION
- 13 mm GYPSUM WALL BOARD

WALL TYPE P2:

- 13 mm GYPSUM WALL BOARD
- 38 X 140 mm WOOD STUD @ 406 O.C. c/w
- c/w 90 mm MINERAL WOOL BATT INSULATION
- 13 mm GYPSUM WALL BOARD

WALL TYPE P3:

- 16 mm TYPE X GYPSUM BOARD
- RESILIENT CHANNEL (20 Ga) INSTALLED AT 400 mm O.C
- 90 mm METAL STUDS AT 610 mm O.C.
- c/w 90 mm MINERAL WOOL BATT INSULATION
- 16 mm TYPE X GYPSUM BOARD
- 16 mm TYPE X GYPSUM BOARD

WALL TYPE P4:

ATTACK SIDE
- 16 mm TYPE X GYPSUM BOARD
- PROTECTION MATERIAL - STEEL MESH
- 152 mm METAL STUDS AT 610 mm O.C.
- c/w 152 mm MINERAL WOOL BATT INSULATION
- 16 mm TYPE X GYPSUM BOARD

SECURE SIDE

ROOF ASSEMBLIES

EXISTING ROOF TYPE R1
- CAP SHEET
- BASE SHEET
- STARTER SHEET
- 6 mm FIBREGLASS MAT/FIBREGLASS PAPER.
- 100 mm RIGID INSULATION
- PEEL AND STICK VAPOUR BARRIER
- ROLL ON VAPOUR BARRIER
- 16 mm OSB SHEATHING

ROOF TYPE R2

NEW ROOF TYPE R2 (BY STRUCTURAL)
- LOW-SLOPE STEEL ROOF PANELS, 610 mm WIDE, PREFINISHED ON ANGLE CLIPS @ 610 mm O.C.
- ROOF MEMBRANE
- STARTER SHEET
- 16 mm PLYWOOD SHEATHING
- 2 LAYERS OF PERPENDICULAR WOOD FURRING
- 38 x 285 mm ROOF JOISTS @ 610 mm O.C.
- 2 LAYERS 140 mm THICK MINERAL WOOL BATT INSULATION RSI 3.87
- UNDERSIDE OF JOISTS
- POLYETHYLENE VAPOUR BARRIER
- 38 mm POLYISOCYANURATE INSULATION SHEATHING BOARD

13 mm GYPSUM BOARD SECURED TO ROOF JOISTS

CEILING ASSEMBLIES

C2: EXISTING - GYPSUM BULKHEAD

- 16 mm MINERAL ACOUSTIC TILE 610 x 1220 mm
- 25 mm WIDE EXPOSED T-BAR SYSTEM
- SUSPENSION WIRES FROM STRUCTURE

- 16 mm TYPE X GYPSUM BOARD ON
- 22 mm METAL FURRING AT 400 mm OC

13 mm TYPE X GYPSUM BOARD
13 mm TYPE X GYPSUM BOARD
RESILIENT CHANNEL @ 610 mm OC
102 mm C-H STUD AT 610 mm OC
c/w 76 mm MINERAL WOOL BATT INSULATION
26 mm GLASS-MAT LINER PANEL

COVER, GENERAL NOTES & KEY PLAN
301 FLOOR PLAN - DEMOLITION
302 FLOOR PLAN - NEW WORK
303 DETAILS
304 DETAILS
305 ELEVATIONS
306 SECTION DETAILS
307 DETAILS
308 INTERIOR ELEVATIONS - CASEWORK
309 SCHEDULES

1. ALL DIMENSIONS ARE IN MM UNLESS NOTED OTHERWISE.
2. DO NOT SCALE DIMENSIONS FROM DRAWINGS.
3. REVIEW ALL CONSTRUCTION DOCUMENTS AND REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO UNDERTAKING WORK.
4. FLOOR PLANS: UNLESS NOTED OTHERWISE ALL DIMENSIONS ARE TO CENTRE OR END OF STUD OR EXISTING FINISH.
5. CUT, PATCH AND MAKE GOOD EXISTING CONSTRUCTION AS REQUIRED TO ACCOMMODATE NEW WORK. REPAIR AND MAKE GOOD EXISTING CONSTRUCTION AFFECTED BY DEMOLITION OR INCORPORATION OF NEW WORK. MATCH ADJACENT FINISHES, MATERIALS AND CONSTRUCTION DETAILS.
6. REMOVE AND REINSTATE ACT CEILING TILES IN AREAS OUTSIDE OF DEFINED AREA / EXTENT OF WORK TO ACCOMMODATE THE PASSAGE OF NEW M/E SERVICES INCLUDING ALL ELECTRICAL AND IT CONDUIT AND CABLING INSTALLATION.
7. CONTRACTOR TO PROVIDE ADEQUATE SECURE BLOCKING IN PARTITIONS TO RECEIVE WALL MOUNTED UNITS SUCH AS COUNTERTOPS, SHELVES, MILLWORK, HUNG LAVATORIES, VALENCES, GRAB BARS, AND FIRE HOSE CABINET, ELEC PANELS, WASHROOM ACCESSORIES.
8. REFER TO M/E DRAWINGS FOR LOCATIONS OF HVAC DIFFUSERS, LIGHTS, GRILLS, FIRE PROTECTION ETC. COORDINATE THE LOCATION AND FINISH OF ANY EXPOSED M/E WITH ARCHITECTURAL.
9. PROVIDE FIRESTOPPING AT ALL NEW PENETRATIONS THROUGH SEPARATIONS AND FLOORS SLAB AND FIRE SEPARATIONS.
10. ALL NEW DOORS ARE 100 mm AWAY FROM ADJACENT WALLS UNLESS OTHERWISE NOTED.

ABBREVIATIONS:

ACC	ACCESSIBLE
A.F.F.	ABOVE FINISHED FLOOR
A-TYP.	A-TYPICAL
APPROX.	APPROXIMATE
ARCH	ARCHITECT, ARCHITECTURE
BLDG	BUILDING
CL	CENTRE LINE
CONC	CONCRETE
CONT	CONTINUOUS, CONTINUE, CONTROL
COORD	COORDINATION
CU	CARLETON UNIVERSITY
c/w	COMPLETE WITH
DCC	DEFENCE CONSTRUCTION CANADA
DEMO	DEMOLITION
DET	DETAIL
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DND	DEPARTMENT OF NATIONAL DEFENCE
DWG	DRAWING
EA	EACH
ELEC	ELECTRICAL
ELEV	ELEVATION
EQ	EQUAL
EQUIP	EQUIPMENT
EXIST	EXISTING
FG	FIBERGLASS
FLR	FLOOR
FOH	FRONT OF HOUSE
GC	GARBAGE CHUTE
GWB	GYPSUM WALL BOARD
HPL	HEIGHT PRESSURE LAMINATE
HT	HEIGHT
HVAC	HEATING, VENTING AND AIR CONDITIONING
INFO	INFORMATION
INT	INTERIOR
JAN.	JANITOR ROOM
MANUF.	MANUFACTURER
MAX	MAXIMUM
MECH	MECHANICAL
MIN	MINIMUM
MISC	MISCELLANEOUS
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTRE
PS	PRESSED STEEL
PT	PRESSURE TREATED
PSF	PRESSED STEEL FRAME
INFO	INFORMATION
INT	INTERIOR
JAN.	JANITOR ROOM
QTY	QUANTITY
RCP	REFLECTED CEILING PLAN
REL	RELOCATED
REQ'D	REQUIRED
SIM	SIMILAR
SPEC	SPECIFICATION
STN	FOOD SERVICE STATION
STRUCT	STRUCTURAL
TBD	TO BE DETERMINED
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
U/S	UNDERSIDE
W/	WITH
W/O	WITHOUT
WC	WATER CLOSET / TOILETS
WD	WOOD

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2	2025/10/20	ISSUED FOR 99% REVIEW	APB
	2025/07/22	ISSUED FOR 60% REVIEW	APB

ONTARIO ASSOCIATION OF ARCHITECTS
ERIN ST. CLAIR MacEWEN
LICENCE
3878

SCALE - ÉCHELLE

LOCATION - EMPLACEMENT
CFB Kingston ON

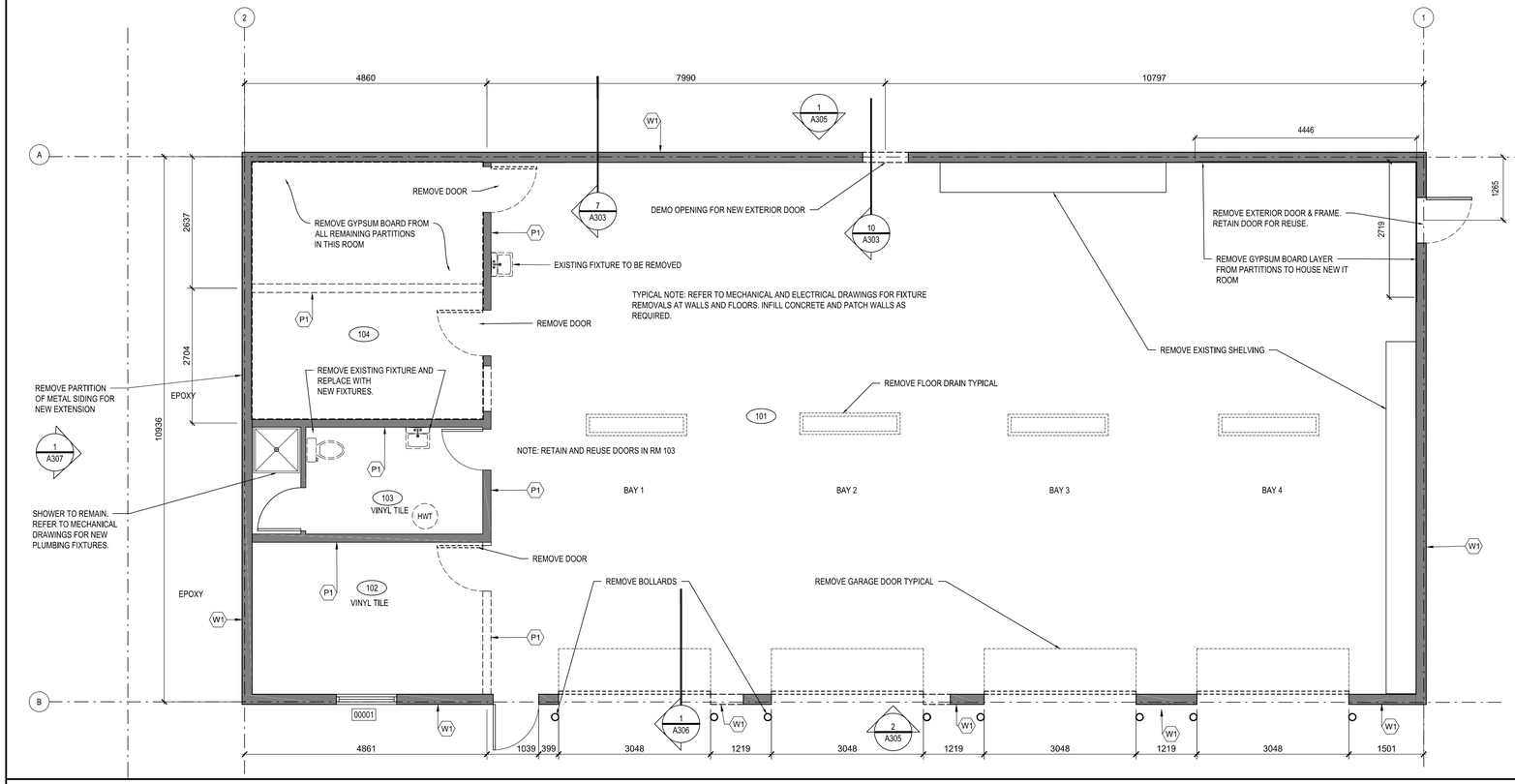
PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

TRADE - MÉTIER	DATE
TRADE	2025-12-09

SUBJECT - SUJET
COVER, GENERAL NOTES

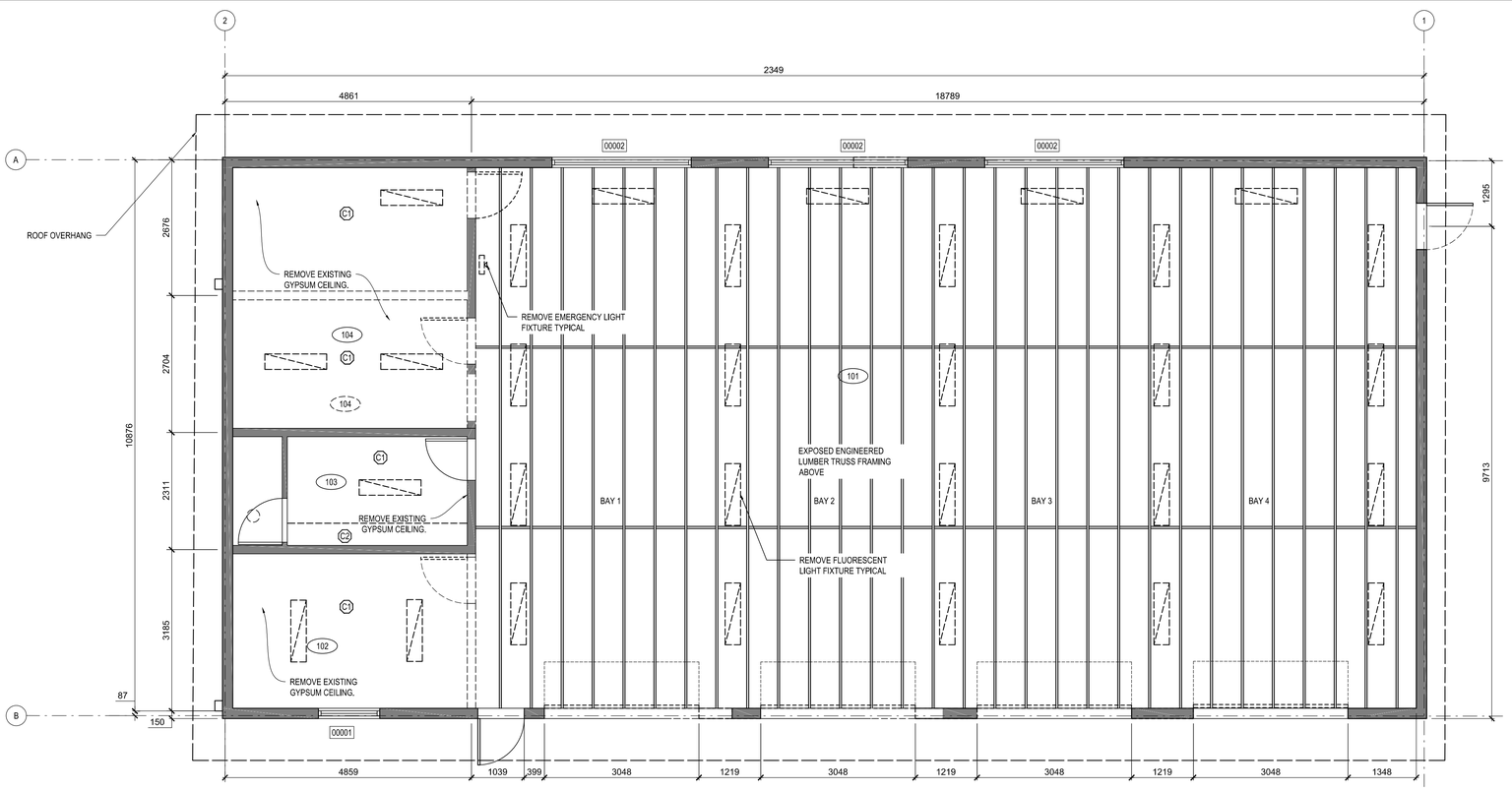
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CHECKED/VÉRIFIÉ: MJAW	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: X.X.	300
PF NUMBER: XXXXXXXX	DWG. NO. - DESSIN NO.: K-B35-2508/3-300	

$FILES
$PENTBLSS
$PLTDRVSS
$USERNAMES
$DATES



1 / 301 FLOOR PLAN - DEMOLITION WORK

SCALE: 1:50



2 / 301 REFLECTED CEILING PLAN - DEMOLITION WORK

SCALE: 1:50

LEGEND

WALL TYPE W1:
FULL HEIGHT EXISTING EXTERIOR WALL
- METAL SIDING
- AIR BARRIER
- 13 mm OSB SHEATHING
- 38 x 140 mm STUD @ 406 O.C.
- FIBERGLAS INSULATION
- POLY VAPOUR BARRIER
- 13 mm GYPSUM WALL BOARD

WALL TYPE W2:
FULL HEIGHT NEW EXTERIOR WALL
- METAL SIDING
- 19 x 64 mm WOOD FURRING @ 406 mm O.C.
- AIR BARRIER
- 13 mm OSB SHEATHING
- 38 x 140 mm STUD @ 406 O.C.
- FIBREGLASS INSULATION
- POLY VAPOUR BARRIER
- 13 mm GYPSUM WALL BOARD

WALL TYPE W3:
FULL HEIGHT NEW EXTERIOR WALL
- METAL SIDING
- 19 x 64 mm WOOD FURRING @ 406 mm O.C.
- 38 mm POLYISOCYANURATE SHEATHING BOARD
- 13 mm OSB SHEATHING
- 38 x 140 mm STUD @ 406 O.C.
- FIBREGLASS INSULATION
- POLY VAPOUR BARRIER
- 13 mm GYPSUM WALL BOARD

WALL TYPE P1:
FULL HEIGHT EXISTING INTERIOR PARTITION
- 13 mm GYPSUM WALL BOARD
- 140 mm STUD @ 406 O.C.
- FIBREGLASS INSULATION
- 13 mm GYPSUM WALL BOARD

WALL TYPE P2:
NEW FULL HEIGHT INTERIOR PARTITION
- 13 mm GYPSUM WALL BOARD
- 140 mm STUD @ 406 O.C.
- c/w 90 mm MINERAL WOOL BATT INSULATION
- 13 mm GYPSUM WALL BOARD

WALL TYPE P3:
NEW FULL HEIGHT PARTITION TYPE P3 - STC 53
- 16 mm TYPE X GYPSUM BOARD
- RESILIENT CHANNEL (20 Ga) INSTALLED AT 400 mm O.C
- 90 mm METAL STUDS AT 610 mm O.C.
- c/w 90 mm MINERAL WOOL BATT INSULATION
- 16 mm TYPE X GYPSUM BOARD
- 16 mm TYPE X GYPSUM BOARD

WALL TYPE P4:
NEW FULL HEIGHT PARTITION TYPE P4
ATTACK SIDE
- 16 mm TYPE X GYPSUM BOARD
- PROTECTION MATERIAL - STEEL MESH
- 152 mm METAL STUDS AT 600 mm O.C.
- c/w 152 mm MINERAL WOOL BATT INSULATION
- 16 mm TYPE X GYPSUM BOARD

SECURE SIDE

ROOF TYPE R1
EXISTING ROOF TYPE R1
- CAP SHEET
- BASE SHEET
- STARTER SHEET
- 6 mm FIBREGLASS MAT/FIBREGLASS PAPER.
- 100 mm RIGID INSULATION
- PEEL AND STICK VAPOUR BARRIER
- ROLL ON VAPOUR BARRIER
- 16 mm OSB SHEATHING

ROOF TYPE R2
NEW ROOF TYPE R2 (BY STRUCTURAL)
- LOW-SLOPE STEEL ROOF PANELS, 610 mm WIDE, REFINISHED ON ANGLE CLIPS @ 610 mm O.C.
- ROOF MEMBRANE
- STARTER SHEET
- 16 mm PLYWOOD SHEATHING
- 2 LAYERS OF PERPENDICULAR WOOD FURRING
- 38 x 285 mm ROOF JOISTS @ 610 mm O.C.
- 2 LAYERS 140 mm THICK MINERAL WOOL BATT INSULATION RSI 3.87
- UNDERSIDE OF JOISTS
- POLYETHYLENE VAPOUR BARRIER
- 38 mm POLYISOCYANURATE INSULATION SHEATHING BOARD
- 13 mm GYPSUM BOARD SECURED TO ROOF JOISTS

C1: EXISTING - GYPSUM CEILING

C2: EXISTING - GYPSUM BULKHEAD

C3: NEW - ACT CEILING
- 16 mm MINERAL ACOUSTIC TILE 610 x 1220 mm
- 25 mm WIDE EXPOSED T-BAR SYSTEM
- SUSPENSION WIRES FROM STRUCTURE

C4: NEW GYPSUM CEILING
- 16 mm TYPE X GYPSUM BOARD ON
- 22 mm METAL FURRING AT 400 mm O.C.

C5: NEW CEILING - TYPE C5 - STC 53
13 mm TYPE X GYPSUM BOARD
13 mm TYPE X GYPSUM BOARD
RESILIENT CHANNEL @ 610 mm O.C.
102 mm C-H STUD AT 610 mm O.C.
c/w 76 mm MINERAL WOOL BATT INSULATION
26 mm GLASS-MAT LINER PANEL

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LEGEND

D000 — DOOR LABEL
W1 — WALL TYPE LABEL
0000 — WINDOW LABEL
000 — ROOM or REF NUMBER
000 — COLUMN GRID BUBBLE
00000 — ELEVATION LABEL
EXISTING PARTITION TO REMAIN
PARTITION/ELEMENT TO BE REMOVED
W1 — PARTITION TAG
P3 — PARTITION DETAIL TAG
C1 — CEILING TAG

N — PROJECT NORTH ARROW

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ONTARIO ASSOCIATION OF ARCHITECTS
ERIC ST. CLAIR MacEWEN
LICENCE
3676

SCALE - ÉCHELLE
Scale / Échelle

LOCATION - EMPLACEMENT
CFB Kingston ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

TRADE - MÉTIER
TRADE

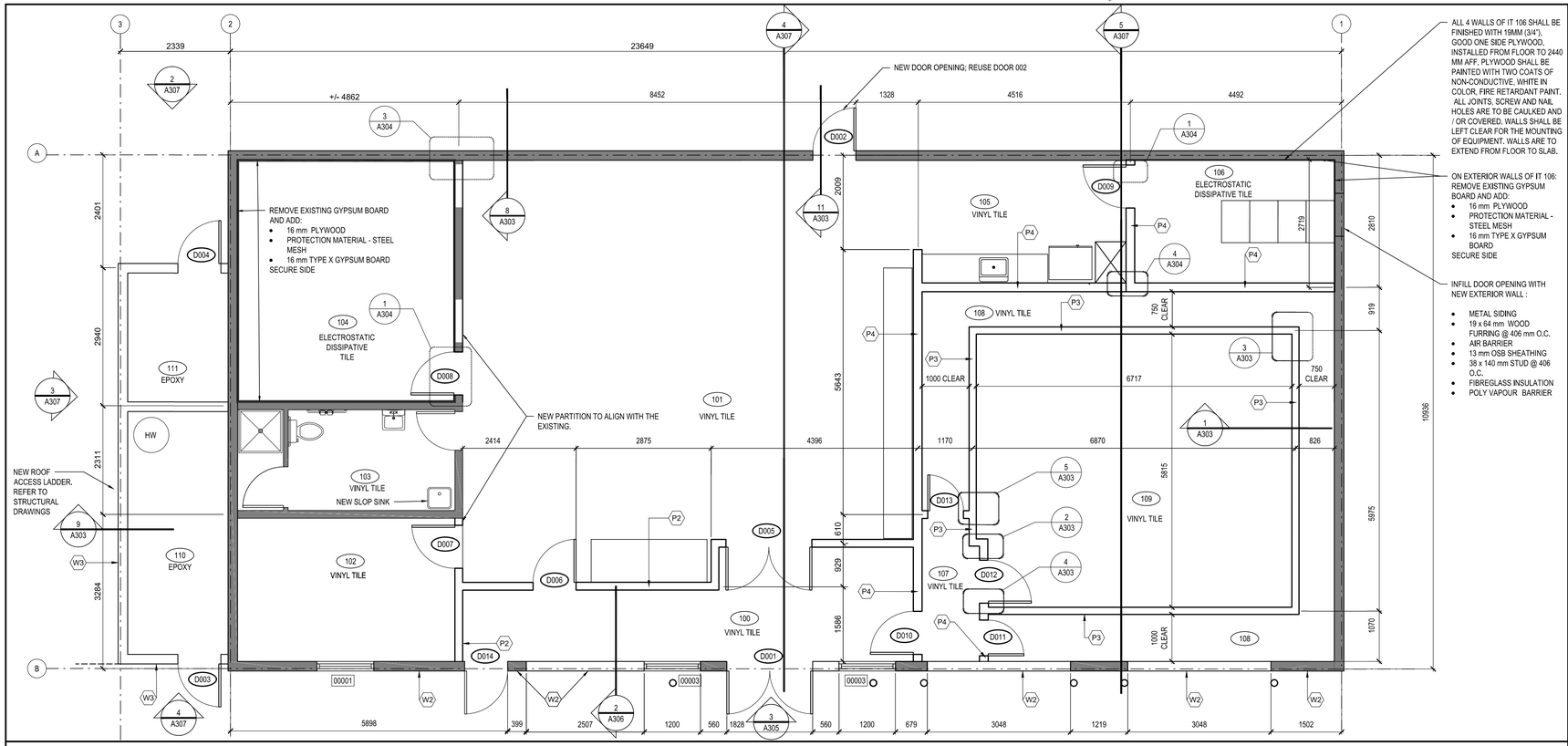
DATE
2025-12-09

SUBJECT - SUJET
DEMOLITION PLANS

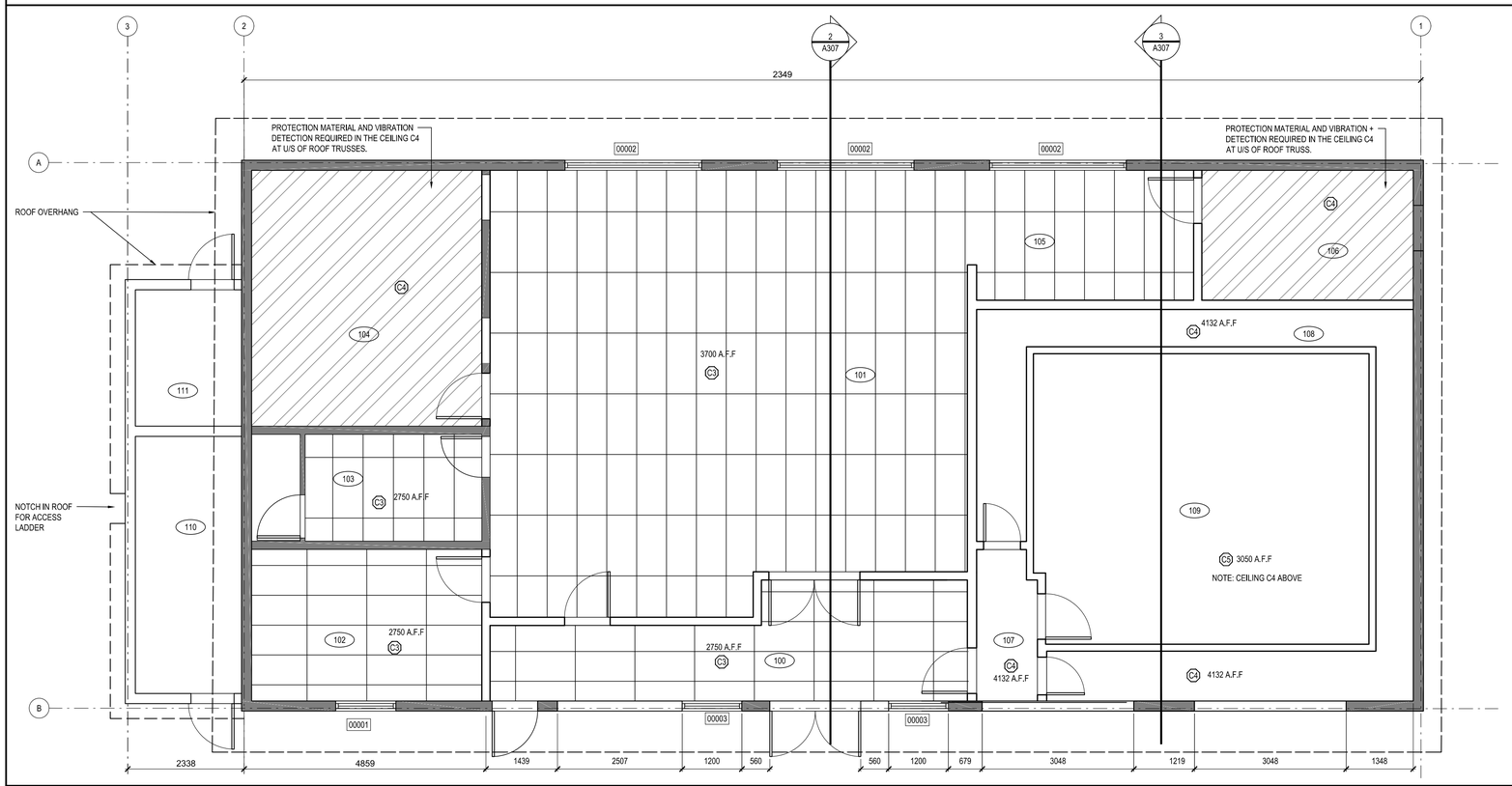
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DESIGNED/ÉTUDIÉ X.X.		DES OFF/AGENT CONCEPT X.X.
DRAWN/DESSINÉ APB		SECT HD/CHEF SECT X.X.
CHECKED/VÉRIFIÉ MJAW	CFFM/DSIFC X.X.	DES MGR/GEST CONCEPT X.X.
COORDINATION X.X.	REVIEWED - REVU X.X.	301
PF NUMBER XXXXXXXX	DWG. NO. - DESSIN NO. K-B35-2508/3-301	

Canada

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$DATES



1 / 302 FLOOR PLAN - NEW
SCALE: 1:50



2 / 302 REFLECTED CEILING PLAN - NEW
SCALE: 1:50

LEGEND

WALL TYPE W1:
FULL HEIGHT EXISTING EXTERIOR WALL
- METAL SIDING
- AIR BARRIER
- 13 mm OSB SHEATHING
- 38 x 140 mm STUD @ 406 O.C.
- FIBERGLAS INSULATION
- POLY VAPOUR BARRIER
- 13 mm GYPSUM WALL BOARD

WALL TYPE W2:
FULL HEIGHT NEW EXTERIOR WALL
- METAL SIDING
- 19 x 64 mm WOOD FURRING @ 406 mm O.C.
- AIR BARRIER
- 13 mm OSB SHEATHING
- 38 x 140 mm STUD @ 406 O.C.
- FIBREGLASS INSULATION
- POLY VAPOUR BARRIER
- 13 mm GYPSUM WALL BOARD

WALL TYPE W3:
FULL HEIGHT NEW EXTERIOR WALL
- METAL SIDING
- 19 x 64 mm WOOD FURRING @ 406 mm O.C.
- 38 mm POLYISOCYANURATE SHEATHING BOARD
- 13 mm OSB SHEATHING
- 38 x 140 mm STUD @ 406 O.C.
- FIBREGLASS INSULATION
- POLY VAPOUR BARRIER
- 13 mm GYPSUM WALL BOARD

WALL TYPE P1:
FULL HEIGHT EXISTING INTERIOR PARTITION
- 13 mm GYPSUM WALL BOARD
- 140 mm STUD @ 406 O.C.
- FIBREGLASS INSULATION
- 13 mm GYPSUM WALL BOARD

WALL TYPE P2:
NEW FULL HEIGHT INTERIOR PARTITION
- 13 mm GYPSUM WALL BOARD
- 140 mm STUD @ 406 O.C.
- c/w 90 mm MINERAL WOOL BATT INSULATION
- 13 mm GYPSUM WALL BOARD

WALL TYPE P3:
NEW FULL HEIGHT PARTITION TYPE P3 - STC 53
- 16 mm TYPE X GYPSUM BOARD
- RESILIENT CHANNEL (20 Ga) INSTALLED AT 400 mm O.C
- 90 mm METAL STUDS AT 610 mm O.C.
- c/w 90 mm MINERAL WOOL BATT INSULATION
- 16 mm TYPE X GYPSUM BOARD
- 16 mm TYPE X GYPSUM BOARD

WALL TYPE P4:
NEW FULL HEIGHT PARTITION TYPE P4
ATTACK SIDE
- 16 mm TYPE X GYPSUM BOARD
- PROTECTION MATERIAL - STEEL MESH
- 152 mm METAL STUDS AT 600 mm O.C.
- c/w 152 mm MINERAL WOOL BATT INSULATION
- 16 mm TYPE X GYPSUM BOARD

SECURE SIDE

ROOF TYPE R1
EXISTING ROOF TYPE R1
- CAP SHEET
- BASE SHEET
- STARTER SHEET
- 6 mm FIBREGLASS MAT/FIBREGLASS PAPER.
- 100 mm RIGID INSULATION
- PEEL AND STICK VAPOUR BARRIER
- ROLL ON VAPOUR BARRIER
- 16 mm OSB SHEATHING

ROOF TYPE R2
NEW ROOF TYPE R2 (BY STRUCTURAL)
- LOW-SLOPE STEEL ROOF PANELS, 610 mm WIDE, REFINISHED ON ANGLE CLIPS @ 610 mm O.C.
- ROOF MEMBRANE
- STARTER SHEET
- 16 mm PLYWOOD SHEATHING
- 2 LAYERS OF PERPENDICULAR WOOD FURRING
- 38 x 285 mm ROOF JOISTS @ 610 mm O.C.
- 2 LAYERS 140 mm THICK MINERAL WOOL BATT INSULATION RSI 3.87
- UNDERSIDE OF JOISTS
- POLYETHYLENE VAPOUR BARRIER
- 38 mm POLYISOCYANURATE INSULATION SHEATHING BOARD
- 13 mm GYPSUM BOARD SECURED TO ROOF JOISTS

C1: EXISTING - GYPSUM CEILING

C2: EXISTING - GYPSUM BULKHEAD

C3: NEW - ACT CEILING
- 16 mm MINERAL ACOUSTIC TILE 610 x 1220 mm
- 25 mm WIDE EXPOSED T-BAR SYSTEM
- SUSPENSION WIRES FROM STRUCTURE

C4: NEW GYPSUM CEILING
- 16 mm TYPE X GYPSUM BOARD ON
- 22 mm METAL FURRING AT 400 mm O.C.

C5: NEW CEILING - TYPE C5 - STC 53
13 mm TYPE X GYPSUM BOARD
13 mm TYPE X GYPSUM BOARD
RESILIENT CHANNEL @ 610 mm O.C.
102 mm C-H STUD AT 610 mm O.C.
c/w 76 mm MINERAL WOOL BATT INSULATION
26 mm GLASS-MAT LINER PANEL

National Defence / Défense nationale

Headquarters
Quartier général

D000 DOOR LABEL
W1 WALL TYPE LABEL
0000 WINDOW LABEL
000 ROOM or REF NUMBER
000 COLUMN GRID BUBBLE
00000 ELEVATION LABEL
EXISTING PARTITION TO REMAIN
PARTITION/ELEMENT TO BE REMOVED
W1 PARTITION TAG
P3 PARTITION DETAIL TAG
C1 CEILING TAG

N PROJECT NORTH ARROW

NO.	DATE	REVISION	APPR.
5	2026-05-25	ISSUED FOR TENDER	APB
4	2026-03-30	ISSUED FOR 100% REVIEW	MJAW
3	2025/12/09	ISSUED FOR 99%R1 REVIEW	APB
2	2025/10/20	ISSUED FOR 99% REVIEW	APB
1	2025/07/22	ISSUED FOR 60% REVIEW	APB

ONTARIO ASSOCIATION OF ARCHITECTS
ERIC ST. CLAIR MacEWEN
LICENCE 3679

SCALE - ÉCHELLE
Scale / Échelle

LOCATION - EMPLACEMENT
CFB Kingston ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

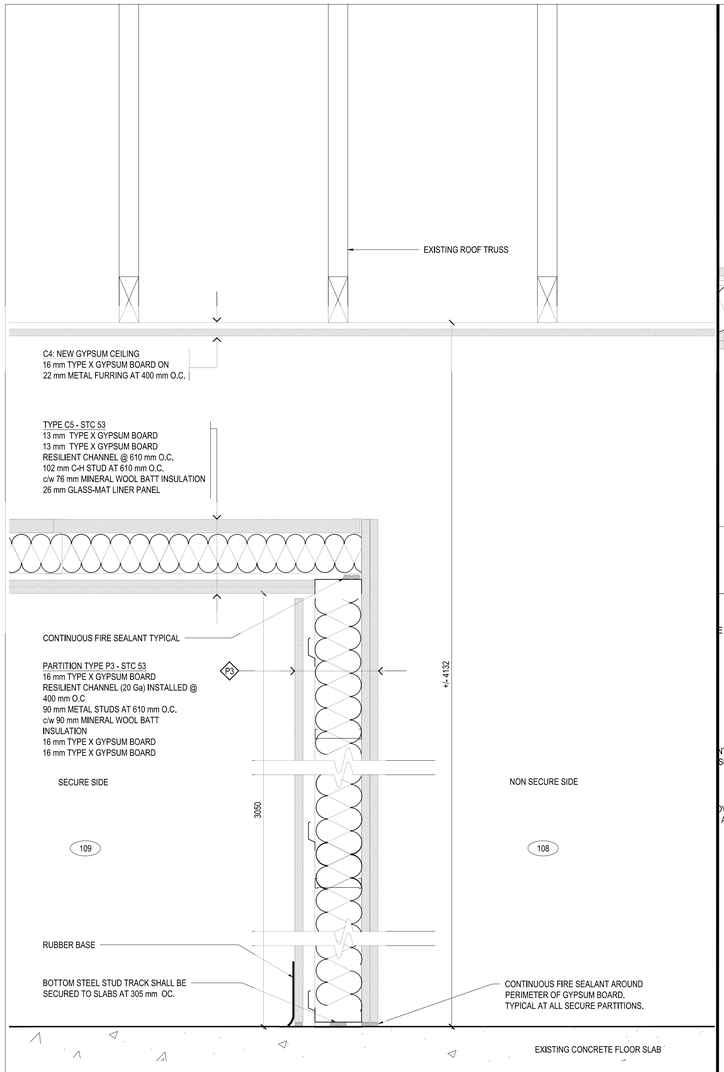
TRADE - MÉTIER: TRADE
DATE: 2025-12-09

SUBJECT - SUJET
FLOOR PLANS - NEW WORK

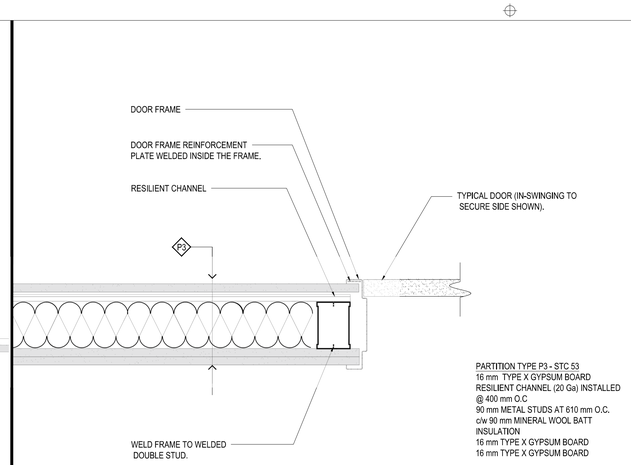
PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: WMTA		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: APB		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: MJAW	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: X.X.	302
PF NUMBER: XXXXXXXX	DWG. NO. - DESSIN NO.: K-B35-2508/3-302	

Canada

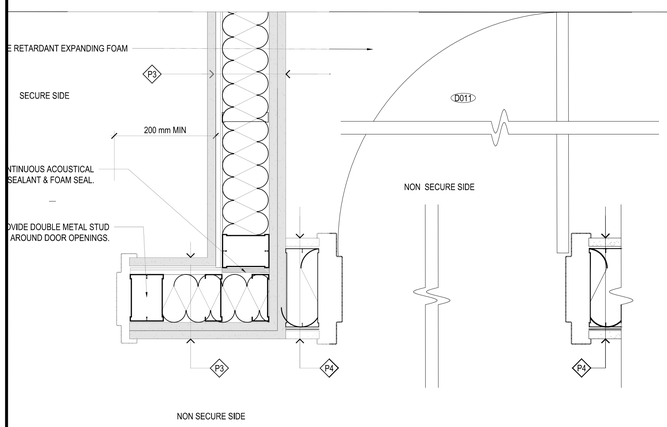
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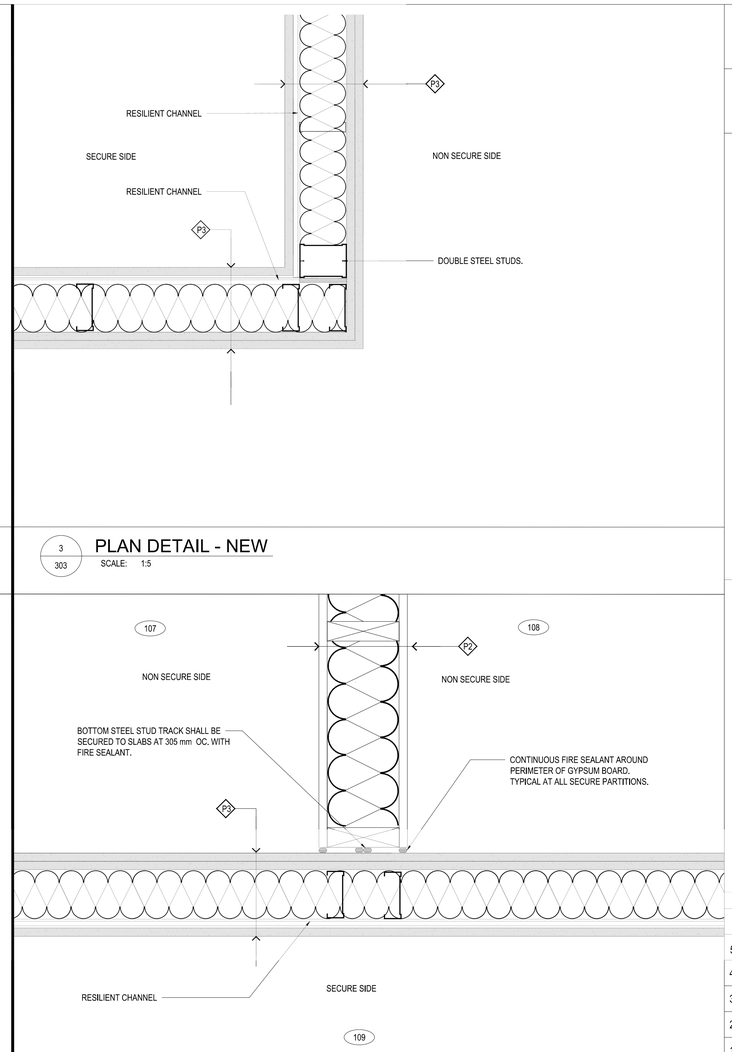
1 / 303 SECTION DETAIL - NEW FALSE CEILING
SCALE: 1:5



2 / 303 PLAN DETAIL AT DOOR
SCALE: 1:5

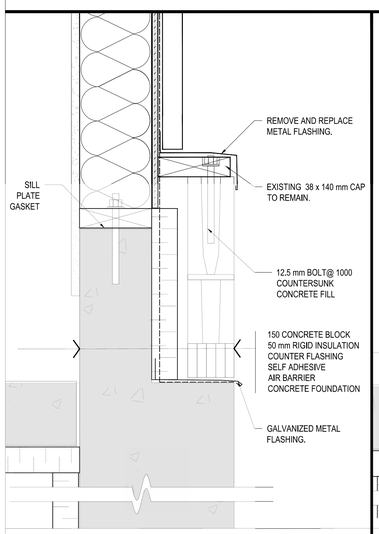


4 / 303 PLAN DETAIL - NEW
SCALE: 1:5

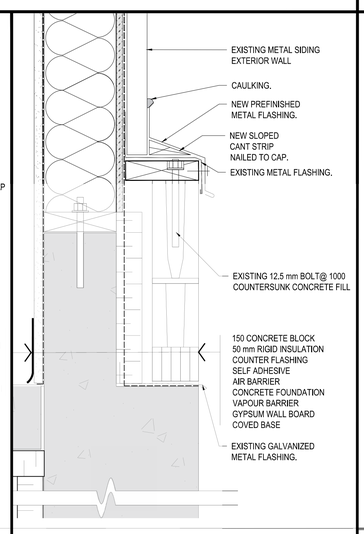


3 / 303 PLAN DETAIL - NEW
SCALE: 1:5

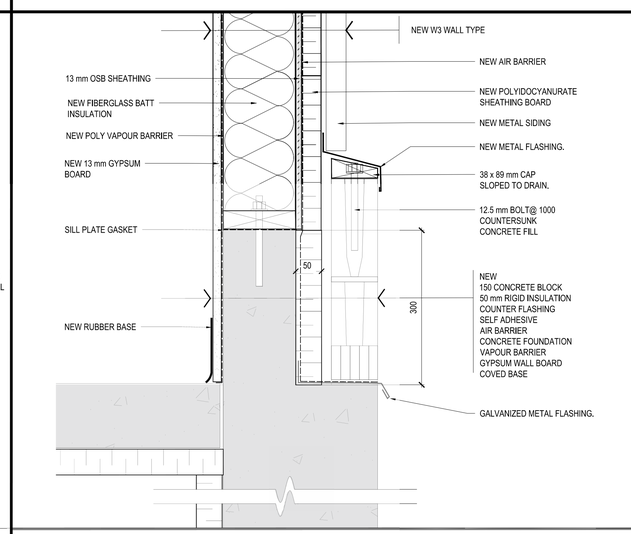
5 / 303 PLAN DETAIL - NEW
SCALE: 1:5



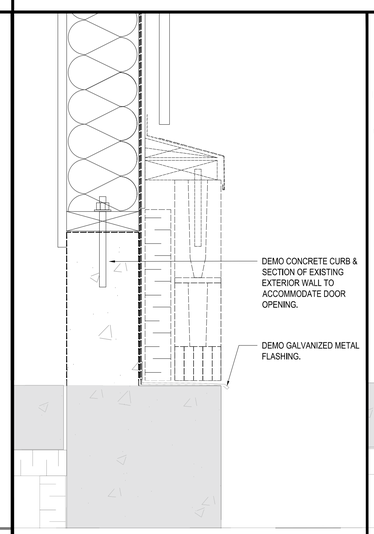
7 / 303 SECTION DETAIL - DEMO SILL
SCALE: 1:5



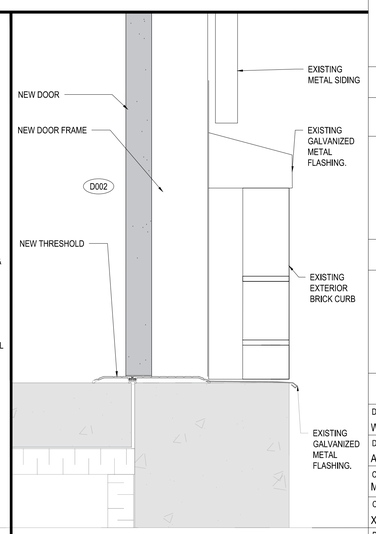
8 / 303 SECTION DETAIL - NEW SILL
SCALE: 1:5



9 / 303 SECTION DETAIL- NEW SILL
SCALE: 1:5



10 / 303 SECTION - EXTERIOR WALL
SCALE: 1:5



11 / 303 SECTION - NEW OPENING
SCALE: 1:5

LEGEND

Headquarters
Quartier général

- D000 — DOOR LABEL
- W1 — WALL TYPE LABEL
- 0000 — WINDOW LABEL
- 000 — ROOM or REF NUMBER
- 000 — COLUMN GRID BUBBLE
- 00000 — ELEVATION LABEL
- EXISTING PARTITION TO REMAIN
- W1 — PARTITION TAG
- P3 — PARTITION DETAIL TAG
- C1 — CEILING TAG

WALL TYPE P1:
FULL HEIGHT EXISTING INTERIOR PARTITION
- 13 mm GYPSUM WALL BOARD
- 140 mm STUD @ 406 O.C.
- FIBREGLASS INSULATION
- 13 mm GYPSUM WALL BOARD

WALL TYPE P2:
NEW FULL HEIGHT INTERIOR PARTITION
- 13 mm GYPSUM WALL BOARD
- 140 mm STUD @ 406 O.C.
- c/w 90 mm MINERAL WOOL BATT INSULATION
- 13 mm GYPSUM WALL BOARD

WALL TYPE P3:
NEW FULL HEIGHT PARTITION TYPE P3 - STC 53
- 16 mm TYPE X GYPSUM BOARD
- RESILIENT CHANNEL (20 Ga) INSTALLED AT 400 mm O.C
- 90 mm METAL STUDS AT 610 mm O.C.
- c/w 90 mm MINERAL WOOL BATT INSULATION
- 16 mm TYPE X GYPSUM BOARD

NO.	DATE	REVISION	APPR.
5	2026-05-25	ISSUED FOR TENDER	APB
4	2026-03-30	ISSUED FOR 100% REVIEW	MJAW
3	2025/12/09	ISSUED FOR 99%R1 REVIEW	APB
2	2025/10/20	ISSUED FOR 99% REVIEW	APB
1	2025/07/22	ISSUED FOR 60% REVIEW	APB

ONTARIO ASSOCIATION OF ARCHITECTS
ERIC ST. CLAIR McEWEN
LICENCE
3878

SCALE - ÉCHELLE
Scale / Échelle

LOCATION - EMPLACEMENT
CFB Kingston ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

TRADE - MÉTIER
TRADE

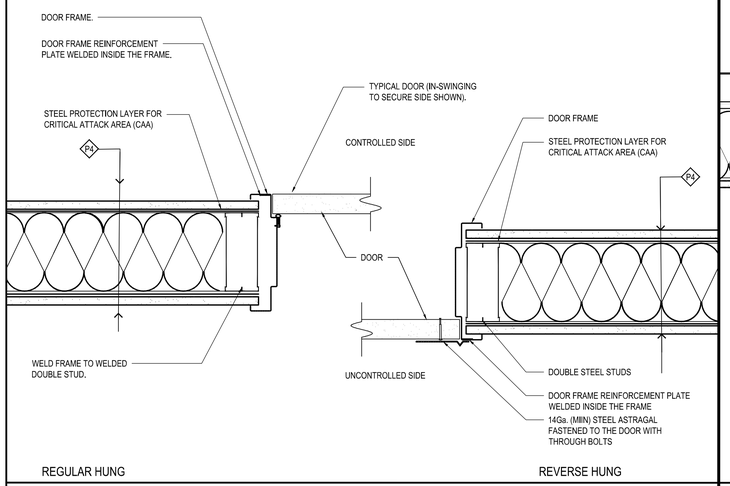
DATE
2025-12-09

SUBJECT - SUJET
DETAILS

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ WMTA		DES OFF/AGENT CONCEPT X.X.
DRAWN/DESSINÉ APB		SECT HD/CHEF SECT X.X.
CHECKED/VÉRIFIÉ MJAW	CFFM/DSIFC X.X.	DES MGR/GEST CONCEPT X.X.
COORDINATION X.X.	REVIEWED - REVU X.X.	303
PF NUMBER XXXXXXXX	DWG. NO. - DESSIN NO. K-B35-2508/3-303	

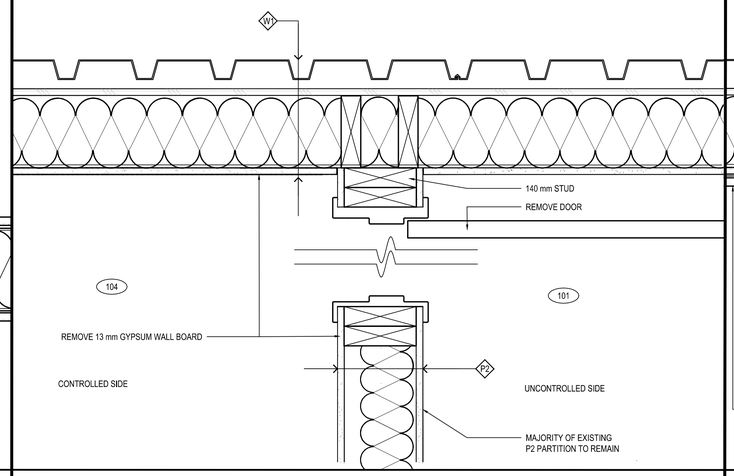
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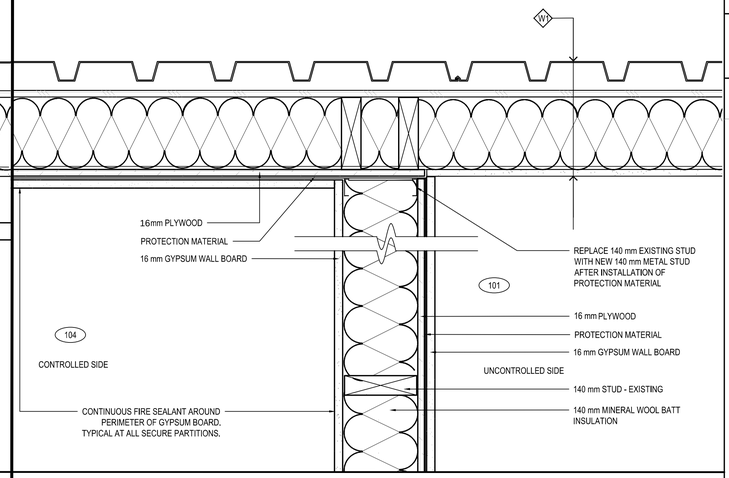
1 / 304 PLAN DETAIL AT NEW DOOR

SCALE: 1:5



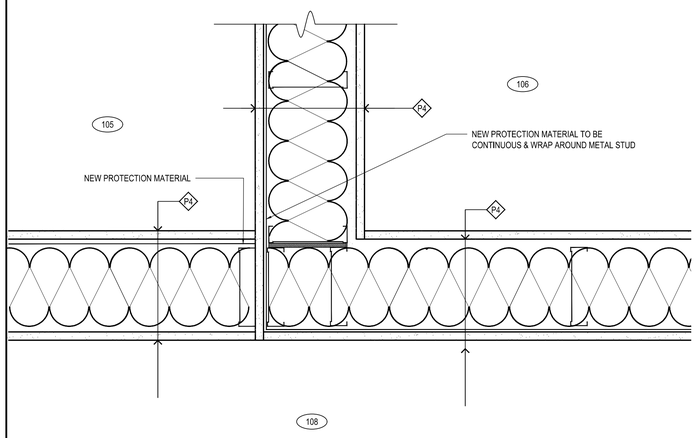
2 / 304 PLAN DETAIL - DEMO

SCALE: 1:5



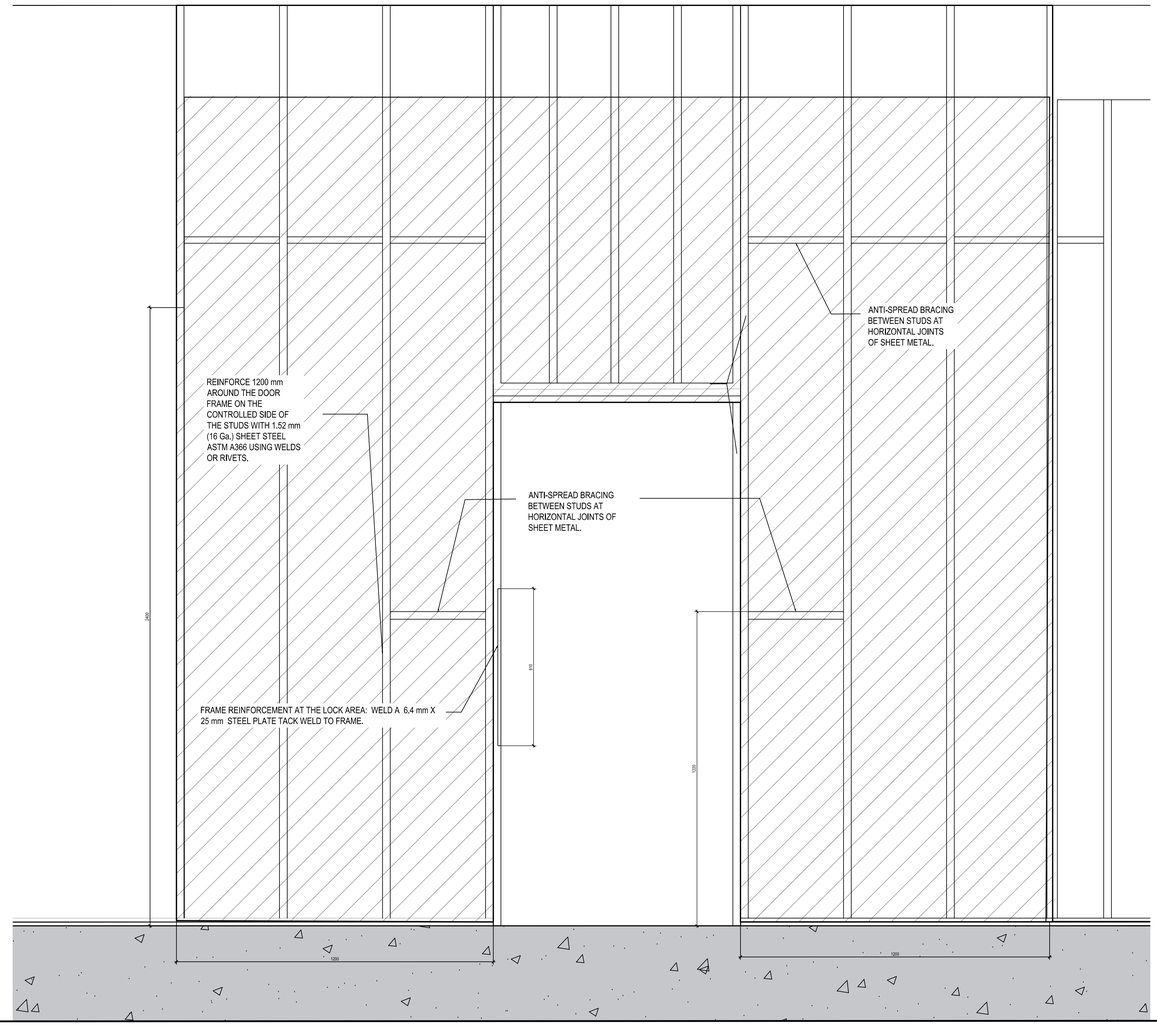
3 / 304 PLAN DETAIL - NEW

SCALE: 1:5



4 / 304 PLAN DETAIL - NEW PARTITION @ IT ROOM

SCALE: 1:5



5 / 304 ELEVATION - NEW DOOR REINFORCEMENT AT DOORS 008 & 009

SCALE: 1:10

National Defence / Défense nationale

Headquarters
Quartier général

LEGEND

WALL TYPE P1:
FULL HEIGHT EXISTING INTERIOR PARTITION
- 13 mm GYPSUM WALL BOARD
- 140 mm STUD @ 406 O.C.
- FIBREGLASS INSULATION
- 13 mm GYPSUM WALL BOARD

WALL TYPE P2:
NEW FULL HEIGHT INTERIOR PARTITION
- 13 mm GYPSUM WALL BOARD
- 140 mm STUD @ 406 O.C.
- c/w 90 mm MINERAL WOOL BATT INSULATION
- 13 mm GYPSUM WALL BOARD

WALL TYPE P3:
NEW FULL HEIGHT PARTITION TYPE P3 - STC 53
- 16 mm TYPE X GYPSUM BOARD
- RESILIENT CHANNEL (20 Ga) INSTALLED AT 400 mm O.C
- 90 mm METAL STUDS AT 610 mm O.C.
- c/w 90 mm MINERAL WOOL BATT INSULATION
- 16 mm TYPE X GYPSUM BOARD
- 16 mm TYPE X GYPSUM BOARD

WALL TYPE P4:
NEW FULL HEIGHT PARTITION TYPE P4
ATTACK SIDE
- 16 mm TYPE X GYPSUM BOARD
- PROTECTION MATERIAL - STEEL MESH
- 152 mm METAL STUDS AT 600 mm O.C.
- c/w 152 mm MINERAL WOOL BATT INSULATION
- 16 mm TYPE X GYPSUM BOARD

SECURE SIDE

NO.	DATE	REVISION	APPR.
5	2026-05-25	ISSUED FOR TENDER	APB
4	2026-03-30	ISSUED FOR 100% REVIEW	MJAW
3	2025/12/09	ISSUED FOR 99%R1 REVIEW	APB
2	2025/10/20	ISSUED FOR 99% REVIEW	APB
1	2025/07/22	ISSUED FOR 60% REVIEW	APB

ONTARIO ASSOCIATION OF ARCHITECTS
ERIC ST. CLAIR MacEWEN
LICENCE
3678

SCALE - ÉCHELLE
Scale / Échelle

LOCATION - EMPLACEMENT
CFB Kingston ON

PROJECT - PROJET

CONSTRUCT NEW WORKSHOP

TRADE - MÉTIER: TRADE
DATE: 2025-12-09

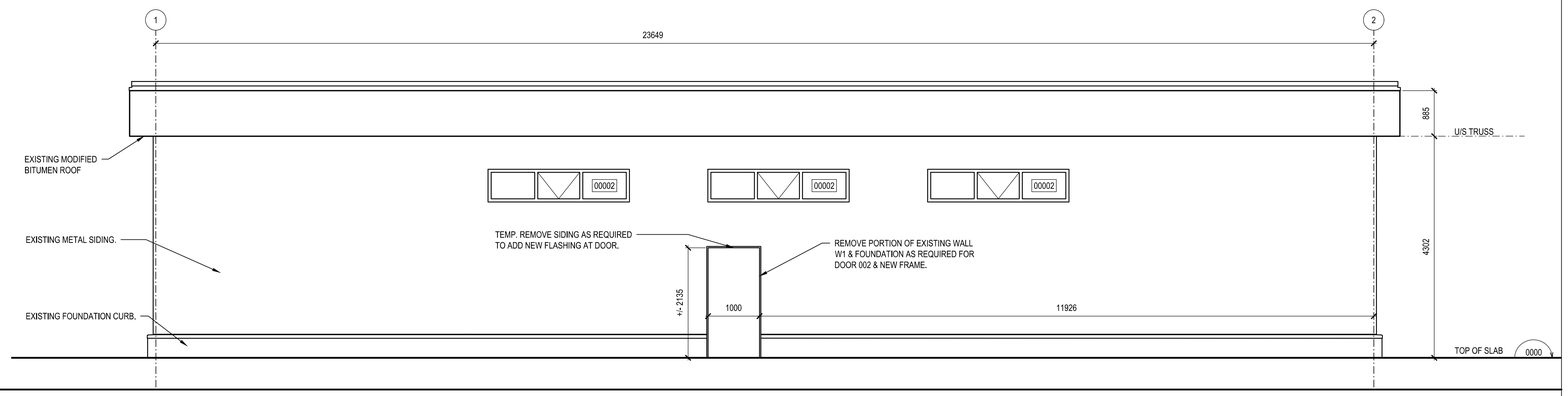
SUBJECT - SUJET

DETAILS

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: WMTA		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: APB		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: MJAW	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: X.X.	304
PF NUMBER: XXXXXXXX	DWG. NO. - DESSIN NO.: K-B35-2508/3-304	

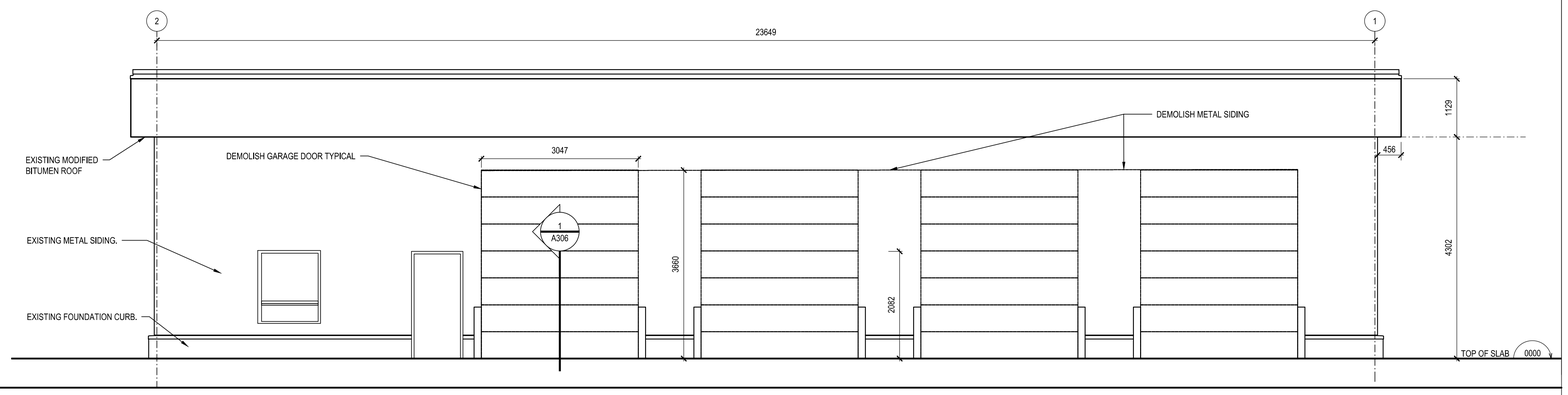
Canada

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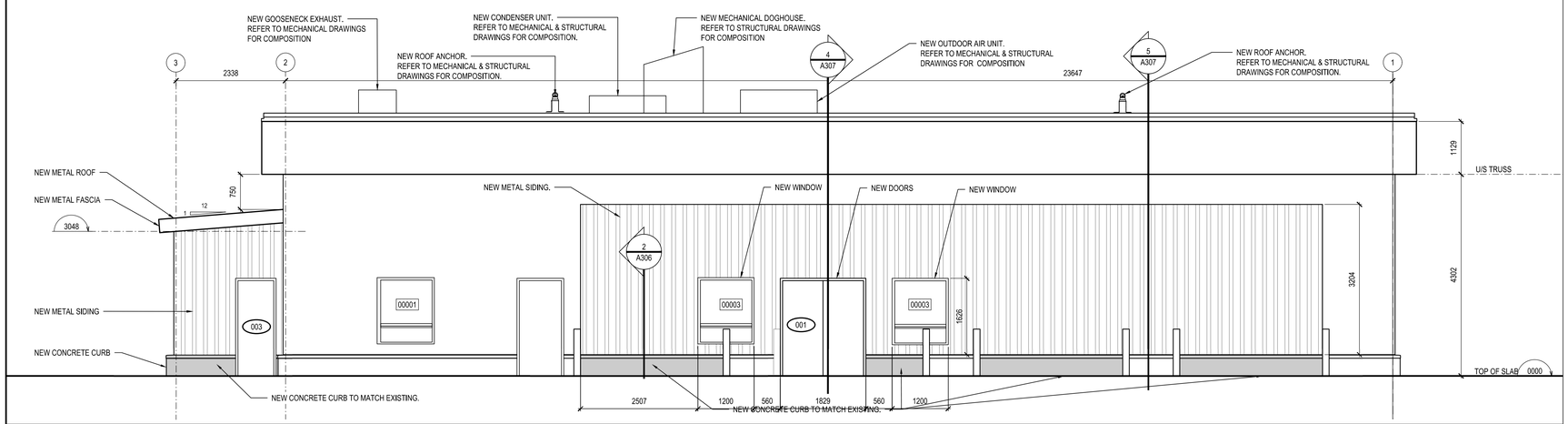
1/305 NORTH ELEVATION - EXISTING

SCALE: 1:50



2/305 SOUTH ELEVATION - EXISTING

SCALE: 1:50



3/305 SOUTH ELEVATION - NEW

SCALE: 1:50

WALL TYPE W1:

- METAL SIDING
- AIR BARRIER
- 13 mm OSB SHEATHING
- 38 x 140 mm STUD @ 406 O.C.
- FIBERGLAS INSULATION
- POLY VAPOUR BARRIER
- 13 mm GYPSUM WALL BOARD

WALL TYPE W2:

- METAL SIDING
- 19 x 64 mm WOOD FURRING @ 406 mm O.C.
- AIR BARRIER
- 13 mm OSB SHEATHING
- 38 x 140 mm STUD @ 406 O.C.
- FIBREGLASS INSULATION
- POLY VAPOUR BARRIER
- 13 mm GYPSUM WALL BOARD

WALL TYPE W3:

- METAL SIDING
- 19 x 64 mm WOOD FURRING @ 406 mm O.C.
- 38 mm POLYISOCYANURATE SHEATHING BOARD
- 13 mm OSB SHEATHING
- 38 x 140 mm STUD @ 406 O.C.
- FIBREGLASS INSULATION
- POLY VAPOUR BARRIER
- 13 mm GYPSUM WALL BOARD

WALL TYPE P1:

- 13 mm GYPSUM WALL BOARD
- 140 mm STUD @ 406 O.C.
- FIBREGLASS INSULATION
- 13 mm GYPSUM WALL BOARD

WALL TYPE P2:

- 13 mm GYPSUM WALL BOARD
- 140 mm STUD @ 406 O.C.
- c/w 90 mm MINERAL WOOL BATT INSULATION
- 13 mm GYPSUM WALL BOARD

WALL TYPE P3:

- 16 mm TYPE X GYPSUM BOARD
- RESILIENT CHANNEL (20 Ga) INSTALLED AT 400 mm O.C
- 90 mm METAL STUDS AT 610 mm O.C.
- c/w 90 mm MINERAL WOOL BATT INSULATION
- 16 mm TYPE X GYPSUM BOARD
- 16 mm TYPE X GYPSUM BOARD

WALL TYPE P4:

ATTACK SIDE

- 16 mm TYPE X GYPSUM BOARD
- PROTECTION MATERIAL - STEEL MESH
- 152 mm METAL STUDS AT 600 mm O.C.
- c/w 152 mm MINERAL WOOL BATT INSULATION
- 16 mm TYPE X GYPSUM BOARD

SECURE SIDE

ROOF TYPE R1

- CAP SHEET
- BASE SHEET
- STARTER SHEET
- 6 mm FIBREGLASS MAT/FIBREGLASS PAPER.
- 100 mm RIGID INSULATION
- PEEL AND STICK VAPOUR BARRIER
- ROLL ON VAPOUR BARRIER
- 16 mm OSB SHEATHING

ROOF TYPE R2

- LOW-SLOPE STEEL ROOF PANELS, 610 mm WIDE, REFINISHED ON ANGLE CLIPS @ 610 mm O.C.
- ROOF MEMBRANE
- STARTER SHEET
- 16 mm PLYWOOD SHEATHING
- 2 LAYERS OF PERPENDICULAR WOOD FURRING
- 38 x 285 mm ROOF JOISTS @ 610 mm O.C.
- 2 LAYERS 140 mm THICK MINERAL WOOL BATT INSULATION RSI 3.87
- UNDERSIDE OF JOISTS
- POLYETHYLENE VAPOUR BARRIER
- 38 mm POLYISOCYANURATE INSULATION SHEATHING BOARD
- 13 mm GYPSUM BOARD SECURED TO ROOF JOISTS

C1: EXISTING - GYPSUM CEILING

C2: EXISTING - GYPSUM BULKHEAD

- 16 mm MINERAL ACOUSTIC TILE 610 x 1220 mm
- 25 mm WIDE EXPOSED T-BAR SYSTEM
- SUSPENSION WIRES FROM STRUCTURE

- 16 mm TYPE X GYPSUM BOARD ON
- 22 mm METAL FURRING AT 400 mm O.C.

13 mm TYPE X GYPSUM BOARD
13 mm TYPE X GYPSUM BOARD
RESILIENT CHANNEL @ 610 mm O.C.
102 mm C-H STUD AT 610 mm O.C.
c/w 76 mm MINERAL WOOL BATT INSULATION
26 mm GLASS-MAT LINER PANEL

National Defence / Défense nationale

Quartier général

TEXT & DIMENSIONS

DOOR LABEL

WALL TYPE LABEL

WINDOW LABEL

ROOM or REF NUMBER

COLUMN GRID BUBBLE

ELEVATION LABEL

EXISTING PARTITION TO REMAIN

PARTITION/ELEMENT TO BE

CEILING TAG

NORTH ARROW

NO.	DATE	REVISION	APPR.
5	2026-05-25	ISSUED FOR TENDER	APB
4	2026-03-30	ISSUED FOR 100% REVIEW	MJAW
3	2025/12/09	ISSUED FOR 99%R1 REVIEW	APB
2	2025/10/20	ISSUED FOR 99% REVIEW	APB
1	2025/07/22	ISSUED FOR 60% REVIEW	APB

ONTARIO ASSOCIATION OF ARCHITECTS
ERIC ST. CLAIR McEWEN
LICENCE
3878

SCALE - ÉCHELLE

LOCATION - EMPLACEMENT
CFB Kingston ON

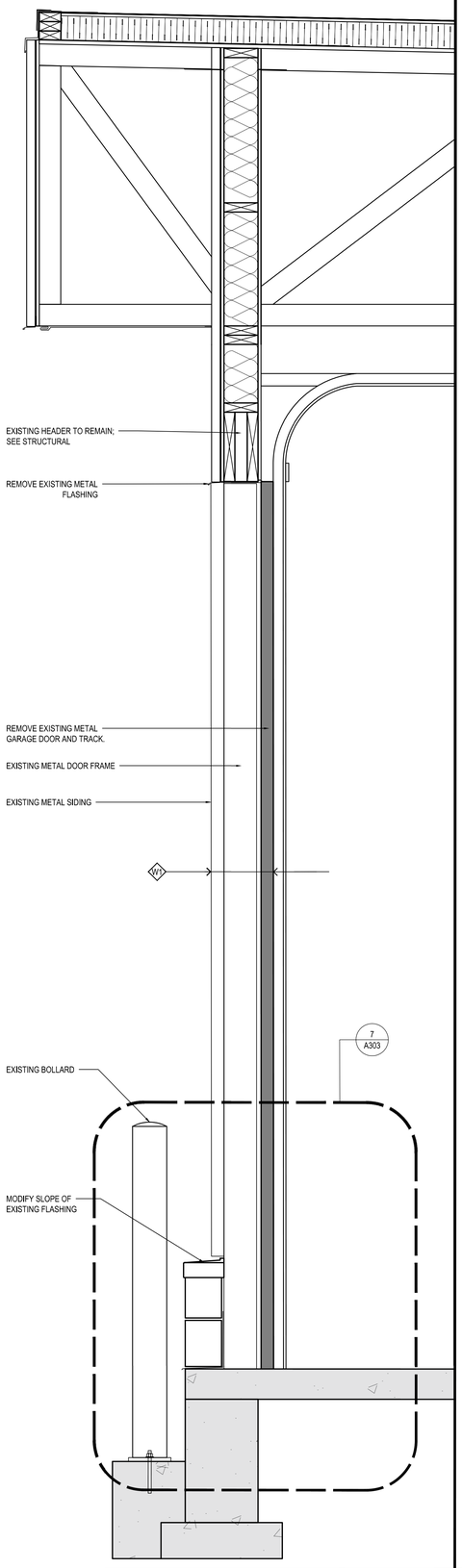
PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

TRADE - MÉTIER: TRADE
DATE: 2025-12-09

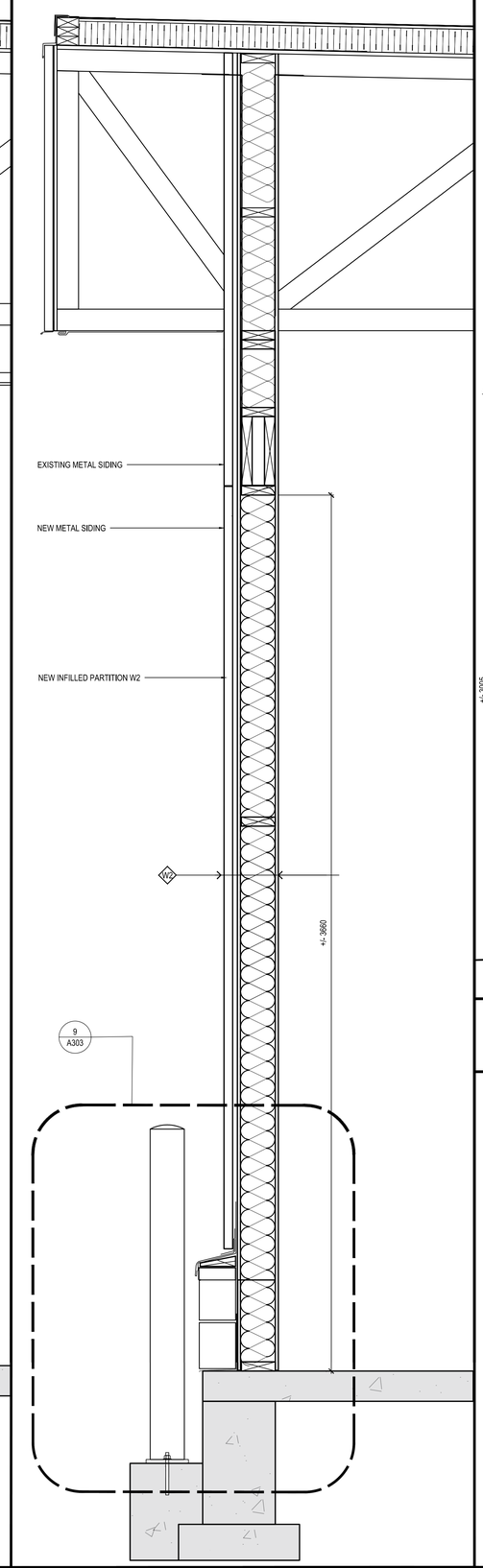
SUBJECT - SUJET
ELEVATIONS

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: WMTA		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: APB		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: MJAW	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: X.X.	305
PF NUMBER: XXXXXXXX	DWG. NO. - DESSIN NO.: K-B35-2508/3-305	

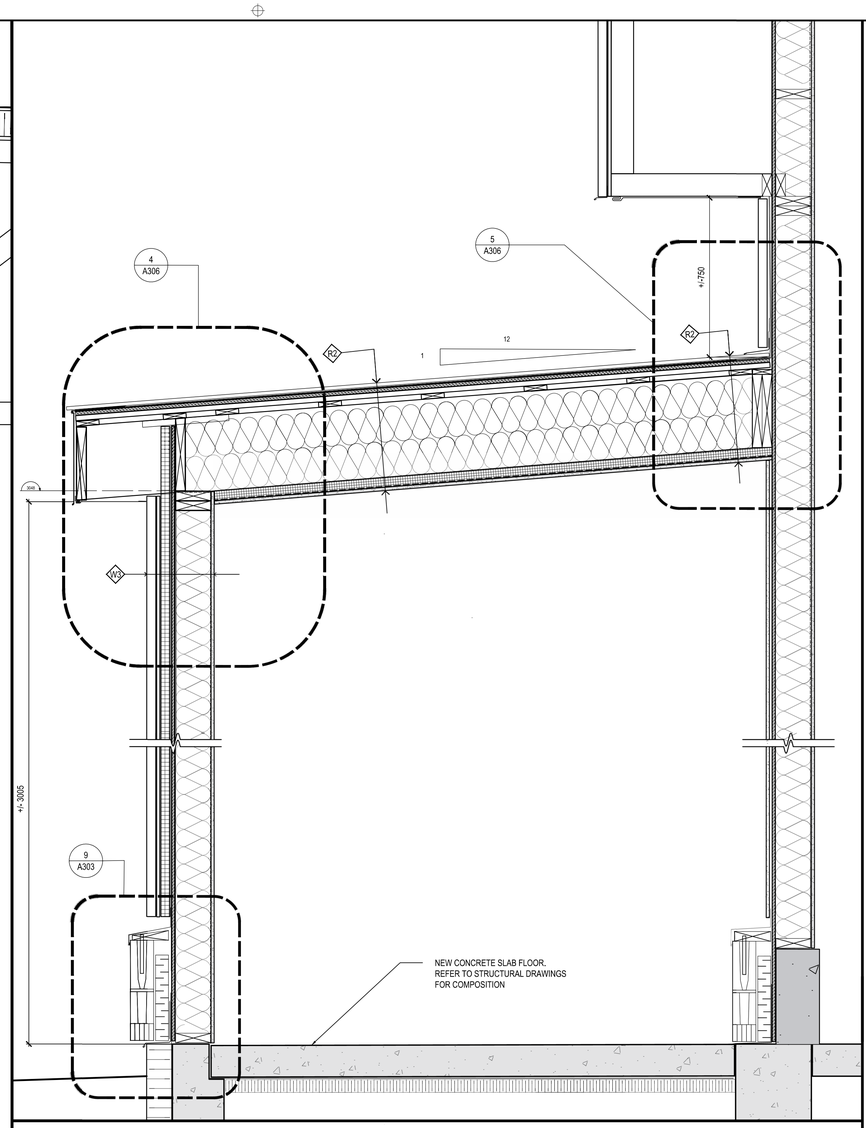
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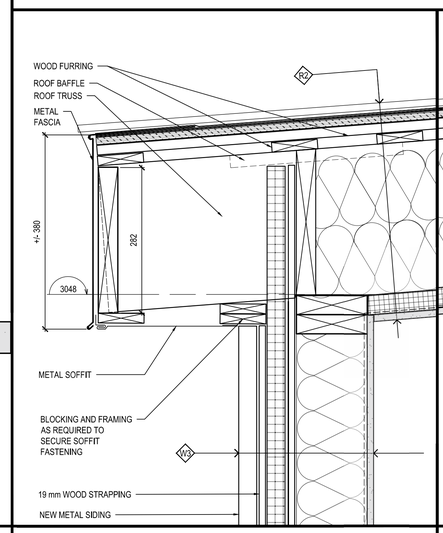
1 306 SECTION AT EXISTING GARAGE DOOR
SCALE: 1:5



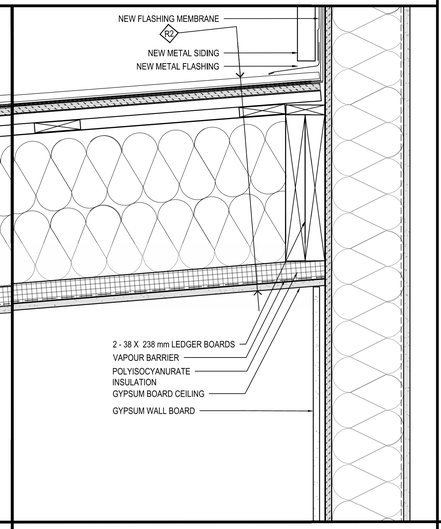
2 306 SECTION AT NEW INFILLED WALL
SCALE: 1:5



3 306 SECTION AT NEW MECHANICAL ROOM
SCALE: 1:10



4 306 SECTION - EAVE DETAIL
SCALE: 1:5



5 306 SECTION DETAIL - NEW ROOF
SCALE: 1:5

LEGEND

WALL TYPE W1:
FULL HEIGHT EXISTING EXTERIOR WALL
- METAL SIDING
- AIR BARRIER
- 13 mm OSB SHEATHING
- 38 x 140 mm STUD @ 406 O.C.
- FIBERGLAS INSULATION
- POLY VAPOUR BARRIER
- 13 mm GYPSUM WALL BOARD

WALL TYPE W2:
FULL HEIGHT NEW EXTERIOR WALL
- METAL SIDING
- 19 x 64 mm WOOD FURRING @ 406 mm O.C.
- AIR BARRIER
- 13 mm OSB SHEATHING
- 38 x 140 mm STUD @ 406 O.C.
- FIBREGLASS INSULATION
- POLY VAPOUR BARRIER
- 13 mm GYPSUM WALL BOARD

WALL TYPE W3:
FULL HEIGHT NEW EXTERIOR WALL
- METAL SIDING
- 19 x 64 mm WOOD FURRING @ 406 mm O.C.
- 38 mm POLYISOCYANURATE SHEATHING BOARD
- 13 mm OSB SHEATHING
- 38 x 140 mm STUD @ 406 O.C.
- FIBREGLASS INSULATION
- POLY VAPOUR BARRIER
- 13 mm GYPSUM WALL BOARD

WALL TYPE P1:
FULL HEIGHT EXISTING INTERIOR PARTITION
- 13 mm GYPSUM WALL BOARD
- 140 mm STUD @ 406 O.C.
- FIBREGLASS INSULATION
- 13 mm GYPSUM WALL BOARD

WALL TYPE P2:
NEW FULL HEIGHT INTERIOR PARTITION
- 13 mm GYPSUM WALL BOARD
- 140 mm STUD @ 406 O.C.
- c/w 90 mm MINERAL WOOL BATT INSULATION
- 13 mm GYPSUM WALL BOARD

WALL TYPE P3:
NEW FULL HEIGHT PARTITION TYPE P3 - STC 53
- 16 mm TYPE X GYPSUM BOARD
- RESILIENT CHANNEL (20 Ga) INSTALLED AT 400 mm O.C
- 90 mm METAL STUDS AT 610 mm O.C.
- c/w 90 mm MINERAL WOOL BATT INSULATION
- 16 mm TYPE X GYPSUM BOARD
- 16 mm TYPE X GYPSUM BOARD

WALL TYPE P4:
NEW FULL HEIGHT PARTITION TYPE P4
ATTACK SIDE
- 16 mm TYPE X GYPSUM BOARD
- PROTECTION MATERIAL - STEEL MESH
- 152 mm METAL STUDS AT 600 mm O.C.
- c/w 152 mm MINERAL WOOL BATT INSULATION
- 16 mm TYPE X GYPSUM BOARD

SECURE SIDE

ROOF TYPE R1
EXISTING ROOF TYPE R1
- CAP SHEET
- BASE SHEET
- STARTER SHEET
- 6 mm FIBREGLASS MAT/FIBREGLASS PAPER.
- 100 mm RIGID INSULATION
- PEEL AND STICK VAPOUR BARRIER
- ROLL ON VAPOUR BARRIER
- 16 mm OSB SHEATHING

ROOF TYPE R2
NEW ROOF TYPE R2 (BY STRUCTURAL)
- LOW-SLOPE STEEL ROOF PANELS, 610 mm WIDE, REFINISHED ON ANGLE CLIPS @ 610 mm O.C.
- ROOF MEMBRANE
- STARTER SHEET
- 16 mm PLYWOOD SHEATHING
- 2 LAYERS OF PERPENDICULAR WOOD FURRING
- 38 x 285 mm ROOF JOISTS @ 610 mm O.C.
- 2 LAYERS 140 mm THICK MINERAL WOOL BATT INSULATION RSI 3.87
- UNDERSIDE OF JOISTS
- POLYETHYLENE VAPOUR BARRIER
- 38 mm POLYISOCYANURATE INSULATION SHEATHING BOARD
- 13 mm GYPSUM BOARD SECURED TO ROOF JOISTS

C1: EXISTING - GYPSUM CEILING

C2: EXISTING - GYPSUM BULKHEAD

C3: NEW - ACT CEILING
- 16 mm MINERAL ACOUSTIC TILE 610 x 1220 mm
- 25 mm WIDE EXPOSED T-BAR SYSTEM
- SUSPENSION WIRES FROM STRUCTURE

C4: NEW GYPSUM CEILING
- 16 mm TYPE X GYPSUM BOARD ON
- 22 mm METAL FURRING AT 400 mm O.C.

C5: NEW CEILING - TYPE C5 - STC 53
13 mm TYPE X GYPSUM BOARD
13 mm TYPE X GYPSUM BOARD
RESILIENT CHANNEL @ 610 mm O.C.
102 mm C-H STUD AT 610 mm O.C.
c/w 76 mm MINERAL WOOL BATT INSULATION
26 mm GLASS-MAT LINER PANEL

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D000 DOOR LABEL
W1 WALL TYPE LABEL
0000 WINDOW LABEL
000 ROOM or REF NUMBER
000 COLUMN GRID BUBBLE
00000 ELEVATION LABEL
W1 PARTITION TAG
P3 PARTITION DETAIL TAG
C1 CEILING TAG

NO.	DATE	REVISION	APPR.
5	2026-05-25	ISSUED FOR TENDER	APB
4	2026-03-30	ISSUED FOR 100% REVIEW	MJAW
3	2025/12/09	ISSUED FOR 99%R1 REVIEW	APB
2	20251020	ISSUED FOR 99% REVIEW	APB
1	2025/07/22	ISSUED FOR 60% REVIEW	APB

ONTARIO ASSOCIATION OF ARCHITECTS
ERIC ST. CLAIR MacEWEN
LICENCE
3678

SCALE - ÉCHELLE
Scale / Échelle

LOCATION - EMPLACEMENT
CFB Kingston ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

TRADE - MÉTIER
TRADE

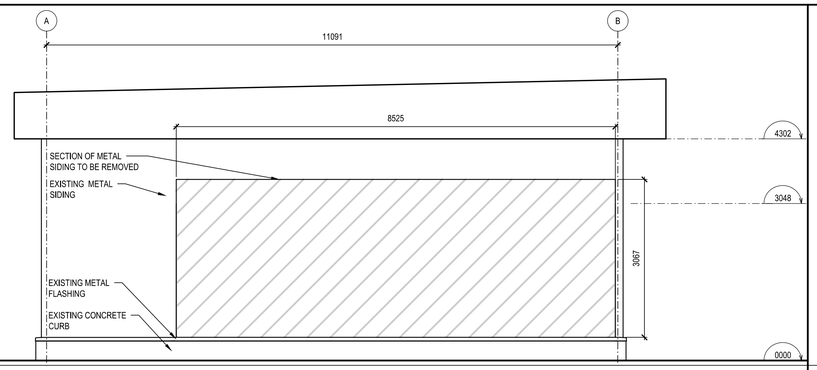
DATE
2025-12-09

SUBJECT - SUJET
DETAILS - NEW WORK

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: WMTA		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: APB		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: MJAW	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: X.X.	306

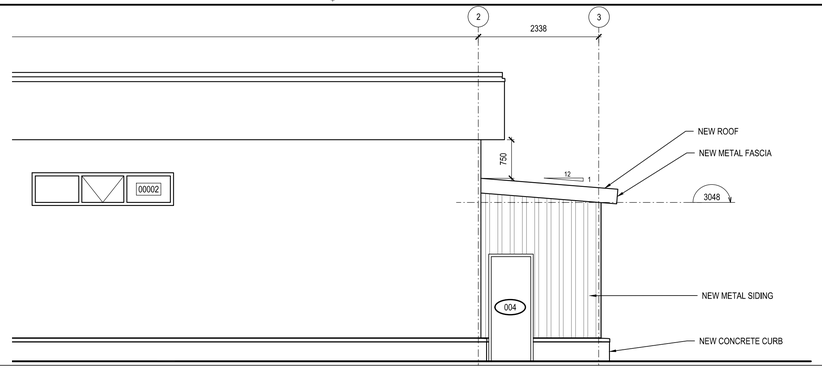
PF NUMBER: XXXXXXXX
DWG. NO. - DESSIN NO.: K-B35-2508/3-306

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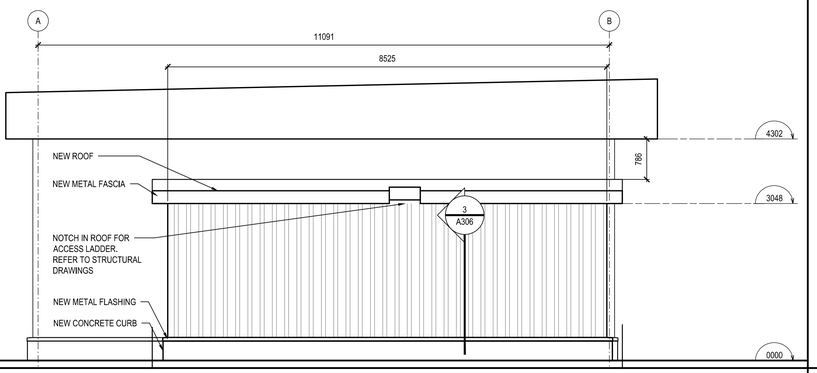
1 / 307 WEST ELEVATION - DEMO

SCALE: 1:50



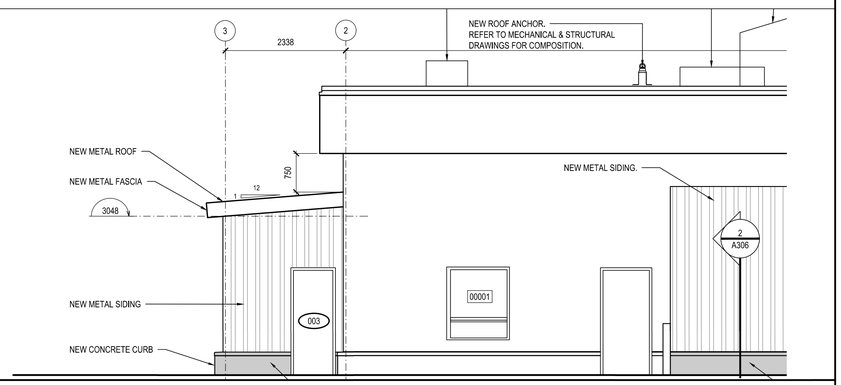
2 / 307 NORTH ELEVATION - NEW

SCALE: 1:50



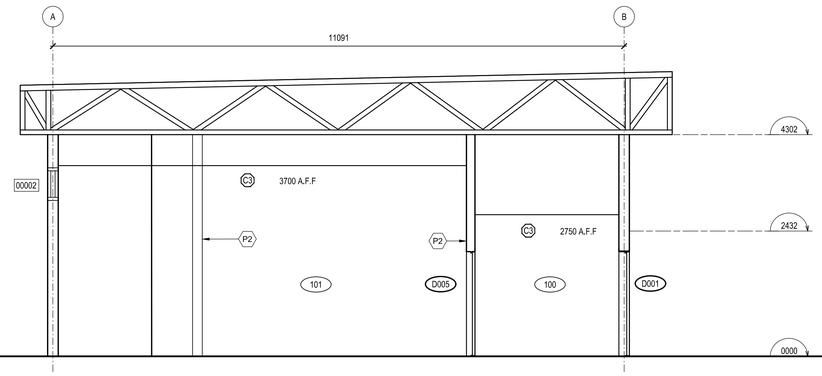
3 / 307 WEST ELEVATION - NEW

SCALE: 1:50



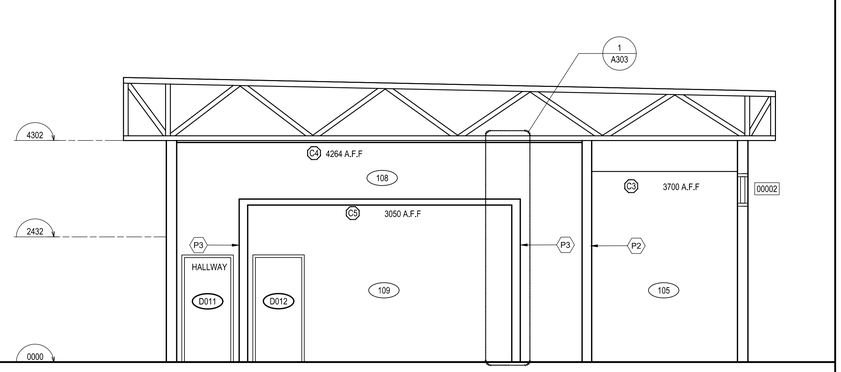
4 / 307 SOUTH ELEVATION - NEW

SCALE: 1:50



5 / 307 SECTION 1- NEW

SCALE: 1:50



6 / 307 SECTION 2 - NEW

SCALE: 1:50

LEGEND

WALL TYPE W1:
FULL HEIGHT EXISTING EXTERIOR WALL
- METAL SIDING
- AIR BARRIER
- 13 mm OSB SHEATHING
- 38 x 140 mm STUD @ 406 O.C.
- FIBERGLAS INSULATION
- POLY VAPOUR BARRIER
- 13 mm GYPSUM WALL BOARD

WALL TYPE W2:
FULL HEIGHT NEW EXTERIOR WALL
- METAL SIDING
- 19 x 64 mm WOOD FURRING @ 406 mm O.C.
- AIR BARRIER
- 13 mm OSB SHEATHING
- 38 x 140 mm STUD @ 406 O.C.
- FIBREGLASS INSULATION
- POLY VAPOUR BARRIER
- 13 mm GYPSUM WALL BOARD

WALL TYPE W3:
FULL HEIGHT NEW EXTERIOR WALL
- METAL SIDING
- 19 x 64 mm WOOD FURRING @ 406 mm O.C.
- 38 mm POLYISOCYANURATE SHEATHING BOARD
- 13 mm OSB SHEATHING
- 38 x 140 mm STUD @ 406 O.C.
- FIBREGLASS INSULATION
- POLY VAPOUR BARRIER
- 13 mm GYPSUM WALL BOARD

WALL TYPE P1:
FULL HEIGHT EXISTING INTERIOR PARTITION
- 13 mm GYPSUM WALL BOARD
- 140 mm STUD @ 406 O.C.
- FIBREGLASS INSULATION
- 13 mm GYPSUM WALL BOARD

WALL TYPE P2:
NEW FULL HEIGHT INTERIOR PARTITION
- 13 mm GYPSUM WALL BOARD
- 140 mm STUD @ 406 O.C.
- c/w 90 mm MINERAL WOOL BATT INSULATION
- 13 mm GYPSUM WALL BOARD

WALL TYPE P3:
NEW FULL HEIGHT PARTITION TYPE P3 - STC 53
- 16 mm TYPE X GYPSUM BOARD
- RESILIENT CHANNEL (20 Ga) INSTALLED AT 400 mm O.C
- 90 mm METAL STUDS AT 610 mm O.C.
- c/w 90 mm MINERAL WOOL BATT INSULATION
- 16 mm TYPE X GYPSUM BOARD
- 16 mm TYPE X GYPSUM BOARD

WALL TYPE P4:
NEW FULL HEIGHT PARTITION TYPE P4
ATTACK SIDE
- 16 mm TYPE X GYPSUM BOARD
- PROTECTION MATERIAL - STEEL MESH
- 152 mm METAL STUDS AT 600 mm O.C.
- c/w 152 mm MINERAL WOOL BATT INSULATION
- 16 mm TYPE X GYPSUM BOARD

SECURE SIDE

ROOF TYPE R1
EXISTING ROOF TYPE R1
- CAP SHEET
- BASE SHEET
- STARTER SHEET
- 6 mm FIBREGLASS MAT/FIBREGLASS PAPER.
- 100 mm RIGID INSULATION
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- ROLL ON VAPOUR BARRIER
- 16 mm OSB SHEATHING

ROOF TYPE R2
NEW ROOF TYPE R2 (BY STRUCTURAL)
- LOW-SLOPE STEEL ROOF PANELS, 610 mm WIDE, REFINISHED ON ANGLE CLIPS @ 610 mm O.C.
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- STARTER SHEET
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- 2 LAYERS OF PERPENDICULAR WOOD FURRING
- 38 x 285 mm ROOF JOISTS @ 610 mm O.C.
- 2 LAYERS 140 mm THICK MINERAL WOOL BATT INSULATION RSI 3.87
- UNDERSIDE OF JOISTS
- POLYETHYLENE VAPOUR BARRIER
- 38 mm POLYISOCYANURATE INSULATION SHEATHING BOARD
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C1: EXISTING - GYPSUM CEILING

C2: EXISTING - GYPSUM BULKHEAD

C3: NEW - ACT CEILING
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- 16 mm TYPE X GYPSUM BOARD ON
- 22 mm METAL FURRING AT 400 mm O.C.

C5: NEW CEILING - TYPE C5 - STC 53
13 mm TYPE X GYPSUM BOARD
13 mm TYPE X GYPSUM BOARD
RESILIENT CHANNEL @ 610 mm O.C.
102 mm C-H STUD AT 610 mm O.C.
c/w 76 mm MINERAL WOOL BATT INSULATION
26 mm GLASS-MAT LINER PANEL

National Defence / Défense nationale

Headquarters
Quartier général

TEXT & DIMENSIONS

NO.	DATE	REVISION	APPR.
5	2026-05-25	ISSUED FOR TENDER	APB
4	2026-03-30	ISSUED FOR 100% REVIEW	MJAW
3	2025/12/09	ISSUED FOR 99%R1 REVIEW	APB
2	2025/10/20	ISSUED FOR 99% REVIEW	APB
1	2025/07/22	ISSUED FOR 60% REVIEW	APB

ONTARIO ASSOCIATION OF ARCHITECTS
ERIC ST. CLAIR McEWEN
LICENCE
3678

SCALE - ÉCHELLE
Scale / Échelle

LOCATION - EMPLACEMENT
CFB Kingston ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

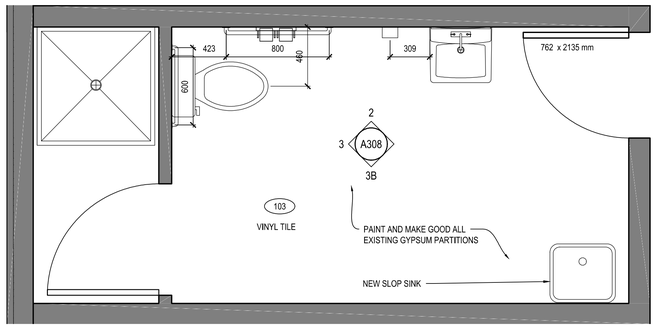
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DATE: 2025-12-09

SUBJECT - SUJET
DETAILS - SECTIONS

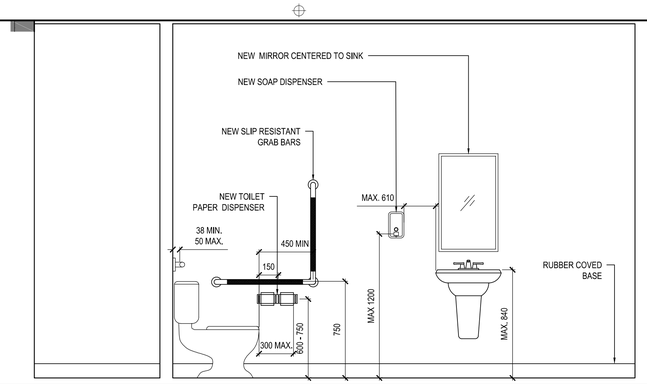
PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: WMTA		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: APB		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: MJAW	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: X.X.	307
PF NUMBER: XXXXXXXX	DWG. NO. - DESSIN NO.: K-B35-2508/3-307	

Canada

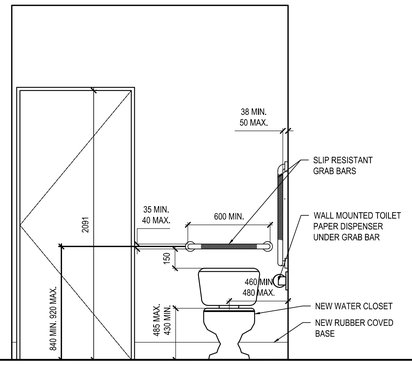
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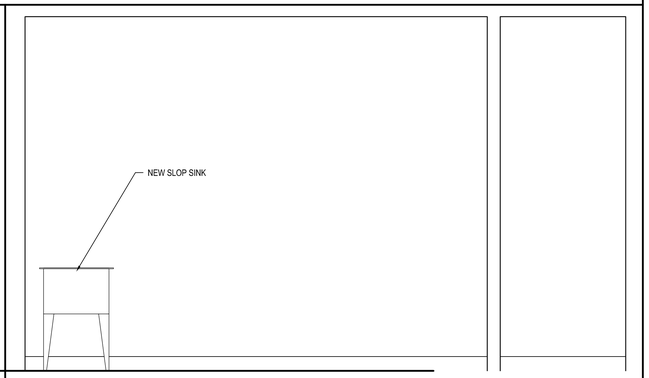
1/308 WASHROOM PLAN - NEW WORK
SCALE: 1:20



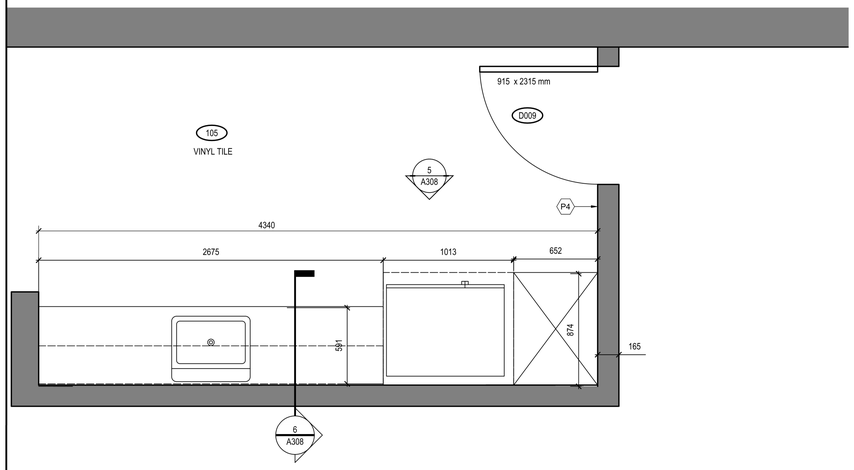
2/308 WASHROOM - NORTH ELEVATION
SCALE: 1:20



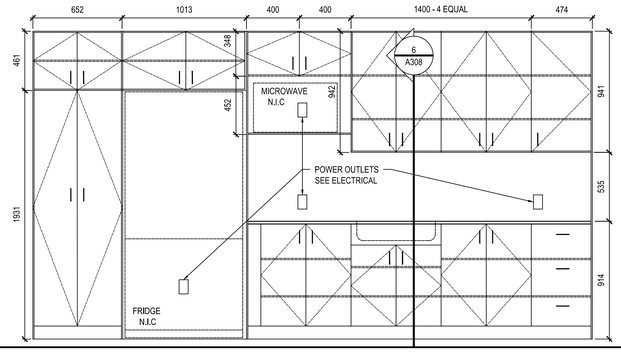
3/308 WASHROOM - WEST ELEVATION
SCALE: 1:20



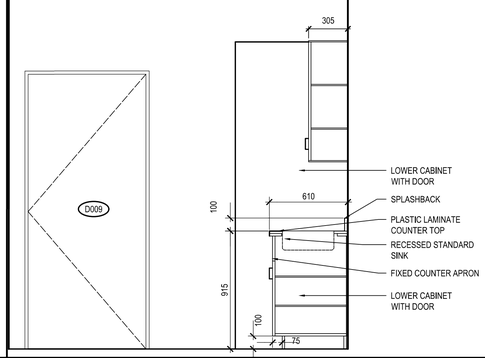
3B/308 WASHROOM - WEST ELEVATION
SCALE: 1:20



4/308 KITCHEN PLAN - NEW WORK
SCALE: 1:20



5/308 KITCHEN - SOUTH ELEVATION
SCALE: 1:20



6/308 KITCHEN SECTION - NEW WORK
SCALE: 1:20

National Defence / Défense nationale

Headquarters
Quartier général

D000 DOOR LABEL
W1 WALL TYPE LABEL
0000 WINDOW LABEL
000 ROOM or REF NUMBER
000 COLUMN GRID BUBBLE
00000 ELEVATION LABEL
EXISTING PARTITION TO REMAIN
PARTITION/ELEMENT TO BE REMOVED
W1 PARTITION TAG
P2 PARTITION DETAIL TAG
C1 CEILING TAG

N PROJECT NORTH ARROW

NO.	DATE	REVISION	APPR.
5	2026-05-25	ISSUED FOR TENDER	APB
4	2026-03-30	ISSUED FOR 100% REVIEW	MJAW
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2	2025/10/20	ISSUED FOR 99% REVIEW	APB
1	2025/07/22	ISSUED FOR 60% REVIEW	APB

ONTARIO ASSOCIATION OF ARCHITECTS
SERGE ST. CLAIR MacEWEN
LICENCE
3678

SCALE - ÉCHELLE
Scale / Échelle

LOCATION - EMPLACEMENT
CFB Kingston ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

TRADE - MÉTIER: TRADE
DATE: 2025/10/06

SUBJECT - SUJET
INTERIOR ELEVATIONS

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: WMTA		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: APB		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: MJAW	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: X.X.	308
PF NUMBER: XXXXXXXX	DWG. NO. - DESSIN NO.: K-B35-2508/3-308	

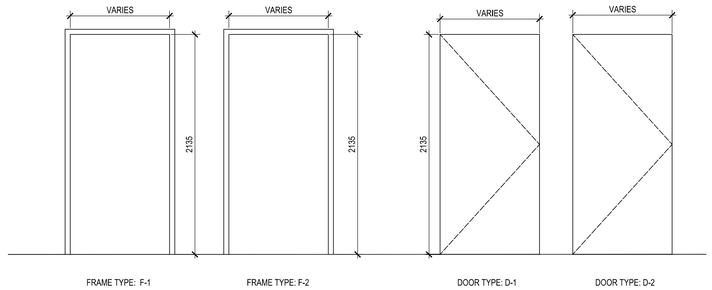
Canada

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$USERNAME$
$DATES

ROOM FINISH SCHEDULE

ROOM#		NORTH		EAST		SOUTH		WEST		FLOOR		CEILING	NOTES
		SUBSTRATE	FINISH	SUBSTRATE	FINISH	SUBSTRATE	FINISH	SUBSTRATE	FINISH	SUBSTRATE	FINISH	SUBSTRATE	ALL ROOMS FINISHED WITH 100 mm RUBBER BASE
100		GWB	PT	GWB	PT	GWB/Glazing	PT	GWB	PT	CONCRETE	VINYL	ACT	
101		GWB/Glazing	PT	GWB	PT	GWB	PT	GWB	PT	CONCRETE	VINYL	ACT	
102		GWB	PT	GWB	PT	GWB/Glazing	PT	GWB	PT	CONCRETE	VINYL	ACT	
103		GWB	PT	GWB	PT	GWB	PT	GWB	PT	CONCRETE	VINYL	ACT	
104		GWB	PT	GWB	PT	GWB	PT	GWB	PT	CONCRETE	ELECTROSTATIC DISSIPATIVE	ACT	
105		GWB/Glazing	PT	GWB	PT	GWB	PT		PT	CONCRETE	VINYL	ACT	
106		GWB	PT	GWB	PT	GWB	PT	GWB	PT	CONCRETE	ELECTROSTATIC DISSIPATIVE	GWB	
107		GWB	PT	GWB	PT	GWB	PT	GWB	PT	CONCRETE	VINYL	GWB	
108		GWB	PT	GWB	PT	GWB	PT	GWB	PT	CONCRETE	VINYL	GWB	
109		GWB	PT	GWB	PT	GWB	PT	GWB	PT	CONCRETE	VINYL	GWB	
110		GWB	PT	GWB	PT	GWB	PT	GWB	PT	CONCRETE	EPOXY	GWB	
111		GWB	PT	GWB	PT	GWB	PT	GWB	PT	CONCRETE	EPOXY	GWB	

1 / 309 ROOM FINISH SCHEDULE
SCALE: N.T.S



3 / 309 DOOR & FRAME ELEVATION
SCALE: N.T.S

DOOR SCHEDULE

DOOR	DOOR TYPE	INSULATED	FRAME	HARDWARE GROUP	NOTES/COMMENTS
D001	STEEL	YES	STEEL	HG01	
D002	STEEL	YES	STEEL	HG02	REUSED - 915 X 2315 - EXTERIOR - REUSED DOOR
D003	STEEL	NO	STEEL	HG03	
D004	STEEL	NO	STEEL	HG03	
D005	STEEL	NO	STEEL	HG04	
D006	STEEL	NO	STEEL	HG05	
D007	STEEL	NO	STEEL	HG06	
D008	STEEL	NO	STEEL	HG07	
D009	STEEL	NO	STEEL	HG08	
D010	STEEL	NO	STEEL	HG07	
D011	STEEL	NO	STEEL	HG09	
D012	STEEL	NO	STEEL	HG07	
D013	STEEL	NO	STEEL	HG09	
D014	EXISTING	EXISTING	EXISTING	HG10	EXISTING DOOR & FRAME TO BE REUSED

WINDOW SCHEDULE

NO.	TYPE	INSULATED	OPENING	REMARKS
0001	ALUM	YES	YES	EXISTING - ONE WAY MIRROR GLAZE TO BE APPLIED.
0002	ALUM	YES	YES	EXISTING.
0003	ALUM	YES	YES	NEW ALUMINUM WINDOW - 2769 x 635 mm R.O - SIMILAR TO EXISTING - ONE WAY MIRROR GLAZE TO BE APPLIED.

2 / 309 DOOR & WINDOW SCHEDULE
SCALE: N.T.S

GENERAL NOTES:

1. ALL DIMENSIONS ARE IN MM UNLESS NOTED OTHERWISE.
2. DO NOT SCALE DIMENSIONS FROM DRAWINGS.
3. REVIEW ALL CONSTRUCTION DOCUMENTS AND REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO UNDERTAKING WORK.
4. FLOOR PLANS: UNLESS NOTED OTHERWISE ALL DIMENSIONS ARE TO CENTRE OR END OF STUD OR EXISTING FINISH.
5. CUT, PATCH AND MAKE GOOD EXISTING CONSTRUCTION AS REQUIRED TO ACCOMMODATE NEW WORK. REPAIR AND MAKE GOOD EXISTING CONSTRUCTION AFFECTED BY DEMOLITION OR INCORPORATION OF NEW WORK. MATCH ADJACENT FINISHES, MATERIALS AND CONSTRUCTION DETAILS.
6. REMOVE AND REINSTATE ACT CEILING TILES IN AREAS OUTSIDE OF DEFINED AREA / EXTENT OF WORK TO ACCOMMODATE THE PASSAGE OF NEW M/E SERVICES INCLUDING ALL ELECTRICAL AND IT CONDUIT AND CABLING INSTALLATION.
7. CONTRACTOR TO PROVIDE ADEQUATE SECURE BLOCKING IN PARTITIONS TO RECEIVE WALL MOUNTED UNITS SUCH AS COUNTERTOPS, SHELVES, MILLWORK, HUNG LAVATORIES, VALENCES, GRAB BARS, AND FIRE HOSE CABINET, ELEC PANELS, WASHROOM ACCESSORIES.
8. REFER TO M/E DRAWINGS FOR LOCATIONS OF HVAC DIFFUSERS, LIGHTS, GRILLS, FIRE PROTECTION ETC. COORDINATE THE LOCATION AND FINISH OF ANY EXPOSED M/E WITH ARCHITECTURAL.
9. PROVIDE FIRESTOPPING AT ALL NEW PENETRATIONS THROUGH FIRE SEPARATIONS AND FLOORS SLAB AND FIRE SEPARATIONS.

National Defence / Défense nationale

Headquarters
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TEXT & DIMENSIONS

NO.	DATE	REVISION	APPR.
5	2026-05-25	ISSUED FOR TENDER	APB
4	2026-03-30	ISSUED FOR 100% REVIEW	MJAW
3	2025/12/09	ISSUED FOR 99%R1 REVIEW	APB
2	2025/10/20	ISSUED FOR 99% REVIEW	APB
1	2025/07/22	ISSUED FOR 60% REVIEW	APB

ONTARIO ASSOCIATION OF ARCHITECTS
ERIC ST. CLAIR MacEWEN
LICENCE
3878

SCALE - ÉCHELLE
Scale / Échelle

LOCATION - EMPLACEMENT
CFB Kingston ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

TRADE - MÉTIER
TRADE

DATE
2025-12-09

SUBJECT - SUJET
SCHEDULES

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: WMTA		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: APB		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: MJAW	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: X.X.	309
PF NUMBER: XXXXXXXX	DWG. NO. - DESSIN NO.: K-B35-2508/3-309	

Canada

$FILE$
$PENTBLS$
$PLTDRVS$
$USERNAMES$
$DATE$

GENERAL NOTES:

1. ALL WORK SHALL CONFORM TO APPLICABLE CODES SUCH AS:
   1.1. LATEST EDITION OF THE NATIONAL BUILDING CODE OF CANADA.
   1.2. NFPA (FIRE PROTECTION)
   1.3. SMACNA (DUCTWORK)
   1.4. ULC & CSA/CAN INSTRUCTIONS & REQUIREMENTS

2. CONTRACTORS MUST COMPLY WITH LOCAL BY-LAWS, CANADIAN CONSTRUCTION SAFETY CODE, AND ALL REGULATIONS SET BY AUTHORITIES HAVING JURISDICTION. IN CASE OF A CONFLICT OR DISCREPANCY, THE MORE STRINGENT REQUIREMENTS SHALL APPLY.

3. CONTRACTORS SHALL BE RESPONSIBLE FOR ALL APPLICABLE FEES, PERMITS, INSPECTIONS BY JURISDICTION HAVING AUTHORITY, AND TAXES RELATING TO THE MECHANICAL SCOPE OF WORK.

4. CONTRACTORS SHALL CHECK AND VERIFY ALL RELEVANT DIMENSIONS AND MATERIALS ON SITE AND REPORT ALL ERRORS AND OMISSIONS TO DCC REPRESENTATIVE PRIOR TO DEMOLITION, CONSTRUCTION OR ORDERING EQUIPMENT;

5. THE MECHANICAL DOCUMENTS (DRAWINGS AND SPECIFICATIONS) SHALL BE READ IN CONJUNCTION WITH THE DOCUMENTS (DRAWINGS AND SPECIFICATIONS) OF ALL OTHER DISCIPLINES.

6. MECHANICAL DRAWINGS SHOW THE COMPLETED WORK ONLY. INSTALL AND REMOVE ALL TEMPORARY WORKS (SHORING, BRACING, ETC) REQUIRED TO PROTECT THE EXISTING STRUCTURE AND ARCHITECTURAL FINISHES DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY WORKS WHICH MAY BE REQUIRED FOR EXECUTION OF THE PROJECT. ALL TEMPORARY WORKS SHALL BE DESIGNED AND REVIEWED BY PROFESSIONAL ENGINEER RETAINED BY GENERAL CONTRACTOR AND LICENSED IN PROVINCE OF ONTARIO. CONSTRUCTION LOADS ON THE PERMANENT STRUCTURE ALONG THE PATH OF TRAVEL SHALL BE ASSESSED BY PROFESSIONAL ENGINEER RETAINED BY GENERAL CONTRACTOR AND LICENSED IN PROVINCE OF ONTARIO.

7. PROVIDE CUTTING, PATCHING, AND CORING OF ALL WALLS, CEILINGS, CONCRETE SLABS, AND OTHER SURFACES AS REQUIRED FOR MECHANICAL WORK. COORDINATE WITH DCC REPRESENTATIVE PRIOR TO CORE DRILLING AND CUTTING OF STRUCTURE. ALL PROPOSED OPENINGS SHALL BE SCANNED, TRACED, AND REVIEWED BY PROFESSIONAL ENGINEER RETAINED BY GENERAL CONTRACTOR AND LICENSED IN PROVINCE OF ONTARIO PRIOR TO CORING. CUT, DAMAGED, OR DISTURBED SURFACES MUST BE PATCHED AND REPAIRED TO REVIEW OF PROFESSIONAL ENGINEER RETAINED BY GENERAL CONTRACTOR AND LICENSED IN PROVINCE OF ONTARIO. MATCH EXISTING MATERIAL, COLOUR, FINISH, AND TEXTURE OR AS INDICATED OTHERWISE.

8. SEISMIC RESTRAINT SYSTEM (SRS)
   8.1. DESIGN SHALL BE BY PROFESSIONAL ENGINEER SPECIALIZING IN DESIGN OF SRS AND REGISTERED IN PROVINCE OF ONTARIO. SRS CALCULATIONS AND DRAWINGS SHALL BEAR THE SRS DESIGN ENGINEER'S SEAL AND SIGNATURE.
   8.2. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR RESPECTIVE DISCIPLINE AS IT RELATES TO THE SRS. CONTRACTOR SHALL COMPLY WITH BOTH NBC AND NFPA.
   8.3. EACH CONTRACTOR SHALL USE ONE SUPPLIER TO PROVIDE SEISMIC DESIGN, ISOLATION AND RESTRAINT.
   8.4. SEISMIC RESTRAINTS SHALL BE PROVIDED FOR ALL OPERATIONAL AND FUNCTIONAL COMPONENTS OF BUILDING SERVICES IN ACCORDANCE WITH NBC, ASHRAE STANDARD "A PRACTICAL GUIDE TO SEISMIC RESTRAINT", NFPA, SMACNA "SEISMIC RESTRAINT MANUAL" AND GOOD ENGINEERING PRACTICE.

LEGEND - GENERAL

SYMBOL	DESCRIPTION
	ITEMS TO BE DEMOLISHED
	EXISTING ITEMS TO REMAIN
	NEW ITEMS TO BE SUPPLIED AND INSTALLED
(X)	DENOTES EXISTING ITEM TO BE REMOVED
(E)	DENOTES EXISTING ITEM INDICATED TO REMAIN
(R)	DENOTES ITEM TO BE RELOCATED
A / 401	SECTION A ON DRAWING 401
1 / 401	DETAIL 1 ON DRAWING 401

LEGEND - VALVES

SYMBOL	DESCRIPTION
	GATE VALVE
	BALL VALVE
	BUTTERFLY VALVE
	CHECK VALVE
	BALANCING VALVE WITH PRESSURE TAPPINGS
	PRESSURE REDUCING VALVE
	SAFETY OR RELIEF VALVE
	BACKFLOW PREVENTER WITH BALL VALVES
	BACKFLOW PREVENTER WITH BUTERFLY VALVES
	THERMOSTATIC MIXING VALVE
PIV	POSITION INDICATING VALVE

LEGEND - AIR DISTRIBUTION

SYMBOL	DESCRIPTION
300x250	DUCT SIZE, WHERE FIRST DIMENSION IS VISIBLE
	SUPPLY AIR RECTANGULAR DUCT DOWN
	SUPPLY AIR RECTANGULAR DUCT UP
	RETURN/EXHAUST AIR RECTANGULAR DUCT DOWN
	RETURN/EXHAUST AIR RECTANGULAR DUCT UP
	SUPPLY AIR ROUND DUCTWORK DOWN
	SUPPLY AIR ROUND DUCTWORK UP
	RETURN/EXHAUST AIR ROUND DUCTWORK DOWN
	RETURN/EXHAUST AIR ROUND DUCTWORK UP
	ACOUSTICALLY LINED DUCT
	FLEXIBLE CONNECTION
	SPPLY/RETURN/EXHAUST GRILLE
	SIDEWALL SUPPLY GRILLE
BD	BALANCING DAMPER
DG	DOOR GRILLE
EXTERIOR WALL	PRESSURE RELIEF KIT
TAG FLOW DIM	GRILLE IDENTIFICATION TAG TAG: TYPE OF GRILLE (SEE SPECIFICATION SECTION) DIM: FACE SIZE IN mm x mm FLOW: FLOW RATE IN L/s

LEGEND - FIRE PROTECTION

SYMBOL	DESCRIPTION
F	FIRE PIPE
FE	PORTABLE FIRE EXTINGUISHER
FS	PIPE-MOUNT FLOW SWITCH
	SUPERVISED ISOLATION VALVE
D	DRY ALARM CHECK VALVE
	FIRE DEPARTMENT CONNECTION
	WALL MOUNTED TEST HEADER
	BALL DRIP VALVE

LEGEND - PIPING SPECIALTIES

SYMBOL	DESCRIPTION
	PIPE DROPS DOWN
	PIPE RISES UP
	BRANCH OFF BOTTOM OF PIPE
	BRANCH OFF TOP OF PIPE
	CONTINUOUS PIPE
1%	PIPING PITCH (DN. OR UP: INDICATE)
	DIRECTION OF FLOW
	CAPPED PIPE
	UNION
M	METER
	STRAINER
T	THERMOMETER
P	PRESSURE GAUGE

LEGEND - CONTROLS

SYMBOL	DESCRIPTION
T	TEMPERATURE SENSOR
T	THERMOSTAT
S	MANUAL VARIABLE SPEED CONTROLLER
	CONTROL WIRING
	FILTER DIFFERENTIAL PRESSURE INDICATOR
PS	DIFFERENTIAL PRESSURE SENSOR
M	MOTORIZED DAMPER (SINGLE BLADE OR BUTTERFLY)
M	MOTORIZED DAMPER (PARALLEL BLADE)
M	MOTORIZED DAMPER (OPPOSED BLADE)

LEGEND - EQUIPMENT

SYMBOL	DESCRIPTION
	PUMP
	ELECTRIC COIL
	UNIT HEATER, HORIZONTAL DISCHARGE
	CENTRIFUGAL FAN
	PROPELLER FAN
	FILTER
	SINGLE-BLADE OR BUTTERFLY DAMPER
	OPPOSED BLADE DAMPER
	PARALLEL BLADE DAMPER
	LOUVER

LEGEND - HEATING AND COOLING

SYMBOL	DESCRIPTION
R	REFRIGERANT LINE
V	FLUE VENT

LEGEND - PLUMBING

SYMBOL	DESCRIPTION
SAN	SANITARY DRAIN ABOVE GROUND
SAN	SANITARY DRAIN BELOW GROUND
P	PRIMER LINE
-	DOMESTIC COLD WATER
DCW	DOMESTIC COLD WATER BELOW GROUND
- -	DOMESTIC HOT WATER
- - -	DOMESTIC HOT WATER RETURN
CA	COMPRESSED AIR
CD	CONDENSATE DRAIN
G	NATURAL GAS ABOVE GROUND
G	NATURAL GAS BELOW GROUND
HB	HOSE BIB/WALL HYDRANT
CO	DRAIN PIPE WITH CLEANOUT
CO	DRAIN PIPE WITH CLEANOUT UP TO FLOOR
	DRAINAGE TRAP
FD	FLOOR DRAIN
FFD	FUNNEL FLOOR DRAIN

ABBREVIATIONS

SYMBOL	DESCRIPTION
BFP	BACKFLOW PREVENTER
CTE	CONNECT TO EXISTING
DWHT	DOMESTIC HOT WATER TANK
EA	EXHAUST AIR
EF	EXHAUST FAN
EG	EXHAUST GRILLE
ES	EMERGENCY SHOWER
HB	HOSE BIBB
IFC	INDOOR FAN COIL UNIT
LAV	LAVATORY
MV	THERMOSTATIC MIXING VALVE
NT	NEUTRALIZATION TANK
OA	OUTDOOR AIR
OG	OUTDOOR AIR GRILLE
OI	OIL INTERCEPTOR
OU	OUTDOOR UNIT
PTAC	PACKAGED TERMINAL AIR CONDITIONER
RPZ	REDUCED PRESSURE ZONE ASSEMBLY BACKFLOW PREVENTER
SH	SHOWER
TD	TRENCH DRAIN
US	UTILITY SINK
UH	UNIT HEATER
WC	WATER CLOSET
WL	WEATHER LOUVER

DRAWING LIST

400	LEGENDS, ABBREVIATIONS, GENERAL NOTES AND DRAWING LIST
401	DETAILS AND HVAC SCHEDULES
402	PLUMBING SCHEDULES
410	FLOOR PLAN - PLUMBING AND COMPRESSED AIR SYSTEM LAYOUTS - DEMOLITION
411	FLOOR PLAN - HVAC LAYOUT - DEMOLITION
412	SITE PHOTOS
420	FLOOR PLAN -FIRE PROTECTION LAYOUT NEW WORK SCHEMATIC DIAGRAM - FIRE PROTECTION AND PLUMBING - NEW WORK
421	SCHEMATIC DIAGRAMS - NOVEC 1230 GAS SUPPRESSION SYSTEM NOVEC 1230 SYSTEM CONTROLS AND FIRE ALARM INTEGRATION
430	FLOOR PLAN - PLUMBING AND CONDENSATE DRAIN LAYOUTS - NEW WORK
440	FLOOR PLAN - HVAC AND REFRIGERATION LAYOUTS - NEW WORK
441	ROOF PLAN - HVAC AND REFRIGERATION LAYOUT - NEW WORK DETAILS AND SECTIONS
450	SITE PLAN - GAS SERVICES - NEW WORK DETAILS
460	CONTROL SCHEMATIC DIAGRAMS

National Defence / Défense nationale

Headquarters
Quartier général

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LICENSED PROFESSIONAL ENGINEER
Y. MA
100068500
2026-05-25
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

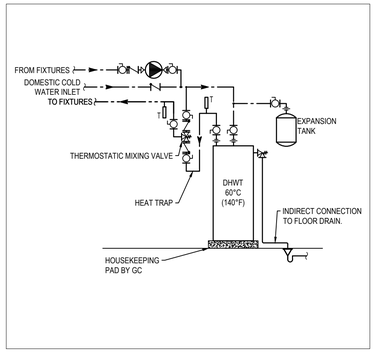
TRADE - MÉTIER
MECHANICAL

DATE
2026/05/25

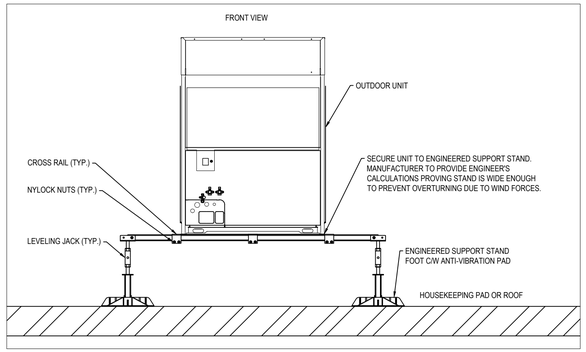
SUBJECT - SUJET
LEGENDS, ABBREVIATIONS, GENERAL NOTES AND DRAWING LIST

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ W. QIU		DES OFF/AGENT CONCEPT X.X.
DRAWN/DESSINÉ C. JOHNSTON		SECT HD/CHEF SECT X.X.
CHECKED/VÉRIFIÉ M. MA	CFFM/DSIFC X.X.	DES MGR/GEST CONCEPT X.X.
COORDINATION X.X.	REVIEWED - REVU Reviewed	
PF NUMBER 500478454	DWG. NO. - DESSIN NO. K-B35-2508/3 -400	

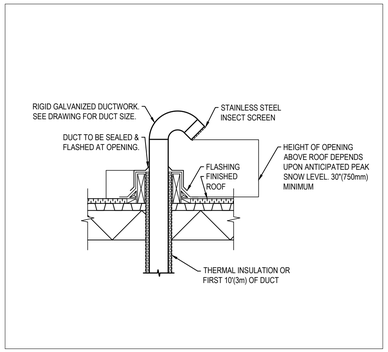
Canada



1 / 401 HOT WATER TANK PIPING DETAIL
SCALE: N.T.S.



2 / 401 OUTDOOR UNIT SUPPORT
SCALE: N.T.S.



3 / 401 GOOSENECK EXHAUST INSTALLATION
SCALE: N.T.S.

DEDICATED OUTDOOR AIR UNIT

TAG	MANUFACTURER	MODEL	LOCATION	SUPPLY FAN					ELECTRIC HEATER				ELECTRICAL				WEIGHT (KG)	NOTES
									OUTDOOR AIR									
				AIR VOLUME (L/s)	FAN TYPE	MOTOR TYPE	MOTOR SIZE (kW)	E.S.P (Pa)	AIR VOLUME (L/s)	DRY BULB TEMPERATURE (°C)		CAPACITY (kW)	VOLTAGE	FLA (A)	MCA (A)	MOP (A)		
										ENTERING	LEAVING							
DOAS -1			AS SHOWN ON DRAWINGS	262	DIRECT DRIVE BACKWARD CURVED ALUMINUM	ECM	0.75	187.5	262	-24.0	23.4	15.0	208/3/60	49.0	61.0	70.0	221	1, 2, 3

NOTES
1. INTEGRAL SCR CONTROL FOR ELECTRIC HEATER.
2. SEE DRAWINGS FOR AIRFLOW CONFIGURATION. ANY OTHER CONFIGURATIONS ARE NOT ACCEPTABLE.
3. ROOF CURB TO BE SUPPLIED BY MANUFACTURER AND INSTALLED BY DIVISION 23.

CABINET UNIT HEATER

TAG	LOCATION	MANUFACTURER	MODEL	HEATING CAPACITY (kW)	AIRFLOW (L/s)	TEMPERATURE RISE (°C)	POWER	WEIGHT (kG)	NOTES
CUH-1	AS SHOWN ON DRAWINGS			5.0	142	29.4	208/3/60	35	1, 2, 3

NOTES
1. SEMI-RECESSED.
2. MOUNT 150mm A.F.F.
3. UNIT TO BE CONTROLLED BY VRF THERMOSTAT. COORDINATE WITH VRF MANUFACTURER.

VRF SYSTEM

TAG		AREA SERVED	MANUFACTURER	INDOOR FAN COIL UNIT								OUTDOOR UNIT									REFRIGERANT	NOTES
				TYPE	MODEL	NOMINAL CAPACITY (kW)		MEDIUM AIRFLOW RATE (L/s)	ELECTRICAL			WEIGHT (kG)	MODEL	RATED CAPACITY (kW)		OPERATING TEMPERATURE RANGE (°C)				ELECTRICAL			WEIGHT (kG)		
																COOLING		HEATING							
INDOOR FAN COIL UNIT	OUTDOOR UNIT					COOLING	HEATING		POWER SUPPLY	MCA (A)	MOP (A)			COOLING	HEATING	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	POWER SUPPLY	MCA (A)	MOP (A)			
IFC-1.1	OU-1	AS SHOWN ON DRAWING		4-WAY CEILING RECESSED CASSETTE		5.3	5.9	300	208/1/60	0.90	15.0	22	TO MATCH CONNECTED IFCs			-5.0	50.0	-30.0	16.1	208/3/60	40.8	70.0	292	R32	1, 2, 3, 4
IFC-1.2		AS SHOWN ON DRAWING		4-WAY CEILING RECESSED CASSETTE		3.5	4.0	233	208/1/60	0.70	15.0	21													
IFC-1.3		AS SHOWN ON DRAWING		4-WAY CEILING RECESSED CASSETTE		2.3	2.6	183	208/1/60	0.50	15.0	19													
IFC-1.4		AS SHOWN ON DRAWING		4-WAY CEILING RECESSED CASSETTE		3.5	4.0	233	208/1/60	0.70	15.0	21													
IFC-1.5		AS SHOWN ON DRAWING		WALL MOUNTED		4.1	4.5	260	208/1/60	0.40	15.0	21													

NOTES
1. VRF HEAT RECOVERY SYSTEM.
2. PERFORMANCE REQUIREMENTS: IN COMPLIANCE WITH NATIONAL ENERGY CODE OF CANADA FOR BUILDINGS 2020 AND ASHRAE STANDARD 90.1-2022, WHICHEVER IS MORE STRINGENT.
3. STANDS AND WIND/HAIL GUARDS SHALL BE SUPPLIED BY THE UNIT MANUFACTURER FOR FIELD INSTALLATION.
4. FOR WALL-MOUNTED UNIT, CONDENSATE PUMP SHALL BE SUPPLIED BY THE UNIT MANUFACTURER FOR FIELD INSTALLATION.

GENERAL VENTILATION FANS

TAG	MANUFACTURER	MODEL	LOCATION	SYSTEM	TYPE	AIR FLOW L/s	STATIC PRESSURE Pa	FAN RPM rpm	DRIVE	MOTOR				NOTES
										bhp	hp	rpm	V/Ph/Hz	
EF-2			AS SHOWN ON DRAWINGS	KITCHEN/LUNCH ROOM EXHAUST	CENTRIFUGAL CEILING CABINET FAN	42	50	800	DIRECT		0.04	1075	120/1/60	1, 2, 3, 4, 5, 6
EF-4			AS SHOWN ON DRAWINGS	WASHROOM	CENTRIFUGAL CEILING CABINET FAN	47	63	891	DIRECT		0.04	1075	120/1/60	1, 2, 3, 4, 5, 6

NOTES
1. COATING: NO COAT - GALVANIZED STEEL.
2. FAN SPEED CONTROLLER (LOOSE).
3. WHITE PLASTIC GRILLE.
4. UL 705 - POWER VENTILATOR.
5. SERVICE SWITCH: PLUG DISCONNECT.
6. ISOLATOR KIT.

PURGING FANS

TAG	MANUFACTURER	MODEL	LOCATION	SYSTEM	TYPE	AIR FLOW	STATIC PRESSURE	FAN RPM	DRIVE	MOTOR			WEIGHT	NOTES
						L/s	Pa	rpm		Watt	FLA	V/Ph/Hz	kG	
EF-1			AS SHOWN ON DRAWINGS	POST-DISCHARGE PURGE	INLINE DUCT FAN	59	75	1650	DIRECT	62	0.37	120/1/60	3.2	1
EF-3			AS SHOWN ON DRAWINGS	POST-DISCHARGE PURGE	INLINE DUCT FAN	144	75	2550	DIRECT	188	1.60	120/1/60	5.0	1

NOTES
1. MANUFACTURER TO SUPPLY ACCESSORIES FOR FIELD INSTALLATION.
.1 MANUAL VARIABLE SPEED CONTROLLER.
.2 MOUNTING CLAMP.

SPLIT AIR CONDITIONING SYSTEMS

TAG		MANUFACTURER	AREA SERVED	INDOOR FAN COIL UNIT										OUTDOOR UNIT					EFFICIENCY				REFRIGERANT	NOTES
				MODEL	TYPE	COOLING CAPACITY (kW)		AIRFLOW (L/s)			NET WEIGHT (kG)	ELECTRICAL			MODEL	NET WEIGHT (kG)	ELECTRICAL			COOLING		HEATING			
INDOOR FAN COIL UNIT	OUTDOOR UNIT					MAX.	MIN.	LO	MI	HI		POWER SUPPLY	MCA (A)	MFA (A)			POWER SUPPLY	MCA (A)	MFA (A)	SEER2	EER2	HSPF2	COP		
IFC-2.1	OU-2		AS SHOWN ON DRAWINGS		WALL MOUNTED	7.71	2.90	321	347	373	25	208/60/1	0.69	15		48	208/60/1	14.3	20	27.0	12.0	11.0	2.6	R32	1, 2, 3
IFC-3.1	OU-3		AS SHOWN ON DRAWINGS		WALL MOUNTED	7.71	2.90	321	347	373	25	208/60/1	0.69	15		48	208/60/1	14.3	20	27.0	12.0	11.0	2.6	R32	1, 2, 3

NOTES
1. MANUFACTURER TO SUPPLY FOLLOWING FOR FIELD INSTALLATION:
.1 STAND-ALONE CONTROLS INCLUDING WALL MOUNTED PROGRAMMABLE THERMOSTAT, CONTROL WIRING AND BACnet GATEWAY.
.2 ULTRA-LOW AMBIENT COOLING KIT (-40°F) AND WIND BAFFLES.
.3 STAND FRAME TO SUPPORT OUTDOOR UNIT.
2. HEAT PUMP SYSTEM.
3. COOLING PERFORMANCE BASED ON 35°C AMBIENT.

National Defence / Défense nationale

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1	2025/07/22	ISSUED FOR 60% REVIEW	M.M

LICENSED PROFESSIONAL ENGINEER
Y. MA
100069580
2026-05-25
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

TRADE - MÉTIER
MECHANICAL

DATE
2026/05/25

SUBJECT - SUJET
DETAILS AND HVAC SCHEDULES

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: W. QIU		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: C. JOHNSTON		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: M. MA	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 -401	

Canada

PLUMBING FIXTURES

LOCATION	FIXTURE		DESCRIPTION	ACCESSORIES	SAN	VENT	DHW	DCW	NOTES
WC-1	Water Closet		Tank type, Right Height 419 mm high Toilet, white Vitreous china, Floor Mounted, high efficiency HET 4.8 L per flush, elongated bowl. Actuator on left hand.	Extra heavy duty Toilet Seat, white solid plastic, open front with cover. Closet supply kit shall include Lead free chrome-plated heavy pattern brass stops with full turn brass stem, no plastic chrome plated copper risers and brass flange. Provide Floor Flange, (same material as the connecting pipe drain), with all brass bolts and with rubber gasket.	75	40		15	
LAV-1	Basin		Wall hung basin, vitreous china, 102mm centerset , rear overflow, recessed self-draining faucet ledge. Vitreous china shroud/knee contact guard.	Two (2) handle faucet,polished chrom finish. 1.9 LPM (0.5 GPM) multi-laminar spray outlet. Gooseneck spout 130mm spout reach, 273mm hight. Vandal-resistant wrist blade handles. Below Deck Mechanical Water Mixing Valve, integral checks. Chrom finish, open Grid, offset wheelchair waste strainer. Polished brass Faucet Supplies. P-Trap. Basin Carrier.	32	32	15	15	
SH-1	Shower		Chrome shower head/arm/flange	Metal lever volume cotrol with temperature adjustment. Shower Mixing valve to CSA B125/ASSE 1016.	50	40	15	15	
SK-1	Sink		Double compartment with faucet ledge. 20 gauge, typy 302, 18-8 Stainless steel. Self rimming. Exposed surface are stain finished. Spillway between bowls. Underside is fully sound dampened and undercoated. c/w factory applied rim seal, installtion kit and 89mm crum cup waste fitting. location center back. overall size 520mm x 790mm x 180mm	Brass tail piece, inline check stops, brass quarter turn stops, 13mm thermostatic mixing valve. Heavy duty cast brass sink faucet. 203mm centers. two handle. Polished chrome plated finish. Metal hold-down package. 8" cast deck faucet. 203mm wallform swing spout, vandal resistant 5.7L/min flow control aerator. 102mm hooded blade handles-ADA compliant-metal-color indexed-vandal resistant screws. Counterto c/w clamping devices Provide P-Trap with cleanout.	40	32	15	15	
US-1	Utility Sink		610mm wide x 508mm long x 340mm high deep. Floor mounted, solid polypropylene plastic, white baked enamel steel legs, strainer and integral drain and plug, 38 mm tailpiece.	Two handles faucet: chrome plated finish, ECAST construction lead free (equal or less than 0.25%) cast brass body, quaturn compression operating cartridge, 5.7 LPM pressure compensating Soffilo aerator outlet, 152mm S Type swing spout, 51mm metal vandal proof canopy wing handles. Faucet supplies: Chrome plated finish polished brass, commercial duty 1/4 turn ball valve angle stops, 13mm I.D. Inlet x 127mm horizontal extension tubes, convertible 1/4 turn/loose key handles, Escutcheon and flexible copper risers. P-Trap: heavy cast brass adjustable body, with slip nut, 38mm size, Box flange and Seamless tubular wall bend.	40	32	15	15	

DOMESTIC HOT WATER HEATER

TAG	MANUFACTURER	MODEL	TANK CAPACITY (L)	RECOVERY RATE @ 56°C TEMP. RISE (L/h)	ELECTRICITY		SHIPPING WEIGHT (KG)	NOTES
					INPUT (kW)	V/Ph		
DHWT-1			284	151	10	208/3	96	TWO 5kW ELEMENTS SIMULTANEOUS OPERATION.

THERMAL EXPANSION TANK

TAG	MANUFACTURER / MODEL	SYSTEM	TYPE	TANK VOLUME (L)	ACCEPT VOLUME (L)	WORKING PRESSURE (KPa)	DIMENSION		NOTES
							DIAMETER (mm)	HEIGHT (mm)	
ET-1		DOMESTIC WATER	DIAPHRAGM/VERTICAL	8	3.4	1034	254	264	

PUMP

TAG	LOCATION	SYSTEM	FLUID			HEAD kPa	MOTOR			NOTES
			FLOW L/m	TYPE	TEMP. °C		kW	rpm	V/Ph/Hz	
P-1	WATER ROOM	DOMESTIC HOT WATER RECIRCULATION	6.1	WATER	104	24	0.02	3250	120/1/60	1

NOTES
1. CONSTANT SPEED. STARTER TO BE PROVIDED BY DIV. 26.

BACKFLOW PREVENTER

TAG	MANUFACTURER / MODEL	SYSTEM	TYPE	LOCATION	PIPE SIZE (mm)	ISOLATION VALVE	NOTES
RPZ-1		FIRE PROTECTION SYSTEM	REDUCED PRESSURE ZONE ASSEMBLY	WATER ROOM	150	BUTTERFLY VALVE	1
RPZ-2		DOMESTIC COLD WATER	REDUCED PRESSURE ZONE ASSEMBLY	WATER ROOM	20	BALL VALVE	1

NOTES
1. ALL BACKFLOW PREVENTERS TO BE INSTALLED AS PER CSA B64.10 - SELECTION AND INSTALLATION OF BACKFLOW PREVENTERS.

National Defence / Défense nationale

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Quartier général

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3	2025/12/09	RE-ISSUED FOR 99% SUBMISSION	M.M
2	2025/10/21	ISSUED FOR 99% REVIEW	M.M
1	2025/07/22	ISSUED FOR 60% REVIEW	M.M

LICENSED PROFESSIONAL ENGINEER
V. MA
100069880
2026-05-25
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

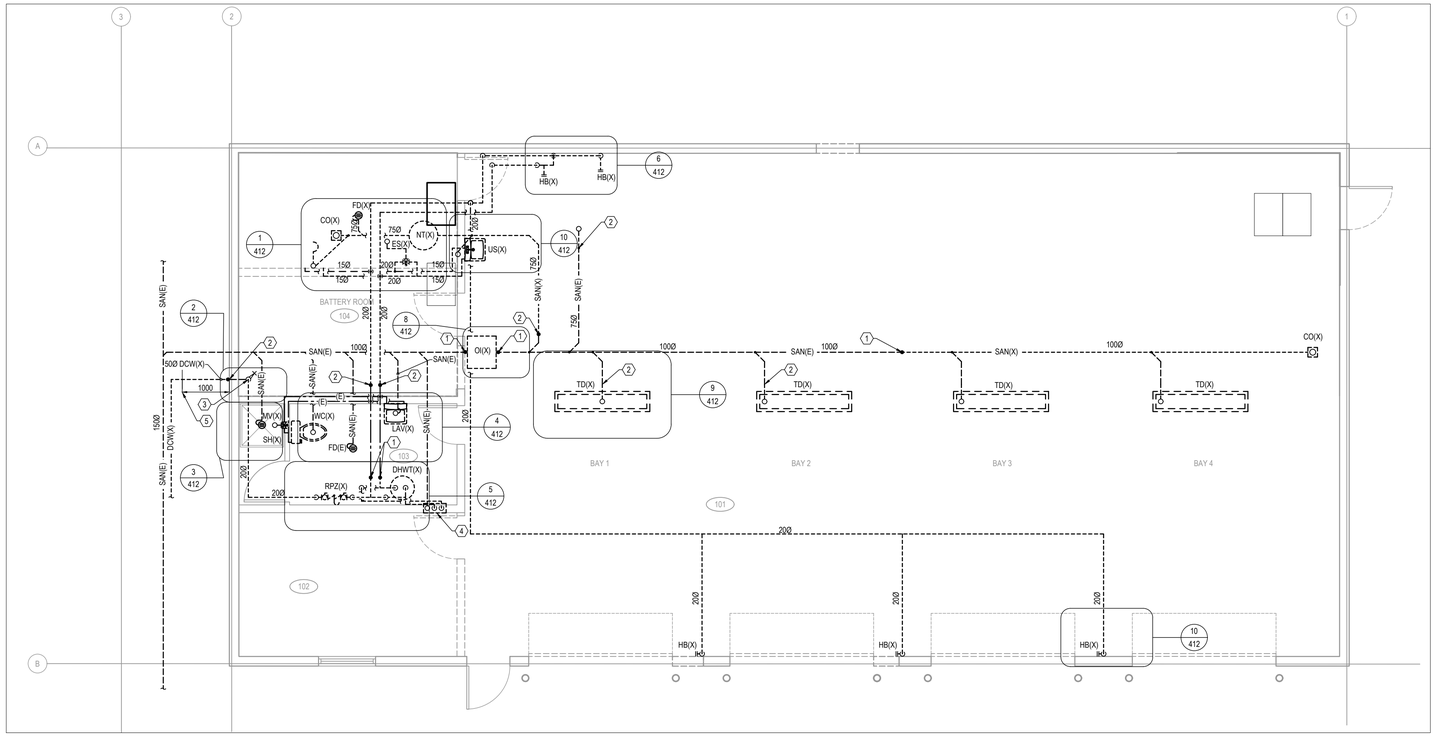
TRADE - MÉTIER
MECHANICAL

DATE
2026/05/25

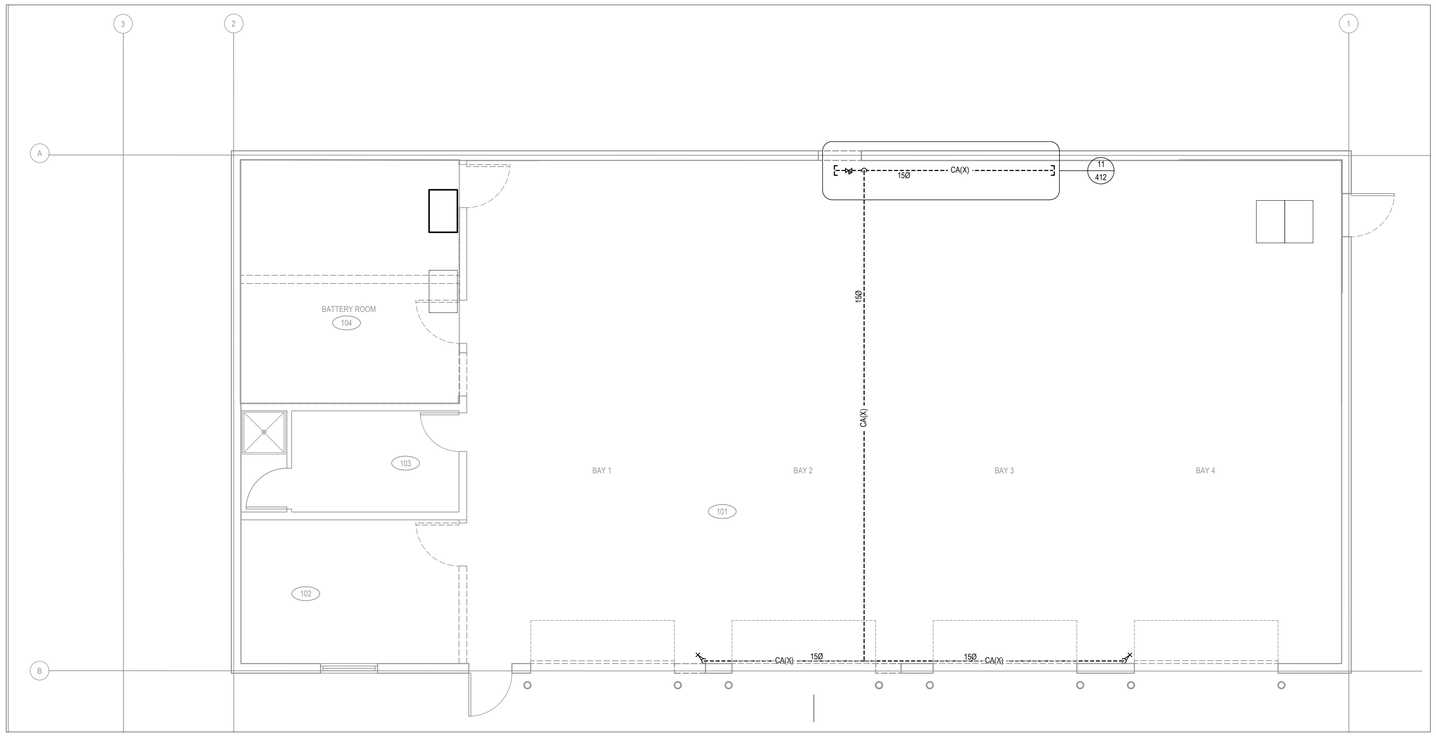
SUBJECT - SUJET
PLUMBING SCHEDULES

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ W. QIU		DES OFF/AGENT CONCEPT X.X.
DRAWN/DESSINÉ C. JOHNSTON		SECT HD/CHEF SECT X.X.
CHECKED/VÉRIFIÉ M. MA	CFFM/DSIFC X.X.	DES MGR/GEST CONCEPT X.X.
COORDINATION X.X.	REVIEWED - REVU Reviewed	
PF NUMBER 500478454	DWG. NO. - DESSIN NO. K-B35-2508/3 - 402	

Canada



1 / 410 FLOOR PLAN - PLUMBING LAYOUT - DEMOLITION
SCALE: 1:50



2 / 410 FLOOR PLAN - COMPRESSED AIR SYSTEM LAYOUT- DEMOLITION
SCALE: 1:50

GENERAL NOTES

1. ALL PLUMBING FIXTURES SHOWN AND ACCESSORIES SUCH AS TRIMS AND SUPPORTS TO BE REMOVED. DISCONNECT EXISTING SERVICES TO FACILITATE REMOVAL WORK.
2. ALL EXISTING HOLES FROM REMOVED SERVICES TO BE FIRE-RATED FILLED. REFER TO ARCHITECTURAL DRAWINGS.

DRAWING NOTES

1. CUT PIPE AT APPROXIMATELY THIS LOCATION. VERIFY ON SITE.
2. CUT AND CAP PIPE AT APPROXIMATELY THIS LOCATION. VERIFY ON SITE.
3. CUT AND CAP PIPE AT FLOOR SLAB.
4. REMOVE WASHER WALL BOX.
5. EXISTING DOMESTIC COLD WATER PIPE BEYOND THIS LINE TO BE REMOVED BY CIVIL CONTRACTOR. REFER TO CIVIL DRAWINGS. COORDINATE WITH CIVIL CONTRACTOR.

National Defence / Défense nationale

Headquarters
Quartier général

SITE NORTH

NO.	DATE	REVISION	APPR.
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2	2025/10/21	ISSUED FOR 99% REVIEW	M.M
1	2025/07/22	ISSUED FOR 60% REVIEW	M.M

LICENSED PROFESSIONAL ENGINEER
Y. MA
100009980
2026-05-25
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

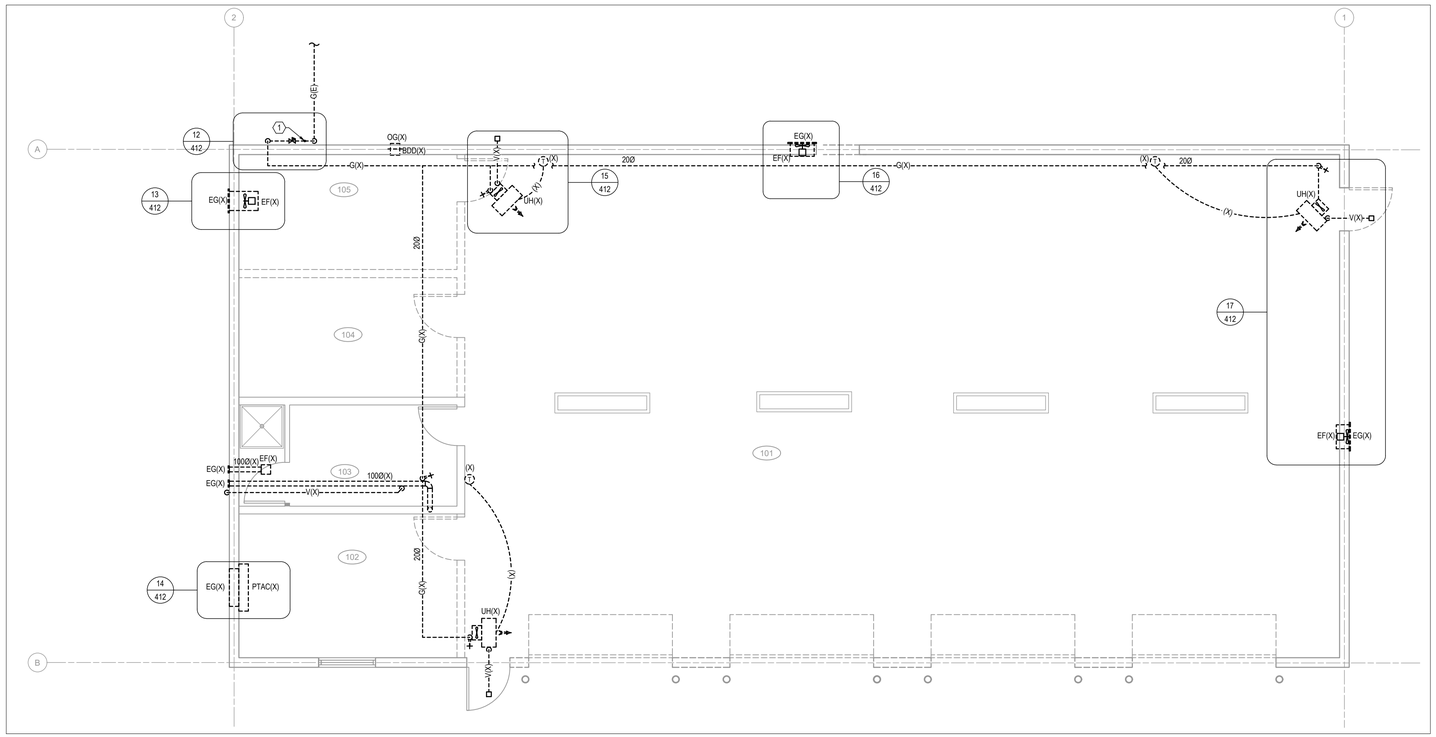
TRADE - MÉTIER
MECHANICAL

DATE
2026/05/25

SUBJECT - SUJET
FLOOR PLAN
PLUMBING AND
COMPRESSED AIR SYSTEM LAYOUTS
DEMOLITION

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: W. QIU		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: C. JOHNSTON		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: M. MA	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 - 410	

Canada



1 / 411 FLOOR PLAN - HVAC LAYOUT - DEMOLITION
SCALE: 1:50

GENERAL NOTES

1. ALL EXISTING HOLES FROM REMOVED SERVICES TO BE FIRE-RATED FILLED. REFER TO ARCHITECTURAL DRAWINGS.

DRAWING NOTES

1 CUT PIPE AT APPROXIMATELY THIS LOCATION. VERIFY ON SITE.

National Defence / Défense nationale

Headquarters
Quartier général

SITE NORTH

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1	2025/07/22	ISSUED FOR 60% REVIEW	M.M

LICENSED PROFESSIONAL ENGINEER
Y. MA
100009980
2026-05-25
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

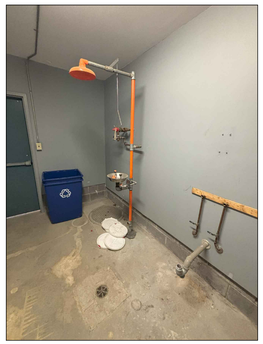
TRADE - MÉTIER
MECHANICAL

DATE
2026/05/25

SUBJECT - SUJET
FLOOR PLAN
HVAC LAYOUT
DEMOLITION

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: W. QIU		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: C. JOHNSTON		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: M. MA	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 - 411	

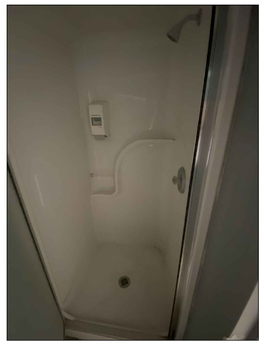
Canada



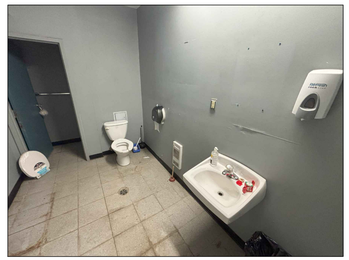
1/412 PLUMBING FIXTURE
SCALE: N.T.S.



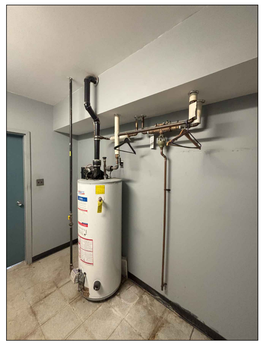
2/412 WATER MAIN
SCALE: N.T.S.



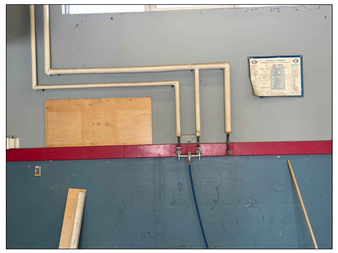
3/412 SHOWER STALL
SCALE: N.T.S.



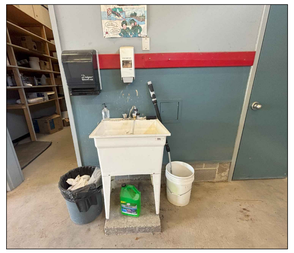
4/412 PLUMBING FIXTURE
SCALE: N.T.S.



5/412 DHW TANK AND BACKFLOW PREVENTER
SCALE: N.T.S.



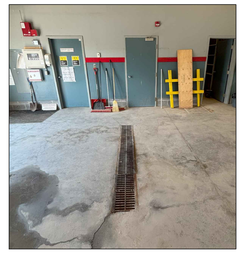
6/412 HOSE BIBBS
SCALE: N.T.S.



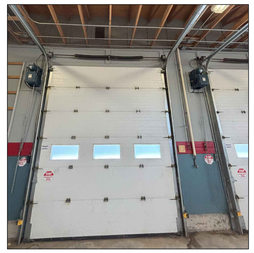
7/412 UTILITY SINK
SCALE: N.T.S.



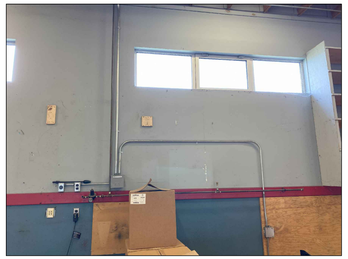
8/412 OIL INTERCEPTOR
SCALE: N.T.S.



9/412 TRENCH DRAIN
SCALE: N.T.S.



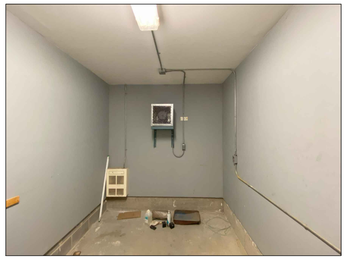
10/412 HOSE BIB
SCALE: N.T.S.



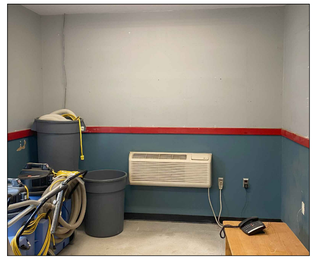
11/412 COMPRESSED AIR SERVICES
SCALE: N.T.S.



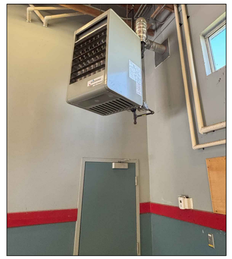
12/412 NATURAL GAS SERVICES
SCALE: N.T.S.



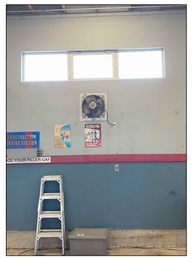
13/412 EXHAUST FAN
SCALE: N.T.S.



14/412 PACKAGE TERMINAL AIR CONDITIONER
SCALE: N.T.S.



15/412 UNIT HEATER AND THERMOSTAT
SCALE: N.T.S.



16/412 EXHAUST FAN
SCALE: N.T.S.



17/412 UNIT HEATER AND EXHAUST FAN
SCALE: N.T.S.

National Defence / Défense nationale

Headquarters
Quartier général

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LICENSED PROFESSIONAL ENGINEER
Y. MA
100089580
2026-05-25
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

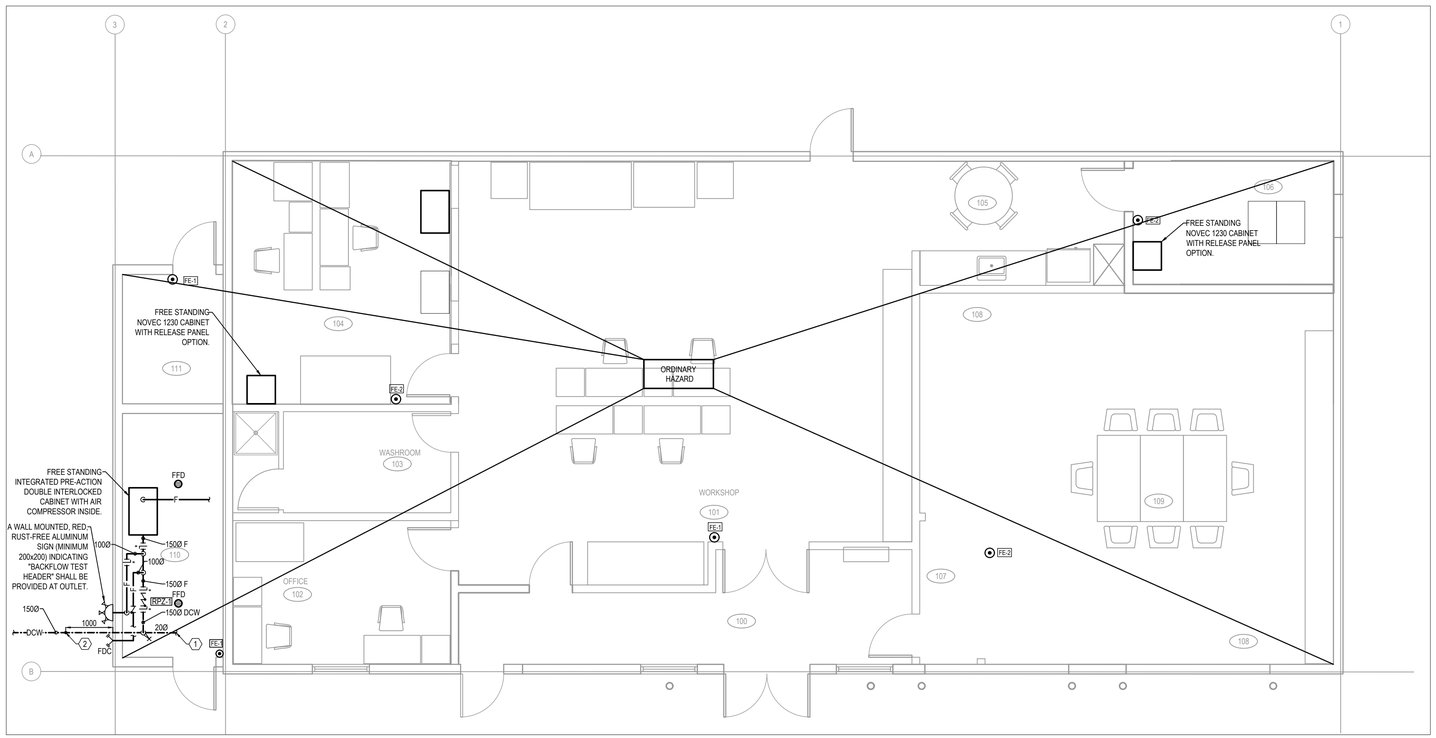
TRADE - MÉTIER
MECHANICAL

DATE
2026/05/25

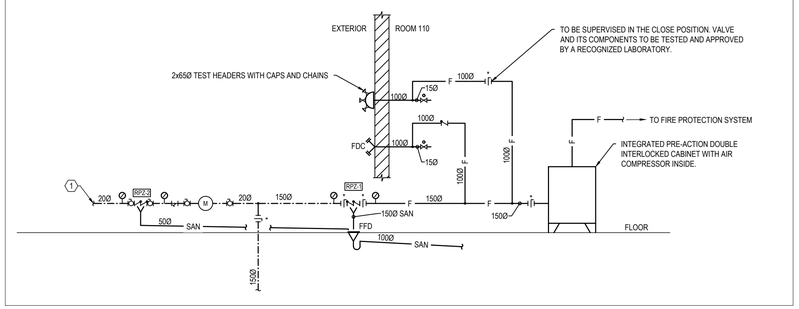
SUBJECT - SUJET
SITE PHOTOS

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: W. QIU		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: C. JOHNSTON		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: M. MA	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 - 412	

Canada



1 / 420 FLOOR PLAN - FIRE PROTECTION AND PLUMBING LAYOUT - NEW WORK
SCALE: 1:50



2 / 420 SCHEMATIC DIAGRAM - FIRE PROTECTION AND PLUMBING - NEW WORK
SCALE: N.T.S.

GENERAL NOTES

1. THE ENTIRE BUILDING INCLUDING THE SPACE BETWEEN THE ROOF AND DROP DOWN CEILING (e.g., CEILING SPACES ABOVE ROOMS 100, 102, 103, 104 AND 109 etc.) SHALL BE PROTECTED WITH A PRE-ACTION DOUBLE INTERLOCKED FIRE SPRINKLER SYSTEM. ROOM 104 AND 106 AREA SHALL ALSO BE PROTECTED WITH CLEAN AGENT SYSTEMS.

2. FIRE EXTINGUISHERS
   - 2.1. WALL MOUNTED (FE-1).
     - 2.1.1. TORED PRESSURE DRY CHEMICAL TYPE WITH STEEL CYLINDER, POSITIVE ON/OFF OPERATION, AND WATERPROOF STAINLESS STEEL GAUGE. ULC LABELLED FOR A, B AND C CLASS PROTECTION.
     - 2.1.2. COMPLETE WITH WALL MOUNTED BRACKET.
     - 2.1.3. SIZE: 5 LBS., 3A-10C.
   - 2.2. WALL MOUNTED (FE-2).
     - 2.2.1. SIZE: 101.LBS, CLEAN AGENT.
     - 2.2.2. COMPLETE WITH WALL MOUNTED BRACKET.

3. SPRINKLERS
   - 3.1. THE SPRINKLER CONTRACTOR SHALL REVIEW THE COMPLETE SET OF DRAWINGS INCLUDING ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL TO FULLY UNDERSTAND THE STRUCTURE AND CEILING SPACES, AND IDENTIFY ALL OBSTRUCTIONS REQUIRING ADDITIONAL COVERAGE.
   - 3.2. THE SPRINKLER CONTRACTOR SHALL PARTICIPATE IN THE INTERFERENCE DRAWING PROCESS LED BY THE MECHANICAL CONTRACTOR.
   - 3.3. SUBMIT SHOP DRAWINGS STAMPED AND SEALED BY PROFESSIONAL ENGINEER REGISTERED OR LICENSED IN PROVINCE OF ONTARIO

4. ALL VALVES AND PIPE UPSTREAM OF BACKFLOW PREVENTER FOR FIRE PROTECTION SYSTEM MUST BE SUITABLE FOR POTABLE WATER.

DRAWING NOTES

1. DOMESTIC COLD WATER MAIN TO SERVE THE BUILDING. SEE DETAIL 1 ON DRAWING 430 FOR CONTINUATION.
2. NEW WATER MAIN BEYOND THIS LINE TO BE SUPPLIED AND INSTALLED BY CIVIL CONTRACTOR. REFER TO CIVIL DRAWINGS. COORDINATE WITH CIVIL CONTRACTOR.

National Defence / Défense nationale

Headquarters
Quartier général

SITE NORTH

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LICENSED PROFESSIONAL ENGINEER
Y. MA
100009980
2026-05-25
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

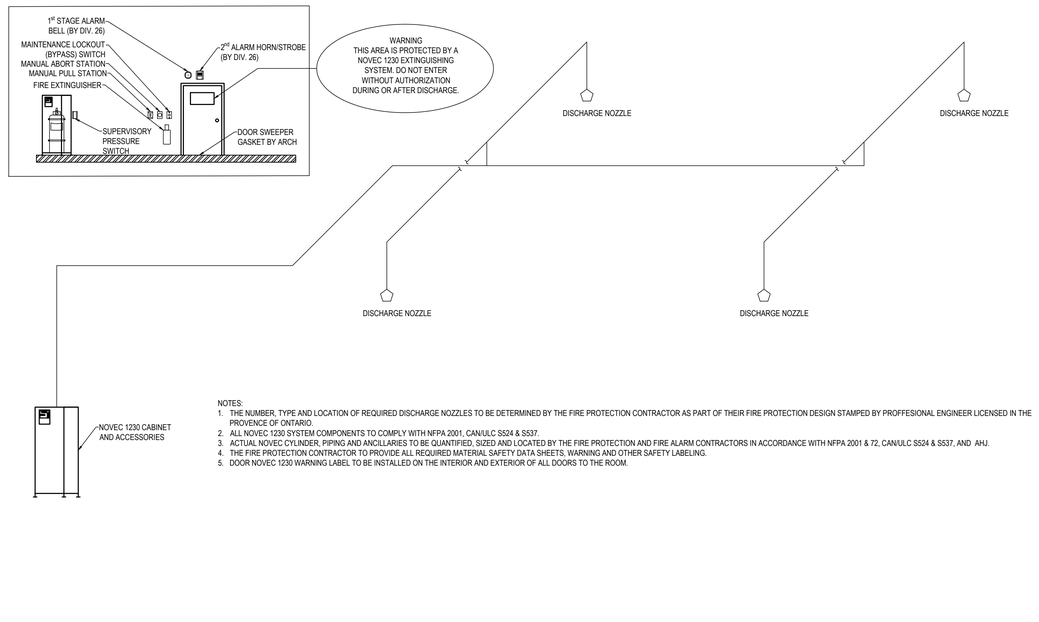
TRADE - MÉTIER
MECHANICAL

DATE
2026/05/25

SUBJECT - SUJET
FLOOR PLAN -FIRE PROTECTION LAYOUT NEW WORK
SCHEMATIC DIAGRAM - FIRE PROTECTION AND PLUMBING - NEW WORK

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: W. QIU		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: C. JOHNSTON		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: M. MA	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 - 420	

Canada



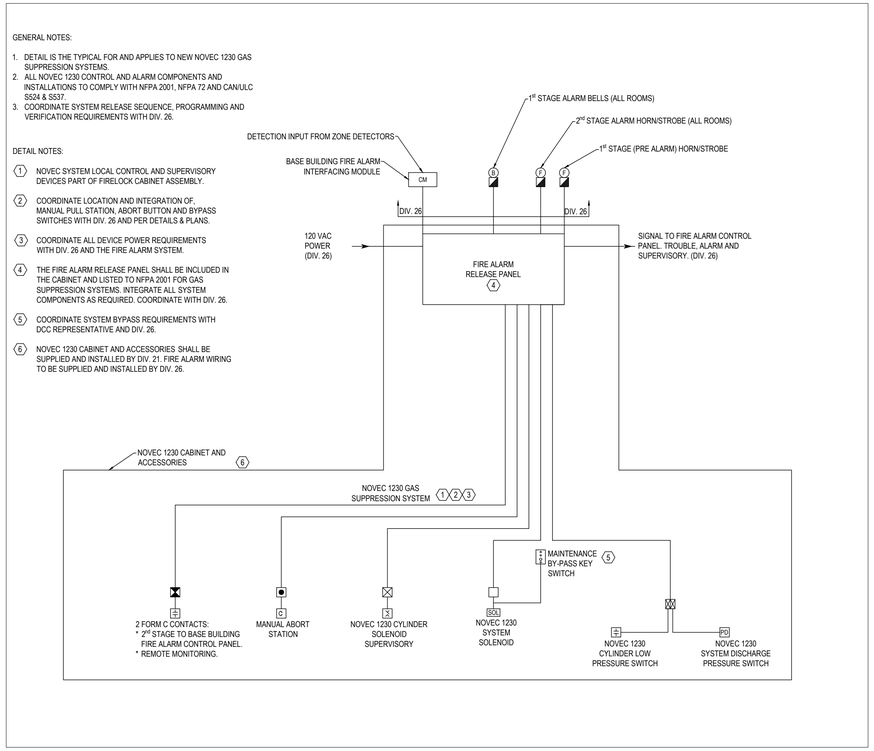
NOTES:
1. THE NUMBER, TYPE AND LOCATION OF REQUIRED DISCHARGE NOZZLES TO BE DETERMINED BY THE FIRE PROTECTION CONTRACTOR AS PART OF THEIR FIRE PROTECTION DESIGN STAMPED BY PROFFESIONAL ENGINEER LICENSED IN THE PROVENCE OF ONTARIO.
2. ALL NOVEC 1230 SYSTEM COMPONENTS TO COMPLY WITH NFPA 2001, CAN/ULC S524 & S537.
3. ACTUAL NOVEC CYLINDER, PIPING AND ANCILLARIES TO BE QUANTIFIED, SIZED AND LOCATED BY THE FIRE PROTECTION AND FIRE ALARM CONTRACTORS IN ACCORDANCE WITH NFPA 2001 & 72, CAN/ULC S524 & S537, AND AHJ.
4. THE FIRE PROTECTION CONTRACTOR TO PROVIDE ALL REQUIRED MATERIAL SAFETY DATA SHEETS, WARNING AND OTHER SAFETY LABELING.
5. DOOR NOVEC 1230 WARNING LABEL TO BE INSTALLED ON THE INTERIOR AND EXTERIOR OF ALL DOORS TO THE ROOM.

1 / 421 SCHEMATIC DIAGRAM - NOVEC 1230 GAS SUPRESSION SYSTEM
SCALE: N.T.S.

FIRE PROTECTION ZONE INFORMATION - GAS SUPPRESSION

ROOM SERVICE	SYSTEM TYPE	HAZARD CLASS	DESIGN CONCENTRATION	TIME TO REACH AND HOLD CONCENTRATION	ESTIMATED COVERAGE VOLUME
IT	NOVEC 1230 GAS SUPPRESSION	ORDINARY HAZARD	> 4.7%	AS PER NFPA 2001	55 m^3
CAD AREA	NOVEC 1230 GAS SUPPRESSION	ORDINARY HAZARD	> 4.7%	AS PER NFPA 2001	125 m^3

NOTES:
1. DESIGN CONCENTRATION MINIMUM TO BE 4.7%. FIRE PROTECTION CONTRACTOR TO CALCULATE THE REQUIRED CONCENTRATION FOR THE SPACE.
2. IFC-2.1 AND OU-2 TO CONTINUE RUNNING DURING FIRE EVENT.



2 / 421 SCHEMATIC DIAGRAM - NOVEC 1230 SYSTEM CONTROLS AND FIRE ALARM INTEGRATION
SCALE: N.T.S.

National Defence / Défense nationale

Headquarters
Quartier général

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4	2026/03/30	ISSUED FOR 100% SUBMISSION	M.M
3	2025/12/09	RE-ISSUED FOR 99% SUBMISSION	M.M
2	2025/10/21	ISSUED FOR 99% REVIEW	M.M
1	2025/07/22	ISSUED FOR 60% REVIEW	M.M

LICENSED PROFESSIONAL ENGINEER
Y. MA
100069580
2026-05-25
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

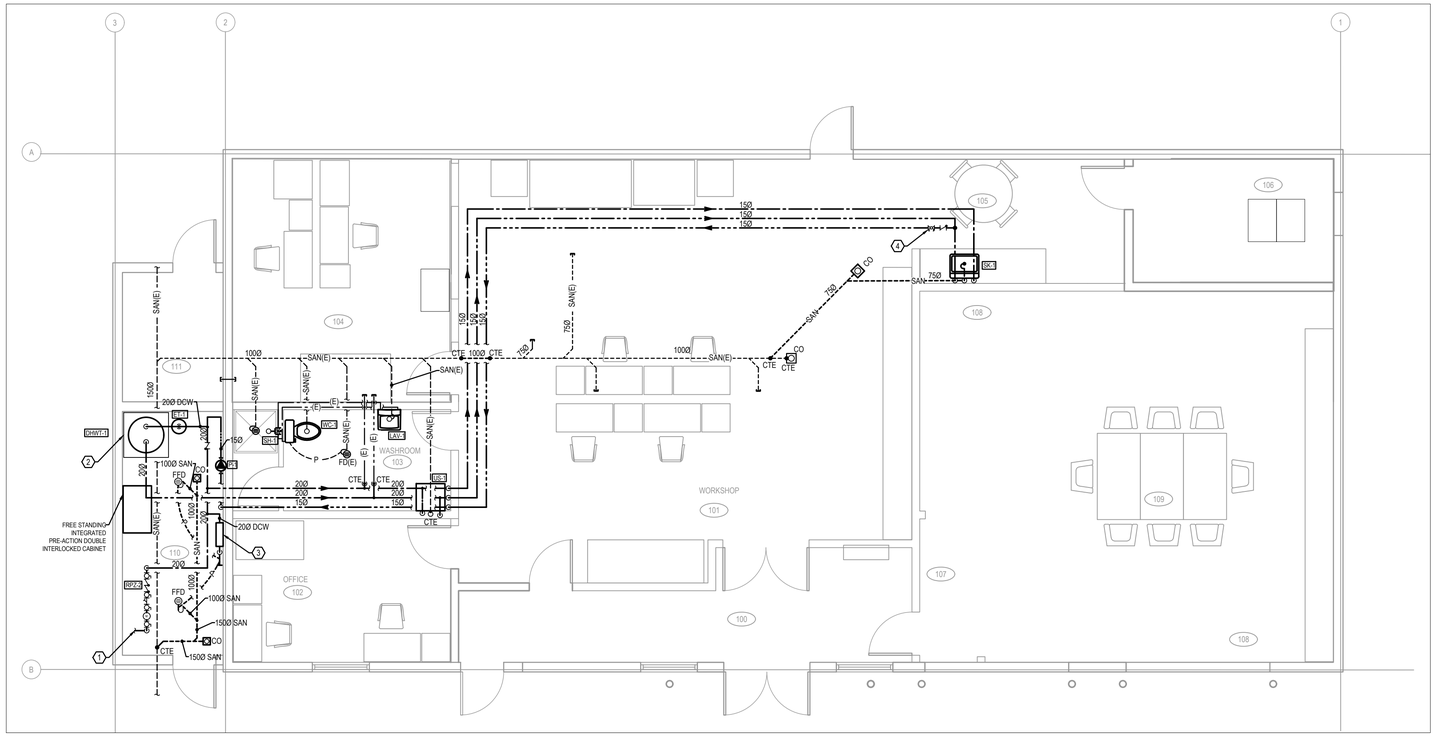
TRADE - MÉTIER
MECHANICAL

DATE
2026/05/25

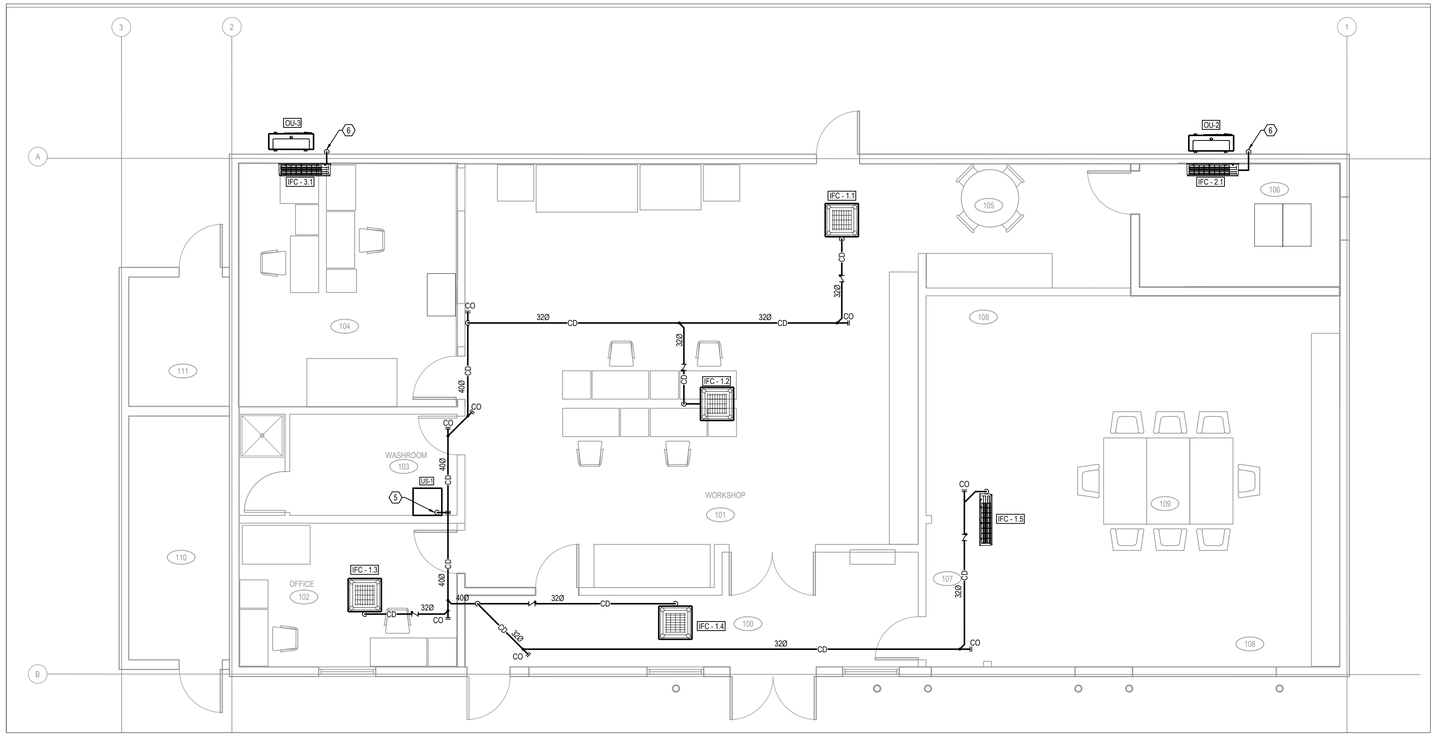
SUBJECT - SUJET
SCHEMATIC DIAGRAMS - NOVEC 1230 GAS SUPPRESSION SYSTEM AND NOVEC 1230 SYSTEM CONTROLS AND FIRE ALARM INTEGRATION

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: W. QIU		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: C. JOHNSTON		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: M. MA	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 - 421	

Canada



1 / 430 FLOOR PLAN - PLUMBING LAYOUT - NEW WORK
SCALE: 1:50



2 / 430 FLOOR PLAN - CONDENSATE DRAIN LAYOUT - NEW WORK
SCALE: 1:50

GENERAL NOTES

1. UNLESS OTHERWISE NOTED IN DRAWING NOTES, NEW PLUMBING FIXTURES TO BE CONNECTED TO EXISTING DOMESTIC COLD AND HOT WATER PIPES AND EXISTING SANITARY DRAIN.
2. PROVIDE VENT IN ACCORDANCE WITH NBC.
3. INSTALL CONDENSATE DRAINS FOR INDOOR FAN COIL UNITS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS CONTAINED IN INSTALLATION MANUAL.
4. RUN CONDENSATE DRAINS AS HIGH AS PRACTICAL AND MINIMIZE INTERFERENCES WITH NEW DUCTWORK AND EXISTING SERVICES.
5. PIPE TRACING HEATING CABLES.
   - 5.1. SELF-REGULATING HEATING CABLE WITH NICKEL PLATED COPPER BUS WIRES, POLYOLEFIN PRIMARY AND OVERALL JACKETS AND TINNED COPPER BRAIDING. HEATING CAPACITY: 10.2 W/M; FOR USE WITH 120 V POWER SUPPLY.
   - 5.2. COMPLY WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS AND SPECIFICATIONS, INCLUDING PRODUCT TECHNICAL BULLETINS, HANDLING, STORAGE AND INSTALLATION INSTRUCTIONS, AND DATASHEET.
   - 5.3. INSTALL HEATING CABLES IN ACCORDANCE WITH MANUFACTURE'S INSTRUCTIONS. DISTRIBUTE AND FASTEN CABLE EVENLY ON PIPE USING PIPE STRAP OR TAPE AT MAXIMUM SPACING 0.5m. ENSURE THAT HEATING CABLES DO NOT TOUCH OR CROSS EACH OTHER. RUN ONLY COLD LEADS IN CONDUIT AND ENSURE SENSING BULB DOES NOT TOUCH CABLE. GROUND SHIELD TO BUILDING GROUND. COORDINATE CABLE INSTALLATION WITH INSULATION APPLICATION. LOOP ADDITIONAL CABLE AT FITTINGS, VALVES, AND FLANGES.
   - 5.4. MAKE POWER AND CONTROL CONNECTIONS.
   - 5.5. TESTS:
     - 5.5.1. PERFORM TESTS IN ACCORDANCE WITH ELECTRICAL SPECIFICATIONS.
     - 5.5.2. USE 500 V HIGH VOLTAGE INSULATION TESTER TO TEST CABLES FOR CONTINUITY AND INSULATION VALUE AND RECORD READINGS BEFORE, DURING AND AFTER INSTALLATION.
     - 5.5.3. WHERE RESISTANCE OF 50 MEGOHMS OR LESS IS MEASURED, STOP WORK AND ADVISE DCC REPRESENTATIVE.
6. TRAP SEAL PRIMING STATION SPECIFICATIONS:
   - 6.1. FEATURES:
     - 6.1.1. ATMOSPHERIC VACCUM BREAKER.
     - 6.1.2. PRE-SET 24 HOUR CLOCK.
     - 6.1.3. MANUAL OVERRIDE SWITCH/TEST BUTTON.
     - 6.1.4. 120V/220V SOLENOID VALVE.
     - 6.1.5. 120V/220V 3 WIRE CONNECTION.
     - 6.1.6. 20Ø FNPT CONNECTION.
     - 6.1.7. CALIBRATED MANIFOLD FOR EQUAL WATER DISTRIBUTION.
     - 6.1.8. 13Ø OUTLET COMPRESSION FITTINGS.
   - 6.2. SUPPLY A MINIMUM OF 2 OZ> OF POTABLE WATER AT 20PSIG AT A PRESET FACTORY SETTING OF 10 SECONDS.
   - 6.3. METAL CABINET: 300X300X100MM NEMA 1 WITH COVER PLATE.
   - 6.4. INLET: 20Ø NPT FEMALE. ANSI/ASME BI.20.1.
   - 6.5. OUTLET: 13Ø COMPRESSION FITTING. SAEJ512.
   - 6.6. MANIFOLD: 20Ø TYPE "L" COPPER TUBING. ASTM B88.
   - 6.7. SOLDERED JOINTS: 95-5 LEAD FREE CONTAINING LEAD NOT IN EXCESS OF 0.2%.
   - 6.8. ELECTRICAL COMPONENTS: CIRCUIT BREAKER, MANUAL OVER RIDE SWITCH/TEST BUTTON, TIMER, SOLENOID VALVE MARKED AS UL LISTED.
   - 6.9. BACKFLOW PREVENTION: ANTI-SIPHON ATMOSPHERIC VACUUM BREAKER MEETS LOS ANGELES CODE, IAPMO, NEW YORK BOARD OF STANDARDS, ASSE 1001 AND CSA.
   - 6.10. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

DRAWING NOTES

1. SEE DETAIL 1 ON DRAWING 420 FOR NEW DOMESTIC COLD WATER MAIN.
2. REFER TO STRUCTURAL DRAWINGS FOR NEW HOUSEKEEPING PAD FOR DOMESTIC HOT WATER TANK.
3. PROVIDE SURFACE MOUNTED ELECTRONIC TRAP SEAL PRIMING STATION.
4. BALANCE TO 6.1 L/m.
5. TERMINATE 40Ø CONDENSATE DRAIN 50mm ABOVE THE EDGE OF UTILITY SINK.
6. CONDENSATE DRAIN TO PENETRATE EXTERIOR WALL, HEAT TRACED AND BE COMPLETE WITH 45° DOWNWARD-TURNED ELBOW TERMINATING 450mm ABOVE GRADE. USE SEALANT AROUND PENETRATION TO MAKE ENVELOPE WATER TIGHT.

National Defence / Défense nationale

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Quartier général

SITE NORTH

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LICENSED PROFESSIONAL ENGINEER
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100069580
2026-05-25
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

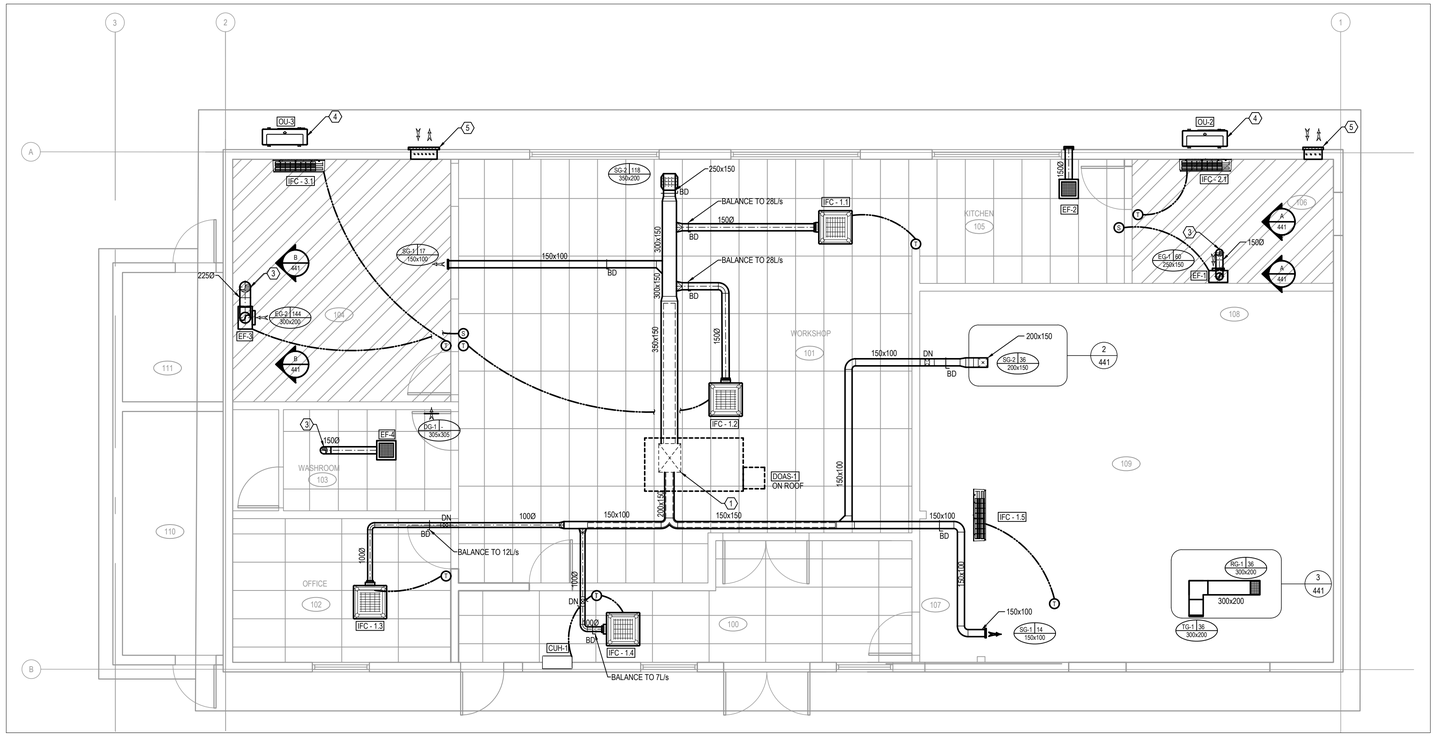
TRADE - MÉTIER
MECHANICAL

DATE
2026/05/25

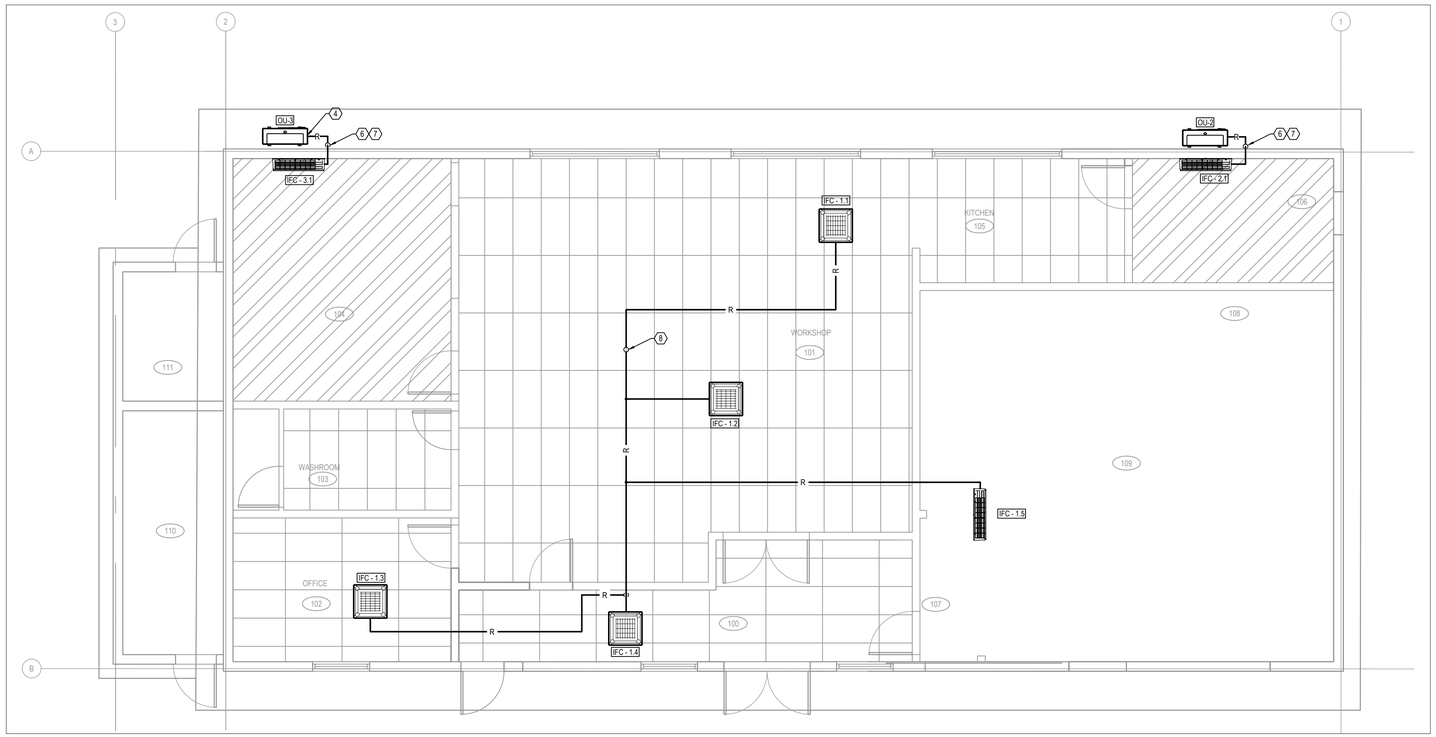
SUBJECT - SUJET
FLOOR PLAN
PLUMBING AND CONDENSATE DRAIN LAYOUTS
NEW WORK

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: W. QIU		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: C. JOHNSTON		SECT HD/CHEF SECT: X.X.
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COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 - 430	

Canada



1 / 440 FLOOR PLAN - HVAC LAYOUT - NEW WORK
SCALE: 1:50



2 / 440 FLOOR PLAN - REFRIGERATION LAYOUT - NEW WORK
SCALE: 1:50

GENERAL NOTES

1. THERMOSTATS SHALL BE SUPPLIED BY THE VRF MANUFACTURER AND INSTALLED BY THE EMCS CONTRACTOR.
2. COORDINATE WITH DCC REPRESENTATIVE FOR EXACT LOCATIONS OF THERMOSTATS.
3. REFRIGERANT PIPING LAYOUTS ARE FOR ILLUSTRATIVE PURPOSES ONLY AND MUST BE DESIGNED BY A MANUFACTURER'S CERTIFIED DESIGNER. THIS DESIGNER SHALL VISIT SITE PRIOR TO DESIGN TO ENSURE PIPING LAYOUTS SUIT SITE CONDITIONS AND PIPE LENGTH LIMITATIONS, EXISTING SERVICES, AND AVOID DISTURBANCES TO MEET CODE REQUIREMENTS.
4. ROOMS 104 AND 106: DO NOT MOUNT INDOOR FAN COIL UNITS OR REFRIGERANT LINES DIRECTLY ABOVE IT EQUIPMENT OR RACKS.
5. SPECIFICATIONS FOR PRESSURE RELIEF KIT
   - 5.1. A PRESSURE RELIEF KIT SHALL INCLUDE, BUT NOT LIMITED TO, A DUAL-WAY PRESSURE RELIEF VENT AND A WEATHER LOUVER. ALL COMPONENTS SHALL BE MANUFACTURED FROM A SINGLE MANUFACTURER.
   - 5.2. DUAL-WAY PRESSURE RELIEF VENT
     - 5.2.1. SHALL BE SPECIFICALLY DESIGNED FOR USE WITH HALOCARBON GASES (NOVEC 1230 (FK-5-1-12)), AND IDEAL FOR APPLICATIONS REQUIRING RELIABLE PRESSURE VENTING TO PREVENT NEGATIVE PRESSURE AND OVER-PRESSURIZATION.
     - 5.2.2. SHALL BE OF TWO-PIVOT DESIGN FOR BOTH NEGATIVE PRESSURE RELIEF AND POSITIVE PRESSURE RELIEF.
     - 5.2.3. SHALL FULLY OPEN AT 120 TO 160 PA.
     - 5.2.4. SHALL BE CONSTRUCTED FROM STEEL ZINTEC AND POWDER COATED IN RAL-9003 WHITE.
     - 5.2.5. SHALL BE MANUFACTURED TO ISO9001.
     - 5.2.6. SHALL CARRY A 3-YEAR WARRANTY.
     - 5.2.7. SHALL BE 4-HOUR FIRE RESISTANCE RATED BY EXOVA WARRINGTON FIRE TO BS EN 133-1-2012 (REPORT NO. 359639).
     - 5.2.8. VENT FOR ROOM 106: 375x375mm
     - 5.2.9. VENT FOR ROOM 104: 550x550mm
   - 5.3. WEATHER LOUVER
     - 5.3.1. SHALL BE A SURFACE-MOUNTED UNIT.
     - 5.3.2. SHALL BE ENGINEERED TO PROVIDE A FREE VENT AREA THAT ALIGNS WITH THE SPECIFICATIONS OF THE PRESSURE RELIEF VENT TO ENSURE CONSISTENT AIRFLOW, WHILE SIMULTANEOUSLY OFFERING ROBUST PROTECTION AGAINST THE ELEMENTS FOR PRESSURE RELIEF VENT IN EXTERNAL WALL.
     - 5.3.3. SHALL UTILIZE A CAREFULLY CRAFTED LOUVER BLADE ASSEMBLY, HOUSED WITHIN A CUSTOM-DESIGNED 'EXPANDER BOX'. THIS DESIGN SHALL SIGNIFICANTLY ENHANCE THE FREE VENT AREA SUCH THAT A LOUVER SYSTEM CAN PROVIDE UP TO 85% OF THE FREE VENT AREA SEEN IN THE PRESSURE RELIEF VENTS, FAR SUPERIOR TO TYPICAL MARKET EXTERNAL WEATHER LOUVRES, WHICH USUALLY OFFER ONLY UP TO 50% FREE VENT AREA.
     - 5.3.4. SHALL BE CONSTRUCTED FROM STEEL AND POWDER COATED IN RAL-9006 GREY.
     - 5.3.5. SHALL BE MANUFACTURED TO ISO9001.
     - 5.3.6. SHALL CARRY A 3-YEAR WARRANTY.
6. THE FOLLOWING EQUIPMENT SHALL BE DE-ENERGIZED ON A SIGNAL FROM THE FIRE ALARM SYSTEM:
   - 6.1. DOAS-1,
   - 6.2. IFC-1.1 THROUGH 1.5 AND OU-1,
   - 6.3. IFC-3.1 AND OU-3 AND
   - 6.4. EF-2/4.

DRAWING NOTES

1. PROVIDE 1500 mm HIGH PLENUM, WHOSE DIMENSIONS SHALL MATCH UNIT'S SUPPLY AIR OPENING. PLENUM TO BE LINED WITH 25mm ACOUSTICAL INSULATION.
2. PROVIDE WALL CAP C/W SCREEN.
3. DUCT UP TO ROOF VIA GOOSENECK.
4. REFER TO STRUCTURAL DRAWINGS FOR NEW HOUSEKEEPING PAD.
5. MOUNT PRESSURE RELIEF KIT AS HIGH AS PRACTICAL. REFER TO ARCHITECTURAL DRAWINGS.
6. REFRIGERANT LINES TO PENETRATE EXTERIOR WALL. USE SEALANT AROUND PENETRATION TO MAKE ENVELOPE WATER TIGHT.
7. PROVIDE METAL ENCLOSURE FOR NEW REFRIGERANT LINES AND CONDENSATE DRAIN.
8. REFRIGERANT LINE UP TO ROOF. SEE DETAIL 1 ON DRAWING 441 FOR CONTINUATION.

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LICENSED PROFESSIONAL ENGINEER
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100068580
2026-05-25
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

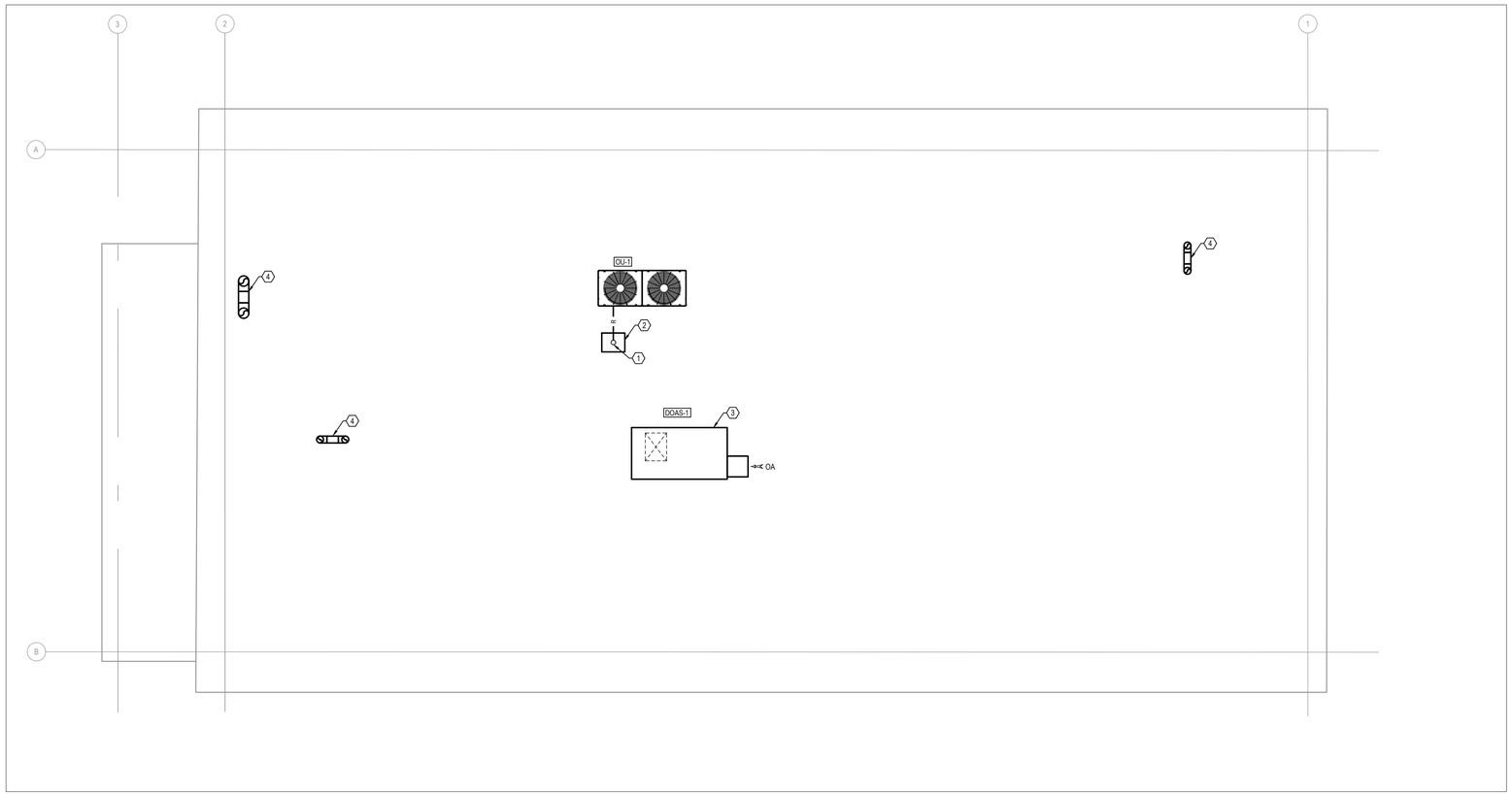
TRADE - MÉTIER
MECHANICAL

DATE
2026/05/25

SUBJECT - SUJET
FLOOR PLAN
HVAC AND REFRIGERATION LAYOUTS
NEW WORK

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: W. QIU		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: C. JOHNSTON		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: M. MA	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 - 440	

Canada



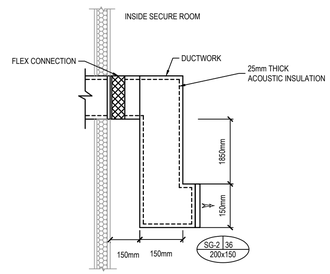
1 / 441 ROOF PLAN - HVAC AND REFRIGERATION LAYOUT - NEW WORK
SCALE: 1:50

GENERAL NOTES

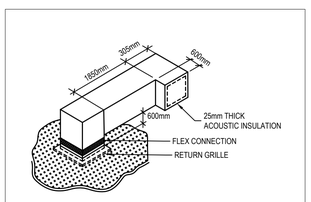
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DRAWING NOTES

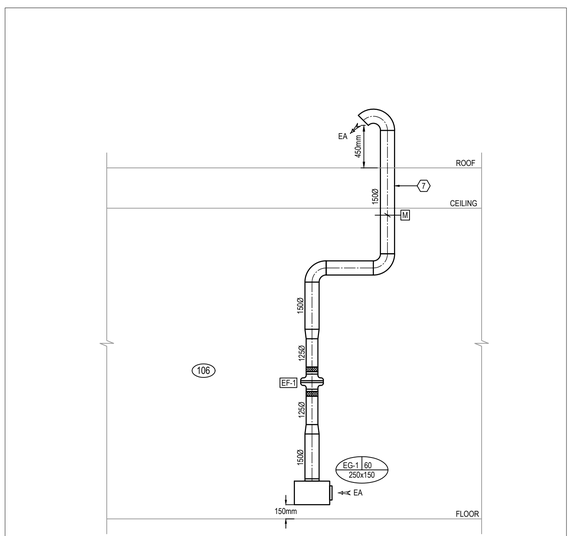
1. REFRIGERANT LINE DOWN TO CEILING SPACE UNDERNEATH. SEE DETAIL 2 ON DRAWING 440 FOR CONTINUATION.
2. REFER TO STRUCTURAL DRAWINGS FOR THE DETAILS OF SERVICE BOX.
3. REFER TO STRUCTURAL DRAWINGS FOR DETAILS OF UNIT SUPPORT.
4. PROVIDE GOOSENECK ON ROOF.
5. PROVIDE AN EXHAUST PLENUM (300mm WIDE X 200mm DEEP X 200mm HIGH).
6. PROVIDE AN EXHAUST PLENUM (350mm WIDE X 275mm DEEP X 250mm HIGH).
7. THERMALLY INSULATE DUCT BETWEEN ROOF AND MOTORIZED DAMPER.



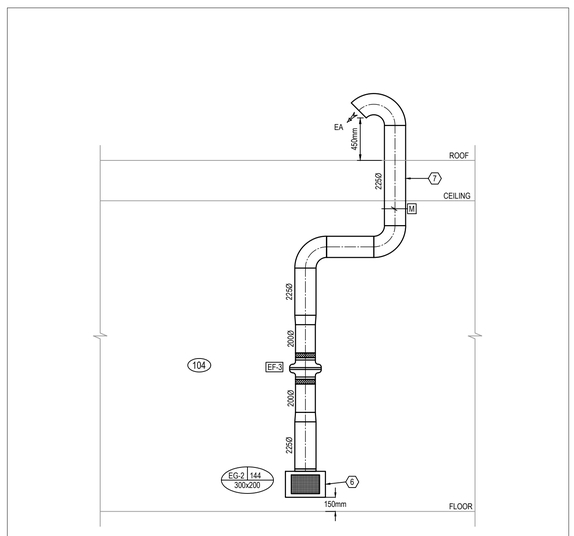
2 / 441 DETAIL OF SUPPLY GRILLE AND DUCT
SCALE: N.T.S.



3 / 441 DETAIL OF RETURN GRILLE AND DUCT
SCALE: N.T.S.



4 / 441 SECTION - EXHAUST FAN (EF-1)
SCALE: 1:25



5 / 441 SECTION - EXHAUST FAN (EF-3)
SCALE: 1:25

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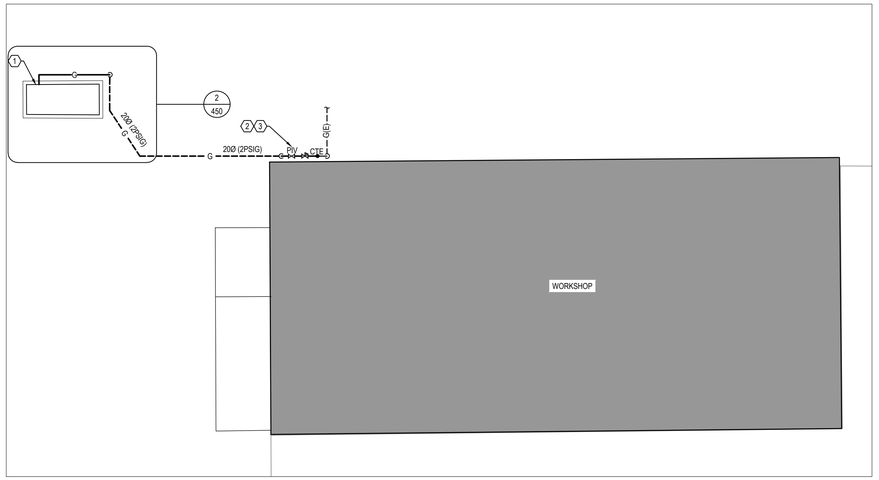
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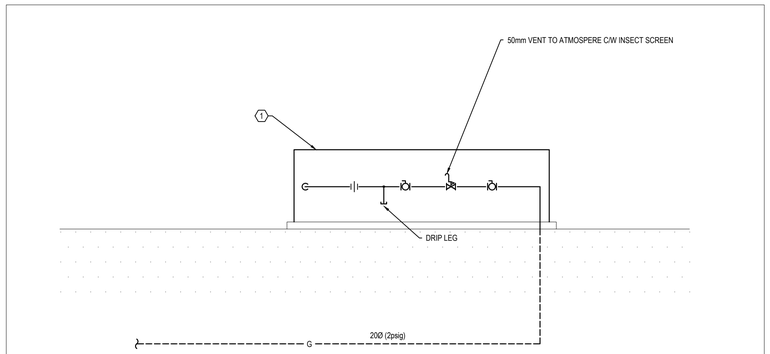
SUBJECT - SUJET
ROOF PLAN
HVAC AND REFRIGERATION LAYOUT
NEW WORK
DETAILS AND SECTIONS

PRODUCTION		CONCURRENCE - APPROBATION
DESIGNED/ÉTUDIÉ W. QIU		DES OFF/AGENT CONCEPT X.X.
DRAWN/DESSINÉ C. JOHNSTON		SECT HD/CHEF SECT X.X.
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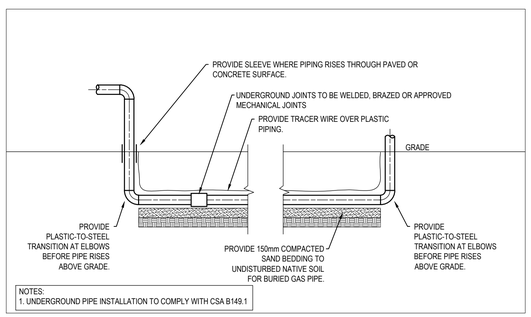
1/450 SITE PLAN - GAS SERVICES - NEW WORK
SCALE: 1:100



NOTE:

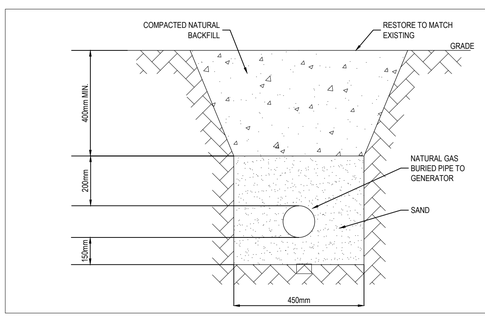
PROVIDE A GAS PRESSURE REDUCING VALVE TO SUIT NEW GENERATOR. COORDINATE WITH GENERATOR'S MANUFACTURER.

2/450 GENERATOR CONNECTION DETAIL
SCALE: N.T.S.



NOTES:
1. UNDERGROUND PIPE INSTALLATION TO COMPLY WITH CSA B149.1

3/450 BURIED GAS PIPE INSTALLATION DETAIL
SCALE: N.T.S.



4/450 NATURAL GAS TRENCH DETAIL
SCALE: N.T.S.

GENERAL NOTES

1. IDENTIFY ALL EXISTING SERVICES BELOW GRADE PRIOR TO INSTALLATION OF NEW GAS PIPING SUCH THAT THE NEW PIPING WILL NOT INTERFERE WITH ANY EXISTING SERVICES.
2. COORDINATE GAS SERVICE SHUTDOWN WITH DCC REPRESENTATIVE.
3. ROUTE UNDERGROUND GAS PIPING WITH ELECTRICAL SERVICES AS SHOWN. MAINTAIN 300mm MINIMUM DISTANCE FROM ELECTRICAL SERVICES. COORDINATE WITH DIV. 26. REFER TO ELECTRICAL DRAWINGS.
4. PROVIDE FINAL CONNECTION TO EMERGENCY GENERATOR AS PER MANUFACTURER'S RECOMMENDATIONS.
5. ANY WORK INCLUDING, BUT NOT LIMITED TO, DEMOLITION AND NEW WORK ON GAS SERVICES UPSTREAM OF AND INCLUDING PRESSURE REGULATOR SHALL BE DONE BY ENBRIDGE. COORDINATE WITH ENBRIDGE REPRESENTATIVE.

DRAWING NOTES

1. NEW EMERGENCY GENERATOR TO BE SUPPLIED AND INSTALLED BY DIV. 26. REFER TO ELECTRICAL DRAWINGS.
2. NEW POSITION INDICATING VALVE TO BE SUPPLIED AND INSTALLED BY ENBRIDGE AND ELECTRICALLY CONNECTED BY DIV. 26. REFER TO ELECTRICAL DRAWINGS.
3. PROVIDE SIGNAGE INDICATING "LIFE SAFETY EMERGENCY GENERATOR ISOLATION VALVE".

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LOCATION - EMPLACEMENT
CFB KINGSTON ON

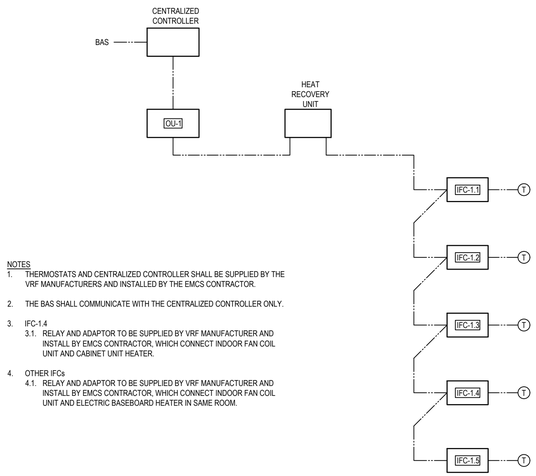
PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

TRADE - MÉTIER: MECHANICAL
DATE: 2026/05/25

SUBJECT - SUJET
SITE PLAN
GAS SERVICES - NEW WORK
DETAILS

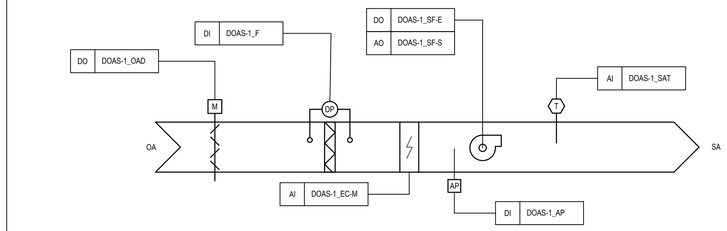
PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: W. QIU		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: C. JOHNSTON		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: M. MA	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 - 450	

Canada



NOTES
1. THERMOSTATS AND CENTRALIZED CONTROLLER SHALL BE SUPPLIED BY THE VRF MANUFACTURERS AND INSTALLED BY THE EMCS CONTRACTOR.
2. THE BAS SHALL COMMUNICATE WITH THE CENTRALIZED CONTROLLER ONLY.
3. IFC-1.4
   3.1. RELAY AND ADAPTOR TO BE SUPPLIED BY VRF MANUFACTURER AND INSTALL BY EMCS CONTRACTOR, WHICH CONNECT INDOOR FAN COIL UNIT AND CABINET UNIT HEATER.
4. OTHER IFCs
   4.1. RELAY AND ADAPTOR TO BE SUPPLIED BY VRF MANUFACTURER AND INSTALL BY EMCS CONTRACTOR, WHICH CONNECT INDOOR FAN COIL UNIT AND ELECTRIC BASEBOARD HEATER IN SAME ROOM.

1 460 CONTROL SCHEMATIC DIAGRAM - VRF SYSTEM
SCALE: 1:50

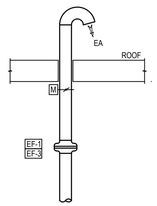


CONTROL POINTS - DOAS-1

LABEL	DESCRIPTION	TYPE	DEVICE	UNIT	TERMINAL/DEVICE TO BE SUPPLIED AND INSTALLED BY UNIT MANUFACTURER	DEVICE TO BE SUPPLIED AND INSTALLED BY EMCS CONTRACTOR	REMARKS
DOAS-1_SF-E	SUPPLY FAN ENABLE	DO	ECM	START/STOP	YES		
DOAS-1_SF-S	SUPPLY FAN SPEED	AO	ECM	%	YES		REFER TO NOTE 4 IN DEDICATED OUTDOOR AIR UNIT SCHEDULE ON DRAWING 401.
DOAS-1_SAT	SUPPLY AIR TEMPERATURE	AI	TEMPERATURE SENSOR	°C		YES	
DOAS-1_EC-M	ELECTRIC COIL MODULATION	AO	SCR	% HEAT	YES		
DOAS-1_OAD	OUTDOOR AIR DAMPER	DO	ACTUATOR	OPEN/CLOSE	YES		
DOAS-1_F	FILTER	DI	DIFFERENTIAL PRESSURE SWITCH	OK/DIRTY	YES		
DOAS-1_AP	AIRFLOW PROVING	DI	AIRFLOW SWITCH	AIR/NO AIR	YES		

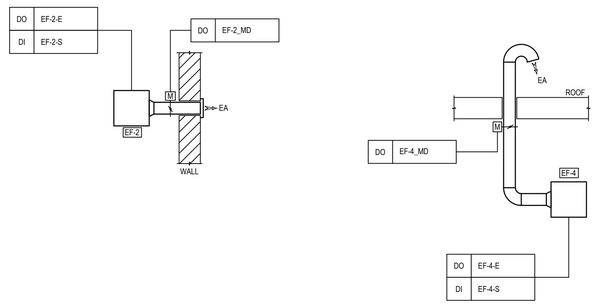
NOTES
1. ALL DEVICES SHOWN IN THIS TABLE SHALL BE CONTROLLED OR MONITORED FROM BAS CONTROL PANELS.

2 460 CONTROL SCHEMATIC DIAGRAM - DOAS-1
SCALE: N.T.S.



NOTES:
1. EF-1/3 AND ASSOCIATED MOTORIZED DAMPERS SHALL NOT BE CONTROLLED BY BAS.
2. MOTORIZED DAMPER SHALL BE C/W 24V ENDSWITCH.
3. MOTORIZED DAMPER SHALL BE HARDWIRED TO THE FAN CONTACT SUCH THAT FAN WILL NOT START UNTIL DAMPER IS CONFIRMED OPEN.
4. COORDINATE WITH DIV. 26.

3 460 CONTROL SCHEMATIC DIAGRAM - POST-DISCHARGE PURGING FANS
SCALE: N.T.S.



NOTES:
1. MOTORIZED DAMPER SHALL BE C/W 24V ENDSWITCH.
2. MOTORIZED DAMPER SHALL BE HARDWIRED TO THE FAN CONTACT SUCH THAT THE ENABLE POINT WILL OPEN THE DAMPER AND THE DAMPER ENDSWITCH WILL START THE FAN.
3. COORDINATE WITH DIV. 26.

CONTROL POINTS - GENERAL VENTILATION FANS

LABEL	DESCRIPTION	TYPE	SENSOR/DEVICE	UNITS	REMARKS
EF-2-E	EXHAUST FAN ENABLE	DO	RELAY	START/STOP	
EF-2-S	EXHAUST FAN STATUS	DI	CURRENT SWITCH	ON/OFF	
EF-2_MD	MOTORIZED DAMPER	DO	ACTUATOR	OPEN/CLOSE	
EF-4-E	EXHAUST FAN ENABLE	DO	RELAY	START/STOP	
EF-4-S	EXHAUST FAN STATUS	DI	CURRENT SWITCH	ON/OFF	
EF-4_MD	MOTORIZED DAMPER	DO	ACTUATOR	OPEN/CLOSE	

4 460 CONTROL SCHEMATIC DIAGRAM - GENERAL VENTILATION FANS
SCALE: N.T.S.

National Defence / Défense nationale

Headquarters
Quartier général

NO.	DATE	REVISION	APPR.
5	2026/05/25	ISSUED FOR TENDER	M.M
4	2026/03/30	ISSUED FOR 100% SUBMISSION	M.M
3	2025/12/09	RE-ISSUED FOR 99% SUBMISSION	M.M
2	2025/10/21	ISSUED FOR 99% REVIEW	M.M
1	2025/07/22	ISSUED FOR 60% REVIEW	M.M

LICENSED PROFESSIONAL ENGINEER
Y. MA
100068580
2026-05-25
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

TRADE - MÉTIER
MECHANICAL

DATE
2026/05/25

SUBJECT - SUJET
CONTROL SCHEMATIC DIAGRAMS

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: W. QIU		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: C. JOHNSTON		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: M. MA	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 - 460	

Canada

GENERAL NOTES

1. PROCUREMENT:
   UPON SHOP DRAWING APPROVAL, THE CONTRACTOR SHALL PROVIDE DCC REPRESENTATIVE WITH SUFFICIENT OFFICIAL PROOF, IN WRITING, CONFIRMING THE MATERIALS HAVE BEEN ORDERED AND INDICATING THE EXPECTED DELIVERY DATE TO SITE.
2. CONTRACTOR IS RESPONSIBLE FOR USING PROPER LOCK OUT / TAG OUT PROCEDURES WHILE WORKING AT THIS FACILITY. CONTRACTOR TO DEMONSTRATE TO THE DCC REPRESENTATIVE, THEIR LOCK OUT / TAG OUT PROCEDURES BEFORE STARTING ANY WORK AT THE FACILITY.
3. ALL SURFACE MOUNT CONDUIT SHALL BE PAINTED TO MATCH COLOUR OF SURFACE IT IS ROUTED ON.
4. POWER SHUTDOWNS TO BE COORDINATED WITH DCC REPRESENTATIVE WITH MINIMUM 2 WEEK NOTICE. ALL POWER SHUTDOWN WORK TO BE COMPLETED DURING WEEKEND [NON-REGULAR WORKING HOURS].
5. CIRCUIT BREAKERS KA RATING SHALL MATCH EXISTING PANELBOARD RATINGS ONSITE.
6. PROVIDE LAMACOID LABELS FOR ALL POWER DISTRIBUTION EQUIPMENT, INCLUDING DISCONNECT SWITCHES, 4.76MM MINIMUM TEXT HEIGHT, WHITE LAMACOID WITH BLACK CHARACTERS. TAG SHALL INDICATE ELECTRICAL EQUIPMENT TAG, ELECTRICAL CHARACTERISTICS, ASSOCIATED MECHANICAL EQUIPMENT (WHEN APPLICABLE), CIRCUIT AND FED FROM 'XXXX'.
7. CONTRACTOR SHALL RESTORE WORKSITE AND MAKE GOOD ALL FINISHES.
8. CONFORM TO REQUIREMENTS OF THE GENERAL CONDITIONS. PROVIDE ALL LABOUR, MATERIALS, PRODUCTS, EQUIPMENT, SERVICES AND ALL INCIDENTALS REQUIRED TO COMPLETE, TEST AND COMMISSION ALL ELECTRICAL WORK SHOWN ON THE DRAWINGS AND/OR NOTED HEREUNDER. ELECTRICAL WORK SHALL BE CARRIED OUT BY A CONTRACTOR HOLDING A VALID CONTRACTOR'S LICENSE AND QUALIFIED ELECTRICIANS WHO HOLD VALID ONTARIO CERTIFICATES OF QUALIFICATION.
9. ALL WORK SHALL BE IN FULL ACCORDANCE WITH APPLICABLE CODES, LAWS AND REGULATIONS.
10. WHEN CONDUIT PENETRATES WALLS, SEAL TO MINIMIZE AIR TRANSFER AND MAINTAIN FIRE RATING UNLESS NOTED OTHERWISE.
11. ALL DIMENSIONS ARE UNITS OF METRIC UNLESS NOTED OTHERWISE.
12. ALL VISIBLE CONDUIT, JUNCTION BOXES, DEVICES AND FIXTURES SHALL BE CLEANED OF HANDPRINTS, STICKERS, PRODUCTION LABELS AND SIMILAR.
13. COORDINATE ELECTRIC HEATER EXACT MOUNTING HEIGHT WITH DCC REPRESENTATIVE ONSITE.

DEMOLITION GENERAL NOTES

1. TRACE ALL CIRCUITS AFFECTED BY THE DEMOLITION. REVISE CIRCUITING TO RENOVATED AREAS AS INDICATED. MAINTAIN CIRCUIT PATH FOR UNAFFECTED PORTION OF CIRCUITS BY ADDING CONCEALED WIRE AND CONDUIT AS REQUIRED.
2. NOT ALL ITEMS TO BE REMOVED OR RELOCATED ARE SHOWN FOR CLARITY. THIS CONTRACTOR SHALL VERIFY ON SITE ALL ITEMS AFFECTED BY THIS WORK.
3. REMOVE AND SAFELY DISPOSE OF ALL ABANDONED WIRING AND CONDUIT ALL THE WAY BACK TO SOURCE OR PANEL AND MAKE SAFE.
4. CONTRACTOR SHALL ALLOW FOR PATCHING, REPAIRING AND PAINTING WALLS AND CEILINGS TO MATCH EXISTING WHEN REQUIRED FOR ALL WALL AND CEILING MOUNTED FIXTURE REPLACEMENT.
5. ALL PENETRATIONS IN FIRE RATED ASSEMBLIES SHALL BE FIRESTOPPED WITH THE SAME FIRE RATING AS THE ASSEMBLY THAT IT PENETRATES.
6. ALL ITEMS TO BE DEMOLISHED MAY NOT BE SHOWN. CONTRACTOR TO ALLOW FOR REMOVAL OF ALL SYSTEMS AND DEVICES NOT SHOWN TO BE RE-USED OR TO REMAIN, INCLUDING ASSOCIATED CONDUITS, BOXES AND WIRING.

ELECTRICAL SITE WORKS GENERAL NOTES

1. ALL EXISTING UNDERGROUND SERVICES ARE NOT SHOWN ON THIS DRAWING FOR CLARITY. COORDINATE EXACT UNDERGROUND ROUTING ONSITE WITH OTHER TRADES AND WITH EXISTING UNDERGROUND SERVICES (GAS, WATER, SEWER ETC.). REFER TO RELATED SITE SERVICES DRAWINGS. ALTERNATE ROUTING PROPOSALS SHALL RECEIVE APPROVAL SIGN-OFF FROM DCC REPRESENTATIVE.
2. ELECTRICAL DUCT BANK SHALL BE INSTALLED WITH A MINIMUM 1 METER CLEARANCE FROM ALL OTHER SERVICES. WHERE THIS SEPARATION CANNOT BE ACHIEVED ADVISE DCC REPRESENTATIVE. WHEN ELECTRICAL DUCT BANK IS ROUTED WITHIN 1 METER OF ENBRIDGE NATURAL GAS LINE THE CONTRACTOR SHALL FOLLOW ENBRIDGE'S REQUIREMENTS. MECHANICAL EXCAVATION IS NOT PERMITTED WITHIN 3m OF PIPELINE UNLESS VERIFIED AND EXACT LOCATION HAS BEEN DETERMINED. VERTICAL AND HORIZONTAL CLEARANCES SHALL BE AS PER ENBRIDGE'S REQUIREMENTS AS IT RELATES TO THE GAS PIPE SIZE AND PRESSURE.
3. ALL NECESSARY ESA INSPECTIONS TO BE COORDINATED BY THIS CONTRACTOR AS REQUIRED.
4. EXCAVATION, BACKFILL, CONCRETE AND REINFORCEMENT WORK ASSOCIATED WITH THE ELECTRICAL INSTALLATION TO BE BY GENERAL CONTRACTOR.
5. PROVIDE RISES AND DROPS IN CONDUIT RUN AS REQUIRED TO ACCOMMODATE CHANGES IN ELEVATION AND EXISTING UNDERGROUND SERVICES. REPORT ALL CHANGES IN DIRECTION TO DCC REPRESENTATIVE PRIOR TO INSTALLATION. LOW SPOTS AND SUDDEN CHANGES IN DIRECTION WILL NOT BE ACCEPTED.
6. COORDINATE ELECTRICAL SHUTDOWN WITH DCC REPRESENTATIVE.
7. RESTORATION: UPON COMPLETION OF CLEANUP, GRADE SURFACE AS INDICATED OR RESTORE TO ORIGINAL CONDITIONS. REPLACE TOPSOIL AND PREPARE FOR RESTORATION OF LAWNS. REFER TO CIVIL DRAWINGS AND SPECIFICATIONS FOR FURTHER DETAILS. IF RETAINING WALL IS ALTERED THEN RESTORE TO MATCH EXISTING.
8. ALL DUCT BANKS AT ROAD AND ENTRANCE CROSSINGS SHALL BE CONCRETE ENCASED.
9. ALL ELECTRICAL WORK COMPLETED AS PART OF THIS WORK MUST MEET THE REQUIREMENTS OF THE ONTARIO ELECTRICAL SAFETY CODE (OESC) LATEST REVISION. ALL WORK SHALL BE INSPECTED BY ESA. ALL NEW INSTALLATIONS REQUIRE CONNECTION AUTHORIZATION FROM ESA BEFORE ENERGIZATION OF SOURCE OF POWER. CONTRACTOR SHALL REFER TO ELECTRIC UTILITY FOR CONNECTION REQUIREMENTS FOR ELECTRICAL SITE SERVICES, THIS WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE ELECTRIC UTILITY REQUIREMENTS.
10. ALL MATERIAL AND INSTALLATION SHALL MEET THE CSA SPECIFICATIONS AND DETAILS.
11. IF NECESSARY FOR CONTRACTOR TO WORK WITHIN 3 METERS OF HIGH VOLTAGE HYDRO LINES OR ENBRIDGE NATURAL GAS CONTRACTOR SHALL COORDINATE WITH UTILITY TO HAVE THE APPROPRIATE REPRESENTATIVE AUTHORITY OWNER PRESENT FOR THEIR ASSISTANCE/ADVICE TO COMPLETE THE WORK.
12. WIRING IDENTIFICATION SHALL BE COLOUR CODED TO CSA C22.1. (BLACK, RED, BLUE, WHITE AND GREEN)
13. ALL OVERHEAD AND UNDERGROUND WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE ONTARIO ELECTRICAL SAFETY CODE AND CAN/CSA-C22.3 NO.7-15 AND NO. 1-20.
14. ALL WIRING SHALL BE CU RWU90 XLPE WITH 1000V INSULATION UNLESS APPROVED OTHERWISE. SIZING AS NOTED ON THE DRAWINGS.
15. ALL TERMINATIONS SHALL BE IN ACCORDANCE WITH CSA C22.2 NO. 41-22 AND NO. 65-18.
16. ALL UNDERGROUND CONDUIT SHALL BE RIGID DB2 PVC CONDUIT RATED FOR DIRECT BURIED OF CONCRETE ENCASEMENT TO CSA C22.2 NO. 211.1. ALL 90 DEGREE BENDS SHALL BE LONG SWEEP FITTINGS. ALL CONDUIT EXPOSED ABOVE GRADE SHALL BE UV RESISTANT. CONTRACTOR SHALL PROVIDE WEATHERPROOF EXPANSION FITTINGS FOR RIGID CONDUIT WITH INTERNAL BONDING ASSEMBLY SUITABLE FOR 200MM LINEAR EXPANSION AT ENTRY TO FUSED DISCONNECT.

ELECTRICAL LEGEND - LINE TYPES

LINE TYPE	DESCRIPTION
	NEW ITEM TO BE PROVIDED
	EXISTING ITEM TO REMAIN
	ITEM TO BE DEMOLISHED
— — — S — — — S —	SECONDARY UNDERGROUND DUCT
— — — — P — — — —	PRIMARY UNDERGROUND DUCT
— · — · — · — · — · —	LOW VOLTAGE CONNECTION
— — x — — — x — —	EXISTING FENCE LINE
— — — — COM — — — —	UNDERGROUND COMMUNICATIONS DUCT
SAN	SANITATION LINE
W	WATER LINE
F	FIRE ALARM DUCT
. . . . .	LIGHTING ZONE
— — — — G — — — —	GAS LINE

ELECTRICAL LEGEND - LIGHTING

SYMBOL	DESCRIPTION
	RECESSED MOUNTED LINEAR LUMINARIE - SIZE AND TYPE AS PER LUMINARE SCHEDULE
	SURFACE MOUNTED LINEAR LUMINAIRE - SIZE AND TYPE AS PER LUMINAIRE SCHEDULE
	SUSPENDED MOUNTED LINEAR LUMINAIRE - SIZE AND TYPE AS PER LUMINAIRE SCHEDULE
	WALL MOUNTED LINEAR LUMINARE - SIZE AND TYPE AS PER LUMINAIRE SCHEDULE
	WALL MOUNTED LUMINAIRE - SIZE AND TYPE AS PER LUMINAIRE SCHEDULE
	RECESSED MOUNTED DOWNLIGHT LUMINAIRE - SIZE AND TYPE AS PER LUMINAIRE SCHEDULE
	SURFACE MOUNTED DOWNLIGHT LUMINAIRE - SIZE AND TYPE AS PER LUMINAIRE SCHEDULE

ELECTRICAL LEGEND - SITE PLAN

SYMBOL	DESCRIPTION
	TRANSFORMER
C	COMMUNICATIONS MANHOLE
JB	JUNCTION BOX
	GATE CONTROL POST
	GATE OPERATOR
GEN	GENERATOR

LIGHTING NOTES

1. CONTRACTOR IS TO INVESTIGATE AND VERIFY VOLTAGES BEFORE ORDERING OR INSTALLING ANY MATERIAL. CONTRACTOR TO CARRY ALL COSTS TO MAKE ANY MODIFICATIONS TO EXISTING WIRING AND SERVICE TO SUPPORT THE NEW LIGHT FIXTURE. CONTRACTOR WILL CARRY COSTS FOR ALL NECESSARY ACCESSORIES REQUIRED TO COMPLETE THE WORK INCLUDING TRANSFORMERS. CONTRACTOR SHALL ALLOW FOR NEW SEISMIC CHAINS TO BE ATTACHED TO EXISTING STRUCTURE FOR ALL NEW FIXTURES.
2. CONTRACTOR SHALL ALLOW TO DEMONSTRATE NEW EMERGENCY LIGHTING OPERATING TO DCC REPRESENTATIVE.
3. EXACT LIGHTING LAYOUT TO BE DETERMINED ON SITE TO SUIT EXISTING CONDITIONS. ADJUST GRID AND PROVIDE NEW SUPPORTS AND TILES AS REQUIRED. REPORT ANY DISCREPANCIES TO DCC REPRESENTATIVE FOR APPROVAL.
4. ALL FIXTURES AND DEVICES TO BE CONSIDERED NEW UNLESS OTHERWISE SPECIFIED.

ELECTRICAL LEGEND - POWER DISTRIBUTION

SYMBOL	DESCRIPTION
	DUPLEX RECEPTACLE 120V, 15A, 'U' GROUND
	DUPLEX RECEPTACLE WITH INTEGRAL GFI PROTECTION, 120V, 15A, 'U' GROUND
WP	120V, 15A, 'U' GROUND DUPLEX RECEPTACLE WITH INTEGRAL GFI PROTECTION MOUNTED IN WEATHERPROOF ENCLOSURE C/W WHILE-IN-USE COVER
	DUPLEX RECEPTACLE 120V, 20A, 'U' GROUND
	DUPLEX RECEPTACLE WITH INTEGRAL GFI PROTECTION, 120V, 20A, 'U' GROUND
HK	DUPLEX HOUSEKEEPING RECEPTACLE 120V, 20A, 'U' GROUND
X-XXR	SPECIAL NON-LOCKING RECEPTACLE 'X-XXR' DENOTES CSA CONFIGURATION TYPE
PP	POWER POLE
	120V SINGLE PHASE DIRECT CONNECTION
	208V SINGLE PHASE DIRECT CONNECTION
	208V THREE PHASE DIRECT CONNECTION
	PANELBOARD, SURFACE MOUNTED
	PANELBOARD, FLUSH MOUNTED
	EMERGENCY RELEASE PUSH-BUTTON
	EMERGENCY LIGHT
	UNFUSED DISCONNECT SWITCH
	FUSED DISCONNECT SWITCH
	TRANSFORMER
	COMBINATION MOTOR STARTER C/W PILOT LIGHT
	BASEBOARD HEATER
	GROUND BAR
F	FAN CONTROL TOGGLE SWITCH
	RECESSED WALL FAN HEATER
	ABORT PUSH BUTTON

ELECTRICAL LEGEND - FIRE ALARM

SYMBOL	DESCRIPTION
FACP	FIRE ALARM CONTROL PANEL
FARP	FIRE ALARM RELEASE PANEL
RB	FIRE ALARM SMOKE DETECTOR; 'RB' DENOTES RELAY BASE
	FIRE ALARM THERMAL DETECTOR - FIXED TEMPERATURE
	FIRE ALARM COMBINATION HORN / STROBE
	FIRE ALARM MANUAL PULL STATION
SV	FIRE ALARM SUPERVISED VALVE
FS	FIRE ALARM FLOW SWITCH
	EMERGENCY STROBE
	FIRE ALARM BELL
MM	MONITORING MODULE
FI	ISOLATION MODULE
	CEILING MOUNTED STROBE, BLUE LENS
	FIRE ALARM EXTERIOR HORN
VSD	VESDA

DRAWING LIST

501	ELECTRICAL SCOPE, GENERAL NOTES, LEGENDS AND DRAWING LIST
502	ELECTRICAL DEMOLITION - SITE PLAN
503	ELECTRICAL NEW WORK - SITE PLAN
504	ELECTRICAL - SITE PLAN DETAILS
505	ELECTRICAL DEMOLITION - LIGHTING & FIRE ALARM FLOOR PLAN
506	ELECTRICAL DEMOLITION - POWER & SYSTEMS FLOOR PLAN
507	ELECTRICAL NEW WORK - LIGHTING FLOOR PLAN & SCHEDULES
508	ELECTRICAL - LIGHTING CONTROL DETAILS
509	ELECTRICAL NEW WORK - POWER FLOOR PLAN & PANEL SCHEDULES
510	ELECTRICAL NEW WORK - POWER ROOF PLAN & MECHANICAL SCHEDULE
511	ELECTRICAL - SINGLE LINE DIAGRAM
512	ELECTRICAL - FLOOR PLAN DETAILS
513	ELECTRICAL NEW WORK - FIRE ALARM & RISER DIAGRAM
700	ELECTRICAL NEW WORK - TELECOMMUNICATIONS FLOOR PLAN & DETAILS
800	ELECTRICAL NEW WORK - NETWORK COMMUNICATIONS FLOOR PLAN
801	ELECTRICAL NEW WORK - NETWORK COMMUNICATIONS FLOOR PLAN & DETAILS

ELECTRICAL LEGEND - NOTATION

ACRONYM	DESCRIPTION
AFF	ABOVE FINISHED FLOOR
AH	DEVICE MOUNTED 305mm ABOVE HEATER
EF	EXHAUST FAN
HWT	HOT WATER TANK
MH	MOUNTING HEIGHT
OC	DEVICE MOUNTED 150mm ABOVE COUNTER
GND	GROUND
RB	RELAY BASE
TX	TRANSFORMER
UC	UNDERCOUNTER
VFD	VARIABLE FREQUENCY DRIVE
WP	WEATHER-PROOF
XX-YY-ZZ	'XX' DENOTES PANEL; 'YY' DENOTES CIRCUIT NUMBER; 'ZZ' DENOTES SWITCH NUMBER
(E)	EXISTING ITEM INCLUDED IN BASE BUILDING. INDICATED TO REMAIN.
(EC)	EXISTING ITEM INDICATED TO REMAIN. RE-WIRE TO ACCOMMODATE CIRCUITS/SWITCHING SHOWN. DISCONNECT EXISTING ITEM INDICATED AND MAKE SAFE.
(ER)	RELOCATE / REUSE ITEM - EXISTING LOCATION
(N)	INDICATES NEW DEVICE
(R)	DISCONNECT AND REINSTALL EXISTING ITEM TO ACCOMMODATE NEW CONSTRUCTION
(RC)	RELOCATE / REUSE ITEM - NEW LOCATION. PROVIDE NEW WIRING/SWITCHING AS SHOWN.
(RR)	REMOVE AND REPLACE WITH NEW UNIT
(X)	DISCONNECT AND DISPOSE OF ITEM. REMOVE ALL ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE AND MAKE SAFE.
HK	HOUSE KEEPING
DS	DISCONNECT SWITCH
CM	COMBINATION MAGNETIC MOTOR STARTER

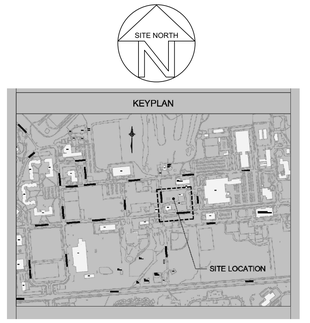
SCOPE OF WORK

WORK COVERED BY CONTRACT THIS CONTRACTOR:

1. DEMOLITION AND REMOVAL OF EXISTING ELECTRICAL SYSTEMS AND DISCONNECTION OF MECHANICAL SYSTEMS.
2. REPLACEMENT OF THE EXISTING ELECTRICAL SERVICE ENTRANCE AND PROVISION OF NEW PADMOUNT TRANSFORMER AND MAIN DISTRIBUTION BOARD.
3. NEW STANDBY GENERATING SET AND AUTOMATIC TRANSFER SWITCH.
4. NEW BUILDING POWER DISTRIBUTION SYSTEM.
5. NEW UNDERGROUND TRENCHING AND DUCT BANK.
6. NEW INTERIOR LIGHTING, LIGHTING CONTROLS AND EXTERIOR LIGHTING.
7. NEW FIRE ALARM SYSTEM.
8. ELECTRICAL CONNECTION OF NEW PRE-ACTION SPRINKLER SYSTEM AND CLEAN AGENT SUPPRESSION SYSTEM.
9. ELECTRICAL CONNECTION OF NEW HVAC EQUIPMENT AND EXHAUST FANS.
10. NEW VOICE/DATA COMMUNICATIONS INFRASTRUCTURE.
11. RELOCATION AND CONNECTION OF GATE OPERATION EQUIPMENT.
12. INSTALLATION OF SECURITY INFRASTRUCTURE.
13. EXTENSION OF COMMUNICATIONS DUCT BANK TO ROOM 106.

National Defence / Défense nationale

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NO.	DATE	REVISION	APPR.
5	2026/05/25	ISSUED FOR TENDER	R.K.
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1	2025/07/22	ISSUED FOR 60% REVIEW	R.K.

LICENSED PROFESSIONAL ENGINEER
2026-05-25
R. F. KONG
100131490
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

TRADE - MÉTIER: ELECTRICAL
DATE: 2026/03/30

SUBJECT - SUJET
ELECTRICAL SCOPE, GENERAL NOTES, LEGENDS AND DRAWING LIST

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: R. KONG		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: S. AUSTEN		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: P. SCISSONS	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 - 501	

Canada



1/502 SITE PLAN - DEMOLITION
SCALE: 1:250

DEMOLITION NOTES

A. CONTRACTOR TO DISCONNECT AND REMOVE WIRING BACK TO TX 'T-7B' AND MAKE SAFE. CONDUIT TO BE REMOVED TO THE POINT OF THE CONDUIT SPLIT IN THE DUCT BANK AND CAPPED AND STAKED. PATCH AND REPAIR EXISTING BUILDING SERVICE ENTRANCE POINTS AND MAKE WATER TIGHT.

B. GATE ELECTRIC STRIKE, OPERATOR, SENSORS AND GATE CONTROLLER TO BE ELECTRICALLY DISCONNECTED AND RE-USED IN NEW LOCATION. AREAS WHERE EQUIPMENT HAS BEEN REMOVED WILL BE RESTORED TO ORIGINAL CONDITION. SEE CIVIL DRAWINGS.

C. EXISTING DUCTS TO BE RE-ROUTED TO NEW GATE OPENER AND GATE CONTROLLER LOCATIONS. CONDUIT AND CABLING TO BE RE-USED.

D. EXISTING ELECTRICAL SERVICE TO TRAILER TO BE DEMOLISHED. REMOVE CABLE BACK TO TX 'T-7B'. CAP AND STAKE CONDUIT.

E. GRASS AND PAVED AREAS WHERE FENCE POST HAS BEEN REMOVED WILL BE RESTORED TO ORIGINAL CONDITION. REFER TO CIVIL DRAWINGS.

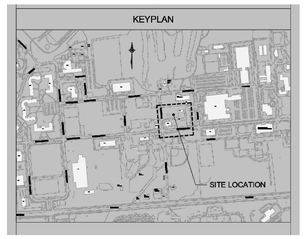
F. DEMOLISH DUCT BANK BACK TO THIS POINT AND STAKE THE LOCATION. PULL BACK EXISTING COMMUNICATIONS CABLING COIL FOR TERMINATION IN NEW MANHOLE. REFER TO NEW WORK ON DRAWING S03 FOR FURTHER DETAILS. PATCH AND REPAIR EXISTING BUILDING ENTRANCE POINTS AND MAKE WATER TIGHT.

National Defence / Défense nationale

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Quartier général

SITE NORTH

KEYPLAN



NO.	DATE	REVISION	APPR.
5	2026/05/25	ISSUED FOR TENDER	R.K.
4	2026/03/30	ISSUED FOR 100% SUBMISSION	R.K.
3	2025/12/09	RE-ISSUED FOR 99% SUBMISSION	R.K.
2	2025/10/21	ISSUED FOR 99% REVIEW	R.K.
1	2025/07/22	ISSUED FOR 60% REVIEW	R.K.

LICENSED PROFESSIONAL ENGINEER
2026-05-25
R. F. KONG
100131490
Robert Kong
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

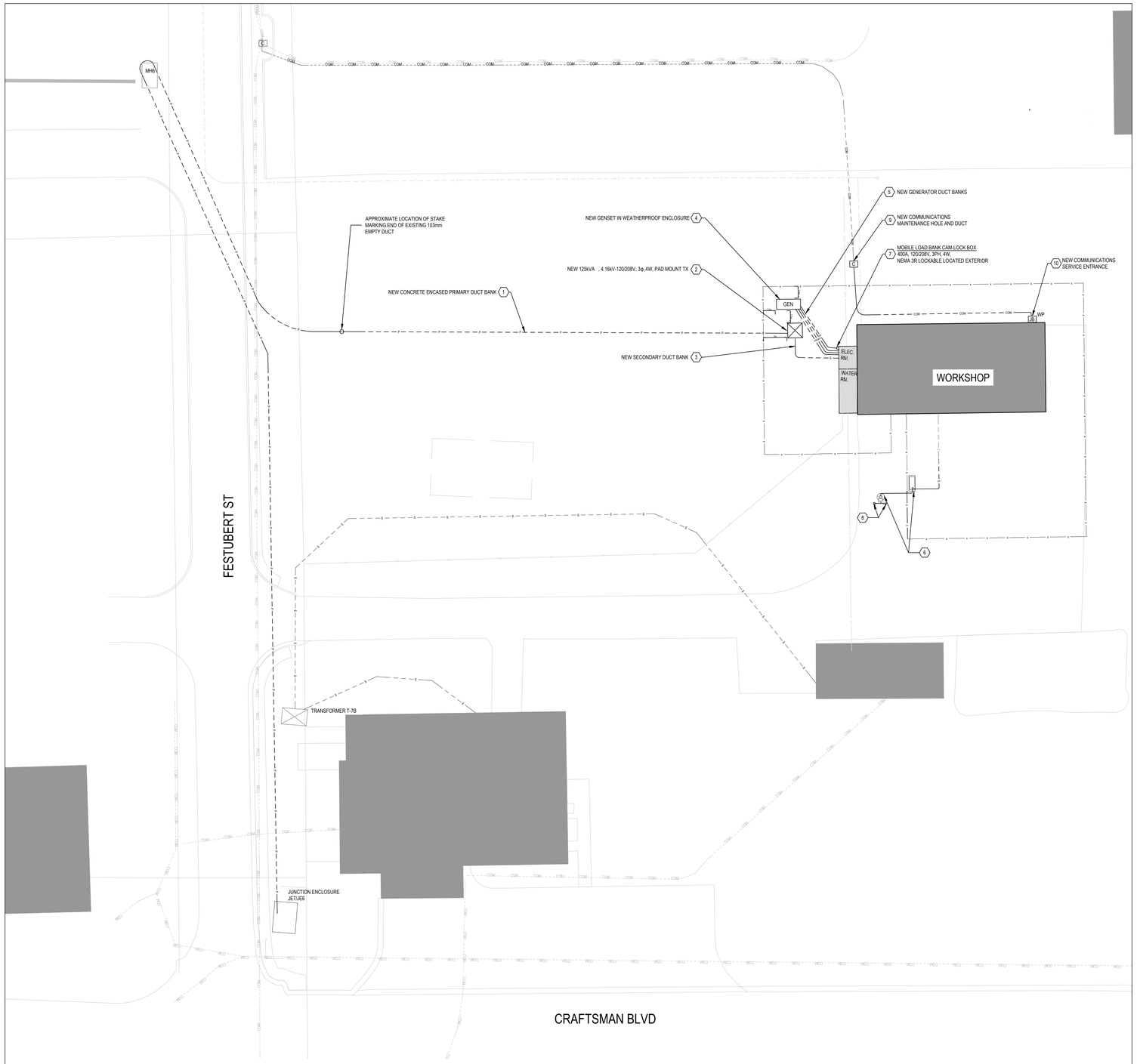
TRADE - MÉTIER
ELECTRICAL

DATE
2026/03/30

SUBJECT - SUJET
ELECTRICAL DEMOLITION - SITE PLAN

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: R. KONG		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: S. AUSTEN		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: P. SCISSONS	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 -502	

Canada



1/503 SITE PLAN - NEW WORK
SCALE: 1:250

CONSTRUCTION NOTES

1. NEW TRANSFORMER PRIMARY DUCT BANK:
CONTRACTOR TO LOCATE AND INTERCEPT EXISTING BURIED 103mm DUCT BANK AND EXTEND TO PAD MOUNT TRANSFORMER AS SHOWN. COORDINATE ROUTE OF NEW DUCT BANK WITH OTHER SERVICES. SEE CONCRETE BURIED DUCT BANK DETAIL #1 'AA' ON DRAWING 504. PROVIDE NEW PRIMARY CONDUCTORS AS PER SINGLE LINE DIAGRAM ON DRAWING 511.

2. NEW 125kVA, 4.16kV-120/208V, 3ph, 4W TRANSFORMER:
PROVIDE NEW PAD MOUNT TRANSFORMER, PRECAST CONCRETE BASE AND GROUNDING GRID AS PER DETAIL #3 ON DRAWING 504. TERMINATE PRIMARY AND SECONDARY CONDUCTORS. INSTALL TRANSFORMER A MINIMUM OF 3m AWAY FROM FENCE TO AVOID BONDING REQUIREMENTS.

3. NEW TRANSFORMER SECONDARY DUCT BANK:
PROVIDE 3 X 78mm DIRECT BURIED DUCT BANK (ONE SPARE) AS PER DETAIL #2 ON DRAWING 504 FORMATION '88F' FROM TRANSFORMER TO ELECTRICAL ROOM MAIN DISCONNECT SWITCH. PROVIDE SECONDARY CONDUCTORS AS PER SINGLE LINE DIAGRAM ON DRAWING 511.

4. NEW STANDBY GENSET:
PROVIDE 156kVA/125kW, 120/208V, 3φ, 4W NATURAL GAS STAND-BY GENERATOR IN A SKIN-TIGHT WEATHERPROOF AND SOUND ATTENUATED LEVEL 2 ENCLOSURE ON CONCRETE PAD. REFER TO STRUCTURAL DRAWINGS FOR CONCRETE PAD REQUIREMENTS.

5. GENERATOR TO ELECTRICAL ROOM DUCT BANK:
PROVIDE THE FOLLOWING DIRECT BURIED DUCT BANKS C/W CONDUCTORS FROM GENERATOR TO MAIN ELECTRICAL ROOM:
2 X 78mm POWER FROM GEN TO ATS
1 X 53mm GEN CIRCUITS (BLOCK HEATER, BAT. CHARGER)
1 X 53mm FIRE ALARM
1 X 53mm COMMS/CONTROLS
2 X 78mm TO LOAD BANK CAMLOCK REFER TO DETAIL #2 ON DRAWING 504. REFER TO SINGLE LINE DIAGRAM ON DRAWING 511 FOR FURTHER DETAILS.

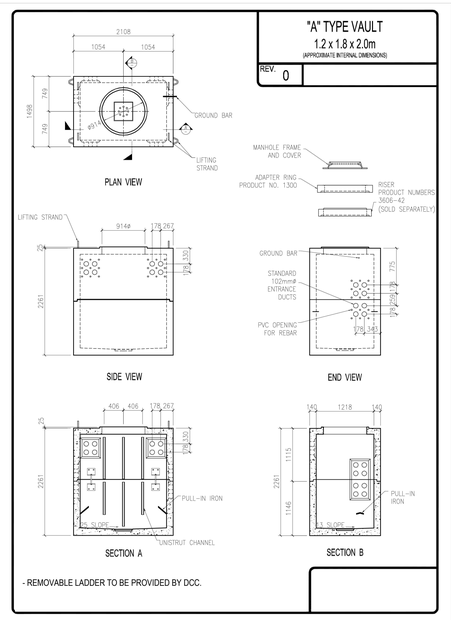
6. GATE OPENER AND CONTROL POST
INTERCEPT AND PROVIDE NEW 3 X 53mm CONCRETE BURIED CONDUITS FROM BUILDING TO RELOCATED GATE CONTROLLER FOR POWER AND CONTROLS. REFER TO DETAIL #1 FORMATION 'BA' AND DETAIL #6 ON DRAWING 504. PROVIDE NEW POWER WIRING AND PULL ROPE FOR CONTROLS AS REQUIRED. POWER TO BE PROVIDE FROM PANEL P1 CIRCUITS 24 AND 26.

7. GENERATOR TO MOBILE LOAD BANK DUCT BANK:
PROVIDE TWO 78mm DUCT BANKS TO BE ROUTED FROM GENSET TO MOBILE LOAD BANK. SEE DETAIL #2 'BA' ON DRAWING 504.

8. GATE CONTROL POST BOLLARDS:
PROVIDE CAST-IN-PLACE CONCRETE BASE AND TWO PROTECTIVE BOLLARDS AS PER DETAIL #5 ON DRAWING 504.

9. NEW COMMUNICATIONS MAINTENANCE HOLE AND DUCT:
INTERCEPT EXISTING DUCT BANK AT STAKED LOCATION AND PROVIDE NEW MAINTENANCE HOLE C/W 909mm TOP PAD AND WATERTIGHT FRAME AND COVER WITH CUSTOM TEXT EMBOSSING TO READ 'COMMUNICATIONS'. SEE DETAIL #2 ON THIS DRAWING.
PROVIDE TWO 103mm COMMUNICATIONS DUCTS FROM COMMUNICATIONS MAINTENANCE HOLE TO IT ROOM. PROVIDE PULL CORD. COMMUNICATIONS PULLING AND CABLE SPLICING DONE BY DCC TELECOM CONTRACTOR. COORDINATE WITH OTHER BURIED SERVICES. SEE DETAIL #2 'BA' ON DRAWING 504. BOND ALL RACK SUPPORTS/SPLICES WITH #6AWG TO MH GROUND BAR. PULL #2/0 GROUND FROM MH GROUND BAR TO MAIN GROUND IN ROOM 106.

10. NEW COMMUNICATIONS SERVICE ENTRANCE:
PROVIDE TWO NEW 103mm CONDUITS FOR SEPARATE NETWORKS 1 & 2. CONNECT TO TWO NEW WEATHERPROOF NEMA 4X JUNCTION BOX 610mm X 610mm X 250mm MOUNTED ON BUILDING WALL. REFER TO DETAIL #4 ON DRAWING 504 FOR ELEVATION VIEW.



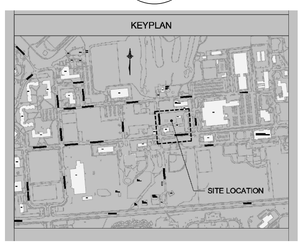
2/503 MAINTENANCE HOLE DETAIL
SCALE: N.T.S.

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LICENSED PROFESSIONAL ENGINEER
2026-05-25
R. F. KONG
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Robert Kong
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

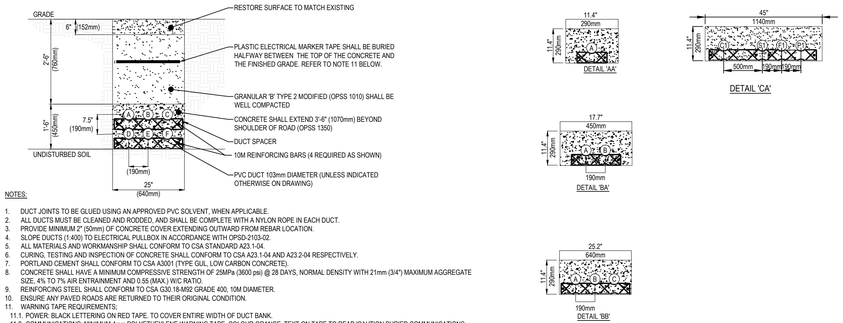
TRADE - MÉTIER
ELECTRICAL

DATE
2026/03/30

SUBJECT - SUJET
ELECTRICAL NEW WORK - SITE PLAN

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: R. KONG		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: S. AUSTEN		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: P. SCISSONS	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 -503	

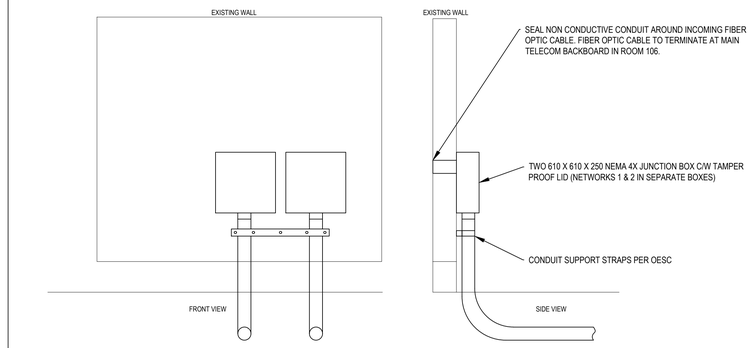
Canada



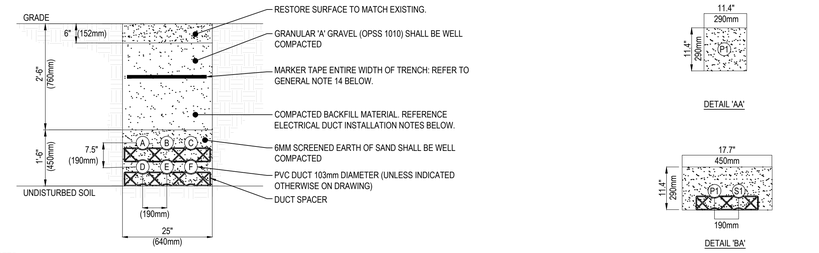
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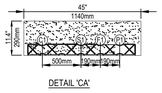
1. DUCT JOINTS TO BE GLUED USING AN APPROVED PVC SOLVENT, WHEN APPLICABLE.
2. ALL DUCTS MUST BE CLEANED AND RODDED, AND SHALL BE COMPLETE WITH A NYLON ROPE IN EACH DUCT.
3. PROVIDE MINIMUM 2" (50mm) OF CONCRETE COVER EXTENDING OUTWARD FROM REBAR LOCATION.
4. SLOPE DUCTS (1:400) TO ELECTRICAL PULLBOX IN ACCORDANCE WITH OPSD-2103-02.
5. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO CSA STANDARD A23.1-04.
6. CURING, TESTING AND INSPECTION OF CONCRETE SHALL CONFORM TO CSA A23.1-04 AND A23.2-04 RESPECTIVELY.
7. PORTLAND CEMENT SHALL CONFORM TO CSA A3001 (TYPE GUL, LOW CARBON CONCRETE).
8. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 25MPa (3600 psi) @ 28 DAYS, NORMAL DENSITY WITH 21mm (3/4") MAXIMUM AGGREGATE SIZE, 4% TO 7% AIR ENTRAINMENT AND 0.55 (MAX.) W/C RATIO.
9. REINFORCING STEEL SHALL CONFORM TO CSA G30.18-M92 GRADE 400, 10M DIAMETER.
10. ENSURE ANY PAVED ROADS ARE RETURNED TO THEIR ORIGINAL CONDITION.
11. WARNING TAPE REQUIREMENTS:
    - 11.1. POWER: BLACK LETTERING ON RED TAPE. TO COVER ENTIRE WIDTH OF DUCT BANK.
    - 11.2. COMMUNICATIONS: MINIMUM 4mm POLYETHEYLENE WARNING TAPE, COLOUR ORANGE. TEXT ON TAPE TO READ 'CAUTION BURIED COMMUNICATIONS CABLE BELOW.' TEXT SIZE TO BE 75-150mm IN WIDTH. TAPE TO COVER ENTIRE WIDTH OF DUCT BANK.

1 / 504 CONCRETE BURIED DUCT BANK DETAIL
SCALE: N.T.S.



4 / 504 COMMS SERVICE ENTRANCE ELEVATION VIEW
SCALE: N.T.S.

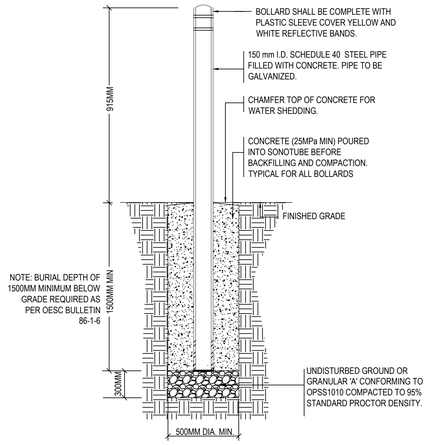




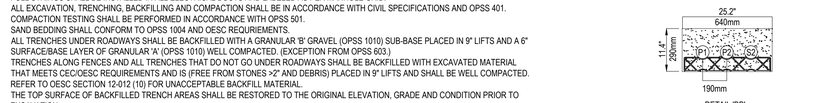
NOTES:

1. ALL ELECTRICAL DUCTS SHALL BE INSTALLED IN ACCORDANCE WITH OPSS 603.
2. PULL STRINGS SHALL BE INSTALLED IN ALL ELECTRICAL DUCTS AND LABELED AS PER MANHOLE GRID.
3. ALL EXCAVATION, TRENCHING, BACKFILLING AND COMPACTION SHALL BE IN ACCORDANCE WITH CIVIL SPECIFICATIONS AND OPSS 401.
4. COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH OPSS 501.
5. SAND BEDDING SHALL CONFORM TO OPSS 1004 AND OESC REQUIREMENTS.
6. ALL TRENCHES UNDER ROADWAYS SHALL BE BACKFILLED WITH A GRANULAR 'B' GRAVEL (OPSS 1010) SUB-BASE PLACED IN 9" LIFTS AND A 6" SURFACE/BASE LAYER OF GRANULAR 'A' (OPSS 1010) WELL COMPACTED. (EXCEPTION FROM OPSS 603.)
7. TRENCHES ALONG FENCES AND ALL TRENCHES THAT DO NOT GO UNDER ROADWAYS SHALL BE BACKFILLED WITH EXCAVATED MATERIAL THAT MEETS CEC/OESC REQUIREMENTS AND IS (FREE FROM STONES >2" AND DEBRIS) PLACED IN 9" LIFTS AND SHALL BE WELL COMPACTED. REFER TO OESC SECTION 12-012 (10) FOR UNACCEPTABLE BACKFILL MATERIAL.
8. THE TOP SURFACE OF BACKFILLED TRENCH AREAS SHALL BE RESTORED TO THE ORIGINAL ELEVATION, GRADE AND CONDITION PRIOR TO EXCAVATION.
9. GRAVEL ROADWAY SURFACES SHALL BE RESTORED IN ACCORDANCE WITH OPSS 301. PAVED ROADS SHALL BE RESTORED IN ACCORDANCE WITH OPSS 310.
10. DUCT JOINTS TO BE GLUED USING AN APPROVED PVC SOLVENT, WHEN APPLICABLE.
11. ALL DUCTS MUST BE CLEANED AND RODDED, AND SHALL BE COMPLETE WITH A NYLON ROPE IN EACH DUCT.
12. SLOPE DUCTS (1:400) TO ELECTRICAL PULLBOX IN ACCORDANCE WITH OPSD-2103-02, ALL DUCTS SHALL SLOPE AWAY FROM BUILDINGS.
13. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO CSA STANDARD A23.1-04.
14. WARNING TAPE REQUIREMENTS:
    - 14.1. POWER: PLASTIC ELECTRICAL MARKER TAPE SHALL BE BURIED HALFWAY BETWEEN THE TOP OF THE CONCRETE AND THE FINISHED GRADE. BLACK LETTERING ON RED TAPE. TO COVER ENTIRE WIDTH OF DUCT BANK.
    - 14.2. COMMUNICATIONS: CABLE MARKER TAPE SHALL BE BURIED HALFWAY BETWEEN THE TOP OF THE CONCRETE AND THE FINISHED GRADE. MINIMUM 4mm POLYETHEYLENE WARNING TAPE, COLOUR ORANGE. TEXT ON TAPE TO READ 'CAUTION BURIED COMMUNICATIONS CABLE BELOW.' TEXT SIZE TO BE 75-150mm IN WIDTH. TAPE TO COVER ENTIRE WIDTH OF DUCT BANK.

2 / 504 DIRECT BURIED DUCT BANK DETAIL
SCALE: N.T.S.



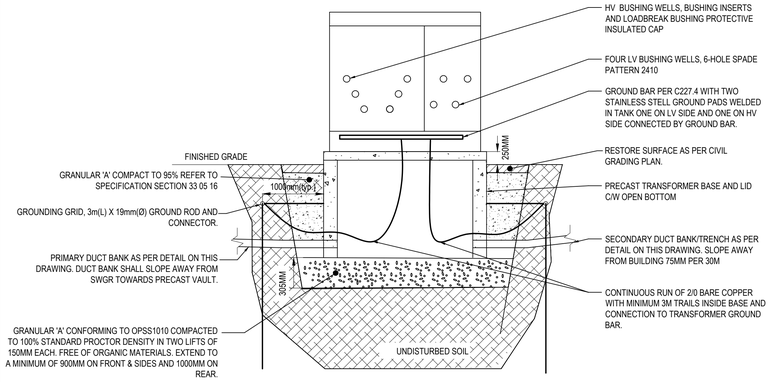
5 / 504 PROTECTIVE BOLLARD DETAIL
SCALE: N.T.S.



NOTES:

1. ALL ELECTRICAL DUCTS SHALL BE INSTALLED IN ACCORDANCE WITH OPSS 603.
2. PULL STRINGS SHALL BE INSTALLED IN ALL ELECTRICAL DUCTS AND LABELED AS PER MANHOLE GRID.
3. ALL EXCAVATION, TRENCHING, BACKFILLING AND COMPACTION SHALL BE IN ACCORDANCE WITH CIVIL SPECIFICATIONS AND OPSS 401.
4. COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH OPSS 501.
5. SAND BEDDING SHALL CONFORM TO OPSS 1004 AND OESC REQUIREMENTS.
6. ALL TRENCHES UNDER ROADWAYS SHALL BE BACKFILLED WITH A GRANULAR 'B' GRAVEL (OPSS 1010) SUB-BASE PLACED IN 9" LIFTS AND A 6" SURFACE/BASE LAYER OF GRANULAR 'A' (OPSS 1010) WELL COMPACTED. (EXCEPTION FROM OPSS 603.)
7. TRENCHES ALONG FENCES AND ALL TRENCHES THAT DO NOT GO UNDER ROADWAYS SHALL BE BACKFILLED WITH EXCAVATED MATERIAL THAT MEETS CEC/OESC REQUIREMENTS AND IS (FREE FROM STONES >2" AND DEBRIS) PLACED IN 9" LIFTS AND SHALL BE WELL COMPACTED. REFER TO OESC SECTION 12-012 (10) FOR UNACCEPTABLE BACKFILL MATERIAL.
8. THE TOP SURFACE OF BACKFILLED TRENCH AREAS SHALL BE RESTORED TO THE ORIGINAL ELEVATION, GRADE AND CONDITION PRIOR TO EXCAVATION.
9. GRAVEL ROADWAY SURFACES SHALL BE RESTORED IN ACCORDANCE WITH OPSS 301. PAVED ROADS SHALL BE RESTORED IN ACCORDANCE WITH OPSS 310.
10. DUCT JOINTS TO BE GLUED USING AN APPROVED PVC SOLVENT, WHEN APPLICABLE.
11. ALL DUCTS MUST BE CLEANED AND RODDED, AND SHALL BE COMPLETE WITH A NYLON ROPE IN EACH DUCT.
12. SLOPE DUCTS (1:400) TO ELECTRICAL PULLBOX IN ACCORDANCE WITH OPSD-2103-02, ALL DUCTS SHALL SLOPE AWAY FROM BUILDINGS.
13. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO CSA STANDARD A23.1-04.
14. WARNING TAPE REQUIREMENTS:
    - 14.1. POWER: PLASTIC ELECTRICAL MARKER TAPE SHALL BE BURIED HALFWAY BETWEEN THE TOP OF THE CONCRETE AND THE FINISHED GRADE. BLACK LETTERING ON RED TAPE. TO COVER ENTIRE WIDTH OF DUCT BANK.
    - 14.2. COMMUNICATIONS: CABLE MARKER TAPE SHALL BE BURIED HALFWAY BETWEEN THE TOP OF THE CONCRETE AND THE FINISHED GRADE. MINIMUM 4mm POLYETHEYLENE WARNING TAPE, COLOUR ORANGE. TEXT ON TAPE TO READ 'CAUTION BURIED COMMUNICATIONS CABLE BELOW.' TEXT SIZE TO BE 75-150mm IN WIDTH. TAPE TO COVER ENTIRE WIDTH OF DUCT BANK.

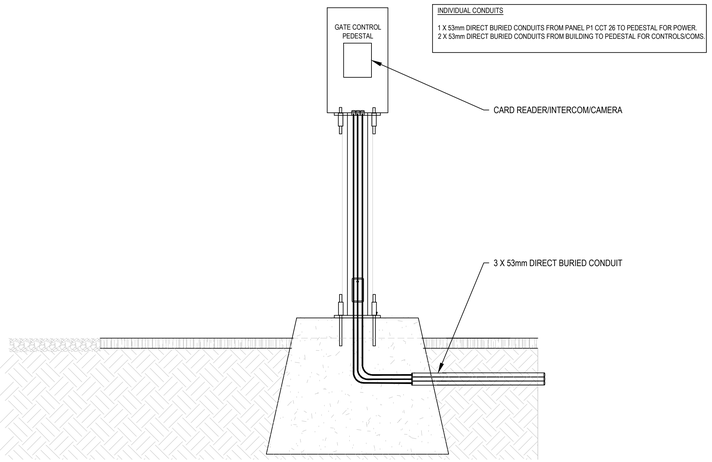
2 / 504 DIRECT BURIED DUCT BANK DETAIL
SCALE: N.T.S.



NOTES:

1. OUTDOOR PADMOUNT TRANSFORMERS SHALL BE LOCATED AND INSTALLED AS PER RULE 26-242 OF THE CANADIAN ELECTRICAL CODE.
2. NO PLANTS OR FIRE HYDRANTS SHALL BE INSTALLED WITHIN 3M OF THE TRANSFORMER.
3. ALL WORK SHALL BE INSPECTED BY ESA REPRESENTATIVE PRIOR TO BACKFILLING. THIS CONTRACTOR IS RESPONSIBLE FOR CONDUCTING COMPACTION TESTS BY A QUALIFIED TESTING AGENCY AND PROVIDING THE TEST RESULTS TO DCC REPRESENTATIVE.
4. IF BOLLARDS ARE REQUIRED, EXTEND COMPACTED BASE TO 1000mm FROM WALL. IF BOLLARDS ARE NOT REQUIRED, EXTEND COMPACTED BASE TO 300mm FROM WALL.
5. CONCRETE BASE AND LID SHALL BE APPROVED BY SHOP DRAWING SUBMITTAL. PRECAST BASE SHALL BE 35 MPA CONCRETE AND MEET CSA A23.1-M90 REQUIREMENTS FOR CONCRETE EXPOSED TO DE-ICING CHEMICALS.
6. PAD SHALL BE PROVIDED WITH SWIFT LIFT SYSTEM TO ACCOMMODATE INSTALLATION AND REMOVAL.
7. PROVIDE MINIMUM OF 3M OF SLACK IN SECONDARY CONDUCTORS INSIDE TRANSFORMER BASE.
8. CONTRACTOR SHALL MEGGER SECONDARY CONDUCTORS AND PROVIDE TEST RESULTS TO DND REPRESENTATIVE ON THE APPROVED FORM PRIOR ENERGIZING OF THE CABLES.
9. ALL GROUND CONNECTORS TO BE AMPACT TYPE.
10. THE GROUNDING SHALL BE DONE IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE AND INSPECTED BY ESA AND DND REPRESENTATIVE PRIOR TO BACKFILLING.
11. ADDITIONAL GROUNDING RODS AND/OR PLATES SHALL BE ADDED TO OBTAIN A SATISFACTORY GROUND RESISTANCE OF LESS THAN 25 OHMS (ISOLATED) OR LESS THAN 6 OHMS IF CONNECTED TO THE SYSTEM NEUTRAL.
12. ALL GROUNDING EQUIPMENT SHALL BE CERTIFIED TO CSA STANDARDS.
13. EXCAVATION SHALL BE BACKFILLED AND COMPACTED TO 600MM WITH THE BALANCE OF THE EXCAVATION TO REMAIN OPEN FOR GROUNDING INSTALLATION BY THIS CONTRACTOR AND UNTIL INSPECTIONS ARE COMPLETE.
14. ALL METAL EQUIPMENT WITHIN 2400MM OF THE TRANSFORMER SHALL BE BONDED TO GROUND ROD WITH A MINIMUM 2/0 COPPER GROUND WIRE AND A SEPARATE CONNECTOR APPROVED BY UTILITY PROVIDER.

3 / 504 TRANSFORMER GROUNDING DETAIL
SCALE: N.T.S.

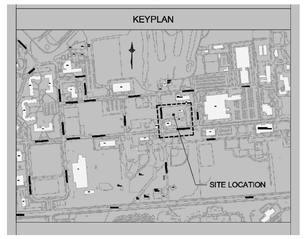


6 / 504 RELOCATED PEDESTAL CONNECTION DETAIL
SCALE: N.T.S.

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Quartier général





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2	2025/10/21	ISSUED FOR 99% REVIEW	R.K.
1	2025/07/22	ISSUED FOR 60% REVIEW	R.K.

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

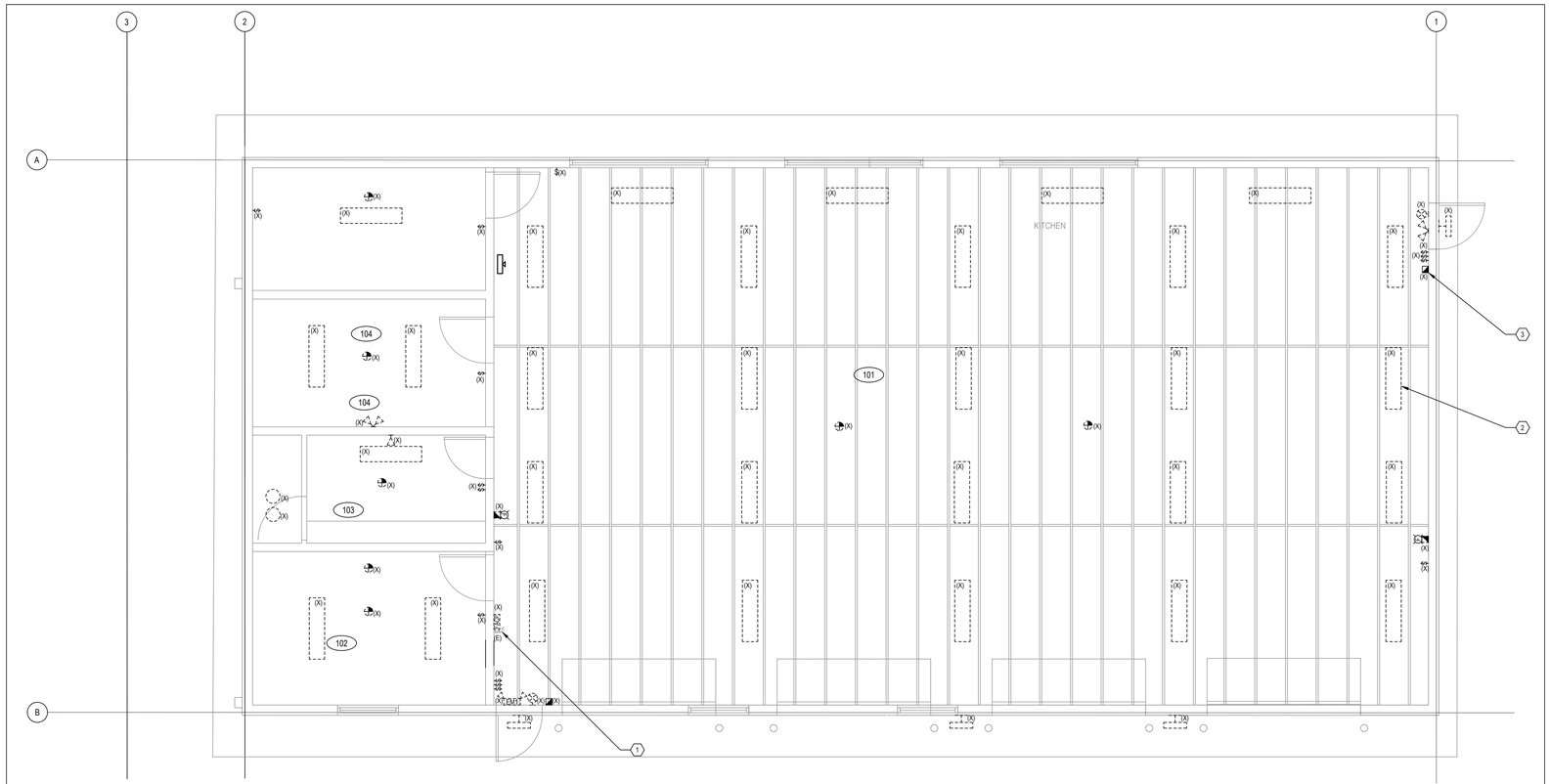
PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

TRADE - MÉTIER: ELECTRICAL
DATE: 2026/03/30

SUBJECT - SUJET
ELECTRICAL - SITE PLAN DETAILS

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: R. KONG		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: S. AUSTEN		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: P. SCISSONS	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 -504	

Canada



1 / 505 REFLECTED CEILING PLAN - LIGHTING AND FIRE ALARM - DEMOLITION
SCALE: 1:50

SCALE 1:50 0 0.5 1 2 3 4

DEMOLITION NOTES

1. DISCONNECT AND REMOVE EXISTING FIRE ALARM PANEL INCLUDING ASSOCIATED WIRING. FALCON TRANSMITTER AND WALL MOUNTED KEY SWITCH WITH LED INDICATOR TO REMAIN AND BE RE-USED BY NEW FIRE ALARM CONTROL PANEL. SEE IMAGE 505.1 ON THIS DRAWING.
2. LIGHTNING DEMOLITION, TYPICAL:
   REMOVE ALL EXISTING INTERIOR AND EXTERIOR LIGHTING, CONTROLS, EXIT SIGNS AND EMERGENCY LIGHTING BACK TO SOURCE AND MAKE SAFE.
3. FIRE ALARM DEMOLITION, TYPICAL:
   REMOVE ALL EXISTING FIRE ALARM DEVICES BACK TO SOURCE AND MAKE SAFE.



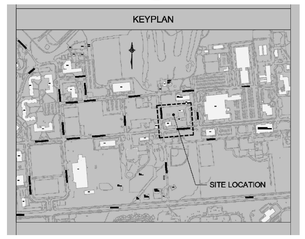
505.1 EXISTING FIRE ALARM PANEL

National Defence / Défense nationale

Headquarters
Quartier général

SITE NORTH

KEYPLAN



NO.	DATE	REVISION	APPR.
5	2026/05/25	ISSUED FOR TENDER	R.K.
4	2026/03/30	ISSUED FOR 100% SUBMISSION	R.K.
3	2025/12/09	RE-ISSUED FOR 99% SUBMISSION	R.K.
2	2025/10/21	ISSUED FOR 99% REVIEW	R.K.
1	2025/07/22	ISSUED FOR 60% REVIEW	R.K.

LICENSED PROFESSIONAL ENGINEER
2026-05-25
R. F. KONG
100131490
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

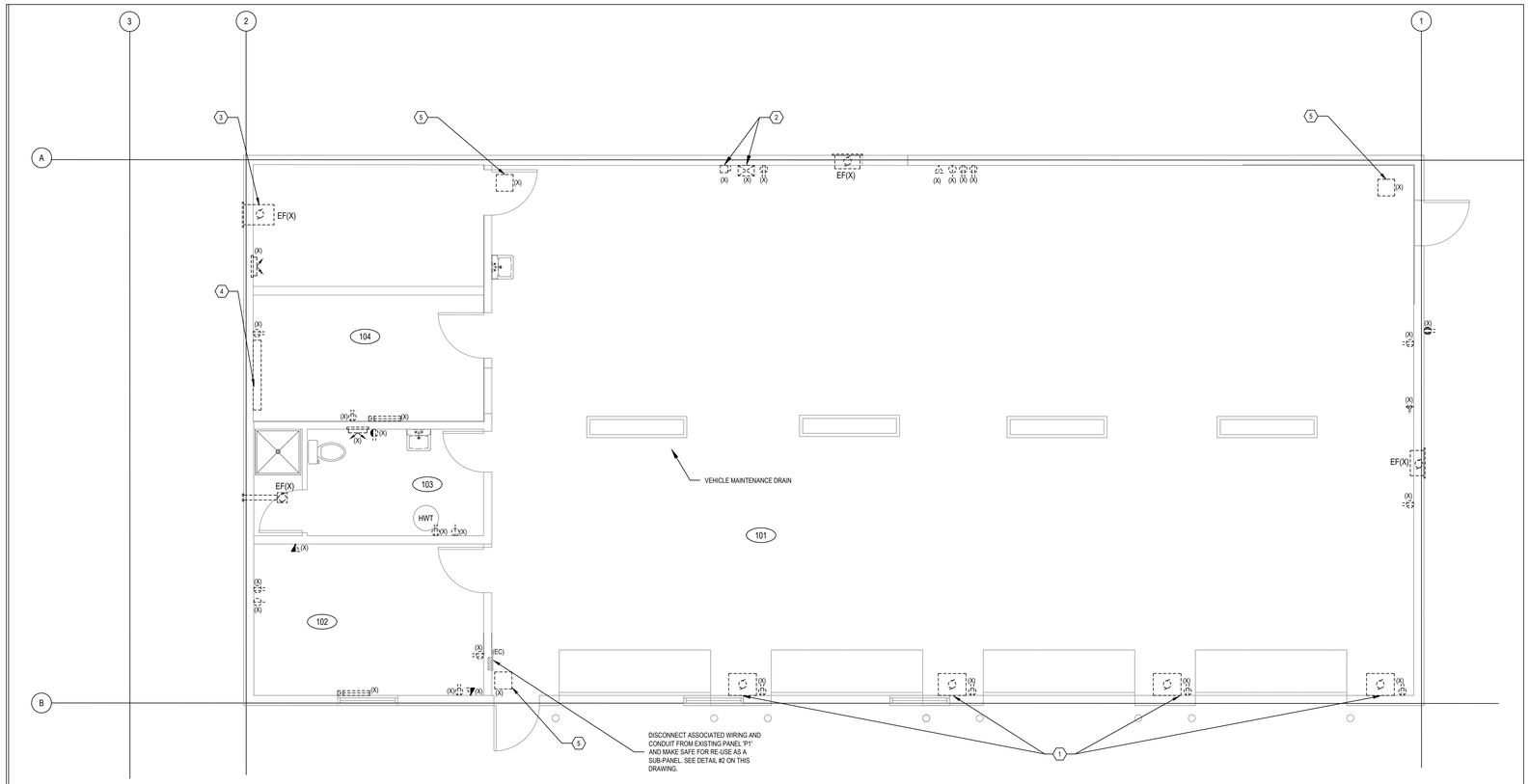
TRADE - MÉTIER
ELECTRICAL

DATE
2026/03/30

SUBJECT - SUJET
ELECTRICAL DEMOLITION - LIGHTING & FIRE ALARM FLOOR PLAN

PRODUCTION		CONCURRENCE - APPROBATION
DESIGNED/ÉTUDIÉ: R. KONG		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: S. AUSTEN		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: P. SCISSONS	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 -505	

Canada



1 / 506 FLOOR PLAN - POWER AND SYSTEMS - DEMOLITION
SCALE: 1:50

SCALE 1:50 0 0.5 1 2 3 4

DEMOLITION NOTES

1. ELECTRICALLY DISCONNECT GARAGE DOOR OPENERS. REMOVE ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE AND MAKE SAFE. SEE IMAGE 506.1 ON THIS DRAWING.
2. ELECTRICALLY DISCONNECT AND REMOVE 550V POWER SYSTEM INCLUDING 347/600V TRANSFORMER, DISCONNECT SWITCH AND 550V SPLITTER. EXISTING GAS MONITORING AND BATTERY ROOM VENTILATION SYSTEM TO BE DEMOLISHED. REMOVE ASSOCIATED CONDUIT AND WIRING BACK TO SOURCE AND MAKE SAFE. SEE IMAGE DETAIL 506.2 ON THIS DRAWING.
3. TYPICAL; ELECTRICALLY DISCONNECT EXISTING EXHAUST FANS, REMOVE ASSOCIATED CONDUIT AND WIRING BACK TO SOURCE AND MAKE SAFE.
4. EXISTING WALL MOUNTED COMMUNICATION INFRASTRUCTURE INCLUDING PLYWOOD BACKBOARD, WALL MOUNTED COMMUNICATION RACK, INCOMING DUCTS, CABLES, CABLE TRAY AND GROUND BAR TO BE REMOVED BY DCC PRIOR TO CONSTRUCTION. DEMOLISH ANY REMAINING EQUIPMENT. REFER TO PHOTO 506.3.
5. TYPICAL; ELECTRICALLY DISCONNECT EXISTING GAS POWERED HEATERS, REMOVE ASSOCIATED CONDUIT AND WIRING BACK TO SOURCE AND MAKE SAFE.

RM. 101 ENTRY

EXISTING PANEL 'P1' SCHEDULE DEMOLITION

MANUFACTURER: MAINS: 225A AMPS 120 / 208 VOLTS 3 PH 4 W

LOAD DESCRIPTION	NO.	MISC	MOTOR	ELECT HEAT	RECEPT	LIGHTS	BKR SIZE	CIRCUIT NUMBER	BKR SIZE	LIGHTS	RECEPT	ELECT HEAT	MOTOR	MISC	NO	LOAD DESCRIPTION
OS/EAST RECEPTACLE (X)							20	1	2	15						TRANSMITTER F/A (X)
RM. 102 HEAT (X)						*	15	3	4	15	*					RM. 104 HEAT (X)
* * *						*	2P	5	6	2P	*					* * *
RM. 103 HEAT (X)						*	15	7	8	30						RM. 105 HEAT (X)
* * *						*	2P	9	10	2P						* * *
COMPRESSOR NORTH (X)							30	11	12	15						FIRE ALARM (FIRE SHIELD) (X)
* * *							2P	13	14	15						GAS HTR. (BATTERY ROOM) (X)
EXHAUST FAN (NORTH END) (X)							15	15	16	15						RM. 104 RECEPT. (X)
GARAGE RECEPTACLES (X)							20	17	18	15						GAS HTR. (EAST END) (X)
DRYER RECEPTACLE (X)							30	19	20	20						PLASMA RECEPT. (T-SLOT) (X)
* * *							2P	21	22	30						PLASMA RECEPT. (T-SLOT) (X)
HWT RECEPTACLE (X)							15	23	24	15						EXHAUST FAN (BATTERY RM.) (X)
HEAT PUMP OFFICE (X)						*	15	25	26	15						WASHER RECEPT. (X)
* * *						*	2P	27	28	15						RM. 102 RECEPT. (X)
OVERHEAD DOORS (X)							15	29	30	15						LIGHTS. 102, 103, 104, 105 (X)
GFI OUTDOOR RECEPT. (X)							20	31	32	15						GAS HTR. (BY PANEL) (X)
OVERHEAD DOORS RECEPT. (X)							15	33	34	15						103 LIGHTS. / RECEPT. (X)
RM.101 BAY LIGHTS (X)							15	35	36	15						EXHAUST FAN EAST (X)
GATE MTR (X)							15	37	38	60						XFMR (X)
RM. 101 BAY LIGHTS (X)							15	39	40							* * *
OVERHEAD DOOR LIGHTS (X)							15	41	42	3P						* * *
SUB-TOTAL KW																SUB-TOTAL KW

SPECIAL FEATURES:	
SQAURE D NQOD	
MAIN BREAKER 225A	LOCATION: VESTIBULE
FEEDER:	LENGTH:

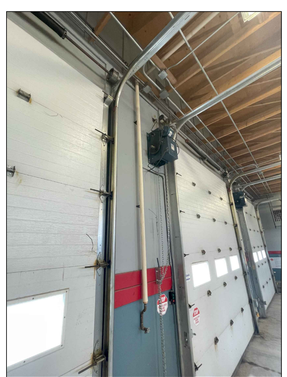
LOAD SUMMARY (KW)

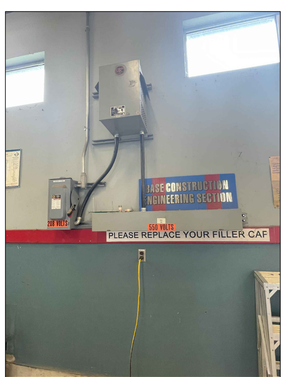
LOAD	CONNECT	D.F.	DEMAND
LIGHTS		1.0	
RECEPT		0.5	
ELEC HTG		0.75	
MOTORS		0.8	
MISC		0.5	
TOTAL			

NOTES:
TYPICAL; CIRCUIT BREAKERS TO REMAIN FOR USE IN NEW WORK

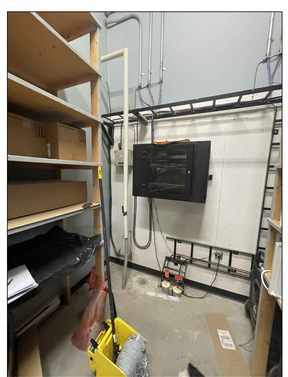
* : DESIGNATES CIRCUIT BREAKER TO BE REMOVED

2 / E-506 EXISTING PANEL 'P1' DEMOLITION


506.1 | GARAGE DOOR OPENERS



506.2 | 208V-550V POWER SYSTEM

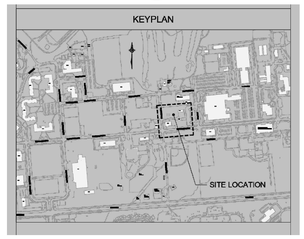

506.3 | TELECOM DEMARC

National Defence / Défense nationale

Headquarters
Quartier général



KEYPLAN



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LICENSED PROFESSIONAL ENGINEER
2026-05-25
R. F. KONG
100131490
Robert Kong
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

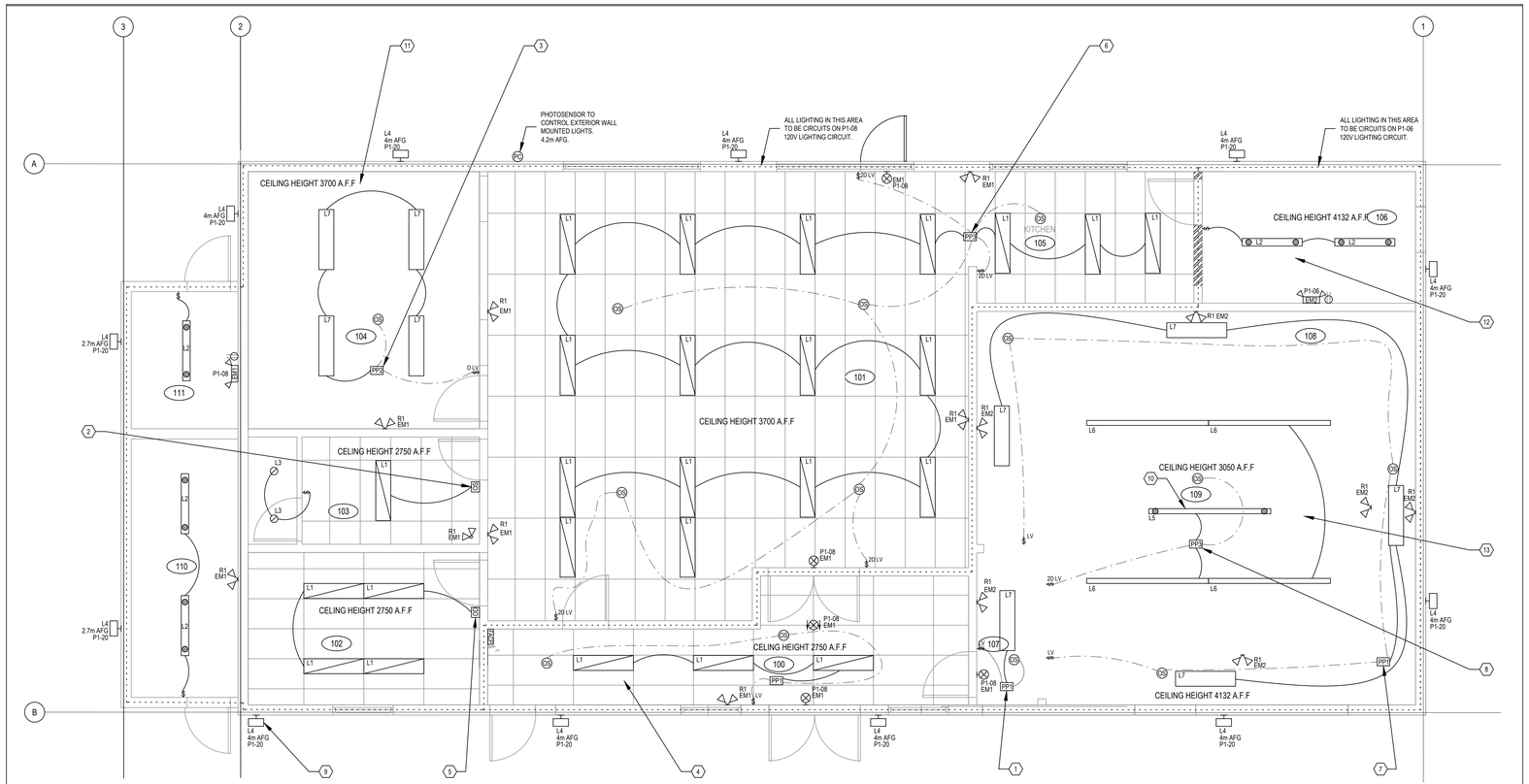
TRADE - MÉTIER
ELECTRICAL

DATE
2026/03/30

SUBJECT - SUJET
ELECTRICAL DEMOLITION - POWER & SYSTEMS FLOOR PLAN

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: R. KONG		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: S. AUSTEN		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: P. SCISSONS	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 -506	

Canada



1 / 507 REFLECTED CEILING PLAN - LIGHTING LAYOUT - NEW WORK

SCALE: 1:50

SCALE 1:50 0 0.5 1 2 3 4

CONSTRUCTION NOTES

1. ROOM 107 LIGHTING CONTROLS:
SEE DETAIL #1 ON DRAWING 508.

2. ROOM 103 LIGHTING CONTROLS:
SEE DETAIL #2 ON DRAWING 508.

3. ROOM 104 LIGHTING CONTROLS:
SEE DETAIL #3 ON DRAWING 508.

4. ROOM 100 LIGHTING CONTROLS:
SEE DETAIL #4 ON DRAWING 508.

5. ROOM 102 LIGHTING CONTROLS:
SEE DETAIL #5 ON DRAWING 508.

6. ROOM 101 LIGHTING CONTROLS:
SEE DETAIL #6 ON DRAWING 508.

7. ROOM 108 LIGHTING CONTROLS:
SEE DETAIL #7 ON DRAWING 508.

8. ROOM 109 LIGHTING CONTROLS:
SEE DETAIL #8 ON DRAWING 508.

9. EXTERIOR LIGHTING, TYPICAL; EXTERIOR LIGHTING TO BE CONTROLLED BY PHOTOSENSOR.

10. LIGHT FIXTURE TO BE CENTERED OVER TABLE. COORDINATE WITH FINAL FURNITURE LAYOUT.

11. ROOM 104:
CONDUIT TO CHANGE TO NON-CONDUCTIVE TYPE PRIOR TO ENTERING ROOM.

12. ROOM 106:
CONDUIT TO CHANGE TO NON-CONDUCTIVE TYPE PRIOR TO ENTERING ROOM 106. NO WALL PENETRATIONS PERMITTED WITHIN 1200mm OF THE DOOR. DEVICES AND CONDUIT WITHIN 1200mm OF DOOR TO BE SURFACE MOUNTED. REFER TO DETAIL #2 ON DRAWING 512.

13. ROOM 109:
CONDUIT TO CHANGE TO NON-CONDUCTIVE TYPE PRIOR TO ENTERING ROOM. CONDUIT MUST NOT ENTER THE ROOM STRAIGHT, PENETRATE AT AN ANGLE OF 30 DEGREES AT MINIMUM.

LUMINAIRE SCHEDULE

TAG	DESCRIPTION	LUMENS	TYPE	WATTS	COLOUR	VOLTS	MOUNTING	REMARKS
L1	305mm X 1220mm (1' X 4') LED LUMINAIRE	4026	LED	31	4000K	120V	RECESSED	LED PANEL RECESS MOUNTED SUITABLE FOR T-BAR CEILINGS, 120V, 0-10V DIMMING.
L2	1220mm (4') LED STRIP LIGHT	4006	LED	36	4000K	120V	SUSPENDED	1220mm (4') SUSPENDED STRIP LIGHT LED , 120V, C/W CHAIN SUSPENSION HARDWARE.
L3	LED DOWNLIGHT - WET LOCATION RATED	1191	LED	10	4000K	120V	SURFACE	WATER RESISTANT SURFACE MOUNTED LED DOWNLIGHT. 120V, IP65 RATED.
L4	EXTERIOR WALL-MOUNTED LED FIXTURE	3725	LED	25	3000K	120V	WALL MOUNTED	EXTERIOR LIGHTING TO UTILIZE DARK SKY FRIENDLY FULL CUT-OFF. 120V. FIXTURES TO HAVE LOW TEMP RATED DRIVERS AND 0-10V DIMMING TO 10%. AUTOMATIC CONTROLS USING PHOTOSENSOR TO BE PROVIDED.
L5	2438mm (8') DECORATIVE DIRECT/INDIRECT LINEAR	750L UP/ 350L DOWN	LED	72	4000K	120V	SUSPENDED	SLIM, 103mm(H) X 78mm(W), DIRECT/INDIRECT LINEAR SUSPENDED LUMINAIRE CENTER ABOVE TABLE, 120V, 0-10V DIMMING, FROSTED LENS, 1CCT CONTROL, AIRCRAFT CABLE SUSPENSION 915MM BELOW CEILING. UPLIGHT WIDE THROW, 40% DOWN, 60% UP.
L6	2438mm (8') DECORATIVE LINEAR	6000	LED	66	4000K	120V	SURFACE	SLIM 103mm(H)X78mm(W) SURFACE MOUNT LINEAR TO MATCH 120V, 0-10V DIMMING, FROSTED LENS. TO MATCH SAME PRODUCT FAMILY AS TYPE L5 ABOVE.
L7	305mm X 1220mm (1' X 4') LED LUMINAIRE	4654	LED	35	4000K	120V	SURFACE	305mm x 1220mm LED PANEL SURFACE MOUNTED, 120V, 0-10V DIMMING. C/W SURFACE MOUNTING KIT.

NOTES:
1. ALL LUMINAIRES SHALL BE 80CRI OR GREATER.
2. ALL COLOUR FINISHES TO BE STANDARD. EXACT COLOUR TO BE CONFIRMED AT SHOP DRAWING PHASE WITH OWNER/ARCHITECT.
3. CONTRACTOR SHALL PROVIDE ACCESSORIES AND MOUNTING HARDWARE AS REQUIRED FOR COMPLETE INSTALLATION.
4. ALL LUMINAIRES SHALL BE CERTIFIED TO CSA STANDARDS.
5. ALL LUMINAIRES SHALL HAVE 5 YEAR WARRANTY.

LIGHTING CONTROL SCHEDULE

TYPE	DESCRIPTION	REMARKS
OD	WALL MOUNTED OCCUPANCY SENSOR - LINE VOLTAGE WITH DIMMING	DECORA STYLE WITH 'ON/OFF' BUTTON AND SEPARATE 'UP' AND 'DOWN' SOFT CLICK DIMMER BUTTONS, 0-10V DIMMING WITH DUAL TECHNOLOGY OCCUPANCY SENSOR. 120/277V.
OS	WALL MOUNTED OCCUPANCY SENSOR - LINE VOLTAGE	DECORA STYLE WITH 'ON/OFF' BUTTON, DUAL TECHNOLOGY OCCUPANCY SENSOR. 120/277V
$	ON/OFF TOGGLE SWITCH, LINE VOLTAGE	SINGLE CHANNEL, LINE VOLTAGE DECORA STYLE WITH ON/OFF CONTROL.
$LV	ON/OFF TOGGLE SWITCH, LOW VOLTAGE	SINGLE CHANNEL, LOW VOLTAGE DECORA STYLE WITH ON/OFF CONTROL.
$D LV	DIMMER SWITCH	SINGLE CHANNEL, LOW VOLTAGE DECORA STYLE WITH LARGE 'ON/OFF' BUTTON AND SEPARATE 'UP' AND 'DOWN' SOFT CLICK DIMMER BUTTONS. COMPLETE WITH PLENUM RATED CAT5E CABLE.
OS	CEILING MOUNTED OCCUPANCY SENSOR - LOW VOLTAGE	CEILING MOUNTED OCCUPANCY SENSOR. PASSIVE DUAL TECHNOLOGY, 360 ° RANGE, 1000SQFT MAJOR MOTION. 20mA LOW VOLTAGE 24VDC. CAT 5 CONNECTION.
PP1	LOAD CONTROLLER ON/OFF - 1 ZONE	SINGLE ZONE ON/OFF CONTROLLER, 120/277V, 10A, MOUNTED ON CEILING OR IN ELECTRICAL CLOSET.
PP2	LOAD CONTROLLER ON/OFF DIMMING - 1 ZONE	SINGLE ZONE ON/OFF + DIMMING CONTROLLER, 120/277V, 10A, MOUNTED ON CEILING OR IN ELECTRICAL CLOSET.
PP3	LOAD CONTROLLER ON/OFF DIMMING - 2 ZONE	TWO ZONE ON/OFF CONTROLLER + DIMMING, 120/277V, 10A, MOUNTED ON CEILING OR IN ELECTRICAL CLOSET.
$2D LV	TWO ZONE DIMMER SWITCH	TWO ZONE, LOW VOLTAGE DECORA STYLE WITH LARGE 'ON/OFF' BUTTONS AND SEPARATE 'UP' AND 'DOWN' SOFT CLICK DIMMER BUTTONS. COMPLETE WITH PLENUM RATED CAT5E CABLE.

EMERGENCY LIGHTING SCHEDULE

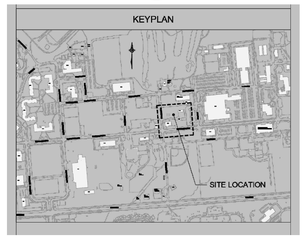
TYPE	DESCRIPTION	REMARKS
	CEILING MOUNTED EXIT SIGN C/W DIRECTION ARROWS AS INDICATED	SINGLE/DOUBLE FACED UNIVERSAL MOUNTED C/W ONE PIECE STEEL HOUSING. PROVIDE PICTOGRAM A WITH DIRECTIONAL ARROWS AS INDICATED ON DRAWINGS. SELF ILLUMINATED. AC/DC TYPE.
	WALL MOUNTED EXIT SIGN	SINGLE FACED UNIVERSAL MOUNTED C/W ONE PIECE STEEL HOUSING. PROVIDE GREEN ON WHITE PICTOGRAM WITH DIRECTIONAL ARROWS AS INDICATED ON DRAWINGS. SELF ILLUMINATED. AC/DC TYPE.
EM	EMERGENCY BATTERY PACK C/W TWO INTEGRAL HEADS	120/347VAC INPUT, 12VDC OUTPUT, 200W WALL MOUNT EMERGENCY BATTERY PACK C/W TWO 6W LED MR16 LAMPS AND AUTO TEST SELF-DIAGNOSTIC.
R1	REMOTE DOUBLE HEAD	CAST METAL HOUSING WITH WHITE POWDERCOAT FINISH C/W STANDARD CANOPY AND 12-24V MR16 STYLE 6W LED LAMPS.

National Defence / Défense nationale

Headquarters
Quartier général

SITE NORTH

KEYPLAN



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2	2025/10/21	ISSUED FOR 99% REVIEW	R.K.
1	2025/07/22	ISSUED FOR 60% REVIEW	R.K.

LICENSED PROFESSIONAL ENGINEER
2026-05-25
R. F. KONG
100131490
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

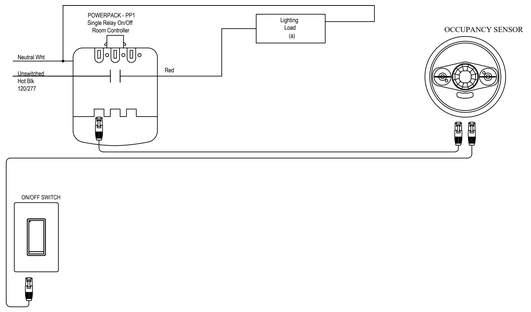
TRADE - MÉTIER
ELECTRICAL

DATE
2026/03/30

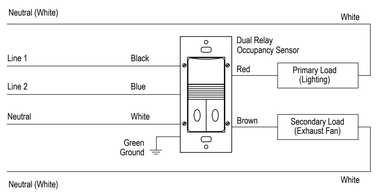
SUBJECT - SUJET
ELECTRICAL NEW WORK - LIGHTING FLOOR PLAN & SCHEDULES

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: R. KONG		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: S. AUSTEN		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: P. SCISSONS	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 -507	

Canada



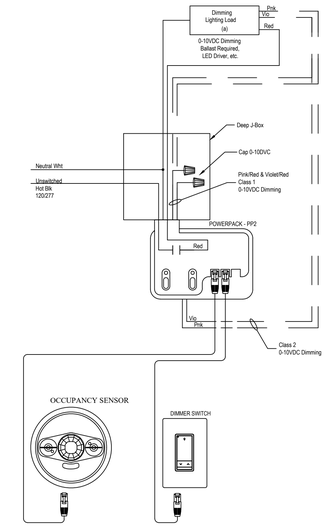
1 508 ROOM 107 LIGHTING CONTROLS
SCALE: N.T.S.



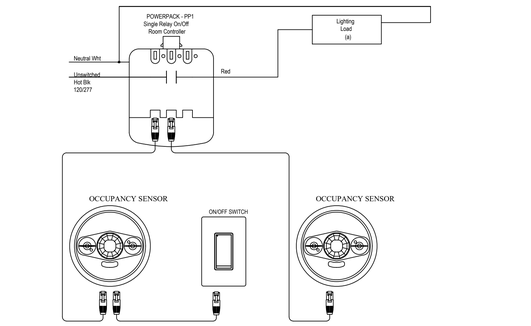
NOTES:

1. RELAY #1 TO CONTROL LIGHTING IN ROOM. RELAY #2 TO CONTROL EXHAUST FAN. PROGRAM OCCUPANCY SENSORS TO BE AUTO-ON WITH AN OFF DELAY OF 20MIN TO OPERATE FAN AFTER THE ROOM HAS BEEN VACATED.

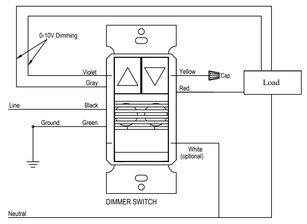
2 508 ROOM 103 LIGHTING AND FAN CONTROLS
SCALE: N.T.S.



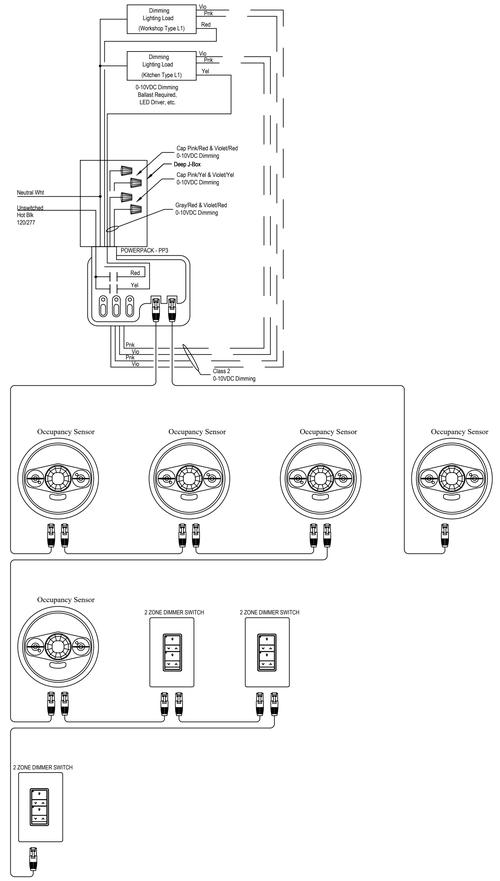
3 508 ROOM 104 LIGHTING CONTROLS
SCALE: N.T.S.



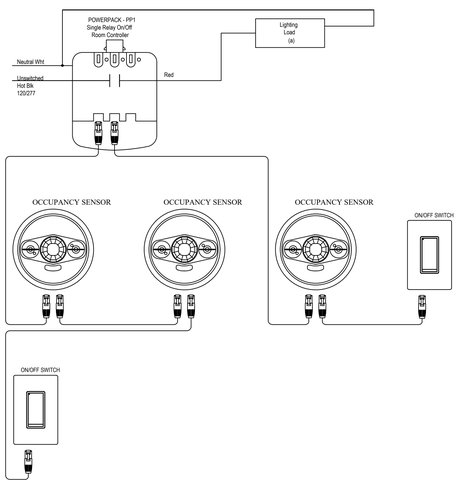
4 508 ROOM 100 LIGHTING CONTROLS
SCALE: N.T.S.



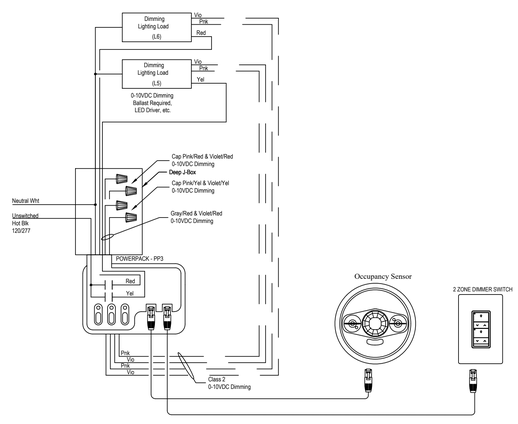
5 508 ROOM 102 DIMMER SENSOR SWITCH WIRING
SCALE: N.T.S.



6 508 ROOM 101 LIGHTING CONTROLS
SCALE: N.T.S.



7 508 ROOM 108 LIGHTING CONTROLS
SCALE: N.T.S.

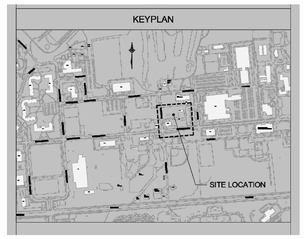


8 508 ROOM 109 LIGHTING CONTROLS
SCALE: N.T.S.

National Defence / Défense nationale

Headquarters
Quartier général





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SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

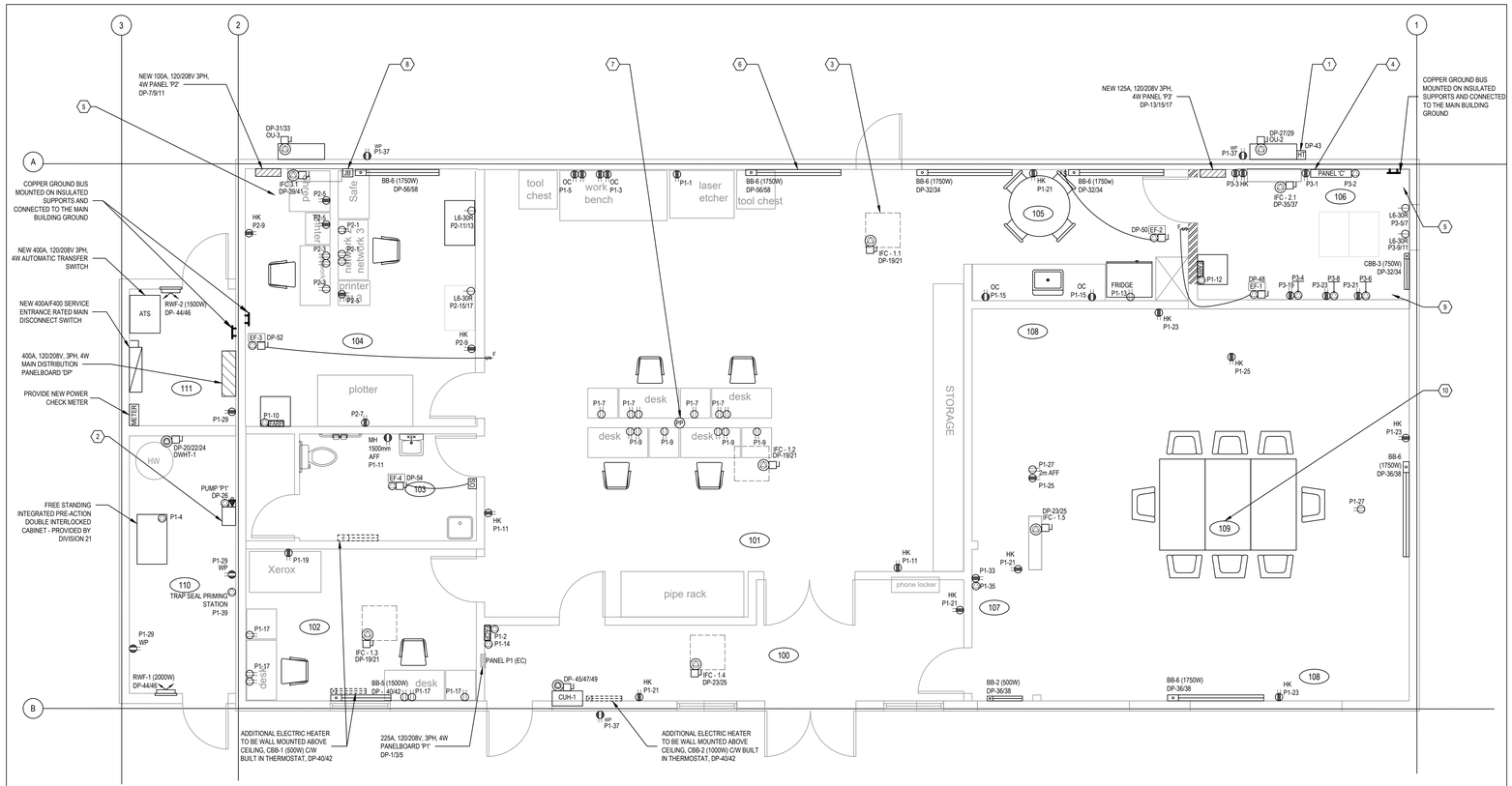
PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

TRADE - MÉTIER	DATE
ELECTRICAL	2026/03/30

SUBJECT - SUJET
ELECTRICAL - LIGHTING CONTROL DETAILS

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: R. KONG		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: S. AUSTEN		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: P. SCISSONS	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 -508	

Canada



1 / 509 FLOOR PLAN - POWER LAYOUT - NEW WORK

SCALE: 1:50

SCALE 1:50 0 0.5 1 2 3 4

CONSTRUCTION NOTES

1. HEAT TRACING:
PROVIDE DEDICATED 20A, 120V GFCI BREAKER AND CONNECTION TO NEW HEAT TRACING FOR EXTERIOR CONDENSATE DRAIN. SEE MECHANICAL DRAWINGS AND COORDINATE WITH MECHANICAL CONTRACTOR. HEAT TRACING SUPPLIED AND INSTALLED BY MECHANICAL CONTRACTOR AND ELECTRICALLY CONNECTED BY THIS CONTRACTOR.

2. PUMP P1:
PROVIDE NEW COMBINATION MAGNETIC SIZE 0 MOTOR STARTER C/W PILOT LIGHT AND ELECTRICALLY CONNECT WITH NEW PUMP P1. REFER TO MECHANICAL EQUIPMENT SCHEDULE ON DRAWING 510 FOR CONNECTION SPECIFICATIONS.

3. INTERIOR FAN COILS, TYPICAL:
ELECTRICALLY CONNECT FAN COILS TO CORRESPONDING OUTDOOR UNITS AS SHOWN IN THE MECHANICAL EQUIPMENT SCHEDULE ON DRAWING 510. SUPPLY ALL CONDUIT, WIRING AND ACCESSORIES INCLUDING MEANS OF DISCONNECT.

4. COMMUNICATIONS POWER SUPPLY:
PROVIDE POWER FOR NEW WALL MOUNTED COMMUNICATION PANEL. PROVIDE NEW 20A RECEPTACLE. DND TO SUPPLY AND INSTALL COMMUNICATION PANEL AND CABLES.

5. ANTI-STATIC FLOORING:
GROUNDING STRAPS TO BE PROVIDED FOR ELECTROSTATIC DISCHARGE. ANTI-STATIC FLOORING TO BE CONNECTED TO GROUND BAR USING FLAT COPPER TAPE WITH A MINIMUM OF ONE GROUNDING POINT PER 1000SQ.FT. SEE DETAIL #1 ON DRAWING 512.

6. ELECTRIC HEATERS, TYPICAL:
FOR GROUND LEVEL HEATERS; PROVIDE 21mm CONDUIT C/W PULL ROPE FOR LOW VOLTAGE WIRING. CONTROLS TO B.A.S. BY MECHANICAL TRADES.
FOR ABOVE CEILING HEATERS PROVIDE BUILT IN THERMOSTAT.

7. MULTI-CHANNEL POWERPOLE:
TELE-POWER POLES, TYPCIAL; PROVIDE MULTI- CHANNEL WIREMOLD TO EACH WORKSTATION FOR THREE DUPLEX RECEPTACLES AND ONE 'NET 1' DATA OUTLET. POWER AND SYSTEMS TO BE IN SEPARATE RACEWAY COMPARTMENTS.

8. ROOM 104:
CONDUIT TO CHANGE TO NON-CONDUCTIVE TYPE PRIOR TO ENTERING ROOM. PROVIDE MULTI-CHANNEL WIREMOLD C/W CONDUCTORS DOWN TO 103mm X 103mm JUNCTION BOX. PROVIDE CABLE WHIP INTO FUTURE 5 WIRE MODULAR FURNITURE SYSTEM. FURNITURE TO BE PROVIDED BY DND.

9. ROOM 106:
CONDUIT TO CHANGE TO NON-CONDUCTIVE TYPE PRIOR TO ENTERING ROOM. NO WALL PENETRATIONS PERMITTED WITHIN 1200mm OF THE DOOR. DEVICES AND CONDUIT WITHIN 1200mm OF DOOR TO BE SURFACE MOUNTED. REFER TO DETAIL #2 ON DRAWING 512.

10. ROOM 109:
CONDUIT TO CHANGE TO NON-CONDUCTIVE TYPE PRIOR TO ENTERING ROOM. CONDUIT MUST NOT ENTER THE ROOM STRAIGHT, PENETRATE AT AN ANGLE OF 30 DEGREES AT MINIMUM.

ELECTRICAL ROOM

NEW PANEL 'DP' SCHEDULE

MANUFACTURER: MAINS: 400A AMPS 120 / 208 VOLTS 3 PH 4 W

LOAD DESCRIPTION	NO.	MISC	MOTOR	ELECT HEAT	RECEPT	LIGHTS	BKR SIZE	CIRCUIT NUMBER	BKR SIZE	LIGHTS	RECEPT	ELECT HEAT	MOTOR	MISC	NO	LOAD DESCRIPTION
PANEL 'P1' ROOM 100	1	0.0	0.0	0.0	0.0	0.0	225 / 3P	1 2 / 3 4 / 5 6	60 / 3P						1	SPD
PANEL 'P2' ROOM 104	1	0.0	0.0	0.0	0.0	0.0	100 / 3P	7 8 / 9 10 / 11 12	70 / 3P				17.7		1	DOAS-1 ROOFTOP UNIT
PANEL 'P3' ROOM 106	1	0.0	0.0	0.0	0.0	0.0	100 / 3P	13 14 / 15 16 / 17 18	70 / 3P				14.7		1	OU-1 ROOFTOP UNIT
INTERIOR FAN COILS IFC-1.1, IFC-1.2, IFC-1.3	3		0.6				15 / 2P	19 20 / 21 22	40 / 3P				10.0		1	DHWT-1 - 10KW WATER ENTRY ROOM
FAN COIL UNITS IFC-1.4, IFC-1.5	3		0.6				15 / 2P	23 24 / 25 26	15				0.1		1	P-1 DHWT PUMP
OUTDOOR UNIT OU-2	1		3.0				20 / 2P	27 28 / 29 30	20 / 2P							SPRINKLER COMPRESSOR
OUTDOOR UNIT OU-3	1		3.0				20 / 2P	31 32 / 33 34	30 / 2P				4.25		2	BASEBOARD HEATERS RM. 105, RM. 106 AND RM. 101
INDOOR UNIT IFC-2.1	1		0.2				15 / 2P	35 36 / 37 38	30 / 2P				4.0		3	BASEBOARD HEATERS RM. 108 AND RM. 107
INDOOR UNIT IFC-3.1	1		0.2				15 / 2P	39 40 / 41 42	30 / 2P				3.5		4	BASEBOARD HEATERS RM. 102, RM. 103 AND RM. 100
OU-2 HEAT TRACING	1						20	43 44	30 / 2P				3.5		2	RWF HEATERS 1 & 2 RM. 110 AND RM. 111
CUH-1	1			5.0			30 / 3P	45 46 / 47 48 / 49 50	15				0.06 / 0.1			EF-1 / EF-2
SPACE								51 52	15				0.2			EF-3
SPACE								53 54	15				0.1			EF-4
SPACE								55 56	30 / 2P				4.0			BASEBOARD HEATERS RM. 104 AND RM. 101
SPACE								57 58								SPACE
SPACE								59 60								SPACE
SPACE								61 62								SPACE
SPACE								63 64								SPACE
SPACE								65 66								SPACE
SPARE							20	67 68	15							SPARE
SPARE							20	69 70	15							SPARE
SPARE							20	71 72	15							SPARE
SUB-TOTAL KW		0.0	7.6	5.0	0.0	0.0				0.0	0.0	28.4	35.8	0.0		SUB-TOTAL KW

SPECIAL FEATURES:	
MAIN LUG 400A	LOCATION: ELEC ROOM
FEEDER:	LENGTH:

LOAD SUMMARY (KW)

LOAD	CONNECT	D.F.	DEMAND
LIGHTS		1.0	
RECEPT		0.5	
ELEC HTG	33.4	0.75	25.4
MOTORS	43.4	0.8	34.7
MISC		0.5	
TOTAL			

MAIN ENTRANCE

EXISTING PANEL 'P1' SCHEDULE NEW WORK

MANUFACTURER: MAINS: 225A AMPS 120 / 208 VOLTS 3 PH 4 W

LOAD DESCRIPTION	NO.	MISC	MOTOR	ELECT HEAT	RECEPT	LIGHTS	BKR SIZE	CIRCUIT NUMBER	BKR SIZE	LIGHTS	RECEPT	ELECT HEAT	MOTOR	MISC	NO	LOAD DESCRIPTION
RECEPT. (RM. 101 LASER ETCHER)							20	1 2	15	**						FIRE ALARM CONTROL PANEL
RECEPT. (RM. 101 BENCH)							20	3 4	15	**						PRE-ACTION SPRINKLER CABINET
RECEPT. (RM. 101. BENCH)						*	**20**	5 6	15							BATTERY PACK EM2 + LIGHTS
RECEPT. (RM. 101 DESKS)							15	7 8	15							BATTERY PACK EM1 + LIGHTS
RECEPT. (RM. 101 DESKS)							15	9 10	15	**						FIRE ALARM RELEASE PANEL (104)
RECEPT. (RM. 103/RM. 101)						*	**20**	11 12	15	**						FIRE ALARM RELEASE PANEL (106)
RECEPT. (RM. 105 FRIDGE)						*	**15**	13 14	15	**						FACP FALCON TRANSMITTER
RECEPT. (RM. 105)						*	**20**	15 16	15							SPARE
RECEPT. (RM. 102 DESKS)							15	17 18	15							SPARE
RECEPT. (RM. 102 XEROX)						*	**20**	19 20	15							LIGHTS (EXTERIOR)
RECEPT. (RM. 100 AND 107)						*	**20**	21 22	15							SPARE
RECEPT. (RM. 108)						*	**20**	23 24	15							GATE MOTOR
RECEPT. (RM. 109)						*	**20**	25 26	15	*						GATE PEDESTAL
RECEPT. (RM. 109)							15	27 28	30 / 2P							SPARE
RECEPT. (RM. 110 + RM. 111)						*	**20**	29 30								
RECEPT. (ROOF MAINTENANCE)						*	**20**	31 32	30 / 2P							SPARE
RECEPT. (RM. 107 PNL 'S4')						*	**20**	33 34								
PANEL S4							15	35 36	60 / 3P							SPARE
RECEPT. (EXTERIOR)							15	37 38								
TRAP SEAL PRIMING STATION							15	39 40	30 / 3P							SPARE
SPACE								41 42	30							SPARE
SUB-TOTAL KW																SUB-TOTAL KW

SPECIAL FEATURES:	
SQUARE D NQOD	
MAIN BREAKER 225A	LOCATION: VESTIBULE
FEEDER:	LENGTH:

LOAD SUMMARY (KW)

LOAD	CONNECT	D.F.	DEMAND
LIGHTS		1.0	
RECEPT		0.5	
ELEC HTG		0.75	
MOTORS		0.8	
MISC		0.5	
TOTAL			

NOTES:
*: PROVIDE NEW CIRCUIT BREAKER IN EXISTING ELECTRICAL PANEL

**: FIRE ALARM BREAKERS WITH LOCKING, PAINTED RED

RM. 104

NEW PANEL 'P2' SCHEDULE

MANUFACTURER: MAINS: 125A AMPS 120 / 208 VOLTS 3 PH 4 W

LOAD DESCRIPTION	NO.	MISC	MOTOR	ELECT HEAT	RECEPT	LIGHTS	BKR SIZE	CIRCUIT NUMBER	BKR SIZE	LIGHTS	RECEPT	ELECT HEAT	MOTOR	MISC	NO	LOAD DESCRIPTION
RECEPT. (RM. 104 DESKS)							15	1 2	30 / 2P							SPARE
RECEPT. (RM. 104 DESKS)							15	3 4								
RECEPT. (PRINTER/SHRED)							20	5 6	30 / 2P							SPARE
RECEPT. (AREA PLOTTER)							20	7 8								
RECEPT. (RM. 104 HK)							20	9 10	30 / 2P							SPARE
RECEPT. (SPECIAL)							30 / 2P	11 12 / 13 14								SPACE
RECEPT. (SPECIAL)							30 / 2P	15 16 / 17 18								SPACE
SPACE								19 20	15							SPARE
SPACE								21 22	15							SPARE
SPACE								23 24	15							SPARE
SUB-TOTAL KW																SUB-TOTAL KW

SPECIAL FEATURES:	
MAIN BREAKER	LOCATION:
FEEDER:	LENGTH:

LOAD SUMMARY (KW)

LOAD	CONNECT	D.F.	DEMAND
LIGHTS		1.0	
RECEPT		0.5	
ELEC HTG		0.75	
MOTORS		0.8	
MISC		0.5	
TOTAL			

RM. 106

NEW PANEL 'P3' SCHEDULE

MANUFACTURER: MAINS: 125A AMPS 120 / 208 VOLTS 3 PH 4 W

LOAD DESCRIPTION	NO.	MISC	MOTOR	ELECT HEAT	RECEPT	LIGHTS	BKR SIZE	CIRCUIT NUMBER	BKR SIZE	LIGHTS	RECEPT	ELECT HEAT	MOTOR	MISC	NO	LOAD DESCRIPTION
RECEPT. (RM. 106)							20	1 2	20							PANEL C
RECEPT. (RM. 106 HK)							20	3 4	15							PANEL S1
RECEPT. (RM. 106 SPECIAL)							30 / 2P	5 6 / 7 8	15							PANEL S2 / PANEL S3
RECEPT. (RM. 106 SPECIAL)							30 / 2P	9 10 / 11 12	30 / 2P							SPARE
SPACE								13 14	30 / 2P							SPARE
SPACE								15 16								
SPARE							15	17 18	15							SPARE
RECEPT. (PANEL S1)							20	19 20	15							SPARE
RECEPT. (PANEL S2)							20	21 22								SPACE
RECEPT. (PANEL S3)							20	23 24								SPACE
SUB-TOTAL KW																SUB-TOTAL KW

SPECIAL FEATURES:	
MAIN BREAKER	LOCATION:
FEEDER:	LENGTH:

LOAD SUMMARY (KW)

LOAD	CONNECT	D.F.	DEMAND
LIGHTS		1.0	
RECEPT		0.5	
ELEC HTG		0.75	
MOTORS		0.8	
MISC		0.5	
TOTAL			

ELECTRIC HEATING SCHEDULE

TAG	DESCRIPTION	REMARKS
BB-1	300W BASEBOARD HEATER, 505mm	208V, 1ϕ, 22 GAUGE STEEL CASING, WHITE GLOSS POLYESTER PAINT FINISH. BUILT IN LOW VOLTAGE RELAY.
BB-2	500W BASEBOARD HEATER, 708mm	208V, 1ϕ, 22 GAUGE STEEL CASING, WHITE GLOSS POLYESTER PAINT FINISH. BUILT IN LOW VOLTAGE RELAY.
BB-3	750W BASEBOARD HEATER, 956mm	208V, 1ϕ, 22 GAUGE STEEL CASING, WHITE GLOSS POLYESTER PAINT FINISH. BUILT IN LOW VOLTAGE RELAY.
BB-4	1000W BASEBOARD HEATER, 1207mm	208V, 1ϕ, 22 GAUGE STEEL CASING, WHITE GLOSS POLYESTER PAINT FINISH. BUILT IN LOW VOLTAGE RELAY.
BB-5	1500W BASEBOARD HEATER, 1683mm	208V, 1ϕ, 22 GAUGE STEEL CASING, WHITE GLOSS POLYESTER PAINT FINISH. BUILT IN LOW VOLTAGE RELAY.
BB-6	1750W BASEBOARD HEATER, 1930mm	208V, 1ϕ, 22 GAUGE STEEL CASING, WHITE GLOSS POLYESTER PAINT FINISH. BUILT IN LOW VOLTAGE RELAY.
RWF-1	2000W WALL FAN HEATER	208V, 1ϕ, BUILT IN LOW VOLTAGE RELAY. RECESSED WITH 60mm DEPTH.
RWF-2	1500W WALL FAN HEATER	208V, 1ϕ, BUILT IN LOW VOLTAGE RELAY. RECESSED WITH 60mm DEPTH.
CBB-1	500W BASEBOARD HEATER, 708mm	208V, 1ϕ, 22 GAUGE STEEL CASING, WHITE GLOSS POLYESTER PAINT FINISH. BUILT IN THERMOSTAT.
CBB-2	1000W BASEBOARD HEATER, 1207mm	208V, 1ϕ, 22 GAUGE STEEL CASING, WHITE GLOSS POLYESTER PAINT FINISH. BUILT IN THERMOSTAT.
CBB-3	750W BASEBOARD HEATER, 956mm	208V, 1ϕ, 22 GAUGE STEEL CASING, WHITE GLOSS POLYESTER PAINT FINISH. BUILT IN THERMOSTAT.

National Defence / Défense nationale

Headquarters
Quartier général

NO.	DATE	REVISION	APPR.
5	2026/05/25	ISSUED FOR TENDER	R.K.
4	2026/03/30	ISSUED FOR 100% SUBMISSION	R.K.
3	2025/12/09	RE-ISSUED FOR 99% SUBMISSION	R.K.
2	2025/10/21	ISSUED FOR 99% REVIEW	R.K.
1	2025/07/22	ISSUED FOR 60% REVIEW	R.K.

LICENSED PROFESSIONAL ENGINEER
2026-05-25
R. F. KONG
100131490
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

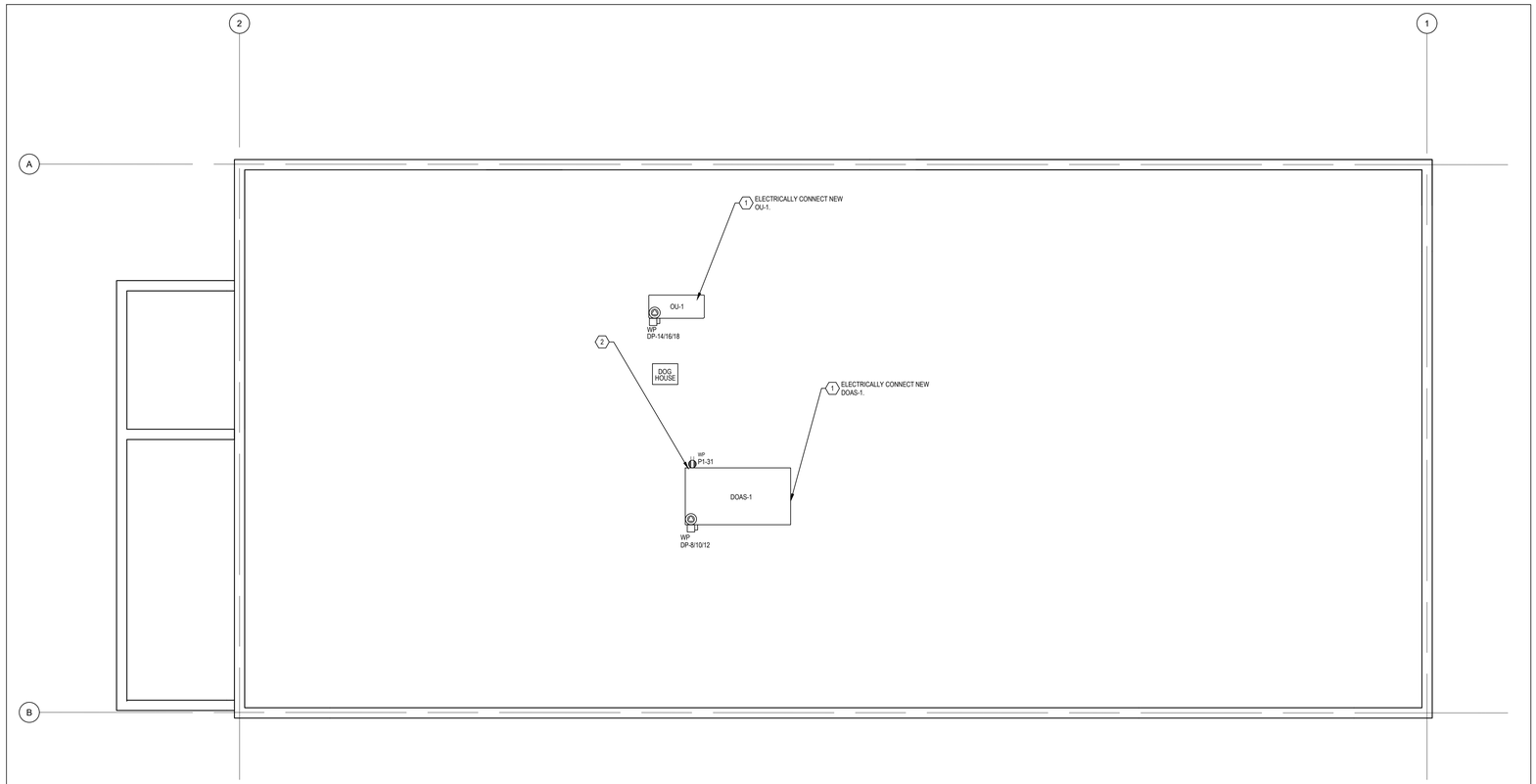
PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

TRADE - MÉTIER: ELECTRICAL
DATE: 2026/03/30

SUBJECT - SUJET
ELECTRICAL NEW WORK - POWER FLOOR PLAN & PANEL SCHEDULES

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: R. KONG		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: S. AUSTEN		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: P. SCISSONS	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 -509	

Canada



1/510 ROOF PLAN - NEW WORK
SCALE: 1:50

SCALE 1:50 0 0.5 1 2 3 4

DRAWING NOTES

1. PROVIDE NEMA 3R DISCONNECT SWITCH FOR NEW UNITS. PROVIDE LAMACOID LABEL INDICATING VOLTAGE AND CIRCUIT. REFER TO MECHANICAL EQUIPMENT SCHEDULE ON THIS DRAWING FOR CONNECTION REQUIREMENTS. SEE DETAIL #2 ON THIS DRAWING FOR CONNECTION DETAIL.
2. PROVIDE ROOFTOP MAINTENANCE RECEPTACLE GFCI, 20A, C/W WHILE-IN-USE WEATHERPROOF COVER MOUNTED AT 750mm ABOVE ROOF AND WITHIN 7.5m OF EQUIPMENT IN ACCORDANCE WITH OESC REQUIREMENTS.

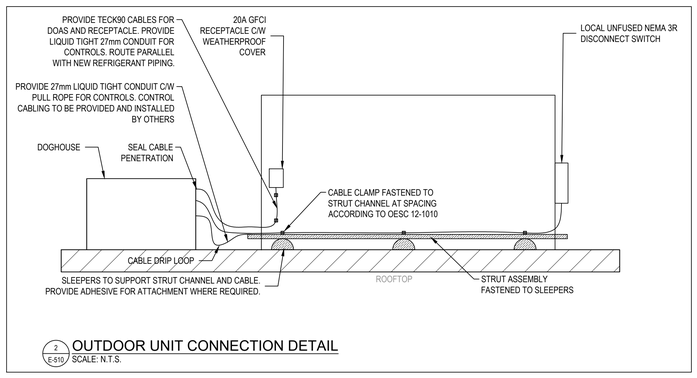
MECHANICAL EQUIPMENT SCHEDULE

EQUIPMENT		EQUIPMENT RATING							FEEDER INFORMATION				EQUIPMENT			STARTER												LOCAL DISCONNECT				CONTROL					
TAG	LOCATION	kW	HP	VOLTAGE(V)	PHASE	FLA (A)	MCA (A)	MOCP (A)	SOURCE	CABLE SIZE	CABLE TYPE	MIN. CONDUIT SIZE (mm)	SUPPLIED BY	INSTALLED BY	CONNECTED BY	SUPPLIED BY	INSTALLED BY	TYPE	SIZE	O/L RELAY	H/OA	ON/OFF	PL	PB	OTHER	SUPPLIED BY	INSTALLED BY	HEAVY DUTY	TOGGLE SWITCH	SUPPLIED BY	INSTALLED BY	CONNECTED BY	F/A SYSTEM CONNECTION	RELAYED SCHEMATIC	NOTES
AIR HANDLING UNITS																																				
DOAS-1	ROOF, AS SHOWN ON DRAWINGS			208	3	49	61	70	PNL 'DP'	3#3AWG+#8G	Cu	35	M	M	E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	E	E	Y	N	M	M	C	N/A		1, 2, 3
OU-1	ROOF, AS SHOWN ON DRAWINGS	23		208	3		40	70	PNL 'DP'	3#3AWG+#8G	Cu	35	M	M	E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	E	E	Y	N	M	M	C	N/A		1, 2, 3
IFC 1.1	AS SHOWN ON DRAWINGS			208	1		0.9	15	PNL 'DP'	2#12AWG+#12G	Cu	21	M	M	E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	E	E	N	Y	M	M	C	N/A		1, 2, 3
IFC 1.2	AS SHOWN ON DRAWINGS			208	1		0.7	15	PNL 'DP'	2#12AWG+#12G	Cu	21	M	M	E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	E	E	N	Y	M	M	C	N/A		1, 2, 3
IFC 1.3	AS SHOWN ON DRAWINGS			208	1		0.5	15	PNL 'DP'	2#12AWG+#12G	Cu	21	M	M	E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	E	E	N	Y	M	M	C	N/A		1, 2, 3
IFC 1.4	AS SHOWN ON DRAWINGS			208	1		0.7	15	PNL 'DP'	2#12AWG+#12G	Cu	21	M	M	E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	E	E	N	Y	M	M	C	N/A		1, 2, 3
IFC 1.5	AS SHOWN ON DRAWINGS			208	1		0.4	15	PNL 'DP'	2#12AWG+#12G	Cu	21	M	M	E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	E	E	N	Y	M	M	C	N/A		1, 2, 3
OU-2	ROOM 106 EXT WALL, AS SHOWN ON DRAWINGS			208	1		14	20	PNL 'DP'	2#12AWG+#12G	Cu	21	M	M	E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	E	E	Y	N	M	M	C	N/A		1, 2, 3
IFC 2.1	ROOM 106 INTERIOR, AS SHOWN ON DRAWINGS			208	1		0.7	15	PNL 'DP'	2#12AWG+#12G	Cu	21	M	M	E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	E	E	N	Y	M	M	C	N/A		1, 2, 3
OU-3	ROOM 104, AS SHOWN ON DRAWINGS			208	1		14	20	PNL 'DP'	2#12AWG+#12G	Cu	21	M	M	E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	E	E	Y	N	M	M	C	N/A		1, 2, 3
IFC 3.1	ROOM 104, AS SHOWN ON DRAWINGS			208	1		0.6	15	PNL 'DP'	2#12AWG+#12G	Cu	21	M	M	E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	E	E	N	Y	M	M	C	N/A		1, 2, 3
HEATERS																																				
CUH-1	ROOM 100, AS SHOWN ON DRAWINGS	5		208	3		24	30	PNL 'DP'	3#10AWG+#12G	Cu	21	M	M	E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	E	E	N	Y	M	M	M	N/A		1, 2, 3
OTHER																																				
DWHT-1	ROOM 110, AS SHOWN ON DRAWINGS	10.0		208	3	28		40	PNL 'DP'	3#8AWG+#10G	Cu	27	M	M	E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	E	E	Y	N	M	M	M	N/A		1, 2, 3
P-1	ROOM 110, AS SHOWN ON DRAWINGS	0.02		120	1	5		15	PNL 'DP'	2#12AWG+#12G	Cu	21	M	M	E	E	E	CM	0	Y	Y	N	Y	N	N/A	N/A	N/A	N/A	N/A	M	M	E	N/A		1, 2, 3, 4
EXHAUST FANS																																				
EF-1	ROOM 106, AS SHOWN ON DRAWINGS	0.07		120	1	1		15	PNL 'DP'	2#12AWG+#12G	Cu	21	M	M	E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	E	E	N	Y	M	M	M	N/A		1, 2, 3
EF-2	ROOM 105, AS SHOWN ON DRAWINGS		0.4	120	1			15	PNL 'DP'	2#12AWG+#12G	Cu	21	M	M	E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	E	E	N	Y	M	M	M	N/A		1, 2, 3
EF-3	ROOM 104, AS SHOWN ON DRAWINGS		0.4	120	1			15	PNL 'DP'	2#12AWG+#12G	Cu	21	M	M	E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	E	E	N	Y	M	M	M	N/A		1, 2, 3
EF-4	ROOM 102, AS SHOWN ON DRAWINGS	0.20		120	1	2		15	PNL 'DP'	2#12AWG+#12G	Cu	21	M	M	E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	E	E	N	Y	M	M	M	N/A		1, 2, 3

NOTES:
1. REFER TO FLOOR PLANS FOR CIRCUIT NUMBERS AND LOCATIONS.
2. DIRECT CONNECTION TO EQUIPMENT.
3. ELECTRICAL CONTRACTOR SHALL CONFIRM MAXIMUM OVER CURRENT PROTECTION WITH FINAL APPROVED SHOP DRAWINGS. PROVIDE OVERCURRENT PROTECTION AS PER MANUFACTURERS RECOMMENDATIONS.
4. DISCONNECT SWITCH TO BE INTEGRATED IN THE COMBINATION MOTOR STARTER

LEGEND:

IR: CURRENT RELAY
CM: COMBINATION MAGNETIC
O/L: OVERLOAD
PL: PILOT LIGHT
E: ELECTRICAL CONTRACTOR: DIVISION 26
MAG: MAGNETIC STARTER
SS: SWITCH SPEED
WP: WEATHERPROOF
PB: START/STOP PUSHBUTTON
C: CONTROLS CONTRACTOR : DIVISION 25
RSS: REMOTE STOP/START
MAN: MANUAL STARTER
DSD: DUCT SMOKE DETECTOR
TOR: THERMISTOR RELAY
M: MECHANICAL CONTRACTOR : DIVISION 23
TOG: TOGGLE SWITCH
F/A: FIRE ALARM
PQ: HAND-OFF-AUTO
N/E: SELECTABLE "EM" OPERATION CONTROLLED BY ECMS
V: EQUIPMENT VENDOR
M.I.: MINERAL INSULATED CABLE



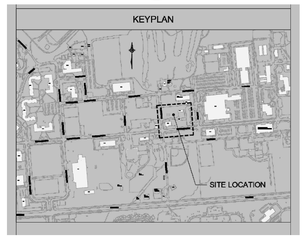
2/E-510 OUTDOOR UNIT CONNECTION DETAIL
SCALE: N.T.S.

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3	2025/12/09	RE-ISSUED FOR 99% SUBMISSION	R.K.
2	2025/10/21	ISSUED FOR 99% REVIEW	R.K.
1	2025/07/22	ISSUED FOR 60% REVIEW	R.K.

LICENSED PROFESSIONAL ENGINEER
2026-05-25
R. F. KONG
100131490
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

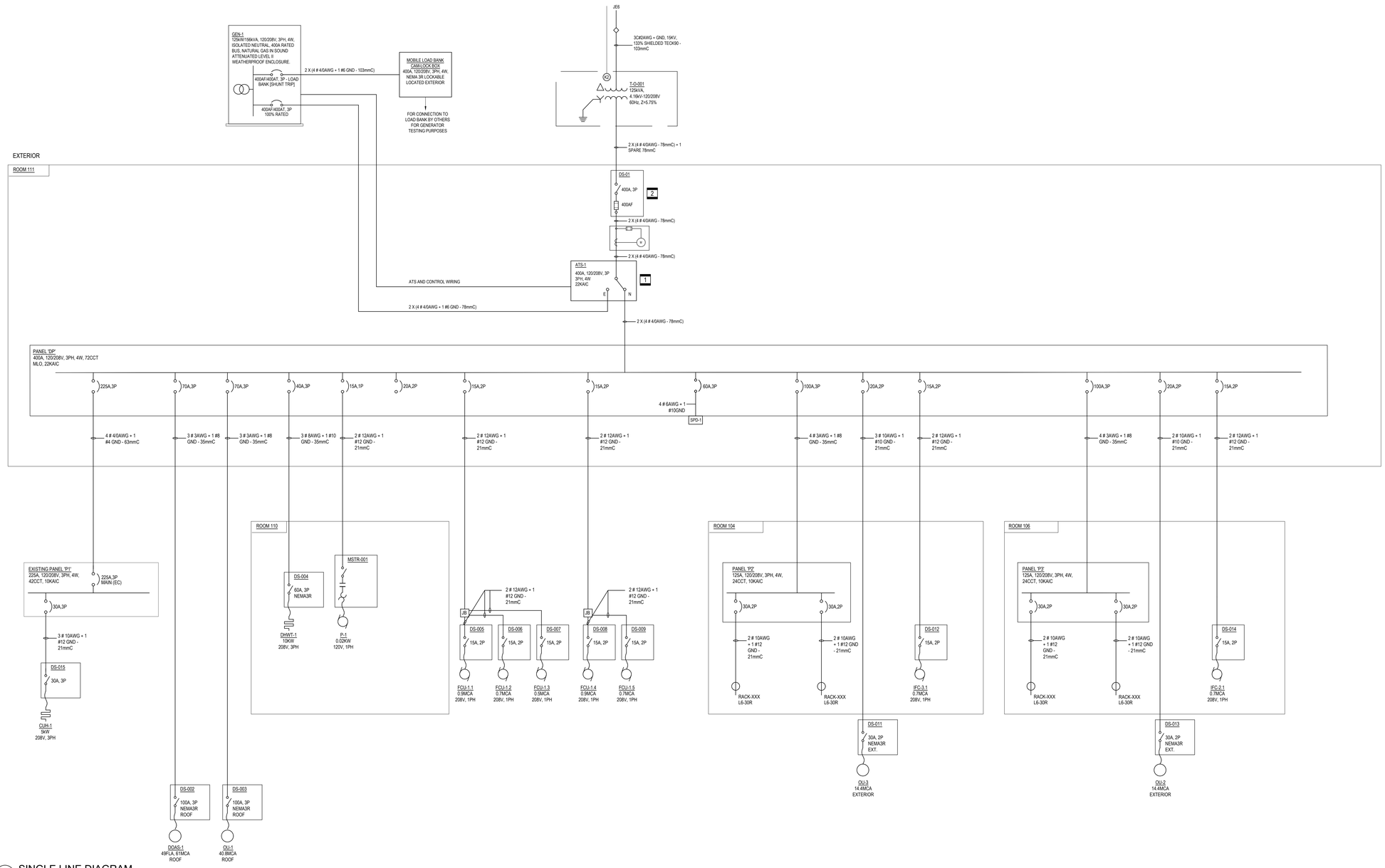
TRADE - MÉTIER
ELECTRICAL

DATE
2026/03/30

SUBJECT - SUJET
ELECTRICAL NEW WORK - POWER ROOF PLAN & MECHANICAL SCHEDULE

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: R. KONG		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: S. AUSTEN		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: P. SCISSONS	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 -510	

Canada



1 / 511 SINGLE LINE DIAGRAM

SCALE: N.T.S.

GENERAL NOTES

1. NOT ALL LOADS ARE SHOWN ON SINGLE LINE DIAGRAM. REFER TO PANEL SCHEDULES FOR FURTHER DETAILS.
2. MINIMUM SYMMETRICAL INTERRUPTING RATING FOR 208V PANELS 10,000A RMS. UNLESS INDICATED OTHERWISE

DRAWING NOTES

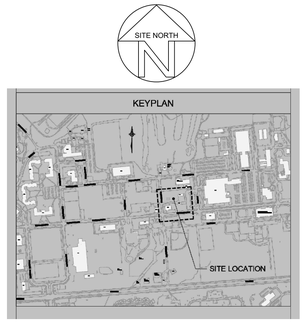
1 AUTOMATIC TRANSFER SWITCH
PROVIDE AUTOMATIC TRANSFER SWITCH C.W MAINTENANCE DOUBLE BYPASS AND OPEN TRANSITION.

2 SERVICE ENTRANCE RATED FUSE DISCONNECT
PROVIDE SERVICE ENTRANCE RATED FUSED DISCONNECT WITH C/W 3 X 400A CLASS 'L' TIME DELAY FUSES.

SPD-1 SURGE PROTECTION DEVICE - DEVICE SHALL BE RATED 208V, 3PH, 4W WITH MAXIMUM CURRENT OF 100KA PER MODE AND 200KA PER PHASE. DEVICE SHALL BE PARALLEL CONNECTED NEXT TO PANELBOARD USING MANUFACTURERS RECOMMENDED METHODS (SHORT OF WIRE LEADS AS POSSIBLE). THE DEVICE SHALL PROVIDE ALL MODE PROTECTION USING METAL OXIDE VARISTORS (MOV) AND SHALL MEET OR SURPASS THE REQUIREMENTS OF ANSI/IEEE C62.41, UL 1449 AND UL 1283 STANDARDS. 30 YEAR UNLIMITED FREE REPLACEMENT WARRANTY, WEATHERPROOF NEMA 4 STEEL ENCLOSURE, COMPONENT LEVEL FUSING.

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2	2025/10/21	ISSUED FOR 99% REVIEW	R.K.
1	2025/07/22	ISSUED FOR 60% REVIEW	R.K.

LICENSED PROFESSIONAL ENGINEER
2026-05-25
R. F. KONG
100131490
Robert Kong
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

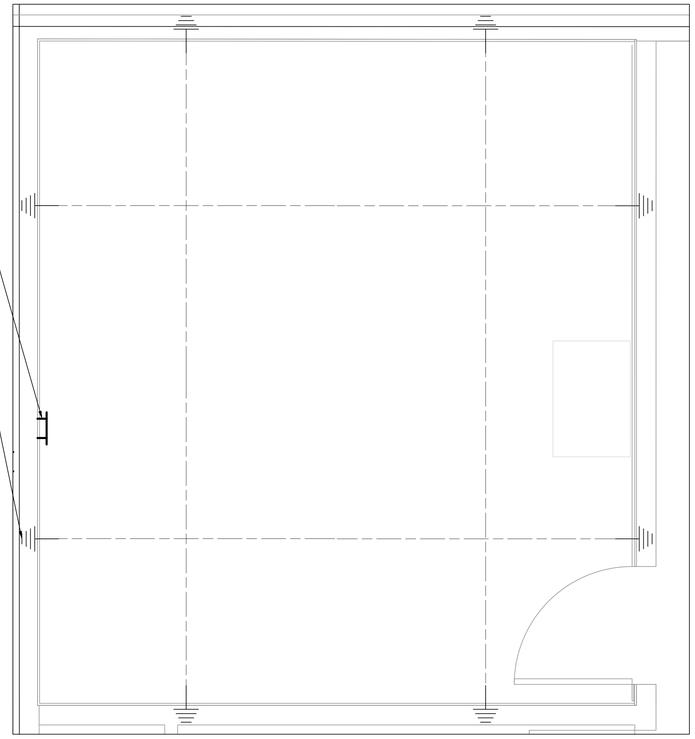
PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

TRADE - MÉTIER: ELECTRICAL
DATE: 2026/03/30

SUBJECT - SUJET
ELECTRICAL - SINGLE LINE DIAGRAM

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: R. KONG		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: S. AUSTEN		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: P. SCISSONS	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 - 511	

Canada



1/512 ANTI-STATIC FLOORING
SCALE: N.T.S.

GENERAL NOTES

1. ELECTRICAL CONTRACTOR SHALL INSTALL GROUNDING TAPE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDED INSTALLATION PRACTICES. PROVIDE ALL REQUIRED ACCESSORIES AND COMPONENTS FOR COMPLETE SYSTEM. COORDINATE WITH FLOORING CONTRACTOR ONSITE.

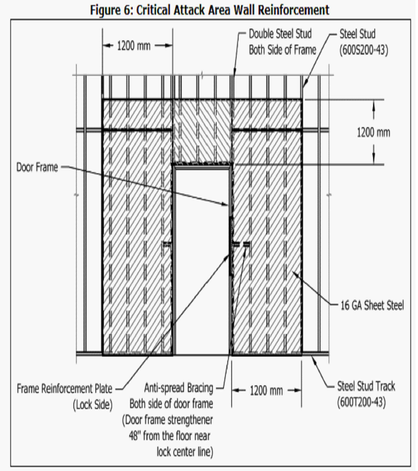
INSTALLATION INSTRUCTION DESIGN BASIS; GROUNDING THE FLOOR

1. THE COPPER TAPE IS FRAGILE, AND CARE MUST BE TAKEN DURING ITS INSTALLATION.
2. GROUNDING COPPER TAPE MUST BE INSTALLED ON THE SUBFLOOR PRIOR TO SPREADING THE ADHESIVE.
3. THE COPPER TAPE ADHESIVE MUST MAKE GOOD CONTACT WITH THE SUBFLOOR TO ENSURE IT DOES NOT MOVE.
4. TAKE CARE NOT TO BREAK THE COPPER TAPE WHEN APPLYING THE GROUNDING STRIPS TO THE FLOOR. IF THE COPPER TAPE IS BROKEN, THERE IS NO NEED TO REPLACE IT ENTIRELY BUT SIMPLY JOIN THE BROKEN TAPE WITH A PIECE OF COPPER TAPE.
5. USING LENGTHS OF COPPER TAPE 9.5 MM (3/8") WIDE X 1.8 M (6 FT.) LONG X (0.003") THICK, APPLY THE FIRST 1 M (3 FT.) TO THE FLOOR OUT FROM THE WALL INTO THE FLOOR AREA. TAKE THE REMAINDER OF THE TAPE AND ATTACH IT TO THE WALL READY FOR INSTALLATION TO THE PERMANENT GROUNDING SERVICE OR BUS BAR.
6. THIS PROCEDURE SHOULD BE REPEATED EVERY 4.9 M (16 FT.) AROUND THE ROOM'S PERIMETER (NOTE: ELECTRICAL OUTLETS ARE GENERALLY SPACED EVERY 8 FT. APART).
7. ALL EXTREMITIES OF THE COPPER TAPE SHOULD BE TEMPORARILY PROTECTED WITH MASKING TAPE UNTIL INSTALLATION IS COMPLETED.
8. THE COPPER TAPE SHALL BE FREE OF STRESS AT THE INTERSECTION OF FLOOR AND WALLS.
9. CARE MUST BE TAKEN NOT TO DAMAGE COPPER TAPE WHILE WALKING IN THE ROOM OR WHEN SPREADING THE ADHESIVE.

ELECTRICAL TESTING PROCEDURES

1. THE ELECTRICAL RESISTANCE OF ELECTROTILE FLOORING MUST BE MEASURED IN ACCORDANCE WITH THE ANSI/ESD STM7.1 (LATEST VERSION) TEST METHOD (ASTM F 150).
2. TESTS AND/OR APPROVAL ARE REQUIRED IN ORDER FOR THE WARRANTY TO BE VALID. NOTE: TESTING CAN ONLY BE PERFORMED ON A CLEAN FLOOR.
3. SURFACE-TO-SURFACE TESTING. THE SURFACE RESISTANCE MUST BE MEASURED USING TWO 2.27 KG ± 28 G (5 LBS ± 1 OZ.) ELECTRODES PLACED 91.5 CM (36") APART CONNECTED TO A MEGOHMMETER WITH 100 VOLTS OPEN CIRCUIT VOLTAGE. BOTH ELECTRODES MUST BE AT LEAST 91.5 CM (36") FROM ANY GROUNDED OBJECT OR WALL.
4. APPLY 100 VOLTS AND RECORD THE READING AFTER 15 SECONDS.
5. DO 3 MEASUREMENTS AT DIFFERENT LOCATIONS WITHIN A 1,000 SQ. FT. (92.9 SQ. M) AREA; THEN, ONE PER THOUSAND SQUARE FOOT. FOR 1000 SQ. FT. AND LESS TAKE 5 MEASUREMENTS.
6. SURFACE-TO-GROUND TESTING. THE GROUND RESISTANCE MUST ALSO BE MEASURED BETWEEN AN ELECTRODE PLACED 91.5 CM (36") FROM THE WALL AND THE GROUND.
7. APPLY 100 VOLTS AND RECORD THE READING AFTER 15 SECONDS.
8. DO 3 GROUND-RESISTANCE MEASUREMENTS AT DIFFERENT LOCATIONS WITHIN A 1,000 SQ. FT. (92.9 SQ. M) AREA; THEN, ONE PER THOUSAND SQUARE FOOT. FOR 1,000 SQ. FT. AND LESS TAKE 5 MEASUREMENTS.
9. AFTER EACH READING, MAKE SURE TO CLEAN THE SURFACE OF THE ELECTRODE WITH A CLEAN RAG AND A SOLUTION OF ISOPROPYL ALCOHOL 70% THEN, LET THE ELECTRODE SURFACE CLEANED DRY OUT (FEW SECONDS) AND FOLLOW TO THE NEXT READING.
10. CONDUCTIVE TILE: THE AVERAGE SURFACE RESISTANCE AND GROUND RESISTANCE MUST BE BETWEEN 25 X 103 OHMS AND 1 X 106 OHMS (0.025 MOHMS AND 1 MOHMS).
11. STATIC DISSIPATIVE TILE: AN AVERAGE READING OF BETWEEN 1 X 106 OHMS AND 1 X 109 OHMS (1 MOHMS AND 1,000 MOHMS).

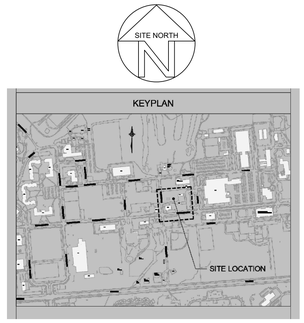
Figure 6: Critical Attack Area Wall Reinforcement



2/512 CRITICAL WALL REINFORCEMENT AREA
SCALE: N.T.S.

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1	2025/07/22	ISSUED FOR 60% REVIEW	R.K.

LICENSED PROFESSIONAL ENGINEER
2026-05-25
R. F KONG
100131490
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

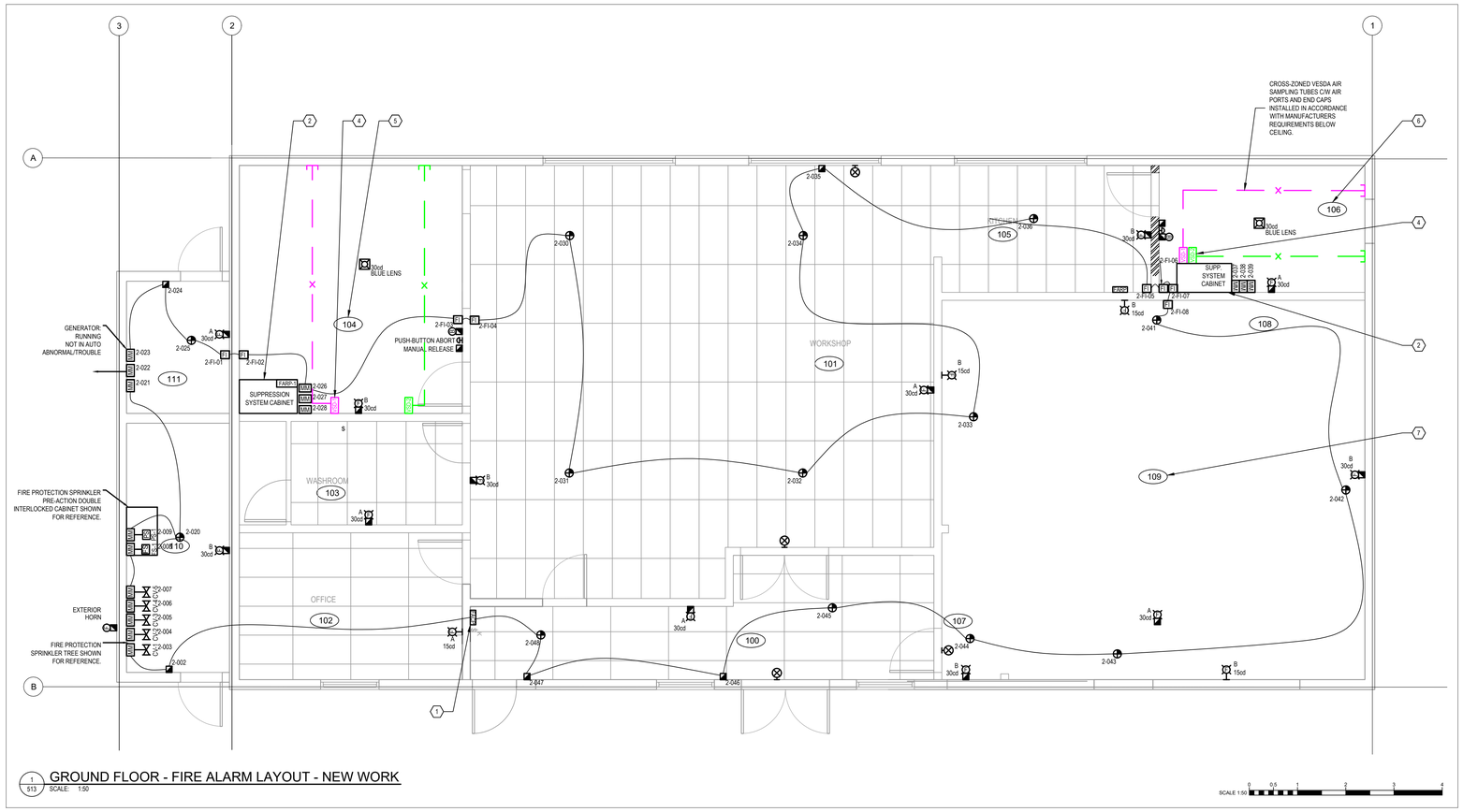
PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

TRADE - MÉTIER: ELECTRICAL
DATE: 2026/03/30

SUBJECT - SUJET
ELECTRICAL - FLOOR PLAN DETAILS

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: R. KONG		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: S. AUSTEN		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: P. SCISSONS	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 -512	

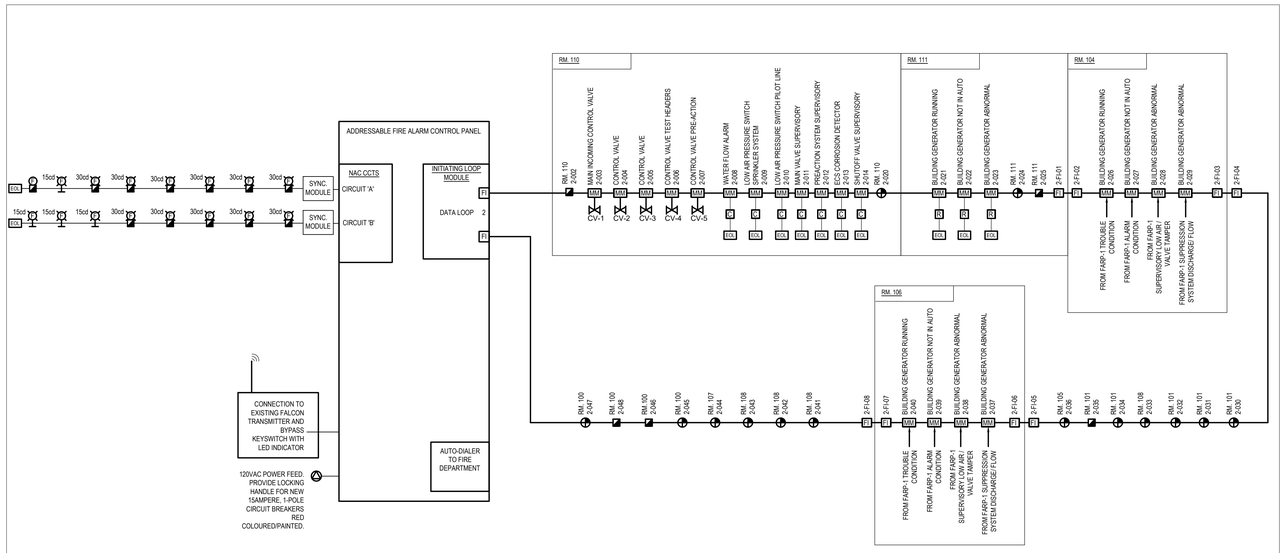
Canada



1 / 513 GROUND FLOOR - FIRE ALARM LAYOUT - NEW WORK
SCALE: 1:50

CONSTRUCTION NOTES

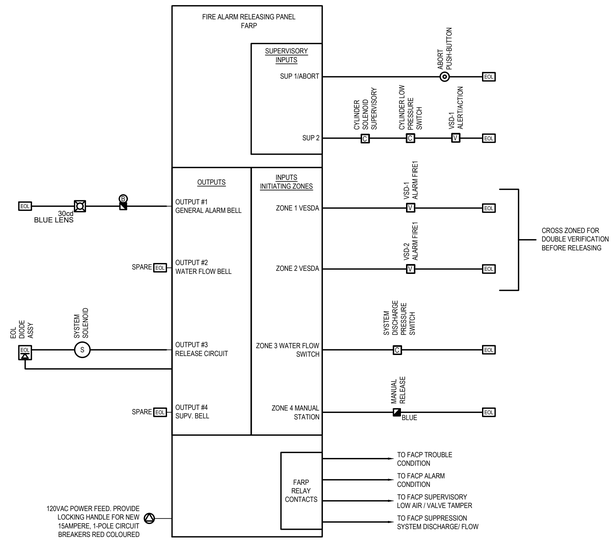
1. CONNECT NEW FIRE ALARM CONTROL PANEL TO EXISTING FALCON TRANSMITTER AND BYPASS KEY SWITCH WITH LED INDICATOR. SEE PHOTO 505.1 ON DRAWING 505 FOR IMAGE.
2. CLEAN AGENT FIRE SUPPRESSION SYSTEM, FREE STANDING CABINET, TYPICAL OF 2. TO BE PROVIDED AND INSTALLED BY DIV. 21. ELECTRICAL CONTRACTOR SHALL PROVIDE RELEASING PANEL, FIRE ALARM DEVICES, ABORT BUTTON, MANUAL RELEASE AS INDICATED IN DETAIL #3 ON THIS DRAWING.
3. DOUBLE INTERLOCK PRE-ACTION SPRINKLER CABINET C/W COMPRESSOR TO BE PROVIDED AND INSTALLED BY DIV. 21. ELECTRICAL CONTRACTOR TO PROVIDE DEDICATED 120V CIRCUIT AND FIRE ALARM MONITORING CONNECTIONS.
4. PROVIDE CROSS ZONED VERY EARLY SMOKE DETECTION ASPIRATION SYSTEM C/W AIR SAMPLING TUBE PIPING MOUNTED BELOW CEILING IN ACCORDANCE WITH MANUFACTURER INSTALLATION INSTRUCTIONS. CONNECT VESDA ALERT TO FARP SUPERVISORY TO MONITOR FOR LOW LEVEL OBSTRUCTION IN THE AIR AND NOTIFY FOR INVESTIGATE. CONNECT VESDA ALARM/FIRE1OUTPUT TO FARP TO INITIATE ALARM CONDITION AND RELEASE SUPPRESSION SYSTEM UPON BOTH VESDA SYSTEM BEING IN ALARM CONDITION.
5. ROOM 104: CONDUIT TO CHANGE TO NON-CONDUCTIVE TYPE PRIOR TO ENTERING ROOM
6. ROOM 106: CONDUIT TO CHANGE TO NON-CONDUCTIVE TYPE PRIOR TO ENTERING ROOM 106. NO WALL PENETRATIONS PERMITTED WITHIN 1200mm OF THE DOOR. DEVICES AND CONDUIT WITHIN 1200mm OF DOOR TO BE SURFACE MOUNTED. REFER TO DETAIL #2 ON DRAWING 512.
7. ROOM 109: CONDUIT MUST NOT ENTER THE ROOM STRAIGHT, PENETRATE AT AN ANGLE OF 30 DEGREES AT MINIMUM.



NOTES:

1. REFER TO FIRE ALARM DRAWINGS FOR EXACT QUANTITIES AND LOCATIONS OF DEVICES.
2. SYNCHRONIZATION MODULES TO BE PROVIDED AS INDICATED FOR STROBE SYNCHRONIZATION.
3. EXACT SYSTEM AND COMPONENT REQUIREMENTS TO BE COORDINATED WITH APPROVED SPRINKLER AND SUPPRESSION SYSTEM SHOP DRAWINGS.
4. DATA COMMUNICATION LINK BETWEEN FIRE ALARM PANEL AND FIELD INITIATION DEVICES TO BE CLASS 'A' CIRCUIT WITH ONE SUPPLY PATH AND RETURNING THROUGH AN ALTERNATE PATH TO THE FIRE ALARM. CONDUIT RUNS TO HAVE MINIMUM 1.2M SEPARATION HORIZONTALLY AND 300MM VERTICALLY.
5. THIS CONTRACTOR SHALL PROVIDE ALL REQUIRED ADDRESSABLE MODULES AND WIRING FOR CONNECTION OF NON-ADDRESSABLE EQUIPMENT (E.G. SPRINKLER MONITORING DEVICES).
6. THE CONTRACTOR SHALL PROVIDE AN AS-BUILT RISER DIAGRAM AND PASSIVE GRAPHIC UPON COMPLETION OF THE WORK.
7. TYPICAL: HORNS/STROBES SHALL BE MOUNTED ON COMMON FACEPLATE. STROBES TO BE SET TO THE CANDELA LEVELS INDICATED ON THE FLOOR PLANS.
8. PROVIDE CLASS A INITIATION CIRCUITS AND CLASS B NOTIFICATION CIRCUITS.
9. WIRING SHALL BE SOLID TINNED COPPER, ANNEALED CONDUCTORS WITH CODED PVC INSULATION, AND WITH OVERALL RED PVC JACKET. CABLES SHALL BE CSA CERTIFIED, ULC LISTED, 300 VOLT, 105°C. ALL CABLES SHALL BE MINIMUM 1hr RATED. INITIATING CIRCUITS SHALL BE 18 AWG MINIMUM AND IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS. SIGNAL CIRCUITS SHALL BE 12 AWG MINIMUM AND IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS. CONTROL CIRCUITS SHALL BE 14 AWG MINIMUM AND IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS. REFER TO ELECTRICAL SPECIFICATION.
10. FAULT ISOLATION MODULES INSTALLED ON OPPOSITE SIDES OF THE SAME FIRE SEPARATION SHALL BE OFFSET HORIZONTALLY TO A MINIMUM OF 400mm, AND NOT LOCATED WITHIN THE SAME STUD SPACE. EXACT MOUNTING LOCATION OF FAULT ISOLATORS AND MONITORING MODULES TO BE DETERMINED ONSITE. DEVICES SHALL BE MOUNTED IN ACCORDANCE WITH CAN/ULC-S524.

2 / 513 FIRE ALARM RISER DIAGRAM
SCALE: N.T.S.



NOTES:

1. **FIRE SUPPRESSION RELEASING SYSTEM, INSTALLATION, MOUNTING LOCATION OF DEVICES AND PROGRAMMING SHALL BE COMPLETE IN ACCORDANCE WITH CAN/ULC. SHOP DRAWING SUBMISSION SHALL INCLUDE VESDA MANUFACTURER AIR SAMPLING TUBE LAYOUT, ISOLAMETIC VIEW AND RESPONSE TIME.**
2. **ROOM 104 FARP-1:** DOUBLE ACTIVATION FROM CROSS ZONED SPOT-TYPE VERY EARLY SMOKE DETECTOR ASPIRATING SYSTEMS VSD-1 AND VSD-2 C/W MANUAL RELEASE SWITCH ADJACENT TO ENTRANCE AND PUSH-BUTTON ABORT SWITCH AS SHOWN ON FLOORPLAN LAYOUT. UPON ACTIVATION 30-SECOND DELAY TIMER WITH BELL AND BLUE STROBE NOTIFICATION. **REFER TO SPECIFICATIONS AND SEQUENCE OF OPERATION FOR FURTHER DETAILS.**
3. **ROOM 106 - FARP-2:** DOUBLE ACTIVATION FROM CROSS ZONED VERY EARLY SMOKE DETECTOR ASPIRATING SYSTEMS VSD-1 AND VSD-2 C/W MANUAL RELEASE SWITCH ADJACENT TO ENTRANCE AND PUSH-BUTTON ABORT SWITCH AS SHOWN ON FLOORPLAN LAYOUT. UPON ACTIVATION 30-SECOND DELAY TIMER WITH BELL AND BLUE STROBE NOTIFICATION. **REFER TO SEQUENCE OF OPERATIONS FOR FURTHER DETAILS.**

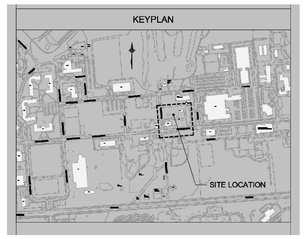
3 / 513 FIRE ALARM RELEASING PANEL RISER
SCALE: N.T.S.

National Defence / Défense nationale

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KEYPLAN



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2	2025/10/21	ISSUED FOR 99% REVIEW	R.K.
1	2025/07/22	ISSUED FOR 60% REVIEW	R.K.

LICENCED PROFESSIONAL ENGINEER
2026-05-25
R. F. KONG
100131490
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

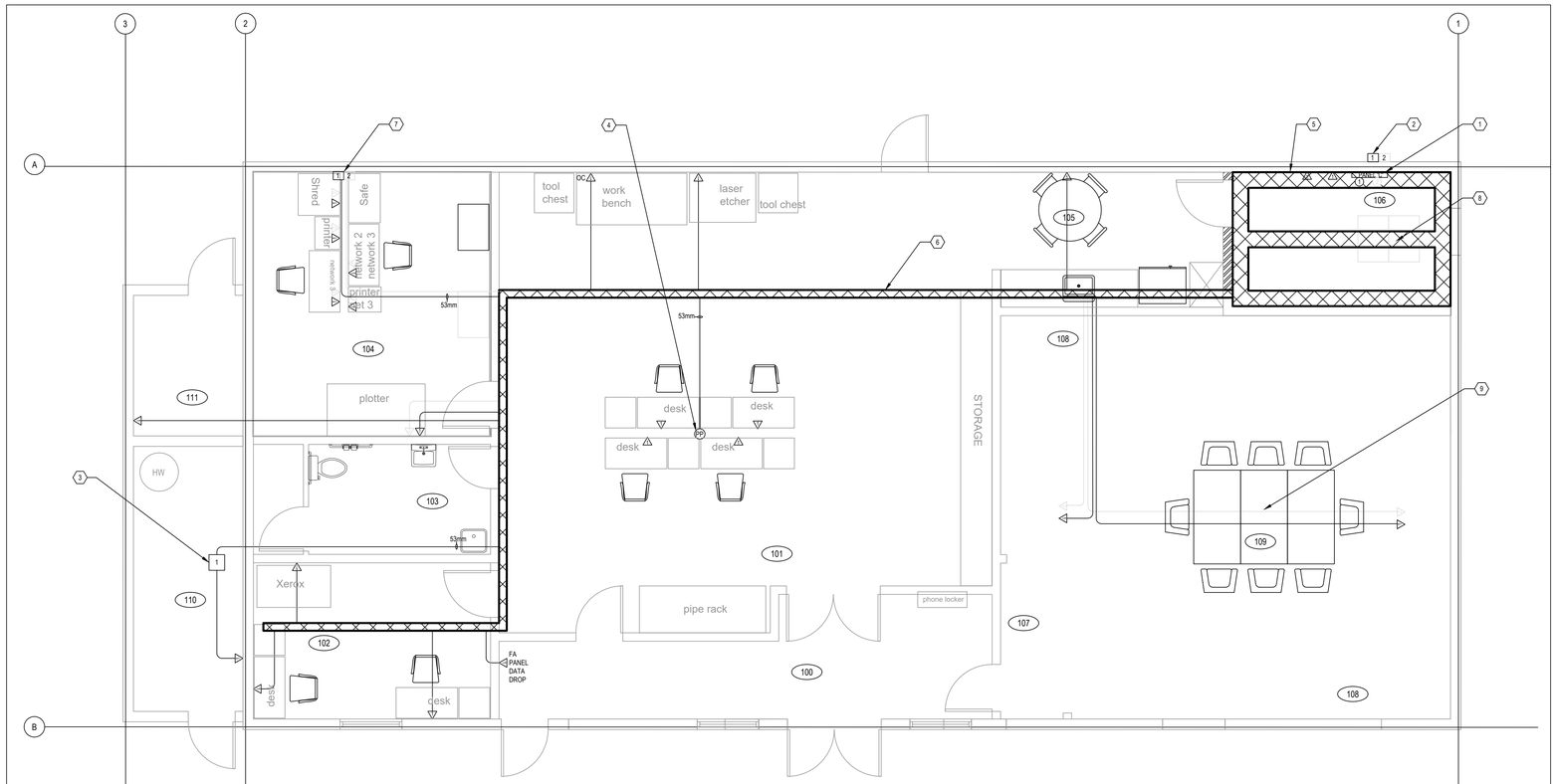
TRADE - MÉTIER
ELECTRICAL

DATE
2026/03/30

SUBJECT - SUJET
ELECTRICAL NEW WORK - FIRE ALARM & RISER DIAGRAM

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: R. KONG		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: S. AUSTEN		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: P. SCISSONS	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 - 513	

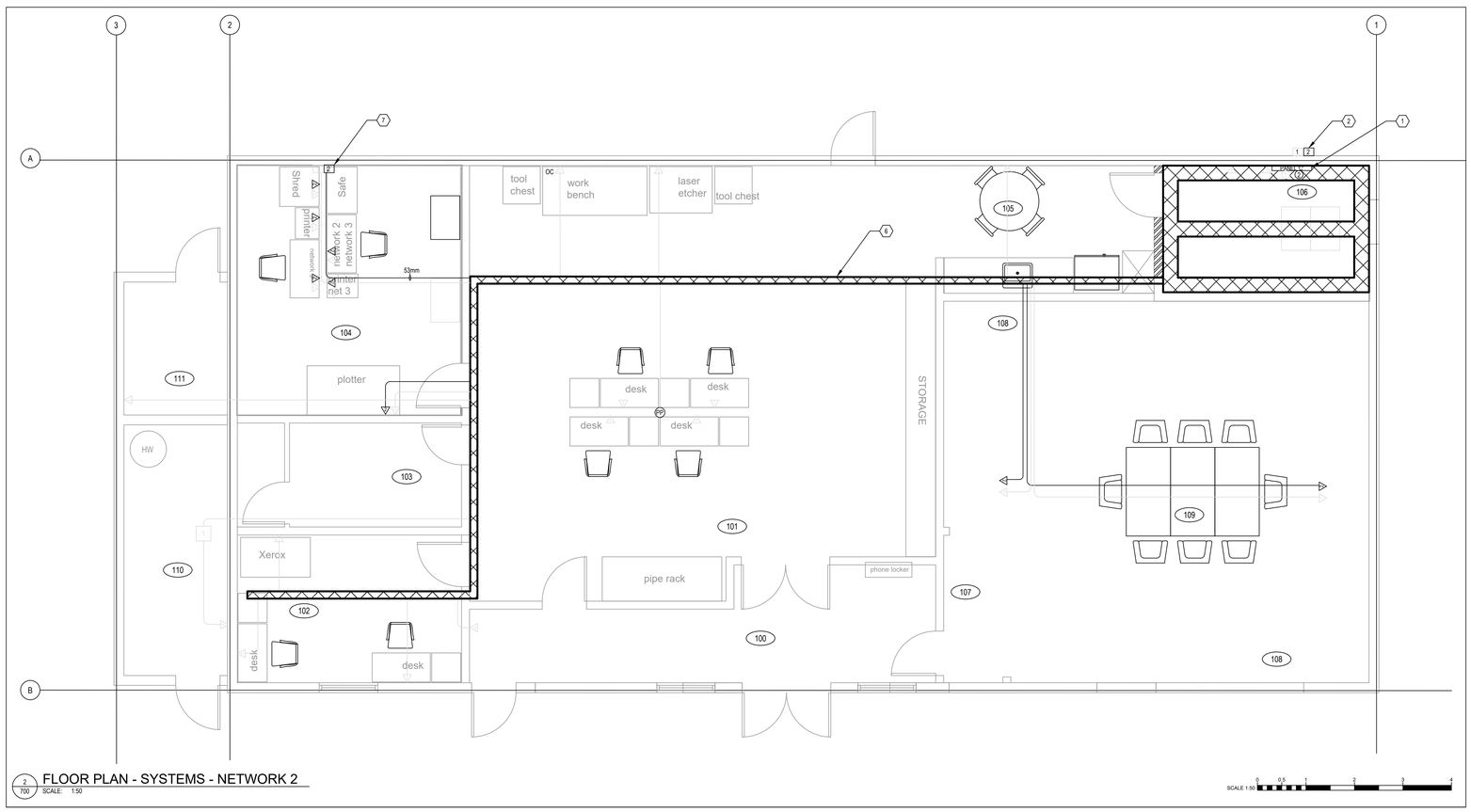
Canada



1/700 FLOOR PLAN - SYSTEMS - NETWORK 1

SCALE: 1:50

SCALE 1:50 0 0.5 1 2 3 4



2/700 FLOOR PLAN - SYSTEMS - NETWORK 2

SCALE: 1:50

SCALE 1:50 0 0.5 1 2 3 4

CONSTRUCTION NOTES

1. PROVIDE NEW WALL MOUNTED COMMUNICATION INFRASTRUCTURE INCLUDING PLYWOOD BACKBOARD, INCOMING DUCTS AND NEW 20A RECEPTACLE. PROVIDE SEPARATE 'NET 1' & 'NET 2' DATA CONDUITS. CONDUITS TO BE LEFT EMPTY. SUPPLY, INSTALLATION AND TESTING OF COMMUNICATION EQUIPMENT AND WIRING BY DND. REFER TO DRAWING 801 FOR CONDUIT TO PULL BOX CONNECTION DETAILS. PRIMARY BONDING BUSBAR (PBB) TO BE MOUNTED AT TOP OF THE BACKBOARD. PROVIDE GROUNDING STRAPS TO RACKS, CABLE TRAY, ECT. PROVIDE 305mm PRIMARY BONDING BUSBAR C/W BOLT HOLE CONNECTIONS. PROVIDE 1#3AWG GROUND BACK TO MAIN GROUND LOCATED IN ROOM 106. PROVIDE MINIMUM #6AWG GROUND TO ALL RACKS, CABLE TRAY AND WALL MOUNTED EQUIPMENT. REFER TO DETAIL #4 ON DRAWING 801.
2. TWO NEW WEATHERPROOF NEMA 4X 610mm X 610mm X 203mm PULLBOXES ON EXTERIOR WALL FOR NETWORK 1 AND NETWORK 2 ENTRY. REFER TO DETAIL 4 ON DRAWING 504.
3. PROVIDE PULL BOX, MINIMUM SIZE TO BE 305mm X 305mm X 203mm. TYPICAL.
4. TELE-POWER POLE, TYPCIAL; PROVIDE MULTI- CHANNEL WIREMOLD TO EACH WORKSTATION FOR THREE DUPLEX RECEPTACLES, AND ONE 'NET 1' DATA OUTLET OUTLET PER WORKSTATION
5. PROVIDE AND INSTALL WIRE MESH CABLE TRAY 305mm X 105mm AT 2250mm AFF IN ROOM 106. COORDINATE INSTALLATION WITH DND REPRESENTATIVE ON SITE. REFER TO DRAWING 801 FOR CONDUIT TO CABLE TRAY CONNECTION DETAILS.
6. WIRE MESH CABLE TRAY THROUGHOUT WORKSHOP TO BE 150mm X 53mm. PROVIDE SEPARATIONS FOR EACH NETWORK. COORDINATE INSTALLATION WITH DND REPRESENTATIVE ON SITE. REFER TO DRAWING 801 FOR CONDUIT TO CABLE TRAY CONNECTION DETAILS.
7. ROOM 104:
   CONDUIT TO CHANGE TO NON-CONDUCTIVE TYPE PRIOR TO ENTERING ROOM. PROVIDE MULTI-CHANNEL WIREMOLD TO TWO SEPARATE 103mm X 103mm PULL BOX C/W CABLE GROMMET FOR NETWORK 1 AND NETWORK 2, CAT 6 CABLING TO BE ROUTED INTO FURNITURE CABLE MANAGEMENT SYSTEM TO OUTLETS.
8. ROOM 106:
   CONDUIT TO CHANGE TO NON-CONDUCTIVE TYPE PRIOR TO ENTERING ROOM. NO WALL PENETRATIONS PERMITTED WITHIN 1200mm OF THE DOOR. DEVICES AND CONDUIT WITHIN 1200mm OF DOOR TO BE SURFACE MOUNTED. REFER TO DETAIL #2 ON DRAWING 512.
9. ROOM 109:
   CONDUIT TO CHANGE TO NON-CONDUCTIVE TYPE PRIOR TO ENTERING ROOM. CONDUIT MUST NOT ENTER THE ROOM STRAIGHT, PENETRATE AT AN ANGLE OF 30 DEGREES AT MINIMUM.

DRAWING NOTES

A. ALL CABLE TRAYS AND CONDUITS SHALL BE GROUNDED/BONDED.

B. CONNECT EACH END OF ANY CABLE TRAYS TO GROUND LOOP.

C. ALL CONDUIT FROM CEILING MOUNTED PULL BOXES OR CABLE TRAY TO COMMUNICATIONS OUTLETS SHALL BE 27mm CONDUIT AND ALL OUTLET BOXES SHALL BE MDVO STYLE 103mm X 103mm X 53mm TYPE. CONTRACTOR TO CONFIRM EXACT ROUTING WITH DCC REPRESENTATIVE ONSITE.

D. CONDUIT SYSTEM TO BE INSTALLED IN CEILING SPACE.

ELECTRICAL LEGEND - COMMUNICATION

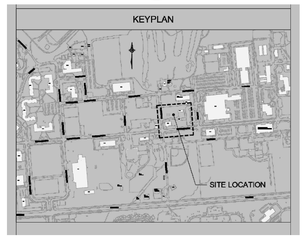
SYMBOL	DESCRIPTION
▽	DATA OUTLET, NUMBER DENOTES NETWORK
X	COMMUNICATIONS CONDUIT ENTRY, NUMBER DENOTES NETWORK
X	COMMUNICATIONS PULL BOX, NUMBER DENOTES NETWORK
⊠⊠⊠	WIRE MESH CABLE TRAY

National Defence / Défense nationale

Headquarters
Quartier général

SITE NORTH

KEYPLAN



NO.	DATE	REVISION	APPR.
5	2026/05/25	ISSUED FOR TENDER	R.K.
4	2026/03/30	ISSUED FOR 100% SUBMISSION	R.K.
3	2025/12/09	RE-ISSUED FOR 99% SUBMISSION	R.K.
2	2025/10/21	ISSUED FOR 99% REVIEW	R.K.
1	2025/07/22	ISSUED FOR 60% REVIEW	R.K.

LICENSED PROFESSIONAL ENGINEER
2026-05-25
R. F. KONG
100131490
Robert Kong
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

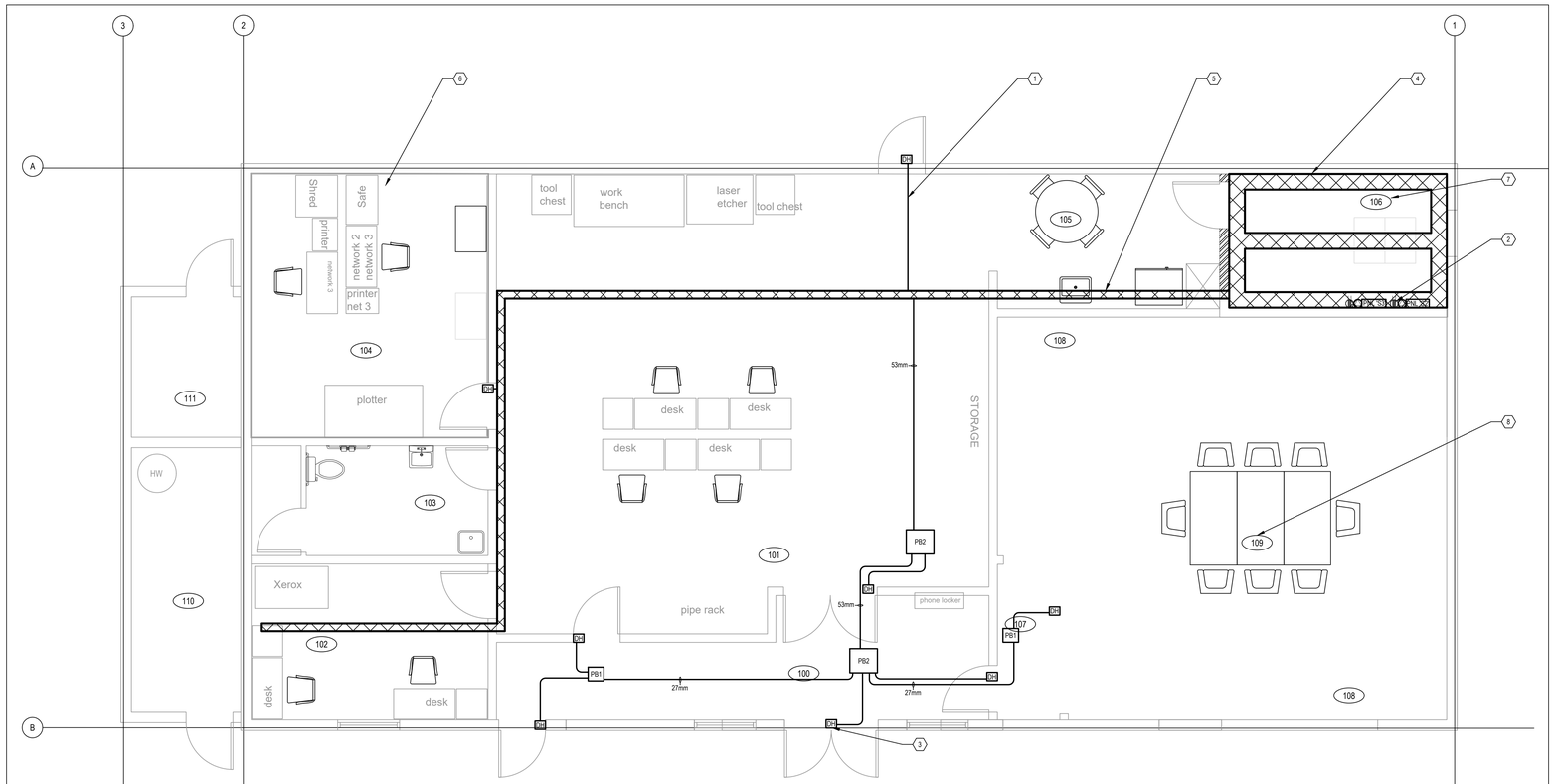
PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

TRADE - MÉTIER: ELECTRICAL
DATE: 2026/03/30

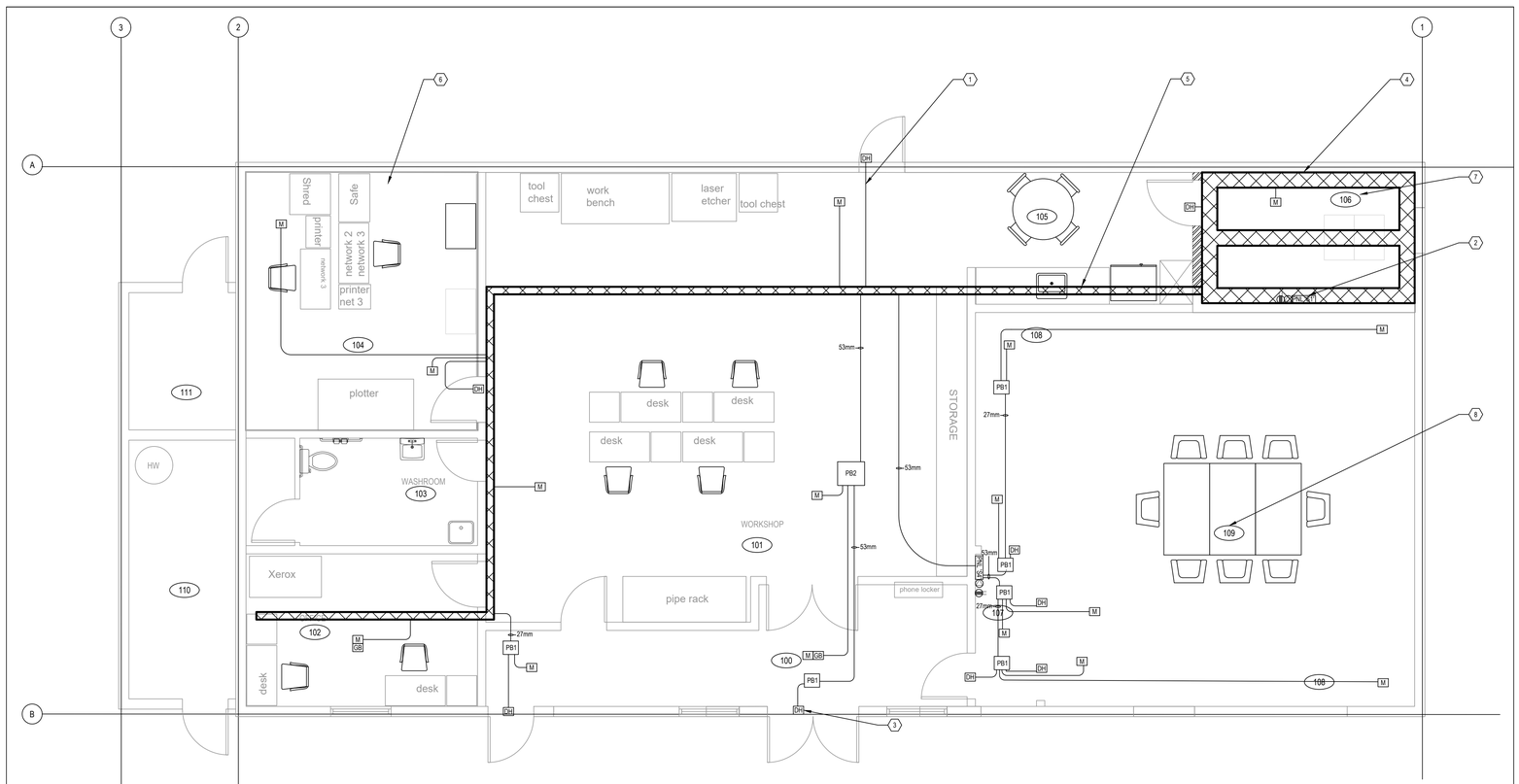
SUBJECT - SUJET
ELECTRICAL NEW WORK - TELECOMMUNICATIONS
FLOOR PLAN & DETAILS

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: R. KONG		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: S. AUSTEN		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: P. SCISSONS	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 -700	

Canada



1 / 800 FLOOR PLAN - NETWORK COMMUNICATIONS - SYSTEM 1
SCALE: 1:50



2 / 800 FLOOR PLAN - NETWORK COMMUNICATIONS - SYSTEM 2
SCALE: 1:50

CONSTRUCTION NOTES

1. TYPICAL; COORDINATE EXACT CONDUIT ROUTING WITH DND REPRESENTATIVE ONSITE. SUPPLY, INSTALLATION AND TESTING OF ALL EQUIPMENT WILL BE COMPLETED BY OTHERS. REFER TO DRAWING 801 FOR CONDUIT TO PULL BOX CONNECTION DETAILS.
2. TYPICAL; PROVIDE NEW DEDICATED 120V, 15A BREAKER AND DUPLEX RECEPTACLE FOR S SERIES PANELS. CONTRACTOR TO COORDINATE EXACT LOCATION WITH DND REPRESENTATIVE ON SITE.
3. TYPICAL; PROVIDE CONDUIT INFRASTRUCTURE FOR DOOR SYSTEMS. CONDUITS TO CONNECT BACK TO S SERIES PANEL. SEE DETAILS #2 AND #3 ON DRAWING 801.
4. PROVIDE AND INSTALL WIRE MESH CABLE TRAY 305mm X 105mm AT 2250mm AFF IN ROOM 106. COORDINATE INSTALLATION WITH DND REPRESENTATIVE ON SITE. REFER TO DRAWING 801 FOR CONDUIT TO CABLE TRAY CONNECTION DETAILS.
5. WIRE MESH CABLE TRAY THROUGHOUT WORKSHOP TO BE 150mm X 53mm. PROVIDE SEPARATIONS FOR EACH NETWORK. COORDINATE INSTALLATION WITH DND REPRESENTATIVE ON SITE. REFER TO DRAWING 801 FOR CONDUIT TO CABLE TRAY CONNECTION DETAILS.
6. ROOM 104:
   CONDUIT TO CHANGE TO NON-CONDUCTIVE TYPE PRIOR TO ENTERING ROOM.
7. ROOM 106:
   CONDUIT TO CHANGE TO NON-CONDUCTIVE TYPE PRIOR TO ENTERING ROOM 106. NO WALL PENETRATIONS PERMITTED WITHIN 1200mm OF THE DOOR. DEVICES AND CONDUIT WITHIN 1200mm OF DOOR TO BE SURFACE MOUNTED. REFER TO DETAIL #2 ON DRAWING 512.
8. ROOM 109:
   CONDUIT TO CHANGE TO NON-CONDUCTIVE TYPE PRIOR TO ENTERING ROOM. CONDUIT MUST NOT ENTER THE ROOM STRAIGHT, PENETRATE AT AN ANGLE OF 30 DEGREES AT MINIMUM.

DRAWING NOTES

A. ALL CONDUITS ENTERING SHALL BE PROPERLY BONDED.

B. ELECTRICAL CONTRACTOR TO COORDINATE EXACT LOCATIONS OF CONDUIT INFRASTRUCTURE ON SITE WITH DND REPRESENTATIVE TO ENABLE PROPER ROUTING.

C. CONDUIT SHALL BE 27mm AT MINIMUM UNLESS NOTED OTHERWISE.

D. ALL DEVICES AND WIRING TO BE PROVIDED AND INSTALLED BY OTHERS. THIS CONTRACTOR SHALL PROVIDE ALL CONDUIT PATHWAYS, JUNCTION BOXES, BONDING AND PULL ROPES.

ELECTRICAL LEGEND - NETWORK COMMUNICATIONS

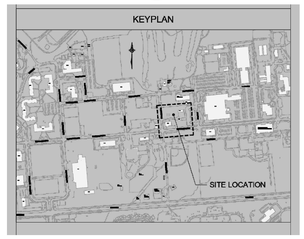
SYMBOL	DESCRIPTION
M	4" X 4" OCTAGON BOX CEILING MOUNTED
GB	CONDUIT STUB CEILING MOUNTED
DH	DOOR HARDWARE CONDUIT STUB INTO DOOR FRAME
F	WEATHERPROOF 4" X 4" OCTAGON BOX
SW	SOURCE WHICH SYSTEM 3 DEVICES WILL FEED TO
	WIRE MESH CABLE TRAY
PB1	PULL BOX 1: 305mm X 305mm X 203mm
PB2	PULL BOX 2: 457mm X 457mm X 203mm

National Defence / Défense nationale

Headquarters
Quartier général

SITE NORTH

KEYPLAN



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LICENSED PROFESSIONAL ENGINEER
2026-05-25
R. F. KONG
100131490
PROVINCE OF ONTARIO

SCALE - ÉCHELLE
AS SEEN ON DRAWINGS

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

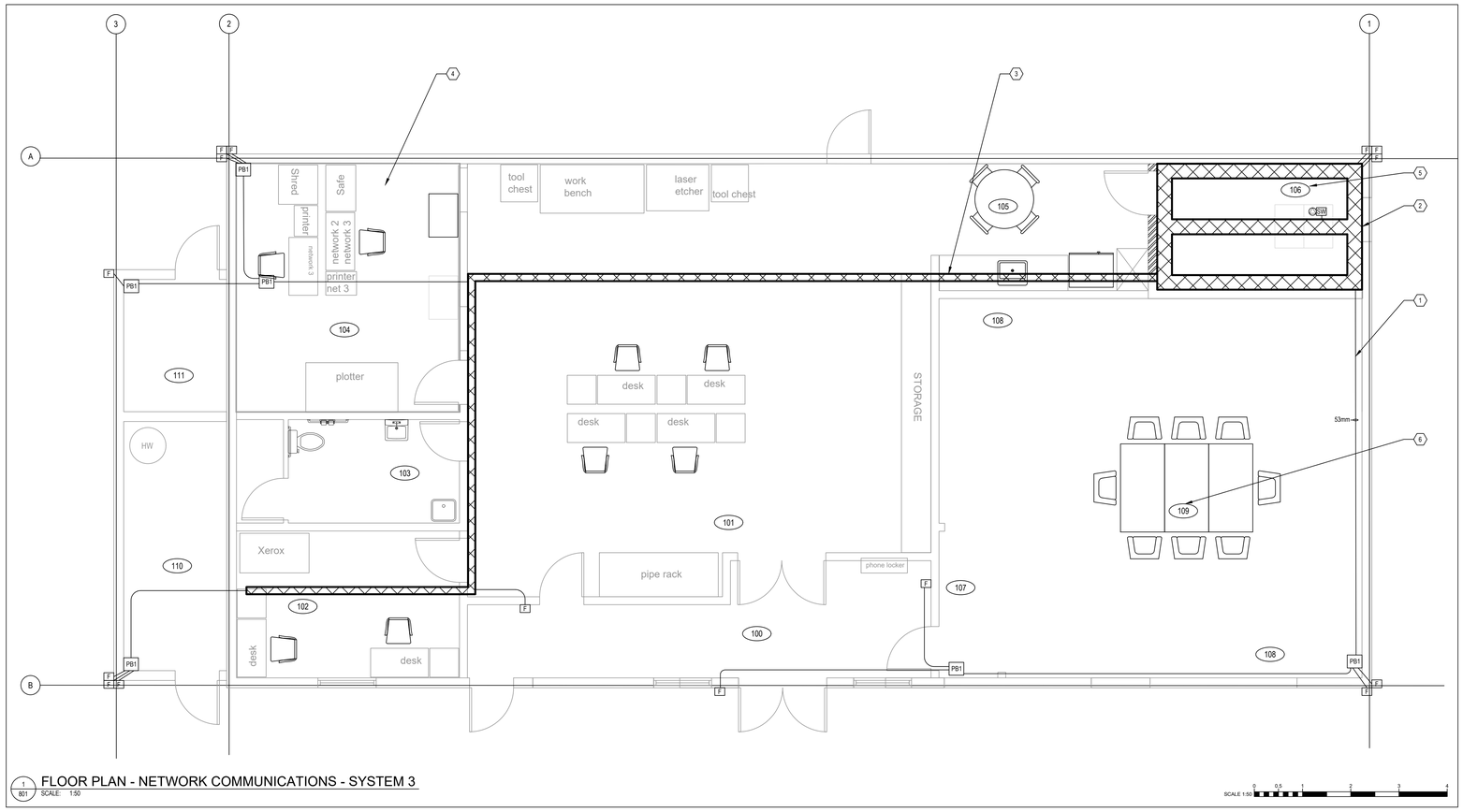
TRADE - MÉTIER
ELECTRICAL

DATE
2026/03/30

SUBJECT - SUJET
ELECTRICAL NEW WORK - NETWORK COMMUNICATIONS FLOOR PLAN

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: R. KONG		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: S. AUSTEN		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: P. SCISSONS	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 -800	

Canada



1 / 801 FLOOR PLAN - NETWORK COMMUNICATIONS - SYSTEM 3
SCALE: 1:50

SCALE 1:50 0 0.5 1 2 3 4

CONSTRUCTION NOTES

1. TYPICAL; COORDINATE EXACT CONDUIT ROUTING WITH DND REPRESENTATIVE ONSITE. SUPPLY, INSTALLATION AND TESTING OF ALL EQUIPMENT WILL BE COMPLETED BY OTHERS. REFER TO DRAWING 801 FOR CONDUIT AND PULLBOX CONNECTION DETAILS.
2. PROVIDE AND INSTALL WIRE MESH CABLE TRAY 305mm X 105mm IN ROOM 106 AT 2250mm AFF. COORDINATE INSTALLATION WITH DND REPRESENTATIVE ON SITE. REFER TO DRAWING 801 FOR CONDUIT TO CABLE TRAY CONNECTION DETAILS.
3. WIRE MESH CABLE TRAY THROUGHOUT WORKSHOP TO BE 150mm X 53mm. PROVIDE SEPARATIONS FOR EACH NETWORK. COORDINATE INSTALLATION WITH DND REPRESENTATIVE ON SITE. REFER TO DRAWING 801 FOR CONDUIT TO CABLE TRAY CONNECTION DETAILS.
4. ROOM 104:
   CONDUIT TO CHANGE TO NON-CONDUCTIVE TYPE PRIOR TO ENTERING ROOM.
5. ROOM 106:
   CONDUIT TO CHANGE TO NON-CONDUCTIVE TYPE PRIOR TO ENTERING ROOM 106. NO WALL PENETRATIONS PERMITTED WITHIN 1200mm OF THE DOOR. DEVICES AND CONDUIT WITHIN 1200mm OF DOOR TO BE SURFACE MOUNTED. REFER TO DETAIL #2 ON DRAWING 512.
6. ROOM 109:
   CONDUIT TO CHANGE TO NON-CONDUCTIVE TYPE PRIOR TO ENTERING ROOM.
   CONDUIT MUST NOT ENTER THE ROOM STRAIGHT, PENETRATE AT AN ANGLE OF 30 DEGREES AT MINIMUM.

DRAWING NOTES

A. ALL CONDUITS ENTERING SHALL BE PROPERLY BONDED.

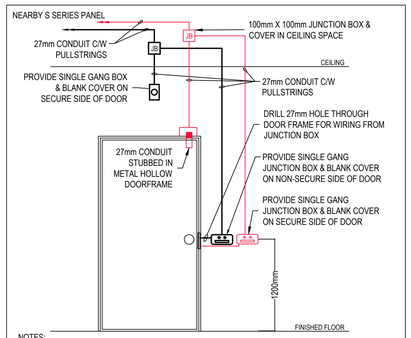
B. ELECTRICAL CONTRACTOR TO COORDINATE EXACT LOCATIONS OF CONDUIT INFRASTRUCTURE ON SITE WITH DND REPRESENTATIVE TO ENABLE PROPER ROUTING.

C. CONDUIT SHALL BE 27mm AT MINIMUM UNLESS SHOWN OTHERWISE.

D. ALL DEVICES AND WIRING TO BE PROVIDED AND INSTALLED BY OTHERS. THIS CONTRACTOR SHALL PROVIDE ALL CONDUIT PATHWAYS, JUNCTION BOXES, BONDING AND PULL ROPES.

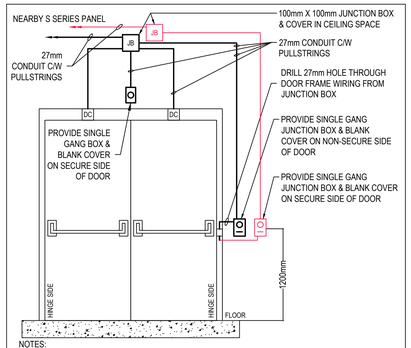
ELECTRICAL LEGEND - NETWORK COMMUNICATIONS

SYMBOL	DESCRIPTION
M	4" X 4" OCTAGON BOX CEILING MOUNTED
CS	CONDUIT STUB CEILING MOUNTED
DC	DOOR HARDWARE CONDUIT STUB INTO DOOR FRAME
F	WEATHERPROOF 4" X 4" OCTAGON BOX
SW	SOURCE WHICH SYSTEM 3 DEVICES WILL FEED TO
	WIRE MESH CABLE TRAY
PB1	PULL BOX 1: 305mm X 305mm X 203mm
PB2	PULL BOX 2: 457mm X 457mm X 203mm
DC	27mm CONDUIT STUBBED IN METAL HOLLOW DOORFRAME



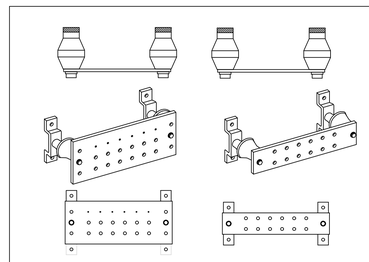
NOTES:
1. CONDUITS AND BOXES BY DIVISION 26. DEVICES, DOOR HARDWARE AND LOW VOLTAGE WIRING BY OTHERS. THIS DRAWING PROVIDES GENERAL INSTALLATION INFORMATION ONLY. CONFIRM EXACT REQUIREMENTS WITH DCC REPRESENTATIVE ON SITE.
2. CONFIRM EXACT LOCATIONS FOR DEVICES ON SITE PRIOR TO INSTALLATION.
3. ALL CONDUIT SHALL BE RUN CONCEALED INSIDE THE WALLS. ALL EXPOSED DEVICES OR WIRES TO BE MOUNTED ON INSIDE OF PROTECTED AREA.
4. ALL CONDUITS TO BE MINIMUM 27mm DIAMETER C/W PULL ROPE.
5. DETAIL IS TYPICAL, REFER TO FLOOR PLAN FOR EXACT DEVICE QUANTITY AND LOCATIONS.
6. SYSTEM 1 HARDWARE IN BLACK. SYSTEM 2 HARDWARE IN RED.

2 / 801 SINGLE DOOR HARDWARE
SCALE: N.T.S.

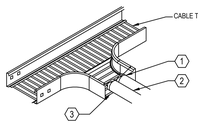


NOTES:
1. CONDUITS AND BOXES BY DIVISION 26. DEVICES, DOOR HARDWARE AND LOW VOLTAGE WIRING BY OTHERS. THIS DRAWING PROVIDES GENERAL INSTALLATION INFORMATION ONLY. CONFIRM EXACT REQUIREMENTS WITH DCC REPRESENTATIVE ON SITE.
2. CONFIRM EXACT LOCATIONS FOR DEVICES ON SITE PRIOR TO INSTALLATION.
3. ALL CONDUIT SHALL BE RUN CONCEALED INSIDE THE WALLS. ALL EXPOSED DEVICES OR WIRES TO BE MOUNTED ON INSIDE OF PROTECTED AREA.
4. ALL CONDUITS TO BE MINIMUM 27mm DIAMETER C/W PULL ROPE.
5. DETAIL IS TYPICAL, REFER TO FLOOR PLAN FOR EXACT DEVICE QUANTITY AND LOCATIONS.
6. SYSTEM 1 HARDWARE IN BLACK. SYSTEM 2 HARDWARE IN RED.

3 / 801 DOUBLE DOOR HARDWARE
SCALE: N.T.S.

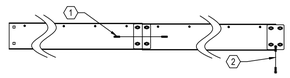


4 / 801 ROOM 106 GROUND BUS DETAILS
SCALE: N.T.S.



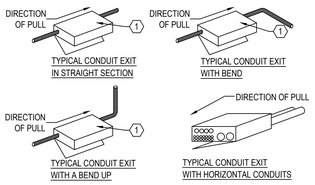
1. 103mm CONDUITS ENTERING CABLE TRAY FROM THE SIDE SHALL BE BONDED TO THE CABLE TRAY AS PER THE PERFORMANCE SPEC.
2. 103mm EMT CONDUITS.
3. THE OPENING MADE IN THE SIDE OF THE CABLE TRAY SHALL BE FREE OF SHARP EDGES. BOTTOM OF CONDUITS SHALL REST ON THE CABLE TRAY. CABLE TRAY SHALL HAVE SUSPENSION 600mm ON EITHER SIDE OF 103mm CONDUIT ENTRY.

5 / 801 TYPICAL 103mm SIDE ENTRY TO TRAY
SCALE: N.T.S.



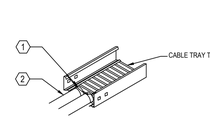
1. BONDING CONNECTIONS SHALL BE A MINIMUM OF #6 AWG COPPER RW90 GREEN INSULATED AND LUGS SHALL BE IRREVERSIBLE COMPRESSION TYPE, CABLE TRAY SHALL BE BONDED AT EACH MECHINACAL CONNECTION (SECTION OF TRAY).
2. ALL CABLE TRAY ENTERING THE TELECOM ROOMS SHALL BE BONDED TO THE TELECOMMUNICATIONS BUSS BAR THIS CONNECTION SHALL BE A MINIMUM OF #6 AWG COPPER RW90 GREEN INSULATED AND LUGS SHALL BE TWO HOLE IRREVERSIBLE COMPRESSION TYPE .

6 / 801 TYPICAL BONDING OF CABLE TRAY
SCALE: N.T.S.



1. CONDUITS SHALL ONLY EXIT IN THE DIRECTION OF THE PULL. CONDUITS SHALL NEVER EXIT THE BACK, SIDES OR TOP OF A PULL BOX. CONDUIT ENDS SHALL BE ALIGNED.

7 / 801 CONDUIT PULL BOX DETAIL
SCALE: N.T.S.



1. 103mm CONDUIT ENTRY FROM END OF TRAY (i.e. PENETRATIONS THRU FIREWALLS).
2. 103mm CONDUITS ENTERING CABLE TRAY FROM THE END SHALL BE BONDED TO THE CABLE TRAY AS PER THE PERFORMANCE SPEC.

8 / 801 TYPICAL 103mm END ENTRY TO TRAY
SCALE: N.T.S.



CONDUITS:
1. SHALL COMMENCE WITHIN 100MM ABOVE AND PERPENDICULAR TO THE INSIDE EDGE OF THE CABLE TRAY ON THE CLOSEST SIDE TO THE OUTLET BOX;
2. SHALL BE REAMED AND BUSHED;
3. SHALL BE BONDED WITH GREEN-JACKETED, #6 AWG RW90 STRANDED COPPER CONDUCTOR (OPTION A) OR MECHANICALLY BONDED TO THE CABLE TRAY WITH ELECTRICALLY CONDUCTIVE MATERIAL NOT PRONE TO GALVANIC CORRISION (OPTION B). SHALL USE IRREVERSIBLE COMPRESSION ON OR EXOTHERMIC WELD TYPE LUGS/CONNECTORS, INSTALLED USING MANUFACTURER'S SPECIFICATIONS.
4. MATERIALS BOLTED OR RIVETED TO THE CABLE TRAY SHALL BE FREE OF BURRS AND OR SHARP EDGES. DO NOT ALLOW BOLTS AND OR RIVETS TO OBSTRUCT OR INTERFERE WITH THE INTERIOR SPACE OF THE TRAY;

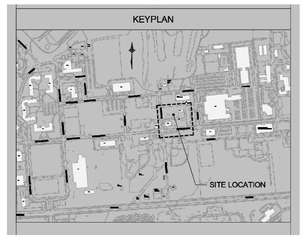
9 / 801 TYPICAL 27-53mm SIDE ENTRY TO TRAY
SCALE: N.T.S.

National Defence / Défense nationale

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LICENSED PROFESSIONAL ENGINEER
2026-05-25
R. F. KONG
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PROVINCE OF ONTARIO

SCALE - ÉCHELLE
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LOCATION - EMPLACEMENT
CFB KINGSTON ON

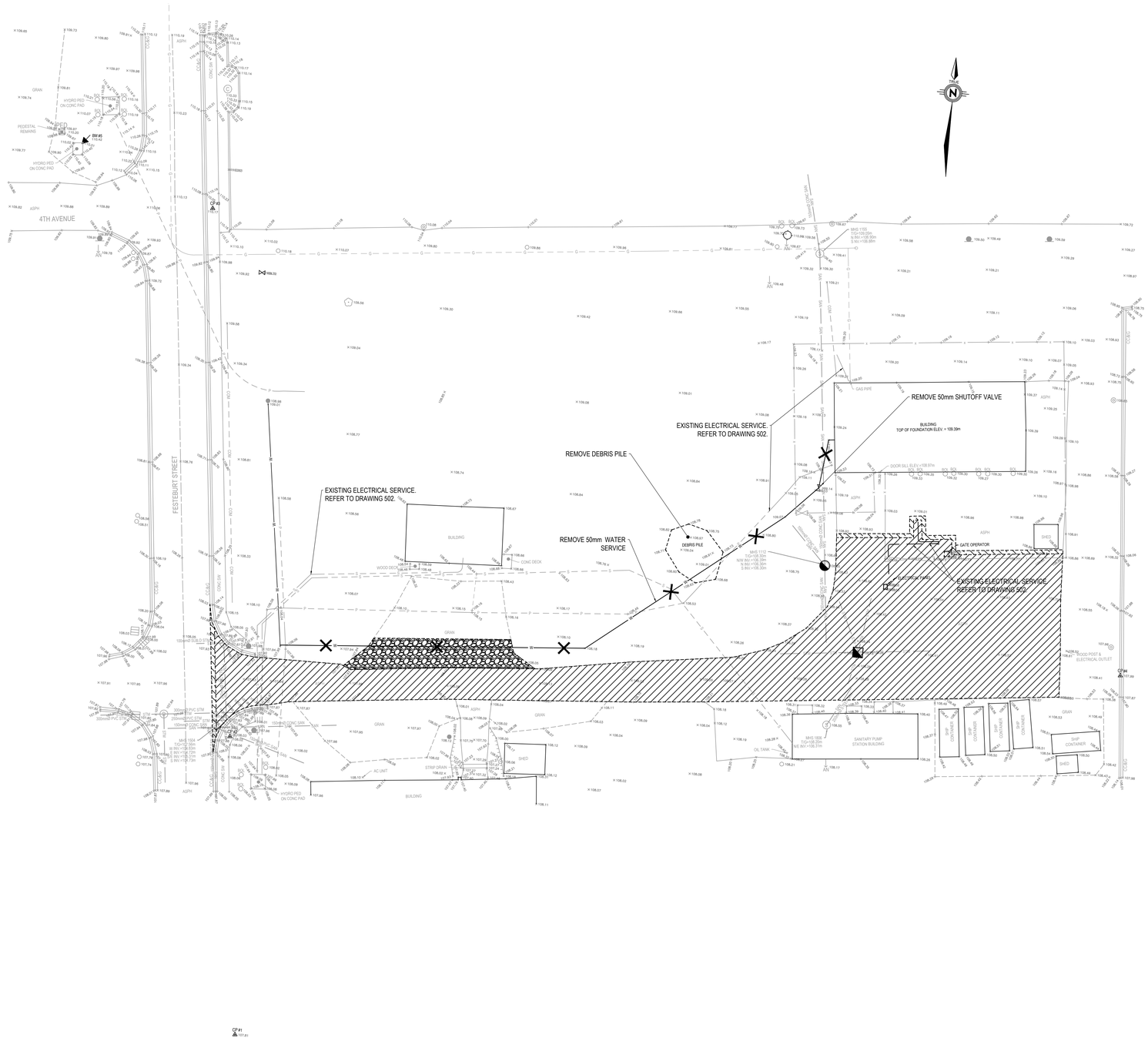
PROJECT - PROJET
CONSTRUCT NEW WORKSHOP

TRADE - MÉTIER: ELECTRICAL
DATE: 2026/03/30

SUBJECT - SUJET
ELECTRICAL NEW WORK - NETWORK COMMUNICATIONS FLOOR PLAN & DETAILS

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: R. KONG		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: S. AUSTEN		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: P. SCISSONS	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: Reviewed	801
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3 - 801	

Canada



LEGEND

- ASPHALT REMOVAL (FULL DEPTH)
- ASPHALT REMOVAL (PARTIAL DEPTH)
- GRAVEL REMOVAL
- WATER SERVICE REMOVAL
- MAINTENANCE HOLE ADJUSTMENT
- CATCH BASIN ADJUSTMENT

CONTROL POINT AND BENCHMARK SCHEDULE

LOCATION	POINT	DESCRIPTION	COORDINATES		ELEVATIONS
			NORTHING	EASTING	
FESTUBERT STREET & CRAFTSMAN BLVD	CP#1	MAGNAIL IN CONCRETE SIDEWALK	4899959.866	384325.198	107.807
FESTUBERT STREET	CP#2	MAGNAIL IN CONCRETE SIDEWALK	4899997.259	384321.293	108.025
FESTUBERT STREET & 4TH AVENUE	CP#3	MAGNAIL IN CONCRETE SIDEWALK	4900063.380	384313.331	110.171
PARKING LOT EAST OF SITE	CP#4	MAGNAIL IN CONCRETE CURB	4900014.676	384432.431	107.990
FESTUBERT STREET & 4TH AVENUE	BM#5	CUT-CROSS ON CONCRETE TRANSFORMER PAD	4900070.058	384296.192	110.415
UTM, ZONE 18, NAD 83 (ORIGINAL) - CGVD28					
NOTE: CP#1 NOT SHOWN ON PLAN VIEW					
DIMENSIONS SHOWN ARE GROUND DISTANCES					

GENERAL NOTES

01 THE CONTRACTOR IS RESPONSIBLE FOR CHECKING AND VERIFYING ALL DIMENSIONS WITH RESPECT TO SITE CONDITIONS AND ALL MATERIALS TO THE PROJECT. ANY DISCREPANCY SHALL BE REPORTED TO THE DCC REPRESENTATIVE.

02 THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL MATERIAL RELEVANT TO THE PROJECT.

03 ADDITIONAL DRAWINGS MAY BE ISSUED FOR CLARIFICATION TO ASSIST PROPER EXECUTION OF WORK. SUCH DRAWINGS WILL HAVE THE SAME MEANING AND INTENT AS IF THEY WERE INCLUDED WITH THE CONTRACT DOCUMENTS.

04 CONTRACTOR MUST COMPLY WITH LOCAL BY-LAWS, CANADIAN CONSTRUCTION SAFETY CODE AND ALL REGULATIONS SET BY AUTHORITIES HAVING JURISDICTION. IN CASE OF CONFLICT OR DISCREPANCY, THE MORE STRINGENT REQUIREMENTS SHALL APPLY.

05 CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED UTILITY LOCATES, INSPECTIONS, PERMITS, AND APPROVALS, INCLUDING ALL ASSOCIATED COSTS. LOCATION OF EXISTING UTILITIES ARE APPROXIMATE ONLY AND BASED ON BEST AVAILABLE INFORMATION.

06 CONTRACTOR IS RESPONSIBLE FOR MAINTAINING FIRE ACCESS / CONTROL AT ALL TIMES. FIRE LANE WIDTH OF 6m MINIMUM DURING CONSTRUCTION.

07 EXISTING WATERMAIN SYSTEM TO REMAIN IN CURRENT OPERATION UNTIL NEW SYSTEMS IS COMPLETED AND COMMISSIONED TO THE SATISFACTION OF DCC REPRESENTATIVE REQUIREMENTS. TEMPORARY SHUT DOWNS REQUIRED FOR CROSSINGS SHALL BE COORDINATED AND APPROVED BY DCC REPRESENTATIVE PRIOR TO CONSTRUCTION.

08 CONTRACTOR TO CONTACT GAS COMPANY REPRESENTATIVE WHEN WORKING AROUND ANY GAS LINES INCLUDING REMOVALS, CONSTRUCTION AND REINSTATEMENT WORK.

09 WATERMAIN AND SEWER MAINS INSTALLED UNDER EXISTING ELECTRICAL / COMM. / GAS PLANTS SHALL BE SUPPORTED AS PER ELECTRICAL / COMM. / GAS REQUIREMENTS. IF A CROSSING IS UNDER AN EXISTING CONCRETE DUCT BANK, FILL BETWEEN WATERMAIN / SEWER AND DUCT BANK WITH UNSHRINKABLE CONCRETE.

DRAWING NOTES

WATERMAIN

1. NEW WATERMAIN TO BE 152mmØ PVC DR18 CL-150.
2. CONTRACTOR TO INSTALL TRACER WIRE ON ALL NEW WATERMAIN AND BRING UP ALONG NEW ISOLATION VALVE.
3. ALL WATERMAIN FITTINGS AND CONNECTIONS TO BE CONSTRUCTED ON SOLID GROUND.
4. MINIMUM COVER ON THE WATERMAIN AND WATER SERVICE SHALL BE 1.8m FROM PROPOSED FINISH GRADE TO THE TOP OF PIPE UNLESS OTHERWISE IDENTIFIED.
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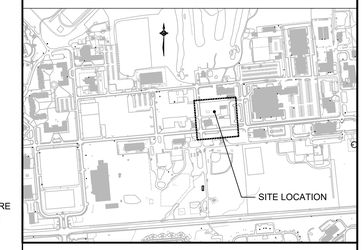
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National Defence / Défense nationale

Headquarters
Quartier général

KEYPLAN



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REGISTERED PROFESSIONAL ENGINEER
D.NGUYEN
100053149
MAY 25, 2026
PROVINCE OF ONTARIO

SCALE - ÉCHELLE 1:250 (0 m, 4, 8 / 2, 6, 10 m)

LOCATION - EMPLACEMENT
CFB KINGSTON ON

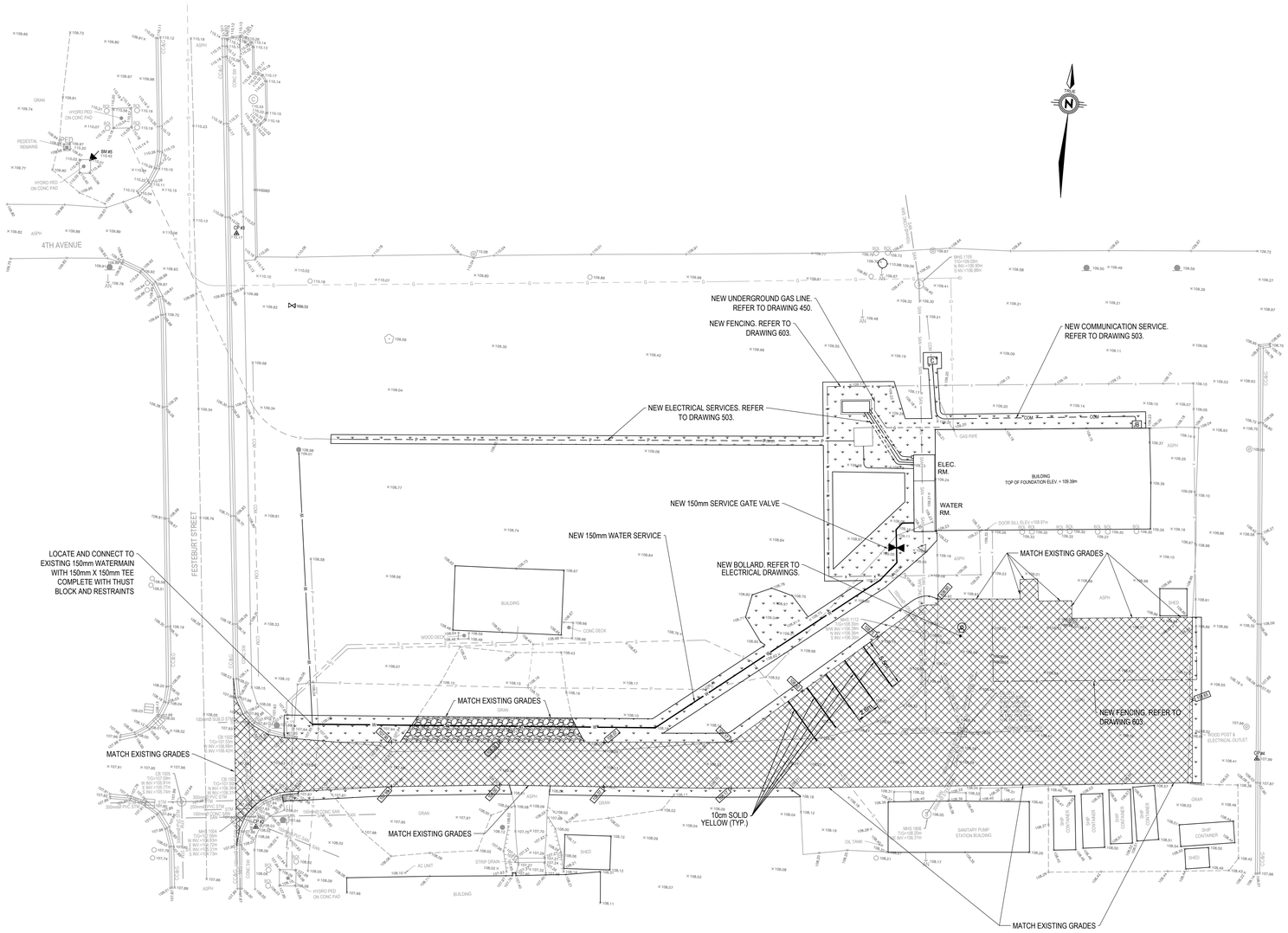
PROJECT - PROJET
DCC KINGSTON - CONSTRUCT NEW WORKSHOP

TRADE - MÉTIER: CIVIL
DATE: 2025/10/21

SUBJECT - SUJET
REMOVALS

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: L.AUBERTIN		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: L.AUBERTIN		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: D.NGUYEN	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: X.X.	601 / of #
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3-601	

Canada



LEGEND

- NEW PAVEMENT STRUCTURE
- NEW SOD COMPLETE WITH 100mm TOPSOIL
- NEW 150mm GRAVEL
- 109.00 PROPOSED GRADE

GENERAL NOTES

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DRAWING NOTES

WATERMAIN

1. NEW WATERMAIN TO BE 152mmØ PVC DR18 CL-150.
2. CONTRACTOR TO INSTALL TRACER WIRE ON ALL NEW WATERMAIN AND BRING UP ALONG NEW ISOLATION VALVE.
3. ALL WATERMAIN FITTINGS AND CONNECTIONS TO BE CONSTRUCTED ON SOLID GROUND.
4. MINIMUM COVER ON THE WATERMAIN AND WATER SERVICE SHALL BE 1.8m FROM PROPOSED FINISH GRADE TO THE TOP OF PIPE UNLESS OTHERWISE IDENTIFIED.
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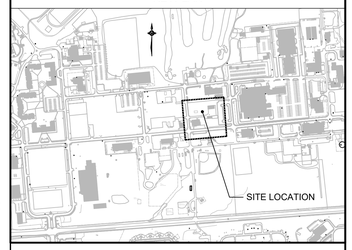
CONTROL POINT AND BENCHMARK SCHEDULE

LOCATION	POINT	DESCRIPTION	COORDINATES		ELEVATIONS
			NORTHING	EASTING	
FESTUBERT STREET & CRAFTSMAN BLVD	CP#1	MAGNAIL IN CONCRETE SIDEWALK	4899959.866	384325.198	107.807
FESTUBERT STREET	CP#2	MAGNAIL IN CONCRETE SIDEWALK	4899997.259	384321.293	108.025
FESTUBERT STREET & 4TH AVENUE	CP#3	MAGNAIL IN CONCRETE SIDEWALK	4900063.380	384313.331	110.171
PARKING LOT EAST OF SITE	CP#4	MAGNAIL IN CONCRETE CURB	4900014.676	384432.431	107.990
FESTUBERT STREET & 4TH AVENUE	BM#5	CUT-CROSS ON CONCRETE TRANSFORMER PAD	4900070.058	384296.192	110.415
UTM, ZONE 18, NAD 83 (ORIGINAL) - CGVD28					
NOTE: CP#1 NOT SHOWN ON PLAN VIEW					
DIMENSIONS SHOWN ARE GROUND DISTANCES					

National Defence / Défense nationale

Headquarters
Quartier général

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3	2025/12/09	RE-ISSUED FOR 99% SUBMISSION	D.N.
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1	2025/07/22	ISSUED FOR 60% REVIEW	D.N.

REGISTERED PROFESSIONAL ENGINEER
D.NGUYEN
100053149
MAY 25, 2026
PROVINCE OF ONTARIO

SCALE - ÉCHELLE 1:250 (0 m, 2, 4, 6, 8, 10 m)

LOCATION - EMPLACEMENT
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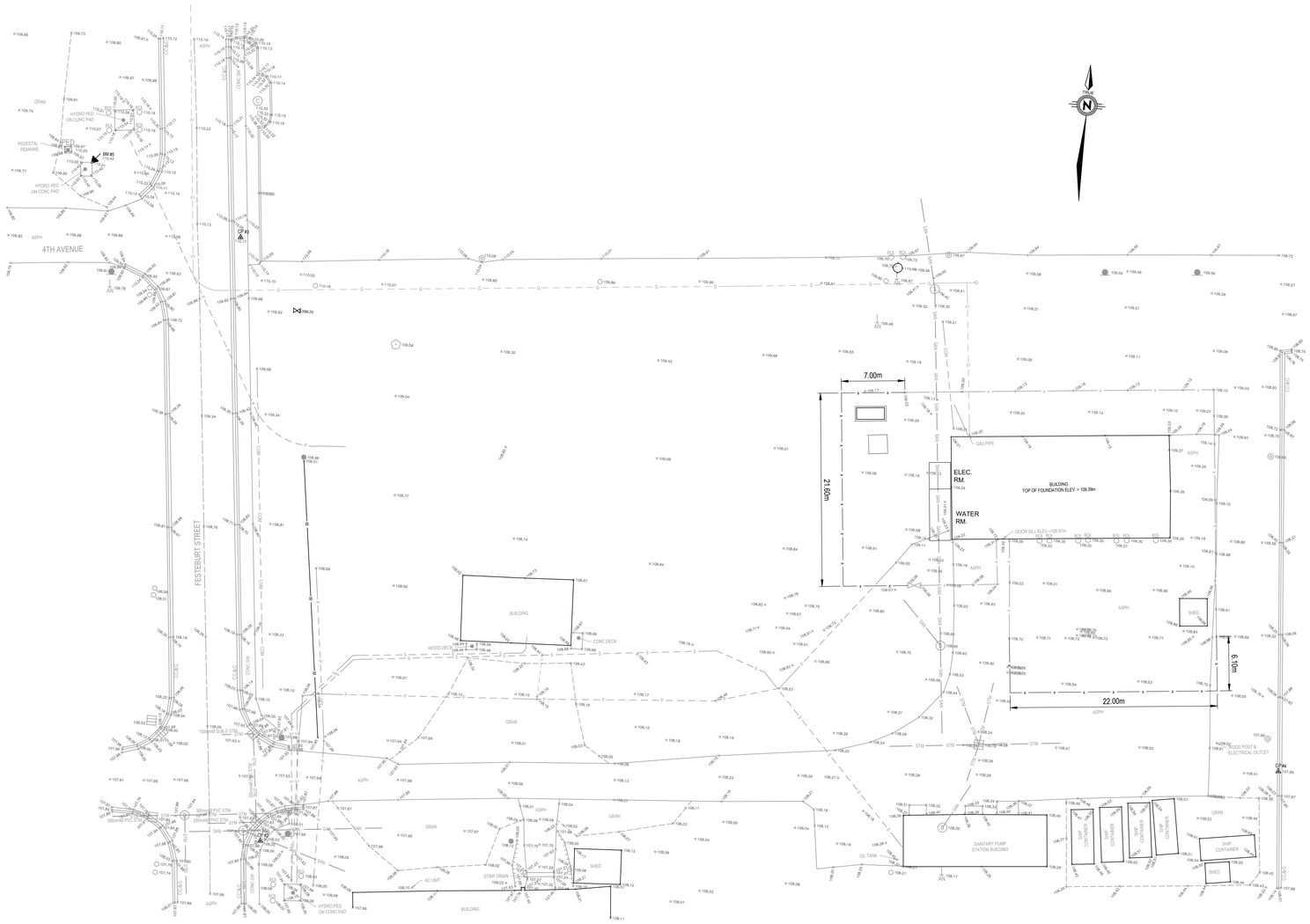
PROJECT - PROJET
DCC KINGSTON - CONSTRUCT NEW WORKSHOP

TRADE - MÉTIER: CIVIL
DATE: 2025/10/21

SUBJECT - SUJET
REINSTATEMENTS

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: L.AUBERTIN		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: L.AUBERTIN		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: D.NGUYEN	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: X.X.	602 / of #
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3-602	

Canada



DRAWING NOTES

MATERIALS

CONCRETE

1) CONCRETE SHALL CONFORM TO ONTARIO PROVINCIAL SPECIFICATION STANDARD (OPSS) 1350 FOR 20 MPa CONCRETE.
2) CHEMICAL ADMIXTURES: TO CAN3-A266.2 FOR ACCELERATING OR RETARDING ADMIXTURES DURING COLD OR HOT WEATHER.
3) CONCRETE PLACING, CURING, AND PROTECTION FROM THE WEATHER AND TEMPERATURE SHALL BE IN ACCORDANCE WITH OPSS 904.
4) CURING CONCRETE BEFORE ATTACHING FENCING MATERIALS:
   - .1 AVERAGE SOIL CONDITIONS: MINIMUM 5 DAYS.
   - .2 SOLID ROCK CONDITIONS: MINIMUM 2 DAYS.

CHAIN-LINK FENCE

1) CHAIN-LINK FENCE FABRIC: TO CAN/CGSB-138.1.
   - .1 TYPE 1, CLASS A, MEDIUM STYLE.
   - .2 HEIGHT OF FABRIC: 2.1 m.
   - .3 TO BE 9 GAUGE MINIMUM WIRE MESH.
   - .4 OPENING TO BE NO LARGER THAN 5 cm.

2) POSTS AND BRACE RAILS: TO CAN/CGSB-138.2, SCHEDULE 40 GALVANIZED STEEL PIPE. DIMENSIONS AS INDICATED.
3) BOTTOM TENSION WIRE: TO CAN/CGSB-138.1, TABLE 2, SINGLE STRAND, GALVANIZED STEEL WIRE, 5 mm DIAMETER.
4) TIE WIRE FASTENERS: TO CAN/CGSB-138.1, TABLE 2 (GALVANIZED STEEL WIRE) SINGLE STRAND.
5) TENSION BARS: TO ASTM A525M, 5 X 20 mm MINIMUM GALVANIZED STEEL.
6) GATE FRAMES: TO ASTM A53, GALVANIZED STEEL PIPE, STANDARD WEIGHT 45 mm OUTSIDE DIAMETER PIPE FOR OUTSIDE FRAME, 35 mm OUTSIDE DIAMETER PIPE FOR INTERIOR BRACING.
   - .1 FABRICATE GATES AS INDICATED WITH ELECTRICALLY WELDED JOINTS.
   - .2 FASTEN FENCE FABRIC TO GATES WITH TWISTED SELVAGE AT TOP.
   - .3 FURNISH ALL GATES WITH TWO GALVANIZED MALLEABLE IRON HINGES TOP AND BOTTOM AND SINGLE CENTRE GALVANIZED MALLEABLE IRON HINGE AND LATCH AND LATCH CATCH WITH PROVISION FOR PADLOCK WHICH CAN BE ATTACHED AND OPERATED FROM EITHER SIDE OF INSTALLED GATE.
   - .4 FURNISH DOUBLE GATES WITH CHAIN HOOKS TO HOLD GATES OPEN AND CENTRE REST WITH DROP BOLT FOR CLOSED POSITION.
7) FITTINGS AND HARDWARE: TO CAN/CGSB-138.2, GALVANIZED STEEL OR MALLEABLE OR DUCTILE CAST IRON. TENSION BAR BANDS: 3 X 20 mm MINIMUM GALVANIZED STEEL. POST CAPS TO PROVIDE WATERPROOF FIT, TO FASTEN SECURELY OVER POSTS AND TO CARRY TOP RAIL. TURNBUCKLES TO BE DROP FORGED.
8) GALVANIZING:
   - .1 FOR CHAIN LINK FABRIC: TO CAN/CGSB-138.1 GRADE 2.
   - .2 FOR PIPE: 550 g/m2 MINIMUM TO ASTM A90.
   - .3 FOR OTHER FITTINGS: TO CAN/CSA-G164.

9) THREE STRANDS OF BARBED WIRE SET OUTWARDS AT 45 DEGREES AS PER OPSD 972.101.

EXECUTION

CHAIN-LINK FENCE

1) ERECT FENCING AND GATES ALONG LINES AS INDICATED AND IN ACCORDANCE WITH CAN/CGSB-138.3.
   - .1 PROVIDE CLEARANCE BETWEEN BOTTOM OF FENCE AND GROUND SURFACE OF 30-50 mm.
2) EXCAVATE POST HOLES TO DIMENSIONS INDICATED BY METHODS APPROVED BY THE TECHNICAL AUTHORITY.
3) INSTALL GATE POSTS ON BOTH SIDES OF GATE OPENINGS.
4) INSTALL CORNER POSTS AT HORIZONTAL DEFLECTION IN THE FENCE LINE OF 10 DEGREES OR MORE.
5) STRAINING POSTS SHALL BE INSTALLED AT EQUAL INTERVALS NOT EXCEEDING 150 m. ADDITIONAL STRAINING POSTS SHALL BE INSTALLED WHERE CHANGE IN VERTICAL ALIGNMENT OF THE FENCING EXCEEDS 30 DEGREES (SEE DWG CHANGE OF GRADE DETAIL).
6) INSTALL LINE POSTS SPACED AT EQUAL HORIZONTAL DISTANCE WITH A MAXIMUM OF 3 m BETWEEN LINE POSTS.
7) PLACE CONCRETE IN POST HOLES THEN EMBED POSTS INTO CONCRETE TO DEPTHS INDICATED. EXTEND CONCRETE 50 mm ABOVE GROUND LEVEL AND SLOPE TO DRAIN AWAY FROM POSTS. BRACE POSTS TO HOLD POSTS IN PLUMB POSITION AND TRUE TO ALIGNMENT AND ELEVATION UNTIL CONCRETE HAS SET.
8) INSTALL TOP RAIL BETWEEN POSTS AND FASTEN SECURELY TO POSTS AND SECURELY FASTEN ALL WATERPROOF CAPS.
9) INSTALL BRACE RAILS ON BOTH SIDES OF GATE, CORNER AND STRAINING POSTS. PLACED IN CENTER OF PANEL AND PARALLEL TO GROUND SURFACE.
10) INSTALL ALL POST CAPS.
11) INSTALL BOTTOM TENSION WIRE, STRETCH TIGHTLY AND FASTEN SECURELY TO GATE, CORNER AND STRAINING POSTS WITH TURNBUCKLES AND TENSION BAR BANDS.
12) FENCE FABRIC SHALL NOT BE INSTALLED UNTIL THE CONCRETE FOOTINGS HAVE CURED FOR A MINIMUM OF 5 DAYS.
13) LAY OUT FENCE FABRIC. STRETCH TIGHTLY TO TENSION RECOMMENDED BY MANUFACTURER AND FASTEN TO GATE, CORNER AND STRAINING POSTS WITH TENSION BARS SECURED TO POSTS WITH TENSION BAR BANDS SPACED AT 300 mm INTERVALS. KNUCKLED SELVAGE AT BOTTOM. TWISTED SELVAGE AT TOP. THE LONGITUDINAL AXIS OF THE DIAMOND PATTERN SHALL BE PERPENDICULAR TO THE SLOPE OF THE TOP RAIL. THE FABRIC MUST BE TAUT AND SECURELY ANCHORED. THE FABRIC SHALL BE PLACED ON THE OUTSIDE FACE OF POSTS.
14) SECURE FABRIC TO TOP RAILS, LINE POSTS AND BOTTOM TENSION WIRE WITH TIE WIRES AT 450 mm INTERVALS (TYPICAL). GIVE TIE WIRES MINIMUM TWO TWISTS.
15) INSTALLATION OF GATES:
   - .1 INSTALL GATES IN LOCATIONS AS INDICATED.
   - .2 LEVEL GROUND BETWEEN GATE POSTS AND SET GATE BOTTOM APPROXIMATELY 40-75 mm ABOVE GROUND SURFACE.
   - .3 DETERMINE POSITION OF CENTER GATE REST FOR DOUBLE GATES. CAST GATE REST IN CONCRETE AS DIRECTED. DOME CONCRETE ABOVE GROUND SURFACE TO SHED WATER.
16) TOUCH UP: CLEAN DAMAGED SURFACES WITH WIRE BRUSH REMOVING LOOSE AND CRACKED COATINGS. APPLY TWO COATS OF ORGANIC ZINC-RICH PAINT TO DAMAGED SURFACES. PRE-TREAT DAMAGED SURFACES ACCORDING TO MANUFACTURERS' INSTRUCTIONS FOR ZINC-RICH PAINT.

POST AND RAIL SIZE	
TYPE	DIAMETER
CORNER AND STRAINING POSTS	89mm
LINE POSTS	60mm
BRACING AND TOP RAILS	42mm
GATE POSTS	100mm

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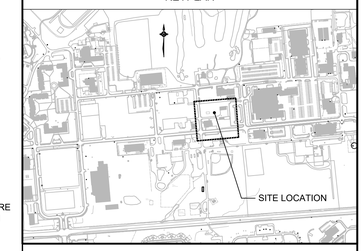
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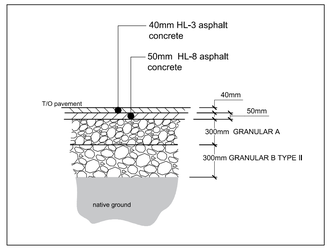
PROJECT - PROJET
DCC KINGSTON - CONSTRUCT NEW WORKSHOP

TRADE - MÉTIER: CIVIL
DATE: 2025/10/21

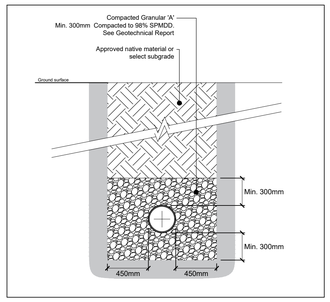
SUBJECT - SUJET
NEW FENCE WORK

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ L.AUBERTIN		DES OFF/AGENT CONCEPT X.X.
DRAWN/DESSINÉ L.AUBERTIN		SECT HD/CHEF SECT X.X.
CHECKED/VÉRIFIÉ D.NGUYEN	CFFM/DSIFC X.X.	DES MGR/GEST CONCEPT X.X.
COORDINATION X.X.	REVIEWED - REVU X.X.	603 / of #
PF NUMBER 500478454	DWG. NO. - DESSIN NO. K-B35-2508/3-603	

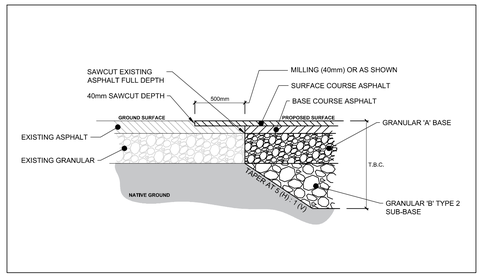
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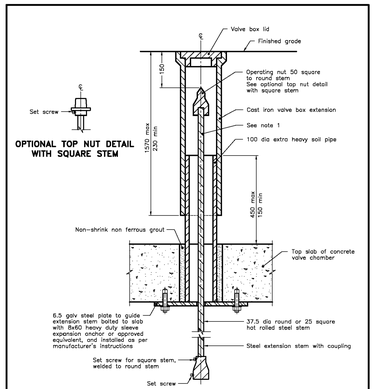
1 / 604 Pavement Structure (Typ.)
Scale: **As shown**



2 / 604 STANDARD TRENCH DETAIL
Scale: **N.T.S.**



3 / 604 KEY JOINT DETAIL
Scale: **As shown**

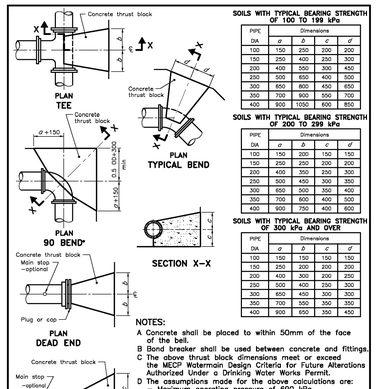


OPTIONAL TOP NUT DETAIL WITH SQUARE STEM

CROSS SECTION

NOTES:
1 Either the square or round stem shall be used with specified connections.
A Valve stem and valve shall be placed plumb.
B Stem guide is required if the unsupported length exceeds 2.0m.
C All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2018	Rev 4
VALVE OPERATOR		OPSD 1101.020



SOILS WITH TYPICAL BEARING STRENGTH OF 100 TO 199 kPa

PIPE DIA	Dimensions a	b	c	d
100	150	250	200	200
150	250	400	250	300
200	400	550	300	450
250	500	650	400	500
300	650	800	450	650
350	700	900	550	700
400	900	1050	600	850

SOILS WITH TYPICAL BEARING STRENGTH OF 200 TO 299 kPa

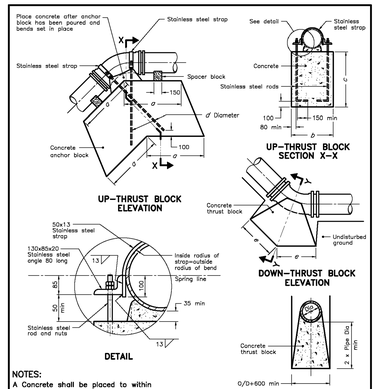
PIPE DIA	Dimensions a	b	c	d
100	150	200	150	150
150	250	250	200	200
200	400	350	250	300
250	500	450	300	350
300	650	500	350	400
350	700	600	400	500
400	900	750	400	600

SOILS WITH TYPICAL BEARING STRENGTH OF 300 kPa AND OVER

PIPE DIA	Dimensions a	b	c	d
100	150	150	150	150
150	250	200	200	200
200	400	300	200	250
250	500	400	250	300
300	650	450	300	300
350	700	550	350	350
400	900	650	350	450

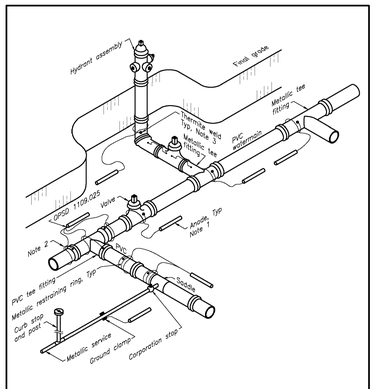
NOTES:
A Concrete shall be placed to within 50mm of the face of the bell.
B Bond breaker shall be used between concrete and fittings.
C The above thrust block dimensions meet or exceed the MECP Watermain Design Criteria for Future Alterations Authorized Under a Drinking Water Works Permit.
D The assumptions made for the above calculations are:
– Maximum operating pressure of 690 kPa,
– Maximum surge pressure with a flow velocity change of 0.6 m/s of 790 kPa for Class 52 DI pipe and 240 kPa for PVC pipe.
E The tables apply to both ductile iron and PVC pipe. When one length exceeded the other, the longer length was used.
F All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2018	Rev 3
CONCRETE THRUST BLOCKS FOR TEES, PLUGS, AND HORIZONTAL BENDS		OPSD 1103.010



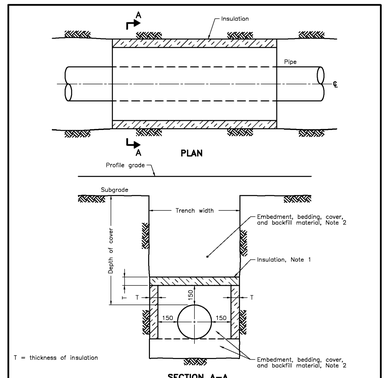
NOTES:
A Concrete shall be placed to within 50mm of the face of the bell.
B Bond breaker shall be used between concrete and fittings.
C This blocking is for bends up to 45° for up–thrust and 90° for down–thrust.
D This OPSD shall be read in conjunction with OPSD 1103.021.
E All stainless steel to be type 316.
F Stainless steel rods and nuts to be designed based on actual watermain diameter and surge pressure.
G All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2018	Rev 4
CONCRETE THRUST BLOCKS FOR VERTICAL BENDS		OPSD 1103.020



NOTES:
1 Anode shall be placed at least 1.0m away from the water system pipe and appurtenances and as deep as the bottom of the pipe and appurtenances or as specified in Contract Documents.
2 Anode connecting wire shall be loosely wrapped around pipes and fittings and knotted.
3 Protective coating shall be applied to all thermite welds.

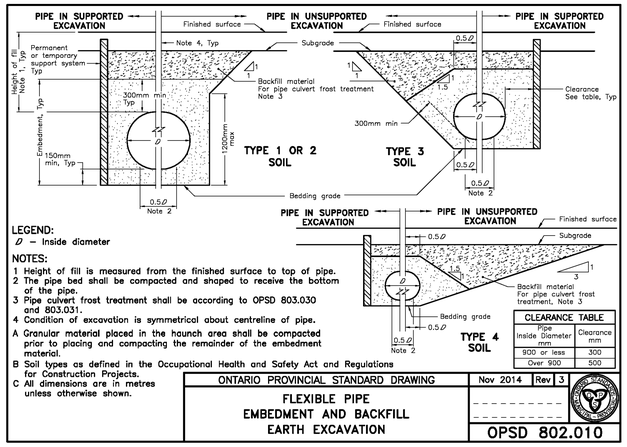
ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2020	Rev 3
CATHODIC PROTECTION FOR PVC WATERMAIN SYSTEMS		OPSD 1109.011



SECTION A–A
TYPICAL PIPE INSULATION DETAIL

NOTES:
1 The insulation material shall be extruded polystyrene according to OPSS 1605 with a minimum compressive strength of 275 kPa.
2 Pipe embedment or bedding, cover, and backfill shall be according to:
a) Flexible OPSD 802.010, 802.013, 802.020, and 802.023.
b) Rigid – OPSD 802.030, 802.031, 802.032, 802.033, 802.050, 802.051, 802.052, and 802.053.
A Minimum insulation thickness shall be 50mm.
B Joints shall be staggered for multiple insulation sheets.
C This OPSD is to be read in conjunction with OPSD 3090.100 and 3090.101.
D All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2020	Rev 1
INSULATION FOR SEWERS AND WATERMAINS IN SHALLOW TRENCHES		OPSD 1109.030



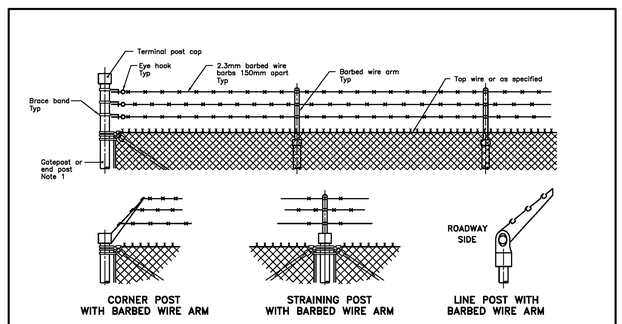
LEGEND:
D – Inside diameter

NOTES:
1 Height of fill is measured from the finished surface to top of pipe.
2 The pipe bed shall be compacted and shaped to receive the bottom of the pipe.
3 Pipe culvert frost treatment shall be according to OPSD 803.030 and 803.031.
4 Condition of excavation is symmetrical about centreline of pipe.
A Granular material placed in the haunch area shall be compacted prior to placing and compacting the remainder of the embedment material.
B Soil types as defined in the Occupational Health and Safety Act and Regulations for Construction Projects.
C All dimensions are in metres unless otherwise shown.

CLEARANCE TABLE

Pipe Inside Diameter mm	Clearance mm
900 or less	300
Over 900	500

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2014	Rev 3
FLEXIBLE PIPE EMBEDMENT AND BACKFILL EARTH EXCAVATION		OPSD 802.010



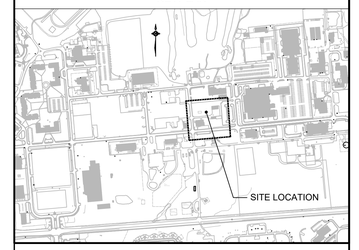
NOTES:
1 Terminal post shall be lengthened when barbed wire is specified, except when barbed wire arms are used.
A Installation as viewed from the roadway.
B All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2012	Rev 2
FENCE, CHAIN–LINK COMPONENT – BARBED WIRE		OPSD 972.101

National Defence / Défense nationale

Headquarters
Quartier général

KEYPLAN



NO.	DATE	REVISION	APPR.
4	2026/05/25	ISSUED FOR TENDER	D.N.
3	2025/12/09	RE-ISSUED FOR 99% SUBMISSION	D.N.
2	2025/10/21	ISSUED FOR 99% REVIEW	D.N.
1	2025/07/22	ISSUED FOR 60% REVIEW	D.N.

REGISTERED PROFESSIONAL ENGINEER
D.NGUYEN
100053149
MAY 05, 2026
PROVINCE OF ONTARIO

SCALE - ÉCHELLE

LOCATION - EMPLACEMENT
CFB KINGSTON ON

PROJECT - PROJET
DCC KINGSTON - CONSTRUCT NEW WORKSHOP

TRADE - MÉTIER: CIVIL
DATE: 2025/10/21

SUBJECT - SUJET
DETAILS

PRODUCTION	CONCURRENCE - APPROBATION	
DESIGNED/ÉTUDIÉ: L.AUBERTIN		DES OFF/AGENT CONCEPT: X.X.
DRAWN/DESSINÉ: L.AUBERTIN		SECT HD/CHEF SECT: X.X.
CHECKED/VÉRIFIÉ: D.NGUYEN	CFFM/DSIFC: X.X.	DES MGR/GEST CONCEPT: X.X.
COORDINATION: X.X.	REVIEWED - REVU: X.X.	604 of #
PF NUMBER: 500478454	DWG. NO. - DESSIN NO.: K-B35-2508/3-604	

Canada