

ISSUED DATE:.

**2026-01-15**

**CITY OF  
PETERBOROUGH**

# **QACC ELEVATOR MODERNIZATION**

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**ISSUED FOR TENDER**

○ Unity

**SPECIFICATIONS OF CONSTRUCTION:****PROJECT MANAGEMENT & COORDINATION:**

- .1 PROJECT COORDINATION
  - .1 THE CONTRACTOR IS RESPONSIBLE FOR THE OVERALL COORDINATION OF THE WORK, COORDINATE THE WORK OF ALL SUBCONTRACTORS AND PROVIDE SUCH ASSISTANCE AS IS NECESSARY.
  - .2 PROJECT SUPERVISION
    - .1 THE CONTRACTOR SHALL PROVIDE SITE SUPERVISION AS REQUIRED ON SITE FOR REGULAR REVIEW, AND COORDINATION ON SITE BETWEEN SUBTRADES.
    - .3 PROJECT MEETINGS
      - .1 UNITY DESIGN STUDIO WILL SCHEDULE AND ADMINISTER PROJECT PROGRESS MEETINGS THROUGHOUT PROGRESS OF WORK AS REQUIRED. UNITY DESIGN STUDIO TO RECORD AND DISTRIBUTE MINUTES. UNITY WILL ITEMIZE SIGNIFICANT PROCEEDINGS AND DECISIONS. IDENTIFY 'ACTION BY' APPROPRIATE PARTIES. REPRODUCE AND DISTRIBUTE COPIES OF MINUTES AFTER EACH MEETING AND TRANSMIT TO MEETING PARTICIPANTS AND AFFECTED PARTIES NOT IN ATTENDANCE.
    - .4 SUBMITTALS
      - .1 SUBMIT TO CONSULTANT, ALL ITEMS SPECIFIED FOR REVIEW, AT LEAST 10 BUSINESS DAYS BEFORE REVIEWED SUBMISSIONS WILL BE NEEDED, AND IN ORDERLY SEQUENCE SO AS TO NOT CAUSE DELAY IN THE WORK. DO NOT PROCEED WITH WORK AFFECTED BY THE SUBMITTAL UNTIL REVIEW IS COMPLETED.
      - .2 VERIFY FIELD MEASUREMENTS AND AFFECTED ADJACENT WORK ARE COORDINATED. CONTRACTOR'S RESPONSIBILITY FOR ERRORS AND OMISSIONS IN SUBMISSION, OR DEVIATIONS FROM REQUIREMENTS OF CONTRACT DOCUMENTS, IS NOT RELIEVED BY CONSULTANT'S REVIEW OF SUBMITTALS.
    - .5 SUBMISSION REQUIREMENTS
      - .1 SUBMIT PDF COPIES OF ALL SHOP DRAWING AND DATA SUBMITTALS.
      - .2 RETURN OF SUBMISSIONS
        - .1 IF NO ERRORS ARE DISCOVERED OR ONLY MINOR CORRECTIONS ARE MADE, ONE COPY OF THE SUBMISSION WILL BE RETURNED. IF SHOP DRAWINGS OR DATA SHEETS ARE REJECTED, NOTED COPY WILL BE RETURNED AND RESUBMISSION OF CORRECTED SHOP DRAWINGS OR DATA SHEETS THROUGH THE SAME PROCEDURE INDICATED ABOVE SHALL BE MADE.
        - .2 VERIFY FIELD MEASUREMENTS AND AFFECTED ADJACENT WORK ARE COORDINATED. CONTRACTOR'S RESPONSIBILITY FOR ERRORS AND OMISSIONS IN SUBMISSION, OR DEVIATIONS FROM REQUIREMENTS OF CONTRACT DOCUMENTS, IS NOT RELIEVED BY CONSULTANT'S REVIEW OF SUBMITTALS.
      - .3 INDICATE MATERIALS, METHODS OF CONSTRUCTION AND ATTACHMENT OR ANCHORAGE, ERECTION DIAGRAMS, CONNECTIONS, EXPLANATORY NOTES AND OTHER INFORMATION NECESSARY FOR COMPLETION OF WORK.
      - .4 ADJUSTMENTS MADE ON SHOP DRAWINGS ARE NOT INTENDED TO CHANGE THE CONTRACT PRICE. IF ADJUSTMENTS AFFECT THE VALUE OF WORK, STATE SUCH IN WRITING TO THE CONSULTANT PRIOR TO PROCEEDING WITH THE WORK.
      - .5 PRODUCT DATA SHEETS
        - .1 MANUFACTURER'S STANDARD SCHEMATICS, CATALOGUE SHEETS, DIAGRAMS, SCHEDULES, PERFORMANCE CHARTS, ILLUSTRATIONS AND OTHER DESCRIPTIVE DATA ARE ACCEPTABLE IN LIEU OF SHOP DRAWINGS, WHERE SPECIFIED.
        - .2 SUBMIT SAMPLES FOR REVIEW. LABEL SAMPLES AS TO ORIGIN AND INTENDED USE IN THE WORK. WHERE COLOUR, PATTERN OR TEXTURE IS CRITERIA, SUBMIT FULL RANGE OF SAMPLES.
        - .3 REVIEWED SAMPLES WILL BECOME STANDARDS OF WORK AND MATERIAL AGAINST WHICH INSTALLED WORK WILL BE CHECKED ON PROJECT.

**GENERAL:**

THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS.

ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE ONTARIO BUILDING CODE, NATIONAL BUILDING CODE AND STRUCTURAL COMMENTARIES (PART 4). ABIDE BY LOCAL MUNICIPAL BY-LAWS AND OTHER REGULATORY AGENCIES THAT MAY AFFECT THE WORK.

ALL DIMENSIONS, ELEVATIONS, OPENINGS FOR PIPES, SLEEVES, EQUIPMENT LOCATIONS AND THE LIKE SHALL BE CHECKED WITH THE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS. REPORT ANY DISCREPANCIES TO THE OWNER BEFORE PROCEEDING WITH THE WORK. DO NOT SCALE THESE DRAWINGS.

THE CONTRACTOR SHALL REVIEW THE SITE CONDITIONS AND ASSUME RESPONSIBILITY FOR EXISTING SERVICES (WATER, POWER, SEWAGE, GAS ETC.) THAT POTENTIALLY EXIST AT THE SITE.

PROVIDE ALL NECESSARY SHORING, SCAFFOLDING AND UNDERPINNING TO EXECUTE THE PROJECT SAFELY.

MAKE GOOD TO ANY ADJACENT SURFACES DISTURBED BY THE WORK. REPAIR TO MATCH EXISTING.

CARE TO BE TAKEN DURING THE WORK NOT TO DAMAGE EXISTING SERVICES.

FEATURES OF CONSTRUCTION NOT FULLY SHOWN SHALL BE OF THE SAME CHARACTER AS SHOWN FOR SIMILAR CONDITIONS.

PROVIDE BARRICADE AND SIGNS TO PROTECT WORKERS AND WORK AREA DURING THE WORK.

MAKE GOOD ANY DAMAGES DONE DURING CONSTRUCTION.

**DEMOLITION:**

INSPECT AND VERIFY ITEMS DESIGNATED FOR REMOVAL, DISPOSAL AND/OR SALVAGE ANY ITEMS TO REMAIN.

DISPOSE OF MATERIALS NOT DESIGNATED FOR SALVAGE OR REUSE IN THE WORK, OFF SITE.

DO NOT DISTURB ADJACENT ITEMS DESIGNATED TO REMAIN. RESTORE AREAS AND EXISTING WORKS OUTSIDE OF DEMOLITION TO MATCH CONDITION OF ADJACENT, UNDISTURBED AREAS. ON A DAILY BASIS MAINTAIN CONSTRUCTION SITE, FREE FROM DEBRIS AND WASTE MATERIAL.

PROVIDE ON SITE CONTAINERS FOR COLLECTING WASTE MATERIALS AND RUBBISH. UPON DEMOLITION THAT INVOLVES THE DISCONNECTION OF ANY ELECT./MECH. SERVICES, TO BE COORDINATED WITH TRADES AND REDIRECTED SO THAT NORMAL OPERATIONS ARE MAINTAINED.

DEMOLISH PARTS OF EXISTING BUILDING TO ACCOMMODATE NEW CONSTRUCTION OR ALTERATIONS AS INDICATED ON THE DRAWINGS.

JOIN AND MAKE GOOD NEW WORK TO EXISTING IN SUCH A MANNER THAT THE JOINT IS STRUCTURALLY SOUND AND INCONSPICUOUS.

NEW OPENINGS REQUIRED IN EXISTING WALLS OR REMOVAL OF WALL SECTIONS SHALL BE CAREFULLY CUT AND FORMED TO BLEND INTO EXISTING WORK.

PROVIDE ANY NECESSARY SHORING, BRACING, ETC.

MAKE GOOD ALL FINISHES. ANY DAMAGE TO EXISTING BUILDING SHALL BE REPAIRED TO THE SATISFACTION OF AND AT NO COST TO THE OWNER.

DEMOLISH IN A MANNER TO MINIMIZE DUSTING. PROVIDE TEMPORARY SCREENS AS NECESSARY.

REMOVE AND DISPOSE OF ALL DEMOLITION ITEMS AND MATERIALS, UNLESS OTHERWISE NOTED, AT AN APPROVED DISPOSAL SITE AND IN ACCORDANCE WITH AUTHORITIES HAVING JURISDICTION.

**SPECIFICATIONS OF MATERIALS:****PAINTING:**

MASK SURROUNDING SURFACES AND PROTECT EXISTING WALLS AND MATERIALS. IF DAMAGE OCCURS OR PAINT SPLATTERED CLEAN UP IMMEDIATELY OR MAKE GOOD CONDITION TO CONSULTANT'S APPROVAL.

SCHEDULE AND COORDINATE THIS WORK WITH OTHER TRADES AND DO NOT PROCEED UNTIL OTHER WORK AND/OR JOB CONDITIONS ARE AS REQUIRED TO ACHIEVE SATISFACTORY RESULTS.

NUMBER OF FINISH COATS SPECIFIED ARE INTENDED TO COVER THE SURFACES COMPLETELY. IF THEY DO NOT, APPLY FURTHER COATS UNTIL COVERAGE IS OBTAINED, AND APPROVED BY OWNER.

APPLY PRIMER-SEALER PAINTS BY HAND BRUSH METHOD OR ROLLER METHOD. PERMIT PAINT TO FULLY DRY HARD BEFORE APPLYING SUCCEEDING COATS ALL IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS.

REMOVE AND PROTECT, PRIOR TO PAINTING OPERATIONS, ALL HARDWARE, ACCESSORIES, DEVICE PLATES, LIGHTING FIXTURES, FACTORY FINISHED WORK, AND SIMILAR ITEMS, OR PROVIDE AMPLE IN-PLACE PROTECTION SUCH AS MASKING TAPE. IF REMOVED, THESE ITEMS SHALL BE LABELLED, STORED, CLEANED IF NECESSARY AND RE-INSTALLED FOLLOWING SUCCESSFUL COMPLETION OF THE WORK IN EACH AREA.

UNLESS OTHERWISE NOTED, FINISH WORK AS INDICATED ON DRAWINGS AS SPECIFIED HEREIN.

.1 HIGH CONTACT GALVANIZED METALS (DOORS, FRAMES, RAILINGS, ETC.) PREMIUM GRADE FINISH.

.1 INT. 5.3M - HIGH PERFORMANCE LATEX PAINT, SEMI-GLOSS FINISH, FOR HIGH CONTACT SURFACES.

.1 COLOUR: AS SELECTED BY THE CONSULTANT FROM STANDARD RANGE.

.1 SCHEDULE OF COATS:

.1 1ST COAT - VINYL WASH PRIMER 1-GP-121M

.2 2ND COAT - ENAMEL UNDERCOAT 1-GP-38M

.3 3RD COAT - SEMI-GLOSS ENAMEL 1-GP-57M

.2 CONCRETE HORIZONTAL SURFACES; PREMIUM GRADE FINISH.

.1 INT. 3.2C, (EP) EPOXY, SEMI-GLOSS FINISH.

.1 EP: STONKOTE GS4®, OR AN APPROVED EQUIVALENT.

.1 LOW VOC, 100% SOLIDS, EPOXY COATING; WITH NON-SLIP SILICA SAND AGGREGATE.

.2 SYSTEM CHARACTERISTICS:

.1 COLOUR AND PATTERN: AS SELECTED BY THE CONSULTANT FROM STANDARD RANGE OF COLOURS.

.2 WEARING SURFACE: STANDARD SMOOTH.

.3 INTEGRAL COVE BASE: 100MM HIGH COVE BASE.

.4 OVERALL SYSTEM THICKNESS: NOMINAL 1/4".

.3 SYSTEM COMPONENTS: MANUFACTURER'S STANDARD COMPONENTS THAT ARE COMPATIBLE WITH EACH OTHER AND AS FOLLOWS:

.1 PATCHING MORTAR: STONSET PM5 EPOXY.

.2 BASE: 100 PERCENT SOLIDS EPOXY RESIN; STONKOTE GS4.

.1 THICKNESS OF COATS: 4-6 MIL DFT.

.2 NUMBER OF COATS: (2) TWO.

.3 AGGREGATE: SILICA SAND.

\*GC TO VERIFY PAINT AND COLOUR SELECTIONS WITH PAINT SAMPLES AND PRODUCT DATA SHEETS TO THE CONSULTANT AND OWNER PRIOR TO ORDER.

**HOLLOW METAL DOORS:**

FABRICATE AND INSTALL LABELED STEEL FIRE RATED DOORS AND FRAMES TO NFPA-80 AND CAN/ULC-S104.

DOORS SHALL BE FABRICATED OF SHEET STEEL: HOT-DIP GALVANIZED/GALVANNEALED STEEL TO ASTM A653/A653M, COLD-ROLLED, COMMERCIAL GRADE (CS), TYPE A, COATING DESIGNATION A40, REINFORCEMENT CHANNEL: CSA-G40.20/G40.21, TYPE 44W, G90 COATING DESIGNATION TO ASTM A653/A653M.

DOORS SHALL BE FLUSH WITH NO FACE SEAMS AND HAVE VERTICAL, MECHANICALLY INTERLOCKING SEAMS ON HINGE AND LOCK EDGES. HAVE 18-GAUGE STEEL END CHANNEL PROJECTIONS WELDED TO TOP AND BOTTOM OF DOOR, BE STIFFENED, INSULATED AND SOUND DEADENED WITH PRE-EXPANDED HONEYCOMB CORE BEARING ULC LABEL FOR HONEYCOMB CORE MATERIAL.

FRAMES SHALL BE TYPE DW SERIES, 143 MM JAMB DEPTH AS MANUFACTURED BY S.W. FLEMING LTD. OR APPROVED EQUAL AND BE FABRICATED OF 18-GAUGE WIPE COAT GALVANIZED STEEL AND ASSEMBLED IN POSITION AND ARC-WELDED OR TACK-WELDED. FRAMES SHALL BE PROVIDED WITH WALL AND BASE ANCHORS TO SUIT EXISTING CONSTRUCTION AND INCLUDE RUBBER BUMPERS AND EXTERIOR TOP CAPS.

FRAMES SHALL BE MORTISED, REINFORCED, DRILLED, AND TAPPED FOR HINGES AND STRIKES INCLUDING REINFORCING FOR OTHER HARDWARE. FRAMES IN EXISTING CONCRETE SHALL BE PROVIDED WITH ANCHORS LOCATED NOT MORE THAN 152MM FROM TOP AND BOTTOM OF EACH JAMB, AND INTERMEDIATE ANCHORS AT 660MM O.C. MAX.

CONTRACTOR TO CO-ORDINATE HARDWARE REQUIREMENTS WITH O.B.C. AND OWNER'S LISTED REQUIREMENTS.

MANUFACTURER QUALIFICATIONS: COMPANY SPECIALIZING IN MANUFACTURING THE PRODUCTS SPECIFIED IN THIS SECTION WITH MINIMUM THREE (3) YEARS DOCUMENTED EXPERIENCE.

**DOOR HARDWARE:**

1. PERFORMANCE CRITERIA: PROVIDE DOOR HARDWARE TO ANSI/BHMAA-156 SERIES FOR ARCHITECTURAL HARDWARE; GRADE 1 AND GRADE 2.

2. HARDWARE FOR DOORS IN FIRE SEPARATION AND EXIT DOORS MUST BE CERTIFIED BY A CANADIAN CERTIFICATION ORGANIZATION ACCREDITED BY STANDARDS COUNCIL OF CANADA. SUPPLY ONLY ULC AND/OR CSA LISTED ELECTRICAL COMPONENTS.

\*\*\*PROVIDE SHOP DRAWING SUBMITTALS AND/OR SAMPLES TO THE CONSULTANT FOR APPROVAL PRIOR TO INSTALLATION AND/OR FABRICATION OF DOORS, FRAMES, AND HARDWARE.

**FIRESTOPPING:**

.1 FIRESTOP SYSTEMS SHALL BE USED IN LOCATIONS INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:

.1 PENETRATIONS THROUGH FIRE RESISTANCE RATED FLOOR AND ROOF ASSEMBLIES INCLUDING BOTH EMPTY OPENINGS AND OPENINGS CONTAINING PENETRANTS.

.2 PENETRATIONS THROUGH FIRE RESISTANCE RATED WALL ASSEMBLIES INCLUDING BOTH EMPTY OPENINGS AND OPENINGS CONTAINING PENETRANTS.

.3 JOINTS BETWEEN FIRE RESISTANCE RATED ASSEMBLIES.

.4 PERIMETER GAPS BETWEEN RATED FLOORS/ROOFS AND AN EXTERIOR WALL ASSEMBLY.

.2 PENETRATIONS: PROVIDE THROUGH-PENETRATION FIRESTOP SYSTEMS THAT ARE PRODUCED AND INSTALLED TO RESIST THE SPREAD OF FIRE, PASSAGE OF SMOKE AND OTHER HOT GASES ACCORDING TO REQUIREMENTS INDICATED, TO RESTORE THE ORIGINAL FIRE-RESISTANCE RATING OF ASSEMBLY PENETRATED.

.3 PROVIDE AND INSTALL COMPLETE PENETRATION FIRESTOP SYSTEMS THAT HAVE BEEN TESTED AND APPROVED BY NATIONALLY ACCEPTED TESTING AGENCIES PER ASTM E814, UL 1479, OR ULC-S115 FIRE TESTS IN A CONFIGURATION THAT IS REPRESENTATIVE OF FIELD CONDITIONS.

PROVIDE SHOP DRAWING SUBMITTALS AND/OR SAMPLES TO THE CONSULTANT FOR APPROVAL PRIOR TO INSTALLATION AND/OR FABRICATION.

**SEALANTS:**

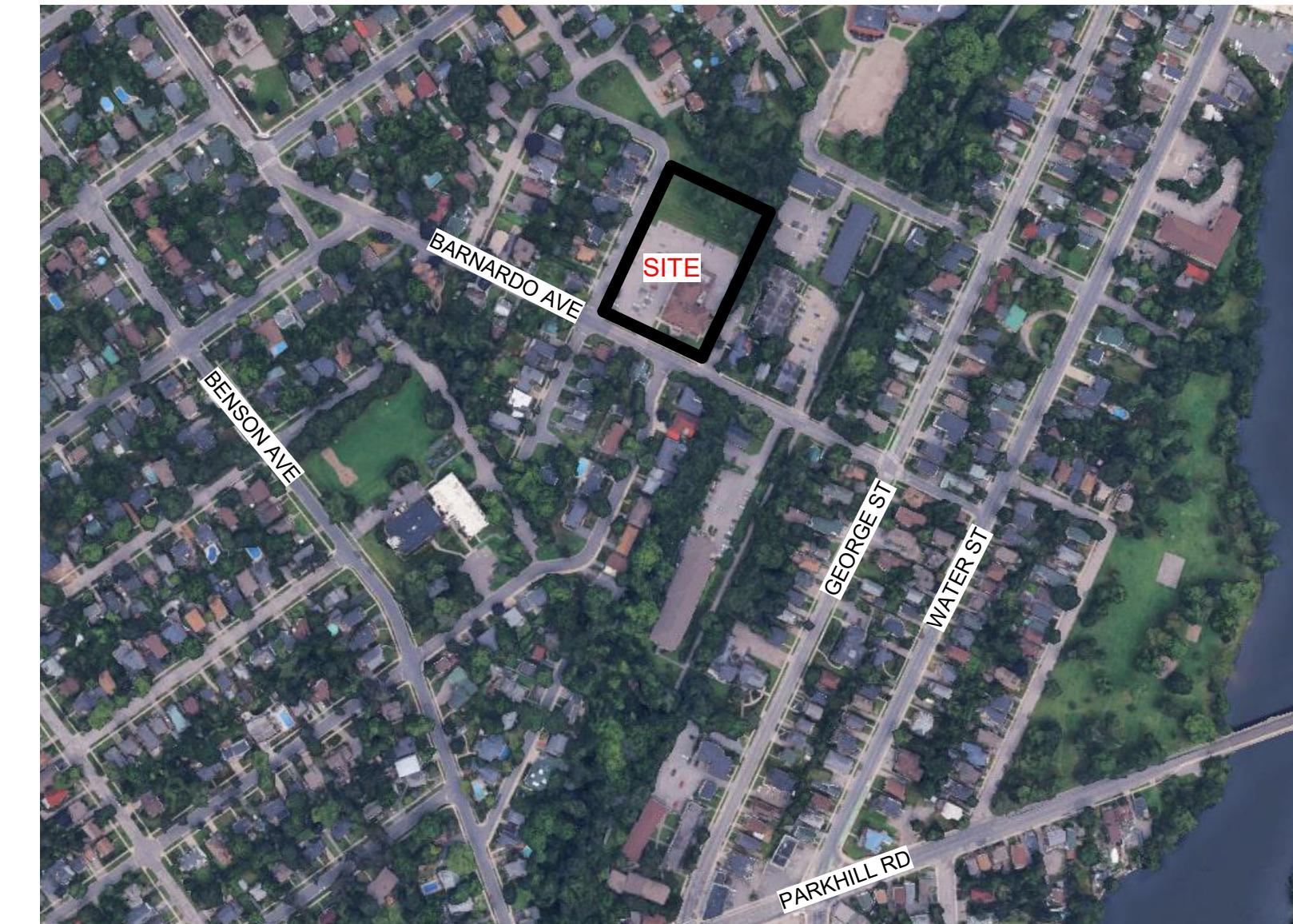
.1 SEALANT TYPE 1: MULTI-COMPONENT, CHEMICAL-CURE POLYPOXIDE POLYURETHANE SEALANT, TO ASTM C920, TYPE M, GRADE NS, CLASS 25, USE T, NT, M, G, A, AND O.

.2 "SIKAFLEX 2C NS" BY SIKA CANADA INC.

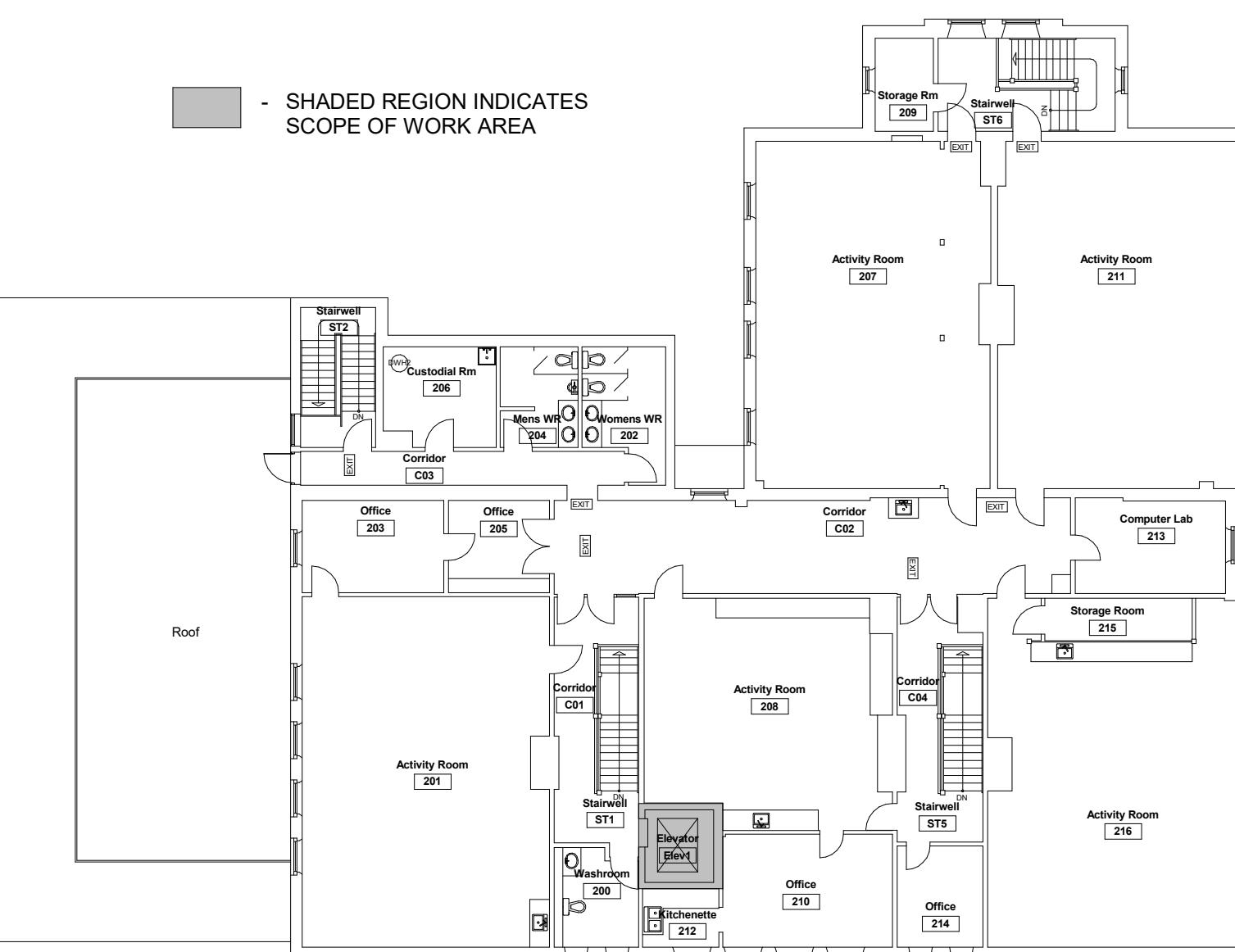
.3 "SONNENBORN SONNOLASTIC® NP 1™" BY BASF BUILDING MATERIALS.

.4 USE: INTERIOR NON-MOVEMENT JOINTS 13MM WIDE OR LESS, BETWEEN DISSIMILAR MATERIALS, INTERIOR JOINTS AT PERIMETER OF ALL BUILT-IN EQUIPMENT, AND INTERIOR JOINTS AT PERIMETER OF METAL DOOR FRAMES.

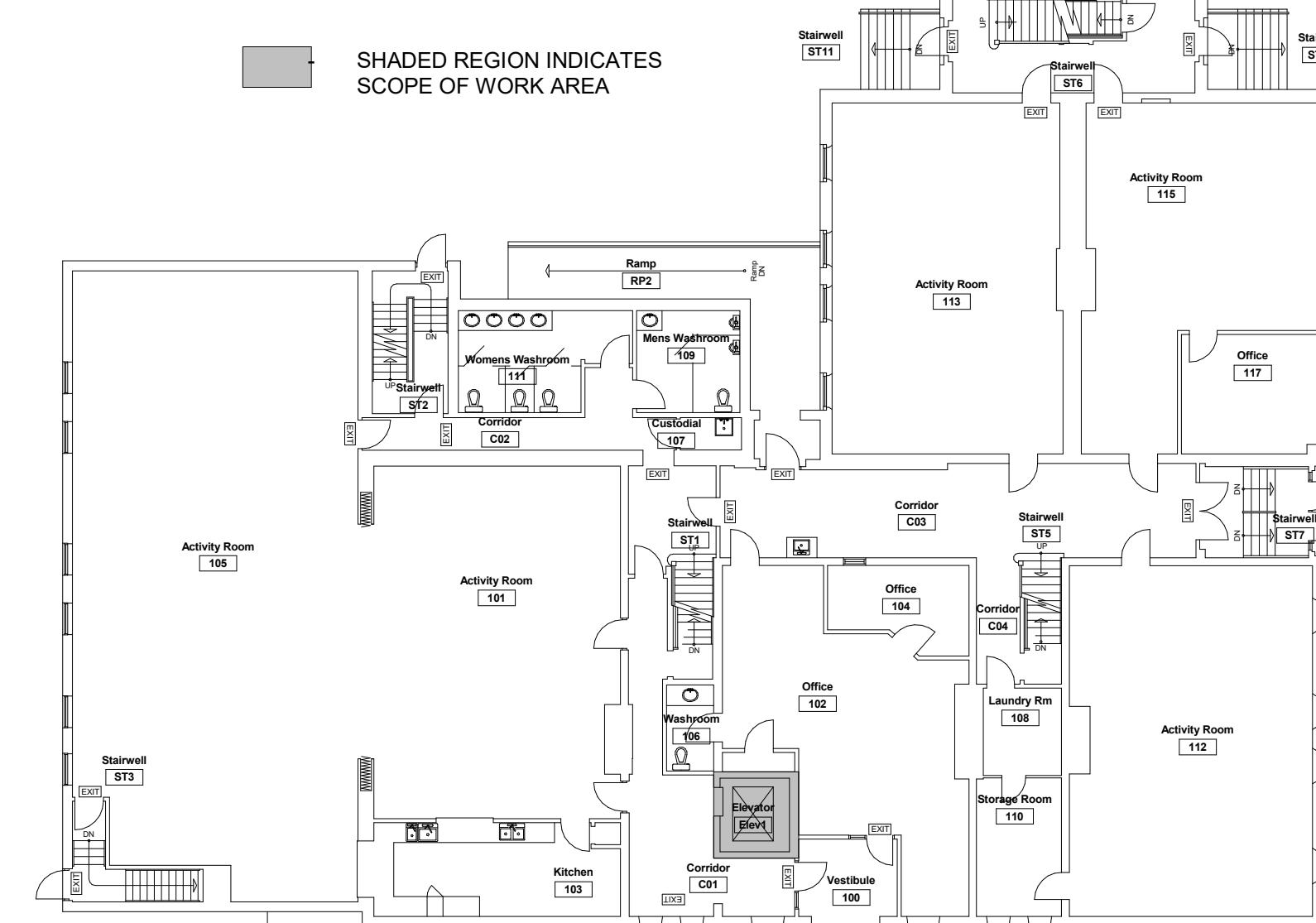
\*\*\*GC TO VERIFY SELECTIONS AND CONFIRM COLOUR WITH SAMPLES AND PRODUCT DATA SHEETS TO THE CONSULTANT AND OWNER PRIOR TO ORDER\*\*\*



**SITE MAP**  
Scale: NTS



**SECOND FLOOR PLAN**  
Scale: 1:200



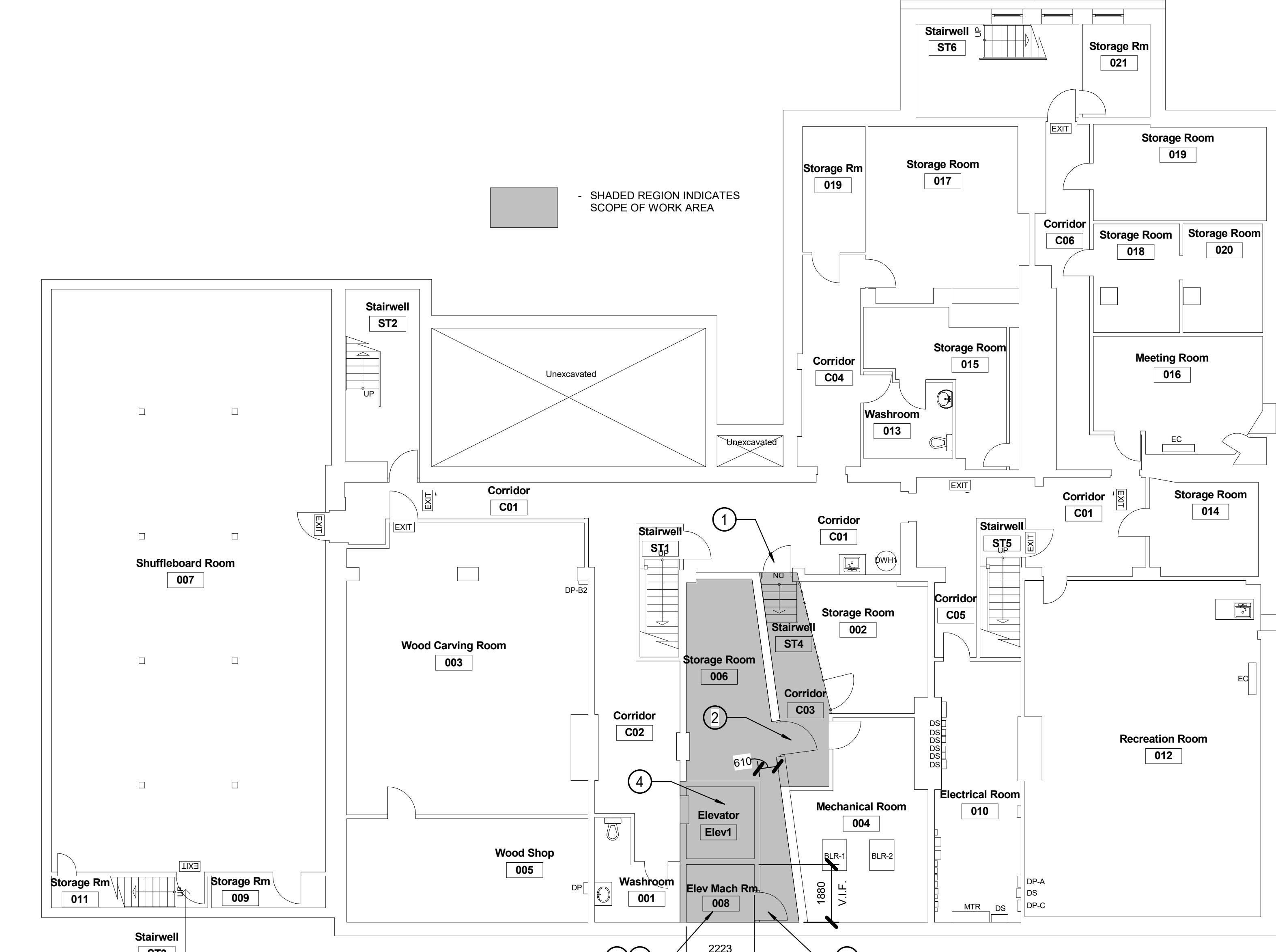
**GROUND FLOOR PLAN**  
Scale: 1:200

**PROVIDE SEPARATE PRICES FOR THE FOLLOWING IN ELEVATOR MACHINE ROOM 008:**

1. REPLACE CEILING WITH 1HR FIRE RATED ASSEMBLY - 2 LAYER TYPE 'X' GYPSUM WALL BOARD CEILING AS PER OBC SB-2 2.3.12.
2. PATCH AND REPAIR EXISTING EXTERIOR FOUNDATION WALL WHERE DAMAGED WITH COMPATIBLE MORTAR PRODUCT.
3. INFILL AND PATCH HOLE IN MASONRY WALL BETWEEN WASHROOM AND MACHINE ROOM AFTER REMOVAL OF EXISTING EXHAUST FAN DUCTING. PROVIDE MATERIAL WITH MINIMUM 1HR FIRE RATING.

**SCOPE OF WORK NOTES**

1. REPLACE EXISTING DOOR AND FRAME WITH 45min. FIRE RATED HOLLOW METAL DOOR AND FRAME AND PAINT PER SPECIFICATIONS. SIZE TO MATCH EXISTING. PROVIDE CLASSROOM LOCKSET WITH LEVER-STYLE HANDLE, CLOSER, AND PANIC BAR. CONFIRM HARDWARE FINISH AND DOOR AND FRAME COLOUR WITH OWNER.
2. REPLACE EXISTING DOOR AND FRAME WITH 45min. FIRE RATED HOLLOW METAL DOOR AND FRAME AND PAINT PER SPECIFICATIONS. SIZE TO MATCH EXISTING. PROVIDE STOREROOM LOCKSET WITH LEVER-STYLE HANDLE, CLOSER, AND PANIC BAR. CONFIRM HARDWARE FINISH AND DOOR AND FRAME COLOUR WITH OWNER.
3. REPLACE EXISTING DOOR AND FRAME WITH 45min. FIRE RATED HOLLOW METAL DOOR AND FRAME AND PAINT PER SPECIFICATIONS. SIZE TO MATCH EXISTING. PROVIDE STOREROOM LOCKSET WITH LEVER-STYLE HANDLE AND REUSE CLOSER. CONFIRM HARDWARE FINISH AND DOOR AND FRAME COLOUR WITH OWNER.
4. REFER TO SOLUCORE SPECIFICATIONS FOR COMPLETE ELEVATOR SCOPE OF WORK (TYP.)
5. PROVIDE FIRESTOPPING PER SPECIFICATIONS AT ALL NEW PENETRATIONS THROUGH ELEVATOR MACHINE ROOM AND ELEVATOR WALLS.
6. PAINT AND SEAL MACHINE ROOM FLOOR WITH EPOXY PRODUCT PER SPECIFICATIONS. CONFIRM COLOUR WITH OWNER FROM FULL LIST OF MANUFACTURER COLOURS.



**BASEMENT FLOOR PLAN**  
Scale: 1:100

**A-101**

All dimensions to be checked and verified on site. Do not scale drawings. Any discrepancies are to be reported to the Consultant. Only latest approved drawings remain the property of the Consultant. Only latest approved drawings to be used for construction.

PROJECT No. 25-119

**CITY OF PETERBOROUGH**  
**QACC ELEVATOR MODERNIZATION**

180 Barnardo Ave, Peterborough, ON

**FLOOR PLANS**

**FIRE ALARM SPECIFICATIONS:**

- THE CONTRACTOR SHALL RELOCATE OR FURNISH NEW LABOUR, SERVICES AND MATERIALS NECESSARY TO PROVIDE A COMPLETE, FUNCTIONAL LIFE SAFETY FIRE SYSTEM. THE SYSTEM SHALL COMPLY IN ALL RESPECTS WITH ALL PERTINENT CODES, RULES, REGULATIONS AND LAWS OF THE LOCAL JURISDICTION. THE SYSTEM SHALL COMPLY IN ALL RESPECTS WITH THE REQUIREMENTS OF THE SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS AND UNDERWRITERS LABORATORIES OF CANADA (ULC) LISTINGS. ALL COMPONENTS SHALL BE ULC LISTED.
- THE NEW SYSTEM SHALL BE A MIRCOM FX4000 SERIES COMPLETE WITH LED ZONE ANNUNCIATOR, ALTERNATE MANUFACTURERS:
  - EDWARDS (C/W WHEELOCK OR SYSTEM SENSOR SIGNAL DEVICES)
  - SIMPLEX (SUPPLIED BY JOHNSON CONTROLS)
- THE EQUIPMENT AND INSTALLATION SHALL COMPLY WITH THE CURRENT PROVISIONS OF THE FOLLOWING CODES AND STANDARDS:
  - LOCAL AND PROVINCIAL BUILDING CODES
  - LOCAL AND PROVINCIAL FIRE CODES
  - CANADIAN NATIONAL ELECTRICAL CODES
  - NFPA 72, NATIONAL FIRE ALARM CODE
  - NFPA 101, LIFE SAFETY CODE
  - CANULC-S524 AND OTHER APPLICABLE ULC STANDARDS
  - AUTHORITY HAVING JURISDICTION
- FIRE DETECTOR MOUNTING:
  - FIRE DETECTORS SHALL NOT BE LOCATED CLOSER THAN 1000mm HORIZONTALLY FROM TIP OF A CEILING SUSPENDED (PADDLE) FAN OR CEILING MOUNTED UNIT HEATER MEASURED TO THE EDGE OF THE DETECTOR.
  - FIRE DETECTORS SHALL NOT BE LOCATED CLOSER THAN 450mm FROM ANY SUPPLY OUTLET OR EXHAUST OUTLET AS MEASURED TO THE EDGE OF THE DETECTOR.
- DEVICE MOUNTING HEIGHT:
  - PULL STATION(S) TO BE MOUNTED 45° (1150mm) A.F.F. TO CENTER OF DEVICE
  - WALL MOUNTED AUDIBLE SIGNAL TO BE MOUNTED MINIMUM 6'(150mm) BELOW CEILING AND NO LESS THAN 90° (2300mm) A.F.F. TO THE TOP OF THE DEVICE
  - STROBE(S) TO BE MOUNTED SO THAT ENTIRE LENS IS 78°\*94° (2000-2400mm) A.F.F.
  - COMBINATION HORN/STROBE(S) SHALL CONFORM TO BOTH 5.2 AND 5.3
  - END OF LINE RESISTORS TO BE MOUNTED LESS THAN 70' (1800mm) A.F.F.
- CONDUIT AND WIRE:
  - WIRING SHALL BE IN ACCORDANCE WITH LOCAL, PROVINCIAL AND NATIONAL CODES, AND AS RECOMMENDED BY THE MANUFACTURER OF THE FIRE ALARM SYSTEM
  - NUMBER AND SIZE OF CONDUCTORS SHALL BE AS RECOMMENDED BY THE FIRE ALARM SYSTEM MANUFACTURER, BUT NOT LESS THAN 18 AWG (1.02 MM) FOR INITIATING DEVICE CIRCUITS AND SIGNALING LINE CIRCUITS, AND 14AWG (1.63 MM) FOR NOTIFICATION APPLIANCE CIRCUITS (UNLESS OTHERWISE DIRECTED BY MANUFACTURER).
  - ALL WIRE AND CABLE SHALL BE LISTED AND/OR APPROVED BY A RECOGNIZED TEST LAB FOR USE WITH A PROTECTIVE SIGNALING SYSTEM.
  - FIELD WIRING SHALL BE ELECTRICALLY SUPERVISED FOR OPEN CIRCUIT AND GROUND FAULTS.
  - ALL WIRE SHALL BE INSTALLED IN CONDUIT. PROVIDE WIREMOLD FOR ALL WIRING IN EXPOSED AREAS. ALL SURFACE MOUNTED CONDUIT MUST BE APPROVED BY OWNER OR CONSULTANT PRIOR TO INSTALLATION.
  - WIRE AND CABLE NOT INSTALLED IN CONDUIT SHALL HAVE A FIRE RESISTANCE RATING SUITABLE FOR THE INSTALLATION AS INDICATED IN NFPA 70 (E.G., FPLR) AND AS PER OBC.
  - ALL JUNCTION BOXES SHALL BE PAINTED RED AND IDENTIFIED AS SIGNAL OR INITIATING. ALL LBS SHALL BE PAINTED RED. ANY CONDUIT LENGTH EXCEEDING 10'(3m) SHALL HAVE COUPLING PAINTED RED FOR IDENTIFICATION.
  - SURFACE DEVICES AND EXPOSED CONDUIT:
    - ALL SURFACE MOUNTED CONDUIT MUST BE APPROVED BY OWNER OR CONSULTANT PRIOR TO INSTALLATION.
    - PROVIDE WIREMOLD (PANDUIT) FOR ALL WIRING IN EXPOSED AREAS.
    - ANY SURFACE BOXES SHALL BE 'FS' (NO KNOCKOUTS) AND BE PRE-APPROVED BY OWNER OR CONSULTANT.
  - FIRE STOP ALL EXISTING AND NEW CONDUIT THROUGH FIRE SEPARATIONS IN ACCORDANCE WITH OBC.

**FIRE ALARM SCOPE OF WORK:**

- EXISTING FIRE ALARM CONTROL PANEL IS MIRCOM FA-1000.
- FIRE ALARM MANUFACTURER TO ATTEND SITE PRIOR TO PRICING TO REVIEW EXISTING SYSTEM FOR CONFORMANCE WITH NEW PROPOSED DEVICES. FIRE ALARM MANUFACTURER TO INCLUDE FOR ALL LABOUR AND COMPONENTS REQUIRED TO CONNECT EXISTING DEVICES TO EXISTING FIRE ALARM CONTROL PANEL IN CONFORMANCE WITH ALL APPLICABLE CODES. ALLOW FOR WIRING BACK TO FIRE ALARM CONTROL PANEL TO SUPPORT NEW ZONE IF REQUIRED.
- PROVIDE NEW DEDICATED ADDRESSABLE INITIATING CIRCUIT AND RELAYS FOR PHASE 2 ELEVATOR RECALL. THIS WORK SHALL BE PRICED AS A SEPARATE PRICE ITEM ON THE TENDER FORM.
- NEW END OF LINE RESISTORS TO BE MOUNTED BY FIRE ALARM CONTROL PANEL.
- LABELING:
  - PAINT ALL FIRE ALARM JUNCTION BOXES RED. IDENTIFY EACH JUNCTION BOX AS EITHER SIGNAL OR INITIATING CIRCUIT.
  - LABEL ALL POWER JUNCTION BOXES WITH PANEL AND CIRCUIT NUMBER.
  - BREAKER FOR FACP AND FIRE COMMUNICATOR SHALL BE LOCKED AND PAINTED RED.
- ELECTRICAL CONTRACTOR IS TO RETAIN THE SERVICES OF A CERTIFIED S1001 CONSULTANT TO CONDUCT THE S1001 TESTING AND VERIFICATION AS REQUIRED BY THE OBC AND APPLICABLE STANDARD
- TEST AND VERIFY THE FIRE ALARM SYSTEM IN CONFORMANCE WITH CANULC-S537-M "STANDARD FOR THE VERIFICATION OF FIRE ALARM SYSTEMS" TO ENSURE SATISFACTORY OPERATION.
- PROVIDE BATTERY CABINET EQUAL TO MIRCOM BC-160 TO HOUSE SPARE PARTS INCLUDED IN PROJECT. PROVIDE LABEL INDICATING "FIRE ALARM SPARE PARTS" AND PAPER COPY OF PARTS LIST WITHIN THE ENCLOSURE.
- S1001 INTEGRATED TESTING CONSULTANT WILL BE CARRIED UNDER A CASH ALLOWANCE. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR RETAINING THE SERVICES OF A S1001 CERTIFIED CONSULTANT TO CARRY OUT THE INTEGRATED TESTING AS REQUIRED BY CANULC S1001 AND OBC. ELECTRICAL CONTRACTOR TO COORDINATE ALL NECESSARY TRADES REQUIRED FOR TESTING.

**ELECTRICAL NOTES:**

- ALL WORK SHALL CONFORM TO CSA REQUIREMENTS.
- PROVIDE CHAINS FOR ALL LIGHT FIXTURES. CHAINS SHALL BE PROVIDED AT ALL FOUR CORNERS.
- PROVIDE JUNCTION BOXES C/W COVERPLATES AS REQUIRED.
- COORDINATE INSTALLATION WITH ALL OTHER TRADES.
- REFER TO 'EMT (ELECTRICAL METALLIC TUBING) vs. LIQUIDTIGHT vs. FLEXIBLE CABLE' FOR ACCEPTABLE USE OF EACH.
- EMT AND BOXES SHALL BE SIZED ACCORDING TO CODE REQUIREMENT BASED ON THE NUMBER OF CONDUCTORS.
- FOR EMT AND/OR CONDUITS BENDS GREATER THAN OR EQUAL TO 270°, A PULL BOX SHALL BE PROVIDED.
- ALL EMT (ELECTRICAL METALLIC TUBING) SHALL BE FIRMLY FASTENED IN PLACE SO AS TO SUPPORT THE WEIGHT OF CONDUIT AND TO PREVENT ANY STRAIN OR STRESS AT TERMINATIONS ACCORDING TO ELECTRICAL CODE 12-1010.
- CONTRACTORS SHALL ATTEMPT TO FISH NEW FEEDS DOWN EXISTING WALLS WHERE THIS IS NOT POSSIBLE (ONLY). SURFACE INSTALLATION IS ACCEPTABLE ON EXISTING BLOCK WALLS IN FINISHED AREAS AS FOLLOWS:
  - BOXES SHALL BE SHALLOW WIRE MOLD BOX WITH NO KNOCKOUTS.
  - CONDUIT SHALL BE WIRE MOLD. COLOUR TO BE WHITE.
- CONTRACTOR TO ALLOW FOR THE RELOCATION OF ANY RECEPTACLE OR DEVICE/EQUIPMENT CONNECTION WITHIN 10' OF LOCATION SHOWN AT NO EXTRA COST.
- DEVICE COVER PLATES SHALL BE STAINLESS STEEL IN ALL AREAS.
- BRANCH CIRCUIT BREAKER AMPERE INTERRUPTING CAPACITY TO MATCH BUS RATING. PROVIDE 10% SPARE FOR FUTURE.
- ALL CIRCUITS SHALL CONTAIN SEPARATE PHASE, NEUTRAL AND GROUND CONDUCTORS. SHARED NEUTRALS IS NOT PERMITTED.
- MAXIMUM VOLTAGE DROP IN BRANCH CIRCUITS TO BE 3%. CONDUCTORS SHALL BE OVERSIZED TO SUIT VOLTAGE DROP WHERE APPLICABLE.
- CONDUCTORS TO BE COPPER UNLESS OTHERWISE NOTED. CONDUCTORS IN RACEWAYS SHALL BE T75 NYLON (T90 ACCEPTABLE IF DERATED AS PER OESC). ALL CONDUCTORS SHALL BE MINIMUM #10AWG FOR EMERGENCY BATTERY CIRCUITS AND EXTERIOR LIGHTING, #14AWG FOR CONTROL WIRING AND MINIMUM #12AWG FOR ALL OTHER APPLICATIONS.
- ALL WIRE SIZES INDICATED ON DRAWINGS ARE BASED ON A 75°C TERMINATION TEMPERATURE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE TERMINATION TEMPERATURE OF EACH DEVICE AND MODIFY THE WIRE SIZE TO SUIT OR NOTIFY ENGINEER FOR DIRECTION.
- IDENTIFY EACH WIRE AND CABLE AT EVERY TERMINATION POINT. IDENTIFY ALL EMT AND/OR CONDUITS WITH 'NEAT' COLOUR BANDS AT NO MORE THAN 25'(7.5m) INTERVALS AND ON BOTH SIDES OF WALLS & FLOOR.
- NON-CURRENT CARRYING METAL PARTS FOR FIXED EQUIPMENT SHALL BE BONDED TO GROUND. INSTALL SEPARATE BONDING IN LIQUIDTIGHT CONDUITS.
- DISCONNECT SWITCHES FOR HVAC EQUIPMENT MUST BE INSTALLED WITHIN 10' (3m).
- ARRANGE FOR ESA INSTALLATION PERMIT AND INSPECTION AND FORWARD A COPY OF THE ESA CERTIFICATE TO THE ENGINEER UPON ACCEPTANCE INCLUDING FIRE ALARM LISTED AS A SEPARATE ITEM. ARRANGE AND PAY FOR OCCUPANCY PERMIT IF FINAL INSPECTION CANNOT BE SCHEDULED BY COMPLETION DATE SET FORTH IN TENDER DOCUMENTS.
- OBTAINT COPY OF TSSA PERMIT AND INSPECTION FOR NEW ELEVATOR [LIFT] AND FORWARD A COPY TO ENGINEER.

**EMT vs. LIQUIDTIGHT vs. FLEXIBLE CABLE**

EMT (ELECTRICAL METALLIC TUBING) MUST BE USED IN THE FOLLOWING INDOOR APPLICATIONS:

- ALL EXPOSED AREAS (USE WIREMOLD ON EXPOSED WALLS IN FINISHED AREAS WHERE EXPOSED WIRING HAS BEEN APPROVED).
- T-BAR CEILING SPACES.

LIQUIDTIGHT MUST BE USED IN THE FOLLOWING INDOOR AND OUTDOOR APPLICATIONS:

- LAST 5' (1.5m) FOR FINAL CONNECTION TO INDOOR AND OUTDOOR MECHANICAL EQUIPMENT. LIQUID TIGHT CONDUIT IN CEILING SPACE MUST BE PLENUM RATED.
- LAST 5'(1.5m) FOR FINAL CONNECTION TO MECHANICAL EQUIPMENT LOCATED IN CEILING SPACE OR ON ROOF.

LIQUIDTIGHT MUST BE USED IN THE FOLLOWING OUTDOOR APPLICATIONS:

- LAST 5' (1.5m) FOR FINAL CONNECTION TO LIGHTING AND SMALL EQUIPMENT/COMPONENTS IN CEILING SPACES. DAISY CHAIN OF LUMINAIRES IS NOT ALLOWED.
- LAST 5'(1.5m) FOR FINAL CONNECTION TO MECHANICAL EQUIPMENT LOCATED IN CEILING SPACE OR ON ROOF.
- FISHED DOWN IN EXISTING WALL(S). FLEXIBLE CABLE IN NOT PERMITTED IN NEW WALL(S).

RIGID CONDUIT MUST BE USED IN THE FOLLOWING OUTDOOR APPLICATIONS:

- ALL OUTDOOR WIRING EXCEPT FOR LAST 5'(1.5m). FINAL CONNECTION TO BE IN LIQUIDTIGHT.

**GENERAL NOTES:**

- WORK TO BE COMPLETED OUTSIDE REGULAR HOURS:
  - ANY WORK THAT CREATES DISRUPTION TO REGULAR BUILDING OR OCCUPANT ACTIVITIES AND OPERATIONS SHALL BE DONE OUTSIDE OF REGULAR BUSINESS HOURS. THIS INCLUDES BUT IS NOT LIMITED TO SERVICE INTERRUPTIONS, WORK THAT GENERATES NOISE, WORK THAT GENERATES VIBRATIONS, WORK THAT GENERATES FUMES/SMELLS, ETC.
  - ANY WORK INSIDE OR OUTSIDE, THAT CREATES RISK TO BUILDING OCCUPANTS SHALL BE DONE OUTSIDE OF REGULAR BUSINESS HOURS.
- THOROUGHLY REVIEW AND COORDINATE WITH SITE CONDITIONS AND COMPLETE DRAWING SET PRIOR TO PRICING AND INSTALLATION.
- OBTAIN, ARRANGE AND PAY FOR ALL REQUIRED PERMITS AND INSPECTIONS.
- OBTAIN AND REVIEW THE DESIGNATED SUBSTANCE REPORT FROM THE CLIENT AND COORDINATE ANY DESIGNATED SUBSTANCE ISSUES WITH THE CLIENT PRIOR TO ANY WORK BEING DONE.
- THE ELECTRICAL CONTRACTOR AND SUB-TRADES SHALL ATTEND ALL SITE MEETINGS UNLESS OTHERWISE APPROVED.
- PROVIDE ELECTRONIC SHOP DRAWINGS IN PDF FORMAT TO CONSULTANT FOR REVIEW. ALL SHOP DRAWINGS MUST BE REVIEWED, STAMPED AND SIGNED BY THE ELECTRICAL CONTRACTOR PRIOR TO SUBMITTING TO THE CONSULTANT. REVIEW SHALL INCLUDE, BUT NOT LIMITED TO, VERIFYING VOLTAGE, RATING, DIMENSIONS AND CLEARANCES. SUBMIT SHOP DRAWINGS ELECTRONICALLY TO CONSULTANT.
- INSTALL ALL WORK IN CONFORMANCE WITH MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.
- MAINTAIN RECORD DRAWINGS ON AN ON-GOING BASIS. DRAWINGS SHALL BE AVAILABLE FOR PERIODIC REVIEW BY THE CONSULTANT DURING CONSTRUCTION.
- ALL WORK SHALL COMPLY WITH APPLICABLE CODES.
- REMOVE ALL REDUNDANT EQUIPMENT AND MATERIALS FROM SITE AND DISPOSE OF IN AN APPROVED MANNER. REDUNDANT EQUIPMENT AND MATERIALS SHALL NOT BE ABANDONED IN PLACE.
- ALL CUTTING, CORING AND PATCHING SHALL BE BY THIS CONTRACTOR. COORDINATE PATCHING WITH GENERAL CONTRACTOR.
- MAINTAIN REQUIRED ACCESS AND CLEARANCE TO ALL EQUIPMENT AND SYSTEMS AS REQUIRED BY CODE AND AS PER MANUFACTURER'S REQUIREMENTS.
- PROVIDE ACCESS DOORS WHERE REQUIRED TO MAINTAIN ACCESS TO DEVICES, EQUIPMENT, JUNCTION BOXES ETC. COORDINATE AND TURN OVER TO GENERAL CONTRACTOR FOR INSTALLATION. CONTRACTOR TO INSTALL WHERE NOT COORDINATED PROPERLY WITH GENERAL CONTRACTOR.
- TAG ALL EQUIPMENT (INCLUDING MECHANICAL EQUIPMENT). EQUIPMENT DISCONNECTS/STARTERS AND PANELS WITH LAMACOID NAMEPLATES. PANEL NAMEPLATE SHALL STATE PANEL DESIGNATION, VOLTAGE, AMPERAGE AND SOURCE OF FEEDER. EQUIPMENT SHALL STATE PANEL AND CIRCUIT NUMBER. PROVIDE TYPED PANEL SCHEDULES IN ALL PANELS. CONFIRM WITH CONSULTANT IF UNCLEAR.
- LABEL ALL RECEPTACLES AND JUNCTION BOXES WITH PANEL AND CIRCUIT NUMBER. USE BLACK MARKER ON CONCEALED JUNCTION BOXES AND CLEAR ADHESIVE LABELS WITH BLACK WRITING ON RECEPTACLES. PAINT ALL JUNCTION BOXES RED FOR FIRE ALARM.
- THE CONTRACTOR SHALL ARRANGE FOR FIELD REVIEWS BY THE CONSULTANT PRIOR TO CEILINGS AND WALLS BEING CLOSED IN, WHERE THIS HAS NOT BEEN ARRANGED IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE CEILING TILES OR ACCESS DOORS FOR REVIEW AT THE DIRECTION OF THE CONSULTANT.
- PERFORM TESTING OF ALL SYSTEMS AS REQUIRED BY CODE AND THE CONSULTANT.
- ASSIST WITH START-UP AND COMMISSIONING OF ALL SYSTEMS AS REQUIRED.
- INSTRUCT AND TRAIN THE OWNER ON PROPER OPERATION OF THE SYSTEM.
- UPON COMPLETION OF THE PROJECT THE CONSULTANT WILL DO A FINAL REVIEW. UPON RECEIVING THE FINAL INSPECTION REPORT, THE CONTRACTOR MUST CORRECT AND SIGN BACK THE INSPECTION REPORT INDICATED ALL DEFICIENCIES ARE COMPLETED. A RE-INSPECTION WILL ONLY BE DONE ONCE THE CONSULTANT RECEIVES THIS IN WRITING. WHERE THE CONSULTANT PERFORMS THE RE-INSPECTION AND THE WORK IS NOT COMPLETE, THE CONTRACTOR IS RESPONSIBLE FOR REIMBURSING THE CONSULTANT FOR THE FIELD REVIEW. THE FEE FOR ADDITIONAL REVIEWS WILL BE AT THE CONSULTANT'S HOURLY RATES PLUS MILEAGE AND APPLICABLE TAXES TO BE PAID DIRECTLY TO THE CONSULTANT PRIOR TO PERFORMING THE NEXT FIELD REVIEW.
- PROVIDE ONE (1) YEAR WARRANTY ON ALL MATERIAL AND LABOUR FROM THE DATE OF SUBSTANTIAL COMPLETION.
- PROGRESS DRAWS SHALL INCLUDE MINIMUM \$1,000.00 FOR MANUALS AND AS-BUILT DRAWINGS. TOTAL AMOUNT SHALL REMAIN UNBILLED UNTIL MANUALS AND AS-BUILT DRAWINGS HAVE BEEN SUBMITTED AND APPROVED AND UNTIL ALL CONSULTANT FIELD REVIEW REPORTS HAVE BEEN SIGNED AND RETURNED TO CONSULTANT ALONG WITH PICTURES AS REQUESTED BY CONSULTANT.
- PROVIDE ONE(1) COPY VIA EMAIL IN PDF FORMAT OF WARRANTY LETTER, ESA CERTIFICATE OF CLEARANCE, FIRE ALARM VERIFICATION REPORT COMPLETE WITH AS-BUILT DRAWINGS, AS-BUILT WIRING REPORT AND AS-BUILT DRAWINGS. AS-BUILT DRAWINGS SHALL INCLUDE COMPLETE SET WITH ANY CHANGES MARKED CLEARLY AND NEATLY IN COLOUR. SUBSTANTIAL COMPLETION WILL NOT BE AWARDED UNTIL THIS INFORMATION IS SUBMITTED TO THE CONSULTANT AND THE CONSULTANT HAS APPROVED.

**LIGHT FIXTURE SCHEDULE**

TAG	DESCRIPTION	MAKE / MODEL	ALTERNATE
S1	SURFACE MOUNTED 4' LED STRIP LIGHT, FROSTED LENS, DIMMABLE DRIVER, 3000 LUMENS, 4000K, 120V, C/W CAGE.	PHILIPS FSS430L840-UNV-DIM C/W FSSWG4	LITHONIA PEERLESS-ELECTRIC CREE LIGHTING
\$	LIGHT SWITCH	HUBBELL 1200 SERIES (120V)	EQUAL

**EMERGENCY LIGHTING SCHEDULE**

TAG	DESCRIPTION	MAKE / MODEL
BU-1	STEEL BATTERY UNIT COMPLETE 2.4W LED HEADS, CORROSION RESISTANT, FACTORY WHITE, REMOVABLE FRONT ACCESS PANEL, LEAD ACID BATTERY, SOLID STATE PULSE-TYPE CHARGER, TEST SWITCH, LED INDICATOR LIGHTS, 120/347V INPUT WITH LINE CORD KIT, 12V OUTPUT, MOUNTED 2.13(7') AFF. EXACT MOUNTING HEIGHT TO BE COORDINATED ON-SITE WITH FINAL CONDITIONS. (ADJUST MOUNTING HEIGHT AS APPLICABLE FOR PROJECT)	EQUAL TO LUMACELL RGL125-100-2-MQM2-LD7 (OR VOLTAGE TO MATCH EXISTING BATTERY UNITS)
##	CEILING MOUNTED REMOTE SINGLE HEAD 12V 4W LED EMERGENCY LIGHT, INJECTION MOLDED IMPACT RESISTANT FLAME RETARDANT THERMOPLASTIC, ADJUSTABLE LENSES, SUITABLE FOR INSTALLATION ON 4" OCTAGON BOX.	EQUAL TO LUMACELL MQM-LD7 (OR VOLTAGE TO MATCH EXISTING BATTERY UNITS)
##	ALL METAL EXIT SIGN, WHITE LED LIGHT SOURCE, FACTORY WHITE, GREEN RUNNING MAN WITH LEGEND PLATE AS NOTED, SINGLE FACE, UNIVERSAL MOUNTING (WALL, END OR CEILING), 120/347V AC INPUT (NORMAL), 6-24V DC INPUT (EMERGENCY).	EQUAL TO LUMACELL LS1WU.
##	WALL MOUNTED REMOTE DUAL HEAD 12V 4W LED EMERGENCY LIGHT, INJECTION MOLDED IMPACT RESISTANT FLAME RETARDANT THERMOPLASTIC, ADJUSTABLE LENSES, SUITABLE FOR INSTALLATION ON 4" OCTAGON BOX, MOUNTED 2.13(7') AFF. EXACT MOUNTING HEIGHT TO BE COORDINATED ON-SITE WITH FINAL CONDITIONS.	EQUAL TO LUMACELL MQM2-LD7 (OR VOLTAGE TO MATCH EXISTING BATTERY UNITS)

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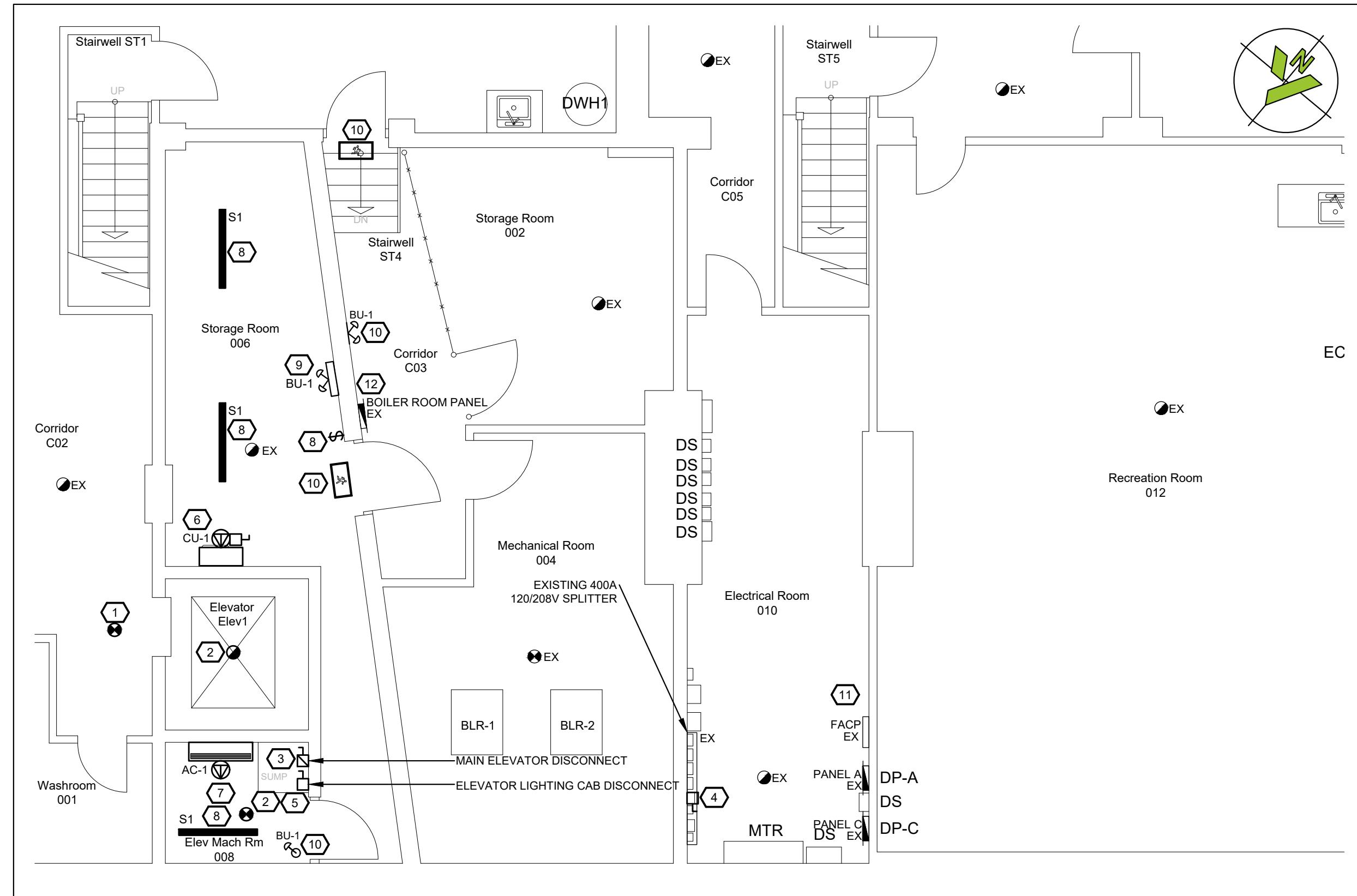


3 2025-12-19 Re-Issued for Tender LC  
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No. Date Description By

POWER LEGEND		
TAG	DESCRIPTION	MAKE/MODEL
	EXISTING PANEL	EXISTING
	208V 1PH GROUNDED DIRECT EQUIPMENT CONNECTION	
	ELEVATOR DISCONNECT C/W AUXILIARY CONTACT	EQUAL TO EATON 1HD221N C/W DS16CP
	DISCONNECT SWITCH 'WP' DENOTES WEATHERPROOF	

ELECTRICAL ABBREVIATIONS		
EX	EXISTING TO REMAIN	
D	EXISTING TO BE REMOVED C/W CONDUIT/WIRING BACK TO SOURCE	
RL	EXISTING TO BE RELOCATED. EXTEND FEED AS REQUIRED.	
RR	EXISTING TO BE REMOVED & REINSTALLED IN SAME LOCATION	
x#	QUANTITY OF DEVICES	
CW	COMPLETE WITH	

FIRE ALARM LEGEND		
<tbl



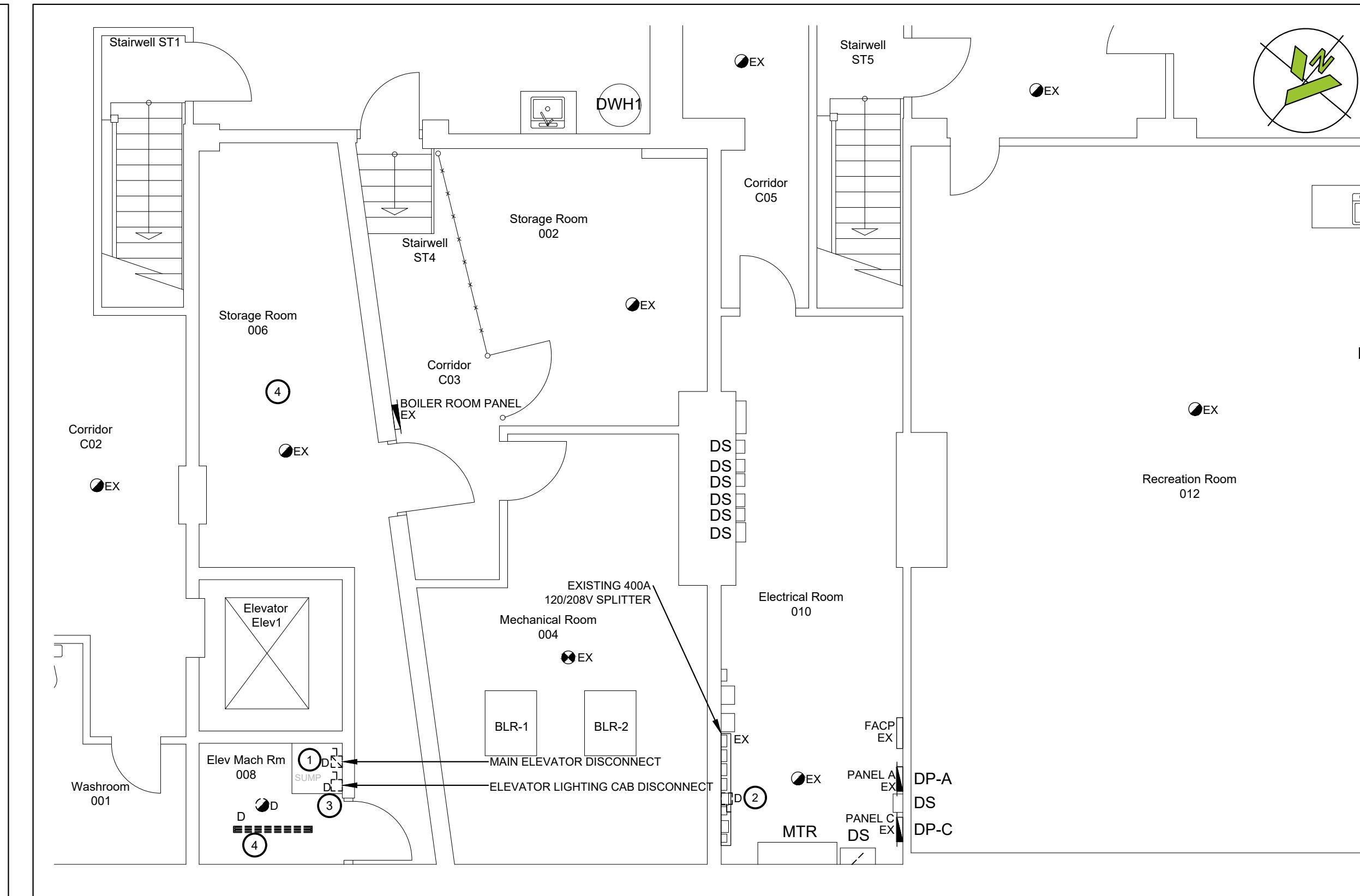
**2** BASEMENT FLOOR - NEW ELECTRICAL LAYOUT  
E-101 SCALE: 3/16"=1"

**NEW WORKING NOTES:**

- 1 PROVIDE SMOKE DETECTOR FOR ELEVATOR LOBBY AND TIE INTO ELEVATOR RECALL. REFER TO FIRE ALARM SCOPE OF WORK. COORDINATE WITH ELEVATOR SERVICE PROVIDER. TO BE PRICED AS A SEPARATE PRICE.
- 2 PROVIDE NEW DETECTOR AS NOTED FOR ELEVATOR PIT AND ELEVATOR MACHINE ROOM AND TIE INTO ELEVATOR RECALL. COORDINATE WITH ELEVATOR SERVICE PROVIDER.
- 3 PROVIDE NEW MAIN ELEVATOR DISCONNECT C/W AUXILIARY CONTACTS. PROVIDE NEW FEED FROM DISCONNECT IN ELECTRICAL ROOM TO SUIT EQUIPMENT RATINGS.
- 4 PROVIDE NEW DISCONNECT FOR ELEVATOR. FEED FROM SPLITTER BELOW. FEED TO BE RATED TO SUIT EQUIPMENT.
- 5 PROVIDE NEW CAB LIGHTING DISCONNECT.
- 6 PROVIDE NEW POWER FEED AND DISCONNECT FOR MECHANICAL EQUIPMENT. FEED FROM BOILER ROOM PANEL WITH #10 CU WIRE IN CONDUIT.
- 7 PROVIDE INTERLOCK WIRING FROM CU IN STORAGE TO AC-1 UNIT. INTERLOCK WIRING SIZED SAME AS POWER FEED. FOLLOW SAME PATH AS REFRIGERATION PIPING UP THROUGH STORAGE ROOM 006. COORDINATE WITH MECHANICAL AND GENERAL CONTRACTOR ON SITE.
- 8 PROVIDE NEW LIGHTING AS SPECIFIED C/W NEW LIGHT SWITCH. TIE INTO NEAREST LIGHTING CIRCUIT IN AREA.
- 9 PROVIDE NEW COMBINATION BATTERY UNIT AND TIE INTO LIGHTING CIRCUIT. PROVIDE RECEPTACLE FOR UNIT CONNECTION.
- 10 PROVIDE NEW EMERGENCY LIGHTING DEVICE AND TIE INTO NEW BATTERY UNIT AND AC POWER AS REQUIRED (CONNECT TO LIGHTING CIRCUIT).
- 11 EXISTING MIRCOM FACP. PROVIDE NEW ADDRESSABLE LOOP FOR ALL FIRE ALARM DEVICES REQUIRED FOR ELEVATOR RECALL WITH ALL REQUIRED RELAYS TO SUPPORT ELEVATOR RECALL AS PER CODE. ALL RELAYS TO BE INSTALLED WITHIN ELEVATOR MACHINE ROOM IN DEDICATED CABINET AND LABELED ACCORDINGLY.
- 12 EXISTING PANEL IS A SIEMENS EQ LOAD CENTER. PROVIDE NEW BREAKERS FOR MECHANICAL EQUIPMENT AND SECURITY EQUIPMENT AS NOTED.

**ELEVATOR ELECTRICAL SPECIFICATIONS:**

- 1 EXISTING ELEVATORS ARE FED FROM DISCONNECT LOCATED IN ELECTRICAL ROOM. REFER TO FLOOR PLAN FOR LOCATION. REMOVE EXISTING FEED AND PROVIDE NEW FEED IN EXISTING CONDUIT. PROVIDE NEW DEDICATED GROUND WIRE FROM SPLITTER TO ELEVATOR CONTROLLER THROUGH ALL ASSOCIATED COMPONENTS AS REQUIRED. SIZE OF GROUND WIRE SHALL BE THE SAME SIZE AS POWER WIRING AND FEED TO ELEVATOR. COORDINATE WITH ELEVATOR SERVICE PROVIDER. REMOVE EXISTING DISCONNECTS IN ELECTRICAL ROOM AND ELEVATOR MACHINE ROOM AND PROVIDE NEW. COORDINATE WITH ELEVATOR SUPPLIER FOR EQUIPMENT RATINGS FOR SIZING OF DISCONNECTS AND WIRING.
- 2 EXISTING ELEVATOR CAB LIGHTING IS FED FROM EXISTING PANEL 'A' LOCATED IN MAIN ELECTRICAL ROOM COMPLETE WITH 15AF DISCONNECTS LOCATED WITHIN THE ELEVATOR MECHANICAL ROOM. REUSE EXISTING ELEVATOR CAB LIGHTING FEEDS FOR NEW ELEVATOR LIGHTING REQUIREMENTS.
- 3 PROVIDE NEW FEED C/W DISCONNECT AND BREAKERS FOR HVAC EQUIPMENT. PROVIDE NEW 20A/2P BREAKER INSIDE EXISTING PANEL.
- 4 PROVIDE ALL NEW CONDUIT AND WIRING FOR ELEVATOR RECALL. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH ELEVATOR SUPPLIER FOR THE INSTALLATION. NEW WIRING FROM THE FIRE ALARM RELAY PANEL TO THE NEW ELEVATOR CONTROLLER FOR FIRE RECALL OPERATION.
- 5 ELECTRICAL CONTRACTOR TO PROVIDE A 1 1/2" EMT CONDUIT COMPLETE WITH PULL STRING FROM THE ELEVATOR MECHANICAL ROOM TO THE SECURITY SYSTEM FOR CONNECTION OF NEW CAMERAS TO SECURITY SYSTEM. ALL WIRING AND WORK FOR THE SECURITY SYSTEM SHALL BE COMPLETED BY CITY'S SECURITY CONTRACTOR. ELECTRICAL CONTRACTOR TO PROVIDE NEW 15A RECEPTACLE C/W NEW BREAKER AND DEDICATED FEED FROM BOILER ROOM PANEL TO SUPPORT SECURITY SYSTEM MODIFICATIONS. EXACT LOCATION OF RECEPTACLE TO BE COORDINATED WITH CITY AND SECURITY CONTRACTOR.
- 6 ELECTRICAL CONTRACTOR TO PROVIDE 1"EMT CONDUIT C/W PANDUIT CAT6 FT6 CABLE FROM ELEVATOR MECHANICAL ROOM TO EXISTING SERVER RACK LOCATED IN OFFICE AREA. COORDINATE FINAL TERMINATION WITH CITY'S IT DEPARTMENT.



**1** BASEMENT FLOOR - DEMO ELECTRICAL LAYOUT  
E-101 SCALE: 3/16"=1"

**DEMO WORKING NOTES:**

- 1 DISCONNECT AND REMOVE MAIN ELEVATOR DISCONNECT LOCATED IN BASEMENT ELECTRICAL ROOM. REMOVE WIRING BACK TO SOURCE. RETAIN CONDUIT FOR REUSE WITH NEW FEED.
- 2 REMOVE DISCONNECT AND FEED BACK TO 400A 120/208V SPLITTER.
- 3 REMOVE DISCONNECT FOR ELEVATOR CAB LIGHTING IN ELEVATOR MACHINE ROOM. RETAIN FEED FOR REUSE.
- 4 DISCONNECT AND REMOVE EXISTING ABANDONED STRIP LIGHTS. RETAIN FEED FOR REUSE WITH NEW LIGHTING.

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No.	Date	Description	By

STAMPS:



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**CIMA+**  
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415 Baseline Road West, Bowmanville,  
ON L1C 5M2 CANADA

CLIENT:

CITY OF PETERBOROUGH

PROJECT NAME:  
**QUEEN ALEXANDRA COMMUNITY CENTER  
ELEVATOR MODERNIZATION**  
180 BARNARDO AVE, PETERBOROUGH ON, K9H 5V3

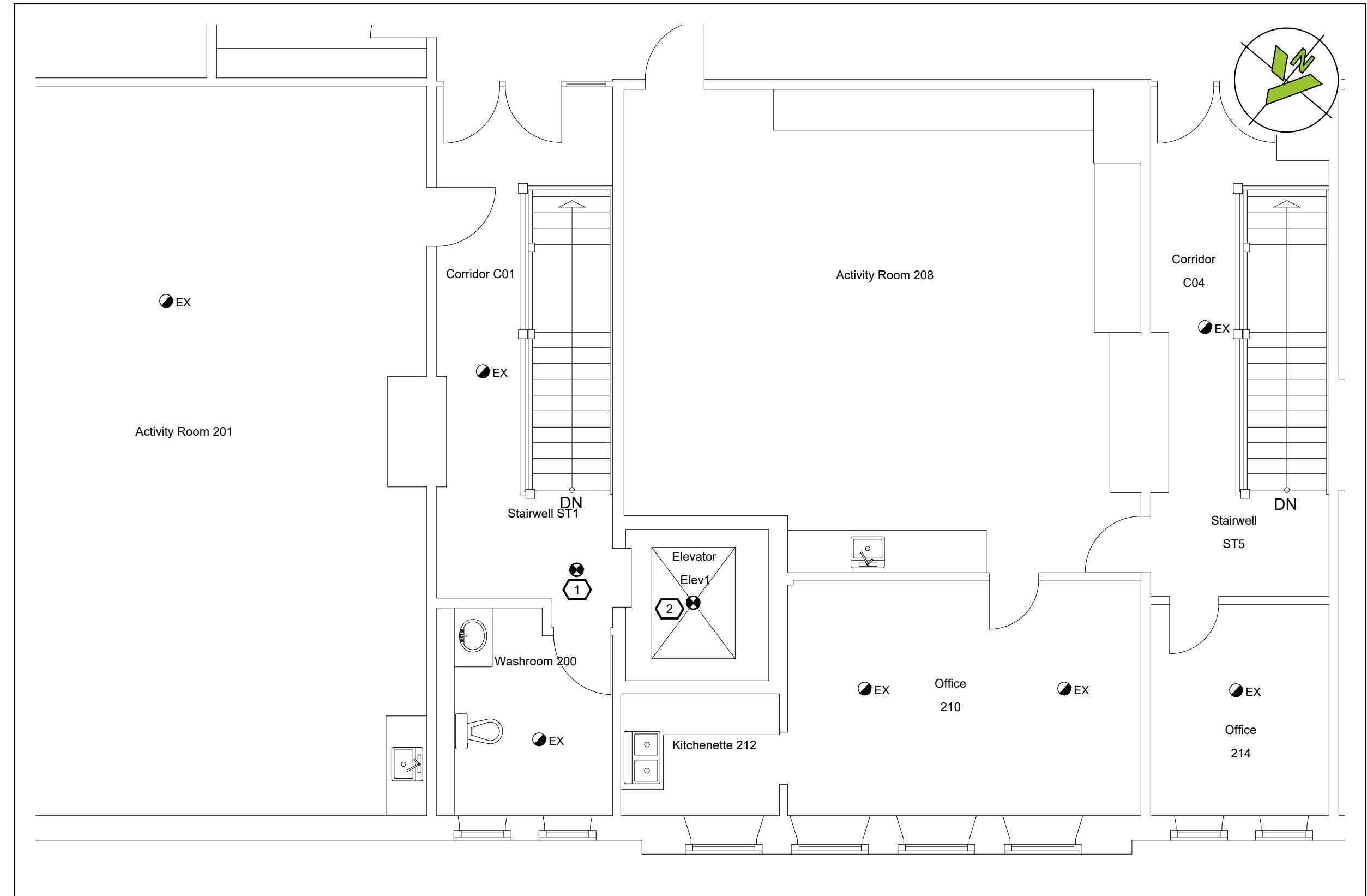
SHEET TITLE:

**BASEMENT LEVEL  
DEMO & NEW ELECTRICAL  
LAYOUTS**

DISCIPLINE:

ELECTRICAL

DRAFTER: RJC	SCALE: AS NOTED
DESIGNER: LC	DATE: 2025-09-25
APPROVER: LC	APPROVER:
PROJECT No: A0000305	DRAWING No:
SHEET No: 2 of 3	E-101

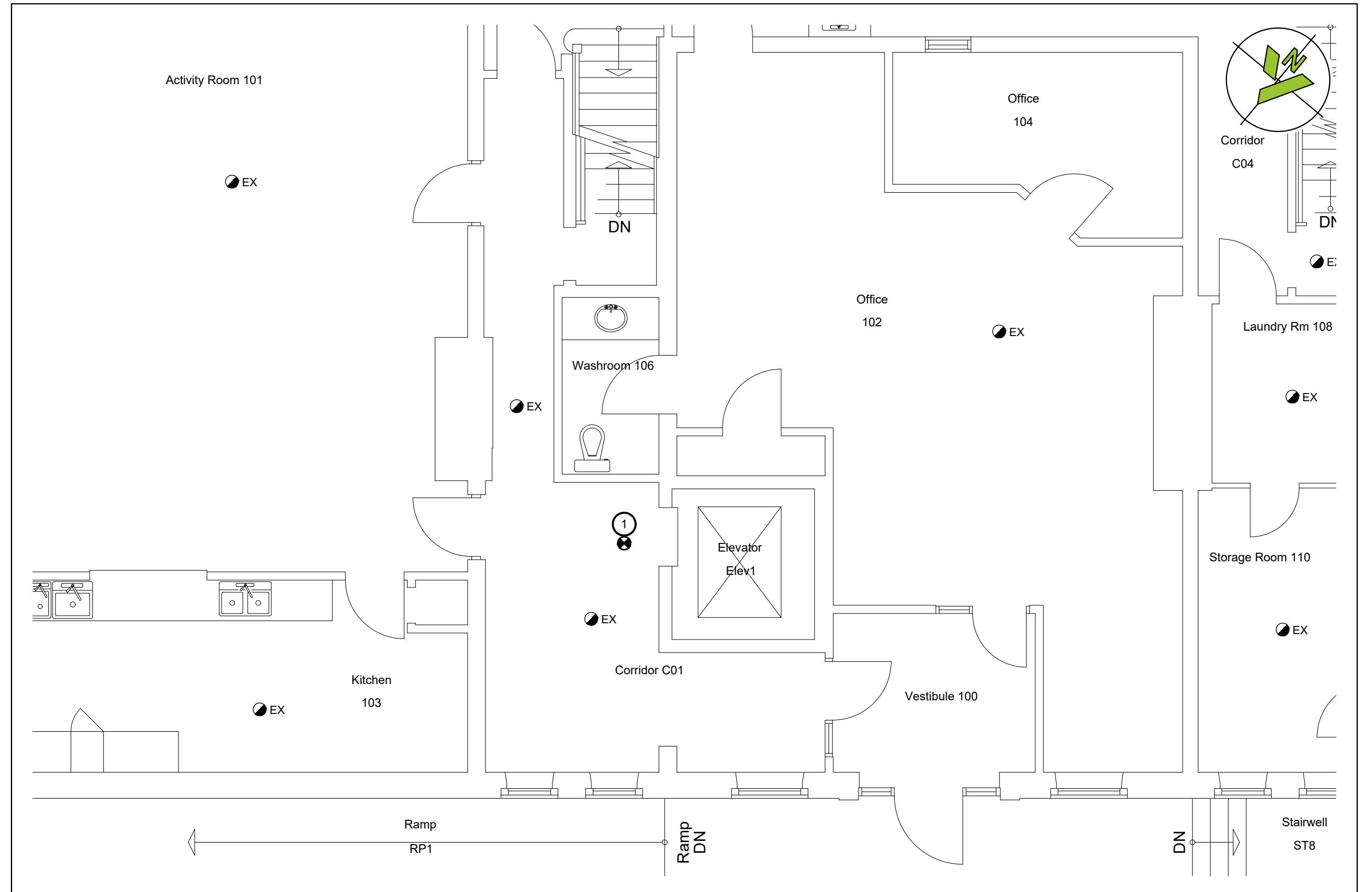


2 SECOND FLOOR - NEW FIRE ALARM LAYOUT  
E-102 SCALE: 3/16"=1"

**NEW WORKING NOTES:**

① PROVIDE SMOKE DETECTOR FOR ELEVATOR LOBBY AND TIE INTO ELEVATOR RECALL. COORDINATE WITH ELEVATOR SERVICE PROVIDER. TO BE PRICED AS A SEPARATE PRICE.

② DISCONNECT AND REMOVE EXISTING HEAT DETECTOR C/W WIRING BACK TO NEAREST DEVICE AND RECTIFY EXISTING CIRCUIT. PROVIDE NEW DETECTOR AS NOTED FOR TOP OF SHAFT. TIE INTO ELEVATOR RECALL AS PER CODE. COORDINATE WITH ELEVATOR SERVICE PROVIDER.



1 GROUND FLOOR - NEW FIRE ALARM LAYOUT  
E-102 SCALE: 3/16"=1"

**NEW WORKING NOTES:**

① PROVIDE SMOKE DETECTOR FOR ELEVATOR LOBBY AND TIE INTO ELEVATOR RECALL. COORDINATE WITH ELEVATOR SERVICE PROVIDER. TO BE PRICED AS A SEPARATE PRICE.

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0	2025-09-29	Issued for Coordination	LC
No.	Date	Description	By

STAMPS:



ENGINEER:  
**CIMA+**  
T 905 697-4464  
415 Baseline Road West, Bowmanville,  
ON L1C 5M2 CANADA

CLIENT:

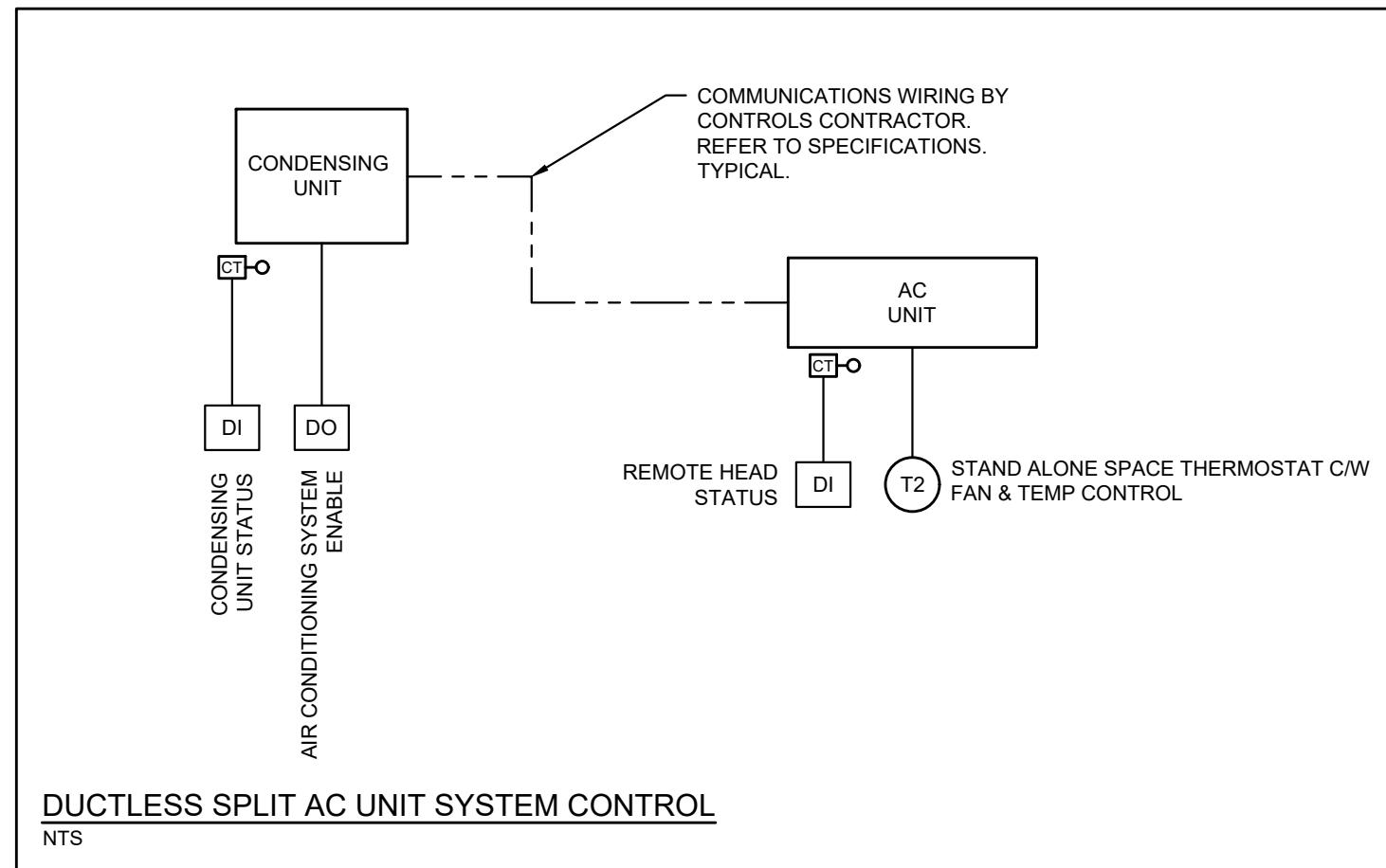
CITY OF PETERBOROUGH

PROJECT NAME:  
QUEEN ALEXANDRA COMMUNITY CENTER  
ELEVATOR MODERNIZATION  
180 BARNARDO AVE, PETERBOROUGH ON, K9H 5V3

SHEET TITLE:

GROUND & SECOND FLOOR  
NEW FIRE ALARM LAYOUTSDISCIPLINE:  
**ELECTRICAL**

DRAFTER: RJC	SCALE: AS NOTED
DESIGNER: LC	DATE: 2025-09-25
APPROVER: LC	APPROVER:
PROJECT No: A0000305	DRAWING No:
SHEET No: 3 of 3	E-102



VRV CONDENSING UNIT SCHEDULE	
TAG	CU-1
SERVICE	AC-1
MANUFACTURER	DAIKIN
TYPE	SINGLE ZONE AC DUCTLESS
MODEL	RKF18AXVJU
REFRIGERANT	R32
INDOOR COOLING CONDITIONS (DB/WB)	°F 80/67
OUTDOOR COOLING CONDITIONS (DB/WB)	°F 95/75
RATED PIPING LENGTH	ft 25
RATED COOLING CAPACITY	btuh 18,100
COOLING SEER/ER	21.0/12.0
ELECTRICAL	208-230/1
LIQUID PIPE CONNECTION	inches 1/4
MCA	amps 14.23
MOPC	amps 20
SOUND PRESSURE LEVEL	dB 54
UNIT DIMENSIONS	inches 36-5/8W x 13-13/16D x 27-13/32H
APPROX. WEIGHT	lbs 60
MAX TOTAL PIPE LENGTH	feet 99
MAX VERTICAL PIPE LENGTH	feet 101
ACCESSORIES	-INVERTER COMPRESSOR -SIDE AND BACK PROTECTION WIRE GUARDS -WALL MOUNTING KIT
ALTERNATE MANUFACTURERS	MITSUBISHI, SAMSUNG, CARRIER

VRV AIR CONDITIONING UNIT SCHEDULE	
TAG	AC-1
SERVICE	ELEVATOR MACHINE ROOM 008
MANUFACTURER	DAIKIN
TYPE	WALL MOUNTED
MODEL	FTKF18AXVJU
REFRIGERANT	R32
INDOOR COOLING CONDITIONS (DB/WB)	°F 80/67
OUTDOOR COOLING CONDITIONS (DB/WB)	°F 95/75
RATED PIPING LENGTH	ft 25
COOLING CAPACITY	btuh 22,000
AIR FLOW	cfm 754/716/605/467/395
LIQUID PIPE CONNECTION	inches 1/4
CONDENSATE CONNECTION	inches 5/8
ELECTRICAL	volt/ph 208-230/1
MCA	amps N/A
MOPC	amps N/A
SOUND PRESSURE LEVEL	dB 49
UNIT DIMENSIONS	inches 39-9/16W x 10-3/4D x 11-11/16H
APPROX. WEIGHT	lbs 30.5
NOTES	-POWER FOR INDOOR UNITS FROM OUTDOOR CONDENSING UNIT
CONTROLS	-INDIVIDUAL ZONE CONTROLLERS/THERMOSTATS SUPPLIED BY MANUFACTURER -REFER TO CONTROLS SCOPE OF WORK
ACCESSORIES	-CONDENSATE PUMP
ALTERNATE MANUFACTURERS	MITSUBISHI, SAMSUNG, CARRIER

#### CONTROLS SCOPE OF WORK:

1. THE DRAWINGS AND SCHEDULES DESCRIBE THE SCOPE OF WORK. PROVIDE ALL REQUIREMENTS INDICATED AND SPECIFIED.
2. COORDINATE ALL REQUIREMENTS THROUGH SHOP DRAWINGS AND BEFORE STARTING INSTALLATION.
3. DISCONNECT AND REMOVE ALL REDUNDANT ELECTRONIC CONTROLS IN AREA OF WORK AS INDICATED ON DRAWINGS.
4. PROVIDE REVISIONS TO EXISTING BAS AS SUPPLIED BY RELIABLE CONTROLS.
5. THE BAS CONTRACTOR SHALL PROVIDE NEW PROGRAMMING, GRAPHICS, PANELS, ETC. TO SUIT CURRENT SCOPE OF WORK.
6. GRAPHICS SHALL INCLUDE ROOM NAME AND NUMBER ALONG WITH EQUIPMENT TAGS. PROVIDE DESCRIPTIVE NOTES FOR EACH UNIT OR PIECE OF EQUIPMENT. OUTLINE/NOTE AREAS SERVED BY EACH UNIT ON FLOOR PLAN.
7. COORDINATE ALL SEQUENCES OF OPERATION AND ALARMING WITH C.O.P. REPRESENTATIVE. CONTROLS CONTRACTOR SHALL COMPLY WITH ALL C.O.P. CONTROLS STANDARDS.
8. COORDINATE FINAL UNIT TAGGING WITH EXISTING NAMING CONVENTION ON SITE TO ENSURE NO DUPLICATION.
9. PROVIDE CONTROL SHOP DRAWINGS C/W ALL CONTROL COMPONENTS, SCHEMATICS, SEQUENCES, AND WIRING DETAILS AS PER SPECIFICATIONS.
10. PROVIDE ONE(1) YEAR WARRANTY ON ALL CONTROLS MATERIAL AND LABOUR.
11. PROVIDE ELECTRONIC AS-BUILT CONTROL DRAWINGS FOR INCLUSION IN CLOSEOUT DOCUMENTS AS PER SPECIFICATIONS.
12. ALL EXISTING BAS CONTROLS AND NETWORK COMMUNICATIONS SHALL REMAIN FULLY FUNCTIONAL AND OPERATIONAL DURING THE EXECUTION OF THE WORK. PROVIDE TEMPORARY WIRING AS REQUIRED TO MAINTAIN SYSTEM UPTIME AND INTEGRITY.
13. COORDINATE ALL WORK SO AS TO MINIMIZE DISRUPTION WITH THE OPERATION OF THE COMMUNITY CENTRE.
14. ANY WORK THAT DISRUPTS THE BUILDING SERVICES SHALL BE COORDINATED AHEAD OF TIME AND BE APPROVED BY C.O.P. REPRESENTATIVE PRIOR TO PROCEEDING.
15. MAINTAIN AS-BUILT DRAWINGS ON AN ON-GOING BASIS. DRAWINGS SHALL BE AVAILABLE FOR PERIODIC REVIEW BY THE CONSULTANT DURING CONSTRUCTION.
16. ALL WORK SHALL COMPLY WITH APPLICABLE CODES.
17. REMOVE ALL REDUNDANT EQUIPMENT, MATERIALS AND GARBAGE FROM SITE AND DISPOSE OF IN AN APPROVED MANNER. REDUNDANT EQUIPMENT AND MATERIALS SHALL NOT BE ABANDONED IN PLACE.
18. ANY CUTTING AND CORING SHALL BE BY THIS CONTRACTOR. COORDINATE PATCHING WITH GENERAL CONTRACTOR.
19. MAINTAIN REQUIRED ACCESS AND CLEARANCE TO ALL EQUIPMENT AND SYSTEMS AS REQUIRED BY CODE AND AS PER MANUFACTURER'S REQUIREMENTS.
20. TAG ALL EQUIPMENT WITH LAMACOID NAMEPLATES. TAG ALL VALVES WITH LAMACOID NAMEPLATES OR BRASS TAGS ON CHAINS.
21. LABEL ALL NEW PIPING (IN AREA OF WORK) WITH SERVICE AND FLOW ARROWS EVERY 10'(3m) AND ON EITHER SIDE OF WALLS.
22. THE CONTRACTOR SHALL ARRANGE FOR ROUGH-IN INSPECTIONS BY THE ENGINEER PRIOR TO INSULATING OR CONCEALING ANYTHING. WHERE THIS HAS NOT BEEN ARRANGED IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXPOSE SERVICES FOR INSPECTION AT THE DIRECTION OF THE CONSULTANT.
23. PERFORM TESTING AND START UP OF ALL SYSTEMS AS REQUIRED BY CODE, THE CONSULTANT, MANUFACTURER'S REQUIREMENTS, AND AUTHORITIES HAVING JURISDICTION. SUBMIT REPORTS TO THE CONSULTANT.
24. INSTRUCT AND DEMONSTRATE TO THE OWNER ON PROPER OPERATION OF THE SYSTEM. RECORD AND SUBMIT A LOG DATED AND SIGNED BY ALL ATTENDEES.
25. UPON COMPLETION OF THE PROJECT THE CONSULTANT WILL DO A FINAL REVIEW. UPON RECEIPT OF THE FINAL INSPECTION REPORT, THE CONTRACTOR MUST CORRECT AND SIGN BACK THE INSPECTION REPORT INDICATING ALL DEFICIENCIES ARE COMPLETELY RE-INSPECTED. ONLY BE DONE ONCE THE CONSULTANT RECEIVES THIS IN WRITING. WHERE THE CONSULTANT PERFORMS THE RE-INSPECTION AND THE WORK IS NOT COMPLETE, THE CONTRACTOR IS RESPONSIBLE FOR REIMBURSING THE CONSULTANT FOR THE FIELD REVIEW. THE FEE FOR ADDITIONAL REVIEWS WILL BE AT THE CONSULTANT'S HOURLY RATES PLUS MILEAGE AND APPLICABLE TAXES TO BE PAID DIRECTLY TO THE CONSULTANT PRIOR TO PERFORMING THE NEXT FIELD REVIEW.
26. PROVIDE ONE (1) YEAR WARRANTY ON ALL MATERIAL AND LABOUR FROM THE DATE OF SUBSTANTIAL COMPLETION.
27. PROGRESS DRAWINGS SHALL INCLUDE MINIMUM \$1,000.00 FOR MANUALS AND AS-BUILT DRAWINGS. TOTAL AMOUNT SHALL REMAIN UNBILLED UNTIL MANUALS AND AS-BUILT DRAWINGS HAVE BEEN SUBMITTED AND APPROVED.
28. PROVIDE ONE (1) YEAR WARRANTY ON ALL MATERIAL AND LABOUR FROM THE DATE OF SUBSTANTIAL COMPLETION.

#### HVAC NOTES:

1. COORDINATE INSTALLATION WITH ALL OTHER TRADES.
2. CONFIRM EXACT LOCATIONS OF THERMOSTATS/SENSORS WITH ENGINEER AND OWNER. MOUNT THERMOSTATS AT 47" (1200mm) AFF.
3. ALL EXPOSED INDOOR CONTROL WIRING (IN UNFINISHED AREAS ONLY) SHALL BE RUN IN EMT CONDUIT WITH FINAL CONNECTION IN BX. ALL CONTROL WIRING SHALL RUN PARALLEL TO BUILDING LINES AND TIGHT TO ROOF DECK OR WALLS. ALL CONTROL WIRING PASSING THROUGH WALLS SHALL BE RUN IN EMT CONDUIT C/W BUSHINGS AT EACH END.
4. PROVIDE TESTING AND STARTUP OF ALL NEW EQUIPMENT AND PROVIDE REPORTS TO THE ENGINEER FOR REVIEW.
5. PROVIDE SLEEVES FOR PIPES THROUGH ALL NEW BLOCK WALLS. FILL VOIDS AROUND PIPES. ENSURE NO CONTACT BETWEEN DISSIMILAR METALS.
6. PROVIDE FIRE STOPPING AROUND ALL EXISTING AND NEW PIPING THROUGH FIRE SEPARATIONS IN ACCORDANCE WITH CAN/ULC-S115.
7. PROVIDE CONDENSATE DRAINS C/W TRAPS FOR NEW INDOOR AIR HANDLING EQUIPMENT AND RUN TO CLOSEST PLUMBING DRAIN WITH INDIRECT DRAIN CONNECTION IN A VISIBLE AND ACCESSIBLE LOCATION. CEILING SPACE NOT ACCEPTABLE. PROVIDE CONDENSATE PUMP WHERE GRAVITY DRAINAGE IS NOT POSSIBLE. REFER TO DETAILS AND SPECIFICATIONS FOR ACCEPTABLE MANUFACTURERS.
8. PROVIDE START-UP AND COMMISSIONING OF ALL NEW EQUIPMENT AND PROVIDE REPORTS TO THE ENGINEER FOR REVIEW.

#### MATERIAL SPECIFICATIONS:

1. REFRIGERATION PIPING:
  1. TYPE ACR COPPER, CERTIFIED TO ASTM B200, WITH BRAZED JOINTS.
  2. PROVIDE P-TRAP AT UNIT, SHUT OFF VALVE, FILTER DRYER, REPLACEMENT CARTRIDGE AND TYPE, AND SIGHT GLASS AT THE CONDENSER. MAKE OIL ADJUSTMENT AS REQUIRED TO SUIT LENGTH OF REFRIGERATION PIPING.
  3. FOR REFRIGERATION SYSTEMS LARGER THAN 3 TONS OF COOLING OR AIR CONDITIONING SYSTEMS LARGER THAN 5 TONS, CONTRACTOR SHALL SUPPLY A TSAA CERTIFICATE ON COMPLETION OF INSTALLATION AND PROVIDE TO CONSULTANT.
  4. PROVIDE 1" (25mm) INSULATION ON ALL INDOOR & OUTDOOR REFRIGERATION PIPING. SUCTION AND LIQUID LINES SHALL BOTH BE INSULATED OUTSIDE OF BUILDING.
  5. PROVIDE UV RESISTANT ALUMINUM JACKET ON OUTDOOR REFRIGERATION PIPING EQUAL TO "3M VENTRECLAD".
  6. PROVIDE PVC JACKET ON ALL INSULATION IN EXPOSED AREAS.
2. PIPE HANGERS:
  1. ADJUSTABLE WROUGHT IRON CLEVIS TYPE AND/OR ADJUSTABLE RING WITH THREADED SUSPENSION RODS.
  2. FOR COPPER PIPING (INCLUDING PIPING WITHIN WALL/F ENCLOSURE) PROVIDE COPPER PLATED OR EPOXY TYPE HANGERS OR PROVIDE SEPARATION OF DISSIMILAR METALS WITH APPROVED DIELECTRIC MATERIALS. INSULATING TAPE IS NOT ACCEPTABLE.
  3. HANGERS SHALL WRAP AROUND OUTSIDE OF PIPE INSULATION. PROVIDE SADDLES TO PREVENT CRUSHING OF INSULATION.
  4. PIPE HANGER SPACING
    - SIZES 0" TO 1-1/4" (0mm to 81.25mm) = 81.25mm
    - SIZES 1-1/2" (38mm) TO 2" (50mm) = 103mm SPACING
    - SIZES 2-1/2" (63mm) AND OVER = 12" (3.5m) SPACING
  5. PROVIDE HANGER WITHIN 12" (300mm) OF EVERY ELBOW.
3. CONDENSATE PIPING SHALL BE COPPER C/W 1" (25mm) INSULATION. PLASTIC TUBING OR PIPE IS NOT ACCEPTABLE.

MECHANICAL LEGEND	
—	NEW
—	EXISTING
-----	DEMOLITION
	SUPPLY DUCTS (UP / DOWN)
	RETURN DUCTS (UP / DOWN)
	FLEXIBLE DUCT CONNECTION
	REFRIGERATION LINE
	CONDENSATE DRAIN LINE
	LOCAL THERMOSTAT SUPPLIED WITH EQUIPMENT
	SPACE SENSOR
	EQUIPMENT <small>—</small> TYPE OF EQUIPMENT SYMBOLS <small>—</small> NUMBER DESIGNATION

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MECHANICAL ABBREVIATIONS	
EX	EXISTING TO REMAIN
CTE	CONNECT TO EXISTING
C/W	COMPLETE WITH
E/A	EXHAUST AIR

STAMPS:

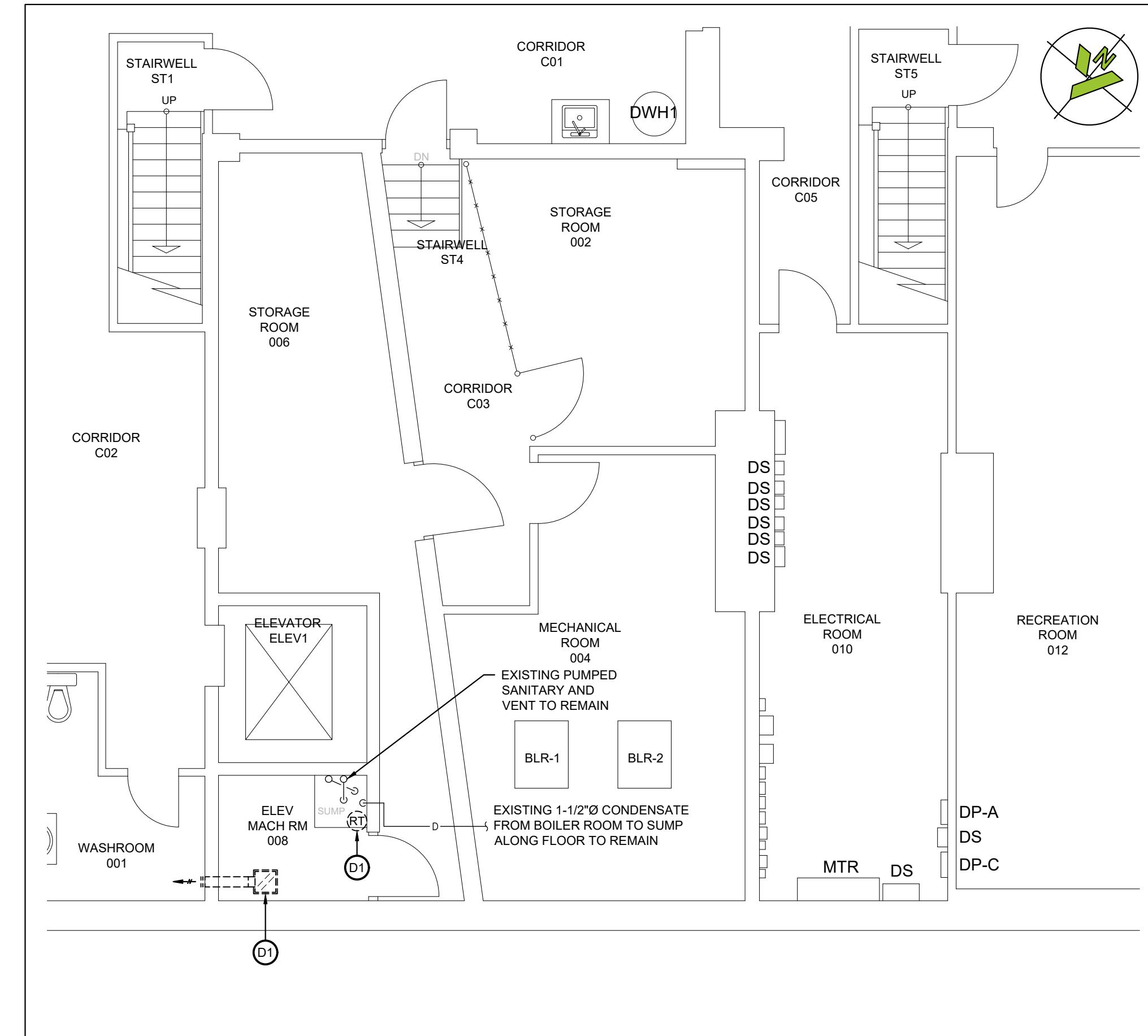
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2	2026-10-20	Re-Issued for Tender	JSG
1	2025-10-20	Issued for Tender	JSG
0	2025-09-29	Issued for Coordination	JSG
No.	Date	Description	By

LICENSED PROFESSIONAL ENGINEER  
J. S. GREER  
100158236  
DEC 19/25  
PROVINCE OF ONTARIO

ENGINEER:  
**CIMA+**  
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415 Baseline Road West, Bowmanville,  
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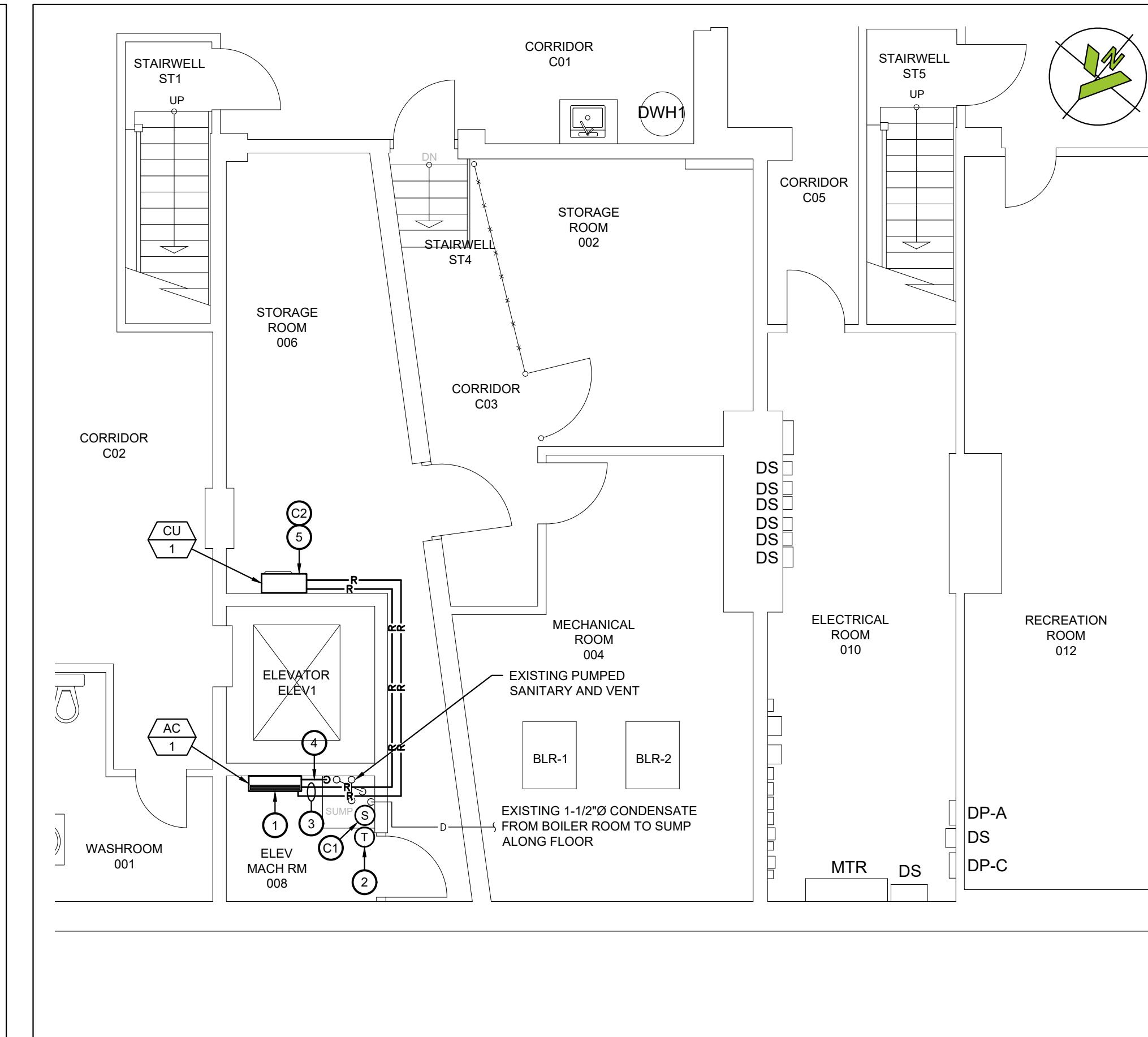
CLIENT:  
**CITY OF PETERBOROUGH**  
PROJECT NAME:  
QUEEN ALEXANDRA COMMUNITY CENTER  
ELEVATOR MODERNIZATION  
180 BARNARDO AVE, PETERBOROUGH ON, K9H 5V3  
SHEET TITLE:

LEGENDS, NOTES AND SCHEDULES  
DISCIPLINE: MECHANICAL  
DRAFTER: MRC  
SCALE: NTS  
DESIGNER: UZ  
DATE: 2025-09-29  
APPROVER: JSG  
PROJECT No: A0000305  
DRAWING No: M-001  
SHEET No: 1 of 2



1 BASEMENT FLOOR - DEMO MECHANICAL LAYOUT  
M-101 SCALE: 3/16"=1"

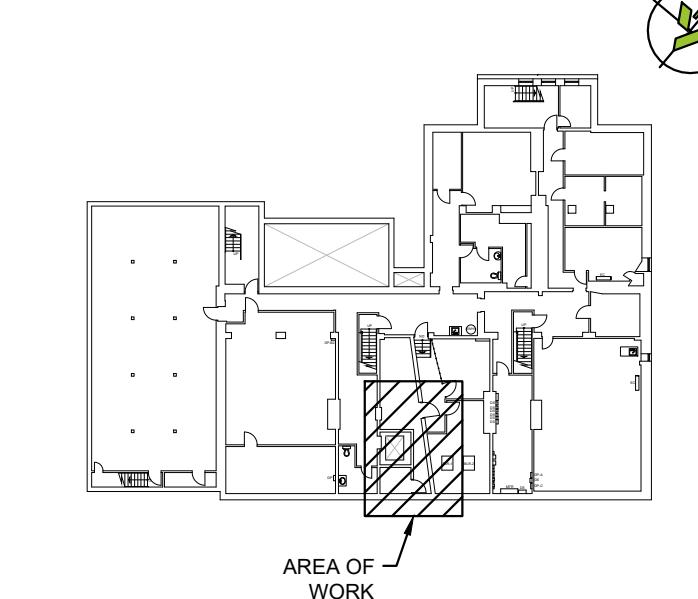
**DEMO WORKING NOTES:**  
 (D1) DISCONNECT AND REMOVE EXISTING EXHAUST FAN AND ASSOCIATED DUCTWORK AND CONTROLS.



2 BASEMENT FLOOR - NEW MECHANICAL LAYOUT  
M-101 SCALE: 3/16"=1"

**NEW WORKING NOTES:**  
 (1) PROVIDE NEW DUCTLESS SPLIT A/C UNIT AND MOUNT ON WALL AT HIGH LEVEL. CONFIRM CLEARANCES FOR DRAIN. MECHANICAL CONTRACTOR SHALL PROVIDE ALL INTERCONNECT WIRING BETWEEN INDOOR UNIT AND CONDENSING UNIT AS PER MANUFACTURERS INSTALLATION INSTRUCTIONS.  
 (2) INSTALL NEW THERMOSTAT (SUPPLIED BY MANUFACTURER). PROVIDE ALL INTERCONNECT WIRING BETWEEN AC UNIT, CONDENSING UNIT, AND THERMOSTAT. COORDINATE FINAL MOUNTING HEIGHT WITH OWNER.  
 (3) RUN NEW INSULATED REFRIGERATION PIPING TO NEW CONDENSING UNIT.  
 (4) RUN NEW CONDENSATE PIPING TO EXISTING SUMP C/W P-TRAP.  
 (5) PROVIDE NEW CONDENSING UNIT FOR ELEVATOR MACHINE ROOM AC-1 AND MOUNT ON WALL. PROVIDE INTERCONNECT WIRING BETWEEN AC UNIT, CONDENSING UNIT, AND THERMOSTAT.

**NEW WORKING NOTES - CONTROLS:**  
 (C1) PROVIDE NEW BAS SPACE SENSOR FOR TEMPERATURE MONITORING.  
 (C2) PROVIDE CONTROLS AND CONTROL WIRING FOR NEW CONDENSING UNIT.



KEY PLAN - BASEMENT

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No.	Date	Description	By

STAMPS:



ENGINEER:  
**CIMA+**  
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 415 Baseline Road West, Bowmanville,  
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CLIENT:  
 CITY OF PETERBOROUGH

PROJECT NAME:  
 QUEEN ALEXANDRA COMMUNITY CENTER  
 ELEVATOR MODERNIZATION  
 180 BARNARDO AVE, PETERBOROUGH ON, K9H 5V3

SHEET TITLE:  
 BASEMENT LEVEL  
 DEMO & NEW  
 MECHANICAL LAYOUT

DISCIPLINE:	MECHANICAL
DRAFTER:	MRC
DESIGNER:	UZ
APPROVER:	JSG
PROJECT No:	A0000305
SHEET No:	2 of 2
SCALE:	AS NOTED
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