

WATERDOWN DISTRICT HIGH SCHOOL MAIN ENTRANCE AND FOYER RENOVATIONS

LIST OF DRAWINGS

ARCHITECTURAL: WARD99 ARCHITECTS INC.

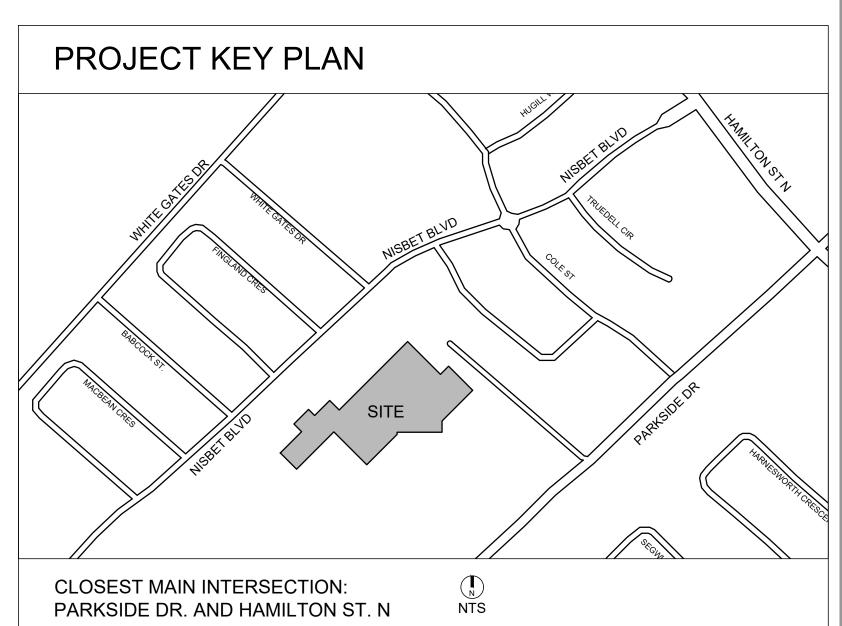
- A0.01 PROJECT TITLE, LIST OF DRAWINGS AND PROJECT INFORMATION
- A0.02 SITE MOBILIZATION PLAN AND NOTES
- A0.03 EXISTING GROUND FLOOR KEY PLAN
- A1.01 DEMOLITION PLANS, NOTES AND LEGENDS
- A1.02 PROPOSED GROUND FLOOR PLAN AND PROPOSED REFLECTED CEILING PLAN, NOTES AND LEGEND
- A3.01 BUILDING SECTION AND STAIR DETAILS
- A3.02 ELEVATIONS AND DETAILS
- DOOR AND HARDWARE SCHEDULE, ELEVATIONS AND DETAILS AND ROOM FINISHES SCHEDULE A5.01

MECHANICAL: SURI AND ASSOCIATES LTD.

MECHANICAL LEGEND, SCHEDULES & KEY PLANS M1 MECHANICAL LAYOUTS **M2**

ELECTRICAL : SURI AND ASSOCIATES LTD.

ELECTRICAL LEGEND & KEY PLANS **ELECTRICAL LAYOUTS E2**



PROJECT INFORMATION

PROJECT TITLE: WATERDOWN DISTRICT HIGH SCHOOL MAIN ENTRANCE AND FOYER RENOVATIONS

PROJECT ADDRESS: 215 Parkside Dr., Waterdown, ON L8B 1B9

OWNER: Hamilton-Wentworth District School Board 20 Education Ct, Hamilton, ON L9A 0B9

CONSULTANT'S CONTACT INFORMATION: 7611 PINE VALLEY DRIVE, UNIT 11, VAUGHAN, ON L4L 0A2 TEL: 416-613-5880 EMAIL: INFO@WARD99ARCHITECTS.COM

SCOPE OF WORK

1. Scope of work includes:

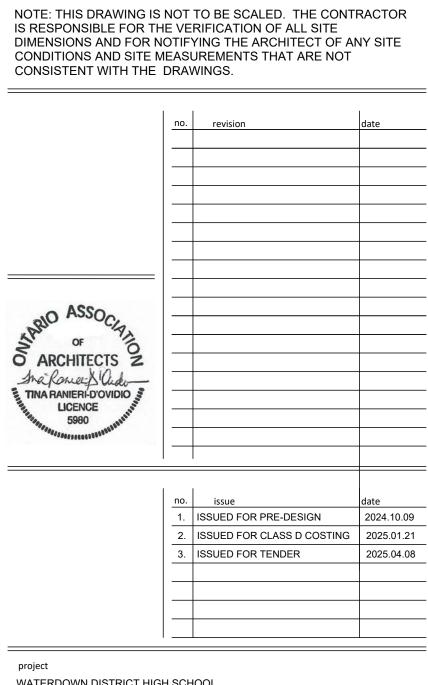
- 1.1. Replacement of existing main entrance exterior aluminum doors and framed screen assembly and associated door hardware.
- 1.2. Replacement of existing ceiling assembly and light fixtures and devices in main entrance
- 1.3. Replacement of existing hot water heating supply unit with new unit in the existing entry vestibule ceiling.
- 1.4. Paints of existing metal works at existing stair in the main foyer and associated guard
- components. 1.5. Replacement of existing tile flooring and base at main fover tiered seating area.

| CONDITIONS AND SITE N CONSISTENT WITH THE | | |
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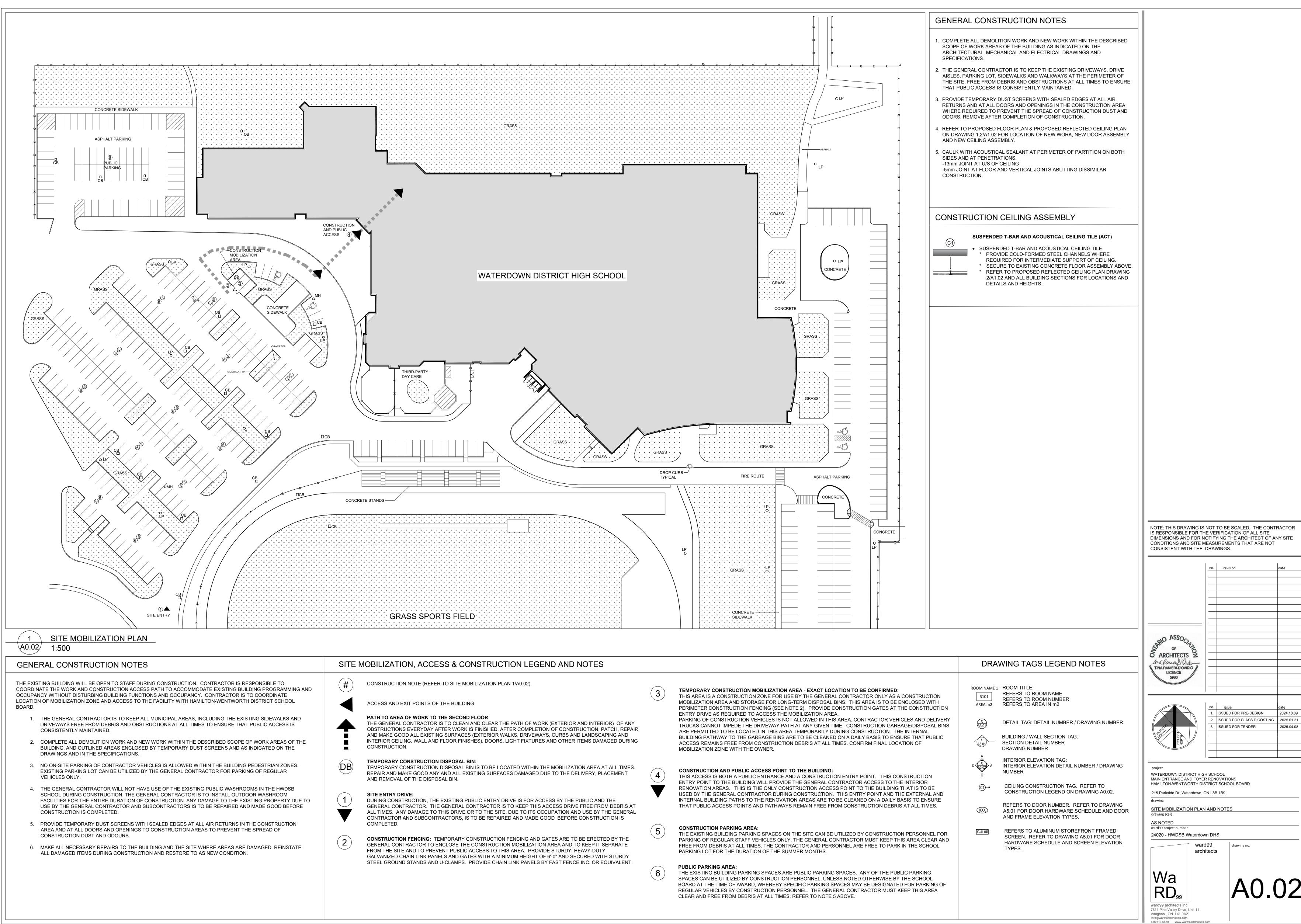
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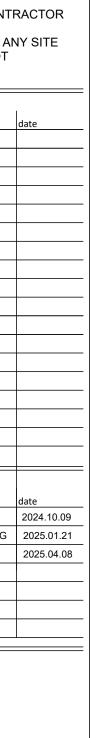
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ward99 architects inc. 7611 Pine Valley Drive, Unit 11 Vaughan , ON L4L 0A2 info@ward99architects.com 16 613 5880 www.ward99a

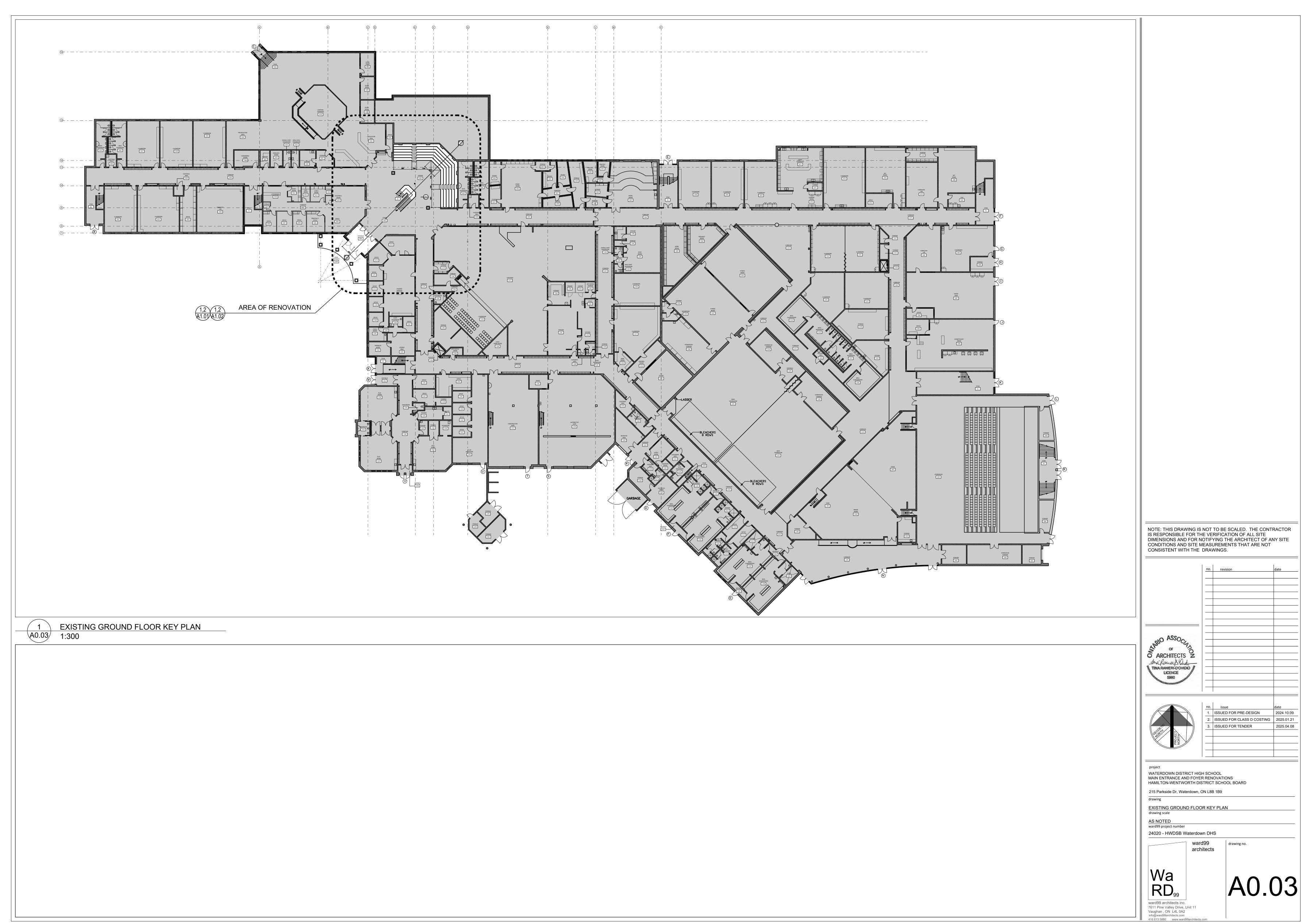






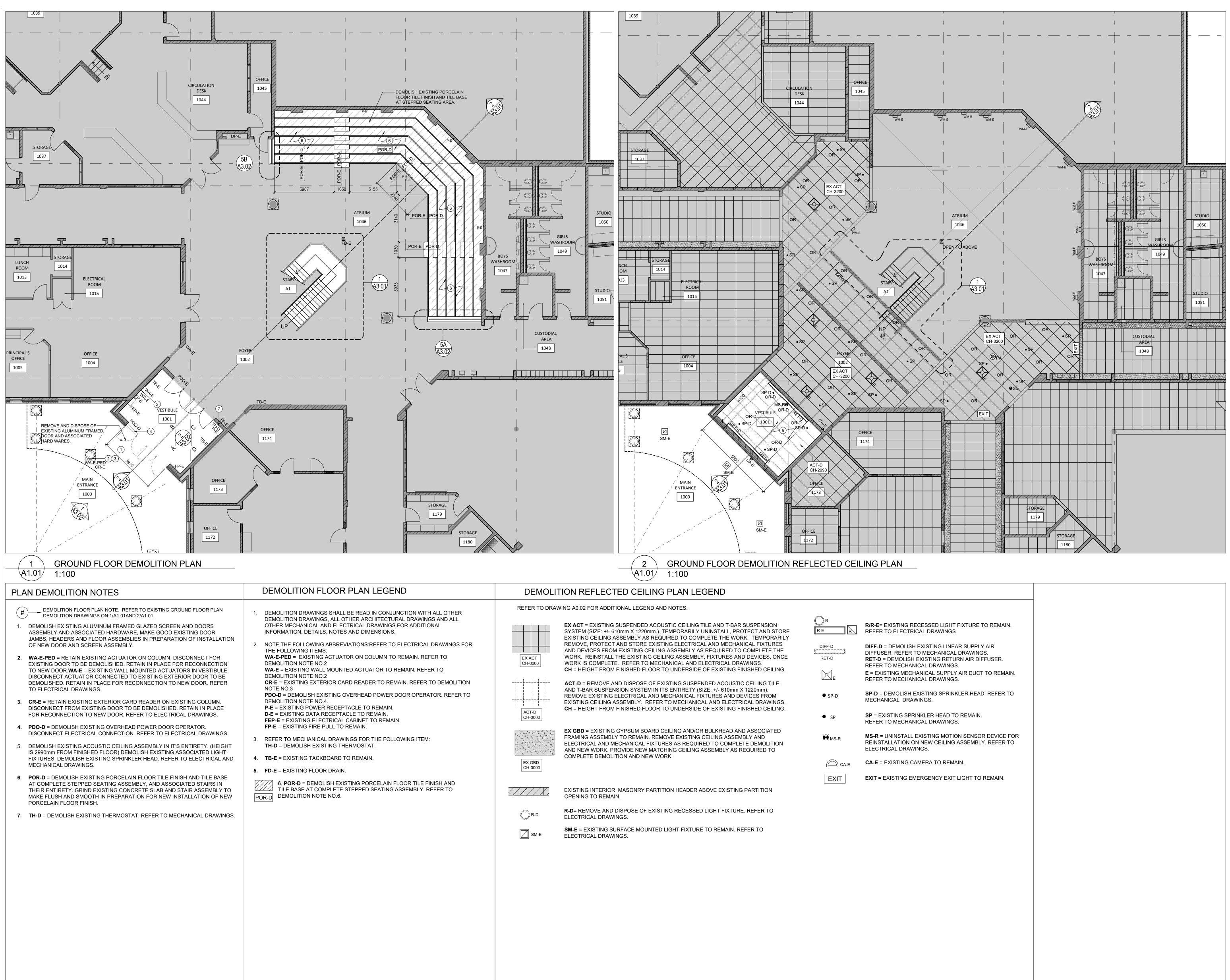










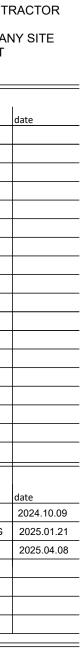


| EXISTING INTERIOR MASONRY PARTITION HEADER ABOVE EXISTING PARTITION OPENING TO REMAIN. |
|---|
| R-D = REMOVE AND DISPOSE OF EXISTING RECESSED LIGHT FIXTURE. REFER TO ELECTRICAL DRAWINGS. |
| SM-E = EXISTING SURFACE MOUNTED LIGHT FIXTURE TO REMAIN. REFER TO |

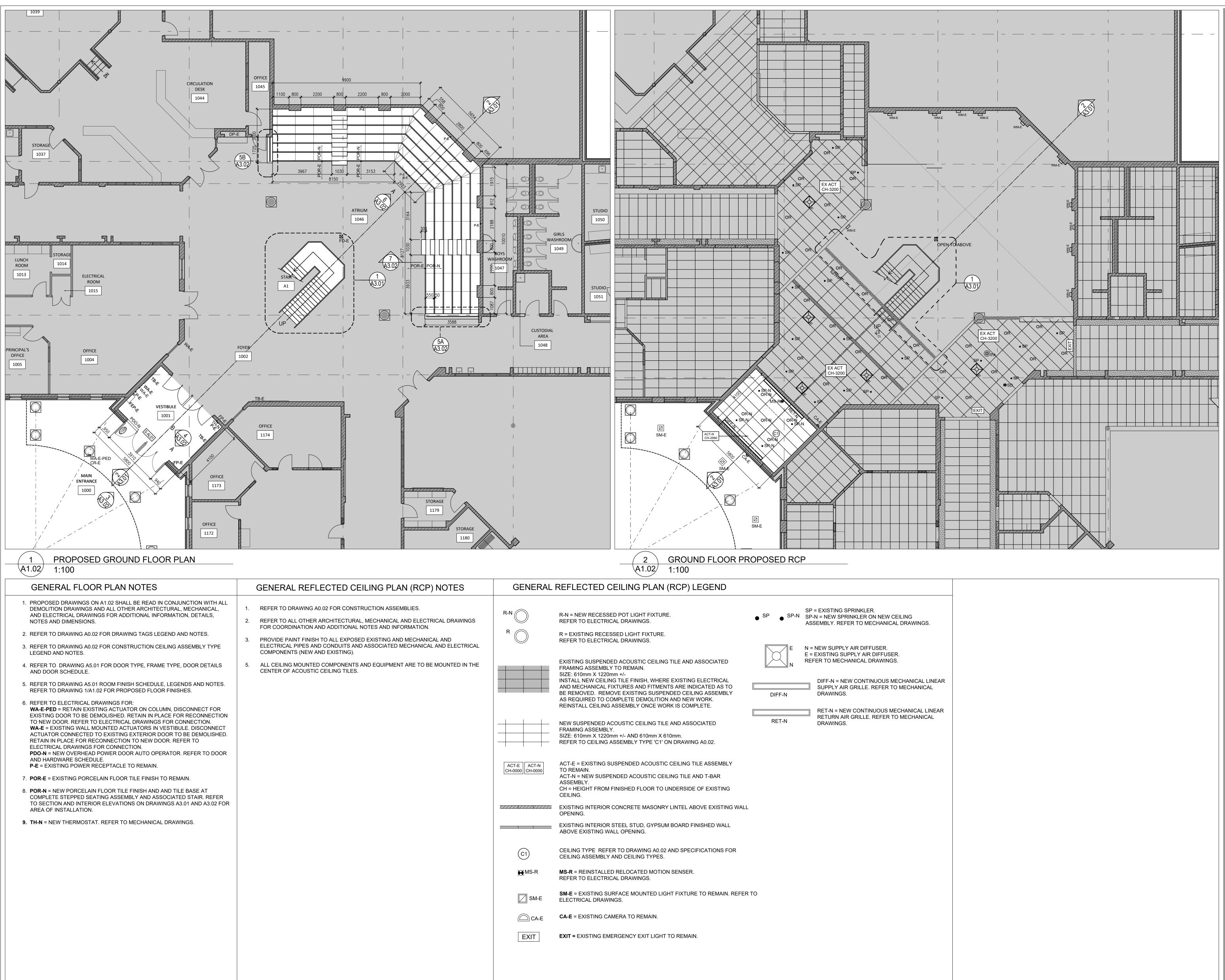
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| SP | SP = EX REFER |
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NOTE: THIS DRAWING IS NOT TO BE SCALED. THE CONTRACTOR IS RESPONSIBLE FOR THE VERIFICATION OF ALL SITE DIMENSIONS AND FOR NOTIFYING THE ARCHITECT OF ANY SITE CONDITIONS AND SITE MEASUREMENTS THAT ARE NOT CONSISTENT WITH THE DRAWINGS.

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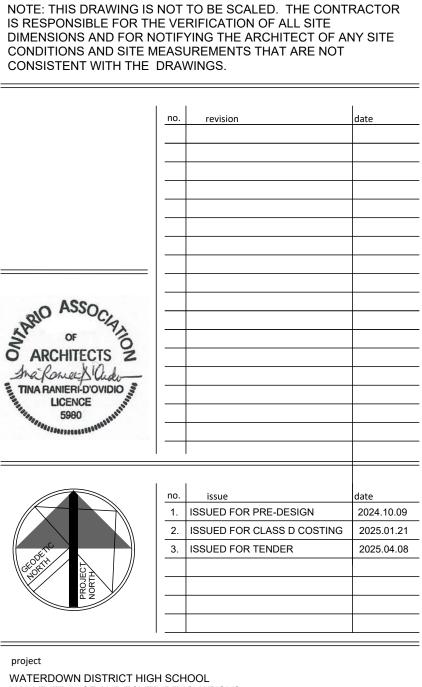


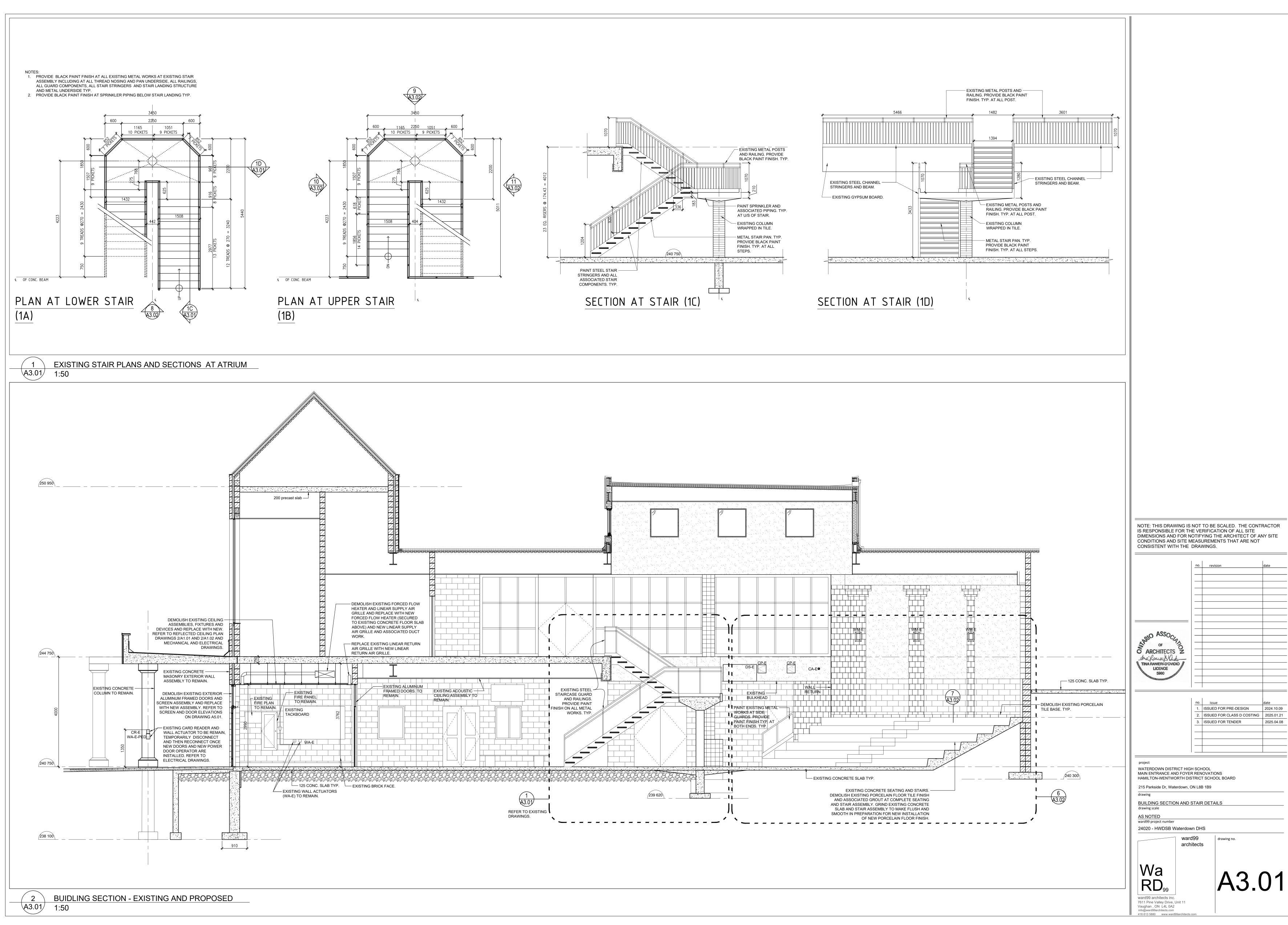


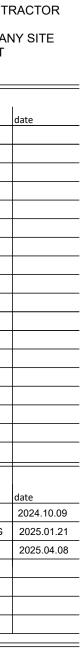
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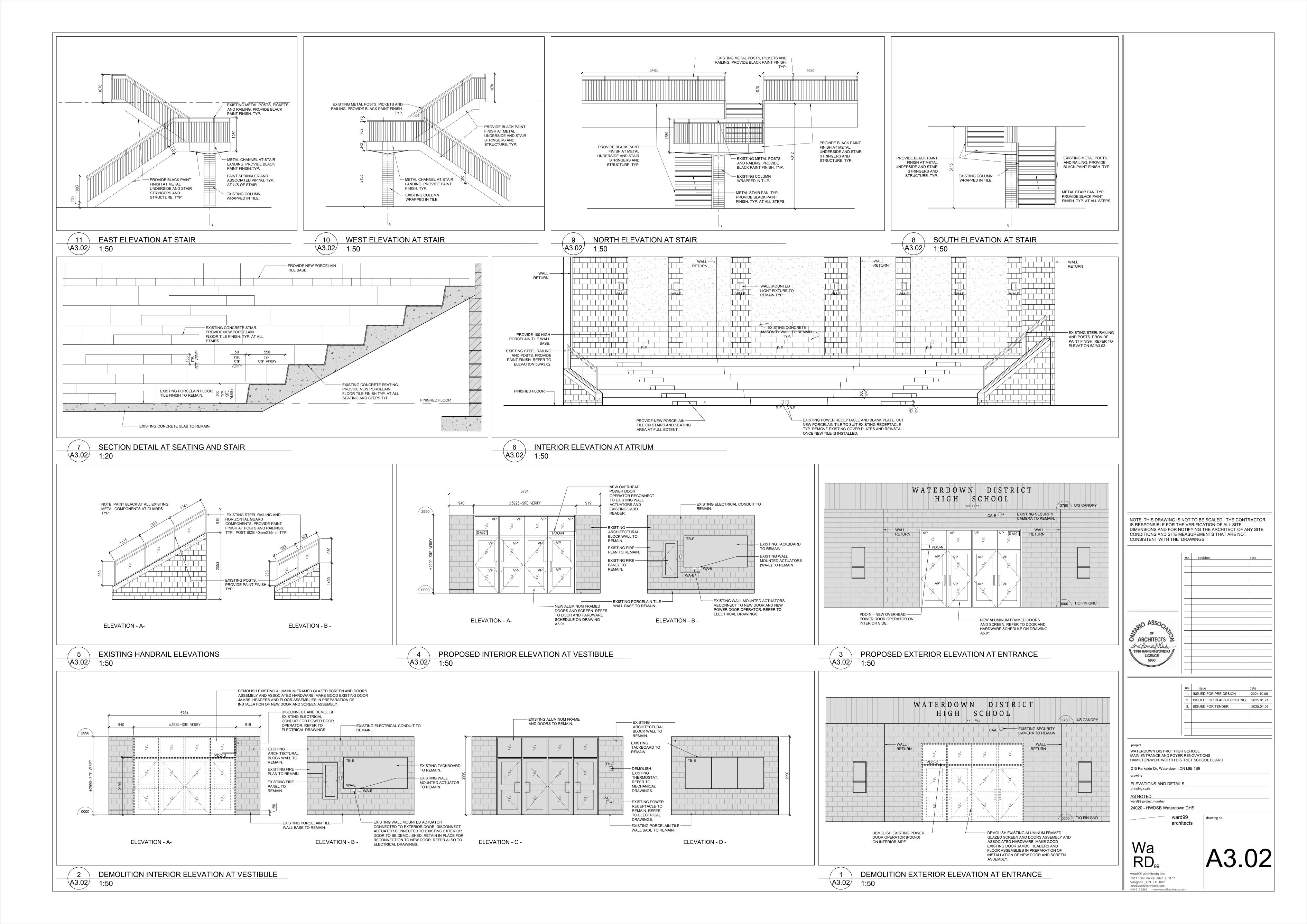
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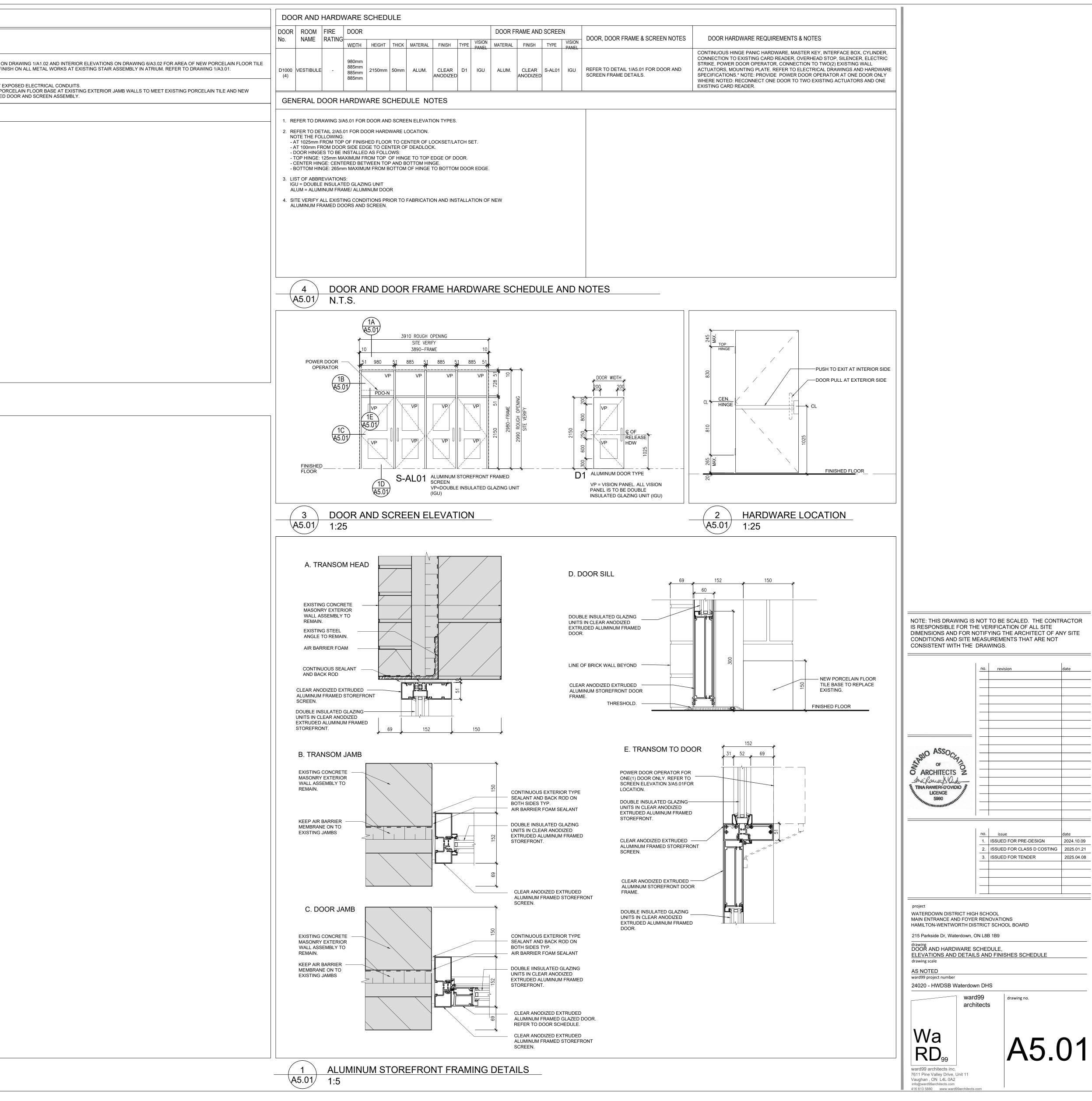


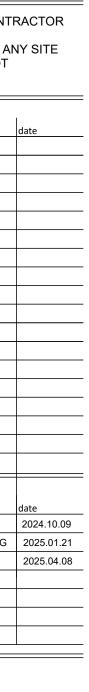






| | | FLOOR | | BASE | WALLS | 6 | | | | | | | CEILIN | G | | |
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|)46 | ATRIUM | CONC | POR-N | POR-N | EX CMU | - | EX CMU | - | EX CMU | - | EX CMU | - | EX ACT/ EX GBD | - | EX | REFER TO PROPOSED PLAN AND BASE. PROVIDE PAINT |
| 001 | VESTIBULE | CONC | EX POR | EX POR/ POR-N | EX CMU | - | EX CMU | - | EX CMU | - | EX CMU | - | NEW ACT | - | 2990 | PROVIDE PAINT FINISHES A PROVIDE NEW 150mm HIGH EXTERIOR ALUMINUM FRAM |
| RO | OM FIN | IISH S | CHEI | DULE | NOT | ΞS | 1 | I | - | | 1 | | | | | |
| | REFER TO PR AREA. | OPOSED FL | -OOR PLAI | N DRAWING | G 1/A1.02 F | OR NEW | FLOOR FIN | ISHES AT | ATRIUM 10 | 46, AT EX | ISTING SEA | TING | | | | |
| 1 | WHERE NEW EXISTING CON FOR THE INST | VCRETE FLO | OOR AND ⁻ | THE CONC | RETE FLO | OR SLAB | IS TO BE CL | EANED A | AND MADE G | MOVED F GOOD IN F | ROM THE | ON | | | | |
| (| WHERE NEW CONCRETE W NEW FINISHES | ALLS. SUR | E IS INDICA FACES AR | TED TO BE E TO BE C | E INSTALLE LEANED AI | ED, EXIST ND MADE | ing grout Good in P | IS TO BE REPARA | REMOVED | FROM TH HE INSTA | IE EXISTING LLATION OI | 3 | | | | |
| . (| CLEAN, REPA ASSOCIATED | IR AND MAK WALL FRAM | KE GOOD A MING, IN PI | ALL WALLS | AFTER TH | E REMO\ W FINISH | /AL OF EXIS I. | STING WA | LL FINISHE | S, FLOOR | BASE AND | ALL | | | | |
| I | PAINT ALL EX | POSED NEV | V AND EXI | STING ELE | CTRICAL C | CONDUITS | S AND PIPIN | IG AND SI | PRINKLER P | PIPING. | | | | | | |
| | REFER TO INT AND DESCRIF | | VATION DI | RAWINGS | A3.01 AND | A3.02 AS | NOTED ON | THE FLO | OR PLANS, | FOR ADD | ITIONAL NO | DTES | | | | |
| | REFER TO ELI AND FITMENT | | AND MECH | ANICAL DF | RAWINGS F | OR WALL | AND CEILI | NG MOUN | ITED FIXTU | RES, DEV | ICES, GRILI | LES | | | | |
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|-------|-------------------------|--|--|-------------|-----------|--|--------------|
| | Ν | MECHANICAL LEGEND | GENE | RAL_NOTES_ | | AECHANICAL | |
| t | | EXISTING RIGID DUCTWORK | 1. W | ORK SHALL | INCL | UDE STARTUP & COMMISSIONING OF | |
| Ì | | RIGID DUCTWORK | | | | S, FURNISHING OF OPERATING AND RUCTIONS, TRAINING STAFF ABOUT THE | |
| ľ | 5000000 | ACOUSTICALLY LINED DUCTWORK | 0 | PERATION A | ND O | NE (1) YEAR GUARANTEE, COMMENCING ON | |
| ľ | | SPIN-ON FITTING WITH BALANCING DAMPER | | | | EPTANCE BY THE OWNER. | |
| İ | NMM1 | FLEXIBLE ROUND DUCTWORK | | | |) INCLUDE TESTING AND BALANCING OF AIR AN REQUIREMENTS. MAKE ALL ADJUSTMENTS | |
| Ì | | SUPPLY/FRESH AIR DUCT RISER | | | | PROVIDE DESIGN AIR FLOW. | |
| - C - | | RETURN/EXHAUST AIR DUCT RISER | | | | ERIAL AND EQUIPMENT AS SPECIFIED, EXCEPT | |
| İ | | DUCT ELBOW WITH TURNING VANES | | RITING BY 1 | | APPROVAL FOR SUBSTITUTION IS GIVEN IN ENANT. | |
| t | F/C | FLEXIBLE CONNECTOR | 4. P | ROPOSAL SH | HALL | BE BASED ON THE SPECIFIED MATERIAL AND | |
| t | -=-U/c | DOOR UNDERCUT (SIZE AS NOTED) | E | QUIPMENT IN | n ori | DER TO PROMOTE EQUAL BIDDING. | |
| t | T T | THERMOSTAT | 5. VERIFY LOCAL CONDITIONS AT THE SITE. COMPLY WITH ALL APPLICABLE CODES. SECURE AND PAY FOR ALL REQUIRED | | | | |
| ł | B/D | BALANCING DAMPER | | PERMITS. | JUDE | 5. SECORE AND FAI FOR ALL REQUIRED | |
| ł | | EXISTING PIPEWORK/EQUIPMENT | | | | ECTURAL AND ELECTRICAL DRAWINGS FOR | |
| ł | -X - X - X - | REMOVE EXISTING PIPE/DUCT | c C | O-ORDINATIO | ON O | F ALL RELATED WORK. | |
| ł | | | 7. ALL EXISTING SERVICES SHOWN ARE APPROXIMATE AND BASED ON EXISTING RECORD DRAWINGS. CONTRACTOR SHALL VISIT THE SITE PRIOR TO COMMENCING ALL WORK AND VERIFY ALL CONNECTIONS, DUCT SIZES, AND LOCATIONS. | | | | |
| ł | UP O DN | NEW PIPE WORK/EQUIPMENT PIPE RISER | | | | | |
| ł | | | 0 | | | | |
| ł | CTE | CONNECT TO EXISTING | A A | RCHITECTUR | AL AN | DRAWINGS DO NOT SHOW ALL THE ID STRUCTURAL DETAILS AND ANY | |
| ł | EX | DENOTES EXISTING TO REMAIN | | | | FORMATION INVOLVING ACCURATE MEASURING SHALL BE TAKEN FROM THE BUILDING | |
| | 36"x24" B | SIZE OF DIFFUSER/GRILLE/REGISTER | D | RAWINGS OF | AT ' | THE BUILDING. MAKE, WITHOUT ADDITIONAL ESSARY CHANGES OR ADDITIONS TO THE | |
| | 1200 B | TYPE OF DIFFUSER/GRILLE/REGISTER | | | | TO ACCOMMODATE THE ABOVE CONDITIONS. | |
| L | | ——AIR QUANTITY (CFM) | 9. A | LL CUTTING, | SCA | NNING, CORING, PATCHING, MAKING GOOD AND | |
| ſ | | | | | | EQUIRED AS A RESULT OF THE DEMOLITION | |
| | DRAWING_LIST | | Т Т | | | NTRACTOR AS A PART OF THE BASE | |
| | M1 - MECHAN | ICAL LEGEND, SCHEDULES AND KEY PLAN | | | | | |
| | M2 – MECHAN | ICAL LAYOUIS | e | | | | |
| | | | 27 | | | 7 | |
| | A)_GENER | RAL_MECHANICAL_CONDITIONS | | | <u>D)</u> | INSULATION | |
| | | CTORS SHALL VERIFY AND COORDINATE WITH ALL OTHER | | | 1. | INSULATE NEW AND AFFECTED EXISTING DUCTWORK. | |
| | PROJEC | T CONCERNING ALL MECHANICAL AND ELECTRICAL SERVICE | S THAT AFFE | CT | | ADHESIVES SHALL BE IN COMPLIANCE WITH ONTARIO INSTALLED TO MANUFACTURER'S RECOMMENDATIONS | |
| | SITE SEF | APLETION OF THEIR WORK. THIS WILL INCLUDE, BUT NOT ONL' RVICE VOLTAGE AND THAT OF ALL MECHANICAL EQUIPMENT SU | PPLIED BY TH | HIS | | INSULATION FOR INSPECTION OUTLETS AND EQUIPM | |
| | SHALL B | CTOR, AND SIZE AND LOCATION OF ALL OTHER SERVICES. ANY IE REPORTED TO THE ENGINEER IMMEDIATELY. | DISCREPANC | JES | 2. | INSULATION SHALL CONTINUE THROUGH SLEEVES AN | |
| | | TO INSTRUCTION TO BIDDERS, GENERAL CONDITIONS | ND GENERAL | - | | "REQUIRED FIRE SEPARATIONS" WHERE SLEEVES A "FIRE STOPPED". SEE SLEEVES. INSULATION SHALL | |
| | | MENIS. ECTION 15 A SHALL APPLY DIVISION 15 SECTIONS. | | | 7 | STOPPING AND VAPOR SEALED. | |
| | | SUBMITTING BIDS, IT IS SUGGESTED THAT BIDDING CON | | | з. | WORK WHICH IS INACCESSIBLE FOR APPLICATION O INSTALLATION SHALL BE INSULATED AND FINISHED | |
| | | S SITE CONDITIONS. | | | | POSITION. | |
| | | E ALL LABOUR, MATERIALS AND EQUIPMENT NECESSARY | | | 4. | SEAL DUCT INSULATION WITH MASTIC AT ALL JOINTS JOINTS WITH APPROVED SELF-ADHESIVE FOIL FACE | |
| | APPLICA | SHOWN AND DESCRIBED. INSTALLATION OF MATERIALS SHAI BLE PROVINCIAL, FEDERAL AND MUNICIPAL REQUIREMENTS. | L MEET ALL | | | 50 MM WIDE VAPOR BARRIER TAPE. WHERE DUCTS PROOFED THERMAL INSULATION IS NOT REQUIRED | S ARE SOU |
| | 6. OBTAIN | PERMITS AND ALL FEES FOR WORK AND REQUIRED INSP | ECTIONS. | | | AT LEAST 150 MM (6") EXCEPT WHERE NOTED. | |
| | 7. – | | | | 5. | | |
| | | AWINGS SHALL BE CONSIDERED DIAGRAMMATIC ONLY. ALL | | MENTS | | SUPPORT. REMOVE HANGERS TEMPORARILY TO FA | ACILITATE IN |
| | | BE TAKEN FROM BUILDING SITE AND ARCHITECT'S DRAWI | | | 6. | DAMAGED INSULATION ON EXISTING DUCTS, PIPES & | FITTINGS |
| | 9. ALL MAT BEAR CS | FERIALS SHALL CONFORM CSA, HEPC, AND CEC REQUIREN A LABEL. GAS FIRED EQUIPMENT SHALL BEAR CGA LABEL. | IENTS AND S | SHALL | - | REPLACE WITH NEW INSULATION. | |
| | | | | | 7. | PERFORM INSULATION WORK USING QUALIFIED INSU ACCORDANCE WITH LATEST TRADE APPLICATION MET | |
| | CONSTRU | ISTING SERVICES MUST BE MAINTAINED AT ALL TIMES DUI JCTIONTHIS CONTRACTOR TO PROVIDE ALL NECESSARY TEMPO | | ETC., | | DESIGNEE'S APPROVAL. | |
| | SO AS 1 | TO CARRY OUT ABOVE. | | | 8. | APPLY INSULATION UNDER AMBIENT TEMPERATURE | CONDITIONS |

- SO AS TO CARRY OUT ABOVE. TEMPORARY LIGHT, POWER AND WATER BY GENERAL CONTRACTOR
- 12. ALL CUTTING AND PATCHING FOR MECHANICAL WORK WILL BE CARRIED OUT BY THE MECHANICAL CONTRACTOR. 13. PROVIDE TEMPORARY BUILDINGS AND MATERIAL STORAGE AS REQUIRED AND BE
- RESPONSIBLE FOR ANY LOSS OR DAMAGE THERE TO. 14. SUBMIT SAMPLES OF MATERIALS WHEN REQUIRED. 15. SUBMIT SHOP DRAWINGS FOR REVIEW COVERING MAJOR MANUFACTURED ITEMS, I.E.
- FANS, PLUMBING FIXTURES, HVAC EQUIPMENT, ETC. 16. SUPPLY AND LOCATE ALL BASES, SUPPORTS, SLEEVES, CURBS, ETC. REQUIRED
- FOR THIS WORK. FLASHING BY ROOF TRADES. COUNTERFLASHING BY THIS CONTRACTOR. EXCEPT AS NOTED ON DRAWING. 17. SUPPLY PROPER STARTER WITH OVERLOAD PROTECTION AND DISCONNECT SWITCHES FOR POWERED MECHANICAL EQUIPMENT AND HAND OVER TO ELECTRICAL
- CONTRACTOR FOR INSTALLATION. THIS DOES NOT INCLUDE ISOLATION SWITCHES, UNLESS STATED SPECIFICALLY. 18. ALL POWER WIRING BY ELECTRICAL CONTRACTOR, CONTROL AND INTERLOCK WIRING
- BY MECHANICAL CONTRACTOR. 19. SUPPLY AND INSTALL ALL NECESSARY ACCESS FOR MECHANICAL EQUIPMENT.
- WHERE NECESSARY, DOORS SHALL BE RATED TO SUIT FIRE ASSEMBLY RATING. 20. DO ALL EXCAVATING AND BACKFILLING FOR MECHANICAL WORK.
- 21. PIPE HANGERS SHALL BE CLEVIS SPLIT TYPE WITH MILD STEEL RODS. FOR COPPER PIPE USE PLASTIC INSERTS. DO NOT SUPPORT EQUIPMENT OR PIPING FROM ROOF DECK WITHOUT PERMISSION FROM ARCHITECTS. SUPPLY AND INSTALL NECESSARY STEEL TO TRANSFER LOAD TO STRUCTURED MEMBERS.
- 22. ALL DISSIMILAR METALS (STEEL-COPPER, ETC. SHALL BE SEPARATED USING GASKETS OR EPCO"DI-ELECTRIC" FITTINGS.
- 23. INSTALL CHROME-PLATED ESCUTCHEONS WHERE BRANCH PIPES PASS THROUGH FINISHED SURFACE.
- 24. KEEP ACCURATE RECORD "AS BUILT" DRAWINGS AND SUBMIT THESE BEFORE FINAL CERTIFICATE OF COMPLETION.
- 25. ALL SURFACES MUST BE LEFT CLEAN AND SMOOTH, READY FOR PAINTING BY GENERAL TRADES.
- 26. IDENTIFY ALL PIPING. USE STENCILS OR COLOUR CODES AND DIRECTIONAL ARROWS.
- 27. ON COMPLETION OF THE WORK, REMOVE FROM THE PREMISES ALL TOOLS, DEBRIS, SURPLUS AND WASTE MATERIALS RESULTING FROM OPERATIONS UNDER THIS SECTIONS.
- CLEAN ALL EQUIPMENT AND LEAVE ALL ITEMS IN PERFECT ORDER READY FOR OPERATION 28. AFTER ACCEPTANCE, INSTRUCT OWNER IN EQUIPMENT OPERATION AND PROVIDE HIM WITH OPERATING AND MAINTENANCE STANDARDS AND EXTENDED WARRANTY EQUIPMENT.
- 29. THE CONTRACTOR SHALL, BEFORE FINAL PAYMENT IS MADE, GUARANTEE ALL MATERIALS AND WORKMANSHIP SUPPLIED BY HIM IN THE PERFORMANCE OF THIS CONTRACT FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE AND SHALL, WHEN CALLED UPON, MAKE GOOD WITHOUT FURTHER COST TO THE OWNER SUCH DEFECTS AS MAY APPEAR WITHIN THIS PERIOD.
- B) FILED QUALITY CONTROL . OPERATE SYSTEM TO FULL CAPACITY AND VERIFY PROPER, SAFE EFFICIENT OPERATION OF ALL PARTS AND EACH COMPLETE SYSTEM. OIL MOTORS AND GREASE BEARINGS BEFORE OPERATING EQUIPMENT.
- WHEN WORK IS COMPLETE AND SYSTEM IS IN OPERATION, ADJUST VALVES, ADJUST AHU FAN BELT DRIVES FOR DESIGN AIR CAPACITIES, CONTROLS, DAMPERS AND THERMOSTATS SO THAT THERE IS EVEN DISTRIBUTION OF COOLING, HEATING AND VENTILATION AIR THROUGHOUT. TURN OVER TO OWNER, NECESSARY KEYS, HANDLES AND OPERATING DEVICES FOR EACH SYSTEM.
- 3. TEST AND BALANCE AIR SYSTEM SUCH THAT AIR QUANTITIES AT EACH OUTLET, GRILLE AND REGISTER ARE WITHIN 5% OF DESIGN FIGURES. FAN SPEEDS, SPLITTER AND BALANCING DAMPERS SHALL BE ADJUSTED TO ACHIEVE THESE RESULTS. PREPARE AND SUBMIT A FINAL BALANCING REPORT FOR CHECKING AND APPROVAL. 4. IF SPOT CHECKING SYSTEMS REVEALS ACTUAL AIR QUANTITIES DO NOT AGREE
- WITH AIR BALANCE REPORT, REBALANCE SYSTEMS UNTIL SATISFACTORY, WITHOUT EXTRA REMUNERATION. <u>C) DUCTWORK</u>
- 1. DUCTS & PLENUM BOXES SHALL BE CONSTRUCTED OF #10 GAUGE FIRST QUALITY, SMOOTH FINISHED, COLD ROLLED GALVANIZED STEEL PER SMACNA W.G. SEAL CLASS 'B' GUARANTEED TO DOUBLE SEAM WITHOUT FRACTURING. 2. MAKE JOINTS SUITABLY AIR TIGHT WITH LAPS IN DIRECTION OF AIR FLOW.
- WHENEVER POSSIBLE, SIZES OF DUCTS SHALL CONFORM TO THOSE INDICATED. WHERE STRUCTURAL CONDITIONS REQUIRE SHAPE BE MODIFIED. DUCTS MUST HAVE SAME CROSS-SECTIONAL AREA INDICATED AND WIDTH OF DUCT SHALL NOT EXCEED SIX TIMES DEPTH EXCEPT WITH SPECIAL APPROVAL. DUCTWORK SHALL BE IN ACCORDANCE WITH ASHRAE GUIDE. 3. PROVIDE EXTENSION COLLARS FOR OUTLETS, AIR GUIDE VANES AND OTHER
- SPECIAL FEATURES INDICATED OR REQUIRED. TRANSITION DUCTS AT NOT MORE THAN 30 DEGREE SLOPE. ELBOWS AND BENDS SHALL BE MINIMUM ONE DUCT WIDTH RADIUS. 4. DUCT SEALANT SHALL BE MULTIPURPOSE AIR DUCT SEALANT, U.L.C. LABELED, AS
- PROVIDED BY TRANS CONTINENTAL EQUIPMENT, CONCORD OR FLEXMASTER DUCT BOND II (RICHMOND HILL). 5. PITOT TUBE OPENING ENCLOSURES SHALL BE DIAL #1000 OR 2000 (AIR POWER
- EQUIPMENT, TORONTO). 6. AIR TURNING ASSEMBLY SHALL BE DOUBLE THICKNESS TYPE WITH DURO DYNE #VR-2 VANE RAILS.
- 7. ACOUSTIC DUCT LINER SHALL BE 25 MM THICK FIBERGLAS OR EQUAL RIGID COATED DUCT LINER OF 4-1/2# DENSITY WITH FLAME SPREAD RATING OF 25, FUEL CONTRIBUTED RATING OF 15 AND SMOKE DEVELOPED RATING OF 40 WITH NEOPRENE FACE COATING.

- APPLY INSULATION UNDER AMBIENT TEMPERATURE CONDITIONS IN ACCORDANCE WITH INSULATION OR ADHESIVE MANUFACTURER'S RECOMMENDATIONS. DO NOT APPLY INSULATION UNTIL DUCTWORK HAS BEEN TESTED, INSPECTED,
- VERIFIED, AND ACCEPTED BY THE CONSULTANT. 10. APPLY INSULATION NEATLY AND TIGHTLY IN UNBROKEN LENGTHS AND WITH ENDS OF SECTIONS FIRMLY AND SQUARELY BUTTED OR ENGAGED TOGETHER. LAP CANVAS OR OTHER SPECIFIED WRAPPING OVER ALL JOINTS AND THOROUGHLY CEMENT DOWN WITH ADHESIVE. EXTEND INSULATION THROUGH SLEEVES IN WALLS (EXCEPT FIRE WALLS) OR OTHER OPENINGS IN BUILDING TO MAKE
- 11. COVER ALL EXHAUST DUCTWORK FOR A MINIMUM LENGTH OF 10'-0" (3.05 M) FROM ROOF/WALL OPENINGS, WITH 2" (50 MM) THICK RIGID FIBREGLASS INSULATION WITH FACTORY APPLIED REINFORCED ALUMINUM FOIL VAPOUR BARRIER. SEAL ALL JOINTS AND BREAKS WITH 4" (100 MM) WIDE STRIPS OF OPEN MESH GLASS CLOTH OR TAPE IMBEDDED BETWEEN TWO COATS OF VAPOUR BARRIER SEALANT.
- 12. SECURE INSULATION ON EXPOSED RECTANGULAR DUCTWORK WITH WELDED IMPALING PINS AND SPEED WASHER TYPE FASTENERS AT 300 MM (12") CENTRES. PROVIDE A MINIMUM OF TWO ROWS OF FASTENERS ON EACH SIDE OF DUCT

E) HOT WATER HEATING PIPING

- 1. PIPING SHALL BE:
- .1 STEEL: ASTM A53 GRADE B, SEAMLESS OR ERW, SCHEDULE 40. .2 COPPER WATER TUBE OPTION: ASTM B88, TYPE K OR L, HARD DRAWN SOFT DRAWN TUBING, 20 MM (3/4 INCH) AND LARGER, MAY BE USED FOR RUNOUTS TO FLOOR MOUNTED FAN COIL UNITS OR PERIMETER
- CONVECTORS E)_BALANCING
- SUPPLY AND INSTALL ALL NECESSARY BALANCING AND VOLUME DAMPERS VALVES. BALANCE THE AIR & WATER SYSTEMS TO THE AIR VOLUMES & FLOW SHOWN ON THE DRAWINGS. SUBMIT BALANCING REPORT TO THE CONSULTANT AND OWNER. AIR & WATER BALANCING MUST BE PERFORMED BY A REPRESENTATIVE OF THE ASSOCIATED AIR BALANCING COUNCIL, CANADIAN CHAPTER AND SHALL BE APPROVED BY THE BUILDING OWNER. BALANCING OF AIR & WATER SYSTEM SHALL BE AT FULL LOAD CONDITIONS. THE BALANCING
- REPORT SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING: A. <u>FAN_DATA_SHEET:</u>
- SUPPLY AND RETURN FANS AIR FLOW - MAKE, MODEL, SERIAL NUMBER
- MOTOR H.P., VOLTAGE, RATED AMP, RUNNING AMP - FAN PULLEY SIZE, MOTOR PULLEY SIZE, BELT SIZE.
- B. <u>AIR_OUTI_ET_SHEET:</u> - OUTLET NUMBER, MAKE, MODEL

TO AIR OUTLET SHEETS.

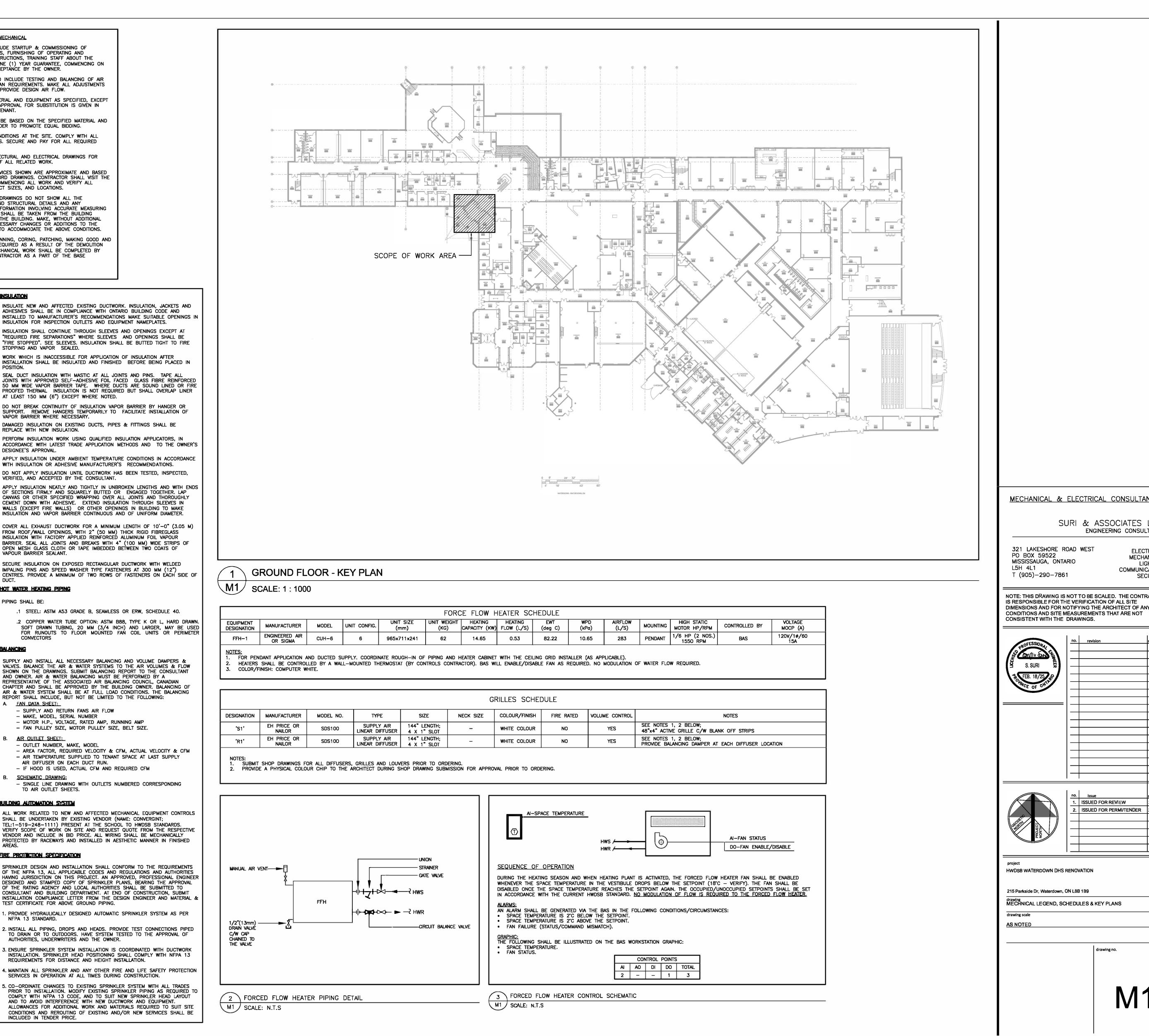
- AREA FACTOR, REQUIRED VELOCITY & CFM, ACTUAL VELOCITY & CFM - AIR TEMPERATURE SUPPLIED TO TENANT SPACE AT LAST SUPPLY
- AIR DIFFUSER ON EACH DUCT RUN. - IF HOOD IS USED, ACTUAL CFM AND REQUIRED CFM
- B. <u>SCHEMATIC DRAWING</u>: - SINGLE LINE DRAWING WITH OUTLETS NUMBERED CORRESPONDING

1) BUILDING AUTOMATION SYSTEM

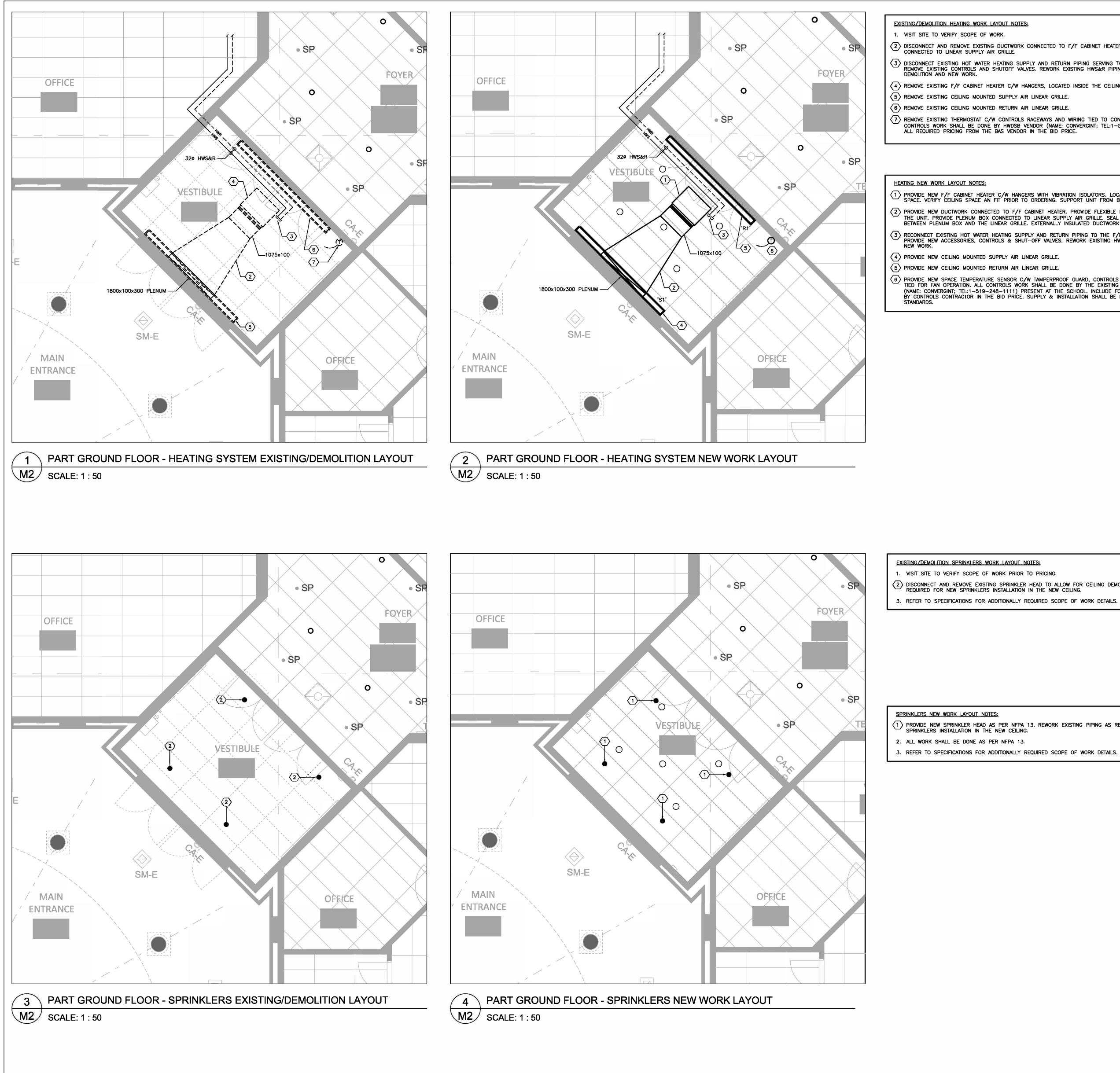
ALL WORK RELATED TO NEW AND AFFECTED MECHANICAL EQUIPMENT CONTROLS SHALL BE UNDERTAKEN BY EXISTING VENDOR (NAME: CONVERGINT; TEL:1-519-248-1111) PRESENT AT THE SCHOOL TO HWDSB STANDARDS. VERIFY SCOPE OF WORK ON SITE AND REQUEST QUOTE FROM THE RESPECTIVE VENDOR AND INCLUDE IN BID PRICE. ALL WIRING SHALL BE MECHANICALLY PROTECTED BY RACEWAYS AND INSTALLED IN AESTHETIC MANNER IN FINISHED AREAS

J)_FIRE_PROTECTION_SPECIFICATION

- 1. SPRINKLER DESIGN AND INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE NFPA 13, ALL APPLICABLE CODES AND REGULATIONS AND AUTHORITIES HAVING JURISDICTION ON THIS PROJECT. AN APPROVED, PROFESSIONAL ENGINEER DESIGNED AND STAMPED COPY OF SPRINKLER PLANS, BEARING THE APPROVAL OF THE RATING AGENCY AND LOCAL AUTHORITIES SHALL BE SUBMITTED TO CONSULTANT AND BUILDING DEPARTMENT. AT END OF CONSTRUCTION, SUBMIT INSTALLATION COMPLIANCE LETTER FROM THE DESIGN ENGINEER AND MATERIAL & TEST CERTIFICATE FOR ABOVE GROUND PIPING.
- 1. PROVIDE HYDRAULICALLY DESIGNED AUTOMATIC SPRINKLER SYSTEM AS PER NFPA 13 STANDARD.
- 2. INSTALL ALL PIPING, DROPS AND HEADS. PROVIDE TEST CONNECTIONS PIPED TO DRAIN OR TO OUTDOORS. HAVE SYSTEM TESTED TO THE APPROVAL OF AUTHORITIES, UNDERWRITERS AND THE OWNER.
- 3. ENSURE SPRINKLER SYSTEM INSTALLATION IS COORDINATED WITH DUCTWORK INSTALLATION. SPRINKLER HEAD POSITIONING SHALL COMPLY WITH NFPA 13
- REQUIREMENTS FOR DISTANCE AND HEIGHT INSTALLATION. 4. MAINTAIN ALL SPRINKLER AND ANY OTHER FIRE AND LIFE SAFETY PROTECTION
- SERVICES IN OPERATION AT ALL TIMES DURING CONSTRUCTION. 5. CO-ORDINATE CHANGES TO EXISTING SPRINKLER SYSTEM WITH ALL TRADES PRIOR TO INSTALLATION. MODIFY EXISTING SPRINKLER PIPING AS REQUIRED TO COMPLY WITH NFPA 13 CODE, AND TO SUIT NEW SPRINKLER HEAD LAYOUT AND TO AVOID INTERFERENCE WITH NEW DUCTWORK AND EQUIPMENT. ALLOWANCES FOR ADDITIONAL WORK AND MATERIALS REQUIRED TO SUIT SITE CONDITIONS AND REROUTING OF EXISTING AND/OR NEW SERVICES SHALL BE INCLUDED IN TENDER PRICE.



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EXISTING/DEMOLITION_SPRINKLERS_WORK_LAYOUT_NOTES: 1. VISIT SITE TO VERIFY SCOPE OF WORK PRIOR TO PRICING. 2 DISCONNECT AND REMOVE EXISTING SPRINKLER HEAD TO ALLOW FOR CEILING DEMOLITION. REWORK PIPING AS REQUIRED FOR NEW SPRINKLERS INSTALLATION IN THE NEW CEILING.

SPRINKLERS NEW WORK LAYOUT NOTES: 1 PROVIDE NEW SPRINKLER HEAD AS PER NFPA 13. REWORK EXISTING PIPING AS REQUIRED FOR NEW SPRINKLERS INSTALLATION IN THE NEW CEILING. 2. ALL WORK SHALL BE DONE AS PER NFPA 13. 3. REFER TO SPECIFICATIONS FOR ADDITIONALLY REQUIRED SCOPE OF WORK DETAILS.

FEB. 18/25 o. issue ISSUED FOR REVIEW ISSUED FOR PERMI/TENDER project HWDSB WATERDOWN DHS RENOVATION 215 Parkside Dr, Waterdown, ON L8B 1B9 drawing MECHANICAL LAYOUTS drawing scale AS NOTED drawing no. M2

6 PROVIDE NEW SPACE TEMPERATURE SENSOR C/W TAMPERPROOF GUARD, CONTROLS RACEWAYS AND WIRING TIED FOR FAN OPERATION. ALL CONTROLS WORK SHALL BE DONE BY THE EXISTING BAS VENDOR (NAME: CONVERGINT; TEL:1-519-248-1111) PRESENT AT THE SCHOOL. INCLUDE FOR ALL REQUIRED CHARGES BY CONTROLS CONTRACTOR IN THE BID PRICE. SUPPLY & INSTALLATION SHALL BE DONE TO HWDSB CONTROLS

3 RECONNECT EXISTING HOT WATER HEATING SUPPLY AND RETURN PIPING TO THE F/F CABINET HEATER. PROVIDE NEW ACCESSORIES, CONTROLS & SHUT-OFF VALVES. REWORK EXISTING HWS&R PIPING TO FACILITATE

1 PROVIDE NEW F/F CABINET HEATER C/W HANGERS WITH VIBRATION ISOLATORS. LOCATED INSIDE THE CEILING SPACE. VERIFY CEILING SPACE AN FIT PRIOR TO ORDERING. SUPPORT UNIT FROM BUILDING STRUCTURE. 2 PROVIDE NEW DUCTWORK CONNECTED TO F/F CABINET HEATER. PROVIDE FLEXIBLE DUCTWORK CONNECTION AT THE UNIT. PROVIDE PLENUM BOX CONNECTED TO LINEAR SUPPLY AIR GRILLE. SEAL (NO LEAKAGE) CONNECTION BETWEEN PLENUM BOX AND THE LINEAR GRILLE. EXTERNALLY INSULATED DUCTWORK AND PLENUM BOX.

CONTROLS WORK SHALL BE DONE BY HWDSB VENDOR (NAME: CONVERGINT; TEL:1-519-248-1111). INCLUDE ALL REQUIRED PRICING FROM THE BAS VENDOR IN THE BID PRICE.

 $\langle 5 \rangle$ remove existing ceiling mounted supply air linear grille. (6) REMOVE EXISTING CEILING MOUNTED RETURN AIR LINEAR GRILLE. $\langle 7 \rangle$ remove existing thermostat C/W controls raceways and wiring tied to control valve. All

 $\langle 4 \rangle$ remove existing F/F cabinet heater C/W hangers, located inside the ceiling space.

3 DISCONNECT EXISTING HOT WATER HEATING SUPPLY AND RETURN PIPING SERVING THE F/F CABINET HEATER. REMOVE EXISTING CONTROLS AND SHUTOFF VALVES. REWORK EXISTING HWS&R PIPING TO FACILITATE DEMOLITION AND NEW WORK.

2 DISCONNECT AND REMOVE EXISTING DUCTWORK CONNECTED TO F/F CABINET HEATER AND PLENUM BOX CONNECTED TO LINEAR SUPPLY AIR GRILLE.

| MECHANICAL & | ELECTRICAL CONSULTA | <u>NT:</u> |
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| ELECT | RICAL LEGEND |
|-----------------|---|
| ES | ELECTRICAL STRIKE |
| CR | CARD READER |
| DC | DOOR CONTACT |
| MS | MOTION SENSOR |
| ۲ | DIRECT POWER CONNECTION |
| ● | DOOR OPERATOR PUSH BUTTON OR PLATE |
| ď | FUSED DISCONNECT SWITCH |
| Ľ | UN-FUSED DISCONNECT SWITCH |
| Ф | POWER RECEPTACLE MOUNTED AT STANDARD HEIGHT |
| \$ _к | KEY SWITCH |
| EX | DENOTES EXISTING DEVICE/EQUIPMENT TO REMAIN |
| ER | DENOTES EXISTING DEVICE/EQUIPMENT TO BE RELOCATED |
| RE | DENOTES RELOCATED OR NEW POSITION OF AN EXISTING DEVICE/EQUIPMENT TO BE RELOCATED |
| R | DENOTES EXISTING DEVICE/EQUIPMENT TO BE REMOVED C/W REDUNDANT WIRING AND RACEWAYS TO THE SOURCE |
| RP | DENOTES REPLACED DEVICE/EQUIPMENT. REWORK/EXTEND WIRING AS REQUIRED. |
| A-5 | DENOTES DEVICE/EQUIPMENT CONNECTED TO PANEL 'A', CIRCUIT #5 |

GENERAL NOTES

- IT IS RECOMMENDED FOR THE ELECTRICAL CONTRACTOR TO VISIT THE SITE AND REVIEW EXISTING CONDITIONS AND THE PROPOSED SCOPE OF WORK TO SUIT EXISTING CONDITIONS AND PROPOSED WORK IN ARCHITECTURAL DRAWINGS PRIOR TO PRICING.
- 2. CAREFULLY EXAMINE EXISTING UTILITY LINES SUCH AS GAS, WATER ETC. PRIOR TO STARTING ELECTRICAL CONSTRUCTION. COORDINATE WITH OTHER TRADES AND REPORT OF ANY DISCREPANCIES PRIOR TO PROCEEDING. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF ALL DEVICES AND EQUIPMENT AS WELL AS
- MOUNTING HEIGHTS. ALL RACEWAYS AND BACKBOXES SHALL BE CONCEALED IN NEW BLOCK WALLS. USE SURFACE MOUNTED RACEWAYS (WIREMOLD V500/V700 OR EQUAL) FOR EXISTING SOLID SURFACES. FOR LARGE SIZE RACEWAYS,
- PAINTED CONDUIT WITH DIE-CAST ALUMINUM BACKBOXES WILL BE CONSIDERED ACCEPTABLE. PROVIDE LABELS ON NEW & EXISTING SWITCHES, RECEPTACLES & JUNCTION BOXES COVERPLATES TO STATE PANEL NAME AND BREAKER NUMBER. UPDATE EXISTING PANEL SCHEDULES TO REFLECT THE NEW LOADS.
- THE CONTRACTOR MUST REVIEW THE "FINISHING HARDWARE SCHEDULE" THOROUGHLY PRIOR TO PRICING FOR ALL MATERIAL SUPPLY (BACKBOXES, WIRING, CONDUIT ETC.) AND INSTALLATION REQUIREMENTS ASSOCIATED WITH ALL EQUIPMENT. ENSURE TO INCLUDE IN THE TENDER PRICE FOR ALL MATERIAL AND LABOUR REQUIRED FOR COMPLETE INSTALLATION AS PER THE FINISHING HARDWARE SCHEDULE AND THESE DRAWINGS AND
- SPECIFICATIONS. PROVIDE FOR ALL POWER CONNECTIONS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. PROVIDE NEW 15A-1P BREAKERS (UNLESS OTHERWISE STATED) FOR ALL NEW CIRCUITS PROPOSED ON THE
- DRAWINGS SUITABLE FOR THE RESPECTIVE PANEL. B. UPDATE PANEL DIRECTORIES IN ALL PANELS WHERE NEW CIRCUITS ARE ADDED.
- ALL WIRING SHALL BE INSTALLED IN RACEWAYS WITH SHORT RUNS OF BX CABLES FOR FINAL CONNECTION (MAX.
- 5'-0") OR WITHIN DEMOUNTABLE WALLS. ALL WIRING SHALL BE STAR WIRED FROM NEAREST HOMERUN CONDUIT AND JUNCTION BOXES. NO DAISY CHAIN FASHION OF WIRING WILL BE ACCEPTED.
- 10. TEST OPERATION OF ALL RELOCATED AND NEW DEVICES, EQUIPMENT AND SYSTEMS PRIOR TO PROJECT COMPLETION.

DRAWING_LIST

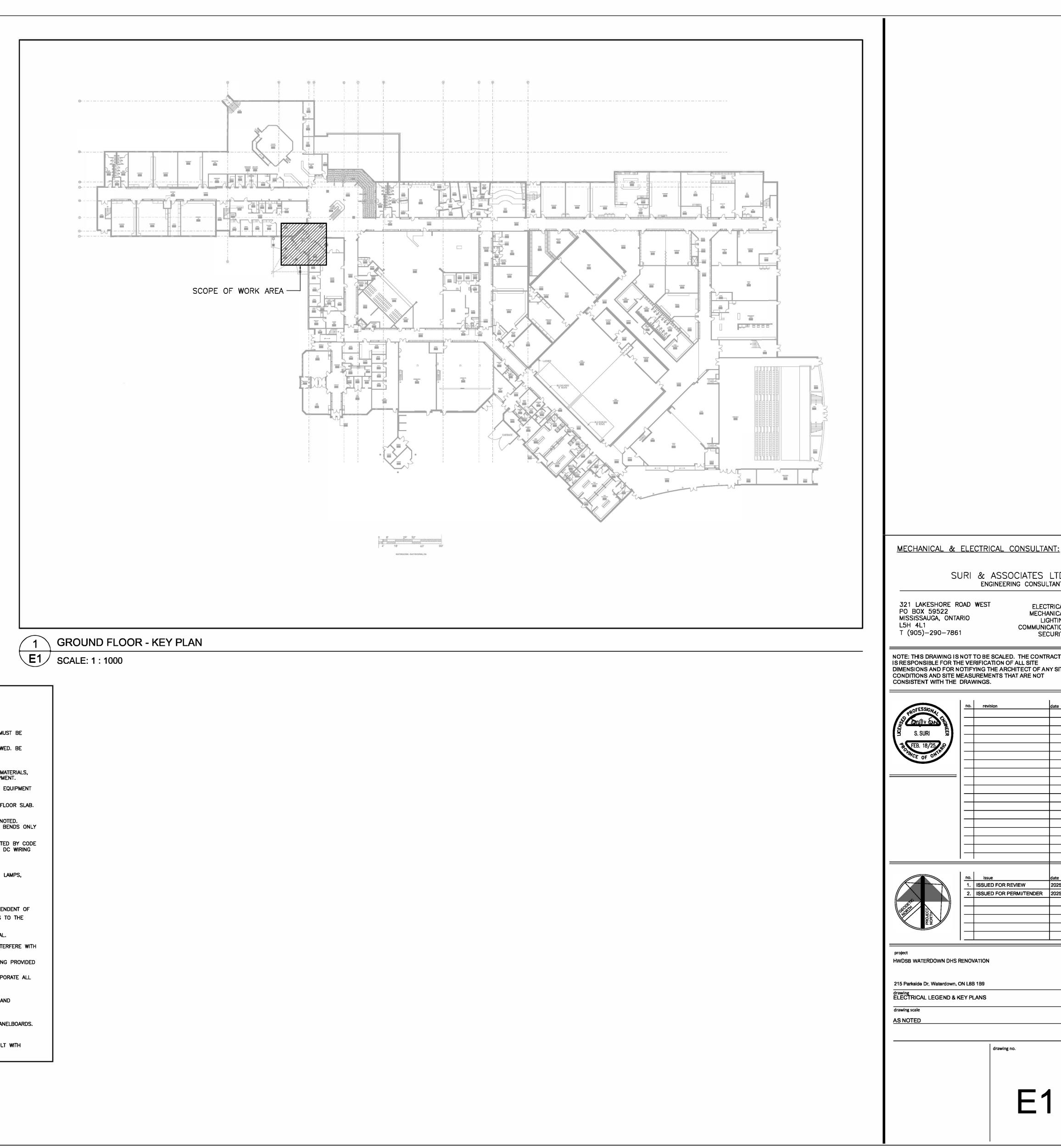
E1 – ELECTRICAL LEGEND, NOTES & KEY PLAN E2 – ELECTRICAL LAYOUTS

LIGHT FIXTURES SCHEDULE:

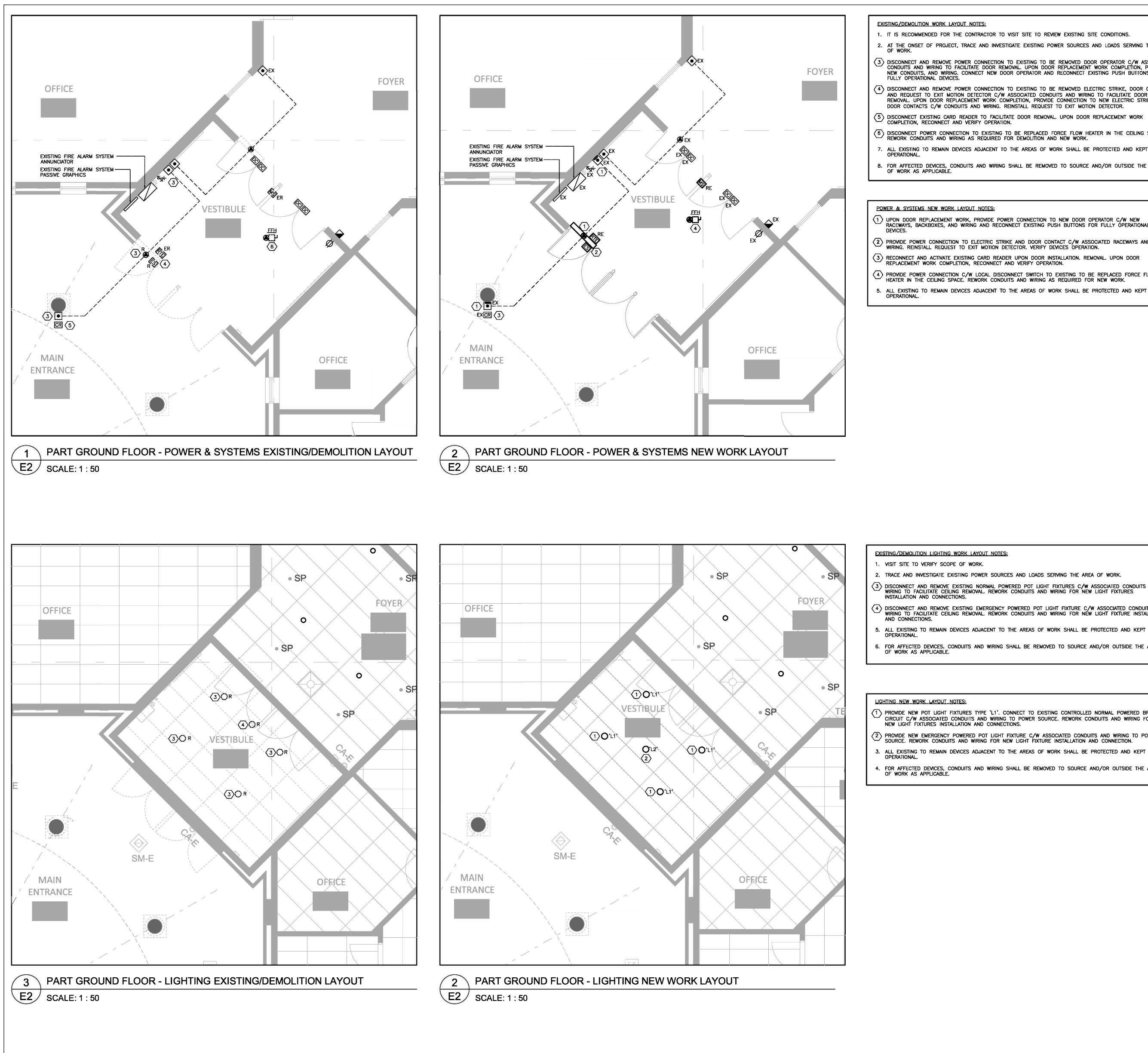
L1' LITHONIA #LDN6 40/25 L06 AR LSS 347V (VERIFY ON SITE)-EZ10. VERIFY EXISTING SOURCE VOLTAGE. ORDER LIGHT FIXTURES TO SUIT. 2500 LUMENS. ENERGY STAR CERTIFIED. 'L2' EMERGI-LITE #EFR9WH-LVC-EL-GRHR05. VERIFY EXISTING SOURCE VOLTAGE. ORDER LIGHT FIXTURES TO SUIT.

ELECTRICAL SPECIFICATIONS

- I. OBTAIN ALL APPROVALS FROM PUBLIC AUTHORITIES HAVING JURISDICTION, BEFORE COMMENCING WORK AND PAY FOR ESA INSPECTION FEES AND OBTAIN APPROVAL. 2. –
- 3. EXAMINE ARCHITECTURAL, STRUCTURAL AND MECHANICAL DRAWINGS BEFORE PROCEEDING WITH THE WORK. ANY DISCREPANCIES BETWEEN DRAWINGS AND/OR SPECIFICATIONS MUST BE REFERRED TO THE ARCHITECT BEFORE ANY AFFECTED WORK IS COMMENCED.
- 4. ALL CUTTING, PATCHING AND FIRE STOPPING REQUIRED FOR THE WORK OF THIS DIVISION SHALL BE CARRIED OUT BY THIS DIVISION. NO CHASING BLOCKWORK WILL BE ALLOWED. BE RESPONSIBLE AND PAY FOR ANY DAMAGE TO THE BUILDING INCURRED BY WORK OF THIS DIVISION.
- 5. SUBMIT SHOP DRAWINGS FOR REVIEW AND RECORDS.
- 6. ALL MATERIALS USED THROUGHOUT SHALL BE NEW, OF BEST QUALITY C.S.A. APPROVED AND OF ONE MANUFACTURE. WHEREVER TRADE NAMES ARE NOT USED TO DESCRIBE MATERIALS, THESE MATERIALS SHALL BE OF BEST AVAILABLE QUALITY AND MANUFACTURE. OBTAIN AND PAY FOR SPECIAL HYDRO INSPECTION OF SPECIFIED NON-C.S.A. ELECTRICAL EQUIPMENT.
- 7. PROVIDE ALL CONDUIT, WIRING, BOXES, SWITCHES, OUTLETS, DEVICES, BRUSHED STAINLESS STEEL COVERPLATES ETC., AS REQUIRED. MAKE FINAL CONNECTIONS TO VIBRATING EQUIPMENT WITH FLEXIBLE CONDUIT.
- 8. PROVIDE ALL HANGERS, INSERTS AND SUPPORTS OF APPROVED TYPES REQUIRED FOR THE WORK OF THIS DIVISION. PROVIDE CONDUIT FOR ALL SERVICES PENETRATING THE FLOOR SLAB. SEAL ALL PENETRATIONS THROUGH FLOOR SLABS WITH AN APPROVED NON-SHRINK, WATERPROOF AND FIREPROOF SEALANT APPROVED BY ARCHITECT.
- 9. ALL CONDUIT SHALL BE RIGID STEEL THICK WALLED OR EMT THINWALL WITH STEEL SET SCREW COUPLINGS AND CONNECTORS WITH INSULATED THROATS UNLESS OTHERWISE NOTED. EXPOSED RACEWAYS IN FINISHED AREAS SHALL BE WIREMOLD CHANNELS INSTALLED NEAT IN APPEARANCE, RUN PARALLEL TO BUILDING LINES AND CONCENTRIC RIGHT ANGLE BENDS ONLY SHALL BE USED. EXTERIOR EXPOSED CONDUIT SHALL BE RIGID GALVANIZED STEEL.
- IO. ALL WIRING SHALL BE MINIMUM #12 GAUGE COPPER, EXCEPT AS OTHERWISE NOTED. ALL WIRING SHALL BE 600 VOLT TYPE RW90. BX CABLE MAY BE USED WHERE PERMITTED BY CODE IN CEILING SPACE FOR FINAL CONNECTION TO LIGHT FIXTURE AND FROM CEILING DISTRIBUTION BOXES DOWN PARTITIONS TO RECEPTACLES ONLY. MINIMUM SIZE WIRING FOR DC WIRING SHALL BE #10 GAUGE. MAXIMUM VOLTAGE DROP SHALL NOT EXCEED 2 PERCENT. LUMINAIRES AND LAMPS
- PROVIDE LUMINAIRES WITH LED LAMPS AS INDICATED ON THE DRAWINGS. THESE MUST AND SHALL BE COMPLETE WITH ALL NECESSARY FRAMES, MOUNTING PLATES, HANGERS, LAMPS, DIFFUSERS, CANOPIES, SUPPORTS, ETC. UNLESS OTHERWISE NOTED, LAMPS SHALL BE 4000K 80 CRI MINIMUM 50,000 HOURS.
- COORDINATE MOUNTING AND LOCATION OF LUMINAIRES WITH OTHER TRADES TO AVOID CONFLICTS.
- ALL LUMINAIRES WHICH ARE LOCATED IN SUSPENDED CEILINGS SHALL BE SUPPORTED BY APPROVED CHAINS, WHICH SHALL ALLOW THE LUMINAIRES TO BE SUPPORTED INDEPENDENT OF THE CEILING SYSTEM. A 1'X4' FLUORESCENT LUMINAIRE SHALL BE SUPPORTED WITH TWO (2) CHAINS AND A 2'X4' LUMINAIRE SHALL BE SUPPORTED WITH FOUR (4) CHAINS TO THE ROOF STRUCTURE OR SLAB ABOVE. ANCHOR CHAINS TO JOIST AND BRIDGING WHERE POSSIBLE. WHEN CONNECTING TO STEEL DECK, ANCHOR TO SIDE FLUTES. 12. PROVIDE GROUND WIRES WITH ALL FEEDERS AND CIRCUITS IN ACCORDANCE WITH APPLICABLE CODES AND HYDRO REQUIREMENTS. PROVIDE MAIN GROUND TO HYDRO APPROVAL.
- 13. CO-ORDINATE WITH OTHER TRADES IN LAYING OUT OF THE WORK SO AS NOT TO CONFLICT WITH THE WORK OF OTHER TRADES. CARRY OUT WORK PROMPTLY WHICH MAY INTERFERE WITH THE WORK SCHEDULE OF OTHER TRADES.
- 14. MECHANICAL TRADES WIRING: PROVIDE ALL CONDUIT, WIRING, SPLITTERS, OUTLET BOXES AND DISCONNECT SWITCHES AS SHOWN. ALL MOTORS, STARTERS AND CONTROL WIRING PROVIDED UNDER DIVISION 15. INSTALL ALL STARTERS AND WIRE COMPLETE. 15. AFTER COMPLETION OF THE WORK, PROVIDE THE CONSULTANT TO REVIEW A SET OF REPRODUCIBLE 'AS-BUILT' RECORD DRAWINGS PRIOR TO SUBMISSION TO OWNER. INCORPORATE ALL
- CHANGES ON AUTOCAD R2010. 16. ALTERATIONS AND ADDITIONS: CONTRACTORS SHALL NOTE THAT THIS CONTRACT IS AN ALTERATION TO AN EXISTING BUILDING AND SHALL THOROUGHLY INVESTIGATE THE EXISTING ELECTRICAL INSTALLATION AND
- CONDITIONS. 17. DEMOLITION
- REMOVE ALL EXPOSED CONDUITS, BRANCH WIRING, OUTLETS, LUMINAIRES, EMERGENCY LIGHTING ETC. FROM CEILINGS AND WALLS BEING DEMOLISHED. REMOVE WIRING TO PANELBOARDS. 18. PROVIDE MIN. OF 1 YEAR WARRANTY FOR THE SCOPE OF WORK.
- 19. ALL WORK SHALL BE DONE WITH MINIMUM POSSIBLE INTERRUPTION TO EXISTING BUILDING SYSTEMS AND IN THE TIME SCHEDULE PERMITTED BY THE SCHOOL BOARD. CONSULT WITH PROJECT MANAGER PRIOR TO PRICING.



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| EXISTING/DEMOLITION WORK LAYOUT NOTES: |
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| 1. IT IS RECOMMENDED FOR THE CONTRACTOR TO VISIT SITE TO REVIEW EXISTING SITE CONDITIONS. |
| 2. AT THE ONSET OF PROJECT, TRACE AND INVESTIGATE EXISTING POWER SOURCES AND LOADS SERVING THE AREA OF WORK. |
| 3 DISCONNECT AND REMOVE POWER CONNECTION TO EXISTING TO BE REMOVED DOOR OPERATOR C/W ASSOCIATED CONDUITS AND WIRING TO FACILITATE DOOR REMOVAL. UPON DOOR REPLACEMENT WORK COMPLETION, PROVIDE NEW CONDUITS, AND WIRING. CONNECT NEW DOOR OPERATOR AND RECONNECT EXISTING PUSH BUTTONS FOR FULLY OPERATIONAL DEVICES. |
| DISCONNECT AND REMOVE POWER CONNECTION TO EXISTING TO BE REMOVED ELECTRIC STRIKE, DOOR CONTACT AND REQUEST TO EXIT MOTION DETECTOR C/W ASSOCIATED CONDUITS AND WIRING TO FACILITATE DOOR REMOVAL. UPON DOOR REPLACEMENT WORK COMPLETION, PROVIDE CONNECTION TO NEW ELECTRIC STRIKE AND DOOR CONTACTS C/W CONDUITS AND WIRING. REINSTALL REQUEST TO EXIT MOTION DETECTOR. |
| 5 DISCONNECT EXISTING CARD READER TO FACILITATE DOOR REMOVAL. UPON DOOR REPLACEMENT WORK COMPLETION, RECONNECT AND VERIFY OPERATION. |
| 6 DISCONNECT POWER CONNECTION TO EXISTING TO BE REPLACED FORCE FLOW HEATER IN THE CEILING SPACE. REWORK CONDUITS AND WIRING AS REQUIRED FOR DEMOLITION AND NEW WORK. |
| 7. ALL EXISTING TO REMAIN DEVICES ADJACENT TO THE AREAS OF WORK SHALL BE PROTECTED AND KEPT OPERATIONAL. |
| 8. FOR AFFECTED DEVICES, CONDUITS AND WIRING SHALL BE REMOVED TO SOURCE AND/OR OUTSIDE THE AREA OF WORK AS APPLICABLE. |
| |
| POWER_&_SYSTEMS_NEW_WORK_LAYOUT_NOTES: |
| 1 UPON DOOR REPLACEMENT WORK, PROVIDE POWER CONNECTION TO NEW DOOR OPERATOR C/W NEW RACEWAYS, BACKBOXES, AND WIRING AND RECONNECT EXISTING PUSH BUTTONS FOR FULLY OPERATIONAL DEVICES. |
| 2 PROVIDE POWER CONNECTION TO ELECTRIC STRIKE AND DOOR CONTACT C/W ASSOCIATED RACEWAYS AND WIRING. REINSTALL REQUEST TO EXIT MOTION DETECTOR. VERIFY DEVICES OPERATION. |
| 3 RECONNECT AND ACTIVATE EXISTING CARD READER UPON DOOR INSTALLATION. REMOVAL. UPON DOOR REPLACEMENT WORK COMPLETION, RECONNECT AND VERIFY OPERATION. |
| A PROVIDE POWER CONNECTION C/W LOCAL DISCONNECT SWITCH TO EXISTING TO BE REPLACED FORCE FLOW HEATER IN THE CEILING SPACE. REWORK CONDUITS AND WIRING AS REQUIRED FOR NEW WORK. |

2. TRACE AND INVESTIGATE EXISTING POWER SOURCES AND LOADS SERVING THE AREA OF WORK. 3 DISCONNECT AND REMOVE EXISTING NORMAL POWERED POT LIGHT FIXTURES C/W ASSOCIATED CONDUITS AND WIRING TO FACILITATE CEILING REMOVAL. REWORK CONDUITS AND WIRING FOR NEW LIGHT FIXTURES INSTALLATION AND CONNECTIONS.

DISCONNECT AND REMOVE EXISTING EMERGENCY POWERED POT LIGHT FIXTURE C/W ASSOCIATED CONDUITS AND WIRING TO FACILITATE CEILING REMOVAL. REWORK CONDUITS AND WIRING FOR NEW LIGHT FIXTURE INSTALLATION

5. ALL EXISTING TO REMAIN DEVICES ADJACENT TO THE AREAS OF WORK SHALL BE PROTECTED AND KEPT OPERATIONAL.

6. FOR AFFECTED DEVICES, CONDUITS AND WIRING SHALL BE REMOVED TO SOURCE AND/OR OUTSIDE THE AREA

1 PROVIDE NEW POT LIGHT FIXTURES TYPE 'L1'. CONNECT TO EXISTING CONTROLLED NORMAL POWERED BRANCH CIRCUIT C/W ASSOCIATED CONDUITS AND WIRING TO POWER SOURCE. REWORK CONDUITS AND WIRING FOR NEW LIGHT FIXTURES INSTALLATION AND CONNECTIONS.

2 PROVIDE NEW EMERGENCY POWERED POT LIGHT FIXTURE C/W ASSOCIATED CONDUITS AND WIRING TO POWER SOURCE. REWORK CONDUITS AND WIRING FOR NEW LIGHT FIXTURE INSTALLATION AND CONNECTION. 3. ALL EXISTING TO REMAIN DEVICES ADJACENT TO THE AREAS OF WORK SHALL BE PROTECTED AND KEPT

4. FOR AFFECTED DEVICES, CONDUITS AND WIRING SHALL BE REMOVED TO SOURCE AND/OR OUTSIDE THE AREA

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