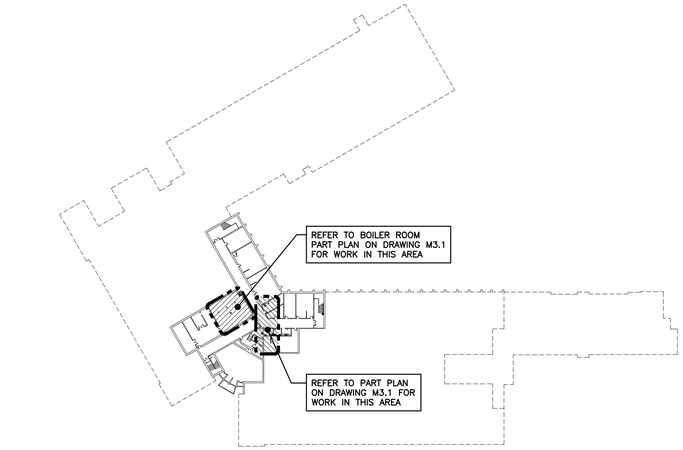
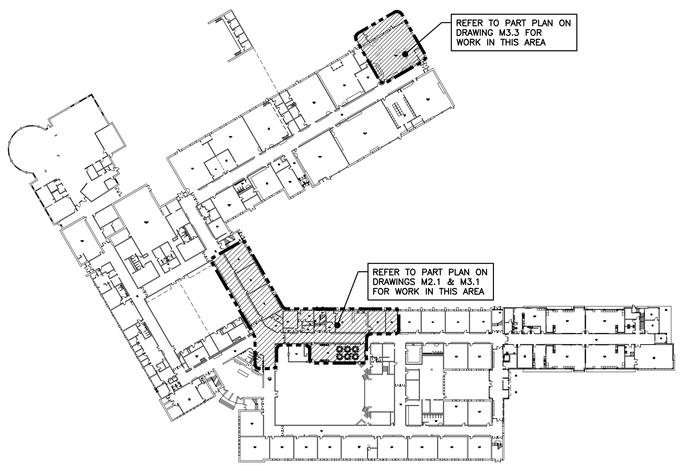
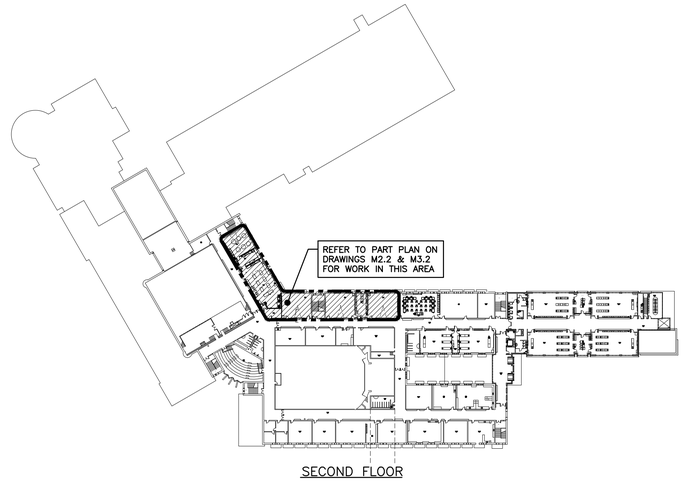



BASEMENT




GROUND FLOOR




SECOND FLOOR

KEY PLAN
SCALE: N.T.S.

## GENERAL NOTES

- ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE PREPARED SPECIFICATION.
- UPON COMPLETION OF THE PROJECT OR UPON COMPLETION OF EACH INDIVIDUAL PHASE OF THE PROJECT THE CONTRACTORS SHALL PROVIDE THE FOLLOWING CERTIFICATES BEFORE CONFORMANCE LETTERS ARE ISSUED BY THE CONSULTANT:
  - POTABLE WATER TEST (SEE SPEC 22 11 16 PART 3)
  - BACKFLOW TEST CERTIFICATE(S) FOR ALL TESTABLE DEVICES
  - COPY OF MANDATORY TSSA/CSA-B149 GAS PRESSURE TEST TAG
  - NFPA-13 SPRINKLER CONTRACTOR'S MATERIAL & TEST CERTIFICATE
  - SPRINKLER DESIGN ENGINEER'S LETTER
  - NFPA-96 KITCHEN HOOD FIRE SUPPRESSION SYSTEM TEST

  ALL CERTIFICATES ARE TO BE SUBMITTED TOGETHER IN A SINGLE PACKAGE.

## GRILLE SCHEDULE

| Item | Type | Manufacturer & Model | Finish | Remarks |
|---|---|---|---|---|
| D1 | SQUARE CEILING SUPPLY | KRUEGER 1400A | BRITISH WHITE | SLIDING ADJUSTMENT NOT ACCEPTABLE, 4 CONE, STEEL |
| R1 | CEILING RETURN/EXHAUST | KRUEGER S580 | BRITISH WHITE | C/W SCREWED FASTENING, ALUMINUM, 3/4" BLADE SPACING |
| S1 | LINEAR SUPPLY | KRUEGER 5885 | BRITISH WHITE | C/W SCREWED FASTENING, DOUBLE DEFLECTION, ALUMINUM, 1/2" BLADE SPACING C/W AIR EXTRACTOR |
| | | | | |
| | | | | |

1. ACCEPTABLE MANUFACTURERS: KRUEGER/EH PRICE/NAILOR/TITUS/CARNES/SEIHO/METALAIRE

## EXHAUST HOOD SCHEDULE

| Item | Description | Type | Capacity cfm | SP in wc | Dimensions (inches) | Manufacturer & Model | Remarks |
|---|---|---|---|---|---|---|---|
| HOOD #1 | NFPA EXHAUST HOOD | DRY GREASE EXTRACTOR | 3050 | 1.64 | 114"(L) x 57"(W) | SPRING AIR DN-BF-MZ-9.50/4.75 | C/W S.S. SHROUD TO CEILING (No. 4 FINISH) AND DUCT COLLAR. PROVIDE LIGHT AS SPECIFIED |
| HOOD #2 | NFPA EXHAUST HOOD | DRY GREASE EXTRACTOR | 852 | 1.50 | 78"(L) x 57"(W) | SPRING AIR DN-BF-MZ-6.50/4.75 | C/W S.S. SHROUD TO CEILING (No. 4 FINISH) AND DUCT COLLAR. PROVIDE LIGHT AS SPECIFIED |
| HOOD #3 | DISHWASHING EXHAUST HOOD | BOX CANOPY FILTER HOOD | 399 | 0.25 | 42"(L) x 47"(W) | SPRING AIR SAN-C-3.50/3.92 | C/W S.S. SHROUD TO CEILING (No. 4 FINISH) AND DUCT COLLAR. PROVIDE LIGHT AS SPECIFIED |

1. ACCEPTABLE MANUFACTURERS: SPRING AIR/GARLAND/GAYLORD/GREENHECK

## FAN SCHEDULE

| Item | Type | Service | Exhaust Air Data | | | Voltage | Manufacturer | Model | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | Capacity cfm | Size hp | SP in. wc | | | | |
| EF-34 | INLINE DUCT MOUNTED EXHAUST | DRYER BOOSTER FAN | 150 | Fhp | 0.2 | 120/1/60 | ORTECH | SDF200 | C/W DRYER AMP SENSOR FAN CONTROL (ORTECH-ASO), INSTALLED BY ELECTRICAL DIVISION |
| EF-35 | ROOFTOP UPBLAST EXHAUST | KITCHEN 7-202 HOOD EXHAUST #1 & #2 | 3902 | 2.0 | 2.0 | 208/3/60 | PENN BARRY | FX18BHFT | C/W 24" HIGH VENTED ROOF CURB & ACCESSORIES AS PER NFPA |
| EF-36 | ROOFTOP UPBLAST EXHAUST | DISHWASHING HOOD EXHAUST #3 | 400 | 1/4 | 0.625 | 120/1/60 | PENN BARRY | FX08B | C/W 24" HIGH ROOF CURB, BACKDRAFT DAMPER, & WATERTIGHT DUCTWORK |
| EF-37 | ROOFTOP EXHAUST | KITCHEN 7-202 | 900 | FHP | 0.375 | 120/1/60 | PENN BARRY | DX16V | C/W 24" HIGH ROOF CURB, BACKDRAFT DAMPER, ECM MOTOR & SPEED CONTROLLER. DVR BY BAS CONTRACTOR |
| EF-38 | ROOFTOP EXHAUST | SERVERY 7-206 | 900 | FHP | 0.375 | 120/1/60 | PENN BARRY | DX16V | C/W 24" HIGH ROOF CURB, BACKDRAFT DAMPER, ECM MOTOR & SPEED CONTROLLER. DVR BY BAS CONTRACTOR |
| EF-39 | CEILING MOUNTED EXHAUST | ELEC 7-200 | 200 | FHP | 0.125 | 120/1/60 | PENN BARRY | Z8H | C/W VIBRATION ISOLATION HANGERS, REVERSE ACTING THERMOSTAT, & BACKDRAFT DAMPER. RA THERMOSTAT BY BAS CONTRACTOR. |

1. ACCEPTABLE MANUFACTURERS: PENN BARRY/GREENHECK/COOK/JENN/CARNES/ACME/ZONEX/TWIN CITY/REVERSOMATIC/FANTECH/AEROVENT

## PLUMBING FIXTURE CONNECTIONS

| Item | Type | Manufacturer & Model | Trim | Sanitary (in.) | Vent (in.) | CW (in.) | HW/TW (in.) |
|---|---|---|---|---|---|---|---|
| L-1 | BARRIER-FREE WALL MOUNTED HANDWASH SINK | AMERICAN STANDARD MURRO | DELTA 591T0256 (591T1256 BATTERY) FAUCET, C/W OFFSET WASTE WITH GRID STRAINER & CONCEALED WALL CARRIER. PROVIDE SHROUD/KNEE CONTACT GUARD | 32 | 32 | 15 | 15 |
| S-1 | SINGLE COMPARTMENT STAINLESS STEEL SINK | FRANKE LBS4608P-1/3 | ZURN Z871B1-17F FAUCET, 8" CENTERS, BLADE HANDLES, VANDAL RESISTANT AERATOR | 40 | 32 | 15 | 15 |
| S-2 | DOUBLE COMPARTMENT STAINLESS STEEL SINK | FRANKE LBD6408-1/3 | ZURN Z82300-CP8 FAUCET, SINGLE HANDLE, 8" COVER PLATE, VANDAL RESISTANT AERATOR | 40 | 32 | 15 | 15 |
| S-3 | TRIPLE COMPARTMENT STAINLESS STEEL SINK (FREE-STANDING) | TARRISON CDS3-18 | DELTA 28C4423-S7 WALLMOUNT FAUCET, __ LEVER HANDLES, VANDAL RESISTANT AERATOR, 11" SWING SPOUT. PROVIDE TWO(2) FAUCETS FOR EACH SINK | 40 | 32 | 15 | 15 |
| WS-1 | WASHER SUPPLY | ZURN WM-2961 | ENCASED WITH SINGLE LEVER HANDLE VALVE, HEAVY DUTY MOUNTING STRAPS, KNOCKOUTS FOR RIGHT OR LEFT MOUNTING & TAILPIECE | 40 | 32 | 15 | 15 |
| EW-1 | EMERGENCY EYEWASH | HAWS 7260B | HAWS 9210EW MIXING VALVE, 10"ø IMPACT RESISTANT BOWL & CHROME PLATED SPRAY HEADS W/COVERS | 32 | 32 | 15 | 15 |
| FD-1 | GENERAL DUTY FLOOR DRAIN | WATTS FD-200 | WATTS B4 DRAIN BODY AND WATT A51 5" ROUND NB STRAINER, C/W TRAP PRIMER CONNECTION | SEE PLAN | 40 | N/A | N/A |
| HD-1 | HUB DRAIN | WATTS FD-200-DD | NICKEL-BRONZE ADJUSTABLE HEAD HUB & TRAP PRIMER CONNECTION | SEE PLAN | 40 | N/A | N/A |

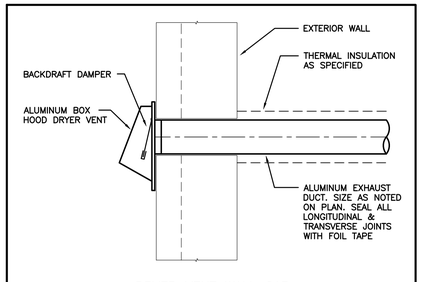
ACCEPTED MATERIALS:
- DELTA
- ZURN
- MOEN
- FRANKE (S.S. SINKS)
- NOVANNI (S.S. SINKS)
- WESSAN (S.S. SINKS)
- ELKAY (S.S. SINKS)
- BRADLEY (EYEWASH)
- HAWS (EYEWASH)
- GUARDIAN (EYEWASH)

MINIMUM UNDERGROUND SANITARY LINE SIZE SHALL BE 50ø (2"ø)

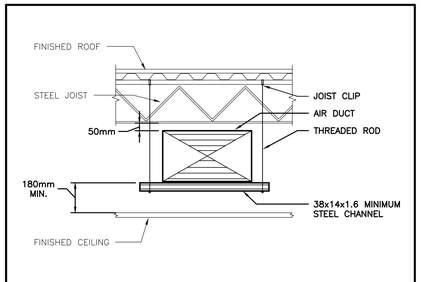
## HEATING COMPONENT SCHEDULE

| Item | Type | Size | Capacity MBH | EWT °F | LWT °F | EAT °F | Manufacturer & Model | Remarks |
|---|---|---|---|---|---|---|---|---|
| H-1 | RADIATION | AS NOTED | AS NOTED | 150 | 130 | 70 | ENG AIR WF-1A | 1 ROW, 18" HIGH CABINET BOTTOM MOUNTED AT 6"-8" AFF |

1. ACCEPTABLE MANUFACTURERS: ENGINEERED AIR/SLANT FIN/SIGMA/DUNHAM BUSH/ROSEMEX/RITTLING.
2. CABINET FINISHES ARE TO BE FACTORY FINISH PAINTED SELECTED FROM STANDARD MANUFACTURER'S COLOURS UNLESS OTHERWISE NOTED.




DRYER VENT WALL CAP




DUCT SUPPORT IN CEILING FROM STEEL FRAME

## MECHANICAL LEGEND

| Item | Description | Item | Description |
|---|---|---|---|
| | CUT EXISTING & CONNECT NEW PIPING | NC COMM NO | 3-WAY MIXING VALVE |
| | FLOW DIRECTION | M | MOTORIZED VALVE ACTUATOR |
| | DOMESTIC COLD WATER PIPING | | RISER VALVE |
| | DOMESTIC HOT WATER PIPING | BV | BALANCING VALVE |
| | DOMESTIC HOT WATER RECIRC. PIPING | TCV | TEMPERATURE CONTROL VALVE |
| | DOMESTIC TEMPERED WATER PIPING | FE | WALL MOUNTED FIRE EXTINGUISHER |
| -EX-SAN- | EXISTING SANITARY PIPING ABOVE FLOOR | FB | WALL MOUNTED FIRE BLANKET |
| -EX-SAN- | EXISTING SANITARY PIPING BELOW FLOOR | CO | FLOOR CLEANOUT |
| -SAN- | SANITARY PIPING ABOVE FLOOR | CO | LINE CLEANOUT |
| -SAN- | SANITARY PIPING BELOW FLOOR | G T | THERMOSTAT (WITH OR WITHOUT GUARD) |
| -CD- | CONDENSATE PIPING | C | CO2 SENSOR |
| -V- | VENT PIPING | | TURNING VANES |
| -HWS- | HEATING WATER SUPPLY PIPING | | SUPPLY AIR DUCT |
| -HWR- | HEATING WATER RETURN PIPING | | RETURN/EXHAUST AIR DUCT |
| -HCS- | HEATING/CHILLED WATER SUPPLY PIPING | | ACOUSTIC DUCT LINING |
| -HCR- | HEATING/CHILLED WATER RETURN PIPING | | BRANCH LINE SPIN-IN COLLAR C/W BALANCING DAMPER |
| -G- | NATURAL GAS PIPING | | |
| -HPG- | HIGH PRESSURE NATURAL GAS PIPING | BD | BALANCING DAMPER |
| -SP- | SPRINKLER PIPING | OBD | OPPOSED BLADE DAMPER |
| FD | FLOOR DRAIN | | MOTORIZED DAMPER (OPPOSED BLADE) |
| P | TRAP PRIMER | IBBD | INLET BLOWBACK DAMPER |
| | TEE CONNECTION | FD | FIRE DAMPER |
| | PIPE DOWN | FF | FIRE FLAP |
| | PIPE UP | BDD | BACKDRAFT DAMPER |
| | FLEXIBLE CONNECTION | | FLEXIBLE ROUND DUCT |
| | REDUCER/INCREASER | | RIGID ROUND DUCT |
| | CHECK VALVE | AL | ALUMINUM DUCT |
| | REDUCED PRESSURE BACKFLOW PREVENTOR | SS | STAINLESS STEEL DUCT |
| | UNION | Type Size Cap. | DIFFUSER/GRILLE SIZE (lmp), TYPE & CAPACITY (cfm) |
| | STRAINER | Type Size 1 Size 2 Capacity | HYDRONIC HEATING SIZE, TYPE & CAPACITY |
| VB | VACUUM BREAKER | | |
| | SCREWED OR WELDED PIPE CAP | AD | ACCESS DOOR |
| NO | NORMALLY OPEN | EXP | EXPANSION COMPENSATOR/JOINT |
| NC | NORMALLY CLOSED | RIC | RETURN IN CABINET |
| | BALL VALVE | AFF | ABOVE FINISHED FLOOR |
| | BUTTERFLY VALVE | AFR | ABOVE FINISHED ROOF |
| | GATE VALVE | EX | EXISTING DUCT (SIZE AS INDICATED) |
| AV | AIR VENT | | SOLENOID VALVE |
| | | | |
| | | | |

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work. The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.
The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.
Drawings and specifications, etc., prepared and issued by the consultant are the property of the consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.
Do not scale this drawing.
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Phone: 519-725-3555 Fax: 519-725-2515
Website: deiassociates.ca
Project Number: 20324

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.

| No. | Rivision | Date |
|---|---|---|
| | | |

LICENSED PROFESSIONAL ENGINEER
25 Feb 22
M.B. WHITE
100190176
PROVINCE OF ONTARIO

| No. | Rivision | Date |
|---|---|---|
| 1 | ISSUED FOR OWNER'S REVIEW | 12/22/2021 |
| 2 | ISSUED FOR PERMIT AND TENDER | 02/25/2022 |

PROJECT NORTH
GRAND RIVER COLLEGIATE INSTITUTE

project
WRDSB GRAND RIVER COLLEGIATE INSTITUTE RENOVATIONS

WATERLOO REGION DISTRICT SCHOOL BOARD
175 INDIAN RD, KITCHENER, ON N2B 2S7

drawing
KEY PLAN, LEGEND, SCHEDULES AND DETAILS

drawing scale
AS NOTED

ward99 project number
20038 - WRDSB GRAND RIVER

ward99 architects
ward99 architects inc.
7500 Highway 27, Unit 27B
Vaughan ON L4H 0J2
info@ward99architects.com
416 613 5880 www.ward99architects.com

drawing no.
M1.1

## UNIT VENTILATOR SCHEDULE

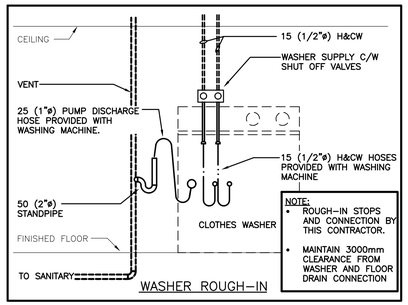
| Item | Type | Service | Capacity | | Min. O.A. | SP in. | Size | Heating | | | | | | Cooling | | | | | | Electrical | | | Manufacturer | Model | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | tons | cfm | Position | wc | hp | Medium | Coil Rows | EWT °F | LWT °F | Capacity MBH | GPM | Medium | EWT °F | LWT °F | Total Cap. MBH | Sens. Cap. MBH | GPM | Voltage | MCA | MOCP | | | |
| UV-6 | HORIZONTAL UNIT VENTILATOR | CLASSROOM 3-203 | 3.0 | 1250 | 35% | 0.1 | 1/3 | WATER | 2 | 150 | 130 | 83.2 | 8.3 | WATER | 45 | 55 | 31.0 | 23.0 | 6.2 | 120/1/60 | 6.30 | 15 | DAIKIN | UAVS9-H13 | C/W ECM MOTOR, DIGITAL READY, 2 ROW HEATING COIL, FACE & BYPASS DAMPER, REAR CHASE, HEAVY DUTY LATTICE GRILLE WITH RECTANGULAR HOLES TO MATCH LOUVER BLADE SPACING, AND 3-WAY VALVE AT HEATING COIL |
| UV-7 | HORIZONTAL UNIT VENTILATOR | CLASSROOM 3-207 | 3.0 | 1250 | 35% | 0.1 | 1/3 | WATER | 2 | 150 | 130 | 83.2 | 8.3 | WATER | 45 | 55 | 31.0 | 23.0 | 6.2 | 120/1/60 | 6.30 | 15 | DAIKIN | UAVS9-H13 | |
| UV-8 | HORIZONTAL UNIT VENTILATOR | CLASSROOM 3-211 | 3.0 | 1250 | 35% | 0.1 | 1/3 | WATER | 2 | 150 | 130 | 83.2 | 8.3 | WATER | 45 | 55 | 31.0 | 23.0 | 6.2 | 120/1/60 | 6.30 | 15 | DAIKIN | UAVS9-H13 | |
| UV-9 | HORIZONTAL UNIT VENTILATOR | SERVERY 7-206 | 3.0 | 1250 | 35% | 0.1 | 1/3 | WATER | 2 | 150 | 130 | 83.2 | 8.3 | WATER | 45 | 55 | 31.0 | 23.0 | 6.2 | 120/1/60 | 6.30 | 15 | DAIKIN | UAVS9-H13 | |
| UV-10 | HORIZONTAL UNIT VENTILATOR | KITCHEN 7-202 | 4.0 | 1500 | 35% | 0.1 | 1/4 | WATER | 2 | 150 | 130 | 118.0 | 11.8 | WATER | 45 | 55 | 38.1 | 27.6 | 7.6 | 120/1/60 | 6.30 | 15 | DAIKIN | UAVS9-H15 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |

1. ACCEPTABLE MANUFACTURERS: DAIKIN/ENGINEEREED AIR/TRANE

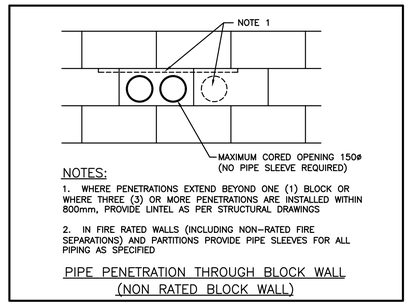
## MAKE-UP AIR UNIT SCHEDULE

| Item | Type | Service | Supply Air Fan Data | | | | Min. Position Outdoor Air % | Heating | | | | | | Manufacturer | Model | Weight lbs | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Capacity cfm | Size hp | Drive | ESP in. wc | | Voltage | MCA | MOCP | Medium | Capacity MBH | EAT db °F | LAT db °F | | | |
| MUA-1 | ROOF MOUNTED MUA UNIT | KITCHEN 7-202 | 3700 | 2 | VARIABLE FREQUENCY DRIVE | 0.625 | 100% | 208/3/60 | 8 | 15 | DIRECT GAS | 321 | -5 | 75 | BOUSQUET | SDM(E)-50 | 750± | C/W 600mm HIGH ROOF CURB AND MOTOR RATED FOR VFD |

1. ACCEPTABLE MANUFACTURERS: ENGINEEREED AIR/BOUSQUET



WASHER ROUGH-IN

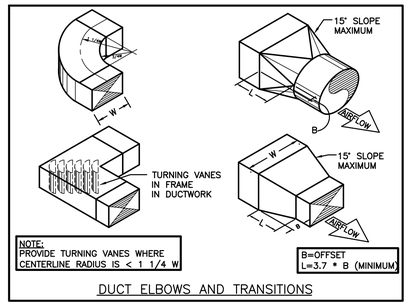


NOTES:

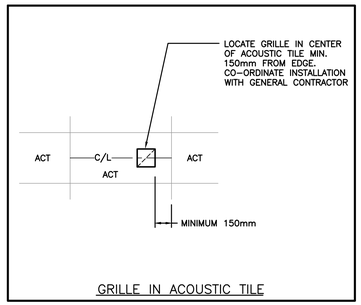
1. WHERE PENETRATIONS EXTEND BEYOND ONE (1) BLOCK OR WHERE THREE (3) OR MORE PENETRATIONS ARE INSTALLED WITHIN 800mm, PROVIDE LINTEL AS PER STRUCTURAL DRAWINGS

2. IN FIRE RATED WALLS (INCLUDING NON-RATED FIRE SEPARATIONS) AND PARTITIONS PROVIDE PIPE SLEEVES FOR ALL PIPING AS SPECIFIED

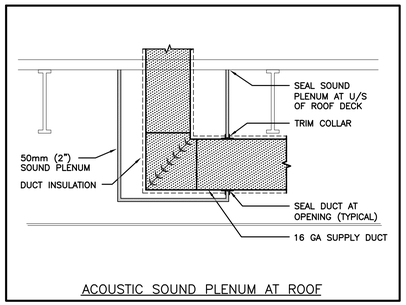
PIPE PENETRATION THROUGH BLOCK WALL (NON RATED BLOCK WALL)



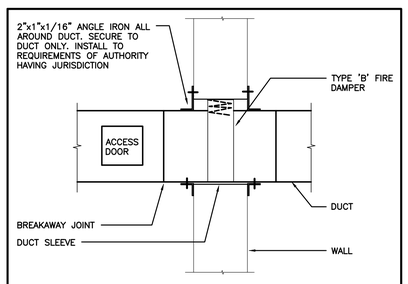
DUCT ELBOWS AND TRANSITIONS



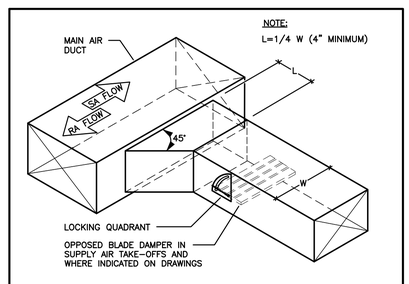
GRILLE IN ACOUSTIC TILE



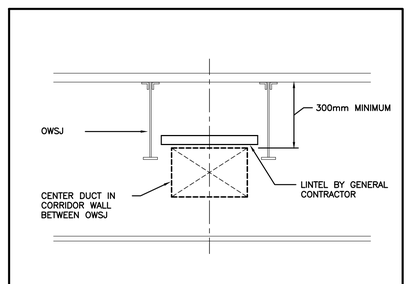
ACOUSTIC SOUND PLENUM AT ROOF



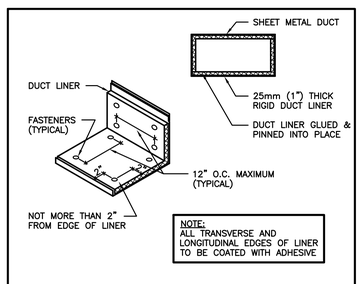
DUCT PENETRATION THRU FIRE SEPARATION



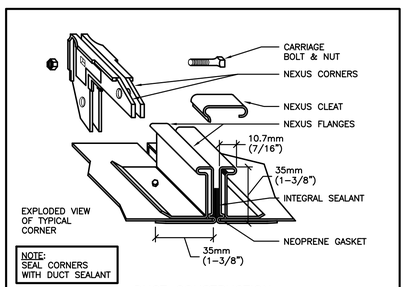
SQUARE DUCT BRANCH TAKEOFF



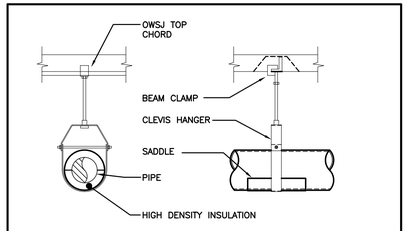
DUCT THRU CORRIDOR WALL



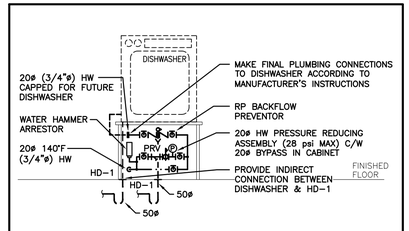
ACOUSTIC LINING



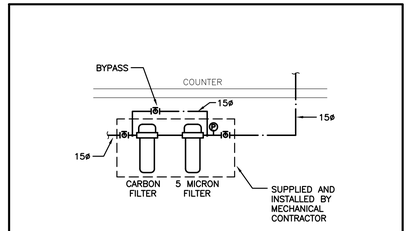
DUCT CONSTRUCTION



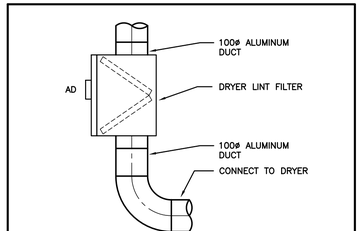
PIPE HANGER



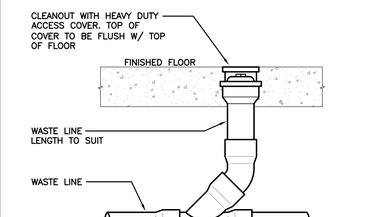
COMMERCIAL DISHWASHER ROUGH-IN



COFFEE MAKER/ICE MAKER WATER FILTER



DRYER LINT FILTER



CLEANOUT

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Project Number: 20324

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.

| No. | Rivision | Date |
|---|---|---|

LICENSED PROFESSIONAL ENGINEER
25 Feb 22
M.B. WHITE
100190774
PROVINCE OF ONTARIO

| No. | Rivision | Date |
|---|---|---|
| 1 | ISSUED FOR OWNER'S REVIEW | 12/22/2021 |
| 2 | ISSUED FOR PERMIT AND TENDER | 02/25/2022 |

project
WRDSB GRAND RIVER COLLEGIATE INSTITUTE RENOVATIONS

WATERLOO REGION DISTRICT SCHOOL BOARD
175 INDIAN RD, KITCHENER, ON N2B 2S7

drawing
SCHEDULES AND DETAILS

drawing scale
AS NOTED

ward99 project number
20038 - WRDSB GRAND RIVER

ward99 architects
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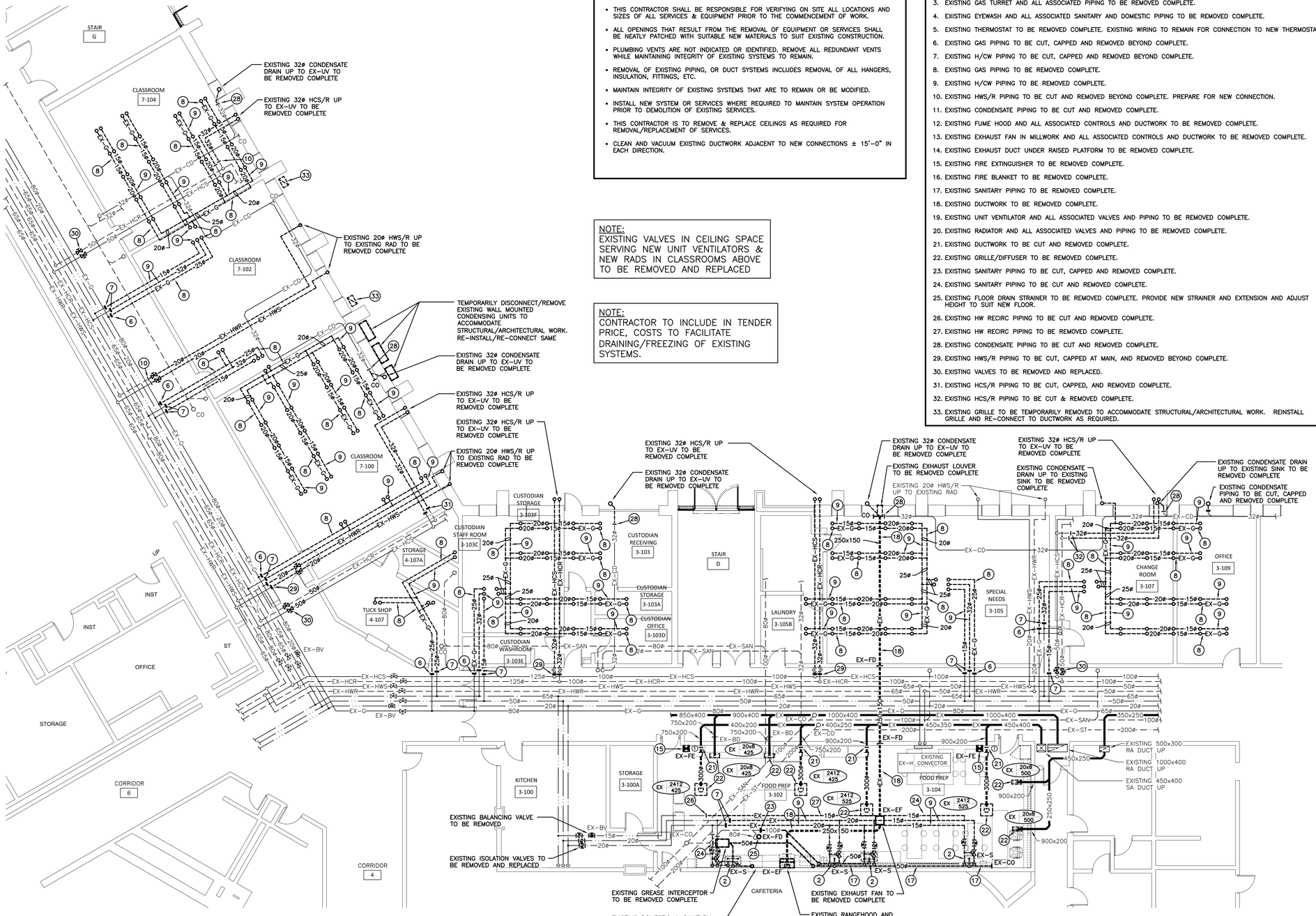
drawing no.
M1.2




## GENERAL DEMOLITION NOTES

- EXISTING MECHANICAL ITEMS NOT SHOWN SHALL REMAIN UNLESS NOTED OTHERWISE.
- EXISTING MECHANICAL ITEMS SHOWN BUT NOT NOTED AS BEING REMOVED OR RENOVATED SHALL REMAIN AS PRESENTLY INSTALLED AND OPERATING.
- THIS CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ON SITE ALL LOCATIONS AND SIZES OF ALL SERVICES & EQUIPMENT PRIOR TO THE COMMENCEMENT OF WORK.
- ALL OPENINGS THAT RESULT FROM THE REMOVAL OF EQUIPMENT OR SERVICES SHALL BE NEATLY PATCHED WITH SUITABLE NEW MATERIALS TO SUIT EXISTING CONSTRUCTION.
- PLUMBING VENTS ARE NOT INDICATED OR IDENTIFIED. REMOVE ALL REDUNDANT VENTS WHILE MAINTAINING INTEGRITY OF EXISTING SYSTEMS TO REMAIN.
- REMOVAL OF EXISTING PIPING, OR DUCT SYSTEMS INCLUDES REMOVAL OF ALL HANGERS, INSULATION, FITTINGS, ETC.
- MAINTAIN INTEGRITY OF EXISTING SYSTEMS THAT ARE TO REMAIN OR BE MODIFIED.
- INSTALL NEW SYSTEM OR SERVICES WHERE REQUIRED TO MAINTAIN SYSTEM OPERATION PRIOR TO DEMOLITION OF EXISTING SERVICES.
- THIS CONTRACTOR IS TO REMOVE & REPLACE CEILINGS AS REQUIRED FOR REMOVAL/REPLACEMENT OF SERVICES.
- CLEAN AND VACUUM EXISTING DUCTWORK ADJACENT TO NEW CONNECTIONS ± 15'-0" IN EACH DIRECTION.

NOTE:
EXISTING VALVES IN CEILING SPACE SERVING NEW UNIT VENTILATORS & NEW RADS IN CLASSROOMS ABOVE TO BE REMOVED AND REPLACED

NOTE:
CONTRACTOR TO INCLUDE IN TENDER PRICE, COSTS TO FACILITATE DRAINING/FREEZING OF EXISTING SYSTEMS.

## SPECIFIC DEMOLITION NOTES

1. EXISTING SINK, GAS TURRET, AND ALL ASSOCIATED SANITARY AND DOMESTIC PIPING TO BE REMOVED COMPLETE.
2. EXISTING SINK AND ALL ASSOCIATED SANITARY AND DOMESTIC PIPING TO BE REMOVED COMPLETE.
3. EXISTING GAS TURRET AND ALL ASSOCIATED PIPING TO BE REMOVED COMPLETE.
4. EXISTING EYEWASH AND ALL ASSOCIATED SANITARY AND DOMESTIC PIPING TO BE REMOVED COMPLETE.
5. EXISTING THERMOSTAT TO BE REMOVED COMPLETE. EXISTING WIRING TO REMAIN FOR CONNECTION TO NEW THERMOSTAT.
6. EXISTING GAS PIPING TO BE CUT, CAPPED AND REMOVED BEYOND COMPLETE.
7. EXISTING H/CW PIPING TO BE CUT, CAPPED AND REMOVED BEYOND COMPLETE.
8. EXISTING GAS PIPING TO BE REMOVED COMPLETE.
9. EXISTING H/CW PIPING TO BE REMOVED COMPLETE.
10. EXISTING HWS/R PIPING TO BE CUT AND REMOVED BEYOND COMPLETE. PREPARE FOR NEW CONNECTION.
11. EXISTING CONDENSATE PIPING TO BE CUT AND REMOVED COMPLETE.
12. EXISTING FUME HOOD AND ALL ASSOCIATED CONTROLS AND DUCTWORK TO BE REMOVED COMPLETE.
13. EXISTING EXHAUST FAN IN MILLWORK AND ALL ASSOCIATED CONTROLS AND DUCTWORK TO BE REMOVED COMPLETE.
14. EXISTING EXHAUST DUCT UNDER RAISED PLATFORM TO BE REMOVED COMPLETE.
15. EXISTING FIRE EXTINGUISHER TO BE REMOVED COMPLETE.
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19. EXISTING UNIT VENTILATOR AND ALL ASSOCIATED VALVES AND PIPING TO BE REMOVED COMPLETE.
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21. EXISTING DUCTWORK TO BE CUT AND REMOVED COMPLETE.
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23. EXISTING SANITARY PIPING TO BE CUT, CAPPED AND REMOVED COMPLETE.
24. EXISTING SANITARY PIPING TO BE CUT AND REMOVED COMPLETE.
25. EXISTING FLOOR DRAIN STRAINER TO BE REMOVED COMPLETE. PROVIDE NEW STRAINER AND EXTENSION AND ADJUST HEIGHT TO SUIT NEW FLOOR.
26. EXISTING HW RECIRC PIPING TO BE CUT AND REMOVED COMPLETE.
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29. EXISTING HWS/R PIPING TO BE CUT, CAPPED AT MAIN, AND REMOVED BEYOND COMPLETE.
30. EXISTING VALVES TO BE REMOVED AND REPLACED.
31. EXISTING HCS/R PIPING TO BE CUT, CAPPED, AND REMOVED COMPLETE.
32. EXISTING HCS/R PIPING TO BE CUT & REMOVED COMPLETE.
33. EXISTING GRILLE TO BE TEMPORARILY REMOVED TO ACCOMMODATE STRUCTURAL/ARCHITECTURAL WORK. REINSTALL GRILLE AND RE-CONNECT TO DUCTWORK AS REQUIRED.

## GROUND FLOOR PART PLAN – DEMOLITION

SCALE: 1:100

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Project Number: 20324

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LICENSED PROFESSIONAL ENGINEER
25 Feb 22
M.B. WHITE
100190176
PROVINCE OF ONTARIO

| No. | Rivision | Date |
|---|---|---|
| 1 | ISSUED FOR OWNER'S REVIEW | 12/22/2021 |
| 2 | ISSUED FOR PERMIT AND TENDER | 02/25/2022 |

PROJECT NORTH
GRID NORTH

project
WRDSB GRAND RIVER COLLEGIATE INSTITUTE RENOVATIONS

WATERLOO REGION DISTRICT SCHOOL BOARD
175 INDIAN RD, KITCHENER, ON N2B 2S7

drawing
GROUND FLOOR PART PLAN - DEMOLITION

drawing scale
AS NOTED

ward99 project number
20038 - WRDSB GRAND RIVER

ward99 architects
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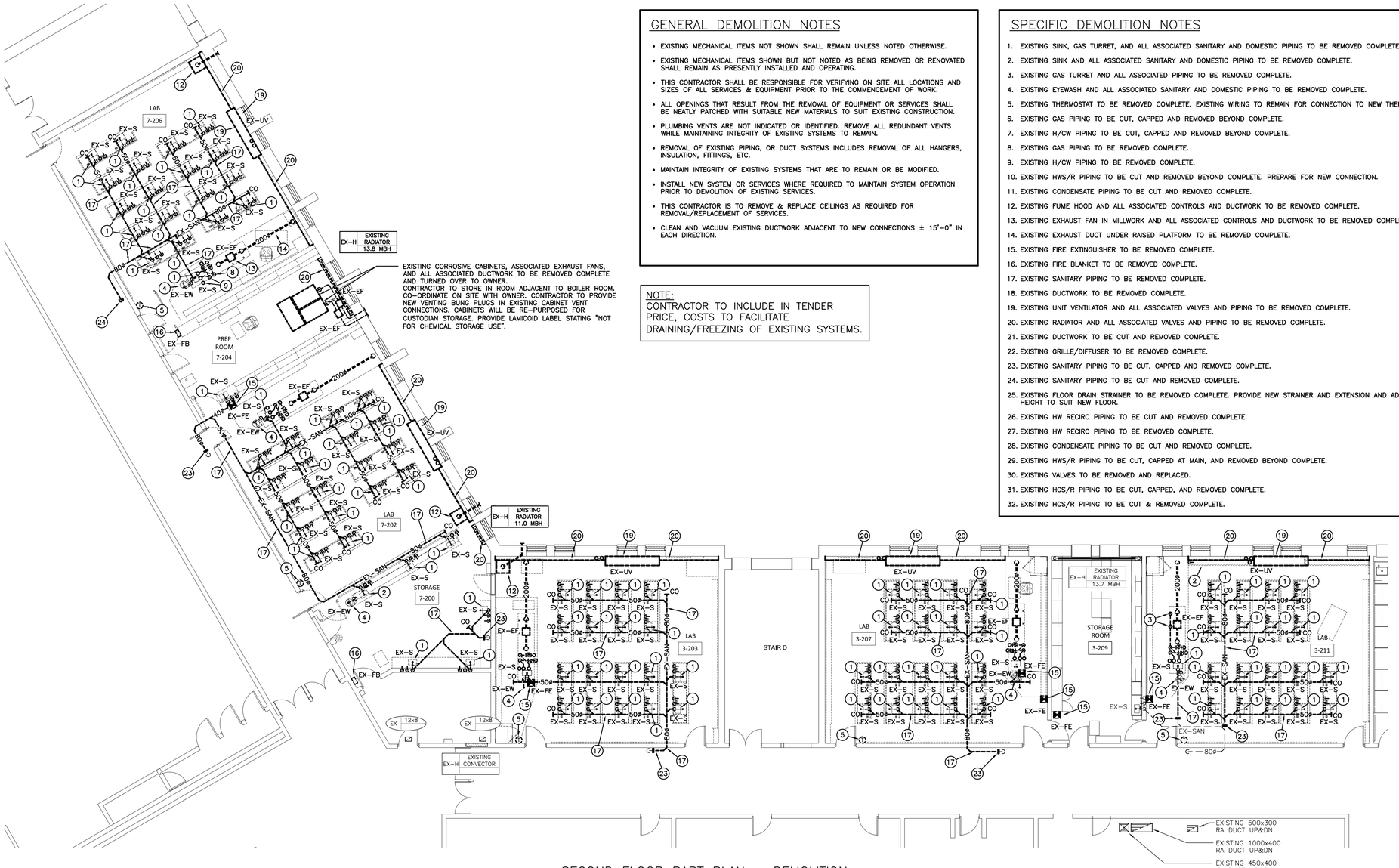
drawing no.
M2.1




SECOND FLOOR PART PLAN – DEMOLITION

SCALE: 1:100

## GENERAL DEMOLITION NOTES

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NOTE:
CONTRACTOR TO INCLUDE IN TENDER PRICE, COSTS TO FACILITATE DRAINING/FREEZING OF EXISTING SYSTEMS.

## SPECIFIC DEMOLITION NOTES

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Project Number: 20324

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LICENSED PROFESSIONAL ENGINEER
25 Feb 22
M.B. WHITE
100190774
PROVINCE OF ONTARIO

| No. | Rivision | Date |
|---|---|---|
| 1 | ISSUED FOR OWNER'S REVIEW | 12/22/2021 |
| 2 | ISSUED FOR PERMIT AND TENDER | 02/25/2022 |

project
WRDSB GRAND RIVER COLLEGIATE INSTITUTE RENOVATIONS

WATERLOO REGION DISTRICT SCHOOL BOARD
175 INDIAN RD, KITCHENER, ON N2B 2S7

drawing
SECOND FLOOR PART PLAN - DEMOLITION

drawing scale
AS NOTED

ward99 project number
20038 - WRDSB GRAND RIVER

ward99 architects
ward99 architects inc.
7500 Highway 27, Unit 27B
Vaughan ON L4H 0J2
info@ward99architects.com
416 613 5880 www.ward99architects.com

drawing no.
M2.2

NOTE:
IN EXISTING CLASSROOMS 7–104, 7–102, 7–100, TEMPORARILY REMOVE AND REINSTALL EXISTING MECHANICAL GRILLES/DEVICES TO SUIT NEW CEILING WORK. REFER TO ARCHITECTURAL DOCUMENTS.

NOTE:
EXISTING VALVES IN CEILING SPACE SERVING NEW UNIT VENTILATORS & NEW RADS IN CLASSROOMS ABOVE TO BE REMOVED AND REPLACED.

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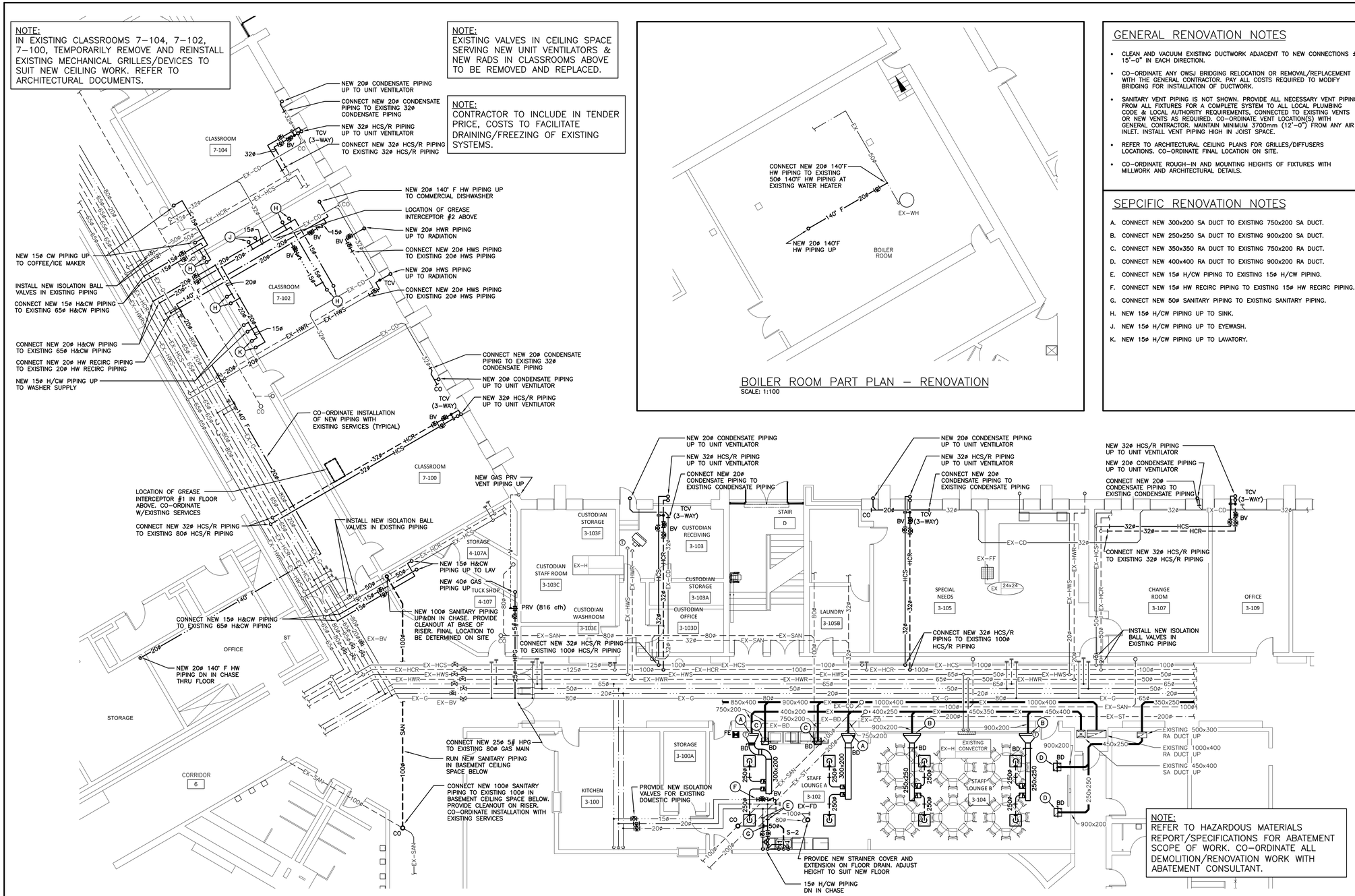


GROUND FLOOR PART PLAN – RENOVATION
SCALE: 1:100




BOILER ROOM PART PLAN – RENOVATION
SCALE: 1:100

NOTE:
REFER TO HAZARDOUS MATERIALS REPORT/SPECIFICATIONS FOR ABATEMENT SCOPE OF WORK. CO–ORDINATE ALL DEMOLITION/RENOVATION WORK WITH ABATEMENT CONSULTANT.

## GENERAL RENOVATION NOTES

- CLEAN AND VACUUM EXISTING DUCTWORK ADJACENT TO NEW CONNECTIONS ± 15'–0" IN EACH DIRECTION.
- CO–ORDINATE ANY OWSJ BRIDGING RELOCATION OR REMOVAL/REPLACEMENT WITH THE GENERAL CONTRACTOR. PAY ALL COSTS REQUIRED TO MODIFY BRIDGING FOR INSTALLATION OF DUCTWORK.
- SANITARY VENT PIPING IS NOT SHOWN. PROVIDE ALL NECESSARY VENT PIPING FROM ALL FIXTURES FOR A COMPLETE SYSTEM TO ALL LOCAL PLUMBING CODE & LOCAL AUTHORITY REQUIREMENTS, CONNECTED TO EXISTING VENTS OR NEW VENTS AS REQUIRED. CO–ORDINATE VENT LOCATION(S) WITH GENERAL CONTRACTOR. MAINTAIN MINIMUM 3700mm (12'–0") FROM ANY AIR INLET. INSTALL VENT PIPING HIGH IN JOIST SPACE.
- REFER TO ARCHITECTURAL CEILING PLANS FOR GRILLES/DIFFUSERS LOCATIONS. CO–ORDINATE FINAL LOCATION ON SITE.
- CO–ORDINATE ROUGH–IN AND MOUNTING HEIGHTS OF FIXTURES WITH MILLWORK AND ARCHITECTURAL DETAILS.

## SEPCIFIC RENOVATION NOTES

A. CONNECT NEW 300x200 SA DUCT TO EXISTING 750x200 SA DUCT.
B. CONNECT NEW 250x250 SA DUCT TO EXISTING 900x200 SA DUCT.
C. CONNECT NEW 350x350 RA DUCT TO EXISTING 750x200 RA DUCT.
D. CONNECT NEW 400x400 RA DUCT TO EXISTING 900x200 RA DUCT.
E. CONNECT NEW 15ø H/CW PIPING TO EXISTING 15ø H/CW PIPING.
F. CONNECT NEW 15ø HW RECIRC PIPING TO EXISTING 15ø HW RECIRC PIPING.
G. CONNECT NEW 50ø SANITARY PIPING TO EXISTING SANITARY PIPING.
H. NEW 15ø H/CW PIPING UP TO SINK.
J. NEW 15ø H/CW PIPING UP TO EYEWASH.
K. NEW 15ø H/CW PIPING UP TO LAVATORY.

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LICENSED PROFESSIONAL ENGINEER
25 Feb 22
M.B. WHITE
100149074
PROVINCE OF ONTARIO

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project
WRDSB GRAND RIVER COLLEGIATE INSTITUTE RENOVATIONS

WATERLOO REGION DISTRICT SCHOOL BOARD
175 INDIAN RD, KITCHENER, ON N2B 2S7

drawing
BASEMENT AND GROUND FLOOR PART PLANS - RENOVATION

drawing scale
AS NOTED

ward99 project number
20038 - WRDSB GRAND RIVER

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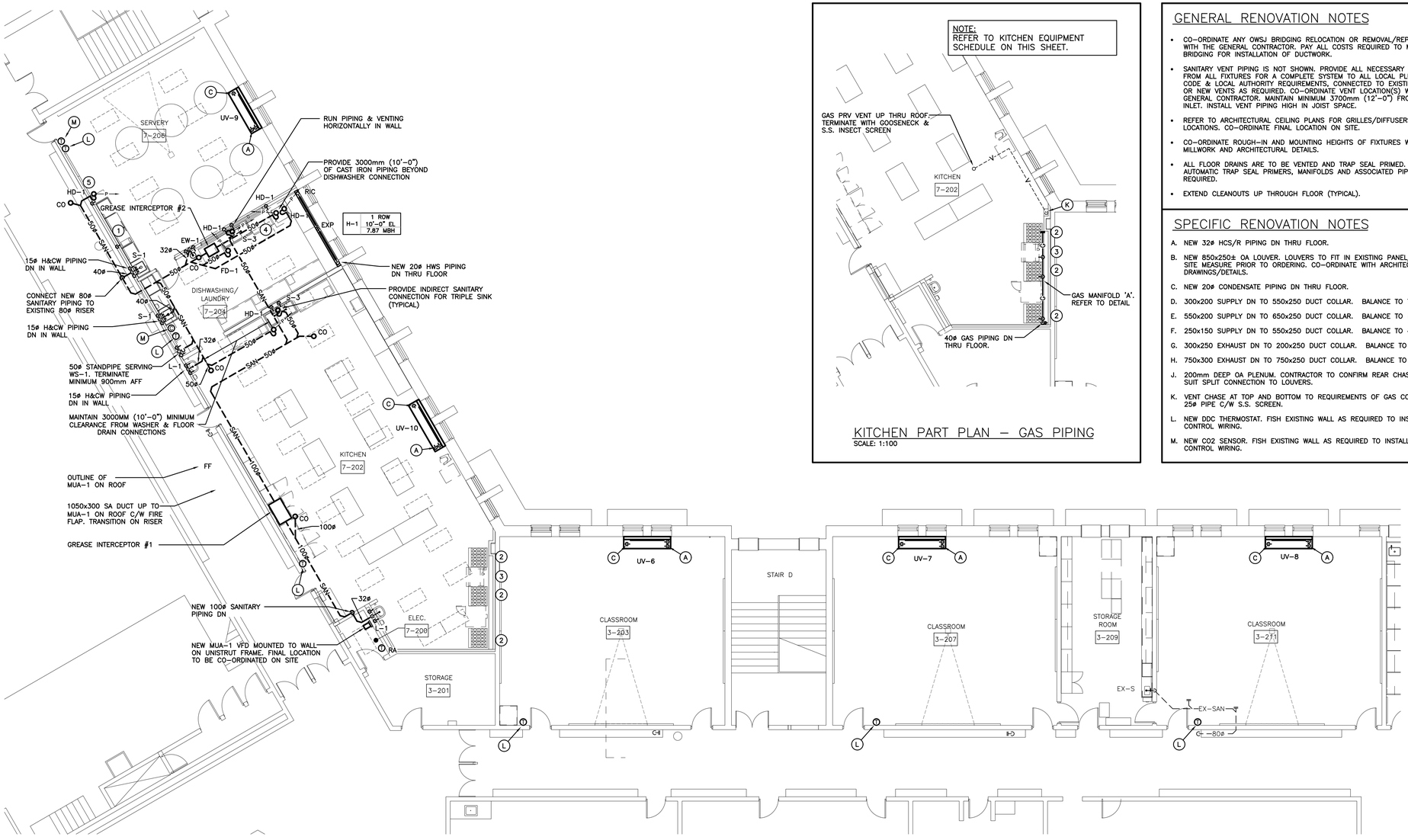



## SECOND FLOOR PART PLAN – RENOVATION – DRAINAGE & PIPING

SCALE: 1:100




## KITCHEN PART PLAN – GAS PIPING

SCALE: 1:100

## GENERAL RENOVATION NOTES

- CO-ORDINATE ANY OWSJ BRIDGING RELOCATION OR REMOVAL/REPLACEMENT WITH THE GENERAL CONTRACTOR. PAY ALL COSTS REQUIRED TO MODIFY BRIDGING FOR INSTALLATION OF DUCTWORK.
- SANITARY VENT PIPING IS NOT SHOWN. PROVIDE ALL NECESSARY VENT PIPING FROM ALL FIXTURES FOR A COMPLETE SYSTEM TO ALL LOCAL PLUMBING CODE & LOCAL AUTHORITY REQUIREMENTS, CONNECTED TO EXISTING VENTS OR NEW VENTS AS REQUIRED. CO-ORDINATE VENT LOCATION(S) WITH GENERAL CONTRACTOR. MAINTAIN MINIMUM 3700mm (12'-0") FROM ANY AIR INLET. INSTALL VENT PIPING HIGH IN JOIST SPACE.
- REFER TO ARCHITECTURAL CEILING PLANS FOR GRILLES/DIFFUSERS LOCATIONS. CO-ORDINATE FINAL LOCATION ON SITE.
- CO-ORDINATE ROUGH-IN AND MOUNTING HEIGHTS OF FIXTURES WITH MILLWORK AND ARCHITECTURAL DETAILS.
- ALL FLOOR DRAINS ARE TO BE VENTED AND TRAP SEAL PRIMED. PROVIDE AUTOMATIC TRAP SEAL PRIMERS, MANIFOLDS AND ASSOCIATED PIPING AS REQUIRED.
- EXTEND CLEANOUTS UP THROUGH FLOOR (TYPICAL).

## SPECIFIC RENOVATION NOTES

A. NEW 32ø HCS/R PIPING DN THRU FLOOR.

B. NEW 850x250± OA LOUVER. LOUVERS TO FIT IN EXISTING PANEL/OPENING. SITE MEASURE PRIOR TO ORDERING. CO-ORDINATE WITH ARCHITECTURAL DRAWINGS/DETAILS.

C. NEW 20ø CONDENSATE PIPING DN THRU FLOOR.

D. 300x200 SUPPLY DN TO 550x250 DUCT COLLAR. BALANCE TO 724 CFM.

E. 550x200 SUPPLY DN TO 650x250 DUCT COLLAR. BALANCE TO 1449 CFM.

F. 250x150 SUPPLY DN TO 550x250 DUCT COLLAR. BALANCE TO 406 CFM.

G. 300x250 EXHAUST DN TO 200x250 DUCT COLLAR. BALANCE TO 852 CFM.

H. 750x300 EXHAUST DN TO 750x250 DUCT COLLAR. BALANCE TO 3050 CFM.

J. 200mm DEEP OA PLENUM. CONTRACTOR TO CONFIRM REAR CHASE DEPTH TO SUIT SPLIT CONNECTION TO LOUVERS.

K. VENT CHASE AT TOP AND BOTTOM TO REQUIREMENTS OF GAS CODE WITH 25ø PIPE C/W S.S. SCREEN.

L. NEW DDC THERMOSTAT. FISH EXISTING WALL AS REQUIRED TO INSTALL NEW CONTROL WIRING.

M. NEW CO2 SENSOR. FISH EXISTING WALL AS REQUIRED TO INSTALL NEW CONTROL WIRING.

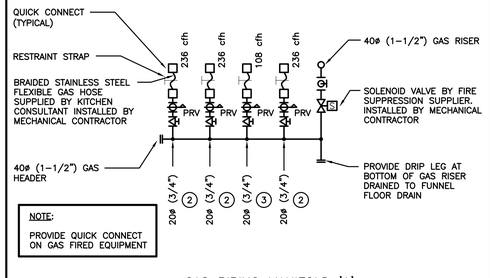
## KITCHEN EQUIPMENT

| Item | Quantity | Description | Connections by Mechanical Contractor | Supplied by Mechanical Contractor | Installed by Mechanical Contractor | Plumbing (size in mm) CW ✓ | CW ø | HW (110°) ✓ | HW (110°) ø | HW (140°) ✓ | HW (140°) ø | Direct Drain ✓ | Direct Drain ø | Indirect Drain ✓ | Indirect Drain ø | Gas (size in mm) Input (MBH) | Gas Connection Size | Ventilation cfm | Backflow Preventor Model (By Mechanical Contractor) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | COFFEE BREWER | ✓ | | ✓ | ✓ | 15ø | | | | | | | | | | | | AVB | |
| 2 | 3 | RANGE (6 BURNER) | ✓ | | ✓ | | | | | | | | | | | 236 | 20ø | | | |
| 3 | 1 | CHARBROILER | ✓ | | ✓ | | | | | | | | | | | 108 | 20ø | | | |
| 4 | 1 | DISHWASHER | ✓ | | ✓ | | | | | ✓ | 20ø | ✓ | 50ø | | | | | | RP | PIPE TO HD-1 |
| 5 | 1 | ICE MAKER | ✓ | | ✓ | ✓ | 15ø | | | | | | | ✓ | 20ø | | | | AVB | PIPE TO HD-1 |
| | | | | | | | | | | | | | | | | | | | | |

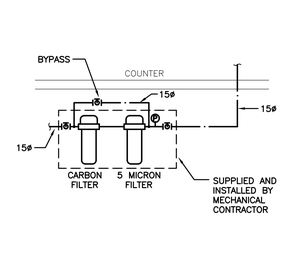
FINAL CONNECTION TO KITCHEN EQUIPMENT SHALL BE BY THIS CONTRACTOR C/W VALVES & BACKFLOW PREVENTOR AS INDICATED. VENT FIXTURES LOCATED IN PART WALL UNDER FLOOR. EXTEND VENT TO NEAREST PARTITION WALL.

BACKFLOW PREVENTORS
DuC – DUAL CHECK VALVE, AG – AIR GAP, DCAP – DUAL CHECK VALVE W/ ATMOS PORT, RP – REDUCED PRESSURE BACKFLOW PREVENTOR. AVB – AIR VACUUM BREAKER

PROVIDE GAS PRESSURE REDUCING VALVES AS REQUIRED FOR EACH PIECE OF EQUIPMENT. GAS PRESSURE 7" WATER COLUMN.




## GAS PIPING MANIFOLD 'A'




## ICE MAKER WATER FILTER

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Phone: 519-725-3555 Fax: 519-725-2515
Website: deiassociates.ca
Project Number: 20324

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|---|---|---|

LICENSED PROFESSIONAL ENGINEER
25 Feb 22
M.B. WHITE
100190776
PROVINCE OF ONTARIO

| No. | Rivision | Date |
|---|---|---|
| 1 | ISSUED FOR OWNER'S REVIEW | 12/22/2021 |
| 2 | ISSUED FOR PERMIT AND TENDER | 02/25/2022 |

project
WRDSB GRAND RIVER COLLEGIATE INSTITUTE RENOVATIONS

WATERLOO REGION DISTRICT SCHOOL BOARD
175 INDIAN RD, KITCHENER, ON N2B 2S7

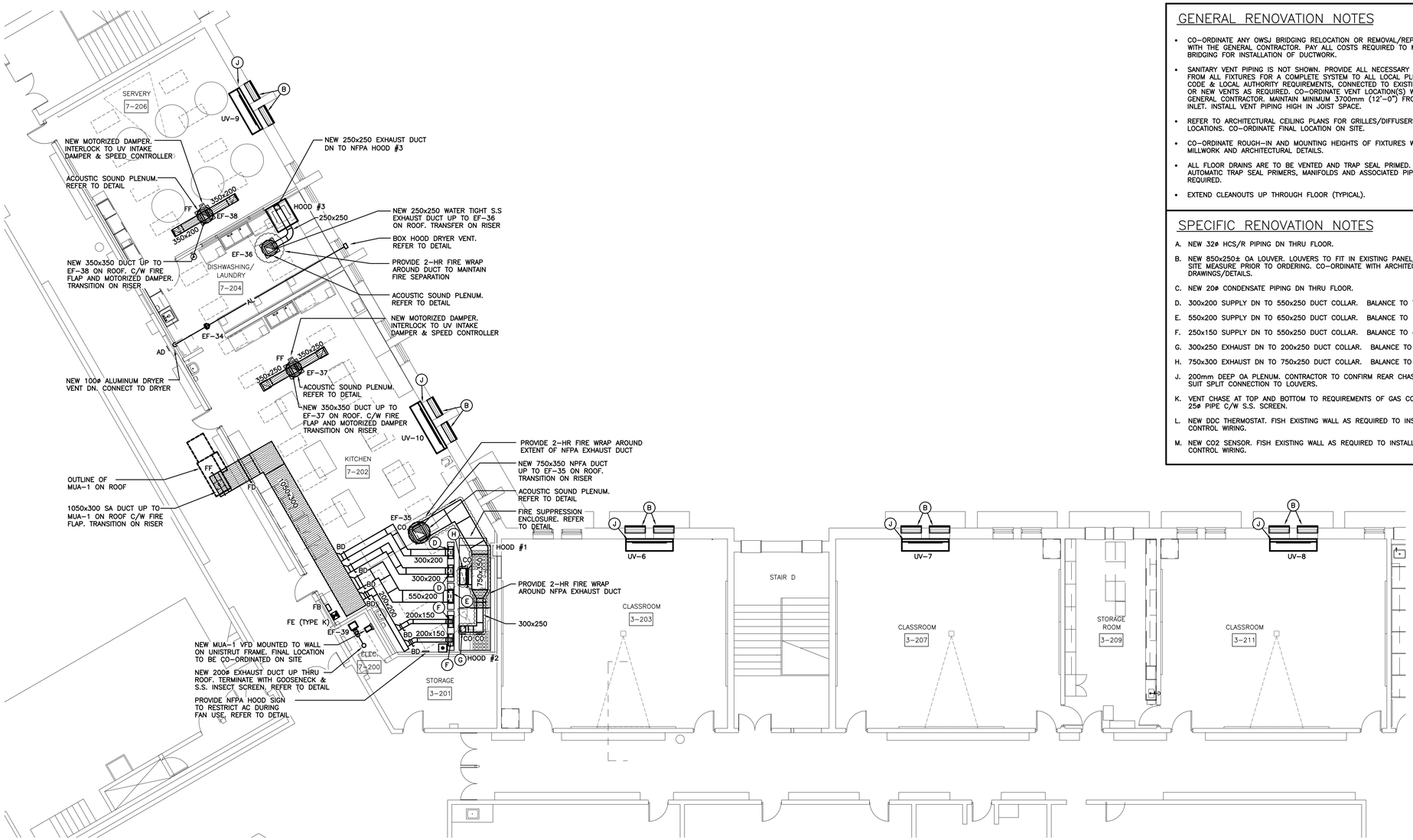
drawing
SECOND FLOOR PART PLAN - RENOVATION - DRAINAGE & PIPING

drawing scale
AS NOTED

ward99 project number
20038 - WRDSB GRAND RIVER

ward99 architects
ward99 architects inc.
7500 Highway 27, Unit 27B
Vaughan ON L4H 0J2
info@ward99architects.com
416 613 5880 www.ward99architects.com

drawing no.
M3.2




## SECOND FLOOR PART PLAN – RENOVATION – VENTILATION

SCALE: 1:100

## GENERAL RENOVATION NOTES

- CO-ORDINATE ANY OWSJ BRIDGING RELOCATION OR REMOVAL/REPLACEMENT WITH THE GENERAL CONTRACTOR. PAY ALL COSTS REQUIRED TO MODIFY BRIDGING FOR INSTALLATION OF DUCTWORK.
- SANITARY VENT PIPING IS NOT SHOWN. PROVIDE ALL NECESSARY VENT PIPING FROM ALL FIXTURES FOR A COMPLETE SYSTEM TO ALL LOCAL PLUMBING CODE & LOCAL AUTHORITY REQUIREMENTS. CONNECTED TO EXISTING VENTS OR NEW VENTS AS REQUIRED. CO-ORDINATE VENT LOCATION(S) WITH GENERAL CONTRACTOR. MAINTAIN MINIMUM 3700mm (12'-0") FROM ANY AIR INLET. INSTALL VENT PIPING HIGH IN JOIST SPACE.
- REFER TO ARCHITECTURAL CEILING PLANS FOR GRILLES/DIFFUSERS LOCATIONS. CO-ORDINATE FINAL LOCATION ON SITE.
- CO-ORDINATE ROUGH-IN AND MOUNTING HEIGHTS OF FIXTURES WITH MILLWORK AND ARCHITECTURAL DETAILS.
- ALL FLOOR DRAINS ARE TO BE VENTED AND TRAP SEAL PRIMED. PROVIDE AUTOMATIC TRAP SEAL PRIMERS, MANIFOLDS AND ASSOCIATED PIPING AS REQUIRED.
- EXTEND CLEANOUTS UP THROUGH FLOOR (TYPICAL).

## SPECIFIC RENOVATION NOTES

A. NEW 32ø HCS/R PIPING DN THRU FLOOR.

B. NEW 850x250± OA LOUVER. LOUVERS TO FIT IN EXISTING PANEL/OPENING. SITE MEASURE PRIOR TO ORDERING. CO-ORDINATE WITH ARCHITECTURAL DRAWINGS/DETAILS.

C. NEW 20ø CONDENSATE PIPING DN THRU FLOOR.

D. 300x200 SUPPLY DN TO 550x250 DUCT COLLAR. BALANCE TO 724 CFM.

E. 550x200 SUPPLY DN TO 650x250 DUCT COLLAR. BALANCE TO 1449 CFM.

F. 250x150 SUPPLY DN TO 550x250 DUCT COLLAR. BALANCE TO 406 CFM.

G. 300x250 EXHAUST DN TO 200x250 DUCT COLLAR. BALANCE TO 852 CFM.

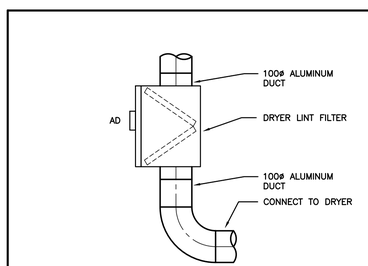
H. 750x300 EXHAUST DN TO 750x250 DUCT COLLAR. BALANCE TO 3050 CFM.

J. 200mm DEEP OA PLENUM. CONTRACTOR TO CONFIRM REAR CHASE DEPTH TO SUIT SPLIT CONNECTION TO LOUVERS.

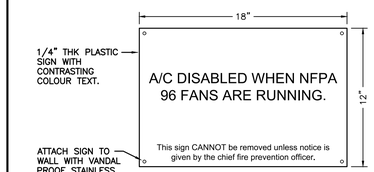
K. VENT CHASE AT TOP AND BOTTOM TO REQUIREMENTS OF GAS CODE WITH 25ø PIPE C/W S.S. SCREEN.

L. NEW DDC THERMOSTAT. FISH EXISTING WALL AS REQUIRED TO INSTALL NEW CONTROL WIRING.

M. NEW CO2 SENSOR. FISH EXISTING WALL AS REQUIRED TO INSTALL NEW CONTROL WIRING.




DRYER LINT FILTER




NFPA FAN SIGN

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PROJECT NORTH
SURVEY NORTH

project
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WATERLOO REGION DISTRICT SCHOOL BOARD
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drawing
SECOND FLOOR PART PLAN - RENOVATION - VENTILATION

drawing scale
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ward99 project number
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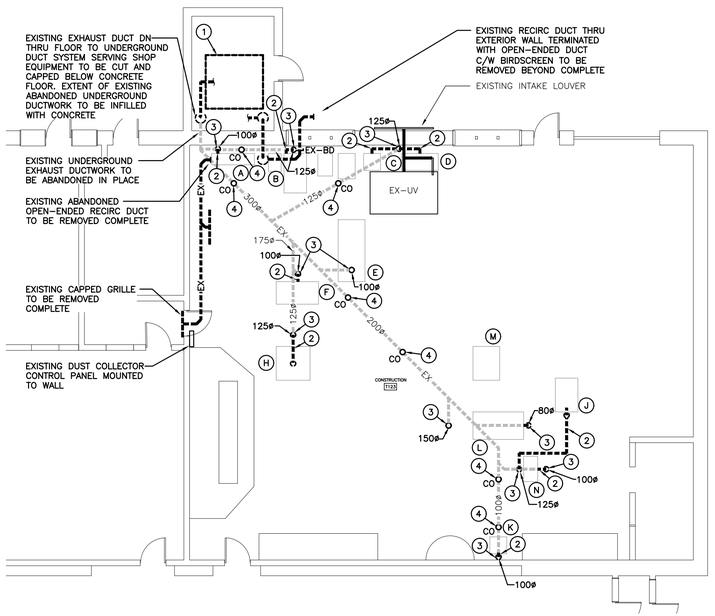
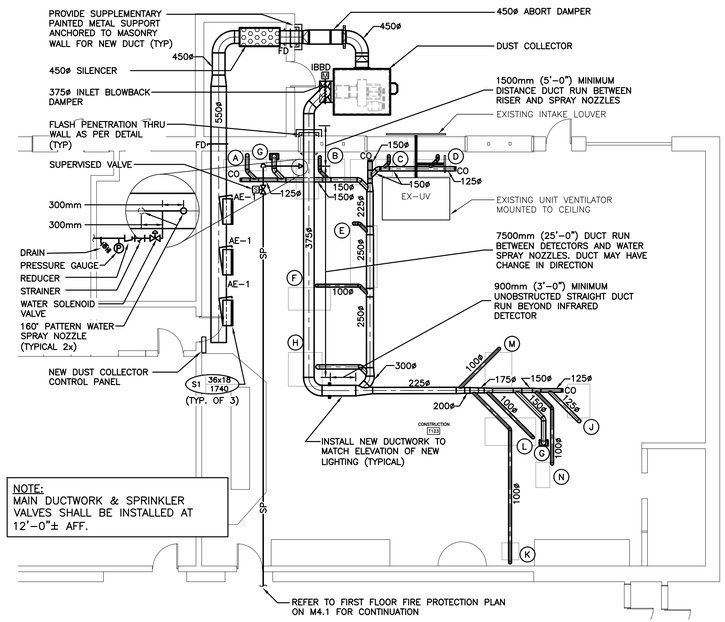



CONSTRUCTION ROOM PART PLAN – DEMOLITION

SCALE: 1:100




CONSTRUCTION ROOM PART PLAN – RENOVATION

SCALE: 1:100

## GENERAL DEMOLITION NOTES

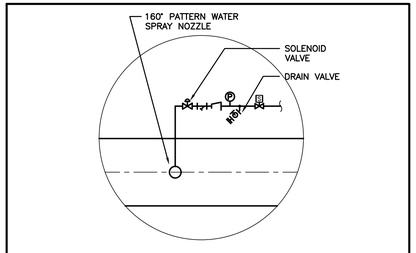
- EXISTING MECHANICAL ITEMS NOT SHOWN SHALL REMAIN UNLESS NOTED OTHERWISE.
- EXISTING MECHANICAL ITEMS SHOWN BUT NOT NOTED AS BEING REMOVED OR RENOVATED SHALL REMAIN AS PRESENTLY INSTALLED AND OPERATING.
- THIS CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ON SITE ALL LOCATIONS AND SIZES OF ALL SERVICES & EQUIPMENT PRIOR TO THE COMMENCEMENT OF WORK.
- ALL OPENINGS THAT RESULT FROM THE REMOVAL OF EQUIPMENT OR SERVICES SHALL BE NEATLY PATCHED WITH SUITABLE NEW MATERIALS TO SUIT EXISTING CONSTRUCTION.
- PLUMBING VENTS ARE NOT INDICATED OR IDENTIFIED. REMOVE ALL REDUNDANT VENTS WHILE MAINTAINING INTEGRITY OF EXISTING SYSTEMS TO REMAIN.
- REMOVAL OF EXISTING PIPING, OR DUCT SYSTEMS INCLUDES REMOVAL OF ALL HANGERS, INSULATION, FITTINGS, ETC.
- MAINTAIN INTEGRITY OF EXISTING SYSTEMS THAT ARE TO REMAIN OR BE MODIFIED.
- INSTALL NEW SYSTEM OR SERVICES WHERE REQUIRED TO MAINTAIN SYSTEM OPERATION PRIOR TO DEMOLITION OF EXISTING SERVICES.
- THIS CONTRACTOR IS TO REMOVE & REPLACE CEILINGS AS REQUIRED FOR REMOVAL/REPLACEMENT OF SERVICES.

## SPECIFIC DEMOLITION NOTES

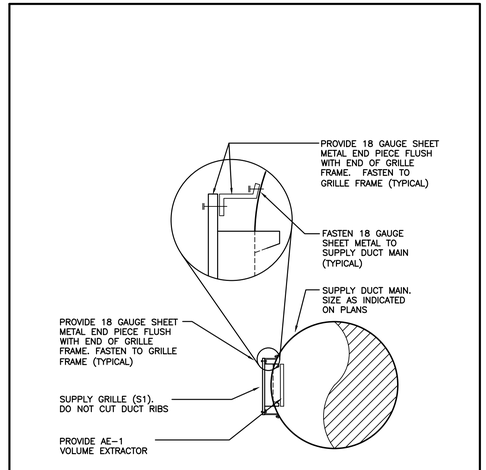
1. EXISTING DUST COLLECTOR AND ALL ASSOCIATED COMPONENTS ARE TO BE DISCONNECTED & REMOVED COMPLETE. CO–ORDINATE NEW OPENING IN EXISTING WALL FOR REMOVAL WITH ARCHITECTURAL PLANS.
2. EXISTING DUST COLLECTOR DUCTWORK TO BE REMOVED COMPLETE. ALL FLEXIBLE HOSES AT EQUIPMENT CONNECTIONS TO BE REMOVED & REPLACED COMPLETE
3. EXISTING EXHAUST DUCT TO BE CUT BELOW FLOOR, INFILLED WITH CONCRETE, CAPPED AND REMOVED BEYOND COMPLETE. EXISTING UNDER–FLOOR DUCTWORK TO BE ABANDONED IN PLACE. CONCRETE INFILL BY OTHERS. REFER TO ARCHITECTURAL DRAWINGS.
4. EXISTING DUST COLLECTOR CLEAN OUT TO BE CUT BELOW FLOOR, INFILLED WITH CONCRETE, CAPPED, AND REMOVED BEYOND COMPLETE. EXISTING UNDER–FLOOR DUCTWORK TO BE ABANDONED IN PLACE. CONCRETE INFILL BY OTHERS. REFER TO ARCHITECTURAL DRAWINGS.

## GENERAL RENOVATION NOTES

- CLEAN AND VACUUM EXISTING DUCTWORK ADJACENT TO NEW CONNECTIONS ± 15'–0" IN EACH DIRECTION.
- CO–ORDINATE ANY OWSJ BRIDGING RELOCATION OR REMOVAL/REPLACEMENT WITH THE GENERAL CONTRACTOR. PAY ALL COSTS REQUIRED TO MODIFY BRIDGING FOR INSTALLATION OF DUCTWORK.
- REFER TO ARCHITECTURAL CEILING PLANS FOR GRILLES/DIFFUSERS LOCATIONS. CO–ORDINATE FINAL LOCATION ON SITE.
- CO–ORDINATE ROUGH–IN AND MOUNTING HEIGHTS OF FIXTURES WITH MILLWORK AND ARCHITECTURAL DETAILS.




SPARK ARRESTOR SPRAY NOZZLE INSTALLATION



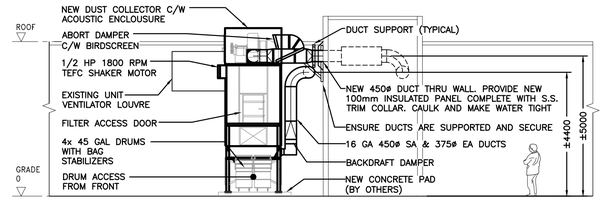

SUPPLY GRILLE (S1) INSTALLATION

## EQUIPMENT OUTLET TYPES

A. EXISTING LATHE (5"ø)
B. EXISTING 32"x56" BAND SAW (4"ø)
C. EXISTING SPINDLE SANDER (4"ø)
D. EXISTING BELT SANDER (5"ø)
E. EXISTING 88"x38" TABLE SAW (4"ø)
F. EXISTING 32"x62" JOINTER (4"ø)
G. NEW FLOOR SWEEP (6"ø)
H. EXISTING THICKNESS PLANER (6"ø)
J. EXISTING THICKNESS SANDER (5"ø)
K. EXISTING MITRE SAW (4"ø)
L. EXISTING 32"x72 JOINTER (4"ø)
M. EXISTING 48"x38" TABLE SAW (4"ø)
N. EXISTING 20"x36" BAND SAW (4"ø)

NOTES:
- ACCESS DOORS ARE TO BE LOCATED TO MEET NFPA STANDARDS
- FINAL LOCATION AND CONNECTIONS TO EQUIPMENT TO BE DETERMINED ON SITE. PROVIDE BLAST GATE AT EACH CONNECTION.
- REFER TO MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS FOR CONNECTIONS TO EQUIPMENT NOT INDICATED.
- COORDINATE ALL NEW DUCTWORK WITH EXISTING LIGHTS PRIOR TO INSTALLATION.

CONSTRUCTION ROOM– DUST COLLECTOR OUTLET SCHEDULE




DUST COLLECTOR ELEVATION

SCALE: NTS

## SPRINKLER SYSTEM SHUT DOWN

- THIS CONTRACTOR SHALL NOTIFY THE BUILDING DEPARTMENT AND THE AUTHORITY HAVING JURISDICTION IN WRITING SEVENTY TWO (72) HOURS IN ADVANCE OF ANY WORK. IT IS THE RESPONSIBILITY OF THE SPRINKLER CONTRACTOR TO PROVIDE A TWENTY FOUR (24) HOUR FIRE WATCH. WHILE THE COMPLETE EXISTING STANDPIPE SYSTEM IS NOT IN OPERATION. ALL COSTS ASSOCIATED WITH THE FIRE WATCH AND/OR ALL REQUIREMENTS BY THE BUILDING DEPARTMENT AND/OR AUTHORITY HAVING JURISDICTION, (WHILE THE EXISTING SPRINKLER SYSTEM IS SHUT DOWN) SHALL BE BORNE BY THE SPRINKLER CONTRACTOR.

## GENERAL FIRE PROTECTION NOTES

- SPRINKLER MAINS SHOWN ARE PREFERRED MAIN LOCATIONS.
- REFER TO ARCHITECTURAL DRAWINGS FOR REFLECTED CEILING PLANS AND CEILING TYPES
- SUBMIT PRELIMINARY DESIGN & HYDRAULIC CALCULATIONS STAMPED BY A PROFESSIONAL ENGINEER, AND MANUFACTURERS' PRODUCT SHEETS FOR SHOP DRAWING SUBMISSION AS SPECIFIED PRIOR TO COMMENCING WORK.
- ENSURE DESIGN MEETS OR EXCEEDS PRESENT NAPA 13 STANDARDS. ENSURE SPRINKLER SYSTEMS ARE INSTALLED TO NAPA 13 STANDARDS. UPON COMPLETION, SPRINKLER CONTRACTOR TO PROVIDE REPRODUCIBLE DRAWING (AT 1/8"=1'–0" SCALE) AND HYDRAULIC CALCULATIONS OF AS–BUILT CONDITION.
- SPRINKLER CONTRACTOR'S 'PROFESSIONAL ENGINEER' TO PROVIDE O.B.C. AND NAPA REQUIRED INSPECTION AND CERTIFICATION.
- SPRINKLER PIPING TO BE COORDINATED WITH OTHER SERVICES PRIOR TO INSTALLATION
- SPRINKLER CONTRACTOR TO VISIT SITE AND EVALUATE EXISTING CONDITIONS PRIOR TO TENDER CLOSING. INCLUDE ALL MODIFICATIONS IN TENDER PRICE.
- SPRINKLER CONTRACTOR TO PROVIDE SERVICES WITH THE FIRE COMMISSIONING AGENT (FICA) TO MEET THE REQUIREMENTS OF ADMINISTRATION, VERIFICATION, AND FINAL SIGNOFF TO THE LOCAL AUTHORITIES AND CONSULTANT.
- MODULATE ALL VALVES TO CREATE WATER FLOW, AND TEST ALL DEVICES TO VERIFY SPRINKLER SYSTEM SENDS SIGNAL TO FIRE ALARM PANEL FOR ALARM, SUPERVISORY, AND TROUBLE.
- PERFORM ALL WORK IN ACCORDANCE WITH NFPA 3.
- RETURN SPRINKLER SYSTEM TO NORMAL OPERATION ON COMPLETION OF TESTING

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project
WRDSB GRAND RIVER COLLEGIATE INSTITUTE RENOVATIONS

WATERLOO REGION DISTRICT SCHOOL BOARD
175 INDIAN RD, KITCHENER, ON N2B 2S7

drawing
CONSTRUCTION ROOM DEMOLITION & RENOVATION PART PLANS, DUST COLLECTOR SPRINKLER/SPARK DETECTION, & DETAILS

drawing scale
AS NOTED

ward99 project number
20038 - WRDSB GRAND RIVER

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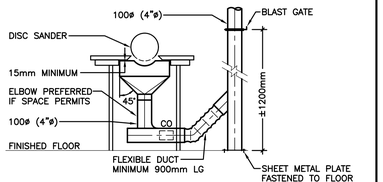
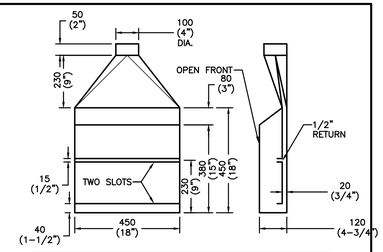
416 613 5880 www.ward99architects.com

drawing no.
M3.4



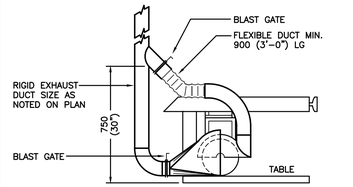

NOTE:
1. CONTRACTOR SHALL LOCATE VERTICAL DUCT DROPS TO FACILITATE EASY ACCESS TO MACHINE FOR OPERATION & MAINTENANCE.
2. CONTRACTOR TO FIELD MEASURE EXISTING WOOD WORKING EQUIPMENT & FABRICATE SHEET METAL HOODS AS REQUIRED.
3. PROVIDE 40ø (1 1/2"ø) FLEXIBLE CONNECTION TO SAFETY GUIDE AS REQUIRED.

DISC SANDER DUST COLLECTOR




NOTE:
1. LOCATE VERTICAL DUCT DROPS TO MACHINE FOR PROPER OPERATION & MAINTENANCE.
2. FIELD MEASURE EXISTING WOOD WORKING EQUIPMENT & MANUFACTURE SHEET METAL HOODS AS REQUIRED.
3. EPOXY PAINT CONTACT SURFACES INCLUDING I/S PLENUM.
4. 14 GA. SATIN COAT; TACK AND SEAL.

DUST COLLECTION – RADIAL ARM SAW

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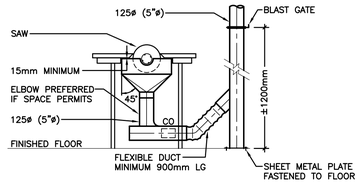
RADIAL ARM SAW EXTRACTOR (MITRE SAW SIMILAR)




NOTE:
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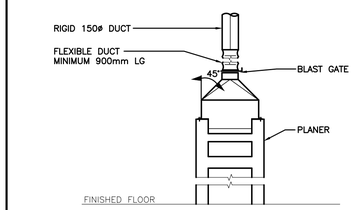
TABLE SAW DUST COLLECTOR

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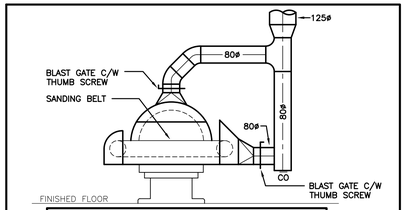
PLANER DUST COLLECTOR

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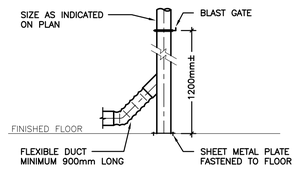
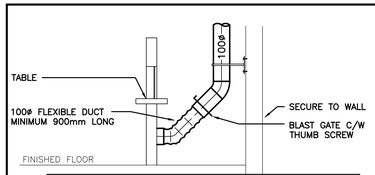
2. FIELD MEASURE EXISTING WOOD WORKING EQUIPMENT & MANUFACTURE SHEET METAL HOODS AS REQUIRED

BELT SANDER DUST COLLECTOR

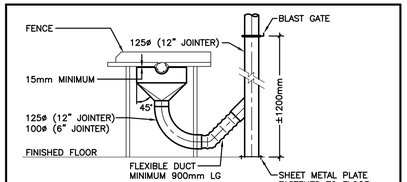



CONSTRUCTION TYPICAL EQUIPMENT CONNECTION



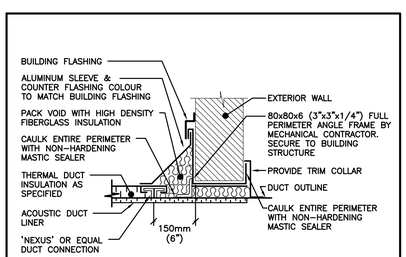

NOTE:
1. LOCATE VERTICAL DUCT DROPS TO MACHINE FOR PROPER OPERATION & MAINTENANCE.
2. FIELD MEASURE EXISTING WOOD WORKING EQUIPMENT & MANUFACTURE SHEET METAL HOODS AS REQUIRED.

BANDSAW DUST COLLECTOR



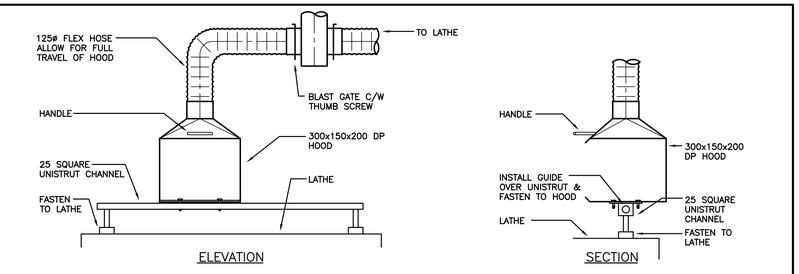

NOTE:
1. CONTRACTOR SHALL LOCATE VERTICAL DUCT DROPS TO FACILITATE EASY ACCESS TO MACHINE FOR OPERATION & MAINTENANCE.
2. CONTRACTOR TO FIELD MEASURE EXISTING WOOD WORKING EQUIPMENT & FABRICATE SHEET METAL HOODS AS REQUIRED.

JOINTER DUST COLLECTOR

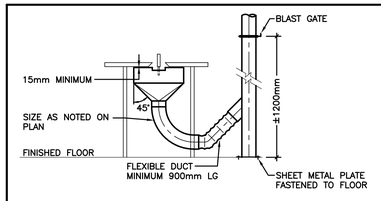



NOTE: VERTICAL ADJUSTMENTS MAY BE REQUIRED ON SITE

DUCT THRU EXTERIOR WALL




LATHE DUST COLLECTOR




NOTE:
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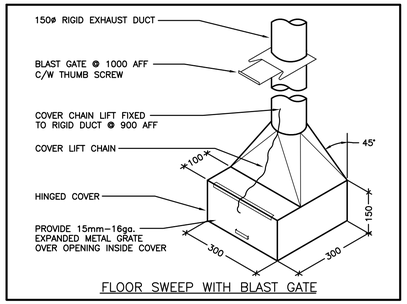
SPINDLE SANDER DUST EXTRACTOR




FLOOR SWEEP WITH BLAST GATE

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Phone: 519-725-3555 Fax: 519-725-2515
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Project Number: 20324

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LICENSED PROFESSIONAL ENGINEER
25 Feb 22
M.B. WHITE
100190774
PROVINCE OF ONTARIO

| No. | Rivision | Date |
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| 1 | ISSUED FOR OWNER'S REVIEW | 12/22/2021 |
| 2 | ISSUED FOR PERMIT AND TENDER | 02/25/2022 |

project
WRDSB GRAND RIVER COLLEGIATE INSTITUTE
RENOVATIONS

WATERLOO REGION DISTRICT SCHOOL BOARD
175 INDIAN RD, KITCHENER, ON N2B 2S7

drawing
DUST COLLECTOR DETAILS

drawing scale
AS NOTED

ward99 project number
20038 - WRDSB GRAND RIVER

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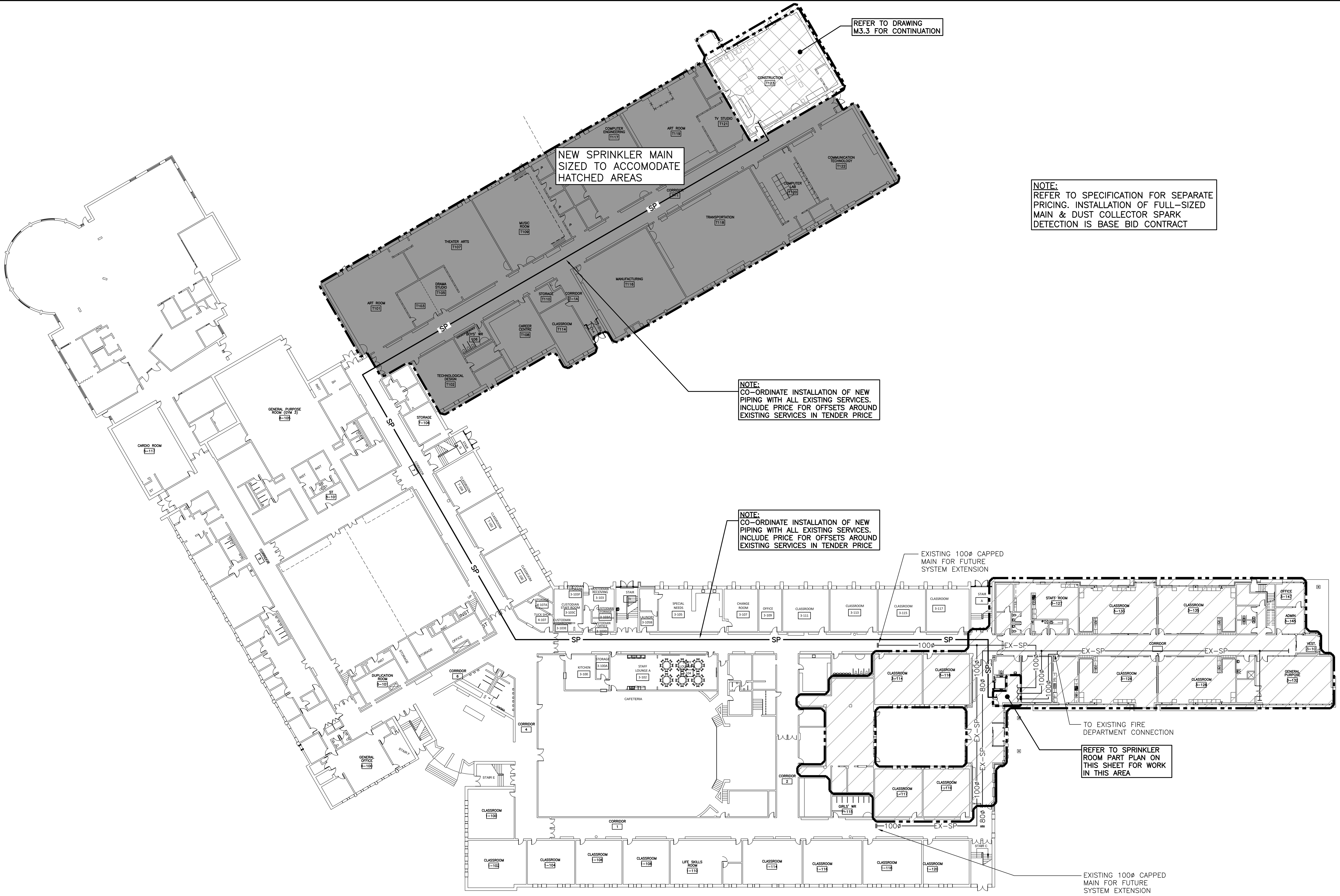
drawing no.
M3.5




FIRST FLOOR PLAN – FIRE PROTECTION RENOVATION
SCALE: 1:400

## GENERAL SPRINKLER NOTES

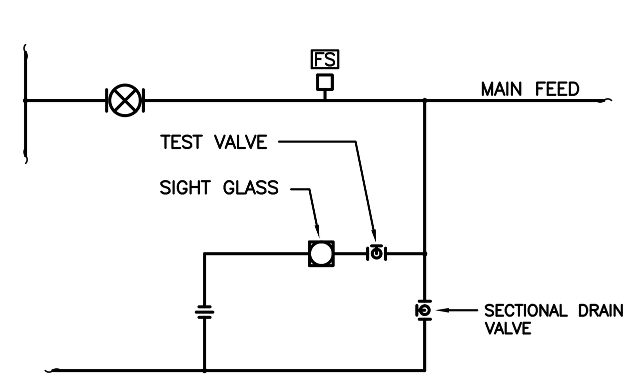
- SUBMIT PRELIMINARY DESIGN & HYDRAULIC CALCULATIONS STAMPED BY A PROFESSIONAL ENGINEER, AND MANUFACTURERS' PRODUCT SHEETS FOR SHOP DRAWING SUBMISSION AS SPECIFIED PRIOR TO COMMENCING WORK.
- ENSURE DESIGN MEETS OR EXCEEDS PRESENT NFPA 13 STANDARDS. ENSURE SPRINKLER SYSTEMS ARE INSTALLED TO NFPA 13 STANDARDS. UPON COMPLETION, SPRINKLER CONTRACTOR TO PROVIDE REPRODUCIBLE DRAWING (AT 1=100 SCALE) AND HYDRAULIC CALCULATIONS OF AS-BUILT CONDITION.
- SPRINKLER CONTRACTOR'S 'PROFESSIONAL ENGINEER' TO PROVIDE O.B.C. AND NFPA REQUIRED INSPECTION AND CERTIFICATION.
- REFER TO ARCHITECTURAL DRAWINGS FOR REFLECTED CEILING PLAN.
- PROVIDE SPRINKLER HEAD TYPES AS FOLLOWS:
  - PROVIDE UPRIGHT HEADS WITHIN 12" OF EXPOSED DECK THROUGHOUT EXPOSED STRUCTURE AREAS. PROVIDE HEAD GUARDS IN GYM, AREAS WHERE HEADS ARE BELOW 8'-0" & STORAGE ROOMS.
  - PROVIDE CONCEALED PENDENT HEADS IN CEILINGS OF UNSUPERVISED AREAS (CORRIDORS, CHANGE ROOMS AND WASHROOMS). COVER PLATE FINISH SELECTED BY CONSULTANT.
  - PROVIDE SEMI-RECESSED HEADS IN ALL OTHER CEILING AREAS (CLASSROOMS, OFFICES, SEMINAR ROOMS, etc.). HEAD & ESCUTCHEON FINISH SELECTED BY CONSULTANT.
- SPRINKLER HEADS TO BE IN CENTRELINE OF CEILING TILE. MINIMUM 150mm (6") FROM EDGE.
- FINAL NUMBER AND LOCATION OF SPRINKLER HEADS TO BE DETERMINED BY CONTRACTOR'S HYDRAULIC CALCULATIONS AND APPROVED DRAWINGS.
- SPRINKLER PIPING TO BE COORDINATED WITH OTHER SERVICES PRIOR TO INSTALLATION
- PROVIDE SPRINKLER HEADS UNDER ALL DUCTWORK AND EQUIPMENT OVER 1200mm WIDE.
- SPRINKLER CONTRACTOR TO VISIT SITE AND EVALUATE EXISTING CONDITIONS PRIOR TO TENDER CLOSING. INCLUDE ALL MODIFICATIONS IN TENDER PRICE.
- COMMISSIONING OF INTEGRATED TESTING OF FIRE PROTECTION AND LIFE SAFETY SYSTEM.
  - SPRINKLER CONTRACTOR TO PROVIDE SERVICES WITH THE FIRE COMMISSIONING AGENT (FCA) TO MEET THEIR REQUIREMENTS OF ADMINISTRATION, VERIFICATION, AND FINAL SIGNOFF TO THE LOCAL AUTHORITIES AND CONSULTANT. THE FCA IS BEING RETAINED BY THE ELECTRICAL CONTRACTOR, HOWEVER, THIS CONTRACTOR'S WORK TO SATISFY THE FCA REQUIREMENTS SHALL BE INCLUDED IN THE TENDER PRICE.
  - CHECK/TEST: MOVEMENT OF ALL VALVES, CREATE WATER FLOW AT ALL DEVICES TO VERIFY DETECTION AT FIRE ALARM PANEL, OPERATION OF ALL PUMPS &/OR COMPRESSORS.
  - PERFORM ALL WORK IN ACCORDANCE WITH NFPA 3.
  - RETURN SPRINKLER/STANDPIPE SYSTEM TO NORMAL OPERATION ON COMPLETION OF TESTING

## SPRINKLER LEGEND

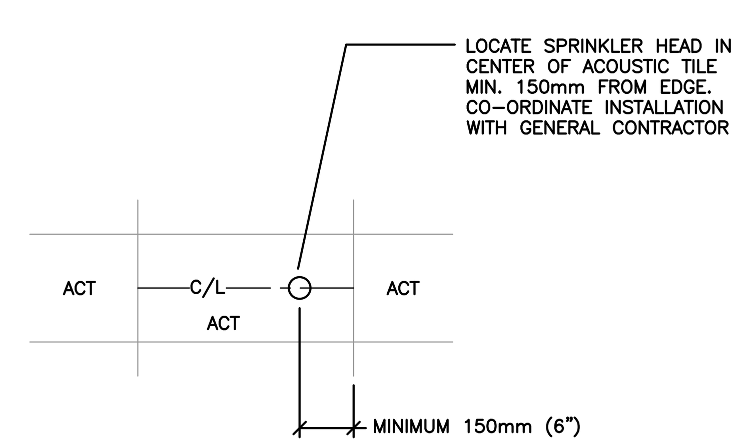
DENOTES AREA WITH EXISTING SPRINKLER COVERAGE

DENOTES AREA FOR FUTURE SPRINKLER COVERAGE (REFER TO SEPARATE PRICING)

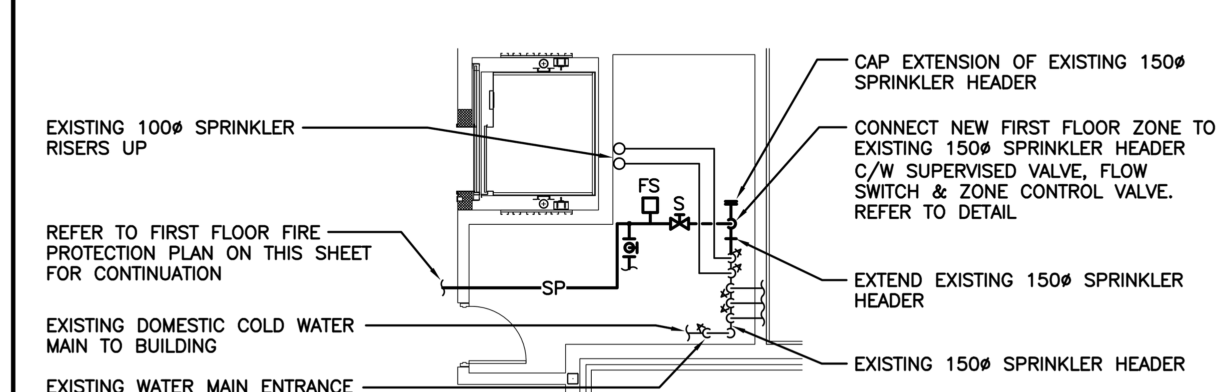
DENOTES AREA TO PROVIDE FULL SPRINKLER COVERAGE (REFER TO SEPARATE PRICING)




SPRINKLER ZONE CONTROL VALVE




SPRINKLER HEAD IN ACOUSTIC TILE




SPRINKLER ROOM PART PLAN
SCALE: 1:100

## SPRINKLER SYSTEM SHUT DOWN

- THIS CONTRACTOR SHALL NOTIFY THE BUILDING DEPARTMENT AND THE AUTHORITY HAVING JURISDICTION IN WRITING SEVENTY TWO (72) HOURS IN ADVANCE OF ANY WORK. IT IS THE RESPONSIBILITY OF THE SPRINKLER CONTRACTOR TO PROVIDE A TWENTY FOUR (24) HOUR FIRE WATCH, WHILE THE COMPLETE EXISTING STANDPIPE SYSTEM IS NOT IN OPERATION. ALL COSTS ASSOCIATED WITH THE FIRE WATCH AND/OR ALL REQUIREMENTS BY THE BUILDING DEPARTMENT AND/OR AUTHORITY HAVING JURISDICTION, (WHILE THE EXISTING SPRINKLER SYSTEM IS SHUT DOWN) SHALL BE BORNE BY THE SPRINKLER CONTRACTOR.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Project Number: 20324



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LICENSED PROFESSIONAL ENGINEER
25 Feb 22
M.B. WHITE
100149074
PROVINCE OF ONTARIO

GEODETIC NORTH
PROJECT NORTH

| No. | Rivision | Date |
|---|---|---|
| 1 | ISSUED FOR OWNER'S REVIEW | 12/22/2021 |
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project
WRDSB GRAND RIVER COLLEGIATE INSTITUTE RENOVATIONS

WATERLOO REGION DISTRICT SCHOOL BOARD
175 INDIAN RD. KITCHENER, ON N2B 2S7

drawing
FIRST FLOOR PLAN - FIRE PROTECTION

drawing scale
AS NOTED

ward99 project number
20038 - WRDSB GRAND RIVER


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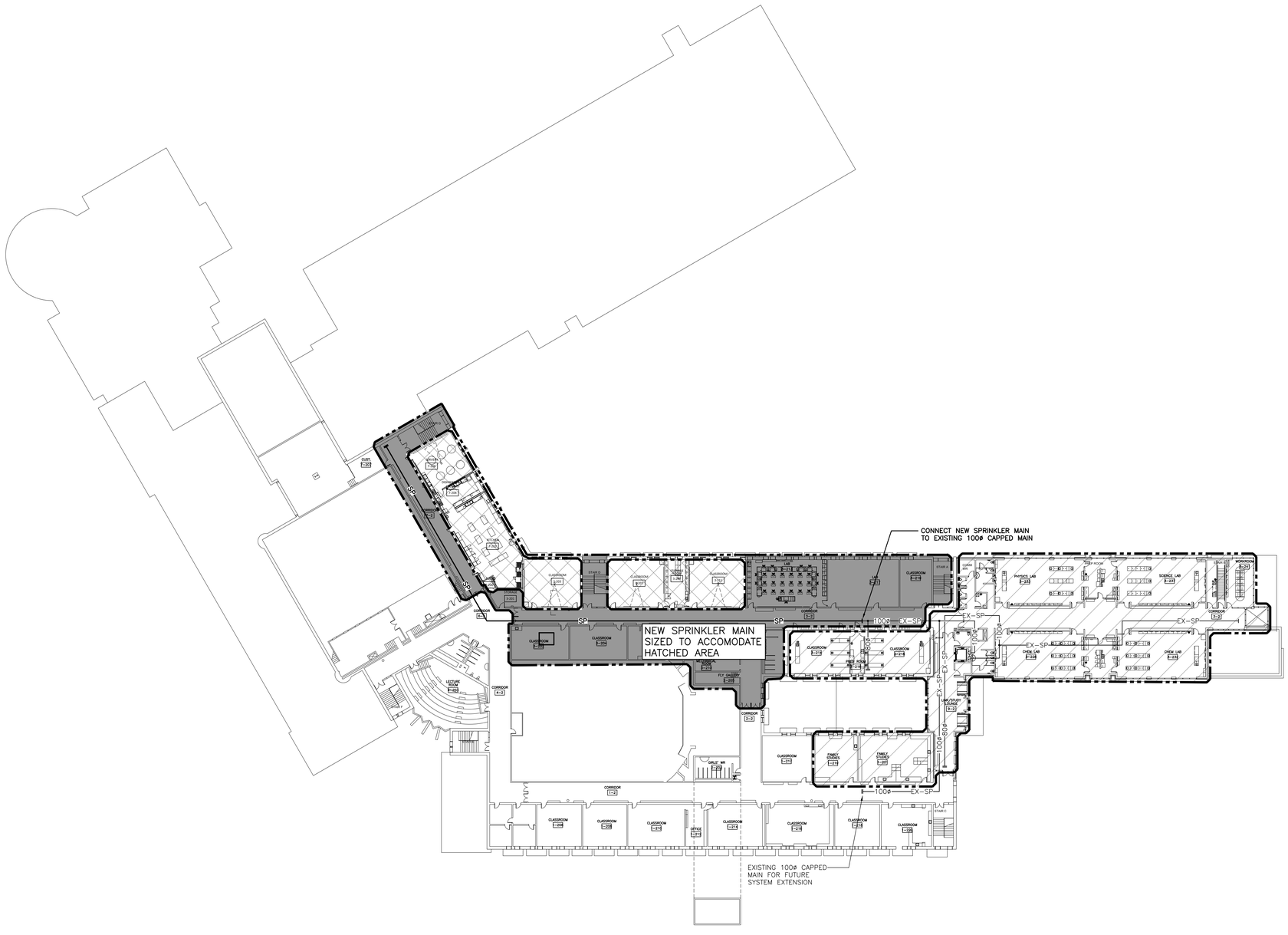
drawing no.
M4.1




## SECOND FLOOR PLAN – FIRE PROTECTION RENOVATION

SCALE: 1:400

## GENERAL SPRINKLER NOTES

- SUBMIT PRELIMINARY DESIGN & HYDRAULIC CALCULATIONS STAMPED BY A PROFESSIONAL ENGINEER, AND MANUFACTURERS' PRODUCT SHEETS FOR SHOP DRAWING SUBMISSION AS SPECIFIED PRIOR TO COMMENCING WORK.
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  - PERFORM ALL WORK IN ACCORDANCE WITH NFPA 3.
  - RETURN SPRINKLER/STANDPIPE SYSTEM TO NORMAL OPERATION ON COMPLETION OF TESTING

## SPRINKLER LEGEND

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DENOTES AREA FOR FUTURE SPRINKLER COVERAGE (REFER TO SEPARATE PRICING)

DENOTES AREA TO PROVIDE FULL SPRINKLER COVERAGE (REFER TO SEPARATE PRICING)

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Phone: 519-725-3555 Fax: 519-725-2515
Website: deiassociates.ca
Project Number: 20324

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LICENSED PROFESSIONAL ENGINEER
25 Feb 22
M.B. WHITE
100190175
PROVINCE OF ONTARIO

| No. | Rivision | Date |
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PROJECT NORTH
GRAND RIVER COLLEGIATE INSTITUTE

project
WRDSB GRAND RIVER COLLEGIATE INSTITUTE
RENOVATIONS

WATERLOO REGION DISTRICT SCHOOL BOARD
175 INDIAN RD, KITCHENER, ON N2B 2S7

drawing
SECOND FLOOR PLAN - FIRE PROTECTION

drawing scale
AS NOTED

ward99 project number
20038 - WRDSB GRAND RIVER

ward99 architects
ward99 architects inc.
7500 Highway 27, Unit 27B
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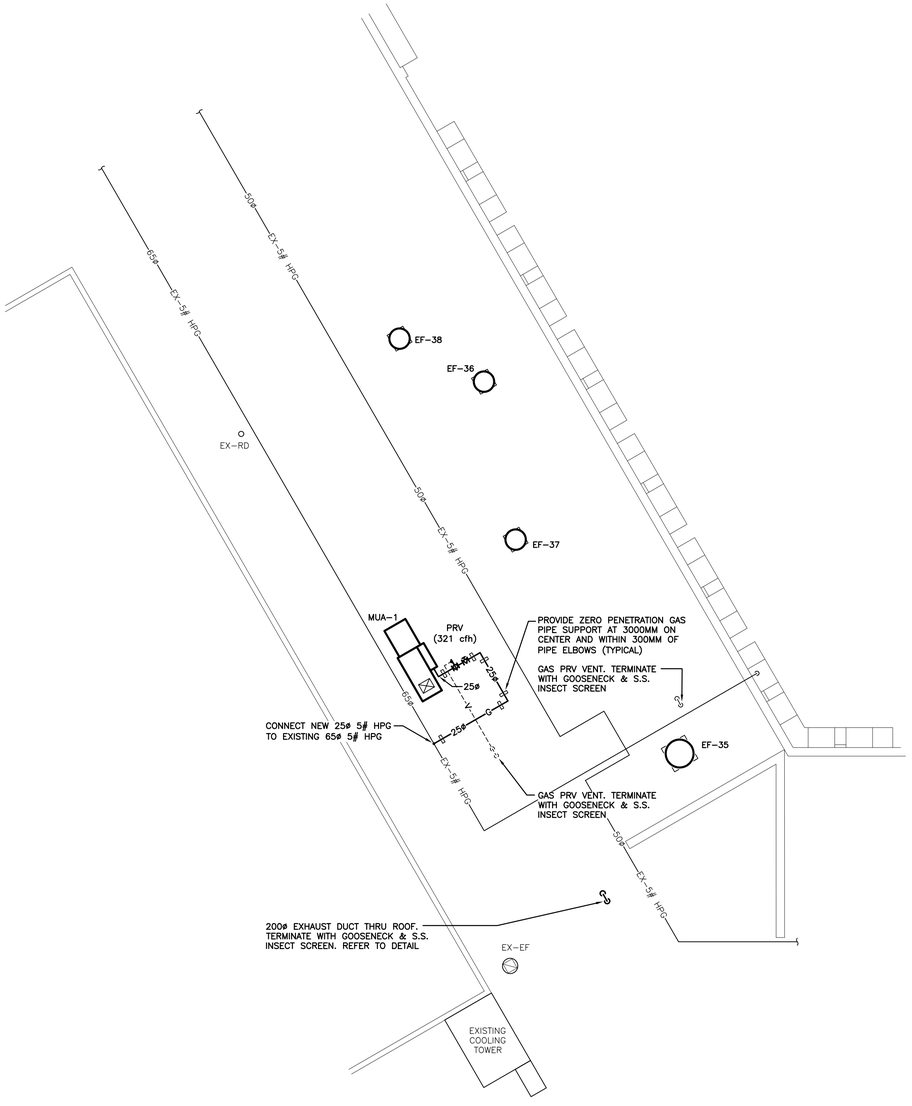
416 613 5880 www.ward99architects.com

drawing no.
M4.2

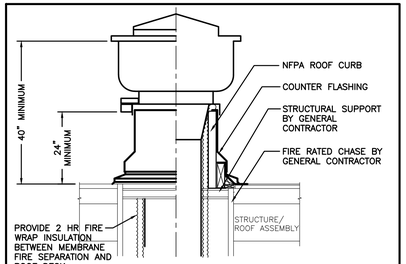



ROOF PLAN

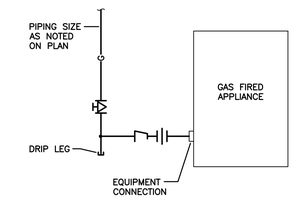
SCALE: 1:100

## GENERAL NOTES

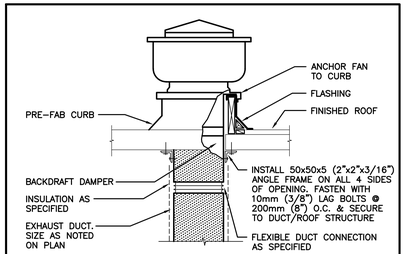
- MAINTAIN MINIMUM 3700mm (12'-0") LATERAL DISTANCE BETWEEN SANITARY VENTS AND ALL AIR INTAKE/EXHAUST OPENINGS.
- MAINTAIN MINIMUM 3000mm (10'-0") LATERAL DISTANCE BETWEEN PRV, FUEL FIRED APPLIANCE, AND/OR EXHAUST VENTS AND ALL AIR INTAKE/EXHAUST OPENINGS.
- ALL EQUIPMENT SHALL BE MINIMUM 3.0m FROM EDGE OF ROOF.



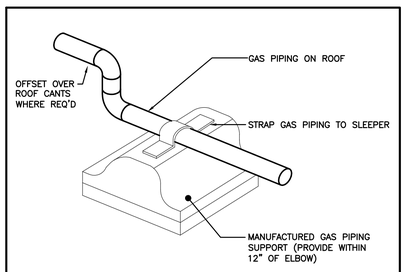

NFPA EXHAUST FAN INSTALLATION



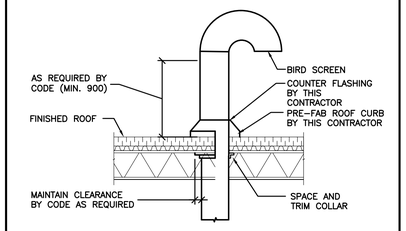

GAS PIPING CONNECTION



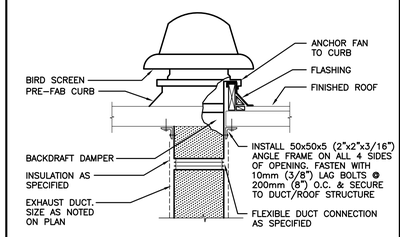

UPBLAST EXHAUST FAN INSTALLATION




GAS PIPE SUPPORT ON ROOF




EXHAUST GOOSENECK DETAIL




EXHAUST FAN ON ROOF

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LICENSED PROFESSIONAL ENGINEER
25 Feb 22
M.B. WHITE
100190174
PROVINCE OF ONTARIO

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GRAND RIVER COLLEGIATE INSTITUTE
PROJECT NORTH

project
WRDSB GRAND RIVER COLLEGIATE INSTITUTE RENOVATIONS

WATERLOO REGION DISTRICT SCHOOL BOARD
175 INDIAN RD, KITCHENER, ON N2B 2S7

drawing
ROOF PLAN & DETAILS

drawing scale
AS NOTED

ward99 project number
20038 - WRDSB GRAND RIVER

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drawing no.
M5.1