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CHECK AND VERIFY ALL DIMENSIONS AT THE SITE.
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AND SEALED BY THE CONSULTANT.

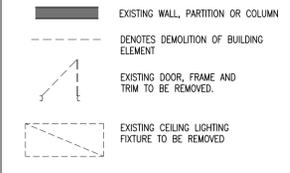


NO.	ISSUES/ REVISIONS	DATE	BY
1	Issued for Permit and Tender	Feb. 27, 2026	BBA

TYPICAL DEMOLITION NOTES

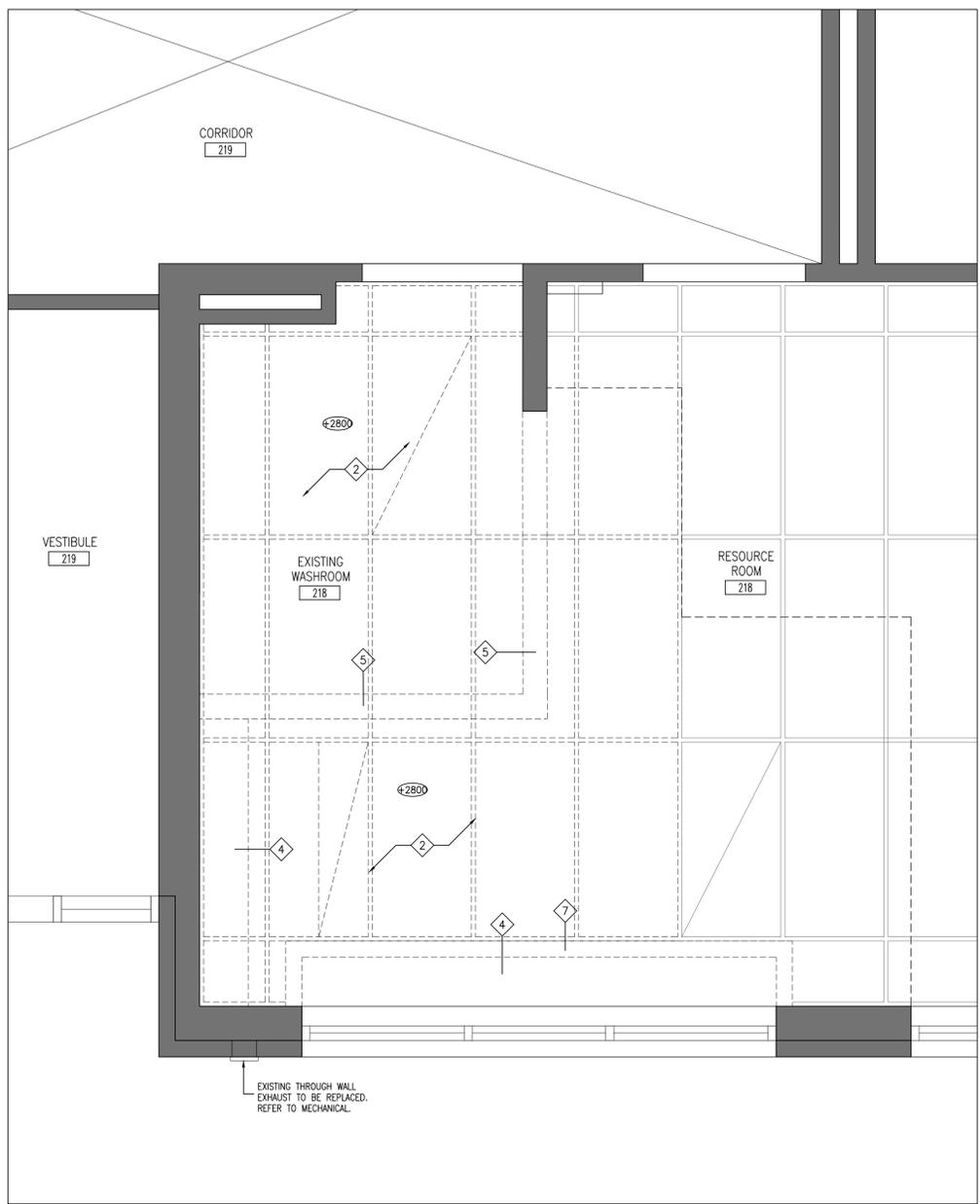
- SITE VERIFY ALL DIMENSIONS AND CONDITIONS.
- ALL WORK TO BE IN ACCORDANCE WITH THE ONTARIO BUILDING CODE AND THE OCCUPATIONAL HEALTH AND SAFETY ACT REGULATIONS FOR CONSTRUCTION PROJECTS.
- PROVIDE PROTECTION IN LOCATIONS APPROVED BY THE OWNER AND CONSULTANT SO AS NOT TO DAMAGE EXISTING STRUCTURE, OR PART THEREOF.
- COMPLETE ALL DEMOLITION WORK NECESSARY TO COMPLETE THE RENOVATIONS AS SHOWN AND AS REQUIRED. DEMOLITION OF BUILDING ELEMENTS INCLUDES COMPLETE REMOVAL OF ALL ASSOCIATED FIXTURES, FITTINGS, HARDWARE, FASTENERS, EQUIPMENT AND ACCESSORIES UNLESS NOTED OTHERWISE.
- ARCHITECTURAL, MECHANICAL AND ELECTRICAL DEMOLITION DRAWINGS ARE COMPLEMENTARY AND SHALL BE READ TOGETHER.
- NOTIFY CONSULTANT OF LOAD BEARING MEMBERS OR ASSEMBLIES IDENTIFIED OR DISCOVERED DURING WORK AND NOT INDICATED ON DRAWINGS. DO NOT PROCEED WITH REMOVALS WITHOUT PRIOR REVIEW BY THE CONSULTANT.
- PROVIDE TEMPORARY SUPPORT OF PIPES, DUCTS AND ELECTRICAL CHASES AS REQUIRED FOR SAFE REMOVAL. EXISTING AND PROPOSED SUPPORTS ARE TO BE REVIEWED BY THE CONSULTANT PRIOR TO THE REMOVAL OF ANY COMPONENTS WHICH MAY FALL, OR CAUSE OTHERS TO FALL.
- MAINTAIN WORK AREAS AND STORAGE AREAS CLEAN AND ORDERLY AT ALL TIMES.
- DEMOLITION INCLUDES ALL ASSOCIATED MECHANICAL AND ELECTRICAL SERVICES, EQUIPMENT, FITTINGS, FIXTURES, HANGERS, BRACKETS, TRIM AND ACCESSORIES AS REQUIRED TO COMPLETE THE WORK.
- MAINTAIN EXISTING FIRE HOSE CABINETS AND FIRE RATINGS.
- REMOVAL ALL PROTRUSIONS IN FLOOR SLAB AND GRIND DOWN TO FLOOR LEVEL.
- CLEAN AND REPAIR ALL EXISTING SURFACES TO REMAIN, AS NECESSARY TO RECEIVE NEW FINISHES.
- DISCONNECT AND CAP OFF ALL SERVICES PRIOR TO DEMOLITION.
- DISPOSE OF ALL MATERIALS OFF SITE. COORDINATE ITEMS FOR SALVAGE / HANDOVER WITH OWNER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING STRUCTURE OR FINISHES SHOWN TO REMAIN AND REPAIR / REPLACE SAME TO THE SATISFACTION OF THE OWNER AND CONSULTANT.
- CONSTRUCTION AREA TO BE SECURED AT ALL TIMES.
- WHERE EXISTING CONSTRUCTION IS FOUND TO CONTAIN ANY HAZARDOUS MATERIAL, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND THE CONSULTANT IN WRITING. NOTE: REMOVAL, DISPOSAL AND REPLACEMENT OF THE HAZARDOUS MATERIAL SHALL BE IN ACCORDANCE WITH PROVINCE, LOCAL AND FEDERAL REGULATIONS. DESIGNATED SUBSTANCE SURVEY WAS COMPLETED NO CONCERNS WERE IDENTIFIED.
- REMOVE EXISTING CEILINGS FOR EXTENT SHOWN AND AS REQUIRED. HAND OVER REDUNDANT HVAC DIFFUSERS AND GRILLES TO OWNER FOR REUSE. PROVIDE NEW CEILING TRIM AND GRID SYSTEM TO MATCH EXISTING WHERE REQUIRED TO MAKE GOOD EXISTING CEILINGS.

DEMOLITION LEGEND

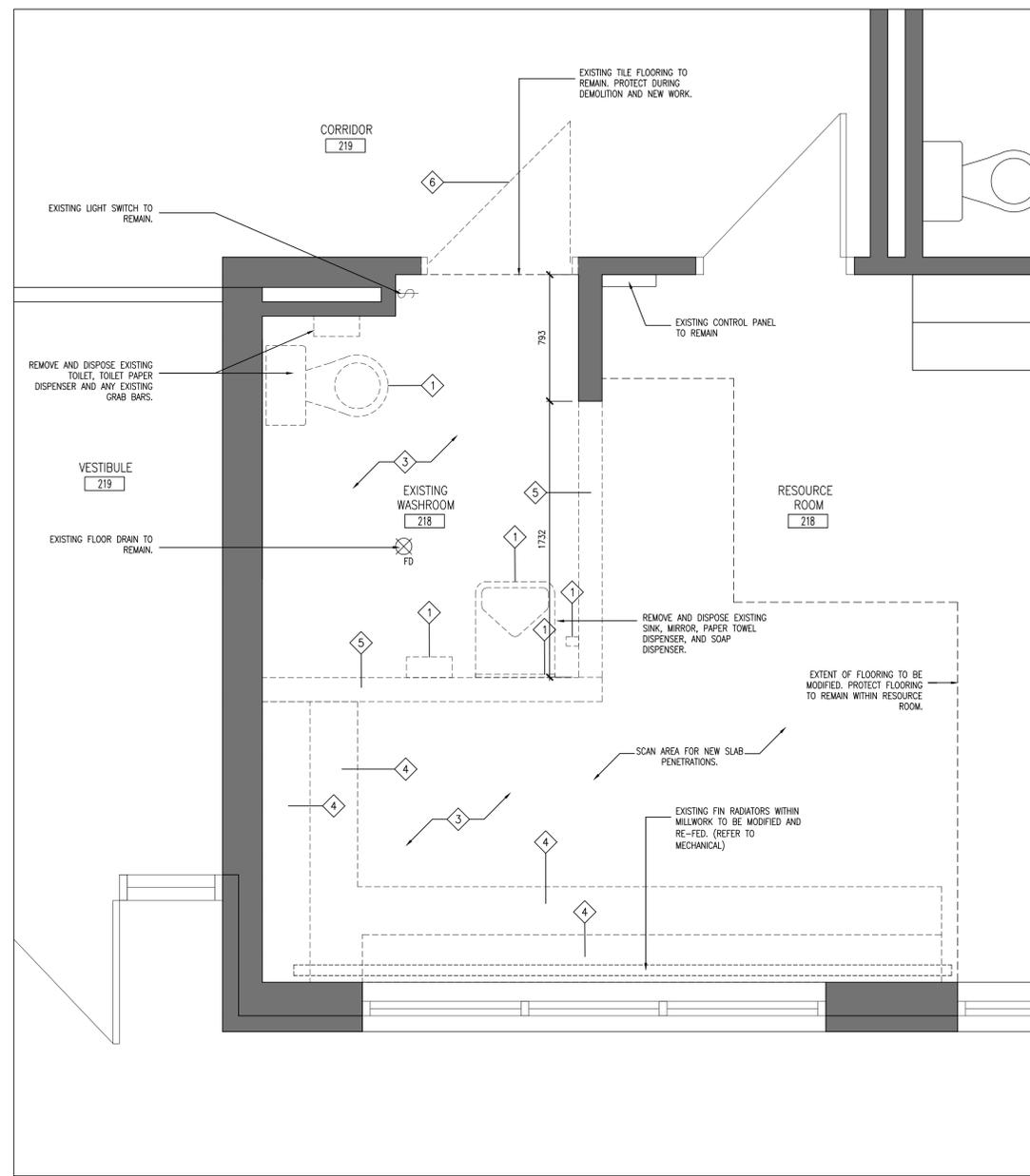


DEMOLITION NOTES

- REMOVE AND DISPOSE OF EXISTING PLUMBING FIXTURE. PATCH AND REPAIR TO MAKE GOOD.
- REMOVE AND DISPOSE EXISTING AC/CEILING SYSTEM, LIGHTING FIXTURES AND DEVICES AS REQUIRED TO COMPLETE THE RENOVATION SCOPE OF WORK. REFER TO MECHANICAL/ELECTRICAL DRAWINGS FOR MORE DETAILS.
- REMOVE AND DISPOSE OF EXISTING FLOOR TILE AND RUBBER WALL BASE. GRIND SURFACE FLOORING AND EXISTING SURFACES TO RECEIVE NEW FLOORING AND BASE AS SCHEDULED.
- REMOVE AND DISPOSE OF EXISTING MILLWORK, PATCH AND REPAIR ALL AFFECTED AREAS.
- REMOVE AND DISPOSE OF EXISTING PARTITION WALL TO EXTENT SHOWN. PATCH AND REPAIR ALL AFFECTED AREAS.
- REMOVE AND DISPOSE OF EXISTING DOOR, FRAME, AND TRIM. PATCH AND REPAIR WALL TO MAKE GOOD.
- REMOVE AND DISPOSE OF EXISTING BULKHEAD. PATCH AND REPAIR ALL AFFECTED AREAS.



2 LEVEL 2 DEMOLITION RCP
A201 1:20



1 LEVEL 2 DEMOLITION PLAN
A201 1:20

NOVADYNE

269 North Indian Road Tel: (705) 696-2119
Hastings, ON, Canada
K0L 1Y0



PROJECT:
IMMACULATE CONCEPTION
C.E.S.
NEW UNIVERSAL WASHROOM

76 Robinson Street
Peterborough, ON K9H 1E8
PVNCCDSB

DRAWING:
DEMOLITION
FLOOR PLAN, &
DEMOLITION RCP

DESIGN BY: BBA
DRAWN BY: D.G.
CHECKED BY: CC
DATE: 26-01-07
SCALE: 1:20



PROJECT NO: DRAWING NO:

25223 A201

15100 BASIC REQUIREMENTS

1.0 SCOPE OF WORK

- 1.1 Provide all labour, materials equipment and services for the mechanical work involved for the construction of the new Universal Washroom. The work includes, but not limited to:
 - replace the existing exhaust fan and exhaust ducting.
 - modify the heating rods in the adjacent room
 - supply and install plumbing fixtures as described on the drawings.
 - supply and install a new cabinet heater with connections to the heating system.
 - work with the Board's controls contractor to modify the BMS controls for the school.
 - work must be complete by last August for the start of school in September.
- 1.2 Upon completion of the work leave all systems in proper operating order and the premises in a clean and tidy condition to the satisfaction of the Consultant.

2.0 REGULATIONS, CODES AND STANDARDS

- 2.1 The work shall accord strictly with all rules, regulations, by-laws and the requirements and interpretations of all authorities having jurisdiction.
- 2.2 Drawings and specifications should not conflict with the above regulations, but where there are apparent discrepancies the Contractor shall notify the Consultant in writing and obtain clarification before proceeding with the work.
- 2.3 The work of the mechanical division shall conform to the following Codes, Regulations and Standards including, unless referenced otherwise, latest revisions issued up to date of tender submission.
 1. The Ontario Building Code, to Ontario Regulation 332/12 with amendments.
 2. NFPA 90A with respect to Air Conditioning and Ventilating Systems.
 3. NFPA 90B with respect to Warm Air Heating and Air Conditioning Systems.
 4. ASHRAE Guide and Data Books.
 5. SMACNA "HVAC Duct Construction Standards"
 6. All other codes, standards, regulations referred to in the above documents, adopted by the authorities having jurisdiction and/or applicable to the work of this Division as shown on the contract documents.
 7. Ontario Natural Gas Utilization Code CGA/CSA B149.1.

3.0 EXAMINATION OF SITE

- 3.1 The actual location of existing services shall be verified in the field before work is commenced.

4.0 DRAWINGS, CHANGES AND INSTALLATIONS

- 4.1 The drawings shall be considered to show the general character and scope of the work and not the exact details of the installation. The installation shall be complete with all accessories required for a complete and operative installation. The Consultant reserves the right to make reasonable changes required to accommodate conditions arising during the progress of the work, at no extra cost to the Owner.

5.0 RECORD DRAWINGS

- 5.1 The Contractor shall clearly mark, as the job progresses, all changes and deviations from that shown on contract drawings. On project completion, the Contractor shall forward to the Consultant one set of drawings indicating the as-built conditions.

6.0 SHOP DRAWINGS

- 6.1 Submit three copies of shop drawings or digital pdfs which indicate clearly the materials and/or equipment actually being supplied, all details of construction, accurate dimensions, capacity, operating characteristics and performance shall be submitted to the Consultant for approval. Each shop drawing shall give the identifying number of the specific pump, fan, etc. for which it was prepared (e.g. Fan F-7) Shop Drawings in pdf format are acceptable.

- 6.2 Prior to submission to the Consultant, **THE CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS AND APPROVE THEM**, indicating that the drawings have been checked and the described equipment has been co-ordinated.

- 6.3 Installation of any equipment shall not be commenced until after shop drawings have been reviewed by the Consultant.

- 6.4 Bind one complete set of reviewed Shop Drawings into each operating and maintenance instruction manual.

7.0 QUALIFICATION OF TRADESMEN

- 7.1 The Contractor shall maintain at the job site, at all times, qualified personnel and supporting staff, with proven experience in erecting, supervising, testing and adjusting projects of comparable nature and complexity.

8.0 PRODUCT DELIVERY, STORAGE AND HANDLING

- 8.1 Inspect products delivered to the site, and before acceptance ensure that the product is: new, the best of its respective kind, free from defects, is as specified, and is as per reviewed shop drawings, all in accordance with the Contract Documents.
- 8.2 Store materials only in designated areas and protect as necessary to maintain materials in new condition.
- 8.3 Any unpainted steel surface shall be prime coated under this Division.

9.0 WARRANTY

- 9.1 The Contractor shall provide a warranty of one year for all systems and equipment installed under this contract. The Contractor agrees to correct promptly, at his own expense, defects or deficiencies in the Work which appear prior to and during the period of one year from the date of acceptance by the Owner of the Work or portions of the work.

10.0 OPERATION AND MAINTENANCE INSTRUCTIONS

- 10.1 Three (3) copies of complete operating and maintenance instructions for all mechanical equipment and systems, bound in hard covered manuals, shall be supplied.
- 10.2 INSTRUCTIONS TO OWNER

- 11.1 Instruct the Owner's representative(s) in all respects of the operation and maintenance of systems and equipment. Obtain in writing from the Consultant a list of the Owner's representative(s) qualified to receive instructions.

15200 BASIC MATERIALS AND METHODS

1.0 MATERIALS

- 1.1 Make and quality of materials in the construction of this project shall be subject to the approval of the Consultant.
- 1.2 Materials and equipment supplied by this Division shall be new and free from defects and shall be equivalent in physical characteristics and performance to that specified by the manufacturer's name and catalogue number.
- 2.0 CUTTING, PATCHING, SLEEVES AND ESCUTCHEONS

- 2.1 The Contractor shall co-ordinate on site the position of all sleeves and openings required for the work.
- 2.2 Openings shall be made at the expense of the mechanical division, except for lower openings which shall be co-ordinated with the general contractor. Cutting of structural members shall not be permitted without specified written approval by the Consultant.
- 2.3 All drilling for hangers, rod inserts and work of similar nature shall be done under this contract.
- 2.4 It shall be the responsibility of the mechanical division to locate and provide anchor bolts, equipment bases and curbs.

3.0 HANGERS AND EQUIPMENT SUPPORTS

- 3.1 Piping and equipment provided under the mechanical division shall be complete with all necessary supports and hangers required for a safe and workmanlike installation. Auxiliary structural members shall be provided under the mechanical section concerned, where piping, ducts or equipment must be suspended between the joists or beams of the structure.
- 3.2 New steel supports are to be primed with red oxide primer and painted with alkylid enamel.
- 3.3 Ceiling tiles will be removed by this Contractor. Damaged tiles will be replaced by the

4.0 ELECTRICAL CHARACTERISTICS

- 4.1 Electric motors for all driven equipment supplied under the mechanical division shall be provided and installed under this Division.
- 4.2 Motors shall have the following electrical characteristics, unless otherwise specified:
For 1/3 HP or larger - 208 volt - 3 ph - 60 Hz (HOLD)
For 1/4 HP and smaller - 120 volt - 1 ph - 60 Hz

5.0 ACCESS PANELS AND ACCESSIBILITY

- 5.1 All parts of the installation requiring periodic maintenance shall be accessible. Wherever valves, dampers, etc. are concealed by the building construction, access doors or panels shall be furnished by this section and installed under this contract. The mechanical division shall be responsible for their proper location.

6.0 CLEANING

- 6.1 Clean thoroughly all fixtures and equipment from grease, dirt, plaster or any other foreign material. Any dirt, rubbish or grease on walls, floors or fixtures accumulated from the work of the mechanical division shall be removed promptly from the premises by this division.

7.0 COOPERATION WITH OTHER DIVISIONS

- 7.1 Each section shall confine itself to installing all materials in the spaces shown without encroaching upon space for materials installed under other sections or divisions. Where the space allotted to another section or division is encroached upon, the materials shall be relocated to their proper space allotments in such a manner to complete the work using space allotted to the

various sections and divisions. Relocation of materials and work involved shall be paid for by the section responsible for the encroachment at no extra cost to the Owner.

8.0 NAMEPLATES & SIGNS

- 8.1 Each piece of mechanical equipment shall be complete with a lamacoid nameplate securely fastened in a conspicuous place on the equipment. The nameplate shall be 3/32" thick laminated phenolic plastic 3-3/8" long x 1-5/8" wide with black face and white centre, 7/32" high lettering shall be engraved through to the white lamination with the following -
- Equipment type and number. E.g., Fan No.1, Pump No. 2 etc.
- 8.2 Supply and install piping and ductwork identification - plastic coated cloth material, waterproof self adhesive, with black letters 2" high, direction arrows to indicate direction of flow, 2" high x 6", black letters on white background. Locate on each side of penetration and every 20'-0".

9.0 MAINTENANCE MATERIALS

- 9.1 Lubricating oils, greases, spare parts, replacement parts and special maintenance and service tools where called for in the specifications shall be presented to the Owner during the instruction period.

10.0 DUCT CLEANING

- 10.1 The interiors of all new plenums, casings and ductwork, shall be clean at the completion of substantial performance.

15300 INSULATION AND LININGS

- 1.1 Pipe insulation to be rigid pre-formed fibre glass with factory applied vapour barrier and self seal lap joint equal to John Mansville Microlok HP. Insulation thickness to be as follows:
Pipe up to and including 1": 1" thick
Pipe between 1" and 2": 1.5" thick
Pipe above 2": 2" thick
- 1.2 Cover the insulation with PVC jackets, fire rated to 25/50, equal to John Mansville 'Zastan' PVC fitting covers and jacketing.
- 1.3 Install as per manufacturer's recommendations.
- 1.4 Insulation must be dust free, fibre free and resist mold and mildew.
- 1.5 Insulation materials to have a conductivity of .27 BTU-in/hr-ft² and have a flame -spread index of less than 25 and a smoke developed index of less than 50.
- 1.6 Fresh air supply and exhaust ducting to the outdoors is to be insulated with 2" fiberglass with foil and vapour barrier backing. FSK. Tape all joints with foil backed tape.

15400 PLUMBING SPECIFICATIONS

- 1.1 Reference: Ontario Building Code
- 1.2 Submit product data for plumbing fixtures, floor drains, etc.
- 1.3 Architectural drawings to govern the number and location of fixtures, except for floor drains.
- 1.4 Fixtures to be the product of one manufacturer and of the same type.
- 1.5 Trim in any one washroom to be the product of one manufacturer.
- 1.6 Exposed plumbing brass to be chrome plated.
- 1.7 PCW and DHW above ground main piping to be copper tube, hard drawn, type L to ASTM B88B. Bronze or copper fittings, soldering with lead free solder. Branch piping 1" or less into classrooms, and into washrooms may be PEX piping to CAN/CSA-B137.10
- 1.8 Isolation valves: Class 150, screwed or soldered, bronze body, chrome plated brass ball, PTFE teflon adjustable packing, brass gland, PTFE teflon seat, plastic coated steel handle.
- 1.9 Check valves: 200 lb. class, bronze body Watts CV or equal.
- 1.10 Below Grade Sanitary: PVC to CAN/CSA B181.2, solvent welded to ASTM D2235.
- 1.11 Above Grade Sanitary and Venting: PVC to CAN/CSA B182.2, solvent welded to ASTM D2235 with a flame spread rating of 25 or less. Pipe to be IPEX System 15. Pipe in ceiling space acting as a return or plenum is to be plenum rated with a flame spread of 25 and smoke developed of less than 50. Pipe to be equal to IPEX XFR.
- 1.12 Domestic water pipe insulation to be 1" thick preformed rigid fibre glass with factory applied vapour barrier and self seal lap joint equal to Manson Alley K with APT Jacket. Use premoled PVC covers for fittings over 1" in size.

2.0 Execution

- 2.1 Install buried pipe on a 6" bed of clean washed sand, shaped to accommodate fittings and to line and grade as indicated. Backfill with a further 6" layer of sand.
- 2.2 Install clean-outs as indicated and as required by code and at the base of soil stacks.
- 2.3 Sanitary and floor drains are to be trap seal primed from the nearest cold potable water supply. Provide trap seal primer to all hub drains for fan coil units. Trap seal primers must be installed with a backflow preventer suitable for "severe" test, meeting the requirements of CSA B64.10-187. Options are vacuum breakers, reduced pressure preventers or electronic primers.
- 2.4 Assemble piping using Code and ANSI standards. Maintain straight lines along walls for pipe routing.
- 2.5 Install isolation valves on each plumbing fixture supply line.
- 2.6 Pipe hot water relief lines to nearest floor drain or janitor's sink. Provide drain and vent if no floor drain is nearby.
- 2.7 Insulate all plumbing supply lines with fibrous glass split sectional pipe insulation as per 15300.
- 2.8 Flush out and rinse systems. Clean out orator screens and strainers. Leak test according to plumbing code before plumbing is closed in or buried. Notify Consultant 48 hours in advance.
- 2.9 Connect trap seal primer to floor drains from nearby faucet. Provide metering valve. Provide backflow protection device in supply to trap seal primer.
- 2.10 Seal all penetrations through fire separations (walls between suites, floors and ceilings) to Code and ULC requirements, Use fire proof caulking equal to Hilti FS-1.
- 2.11 PVC pipe penetrations through fire separations are to be protected with firestop collars, caulking , etc. and be ULC rated for the rating specified. Acceptable manufacturers are Hilti, 3M. Shop drawings are to be provided for all firestopping details.

15550 HEATING WATER AND GLYCOL PIPING AND SPECIALTIES

- 1.1 Carbon steel pipe: Sch 40 to ASTM A53 Gr. B, Design: 150 psig at 200oF.

1.2 Pipe Joints

- 1.2.1 NPS 2" and under: screwed fittings with teflon tape, thread taper to ANSI B2.1.
- 1.2.2 NPS 3" and above: welded piping system as specified below.

Welded Piping

- Butt welding fittings and flanges to CSA W47.1.
- Flanges: 150 lb. raised face (flat face on cast iron equipment only).
- Flange Gaskets: to ANSI B16.21
- Bolts and nuts: to ANSI B18.2.1 and ANSI B18.2.2 and to ASTM A307 Gr. B.

1.3 Fittings

- 1.3.1 NPS 2 and below: malleable iron, screwed, to ANSI B16.3, and ASTM A47, 3000 lb. rating, unions to be ANSI 3000 lb. class brass to iron seal, malleable iron to ASTM A47.
- 1.3.2 NPS 2" and above: Welded piping: schedule 40 carbon steel to ASTM A234 Gr. WPB, and ANSI B16.9, bevel edge.

1.4 Ball Valves

- 1.4.1 NPS 2" and under to be ANSI 150 lb. class, screwed, standard port, bronze body, chromed bronze ball, TFE seats, equal to Watts B-6000, MA Stewart B-3.
- 1.4.2 install drain valves at all low points. Valves to be 3/4" unless noted.

1.5 Butterfly Valves - none required

1.6 Swing Check Valves

- 1.6.1 NPS 2 and under, screwed to be ANSI 200 lb. class, bronze body, composition disc, screwed or bolted cover, equal to Crane 41, Watts CV
- 1.6.2 NPS 2 1/2 and up: ANSI 125 lb. class, 860 kPa, cast iron body, FF flange, bronze disc, bolted cap, equal to Watts CV

1.7 Gate Valves - none required

1.8 Expansion Joints - none required

1.9 Strainers

- 1.9.1 NPS 2 and below: Threaded, bronze body and brass screen, equal to Watts 7775
- 1.9.2 NPS 2 1/2 and above: Cast iron, 125 lb., brass screen, equal to Watts 77F

1.10 Thermowells - none required

1.11 Automatic Air Vent

- 1.11.1 Standard float vent with brass body and NPS 1/8 connection and rated at 100 psi working pressure.
- 1.11.2 Float: solid material suitable for 115oC working temperature.
- 1.11.3 Acceptance: Watts FV4. Amtral Nos. 700, 702; Maid-O-Mist No. 7; Braukman EA122, Taco 417.
- 1.11.4 install at all high points.

1.12 Air Separator In-Line - none required

1.13 Hydronic System Pressure Safety Relief Valve - no additional required

- 1.14 Balancing Valves: Install in glycol circuits where indicated shall be equipped with a balancing valve equal to Tour and Anderson 787. Units to be line size.

1.15 Backflow Preventers: None Required.

2.0 PART 3 - EXECUTION

- 2.1 Do all piping installation in accordance with manufacturer's recommendations and to code requirements. Hot welding permits are required for welding if any. The successful bidder will be provided with a procedure to follow when required.
- 2.2 Connect piping to valves, fittings, expansion tank, pumps, etc. as indicated and in accordance with manufacturer's

recommendations, unless otherwise indicated. Suspend piping with clevis hangers, spaced according to code requirements, allowing for expansion.

- 2.3 Flush piping prior to connecting to equipment. Closed water systems are to be cleaned and flushed thoroughly prior to putting into service.
- 2.4 Slope piping in direction of flow, 1 in. (25 mm) in 20 ft. (6 m), unless otherwise indicated, to facilitate drainage.
- 2.5 Use eccentric reducers at pipe size changes. Orient reducers to provide positive drainage or venting.
- 2.6 Provide for access to equipment, components and valves for maintenance and service.
- 2.7 Install valves with stems upright or horizontal unless approved otherwise.
- 2.8 Install strainers in horizontal or down-flow lines, ensuring clearance for basket removal.
- 2.9 Install air vents at high points of piping system.
- 2.10 Support expansion tank if any from wall or floor in accordance with manufacturer's recommendations. Ensure that tank does not support piping.
- 2.11 Pipe pressure relief lines to drain.
- 2.12 Hydrostatically test the system at 100 psig.
- 2.13 Contractor to flush and clean any altered heating loops.
- 2.14 Contractor to provide pipe sleeves for all piping penetrating masonry walls or other areas where abrasion may be present.

15600 SHEET METAL DUCTWORK AND SPECIALTIES

- 1.1 Make all ductwork, unless specifically noted otherwise, of galvanized sheet steel to ASTM A525-83, and according to the requirements of SMACNA for a 1" wg pressure class and a seal class of "C". Provide reinforcements fabricated from angles, zeos, or channels as per SMACNA. Support ducts with hangers and tie-rods.
- 1.2 Where ductwork passes through a wall or floor, other than when a fire damper is required, pack around the duct using a fire resistant material to ensure a sound and air-tight joint.
- 1.3 Make changes in direction of horizontal ducts with elbows having an inside radius not less than the width of the duct. Make a change of direction from horizontal to vertical duct with elbows having an inside radius equal to the depth of the duct. Where this is not possible due to the building construction, use turning vanes. These shall be hollow "Duro Vane Rail" manufactured by Duro Dyne or similar turning vanes acceptable to the Consultant. Square throat elbos are not acceptable.
- 1.4 Provide flexible connections at each air handling unit and fan to duct connection. The frame shall be galvanized sheet metal with fire-resistant neoprene coated glass fabric, clenched by double locked seams. Temperature rating shall be -40oF to 190oF.
- 1.5 Provide access panels at all grovity dampers, fire dampers, motorized dampers, coils, fan bearings or similar equipment requiring occasional maintenance or inspections Panels shall be 1" thick, insulated, low leakage, cam lock closure, and equal to Nalor Series 0800. Minimum size to be 12x12 or 2" less than the duct width squared.
- 1.6 For duct expansions, the angle formed at each side of the duct shall not exceed 20°. For contractions, the angle formed at each side of the duct shall not exceed 30°.
- 1.7 Provide take-off boots and balancing dampers at all branches according to SMACNA standards.
- 1.8 Grilles and Diffusers: Refer to schedules on drawings for size, colour and supplier.
- 1.9 Insulated flexible ducting is to be used to connect ductwork to ceiling diffusers. Maximum length of the flex ducting to be four feet. Ducting and insulation to meet NFPA requirements for to flame spread and smoke developed, 25/ 50. Support flexible ducting a minimum of every 5 feet.
- 1.10 Fire Dampers: None Required.

15900 GENERAL CONTROLS & BMS CONTROLS

- 1.1 BMS controls will be done by the Board's controls service contractor: Setpoint Controls, Peterborough. Contact: Matt Jewell, Tel: 705-745-1600
- 1.2 The school has a Reliable Controls Building Management System (BMS) in place with a local panel in the boiler room.
- 2.0 PVNCDSB Controls Contractor Scope of Work (to be included in the tender price)
 - Modify the radiator controls in the Resource Room
 - Add an adjustable room temperature sensor for the new washroom to control the new heating equipment.
 - Provide new BMS components, programming, commissioning as required.
 - Modify school graphics package to reflect changes made.

3.0 EXECUTION

- 3.1 All equipment supplied under this section shall be installed complete with all required electric control wiring by Division 15.
- 3.2 All control wiring will be less than 50 volts and shall be a minimum of #18 gauge wire and be plenum rated.
- 3.3 All control wiring, conduit, accessories, etc. shall be installed by the controls contractor in accordance with requirements specified by local electrical authority.
- 3.4 All power wiring shall be done by a qualified electrician and meet the requirements of the Ontario Electric Code. Refer to Electrical drawings.
- 3.5 Control circuits and components to be 24VAC. Provide all suitable contactors, relays, transformers etc. as required for a complete functional system.
- 3.6 All wiring into control panels shall be connected to terminal strips provided by the contractor. All wiring is to be labelled. At the end of the job, the Contractor shall turn over to the Owner, an as-built schematic indicating all wiring connections by number. As-built logic and point diagrams shall also be provided to the Owner.
- 3.7 Program and graphics shall be updated by the Controls Contractor.
- 3.8 After all controls are installed and operating the Contractor shall test all systems.

15950 BALANCING, TESTING AND COMMISSIONING

- 1.1 The Mechanical Contractor shall check the operation of the exhaust fan and hydronic baseboard heater
- 1.2 Provide final maintenance manuals and as-built record drawings. Final holdback will not be paid until this documentation has been received.

DRAWING LIST - MECHANICAL

- M1 TITLE AND SPECIFICATIONS
- M2 SCHEDULES
- M3 FLOOR PLANS

GENERAL NOTES

1.  PLAN, SECTION OR DETAIL NUMBER
DRAWING WHERE DETAILED
(- MEANS THIS DRAWING)

2. CONTRACTOR SHALL VERIFY SITE CONDITIONS AND REPORT ANY DISCREPANCIES AND INCONSISTENCIES TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

LOCATION AND SETTING OUT IS THE RESPONSIBILITY OF THE CONTRACTOR.

UNLESS NOTED OTHERWISE, DIMENSIONS ARE IN IMPERIAL UNITS.

Rev.	Date	Description	By	App.
				-
				-
0	FEB 26 26	FOR PERMIT AND TENDER	AB	-
P1	FEB 20 26	FOR REVIEW	AB	-

NOVADYNE

269 North Indian Road Tel: (705) 696-2119
Hastings, ON, Canada
K0L 1Y0

	DWN.	AB	FEB 2026
	CHK.		
	DSN.	A. BUCHKOWSKI	FEB 2026
	SCALE:	AS NOTED	
CLIENT			
PROJECT	IMMACULATE CONCEPTION CES NEW UNIVERSAL WASHROOM 76 ROBINSON STREET, PETERBOROUGH, ON		
TITLE	TITLE & SPECIFICATIONS		
FILE No.	DWG. No.	Rev. No.	
0685-M1	M1	0	
CLIENT FILE No.			

PLUMBING FIXTURE SCHEDULE

REF.	FIXTURE NAME	HOT	COLD	DRAIN	VENT	REMARKS
C.O.	CLEAN OUT	-	-	-	-	ZURN ZN-1602, ADJUSTABLE HEAD WITH BODY SLEEVE SEAL
LAV1	LAVATORY (ACCESSIBLE)	½"	½"	1½"	1½"	ADA COMPLIANT LAVATORY: 559 X 540 (22" X 21.3") LAVATORY REAR OVERFLOW, WHITE, VITREOUS CHINA, WALL HUNG WITH CUTOUT TEMPLATE. 4" CENTRES FOR FAUCET, AMERICAN STANDARD MURRO 0954 000. PROVIDE OPTIONAL KNEE GUARD 0059 020. PROVIDE SUPPORT CARRIAGE TO SUIT EQUAL TO WATTS CA-411-WC, PLUS BACKING AS REQUIRED. FAUCET TO BE POLISHED CHROME PLATE FINISH, SOLID METAL CONSTRUCTION, GOOSENECK DESIGN, WRIST BLADE HANDLES WITH HOT AND COLD INDICATORS, AERATOR LIMITED TO 4.5 L/MIN, EQUAL TO MOEN DURA #8279. DRAIN TO BE MCGUIRE #155wc CHROME PLATED BRASS, POLISHED DRAIN, OFFSET OPEN GRID STRAINER, CAST BRASS 1½" MCGUIRE #LF165 SUPPLIES, CHROME PLATED, POLISHED SHORT RIGID ANGLE WITH ESCUTCHEONS AND BRAIDED FLEXIBLE HOSES. MCGUIRE #8088 C.P. POLISHED P TRAP, CAST BRASS, 1½" WITH CLEAN-OUT AND ESCUTCHEON.
WC1	WATER CLOSET (ACCESSIBLE)	½"	-	3"	1½"	BARRIER FREE HEIGHT, WHITE VITREOUS CHINA, ROUND BOWL, FLOOR MOUNTED AND TANK WATER CLOSET, 4.8 LPF, AMERICAN STANDARD CADET 215BA.105. THE TOILET HANDLE IS ON THE RIGHT SIDE. SEAT TO BE BEMIS HEAVY DUTY, SOLID WHITE PLASTIC, IMPACT RESISTANT, OPEN FRONT, "STA-TITE" PLASTIC HINGES WITH SS POSTS. PLUMBER TO ADJUST LOCATION OF THE FLOOR FLANGE AS REQUIRED.
SH	SHOWER (ACCESSIBLE)	½"	½"	2"	1½"	SHOWER IS TO BE BUILT-IN AND TILED AS PER ARCHITECTURAL DRAWINGS. SHOWER DRAIN TO BE DURA-COATED, CAST IRON BODY, BOTTOM OUTLET, CLAMP COLLAR, POLISHED NICKEL BRONZE STRAINER, 3/8" TRAP SEALER PRIMER, EQUAL TO ZURN Z-415-B. WITH ACCESSORIES FOR POURED CONCRETE FLOOR AS REQUIRED. FIXTURE TO BE AMERICAN STANDARD COMMERCIAL SHOWER SYSTEM TRIM KIT TU6625S.211. KIT INCLUDES VALVE TRIM, PRESSURE BALANCING CARTRIDGE, IN LINE VACUUM BREAKER, WALL SUPPLY, 36" SLIDE BAR, 3 FUNCTION HAND HELD SHOWER, FLEX HOSE. VALVE MEETS CSA B125.1 & 125.16. ADA COMPLIANT. SUPPLY AMERICAN STANDARD R422 ROUGH-IN VALVE. MOUNT VALVE AND GRAB BAR AS PER ARCHITECTURAL DRAWINGS.

FAN SCHEDULE

Item	Name	Airflow (cfm)	ESP (wc)	Noise (sones)	Motor	Power (v-ph-hz)	Model	Description
EF-1	WC EXHAUST FAN	120	.25	0.5	30 watts 1161 rpm	120-1-60	PANASONIC WHISPER CEILING FV-15VQ5	LOW NOISE CEILING MOUNTED EXHAUST FAN, CENTRIFUGAL, DIRECT DRIVE, HOUSING MADE OF GALVANIZED STEEL, INTEGRAL BACKDRAFT DAMPER, PLASTIC GRILLE, 4 POLE PLUG-IN MOTOR, 6" DUCT OUTLET, AMCA RATED. INSTALL ON CEILING AND OPERATE BY WALL TIMER. MECH CONTRACTOR TO PROVIDE 5/10/20 MINUTE TIMER.

GRILLE SCHEDULE

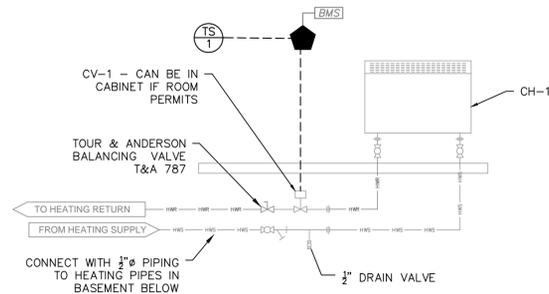
Item	Type	Colour	EH Price Model	Remarks
G1	RET	WHITE	16x10/530/F/S/A/B12	

CONVECTOR HEATER

Item	Room	Heat	Cabinet Length	Cabinet Depth	Cabinet Height	Options	Model	Control Valve
CH-1	UNIVERSAL WASHROOM	4500 BTU/HR (1.3 kW)	32" (813mm)	6" (150mm)	26" (660mm)	ACCESS DOOR	SIGMA CWS SLOPED TOP WALL MOUNTED	CV-1 SEE NOTES

HEATER SPECIFICATIONS

- ALL NEW CABINET HEATERS ARE BASED ON 170° WATER TEMPERATURE WITH A TEMPERATURE DROP OF 20°F.
- HEATERS ARE TO BE EQUIVALENT TO SIGMA CWS.
- THE HOUSING WILL BE ONE PIECE WITH A SLOPED TOP, 18 GAUGE STEEL, 6" WIDE, 26" HIGH, COMPLETE WITH WALL MOUNTING BRACKETS, HANGERS, CONNECTORS, ACCESS DOORS, END CAPS. COLOUR: TINTED WHITE. LENGTHS: AS PER SCHEDULE
- CONTROL VALVE, AND ISOLATION VALVE, UNIONS TO BE MOUNTED IN THE CABINET. PROVIDE ½" DRAIN VALVE AND PET COCK VENT VALVE.
- MOUNT CABINETS UNITS A MINIMUM OF 5" (125mm) ABOVE THE FINISHED FLOOR.
- NEW CONTROL VALVE CV-1 TO BE: 2 WAY FORGED BRASS BODY, SS BALL, PTFE SEATS, EPDM O-RINGS, SPRING TO FAIL OPEN, PROPORTIONAL, 24 V ACTUATOR. CV=0.8 EQUAL TO BELIMO B209 1FRB-24-SR-T US
- CONTROLS CONTRACTOR TO PROVIDE WALL TEMPERATURE SENSOR AND DEVICES TO CONTROL CV-1



1 TYPICAL HW CABINET HEATER - PIPING & CONTROLS
M2 SCALE: NTS

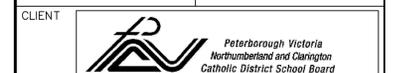
Rev.	Date	Description	By	App.
0	FEB 26 26	FOR PERMIT AND TENDER	AB	-
P1	FEB 20 26	FOR REVIEW	AB	-

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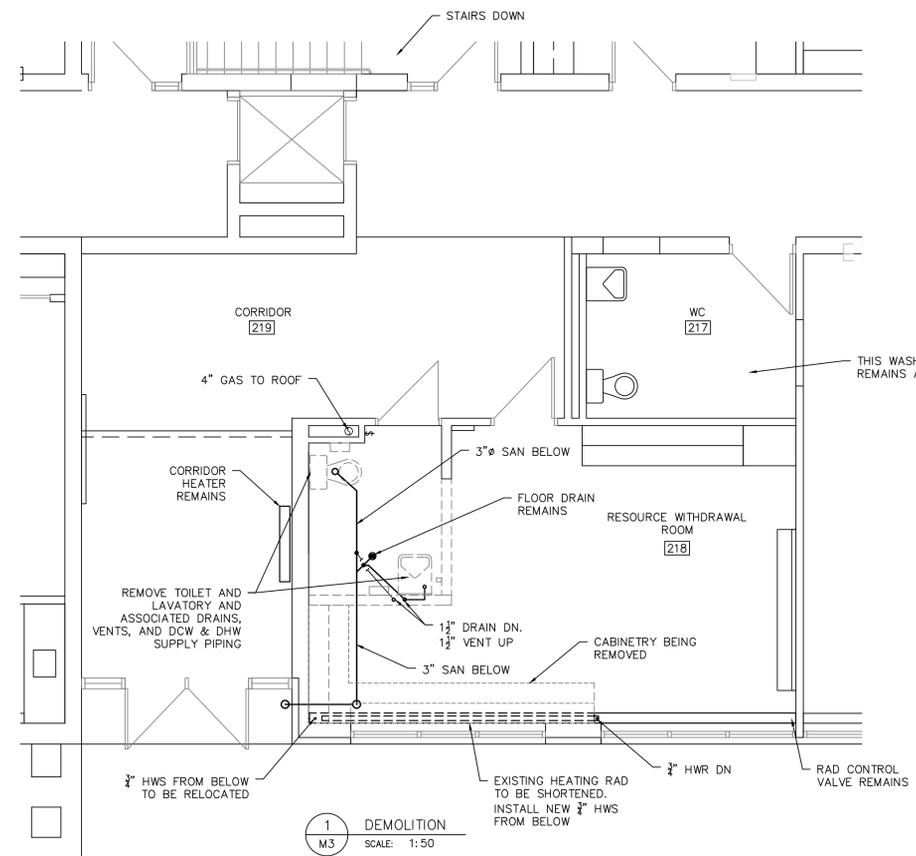
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CHK.		
DSN.	A. BUCHKOWSKI	FEB 2026
SCALE:	As Noted	



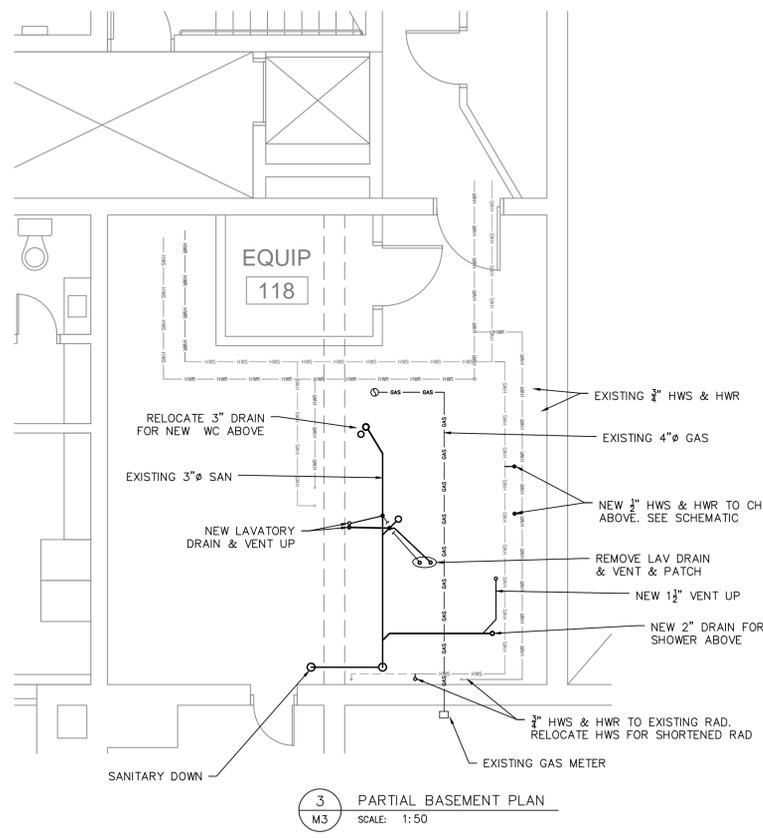
PROJECT
IMMACULATE CONCEPTION CES
NEW UNIVERSAL WASHROOM
76 ROBINSON STREET, PETERBOROUGH, ON

TITLE
SCHEDULES

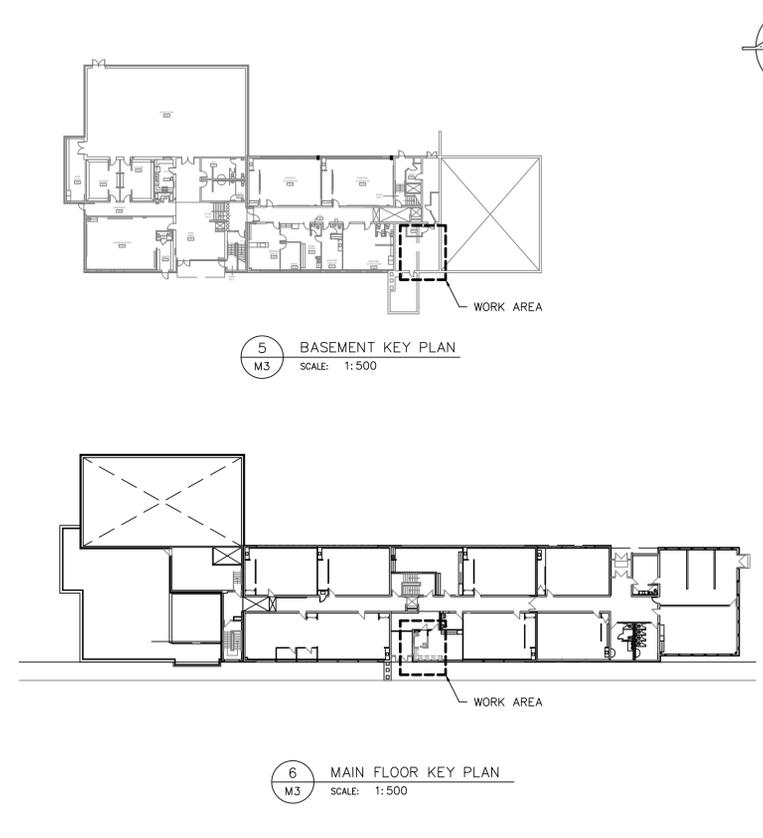
FILE No.	DWG. No.	Rev. No.
0685-M2	M2	0
CLIENT FILE No.		



1 DEMOLITION
M3 SCALE: 1:50

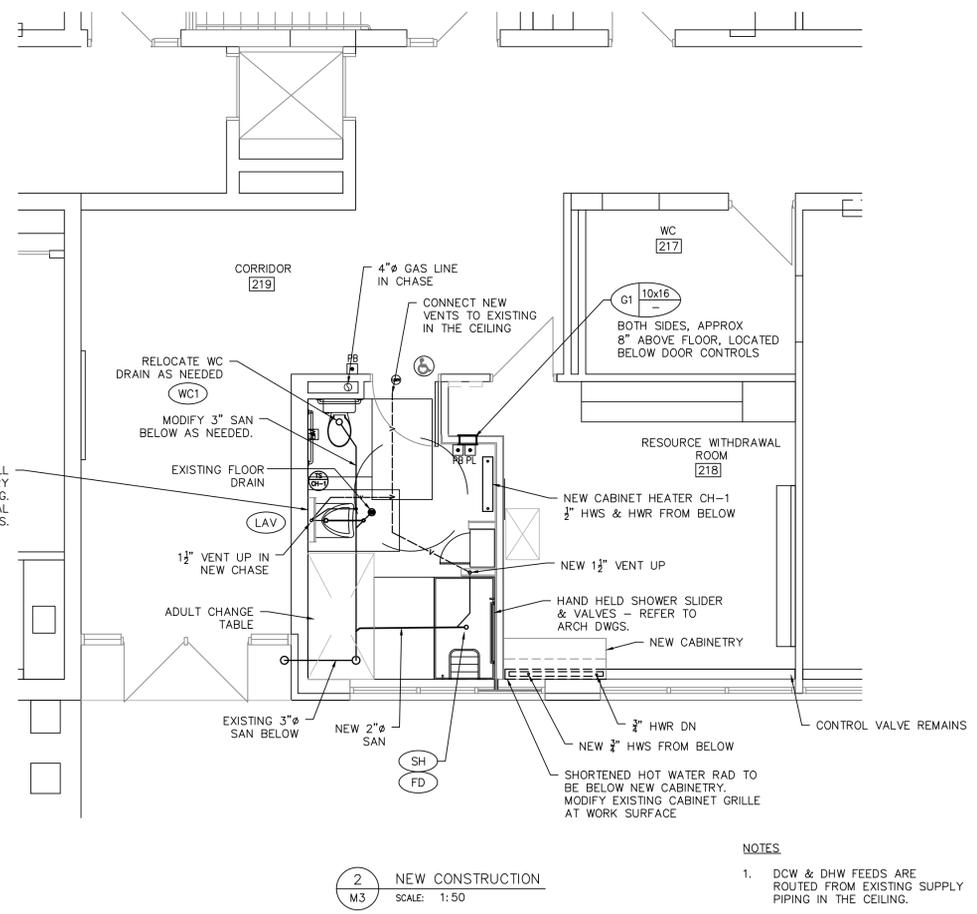


3 PARTIAL BASEMENT PLAN
M3 SCALE: 1:50



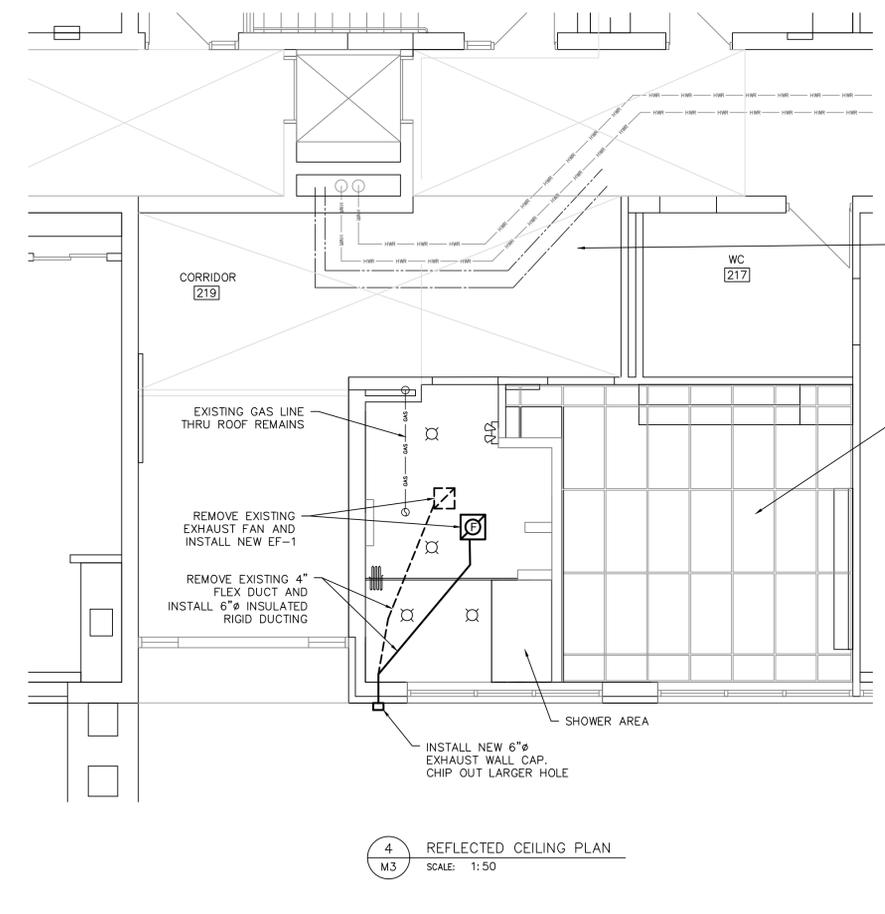
5 BASEMENT KEY PLAN
M3 SCALE: 1:500

6 MAIN FLOOR KEY PLAN
M3 SCALE: 1:500



2 NEW CONSTRUCTION
M3 SCALE: 1:50

NOTES
1. DCW & DHW FEEDS ARE ROUTED FROM EXISTING SUPPLY PIPING IN THE CEILING.



4 REFLECTED CEILING PLAN
M3 SCALE: 1:50

EXISTING HWS & HWR, DCW & DHW IN CEILING CORRIDOR.
FIXTURES IN RENOVATED WASHROOM ARE FED FROM CORRIDOR DCW & DHW PIPING IN CEILING

RESOURCE WITHDRAWAL ROOM [218]

NOTES
1. EXHAUST FAN OPERATED BY WALL MOUNTED ADJUSTABLE TIMER.

Rev.	Date	Description	By	App.
0	FEB 26 26	FOR PERMIT AND TENDER	AB	-
P1	FEB 20 26	FOR REVIEW	AB	-

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SCALE:	As Noted	

CLIENT
Peterborough Victoria Northumberland and Clarington Catholic District School Board

PROJECT
IMMACULATE CONCEPTION CES NEW UNIVERSAL WASHROOM
76 ROBINSON STREET, PETERBOROUGH, ON

TITLE
FLOOR PLANS

FILE No.	DWG. No.	Rev. No.
0685-M3	M3	0
CLIENT FILE No.		