

Hamilton

Planning and Economic Development Department
Building Division
71 Main Street West – 3rd Floor
Hamilton, Ontario L8P 4Y5
905-546-2720
Email: building@hamilton.ca

For Inspections Please Email:
building@hamilton.ca

BUILDING PERMIT

PERMIT NO. 25-104730 G3
500 BENDAMERE AVENUE HAMILTON
CON 5 PT LOT 20 BTN HAM IRREG 7.74AC 546.00FR 643.06D
Roll Number: 2518081012034800000 Ward 14

This Permit is issued to:

(APPLICANT)

AMRA J ARCHITECTS INC.
(AMRA JANJUSEVIC)
63 STOWBRIDGE CRES
ANCASTER, ON L9G 5E1
PRIMARY: 905-920-5121

(OWNER)

HAMILTON WENTWORTH
DISTRICT SCHOOL BOARD
(AMIE MYSZKOWSKI)
20 EDUCATION CRT
HAMILTON, ON L8N 3L1
PRIMARY: 289-659-2435

(CONTRACTOR)

TO BE DETERMINED

Description of Work:

Alterations to the main floor and second floor of "CHEDOKE ELEMENTARY SCHOOL" of existing 6(six) group washrooms.

Notes and Conditions:

Field Review by an Architect and Professional Engineer(s) is required pursuant to OBC Division C, Section 1.2.

Zoning Data: Front Yard

Rear Yard

Side Yard

Zoning

REVIEWED BY:

Rosie Hagerty

ZONING

Dan Lazar

BUILDING

NOTICE

PLANS AND DOCUMENTS

The Plans and documents, on the basis of which this Permit was issued, shall be kept on site.

REVOCATION

This permit may be revoked if it was issued on the basis of mistaken or false information or in error, or where the construction has been substantially suspended or discontinued for a period in excess of one year. This permit will be deemed to have lapsed, and will be revoked if construction has not commenced within six months of the date of issue.

CONSTRUCTION

All construction proposed and authorized, hereto, shall, in all respects, conform with the plans submitted and reviewed, the provisions of the Building Code Act and the Ontario Building Code, as amended, the Bylaws of the City of Hamilton and any other applicable law. It is the responsibility of the permit holder to ensure that the work authorized by this permit is carried out in accordance with the requirements set out, hereto.

ISSUED BY:

Dan Lazar

FOR CHIEF BUILDING OFFICIAL

DATE ISSUED:

January 7, 2026

CONSTRUCTION VALUE:

\$650,000.00



PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT
Building Division
71 Main Street West – 3rd Floor
Hamilton, Ontario, Canada, L8P 4Y5
Phone: 905.546.2720 Fax: 905.546.2764
E-mail: building@hamilton.ca

For Inspections Please Email:
building@hamilton.ca

BUILDING PERMIT

This card must be kept posted in a conspicuous place on the site of construction.

25-104730 G3

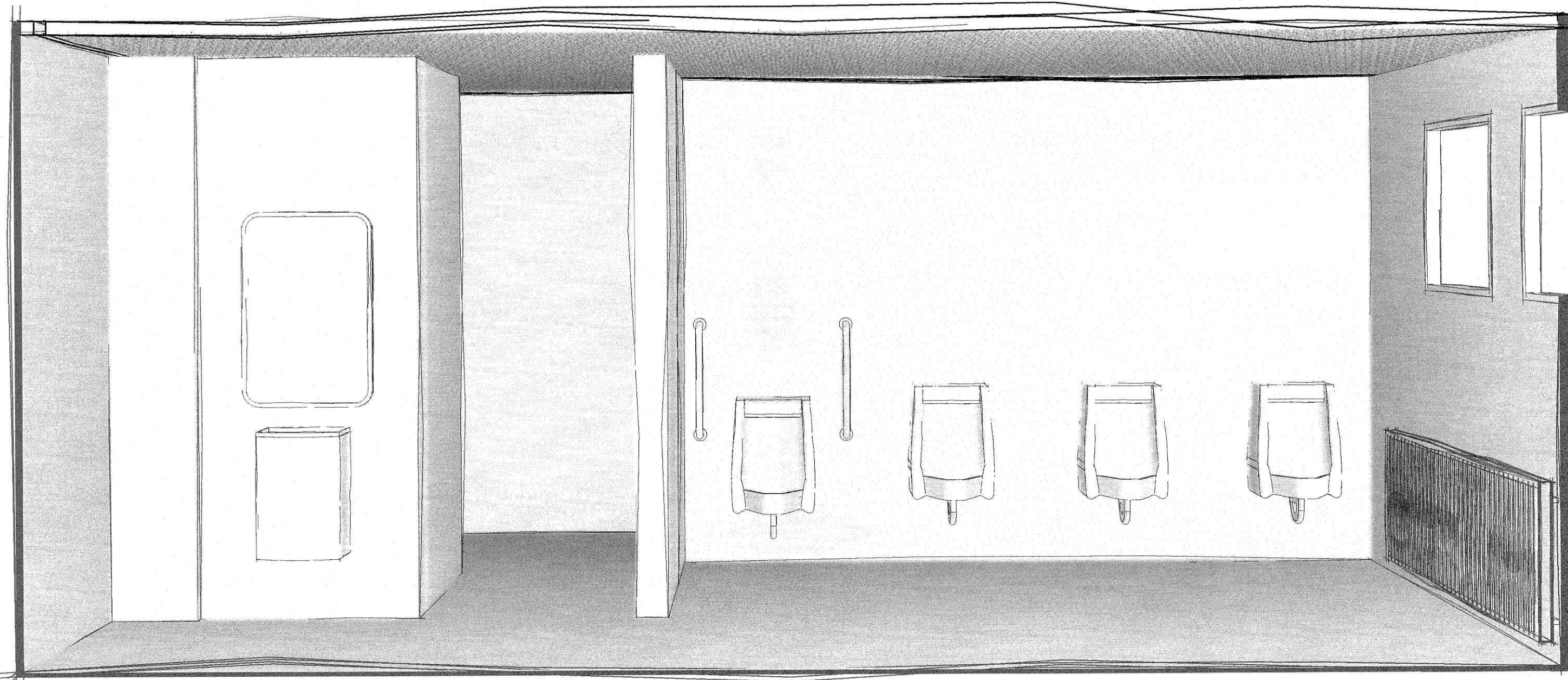
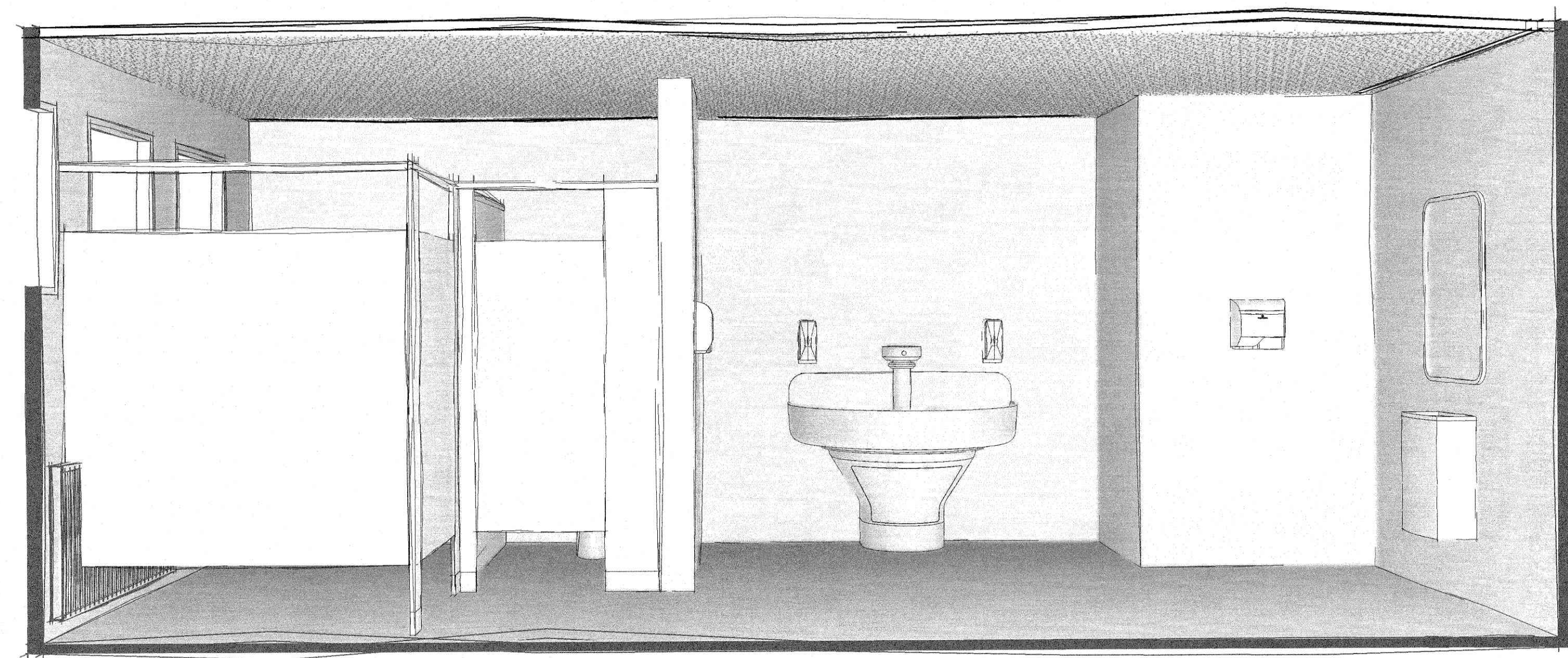
Location: 500 BENDAMERE AVENUE HAMILTON

Description of Work:

Alterations to the main floor and second floor of "CHEDOKE ELEMENTARY SCHOOL" of existing 6(six) group washrooms.

Date issued: January 7, 2026

Robert Lalli
Chief Building Official



HWDSB

2026-P02206 Chedoke Elementary School Washroom Renovations

500 Bendamere Ave., Hamilton, ON

SHEET ARCHITECTURAL DRAWINGS

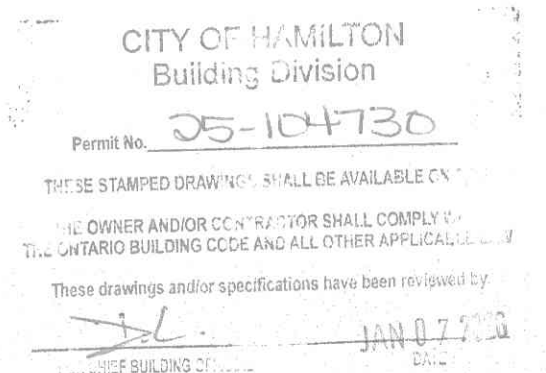
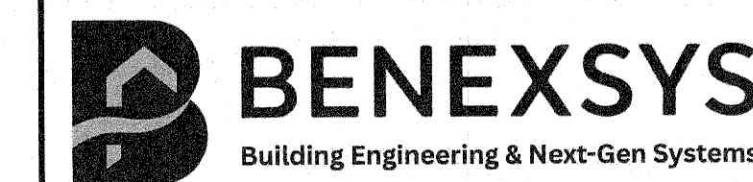
- A0.01 COVER SHEET
- A1.01 GENERAL NOTES, LEGENDS, OBC MATRIX
- A1.02 GROUND FLOOR DEMOLITION
- A1.03 SECOND FLOOR DEMOLITION
- A1.04 GROUND FLOOR PROPOSED FLOOR PLANS
- A1.05 SECOND FLOOR PROPOSED FLOOR PLANS
- A1.06 GROUND FLOOR PROPOSED INTERIOR ELEVATIONS
- A1.07 SECOND FLOOR PROPOSED INTERIOR ELEVATIONS

SHEET MECHANICAL DRAWINGS

- M-0.01 MECHANICAL SPECIFICATIONS, LEGEND, SCHEDULE
- M-1.01 MECHANICAL DEMOLITION
- M-1.02 MECHANICAL NEW CONSTRUCTION
- M-2.01 PLUMBING FIXTURES

SHEET ELECTRICAL DRAWINGS

- E-0.01 ELECTRICAL SPECIFICATIONS, LEGEND, SCHEDULE
- E-1.01 ELECTRICAL DEMOLITION
- E-1.02 ELECTRICAL NEW CONSTRUCTION



project number 25-25
DRAWING NO. A0.01

Name of Practice: AMRA J Architects Inc. info@ajs.design 905-920-5121	
Name of Project: 2025-P02206 CHEDOKe ELEMENTARY SCHOOL WASHROOM RENOVATIONS	
Location: 500 Bendamere Ave. Hamilton, ON	
Date: DECEMBER 18, 2025	
2024 Ontario Building Code Data Matrix Part 11 – Renovation	
11.00 Building Code Version: O_Reg_163/24 Last Amendment: O_Reg_447/24	Building Code Reference 1
11.01 Project Type: ☐ Addition ☒ Renovation ☐ Addition and renovation Description: Renovation of washrooms	A1 13.3.3B.
11.02 Major Occupancy Classification: Use A2 EX ELEMENTARY SCHOOL	312.1(1), 214.1(1), and 11.2.1.
11.03 Superimposed Major Occupancies: ☒ No ☐ Yes Description:	11.2, 322.5, 322.8, and 22.1.
11.04 Building Area (m²): Description: Existing New Total EXISTING 0 0 0	A1 14.1.2, 11.2, and 11.3.
11.05 Building Height: 2 Storeys above grade EX (m) Above grade 0 Storeys below grade	A1 14.1.2, 22.11, 22.2.2, and 11.3.
11.06 Number of Streets/Firefighter Access: EX_street(s)	322.10, 322.5, 224.1, and 11.3.
11.07 Building Size: ☐ Small ☐ Medium ☒ Large ☐ > Large	11.2.1.1, and 11.2.1.1.8.N.
11.08 Existing Building Classification: Change in Major Occupancy: ☐ Yes ☒ Not Applicable (no change of major occupancy) Construction Index: 0 Hazard Index: 0 Importance Category: ☐ Low ☐ Normal ☐ High ☐ Post-disaster	10.1.1.2, 11.2.1.1, 11.2.1.1.8, and 11.2.1.1.8.N.
11.09 Renovation Type: ☒ Basic Renovation ☐ Extensive Renovation	11.3.3.1, and 11.3.3.2.
11.10 Occupant Load: Floor Level/Area Occupancy Type Based On Occupant Load (Persons) FIRST AND SECOND SCHOOL DESIGN 483	31.17, 212.2, and 114.2.2.
11.11 a Plumbing Fixture Requirements: Ratio: M.F. = 60/50 Except as otherwise noted Floor Level/Area Occupant Load OBC Reference WCs Required WCs Provided FIRST/SECOND 483 3.7.4.3.1(4) 10F + 9M 13F + 17M	3.7.4, 11.3.4, 11.3.5, 114.2.4, and 114.2.5.
11.11 b Plumbing Fixture Requirements continued: Floor Level/Area (repeated) Barrier-free WCs Required Barrier-free WCs Provided Universal Washrooms Required Universal Washrooms Provided FIRST / SECOND 6 6 1 1 EX	Tables 3.8.2.3.A and 3.8.2.3.B
11.12 Barrier-free Design: ☒ Yes ☐ No NEW CONSTRUCTION IS MEETING BARRIER FREE DESIGN Barrier-free Entrances: Number EX EX	11.3.1.2, 11.3.2, and 11.3.3.2.
11.13 Reduction in Performance Level: Structural: ☒ No ☐ Yes By increase in occupant load: ☒ No ☐ Yes By change of major occupancy: ☒ No ☐ Yes Plumbing: ☒ No ☐ Yes Sewage systems: ☒ No ☐ Yes Extension of buildings of combustible construction: ☒ No ☐ Yes	11.4.2.1, 11.4.2.2, 11.4.2.3, 11.4.2.4, 11.4.2.5, and 11.4.2.6.
11.14 Compensating Construction: ☒ No ☐ Yes Structural: ☒ No ☐ Yes (Describe) Increase in occupant load: ☒ No ☐ Yes (Describe) Change of major occupancy: ☒ No ☐ Yes (Describe) Plumbing: ☒ No ☐ Yes (Describe) Sewage systems: ☒ No ☐ Yes (Describe) Extension of buildings of combustible construction: ☒ No ☐ Yes (Describe)	11.4.3.1, 11.4.3.2, 11.4.3.3, 11.4.3.4, 11.4.3.5, 11.4.3.6, and 11.4.3.7.
11.15 Compliance Alternatives Proposed: ☒ No ☐ Yes (list numbers and describe) (list numbers and describe)	11.5.1.

1 All references are to Division B of the OBC, unless preceded by [A] for Division A and [C] for Division C.

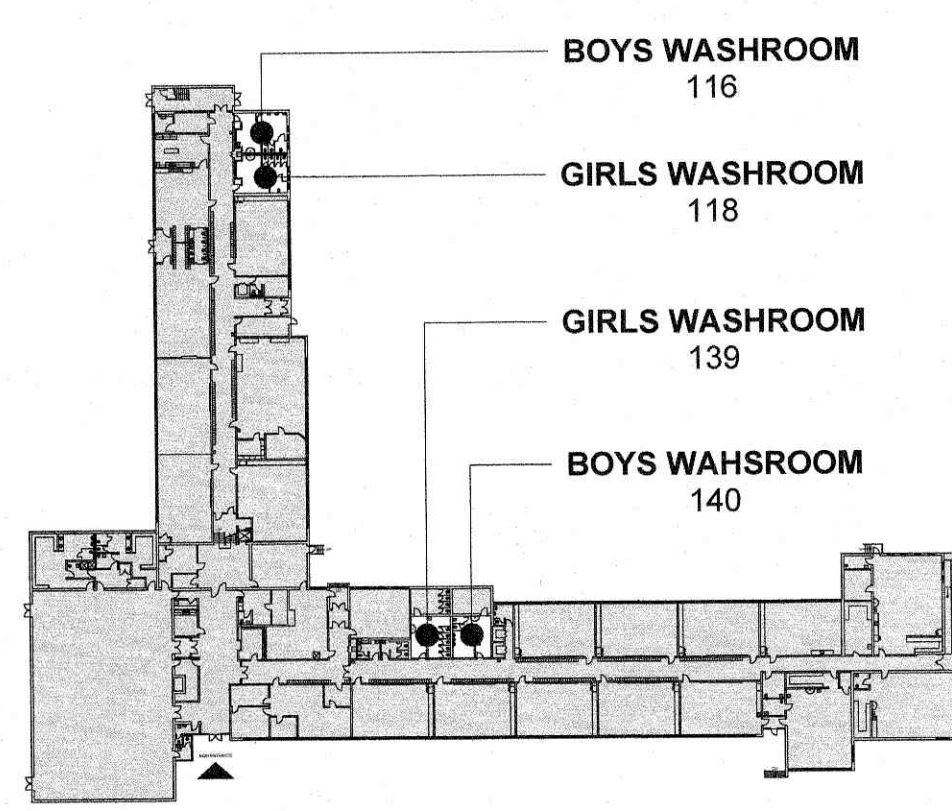
Ontario Building Code Data Matrix, Part 11
© Ontario Association of Architects

January 2025

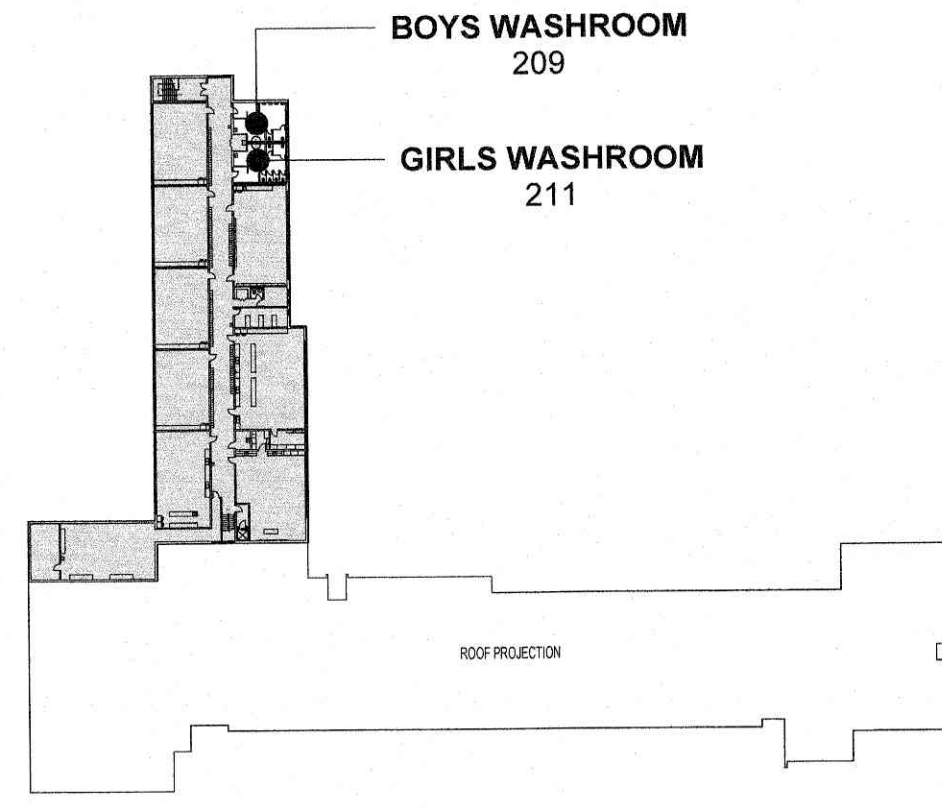
WASHROOM FIXTURES COUNT (483 OCCUPANCY)

FLOOR	ROOM NAME	WC	URINAL
1	BOYS WASHROOM (116)	2	4
	GIRLS WASHROOM (118)	4	0
	GIRLS WASHROOM (139)	5	0
	BOYS WASHROOM (140)	3	2
	BOYS WASHROOM (209)	2	4
2	GIRLS WASHROOM (211)	4	0
TOTAL:		20	10

WASHROOM TYPE	OBC REQUIREMENT (483)	TOTAL REQUIRED	TOTAL PROVIDED
BOYS WASHROOMS	9	9	17
GIRLS WASHROOMS	10	10	13
SINGLE USE WASHROOMS	1	1	1



GROUND FLOOR KEY MAP
SCALE: 1:1000



SECOND FLOOR KEY MAP
SCALE: 1:1000

NOTES AND SPECIFICATIONS

All work to be carried out in accordance with the latest edition of the local, provincial and federal construction and building codes, the National Fire Code, the Occupational Health and Safety Act, and any other authorities having jurisdiction.

The general contractor shall comply with all the requirements with respect to construction procedures, insurance, security, building access, life safety & fire regulations, security clearances of employees, hoisting, garbage removal, etc., as set out by the school board/client and instructions to bidders.

The contractor shall read the drawings provided in conjunction with specifications & instructions on the bid documents. Any discrepancies or omissions on any drawings or specifications are to be reported to the consultant prior to commencement of work.

The contractor is recommended to familiarize themselves with existing site conditions during designated site visit date or otherwise obtain information required to submit a firm quotation. Contractors will not be allowed to visit the site prior to or after the designated site visit date.

All dimensions are clear unless otherwise noted, contractor to field verify all dimensions and elevations prior to construction and report discrepancies to consultant prior to making modifications to suit existing site conditions.

All materials specified are to be installed, finished & sealed in accordance with the manufacturer's recommendations & specifications.

All materials shall be as specified. Contractor must obtain written approval from architect for any material or finish substitutes or alternatives.

All materials as supplied and installed in this project must meet the smoke/flame spread rating as specified in the building code.

The contractor shall ensure all areas are sealed against dust & secured with safety wall/hoarding. Damages to existing materials, windows, furnishings, equipment, base building finishes within and outside the "area of work" will be the full responsibility of the contractor to replace without additional costs.

The "area of work" is defined as the immediate areas where demolition and new construction occurs but may not be completely limited to the area defined within.

The contractor is responsible for the supply and installation of any materials not specifically indicated but reasonably implied and necessary for completion of work with no additional costs under his or her contract.

To minimize dust travel, all supply air diffusers & exhaust air grilles to be sealed in areas of demolition and construction.

The contractor shall patch and repair and/or skim coat at damages, punctures, and other irregularities on existing walls, floors, and ceilings. Where damages are existing or caused by demolition. The contractor shall ensure a smooth and even surface to the satisfaction of the architect, in preparation for new finish applications as specified.

The contractor is to coordinate any water/electricity shutoff with the owner at least 72 hours in advance to work commencing.

It is the sole responsibility of the contractor to design all shoring and temporary bracing as per O.Reg 213/91 and the contractor shall retain an engineer as required. Any new openings within the existing block walls will require temporary shoring.

PROJECT SCOPE

The project scope includes the complete renovation of the existing washrooms at Chedoke Elementary School. The building has an area of 3,996 sq.m. It is of non-combustible construction, is not sprinklered, and is equipped with a fire alarm system. There is no proposed change of use or increase in occupancy.

The primary objective of the project is to improve accessibility and functionality of existing washrooms. The scope includes architectural, mechanical, and electrical modifications. The total renovation area is approximately 183 sq.m.

DEMOLITION:

- Review the entire set of drawings, including mechanical and electrical, for the full scope of work. Include provisions for all repairs of materials disturbed by mechanical or electrical demolition and new work.
- Verify all dimensions on site and review any discrepancies with the consultants. Report any contemplated deviations from the drawings prior to making changes.
- Ensure that all areas disturbed or damaged during construction, whether shown on the drawings or not, are restored to their original condition.

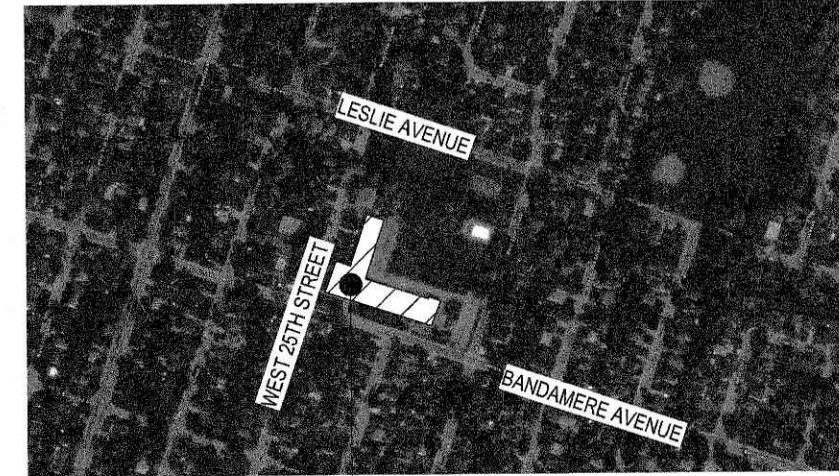
At a minimum, within the area of renovation:

- Remove existing plumbing fixtures, toilet partitions, and bathroom accessories.
- Return existing toilet tissue, paper towel, and soap dispensers to the owner.
- Review with the owner which items will be reinstalled after construction is completed.
- Where existing flooring is removed, prepare the substrate as required for the new tile finish.
- Fully enclose the construction area and coordinate all demolition and new work in such a manner as not to disturb the day-to-day operation of the surrounding areas.

NEW CONSTRUCTION

- New work includes construction required to renovate the group student washroom, including:
- Installation of new barrier-free compliant toilets, sinks, washroom partitions, and accessories.
 - Construction of new masonry walls where required.
 - Finishing of existing walls with ceramic tiles to the height indicated on the drawings.
 - Review of existing wall-mounted conduits, pipes, and ducts, allowing for relocation or new finishes to achieve the new construction look.
 - Construction of new gypsum board wall partitions as indicated.
 - Installation of new tile flooring with baseboard.
 - Replacement of all gypsum board ceilings, coordinated with existing ducts and new mechanical and electrical services.
 - Use of aluminum edge profiles at junctions of tile finishes.

FLAME - SPREAD RATING AND SMOKE DEVELOPED CLASSIFICATION OF ALL INTERIOR FINISHES SHALL COMPLY WITH SUBSECTION 3.1.13. INTERIOR FINISH.

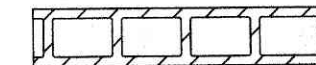


AREA OF WORK

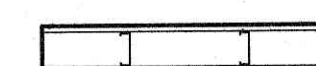
SITE LOCATION
SCALE: NTS

PARTITION SCHEDULE

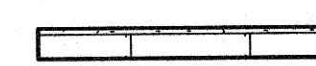
SCALE: 1:20



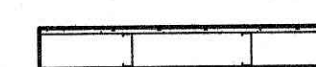
P1 • 6" CONCRETE BLOCK



P2 • 15.9MM GYPSUM BOARD
• 82MM STEEL STUDS @ 400MM O.C.
• 15.9MM GYPSUM BOARD



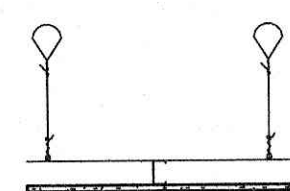
F1 • 15.9MM GYPSUM BOARD
• 64MM STEEL STUDS @ 400MM O.C.



F2 • 15.9MM GYPSUM BOARD
• 92MM STEEL STUDS @ 400MM O.C.

CEILING SCHEDULE

SCALE: 1:20



GB1 • 64MM STEEL STUDS @ 400MM O.C.
• 16MM GYPSUM BOARD

SYMBOL LEGEND

ELEVATION NAME	ELEVATION REFERENCE	INTERIOR ELEVATION REFERENCE	W1	WALL TAG
SECTION REFERENCE	SPOT ELEVATION	DEMOLITION / CONSTRUCTION TAG	W1	WINDOW / SCREEN TAG
DETAIL REFERENCE	ROOM NAME	ROOM TAG	#	REVISION TAG
EXTERIOR ELEVATION REFERENCE	101	DOOR TAG	C1	CEILING TAG
	D100		3/8"	WALL HEIGHT

DRAWING LEGEND

EXISTING

AREA OF WORK

MASONRY WALLS

GYPSUM BOARD

EXISTING WALL TO REMAIN

EXISTING TO BE DEMOLISHED

EXISTING DOORS TO REMAIN

GYPSUM BOARD CEILING

CONSTRUCTION HOARDING
PARTITION:
16mm GWB ON 92mm STEEL STUDS
FRAMING @ 810mm O.C.

EXTEND TO USE OF EXISTING
CEILING. PROVIDE SMOKE AND FIRE
SEALS AT JUNCTIONS (TYP) PROVIDE
TEMPORARY CONSTRUCTION
DOORS WITH LOCKS.
PATCH AND REPAIR EXISTING WALL,
FLOOR AND CEILING AS MAY BE
REQUIRED AFTER REMOVAL OF
HOARDING. (TYP)

DOORS TO BE DEMOLISHED

NEW DOORS



CITY OF HAMILTON
Building Division

Permit No. 05-104730

THESE STAMPED DRAWINGS SHALL BE AVAILABLE ON THE PROJECT SITE. THE OWNER AND/OR CONTRACTOR SHALL COMPLY WITH THE ONTARIO BUILDING CODE AND ALL OTHER APPLICABLE LAWS.

These drawings and/or specifications have been reviewed by
DATE: JAN 07 2025
DATE: _____

DO NOT SCALE DRAWING. DIMENSIONS ARE TO BE CHECKED AND VERIFIED BY THE CONTRACTOR ON SITE. ALL DRAWINGS, SPECIFICATIONS, AND RELATED DOCUMENTS ARE THE COPYRIGHT PROPERTY OF THE ARCHITECT AND MUST BE RETURNED UPON REQUEST. REPRODUCTION OF DRAWINGS, SPECIFICATIONS, AND RELATED DOCUMENTS IN WHOLE OR IN PART IS STRICTLY FORBIDDEN WITHOUT THE ARCHITECT'S WRITTEN PERMISSION.

0 ISSUED FOR BUILDING PERMIT 25/12/18

No. DESCRIPTION DATE

REVISIONS

SEAL:



HWDSB

BENEXSYS
Building Engineering & Heat-Cool Systems

AMRA J
ARCHITECTS INC.

EMAIL: info@ajs.design
https://ajs.design 905-920-5121

Project Title:
2026-P02206 Chedoke Elementary School Washroom Renovations

500 Bendamere Ave., Hamilton, ON

Drawing Title:
GENERAL NOTES, LEGENDS, OBC MATRIX

Drawn: AS

Scale: As indicated

Checked: AJ

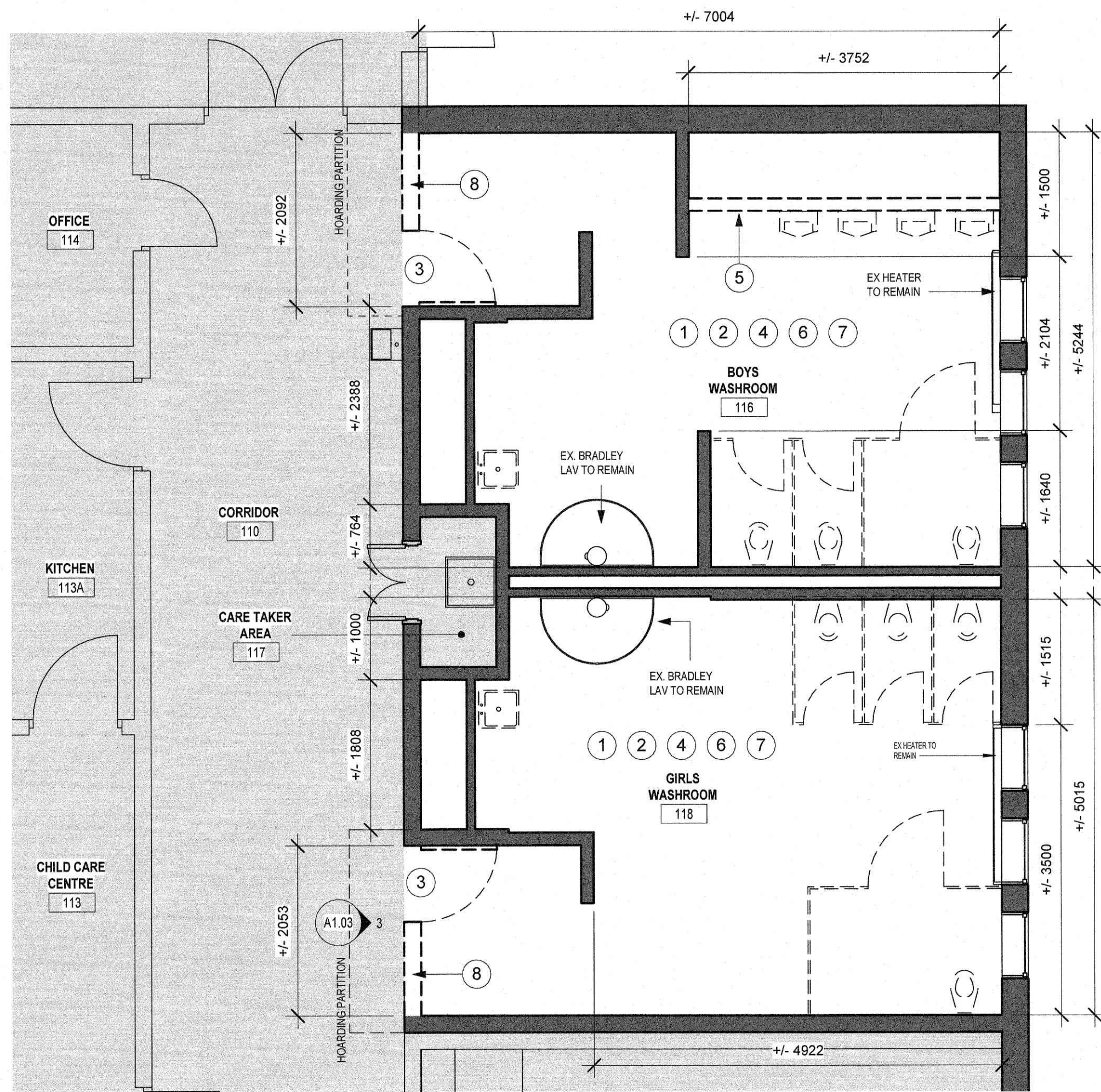
Project number: 25-25

Drawing No:

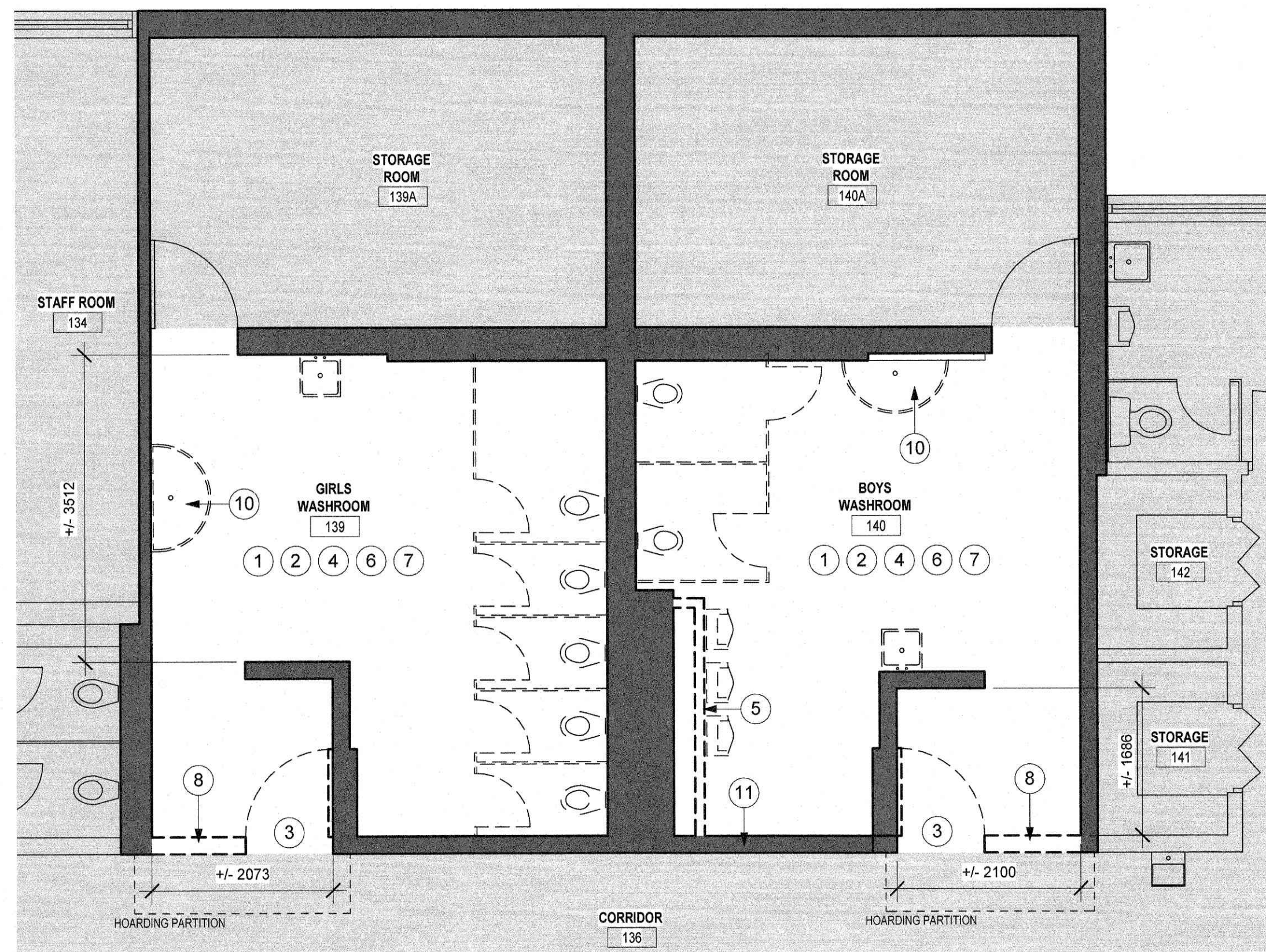
A1.01

0

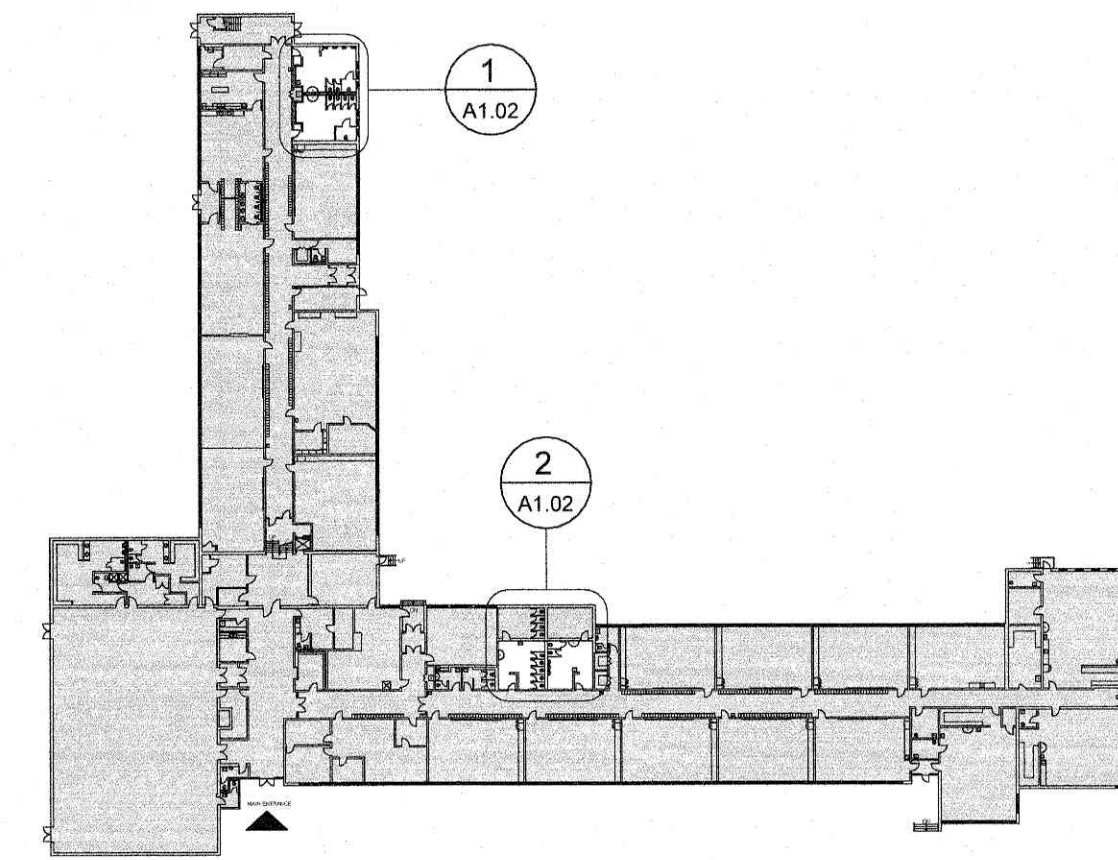
Revisions



ROOMS 116, 118 (PARTIAL RENOVATION) DEMOLITION
SCALE: 1 : 50



ROOMS 139, 140 (FULL RENOVATION) DEMOLITION
SCALE: 1 : 50



GROUND FLOOR DEMOLITION - KEY MAP
SCALE: 1 : 850

DEMOLITION NOTES

- 1 REMOVE ALL EXISTING WALL-MOUNTED WASHROOM ACCESSORIES. REMOVE ANY SCREWS, NAILS, OR FASTENERS LEFT IN WALLS.
- 2 REMOVE AND DISPOSE EXISTING PLUMBING FIXTURES, INCLUDING BUT NOT LIMITED TO MIRRORS, SHELVES, PAPER HOLDERS, NAPKIN DISPOSALS, AND GRAB BARS. REFER TO MECHANICAL PLANS FOR THE FULL SCOPE OF WORK.
- 3 REMOVE EXISTING DOOR AND FRAME.
- 4 REMOVE EXISTING METAL WALL PANELS/COVERS AND INFILL WALL WITH MATERIALS TO MATCH IF REQUIRED
- 5 DEMOLISH EXISTING GYPSUM BOARD PARTITION AND FINISHES
- 6 DEMOLISH GYPSUM BOARD CEILING AND ITS SUPPORT SYSTEM
- 7 REMOVE EXISTING FLOORING AND BASE WHILE PRESERVING ADJACENT SURFACES IN GOOD CONDITION. LEVEL AS REQUIRED, AND PREPARE FLOOR FOR NEW FINISH.
- 8 DEMOLISH THE MASONRY WALL UP TO THE UNDERSIDE OF THE STRUCTURE TO WIDEN THE EXISTING OPENING. REFER TO DETAIL 3/A1.03 AND THE NEW LAYOUT FOR REFERENCE.
- 9
- 10 REMOVE AND RELOCATE EXISTING BRADLEY SINK TO ROOM 209 OR 211
- 11 REMOVE EXISTING DRYWALL BULKHEAD AROUND MECHANICAL DUCT.
- 12 RELOCATE EXISTING LOCKERS AS REQUIRED FOR NEW OPENING.

GENERAL DEMOLITION NOTES:

ALL SURFACES WITHIN THE SCOPE OF WORK DAMAGED DURING DEMOLITION/REMOVAL SHALL BE REPAIRED OR REINSTATED AS NEEDED TO RECEIVE NEW FINISHES AS INDICATED ON THE PROPOSED LAYOUT.



CITY OF HAMILTON
Building Division
Permit No. 25-104730
DATE: 25-12-18
MAN 07 2025

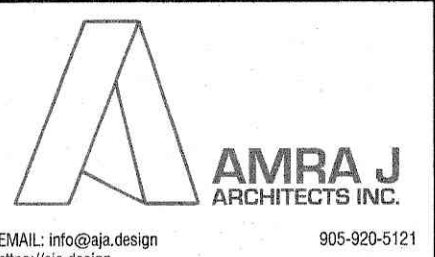
DO NOT SCALE DRAWING. DIMENSIONS ARE TO BE CHECKED AND VERIFIED BY THE CONTRACTOR ON SITE. ALL DRAWINGS, SPECIFICATIONS, AND RELATED DOCUMENTS ARE THE COPYRIGHT PROPERTY OF THE ARCHITECT AND MUST BE RETURNED UPON REQUEST. REPRODUCTION OF DRAWINGS, SPECIFICATIONS, AND RELATED DOCUMENTS IN WHOLE OR IN PART IS STRICTLY FORBIDDEN WITHOUT THE ARCHITECT'S WRITTEN PERMISSION.

No.	DESCRIPTION	DATE
0	ISSUED FOR BUILDING PERMIT	25/12/18



HWDSB

BENEXSYS
Building Engineering & Heat-Gas Systems



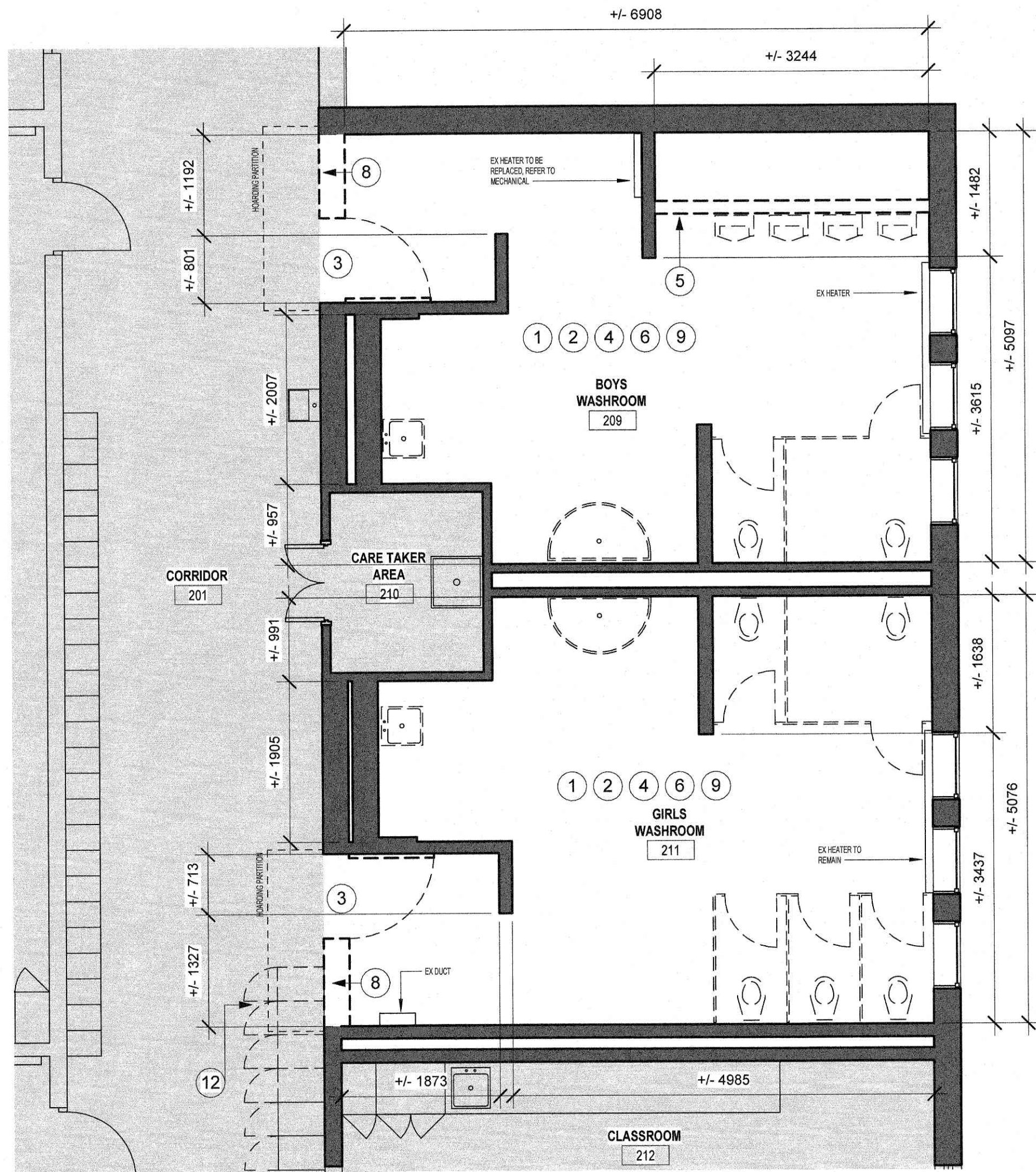
project title:
2026-P02206 Chedoke Elementary School Washroom Renovations
500 Bendamere Ave., Hamilton, ON

drawing title:
GROUND FLOOR DEMOLITION

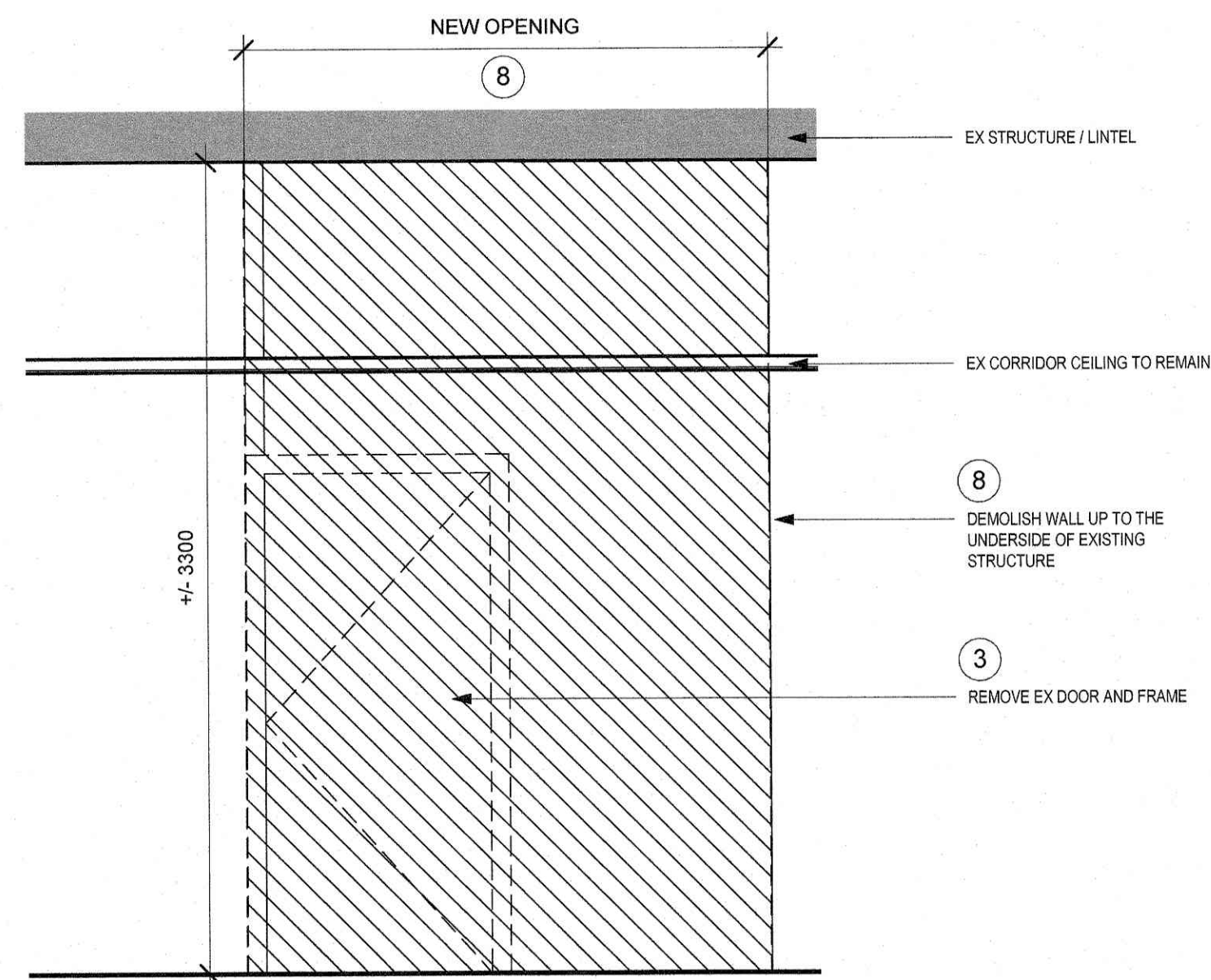
drawn: AS
checked: AJ
scale: As indicated
project number: 25-25

DRAWING NO.:
A1.02
Revision: 0

12/18/2025 12:03:36 PM
Z:\Projects\25-25 2025-P02206 Chedoke Elementary School\25-25 CHEDOKE ELEMENTARY SCHOOL.dwg



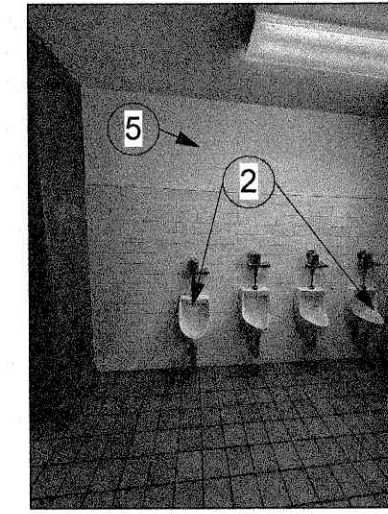
ROOMS 209, 211 (PARTIAL RENOVATION) DEMOLITION
SCALE: 1:50
2
A1.03



OPENING DEMOLITION TYP DETAIL
SCALE: 1:25
3
A1.03



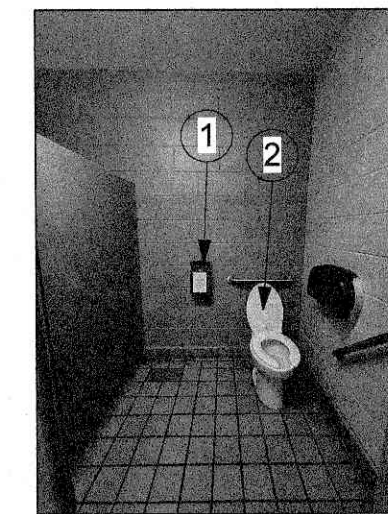
ROOM 209



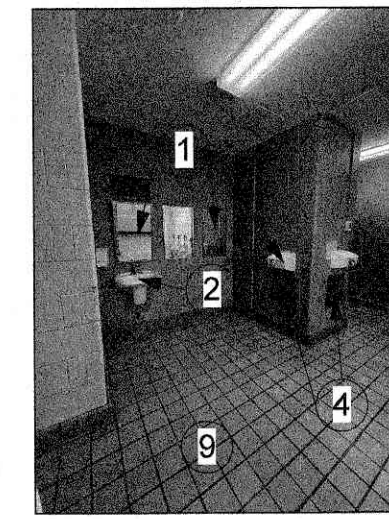
ROOM 209



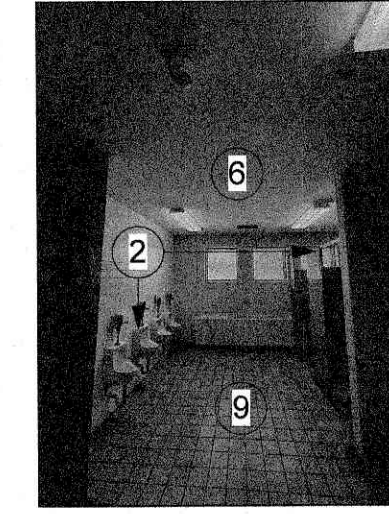
ROOM 211



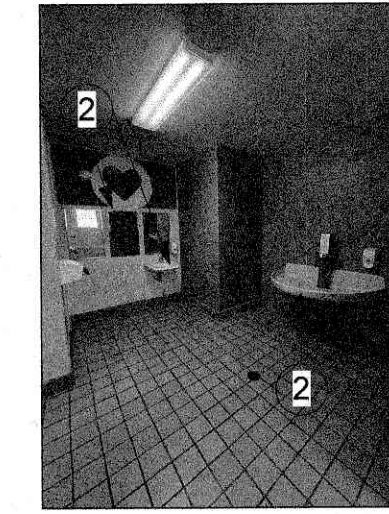
ROOM 211



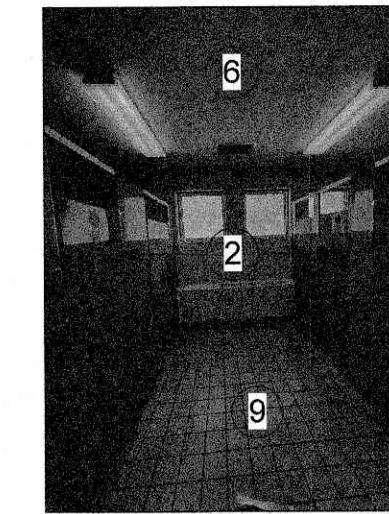
ROOM 209



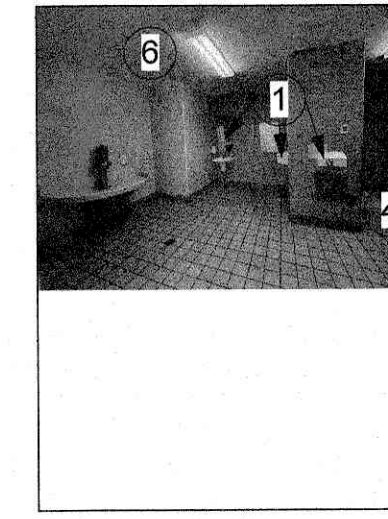
ROOM 209



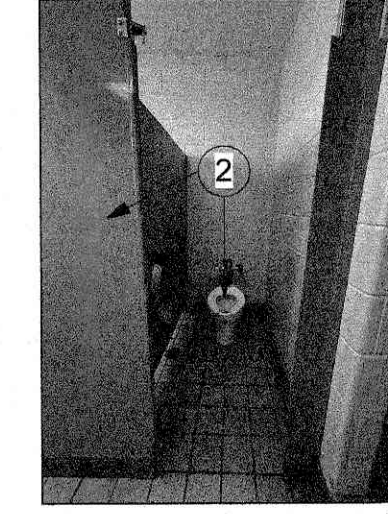
ROOM 211



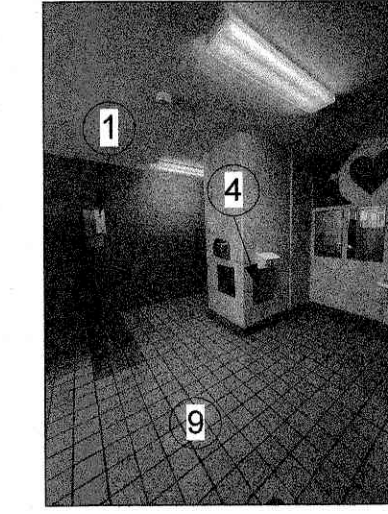
ROOM 211



ROOM 209



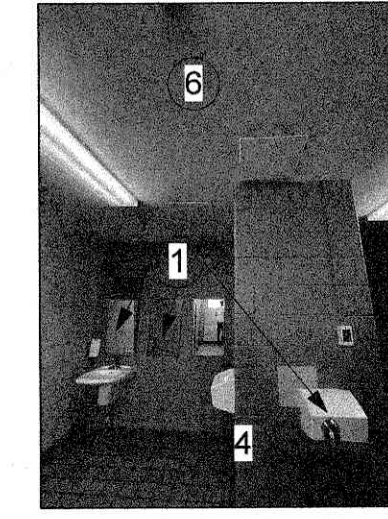
ROOM 209



ROOM 211



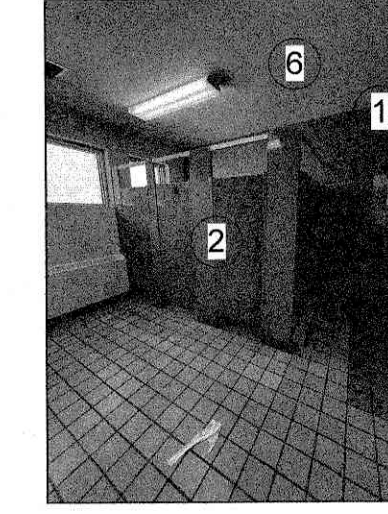
ROOM 211



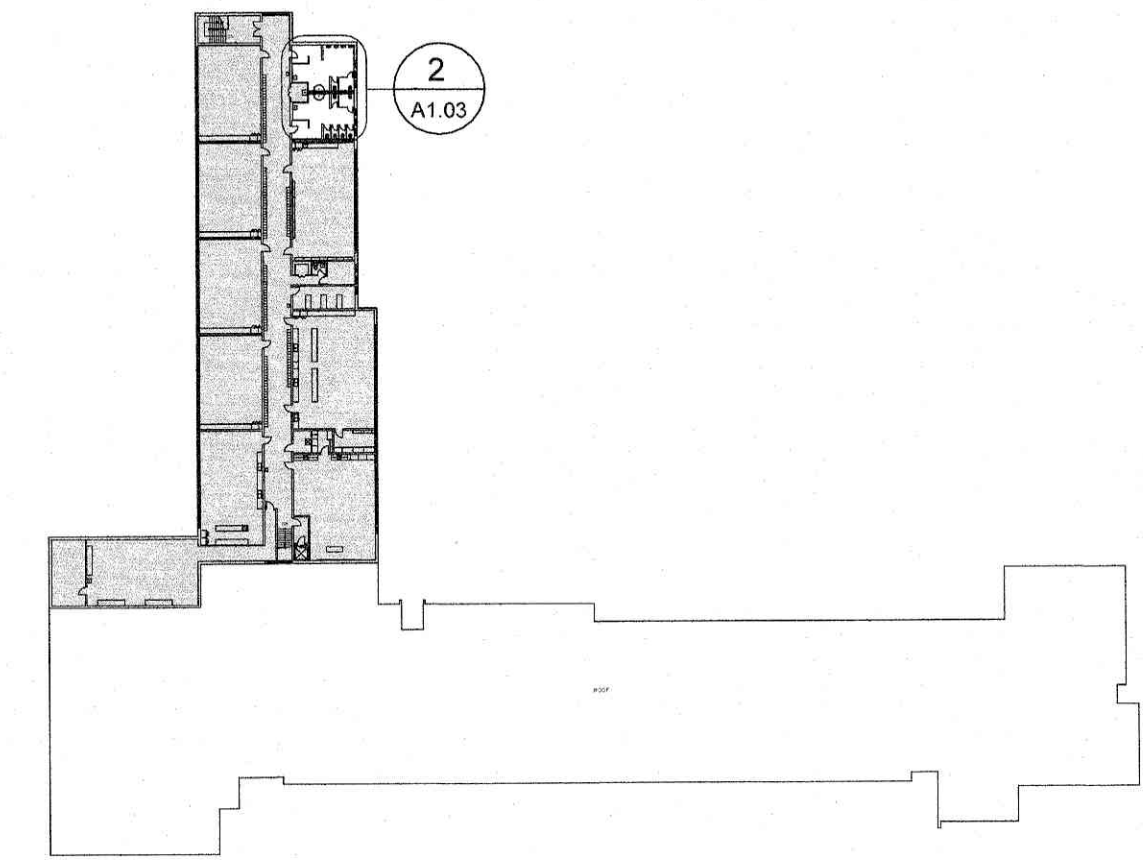
ROOM 209



ROOM 209



ROOM 211



SECOND FLOOR DEMOLITION - KEY MAP
SCALE: 1:850

DEMOLITION NOTES

- 1 REMOVE ALL EXISTING WALL-MOUNTED WASHROOM ACCESSORIES. REMOVE ANY SCREWS, NAILS, OR FASTENERS LEFT IN WALLS.
- 2 REMOVE AND DISPOSE EXISTING PLUMBING FIXTURES, INCLUDING BUT NOT LIMITED TO MIRRORS, SHELVES, PAPER HOLDERS, NAPKIN DISPOSALS, AND GRAB BARS. REFER TO MECHANICAL PLANS FOR THE FULL SCOPE OF WORK.
- 3 REMOVE EXISTING DOOR AND FRAME.
- 4 REMOVE EXISTING METAL WALL PANELS/COVERS AND INFILL WALL WITH MATERIALS TO MATCH IF REQUIRED
- 5 DEMOLISH EXISTING GYPSUM BOARD PARTITION AND FINISHES
- 6 DEMOLISH GYPSUM BOARD CEILING AND ITS SUPPORT SYSTEM
- 7 REMOVE EXISTING FLOORING AND BASE WHILE PRESERVING ADJACENT SURFACES IN GOOD CONDITION. LEVEL AS REQUIRED, AND PREPARE FLOOR FOR NEW FINISH.
- 8 DEMOLISH THE MASONRY WALL UP TO THE UNDERSIDE OF THE STRUCTURE TO WIDEN THE EXISTING OPENING. REFER TO DETAIL 3/A1.03 AND THE NEW LAYOUT FOR REFERENCE.
- 9
- 10 REMOVE AND RELOCATE EXISTING BRADLEY SINK TO ROOM 209 OR 211
- 11 REMOVE EXISTING DRYWALL BULKHEAD AROUND MECHANICAL DUCT.
- 12 RELOCATE EXISTING LOCKERS AS REQUIRED FOR NEW OPENING.

GENERAL DEMOLITION NOTES:

ALL SURFACES WITHIN THE SCOPE OF WORK DAMAGED DURING DEMOLITION/REMOVAL SHALL BE REPAIRED OR REINSTATED AS NEEDED TO RECEIVE NEW FINISHES AS INDICATED ON THE PROPOSED LAYOUT.

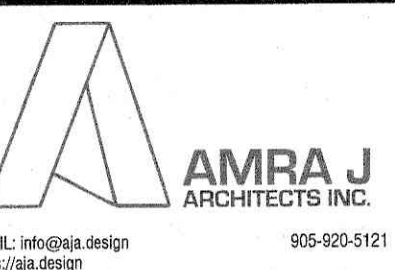


DO NOT SCALE DRAWING. DIMENSIONS ARE TO BE CHECKED AND VERIFIED BY THE CONTRACTOR ON SITE.
ALL DRAWINGS, SPECIFICATIONS, AND RELATED DOCUMENTS ARE THE COPYRIGHT PROPERTY OF THE ARCHITECT AND MUST BE RETURNED UPON REQUEST. REPRODUCTION OF DRAWINGS, SPECIFICATIONS, AND RELATED DOCUMENTS IN WHOLE OR IN PART IS STRICTLY FORBIDDEN WITHOUT THE ARCHITECT'S WRITTEN PERMISSION.

0	ISSUED FOR BUILDING PERMIT	25/12/18
No.	DESCRIPTION	DATE
REVISIONS		



HWDSB



Project Title:
2026-P02206 Chedoke Elementary School Washroom Renovations

500 Bendamere Ave., Hamilton, ON

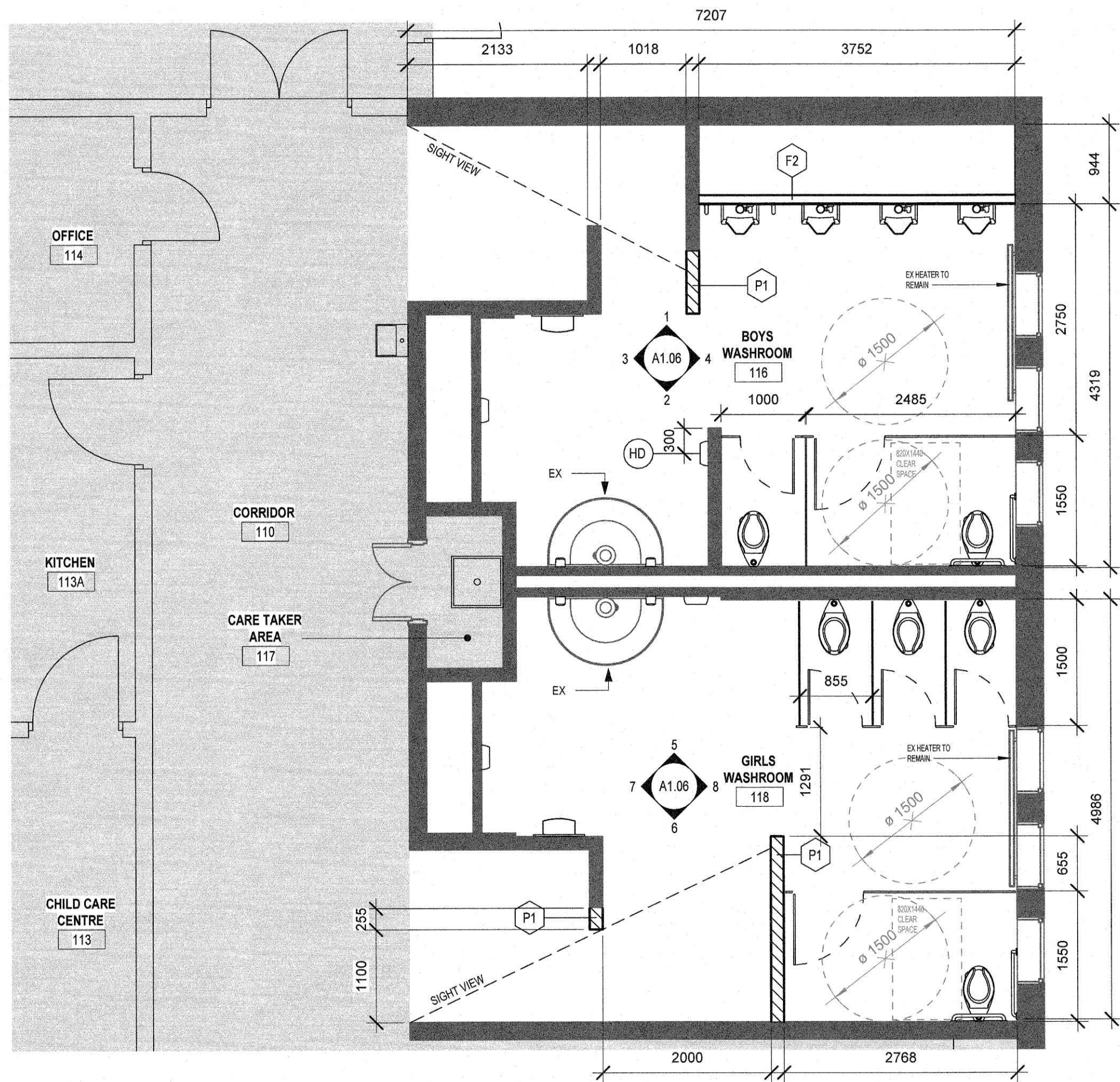
Drawing Title:
SECOND FLOOR DEMOLITION

Drawn:
AS
Scale:
As indicated
Checked:
AJ
Project Number:
25-25

Drawing No.:
A1.03

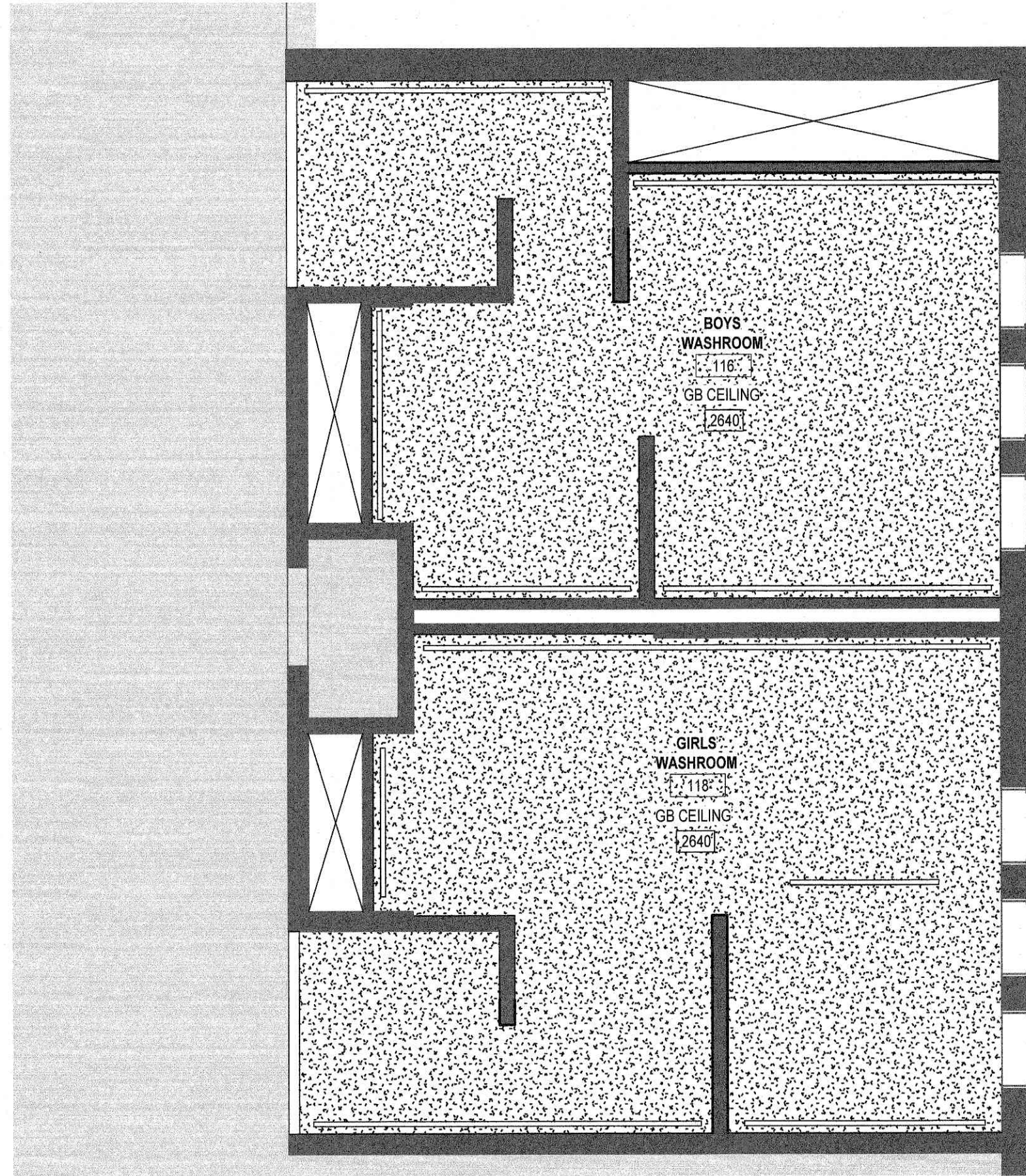
Revision:
0

12/18/2025 12:03:38 PM



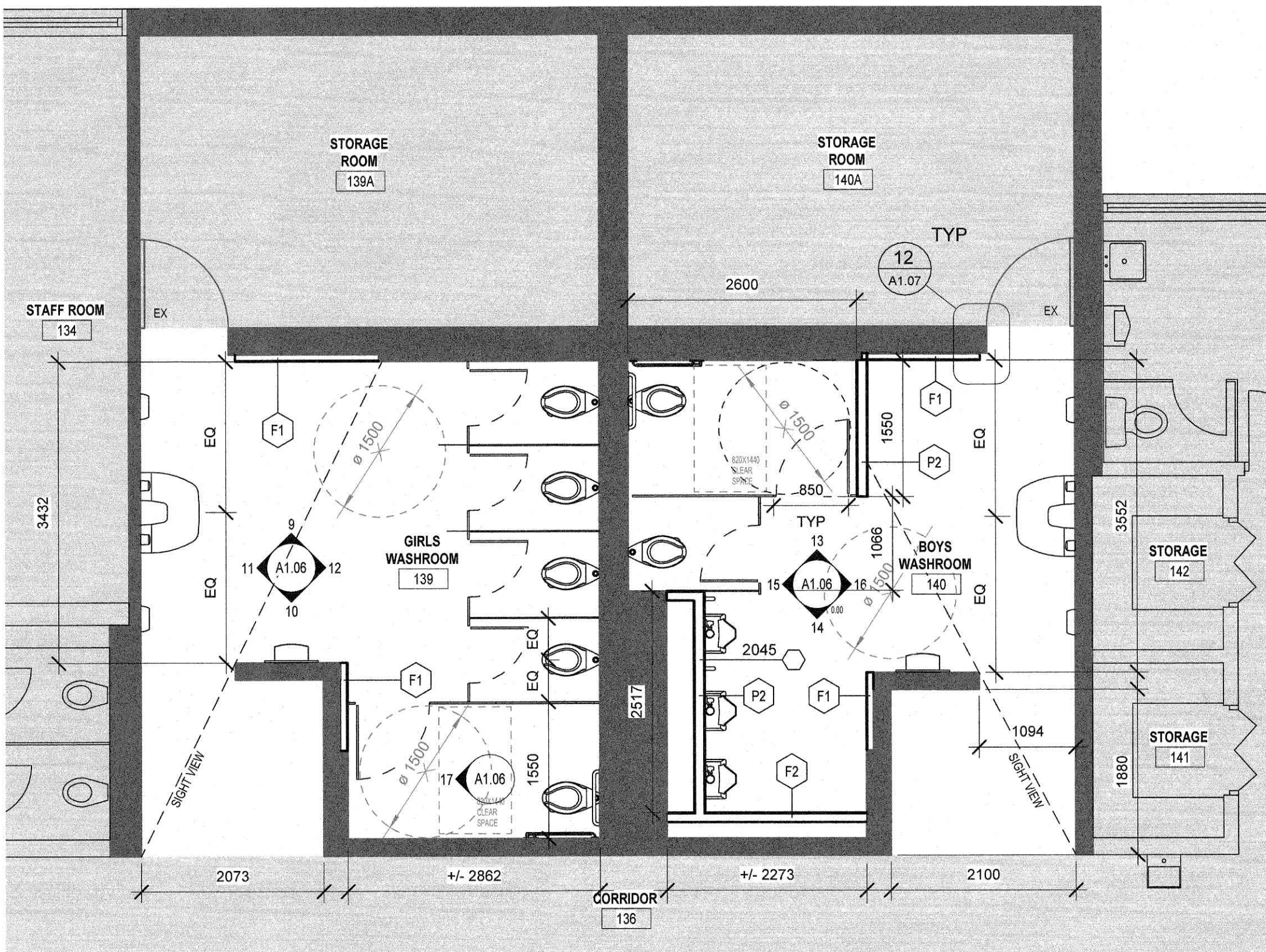
ROOMS 116, 118 (PARTIAL RENOVATION) PROPOSED FLOOR PLAN
SCALE: 1:50

2
A1.04



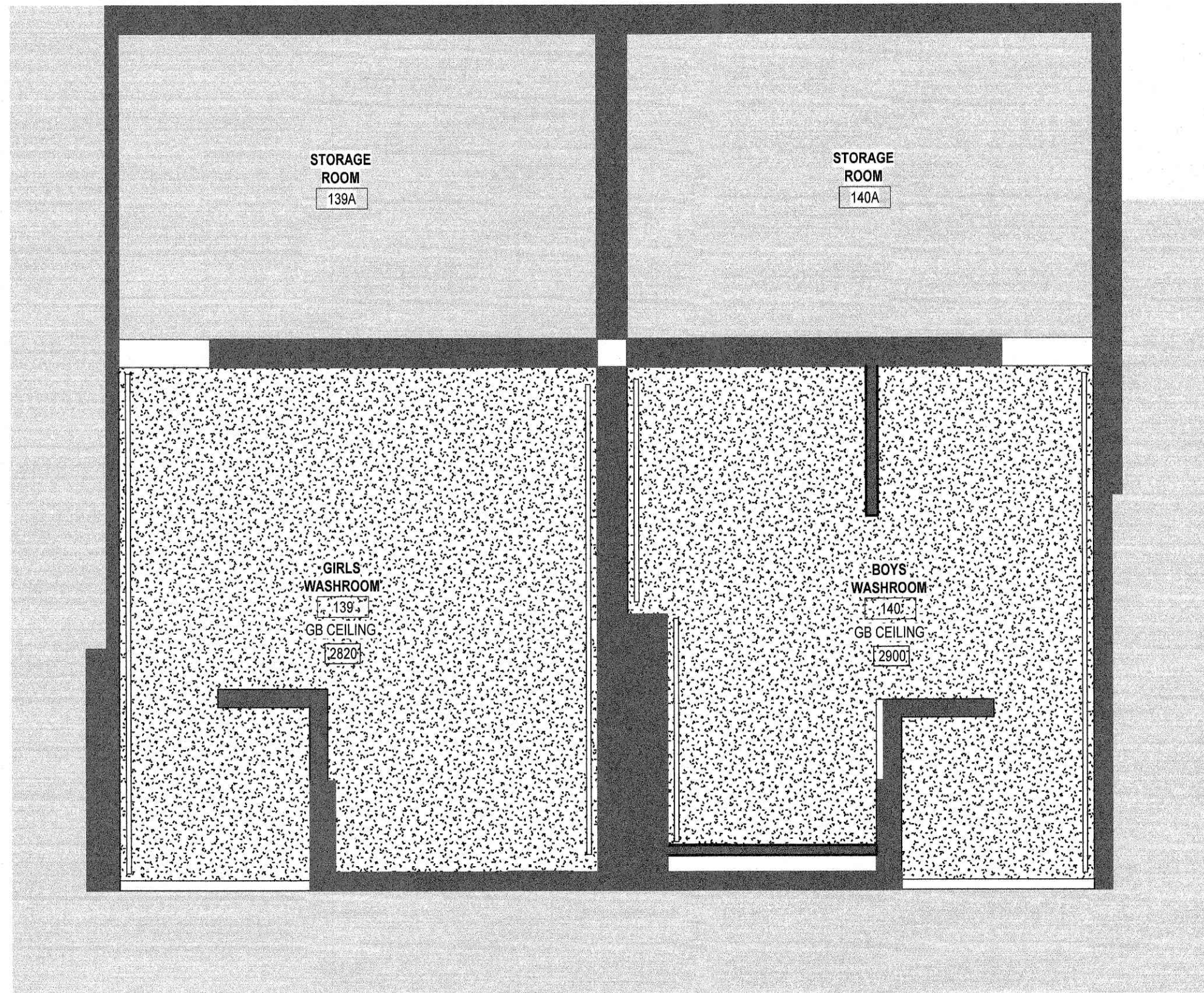
ROOMS 116, 118 PROPOSED RCP
SCALE: 1:50

3
A1.04



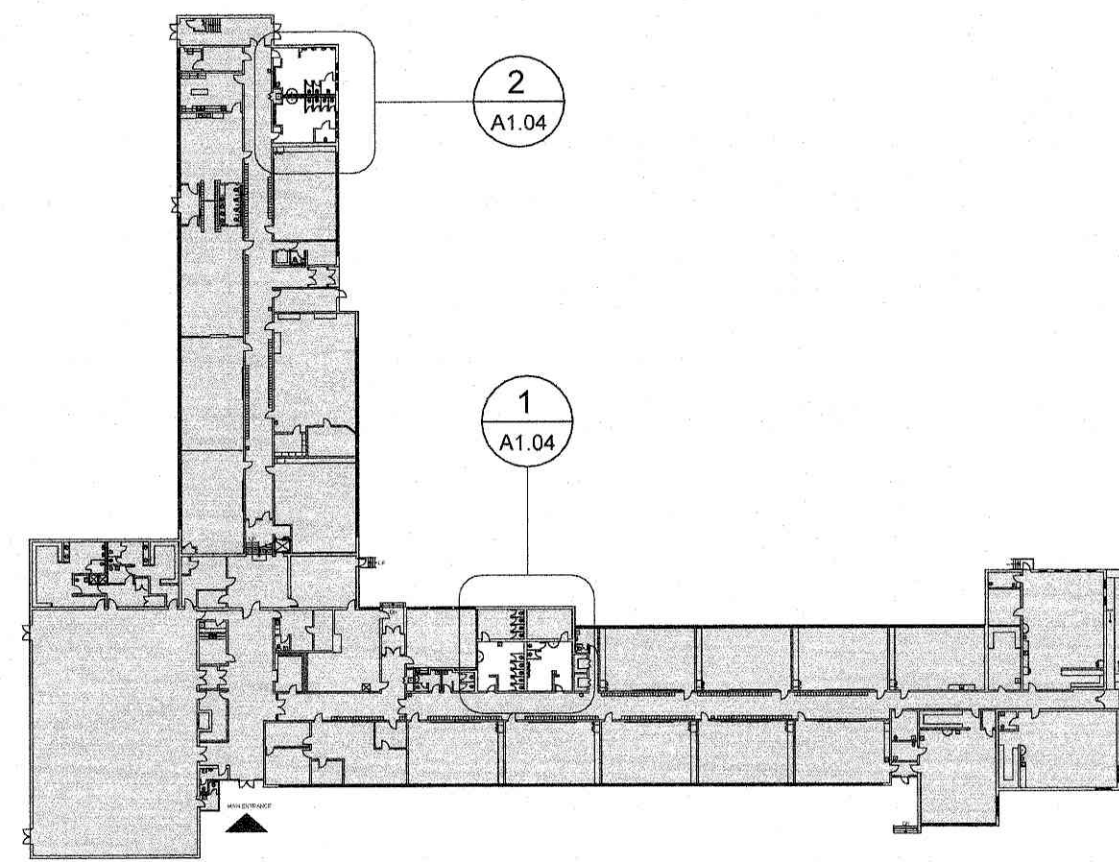
ROOMS 139, 140 (FULL RENOVATION) PROPOSED LAYOUT FLOOR PLAN
SCALE: 1:50

1
A1.04



ROOMS 139, 139A, 140, 140A PROPOSED RCP
SCALE: 1:50

6
A1.04



GROUND FLOOR PROPOSED FLOOR PLAN - KEY MAP
SCALE: 1:850



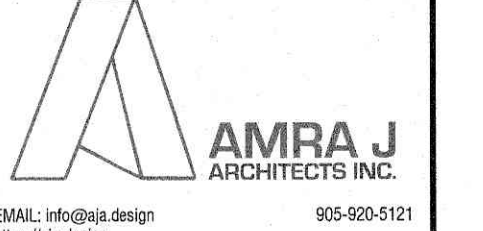
CITY OF HAMILTON
Building Division
Permit No. 25-104730
THESE STAMPED DRAWINGS SHALL BE AVAILABLE ON SITE
THE OWNER AND/OR CONTRACTOR SHALL COMPLY WITH THE ONTARIO BUILDING CODE AND ALL OTHER APPLICABLE LAWS
These drawings and/or specifications have been reviewed by
JAN 02 2025
DATE

DO NOT SCALE DRAWING DIMENSIONS ARE TO BE CHECKED AND VERIFIED BY THE CONTRACTOR ON SITE
ALL DRAWING SPECIFICATIONS AND RELATED DOCUMENTS ARE THE COPYRIGHT PROPERTY OF THE ARCHITECT AND MUST BE RETURNED UPON REQUEST
REPRODUCTION OF DRAWINGS, SPECIFICATIONS, AND RELATED DOCUMENTS IN WHOLE OR IN PART IS STRICTLY FORBIDDEN WITHOUT THE ARCHITECT'S WRITTEN PERMISSION

0	ISSUED FOR BUILDING PERMIT	25/12/18
No.	DESCRIPTION	DATE
REVISIONS		



HWDSB



WASHROOM FLOOR PLANS ABBREVIATIONS	
CH	COAT HOOK
HD	HAND DRYER (SEE ELECTRICAL DWGS)
PTD	PAPER TOWEL DISPENSER
SD	SOAP DISPENSER (SUPPLIED BY OWNER, INSTALLED BY GC)
TPD	TOILET PAPER DISPENSER
GB1	VERTICAL GRAB BAR
GB2	HORIZONTAL GRAB BAR (800MM)
GB3	L-SHAPED GRAB BAR
ND	NAPKIN DISPOSAL
MR	MIRROR
WR	WASTE RECEPTACLE

project title:
2026-P02206 Chedoke Elementary School Washroom Renovations
500 Bendamere Ave., Hamilton, ON

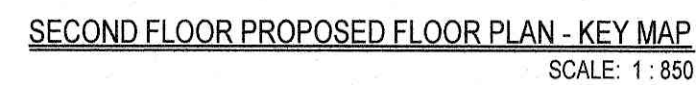
drawing title:
GROUND FLOOR PROPOSED FLOOR PLANS

drawn by:
AS
scale:
As indicated

checked by:
AJ
project number:
25-25

DRAWING NO:
A1.04
Revision:
0

Z:\Projects\25-25 2025-P02206 Chedoke Elementary School\25-25 CHEDOKO ELEMENTARY SCHOOL.rvt



WASHROOM FLOOR PLANS ABBREVIATIONS

CH	COAT HOOK
HD	HAND DRYER (SEE ELECTRICAL DWGS)
PTD	PAPER TOWEL DISPENSER
SD	SOAP DISPENSER (SUPPLIED BY OWNER, INSTALLED BY GC)
TPD	TOILET PAPER DISPENSER
GB1	VERTICAL GRAB BAR
GB2	HORIZONTAL GRAB BAR (600MM)
GB3	L - SHAPED GRAB BAR
ND	NAPKIN DISPOSAL
MR	MIRROR
WR	WASTE RECEPTACLE

CITY OF HAMILTON
BUILDING DIVISION
Planning & Development Department

DEC 18 2025

REC'D BY _____ DATE _____
REF'D TO _____ DATE _____

CITY OF HAMILTON
Building Division

Permit No. 25-104730

THESE STAMPED DRAWINGS SHALL BE AVAILABLE ON SITE

THE OWNER AND/OR CONTRACTOR SHALL COMPLY WITH
THE ONTARIO BUILDING CODE AND ALL OTHER APPLICABLE LA

These drawings and/or specifications have been reviewed by

D.L. JAN 07 2007

CITY BUILDING OFF. DATE

DO NOT SCALE DRAWING. DIMENSIONS ARE TO BE CHECKED AND VERIFIED BY THE CONTRACTOR ON SITE

ALL DRAWINGS, SPECIFICATIONS, AND RELATED DOCUMENTS ARE THE COPYRIGHT PROPERTY OF THE ARCHITECT AND MUST BE RETURNED UPON REQUEST. REPRODUCTION OF DRAWINGS, SPECIFICATIONS, AND RELATED DOCUMENTS IN WHOLE OR IN PART IS STRICTLY FORBIDDEN WITHOUT THE ARCHITECT'S WRITTEN PERMISSION.

0	ISSUED FOR BUILDING PERMIT	25/12/18
No.	DESCRIPTION	DATE
REVISIONS		

SEAL:

**HWDSB**

EMAIL: info@aja.design 905-920-512

project title:
2026-P02206 Chedoke Elementary
School
Washroom Renovations

500 Bendamere Ave., Hamilton, ON

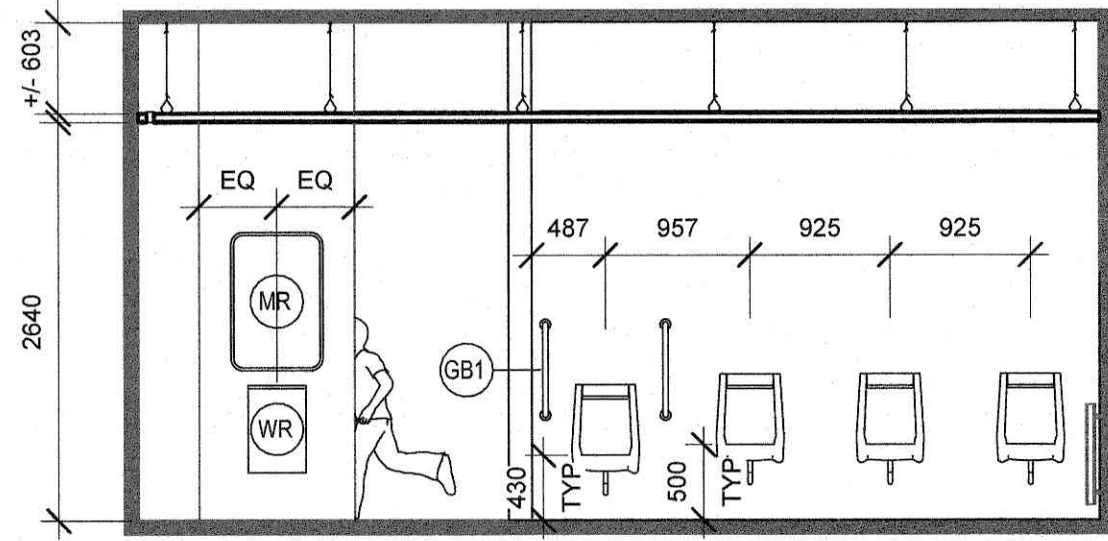
drawing title:
SECOND FLOOR PROPOSED
FLOOR PLANS

drawn: AS	scale: As indicated
checked: AJ	project number: 25-25

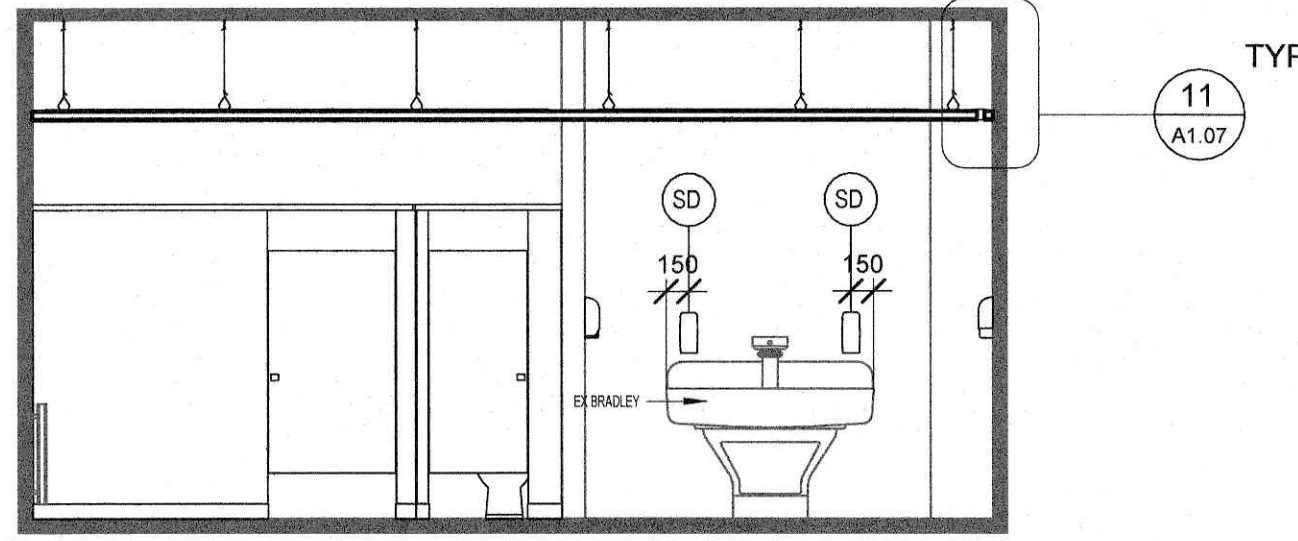
DRAWING NO	
------------	--

A1.05

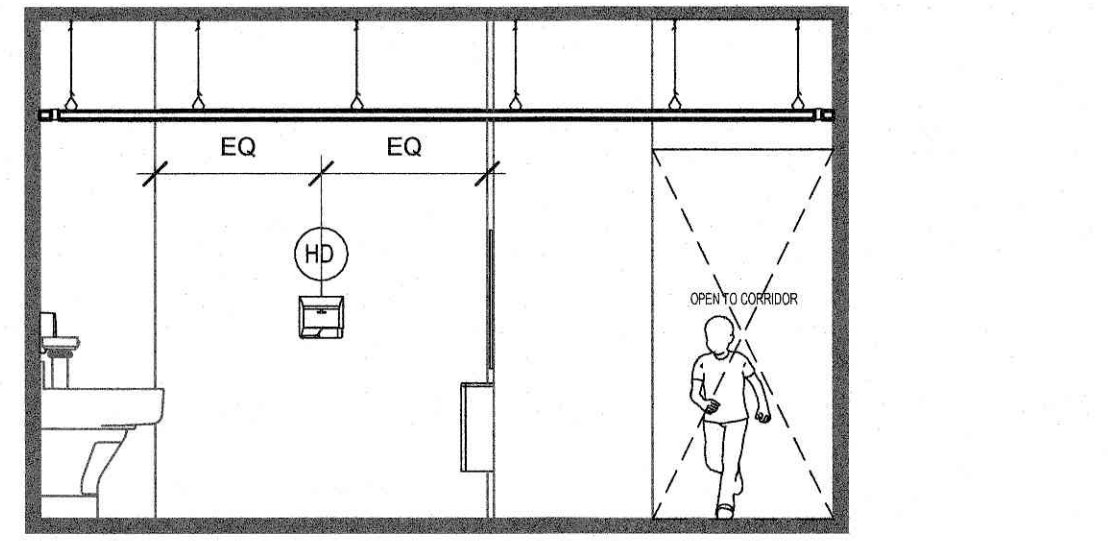
0
Reviews



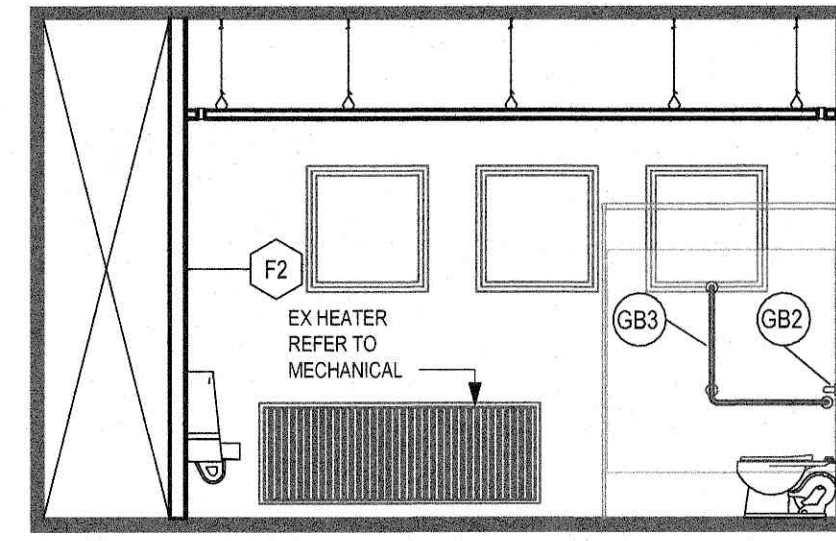
BOYS WASHROOM 116 NORTH ELEVATION
SCALE: 1:50
1
A1.04



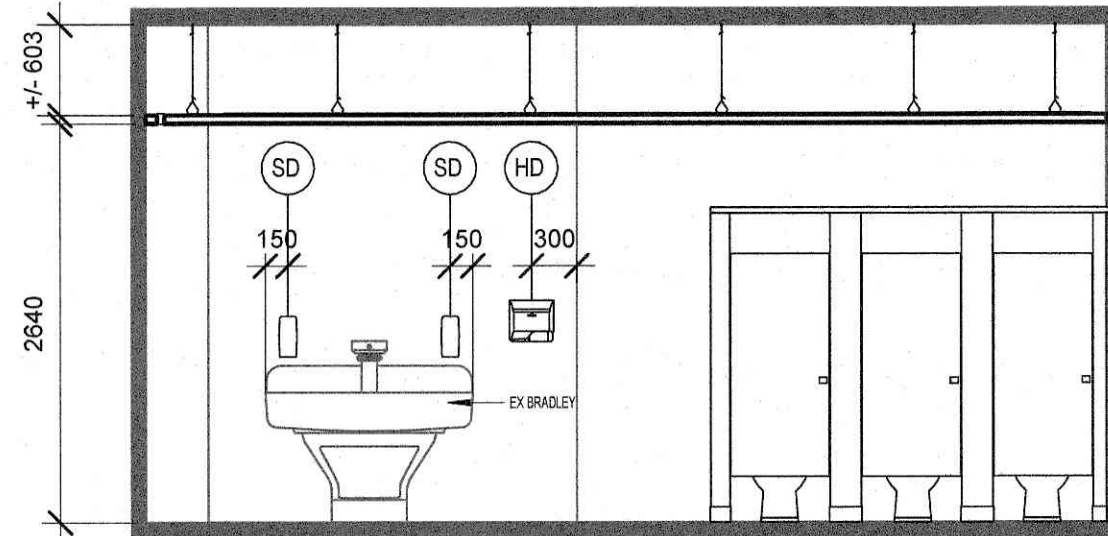
BOYS WASHROOM 116 SOUTH ELEVATION
SCALE: 1:50
2
A1.04



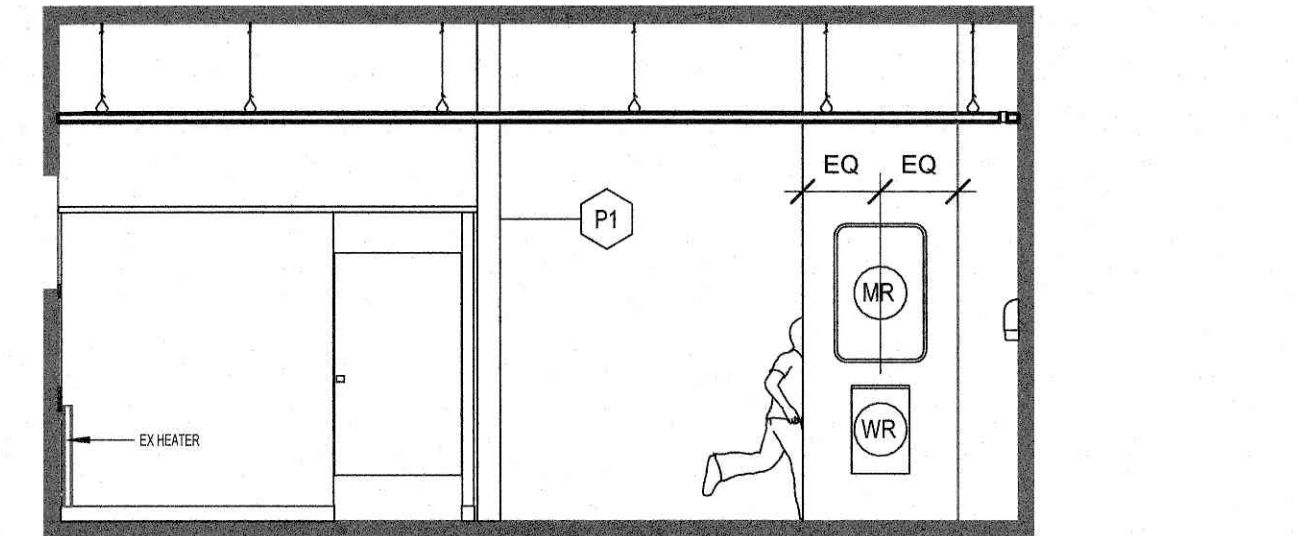
BOYS WASHROOM 116 WEST ELEVATION
SCALE: 1:50
3
A1.04



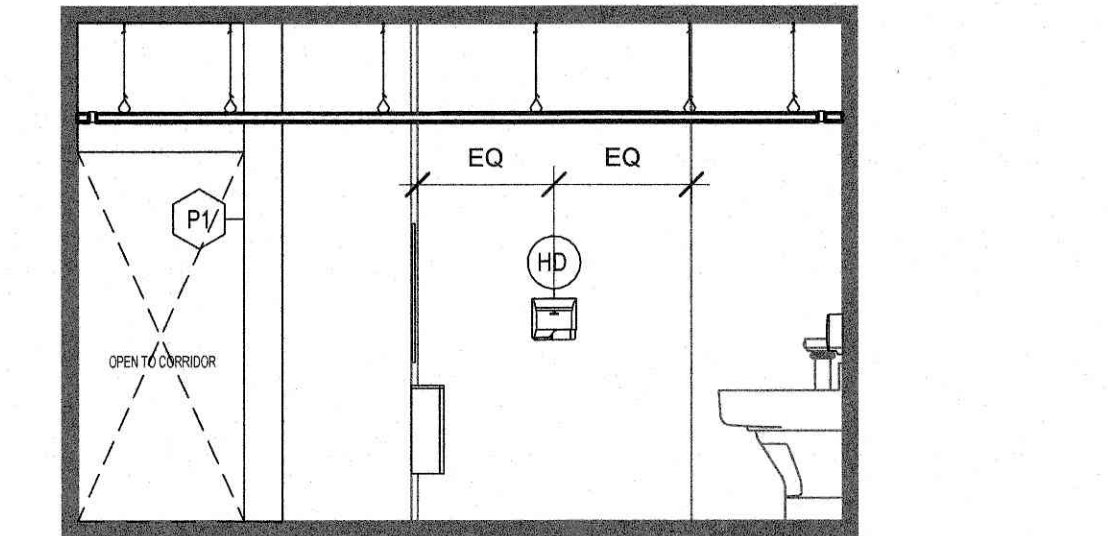
BOYS WASHROOM 116 EAST ELEVATION
SCALE: 1:50
4
A1.04



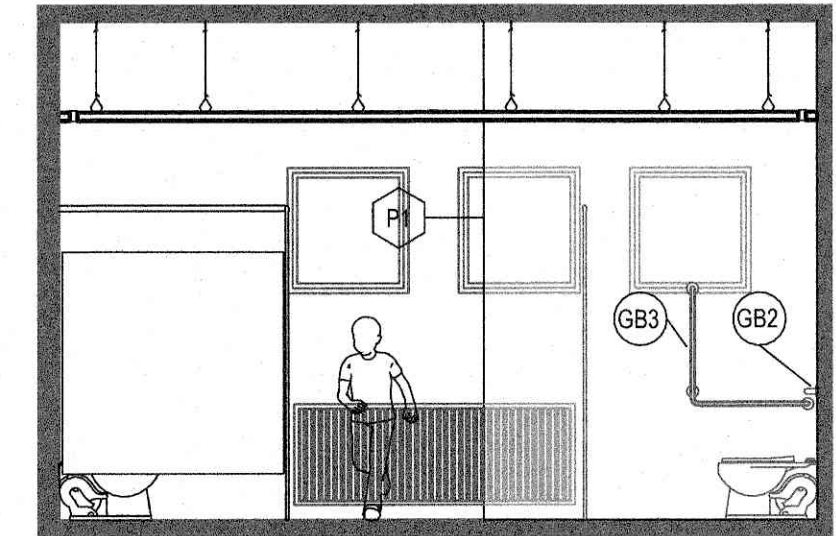
GLRLS WASHROOM 118 NORTH ELEVATION
SCALE: 1:50
5
A1.04



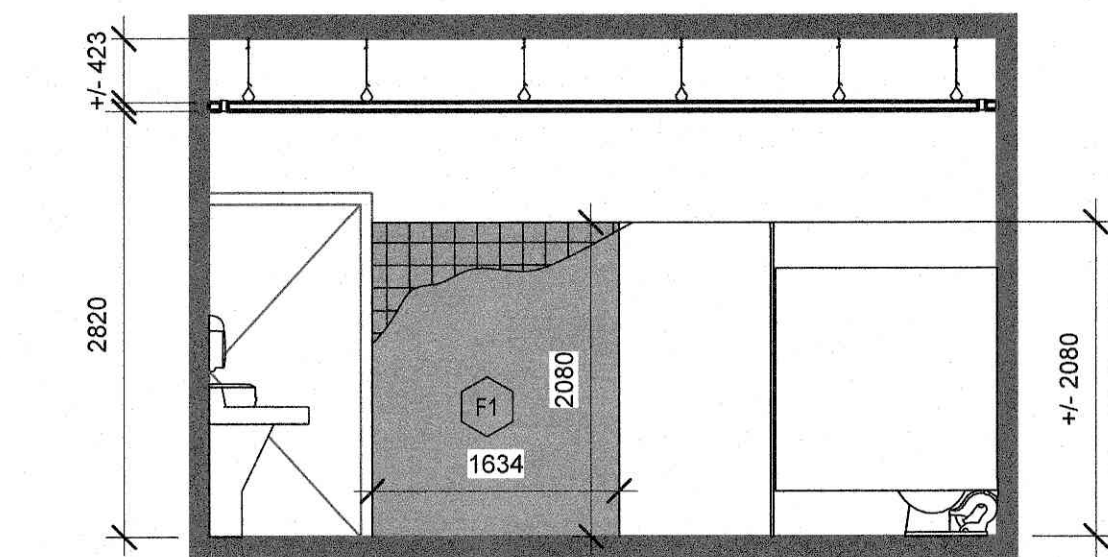
GLRLS WASHROOM 118 SOUTH ELEVATION
SCALE: 1:50
6
A1.04



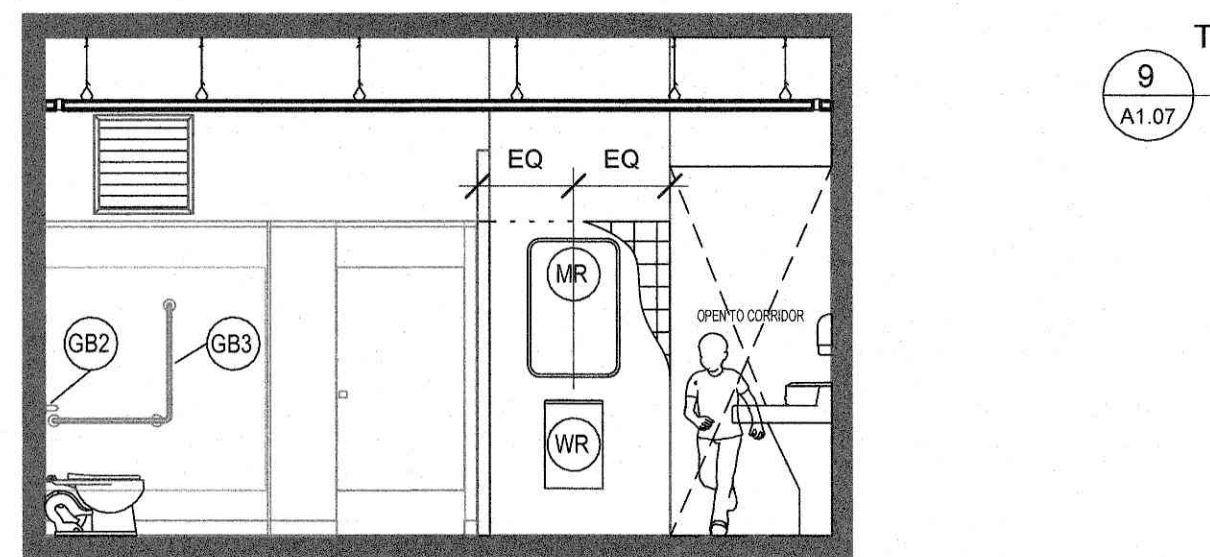
GLRLS ROOM 118 WEST ELEVATION
SCALE: 1:50
7
A1.04



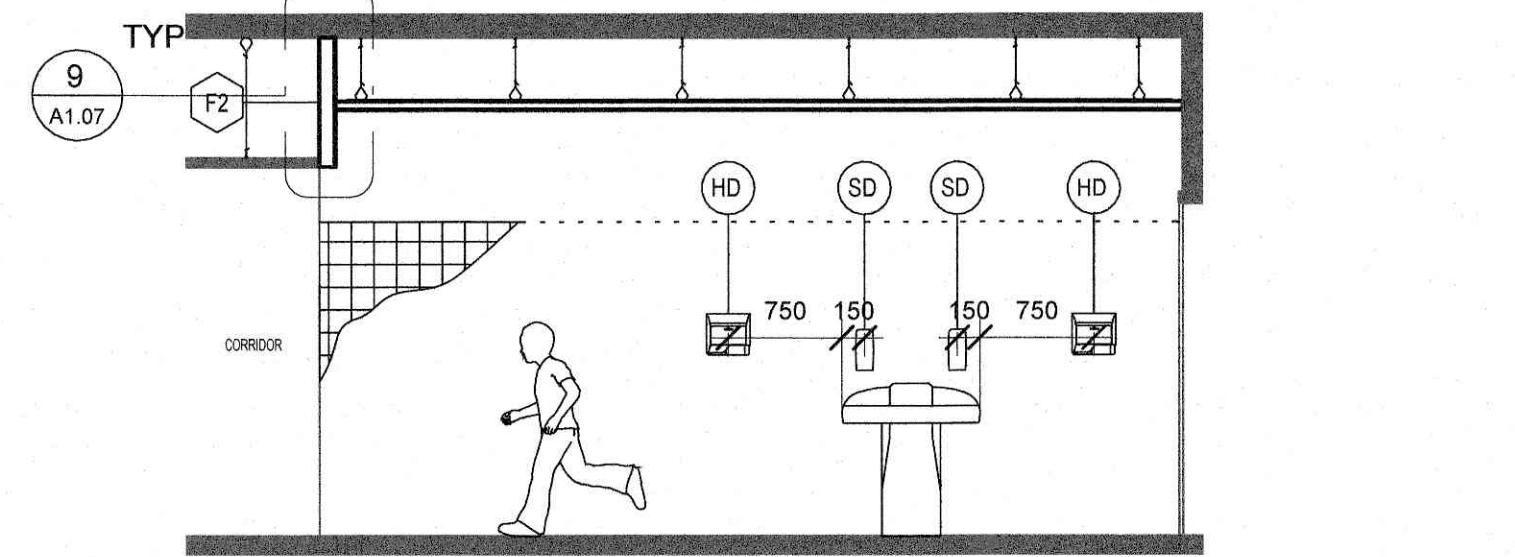
GLRLS WASHROOM 118 EAST ELEVATION
SCALE: 1:50
8
A1.04



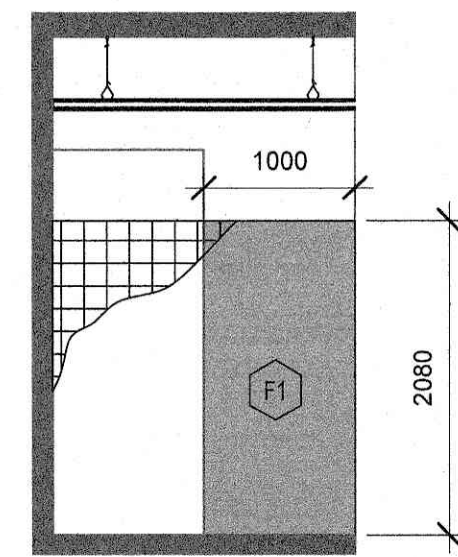
GLRLS WASHROOM 139 NORTH ELEVATION
SCALE: 1:50
9
A1.04



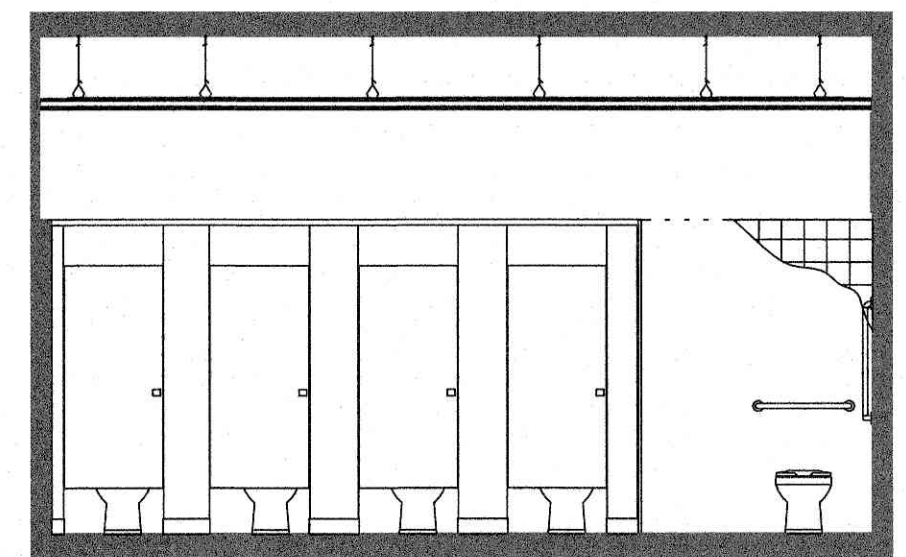
GLRLS WASHROOM 139 SOUTH ELEVATION
SCALE: 1:50
10
A1.04



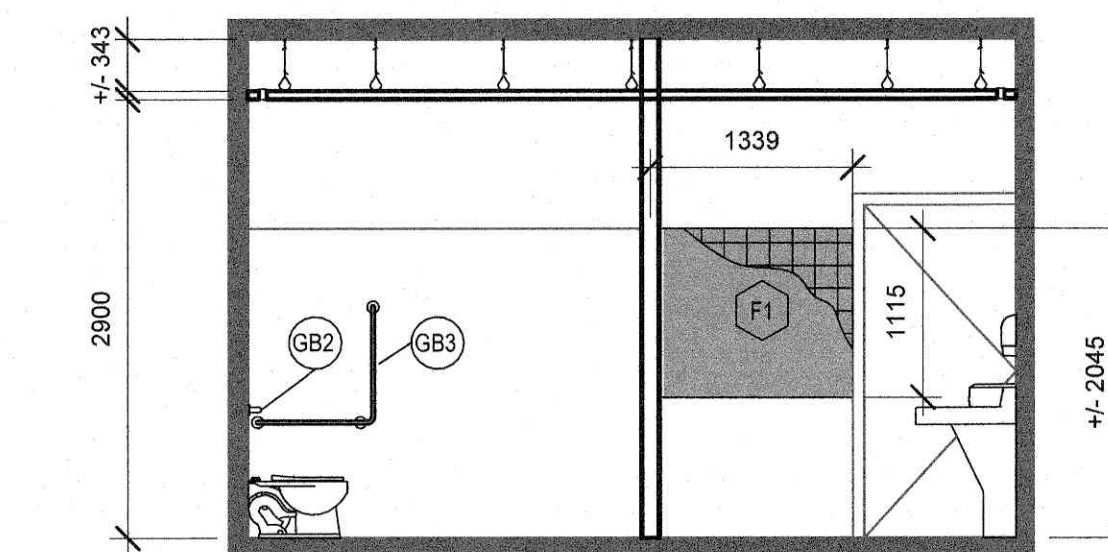
GLRLS WASHROOM 139 WEST ELEVATION
SCALE: 1:50
11
A1.04



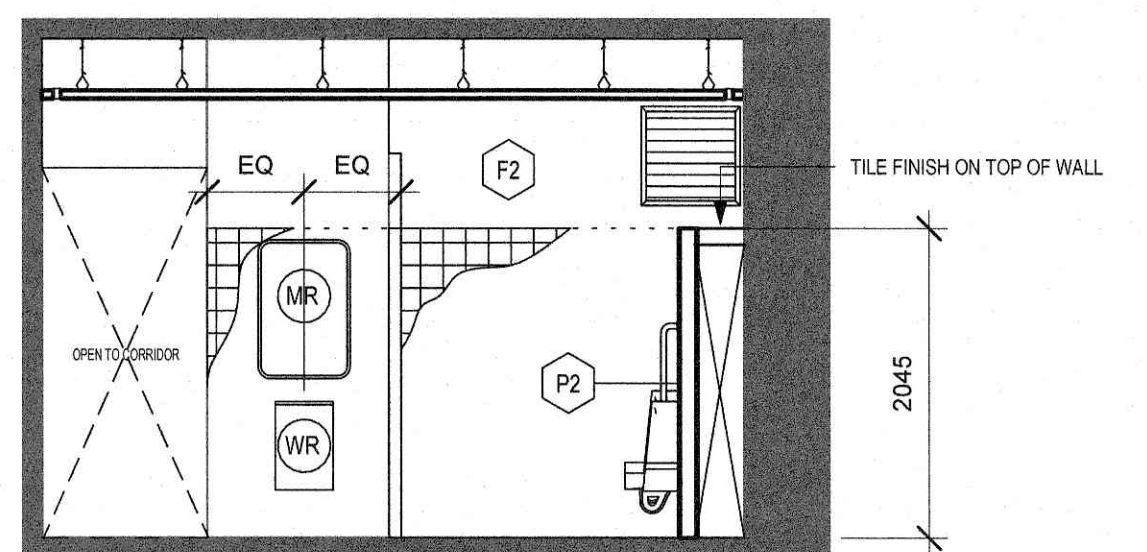
GLRLS WASHROOM 139 WEST ELEVATION 2
SCALE: 1:50
17
A1.04



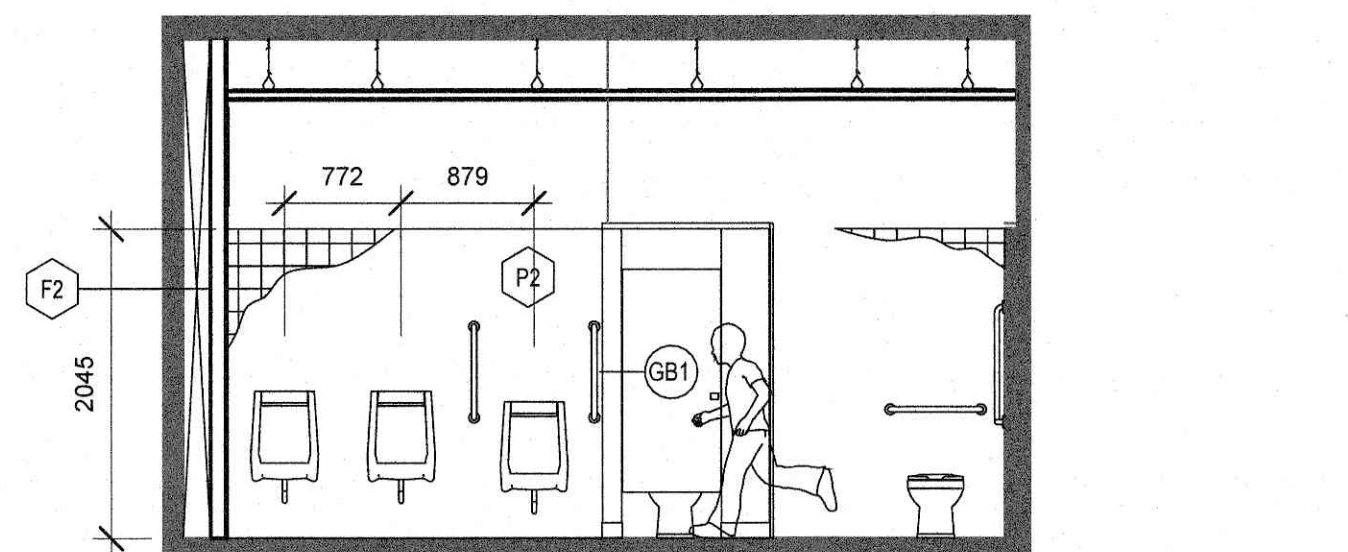
GLRLS WASHROOM 139 EAST ELEVATION
SCALE: 1:50
12
A1.04



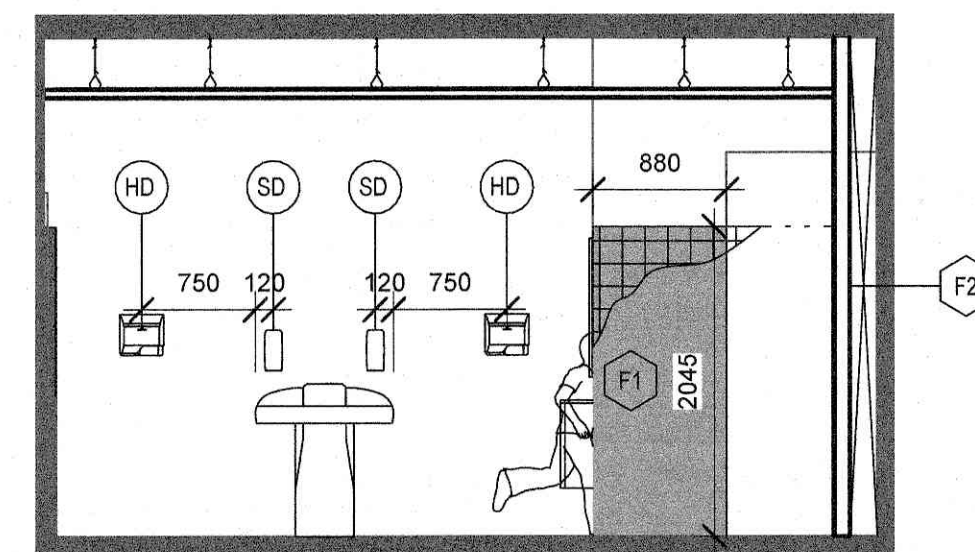
BOYS WASHROOM 140 NORTH ELEVATION
SCALE: 1:50
13
A1.04



BOYS WASHROOM 140 SOUTH ELEVATION
SCALE: 1:50
14
A1.04

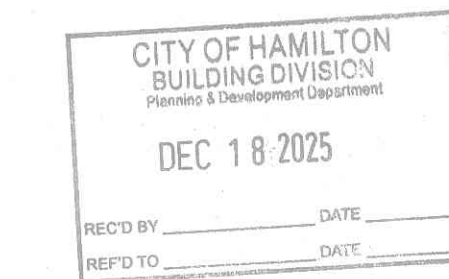


BOYS WASHROOM 140 WEST ELEVATION
SCALE: 1:50
15
A1.04



BOYS WASHROOM 140 EAST ELEVATION
SCALE: 1:50
16
A1.04

WASHROOM FLOOR PLANS ABBREVIATIONS	
CH	COAT HOOK
HD	HAND DRYER (SEE ELECTRICAL DWGS)
PTD	PAPER TOWEL DISPENSER
SD	SOAP DISPENSER (SUPPLIED BY OWNER, INSTALLED BY GC)
TPD	TOILET PAPER DISPENSER
GB1	VERTICAL GRAB BAR
GB2	HORIZONTAL GRAB BAR (600MM)
GB3	L-SHAPED GRAB BAR
ND	NAPKIN DISPOSAL
MR	MIRROR
WR	WASTE RECEPTACLE



CITY OF HAMILTON
Building Division
Permit No. 25-104730
THESE STAMPED DRAWINGS SHALL BE AVAILABLE ON SITE
THE OWNER AND/OR CONTRACTOR SHALL COMPLY WITH
THE ONTARIO BUILDING CODE AND ALL OTHER APPLICABLE LAW
These drawings and/or specifications have been reviewed by
DATE: 12/18/2025

DO NOT SCALE DRAWING DIMENSIONS ARE TO BE
CHECKED AND VERIFIED BY THE CONTRACTOR ON SITE
ALL DRAWING SPECIFICATIONS AND RELATED
DOCUMENTS ARE THE COPYRIGHT PROPERTY OF THE
ARCHITECT AND MUST BE KEPT AS A RECORD
REPRODUCTION OF DRAWINGS, SPECIFICATIONS, AND
RELATED DOCUMENTS IN WHOLE OR IN PART IS STRICTLY
PROHIBITED WITHOUT THE ARCHITECT'S WRITTEN
PERMISSION

0	ISSUED FOR BUILDING PERMIT	25/12/18
No.	DESCRIPTION	DATE
REVISIONS		



HWDSB

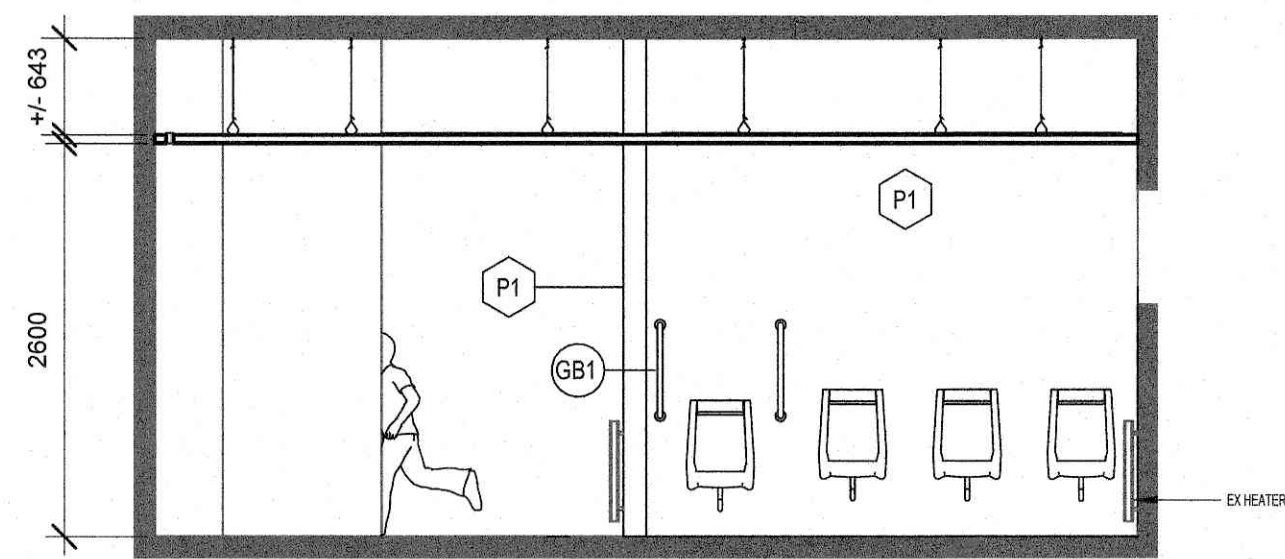


project title:
2025-P02206 Chedoke Elementary School Washroom Renovations
500 Bendamere Ave., Hamilton, ON

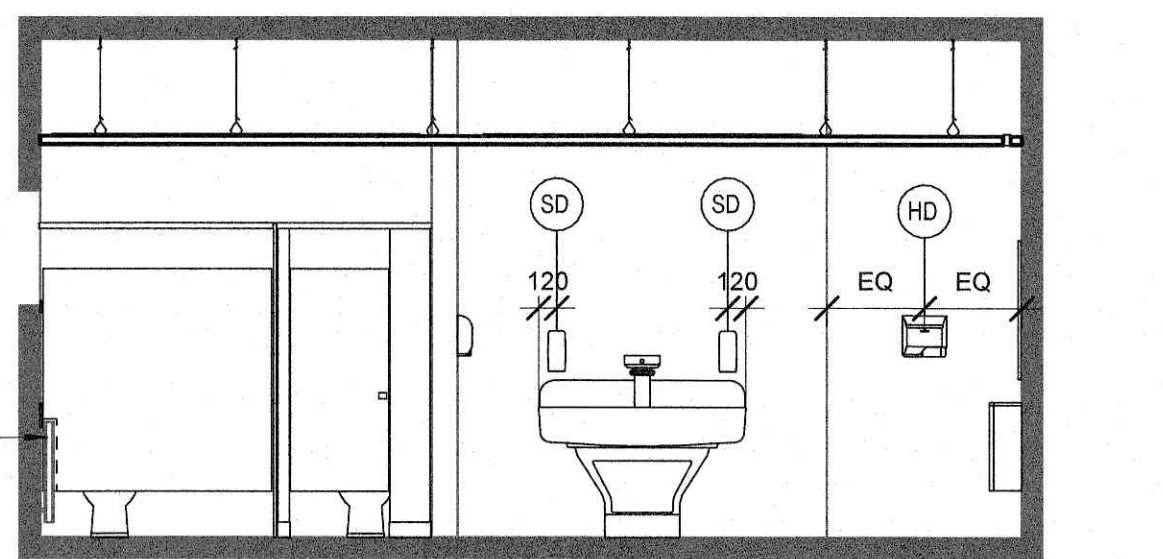
drawing title:
GROUND FLOOR PROPOSED INTERIOR ELEVATIONS

drawn:	scale:
AS	As indicated
checked:	project number:
AJ	25-25

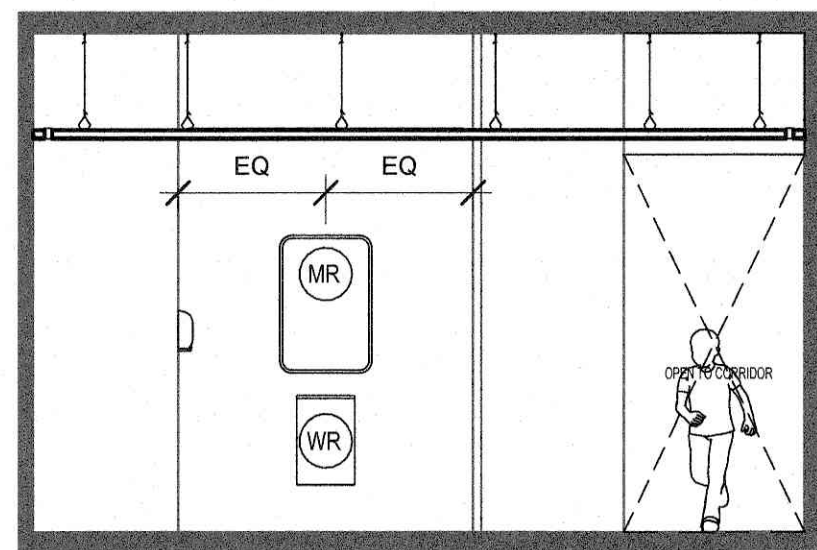
DRAWING NO:
A1.06
0
Revision



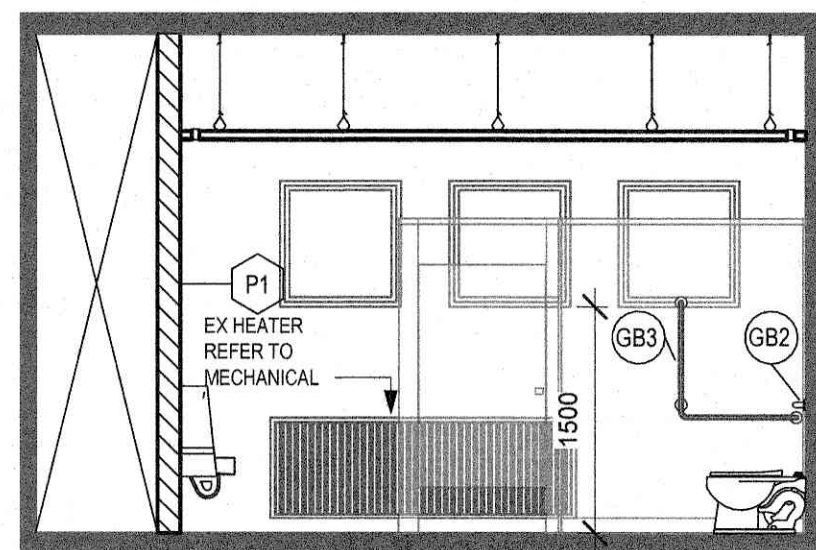
BOYS WASHROOM 209 NORTH ELEVATION
SCALE: 1:50
A1.05



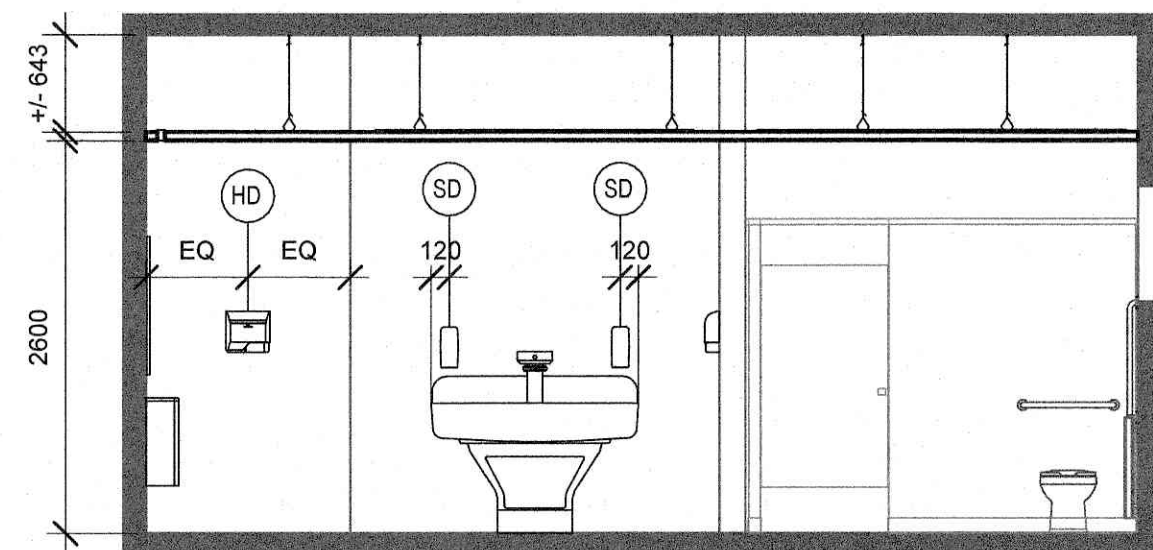
BOYS WASHROOM 209 SOUTH ELEVATION
SCALE: 1:50
A1.05



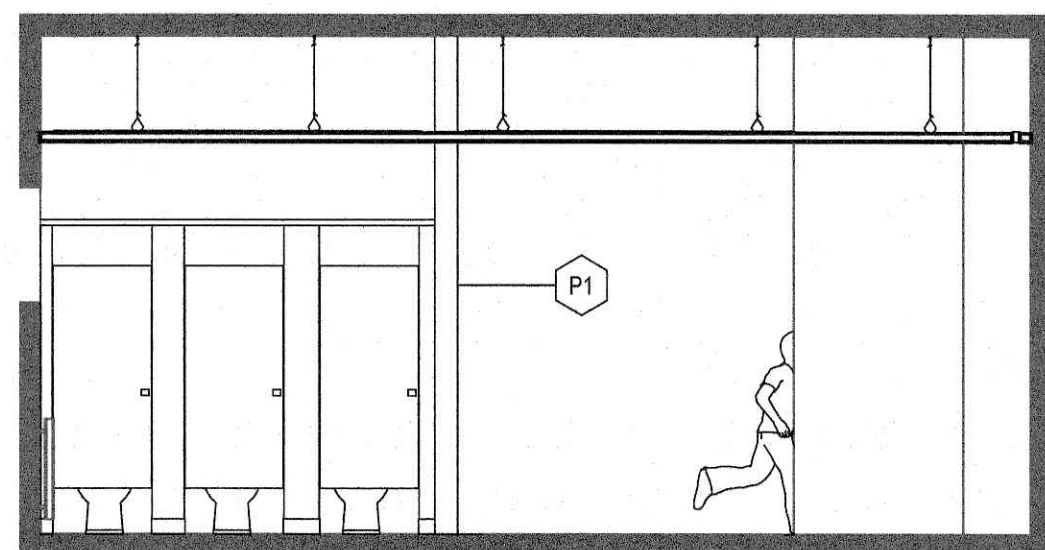
BOYS WASHROOM 209 WEST ELEVATION
SCALE: 1:50
A1.05



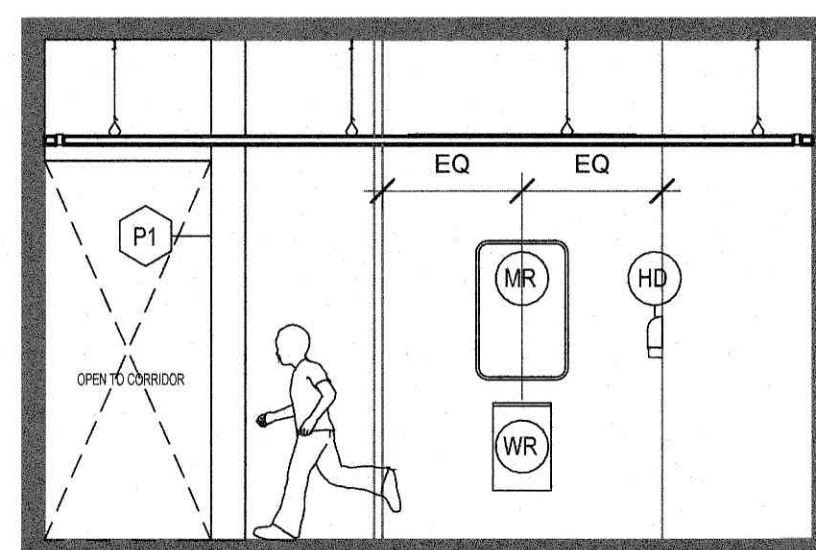
BOYS WASHROOM 209 EAST ELEVATION
SCALE: 1:50
A1.05



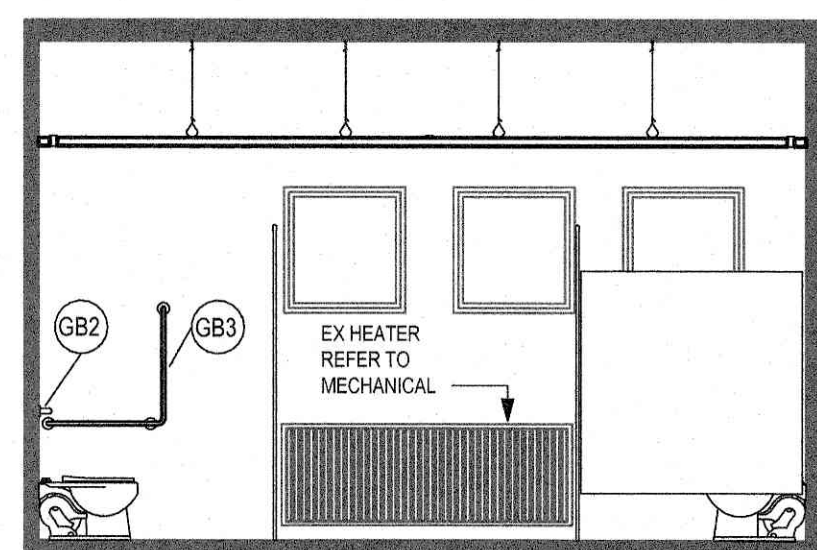
GIRLS WASHROOM 211 NORTH ELEVATION
SCALE: 1:50
A1.05



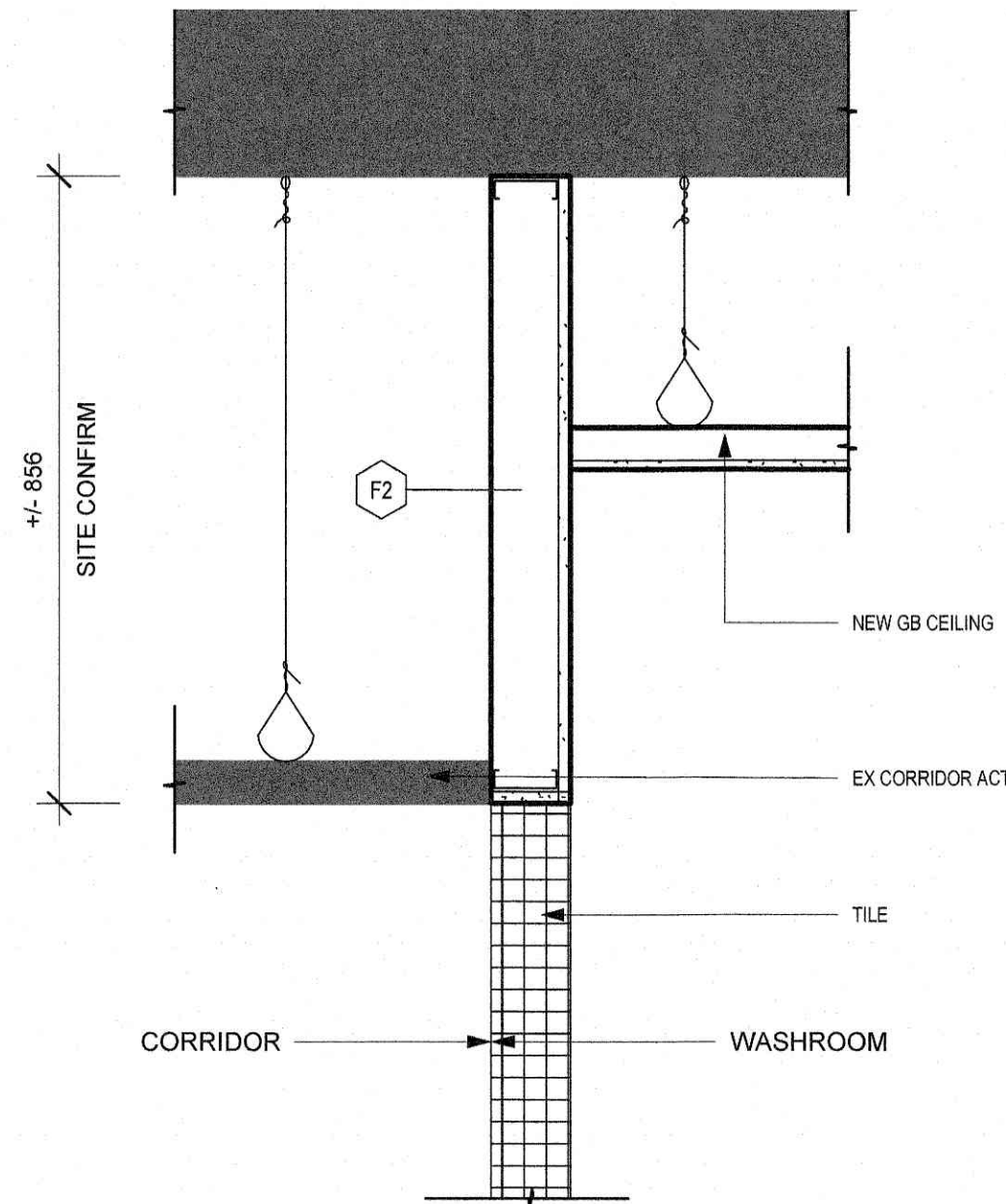
GIRLS WASHROOM 211 SOUTH ELEVATION
SCALE: 1:50
A1.05



GIRLS WASHROOM 211 WEST ELEVATION
SCALE: 1:50
A1.05



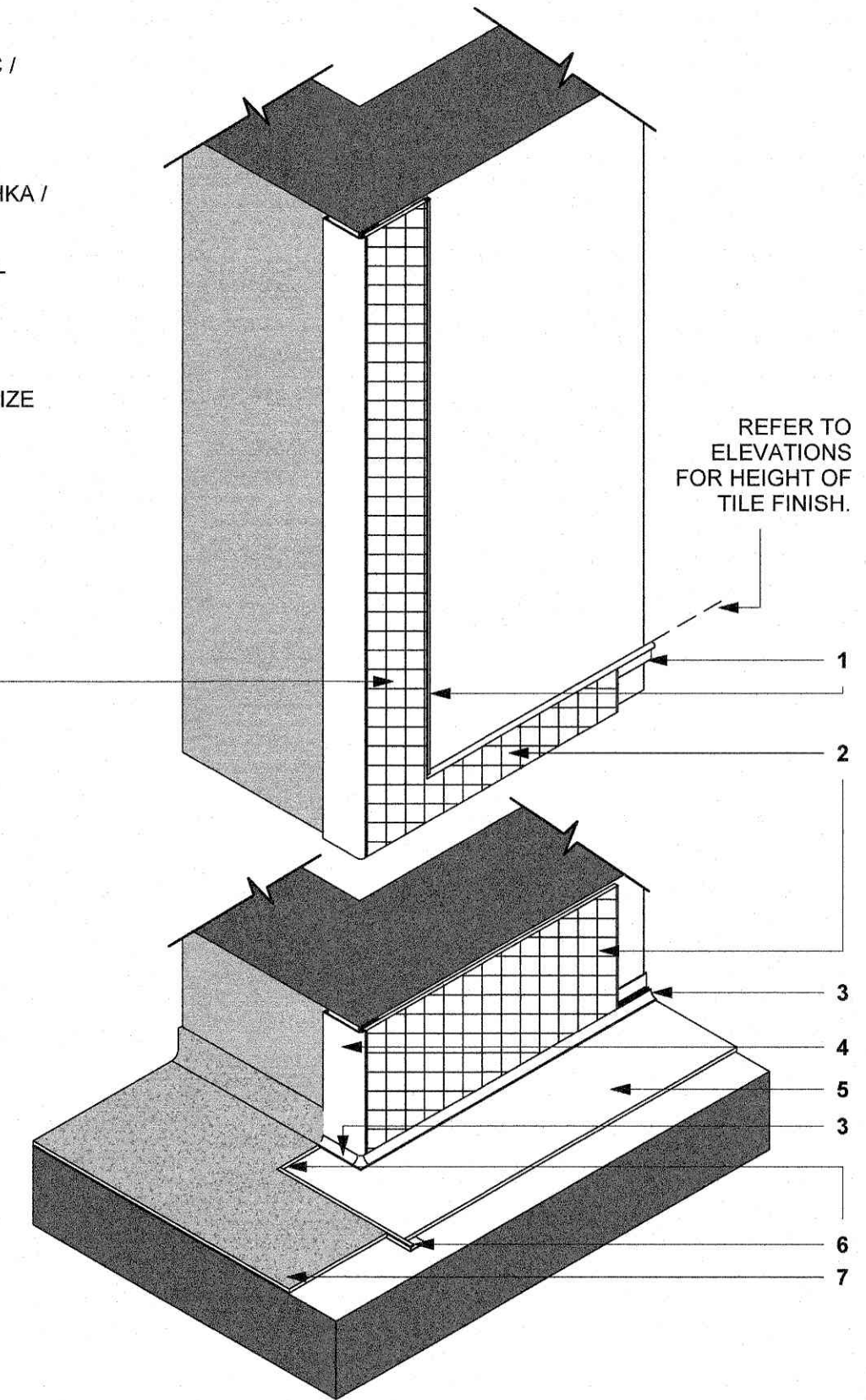
GIRLS WASHROOM 211 EAST ELEVATION
SCALE: 1:50
A1.05



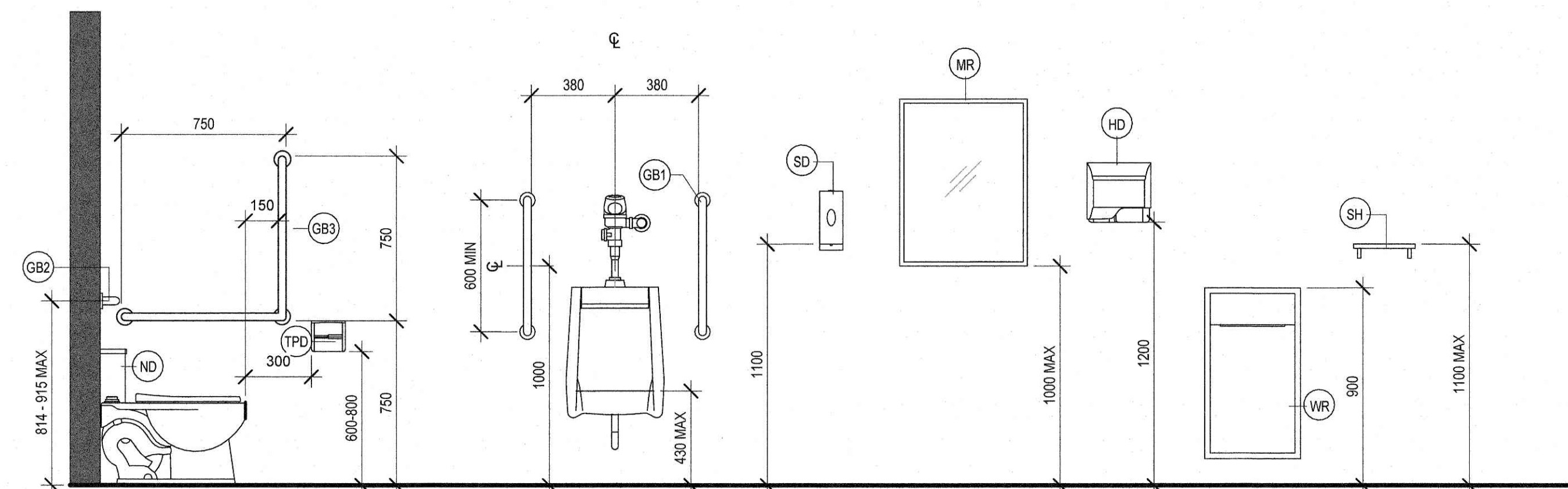
BULKHEAD TYPICAL DETAIL
SCALE: 1:10
A1.07

- 1- STAINLESS STEEL SCHLUTER QUADREC / SIZE TO SUIT INSTALLATION
- 2- NEW WALL TILE
- 3- STAINLESS STEEL SCHLUTER DILEX-AHKA / SIZE TO SUIT INSTALLATION
- 4- STAINLESS STEEL SCHLUTER RONDEC-STEP / SIZE TO SUIT INSTALLATION
- 5- NEW TILE FLOORING
- 6- STAINLESS STEEL SCHLUTER DECO / SIZE TO SUIT INSTALLATION
- 7- EXISTING CORRIDOR FLOORING

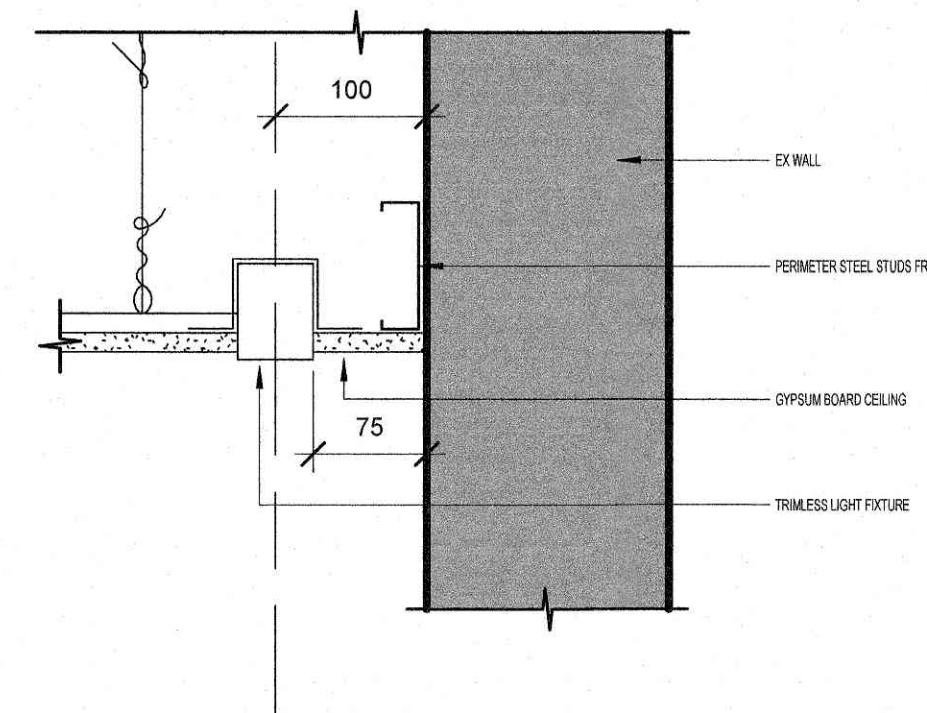
TILE TO RUN TO THE UNDERSIDE OF THE HEADER. REFER TO DETAIL 9/A1.07



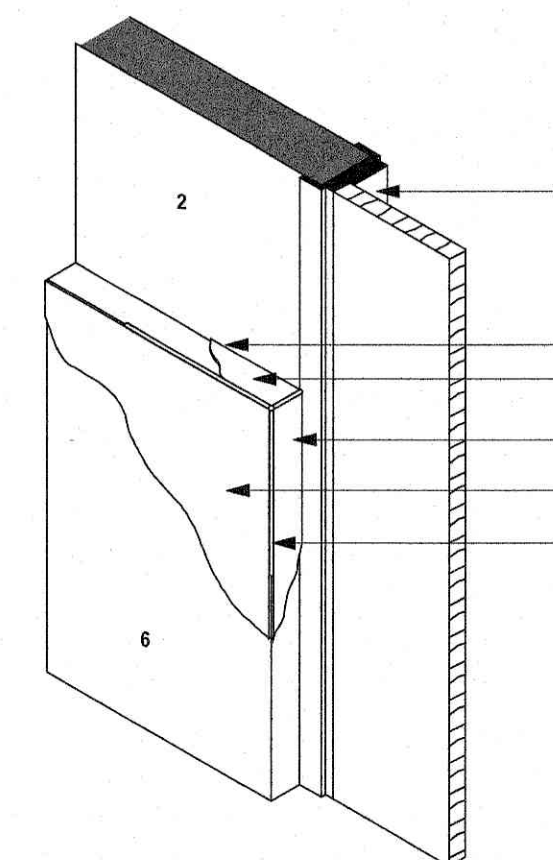
WASHROOM OPENING TO CORRIDOR TYP DETAIL
SCALE: 1:8
A1.07



TYPICAL WASHROOM ACCESSORIES MOUNTING HEIGHT
SCALE: 1:20



LINEAR LIGHT DETAIL
SCALE: 1:5
A1.07



- 1- EXISTING DOOR / FRAME
- 2- EXISTING MASONRY WALL
- 3- SEALANT
- 4- TILE
- 5- STAINLESS STEEL SCHLUTER QUADREC / SIZE TO SUIT INSTALLATION
- 6- EX MASONRY / NEW F1 BUMP OUT

BUMP OUT TILE DETAIL
SCALE: 1:15
A1.07



CITY OF HAMILTON
Building Division
Permit No. 25-104730
THOSE STAMPED DRAWINGS SHALL BE AVAILABLE ON SITE
THE OWNER AND/OR CONTRACTOR SHALL COMPLY WITH THE ONTARIO BUILDING CODE AND ALL OTHER APPLICABLE LAW
Those drawings and/or specifications have been reviewed by
DATE: 11/11/25

DO NOT SCALE DRAWING DIMENSIONS ARE TO BE CHECKED AND VERIFIED BY THE CONTRACTOR ON SITE
ALL DRAWINGS, SPECIFICATIONS, AND RELATED DOCUMENTS ARE THE COPYRIGHT PROPERTY OF THE ARCHITECT AND MUST BE RETURNED UPON REQUEST
REPRODUCTION OF DRAWINGS, SPECIFICATIONS, AND RELATED DOCUMENTS IN WHOLE OR IN PART IS STRICTLY FORBIDDEN WITHOUT THE ARCHITECT'S WRITTEN PERMISSION

0 ISSUED FOR BUILDING PERMIT 25/12/18
No. DESCRIPTION DATE

REVISIONS

SEAL:



HWDSB



EMAIL: info@aja.design 905-820-5121
https://aja.design

project title:
2026-P02206 Chedoke Elementary School Washroom Renovations

500 Bendamere Ave., Hamilton, ON

drawing title:
SECOND FLOOR PROPOSED INTERIOR ELEVATIONS

drawn: AS scale: As indicated

checked: AJ project number: 25-25

DRAWING NO:

A1.07

0

GENERAL PROVISIONS FOR MECHANICAL SPECIFICATIONS:

1. GENERAL CONTRACT
- 1.1 THE INSTRUCTIONS TO BIDDERS AND THE GENERAL CONDITIONS OF THE ARCHITECTURAL SPECIFICATIONS ARE AN INTEGRAL PART OF MECHANICAL DIVISION, AND SHALL BE READ IN CONJUNCTION HERewith THESE INSTRUCTIONS TO BIDDERS AND GENERAL CONDITIONS SHALL BE FULLY BINDING ON THE GENERAL CONTRACTOR AND HIS SUBCONTRACTORS TO THE FULL SATISFACTION OF THE ARCHITECT AND ENGINEER.
- 1.2 THE RESPONSIBILITY AND SCOPE OF EACH SUB-TRADE RESTS SOLELY WITH THE GENERAL CONTRACTOR. EXTRAS WILL NOT BE CONSIDERED BASED ON THE GROUNDS OF DIFFERENCE IN INTERPRETATION OF SPECIFICATIONS AND DRAWINGS AS TO WHICH TRADE INVOLVED SHALL PROVIDE CERTAIN SPECIALTIES OR MATERIALS.
- 1.3 THE INTENT OF THIS SPECIFICATION AND DRAWING IS TO PROVIDE FOR A COMPLETE OPERATING SYSTEM IN COMPLETE ACCORD WITH ALL APPLICABLE CODES. THESE SPECIFICATIONS MAY NOT COVER EACH AND EVERY ITEM REQUIRED FOR THE COMPLETE INSTALLATION; THEREFORE, THE CONTRACTOR SHALL MAKE PROVISIONS FOR ALL LABOUR, MATERIAL, AND EQUIPMENT DEEMED NECESSARY TO COMPLETE THE SYSTEM.
2. EXAMINATION OF PREMISES AND PLANS
- 2.1 THIS PROJECT INVOLVES RENOVATIONS TO EXISTING BUILDINGS, THEREFORE EXAMINE THE SITE AND MAKE ALLOWANCE FOR ALL LOCAL CONDITIONS AFFECTING THE WORK UNDER THIS CONTRACT PRIOR TO SUBMITTING FINAL PRICE. NO ALLOWANCE TO BE MADE LATER FOR ANY EXPENSE INCURRED THROUGH FAILURE TO MAKE THIS EXAMINATION.
- 2.2 THIS DRAWINGS AND SPECIFICATIONS SHALL BE READ IN CONJUNCTION WITH BASE BUILDING DRAWINGS AND SPECIFICATIONS. MAXIMUM CONDITIONS WILL GOVERN.
- 2.3 THE LAYOUT OF THE EXISTING SYSTEMS HAS BEEN TAKEN FROM AVAILABLE INFORMATION AND SHALL BE ACCURATELY CHECKED ON THE SITE.
3. PERMITS AND FEES
- 3.1 GIVE ALL NECESSARY NOTICE, OBTAIN ALL NECESSARY PERMITS AND PAY ALL FEES IN ORDER THAT THE WORK SPECIFIED MAY BE CARRIED OUT AND FURNISH ANY CERTIFICATES NECESSARY AS EVIDENCE THAT THE WORK INSTALLED CONFORMS WITH THE LAWS AND REGULATIONS OF ALL AUTHORITIES HAVING JURISDICTION.
4. CODES AND BYLAWS
- 4.1 COMPLY WITH ALL CODES AND BY-LAWS RELATING TO THE INSTALLATIONS AND EQUIPMENT. CARRY OUT, WITHOUT CHARGE TO THE OWNER, ALL CHANGES AND ALTERATIONS REQUIRED BY AN AUTHORIZED INSPECTOR OF AN AUTHORITY HAVING JURISDICTION. PROVIDE ANY CERTIFICATES, AT THE ENGINEER'S REQUEST AS EVIDENCE THAT THE WORK INSTALLED CONFORMS WITH THE LAWS AND REGULATIONS OF ALL AUTHORITIES HAVING JURISDICTION.
- 4.2 INSTALLATION OF ALL MECHANICAL AND ELECTRICAL SYSTEMS SHALL COMPLY WITH THE REQUIREMENTS OF ONTARIO BUILDING CODE 2006.
5. INTERRUPTION OF EXISTING SERVICES
- 5.1 THE CONTRACTOR SHALL ARRANGE THE SCHEDULE AND PROCEED WITH THE WORK DESCRIBED WITH THE MINIMUM DISTURBANCE AND INTERRUPTION OF EXISTING FACILITIES AND SERVICES.
- 5.2 THE PREMISES WILL BE KEPT OPERATIONAL DURING ENTIRE LENGTH OF CONSTRUCTION. CONTRACTOR TO MAKE ALL NECESSARY ALLOWANCES.
6. RESPONSIBILITY
- 6.1 ASSUME FULL RESPONSIBILITY FOR LAYOUT OF THE WORK AND FOR ANY DAMAGE CAUSED THE OWNER OR OTHERS BY IMPROPER LOCATION OR CARRYING OUT OF THIS WORK.
7. CLEANING
- 7.1 DURING THE COURSE OF CONSTRUCTION AND UPON COMPLETION, REMOVE FROM THE PROJECT SITE, TO COMPLETE SATISFACTION OF THE OWNER, ALL RUBBISH AND WASTE RESULTING FROM THIS WORK. CLEAN-UP TO INCLUDE FLOOR, WALL, CEILING AND ROOF AREAS.
8. GUARANTEE
- 8.1 FURNISH THE OWNER WITH A WRITTEN GUARANTEE FOR THE SATISFACTORY OPERATION OF ALL WORK AND APPARATUS INSTALLED UNDER THIS CONTRACT, AND REPLACE FORTHWITH, AT THE CONTRACTOR'S OWN EXPENSE, ON ANY PART OF THE SYSTEM WHICH MAY FAIL OR PROVE DEFECTIVE WITHIN A PERIOD OF 12 MONTHS AFTER THE FINAL ACCEPTANCE OF THE COMPLETE CONTRACT, ALWAYS PROVIDED SUCH FAILURE IS NOT DUE TO IMPROPER USAGE OR ORDINARY WEAR AND TEAR.
9. CUTTING AND PATCHING
- 9.1 ALL CUTTING AND PATCHING REQUIRED TO PERFORM WORK, TO BE THE RESPONSIBILITY OF THE INDIVIDUAL DIVISION.
10. SHOP DRAWINGS
- 10.1 SUBMIT DETAILED SHOP DRAWINGS FOR REVIEW BY ENGINEER. THESE WILL BE REVIEWED FOR SPECIFICATION COMPLIANCE AND SHALL BE REVISED AS OFTEN AS MAY BE FOUND NECESSARY TO THE SATISFACTION OF THE ENGINEER. NUMBER OF REQUIRED COPIES SHALL BE DETERMINED AND COORDINATED WITH ARCHITECT, GENERAL CONTRACTOR AND OWNER AT START UP OF THE PROJECT.
- 10.2 ALL SHOP DRAWINGS SHALL BE REVIEWED, SIGNED AND STAMPED BY CONTRACTOR INDICATING THAT PROPOSED MATERIAL, EQUIPMENT AND SYSTEM, COMPLIES WITH DRAWINGS, SPECIFICATIONS AND PROJECT REQUIREMENT. REVIEW OF SHOP DRAWINGS BY CONSULTANT IS FOR CONFORMANCE WITH GENERAL DESIGN CONCEPT AND DOES NOT APPROVE THE DETAILS OF CONSTRUCTION AND INSTALLATION OF THE MATERIAL, EQUIPMENT AND SYSTEMS, RESPONSIBILITY OF WHICH REMAINS WITH CONTRACTOR AND SUPPLIER.
11. RECORD DRAWINGS
- 11.1 DURING CONSTRUCTION CLEARLY MARK ON A SET OF WHITE PRINTS OF CONTRACT DRAWINGS ALL CHANGES WHICH ARE REQUIRED BY ADDENDUMS, SITE INSTRUCTIONS, CHANGE NOTICES AND SITE CONDITIONS AND MAKE IT AVAILABLE TO CONSULTANT FOR REVIEW.
- 11.2 AFTER COMPLETION OF THE WORK SUBMIT ONE SET OF ELECTRONIC COPY OF MARKED UP 'AS BUILT' DRAWINGS TO CONSULTANT FOR REVIEW. REVIEW OF RECORD DRAWINGS BY CONSULTANT SHALL BE FOR GENERAL CONFORMANCE AND IT IS NOT APPROVAL OF THE ACCURACY OF THE DRAWINGS. THIS DIVISION IS RESPONSIBLE FOR ACCURACY OF 'AS BUILT' DRAWINGS.
- 11.3 INCORPORATE ALL THE COMMENTS FROM CONSULTANT AND SUBMIT CAD FILE AND TWO SETS OF HARD COPIES OF 'AS BUILT' DRAWINGS TO THE OWNER. AN E-MAIL COPY OF TENDER DRAWINGS CAN BE OBTAINED FROM CONSULTANT AT NO CHARGE.
- 11.4 INSTRUCT THE OWNER'S REPRESENTATIVE IN THE OPERATION AND MAINTENANCE OF ALL EQUIPMENT.
12. REMOVAL OF EXISTING MATERIALS
- 12.1 PRESENT EXISTING MATERIAL AND EQUIPMENT REMOVED FROM WORK BUT NOT IDENTIFIED FOR RE-USE ON SITE TO OWNER. ACCEPTANCE OF REMOVED MATERIAL AND EQUIPMENT IS AT THE DISCRETION OF OWNER. WHERE DEEMED UNSUITABLE, CONTRACTOR TO REMOVE SUCH ITEMS FROM SITE.
13. OPERATION & MAINTENANCE (O&M) MANUAL
- SUBMIT 5 COPIES OF O&M MANUALS TO CONSULTANT FOR REVIEW. MANUALS SHALL INCLUDE SHOP DRAWINGS OF ALL NEW EQUIPMENT, TEST AND BALANCING REPORTS, COMMISSIONING REPORTS, WARRANTIES, AND OPERATION AND MAINTENANCE PROCEDURES.
14. TESTING, BALANCING & ADJUSTING
- PERFORM TESTING, BALANCING AND ADJUSTING TO PERTINENT SYSTEMS INCLUDING:
- HVAC SYSTEM

- SUBMIT BALANCING REPORT TO CONSULTANT FOR APPROVAL TO ENSURE THAT ALL COMPONENTS ARE OPERATING WITHIN THEIR DESIGN PARAMETERS.
- TEST AND COMMISSION ALL NEW EQUIPMENT AND SYSTEMS.
- PROVIDE GAS CERTIFICATE OF TESTING ENTITY.
- COMPLETE AND PROVIDE AS-BUILT DRAWINGS AND OPERATION AND MAINTENANCE MANUALS AS INDICATED.

MECHANICAL SPECIFICATION

PLUMBING

- MATERIALS AND INSTALLATION MUST COMPLY WITH THE STANDARDS OF THE ONTARIO BUILDING CODE AND PLUMBING CODE.
- COORDINATE LOCATIONS AND ROUTING WITH OTHER TRADES FOR EQUIPMENT, CONTROL DEVICES, SERVICES AND DISTRIBUTION SYSTEMS.
- PROVIDE WIRING DRAWINGS TO THE ELECTRICAL CONTRACTOR FOR MECHANICAL CONNECTIONS.
- CONFIRM EXACT DIMENSIONS AND LOCATIONS OF OPENINGS, SLEEVES AND INSERTS ON SITE. ANY REQUIRED CUTTING, CHASES OR HOLES IN FLOORS, WALLS OR ROOFS SHALL BE EXECUTED BY THE CONTRACTOR AND MADE GOOD AS REQUIRED.
- USE DIELECTRIC COUPLINGS FOR CONNECTIONS BETWEEN DISSIMILAR METALS.
- DOMESTIC HOT AND COLD WATER PIPING TO BE TYPE "L" STANDARD STREAMLINED COPPER PIPE WITH CAST BRASS SOLDER FITTINGS. SOLDER TO BE 95%.
- BRANCH SANITARY DRAINAGE PIPING (UNDER 75MM DIA.) ABOVE GROUND TO BE DWV COPPER PIPE WITH WROUGHT COPPER OR CAST BRASS JOINTS. SOLDER TO BE 90/10.
- STORM DRAINAGE AND MAIN SANITARY DRAINAGE PIPING TO BE CAST IRON, BITUMINOUS COATING TO CSA B70. MECHANICAL JOINTS WITH NEOPRENE GASKETS AND STAINLESS STEEL SLIPS. DRAINAGE BELOW GRADE TO BE CAST IRON OR PVC DWV.
- REMOVE ALL EXISTING DRAIN, VENT, HOT AND COLD WATER PIPES NOT USED IN THIS CONTRACT AT FLOOR, WALL OR CEILING.
- PROVIDE AND INSTALL VENTING SYSTEM FOR ALL PLUMBING FIXTURE IN ACCORDANCE WITH THE ONTARIO BUILDING CODE. ALL FLOOR DRAIN TRAPS SHALL BE VENTED AND PRIMED.
- SUPPORT HORIZONTAL PIPING EVERY 2500 MM (8') FOR 3/4" PIPE AND SMALLER, AND EVERY 3000 MM (10') FOR LARGER SIZES. PROVIDE PIPE HANGERS AND SUPPORTS AS FOLLOWS: HANGERS SHALL BE ADJUSTABLE SWIVEL RING TYPE (GRINNELL FIGURE #101) FOR UP TO 50 MM AND ADJUSTABLE WROUGHT CLEVIS TYPE (GRINNELL FIGURE #280) FOR 2-1/2" AND OVER. ALL HANGERS AND RODS SHALL BE ADEQUATE IN SIZE AND STRENGTH TO SAFELY SUPPORT THE PIPING SYSTEM.
- ARRANGE PIPING TO AVOID AIR BINDING AND WATER HAMMER; SLOPE DRAINAGE PIPING TO ELIMINATE AIR POCKETS.
- PROVIDE CLEANOUTS AS REQUIRED. CLEANOUTS SHALL BE OF THE SAME SIZE AS THE PIPE UP TO 4". BRANCH CLEANOUTS SHALL BE ACCESSIBLE. INSTALL CLEANOUTS AT THE END OF BRANCHES AND AT THE BASE OF SOILWASTE STACKS. CLEANOUTS SHALL BE BRASS SCREW PLUG TYPE WITH CAST IRON BODIES WHERE INDICATED.
- SHUT-OFF VALVES 50 MM (2") AND SMALLER SHALL BE 150 LB SOLDER JOINT BRONZE BALL VALVES WITH LEVER HANDLES AND STEM EXTENSIONS WHERE REQUIRED.
- SUPPLY AND INSTALL THE PLUMBING FIXTURES SHOWN AND LISTED IN THE FIXTURE SCHEDULE. SUBMIT SHOP DRAWINGS FOR FIXTURES PRIOR TO INSTALLATION.

PIPING INSULATION (PLUMBING)

- DOMESTIC COLD WATER PIPING TO BE INSULATED WITH PREFORMED GLASS FIBER INSULATION TO CSG8 51-GP-9C. FACTORY APPLIED RFFK VAPOUR BARRIER JACKET WITH WHITE KRAFT SIDE FACING OUT 1/2" THICK. K FACTOR 0.25 @ 750F OR BETTER. SEAL BUTT JOINTS WITH PRESSURE SENSITIVE VAPOUR BARRIER ADHESIVE.
- DOMESTIC COLD WATER PIPING IN UNCONDITIONED SPACE OR OUTSIDE TO BE INSULATED WITH PREFORMED GLASS FIBER INSULATION TO CSG8 51-GP-9C. FACTORY APPLIED RFFK VAPOUR BARRIER JACKET WITH WHITE KRAFT SIDE FACING OUT 1-1/2" THICK. K FACTOR 0.25 @ 750F OR BETTER. SEAL BUTT JOINTS AND END JOINTS WITH PRESSURE SENSITIVE VAPOUR BARRIER ADHESIVE AND PVC JACKET.

PLUMBING FIXTURE INSTALLATION

- FIXTURE INSTALLATION - GENERAL
- INSTALL FIXTURES EXACTLY AS SHOWN ON ARCHITECTURAL DRAWINGS. EACH FIXTURE SHALL BE COMPLETE WITH TRIM, ACCESSORIES, SUPPORTS AND FASTENING HARDWARE. FIXTURES AND TRIMS MUST BE C.S.A. APPROVED, EXACT LOCATIONS TO BE COORDINATED ON SITE WITH THE LATEST ARCHITECTURAL DRAWINGS.
- PROVIDE DOMESTIC WATER PIPING, SHUT-OFF VALVES, TRAPS AND DRAINAGE FOR EACH FIXTURE. INSTALL FIXTURES COMPLETE, TESTED AND READY FOR SERVICE IN ACCORDANCE WITH MANUFACTURER INSTRUCTIONS. ARRANGE CUTTING AND PATCHING REQUIRED FOR INSTALLATION. CUTTING OF WALLS/FLOORS/CEILINGS IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE MADE GOOD BY OTHERS AS NOTED.
- FINAL ROUTING OF PIPES TO BE DETERMINED ON SITE AFTER REVIEW OF STRUCTURAL, ELECTRICAL AND ARCHITECTURAL CONDITIONS. THE CONTRACTOR SHALL COORDINATE ROUTING WITH OTHER TRADES; ANY CHANGES REQUIRED DURING CONSTRUCTION SHALL BE ACCOMMODATED BY THE CONTRACTOR UNLESS THE CHANGE EXCEEDS 2.5 METRES FROM THE SHOWN CONNECTION, IN WHICH CASE ADDITIONAL COST SHALL BE ADDRESSED.
- SUPPORT FIXTURES LEVEL AND SQUARE AND CONNECT WITH SUPPLIES, DRAINS, TRAPS AND VENTS.
- WHERE A FAUCET HAS SEPARATE HOT AND COLD WATER HANDLES, POSITION THE HOT WATER HANDLE ON THE LEFT SIDE OF THE FAUCET.
- WHERE FIXTURES ON LOCATED ON EXTERIOR WALLS, RUN THE WATER SUPPLIES UP THROUGH THE FLOOR FOR OTHER FIXTURE LOCATIONS, RUN WATER SUPPLIES IN THE WALL CAVITY.
- PROVIDE RESILIENT, WATER-TIGHT AND GAS-TIGHT SEALS FOR EVERY JOINT IN A FLOOR FLANGE OR BETWEEN A FLOOR-OUTLET FIXTURE AND THE DRAIN.
- START-UP AND TESTING
- TEST, ADJUST AND SET TEMPERATURE CONTROL ON THERMOSTATIC MIXING VALVES TO SUPPLY A MAXIMUM WATER TEMPERATURE OF 29°C (85°F).
- TEST, ADJUST AND SET HIGH TEMPERATURE LIMIT STOPS ON THERMOSTATIC MIXING VALVES TO SUPPLY A TEMPERED WATER NOT EXCEEDING 32°C (90°F).
- FLOW WATER THROUGH EACH EMERGENCY FIXTURE AND TMV FOR AT LEAST TWO (2) MINUTES. RECORD THE WATER TEMPERATURE (AS MEASURED AT THE TMV) AT 10 SECONDS FROM ON-SET OF FLOW, AT THE TIME TO REACH THE CONTROL SETPOINT, AND AGAIN AT THE END OF THE TEST PERIOD.
- TEST AND INSTALLATION RECORDS

3.1 AFTER COMPLETION OF TESTING AND AT TURN-OVER TO THE OWNER, ATTACH AND FILL OUT AN INSPECTION TAG TO EACH EMERGENCY FIXTURE IDENTIFYING THE DATE OF THE TEST AND THE PERSON WHO CONDUCTING THE TEST

3.2 PROVIDE A REPORT OF THIS TESTING AND INCLUDE:

- FIXTURE REFERENCE.
- MEASURED TEMPERATURES.
- DATE OF TEST(S).
- SIGNATURE OF PERSON(S) CONDUCTING TEST.

3.3 SUBMIT A COPY OF EACH REPORT TO THE CONSULTANT AND OWNER FOR REVIEW AND ACCEPTANCE.

3.4 THE ABOVE TESTS ARE SUBJECT TO A DEMONSTRATION TEST AUDIT OF UP TO 10% OF THE TOTAL FIXTURE COUNT TO VERIFY COMPLIANCE. IF AUDIT TESTS ARE NOT SATISFACTORY TO THE CONSULTANT, ADDITIONAL TESTING AND VERIFICATION WILL BE CONDUCTED BY THE CONTRACTOR UNTIL SUCH TIME AS A DEMONSTRATION AUDIT PROVIDES SATISFACTORY RESULTS TO THE CONSULTANT.

4. FIXTURE SUPPORTS

4.1 PROVIDE PLATES, BRACKETS, WALL CARRIERS, CLEATS, AND SUPPORTS TO SECURE FIXTURES IN PLACE.

4.2 FASTEN WALL BRACKETS WITH BOLTS ATTACHED TO DOUBLE STEEL SUPPORTING PLATES.

4.3 BOLT FIXTURE TO WALL THROUGH CORED HOLES UNDER LAVATORY WALL FLANGE, USING CHROME PLATED CARRIAGE BOLTS WITH INTEGRAL WASHERS, AND EXPANSION SHIELDS.

4.4 INSTALL EXTRA-HEAVY-DUTY CHAIR CARRIERS FOR FIXTURES NOT DIRECTLY SUPPORTED FROM FLOOR.

4.5 CONCEAL VERTICAL SUPPORTS AND BASEPLATES IN WALL CONSTRUCTION.

4.6 APPLY SEALANT BEAD BETWEEN WALL MOUNTED FIXTURE AND FINISHED WALL AND FINISH WITH A SMOOTH CONCAVE PROFILE.

4.7 SET FLOOR MOUNTED WATER CLOSET BOWLS IN MASTIC, AND SEAL THE FLOOR FLANGE WITH A RESILIENT, WATER-TIGHT AND GAS-TIGHT FLANGE SEAL.

5. PROTECTION

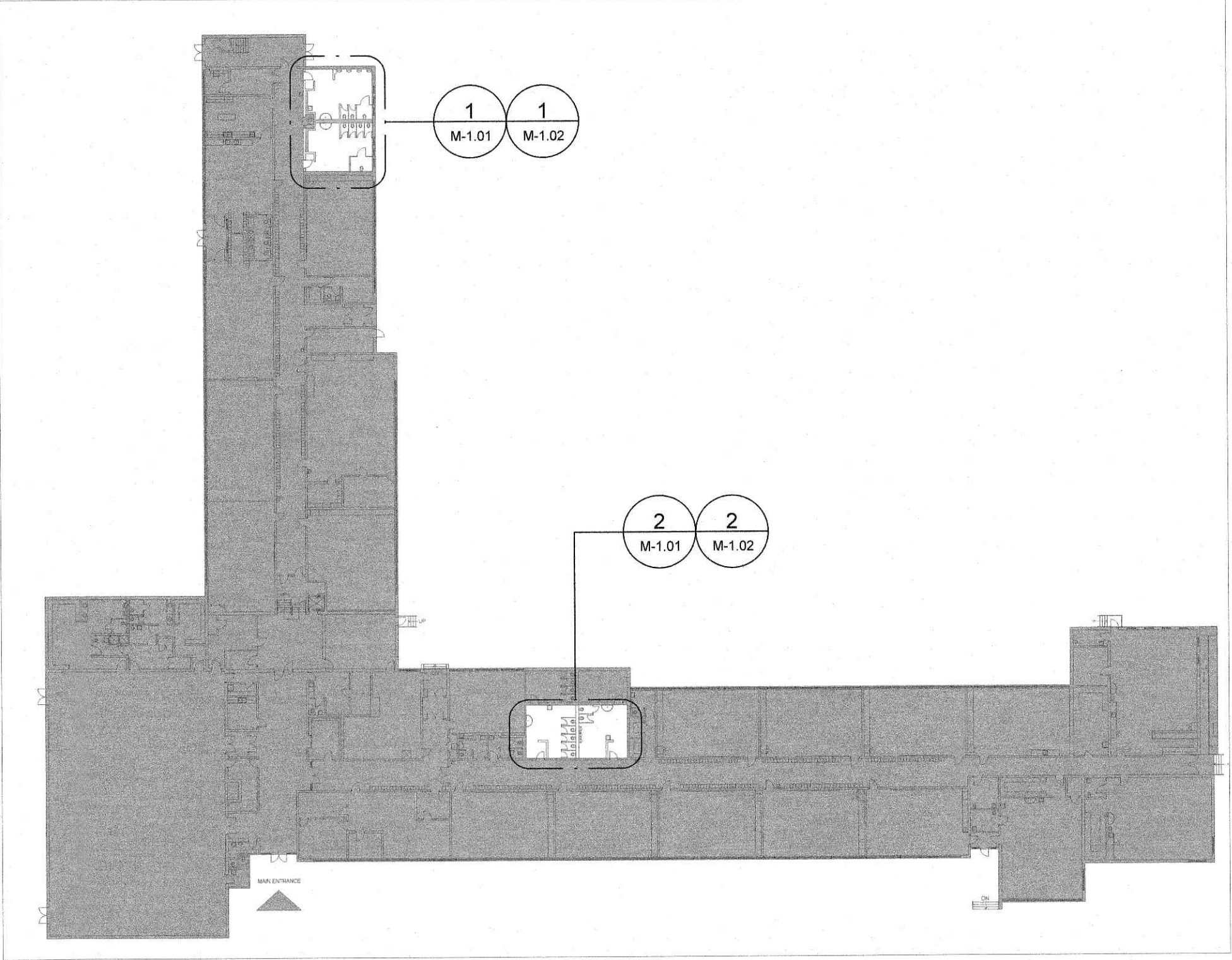
- COVER PLUMBING FIXTURES AND TRIM WITH PLYWOOD, CARDBOARD OR HEAVY PAPER AND KEPT PROTECTED BEFORE, DURING AND AFTER INSTALLATION UNTIL WORK IS COMPLETED AND ACCEPTED.
- CLEAN FIXTURES, AND TRIM IMMEDIATELY PRIOR TO BUILDING COMPLETION.

DRAWINGS LIST

DWG NO.	DRAWING NAME
M-0.01	MECHANICAL SPECIFICATIONS, LEGEND, SCHEDULE
M-1.01	MECHANICAL DEMOLITION
M-1.02	MECHANICAL NEW CONSTRUCTION
M-2.01	PLUMBING FIXTURES

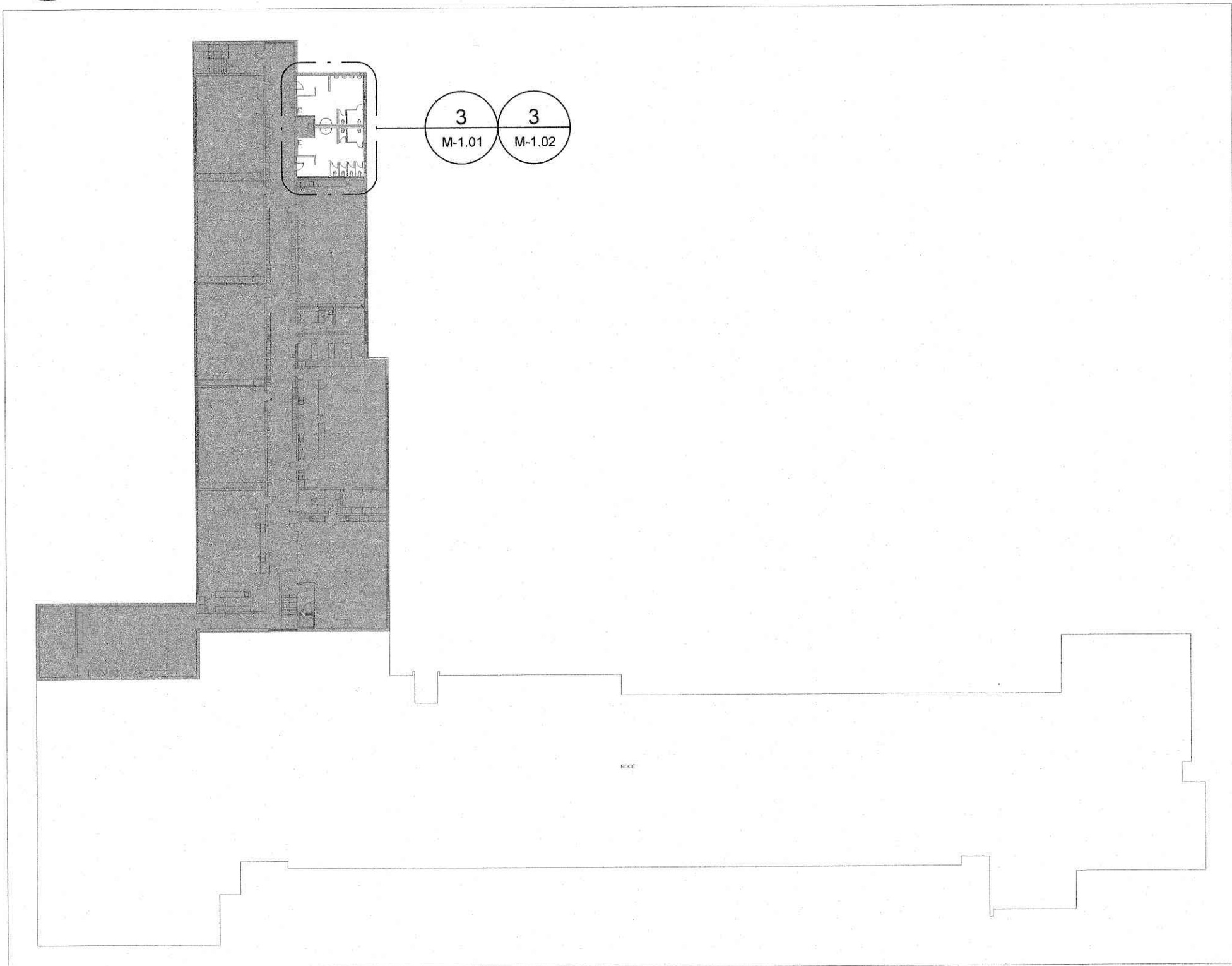
LEGEND

PLUMBING AND DRAINAGE	
SYMBOL	DESCRIPTION
	SANITARY AT HIGH LEVEL
	SANITARY UNDER SLAB OR CEILING BELOW
	FLOOR DRAIN
	TRAP PRIMER
	TRAP PRIMER ASSEMBLY C/W SOLENOID VALVE & TRIM
	SANITARY VENT
	SANITARY CLEANOUT IN ACCESSIBLE CEILING SPACE
	SANITARY CLEANOUT IN SLAB
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	DOMESTIC HOT WATER RECIRCULATION
	AIR OUTLET OR INLET TAG



GROUND FLOOR - KEY MAP

1:500



SECOND FLOOR - KEY MAP

1:500

PLUMBING FIXTURES SCHEDULE

TAG/MARK/LABEL	PRODUCT CATEGORY	MANUFACTURER	MODEL NUMBER	DESCRIPTION	ROUGH IN				FAUCET/FLUSH VALVE	ACCESSORIES	REMARKS/COMMENTS
					DRAIN	VENT	HOT	COLD			
WC-1	TOILET	AMERICAN STANDARD	3451001.020	WHITE FINISH VITREOUS CHINA, EVERCLEAN® ANTIMICROBIAL SURFACE	3	1 1/2	-	1	SLOAN ROYAL 111-1.6, LOW CONSUMPTION 6.0 LPF (1.6 GPF), MANUAL	SEAT: BEMIS BEMIS COMMERCIAL 1955CT 000, FITS MOST MANUFACTURERS' BLOWMOLD TOILETS, WHITE, ECO-FRIENDLY HEAVY-DUTY PLASTIC WITH MOLDED-IN COLOR	PROVIDE ALL REQUIRED ACCESSORIES. COMPONENTS SHOWN ON DWG M2.01 ARE DIAGRAMMATIC/ILLUSTRATIVE ONLY.
WC-2	TOILET	AMERICAN STANDARD	3641001.020	WHITE FINISH VITREOUS CHINA	3	1 1/2	-	1	SLOAN ROYAL 111-1.6, LOW CONSUMPTION 6.0 LPF (1.6 GPF), MANUAL		SAME AS ABOVE.
UR-1	URINAL	AMERICAN STANDARD	6500001.020 7381755-200.0020A	WASHROOM® FLOWSEB®, WALL-HUNG, FLUSH VALVE URINAL, STANDARD USE, VITREOUS CHINA, WHITE FINISH, 19 MM (3/4") SPUD CONNECTION, TOP SPUD, URINAL OPERATES IN THE RANGE OF 0.5 TO 3.8 LPF (0.125 - 1.0 GPF), POWERFUL, WASHDOWN, VANDAL-RESISTANT STAINLESS STEEL STRAINER	2	1 1/2	-	3/4	WATER MARTIX UTC SENTINEL REFER TO INSTALLATION DETAILS.	CARRIER: WATTS CA-321, URINAL CARRIER, WALL PLATE COUPLING. MISSION RUBBER PRODUCTS CORP NO HUB SERIES	SAME AS ABOVE.
WS-1	GROUP HANDWASHING STATIONS	ACORN	3604-2-SO		2	1 1/4	3/4	3/4		MIXING VALVE: LAWLOR 570-96820 SUPPLY: MCGUIRE LPB1170	SAME AS ABOVE.

FLOOR DRAIN AND CLEAN OUT SCHEDULE

TAG/MARK/LABEL	PRODUCT CATEGORY	MANUFACTURER	MODEL NUMBER	DESCRIPTION	BODY MATERIAL	TOP/GRADE/STRAINER/DOME	COVER	OUTLET SIZE (INCHES)	REMARKS/COMMENTS
UR-1	CLEAN OUT	WATTS	CO-38CO-382-RD-RD	WALL ACCESS, NON-ADJUSTABLE, WALL CLEANOUT, GASKETED BRASS COUNTERSINK PLUG FOR URINAL	CAST IRON	ROUND	STAINLESS STEEL ACCESS COVER	51 MM (2") PIPE SIZE, NO-HUB OUTLET	
FD	FLOOR DRAIN	WATTS	FD-103-C-4-6-7	FINISHED AREA, FLOOR DRAIN, ANCHOR FLANGE, TRAP PRIMER TAPPING, REVERSIBLE MEMBRANE CLAMP, COLLAR WITH PRIMARY AND SECONDARY WEERPHOLES, VANDAL-PROOF, TRAP PRIMER TAPPING	EPOXY COATED CAST IRON, STANDARD BODY MATERIAL	ADJUSTABLE, 6 MM (1/4") THICK TOP, ROUND, UNSIZED STRAINER		75 MM (3") PIPE SIZE, TO BE DETERMINED	USE SQUARE STRAINER IN TILED AREAS AND ROUND STRAINER ELSEWHERE. C/W TRAP PRIMER
CO	CLEAN OUT	WATTS	CO-200-R	UNFINISHED AREA, ADJUSTABLE, FLOOR CLEANOUT	EPOXY COATED CAST IRON, STANDARD (EPOXY COATED CAST IRON)	ROUND, 130 MM (5-1/8") NICKEL BRONZE TOP	UNSIZED COVER	UNSIZED PIPE, TO BE DETERMINED	

CONVECTOR SCHEDULE

TAG	MANUFACTURER	MODEL	LEVEL	ROOM	HEATING CAPACITY (BTU/HR)	AWT (°F)	EAT (°F)	HEIGHT (IN)	WIDTH (IN)	LENGTH (IN)	WATER FLOW (GPM)
CV-01	TRANE OR APPROVED EQUAL	SW-A	LEVEL 2	RM 209	7,200	170	65	32	8	32	0.82

NOTE: C/W ENCLOSURE AND ACCESS PANEL FOR CONTROL VALVE SERVICE AND MAINTENANCE.

REGISTER, GRILLE & DIFFUSER SCHEDULE

TAG	MANUFACTURER	MODEL	QTY	TYPE	MATERIAL	REMARKS
E-1	PRICE OR EQUIVALENT	80	SEE PLAN	EGG CRATE GRILLE	ALUMINUM	1/2X12X1/2 ALUMINUM EGGCRATE CORE, C/W 1 1/4" FLAT BORDER & SCREWED FASTENING FOR SURFACE MOUNTING.
E-2	PRICE OR EQUIVALENT	630 SERIES	SEE PLAN	LOUVERED GRILLE	ALUMINUM	0" DEFLECTION 3/4 IN. BLADE SPACING, C/W BORDER & SCREWED FASTENING FOR SIDE WALL MOUNTING.

NOTES:
- PROVIDE FULL PERIMETER GASKET WITH PLASTER FRAMES CONCEALED FASTENERS AND CONCEALED OPERATOR.
- COLOR: COORDINATE WITH ARCHITECTURAL



CITY OF HAMILTON
Building Division

Permit No. 25-104730

THESE STAMPED DRAWINGS SHALL BE AVAILABLE ON SITE

THE OWNER AND/OR CONTRACTOR SHALL COMPLY WITH THE ONTARIO BUILDING CODE AND ALL OTHER APPLICABLE LAW

These drawings and/or specifications have been reviewed by

JAN 07 2025

DATE

2.0	ISSUED FOR PERMIT	2025/12/15
1.0	ISSUED FOR CLIENT REVIEW	2025/07/19
Rev	Description	Date

Orientation	Seal

Key Plan	
The Contractor shall check and verify all dimensions and report all errors and omissions to the Owner's/MS Designee (as applicable) for his/her written direction before proceeding with the Work.	
	A Detail No B Sheet No where detailed

The specifications are to be considered as an integral part of these drawings. Neither the drawings nor the specifications shall be used alone.

Architect	AMRA J ARCHITECTS INC. EMAIL: info@aja.design https://aja.design
-----------	--

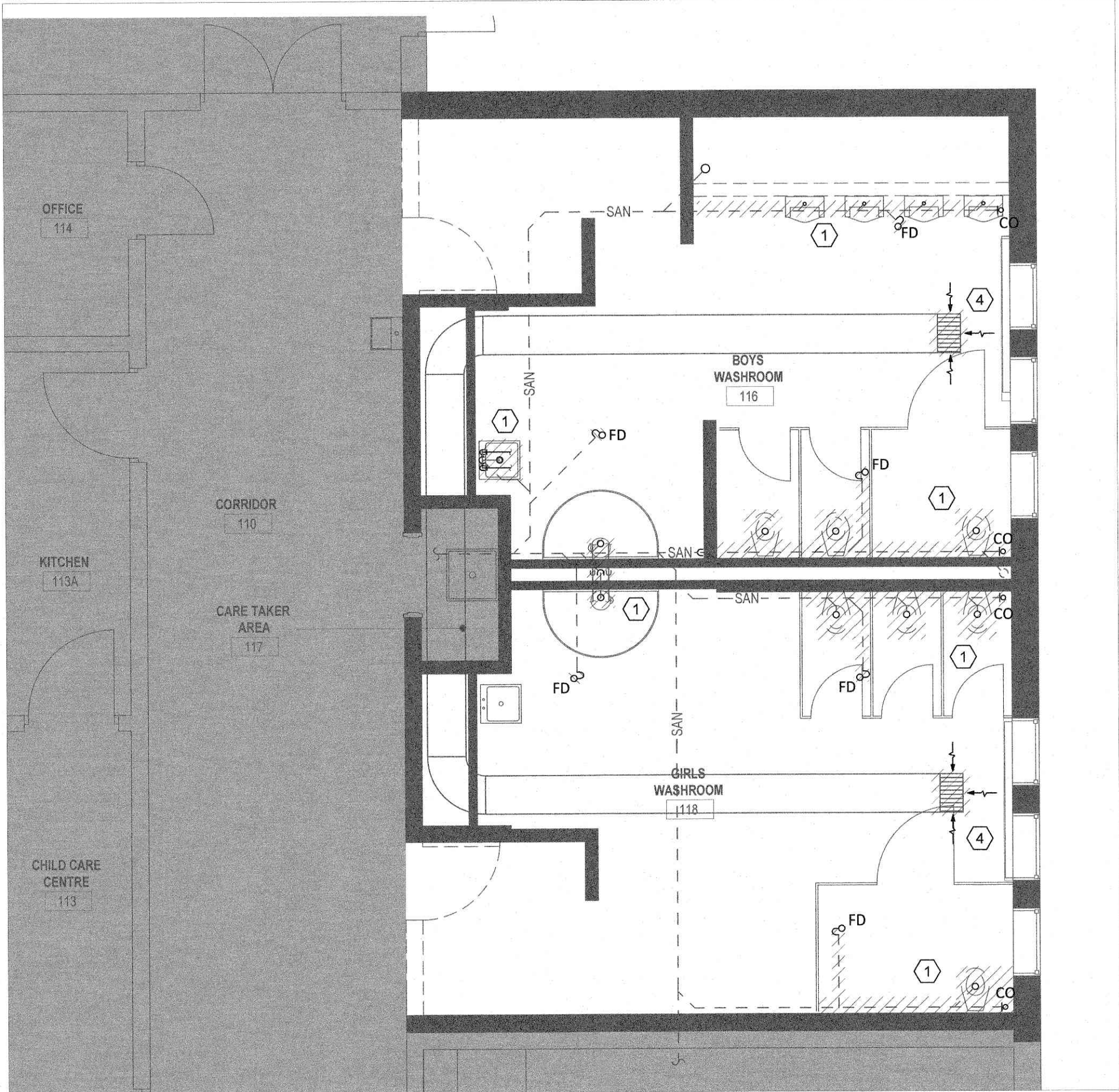
Engineer	Benexsys Website: Benexsys.com info@benexsys.com
----------	--

Client	HWDSB
--------	-------

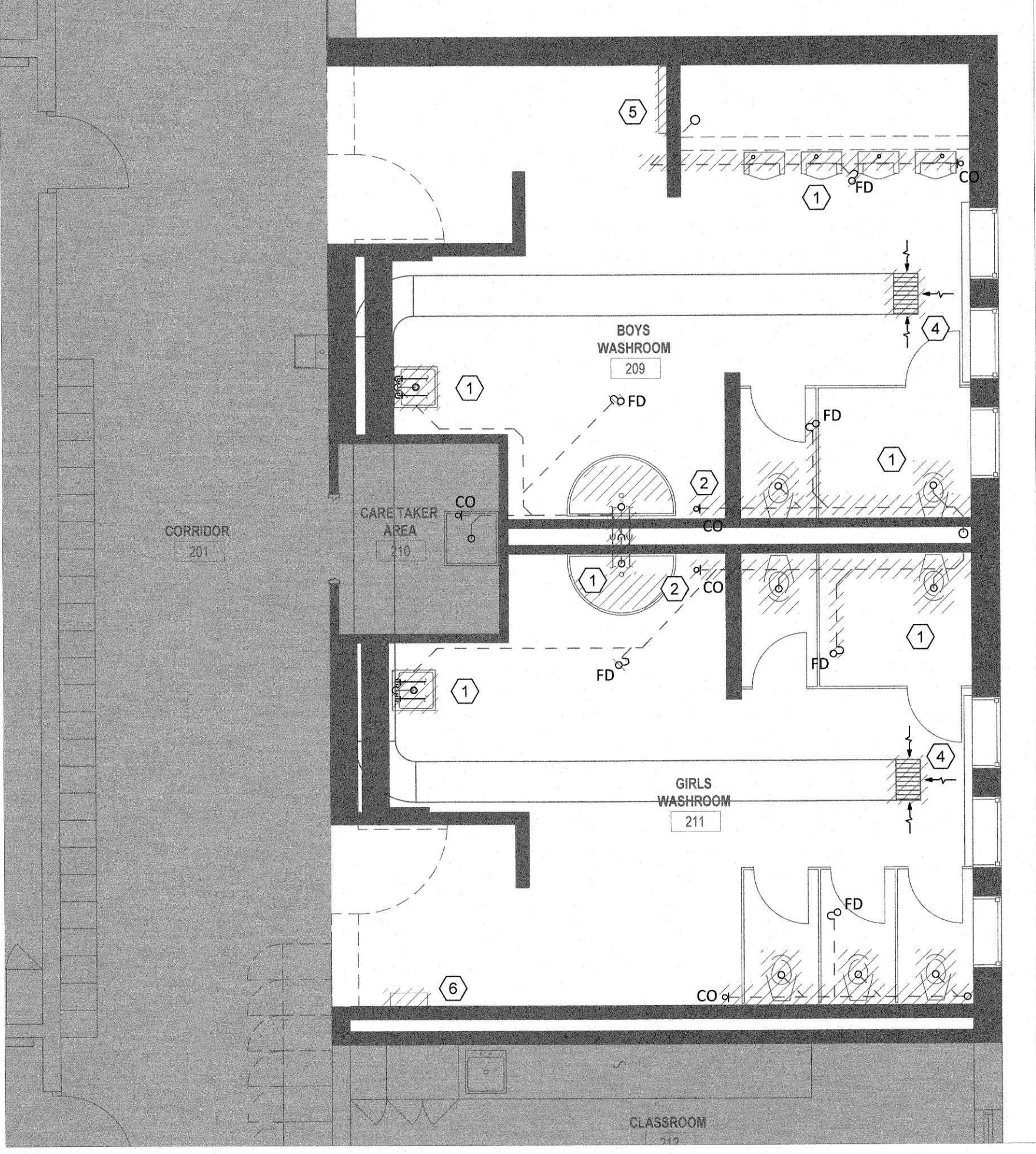
Project	Chetoke Elementary School Washroom Renovation
---------	---

Location	500 Bendamere Ave., Hamilton, ON
----------	----------------------------------

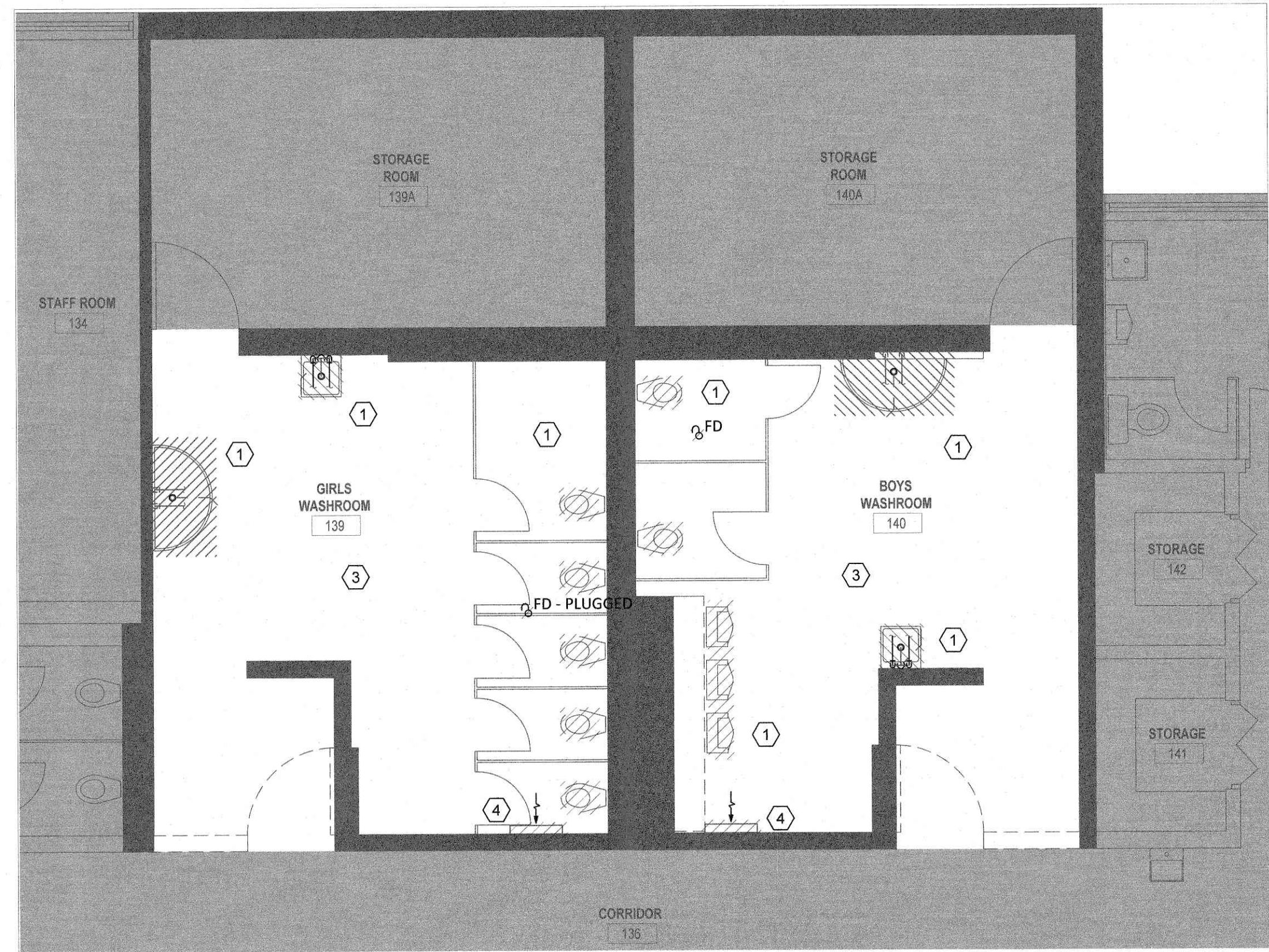
DRAWING TITLE:		MECHANICAL SPECIFICATIONS, LEGEND, SCHEDULE	
Substantial Performance Date:	TBD	CLIENT PROJECT NO.:	25-25
DATE:	2025-11-03	PROJECT NO.:	D102
SCALE:	AS SHOWN	DRAWING NO.:	M-0.01
DRAWN BY:	MA		
DESIGNED BY:	MF		
APPROVED BY:	MS		



1 ROOMS 116, 118 MECHANICAL DEMOLITION
M-1.01 1: 50



3 ROOMS 219, 211 MECHANICAL DEMOLITION
M-1.01 1: 50



2 ROOMS 139, 140 MECHANICAL DEMOLITION - FULL RENOVATION
M-1.01 1: 50

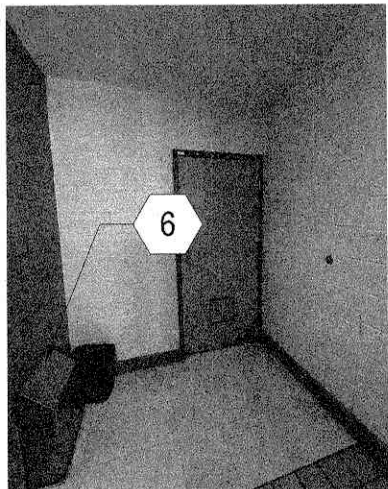
CONSTRUCTION NOTES

- GENERAL**
- ASSUMPTIONS HAVE BEEN MADE REGARDING EXISTING CONDITIONS DUE TO THE LACK OF ACCURATE AS-BUILT DRAWINGS. THE CONTRACTOR SHALL VERIFY ALL EXISTING RELATED SERVICES ON SITE AND REPORT ANY DISCREPANCIES TO THE ARCHITECT/ENGINEER. THE CONTRACTOR SHALL CARRY THE COST AS PART OF THE ORIGINAL BID FOR ADJUSTMENTS, RELOCATIONS, OR EXTENSIONS OF SERVICES TO SUIT THE NEW LAYOUT.
 - SANITARY VENT PIPING IS NOT SHOWN ON THE DRAWINGS. SUPPLY AND INSTALL ALL VENT PIPING REQUIRED TO SERVE EACH FIXTURE, ENSURING THE SYSTEM IS COMPLETE AND MEETS LOCAL PLUMBING CODES AND AUTHORITIES HAVING JURISDICTION. CONNECT TO EXISTING OR NEWLY PROVIDED VENT STACKS AS APPLICABLE.
 - PROVIDE TEMPORARY PLUGS AS REQUIRED TO PREVENT ODORS.
 - INSTALL OVERHEAD PIPING TIGHT TO STRUCTURE WITH INSULATION CLEARANCE.
 - INCLUDE SHUT-OFF VALVES ON ALL RISERS AND EQUIPMENT CONNECTIONS.
 - COORDINATE WITH THE GENERAL CONTRACTOR FOR ALL CUTTING, EXCAVATION, BACKFILLING AND FINISHES.
 - COORDINATE THE NEW SERVICES WITH EXISTING MECHANICAL AND ELECTRICAL SERVICES AND STRUCTURAL MEMBERS. OFFSET PIPE ROUTES AS REQUIRED.
 - PROVIDE AN ACCESS DOOR FOR VALVES OR OTHER PLUMBING COMPONENTS INSTALLED IN CONCEALED SPACES THAT REQUIRE ACCESS FOR SERVICE AND MAINTENANCE.
 - MAINTAIN CONTINUOUS OPERATION OF ESSENTIAL SERVICES DURING CONSTRUCTION. PHASE WORK TO AVOID DISRUPTIONS.
 - VERIFY STRUCTURAL INTEGRITY BEFORE OPENINGS.

- KEYED NOTES:**
- REMOVE EXISTING PLUMBING FIXTURES, FLOOR DRAINS, AND CLEANOUTS AS SHOWN. C/W ALL ASSOCIATED DOMESTIC WATER, DRAIN, AND VENT PIPING TO THE EXTENT REQUIRED TO COMPLETE THE NEW INSTALLATION, INCLUDING BACK TO MAIN WHERE NECESSARY, AND CAP. REMOVE EXISTING ACCESS PANELS UPON REMOVAL OF EXISTING SINKS. REUSE THE EXISTING WASH FOUNTAIN IN ROOM 139 & 140 IF THEY WERE FULLY OPERATIONAL & INCLUDE TAG FOR CSA COMPLIANCE IN ROOM 219 & 211. OTHERWISE PROVIDE A CREDIT FOR THE DEMOLITION AND REINSTALLATION OF WASH FOUNTAINS AT 219 & 211.
 - REMOVE EXISTING SANITARY PIPING AS SHOWN. VERIFY LOCATION AND CONDITION OF REMAINING PIPING BEFORE REMOVAL.
 - THE LOCATIONS OF DRAIN PIPING IN ROOM 139 & 140 WERE UNKNOWN DURING DESIGN, AND NOT SHOWN ON THIS DRAWING. THE CONTRACTOR SHALL CONDUCT INVESTIGATION, INCLUDING VIDEO LOCATING, TO IDENTIFY THE EXACT LOCATION OF DRAIN PIPING. PROVIDE NEW DOMESTIC WATER AND SANITARY PIPING TO SUITE THE NEW FIXTURES LOCATION AS REQUIRED. PROVIDE MARK UPS FOR AS-BUILT DRAWINGS.
 - REMOVE THE EXISTING EXHAUST AIR GRILLES.
 - REMOVE THE EXISTING HEATING CONVECTOR C/W ASSOCIATED COMPONENTS.
 - OPEN EXISTING ENCLOSURE AND INVESTIGATE CONCEALED PIPING. IF FOUND ABANDONED, CUT AND CAP PIPING BELOW FLOOR. ALLOW FOR CEILING OPENING AND REINSTATEMENT AS REQUIRED. IF FOUND OPERATIONAL, PROVIDE CREDIT FOR DEMOLITION WORK.



ROOM 211



ROOM 211



Rev	Description	Date
2.0	ISSUED FOR PERMIT	2025/12/15
1.0	ISSUED FOR CLIENT REVIEW	2025/07/19



Key Plan

The Contractor shall check and verify all dimensions and report all errors and omissions to the Owner's/MBS Designee (as applicable) for his/her written direction before proceeding with the Work.

A	A Detail No
B	B Sheet No where detailed

The specifications are to be considered as an integral part of these drawings. Neither the drawings nor the specifications shall be used alone.

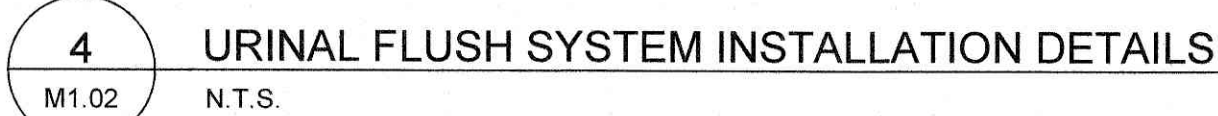
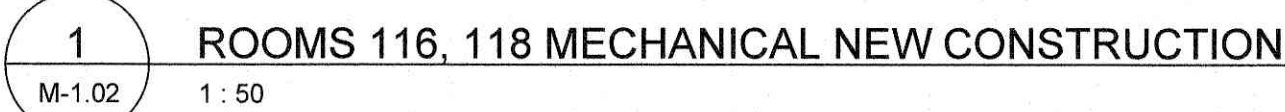


Project: Chedoke Elementary School Washroom Renovation

Location: 500 Bendamere Ave., Hamilton, ON

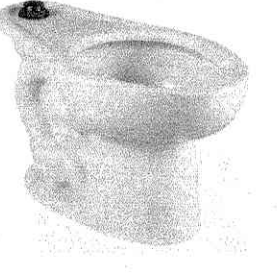
DRAWING TITLE: MECHANICAL DEMOLITION LAYOUT

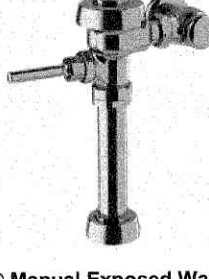
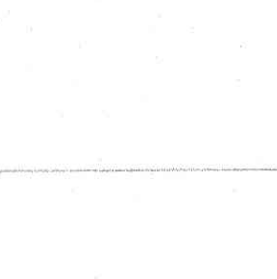
Substantial Performance Date:	TBD	CLIENT PROJECT NO:	25-25
DATE:	2025-11-03	PROJECT NO:	D102
SCALE:	AS SHOWN	DRAWN BY:	MA
DRAWN BY:	MA	DESIGNED BY:	MF
DESIGNED BY:	MF	APPROVED BY:	MS
APPROVED BY:	MS		M-1.01



DESIGNED BY :	MF	M-1.02
APPROVED BY :	MS	

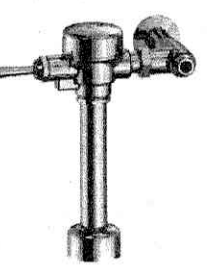
	WC-1	Toilet - Floor mounted with floor outlet
	MADERA™ FloWise®	

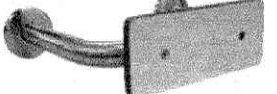
	American Standard-Toilet ☑ 3451001.020 
☑ 1955CT 000 BEMIS Commercial Heavy-Duty Open front Toilet seat Without cover. Fits most manufacturers' elongated toilets. White. Eco-friendly heavy-duty plastic with molded-in color. Color-matched plastic check hinges with stainless steel posts and pintles, preventing the seat from exceeding 11" beyond vertical. Stay-Tite® Seat Fastening System™. Four (4) ring bumpers. Compliance and certifications: IAPMO/ANSI Z124.5 compliant, IAPMO/ANSI Z124.5 compliant. Dimensions: 471 mm (18-9/16") long x 368 mm (14-1/2") wide x 60 mm (2-3/8") high.	Toilet, Floor mounted with floor outlet. Toilet operates in the range of 4.2 to 6.0 LPF (1.1 - 1.6 GPF). Vitreous china. White finish. EverClean® antimicrobial surface. Elongated bowl. 381 mm (15") rim height. 254 mm (10") to 305 mm (12") rough-in from wall to the center of waste outlet. Check-led siphon jet flush action. 38 mm (1-1/2") top spud. Flush valve by others. Fully-glazed 54 mm (2-1/8") rimway. Condensation channel. Toilet seat not included. Two (2) colour-matched bolt caps with retainers (481310-100). Overall Dimensions: 356 mm (14") wide x 718 mm (28-1/4") from finished wall x. Water Surface: 254 x 305 mm (10" x 12") water surface area. Map Score: ~1000 MaP® flush score. Compliance and certifications: ASME A112.19.2 compliant, CSA B45.1 compliant.

	American Standard-Toilet ☑ 3451001.020 
☑ ROYAL 111-16 ROYAL® Manual Exposed Water closet flushometer, 38 mm (1-1/2") spud coupling For top spud toilet, constructed from Semi-red brass. Polished chrome finish. Low consumption 6.0 LPF (1.6 GPF). Chloramine resistant PERMEX® synthetic rubber diaphragm. Metal oscillating handle with triple seal handle packing. Flush tube for 292 mm (11-1/2") rough-in. Adjustable tailpiece, 25 mm (1") I.P.S. screwdriver Bak-Chek® angle control stop with free spinning vandal-resistant stop cap. Dual-filtered fixed bypass. Sweat solder adapter kit with cover tube. High back pressure vacuum breaker. Inlet located right of valve. 25 mm (1") supply pipe. Cast wall flange with set screw. Non-hold-open, no external volume adjustment. Fixed volume accuracy is controlled by CID™ technology. Pressure Range: 103 - 552 kPa (15 - 80 PSI) operating water pressure. Compliance and certifications: Requires less than 5 pounds of force to activate (push-button). cUPC compliant.	Toilet, Floor mounted with floor outlet. Toilet operates in the range of 4.2 to 6.0 LPF (1.1 - 1.6 GPF). Vitreous china. White finish. Elongated bowl. Right Height® rim at 432 mm (17"). Wider footprint ideal for retrofit installation. 254 mm (10") to 305 mm (12") rough-in from wall to the center of waste outlet. Siphon jet flush action. Gravity-assisted flush. 38 mm (1-1/2") top spud. Flush valve by others. Fully-glazed 51 mm (2") rimway. Static load rating of 500 kg (2000 lb). Includes color-matched 5309110 Right Height® heavy duty elongated toilet open front seat. Seat cover. Molded solid polypropylene with stainless steel check hinges. Two (2) bolt caps. Consisting of: 5309110 seat. Overall Dimensions: 432 mm (17") wide x 718 mm (28-1/4") from finished wall x. Water Surface: 254 x 305 mm (10" x 12") water surface area. Map Score: ~1000 MaP® flush score (when use with proper flush valve). Compliance and certifications: ASME A112.19.2 compliant, CSA B45.1 compliant.

Note:	Spec Reference: 311110 Product Reference: 17168881; 34422354; 7307932
--------------	---

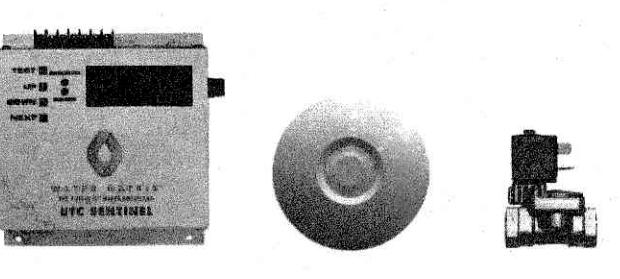
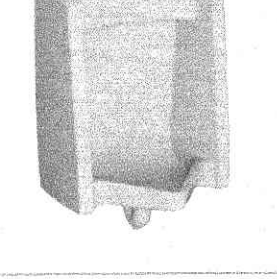
	WC-2	Toilet - Floor mounted with floor outlet
	RIGHT WIDTH™ FloWise®	

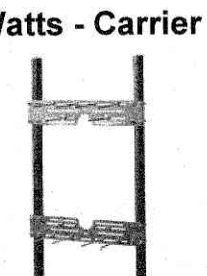
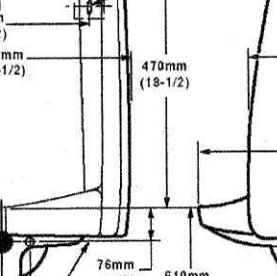
	American Standard-Toilet ☑ 3641001.020 
☑ DELTA 91T201 Manual Exposed Water closet flushometer, 38 mm (1-1/2") spud coupling For top spud toilet, constructed from Semi-red brass. Polished chrome finish. Low consumption 6.0 LPF (1.6 GPF). Chloramine resistant PERMEX® synthetic rubber diaphragm. Metal oscillating handle with triple seal handle packing. Flush tube for 292 mm (11-1/2") rough-in. Adjustable tailpiece, 25 mm (1") I.P.S. screwdriver Bak-Chek® angle control stop with free spinning vandal-resistant stop cap. Dual-filtered fixed bypass. Sweat solder adapter kit with cover tube. High back pressure vacuum breaker. Inlet located right of valve. 25 mm (1") supply pipe. Cast wall flange with set screw. Non-hold-open, no external volume adjustment. Fixed volume accuracy is controlled by CID™ technology. Pressure Range: 103 - 552 kPa (15 - 80 PSI) operating water pressure. Compliance and certifications: Requires less than 5 pounds of force to activate (push-button). cUPC compliant.	Toilet, Floor mounted with floor outlet. Toilet operates in the range of 4.2 to 6.0 LPF (1.1 - 1.6 GPF). Vitreous china. White finish. Elongated bowl. Right Height® rim at 432 mm (17"). Wider footprint ideal for retrofit installation. 254 mm (10") to 305 mm (12") rough-in from wall to the center of waste outlet. Siphon jet flush action. Gravity-assisted flush. 38 mm (1-1/2") top spud. Flush valve by others. Fully-glazed 51 mm (2") rimway. Static load rating of 500 kg (2000 lb). Includes color-matched 5309110 Right Height® heavy duty elongated toilet open front seat. Seat cover. Molded solid polypropylene with stainless steel check hinges. Two (2) bolt caps. Consisting of: 5309110 seat. Overall Dimensions: 432 mm (17") wide x 718 mm (28-1/4") from finished wall x. Water Surface: 254 x 305 mm (10" x 12") water surface area. Map Score: ~1000 MaP® flush score (when use with proper flush valve). Compliance and certifications: ASME A112.19.2 compliant, CSA B45.1 compliant.

	American Standard-Toilet ☑ 3641001.020 
☑ CM-1604-10M wall mounting, back rest, solid core plastic laminate panel back. Antique white, 305 mm (12") wide, 102 mm (4") high, 137 mm (5-3/8"), 18 gauge stainless steel bar with #4 gloss with flanges and covers, concealed snap flanges and mounting hardware included. Provide adequate backing in wall for support and comply to local codes for barrier free requirements.	Toilet, Floor mounted with floor outlet. Toilet operates in the range of 4.2 to 6.0 LPF (1.1 - 1.6 GPF). Vitreous china. White finish. Elongated bowl. Right Height® rim at 432 mm (17"). Wider footprint ideal for retrofit installation. 254 mm (10") to 305 mm (12") rough-in from wall to the center of waste outlet. Siphon jet flush action. Gravity-assisted flush. 38 mm (1-1/2") top spud. Flush valve by others. Fully-glazed 51 mm (2") rimway. Static load rating of 500 kg (2000 lb). Includes color-matched 5309110 Right Height® heavy duty elongated toilet open front seat. Seat cover. Molded solid polypropylene with stainless steel check hinges. Two (2) bolt caps. Consisting of: 5309110 seat. Overall Dimensions: 432 mm (17") wide x 718 mm (28-1/4") from finished wall x. Water Surface: 254 x 305 mm (10" x 12") water surface area. Map Score: ~1000 MaP® flush score (when use with proper flush valve). Compliance and certifications: ASME A112.19.2 compliant, CSA B45.1 compliant.

Note:	Spec Reference: 311110 Product Reference: 222308; 7307932; 7039293
--------------	--

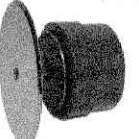
	UR-1	Flush valve urinal Top spud
	WASHBROOK® FLOWISE® - Top spud	

	American Standard-Urinal ☑ 6590001.020 7381755-200.0020A 
☑ UTC SENTINEL WATER MATRIX 1. PASSIVE INFRARED MOTION SENSOR: THE PIR SENSOR MAY BE FLUSH-MOUNTED ON THE CEILING OR HIDDEN BEHIND A CEILING GRATE WHILE STILL PROVIDING OPTIMAL PERFORMANCE. IT ACTIVATES ONLY WHEN URINALS ARE USED AND IS DESIGNED FOR 360° COVERAGE BUT WILL DETECT ONLY PEOPLE STANDING DIRECTLY IN FRONT OF THE URINALS. AN ACTIVATION LIGHT INDICATES WHEN MOTION IS DETECTED. THIS LIGHT CAN REMAIN VISIBLE OR BE COVERED AFTER INSTALLATION SO IT DOES NOT ATTRACT ATTENTION. THE LIGHT IS MAINLY USED DURING SETUP TO ADJUST THE ACTIVATION FIELD. THE SENSOR OPERATES ON 16 VDC AT 50 MA. 2. SOLENOID VALVE AND ASSEMBLY: THE SOLENOID VALVE MUST BE INSTALLED IN THE MAIN WATER SUPPLY LINE AND IS RATED AT 6 WATTS, OPERATING ON 24 VDC. IT IS A NORMALLY CLOSED VALVE, MEANING IT WILL REMAIN SHUT IF POWER IS LOST, AND IS SPECIFICALLY DESIGNED AS A SLOW-ACTUATING VALVE SO IT OPENS AND CLOSSES GRADUALLY TO REDUCE STRESS ON THE SYSTEM. 3. PROGRAMMABLE CONTROL UNIT: THE CONTROL UNIT PLUGS INTO A STANDARD 110-VOLT OUTLET AND OUTPUTS 24 VDC / 60 HZ / 1.2 A. WITH CSA APPROVAL. IT INCLUDES THREE PROGRAMMABLE STAGES: AN INACTIVITY TIMER (1-99 HOURS) THAT PERIODICALLY FLUSHES EVEN WITHOUT SENSOR ACTIVATION; A POST-ACTIVATION DELAY TIMER (1-99 MINUTES) THAT PREVENTS FLUSHING AFTER EVERY USER; AND A FLUSH-DURATION TIMER (1-99 MINUTES) THAT DETERMINES HOW LONG THE SOLENOID STAYS OPEN AND HOW MUCH WATER IS USED. THE UNIT ALSO INCLUDES A TEST BUTTON THAT INITIATES A REDUCED-DELAY FLUSH FOR MAINTENANCE AND MONITORS THE TOTAL NUMBER OF FLUSHES.	WASHBROOK® FLOWISE®, Wall-hung. Flush valve urinal. Top spud. Vitreous china. White finish. Urinal operates in the range of 0.5 to 3.8 LPF (0.125 - 1.0 GPF). Powerful washdown flush action. 51 mm (2") NPT female outlet. 18 mm (3/4") spud connection. The flush valve can be installed either on left or right side. Vandal-resistant stainless steel body. Overall dimensions: 359 mm (14-1/8") projection from the wall, 479 mm (18-7/8") wide, 654 mm (25-11/16") high. Pressure rating: 552 kPa (80 PSI) operating pressure, 1.7 bar (25 psi) working pressure. Compliance and certifications: CSA B45.4-08 compli. ANSI A117.1 compliant, ASME A112.19.2 compliant.

	American Standard-Urinal ☑ 6590001.020 7381755-200.0020A 
☑ CA-321 epoxy coated, Floor Mounted Urinal Carrier with Bearing Plate, Wall Plate, welded feet, Universal steel hanger support plate, bottom bearing plate. Heavy gauge steel offset uprights, integral mounting brackets. Plated hardware.	WASHBROOK® FLOWISE®, Wall-hung. Flush valve urinal. Top spud. Vitreous china. White finish. Urinal operates in the range of 0.5 to 3.8 LPF (0.125 - 1.0 GPF). Powerful washdown flush action. 51 mm (2") NPT female outlet. 18 mm (3/4") spud connection. The flush valve can be installed either on left or right side. Vandal-resistant stainless steel body. Overall dimensions: 359 mm (14-1/8") projection from the wall, 479 mm (18-7/8") wide, 654 mm (25-11/16") high. Pressure rating: 552 kPa (80 PSI) operating pressure, 1.7 bar (25 psi) working pressure. Compliance and certifications: CSA B45.4-08 compli. ANSI A117.1 compliant, ASME A112.19.2 compliant.

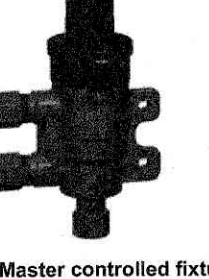
Note:	Spec Reference: 311110 Product Reference: 9282675; 18979307; 7007619; 7301681; 25029650
--------------	---

	UR-1	Flush valve urinal Top spud
	WASHBROOK® FLOWISE® - Top spud	

	American Standard-Urinal ☑ 6590001.020 7381755-200.0020A 
☑ CO-38CO-382-RD-RD Non-adjustable Wall cleanout, Cast iron, 51 mm (2") pipe size No-hub outlet. Round. Stainless steel access cover. Gasketed brass countersunk plug for urinal.	WASHBROOK® FLOWISE®, Wall-hung. Flush valve urinal. Top spud. Vitreous china. White finish. Urinal operates in the range of 0.5 to 3.8 LPF (0.125 - 1.0 GPF). Powerful washdown flush action. 51 mm (2") NPT female outlet. 18 mm (3/4") spud connection. The flush valve can be installed either on left or right side. Vandal-resistant stainless steel body. Overall dimensions: 359 mm (14-1/8") projection from the wall, 479 mm (18-7/8") wide, 654 mm (25-11/16") high. Pressure rating: 552 kPa (80 PSI) operating pressure, 1.7 bar (25 psi) working pressure. Compliance and certifications: CSA B45.4-08 compli. ANSI A117.1 compliant, ASME A112.19.2 compliant.

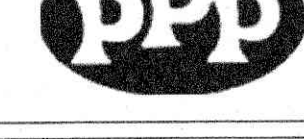
Note:	Spec Reference: 311110 Product Reference: 9282675; 18979307; 7007619; 7301681; 25029650
--------------	---

	Wash Station	Group Handwashing Stations
	Terreon Tri-Fount	

	American Standard-Urinal ☑ 6590001.020 7381755-200.0020A 
☑ 570-86820 Point of Use and Master controlled fixtures. Thermostatic master water mixing control valve. The temperature is adjusted with the help of Spirde.	Terreon® Tri-Fount™ Washfountains ☑ MF2933 

	American Standard-Urinal ☑ 6590001.020 7381755-200.0020A 
☑ LFBV170 CONVERTIBLE™ Commercial Faucet Supply kit, consisting of (2) stop valves, (2) risers, (2) flanges (standard), Lead Free Brass body. Chrome-plated finish. 138 - 882 kPa (20 - 125 PSI) operating pressure. 4 to 50 °C (40 to 140 °F) operating temperature. Convertible loose key/triangle handle. Quarter turn ball valve. Angle stop. Brass ball valve. C.P. wrought steel deep bell wall flange (standard). C.P. prefabricated 127 mm (5") copper sweat tube extension nipple. 305 mm (12") C.P. lavatory flexible copper riser tubes (standard), 13 mm (1/2") sweat inlet x 10 mm (3/8") O.D. outlet, 82 °C (180 °F) maximum during high-temperature system flush. Compliance and certifications: AB 100 compliant, ASME A112.18.1 compliant, ASME A112.18.2.2 (risers), CSA B125.2 compliant (risers), Certified to NSF/ANSI 372. Certified to NSF/ANSI 61, UPC compliant.	On-floor, circular, 3-station washfountain, solid-surface construction, infrared sensor operation (plug-in power), accommodates up to three simultaneous users, wall spud water connection, vandal-resistant sprayhead, and 38 mm (1-1/2") nominal waste outlet.

Note:	Spec Reference: 311110 Product Reference: 9063020; 7018383; 9737641
--------------	---

	Electric Trap Primer	Trap Primer
	PRIME-TIME ELECTRONIC TRAP PRIMING ASSEMBLY	

To be specified Cabinet ☑ 16 gauge steel, galvanized - Dry wall, flush mount (In wall) cabinet depth 4", mounting anchor Provided ☑ 16 gauge steel, galvanized - Fire Rated, flush mount (In wall) cabinet depth 6", mounting anchors Provided Compression Fittings ☑ 1/2" Comp. for 3/8" ID Copper line ☑ 5/8" Comp. for 1/2" ID Copper line. This line is the floor drain trap make-up water line. ☑ 1/2" PEX ☑ 1/2" ProPEX Number of Drains ☑ serving 4 drains (ID Width 14" x height 16" cabinet) ☑ serving 6 drains (ID Width 14" x height 16" cabinet) ☑ serving 8 drains (ID Width 14" x height 16" cabinet) ☑ serving 10 drains (ID Width 14" x height 16" cabinet) ☑ serving 12 drains (ID Width 14" x height 16" cabinet) ☑ serving 13 to 20 drains (ID Width 20-12" x height 16-12") ☑ serving 21 to 30 drains (ID Width 30-12" x height 20-12") Voltage ☑ 24 V (energy management system) ☑ 120 V ☑ 240 V	PPP-Trap Primer ☑ PT-6-500 
Flush mount, electronic trap priming assembly. 3/4" NPT female, 5/8" or 1/2" compression fitting, serving 6 drains (ID Width 14" x height 16" cabinet). 1/2" Comp. for 3/8" ID Copper line. A-B Siphon atmospheric vacuum breaker meets Los Angeles code (APMO, New York board of standards, ASSE 1001 and CSA, 3/4" type 1, copper tubing ASTM B88, 20 PSI-150 PSI, 120 V, Circuit Breaker, Test Switch, 1 timer, Solenoid Valve marked as UL listed. Electronic assembly tested and certified per UL #73.	Flush mount, electronic trap priming assembly. 3/4" NPT female, 5/8" or 1/2" compression fitting, serving 6 drains (ID Width 14" x height 16" cabinet). 1/2" Comp. for 3/8" ID Copper line. A-B Siphon atmospheric vacuum breaker meets Los Angeles code (APMO, New York board of standards, ASSE 1001 and CSA, 3/4" type 1, copper tubing ASTM B88, 20 PSI-150 PSI, 120 V, Circuit Breaker, Test Switch, 1 timer, Solenoid Valve marked as UL listed. Electronic assembly tested and certified per UL #73.

Note:	Spec Reference: 311110 Product Reference: 9082419
--------------	---

CITY OF HAMILTON
BUILDING DIVISION
Permit & Development Department

DEC 18 2025

REC'D BY: _____ DATE: _____
REF'D TO: _____ DATE: _____

CITY OF HAMILTON
Building Division

Permit No. 25-104730

THE SE STAMPED DRAWINGS SHALL BE AVAILABLE ON SITE.

THE OWNER AND/OR CONTRACTOR SHALL COMPLY WITH THE ONTARIO BUILDING CODE AND ALL OTHER APPLICABLE LAW.

These drawings and/or specifications have been reviewed by:

DATE: JAN 27 2026

OFFICE BUILDING OFFICIAL

2.0	ISSUED FOR PERMIT	2025/12/15
1.0	ISSUED FOR CLIENT REVIEW	2025/07/19
Rev	Description	Date

Orientation

Seal

Key Plan

The Contractor shall check and verify all dimensions and report all errors and omissions to the Owner's/MBS Designee (as applicable) for his/her written direction before proceeding with the Work.

A Detail No
B Sheet No where detailed

The specifications are to be considered as an integral part of these drawings. Neither the drawings nor the specifications shall be used alone.

Architect

AMRA J
ARCHITECTS INC.
EMAIL: info@aja.design 905-920-5121
https://aja.design

Engineer

Benexsys
Website: Benexsys.com
info@benexsys.com

Client

HWDSB

Project:

Chedoke Elementary School Washroom Renovation

Location:

500 Bendamere Ave., Hamilton, ON

DRAWING TITLE:

PLUMBING FIXTURES

Substantial Performance Date: TBD

CLIENT PROJECT NO.: 25-25

DATE: 2025-11-03

PROJECT NO.: D102

SCALE: AS SHOWN

DRAWN BY: MA

DRAWING NO.: M-2.01

DESIGNED BY: MF

APPROVED BY: MS

GENERAL PROVISIONS FOR ELECTRICAL SPECIFICATIONS:

1. GENERAL

- 1.1. SUPPLY LABOR, TOOLS, AND SERVICES AND PROVIDE ALL MATERIALS AND EQUIPMENT TO COMPLETE WORK IN ACCORDANCE WITH DRAWINGS AND SPECIFICATION.
- 1.2. COMPLY WITH LAWS, REGULATIONS, C.S.A., BUILDING CODE, ELECTRICAL SAFETY CODE, FIRE CODE, CODES AND REGULATIONS OF AUTHORITIES HAVING JURISDICTION.

2. EXISTING CONDITION

- 2.1. PRIOR TO SUBMITTING THE BID, VISIT THE SITE AND CAREFULLY EXAMINE EXISTING CONDITION WHICH WILL OR MAY AFFECT THE WORK.
- 2.2. CAREFULLY READ SPECIFICATION AND DRAWINGS AND BECOME FAMILIAR WITH PROJECT AND OTHER ASSOCIATED WORKS IN ORDER THAT THE BID INCLUDES FOR EVERYTHING REQUIRED TO COMPLETE THE WORK.

- 2.3. REMOVE ALL EXISTING ELECTRICAL EQUIPMENT, WIRING, CONDUITS AND DEVICES WHERE NOT TO BE REUSED AND AS NOTED ON THE DRAWINGS, WHERE EQUIPMENT IS REMOVED, CUT-OFF AT THE POINT OF SUPPLY, REMOVE WIRING AND MAKE THE SYSTEM SAFE.
- 2.4. CO-ORDINATE WITH DIVISION 15 FOR DEMOLITION OF MECHANICAL EQUIPMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR DISCONNECTING AND REMOVAL OF POWER SUPPLY, CONDUIT, WIRING, BOXES, ETC., FOR THE MECHANICAL EQUIPMENT TO BE REMOVED AS SPECIFIED UNDER DIVISION 15 AND MAKE SAFE.

- 2.5. ALL MATERIALS AND/OR EQUIPMENT DESIGNATED FOR SALVAGE SHALL BE TURNED OVER TO THE OWNER. ALL OTHER MATERIALS AND/OR EQUIPMENT DESIGNATED FOR REMOVAL BECOMES THE PROPERTY OF THIS CONTRACTOR AND SHALL BE PROMPTLY REMOVED FROM SITE. UNDER NO CIRCUMSTANCES SHALL THE MATERIALS AND/OR EQUIPMENT BE SOLD DIRECTLY FROM SITE.
- 2.6. CONTACT THE OWNER PRIOR TO ANY DEMOLITION WORK. IN ADDITION TO THE EQUIPMENT AND/OR MATERIAL AS SHOWN ON THE DRAWING, THE OWNER WILL DESIGNATE WHICH EQUIPMENT AND/OR MATERIALS ARE TO BE SALVAGED. DEMOLITION WORK IS TO PROCEED ONLY AFTER OWNER'S APPROVAL IS OBTAINED.

- 2.7. ACTIVE SERVICES TO THE EXISTING FACILITY SHALL BE PROTECTED AND MAINTAINED WITHOUT INTERRUPTION.
- 2.8. WHENEVER EXISTING ELECTRICALLY OPERATED EQUIPMENT IS REMOVED FROM ITS PRESENT LOCATION OR RE-INSTALLED ELSEWHERE, REMOVE REDUNDANT EXISTING CONDUITS, BOXES, CABLES, FIXTURES, ETC. OPENINGS IN WALLS, FLOORWAYS, PANELS, ETC. WHICH MAY RESULT FROM SUCH REMOVAL OF EQUIPMENT SHALL BE CLOSED IN A PROPER MANNER AND ALL CABLES AND WIRES PROPERLY TERMINATED AND INSULATED TO RESTORE THE SYSTEM TO A SAFE AND SOUND CONDITION AND TO THE ARCHITECT'S SATISFACTION.

- 2.9. WHERE ELECTRICAL WIRING AND/OR CONDUIT PASS THROUGH OR IN THE AREA TO SERVE ITEMS WHICH ARE TO REMAIN, THE SERVICE SHALL BE MAINTAINED. WHENEVER EXISTING CONCEALED FINISHES (SUCH AS DRYWALL, BULKHEAD, SUSPENDED CEILING AND DRYWALL CEILING, FURRED-OUT WALL SPACE, ETC.) IS TO BE DEMOLISHED AND REPLACED WITH EXPOSED STRUCTURE, REPLACE ALL ACTIVE WIRING INCLUDING BX CABLE CONCEALED BEHIND EXISTING FINISHES AND WHICH HAVE BECOME EXPOSED DURING RENOVATION WORK WITH WIRING IN METAL CONDUIT AND/OR WIREMOLD. ALL EXISTING OUTLET BOXES, JUNCTION BOXES AND DEVICES MOUNTED IN OR ON THE EXISTING CONCEALED FINISHES AND/OR ANY EXISTING WIRING IN CONDUIT INSTALLED IN THE EXISTING CONCEALED FINISHES SHALL BE RELOCATED AND/OR REROUTED TO THE FINAL FINISHED STRUCTURAL OUTLET, ROUTING, METHOD AND DETAIL AS LATER DIRECTED BY THE ENGINEER ON SITE TO SUIT SITE CONDITION.

- 2.10. IN EVERY INSTANCE WHERE IT IS REQUIRED IN THE SPECIFICATIONS AND/OR ON THE DRAWINGS THAT EQUIPMENT AND/OR MATERIALS BE REMOVED FROM EXISTING LOCATIONS AND BE RE-INSTALLED, EITHER IN WHOLE OR IN PART, IN NEW LOCATIONS, ALL SUCH EQUIPMENT AND/OR MATERIALS SHALL BE THOROUGHLY CLEANED AND WHERE NECESSARY PUT INTO GOOD OPERATING CONDITION BEFORE BEING RE-INSTALLED IN THE NEW LOCATION.

- 2.11. OFFSET EXISTING CONDUIT, WIRING WHERE NECESSARY TO SUIT NEW MECHANICAL, ARCHITECTURAL AND STRUCTURAL WORK.
- 2.12. IN AREAS WHERE IT WILL BECOMES INACCESSIBLE FOR SERVICING, SUCH AS A NEW DRYWALL CEILING, REMOVE, EXTEND AND RELOCATE ALL EXISTING JUNCTION BOXES/OUTLET BOXES TO AN AREA WHICH IS ACCESSIBLE FOR SERVICING, SUCH AS A T-BAR CEILING OR EXTEND EXISTING JUNCTION BOX/OUTLET BOXES TO THE UNDERSIDE OF NEW FINISHED CEILING WITH DECORATIVE COVERPLATES. PER ENGINEER'S SITE DIRECTION AT LATER DATE.

- 2.13. TEST ALL PARTS OF THE RE-USED OR RELOCATED ELECTRICAL EQUIPMENT AND CORRECT ALL FAULTS, GROUNDS, ETC.
- 2.14. WHENEVER THE EXISTING CONDUITS/CABLES/WIRES ARE TO REMAIN, PACK AND SEAL THE JOINT BETWEEN THE OPENING AND THE EXISTING CONDUIT WITH DOW CORNING SERIES 2000 FIRE STOP SEALANT AND APPROVED MATERIAL. PACK AND SECURE IN SUCH A MANNER THAT THE PACKING IN VERTICAL HOLE AND OPENING WILL NOT FALL OUT.

- 2.15. WHENEVER THE EXISTING CONDUITS/CABLES/WIRES ARE REMOVED, PACK AND SEAL THE EXISTING OPENING WITH DOW CORNING SERIES 2000 FIRE STOP SEALANT AND APPROVED MATERIAL SAME AS ABOVE.

3. PERMITS, CERTIFICATES AND FEES

- 3.1. APPLY, PAY FOR AND OBTAIN ALL PERMITS REQUIRED TO COMPLETE THE WORK BY AUTHORITIES HAVING JURISDICTION.
- 3.2. WHEN WORK IS COMPLETE, SUPPLY AND HAND OVER INSPECTION CERTIFICATES FROM AUTHORITIES TO CONSULTANT/ARCHITECT AND PAY ALL REQUIRED FEES AND CHARGES.

4. COORDINATION AND COOPERATION

- 4.1. COORDINATE YOUR WORK WITH THE WORK OF OTHER TRADES TO ENSURE A PROPER AND COMPLETE INSTALLATION.
- 4.2. ESTABLISH EXACT ROUTES OF SERVICES, LOCATION OF EQUIPMENT AND DEVICES IN COORDINATION WITH OTHER TRADES IN ORDER TO COMPLY WITH ALL APPLICABLE CODES AND TO AVOID ANY INTERFERENCE.

5. CLEANING AND NOISE CONTROL

- 5.1. DURING CONSTRUCTION KEEP SITE CLEAR OF WASTE AND RUBBISH. AFTER COMPLETION OF THE WORK CLEAN SITE, REMOVE ALL DEBRIS AND PAY FOR REPAIR OF DAMAGES CAUSED BY THE WORK OF THIS DIVISION.
- 5.2. COORDINATE WORK WITH OTHER TRADES TO MINIMIZE NOISE AND ALL WORK WHICH MAY CAUSE NOISE DISTURBANCE MUST BE COORDINATED WITH CONSULTANT/ARCHITECT AND THE OWNER.

6. INSPECTION, TESTING AND COMMISSIONING

- 6.1. CONSULTANT SHALL HAVE ACCESS TO SITE AT ALL TIMES. CONTRACTOR SHALL NOTIFY CONSULTANT OF THE STAGES OF THE WORK.

- 6.2. IF WORK DOES NOT COMPLY WITH DRAWINGS, SPECIFICATION AND CODES, SUCH DEFICIENCIES SHALL BE CORRECTED AT CONTRACTOR'S EXPENSE.
- 6.3. ALL INSTALLATIONS AND SYSTEMS SHALL BE TESTED AND COMMISSIONED TO ENSURE PROPER OPERATION AND REQUIREMENT OF AUTHORITIES HAVING JURISDICTION.

7. INSURANCE

- 7.1. MAINTAIN ALL NECESSARY INSURANCE TO PROTECT THE OWNER AND THE TRADES OF THIS DIVISION FROM ALL POSSIBLE CLAIMS.

8. SCHEDULE OF THE WORK

- 8.1. COMPLY WITH THE SCHEDULE OF THE WORK AND PHASING OF THE PROJECT PREPARED AND APPROVED BY ARCHITECT AND GENERAL CONTRACTOR.

9. WARRANTY

- 9.1. AFTER COMPLETION OF THE WORK SUBMIT A WRITTEN WARRANTY LETTER INDICATING THAT FROM THE DATE OF WRITTEN ACCEPTANCE BY CONSULTANT AND FOR PERIOD OF ONE YEAR, ANY DEFECT IN MATERIAL OR WORKMANSHIP WILL BE RECTIFIED AT NO COST TO THE OWNER.

10. SHOP DRAWINGS

- 10.1. SUBMIT ELECTRONIC COPIES OF SHOP DRAWINGS FOR ALL ELECTRICAL EQUIPMENT, DEVICES AND LIGHTING FIXTURE FOR APPROVAL.
- 10.2. ALL SHOP DRAWINGS SHALL BE REVIEWED, SIGNED AND STAMPED BY CONTRACTOR INDICATING THAT PROPOSED MATERIAL, EQUIPMENT AND SYSTEM, COMPLIES WITH DRAWINGS, SPECIFICATIONS AND PROJECT REQUIREMENT. REVIEW OF SHOP DRAWINGS BY CONSULTANT IS FOR CONFORMANCE WITH GENERAL DESIGN CONCEPT AND DOES NOT APPROVE THE DETAILS OF CONSTRUCTION AND INSTALLATION OF THE MATERIAL, EQUIPMENT AND SYSTEMS, RESPONSIBILITY OF WHICH REMAINS WITH CONTRACTOR AND SUPPLIER.

11. HAZARDOUS MATERIALS

- 11.1. IF AT ANY TIME DURING CONSTRUCTION ASBESTOS MATERIAL ARE FOUND OR SUSPECTED, IMMEDIATELY STOP WORKING IN THAT AREA AND REPORT TO GENERAL CONTRACTOR/ARCHITECT. DO NOT CONTINUE WORK IN THE AFFECTED AREA WITHOUT APPROVAL FROM ASBESTOS CONSULTANT.

12. RECORD DRAWINGS AND MANUALS

- 12.1. DURING CONSTRUCTION, CLEARLY MARK ON A SET OF WHITE PRINTS OF CONTRACT DRAWINGS ALL CHANGES WHICH ARE REQUIRED BY ADDENDUMS, SITE INSTRUCTIONS, CHANGE NOTICES AND SITE CONDITIONS AND MAKE IT AVAILABLE TO CONSULTANT FOR REVIEW.
- 12.2. AFTER COMPLETION OF THE WORK, SUBMIT ONE SET OF HARD COPY AND ONE ELECTRONIC COPY (IN PDF FORMAT) OF MARKED UP AS BUILT DRAWINGS TO CONSULTANT FOR REVIEW. REVIEW OF RECORD DRAWINGS BY CONSULTANT SHALL BE FOR GENERAL CONFORMANCE AND IT IS NOT APPROVAL OF THE ACCURACY OF THE DRAWINGS. THIS DIVISION IS RESPONSIBLE FOR ACCURACY OF AS BUILT DRAWINGS.

- 12.3. INCORPORATE ALL THE COMMENTS FROM CONSULTANT AND SUBMIT CAD FILE AND TWO SETS OF HARD COPIES OF AS BUILT DRAWINGS TO THE OWNER, AN ELECTRONIC COPY OF TENDER DRAWINGS CAN BE OBTAINED FROM CONSULTANT AT NO CHARGE.
- 12.4. AFTER COMPLETION OF THE PROJECT SUBMIT 1 SET HARD COVER BINDERS AND ONE ELECTRONIC COPY (IN PDF FORMAT) OF ELECTRICAL MANUALS. EACH MANUAL SHALL INCLUDE: LETTER OF WARRANTY, ECA CERTIFICATE, FIRE ALARM INSTALLATION AND VERIFICATION REPORT AND CERTIFIED EMERGENCY LIGHTING TEST REPORT, ALL APPROVED SHOP DRAWINGS AND OPERATING MANUALS.

- 12.5. INSTRUCT THE OWNER'S REPRESENTATIVE IN THE OPERATION AND MAINTENANCE OF ALL EQUIPMENT.

13. CUTTING, PATCHING, CORE DRILLING AND SLEEVES

- 13.1. ALL REQUIRED CUTTING, PATCHING AND CORE DRILLING REQUIRED FOR ELECTRICAL CONTRACTOR'S WORK SHALL BE BY ELECTRICAL CONTRACTOR. PATCHING SHALL EXACTLY MATCH EXISTING FINISHES AND SHALL BE PERFORMED BY SKILLED TRADESMAN TO THE APPROVAL OF GENERAL CONTRACTOR.
- 13.2. ELECTRICAL CONTRACTOR SHALL COORDINATE LOCATION OF REQUIRED FLOOR CORE DRILLING WITH GENERAL CONTRACTOR IN RELATION TO REINFORCING RODS AND OTHER SERVICES.

- 13.3. PROVIDE GALVANIZED STEEL SLEEVES WHERE CONDUIT PASSING THROUGH WALLS, PARTITIONS AND FLOORS. THE SPACE BETWEEN THE SLEEVE AND CONDUIT SHALL BE FILLED WITH ULC LISTED MATERIAL TO PROVIDE SMOKE SEAL AND FIRE STOP RATING TO BUILDING CODE REQUIREMENTS.
- 13.4. PROVIDE ACCESS DOOR AS REQUIRED IN WALLS AND CEILINGS. ENSURE THAT ACCESS IS PROVIDED FOR ALL EQUIPMENT, DEVICES AND APURTENANCES. PROVIDE ACCESS COMPATIBLE WITH THE ADJACENT FINISHES AND FIRE RATING EQUAL TO SURFACES IN WHICH INSTALLED.

- 13.5. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL CONE ROOF FLASHING AND SEALANT FOR POWER CABLES PENETRATION THRU ROOF.

14. GENERAL MATERIALS AND WORKMANSHIP

- 14.1. ALL MATERIALS SHALL BE NEW AND OF THE TYPE AS SPECIFIED AND FREE FROM DEFECTS AND SHALL BE C.S.A. APPROVED, IF ACCEPTABLE MANUFACTURERS ARE LISTED, ENSURE PRODUCT SUPPLIED BY MANUFACTURER OTHER THAN BASE SPECIFIED PRODUCT, MEETS ALL THE REQUIREMENTS OF THE PROJECT AND ARE EQUIVALENT.
- 14.2. ALL WORK SHALL BE EXECUTED IN A WORKMANLIKE MANNER, PRESENT NEAT APPEARANCE AND SHALL CONFORM TO ELECTRICAL SAFETY CODE, AND LOCAL AUTHORITY'S REQUIREMENTS.

- 14.3. ELECTRICAL DEVICES AND/OR EQUIPMENT MAY BE RELOCATED UP TO 3M (10') IN ANY DIRECTION WITHOUT ADJUSTMENT TO CONTRACT PRICE.
- 14.4. PRODUCTS NOT SPECIFICALLY SPECIFIED SHALL BE OF A QUALITY CONSISTENT WITH THE REMAINDER OF THE SPECIFICATION. 14.5 PROVIDE A COMPLETE ITEMIZED BREAKDOWN OF MATERIAL AND LABOUR FOR EACH CHANGE AT NET COST.

COMMON ELECTRICAL PROVISIONS

1. REFERENCES

- 1.1. ALL WORK SHALL COMPLY WITH THE LATEST EDITIONS OF APPLICABLE STANDARDS AND CODES, INCLUDING BUT NOT LIMITED TO:
- 1.2. CSA-C22.1 - CANADIAN ELECTRICAL CODE, PART I.
- 1.3. ONTARIO ELECTRICAL SAFETY CODE (OESC).
- 1.4. CSA C22.2 PRODUCT STANDARDS.

- 1.5. CAN/CSA-C22.3 NO. 1 - OVERHEAD SYSTEMS.
- 1.6. CAN3-C235 - PREFERRED VOLTAGE LEVELS FOR AC SYSTEMS.

2. ELECTRICAL DEMOLITION

- 2.1. DISCONNECT AND REMOVE ALL DEVICES, CONDUITS, AND EQUIPMENT ASSOCIATED WITH REDUNDANT SYSTEMS.
- 2.2. MAINTAIN CIRCUIT INTEGRITY FOR ACTIVE EQUIPMENT.
- 2.3. DE-ENERGIZE AND LABEL UNUSED BREAKERS; UPDATE PANEL SCHEDULES.
- 2.4. REMOVE OR PROPERLY TERMINATE ABANDONED WIRING IN ACCORDANCE WITH OESC RULES 2-126, 12-114, AND 12-3000, AND APPLICABLE ESA BULLETINS.

3. CONDUCTORS AND CABLES

- 3.1. MINIMUM CONDUCTOR SIZE: #12 AWG COPPER, RW90 INSULATION, 600 V RATING.
- 3.2. AC90 LIMITED TO FIXTURE AND DEVICE DROPS (MAX. 3 M EXPOSED RUN); NOT PERMITTED IN PATIENT AREAS OR FOR INTERCONNECTION BETWEEN LUMINAIRES.
- 3.3. OUTDOOR AND WET LOCATIONS: RW90BX COPPER ONLY.
- 3.4. CONNECTORS AND TERMINATIONS: CSA APPROVED, COPPER OR COPPER ALLOY COMPONENTS.
- 3.5. VOLTAGE DROP LIMITS: 2% FOR FEEDERS, 3% FOR BRANCH CIRCUITS.

4. CONDUIT AND RACEWAYS

- 4.1. USE EMT FOR INTERIOR BRANCH CIRCUITS, PVC FOR EXTERIOR, AND LIQUID-TIGHT FLEXIBLE CONDUIT FOR VIBRATING OR WET LOCATIONS.
- 4.2. CONCEAL CONDUIT IN FINISHED SPACES; INSTALL EXPOSED ONLY IN SERVICE AREAS.
- 4.3. FASTEN CONDUITS USING GALVANIZED STEEL STRAPS OR CHANNEL SUPPORTS—NO PERFORATED STRAPS OR THE WIRE PERMITTED.
- 4.4. PROVIDE SLEEVES AND CONDUIT RUNS BEFORE CONCRETE POURS; ALIGN WITH STRUCTURAL GRIDS.

5. BOXES AND ENCLOSURES

- 5.1. JUNCTION AND PULL BOXES: WELDED STEEL CONSTRUCTION TO CSA C22.2 NO. 40; PROVIDE AS REQUIRED TO LIMIT CONDUIT RUNS TO 30 M.
- 5.2. OUTLET BOXES: GALVANIZED STEEL, MINIMUM 3"X2"X1/4"; SIZE ACCORDING TO NUMBER OF CONDUCTORS PER OESC.
- 5.3. MAINTAIN 150 MM MINIMUM SEPARATION BETWEEN OUTLETS ON OPPOSITE WALL FACES.
- 5.4. RELOCATION WITHIN 3 M PERMITTED WITHOUT COST ADJUSTMENT IF REQUESTED PRIOR TO INSTALLATION.

6. GROUNDING AND BONDING

- 6.1. GROUND ALL ELECTRICAL EQUIPMENT AND SYSTEMS REGARDLESS OF NOTATION.
- 6.2. PROVIDE DEDICATED GROUNDING CONDUCTORS IN EVERY CONDUIT.
- 6.3. ENSURE NO OBJECTIONABLE CURRENT FLOW UNDER NORMAL OPERATING CONDITIONS.

7. SUPPORTS AND MOUNTING

- 7.1. USE HOT-DIPPED GALVANIZED STRUT CHANNELS, THREADED RODS, AND ANCHORS.
- 7.2. CONDUITS AND PANELS MUST BE SECURELY SUPPORTED; NO WIRE OR PERFORATED STRAP HANGERS ALLOWED.
- 7.3. PROVIDE CONCRETE HOUSEKEEPING PADS (100 MM HIGH) FOR ALL FLOOR-MOUNTED ELECTRICAL EQUIPMENT.

8. VIBRATION ISOLATION

- 8.1. INSTALL FLEXIBLE CONNECTIONS AND ISOLATORS TO PREVENT TRANSMISSION OF VIBRATION OR NOISE FROM ELECTRICAL EQUIPMENT TO STRUCTURE.

9. IDENTIFICATION

- 9.1. ENSURE ALL NAMEPLATES AND CSA MARKINGS REMAIN VISIBLE POST-INSTALLATION.
- 9.2. IDENTIFY WIRING WITH PERMANENT PHASE COLOURS OR NUMBER-CODED MARKERS CONSISTENT ACROSS THE PROJECT.
- 9.3. 347/60 V - BLUE, 120/208 V - BLACK, EMERGENCY - YELLOW, UPS - ORANGE, COMMUNICATIONS - GREEN, FIRE ALARM - RED.
- 9.4. LABEL ALL RECEPTABLES AND DEVICES WITH PANEL AND CIRCUIT NUMBER ON THE COVER PLATE. UPDATE AND TYPE ALL PANEL DIRECTORIES; INCLUDE PANEL NAME, VOLTAGE, PHASE, CURRENT RATING, AND SOURCE.

10. PROTECTIVE DEVICE COORDINATION

- 10.1. CONFIRM THAT ALL FUSES, BREAKERS, AND RELAYS ARE SET AND RATED ACCORDING TO COORDINATION REQUIREMENTS BEFORE ENERGIZING THE SYSTEM.

11. EQUIPMENT WIRING

- 11.1. PLUMBING EQUIPMENT WIRING.
- 11.2. PROVIDE BRANCH CIRCUIT WIRING AND AN OUTLET FOR PLUMBING FIXTURE CONTROL, CONTROL WIRING PERFORMED BY PLUMBING TRADE.
- 11.3. HVAC EQUIPMENT WIRING.
- 11.4. IN THE CASE OF UNIT HEATERS, REHEAT COILS AND CABINET UNIT HEATERS, TERMINATE WIRING ON TERMINALS PROVIDED. CONTROL WIRING, THERMOSTAT INTEGRATION, AND OTHER CONTROLS ARE TO BE PERFORMED BY THE SUPPLYING TRADE.

- 11.5. PROVIDE BRANCH CIRCUIT WIRING AND AN OUTLET FOR EACH MOTORIZED DAMPER, VARIABLE AIR VOLUME BOX (VAV BOX), OR HEATING CONTROL VALVE. CONTROL WIRING PERFORMED BY HVAC TRADE.
- 11.6. MOTOR SIZING.
- 11.7. MOTORS UP TO AND INCLUDING 1/3 HP, SHALL BE 1 PHASE, 60 HZ, 120 VOLTS.
- 11.8. MOTORS ABOVE 1/3 HP AS INDICATED ON DRAWINGS.

LOW-VOLTAGE TRANSFORMERS

1. STANDARDS AND CONSTRUCTION
- 1.1. DRY-TYPE TRANSFORMERS TO MEET CSA C22 AND C802 STANDARDS.
- 1.2. CSA TYPE 2 DRIP-PROOF ENCLOSURE, COMPLIANT WITH ANSI, NEMA, AND IEEE STANDARDS.
- 1.3. FINISH: ASA 61 GRAY EPOXY.
- 1.4. 3-PHASE, 3-COIL, ANN-TYPE, DELTA-WYE CONNECTION; 600-120/208 V, 60 HZ.

- 1.5. FOUR (4) TAPS: 2XFCBN AND 2XFCBN AT 2.5% PER TAP.
- 1.6. COPPER WINDINGS, EPOXY IMPREGNATED, WITH ANTI-VIBRATION PADS AND ELECTROSTATIC SHIELDING.
- 1.7. INSULATION CLASS 220, 115°C (239°F) WINDING RISE.
- 1.8. WALL-MOUNTED FOR UNITS ≤ 45 KVA UNLESS NOTED OTHERWISE.
- 1.9. HEAVY-GAUGE STEEL CONSTRUCTION WITH RUST AND CORROSION PROTECTION.
- 1.10. 1-2 KV CLASS, 10 KV BIL.
- 1.11. DOUBLE NEUTRAL CONNECTOR.

2. EFFICIENCY AND NOISE
- 2.1. TRANSFORMERS SHALL MEET OR EXCEED ASHRAE 90.1-2010 TABLE 8.1 NOMINAL EFFICIENCIES.
- 2.2. MAXIMUM SOUND LEVELS:
- UP TO 45 KVA: 45 DB, UP TO 150 KVA: 50 DB, UP TO 300 KVA: 55 DB, UP TO 500 KVA: 60 DB
- 2.3. T-CONNECTED TRANSFORMERS ARE NOT PERMITTED.

WIRING DEVICES

1. SWITCHES

1. MANUALLY-OPERATED GENERAL PURPOSE AC SWITCHES: CSA C22.2 NO. 111-M1986.
2. SNAP SWITCHES: CSA C22.2 NO. 55-M1986.
3. RATINGS: 15 A, 20 A, 120 V; SINGLE, DOUBLE, THREE-WAY, FOUR-WAY; PILOT LIGHTS OR KEY OPERATOR AS INDICATED.
4. SINGLE MANUFACTURER THROUGHOUT, COLOR PER ARCHITECT.
5. LOCAL SPECIFICATION GRADE.
- 5.1. 120 V: P&S #26021 SERIES, HUBBELL #2121 SERIES
- 5.2. 347 V: P&S #2601-347 SERIES

2. RECEPTABLES

1. PROVIDE CSA APPROVED, EXTRA HEAVY DUTY, INDUSTRIAL GRADE, AC QUIET ACTION NYLON TOGGLE TYPE, 20A, 120 & 208V SWITCHES AND EXTRA HEAVY DUTY, SPECIFICATION GRADE PREMIUM QUALITY, NYLON BODY CONSTRUCTION DUPLEX, U GROUND, 15A 125V, 3W RECEPTABLES. DEVICES SHALL BE BACK AND SIDE WIRED. PROVIDE STAINLESS STEEL TYPE OR IMPACT RESISTANT THERMOPLASTIC FACEPLATES WITH MATCHING SCREWS, AS PER EXISTING STANDARDS.
2. IDENTIFY CIRCUIT NUMBERS ON RECEPTACLE DESIGNATED LABELLING SPACES. PROVIDE PERMANENTLY LABELLED, ENGRAVED, IDENTIFICATION LABEL ON OUTSIDE OF EACH DEVICE OUTLET, IDENTIFYING LOCATION FROM WHERE EACH DEVICE IS FED, COMPLY WITH CSA 232 WITH REGARDS TO LABELLING AND IDENTIFICATION OF DEVICES.
3. WHERE SHOWN, 15A 125V, ULC LISTED, CLASS A, GROUP ONE, 2 POLE, 3W, WHITE COLOURED, SPECIFICATION GRADE, GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE, COMPLETE WITH WHITE FACEPLATES DECORA STYLE.
4. CONFIRM RECEPTACLE TYPE, NUMBER OF POLES, AND FINISHES OF DEVICES WITH CONSULTANT PRIOR TO ORDERING. SUBMIT SAMPLES AND FINISHES FOR CONSULTANT'S REVIEW.
5. MANUFACTURERS: HUBBELL, LEVITON, PASS & SEMOUR, BRYANT, EATON WIRING DEVICES.

3. COVER PLATES

1. COMPATIBLE WITH DEVICE TYPE, ONE MANUFACTURER THROUGHOUT.
2. SURFACE-MOUNTED STEEL PLATES FOR UTILITY BOXES; STAINLESS STEEL FOR FLUSH OR SURFACE MOUNT IN FINISHED AREAS.
3. WET-LOCATION RATED FOR EXTERIOR APPLICATIONS.

CIRCUIT PROTECTION DEVICES

1. FUSES

- 1.1. CSA C22.2 NO. 248 SERIES, CLASS AS INDICATED.
- 1.2. MANUFACTURERS: MERSEN, GEC, LITTELFUSE, EATON-COOPER BUSSMAN.
- 1.3. VOLTAGE RATING SUITABLE FOR PHASE-TO-PHASE VOLTAGE.
- 1.4. FEEDER SWITCHES: HRC-1 CLASS S, TIME DELAY (GOULD AUT TYPE).

2. ENCLOSED SWITCHES

1. FUSIBLE AND NON-FUSIBLE, PADLOCKABLE DISCONNECTS, CSA ENCLOSURE AS INDICATED.
- 1.2. MECHANICALLY INTERLOCKED DOOR TO PREVENT OPENING WHEN SWITCH IS ON.
- 1.3. FUSE HOLDERS SIZED FOR SPECIFIED FUSES, QUICK-MAKE/QUICK-BREAK ACTION.
- 1.4. SWITCH POSITION MARKED ON/OFF ON ENCLOSURE.

INTERIOR LIGHTING

1. GENERAL

- 1.1. PROVIDE ALL LUMINAIRES AS SHOWN ON THE DRAWINGS AND AS SPECIFIED IN THE LUMINAIRE SCHEDULE.
- 1.2. ALL LUMINAIRES SHALL BE COMPLETE WITH NEW LAMPS, DRIVERS, ACCESSORIES AND MOUNTING APPURTENANCES.
- 1.3. ALL LUMINAIRES TO BE CSA APPROVED.
- 1.4. AIM AND ADJUST ALL LUMINAIRES AS REQUIRED.
- 1.5. ALL NEW DOWNLIGHTS AND SURFACE-MOUNTED LUMINAIRES INSTALLED IN OR ON BASE BUILDING CEILINGS SHALL BE INDEPENDENTLY SUPPORTED FROM THE BUILDING STRUCTURE USING TENSO CHAINS, UNLESS OTHERWISE SPECIFIED.
- 1.6. IF WRITTEN CONFIRMATION CANNOT BE PROVIDED THAT THE EXISTING BASE BUILDING CEILING IS DESIGNED TO CARRY THE ADDED WEIGHT OF LUMINAIRES, THE ELECTRICAL CONTRACTOR SHALL INSTALL ADDITIONAL STRUCTURAL SUPPORTS FOR ALL NEW AND RELOCATED BASE BUILDING LUMINAIRES. EACH TRIGGER FIXTURE SHALL BE SUPPORTED BY TWO TENSO CHAINS FROM THE STRUCTURE ABOVE, AND EACH DOWNLIGHT BY AT LEAST ONE TENSO CHAIN. INCLUDE ALL ASSOCIATED COSTS IN THE TENDER PRICE.
- 1.7. COOPERATE WITH ALL OTHER TRADES FOR THE PROPER INSTALLATION OF ALL LUMINAIRES.

11. LED INTERIOR LUMINAIRES

- 1.1. TESTED PER IES LM-79, LM-80, AND L70 LUMEN MAINTENANCE AT ≥ 50 000 HOURS
- 1.2. DRIVERS: PF ≥ 0.9, THD ≤ 20%, 0-10 V DIMMING STANDARD OR COMPATIBLE PROTOCOL.
- 1.3. WARRANTY: 5 YEARS.
- 1.4. CRI ≥ 80; EFFICACY PER DLC OR ENERGY STAR.

EMERGENCY LIGHTING

1. BATTERY UNITS AND REMOTE HEADS

- 1.1. MINIMUM 10 AHS OR HEAVIER TO LIMIT VOLTAGE DROP ≤ 5%, CONSULT MANUFACTURER TABLES.
- 1.2. CIRCUIT BREAKER LOOK AT SOURCE PANELBOARD.
- 1.3. CONTRACTOR TO VERIFY COMPLIANCE WITH CSA C22.2 NO. 141 AND VOLTAGE DROP LIMITS.
- 1.4. MOUNT UNIT 300 MM (12") BELOW FINISHED CEILING UNLESS NOTED OTHERWISE AND AIM FIXTURE HEAD TO ILLUMINATE EXIT PATH. PROVIDE WIRE GUARDS FOR ALL SURFACE-MOUNTED BATTERY PACKS AND REMOTE EMERGENCY FIXTURES INSTALLED IN PUBLIC AREAS (I.E. SCHOOL WASHROOMS).

- 1.5. MANUFACTURERS: LUMACELL, EMERGIUTE, BEGHELLI, STANPRO.

LIGHTING CONTROLS

1. OCCUPANCY AND TIME-CONTROL DEVICES

- 1.1. ALL DEVICES INSTALLED AS INDICATED IN THE APPLICABLE SCHEDULES.
- 1.2. CONFIGURE OCCUPANCY SENSORS TO TURN LIGHTS OFF NO LATER THAN 30 MINUTES AFTER A SPACE BECOMES UNOCCUPIED. CONFIRM THE EXACT TIMING WITH THE CONSULTANT BEFORE INSTALLATION.

TRACING EXISTING ELECTRICAL CIRCUITS

1. TRACE ALL CIRCUITS IN THE AREA OF WORK LISTED AS EXISTING, AND VERIFY EXISTING CONDITIONS PRIOR TO ANY MODIFICATIONS AS INDICATED.
2. WHERE DRAWINGS INDICATE "CONNECT TO EXISTING CIRCUIT", USE A SPARE BREAKER, WHERE AVAILABLE. OTHERWISE, VERIFY EXISTING LOAD WITH A METER AND ADVISE THE CONSULTANT IF THE ADDITIONAL LOAD WILL CAUSE A CIRCUIT TO TRIP.
3. WHERE PROVIDED PANELBOARD SCHEDULES INDICATE "EXISTING CIRCUIT" OR SIMILAR, PROVIDE THE CORRECT DESCRIPTION FOR THE CIRCUIT. "EXISTING CIRCUIT" WILL NOT BE ACCEPTABLE IN THE FINAL PANELBOARD SCHEDULES SUBMITTED AS PART OF CLOSEOUT SUBMITTALS.

TESTING, BALANCING & ADJUSTING

1. PERFORM TESTING, BALANCING AND ADJUSTING TO PERTINENT SYSTEMS INCLUDING:
- 1.1. ELECTRICAL DISTRIBUTION SYSTEM
- 1.2. MOTOR STARTERS AND VARIABLE FREQUENCY DRIVES
- 1.3. FIRE ALARM SYSTEMS
- 1.4. COMPILE AND PROVIDE AS-BUILT DRAWINGS AND OPERATION AND MAINTENANCE MANUALS AS INDICATED
- 1.5. LIGHTING CONTROLS - THIRD PARTY COMPANY SHALL BE USED TO PERFORM TESTING OF LIGHTING CONTROL DEVICES.

COMMISSIONING

1. COMMISSION ALL ELECTRICAL SYSTEMS TO CONFIRM THEY ARE INSTALLED, TESTED, AND OPERATING IN ACCORDANCE WITH THE DESIGN INTENT, MANUFACTURER RECOMMENDATIONS, AND APPLICABLE CODES. COORDINATE ACTIVITIES WITH OTHER TRADES AND PROVIDE ALL REQUIRED INSTRUMENTS AND PERSONNEL FOR TESTING.
2. NO SYSTEM SHALL BE ENERGIZED UNTIL INSULATION, CONTINUITY, AND GROUNDING TESTS HAVE BEEN SUCCESSFULLY COMPLETED AND ACCEPTED BY THE CONSULTANT.

3. PERFORM INSULATION RESISTANCE TESTS AS FOLLOWS:
- 3.1. CIRCUITS, FEEDERS, AND EQUIPMENT RATED UP TO 350 V: TEST WITH A 500 V MEGGER.
- 3.2. CIRCUITS AND EQUIPMENT RATED 350-600 V: TEST WITH A 1000 V MEGGER.
- 3.3. RECORD ALL RESULTS AND CONFIRM ACCEPTABLE RESISTANCE TO GROUND PRIOR TO ENERGIZING ANY SYSTEM.
4. CONDUCT LOAD AND VOLTAGE VERIFICATION DURING COMMISSIONING:
- 4.1. MEASURE PHASE CURRENTS ON PANELBOARDS UNDER TYPICAL LOAD CONDITIONS AND REBALANCE CIRCUITS TO ACHIEVE A MAXIMUM DEVIATION OF 5% BETWEEN PHASES.
- 4.2. MEASURE PHASE VOLTAGES AT REPRESENTATIVE LOADS AND ADJUST TRANSFORMER TAPS TO MAINTAIN VOLTAGE WITHIN ±2% OF NOMINAL RATING.
- 4.3. RECORD AND SUBMIT READINGS AS PART OF THE COMMISSIONING DOCUMENTATION.
5. COMPLETE STARTUP OF ALL ELECTRICAL EQUIPMENT IN ACCORDANCE WITH NETA ATS STANDARDS AND MANUFACTURER REQUIREMENTS. CONFIRM PROPER PHASING, ROTATION, AND OPERATION OF ALL MOTORS AND CONTROLS. COORDINATE STARTUP SEQUENCING WITH MECHANICAL AND CONTROL SYSTEMS.
6. PERFORM LIGHTING SYSTEM COMMISSIONING TO VERIFY PROPER OPERATION AND CONTROL. FUNCTIONALITY. ENGAGE A QUALIFIED MANUFACTURER'S REPRESENTATIVE OR TESTING AGENCY FOR TESTING. CONFIRM ALL SWITCHES, DIMMERS, SENSORS, AND CONTROL DEVICES ARE PROPERLY INSTALLED, CALIBRATED, AND PROGRAMMED. ADJUST OCCUPANCY SENSORS, DAYLIGHT SENSORS, AND TIME SWITCHES TO ENSURE DESIRABLE AUTOMATIC OPERATION AND SHUTOFF PERFORMANCE.
7. PREPARE AND SUBMIT A COMMISSIONING AND TEST REPORT SUMMARIZING INSULATION READINGS, LOAD BALANCE DATA, VOLTAGE LEVELS, AND RESULTS OF LIGHTING AND CONTROL TESTING. INCLUDE EQUIPMENT CALIBRATION CERTIFICATES AND ANY CORRECTIVE ACTIONS TAKEN.

COMMISSIONING

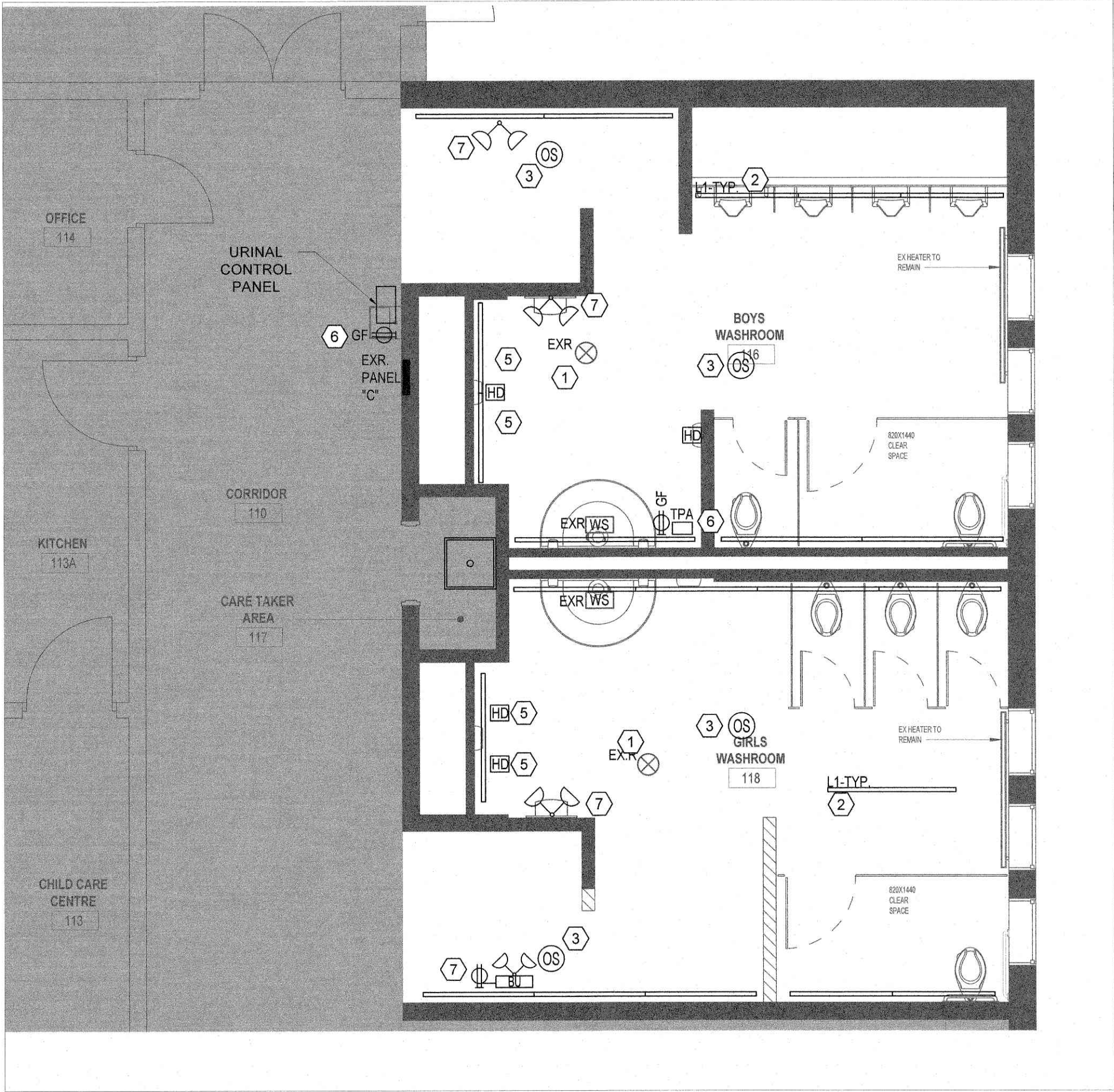
1. COMMISSION ALL ELECTRICAL SYSTEMS TO CONFIRM THEY ARE INSTALLED, TESTED, AND OPERATING IN ACCORDANCE WITH THE DESIGN INTENT, MANUFACTURER RECOMMENDATIONS, AND APPLICABLE CODES. COORDINATE ACTIVITIES WITH OTHER TRADES AND PROVIDE ALL REQUIRED INSTRUMENTS AND PERSONNEL FOR TESTING.
2. NO SYSTEM SHALL BE ENERGIZED UNTIL INSULATION, CONTINUITY, AND GROUNDING TESTS HAVE BEEN SUCCESSFULLY COMPLETED AND ACCEPTED BY THE CONSULTANT.

3. PERFORM INSULATION RESISTANCE TESTS AS FOLLOWS:
- 3.1. CIRCUITS, FEEDERS, AND EQUIPMENT RATED UP TO 350 V: TEST WITH A 500 V MEGGER.
- 3.2. CIRCUITS AND EQUIPMENT RATED 350-600 V: TEST WITH A 1000 V MEGGER.
- 3.3. RECORD ALL RESULTS AND CONFIRM ACCEPTABLE RESISTANCE TO GROUND PRIOR TO ENERGIZING ANY SYSTEM.
4. CONDUCT LOAD AND VOLTAGE VERIFICATION DURING COMMISSIONING:
- 4.1. MEASURE PHASE CURRENTS ON PANELBOARDS UNDER TYPICAL LOAD CONDITIONS AND REBALANCE CIRCUITS TO ACHIEVE A MAXIMUM DEVIATION OF 5% BETWEEN PHASES.
- 4.2. MEASURE PHASE VOLTAGES AT REPRESENTATIVE LOADS AND ADJUST TRANSFORMER TAPS TO MAINTAIN VOLTAGE WITHIN ±2% OF NOMINAL RATING.
- 4.3. RECORD AND SUBMIT READINGS AS PART OF THE COMMISSIONING DOCUMENTATION.
5. COMPLETE STARTUP OF ALL ELECTRICAL EQUIPMENT IN ACCORDANCE WITH NETA ATS STANDARDS AND MANUFACTURER REQUIREMENTS. CONFIRM PROPER PHASING, ROTATION, AND OPERATION OF ALL MOTORS AND CONTROLS. COORDINATE STARTUP SEQUENCING WITH MECHANICAL AND CONTROL SYSTEMS.
6. PERFORM LIGHTING SYSTEM COMMISSIONING TO VERIFY PROPER OPERATION AND CONTROL. FUNCTIONALITY. ENGAGE A QUALIFIED MANUFACTURER'S REPRESENTATIVE OR TESTING AGENCY FOR TESTING. CONFIRM ALL SWITCHES, DIMMERS, SENSORS, AND CONTROL DEVICES ARE PROPERLY INSTALLED, CALIBRATED, AND PROGRAMMED. ADJUST OCCUPANCY SENSORS, DAYLIGHT SENSORS, AND TIME SWITCHES TO ENSURE DESIRABLE AUTOMATIC OPERATION AND SHUTOFF PERFORMANCE.
7. PREPARE AND SUBMIT A COMMISSIONING AND TEST REPORT SUMMARIZING INSULATION READINGS, LOAD BALANCE DATA, VOLTAGE LEVELS, AND RESULTS OF LIGHTING AND CONTROL TESTING. INCLUDE EQUIPMENT CALIBRATION CERTIFICATES AND ANY CORRECTIVE ACTIONS TAKEN.

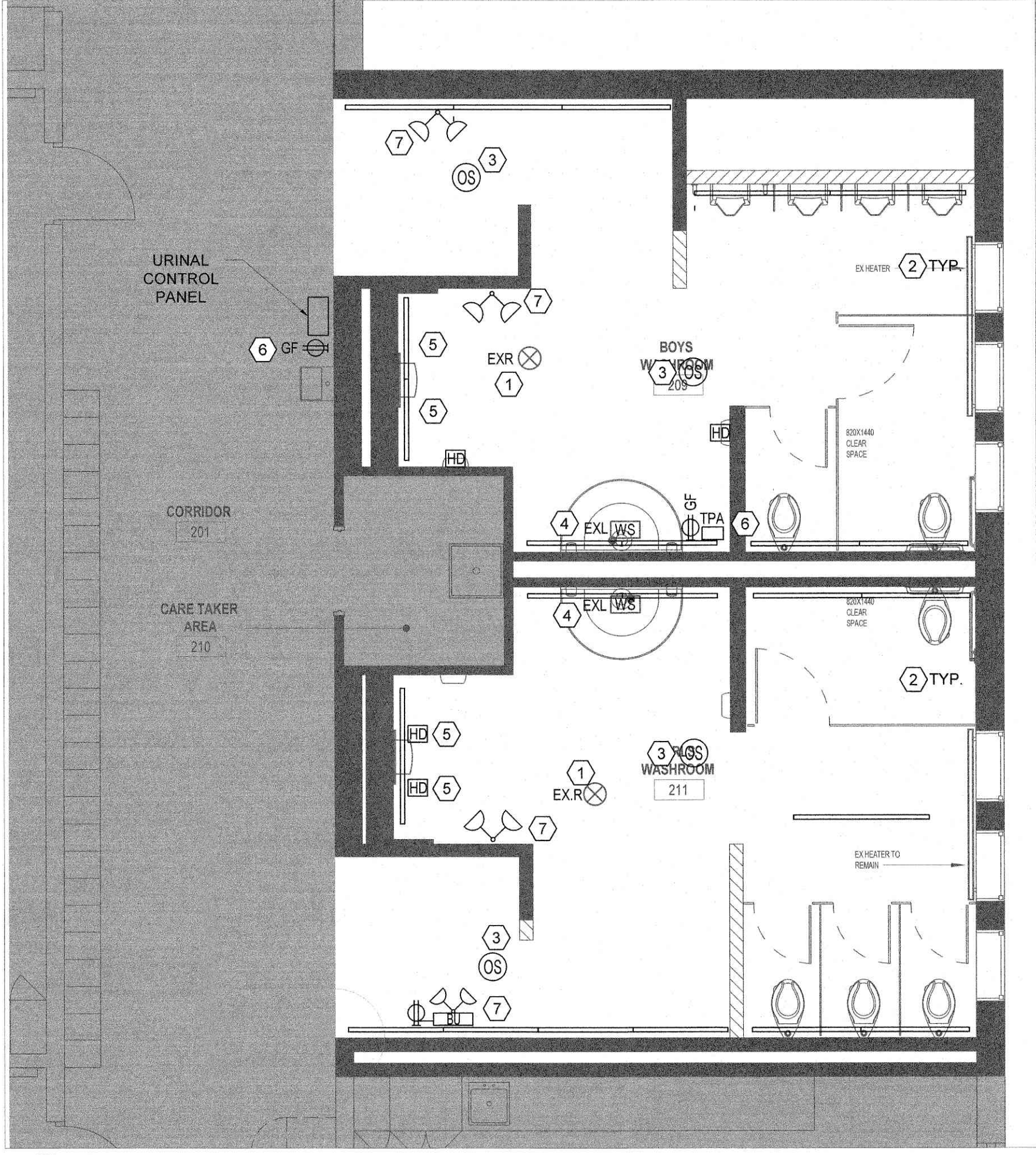
COMMISSIONING

1. COMMISSION ALL ELECTRICAL SYSTEMS TO CONFIRM THEY ARE INSTALLED, TESTED, AND OPERATING IN ACCORDANCE WITH THE DESIGN INTENT, MANUFACTURER RECOMMENDATIONS, AND APPLICABLE CODES. COORDINATE ACTIVITIES WITH OTHER TRADES AND PROVIDE ALL REQUIRED INSTRUMENTS AND PERSONNEL FOR TESTING.
2. NO SYSTEM SHALL BE ENERGIZED UNTIL INSULATION, CONTINUITY, AND GROUNDING TESTS HAVE BEEN SUCCESSFULLY COMPLETED AND ACCEPTED BY THE CONSULTANT.

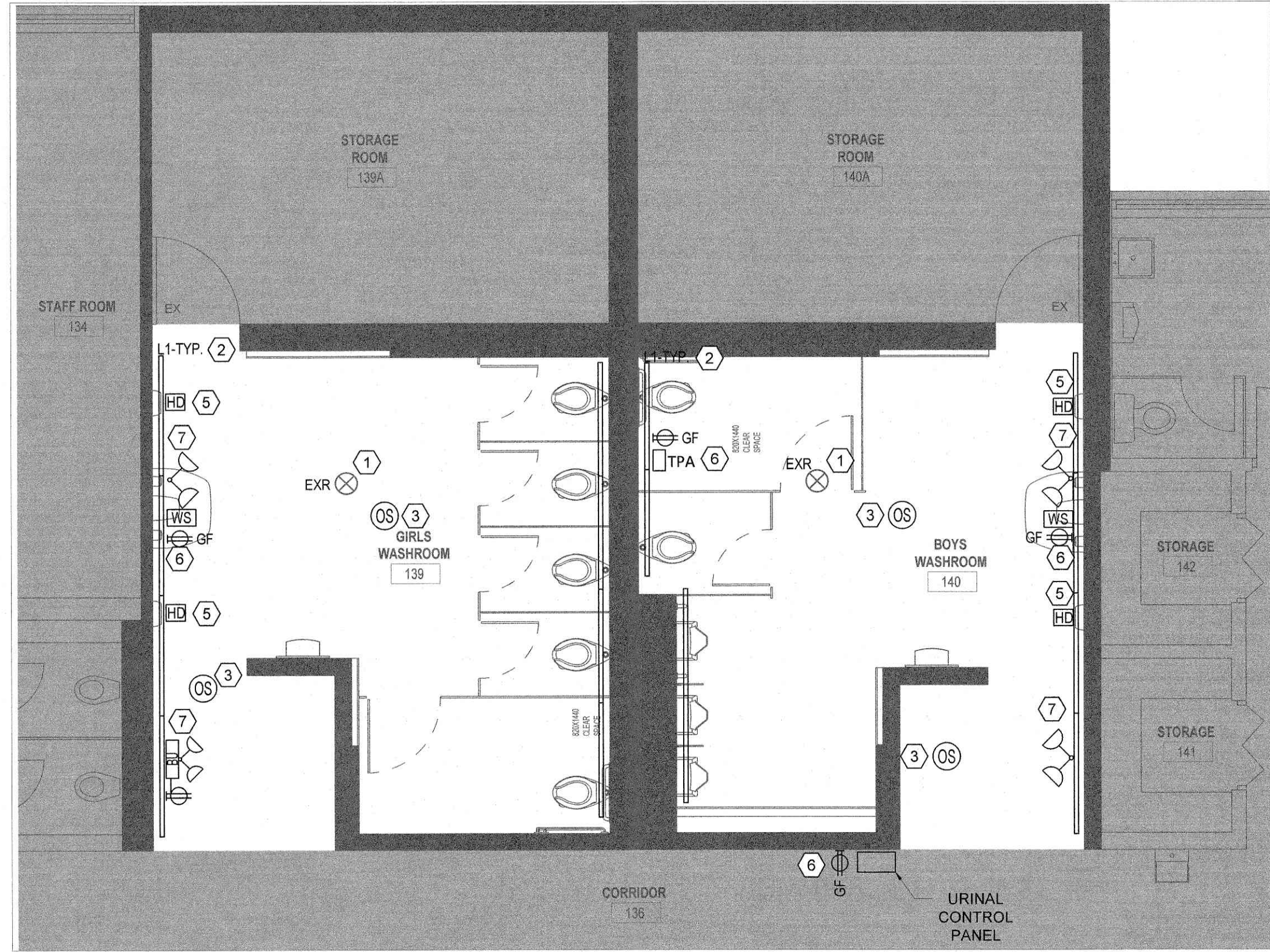
3. PERFORM INSULATION RESISTANCE TESTS AS FOLLOWS:
- 3.1. CIRCUITS, FEEDERS, AND EQUIPMENT RATED UP TO 350 V: TEST WITH A 500 V MEGGER.
- 3.2. CIRCUITS AND EQUIPMENT RATED 350-600 V: TEST WITH A 1000 V MEGGER.
- 3.3. RECORD ALL RESULTS AND CONFIRM ACCEPTABLE RESISTANCE TO GROUND PRIOR TO ENERGIZING ANY SYSTEM.
4. CONDUCT LOAD AND VOLTAGE VERIFICATION DURING COMMISSIONING:
- 4.1. MEASURE PHASE CURRENTS ON PANELBOARDS UNDER TYPICAL LOAD CONDITIONS AND REBALANCE CIRCUITS TO ACHIEVE A MAXIMUM DEVIATION OF 5% BETWEEN PHASES



1 ROOMS 116, 118 ELECTRICAL NEW CONSTRUCTION
E-1.02 1:50



3 ROOMS 219, 211 ELECTRICAL NEW CONSTRUCTION
E-1.02 1:50



2 ROOMS 139, 140 ELECTRICAL NEW CONSTRUCTION - FULL RENOVATION
E-1.02 1:50

CONSTRUCTION NOTES

- GENERAL
- ASSUMPTIONS HAVE BEEN MADE REGARDING EXISTING CONDITIONS DUE TO THE LACK OF ACCURATE AS-BUILT DRAWINGS. THE CONTRACTOR SHALL VERIFY ALL EXISTING RELATED SERVICES ON SITE AND REPORT ANY DISCREPANCIES TO THE ARCHITECT/ENGINEER. THE CONTRACTOR SHALL CARRY THE COST AS PART OF THE ORIGINAL BID FOR ADJUSTMENTS, RELOCATIONS, OR EXTENSIONS OF SERVICES TO SUIT THE NEW LAYOUT.
 - TRACE ALL EXISTING CIRCUITS IN THE AREA OF WORK AND VERIFY EXISTING CONDITIONS PRIOR TO ANY MODIFICATIONS.
 - WHERE DRAWINGS INDICATE "CONNECT TO AN EXISTING PANEL", INCLUDE FOR RE-ARRANGING THE EXISTING CIRCUITS AND UTILIZING SPACE SAVER BREAKERS TO MAKE SPACE IN EXISTING PANEL. CONTRACTOR IS ALLOWED TO UTILIZE EXISTING SPARE BREAKERS IN EXISTING PANELS, IF AVAILABLE. PANEL C SHOWN ON 1ST FLOOR CORRIDOR OUTSIDE WASHROOM 116 & 118 IS FULL AND DOES NOT HAVE SPARE BREAKER.
 - UPDATE THE EXISTING PANELS SCHEDULES IMPACTED AS PART OF THIS SCOPE OF WORK TO REFLECT THE ACTUAL CIRCUIT DESIGNATION IN FINAL CLOSEOUT DOCUMENTATION. "EXISTING CIRCUIT" WILL NOT BE ACCEPTABLE.
 - COORDINATE NEW AND EXISTING CONDUIT ROUTING WITH MECHANICAL SERVICES, STRUCTURAL ELEMENTS, AND ARCHITECTURAL FEATURES. OFFSET OR RELOCATE AS REQUIRED TO AVOID CONFLICTS.
 - MAINTAIN CONTINUOUS OPERATION OF ESSENTIAL ELECTRICAL SERVICES DURING CONSTRUCTION. PHASE WORK TO AVOID SERVICE INTERRUPTIONS UNLESS APPROVED BY THE OWNER.
 - CONFIRM ALL DEVICE AND EQUIPMENT LOCATIONS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS PRIOR TO INSTALLATION.
 - INSTALL ALL WORK IN ACCORDANCE WITH THE ONTARIO ELECTRICAL SAFETY CODE (OESC) AND AUTHORITIES HAVING JURISDICTION.

- KEYED NOTES:
- VERIFY CONDITION AND OPERATION OF EXISTING HEAT/SMOKE DETECTOR LEFT IN PLACE. RESTORE CONNECTIONS AS REQUIRED.
 - PROVIDE NEW LIGHT FIXTURES AS PER LIGHTING SCHEDULE AND CONNECT TO OCCUPANCY SENSOR CONTROL CIRCUIT. VERIFY SENSOR/DRIVER/LED COMPATIBILITY, MINIMUM LOAD AND IN-RUSH RATINGS PRIOR TO INSTALLATION.
 - PROVIDE NEW LINE-VOLTAGE CEILING-MOUNTED OCCUPANCY SENSOR FOR LIGHTING CONTROL. EXTEND/RE-ROUTE SWITCHED HOT AS REQUIRED FROM THE OLD SWITCH LOCATION OR JUNCTION BOX TO SENSOR JUNCTION BOX IN CEILING. CAP AND LABEL UNUSED CONDUCTORS. COORDINATE SENSOR LOCATION AND COMMISSIONING WITH MANUFACTURER TO ENSURE MAXIMUM COVERAGE.
 - RECONNECT EXISTING PLUMBING FIXTURE ELECTRICAL CONNECTIONS AT NEW LOCATIONS. EXTEND WIRING AND CONDUITS AS REQUIRED. FINAL TERMINATION OF FIXTURE CONTROL WIRING SHALL BE COMPLETED BY MECHANICAL CONTRACTOR.
 - SUPPLY AND INSTALL NEW HAND DRYER AT THE NEW LOCATION AND PROVIDE POWER USING THE EXISTING CIRCUIT. EXTEND WIRING AND CONDUIT AS REQUIRED.
 - SUPPLY AND INSTALL A NEW 15 A-1P 120 V GFI DUPLEX RECEPTACLE C/W WIRING AND CONDUIT FOR THE NEW ELECTRONIC TRAP PRIMER BOX RECESSED IN THE WALL, URINAL CONTROL PANEL, AND NEW WASH FOUNTAIN. COORDINATE FIXTURE LOCATION AND CONNECTION REQUIREMENTS WITH MECHANICAL CONTRACTOR. PROVIDE POWER VIA A NEW 15A-1P DEDICATED CIRCUIT FROM PANEL "PS" SHOWN ON E0.01 OR THE NEAREST EXISTING PANEL C/W ASSOCIATED WIRING AND CONDUIT TO SOURCE POWER.
 - SUPPLY AND INSTALL NEW BATTERY PACK EMERGENCY LIGHTING UNIT WITH REMOTE HEADS AS INDICATED C/W DC WIRING & CONDUIT RUN AND A NEW 15 A-1P 120 V DUPLEX RECEPTACLE. LOCATE NO LOWER THAN 8'-0" (2400 MM) AFF. PROVIDE POWER VIA A NEW 15A-1P DEDICATED CIRCUIT WITH A BREAKER LOCK FROM PANEL "PS" SHOWN ON E0.01 OR THE NEAREST EXISTING PANEL C/W ASSOCIATED WIRING AND CONDUIT TO SOURCE POWER.

LUMINAIRE SCHEDULE					
SYMBOL	QTY	LABEL	LUMEN PER LAMP	[MANUFAC]	DESCRIPTION
L1	AS SHOWN	L1	4320	ED VECTOR	CAT# XX R-10W-DD-UNV-ST-RT-OP-WH-40K, ARCHITECTURAL LINEAR LUMINAIRE, 1-8 FT CONTINUOUS RUN 10, 0.5 FT INCREMENTS 10 W/FT, DIRECT RADIANCE, ON/OFF INTEGRATED DRIVER, RECESSED TRIMLESS, OPAL LENS, WHITE, CCT SET TO 4000K, 80+CRI
	3	BU	LED 2-4W MR16	EMERGI-LITE	CAT# EM-1 #12JMLA-72-U/2-LG TWIN HEAD (1 CUBE 2 LAMPS) LED REMOTE MR16 FIXTURE C/W COMPACT VANDAL RESISTANT DESIGN, WHITE COLOUR, FULL AIMING ADJUSTMENT, 360° ROTATION AND LEXAN COVER WITH WIRE GUARD
	9	NA	LED 2-4W MR16	EMERGI-LITE	CAT. #EF39-D-M-LG TWIN HEAD (1 CUBE 2 LAMPS) LED REMOTE MR16 FIXTURE C/W COMPACT VANDAL RESISTANT DESIGN, WHITE COLOUR, FULL AIMING ADJUSTMENT, 360° ROTATION AND LEXAN COVER WITH WIRE GUARD.

ELECTRICAL APPLIANCES					
LABEL	QTY	AMP	WATTS/HZ	[MANUFAC]	DESCRIPTION
HD	12	8.3	120V/60HZ	SLIMDRI	SURFACE-MOUNTED ADA COMPLIANT HAND DRYERS, STAINLESS STEEL WITH POLISHED FINISH, KIT #L-972, UNIT WEIGHT 10.7 LBS (4.8 KG), UNIT DIMENSIONS 10.7 × 11.43 × 3.9 INCHES



CITY OF HAMILTON
Building Division
Permit No. 25-104730
1" = 16' STAMPED DRAWINGS SHALL BE AVAILABLE ON SITE
OWNER AND/OR CONTRACTOR SHALL COMPLY WITH
ALL ONTARIO BUILDING CODES AND ALL OTHER APPLICABLE LAWS
These drawings and/or specifications have been reviewed by
[Signature] [Date]

2.0	ISSUED FOR PERMIT	2025/12/15
1.0	ISSUED FOR CLIENT REVIEW	2025/07/19
Rev	Description	Date
Orientation	Seal	
Key Plan		

The Contractor shall check and verify all dimensions and report all errors and omissions to the Owner's/MBS Designee (as applicable) for his/her written direction before proceeding with the Work.

A	A Detail No
B	B Sheet No where detailed

The specifications are to be considered as an integral part of these drawings. Neither the drawings nor the specifications shall be used alone.

Architect

EMAIL: info@aja.design 905-920-5121
https://aja.design

Engineer

Website: Benexsys.com
info@benexsys.com

Client

Project:
Chedoke Elementary School Washroom Renovation

Location:
500 Bendamere Ave., Hamilton, ON

DRAWING TITLE:
ELECTRICAL NEW CONSTRUCTION LAYOUT

Substantial Performance Date:	TBD	CLIENT PROJECT NO:	25-25
DATE:	2025-11-03	PROJECT NO:	D102
SCALE:	AS SHOWN	DRAWING NO:	E-1.02
DRAWN BY:	MA		
DESIGNED BY:	MF		
APPROVED BY:	MS		