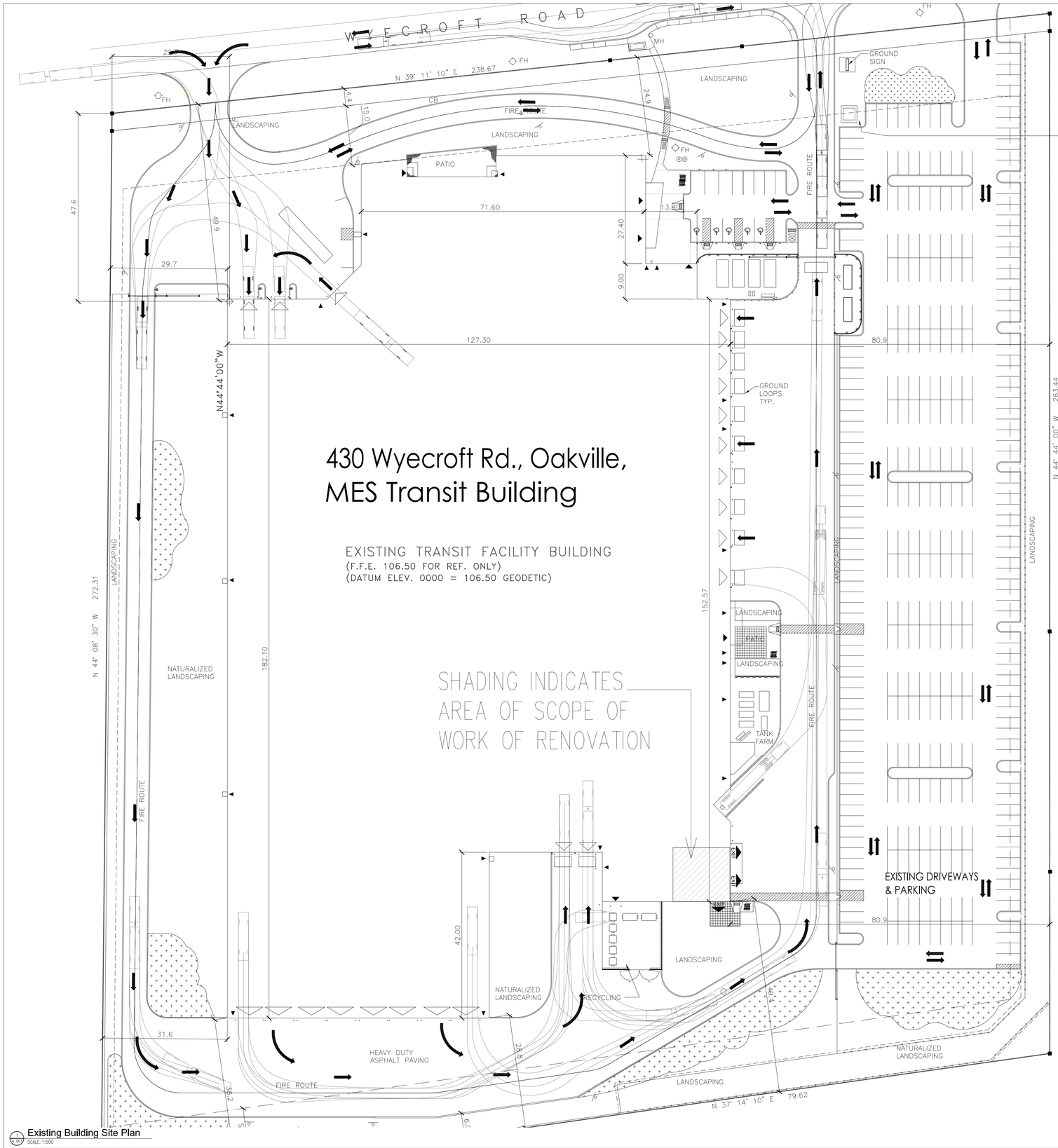
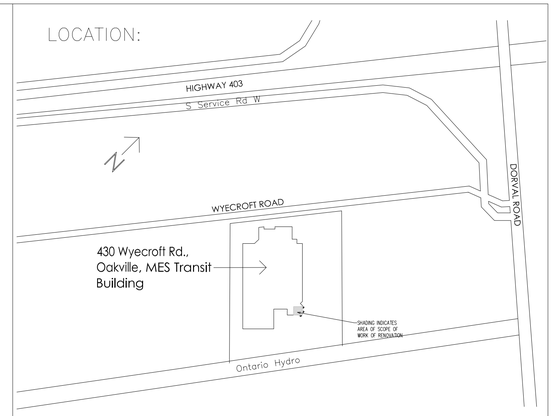


430 Wyecroft Rd., Oakville, MES Transit Building

EXISTING TRANSIT FACILITY BUILDING
(F.F.E. 106.50 FOR REF. ONLY)
(DATUM ELEV. 0000 = 106.50 GEODETIC)

Existing Building Site Plan
SCALE: 1:500

LOCATION:



KEY PLAN
SCALE: N.T.S

STATISTICS

ADDRESS: 430 Wyecroft Rd., Oakville, ON. L6K 2G7		
ZONING: E3 Sp3 INDUSTRIAL	REGISTERED PLAN: PART OF LOT 19 CONCESSION 3 SOUTH OF DUNDAS STREET, DESIGNATED AS PART 2 ON PLAN 20R-18030 BEING PART OF PIN24830-0114	

EXISTING MES OFFICES FLOOR AREA - NO CHANGE

PROPOSED USE: MES OFFICES - NO CHANGE

CAR PARKING:
EXISTING PARKING - NO CHANGE

BUILDING HEIGHT : EXISTING (NO CHANGE)

SET BACKS:
ALL SET-BACKS EXISTING , NO CHANGE FOR EXISTING SET-BACKS

DRAWINGS LIST

Sheet Number	Sheet Name
A001	SITE PLAN & STATISTICS
A002	GENERAL NOTES & SPECS
A100	EXISTING MAIN FLOOR - DEMOLITIONPLAN
A101	EXISTING SECOND FLOOR - DEMOLITION PLAN
A102	PROPOSED MAIN FLOOR PLAN
A103	PROPOSED SECOND FLOOR PLAN
A104	MAIN FLOOR - FLOOR FINISHES PLAN
A105	SECOND FLOOR - FLOOR FINISHES PLAN
A106	MAIN FLOOR - REFLECTED CEILING PLAN
A107	SECOND FLOOR - REFLECTED CEILING PLAN
A401	EXTERIOR ELEVATIONS
A402	INTERIOR ELEVATIONS
A701	DETAILS

TOTAL: 13 Drawings

Revisions

No.	Issued	Date
1	Issued for Client Review	Oct. 25, 2023
2	Issued for Building Permit	Dec. 05, 2023
3	Issued for Tender	Feb. 26, 2024
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Client
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MARIANA KHEIMER
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Keyplan & Project North

Project
MES - TRANSIT RENOVATION
430 Wyecroft Rd., Oakville , ON L6K 2G7

Drawing Title
SITE PLAN & STATISTICS

scale	date
As Shown	May 1st, 2023
project: 2023 -15	drawn by: MK

drawing No.
A 001

GENERAL NOTES

- DO NOT SCALE THE DRAWINGS
- GENERAL CONTRACTOR TO VERIFY FIELD CONDITION PRIOR TO COMMENCEMENT OF WORK
- THE CONTRACTOR SHALL COORDINATE ALL PARTS OF WORK, NOTIFY THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION
- UNLESS OTHERWISE INDICATED, PLANS DIMENSIONS ARE TO GRIDLINES, FINISHED SURFACE OF MASONRY WALLS, FACE OF DRYWALL PARTITIONS.
- WHERE NEW WALLS ARE CONSTRUCTED, PATCH ALL HOLES IN EXISTING DRYWALL AND MAKE IT FLUSH WITH THE EXISTING WALL, SEAL JOINTS WITH ACOUSTIC SEALANT.
- FULL HEIGHT PARTITIONS SHALL BE SEALED WITH ACOUSTIC SEALANT ON BOTH SIDES, TOP & BOTTOM, INTERSECTIONS, DOOR FRAMES & ALL OTHER PENETRATIONS.
- ALL PENETRATIONS THROUGH FIRE RATED WALLS SHALL MAINTAIN CONTINUITY OF FIRE RATING.
- PATCH & MAKE GOOD ALL FLOORS, WALLS AND CEILINGS AFFECTED BY DEMOLITION.
- INFILL ANY PENETRATION RESULTING FROM THE REMOVAL OF EXISTING MECHANICAL HVAC DIFFUSERS OR REMOVED LIGHT FITTINGS

FLOORS GENERAL NOTES

- ALL FLOOR AREAS TO BE FEATHERED AS REQUIRED TO MAKE COMPLETELY SMOOTH AND LEVEL BEFORE INSTALLATION OF NEW FLOOR FINISHES. SKIM FLOOR AS REQUIRED.
- ALL FLOOR FINISHES TO BE INSTALLED AFTER THE CONSTRUCTION OF PARTITIONS.
- WHEREVER A CHANGE OF FLOORING MATERIAL OCCURS, THE JOINT IS TO BE IN LINE WITH THE DOOR THRESHOLD, UNLESS OTHERWISE NOTED.
- USE TRANSITION STRIP FOR JOINTS BETWEEN TWO DIFFERENT FLOOR FINISHES MATERIAL.
- COORDINATE WITH INTERIOR DESIGN DRAWINGS FOR FLOOR FINISHES

DRYWALLS GENERAL NOTES

- Framing:
- Unless specified otherwise extend partitions assembly and individual studs framing each side of openings to underside of structure above. Provide for deflection of structure.
- Furr duct shafts, beams, columns, pipe spaces, exposed services and around built in equipment or openings on all sides.
- Install runner channels at top and bottom of partitions and secure to supporting building elements at maximum 610mm o.c.
- At partition corners extend one runner channel to end of corner and butt other runner channel; allow clearance for gypsum board thickness; do not mitre runner channels.
- Install studs vertically; fix studs to runner channels by screwing on both sides.
- Install additional studs as detailed and required at partition intersections, openings and terminations at dissimilar materials.Place studs not more than 50mm from abutting walls, openings and each side of corners.
- Stiffen partitions over 2400mm in height at maximum 1500mm with at least one 19mm horizontal bracing channel extending full length of partition.
- Where studs extend over 3600mm in height, provide continuous girt bracing spaced approximately at mid height and double studs each side of door frames and other openings. In addition, carry studs through to structure above. Use 90mm studs spaced 400mm o.c. unless indicated otherwise. Conform to manufacturer's limiting height restriction. Brace diagonally to structure above, on approximately 45° angle, both sides of partitions, 2400mm o.c. maximum. Carry bracing down as close to ceiling as possible.
- Where studs have to be joined or spliced to achieve required height, nest one stud completely within other for distance of 600mm minimum.

- In glazed partitions install horizontal runner at top and bottom of rough opening.
- Shim furring members for wall furring to present true, plumb line and plane face for application of wallboard.
- Locate furring members not more than 50mm away from openings, interior corners, intersections, frames, and control joints.
- Install miscellaneous furring using studs or furring runners as best suited for location.
- Install nested stud girts at proper locations to provide fastening anchorage for accessories, and equipment requiring special support.
- Install continuous insulating strips to isolate studs from un-insulated surfaces.
- Provide horizontal framing and reinforcing sufficiently strong, stiff and sturdy to take load of wall hung cases, shelving, and equipment. Mark gypsum board to show where supports are located. Coordinate number and height of horizontal elements with drawings and related subcontractors. Screw continuous 150mm wide fastener reinforcement to metal studs before installing gypsum board.

- Installation:
- Do not install gypsum board tight to floor surface. Leave a gap of 13 mm minimum between floor surface and underside of panel.
- Apply gypsum board to framing with screw fasteners. Position all edges or ends over supporting members. Use maximum practical sizes and install vertically or horizontally to minimize end joints.
- Fit end and edge joints closely, but not forced together. Stagger joints on opposite sides of partition and locate inconspicuously.
- Where joints cannot terminate on support member terminate between supports, stagger and back block them for joint treatment to minimize irregular joint appearance in side light.
- Apply screw fasteners, for non-rated assemblies, at the following spacing (apply screw fasteners in rate assemblies in accordance with ULC standards).

.1 For single layer space screws 300mm o.c. in field of panels and along edges or end joints.

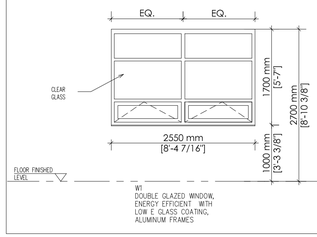
.2 For double layer screw attachment, space screws 400mm o.c. for both layers. Apply both layers of gypsum panels parallel to studs with joints in face layer offset from base layer joints. Use 25mm screws for base layer and 41mm screws for face layer.

- Adhesive bonded gypsum board; apply 13x13mm ribbons of laminating adhesive to back side of board, parallel to long dimension; space adhesive ribbons at maximum 150mm o.c. temporarily brace boards until complete adhesive bond develops.
- Provide moulding at perimeter of gypsum board ceilings and around window openings as detailed.
- Provide casing beads where gypsum board butts dissimilar materials, against surfaces having no trim concealing junction and at openings.
- Provide corner beads at external corners.
- Provide insulating strips where gypsum board butts frames of exterior doors and windows or exposed masonry and concrete walls. Adhere strips to casing beads and compress 50%.
- In areas requiring gypsum board ceiling, gypsum board shall extend over the whole ceiling area including furred and pipe spaces.
- Where space above ceiling is congested with services, making installation difficult, contractor may use alternate system, with Consultant's approval, provided fire rating of assembly is maintained and no additional cost to Owner is incurred.

WINDOW SCHEDULE

NO.	TYPE	SIZE (W x H) mm	QTY.	LOCATION	REMARKS
W1	CASEMENT	2550 x 1700	1	OPEN OFFICE	

WINDOW TYPES



GENERAL NOTES FOR WINDOWS:

- Contractor to verify rough opening measurements on site & make sure of the final measurement of the window.
- Contractor to submit shop drawings for review & approval prior to proceeding with any construction.

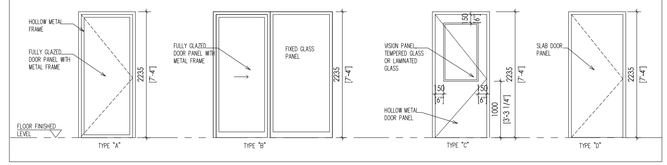
DOOR SCHEDULE

NOTE

- DOORS SIZE INDICATED IN THIS SCHEDULE IS THE CLEAR DOORWAY OPENING SIZE; FRAME NOT INCLUDED, FOR ROUGH OPENINGS REFER TO PLAN DRAWINGS
- EVERY DOORWAY THAT IS LOCATED IN A BARRIER FREE PATH OF TRAVEL SHALL HAVE A CLEAR DOORWAY OPENING WIDTH OF NOT LESS THAN 860mm WHEN THE DOOR IS IN THE OPEN POSITION, CONFORM TO O.B.C 3.8.3.3(1)
- ALL DOORS ARE SWING-TYPE DOORS UNLESS OTHERWISE NOTED IN THE SCHEDULE
- ALL EXTERIOR DOORS TO BE THERMALLY INSULATED & COMPLY WITH OBC 9.7.3.3
- A GLASS DOOR SHALL BE CONSTRUCTED OF LAMINATED GLASS OR TEMPERED SAFETY GLASS, CONFORM TO O.B.C 3.3.1.18
- ALL EXTERIOR DOORS TO HAVE WEATHER STRIPPING & THRESHOLD FOR COMPLETE WEATHER TIGHT INSTALLATION
- ALL WASHROOM DOORS TO BE EQUIPPED WITH A PRIVACY LOCK
- PROVIDE DOOR STOPPER FOR ALL DOORS TO PROTECT WALLS.

NO.	TYPE	SIZE (mm) width x height	QTY.	DOOR TYPE	DOOR MATERIAL	FRAME MATERIAL	LOCATION	REMARKS
01	INTERIOR	915 x 2230	4	A	HOLLOW METAL & FULL GLASS	HOLLOW METAL	OFFICES 199, 199A, 189 & 198A	HOLLOW METAL FRAMED DOOR WITH FULL GLASS PANEL
02	INTERIOR	915 x 2230	1	B	HOLLOW METAL & FULL GLASS	HOLLOW METAL	MEETING ROOM 198	HOLLOW METAL & GLASS SLIDING DOOR
03	INTERIOR	915 x 2230	1	A	HOLLOW METAL & FULL GLASS	EXISTING FRAME	DOOR TO NEW OFFICE AREA	HOLLOW METAL & GLASS FLUSH DOOR
04	EXTERIOR	915 x 2230	1	C	HOLLOW METAL	HOLLOW METAL	EXIT DOORS	HOLLOW METAL INSULATED FLUSH DOOR WITH PANIC HARDWARE,CARD READER & DOOR CLOSER
05	INTERIOR	915 x 2230	2	D	HOLLOW METAL	HOLLOW METAL	SERVICE ENCLOSURE & STORAGE	HOLLOW METAL FLUSH DOOR WITH LOCK

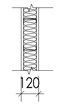
DOOR TYPES



WALL TYPES

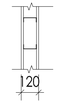
W1 INTERIOR STUD PARTITION

- 12.7mm DRYWALL BOARD ON BOTH SIDES OF
- 92mm WIDE METAL STUDS @ 400mm O/C WITH ABSORPTIVE MATERIAL
- TOP & BOTTOM TRACKS



W2 INTERIOR STUD PARTITION

- 12.7mm DRYWALL BOARD ON BOTH SIDES OF
- 92mm WIDE METAL STUDS @ 400mm O/C
- TOP & BOTTOM TRACKS

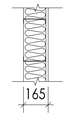


W3 INTERIOR FINISH DRYWALL

- 12.7mm DRYWALL BOARD ON
- 42mm FURRING CHANNELS
- TOP & BOTTOM TRACKS

W4 INTERIOR FINISH WALL

- 12.7mm DRYWALL BOARD ON THE INTERIOR SIDE OF
- 152mm WIDE METAL STUDS @ 400mm O/C WITH
- R20 BATT INSULATION
- TOP & BOTTOM TRACKS



Revisions

No.	Issued	Date
1	Issued for Client Review	Oct. 25, 2023
2	Issued for Building Permit	Dec. 05, 2023
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Client

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Seal

ONTARIO ASSOCIATION OF ARCHITECTS
MISSAA KHIDHER
LICENCE
7146

Keyplan & Project North

Project

MES - TRANSIT RENOVATION

430 Wyecroft Rd., Oakville , ON L6K 2G7

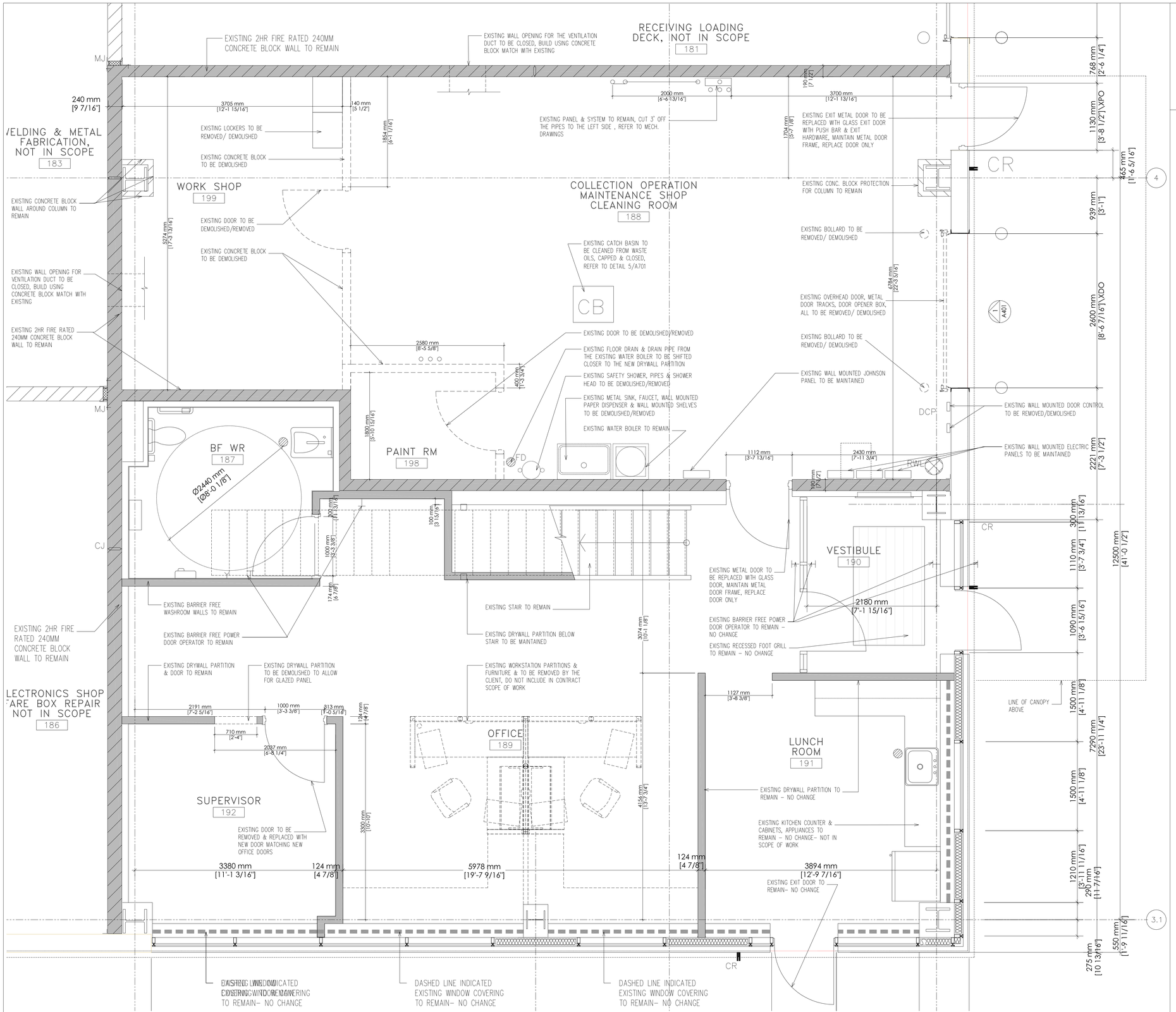
Drawing Title

GENERAL SPECIFICATIONS & NOTES

scale	date
NTS	Oct. 25, 2023
project: 202162	drawn by: MK

drawing No.

A 002



Existing Floor plan
SCALE: 1:30

WALLS CONSTRUCTION LEGEND

- PROPOSED NEW WALL TO BE CONSTRUCTED
- EXISTING WALL TO REMAIN
- EXISTING WALL TO BE DEMOLISHED

GENERAL DEMOLITION NOTES

1. THE INTENT OF THIS DEMOLITION DRAWING IS TO SHOW APPROXIMATE EXTENT AND NATURE OF DEMOLITION REQUIREMENT ONLY. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFYING ACTUAL SITE CONDITIONS AS THEY ARE RELATED TO NEW CONSTRUCTION ITEMS. REPORTING DISCREPENCIES TO THE ARCHITECT AS REQUIRED.
2. DEMOLITION DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS & RELATED INFORMATION SHOWN HERE FOR A COMPLETE UNDERSTANDING OF THE INTENDED FINISHED PRODUCT AND RELATED DEMOLITION REQUIREMENTS.
3. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO REMOVE AND RELOCATE ALL EXISTING ABOVE FLOOR FINISH FURNITURE, FIXTURES & EQUIPMENT ITEMS FROM THE SUBJECT SPACE TO OWNERS' DESIGNATED STORAGE LOCATION (ON-SITE). ITEMS DESIGNATED FOR REUSE ARE TO BE RELOCATED INTO SUBJECT SPACES FOLLOWING CONSTRUCTION.
4. ITEMS TO BE DEMOLISHED SHALL BE DISPOSED OF LEGALLY OFF THE SITE AND COMPLY WITH ALL LOCAL HAULING AND DISPOSAL REQUIREMENTS AT THE CONTRACTOR'S EXPENSE.
5. ALL EXISTING FURNITURE ITEMS DESIGNATED FOR REMOVAL ARE TO BE OFFERED TO BUILDING OWNERS
6. ALL EXISTING CONCRETE BLOCK WALLS, PLUMBING FIXTURES, MILLWORK ITEMS, DOORS & FRAMES, LIGHTING ITEMS, ETC. DESIGNATED FOR REMOVAL ARE TO BE OFFERED TO BUILDING OWNERS FOR FIRST RIGHT TO REFUSAL PRIOR TO DISCHARGING AT AN APPROVED LANDFILL SITE OR CONSTRUCTION MATERIAL RE-CYCLING DEPOT.
7. THE GENERAL CONTRACTOR SHALL MAINTAIN A SEPARATION BETWEEN AREAS WITHIN THE SCOPE OF WORK AND AREAS OUTSIDE OF THE SCOPE OF WORK BY PROVIDING PLASTIC SHEATHING BETWEEN CONTINUOUS SPACES AND/OR TEMPORARILY TAPING OF JOINTS AND GAPS TO PREVENT DUST MIGRATION.
8. WHERE EXISTING CEILING (GROUND FLOOR) IS AFFECTED, CONTRACTOR TO TAKE CARE IN REMOVAL TO ACCESS AREAS AND ANY TILES/GRIDS TO BE REPLACED IF DAMAGED. IT IS THE INTENT IF AREAS OF CEILING ARE TO BE TAKEN DOWN THAT THEY ARE RE-INSTATED TO MATCH EXISTING LAYOUT . CONTRACTORS TO ALLOW FOR REPLACING DAMAGED TILES / GRID (TO MATCH EXISTING).
9. **THE GENERAL CONTRACTOR SHALL CAUSE NO DAMAGE TO EXISTING CONSTRUCTION TO REMAIN WHEREVER POSSIBLE, AND SHALL TAKE SPECIAL CARE NOT TO ENCROACH ON ADJACENT OCCUPIED AREAS OR AREAS NOT WITHIN THE SCOPE OF WORK. PROTECT ALL EXISTING FINISHES, DOORS, FRAMES, ETC. WHICH ARE TO REMAIN .**
10. **THE GENERAL CONTRACTOR SHALL USE ALL MEANS NECESSARY TO ENSURE THE SAFETY OF ADJACENT OCCUPIED AREAS THROUGH THE ERECTION OF CONSTRUCTION HOARDING**
11. **THE GENERAL CONTRACTOR SHALL CONDUCT DEMOLITION OPERATIONS & THE REMOVAL OF DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH SURROUNDING AREAS OPERATING WITHIN THE FACILITY**
12. **THE ARCHITECT SHALL NOT BE HELD LIABLE FOR ANY ASBESTOS OR OTHER HAZARDOUS MATERIAL ON JOBSITE. ALL HAZARDOUS MATERIAL SHALL BE REMOVED FROM SITE AS PER STANDARD PROCEDURES APPROVED BY AREA OF JURISDICTION**
13. **MAINTAIN EXISTING UTILITIES TO REMAIN OPERATIONAL AND PROTECT AGAINST DAMAGE DURING DEMOLITION OPERATIONS.**
14. **SCHEDULE SERVICE SHUT-DOWNS WITH THE OWNER, COORDINATE TIMING, LENGTH & DURATION ACCORDINGLY**
15. **REFER TO MECHANICAL DRAWINGS FOR SPECIFIED DEMOLITION NOTES REGARDING THESE DISCIPLINES, INCLUDING REQUIRED EXTENT OF FLOOR TRENCHING FOR NEW ITEMS NOT SPECIFICALLY SHOWN HEREON. ALL TRENCHING IN CONCRETE FLOORS TO BE PATCHED AND REPAIRED AS PER SPECIFICATIONS AND/OR AS REQUIRED FOR NEWLY SPECIFIED FIXTURES**
16. **UPON COMPLETION, CLEAN THE ENTIRE AREA OF DEMOLITION TO A TIDY, UNIFORM CONDITION, REMOVING ALL DEBRIS, DUST PARTITIONS AND ASSOCIATED MATERIALS USED DURING THE DEMOLITION. CLEAN ALL AREAS IMPACTED BY THE DEMOLITION, INCLUDING BUT NOT LIMITED TO, ADJACENT OCCUPIED AREAS AND AREAS NOT WITHIN THE SCOPE OF WORK**

Revisions

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Client

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Keyplan & Project North

Project

MES - TRANSIT RENOVATION

430 Wyecroft Rd., Oakville , ON L6K 2G7

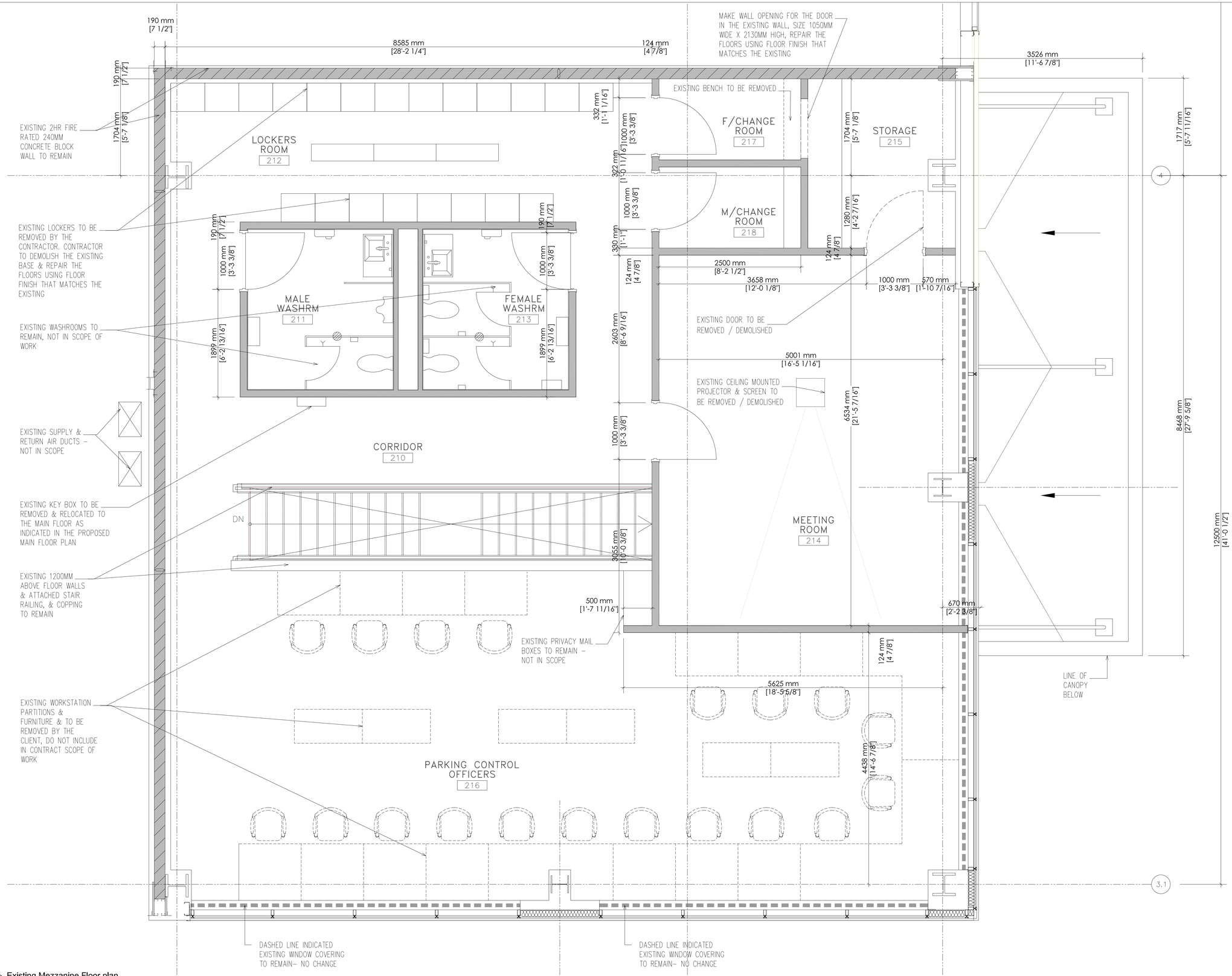
Drawing Title

EXISTING MAIN FLOOR - DEMOLITION FLOOR PLAN

scale	date
1 : 30	Oct. 25. 2023
project	drawn by
2023 -34	MK

drawing No.

A 100



A 101 Existing Mezzanine Floor plan
SCALE: 1:30

Revisions

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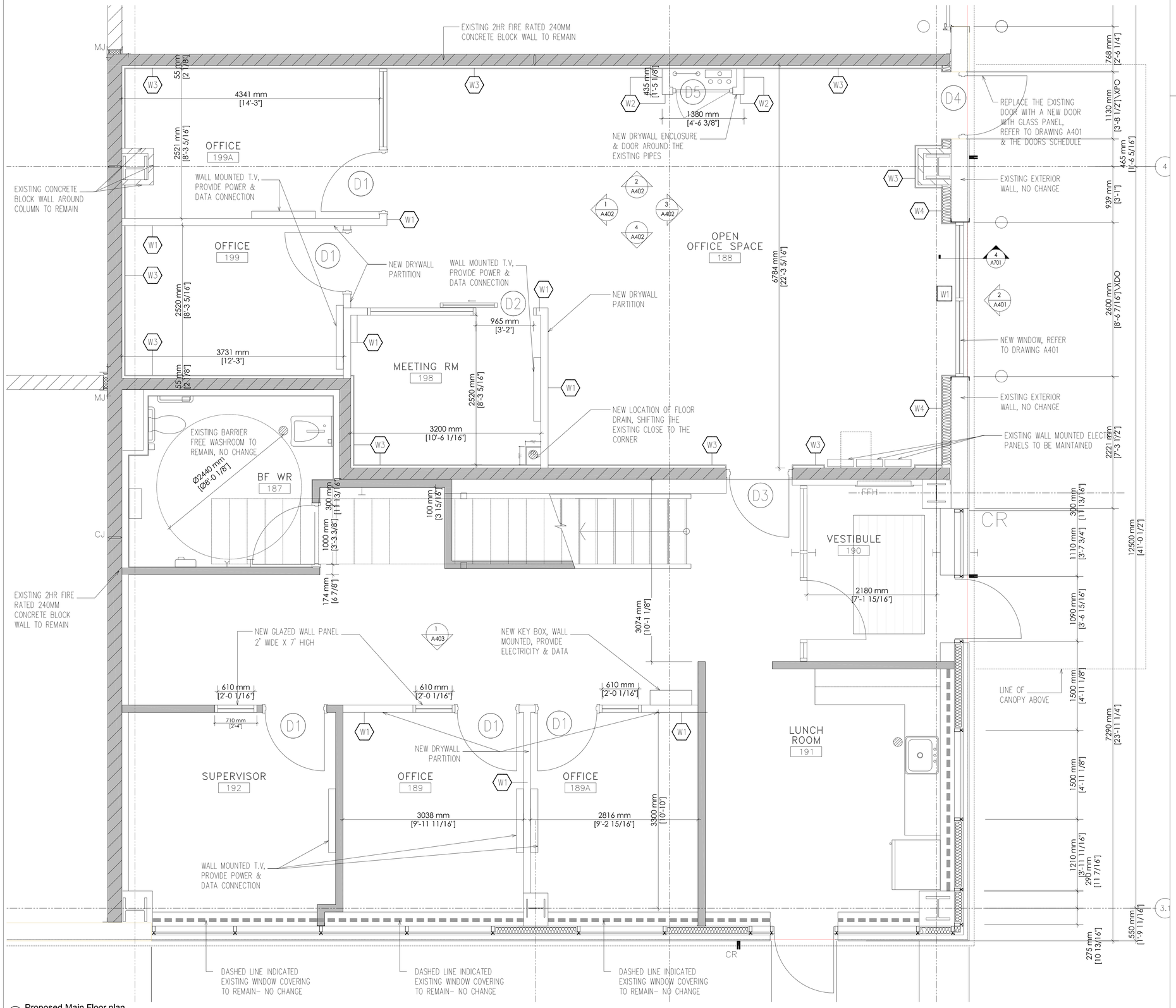
Project
MES - TRANSIT RENOVATION
430 Wyecroft Rd., Oakville , ON L6K 2G7

Drawing Title
EXISTING MEZZANINE FLOOR - DEMOLITION FLOOR PLAN

scale	date
1 : 30	Oct. 25. 2023
project 2023 -34	drawn by MK

drawing No.
A 101



Proposed Main Floor plan
SCALE: 1:30

WALLS CONSTRUCTION LEGEND

- PROPOSED NEW WALL TO BE CONSTRUCTED
- EXISTING WALL TO REMAIN
- EXISTING WALL TO BE DEMOLISHED

General notes from approved building permit:

- elements of structural, non-structural component& their equipments; including connection to the structure; shall be designed in conformance with OBC DIV.B, part 4
- Portable distinguishers shall be provided in conformance with the Ontario Building Code.
- In buildings of non-combustible construction, except for Exit closures; flame spread rating of all interior wall & ceiling finishes (including glazing), shall not exceed 150 & 25 respectively.

Revisions

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Keyplan & Project North

Project

MES - TRANSIT RENOVATION

430 Wyecroft Rd., Oakville , ON L6K 2G7

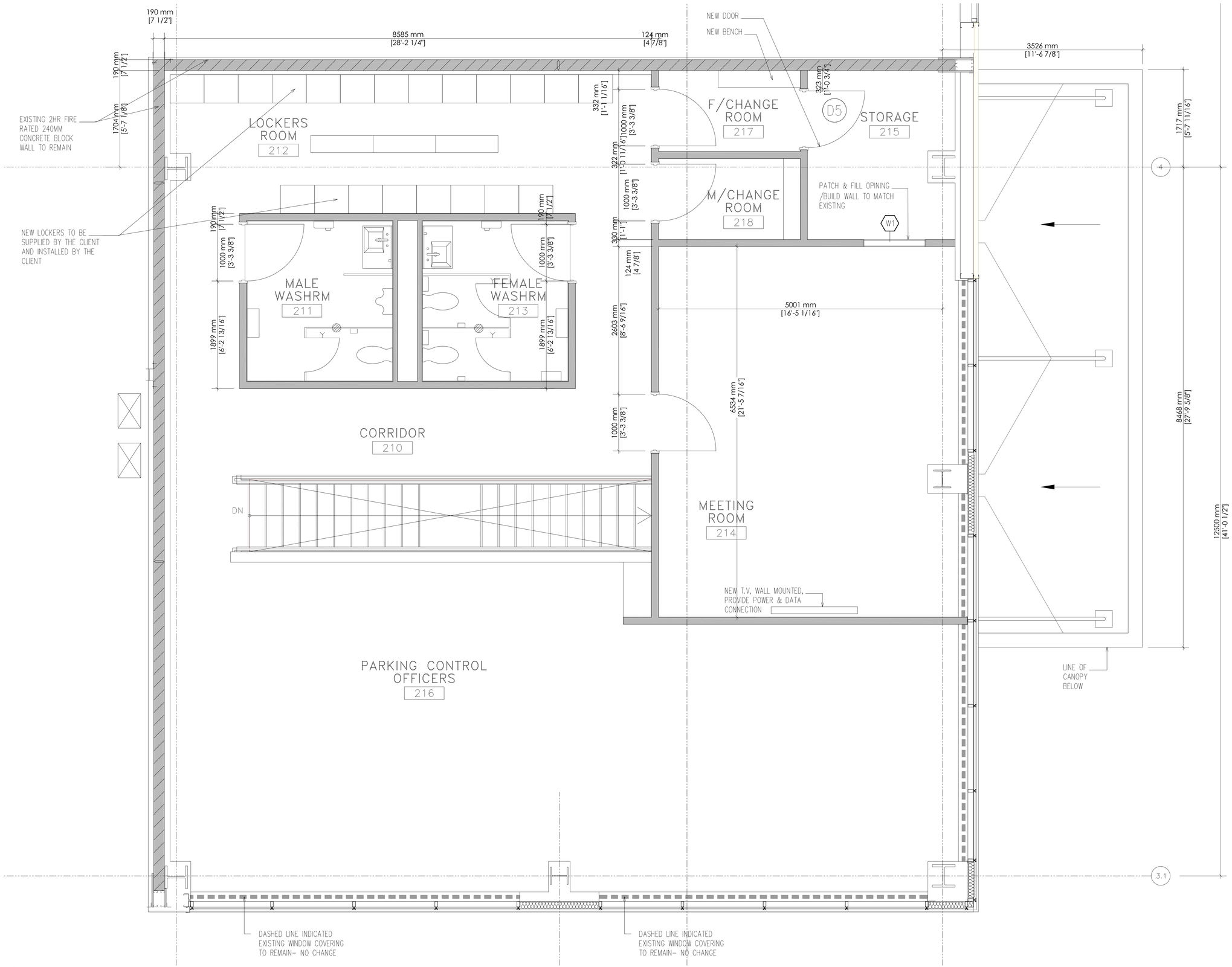
Drawing Title

PROPOSED MAIN FLOOR

scale	date
1 : 30	Oct. 25. 2023
project	drawn by
2023 -34	MK

drawing No.

A 102



A103 Proposed Mezzanine Floor plan
SCALE: 1:30

Revisions		
No.	Issued	Date
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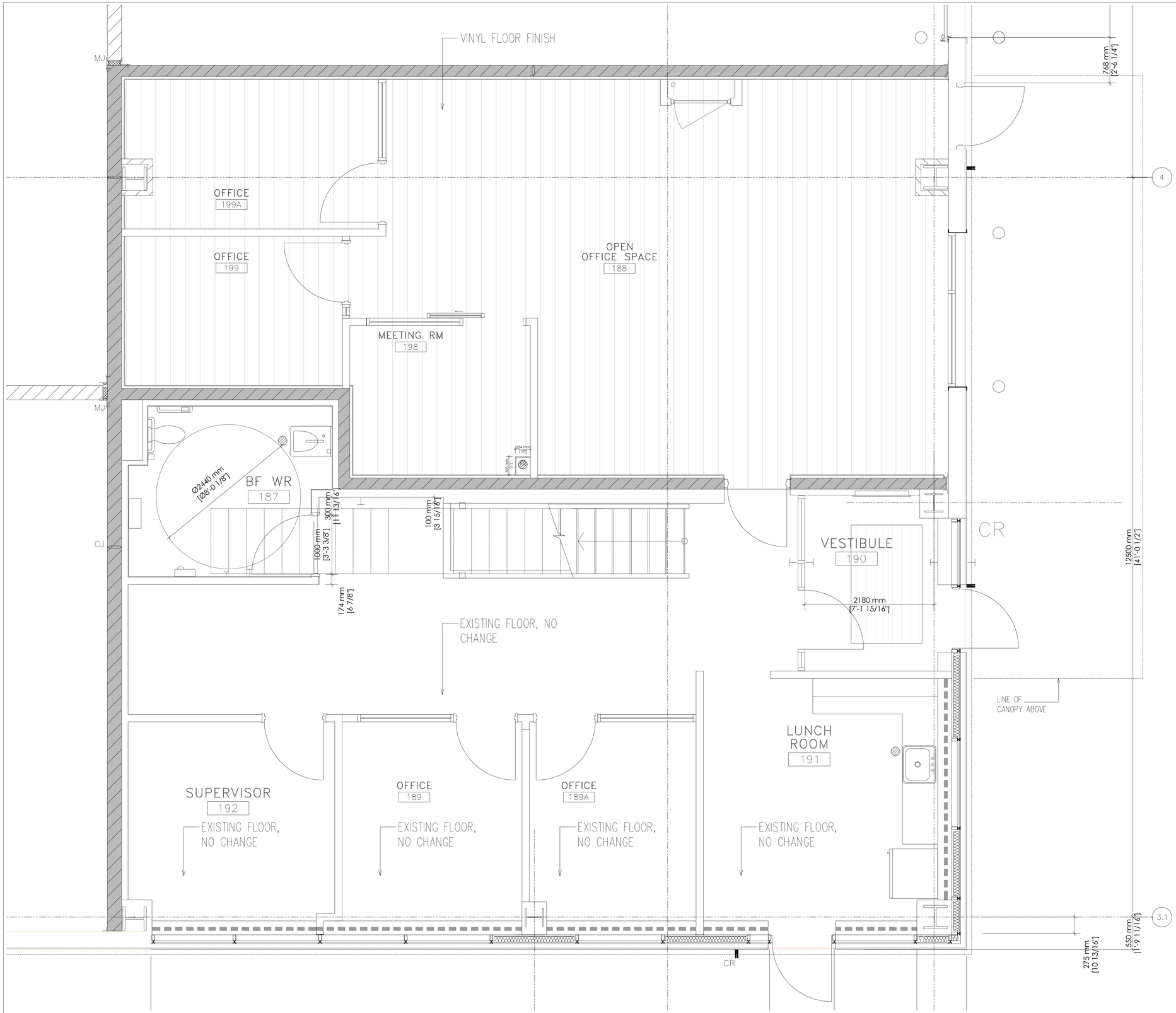
Keyplan & Project North

Project
MES - TRANSIT RENOVATION
430 Wyecroft Rd., Oakville , ON L6K 2G7

Drawing Title
PROPOSED MEZZANINE FLOOR

scale	date
1 : 30	Oct. 25. 2023
project	drawn by
2023 -34	MK

drawing No.
A 103



A 104 Proposed Main Floor plan
SCALE: 1:30

Revisions		
No.	Issued	Date
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Client

OAKVILLE

Consultant

2MK Architects Inc.

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Seal

ONTARIO ASSOCIATION OF ARCHITECTS
MISSAA KHIDHER
LICENCE
7168

Keyplan & Project North

Project

MES - TRANSIT RENOVATION

430 Wyecroft Rd., Oakville , ON L6K 2G7

Drawing Title

MAIN FLOOR - FLOOR FINISHES PLAN

scale	date
1 : 30	Oct. 25, 2023
project	drawn by
2023 -34	MK

drawing No.

A 104

Proposed Main Floor plan
SCALE: 1:30

CEILING LEGEND

- SUSPENDED METAL GRID AND LAY-IN ACOUSTIC TILE 610mm x 1219mm U/S AS NOTED
- GYPSUM BOARD CEILING
- PARTITION OR WALL TO U/S METAL DECK ABOVE
- PARTITION TO 3048 A.F.F.
- 2'X4' CEILING MOUNTED LIGHT FITTING

TYPICAL NOTES:

ANY CEILING FIXTURES SHOWN ARE FOR DESIGN REFERENCE ONLY. REFER TO ELECTRICAL DRAWINGS

FOR LOCATION & TYPE OF DIFFUSERS & RETURN AIR GRILLES REFER TO MECHANICAL DRAWINGS

THE EXISTING RECESSED PROJECTION SCREENS ARE TO BE REMOVED & DELIVERED TO THE OWNER

THE EXISTING LIGHT FITTINGS IN THE MAINTENANCE SHOP ARE TO BE REMOVED & DELIVERED TO THE OWNER

Revisions

No.	Issued	Date
1	Issued for Review	Oct. 25, 2023
2	Issued for Building Permit	Dec. 05, 2023
3	Issued for Tender	Feb. 26, 2024
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Project

MES - TRANSIT RENOVATION

430 Wyecroft Rd., Oakville , ON L6K 2G7

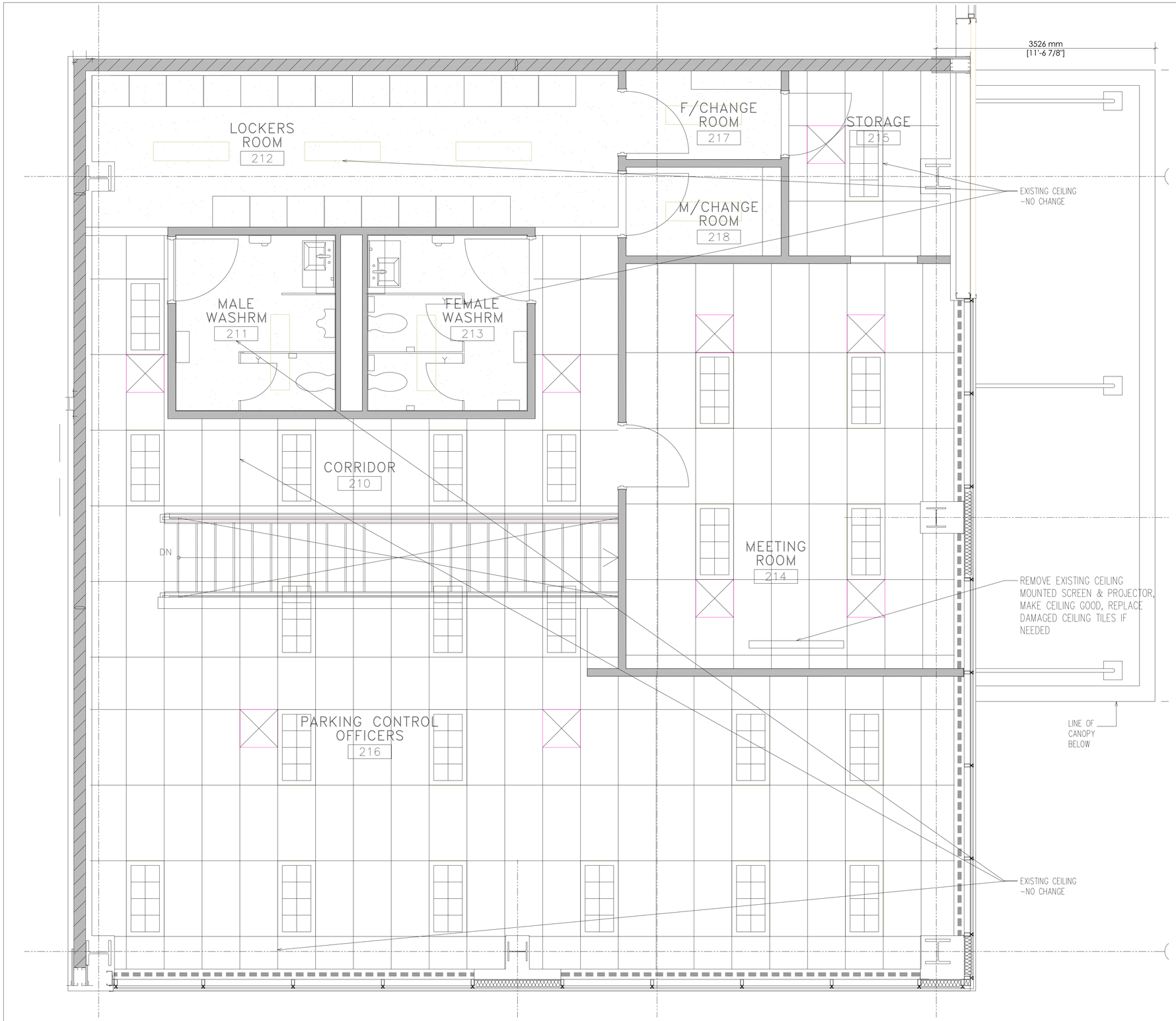
Drawing Title

MAIN FLOOR - REFLECTED CEILING PLAN

scale	date
1 : 30	Oct. 25, 2023
project	drawn by
2023 -34	MK

drawing No.

A 106



Proposed Main Floor plan
SCALE: 1:30

CEILING LEGEND

- SUSPENDED METAL GRID AND LAY-IN ACOUSTIC TILE 610mm x 1219mm U/S AS NOTED
- GYPSUM BOARD CEILING
- PARTITION OR WALL TO U/S METAL DECK ABOVE
- PARTITION TO 3048 A.F.F.
- 2'X4' CEILING MOUNTED LIGHT FITTING

TYPICAL NOTES:

ANY CEILING FIXTURES SHOWN ARE FOR DESIGN REFERENCE ONLY. REFER TO ELECTRICAL DRAWINGS

FOR LOCATION & TYPE OF DIFFUSERS & RETURN AIR GRILLES REFER TO MECHANICAL DRAWINGS

THE EXISTING RECESSED PROJECTION SCREENS ARE TO BE REMOVED & DELIVERED TO THE OWNER

THE EXISTING LIGHT FITTINGS IN THE MAINTENANCE SHOP ARE TO BE REMOVED & DELIVERED TO THE OWNER

NOTE:
NO CHANGE TO THE EXISTING SECOND FLOOR CEILING EXCEPT WHERE MARKED FOR THE PROJECTOR SCREEN TO BE REMOVED AS NOTED.

Revisions

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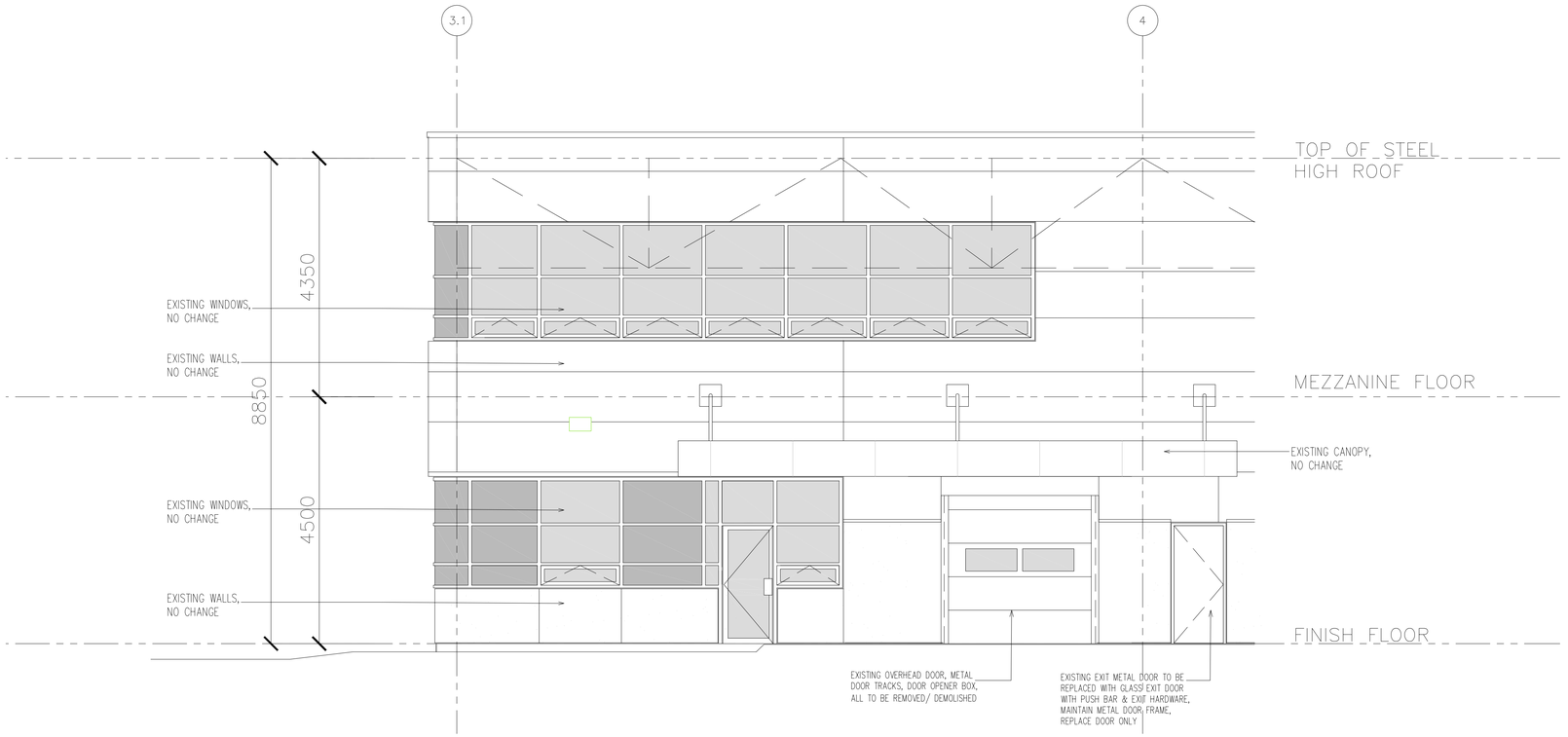
Project
MES - TRANSIT RENOVATION
430 Wyecroft Rd., Oakville , ON L6K 2G7

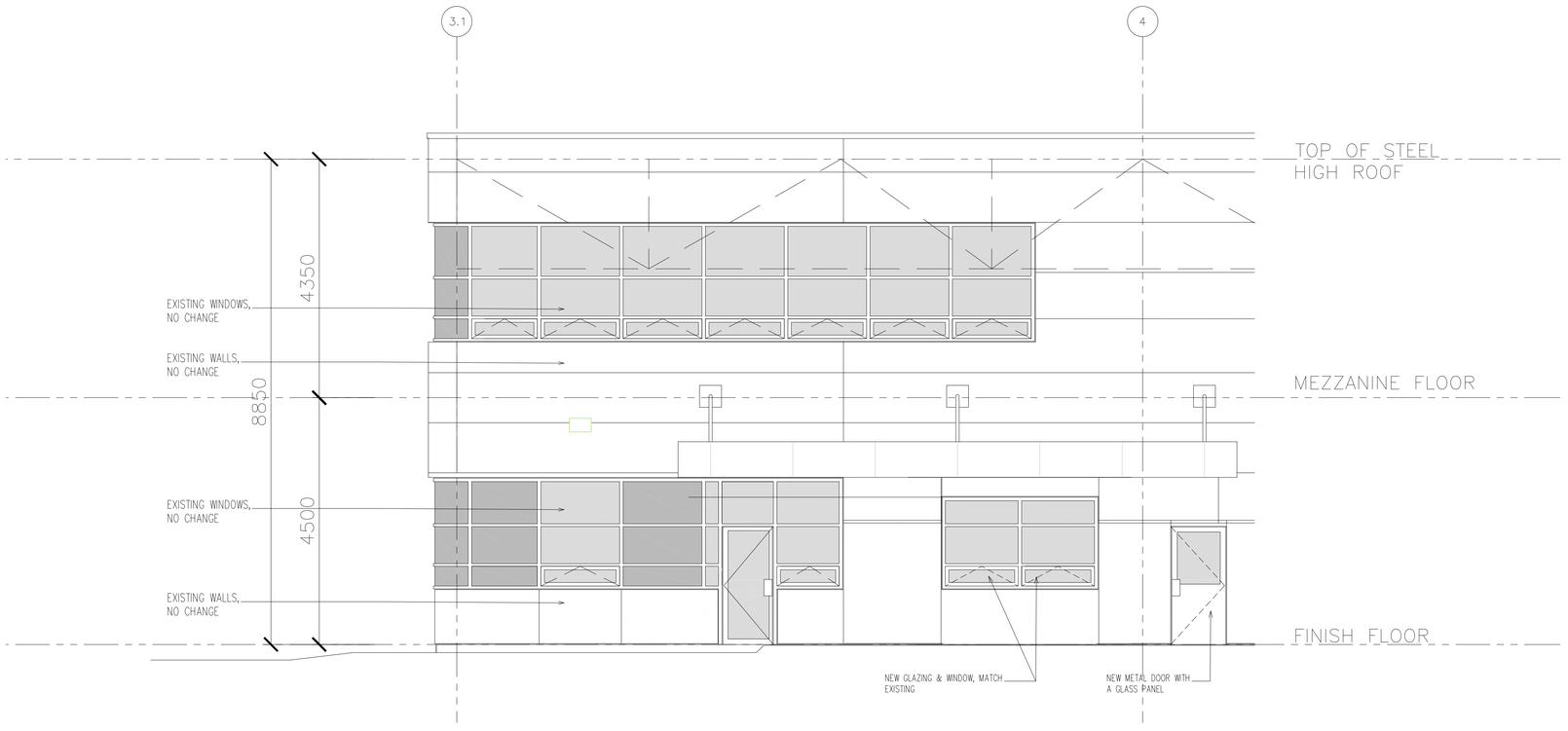
Drawing Title
SECOND FLOOR - REFLECTED CEILING PLAN

scale	date
1 : 30	Oct. 25. 2023
project	drawn by
2023 -34	MK

drawing No.
A 107



1 A 401 EXISTIG PARTIAL EAST ELEVATION
SCALE: 1:50



2 A 401 PROPOSED PARTIAL EAST ELEVATION
SCALE: 1:50

Revisions

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Keyplan & Project North

Project

MES - TRANSIT RENOVATION

430 Wyecroft Rd., Oakville , ON L6K 2G7

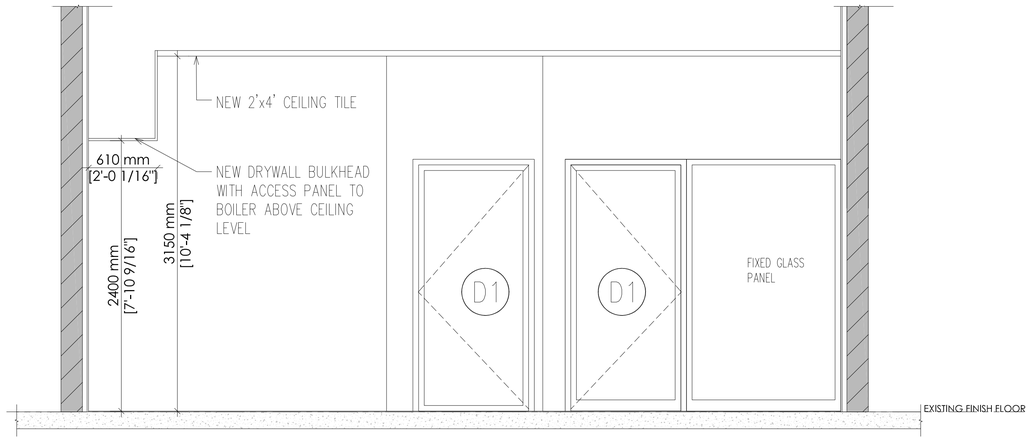
Drawing Title

EXTERIOR ELEVATIONS

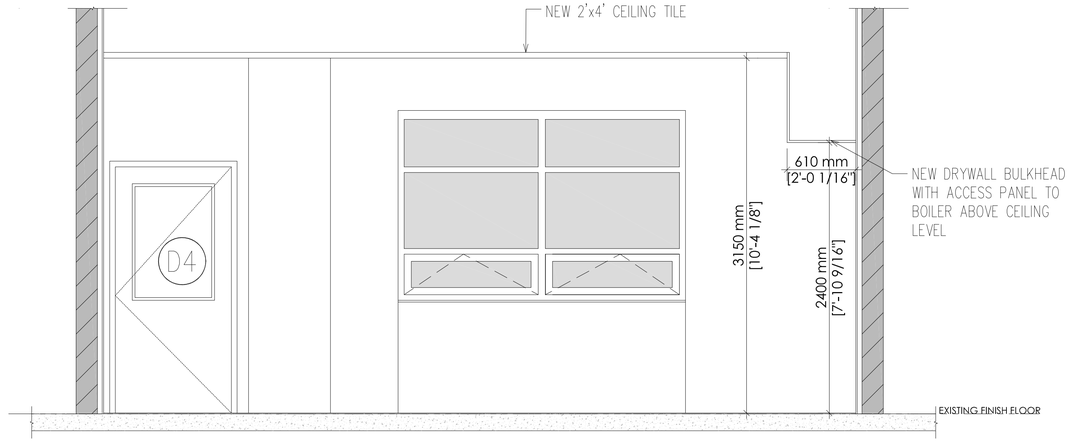
scale	date
1 : 50	Oct. 25. 2023
project: 2023 -34	drawn by: MK

drawing No.

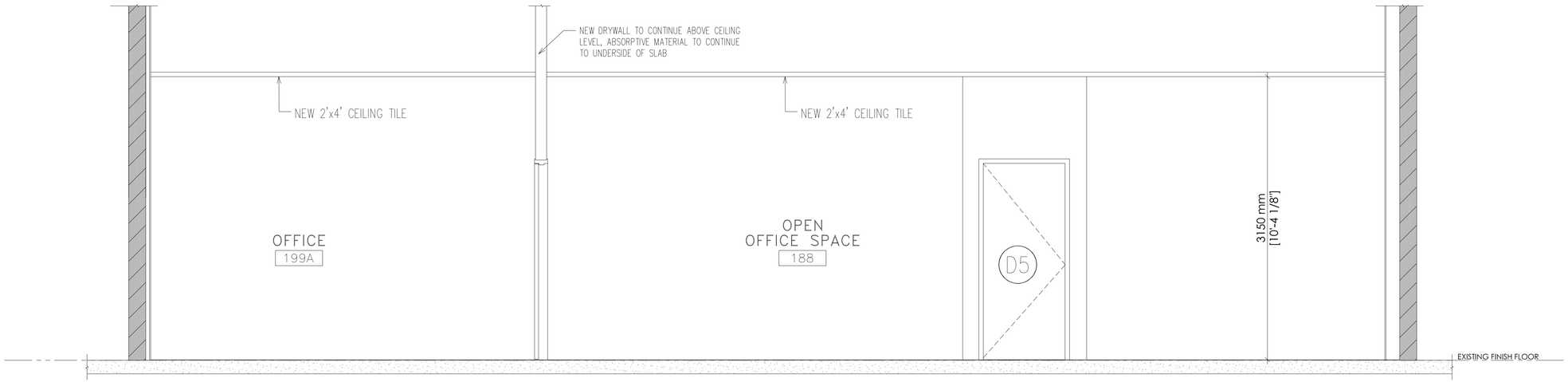
A 401



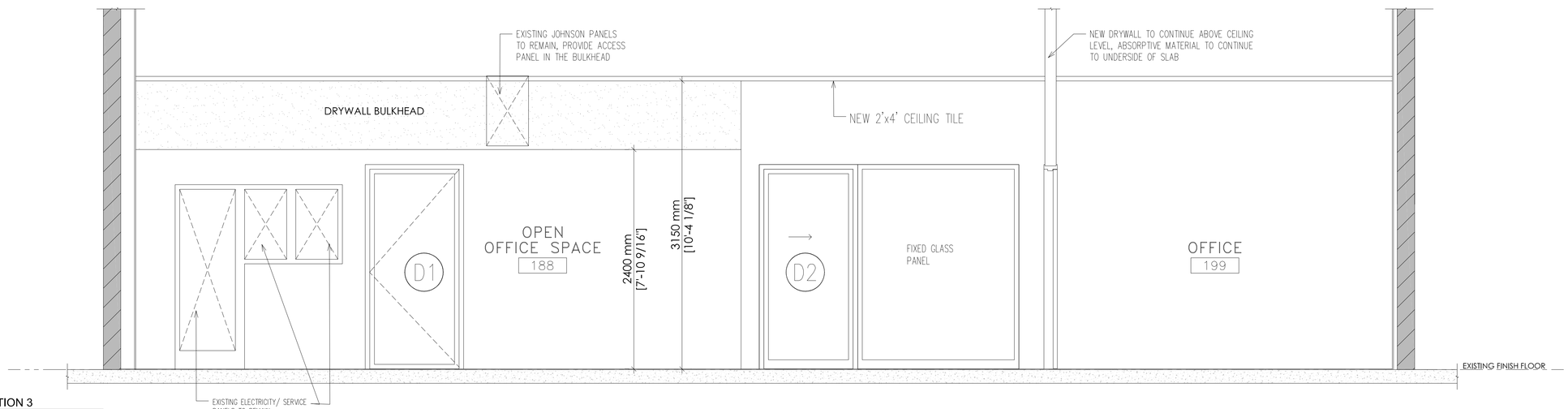
1 / A 402 INTERIOR ELEVATION !
SCALE: 1:25



4 / A 402 INTERIOR ELEVATION 4
SCALE: 1:25



2 / A 402 INTERIOR ELEVATION 2
SCALE: 1:25



3 / A 402 INTERIOR ELEVATION 3
SCALE: 1:25

Revisions

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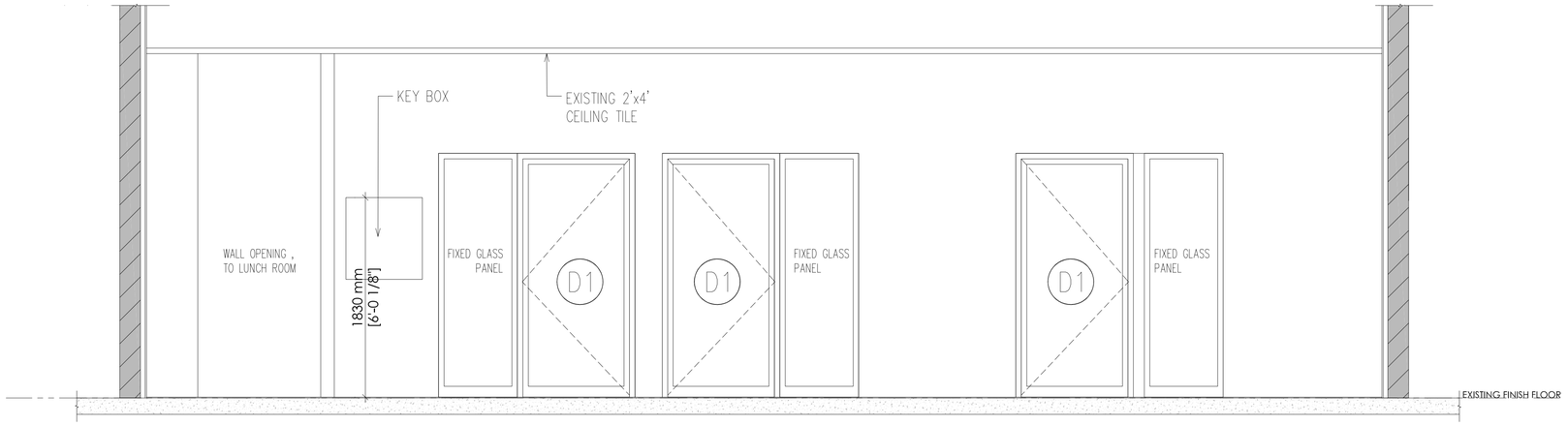
Project
MES - TRANSIT RENOVATION
430 Wyecroft Rd., Oakville , ON L6K 2G7

Drawing Title
INTERIOR ELEVATIONS

scale	date
1 : 50	Oct. 25. 2023
project	drawn by
2023 -34	MK

drawing No.
A 402



1 / K 403 INTERIOR ELEVATION 5
SCALE: 1:25

Revisions

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Project

MES - TRANSIT RENOVATION

430 Wyecroft Rd., Oakville , ON L6K 2G7

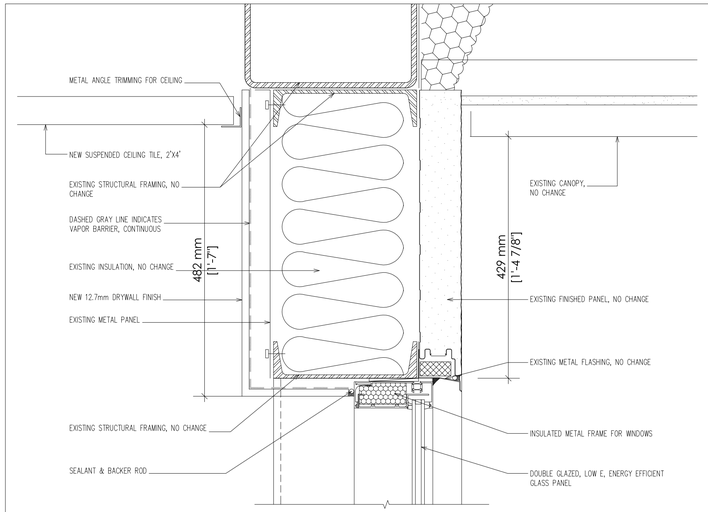
Drawing Title

INTERIOR ELEVATIONS

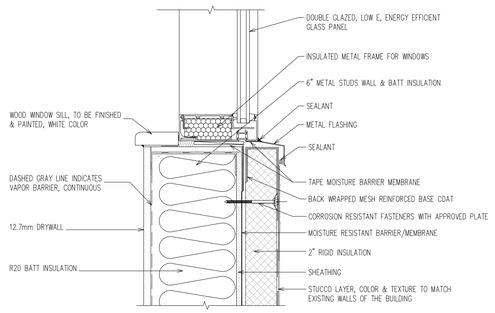
scale	date
1 : 50	Oct. 25. 2023
project: 2023 -34	drawn by: MK

drawing No.

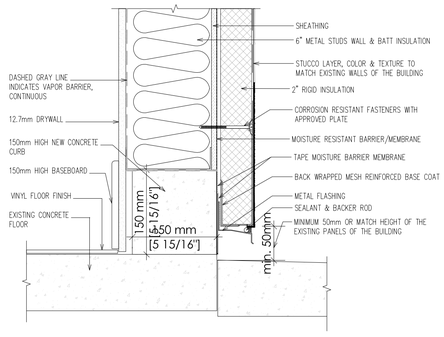
A 403



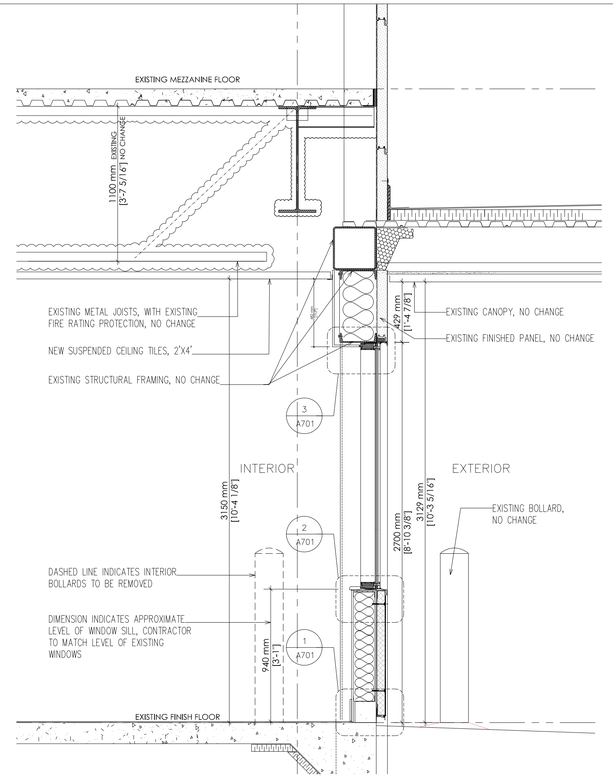
1 / A 701 WALL SECTION DETAIL
SCALE: 1:5



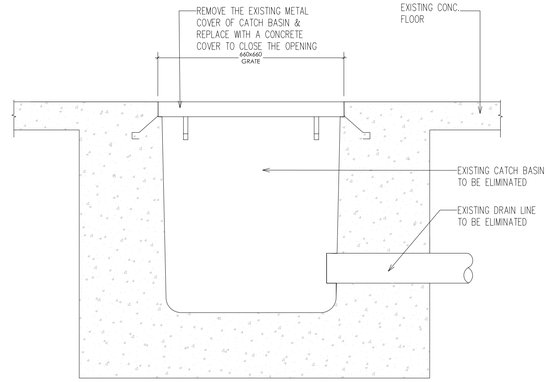
2 / A 701 WALL SECTION DETAIL
SCALE: 1:5



3 / A 701 WALL SECTION DETAIL
SCALE: 1:5



4 / A 701 WALL SECTION 1
SCALE: 1:20



General notes for eliminating the existing catch basin:

- Clean the existing catch basin & remove any debris or chemicals, make sure of health safety while performing this type of work.
- disconnect the existing drain line pipe from the plumbing system of the building, to make sure no back flow will be flowing from the adjacent space labeled as "Receiving, Loading Deck" . the drain pipe should be disconnected completely.
- Contractor to eliminate this catch basin, fill with clean sand or concrete, make sure no odors will vent from this eliminated catch basin.
- remove the existing metal grate/cover & replace with concrete cover , concrete cover to have sufficient load bearing & act as part of the existing concrete floor slab.
- seal the joint between the concrete cover & the existing concrete slab, using durable odor sealant material .

5 / A 701 DETAIL OF ELIMINATING THE EXISTING CATCH BASIN
SCALE: 1:10

Revisions		
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Project

MES - TRANSIT RENOVATION

430 Wyecroft Rd., Oakville , ON L6K 2G7

Drawing Title

DETAILS

scale	date
1 : 30	Oct. 25. 2023
project: 2023 -34	drawn by: MK

drawing No.

A 701

PART A - GENERAL

1 CODES & REGULATIONS

1.1 ALL WORK SHALL COMPLY WITH THE LATEST EDITIONS OF THE BUILDING CODE, ELECTRICAL CODE, C.S.A. STANDARDS, UNDERWRITERS' LABORATORIES, ALL APPLICABLE CODES, AND ALL OTHER AUTHORITIES HAVING JURISDICTION. THESE CODES AND REGULATIONS CONSTITUTE AN INTEGRAL PART OF THE SPECIFICATIONS.

2 BUILDING STANDARDS

2.1 COMPLETE ALL ELECTRICAL WORK IN ACCORDANCE WITH THE RELEVANT SECTIONS OF THE BASE BUILDING SPECIFICATIONS, DRAWINGS, AND STANDARDS TO THE SATISFACTION OF THE CONSULTANT AND/OR THE BUILDING OWNER. THE BASE BUILDING DOCUMENTS WILL BE MADE AVAILABLE FOR REVIEW BY THE BUILDING OWNER IF SO REQUIRED.

3 SITE VISIT

3.1 THE CONTRACTOR SHALL VISIT THE SITE AND EXAMINE ALL DRAWINGS CAREFULLY TO DETERMINE THE EXTENT OF WORK AFFECTING THE EXISTING BUILDING. DETERMINE AND INCLUDE IN THE TOTAL PRICE, THE TOTAL COST OF LABOUR AND MATERIAL TO DISCONNECT, REMOVE, RELOCATE, BLANK OFF, REROUTE OR MAKE SAFE ALL EXISTING SERVICES, CONDUITS, WIRE, BOXES, LUMINAIRES AND EQUIPMENT AS REQUIRED.

3.2 NO CLAIM FOR EXTRA COST FOR ADDITIONAL WORK WILL BE ENTERTAINED FOR OBVIOUS CONSIDERATIONS THAT MAY HAVE BEEN OVERLOOKED.

4 PERMITS AND INSPECTIONS

4.1 THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND INSPECTIONS AS REQUIRED OR REQUESTED.

4.2 ONCE THE ELECTRICAL WORK HAS BEEN COMPLETED AND ACCEPTED BY THE OWNER, THE ELECTRICAL CONTRACTOR SHALL PROVIDE THE OWNER WITH CERTIFICATES VERIFYING THAT THE WORK HAS BEEN COMPLETED IN ACCORDANCE WITH ALL CODES, BUILDING STANDARDS AND ALL AUTHORITIES HAVING JURISDICTION.

5 INSURANCE

5.1 PROVIDE INSURANCE FOR THE DURATION OF THE PROJECT TO PROTECT THE BUILDING OWNER, TENANT, AND TRADES FROM ALL CLAIMS. SUBMIT, AT THE TIME OF THE BID, PROOF OF AN AMOUNT ACCEPTABLE TO BUILDING OWNER AND TENANT.

6 CONTRACT DOCUMENTS

6.1 THE DRAWINGS FOR THE WORK OF THIS DIVISION ARE IN PART DIAGRAMMATIC, INTENDED TO CONVEY THE SCOPE OF WORK, GENERAL ARRANGEMENT, APPROXIMATE SIZES AND LOCATIONS OF THE EQUIPMENT AND OUTLETS.

6.2 REPORT ANY DISCREPANCIES BETWEEN THE ARCHITECTURAL, INTERIOR DESIGNER, MECHANICAL, STRUCTURAL, SECURITY, AUDIO VISUAL, KITCHEN, LANDSCAPE DRAWINGS, ETC. AND THE ENGINEER'S DRAWING TO THE ENGINEER PRIOR TO INSTALLATION.

6.3 WHENEVER DIFFERENCES OCCUR BETWEEN PLANS AND DIAGRAMS, SCHEMATICS, AND BETWEEN SPECIFICATIONS AND DRAWINGS, THE MAXIMUM
CONDITION SHALL GOVERN AND THE TENDER SHALL BE BASED ON WHICHEVER IS THE GREATER AMOUNT.

7 SHOP DRAWINGS

7.1 SUBMIT SHOP DRAWINGS OF DISCONNECT SWITCHES AND OTHER MAJOR ELECTRICAL EQUIPMENT, AS REQUESTED BY ENGINEER, UNLESS OTHERWISE NOTED. EACH SHOP DRAWING SHALL BE CHECKED AND STAMPED AS BEING CORRECT BY THE GENERAL CONTRACTOR AND THE APPROPRIATE TRADE BEFORE SUBMISSION TO THE ENGINEER FOR APPROVAL.

8 RECORD DRAWINGS

8.1 KEEP A RECORD SET OF DRAWINGS ON THE SITE ON WHICH SHALL BE CLEARLY INDICATED, THE EXACT LOCATION OF ALL OUTLETS, FIXTURES, FEEDER RUNS, PANELS, CONDUITS, JUNCTION BOXES, PULL BOXES, ETC. INFORMATION ON THESE DRAWINGS SHALL BE INCORPORATED IN THE AS-BUILT DRAWINGS UPON COMPLETION OF THE PROJECT.

9 EXTRA WORK

9.1 IN CASES WHERE EXTRA WORK OF ANY KIND IS REQUIRED, OBTAIN WRITTEN INSTRUCTIONS FROM THE ARCHITECT/DESIGN CONSULTANT BEFORE PROCEEDING. PAYMENTS WILL BE MADE FOR AUTHORIZED CHANGES ONLY.

9.2 QUOTATION WITH BREAKDOWN OF MATERIAL, LABOUR, OVERHEAD, PROFIT, ETC. SHALL BE SUBMITTED FOR EACH CHANGE. LABOUR UNITS SHALL BE BASED ON THE LATEST NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION (NECA) LABOUR UNITS COLUMN ONE FOR THE COMPLETE DURATION OF THE PROJECT. MATERIAL PRICES SHALL BE BASED ON THE CURRENT NATIONAL PRICE SYSTEM WITH TRADE DISCOUNTS. HOURLY LABOUR RATE SHALL INCLUDE ALL RELATED CHARGES FOR SUPERVISION, HYDRO INSPECTION, HAND TOOLS, PARKING, CLEAN-UP, AS BUILT DRAWINGS AND ADDITIONAL BONDING.

10 WARRANTY

10.1 THE CONTRACTOR SHALL PROVIDE THE TENANT WITH A WRITTEN ONE-YEAR WARRANTY, COMMENCING ON THE DATE OF ACCEPTANCE. THE WARRANTY SHALL COVER THE COMPLETE ELECTRICAL INSTALLATION. THE ELECTRICAL CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY DEFECTS IN MATERIALS OR WORKMANSHIP THAT OCCUR DURING THE WARRANTY PERIOD AT A TIME CONVENIENT TO THE TENANT/BUILDING OWNER, AND AT NO EXTRA COST.

11 AS-BUILTS

11.1 PROVIDE AS-BUILT DRAWINGS OF THE ACTUAL INSTALLATION AS ELECTRONIC FILES IN AUTOCAD COMPATIBLE FORMAT.

11.2 AS-BUILT DRAWINGS SHALL INCORPORATE ALL CHANGES AND DEVIATIONS FROM TENDER DRAWINGS, INCLUDING ALL MAIN CONDUIT RUNS, CABLE TRAYS, JUNCTION BOXES AND INFORMATION RECORDED ON RECORD DRAWINGS DURING CONSTRUCTION.

11.3 ENGINEER'S STAMP AND COMPANY LOGO SHALL BE REMOVED FROM DRAWINGS. DRAWINGS SHALL BE MARKED "AS-BUILT", ALONG WITH ELECTRICAL CONTRACTOR'S NAME.

12 CLOSE-OUT DOCUMENTS

12.1 AFTER COMPLETION OF THE PROJECT, PROVIDE THE FOLLOWING DOCUMENTS TO THE BUILDING OWNER, THE TENANT AND THE ENGINEER:
- a) THREE SETS OF FULL-SIZE AS-BUILT DRAWINGS, ALONG WITH DISK(S)
- b) ESA CERTIFICATE
- c) FIRE ALARM VERIFICATION REPORT AND CERTIFICATE (IF APPLICABLE)
- d) WRITTEN WARRANTY

12.2 THE CONTRACTOR SHALL NOTE THAT PRIOR TO SUBSTANTIAL PERFORMANCE STATUS OF THE BUILDING, IN ADDITION TO WHAT'S DETAILED IN THE ELECTRICAL SPECIFICATION SECTION 12.1, THE FOLLOWING DOCUMENTS ARE REQUIRED TO BE ISSUED TO THE CONSULTANT:

a) ALL COMMISSIONING REPORTS FROM EACH COMPLETED SYSTEM INSTALLED OR ANY SYSTEM PARTIALLY MODIFIED.

PART B - EXECUTION

1 WORKMANSHIP

1.1 ALL WORK SHALL BE CARRIED OUT AND PERFORMED IN A WORKMANLIKE MANNER TO THE SATISFACTION OF THE ARCHITECT/DESIGN CONSULTANT. ANY UNSATISFACTORY WORK BY THE DIVISION SHALL BE REPLACED WITHOUT EXTRA COST TO THE OWNER.

1.2 THE CONSTRUCTION SITE SHALL BE KEPT CLEAN AND ANY DEBRIS AND CONSTRUCTION MATERIAL SHALL BE REMOVED FROM THE SITE THROUGHOUT THE CONSTRUCTION PERIOD AND ON COMPLETION OF THE WORK.

2 SCHEDULING

2.1 ALL WORK SHALL BE SCHEDULED AND COORDINATED TO AVOID ANY CONFLICTS WITH OTHER TRADES, BUILDING OWNER AND TENANT(S) DURING OR AFTER CONSTRUCTION. ALLOW FOR ALL NECESSARY PREMIUM TIME. ALL ALLOWANCE FOR THIS SHALL BE INCLUDED IN THE TENDER PRICE.

3 DELIVERY OF EQUIPMENT

3.1 DELIVERY SCHEDULE OF ALL MAJOR ITEMS OF EQUIPMENT SUPPLIED UNDER THIS CONTRACT SHALL BE SUBMITTED IN WRITING TO THE GENERAL CONTRACTOR AT THE START OF THE PROJECT. FAILURE TO IDENTIFY DELIVERY PROBLEMS MAY RESULT IN DELAY CLAIMS.

4 TEMPORARY POWER

4.1 PROVIDE TEMPORARY ELECTRICAL POWER FOR THE WORK OF THIS TRADE AND OTHER TRADES AS REQUIRED BY THE GENERAL CONTRACTOR OR THE TENANT.

5 ROUTING OF EQUIPMENT

5.1 NEW CONDUITS AND OTHER NEW SERVICES SHALL BE CAREFULLY ROUTED SO THAT THEY DO NOT INTERFERE WITH ANY EXISTING INSTALLATIONS. ROUTING OF EQUIPMENT IN BUILDING COMMON AREAS AND RISER ROOMS SHALL BE REVIEWED AND APPROVED BY BUILDING OWNER PRIOR TO INSTALLATION. ANY EXISTING CONDUITS, CABLE TRAYS, BUS DUCTS OR OTHER SERVICES THAT INTERFERE WITH THE NEW INSTALLATION SHALL BE RELOCATED UNDER THIS CONTRACT.

6 FLOOR PENETRATION

6.1 X-RAY AND OBTAIN WRITTEN APPROVAL FROM BUILDING OWNER PRIOR TO PENETRATING ANY STRUCTURAL SURFACES OR FLOOR SLABS AND CARRY OUT THE WORK IN ACCORDANCE WITH THE BUILDING STANDARDS. THE CONTRACTOR SHALL REPLACE OR REPAIR ANY ITEMS WHICH ARE DAMAGED DUE TO THIS WORK AT NO EXTRA COST TO THE BUILDING OWNER.

6.2 ALL NEW SERVICES THAT PENETRATE THE FLOOR SLAB OR FIRE-RATED WALLS OR CEILINGS SHALL BE IN CONDUIT AND SHALL BE SEALED WITH AN APPROVED NON-SHRINK, WATERPROOF AND FIREPROOF SEALANT.

7 CUTTING AND PATCHING

7.1 ALL CUTTING AND PATCHING REQUIRED TO THE BUILDING STRUCTURE FOR THE WORK SHALL BE INCLUDED AS PART OF THIS CONTRACT, UNLESS OTHERWISE ADVISED BY THE GENERAL CONTRACTOR.

8 ACCESS PANEL

8.1 ACCESS PANELS SHALL BE PROVIDED IN CEILING WHERE JUNCTION BOXES AND OTHER ELECTRICAL EQUIPMENT CANNOT BE LOCATED IN ACCESSIBLE LOCATIONS PROVIDED THAT APPROVAL HAS BEEN OBTAINED FROM THE ARCHITECT/DESIGN CONSULTANT.

9 NOISE & VIBRATION

9.1 ALL ELECTRICAL EQUIPMENT SHALL OPERATE WITHOUT OBJECTIONABLE NOISE OR VIBRATION TO THE OWNER'S SATISFACTION.

10 GROUNDING

10.1 ALL GROUNDING SHALL CONFORM TO THE ELECTRICAL SAFETY CODE AND LOCAL AUTHORITY REQUIREMENTS.

10.2 PROVIDE SEPARATE GREEN INSULATED GROUND CONDUCTOR IN EVERY POWER CONDUIT TO ALL DEVICES, EQUIPMENT, AND WITH ALL FEEDERS.

11 DIRECTORY

11.1 PROVIDE TYPEWRITTEN DIRECTORIES FOR NEW AND EXISTING PANELBOARDS WITHIN THE AREA OF WORK, TO REFLECT THE LATEST REVISIONS. LABELING TO BE BASED ON ROOM NUMBERS AND/OR LOCATION AND LOAD TYPES.

12 DISRUPTION OF EXISTING SERVICES

12.1 THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY DISRUPTION TO THE EXISTING SERVICES. THE EXISTING BUILDING MUST BE KEPT IN OPERATION AT ALL TIMES. ARRANGE WORK IN SUCH A MANNER THAT

THE ARCHITECT/DESIGN CONSULTANT AT LEAST 48 HOURS IN ADVANCE. OVERTIME WORK THAT MAY BE REQUIRED TO TIE-IN SERVICES AT NIGHT OR ON WEEKENDS SHALL BE INCLUDED IN THE TENDER AMOUNT.

13 DEFECT OR INTERFERENCE

13.1 EXAMINE THE WORK OF THE OTHER TRADES, AS THEY AFFECT THIS DIVISION. REPORT AT ONCE TO THE ARCHITECT/DESIGN CONSULTANT ANY DEFECT OR INTERFERENCE THAT MAY AFFECT THE WORK OF THIS DIVISION OR THE GUARANTEE OF THIS WORK.

14 ELECTRICAL IDENTIFICATION FOR ELECTRICAL SYSTEMS

14.1 INSTALL CONDUCTOR IDENTIFICATION MARKERS AT PANEL, OUTLET BOX CONNECTIONS TO DEVICE OUTLET BOXES. TYPICAL IDENTIFICATION IF DEVICE IS CONNECTED TO PANEL RP-H2B, CIRCUIT 5: H2B-5. PANELBOARD IDENTIFICATION WITH ENGRAVED LAMINATED PLASTIC, BLACK LETTERING ON WHITE BACKGROUND, 6MM CHARACTER HEIGHT. WIRE AND CABLE IDENTIFICATION ACCEPTABLE MANUFACTURER WIELAND Z TYPE.

PART C - MATERIAL

1 GENERAL

1.1 ALL ELECTRICAL EQUIPMENT SHALL BE C.S.A. APPROVED AND BEAR THE C.S.A. STAMP. ALL EQUIPMENT SHALL BE NEW UNLESS OTHERWISE NOTED.

2 WIRE AND CABLE

2.1 ALL WIRE AND CABLE SHALL BE COPPER WITH TYPE R-90, X-LINK INSULATION, AND MINIMUM NO. 12 AWG WIRE SIZE. NO. 10 AND 12 TO BE SOLID AND NO. 8 AND LARGER TO BE STRANDED.

2.2 SIZE ALL WIRE FOR MAXIMUM 3% VOLTAGE DROP AT 80% LOAD AND 90% POWER FACTOR.

3 CONDUIT

3.1 ALL WIRING IN CEILINGS AND PARTITIONS SHALL BE IN EMT CONDUIT WITH STEEL SET-SCREW COUPLING AND CONNECTORS.

3.2 ALL WIRING IN SLABS SHALL BE IN RIGID PVC CONDUIT.

3.3 AC-90 CABLE MAY BE PERMITTED FOR DOWN-DROPS FROM JUNCTION BOXES TO LUMINAIRES AND IN PARTITIONS UNLESS PROHIBITED BY CODE OR BUILDING STANDARDS. AC-90 CABLE SHALL NOT BE USED IN ANY EXPOSED AREAS UNLESS OTHERWISE NOTED. AC-90 CABLE RUNS IN CEILING SPACE SHALL NOT EXCEED 3048 MM (10') IN LENGTH. DO NOT TERMINATE AC-90 CABLE DIRECTLY TO PANELBOARDS.

3.4 PROVIDE FLEXIBLE METAL CONDUIT FOR CONNECTION TO TRANSFORMERS AND MOTORS, MINIMUM 1 M (3') LENGTH.

3.5 ALL CONDUITS FOR COMMUNICATION WIRING SHALL BE INSTALLED WITH BUSHINGS AT EACH END. CONDUITS SHALL BE TERMINATED ON EQUIPMENT RACK, BACKBOARD OR CABLE TRAY WITHIN THE ROOM.

3.6 ALL EMPTY CONDUITS SHALL BE COMPLETE WITH NYLON PULL STRING. DO NOT CADDIE CLIP CONDUITS TO CEILING HANGERS.

4 PULL BOXES

4.1 A MINIMUM OF ONE PULL BOX SHALL BE INSTALLED FOR EVERY 30 M (100') OF CONDUIT (EACH 90 DEGREE BEND SHALL EQUATE TO A 9 M (30') LENGTH OF CONDUIT). NO MORE THAN TWO 90 DEGREE BENDS SHALL BE INSTALLED BETWEEN TWO PULL BOXES.

5 FUSIBLE AND NON FUSIBLE DISCONNECT SWITCHES

5.1 ALL NEW DISCONNECT SWITCHES TO BE OF THE SAME MANUFACTURER, RATING AND TYPE TO COMPLY WITH BASE BUILDING EQUIPMENT WHERE POSSIBLE. DISCONNECT SWITCHES SHALL BE OF QUICK-MAKE/QUICK-BREAK TYPE, HEAVY DUTY, SHORT CIRCUIT RATING 100,000A RMS SYM.

5.2 PROTECT EQUIPMENT FROM DUST, DEBRIS, MOISTURE, AND PHYSICAL DAMAGE, WITH SEALED ENVELOPE OF PLASTIC OR OTHER IMPERVIOUS MATERIAL UNTIL BUILDING IS ENCLOSED AND CLEANED AND EQUIPMENT IS ENERGIZED. FINISH EQUIPMENT ENCLOSURES TO ANSI 49 OR ANSI 61, BAKED GREY EMANEL.

5.3 INSTALL LOCAL TO EQUIPMENT ON ADJACENT WALL, COLUMN, OR OTHER SUITABLE MOUNTING SOURFACE. WHERE NECESSARY PROVIDE FREE STANDING RIGID CONTINUOUS SLOTTED CHANNEL STRUT FRAME. WHERE MOUNTED ON MASONRY WALLS, ALLOW MINIMUM OF 6MM CLEAR SPACE BETWEEN ENCLOSURE AND MASONRY WALL.

5.4 STORE FUSES IN A MOISTURE FREE LOCATION UNTIL READY TO ENERGIZE. INSTALL FUSES IMMEDIATELY PRIOR TO ENERGIZATION. PRIOR TO ACCEPTANCE OF THE WORK, CLEARLY MARK MANUFACTURER'S LABELS ON INSIDE COVER OF EACH FUSIBLE UNIT, WITH AMPERE RATING AND CATALOGUE SYMBOL OF REPLACEMENT FUSES TO BE USED.

5.5 MANUFACTURER - SCHNEIDER SQUARE D, CUTLER-HAMMER, GE CANADA, SIEMENS.

6. DISTRIBUTION EQUIPMENT

6.1 ALL NEW PANELBOARDS, DISCONNECT SWITCHES, SPLITTERS ETC. TO BE OF THE SAME SAME MANUFACTURER, RATING AND TYPE TO COMPLY WITH BASE BUILDING EQUIPMENT WHERE POSSIBLE. ALL PANELBOARDS SHALL LOADS BALANCED ON THE FEEDERS (OPERATING AT NORMAL BUSINESS HOURS). ADJUST BRANCH CIRCUITS AS REQUIRED. DISCONNECT SWITCHES SHALL BE OF QUICK MAKE/QUICK BREAK TYPE.

6.2 PANELBOARDS CIRCUIT BREAKER TYPE TO CSA C22.2 NO. 29M. ENCLOSURE: DEADFRONT CONSTRUCTION, CODE GAUGE STEEL TO CSA TYPE 1 WITH DRIP TRAY FOR SPRINKLERS. BUS: COPPER, INCLUDING HALF CAPACITY GROUND BAR AND FULL CAPACITY NEUTRAL BAR. FULL HINGED DOOR WITH 2 KEYS PER PANELBOARD.

6.3 CIRCUIT BREAKERS: BOLTON, QUICK MAKE, QUICK BREAK, THERMAL AND MAGNETIC TRIP, TRIP INDIACTING, TRIP FREE HANDLE, AMPERE RATING, NUMBER OF POLES AND INTERRUPTING CAPACITY AS NOTED ON PANEL SCHEDULES TO CSA C22.2 NO. 5M. MULTI POLE BREAKERS WITH COMMON HANDLE.

6.4 ACCEPTABLE MANUFACTURERS: SCHNEIDER, SIEMENS, CUTLER-HAMMER

7. DRY TYPE TRANSFORMERS

7.1 TYPE ANN TO CSA C22.2 NO. 47M AND CSA C9M WITH ENERGY EFFICIENCY CRITERIA TO CSA 802. COPPER WINDING WITH TIN PLATED BUS CONNECTIONS. INSULATION: CLASS H/220 DEG. C, TEMPERATURE RISE 150O C. ENCLOSURE TYPE 1, REMOVABLE FRONT DOOR.

7.2 ACCEPTABLE MANUFACTURERS : MARCUS, SCHNEIDER, CUTLER-HAMMER

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Project:

MES - TRANSIT RENOVATION

430 Wyecroft Rd., Oakville ,
ON L6K 2G7

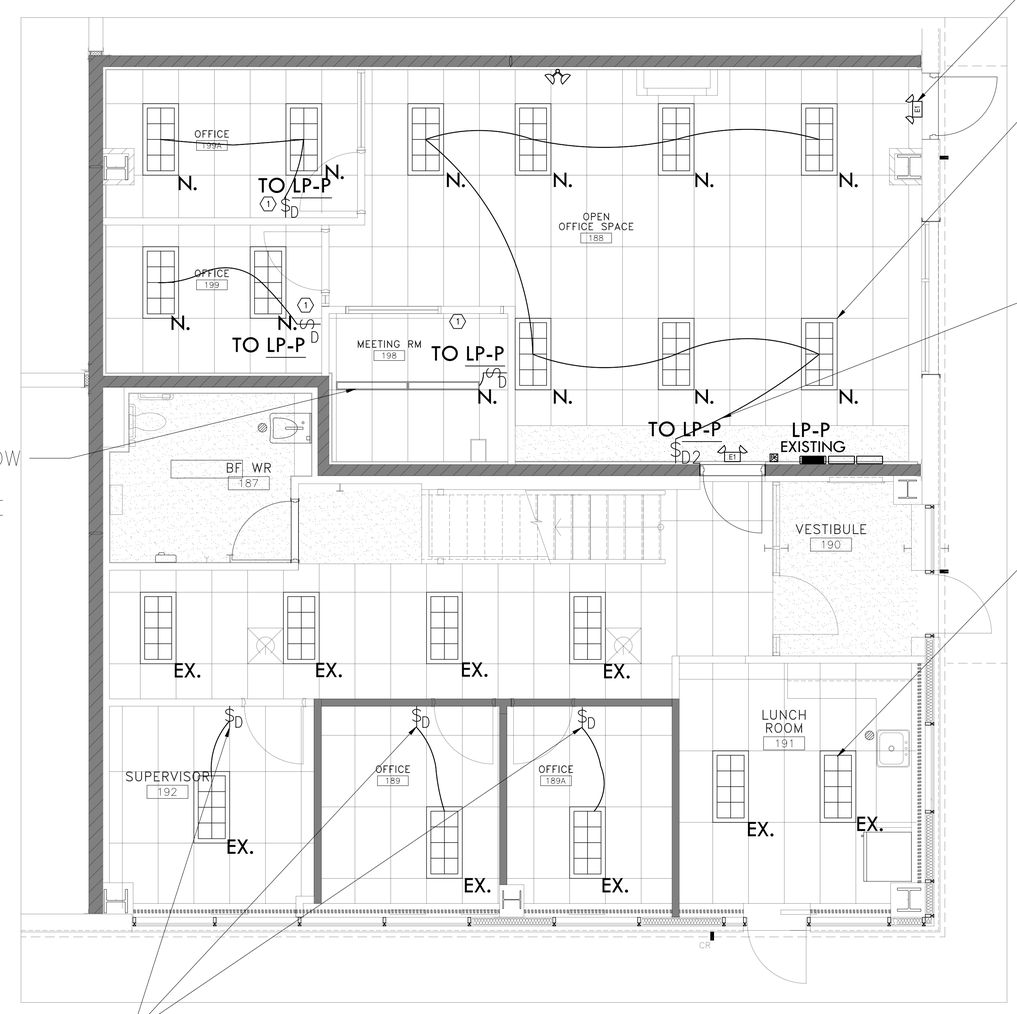
Sheet title:

ELECTRICAL SPECIFICATION

D'wg. no.

E-01

Scale: 1/4" = 1'-0"	Date: NOV 03, 2023
DRAWN: I.A.	REVIEW: M.A.
DESIGN:	Checked:



SUSPENDED BELOW THE CEILING ALIGN ABOVE THE TABLE

NEW SWITCH TO CONTROL THE EXISTING LIGHTING IN THE ROOM (TYPICAL)

EMERGENCY LIGHTING WITH RUNNING MAN PICTOGRAM (TYPICAL)

NEW LIGHTING FIXTURE, 2'X4' LED MODEL: (STANPRO/69345/SKY WALL SERIES). (TYPICAL)

REVISE LIGHTING CIRCUITS TO INCORPORATE NEW SWITCHING/CONTROL ARRANGEMENT. PROVIDE NEW CONDUIT AND WIRING TO SUIT. (TYPICAL)

EXISTING LIGHTING FIXTURE (TYPICAL)

NOTE:

1. FOR OPEN AREA INSTALL OCCUPANCY SENSOR AND LIGHT SENSOR TO CONTROL LIGHTING TO MEET SB-10 AND ASHRAE 90.1-2013
2. MODIFY CIRCUIT TO ACCOMMODATE THE LIGHTING CONTROL REQUIREMENT
3. CHANGE LIGHT SWITCHES TO DIMMER TYPE

$D	LEGRAND WATTSTOPPER 0-10V DIMMER - CAT.# - RH4FBL3PW
$D2	LEGRAND WATTSTOPPER PHASE DIMMER - CAT.# - RH703PTUW

EX.	EXISTING LIGHTING FIXTURE
N.	NEW LIGHTING FIXTURE, 2'X4' LED MODEL: (STANPRO / 69345/ SKY WALL SERIES).
N.	NEW LIGHTING FIXTURE, 4' LED MODEL: (LUMINATION® LDS SERIES).
	MANUAL PULL STATIONS, C/W LEXAN COVER. 140CM HEIGHT
E1	EXIT LIGHT: SHADED AREA DENOTES FACE. WALL MOUNT WHEN SHOWN WITH BRACKET, CEILING MOUNT OTHERWISE. COORDINATE WITH DOOR SWINGS. PROVIDE ARROW AS NOTED. MODEL (STANPRO / PRMS - STEEL COMBO - PRMS6036)
	EMERGENCY LIGHTING UNIT, W/INTEGRAL BATTERY, PLUG-IN CONNECTION, W/2 MOUNTING HEADS. MODEL (STANPRO / PRMS - STEEL COMBO - PRMS6036).

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Project:

MES - TRANSIT RENOVATION

430 Wyecroft Rd., Oakville , ON L6K 2G7

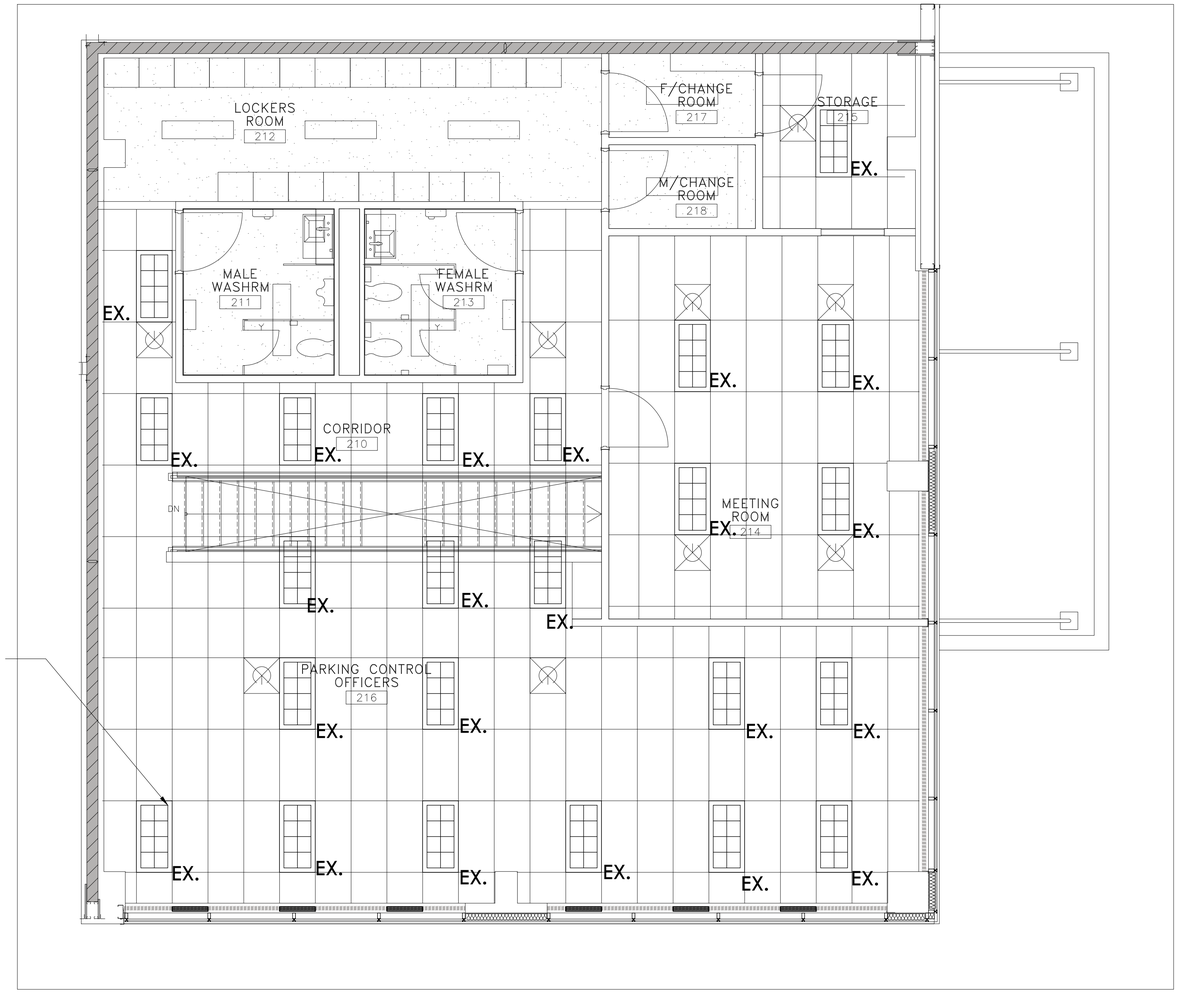
Sheet title:

LIGHTING LAYOUT AND LIFE SAFETY

D'wg. no.

E-02

Scale: 1/4" = 1'-0"	Date: NOV 03, 2023
DRAWN: I.A.	REVIEW: M.A.
DESIGN:	Checked:



EXISTING LIGHTING FIXTURE (TYPICAL)

NOTE:

1. FOR OPEN AREA INSTALL OCCUPANCY SENSOR AND LIGHT SENSOR TO CONTROL LIGHTING TO MEET SB-10 AND ASHRAE 90.1-2013
2. MODIFY CIRCUIT TO ACCOMMODATE THE LIGHTING CONTROL REQUIREMENT
3. CHANGE LIGHT SWITCHES TO DIMMER TYPE

$_{TD}$	LEGRAND WATTSTOPPER 0-10V DIMMER - CAT.# - RH4FBL3PW
$_{TD2}$	LEGRAND WATTSTOPPER PHASE DIMMER - CAT.# - RH703PTUW

EX.	EXISTING LIGHTING FIXTURE
N.	NEW LIGHTING FIXTURE, 2'X4' LED MODEL: (STANPRO / 69345/ SKY WALL SERIES).
	MANUAL PULL STATIONS, C/W LEXAN COVER. 140CM HEIGHT
E1	EXIT LIGHT: SHADED AREA DENOTES FACE. WALL MOUNT WHEN SHOWN WITH BRACKET, CEILING MOUNT OTHERWISE. COORDINATE WITH DOOR SWINGS. PROVIDE ARROW AS NOTED. MODEL (STANPRO / PRMS - STEEL COMBO - PRMS6036)
	EMERGENCY LIGHTING UNIT, W/INTEGRAL BATTERY, PLUG-IN CONNECTION, W/2 MOUNTING HEADS. MODEL (STANPRO / PRMS - STEEL COMBO - PRMS6036).

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Project:

MES - TRANSIT RENOVATION

430 Wyecroft Rd., Oakville ,
ON L6K 2G7

Sheet title:

LIGHTING LAYOUT
MEZZANINE LEVEL

D'wg. no.

E-03

Scale: 1/4" = 1'-0"	Date: NOV 03, 2023
DRAWN: I.A.	REVIEW: M.A.
DESIGN:	Checked:

BASE FEED– 8 WIRED, 4 CIRCUIT FOR FURNITURE POWER REVISE CIRCUITS TO INCORPORATE NEW ELECTRICAL OUTLETS & RECEPTACLES ARRANGEMENT. PROVIDE NEW CONDUIT AND WIRING TO SUIT.

REVISE CIRCUITS TO INCORPORATE NEW ELECTRICAL OUTLETS & RECEPTACLES ARRANGEMENT. PROVIDE NEW CONDUIT AND WIRING TO SUIT. (TYPICAL)

1. RE–USE EXISTING CIRCUITS MADE AVAILABLE FOLLOWING DEMOLITION. PROVIDE NEW CIRCUITS/BREAKERS WITHIN EXISTING PANELS AS REQUIRED TO SUIT LAYOUT SHOWN.
2. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH INTERIOR DESIGNERS' DRAWINGS FOR DIMENSIONS, MOUNTING HEIGHTS, CONSTRUCTION DETAILS, FINISHES AND COLOURS. WHERE DISCREPANCIES OCCUR CONTRACTOR TO CONFIRM WITH INTERIOR DESIGNER AND/OR CONSULTANT PRIOR TO COMMENCEMENT OF WORK.
3. PROVIDE TYPED LABEL INDICATING AS–BUILT PANEL DESIGNATION & CIRCUIT NUMBER(S) ON ALL RECEPTACLES AND POWERED DEVICES.
4. FOR ALL NEW CONDUIT RUNS WHICH PASS THROUGH FIRE RATED ASSEMBLIES, ELECTRICAL CONTRACTOR SHALL FILL CORE DRILL WITH cUL LISTED AND APPROVED WATERPROOF & FIREPROOF FILLER MATERIALS SO AS TO MAINTAIN FIRE RATING.
5. NEW CIRCUITS SHALL BE 15A–1P OR 20A–1P BREAKERS AS IDENTIFIED ON PANEL SCHEDULES AND CONNECTED WITH 2#12+G–3/4" DIA. CONDUIT UNLESS NOTED OTHERWISE.
6. ALL FIRE ALARM PULL STATIONS TO BE MOUNTED AL 1200MM (47") A.F.F.. REWORK EXISTING PULL STATIONS TO SUIT.

	WALL MOUNTED DUPLEX RECEPTACLE
	WALL MOUNTED DATA/VOICE OUTLET
	WALL MOUNTED DATA/VOICE OUTLET
	CABLE CONCEALER FEED FOR POWER AND COMMUNICATIONS TO SYSTEM FURNITURE
	COMBINATION OUTLETS WITH OUTLETS AS MENTIONED

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Project:

MES - TRANSIT RENOVATION

430 Wyecroft Rd., Oakville , ON L6K 2G7

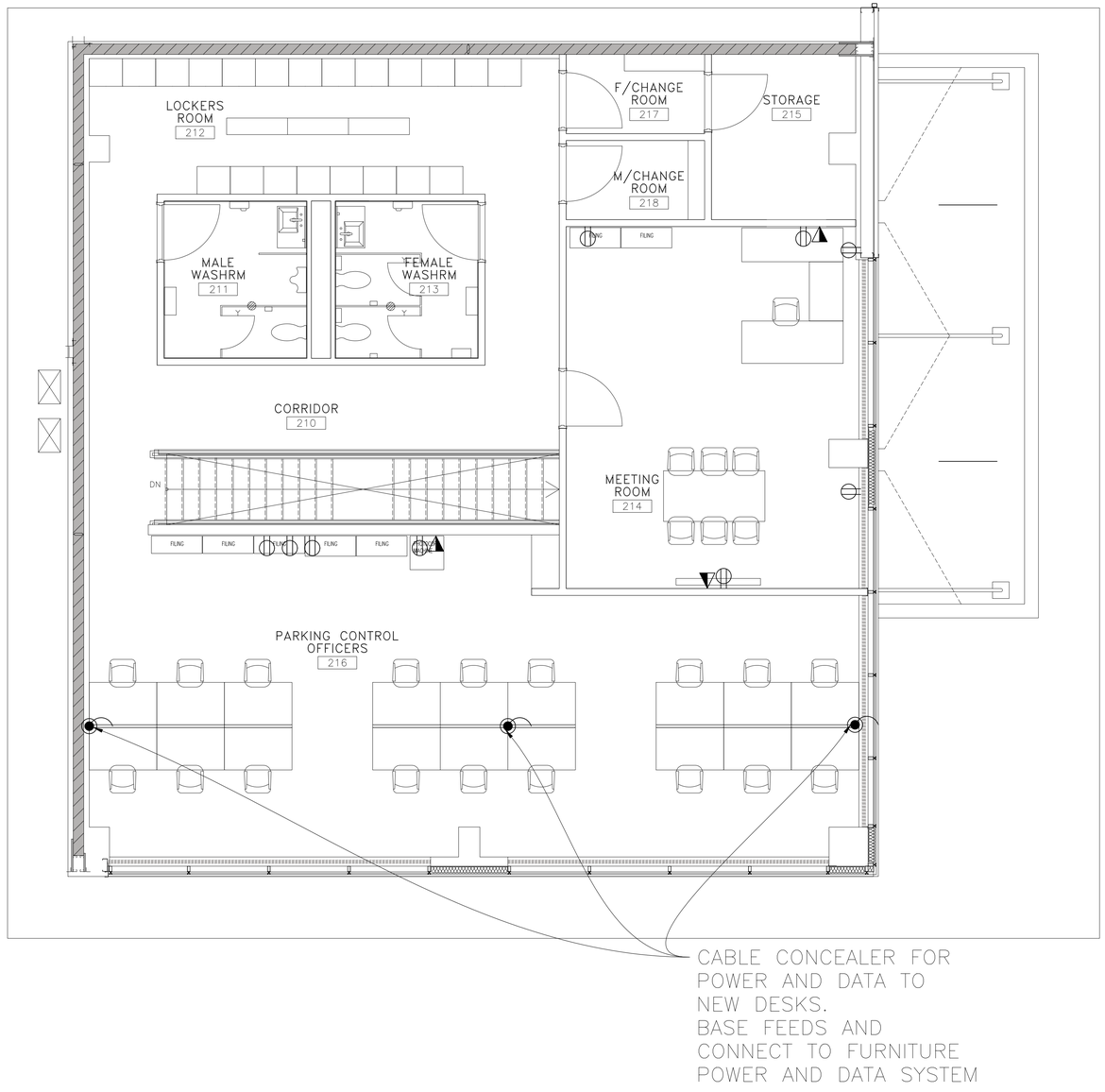
Sheet title:

ELECTRICAL OUTLETS & RECEPTACLES LAYOUT GROUND LEVEL

D'wg. no.

E-04

Scale: 1/4" = 1'-0"	Date: NOV 03, 2023
DRAWN: I.A.	REVIEW: M.A.
DESIGN:	Checked:



1. RE-USE EXISTING CIRCUITS MADE AVAILABLE FOLLOWING DEMOLITION. PROVIDE NEW CIRCUITS/BREAKERS WITHIN EXISTING PANELS AS REQUIRED TO SUIT LAYOUT SHOWN.
2. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH INTERIOR DESIGNERS' DRAWINGS FOR DIMENSIONS, MOUNTING HEIGHTS, CONSTRUCTION DETAILS, FINISHES AND COLOURS. WHERE DISCREPANCIES OCCUR CONTRACTOR TO CONFIRM WITH INTERIOR DESIGNER AND/OR CONSULTANT PRIOR TO COMMENCEMENT OF WORK.
3. PROVIDE TYPED LABEL INDICATING AS-BUILT PANEL DESIGNATION & CIRCUIT NUMBER(S) ON ALL RECEPTACLES AND POWERED DEVICES.
4. FOR ALL NEW CONDUIT RUNS WHICH PASS THROUGH FIRE RATED ASSEMBLIES, ELECTRICAL CONTRACTOR SHALL FILL CORE DRILL WITH cUL LISTED AND APPROVED WATERPROOF & FIREPROOF FILLER MATERIALS SO AS TO MAINTAIN FIRE RATING.
5. NEW CIRCUITS SHALL BE 15A-1P OR 20A-1P BREAKERS AS IDENTIFIED ON PANEL SCHEDULES AND CONNECTED WITH 2#12+G-3/4" DIA. CONDUIT UNLESS NOTED OTHERWISE.
6. ALL FIRE ALARM PULL STATIONS TO BE MOUNTED AL 1200MM (47") A.F.F.. REWORK EXISTING PULL STATIONS TO SUIT.

	WALL MOUNTED DUPLEX RECEPTACLE
	WALL MOUNTED DATA/VOICE OUTLET
	WALL MOUNTED DATA/VOICE OUTLET
	CABLE CONCEALER FEED FOR POWER AND COMMUNICATIONS TO SYSTEM FURNITURE
	COMBINATION OUTLETS WITH OUTLETS AS MENTIONED

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Project:

MES - TRANSIT RENOVATION

430 Wyecroft Rd., Oakville ,
ON L6K 2G7

Sheet title:

ELECTRICAL OUTLETS & RECEPTACLES LAYOUT MEZZANINES LEVEL

D'wg. no.

E-05

Scale: 1/4" = 1'-0"	Date: NOV 03, 2023
DRAWN: I.A.	REVIEW: M.A.
DESIGN:	Checked:

BASE BUILDING NOTES:
1- BASE BUILDING CONTROL IS JOHNSON CONTROL (JCI). CONTRACTOR SHALL COORDINATE WITH THE BASE BUILDING CONTROL CONTRACTOR FOR ANY MODIFICATIONS NEEDED FOR THE BUILDING AS RESULT OF THIS PROJECT.
2- CLOSE, SEAL AND MAKE GOOD ANY OPENING IN THE WALLS AS A RESULT OF NEW WORK OR DEMOLITION RESULTED FROM THIS PROJECT.
3- SEAL ALL OPENINGS TO THE ADJACENT ROOMS AND SPACES WITH FIRE STOP SEAL. .
4- COVER AND SEAL ALL FLOOR OPENINGS. MAKE FOOD AND MATCH EXISTING FLOOR.

MECHANICAL DRAWING LIST

HVAC DRAWING NOTES

1. MAINTAIN EXISTING HVAC SYSTEM INCLUDING DUCT AND AIR OUTLETS WHERE POSSIBLE.
2. BALANCE THE SUPPLY AIR SYSTEM TO THE AIRFLOW RATES SHOWN ON THE DRAWINGS. FLOWS SHOWN ARE IN CFM.
3. FLEXIBLE DUCT SHALL NOT BE USED FOR HOOD SUPPLY AND EXHAUST SYSTEM.
4. PROVIDE BALANCING DAMPER TO EACH DUCT BRANCH FOR BALANCING. THE BALANCING DAMPER SHALL BE ACCESSIBLE.
5. COORDINATE THE DIFFUSERS' LOCATIONS WITH OTHER SERVICES (E.G. LIGHTS AND SPRINKLERS).
6. INSTALL NEW EXHAUST AIR SYSTEM FOR ALL WASHROOMS AND SHOWN ON THE ADRWINGS.

FIRE PROTECTION DRAWING NOTES:

1. THE DRAWINGS ARE INTENDED TO PROVIDE THE DESIGN INTENT. SPRINKLER CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR THE LAYOUT AND DETAILS OF ALL SPRINKLER WORK TO MEET THE REQUIREMENTS OF NFPA 13 AND LOCAL AUTHORITIES HAVING JURISDICTION.
2. SPRINKLER CONTRACTOR SHALL PROVIDE ENGINEERS STAMPED DRAWINGS, HYDRAULIC CALCULATIONS AND SUBMIT FOR BUILDING PERMIT APPLICATION PRIOR TO INSTALLATION OF THE SYSTEM IF NEEDED.
3. SPRINKLER SYSTEM SHALL BE INSTALLED IN ACCORDANCE TO LATEST REQUIREMENTS OF NFPA 13 AND ALL LOCAL AUTHORITIES HAVING JURISDICTION.
4. SPRINKLER CONTRACTOR SHALL RE-CERTIFY THE SPRINKLER SYSTEM ON COMPLETION OF WORK AS REQUIRED.
5. ALL NEW SPRINKLER HEADS SHALL BE ULC LISTED.
6. THE CONTRACTOR SHALL PROVIDE FIRE WATCH AT ALL TIMES WHEN THE SPRINKLER SYSTEM IS NOT OPERATIONAL.
7. SPRINKLER HEADS SHALL BE PENDENT IN AREAS WITH CEILING AND UPRIGHT IN OPEN AREA.
8. THE SPRINKLER LAYOUT IS BASED ON LIGHT HAZARD APPLICATION.
9. COORDINATE PIPE ROUTE AND SPRINKLER HEAD LOCATIONS WITH OTHER SERVICES.
10. COORDINATE WITH LANDLORD FOR SPRINKLER PIPING INSTALLATION AND ANY NECESSARY SHUT DOWN
11. FIRE EXTINGUISHER SHALL BE ABC DRY CHEMICAL 10 LB., WITH 3A10BC RATING C/W BRACKET. INSTALL WHERE SHOWN ON THE DRAWINGS AND AS REQUIRED BY THE CODES AND AUTHORITIES HAVING JURISDICTION. FOR KITCHEN PROVIDE FIRE EXTINGUISHER CLASS B FIRES DRY CHEMICAL (PURPLE K) 10 LB, 60 BC RATING, NATIONAL FIRE, MODEL PK-10 OR EQUAL.

MECHANICAL DRAWING LEGEND

DOMESTIC COLD WATER	
DOMESTIC HOT WATER	
SANITARY PIPE	SAN
GAS PIPE	
SUPPLY/MAKE UP AIR	
RETURN/EXHAUST DUCT	
EXHAUST FAN	
SUPPLY AIR DIFFUSER	
CEILING SUPPLY DIFFUSER	
RETURN/EXHAUST GRILL	
BALANCING DAMPER	BD
GATE VALVE	
FLOOR DRAIN	F.D
CLEANOUT	F.C.O
TANKLESS WATER HEATER	
EXISTING PENDENT SPRINKLER	E
UPRIGHT SPRINKLER	
SPRINKLER TO REMOVE	RE
FIRE EXTINGUISHER	
RETURN AIR GRILL	RAG
RETURN AIR DUCT	RAD
HIGH LEVEL ON WALL	HW
LOW LEVEL ON WALL	LW
TO ABOVE	T/A
FROM BELOW	F/B
EXISTING	EX.

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Project:
MES - TRANSIT RENOVATION
430 Wyecroft Rd., Oakville ,
ON L6K 2G7

Sheet title:
LEGEND, SCHEDULE, AND DRAWING LIST

D'wg. no.
M-01

Scale: 1/4" = 1'-0"	Date: NOV 03, 2023
DRAWN: I.A.	REVIEW: M.A.
DESIGN:	Checked:

1.0 MECHANICAL SPECIFICATIONS

1.1 GENERAL

THE RESPONSIBILITY AND SCOPE OF EACH SUB-TRADE RESTS SOLELY WITH THE 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.

SHOULD ANY CONFLICTS OCCUR BETWEEN LAYOUTS SHOWN ON DRAWING AND APPLICABLE CODES, THE CODE REQUIREMENTS SHALL BE ADHERED TO.

1.2 EXAMINATION OF WORK

DRAWINGS ARE DIAGRAMMATIC AND APPROXIMATELY TO SCALE. THE CONTRACT DOCUMENTS ESTABLISH SCOPE, MATERIAL AND QUALITY AND ARE NOT DETAILED INSTALLATION INSTRUCTIONS.

THE MECHANICAL CONTRACTOR MUST VISIT THE SITE TO PRE-QUALIFY HIS/HER TENDER SUBMISSION. FAILURE TO COMPLY WITH THIS REQUIREMENT WILL RENDER HIS/HER PORTION (DIVISION 15) OF THE WHOLE TENDER AS UNQUALIFIED AND WILL BE REJECTED.

1.3 INTENT

IT IS THE INTENT OF THIS SPECIFICATION AND DRAWINGS TO PROVIDE FOR A COMPLETE AND FULLY OPERATING SYSTEM IN COMPLETE ACCORD WITH ALL APPLICABLE CODES. THESE SPECIFICATIONS MAY NOT COVER EACH AND EVERY ITEM REQUIRED FOR THE COMPLETE MECHANICAL INSTALLATION. THEREFORE, THE CONTRACTOR SHALL MAKE HIS OWN PROVISIONS FOR ALL LABOUR, MATERIALS AND EQUIPMENT DEEMED NECESSARY TO COMPLETE THE MECHANICAL SYSTEM.

THE SPECIFICATIONS ARE INTEGRAL WITH THE DRAWINGS WHICH ACCOMPANY THEM. NEITHER IS TO BE USED ALONE. ANY ITEM OR SUBJECT OMITTED FROM ONE, BUT IMPLIED ON THE OTHER IS PROPERLY SPECIFIED.

'NOTES' ARE INCLUDED TO ASSIST THE CONTRACTOR IN UNDERSTANDING THE SCOPE OF WORK. UNLESS NOTED OTHERWISE THE NOTATIONS SHALL APPLY FOR THE ENTIRE FLOOR AREA WITHIN WHICH THE NOTATION IS LOCATED. MULTIPLE NOTES SHALL NOT BE INTERPRETED THAT AN UNNOTED ITEM IS EXCLUDED.

ALL WORK TO CONFORM TO LATEST NATIONAL, PROVINCIAL, MUNICIPAL CODES, BYLAWS, REGULATIONS AUTHORITIES HAVING JURISDICTION.

WHENEVER DIFFERENCES OCCUR IN THE CONTRACT DOCUMENTS, THE MAXIMUM CONDITION WILL GOVERN AND BE INCLUDED IN THE CONTRACT PRICE.

CONFORM TO MANUFACTURER'S INSTRUCTIONS, DETAILS AND PROCEDURES FOR EQUIPMENT INSTALLATIONS.

INSTALL EQUIPMENT IN LOCATIONS AND ROUTES SHOWN WITH MINIMUM INTERFERENCE WITH OTHER SERVICES OR TRADES. REMOVE AND REPLACE EQUIPMENT IMPROPERLY INSTALLED.
ALL NEW INSTALLATIONS ARE TO MEET OR EXCEED BASE BUILDING STANDARDS.

1.4 INSURANCE

THE CONTRACTOR MUST HAVE COMPREHENSIVE GENERAL LIABILITY INSURANCE COVERAGE OF NOT LESS THAN SPECIFIED IN THE TENDER DOCUMENTS INCLUDING NON OWNED CAR COVERAGE, CONTRACTUAL LIABILITY AND CONTAINING A CROSS LIABILITY CLAUSE. COVERAGE SHALL INCLUDE LOSS OR DAMAGE CAUSED BY THE CONTRACTOR.
THE CONTRACTOR SHALL CARRY FULL EMPLOYEE'S LIABILITY INSURANCE IN ACCORDANCE WITH THE WORKER'S COMPENSATION ACT.

1.5 LIABILITY

THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR LAYING OUT HIS WORK AND FOR ANY DAMAGE CAUSED TO OWNER OR OTHER CONTRACTOR BY IMPROPER LOCATION OR CARRYING OUT HIS WORK.

THIS CONTRACTOR SHALL PROTECT ALL FINISHED AND UNFINISHED WORK OF HIS OWN AND OTHER CONTRACTORS, INCLUDING EXISTING FROM DAMAGE DUE TO CARRYING OUT HIS WORK.

VERIFY ALL EXISTING ELEVATIONS, DIMENSIONS, CLEARANCES AND BUILDING FEATURES PRIOR TO COMMENCING INSTALLATION.

1.6 COORDINATION AND CO-OPERATION

COORDINATE WORK WITH ALL OTHER SUBCONTRACTORS AND TRADES INVOLVED. CONFIRM IN WRITING TO GENERAL CONTRACTOR/ENGINEER ANY EXISTING SERVICES OR WORKS DEEMED TO BE UNACCEPTABLE AND/OR DEFECTIVE PRIOR TO COMMENCING WORK.

1.7 INTERRUPTION OF SERVICES

WHILE WORK IS IN PROGRESS, CONTINUITY OF SERVICES SHALL BE MAINTAINED TO ALL EXISTING SERVICES. INTERRUPTIONS SHALL BE COORDINATED WITH THE OWNER AS TO TIME AND DURATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY INTERRUPTIONS TO SERVICES AND SHALL REPAIR ANY DAMAGES TO THE EXISTING SYSTEMS CAUSED BY HIS OPERATIONS.

THE CONTRACTOR SHALL INCLUDE IN HIS PRICE ANY COST FOR PREMIUM TIME OUTSIDE OF NORMAL WORKING HOURS TO COMPLETE THE WORK ON SCHEDULE AND TO MAINTAIN ALL EXISTING SYSTEMS IN OPERATION.

1.8 CERTIFICATES, FEES, ETC.

GIVE ALL NOTICES, OBTAIN ALL PERMITS AND PAY ALL FEES SO THAT THE WORK SPECIFIED MAY BE CARRIED OUT. FURNISH ANY CERTIFICATES AT THE OWNER'S REQUEST AS EVIDENCE THAT WORK INSTALLED CONFORMS TO THE LAWS AND REGULATIONS OF ALL AUTHORITIES HAVING JURISDICTIONS.
CERTIFICATES/PERMITS ARE TO BE PROVIDED FOR QUALITY OF WORKMANSHIP AND WORKMAN QUALIFICATIONS.

INSPECTIONS SHALL BE MADE PROMPTLY. IF ANY WORK IS COVERED UP WITHOUT CONSENT, IT SHALL, IF REQUIRED, BE UNCOVERED FOR EXAMINATION AND MAKE GOOD AT NO EXTRA COST TO OWNER.

1.9 IDENTIFICATION

PROVIDE FOR IDENTIFICATION OF PIPING AND DUCTWORK WITH MARKERS SHOWING SERVICE AND DIRECTION OF FLOW. APPLY LABELS AT MAXIMUM 50-FT INTERVALS, BEFORE AND AFTER PASSING THROUGH WALLS, AT ACCESS DOOR OPENINGS, AT EACH SHUT OFF VALVE AND ADJACENT TO EACH PIECE OF EQUIPMENT. LABELS SHALL BE WATERPROOF AND HEAT RESISTANT WITH YELLOW BACKGROUND, MINIMUM 1-INCH LETTERING AND DRY ADHESIVE BACKING. PROVIDE 3M #76 ADHESIVE MINIMUM 1-INCH LETTERING AND DRY ADHESIVE BACKING. PROVIDE 3M #76 ADHESIVE IN ADDITION TO DRY ADHESIVE BACKING.
PROVIDE 2-INCH WIDE COLOUR BAND OF PLASTIC PRESSURE SENSITIVE TAPE FOR PIPING LAMICOID LABELS WITH 1/2-INCH LETTERS AND KEY WITH CONTROL SCHEMATICS.

1.10 CUTTING AND PATCHING

UNLESS BUILDER'S WORK IS EXCLUDED FROM HIS SCOPE OF WORK, THE MECHANICAL CONTRACTOR SHALL INCLUDE AND BE RESPONSIBLE FOR CUTTING, PATCHING AND MAKE GOOD ALL OPENINGS REQUIRED FOR THE MECHANICAL SERVICES. PROTECT EXISTING BUILDING, STRUCTURE AND FINISHES.

LOCATE HOLES AND PROVIDE SLEEVES, CUTTING AND FITTING REQUIRED FOR MECHANICAL WORK. RELOCATE IMPROPERLY LOCATED HOLES AND REPAIR WORK ACCORDINGLY.

PROVIDE EXPANSION BOLTS, HANGER RODS, BRACKETS AND SUPPORTS.

DO NOT ALTER STRUCTURAL MEMBERS OF BUILDING WITHOUT OBTAINING APPROVAL FROM CONSULTANT.
PERFORM PATCHING OF FINISHED WORK IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF SPECIFICATIONS.

1.11 FLASHING

DO ALL FLASHING AND COUNTER FLASHING WHERE DUCTS AND OTHER MECHANICAL PARTS ARE PASSING THROUGH WEATHER AND/OR WATER PROOF WALLS, FLOORS AND ROOFS, ALL TO THE SATISFACTION OF THE OWNER.

1.12 PIPE HANGERS, SUPPORTS AND SLEEVES

HANGERS AND SUPPORTS SHALL SECURE PIPES IN PLACE, PREVENT VIBRATION, MAINTAIN GRADE BY ADJUSTMENT, PROVIDE FOR EXPANSION AND CONTRACTION AND SHALL BE DIRECTLY FROM THE STRUCTURE.

1.13 TESTING

TEST ALL EQUIPMENT AND MATERIALS WHERE REQUIRED BY SPECIFICATIONS OR AUTHORITIES HAVING JURISDICTION, TO DEMONSTRATE ITS PROPER OPERATION AND FUNCTIONALITY TO THE OWNER'S REPRESENTATIVE. TEST PROCEDURES SHALL BE IN ACCORDANCE WITH APPLICABLE PORTIONS OF THE ASME, ASHRAE, SMACNA, NFPA, CSA AND OTHER RECOGNIZED TEST CODES AS FAR AS FIELD CONDITIONS PERMIT.

ALL LOW VELOCITY DUCT SYSTEMS, INCLUDING SUPPLY, RETURN AND EXHAUST SHALL BE CHECKED FOR TIGHTNESS. ALL LEAKS SHALL BE REPAIRED BEFORE DUCTS ARE FURRED IN TO ENSURE TOTAL OUTLET CAPACITY IS WITHIN 5% OF THE QUANTITY BEING SUPPLIED BY THE AIR SYSTEMS.

1.14 ELECTRIC MOTORS AND WIRING

CONTRACTOR TO REVIEW ALL EQUIPMENT REQUIRING ELECTRICAL HOOK-UP WITH ELECTRICAL CONTRACTOR AND ELECTRICAL DRAWINGS PRIOR TO ORDERING EQUIPMENT. CONFIRM ALL ELECTRICAL CHARACTERISTICS AS REQUIRED.

SUPPLY ALL MECHANICAL EQUIPMENT WITH ELECTRIC MOTORS AS REQUIRED.

THE ELECTRICAL SUBCONTRACTOR SHALL BE RESPONSIBLE TO SUPPLY ALL MOTOR STARTERS AND DISCONNECT SWITCHES FOR ALL MOTORS FOR THE PROJECT, ALL LINE VOLTAGE WIRING TO STARTERS AND STARTERS TO MOTORS EXCEPT ON PREWIRED PACKAGED EQUIPMENT.

1.15

CONTROLS (FAN SWITCHES) CONNECTED TO MECHANICAL EQUIPMENT SHALL BE SUPPLIED BY THE MECHANICAL TRADE AND SHALL BE INSTALLED, WIRED IN AND CONNECTED BY THE DIVISION 15 TRADES.

1.16 RECORD "AS-BUILT" DRAWINGS

KEEP IN THE JOB OFFICE AN EXTRA SET OF WHITE PRINTS AND SPECIFICATIONS ON WHICH ALL CHANGES AND DEVIATIONS SHALL BE RECORDED DAILY. AT COMPLETION OF THE PROJECT, TURN OVER TO THE ENGINEER THREE SETS OF NEAT AS-BUILT DRAWINGS AND SPECIFICATIONS. THESE EXTRA SETS OF WHITE PRINT AND SPECIFICATIONS SHALL BE PROVIDED BY THE ARCHITECT.

1.17 SHOP DRAWINGS

BEFORE FABRICATION OF ANY MATERIALS OR EQUIPMENT, SUBMIT A MINIMUM OF SIX (6) COMPLETE SETS OF DRAWINGS AND DATA SHEETS COVERING ALL ITEMS OF EQUIPMENT FURNISHED AND INTENDED FOR INSTALLATION.

THE ENGINEER'S REVIEW SHALL NOT RELIEVE THIS CONTRACTOR FROM RESPONSIBILITY TO PROVIDE MATERIALS AND EQUIPMENT IN ACCORDANCE WITH THE DESIGN INTENT AND CONTRACT DOCUMENTS. ALL DIMENSIONS AND SUITABILITY FOR SITE CONDITIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR, ALL ELECTRICAL CHARACTERISTICS MUST BE COORDINATED WITH THE ELECTRICAL SUB-CONTRACTOR.

REPAIR ANY TEMPORARY EQUIPMENT USED FOR TEMPORARY HEAT, TO THE FULL SATISFACTION OF THE OWNER.

1.18 STANDARD OF WORKMANSHIP AND MATERIALS

MAKE AND QUALITY OF MATERIALS USED ARE SUBJECT TO APPROVAL BY THE SHALL BE FULLY OPERATIONAL AND ANY DEFICIENCIES SHALL BE IDENTIFIED TO ENGINEER.

ALL DEFICIENCIES SHALL BE COMPLETED WITHIN 2 WEEKS AFTER SUBSTANTIAL COMPLETION. FAILURE TO COMPLETE WORK WITHIN THE TIME FRAME WILL RESULT IN WORK BEING DONE BY THE OWNER AND THE COST BORNE BY THE CONTRACTOR.

1.19 EQUIPMENT CLEANUP

DUCTS AND EQUIPMENT SHALL BE THOROUGHLY CLEANED OF DIRT, CUTTINGS AND OTHER FOREIGN SUBSTANCES. DISCONNECT, CLEAN AND RECONNECT WHENEVER NECESSARY FOR THE PURPOSE OF LOCATING AND REMOVING OBSTRUCTIONS. REPAIR WORK DAMAGED IN THE CAUSE OF REMOVING OBSTRUCTIONS.

ALL MECHANICAL (DIVISION 15) MATERIALS TO BE DEMOLISHED SHALL BE REMOVED AND DISPOSED OF OFF-SITE BY THIS DIVISION 15. ACCORDANCE WITH ALL LOCAL, PROVINCIAL AND FEDERAL ENVIRONMENTAL REGULATIONS.

1.20 GUARANTEE

THE MECHANICAL SUBCONTRACTOR, AS A CONDITION PRECEDENT TO FINAL PAYMENT AFTER COMPLETION OF HIS WORK, SHALL GIVE OWNER A WRITTEN GUARANTEE WARRANTING ALL APPARATUS FURNISHED UNDER THE CONTRACT FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE OF HIS WORK BY THE ARCHITECT AND ENGINEER.

ATTEND IMMEDIATELY, AT NO COST TO OWNER, TO ANY AND ALL DEFECTS OCCURRING DURING THE WARRANTEE PERIOD.

1.21 OPERATION AND MAINTENANCE DATA

FURNISH THREE SETS OF OPERATING AND MAINTENANCE DATA FOR ALL EQUIPMENT AND SYSTEMS. DATA SHALL BE ASSEMBLED IN BOOK FORM WITH HARD COVER AND INDEX, IDENTIFY FRONT COVER WITH NAME AND LOCATION OF THE PROJECT, CONSULTING ENGINEER AND CONTRACTOR. PRIOR TO SUBSTANTIAL COMPLETION SUBMIT ONE COPY TO ENGINEER FOR APPROVAL.

1.22 APPROVALS

THE PRICE SUBMITTED FOR THIS CONTRACT SHALL BE BASED ON THE USE OF MATERIALS AND EQUIPMENT SPECIFIED. IF THIS CONTRACTOR WISHES TO QUOTE ON EQUIVALENT MATERIALS AND EQUIPMENT, HE MUST QUOTE ON PRODUCTS APPROVED BY THE ENGINEER IN WRITING, AS AN EQUIVALENT TO THE PRODUCT SPECIFIED.

THIS CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY ADDITIONAL WORK OR MATERIALS REQUIRED BY THE MECHANICAL TRADE OR OTHER CONTRACTORS TO ACCOMMODATE APPROVED EQUIVALENT MATERIALS OR EQUIPMENT. EXTRAS SHALL NOT BE APPROVED TO COVER SUCH WORK.

1.23 VALUATION OF CHANGES

FOR EACH CHANGE, SUBMIT A COMPLETE, ITEMIZED BREAKDOWN OF LABOUR AND MATERIAL AT NET COST, SHOWING QUANTITIES, UNIT COST, HOURS PER EACH ITEM INSTALLED, PROFIT, OVERHEAD ETC., ONLY THE NET DIFFERENCE BETWEEN AN EXTRA AND A CREDIT WILL BE SUBJECT TO OVERHEAD AND PROFIT MARK UP.

2.0 LANDLORD APPROVAL

2.1. CONFORM TO SCHEDULE 'C' OF LANDLORD I TENANT LEASE AGREEMENT.

2.2 CONFORM TO BASE BUILDING STANDARDS AND SPECIFICATIONS AND ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF ALL GOVERNING AUTHORITIES AND LOCAL BYLAWS.

2.3 ALL WORK MUST COMPLY WITH THE LANDLORDS GUIDELINES WHERE APPLICABLE.

2.4 OBTAIN APPROVAL FROM THE LANDLORD BEFORE CUTTING ANY STRUCTURAL WALLS OR FLOORS. CUTTING AND DRILLING SHALL ONLY BE AT TIMES ALLOWED BY THE LANDLORD. CHECK AND VERIFY THE LOCATION OF EXISTING MECHANICAL AND ELECTRICAL SERVICES IN WALLS AND BELOW THE FLOOR SLAB IN ALL AREAS REQUIRING CORE DRILLING AND CUTTING. PROTECT ALL TENANT AREAS WHERE CORE DRILLING OCCURS. PROVIDE X-RAY STUDY BEFORE DRILLING OR CUTTING WHERE REQUIRED BY THE LANDLORD.

2.5 SEAL TO BE AIR-TIGHT AROUND ALL DUCTWORK AND PIPING PENETRATIONS THROUGH PARTITIONS, BAFFLES ABOVE CEILINGS, AND THROUGH FLOORS THAT ARE NOT FIRE RATED.ALL SHUTDOWN, DRAINING AND FILLING OF ANY PORTION OF THE EXISTING BASE BUILDING SYSTEMS SHALL BE PERFORMED BY THE LANDLORD'S BUILDING OPERATIONS STAFF AND SHALL BE CO-ORDINATED WITH THE LANDLORD FOR TIME AND DURATION OF INTERRUPTIONS. COMPLY WITH ALL OF THE LANDLORD'S INSTRUCTIONS, AND INCLUDE FOR ALL COSTS FOR THIS WORK IN THE TENDER PRICE.

2.6. PROVIDE TEMPORARY FILTERS, 1 IN. THICK DISPOSABLE MEDIA TYPE, OVER ALL RETURN AIR OPENINGS IN THE BASE BUILDING H.V.A.C. SYSTEMS THAT REMAIN IN OPERATION DURING CONSTRUCTION.
MAINTAIN AND REPLACE THE TEMPORARY FILTER MEDIA AS REQUIRED TO PREVENT CONSTRUCTION DUST FROM FOULING THE BASE BUILDING EQUIPMENT. REMOVE SAME AT THE COMPLETION OF CONSTRUCTION. FILTERS IN ALL BASE BUILDING AIR HANDLING EQUIPMENT I.E., AIR HANDLING UNITS, INDUCTION UNITS, FAN COIL UNITS, ETC., SHALL BE REPLACED AFTER CONSTRUCTION IS COMPLETED.

2.7. PRIOR TO OPERATING ANY EXISTING OR NEW EQUIPMENT DURING ANY STAGE OF CONSTRUCTION,
APPROVAL FROM THE LANDLORD MUST BE RECEIVED IN WRITING.

2.8 ALL EXISTING EQUIPMENT, MATERIALS AND ASSOCIATED CONTROLS NOT USED IN THIS CONTRACT SHALL BE PACKAGED AND TURNED-OVER TO THE LANDLORD.

2.9 PROVIDE DUCT SEALER ON ALL NEW DUCT JOINTS. TAPE IS NOT PERMITTED.

2.10 CONTRACTOR IS RESPONSIBLE TO COORDINATE BETWEEN MECHANICAL, ELECTRICAL AND ARCHITECTURAL DRAWINGS.

3.0 PLUMBING

3.1 PIPE AND FITTINGS

ALL PLUMBING WORK TO CONFORM TO OBC, ONTARIO WATER REGULATION ACT NO. 615/64, CONSTRUCTION SAFETY ACT AND REGULATIONS OF THE CITY AND LOCAL AUTHORITIES.

COORDINATE PIPE INSTALLATION WITH ELECTRICAL CONDUITS, DUCTS AND STRUCTURAL MEMBERS. OFFSET PIPE AS REQUIRED. ALL REVISIONS SHALL BE MARKED ON AS-BUILT DRAWINGS.
CONTRACTOR SHALL FIELD VERIFY EXISTING PLUMBING AND DRAINAGE INVERTS BEFORE PROCEEDING WITH THE WORK. ALL EXISTING BURIED SERVICE LOCATIONS ON DRAWINGS ARE APPROXIMATE ONLY. REPORT ANY DISCREPANCIES TO THE MECHANICAL ENGINEER IMMEDIATELY.

CONTRACTOR TO CARRY OUT IN HIS PRICE A PIPING SYSTEM TEST PRIOR TO INSULATION OR COVERING OF PIPING SYSTEM. PROVIDE TEST REPORT.
DRAINAGE AND VENT PIPING ABOVE GRADE SHALL BE DWV COPPER OR CAST IRON WITH MECHANICAL JOINTS.

SANITARY DRAINS 1 1/2-INCH AND SMALLER MAY BE HARD TEMPERED COPPER DRAINAGE TUBE (DWV).

DOMESTIC HOT AND COLD WATER PIPING ABOVE GRADE AND INSIDE BUILDING SHALL BE TYPE L HARD COPPER. DO NOT INSTALL HOT AND COLD WATER PIPES IN EXPOSED EXTERIOR WALLS.
DOMESTIC PIPING SOLDER SHALL BE LEAD FREE.
PROVIDE PIPE SLEEVES FOR ALL PIPING PASSING THROUGH FLOOR SLAB. PIPE SLEEVES WILL PROJECT 2-INCH ABOVE FINISHED FLOOR LEVEL AND BE CAULKED TO MAKE WATER TIGHT PENETRATION.
WHERE DISSIMILAR METALS ARE JOINED OR SUPPORTED, THE PIPING SHALL HAVE NON CONDUCTING TYPE CONNECTIONS OR HANGERS TO PREVENT GALVANIC CORROSION.
ALL PIPING PASSING THROUGH FIRE SEPARATIONS TO BE FIRE STOPPED TO MAINTAIN ORIGINAL FIRE RATING.
ALL PLUMBING ROUGH-INS SHALL BE INSPECTED BY THE ENGINEER. CONTRACTOR TO INFORM ENGINEER PRIOR TO CONCEALING.

3.2 PIPE INSULATION

PROVIDE INSULATION C/W VAPOUR BARRIER TO ALL DOMESTIC HOT AND COLD WATER LINES, PIPE INSULATION SHALL BE 1-INCH THICK, EXCEPT FOR 3/4-INCH PIPE SIZES OR LESS, USE 1/2-INCH THICK INSULATION. COVER EXPOSED PIPES WITH PVC JACKETS.

FINISH INSULATION NEATLY AT HANGERS, SUPPORTS AND OTHER PROTRUSIONS. INSULATE FITTINGS AND VALVES.

3.3 CLEANOUTS

PROVIDE CLEANOUTS WHERE SHOWN AND AT ALL LOCATIONS AS REQUIRED BY THE ONTARIO CODE AND GUIDELINE FOR PLUMBING

3.4 UNIVERSAL ACCESS DOOR FOR WALLS AND CEILINGS

ACUDOR SERIES UF-5000 ACCESS DOORS, 14 GA. (1.7MM) STEEL, RUST RESISTANT, CONTINUOUS CONCEALED HINGE, WITH POSITIVE AND SELF-OPENING SCREWDRIVER OPERATED LOCK. DOORS IN TILE WALLS SHALL BE STAINLESS STEEL AND SHALL SUIT TILE PATTERN. ALL OTHER PANELS SHALL BE PRIME PAINTED STEEL. MINIMUM SIZE OF PANELS SHALL BE 12" X 18" (300MM X 450MM). WHEREVER POSSIBLE 24" X 24" (600MM X 600MM) PANELS SHALL BE USED.

4.0 HVAC

4.1 DUCTWORK

DUCTWORK SHALL BE GALVANIZED STEEL AND SHALL BE LOCK FORMING QUALITY. ALL DUCTWORK SHALL BE CONSTRUCTED, BRACED, CONNECTED AND JOINTED AS RECOMMENDED IN THE LATEST ISSUE OF ASHRAE GUIDE AND THE DUCT CONSTRUCTION STANDARDS ISSUED BY THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION INC. (SMACNA). ALL DUCTWORK SHALL BE INSTALLED TO CONFORM TO THE ONTARIO BUILDING CODE, NFPA PAMPHLETS 90A AND 91 AND IN ACCORDANCE WITH APPLICABLE CODES. THE MINIMUM SHEET METAL THICKNESS FOR DUCTS SHALL BE AS FOLLOWS:

RECTANGULAR DUCTS

MAXIMUM WIDTH	GAUGE
UP TO 12-INCH	26
12 TO 30-INCH	24
31 TO 55-INCH	22

ROUND DUCTWORK SHALL BE SUSPENDED BY BAND IRON HANGERS.

RECTANGULAR DUCTWORK SHALL BE SUPPORTED AT MAXIMUM 8-FT SPACING.

ALL DUCTS ASSOCIATED WITH FANS AND OTHER MACHINERY SHALL BE INSTALLED WITH CANVAS FLEXIBLE CONNECTIONS ON INLET AND OUTLET OPENINGS.

ALL FANS AND AIR HANDLING UNITS SHALL BE MOUNTED WITH VIBRATION ISOLATORS.

4.2 VOLUME DAMPERS

INSTALL VOLUME DAMPERS AT ALL AIR INLETS AND OUTLETS AND WHERE REQUIRED FOR BALANCING, SINGLE BLADE WITH LOCKING QUADRANT FOR DUCTS LESS THEN 12-INCH DEEP. PROVIDE MULTI-BLADE OPPOSED BLADE DAMPERS FOR DUCTS GREATER THEN 12-INCH DEEP.

PROVIDE MULTI-BLADE OPPOSED BLADE BALANCING DAMPERS WHERE SHOWN.

4.3 AIR OUTLETS

PROVIDE ALL AIR OUTLETS COMPLETE WITH ACCESSORIES AS SPECIFIED HEREIN AND INDICATED ON THE DRAWINGS. COORDINATE LOCATIONS OF ALL AIR OUTLETS WITH LIGHTING AND CEILING GRID. THE POSITIONS INDICATED ARE APPROXIMATE ONLY. THIS CONTRACTOR SHALL CHECK THE LOCATION OF ALL OUTLETS AND SHALL MAKE SUCH ADJUSTMENTS IN POSITION AS NECESSARY TO CONFORM WITH ARCHITECTURAL FEATURES AT NO EXTRA COST TO OWNER.

PROVIDE BALANCING DAMPERS NEAR EACH SUPPLY AIR OUTLET.
SIZES AND AIR VOLUME AS SCHEDULED.

4.4 AIR SYSTEM TESTING , BALANCING AND COMMISSIONING

BALANCE SYSTEM FOR RATED AIR FLOW, ROOM TEMPERATURE CONTROL AND CURRENT DRAW AFTER INSTALLATION IS COMPLETE AND IN FULL WORKING ORDER. ADJUST CONTROL FOR CONTINUOUS AIR CIRCULATION AND MINIMUM ENERGY CONSUMPTION. ADJUST FAN SPEED AS REQUIRED TO OBTAIN SPECIFIC PERFORMANCES. CONTRACTOR TO BALANCE SYSTEM FOR OUTSIDE AIR AS GIVEN IN UNIT PERFORMANCE.

COMMISSION ENTIRE MECHANICAL SYSTEM INCLUDE START UP REPORT IN MAINTENANCE MANUAL

THE BALANCING CONTRACTOR SHALL MAKE NECESSARY ADJUSTMENTS, REPLACE MOTOR AND FAN SHEAVES AND BELTS UPON BALANCING OF EXISTING AND NEW AIR SYSTEMS.
SYSTEMS.

4.5 CONTROLS BY MECHANICAL CONTRACTOR

PROVIDE SYSTEM COMPONENTS CONSISTING OF THERMOSTATS, INDICATING DEVICES, INTERFACE EQUIPMENT AS REQUIRED TO OPERATE MECHANICAL SYSTEM AND TO PERFORM FUNCTIONS SPECIFIED.

PROVIDE TEMPERATURE SENSORS WHERE SHOWN ON THE DRAWINGS.

VERIFY LOCATION OF ALL THERMOSTATS AND SENSORS BEFORE INSTALLATION. LOCATE THERMOSTAT AT 47-INCHES AFF.

CONTRACTOR TO PROVIDE ALL CONTROL COMPONENTS AND LOW VOLTAGE WIRING TO ENSURE A COMPLETE AND OPERATIONAL SYSTEM.

Contractor must check and verify all dimensions and be res- ponsible for same, reporting any discrepancies to the Engineer before commencing work.
Prints shall not be used for construction until signed 'Approved For Construction' by the Engineer.
Prints are not to be scaled.
All drawings, prints and specifications are the property of the Engineer and shall be returned to him on completion of the work.
All work shall be performed in accordance with the latest edition of the ONTARIO BUILDING CODE, NATIONAL BUILDING CODE and regulatory regulations of Authorities having Jurisdiction.
These notes are to be read in conjunction with all drawings and specifications.

The Contractor shall check all dimensions and other data from the job and report any discrepancies to the Architects before proceeding.

No.	Date:	Revision:	D'wn.	Ch'd.
1	NOV 03, 2023	ISSUED FOR PERMIT		
2	NOV 21, 2023	ISSUED FOR PERMIT		
3	NOV 30, 2023	ISSUED FOR PERMIT		
4	DEC 04, 2023	ISSUED FOR PERMIT		
5	DEC 07, 2023	ISSUED FOR PERMIT		
6	JAN 18, 2024	ISSUED FOR PERMIT		
7	JAN 29, 2024	ISSUED FOR PERMIT		
8	FEB 14, 2024	ISSUED FOR TENDER		
9	FEB 22, 2024	ISSUED FOR TENDER		

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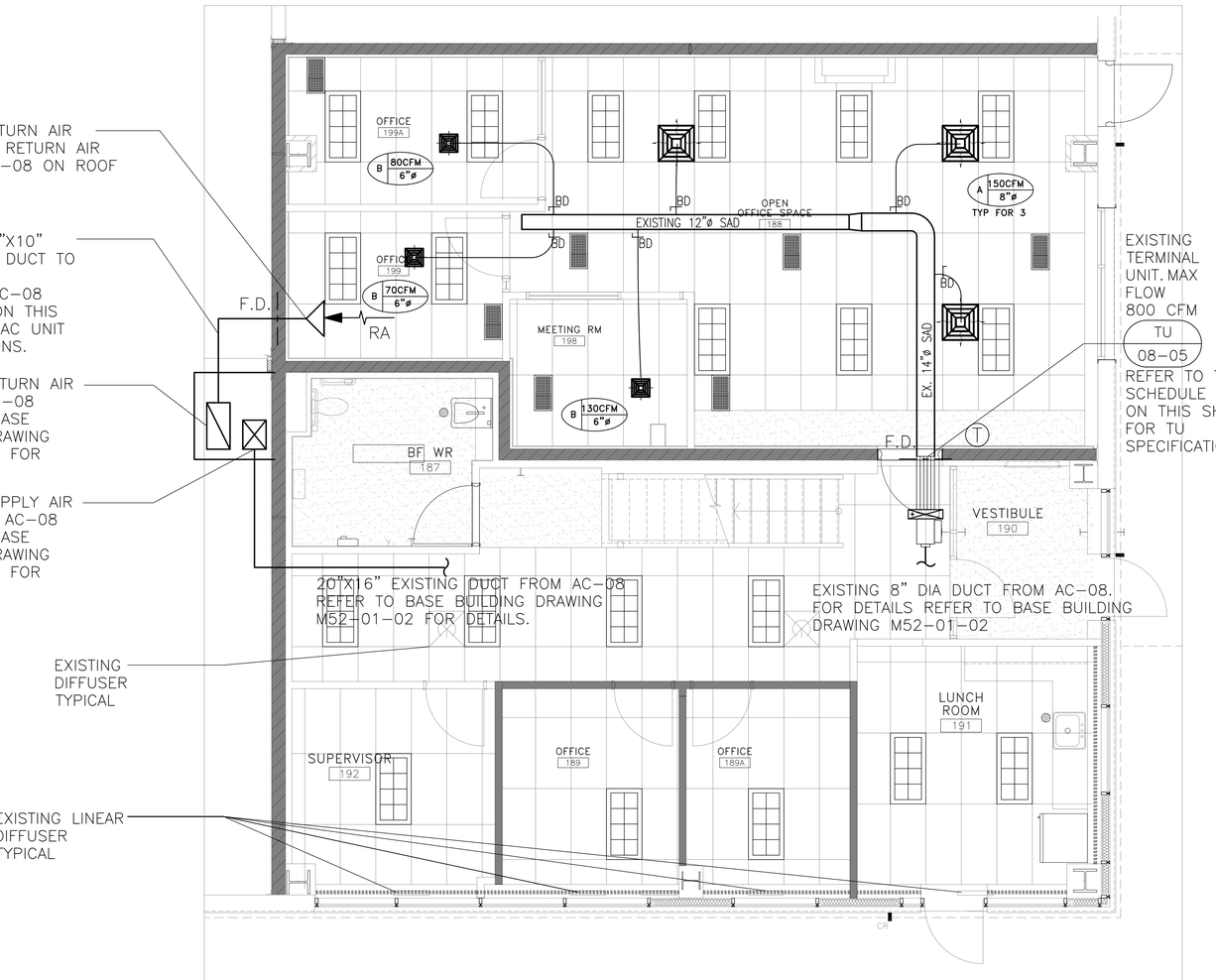
Project:
MES - TRANSIT RENOVATION
430 Wyecroft Rd., Oakville , ON L6K 2G7

Sheet title:
GENERAL SPECIFICATION

D'wg. no.
M-02

Scale:	1/4" = 1'-0"	Date:	NOV 03, 2023
DRAWN:	I.A.	REVIEW:	M.A.
DESIGN:		Checked:	



AIR CONDITIONING UNITS (AC)

Mark No.		AC-1	AC-2	AC-3	AC-4	AC-5	AC-6	AC-7	AC-8	AC-9
Revision Date		NOV. 2009	NOV. 2009	NOV. 2009	NOV. 2009	NOV. 2009	NOV. 2009	NOV. 2009	NOV. 2009	NOV. 2010
Service		Admin Offices 1	Fitness Rm.	Admin Offices 2	Admin Offices 3	Maint. Offices	Stores	Stores	Parking Offices	IT Room
Drawing Location		M53-01-00	M53-01-00	M53-01-00	M53-01-00	M53-01-00	M53-01-00	M53-01-00	M53-01-00	M52-01-01 & M53-01-00
General Requirements										
Unit Footprint (LxWxH)	mm	3000x2130x1450 (H)	1400x1060x910	3000x2130x 1450 (H)	1460x762x910 1342x457x916 (H)	1520x1078x 1000 (H)	3000x2130x1450 (H)	1520x1078x1000 (H)	1520x1078x 1000 (H)	1460x762x 910 1342x457x916 (H)
Unit MAX Weight	kg	1200	320	1200	110 EACH	360	1200			110 EACH
Seismic Restraint		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Manufacturer		McQuay	McQuay	McQuay	Lastell	McQuay	McQuay	McQuay	McQuay	Lastell
Model		WRGD13D0	WRGD15T2	WRGD13D0	SPLIT MAX4415E 2 W/M36D1W PFC 0.37A (NOTE 1 AND 4)	WRGD15T2	WRGD13D0	WRGD13B0	WRGD11B0	SPLIT MAX4415E 2 W/M63D1W PFC 0.37A (NOTE 1 AND 8)
Fans		RETURN / SUPPLY	RETURN / SUPPLY	RETURN / SUPPLY	RETURN / SUPPLY	RETURN / SUPPLY	RETURN / SUPPLY	RETURN / SUPPLY	RETURN / SUPPLY	RETURN / SUPPLY
Total Capacity	l/s	2620 / 3760	1175 / 1175	2580 / 3490	580	705 / 1550	4324 / 4700	4324 / 4788	1170 / 1927	580
Min Fresh Air	l/s	940	530	930		845	1670	1670	750	
External Static Pressure	Pa	NOTE 7 / 311	NOTE 7 / 311	NOTE 7 / 311	75	NOTE 7 / 311	311	311	NOTE 7 / 311	75
Cooling										
Sensible Capacity	kW	61	14.4	52	7.9	22.6	63.5	63.5	27	7.9
Total Capacity	kW	82.6	22.3	74	9.7	32	70	70	36	9.7
Evaporator EAT (db)	°C	26.2	25.8	28.7	--	26	26.0	26.0	26.0	--
Evaporator EAT (wb)	°C	20.1	20.3	20.1	--	20.6	18.6	18.6	20.0	--
Evaporator LAT (db)	°C	14.4	15.4	14.5	22	14.4	15.0	15.0	14.5	22
Evaporator LAT (wb)	°C	13.7	14.9	13.7	15.5	13.7	14.4	14.4	13.7	15.5
Location		ROOF	ROOF	ROOF	INSIDE	ROOF	ROOF	ROOF	ROOF	INSIDE & ROOF
Summer Heat Recovery (Heat Pipe)	kW	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Refrigerant For Heat Pump		R410a	R410a	R410a	R407C	R410	R410	R410	R410	R407C
Heating										
Type		Geothermal	Geothermal	Geothermal	Electric	Geothermal	Geothermal	Geothermal	Geothermal	Electric
Modulation		Y	Y	Y	Y	Y	Y	Y	Y	Y
Capacity (GAppl) (Min)	kW	46	26	77	8	33	73	73	38	8
Filter										
Filter Type		50 mm PLEATED FILTERS	50 mm PLEATED FILTERS	50 mm PLEATED FILTERS	50 mm PLEATED FILTERS	50 mm PLEATED FILTERS	50 mm PLEATED FILTERS	50 mm PLEATED FILTERS	50 mm PLEATED FILTERS	50 mm PLEATED FILTERS
Qty of Filter	l/s	4.6	1.3	4.2	N/A	1.6	4.0	4.0	2.0	N/A
MERV Rating	No	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Humidifier (Steam)		N/A	N/A	N/A	2	N/A	N/A	N/A	N/A	2
Power		N/A	N/A	N/A	2.5	N/A	N/A	N/A	N/A	2.5
Motor / Power										
Power	HP	5	1	5		1	5	5	2	
MCA	A	40	13	40		9.9	35.5	35.5	20.6	
FLC	A	30	10	41.3	43	8.2	33	33	16	43
Volts/Phase/Hz		575/3/60	575/3/60	575/3/60	208/3/60	575/3/60	575/3/60	575/3/60	575/3/60	208/3/60
Lifeload Disconnect		Y	Y	Y	Y	Y	Y	Y	Y	Y
CONTROLS										
Control Sequence	CS	701	702	701	701	701	702	702	701	701 (NOTE 10)
Operating Controls										
Start/Stop		OEM & BMS	OEM & BMS	OEM & BMS	OEM & BMS	OEM & BMS	OEM & BMS	OEM & BMS	OEM & BMS	OEM & BMS
Fire Alarm Stop		Y	Y	Y	Y	Y	Y	Y	Y	Y
Device (See A Notes:)										
Equipment Started by		BMS SCHEDULE/OPERATOR	BMS SCHEDULE/OPERATOR	BMS SCHEDULE/OPERATOR	BMS SCHEDULE/OPERATOR	BMS SCHEDULE/OPERATOR	BMS SCHEDULE/OPERATOR	BMS SCHEDULE/OPERATOR	BMS SCHEDULE/OPERATOR	BMS SCHEDULE/OPERATOR
Status										
Current Transducer		Y	Y	Y	Y	Y	Y	Y	Y	Y
ELECTRICAL COORDINATION										
General Requirements										
Normal Power		Y	Y	Y	Y	Y	Y	Y	Y	Y
Emergency Power		Y	Y	Y	Y	Y	Y	Y	Y	Y
Disconnect provided by		MANUFACTURER	MANUFACTURER	MANUFACTURER	MANUFACTURER	MANUFACTURER	MANUFACTURER	MANUFACTURER	MANUFACTURER	MANUFACTURER
Starter (refer to Controls Schedule for Operating Controls)										
Standard Starter		NOTE 1 & 8	NOTE 1 & 8	NOTE 1 & 8	NOTE 1	NOTE 1	NOTE 1	NOTE 1	NOTE 1	NOTE 1
Volts/Phase/Hz					208/3/60					208/3/60
MIN 400mm ROOF CURB		BY MECH. CONTRACTOR	BY MECH. CONTRACTOR	BY MECH. CONTRACTOR	BY MECH. CONTRACTOR	BY MECH. CONTRACTOR	BY MECH. CONTRACTOR	BY MECH. CONTRACTOR	BY MECH. CONTRACTOR	N/A SEE NOTE 9

Notes:
1. Starter is supplied with equipment.
2. Coil perf. based on R-410a refrigerant.
3. Unit base and curb to be seismically restrained and provided with predrilled holes for site fastening.
4. Complete piping and wiring of split unit to M.Mechanical.
5. All motors 0 HP and above to be premium efficiency. (See Spec.230513).
6. 4-Ah/ controls to be supplied by manufacturer and to be BMS compatible.
7. Return fan duct mounted for AC-1, 3, 5 & 9 see fan schedule.
8. Control microprocessor with equipment.
9. Condensing unit to be wall mounted c/w hot dip galvanized steel frame by mechanical contractor. Seismic restraints requirements to be coordinated with specialized contractor.
10. Provide TE, control panel, ACB controller serving both AC-8 and AC-9 and BMS connection. Wiring from units to ACB controller by controls contractor (a total of 4 wires required from each unit to ACB).

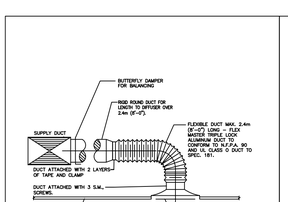
TERMINAL UNITS (TU)

Mark No.		TU-05-01	TU-05-02	TU-05-03	TU-05-04	TU-05-05	TU-05-06	TU-05-07	TU-05-08	TU-05-09	TU-05-01	TU-05-02	TU-07-01	TU-08-01	TU-08-02	TU-08-03	TU-08-04	TU-05-05
Revision Date		NOV. 2009	NOV. 2009	NOV. 2009	NOV. 2009	NOV. 2009	NOV. 2009	NOV. 2009	NOV. 2009	NOV. 2009	NOV. 2009	NOV. 2009	NOV. 2009	NOV. 2009	NOV. 2009	NOV. 2009	NOV. 2009	NOV. 2009
Service		Maintenance Offices AC-05 TO AC-08																
Drawing Location		M52-01-02	M52-01-02	M52-01-02	M52-01-02	M52-01-02	M52-01-02	M52-01-02	M52-01-01	M52-01-01	M52-01-01	M52-01-02	M52-01-02	M52-01-01	M52-01-02	M52-01-02	M52-01-02	M52-01-02
Performance																		
Terminal Unit Type																		
Max. Primary Design Airflow	Lps	80	79	160	47	114	125	364	94	71	140	140	400	546	381	520	282	376
Minimum Primary Airflow	Lps	24	24	48	14	34	38	110	28	21	45	45	120	164	114	16	85	113
Inlet Primary Diameter	mm								N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Attenuator Length	mm	914	914	914	914	914	914	914	914	914	N/A	N/A	N/A	914	914	914	914	914
Max. NC with Attenuator	NC																	
Manufacturer		Johnson Controls	Johnson Controls	Johnson Controls	Johnson Controls	Johnson Controls	Johnson Controls	Johnson Controls	Johnson Controls	Johnson Controls	Johnson Controls	Johnson Controls	Johnson Controls	Johnson Controls	Johnson Controls	Johnson Controls	Johnson Controls	Johnson Controls
Model		VVT	VVT	VVT	VVT	VVT	VVT	VVT	VVT	VVT	VVT	VVT	VVT	VVT	VVT	VVT	VVT	VVT
Size		5	5	8	5	6	6	10	5	5	6	6	10	12	10	10	8	10
Reheat Coil																		
Type		N/A	N/A	N/A	N/A	N/A	FINNED TUBULAR	FINNED TUBULAR	N/A	N/A	N/A	N/A	N/A	FINNED TUBULAR	FINNED TUBULAR	FINNED TUBULAR	FINNED TUBULAR	FINNED TUBULAR
Size	mm x mm	N/A	N/A	N/A	N/A	N/A	406x254	356x318	N/A	N/A	N/A	N/A	N/A	406x381	356x318	305x203	356x318	356x318
Electric Coil Rating	kW	N/A	N/A	N/A	N/A	N/A	1.5	2.5	N/A	N/A	N/A	N/A	N/A	5	2.5	3	2	2
Volts/Phase/Hz		N/A	N/A	N/A	N/A	N/A	575/3/60	575/3/60	N/A	N/A	N/A	N/A	N/A	575/3/60	575/3/60	575/3/60	575/3/60	575/3/60
CONTROLS																		
Control Sequence	CS	701	701	701	701	701	823	823	825	825	823	823	823	823	823	823	823	823
Electric Reheat Control																		
SCR Control		N/A	N/A	N/A	N/A	N/A	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
ELECTRICAL COORDINATION																		
General Requirements																		
Normal Power		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Emergency Power		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Disc connect provided by		Manufact.	Manufact.	Manufact.	Manufact.	Manufact.	Manufact.	Manufact.	Manufact.	Manufact.	Manufact.	Manufact.	Manufact.	Manufact.	Manufact.	Manufact.	Manufact.	Manufact.
Volts/Phase/Hz		120/1/60	120/1/60	120/1/60	120/1/60	120/1/60	575/3/60	575/3/60	120/1/60	120/1/60	120/1/60	120/1/60	120/1/60	575/3/60	575/3/60	575/3/60	575/3/60	575/3/60

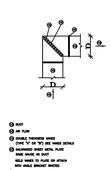
Notes:
1. Unit c/w disconnect, thermostat, transformer for controls
2. Elektrical reheat comes on at minimal air flow.

GENERAL NOTES:

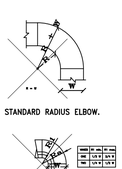
- CONTRACTOR TO CHECK EXACT LOCATIONS UPON SITE CONDITIONS. REVIEW ANY REVISIONS WITH CONSULTANT. AND COORDINATE WITH OTHER SERVICES.
- CONTRACTOR TO BALANCE THE SYSTEM BASED ON THE AIR VALUES AS SHOWN.
- ANY OPEN ENDED DUCTWORK FOUND IN CEILING SPACE SHALL BE CAPPED UNLESS NOTED OTHERWISE.



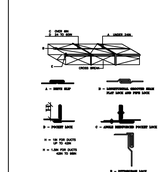
TYPICAL DIFFUSER CONNECTION DETAIL



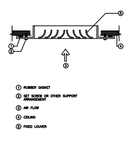
SINGLE SQUARE ELBOW.



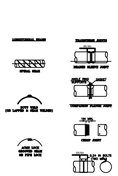
SINGLE ELBOW 90°



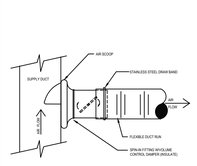
RECTANGULAR DUCT JOINTS AND SEAMES.



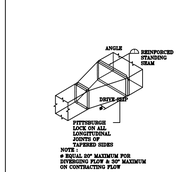
RETURN AIR GRILLE.



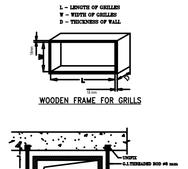
ROUND DUCT CONSTRUCTION.



TAKE OFF WITH VOLUME DUMBER



DETAIL–TAPERS AND OFFSETS



DUCT HANGING DETAIL

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9	FEB 22, 2024	ISSUED FOR TENDER		

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Project:

MES - TRANSIT RENOVATION

430 Wyecroft Rd., Oakville , ON L6K 2G7

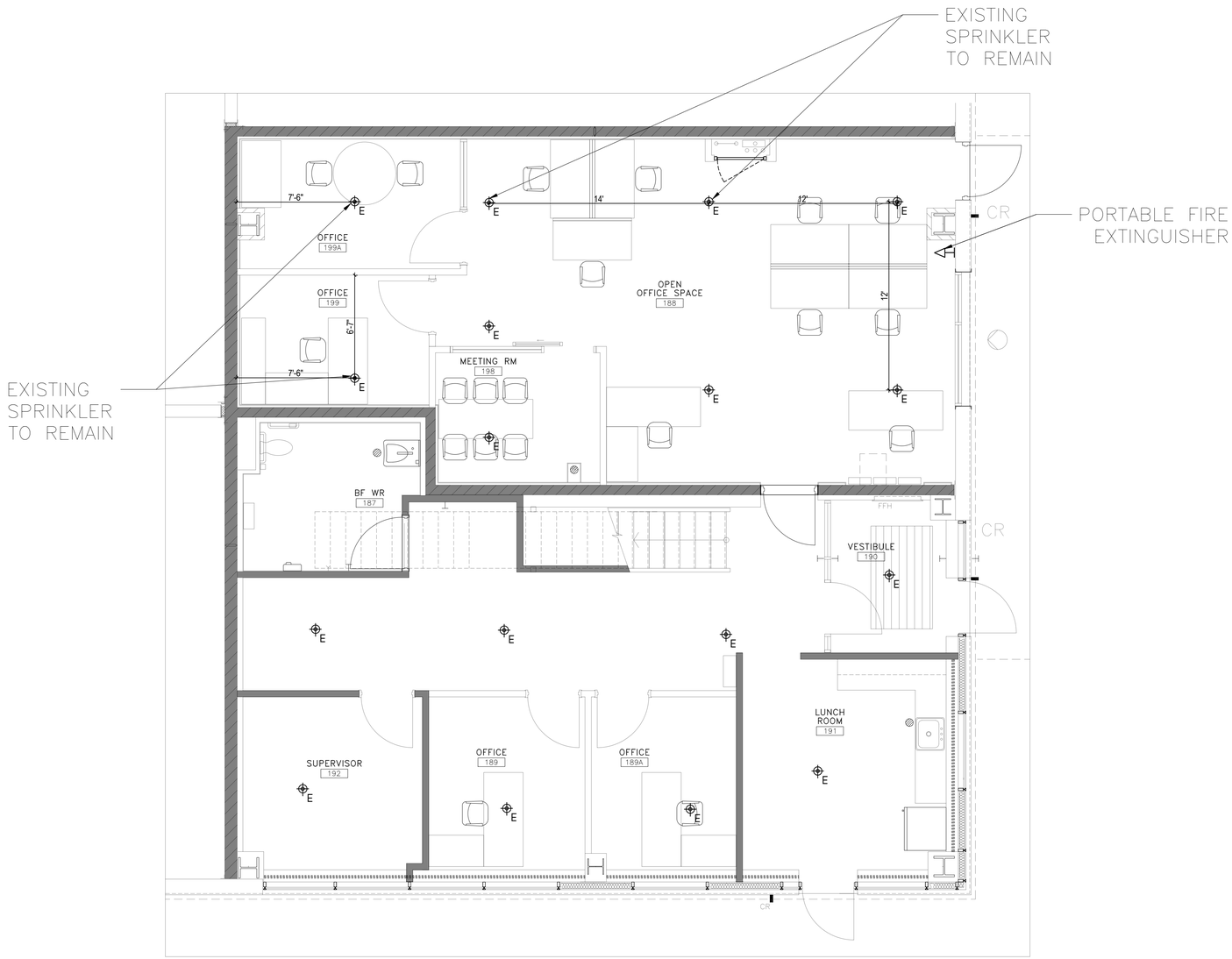
Sheet title:

HVAC LAYOUT
GROUND LEVEL

D'wg. no.

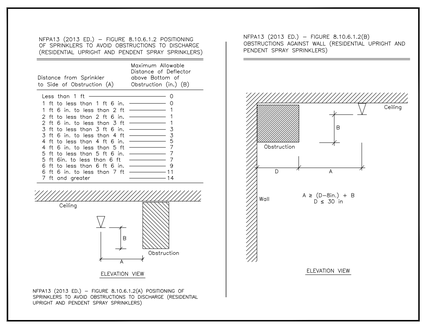
M-03

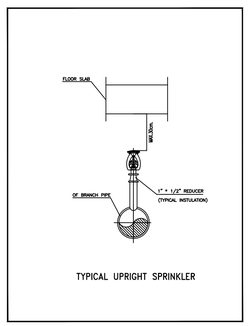
Scale: 1/4" = 1'-0"	Date: NOV 03, 2023
DRAWN: I.A.	REVIEW: M.A.
DESIGN:	Checked:



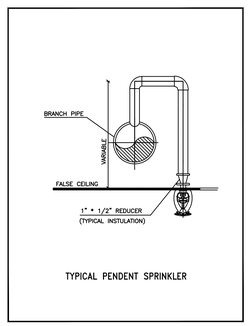
GENERAL NOTES:

- CONTRACTOR TO CHECK EXACT LOCATIONS UPON SITE CONDITIONS. REVIEW ANY REVISIONS WITH CONSULTANT. AND COORDINATE WITH OTHER SERVICES.
- HEAD LOCATION, HEAD QUANTITY, AND LAYOUT OF SPRINKLER SYSTEMS SHOWN ON DRAWINGS ARE TO ASSIST TENDER COORDINATION ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE ADEQUATE HEAD COVERAGE, HEAD QUANTITIES, PIPE SIZING, ZONING, AND VALVING FOR THE SYSTEM AS PER NFPA 13 HAZARD OCCUPANCIES, OWNER'S INSURERS' STANDARDS, AND AUTHORITIES HAVING JURISDICTION. INSTALL ADDITIONAL HEADS, VALVES, AND RESIZE PIPING AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER.
- SIZE REDUCTION OF SPRINKLER MAIN SHALL NOT BE ACCEPTED UNLESS APPROVED BY THE CONSULTANT. RE-ROUTING OF SPRINKLER MAIN SHALL BE APPROVED IN ADVANCE BY THE CONSULTANT.





TYPICAL UPRIGHT SPRINKLER



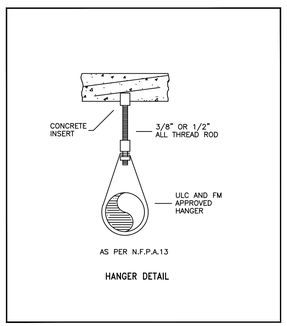
TYPICAL PENDENT SPRINKLER

Table 9.2.2.1(a) Maximum Distance Between Hangers (ft-in.) 2013 EDITION

	Nominal Pipe Size (in.)									
	¾	1	1¼	1½	2	2½	3	3½	4	5	6	8
Steel pipe except threaded lightwall	N/A	12-0	12-0	15-0	15-0	15-0	15-0	15-0	15-0	15-0	15-0	15-0
Threaded lightwall steel pipe	N/A	12-0	12-0	12-0	12-0	12-0	N/A	N/A	N/A	N/A	N/A	
Copper tube	8-0	8-0	10-0	10-0	12-0	12-0	15-0	15-0	15-0	15-0	15-0	15-0
CPVC	5-6	6-0	6-6	7-0	8-0	9-0	10-0	N/A	N/A	N/A	N/A	N/A
Ductile iron pipe	N/A	N/A	N/A	N/A	N/A	N/A	15-0	N/A	15-0	N/A	15-0	15-0

TYPICAL HANGER LOCATION
SPRINKLER BRANCH LINE
SPRINKLER MAIN
MAX.3 FT FOR 1" DIA. PIPE
MAX.4 FT FOR 1¼" DIA. PIPE
MAX.5 FT FOR 1½" DIA. AND LARGER PIPE
MAX.12 FT — 1" AND 1¼" DIA.
MAX.15 FT — 1½" DIA. AND LARGER PIPE

TYPICAL HANGER SPACING DETAIL



HANGER DETAIL

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MES - TRANSIT RENOVATION

430 Wyecroft Rd., Oakville ,
ON L6K 2G7

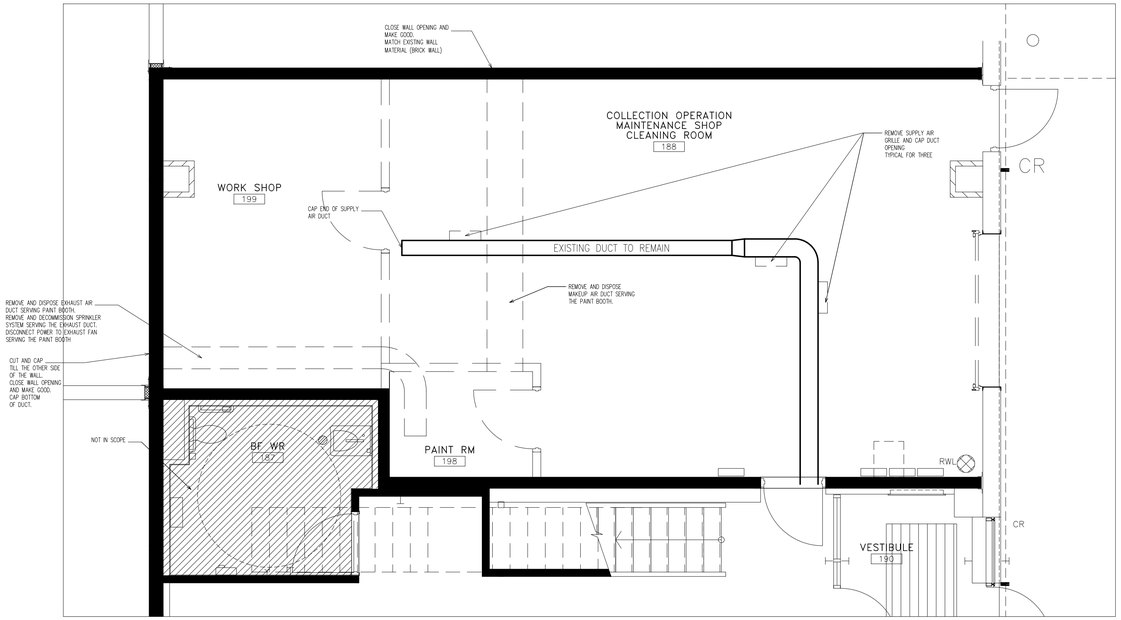
Sheet title:

SPRINKLER LAYOUT

D'wg. no.

M-04

Scale:	1/4" = 1'-0"	Date:	NOV 03, 2023
DRAWN:	I.A.	REVIEW:	M.A.
DESIGN:		Checked:	



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9	FEB 22, 2024	ISSUED FOR TENDER		

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MES - TRANSIT RENOVATION

430 Wyecroft Rd., Oakville ,
ON L6K 2G7

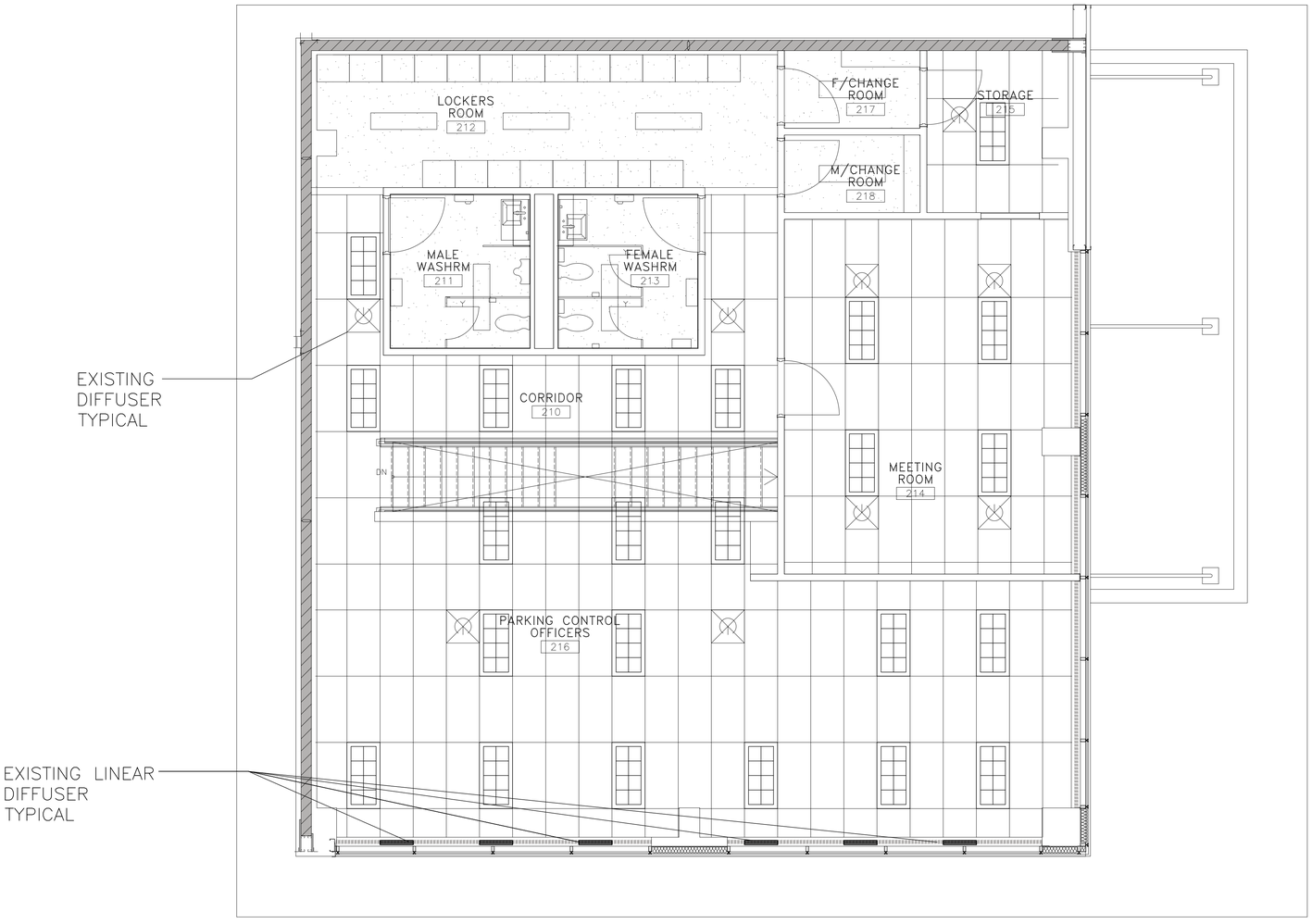
Sheet title:

MECHANICAL(HVAC) DEMOLISH LAYOUT

D'wg. no.

M-05

Scale:	1/4" = 1'-0"	Date:	NOV 03, 2023
DRAWN:	I.A.	REVIEW:	M.A.
DESIGN:		Checked:	



Contractor must check and verify all dimensions and be res- ponsible for same, reporting any discrepancies to the Engineer before commencing work.
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These notes are to be read in conjunction with all drawings and specifications.

The Contractor shall check all dimensions and other data from the job and report any discrepancies to the Architects before proceeding.

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9	FEB 22, 2024	ISSUED FOR TENDER		

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MES - TRANSIT RENOVATION

430 Wyecroft Rd., Oakville ,
ON L6K 2G7

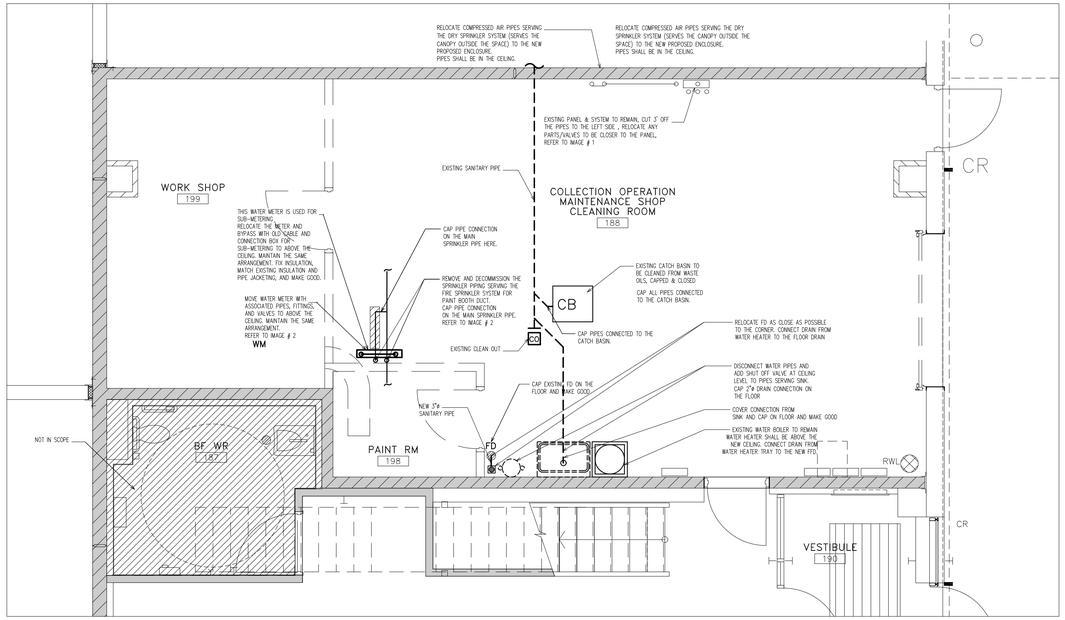
Sheet title:

HVAC LAYOUT
MEZZANINES LEVEL

D'wg. no.

M-06

Scale:	1/4" = 1'-0"	Date:	NOV 03, 2023
DRAWN:	I.A.	REVIEW:	M.A.
DESIGN:		Checked:	



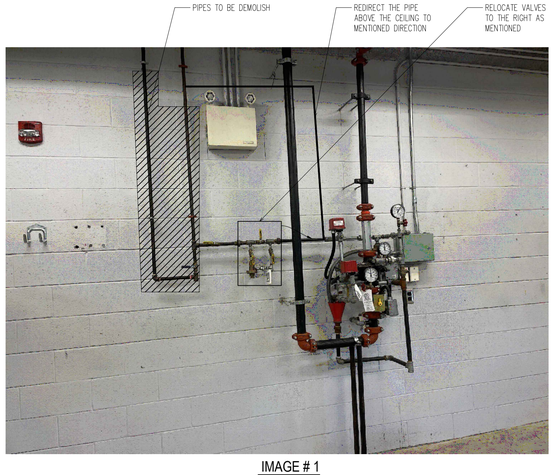
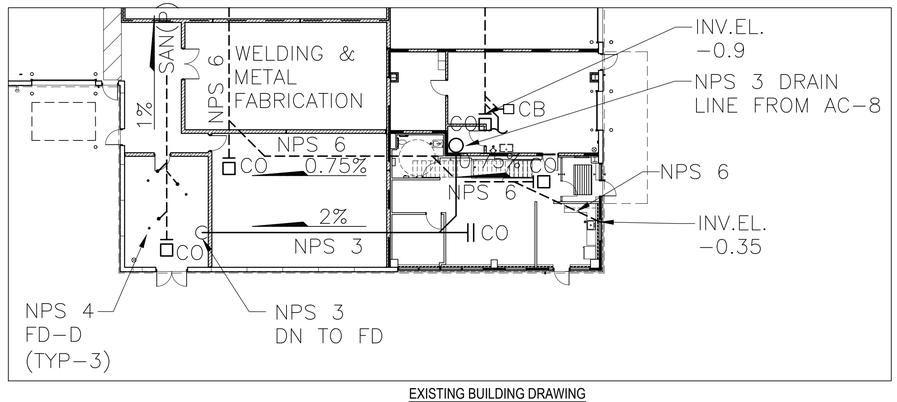


IMAGE # 1

IMAGE # 2



EXISTING BUILDING DRAWING

Contractor must check and verify all dimensions and be res- ponsible for same, reporting any discrepancies to the Engineer before commencing work.
Prints shall not be used for construction until signed 'Approved For Construction' by the Engineer.
Prints are not to be scaled.
All drawings, prints and specifications are the property of the Engineer and shall be returned to him on completion of the work.
All work shall be performed in accordance with the latest edition of the ONTARIO BUILDING CODE, NATIONAL BUILDING CODE and regulatory regulations of Authorities having Jurisdiction .
These notes are to be read in conjunction with all drawings and specifications.

The Contractor shall check all dimensions and other data from the job and report any discrepancies to the Architects before proceeding.

No.	Date:	Revision:	D'wn.	Ch'd.
1	NOV 03, 2023	ISSUED FOR PERMIT		
2	NOV 21, 2023	ISSUED FOR PERMIT		
3	NOV 30, 2023	ISSUED FOR PERMIT		
4	DEC 04, 2023	ISSUED FOR PERMIT		
5	DEC 07, 2023	ISSUED FOR PERMIT		
6	JAN 18, 2024	ISSUED FOR PERMIT		
7	JAN 29, 2024	ISSUED FOR PERMIT		
8	FEB 14, 2024	ISSUED FOR TENDER		
9	FEB 22, 2024	ISSUED FOR TENDER		

LEEN CONSULTING
www.leenconsulting.ca

Project:

MES - TRANSIT RENOVATION

430 Wyecroft Rd., Oakville , ON L6K 2G7

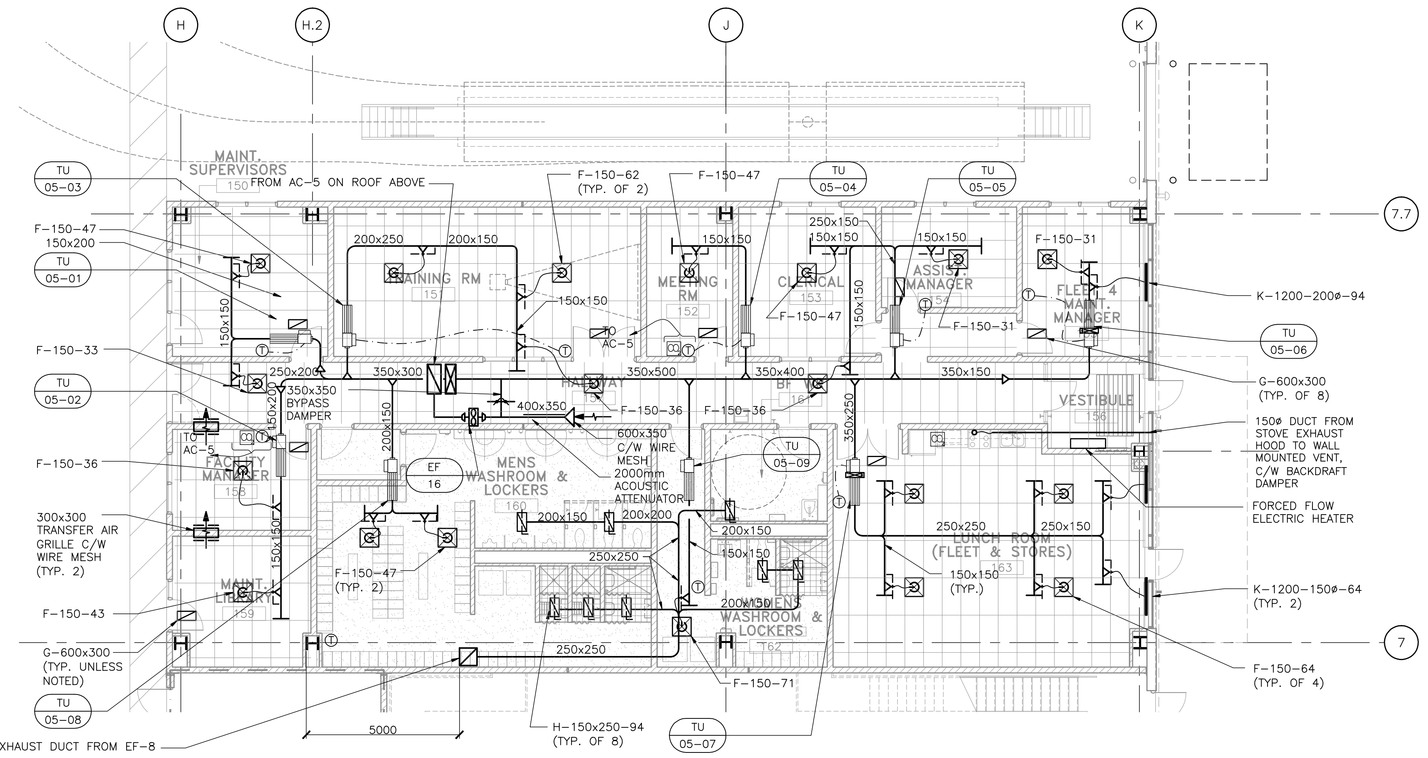
Sheet title:

PLUMBING DEMOLISH LAYOUT AND NEW WORK

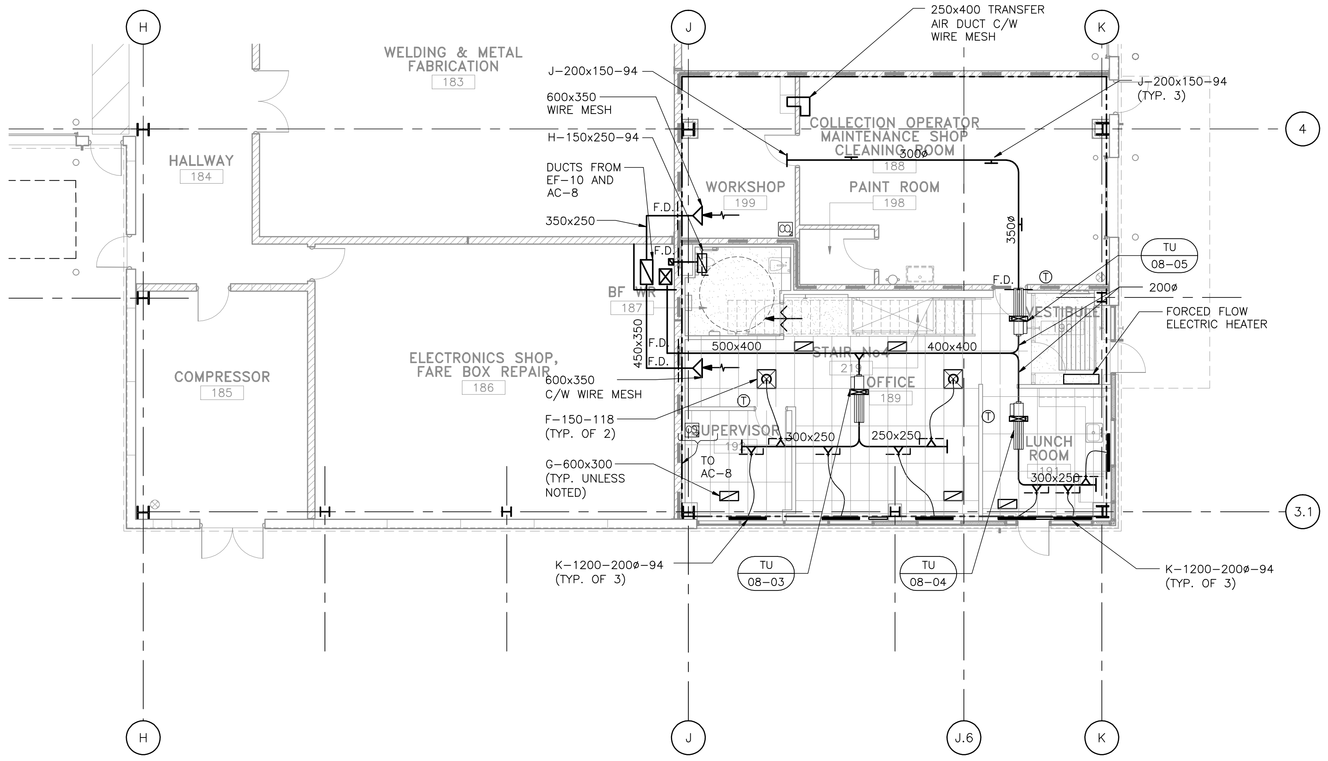
D'wg. no.

M-07

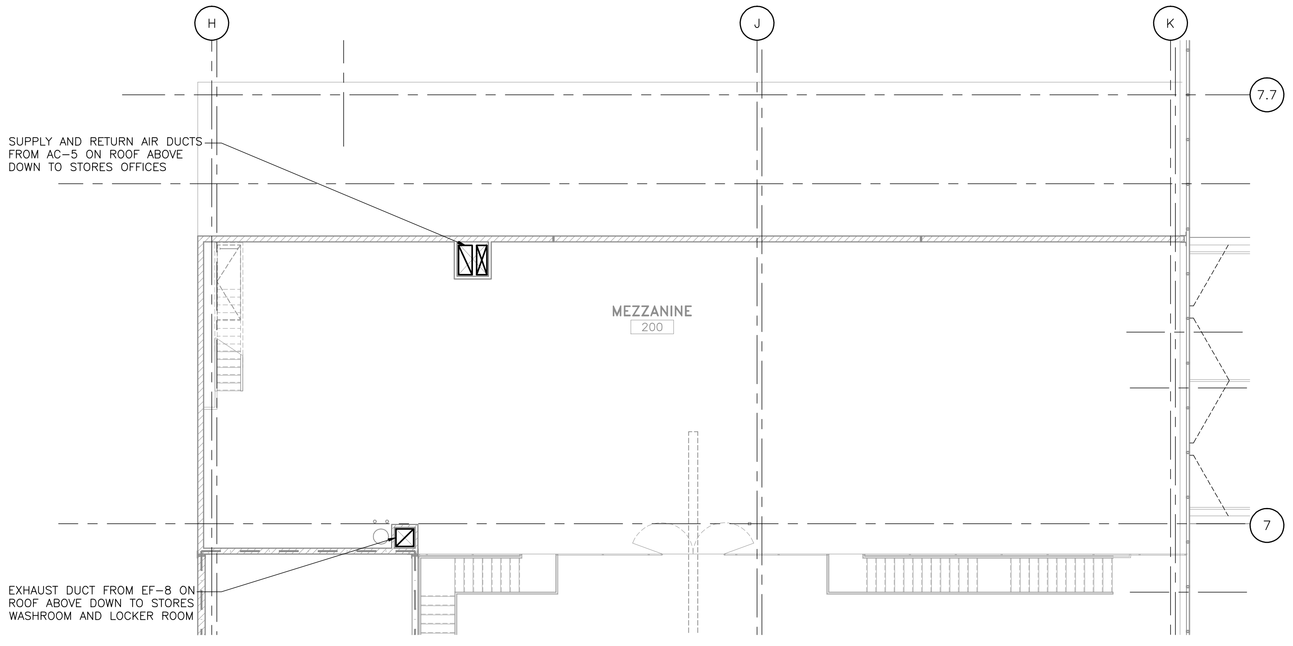
Scale:	1/4" = 1'-0"	Date:	NOV 03, 2023
DRAWN:	I.A.	REVIEW:	M.A.
DESIGN:		Checked:	



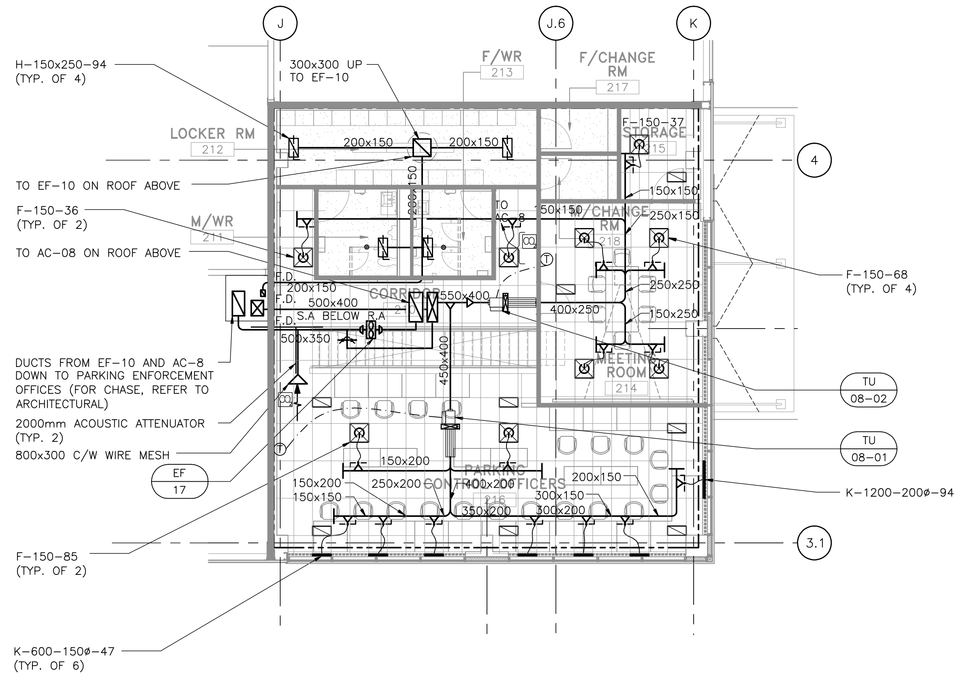
1 M52-01-02 **ENLARGED PLAN STORES AREA – HVAC**
SCALE 1:100



2 M52-01-02 **ENLARGED PLAN STORES AREA – HVAC**
SCALE 1:100



3 M52-01-02 **ENLARGED MEZZANINE PART PLAN – HVAC**
SCALE 1:100



4 M52-01-02 **ENLARGED MEZZANINE PART PLAN – HVAC**
SCALE 1:100

NOTES:

1. DUCT SIZE INDICATED ON DUCT SILENCER IS INSIDE DIMENSION

DATE (mmm dd yyyy)	ISSUED FOR	REV
SEP 21 2009	65% TENDER REVIEW	A
OCT 20 2009	95% TENDER REVIEW / PEER REVIEW	B
NOV 04 2009	100% REVIEW	C
NOV 09 2009	CONSTRUCTION	0
DEC 01 2009	ADDENDUM	1
MAY 20 2011	RECORD	2

KEY PLAN

DISCLAIMER

"THE ISSUANCE OF THIS RECORD DRAWING IS A REPRESENTATION BY THE ARCHITECT AND OR ENGINEER THAT THE CONSTRUCTION, ENLARGEMENT OR ALTERATION OF THE BUILDING IS IN GENERAL, AS OPPOSED TO PRECISE, CONFORMITY WITH THE DESIGN PREPARED AND PROVIDED BY THE ARCHITECT AND OR ENGINEER, BUT IS NOT A REPRESENTATION THAT THE CONSTRUCTION, ENLARGEMENT OR ALTERATION OF THE BUILDING IS IN CONFORMITY WITH A DESIGN THAT HAS BEEN PREPARED OR PROVIDED BY OTHERS. THE REVISIONS TO THESE CONTRACT DOCUMENTS, REFLECTING THE SIGNIFICANT CHANGES IN THE WORK MADE DURING CONSTRUCTION, ARE BASED ON DESIGN CHANGES ISSUED DURING THE COURSE OF CONSTRUCTION, OR DATA FURNISHED BY THE CONTRACTOR TO THE ARCHITECT AND OR ENGINEER. THE ARCHITECT AND OR ENGINEER SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED BY THE CONTRACTOR."

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Architects

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North Arrow: TRUE NORTH

Detail Symbol: DETAIL NUMBER / LOCATION OR DETAIL SHEET

Project Manager M. NG	**Architect/Engineer** G. VERNESCU
Project Leader G. VERNESCU	**Drawn** D. SAVU
Date AUG 28 2009	**Checked** G. VERNESCU

Client
OAKVILLE

Project
OAKVILLE TRANSIT FACILITY
430 WYECROFT RD. OAKVILLE, ONTARIO

Drawing Title
ENLARGED PLAN
STORES AREA
HVAC

Check Scale (may be photo-reduced)
0 1 inch 0 10mm

Project No.	Drawing No.
AAR2070085	M52-01-02

User Name: Tom Chung Plot Date\Time: Tuesday, July 19, 2011 4:26:34 PM Path and File Name: J:\yorein\yor2070085\600-issues\610-issued\2011-05-09_as-built drawings\m52-01-02.dwg