



1 Keyplan  
1:300

LOCATION PLAN



Project Address: 33 Dunsford Rd Dunsford Ontario K0M1L0

GENERAL NOTES

1. THESE DRAWINGS FORM PART OF THE CONTRACT DOCUMENTS. REFER TO THE CONTRACT FOR THE COMPLETE LIST OF CONTRACT DOCUMENTS AND THEIR RELATED HIERARCHY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO READ AND UNDERSTAND THE CONTRACT DOCUMENTS IN THEIR ENTIRETY AND REQUEST CLARIFICATION FROM THE CONSULTANT WHERE NECESSARY.
2. THESE DRAWINGS, THE APPENDIX A - DETAIL BOOKLET, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND THE SPECIFICATION PROJECT MANUAL ARE TO BE READ IN CONJUNCTION WITH ONE ANOTHER IN THEIR ENTIRETY.
3. DRAWINGS ARE NOT TO BE SCALED. WHERE DIMENSIONS ARE IN QUESTION THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING CLARIFICATION FROM THE CONSULTANT BEFORE PROCEEDING.
4. KEYNOTES IN THE DRAWINGS ARE TIED TO THE RELEVANT SPECIFICATION SECTION AND ARE TO BE READ IN CONJUNCTION WITH THE REQUIREMENTS OF THE SPECIFICATIONS.
5. LARGE SCALE DRAWINGS TAKE PRECEDENCE OVER SMALL SCALE DRAWINGS, UNLESS OTHERWISE NOTED.
6. CONTRACTOR TO RETAIN ONE SET OF THE COMPLETE SET OF CONTRACT DOCUMENTS ON SITE AT ALL TIMES FOR REFERENCE INCLUDING ANY CLARIFICATIONS OR MODIFICATIONS ISSUED DURING CONSTRUCTION IN THE FORM OF SUPPLEMENTARY INSTRUCTIONS AND/OR CHANGE ORDERS/DIRECTIVES.

DIMENSIONING CONVENTIONS

- A. ALL DIMENSIONS ON ARCHITECTURAL DRAWINGS ARE CLEAR MEASUREMENTS TO FINISHED FACE UNLESS OTHERWISE NOTED.
- B. CONTRACTOR IS TO ENSURE ALL CODE REQUIRED MINIMUM CLEARANCES ARE MAINTAINED IN THE WORK. NOTIFY CONSULTANT WHERE CLEAR OR CRITICAL DIMENSIONS ARE DESIGNATED BUT CANNOT BE ACHIEVED FOR REVIEW AND DIRECTION.
- C. DRAWINGS ARE NOT TO BE SCALED. VERIFY ANY MISSING OR CONFLICTING DIMENSIONS WITH THE ARCHITECT/CONSULTANT PRIOR TO PROCEEDING WITH THE WORK.
- D. MAINTAIN CONSISTANT FINISHED FLOOR DATUM THROUGHOUT THE PROJECT AREA SUCH THAT DIMENSIONS INDICATED AS ABOVE FINISHED FLOOR (AFF) ARE REFERENCED FROM THE SAME DATUM TO MAINTAIN ALIGNMENT OF ELEMENTS HORIZONTALLY.
- E. CONTRACTOR TO VERIFY ALL DIMENSIONS AND SITE CONDITIONS PRIOR TO STARTING WORK. REPORT ALL DISCREPANCIES TO THE CONSULTANT FOR CLARIFICATION PRIOR TO COMMENCING WORK.
- F. REFER TO APPENDIX A: DETAILS FOR TYPICAL MOUNTING HEIGHTS. BUILDING CODE REQUIRED MINIMUM CLEARANCE ARE TO BE MAINTAINED.

ARCHITECTURAL

| #          | Sheet               |
|------------|---------------------|
| A000       | Cover Sheet         |
| A010       | CODE COMPLIANCE     |
| A020       | DEMOLITION          |
| A200       | Floor Plan NEW WORK |
| A600       | Rm 126A MILLWORK    |
| A900       | FINISHES            |
| A901       | FINISHES            |
| Appendix A | DETAILS             |

STRUCTURAL

| #           | Sheet  |
|-------------|--|
| G1          | STRUCTURAL UPGRADES AND REPAIRS GENERAL NOTES      |
| S1          | STRUCTURAL UPGRADES AND REPAIRS RM 129-132 AND 166 |
| APPENDIX B: | REFERENCE BOOKLET                                  |

MECHANICAL

| #   | Sheet   |
|-----|---|
| M01 | MECHANICAL LEGEND, DRAWING LIST, SCHEDULE, DETAIL AND SPECIFICATION |
| M02 | MECHANICAL PLAN - RM 129/130/131                                    |
| M03 | MECHANICAL PLAN - RM 166  |

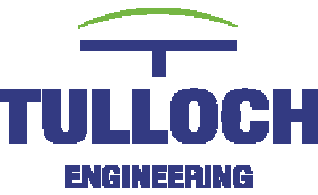
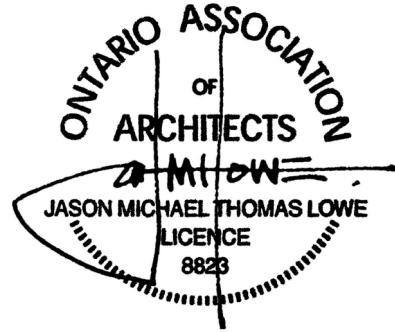
ELECTRICAL

| #   | Sheet   |
|-----|---|
| E01 | KEY PLAN, DRAWING LIST, LEGEND & DETAILS - ELECTRICAL |
| E02 | ELECTRICAL LAYOUTS - ROOM 129 & 129A & 130 & 131      |
| E03 | ELECTRICAL LAYOUTS - ROOM 166                         |



ARCHITECTURE

Jason Lowe Architect Inc.  
77 Main Street East  
Huntsville, Ontario  
P1H 1V7  
  
Contact: Jason Lowe  
T: 705.571.1465  
jason@jasonlowearchitect.com



STRUCTURAL

TULLOCH Engineering Inc.  
80 Main Street - West,  
Huntsville, ON P1H 1W9  
  
Contact: Frank Palmay  
T: 705.789.7851 ext. 433  
frank.palmay@TULLOCH.ca | TULLOCH.ca



MECHANICAL and ELECTRICAL

HL Engineering Ltd.  
14721 Woodbine Ave  
Stouffville, ON Canada  
L4A 2G7  
  
Contact: Ming Jia Li, P.Eng.  
Tel: 905-713-0003  
mjli@hlengineering.ca



OWNER

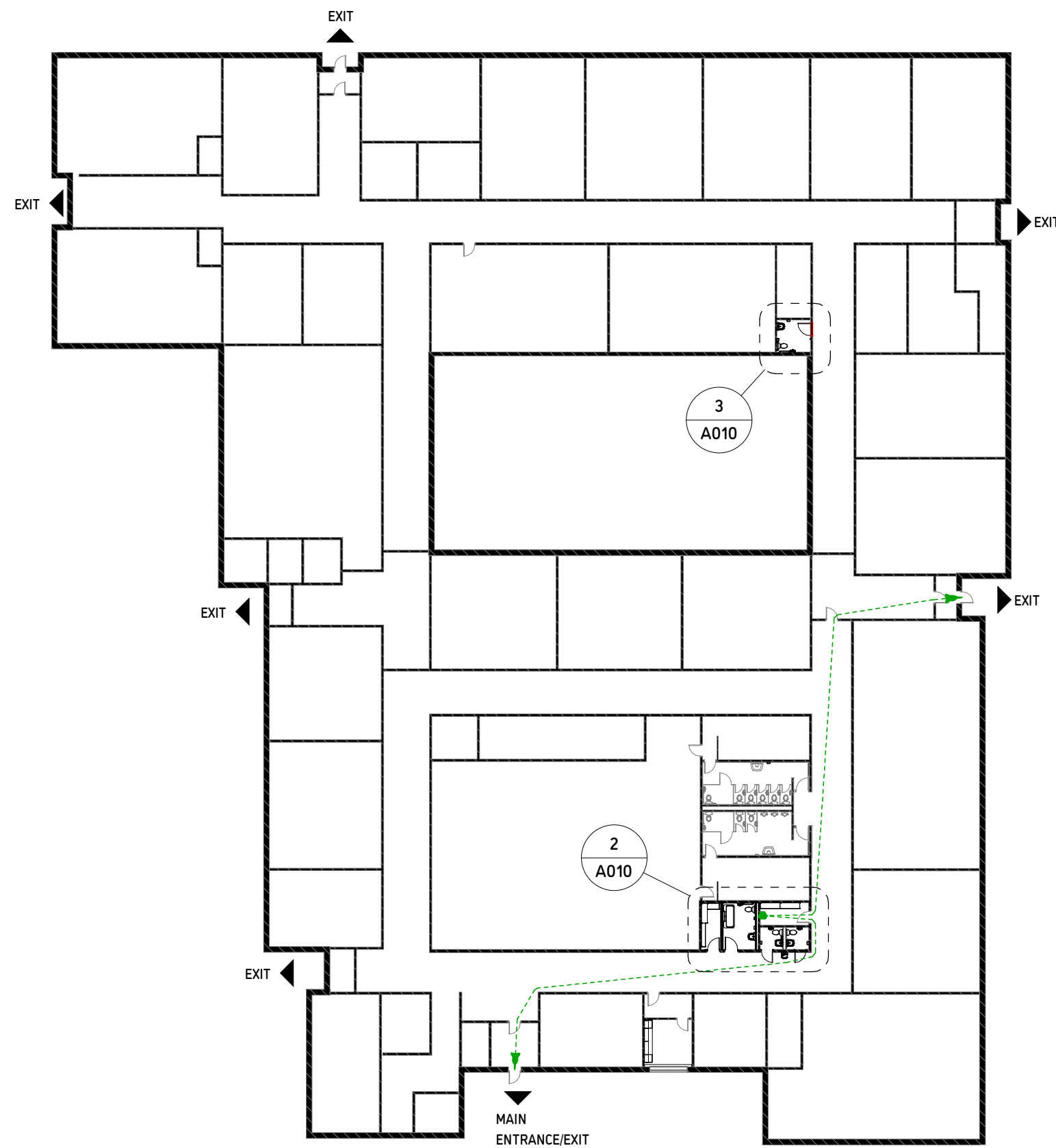
Trillium Lakelands District School Board  
P.O. Box 420  
300 County Road 36  
Lindsay, ON  
K9V 4S4  
  
Contact: Dan Whalen  
T: 705.641.1996  
daniel.whelan@tltdsb.on.ca

# Dunsford District Elementary School Washroom Renewal 2021

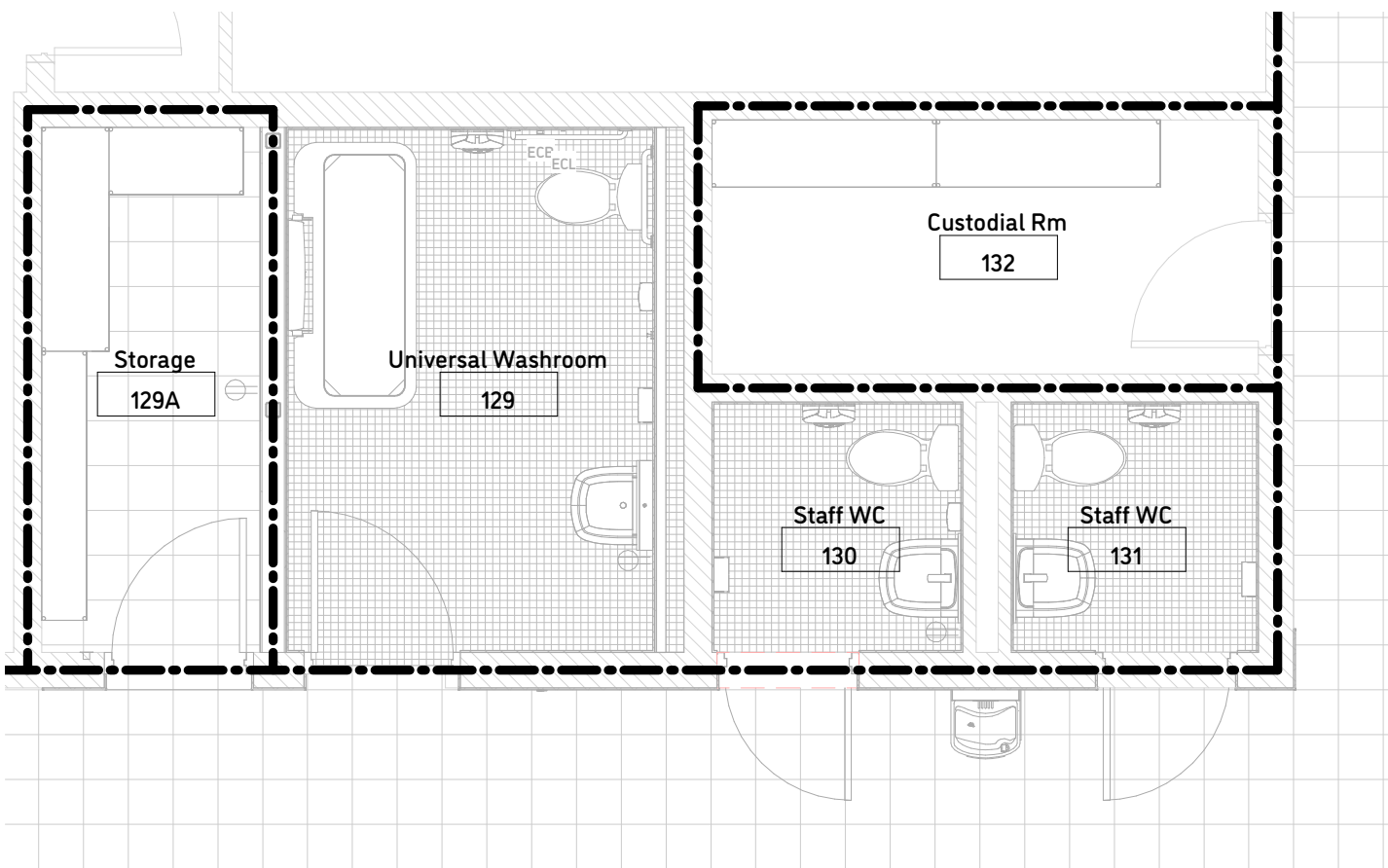
Dunsford, Ontario

Issued for: TENDER and BUILDING PERMIT

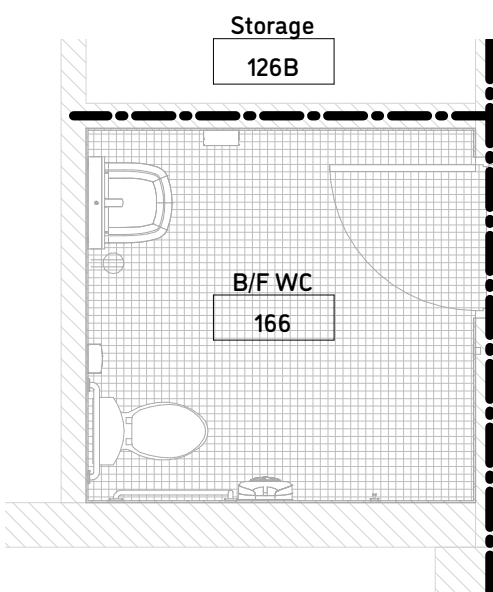




1 Egress Plan  
1:400



2 Fire Separations - Rms 129A-129-130-131-132  
1:50



3 Fire Separations - Rm 166  
1:50

LEGEND

0 HR FRR FIRE SEPARATION (SMOKE SEAL)  
45 MIN FRR FIRE SEPARATION  
1 HR FRR FIRE SEPARATION  
1-1/2 HR FRR FIRE SEPARATION  
2 HR FRR FIRE SEPARATION  
EGRESS PATH  
EXIT

- GENERAL NOTES
1. ALL WORK TO BE PERFORMED IN COMPLIANCE WITH THE ONTARIO BUILDING CODE 2012 AND THE AUTHORITIES HAVING JURISDICTION OVER THIS PROJECT.
2. FOR GENERAL NOTES, SYMBOLS AND ARCHITECTURAL ABBREVIATIONS REFER TO APPENDIX A: DETAILS.
3. INDICATED FIRE SEPARATIONS AND ASSEMBLIES ARE TO BE CONTINUOUS AND UNINTERRUPTED.
4. FIRE SEPARATIONS/FIRE STOPPING: ALL NEW AND EXISTING PENETRATIONS THROUGH WALLS, FLOORS AND/OR CEILINGS DESIGNATED AS FIRE SEPARATIONS, NEW OR EXISTING EXPOSED DURING DEMOLITION, SHALL BE FIRE STOPPED AND SMOKE SEALED USING ULC TESTED AND APPROVED SYSTEM. PATCH AND REPAIR ALL FIRE PROOFING AT BUILDING STRUCTURE WHERE MISSING OR DAMAGED TO MAINTAIN REQUIRED FIRE RATING. SEE DRAWING A010. REFER TO SPECIFICATION SECTIONS 0133.00 AND 0784.00.
5. REFER TO DETAIL BOOKLET FOR CODE REQUIRED MOUNTING HEIGHTS FOR ALL WASHROOM FIXTURES, ACCESSORIES AND DOOR CONTROLS.
6. COORDINATE ALL SERVICE PENETRATIONS, FIRE DAMPERS IN FIRE SEPARATIONS WITH MECHANICAL AND ELECTRICAL SCOPE.
7. REFER TO DOOR SCHEDULE AND SPECIFICATIONS FOR REQUIRED RATED DOORS, FRAMES AND RELATED HARDWARE.

ONTARIO BUILDING CODE DATA MATRIX  
PART 11

|       |                                       |   |  |   |   |
|-------|---------------------------------------|---|--|---|---|
| 11.00 | Building Code Version:                | 0. Reg 332/12   | Last Amendments:   | 0. Reg 139/17, 0. Reg 88/19   | OBC Ref.  |
| 11.01 | Project Type:                         | <input type="checkbox"/> New<br><input type="checkbox"/> Change of Use  | <input type="checkbox"/> Addition<br><input type="checkbox"/> Addition and Renovation  | <input checked="" type="checkbox"/> Renovation  | [A] 1.1.2.  |
|       | Description:                          | WASHROOM RENOVATION   |  |   |   |
| 11.02 | Major Occupancy Classification        | Occupancy Assembly (A2)   | Use Elementary school  |   | 3.1.2.1. (1)  |
| 11.03 | Superimposed Major Occupancies        | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes  | Description:   |   | 3.2.2.7.  |
| 11.04 | Building Area (m2)                    | No changes to building area   |  |   | [A] 1.4.1.2.  |
| 11.05 | Building Height                       | 1 Storeys above grade   | 0 Storeys below grade  | Existing - no change  | [A] 1.4.1.2. & 3.2.1.1.   |
| 11.06 | Number of streets/ Firefighter access | street(s)   | Existing - no change   |   | 3.2.2.10 & 3.2.5.   |
| 11.07 | Building size                         | <input type="checkbox"/> Small<br><input type="checkbox"/> Medium<br><input checked="" type="checkbox"/> Large<br><input type="checkbox"/> > Large  |  |   | T.11.2.1.1.B-N  |
| 11.08 | Existing Building Classification      | Change in Major Occupancy: <input type="checkbox"/> Yes<br>Construction Index: <input checked="" type="checkbox"/> Not applicable (no change of major occupancy)<br>Hazard Index: <input type="checkbox"/> Low<br>Importance Category: <input type="checkbox"/> Normal<br><input type="checkbox"/> High<br><input type="checkbox"/> Post-Disaster                           |  |   | 11.2.1.1.   |
| 11.09 | Renovation Type                       | <input checked="" type="checkbox"/> Basic Renovation<br><input type="checkbox"/> Extensive Renovation   |  |   | 11.3.3.1.<br>11.3.3.2.  |
| 11.10 | Occupant Load                         | Floor Level/Area  | Occ. Type  | Based On  | Occ. Load (Persons)   |
|       |                                       | Entire School   | A2   | OTG (On the ground capacity/Design occupancy)   | 603 persons   |
| 11.11 | Plumbing Fixture Requirements         | Ratio: Male:Female = 50:50  |  |   | 3.7.4.5   |
|       |                                       | Floor Level/Area  | Occupant Load  | OBC Reference   | Fixtures Required   |
|       |                                       | Entire School   | 603  |   |   |
|       |                                       | F   | 302  | 3.7.4.3 (14)  | 12  |
|       |                                       | M   | 302  | 3.7.4.3 (14)  | 10  |
|       |                                       |   |  |   | 16  |
|       |                                       |   |  |   | 17 (+1)   |
|       |                                       |   |  |   | 14 (no change)  |
| 11.12 | Barrier-free Design                   | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No  | Explanation:   | The new universal washroom will have a power door operator, barrier free fixtures, washroom accessories and a new adult change table. | 3.8   |
| 11.13 | Reduction in Performance Level        | Structural: By increase in occupant load: <input checked="" type="checkbox"/> No<br>By change of major occupancy: <input checked="" type="checkbox"/> No<br>Plumbing: <input checked="" type="checkbox"/> No<br>Sewage systems: <input checked="" type="checkbox"/> No<br>Extension of combustible construction: <input checked="" type="checkbox"/> No                     | <input type="checkbox"/> Yes<br><input type="checkbox"/> Yes<br><input type="checkbox"/> Yes<br><input type="checkbox"/> Yes<br><input type="checkbox"/> Yes   |   | 11.4.2.1.<br>11.4.2.2.<br>11.4.2.3.<br>11.4.2.4.<br>11.4.2.5.<br>11.4.2.6.              |
| 11.14 | Compensating Construction:            | <input type="checkbox"/> No<br>Structural: By increase in occupant load: <input checked="" type="checkbox"/> No<br>By change of major occupancy: <input checked="" type="checkbox"/> No<br>Plumbing: <input type="checkbox"/> No<br>Sewage systems: <input checked="" type="checkbox"/> No<br>Extension of combustible construction: <input checked="" type="checkbox"/> No | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> Yes<br><input type="checkbox"/> Yes<br><input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> Yes<br><input type="checkbox"/> Yes | Upgrade to lintels above new doors<br>New plumbing fixtures   | 11.4.3.1.<br>11.4.3.2.<br>11.4.3.3.<br>11.4.3.4.<br>11.4.3.5.<br>11.4.3.6.<br>11.4.3.7. |
| 11.14 | Compliance Alternatives Proposed:     | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes  |  |   | 11.5.1  |
| 11.15 | Notes:                                | RESERVED  |  |   | 11.5.1  |



77 MAIN ST EAST HUNTSVILLE ONTARIO P1H 2B9

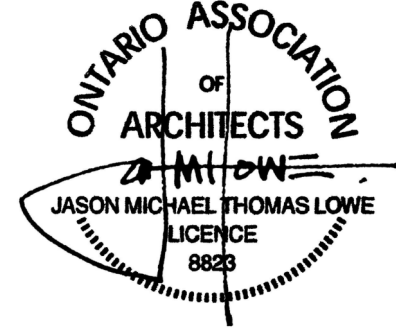
Dunsford District  
Elementary School  
Washroom Renewal  
2021

Dunsford, Ontario

TENDER and  
BUILDING PERMIT

TBD

Seal



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CHECKED: JLA

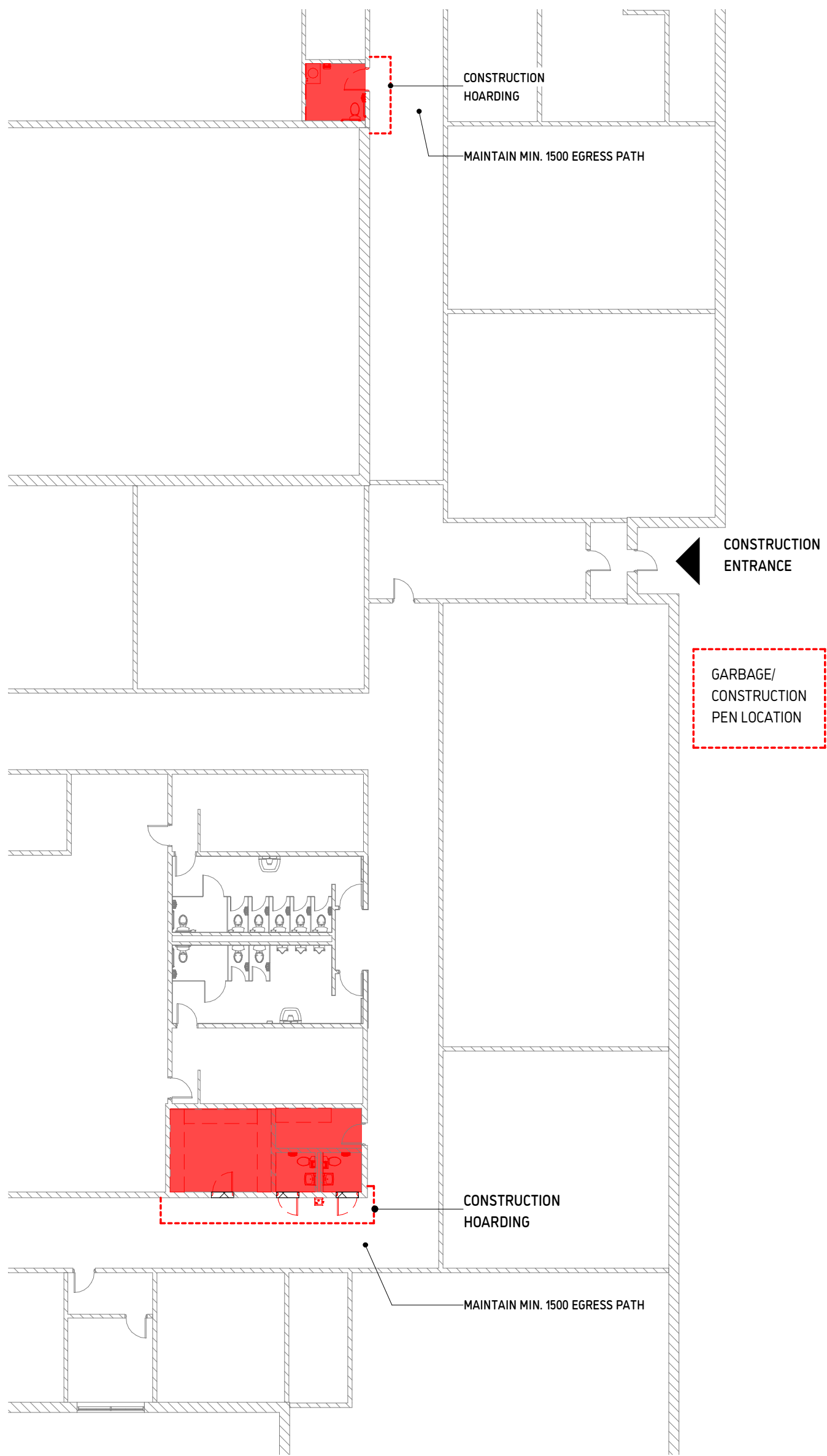
Revisions

CODE COMPLIANCE

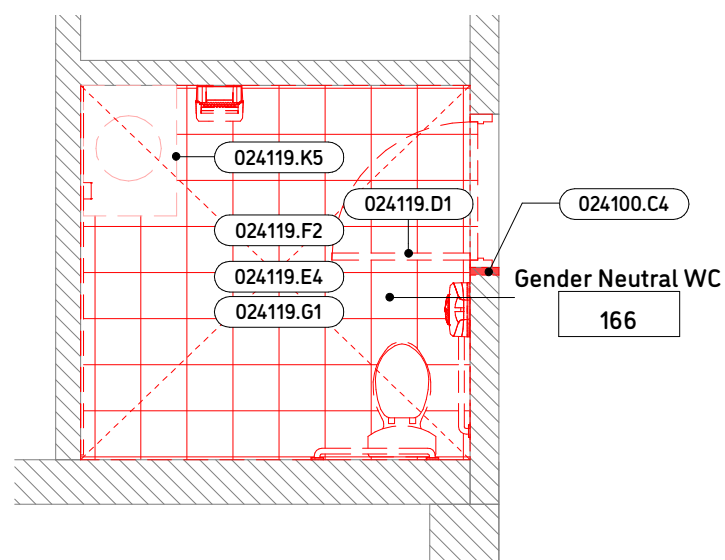
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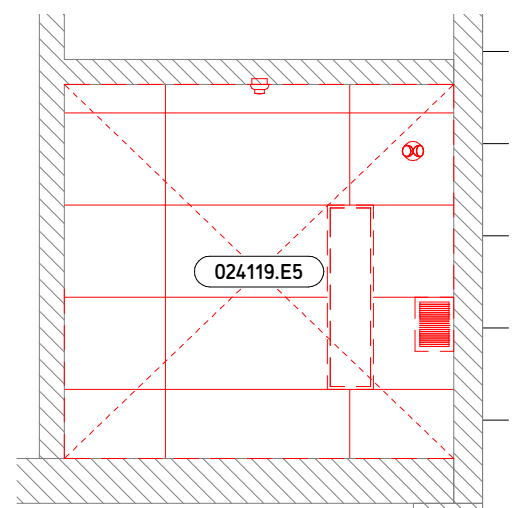
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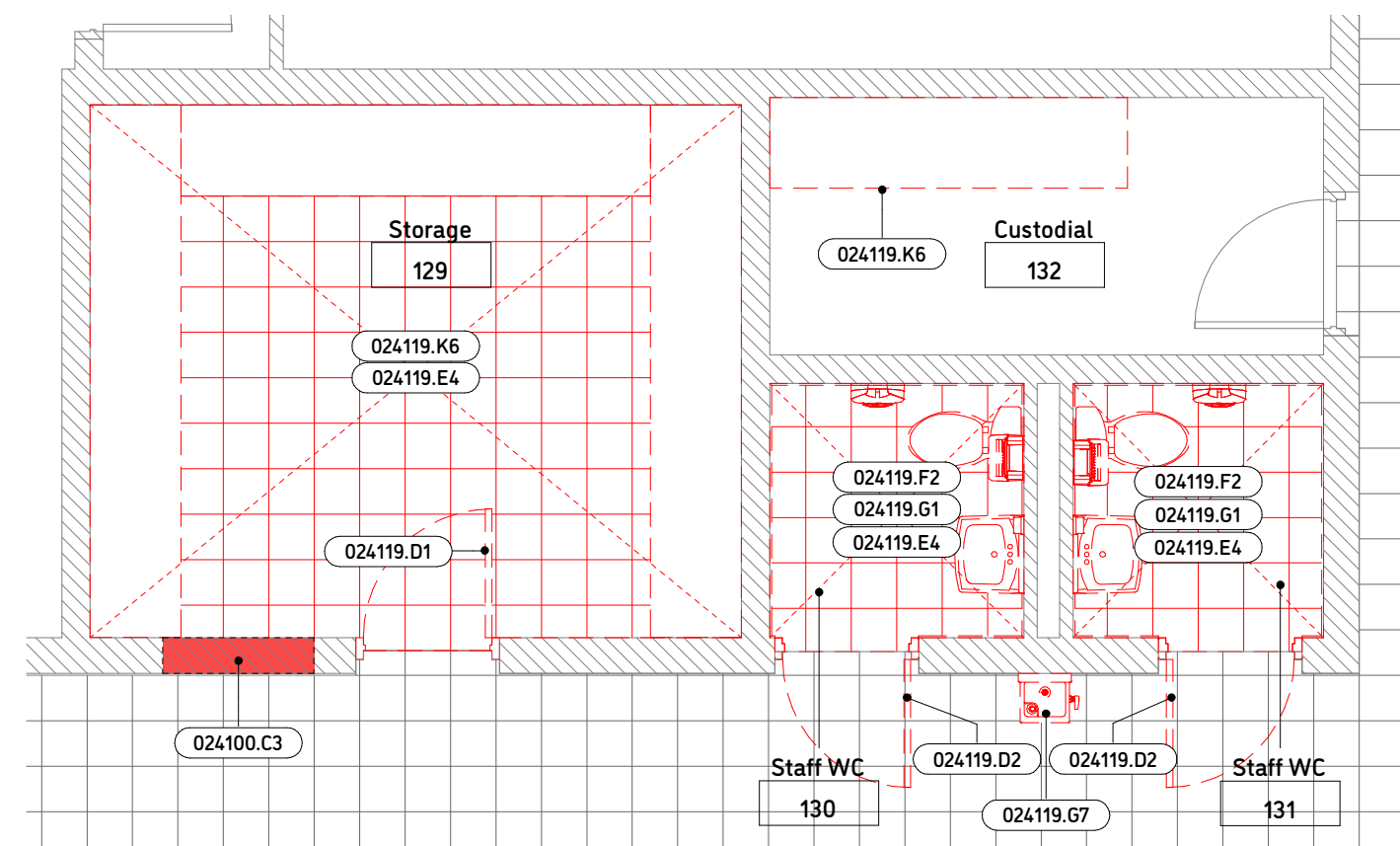
1 DEMOLITION - Keyplan  
1: 200



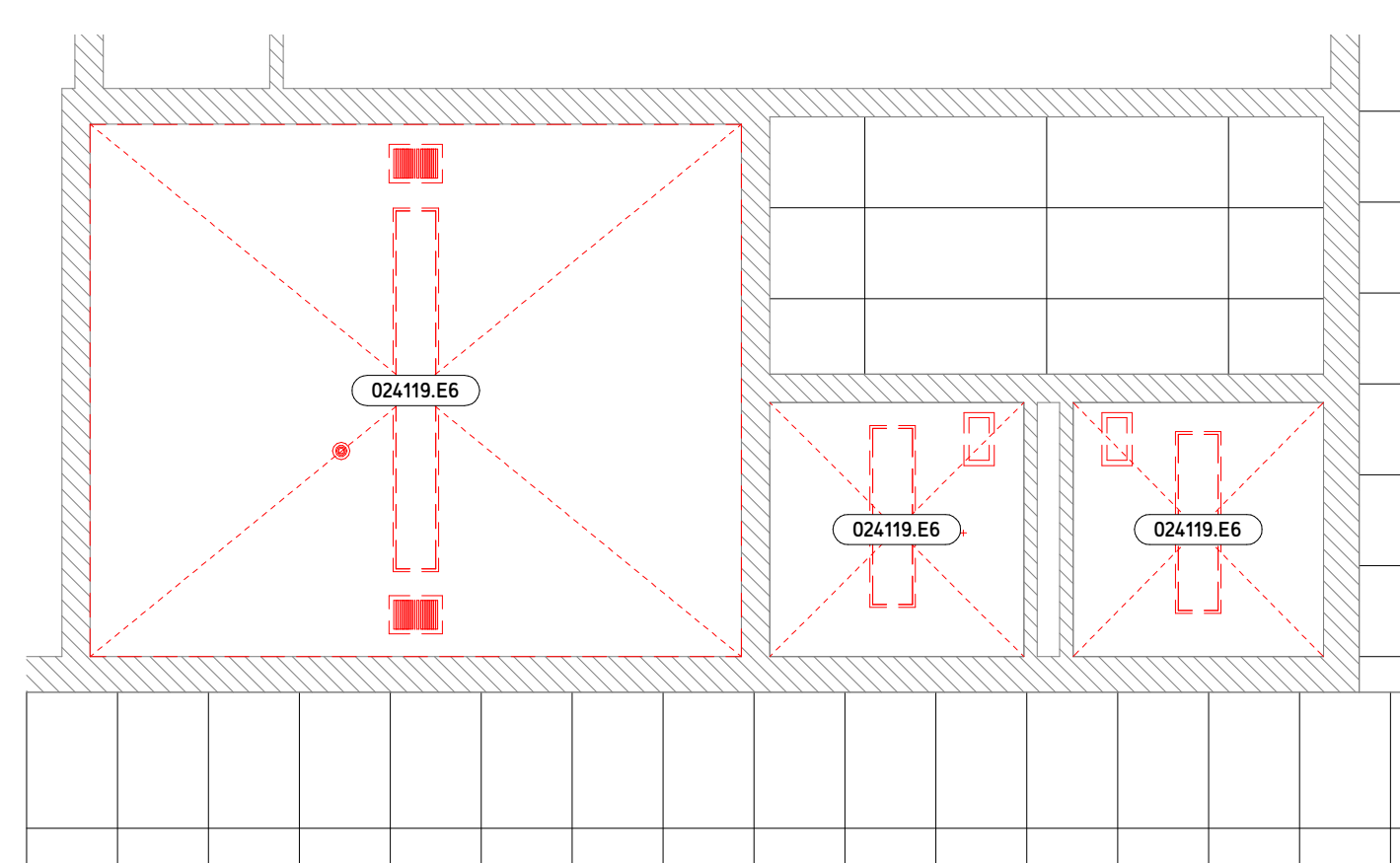
2 Floor Plan Rm 166 DEMOLITION  
1: 50



3 RCP Rm 166 DEMOLITION  
1: 50



4 Floor Plan Rm 129-130-131 DEMOLITION  
1: 50



5 RCP Rm 129-130-131 DEMOLITION  
1: 50

| Keynote Legend |  |
|----------------|--|
| Key Value      | Keynote Text   |
| 024100.C3      | NEW OPENING. Remove portion of wall as required to accommodate new work. Refer to structural for new lintel requirements. Provide engineered shoring as required.  |
| 024100.C4      | WIDENED DOOR OPENING. Remove portion of wall as required to accommodate new work. Refer to structural for new lintel requirements. Provide engineered shoring as required.   |
| 024119.D1      | DOOR. Remove existing door, frame and related hardware.  |
| 024119.D2      | DOOR. Remove existing door and hardware, retain frame for re-use in new work.  |
| 024119.E4      | VINYL COMPOSITE TILE (VCT). Remove existing VCT, scrape/remove all adhesive to expose clean substrate ready for new work.  |
| 024119.E5      | ACOUSTIC TILE CEILING (ACT). Remove existing acoustic tile ceiling tiles and grid system. Retain existing hangers if in reusable condition for new work. Note: In most instances new tile layout has been designed to match original grid location to suit existing duct supply/exhaust locations. Contractor to retain grid location in new work where applicable. Refer to Mechanical and Electrical drawings for ceiling fixture/services removals. |
| 024119.E6      | GYP SUM PLASTER CEILING. Remove sections of existing gypsum/plaster ceiling for structural modifications including installation of masonry lateral supports, lintels and repair work, new partition installation and/or modifications to existing, and all M&E services new and/or existing as required to accomplish new work.  |
| 024119.F2      | WASHROOM ACCESSORIES. Remove all mirrors, grab bars, toilet paper, paper towel and soap dispensers and sanitary napkin vendor accessories. Remove all sanitary napkin disposals. Where in new condition turn over to Owner or retain for reuse as directed by the Consultant. Where accessories are recessed into wall patch/repair/infill void as required to prepare for new finish.   |
| 024119.G1      | PLUMBING FIXTURES. In general all plumbing fixtures are to be removed. Refer to Mechanical for complete removal scope.   |
| 024119.G7      | DRINKING FOUNTAIN. Remove existing drinking fountain. SALVAGE if newer type and in good condition review with Consultant if unit is to be retained for Owner.  |
| 024119.K5      | VANITY CABINETRY. Remove vanity cabinet and counter.   |
| 024119.K6      | SHELVING. Remove shelving and any fasteners. Repair existing walls as necessary for new finishes.  |

- PRE-CONSTRUCTION REQUIREMENTS**
- SITE REVIEWS.** REFER TO SPECIFICATION FOR LIST OF REQUIRED ON SITE REVIEWS THAT THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE CONSULTANT.
  - DRAINAGE INSPECTIONS.** A PRE-CONSTRUCTION DRAINAGE INSPECTION IS REQUIRED PRIOR TO DEMOLITION TO DETERMINE THE CONDITION OF THE EXISTING UNDERSLAB DRAINAGE SYSTEM. PROVIDE TO THE CONSULTANT A DRAINAGE INSPECTION REPORT INCLUDING CAMERA VIDEOS OF EXISTING CONDITIONS PRIOR TO MODIFICATION/REMOVAL OF EXISTING SYSTEMS. REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS FOR REQUIREMENTS.
  - AIR FLOW TESTS.** A PRE-CONSTRUCTION AIR FLOW TEST IS REQUIRED PRIOR TO CONSTRUCTION. REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS.

- DEMOLITION NOTES**
- READ THESE DRAWINGS IN CONJUNCTION WITH NEW WORK AND ADDITIONAL DEMOLITION SCOPE DESCRIBED IN STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS.
  - CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION ENGINEERING INCLUDING SHORING AND SCANNING OF EXISTING SUSPENDED SLABS TO PERFORM DEMOLITION WORK. REFER TO STRUCTURAL FOR FURTHER INFORMATION.
  - DEMOLITION FLOOR PLAN DRAWINGS GENERALLY INDICATE THE EXISTING STATE OF THE EXISTING BUILDING. DIAGONAL HATCHED WALLS INDICATE APPROXIMATE EXTENT OF EXISTING CONSTRUCTION TO REMAIN UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, EXTENT OF DEMOLITION AND REMOVALS ON SITE PRIOR TO WORK PROCEEDING.
  - BROKEN OR DASHED LINES GENERALLY INDICATE REMOVALS. SCOPE TO INCLUDE REMOVALS AS REQUIRED TO ACHIEVE NEW WORK.
  - PROVIDE TEMPORARY BRACING AND SHORING TO SUPPORT EXISTING CONSTRUCTION TO ALLOW FOR NEW CONSTRUCTION AS INDICATED ON DRAWINGS. CONTRACTOR RESPONSIBLE FOR ALL CONSTRUCTION ENGINEERING REQUIRED TO PERFORM WORK OF CONTRACT. REFER TO STRUCTURAL.
  - REFER TO OWNER'S REQUIREMENTS FOR HAZARDOUS MATERIALS PROCEDURES.
  - UPON REMOVAL OF WALL AND CEILING FINISHES THE CONTRACTOR IS TO EXAMINE ALL WALLS TO IDENTIFY ANY EXISTING DEFICIENCIES IN DESIGNATED FIRE SEPARATIONS AND BRING THEM TO THE ATTENTION OF THE CONSULTANT. REPAIR AND REINSTATEMENT OF FIRE SEPARATION/FIRE STOPPING INTEGRITY WILL BE ADDRESSED THROUGH CONTINGENCY/CASH ALLOWANCE.
  - ACCESS DOORS. EXISTING ACCESS DOORS IN WALLS AND CEILING ARE TO BE NOTED AND DIMENSIONED IN PLAN BY CONTRACTOR ON AS-BUILTS AND COORDINATED WITH MECHANICAL AND ELECTRICAL TRADES FOR RE-USE IN NEW WORK IF REQUIRED. IF NOT REQUIRED NOTIFY CONSULTANT. ABANDONED ACCESS DOOR PENETRATIONS IN WALLS TO BE FILLED/REPAIRED AS REQUIRED TO SUPPORT NEW FINISH OVER.
  - SLAB CUTTING AND UNDERSLAB DRAINAGE WORK. REFER TO MECHANICAL. SCOPE OF WORK TO INCLUDE DRAINAGE INSPECTION, VIDEO DOCUMENTATION AND REPORT OF EXISTING UNDERSLAB DRAINAGE SYSTEMS IN AREA OF WORK TO BE FORWARDED TO CONSULTANT PROMPTLY FOR REVIEW. BID PRICE TO INCLUDE:  
a) SELECTIVE AND CLEAN CUTTING AND REMOVAL OF SLAB TO ACHIEVE NEW WORK INDICATED IN MECHANICAL DRAWINGS AND SPECIFICATIONS.  
b) ASSUME EXCAVATION/TRENCHING TO APPROXIMATELY 600mm BELOW SLAB TO EXPOSE UNDERSLAB DRAINAGE OR INSTALL NEW AS INDICATED IN THE MECHANICAL DRAWINGS.  
c) BACKFILL. SUBSURFACE MATERIAL CONDITION IS TO BE REVIEWED BY CONSULTANT PRIOR TO BACKFILL. REFER TO STRUCTURAL. REFER TO STRUCTURAL FOR BACKFILL REQUIREMENTS.  
d) NEW SLAB INFILL - REFER TO STRUCTURAL FOR DETAILS.
  - REFER TO APPENDIX A: DETAILS FOR HOARDING DETAILS. CONTRACTOR TO PROVIDE PLYWOOD OR OTHER DUST-PROOF TYPE DOOR INTO EACH HOARDED ZONE. IF KEY REQUIRED FOR ACCESS, CONTRACTOR IS TO PROVIDE TLOSB ON-SITE STAFF WITH A KEY FOR ACCESS TO THE WORK SITE(S) AT ALL TIMES.
  - WASHROOM ACCESSORIES. IN GENERAL ALL WASHROOM ACCESSORIES TO BE REMOVED UNLESS OTHERWISE NOTED.



77 MAIN ST EAST HUNTSVILLE ONTARIO P1H 2B9

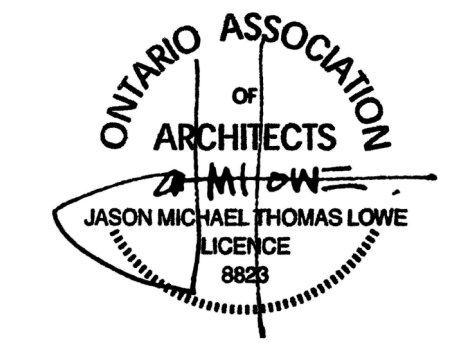
## Dunsford District Elementary School Washroom Renewal 2021

Dunsford, Ontario

## TENDER and BUILDING PERMIT

TBD

Seal



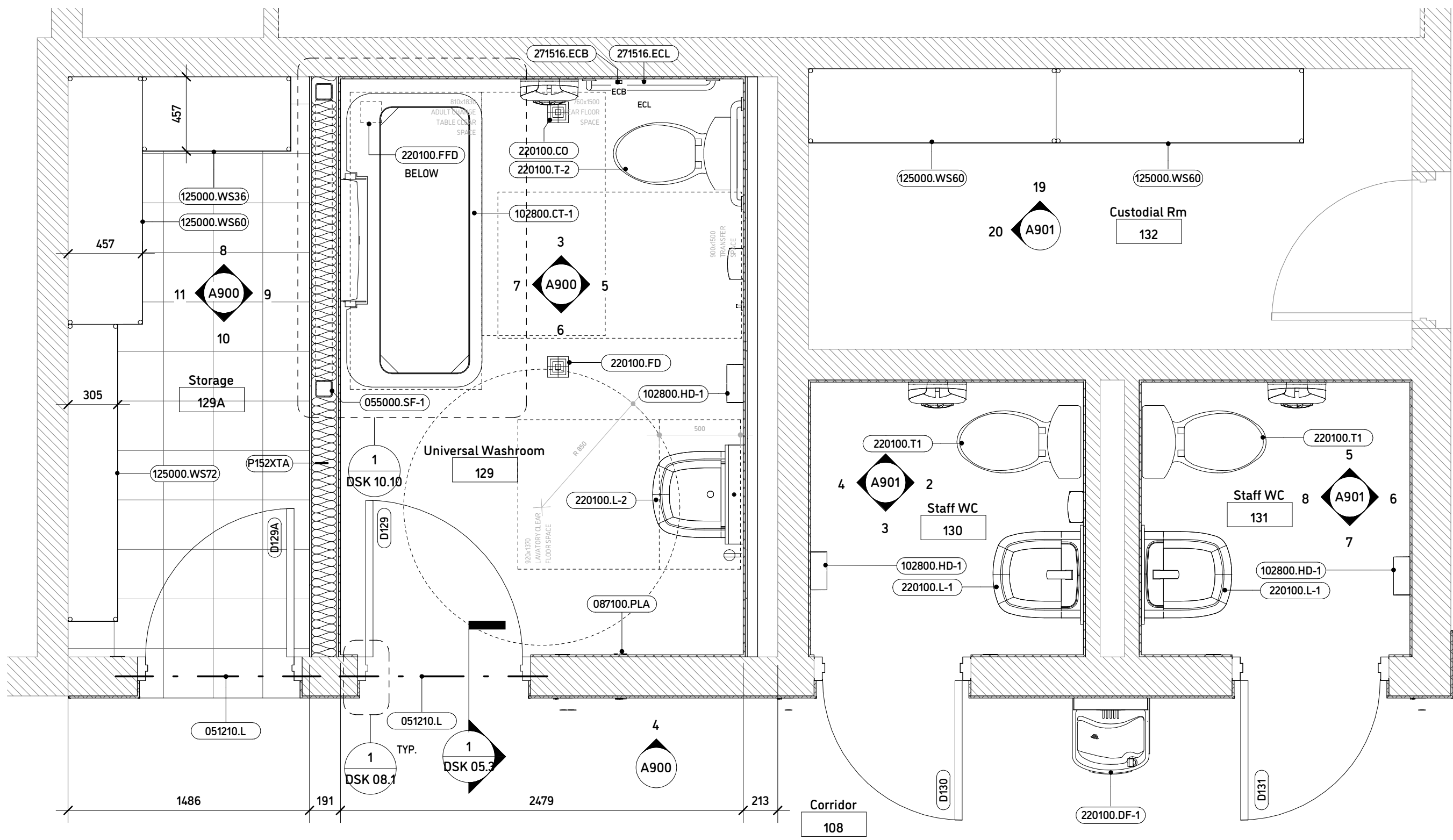
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Revisions

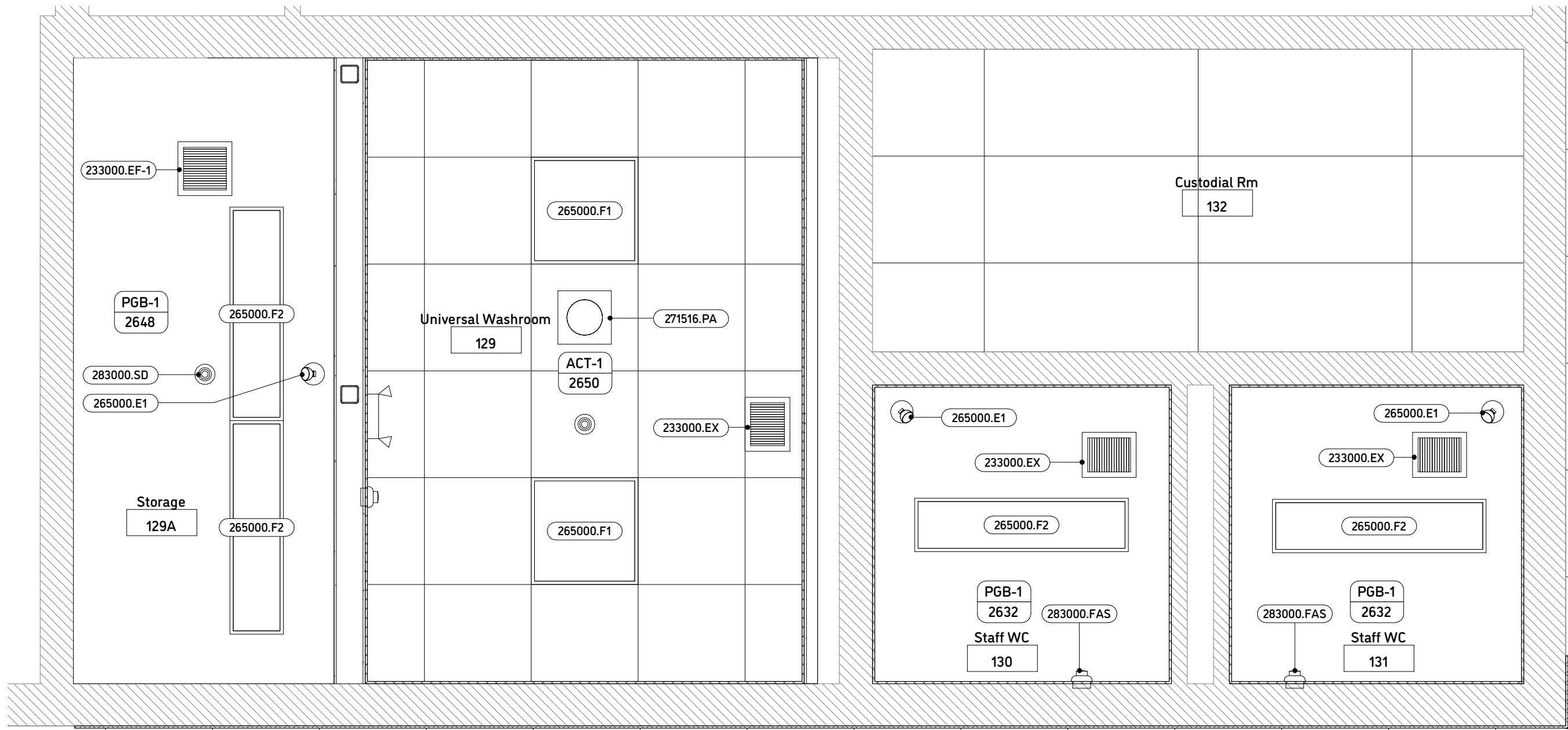
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Sheet  
**A020**

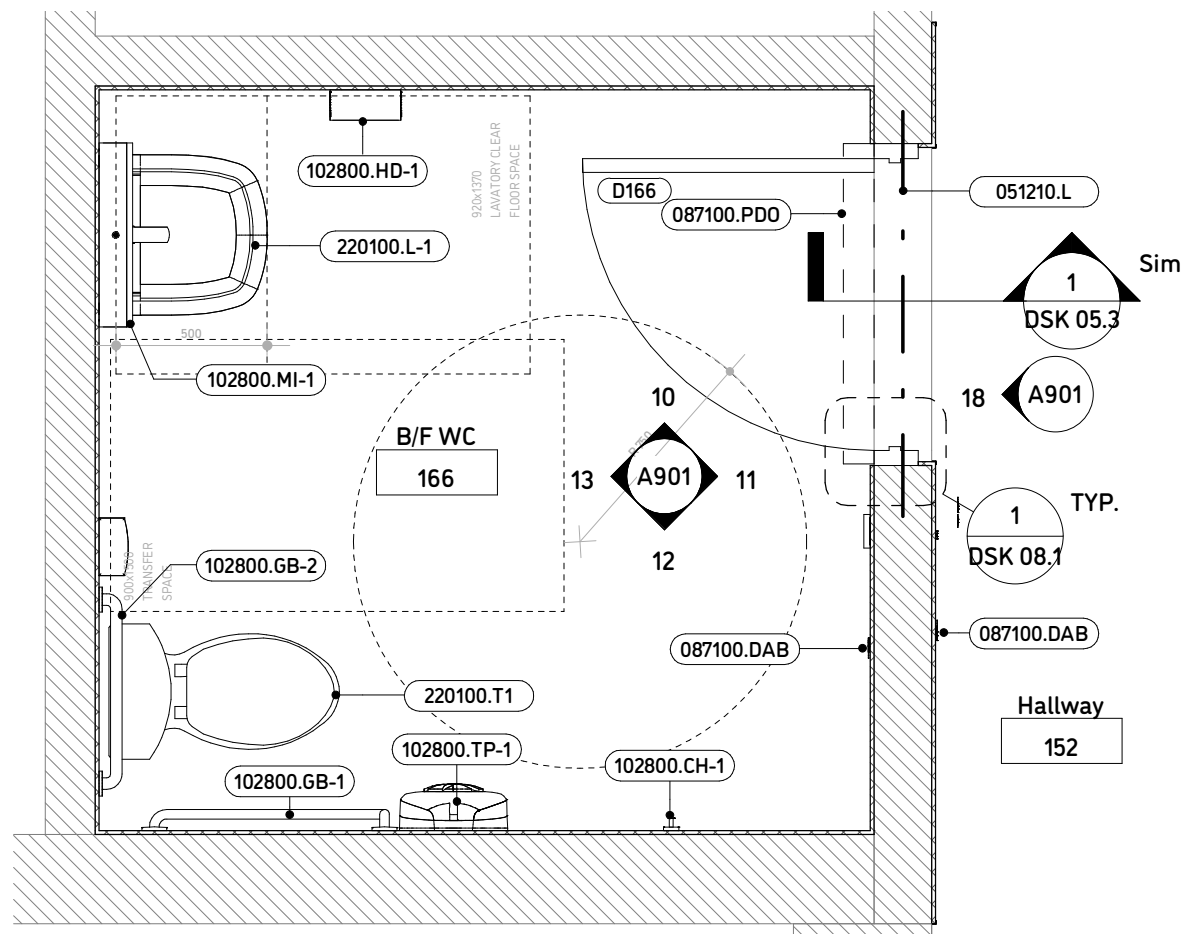




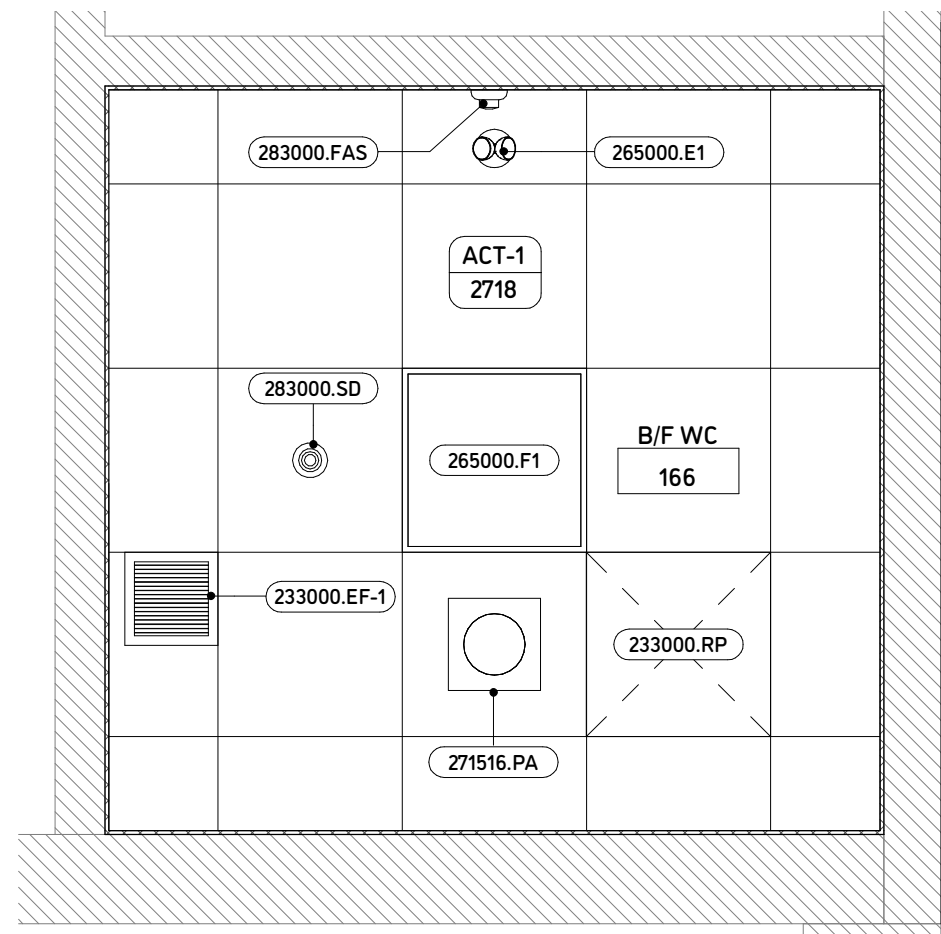
1 Floor Plan Rm 129-130-131 NEW WORK  
1:25



2 RCP Rm 129-130-131 NEW WORK  
1:25



3 Floor Plan Rm 166 NEW WORK  
1:25



4 RCP Rm 166 NEW WORK  
1:25

| Door Schedule |           |         |                    |      |       |        |           |          |        |       |          |        |          |             |          |   |
|---------------|-----------|---------|--------------------|------|-------|--------|-----------|----------|--------|-------|----------|--------|----------|-------------|----------|---|
| Door #        | From Room | To Room |                    | Door |       |        |           |          |        | Frame |          |        | Hardware | Fire Rating | Comments |   |
|               |           |         |                    | Type | Width | Height | Thickness | Material | Finish | Type  | Material | Finish |          |             |          |   |
| D129          | Corridor  | 108     | Universal Washroom | 129  | D1    | 965    | 2134      | 45       | HM     | PME   | F1       | WPSF   | PME      | HG #2       | 45 MIN   | B   |
| D129A         | Corridor  | 108     | Storage            | 129A | D2    | 914    | 2134      | 45       | HM     | PME   | F1       | WPSF   | PME      | HG #4       | 45 MIN   | Door undercut required see Mechanical- max 19mm undercut allowed per NFPA 80. |
| D130          | Staff WC  | 130     | Corridor           | 108  | D1    | 864    | 2134      | 45       | HM     | PME   | F1       | WPSF   | PME      | HG #5       | 45 MIN   | A, B  |
| D131          | Staff WC  | 131     | Corridor           | 108  | D1    | 864    | 2134      | 45       | HM     | PME   | F1       | WPSF   | PME      | HG #5       | 45 MIN   | A, B  |
| D166          | Hallway   | 152     | B/F WC             | 166  | D1    | 965    | 2134      | 45       | HM     | PME   | F1       | WPSF   | PME      | HG #2A      | 45 MIN   | B   |

#### DOOR SCHEDULE - NOTES

REFER TO DOOR SCHEDULE FOR APPLICABLE NOTE(S)  
REFER TO APPENDIX A: DETAILS FOR ADDITIONAL DOOR AND FRAME INFORMATION  
A. NEW DOOR AND HARDWARE IN EXISTING FRAME. COORDINATE HARDWARE WITH EXISTING FRAME PREP. FOR RATED DOORS/Frames ENSURE FIELD MODIFICATIONS MEET NFPA 80 REQUIREMENTS FOR ACCEPTABLE FIELD MODIFICATIONS SO AS TO NOT VOID RATING.  
B. PROVIDE NEW DOOR GRILLE REFER TO MECHANICAL.  
C. CUSTOM SIZE DOOR - CONTRACTOR TO CONFIRM DIMENSIONS ON SITE.

| Keynote Legend |   |
|----------------|---|
| Key Value      | Keynote Text  |
| 051210.L       | New lintel - refer to structural  |
| 055000.SF-1    | Change table support frame. Refer to structural drawings.                 |
| 087100.DAB     | Door Actuator Button (Refer also to Electrical)                           |
| 087100.PDO     | Power Door Operator with hold open function. (Refer also to Electrical)   |
| 087100.PLA     | Combined Push to lock and Door Actuator button (Refer also to Electrical) |
| 102800.CH-1    | Coat Hook   |
| 102800.CT-1    | Change Table  |
| 102800.GB-1    | Stainless Steel 90 Degree Grab Bar  |
| 102800.GB-2    | Stainless Steel 24" Straight Grab Bar                                     |
| 102800.HD-1    | Hand Dryer (Refer to Electrical)  |
| 102800.MI-1    | 24" x 36" Tilt Mirror   |
| 102800.TP-1    | Toilet Paper Holder   |
| 125000.WS36    | Wire Shelving 36"x 72"  |
| 125000.WS60    | Wire Shelving 60"x 72"  |
| 125000.WS72    | Wire Shelving 72"x 72"  |
| 220100.DF-1    | Drinking Fountain DF-1  |
| 220100.L-1     | Lavatory  |
| 220100.L-2     | Lavatory  |
| 220100.T1      | Toilet T-1  |
| 220100.T-2     | Toilet T-2  |
| 233000.EF-1    | Exhaust Fan   |
| 233000.EX      | Exhaust Grille  |
| 233000.RP      | Radiant Panel   |
| 265000.E1      | E1 Emergency Remote Light Fixture Refer to Electrical                     |
| 265000.F1      | F1 Light Fixture Refer to Electrical                                      |
| 265000.F2      | F2 Light Fixture Refer to Electrical                                      |
| 271516.ECB     | Emergency Call Button (Refer also to Electrical)                          |
| 271516.ECL     | Emergency Call Light (Refer also to Electrical)                           |
| 271516.PA      | Public Address Speaker  |
| 283000.FAS     | Fire Alarm Strobe   |
| 283000.SD      | Fire Alarm Smoke Detector   |

#### GENERAL NOTES - FLOOR PLAN

1. ALL WORK SHALL COMPLY WITH THE LATEST VERSION OF THE ONTARIO BUILDING CODE, REFERENCED STANDARDS, AND MANUFACTURER'S INSTRUCTIONS.
2. ALL DRAWINGS SHALL BE FULLY COORDINATED BY CONTRACTOR TO VERIFY ALL DIMENSIONS AND WORK BY ALL TRADES.
3. COORDINATE LOCATIONS OF NEW FLOOR, WALL AND ROOF OPENINGS WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL AND LATEST REVIEWED SHOP DRAWINGS.
4. THE CONTRACT DOCUMENTS ARE TO BE READ AS A WHOLE. REFER TO CONTRACT FOR HIERARCHY OF INFORMATION. ARCHITECTURAL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS. WHERE CONFLICTS ARE ENCOUNTERED BETWEEN DISCIPLINES THE CONTRACTOR IS TO REQUEST CALRIFICATION FROM THE CONSULTANT IN WRITING.
5. DETAILS AND SECTIONS ON THE DRAWINGS ARE INDICATED AT SPECIFIC LOCATIONS. DETAILS NOTED "TYPICAL" OR "TYP." IMPLY SIMILAR CONDITIONS TO BE TREATED SIMILARLY, MODIFICATIONS TO BE MADE BY CONTRACTOR TO ACCOMMODATE MINOR VARIATIONS. WHERE SIGNIFICANT DIFFERENCES ARE ENCOUNTERED DUE TO SITE CONDITION CONTACT CONSULTANT FOR REVIEW AND DIRECTION PRIOR TO PROCEEDING.
6. FIRE SEPARATIONS/FIRE STOPPING. ALL NEW AND EXISTING PENETRATIONS THROUGH WALLS, FLOORS AND/OR CEILINGS DESIGNATED AS FIRE SEPARATIONS, NEW OR EXISTING EXPOSED DURING DEMOLITION, SHALL BE FIRE STOPPED AND SMOKE SEALED USING ULC TESTED AND APPROVED SYSTEMS. PATCH AND REPAIR ALL FIRE PROOFING AT BUILDING STRUCTURE WHERE MISSING OR DAMAGED TO MAINTAIN REQUIRED FIRE RATING. SEE DRAWING A010. REFER TO SPECIFICATION SECTIONS 0133 00 AND 07 84 00.
7. COORDINATE AND SEQUENCE INSTALLATION OF ALL BLOCKING REQUIRED BY NEW WORK WITH ELEVATIONS AND DETAILS.
8. ACCESS PANELS/DOORS. NOT ALL REQUIRED OR EXISTING ACCESS PANELS, DOORS OR COVERS MAY BE INDICATED ON THE DRAWINGS. CONTRACTOR TO COORDINATE ACCESS DOOR AND PANEL REQUIREMENTS WITH APPROPRIATE TRADES. WHERE CONFLICTS ARISE REQUEST CLARIFICATION FROM CONSULTANT.
9. FLOOR DRAINS. REFER TO MECHANICAL. WHERE EXISTING FLOOR DRAINS ARE POSITIONED HIGH IN NEW WORK ALLOW FOR LOCAL SLAB CHIPPING AND FLOOR LEVELING TO SUIT SLOPE OR FLUSH TO NEW FINISHES INSTALL OF NEW DRAIN BODY.
10. FLOOR FINISHES. FLOOR FINISHES ARE NOT INDICATED ON GENERAL FLOOR PLANS FOR CLARITY. REFER TO FLOOR FINISH PLAN(S) FOR FLOOR FINISH INFORMATION, TILE PATTERNS AND RELATED INFORMATION.

#### DIMENSIONING CONVENTIONS

- A. ALL DIMENSIONS ON ARCHITECTURAL DRAWINGS ARE CLEAR MEASUREMENTS TO FINISHED FACE UNLESS OTHERWISE NOTED.
- B. CONTRACTOR IS TO ENSURE ALL CODE REQUIRED MINIMUM CLEARANCES ARE MAINTAINED IN THE WORK. NOTIFY CONSULTANT WHERE CLEAR OR CRITICAL DIMENSIONS ARE DESIGNATED BUT CANNOT BE ACHIEVED FOR REVIEW AND DIRECTION.
- C. DRAWINGS ARE NOT TO BE SCALED. VERIFY ANY MISSING OR CONFLICTING DIMENSIONS WITH THE ARCHITECT/CONSULTANT PRIOR TO PROCEEDING WITH THE WORK.
- D. MAINTAIN CONSISTANT FINISHED FLOOR DATUM THROUGHOUT THE PROJECT AREA SUCH THAT DIMENSIONS INDICATED AS ABOVE FINISHED FLOOR (AFF) ARE REFERENCED FROM THE SAME DATUM TO MAINTAIN ALIGNMENT OF ELEMENTS HORIZONTALLY.
- E. CONTRACTOR TO VERIFY ALL DIMENSIONS AND SITE CONDITIONS PRIOR TO STARTING WORK. REPORT ALL DISCREPANCIES TO THE CONSULTANT FOR CLARIFICATION PRIOR TO COMMENCING WORK.
- F. REFER TO APPENDIX A: DETAILS FOR TYPICAL MOUNTING HEIGHTS. BUILDING CODE REQUIRED MINIMUM CLEARANCE ARE TO BE MAINTAINED.



77 MAIN ST EAST HUNTSVILLE ONTARIO P1H 2B9

## Dunsford District Elementary School Washroom Renewal 2021

Dunsford, Ontario

## TENDER and BUILDING PERMIT

TBD

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PROJECT NO: 2020.007  
DRAWN: JMTL  
CHECKED: JLA

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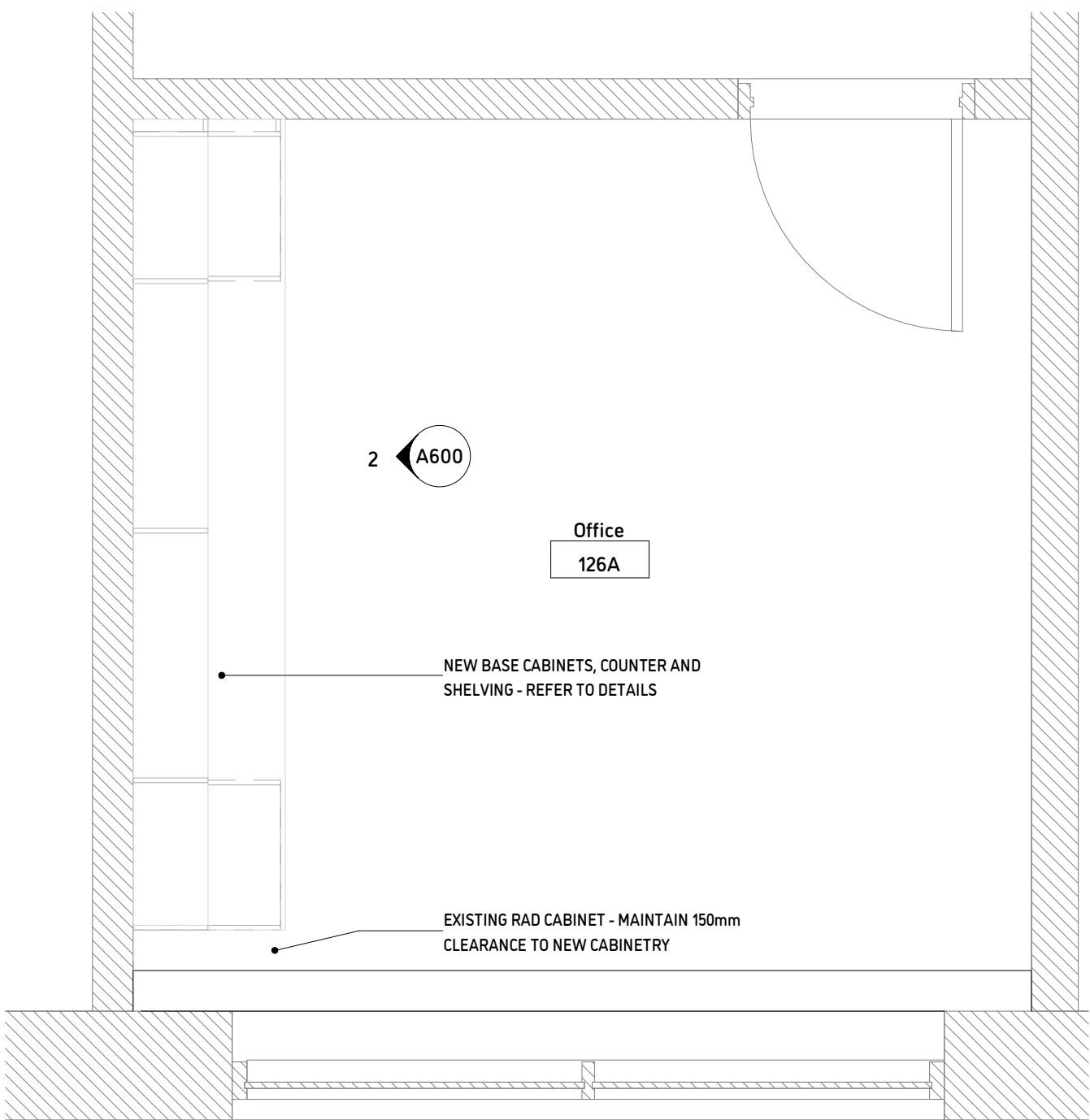
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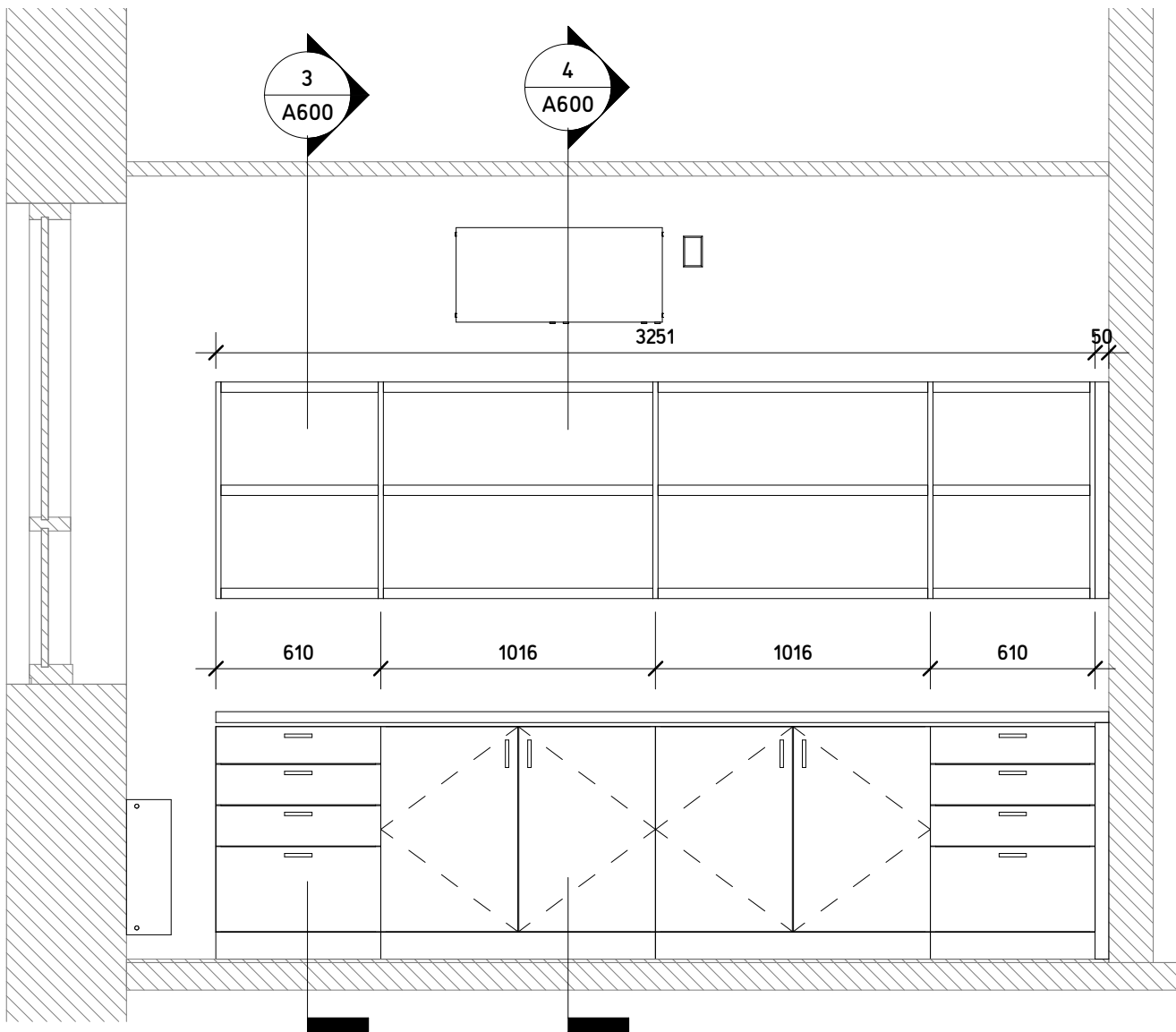
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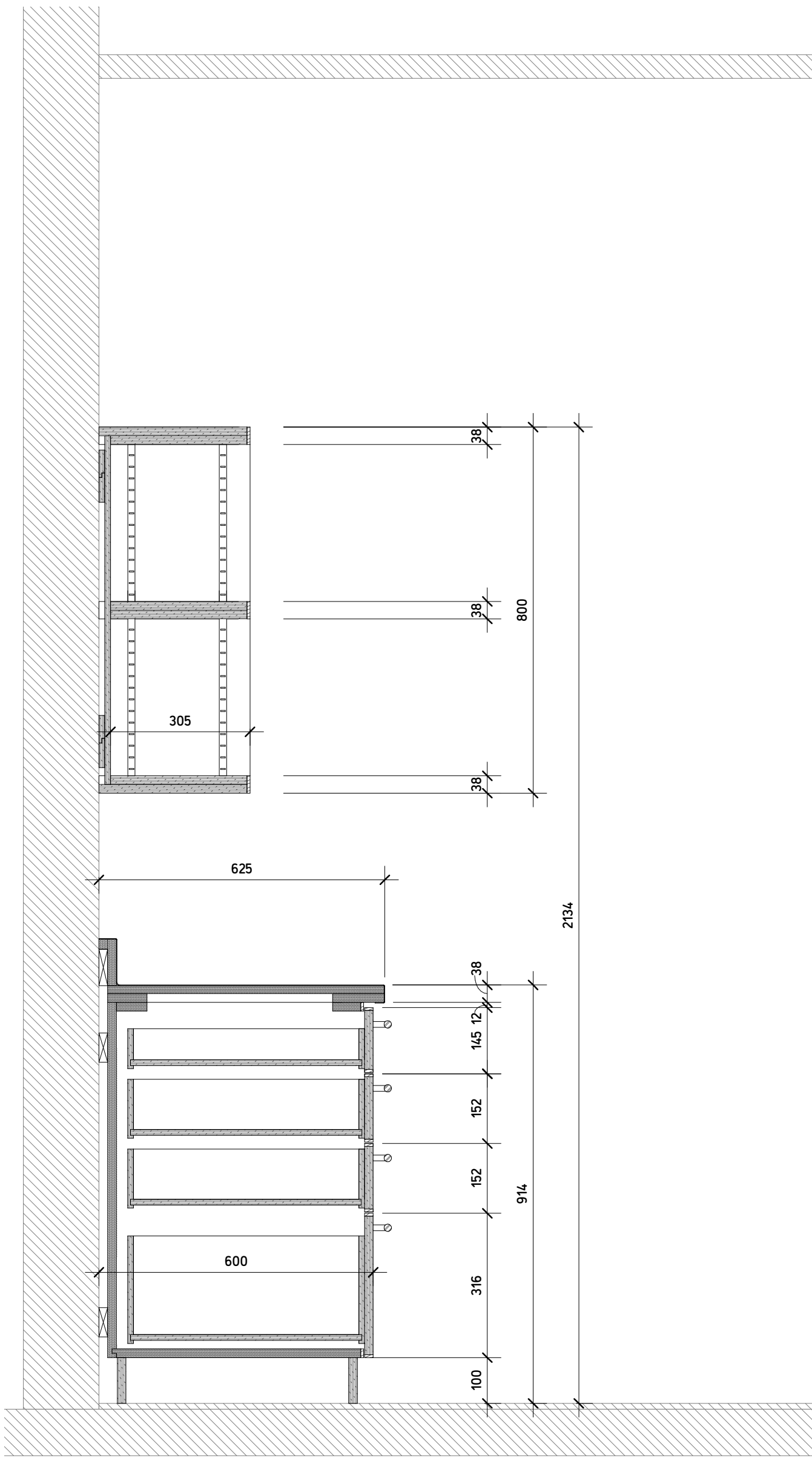




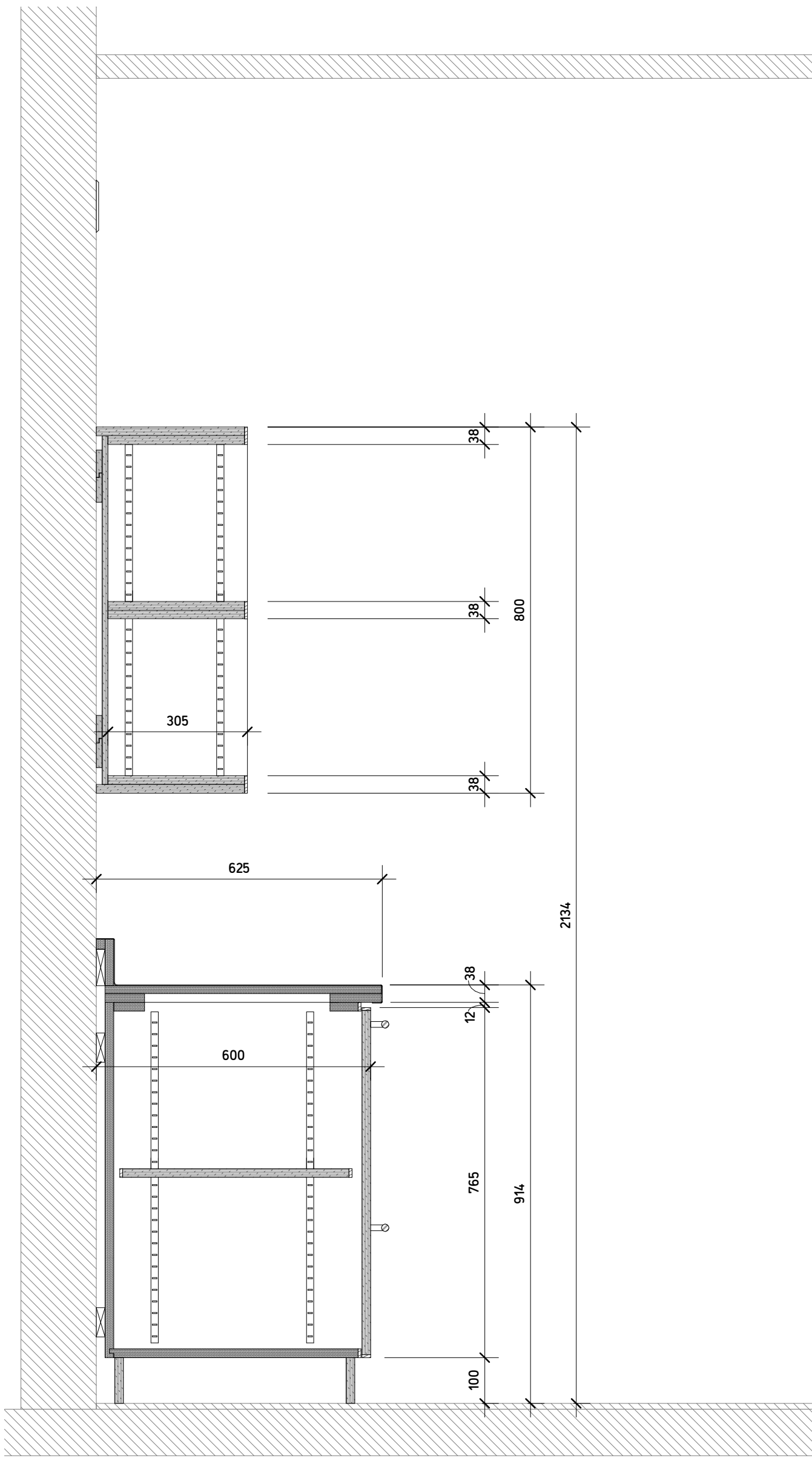
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2 Rm 126A West  
1:25



3 Rm 126A Millwork Drawer Unit Section  
1:10



4 Rm 126A Millwork Double Door Unit Section  
1:10

MILLWORK - GENERAL NOTES

1. REFER TO APPENDIX A: DSK 06 SERIES FOR TLD5B STANDARD MILLWORK DETAILS.

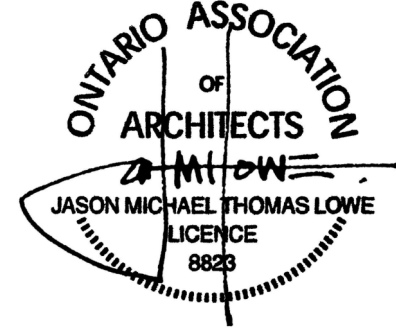
2. ALL PLUMBING FIXTURES, FIRE SUPPRESSION SYSTEMS AND ELECTRICAL TO BE COORDINATED WITH APPROPRIATE TRADES. NO EXPOSED PIPING, CONDUIT OR WIRING TO BE VISIBLE.

Dunsford District  
Elementary School  
Washroom Renewal  
2021

Dunsford, Ontario

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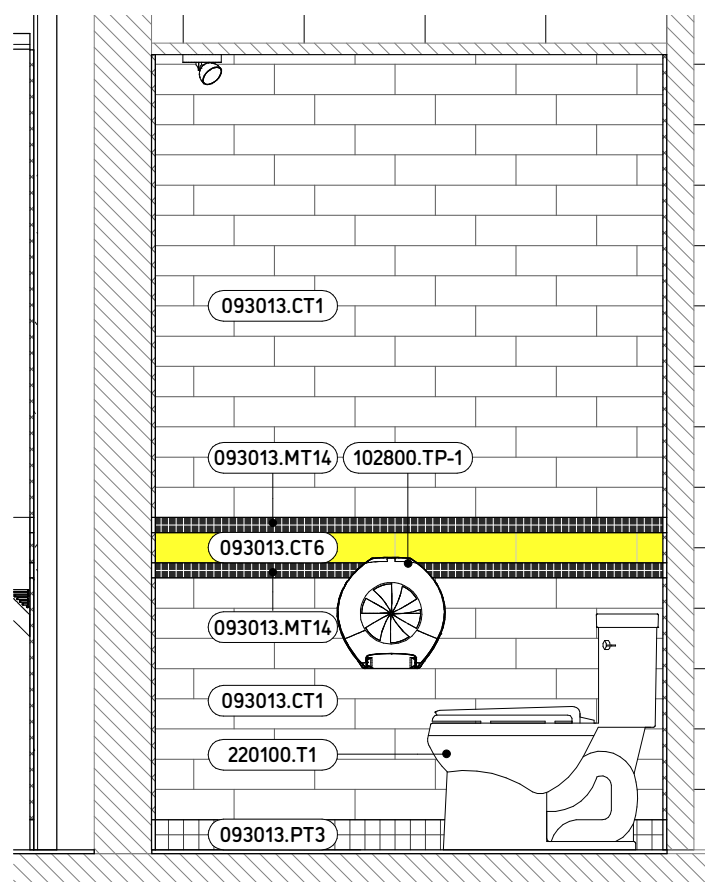
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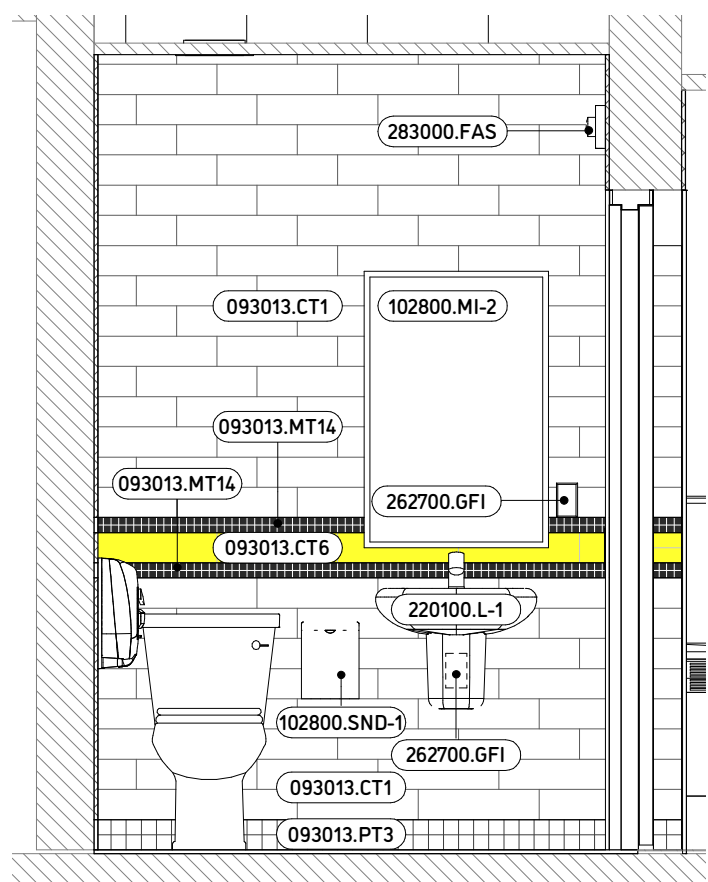
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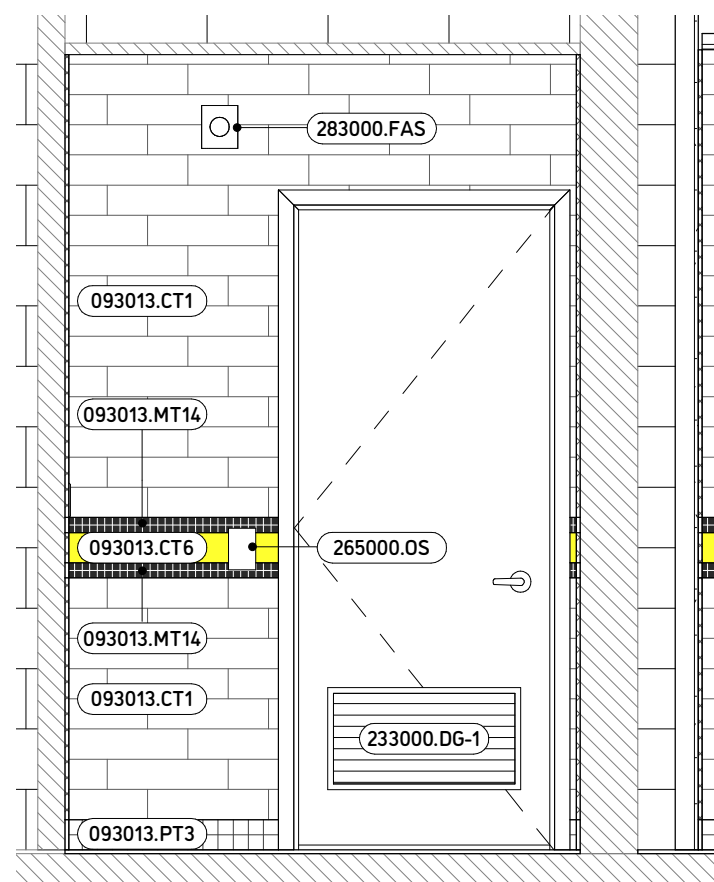




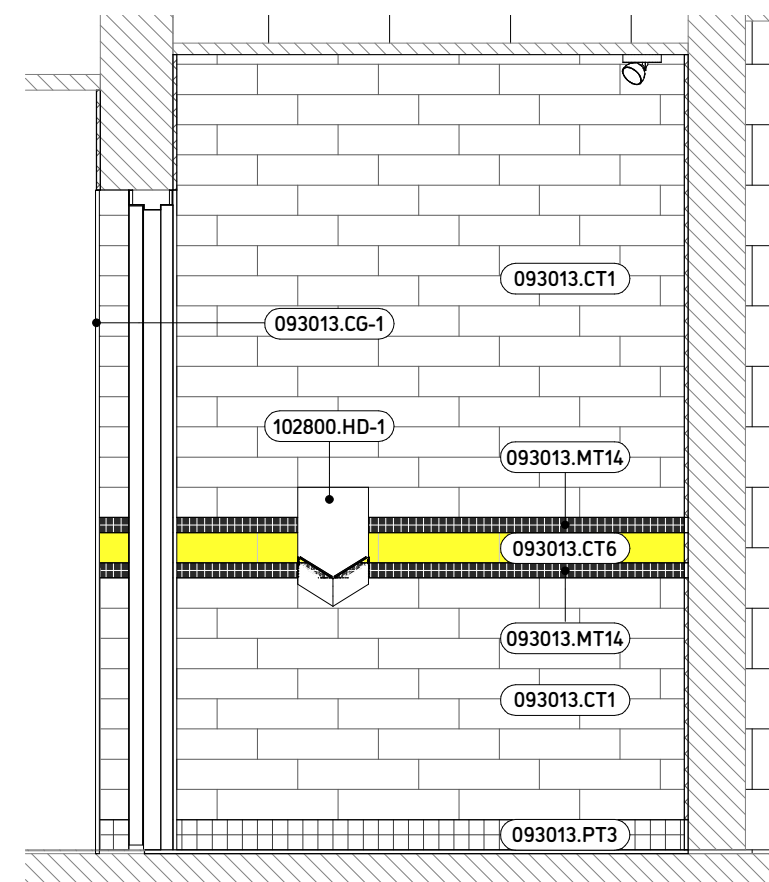
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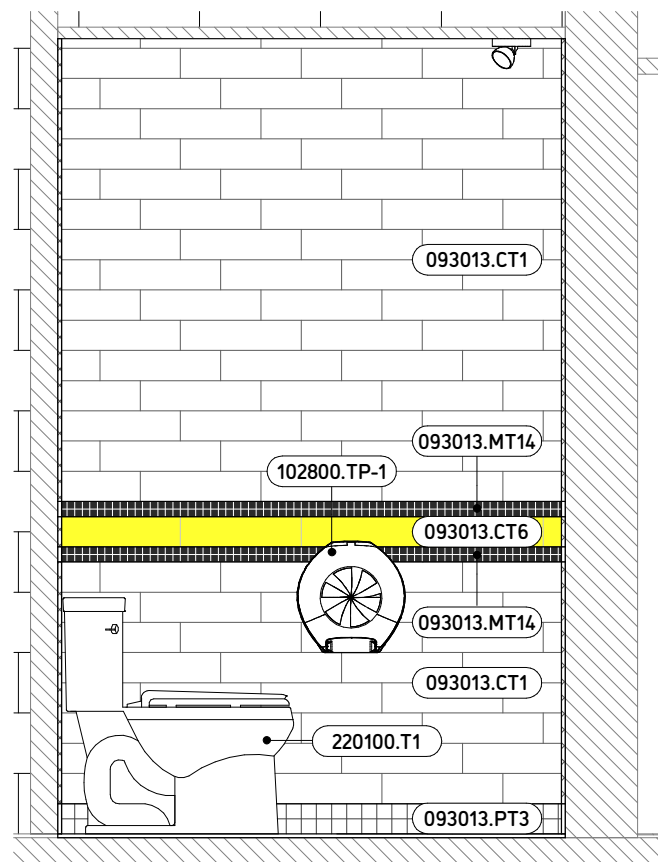
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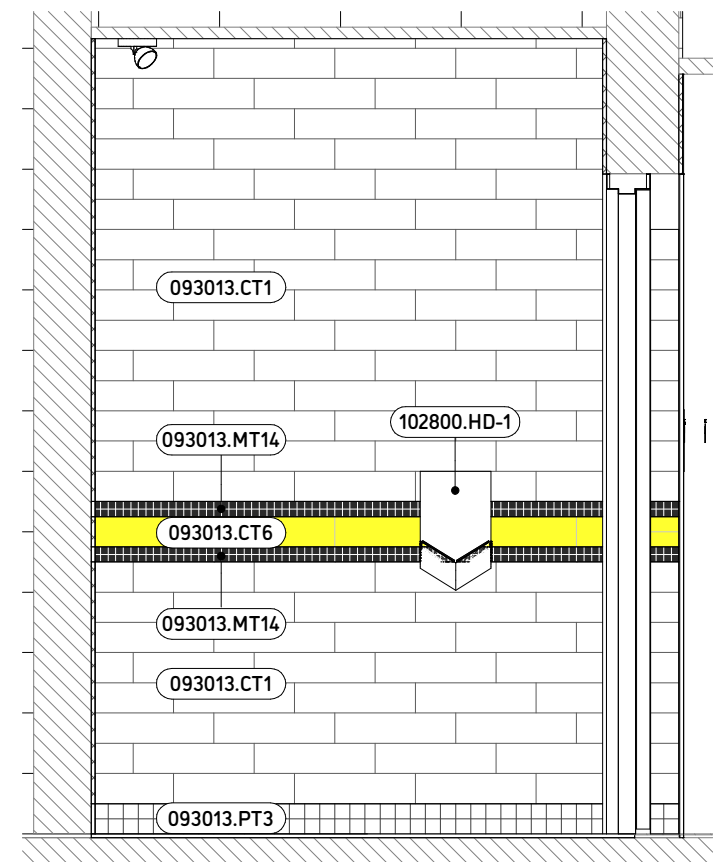
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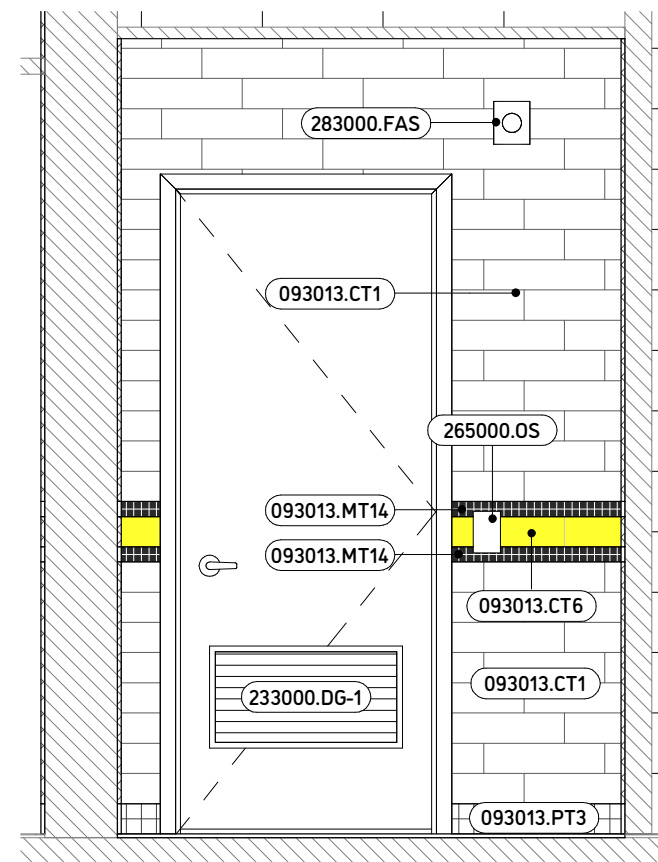
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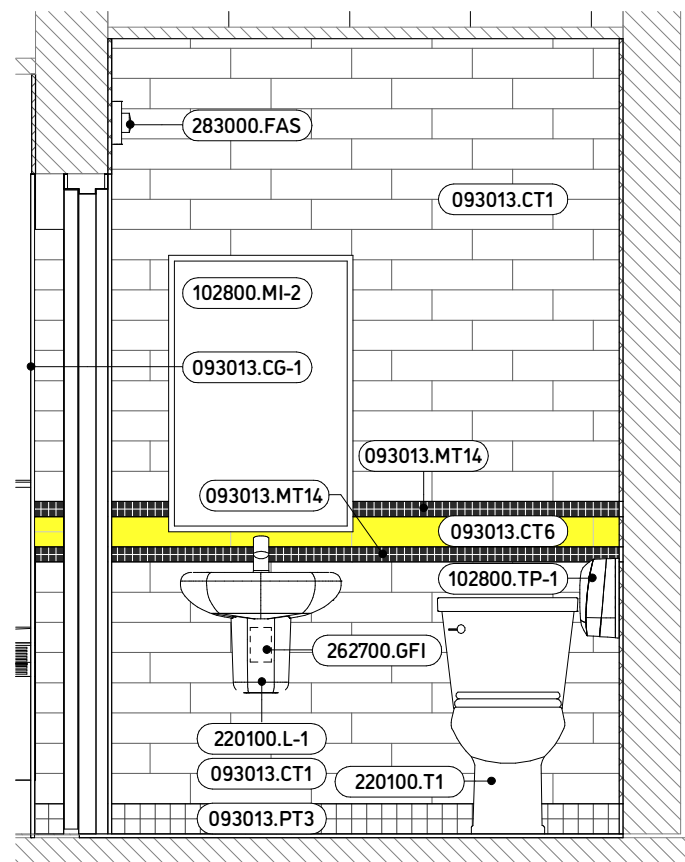
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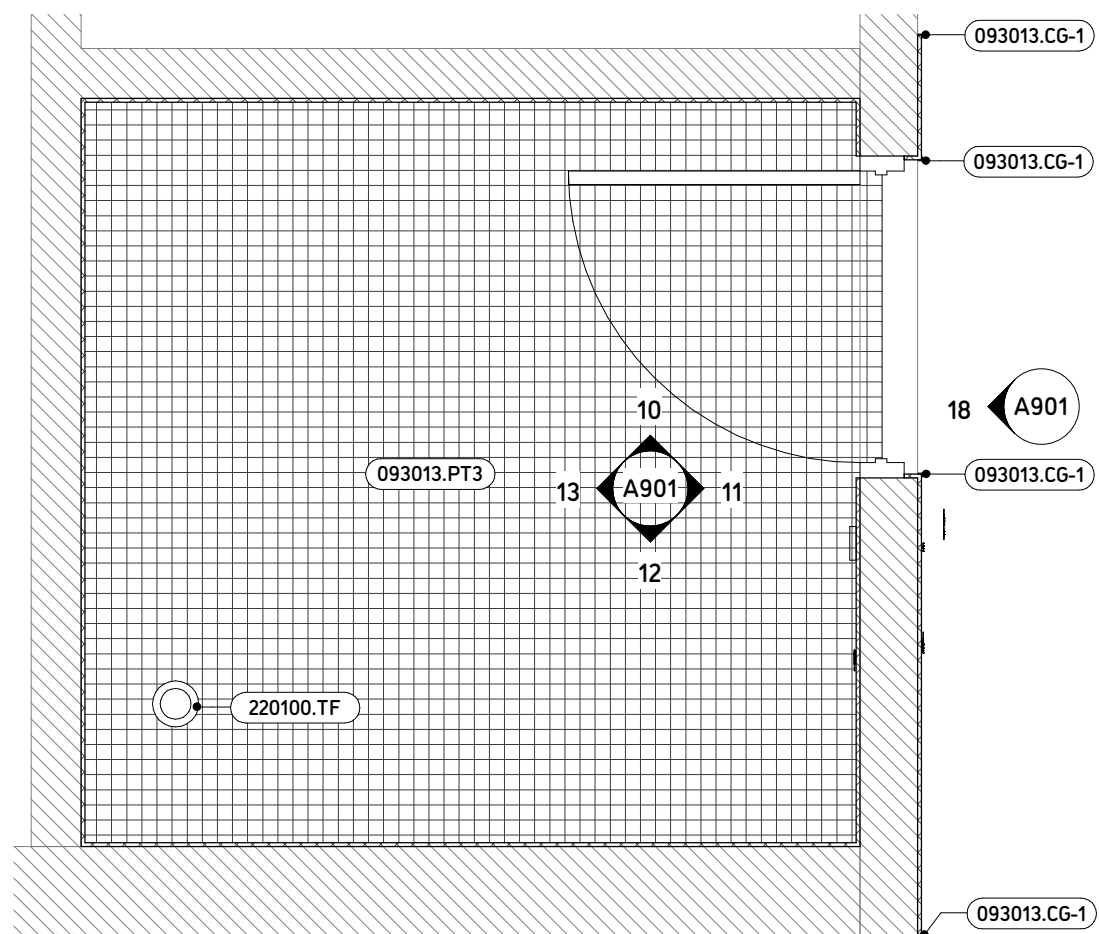
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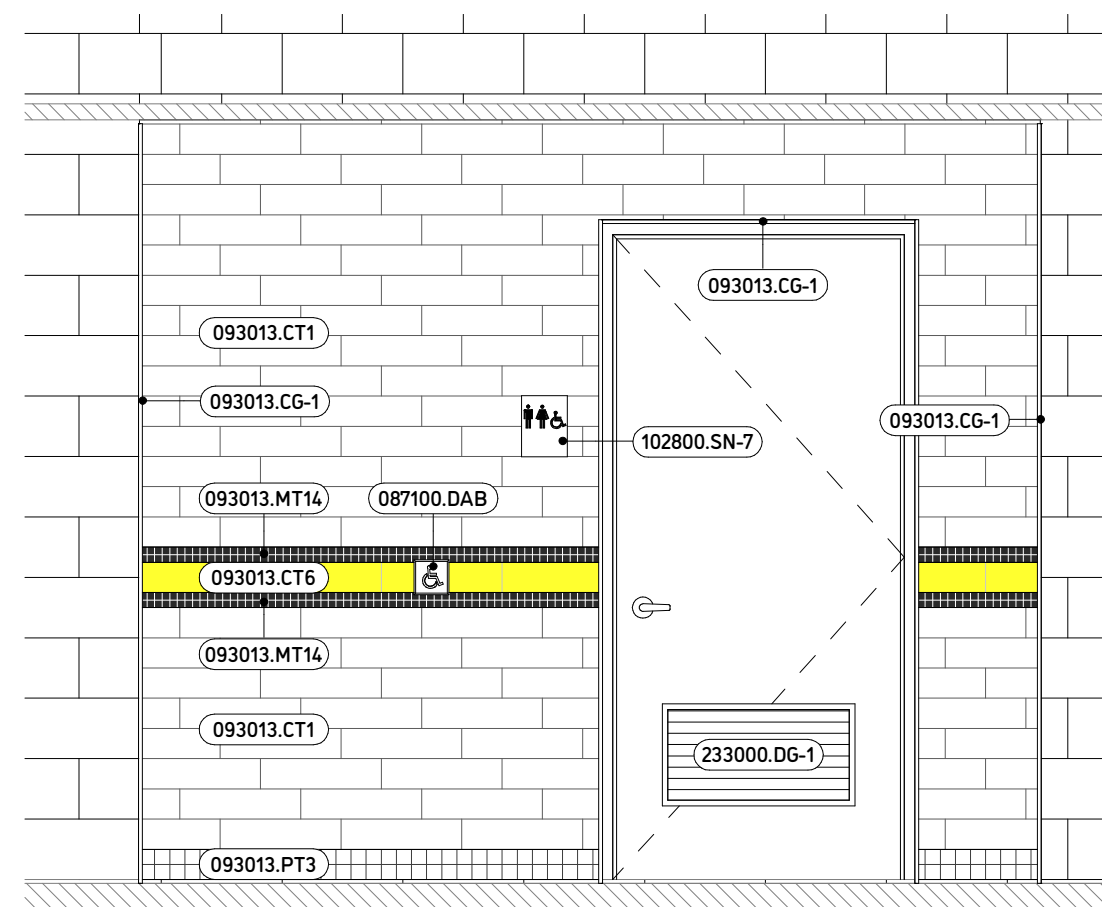
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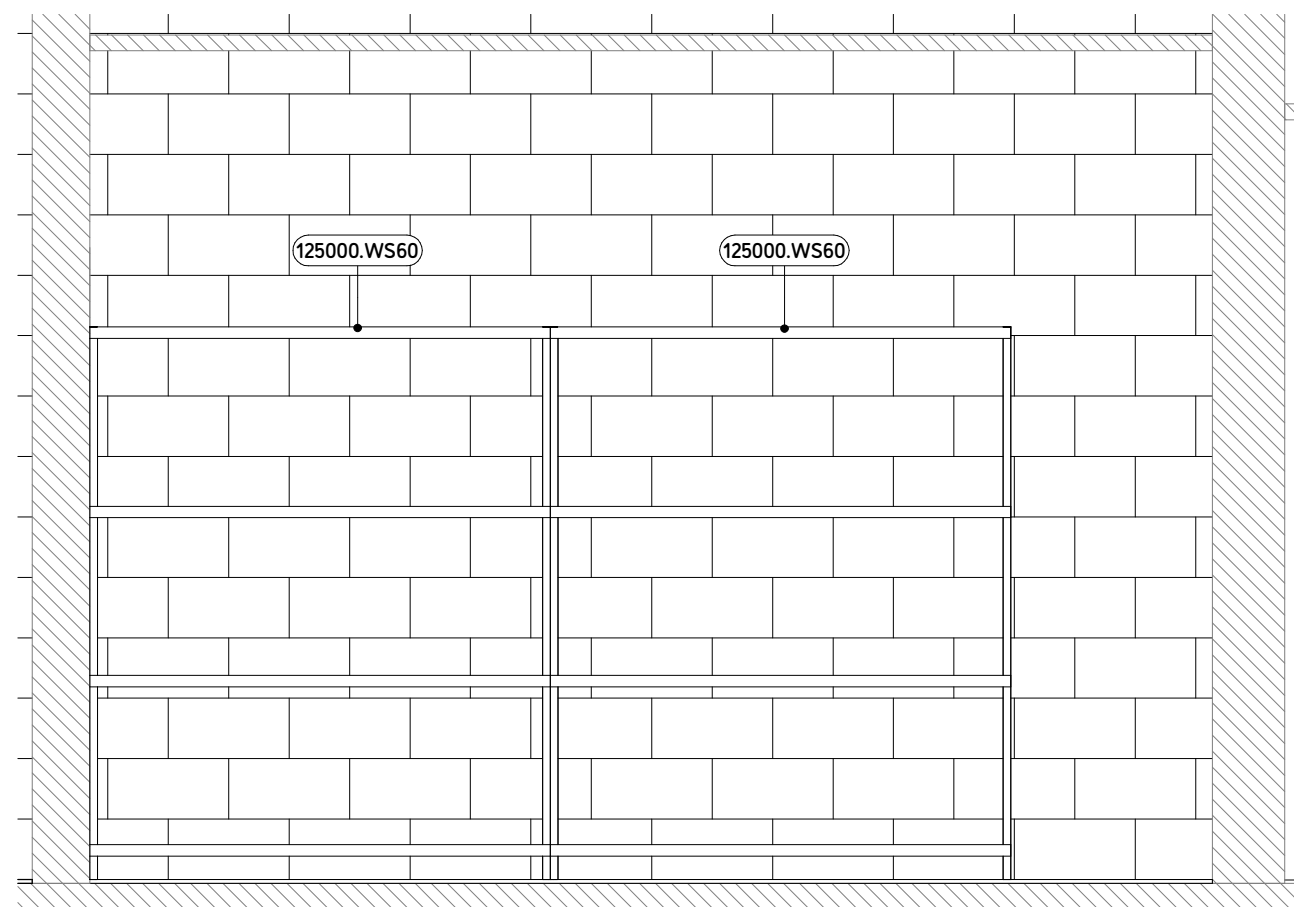
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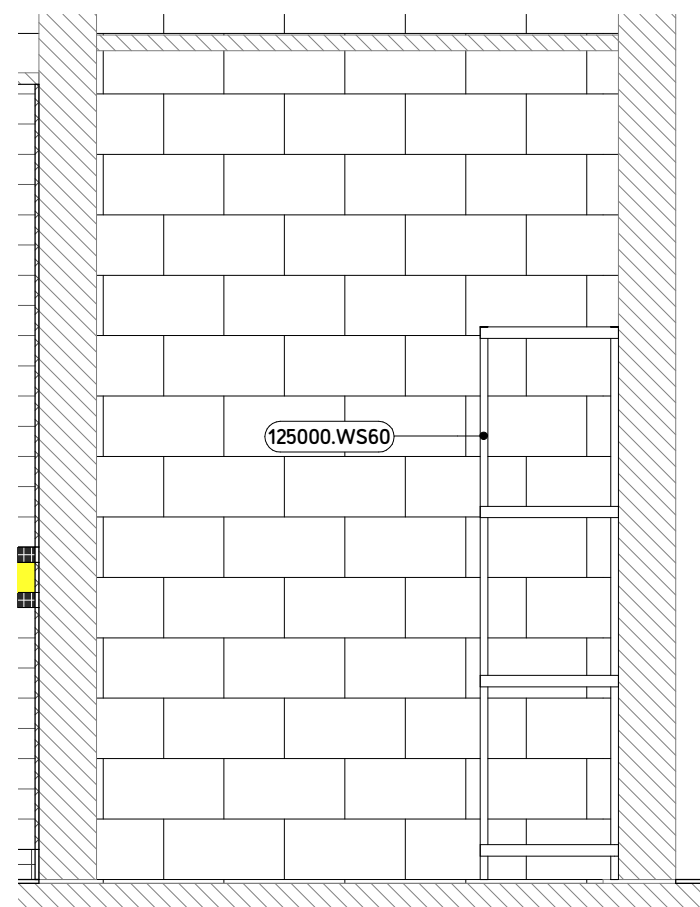
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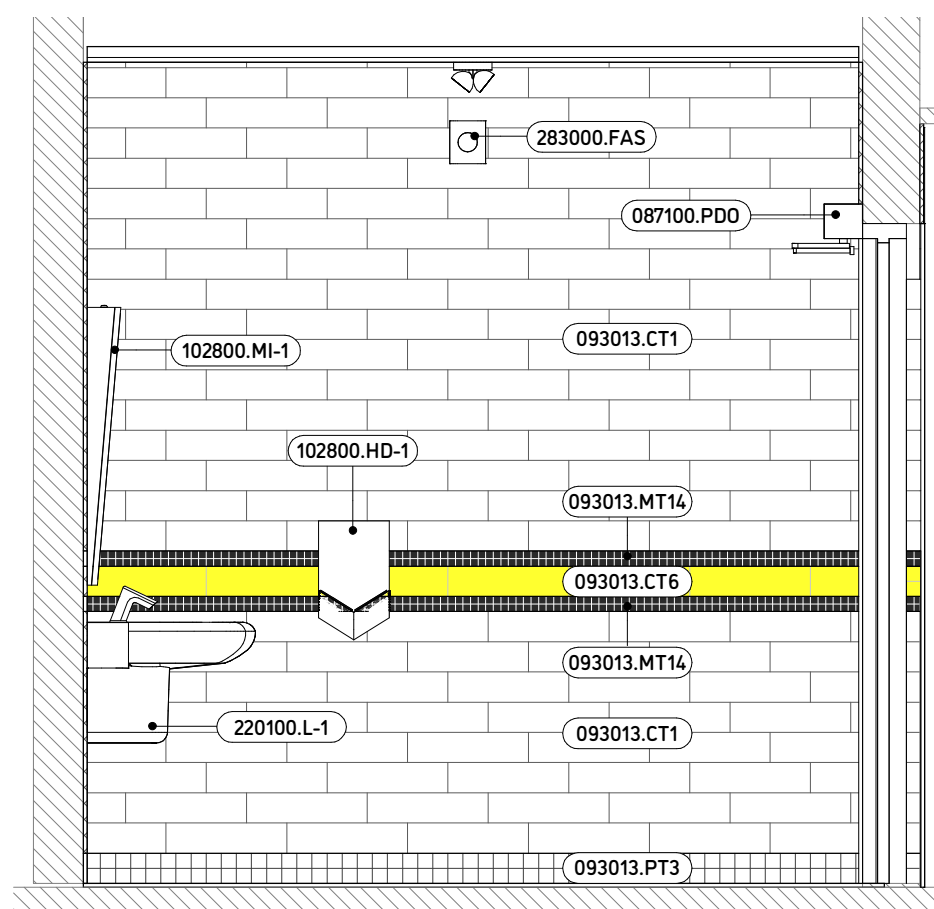
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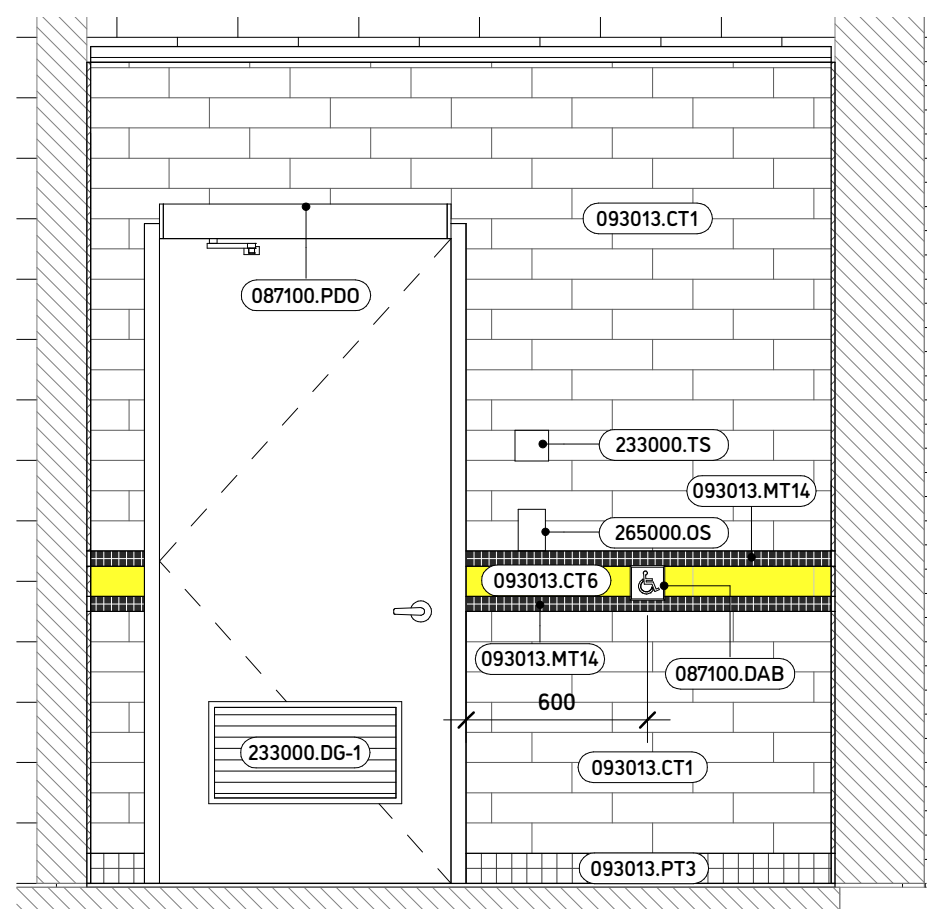
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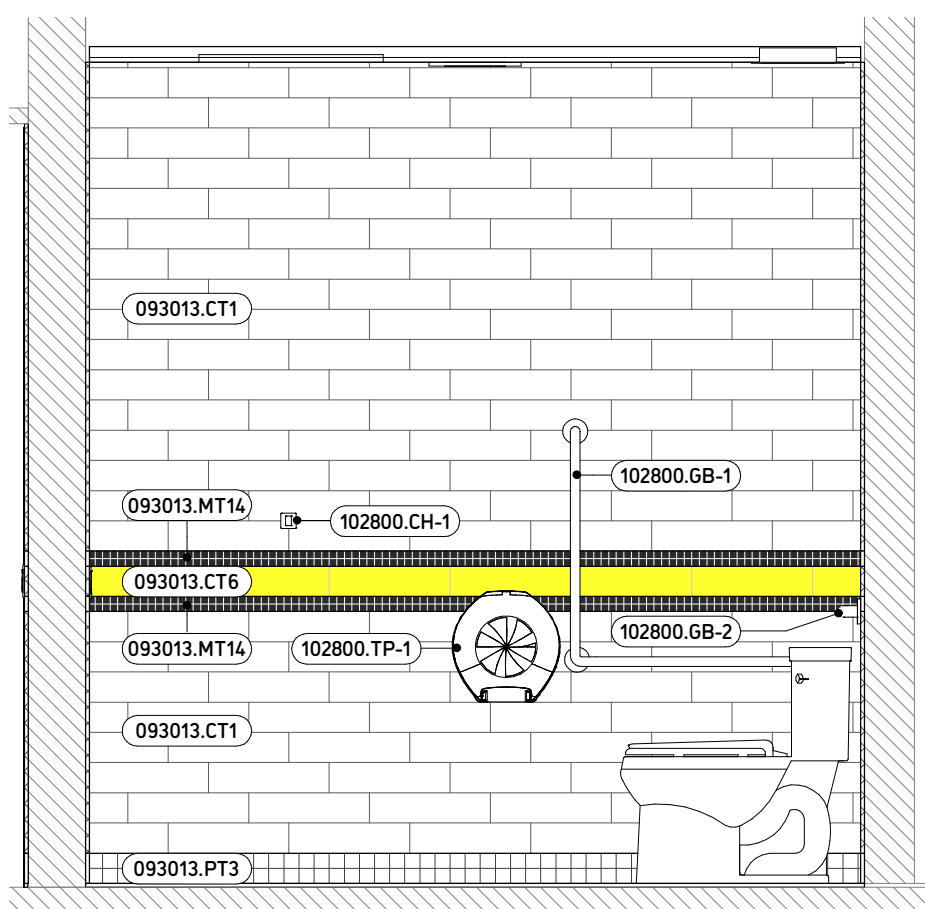
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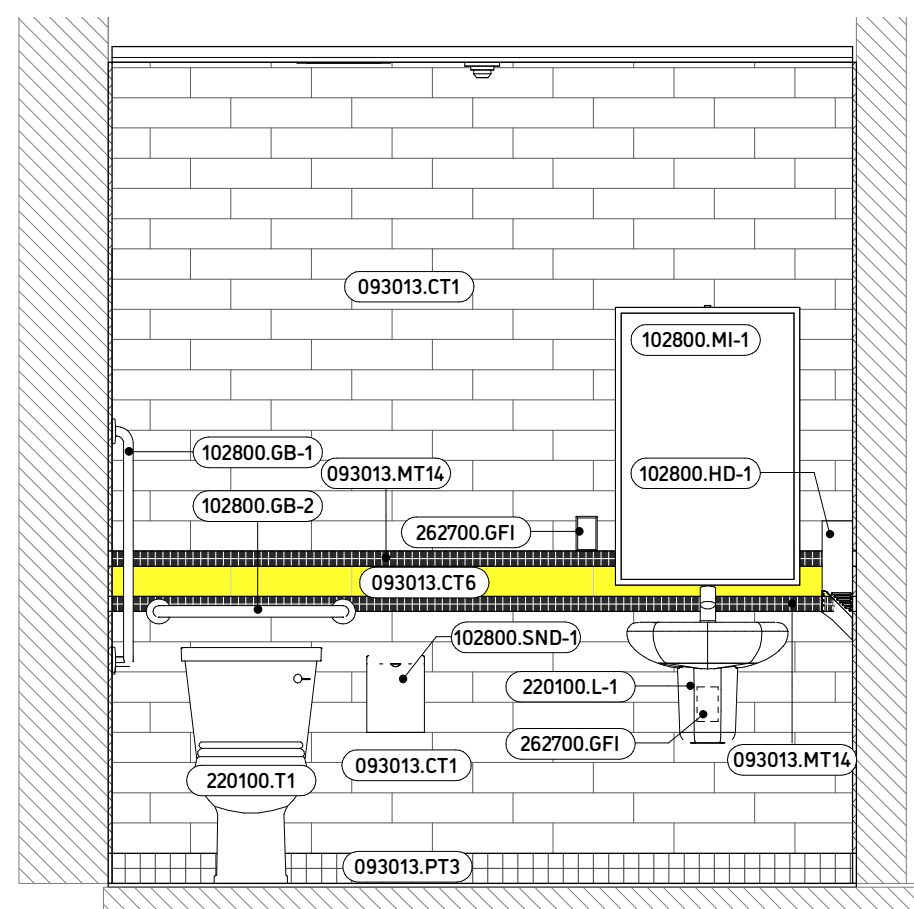
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11 Rm 166 East  
1:25



12 Rm 166 South  
1:25



13 Rm 166 West  
1:25

## FINISHES - GENERAL NOTES

1. TILE PRE-INSTALLATION MEETING. A PRE-INSTALLATION MEETING IS TO BE COORDINATED BY THE CONTRACTOR AND THEIR TILE TRADE(S), THE ARCHITECT AND THE OWNER PRIOR TO COMMENCING TILE INSTALLATION. REFER TO SPECIFICATION SECTION 013119 FOR FURTHER INFORMATION.

2. KEYNOTE NUMBERS RELATE TO THE SPECIFICATION SECTIONS - REFER TO APPROPRIATE SPECIFICATION SECTION FOR FURTHER INFORMATION.

3. FIXTURES AND ACCESSORIES HAVE BEEN REMOVED FROM VIEW IN FINISH PLANS FOR CLARITY. REFER TO FLOOR PLANS FOR FURTHER INFORMATION.

4. COORDINATE PLUMBING FIXTURE FINISHED HEIGHTS WITH FINISHED FLOOR ELEVATIONS FOR FLUSH INSTALL.

5. PAINTING. ALL EXISTING PAINTED SURFACES WITHIN AREA OF NEW WORK TO RECEIVE NEW PAINT FINISH - COLOURS TO MATCH EXISTING SCHOOL COLOUR SCHEME(S) INCLUDING WALLS, GYPSUM CEILINGS, DOORS AND FRAMES UNLESS OTHERWISE NOTED. DO NOT PAINT FIRE RATED DOOR GRILLES (TYP.).

6. REFER TO APPENDIX A: DETAILS FOR TYPICAL APPLICABLE DETAILS.

7. FOR TYPICAL TOILET STALL ACCESSORIES REFER TO APPENDIX A: DETAILS.

### Keynote Legend

| Key Value    | Keynote Text  |
|--------------|---|
| 087100.DAB   | Door Actuator Button [Refer also to Electrical]                         |
| 087100.PDO   | Power Door Operator with hold open function. [Refer also to Electrical] |
| 093013.CG-1  | Tile Corner Trim CG-1 Schluter Rondo                                    |
| 093013.CT1   | Ceramic Wall Tile 100x400 Arctic White Bright                           |
| 093013.CT6   | Ceramic Wall Tile 100x400 Citron Bright                                 |
| 093013.MT14  | Glass Mosaic Tile 25x25 Slate   |
| 093013.PT3   | Porcelain Tile Tile 50x50 Black Fleck                                   |
| 102800.CH-1  | Coat Hook   |
| 102800.GB-1  | Stainless Steel 90 Degree Grab Bar                                      |
| 102800.GB-2  | Stainless Steel 24" Straight Grab Bar                                   |
| 102800.HD-1  | Hand Dryer [Refer to Electrical]  |
| 102800.MI-1  | 24" x 36" Tilt Mirror   |
| 102800.MI-2  | 24" x 36" Mirror  |
| 102800.SN-7  | Gender Neutral Barrier Free   |
| 102800.SND-1 | Sanitary Napkin Disposal  |
| 102800.TP-1  | Toilet Paper Holder   |
| 125000.WS60  | Wire Shelving 60"x 72"  |
| 220100.L-1   | Lavatory  |
| 220100.T1    | Toilet T-1  |
| 220100.TF    | Toilet Flange in tile   |
| 233000.DG-1  | Door Grille. Refer to Mechanical for size.                              |
| 233000.TS    | Thermostat  |
| 262700.GFI   | GFI receptacle - Refer to electrical.                                   |
| 265000.OS    | Occupancy Sensor  |
| 283000.FAS   | Fire Alarm Strobe   |

## Dunsford District Elementary School Washroom Renewal 2021

Dunsford, Ontario

## TENDER and BUILDING PERMIT

TBD

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DATE: 5/17/2021 7:19:04 AM  
PROJECT NO: 2020.007  
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GENERAL NOTES:

1. READ STRUCTURAL DRAWINGS IN CONNECTION WITH OTHER CONTRACT DOCUMENTS
2. THE CONTRACTOR IS TO CHECK AND VERIFY ALL DIMENSIONS ON THE STRUCTURE DRAWINGS WITH THE ARCHITECTURAL DRAWINGS BEFORE CONSTRUCTION. ANY DISCREPANCIES OR ERRORS MUST BE REPORTED TO THE ARCHITECT / ENGINEER PRIOR TO COMMENCING WORK
3. DO NOT SCALE DRAWINGS
4. FEATURES OF CONSTRUCTION NOT FULLY SHOWN ARE OF THE SAME CHARACTER AS THOSE NOTED FOR SIMILAR CONDITIONS.
5. STRUCTURAL DESIGN IS BASED ON THE LATEST EDITION OF THE NATIONAL BUILDING CODE AND, SPECIFICALLY, DIV. B- PART 4 OF THE 2012 ONTARIO BUILDING CODE
6. THE CONTRACTOR IS RESPONSIBLE FOR ARRANGING FOR THE TESTING OF CONCRETE, COMPACTION, INSPECTION OF STRUCTURAL REINFORCING AND STRUCTURAL STEEL FOR ALIGNMENT, BOLTS AND WELDED CONNECTIONS, AND FOR THE PROMPT SUBMISSION OF ALL REPORTS TO THE PROJECT ENGINEER AND ARCHITECT.
7. ANY TEMPORARY SHORING REQUIRED TO CONSTRUCT THE WORKS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
8. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT THE START OF THE PROJECT AND ARRANGE FOR ALL INSPECTIONS IN ACCORDANCE WITH CLAUSE 10.2 OF THE BUILDING CODE ACT AND DIV. C. PART 1 OF THE ONTARIO BUILDING CODE, PROVIDE MINIMUM 48 HOURS NOTICE WHEN AN INSPECTION IS REQUIRED. TULLOCH ENGINEER HUNTSVILLE MY BE CONTACTED BY PHONE AT (705)789-8751.
9. WHERE DEMOLITION OR RENOVATION OF EXISTING BUILDING IS INVOLVED, IT IS THE RESPONSIBILITY OF THE OWNER TO COMPLETE A DESIGNATED SUBSTANCE SURVEY. A COPY OF THE SURVEY SHALL BE FORWARDED TO THE ENGINEER AND TO THE CONTRACTOR PRIOR TO BEGINNING CONSTRUCTION.

STRUCTURAL STEEL:

1. STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF CSA SPECIFICATIONS S16.1 (LATEST EDITION) AND CSA SPECIFICATIONS G40.1 TYPE350W (LATEST EDITION) FOR BEAMS AND 350W FOR HSS (CLASS C).
2. THE WELDING SHALL CONFORM TO THE REQUIREMENTS OF THE CSA W59 AND THE WELDING COMPANY AND WELDERS SHALL BE QUALIFIED UNDER THE REQUIREMENTS OF CSA W57 (LATEST EDITION) FOR THE APPROPRIATE POSITION.
3. PREPARE AND SUBMIT FOR APPROVAL, FULLY DETAILED AND DIMENSIONED DRAWINGS AND ERECTION DIAGRAM, FOUR COPIES SHALL BE PROVIDED TO THE ENGINEER FOR APPROVAL, FABRICATION, AND ERECTION. DRAWINGS SHALL BE SEALED BY THE FABRICATORS ENGINEER. ADDITIONAL COPIES OF THE DRAWINGS SHALL BE PROVIDED AS REQUIRED.
4. BOLTED CONNECTIONS SHALL BE MADE USING FRICTION TYPE CONNECTIONS AND HIGH TENSILE STRENGTH BOLTS (A325 MINIMUM).
5. PROVIDE AND REMOVE TEMPORARY BRACING NECESSARY TO KEEP THE STRUCTURE TRUE AND PLUMB DURING CONSTRUCTION.
6. ALL CONNECTIONS TO BE STANDARD FRAME BEAM CONNECTORS AND ARE TO BE DESIGNED AND STAMPED BY THE FABRICATOR'S ENGINEER AS PER CSA S16.1
7. STEEL SHALL BE THOROUGHLY CLEANED AND BE GIVEN ONE SHOP COAT OF ANTI-CORROSIVE PRIMER, AREAS EFFECTED BY WEATHERING, DAMAGE DUE TO HANDLING ETC., SHALL HAVE THE RUST REMOVED AND BE "TOUCHED UP" IN THE FIELD.
8. ALL OF THE BASE PLATES FOR COLUMNS AND BEARING PLATES FOR THE BEAMS SHALL BE GROUTED WITH MINIMUM OF 38MM (1½") OF 35 MPa (S100 PSI) NON-SHRINK GROUT.
9. NO SPLICES IN BEAMS AND COLUMNS WILL BE ALLOWED WITHOUT WRITTEN APPROVAL BY THE ENGINEER. BUTT WELDS IN SPLICES AND MOMENT CONNECTIONS MUST BE ULTRASONICALLY TESTED OR X-RAYED AND PASSED BY AN INDEPENDENT TESTING COMPANY.
10. CO-ORDINATE WITH MECHANICAL ENGINEER, ELECTRICAL ENGINEER, AND ALL SUB-TRADES WHOSE WORK AFFECTS THE DETAILING, FABRICATION AND ERECTION OF THE STRUCTURAL STEEL. DO NOT CUT OPENINGS IN STRUCTURAL STEEL MEMBERS WITHOUT ENGINEER APPROVAL.
11. NO HOLES SHALL BE CUT IN THE BEAMS OR COLUMNS.

FOUNDATIONS:

1. FOUND ALL FOOTINGS ON NATURALLY CONSOLIDATED, UNDISTURBED SOIL CAPABLE OF SAFELY SUSTAINING 150 Kpa (3000 psf). BEARING CAPACITY SHALL BE CONFIRMED BY CBO OR ENGINEER
2. NO FOOTINGS SHALL BE POURED UNTIL THE ENGINEER HAS APPROVED THE FOUNDATION CONDITIONS.
3. THE LINE SLOPE BETWEEN ADJACENT FOOTINGS OR EXCAVATIONS OR ALONG STEPPED FOOTINGS SHALL NOT EXCEED A RISE OF 7 AND A RUN OF 10.
4. ERECT, MAINTAIN, AND IF REQUIRED, REMOVE A SUPPORTING SHORINGS SYSTEM ALONG THE SIDES OF THE EXCAVATION.

CONCRETE:

1. CONCRETE IS SPECIFIED USING ALTERNATIVE NUMBER OF CSA A23.1 TABLE 2 AS FOLLOWS:

|                                     | EXTERIOR FOUNDATIONS | INTERIOR FLOOR SLAB |
|-------------------------------------|----------------------|---------------------|
| EXPOSED CLASS (TABLE 1)             | C-1                  | N                   |
| AIR CONTENT CATEGORY (TABLE 4)      | 1                    | N/A                 |
| MAX. W/C RATIO (TABLE 2)            | 0.40                 | 0.55                |
| CURING TYPE (TABLE 19)              | 2                    | 1                   |
| MIN. COMPRESSIVE STRENGTH @ 28 DAYS | 35 MPa               | 30 MPa              |

2. AT LEAST TWO (2) WEEKS PRIOR TO THE PLACEMENT OF CONCRETE THE CONTRACTOR SHALL SUBMIT THE FOLLOWING TO THE ENGINEER FOR REVIEW:
  - A VALID 'CERTIFICATE OF READY MIXED CONCRETE PRODUCTION FACILITIES' OR A VALID 'CERTIFICATE OF MOBILE MIX CONCRETE PRODUCTION FACILITIES' AS ISSUED BY THE 'READY MIXED CONCRETE ASSOCIATION OF ONTARIO' TO THE PLANT BEING USED.
  - A COMPLETED 'CONCRETE MIXED FINAL SUBMISSION FORM'
  - A QUALITY PLAN THAT DESIGNATES A SPECIFIED SLUMP OR SOME OTHER MEASURE OF WORKMANSHIP
  - TEST RESULTS TO SHOW COMPLIANCE WITH CSA A23.1
  - AIR VOID SYSTEM OF HARDENED CONCRETE.
  - STATISTICAL STRENGTH TEST ANALYSIS TO CONFIRM THE STRENGTH LEVEL FOR EACH CLASS OF CONCRETE INCLUDING THE EXPECTED 7/28 DAY STRENGTH RATIO
3. FABRICATION AND PLACEMENT OF REINFORCING STEEL TO BE IN ACCORDANCE WITH CSA A23.1 AND THE REINFORCING STEEL INSTITUTE OF CANADA'S 'REINFORCING STEEL MANUAL OF STANDARD PRACTICE'.
4. REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO CSA G30.18 M52, Fy=400 MPa (GRADE 400)
5. CONCRETE SHALL NOT BE POURED UNTIL REBAR HAS BEEN INSPECTED BY THE ENGINEER.
6. WHERE REBARS JOIN AT CORNERS PROVIDE CORNER BARS FOR LAPS, UNLESS NOTED OTHERWISE.
7. CONCRETE COVER FOR REINFORCING STEEL AS PER TABLE 17 OF CSA A23.1
  - ALL CONCRETE CAST AGAINST EARTH 76MM
  - ALL CONCRETE CAST IN FORMS BUT EXPOSED TO EARTH OR WEATHER 50MM
  - BARS 20M AND SMALLER IN WALLS AND SLABS 32MM
  - CONCRETE NOT EXPOSED TO EARTH AND WEATHER 25MM OR 1.5 NOMINAL BAR DIAMETER
8. ALL REINFORCING BARS SHALL BE ACCURATELY PLACED AND ADEQUATELY SUPPORTED BY PRECAST CONCRETE, ADDITION BARS, TIES, TIES OR APPROVED CHAIRS AGAINST DISPLACEMENT.
9. CONTINUOUS AND TEMPERATURE REINFORCING BARS SPLICES TO BE LAPPED 40 BAR DIAMETERS OR A MINIMUM OF 600 AT SPLICES AND CORNERS, UNLESS OTHERWISE SHOWN ON SECTION OR TYPICAL DETAILS. LAP CONTINUOUS TOP BARS AT CENTRE BETWEEN SUPPORTS AND CONTINUOUS ENDS WITH STANDARD HOOKS.
10. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL CONCRETE IS PLACED AND CURED IN CONFORMANCE WITH THE REQUIREMENT OF CSA A23.1-14. THE CONTRACTOR IS RESPONSIBLE FOR ALL HEATING AND HOARDING REQUIRED.
11. ALL EXTERIOR EDGES TO BE CHAMFERED 19MM UNLESS NOTED OTHERWISE.

CEMENTITIOUS GROUT

1. CEMENTITIOUS GROUT UNDER BASE PLATES TO BE SIKAGROUT 212.

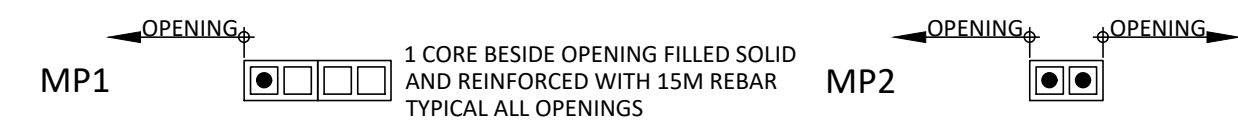
CONCRETE ANCHORS

1. ALL CONCRETE ANCHORS TO BE HILTI HAS ROD HOT DIPPED GALVANIZED (DIAMETER AS NOTED ON DRAWINGS).
2. ALL CONCRETE ANCHORS TO BE COMPLETE WITH HOT DIPPED GALVANIZED FLAT WASHERS, NUTS, LOCK NUTS, ETC. AS SPECIFIED ON THE DRAWINGS
3. ALL EPOXY ADHESIVE SHALL BE HILTI HIT-HY 200/HIT ICE.
4. INSTALL AS PER MANUFACTURE'S SPECIFICATIONS.

MASONRY

1. ALL MASONRY WORK SHALL CONFORM TO NATIONAL BUILDING CODE LATEST EDITION AND CSA STANDARDS S 304.1 - 'DESIGN OF MASONRY STRUCTURES', LATEST EDITION.
2. ALL CONCRETE MASONRY UNITS SHALL CONFORM TO CAN/CSA A165 SERIES-04 EXCEPT WHERE OTHERWISE SPECIFIED. PROVIDE MASONRY BLOCK WITH A MINIMUM COMPRESSIVE STRENGTH OF 15 MPa
3. UNTELS OVER ALL OPENINGS IN NON LOAD BEARING MASONRY WALLS, UNLESS OTHERWISE SHOWN ON STRUCTURAL DRAWINGS.
4. ALL STEEL UNTELS TO HAVE MINIMUM OF 150MM (6") BEARING ON EACH SIDE OF OPENING.
5. PROVIDE MINIMUM OF 2 COURSES OF 100% FILLED SOLID BLOCK 16" LONG MINIMUM FILLED WITH 20 MPa CONCRETE, CENTERED UNDER EACH BEAM AND JOIST BEARING PLATE.
6. MINIMUM BEAM BEARING PLATE UNLESS NOTED FOR JOIST OR BEAM SUPPLIED BY STEEL FABRICATOR  
SP1 - 150MM CONC BLOCK - 250 x 12 x 125  
SP2 - 200MM CONC BLOCK - 250 x 12 x 178  
EACH WITH 1-12MMØ ANCHORS
7. FILL BLOCKS SOLID BELOW BEARING PLATES TWO COURSES, AND ALL LINTEL BLOCKS WITH TYPE M MORTAR 17.5 MPa
8. LOAD BEARING AND NON-LOAD BEARING WALLS TYPE S MORTAR 12.5 MPa
9. PROVIDE HORIZONTAL REINFORCING AT EVERY 2nd BLOCK COURSE USING HEAVY DUTY BLOCK-LOC LADDER REINFORCING.

REINFORCED MASONRY PIERS



MASONRY

1. OVER ALL OPENING AND RECESSES IN MASONRY WALLS, INCLUDING THOSE FOR MECHANICAL AND ELECTRICAL SERVICES OR EQUIPMENT, PROVIDE AND INSTALL MASONRY OR STEEL UNTELS IN ACCORDANCE WITH THE REQUIREMENTS OF THE LINTEL SCHEDULE
2. OBTAIN THE ENGINEER'S PERMISSION FOR ALL OPENINGS, SLEEVES, AND SLOTS THROUGH STRUCTURAL COMPONENTS NOT SHOWN ON STRUCTURAL DRAWINGS.
3. WHERE DOWELS, ANCHOR BOLTS, ETC., ARE SHOWN PROJECTING INTO MASONRY, GROUT THESE TIGHT INTO MASONRY VOIDS WITH CONCRETE OR CEMENT MORTAR.
4. PROVIDE A MINIMUM OF 400MM (16") DEPTH OF 100% SOLID MASONRY UNITS FOR BEARING OF STEEL, CONCRETE, OR MASONRY UNTELS AND FOR MINIMUM OF 200MM (8") PAST BEARING PLATE EACH SIDE.
5. ALL MASONRY MUST BE SET WITH FULLY FILLED JOINTS USING MORTAR AS DEFINED IN THE NATIONAL BUILDING CODE AND/OR CSA A179M. MORTAR TO BE TYPE 'S' UNLESS NOTED OTHERWISE.
6. PROVIDE A MINIMUM OF 38MM (1½") PORTLAND CEMENT GROUT UNDER ALL WALL PLATES AND BASE PLATES.
7. GROUT SHALL ALSO BE SUPPLIED IN CONCRETE BLOCK WALLS WHEREVER HORIZONTAL OR VERTICAL REINFORCING STEEL IS SPECIFIED. FILL CORES SOLID WHEREVER GROUT IS REQUIRED.
8. ALL MASONRY GROUT SHALL CONFORM TO CA/CSA A179-04 AND SHALL BE FINE TYPE GROUT WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 10 MPa.
9. THE CONCRETE BLOCK SHALL CONFORM TO CSA STANDARD CAN3-A165 SERIES-04
10. THE MASONRY WIRE REINFORCING SHALL CONFORM TO CSA A370-04.
11. MASONRY VENEER CONNECTORS SHALL CONFORM TO AN BE INSTALLED IN ACCORDANCE WITH CSA A370-04
12. NO MASONRY WORK SHALL BE PERMITTED WITH TEMPERATURE BELOW 5 DEGREES CELSIUS UNLESS PROVISIONS ARE MADE FOR HEATING THE MATERIALS AND PROTECTING THE WORK WITHOUT WRITTEN APPROVAL OF THE ENGINEER.
13. ALL MASONRY CONSTRUCTION SHALL CONFORM TO CSA STANDARDS A371-04.
14. PROVIDE CONTINUOUS TRUSS TYPE JOINT REINFORCING AT 400MM (16") O.C. AND USE "CORNER-LOK" AT ALL WALL INTERSECTIONS. REINFORCING TO BE HOT DIP GALVANIZED AT ASTM A 153 CLASS B2. LONGITUDINAL WIRES TO BE 4.76MM (⅜") DIAMETER, AND DIAGONAL WIRES TO BE 3.66MM DIAMETER (9 GA).
15. ALL METAL ANCHORS TO BE SECURE WALLS EXPOSED TO WEATHER SHALL BE HOT DIP GALVANIZED.
16. ANCHOR ALL MASONRY TO COLUMNS WITH STEEL STRAP PLATE 40 X 5 X 525MM, 50MM HOOKS AT 600MM O.C. (PLATE 1½" X ⅜" X 21", 2" HOOKS AT 24") UNLESS NOTED.
17. PROVIDED UNTELS PER LINTEL SCHEDULE.
18. VERTICAL REINFORCING SHALL BE CONTINUOUS. LAB BARS 450MM (18")
19. REINFORCE ALL OPENINGS THROUGH MASONRY WALLS WITH TWO (2) 15M VERTICAL BARS EACH SIDE OF THE OPENING AND EXTENDING 600MM (16") PAST OPENING.
20. PROVIDE ONE COURSE BOND BEAM COMPLETE WITH TWO (2) 15M CONTINUOUS FOR ALL BEARING WALLS UNDER ROOF STRUCTURES AND ALL FLOOR STRUCTURES.

WOOD

1. THE STRUCTURAL TIMBER AND LUMBER SHALL BE NO. 1 OR 2 GRADE SPECIES SPF OR BETTER UNLESS NOTED OTHERWISE.
2. THE DESIGN OF THE BEAMS, COLUMNS AND UNTELS IS BASED ON THE LIMIT STATES DESIGN SPECIFIED UNDER CSA STANDARD 086. ANY SUBSTITUTIONS OF SPECIES, GRADE OR GROUP MUST BE APPROVED BY THE ENGINEER PRIOR TO THE COMMENCING OF WORK.
3. THE LUMBER WAS DESIGNED FOR A MOISTURE CONTENT GREATER THAN 15% AT THE TIME OF MANUFACTURE AND LESS THAN 15% IN SERVICE.
4. DURING CONSTRUCTION, ENSURE ALL MEMBERS ARE IN GOOD BEARING CONTACT.
5. CONNECTION HARDWARE IS TO RECEIVE ONE COAT OF ZINC CHROMATE PRIMER OR EQUAL. ENSURE THAT ALL HARDWARE AND FASTENERS IN CONTACT WITH PRESSURE TREATED WOOD ARE COMPATIBLE WITH THE PRESSURE TREATED CHEMICALS.
6. ALL PLYWOOD JOINTS ARE TO BE STAGGERED. NAIL ALL FLOOR, ROOF AND WALL SHEATHING AT 150MM (6") O.C. AT EDGES AND 300MM (1') CENTRES ELSEWHERE UNLESS NOTED OTHERWISE.
7. ALL PLYWOOD SHALL CONFORM TO CSA STANDARD 0121 OR 0151.
8. THE BEARING SHOWN ON THE DRAWINGS IS THE MAXIMUM WIDTH TO BE PROVIDED AND THE TRUSS

MANUFACTURER MUST DESIGN THE TRUSSES TO SUIT THE BEARING WIDTH.

9. PROVIDE STANDARD JOIST HANGERS AS REQUIRED BY SIMPSON, RSC OR APPROVED EQUIVALENT.
10. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED.
11. MAXIMUM BRIDGING SPACING FOR SWAN LUMBER JOISTS SHALL BE 2300MM (7'-6") O.C..
12. SPIKE EACH LAMINATION OF BUILD-UP BEAMS @ 300MM (1') O.C. AS FOLLOWS:
  - 1 ROW OF 90MM (3½") LONG NAILS FOR 140MM (5½") DEPTH.
  - 2 ROWS OF 90MM (3½") LONG NAILS FOR GREATER DEPTH.
13. SPIKE AND GLUE BUILD-UP POSTS @22-MM (8½") O.C. AS PER CODE AS FOLLOWS:
  - 1 ROW FOR 38X89 (2"X4")
  - 2 ROWS FOR LARGER SIZES
14. CONTINUITY OF POST MUST BE MAINTAINED TROUGH FLOORS BY SOLID BLOCKING OR POST EXTENSIONS.

SUBMITTALS

1. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE SUBMITTAL OF ALL REQUIRED SHOP OR FABRICATION DRAWINGS IN A TIMELY MANNER.
2. ALL STRUCTURAL SUBMITTALS SUBMITTED FOR REVIEW MUST FIRST BE REVIEW BY AND STAMPED BY THE GENERAL CONTRACTOR.
3. THE FOLLOWING SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW:

| DRAWING                | P.ENG. SEAL |
|------------------------|-------------|
| A. REINFORCING STEEL   | NO          |
| B. CONCRETE MIX DESIGN | NO          |
| C. STRUCTURAL STEEL    | NO          |
4. WHERE NOTED IN THE ABOVE TABLE, STRUCTURAL SUBMITTALS SHALL BEAR THE SEAL AND SIGNATURE OF A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO.
5. ALL STRUCTURAL SUBMITTALS WILL BE REVIEWED BY THE ARCHITECT AND THE ENGINEER SOLELY FOR THE CONFORMANCE WITH THE DESIGN INTENT AND THE CONSTRUCTION DOCUMENTS.
6. ALL SUBMITTALS SHALL CONSIST OF ONE ELECTRONIC PDF COPY OR FOUR PRINTS. ONE COPY WILL BE RETAINED BY THE ENGINEER.

MATERIALS TESTING AND INSPECTION

THE CONTRACTOR SHALL INCLUDE COSTS TO ENSURE THAT THE FOLLOWING QUALITY CONTROL ACTIVITIES ARE UNDERTAKEN DURING THE COURSE OF WORK:

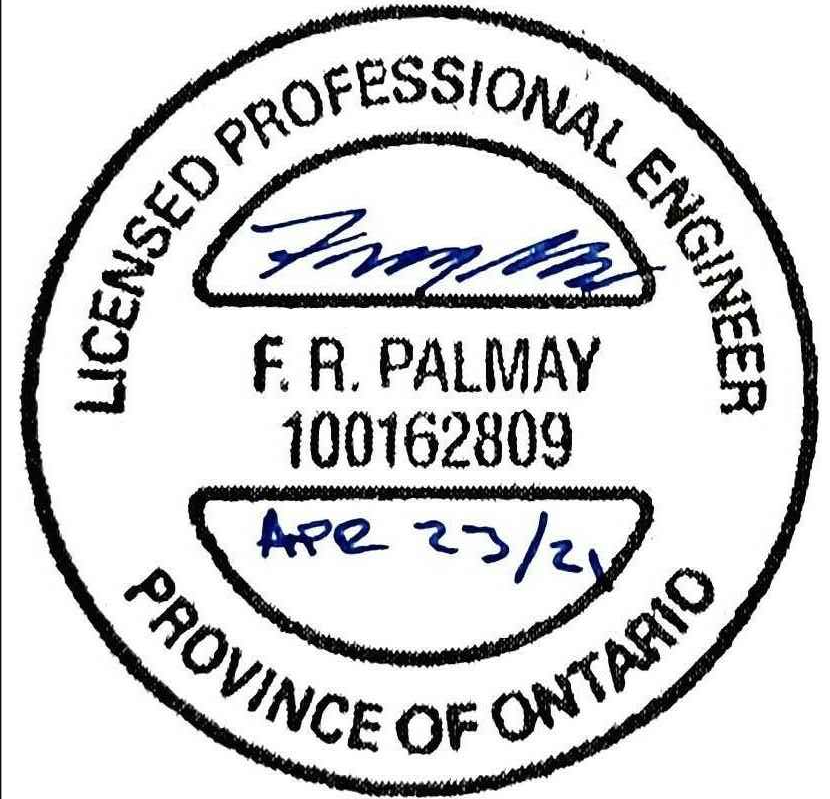
1. COMPACTION TESTING AS SPECIFIED ON THE DRAWINGS
  2. REBAR INSPECTION PRIOR TO CONCRETE PLACEMENT.
  3. CONCRETE TESTING IN ACCORDANCE WITH CSA A23.1 AND A23.2.
- CONTACT TULLOCH ENGINEERING TO OBTAIN PRICING.

FINAL CLEAN UP

1. AT THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES, THE BUILDING ERECTION CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE ALL WASTE CONSTRUCTION MATERIALS, DEBRIS, ETC. FROM THE SITE.
2. AT THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES, THE BUILDING CONTRACTOR SHALL BE RESPONSIBLE TO SWEEP, WIPE AND POWER WASH ALL SURFACES ON THE INTERIOR AND EXTERIOR OF THE BUILDING.



| No. | DATE       | REVISION            |
|-----|------------|---------------------|
| 0   | 2021/03/05 | ISSUED TO ARCHITECT |
| 1   | 2021/03/25 | ISSUED TO ARCHITECT |
| 2   | 2021/04/23 | ISSUED FOR TENDER   |
|     |            |                     |
|     |            |                     |
|     |            |                     |
|     |            |                     |
|     |            |                     |



TLDSB  
1271 CEDAR LANE  
BRACEBRIDGE, ONT

PROJECT ADDRESS:

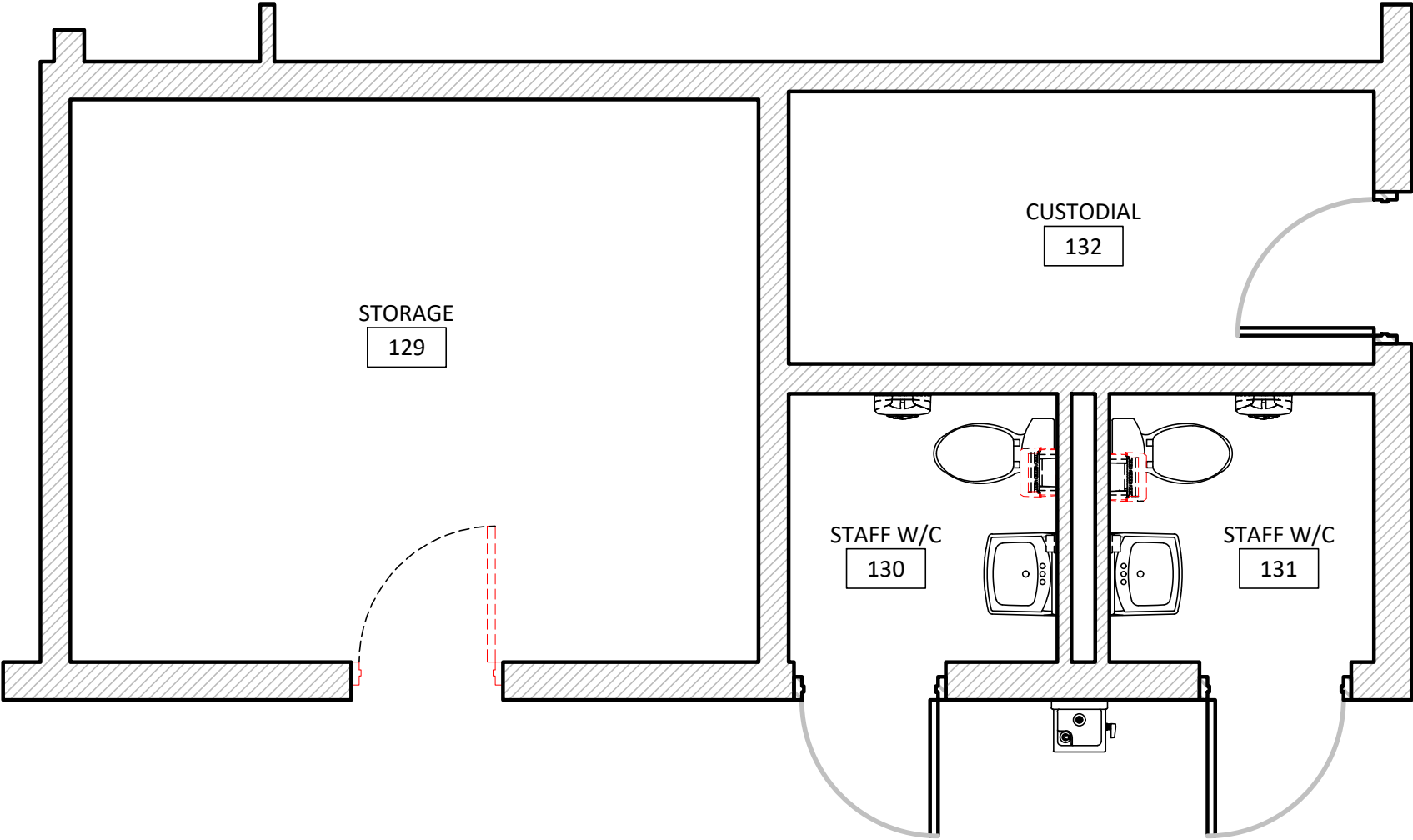
DUNSFORD DISTRICT  
ELEMENTARY SCHOOL  
DUNSFORD, ONT

DRAWING TITLE:

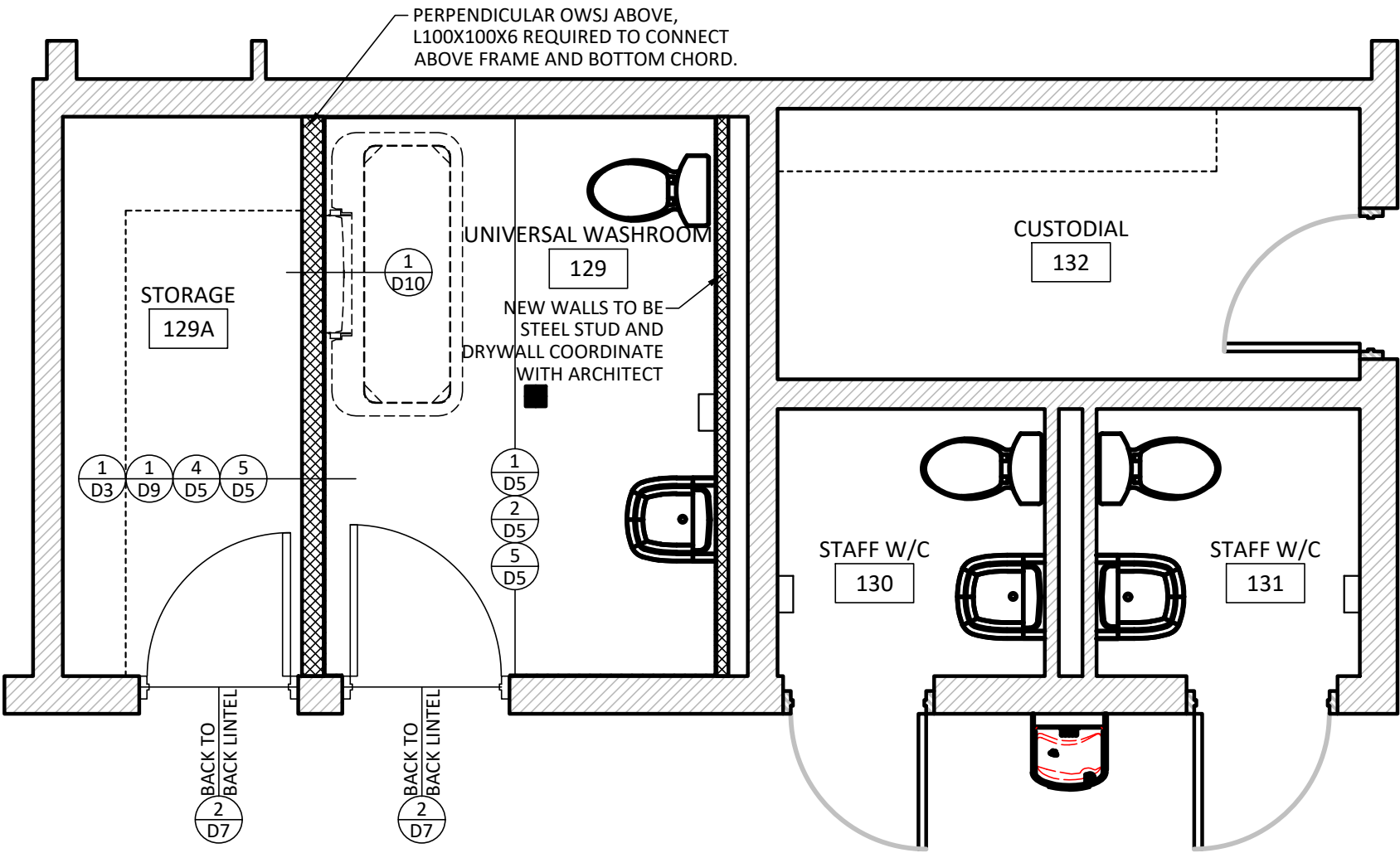
STRUCTURAL  
UPGRADES & REPAIRS  
GENERAL NOTES

| DRAWN       | DESIGNED | CHECKED      | APPROVED |
|-------------|----------|--------------|----------|
| HD          | FP       | FP           | FP       |
| SCALE       |          | DATE (M/D/Y) |          |
| AS NOTED    |          | 2021/03/03   |          |
| PROJECT No. | REVISION | DRAWING      |          |
| 20-1636     | 2        | G1           |          |

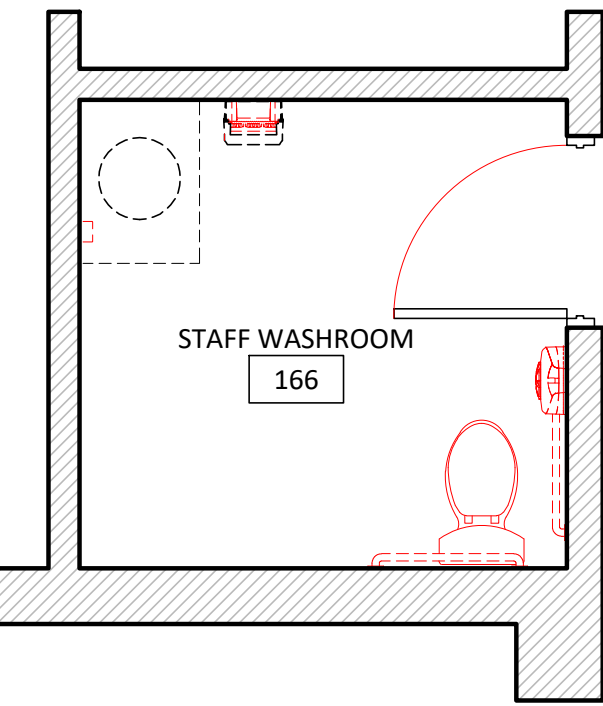




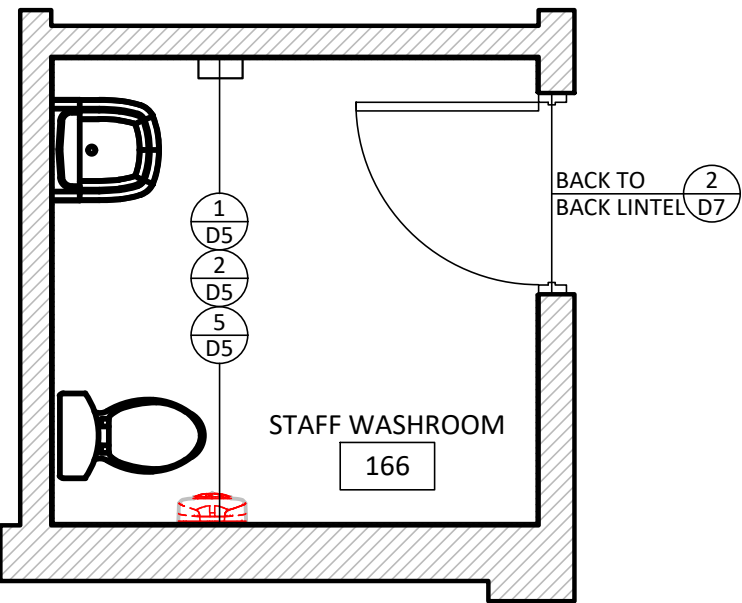
1 ROOM 129, 130, 131 AND 132 - EXISTING CONDITIONS  
S1 1:40



2 ROOM 129, 130, 131 AND 132 - PROPOSED PLAN  
S1 1:40



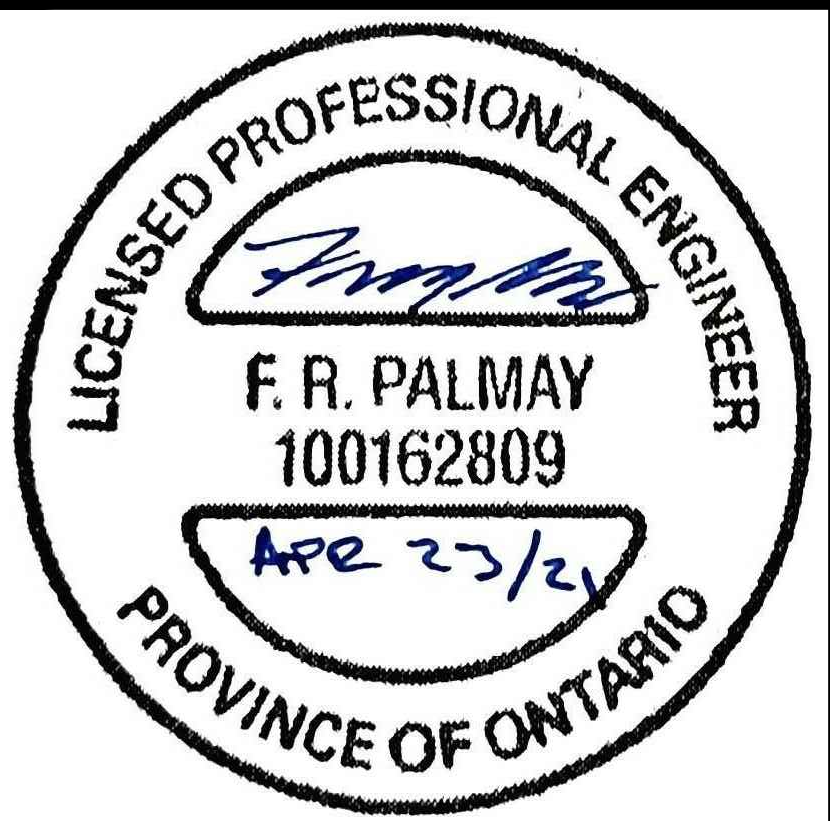
3 ROOM 166 - EXISTING CONDITIONS  
S1 1:40



4 ROOM 166 - PROPOSED PLAN  
S1 1:40



| No. | DATE       | REVISION            |
|-----|------------|---------------------|
| 0   | 2021/03/05 | ISSUED TO ARCHITECT |
| 1   | 2021/03/25 | ISSUED TO ARCHITECT |
| 2   | 2021/04/23 | ISSUED FOR TENDER   |
|     |            |                     |
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TLDSB  
1271 CEDAR LANE  
BRACEBRIDGE, ONT

PROJECT ADDRESS:  
**DUNSFORD DISTRICT  
ELEMENTARY SCHOOL  
DUNSFORD, ONT**

DRAWING TITLE:  
**STRUCTURAL  
UPGRADES & REPAIRS  
RM 129 - 132 AND 166**

| DRAWN       | DESIGNED | CHECKED      | APPROVED |
|-------------|----------|--------------|----------|
| HD          | FP       | FP           | FP       |
| SCALE       |          | DATE (M/D/Y) |          |
| AS NOTED    |          | 2021/03/03   |          |
| PROJECT No. | REVISION | DRAWING      |          |
| 20-1636     | 2        | S1           |          |



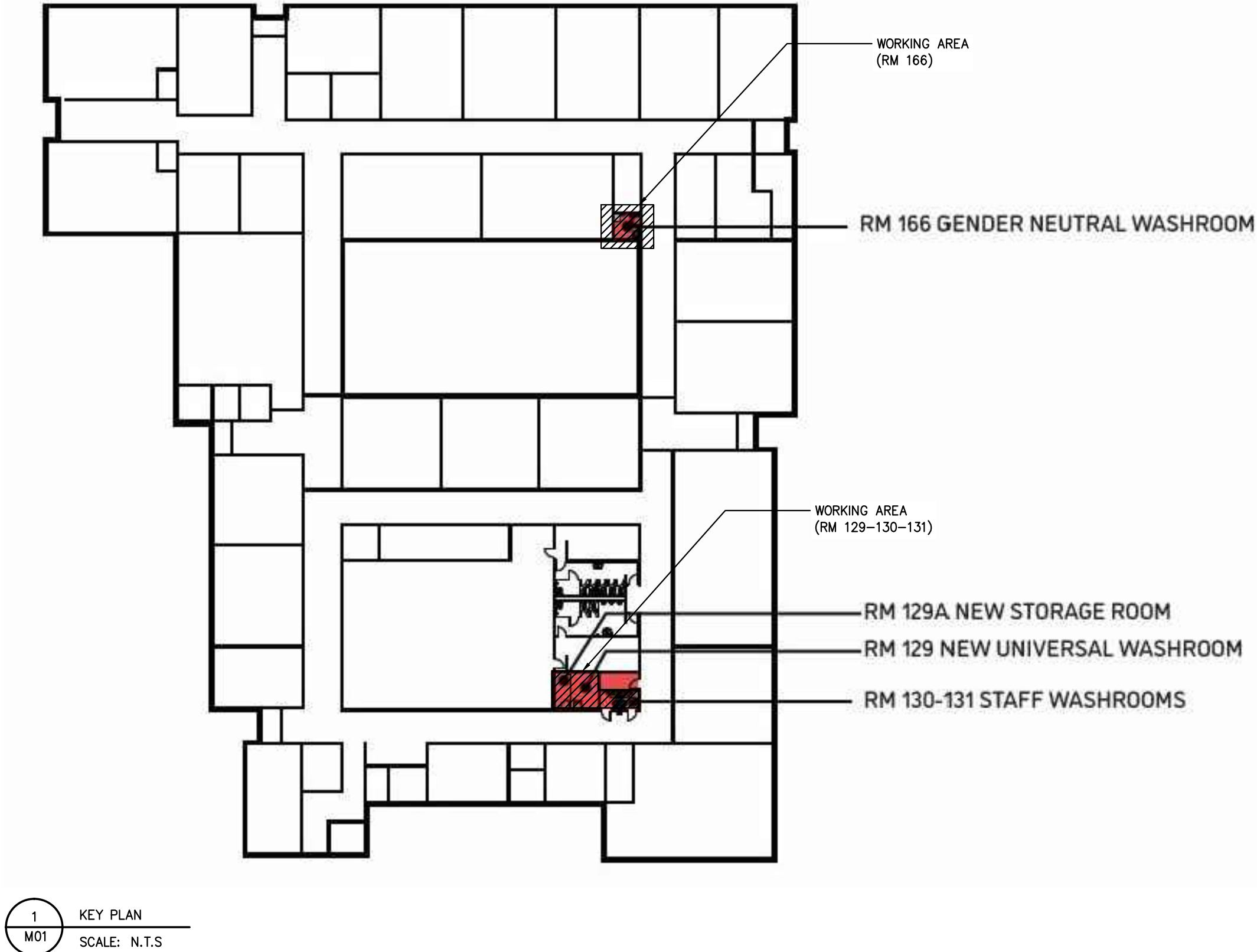


| MECHANICAL DRAWING LIST |   |
|-------------------------|---|
| DWG. NO.                | DRAWING TITLE   |
| M01                     | MECHANICAL LEGEND, DRAWING LIST, SCHEDULE, DETAIL AND SPECIFICATION |
| M02                     | MECHANICAL PLAN – RM 129/130/131                                    |
| M03                     | MECHANICAL PLAN – RM 166  |

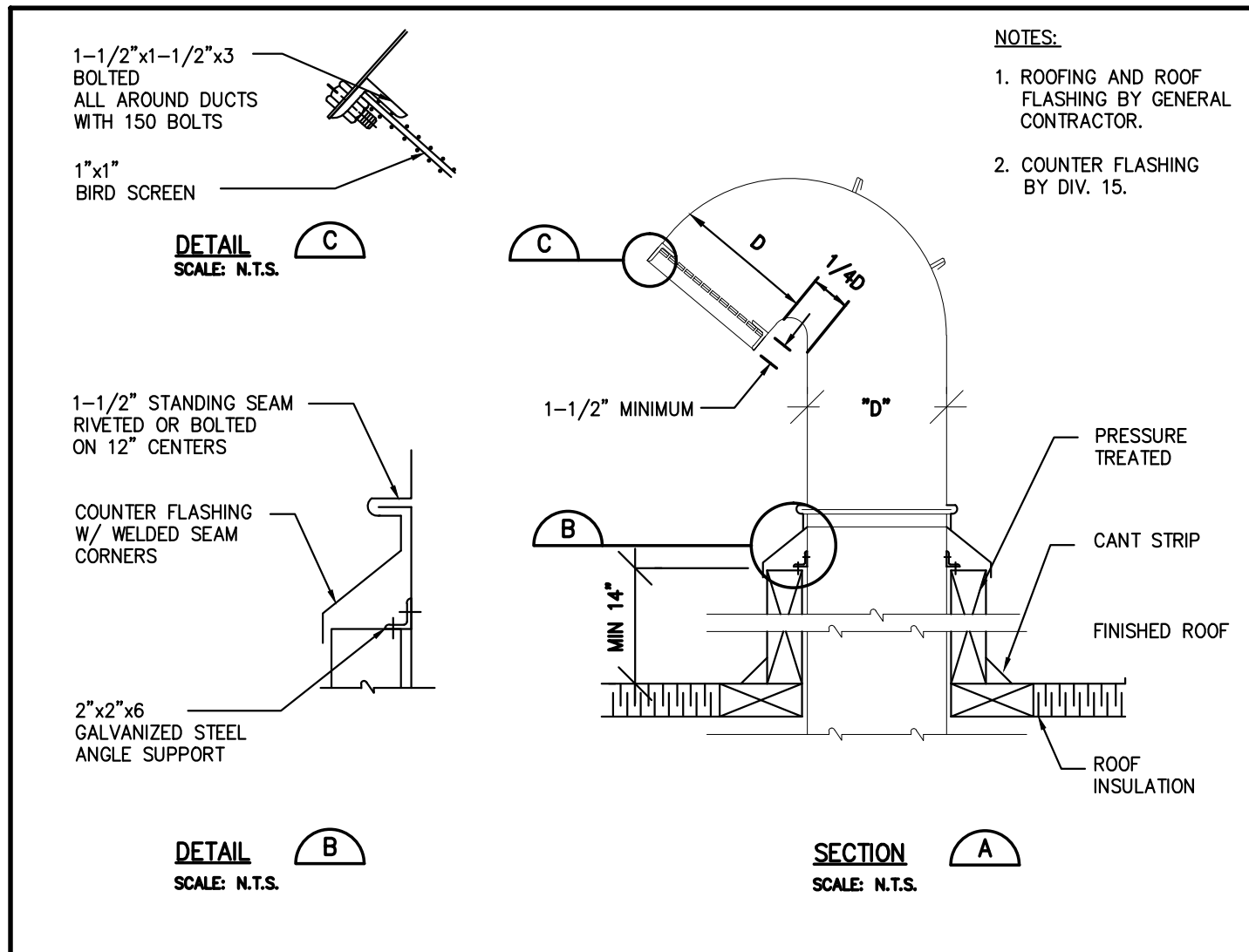
| HVAC LEGEND |                              |
|-------------|------------------------------|
| SYMBOL      | DESCRIPTION                  |
|             | DUCTWORK (SINGLE LINE)       |
|             | FLEXIBLE DUCT                |
|             | CONTROL WIRE                 |
|             | POSITIVE PRESSURE DUCT UP    |
|             | RETURN/EXHAUST DUCT UP       |
|             | SUPPLY DUCT DOWN             |
|             | RETURN/EXHAUST DUCT DOWN     |
|             | THERMOSTAT                   |
|             | TIME SWITCH                  |
|             | DOOR GRILLE                  |
|             | DOOR UNDERCUT                |
|             | BALANCING DAMPER             |
|             | FIRE DAMPER                  |
|             | MOTORIZED DAMPER             |
|             | SQUARE SUPPLY AIR DIFFUSER   |
|             | RETURN OR EXHAUST AIR GRILLE |
|             | DENOTE AIR FLOW RATE XX L/S  |
|             | DIFFUSER/GRILLE TYPE         |
|             | X - TYPE                     |
|             | Y - SIZE (MM)                |
|             | Z - AIR VOLUME (L/S)         |

| PLUMBING LEGEND |   |
|-----------------|---|
| SYMBOL          | DESCRIPTION   |
|                 | DOMESTIC COLD WATER (DCW)                             |
|                 | DOMESTIC HOT WATER (DHW)                              |
|                 | DOMESTIC HOT WATER RECIRCULATION (DHW-R)              |
|                 | BURIED SANITARY DRAIN OR IN CEILING SPACE/FLOOR BELOW |
|                 | SUSPENDED SANITARY DRAIN                              |
|                 | BURIED STORM DRAIN OR IN CEILING SPACE/FLOOR BELOW    |
|                 | SUSPENDED STORM DRAIN                                 |
|                 | CLEANOUT PLUG   |
|                 | FLOOR CLEANOUT  |
|                 | VALVE SHUT-OFF  |
|                 | CAPPED CONNECTION                                     |
|                 | FLOOR DRAIN   |
|                 | HUB DRAIN   |
|                 | PIPE CUT  |
|                 | PIPE DOWN   |
|                 | PIPE UP   |
|                 | SANITARY ROUGH-IN                                     |

| ABBREVIATIONS |  |
|---------------|--|
| ABBREV.       | DESCRIPTION                                      |
| DN            | DOWN   |
| S/A           | SUPPLY AIR                                       |
| R/A           | RETURN AIR                                       |
| E/A           | EXHAUST AIR                                      |
| F/A           | FRESH AIR  |
| RWL           | RAIN WATER LEADER                                |
| NIC           | NOT IN CONTRACT                                  |
| AFF           | ABOVE FINISHED FLOOR                             |
| CTE           | CONNECT TO EXISTING                              |
| RE            | DENOTES EXISTING DEVICE(S) IN RELOCATED POSITION |
| R             | DENOTES EXISTING DEVICE(S) TO BE RELOCATED       |
| D             | DENOTES EXISTING DEVICE(S) TO BE REMOVED         |
| EX            | DENOTES EXISTING DEVICE(S) TO REMAIN             |
| N             | DENOTES PROVIDE NEW DEVICE(S)                    |
| ①             | DENOTES DRAWING REFERENCE NOTES # 1              |
|               | EXISTING SERVICES OR EQUIPMENTS TO BE REMOVED    |
|               | EXISTING SERVICES OR EQUIPMENTS TO BE RELOCATED  |
|               | REFER TO DETAIL No. ON DRAWING No.               |



1 KEY PLAN  
SCALE: N.T.S



2 GOOSENECK THROUGH ROOF  
SCALE: N.T.S

| PLUMBING FIXTURE SCHEDULE |                   |        |        |        |          |  |
|---------------------------|-------------------|--------|--------|--------|----------|--|
| TYPE                      | FIXTURE           | D.H.W. | D.C.W. | VENT   | SANITARY | NOTES  |
| T-1                       | TOILET            | -      | 3/4"   | 1-1/2" | 3"       | FLOOR MOUNTED, TANK TYPE, 1.6 GPF                    |
| T-2                       | TOILET            | -      | 3/4"   | 1-1/2" | 3"       | BARRIER FREE, FLOOR MOUNTED, TANK TYPE, 1.6 GPF      |
| L-1                       | LAVATORY          | 1/2"   | 1/2"   | 1-1/4" | 1-1/4"   | WALL MOUNTED, NO-TOUCH FAUCET, 0.5 GPM               |
| L-2                       | LAVATORY          | 1/2"   | 1/2"   | 1-1/4" | 1-1/4"   | BARRIER FREE, WALL MOUNTED, NO-TOUCH FAUCET, 0.5 GPM |
| DF-1                      | DRINKING FOUNTAIN | -      | 1/2"   | 1-1/4" | 1-1/4"   | BARRIER FREE, HANDS-FREE, SINGLE LEVEL               |

| FAN SCHEDULE  |              |           |                 |                |             |         |          |               |           |
|---|--------------|-----------|-----------------|----------------|-------------|---------|----------|---------------|-----------|
| UNIT No.  | MANUFACTURER | MODEL NO. | FAN             |                |             | V/PH/HZ | CONTROL  | REMARKS       |           |
|   |              |           | FLOW RATE (CFM) | ESP (IN. W.C.) | TYPE        |         |          |               |           |
| EF-1  | GREENHECK    | SP-B110   | 90              | 0.5            | CEILING FAN | - 10    | 115/1/60 | MANUAL SWITCH | NOTE 1, 2 |
| EF-2  | GREENHECK    | CSP-A125  | 60              | 0.375          | INLINE FAN  | - 21    | 115/1/60 | MANUAL SWITCH | NOTE 1, 2 |
| NOTES: 1. MANUAL SWITCH, LIGHTING SWITCH SUPPLIED AND INSTALLED BY ELECTRICAL DIVISION.<br>2. C/W GRAVITY DAMPER. |              |           |                 |                |             |         |          |               |           |

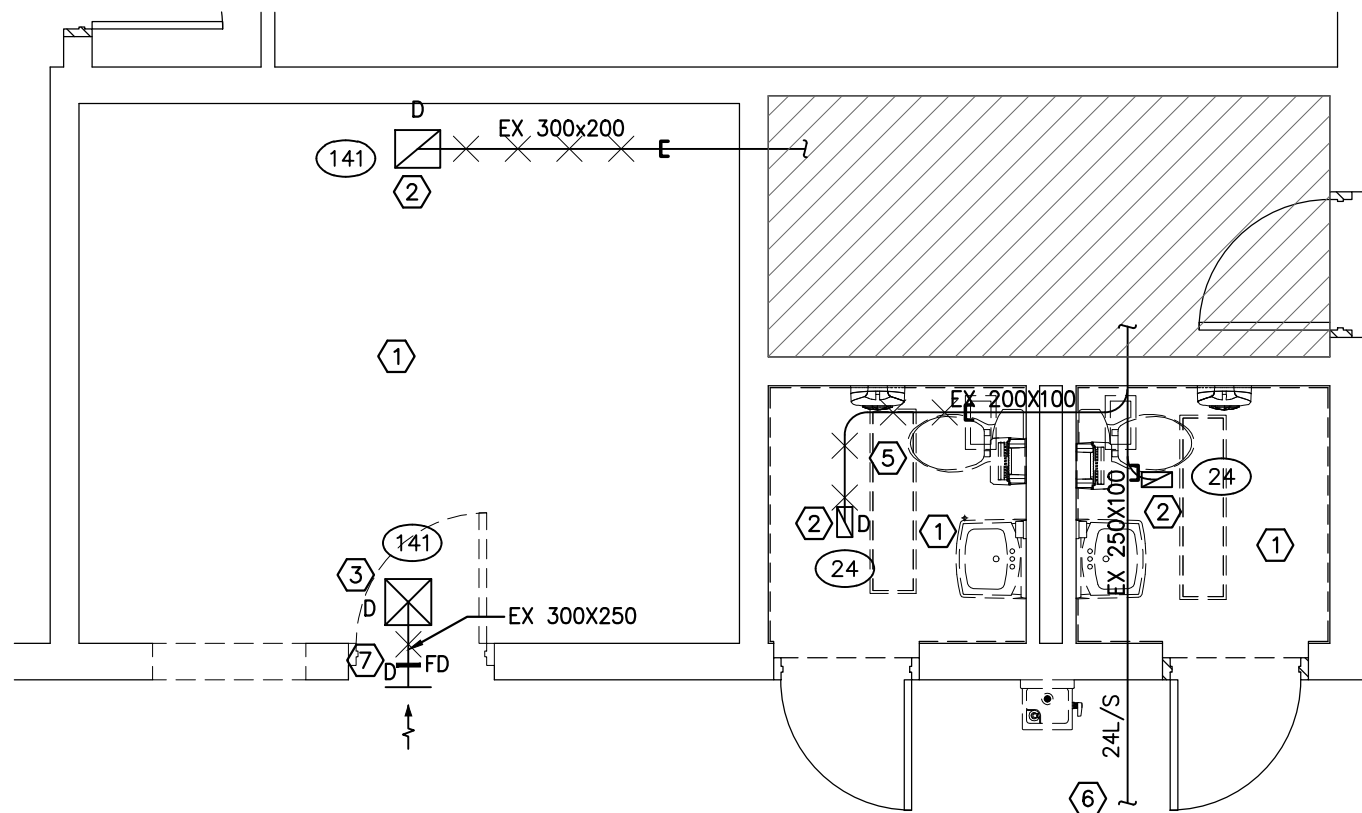
PROJECT GENERAL NOTES:

- PRIOR TO CONSTRUCTION, PERFORM AIR BALANCE TEST FOR EXISTING AIR DISTRIBUTION SYSTEM INCLUDING EXISTING CENTRAL/ROOF EXHAUST FAN TOTAL CFM WITHIN THE PROJECT WORKING AREA. SUBMIT REPORT.
- PRIOR TO CONSTRUCTION, PERFORM DRAINAGE LINE INSPECTION AND CAMERA TEST FOR EXISTING DRAINAGE SYSTEM WITHIN THE PROJECT WORKING AREA. SUBMIT VIDEO AND MEASURED DRAWING.
- PRIOR TO COMPLETION, PERFORM AIR BALANCE TEST FOR THE AIR DISTRIBUTION SYSTEM WITHIN THE PROJECT WORKING AREA. SUBMIT REPORT.
- PRIOR TO COMPLETION, PERFORM DRAINAGE LINE CAMERA TEST FOR THE UNDERGROUND DRAINAGE SYSTEM WITHIN THE PROJECT WORKING AREA. SUBMIT VIDEO AND WRITTEN REPORT.

PLUMBING FIXTURE SPECIFICATION

- "T-1", FLOOR MOUNTED TOILET – VITREOUS CHINA – TANK TYPE  
AMERICAN STANDARD CADET FLOWISE ELONGATED PRESSURE-ASSISTED #2462100 TOILET, 381 MM HIGH, VITREOUS CHINA WITH EVERCLEAN SURFACE WHICH INHIBITS THE GROWTH OF STAIN AND ODOR CAUSING BACTERIA MOLD AND MILDEW, WHITE FINISH, FLOOR MOUNTED, CADET FLUSHING SYSTEM WITH POWERWASH RW SIPHON FLUSHING SYSTEM WHICH SCRUBS BOWL WITH EVERY FLUSH, 4.2 L (1.1 US GAL) PER FLUSH, 305 MM X 254 MM (12" X 10") WATER SURFACE, TWO PIECE, "SPEED CONNECT" TANK ASSEMBLY, LINED TANK, 305 MM (12") ROUGH-IN, ELONGATED BOWL, 54 MM (2-1/8") FULLY GLAZED INTERNAL TRAPWAY, FLOOR OUTLET, BOLT CAPS, PROVIDE BOLTED TANK COVER IF REQUIRED.  
CENTICO #B001S.001 TOILET SEAT, EXTRA HEAVY DUTY, FOR ELONGATED BOWL, OPEN FRONT, SOLID PLASTIC, WITH COVER, STAINLESS STEEL CHECK HINGES, METAL FLAT WASHERS STAINLESS STEEL POSTS AND NUTS  
MCQUIRE #FH172BV TOILET SUPPLY, CHROME PLATED FINISH POLISHED BRASS, COMMERCIAL DUTY 1/4 TURN BALL VALVE ANGLE STOPS, 13 MM (1/2") I.D. INLET X 127 MM (5") LONG RIGID HORIZONTAL INTEGRAL COPPER SWEAT TUBE NIPPLES, COMBINATION V.P. LOOSE KEY HANDLES, ESCUTCHEON AND FLEXIBLE COPPER RISERS, PROVIDE FLOOR FLANGE, (SAME MATERIAL AS THE CONNECTING PIPE DRAIN), WITH ALL BRASS BOLTS AND WITH RUBBER GASKET.
- "T-2", FLOOR MOUNTED TOILET – VITREOUS CHINA – TANK TYPE – BARRIER FREE  
AMERICAN STANDARD CADET FLOWISE RIGHT-HEIGHT ELONGATED PRESSURE-ASSISTED #2467100 TOILET, 419 MM HIGH, VITREOUS CHINA WITH EVERCLEAN SURFACE WHICH INHIBITS THE GROWTH OF STAIN AND ODOR CAUSING BACTERIA MOLD AND MILDEW, WHITE FINISH, FLOOR MOUNTED, CADET FLUSHING SYSTEM WITH POWERWASH RW SIPHON FLUSHING SYSTEM WHICH SCRUBS BOWL WITH EVERY FLUSH, 4.2 L (1.1 US GAL) PER FLUSH, 305 MM X 254 MM (12" X 10") WATER SURFACE, TWO PIECE, "SPEED CONNECT" TANK ASSEMBLY, LINED TANK, 305 MM (12") ROUGH-IN, ELONGATED BOWL, 54 MM (2-1/8") FULLY GLAZED INTERNAL TRAPWAY, FLOOR OUTLET, BOLT CAPS, PROVIDE BOLTED TANK COVER IF REQUIRED.  
CENTICO #B001S.001 TOILET SEAT, EXTRA HEAVY DUTY, FOR ELONGATED BOWL, OPEN FRONT, SOLID PLASTIC, WITH COVER, STAINLESS STEEL CHECK HINGES, METAL FLAT WASHERS STAINLESS STEEL POSTS AND NUTS  
MCQUIRE #FH172BV TOILET SUPPLY, CHROME PLATED FINISH POLISHED BRASS, COMMERCIAL DUTY 1/4 TURN BALL VALVE ANGLE STOPS, 13 MM (1/2") I.D. INLET X 127 MM (5") LONG RIGID HORIZONTAL INTEGRAL COPPER SWEAT TUBE NIPPLES, COMBINATION V.P. LOOSE KEY HANDLES, ESCUTCHEON AND FLEXIBLE COPPER RISERS, PROVIDE FLOOR FLANGE, (SAME MATERIAL AS THE CONNECTING PIPE DRAIN), WITH ALL BRASS BOLTS AND WITH RUBBER GASKET.
- "L-1", WALL MOUNTED LAVATORY, INFRARED SENSOR OPERATED, 15A PLUG  
AMERICAN STANDARD MURRO WITH EVERCLEAN #0955.001EC/0062.000EC BASIN, CENTER HOLE ONLY, 540 MM X 520 MM X 165 MM (21-1/4" X 20-1/2" X 6-1/2") HIGH, VITREOUS CHINA, FOR CARRIER WITH CONCEALED ARMS, REAR OVERFLOW, RECESSED SELF-DRAINING FAUCET LEDGE, ACRYLIC SHROUD (CONCEALED CONTROL BOX AND THERMOSTATIC MIXING VALVE).  
SLOAN BASYS #EFX-200 ELECTRONIC "NO TOUCH" FAUCET, CHROME PLATED FINISH, CENTER HOLE ONLY, DIE CAST BODY, INTEGRAL ABOVE DECK WATER SUPPLY SHUT OFF, OPTIMAL "MID" HEIGHT SPOUT FOR EFFECTIVE HAND WASHING, 167 MM (6-9/16") PROJECTION REACH, ACTIVE IR SENSING, 0.5 GPM (1.9 LPM) MULTI-LAMINAR, BACK UP, ALKALINE BATTERY PROVIDED, BOX MOUNT, SLOAN #BDT, THERMOSTATIC MIXING VALVE, SOLID BIMETAL (BRONZE, BRASS, STAINLESS STEEL), HOT LIMIT STOP SET TO A MAXIMUM OF 43 °C (109.4 °F). SCREWDRIVER ADJUSTMENT TEMPERATURE DIAL WITH SCALE: COLD-HOT. PROVIDE TEE, ADAPTORS AND FLEX. COPPER TUBING TO SUIT INSTALLATION. PROVIDE TEMPERED WATER TO HOT SIDE OF FAUCET. MCQUIRE #155A OPEN GRID DRAIN, CAST BRASS ONE PIECE TOP, 17 GA. (1.5 MM) TUBULAR 32 MM (1-1/4") TAILPIECE. MCQUIRE #FH170BV, FAUCET SUPPLIES, CHROME PLATED FINISH POLISHED BRASS, COMMERCIAL DUTY 1/4 TURN BALL VALVE ANGLE STOPS, 13 MM (1/2") I.D. INLET X 127 MM (5") HORIZONTAL EXTENSION TUBES, COMBINATION V.P. LOOSE KEY HANDLES, ESCUTCHEON AND FLEXIBLE COPPER RISERS. MCQUIRE #8872CB P-TRAP, HEAVY CAST BRASS ADJUSTABLE BODY, WITH SLP NUT, 32 MM (1-1/4") SIZE, BOX FLANGE AND SEAMLESS TUBULAR WALL BEND. WATTS #WCA-411, BASIN CARRIER, CONCEALED ARMS, WALL FLANGES TO ATTACH TO BACKING PLATE SECURED IN WALL WITH LOCKING DEVICE AND LEVELLING SCREWS, HEAVY GAUGE STEEL UPRIGHTS WITH INTEGRAL WELDED FEET. FOR ONE UNIT: 102 MM (4") FOR TWO TO SIX UNITS IN A ROW: 152 MM (6") FINISHED METAL STUD WALL TO BACK OF PIPE SPACE.
- "DF-1", SINGLE-LEVEL DRINKING FOUNTAIN, HANDS FREE, FILTERED REFRIGERATED STAINLESS  
ELKAY EZH2O BOTTLE FILLING STATION WITH SINGLE ADA COOLER, MODEL LZ0WSSK, WALL HUNG WATER COOLER, SINGLE-LEVEL, CHILLING CAPACITY OF 8.0 GPH OF 50 °F DRINKING WATER AT 80 °F AMBIENT AND 80 °F INLET WATER, VISUAL FILTER MONITOR, FILTERED, ANTIMICROBIAL, STAINLESS STEEL COOLER CABINET, LAMINAR FLOW PROVIDES MINIMAL BACK SPLASH, LEAD-FREE DESIGN, ELECTRONIC BOTTLE FILLER SENSOR AND SENSOR BUBBLER, REAL DRAIN SYSTEM ELIMINATES STANDING WATER, STAINLESS STEEL BOTTLE FILLER, QUICK FILL RATE OF 1.1 GPM, INNOVATIVE GREEN TICKER COUNTS BOTTLES SAVED FROM WASTE, CURRENT OF 6.0 AMPS, POWER CONSUMPTION: 370W GREEN SPEC LISTED, PROVIDE ELECTRICAL DUPLEX BOX WITH GFI. MCQUIRE #FJFSTLK DRINKING FOUNTAIN SUPPLIES, CHROME PLATED FINISH POLISHED BRASS, STRAIGHT STOPS, V.P. LOOSE KEYS, LOW LEAD. WATTS #CA-421 WATER COOLER CARRIER, MOUNTED ON CONCRETE FLOOR, UNIVERSAL STEEL HANGAR SUPPORT PLATES WITH INTEGRAL MOUNTING BRACKETS, HEAVY GAUGE STEEL UPRIGHTS WITH INTEGRAL WELDED FEET.
- "FD", FLOOR DRAIN  
WATTS #FD-100-C-L5-1-5-6-7 FLOOR DRAIN – EPOXY COATED, CAST IRON BODY, REVERSIBLE FLASHING CLAMP WITH PRIMARY AND SECONDARY WEEPHOLES, SEDIMENT BUCKET, VANDAL PROOF, TRAP PRIMER CONNECTION WITH PLUG, NO HUB OUTLET. WATTS #L5-1.5" X 5" (127 MM X 127 MM) NICKEL BRONZE, HEAVY DUTY, SQUARE STRAINER. VERIFY EXISTING SANITARY CONNECTION SIZE FOR NEW FLOOR DRAIN REPLACE EXISTING.
- "FED", FLOOR DRAIN WITH FUNNEL  
WATTS #FD-100-C-L5-1-5-6-7 FLOOR DRAIN WITH NICKEL BRONZE FUNNEL – EPOXY COATED, CAST IRON BODY, REVERSIBLE FLASHING CLAMP WITH PRIMARY AND SECONDARY WEEPHOLES, SEDIMENT BUCKET, VANDAL PROOF, TRAP PRIMER CONNECTION WITH PLUG, NO HUB OUTLET. WATTS #L5-1.5" X 5" (127 MM X 127 MM) NICKEL BRONZE, HEAVY DUTY, SQUARE STRAINER. VERIFY EXISTING SANITARY CONNECTION SIZE FOR NEW FLOOR DRAIN REPLACE EXISTING.
- "CO", CLEANOUT  
WATTS #CO-200-S CLEANOUT – EPOXY COATED, CAST IRON BODY, 5-1/8" (130 MM) SQUARE ADJUSTABLE GASKETED HEAVY DUTY NICKEL BRONZE TOP, ABS PLUG WITH NEOPRENE GASKET, VANDAL PROOF, NO HUB OUTLET.





**AIRFLOW TEST**

1. ALL EXISTING AIRFLOW RATE AND DUCT SIZE INDICATED ON THIS DRAWING BASED ON BASE BLDG. MECHANICAL SYSTEM DRAWING FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY EXACT LAYOUTS AND SIZES ON SITE.
2. WITHIN WORKING AREA, PRIOR TO DEMOLITION, PERFORM AIRFLOW TEST OF ALL EXISTING RETURN/EXHAUST AIR GRILLE. SUBMIT EXISTING AIR FLOW TEST REPORT AND EXISTING MECHANICAL DRAWING SHOWING AIRFLOW RATE, DUCT LAYOUT AND SIZE, GRILLE LAYOUT AND SIZE, FIRE DAMPER LOCATION AND SIZE.
3. PRIOR TO CONSTRUCTION, PERFORM DUCT CLEANING FOR ALL THE DUCT WORK WITHIN THE PROJECT WORKING AREA.

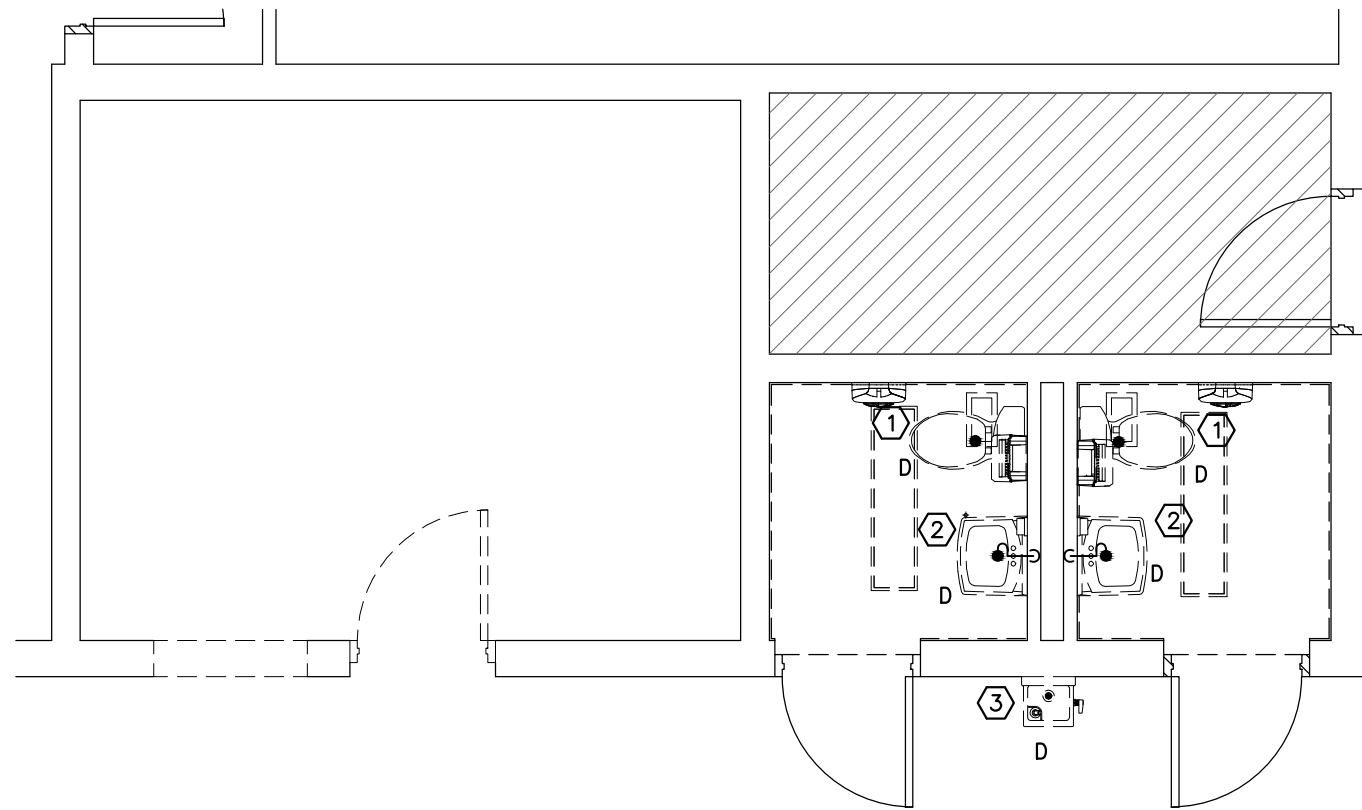
**GENERAL NOTES:**

1. ALL EXISTING MECHANICAL SERVICE TO REMAIN UNLESS INDICATED OTHERWISE.
2. CONTRACTOR TO EXAMINE AND VERIFY EXISTING MECHANICAL SYSTEM CONDITIONS AND LOCATIONS ON SITE.

**DRAWING NOTES:**

- ① PROVIDE AIRFLOW TEST FOR EXISTING EXHAUST SYSTEM.
- ② EXISTING EXHAUST AIR GRILLE TO BE REMOVED. REMOVE AND CAP UN-USED DUCTWORK.
- ③ EXISTING TRANSFER AIR GRILLE AND ASSOCIATED DUCTWORK & DAMPER TO BE REMOVED. CAP THE WALL OPENING.
- ④ EXISTING EXHAUST AIR GRILLE TO REMAIN.
- ⑤ EXISTING TRANSFER AIR GRILLE TO REMAIN.
- ⑥ EXISTING DUCTWORK SERVING OTHER AREAS TO REMAIN.
- ⑦ EXISTING FIRE DAMPER TO BE REMOVED.

1  
M02  
EXISTING MECHANICAL PLAN – RM 129/130/131  
SCALE: 1:50



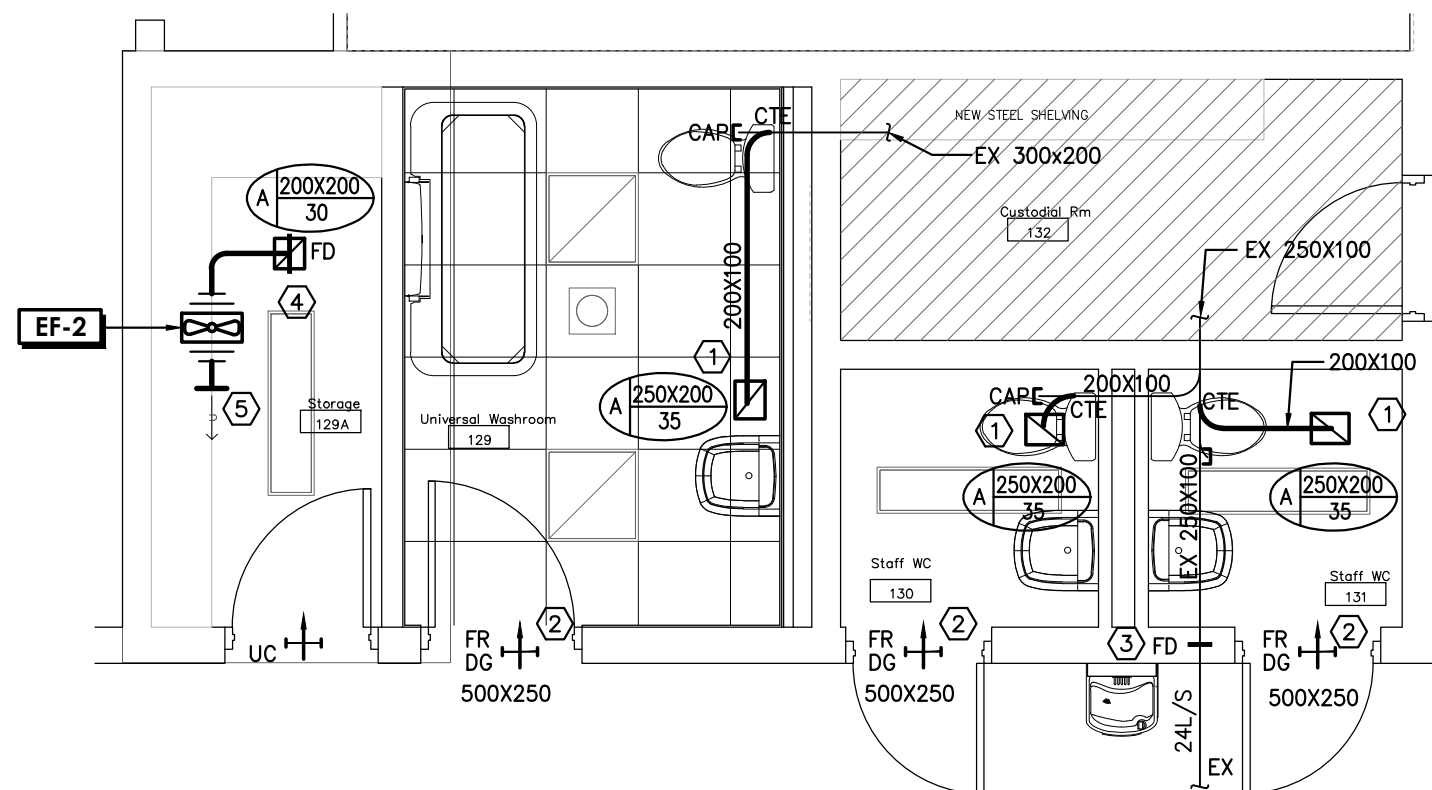
**DRAINAGE SYSTEM TEST**

1. PRIOR TO CONSTRUCTION, PERFORM EXISTING BURIED DRAINAGE LINE CAMERA TEST AND SUBMIT VIDEO & WRITTEN REPORT.
2. PERFORM UNDERGROUND DRAINAGE LINE CLEANING AND REPLACE ALL THE DAMAGED PIPES IF REQUIRED.
3. EXAMINE AND REPLACE ALL EXISTING DAMAGED VENTS WITHIN THE PROJECT WORKING AREA. MODIFY THE EXISTING VENTING SYSTEM TO SUIT NEW PROPOSED LAYOUT AND AS PER O.B.C. REQUIREMENT.

**WATER PIPE VERIFY AND REPLACEMENT**

1. EXAMINE AND REPLACE ALL EXISTING ABOVE GROUND DAMAGED DCW & DHW LINES AND VALVES WITHIN THE PROJECT WORKING AREA.
2. EXAMINE AND REPLACE ALL EXISTING DAMAGED VENTS WITHIN THE PROJECT WORKING AREA. MODIFY THE EXISTING VENTING SYSTEM TO SUIT NEW PROPOSED LAYOUT AND AS PER O.B.C. REQUIREMENT.

1  
M02  
EXISTING MECHANICAL PLAN – RM 129/130/131  
SCALE: 1:50



**AIRFLOW TEST**

1. ALL EXISTING AIRFLOW RATE AND DUCT SIZE INDICATED ON THIS DRAWING BASED ON BASE BLDG. MECHANICAL SYSTEM DRAWING FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY EXACT LAYOUTS AND SIZES ON SITE.
2. WITHIN WORKING AREA, PRIOR TO DEMOLITION, PERFORM AIR TEST OF ALL EXISTING RETURN/EXHAUST AIR GRILLE. SUBMIT EXISTING AIR FLOW TEST REPORT AND EXISTING MECHANICAL DRAWING SHOWING AIRFLOW RATE, DUCT LAYOUT AND SIZE, GRILLE LAYOUT AND SIZE, FIRE DAMPER LOCATION AND SIZE.
3. RE-BALANCE AIRFLOW RATE AS NOTED ON DRAWING. REPLACE EXISTING DAMAGED DUCTWORK WHEN REQUIRED. EXISTING AIRFLOW SERVING OTHER AREAS TO REMAIN. SUBMIT AIR BALANCE REPORT WITH DRAWING.

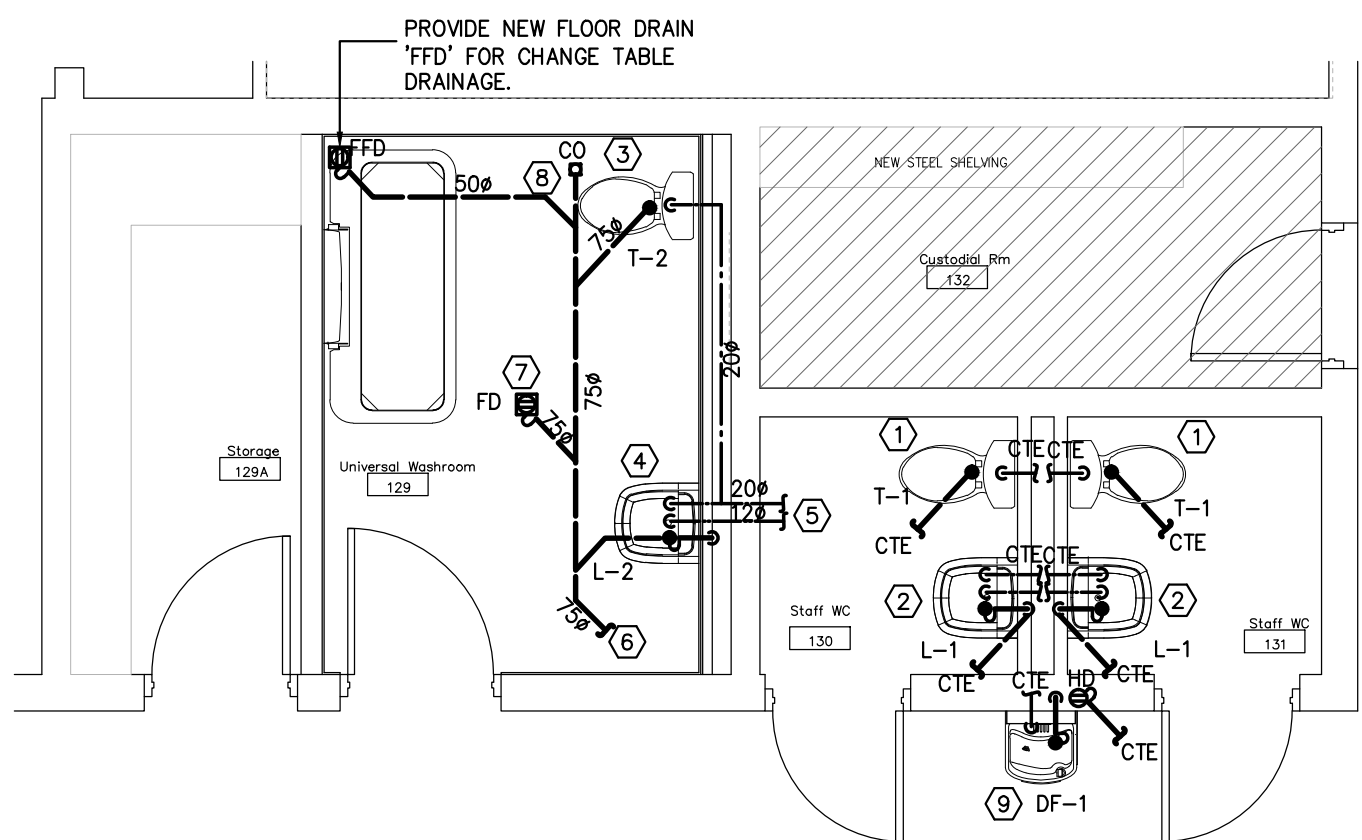
**GENERAL NOTES:**

1. COORDINATE ARCHITECTURAL REFLECTED CEILING PLANS FOR LOCATIONS OF GRILLES AND DIFFUSERS.
2. ALL EQUIPMENTS SHOWN ON THIS DRAWING SHALL BE NEW UNLESS OTHERWISE NOTED.
3. CONTRACTOR TO VERIFY EXISTING FIRE DAMPER LOCATIONS WITHIN SCOPE AREA. PROVIDE FIRE DAMPERS ON EXISTING DUCTS WHERE DUCTS PENETRATE FIRE SEPARATIONS WHEN REQUIRED.

**DRAWING NOTES:**

- ① PROVIDE NEW E/A GRILLE AND NEW DUCTWORK TO CONNECT TO EXISTING. RE-BALANCE AIRFLOW TO L/S AS INDICATED ON DRAWING. PROVIDE NEW BALANCE DAMPER IF REQUIRED.
- ② PROVIDE NEW FIRE RATED DOOR GRILLE C/W UL LISTED FUSIBLE LINK AT LOW LEVEL MODEL AIR LOUVERS 1900A OR APPROVED EQUAL. SIZE AS NOTED ON DRAWING. ALUMINUM FINISH.
- ③ PROVIDE NEW FIRE DAMPER.
- ④ PROVIDE NEW GRILLE C/W FIRE DAMPER AT FIRE-RATED CEILING.
- ⑤ OPEN-ENDED DUCT C/W WIRE MESH AT CEILING SPACE.

2  
M02  
PROPOSED HVAC PLAN – RM 129/130/131  
SCALE: 1:50



**WATER PIPE VERIFY AND REPLACEMENT**

1. EXAMINE AND REPLACE ALL EXISTING ABOVE GROUND DAMAGED DCW & DHW LINES AND VALVES WITHIN THE PROJECT WORKING AREA.
2. EXAMINE AND REPLACE ALL EXISTING DAMAGED VENTS WITHIN THE PROJECT WORKING AREA. MODIFY THE EXISTING VENTING SYSTEM TO SUIT NEW PROPOSED LAYOUT AND AS PER O.B.C. REQUIREMENT.

**DRAINAGE SYSTEM TEST**

1. PRIOR TO CONSTRUCTION, PERFORM EXISTING BURIED DRAINAGE LINE CAMERA TEST AND SUBMIT VIDEO & WRITTEN REPORT.
2. PERFORM UNDERGROUND DRAINAGE LINE CLEANING AND REPLACE ALL THE DAMAGED PIPES IF REQUIRED.
3. EXAMINE AND REPLACE ALL EXISTING DAMAGED VENTS WITHIN THE PROJECT WORKING AREA. MODIFY THE EXISTING VENTING SYSTEM TO SUIT NEW PROPOSED LAYOUT AND AS PER O.B.C. REQUIREMENT.

3  
M02  
PROPOSED PLUMBING & DRAINAGE PLAN – RM 129/130/131  
SCALE: 1:50

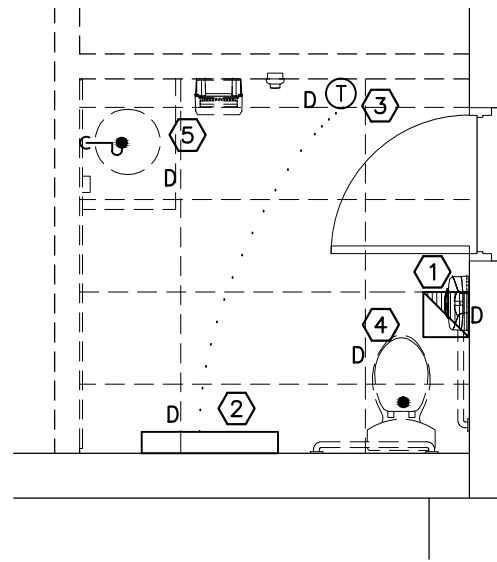
**GENERAL NOTES:**

1. ALL EQUIPMENTS SHOWN ON THIS DRAWING SHALL BE NEW UNLESS OTHERWISE NOTED.
2. ALL DOMESTIC COLD WATER AND DOMESTIC HOT WATER PIPES SHALL BE MINIMUM 200 UNLESS INDICATED OTHERWISE.
3. CONTRACTOR TO VERIFY EXACT LOCATION, SIZE AND CONDITION OF EXISTING WATER SUPPLY PIPING SERVING SCOPE AREA ON SITE FOR NEW CONNECTION.
4. READ IN CONJUNCTION WITH ARCHITECTURAL PLANS FOR PLUMBING FIXTURES INSTALLATION.
5. DOCUMENT ALL THE ACCESS PANELS LOCATIONS ON AS-BUILT DRAWINGS.
6. PERFORM STRUCTURAL COORDINATION FOR MASONRY MODIFICATIONS. REFER TO STRUCTURAL DETAILS FOR MODIFYING OR TRENCHING THE BLOCK WALLS TO RUN NEW CONCEALED SERVICES.
7. PROVIDE ISOLATING BALL VALVES ON MAIN AND/OR BRANCH LINES AND FOR ALL EQUIPMENT SERVED WITH HOT AND COLD WATER LINES. ALL VALVES SHALL BE SUITABLE FOR THE OPERATING PRESSURE OF THE SYSTEM IN WHICH THEY ARE INSTALLED.
8. PROVIDE INSULATION FOR ALL COLD & HOT WATER PIPING.
9. FOR ALL PLUMBING CONNECTIONS TO EXISTING SYSTEM INVOLVING MASONRY MODIFICATIONS, COORDINATE AND REFER TO STRUCTURAL DETAILS.
10. PROVIDE COMPLETE SANITARY VENT CONNECTION TO EXISTING VENT PIPES COMPLY WITH OBC REQUIREMENT.
11. ALL SANITARY DRAINAGE BELOW GRADE SHALL BE MINIMUM 750 UNLESS INDICATED OTHERWISE.
12. CONTRACTOR TO VERIFY EXACT LOCATION, SIZE & INVERT OF SAN. LINES SERVING THE SCOPE AREA ON SITE FOR NEW CONNECTION.
13. ALL NEW FLOOR DRAINS SHALL BE COMPLETE WITH TRAPS AND TRAP PRIMERS. CONTRACTOR TO VERIFY EXISTING TRAP PRIMER WHEN FLOOR DRAIN IS REPLACED. PROVIDE NEW TRAP PRIMER WHEN REQUIRED.
14. PROVIDE NECESSARY DRAINAGE PIPE REPLACEMENT/MODIFICATION/EXTENSION FOR NEW PLUMBING FIXTURE RECONNECTION.
15. CONNECTION WORK FOR NEW PLUMBING FIXTURE DRAINAGE TO EXISTING SANITARY LINE INCLUDES TRENCHING EXCAVATION AND REPAIRING THE EXISTING FLOOR.

**DRAWING NOTES:**

- ① PROVIDE 200 DCW LINE TO NEW TOILET 'T-1' AND CONNECT 750 DRAINAGE TO EXISTING SAN. BRANCH.
- ② PROVIDE 120 DCW & DHW LINES TO NEW LAVATORY 'L-1' AND CONNECT 500 DRAINAGE TO EXISTING SAN. BRANCH.
- ③ PROVIDE 200 DCW LINE AND 750 DRAINAGE LINE TO NEW TOILET 'T-2'.
- ④ PROVIDE 120 DCW & DHW LINES AND 500 DRAINAGE LINE TO NEW LAVATORY 'L-2'.
- ⑤ PROVIDE NEW 200 DCW & 120 DHW LINES TO NEW UNIVERSAL WASHROOM FROM EXISTING WATER SERVICE LINES NEARBY. CONTRACTOR TO VERIFY EXACT LOCATION AND SIZE ON SITE.
- ⑥ PROVIDE NEW 750 SANITARY LINE TO NEW UNIVERSAL WASHROOM FROM EXISTING WATER SERVICE LINES NEARBY. CONTRACTOR TO VERIFY EXACT LOCATION, SIZE AND INVERT ON SITE.
- ⑦ PROVIDE NEW FLOOR DRAIN 'FD'.
- ⑧ PROVIDE NEW FLOOR CLEANOUT 'CO'.
- ⑨ PROVIDE NEW DRINKING FOUNTAIN 'DF-1' REPLACE EXISTING. MODIFY EXISTING WATER SUPPLY LINE AND SANITARY LINE FOR NEW CONNECTION WHEN REQUIRED. REFER TO ARCH. DWG FOR EXACT MOUNTING HEIGHT.





1  
M03  
EXISTING MECHANICAL PLAN – RM 166  
SCALE: 1:50

**AIRFLOW TEST**

1. ALL EXISTING AIRFLOW RATE AND DUCT SIZE INDICATED ON THIS DRAWING BASED ON BASE BLDG. MECHANICAL SYSTEM DRAWING FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY EXACT LAYOUTS AND SIZES ON SITE.
2. WITHIN WORKING AREA, PRIOR TO DEMOLITION, PERFORM AIRFLOW TEST OF ALL EXISTING RETURN/EXHAUST AIR GRILLE. SUBMIT EXISTING AIR FLOW TEST REPORT AND EXISTING MECHANICAL DRAWING SHOWING AIRFLOW RATE, DUCT LAYOUT AND SIZE, GRILLE LAYOUT AND SIZE, FIRE DAMPER LOCATION AND SIZE.
3. PRIOR TO CONSTRUCTION, PERFORM DUCT CLEANING FOR ALL THE DUCT WORK WITHIN THE PROJECT WORKING AREA.

**DRAINAGE SYSTEM TEST**

1. PRIOR TO CONSTRUCTION, PERFORM EXISTING BURIED DRAINAGE LINE CAMERA TEST AND SUBMIT VIDEO & WRITTEN REPORT.
2. PERFORM UNDERGROUND DRAINAGE LINE CLEANING AND REPLACE ALL THE DAMAGED PIPES IF REQUIRED.
3. EXAMINE AND REPLACE ALL EXISTING DAMAGED VENTS WITHIN THE PROJECT WORKING AREA. MODIFY THE EXISTING VENTING SYSTEM TO SUIT NEW PROPOSED LAYOUT AND AS PER O.B.C REQUIREMENT.

**WATER PIPE VERIFY AND REPLACEMENT**

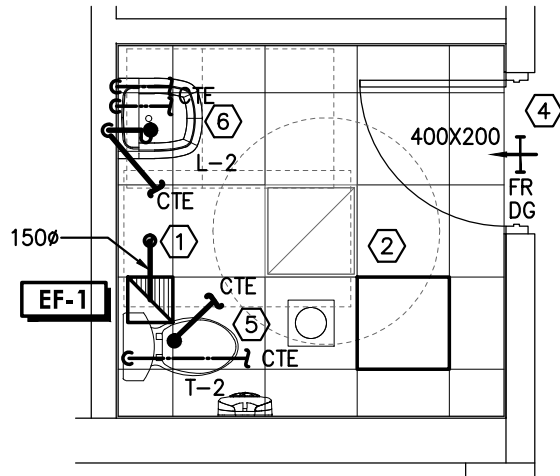
1. EXAMINE AND REPLACE ALL EXISTING ABOVE GROUND DAMAGED DCW & DHW LINES AND VALVES WITHIN THE PROJECT WORKING AREA.
2. EXAMINE AND REPLACE ALL EXISTING DAMAGED VENTS WITHIN THE PROJECT WORKING AREA. MODIFY THE EXISTING VENTING SYSTEM TO SUIT NEW PROPOSED LAYOUT AND AS PER O.B.C REQUIREMENT.

**GENERAL NOTES:**

1. ALL EXISTING MECHANICAL SERVICE TO REMAIN UNLESS INDICATED OTHERWISE.
2. CONTRACTOR TO EXAMINE AND VERIFY EXISTING MECHANICAL SYSTEM CONDITIONS AND LOCATIONS ON SITE.
3. LAYOUT AND SIZE OF EXISTING PIPING SHOWN ON DRAWING ARE BASED ON BASE BUILDING DRAWING FOR REFERENCE ONLY. CONTRACTOR SHALL EXAMINE AND VERIFY EXISTING MECHANICAL SYSTEM CONDITIONS AND LOCATIONS, INVERTS ON SITE.
4. RELOCATE ALL EXISTING ACCESS PANELS WHERE AFFECTED BY THE WORK.
5. ALL REMOVED FLUSH VALVES AND WASHFOUNTAINS SHALL BE RETURNED TO OWNER.

**DRAWING NOTES:**

- ① EXISTING EXHAUST FAN AND ASSOCIATED DUCTWORK TO ROOF TO BE REMOVED. RE-USE EXISTING ROOF OPENING FOR NEW EXHAUST FAN.
- ② EXISTING ELEC. BBH TO BE REMOVED.
- ③ EXISTING THERMOSTAT TO BE REMOVED.
- ④ EXISTING TOILET TO BE REMOVED. REMOVE/CAP ASSOCIATED UN-USED BRANCH PIPES IN WALL/CEILING OR UNDER SLAB.
- ⑤ EXISTING LAVATORY TO BE REMOVED. MODIFY/EXTEND EXISTING BRANCH PIPES FOR NEW LAVATORY CONNECTION.



**WATER PIPE VERIFY AND REPLACEMENT**

1. EXAMINE AND REPLACE ALL EXISTING ABOVE GROUND DAMAGED DCW & DHW LINES AND VALVES WITHIN THE PROJECT WORKING AREA.
2. EXAMINE AND REPLACE ALL EXISTING DAMAGED VENTS WITHIN THE PROJECT WORKING AREA. MODIFY THE EXISTING VENTING SYSTEM TO SUIT NEW PROPOSED LAYOUT AND AS PER O.B.C REQUIREMENT.

**DRAINAGE SYSTEM TEST**

1. PRIOR TO CONSTRUCTION, PERFORM EXISTING DRAINAGE LINE CAMERA TEST AND SUBMIT VIDEO & WRITTEN REPORT.
2. PERFORM DRAINAGE LINE CLEANING AND REPLACE ALL THE DAMAGED PIPES IF REQUIRED.
3. EXAMINE AND REPLACE ALL EXISTING DAMAGED VENTS WITHIN THE PROJECT WORKING AREA. MODIFY THE EXISTING VENTING SYSTEM TO SUIT NEW PROPOSED LAYOUT AND AS PER O.B.C REQUIREMENT.

2  
M03  
PROPOSED MECHANICAL PLAN – RM 166  
SCALE: 1:50

**GENERAL NOTES:**

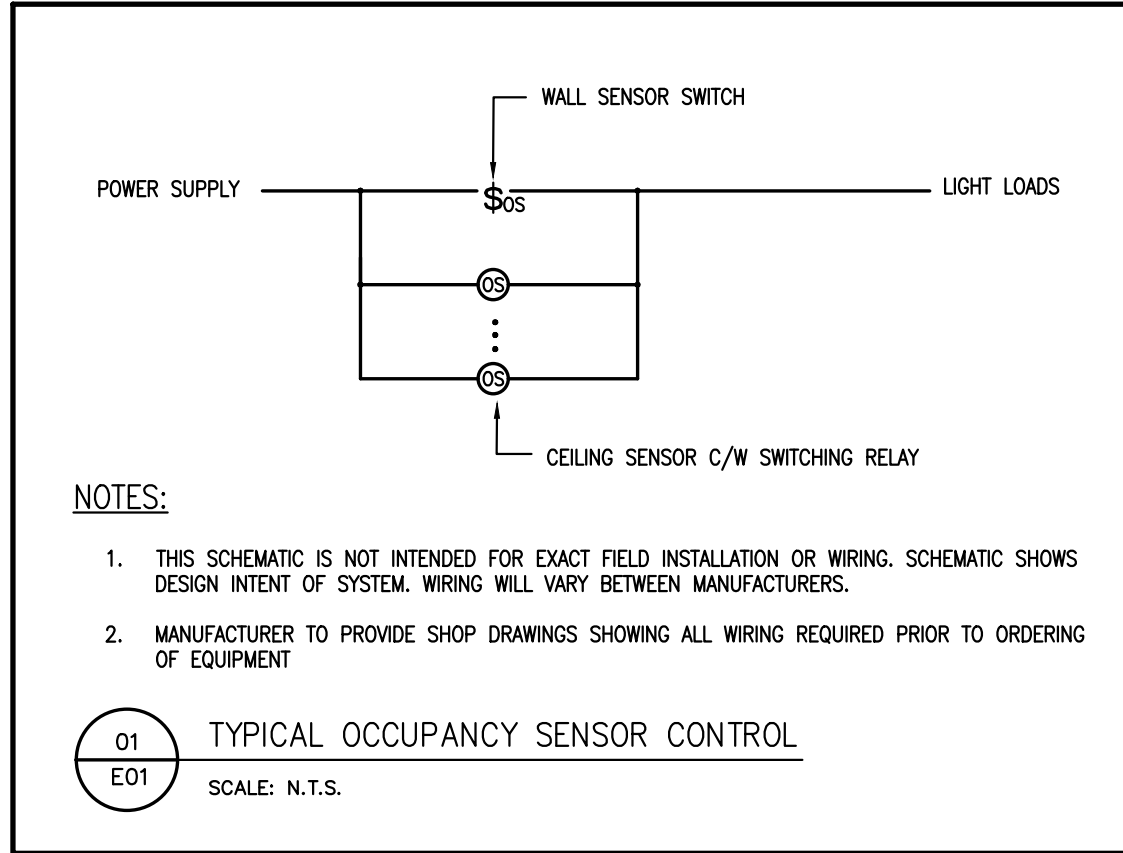
1. ALL EQUIPMENTS SHOWN ON THIS DRAWING SHALL BE NEW UNLESS OTHERWISE NOTED.
2. COORDINATE ARCHITECTURAL REFLECTED CEILING PLAN FOR LOCATIONS OF GRILLES AND DIFFUSERS.
3. CONTRACTOR TO VERIFY EXISTING FIRE DAMPER LOCATIONS WITHIN SCOPE AREA. PROVIDE FIRE DAMPERS ON EXISTING DUCTS WHERE DUCTS PENETRATE FIRE SEPARATIONS WHEN REQUIRED.
4. ALL DOMESTIC COLD WATER AND DOMESTIC HOT WATER PIPES SHALL BE MINIMUM 200 UNLESS INDICATED OTHERWISE.
5. CONTRACTOR TO VERIFY EXACT LOCATION, SIZE AND CONDITION OF EXISTING WATER SUPPLY PIPING SERVING SCOPE AREA ON SITE FOR NEW CONNECTION.
6. READ IN CONJUNCTION WITH ARCHITECTURAL PLANS FOR PLUMBING FIXTURES INSTALLATION.
7. DOCUMENT ALL THE ACCESS PANELS LOCATIONS ON AS-BUILT DRAWINGS.
8. PERFORM STRUCTURAL COORDINATION FOR MASONRY MODIFICATIONS. REFER TO STRUCTURAL DETAILS FOR MODIFYING OR TRENCHING THE BLOCK WALLS TO RUN NEW CONCEALED SERVICES.
9. PROVIDE ISOLATING BALL VALVES ON MAIN AND/OR BRANCH LINES AND FOR ALL EQUIPMENT SERVED WITH HOT AND COLD WATER LINES. ALL VALVES SHALL BE SUITABLE FOR THE OPERATING PRESSURE OF THE SYSTEM IN WHICH THEY ARE INSTALLED.
10. PROVIDE INSULATION FOR ALL COLD & HOT WATER PIPING.
11. FOR ALL PLUMBING CONNECTIONS TO EXISTING SYSTEM INVOLVING MASONRY MODIFICATIONS, COORDINATE AND REFER TO STRUCTURAL DETAILS.
12. PROVIDE COMPLETE SANITARY VENT CONNECTION TO EXISTING VENT PIPES COMPLY WITH OBC REQUIREMENT.
13. ALL SANITARY DRAINAGE BELOW GRADE SHALL BE MINIMUM 750 UNLESS INDICATED OTHERWISE.
14. CONTRACTOR TO VERIFY EXACT LOCATION, SIZE & INVERT OF SAN. LINES SERVING THE SCOPE AREA ON SITE FOR NEW CONNECTION.
15. ALL NEW FLOOR DRAINS SHALL BE COMPLETE WITH TRAPS AND TRAP PRIMERS. CONTRACTOR TO VERIFY EXISTING TRAP PRIMER WHEN FLOOR DRAIN IS REPLACED. PROVIDE NEW TRAP PRIMER WHEN REQUIRED.
16. PROVIDE NECESSARY DRAINAGE PIPE REPLACEMENT/MODIFICATION/EXTENSION FOR NEW PLUMBING FIXTURE RECONNECTION.
17. CONNECTION WORK FOR NEW PLUMBING FIXTURE DRAINAGE TO EXISTING SANITARY LINE INCLUDES TRENCHING EXCAVATION AND REPAIRING THE EXISTING FLOOR.

**DRAWING NOTES:**

- ① PROVIDE NEW 150# EXHAUST DUCT UP TO ROOF C/W GOOSENECK AND INSECT WIREMESH. RE-USE EXISTING ROOF OPENING IF APPLICABLE. CONTRACTOR TO VERIFY EXACT LOCATION ON SITE. REFER TO ARCHITECTURAL FOR ROOF DETAIL AND MECH. DWG M01 DETAIL 2 FOR ROOF GOOSENECK DETAIL.
- ② NEW 0.375KW 600X600 CEILING RECESSED RADIANT PANEL C/W ASSOCIATED CONTROLS BY ELEC. DIVISION.
- ③ RESERVED.
- ④ PROVIDE NEW FIRE RATED DOOR GRILLE C/W UL LISTED FUSIBLE LINK AT LOW LEVEL MODEL AIR LOUVERS 1900A OR APPROVED EQUAL. SIZE AS NOTED ON DRAWING. ALUMINUM FINISH.
- ⑤ PROVIDE 200 DCW LINE TO NEW TOILET 'T-2' AND CONNECT 750 DRAINAGE TO EXISTING SAN.. RECONFIGURE UNDERSLAB DRAINAGE TO SUIT NEW LOCATION.
- ⑥ PROVIDE 120 DCW & DHW LINES TO NEW LAVATORY 'L-2' AND CONNECT 500 DRAINAGE TO EXISTING SAN. LINE.







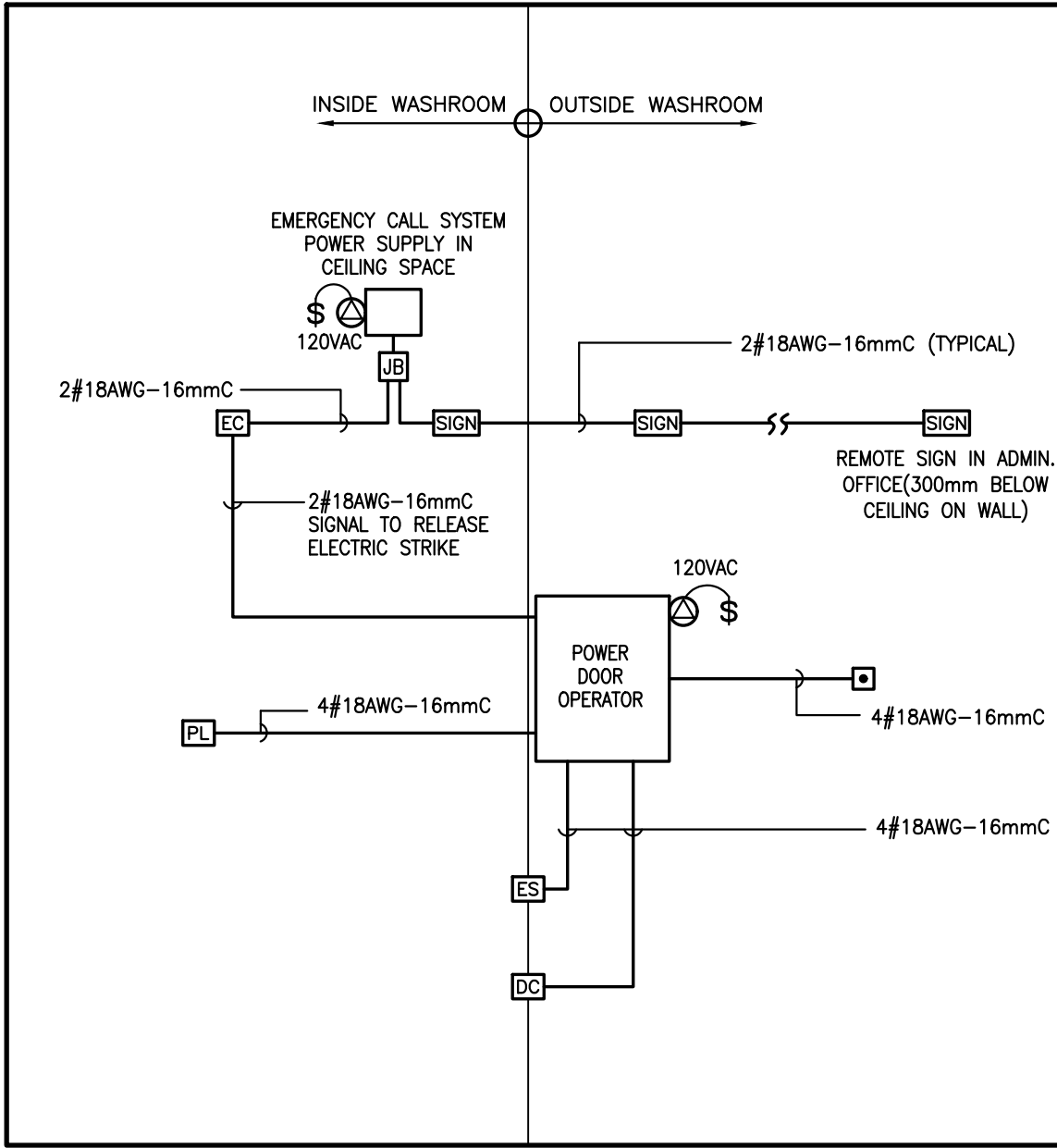
| LUMINAIRE SCHEDULE |  |                             |                            |  |
|--------------------|--|-----------------------------|----------------------------|--|
| TYPE               | DESCRIPTION  | LAMP                        | BALLAST                    | REMARKS  |
| F1                 | 2' x 2' T-BAR CEILING RECESSED LED FIXTURE FOR DAMP AREA, EXTRUDED ALUMINUM HOUSING, C/W ACRYLIC LENS, WHITE FINISH.<br>APPLICATION: WASHROOM  | 35W, LED LAMP, 4000K 3896LM | 347V ELECTRONIC LED DRIVER | RAB DESIGN #CPL22-LED32 SERIES OR APPROVED EQUAL |
| F2                 | 1' x 4' BACKLIT DRYWALL CEILING RECESSED LED PANEL WITH ALUMINUM FRAME AND PMMA LENS, C/W DRYWALL RECESSED MOUNT KIT AND ONE HOUR FIRE RATED ENCLOSURE, WHITE FINISH.<br>APPLICATION: WASHROOM         | 30W, LED LAMP, 4000K 3825LM | 347V ELECTRONIC LED DRIVER | RAB DESIGN #CPL14-LED30 SERIES OR APPROVED EQUAL |
| E1                 | EMERGENCY REMOTE UNIT, C/W ONE(1) OR TWO(2) 6W MR16 LED HEADS, CEILING OR SURFACE MOUNTED, WITH A CLEAR POLYCARBONATE UV AND IMPACT RESISTANT LENS, DIE CAST ALUMINUM BACK PLATE, WHITE FINISH, 12VDC. | 2 x 6W MR16 LED             |                            | EMERGI-LITE #EF40 SERIES OR APPROVED EQUAL       |
| E2                 | EMERGENCY LIGHTING BATTERY UNIT, 1/2HR BATTERY, C/W ONE(1) OR TWO(2) 6W MR16 LED HEADS, WALL MOUNTED, WHITE FINISH, 12VDC/120VAC OR TO MATCH EXISTING AS NOTED. MOUNT @ 200MM BELOW CEILING.           |                             |                            | EMERGI-LITE #ESL SERIES OR APPROVED EQUAL        |

**PROJECT NOTES:**

- ALL WIRES/CONDUITS SHALL BE CONCEALED IN WALLS, OR IN CEILING SPACES, EXCEPT IN ELEC/MECH ROOMS.

| DRAWING LIST |   |
|--------------|---|
| DWG. NO.     | DRAWING TITLE   |
| E01          | KEY PLAN, DRAWING LIST, LEGEND & DETAILS - ELECTRICAL |
| E02          | ELECTRICAL LAYOUTS - ROOM 129 & 130 & 131             |
| E03          | ELECTRICAL LAYOUTS - ROOM 166                         |

| ELECTRICAL LEGEND |   |
|-------------------|---|
| SYMBOL            | DESCRIPTION   |
|                   | FLUORESCENT OR LED LUMINAIRES, RECESSED IN CEILING, LETTER DENOTES FIXTURE TYPE PER SCHEDULE                                      |
|                   | FLUORESCENT OR LED LUMINAIRES, SURFACE MOUNTED ON CEILING, LETTER DENOTES FIXTURE TYPE PER SCHEDULE                               |
|                   | 120V SINGLE POLE TOGGLE SWITCHES, RESPECTIVELY WITH ONE, TWO, OR THREE GANG COVER PLATE, AMPERAGE RATING TO MATCH CIRCUIT BREAKER |
|                   | CEILING MOUNTED OCCUPANCY SENSOR FOR LIGHTING CONTROL   |
|                   | WALL MOUNTED OCCUPANCY SENSOR SWITCH FOR LIGHT  |
|                   | WALL MOUNTED DUPLEX RECEPTACLE, U-GROUND, CSA 5-15R TYPE (15A, 120V) UNLESS OTHERWISE NOTED                                       |
|                   | 15A, 125V DUPLEX GROUND FAULT INTERRUPTER RECEPTACLE (CSA 5-15R)  |
|                   | RECEPTACLES AS ABOVE RESPECTIVELY, BUT MOUNTED AT 8" ABOVE COUNTER TOP, OR 42" AFF, OR AS NOTED                                   |
|                   | 20A, 125V DUPLEX GROUND FAULT INTERRUPTER RECEPTACLE (CSA 5-20R)  |
|                   | DIRECT CONNECTION TO EQUIPMENT AS NOTED.  |
|                   | DIRECT CONNECTION C/W DISCONNECT SWITCH   |
|                   | ELECTRICAL PANEL, RECESSED OR SURFACE MOUNTED   |
|                   | FIRE ALARM SMOKE DETECTOR, CEILING OR WALL MOUNTED  |
|                   | FIRE ALARM HORN C/W STROBE LIGHT  |
|                   | FIRE ALARM STROBE, CEILING OR WALL MOUNTED  |
|                   | FIRE ALARM CONTROL PANEL OR ANNUNCIATOR PANEL, RECESSED OR SURFACE MOUNTED  |
|                   | EMERGENCY LIGHTING REMOTE HEADS, CEILING MOUNTED, WITH DOUBLE OR SINGLE HEADS RESPECTIVELY  |
|                   | EMERGENCY LIGHTING BATTERY UNIT   |
|                   | EMERGENCY LIGHTING BATTERY UNIT C/W INTEGRAL HEADS  |
|                   | CEILING OR WALL RECESSED MOUNTED SINGLE GANG BOX FOR P.A. SPEAKER. "S" DENOTES SURFACE BOX FOR PENDENT SPEAKER.                   |
|                   | POWER DOOR OPERATOR FOR UNIVERSAL WASHROOM  |
|                   | ELECTRIC BASEBOARD HEATER   |
|                   | HAND DRYER  |
|                   | JUNCTION BOX  |
|                   | THERMOSTAT  |
| AFF               | ABOVE FINISHED FLOOR  |
| GF1               | GROUND FAULT INTERRUPTER  |
| LP1-1             | AS APPLIED TO CIRCUITING, DENOTES "PANEL LP-1", CIRCUIT # 1"  |
| TR                | DENOTES TAMPER-RESISTANT TYPE RECEPTACLE  |
| EX                | DENOTES EXISTING DEVICE(S) TO REMAIN  |
| R                 | DENOTES EXISTING DEVICE(S) TO BE RELOCATED  |
| D                 | DENOTES EXISTING DEVICE(S) TO BE REMOVED  |
| RN                | DENOTES EXISTING DEVICE(S) TO BE REMOVED AND REPLACED WITH NEW  |
| RR                | DENOTES EXISTING DEVICE(S) TO BE REMOVED AND RE-INSTALLED IN SAME LOCATION  |
| RE                | DENOTES EXISTING DEVICE(S) IN RELOCATED/REINSTALLED POSITION  |
| N                 | DENOTES PROVIDE NEW DEVICE(S)   |
|                   | DENOTES DRAWING REFERENCE NOTES # 2   |
|                   | DENOTES REFER TO DETAIL #1 ON DRAWING #E-02.  |



**GENERAL NOTES:**

- CONFIRM ALL REQUIRED OUTLETS, CONDUITS, WIRING, ETC. WITH SHOP DRAWINGS PRIOR TO ROUGH IN.
- FOLLOWING ITEMS SHALL BE SUPPLIED AND INSTALLED BY GENERAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE WIRES IN CONDUITS AND JUNCTION BOX FOR EACH DEVICE.
  - PUSH TO LOCK TOUCH PAD, DOOR PUSH BUTTON TOUCH PAD C/W "IN-USE" SIGN.
  - ELECTRIC STRIKES
  - DOOR CONTACTS
  - POWER DOOR OPERATOR C/W POWER SUPPLY TRANSFORMER
  - DOOR OPERATION CONTROL RELAYS
- ELECTRICAL CONTRACTOR SHALL PROVIDE COMPLETE EMERGENCY CALL ASSISTANCE SYSTEM, INCLUDING INTERLOCK SIGNAL TO RELEASE ELECTRIC STRIKE.
- THE MOUNTING HEIGHTS OF ALL OPERATION DEVICES SHALL MEET "OBC BARRIER-FREE DESIGN" REQUIREMENTS (LESS THAN 1200mm AFF). CONFIRM EXACT MOUNTING HEIGHT OF "ASSISTANCE REQUIRED" SIGNS ON SITE. IN GENERAL MINIMUM 200mm ABOVE DOOR AND 200mm BELOW CEILING.
- ALL LOW VOLTAGE WIRING SHALL BE STRANDED & SHIELDED COPPER CONDUCTORS, PLENUM RATED INSTALLED IN CONDUIT OR PLENUM RATED IN HOLLOW METAL DOOR FRAME WHERE ACCESSIBLE. RUN WIRES IN TO HEADER OF AUTOMATIC DOOR OPERATOR OPPOSITE HINGE SIDE ABOVE DOOR JAMB TO ALLOW FOR ORGANIZED LOW VOLTAGE WIRING DUE TO LOCATION OF RELAY.
- COORDINATE LOW VOLTAGE WIRING FINAL CONNECTION & COMMISSIONING OF THE DOOR OPERATOR SYSTEM WITH MANUFACTURER.
- UNIVERSAL BF W/R EMERGENCY CALL SYSTEM SHALL BE CAMDEN #CM-WEC SERIES OR EQUAL.
- "ASSISTANCE REQUIRED" SIGN SHALL BE CAMDEN #CM-AF14150, DOME LIGHT WITH ADJUSTABLE SOUNDER, WEATHER AND VANDAL RESISTANT, TEXT ON LENS.
- EMERGENCY CALL STATION SHALL BE CAMDEN #CM-450R/12, MUSHROOM PUSH BUTTON, PUSH/PULL OPERATION, WITH TEXT "PRESS FOR EMERGENCY ASSISTANCE", SINGLE GANG STAINLESS STEEL FACEPLATE, C/W EXTRA RELAY FOR REMOTE RELEASE OF ELECTRIC STRIKE.
- ALL CONDUITS AND JUNCTION BOXES SHALL BE RECESSED AND CONCEALED, SURFACE INSTALLATION IS NOT PERMITTED.

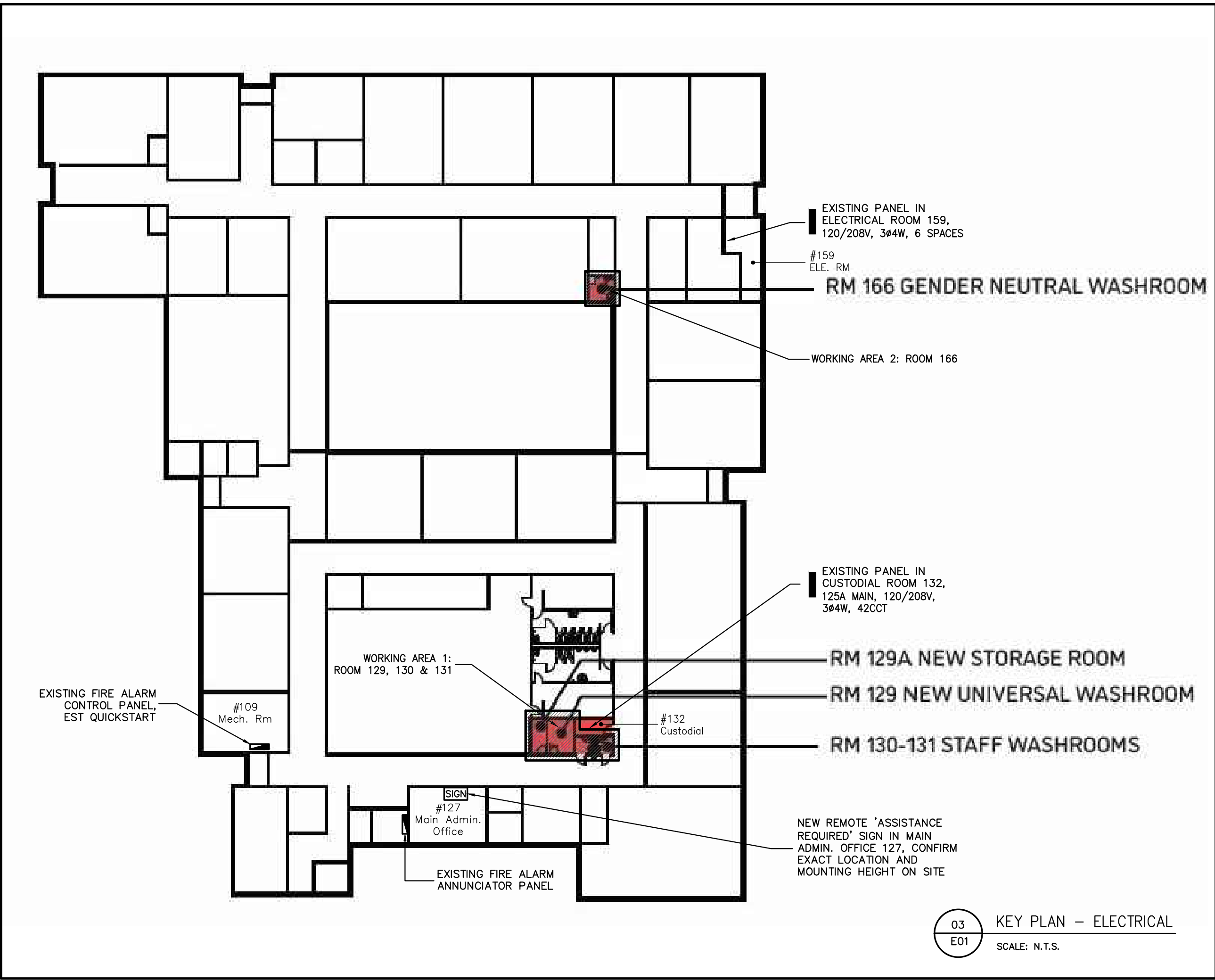
**OPERATION:**

- EXTERIOR DOOR PUSH BUTTON TOUCH PAD OPENS DOOR.
- PUSH TO LOCK TOUCH PAD DEACTIVATES EXTERIOR TOUCH PAD, LOCKS THE DOOR & ACTIVATES "IN USE" SIGNS INSIDE AND OUTSIDE OF THE WASHROOM.
- RE-PUSH TO UNLOCK AND OPEN THE DOOR & DEACTIVATES "IN USE" SIGNS INSIDE AND OUTSIDE OF THE WASHROOM.
- EMERGENCY CALL STATION ACTIVATES ALL EMERGENCY "ASSISTANCE REQUIRED" SIGNS, AND RELEASE THE ELECTRIC STRIKE.

**LEGEND:**

- |  |  |  |  |
|--|--|--|--|
|  | EMERGENCY CALL STATION   |  | RECESSED MOUNTED PUSH-TO-OPEN TOUCH PAD C/W "IN USE" SIGN, PROVIDE 1 1/2" DEEP, 4" SQUARE JUNCTION BOX |
|  | EMERGENCY CALL STATION "ASSISTANCE REQUIRED" SIGN  |  | ELECTRIC STRIKE  |
|  | RECESSED MOUNTED PUSH-TO-LOCK TOUCH PAD C/W "IN USE" SIGN, PROVIDE 1 1/2" DEEP, 4" SQUARE JUNCTION BOX |  | DOOR CONTACT   |

**02 E01** ELECTRICAL DETAILS FOR UNIVERSAL WASHROOM  
SCALE: N.T.S.



77 MAIN ST EAST HUNTSVILLE ONTARIO P1H2B9

Trillium Lakelands  
District School Board  
Dunsford District ES  
Washroom Renovation

WO# 041697

33 Dunsford Rd,  
Dunsford, ON KOM 1L0



**HL ENGINEERING LTD**  
14721 WOODBINE AVE. STOUFFVILLE, ON  
L4A 2G7 905-713-0003 www.hlengineering.ca

DATE: 2021-04  
PROJECT NO: 20065-A7  
DRAWN: HZ  
CHECKED: ML

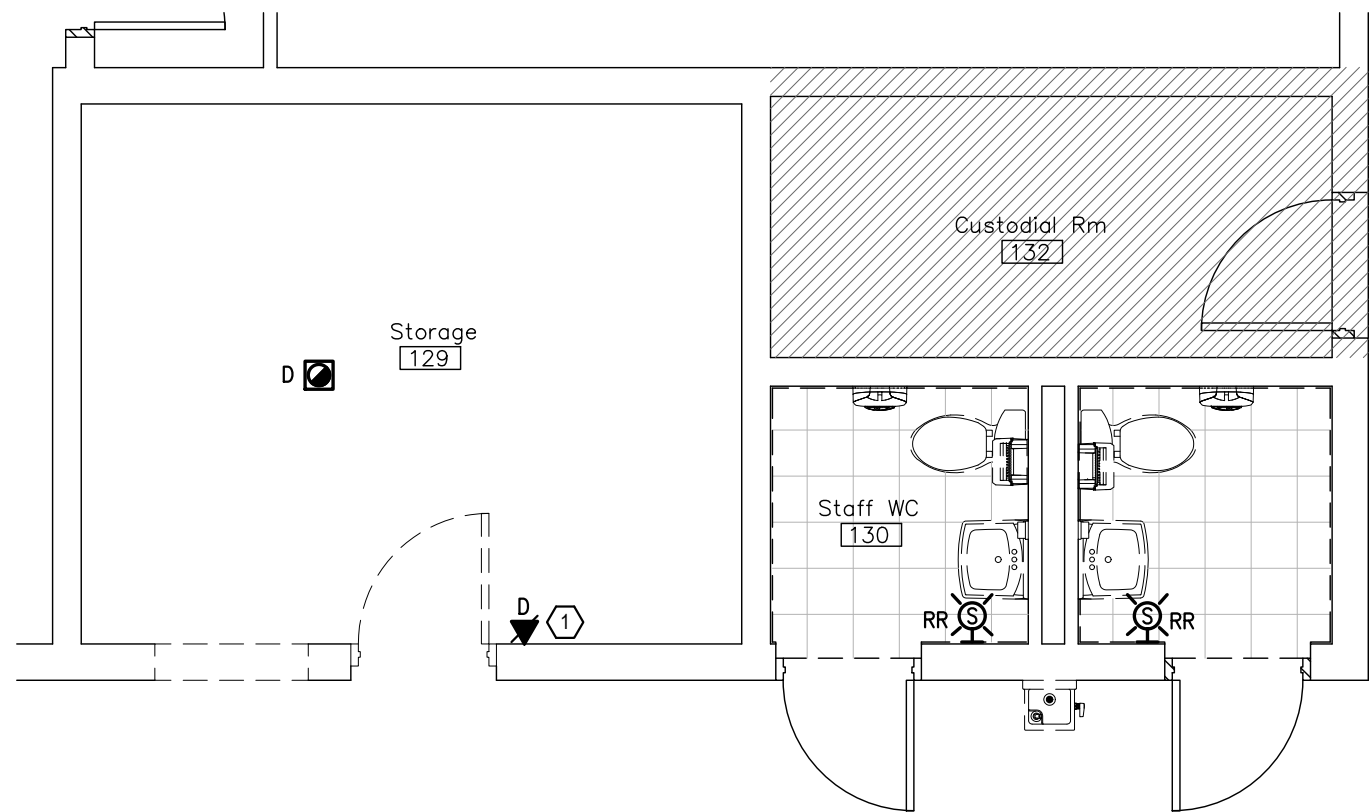
Revisions  
1. ISSUED FOR REVIEW 2020-12-31  
2. ISSUED FOR REVIEW 2021-03-05  
3. ISSUED FOR PERMIT&TENDER 2021-04-19

KEY PLAN, DRAWING  
LIST, LEGEND &  
DETAILS -  
ELECTRICAL

N.T.S.

E01





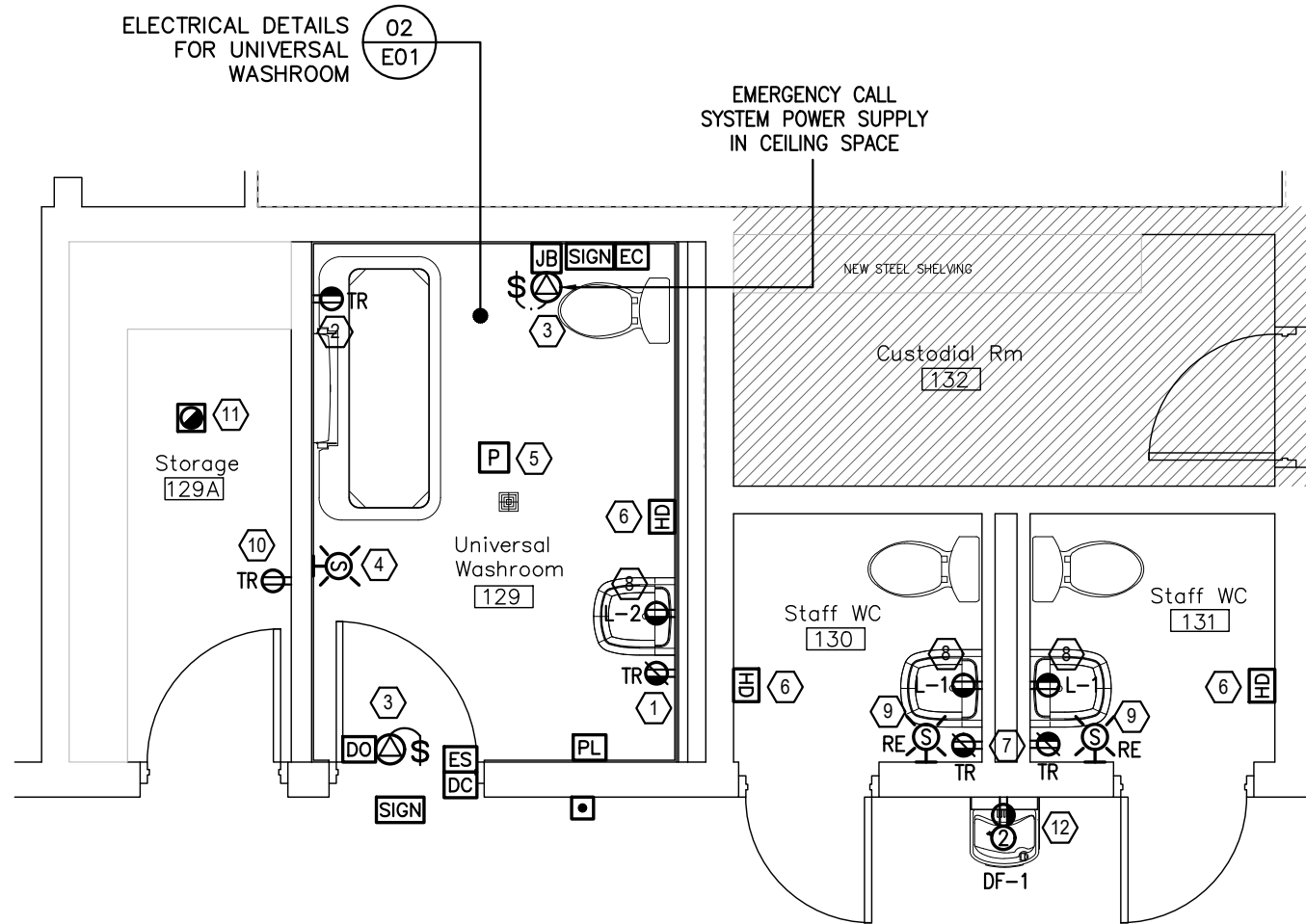
01  
E02  
EXISTING POWER & SYSTEMS LAYOUT - ROOM 129, 130 & 131  
SCALE: 1:50

GENERAL NOTES:

1. UNLESS NOTED OTHERWISE, ALL ELECTRICAL DEVICES/EQUIPMENT SHOWN ARE EXISTING TO REMAIN.
2. REGARDLESS SHOWN OR NOT, REMOVE (OR RELOCATE AS REQUIRED) ALL EXISTING ELECTRICAL DEVICES/EQUIPMENT C/W WIRES/CONDUITS AND BOXES AFFECTED BY DEMOLITION OF EXISTING PARTITIONS.
3. REMOVAL SCOPE SHALL INCLUDE REMOVAL OF ALL UNUSED CIRCUITS BACK TO POWER PANEL, INCLUDING WIRES, CONDUITS AND JUNCTION BOXES, MODIFY PANEL DIRECTORY.

NOTES:

- ① EXISTING TELEPHONE TO BE REMOVED AND RETURNED TO SCHOOL BOARD.



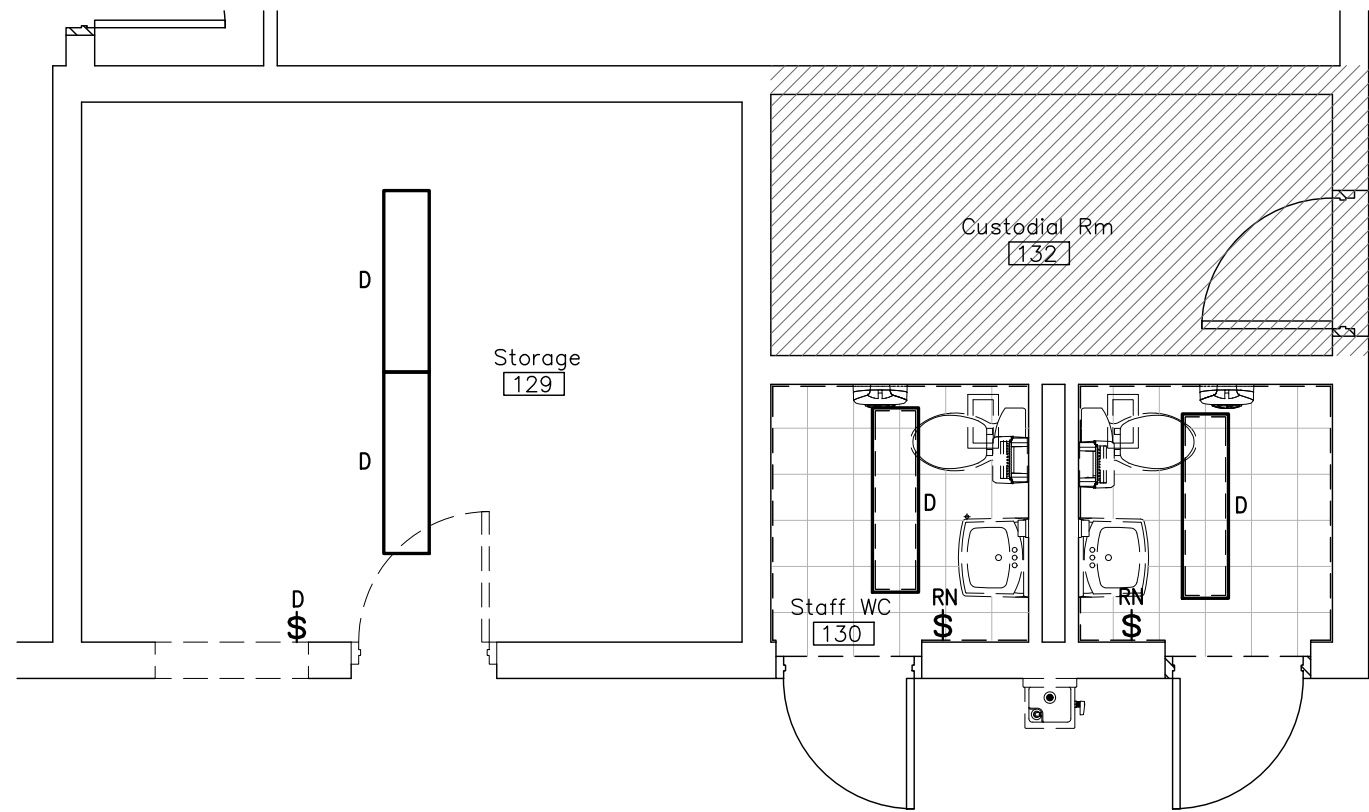
03  
E02  
PROPOSED POWER & SYSTEMS LAYOUT - ROOM 129, 129A, 130 & 131  
SCALE: 1:50

GENERAL NOTES:

1. UNLESS NOTED OTHERWISE, ALL ELECTRICAL DEVICES/EQUIPMENT SHOWN ARE NEW.
2. ALL NEW WIRES/CONDUITS SHALL BE INSTALLED CONCEALED IN CEILING SPACE OR PARTITIONS, SURFACE INSTALLATION IS NOT ACCEPTABLE.
3. ALL WIRING DEVICES TO BE INSTALLED IN RECESSED GANG BOX, SURFACE INSTALLATION IS NOT ACCEPTABLE.
4. CONFIRM ALL EXACT MECHANICAL EQUIPMENTS LOCATION ON MECHANICAL DRAWINGS PRIOR TO ROUGH-IN.

NOTES:

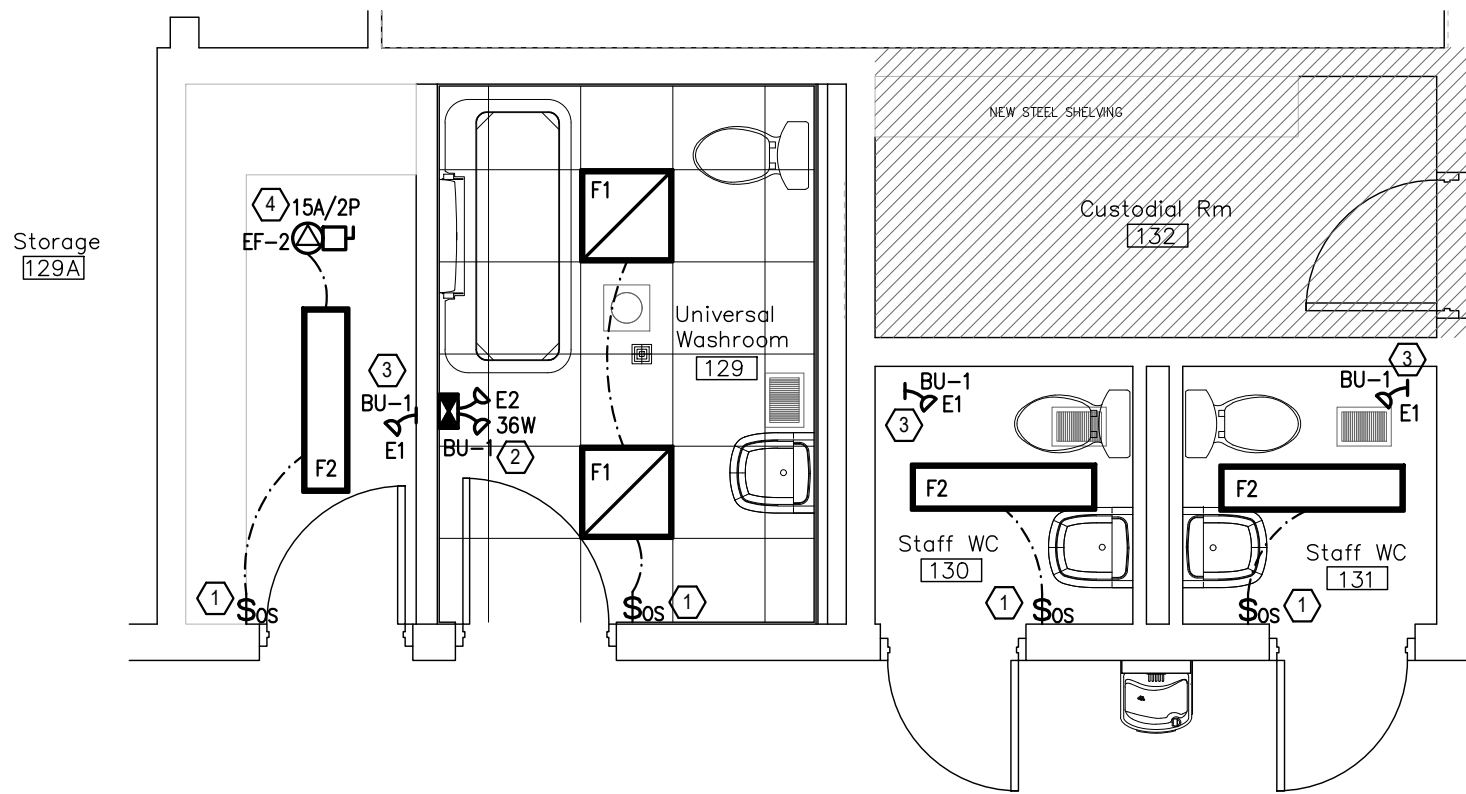
- ① PROVIDE ONE(1) NEW TAMPER-RESISTANT GFI RECEPTACLE IN UNIVERSAL WASHROOM, ADD ONE(1) NEW 15A/1P BREAKER TO MATCH EXISTING IN EXISTING PANEL IN CUSTODIAL ROOM 132, PROVIDE DEDICATED FEEDER: 2#12+GRD-21mmC FROM BREAKER TO GFI RECEPTACLE.
- ② PROVIDE ONE(1) NEW TAMPER-RESISTANT GFI RECEPTACLE FOR ELECTRIC CHANGE TABLE IN UNIVERSAL WASHROOM, CONFIRM EXACT LOCATION AND MOUNTING HEIGHT ON SITE. ADD ONE(1) NEW 15A/1P BREAKER TO MATCH EXISTING IN EXISTING PANEL IN CUSTODIAL ROOM 132, PROVIDE DEDICATED FEEDER: 2#12+GRD-21mmC FROM BREAKER TO GFI RECEPTACLE.
- ③ PROVIDE NEW POWER CONNECTIONS C/W SWITCH FOR NEW EMERGENCY CALL SYSTEM AND POWER DOOR OPERATOR. ADD ONE(1) NEW 15A/1P BREAKER TO MATCH EXISTING IN EXISTING PANEL IN CUSTODIAL ROOM 132, PROVIDE FEEDER: 2#12+GRD-21mmC FROM BREAKER TO EMERGENCY CALL SYSTEM AND DOOR OPERATOR.
- ④ PROVIDE ONE(1) NEW FIRE ALARM STROBE TO MATCH EXISTING, CONNECT TO NEAREST EXISTING FIRE ALARM SIGNALING CIRCUIT IN THIS AREA.
- ⑤ PROVIDE ONE(1) NEW CEILING MOUNTED PA SPEAKER TO MATCH EXISTING, CONNECT TO NEAREST EXISTING PA SPEAKER CIRCUIT IN THIS AREA.
- ⑥ PROVIDE THREE(3) NEW HAND DRYERS, MOUNTED AT 1100mm AFF TO HAND DRYER TOP, ADD THREE(3) NEW 15A/1P GFI BREAKERS TO MATCH EXISTING IN EXISTING PANEL IN CUSTODIAL ROOM 132. PROVIDE DEDICATED FEEDER: 2#12+GRD-21mmC FOR EACH HAND DRYER CIRCUIT.
- ⑦ PROVIDE NEW TAMPER-RESISTANT GFI RECEPTACLES IN STAFF WASHROOMS, ADD ONE(1) NEW 15A/1P BREAKER TO MATCH EXISTING IN EXISTING PANEL IN CUSTODIAL ROOM 132, PROVIDE FEEDER: 2#12+GRD-21mmC FROM BREAKER TO GFI RECEPTACLES.
- ⑧ PROVIDE THREE(3) NEW GFI RECEPTACLES FOR LAVATORY SENSORS, CONFIRM EXACT LOCATION AND MOUNTING HEIGHT ON SITE, CONTRACTOR TO MAKE SURE THE RECEPTACLE TO BE CONCEALED BEHIND LAVATORY 'L-1' AND 'L-2'. ADD ONE(1) NEW 15A/1P BREAKER TO MATCH EXISTING IN EXISTING PANEL IN CUSTODIAL ROOM 132, PROVIDE FEEDER: 2#12+GRD-21mmC FROM BREAKER TO GFI RECEPTACLES.
- ⑨ REINSTALL EXISTING FIRE ALARM STROBES IN STAFF WASHROOMS, CONNECT TO EXISTING FIRE ALARM SIGNALING CIRCUIT IN EACH WASHROOM.
- ⑩ PROVIDE ONE(1) NEW TAMPER-RESISTANT RECEPTACLE IN NEW STORAGE ROOM 129A, ADD ONE(1) NEW 15A/1P BREAKER TO MATCH EXISTING IN EXISTING PANEL IN CUSTODIAL ROOM 132, PROVIDE FEEDER: 2#12+GRD-21mmC FROM BREAKER TO STORAGE RECEPTACLE.
- ⑪ PROVIDE ONE(1) NEW FIRE ALARM SMOKE DETECTOR IN STORAGE ROOM 129A, CONNECT TO EXISTING FIRE ALARM INITIATING CIRCUIT IN THIS ROOM.
- ⑫ PROVIDE ONE(1) NEW 20A GFI RECEPTACLE FOR DRINKING FOUNTAIN 'DF-1', CONFIRM EXACT LOCATION AND MOUNTING HEIGHT ON SITE, CONTRACTOR TO MAKE SURE THE RECEPTACLE TO BE CONCEALED BEHIND 'DF-1'. ADD ONE(1) NEW 20A/1P BREAKER TO MATCH EXISTING IN EXISTING PANEL IN CUSTODIAL ROOM 132, PROVIDE DEDICATED FEEDER: 2#12+GRD-21mmC FROM BREAKER TO NEW GFI RECEPTACLE.



02  
E02  
EXISTING LIGHTING LAYOUT - ROOM 129, 130 & 131  
SCALE: 1:50

GENERAL NOTES:

1. UNLESS NOTED OTHERWISE, ALL ELECTRICAL DEVICES/EQUIPMENT SHOWN ARE EXISTING TO REMAIN.
2. REGARDLESS SHOWN OR NOT, REMOVE (OR RELOCATE AS REQUIRED) ALL EXISTING ELECTRICAL DEVICES/EQUIPMENT C/W WIRES/CONDUITS AND BOXES AFFECTED BY DEMOLITION OF EXISTING PARTITIONS.
3. REMOVAL SCOPE SHALL INCLUDE REMOVAL OF ALL UNUSED CIRCUITS BACK TO POWER PANEL, INCLUDING WIRES, CONDUITS AND JUNCTION BOXES, MODIFY PANEL DIRECTORY.



04  
E02  
PROPOSED LIGHTING LAYOUT - ROOM 129, 129A, 130 & 131  
SCALE: 1:50

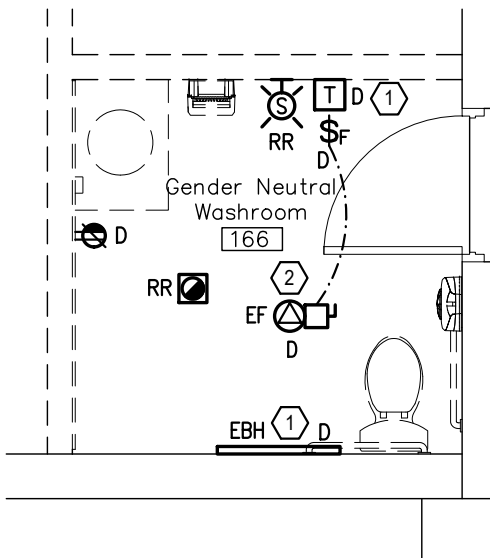
GENERAL NOTES:

1. UNLESS NOTED OTHERWISE, ALL ELECTRICAL DEVICES/EQUIPMENT SHOWN ARE NEW.
2. ALL NEW WIRES/CONDUITS SHALL BE INSTALLED CONCEALED IN CEILING SPACE OR PARTITIONS, SURFACE INSTALLATION IS NOT ACCEPTABLE.
3. ALL WIRING DEVICES TO BE INSTALLED IN RECESSED GANG BOX, SURFACE INSTALLATION IS NOT ACCEPTABLE.

NOTES:

- ① PROVIDE NEW LIGHTS TYPE 'F1' AND 'F2', TO BE CONNECTED TO EXISTING NORMAL LIGHT CIRCUIT IN EACH ROOM AND CONTROLLED BY NEW WALL MOUNTED OCCUPANCY SENSOR SWITCH.
- ② PROVIDE ONE(1) NEW EMERGENCY LIGHTING BATTERY UNIT 'E2' C/W TWO(2) REMOTE HEADS. PROVIDE UNSWITCHED HOT CONDUCTOR FROM EXISTING WASHROOM NORMAL LIGHT CIRCUIT TO 'E2'.
- ③ PROVIDE NEW EMERGENCY REMOTE HEADS 'E1', CONNECT TO NEW EMERGENCY LIGHTING CIRCUIT 'BU-1', ALL NEW REMOTE HEADS SHALL BE FED FROM BATTERY UNIT 'E2'.
- ④ NEW EXHAUST FAN 'EF-2' TO BE CONNECTED TO NORMAL LIGHT CIRCUIT IN STORAGE ROOM 129A AND CONTROLLED BY NEW WALL MOUNTED OCCUPANCY SWITCH.





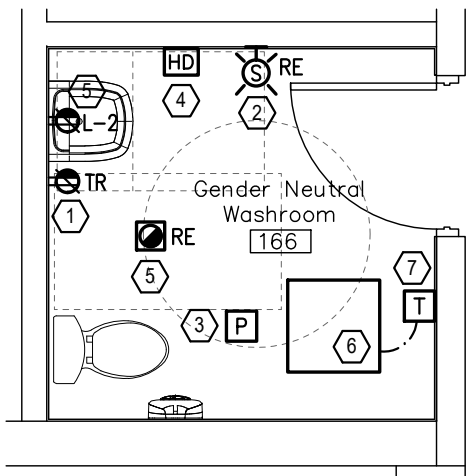
01  
E03  
EXISTING POWER & SYSTEMS LAYOUT - ROOM 166  
SCALE: 1:50

GENERAL NOTES:

1. UNLESS NOTED OTHERWISE, ALL ELECTRICAL DEVICES/EQUIPMENT SHOWN ARE EXISTING TO REMAIN.
2. REGARDLESS SHOWN OR NOT, REMOVE (OR RELOCATE AS REQUIRED) ALL EXISTING ELECTRICAL DEVICES/EQUIPMENT C/W WIRES/CONDUITS AND BOXES AFFECTED BY DEMOLITION OF EXISTING PARTITIONS.
3. REMOVAL SCOPE SHALL INCLUDE REMOVAL OF ALL UNUSED CIRCUITS BACK TO POWER PANEL, INCLUDING WIRES, CONDUITS AND JUNCTION BOXES, MODIFY PANEL DIRECTORY.

NOTES:

1. REMOVE EXISTING WASHROOM ELECTRIC BASEBOARD HEATER CIRCUIT BACK TO POWER PANEL, INCLUDING ELECTRIC HEATER, THERMOSTAT, WIRES AND CIRCUIT BREAKER.
2. REMOVE EXISTING WASHROOM EXHAUST FAN CIRCUIT BACK TO POWER PANEL, INCLUDING EXHAUST FAN, SWITCH, WIRES AND CIRCUIT BREAKER.



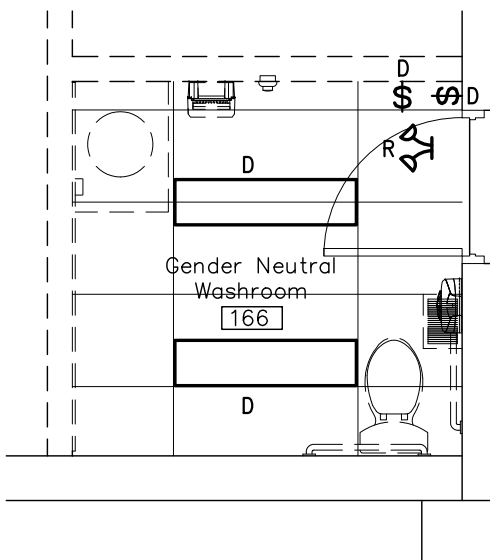
03  
E03  
PROPOSED POWER & SYSTEMS LAYOUT - ROOM 166  
SCALE: 1:50

GENERAL NOTES:

1. UNLESS NOTED OTHERWISE, ALL ELECTRICAL DEVICES/EQUIPMENT SHOWN ARE NEW.
2. ALL NEW WIRES/CONDUITS SHALL BE INSTALLED CONCEALED IN CEILING SPACE OR PARTITIONS, SURFACE INSTALLATION IS NOT ACCEPTABLE.
3. ALL WIRING DEVICES TO BE INSTALLED IN RECESSED GANG BOX, SURFACE INSTALLATION IS NOT ACCEPTABLE.
4. CONFIRM ALL EXACT MECHANICAL EQUIPMENTS LOCATION ON MECHANICAL DRAWINGS PRIOR TO ROUGH-IN.

NOTES:

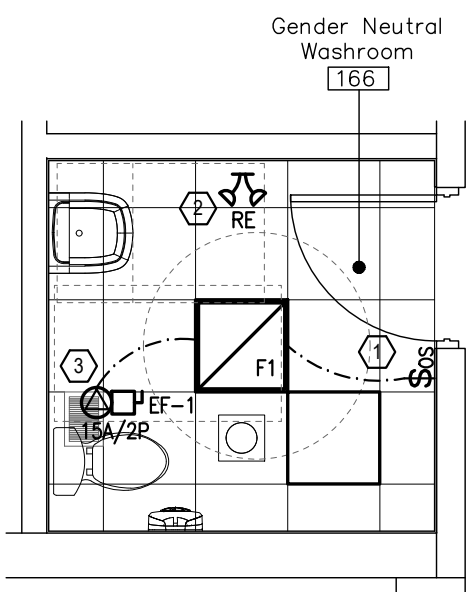
1. PROVIDE ONE(1) NEW TAMPER-RESISTANT GFI RECEPTACLE, CONNECT TO EXISTING GFI RECEPTACLE CIRCUIT IN THIS ROOM.
2. REINSTALL EXISTING FIRE ALARM STROBE, CONNECT TO EXISTING FIRE ALARM SIGNALING CIRCUIT IN THIS ROOM.
3. PROVIDE ONE(1) NEW CEILING MOUNTED PA SPEAKER TO MATCH EXISTING, CONNECT TO NEAREST EXISTING PA SPEAKER CIRCUIT IN THIS AREA.
4. PROVIDE ONE(1) NEW HAND DRYER, MOUNTED AT 1100mm AFF TO HAND DRYER TOP. ADD ONE(1) NEW 15A/1P GFI BREAKER TO MATCH EXISTING IN EXISTING PANEL IN ELECTRICAL ROOM 159. PROVIDE DEDICATED FEEDER: 2#12+GRD-21mmC FOR NEW HAND DRYER CIRCUIT.
5. PROVIDE ONE(1) NEW GFI RECEPTACLE FOR LAVATORY SENSOR, CONFIRM EXACT LOCATION AND MOUNTING HEIGHT ON SITE. CONTRACTOR TO MAKE SURE THE RECEPTACLE TO BE CONCEALED BEHIND LAVATORY 'L-2'. ADD ONE(1) NEW 15A/1P BREAKER TO MATCH EXISTING IN EXISTING PANEL IN ELECTRICAL ROOM 159, PROVIDE FEEDER: 2#12+GRD-21mmC FROM BREAKER TO GFI RECEPTACLE.
6. REINSTALL EXISTING FIRE ALARM SMOKE DETECTOR, CONNECT TO EXISTING FIRE ALARM INITIATING CIRCUIT IN THIS ROOM.
7. PROVIDE ONE(1) NEW ELECTRIC RADIANT CEILING PANEL C/W RECESS MOUNTING KIT, 2'X2', 375W, 120V, QMARK MODEL CP371, WHITE FINISH. ADD ONE(1) NEW 15A/1P BREAKER TO MATCH EXISTING IN EXISTING PANEL IN ELECTRICAL ROOM 159, PROVIDE DEDICATED FEEDER: 2#12+GRD-21mmC FOR NEW RADIANT PANEL CIRCUIT.
8. PROVIDE LINE VOLTAGE THERMOSTAT FOR ELECTRIC RADIANT CEILING PANELS, MOUNTED AT 6' AFF.



02  
E02  
EXISTING LIGHTING LAYOUT - ROOM 129 & 129A & 130 & 131  
SCALE: 1:50

GENERAL NOTES:

1. UNLESS NOTED OTHERWISE, ALL ELECTRICAL DEVICES/EQUIPMENT SHOWN ARE EXISTING TO REMAIN.
2. REGARDLESS SHOWN OR NOT, REMOVE (OR RELOCATE AS REQUIRED) ALL EXISTING ELECTRICAL DEVICES/EQUIPMENT C/W WIRES/CONDUITS AND BOXES AFFECTED BY DEMOLITION OF EXISTING PARTITIONS.
3. REMOVAL SCOPE SHALL INCLUDE REMOVAL OF ALL UNUSED CIRCUITS BACK TO POWER PANEL, INCLUDING WIRES, CONDUITS AND JUNCTION BOXES, MODIFY PANEL DIRECTORY.



04  
E03  
PROPOSED LIGHTING LAYOUT - ROOM 166  
SCALE: 1:50

GENERAL NOTES:

1. UNLESS NOTED OTHERWISE, ALL ELECTRICAL DEVICES/EQUIPMENT SHOWN ARE NEW.
2. ALL NEW WIRES/CONDUITS SHALL BE INSTALLED CONCEALED IN CEILING SPACE OR PARTITIONS, SURFACE INSTALLATION IS NOT ACCEPTABLE.
3. ALL WIRING DEVICES TO BE INSTALLED IN RECESSED GANG BOX, SURFACE INSTALLATION IS NOT ACCEPTABLE.

NOTES:

1. PROVIDE NEW LIGHT 'F1', TO BE CONNECTED TO EXISTING WASHROOM NORMAL LIGHT CIRCUIT AND CONTROLLED BY NEW WALL MOUNTED OCCUPANCY SENSOR SWITCH.
2. RELOCATE EXISTING EMERGENCY REMOTE HEADS TO NEW LOCATION AS SHOWN, EXTEND EXISTING EMERGENCY LIGHT WIRES/CONDUIT TO NEW REMOTE HEAD LOCATION.
3. NEW EXHAUST FAN 'EF-1' TO BE CONNECTED TO EXISTING NORMAL LIGHT CIRCUIT IN THIS ROOM AND CONTROLLED BY NEW OCCUPANCY SENSOR SWITCH.