



CITY OF TORONTO MULTIPLEX  
FOURPLEX NARROW



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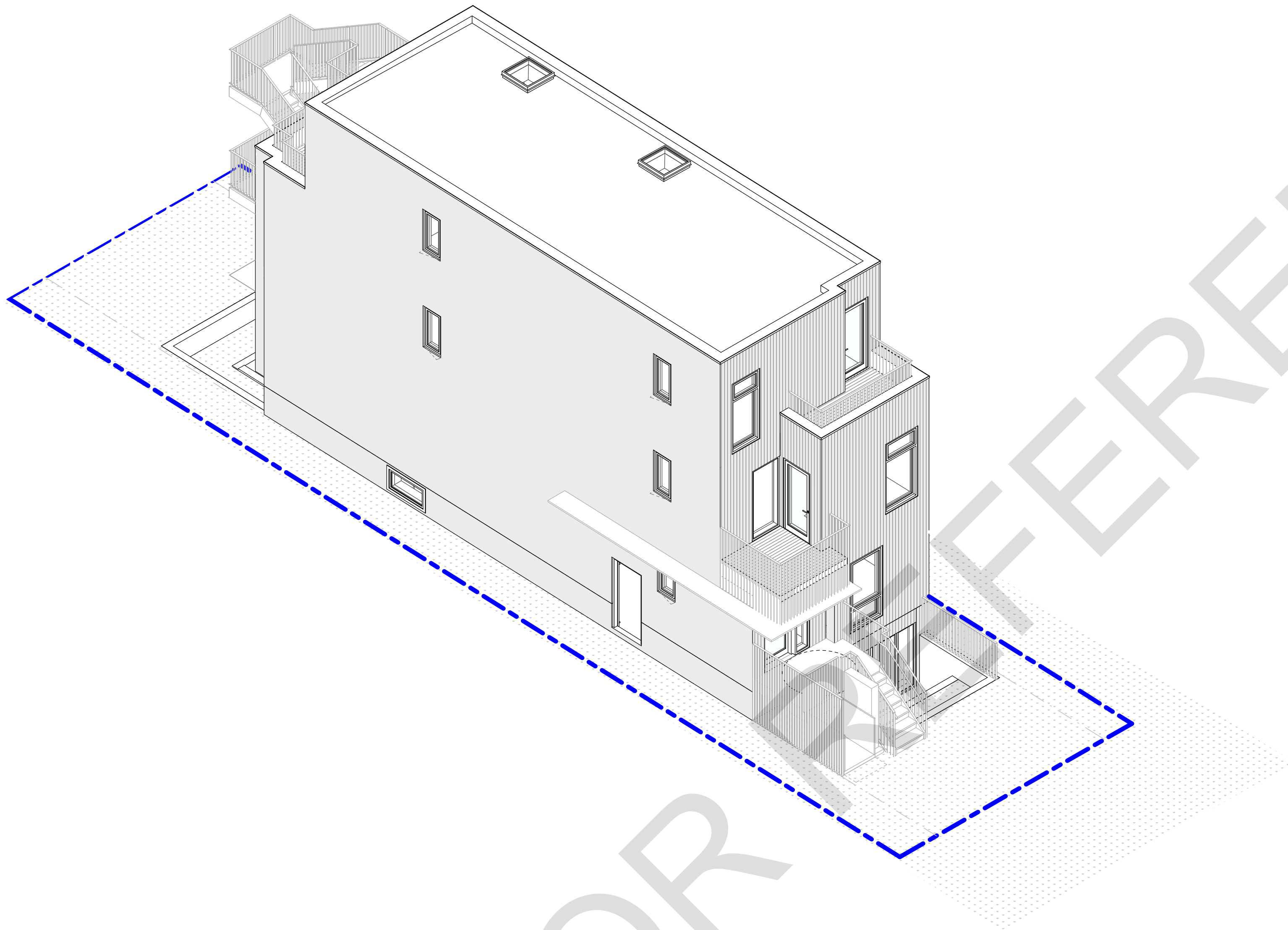
PROFESSIONAL SEAL:

GENERAL NOTES:

1. NO DRAWINGS WILL BE FOR CONSTRUCTION UNLESS STAMPED BY THE QUALIFIED DESIGN PROFESSIONAL (QDP) AND ISSUED FOR THAT PURPOSE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND VERIFYING ALL LEVELS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE QUALIFIED DESIGN PROFESSIONAL PRIOR TO COMMENCING WORK.
3. DO NOT SCALE THE DRAWINGS.

QUALIFIED DESIGN PROFESSIONAL (QDP)

1. ALL END USERS REQUIRE A QUALIFIED DESIGN PROFESSIONAL – EITHER AN ARCHITECT, ENGINEER, OR OTHER PROFESSIONAL AS DESIGNATED BY THE RELEVANT PROFESSIONAL ASSOCIATIONS AND THE AUTHORITY HAVING JURISDICTION.
2. THE QDP MUST REVIEW AND UPDATE THE DESIGN ELEMENTS COLOURED IN BLUE TO CONFIRM SITE-SPECIFIC CONDITIONS AND VERIFY ASSUMPTIONS. THE QDP MUST ENSURE COMPLIANCE WITH ALL APPLICABLE CODES, BYLAWS, AND OTHER REGULATIONS. IF ANY MODIFICATIONS TO ANY PORTION OF THE DESIGN OTHER THAN THE BLUE-HIGHLIGHTED ELEMENTS ARE MADE, THE PLANS WILL NO LONGER QUALIFY AS PRE-APPROVED, AND APPLICANTS WILL BE REQUIRED TO SUBMIT A BUILDING PERMIT APPLICATION THROUGH THE STANDARD REVIEW PROCESS.
3. THE QUALIFIED DESIGN PROFESSIONAL WILL TAKE RESPONSIBILITY FOR THE ENTIRE SET OF DOCUMENTS ONCE UPDATED. THIS INCLUDES APPLYING THE ARCHITECT'S OR ENGINEER'S SEAL AS REQUIRED BY THE RELEVANT PROFESSIONAL ASSOCIATION AND THE AUTHORITIES HAVING JURISDICTION (AHJ). QUALIFIED DESIGN PROFESSIONALS ARE RESPONSIBLE FOR COMPLYING WITH THE RELEVANT REGULATORY ACTS, BYLAWS, AND PROFESSIONAL REQUIREMENTS APPLICABLE TO THEIR JURISDICTION.
4. THE END USER OR THE QUALIFIED DESIGN PROFESSIONAL MAY SUBMIT THE FINALIZED DESIGN FOR A BUILDING PERMIT TO THE APPROPRIATE AUTHORITY HAVING JURISDICTION (AHJ).
5. CONSTRUCTION REVIEW IS THE RESPONSIBILITY OF THE QUALIFIED DESIGN PROFESSIONAL IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS AND PROFESSIONAL PRACTICE STANDARDS.



SHEET LIST - FOURPLEX NARROW

|      |                            |
|------|----------------------------|
| 000  | COVER                      |
| A000 | COVER SHEET                |
| A001 | ASSEMBLIES SCHEDULE        |
| A002 | DOOR AND WINDOW SCHEDULE   |
| A003 | INTERIOR TYPICAL DETAILS   |
| A004 | EXTERIOR TYPICAL DETAILS   |
| A005 | EXTERIOR TYPICAL DETAILS   |
| A006 | EXTERIOR TYPICAL DETAILS   |
| A010 | EBF DIAGRAMS & CODE MATRIX |
| A011 | SITE PLAN                  |
| A100 | BASEMENT FLOOR PLAN        |
| A101 | MAIN FLOOR PLAN            |
| A102 | SECOND FLOOR PLAN          |
| A103 | THIRD FLOOR PLAN           |
| A104 | ROOF PLAN                  |
| A200 | ELEVATIONS                 |
| A201 | ELEVATIONS                 |
| A202 | ELEVATIONS                 |
| A300 | SECTIONS                   |
| A301 | SECTION                    |
| A302 | SECTIONS                   |

ABBREVIATIONS

ABBREVIATIONS MAY OR MAY NOT INCLUDE PERIOD PUNCTUATION. ABBREVIATIONS APPLY TO ARCHITECTURAL DOCUMENTS ONLY.

|         |                                |
|---------|--------------------------------|
| AHJ     | AUTHORITY HAVING JURISDICTION  |
| ARCH    | ARCHITECTURAL                  |
| B/O     | BOTTOM OF                      |
| C/C     | CENTRE TO CENTRE               |
| CL      | CENTER LINE                    |
| CIV     | CIVIL                          |
| CW      | COMES WITH                     |
| CSA     | CANADIAN STANDARDS ASSOCIATION |
| CW      | COMES WITH                     |
| DIA     | DIAMETER                       |
| DIM     | DIMENSION                      |
| DWG     | DRAWING                        |
| EBF     | EXPOSED BUILDING FACE          |
| EST     | ESTABLISHED                    |
| ELEC    | ELECTRICAL                     |
| ELEV    | ELEVATION                      |
| EQ      | EQUAL                          |
| FRM/G   | FRAMING                        |
| GEOTECH | GEOTECHNICAL                   |
| GWB     | GYPSUM WALL BOARD              |
| GRD     | GRADE                          |
| F/F     | FINISH FLOOR                   |
| FFE     | FINISH FLOOR ELEVATION         |
| FLR     | FLOOR                          |
| FRR     | FIRE RESISTANCE RATING         |
| FD      | FLOOR DRAIN                    |
| HR      | HOUR                           |
| LP      | LOW POINT                      |
| MAX     | MAXIMUM                        |
| MECH    | MECHANICAL                     |
| MIN     | MINIMUM                        |
| N/A     | NOT APPLICABLE                 |
| NC      | NON-COMBUSTIBLE                |
| NTS     | NOT TO SCALE                   |
| OBC     | ONTARIO BUILDING CODE          |
| O/C     | ON CENTRE                      |
| PARA    | PARAPET                        |
| PRE-FIN | PREFINISHED                    |
| QDP     | QUALIFIED DESIGN PROFESSIONAL  |
| RM      | ROOM                           |
| R/O     | ROUGH OPENING                  |
| RWIL    | RAIN WATER LEADER              |
| SCH     | SCHEDULE                       |
| SF      | SQUARE FEET                    |
| SIM     | SIMILAR                        |
| SM      | SQUARE METER                   |
| SPEC    | SPECIFICATION                  |
| STC     | SOUND TRANSMISSION CLASS       |
| STRUC   | STRUCTURE                      |
| TBD     | TO BE DETERMINED               |
| T/O     | TOP OF                         |
| T&G     | TONGUE & GROOVE                |
| TYP     | TYPICAL                        |
| U/S     | UNDERSIDE                      |
| W/C     | WASHROOM                       |
| W/      | WITH                           |

ANNOTATION LEGEND

ASSEMBLY TAGS (REFER TO ASSEMBLIES SCHEDULES)

|    |                        |
|----|------------------------|
| W# | EXTERIOR WALL TAG      |
| P# | INTERIOR PARTITION TAG |
| R# | ROOF TAG               |
| F# | FLOOR TAG              |

TAGS

|                     |                                                      |
|---------------------|------------------------------------------------------|
| DW#                 | DOOR TAG<br>REFER TO DOOR SCHEDULE                   |
| WWS#<br>###/### AFF | WINDOW TAG<br>REFER TO WINDOW SCHEDULE               |
| XYZ-#               | MATERIAL TAG                                         |
| #                   | KEYNOTES<br>REFER TO SHEET SPECIFIC KEYNOTE SCHEDULE |

DRAWING TAGS

|                                        |                                                   |
|----------------------------------------|---------------------------------------------------|
| 1<br>A101<br>SIM                       | DETAIL NUMBER<br>DRAWING SHEET NUMBER             |
| 1<br>A101<br>SIM                       | BUILDING SECTION NUMBER<br>DRAWING SHEET NUMBER   |
| 1<br>A101<br>1                         | EXTERIOR ELEVATION NUMBER<br>DRAWING SHEET NUMBER |
| 0                                      | GRID BUBBLE                                       |
| SPOT ELEVATION<br>(ABOVE FINISH FLOOR) |                                                   |
| ROOM                                   | ROOM TAG                                          |
| C                                      | CENTRELINE                                        |

PROJECT:

City of Toronto - Multiplex

FOURPLEX NARROW

SHEET TITLE:

COVER SHEET

PROJECT NO: 241058

SCALE: 1 : 50

SHEET NO:

A000



| N - FOUNDATION WALL ASSEMBLIES |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                             |
|--------------------------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TYPE                           | DIAGRAM | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                           | PERFORMANCE                                                                                                                                                 |
| N1                             |         | <b>CONCRETE FOUNDATION WALL, PERIMETER</b><br><br>9mm<br>47102mm<br>38710mm<br>VAR<br>12713mm<br>3 1/2"89mm<br>3 1/2"89mm<br>58716mm<br><br>CEMENT BOARD (EXTEND 18"455mm BELOW GRADE), PARGED<br>EXTRUDED POLYSTYRENE (R-20.0) HIGH DENSITY<br>DRAINAGE BOARD<br>FOUNDATION WATERPROOFING MEMBRANE<br>CONCRETE FOUNDATION WALL. REFER TO STRUC<br>VAPOUR CONTROL BARRIER<br>AIR CAVITY<br>METAL STUD FRAMING @ 400mm O/C C/W<br>INSULATION (AS REQ.)<br>GYPSUM BOARD | R-VALUE<br>R-20.0 CI                                                                                                                                        |
|                                |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | FRR<br>1HR<br><br>SEE TYPICAL DETAILS FOR ABOVE<br>GRADE WALL ASSEMBLY<br><br>FRR BASED ON SB-2 Table 2.1.1 WITH A<br>MINIMUM CONCRETE THICKNESS OF<br>90mm |
| N2                             |         | <b>CONCRETE FOUNDATION RETAINING WALL, WINDOW WELL AND WALKOUT</b><br><br>VAR<br>CONCRETE FOUNDATION WALL. REFER TO STRUC                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                             |

| W - EXTERIOR WALL ASSEMBLIES |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                    |
|------------------------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TYPE                         | DIAGRAM | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | PERFORMANCE                                                                                                                                                                                                        |
| W1                           |         | <b>EXTERIOR ENVELOPE WALL - COMBUSTIBLE</b><br><br><i>(SEE ELEV. FOR TYPE)</i><br><br>VAR<br>12713mm<br>2 1/2"64mm<br>VAR<br>58716mm<br>5 1/2"140mm<br>5 1/2"140mm<br>VAR<br>58716mm<br><br><b>LIGHT-WEIGHT CLADDING (SEE ELEV. FOR TYPE)</b><br>VENTED CAVITY W/ METAL Z-GIRTS @ 406mm O/C<br>SEMI-RIGID MINERAL WOOL (R-10.0)<br>AIR BARRIER, VAPOUR PERMEABLE<br>PLYWOOD SHEATHING. REFER TO STRUC<br>WOOD STUD FRAMING, 16"406mm O/C<br>REFER TO STRUC, C/W<br>STUD CAVITY IN-FILL INSULATION (R-24.0)<br>VAPOUR CONTROL BARRIER<br>GYPSUM BOARD, TYPE X                     | R-VALUE<br>R-10.0 CI +<br>R-22.0 (R-32.0)                                                                                                                                                                          |
|                              |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | FRR<br>1HR<br><br>REQUIRED FIRE RESISTANCE RATING,<br>TYPE OF CONSTRUCTION, AND<br>CLADDING TYPE PER SITE CONDITIONS -<br>SEE OBC 9.10.14.4 AND 9.10.14.5<br><br>FRR BASED ON SB-2 Table 2.3.4.A and<br>2.3.4.E    |
| W2                           |         | <b>EXTERIOR ENVELOPE WALL - RATED NON-COMBUSTIBLE</b><br><br>VAR<br>12713mm<br>2 1/2"64mm<br>VAR<br>58716mm<br>6"152mm<br>6"152mm<br>VAR<br>12713mm<br>12713mm<br><br><b>NON-COMBUSTIBLE LIGHT-WEIGHT CLADDING</b><br><i>(SEE ELEV. FOR TYPE)</i><br>VENTED CAVITY W/ METAL Z-GIRTS @ 406mm O/C<br>SEMI-RIGID MINERAL WOOL (R-10.0)<br>AIR BARRIER, VAPOUR PERMEABLE<br>PLYWOOD SHEATHING. REFER TO STRUC<br>WOOD STUD FRAMING, 16"406mm O/C<br>REFER TO STRUC, C/W<br>NON-COMBUSTIBLE STUD CAVITY IN-FILL INSULATION (R-24.0)<br>VAPOUR CONTROL BARRIER<br>GYPSUM BOARD, TYPE X | R-VALUE<br>R-10.0 CI +<br>R-22.0 (R-32.0)                                                                                                                                                                          |
|                              |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | FRR<br>1HR<br><br>REQUIRED FIRE RESISTANCE RATING,<br>TYPE OF CONSTRUCTION, AND<br>CLADDING TYPE PER SITE<br>CONDITIONS - SEE OBC 9.10.14.4 AND<br>9.10.14.5<br><br>FRR BASED ON SB-2 Table 2.3.4.A and<br>2.3.4.E |

| R - ROOF ASSEMBLIES |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                          |
|---------------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| TYPE                | DIAGRAM | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | PERFORMANCE                                                                                                                              |
| R1                  |         | <b>MODIFIED BITUMINOUS MEMBRANE ROOFING,</b><br><br>VAR<br>2751mm<br>2751mm<br>34719mm<br>11 7/8"302mm<br>11"279mm<br>VAR<br>58716mm<br><br>ROOFING MEMBRANE - 2 PLY MODIFIED BITUMEN ROOF C/W<br>COVER BOARD (AS REQ.)<br>POLYISOCYANURATE INSULATION BOARD (R-11.1)<br>POLYISOCYANURATE INSULATION BOARD (R-11.1)<br>PLYWOOD ROOF DECK SHEATHING<br>TONGUE AND GROOVE - REFER TO STRUC<br>SLOPED WOOD JOISTS.REFER TO STRUC<br>STUD CAVITY IN-FILL INSULATION (R-43.5)<br>VAPOUR CONTROL BARRIER<br>GYPSUM BOARD, TYPE X                                                                                                                                     | R-VALUE<br>R-22.2 CI +<br>R-43.5                                                                                                         |
|                     |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ROOFING MEMBRANE TO MEET<br>MINIMUM SOLAR REFLECTIVE INDEX<br>(SRI) OF >78.                                                              |
| R2                  |         | <b>ROOF DECK, RATED</b><br><br>1 1/2"38mm<br>VAR<br>2751mm<br>2751mm<br>58716mm<br>VAR<br>47102mm<br>12713mm<br>58716mm<br><br>WOOD DECKING<br>PRESSURE TREATED CANTED WOOD SLEEPERS<br>PERPENDICULAR TO DIRECTION OF SLOPE<br>CW RUBBER UNDERLAY<br>MODIFIED BITUMINOUS MEMBRANE ROOFING<br>POLYISOCYANURATE INSULATION BOARD (R-11.1)<br>POLYISOCYANURATE INSULATION BOARD (R-11.1)<br>EXTERIOR GRADE PLYWOOD<br>CANTED WOOD SLEEPERS, MIN 2% SLOPE<br>ENGINEERED WOOD JOIST OR I-JOIST<br>REFER TO STRUC C/W<br>SPRAY FOAM (R28.0)<br>RESILIENT FURRING CHANNELS @ 24"610mm O/C<br>GYPSUM BOARD, TYPE X                                                     | R-VALUE<br>R-18.4 CI +<br>R-28.0                                                                                                         |
|                     |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | FRR<br>3/4 HR<br><br>FRR BASED ON SB-2 TABLE 2.3.4.B.<br>AND 2.3.4.F.<br><br>REFER TO DETAILS TO AROUND<br>DRAINING THROUGH PARAPET WALL |
| R3                  |         | <b>ROOF DECK, RATED SEPARATION</b><br><br>1 1/2"38mm<br>VAR<br>2751mm<br>58716mm<br>VAR<br>1 1/2"38mm<br>2751mm<br>58716mm<br>VAR<br>47102mm<br>12713mm<br>58716mm<br>58716mm<br><br>WOOD DECKING<br>PRESSURE TREATED CANTED WOOD SLEEPERS<br>PERPENDICULAR TO DIRECTION OF SLOPE<br>CW RUBBER UNDERLAY<br>MODIFIED BITUMINOUS MEMBRANE ROOFING<br>POLYISOCYANURATE INSULATION BOARD (R-8.3)<br>POLYISOCYANURATE INSULATION BOARD (R-8.3)<br>EXTERIOR GRADE PLYWOOD<br>CANTED WOOD SLEEPERS, MIN 2% SLOPE<br>ENGINEERED WOOD JOIST OR I-JOIST<br>REFER TO STRUC C/W<br>SPRAY FOAM (R28.0)<br>RESILIENT FURRING CHANNELS @ 24"610mm O/C<br>GYPSUM BOARD, TYPE X | R-VALUE<br>R-18.4 CI +<br>R-28.0                                                                                                         |
|                     |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | FRR<br>1HR<br><br>FRR BASED ON SB-2 TABLE 2.3.4.B AND<br>2.3.4.F.<br><br>REFER TO DETAILS TO AROUND<br>DRAINING THROUGH PARAPET WALL     |

| F - FLOOR ASSEMBLIES |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                      |
|----------------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TYPE                 | DIAGRAM | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | PERFORMANCE                                                                                                                                                          |
| F1                   |         | <b>BASEMENT FLOOR SLAB ON GRADE</b><br><br>3/4"19mm<br>3/8"10mm<br>VAR<br>2751mm<br>87200mm<br><br><b>FLOOR FINISH</b><br>RUBBER UNDERLAY<br>CAST-IN-PLACE CONCRETE SLAB-ON-GRADE.<br>REFER TO STRUC<br>XPS RIGID INSULATION (R-10.0)<br>VAPOUR CONTROL, DAMPPROOFING LAYER<br>FREE-DRAINING GRANULAR BASE                                                                                                                                                                                                                          | R-VALUE<br>R-10                                                                                                                                                      |
|                      |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | DAMP-PROOFING LAYER PER<br>9.13.2.6(1) MIN 0.15mm THICK WITH<br>JOINTS LAPPED NOT LESS THAN<br>100mm                                                                 |
| F2                   |         | <b>EXTERIOR WALK-OUT SLAB ON GRADE</b><br><br>VAR<br>2751mm<br>87200mm<br><br>CAST IN PLACE CONCRETE SLAB-ON-GRADE,<br>REFER TO STRUC<br>XPS RIGID INSULATION (R-10.0)<br>FREE DRAINING GRANULAR BASE                                                                                                                                                                                                                                                                                                                               | R-VALUE<br>R-10                                                                                                                                                      |
|                      |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | SLAB SLOPED TO FLOOR DRAIN                                                                                                                                           |
| F3                   |         | <b>PORCH STEEL DECK WITH CONCRETE TOPPING</b><br><br>3776mm<br>1 1/2" 38mm<br><br>CONCRETE TOPPING, REFER TO STRUCTURAL<br>METAL DECK, REFER TO STRUC C/W<br>STEEL FRAME, REFER TO STRUC                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                      |
|                      |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                      |
| F4                   |         | <b>WOOD FRAMED FLOOR, RATED SEPARATION</b><br><br>3/4"19mm<br>3/8"10mm<br>3/4"19mm<br>VAR<br>67152mm<br>12713mm<br>58716mm<br>58716mm<br>VAR<br><br><b>FLOOR FINISH</b><br>RUBBER UNDERLAY<br>T&G PLYWOOD SUBFLOOR, SCREWED & GLUED<br>ENGINEERED WOOD JOIST OR I-JOIST<br>REFER TO STRUC<br>ACOUSTIC BATT IN-FILL INSULATION<br>RESILIENT FURRING CHANNELS @ 610mm O/C<br>GYPSUM BOARD, TYPE X<br>WOOD FRAMED LIGHT GAUGE STEEL WITH GYPSUM BOARD<br>BULKHEADSUSPENDED CEILING AT MECH DUCTS.<br>REFER TO MECHANICAL FOR LOCATIONS | FRR<br>1HR<br>STC<br>54<br>IIC<br>48                                                                                                                                 |
|                      |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ALL PERMITTED OPENINGS IN<br>CEILING MEMBRANES TO CONFORM<br>TO OBC 9.10.5.1<br><br>BASED ON F89 IN SB-3                                                             |
| F5                   |         | <b>WOOD FRAMED FLOOR, RATED</b><br><br>3/4"19mm<br>3/8"10mm<br>3/4"19mm<br>VAR<br>67152mm<br>12713mm<br>58716mm<br>58716mm<br>VAR<br><br><b>FLOOR FINISH</b><br>RUBBER UNDERLAY<br>T&G PLYWOOD SUBFLOOR, SCREWED & GLUED<br>ENGINEERED WOOD JOIST OR I-JOIST<br>REFER TO STRUC<br>ACOUSTIC BATT IN-FILL INSULATION<br>RESILIENT FURRING CHANNELS @ 610mm O/C<br>GYPSUM BOARD, TYPE X<br>WOOD FRAMED WITH GYPSUM BOARD<br>BULKHEADSUSPENDED CEILING AT MECH DUCTS.<br>REFER TO MECHANICAL FOR LOCATIONS                              | FRR<br>3/4HR<br>STC<br>N/A<br>IIC<br>N/A                                                                                                                             |
|                      |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ALL PERMITTED OPENINGS IN<br>CEILING MEMBRANES TO CONFORM<br>TO OBC 9.10.5.1<br><br>MIN FRR OF 3/4HR PER 9.10.8.1<br><br>BASED ON SB-2 Table 2.3.4.B. and<br>2.3.4.F |

| P - INTERIOR PARTITION ASSEMBLIES |         |                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                        |
|-----------------------------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TYPE                              | DIAGRAM | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                       | PERFORMANCE                                                                                                                                                                            |
| P1                                |         | <b>2x4 INTERIOR PARTITION</b><br><br>58716mm<br>3 1/2"89mm<br>58716mm<br><br>GYPSUM BOARD<br>WOOD STUD FRAMING @ 16"406mm O/C<br>GYPSUM BOARD                                                                                                                                                                                                                     | FRR<br>N/A                                                                                                                                                                             |
|                                   |         |                                                                                                                                                                                                                                                                                                                                                                   | STC<br>N/A<br><br>16mm 5/8" GYPSUM, TYPE X TO BE<br>USED SUPPORTING STRUCTURE TO<br>PROVIDE 1HR FRR - FRR BASED ON<br>SB-2 TABLE 2.3.4.A. AND 2.3.4.E. -<br>SEE DRAWINGS FOR LOCATIONS |
| P1a                               |         | <b>2x4 INTERIOR PARTITION W/ BATTS</b><br><br>58716mm<br>3 1/2"89mm<br>3 1/2"89mm<br>58716mm<br><br>GYPSUM BOARD<br>WOOD STUD FRAMING @ 16"406mm O/C C/W<br>ACOUSTIC BATT IN-FILL INSULATION<br>GYPSUM BOARD                                                                                                                                                      | FRR<br>N/A                                                                                                                                                                             |
|                                   |         |                                                                                                                                                                                                                                                                                                                                                                   | STC<br>36<br><br>16mm 5/8" GYPSUM, TYPE X TO BE<br>USED SUPPORTING STRUCTURE TO<br>PROVIDE 1HR FRR - FRR BASED ON<br>SB-2 TABLE 2.3.4.A. AND 2.3.4.E. -<br>SEE DRAWINGS FOR LOCATIONS  |
| P1b                               |         | <b>2x6 INTERIOR PARTITION W/ BATTS</b><br><br>58716mm<br>5 1/2"140mm<br>5 1/2"140mm<br>58716mm<br><br>GYPSUM BOARD<br>WOOD STUD FRAMING @ 16"406mm O/C C/W<br>ACOUSTIC BATT IN-FILL INSULATION<br>GYPSUM BOARD                                                                                                                                                    | FRR<br>N/A                                                                                                                                                                             |
|                                   |         |                                                                                                                                                                                                                                                                                                                                                                   | STC<br>36<br><br>16mm 5/8" GYPSUM, TYPE X TO BE<br>USED SUPPORTING STRUCTURE TO<br>PROVIDE 1HR FRR - FRR BASED ON<br>SB-2 TABLE 2.3.4.A. AND 2.3.4.E. -<br>SEE DRAWINGS FOR LOCATIONS  |
| P2                                |         | <b>2x6 INTERIOR PARTITION -<br/>BETWEEN UNIT &amp; STAIRS, RATED SEPARATION</b><br><br>58716mm<br>58716mm<br>12713mm<br>5 1/2"140mm<br>5 1/2"140mm<br>58716mm<br><br>GYPSUM BOARD, TYPE X<br>GYPSUM BOARD, TYPE X<br>RESILIENT FURRING CHANNELS @ 16"406mm O/C<br>WOOD STUD FRAMING<br>REFER TO STRUC<br>ACOUSTIC BATT IN-FILL INSULATION<br>GYPSUM BOARD, TYPE X | FRR<br>1HR                                                                                                                                                                             |
|                                   |         |                                                                                                                                                                                                                                                                                                                                                                   | STC<br>51<br><br>FRR & STC BASED ON W4a AS PER<br>OBC SB-3<br><br>PROVIDE PLYWOOD SHEATHING ON<br>ONE FACE WHERE REQ. - SEE<br>STRUCT. FOR LOCATIONS                                   |
| P3                                |         | <b>PLUMBING CHASE</b><br><br>58716mm<br>12713mm<br>3 1/2"89mm<br><br>GYPSUM BOARD OR TILE BACKER<br>PLYWOOD SHEATHING, WHERE REQ.<br>WOOD STUD FRAMING @ 16"406mm O/C                                                                                                                                                                                             | FRR<br>N/A                                                                                                                                                                             |
|                                   |         |                                                                                                                                                                                                                                                                                                                                                                   | STC<br>N/A                                                                                                                                                                             |

| ASSEMBLIES GENERAL NOTES |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.                       | REFER TO STRUC DRAWINGS AND DOCUMENTATION FOR STRUC DESIGN PARAMETERS INCLUDING LOAD-BEARING WALLS, POSTS, STAIRS, CONCRETE ETC.                                                                                                                                                                                                                                                                                                                                                                                     |
| 2.                       | ALL LOADBEARING WALLS SUPPORTING A RATED FLOOR ASSEMBLY SHALL HAVE A FIRE RESISTANCE RATING NOT LESS THAN THE SUPPORTED FLOOR ABOVE AS PER OBC 9.10.8.3.                                                                                                                                                                                                                                                                                                                                                             |
| 3.                       | THE DESCRIPTION OF THE ASSEMBLIES NOTED IN THE DRAWINGS ARE NOTED "AS BASIS OF DESIGN" AND MAY NOT REPRESENT THE FULL CRITERIA AS DEFINED BY THE TESTING AUTHORITIES.                                                                                                                                                                                                                                                                                                                                                |
| 4.                       | FOR ALL ASSEMBLIES BASED ON AN ASSEMBLY FOUND IN MMAH SUPPLEMENTARY STANDARD SB-3, FOOTNOTES FOR EACH ASSEMBLY TYPE MUST BE CONSULTED FOR SPECIFIC REQUIREMENTS TO OBTAIN VALUES NOTED.                                                                                                                                                                                                                                                                                                                              |
| 5.                       | ALL WALL AND FLOOR ASSEMBLIES REQUIRED TO BE A FIRE SEPARATION SHALL BE CONSTRUCTED AS A CONTINUOUS BARRIER AGAINST THE SPREAD OF FIRE AND SMOKE AS PER OBC 9.10.9.2. REFER TO FIRE SEPARATION DRAWINGS FOR REQUIRED FIRE SEPARATION RATINGS.                                                                                                                                                                                                                                                                        |
| 6.                       | UNLESS OTHERWISE NOTED, ALL RATED PARTITIONS (INCLUDING BUT NOT LIMITED TO ALL COMPONENTS THAT MAKE UP THE PARTITION) AND FURRING ASSEMBLIES ARE TO EXTEND FROM STRUC DECK/SLAB TO U/S OF STRUC DECK/SLAB ABOVE.                                                                                                                                                                                                                                                                                                     |
| 7.                       | PROVIDE ULC-LISTED FIRE STOPPING SEALANT AT ALL RATED PARTITIONS AS REQUIRED.                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 8.                       | ALL PENETRATIONS THROUGH A REQUIRED FIRE SEPARATION TO BE FIRESTOPPED AND/OR SEALED PER THE REQUIREMENTS OF OBC 9.10.9.6.                                                                                                                                                                                                                                                                                                                                                                                            |
| 9.                       | ALL PIPING PENETRATIONS THROUGH A RATED ASSEMBLY OR A MEMBRANE THAT FORMS PART OF A RATED ASSEMBLY TO CONFORM TO OBC 9.10.9.7.                                                                                                                                                                                                                                                                                                                                                                                       |
| 10.                      | ALL OPENINGS FOR ELECTRICAL OR SIMILAR OUTLET BOXES IN RATED ASSEMBLIES TO CONFORM TO OBC 9.10.9.8.                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 11.                      | PROVIDE ULC-LISTED FIRESTOP SYSTEMS AS REQUIRED FOR ALL BUILDING SERVICE PENETRATIONS THROUGH RATED ASSEMBLIES AND TO ENSURE THE CONTINUITY OF RATED ASSEMBLIES. COORDINATE WITH MECHANICAL AND ELECTRICAL DESIGN DRAWINGS.                                                                                                                                                                                                                                                                                          |
| 12.                      | AS PER 9.10.5.1 (3), DRYWALL FORMING PART OF A RATED ASSEMBLY IS PERMITTED TO BE PIERCED BY AN OPENING LEADING TO DUCTS WITHIN THE CEILING SPACE PROVIDED THE DUCTS, THE AMOUNT OF OPENINGS, AND THEIR PROTECTION CONFORM TO SENTENCE 9.10.13.14 (1) AND THE REQUIREMENTS IN MMAH SUPPLEMENTARY STANDARD SB-2 "FIRE AND PERFORMANCE RATINGS".                                                                                                                                                                        |
| 13.                      | FIRE SEPARATIONS THAT SEPARATE AN EXIT FROM THE REMAINDER OF THE BUILDING SHALL HAVE NO OPENINGS OR PENETRATIONS AS PER OBC 9.9.4.2.                                                                                                                                                                                                                                                                                                                                                                                 |
| 14.                      | PROVIDE CONTINUOUS ACOUSTICAL SEALANT (BOTH SIDES) AT TOP AND BOTTOM OF ALL INTERIOR STUD AND GYPSUM BOARD PARTITIONS.                                                                                                                                                                                                                                                                                                                                                                                               |
| 15.                      | ISOLATE ALL MECHANICAL PIPES, DUCTS, AND EQUIPMENT FROM INTERIOR PARTITIONS TO AVOID ACOUSTIC NOISE TRANSFER.                                                                                                                                                                                                                                                                                                                                                                                                        |
| 16.                      | RECESSED LIGHTING FIXTURES SHALL NOT BE LOCATED IN INSULATED CEILINGS UNLESS THE FIXTURES ARE DESIGNED FOR SUCH INSTALLATIONS AS PER OBC 9.34.1.4                                                                                                                                                                                                                                                                                                                                                                    |
| 17.                      | COORDINATE ACCESS PANELS LOCATED WITHIN SUSPENDED GYPSUM BOARD CEILING ASSEMBLIES. ACCESS PANELS TO BE PAINTED OUT TO MATCH THE SURROUNDING CEILING FINISH. PROVIDE ULC-LISTED ACCESS PANEL WHERE PANEL IS LOCATED IN A RATED CEILING. REFER ALSO TO FIRE SEPARATION DRAWINGS.                                                                                                                                                                                                                                       |
| 18.                      | COORDINATE VERTICAL SERVICE SPACES THAT DO NOT EXTEND THROUGH THE ROOF AND/OR DO NOT TERMINATE AT HORIZONTAL FIRE RATED ASSEMBLY (ROOF, FLOOR, ETC.), TO BE ENCLOSED AT THE TOP AND/OR BOTTOM WITH A ULC CONSTRUCTION ASSEMBLY HAVING A FIRE RESISTANCE RATING NOT LESS THAN THAT REQUIRED FOR THE VERTICAL SERVICE SPACE WALLS.                                                                                                                                                                                     |
| 19.                      | PROVIDE ALL PLUMBING CHASES AND MECHANICAL SHAFTS IN ADDITION TO ASSEMBLIES. COORDINATE REQUIRED CRITICAL DIMENSIONS WHEN LAYING OUT WALLS.                                                                                                                                                                                                                                                                                                                                                                          |
| 20.                      | UNLESS NOTED OTHERWISE, ASSEMBLIES ABOVE OR BELOW DOORS, WINDOWS, EXTERIOR OPENINGS AND INTERIOR SCREENS ARE TO BE THE SAME AS THE TYPE DENOTED ON EITHER SIDE. SEE TYPICAL DETAILS.                                                                                                                                                                                                                                                                                                                                 |
| 21.                      | ALL INTERIOR SURFACES ARE REQUIRED TO MEET THE FLAME SPREAD LIMITS DESCRIBED IN OBC 9.10.17.                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 22.                      | PROVIDE TILE BACKER IN LIEU OF GYPSUM BOARD AT ALL ASSEMBLIES TO RECEIVE TILE FINISHES, REFER TO PLANS. ENSURE TILE BACKER IS TYPE X GYPSUM AT REQUIRED FIRE RESISTANCE RATED ASSEMBLIES. ALL WATERPROOF WALL FINISHES TO MEET MIN. HEIGHT REQ. AS PER OBC 9.29.2. ALL TILED WALLS AS PER OBC 9.29.10.                                                                                                                                                                                                               |
| 23.                      | IN AREAS WITH HIGH VAPOUR CONTENT (INCLUDING BUT NOT LIMITED TO BATHROOMS) PROVIDE MOISTURE AND MOULD-RESISTANT GYPSUM BOARD IN LIEU OF REGULAR GYPSUM BOARD. ENSURE THAT THE MOISTURE AND MOULD-RESISTANT GYPSUM BOARD MEETS ALL THE FIRE AND ACOUSTIC RATINGS REFERENCED IN THE ASSEMBLY SCHEDULE.                                                                                                                                                                                                                 |
| 24.                      | PROVIDE 19mm FIRE RATED PLYWOOD BLOCKING AND STUD REINFORCING IN WALLS FOR INSTALLATION OF ALL ELEMENTS NEEDING BLOCKING/REINFORCEMENT, INCLUDING BUT NOT LIMITED TO ALL FIXTURES, PLUMBING ACCESSORIES, MILLWORK, EQUIPMENT, ELECTRIC PANELS, ETC. DESIGN/BUILD ALL BLOCKING AND STUD REINFORCING AS REQUIRED.                                                                                                                                                                                                      |
| 25.                      | ENSURE ADEQUATE BLOCKING/STUD WALL REINFORCEMENT FOR FUTURE GRAB BARS AS PER OBC 9.5.2.4. GRAB BARS SHALL BE CAPABLE OF RESISTING A LOAD OF NO LESS THAN 1.3kN AS PER OBC 9.31.2.3.                                                                                                                                                                                                                                                                                                                                  |
| 26.                      | WHERE FLOOR DRAINS ARE LOCATED IN A ROOM, COORDINATE SLOPING ENTIRE FLOOR TOWARD THE DRAIN. THERE WILL BE NO FLAT FLOOR SURFACE IN THE ROOM WITH A REQUIRED FLOOR DRAIN WHERE WATER CAN PUDDLE. FLOOR TO SLOPE A MINIMUM OF 2% . REFER TO THE MECHANICAL DOCUMENTS TO DETERMINE WHICH ROOMS HAVE FLOOR DRAINS. REPAIR ANY FLOORS THAT PUDDLE WATER AND/ OR DO NOT DIRECT WATER TO THE PROPER FLOOR DRAIN.                                                                                                            |
| 27.                      | FULLY COORDINATE MINIMUM STUD SPACE AND ALL ADDITIONAL SUPPORT REQUIRED FOR SUPPORT AND ANCHORAGE OF MECHANICAL EQUIPMENT OR DUCTS AND ELECTRICAL FIXTURES AS NOTED ON ARCHITECTURAL AND ENGINEERING DRAWINGS.                                                                                                                                                                                                                                                                                                       |
| 28.                      | ALL ASSEMBLIES IN CONTACT WITH THE GROUND SHALL BE CONSTRUCTED TO RESIST THE LEAKAGE OF SOIL GAS FROM THE GROUND INTO THE BUILDINGS IN ACCORDANCE WITH OBC 9.13.4.2. IN AREAS OF THE PROVINCE WHERE RADON GASES ARE KNOWN TO BE A PROBLEM, THE BUILDING SHALL BE DESIGNED AND CONSTRUCTED TO MEET THE RADON LIMITATIONS IN ARTICLE 9.1.1.7. BUILDINGS CONTAINING RESIDENTIAL OCCUPANCIES SHALL BE PROVIDED WITH THE ROUGH IN FOR A RADON EXTRACTION SYSTEM CONFORMING TO ARTICLE 9.13.4.3 (SEE ALSO NOTE A-9.13.4.3) |
| 29.                      | ALL MEMBRANES OR MATERIALS THAT MAKE UP THE AIR BARRIER SYSTEM IN AN ASSEMBLY TO BE CONTINUOUS AT TRANSITIONS AND PENETRATIONS. ALL FLEXIBLE SHEET MATERIAL SHALL BE LAPPED A MIN. OF 100MM AND ALL JOINTS SEALED TO MAINTAIN CONTINUITY AS PER OBC 9.25.3.3.                                                                                                                                                                                                                                                        |
| 30.                      | ALL THERMAL VALUES DESCRIBED IN ASSEMBLIES ARE MINIMUMS BASED ON OBC <b>SB-12 TABLE 3.1.1.2.C</b> COMPLIANCE PACKAGE "ELECTRIC SPACE HEATING". QDP TO VARYIFY WITH ALL SB-12 PRESCRIPTIVE REQUIREMENTS.                                                                                                                                                                                                                                                                                                              |
| 31.                      | THE BASIS OF DESIGN DOES NOT INCLUDE ANY AIRTIGHTNESS SUBSTITUTIONS PERMITTED BY SB-12 3.1.1.4.                                                                                                                                                                                                                                                                                                                                                                                                                      |

| MEMBRANE LEGEND |  |
|-----------------|--|
|                 |  |

| INSULATION LEGEND |  |
|-------------------|--|
|                   |  |

PROFESSIONAL SEAL:

GENERAL NOTES:

QUALIFIED DESIGN PROFESSIONAL (QDP)

DISCLAIMER (WALL ASSEMBLIES):

PROJECT:

City of Toronto - Multiplex

FOURPLEX NARROW

SHEET TITLE:

ASSEMBLIES SCHEDULE

PROJECT NO:

241058

SCALE:

As indicated

SHEET NO:

A001







PROFESSIONAL SEAL:

GENERAL NOTES:

1. NO DRAWINGS WILL BE FOR CONSTRUCTION UNLESS STAMPED BY THE QUALIFIED DESIGN PROFESSIONAL (QDP) AND ISSUED FOR THAT PURPOSE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND VERIFYING ALL LEVELS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE QUALIFIED DESIGN PROFESSIONAL PRIOR TO COMMENCING WORK.
3. DO NOT SCALE THE DRAWINGS.

QUALIFIED DESIGN PROFESSIONAL (QDP)

1. ALL END USERS REQUIRE A QUALIFIED DESIGN PROFESSIONAL – EITHER AN ARCHITECT, ENGINEER, OR OTHER PROFESSIONAL AS DESIGNATED BY THE RELEVANT PROFESSIONAL ASSOCIATIONS AND THE AUTHORITY HAVING JURISDICTION.
2. THE QDP MUST REVIEW AND UPDATE THE DESIGN ELEMENTS COLOURED IN BLUE TO CONFIRM SITE-SPECIFIC CONDITIONS AND VERIFY ASSUMPTIONS. THE QDP MUST ENSURE COMPLIANCE WITH ALL APPLICABLE CODES, BYLAWS, AND OTHER REGULATIONS. IF ANY MODIFICATIONS TO ANY PORTION OF THE DESIGN OTHER THAN THE BLUE-HIGHLIGHTED ELEMENTS ARE MADE, THE PLANS WILL NO LONGER QUALIFY AS PRE-APPROVED, AND APPLICANTS WILL BE REQUIRED TO SUBMIT A BUILDING PERMIT APPLICATION THROUGH THE STANDARD REVIEW PROCESS.
3. THE QUALIFIED DESIGN PROFESSIONAL WILL TAKE RESPONSIBILITY FOR THE ENTIRE SET OF DOCUMENTS ONCE UPDATED. THIS INCLUDES APPLYING THE ARCHITECT'S OR ENGINEER'S SEAL AS REQUIRED BY THE RELEVANT PROFESSIONAL ASSOCIATION AND THE AUTHORITIES HAVING JURISDICTION (AHJS). QUALIFIED DESIGN PROFESSIONALS ARE RESPONSIBLE FOR COMPLYING WITH THE RELEVANT REGULATORY ACTS, BYLAWS, AND PROFESSIONAL REQUIREMENTS APPLICABLE TO THEIR JURISDICTION.
4. THE END USER OR THE QUALIFIED DESIGN PROFESSIONAL MAY SUBMIT THE FINALIZED DESIGN FOR A BUILDING PERMIT TO THE APPROPRIATE AUTHORITY HAVING JURISDICTION (AHJ).
5. CONSTRUCTION REVIEW IS THE RESPONSIBILITY OF THE QUALIFIED DESIGN PROFESSIONAL IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS AND PROFESSIONAL PRACTICE STANDARDS.

1 INTERIOR DETAIL - FIRE SEPARATION STAIR ON FLOOR

A003 1 : 10

2 INTERIOR DETAIL - FIRE SEPARATION, PARTITION & BULKHEAD TO FLOOR

A003 1 : 10

3 INTERIOR DETAIL - FIRE SEPARATION, STAIR LANDING, ADJACENT FLOOR

A003 1 : 10

4 INTERIOR DETAIL - FIRE RATED STRUCTURAL POST, PARTITION WALL

A003 1 : 10

5 SECTION DETAIL - RADON MITIGATION OPTIONS

A003 1 : 10

| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
|-----|------|-------------|

PROJECT:  
City of Toronto - Multiplex

FOURPLEX NARROW

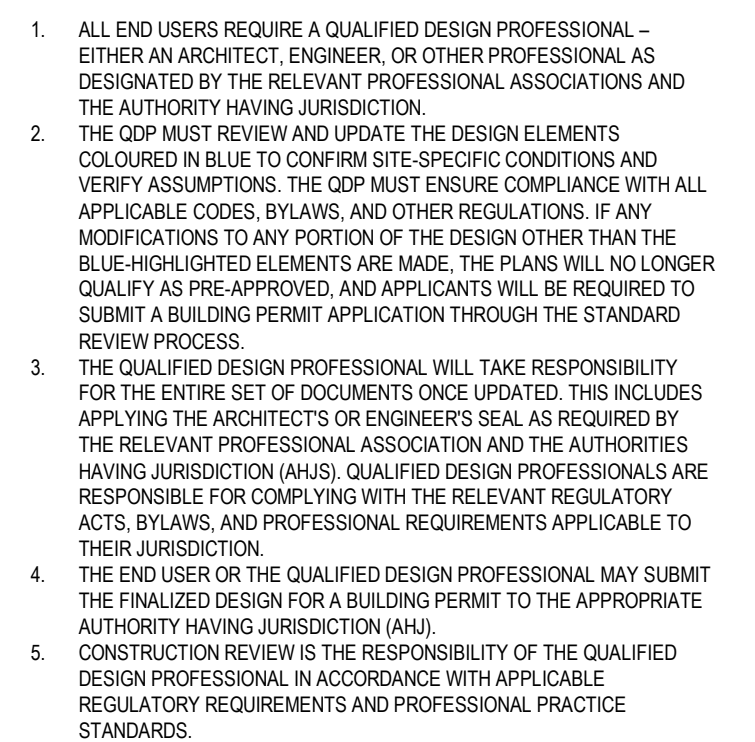
SHEET TITLE:  
INTERIOR TYPICAL  
DETAILS

PROJECT NO: 241058  
SCALE: 1 : 10

SHEET NO:

A003





| NO. | DATE | DESCRIPTION |
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A004

SECTION DETAIL - ENTRY AT GRADE



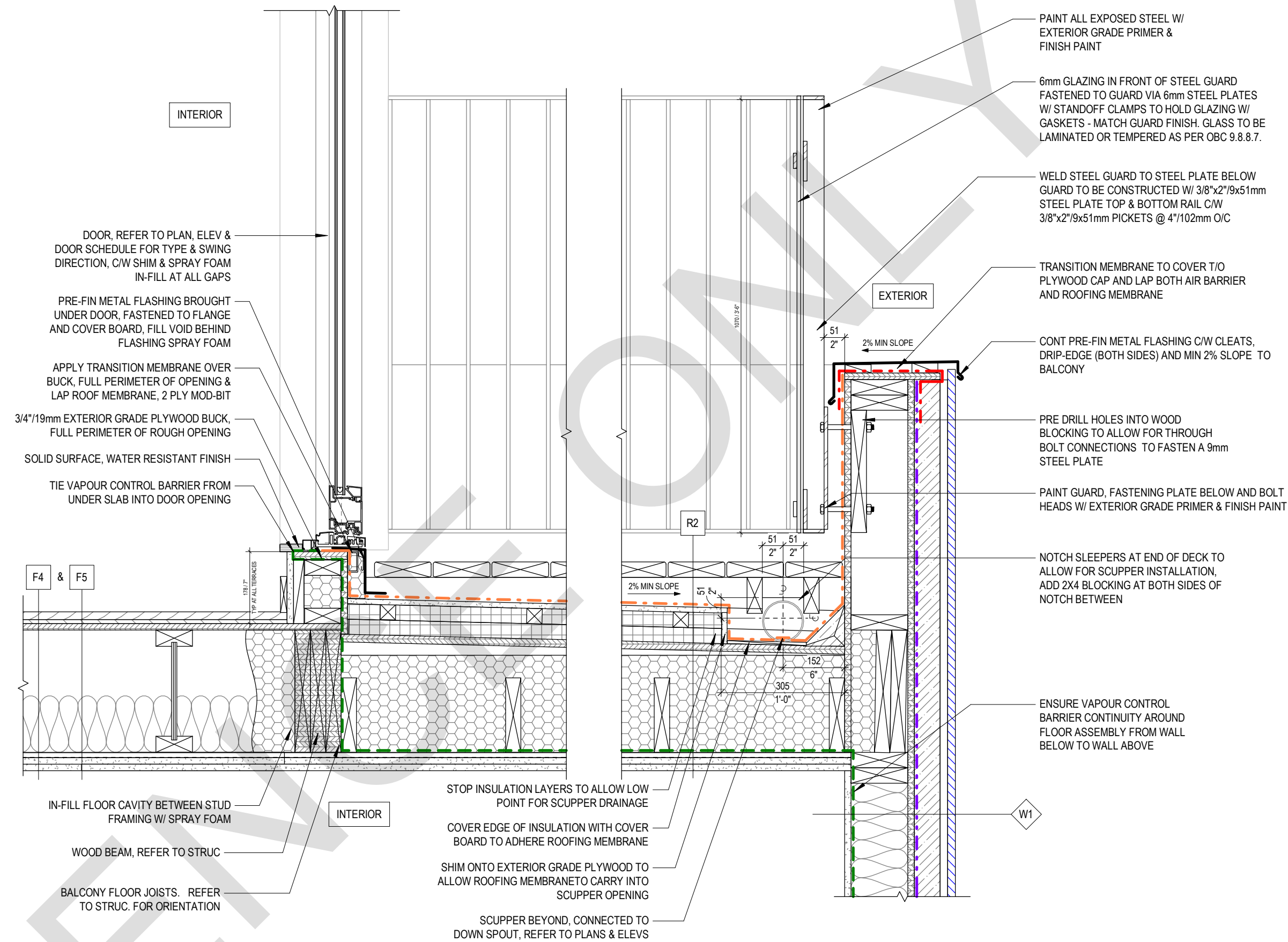
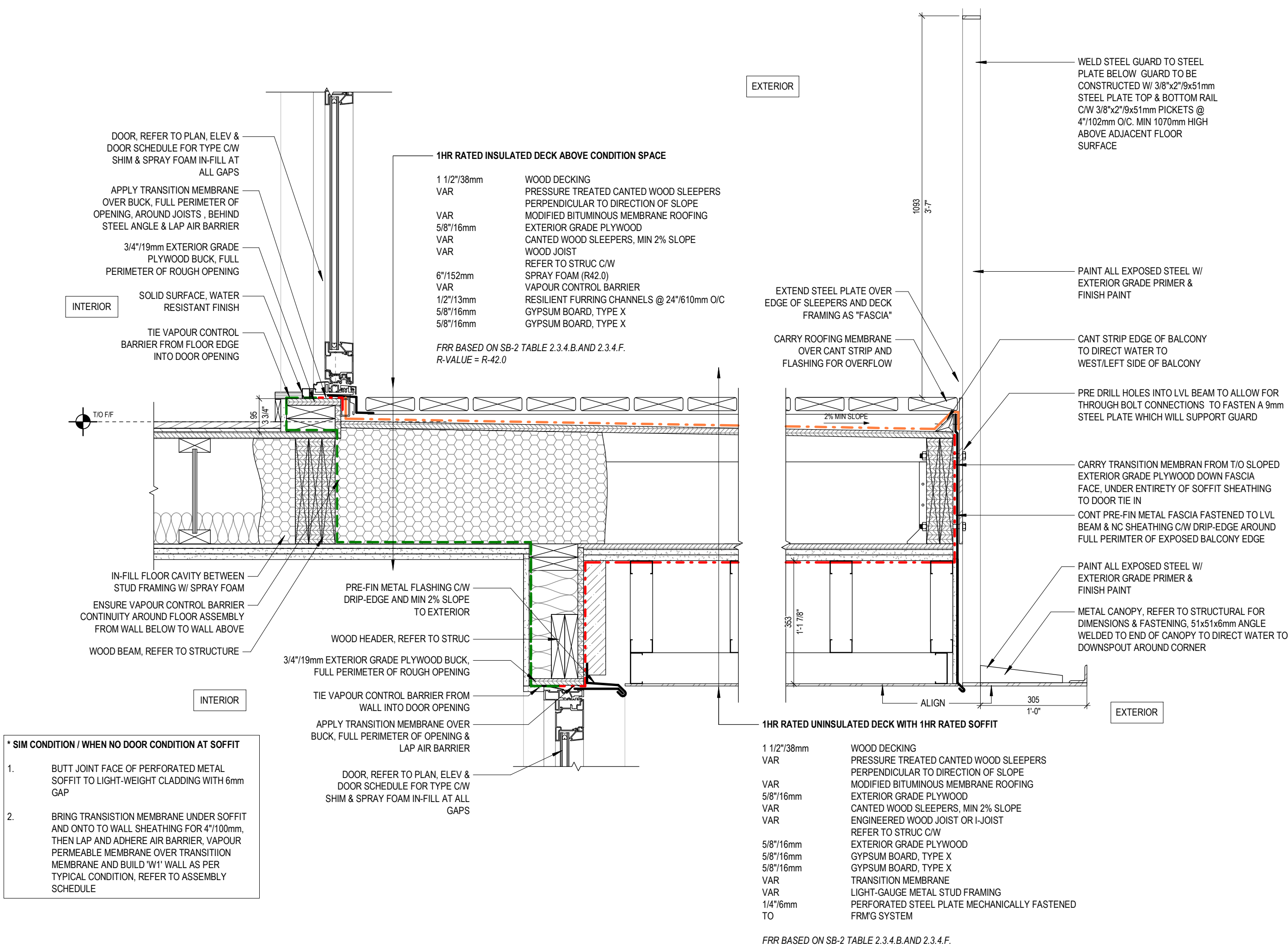
PROFESSIONAL SEAL:

GENERAL NOTES:

1. NO DRAWINGS WILL BE FOR CONSTRUCTION UNLESS STAMPED BY THE QUALIFIED DESIGN PROFESSIONAL (QDP) AND ISSUED FOR THAT PURPOSE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND VERIFYING ALL LEVELS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE QUALIFIED DESIGN PROFESSIONAL PRIOR TO COMMENCING WORK.
3. DO NOT SCALE THE DRAWINGS.

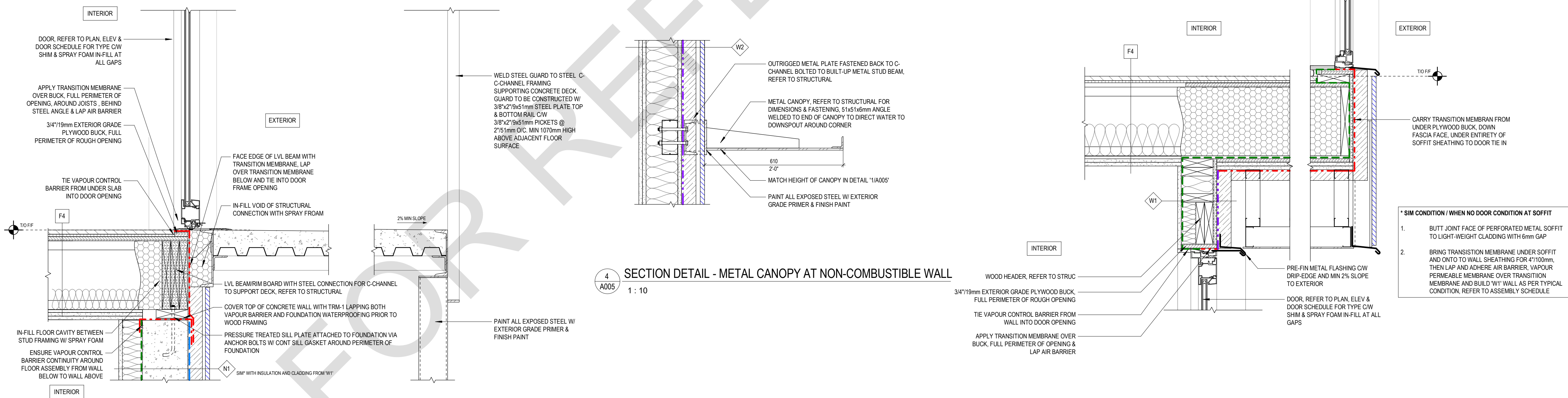
QUALIFIED DESIGN PROFESSIONAL (QDP)

1. ALL END USERS REQUIRE A QUALIFIED DESIGN PROFESSIONAL – EITHER AN ARCHITECT, ENGINEER, OR OTHER PROFESSIONAL AS DESIGNATED BY THE RELEVANT PROFESSIONAL ASSOCIATIONS AND THE AUTHORITY HAVING JURISDICTION.
2. THE QDP MUST REVIEW AND UPDATE THE DESIGN ELEMENTS COLOURED IN BLUE TO CONFIRM SITE-SPECIFIC CONDITIONS AND VERIFY ASSUMPTIONS. THE QDP MUST ENSURE COMPLIANCE WITH ALL APPLICABLE CODES, BYLAWS, AND OTHER REGULATIONS. IF ANY MODIFICATIONS TO ANY PORTION OF THE DESIGN OTHER THAN THE BLUE-HIGHLIGHTED ELEMENTS ARE MADE, THE PLANS WILL NO LONGER QUALIFY AS PRE-APPROVED, AND APPLICANTS WILL BE REQUIRED TO SUBMIT A BUILDING PERMIT APPLICATION THROUGH THE STANDARD REVIEW PROCESS.
3. THE QUALIFIED DESIGN PROFESSIONAL WILL TAKE RESPONSIBILITY FOR THE ENTIRE SET OF DOCUMENTS ONCE UPDATED. THIS INCLUDES APPLYING THE ARCHITECT'S OR ENGINEER'S SEAL AS REQUIRED BY THE RELEVANT PROFESSIONAL ASSOCIATION AND THE AUTHORITIES HAVING JURISDICTION (AHS). QUALIFIED DESIGN PROFESSIONALS ARE RESPONSIBLE FOR COMPLYING WITH THE RELEVANT REGULATORY ACTS, BYLAWS, AND PROFESSIONAL REQUIREMENTS APPLICABLE TO THEIR JURISDICTION.
4. THE END USER OR THE QUALIFIED DESIGN PROFESSIONAL MAY SUBMIT THE FINALIZED DESIGN FOR A BUILDING PERMIT TO THE APPROPRIATE AUTHORITY HAVING JURISDICTION (AHJ).
5. CONSTRUCTION REVIEW IS THE RESPONSIBILITY OF THE QUALIFIED DESIGN PROFESSIONAL IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS AND PROFESSIONAL PRACTICE STANDARDS.



1 SECTION DETAIL - BALCONY OVER CONDITIONED SPACE  
A005 1 : 10

2 SECTION DETAIL - ROOF DECK  
A005 1 : 10



3 SECTION DETAIL - PORCH  
A005 1 : 10

5 SECTION DETAIL - SOFFIT  
A005 1 : 10

NO. DATE DESCRIPTION

PROJECT:  
City of Toronto - Multiplex

FOURPLEX NARROW

SHEET TITLE:  
EXTERIOR TYPICAL  
DETAILS

PROJECT NO: 241058  
SCALE: 1 : 10

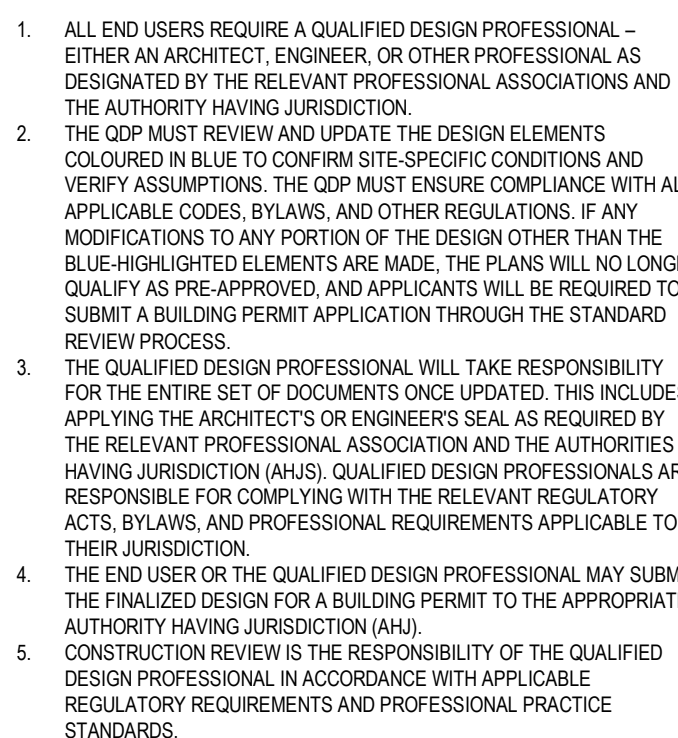
SHEET NO:

A005



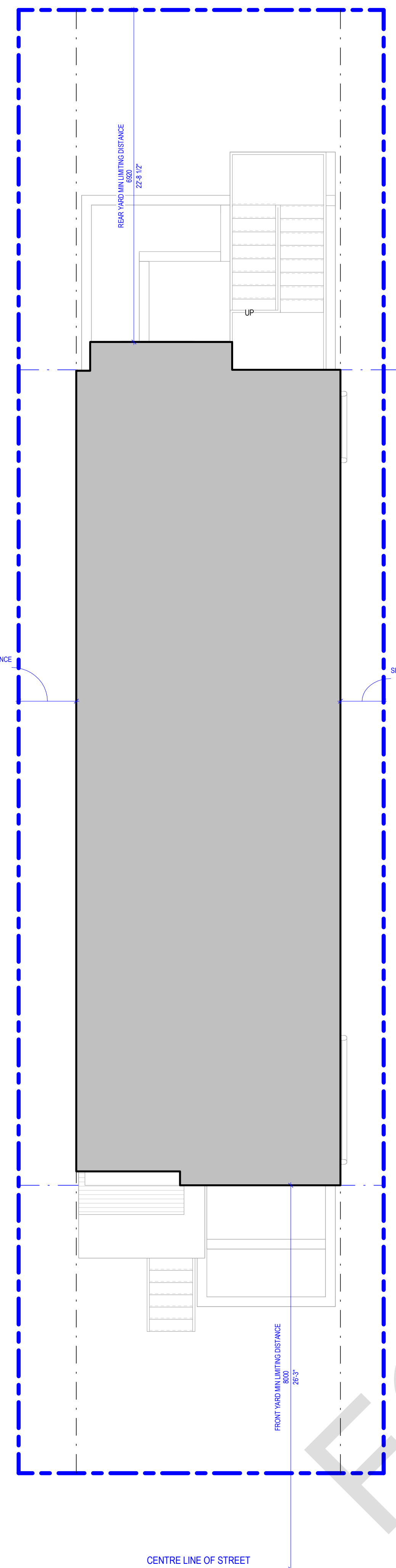




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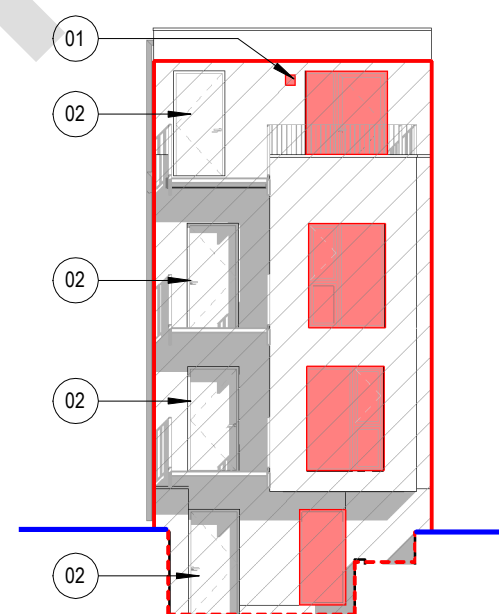
# A010



| <b>BUILDING CODE DATA MATRIX</b>            |                                                                                                                                |                                 |                        |                                                      |                                 |                     |                           |                       |                       |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------|------------------------|------------------------------------------------------|---------------------------------|---------------------|---------------------------|-----------------------|-----------------------|
| <b>PART 9 - HOUSING AND SMALL BUILDINGS</b> |                                                                                                                                |                                 |                        |                                                      |                                 |                     |                           |                       |                       |
| <b>BUILDING CODE VERSION</b>                | O REG. 16324                                                                                                                   |                                 |                        |                                                      | LAST AMENDMENT: O REG. 5/25     |                     |                           |                       | <b>OBC REFERENCE</b>  |
| <b>PROJECT TYPE</b>                         | NEW CONSTRUCTION<br>CONSTRUCTION OF NEW THREE STOREY MULTI UNIT RESIDENTIAL BUILDING                                           |                                 |                        |                                                      |                                 |                     |                           |                       | [A] 1.1.2.            |
| <b>MAJOR OCCUPANCY CLASSIFICATION</b>       | <b>GROUP / DIVISION:</b>                                                                                                       | <b>DESCRIPTION:</b>             |                        |                                                      |                                 |                     |                           |                       |                       |
|                                             | C                                                                                                                              | THREE STOREY FOUR UNIT BUILDING |                        | RESIDENTIAL                                          |                                 |                     |                           |                       |                       |
| <b>SUPERIMPOSED MAJOR OCCUPANCIES</b>       | NO                                                                                                                             |                                 |                        |                                                      |                                 |                     |                           |                       | 9.10.2.3.             |
| <b>BUILDING AREA (m²)</b>                   | <b>DESCRIPTION:</b>                                                                                                            |                                 |                        | <b>TOTAL (m²):</b>                                   |                                 |                     |                           |                       |                       |
|                                             | NEW CONSTRUCTION                                                                                                               |                                 |                        | 94.7                                                 |                                 |                     |                           |                       |                       |
| <b>GROSS AREA (m²)</b>                      | <b>FLOOR LEVEL:</b>                                                                                                            | <b>DESCRIPTION:</b>             | <b>TOTAL (m²):</b>     |                                                      |                                 |                     |                           |                       |                       |
|                                             | BASEMENT                                                                                                                       | 1 RESIDENTIAL UNIT              | 92.7                   |                                                      |                                 |                     |                           |                       |                       |
|                                             | GROUND FLOOR                                                                                                                   | 1 RESIDENTIAL UNIT              | 94.6                   |                                                      |                                 |                     |                           |                       |                       |
|                                             | SECOND FLOOR                                                                                                                   | 1 RESIDENTIAL UNIT              | 94.0                   |                                                      |                                 |                     |                           |                       |                       |
|                                             | THIRD FLOOR                                                                                                                    | 1 RESIDENTIAL UNIT              | 77.9                   |                                                      |                                 |                     |                           |                       |                       |
|                                             | <b>TOTAL (m²):</b>                                                                                                             |                                 |                        | 359.2                                                |                                 |                     |                           |                       |                       |
| <b>BUILDING HEIGHT</b>                      | 3                                                                                                                              | STOREYS ABOVE GRADE             |                        | 10.00 m ABOVE ASSUMED GRADE                          |                                 |                     | [A] 1.4.1.2. AND 9.10.4.  |                       |                       |
| <b>NUMBER OF STREETS</b>                    | 1 STREET                                                                                                                       |                                 |                        |                                                      |                                 |                     |                           |                       | 9.10.20               |
| <b>SPRINKLER SYSTEM</b>                     | NOT REQUIRED                                                                                                                   |                                 | PROVIDED: N/A          |                                                      | 9.10.8.2. TO 9.10.8.4.          |                     |                           |                       |                       |
| <b>FIRE ALARM SYSTEM</b>                    | NOT REQUIRED                                                                                                                   |                                 | TYPE PROVIDED: N/A     |                                                      | 9.10.18                         |                     |                           |                       |                       |
| <b>WATER SUPPLY IS ADEQUATE</b>             | YES/NO                                                                                                                         |                                 |                        |                                                      |                                 |                     |                           |                       | 9.31.3                |
| <b>CONSTRUCTION TYPE</b>                    | <b>PERMITTED:</b>                                                                                                              | COMBUSTIBLE                     |                        | <b>HEAVY TIMBER CONSTRUCTION:</b>                    |                                 |                     | NO                        |                       | 9.10.6                |
|                                             | <b>PROPOSED:</b>                                                                                                               | COMBUSTIBLE                     |                        |                                                      |                                 |                     |                           |                       |                       |
| <b>POST-DISASTER BUILDING</b>               | NO                                                                                                                             |                                 |                        |                                                      |                                 |                     |                           |                       | [A] 1.1.2.2.(2)       |
| <b>OCCUPANT LOAD</b>                        | <b>FLOOR LEVEL:</b>                                                                                                            | <b>UNIT #</b>                   | <b>OCCUPANCY TYPE:</b> | <b>BASED ON:</b>                                     | <b>OCCUPANT LOAD (PERSONS):</b> |                     |                           |                       |                       |
|                                             | BASEMENT                                                                                                                       | UNIT 1                          | RESIDENTIAL            | 2 SLEEPING ROOMS                                     | 4                               |                     |                           |                       |                       |
|                                             | GROUND FLOOR                                                                                                                   | UNIT 2                          | RESIDENTIAL            | 1 SLEEPING ROOM                                      | 2                               |                     |                           |                       |                       |
|                                             | SECOND FLOOR                                                                                                                   | UNIT 3                          | RESIDENTIAL            | 2 SLEEPING ROOMS                                     | 4                               |                     |                           |                       |                       |
|                                             | THIRD FLOOR                                                                                                                    | UNIT 4                          | RESIDENTIAL            | 1 SLEEPING ROOM                                      | 2                               |                     |                           |                       |                       |
|                                             |                                                                                                                                |                                 |                        |                                                      |                                 |                     |                           |                       |                       |
|                                             |                                                                                                                                |                                 |                        |                                                      |                                 |                     |                           |                       |                       |
|                                             |                                                                                                                                |                                 |                        |                                                      |                                 |                     |                           |                       |                       |
|                                             |                                                                                                                                |                                 |                        |                                                      |                                 |                     |                           |                       |                       |
|                                             |                                                                                                                                |                                 |                        |                                                      |                                 |                     |                           |                       |                       |
|                                             |                                                                                                                                |                                 |                        |                                                      |                                 |                     |                           |                       |                       |
|                                             |                                                                                                                                |                                 |                        |                                                      |                                 |                     |                           |                       |                       |
|                                             | <b>TOTAL COUNT:</b>                                                                                                            |                                 |                        | 6 SLEEPING ROOMS                                     | 12                              |                     |                           |                       |                       |
| <b>BARRIER-FREE DESIGN</b>                  | 1 BARRIER FREE UNIT REQUIRED. UNIT 2 CONFORMS TO THE REQUIREMENTS OF ASO/CSA B662-23.                                          |                                 |                        |                                                      |                                 |                     |                           |                       | 9.5.2.                |
| <b>HAZARDOUS SUBSTANCES</b>                 | NO                                                                                                                             |                                 |                        |                                                      |                                 |                     |                           |                       | 9.10.1.3.             |
| <b>REQUIRED FIRE RESISTANCE RATINGS</b>     | <b>HORIZONTAL ASSEMBLY:</b>                                                                                                    |                                 |                        | <b>RATING:</b>                                       | <b>SUPPORTING ASSEMBLY:</b>     |                     |                           |                       |                       |
|                                             | <b>FLOORS:</b>                                                                                                                 |                                 |                        | NAVES, REFER TO PLAN AND SECTION DRAWINGS AND LEGEND |                                 |                     |                           |                       |                       |
| <b>SPATIAL SEPARATION</b>                   | <b>FALLS:</b>                                                                                                                  | <b>EBF AREA (m²):</b>           | <b>LD (m):</b>         | <b>% OPENINGS MAX</b>                                | <b>% PROVIDED</b>               | <b>REQ. RATING:</b> | <b>CONSTRUCTION TYPE:</b> | <b>CLADDING TYPE:</b> | 9.10.14.              |
|                                             | FRONT                                                                                                                          | 56.3                            | 8.0                    | 50%                                                  | 31.0%                           | 45 MIN              | COMBUSTIBLE               | NON-COMBUSTIBLE       |                       |
|                                             | REAR                                                                                                                           | 58.2                            | 6.9                    | 34%                                                  | 19.0%                           | 45 MIN              | COMBUSTIBLE               | NON-COMBUSTIBLE       |                       |
|                                             | SIDE 1                                                                                                                         | 153.2                           | 1.2                    | 7%                                                   | 5.0%                            | 1 HR                | NON-COMBUSTIBLE           | NON-COMBUSTIBLE       |                       |
|                                             | SIDE 2                                                                                                                         | 153.3                           | 0.9                    | 0%                                                   | 0.0%                            | 1 HR                | NON-COMBUSTIBLE           | NON-COMBUSTIBLE       |                       |
| <b>PLUMBING FIXTURE REQUIREMENTS</b>        | A KITCHEN SINK, LAVATORY, BATHTUB OR SHOWER, AND WATER CLOSET SHALL BE PROVIDED FOR EVERY DWELLING UNIT                        |                                 |                        |                                                      |                                 |                     |                           |                       | 9.31.4(1) and 3.7.4.5 |
| <b>NOTES</b>                                | 01 ALL REFERENCES ARE TO DIVISION B OF THE ONTARIO BUILDING CODE UNLESS PRECEDED BY [A] FOR DIVISION A AND [C] FOR DIVISION C. |                                 |                        |                                                      |                                 |                     |                           |                       |                       |

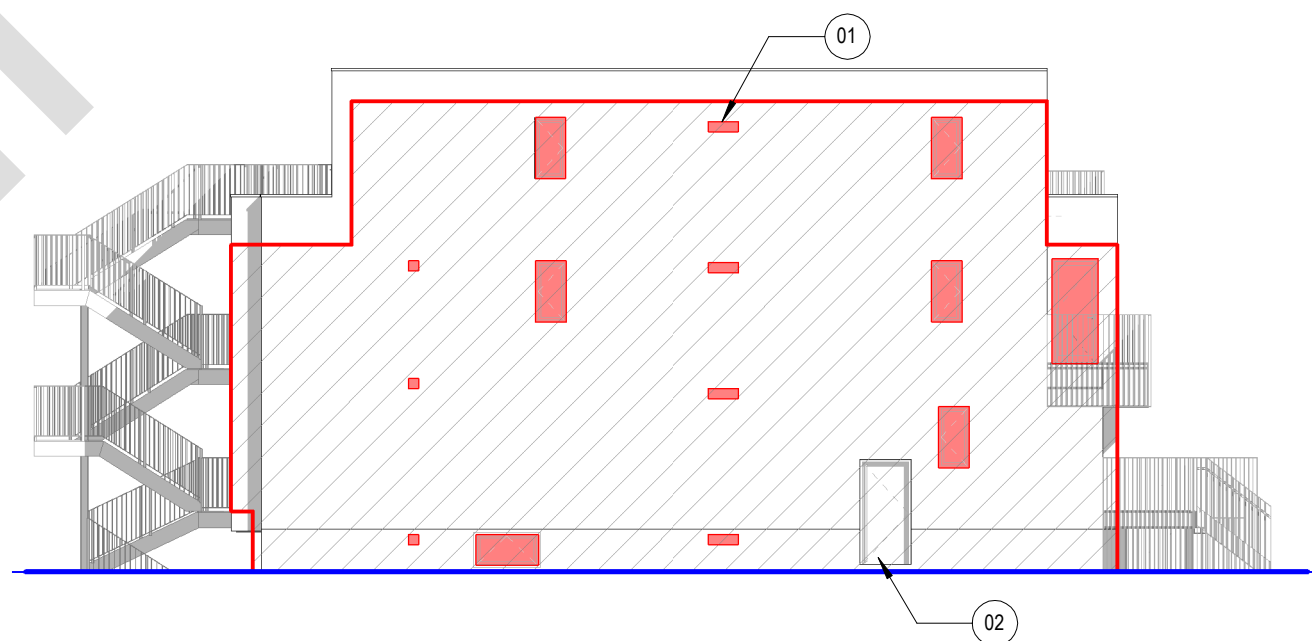
| Comments  | UPO - Exposed Building Face | UPO - Limiting Distance | UPO - Proposed Unprotected Opening Area | UPO - Allowable % Openings | UPO - Proposed % Openings |
|-----------|-----------------------------|-------------------------|-----------------------------------------|----------------------------|---------------------------|
| TOTAL EBF | 56.3 m²                     | 8m                      | 17.3 m²                                 | 56                         | 31                        |

4 EXPOSING BUILDING FACE DIAGRAM - FRONT ELEVATION  
A010 1 : 150



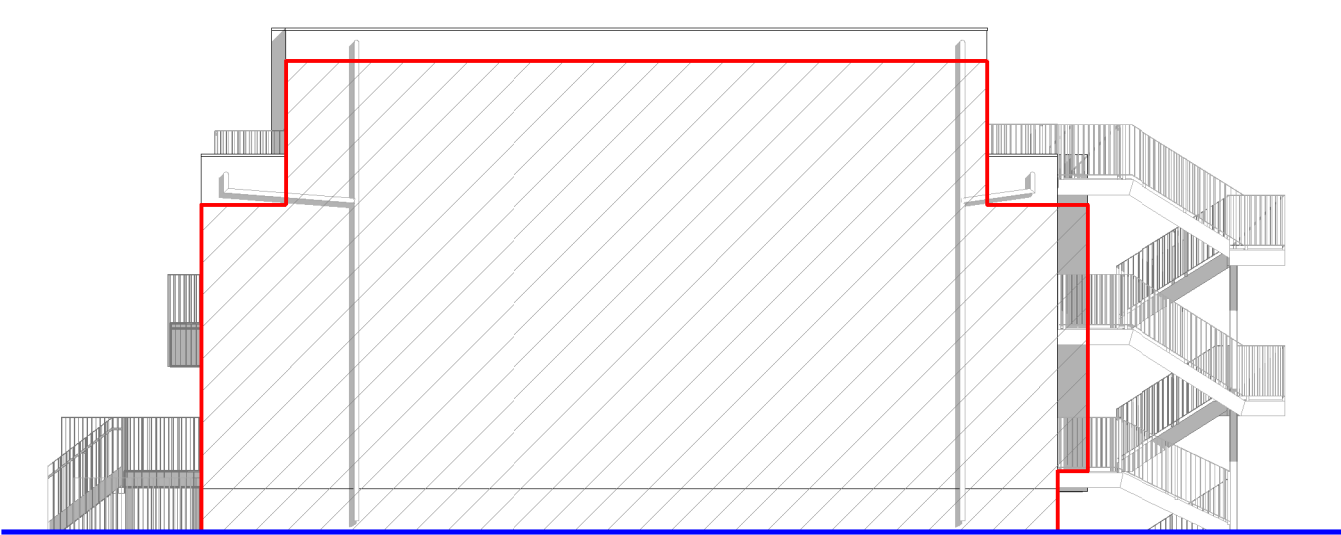
| Comments  | UPO - Exposed Building Face | UPO - Limiting Distance | UPO - Proposed Unprotected Opening Area | UPO - Allowable % Openings | UPO - Proposed % Openings |
|-----------|-----------------------------|-------------------------|-----------------------------------------|----------------------------|---------------------------|
| TOTAL EBF | 58.2 m²                     | 6.9                     | 10.8 m²                                 | 34                         | 19                        |

2 EXPOSING BUILDING FACE DIAGRAM - REAR ELEVATION  
A010 1 : 150



| Comments  | UPO - Exposed Building Face | UPO - Limiting Distance | UPO - Proposed Unprotected Opening Area | UPO - Allowable % Openings | UPO - Proposed % Openings |
|-----------|-----------------------------|-------------------------|-----------------------------------------|----------------------------|---------------------------|
| TOTAL EBF | 153.2 m²                    | 1.2                     | 7.0 m²                                  | 7                          | 5                         |

3 EXPOSING BUILDING FACE DIAGRAM - SIDE 1 ELEVATION  
A010 1 : 150



| Comments  | UPO - Exposed Building Face | UPO - Limiting Distance | UPO - Proposed Unprotected Opening Area | UPO - Allowable % Openings | UPO - Proposed % Openings |
|-----------|-----------------------------|-------------------------|-----------------------------------------|----------------------------|---------------------------|
| TOTAL EBF | 153.3 m²                    | 0.9m                    | 0.0 m²                                  | 0                          | 0                         |

1 EXPOSING BUILDING FACE DIAGRAM - SIDE 2 ELEVATION  
A010 1 : 150

5  
A010

EXPOSING BUILDING FACE DIAGRAM - SITE PLAN

1 : 60



1. NO DRAWINGS WILL BE FOR CONSTRUCTION UNLESS STAMPED BY THE QUALIFIED DESIGN PROFESSIONAL (QDP) AND ISSUED FOR THAT PURPOSE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND VERIFYING ALL LEVELS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE QUALIFIED DESIGN PROFESSIONAL PRIOR TO COMMENCING WORK.
3. DO NOT SCALE THE DRAWINGS.

1. ALL END USERS REQUIRE A QUALIFIED DESIGN PROFESSIONAL – EITHER AN ARCHITECT, ENGINEER, OR OTHER PROFESSIONAL AS DESIGNATED BY THE RELEVANT PROFESSIONAL ASSOCIATIONS AND THE AUTHORITY HAVING JURISDICTION.
2. THE QDP MUST REVIEW AND UPDATE THE DESIGN ELEMENTS COLOURED IN BLUE TO CONFIRM SITE-SPECIFIC CONDITIONS AND VERIFY ASSUMPTIONS. THE QDP MUST ENSURE COMPLIANCE WITH ALL APPLICABLE CODES, BYLAWS, AND OTHER REGULATIONS. IF ANY MODIFICATIONS TO ANY PORTION OF THE DESIGN OTHER THAN THE BLUE-HIGHLIGHTED ELEMENTS ARE MADE, THE PLANS WILL NO LONGER QUALIFY AS PRE-APPROVED, AND APPLICANTS WILL BE REQUIRED TO SUBMIT A BUILDING PERMIT APPLICATION THROUGH THE STANDARD REVIEW PROCESS.
3. THE QUALIFIED DESIGN PROFESSIONAL WILL TAKE RESPONSIBILITY FOR THE ENTIRE SET OF DOCUMENTS ONCE UPDATED. THIS INCLUDES APPLYING THE ARCHITECT'S OR ENGINEER'S SEAL AS REQUIRED BY THE RELEVANT PROFESSIONAL ASSOCIATION AND THE AUTHORITIES HAVING JURISDICTION (AHJS). QUALIFIED DESIGN PROFESSIONALS ARE RESPONSIBLE FOR COMPLYING WITH THE RELEVANT REGULATORY ACTS, BYLAWS, AND PROFESSIONAL REQUIREMENTS APPLICABLE TO THEIR JURISDICTION.
4. THE END USER OR THE QUALIFIED DESIGN PROFESSIONAL MAY SUBMIT THE FINALIZED DESIGN FOR A BUILDING PERMIT TO THE APPROPRIATE AUTHORITY HAVING JURISDICTION (AHJ).
5. CONSTRUCTION REVIEW IS THE RESPONSIBILITY OF THE QUALIFIED DESIGN PROFESSIONAL IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS AND PROFESSIONAL PRACTICE STANDARDS.

NO. DATE DESCRIPTION

PROJECT:  
City of Toronto - Multiplex

FOURPLEX NARROW

SHEET TITLE:  
SITE PLAN

PROJECT NO: 241058  
SCALE: As indicated

SHEET NO:

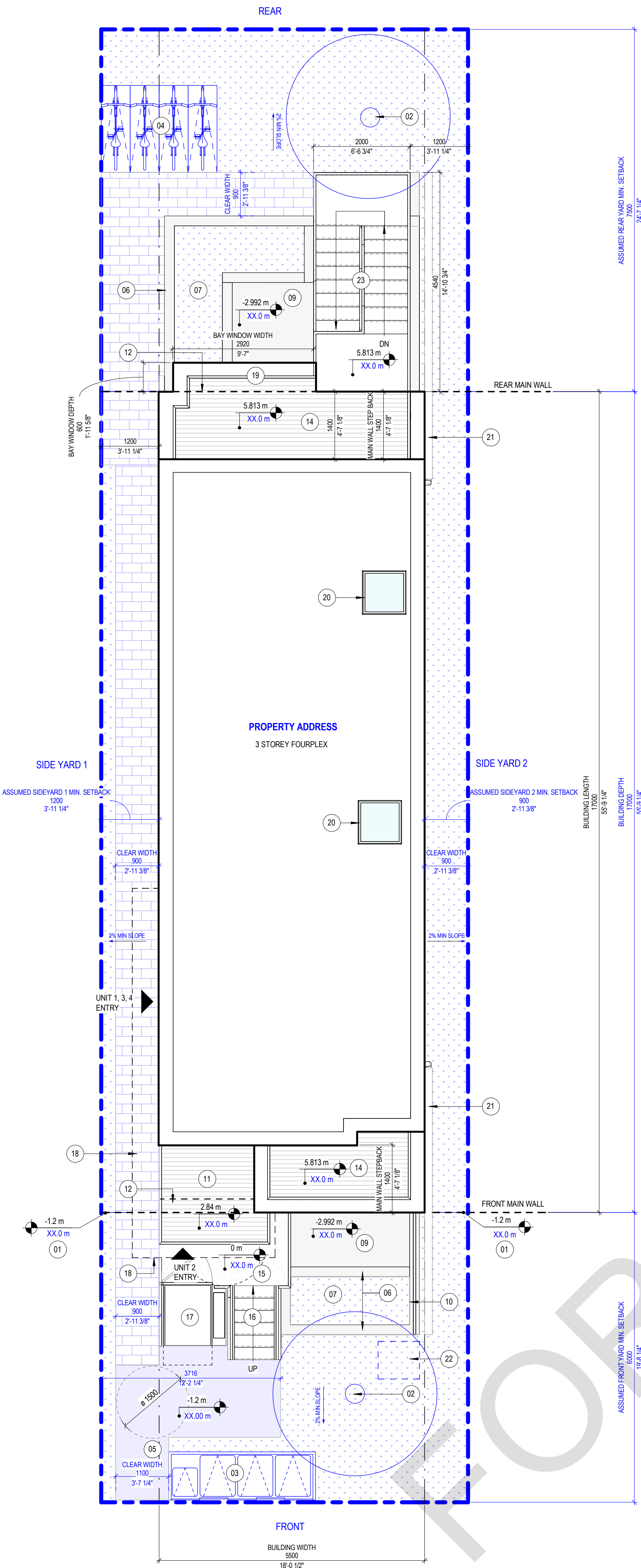
A011

| COT ZONING MATRIX                        |                        |                    | NOTES                                                                                                                                                                                                                                            |
|------------------------------------------|------------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>LOT SIZE</b>                          |                        |                    | LOT AREA, FRONTAGE, AND DEPTH (DEPENDENT ON REQUIRED SITE SURVEY, QDP TO UPDATE)                                                                                                                                                                 |
| LOT AREA (m <sup>2</sup> )               |                        | — m <sup>2</sup>   |                                                                                                                                                                                                                                                  |
| LOT FRONTAGE (m)                         |                        | — m                |                                                                                                                                                                                                                                                  |
| LOT DEPTH (m)                            |                        | — m                |                                                                                                                                                                                                                                                  |
| <b>SETBACKS</b>                          |                        |                    |                                                                                                                                                                                                                                                  |
| FRONT YARD SETBACK                       | 6.0m                   |                    | ALL SETBACK REQUIREMENTS AND PERMITTED ENCROACHMENTS ARE DEPENDENT ON RESIDENTIAL ZONE AND SITE. QDP RESPONSIBLE TO ENSURE ALL SETBACKS AND PERMITTED ENCROACHMENTS TO COMPLY WITH APPLICABLE ZONING BYLAW AND BUILDING CODE (LIMITING DISTANCE) |
| REAR YARD SETBACK                        | 7.5m                   |                    |                                                                                                                                                                                                                                                  |
| SIDEYARD 1 SETBACK                       | 1.2m                   |                    |                                                                                                                                                                                                                                                  |
| SIDEYARD 2 SETBACK                       | 0.9m                   |                    |                                                                                                                                                                                                                                                  |
| <b>RESIDENTIAL UNITS</b>                 |                        |                    |                                                                                                                                                                                                                                                  |
| BASEMENT                                 | 1 DWELLING UNIT        | 2 BEDROOMS         |                                                                                                                                                                                                                                                  |
| GROUND FLOOR                             | 1 DWELLING UNIT        | 1 BEDROOM          | CSA B-652.23 ACCESSIBLE DWELLING UNIT                                                                                                                                                                                                            |
| SECOND FLOOR                             | 1 DWELLING UNIT        | 2 BEDROOMS         |                                                                                                                                                                                                                                                  |
| THIRD FLOOR                              | 1 DWELLING UNIT        | 1 BEDROOM          |                                                                                                                                                                                                                                                  |
| <b>TOTAL BEDROOMS</b>                    |                        |                    | 6 BEDROOMS                                                                                                                                                                                                                                       |
| <b>TOTAL DWELLING UNITS</b>              |                        |                    | 4                                                                                                                                                                                                                                                |
| <b>BUILDING AREA</b>                     |                        |                    | 94.7m <sup>2</sup>                                                                                                                                                                                                                               |
| <b>GROSS FLOOR AREA</b>                  |                        |                    |                                                                                                                                                                                                                                                  |
| BASEMENT                                 | 78.5m <sup>2</sup>     |                    |                                                                                                                                                                                                                                                  |
| OVERALL                                  | 92.7m <sup>2</sup>     |                    |                                                                                                                                                                                                                                                  |
| EXCLUSIONS (STAIRWELLS, UTILITY STORAGE) | 14.3m <sup>2</sup>     |                    |                                                                                                                                                                                                                                                  |
| GROUND FLOOR                             | 82.2m <sup>2</sup>     |                    |                                                                                                                                                                                                                                                  |
| OVERALL                                  | 94.6m <sup>2</sup>     |                    |                                                                                                                                                                                                                                                  |
| EXCLUSIONS (STAIRWELLS)                  | 12.4m <sup>2</sup>     |                    |                                                                                                                                                                                                                                                  |
| SECOND FLOOR                             | 81.8m <sup>2</sup>     |                    |                                                                                                                                                                                                                                                  |
| OVERALL                                  | 94.0m <sup>2</sup>     |                    |                                                                                                                                                                                                                                                  |
| EXCLUSIONS (STAIRWELLS)                  | 12.2m <sup>2</sup>     |                    |                                                                                                                                                                                                                                                  |
| THIRD FLOOR                              | 65.5m <sup>2</sup>     |                    |                                                                                                                                                                                                                                                  |
| OVERALL                                  | 77.7m <sup>2</sup>     |                    |                                                                                                                                                                                                                                                  |
| EXCLUSIONS (STAIRWELLS)                  | 12.2m <sup>2</sup>     |                    |                                                                                                                                                                                                                                                  |
| <b>TOTAL GROSS FLOOR AREA</b>            |                        |                    | 308m <sup>2</sup>                                                                                                                                                                                                                                |
| <b>LANDSCAPED AREA</b>                   |                        |                    |                                                                                                                                                                                                                                                  |
| YARD AREA TOTAL                          | LANDSCAPING AREA TOTAL | % LANDSCAPING AREA | SOFT LANDSCAPING AREA TOTAL                                                                                                                                                                                                                      |
| FRONT YARD                               | — m <sup>2</sup>       | — %                | — m <sup>2</sup>                                                                                                                                                                                                                                 |
| REAR YARD                                | — m <sup>2</sup>       | — %                | — m <sup>2</sup>                                                                                                                                                                                                                                 |
| SIDE YARD 1                              | — m <sup>2</sup>       | — %                | — m <sup>2</sup>                                                                                                                                                                                                                                 |
| SIDE YARD 2                              | — m <sup>2</sup>       | — %                | — m <sup>2</sup>                                                                                                                                                                                                                                 |
| <b>BUILDING HEIGHT</b>                   |                        |                    |                                                                                                                                                                                                                                                  |
| HEIGHT ALLOWABLE PER ZONING (m)          | 10.0m                  |                    |                                                                                                                                                                                                                                                  |
| PROPOSED BUILDING HEIGHT                 | 10.0m                  |                    |                                                                                                                                                                                                                                                  |
| <b>BUILDING DEPTH</b>                    |                        |                    |                                                                                                                                                                                                                                                  |
| DEPTH ALLOWABLE PER ZONING (m)           | 17.0m                  |                    |                                                                                                                                                                                                                                                  |
| DEPTH PROPOSED (m)                       | — m                    |                    |                                                                                                                                                                                                                                                  |
| <b>VEHICULAR PARKING PROVIDED</b>        |                        |                    |                                                                                                                                                                                                                                                  |
| PARKING SPACES                           | 0                      |                    | QDP TO PROVIDE PARKING QUANTITY IF PROPOSED                                                                                                                                                                                                      |
| ACCESSIBLE PARKING SPACES                | 0                      |                    |                                                                                                                                                                                                                                                  |
| <b>BICYCLE PARKING PROVIDED</b>          |                        |                    |                                                                                                                                                                                                                                                  |
| LONG TERM STALLS                         | 0                      |                    | BICYCLE PARKING QTY: IS SUGGESTION ONLY. QDP TO PROVIDE BIKE PARKING QUANTITY IF PROPOSED                                                                                                                                                        |
| SHORT TERM STALLS                        | 4                      |                    |                                                                                                                                                                                                                                                  |

| SITE PLAN KEYNOTES |                                                                                                                                                                                                                                      |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 01                 | QDP TO CALCULATE ESTABLISHED GRADE USING THE REQUIRED SITE SURVEY. ESTABLISHED GRADE TO BE CALCULATED PER SECTION 800.50(240) OF THE CITY OF TORONTO ZONING BY-LAW.                                                                  |
| 02                 | PROPOSED TREE LOCATION AND REQUIRED SOIL VOLUME TO BE ADDED BY QDP. ALL EXISTING TREES SUBJECT TO TORONTO MUNICIPAL CODE CHAPTER 813, TREES.                                                                                         |
| 03                 | WASTE STORAGE LOCATION AND SIZING TO BE DETERMINED BY QDP. ALL WASTE STORAGE SHOWN AS ENCLOSED WITH SCREEN. WASTE STORAGE SHALL NOT BE ENCLOSED WITH A ROOF OR WALL. SCREEN AND ACCESS DOOR SHALL NOT ENCRoACH BEYOND PROPERTY LINE. |
| 04                 | VISITOR BIKE PARKING LOCATION AND QUANTITY TO BE DETERMINED BY QDP. PROPOSED BIKE PARKING STALLS TO COMPLY WITH GUIDELINES FOR THE DESIGN AND MANAGEMENT OF BICYCLE PARKING FACILITIES (2024).                                       |
| 05                 | QDP TO ENSURE ALL EXTERIOR WALKWAYS LEADING TO ACCESSIBLE DWELLING UNIT TO CONFORM TO OBC BARRIER FREE REQUIREMENTS.                                                                                                                 |
| 06                 | CONCRETE FOUNDATION RETAINING WALL. REFER TO STRUCT. QDP TO COORDINATE FOUNDATION WALL HEIGHT WITH REQUIRED SITE SURVEY. REFER TO STRUCT.                                                                                            |
| 07                 | LANDSCAPED TERRACE. QDP TO CONFIRM GRADE CHANGE AT ALL LANDSCAPED TERRACES WITH REQUIRED SITE SURVEY. QDP TO DETERMINE IF GRADE CHANGE REQUIRES GUARD PER OBC 9.8.8.1.(1).                                                           |
| 08                 | RESERVED                                                                                                                                                                                                                             |
| 09                 | BELOW GRADE WALKOUT. CONCRETE SLAB ON GRADE. REFER TO ARCH.                                                                                                                                                                          |
| 10                 | 1070MM GUARD MOUNTED ON FOUNDATION WALL AS REQUIRED PER OBC 9.8.8.1.(1).                                                                                                                                                             |
| 11                 | PROJECTED BALCONY. REFER TO ARCH.                                                                                                                                                                                                    |
| 12                 | EXTENT OF BUILDING FOOTPRINT BELOW. REFER TO ARCH.                                                                                                                                                                                   |
| 13                 | JULIET BALCONY. REFER TO ARCH.                                                                                                                                                                                                       |
| 14                 | ROOF DECK. REFER TO ARCH.                                                                                                                                                                                                            |
| 15                 | ENTRY PORCH. STEEL DECK WITH CONCRETE TOPPING REFER TO STRUCT.                                                                                                                                                                       |
| 16                 | GALVANISED STEEL STAIR. WITH GALVANISED GRATE TREADS. REFER TO STRUCT.                                                                                                                                                               |
| 17                 | UNENCLOSED VERTICAL LIFT AS PER CSA B355.24                                                                                                                                                                                          |
| 18                 | NON-COMBUSTIBLE CANOPY. REFER TO ARCH.                                                                                                                                                                                               |
| 19                 | BAY WINDOW. REFER TO ARCH.                                                                                                                                                                                                           |
| 20                 | SKYLIGHT. REFER TO ARCH.                                                                                                                                                                                                             |
| 21                 | DOWN SPOUT AND EXTENSION AS PER OBC 9.26.18.2.(1). LENGTH AND PLACEMENT OF EXTENSION TO BE CONFIRMED BY QDP. PLACEMENT SHALL NOT IMPEDE SIDE YARD ACCESS.                                                                            |
| 22                 | DRAINAGE DITCH OR DRY WELL FOR SUMP PUMP IF REQUIRED PER 9.14.5.2(3). LOCATION TO BE DETERMINED BY QDP.                                                                                                                              |
| 23                 | UNENCLOSED GALVANISED STEEL EXTERIOR EXIT STAIR AND LANDINGS. REFER TO STRUCT.                                                                                                                                                       |
| 24                 | PADMOUNTED TRANSFORMER. QDP TO ENSURE LOCATION, DIMENSIONS, AND SETBACKS COMPLY WITH ALL TORONTO HYDRO REQUIREMENTS.                                                                                                                 |

| SITE PLAN GENERAL NOTES |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.                      | A SITE SURVEY WILL BE REQUIRED FOR THE PERMIT APPLICATION AND ALL DIMENSIONS, SETBACKS AND GEODETIC ELEVATIONS IDENTIFIED ON THE FINAL SITE PLAN SHALL BE DERIVED FROM THE SITE SPECIFIC INFORMATION.                                                                                                                                                                                                                                                                                                                                                                                  |
| 2.                      | THE SITE PLAN IN THE DOCUMENT IS REPRESENTATIVE ONLY AND INTENDED TO ILLUSTRATE SAMPLE SOLUTIONS TO THE RANGE OF ITEMS TO BE INCLUDED IN THE FINAL SITE PLAN SUBMITTED FOR PERMIT. REFER TO SAMPLE COT ZONING MATRIX INCORPORATED IN THE PACKAGE FOR THE REQUIRED INFORMATION.                                                                                                                                                                                                                                                                                                         |
| 3.                      | ALL ACCESSIBLE REQUIREMENTS ON THE SITE PLAN ARE BASED ON THE PERTINENT OBC DIMENSIONS. AN ALTERNATIVE COMPLIANCE DOCUMENT IS THE CSA B651.23.                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 4.                      | ALL FINISHED LANDSCAPE SHOWN INCLUDING TREES AND SOFTSCAPE IS A GUIDELINE ONLY.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 5.                      | ALL MATERIALS INDICATED IN SITE PLAN KEY NOTES ARE REPRESENTATIVE ONLY AND INTENDED TO ILLUSTRATE A SAMPLE FINISH.                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 6.                      | ALL STRUCTURED WASTE MANAGEMENT AND BICYCLE PARKING ON SITE PLAN ARE REPRESENTATIVE ONLY AND INTENDED TO ILLUSTRATE SAMPLE SOLUTIONS.                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 7.                      | ALL SITE PLANS TO INCLUDE BUILDING NORTH.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 8.                      | THESE PLANS ARE EXPECTED TO COMPLY WITH PART 9 OF THE ONTARIO BUILDING CODE TAKING INTO CONSIDERATION THE BUILDING HEIGHT, AS DEFINED BY THE ONTARIO BUILDING CODE (OBC), IS DETERMINED BASED ON THE AVERAGE GRADE CALCULATED AROUND THE PERIMETER OF THE BUILDING. THE LOWEST LEVEL IS REQUIRED TO BE CLASSIFIED AS A "BASEMENT". THE QDP IS REQUIRED TO PROVIDE AVERAGE GRADE AND FIRST-STOREY CALCULATIONS DEMONSTRATING THIS. THE USE OF PLANTERS, RETAINING WALLS, OR PODIUMS TO ARTIFICIALLY ENHANCE THE GRADING OF THE SITE AS IT RELATES THE BUILDING HEIGHT IS NOT PERMITTED. |
| 9.                      | THE SITE PLAN SHOWN IS DIAGRAMMATIC ONLY. PROPERTY LINES, GRADES, ELEVATIONS, SETBACKS, SERVICING LOCATIONS, TREE PROTECTION ZONES, SOFT LANDSCAPING, PARKING, WASTE STORAGE, DRAINAGE PATTERNS, RETAINING WALLS, AND ACCESSIBILITY FEATURES SHALL BE DERIVED FROM A CURRENT SITE SURVEY AND VERIFIED BY THE QUALIFIED DESIGN PROFESSIONAL.                                                                                                                                                                                                                                            |

| SITE PLAN LEGEND |                                                                                    |
|------------------|------------------------------------------------------------------------------------|
|                  | SOFT LANDSCAPE, QDP TO UPDATE AS PER SOFT LANDSCAPING REQUIREMENTS                 |
|                  | CONCRETE UNIT PAVERS                                                               |
|                  | CONCRETE HARDSCAPE AT GRADE TO BE UPDATED BY QDP                                   |
|                  | CONCRETE HARDSCAPE (REFER TO ARCH.)                                                |
|                  | DECKING AT WALKOUT TERRACE (REFER TO ARCH.)                                        |
|                  | SCREENED WASTE STORAGE AREA. REFER TO KEYNOTE 03.                                  |
|                  | SPOT ELEVATION. GEODETIC ELEVATION TO BE UPDATED BY QDP WITH REQUIRED SITE SURVEY. |
|                  | SHORT TERM BIKE PARKING STALL. REFER TO KEYNOTE 04.                                |
|                  | UNENCLOSED VERTICAL LIFT. REFER TO KEYNOTE 17                                      |
|                  | 1800MM TURNING DIAMETER AT ENTRY PORCH TO CONFORM TO CSA-B652.23.                  |
|                  | 1500MM TURNING DIAMETER AS PER OBC AT GRADE WHERE REQUIRED.                        |
|                  | SUGGESTED TREE LOCATION. REFER TO KEYNOTE 02.                                      |





PROFESSIONAL SEAL:

GENERAL NOTES:

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- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND VERIFYING ALL LEVELS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE QUALIFIED DESIGN PROFESSIONAL PRIOR TO COMMENCING WORK.
- DO NOT SCALE THE DRAWINGS.

QUALIFIED DESIGN PROFESSIONAL (QDP)

- ALL END USERS REQUIRE A QUALIFIED DESIGN PROFESSIONAL – EITHER AN ARCHITECT, ENGINEER, OR OTHER PROFESSIONAL AS DESIGNATED BY THE RELEVANT PROFESSIONAL ASSOCIATIONS AND THE AUTHORITY HAVING JURISDICTION.
- THE QDP MUST REVIEW AND UPDATE THE DESIGN ELEMENTS COLOURED IN BLUE TO CONFIRM SITE-SPECIFIC CONDITIONS AND VERIFY ASSUMPTIONS. THE QDP MUST ENSURE COMPLIANCE WITH ALL APPLICABLE CODES, BYLAWS, AND OTHER REGULATIONS. IF ANY MODIFICATIONS TO ANY PORTION OF THE DESIGN OTHER THAN THE BLUE-HIGHLIGHTED ELEMENTS ARE MADE, THE PLANS WILL NO LONGER QUALIFY AS PRE-APPROVED, AND APPLICANTS WILL BE REQUIRED TO SUBMIT A BUILDING PERMIT APPLICATION THROUGH THE STANDARD REVIEW PROCESS.
- THE QUALIFIED DESIGN PROFESSIONAL WILL TAKE RESPONSIBILITY FOR THE ENTIRE SET OF DOCUMENTS ONCE UPDATED. THIS INCLUDES APPLYING THE ARCHITECT'S OR ENGINEER'S SEAL AS REQUIRED BY THE RELEVANT PROFESSIONAL ASSOCIATION AND THE AUTHORITIES HAVING JURISDICTION (AHJ). QUALIFIED DESIGN PROFESSIONALS ARE RESPONSIBLE FOR COMPLYING WITH THE RELEVANT REGULATORY ACTS, BYLAWS, AND PROFESSIONAL REQUIREMENTS APPLICABLE TO THEIR JURISDICTION.
- THE END USER OR THE QUALIFIED DESIGN PROFESSIONAL MAY SUBMIT THE FINALIZED DESIGN FOR A BUILDING PERMIT TO THE APPROPRIATE AUTHORITY HAVING JURISDICTION (AHJ).
- CONSTRUCTION REVIEW IS THE RESPONSIBILITY OF THE QUALIFIED DESIGN PROFESSIONAL IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS AND PROFESSIONAL PRACTICE STANDARDS.

NO. DATE DESCRIPTION

PROJECT:  
City of Toronto - Multiplex

FOURPLEX NARROW

SHEET TITLE:  
BASEMENT FLOOR PLAN

PROJECT NO: 241058  
SCALE: 1:50

SHEET NO:

A100

### FLOOR PLAN GENERAL NOTES

- MIN CEILING HEIGHTS AS PER OBC TABLE 9.5.3.1  
BATHROOMS & HALLWAYS = 2100mm  
BEDROOM = 2300mm (50%) OR 2100mm (100%)  
LIVING/DINING/KITCHEN = 2300mm (75%) OR 2100mm (100%)
- MIN ROOM AREAS AS PER OBC TABLE 9.5.3A-E  
LIVING ROOM = 13.5m<sup>2</sup> (11m<sup>2</sup> COMBINED WITH KITCHEN & DINING FOR TWO PEOPLE)  
DINING = 3.25m<sup>2</sup> (COMBINED ROOM)  
KITCHEN = 4.2m<sup>2</sup> (3.7m<sup>2</sup> FOR TWO PEOPLE)  
BEDROOM = 6m<sup>2</sup> (WITH CLOSET)  
MASTER BEDROOM = 8.8m<sup>2</sup> (WITH CLOSET)  
COMBINED LIVING, DINING, AND KITCHEN = 21.25m<sup>2</sup> (17.95m<sup>2</sup> FOR TWO PEOPLE)
- ALL ROOMS LABELLED AS 'DEN' SHALL NOT BE USED AS A BEDROOM. DENS SHALL NOT BE PROVIDED WITH A DOOR.
- ALL DROPPED CEILINGS AND BULKHEADS FOR MECHANICAL TO PROVIDE MIN 2100mm CLEAR HEIGHT BELOW
- UNITS SHOWING ONLY ONE BEDROOM ARE DESIGNED TO ACCOMMODATE NOT MORE THAN TWO PEOPLE
- ALL EXTERIOR STAIRS DESIGNED FROM FLOOR LEVEL TO ASSUMED GRADE. QDP TO ADJUST AS REQ. PER SITE GRADING AND ENSURE REQUIREMENTS OF OBC 9.8 ARE MET.

### FIRE SEPARATION LEGEND (MIN. REQ.)

- 1HR FIRE SEPARATION
- 45MIN FIRE SEPARATION

### RATED ASSEMBLIES LEGEND (MIN. REQ.)

- 1HR FRR
- 45MIN FRR

### FLOOR PLAN KEYNOTES

- ROOF DECK
- ROOF DRAIN/THROUGH WALL SCUPPER CONNECTED TO DOWNSPOUT
- ALL STUD WALLS TO BE REINFORCED TO PERMIT FUTURE INSTALLATION OF GRAB BARS BEHIND WATER CLOSETS, BATHUBS/SHOWERS AS PER 9.5.2.4. ALL GWB TO BE MOISTURE RESISTANT AND SUBSTITUTED FOR TILE BACKER ON ALL TILED WALL SURFACES.
- NON COMBUSTIBLE CANOPY ABOVE ENTRANCES
- RESERVED
- LANDSCAPED TERRACE
- BELOW GRADE WALKOUT
- STORM WATER SUMP PUMP BELOW SLAB REFER TO MECH- DISCHARGE PER SITE CONDITIONS - SEE SITE PLAN
- RESERVED
- 1070MM GUARD AS REQUIRED PER 9.8.8.1(1)
- UNENCLOSED VERTICAL LIFT AS PER CSA B355.24
- ENTRY PORCH
- PROJECTED BALCONY
- SANITARY SUMP PIT BELOW SLAB IF REQUIRED. REFER TO MECH
- LATERAL STABILIZING COLUMN ON CONCRETE PIER. REFER TO STRUCT.
- SKYLIGHT ABOVE
- STRUCTURAL STUD WALL WITH PLYWOOD SHEATHING-REFER TO STRUCT. COW 16 MM TYPE X GIB ON EACH SIDE
- 1 HR FRR SUPPORTING STRUCTURE. SEE STRUCT. REFER TO A003 INTERIOR DETAIL - FIRE RATED STRUCTURAL POST, PARTITION WALL
- ALTERNATE CURVED LANDING. REFER TO STRUCT
- DOUBLE STUD WALL WITH PLYWOOD SHEATHING ON ONE SIDE. REFER TO STRUCT.
- PROTECTED WINDOW
- PROVIDE FURRING ON WALL FRAMING AS REQUIRED TO ALIGN WITH STAIR DIMENSIONS
- RESERVED

### FLOOR PLAN LEGEND

|  |                                                           |
|--|-----------------------------------------------------------|
|  | FLOOR MOUNTED TOILET                                      |
|  | PRE-FAB STANDING SHOWER                                   |
|  | PRE-FAB TUB                                               |
|  | KITCHEN SINK                                              |
|  | KITCHEN SINK (SMALL)                                      |
|  | WASHROOM SINK                                             |
|  | WASHER (W)<br>DRYER (D)<br>STACKED WASHER AND DRYER (W/D) |
|  | DOMESTIC HOT WATER                                        |
|  | AIR HANDLER                                               |
|  | RANGE, TYPICAL                                            |
|  | RANGE, NARROW                                             |
|  | REFRIGERATOR                                              |
|  | REFRIGERATOR (NARROW)                                     |
|  | DISHWASHER                                                |
|  | DISHWASHER (NARROW)                                       |
|  | CLOSET COAT ROD                                           |
|  | ELECTRICAL PANEL                                          |

1 A100 BASEMENT FLOOR PLAN  
1:50



LEGEND

GENERAL NOTE:  
UNIT 2 DESIGNED TO CSA/ASC B652.23 - "ACCESSIBLE DWELLINGS." CONSULT THE STANDARD FOR A COMPLETE SET OF REQUIREMENTS.

DOORS AND DOORWAYS (B652:23 5.7)

REFER TO B652:23 5.7 DOORS AND DOORWAYS FOR ADDITIONAL REQUIREMENTS:  
1. DOOR WIDTH AND CLEARANCE REQUIREMENTS  
2. POWER DOOR OPERATOR REQUIREMENTS

SLIDING DOOR

SWINGING DOOR

PULL SIDE

PUSH SIDE

BATHROOMS (B652:23 5.9)

REFER TO B652:23 5.9 BATHROOM(S) FOR ADDITIONAL REQUIREMENTS:  
1. WALL REINFORCING BACKING AND GRAB BARS  
2. VANITY AND ACCESSORY REQUIREMENTS  
3. WASHROOM ILLUMINATION REQUIREMENTS

ROLL-IN SHOWER

TOILET

BATHROOM SINK

WHEN SHOWER IS USED AS PART OF THE TURNING DIAMETER, THE SHOWER TO REMAIN UNOBSTRUCTED, HAVE A SLOPE LESS THAN 2% AND BE CONSTRUCTED AS A WET ROOM.

TRANSFER SPACE AND CLEAR SPACE AS PER B652:23 5.9  
BLOCKING BESIDE TOILET FOR GRAB BAR AS PER B652:23 5.9  
GRAB RAILS AS PER B652:23 5.9.11  
GRAB BARS

WASHROOM SINK AS PER B652:23 5.9 BATHROOM(S)  
CLEAR SPACE BELOW AS PER B652:23 5.9 BATHROOM(S)

KITCHEN (B652:23 5.10)

REFER TO B652:23 5.10 KITCHENS FOR ADDITIONAL REQUIREMENTS:  
1. MIN. REQ COUNTER SPACE BETWEEN COOKTOP AND SINK NOT LESS THAN 820mm  
2. ADDITIONAL KITCHEN FIXTURE AND APPLIANCE REQUIREMENTS  
3. ELECTRICAL REQUIREMENTS IN KITCHEN  
4. ADDITIONAL CABINETRY AND SPACE PLANNING REQUIREMENTS

REFRIGERATOR

KITCHEN SINK

COOKTOP

MICROWAVE

REFRIGERATOR AS PER B652:23 5.10 KITCHENS  
CLEAR SPACE IN FRONT AS PER B652:23 5.10 KITCHENS

KITCHEN SINK AS PER B652:23 5.10 KITCHENS  
CLEAR SPACE BELOW AS PER B652:23 5.10 KITCHENS

COOKTOP AS PER B652:23 5.10 KITCHENS  
CLEAR SPACE BELOW AS PER B652:23 5.10 KITCHENS

MICROWAVE AND OVEN AS PER B652:23 5.10 KITCHENS  
CLEAR SPACE IN FRONT AS PER B652:23 5.10 KITCHENS

BEDROOMS (B652:23 5.11)

REFER TO B652:23 5.11 BEDROOMS FOR ADDITIONAL REQUIREMENTS:  
1. CLEAR SPACE AND TRANSFER SPACES AROUND BED  
2. ELECTRICAL REQUIREMENTS IN BEDROOMS

THE BED SHALL HAVE A 1200mm ACCESSIBLE PATH ON THREE SIDES AND PROVIDE A TURNING DIAMETER OF 1800mm WHERE A BEDROOM CONTAINS A BUILT-IN CLOSET

LAUNDRY (B652:23 5.12)

CLOSETS (B652:23 5.13)

REFER TO B652:23 5.12 LAUNDRY FOR ADDITIONAL REQUIREMENTS:  
1. APPLIANCE REQUIREMENTS  
CLOSET DOORS SHALL ALLOW FULL ACCESS TO SIDE-BY-SIDE UNITS  
3. STORAGE AND ACCESSORY REQUIREMENTS

REFER TO B652:23 5.13 CLOSETS FOR ADDITIONAL REQUIREMENTS:  
1. SHELVES, HANGING ROD HEIGHTS AND STORAGE REQUIREMENTS

WASHER AND DRYER

WASHER AND DRYER AS PER B652:23 5.12 KITCHENS  
CLEAR SPACE AS PER B652:23 5.12 LAUNDRY

1800mm MIN. TURNING DIAMETER IN FRONT OF BEDROOM CLOSET AS PER B652:23 5.11 BEDROOMS

FLOOR PLAN GENERAL NOTES

1. MIN CEILING HEIGHTS AS PER OBC TABLE 9.5.3.1  
BATHROOMS & HALLWAYS = 2100mm  
BEDROOM = 2300mm (50%) OR 2100mm (100%)  
LIVING/DINING/KITCHEN = 2300mm (75%) OR 2100mm (100%)  
2. MIN ROOM AREAS AS PER OBC TABLE 9.5.3A-E  
LIVING ROOM = 13.5m² (11m² COMBINED WITH KITCHEN & DINING FOR TWO PEOPLE)  
DINING = 3.25m² (COMBINED ROOM)  
KITCHEN = 4.2m² (3.7m² FOR TWO PEOPLE)  
BEDROOM = 6m² (WITH CLOSET)  
MASTER BEDROOM = 8.8m² (WITH CLOSET)  
COMBINED LIVING, DINING, AND KITCHEN = 21.25m² (17.95m² FOR TWO PEOPLE)  
3. ALL ROOMS LABELLED AS 'DEN' SHALL NOT BE USED AS A BEDROOM. DENS SHALL NOT BE PROVIDED WITH A DOOR.  
4. ALL DROPPED CEILINGS AND BULKHEADS FOR MECHANICAL TO PROVIDE MIN 2100mm CLEAR HEIGHT BELOW  
5. UNITS SHOWING ONLY ONE BEDROOM ARE DESIGNED TO ACCOMMODATE NOT MORE THAN TWO PEOPLE  
6. ALL EXTERIOR STAIRS DESIGNED FROM FLOOR LEVEL TO ASSIGNED GRADE. QDP TO ADJUST AS REQ. PER SITE GRADING AND ENSURE REQUIREMENTS OF OBC 9.8 ARE MET.

FIRE SEPARATION LEGEND (MIN. REQ.)

1HR FIRE SEPARATION

45MIN FIRE SEPARATION

RATED ASSEMBLIES LEGEND (MIN. REQ.)

1HR FRR

45MIN FRR

| FLOOR PLAN KEYNOTES |                                                                                                                                                                                                                                |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 01                  | ROOF DECK                                                                                                                                                                                                                      |
| 02                  | ROOF DRAIN/THROUGH WALL SCUPPER CONNECTED TO DOWNSPOUT                                                                                                                                                                         |
| 03                  | ALL STUD WALLS TO BE REINFORCED TO PERMIT FUTURE INSTALLATION OF GRAB BARS BEHIND WATER CLOSETS, BATHTUBS/SHOWERS AS PER 9.5.2.4. ALL GWB TO BE MOISTURE RESISTANT AND SUBSTITUTED FOR TILE BACKER ON ALL TILED WALL SURFACES. |
| 04                  | NON COMBUSTIBLE CANOPY ABOVE ENTRANCES                                                                                                                                                                                         |
| 05                  | RESERVED                                                                                                                                                                                                                       |
| 06                  | LANDSCAPED TERRACE                                                                                                                                                                                                             |
| 07                  | BELOW GRADE WALKOUT                                                                                                                                                                                                            |
| 08                  | STORM WATER SUMP PUMP BELOW SLAB REFER TO MECH- DISCHARGE PER SITE CONDITIONS - SEE SITE PLAN                                                                                                                                  |
| 09                  | RESERVED                                                                                                                                                                                                                       |
| 10                  | 1070MM GUARD AS REQUIRED PER 9.8.8.1(1)                                                                                                                                                                                        |
| 11                  | UNENCLOSED VERTICAL LIFT AS PER CSA B355.24                                                                                                                                                                                    |
| 12                  | ENTRY PORCH                                                                                                                                                                                                                    |
| 13                  | PROJECTED BALCONY                                                                                                                                                                                                              |
| 14                  | SANITARY SUMP PIT BELOW SLAB IF REQUIRED. REFER TO MECH                                                                                                                                                                        |
| 15                  | LATERAL STABILIZING COLUMN ON CONCRETE PIER. REFER TO STRUCT.                                                                                                                                                                  |
| 16                  | SKYLIGHT ABOVE                                                                                                                                                                                                                 |
| 17                  | STRUCTURAL STUD WALL WITH PLYWOOD SHEATHING-REFER TO STRUCT. COW 16 MM TYPE X GIBS ON EACH SIDE                                                                                                                                |
| 18                  | 1 HR FRR SUPPORTING STRUCTURE. SEE STRUC. REFER TO A003 INTERIOR DETAIL - FIRE RATED STRUCTURAL POST, PARTITION WALL                                                                                                           |
| 19                  | ALTERNATE CURVED LANDING. REFER TO STRUCT                                                                                                                                                                                      |
| 20                  | DOUBLE STUD WALL WITH PLYWOOD SHEATHING ON ONE SIDE. REFER TO STRUCT.                                                                                                                                                          |
| 21                  | PROTECTED WINDOW                                                                                                                                                                                                               |
| 22                  | PROVIDE FURRING ON WALL FRAMING AS REQUIRED TO ALIGN WITH STAIR DIMENSIONS                                                                                                                                                     |
| 23                  | RESERVED                                                                                                                                                                                                                       |

| FLOOR PLAN LEGEND |                               |
|-------------------|-------------------------------|
|                   | FLOOR MOUNTED TOILET          |
|                   | PRE-FAB STANDING SHOWER       |
|                   | PRE-FAB TUB                   |
|                   | KITCHEN SINK                  |
|                   | KITCHEN SINK (SMALL)          |
|                   | WASHROOM SINK                 |
|                   | WASHER (W)                    |
|                   | DRYER (D)                     |
|                   | STACKED WASHER AND DRYER (WD) |
|                   | DOMESTIC HOT WATER            |
|                   | AIR HANDLER                   |
|                   | RANGE, TYPICAL                |
|                   | RANGE, NARROW                 |
|                   | REFRIGERATOR                  |
|                   | REFRIGERATOR (NARROW)         |
|                   | DISHWASHER                    |
|                   | DISHWASHER (NARROW)           |
|                   | CLOSET COAT ROD               |
|                   | ELECTRICAL PANEL              |

Toronto

PROFESSIONAL SEAL:

GENERAL NOTES:

1. NO DRAWINGS WILL BE FOR CONSTRUCTION UNLESS STAMPED BY THE QUALIFIED DESIGN PROFESSIONAL (QDP) AND ISSUED FOR THAT PURPOSE.  
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND VERIFYING ALL LEVELS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE QUALIFIED DESIGN PROFESSIONAL PRIOR TO COMMENCING WORK.  
3. DO NOT SCALE THE DRAWINGS.

QUALIFIED DESIGN PROFESSIONAL (QDP)

1. ALL END USERS REQUIRE A QUALIFIED DESIGN PROFESSIONAL - EITHER AN ARCHITECT, ENGINEER, OR OTHER PROFESSIONAL AS DESIGNATED BY THE RELEVANT PROFESSIONAL ASSOCIATIONS AND THE AUTHORITY HAVING JURISDICTION.  
2. THE QDP MUST REVIEW AND UPDATE THE DESIGN ELEMENTS COLOURED IN BLUE TO CONFIRM SITE-SPECIFIC CONDITIONS AND VERIFY ASSUMPTIONS. THE QDP MUST ENSURE COMPLIANCE WITH ALL APPLICABLE CODES, BYLAWS, AND OTHER REGULATIONS. IF ANY MODIFICATIONS TO ANY PORTION OF THE DESIGN OTHER THAN THE BLUE-HIGHLIGHTED ELEMENTS ARE MADE, THE PLANS WILL NO LONGER QUALIFY AS PRE-APPROVED, AND APPLICANTS WILL BE REQUIRED TO SUBMIT A BUILDING PERMIT APPLICATION THROUGH THE STANDARD REVIEW PROCESS.  
3. THE QUALIFIED DESIGN PROFESSIONAL WILL TAKE RESPONSIBILITY FOR THE ENTIRE SET OF DOCUMENTS ONCE UPDATED. THIS INCLUDES APPLYING THE ARCHITECT'S OR ENGINEER'S SEAL AS REQUIRED BY THE RELEVANT PROFESSIONAL ASSOCIATION AND THE AUTHORITIES HAVING JURISDICTION (AHS). QUALIFIED DESIGN PROFESSIONALS ARE RESPONSIBLE FOR COMPLYING WITH THE RELEVANT REGULATORY ACTS, BYLAWS, AND PROFESSIONAL REQUIREMENTS APPLICABLE TO THEIR JURISDICTION.  
4. THE END USER OR THE QUALIFIED DESIGN PROFESSIONAL MAY SUBMIT THE FINALIZED DESIGN FOR A BUILDING PERMIT TO THE APPROPRIATE AUTHORITY HAVING JURISDICTION (AHS).  
5. CONSTRUCTION REVIEW IS THE RESPONSIBILITY OF THE QUALIFIED DESIGN PROFESSIONAL IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS AND PROFESSIONAL PRACTICE STANDARDS.

NO. DATE DESCRIPTION

PROJECT:

City of Toronto - Multiplex

FOURPLEX NARROW

SHEET TITLE:

MAIN FLOOR PLAN

PROJECT NO:

241058

SCALE:

1 : 50

SHEET NO:

A101



PROFESSIONAL SEAL:

GENERAL NOTES:

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NO. DATE DESCRIPTION

PROJECT:  
City of Toronto - Multiplex

FOURPLEX NARROW

SHEET TITLE:  
SECOND FLOOR PLAN

PROJECT NO: 241058  
SCALE: 1 : 50

SHEET NO:

A102

### FLOOR PLAN GENERAL NOTES

- MIN CEILING HEIGHTS AS PER OBC TABLE 9.5.3.1  
BATHROOMS & HALLWAYS = 2100mm  
BEDROOM = 2300mm (50%) OR 2100mm (100%)  
LIVING/DINING/KITCHEN = 2300mm (75%) OR 2100mm (100%)
- MIN ROOM AREAS AS PER OBC TABLE 9.5.3A-E  
LIVING ROOM = 13.5m<sup>2</sup> (11m<sup>2</sup> COMBINED WITH KITCHEN & DINING FOR TWO PEOPLE)  
DINING = 3.25m<sup>2</sup> (COMBINED ROOM)  
KITCHEN = 4.2m<sup>2</sup> (3.7m<sup>2</sup> FOR TWO PEOPLE)  
BEDROOM = 6m<sup>2</sup> (WITH CLOSET)  
MASTER BEDROOM = 8.8m<sup>2</sup> (WITH CLOSET)  
COMBINED LIVING, DINING, AND KITCHEN = 21.25m<sup>2</sup> (17.95m<sup>2</sup> FOR TWO PEOPLE)
- ALL ROOMS LABELLED AS 'DEN' SHALL NOT BE USED AS A BEDROOM. DENS SHALL NOT BE PROVIDED WITH A DOOR.
- ALL DROPPED CEILINGS AND BULKHEADS FOR MECHANICAL TO PROVIDE MIN 2100mm CLEAR HEIGHT BELOW
- UNITS SHOWING ONLY ONE BEDROOM ARE DESIGNED TO ACCOMMODATE NOT MORE THAN TWO PEOPLE
- ALL EXTERIOR STAIRS DESIGNED FROM FLOOR LEVEL TO ASSUMED GRADE. QDP TO ADJUST AS REQ. PER SITE GRADING AND ENSURE REQUIREMENTS OF OBC 9.8 ARE MET.

### FIRE SEPARATION LEGEND (MIN. REQ.)

- 1HR FIRE SEPARATION
- 45MIN FIRE SEPARATION

### RATED ASSEMBLIES LEGEND (MIN. REQ.)

- 1HR FRR
- 45MIN FRR

### FLOOR PLAN KEYNOTES

- ROOF DECK
- ROOF DRAIN/THROUGH WALL SCUPPER CONNECTED TO DOWNSPOUT
- ALL STUD WALLS TO BE REINFORCED TO PERMIT FUTURE INSTALLATION OF GRAB BARS BEHIND WATER CLOSETS, BATHUBS/SHOWERS AS PER 9.5.2.4. ALL GWB TO BE MOISTURE RESISTANT AND SUBSTITUTED FOR TILE BACKER ON ALL TILED WALL SURFACES.
- NON COMBUSTIBLE CANOPY ABOVE ENTRANCES
- RESERVED
- LANDSCAPED TERRACE
- BELOW GRADE WALKOUT
- STORM WATER SUMP PUMP BELOW SLAB REFER TO MECH- DISCHARGE PER SITE CONDITIONS - SEE SITE PLAN
- RESERVED
- 1070MM GUARD AS REQUIRED PER 9.8.8.1(1)
- UNENCLOSED VERTICAL LIFT AS PER CSA B355.24
- ENTRY PORCH
- PROJECTED BALCONY
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- SKYLIGHT ABOVE
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- PROVIDE FURRING ON WALL FRAMING AS REQUIRED TO ALIGN WITH STAIR DIMENSIONS
- RESERVED

### FLOOR PLAN LEGEND

|  |                               |
|--|-------------------------------|
|  | FLOOR MOUNTED TOILET          |
|  | PRE-FAB STANDING SHOWER       |
|  | PRE-FAB TUB                   |
|  | KITCHEN SINK                  |
|  | KITCHEN SINK (SMALL)          |
|  | WASHROOM SINK                 |
|  | WASHER (W)                    |
|  | DRYER (D)                     |
|  | STACKED WASHER AND DRYER (WD) |
|  | DOMESTIC HOT WATER            |
|  | AIR HANDLER                   |
|  | RANGE, TYPICAL                |
|  | RANGE, NARROW                 |
|  | REFRIGERATOR                  |
|  | REFRIGERATOR (NARROW)         |
|  | DISHWASHER                    |
|  | DISHWASHER (NARROW)           |
|  | CLOSET COAT ROD               |
|  | ELECTRICAL PANEL              |

SECOND FLOOR PLAN  
1 : 50



PROFESSIONAL SEAL:

GENERAL NOTES:

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NO. DATE DESCRIPTION

PROJECT:  
City of Toronto - Multiplex

FOURPLEX NARROW

SHEET TITLE:  
THIRD FLOOR PLAN

PROJECT NO: 241058  
SCALE: 1 : 50

SHEET NO:

A103

### FLOOR PLAN GENERAL NOTES

- MIN CEILING HEIGHTS AS PER OBC TABLE 9.5.3.1  
BATHROOMS & HALLWAYS = 2100mm  
BEDROOM = 2300mm (50%) OR 2100mm (100%)  
LIVING/DINING/KITCHEN = 2300mm (75%) OR 2100mm (100%)
- MIN ROOM AREAS AS PER OBC TABLE 9.5.3A-E  
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BEDROOM = 6m<sup>2</sup> (WITH CLOSET)  
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COMBINED LIVING, DINING, AND KITCHEN = 21.25m<sup>2</sup> (17.95m<sup>2</sup> FOR TWO PEOPLE)
- ALL ROOMS LABELLED AS 'DEN' SHALL NOT BE USED AS A BEDROOM. DENS SHALL NOT BE PROVIDED WITH A DOOR.
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- UNITS SHOWING ONLY ONE BEDROOM ARE DESIGNED TO ACCOMMODATE NOT MORE THAN TWO PEOPLE
- ALL EXTERIOR STAIRS DESIGNED FROM FLOOR LEVEL TO ASSUMED GRADE. QDP TO ADJUST AS REQ. PER SITE GRADING AND ENSURE REQUIREMENTS OF OBC 9.8 ARE MET.

### FIRE SEPARATION LEGEND (MIN. REQ.)

|  |                       |
|--|-----------------------|
|  | 1HR FIRE SEPARATION   |
|  | 45MIN FIRE SEPARATION |

### RATED ASSEMBLIES LEGEND (MIN. REQ.)

|  |           |
|--|-----------|
|  | 1HR FRR   |
|  | 45MIN FRR |

### FLOOR PLAN KEYNOTES

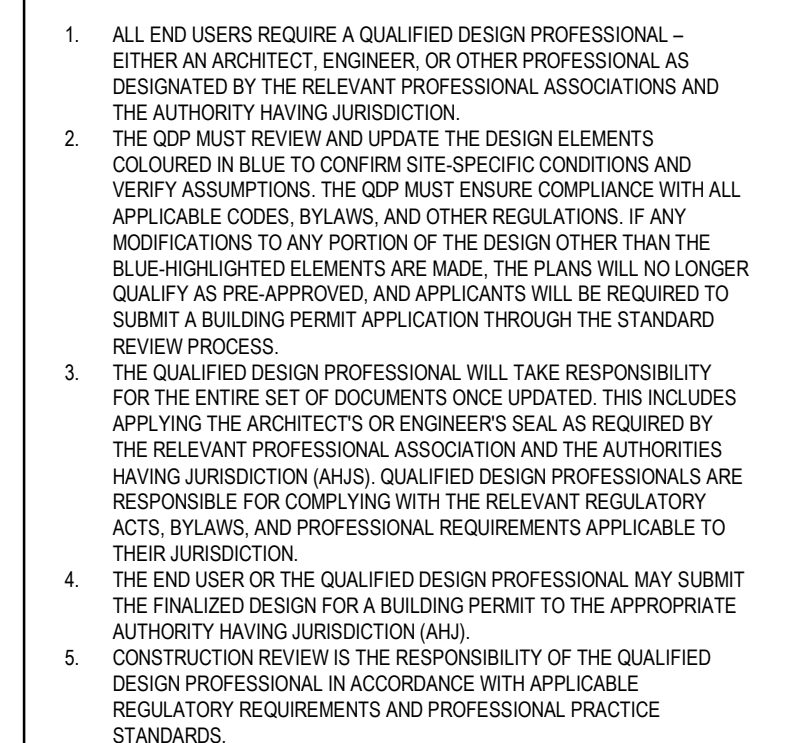
- ROOF DECK
- ROOF DRAIN/THROUGH WALL SCUPPER CONNECTED TO DOWNSPOUT
- ALL STUD WALLS TO BE REINFORCED TO PERMIT FUTURE INSTALLATION OF GRAB BARS BEHIND WATER CLOSETS, BATHUBS/SHOWERS AS PER 9.5.2.4. ALL GWB TO BE MOISTURE RESISTANT AND SUBSTITUTED FOR TILE BACKER ON ALL TILED WALL SURFACES.
- NON COMBUSTIBLE CANOPY ABOVE ENTRANCES
- RESERVED
- LANDSCAPED TERRACE
- BELOW GRADE WALKOUT
- STORM WATER SUMP PUMP BELOW SLAB REFER TO MECH- DISCHARGE PER SITE CONDITIONS - SEE SITE PLAN
- RESERVED
- 1070MM GUARD AS REQUIRED PER 9.8.8.1(1)
- UNENCLOSED VERTICAL LIFT AS PER CSA B355.24
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- SANITARY SUMP PIT BELOW SLAB IF REQUIRED. REFER TO MECH
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- SKYLIGHT ABOVE
- STRUCTURAL STUD WALL WITH PLYWOOD SHEATHING-REFER TO STRUCT. COW 16 MM TYPE X GIBS ON EACH SIDE
- 1 HR FRR SUPPORTING STRUCTURE. SEE STRUCT. REFER TO A003 INTERIOR DETAIL - FIRE RATED STRUCTURAL POST, PARTITION WALL
- ALTERNATE CURVED LANDING. REFER TO STRUCT
- DOUBLE STUD WALL WITH PLYWOOD SHEATHING ON ONE SIDE. REFER TO STRUCT.
- PROTECTED WINDOW
- PROVIDE FURRING ON WALL FRAMING AS REQUIRED TO ALIGN WITH STAIR DIMENSIONS
- RESERVED

### FLOOR PLAN LEGEND

|  |                               |
|--|-------------------------------|
|  | FLOOR MOUNTED TOILET          |
|  | PRE-FAB STANDING SHOWER       |
|  | PRE-FAB TUB                   |
|  | KITCHEN SINK                  |
|  | KITCHEN SINK (SMALL)          |
|  | WASHROOM SINK                 |
|  | WASHER (W)                    |
|  | DRYER (D)                     |
|  | STACKED WASHER AND DRYER (WD) |
|  | DOMESTIC HOT WATER            |
|  | AIR HANDLER                   |
|  | RANGE, TYPICAL                |
|  | RANGE, NARROW                 |
|  | REFRIGERATOR                  |
|  | REFRIGERATOR (NARROW)         |
|  | DISHWASHER                    |
|  | DISHWASHER (NARROW)           |
|  | CLOSET COAT ROD               |
|  | ELECTRICAL PANEL              |

1 A103  
THIRD FLOOR PLAN  
1 : 50





| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
|-----|------|-------------|

PROJECT:

City of Toronto - Multiplex

**FOURPLEX NARROW**

SHEET TITLE:

## ROOF PLAN

PROJECT NO:

**SCALE:** 1 : 50

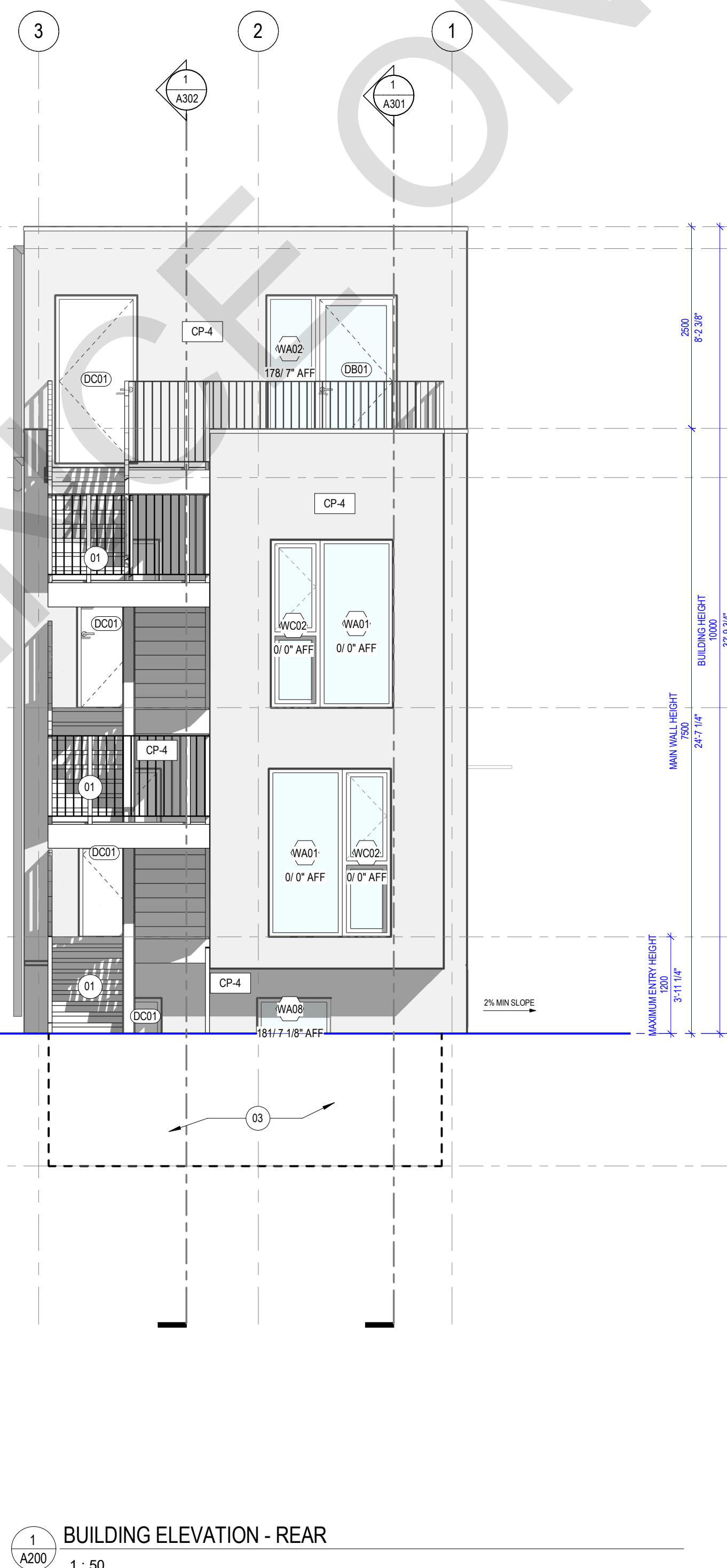
SHEET NO:

A104





| ELEVATION MATERIAL SCHEDULE |                             |
|-----------------------------|-----------------------------|
| TAG                         | MATERIAL                    |
| CP-3                        | CLADDING, TYPE 3            |
| CP-4                        | CLADDING, TYPE 4            |
| PFM                         | PRE-FINISHED METAL FLASHING |





| ELEVATION MATERIAL SCHEDULE |                             |
|-----------------------------|-----------------------------|
| TAG                         | MATERIAL                    |
| CP-3                        | CLADDING, TYPE 3            |
| CP-4                        | CLADDING, TYPE 4            |
| PFM                         | PRE-FINISHED METAL FLASHING |

1. NO DRAWINGS WILL BE FOR CONSTRUCTION UNLESS STAMPED BY THE QUALIFIED DESIGN PROFESSIONAL (QDP) AND ISSUED FOR THAT PURPOSE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND VERIFYING ALL LEVELS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE QUALIFIED DESIGN PROFESSIONAL PRIOR TO COMMENCING WORK.
3. DO NOT SCALE THE DRAWINGS.

QUALIFIED DESIGN PROFESSIONAL (QDP)

1. ALL END-USERS REQUIRE A QUALIFIED DESIGN PROFESSIONAL – EITHER AN ARCHITECT, ENGINEER, OR OTHER PROFESSIONAL AS DESIGNATED BY THE RELEVANT PROFESSIONAL ASSOCIATIONS AND SOCIETIES HAVING JURISDICTION.
2. THE OGP MUST REVIEW AND UPDATE THE DESIGN ELEMENTS COLOURED IN BLUE TO CONFIRM SITE-SPECIFIC CONDITIONS AND ASSUMPTIONS. THE OGP MUST REVIEW AND UPDATE THE DESIGN WITH ALL APPLICABLE CODES, BYLAWS, AND OTHER REGULATIONS. IF ANY MODIFICATIONS TO ANY PORTION OF THE DESIGN OTHER THAN THE BLUE-HIGHLIGHTED ELEMENTS ARE MADE, THE PLANS WILL NO LONGER BE APPROVED FOR CONSTRUCTION.
3. TO SUBMIT A BUILDING PERMIT APPLICATION THROUGH THE STANDARD REVIEW PROCESS.
4. THE QUALIFIED DESIGN PROFESSIONAL WILL TAKE RESPONSIBILITY FOR THE ENTIRE SET OF DOCUMENTS ONCE UPDATED. THIS INCLUDES APPLYING THE ARCHITECTS OR ENGINEERS SEAL AS REQUIRED BY THE RELEVANT PROFESSIONAL ASSOCIATIONS AND SOCIETIES HAVING JURISDICTION (HJUS). QUALIFIED DESIGN PROFESSIONALS ARE RESPONSIBLE FOR COMPLYING WITH THE RELEVANT REGULATORY ACTS, BYLAWS, AND PROFESSIONAL REQUIREMENTS APPLICABLE TO THE CONSTRUCTION.
5. THE END USER OR THE QUALIFIED DESIGN PROFESSIONAL MAY SUBMIT THE FINALIZED DESIGN FOR A BUILDING PERMIT TO THE APPROPRIATE REGULATORY AGENCIES.
6. THE CONSTRUCTION REVIEW IS THE RESPONSIBILITY OF THE QUALIFIED DESIGN PROFESSIONAL IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS AND PROFESSIONAL PRACTICE STANDARDS.

[illegible]

| NO. | DATE | DESCRIPTION |
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**PROJECT:**

## City of Toronto - Multiplex

## FOURPLEX NARROW

**SHEET TITLE:**

## ELEVATIONS

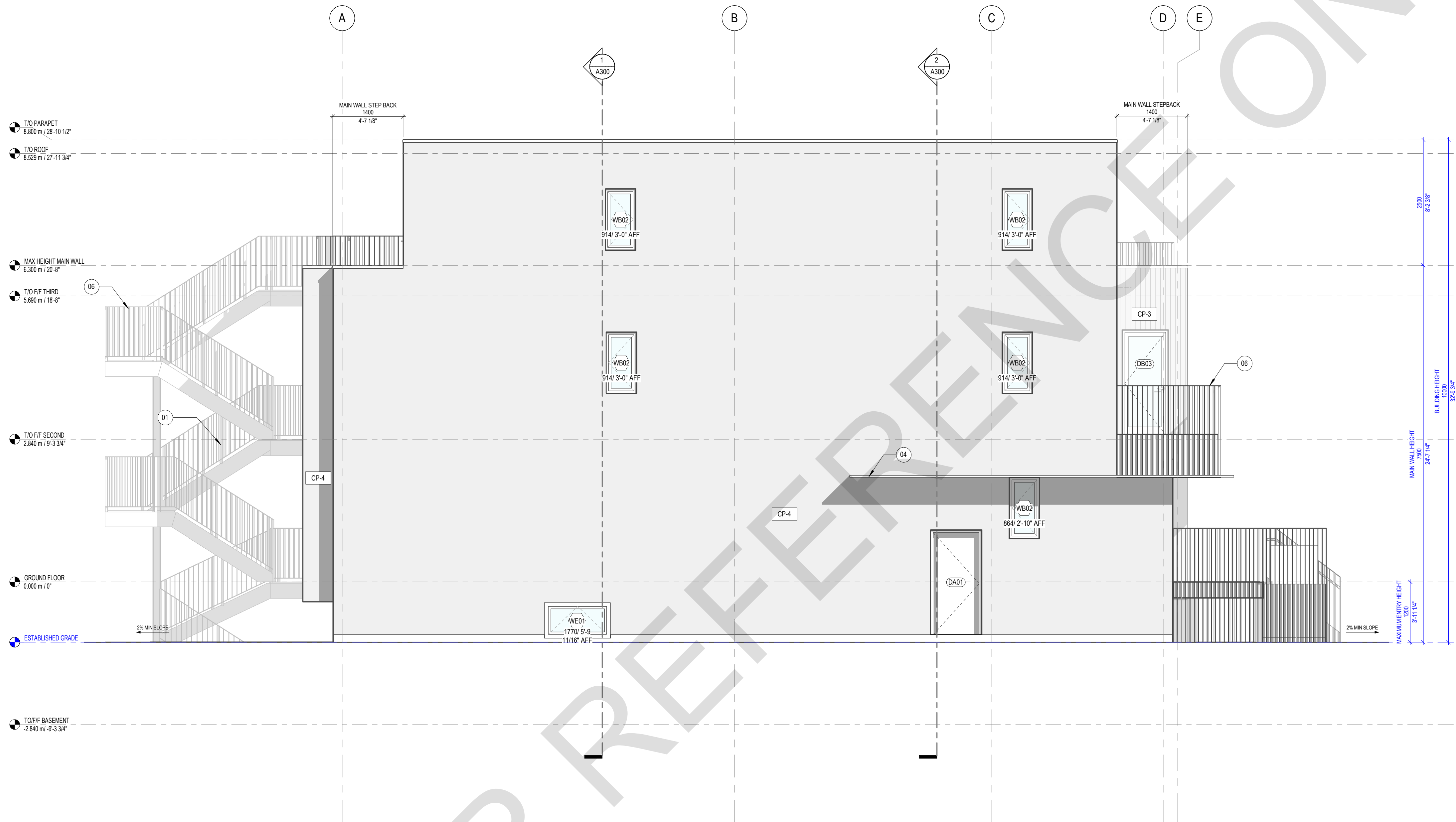
PROJECT NO:

241051

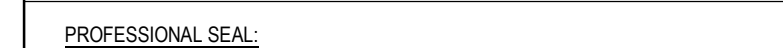
**SCALE:** As indicated

**SHEET NO:**

# A201







| ELEVATION MATERIAL SCHEDULE |                             |
|-----------------------------|-----------------------------|
| TAG                         | MATERIAL                    |
| CP-3                        | CLADDING, TYPE 3            |
| CP-4                        | CLADDING, TYPE 4            |
| PFM                         | PRE-FINISHED METAL FLASHING |

| TAG  | MATERIAL                    |
|------|-----------------------------|
| CP-3 | CLADDING, TYPE 3            |
| CP-4 | CLADDING, TYPE 4            |
| PFM  | PRE-FINISHED METAL FLASHING |

GENERAL NOTES

1. NO DRAWINGS WILL BE FOR CONSTRUCTION UNLESS STAMPED BY THE QUALIFIED DESIGN PROFESSIONAL (QDP) AND ISSUED FOR THAT PURPOSE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND VERIFYING ALL LEVELS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE QUALIFIED DESIGN PROFESSIONAL PRIOR TO COMMENCING WORK.
3. DO NOT SCALE THE DRAWINGS.

QUALIFIED DESIGN PROFESSIONAL (QDP)

1. ALL END USERS REQUIRE A QUALIFIED DESIGN PROFESSIONAL – EITHER AN ARCHITECT, ENGINEER, OR OTHER PROFESSIONAL AS DESIGNATED BY THE RELEVANT PROFESSIONAL ASSOCIATIONS AND AUTHORITY HAVING JURISDICTION OVER THE PROJECT.
2. THE QDP MUST REVIEW AND UPDATE THE DESIGN ELEMENTS COLOURED IN BLUE TO CONFIRM SITE-SPECIFIC CONDITIONS AND VARYING ASSUMPTIONS. THE QDP MUST ENSURE COMPLIANCE WITH ALL APPLICABLE CODES, REGULATIONS, STANDARDS, AND ORDINANCES. ANY MODIFICATIONS TO ANY PORTION OF THE DESIGN OTHER THAN THE BLUE-HIGHLIGHTED ELEMENTS ARE MADE. THE PLANS WILL NO LONGER BE APPROVED FOR CONSTRUCTION BY THE AUTHORITY UNTIL THE QDP SUBMIT A BUILDING PERMIT APPLICATION THROUGH THE STANDARD REVIEW PROCESS.
3. THE QDP DESIGN PROFESSIONAL WILL TAKE RESPONSIBILITY FOR THE ENTIRE SET OF DOCUMENTS ONCE UPDATED. THIS INCLUDES APPLYING THE ARCHITECT'S OR ENGINEER'S SEAL AS REQUIRED BY THE RELEVANT PROFESSIONAL ASSOCIATION AND THE AUTHORITY. THE QDP ASSOCIATION AND THE QDP DESIGN PROFESSIONAL ARE RESPONSIBLE FOR COMPLYING WITH THE RELEVANT REGULATORY ACTS, BYLAWS, AND PROFESSIONAL REQUIREMENTS APPLICABLE TO THE PRACTICE.
4. THE END USER OR THE QUALIFIED DESIGN PROFESSIONAL MAY SUBMIT THE FINALIZED DESIGN FOR A BUILDING PERMIT TO THE APPROPRIATE AUTHORITY FOR CONSTRUCTION REVIEW.
5. CONSTRUCTION REVIEW IS THE RESPONSIBILITY OF THE QUALIFIED DESIGN PROFESSIONAL IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS AND PROFESSIONAL PRACTICE STANDARDS.

[illegible]

| NO. | DATE | DESCRIPTION |
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PROJECT:

City of Toronto - Multiplex

## FOURPLEX NARROW

**SHEET TITLE:**

## ELEVATIONS

PROJECT NO:

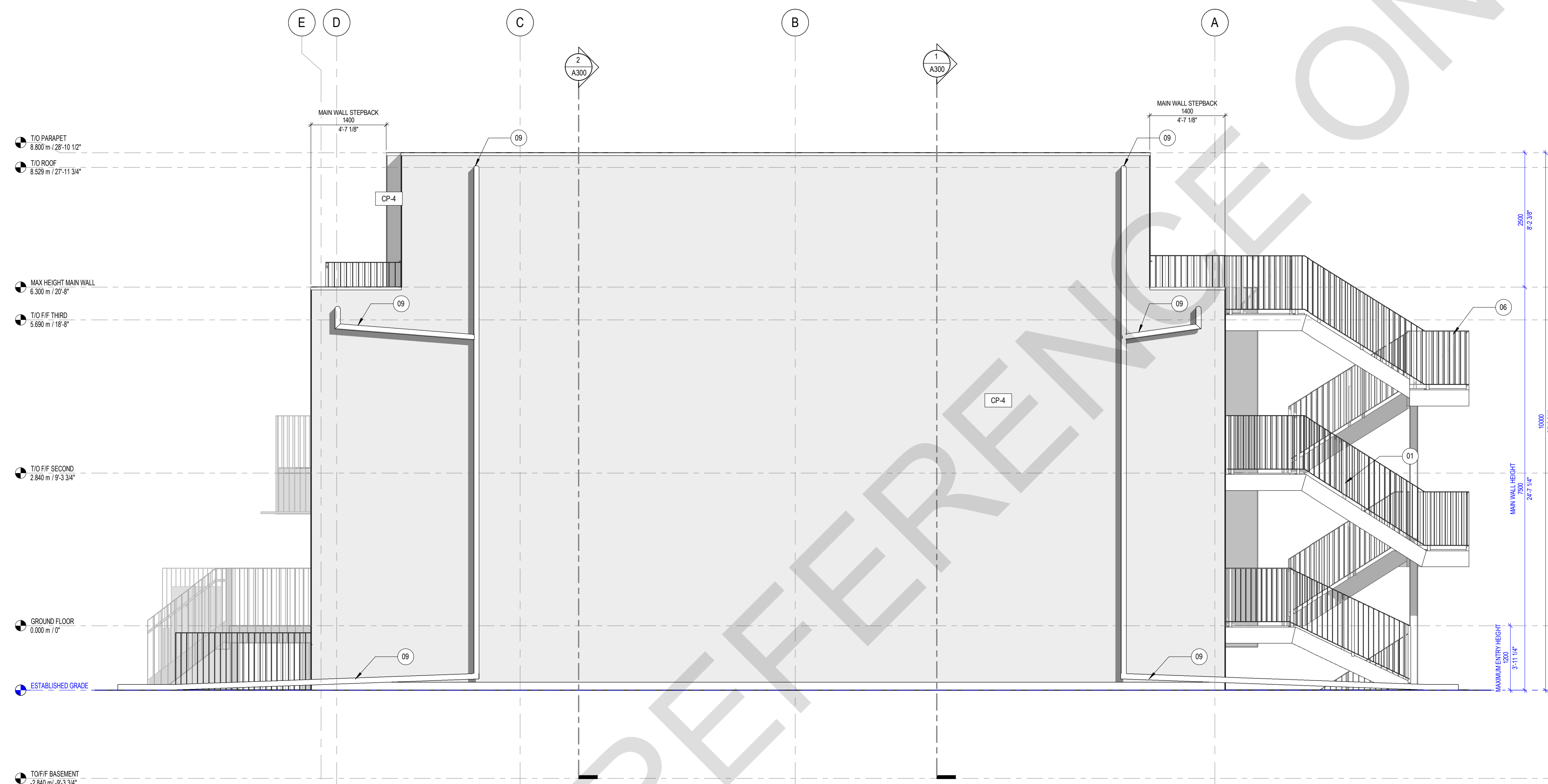
241058

**SCALE:**

As indicated

SHEET NO:

# A202



1 BUILDING ELEVATION - SIDE 2  
A202 1 : 50



# A300

 **BUILDING SECTION 2**  
1 : 50



PROFESSIONAL SEAL:

GENERAL NOTES:

- NO DRAWINGS WILL BE FOR CONSTRUCTION UNLESS STAMPED BY THE QUALIFIED DESIGN PROFESSIONAL (QDP) AND ISSUED FOR THAT PURPOSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND VERIFYING ALL LEVELS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE QUALIFIED DESIGN PROFESSIONAL PRIOR TO COMMENCING WORK.
- DO NOT SCALE THE DRAWINGS.

QUALIFIED DESIGN PROFESSIONAL (QDP)

- ALL END USERS REQUIRE A QUALIFIED DESIGN PROFESSIONAL – EITHER AN ARCHITECT, ENGINEER, OR OTHER PROFESSIONAL AS DESIGNATED BY THE RELEVANT PROFESSIONAL ASSOCIATIONS AND THE AUTHORITY HAVING JURISDICTION.
- THE QDP MUST REVIEW AND UPDATE THE DESIGN ELEMENTS COLOURED IN BLUE TO CONFIRM SITE-SPECIFIC CONDITIONS AND VERIFY ASSUMPTIONS. THE QDP MUST ENSURE COMPLIANCE WITH ALL APPLICABLE CODES, BYLAWS, AND OTHER REGULATIONS. IF ANY MODIFICATIONS TO ANY PORTION OF THE DESIGN OTHER THAN THE BLUE-HIGHLIGHTED ELEMENTS ARE MADE, THE PLANS WILL NO LONGER QUALIFY AS PRE-APPROVED, AND APPLICANTS WILL BE REQUIRED TO SUBMIT A BUILDING PERMIT APPLICATION THROUGH THE STANDARD REVIEW PROCESS.
- THE QUALIFIED DESIGN PROFESSIONAL WILL TAKE RESPONSIBILITY FOR THE ENTIRE SET OF DOCUMENTS ONCE UPDATED. THIS INCLUDES APPLYING THE ARCHITECT'S OR ENGINEER'S SEAL AS REQUIRED BY THE RELEVANT PROFESSIONAL ASSOCIATION AND THE AUTHORITIES HAVING JURISDICTION (AHJS). QUALIFIED DESIGN PROFESSIONALS ARE RESPONSIBLE FOR COMPLYING WITH THE RELEVANT REGULATORY ACTS, BYLAWS, AND PROFESSIONAL REQUIREMENTS APPLICABLE TO THEIR JURISDICTION.
- THE END USER OR THE QUALIFIED DESIGN PROFESSIONAL MAY SUBMIT THE FINALIZED DESIGN FOR A BUILDING PERMIT TO THE APPROPRIATE AUTHORITY HAVING JURISDICTION (AHJ).
- CONSTRUCTION REVIEW IS THE RESPONSIBILITY OF THE QUALIFIED DESIGN PROFESSIONAL IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS AND PROFESSIONAL PRACTICE STANDARDS.

NO. DATE DESCRIPTION

PROJECT:  
City of Toronto - Multiplex

FOURPLEX NARROW

SHEET TITLE:  
SECTION

PROJECT NO: 241058  
SCALE: 1:50

SHEET NO:

A301

SECTION KEYNOTES

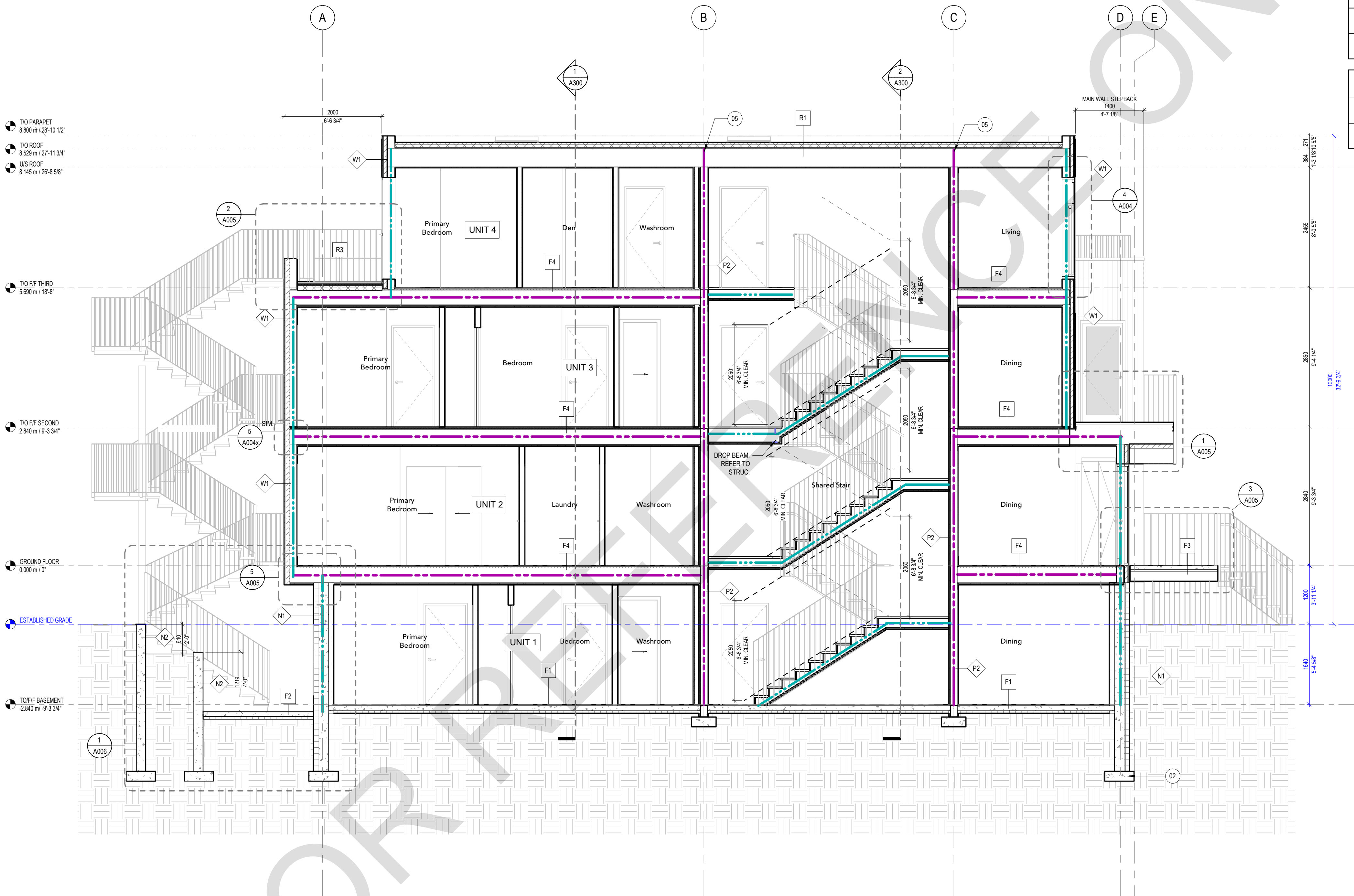
- STRUCTURAL STEEL COLUMNS REFER TO STRUCTURAL.
- ALL FOUNDATION WALLS AND FOOTING SIZES VARIES. REFER TO STRUCT.
- THICKENED SLAB. REFER TO STRUCT.
- ALL WALL AND FLOOR ASSEMBLIES AT STAIRS AND LANDINGS REQUIRED TO BE A FIRE SEPARATION SHALL BE CONSTRUCTED AS A CONTINUOUS BARRIER AGAINST THE SPREAD OF FIRE AND SMOKE AS PER OBC 9.10.9.2. REFER TO FIRE SEPARATION DRAWINGS FOR REQUIRED FIRE SEPARATION RATINGS.
- CONTINUE FIRE SEPARATION THROUGH ROOF ASSEMBLY.

FIRE SEPARATION LEGEND (MIN. REQ.)

- 1HR FIRE SEPARATION
- 45MIN FIRE SEPARATION

RATED ASSEMBLIES LEGEND (MIN. REQ.)

- 1HR FRR
- 45MIN FRR



1  
A301  
BUILDING SECTION 3  
1:50





- 01 STRUCTURAL STEEL COLUMNS REFER TO STRUCTURAL.
- 02 ALL FOUNDATION WALLS AND FOOTING SIZES VARIES. REFER TO STRUCT.
- 03 THICKENED SLAB. REFER TO STRUCT.
- 04 ALL WALL AND FLOOR ASSEMBLIES AT STAIRS AND LANDINGS REQUIRED TO BE A FIRE SEPARATION SHALL BE CONSTRUCTED AS A CONTINUOUS BARRIER AGAINST THE SPREAD OF FIRE AND SMOKE AS PER NBC 3.10.9.2. REFER TO FIRE SEPARATION DRAWINGS FOR REQUIRED FIRE SEPARATION RATINGS.
- 05 CONTINUE FIRE SEPARATION THROUGH ROOF ASSEMBLY.

|                                                                                     |                       |
|-------------------------------------------------------------------------------------|-----------------------|
|  | 1HR FIRE SEPARATION   |
|  | 45MIN FIRE SEPARATION |

|                                                                                     |           |
|-------------------------------------------------------------------------------------|-----------|
|  | 1HR FRR   |
|  | 45MIN FRR |

1. NO DRAWINGS WILL BE FOR CONSTRUCTION UNLESS STAMPED BY THE QUALIFIED DESIGN PROFESSIONAL (QDP) AND ISSUED FOR THAT PURPOSE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND VERIFYING ALL LEVELS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE QUALIFIED DESIGN PROFESSIONAL PRIOR TO COMMENCING WORK.
3. DO NOT SCALE THE DRAWINGS.

1. ALL END USERS REQUIRE A QUALIFIED DESIGN PROFESSIONAL - EITHER AN ARCHITECT, ENGINEER, OR OTHER PROFESSIONAL AS DESIGNATED BY THE RELEVANT PROFESSIONAL ASSOCIATIONS AND THE AUTHORITY HAVING JURISDICTION. THE DESIGN PROFESSIONAL ON THE ODP MUST REVIEW AND UPDATE THE DESIGN ELEMENTS AND COLORED ASSUMPTIONS TO CONFORM SITE-SPECIFIC CONDITIONS AND REQUIREMENTS. THE ODP MUST OBTAIN COMPLIANCE WITH ALL APPLICABLE CODES, BYLAWS, ORDINANCES, AND REGULATIONS. ANY MODIFICATIONS TO ANY PORTION OF THE DESIGN OTHER THAN THE BLUE-HIGHLIGHTED ELEMENTS ARE MADE, THE PLANS WILL NO LONGER BE CONSIDERED APPROVED. THE DESIGN PROFESSIONAL MUST BE ABLE TO SUBMIT A BUILDING PERMIT APPLICATION THROUGH THE STANDARD REVIEW PROCESS.
2. THE DESIGN PROFESSIONAL WILL TAKE RESPONSIBILITY FOR THE ENTIRE SET OF DOCUMENTS (ONCE UPDATED). THIS INCLUDES APPROVING THE ARCHITECTS OR ENGINEER'S SEAL AS REQUIRED BY THE RELEVANT PROFESSIONAL ASSOCIATION AND THE AUTHORITIES HAVING JURISDICTION. THE DESIGN PROFESSIONAL AND ARCHITECT ARE RESPONSIBLE FOR COMPLYING WITH THE RELEVANT REGULATORY ACTS, BYLAWS, AND PROFESSIONAL REQUIREMENTS APPLICABLE TO THEIR PRACTICE.
3. THE END USER OR THE QUALIFIED DESIGN PROFESSIONAL MAY SUBMIT THE FINALIZED DESIGN FOR A BUILDING PERMIT TO THE APPROPRIATE AUTHORITY HAVING JURISDICTION.
4. CONSTRUCTION REVIEW IS THE RESPONSIBILITY OF THE QUALIFIED DESIGN PROFESSIONAL IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS AND PROFESSIONAL PRACTICE STANDARDS.

[illegible]

| NO. | DATE | DESCRIPTION |
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PROJECT:

City of Toronto - Multiplex

## FOURPLEX NARROW

SHEET TITLE:

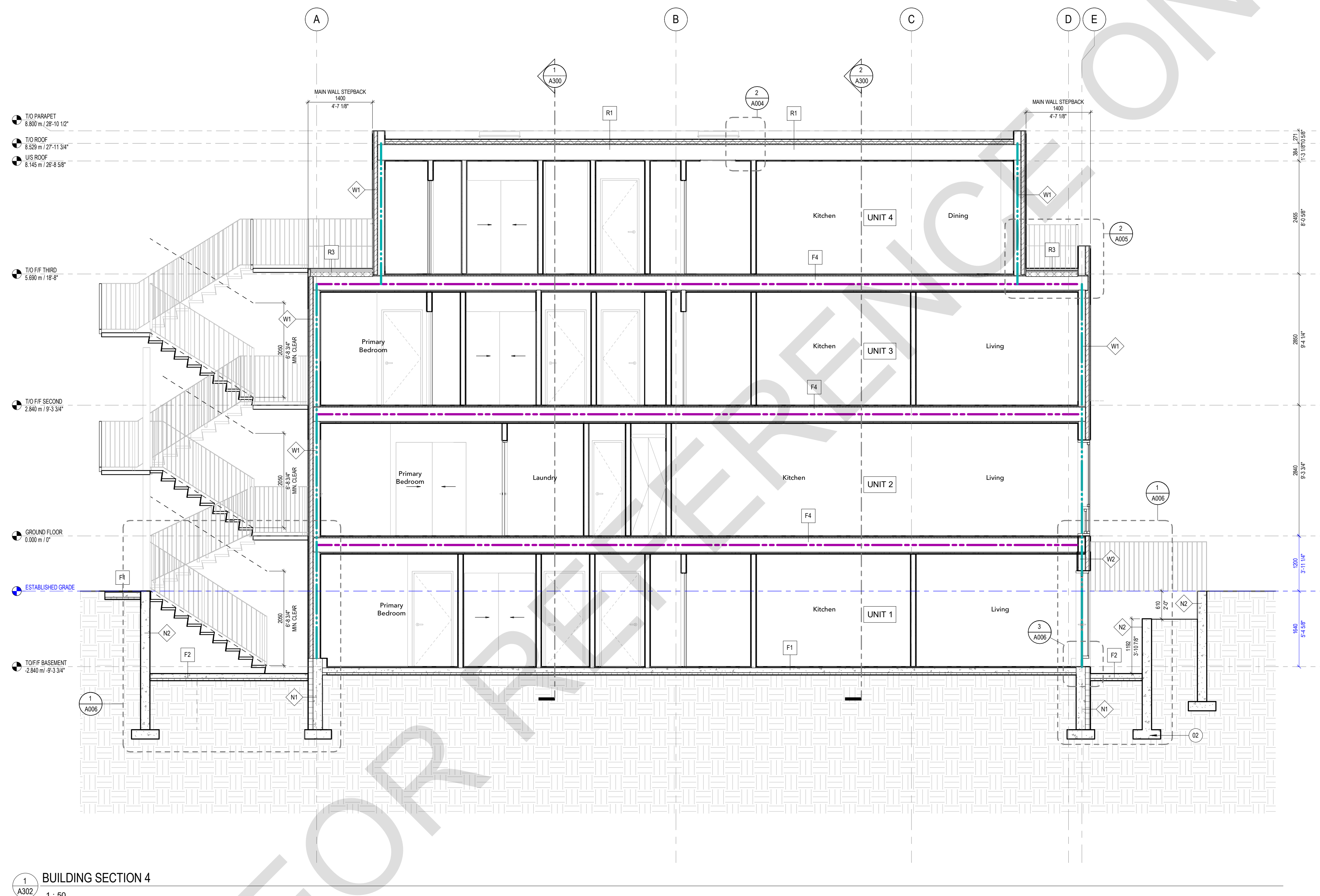
## SECTIONS

PROJECT NO:

PROJECT NO: 241058

SHEET NO:

A302



1 BUILDING SECTION 4  
A302 1 : 50



**CITY OF TORONTO MULTIPLEX  
FOURPLEX NARROW**  
STRUCTURAL DRAWINGS



PROFESSIONAL SEAL:

GENERAL NOTES:

1. NO DRAWINGS WILL BE FOR CONSTRUCTION UNLESS STAMPED BY THE QUALIFIED DESIGN PROFESSIONAL (QDP) AND ISSUED FOR THAT PURPOSE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND VERIFYING ALL LEVELS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE QUALIFIED DESIGN PROFESSIONAL PRIOR TO COMMENCING WORK.
3. DO NOT SCALE THE DRAWINGS.

QUALIFIED DESIGN PROFESSIONAL (QDP)

1. ALL END USERS REQUIRE A QUALIFIED DESIGN PROFESSIONAL – EITHER AN ARCHITECT, ENGINEER, OR OTHER PROFESSIONAL AS DESIGNATED BY THE RELEVANT PROFESSIONAL ASSOCIATIONS AND THE AUTHORITY HAVING JURISDICTION.
  2. THE QUALIFIED DESIGN PROFESSIONAL MUST REVIEW AND UPDATE THE PRE-APPROVED DESIGN DRAWINGS TO ALIGN WITH SITE CONDITIONS, VERIFY ASSUMPTIONS, MAKE ANY FINAL DESIGN SELECTIONS OR MODIFICATIONS DESIRED, AND ENSURE CODE COMPLIANCE WITH ALL APPLICABLE CODES, BYLAWS, AND OTHER REGULATIONS.
  3. THE QUALIFIED DESIGN PROFESSIONAL WILL TAKE RESPONSIBILITY FOR THE ENTIRE SET OF DOCUMENTS ONCE UPDATED. THIS INCLUDES APPLYING THE ARCHITECTS OR ENGINEERS SEAL AS REQUIRED BY THE APPLICABLE PROFESSIONAL ASSOCIATION AND THE AUTHORITY HAVING JURISDICTION (AHJ). QUALIFIED DESIGN PROFESSIONALS ARE RESPONSIBLE FOR COMPLYING WITH THE RELEVANT REGULATORY ACTS, BYLAWS, AND PROFESSIONAL REQUIREMENTS APPLICABLE TO THE JURISDICTION.
  4. THE ENGINEER OR THE QUALIFIED DESIGN PROFESSIONAL MAY SUBMIT THE FINALIZED DESIGN FOR A BUILDING PERMIT TO THE APPROPRIATE AUTHORITY HAVING JURISDICTION (AHJ).
- CONSTRUCTION REVIEW IS THE RESPONSIBILITY OF THE QUALIFIED DESIGN PROFESSIONAL IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS AND PROFESSIONAL PRACTICE STANDARDS.

[illegible]

| NO. | DATE | DESCRIPTION |
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**PROJECT:**

City of Toronto - Multiplex

## FOURPLEX NARROW

**SHEET TITLE:**

COVER

PROJECT NO:

SCALE: N.T.S.

**SHEET NO:**

S-000



1. USE OF THESE STRUCTURAL DRAWINGS
  - 1.1. STRUCTURAL MEMBERS SHOWN ON THIS SET OF DRAWINGS HAVE BEEN DESIGNED TO RESIST PART 9 ENVIRONMENTAL DESIGN LOADS BASED ON WORST CASE WIND, SNOW AND SEISMIC VALUES FOR METROPOLITAN TORONTO LOCATIONS PER CBC 2024 S8, TABLE 2 - CLIMATIC DESIGN DATA
  - 1.2. SIZING OF ENGINEERED LUMBER FRAMING, STEEL ELEMENTS, COLD FORMED STEEL FRAMING, REINFORCED CONCRETE FOUNDATION WALLS AND FOOTINGS HAS BEEN CALCULATED IN ACCORDANCE WITH PART 4 OF THE CBC WHERE DESIGN REQUIREMENTS EXCEEDS EXISTING CONDITIONS
  - 1.3. LATERAL RESISTANCE TO WIND LOADS PROVIDED ARE PROVIDED BY BRACED WALL BANDS AND PANELS CALCULATED IN ACCORDANCE WITH CBC 9.2.3.13 AND WHERE ARCHITECTURAL DESIGN IMPERATIVES EXCEED THE LIMITS OF PART 9, SHEAR WALLS AND LATERAL RESISTING ELEMENTS WERE DESIGNED IN ACCORDANCE WITH PART 4 OF THE CBC USING LOADS GENERATED USING PART 4.
  - 1.4. ANY CHANGES TO FRAMING LAYOUT, ASSEMBLIES, MATERIALS, CONNECTIONS AND /OR LOCATION OF THE BUILDING OUTSIDE OF METROPOLITAN TORONTO (2026 BOUNDARIES) MUST BE CARRIED OUT BY A STRUCTURAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO.
  - 1.5. FOUNDATION ELEMENTS HAVE BEEN DESIGNED USING AN ALLOWABLE SOIL BEARING VALUE OF 75 kPa.
  - 1.6. THE OWNER MUST CONFIRM THIS MINIMUM BEARING VALUE BY GEOTECHNICAL INVESTIGATION OR BY MEANS THAT IS IN ACCORDANCE WITH THE CITY OF TORONTO'S CBO (CHIEF BUILDING OFFICIAL)
  - 1.7. USE OF HIGHER ALLOWABLE SOIL BEARING VALUES TO OPTIMIZE FOOTING SIZES SHOWN ON THESE DRAWINGS MUST BE BASED ON FINDINGS AND RECOMMENDATIONS MADE BY A GEOTECHNICAL INVESTIGATION AND DESIGN REVISIONS CARRIED OUT BY A STRUCTURAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO.
  - 1.8. THE OWNER MUST CONFIRM PRIOR TO CONSTRUCTION THAT PROPOSED EXCAVATIONS AND CONSTRUCTION OF FOUNDATIONS OR OTHER BUILDING ELEMENTS WILL BE ABOVE OR BELOW A 7:10 RATIO OF REPOSE TO ADJACENT BUILDING FOUNDATIONS. CONSTRUCTING WITHIN THIS ANGLE OF REPOSE REQUIRES FOUNDATIONS TO BE DESIGNED AND REVIEWED ON SITE BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO.
2. LOADS USED IN THE DESIGN:
  - 2.1. SNOW: 1.08 kPa
  - 2.2. LIVE: 1.9 kPa RESIDENTIAL OCCUPANCY AND 4.8 kPa COMMON AND EGRESS AREAS.
  - 2.3. DEAD: 1.0 kPa (ROOF) and 1.7 kPa (FLOORS) and 0.7 kPa (EXTERIOR WALLS).
  - 2.4. S8, TABLE 2: 0.83 kPa (WIND) AND 0.83 kPaSLS FOR PART 4 SHEAR WALLS AND MOMENT RESISTING COLUMNS
  - 2.5. INTERNAL WIND PRESSURE: 0.5 kPa
3. SUBMITTALS:
  - 3.1. SHOP DRAWINGS DESIGNED BY A STRUCTURAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO OR SUPPLIER APPROVED BY THE CHIEF BUILDING OFFICIAL OF THE CITY OF TORONTO ARE REQUIRED FOR REVIEW AND APPROVAL BY THE PROJECT DESIGN PROFESSIONAL OF THE FOLLOWING ELEMENTS:
    - 3.2. ENGINEERED LUMBER ROOF AND FLOOR FRAMING FOR GRAVITY LOADS SHOWN ON THESE DRAWINGS.
    - 3.3. COLD FORMED STEEL (CFS) BEARING WALLS FOR GRAVITY, WIND, AND LATERAL FORCES SHOWN ON THESE DRAWING.
    - 3.4. MISCELLANEOUS METALS ITEMS SUCH AS EXTERIOR ENTRY STAIRS, EXTERIOR EGRESS STAIRS, GUARD RAILS AND OTHER LATERAL ELEMENTS SUPPORTING LIVE, SNOW OR WIND LOADS.
    - 3.5. GEOTECHNICAL ENGINEERING REPORTS AS REQUIRED.
    - 3.6. CONFIRMATION THAT BUILDING FOUNDATIONS, SHORING AND EXCAVATIONS DO NOT ENROACH ON SAFE ANGLE OF REPOSE TO ADJACENT BUILDING OR STRUCTURE FOUNDATIONS.
    - 3.7. RESERVED.
  - 3.2. GENERAL
    - 4.1. REFER TO THE REQUIREMENTS OF THE ONTARIO BUILDING CODE 2024, O.R.G. 163/24 AND ANY APPLICABLE ACTS OF AUTHORITY HAVING JURISDICTION.
    - 4.2. READ STRUCTURAL DRAWINGS IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS.
    - 4.3. BEFORE PROCEEDING WITH WORK, CHECK ALL THE DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS WITH THE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND REPORT DISCREPANCIES TO THE APPROVED DESIGN PROFESSIONAL. DO NOT MAKE THE DRAWINGS.
    - 4.4. REFER TO THE ARCHITECTURAL AND OTHER DRAWINGS FOR LOCATIONS AND DIMENSIONING OF OPENINGS AND SLEEVES NOT SHOWN ON THE STRUCTURAL DRAWINGS. ASSUME TYPICAL DETAILS APPLY. HOWEVER, OBTAIN THE APPROVED DESIGN PROFESSIONAL'S PRIOR APPROVAL BEFORE INSTALLING OPENINGS, SLEEVES, ETC. WHICH ARE NOT SHOWN ON STRUCTURAL DRAWINGS.
    - 4.5. SEE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATIONS OF PITS, BASES, SLUMPS, TRENCHES, DEPRESSIONS, GROOVES, CURBS, CHAMFERS AND SLOPES NOT SHOWN ON STRUCTURAL DRAWINGS. ADJUST UNDERSIDE ELEVATIONS OF FOOTINGS AS REQUIRED TO AVOID UNDERMINING THE FOOTINGS AND FOUNDATIONS.
    - 4.6. HORIZONTAL AND VERTICAL DESIGN LOADS ARE NOTED. THEY SHALL NOT BE EXCEEDED DURING CONSTRUCTION.
    - 4.7. TYPICAL STRUCTURAL DETAILS SHALL GOVERN THE WORK. IF DETAILS DIFFER ON THE DRAWINGS, THE MOST STRINGENT SHALL GOVERN.
    - 4.8. CONTRACTOR TO PROVIDE AND BE SOLELY RESPONSIBLE FOR ALL TEMPORARY WORKS.
    - 4.9. THE INFORMATION SHOWN ON STRUCTURAL DRAWINGS REPRESENT THE BUILDING IN ITS FINISHED STATE. CONTRACTOR TO REVEAL HIDDEN REQUIREMENTS AND DETERMINE ALL TEMPORARY WORKS REQUIRED TO COMPLETE THE STRUCTURE PER CONTRACT DOCUMENTS INCLUDING MEANS, METHOD, TECHNIQUES, SEQUENCES, PROCEDURES, TEMPORARY SHORING AND/OR BRACING, TEMPORARY OPENINGS, EXCAVATION SHORING, ERECTION PROCEDURES, ETC.
5. DESIGN NOTES
  - 5.1. THE BUILDING IS DESIGNATED AS BELONGING TO THE NORMAL IMPORTANCE CATEGORY, AS DEFINED IN THE CBC 2024.
  - 5.2. ALL REINFORCED CONCRETE ELEMENTS HAVE BEEN DESIGNED IN ACCORDANCE WITH CSA STANDARD A23.1.
  - 5.3. ALL STRUCTURAL TIMBER ELEMENTS HAVE BEEN DESIGNED IN ACCORDANCE WITH CSA STANDARD C08.
  - 5.4. LATERAL FORCES ON STRUCTURAL FRAME
    - 5.5. THE LATERAL FORCE ON EACH BRACED WALLS AS PER 9.2.3.13.(2),(a) OF THE CBC 2024. WOOD SHEAR WALLS, CFS BRACED FRAMES, AND MOMENT RESISTING BEAM COLUMNS.
    - 5.6. THE FRAME IS NOT STABLE UNTIL THE LATERAL LOAD RESISTING SYSTEM IS IN PLACE.
  - 5.7. WIND:
    - 5.8. THE DESIGN OF THE STRUCTURE FOR WIND IS BASED ON AN HOURLY WIND PRESSURE OF 0.47 kPa (BASED ON 150 YEAR RETURN FOR SCARBOROUGH).
    - 5.9. EXPOSURE CATEGORY: ROUGH TERRAIN.
    - 5.10. THE IMPORTANCE FACTOR FOR WIND DESIGN IS 1.0. FOR DEFLECTION ANALYSIS, THE FACTOR IS 0.75.
    - 5.11. WHERE CBC 9.2.3.13.1 WAS NOT APPLICABLE THE DESIGN WIND FORCES HAVE BEEN CALCULATED IN ACCORDANCE WITH THE ONTARIO BUILDING CODE 2024 AND WITH THE "STATIC" PROCEDURE DESCRIBED IN THE USER'S GUIDE - NBC 2020 - STRUCTURAL COMMENTARIES (PART 4).
  - 5.4. LATERAL FORCES ON FOUNDATION WALLS
    - 5.5. WALLS RETAINING EARTH ARE DESIGNED TO SAFELY WITHSTAND A HORIZONTAL PRESSURE AT ANY DEPTH (h) GIVEN BY THE EXPRESSION:
$$P = K \cdot (\gamma \cdot h + q)$$
WHERE:
      - K IS THE LATERAL EARTH PRESSURE COEFFICIENT
      - P IS THE PRESSURE EXERTED HORIZONTALLY
      - h IS THE DEPTH BELOW GRADE
      - γ IS THE UNIT WEIGHT OF SOIL
      - q IS THE SURCHARGE ON THE GROUND SURFACE
    - 5.12. THE WALLS HAVE BEEN DESIGNED ASSUMING THAT THERE IS FREE-DRAINAGE BACKFILL, OR THAT OTHER PROVISIONS HAVE BEEN MADE, SUCH THAT THE WALLS ARE NOT SUBJECT TO HYDROSTATIC PRESSURE.
    - 5.13. IN ACCORDANCE WITH CBC C08 4.4.6, THE WALLS HAVE BEEN DESIGNED USING K=0.83, AND γ=21 kn/m3.
  - 5.7. SNOW LOADS ON ROOF:
    - 5.8. THE ROOFS HAVE BEEN DESIGNED WITH Ss = 1.2 kPa AND Sr = 0.4 kPa.
    - 5.12. THE IMPORTANCE FACTOR, I/S, IS 1.0 FOR ULS AND 0.9 FOR SLS.
    - 5.13. LIVE AND OTHER LOADS:
      - 5.14. SEE NOTES BELOW FLOOR PLANS.
      - 5.15. IN THE DESIGN OF COLUMNS, WALLS, BEAMS, FLAT SLABS ETC. THE INDICATED LIVE LOADS HAVE NOT BEEN REDUCED AS PER TRIBUTARY AREA CONSIDERATIONS OF THE ONTARIO BUILDING CODE.
    - 5.16. FUTURE EXTENSIONS:
      - 5.17. THE STRUCTURE HAS NOT BEEN DESIGNED FOR ANY FUTURE EXTENSIONS.
6. CONCRETE
  - 6.1. MATERIALS
    - 6.1.1. CONCRETE
      - 6.1.1.1. CONFORM TO THE REQUIREMENTS OF CSA STANDARD A23.1 (LATEST VERSION) AND THE FOLLOWING FOR STRENGTH, SLUMP, CURING AND DESIGNED MATERIALS CONTENT AND AIR CONTENT.
      - 6.1.1.2. FOR NOMINALLY UNREINFORCED CONCRETE, CONFORM TO THE REQUIREMENTS OF CSA STANDARD A438 (LATEST VERSION) AND THE FOLLOWING FOR STRENGTH, SLUMP, WATER-TO-CEMENTING MATERIALS CONTENT AND AIR CONTENT, INCLUDING THE FOLLOWING:
        - 6.1.1.2.1. CONCRETE STRENGTH: 50 MPa; INCREASE TO:
        - 6.1.1.2.2. 32 MPa FOR GARAGE FLOORS, CARPORT FLOORS AND ALL EXTERIOR FLATWORK.
        - 6.1.1.2.3. 25 MPa FOR INTERIOR SLABS ON GRADE, UNLESS DAMP PROOFING IS PROVIDED (0.15 mm POLYETHYLENE BELOW SLAB OR JOIST).
        - 6.1.1.2.4. AIR CONTENT OF 5%-8% WHERE EXPOSED TO FREEZE-THAW, REDUCE TO 3%-6% FOR FOOTINGS.
        - 6.1.1.2.5. MAXIMUM SLUMP OF 100 mm. INCREASE TO 150mm FOR CONVENTIONAL FOUNDATIONS.
      - 6.1.1.3. NOMINAL MAXIMUM SIZE OF AGGREGATE SHALL 20 mm. USE SMALLER AGGREGATES AS APPROPRIATE IN AREAS OF CONGESTED REINFORCING STEEL OR TO IMPROVE WORKABILITY. MODIFY MIX DESIGNS TO SUIT.
      - 6.1.1.3.1. WHERE AGGREGATES SMALLER THAN 14 mm ARE USED, INCREASE AIR CONTENT BY 1%.
      - 6.1.1.3.2. REINFORCED CONCRETE IS EXPOSED TO DE-ICING CHEMICALS TO HAVE DC CORROSION INHIBITOR @ 111cu.m dosage OR APPROVED EQUIVALENT
      - 6.1.1.3.3. MAX 25kg cement/cu.m.
    - 6.1.2. REINFORCEMENT
      - 6.1.2.1. CONFORM TO THE REQUIREMENTS OF CSA G30.18 FOR CARBON STEEL REINFORCING BARS
      - 6.1.2.2. CONFORM TO THE REQUIREMENTS OF ASTM A1064/A1064M FOR WELDED WIRE FABRIC.
      - 6.1.2.3. REINFORCING BARS SHALL HAVE A MINIMUM YIELD STRENGTH  $f_y = 400$  MPa, AND WELDED WIRE FABRIC SHALL HAVE A MINIMUM YIELD STRENGTH  $f_y = 386$  MPa. SUPPLY IN FLAT SHEETS.
      - 6.1.2.4. WHERE WELDING OF REBAR IS INDICATED, WELDABLE GRADE REBAR SHALL BE USED.
  - 6.2. EXECUTION
    - 6.2.1. CONCRETE AND REINFORCEMENT
      - 6.2.1.1. PROVIDE DOWELS TO WALLS AND COLUMNS SIMILAR IN NUMBER, SIZE, AND SPACING TO THE VERTICAL STEEL IN THE WALL OR COLUMN EXCEPT WHEN NOTED OTHERWISE.
    - 6.2.1.2. CONSTRUCTION JOINTS:
      - 6.2.1.2.1. VERTICAL CONSTRUCTION JOINTS MAY BE MADE ONLY AT MID-SPAN OF BEAMS, JOISTS, AND SLABS UNLESS OTHERWISE SHOWN OR DIRECTED AND THEIR LOCATION SHALL BE REVIEWED BY THE CONSULTANT.
      - 6.2.1.2.2. PROVIDE 36x89 KLS AT CONSTRUCTION JOINTS UNLESS NOTED OTHERWISE.
      - 6.2.1.2.3. NO SLABS TO BE PLACED VERTICALLY OR HORIZONTALLY THROUGH BEAMS WITHOUT BEING REVIEWED BY THE CONSULTANT.
      - 6.2.1.2.4. WELDING OF REBAR SHALL BE DONE IN ACCORDANCE WITH CSA W186.
    - 6.2.1.3. CONCRETE COVER TO REINFORCEMENT:
      - 6.2.2.1. CONFORM TO THE REQUIREMENTS OF CSA STANDARD A23.1 (LATEST VERSION) FOR COVER TO REINFORCEMENT.
      - 6.2.2.2. ADDITIONAL COVER REQUIREMENTS AS APPLICABLE.
      - 6.2.2.2.1. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH:
      - 6.2.2.2.2. 30M BARS AND SMALLER: 75mm
      - 6.2.2.2.3. CONCRETE EXPOSED TO CHLORIDES (C-1, C-3) (DO

7.1.5. WELDS - CONFORM WITH CSA W59-03

7.1.6. ANCHOR RODS - CONFORM TO THE REQUIREMENTS OF CSA G40.21 GRADE 300W UNLESS NOTED OTHERWISE.

7.1.7. ALL OTHER - CONFORM TO THE REQUIREMENTS OF CSA G40.21 GRADE 300W

7.1.8. NOMINAL GRADE PLATE PROTECTION IN ACCORDANCE WITH CISC/PRIA-173a - A QUICK-DRYING ONE COAT PAINT FOR USE ON STRUCTURAL STEEL.

7.2. EXECUTION

7.2.1. PROVIDE A MINIMUM BEARING OF 200 mm FOR ALL STEEL BEAMS BEARING ON MASONRY AND A MINIMUM OF 100 mm ON STRUCTURAL STEEL, UNLESS NOTED OTHERWISE.

7.2.2. CENTRE BEARING PLATES UNDER BEAMS, OR AS NOTED.

7.2.3. BEARING PLATE DIMENSION GIVEN FIRST INDICATES SIDE PARALLEL TO BEAM WEB.

7.2.4. NOT TO BE USED FOR CROSS BRACING, AND THE LIKE FOR THE LOADINGS AND FORCES SHOWN OR IMPLIED ON THE DRAWINGS.

7.2.5. PROVIDE FULL DEPTH OF THE DIFFERENCE AT ALL BEAMS BEARING ON COLUMNS AND ALL BEAMS SUPPORTING COLUMNS. WEB STIFFENERS SHALL BE OF THE SAME SIZE AND THICKNESS AS THE COLUMN FLANGES AND SHALL ALIGN WITH THE FLANGES OF THE SUPPORTING COLUMN.

7.2.6. CONNECT BEAMS FOR THE FACTORED REACTIONS INDICATED ON THE DRAWINGS. IF BEAM REACTIONS ARE NOT INDICATED, THE CONNECTIONS SHALL BE DESIGNED FOR ONE-HALF THE TOTAL UNIFORM LOAD CAPACITY OF THE SIMPLE SPAN BEAM FOR THE GIVEN SPAN PRESENTED IN THE CISC HANDBOOK OF STEEL CONSTRUCTION. BOLTED CONNECTIONS SHALL HAVE A MINIMUM OF TWO BOLTS PER JOINT.

7.2.7. STEEL SUPPLIER TO DESIGN AND PROVIDE INTERCONNECTION BETWEEN BUILT UP MEMBERS AS NOTED, WHERE NOT NOTED, STEEL SUPPLIER IS TO INTERCONNECT AS REQUIRED TO ENSURE ADEQUATE CAPACITY FOR THE DESIGN FORCES SHOWN OR IMPLIED ON THE DRAWINGS.

7.2.8. STEEL SUPPLIER TO DESIGN CONNECTIONS OF SINGLE ANGLE MEMBERS FOR THE FORCES SHOWN OR IMPLIED IN THE DRAWINGS, SUCH THAT CONNECTIONS ARE MADE TO THE SAME LEG EACH END BY WELDING OR WITH A MINIMUM OF TWO BOLTS.

7.2.9. ALL STRUCTURAL STEEL LOCATED OUTSIDE OF THE BUILDING ENVELOPE OR EXPOSED TO HIGH HUMIDITY OR MOISTURE SHALL BE FULLY GALVANIZED IN ACCORDANCE WITH CSA G164.

7.2.9.1. WHERE GALVANIZING IS DEMANDS, THE COATING SHALL BE REPAIRED IN ACCORDANCE WITH ASTM A780/A780M.

7.2.9.2. PROVIDE COATINGS OF Z180 GALVANIZING IN ACCORDANCE WITH ASTM-A653/A653M FOR EXTERIOR BUILDING ENVELOPE.

7.2.9.3. WHERE GALVANIZING IS DEMANDS, THE COATING SHALL BE REPAIRED IN ACCORDANCE WITH ASTM A780/A780M.

7.2.9.4. PROVIDE COATINGS OF Z180 GALVANIZING IN ACCORDANCE WITH ASTM-A653/A653M FOR EXTERIOR BUILDING ENVELOPE.

8. LIGHTWEIGHT STEEL FRAMING SYSTEM

8.1. MATERIALS

8.1.1. CONFORM TO THE REQUIREMENTS OF CSA-S136

8.1.2. STEEL SHALL MEET THE REQUIREMENTS OF CAN/CSA-S136 WITH A MINIMUM YIELD STRENGTH OF 228 MPa FOR MATERIAL 1.2mm THICK AND THINNER AND 345 MPa FOR MATERIAL 1.4mm AND THICKER.

8.1.3. USE METALLIC COATINGS CONFORMING TO ASTM-A653/A653M AND THE FOLLOWING:

8.1.3.1. MINIMUM COATINGS OF Z180 GALVANIZING IN ACCORDANCE WITH ASTM-A653/A653M FOR EXTERIOR BUILDING ENVELOPE.

8.1.3.2. MINIMUM Z275 GALVANIZING COATING FOR STEEL STUD/BUCK VENEER ASSEMBLIES.

8.1.4. BOLTS, NUTS AND WASHERS - ASTM A307 OR ASTM F3125, HOT-DIP GALVANIZED WHERE EXPOSED TO CORROSION POTENTIAL.

8.1.5. SHEET METAL SCREWS AND CONCRETE ANCHORS - MINIMUM 0.008mm coating OF ZINC.

8.1.6. USE 200 MESH PAINT COATING TO CAN/CSA-S136-181 FOR TOUCHING UP WELDS AND DAMAGED METALLIC COATING.

8.1.7. MINIMUM PLATE DESIGN THICKNESSES, EXCLUSIVE OF COATING:

8.1.7.1. MEMBER DEPTH 152mm OR LESS - 0.87mm

8.1.7.2. MEMBER DEPTH 203mm - 1.14mm

8.1.7.3. MEMBER DEPTH 254mm - 1.43mm

8.1.7.4. MEMBER DEPTH 305mm OR MORE - 1.81mm

8.1.7.5. BRIDGING CHANNELS - 1.087mm FOR STUDS, 1.367mm FOR JOISTS

8.1.7.6. U-P LIP ANGLES - 1.387mm FOR STUDS, 1.720mm FOR JOISTS

8.1.7.7. TRACK, CLIP ANGLES AND THE LIKE ARE TO BE AT LEAST THE SAME THICKNESS AS THE STUD OR JOIST.

8.2. DESIGN AND EXECUTION

8.2.1. DESIGN ALL FRAMING, INCLUDING CONNECTIONS, BRIDGING, TRACKS, CLOSURE CHANNELS, WEB STIFFENERS, WEB CUT-OUTS, SHEATHING, CROSS BRACING, AND THE LIKE FOR THE LOADINGS AND FORCES SHOWN OR IMPLIED ON THE DRAWINGS. THE DESIGN AND REVIEW SHALL BE PERFORMED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF ONTARIO.

8.2.2. DESIGN WIND-BEARING EXTERIOR STUDS TO RESIST THE SPECIFIED WIND LOAD BUT NOT LESS THAN 1.0 kPa. DESIGN LOAD-BEARING EXTERIOR STUDS TO RESIST THE SPECIFIED WIND LOAD BUT NOT LESS THAN 1.25 kPa.

8.2.3. DESIGN EXTERIOR STUDS SUCH THAT THE DEFLECTION UNDER SL'S WIND LOAD DOES NOT EXCEED 1/360 OF THE SPAN OF THE STUD.

8.2.4. FINITE STUDS IN SUCH A WAY THAT THERE IS AT LEAST 300mm FROM THE END OF THE MEMBER TO THE CENTRE OF THE FIRST PERFORATION.

8.2.5. PROVIDE HORIZONTAL BRIDGING SPACED AT NOT MORE THAN 1200mm FOR STUDS.

8.2.6. DESIGN PERMANENT BRIDGING SPACED AT NOT MORE THAN 1200mm FOR STUDS.

8.2.7. SUBMIT SHOP AND ERECTION DRAWINGS BEARING THE SEAL OF A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO.

8.2.8. SUBMIT SHOP AND ERECTION DRAWINGS BEARING THE SEAL OF A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO.

8.2.9. AT THE REQUEST OF THE CONSULTANT SUBMIT CALCULATIONS BEARING THE SIGNATURE AND SEAL OF A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO.

8.2.10. NO STEEL SHALL BE CUT WITHOUT THE PERMISSION OF THE APPROVED DESIGN PROFESSIONAL.

8.2.11. PROVIDE COATINGS OF Z180 GALVANIZING IN ACCORDANCE WITH ASTM-A653/A653M FOR EXTERIOR BUILDING ENVELOPE.

8.2.12. PROVIDE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR SERVICES.

8.2.13. PROVIDE FRAMING AROUND ALL OPENINGS GREATER THAN 100mm. USE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS.

9. 060000 WOOD

9.1. MATERIALS

9.1.1. SAWN LUMBER

9.1.1.1. CONFORM TO THE REQUIREMENTS OF CSA-O141

9.1.1.2. SPECIES - SPRUCE-PINE-FIR

9.1.1.3. GRADE - No.1/NG2

9.1.1.4. ALL WOOD EXPOSED TO WEATHER AND EARTH TO BE PRESURE TREATED IN ACCORDANCE WITH CSA O80.

9.1.2. PLYWOOD SHEATHING

9.1.2.1. CONFORM TO THE REQUIREMENTS OF CSA O121 AND CSA O151

9.1.2.2. FLOOR AND ROOF SHEATHING TO BE TONGUE AND GROOVE.

9.1.3. WOOD JOISTS

9.1.3.1. JOISTS MUST MEET OR EXCEED THE DESIGN REQUIREMENTS SHOWN ON THE STRUCTURAL DRAWINGS AND BE IN CONFORMANCE WITH CSA O80.

9.1.4. LAMINATED VENEER LUMBER (LVL)

9.1.4.1. MUST MEET OR EXCEED THE DESIGN REQUIREMENTS SHOWN ON THE STRUCTURAL DRAWINGS, BE IN CONFORMANCE WITH CSA C08

9.1.4.2. BENDING MEMBERS PROPERTIES -  $E = 2.0 \times 10^6$  psi,  $F_b = 4.805$  ksi

9.1.5. LAMINATED STRAND LUMBER (LSL)

9.1.5.1. MUST MEET OR EXCEED THE DESIGN REQUIREMENTS SHOWN ON THE STRUCTURAL DRAWINGS, BE IN CONFORMANCE WITH CSA C08

9.1.5.2. BENDING MEMBERS PROPERTIES -  $E = 1.3 \times 10^6$  psi,  $F_b = 3.140$  ksi OR  $E = 1.55 \times 10^6$  psi,  $F_b = 4.295$  ksi

9.1.6. COMPRESSION MEMBERS PROPERTIES -  $E = 1.3 \times 10^6$  psi,  $F_c = 3.140$  ksi,  $F_{cl} = 2.235$  ksi

9.2. CONNECTIONS

9.2.1. ALL WOOD TO WOOD CONNECTIONS OR WOOD TO STEEL CONNECTIONS, UNLESS OTHERWISE NOTED, ARE TO BE THE APPROPRIATE FACE OR TOP MOUNT HANGERS, SIZED FOR THE CONNECTION FORCE AND MEMBER CONFIGURATION INDICATED.

9.2.2. NAILS ARE TO BE COMMON STEEL WIRE NAILS CONFORMING TO THE REQUIREMENTS OF ASTM F1667 OR CSA B111. NAILS SHALL HAVE A MINIMUM DIAMETER (CORRESPONDING TO NAIL LENGTH) AS FOLLOWS: 2.87mm (FOR 57mm/2'-0" LONG NAILS); 3.25mm (54mm/2'-10" LONG); 3.66mm (78mm/3'-0" LONG); 4.88mm (102mm/4'-0" LONG).

9.2.2.1. SUBSTITUTION OF THE ABOVE-SPECIFIED NAIL DIAMETERS IS SUBJECT TO APPROVAL BY THE ENGINEER. FOR PART 9 PLACING OF NAIL SUBSTITUTION MAY BE PERFORMED IN ACCORDANCE WITH CL. A-5.2.3.1.1 (2) IN THE APPENDIX OF NBC 2002.

9.2.3. WOOD SCREWS ARE TO CONFORM TO THE REQUIREMENTS OF ASTM B18.6.1. REFER TO CSA O80 FOR DIAMETER AND NAIL YIELD STRENGTH THAT WE PASS A 4mm SIEVE.

9.2.4. ALL NAILS AND SCREWS USED IN AN EXTERIOR APPLICATION OR USED WITH PRESERVATIVE TREATED WOOD SHALL BE APPROPRIATELY COATED WITH A PROTECTIVE COATING COMPATIBLE WITH THE WOOD PRESERVATIVE TREATMENT.

9.2.5. BOLTS, NUTS AND WASHERS: ASTM A307 OR SAE J429 GRADE 2.

9.2.6. LAG SCREWS ARE TO CONFORM TO THE REQUIREMENTS OF ASTM B18.2.1.

9.2.7. ALL LAG BOLTS, THRU BOLTS AND OTHER HARDWARE TO BE HOT DIPPED GALVANIZED.

9.2.8. ALL LAG BOLTS SHALL HAVE SHARP THREADS FOR AT LEAST ONE-HALF THE TOTAL BOLT LENGTH, UP TO 162 mm (6").

9.2.9. THRU BOLTS, LAG BOLTS WITH FULL THREADS OR INSUFFICIENT THREAD LENGTH WILL BE REJECTED OUTRIGHT, UNLESS OTHERWISE APPROVED BY THE APPROVED DESIGN PROFESSIONAL. ALL NAILS ARE TO HAVE FULL ROUND HEADS; CLIPPED HEAD NAILS ARE NOT ACCEPTABLE. NAILS ARE TO BE DRIVEN FLUSH; DO NOT OVERDRIVE NAILS.

9.2.10. DRIVEN DOWN NAILS OR DOUBLE STUDS AT THE END OF THE SHEARWALL, UNLESS NOTED OTHERWISE, SHOULD THE HOLD DOWN BE ACCEPTED INWARD FROM THE WALL END DUE TO FIELD CONDITIONS. THE SHEATHING SHALL BE NAILED TO THE DOUBLE STUDS CARRYING THE HOLD DOWN WITH EDGE NAIL SPACING.

9.2. EXECUTION

9.2.1. PROTECT ALL WOOD PRODUCTS FROM DAMAGE AND STAINING DUE TO WETTING AND MOISTURE.

9.2.2. BEFORE INSTALLING DECORATIVE SHEATHING FROM EXCESSIVE MOISTURE UNTIL FINAL WATERPROOFING IS COMPLETE. ENSURE SURFACES THAT ARE TO RECEIVE FINISHES MEET MANUFACTURERS REQUIREMENTS FOR MAXIMUM MOISTURE CONTENT FOR THE FINISH SPECIFIED.

9.2.3. PRESERVATIVE TREATED WOOD SHALL BE TREATED TO A MINIMUM DIMENSION OF 2" (51mm). PRESERVATIVE TREATED FOR EXTERIOR APPLICATIONS SHALL NOT BE INCISED. IF INCISED LUMBER IS TO BE USED, CONFORM MEMBER SIZES WITH THE ENGINEER PRIOR TO CONSTRUCTION.

9.2.4. JOISTS, STUDS AND BUILT-UP BEAMS COMPRISED OF 2" (51mm) LUMBER MUST BEAR FULLY 38mm MINIMUM ON THE SUPPORT SURFACE. IF HANGERS ARE USED, THEY MUST ADEQUATELY SUPPORT THE FULL SHEAR CAPACITY OF THE MEMBER, UNLESS NOTED OTHERWISE.

9.2.5. PROVIDE APPROPRIATE FACE OR TOP MOUNT CONNECTORS AT ALL JOINTS TO JOIST, JOIST TO BEAM, AND BEAM TO POST CONNECTIONS UNLESS OTHERWISE NOTED.

9.2.6. NAIL ALL OTHER FRAMING IN ACCORDANCE WITH OBC CLAUSE 9.2.3.3 AND OBC TABLE 9.2.3.4.

9.2.7. THE NUMBER OF NAILS SPECIFIED IN TABLE 9.2.3.4 SHALL BE INCREASED BY 50% WHEN THE DIAMETER OF THE SUPPLIED NAILS DO NOT CONFORM TO THE DIAMETERS INDICATED ABOVE.

10. FOUNDATIONS

10.1. FOUND ALL FOOTINGS ON NATURALLY CONSOLIDATED UNDISTURBED SOIL, CAPABLE OF SAFELY SUSTAINING AN ULTIMATE BEARING VALUE OF 125 kPa AND AN ALLOWABLE BEARING VALUE OF 75 kPa.

10.2. FOUNDATION SHALL BE PROTECTED FROM FREEZING BELOW THE LEVEL AT WHICH POTENTIAL DAMAGE RESULTING FROM FROST ACTION CAN OCCUR, BUT A

## ABBREVIATIONS

TD0001

|            |                                             |                   |                                   |
|------------|---------------------------------------------|-------------------|-----------------------------------|
| Ⓐ          | = AT                                        | DS                | = DRAG STRUT                      |
| ABOLT      | = ANCHOR BOLT                               | DWG(S)            | = DRAWING(S)                      |
| ADJ        | = ADJUSTABLE                                | DWL(S)            | = DOWEL(S)                        |
| ALT        | = ALTERNATE                                 | EA                | = EACH                            |
| ARCH       | = ARCHITECTURAL                             | EF                | = EACH FACE                       |
| ASL        | = ACCUMULATED SNOW LOAD                     | EW                | = EACH WAY                        |
| B          | = BOTTOM                                    | EL                | = ELEVATION                       |
| BEW        | = BOTTOM EACH WAY                           | ELEC              | = ELECTRICAL                      |
| BL         | = BOTTOM LOWER LAYER                        | ELEV              | = ELEVATOR                        |
| BUL        | = BOTTOM UPPER LAYER                        | EW                | = EAST-WEST                       |
| BLDG       | = BUILDING                                  | EQ                | = EQUAL                           |
| BM         | = BEAM                                      | EXIST             | = EXISTING                        |
| BP/L, BSPL | = BASE OR BEARING PLATE                     | EXPT              | = EXPANSION JOINT                 |
| BSMT       | = BASEMENT                                  | EXT               | = EXTERIOR                        |
| ct/c       | = CENTRE TO CENTRE                          | FF                | = FAR                             |
| c/w        | = COMPLETE WITH                             | FDN               | = FOUNDATION                      |
| C          | = EPOXY COATED                              | FIN               | = FINISHED                        |
| Ct, Pl, Af | = FACTORED COMPRESSION OR AXIAL FORCE, KN   | FL                | = FLOOR                           |
| CANT       | = CANTILEVER                                | FTG               | = FOOTING                         |
| CFW        | = COLD-FORMED STUD WALL                     | FW                | = FOUNDATION WALL                 |
| CA         | = COLUMN ABOVE                              | f <sub>c</sub>    | = CONCRETE STRENGTH, MPa          |
| CB         | = COLUMN BELOW                              | GA                | = GAUGE                           |
| CDL        | = COMPRESSION DEVELOPMENT LENGTH, mm        | GALV              | = GALVANIZED                      |
| CIF        | = CONFIRM IN FIELD                          | GEN               | = GENERAL                         |
| CJ         | = CONSTRUCTION JOINT                        | GL                | = GULLIM                          |
| CLS        | = COMPRESSION LAP SPICE, mm                 | H, HOR            | = HORIZONTAL                      |
| CLT        | = CROSS LAMINATED TIMBER                    | HGD               | = HOT DIP GALVANIZED              |
| CLTW       | = CROSS LAMINATED TIMBER WALL               | HEF, H EF         | = HORIZONTAL EACH FACE            |
| COL        | = COLUMN                                    | HEE               | = HOOKED EACH END                 |
| COMP       | = COMPRESSION                               | HF                | = FACTORED HOR FORCE, KN          |
| CONC       | = CONCRETE                                  | HSC               | = HORIZONTALLY SLOTTED CONNECTION |
| CONSTR     | = CONSTRUCTION                              | IF                | = INSIDE FACE                     |
| CONT       | = CONTINUOUS                                | INT               | = INTERIOR                        |
| CW         | = CONCRETE WALL                             | J                 | = JOINT                           |
| DET        | = DETAIL                                    | KN                | = KILOWEIGHTON                    |
| DEV        | = DEVELOPMENT                               | kg                | = KILOGRAM                        |
| DIA        | = DIAMETER                                  | knm               | = KILOWEIGHTON METRES             |
| DIA Ø      | = (Ø) DIAMETER                              | kn/m <sup>2</sup> | = KN PER SQUARE METRE             |
| DM         | = DIMENSION                                 | kn/m              | = KN PER METRE                    |
| DJ         | = DOUBLE JOIST                              | kPa               | = KILOPASCAL                      |
| DL         | = DEAD LOAD                                 |                   |                                   |
| DLH        | = DEVELOPMENT LENGTH FOR STANDARD HOOKS, mm |                   |                                   |
| DO         | = DITTO                                     |                   |                                   |

## FOOTING ADJACENT TO EXCAVATION

TD3101

ADJUST FOOTING ELEVATIONS SHOWN ON DRAWINGS IF NECESSARY TO MAINTAIN THE MAX. 7 TO 10 SLOPE BETWEEN FOOTINGS AND ADJACENT EXCAVATIONS FOR DRAINS OR OTHER ITEMS

### RELATION TO ADJACENT FOOTINGS AND EXCAVATIONS

RELATION TO SERVICES

#### NOTES:

- WHERE MECH SERVICES UNDERMINE PAD FOOTINGS, EXTEND EXCAVATION BELOW SLOPE OF REPOSE AND RAISE GRADE WITH EITHER LEAN MIX, ENGINEERED FILL (IF APPLICABLE) OR OVERPOUR FOOTING.
- DO NOT PLACE SERVICE PIPES UNDER PAD FOOTINGS.
- THE PROVISIONS NOTED ABOVE REGARDING THE PERMISSIBLE SOIL SLOPES ARE BASED ON THE STRUCTURAL REQUIREMENTS ONLY. CONTRACTORS ARE RESPONSIBLE FOR FOLLOWING ALL MINISTRY OF LABOUR REQUIREMENTS RELATED TO EXCAVATIONS AND TRENCHING.

## SUMP PITS AND TRENCHES

TD0322

#### SUMP PIT NOTES:

- REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SUMP PIT LOCATIONS.
- WHERE SUMP PITS UNDERMINE STRIP OR PAD FOOTINGS, LOWER THE US OF FOOTINGS ELEVATIONS FROM THOSE SHOWN ON PLAN AS PER TD3101.
- THE SUMP PITS DO NOT HAVE TO BE CAST IN PLACE REINFORCED CONCRETE. REFER TO MECHANICAL SPECIFICATIONS FOR REQUIREMENTS.

ABBREVIATIONS

TD3104

|                           |                                               |
|---------------------------|-----------------------------------------------|
| LL                        | = LIVE LOAD                                   |
| LG                        | = LONGS                                       |
| LLV                       | = LONG LEGS VERTICAL                          |
| LLH                       | = LONG LEGS HORIZONTAL                        |
| LW                        | = LIGHT-WOOD WALL                             |
| MC, $\blacktriangleright$ | = MOMENT CONNECTION                           |
| MECH                      | = MECHANICAL                                  |
| MEW                       | = MIDDLE EACH WAY                             |
| MEZZ                      | = MEZZANINE                                   |
| MID                       | = MIDDLE                                      |
| MISC                      | = MISCELLANEOUS                               |
| ML                        | = MIDDLE LAYER                                |
| mm                        | = MILLIMETRE                                  |
| MOM                       | = MOMENT                                      |
| m                         | = METRE, METRIC                               |
| MPa                       | = MEGAPASCAL                                  |
| MW                        | = MASONRY WALL                                |
| MF                        | = FACTORED MOMENT                             |
| MX, MY                    | = FACTORED MOMENT ABOUT X-AXIS OR Y-AXIS, KNm |
| MFW                       | = MASONRY FOUNDATION WALL                     |
| MRW                       | = MASONRY RETAINING WALL                      |
| N                         | = NETWORKS                                    |
| NF                        | = NEAR FACE                                   |
| NC                        | = NOT IN CONTRACT                             |
| NLT                       | = NAIL LAMINATED TIMBER                       |
| N/S                       | = NORTH/SOUTH                                 |
| NTS                       | = NOT TO SCALE                                |
| OF                        | = OUTSIDE FACE                                |
| OWSJ                      | = OPEN WEB STEEL JOISTS                       |
| OPEN                      | = OPENING                                     |
| PL                        | = PLATE                                       |
| PC                        | = PRECAST                                     |
| PROJ                      | = PROJECTION                                  |
| R                         | = REACTION                                    |
| RAD                       | = RADIUS                                      |
| REF                       | = REFERENCE                                   |
| REINF                     | = REINFORCE, REINFORCEMENT                    |
| REQ'D                     | = REQUIRED                                    |
| REV                       | = REVISION, REVISED                           |
| RF                        | = FACTORED REACTION FORCE, KN                 |
| rw, RW                    | = REINFORCED WITH                             |
| RW                        | = RETAINING WALL                              |
| SECT                      | = SECTION                                     |
| SDF                       | = STEP DOWN FOOTING                           |

|           |                                        |
|-----------|----------------------------------------|
| SIM       | = SIMILAR                              |
| SIP       | = STRUCTURALLY INSULATED PANEL         |
| SL        | = SNOW LOAD                            |
| SOG       | = SLAB ON GRADE                        |
| SPECS     | = SPECIFICATIONS                       |
| SQ        | = SQUARE                               |
| STD       | = STANDARD                             |
| STRUCT    | = STRUCTURAL                           |
| SW        | = SHEAR WALL OR STUD WALL              |
| T         | = TOP                                  |
| TD        | = TYPICAL DETAIL                       |
| TDL       | = TENSION DEVELOPMENT LENGTH, mm       |
| TDL, TOS  | = TOP OF SLAB                          |
| TEN       | = TENSION                              |
| TEW       | = TOP EACH WAY                         |
| TM/       | = FACTORED TORSIONAL MOMENT, KNm       |
| TI        | = FACTORED TENSION FORCE, KN           |
| TJ        | = TIE JOIST                            |
| TLL       | = TOP LOWER LAYER                      |
| TUL       | = TOP UPPER LAYER                      |
| TEMP      | = TEMPERATURE                          |
| TLS       | = TENSION LAP SPICE, mm                |
| TYPR      | = TYPICAL                              |
| UL        | = UPPER LAYER                          |
| UN, UNO   | = UNLESS NOTED OTHERWISE               |
| US        | = UNDERSIDE                            |
| VF        | = FACTORED SHEAR OR VERTICAL FORCE, KN |
| V         | = VERTICAL                             |
| VER, V EF | = VERTICAL, EACH FACE                  |
| VB        | = VERTICAL BRACE/RACING                |
| VSC       | = VERTICALLY SLOTTED CONNECTION        |
| WPL       | = WALL PLATE                           |
| WW        | = WOOD WALL                            |
| WWF       | = WELDED WIRE FABRIC                   |
| WWM       | = WELDED WIRE MESH                     |
| WI, w/    | = WITH                                 |
| wD, wL    | = UNIFORMLY DISTRIBUTED LOADS          |

WALL FOOTINGS

TD3104

**STRIP FOOTINGS FOR CONCRETE WALLS**

PROVIDE VERTICAL DOWELS TO MATCH VERTICAL WALL REINFORCING

100 MIN TYP. UN

PROVIDE CONT. 30x309 KEY

1-15M CONT.

250 TYP. UN

**STRIP FOOTING FOR ALL LOAD BEARING MASONRY WALLS**

DOWEL TO MATCH VERT. REINF. IN WALL

100 TYP. UN

250 TYP. UN

2-15M CONT.

**TYPICAL STEPPING DETAIL FOR STRIP FOOTINGS**

MARKED SDF (STEP DOWN FOOTING) ON PLAN

800 MIN

600 MAX

1000 MIN

10

STAGGERED U/S FOOTING

IF TOTAL HEIGHT OF STEPPING "D" EXCEEDS 2000, PROVIDE INTERMEDIATE HORIZONTAL SECTIONS WITH A MINIMUM HORIZONTAL LENGTH OF 1200 BETWEEN STEPPED FOOTINGS.

CONFIRM WITH GEOTECHNICAL REPORT

**PIPES CROSSING BENEATH CONT. WALL FOOTINGS**

WHEN "B" EXCEEDS 2000 mm FOOTING SHALL BE STEPPED DOWN FROM BOTH SIDES

PROVIDE PVC SLEEVE, ID 100mm LARGER THAN SERVICE PIPE. FILL GAP WITH FIBERGLASS. WRAP WITH GEOCLOTH TO PREVENT FINE SOIL FROM ENTERING.

BACKFILL WITH LEAN MIX CONCR. UNDER EXCAVATION RUNS ACROSS AND WHERE THE LINE OF FOOTING

150mm

WALL FTG

UNDISTURBED SOIL

SERVICE PIPE

SLAB ON GRADE - JOINTS, STEPS, SAWCUTS

TD0320

**TYPICAL SAWCUT**

REINF. - SEE PLAN

500

150

25 COVER

10M@250 MAX

1-15M T&B

10M@250 EV

STEPS UP TO 750

STEPS OVER 750 BUT NOT GREATER THAN 2000

PROVIDE SHORING DURING BACKFILLING

COVER 50 BUT NOT GREATER THAN 2000

SAWCUT @ 28 TIMES SLAB THICKNESS MAX. AND LESS THAN 4500 d/c

REINF. AT MID DEPTH. SEE PLAN (DO NOT CUT)

NOTE: UNO. REFER TO ARCH FOR SAWCUT LAYOUT

POUR CONCRETE AROUND COLUMN MIN. 7 DAYS AFTER POURING SURROUNDING SLAB

800

COLUMN

EXTEND SAWCUT AS CLOSE AS PRACTICAL WITHOUT MARRING COLUMN

SAWCUT SHOWN THUS TYP.

300 MIN

HSS OR CONC. COLUMN

WIDE FLANGE COLUMN

ISOLATION JOINT AROUND COLUMN

SAWCUTS AT COLUMN

[illegible]



GENERAL NOTES

1. NO DRAWINGS WILL BE FOR CONSTRUCTION UNLESS STAMPED BY THE QUALIFIED DESIGN PROFESSIONAL (QDP) AND ISSUED FOR THAT PURPOSE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND VERIFYING ALL LEVELS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE QUALIFIED DESIGN PROFESSIONAL PRIOR TO COMMENCING WORK.
3. DO NOT SCALE THE DRAWINGS.

QUALIFIED DESIGN PROFESSIONAL (QDP)

- 1 ALL END USERS REQUIRE A QUALIFIED DESIGN PROFESSIONAL –  
EITHER AN ARCHITECT, ENGINEER, OR OTHER PROFESSIONAL AS  
DESIGNATED BY THE RELEVANT PROFESSIONAL ASSOCIATIONS AND  
HAVING THE NECESSARY LICENSES.
- 2 THE QUALIFIED DESIGN PROFESSIONAL MUST REVIEW AND UPDATE  
THE PRE-APPROVED DESIGN DRAWINGS TO ALIGN WITH SITE  
CONDITIONS, VERIFY ADEQUACY OF THE DESIGN, AND ADDRESS  
SELECTIONS OR MODIFICATIONS DESIRED, AND ENSURE CODE  
COMPLIANCE WITH ALL APPLICABLE CODES, BYLAWS, AND OTHER  
RELEVANT STANDARDS.
- 3 THE QUALIFIED DESIGN PROFESSIONAL WILL TAKE RESPONSIBILITY  
FOR THE ENTIRE SET OF DOCUMENTS UPON UPDATING. THIS INCLUDES  
APPLYING THE ARCHITECT'S OR ENGINEER'S SEAL AS REQUIRED BY  
THE RELEVANT PROFESSIONAL ASSOCIATION AND ANY LOCALITIES  
HAVING JURISDICTION (AHS). QUALIFIED DESIGN PROFESSIONALS  
ARE RESPONSIBLE FOR COMPLYING WITH THE RELEVANT REGULATORY  
ACTS, BYLAWS, AND PROFESSIONAL REQUIREMENTS APPLICABLE TO  
THEIR JURISDICTION.
- 4 THE END USER OR THE QUALIFIED DESIGN PROFESSIONAL MAY SUBMIT  
THE FINALIZED DESIGN FOR A BUILDING PERMIT TO THE APPROPRIATE  
LOCAL BUILDING JURISDICTION.
- 5 CONSTRUCTION REVIEW IS THE RESPONSIBILITY OF THE QUALIFIED  
DESIGN PROFESSIONAL IN ACCORDANCE WITH APPLICABLE  
RELEVANT REQUIREMENTS AND PROFESSIONAL PRACTICE  
STANDARDS.

| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
|-----|------|-------------|

**PROJECT:**

## City of Toronto - Multiplex

## FOURPLEX NARROW

**SHEET TITLE:**

## GENERAL NOTES AND TYPICAL DETAILS

PROJECT NO:

SCALE: N.T.S

**SHEET NO:**

S-002

| <p><b>ANCHOR RODS AND BASEPLATES FOR GRAVITY COLUMNS</b></p> <p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>THE BASE PLATE DIMENSION GIVEN FIRST IS PARALLEL TO THE COLUMN WEB, OR TO THE LONG DIMENSION OF THE COLUMN.</li> <li>IF THE COLUMN IS SQUARE OR ROUND, THE DIMENSION GIVEN FIRST IS PARALLEL TO THE NORTH-SOUTH AXIS.</li> <li>TYPICAL MINIMUM EDGE DISTANCE "x" FROM CENTRE OF HOLE TO EDGE OF THE PLATE TO BE 1.2 x HOLE DIAMETER AT ROLLED, SAWN OR CUT EDGES, AND 1.6 x HOLE DIAMETER AT SHEARED EDGES.</li> <li>CONNECT COLUMN TO THE BASE PLATE FOR BASE REACTIONS NOTED IN THE COLUMN SCHEDULE. IF NONE SPECIFIED, FIT COLUMN TO BEAR AND WELD FOR A SHEAR FORCE EQUAL TO 2% OF THE FACTORED AXIAL LOAD.</li> <li>REFER TO TABLE BELOW FOR MAXIMUM ANCHOR ROD HOLE SIZES AND MINIMUM PLATE WASHER SIZES. REFER TO PROJECT SPECIFIC DETAILS FOR WELD WASHERS AT BRACE OR FRAME LOCATIONS.</li> <li>CIRCULAR (DIAMETER) OR SQUARE (SIDE) WASHERS MEETING THE MIN. WASHER SIZE ARE ACCEPTABLE.</li> <li>DO NOT WELD WASHERS TO THE BASE PLATE UNLESS NOTED OTHERWISE.</li> <li>FOR 1" DIAMETER ANCHOR RODS, 20mm DIAMETER HOLES MAY BE USED WITH ASTM A307 WASHERS IN PLACE OF FABRICATED PLATE WASHERS.</li> </ol> <table border="1"> <thead> <tr> <th>ANCHOR ROD DIAMETER (in.)</th> <th>MAX HOLE DIAMETER</th> <th>MIN. WASHER SIZE</th> <th>MIN. WASHER THICKNESS (1554 Gr.36)</th> <th>MIN. WASHER THICKNESS (1554 Gr.55)</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>33</td> <td>51</td> <td>5.4</td> <td>7.9</td> </tr> <tr> <td>1 1/4"</td> <td>40</td> <td>64</td> <td>7.9</td> <td>7.9</td> </tr> <tr> <td>1 1/2"</td> <td>46</td> <td>76</td> <td>9.5</td> <td>9.5</td> </tr> <tr> <td>1 3/4"</td> <td>52</td> <td>89</td> <td>13</td> <td>13</td> </tr> <tr> <td>1 7/8"</td> <td>59</td> <td>102</td> <td>13</td> <td>16</td> </tr> <tr> <td>2"</td> <td>70</td> <td>114</td> <td>16</td> <td>16</td> </tr> <tr> <td>2 1/4"</td> <td>83</td> <td>127</td> <td>19</td> <td>19</td> </tr> <tr> <td>2 1/2"</td> <td>95</td> <td>140</td> <td>19</td> <td>22</td> </tr> </tbody> </table> | ANCHOR ROD DIAMETER (in.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | MAX HOLE DIAMETER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | MIN. WASHER SIZE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | MIN. WASHER THICKNESS (1554 Gr.36) | MIN. WASHER THICKNESS (1554 Gr.55) | 1" | 33 | 51 | 5.4 | 7.9 | 1 1/4" | 40 | 64 | 7.9 | 7.9 | 1 1/2" | 46 | 76 | 9.5 | 9.5 | 1 3/4" | 52 | 89 | 13 | 13 | 1 7/8" | 59 | 102 | 13 | 16 | 2" | 70 | 114 | 16 | 16 | 2 1/4" | 83 | 127 | 19 | 19 | 2 1/2" | 95 | 140 | 19 | 22 | <p><b>COLD-FORMED STEEL - BEAM SUPPORTING JOISTS</b></p> <p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>CLIP ANGLE BETWEEN JOISTS FASTER TO BEAMS SCREW TO JOISTS</li> <li>JOISTS LAPPED OVER BEAM</li> <li>CONTINUOUS BRIDGING BETWEEN JOISTS, OR BLOCK EVERY OTHER SPACE</li> <li>JOIST TRACKS BACK-TO-BACK SCREW TOGETHER SCREW TO JOISTS FASTEN EACH TRACK TO BEAM ADJACENT TO JOISTS</li> <li>WEB STIFFENERS AS REQUIRED BY MANUFACTURER</li> <li>CLIP ANGLE BETWEEN JOISTS FASTER TO BEAMS SCREW TO JOISTS</li> <li>JOIST TRACKS BACK-TO-BACK SCREW TOGETHER SCREW TO JOISTS FASTEN EACH TRACK TO BEAM ADJACENT TO JOISTS</li> <li>WEB STIFFENERS AS REQUIRED BY MANUFACTURER</li> <li>CLIP ANGLE BETWEEN JOISTS FASTER TO BEAMS SCREW TO JOISTS</li> <li>JOIST TRACKS BACK-TO-BACK SCREW TOGETHER SCREW TO JOISTS FASTEN EACH TRACK TO BEAM ADJACENT TO JOISTS</li> <li>WEB STIFFENERS AS REQUIRED BY MANUFACTURER</li> </ol> | <p><b>COLD-FORMED STEEL - FRAMING AT WALLS</b></p> <p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>2 SCREWS AT EACH STUD TO JOIST BELOW</li> <li>STUD, ALIGN WITH JOIST BELOW</li> <li>WALL TRACK</li> <li>CLIP ANGLE BETWEEN JOISTS FASTER TO BEAMS SCREW TO JOISTS</li> <li>JOIST TRACKS BACK-TO-BACK SCREW TOGETHER SCREW TO JOISTS FASTEN EACH TRACK TO BEAM ADJACENT TO JOISTS</li> <li>WEB STIFFENERS AS REQUIRED BY MANUFACTURER</li> <li>CLIP ANGLE BETWEEN JOISTS FASTER TO BEAMS SCREW TO JOISTS</li> <li>JOIST TRACKS BACK-TO-BACK SCREW TOGETHER SCREW TO JOISTS FASTEN EACH TRACK TO BEAM ADJACENT TO JOISTS</li> <li>WEB STIFFENERS AS REQUIRED BY MANUFACTURER</li> <li>CLIP ANGLE BETWEEN JOISTS FASTER TO BEAMS SCREW TO JOISTS</li> <li>JOIST TRACKS BACK-TO-BACK SCREW TOGETHER SCREW TO JOISTS FASTEN EACH TRACK TO BEAM ADJACENT TO JOISTS</li> <li>WEB STIFFENERS AS REQUIRED BY MANUFACTURER</li> </ol> | <p><b>COLD-FORMED STEEL - BUILT-UP BEAMS</b></p> <p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>CLIP ANGLE BETWEEN JOISTS FASTER TO BEAMS SCREW TO JOISTS</li> <li>JOIST TRACKS BACK-TO-BACK SCREW TOGETHER SCREW TO JOISTS FASTEN EACH TRACK TO BEAM ADJACENT TO JOISTS</li> <li>WEB STIFFENERS AS REQUIRED BY MANUFACTURER</li> <li>CLIP ANGLE BETWEEN JOISTS FASTER TO BEAMS SCREW TO JOISTS</li> <li>JOIST TRACKS BACK-TO-BACK SCREW TOGETHER SCREW TO JOISTS FASTEN EACH TRACK TO BEAM ADJACENT TO JOISTS</li> <li>WEB STIFFENERS AS REQUIRED BY MANUFACTURER</li> <li>CLIP ANGLE BETWEEN JOISTS FASTER TO BEAMS SCREW TO JOISTS</li> <li>JOIST TRACKS BACK-TO-BACK SCREW TOGETHER SCREW TO JOISTS FASTEN EACH TRACK TO BEAM ADJACENT TO JOISTS</li> <li>WEB STIFFENERS AS REQUIRED BY MANUFACTURER</li> <li>CLIP ANGLE BETWEEN JOISTS FASTER TO BEAMS SCREW TO JOISTS</li> <li>JOIST TRACKS BACK-TO-BACK SCREW TOGETHER SCREW TO JOISTS FASTEN EACH TRACK TO BEAM ADJACENT TO JOISTS</li> <li>WEB STIFFENERS AS REQUIRED BY MANUFACTURER</li> </ol> |
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| <p><b>WOOD FRAMING (1 OF 2)</b></p> <p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>SEE PLANS FOR JOIST SIZE, SPACING, SPECIES AND LUMBER GRADE. SPACING NOT TO EXCEED 16" [406].</li> <li>UNLESS NOTED OTHERWISE ON THE DRAWINGS, PROVIDE BRIDGING AS PER THE DETAIL BELOW AND THE SPACING REQUIREMENTS OF NOTE 4.</li> <li>WHERE SPECIFIED ON THE DRAWINGS, PROVIDE STRAPPING AS PER THE DETAIL BELOW AND THE SPACING REQUIREMENTS OF NOTE 4.</li> <li>UNLESS NOTED OTHERWISE, JOISTS ARE TO BE LOCATED NOT MORE THAN 7'-0" FROM A SUPPORT AND SPACED AT NOT GREATER THAN 17'-0" o.c.</li> <li>WHERE HOLES ARE REQUIRED IN UNIFORMLY LOADED JOISTS FOR WIRING OR PLUMBING, THEIR DIAMETER SHALL NOT EXCEED ONE QUARTER OF THE JOIST DEPTH. CENTRE HOLES AT THE MID-DEPTH OF THE JOISTS, WITHIN THE MIDDLE TWO-THIRDS OF THE SPAN. HOLES SHALL BE SPACED NO CLOSER THAN A CLEAR DISTANCE OF ONE FULL JOIST DEPTH FROM ONE ANOTHER AS PER THE DETAIL BELOW.</li> <li>HOLES NOT CONFORMING TO THE REQUIREMENTS OF NOTE 6 MUST BE APPROVED BY THE CONSULTANT.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <p><b>WOOD FRAMING (2 OF 2)</b></p> <p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>SEE PLANS FOR JOIST SIZE, SPACING, SPECIES AND LUMBER GRADE. SPACING NOT TO EXCEED 16" [406].</li> <li>UNLESS NOTED OTHERWISE ON THE DRAWINGS, PROVIDE BRIDGING AS PER THE DETAIL BELOW AND THE SPACING REQUIREMENTS OF NOTE 4.</li> <li>WHERE SPECIFIED ON THE DRAWINGS, PROVIDE STRAPPING AS PER THE DETAIL BELOW AND THE SPACING REQUIREMENTS OF NOTE 4.</li> <li>UNLESS NOTED OTHERWISE, JOISTS ARE TO BE LOCATED NOT MORE THAN 7'-0" FROM A SUPPORT AND SPACED AT NOT GREATER THAN 17'-0" o.c.</li> <li>WHERE HOLES ARE REQUIRED IN UNIFORMLY LOADED JOISTS FOR WIRING OR PLUMBING, THEIR DIAMETER SHALL NOT EXCEED ONE QUARTER OF THE JOIST DEPTH. CENTRE HOLES AT THE MID-DEPTH OF THE JOISTS, WITHIN THE MIDDLE TWO-THIRDS OF THE SPAN. HOLES SHALL BE SPACED NO CLOSER THAN A CLEAR DISTANCE OF ONE FULL JOIST DEPTH FROM ONE ANOTHER AS PER THE DETAIL BELOW.</li> <li>HOLES NOT CONFORMING TO THE REQUIREMENTS OF NOTE 6 MUST BE APPROVED BY THE CONSULTANT.</li> </ol> | <p><b>WOOD FRAMING - BUILT-UP BEAMS</b></p> <p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>JOISTS SHALL BE MADE IN SUCH A WAY THAT:</li> <li>JOISTS SHALL BE LOCATED AS SHOWN ABOVE.</li> <li>JOISTS SHALL ONLY BE MADE IN MULTIPLE SPAN BEAMS WHICH ARE CONTINUOUS OVER THEIR SUPPORTS AS INDICATED ON PLAN. PILES OF BEAMS INDICATED AS SINGLE SPAN BEAMS SHALL NOT HAVE JOINTS.</li> <li>JOISTS SHALL NOT BE MADE NEAR END SUPPORTS.</li> <li>NOT MORE THAN ONE JOIST SHALL OCCUR IN ANY INDIVIDUAL MEMBER WITHIN ANY ONE SPAN NOR WITHIN TWO ADJACENT SPANS.</li> <li>JOISTS SHALL NOT BE MADE IN ADJACENT MEMBERS OF A BUILT-UP BEAM AT THE SAME LOCATION.</li> <li>NOT MORE THAN HALF OF THE MEMBERS WITHIN A BUILT-UP BEAM SHALL BE JOINED AT ANY ONE LOCATION.</li> <li>THE ABOVE REQUIREMENTS ARE BASED ON THE PROVISIONS OF PART 9 OF THE BUILDING CODE AND MAY NOT BE SUITABLE TO STRUCTURES FALLING OUTSIDE THE SCOPE OF PART 9.</li> </ol> | <p><b>WOOD FRAMING - SUPPORTING LEDGERS</b></p> <p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>SUITABLE FOR RESIDENTIAL FLOORS WITH LL=40 PSF (1.94kPa), DL=50 PSF (1.44kPa), MAXIMUM SPAN 12'-2" (4.8m).</li> <li>LEADER MATERIAL TO BE 2.0E, 9.4MPa (16.5ksi).</li> <li>EMBEDMENT DEPTH OF ANCHOR SHALL BE AS PER MANUFACTURER'S SPECIFICATIONS.</li> <li>PROVIDE SILL GASKET FOR BELOW GRADE APPLICATIONS.</li> <li>ADDITIONAL ANCHORS (IF REQUIRED) NOTED ON PLAN FOR TRANSFER OF DIAPHRAGM FORCES.</li> </ol> |                                    |                                    |    |    |    |     |     |        |    |    |     |     |        |    |    |     |     |        |    |    |    |    |        |    |     |    |    |    |    |     |    |    |        |    |     |    |    |        |    |     |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <p><b>STUD WALL - FLOOR FRAMING</b></p> <p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>SEE PLANS FOR JOIST SIZE, SPACING, SPECIES AND LUMBER GRADE. SPACING NOT TO EXCEED 16" [406].</li> <li>UNLESS NOTED OTHERWISE ON THE DRAWINGS, PROVIDE BRIDGING AS PER THE DETAIL BELOW AND THE SPACING REQUIREMENTS OF NOTE 4.</li> <li>WHERE SPECIFIED ON THE DRAWINGS, PROVIDE STRAPPING AS PER THE DETAIL BELOW AND THE SPACING REQUIREMENTS OF NOTE 4.</li> <li>UNLESS NOTED OTHERWISE, JOISTS ARE TO BE LOCATED NOT MORE THAN 7'-0" FROM A SUPPORT AND SPACED AT NOT GREATER THAN 17'-0" o.c.</li> <li>WHERE HOLES ARE REQUIRED IN UNIFORMLY LOADED JOISTS FOR WIRING OR PLUMBING, THEIR DIAMETER SHALL NOT EXCEED ONE QUARTER OF THE JOIST DEPTH. CENTRE HOLES AT THE MID-DEPTH OF THE JOISTS, WITHIN THE MIDDLE TWO-THIRDS OF THE SPAN. 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                                                                                                                                                                                                                                       | <p><b>STUD WALL - DETAILS</b></p> <p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>EDGES OF FLOOR AND ROOF SHEATHING TO BE TONGUE AND GROOVE.</li> <li>USE 2" NAILS OR 16" SCREWS FOR SHEATHING LESS THAN 2" THICK.</li> <li>USE 2" NAILS OR 16" SCREWS FOR 2" TO 1" SHEATHING.</li> <li>MINIMUM THICKNESS OF SUB-FLOOR SHALL BE 1/2" FOR JOIST SPACING UP TO 14" [356] AND 3/4" FOR JOIST SPACING OF 2'-0" [6</li></ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     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| 4PLEX NARROW ROOF MEMBER SCHEDULE (FACTORED LOADS) |                                                          |                        |       |                                                                                                              |  |                                        |
|----------------------------------------------------|----------------------------------------------------------|------------------------|-------|--------------------------------------------------------------------------------------------------------------|--|----------------------------------------|
| LABEL                                              | SECTION                                                  | REACTIONS<br>(kN, UNO) |       | COMMENTS                                                                                                     |  | FINAL DESIGN FOR<br>CONSTRUCTION (IFC) |
|                                                    |                                                          | LEFT                   | RIGHT |                                                                                                              |  |                                        |
| RJ1                                                | 302 JOIST @406 or<br>SLOPED ROOF JOISTS                  | 4                      | 4     | M <sub>u</sub> = 3 kN-m<br>V <sub>u</sub> = 4 kN<br>E <sub>u</sub> = 255 x 10 <sup>6</sup> N-mm <sup>2</sup> |  | BY EWP SUPPLIER                        |
| RB1                                                | (2) 44 x 302 LVL                                         | 10                     | 15    | SUPPORT WITH POSTS AS PER<br>PLAN                                                                            |  | AS SHOWN ON PLAN                       |
| RB2                                                | (2) 44 x 302 LVL                                         | 5                      | 5     | SUPPORT ROOF JOISTS w/<br>SLOPE-ABLE FACE MOUNT<br>HANGERS                                                   |  | AS SHOWN ON PLAN                       |
| RB3                                                | (2) 38 x 302 LVL                                         | 5                      | 5     | SUPPORT WITH POSTS AS PER<br>PLAN                                                                            |  | AS SHOWN ON PLAN                       |
| RB4                                                | (2) 600x200-48 +<br>(2) 600x150-48 BUILT-UP<br>CFS UNTEL | 5                      | 5     | SUPPORT WITH POSTS AS PER<br>PLAN                                                                            |  | BY CFS STUD SUPPLIER                   |

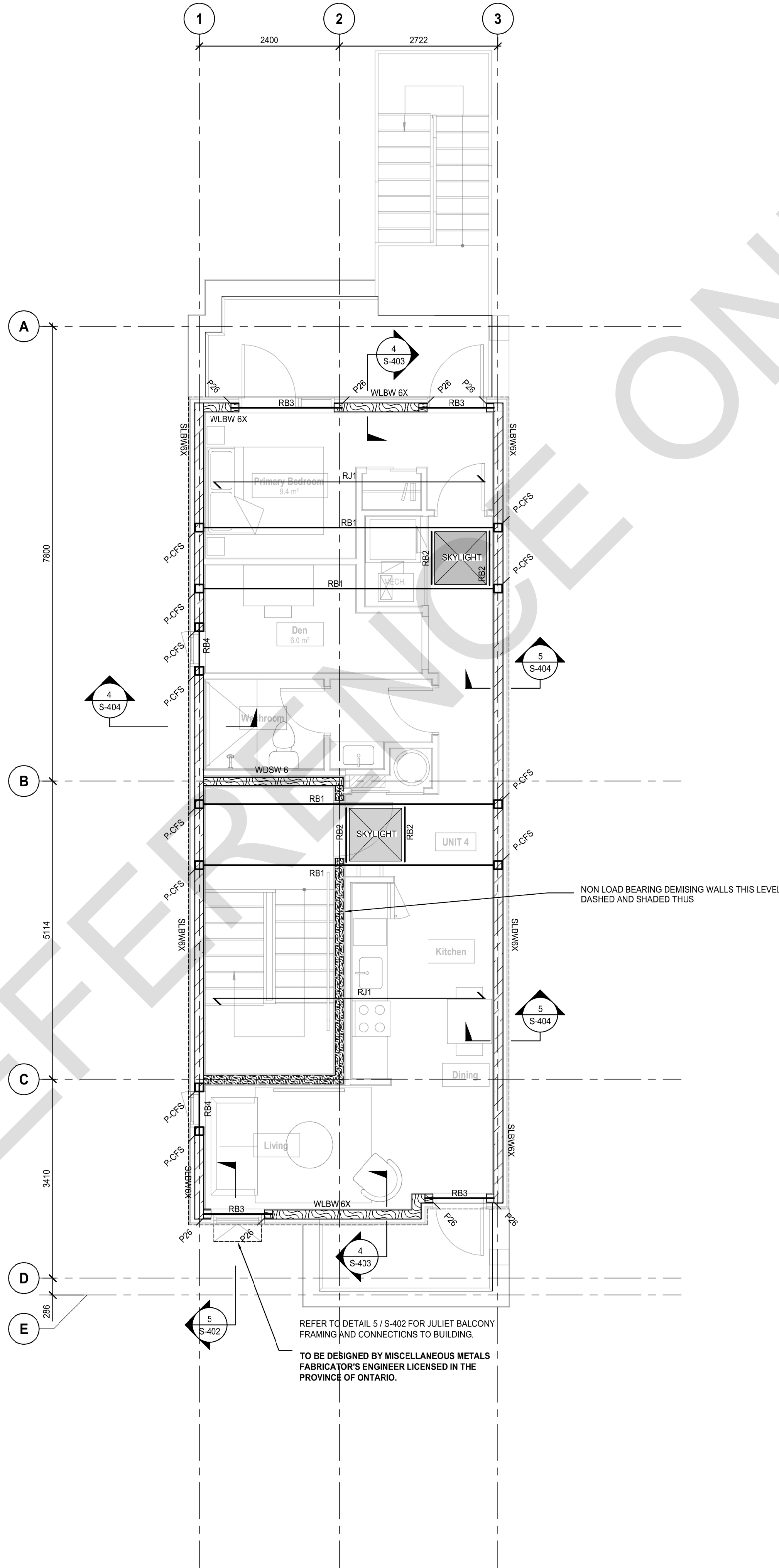
MEMBER SCHEDULE NOTES:

- LEFT AND RIGHT ENDS OF BEAMS ARE DEFINED BY THE ORIENTATION OF THE BEAM MARK ON PLAN. PLAN DOWN = LEFT, PLAN UP = RIGHT.
- PROVIDE APPROPRIATE HOLD-DOWN STRAPS, TIES AND ANCHORS WHERE UPLIFT FORCES ARE NOTED OR AT BACK SPAN SUPPORT OF CANTILEVERED BEAMS.
- WHERE REACTION FORCES ARE NOT SHOWN FOR WOOD BEAMS, BEAM CONNECTIONS SHALL BE DESIGNED FOR 70% OF THE SHEAR CAPACITY OF THE BEAM.

| WALL AND POST SCHEDULE |                                                                                                         |                                   |                      |
|------------------------|---------------------------------------------------------------------------------------------------------|-----------------------------------|----------------------|
| LABEL                  | ELEMENT                                                                                                 | COMMENTS                          | FINAL DESIGN (IFC)   |
| WLBW 6X                | 38 x 140 SPF @406 EXTERIOR LOAD BEARING STUD WALLS WITH 16mm PLYWOOD SHEATHING SHOWN TYP.               | TYPICAL EXTERIOR WOOD WALL        | AS SHOWN ON PLAN     |
| SLBW 6X                | 600x162-38 CFS STUDS @406 + 600x159-68 T&G TRACKS WITH 16mm NON-COMBUSTIBLE SHEATHING BY CFS SUPPLIER   | TYPICAL EXTERIOR CFS WALL         | BY CFS STUD SUPPLIER |
| WDSW 6                 | 38 x 140 SPF @406 STUD SHEAR WALL, CLAD ONE SIDE OF WALL WITH 12.7mm PLYWOOD SHEATHING FOR EXTENT SHOWN | INTERIOR LOAD BEARING SHEAR WALLS | AS SHOWN ON PLAN     |
| PI#4                   | (#) 38 x 89 SPF BUILT UP POST                                                                           |                                   | AS SHOWN ON PLAN     |
| PI#6                   | (#) 38 x 140 SPF BUILT UP POST                                                                          |                                   | AS SHOWN ON PLAN     |
| P-CFS                  | BUILT-UP CFS STUDS TO MATCH WALL WIDTH                                                                  |                                   | BY CFS STUD SUPPLIER |

ROOF LEVEL FRAMING NOTES

- LOADS USED IN THE DESIGN:  
SNOW: 1.06 kPa  
DEAD LOAD: 0.30 kPa (ROOFING)  
0.20 kPa (STRUCTURE)  
0.10 kPa (FINISHES)  
0.40 kPa (SUSPENDED)  
1.00 kPa (ROOF TOTAL)
- SOLAR PANEL ALLOWANCE OF 0.5 kPa HAS BEEN ASSESSED FOR ROOF FRAMING DESIGN.
- REFER TO ARCHITECTURAL DRAWINGS FOR DATUM ELEVATIONS.
- ALL NEW FLOOR SHEATHING TO BE 3/4" T&G FASTENED DIRECTLY TO ROOF JOISTS.
- ALL WOOD-TO-WOOD CONNECTIONS ARE TO BE MADE WITH APPROPRIATE TOP OR FACE MOUNT HANGERS.
- ALL TEMPORARY WORKS, INCLUDING SHORING IS THE RESPONSIBILITY OF THE CONTRACTOR.
- PROVIDE SOLID BLOCKING IN JOIST SPACE (SQUASH BLOCKS) AND CONTINUE ALL BUILT UP POSTS DOWN TO T/O FOUNDATION WALLS.
- BUILT-UP SPF POSTS MARKED "P38", "P46", ETC. DENOTES (3) 38x140, (4) 38x140, ETC.
- WHERE POSTS ARE NOT MARKED ON PLAN, PROVIDE MATCHING NUMBER OF BUILT-UP STUDS TO SUPPORT DIMENSIONAL LUMBER BEAMS AND MATCHING NUMBER OF STUDS PLUS (1) TO SUPPORT ENGINEERED LUMBER BEAMS, TYP.
- P-CFS NOTES BUILT-UP COLD FORMED STEEL POST BY SUPPLIER.
- REFER TO GENERAL NOTES AND TYPICAL DETAILS FOR ADDITIONAL INFORMATION.
- DO NOT SCALE STRUCTURAL DRAWINGS.





1. NO DRAWINGS WILL BE FOR CONSTRUCTION UNLESS STAMPED BY THE QUALIFIED DESIGN PROFESSIONAL (QDP) AND ISSUED FOR THAT PURPOSE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND VERIFYING ALL LEVELS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE QUALIFIED DESIGN PROFESSIONAL PRIOR TO COMMENCING WORK.
3. DO NOT SCALE THE DRAWINGS.

1. ALL END USERS REQUIRE A QUALIFIED DESIGN PROFESSIONAL. – EITHER AN ARCHITECT, ENGINEER, OR OTHER PROFESSIONAL AS DESIGNATED BY THE RELEVANT PROFESSIONAL ASSOCIATIONS AND THE AUTHORITY HAVING JURISDICTION.
2. THE QUALIFIED DESIGN PROFESSIONAL MUST REVIEW AND UPDATE THE PRE-APPROVED DESIGN DRAWINGS TO ALIGN WITH SITE CONDITIONS, VERIFY ASSUMPTIONS, MAKE ANY FINAL DESIGN SELECTIONS OR MODIFICATIONS DESIRED, AND ENSURE CODE COMPLIANCE WITH ALL APPLICABLE CODES, BYLAWS, AND OTHER REGULATIONS.
3. THE QUALIFIED DESIGN PROFESSIONAL WILL TAKE RESPONSIBILITY FOR THE ENTIRE SET OF DOCUMENTS ONCE UPDATED, THIS INCLUDES APPLYING THE ARCHITECT'S OR ENGINEER'S SEAL, AS REQUIRED BY THE APPLICABLE PROFESSIONAL BOARD OF REGULATION OR AUTHORITY HAVING JURISDICTION (AHJ). QUALIFIED DESIGN PROFESSIONALS ARE RESPONSIBLE FOR COMPLYING WITH THE RELEVANT REGULATORY ACTS, BYLAWS, AND PROFESSIONAL REQUIREMENTS APPLICABLE TO THEIR JURISDICTION.
4. THE QUALIFIED DESIGN PROFESSIONAL MAY SUBMIT THE FINALIZED DESIGN FOR A BUILDING PERMIT TO THE APPROPRIATE AUTHORITY HAVING JURISDICTION (AHJ). CONSTRUCTION REVIEW IS THE RESPONSIBILITY OF THE QUALIFIED DESIGN PROFESSIONAL IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS AND PROFESSIONAL PRACTICE STANDARDS.

[illegible]

| NO. | DATE | DESCRIPTION |
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**PROJECT:**

## City of Toronto - Multiplex

## FOURPLEX NARROW

**SHEET TITLE:**

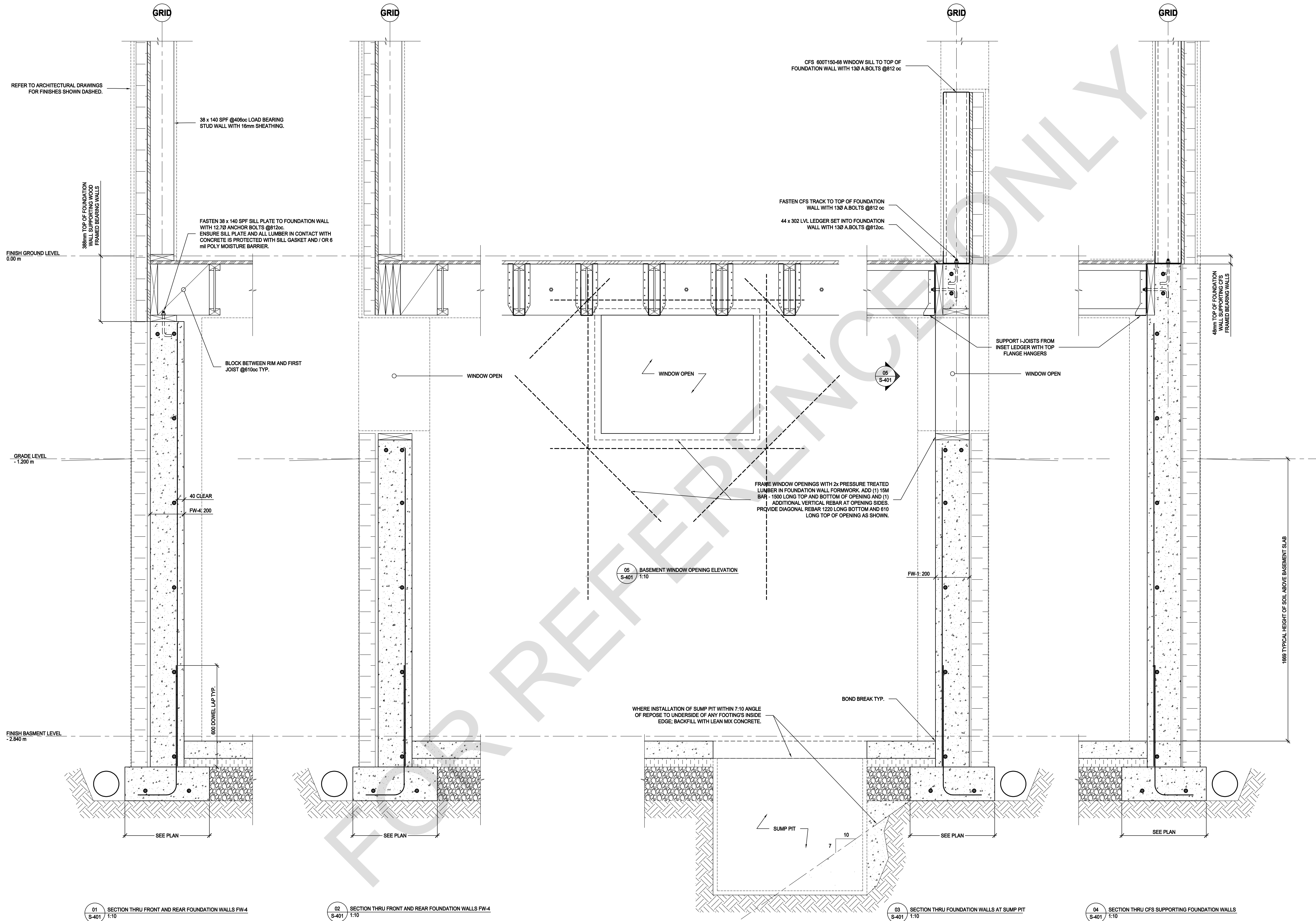
## FOUNDATION DETAILS

PROJECT NO:

SCALE: 1 : 10

**SHEET NO:**

# S-401





1. NO DRAWINGS WILL BE FOR CONSTRUCTION UNLESS STAMPED BY THE QUALIFIED DESIGN PROFESSIONAL (QDP) AND ISSUED FOR THAT PURPOSE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND VERIFYING ALL LEVELS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE QUALIFIED DESIGN PROFESSIONAL PRIOR TO COMMENCING WORK.
3. DO NOT SCALE THE DRAWINGS.

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- THE QUALIFIED DESIGN PROFESSIONAL MUST REVIEW AND UPDATE THE PRE-APPROVED DESIGN DRAWINGS TO ALIGN WITH STATE AND FEDERAL REQUIREMENTS, AND PROVIDE ANY NECESSARY DESIGN SELECTIONS OR MODIFICATIONS DESIRED, AND ENSURE CODE COMPLIANCE WITH ALL APPLICABLE CODES, BYLAWS, AND OTHER RELEVANT REGULATIONS.
- THE QUALIFIED DESIGN PROFESSIONAL WILL TAKE RESPONSIBILITY FOR THE ENTIRE SET OF DOCUMENTS UPON UPDATE. THIS INCLUDES APPLYING THE ARCHITECT'S OR ENGINEER'S SEAL, AS REQUIRED BY THE RELEVANT PROFESSIONAL ASSOCIATIONS AND THE AUTHORITY HAVING JURISDICTION (A/HJ). QUALIFIED DESIGN PROFESSIONALS ARE RESPONSIBLE FOR COMPLYING WITH THE RELEVANT REGULATORY REQUIREMENTS AND PROFESSIONAL REQUIREMENTS APPLICABLE TO THEIR JURISDICTION.
- THE END USER OR THE QUALIFIED DESIGN PROFESSIONAL MAY SUBMIT A REQUEST FOR A PERMIT TO THE A/HJ TO OBTAIN A PERMIT TO THE APPROPRIATE AUTHORITY HAVING JURISDICTION (A/HJ).
- CONSTRUCTION REVIEW IS THE RESPONSIBILITY OF THE QUALIFIED DESIGN PROFESSIONAL IN ACCORDANCE WITH THE APPLICABLE REGULATORY REQUIREMENTS AND PROFESSIONAL PRACTICE STANDARDS.

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| NO. | DATE | DESCRIPTION |
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**PROJECT:**

# City of Toronto - Multiplex

## FOURPLEX NARROW

**SHEET TITLE:**

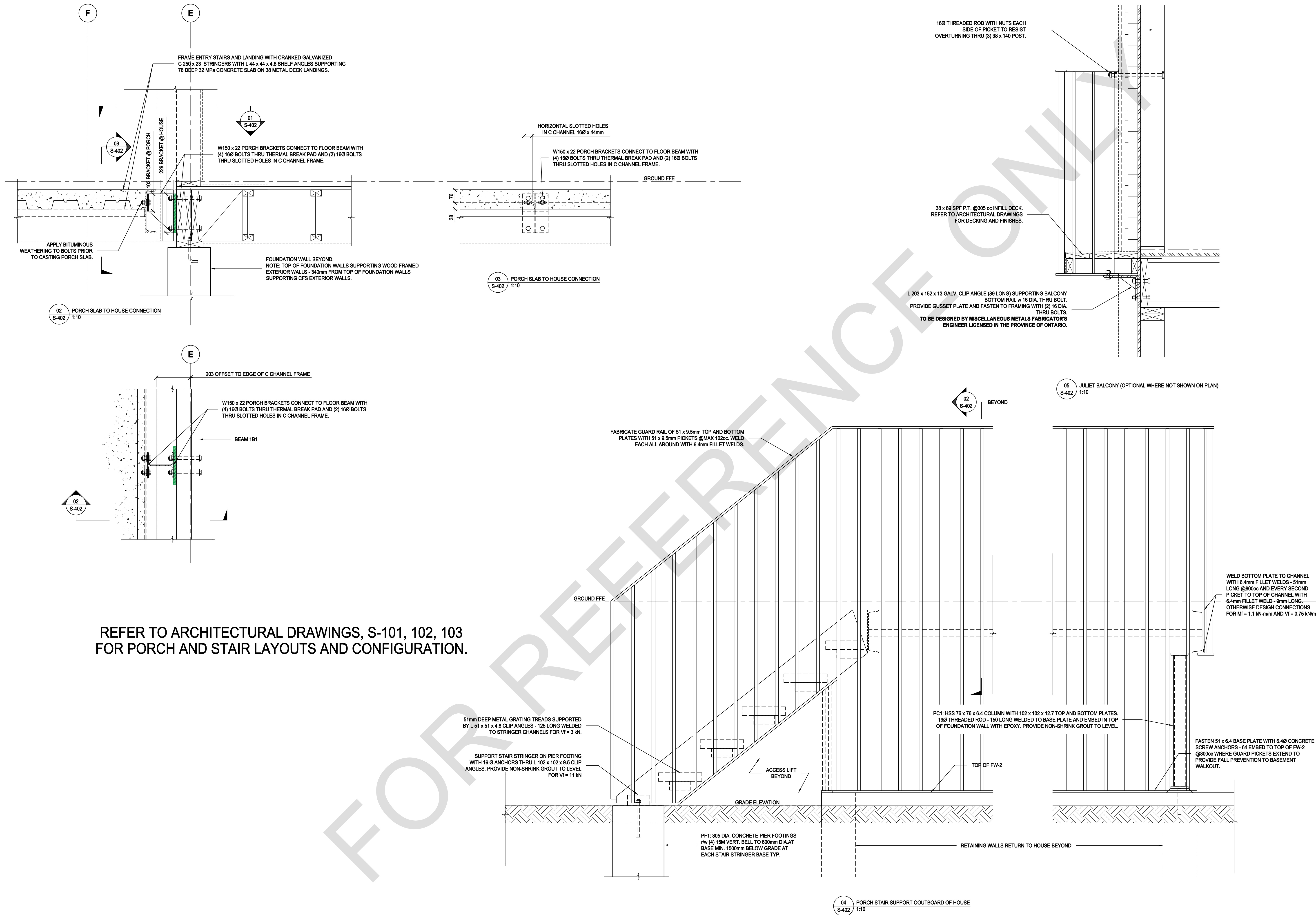
## ENTRY PORCH AND EGRESS STAIR SUPPORT DETAILS

PROJECT NO:

SCALE: 1 : 10

**SHEET NO:**

# S-402





1. NO DRAWINGS WILL BE FOR CONSTRUCTION UNLESS STAMPED BY THE QUALIFIED DESIGN PROFESSIONAL (QDP) AND ISSUED FOR THAT PURPOSE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND VERIFYING ALL LEVELS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE QUALIFIED DESIGN PROFESSIONAL PRIOR TO COMMENCING WORK.
3. DO NOT SCALE THE DRAWINGS.

1. ALL END USERS REQUIRE A QUALIFIED DESIGN PROFESSIONAL – EITHER AN ARCHITECT, ENGINEER, OR OTHER PROFESSIONAL AS DESIGNATED BY THE RELEVANT PROFESSIONAL ASSOCIATIONS AND REGULATORY REQUIREMENTS HAVING JURISDICTION (AHJ).
2. THE QUALIFIED DESIGN PROFESSIONAL MUST REVIEW AND UPDATE THE PRE-APPROVED DESIGN DRAWINGS TO ALIGN WITH SITE CONDITIONS, VERIFY ASSUMPTIONS, MAKE ANY FINAL DESIGN SELECTIONS OR MODIFICATIONS DESIRED, AND ENSURE CODE COMPLIANCE WITH ALL APPLICABLE CODES, BYLAWS, AND OTHER REGULATIONS.
3. THE QUALIFIED DESIGN PROFESSIONAL WILL TAKE RESPONSIBILITY FOR THE ENTIRE SET OF DOCUMENTS (ONCE UPDATED). THIS INCLUDES ANY AND ALL ARCHITECTURAL, ENGINEERING, AND SURVEYING AS WELL AS THE RELEVANT PROFESSIONAL ASSOCIATION AND THE AUTHORITIES HAVING JURISDICTION (AHJ). QUALIFIED DESIGN PROFESSIONALS ARE RESPONSIBLE FOR COMPLYING WITH THE RELEVANT REGULATORY ACTS, BYLAWS, AND PROFESSIONAL REQUIREMENTS APPLICABLE TO THEIR JURISDICTION.
4. THE END USER OR THE QUALIFIED DESIGN PROFESSIONAL MAY SUBMIT THE FINALIZED DESIGN FOR A BUILDING PERMIT TO THE APPROPRIATE AUTHORITY HAVING JURISDICTION (AHJ).
5. CONSTRUCTION REVIEW AND VERIFICATION OF THE QUALIFIED DESIGN PROFESSIONAL'S RESPONSIBILITY IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS AND PROFESSIONAL PRACTICE STANDARDS.

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**PROJECT:**

City of Toronto - Multiplex

## FOURPLEX NARROW

**SHEET TITLE:**

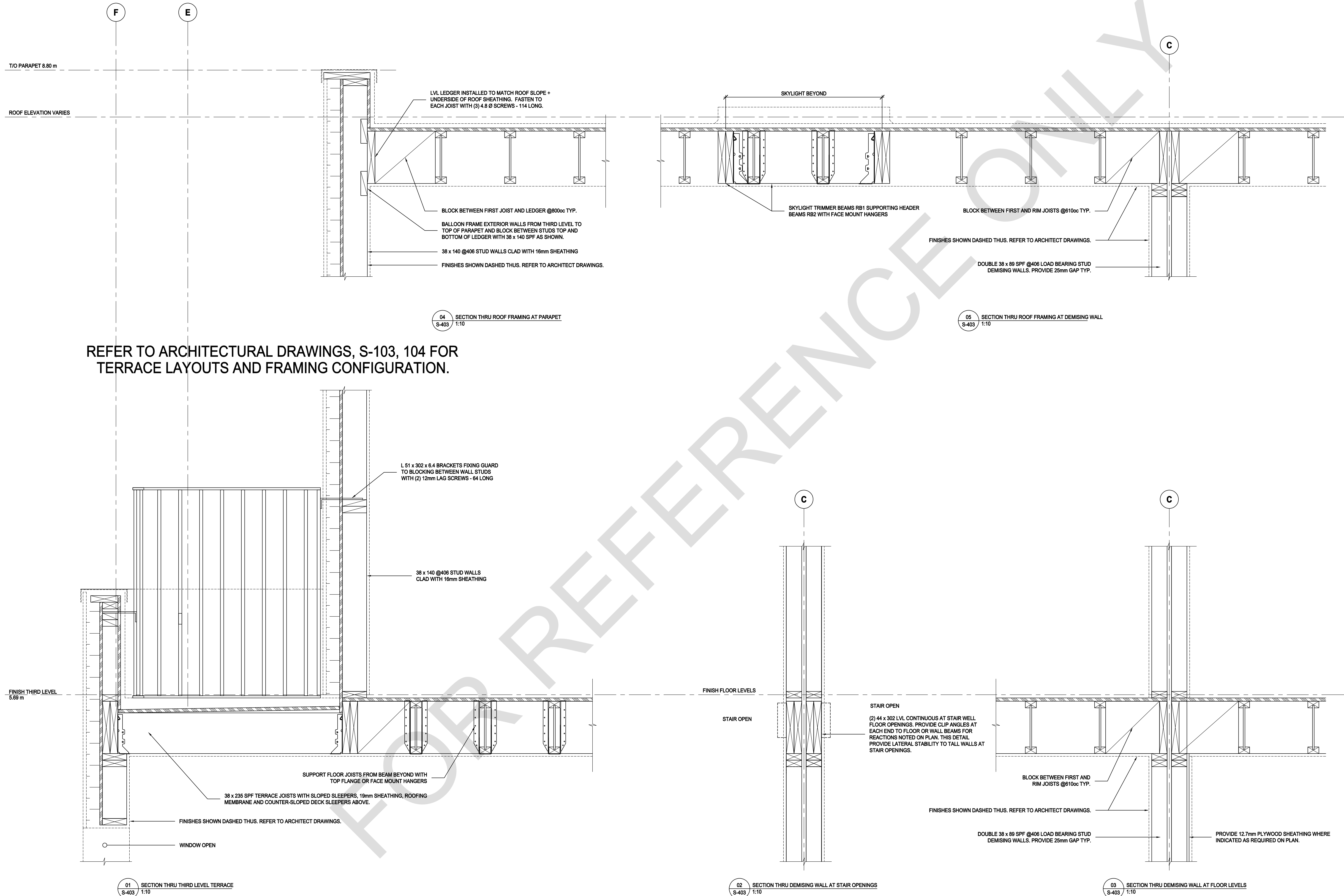
## WOOD FRAMING DETAILS

PROJECT NO: 250580

1 : 10

SHEET NO:

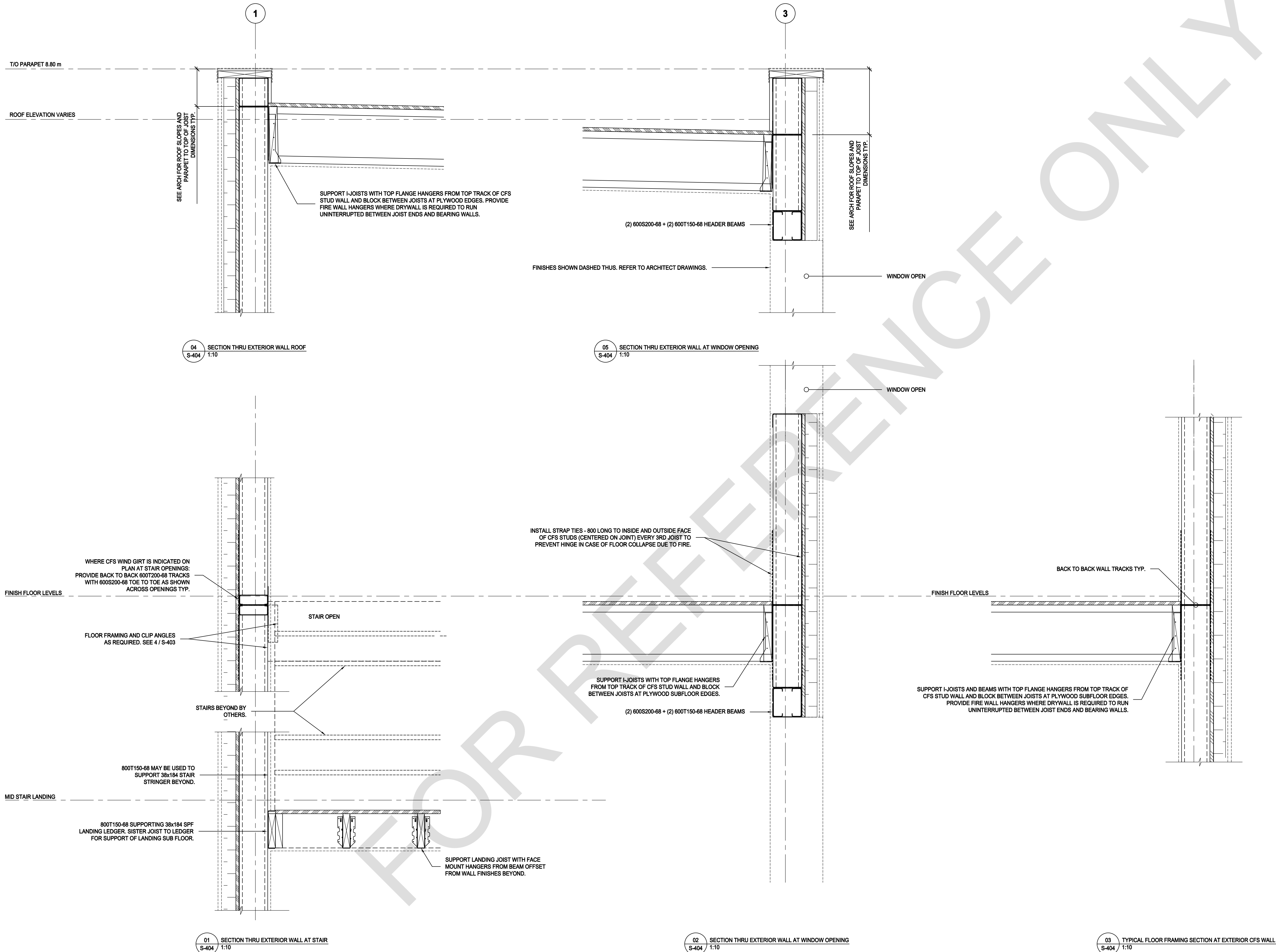
S-403





| NO. | DATE | DESCRIPTION |
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# S-404





PROFESSIONAL SEAL:

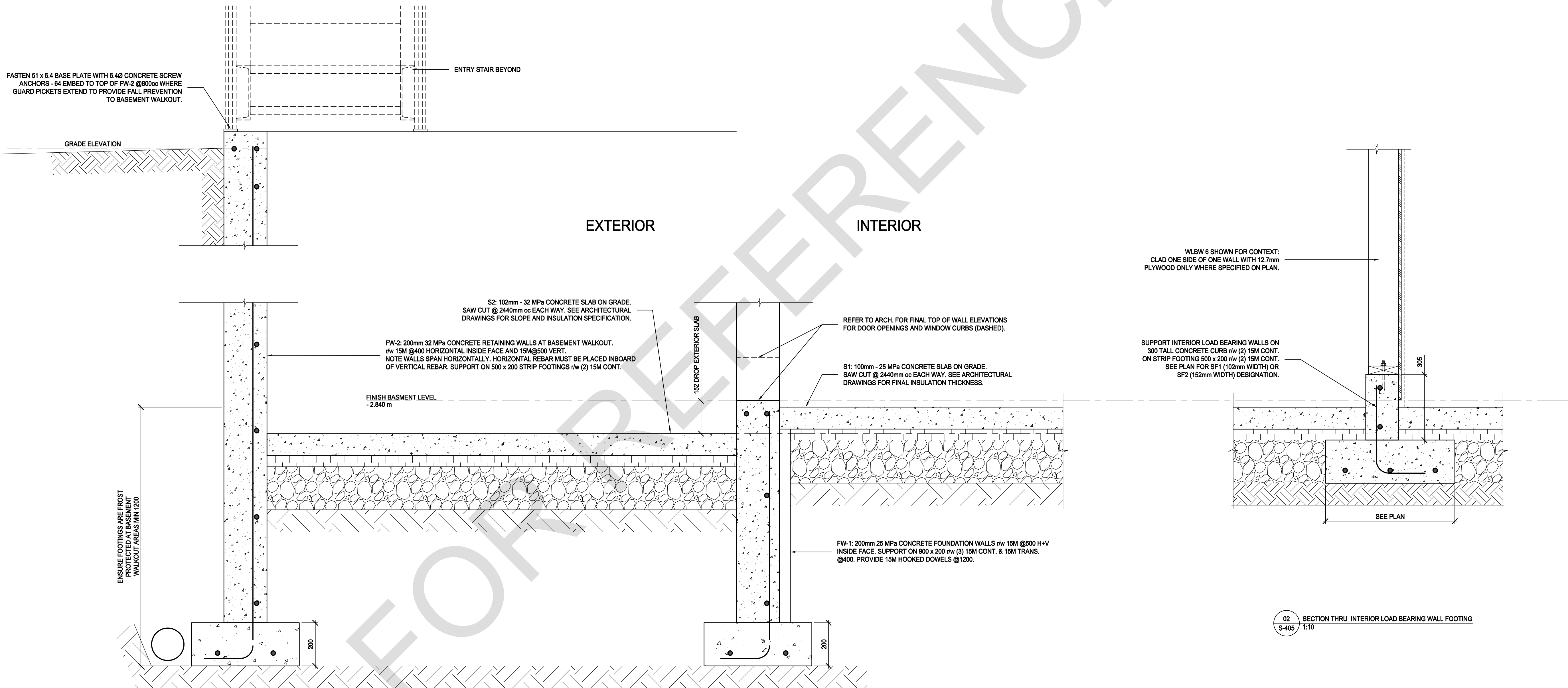
GENERAL NOTES:

- NO DRAWINGS WILL BE FOR CONSTRUCTION UNLESS STAMPED BY THE QUALIFIED DESIGN PROFESSIONAL (QDP) AND ISSUED FOR THAT PURPOSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND VERIFYING ALL LEVELS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE QUALIFIED DESIGN PROFESSIONAL PRIOR TO COMMENCING WORK.
- DO NOT SCALE THE DRAWINGS.

QUALIFIED DESIGN PROFESSIONAL (QDP)

- ALL END USERS REQUIRE A QUALIFIED DESIGN PROFESSIONAL – EITHER AN ARCHITECT, ENGINEER, OR OTHER PROFESSIONAL AS DESIGNATED BY THE RELEVANT PROFESSIONAL ASSOCIATIONS AND THE AUTHORITY HAVING JURISDICTION.
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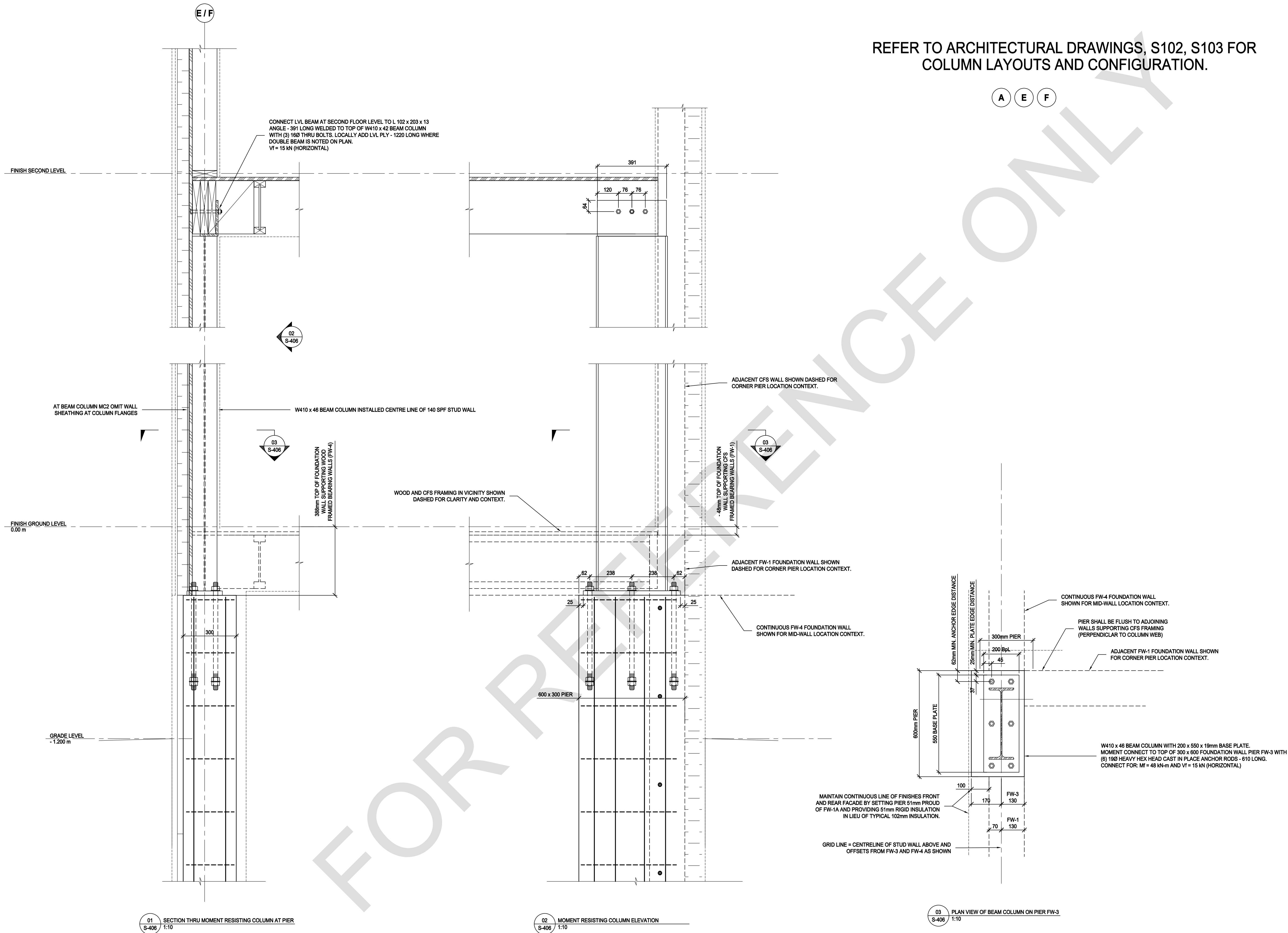
REFER TO ARCHITECTURAL DRAWINGS, S-101, 102, 103  
FOR PORCH AND STAIR LAYOUTS AND CONFIGURATION.





REFER TO ARCHITECTURAL DRAWINGS, S102, S103 FOR  
COLUMN LAYOUTS AND CONFIGURATION.

**A**   **E**   **F**

[illegible]

| NO. | DATE | DESCRIPTION |
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PROJECT: City of Toronto - Multiplex

## FOURPLEX NARROW

SHEET TITLE:  
LATERAL STABILIZING COLUMN  
DETAILS

PROJECT NO: \_\_\_\_\_  
SCALE: 1 : 10

SHEET NO:

# S-406



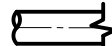
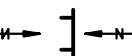
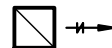
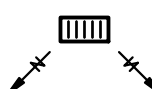
# CITY OF TORONTO MULTIPLEX FOURPLEX NARROW MECHANICAL DRAWINGS - GAS

| MECHANICAL DRAWING LIST |                                                            |
|-------------------------|------------------------------------------------------------|
| DRAWING NO.             | DRAWING NAME                                               |
| M000                    | MECHANICAL COVER SHEET & SYMBOLS                           |
| M001                    | MECHANICAL OUTLINE SPECIFICATIONS                          |
| M002                    | MECHANICAL DETAILS - GAS                                   |
| M100                    | FOURPLEX NARROW PLUMBING (BELOW GRADE & BASEMENT) - GAS    |
| M101                    | FOURPLEX NARROW PLUMBING (MAIN FLOOR TO THIRD FLOOR) - GAS |
| M102                    | FOURPLEX NARROW HVAC                                       |

| ABBREVIATIONS |             |
|---------------|-------------|
| SYMBOL        | DESCRIPTION |
| S/A           | SUPPLY AIR  |
| R/A           | RETURN AIR  |
| E/A           | EXHAUST AIR |
| O/A           | OUTDOOR AIR |

| PLUMBING AND DRAINAGE                                                               |                                  |
|-------------------------------------------------------------------------------------|----------------------------------|
| SYMBOL                                                                              | DESCRIPTION                      |
|    | P-TRAP                           |
|     | CLEAN OUT (FLOOR & CEILING)      |
|     | ROUND FLOOR DRAIN                |
|   | HUB DRAIN                        |
|   | DOMESTIC COLD WATER (DCW) PIPING |
|   | DOMESTIC HOT WATER (DHW) PIPING  |
|   | SANITARY DRAINAGE (SAN) PIPING   |
|  | WATER METER                      |

| MECHANICAL PIPING                                                                  |                            |
|------------------------------------------------------------------------------------|----------------------------|
| SYMBOL                                                                             | DESCRIPTION                |
|  | PIPE DOWN                  |
|  | PIPE UP                    |
|  | PIPE UP & DOWN             |
|  | VALVE                      |
|  | BALANCING VALVE            |
|  | PIPE CONTINUATION          |
|  | CONDENSATE DRAINAGE PIPING |
|  | FLOW DIRECTION             |

| DUCTWORK                                                                            |                                         |
|-------------------------------------------------------------------------------------|-----------------------------------------|
| SYMBOL                                                                              | DESCRIPTION                             |
|   | SUPPLY AIR DUCT UP & DOWN               |
|   | RETURN / EXHAUST AIR DUCT UP & DOWN     |
|   | ROUND DUCT UP & DOWN                    |
|   | DUCT CONTINUATION (ROUND & RECTANGULAR) |
|   | SUPPLY / RETURN GRILLE                  |
|   | RETURN / EXHAUST GRILLE                 |
|   | TOILET EXHAUST FAN                      |
|   | FLOOR GRILLE                            |
|   | CEILING GRILLE                          |
|   | FLOOR BOOT                              |
|  | THERMOSTAT                              |
|   | DOOR UNDERCUT                           |



PROFESSIONAL SEAL

## DISCLAIMER

GENERAL NOTES:

1. NO DRAWINGS WILL BE FOR CONSTRUCTION UNLESS STAMPED BY THE QUALIFIED DESIGN PROFESSIONAL (QDP) AND ISSUED FOR THAT PURPOSE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND VERIFYING ALL LEVELS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE QUALIFIED DESIGN PROFESSIONAL PRIOR TO COMMENCING WORK.
3. DO NOT SCALE THE DRAWINGS.

QUALIFIED DESIGN PROFESSIONAL (QDP)

- ALL END USERS REQUIRE A QUALIFIED DESIGN PROFESSIONAL -  
EITHER AN ARCHITECT, ENGINEER, OR OTHER PROFESSIONAL AS  
DESIGNED BY THE RELEVANT PROFESSIONAL ASSOCIATIONS AND  
AUTHORITY HAVING JURISDICTION.
- THE QUALIFIED DESIGN PROFESSIONAL MUST REVIEW AND UPDATE  
THE PRE-APPROVED DESIGN DRAWINGS TO ALIGN WITH SITE  
CONDITIONS, VERIFY ASSUMED CONDITIONS, AND ADDRESS  
SELECTIONS OR MODIFICATIONS DESIRED, AND ENSURE CODE  
COMPLIANCE WITH ALL APPLICABLE CODES, BYLAWS, AND OTHER  
REGULATIONS.
- THE QUALIFIED DESIGN PROFESSIONAL WILL TAKE RESPONSIBILITY  
FOR THE ENTIRE SET OF DOCUMENTS (ONCE UPDATED, THIS INCLUDES  
APPLYING THE ARCHITECT'S OR ENGINEER'S SEAL AS REQUIRED BY  
THE RELEVANT PROFESSIONAL ASSOCIATION AND THE AUTHORITIES  
HAVING JURISDICTION). THE QUALIFIED DESIGN PROFESSIONAL WILL  
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ACTS, BYLAWS, AND PROFESSIONAL REQUIREMENTS APPLICABLE TO  
THEIR JURISDICTION.
- THE QUALIFIED DESIGN PROFESSIONAL MAY SUBMIT  
THE FINALIZED DESIGN FOR A BUILDING PERMIT TO THE APPROPRIATE  
AUTHORITY HAVING JURISDICTION (AHJ).
- THE DESIGN REVIEW IS THE RESPONSIBILITY OF THE QUALIFIED  
DESIGN PROFESSIONAL IN ACCORDANCE WITH APPLICABLE  
REGULATORY REQUIREMENTS AND PROFESSIONAL PRACTICE  
STANDARDS.
- END USER SHALL COMPLETE EDS AND CONFIRM COMPLIANCE WITH SELECTED  
SB-12 PACKAGE.

[illegible]

| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
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**PROJECT:**

City of Toronto - Multiplex

**SHEET TITLE:**

# MECHANICAL COVER SHEET & SYMBOLS

PROJECT NO: 241058

SCALE: NTS

SHEET NO:

# M000





### MECHANICAL OUTLINE SPECIFICATIONS

## DESIGN CRITERIA AND REQUIREMENTS

1. THE MECHANICAL SYSTEMS SHALL BE DESIGNED IN ACCORDANCE WITH THE ONTARIO BUILDING CODE (OBC), SPECIFIC REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION, DESIGN PRINCIPLES AND STANDARDS OBTAINED FROM THE OWNER AND DESIGN TEAM AS WELL AS STANDARDS OF GOOD ENGINEERING PRACTICES.
2. WORK SHALL BE COMPLETED IN ACCORDANCE WITH STANDARDS PUBLISHED BY THE FOLLOWING PARTIAL LIST OF AUTHORITIES:
  - A. THERMAL ENVIRONMENTAL CONDITIONS FOR HUMAN OCCUPANCY, ANSI/ASHRAE STANDARD 55 (LATEST EDITION);
  - B. VENTILATION REQUIREMENTS TO BE BASED ON MOST CURRENT OBC PART 9 TABLE 9.3.2.3.3.
  - C. HANDBOOKS PUBLISHED BY AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING ENGINEERS (ASHRAE).
3. HEATING AND COOLING CALCULATIONS TO BE BASED ON MOST CURRENT CLIMATICAL DATA (SB-1) AND ENERGY EFFICIENCY OF HOUSING COMPLIANCE PACKAGES (SB-12) PUBLISHED IN THE ONTARIO BUILDING CODE AND SHALL BE COMPLETED IN ACCORDANCE WITH THE STANDARD CAN/CSA-F280-12 (R2021) TO DETERMINE THE SIZE/CAPACITY OF THE HEATING/AIR CONDITIONING SYSTEMS.

- A. ALL OCCUPIED AREAS WILL BE AIR CONDITIONED WITH THE FOLLOWING ENVIRONMENTAL CONDITIONS:
  - a. WINTER: 22.0°C ± 1°C AND 20% ± 5% RELATIVE HUMIDITY
  - b. SUMMER: 24.0°C ± 1°C AND 60% ± 5% RELATIVE HUMIDITY
4. PIPING, DUCTWORK AND EQUIPMENT SIZED IN THESE PACKAGES ARE BASIS OF DESIGN AND ALL LOAD CALCULATIONS SHALL BE COMPLETED BY THE QUALIFIED DESIGN PROFESSIONAL. THE CAPACITY OF SYSTEM, CORRESPONDING FLOW RATE AND ALL SERVICES SIZING SHALL BE CONFIRMED WITH RESPECT TO ACTUAL SITE CONDITION AND ORIENTATION.
5. ALL EFFICIENCIES NOTED IN SPECIFICATION ARE MINIMUMS. DESIGNER SHALL CONFIRM EQUIPMENT TO BE COORDINATED WITH THOSE EFFICIENCY DESIGN FORM PER ENERGY EFFICIENCY OF HOUSING COMPLIANCE PACKAGES (SB-12).
6. ALL UNPROTECTED MECHANICAL PENETRATIONS ON EXPOSING BUILDING FACE MORE THAN 130MM SHALL BE COORDINATED WITH THE QUALIFIED DESIGN PROFESSIONAL AND NOTED ON ARCHITECTURAL DRAWINGS AS PER OBC 9.10.14.6.

## SITE SERVICES

## 1. WATER SERVICES

- A. ONE (1) POTABLE WATER SERVICE WILL BE PROVIDED TO THE BUILDING THEN THE SERVICE WILL SPLIT AND RUN TO INDIVIDUAL UTILITY METER INSIDE EACH RESIDENTIAL UNIT.
2. SANITARY SEWERS:
- A. ONE (1) SANITARY SERVICE CONNECTION WILL BE PROVIDED TO THE BUILDING COMPLETE WITH SAMPLING PORT IN COORDINATION WITH THE QUALIFIED DESIGN PROFESSIONAL OF SITE SERVICES. COORDINATE LOCATION AND INVERT OF INCOMING CONNECTION WITH THE QUALIFIED DESIGN PROFESSIONAL OF SITE SERVICES. THE QUALIFIED DESIGN PROFESSIONAL SHALL CONFIRM SANITARY PUMP DESIGN TO SUIT ACTUAL SITE CONDITION AS REQUIRED.
- B. ROOF GUTTERS TO BE PIPED AND ROUTED DOWN THE SIDE OF THE BUILDING TO SPILL ON GRADE.

## PLUMBING AND DRAINAGE

1. POTABLE WATER:
- A. AN INCOMING POTABLE WATER CONNECTION COMPLETED WITH A METER ASSEMBLY WILL SUPPLY WATER TO EACH RESIDENTIAL UNIT. OPTIONAL WATER FILTRATION INCLUDING CARBON ACTIVATED FILTERS, UV AND RO CAN BE PROVIDED IN AREAS WHERE WATER QUALITY IS OF CONCERN.
- B. POLYETHYLENE PEX PIPING WILL BE PROVIDED TO DISTRIBUTE COLD AND HOT WATER THROUGHOUT THE UNIT.
- a. TUBE SHALL BE CROSS-LINKED POLYETHYLENE (PEX) MANUFACTURED BY PEX-A OR PEROXIDE METHOD. PEX TUBING SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM F876, ASTM F877 AND CAN/CSA-B137.5. THE TUBE SHALL BE LISTED TO ASTM BY AN INDEPENDENT THIRD PARTY AGENCY.
- b. FITTINGS SHALL BE MANUFACTURED OF ENGINEERED PLASTIC (EP). FITTINGS SHALL BE PEX-A COLD EXPANSION TYPE CERTIFIED TO ASTM F1960.
- (1) FITTINGS SHALL BE SUPPLIED BY THE PEX TUBING MANUFACTURER.
- (2) PEX-A COLD EXPANSION TYPE FITTINGS SHALL BE AN ASSEMBLY CONSISTING OF INSERT AND PEX-A COLD EXPANSION RING.
- (3) FITTING TYPE: UPONOR ENGINEERED PLASTIC (EP).

2. DRAINAGE:

4. ALL SANITARY DRAIN AND MAIN VENT STACKS SHALL BE PLASTIC ABS WITH GLUED CONNECTIONS, WHERE REQUIRED TO MEET FIRE SPREAD AND SMOKE DEVELOPMENT RATINGS METALLIC PIPING OR XFR PIPING IS TO BE PROVIDED BASED ON LOCAL JURISDICTION APPROVAL.
5. UNDERGROUND DRAINAGE PIPING SHALL BE PVC DR35 RIGID SEWER PIPING. PIPING 4" AND LARGER TO BE GREEN PVC HUB AND SPIGOT SEWER PIPE AND FITTINGS TO CAN/CSA B182.2. SIZE 3" PIPE TO BE PVC WITH SOLVENT WELD JOINTS CERTIFIED TO CSA B182.1 AND COLOUR CODED AS PER LOCAL CODES.
6. DOMESTIC HOT WATER PRODUCTION:
  - A. AN ELECTRIC DOMESTIC HOT WATER (DHW) TANK WILL BE PROVIDED FOR EACH RESIDENTIAL UNIT.
  - B. DOMESTIC HOT WATER SHALL BE STORED AT A MINIMUM OF 52°C (125°F).
  - C. A MIXING VALVE SHALL BE PROVIDED TO SUPPLY 49°C (120°F) DOMESTIC HOT WATER TO THE FIXTURES.
7. PRESSURE BALANCING TYPE MIXING VALVES SHALL BE PROVIDED FOR ALL SHOWERS.
8. DRAIN WATER HEAT RECOVERY COIL SHALL BE PROVIDED FOR EACH MULTI-STORY UNIT.
9. PLUMBING FIXTURES SHALL BE LOW FLOW AND OF FIRST QUALITY.

7. SANITARY DRAINS WILL BE COLLECTED AND CO

- UNLESS OTHERWISE NOTED, SLOPE ALL 75 MM (3") DRAINAGE PIPING AT 2% SLOPE AND ALL 100 MM (4") AND LARGER DRAINAGE PIPING AT 1% SLOPE.
- HEATING, VENTILATION, AND AIR CONDITIONING (HVAC)
1. HEATING AND COOLING SYSTEMS:
- A. HEATING AND COOLING WILL BE PRODUCED BY SELECTING ONE OF THE FOLLOWING OPTIONS:
- COLD CLIMATE HEAT PUMP & ERV (ALL ELECTRIC)
  - GAS FURNACE C/W HEAT PUMP & ERV (HYBRID)
  - GAS FURNACE C/W DX COOLING & ERV (GAS)
- B. THE CAPACITY OF THE SYSTEM SHALL BE SIZED AND SELECTED TO MEET THE FULL HEATING AND COOLING LOAD REQUIREMENTS OF THE RESIDENTIAL UNIT.
- C. UNIT TO BE COMPLETE WITH MINIMUM MERV 8 FILTRATION.
- D. THE OUTDOOR CONDENSING UNIT IS TO BE LOCATED WITHIN CLOSE PROXIMITY TO THE INDOOR UNIT AND CONNECTED WITH REFRIGERANT PIPING.
- E. REFER TO SEPARATE SPECIFICATION AND DETAILS SHEET FOR PARTICULAR OPTION OF SYSTEM.

## 2 VENTILATION AND EXHAUST SYSTEMS

- A. VENTILATION AIR WILBE PROVIDED BY AN ENERGY RECOVERY VENTILATOR (ERV) THAT WILL TRANSFER ENERGY FROM THE PRIMARY BATHROOM EXHAUST TO PRE-CONDITION OUTDOOR AIR THAT WILL BE DUCTED BACK TO THE INDOOR UNIT. SIZE OF ERV TO BE DETERMINED BASED ON OBC PART 9 REQUIREMENT. ERV PERFORMANCE SHALL HAVE A MINIMUM OF 75% EFFECTIVENESS. WHERE REQUIRED, AN ELECTRIC DUCT HEATER SHALL BE PROVIDED. THE ERV SHALL BE CONTROLLED BY A LOCAL TIMER SWITCH.
- B. SECONDARY WASHROOMS WILL BE PROVIDED WITH DEDICATED CEILING MOUNTED TOILET EXHAUST FANS COMPLETE WITH LOCAL SWITCH.
- C. CLOTHES DRYERS WILL BE PROVIDED WITH A LINT TRAP AND DRYER BOOSTER FAN CONNECTED TO A CURRENT SENSOR TO AID IN DRYER EXHAUST. LINT TRAPS WILL BE PROVIDED ON THE SUCTION SIDE OF THE FAN WITHIN THE SUEITE LAUNDRY ROOM.
- D. KITCHEN HOOD EXHAUSTS WILL BE SIZED FOR MINIMUM 150 CFM AND DUCTED TO OUTDOORS.
- E. ALL EXHAUST DUCTWORK WILL BE DISCHARGED TO THE EXTERIOR THROUGH THE EXTERIOR WALLS OF THE UNIT OR THROUGH THE ROOF FOR THE TOP LEVEL.

- F. EXHAUST DUCTWORK SHALL BE INSULATED FOR THE FIRST 10FT FROM THE EXTERIOR LOUVRE.

## 2. AIR DISTRIBUTION

- A. DUCTWORK SHALL BE GALVANIZED SHEET METAL UNLESS OTHERWISE INDICATED. DUCTS SHALL BE SIZED AT A PRESSURE DROP OF 0.08" (20PA) PER 100' (30.5M) WITH MAXIMUM AIR VELOCITIES OF 1400 FEET (427M) PER MINUTE.
  - B. DUCTWORK TO BE INSULATED TO MEET ASHRAE 90.1 AND THE GOVERNING AUTHORITY REQUIREMENTS.
  - C. PROVIDE ACOUSTIC LINING FOR ALL SUPPLY AND RETURN AIR DUCTWORK SERVING MECHANICAL EQUIPMENT WITH FANS TO A MAXIMUM OF 4.5M (15') FROM THE EQUIPMENT, MEASURED OUTWARD IN ALL DIRECTIONS.
  - D. SUPPLY AIR FROM THE INDOOR UNIT SHALL BE DUCTED TO EACH ROOM VIA 200X100 SIDEWALL GRILLES OR FLOOR REGISTERS.
  - E. EACH ROOM SHALL HAVE A RETURN AIR GRILLE OR AN 1" (25MM) DOOR UNDERCUT FOR AIR TRANSFER.
  - F. PROVIDE BALANCING DAMPERS AT ALL DUCT BRANCHES FOR AIR BALANCING.
  - G. A PROGRAMMABLE THERMOSTAT WITH OCCUPANCY SENSOR SHALL BE PROVIDED TO CONTROL THE SUITE HVAC SYSTEM.
  - H. DUCTWORK PENETRATING CEILING MEMBRANES REQUIRED TO HAVE A FIRE-RESISTANCE RATING SHALL CONFORM TO REQUIREMENTS MENTIONED PER CBC 9.10.5.1. (3).
4. REFRIGERATION:
- A. DESIGN AND INSTALLATION OF REFRIGERATION SYSTEM SHALL BE IN ACCORDANCE WITH CSA B52 MECHANICAL REFRIGERATION CODE, ONTARIO BUILDING CODE, AHRI, AND EQUIPMENT MANUFACTURERS RECOMMENDATIONS.
  - B. NEW REFRIGERATION PIPING SHALL BE ACR SEAMLESS COPPER TUBING SUITABLE FOR AIR CONDITIONING OR REFRIGERATION SYSTEMS.
  - C. KEEP TUBING RUNS AND NUMBER OF ELBOWS AND FITTINGS TO A MINIMUM.
  - D. ENSURE TUBING IS DEHYDRATED, TESTED, ADEQUATELY CHARGED, AND GAS TIGHT.
  - E. PIPING SHALL BE INSULATED WITH FLEXIBLE ELASTOMERIC, CLOSED CELL, SLEEVE TYPE LONGITUDINALLY SPLIT SELF-SEAL FORMED PLASTIC PIPE INSULATION EQUIVALENT TO ARMACELL API/ARMAFLEX SS. INSULATION SHALL BE 25 MM (1") THICK.
  - F. COORDINATE AND RUN ALL REFRIGERANT LINES INSIDE DESIGNATED CAVITY. NO EXTERIOR RUNS PERMITTED UNLESS OTHERWISE INSTRUCTED.

## 5. FIRE STOPPING AND SMOKE SEAL SYSTEMS

- A. LABELS-FREE, ELASTOMERIC MATERIALS AND INTUMESCENT MATERIALS. TESTED, LISTED AND ASSEMBLED BY ULC IN ACCORDANCE WITH CANULC S115, AND CANULC S101 FOR INSTALLATION IN ULC DESIGNATED FIRESTOPPING, AND SMOKE SEAL SYSTEMS TO PROVIDE A POSITIVE FIRE, WATER AND SMOKE SEAL AND A FIRE RESISTANCE RATING (FLAME, HOSE STREAM AND TEMPERATURE) NO LESS THAN FIRE RATING FOR SURROUNDING CONSTRUCTION.
- B. FIRESTOPPING AND SMOKE SEAL MATERIAL SYSTEM TO BE SPECIFICALLY ULC CERTIFIED WITH DESIGNATED REFERENCE NUMBER FOR ITS SPECIFIC INSTALLATION.
- C. SMOKE AND FIRE SEAL MATERIALS AND MANUFACTURERS MUST BE SPECIFICALLY APPROVED FOR EACH APPLICATION OF PENETRATED SURFACES, AS APPROVED BY FM GLOBAL AND LISTED IN FM GLOBAL APPROVAL GUIDE. LISTED COMPANIES HEREIN AND OTHER MANUFACTURERS ARE ONLY ACCEPTABLE IF COMPLIANT WITH THESE REQUIREMENTS.
- D. MATERIALS ARE TO BE COMPATIBLE WITH ABUTTING DISSIMILAR MATERIALS AND FINISHES AND COMPLETE WITH PRIMERS, DAMPING AND BACK-UP MATERIALS, SUPPORTS, AND ANCHORING DEVICES IN ACCORDANCE WITH FIRESTOPPING MANUFACTURER'S RECOMMENDATIONS AND ULC TESTED ASSEMBLY. COORDINATE MATERIAL REQUIREMENTS WITH TRADES SUPPLYING ABUTTING AREAS OF MATERIALS.
- E. TYPICALLY, FOR OPENINGS OF UP TO 250 MM (10") IN DIAMETER, PROVIDE PUTTY PAD TYPE FIRESTOP MATERIALS INTUMESCENT, NON-HARDENING, WATER RESISTANT PUTTIES CONTAINING NO SOLVENTS, INORGANIC FIBRES OR SILICONE COMPOUNDS.
- F. TYPICALLY, FOR OPENINGS OF GREATER THAN 250 MM (10") IN DIAMETER, AND FOR RECTANGULAR OPENINGS, PROVIDE PILLOW TYPE FIRESTOP MATERIALS RE-ENTERABLE, NON-CURING, MINERAL FIBRE CORE ENCAPSULATED ON SIX SIDES WITH INTUMESCENT COATING CONTAINED IN A FLAME RETARDANT POLY BAG.
- G. SUPPLY PRODUCTS OF A SINGLE MANUFACTURER FOR USE ON WORK OF THIS DIVISION.
- H. INSTALL TO BE MANUFACTURER TRAINED AND CERTIFIED ON SPECIFIC PRODUCT.
- I. INCLUDE FOR MANUFACTURER'S AUTHORIZED REPRESENTATIVE TO INSPECT AND VERIFY EACH INSTALLATION AND APPLICATION.

## ENERGY RECOVERY VENTILATOR (ERV)

1. UNIT SHALL BE FACTORY ASSEMBLED, WIRED AND TESTED AND SHALL CONFORM TO CSA AND UL STANDARDS.
2. UNIT SHALL BE COMPACT WITH A LOW PROFILE SUITABLE FOR INSTALLATION IN BULKHEADS AND DROPPED CEILINGS WITH MINIMUM 210mm CLEAR HEIGHT BELOW.
3. CABINET SHALL BE CONSTRUCTED OF 22-GAUGE PRE-PAINTED GALVANIZED STEEL FOR CORROSION RESISTANCE AND INSULATED TO PREVENT EXCESSIVE CONDENSATION. CABINET SHALL BE COMPLETE WITH DRAIN CONNECTIONS, BALANCING PORTS, AND THREADED INSERTS TO ACCEPT S-HOOKS AND HANGING STRAPS SUPPLIED WITH UNIT.
4. ENERGY RECOVERY ASSEMBLY SHALL BE THERMALLY CONDUCTIVE, ALUMINUM CROSS-FLOW ENERGY RECOVERY CORE WITH MINIMUM SRE OF 75% OR MINIMUM EFFICIENCY IN COMPLIANCE WITH ENERGY EFFICIENCY OF HOUSING COMPLIANCE PACKAGES (SB-12). THE CORE SHALL BE EASILY REMOVABLE FOR CLEANING AND SERVICE.
5. UNIT COMPLETE WITH WASHABLE MERV-6 AIR FILTERS LOCATED IN EXHAUST AND SUPPLY AIR STREAMS.
6. EACH AIRSTREAM HAS AN INDEPENDENT CENTRIFUGAL HIGH EFFICIENCY ECM BLOWER WITH MULTIPLE FAN SPEED OPERATION.
7. DEFROST MODE: SUPPLY AIR SHUTS OFF TO DEFROST CORE WITH WARM EXHAUST AIR AT HIGH SPEED.
8. UNIT COMPLETE WITH WALL MOUNT CONTROLLER WITH SELECTABLE ON/OFF, AND FAN SPEED SETTINGS.

## ELECTRIC DOMESTIC HOT WATER TANK

1. CSA CERTIFIED ELECTRIC DOMESTIC HOT WATER TANK AND HEATER WITH MINIMUM EF RATING OF 0.8, AND COMPLETE WITH:
  - A. 1035 KPA (150 PSI) RATED (WORKING PRESSURE) STEEL TANK, GLASS LINED, INSULATED (EXCEPT FOR CONTROL PANEL AREA) WITH INJECTED MINIMUM R-16 FOAM INSULATION, COVERED WITH AN ENAMELLED STEEL JACKET, AND EQUIPPED WITH 40 MM (1-1/2") DIA. NPS BRASS NIPPLE WATER INLET AND OUTLET CONNECTIONS, A DRAIN VALVE, AND SACRIFICIAL ANODE RODS;
  - B. REMOVABLE MULTIPLE IMMERSION HEATING ELEMENTS, EACH CONSISTING OF A WIRE FILAMENT IN A SEALED STAINLESS STEEL SHEATH;
  - C. ASME RATED TEMPERATURE AND PRESSURE RELIEF VALVE;
  - D. FACTORY PRE-WIRED POWER AND CONTROL PANEL.
2. EQUIP ENAMELLED STEEL VENTILATED CONTROL PANEL WITH REMOVABLE GLASS FIBRE INSULATION TO COVER BARE AREA OF TANK, A HINGED DOOR, MULTIPLE KNOCKOUTS, A GROUND SCREW, AND FOLLOWING:
  - A. TERMINAL BLOCK FOR POWER WIRING CONNECTIONS;
  - B. MAGNETIC CONTACTORS FOR HEATING ELEMENTS;
  - C. ADJUSTABLE IMMERSION THERMOSTAT;
  - D. MANUAL RESET IMMERSED HIGH TEMPERATURE LIMIT CONTROL FOR EACH ELEMENT;
  - E. FUSE BLOCK WITH FUSES;
  - F. ELEMENT DIAGNOSTIC PANEL WITH LED'S FOR EACH ELEMENT TO MONITOR ON-OFF OPERATION OF EACH ELEMENT.
3. UNIT SHALL HAVE MINIMUM EFFICIENCY IN COMPLIANCE WITH ENERGY EFFICIENCY OF HOUSING CONSTRUCTION PACKAGES (ESB-12).

## TOILET EXHAUST FANS

1. CEILING EXHAUST FAN SHALL BE HVI CERTIFIED AND IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:
2. 26 GAUGE ZINC-ALUMINUM-MAGNESIUM (ZAM) HOUSING C/W INTEGRATED 6" DUCT ADAPTOR, BUILT-IN DAMPER AND BUILT IN METAL FLANGE;
3. FAN C/W POLY PRO MATERIAL AND ATTACHES DIRECTLY TO HOUSING WITH TORSION SPRINGS;
4. MOTOR BE TO TOTALLY ENCLOSED WITH A BRUSHLESS ECM MOTOR TECHNOLOGY RATED FOR CONTINUOUS RUN AND EQUIPPED WITH THERMAL-CUTOFF FUSE. MOTOR TO BE REMOVABLE WITH PERMANENTLY LUBRICATED PLUG-IN MOTOR;
5. FAN VENTILATION RATES SHALL BE MANUALLY ADJUSTABLE;
6. FAN SHALL BE UL AND CUL LISTED FOR TUBSHOWER ENCLOSURE WHEN GFCI PROTECTED.

## DRYER EXHAUST

1. DRYER BOOSTER FAN SHALL BE HVI CERTIFIED AND IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:
- A. 26-GAUGE GALVANISED STEEL HOUSING SUPPLIED WITH VIBRATION ISOLATION TO SUIT MOUNTING;
  - B. ROUND INLET AND DISCHARGE COLLAR;
  - C. FIELD WIRING COMPARTMENT WITH REMOVABLE ACCESS PANEL;
  - D. BACKWARDLY-INCLINED, SELF-CLEANING IMPELLER, FULLY-SEALED IMPELLER ASSEMBLY WITH AUTOMATIC-RESET THERMAL OVERLOAD PROTECTION, AND PERMANENTLY-LUBRICATED MOTOR;
- E. ACCESSORIES:
- a. AMP SENSOR (CURRENT-SENSING RELAY SWITCH!);
  - b. LINT TRAP;
  - c. WALL BOX.

### KITCHEN RANGE HOOD

1. DUCTED RANGE HOODS, CSA CERTIFIED, ROTARY SOLID STATE SPEED CONTROL PROVIDING INFINITE RANGE, ROTARY LIGHT CONTROL SWITCH, BACKDRAFT DAMPER, WITH LIGHT LENS AND PERMANENT, WASHABLE ALUMINUM MESH GREASE FILTER(S).

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PROJECT: City of Toronto - Multiplex

SHEET TITLE:

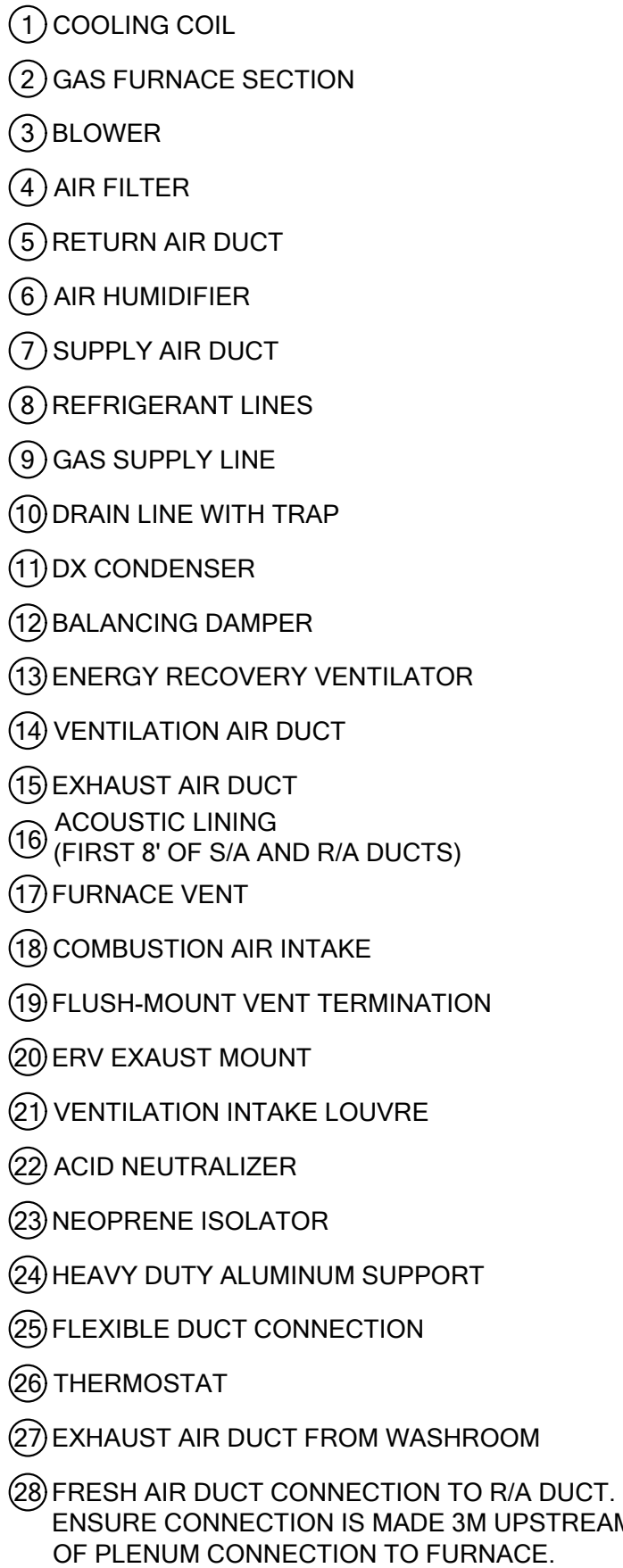
MECHANICAL OUTLINE  
SPECIFICATIONS

PROJECT NO: 241058  
SCALE: NTS

**SHEET NO:**

# M001





SCALE: NTS



|    |                                                                                                                                                                                                                                                                                                 |
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|    | <p>ALL EQUIPMENT SIZED IN THIS PACKAGE ARE BASIS OF DESIGN AND ALL LOAD CALCULATIONS SHALL BE COMPLETED BY THE QUALIFIED DESIGN PROFESSIONAL. THE CAPACITY SYSTEM CORRESPONDING FLOW RATE AND ALL SERVICES SIZING SHALL BE CONFIRMED WITH RESPECT TO ACTUAL SITE CONDITION AND ORIENTATION.</p> |
| 2. | <p>ALL EFFICIENCIES NOTED IN SPECIFICATION ARE MINIMUMS. QUALIFIED DESIGN PROFESSIONAL SHALL CONFIRM EQUIPMENT TO BE COORDINATED WITH THOSE EFFICIENCY DESIGN FORM PER ENERGY EFFICIENCY OF HOUSING COMPLIANCE PACKAGES (SB-12).</p>                                                            |

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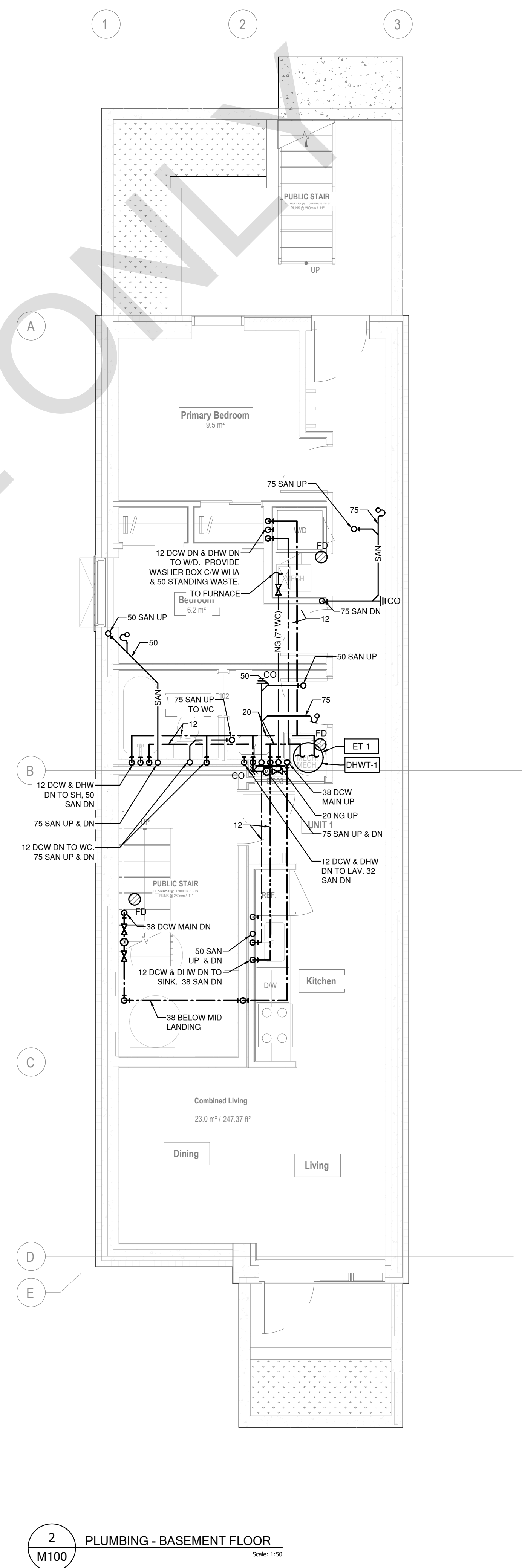
1. C/W 1 KW ELECTRIC PRE-HEATER BEFORE ERV CORE ON THE OUTDOOR AIR INTAKE
2. C/W 5 SPEED OPTIONS

1. ALL END USERS REQUIRE A QUALIFIED DESIGN PROFESSIONAL – WHETHER AN ARCHITECT, ENGINEER, OR OTHER PROFESSIONAL AS DESIGNATED BY THE RELEVANT PROFESSIONAL ASSOCIATIONS AND AUTHORITY HAVING JURISDICTION (AHJ).
2. THE QUALIFIED DESIGN PROFESSIONAL MUST REVIEW AND UPDATE THE PRE-APPROVED DESIGN DRAWINGS TO ALIGN WITH SITE CONDITIONS. VERIFY ASSUMPTIONS, MAKE ANY FINAL DESIGN CHANGES OR MODIFICATIONS NEEDED, ENSURE THE DESIGN COMPLIANCE WITH ALL APPLICABLE CODES, BYLAWS, AND OTHER REGULATIONS.
3. THE QUALIFIED DESIGN PROFESSIONAL WILL TAKE RESPONSIBILITY FOR THE ENTIRE SET OF DOCUMENTS ONCE UPDATED. THIS INCLUDES APPLYING THE ARCHITECT'S OR ENGINEER'S SEAL, AS REQUIRED BY THE RELEVANT PROFESSIONAL ASSOCIATION AND THE AUTHORITIES HAVING JURISDICTION (AHJ). THE QUALIFIED DESIGN PROFESSIONAL IS RESPONSIBLE FOR COMPLYING WITH THE RELEVANT REGULATORY ACTS, BYLAWS, AND PROFESSIONAL REQUIREMENTS APPLICABLE TO THIS JURISDICTION.
4. THE END USER OR THE QUALIFIED DESIGN PROFESSIONAL MAY SUBMIT THE FINALIZED DESIGN FOR A BUILDING PERMIT TO THE APPROPRIATE AUTHORITY HAVING JURISDICTION (AHJ).
5. THE QUALIFICATION REVIEW IS THE SOLE RESPONSIBILITY OF THE QUALIFIED DESIGN PROFESSIONAL IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS AND PROFESSIONAL PRACTICE STANDARDS.
6. QIP MUST COMPLETE EDES AND CONFIRM COMPLIANCE WITH SELECTED SB-12 PACKAGE.

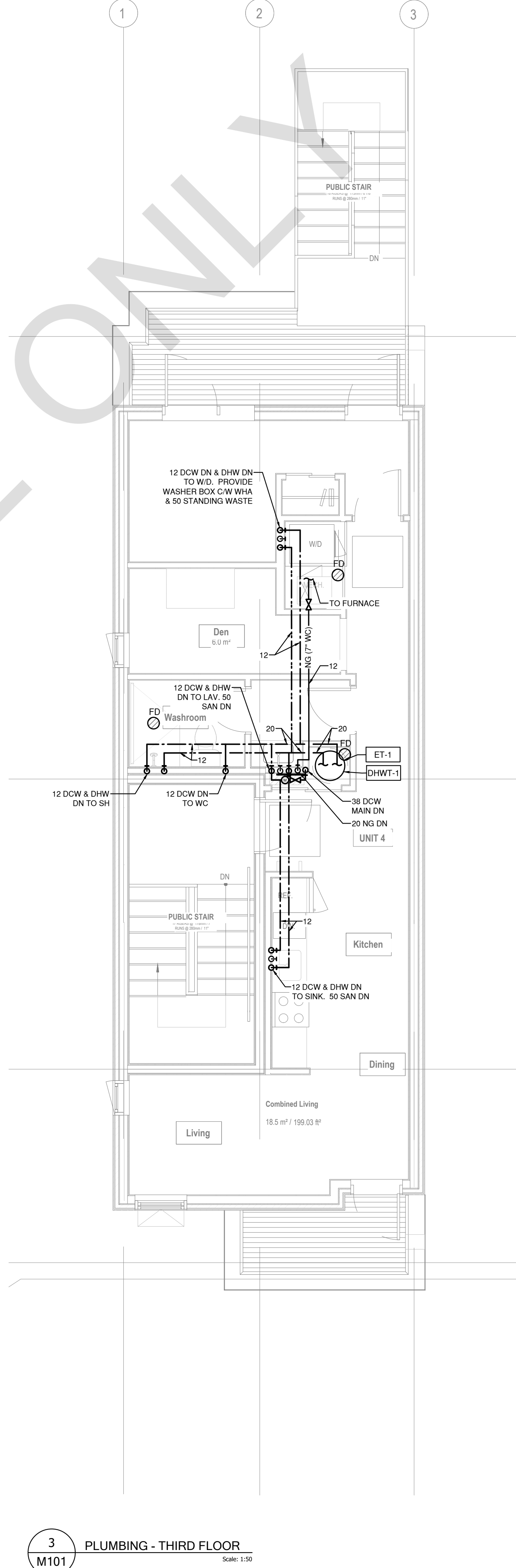
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# M002C











## DISCLAIMER

GENERAL NOTES:

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2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND VERIFYING ALL LEVELS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE QUALIFIED DESIGN PROFESSIONAL PRIOR TO COMMENCING WORK.
3. DO NOT SCALE THE DRAWINGS.

QUALIFIED DESIGN PROFESSIONAL (QDP)

1. ALL END USERS REQUIRE A QUALIFIED DESIGN PROFESSIONAL - EITHER AN ARCHITECT, ENGINEER, OR OTHER PROFESSIONAL AS DESIGNATED BY THE RELEVANT PROFESSIONAL ASSOCIATIONS AND THE AUTHORITY HAVING JURISDICTION.
2. THE QUALIFIED DESIGN PROFESSIONAL MUST REVIEW AND UPDATE THE PRE-APPROVED DESIGN DRAWINGS TO ALIGN WITH SITE CONDITIONS, VERIFY ASSUMPTIONS, MAKE ANY FINAL DESIGN CHANGES OR MODIFICATIONS, DESIGN, AND ENGINEER TO CODE COMPLIANCE WITH ALL APPLICABLE CODES, BYLAWS, AND OTHER REGULATIONS.
3. THE QUALIFIED DESIGN PROFESSIONAL WILL TAKE RESPONSIBILITY FOR THE ENTIRE SET OF DOCUMENTS UPON SUBMIT. THIS INCLUDES APPLYING THE ARCHITECT'S OR ENGINEER'S SEAL AS REQUIRED BY THE RELEVANT PROFESSIONAL ASSOCIATION AND THE AUTHORITIES HAVING JURISDICTION. THE QUALIFIED DESIGN PROFESSIONAL IS RESPONSIBLE FOR COMPLYING WITH THE RELEVANT REGULATORY ACTS, BYLAWS, AND PROFESSIONAL REQUIREMENTS APPLICABLE TO THEIR JURISDICTION.
4. THE ARCHITECT OR THE QUALIFIED DESIGN PROFESSIONAL MAY SUBMIT THE FINALIZED DESIGN FOR A BUILDING PERMIT TO THE APPROPRIATE AUTHORITY HAVING JURISDICTION (AHP).
5. THE DESIGNATION REVIEW IS THE SOLE RESPONSIBILITY OF THE QUALIFIED DESIGN PROFESSIONAL IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS AND PROFESSIONAL PRACTICE STANDARDS.
6. HEATING AND COOLING LOAD CALCULATIONS SHALL BE COMPLETED BY THE DDP.
7. EQUIPMENT SCHEDULES SHOWN ARE CONCEPTUAL, AND MUST BE OBTAINED FOR THE PROJECT.
8. SUPPLY, RETURN AND EXHAUST AIRFLOW QUANTITIES SHALL BE VERIFIED BY THE DDP.
9. DDP SHALL COMPLETE FEEDS AND CONFIRM COMPLIANCE WITH SELECTED CODES AND EGRESS.

[illegible]

| NO. | DATE | DESCRIPTION |
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PROJECT:

City of Toronto - Multiplex

SHEET TITLE:

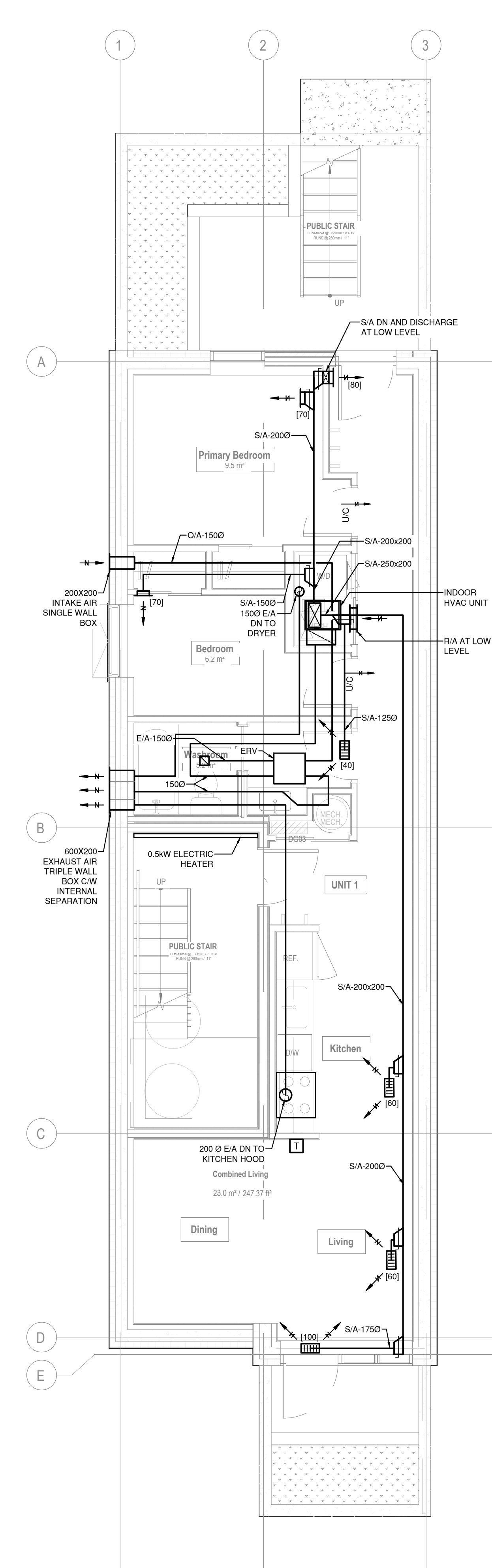
FOURPLEX NARROW  
HVAC

|             |        |
|-------------|--------|
| PROJECT NO: | 241058 |
|-------------|--------|

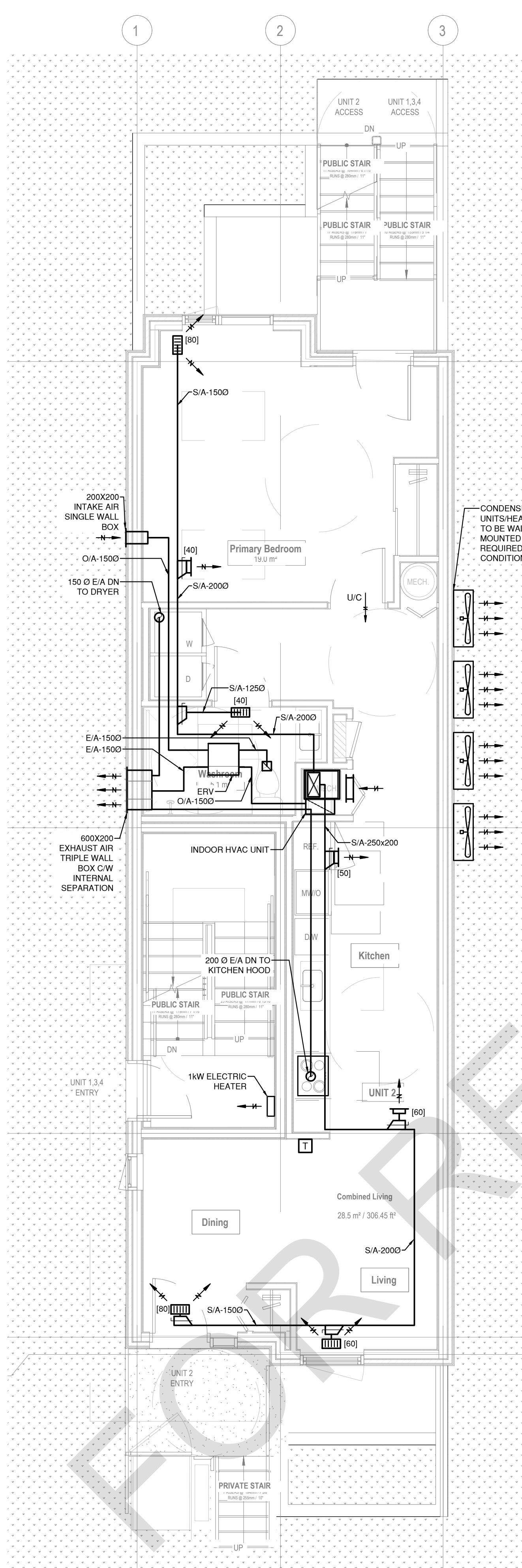
SCALE: AS NOTED

SHEET NO.

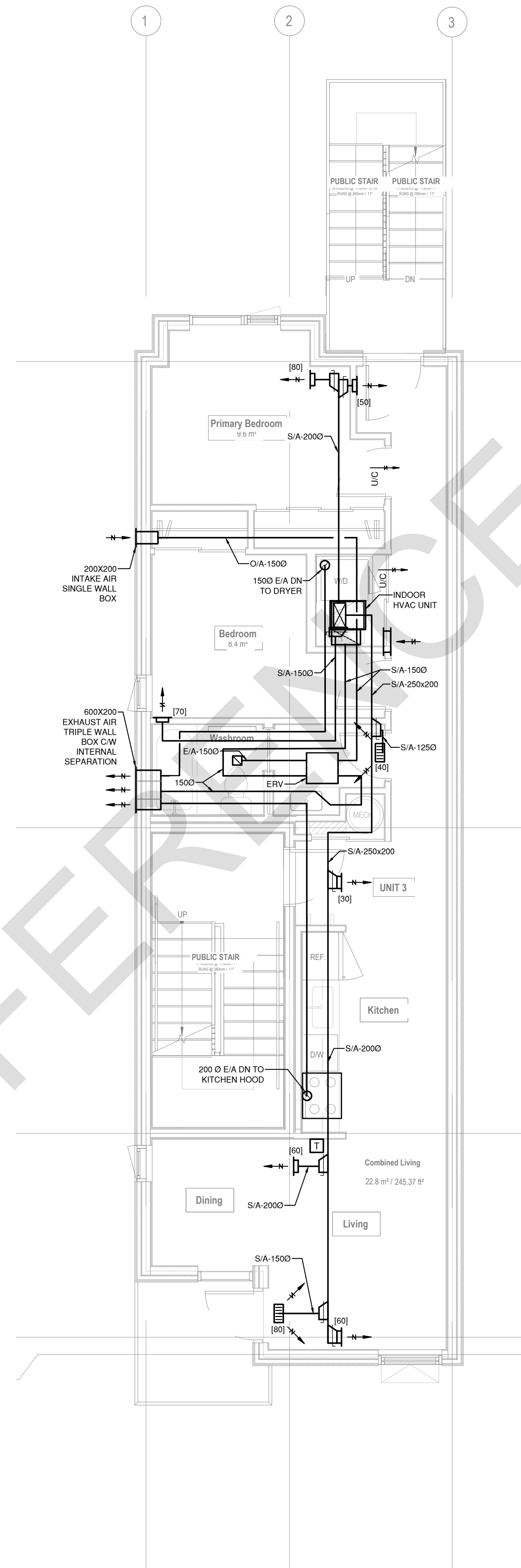
M102



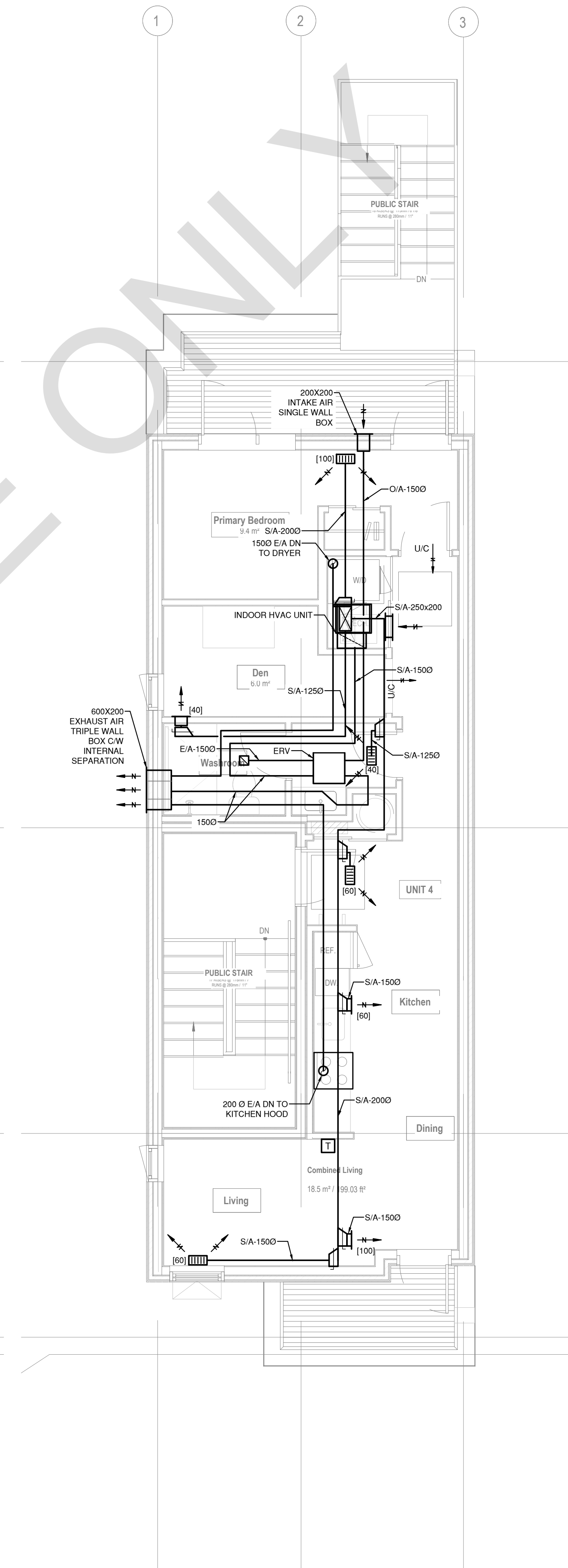
1 HVAC - BASEMENT  
M102 Scale: 1:50



2 HVAC - MAIN FLOOR  
M102 Scale: 1:50



3 HVAC - SECOND FLOOR  
M102 Scale: 1:50



4 HVAC - THIRD FLOOR  
M102 Scale: 1:50









GENERAL NOTES:

1. NO DRAWINGS WILL BE FOR CONSTRUCTION UNLESS STAMPED BY THE QUALIFIED DESIGN PROFESSIONAL (QDP) AND ISSUED FOR THAT PURPOSE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND VERIFYING ALL LEVELS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE QUALIFIED DESIGN PROFESSIONAL PRIOR TO COMMENCING WORK.
3. DO NOT SCALE THE DRAWINGS.

QUALIFIED DESIGN PROFESSIONAL (QDP)

1. ALL END USERS REQUIRE A QUALIFIED DESIGN PROFESSIONAL – EITHER AN ARCHITECT, ENGINEER, OR OTHER PROFESSIONAL AS DESIGNATED BY THE RELEVANT PROFESSIONAL ASSOCIATIONS AND THE AUTHORITY HAVING JURISDICTION.
2. THE QUALIFIED DESIGN PROFESSIONAL MUST REVIEW AND UPDATE THE PRE-APPROVED DESIGN DRAWINGS TO ALIGN WITH SITE CONDITIONS, VERIFY ASSUMPTIONS, MAKE ANY FINAL DESIGN SELECTIONS OR MODIFICATIONS DESIRED, AND ENSURE CODE CONFORMANCE WITH ALL APPLICABLE CODES, BYLAWS, AND OTHER REGULATIONS.
3. THE QUALIFIED DESIGN PROFESSIONAL WILL TAKE RESPONSIBILITY FOR THE ENTIRE SET OF DOCUMENTS (ONCE UPDATED). THIS INCLUDES APPLYING THE ARCHITECTS OR ENGINEERS SEAL AS REQUIRED BY THE APPLICABLE PROFESSIONAL LAW AND ANY OTHER PROFESSIONS HAVING JURISDICTION (AHJ). QUALIFIED DESIGN PROFESSIONALS ARE RESPONSIBLE FOR COMPLYING WITH THE RELEVANT REGULATORY ACTS, BYLAWS, AND PROFESSIONAL REQUIREMENTS APPLICABLE TO THEIR JURISDICTION.
4. THE USER OR THE QUALIFIED DESIGN PROFESSIONAL MAY SUBMIT THE FINALIZED DESIGN FOR A BUILDING PERMIT TO THE APPROPRIATE AUTHORITY HAVING JURISDICTION (AHJ).  
CONSTRUCTION REVIEW IS THE RESPONSIBILITY OF THE QUALIFIED DESIGN PROFESSIONAL IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS AND PROFESSIONAL PRACTICE STANDARDS.

| NO. | DATE | DESCRIPTION |
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**PROJECT:**

City of Toronto - Multiplex

**SHEET TITLE:**

FOURPLEX NARROW  
ELECTRICAL

PROJECT NO: 241058  
SCALE: AS NOTED

SHEET NO:

# E100

