

Design Discipline

Documents prepared by the respective Consultants are designated by the following discipline symbols:

- Architect (A)
- Civil Consultant (C)
- Commissioning Consultant (CxA)
- Electrical Consultant (E)
- Elevator Consultant (ELEV)
- Hardware Consultant (H)
- Landscape Consultant (L)
- Signage Consultant (SIG)
- Sustainability Consultant (SU)
- Mechanical Consultant (M)
- Owner (O)
- Structural Consultant (S)

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- Appendix 13: Appliance Schedule	O

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1 General

1.1 Section includes

- .1 The General Conditions and Supplementary Conditions of the Contract, Division 01 Specification Sections, and Contract Drawings apply to this Section.
- .2 Work of this Section includes, but is not limited to the following:
 - .1 Motorized operated window coverings.
 - .2 Manually operated window coverings.

1.2 Reference standards

- .1 CAN/ULC-S109, Flame Tests of Flame-resistant Fabrics and Films.

1.3 Design requirements

- .1 Design manual roller shade to be cordless type, with snap-in mounting, end brackets, shade tube, aluminum fascias, soffit, hembar and fabric as required for complete installation.

1.4 Submittals

- .1 Product data:
 - .1 Submit manufacturer's Product data according to Section 01 33 00 indicating:
 - .1 Performance criteria, compliance with appropriate reference standard(s), characteristics, limitations, and finishes.
 - .2 Product transportation, storage, handling and installation requirements.
- .2 Shop Drawings:
 - .1 Submit Shop Drawings according to Section 01 33 00 indicating:
 - .1 Elevations, sections and details of opening size, clearances, handling of operating components, anchorage, dimensions, gauges, materials, and finishes.
 - .2 Complete electrical wiring diagrams including electrical schematics and sequence of operation.

- .3 Samples:
 - .1 Submit following samples according to Section 01 33 00.
 - .1 Two 300 x 300 mm samples of fabric type.
- .4 Sustainability submittals: Submit applicable supporting documentation according to sustainability requirements for the approval of the Consultant.
- .5 Closeout submittals:
 - .1 Submit following for each Product for incorporation into operations and maintenance manuals according to Section 01 78 00:
 - .1 Functional description detailing operation and control of components.
 - .2 Performance criteria and maintenance data.
 - .3 Operating instructions and precautions.
 - .4 Safety precautions.

2 Products

2.1 Acceptable products and manufacturers

- .1 Motorized roller window shade (WS1):
 - .1 Extruded aluminum hanger and closure using a linear motor, fabloc tube and necessary electrical accessories for a single switch or Motor group control operated as indicated on the Shading Schedule. Internal limit switches are adjusted by two hex keys to allow for exact stop positions. Solenoid activated disc brake stops and holds in any position. Asynchronous motor with built in reversible capacitor start and run, 95-125V-AC at 60Hz CSA and UL approved. Complete with fabric type specified.
 - .2 Acceptable manufacturers:
 - .1 Motorized shades:
 - .1 Sun Glow Window Covering Products of Canada Ltd.
 - .2 Or approved equivalent by Elite Pro Shading Systems or approved equivalent manufacturer.
 - .2 Motor and related components: Somfy Canada or approved equivalent.

- .2 Manual roller window shade, cordless/chainless (WS2):
 - .1 Factory assembled, manual, cordless/chainless, roller type fabric shades with speed reducer/spring technology, complete with snap-in mounting, end brackets, shade tube, 100 mm aluminum cassette with fascias and soffits in white colour, hembar and fabric as indicated on drawings and as specified herein.
 - .2 Shade to be pulled down with a light pull to raise and lower shade.
 - .3 Provide dual roller window shades for suite windows with solar shade fabric and black-out shades.
 - .4 Acceptable Product:
 - .1 'ZeroGravity' by Sun Glow Window Covering Products of Canada Ltd.
 - .2 Or approved equivalent by Elite Pro Shading Systems or approved equivalent manufacturer, with similar cordless/chainless system.

2.2 Shading fabric

- .1 Solar shade fabric (for use in WS1 & 2):
 - .1 PVC-free polyester fabric with 1% openness factor, in style as selected by the Consultant. Manufactured by Sun Glow Window Covering Products of Canada Ltd. or approved equivalent.
 - .2 Flame retardance: Fabric shall be certified by an independent laboratory to pass CAN/ULC-S109.
 - .3 Colour:
 - .1 Colour to be selected by the Consultant from manufacturer's full range.
 - .2 Shade fabric on any one floor shall be from the same dye lot.

- .2 Black-out fabric (for use in WS2):
 - .1 **PVC-free** polyester blackout fabric with room darkening/blackout feature, in style as selected by the Consultant. Manufactured by Sun Glow Window Covering Products of Canada Ltd. or approved equivalent.
 - .2 Flame retardance: Fabric shall be certified by an independent laboratory to pass CAN/ULC-S109.
 - .3 Fabric colour:
 - .1 Colour to be selected by the Consultant from manufacturer's full range.
 - .2 Shade fabric on any one floor shall be from the same dye lot.
- .3 Fabric shall be sealed under heat and pressure to retain weave pattern, with additional heat seal at sides, to prevent fraying and to eliminate rough edges.

2.3 Fabrication, manual shades

- .1 Fabricate manual window shades according to reviewed shop drawings and manufacturer's written instructions, complete with speed reducer/spring technology for cordless and chainless manual operation.
- .2 Extruded aluminum shade tube, fascias and soffit: Manufacturer's standard extruded aluminum shade tube and cover.
- .3 Exterior hembar: Extruded aluminum in clear anodized finish with plastic end finials.
- .4 Dynamic hembar (**typical window shades**): At sill locations, in lieu of bottom channel, provide aluminum dynamic hembar with same finish as side channels. Upon contact with sill, it shall provide a light seal even if the sill is slightly out of level.
- .5 End bracket: Two piece moulded ABS construction with a nylon drive sprocket. Incorporate snap-in clip on each end bracket to engage snap-in mounting hardware. Bracket colour shall coordinate with the fascia colour.

- .6 Colour: Exposed surfaces (excluding fabric) shall be colour selected by Consultant, and not necessarily from manufacturer's full colour range. Metal components shall be pretreated and finished with an acceptable baked enamel finish.
- .7 Fasteners: Non-corrosive metal screws for attachment to windows or curtain wall framing, concealed in completed installation.
- .8 Mounting system: Snap-in brackets which allow the shade to be removed without disassembling the shade unit.
- .9 Shade and mounting system to be designed to allow air between shade and glass.
- .10 Fabric shall hang flat, without buckling or distortion. Trimmed edges shall hang straight without curling or raveling.
- .11 Provide stops at highest and lowest shade positions to prevent over winding and unrolling.
- .12 Design and fabricate shades so that there is a maximum 12 mm gap both sides of fabric.
- .13 Blackout side and bottom channels (**blackout shades**): Extruded aluminum channels 38 mm x 28 mm to reduce light infiltration around sides of shade. Channels shall include 11 mm 'Fuzz' on both sides to further minimize infiltration.
- .14 Shades shall be fully factory assembled units of unitized construction consisting of end brackets, shade tube, extruded aluminum fascias, soffit return, hembar and specified fabric.

2.4 Fabrication, motorized shades

- .1 Fabricate motorized window shades according to reviewed shop drawings and manufacturer's written instructions.
- .2 Extruded aluminum shade tube: Minimum 1.5 mm thick, with internal, continuous fins for strength and drive capabilities when attached to the nylon sprocket.
- .3 Fascias and soffit: 1.7 mm thick, extruded aluminum cover. To cover front and rear of shade and soffit return at underside to conceal roller and hardware.

- .4 Electrical components:
 - .1 Internal limit switches: adjustable with two hex keys to allow exact setting of stop position. Micro switches to provide circuit breaking at end of run. Switch setting not to be disturbed by roller tube action.
 - .2 Brake: solenoid activated disc brake mechanism stops and holds any position, brake to disengage when motor is running.
 - .3 Motor: Built-in reversible capacitor start and run. Single phase 95-125V-AC, 60 Hz motor with thermally protected class A temperature rating.
 - .4 Gear box: Satellite gears with 3 levels for load distribution with planetary type gears machined to close tolerance of tempered steel.
 - .5 Controls: Motors will be operated by white three position rocker switch, located remotely.
- .5 Exterior hembar: Extruded aluminum in clear anodized finish with plastic end finials.
- .6 Dynamic hembar: At sill locations, in lieu of bottom channel, provide aluminum dynamic hembar with same finish as side channels. Upon contact with sill, it shall provide a light seal even if the sill is slightly out of level.
- .7 Colour: Exposed surfaces (excluding fabric) shall be colour selected by Consultant, and not necessarily from manufacturer's full colour range. Metal components shall be pretreated and finished with an acceptable baked enamel finish.
- .8 Fasteners: Non-corrosive metal screws for attachment to windows framing, concealed in completed installation.
- .9 Shade and mounting system to be designed to allow air between shade and glass.
- .10 Fabric shall hang flat, without buckling or distortion. Trimmed edges shall hang straight without curling or raveling.
- .11 Provide stops at highest and lowest shade positions to prevent over winding and unrolling.

- .12 Design and fabricate shades so that there is a maximum 12 mm gap both sides of fabric.

3 Execution

3.1 Examination

- .1 Verify condition and dimensions of previously installed work upon which this Section depends. Report defects to Consultant. Commencement of work of this Section means acceptance of existing conditions.

3.2 Installation

- .1 Install shades according to reviewed Shop Drawings, manufacturer's written instructions and to meet requirements of authorities having jurisdiction.
- .2 Install shades in locations shown using specified fasteners, plumb, true, square, straight, and level in proper planes, complete with all fascias/soffits, trims and accessories.

3.3 Adjustment and cleaning

- .1 Shade cloth fabric shall hang flat, without buckling or distortion. Edges, when trimmed, shall hang straight without ravelling. An unguided roller shade cloth shall roll true and straight, without shifting sideways more than 3 mm in either direction due to warp distortion, or weave design.
- .2 Adjust, correct and lubricate fabric shade as required, to provide smooth and efficient operation without binding.
- .3 Clean shade surfaces and remove all finger marks and smudges from fascias, soffits and trim surfaces. Remove all protective films.
- .4 Leave fabric shade in raised position and in first-class condition upon completion of work of this section.

End of section

1 General

1.1 Related Requirements

- .1 Section 26 05 00 – Common Work Results for Electrical.
- .2 Section 27 05 00 – Common Work Results for Communications.
- .3 Section 27 05 28 – Pathways for Communications Systems.
- .4 Section 27 15 13 – Communications Copper Horizontal Cabling.

1.2 References

- .1 Abbreviations:
 - .1 Electronic Access Control (EAC): control of people through entrances and exits of controlled area. Security utilizing hardware systems and specialized procedures to control and monitor movements within a controlled area.
 - .2 CPVX: Central Station Burglar Alarm Systems.
 - .3 CVSG: Mercantile Burglar Alarm Systems.
 - .4 CVWX: Proprietary Burglar Alarm Systems.
 - .5 DRS: Door Release System.
 - .6 PIN: Personal Identification Number.
 - .7 ICT – Information and Communications Technology
 - .8 CCTV – Closed Circuit Television
 - .9 PTZ – Pan, Tilt, Zoom Camera
 - .10 NVR – Network Video Recorder
 - .11 RTLS – Real-Time Locating System
 - .12 PWS – Patient Wandering System
 - .13 ATS – Asset Tracking System
 - .14 DGP – Data Gathering Point
 - .15 DC – Data Centre
 - .16 ACS – Access control System
 - .17 NTP – Network Time Protocol
 - .18 PoE – Power over Ethernet
 - .19 IP – Internet Protocol
 - .20 REX – Request to Exit Motion Detector
 - .21 RXP – Request to Exit Push Button
 - .22 LAN – Local Area Network
 - .23 4CIF – An image resolution of 740 x 480 pixels
 - .24 GUI – Graphical User Interface

- .25 IPS – Images Per Second
 - .26 BTU - British Thermal Unit
 - .27 RU – Rack Unit
 - .28 UTP – Unshielded Twisted Pair
 - .29 RAM – Random Access Memory
 - .30 UPS – Uninterruptible Power Supply
 - .31 KVM – Keyboard, Video, Mouse console
 - .32 VMS – Video Management System
 - .33 DPU – Distributed Processing Unit
 - .34 SOC – Security Operations Centre, the SOC shall be located at Main Reception
 - .35 SCS – Structured Cabling System
- .2 Reference standards:
- .1 Health Canada / Workplace Hazardous Materials Information System (WHMIS)
 - .1 Material Safety Data Sheets (MSDS).
 - .2 Underwriters Laboratories of Canada (ULC)
 - .1 ULC-S317-1996, Installation and Classification of Closed Circuit Video Equipment (CCVC) Systems for Institutional and Commercial Security Systems.
 - .3 Underwriters' Laboratories (UL)
 - .1 UL 827-2008, Central-Station Alarm Services.
 - .2 Underwriters Laboratories (UL) Cable Certification and Follow Up Program.
 - .4 National Fire Protection Association (NFPA)
 - .1 NFPA 70-2011, Article 517, National Electric Code.
 - .2 NFPA 101-2008, Life Safety Code.
 - .5 ANSI/TIA/EIA-568-B.1 and its addendum
 - .6 ANSI/TIA/EIA-568-B.3 and its addendum
 - .7 BICSI Telecommunications Distribution Methods Manual – Most current Edition
 - .8 BICSI Information Transport Systems Installation Manual – Most current Edition
 - .9 American Society for Testing Materials (ASTM).
 - .10 Institute of Electrical and Electronic Engineers (IEEE).
 - .11 Applicable local Building Codes
 - .12 Manufacturer's specifications, latest issue.

1.3 System Description

- .1 The Video Surveillance System shall consist of field and termination equipment necessary to provide a fully automated system.
- .2 The Video Surveillance System shall be designed on a distributed processing architecture employing remote cameras and operator workstations connected to a redundant central server and storage solution.
- .3 As part of this project the contractor will provide a complete IP based video surveillance solution that is scalable from the existing scope of this project to thousands of cameras which can be added on a unit-by-unit basis. This future expansion capacity shall not require significant replacement or upgrading of equipment provided as part of the initial solution.
- .4 The system shall reside on the Owner's network and video shall be viewable on the network on select client workstations.
- .5 The System shall be configured to a maximum of 75% of its input, output and recording capacity.
- .6 Provide general surveillance of exterior buildings and surrounding areas, underground parking areas and all other areas noted on the drawings.
- .7 All video streams from cameras shall be digitally encoded using H.264 or better compression formats for simultaneous monitoring and recording in real time.
- .8 Each camera's bit rate, frame rate and resolution shall be set independently from other cameras in the system, and altering these settings shall not affect the recording and display settings of other cameras.
- .9 The system shall not require proprietary recording hardware, hardware multiplexers or time-division technology for video recording and monitoring.
- .10 The system client and server applications shall be based on a true open architecture that shall allow for use of non-proprietary PC storage hardware that shall not limit the storage capacity and shall allow for incremental upgrades of recording capacity.
- .11 The system shall digitally sign recorded video by way of watermarking to prevent image tampering and to confirm image integrity.
- .12 The system server and client software applications shall be able to operate on separate networks.
- .13 The system shall have the capability of simultaneous live viewing and recording of individual cameras at different frame rates and resolutions.

- .14 The Video Surveillance System must incorporate Self-Monitoring Analysis and Reporting Technology incorporating diagnostics that monitor the internal operation of a drive (including external storage drives) and provide early warning notification to SOC operators for many types of potential problems. This shall allow for the drive to be repaired or replaced before any data is lost or damaged.
- .15 The Video Surveillance System shall utilize a redundant centralized storage topology. All Video System Storage shall be located in Data Centre room.
- .16 The Video Surveillance System shall allow authorized users to save video to a standard recordable DVD. The option to include the player software on the DVD shall be available so that no additional software needs to be purchased.
- .17 Monitoring Locations
 - .1 System monitoring shall be centrally monitored from the Main Reception and the Second Floor East Nurses Station.
 - .2 System monitoring shall also be provided at each Nurses Station with the ability to review all only relevant cameras within that floor.
 - .3 System monitoring shall also be provided via web browser accessible from any workstation on the converged network. Access shall require a valid user ID and password.
 - .4 Perimeter Cameras must be viewable via a web browser at workstation designated by the Owner.
- .18 The system shall be capable of operating even in the event that the system management server is unavailable.
- .19 Following the restoration of power after a failure of main or Centralized UPS, the Video Surveillance System shall revert automatically, within 3.5 minutes, to normal service status without the need for operator intervention. The system shall restart in the same state as existed before the power interruption with no loss of functionality or transaction data.
- .20 Telecommunications Rooms
 - .1 All Video termination equipment with the possible exception of non-PoE camera power supplies shall be rack mounted in equipment cabinets.
 - .2 It shall be the responsibility of the contractor to keep all Video equipment clean and free of dust at all times during the installation.
 - .3 The system shall operate over a central communications backbone and reside on the Owner's network. The contractor shall coordinate with Owner's IT for all required network access.

.21 Power

- .1 All Source 120VAC power for security equipment shall be provided with UPS.
- .2 Provide lockable, hinged covered, terminal cabinets for all power supplies, transformers, and power distribution terminal strips. Provide all conduit and wiring from the 120 VAC facilities to the terminal cabinets.
- .3 Provide protection against surges, spikes, noise, and other line problems for all system equipment and their components. In addition to generator support,
- .4 All equipment and system components which are powered by more than 48 volts AC or DC shall be ULC listed for safety. This includes equipment or system components classified as non-power limited.
- .5 All Video System power supplies shall have battery back and shall be monitored, by the Access Control System, for line failure on a dedicated monitoring input point. Therefore, when an AC line fails, a unique alarm condition will be caused.

.22 Network

- .1 Ensure all IP addressing schemes used on the network are coordinated and reviewed by both the Facility and IT Service providers configuring the network.

.23 Interface with Other Systems

- .1 Network Time Protocol
 - .1 The Video Surveillance System shall be maintained with NTP time. The VSS system shall utilize the Owner's network for NTP time.

1.4 Submittals

- .1 Submit in accordance with Section 01 33 00, and Section 27 05 00.
- .2 Product Data:
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for devices and equipment and include product characteristics, performance criteria, physical size, finish, and limitations.
 - .2 Submit WHMIS MSDS.
 - .3 Submit:
 - .1 Functional description of equipment.
 - .2 Technical data for all devices.

- .3 Device location plans and cable lists.
 - .4 Devices mounting location detail drawings.
 - .5 Typical devices connection detail drawings.
- .3 Shop Drawings:
 - .1 Submit drawings stamped and signed by professional engineer registered or licensed in Province of Ontario, Canada.
 - .2 Shop drawings to indicate project layout, including details.
 - .1 Shop drawings to indicate, mounting heights and locations, wiring diagrams.
 - .2 Submit zone layout drawing indicating number and location of zones and areas covered.
 - .3 Submit wiring diagrams.
 - .4 Submit complete equipment list.
 - .5 Manufacturer specification sheet for each new piece of equipment. Each sheet should clearly identify the particular model number of the hardware being provided.
 - .6 Software configuration parameters.
- .4 Test and Evaluation Reports:
 - .1 Submit certified test reports from approved independent testing laboratories indicating compliance with specifications for specified performance characteristics and physical properties.
- .5 Manufacturer's Instructions: submit manufacturer's installation instructions.
- .6 Manufacturer's Field Reports: submit manufacturer's written reports within 3 days of review, verifying compliance of Work, as described in PART 3 - FIELD QUALITY CONTROL.
- .7 Integration Document for each interface to be implemented or configured.
- .8 Testing and commissioning plan
- .9 Sustainable Design Submittals:
 - .1 Submit calculations on end-of-project recycling rates, salvage rates, and landfill rates demonstrating that 75% of construction wastes were recycled or salvaged.
- .10 Regional Materials: submit evidence that project incorporates required percentage 10% of regional materials and products, showing their cost, distance from project to furthest site of extraction or manufacture, and total cost of materials for project.

1.5 Closeout Submittals

- .1 Submit in accordance with Section 01 78 00, and Section 27 05 00.
- .2 Operation and Maintenance Data: submit operation and maintenance data for access controls and equipment for incorporation into manual.
 - .1 Include:
 - .1 System configuration and equipment physical layout.
 - .2 Functional description of equipment.
 - .3 Instructions of operation of equipment.
 - .4 Illustrations and diagrams to supplement procedures.
 - .5 Operation instructions provided by manufacturer.
 - .6 Cleaning instructions.

1.6 Delivery, Storage, and Handling

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 and with manufacturer's written instructions.
- .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and Handling Requirements:
 - .1 Store materials indoors and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
 - .2 Store and protect access controls and equipment from nicks, scratches, and blemishes.
 - .3 Replace defective or damaged materials with new.
- .4 Extended warranty period must include warranty against meeting specified performance requirements, for specified time period.
- .5 Manufacturer's Warranty: submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official.

1 Products

1.1 General Requirements

- .1 The entire new Video Surveillance System (VSS) must be based on Axis Communications cameras or approved equivalent.
- .2 All VSS components shall be provided with a repair or parts replacement. The repair and parts replacement shall be guaranteed by the manufacturer on warranty and non-warranty items.

- .3 Contractor is fully responsible for the ultimate design and implementation of the system topology (physical and logical) best suited for the project, given identified and recognized physical infrastructure and constraints.

1.2 VMS

- .1 The Region of Durham standard:
 - .1 VMS – Digital Watchdog 5.0 or latest production version

1.3 Cameras

- .1 Manufacturer
 - .1 Axis communications.
- .2 Models
- .3 Standard interior fixed view camera should be AXIS P3267-LV (or most current version), or equivalent running the most recent firmware.
- .4 Standard exterior fixed camera should be AXIS P3267-LVE (or most current version), or equivalent running the most recent firmware.
- .5 Standard long-range exterior fixed camera should be AXIS Q1786-LE (or most current version), or approved equivalent running the most recent firmware.
- .6 Standard 180° fisheye camera should be AXIS P3818-PVE (or most recent version), or equivalent running the most recent firmware.
- .7 Standard PTZ camera should be AXIS Q6135-LE (or most recent version), or equivalent running the most recent firmware.
- .8 Standard 360° camera should be AXIS P3737-PLE (or most recent version), or equivalent running the most recent firmware.
- .9 Corner mount cameras for elevators/small rooms should be AXIS P9106-V for interior, for harsh environments the AXIS Q9216-SLV should be used.
- .10 Camera Licensing – Single DW Spectrum IPVMS License – Digital
- .11 Watchdog Licenses to be provided (Part # DW-SPECTRUMLSC001)

1.4 Server

- .1 Head-end equipment (NVR, Switches, UPS, Local Monitors, etc.) should be housed in an appropriately sized lockable rack with proper venting including an inlet (with filter) and outlet fans with temperature sensing capabilities and constant on feature.

- .2 All devices shall be programmed with usernames and passwords supplied by the Security Services department. No devices shall have default login and passwords left enabled.
- .3 The system will need to record all cameras 24 hours per day, at 10 frames per second for 30 days.
- .4 The system will also need to handle an additional 50% camera load for future expansion, no system should be installed running at maximum capacity.
- .5 Rack Mount
- .6 Windows 10 Pro or greater
- .7 250 GB SSD Raid Redundant Operating System Drive
- .8 Intel 7 Processor or greater
- .9 16 GB (RAM) Memory or greater
- .10 2X Gigabit ethernet ports
- .11 600 Mbps video recording rate or greater
- .12 Video Outputs – HDMI and DVI

1.5 Enclosures, Mounts, and Supports

- .1 Enclosures
 - .1 Cameras shall be installed in lockable enclosures capable of being pendant or pole mounted, on a wall, in a corner, or fitted into a drop ceiling depending on the specific application.
 - .2 Indoor fixed cameras shall be mounted in low profile ceiling mount enclosures for installations in fixed and drop ceilings, and wall mounted enclosures for installations in service areas.
 - .3 Outdoor enclosures shall be equipped with a thermostatically controlled heater and blower.
 - .4 All connections shall be contained within secure enclosures. If external to equipment and enclosures, cabling shall be run in rigid or flexible conduit.
 - .5 Final mounting locations of enclosures shall be co-coordinated Onsite prior to installation
- .2 Mounts/Supports
 - .1 For outdoor cameras mounted on buildings and structures provide mounts/supports to match the camera enclosures. Incorporate a

- camera mount with an adjustable head. Video displacement, as viewed on a monitor,
- .2 Parapet Mount
 - .1 The parapet mount shall be a fixed indoor/outdoor unit.
 - .2 It shall have a load rating of 40 lb (18 kg).
 - .3 The mount may be swivelled inward for servicing.
- .3 To guard against potential vandalism in low ceiling public areas, the camera assemblies shall be capable of withstanding an 80 kg (180 lbs) person grabbing hold of the enclosure and attempting to pull it free from its mount without the aid of tools or weapons. In addition, it shall not be possible to crack, penetrate or damage an enclosure in any way without the aid of tools or weapons.
- .4 Provide indoor camera mounts/supports fabricated and finished to match the camera enclosures and equipped with an adjustable head. It shall be possible to lock the position of the head after adjustments are complete.

1.6 Power Supplies

- .1 Indoor CCTV Power supplies
 - .1 All indoor fixed cameras shall be powered by Power over Ethernet (PoE).
- .2 Outdoor Camera Power supplies
 - .1 When ever possible outdoor fixed cameras shall be powered by Power over Ethernet (PoE) .
 - .2 Outdoor CCTV power supplies shall be model WCS1-4 as manufactured by Pelco or approved equivalent.
 - .3 All camera power supplies shall be connected to UPS and emergency power.
 - .4 An outdoor rated lock shall be supplied and installed on the power supply cabinet to protect the unit from unauthorized access and tampering.
 - .5 Three sets of keys will be provided for the outdoor power supply lock.
 - .6 If multiple locks are supplied, they should be keyed alike.
 - .7 For outdoor cameras provide local 120V AC emergency power to all camera power supplies and install within 50 feet of the camera. All efforts shall be made to install the power supply on the inside of the building where possible.

1.7 Security PoE Switches

- .1 All video network connections should terminate on dedicated patch panels and patch to the dedicated CCTV network switch(es).
- .2 Switches
 - .1 Manufacturer:
 - .1 D-Link.
 - .2 Model:
 - .1 DGS-1210-28MP or most recent model and firmware (selection based on client specifications).
 - .3 24 x 10/100/1000BASE-T PoE ports
 - .4 4 x Gigabit GbE/SFP combo ports
 - .5 L2 switching and L2+ Static Routing
 - .6 Optional "standard mode" or "surveillance mode" management user interface
 - .7 370W PoE budget

2 Execution

2.1 General

- .1 Programming.
 - .1 Include as part of their solution all associated cost to program the system and ensure all configuration and naming conventions are reviewed by facilities.
 - .2 Attend pre-installation meetings as required with Owner's Representative to identify the specifics of the system programming.
 - .3 Document all decided on software configuration parameters and submit for approval.
 - .4 Once approved, implement, and test all system programming required.
 - .5 Include all approved software configuration parameters in final revisions shop drawings.
 - .6 Building door numbers are not yet final and will change prior to final system programming. Ensure final programming configuration and system documentation match this newest set to be provided by the Architect.

2.2 Field of View (FOV)

- .1 The final field of view for each camera is to be reviewed by facilities prior to camera installation.

- .2 IEC/EN 62676-4: 2025 OODPCVS shall be followed for pixel density requirements.
- .3 For observation purposes at the farthest target distance a minimum 20 pixels per meter shall be achieved.
- .4 For detection purposes at the farthest target distance a minimum 50 pixels per meter shall be achieved.
- .5 For recognition purposes at the farthest target distance a horizontal pixel count of 125 pixels per meter shall be achieved.
- .6 For identification purposes at the target distance a horizontal pixel count of 500 pixels per meter shall be achieved.
- .7 The cameras for door monitoring shall include entire door in the field of view.

2.3 Examination

- .1 Verification of Conditions: verify conditions of substrates previously installed under other Sections or Contracts are acceptable for access control system installation in accordance with manufacturer's written instructions.
 - .1 Visually inspect substrate in presence of Consultant.
 - .2 Inform Consultant of unacceptable conditions immediately upon discovery.
 - .3 Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval to proceed from the Owner.

2.4 Installation

- .1 Install Video Surveillance System units and components in accordance with ULC-S317.
- .2 Conduits and back boxes for devices in walls and doors will be provided by Electrical Trade as noted in Section 27 05 28. Provide all control boxes/equipment and conduit work to tie in to rough-ins.
- .3 Provide tamperproof attachments for each activation unit cover plate to receptacle back box.
- .4 Enclose in conduit or flexible protective armor external cables for associated junction box to remaining system locations, from junction box to above ceiling mounted cable ducts or master conduit routes.
- .5 Securely fasten all components to wall, ceiling, or other substrate or structure.

2.5 Site Tests and Inspections

- .1 Perform verification inspections and test in presence of facility representatives.
 - .1 Provide all necessary tools, ladders and equipment.
 - .2 Ensure appropriate subcontractors manufacturer's representatives are present for verification.
- .2 Performance testing:
 - .1 Test procedure: perform test on a "go-no-go" basis.
 - .1 Make only operator adjustments required to show proof of performance.
 - .2 Test to demonstrate and verify that installed system complies with installation and technical requirements of this specification under operating conditions.
 - .3 Test results to be evaluated by Consultant as either acceptable or unacceptable using following procedures.
 - .2 Documentation review:
 - .1 This review will determine if information provided is sufficient to meet requirements of this specification.
 - .2 Provide for review all System manuals, as installed drawings, pretest forms, equipment cabinet pictorials, video equipment details.
 - .3 Mechanical inspection:
 - .1 Consultant and Contractor to tour areas to ensure that Systems and Subsystems are installed in place for proof of performance testing.
 - .2 Take system inventory at this time. Verify following items before beginning proof of performance tests:
 - .1 Electrical power circuits designated for system equipment are properly labeled, wired, phased, protected and grounded.
 - .2 Conductor ends are protected by heat shrink wrap; audio spade lugs, barrier strips and punch blocks are used.
 - .3 Dust, debris, solder splatter, etc. are cleaned and removed from site.
 - .4 Equipment is properly labelled.
 - .5 Equipment identified in system's equipment lists are in-place and properly installed.
 - .6 Each System ground method are installed in accordance with manufacturer's instructions and this specification.

- .3 Subsystem functional test:
 - .1 Conduct operational testing after review of documentation and mechanical inspection completed. Proceed as follows.
 - .1 Perform operational test of each Subsystem to verify that all equipment is properly connected, interfaced and is functionally operational to meet requirements of this specification.
 - .2 Safety:
 - .1 Demonstrate with documentation that access control system meets safety requirements specified in UL 294.
- .4 Visual verification: objective is to assess quality of installation and assembly and overall appearance to ensure compliance with Contract Documents. Visual inspection to include:
 - .1 Sturdiness of equipment fastening.
 - .2 Non-existence of installation related damages.
 - .3 Compliance of device locations with reviewed shop drawings.
 - .4 Compatibility of equipment installation with physical environment.
 - .5 Inclusion of all accessories.
 - .6 Device and cabling identification.
 - .7 Application and location of ULC approval decals.
- .5 Technical verification: purpose to ensure that all systems and devices are properly installed and free of defects and damage. Technical verification includes:
 - .1 Validate cameras, recording and interface with other systems.
 - .2 Connecting joints and equipment fastening.
 - .3 Compliance with manufacturer's specification, product literature and installation instructions.
- .6 Operational verification: purpose to ensure that devices and systems' performance meet or exceed established functional requirements. Operational verification includes:
 - .1 Operation of each device individually and within its environment.
 - .2 Operation of each device in relation with programmable schedule and or/specific functions.

2.6 Field Quality Control

- .1 Manufacturer Services:
 - .1 Manufacturer of products, supplied under this Section, to review Work involved in the handling, installation/application, protection and

cleaning, of its products and submit written reports, in acceptable format, to verify compliance of Work with Contract.

- .2 Manufacturer's Field Services:
 - .1 Obtain written reports from manufacturer verifying compliance of Work, in handling, installing, applying, protecting and cleaning of product.
 - .2 Submit manufacturer's field services consisting of product use recommendations and periodic site visits for inspection of product installation in accordance with manufacturer's instructions.
 - .3 Ensure manufacturer's representative is present before and during critical periods of installation and testing.
 - .4 Schedule site visits to review Work at stages listed:
 - .1 After delivery and storage of products, and when preparatory Work on which Work of this Section depends is complete, but before installation begins.
 - .2 Twice during progress of Work at 25% and 60% complete.
 - .3 Upon completion of Work, after cleaning is carried out.

2.7 Cleaning

- .1 Progress Cleaning: clean in accordance with Section 01 74 00.
 - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 00.
 - .1 Remove protective coverings from accessories and components.
 - .2 Clean housings and system components, free from marks, packing tape, and finger prints, in accordance with manufacturer's written cleaning recommendations.
 - .3 Clean components free from dirt and fingerprints.
 - .4 Remove recycling containers and bins from site and dispose of materials at appropriate facility.

2.8 Protection

- .1 Protect installed products and components from damage during construction.
- .2 Repair damage to adjacent materials caused by access controls and equipment installation.

END OF SECTION

Appliance	Drawing Tag	Location	Manufacturer/Code/Basis of Design	Description	Overall Sizes
Wall Oven Microwave Combo, Built-in	WOVEN-1	Amenity	LG WCEP6423F	Microwave Wall Oven Combo, 30 inch Exterior Width, Convection, One Oven Self Clean, 6.4 cu. ft. Capacity, Wifi Enabled, Air Fry, Stainless Steel colour Air Fry	Capacity6.4 Cu Ft (1.7 Cu Ft upper microwave / 4.7 Cu Ft lower oven) Width 29.75 inches Height 43.81 inches Depth 23.37 inches Nominal Width30 inches Cutout Width28.5 – 28.63 inches (standard); 30 inches (flush) Cutout Height43.44 – 43.5 inches (standard); 44 inches (flush) Cutout Depth24 inches (standard); 25 inches (flush)
Wall Oven, Built-in	WOVEN-2	BF Suites	LG WSED3023B	3.0 cu. ft. Smart Compact Wall Oven with True Convection and Air Fry	Cut-Out (WxHxD) 22 1/16" x 23 1/4" x 21 15/16" Product (WxHxD) 23 5/16" x 23 3/8" x 22 7/16"
Range	RANGE-2	Non BF Suites	Whirlpool YUFE50M4SS	24-Inch Freestanding Electric Range with Air Fry	Depth23.75" Height35.25" Width23.5" Cutout Depth25.0" Cutout Height36.0" Cutout Width24.0"
Refrigerator	FRIDGE-1	Amenity	LG LF21C6200S	French Door Refrigerator, 33 inch Width, 21 cu. ft. Capacity, Counter Depth, Ice Dispenser (Freezer Located), ENERGY STAR Certified, Stainless Steel colour, Counter-Depth MAX™ , ThinQ® Technology	Capacity: Total20.8 cu ft Capacity: Refrigerator14.2 cu ft Capacity: Freezer6.6 cu ft Refrigerator Size (rounded, marketing)21 cu ft Width: Cabinet / Overall32 15/16 in (≈32.94 in / 33 in class) Height: With Hinges69 15/16 in (≈69.94 in / 70 in class) Height: Without Hinges (Case)68 5/8 in (≈68.63 in) Depth: Including Handles28 3/4 in Depth: Excluding Handles28 3/4 in Depth: Without Doors24 13/16 in (≈24.81 in) Depth: Doors Open 90°≈41.7–42 in Counter Depth or StandardCounter Depth (Counter-Depth MAX™)

Appliance	Drawing Tag	Location	Manufacturer/Code/Basis of Design	Description	Overall Sizes
Refrigerator	FRIDGE-2	BF & Non-BF suites	LG LBNC15251V	Bottom Freezer Refrigerator, 28 inch Width, Counter Depth, ENERGY STAR Certified, 14.7 cu. ft. Capacity, Platinum Silver colour, DoorCooling+, SmartDiagnosis™	Product Dimension (WxHxD)27.625 in x 67.75 in x 26.625 in
Dishwasher	DSHWR-1	Suites	LG ADFD5448AT	24 in. Stainless Steel Front Control Built-In Dishwasher with Stainless Steel Tub, Quadwash, Dynamic Dry, ADA, 48 dBA	Depth 23.5" Height 32" Width 22.5"
Cooktop	CKTP-1	Amenity (BF)	LG CBEW3013BE	Electric Cooktop, 30 inch Exterior Width, 4 Burners, 2,500 W Highest Element, Black colour	Product Width30 11/16 inches Product Height4 1/8 inches (manufacturer) / approx. 4 5/16 inches (some retailers) Product Depth21 1/16 inches
Cooktop	CKTP-2	BF Suites	Bosch NET5469SC	Bosch 500 Series NET5469SC Electric Cooktop, 24 inch Exterior Width, 4 Burners, 2,200 W Highest Element, Black colour Series 6	Overall Width23 inches Width22.95 inches (58.3 cm) Depth20.2 inches (51.3 cm) Height4.33 inches (11.0 cm) Overall Appliance Dimensions (HxWxD) (inches)1 1/8" + 4 1/3" x 23" x 20 1/5"
Hood (wall mounted)	HOOD-1	Amenity	Summit SEH3630SSADA	30 inch ADA Compliant European Style Convertible Wall Mount Range Hood with 400 CFM, LED Lighting,Charcoal Filters and Removable Aluminum Cassette Filters, Stainless Steel	37.0" H x 29.5" W x 19.69" D (94cm H x 75cm W x 50cm D)
Hood (under cabinet)	HOOD-2	BF Suites	Summit H24RSSADA	Under Cabinet Convertible Range Hood with Two-speed Fan - Stainless Steel	5.13" H x 23.88" W x 18.63" D (13cm H x 61cm W x 47cm D)

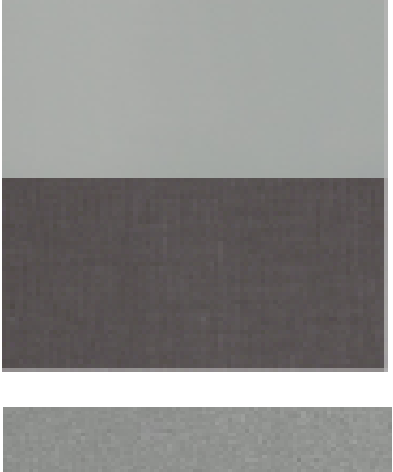
Durham Housing Redevelopment - 409 Centre Street S

MSA PROJECT NO: 25008

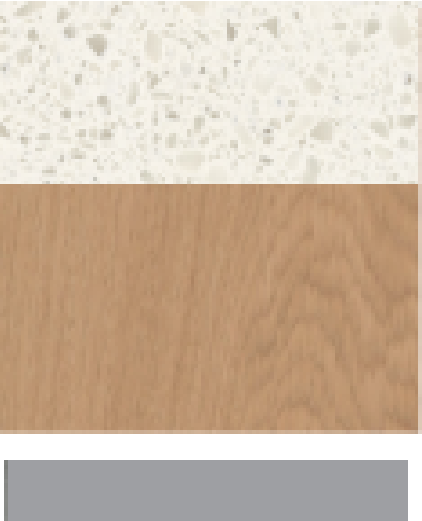
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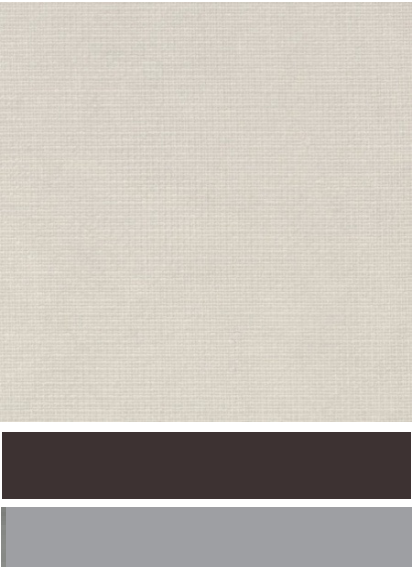
Appliance Schedule

Appliance	Drawing Tag	Location	Manufacturer/Code/Basis of Design	Description	Overall Sizes
Microwave/Hood, Over the range	MCRWV-2	Non BF Suites	Frigidaire UMV1422US	Over the Range Microwave, 24 inch Exterior Width, 1.4 cu. ft. Capacity, 300 CFM, 1,000 W Watts, LED, Stainless Steel colour	Width23 7/8 inches Height17 inches Depth16 3/16 inches
Microwave, built-in cabinet	MCRWV-3	BF Suites	Frigidaire PMBS3080BF	Countertop Built In Microwave, 24 inch Exterior Width, 2.2 cu. ft. Capacity, 1,100 W Watts, Stainless Steel colour Trim Kit Sold Separately	Width24 3/8 inches Height13 5/8 inches Depth19 5/8 inches
Notes:					
Refer to Millwork Drawings, for locations and quantities.					
All finishes are subject to review upon receiving actual samples and client approvals.					
Appliance selections have been provided to identify the Bases of Design and desired product performance requirements. Vendor’s may choose to submit "Alternates" for review. Any "Alternatives" will be evaluated against the Basis of Design product specifications and preference will be given to Ontario and Canada made products.					

Code	Generic Description	Performance Specifications	Basis of Design	Reference Image	Reference Finishes
CS-01A	Table Circular - 24"	Stacking chair • Metal Frame with arms, plastic back, upholstered seat • Plastic back, upholstered seat • Chairs are stackable up to 10 chairs, when stacked on the caddie.	Manufacturer: Krug Product: Corfu Base Finish : Silver Metallic Plastic back: Upholstered Seat: CF Stinson / Fuse 2.0 / FST 241 Charcoal		
CD-01	Chair Dolly	Chair Dolly for CS- 01A Constructed of durable tubular construction and 4 soft-wheel swivel, locking casters.	Manufacturer: Krug Product: Caddie		

Code	Generic Description	Performance Specifications	Basis of Design	Reference Image	Reference Finishes
LS-01	Lounge Chair - Single Seat	Fully upholstered lounge chair • Size: Approx 27"D, 30.5" W, 29"H • Upholstery: Bleach Cleanable Non- Phthalate Vinyl with advanced soil and stain protections, exceeds 100,000 double rubs. Flammability : Passes California TB 117-2013, Section 1 and NFPA 260 & UFAC • 4-leg base - stained solid maple/beach with adjustable glides	Manufacturer: Steelcase / Coalesse Product: Passerelle Lounge Single Seat Upholstery: CF Stinson / Cesto / CST 28 Cherry Wood Finish: Low Sheen Desert Oak Stain on maple		
LS-01	Lounge Chair - Single Seat ALTERNATIVE	Fully upholstered lounge chair • Size: Approx 27"D, 30.5" W, 29"H • Upholstery: Bleach Cleanable Non- Phthalate Vinyl with advanced soil and stain protections, exceeds 100,000 double rubs. Flammability : Passes California TB 117-2013, Section 1 and NFPA 260 & UFAC • 4-leg base - stained solid maple/beach with adjustable glides	Manufacturer: Stance Healthcare Product: Kalarne Single Lounge chair Upholstery: CF Stinson / Cesto / CST 28 Cherry Wood Finish: Aria Stain on European Beech hardwood		

Code	Generic Description	Performance Specifications	Basis of Design	Reference Image	Reference Finishes
TC-24-01	Table Circular - 24"	Free standing cylinder table • Size 24" round x 18" high • Base: Plinth steel base with powder coated finish • Top: Solid surface • Features: Concealed fasteners and glides	Manufacturer: Spec furniture Product: Drum Table Base Finish : Silver Textured Laminate: Wilsonart White Oak Solid Surface Top: Formica Everform - Bianco Mineral 758		
TC-24-01	Table Circular - 18" ALTERNATIVE	Free standing round table • Size: 18"round x 16" high • Base: Plinth steel base with powder coated finish • Top: Solid surface	Manufacturer: Stance Healthcare Product: Spry Base Finish : Textured Nickel Solid Surface Top: Corian Cameo White		

Code	Generic Description	Performance Specifications	Basis of Design	Reference Image	Reference Finishes
TS-48-01	Table Square - 48"	Free standing square table • 48" x 48' square - standard dining height 29" +/- • Base: Metal X base with epoxy powder coated finish • Top: High Pressure light coloured laminate with contrasting PVC flat edge • Features: Flip Top Mechanism • Sloped or beveled features at bottom of bases to minimize hard stops during impact from wheel chairs.	Manufacturer: Spec Furniture Product: Manhattan Series Tables with flip-top mechanism Base Finish : Silver Textured Edge Finish: RAL 8019 Laminate Finish: Wilsonart, Grey Mesh 4877-38		

Note:

Refer to Furniture Plan, A1700 for locations and quantities.

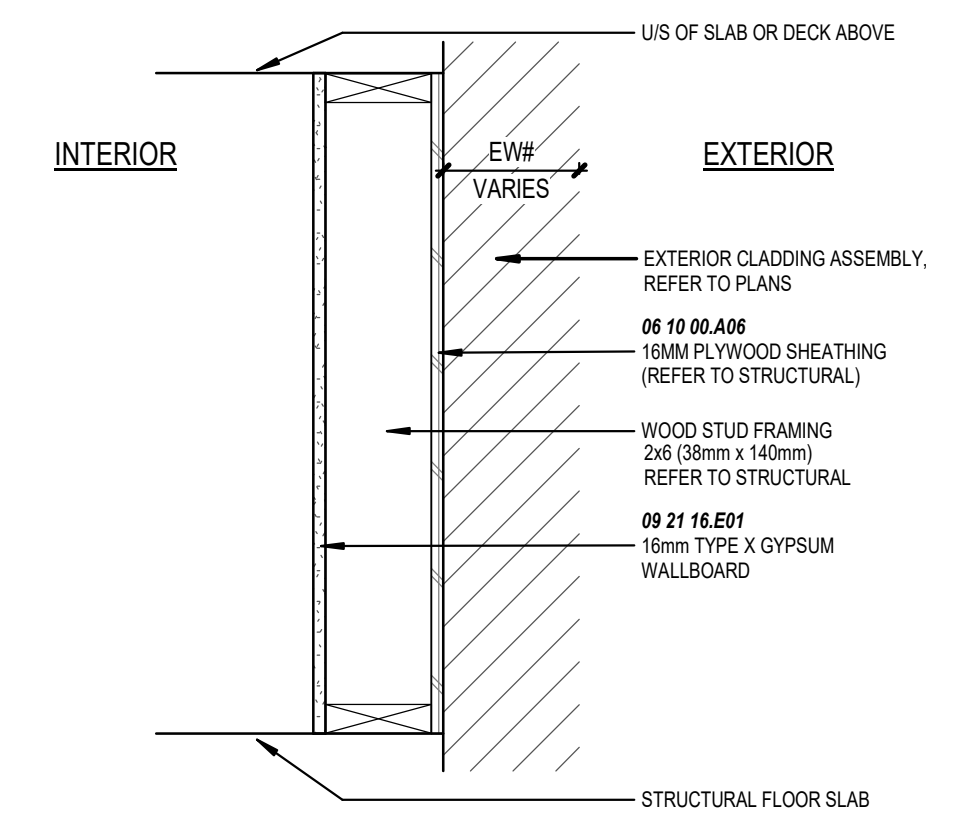
All finishes are subject to review upon receiving actual samples and client approvals.

Furniture selections have been provided to identify the Bases of Design and desired product performance requirements. Vendor’s may choose to submit "Alternates" for review. Any "Alternatives" will be evaluated against the Basis of Design product specifications and preference will be given to Ontario and Canada made products.”

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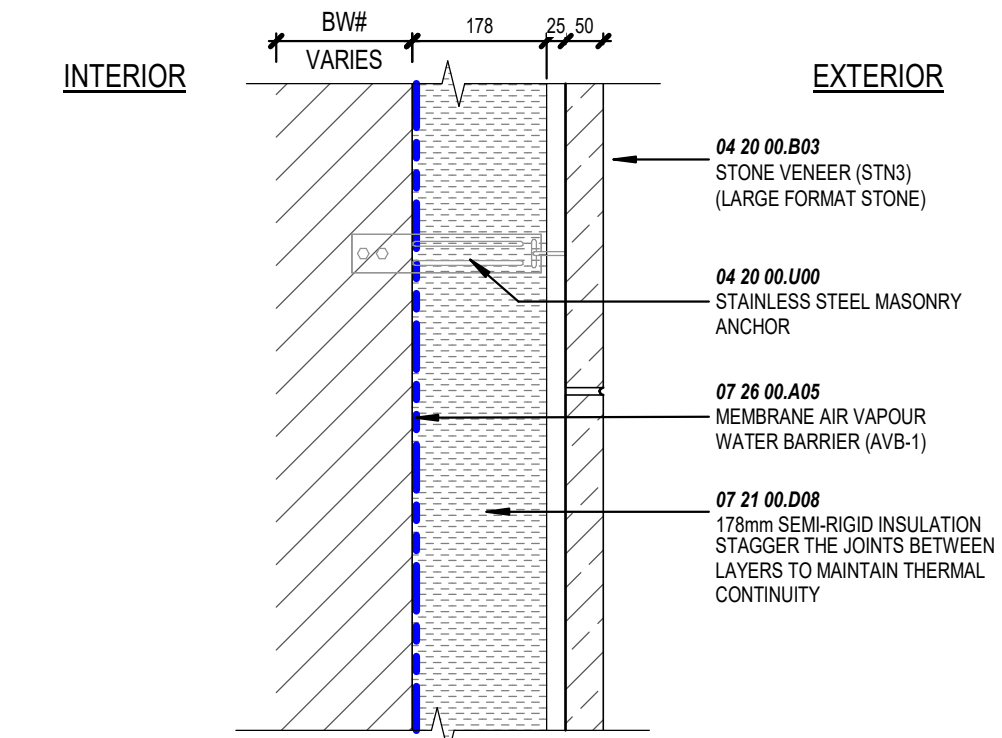
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EXTERIOR BACKUP WALL ASSEMBLIES

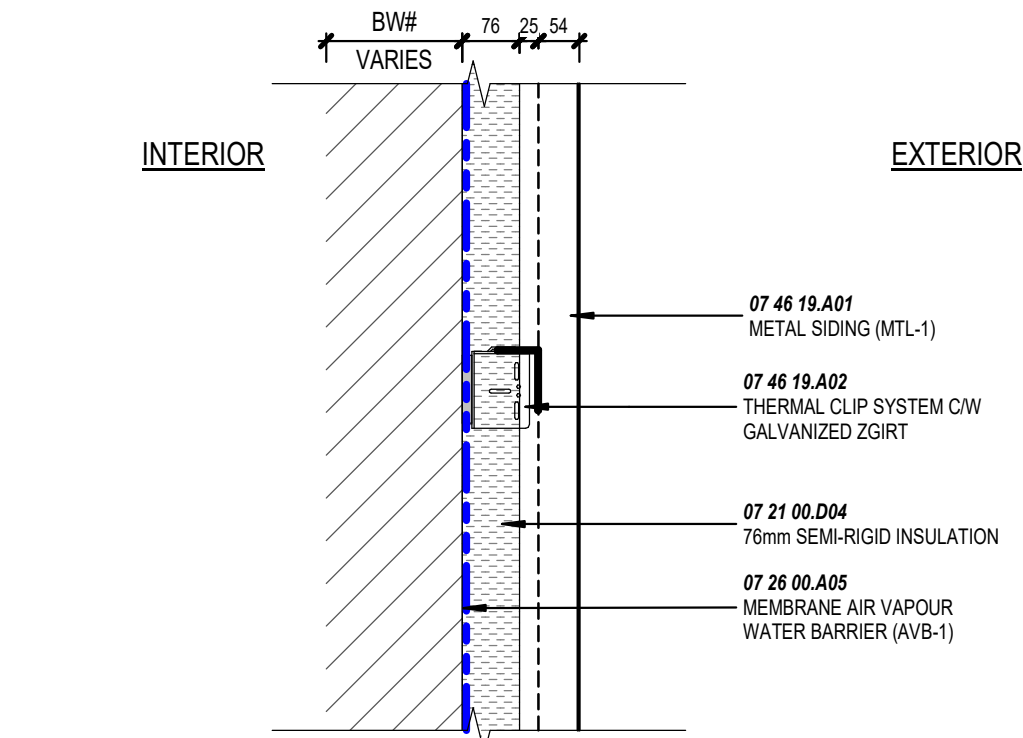


BW1a BACK-UP WALL ASSEMBLY
SCALE: 1:10
MINIMUM R-25 EFFECTIVE COMBINED WITH EW#
ULC DESIGN U356 (UP TO 1HR FRR)

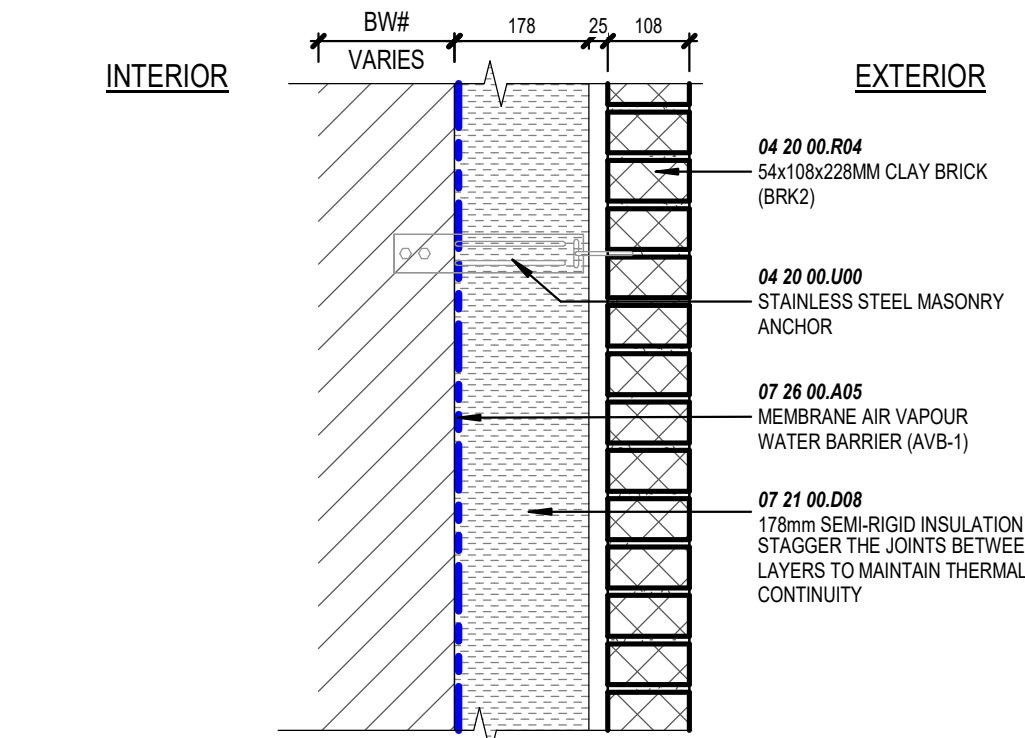
EXTERIOR WALL ASSEMBLIES



EW6 EXTERIOR WALL ASSEMBLY
SCALE: 1:10
MINIMUM R-25 EFFECTIVE COMBINED WITH BW#
STN3 - SMOOTH STONE

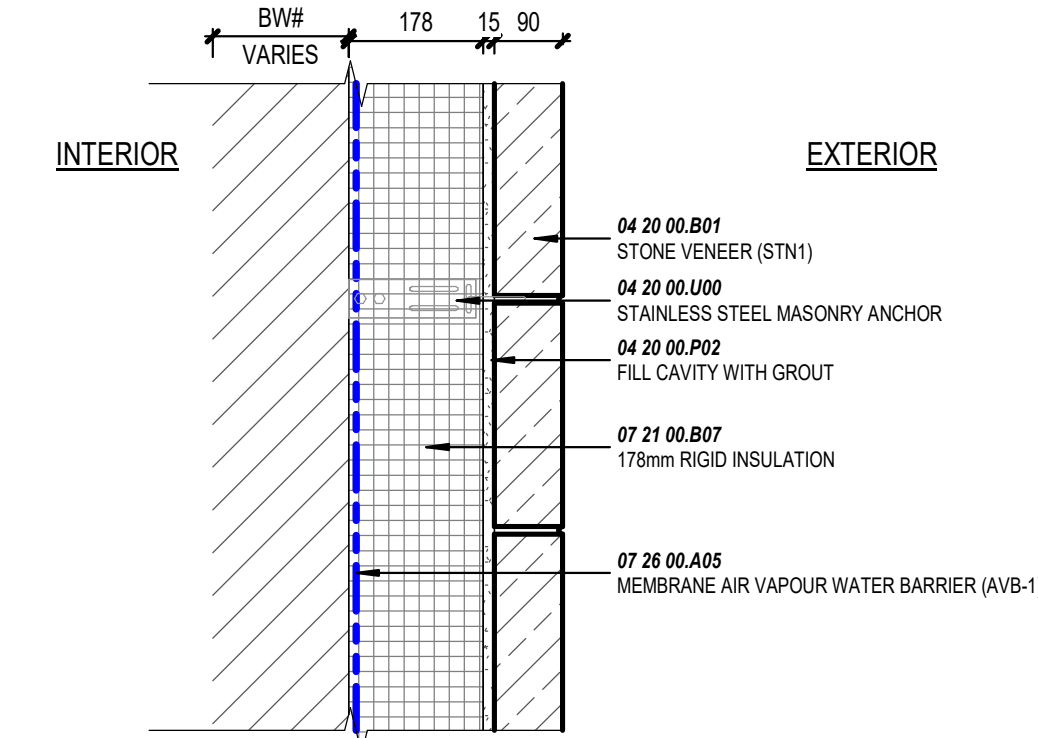


EW3 EXTERIOR WALL ASSEMBLY
SCALE: 1:10
MINIMUM R-25 EFFECTIVE COMBINED WITH BW#
METAL PANEL

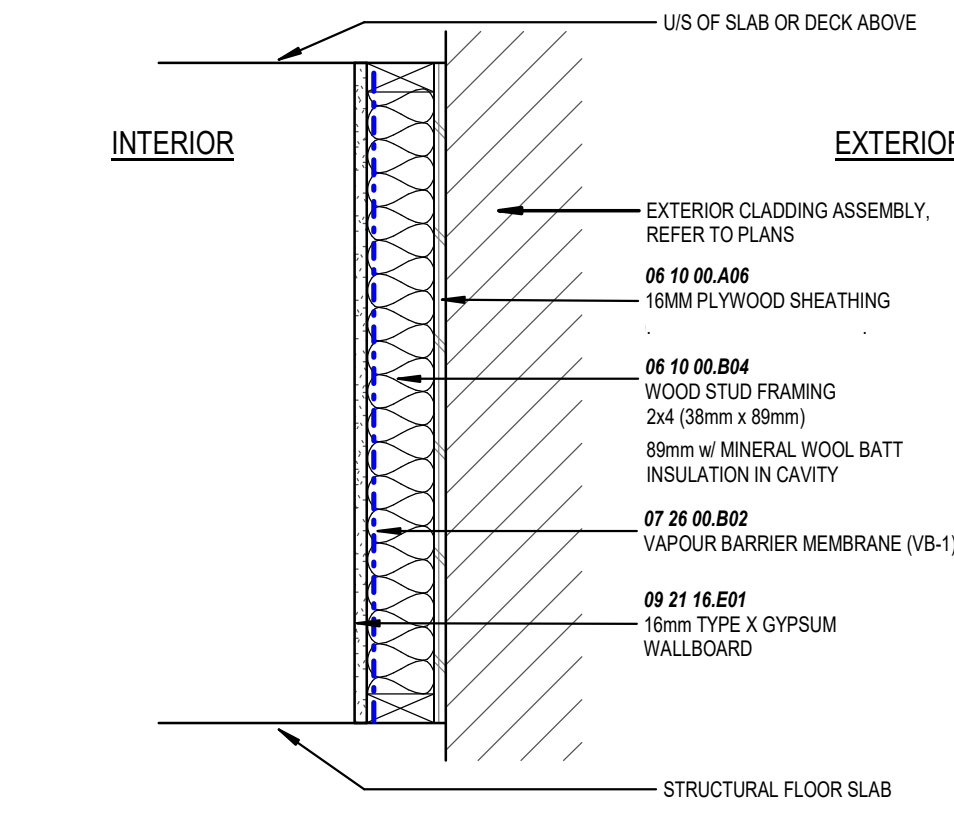


EW1 EXTERIOR WALL ASSEMBLY
SCALE: 1:10
MINIMUM R-25 EFFECTIVE COMBINED WITH BW#
BRK-2 - RUSTIC BRICK

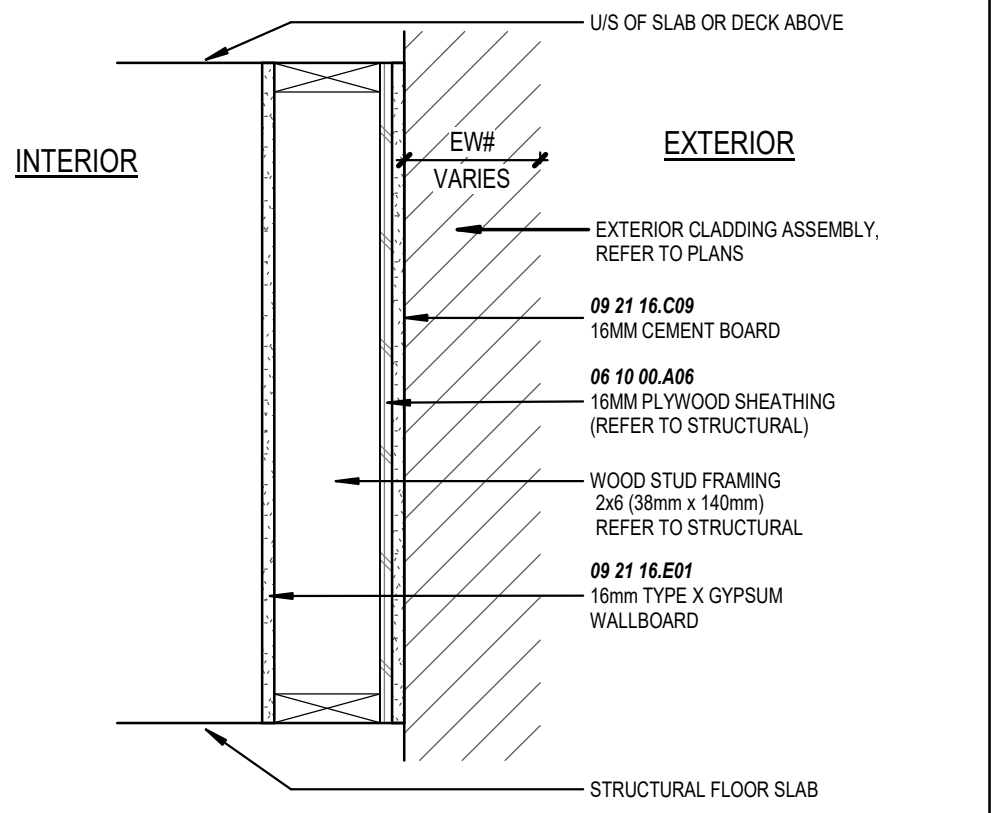
EXTERIOR NEAR GRADE WALL ASSEMBLIES



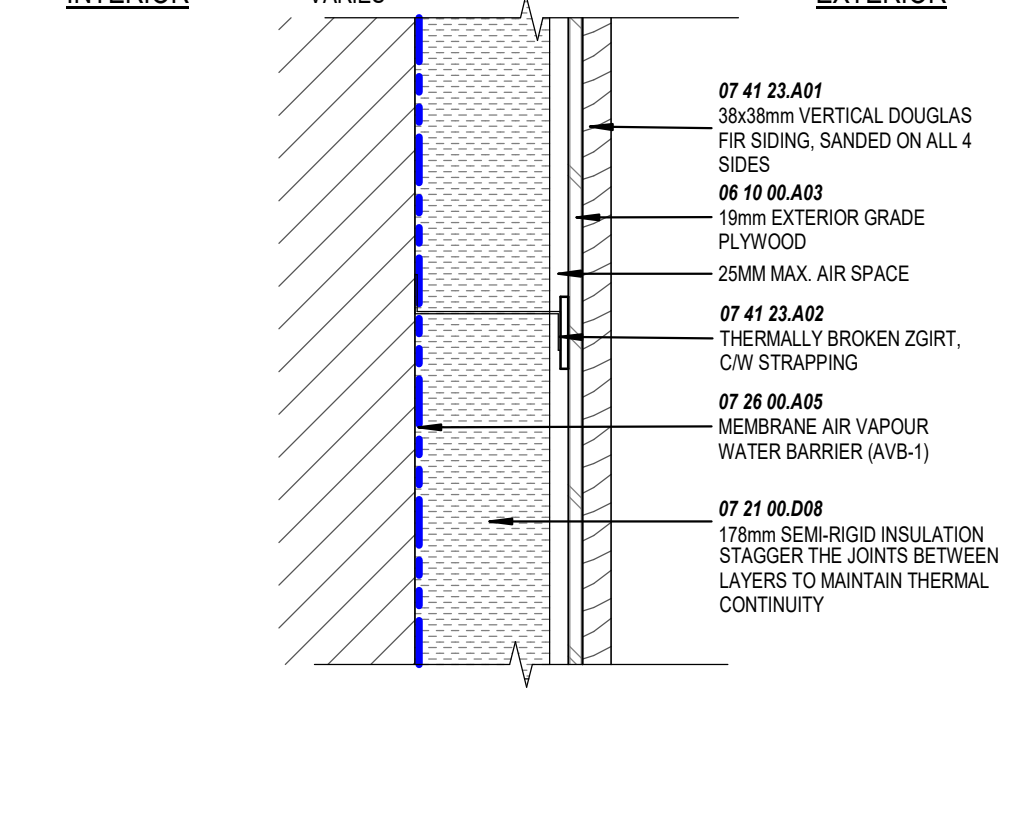
EB1 NEAR GRADE WALL ASSEMBLY
SCALE: 1:10
STONE



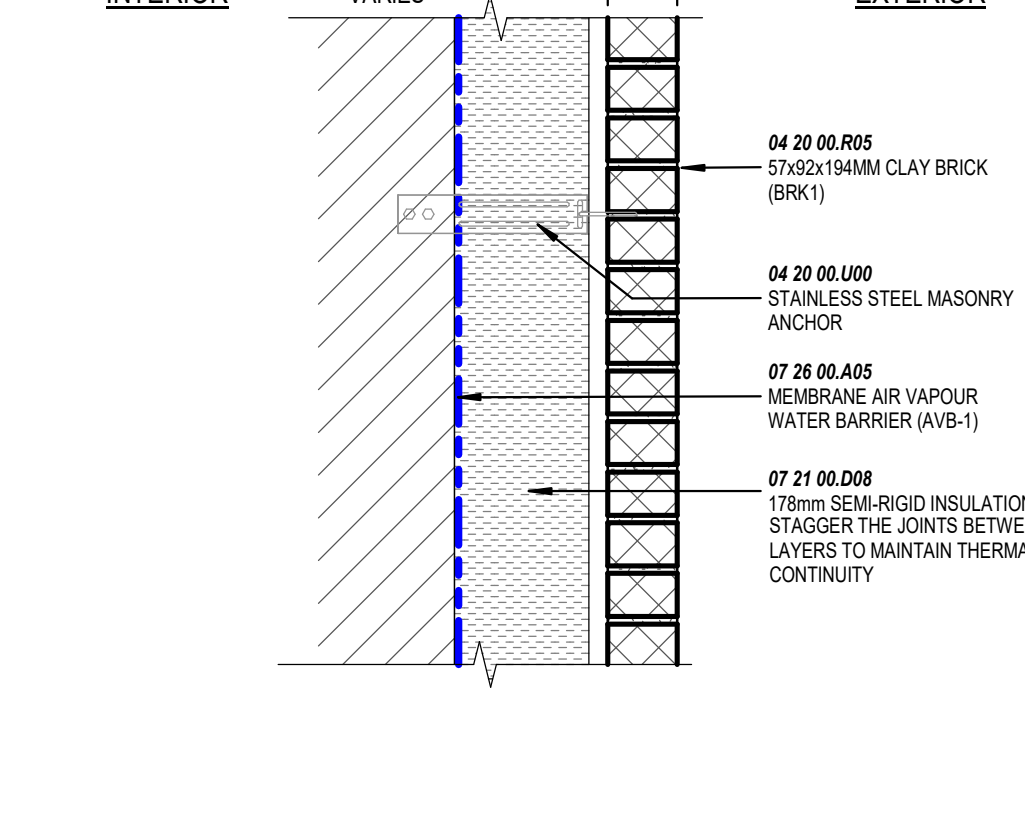
BW1b BACK-UP WALL ASSEMBLY
SCALE: 1:10
MINIMUM R-25 EFFECTIVE COMBINED WITH EW#



BW1c BACK-UP WALL ASSEMBLY
SCALE: 1:10
MINIMUM R-25 EFFECTIVE COMBINED WITH EW#
ULC DESIGN U303 (UP TO 1HR FRR)

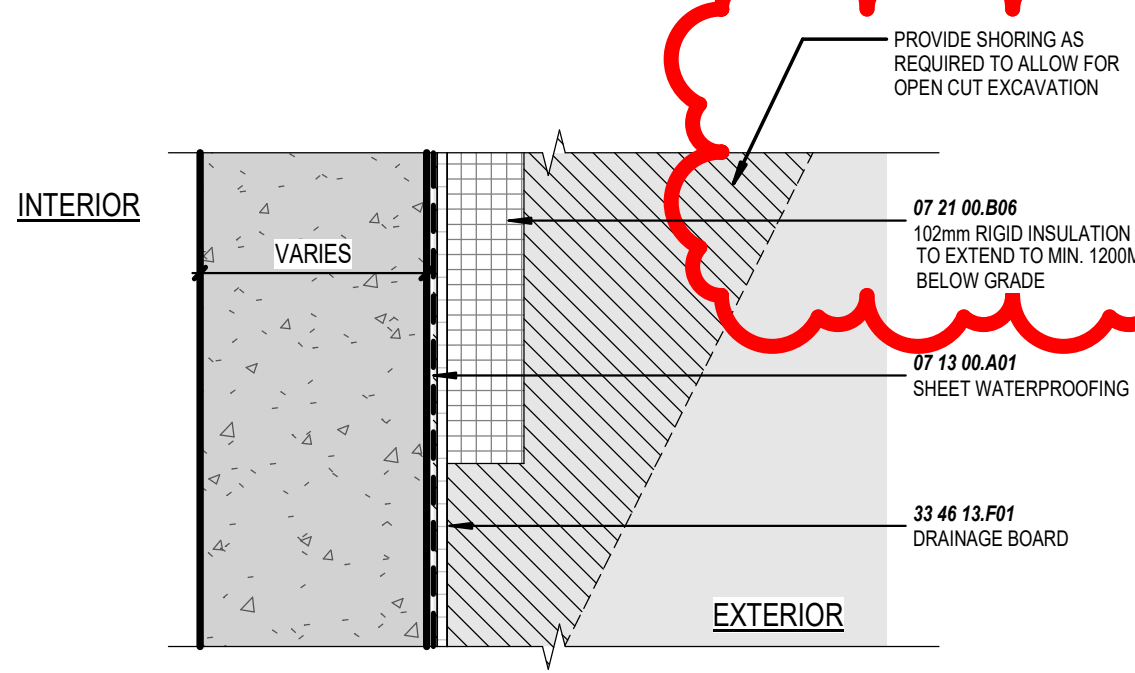


EW4 EXTERIOR WALL ASSEMBLY
SCALE: 1:10
MINIMUM R-25 EFFECTIVE COMBINED WITH BW#
WOOD CLADDING

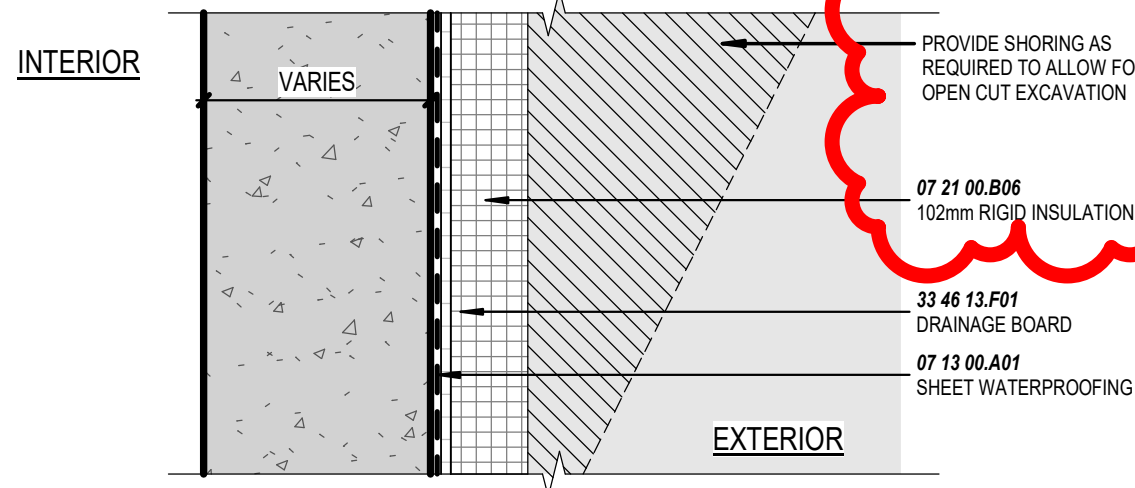


EW1a EXTERIOR WALL ASSEMBLY
SCALE: 1:10
MINIMUM R-25 EFFECTIVE COMBINED WITH BW#
BRK-1 - SMOOTH BRICK

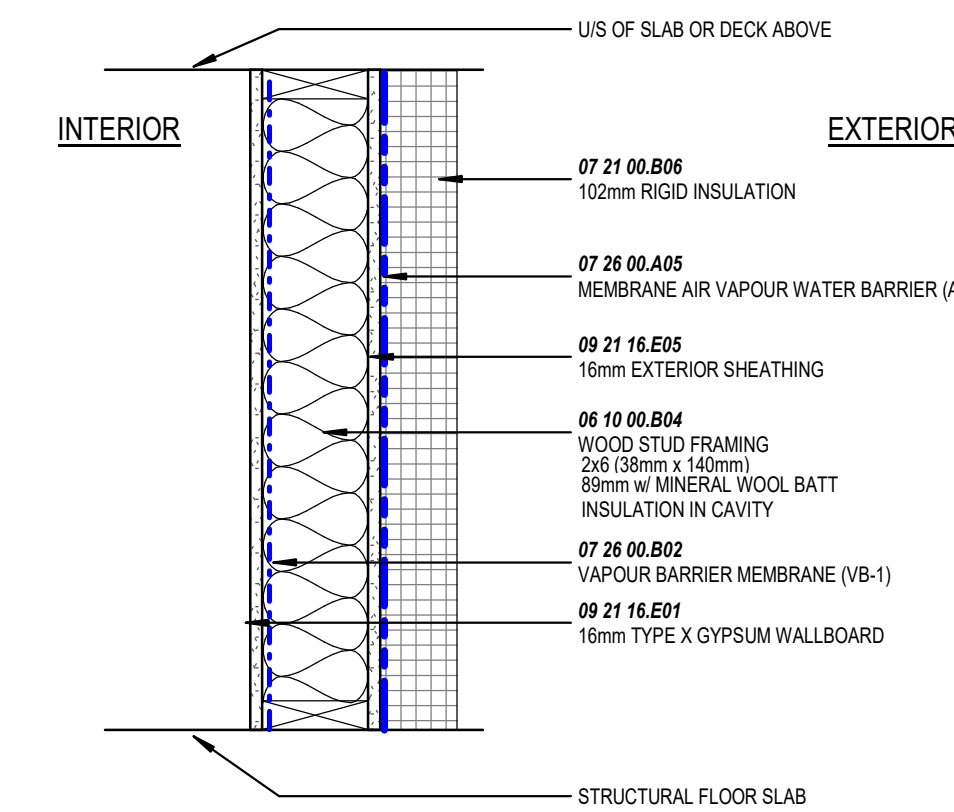
FOUNDATION WALL ASSEMBLY



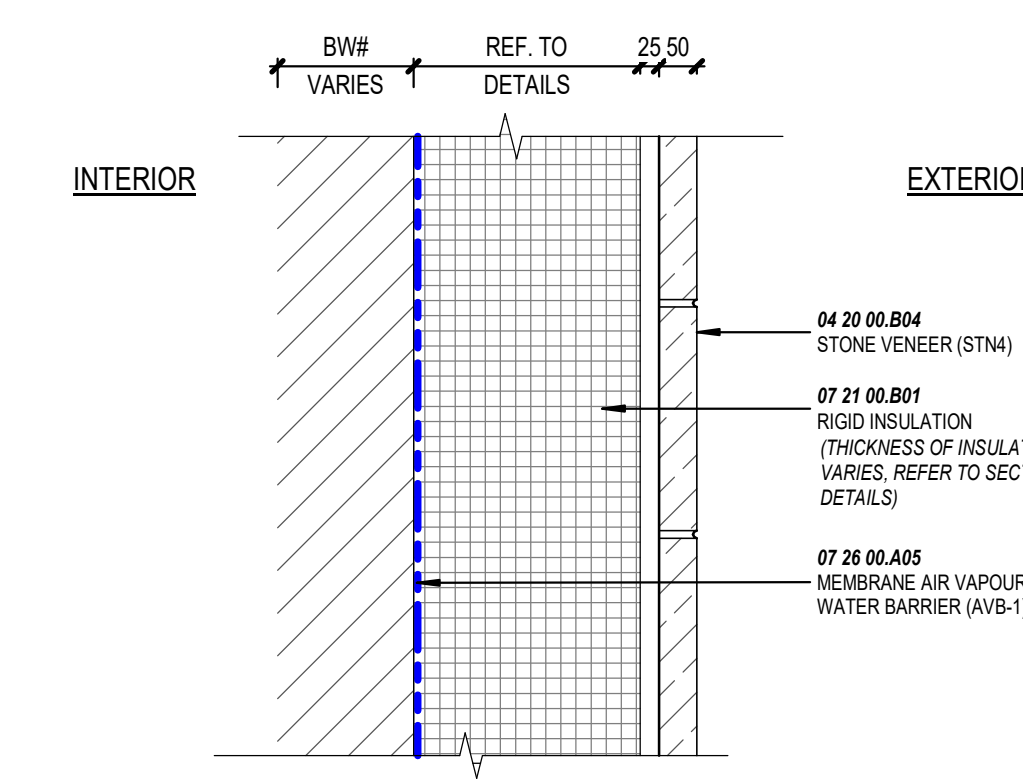
FW1a FOUNDATION WALL ASSEMBLY
SCALE: 1:10
OPEN CUT UNINSULATED



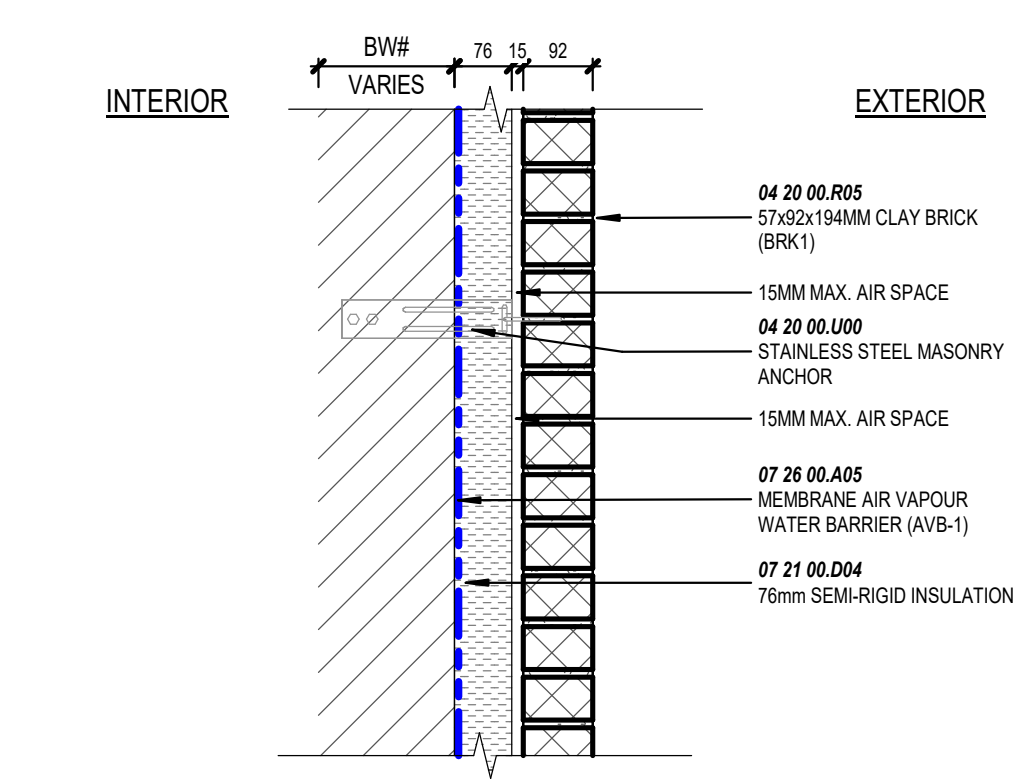
FW1b FOUNDATION WALL ASSEMBLY
SCALE: 1:10
OPEN CUT INSULATED



BW2 ATTIC WALL ASSEMBLY
SCALE: 1:10
MINIMUM R-25 EFFECTIVE



EW5 EXTERIOR WALL ASSEMBLY
SCALE: 1:10
MINIMUM R-25 EFFECTIVE COMBINED WITH BW#
STN4 - STONE AT CANOPIES



EW2 EXTERIOR WALL ASSEMBLY
SCALE: 1:10
MINIMUM R-25 EFFECTIVE COMBINED WITH BW#
BRK-1 - SMOOTH BRICK

EXTERIOR ASSEMBLIES LEGEND

KEYNOTES	HORIZONTAL ASSEMBLIES	VERTICAL ASSEMBLIES
07 09 43.A01 THERMAL SPACER CLIP SYSTEM SPECIFICATION SECTION NUMBER (REFER TO SPECIFICATIONS) KEYNOTE DRAWING CODE (N.L.C. FOR CONSULTANT COORDINATION ONLY) KEYNOTE DESCRIPTION (REFER TO SPECIFICATIONS)	SOFFIT = FLOOR ASSEMBLY + SOFFIT ASSEMBLY ROOF = ROOF ASSEMBLY FLOOR = FLOOR ASSEMBLY	NEAR GRADE = BACK-UP ASSEMBLY + NEAR GRADE ASSEMBLY EXTERIOR WALL = BACK-UP ASSEMBLY + EXTERIOR WALL ASSEMBLY

15	2026-10-13	ISSUED FOR TENDER - ADDENDUM 1	MSA
13	2026-09-16	ISSUED FOR TENDER	MSA
11	2026-03-27	ISSUED FOR 100% CONSTRUCTION DOCUMENTS	MSA
10	2026-02-20	ISSUED FOR 90% CD & CLASS A COSTING	MSA
9	2026-01-30	ISSUED FOR 75% CONSTRUCTION DOCUMENTS	MSA
8	2026-01-30	ISSUED FOR BUILDING PERMIT	MSA
5	2025-12-17	ISSUED FOR 30% CONSTRUCTION DOCUMENTS	MSA
1	2025-06-20	ISSUED FOR 100% DD & CLASS B COSTING	MSA
#	DATE:	REVISION:	BY:
REVISIONS			

REDEVELOPMENT - 409 CENTRE ST S

25008

409 Centre St. South,
Whitby, ON L1N 4W3

Town of Whitby File Number: SP-26-25

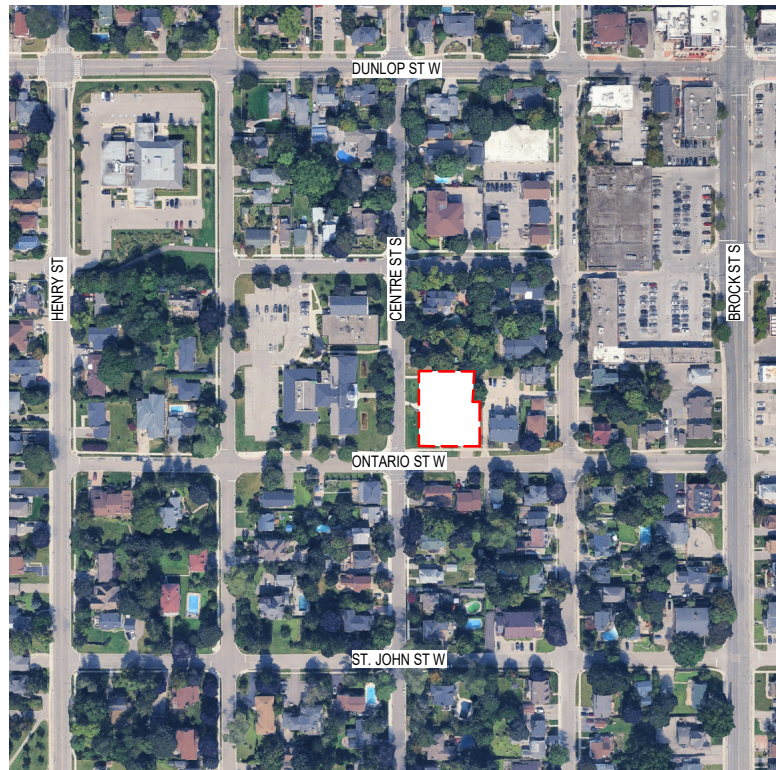
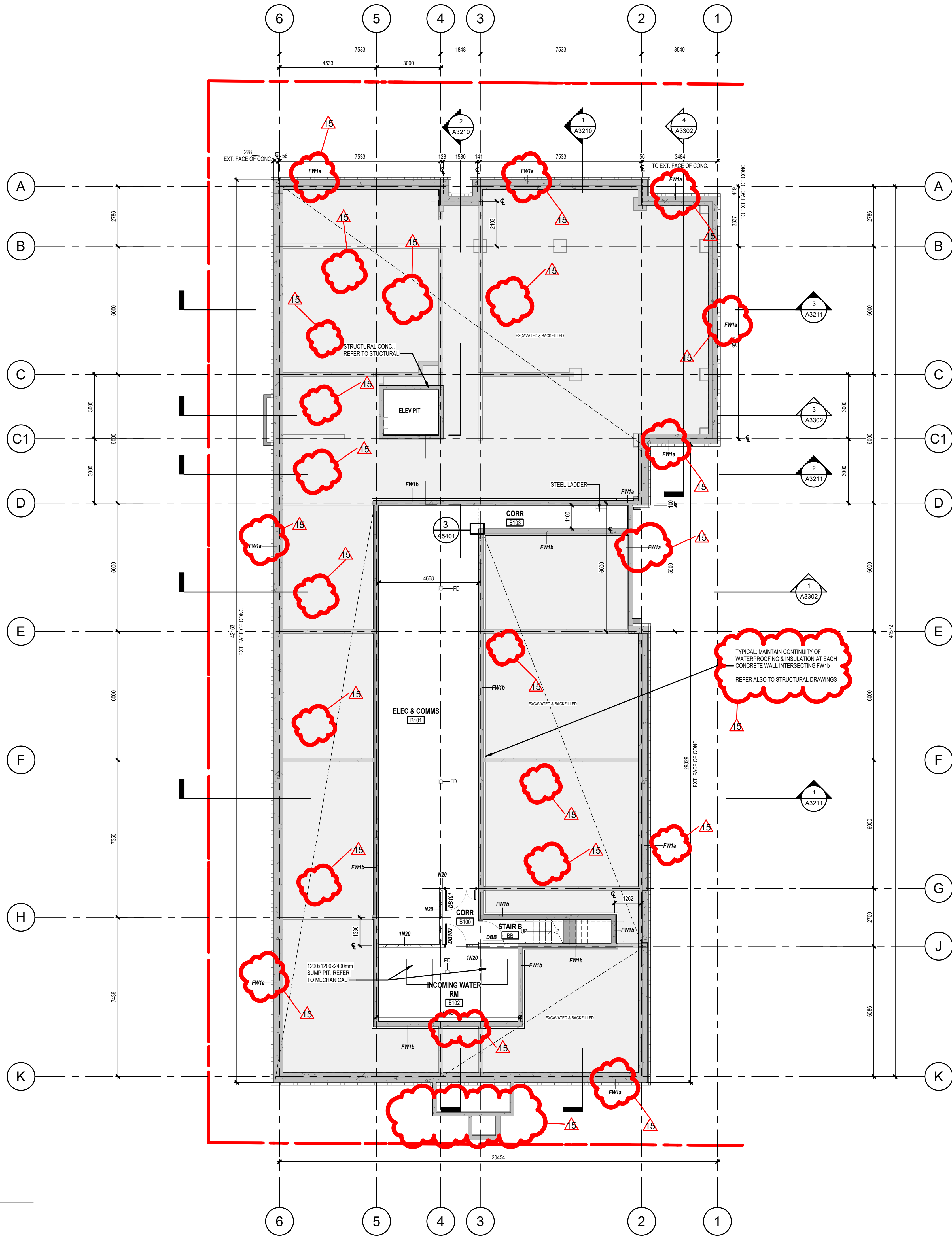
CONSTRUCTION ASSEMBLIES - EXTERIOR

SCALE: As indicated
DRAWN BY: MB
REVIEWED BY: EM
JOB NUMBER: 25008
PLOT DATE: 10/17/22

DRAWING NUMBER:

A0201

1 BASEMENT - FLOOR PLAN
A1400 1:100



Key Plan

1: 5000

GENERAL NOTES

1. STRUCTURAL LAYER OF PLYWOOD ON WALLS TO FACE CORRIDOR (TYPICAL FOR ALL PARTITIONS)
2. ALL ADD BUTTONS TO BE RECESSED AND FLUSH MOUNTED TO WALL
3. MAINTAIN CONTINUITY OF FIRE-RATING OF FIRE-RATED ASSEMBLIES AROUND PENETRATION INCLUDING AT NON-RATED RECESSED EQUIPMENT WITH FIRE SEALANT AND/OR 2 LAYERS 18MM TYPE 'X' GWB



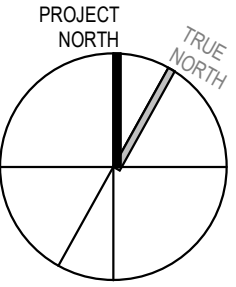
The Regional Municipality
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15	2026-10-13	ISSUED FOR TENDER - ADDENDUM 1	MSA
13	2026-09-16	ISSUED FOR TENDER	MSA
12	2026-05-15	ISSUED FOR SITE PLAN APPROVAL - REV.1	MSA
11	2026-03-27	ISSUED FOR 100% CONSTRUCTION DOCUMENTS	MSA
10	2026-02-20	ISSUED FOR 90% CD & CLASS A COSTING	MSA
9	2026-01-30	ISSUED FOR 75% CONSTRUCTION DOCUMENTS	MSA
7	2026-01-30	ISSUED FOR BUILDING PERMIT	MSA
6	2026-01-30	ISSUED FOR SITE SERVICES PERMIT	MSA
5	2025-12-17	ISSUED FOR 30% CONSTRUCTION DOCUMENTS	MSA
4	2025-11-21	ISSUED FOR SITE PLAN APPROVAL	MSA
3	2025-09-26	ISSUED FOR HERITAGE PERMIT	MSA
2	2025-07-14	ISSUED FOR STAGE 2 PRE-CONSULTATION	MSA
1	2025-06-20	ISSUED FOR 100% DD & CLASS B COSTING	MSA
#	DATE:	REVISION:	BY:
REVISIONS			

REDEVELOPMENT - 409 CENTRE
ST S

25008

409 Centre St. South,
Whitby, ON L1N 4W3

Town of Whitby File Number: SP-26-25

FLOOR PLAN - BASEMENT

SCALE: As indicated
DRAWN BY: VNMB/OE
REVIEWED BY: EM
JOB NUMBER: 25008
PLOT DATE: 05/16/25

DRAWING NUMBER:
A1400

FURNITURE LEGEND

XX-##FURNITURE TAG DENOTES FURNITURE TYPE, REFER TO FURNITURE / APPLIANCE SCHEDULE AND SPECIFICATION FOR ADDITIONAL INFORMATION

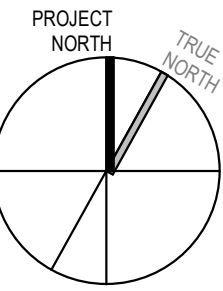
FURNITURE COORDINATION NOTES

1. VENDOR TO PROVIDE ALL FURNITURE, FIXTURE AND EQUIPMENT (FF&E) TAGGED IN THESE DRAWINGS UNLESS OTHERWISE NOTED

2. REFER TO FURNITURE SPECIFICATIONS FOR COMPLETE FF&E SCOPE

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15	2026-10-13	ISSUED FOR TENDER - ADDENDUM 1	MSA
#	DATE:	REVISION:	BY:
REVISIONS			

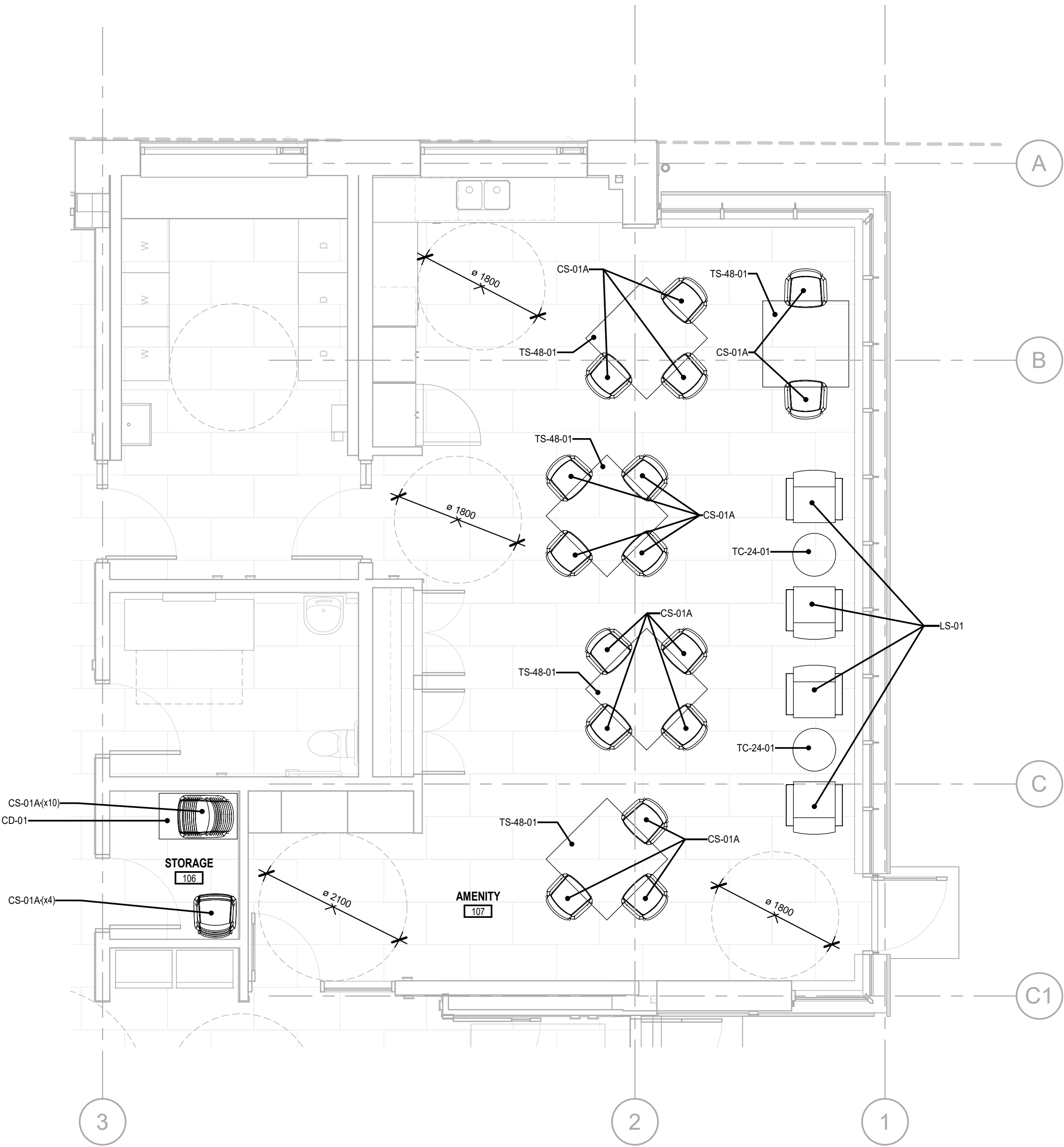
REDEVELOPMENT - 409 CENTRE ST S
25008
409 Centre St. South,
Whitby, ON L1N 4W3
Town of Whitby File Number: SP-26-25

FF&E PLAN - LEVEL 1 AMENITY SPACE

SCALE: As indicated
DRAWN BY: VN/MB/OE
REVIEWED BY: EM
JOB NUMBER: 25008
PLOT DATE: 10/17/22

DRAWING NUMBER:
A1700

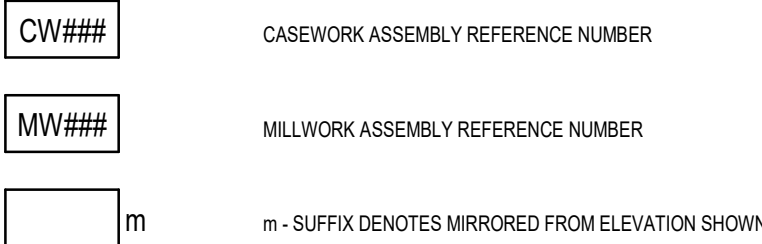
Furniture Schedule		
Furniture - Type Mark	Description	Count
CD-01	Chair Dolly	1
CS-01A	Chair with Arms - Stacking	30
DR-72x78-01	Desk - 72"x78" / 48"x24"	1
LS-01	Lounge - Single	4
TC-24-01	Table - 24" Round	2
TS-48-01	Table - 48" Square	5
Grand total: 43		43



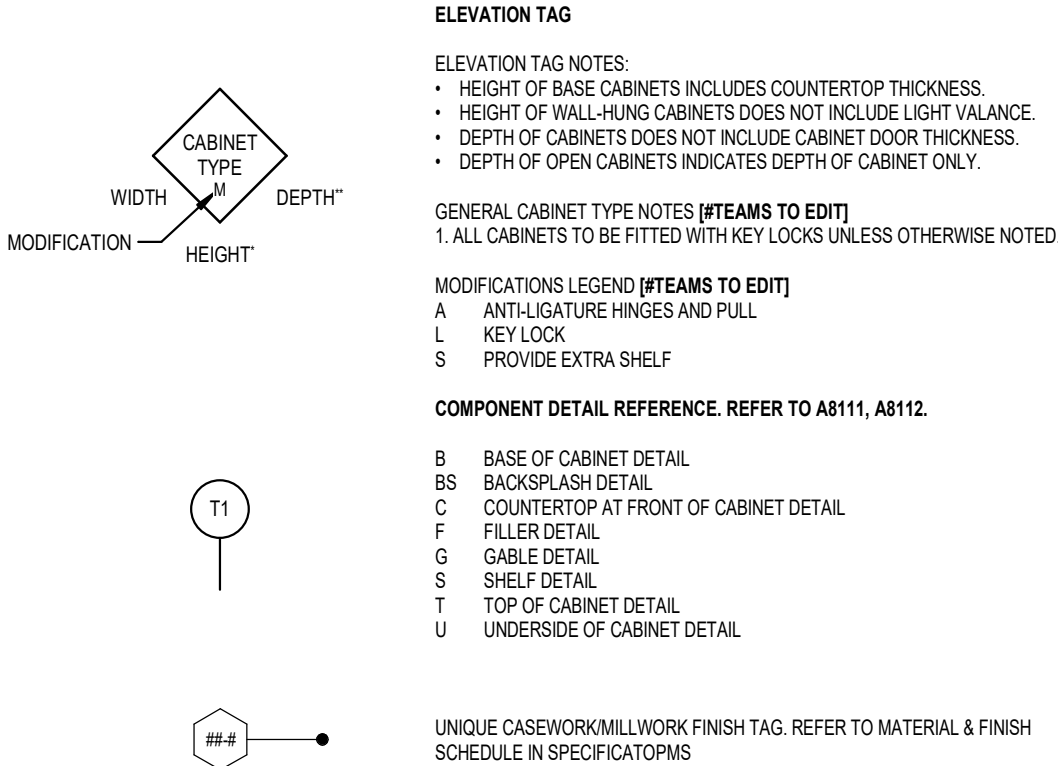
1 LEVEL 1 - FF&E PLAN - AMENITY SPACE
1 : 50

CASEWORK / MILLWORK ASSEMBLY SCHEDULE						
MILLWORK #	DESCRIPTION	MATERIAL	COUNTERTOP MATERIAL	BASE HEIGHT	HARDWARE FINISH	NOTES
CW100	SERVERY - L1 AMENITY	PLAM03	SS01	230mm	BLACK	PROVIDE KEYED LOCKING HARDWARE AT CABINET ABOVE FRIDGE
CW101	SERVERY - SUITE	PLAM02	SS01	TO MATCH SUITE BASE	NICKEL	
CW102	SERVERY - SUITE BF	PLAM02	SS01	TO MATCH SUITE BASE	NICKEL	
CW103	STORAGE - SUITE WC	PLAM02	-	TO MATCH SUITE BASE	NICKEL	
CW104	CLOSET COATS - AMENITY	PLAM03	-	230mm	BLACK	
MW101	VANITY - SUITE	-	-	-	-	
MW102	VANITY - SUITE CHUTE	PLAM02	SS02	TO MATCH SUITE BASE	NICKEL	
MW103	VANITY - SUITE BF	-	SS02	-	-	
MW104	VANITY - STAFF RM	-	SS02	-	-	
MW105	FOLDING - L1 LAUNDRY	-	SS01	TO MATCH ROOM BASE	-	
MW106	CLOSET STORAGE - AMENITY	PLAM03	-	-	BLACK	PROVIDE KEYED LOCKING HARDWARE, CONCEALED HINGES
MW110	MAILBOX SURROUND	WD01	-	TO MATCH ROOM BASE	BLACK	
MW111	BENCH 2	WD01	-	-	-	REFER TO PLANS FOR LENGTH

CASEWORK / MILLWORK PLAN TAG LEGEND

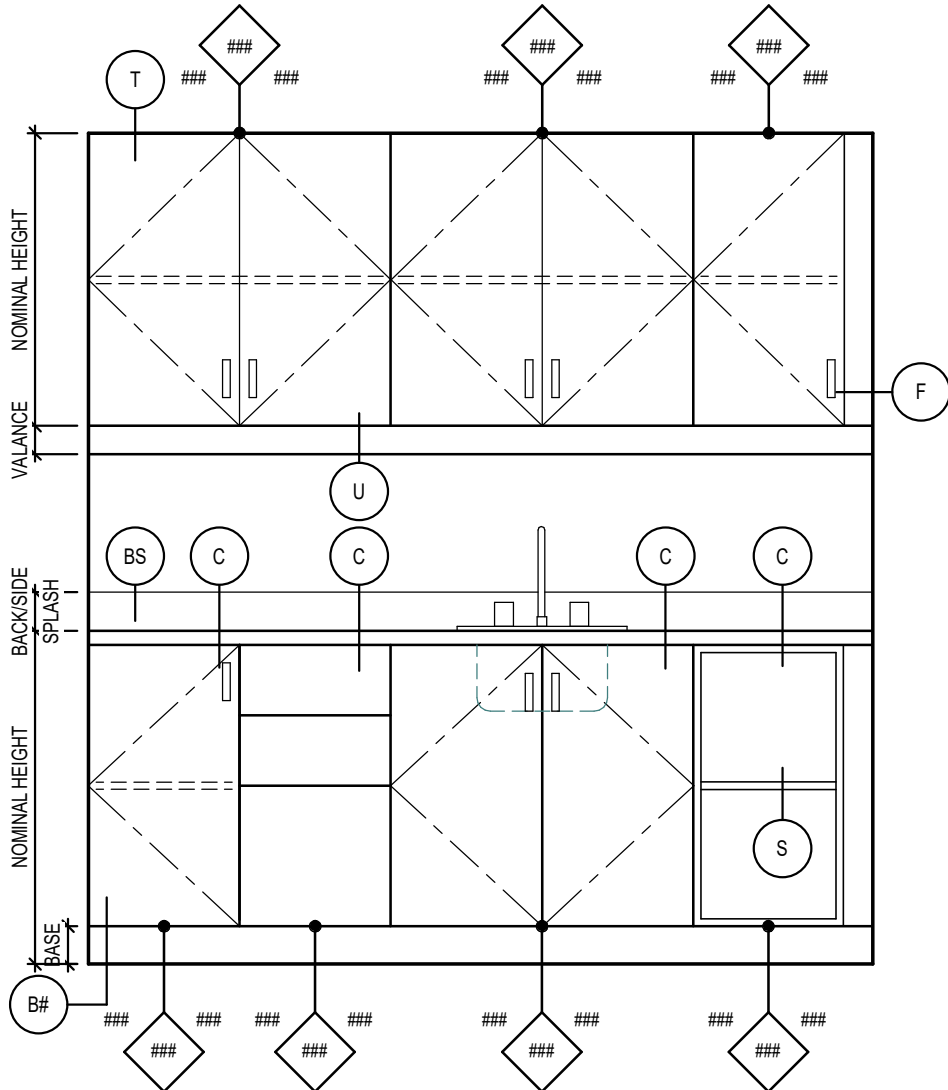


CASEWORK ELEVATION TAG LEGEND



EXAMPLE CASEWORK COMPONENT REFERENCE ELEVATION

ELEVATION HAS BEEN PROVIDED AS A GENERIC REFERENCE AND DOES NOT INCLUDE ALL COMPONENTS OR CABINET TYPES.



CASEWORK AND MILLWORK GENERAL NOTES

- REFER TO 06 20 00 FINISH CARPENTRY SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- TYPICAL CABINET SERIES TYPES ARE LABELED WITH A CABINET DESIGN SERIES (CDS) NUMBER IN ACCORDANCE WITH THE MOST CURRENT NORTH AMERICAN ARCHITECTURAL WOODWORK STANDARDS (NAAWS).
- REFER TO CASEWORK AND MILLWORK ELEVATIONS FOR CABINET SIZES, MOUNTING HEIGHTS AND ADDITIONAL DESIGN DETAILS.
- REFER TO THE CASEWORK AND MILLWORK SCHEDULE FOR CABINET AND COUNTER FINISHES.
 - FASCIA FINISHES SHALL MATCH FRONT OF CABINETS UNLESS OTHERWISE NOTED
 - INTERIOR CABINET FINISHES SHALL BE M/D1 UNLESS OTHERWISE NOTED
 - WHERE APPLICABLE, FOR BOOCASES, MAIL SLOTS AND OPEN CABINETS, ALL EXPOSED SURFACES SHALL MATCH CABINET FINISH AS PER CASEWORK / MILLWORK FINISH SCHEDULE
 - WHERE END OF CABINET DOES NOT MEET A PARTITION, FINISH END OF CABINET TO MATCH ADJACENT FINISH.
- REFER TO THE ROOM FINISHES SCHEDULE FOR APPLIED BASE FINISHES AND WALL FINISHES, INCLUDING APPLIED BACKSPLASHES.
- BACKSPLASHES AND SIDE SPLASHES TO BE FROM TOP OF COUNTER TO UNDERSIDE OF FINISHED CABINET UNLESS NOTED OTHERWISE.
- CASEWORK AND MILLWORK TYPES AND ELEVATIONS ARE TYPICAL. REFER TO FLOOR PLANS FOR LOCATIONS, SPACE CONSTRAINTS, QUANTITIES AND ORIENTATION.
- ELEVATIONS HAVE BEEN PROVIDED FOR DESIGN INTENT. FILLERS HAVE BEEN SHOWN ON TYPICALS WHERE THEY ARE ANTICIPATED. HOWEVER SITE CONDITIONS FROM ROOM TO ROOM MAY VARY. ALL FILLER PANELS TO BE NOT LESS THAN 28MM FACE WIDTH. PROVIDE FILLER PANELS, AS REQUIRED, BETWEEN MILLWORK AND ADJACENT WALL AND CEILING SURFACES. FILLER PANELS TO MATCH FINISH OF ADJACENT MILLWORK UNLESS NOTED OTHERWISE. FILLER PANELS TO BE INSTALLED FLUSH WITH DOOR / DRAWER FRONTS.
- VERIFY IN FIELD ALL FASCIA PANEL HEIGHTS RELATIVE TO CEILING.
- WHERE APPLICABLE, COORDINATE MILLWORK DIMENSIONS AND SHELF LOCATIONS WITH APPLIANCE PRODUCT SPECIFICATIONS. WHERE EQUIPMENT HAS BEEN NOTED ON ELEVATIONS, REFER TO FFE PLANS FOR ADDITIONAL INFORMATION.
- CONTRACTOR SHALL PROVIDE ALL INFRASTRUCTURE MATERIALS, SERVICES AND CONNECTIONS FOR FURNITURE, APPLIANCES AND EQUIPMENT AS DESCRIBED IN ENGINEERS' DOCUMENTS, INCLUDING BUT NOT LIMITED TO POWER, DATA AND PLUMBING.
- ALL HARDWARE TO BE TYPICAL, UNLESS NOTED OTHERWISE. (REFER TO 06 20 00 FINISH CARPENTRY SPECIFICATIONS)
- ALL CABINETS ARE NON-LOCKABLE UNLESS NOTED OTHERWISE.
- ALL SHELVES TO BE ADJUSTABLE UNLESS NOTED OTHERWISE.
- MOUNT CABINET HARDWARE AS PER TYPICAL NOTES ON A8101 CASEWORK / MILLWORK LEGEND AND NOTES, UNLESS NOTED OTHERWISE.
- UNLESS NOTED OTHERWISE, ALL CASEWORK / MILLWORK TO BE CONSTRUCTED OF VENEER CORE PLYWOOD, MINIMUM THICKNESS 3/4" (19MM).
 - BACK PANELS MAY HAVE A MINIMUM THICKNESS OF 1/2" (13MM).
 - CABINET DOORS AND DRAWER FRONTS SHALL BE CONSTRUCTED OF MDF, MINIMUM THICKNESS 3/4" (19MM).
 - PROVIDE EXTERIOR-GRADE VENEER CORE PLYWOOD TO BOTTOMS OF SINK BOXES AND AREAS THAT COME INTO CONTACT WITH WATER.
 - PROVIDE 1" (25MM) SUBSTRATES FOR SHELVES THAT HAVE LARGER SPANS, AS REQUIRED TO MEET NAAWS STANDARDS.
- PROVIDE CLEAR SILICONE SEALANT AT ALL INTERFACES BETWEEN DISSIMILAR MATERIALS, VERTICAL & HORIZONTAL (COUNTERTOPS, WALLS, ETC.)
- PROVIDE GROMMETS WHERE APPLICABLE, EXACT LOCATIONS COORDINATED ON SITE.
- ENSURE MILLWORK / CASEWORK IS MOUNTED TO BLOCKING AS REQUIRED TO SUPPORT CASEWORK / MILLWORK FOR ITS INTENDED FUNCTION. REFER TO MOUNTING HEIGHT SHEETS FOR ADDITIONAL INFORMATION.
- ALL INTERIOR WINDOW SILLS TO BE SOLID WOOD UNLESS NOTED OTHERWISE.
- WHERE PIANO HINGES ARE REQUIRED, PROVIDE A 3MM FILLER BETWEEN CABINETS TO ACCOMMODATE CABINET DOOR SWINGS. OVERALL LENGTH OF ASSEMBLIES SHALL NOT CHANGE. CABINET SIZES TO BE ADJUSTED TO MEET THE DESIGN INTENT WITHIN THE OVERALL LENGTH THAT HAS CURRENTLY BEEN PLANNED. ELEVATIONS TO BE FURTHER DEVELOPED DURING SHOP DRAWING SUBMITTAL REVIEWS.
- APPLY INSECT REPELLANT POWDER (DIATOMACEOUS EARTH) UNDER ALL LOWER CABINETS BEHIND KICKPLATES, AT ALL CABINETS AT SINKS. SEAL ALL CORNERS BETWEEN CABINET BOTTOM, SIDES, AND BACKS.
- PROVIDE ALL SUPPORTS FOR WALL- OR CABINET-MOUNTED APPLIANCES (E.G. MICROWAVES, WALL OVENS, HOODS) AS REQUIRED, INCLUDING BUT NOT LIMITED TO WALL SUPPORT BRACKETS, LOCKING SCREWS, OR BOLTS.
- CONTRACTOR SHALL SUPPLY ALL APPLIANCES AS PER APPLIANCE SCHEDULE

HOW TO READ CASEWORK AND MILLWORK DRAWINGS

THE DOCUMENTS IDENTIFY ASSEMBLIES THAT ARE INTENDED TO HAVE THE SAME BASIS OF DESIGN. CONTRACTOR SHALL SITE VERIFY SPACES PRIOR TO CONSTRUCTION TO ENSURE SITE CONDITIONS SUPPORT THE DESIGN INTENT AND IDENTIFY ADJUSTMENTS, AS REQUIRED IN SHOP DRAWINGS.

CW# - REFERS TO A CASEWORK CONSTRUCTION ASSEMBLY AND MAY INCLUDE A GROUP OF UPPER AND LOWER CABINETS, COUNTERS, FILLERS AND SUPPORTS

MW# - REFERS TO A MILLWORK CONSTRUCTION ASSEMBLY DESIGNED TO SUIT A SPECIFIC CONDITION AND MAY INCLUDE A GROUP OF UPPER AND LOWER CABINETS, COUNTERS, FILLERS AND SUPPORTS.

COMPONENT DETAIL - REFERS TO A SELECTION OF PREDETERMINED DETAILS SUCH AS TOP OF CABINET, UNDERSIDE OF CABINET, BACKSPLASH, BASE AND SHELF DETAILS

CASEWORK AND MILLWORK ASSEMBLIES ARE TAGGED ON FLOOR PLANS. THE TAGS IDENTIFY THE CONSTRUCTION ASSEMBLY TYPE AND LOCATION OF THE ASSEMBLY TYPE WITHIN THE BUILDING.

ELEVATIONS OF CONSTRUCTION ASSEMBLY TYPES ARE TAGGED TO IDENTIFY MILLWORK TYPES AND COMPONENT DETAILS NECESSARY TO COMPLETE THE SCOPE OF WORK.

CASEWORK TAGS REFLECT TYPICAL CABINET SERIES TYPES AS PER NORTH AMERICAN ARCHITECTURAL WOODWORK STANDARDS, UNLESS NOTED OTHERWISE.

CASEWORK VARIANTS

THE FOLLOWING ADDITIONAL CASEWORK TYPES HAVE BEEN CREATED AND HAVE BEEN IDENTIFIED WITH A LETTER MODIFICATION. REFER TO CASEWORK LEGEND FOR ADDITIONAL INFORMATION:

- A** - PROVIDE PULL OUT PANTRY DRAWER HARDWARE SYSTEM - REFER TO SPECIFICATIONS
- P** - PROVIDE PULL DOWN CABINET HARDWARE SYSTEM - REFER TO SPECIFICATIONS
- S** - PROVIDE PULL OUT COUNTERTOP EXTENSION SYSTEM WITHIN TOP CABINET DRAWER. COUNTERTOP EXTENSION PANEL TO MATCH COUNTERTOP AS NOTED IN CASEWORK/MILLWORK SCHEDULE. REFER TO SPECIFICATIONS



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MontgomerySisam

15	2026-10-13	ISSUED FOR TENDER - ADDENDUM 1	MSA
13	2026-09-16	ISSUED FOR TENDER	MSA
11	2026-03-27	ISSUED FOR 100% CONSTRUCTION DOCUMENTS	MSA
10	2026-02-20	ISSUED FOR 90% CD & CLASS A COSTING	MSA
9	2026-01-30	ISSUED FOR 75% CONSTRUCTION DOCUMENTS	MSA
5	2025-12-17	ISSUED FOR 30% CONSTRUCTION DOCUMENTS	MSA
1	2025-06-20	ISSUED FOR 100% DD & CLASS B COSTING	MSA
#	DATE:	REVISION:	BY:
REVISIONS			

REDEVELOPMENT - 409 CENTRE ST S

25008

409 Centre St. South,
Whitby, ON L1N 4W3

Town of Whitby File Number: SP-26-25

CASEWORK / MILLWORK NOTES & LEGEND, SCHEDULE

SCALE: 1 : 20

DRAWN BY: Author

REVIEWED BY: Checker

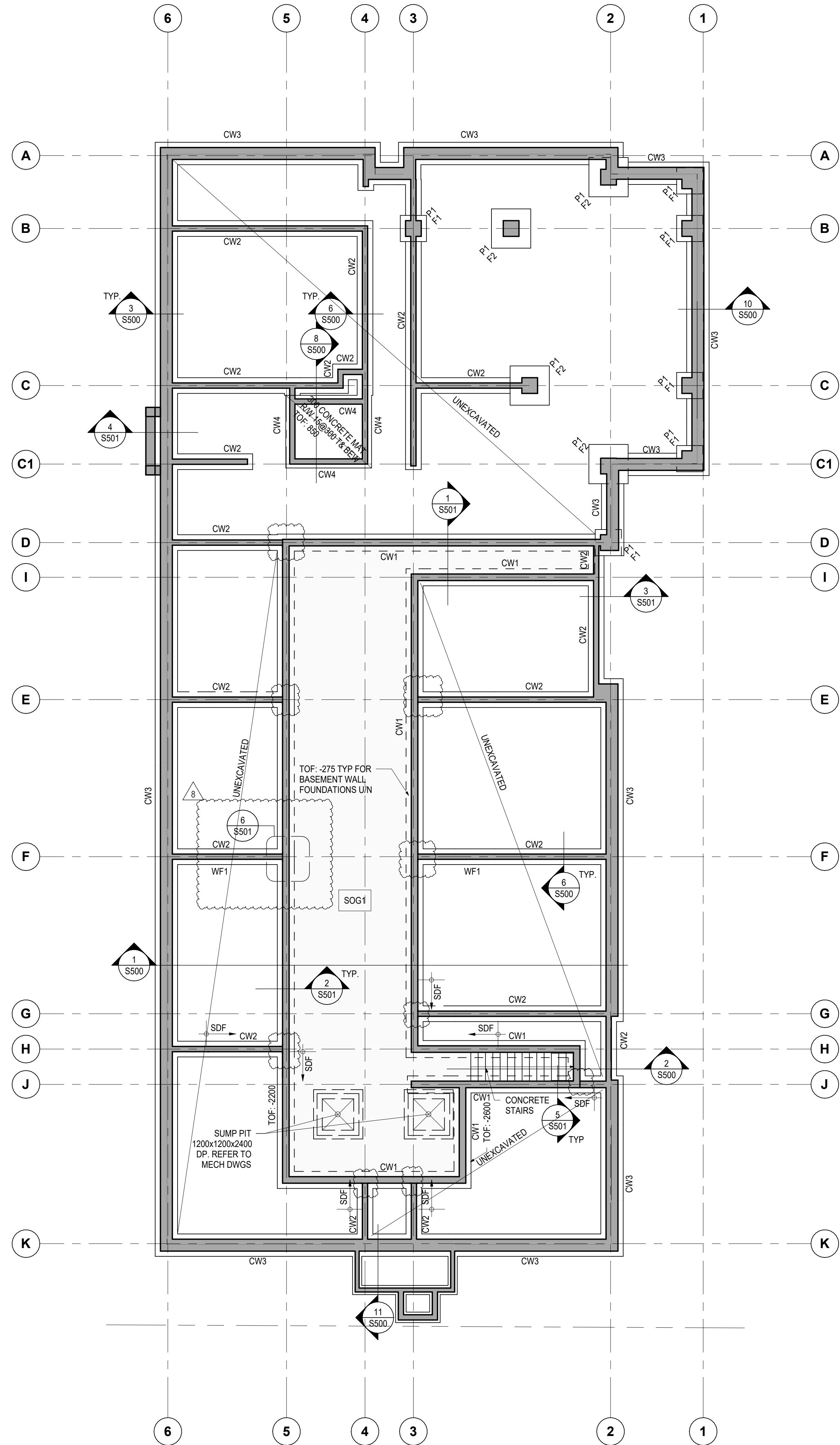
JOB NUMBER: 25008

PLOT DATE: 06/06/25

DRAWING NUMBER:

A8100

2025-10-09 3:17:53 PM AutoSave Doc1 (25356).DWG - 409 Centre St, LEA, 311x1, MAIN, 65x, rvt



1 BASEMENT & FOUNDATION PLAN
S200 1 : 100

NOTES

- SEE GENERAL REQUIREMENTS AND TYPICAL DETAILS (ON DRAWINGS S100 SERIES) AND READ IN CONJUNCTION WITH ALL FOOTING SCHEDULES.
- ELEVATIONS AND GEOMETRY
 - FLOOR DATUM ELEVATION IS -3050 (GEODETIC EL. 97450)
 - TOP OF SLAB IS 0 FROM DATUM ELEVATION EXCEPT AS CROSSED AND NOTED +/-X ON PLAN.
 - *TOP* DENOTES TOP OF FOOTING ELEVATION. UNLESS NOTED SET TOP AT ELEVATION -275 FROM TOP OF BASEMENT SLAB.
- DESIGN LOADING
 - DESIGN LIVE LOAD IS 3.6 kPa.
 - SUPERIMPOSED DEAD LOAD IS 1.5 kPa. THIS INCLUDES PARTITION ALLOWANCE OF 1.0 kPa.
- FRAMING
 - SLAB ON GRADE: 125 THICK CONCRETE SLAB-ON-GRADE (WITH 150x152 MM 18.7MM 18.7 W.W.F. PLACED 50 BELOW TOP OF SLAB)
 - COORDINATE WITH NEW AND EXISTING SERVICES AND FOUNDATION PRIOR TO EXCAVATION FOR FOOTING. REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND SITE SERVICING DRAWINGS.

REV.	DATE	DESCRIPTION
8	2026-10-13	ISSUED FOR STRUCTURAL TENDER
7	2026-09-16	ADDENDUM NO 1
6	2026-03-20	ISSUED FOR 100% CD
5	2026-02-18	ISSUED FOR 90% CD AND CLASS A COSTING
4	2026-01-30	ISSUED FOR BUILDING PERMIT
3	2026-01-30	ISSUED FOR 75% CD
2	2025-12-17	Issued for 30 % Construction Documents
1	2025-06-20	Issued for 100% DD & Class B Costing

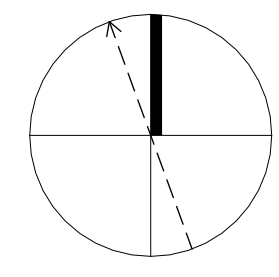
REDEVELOPMENT - 409 CENTRE ST
S - 25008

409 Centre Street, Whitby, ON L1N 4W3

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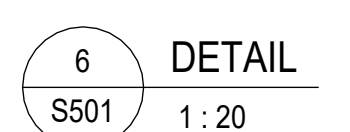
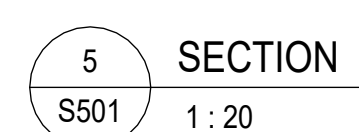
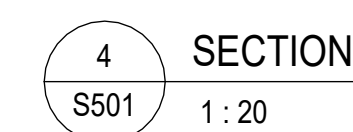
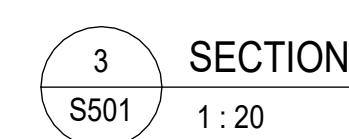
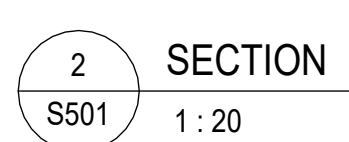
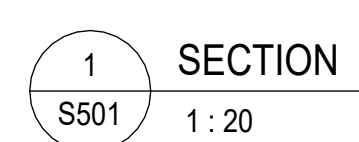
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BASEMENT &
FOUNDATION PLAN

Scale	As indicated	Date	2026-06-12
Drawn	K.N.	Checked By	J.K.
Project No.	25356	Drawing No.	S200



Scale 1 : 20	Date 2026-06-12
Drawn K.N.	Checked By J.K.
Project No. 25356	Drawing No. S501