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# **Noise Control Detailed Study**

## **Arcadia Stage 6**



# Noise Control Detailed Study

## Arcadia Stage 6

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### 1.0 INTRODUCTION

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J.L. Richards & Associates Limited (JLR) was retained by Minto Communities Inc. (Minto) to prepare a Noise Control Detailed Study for their residential development known as Arcadia Stage 6, located at 450 Huntmar Drive, within the City of Ottawa. The purpose of this study is to assess the potential environmental noise impact on the proposed development, due to vehicular traffic from Campeau Drive, Highway-417, and Light Rail Transit (LRT).

This report is prepared to satisfy the Ministry of the Environment, Conservation and Parks (MECP) Environmental Noise Guidelines NPC-300 and the City of Ottawa Environmental Noise Control Guidelines (approved by City Council January 2016) and in particular Part 4 Section 3.1 Noise Control Feasibility Study Requirements.

### 2.0 PROJECT DESCRIPTION

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The subject property is located within the urban limits of the City of Ottawa. The subject parcel is ±5.6 ha that is bounded by Campeau Drive to the north, the LRT and Feedmill Creek to the south, Donum Lane to the east and Country Glen Way to the west, as shown on Figure 1 - Location Plan.

Minto's proposed residential development will consist of 11 Executive Towns, 80 Avenue Towns, 13 Rear Lane Towns, and 264 Infusion Terraces. In addition, the development will have two (2) outdoor amenity areas, and a public parkette as shown on the Concept Plan 32 (revision date 2022-06-09) provided in Appendix 'A'.

### 3.0 TRANSPORTATION NOISE SOURCE

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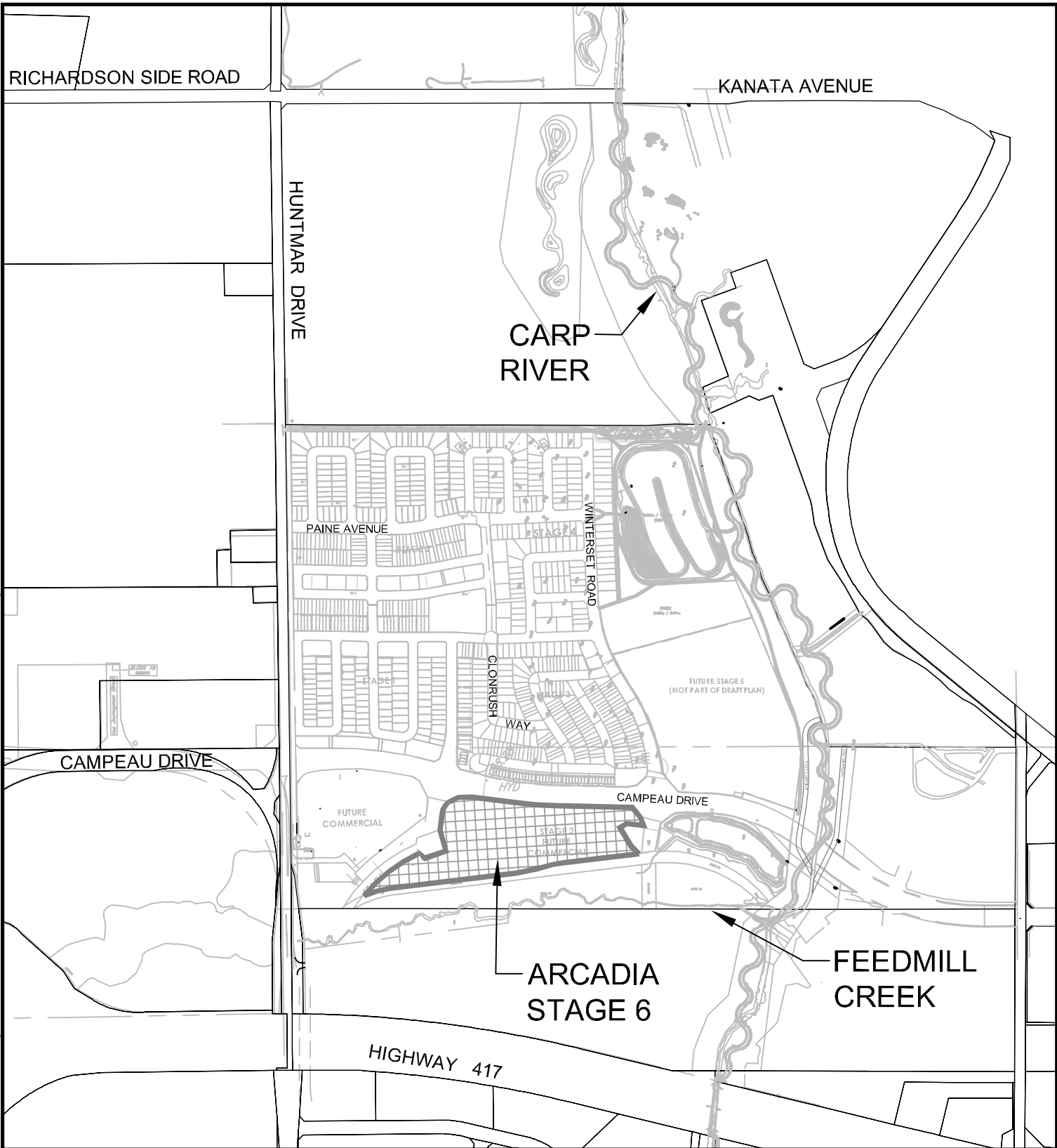
The transportation noise sources are Campeau Drive, Highway-417 and the LRT. Figure 1 (Locations Plan) shows the location of the noise sources and existing roadways in relation to the proposed development.

#### 3.1 Transportation Sound Level Criteria

For the purpose of determining the predicted noise levels, and based on the sound level criteria established by the City of Ottawa Environmental Noise Control Guidelines (ENCG), the following will be used as the maximum acceptable sound levels (Leq) for residential development and other land uses, such as nursing homes, schools and daycare centres:

<b><u>Receiver Location</u></b>	<b><u>Criteria</u></b>	<b><u>Time Period</u></b>
Outdoor Living Area:	55 dBA	Daytime (0700 - 2300 hrs.)
Indoor Living/Dining Rooms (inside):	45 dBA	Daytime (0700 - 2300 hrs.)
General Office, Reception Area (inside):	50 dBA	Daytime (0700 - 2300 hrs.)
Sleeping Quarters (inside):	40 dBA	Nighttime (2300 - 0700 hrs.)

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PROJECT: **MINTO COMMUNITIES INC.**  
**ARCADIA STAGE 6**  
 450 HUNTMAR DRIVE

DRAWING: **LOCATION PLAN**

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**J.L. Richards**  
 ENGINEERS · ARCHITECTS · PLANNERS

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DESIGN: MM  
 DRAWN: KT/TB  
 CHECKED: MM/KF  
 JLR #: 26299-006

DRAWING #:  
**FIGURE 1**

PLOT DATE: Monday, July 4, 2022 10:38:39 AM

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Outdoor Living Areas (OLA) are defined as that portion of the outdoor amenity area of a dwelling for the quiet enjoyment of the outdoor environment during the daytime period. Typically, the point of assessment in an OLA is 3.0 m from the building façade mid-point and 1.5 m above the ground within the designated OLA for each individual unit. OLAs commonly include backyards, balconies (with a minimum depth of 4 m as per NPC-300), common outdoor living areas, and passive recreational areas.

### 3.2 Transportation Noise Attenuation Requirements

When the sound levels are equal to or less than the specified criteria, per the City of Ottawa ENCG and/or MOE NPC-300, no noise attenuation (control) measures are required.

The following Table 1 and Table 2 outline indoor and outdoor noise attenuation measures, respectively, to achieve required dBA Leq for surface transportation noise, per the City of Ottawa ENCG.

**Table 1: Outdoor Noise Control Measures for Surface Transportation Noise**

Primary Mitigation Measure (in order of preference)	Secondary Mitigation Measures	
	Landscape Plantings and/or Non-acoustic Fence to Obscure Noise Source	Warning Clauses
Distance setback with soft ground	Recommended	
Insertion of Noise insensitive land uses between the source and receiver receptor		
Orientation of buildings to provide sheltered zones in rear yards	Required	Warning Clauses necessary and to include: <ul style="list-style-type: none"> <li>- Reference to specific noise mitigation measures in the development.</li> <li>- Whether noise is expected to increase in the future.</li> <li>- That there is a need to maintain mitigation.</li> </ul>
Shared outdoor amenity areas		
Earth berms (sound barriers)		
Acoustic barriers (acoustic barriers)		

**Table 2: Indoor Noise Control Measures for Surface Transportation Noise**

Primary Mitigation Measure (in order of preference)	Secondary Mitigation Measures	
	Landscape Plantings and/or Non-acoustic Fence to Obscure Noise Source	Warning Clauses
Distance setback with soft ground	Recommended	Not necessary
Insertion of Noise insensitive land uses between the source and receiver receptor		
Orientation of buildings to provide sheltered zones or modified interior spaces and amenity areas	Required	Warning Clauses necessary and to include:

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Enhanced construction techniques and construction quality		- Reference to specific noise mitigation measures in the development.
Earth berms (sound barriers)		- Whether noise is expected to increase in the future.
Indoor isolation – air conditioning and ventilation, enhanced dampening materials (indoor isolation)		- That there is a need to maintain mitigation.

The following Table 3 and Table 4 outline the indoor and outdoor noise level limits, respectively, per the MOE NPC-300 and City of Ottawa ENCG.

**Table 3: Outdoor Living Area (OLA) Noise Limit for Surface Transportation**

Time Period	Leq (16 hr) (dBA)
16 hr., 07:00 am - 23:00	55

**Table 4: Indoor Noise Limit for Surface Transportation**

Type of Space	Time Period	Leq (dBA)	
		Road	Rail
Living/dining, den areas of residences, hospitals, nursing homes, schools, daycare centres, etc.	07:00-23:00	45	40
Living/dining, den areas of residences, hospitals, nursing homes, etc. (except schools or daycare centres)	23:00-07:00	45	40
Sleeping quarters	07:00-23:00	45	40
	23:00-07:00	40	35

In addition to the implementation of noise attenuation features, if required, and depending on the severity of the noise problem, warning clauses may be recommended to advise the prospective purchasers/tenants of affected units of the potential environmental noise. These warning clauses should be included in the Site Plan and Subdivision Agreements, in the Offers of Purchase and Sale, and should be registered on Title. Warning clauses may be included for any development, irrespective of whether it is considered a noise sensitive land use.

Where site measures are required to mitigate noise levels, the City of Ottawa requires that notices be placed on Title informing potential buyers and/or tenants of the site conditions.

### 3.3 Prediction of Noise Levels

#### 3.3.1 Road Traffic Data

The following traffic data in Table 5 was used to predict noise levels:

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**Table 5: Road Traffic Data to Predict Noise Levels**

	HWY-417	Campeau Drive
Total Traffic Volume (AADT)	18,333 per lane	35,000
Day/Night Split (%)	92/8	92,8
Medium Trucks (%)	7	7
Heavy Trucks (%)	5	5
Posted Speed (km/hr.)	100	60
Road Gradient (%)	1	1
Road Classification	Freeway, Queensway, Highway	4-Lane Urban Arterial Divided (4-UAD)

Schedule 'F' and Table 1 of Annex 1 of the City of Ottawa Official Plan (May 2003) were utilized to determine the road classification and protected right-of-way. These road classifications were compared to Map 6 of the City of Ottawa Transportation Master Plan (Road Network – Urban). All findings were then compared to Table B1 (Part 4, Appendix 'B') of the City of Ottawa Environmental Noise Control Guidelines in order to determine an appropriate AADT value.

### 3.3.2 Light Rail Transit Corridor Data

Drawing N1 shows the location of the Light Rail Transit (LRT) Corridor in relation to the proposed residential development. The following data in Table 6 was used to predict LRT noise levels:

**Table 6: Light Rail Transit Corridor Data to Predict Noise Levels**

	Light Rail Transit Corridor
Total Train Volume (AADT)	340
Day/Night Split (%)	92/8
No. of Locomotives/Train	2
No. of Cars/Train	4
Maximum Posted Speed (km/hr)	80

### 3.3.3 Noise Level Calculations (Transportation)

The noise levels for the daytime and nighttime periods were calculated for a number of representative receivers described in Table 7 and shown on Drawing N1, using the MOE Road Traffic Noise Computer program STAMSON, Version 5.03.

Computer printouts are included in Appendix 'B'.



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**Table 7: Predicted Noise Levels (Transportation)**

		Noise Levels (dBA)	
		Daytime	Nighttime
Receiver No. and File Names	Receiver Description and Location		
R1 ARC6R1	Outdoor Living Area of Amenity Space fronting on Country Glen Way and Street 1 at a distance of 257.9 m from the centerline of west bound Campeau Drive and 245.3 m from the centerline of east bound Campeau Drive, a distance of 264.9 m from the centerline of west bound HWY-417 and 310.6 m from the centerline of east bound HWY-417, and 16.0 m from the centerline of the LRT.	70.54	-
R2 ARC6R2	Plane of Window (side) of north side of Block TE-2 fronting on Street 1 at a distance of 163.6 m from the centerline of west bound Campeau Drive and 156.4 m from the centerline of east bound Campeau Drive. Represents first level (daytime) and third level (nighttime).	56.55	50.08
R3 ARC6R3	Plane of Window (side) of south side of Block TE-2 (also representing Block TE-1) fronting on Street 1 at a distance of 308.6 m from the centerline of west bound HWY-417 and 351.6 m from the centerline of east bound HWY-417, and 30.0 m from the centerline of the LRT. Represents first level (daytime) and third level (nighttime).	67.97	61.45
R4 ARC6R4	Outdoor Living Area of Amenity Space fronting on Country Glen Way at a distance of 157.0 m from the centerline of west bound Campeau Drive and 126.5 m from the centerline of east bound Campeau Drive.	56.14	-
R5 ARC6R5	Outdoor Living Area of Block 1 fronting on Street 1 at a distance of 311.3 m from the centerline of west bound HWY-417 and 353.0 m from the centerline of east bound HWY-417, and 30.0 m from the centerline of the LRT.	66.67	-
R6 ARC6R6	Outdoor Living Area of Block 2 fronting on Country Glen Way at a distance of 123.9 m from the centerline of west bound Campeau Drive and 93.4 m from the centerline of east bound Campeau Drive.	56.24	-
R7 ARC6R7	Plane of Window (side) of Block 13 (also representing Blocks 1, 10, 16, and TE-3) fronting on Street 1 at a distance of 324.9 m from the centerline of west bound HWY-417 and 366.4 m from the centerline of east bound HWY-417, and 30.0 m from the centerline of the LRT. Represents first level (daytime) and third level (nighttime).	69.07	62.35
R8 ARC6R8	Plane of Window (front) of Block 4 (also representing Blocks 2 and 5) fronting on Campeau Drive at a distance of 29.6 m from the centerline of west bound Campeau Drive and 19.0 m from the centerline of east bound Campeau Drive. Represents first level (daytime) and third level (nighttime).	69.47	62.19

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Receiver No. and File Names	Receiver Description and Location	Noise Levels (dBA)	
		Daytime	Nighttime
R9 ARC6R9	Plane of Window (side) of Block TE-9 (also representing Blocks TE-6, TE-7, TE-10, TE-13, and TE-14) fronting on Street 6 at a distance of 390.7 m from the centerline of west bound HWY-417 and 430.2 m from the centerline of east bound HWY-417, and 24.1 m from the centerline of the LRT. Represents first level (daytime) and third level (nighttime).	68.75	62.11
R10 ARC6R10	Plane of Window (front) of Block TE-8 (also representing Blocks TE-4, TE-5, TE-11, and TE-12) fronting on Campeau Drive at a distance of 35.0 m from the centerline of west bound Campeau Drive and 22.4 m from the centerline of east bound Campeau Drive. Represents first level (daytime) and third level (nighttime).	68.40	61.19
R11 ARC6R11	Plane of Window (front) of Block 14 fronting on Street 2 at a distance of 62.4 m from the centerline of west bound Campeau Drive and 49.9 m from the centerline of east bound Campeau Drive. Represents first level (daytime) and third level (nighttime).	60.06	53.03
R12 ARC6R12	Plane of Window (side) of Block 5 fronting on Campeau Drive at a distance of 39.0 m from the centerline of west bound Campeau Drive and 26.3 m from the centerline of east bound Campeau Drive. Represents first level (daytime) and third level (nighttime).	64.35	57.18
R13 ARC6R13	Plane of Window (side) of Block TE-8 fronting on Country Glen Way at a distance of 45.0 m from the centerline of west bound Campeau Drive and 32.5 m from the centerline of east bound Campeau Drive. Represents first level (daytime) and third level (nighttime).	62.35	55.20

### 3.4 Summary of Findings (Transportation)

A summary of the minimum noise requirements and required Warning Clauses is shown on Table 8. The units will require notices to be registered on Title, advising the occupants of the environmental noise problems and/or of the noise attenuation measures being implemented.

**Table 8: Minimum Required Control Features/Warning Clauses (Transportation)**

Receiver Location	Noise Attenuation Barrier	Central Air Conditioning	Forced Air Heating	Warning Clauses	Building Components Study
Outdoor Living Area – Western Amenity Space and Block 1	Yes	n/a	n/a	Type A/B	n/a

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Receiver Location	Noise Attenuation Barrier	Central Air Conditioning	Forced Air Heating	Warning Clauses	Building Components Study
Plane of Window - Blocks 3, 4, 5, Block 10 (Units A-B), Block 13 (Units A-B), Block 16 (Units A-B), TE-2 (Units C-D), TE-3 (Units A-E), TE-4 to TE-7 & TE-9 to TE-14 (Units A-B), TE-8 (Units A-H)	n/a	Yes	Yes	Type C	Yes
Outdoor Living Area – Eastern Amenity Space	No	n/a	n/a	Type A	n/a

JLR calculated mitigated noise levels using typical 2.2 m and 2.5 m high noise barriers (no aps). A typical 2.2 m high noise barrier is anticipated to mitigate the OLA noise level of Block 1 and 43 to a predicted 66.28 dBA. While a typical 2.5 m high noise barrier is anticipated to mitigate the OLA noise level of Block 1 to a predicted 65.79 dBA.

All detailed calculations are included in Appendix 'C'. Table 9 summarizes the predicted freefield daytime noise levels at selected receivers and the mitigated noise levels resulting from the inclusion of the recommended noise attenuation barriers, as shown on Drawing N1. Calculations indicate that a 2.5 m high noise barrier for the outdoor living areas for Block 1 will satisfactorily mitigate noise levels.

**Table 9: Potential Noise Attenuation Due to Barriers**

Representative Receiver Location	Daytime Noise Level (dBA) Freefield	Attenuation Leq 16 (dBA) with a 2.2 m High Barrier	Attenuation Leq 16 (dBA) with a 2.5 m High Barrier	Recommended Height of Barrier/Berm Combination (m)	Height of Barrier/Berm Combination (m) required for 60dBA
Block 1 (R5)	66.67	66.28	<b>65.79</b>	2.5	4.5

A copy of the grading plan(s) has been included in Appendix 'A'. The grading plan(s) were used to determine the ground elevation for the noise receivers and barrier base.

### 3.5 Summary of Findings (Preliminary Building Component)

JLR completed preliminary building component analyses of a Minto Executive Town, Avenue Town, Rear Lane Town, and Infusion Terrace to determine if sufficient acoustical insulation is provided with a 'typical' building construction to mitigate interior noise levels to MOECC and City of Ottawa criteria. The Acoustical Insulation Factor (AIF) Method, as described in the Ministry of the Environment Ontario, Ontario Publication, Environmental Noise Assessment in Land Use Planning (ENALUP) 1987 (Page 10-29), was used; to assess the building construction required to mitigate exterior noise to meet interior noise criteria. Exterior freefield noise levels at the plane of the windows were calculated for the first and top floors. Freefield noise levels of 69 & 70 dBA were conservatively utilized to determine wall and window construction.

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Minto provided floor plan and building elevation drawings, for the Tahoe (Executive Town), Cambridge (Avenue Town), Bayview (Rear Lane Town), and Infusion Terrace units. Floor and elevation drawings are included in Appendix 'D'. These units are considered representative units. Using Minto drawings, JLR calculated the window areas, floor areas and wall areas for each of the rooms within the units. This data was then used to calculate the window to floor area ratios and wall to floor area ratios. Design tables provided in ENALUP were then utilized to identify minimum window construction and wall construction requirements to mitigate the plane of window noise levels. Table 10 in Appendix 'E' present the working calculations for the window and wall requirements necessary to acoustically insulate each of the noise sensitive rooms within each of the representative units. The following table presents a summary of the analysis with the minimum standard window and wall construction required per unit type.

**Table 10: Minimum Window and Wall Construction Types**

Unit Type	Representative Window Type Glass Thickness (Spacing) Glass Thickness	Representative Exterior Wall Type
Avenue Town (Block 10 Units A & B, Block 13 Units A & B, Block 16 Units A & B)	6(24)6 Double Pane	EW1-EW2
Executive Town (Block 1 Unit A)	6(30)6 Double Pane	EW1-EW4
Metro Town TE-2 (Units C-D), TE-3 (Units A-E), TE-4 to TE-7 & TE-9 to TE-14 (Units A- B), TE-8 (Units A-H)	6(30)6 Double Pane	EW1-EW3
Rear Lane Town (Blocks 3, 4, & 5)	6(70)6 Double Pane	EW1-EW4

For this analysis, sliding glass doors identified on the plans are treated as a window. The acoustic insulation factor methodology does not account for sliding glass doors as a door type. It is noted that no additional doors are identified with a connection to the noise sensitive interior rooms such as the living room, bedroom or kitchen area.

A standard wall construction detail with a 38 x 89 mm wall construction complete with siding, sheathing, insulation and 12.7 mm gypsum board will provide satisfactory acoustic insulation to achieve indoor noise requirements.

Exterior wall type construction notes:

- EW1 – Standard wall construction (noted above), with sheathing, wood or metal siding and fibre backer board.
- EW2 – Standard wall construction (noted above), with rigid insulation (25-30 mm), wood or metal siding, and fibre backer board.
- EW3 – Standard wall construction (noted above), with sheathing, 28 x 89 mm framing, sheathing and asphalt roofing material.
- EW4 – Standard wall construction (noted above), with sheathing and 20 mm stucco.

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It should be noted that other types of window and wall construction could be chosen to achieve the same minimum noise mitigation. These details will be established during the detailed building component study in consultation with Minto.

Tables A2 and A3 from Canada Mortgage and Housing's (CMHC) publication, Airport Noise, revised 1981 were used to convert AIF values to the more widely recognized Sound Transmission Class (STC) values. Appendix 'F' presents these CMHC tables.

AIF and equivalent STC values are presented in Table 11 for the town unit bedroom with the highest AIF requirement. It is recommended that at the time of building permit application that the AIF/STC be confirmed to suit the specific unit proposed for the Block.

**Table 11: AIF Value Conversion to STC Value**

Type of Unit	AIF Required	Windows			Walls		
		Window/Floor Area Ratio	AIF Conversion Formula	STC	Wall/Floor Area Ratio	AIF Conversion Formula	STC
Avenue Town (Block 10 Units A & B, Block 13 Units A & B, Block 16 Units A & B)	37	23%	STC	37	38%	STC – 3	40
Executive Town (Block 1 Unit A)	36	29%	STC-1	37	139	STC-9	45
Metro Town TE-2 (Units C-D), TE-3 (Units A-E), TE-4 to TE-7 & TE-9 to TE-14 (Units A-B), TE-8 (Units A-H)	37	29%	STC-1	38	58%	STC-5	42
Rear Lane Town (Blocks 3, 4, & 5)	38	38%	STC-2	40	111%	STC-8	46

## 4.0 OPINION OF PROBABLE COSTS (OPC) FOR MITIGATION MEASURES

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Based on consultation with Minto, the following Table 12 summarizes our opinion of probable costs for the mitigation measures identified in this report.

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**Table 12: Opinion of Probable Costs for Mitigation Measures**

Item	Cost per Unit	Estimated Quantity	Estimated Sub-Total
Central Air Conditioning (where required)	\$3,000/unit	42	\$126,000
Windows with STC Rating 40	\$2,250/unit	600	\$1,350,000
<b>Estimated Total</b>			<b>\$1,476,000</b>

## 5.0 CONCLUSION AND RECOMMENDATIONS

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Predicted noise levels are expected to exceed the City of Ottawa ENCG and MOECC criteria for daytime outdoor living areas for the proposed units adjacent to the LRT. To address these exceedances, Minto has revised the subdivision plan to reduce the reliance of noise barriers as the primary noise mitigation tool. Building orientation and increased separation to the transportation noise source have been used to reduce noise levels for residential units in close proximity to a significant transportation noise source. Noise barriers will still be required to protect outdoor living areas. Refer to Drawing N1 for noise barrier locations. Although a 2.5 m high noise barrier will help mitigate noise levels for Block 1 the noise level will remain over 60 dBA. Further calculations were performed to determine the height of barrier required to achieve 60 dBA (refer to Table 9 for results).

### 5.1 Outdoor Features

#### 5.1.1 Noise Barrier (2.5 m)

The following townhouse blocks shall include a 2.5 m high noise barrier offset 0.3 m from the rear and/or side property line (refer to Drawing N1):

- Block 1.

### 5.2 Indoor Noise Control Features

#### 5.2.1 Heating System

The following Units/Lots shall be fitted with a forced air heating system or equivalent system:

- Blocks 3, 4, 5, 10 (Units A-B), 13 (Units A-B), Block 16 (Units A-B), TE-2 (Units C-D), TE-3 (Units A-E), TE-4 to TE-7 & TE-9 to TE-14 (Units A-B), TE-8 (Units A-H).

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### 5.2.2 Cooling System

The following Units/Lots shall be fitted with central air conditioning or equivalent system:

Blocks 3, 4, 5, 10 (Units A-B), 13 (Units A-B), Block 16 (Units A-B), TE-2 (Units C-D), TE-3 (Units A-E), TE-4 to TE-7 & TE-9 to TE-14 (Units A-B), TE-8 (Units A-H).

## 5.3 Warning Clauses

### 5.3.1 Warning Clause Type A

Clause A is to be registered on Title for Block 1:

*“Purchasers/tenants are advised that despite the inclusion of noise control features in the development, sound levels due to increasing road/transitway traffic may, on occasion, interfere with some outdoor activities as the sound levels exceed the sound level limits of the City and the Ministry of the Environment.*

*To help address the need for sound attenuation this development includes:*

- *a setback of buildings from the noise source; and*
- *an acoustic barrier.*

*To ensure that provincial sound level limits are not exceeded, it is important to maintain these sound attenuation features.*

*The acoustic barrier shall be maintained and kept in good repair by the property owner. Any maintenance, repair or replacement is the responsibility of the Owner and shall be with the same material or to the same standards, having the same colour, appearance and function of the original.*

*Additionally this development includes trees and shrubs to screen the source of noise from occupants.”*

### 5.3.2 Warning Clause Type B

Clause B is to be registered on Title for Block 1:

*“Purchasers/tenants are advised that despite the inclusion of noise control features within the building units, sound levels due to increasing road/transitway traffic may, on occasion, interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the City and the Ministry of the Environment.*

*To help address the need for sound attenuation this dwelling unit includes:*

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- *single/multi-pane glass windows;*
- *provision for central air conditioning.*

*To ensure that provincial sound level limits are not exceeded it is important to maintain these sound attenuation features.*

*This dwelling unit has also been designed with the provision for adding central air conditioning at the occupant's discretion. Installation of central air conditioning will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the City and the Ministry of the Environment."*

#### 5.3.3 Warning Clause Type C

Clause C is to be registered on Title for Blocks 3, 4, 5, 10 (Units A-B), 13 (Units A-B), Block 16 (Units A-B), TE-2 (Units C-D), TE-3 (Units A-E), TE-4 to TE-7 & TE-9 to TE-14 (Units A-B), TE-8 (Units A-H):

*"Purchasers/tenants are advised that despite the inclusion of noise control features within the building units, sound levels due to increasing road/transitway traffic may, on occasion, interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the City and the Ministry of the Environment.*

*To help address the need for sound attenuation this dwelling unit includes:*

- *single/multi-pane glass windows;*
- *Central air conditioning.*

*To ensure that provincial sound level limits are not exceeded it is important to maintain these sound attenuation features.*

*This dwelling unit has been supplied with a central air conditioning system and other measures which will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the City and the Ministry of the Environment."*

## 5.4 Site Plan Agreement and Notices on Title

It is recommended that the previous recommendations and Warning Clauses are to be included in the Site Plan Agreement and in the Offers of Purchase and Sale and/or lease of the affected units and be registered on Title.



# Noise Control Detailed Study

## Arcadia Stage 6

---

### 5.5 Building Permit Requirements

A report prepared and stamped by a Professional Engineer / Acoustical Consultant detailing building components (e.g. glazing/window, wall sections) to provide acoustical insulation to satisfy the City of Ottawa Environmental Noise Control Guidelines for indoor noise levels is required prior to the issuance of a Building Permit for the following units subject to this Report:

- Block 1 Unit A;
- Blocks 3, 4, & 5;
- Block 10 Units A & B, Block 13 Units A & B, Block 16 Units A & B;
- TE-2 (Units C-D), TE-3 (Units A-E), TE-4 to TE-7 & TE-9 to TE-14 (Units A-B), TE-8 (Units A-H)

This report has been prepared for the exclusive use of Minto Communities Inc., for the stated purpose, for the named facility. Its discussions and conclusions are summary in nature and cannot be properly used, interpreted or extended to other purposes without a detailed understanding and discussions with the client as to its mandated purpose, scope and limitations. This report was prepared for the sole benefit and use of Minto Communities Inc. and may not be used or relied on by any other party without the express written consent of J.L. Richards & Associates Limited.

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J.L. RICHARDS & ASSOCIATES LIMITED

Prepared by:

Reviewed by:

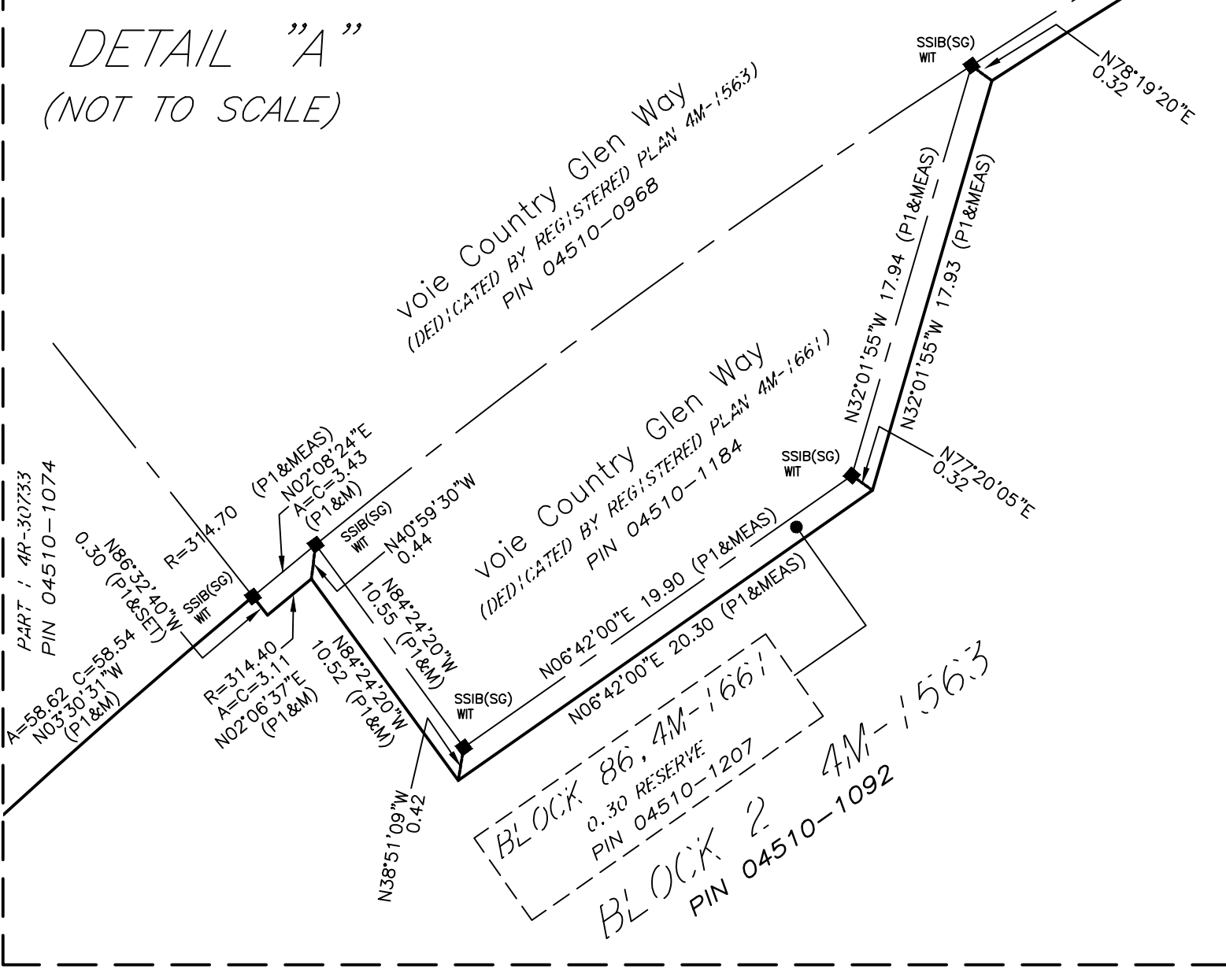
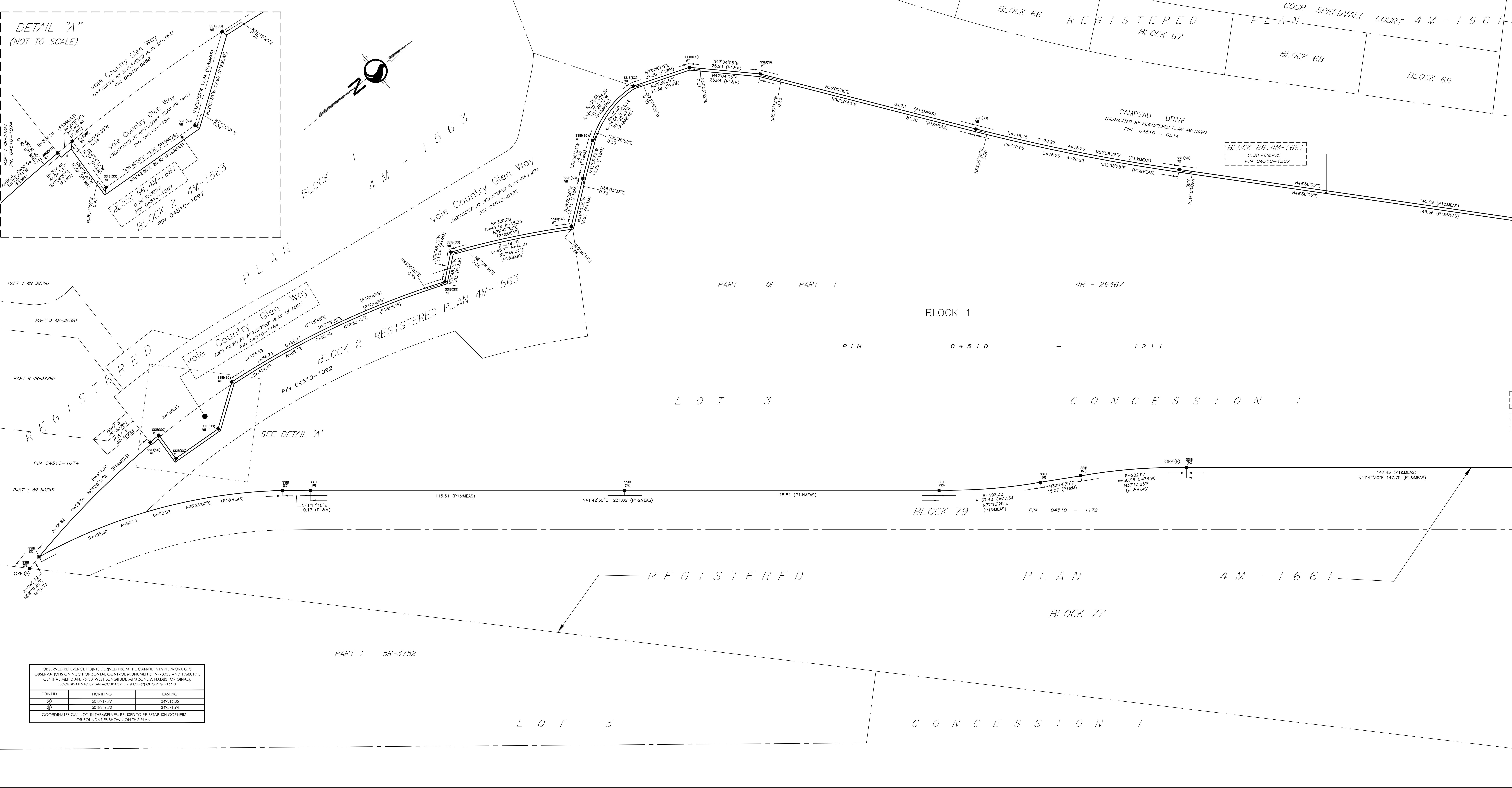
Thomas Blais, A.Sc.T  
Senior Technologist

Lee Jablonski, P.Eng.  
Associate  
Senior Civil Engineer

---

# **Appendix A**

Drawings



**PLAN 4M-**

I HEREBY CERTIFY THAT THIS PLAN 4M-\_\_\_\_\_ IS REGISTERED IN THE LAND REGISTRY OFFICE FOR THE LAND TITLES DIVISION OF OTTAWA-CARLETON (NO. 4) AT \_\_\_\_\_ O'CLOCK ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_ 2022 AND ENTERED IN THE REGISTER FOR P.I.N. \_\_\_\_\_ AND THE REQUIRED CONSENTS ARE REGISTERED AS PLAN DOCUMENT NUMBER OC-\_\_\_\_\_

REPRESENTATIVE FOR LAND REGISTRAR

THIS PLAN COMPRISES ALL OF PINS 04510-1211, 04510-1092, 04510-1209 AND 04510-1210. PART OF BLOCK 1 IS SUBJECT TO EASEMENT AS IN INSTRUMENT OC2248967.

PLAN OF SUBDIVISION OF  
**PART OF BLOCK 2,  
 REGISTERED PLAN 4M-1563 AND  
 PART OF LOT 3  
 CONCESSION 1**  
 (GEOGRAPHIC TOWNSHIP OF MARCH)  
 CITY OF OTTAWA

Scale 1:500

**METRIC CONVERSION**  
 DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

**GRID SCALE CONVERSION**  
 DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99914.

**BEARING NOTE**  
 BEARINGS ARE GRID, DERIVED FROM THE CAN-NET VRS NETWORK OBSERVATIONS ON NCC HORIZONTAL CONTROL MONUMENTS 1972035 AND 19680191, CENTRAL MERIDIAN, 76°30' WEST LONGITUDE MTM ZONE 9, NAD83 (ORIGINAL).

19772035 N:5006040.42 E:324888.04  
 19680191 N:5003564.26 E:38804.94

**LEGEND**

□	DENOTES	FOUND MONUMENTS (STANTEC)
■	IB	SET MONUMENTS (IB)
■	IBB	UNLESS OTHERWISE STATED
■	IBR	IRON BAR
■	IBS	ROUND IRON BAR
■	ISB	STANDARD IRON BAR
■	SC	SHORT STANDARD IRON BAR
■	CC	CUT CROSS
■	CP	CONCRETE PIN
■	WIT	WITNESS
■	FIN	PROPERTY IDENTIFICATION NUMBER
■	M/MEAS	MEASURED
■	PROP	PROPORTIONED
■	OU	ORIGIN UNKNOWN
■	STAT/EC	STANTEC GEOMATICS LTD.
■	P1	REGISTERED PLAN 4M-1661

**OWNER'S CERTIFICATE**  
 THIS IS TO CERTIFY THAT:  
 1. BLOCK 1 HAS BEEN LAID OUT IN ACCORDANCE WITH OUR INSTRUCTIONS.

DATE \_\_\_\_\_  
 \_\_\_\_\_  
 VICE-PRESIDENT, LAND DEVELOPMENT  
 MINTO COMMUNITIES INC.  
 I HAVE THE AUTHORITY TO BIND THE CORPORATION

DATE \_\_\_\_\_  
 \_\_\_\_\_  
 MINTO COMMUNITIES INC.  
 I HAVE THE AUTHORITY TO BIND THE CORPORATION

**SURVEYOR'S CERTIFICATE**  
 I CERTIFY THAT:  
 1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT AND THE LAND TITLES ACT AND THE REGULATIONS MADE UNDER THEM.  
 2. THE SURVEY WAS COMPLETED ON THE DAY OF \_\_\_\_\_, 2022.

DATE \_\_\_\_\_  
 \_\_\_\_\_  
 FRANCIS LAU  
 ONTARIO LAND SURVEYOR

**Stantec Geomatics Ltd.**  
 CANADA LANDS SURVEYORS  
 ONTARIO LAND SURVEYORS  
 1331 CYDIE AVENUE, SUITE 300  
 OTTAWA, ONTARIO, K2C 3G4  
 TEL: 613.722.4400  
 stantec.com

DRAWN: ME PVA \* CHECKED: \* FIELD: \* PROJECT No.: 161614463-132A

OBSERVED REFERENCE POINTS DERIVED FROM THE CAN-NET VRS NETWORK GPS OBSERVATIONS ON NCC HORIZONTAL CONTROL MONUMENTS 19772035 AND 19680191, CENTRAL MERIDIAN, 76°30' WEST LONGITUDE MTM ZONE 9, NAD83 (ORIGINAL). COORDINATES TO URBAN ACCURACY PER SEC 14(2) OF O. REG. 216/10

POINT ID	NORTHING	EASTING
①	5017917.79	349316.85
②	5018259.72	349571.94

COORDINATES CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN.





**Title:** Concept Plan 32

**Project:** Arcadia - Stage 6

**Legend**

- Public Parkette
- Amenity Area
- Open Space
- Executive Towns
- Avenue (B2B) Towns
- Urban (Rear Lane) Towns
- Infusion (Stacked) Towns
- Stage Limits
- 100 Year Floodplain

**Site Statistics (For Stacked Towns Only)**

Unit Count (Stacked Towns only)	264		
	Required	Provided	
Total Amenity Space (6 sq m./unit)	1,584 Sq m.	4,910 Sq m.	
Communal Amenity Space (50% of total amenity per unit = min. 3 Sq m./Unit)	792 Sq m.	2,006 Sq m.	
Bike Rack Count (0.5/Unit - 8 spaces per rack)	16.5	16	
Parking (Section 101)	Above Ground Parking (Units x 1.1)	162	158
	Under Ground Parking (Units x 1.1)	128	148
	Total Parking Spaces	290	306

**NOTES:**

- There is a 10m No Build Setback from the northern LRT property line.
- Each stacked town has a lower unit with a patio (16 sq. m.) and an upper unit with a balcony (6 sq.m.) which are included as private amenity area.
- All pathways are 1.5m unless otherwise noted.
- Parking requirement for stacked towns is 0.90 per unit for the residents + 0.1 per unit for visitor = total 1.0 per unit.
- Assume UG garage for TE-4 to 7 has 80 parking spaces and TE-11 to 14 has 68 parking spaces.

4	Updated curbs on Street No. 2 & 5. Update underground garage boundary for TE-3 to 7.	2022-06-09	K.G.
3	Add lapsed site plan for west property	2022-06-03	K.G.
2	Update Avenue Town & TE-4 to 7	2022-05-11	K.G.
1	Update Avenue Town models (2022)	2022-05-11	K.G.
0	Issued for Review	2022-05-03	K.G.

**Revisions**

No.	Description	Date	By
4	Updated curbs on Street No. 2 & 5. Update underground garage boundary for TE-3 to 7.	2022-06-09	K.G.
3	Add lapsed site plan for west property	2022-06-03	K.G.
2	Update Avenue Town & TE-4 to 7	2022-05-11	K.G.
1	Update Avenue Town models (2022)	2022-05-11	K.G.
0	Issued for Review	2022-05-03	K.G.

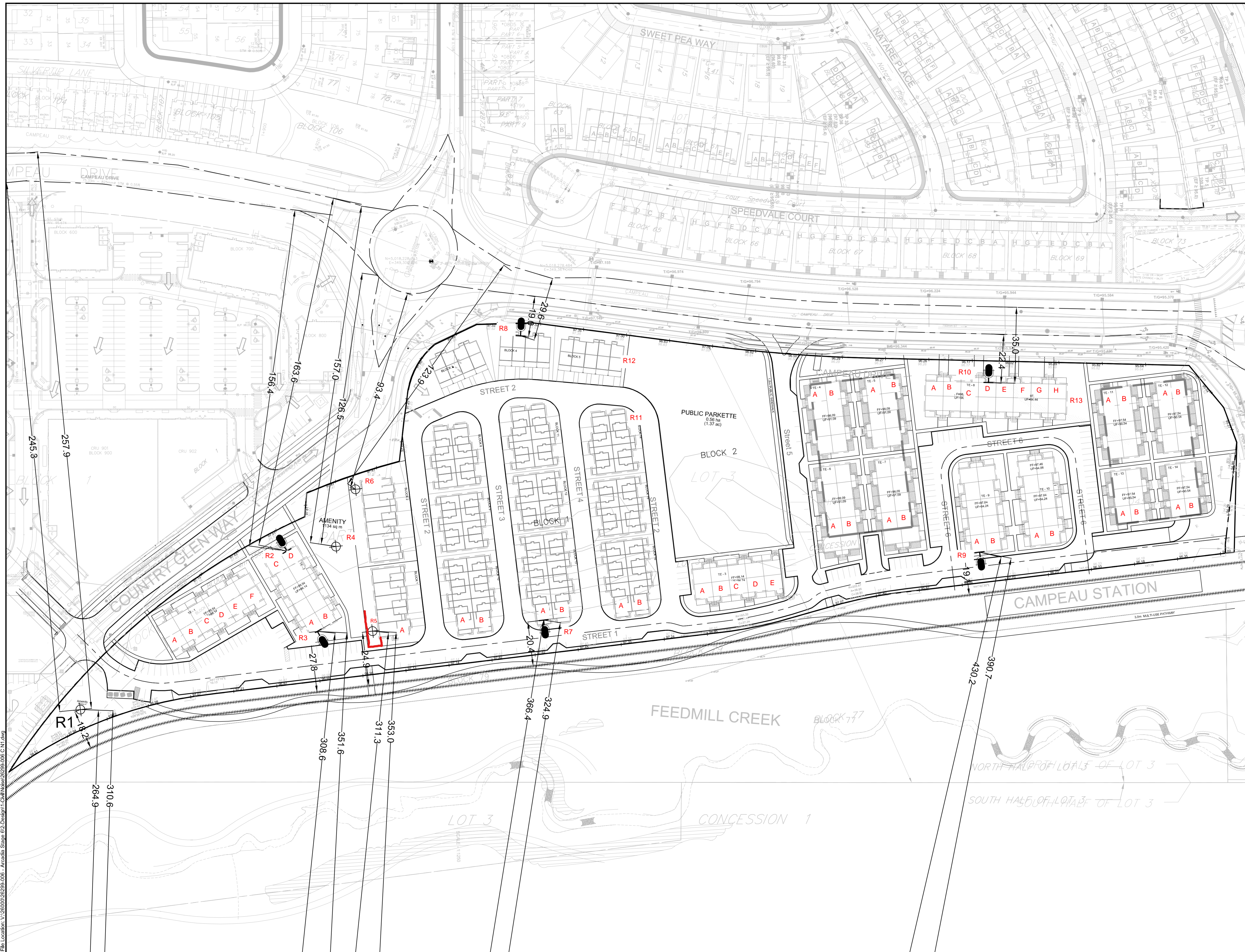
Unit Type	Stage 6	
Executive Towns	11	2.99 %
Avenue Towns	80	21.7 %
Rear Lane Towns	13	3.5 %
Infusion Terraces	264	71.7 %
<b>Total</b>	<b>368</b>	<b>100.0 %</b>
Required Parkland (1ha / 300units)	1.23 ha	
Surplus Parkland from Stage 1-4	0.67 ha	
Min. Parkette Size (Stage 6)	0.56 ha	

**Drawn By:** K.G.  
**Checked By:** C.S.

**Minto Communities Inc**  
180 Kent Street,  
Ottawa, ON  
K1P 0B6

**North**

Scale: NTS



**LEGEND:**

- OUTDOOR RECEIVER
- PLANE OF WINDOW RECEIVER
- ANGLE OF NOISE SOURCE TO RECEIVER
- NOISE BARRIER (2.2m)
- FORCED AIR HEATING SYSTEM REQUIRED, WARNING CLAUSES B
- FORCED AIR HEATING SYSTEM REQUIRED, WARNING CLAUSES A/B

01	ISSUED TO CITY FOR REVIEW FIRST ENGINEERING SUBMISSION	18/07/22
No.	ISSUE / REVISION	DD/MM/YY

This drawing is copyright protected and may not be reproduced or used for purposes other than execution of the described work without the express written consent of J.L. Richards & Associates Limited.

VERIFY SHEET SIZE AND SCALES. BAR TO THE RIGHT IS 25mm IF THIS IS A FULL SIZE DRAWING.

SCALE: 1:750

CLIENT:

CONSULTANT:

ENGINEERS - ARCHITECTS - PLANNERS

PROFESSIONAL STAMP

PROJECT NORTH

PROJECT:

**ARCADIA STAGE 6**

450 HUNTMAR DRIVE

DRAWING:

**NOISE CONTROL DETAILED STUDY  
NOISE RECEIVER LOCATIONS**

DESIGN: MM	DRAWING #:
DRAWN: KC	<b>N1</b>
CHECKED: KF	
JLR #: 26299-006	

File Location: V:\2022\Stage 6\2-Design\1-Civil\Noise\26299-006\_C.N1.dwg

PLOT DATE: Thursday, July 7, 2022 3:32:30 PM

---

## **Appendix B**

Transportation Noise Source  
Predictions

Filename: arc6r1.te            Time Period: Day/Night 16/8 hours  
 Description: Arcadia Stage 6 - R1 OLA, West Amenity Space

Rail data, segment # 1: LRT EB (day/night)

```

-----
Train          ! Trains      ! Speed !# loc !# Cars! Eng !Cont
Type          !             ! (km/h) !/Train!/Train! type !weld
-----+-----+-----+-----+-----+-----
  1. Electric  ! 155.0/15.0 !  80.0 !  2.0 !  4.0 ! Elec! No
  
```

Data for Segment # 1: LRT EB (day/night)

```

-----
Angle1  Angle2      : -90.00 deg   90.00 deg
Wood depth      :           0   (No woods.)
No of house rows :           0 / 0
Surface         :           1   (Absorptive ground surface)
Receiver source distance : 18.20 / 18.20 m
Receiver height :  1.50 / 1.50 m
Topography      :           3   (Elevated; no barrier)
No Whistle
Elevation       :  5.00 m
Reference angle :  0.00
  
```

↑  
 Rail data, segment # 2: LRT WB (day/night)

```

-----
Train          ! Trains      ! Speed !# loc !# Cars! Eng !Cont
Type          !             ! (km/h) !/Train!/Train! type !weld
-----+-----+-----+-----+-----+-----
  1. Electric  ! 155.0/15.0 !  80.0 !  2.0 !  4.0 ! Elec! No
  
```

Data for Segment # 2: LRT WB (day/night)

```

-----
Angle1  Angle2      : -90.00 deg   90.00 deg
Wood depth      :           0   (No woods.)
No of house rows :           0 / 0
Surface         :           1   (Absorptive ground surface)
Receiver source distance : 15.00 / 15.00 m
Receiver height :  1.50 / 1.50 m
Topography      :           3   (Elevated; no barrier)
No Whistle
Elevation       :  5.00 m
Reference angle :  0.00
  
```

↑  
 Results segment # 1: LRT EB (day)



-----  
LOCOMOTIVE (0.00 + 60.40 + 0.00) = 60.40 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	90	0.44	62.65	-1.21	-1.05	0.00	0.00	0.00	60.40
-----	----	------	-------	-------	-------	------	------	------	-------

-----

WHEEL (0.00 + 64.88 + 0.00) = 64.88 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	90	0.54	67.42	-1.29	-1.25	0.00	0.00	0.00	64.88
-----	----	------	-------	-------	-------	------	------	------	-------

-----

Segment Leq : 66.20 dBA

↑

Results segment # 2: LRT WB (day)

-----

LOCOMOTIVE (0.00 + 61.60 + 0.00) = 61.60 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	90	0.44	62.65	0.00	-1.05	0.00	0.00	0.00	61.60
-----	----	------	-------	------	-------	------	------	------	-------

-----

WHEEL (0.00 + 66.18 + 0.00) = 66.18 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	90	0.54	67.42	0.00	-1.25	0.00	0.00	0.00	66.18
-----	----	------	-------	------	-------	------	------	------	-------

-----

Segment Leq : 67.48 dBA

Total Leq All Segments: 69.90 dBA

↑

Results segment # 1: LRT EB (night)

-----

LOCOMOTIVE (0.00 + 53.27 + 0.00) = 53.27 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	90	0.44	55.52	-1.21	-1.05	0.00	0.00	0.00	53.27
-----	----	------	-------	-------	-------	------	------	------	-------

-----

WHEEL (0.00 + 57.75 + 0.00) = 57.75 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	90	0.54	60.29	-1.29	-1.25	0.00	0.00	0.00	57.75
-----	----	------	-------	-------	-------	------	------	------	-------

-----  
Segment Leq : 59.07 dBA

↑  
Results segment # 2: LRT WB (night)  
-----

LOCOMOTIVE (0.00 + 54.47 + 0.00) = 54.47 dBA  
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq  
-----  
-90 90 0.44 55.52 0.00 -1.05 0.00 0.00 0.00 54.47  
-----

WHEEL (0.00 + 59.04 + 0.00) = 59.04 dBA  
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq  
-----  
-90 90 0.54 60.29 0.00 -1.25 0.00 0.00 0.00 59.04  
-----

Segment Leq : 60.34 dBA

Total Leq All Segments: 62.76 dBA

↑  
Road data, segment # 1: HWY 417 EB (day/night)  
-----

Car traffic volume : 59370/5163 veh/TimePeriod \*  
Medium truck volume : 4723/411 veh/TimePeriod \*  
Heavy truck volume : 3373/293 veh/TimePeriod \*  
Posted speed limit : 100 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 73332  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 EB (day/night)  
-----

Angle1 Angle2 : -90.00 deg 90.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 310.60 / 310.60 m

Receiver height : 1.50 / 1.50 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

↑

Road data, segment # 2: HWY 417 WB (day/night)

-----  
Car traffic volume : 59370/5163 veh/TimePeriod \*  
Medium truck volume : 4723/411 veh/TimePeriod \*  
Heavy truck volume : 3373/293 veh/TimePeriod \*  
Posted speed limit : 100 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 73332  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 WB (day/night)

-----  
Angle1 Angle2 : -90.00 deg 90.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 264.90 / 264.90 m  
Receiver height : 1.50 / 1.50 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

↑

Road data, segment # 3: Campeau East (day/night)

-----  
Car traffic volume : 14168/1232 veh/TimePeriod \*  
Medium truck volume : 1127/98 veh/TimePeriod \*  
Heavy truck volume : 805/70 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 17500  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00

Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 3: Campeau East (day/night)

-----  
Angle1 Angle2 : -90.00 deg 0.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 245.30 / 245.30 m  
Receiver height : 1.50 / 1.50 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

↑

Road data, segment # 4: Campeau West (day/night)

-----  
Car traffic volume : 14168/1232 veh/TimePeriod \*  
Medium truck volume : 1127/98 veh/TimePeriod \*  
Heavy truck volume : 805/70 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 17500  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 4: Campeau West (day/night)

-----  
Angle1 Angle2 : -90.00 deg 0.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 257.90 / 257.90 m  
Receiver height : 1.50 / 1.50 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

↑

Results segment # 1: HWY 417 EB (day)

-----  
Source height = 1.50 m

ROAD (0.00 + 58.09 + 0.00) = 58.09 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.66	81.40	0.00	-21.85	-1.46	0.00	0.00	0.00	58.09

Segment Leq : 58.09 dBA

↑  
Results segment # 2: HWY 417 WB (day)

Source height = 1.50 m

ROAD (0.00 + 59.24 + 0.00) = 59.24 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.66	81.40	0.00	-20.70	-1.46	0.00	0.00	0.00	59.24

Segment Leq : 59.24 dBA

↑  
Results segment # 3: Campeau East (day)

Source height = 1.50 m

ROAD (0.00 + 46.05 + 0.00) = 46.05 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.66	70.67	0.00	-20.15	-4.47	0.00	0.00	0.00	46.05

Segment Leq : 46.05 dBA

↑  
Results segment # 4: Campeau West (day)

Source height = 1.50 m

ROAD (0.00 + 45.69 + 0.00) = 45.69 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.66	70.67	0.00	-20.51	-4.47	0.00	0.00	0.00	45.69

Segment Leq : 45.69 dBA

Total Leq All Segments: 61.93 dBA

↑

Results segment # 1: HWY 417 EB (night)

-----  
Source height = 1.49 m

ROAD (0.00 + 50.50 + 0.00) = 50.50 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.66	73.80	0.00	-21.85	-1.46	0.00	0.00	0.00	50.50

-----

Segment Leq : 50.50 dBA

↑

Results segment # 2: HWY 417 WB (night)

-----  
Source height = 1.49 m

ROAD (0.00 + 51.64 + 0.00) = 51.64 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.66	73.80	0.00	-20.70	-1.46	0.00	0.00	0.00	51.64

-----

Segment Leq : 51.64 dBA

↑

Results segment # 3: Campeau East (night)

-----  
Source height = 1.50 m

ROAD (0.00 + 38.46 + 0.00) = 38.46 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.66	63.07	0.00	-20.15	-4.47	0.00	0.00	0.00	38.46

-----

Segment Leq : 38.46 dBA

↑

Results segment # 4: Campeau West (night)

-----  
Source height = 1.50 m

ROAD (0.00 + 38.09 + 0.00) = 38.09 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.66	63.07	0.00	-20.51	-4.47	0.00	0.00	0.00	38.09

Segment Leq : 38.09 dBA

Total Leq All Segments: 54.34 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 70.54  
(NIGHT): 63.34

↑

↑

Filename: arc6r2.te                            Time Period: Day/Night 16/8 hours  
Description: Arcadia Stage 6 - R2 POW, TE-2 Stacked Townhomes

Road data, segment # 1: Campeau East (day/night)

-----  
Car traffic volume : 14168/1232 veh/TimePeriod \*  
Medium truck volume : 1127/98 veh/TimePeriod \*  
Heavy truck volume : 805/70 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 17500  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Campeau East (day/night)

-----  
Angle1 Angle2 : -90.00 deg 90.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 156.40 / 156.40 m  
Receiver height : 5.36 / 8.46 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

↑

Road data, segment # 2: Campeau West (day/night)

-----  
Car traffic volume : 14168/1232 veh/TimePeriod \*  
Medium truck volume : 1127/98 veh/TimePeriod \*  
Heavy truck volume : 805/70 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 17500  
Percentage of Annual Growth : 0.00



Number of Years of Growth : 0.00  
 Medium Truck % of Total Volume : 7.00  
 Heavy Truck % of Total Volume : 5.00  
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: Campeau West (day/night)

-----  
 Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 163.60 / 163.60 m  
 Receiver height : 5.36 / 8.46 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

↑  
 Results segment # 1: Campeau East (day)

Source height = 1.50 m

ROAD (0.00 + 53.69 + 0.00) = 53.69 dBA  

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.54	70.67	0.00	-15.72	-1.26	0.00	0.00	0.00	53.69

 -----

Segment Leq : 53.69 dBA

↑  
 Results segment # 2: Campeau West (day)

Source height = 1.50 m

ROAD (0.00 + 53.38 + 0.00) = 53.38 dBA  

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.54	70.67	0.00	-16.03	-1.26	0.00	0.00	0.00	53.38

 -----

Segment Leq : 53.38 dBA

Total Leq All Segments: 56.55 dBA

↑  
 Results segment # 1: Campeau East (night)

Source height = 1.50 m

ROAD (0.00 + 47.21 + 0.00) = 47.21 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.45	63.07	0.00	-14.78	-1.08	0.00	0.00	0.00	47.21

Segment Leq : 47.21 dBA

↑

Results segment # 2: Campeau West (night)

Source height = 1.50 m

ROAD (0.00 + 46.93 + 0.00) = 46.93 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.45	63.07	0.00	-15.06	-1.08	0.00	0.00	0.00	46.93

Segment Leq : 46.93 dBA

Total Leq All Segments: 50.08 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 56.55  
(NIGHT): 50.08

↑

↑

Filename: arc6r3.te            Time Period: Day/Night 16/8 hours  
 Description: Arcadia Stage 6 - R3 POW, Stacked Towns

Rail data, segment # 1: LRT EB (day/night)

```

-----
Train          ! Trains      ! Speed !# loc !# Cars! Eng !Cont
Type          !             ! (km/h) !/Train!/Train! type !weld
-----+-----+-----+-----+-----+-----
  1. Electric  ! 155.0/15.0 !  80.0 !  2.0 !  4.0 ! Elec! No
  
```

Data for Segment # 1: LRT EB (day/night)

```

-----
Angle1  Angle2      : -90.00 deg  90.00 deg
Wood depth      :          0  (No woods.)
No of house rows :          0 / 0
Surface         :          1  (Absorptive ground surface)
Receiver source distance : 32.30 / 32.30 m
Receiver height :  5.36 / 8.46 m
Topography      :          3  (Elevated; no barrier)
No Whistle
Elevation       :  5.00 m
Reference angle :  0.00
  
```

↑  
 Rail data, segment # 2: LRT WB (day/night)

```

-----
Train          ! Trains      ! Speed !# loc !# Cars! Eng !Cont
Type          !             ! (km/h) !/Train!/Train! type !weld
-----+-----+-----+-----+-----+-----
  1. Electric  ! 155.0/15.0 !  80.0 !  2.0 !  4.0 ! Elec! No
  
```

Data for Segment # 2: LRT WB (day/night)

```

-----
Angle1  Angle2      : -90.00 deg  90.00 deg
Wood depth      :          0  (No woods.)
No of house rows :          0 / 0
Surface         :          1  (Absorptive ground surface)
Receiver source distance : 27.80 / 27.80 m
Receiver height :  5.36 / 8.46 m
Topography      :          3  (Elevated; no barrier)
No Whistle
Elevation       :  5.00 m
Reference angle :  0.00
  
```

↑  
 Results segment # 1: LRT EB (day)

-----  
LOCOMOTIVE (0.00 + 57.45 + 0.00) = 57.45 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	90	0.32	62.65	-4.39	-0.81	0.00	0.00	0.00	57.45
-----	----	------	-------	-------	-------	------	------	------	-------

-----

WHEEL (0.00 + 61.65 + 0.00) = 61.65 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	90	0.42	67.42	-4.74	-1.03	0.00	0.00	0.00	61.65
-----	----	------	-------	-------	-------	------	------	------	-------

-----

Segment Leq : 63.05 dBA

↑

Results segment # 2: LRT WB (day)

-----

LOCOMOTIVE (0.00 + 58.31 + 0.00) = 58.31 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	90	0.32	62.65	-3.53	-0.81	0.00	0.00	0.00	58.31
-----	----	------	-------	-------	-------	------	------	------	-------

-----

WHEEL (0.00 + 62.58 + 0.00) = 62.58 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	90	0.42	67.42	-3.82	-1.03	0.00	0.00	0.00	62.58
-----	----	------	-------	-------	-------	------	------	------	-------

-----

Segment Leq : 63.96 dBA

Total Leq All Segments: 66.54 dBA

↑

Results segment # 1: LRT EB (night)

-----

LOCOMOTIVE (0.00 + 50.84 + 0.00) = 50.84 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	90	0.23	55.52	-4.08	-0.60	0.00	0.00	0.00	50.84
-----	----	------	-------	-------	-------	------	------	------	-------

-----

WHEEL (0.00 + 55.02 + 0.00) = 55.02 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	90	0.33	60.29	-4.43	-0.84	0.00	0.00	0.00	55.02
-----	----	------	-------	-------	-------	------	------	------	-------

-----  
Segment Leq : 56.42 dBA

↑  
Results segment # 2: LRT WB (night)  
-----

LOCOMOTIVE (0.00 + 51.64 + 0.00) = 51.64 dBA  
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq  
-----  
-90 90 0.23 55.52 -3.29 -0.60 0.00 0.00 0.00 51.64  
-----

WHEEL (0.00 + 55.89 + 0.00) = 55.89 dBA  
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq  
-----  
-90 90 0.33 60.29 -3.57 -0.84 0.00 0.00 0.00 55.89  
-----

Segment Leq : 57.28 dBA

Total Leq All Segments: 59.88 dBA

↑  
Road data, segment # 1: HWY 417 EB (day/night)  
-----

Car traffic volume : 59370/5163 veh/TimePeriod \*  
Medium truck volume : 4723/411 veh/TimePeriod \*  
Heavy truck volume : 3373/293 veh/TimePeriod \*  
Posted speed limit : 100 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 73332  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 EB (day/night)  
-----

Angle1 Angle2 : -90.00 deg 90.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 351.60 / 351.60 m

Receiver height : 5.36 / 8.46 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

↑  
Road data, segment # 2: HWY 417 WB (day/night)

-----  
Car traffic volume : 59370/5163 veh/TimePeriod \*  
Medium truck volume : 4723/411 veh/TimePeriod \*  
Heavy truck volume : 3373/293 veh/TimePeriod \*  
Posted speed limit : 100 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 73332  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 WB (day/night)

-----  
Angle1 Angle2 : -90.00 deg 90.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 308.60 / 308.60 m  
Receiver height : 5.36 / 8.46 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

↑  
Results segment # 1: HWY 417 EB (day)

-----  
Source height = 1.50 m

ROAD (0.00 + 58.98 + 0.00) = 58.98 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.54	81.40	0.00	-21.16	-1.26	0.00	0.00	0.00	58.98

-----

Segment Leq : 58.98 dBA

↑  
Results segment # 2: HWY 417 WB (day)

-----  
Source height = 1.50 m

ROAD (0.00 + 59.86 + 0.00) = 59.86 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.54	81.40	0.00	-20.28	-1.26	0.00	0.00	0.00	59.86

-----

Segment Leq : 59.86 dBA

Total Leq All Segments: 62.45 dBA

↑

Results segment # 1: HWY 417 EB (night)

-----  
Source height = 1.49 m

ROAD (0.00 + 52.83 + 0.00) = 52.83 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.45	73.80	0.00	-19.88	-1.08	0.00	0.00	0.00	52.83

-----

Segment Leq : 52.83 dBA

↑

Results segment # 2: HWY 417 WB (night)

-----  
Source height = 1.49 m

ROAD (0.00 + 53.66 + 0.00) = 53.66 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.45	73.80	0.00	-19.06	-1.08	0.00	0.00	0.00	53.66

-----

Segment Leq : 53.66 dBA

Total Leq All Segments: 56.28 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 67.97  
(NIGHT): 61.45





Filename: arc6r4.te                    Time Period: Day/Night 16/8 hours  
Description: Arcadia Stage 6 - R4 POW, Amenity Space

Road data, segment # 1: Campeau East (day/night)

-----  
Car traffic volume : 14168/1232 veh/TimePeriod \*  
Medium truck volume : 1127/98 veh/TimePeriod \*  
Heavy truck volume : 805/70 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 17500  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Campeau East (day/night)

-----  
Angle1 Angle2 : -90.00 deg 90.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 126.50 / 126.50 m  
Receiver height : 1.50 / 1.50 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

↑

Road data, segment # 2: Campeau West (day/night)

-----  
Car traffic volume : 14168/1232 veh/TimePeriod \*  
Medium truck volume : 1127/98 veh/TimePeriod \*  
Heavy truck volume : 805/70 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 17500  
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00  
 Medium Truck % of Total Volume : 7.00  
 Heavy Truck % of Total Volume : 5.00  
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: Campeau West (day/night)

-----  
 Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 157.00 / 157.00 m  
 Receiver height : 1.50 / 1.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

↑  
 Results segment # 1: Campeau East (day)

Source height = 1.50 m

ROAD (0.00 + 53.84 + 0.00) = 53.84 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.66	70.67	0.00	-15.37	-1.46	0.00	0.00	0.00	53.84

Segment Leq : 53.84 dBA

↑  
 Results segment # 2: Campeau West (day)

Source height = 1.50 m

ROAD (0.00 + 52.28 + 0.00) = 52.28 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.66	70.67	0.00	-16.93	-1.46	0.00	0.00	0.00	52.28

Segment Leq : 52.28 dBA

Total Leq All Segments: 56.14 dBA

↑  
 Results segment # 1: Campeau East (night)

Source height = 1.50 m

ROAD (0.00 + 46.24 + 0.00) = 46.24 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.66	63.07	0.00	-15.37	-1.46	0.00	0.00	0.00	46.24

Segment Leq : 46.24 dBA

↑

Results segment # 2: Campeau West (night)

Source height = 1.50 m

ROAD (0.00 + 44.68 + 0.00) = 44.68 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.66	63.07	0.00	-16.93	-1.46	0.00	0.00	0.00	44.68

Segment Leq : 44.68 dBA

Total Leq All Segments: 48.54 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 56.14  
(NIGHT): 48.54

↑

↑

Filename: arc6r5.te            Time Period: Day/Night 16/8 hours  
 Description: Arcadia Stage 6 - R5 OLA, Block 1 Executive Towns

Rail data, segment # 1: LRT EB (day/night)

```

-----
Train          ! Trains      ! Speed !# loc !# Cars! Eng !Cont
Type          !             ! (km/h) !/Train!/Train! type !weld
-----+-----+-----+-----+-----+-----
  1. Electric  ! 155.0/15.0 !  80.0 !  2.0 !  4.0 ! Elec! No
  
```

Data for Segment # 1: LRT EB (day/night)

```

-----
Angle1  Angle2      : -90.00 deg  43.00 deg
Wood depth      :          0   (No woods.)
No of house rows :          0 / 0
Surface         :          1   (Absorptive ground surface)
Receiver source distance : 29.40 / 29.40 m
Receiver height :  1.50 / 1.50 m
Topography      :          3   (Elevated; no barrier)
No Whistle
Elevation       :  5.00 m
Reference angle :  0.00
  
```

↑  
 Rail data, segment # 2: LRT WB (day/night)

```

-----
Train          ! Trains      ! Speed !# loc !# Cars! Eng !Cont
Type          !             ! (km/h) !/Train!/Train! type !weld
-----+-----+-----+-----+-----+-----
  1. Electric  ! 155.0/15.0 !  80.0 !  2.0 !  4.0 ! Elec! No
  
```

Data for Segment # 2: LRT WB (day/night)

```

-----
Angle1  Angle2      : -90.00 deg  43.00 deg
Wood depth      :          0   (No woods.)
No of house rows :          0 / 0
Surface         :          1   (Absorptive ground surface)
Receiver source distance : 24.90 / 24.90 m
Receiver height :  1.50 / 1.50 m
Topography      :          3   (Elevated; no barrier)
No Whistle
Elevation       :  5.00 m
Reference angle :  0.00
  
```

↑  
 Results segment # 1: LRT EB (day)

-----  
LOCOMOTIVE (0.00 + 56.39 + 0.00) = 56.39 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	43	0.44	62.65	-4.19	-2.07	0.00	0.00	0.00	56.39
-----	----	------	-------	-------	-------	------	------	------	-------

-----

WHEEL (0.00 + 60.72 + 0.00) = 60.72 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	43	0.54	67.42	-4.50	-2.21	0.00	0.00	0.00	60.72
-----	----	------	-------	-------	-------	------	------	------	-------

-----

Segment Leq : 62.08 dBA

↑

Results segment # 2: LRT WB (day)

-----

LOCOMOTIVE (0.00 + 57.43 + 0.00) = 57.43 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	43	0.44	62.65	-3.16	-2.07	0.00	0.00	0.00	57.43
-----	----	------	-------	-------	-------	------	------	------	-------

-----

WHEEL (0.00 + 61.83 + 0.00) = 61.83 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	43	0.54	67.42	-3.39	-2.21	0.00	0.00	0.00	61.83
-----	----	------	-------	-------	-------	------	------	------	-------

-----

Segment Leq : 63.18 dBA

Total Leq All Segments: 65.68 dBA

↑

Results segment # 1: LRT EB (night)

-----

LOCOMOTIVE (0.00 + 49.26 + 0.00) = 49.26 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	43	0.44	55.52	-4.19	-2.07	0.00	0.00	0.00	49.26
-----	----	------	-------	-------	-------	------	------	------	-------

-----

WHEEL (0.00 + 53.58 + 0.00) = 53.58 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	43	0.54	60.29	-4.50	-2.21	0.00	0.00	0.00	53.58
-----	----	------	-------	-------	-------	------	------	------	-------

-----  
Segment Leq : 54.95 dBA

↑  
Results segment # 2: LRT WB (night)  
-----

LOCOMOTIVE (0.00 + 50.30 + 0.00) = 50.30 dBA  
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq  
-----  
-90 43 0.44 55.52 -3.16 -2.07 0.00 0.00 0.00 50.30  
-----

WHEEL (0.00 + 54.70 + 0.00) = 54.70 dBA  
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq  
-----  
-90 43 0.54 60.29 -3.39 -2.21 0.00 0.00 0.00 54.70  
-----

Segment Leq : 56.05 dBA

Total Leq All Segments: 58.55 dBA

↑  
Road data, segment # 1: HWY 417 EB (day/night)  
-----

Car traffic volume : 59370/5163 veh/TimePeriod \*  
Medium truck volume : 4723/411 veh/TimePeriod \*  
Heavy truck volume : 3373/293 veh/TimePeriod \*  
Posted speed limit : 100 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 73332  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 EB (day/night)  
-----

Angle1 Angle2 : -90.00 deg 43.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 353.00 / 353.00 m

Receiver height : 1.50 / 1.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

↑  
 Road data, segment # 2: HWY 417 WB (day/night)

-----  
 Car traffic volume : 59370/5163 veh/TimePeriod \*  
 Medium truck volume : 4723/411 veh/TimePeriod \*  
 Heavy truck volume : 3373/293 veh/TimePeriod \*  
 Posted speed limit : 100 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 73332  
 Percentage of Annual Growth : 0.00  
 Number of Years of Growth : 0.00  
 Medium Truck % of Total Volume : 7.00  
 Heavy Truck % of Total Volume : 5.00  
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 WB (day/night)

-----  
 Angle1 Angle2 : -90.00 deg 43.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 311.30 / 311.30 m  
 Receiver height : 1.50 / 1.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

↑  
 Results segment # 1: HWY 417 EB (day)

-----  
 Source height = 1.50 m

ROAD (0.00 + 56.27 + 0.00) = 56.27 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.66	81.40	0.00	-22.77	-2.35	0.00	0.00	0.00	56.27

-----

Segment Leq : 56.27 dBA

↑  
 Results segment # 2: HWY 417 WB (day)

-----  
Source height = 1.50 m

ROAD (0.00 + 57.18 + 0.00) = 57.18 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.66	81.40	0.00	-21.86	-2.35	0.00	0.00	0.00	57.18

-----

Segment Leq : 57.18 dBA

Total Leq All Segments: 59.76 dBA

↑

Results segment # 1: HWY 417 EB (night)

-----  
Source height = 1.49 m

ROAD (0.00 + 48.68 + 0.00) = 48.68 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.66	73.80	0.00	-22.77	-2.35	0.00	0.00	0.00	48.68

-----

Segment Leq : 48.68 dBA

↑

Results segment # 2: HWY 417 WB (night)

-----  
Source height = 1.49 m

ROAD (0.00 + 49.58 + 0.00) = 49.58 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.66	73.80	0.00	-21.86	-2.35	0.00	0.00	0.00	49.58

-----

Segment Leq : 49.58 dBA

Total Leq All Segments: 52.16 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 66.67  
(NIGHT): 59.44





Filename: arc6r6.te                    Time Period: Day/Night 16/8 hours  
Description: Arcadia Stage 6 - R6 OLA, Block 2 Executive Towns

Road data, segment # 1: Campeau East (day/night)

-----  
Car traffic volume : 14168/1232 veh/TimePeriod \*  
Medium truck volume : 1127/98 veh/TimePeriod \*  
Heavy truck volume : 805/70 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 17500  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Campeau East (day/night)

-----  
Angle1 Angle2 : -90.00 deg 19.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 93.40 / 93.40 m  
Receiver height : 1.50 / 1.50 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

↑

Road data, segment # 2: Campeau West (day/night)

-----  
Car traffic volume : 14168/1232 veh/TimePeriod \*  
Medium truck volume : 1127/98 veh/TimePeriod \*  
Heavy truck volume : 805/70 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 17500  
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00  
 Medium Truck % of Total Volume : 7.00  
 Heavy Truck % of Total Volume : 5.00  
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: Campeau West (day/night)

-----  
 Angle1 Angle2 : -90.00 deg 19.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 123.90 / 123.90 m  
 Receiver height : 1.50 / 1.50 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00



Results segment # 1: Campeau East (day)

Source height = 1.50 m

ROAD (0.00 + 54.13 + 0.00) = 54.13 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	19	0.66	70.67	0.00	-13.18	-3.36	0.00	0.00	0.00	54.13

Segment Leq : 54.13 dBA



Results segment # 2: Campeau West (day)

Source height = 1.50 m

ROAD (0.00 + 52.09 + 0.00) = 52.09 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	19	0.66	70.67	0.00	-15.22	-3.36	0.00	0.00	0.00	52.09

Segment Leq : 52.09 dBA

Total Leq All Segments: 56.24 dBA



Results segment # 1: Campeau East (night)

-----

Source height = 1.50 m

ROAD (0.00 + 46.53 + 0.00) = 46.53 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	19	0.66	63.07	0.00	-13.18	-3.36	0.00	0.00	0.00	46.53

Segment Leq : 46.53 dBA

↑

Results segment # 2: Campeau West (night)

Source height = 1.50 m

ROAD (0.00 + 44.49 + 0.00) = 44.49 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	19	0.66	63.07	0.00	-15.22	-3.36	0.00	0.00	0.00	44.49

Segment Leq : 44.49 dBA

Total Leq All Segments: 48.64 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 56.24  
(NIGHT): 48.64

↑

↑

Filename: arc6r7.te            Time Period: Day/Night 16/8 hours  
 Description: Arcadia Stage 6 - R7 POW, Block 13 Executive Towns

Rail data, segment # 1: LRT EB (day/night)

```

-----
Train          ! Trains      ! Speed !# loc !# Cars! Eng !Cont
Type          !             ! (km/h) !/Train!/Train! type !weld
-----+-----+-----+-----+-----+-----
  1. Electric  ! 155.0/15.0 !  80.0 !  2.0 !  4.0 ! Elec! No
  
```

Data for Segment # 1: LRT EB (day/night)

```

-----
Angle1  Angle2      : -90.00 deg   90.00 deg
Wood depth      :           0   (No woods.)
No of house rows :           0 / 0
Surface         :           1   (Absorptive ground surface)
Receiver source distance : 24.90 / 24.90 m
Receiver height :  4.48 / 7.24 m
Topography      :           3   (Elevated; no barrier)
No Whistle
Elevation       :  5.00 m
Reference angle :  0.00
  
```

↑  
 Rail data, segment # 2: LRT WB (day/night)

```

-----
Train          ! Trains      ! Speed !# loc !# Cars! Eng !Cont
Type          !             ! (km/h) !/Train!/Train! type !weld
-----+-----+-----+-----+-----+-----
  1. Electric  ! 155.0/15.0 !  80.0 !  2.0 !  4.0 ! Elec! No
  
```

Data for Segment # 2: LRT WB (day/night)

```

-----
Angle1  Angle2      : -90.00 deg   90.00 deg
Wood depth      :           0   (No woods.)
No of house rows :           0 / 0
Surface         :           1   (Absorptive ground surface)
Receiver source distance : 20.40 / 20.40 m
Receiver height :  4.48 / 7.24 m
Topography      :           3   (Elevated; no barrier)
No Whistle
Elevation       :  5.00 m
Reference angle :  0.00
  
```

↑  
 Results segment # 1: LRT EB (day)

-----  
LOCOMOTIVE (0.00 + 58.82 + 0.00) = 58.82 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	90	0.35	62.65	-2.96	-0.87	0.00	0.00	0.00	58.82
-----	----	------	-------	-------	-------	------	------	------	-------

-----

WHEEL (0.00 + 63.15 + 0.00) = 63.15 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	90	0.45	67.42	-3.19	-1.08	0.00	0.00	0.00	63.15
-----	----	------	-------	-------	-------	------	------	------	-------

-----

Segment Leq : 64.51 dBA

↑

Results segment # 2: LRT WB (day)

-----

LOCOMOTIVE (0.00 + 59.99 + 0.00) = 59.99 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	90	0.35	62.65	-1.80	-0.87	0.00	0.00	0.00	59.99
-----	----	------	-------	-------	-------	------	------	------	-------

-----

WHEEL (0.00 + 64.41 + 0.00) = 64.41 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	90	0.45	67.42	-1.94	-1.08	0.00	0.00	0.00	64.41
-----	----	------	-------	-------	-------	------	------	------	-------

-----

Segment Leq : 65.75 dBA

Total Leq All Segments: 68.18 dBA

↑

Results segment # 1: LRT EB (night)

-----

LOCOMOTIVE (0.00 + 52.06 + 0.00) = 52.06 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	90	0.26	55.52	-2.78	-0.68	0.00	0.00	0.00	52.06
-----	----	------	-------	-------	-------	------	------	------	-------

-----

WHEEL (0.00 + 56.37 + 0.00) = 56.37 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	90	0.37	60.29	-3.01	-0.91	0.00	0.00	0.00	56.37
-----	----	------	-------	-------	-------	------	------	------	-------

-----  
Segment Leq : 57.74 dBA

↑  
Results segment # 2: LRT WB (night)  
-----

LOCOMOTIVE (0.00 + 53.15 + 0.00) = 53.15 dBA  
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq  
-----  
-90 90 0.26 55.52 -1.69 -0.68 0.00 0.00 0.00 53.15  
-----

WHEEL (0.00 + 57.55 + 0.00) = 57.55 dBA  
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq  
-----  
-90 90 0.37 60.29 -1.83 -0.91 0.00 0.00 0.00 57.55  
-----

Segment Leq : 58.90 dBA

Total Leq All Segments: 61.37 dBA

↑  
Road data, segment # 1: HWY 417 EB (day/night)  
-----

Car traffic volume : 59370/5163 veh/TimePeriod \*  
Medium truck volume : 4723/411 veh/TimePeriod \*  
Heavy truck volume : 3373/293 veh/TimePeriod \*  
Posted speed limit : 100 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 73332  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 EB (day/night)  
-----

Angle1 Angle2 : -90.00 deg 90.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 366.40 / 366.40 m

Receiver height : 4.48 / 7.24 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

↑  
 Road data, segment # 2: HWY 417 WB (day/night)

-----  
 Car traffic volume : 59370/5163 veh/TimePeriod \*  
 Medium truck volume : 4723/411 veh/TimePeriod \*  
 Heavy truck volume : 3373/293 veh/TimePeriod \*  
 Posted speed limit : 100 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 73332  
 Percentage of Annual Growth : 0.00  
 Number of Years of Growth : 0.00  
 Medium Truck % of Total Volume : 7.00  
 Heavy Truck % of Total Volume : 5.00  
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 WB (day/night)

-----  
 Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 324.90 / 324.90 m  
 Receiver height : 4.48 / 7.24 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

↑  
 Results segment # 1: HWY 417 EB (day)

-----  
 Source height = 1.50 m

ROAD (0.00 + 58.29 + 0.00) = 58.29 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.57	81.40	0.00	-21.80	-1.30	0.00	0.00	0.00	58.29

-----

Segment Leq : 58.29 dBA

↑  
 Results segment # 2: HWY 417 WB (day)



-----  
Source height = 1.50 m

ROAD (0.00 + 59.11 + 0.00) = 59.11 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.57	81.40	0.00	-20.98	-1.30	0.00	0.00	0.00	59.11

-----

Segment Leq : 59.11 dBA

Total Leq All Segments: 61.73 dBA

↑

Results segment # 1: HWY 417 EB (night)

-----  
Source height = 1.49 m

ROAD (0.00 + 52.00 + 0.00) = 52.00 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.49	73.80	0.00	-20.65	-1.15	0.00	0.00	0.00	52.00

-----

Segment Leq : 52.00 dBA

↑

Results segment # 2: HWY 417 WB (night)

-----  
Source height = 1.49 m

ROAD (0.00 + 52.77 + 0.00) = 52.77 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.49	73.80	0.00	-19.87	-1.15	0.00	0.00	0.00	52.77

-----

Segment Leq : 52.77 dBA

Total Leq All Segments: 55.41 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 69.07  
(NIGHT): 62.35



Filename: Arc6R8.te            Time Period: Day/Night 16/8 hours  
Description: Arcadia Stage 6 - R8 POW, Block 4 Rear Town

Road data, segment # 1: Campeau East (day/night)

-----  
Car traffic volume : 14168/1232 veh/TimePeriod \*  
Medium truck volume : 1127/98 veh/TimePeriod \*  
Heavy truck volume : 805/70 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 17500  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Campeau East (day/night)

-----  
Angle1 Angle2 : -90.00 deg 90.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 19.00 / 19.00 m  
Receiver height : 4.17 / 7.11 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

↑

Road data, segment # 2: Campeau West (day/night)

-----  
Car traffic volume : 14168/1232 veh/TimePeriod \*  
Medium truck volume : 1127/98 veh/TimePeriod \*  
Heavy truck volume : 805/70 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 17500  
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00  
 Medium Truck % of Total Volume : 7.00  
 Heavy Truck % of Total Volume : 5.00  
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: Campeau West (day/night)

-----  
 Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 29.60 / 29.60 m  
 Receiver height : 4.17 / 7.11 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

↑  
 Results segment # 1: Campeau East (day)

Source height = 1.50 m

ROAD (0.00 + 67.72 + 0.00) = 67.72 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.58	70.67	0.00	-1.62	-1.32	0.00	0.00	0.00	67.72

Segment Leq : 67.72 dBA

↑  
 Results segment # 2: Campeau West (day)

Source height = 1.50 m

ROAD (0.00 + 64.68 + 0.00) = 64.68 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.58	70.67	0.00	-4.66	-1.32	0.00	0.00	0.00	64.68

Segment Leq : 64.68 dBA

Total Leq All Segments: 69.47 dBA

↑  
 Results segment # 1: Campeau East (night)

Source height = 1.50 m

ROAD (0.00 + 60.38 + 0.00) = 60.38 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.49	63.07	0.00	-1.53	-1.16	0.00	0.00	0.00	60.38

Segment Leq : 60.38 dBA

↑

Results segment # 2: Campeau West (night)

Source height = 1.50 m

ROAD (0.00 + 57.51 + 0.00) = 57.51 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.49	63.07	0.00	-4.40	-1.16	0.00	0.00	0.00	57.51

Segment Leq : 57.51 dBA

Total Leq All Segments: 62.19 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 69.47  
(NIGHT): 62.19

↑

↑

Filename: arc6r9.te            Time Period: Day/Night 16/8 hours  
 Description: Arcadia Stage 6 - R9 POW, TE-9 Stacked Towns

Rail data, segment # 1: LRT EB (day/night)

```

-----
Train          ! Trains      ! Speed !# loc !# Cars! Eng !Cont
Type          !             ! (km/h) !/Train!/Train! type !weld
-----+-----+-----+-----+-----+-----
  1. Electric  ! 155.0/15.0 !  80.0 !  2.0 !  4.0 ! Elec! No
  
```

Data for Segment # 1: LRT EB (day/night)

```

-----
Angle1  Angle2      : -90.00 deg   90.00 deg
Wood depth      :           0   (No woods.)
No of house rows :           0 / 0
Surface         :           1   (Absorptive ground surface)
Receiver source distance : 31.90 / 31.90 m
Receiver height :   5.36 / 8.46 m
Topography     :           3   (Elevated; no barrier)
No Whistle
Elevation      :   5.00 m
Reference angle :   0.00
  
```

↑  
 Rail data, segment # 2: LRT WB (day/night)

```

-----
Train          ! Trains      ! Speed !# loc !# Cars! Eng !Cont
Type          !             ! (km/h) !/Train!/Train! type !weld
-----+-----+-----+-----+-----+-----
  1. Electric  ! 155.0/15.0 !  80.0 !  2.0 !  4.0 ! Elec! No
  
```

Data for Segment # 2: LRT WB (day/night)

```

-----
Angle1  Angle2      : -90.00 deg   90.00 deg
Wood depth      :           0   (No woods.)
No of house rows :           0 / 0
Surface         :           1   (Absorptive ground surface)
Receiver source distance : 19.10 / 19.10 m
Receiver height :   5.36 / 8.46 m
Topography     :           3   (Elevated; no barrier)
No Whistle
Elevation      :   5.00 m
Reference angle :   0.00
  
```

↑  
 Results segment # 1: LRT EB (day)

-----  
LOCOMOTIVE (0.00 + 57.52 + 0.00) = 57.52 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	90	0.32	62.65	-4.32	-0.81	0.00	0.00	0.00	57.52
-----	----	------	-------	-------	-------	------	------	------	-------

-----

WHEEL (0.00 + 61.73 + 0.00) = 61.73 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	90	0.42	67.42	-4.67	-1.03	0.00	0.00	0.00	61.73
-----	----	------	-------	-------	-------	------	------	------	-------

-----

Segment Leq : 63.13 dBA

↑

Results segment # 2: LRT WB (day)

-----

LOCOMOTIVE (0.00 + 60.46 + 0.00) = 60.46 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	90	0.32	62.65	-1.38	-0.81	0.00	0.00	0.00	60.46
-----	----	------	-------	-------	-------	------	------	------	-------

-----

WHEEL (0.00 + 64.90 + 0.00) = 64.90 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	90	0.42	67.42	-1.49	-1.03	0.00	0.00	0.00	64.90
-----	----	------	-------	-------	-------	------	------	------	-------

-----

Segment Leq : 66.23 dBA

Total Leq All Segments: 67.96 dBA

↑

Results segment # 1: LRT EB (night)

-----

LOCOMOTIVE (0.00 + 50.90 + 0.00) = 50.90 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	90	0.23	55.52	-4.02	-0.60	0.00	0.00	0.00	50.90
-----	----	------	-------	-------	-------	------	------	------	-------

-----

WHEEL (0.00 + 55.09 + 0.00) = 55.09 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-90	90	0.33	60.29	-4.36	-0.84	0.00	0.00	0.00	55.09
-----	----	------	-------	-------	-------	------	------	------	-------

-----  
Segment Leq : 56.49 dBA

↑  
Results segment # 2: LRT WB (night)  
-----

LOCOMOTIVE (0.00 + 53.63 + 0.00) = 53.63 dBA  
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq  
-----  
-90 90 0.23 55.52 -1.29 -0.60 0.00 0.00 0.00 53.63  
-----

WHEEL (0.00 + 58.06 + 0.00) = 58.06 dBA  
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq  
-----  
-90 90 0.33 60.29 -1.40 -0.84 0.00 0.00 0.00 58.06  
-----

Segment Leq : 59.40 dBA

Total Leq All Segments: 61.19 dBA

↑  
Road data, segment # 1: HWY 417 EB (day/night)  
-----

Car traffic volume : 59370/5163 veh/TimePeriod \*  
Medium truck volume : 4723/411 veh/TimePeriod \*  
Heavy truck volume : 3373/293 veh/TimePeriod \*  
Posted speed limit : 100 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 73332  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 EB (day/night)  
-----

Angle1 Angle2 : -90.00 deg 90.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 430.20 / 430.20 m



Receiver height : 5.36 / 8.46 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

↑  
Road data, segment # 2: HWY 417 WB (day/night)

-----  
Car traffic volume : 59370/5163 veh/TimePeriod \*  
Medium truck volume : 4723/411 veh/TimePeriod \*  
Heavy truck volume : 3373/293 veh/TimePeriod \*  
Posted speed limit : 100 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 73332  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 WB (day/night)

-----  
Angle1 Angle2 : -90.00 deg 90.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 390.70 / 390.70 m  
Receiver height : 5.36 / 8.46 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

↑  
Results segment # 1: HWY 417 EB (day)

-----  
Source height = 1.50 m

ROAD (0.00 + 57.63 + 0.00) = 57.63 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.54	81.40	0.00	-22.51	-1.26	0.00	0.00	0.00	57.63

-----  
Segment Leq : 57.63 dBA

↑  
Results segment # 2: HWY 417 WB (day)

-----  
Source height = 1.50 m

ROAD (0.00 + 58.28 + 0.00) = 58.28 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.54	81.40	0.00	-21.86	-1.26	0.00	0.00	0.00	58.28

-----

Segment Leq : 58.28 dBA

Total Leq All Segments: 60.98 dBA

↑

Results segment # 1: HWY 417 EB (night)

-----  
Source height = 1.49 m

ROAD (0.00 + 51.56 + 0.00) = 51.56 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.45	73.80	0.00	-21.15	-1.08	0.00	0.00	0.00	51.56

-----

Segment Leq : 51.56 dBA

↑

Results segment # 2: HWY 417 WB (night)

-----  
Source height = 1.49 m

ROAD (0.00 + 52.17 + 0.00) = 52.17 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.45	73.80	0.00	-20.55	-1.08	0.00	0.00	0.00	52.17

-----

Segment Leq : 52.17 dBA

Total Leq All Segments: 54.89 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 68.75  
(NIGHT): 62.11



Filename: arc6r10.te            Time Period: Day/Night 16/8 hours  
Description: Arcadia Stage 6, R10 POW, TE-8 Stacked Towns

Road data, segment # 1: Campeau East (day/night)

-----  
Car traffic volume : 14168/1232 veh/TimePeriod \*  
Medium truck volume : 1127/98 veh/TimePeriod \*  
Heavy truck volume : 805/70 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 17500  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Campeau East (day/night)

-----  
Angle1 Angle2 : -90.00 deg 90.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 22.40 / 22.40 m  
Receiver height : 4.17 / 7.11 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

↑

Road data, segment # 2: Campeau West (day/night)

-----  
Car traffic volume : 14168/1232 veh/TimePeriod \*  
Medium truck volume : 1127/98 veh/TimePeriod \*  
Heavy truck volume : 805/70 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 17500  
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00  
 Medium Truck % of Total Volume : 7.00  
 Heavy Truck % of Total Volume : 5.00  
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: Campeau West (day/night)

-----  
 Angle1 Angle2 : -90.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 35.00 / 35.00 m  
 Receiver height : 5.36 / 8.46 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

↑  
 Results segment # 1: Campeau East (day)

Source height = 1.50 m

ROAD (0.00 + 66.59 + 0.00) = 66.59 dBA  

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.58	70.67	0.00	-2.75	-1.32	0.00	0.00	0.00	66.59

 -----

Segment Leq : 66.59 dBA

↑  
 Results segment # 2: Campeau West (day)

Source height = 1.50 m

ROAD (0.00 + 63.73 + 0.00) = 63.73 dBA  

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.54	70.67	0.00	-5.68	-1.26	0.00	0.00	0.00	63.73

 -----

Segment Leq : 63.73 dBA

Total Leq All Segments: 68.40 dBA

↑  
 Results segment # 1: Campeau East (night)

Source height = 1.50 m

ROAD (0.00 + 59.31 + 0.00) = 59.31 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.49	63.07	0.00	-2.60	-1.16	0.00	0.00	0.00	59.31

Segment Leq : 59.31 dBA

↑

Results segment # 2: Campeau West (night)

Source height = 1.50 m

ROAD (0.00 + 56.65 + 0.00) = 56.65 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.45	63.07	0.00	-5.34	-1.08	0.00	0.00	0.00	56.65

Segment Leq : 56.65 dBA

Total Leq All Segments: 61.19 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 68.40  
(NIGHT): 61.19

↑

↑

Filename: arc6r11.te            Time Period: Day/Night 16/8 hours  
Description: Arcadia Stage 6 - R11 POW, Blk 14 Executive Towns

Road data, segment # 1: Campeau East (day/night)

-----  
Car traffic volume : 14168/1232 veh/TimePeriod \*  
Medium truck volume : 1127/98 veh/TimePeriod \*  
Heavy truck volume : 805/70 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 17500  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Campeau East (day/night)

-----  
Angle1 Angle2 : 0.00 deg 72.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 49.90 / 49.90 m  
Receiver height : 4.48 / 7.24 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

↑

Road data, segment # 2: Campeau West (day/night)

-----  
Car traffic volume : 14168/1232 veh/TimePeriod \*  
Medium truck volume : 1127/98 veh/TimePeriod \*  
Heavy truck volume : 805/70 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 17500  
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00  
 Medium Truck % of Total Volume : 7.00  
 Heavy Truck % of Total Volume : 5.00  
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: Campeau West (day/night)

-----  
 Angle1 Angle2 : 0.00 deg 72.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 62.40 / 62.40 m  
 Receiver height : 4.48 / 7.24 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

↑  
 Results segment # 1: Campeau East (day)

Source height = 1.50 m

ROAD (0.00 + 57.75 + 0.00) = 57.75 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	72	0.57	70.67	0.00	-8.20	-4.72	0.00	0.00	0.00	57.75

Segment Leq : 57.75 dBA

↑  
 Results segment # 2: Campeau West (day)

Source height = 1.50 m

ROAD (0.00 + 56.22 + 0.00) = 56.22 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	72	0.57	70.67	0.00	-9.72	-4.72	0.00	0.00	0.00	56.22

Segment Leq : 56.22 dBA

Total Leq All Segments: 60.06 dBA

↑  
 Results segment # 1: Campeau East (night)



Source height = 1.50 m

ROAD (0.00 + 50.68 + 0.00) = 50.68 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	72	0.49	63.07	0.00	-7.77	-4.62	0.00	0.00	0.00	50.68

Segment Leq : 50.68 dBA

↑

Results segment # 2: Campeau West (night)

Source height = 1.50 m

ROAD (0.00 + 49.24 + 0.00) = 49.24 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	72	0.49	63.07	0.00	-9.21	-4.62	0.00	0.00	0.00	49.24

Segment Leq : 49.24 dBA

Total Leq All Segments: 53.03 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 60.06  
(NIGHT): 53.03

↑

↑

Filename: arc6r12.te            Time Period: Day/Night 16/8 hours  
Description: Arcadia Stage 6 - R12 POW, Blk 5 Rear Lane Towns

Road data, segment # 1: Campeau East (day/night)

-----  
Car traffic volume : 14168/1232 veh/TimePeriod \*  
Medium truck volume : 1127/98 veh/TimePeriod \*  
Heavy truck volume : 805/70 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 17500  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Campeau East (day/night)

-----  
Angle1 Angle2 : 0.00 deg 90.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 26.30 / 26.30 m  
Receiver height : 4.17 / 7.11 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

↑

Road data, segment # 2: Campeau West (day/night)

-----  
Car traffic volume : 14168/1232 veh/TimePeriod \*  
Medium truck volume : 1127/98 veh/TimePeriod \*  
Heavy truck volume : 805/70 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 17500  
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00  
 Medium Truck % of Total Volume : 7.00  
 Heavy Truck % of Total Volume : 5.00  
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: Campeau West (day/night)

-----  
 Angle1 Angle2 : 0.00 deg 90.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 39.00 / 39.00 m  
 Receiver height : 4.17 / 7.11 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

↑  
 Results segment # 1: Campeau East (day)

Source height = 1.50 m

ROAD (0.00 + 62.48 + 0.00) = 62.48 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.58	70.67	0.00	-3.85	-4.33	0.00	0.00	0.00	62.48

Segment Leq : 62.48 dBA

↑  
 Results segment # 2: Campeau West (day)

Source height = 1.50 m

ROAD (0.00 + 59.78 + 0.00) = 59.78 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.58	70.67	0.00	-6.56	-4.33	0.00	0.00	0.00	59.78

Segment Leq : 59.78 dBA

Total Leq All Segments: 64.35 dBA

↑  
 Results segment # 1: Campeau East (night)

Source height = 1.50 m

ROAD (0.00 + 55.26 + 0.00) = 55.26 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.49	63.07	0.00	-3.64	-4.17	0.00	0.00	0.00	55.26

Segment Leq : 55.26 dBA

↑

Results segment # 2: Campeau West (night)

Source height = 1.50 m

ROAD (0.00 + 52.71 + 0.00) = 52.71 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.49	63.07	0.00	-6.19	-4.17	0.00	0.00	0.00	52.71

Segment Leq : 52.71 dBA

Total Leq All Segments: 57.18 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 64.35  
(NIGHT): 57.18

↑

↑

Filename: arc6r13.te            Time Period: Day/Night 16/8 hours  
Description: Arcadia Stage 6 - R13 POW, TE-8 Stacked Towns

Road data, segment # 1: Campeau East (day/night)

-----  
Car traffic volume : 14168/1232 veh/TimePeriod \*  
Medium truck volume : 1127/98 veh/TimePeriod \*  
Heavy truck volume : 805/70 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 17500  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Campeau East (day/night)

-----  
Angle1 Angle2 : 0.00 deg 61.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 32.50 / 32.50 m  
Receiver height : 5.36 / 8.46 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

↑

Road data, segment # 2: Campeau West (day/night)

-----  
Car traffic volume : 14168/1232 veh/TimePeriod \*  
Medium truck volume : 1127/98 veh/TimePeriod \*  
Heavy truck volume : 805/70 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 17500  
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00  
 Medium Truck % of Total Volume : 7.00  
 Heavy Truck % of Total Volume : 5.00  
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: Campeau West (day/night)

-----  
 Angle1 Angle2 : 0.00 deg 61.00 deg  
 Wood depth : 0 (No woods.)  
 No of house rows : 0 / 0  
 Surface : 1 (Absorptive ground surface)  
 Receiver source distance : 45.00 / 45.00 m  
 Receiver height : 5.36 / 8.46 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

↑  
 Results segment # 1: Campeau East (day)

Source height = 1.50 m

ROAD (0.00 + 60.29 + 0.00) = 60.29 dBA  

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	61	0.54	70.67	0.00	-5.19	-5.19	0.00	0.00	0.00	60.29

 -----

Segment Leq : 60.29 dBA

↑  
 Results segment # 2: Campeau West (day)

Source height = 1.50 m

ROAD (0.00 + 58.11 + 0.00) = 58.11 dBA  

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	61	0.54	70.67	0.00	-7.37	-5.19	0.00	0.00	0.00	58.11

 -----

Segment Leq : 58.11 dBA

Total Leq All Segments: 62.35 dBA

↑  
 Results segment # 1: Campeau East (night)

Source height = 1.50 m

ROAD (0.00 + 53.09 + 0.00) = 53.09 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	61	0.45	63.07	0.00	-4.87	-5.11	0.00	0.00	0.00	53.09

Segment Leq : 53.09 dBA

↑

Results segment # 2: Campeau West (night)

Source height = 1.50 m

ROAD (0.00 + 51.04 + 0.00) = 51.04 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	61	0.45	63.07	0.00	-6.92	-5.11	0.00	0.00	0.00	51.04

Segment Leq : 51.04 dBA

Total Leq All Segments: 55.20 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 62.35  
(NIGHT): 55.20

↑

↑

---

## **Appendix C**

Transportation Mitigated  
Noise Source Predictions



Filename: arc6r522.te            Time Period: Day/Night 16/8 hours  
 Description: Arcadia Stage 6 - R5 OLA Block 1 2.2m Barrier

Rail data, segment # 1: LRT EB (day/night)

```

-----
Train          ! Trains      ! Speed !# loc !# Cars! Eng !Cont
Type          !             ! (km/h) !/Train!/Train! type !weld
-----+-----+-----+-----+-----+-----
  1. Electric  ! 155.0/15.0 !  80.0 !  2.0 !  4.0 ! Elec! No
  
```

Data for Segment # 1: LRT EB (day/night)

```

-----
Angle1  Angle2      : -90.00 deg  43.00 deg
Wood depth      :          0   (No woods.)
No of house rows :          0 / 0
Surface         :          1   (Absorptive ground surface)
Receiver source distance : 29.40 / 29.40 m
Receiver height :  1.50 / 1.50 m
Topography     :          2   (Flat/gentle slope; with barrier)
No Whistle
Barrier angle1 : -90.00 deg  Angle2 : 43.00 deg
Barrier height :  2.20 m
Barrier receiver distance :  7.00 / 7.00 m
Source elevation : 103.00 m
Receiver elevation :  97.49 m
Barrier elevation :  97.10 m
Reference angle :  0.00
  
```

↑  
 Rail data, segment # 2: LRT WB (day/night)

```

-----
Train          ! Trains      ! Speed !# loc !# Cars! Eng !Cont
Type          !             ! (km/h) !/Train!/Train! type !weld
-----+-----+-----+-----+-----+-----
  1. Electric  ! 155.0/15.0 !  80.0 !  2.0 !  4.0 ! Elec! No
  
```

Data for Segment # 2: LRT WB (day/night)

```

-----
Angle1  Angle2      : -90.00 deg  43.00 deg
Wood depth      :          0   (No woods.)
No of house rows :          0 / 0
Surface         :          1   (Absorptive ground surface)
Receiver source distance : 24.90 / 24.90 m
Receiver height :  1.50 / 1.50 m
Topography     :          2   (Flat/gentle slope; with barrier)
No Whistle
  
```

Barrier angle1 : -90.00 deg Angle2 : 43.00 deg  
 Barrier height : 2.20 m  
 Barrier receiver distance : 7.00 / 7.00 m  
 Source elevation : 103.00 m  
 Receiver elevation : 97.49 m  
 Barrier elevation : 97.10 m  
 Reference angle : 0.00

↑  
 Results segment # 1: LRT EB (day)

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
4.00	1.50	3.80	100.90
0.50	1.50	2.96	100.06

LOCOMOTIVE (0.00 + 55.76 + 0.00) = 55.76 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.45	62.65	-4.25	-2.09	0.00	0.00	-0.26	56.06*
-90	43	0.58	62.65	-4.63	-2.26	0.00	0.00	0.00	55.76

\* Bright Zone !

WHEEL (0.00 + 60.22 + 0.00) = 60.22 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.56	67.42	-4.55	-2.23	0.00	0.00	-2.30	58.34*
-90	43	0.66	67.42	-4.85	-2.35	0.00	0.00	0.00	60.22

\* Bright Zone !

Segment Leq : 61.55 dBA

↑  
 Results segment # 2: LRT WB (day)

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
4.00	1.50	4.14	101.24

0.50 !            1.50 !            3.16 !            100.26

LOCOMOTIVE (0.00 + 56.90 + 0.00) = 56.90 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.45	62.65	-3.20	-2.09	0.00	0.00	-0.17	57.20*
-90	43	0.58	62.65	-3.49	-2.26	0.00	0.00	0.00	56.90

\* Bright Zone !

WHEEL (0.00 + 61.42 + 0.00) = 61.42 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.56	67.42	-3.43	-2.23	0.00	0.00	-0.73	61.03*
-90	43	0.66	67.42	-3.65	-2.35	0.00	0.00	0.00	61.42

\* Bright Zone !

Segment Leq : 62.73 dBA

Total Leq All Segments: 65.19 dBA

↑

Results segment # 1: LRT EB (night)

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
4.00 !	1.50 !	3.80 !	100.90
0.50 !	1.50 !	2.96 !	100.06

LOCOMOTIVE (0.00 + 48.63 + 0.00) = 48.63 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.45	55.52	-4.25	-2.09	0.00	0.00	-0.26	48.93*
-90	43	0.58	55.52	-4.63	-2.26	0.00	0.00	0.00	48.63

\* Bright Zone !

WHEEL (0.00 + 53.09 + 0.00) = 53.09 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.56	60.29	-4.55	-2.23	0.00	0.00	-2.30	51.21*
-90	43	0.66	60.29	-4.85	-2.35	0.00	0.00	0.00	53.09

-----  
\* Bright Zone !

Segment Leq : 54.42 dBA

↑  
Results segment # 2: LRT WB (night)  
-----

Barrier height for grazing incidence  
-----

Source Height (m)	! Receiver ! Height (m)	! Barrier ! Height (m)	! Elevation of ! Barrier Top (m)
4.00 !	1.50 !	4.14 !	101.24
0.50 !	1.50 !	3.16 !	100.26

LOCOMOTIVE (0.00 + 49.77 + 0.00) = 49.77 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.45	55.52	-3.20	-2.09	0.00	0.00	-0.17	50.06*
-90	43	0.58	55.52	-3.49	-2.26	0.00	0.00	0.00	49.77

-----

\* Bright Zone !

WHEEL (0.00 + 54.28 + 0.00) = 54.28 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.56	60.29	-3.43	-2.23	0.00	0.00	-0.73	53.90*
-90	43	0.66	60.29	-3.65	-2.35	0.00	0.00	0.00	54.28

-----

\* Bright Zone !

Segment Leq : 55.60 dBA

Total Leq All Segments: 58.06 dBA

↑  
Road data, segment # 1: HWY 417 EB (day/night)  
-----

Car traffic volume : 59370/5163 veh/TimePeriod \*  
Medium truck volume : 4723/411 veh/TimePeriod \*  
Heavy truck volume : 3373/293 veh/TimePeriod \*  
Posted speed limit : 100 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 73332  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 EB (day/night)

-----  
Angle1 Angle2 : -90.00 deg 43.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 353.00 / 353.00 m  
Receiver height : 1.50 / 1.50 m  
Topography : 2 (Flat/gentle slope; with barrier)  
Barrier angle1 : -90.00 deg Angle2 : 43.00 deg  
Barrier height : 2.20 m  
Barrier receiver distance : 7.00 / 7.00 m  
Source elevation : 97.49 m  
Receiver elevation : 98.00 m  
Barrier elevation : 97.10 m  
Reference angle : 0.00

↑

Road data, segment # 2: HWY 417 WB (day/night)

-----  
Car traffic volume : 59370/5163 veh/TimePeriod \*  
Medium truck volume : 4723/411 veh/TimePeriod \*  
Heavy truck volume : 3373/293 veh/TimePeriod \*  
Posted speed limit : 100 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 73332  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 WB (day/night)

-----  
Angle1 Angle2 : -90.00 deg 43.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0

```

Surface                :      1      (Absorptive ground surface)
Receiver source distance : 311.30 / 311.30 m
Receiver height         :   1.50 / 1.50 m
Topography              :      2      (Flat/gentle slope; with barrier)
Barrier angle1          : -90.00 deg  Angle2 : 43.00 deg
Barrier height          :   2.20 m
Barrier receiver distance : 7.00 / 7.00 m
Source elevation         :   97.49 m
Receiver elevation       :   98.00 m
Barrier elevation        :   97.10 m
Reference angle         :    0.00

```

↑

Results segment # 1: HWY 417 EB (day)

-----  
Source height = 1.50 m

Barrier height for grazing incidence

```

-----
Source      ! Receiver  ! Barrier    ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
-----+-----+-----+-----
          1.50 !         1.50 !         2.39 !         99.49

```

ROAD (0.00 + 56.27 + 0.00) = 56.27 dBA

```

Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
-----
  -90   43   0.53  81.40   0.00 -20.96 -2.19  0.00  0.00 -4.90  53.35*
  -90   43   0.66  81.40   0.00 -22.77 -2.35  0.00  0.00  0.00  56.27
-----

```

\* Bright Zone !

Segment Leq : 56.27 dBA

↑

Results segment # 2: HWY 417 WB (day)

-----  
Source height = 1.50 m

Barrier height for grazing incidence

```

-----
Source      ! Receiver  ! Barrier    ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
-----+-----+-----+-----
          1.50 !         1.50 !         2.39 !         99.49

```

ROAD (0.00 + 57.18 + 0.00) = 57.18 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.53	81.40	0.00	-20.13	-2.19	0.00	0.00	-4.90	54.18*
-90	43	0.66	81.40	0.00	-21.86	-2.35	0.00	0.00	0.00	57.18

\* Bright Zone !

Segment Leq : 57.18 dBA

Total Leq All Segments: 59.76 dBA

↑  
Results segment # 1: HWY 417 EB (night)

Source height = 1.49 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.49 !	1.50 !	2.39 !	99.49

ROAD (0.00 + 48.68 + 0.00) = 48.68 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.53	73.80	0.00	-20.96	-2.19	0.00	0.00	-4.90	45.75*
-90	43	0.66	73.80	0.00	-22.77	-2.35	0.00	0.00	0.00	48.68

\* Bright Zone !

Segment Leq : 48.68 dBA

↑  
Results segment # 2: HWY 417 WB (night)

Source height = 1.49 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.49 !	1.50 !	2.39 !	99.49

ROAD (0.00 + 49.58 + 0.00) = 49.58 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.53	73.80	0.00	-20.13	-2.19	0.00	0.00	-4.90	46.58*
-90	43	0.66	73.80	0.00	-21.86	-2.35	0.00	0.00	0.00	49.58

\* Bright Zone !

Segment Leq : 49.58 dBA

Total Leq All Segments: 52.16 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 66.28  
(NIGHT): 59.05

↑  
↑



Filename: arc6r525.te            Time Period: Day/Night 16/8 hours  
 Description: Arcadia Stage 6 - R5 OLA Block 1 2.5m Barrier

Rail data, segment # 1: LRT EB (day/night)

```

-----
Train          ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type          !             ! (km/h) !/Train!/Train! type !weld
-----+-----+-----+-----+-----+-----
  1. Electric  ! 155.0/15.0 !  80.0 !  2.0 !  4.0 ! Elec! No
  
```

Data for Segment # 1: LRT EB (day/night)

```

-----
Angle1  Angle2      : -90.00 deg  43.00 deg
Wood depth      :          0   (No woods.)
No of house rows :          0 / 0
Surface         :          1   (Absorptive ground surface)
Receiver source distance : 29.40 / 29.40 m
Receiver height :  1.50 / 1.50 m
Topography      :          2   (Flat/gentle slope; with barrier)
No Whistle
Barrier angle1  : -90.00 deg  Angle2 : 43.00 deg
Barrier height  :    2.50 m
Barrier receiver distance :  7.00 / 7.00 m
Source elevation : 103.00 m
Receiver elevation :  97.49 m
Barrier elevation :  97.10 m
Reference angle  :    0.00
  
```

↑  
 Rail data, segment # 2: LRT WB (day/night)

```

-----
Train          ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type          !             ! (km/h) !/Train!/Train! type !weld
-----+-----+-----+-----+-----+-----
  1. Electric  ! 155.0/15.0 !  80.0 !  2.0 !  4.0 ! Elec! No
  
```

Data for Segment # 2: LRT WB (day/night)

```

-----
Angle1  Angle2      : -90.00 deg  43.00 deg
Wood depth      :          0   (No woods.)
No of house rows :          0 / 0
Surface         :          1   (Absorptive ground surface)
Receiver source distance : 24.90 / 24.90 m
Receiver height :  1.50 / 1.50 m
Topography      :          2   (Flat/gentle slope; with barrier)
No Whistle
  
```

```

Barrier angle1      : -90.00 deg   Angle2 : 43.00 deg
Barrier height      : 2.50 m
Barrier receiver distance : 7.00 / 7.00 m
Source elevation    : 103.00 m
Receiver elevation  : 97.49 m
Barrier elevation   : 97.10 m
Reference angle     : 0.00

```

↑  
Results segment # 1: LRT EB (day)

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
4.00	1.50	3.80	100.90
0.50	1.50	2.96	100.06

LOCOMOTIVE (0.00 + 55.76 + 0.00) = 55.76 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.44	62.65	-4.19	-2.07	0.00	0.00	-0.40	55.99*
-90	43	0.58	62.65	-4.63	-2.26	0.00	0.00	0.00	55.76

\* Bright Zone !

WHEEL (0.00 + 60.22 + 0.00) = 60.22 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.54	67.42	-4.50	-2.21	0.00	0.00	-4.18	56.54*
-90	43	0.66	67.42	-4.85	-2.35	0.00	0.00	0.00	60.22

\* Bright Zone !

Segment Leq : 61.55 dBA

↑  
Results segment # 2: LRT WB (day)

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
4.00	1.50	4.14	101.24

0.50 !            1.50 !            3.16 !            100.26

LOCOMOTIVE (0.00 + 56.90 + 0.00) = 56.90 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.44	62.65	-3.16	-2.07	0.00	0.00	-0.24	57.19*
-90	43	0.58	62.65	-3.49	-2.26	0.00	0.00	0.00	56.90

\* Bright Zone !

WHEEL (0.00 + 61.42 + 0.00) = 61.42 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.54	67.42	-3.39	-2.21	0.00	0.00	-3.05	58.78*
-90	43	0.66	67.42	-3.65	-2.35	0.00	0.00	0.00	61.42

\* Bright Zone !

Segment Leq : 62.73 dBA

Total Leq All Segments: 65.19 dBA

↑

Results segment # 1: LRT EB (night)

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
4.00 !	1.50 !	3.80 !	100.90
0.50 !	1.50 !	2.96 !	100.06

LOCOMOTIVE (0.00 + 48.63 + 0.00) = 48.63 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.44	55.52	-4.19	-2.07	0.00	0.00	-0.40	48.86*
-90	43	0.58	55.52	-4.63	-2.26	0.00	0.00	0.00	48.63

\* Bright Zone !

WHEEL (0.00 + 53.09 + 0.00) = 53.09 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.54	60.29	-4.50	-2.21	0.00	0.00	-4.18	49.41*
-90	43	0.66	60.29	-4.85	-2.35	0.00	0.00	0.00	53.09

-----  
\* Bright Zone !

Segment Leq : 54.42 dBA

↑  
Results segment # 2: LRT WB (night)  
-----

Barrier height for grazing incidence  
-----

Source Height (m)	! Receiver ! Height (m)	! Barrier ! Height (m)	! Elevation of ! Barrier Top (m)
4.00 !	1.50 !	4.14 !	101.24
0.50 !	1.50 !	3.16 !	100.26

LOCOMOTIVE (0.00 + 49.77 + 0.00) = 49.77 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.44	55.52	-3.16	-2.07	0.00	0.00	-0.24	50.06*
-90	43	0.58	55.52	-3.49	-2.26	0.00	0.00	0.00	49.77

-----

\* Bright Zone !

WHEEL (0.00 + 54.28 + 0.00) = 54.28 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.54	60.29	-3.39	-2.21	0.00	0.00	-3.05	51.64*
-90	43	0.66	60.29	-3.65	-2.35	0.00	0.00	0.00	54.28

-----

\* Bright Zone !

Segment Leq : 55.60 dBA

Total Leq All Segments: 58.06 dBA

↑  
Road data, segment # 1: HWY 417 EB (day/night)  
-----

Car traffic volume : 59370/5163 veh/TimePeriod \*  
Medium truck volume : 4723/411 veh/TimePeriod \*  
Heavy truck volume : 3373/293 veh/TimePeriod \*  
Posted speed limit : 100 km/h  
Road gradient : 1 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 73332  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 EB (day/night)

-----  
Angle1 Angle2 : -90.00 deg 43.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 353.00 / 353.00 m  
Receiver height : 1.50 / 1.50 m  
Topography : 2 (Flat/gentle slope; with barrier)  
Barrier angle1 : -90.00 deg Angle2 : 43.00 deg  
Barrier height : 2.50 m  
Barrier receiver distance : 7.00 / 7.00 m  
Source elevation : 97.49 m  
Receiver elevation : 98.00 m  
Barrier elevation : 97.10 m  
Reference angle : 0.00

↑

Road data, segment # 2: HWY 417 WB (day/night)

-----  
Car traffic volume : 59370/5163 veh/TimePeriod \*  
Medium truck volume : 4723/411 veh/TimePeriod \*  
Heavy truck volume : 3373/293 veh/TimePeriod \*  
Posted speed limit : 100 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 73332  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 WB (day/night)

-----  
Angle1 Angle2 : -90.00 deg 43.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0

```

Surface                :      1      (Absorptive ground surface)
Receiver source distance : 311.30 / 311.30 m
Receiver height         :   1.50 / 1.50  m
Topography              :      2      (Flat/gentle slope; with barrier)
Barrier angle1          : -90.00 deg   Angle2 : 43.00 deg
Barrier height          :   2.50 m
Barrier receiver distance : 7.00 / 7.00  m
Source elevation        :   97.49 m
Receiver elevation      :   98.00 m
Barrier elevation       :   97.10 m
Reference angle         :    0.00

```

↑

Results segment # 1: HWY 417 EB (day)

-----

Source height = 1.50 m

Barrier height for grazing incidence

```

-----
Source      ! Receiver  ! Barrier    ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
-----+-----+-----+-----
          1.50 !         1.50 !         2.39 !         99.49

```

ROAD (0.00 + 53.48 + 0.00) = 53.48 dBA

```

Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
-----
  -90   43   0.51  81.40   0.00 -20.71 -2.17  0.00  0.00 -5.03  53.48
-----

```

Segment Leq : 53.48 dBA

↑

Results segment # 2: HWY 417 WB (day)

-----

Source height = 1.50 m

Barrier height for grazing incidence

```

-----
Source      ! Receiver  ! Barrier    ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
-----+-----+-----+-----
          1.50 !         1.50 !         2.39 !         99.49

```

ROAD (0.00 + 54.30 + 0.00) = 54.30 dBA

```

Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
-----
  -90   43   0.51  81.40   0.00 -19.89 -2.17  0.00  0.00 -5.03  54.30
-----

```

-----  
Segment Leq : 54.30 dBA

Total Leq All Segments: 56.92 dBA

↑  
Results segment # 1: HWY 417 EB (night)  
-----

Source height = 1.49 m

Barrier height for grazing incidence  
-----

Source Height (m)	! Receiver ! Height (m)	! Barrier ! Height (m)	! Elevation of ! Barrier Top (m)
1.49 !	1.50 !	2.39 !	99.49

ROAD (0.00 + 45.88 + 0.00) = 45.88 dBA  
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq  
-----  
-90 43 0.51 73.80 0.00 -20.71 -2.17 0.00 0.00 -5.03 45.88  
-----

Segment Leq : 45.88 dBA

↑  
Results segment # 2: HWY 417 WB (night)  
-----

Source height = 1.49 m

Barrier height for grazing incidence  
-----

Source Height (m)	! Receiver ! Height (m)	! Barrier ! Height (m)	! Elevation of ! Barrier Top (m)
1.49 !	1.50 !	2.39 !	99.49

ROAD (0.00 + 46.71 + 0.00) = 46.71 dBA  
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq  
-----  
-90 43 0.51 73.80 0.00 -19.89 -2.17 0.00 0.00 -5.03 46.71  
-----

Segment Leq : 46.71 dBA

Total Leq All Segments: 49.33 dBA



TOTAL Leq FROM ALL SOURCES (DAY): 65.79  
(NIGHT): 58.61





Filename: arc6r52x.te            Time Period: Day/Night 16/8 hours  
 Description: Arcadia Stage 6 - R5 OLA Block 1 4.5m Barrier

Rail data, segment # 1: LRT EB (day/night)

```

-----
Train          ! Trains      ! Speed !# loc !# Cars! Eng !Cont
Type          !             ! (km/h) !/Train!/Train! type !weld
-----+-----+-----+-----+-----+-----
  1. Electric  ! 155.0/15.0 !  80.0 !  2.0 !  4.0 ! Elec! No
  
```

Data for Segment # 1: LRT EB (day/night)

```

-----
Angle1  Angle2      : -90.00 deg  43.00 deg
Wood depth      :          0   (No woods.)
No of house rows :          0 / 0
Surface         :          1   (Absorptive ground surface)
Receiver source distance : 29.40 / 29.40 m
Receiver height :  1.50 / 1.50 m
Topography      :          2   (Flat/gentle slope; with barrier)
No Whistle
Barrier angle1  : -90.00 deg  Angle2 : 43.00 deg
Barrier height  :    4.50 m
Barrier receiver distance :  7.00 / 7.00 m
Source elevation : 103.00 m
Receiver elevation :  97.49 m
Barrier elevation :  97.10 m
Reference angle :    0.00
  
```

↑  
 Rail data, segment # 2: LRT WB (day/night)

```

-----
Train          ! Trains      ! Speed !# loc !# Cars! Eng !Cont
Type          !             ! (km/h) !/Train!/Train! type !weld
-----+-----+-----+-----+-----+-----
  1. Electric  ! 155.0/15.0 !  80.0 !  2.0 !  4.0 ! Elec! No
  
```

Data for Segment # 2: LRT WB (day/night)

```

-----
Angle1  Angle2      : -90.00 deg  43.00 deg
Wood depth      :          0   (No woods.)
No of house rows :          0 / 0
Surface         :          1   (Absorptive ground surface)
Receiver source distance : 24.90 / 24.90 m
Receiver height :  1.50 / 1.50 m
Topography      :          2   (Flat/gentle slope; with barrier)
No Whistle
  
```

```

Barrier angle1      : -90.00 deg   Angle2 : 43.00 deg
Barrier height      : 4.50 m
Barrier receiver distance : 7.00 / 7.00 m
Source elevation    : 103.00 m
Receiver elevation  : 97.49 m
Barrier elevation   : 97.10 m
Reference angle     : 0.00

```

↑  
Results segment # 1: LRT EB (day)

Barrier height for grazing incidence

```

-----
Source      ! Receiver      ! Barrier      ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
-----+-----+-----+-----
          4.00 !          1.50 !          3.80 !          100.90
          0.50 !          1.50 !          2.96 !          100.06

```

LOCOMOTIVE (0.00 + 50.58 + 0.00) = 50.58 dBA

```

-----
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----
  -90   43   0.31  62.65  -3.84  -1.89   0.00   0.00  -6.34  50.58
-----

```

WHEEL (0.00 + 51.75 + 0.00) = 51.75 dBA

```

-----
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----
  -90   43   0.42  67.42  -4.15  -2.04   0.00   0.00  -9.48  51.75
-----

```

Segment Leq : 54.21 dBA

↑  
Results segment # 2: LRT WB (day)

Barrier height for grazing incidence

```

-----
Source      ! Receiver      ! Barrier      ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
-----+-----+-----+-----
          4.00 !          1.50 !          4.14 !          101.24
          0.50 !          1.50 !          3.16 !          100.26

```

LOCOMOTIVE (0.00 + 52.47 + 0.00) = 52.47 dBA

```

-----
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----
  -90   43   0.31  62.65  -2.89  -1.89   0.00   0.00  -5.40  52.47
-----

```

-----  
WHEEL (0.00 + 53.35 + 0.00) = 53.35 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-----

-90	43	0.42	67.42	-3.13	-2.04	0.00	0.00	-8.90	53.35
-----	----	------	-------	-------	-------	------	------	-------	-------

-----

Segment Leq : 55.94 dBA

Total Leq All Segments: 58.17 dBA

↑

Results segment # 1: LRT EB (night)

-----

Barrier height for grazing incidence

-----

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
4.00 !	1.50 !	3.80 !	100.90
0.50 !	1.50 !	2.96 !	100.06

LOCOMOTIVE (0.00 + 43.45 + 0.00) = 43.45 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-----

-90	43	0.31	55.52	-3.84	-1.89	0.00	0.00	-6.34	43.45
-----	----	------	-------	-------	-------	------	------	-------	-------

-----

WHEEL (0.00 + 44.62 + 0.00) = 44.62 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
--------	--------	-------	--------	-------	-------	-------	-------	-------	--------

-----

-90	43	0.42	60.29	-4.15	-2.04	0.00	0.00	-9.48	44.62
-----	----	------	-------	-------	-------	------	------	-------	-------

-----

Segment Leq : 47.08 dBA

↑

Results segment # 2: LRT WB (night)

-----

Barrier height for grazing incidence

-----

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
4.00 !	1.50 !	4.14 !	101.24
0.50 !	1.50 !	3.16 !	100.26

LOCOMOTIVE (0.00 + 45.34 + 0.00) = 45.34 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.31	55.52	-2.89	-1.89	0.00	0.00	-5.40	45.34

WHEEL (0.00 + 46.22 + 0.00) = 46.22 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.42	60.29	-3.13	-2.04	0.00	0.00	-8.90	46.22

Segment Leq : 48.81 dBA

Total Leq All Segments: 51.04 dBA

↑

Road data, segment # 1: HWY 417 EB (day/night)

-----

Car traffic volume : 59370/5163 veh/TimePeriod \*

Medium truck volume : 4723/411 veh/TimePeriod \*

Heavy truck volume : 3373/293 veh/TimePeriod \*

Posted speed limit : 100 km/h

Road gradient : 1 %

Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 73332

Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00

Medium Truck % of Total Volume : 7.00

Heavy Truck % of Total Volume : 5.00

Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 EB (day/night)

-----

Angle1 Angle2 : -90.00 deg 43.00 deg

Wood depth : 0 (No woods.)

No of house rows : 0 / 0

Surface : 1 (Absorptive ground surface)

Receiver source distance : 353.00 / 353.00 m

Receiver height : 1.50 / 1.50 m

Topography : 2 (Flat/gentle slope; with barrier)

Barrier angle1 : -90.00 deg Angle2 : 43.00 deg

Barrier height : 4.50 m

Barrier receiver distance : 7.00 / 7.00 m

Source elevation : 97.49 m

Receiver elevation : 98.00 m

Barrier elevation : 97.10 m

Reference angle : 0.00

↑

Road data, segment # 2: HWY 417 WB (day/night)

-----  
Car traffic volume : 59370/5163 veh/TimePeriod \*  
Medium truck volume : 4723/411 veh/TimePeriod \*  
Heavy truck volume : 3373/293 veh/TimePeriod \*  
Posted speed limit : 100 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

\* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 73332  
Percentage of Annual Growth : 0.00  
Number of Years of Growth : 0.00  
Medium Truck % of Total Volume : 7.00  
Heavy Truck % of Total Volume : 5.00  
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 WB (day/night)

-----  
Angle1 Angle2 : -90.00 deg 43.00 deg  
Wood depth : 0 (No woods.)  
No of house rows : 0 / 0  
Surface : 1 (Absorptive ground surface)  
Receiver source distance : 311.30 / 311.30 m  
Receiver height : 1.50 / 1.50 m  
Topography : 2 (Flat/gentle slope; with barrier)  
Barrier angle1 : -90.00 deg Angle2 : 43.00 deg  
Barrier height : 4.50 m  
Barrier receiver distance : 7.00 / 7.00 m  
Source elevation : 97.49 m  
Receiver elevation : 98.00 m  
Barrier elevation : 97.10 m  
Reference angle : 0.00

↑

Results segment # 1: HWY 417 EB (day)

-----  
Source height = 1.50 m

Barrier height for grazing incidence

-----  
Source ! Receiver ! Barrier ! Elevation of  
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)  
-----+-----+-----+-----  
1.50 ! 1.50 ! 2.39 ! 99.49

ROAD (0.00 + 49.63 + 0.00) = 49.63 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.39	81.40	0.00	-19.07	-2.00	0.00	0.00	-10.70	49.63

Segment Leq : 49.63 dBA

↑  
 Results segment # 2: HWY 417 WB (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.50	1.50	2.39	99.49

ROAD (0.00 + 50.37 + 0.00) = 50.37 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.39	81.40	0.00	-18.31	-2.00	0.00	0.00	-10.71	50.37

Segment Leq : 50.37 dBA

Total Leq All Segments: 53.03 dBA

↑  
 Results segment # 1: HWY 417 EB (night)

Source height = 1.49 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
1.49	1.50	2.39	99.49

ROAD (0.00 + 42.03 + 0.00) = 42.03 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.39	73.80	0.00	-19.07	-2.00	0.00	0.00	-10.70	42.03

Segment Leq : 42.03 dBA

↑

Results segment # 2: HWY 417 WB (night)

-----

Source height = 1.49 m

Barrier height for grazing incidence

-----

Source	! Receiver	! Barrier	! Elevation of			
Height (m)	! Height (m)	! Height (m)	! Barrier Top (m)			
1.49	!	1.50	!	2.39	!	99.49

ROAD (0.00 + 42.78 + 0.00) = 42.78 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.39	73.80	0.00	-18.31	-2.00	0.00	0.00	-10.71	42.78

Segment Leq : 42.78 dBA

Total Leq All Segments: 45.43 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 59.33  
(NIGHT): 52.10

↑

↑

---

## **Appendix D**

Floor Plan & Building  
Elevation Drawings































# TAHOE 4 2022

## ARCHITECTURAL LEGEND

	Attic Access 1'-8" x 700 min. (Insulated & weatherstripped)
	Medicine Cabinet
	Change between floor finishes
	Door schedule key (numbered)
	Window schedule key (lettered)
	Dropped Ceiling Bulkhead 240 unless noted otherwise
	Deep
	Hardwood
	Laundry Tub
	Microwave
	Optional
	Paper Holder
	RD. & SH. Rod & Shelf
	R.O.H. Rough Opening Height
	R.O.W. Rough Opening Width
	Res. fl. Resilient Vinyl Flooring
	RV Roof Vent
	TB Towel Bar
	TR Towel Ring
	TYP Typical
	UNO Unless noted otherwise

## MECHANICAL LEGEND

	Cold air return grill
	Cold air return duct in wall
	Warm air duct
	Warm air diffuser
	Warm air supply in cabinet toe kick or wall
	Warm air diffuser in ceiling
	Dust Pan Inlet
	Fireplace chimney
	Furnace
	Exhaust vent
	Gas meter
	Water meter
	Service entry
	Floor drain
	Soil stack
	Drain water heat recovery pipe installed on soil stack.
	Hot Water Tank
	Hose bib (FROST FREE)
	Shower head
	Air Conditioning
	Barbeque Gas Line
	Heat Recovery Ventilator
	Tankless Hot Water Tank c/w Drain Pan
	Mechanical vent

## ELECTRICAL LEGEND

	Duplex Outlet (G.F.I. in all bathrooms)
	Split Duplex Outlet
	Duplex outlet upper 1/2 switched
	Weather proof duplex outlet
	220 V outlet
	Electric vehicle charging rough-in c/w 27 conduit to 200amp panel
	Central vacuum outlet
	Single pole switch
	3 way switch
	4 way switch
	Furnace switch
	Double gang switch
	Triple gang switch
	Ceiling light fixture
	Standard potlight 4" (clg. mtd)
	Directional potlight (clg. mtd)
	Pucklight
	Wall mounted light fixture
	Photocell
	Interconnected smoke detector on each floor and in each bedroom with visual signal. Carbon monoxide detector on each floor containing bedrooms
	Electrical panel
	Hydro meter
	Range
	Refrigerator
	Dishwasher
	Dryer
	Washer
	Door chime/buzzer
	Door bell
	Thermostat

## STRUCTURAL LEGEND

	Anchor
	Bottom chord
	Blocking
	Beam pocket
	Both Sides
	Control Joint
	Continuous
	Coon Wire Nails
	Double joist
	Dropped beam
	Each end
	Each way
	Flush beam
	Footing
	Horizontal
	Inside face
	Long leg vertical
	Micro laminated
	Metal hangers
	Nuts and Bolts
	Outside face
	On center
	Plate
	Similar
	Steel Beam
	Stiffner Plate
	Top and Bottom
	Tongue & Groove
	Triple joist
	Wood lintel
	Masonry lintel

## INTERIOR DOOR SCHEDULE

	DOOR 815 X 2030		DOOR 710 X 2030
	DOOR 760 X 2030		DOOR 460 X 2030
	DOOR 610 X 2030		DOOR 865 X 2030
	DOOR 405 X 2030		DOOR 915 X 2030
	DOOR 660 X 2030		DOOR 360 X 2030
	FRENCH DOOR		

## INTERIOR DOORS ROUGH OPENINGS HEIGHTS

DOOR TYPE	ROUGH OPENING HEIGHT (R.O.H.)
2030 Dr. Height (80")	
SWINGING	2108
SLIDING	2145
2440 Dr. Height (96")	
SWINGING	2490
SLIDING	2555

## FOOTING SCHEDULE

F1 - 2'-0" x 2'-0" x 200 DP.  
3-15M (B) x 450 lg. E/W

ALL FOOTINGS TO BE 22"x8"dp. UNO

\*FOOTING WIDTHS ALONG SHARED  
WALLS ASSUMING ADJACENT UNIT IS  
'MIRROR IMAGE'.

## STRUCTURAL FRAMING SCHEDULE

For Steel Framing Layout, Beam/Column/Plate Connection  
Details, see Structural DwgS ST- \* (Also Specs SP-1 & SP-4).

STEEL LINTEL	POSTS
S1 - L 90x90x6	P1(8) - 75 Ø STEEL TELEPOST (8 Feet Max)
S2 - L 90x90x8	P1(9) - 75 Ø STEEL TELEPOST (9 Feet Max)
S3 - L 100x90x6	P2 - 2-38x89 or 2-38x140
S4 - L 125x90x8	P3 - 3-38x89 or 3-38x140
S5 - L 125x90x10	P4 - 4-38x89 or 4-38x140
S6 - L 200x100x12	P5 - 5-38x89 or 5-38x140
S7 - L 150x100x10 (L.L.V.) 200 BEARING	P6 - 6-38x89 or 6-38x140
S8 - L 100x90x8	P11 - HEAVY DUTY STEEL POST, CAPACITY = 55 KN
WOOD LINTEL	P12 - ADJUSTABLE HSS, CAPACITY 100 KN
L1 - 2-38x235 w/ 12.7 PLYWOOD SPACER	HSS 73 OD - HSS 73 O.D. X 4.8 + 12 PLATE TOP & BOTT.
L2 - 2-38x235	HSS 89 OD - HSS 89 O.D. X 4.8 + 12 PLATE TOP & BOTT.
L3 - 3-38x235	HSS 76 - HSS 76.2 X 76.2 X 4.8 + 12 PLATE TOP & BOTT.
L4 - 3-38x235 c/w 2-12.7 PLYWOOD SPACERS & 2 ROWS OF 90 C.W.N. @ 200 c/c B/S	HSS 89 - HSS 89 X 89 X 4.8 + 12 PLATE TOP & BOTT.
L5 - 3-38x286 c/w 2-12.7 PLYWOOD SPACERS & 2 ROWS OF 90 C.W.N. @ 200 c/c B/S	HSS 102 - HSS 102 X 102 X 4.8 + 12 PLATE TOP & BOTT.
L6 - 2-45x240 M.L.	
L7 - 3-45x240 M.L.	
L8 - 2-38x286	
L9 - 3-38x286	
L10 - 2-38x185	
PROVIDE 'P2' POST BOTH ENDS OF LINTEL UNLESS NOTED OTHERWISE	ANCHOR POST TO FOUNDATION W/ 2-12Ø WEDGE ANCHORS PROVIDE 'P2' UNDER ALL DOUBLE JOISTS & TRUSSES U.N.O. FOOTINGS ALL FOOTINGS DESIGNED FOR ALLOWABLE SOIL CAP.= 100kpa

Dwg Sheet Set:	
Floor Plans	A0a CONSTRUCTION NOTES
	A1 BASEMENT FLOOR PLAN
	A2 GROUND FLOOR PLAN ELEV. 'BA' & 'CA' / EXTRA BRICK
	A2a GROUND FLOOR PLAN ELEV. 'DA' / EXTRA BRICK
	A3a SECOND FLOOR PLANS ELEV. 'BA', 'CA' & 'DA'
Pollighy Flex Opt	FX1 FLEX OPTIONS
	AC1 CEILING/POTLIGHTS LAYOUTS
Elevations	A4a FRONT ELEVATION ELEV.-'BA','CA' & 'DA'
	A5a SIDE ELEVATION & ROOF PLAN ELEV.-'BA' / EXTRA BRICK
	A5b SIDE ELEVATION & ROOF PLAN ELEV.-'CA' / EXTRA BRICK
	A5c SIDE ELEVATION & ROOF PLAN ELEV.-'DA' / EXTRA BRICK
	A6a REAR ELEVATIONS ELEV.-'BA','CA' & 'DA'
Sections	A7a CROSS SECTIONS - STAIRS ELEV.-'BA','CA' & 'DA'
	A7b CROSS SECTIONS - GARAGE ELEV.-'BA','CA' & 'DA'
	A1b,c PARTIAL FOUNDATION PLANS RISERS
	A1d,e PARTIAL GROUND FLOOR PLANS RISERS
	A1g PARTIAL PLANS LOOK OUT DECK
	A1f FOUNDATION PLAN WALKOUT BASEMENT
Special Conditions (Look Out/Walk-Out/4&5 Riser)	A1h BASEMENT PLAN WALKOUT BASEMENT
	A4b FRONT ELEVATION ELEV.-'BA','CA' & 'DA' (4 RISER)
	A4c FRONT ELEVATION ELEV.-'BA','CA' & 'DA' (5 RISER)
	A4d FRONT ELEVATION ELEV.-'BA','CA' & 'DA' (6 RISER)
	A5d REAR & SIDE ELEVATIONS LOOK OUT DECK
	A5e SIDE ELEVATIONS WALK-OUT BASEMENT
	A5f REAR ELEVATIONS WALK-OUT BASEMENT

No	Revision	Date	By
2	ISSUED FOR CONSTRUCTION	APR 28/22	
1	STRUCTURAL LETTER	FEB 15/22	



# CONFIDENTIAL

SITE: VISTA STAGE 1  
BROOKLINE STAGE 1  
QUINN'S POINTE ST4

TITLE TYPICAL UNIT  
NOMENCLATURE

FILENAME: ETH060-TAHOE 4-ALL-2022.DWG	Scale N.T.S.
MODEL (EXECUTIVE TOWNHOMES)	dwg # A-0
TAHOE 4 2022 ELEV.- BA, CA, DA (2022 STANDARD DRAWING)	

# CONSTRUCTION NOTES

UNLESS OTHERWISE NOTED  
2012 OBC O. REG. 332/12

ALL CONSTRUCTION PRACTICES TO COMPLY WITH ONTARIO BUILDING CODE (O.B.C.) REGULATIONS  
ALL DIMENSIONS GIVEN FIRST IN METRIC (mm )

## 1 ROOF CONSTRUCTION (SEE SP2 & 7/SP4)

ASPHALT SHINGLES  
APPROVED EAVES PROTECTION TO EXTEND MIN. 900mm ( 2'-11" ) UP ROOF SURFACE TO LINE NOT LESS THAN 300mm ( 12" ) BEYOND INNER FACE OF EXTERIOR WALL FOR ROOF SLOPES LESS THAN 8:12. (OBC 9.26.5)  
11.1 (7/16") OSB SHEATHING W/ 'H' CLIP EDGE SUPPORT  
PRE-ENGINEERED TRUSSES BRACED AS PER MANUFACTURES SPECIFICATIONS & DETAIL 7/SP4  
RSI 10.56 ( R60 ) ROOF INSULATION  
19 x 65 (1x3) STRAPPING @405 O/C  
6 mil. AIR/VAPOUR BARRIER  
12.7mm ( 1/2" ) INT. DRYWALL FINISH  
-PRE-FINISHED ALUM. VENTED SOFFIT & PREFINISHED ALUM. FASCIA.  
ATTIC VENTILATION 1:300 OF INSULATED CEILING AREA UNIFORMLY DISTRIBUTED ON OPPOSITE SIDES OF THE BUILDING WITH NO LESS THAN 25% AT EAVES AND 25% THE SOFFIT (OBC 9.19.1.2)

## 2 EXTERIOR WALL CONSTRUCTION (VINYL SIDING)

VINYL SIDING AS PER ELEVATIONS (SEE SP2)  
EXTERIOR AIR BARRIER (TYVEK)  
EXTERIOR OSB SHEATHING 11.1mm (7/16")  
38mm x140mm (2x6) STUDS @ 405 (16") O.C. U.N.O.  
RSI 3.87 (R22) BATT. INSULATION  
6 mil. VAPOUR BARRIER  
12.7mm (1/2) INT. DRYWALL FINISH

## 2A EXTERIOR WALL CONSTRUCTION (COMPOSITE SIDING)

COMPOSITE SIDING AS PER ELEVATIONS  
38x65 (2x3) STRAPPING AS PER MANUF. SPECS  
EXTERIOR AIR BARRIER (TYVEK)  
EXTERIOR OSB SHEATHING 11.1mm (7/16") (20mm OSB FOR VERT. SIDING)  
38mm x140mm (2x6) STUDS @ 405 (16") O.C. U.N.O.  
RSI 3.87 (R22) BATT. INSULATION  
6 mil. VAPOUR BARRIER  
12.7mm (1/2) INT. DRYWALL FINISH

## 3 EXTERIOR WALL CONSTRUCTION (MASONRY)

MASONRY VENEER , 22 x 180 x 0.76mm ( 7/8" x 7" x 22 ga ) (SEE SP2)  
GALV. METAL TIES @ 400mm (15 3/4" ) PROVIDE  
WEEPHOLES @ 800mm ( 30" ) O.C. HORIZ. @ BOTTOM COURSE ONLY & OVER OPENINGS PROVIDE BASE FLASHING UP MIN. 150mm ( 6" ) BEHIND AIR BARRIER. MIN. 150mm ( 6" ) CLEARANCE BETWEEN MASONRY AND GRADE. ( 9.20.6.4, 9.20.9.5, 9.20.13.5,9.20.13.6 )  
25mm AIR SPACE  
EXTERIOR AIR BARRIER (TYVEK)  
EXTERIOR OSB SHEATHING 11.1mm (7/16")  
38mm x140mm (2x6) STUDS @ 405 (16") O.C. U.N.O.  
RSI 3.87 (R22) BATT. INSULATION  
6 mil. VAPOUR BARRIER  
12.7mm (1/2) INT. DRYWALL FINISH

## 4 INTERIOR STUD PARTITIONS

12.7mm ( 1/2" ) INT. DRYWALL ON BOTH SIDES ( FOR FIN. AREAS)  
2 TOP PLATES & 1 BOTTOM PLATE TO MATCH STUD WIDTH.  
**LOAD BEARING WALLS**  
38mm x 89mm ( 2 x 4 ) OR 38mm x 140mm ( 2 x 6 ) @ 406mm ( 16" ) O.C.  
**NON-LOAD BEARING WALLS**  
38mm x 89mm ( 2 x 4 ) OR 38mm x 140mm ( 2 x 6 ) @ 610mm ( 2'-0" ) O.C. (405 (16") IN BATHROOMS)

## 5 FOUNDATION WALL (SOIL BEARING CAPACITY 100 kPa)

DRAINAGE LAYER TO RETURN AND COVER FOOTING (SEE SP2+SP2.1)  
BITUMINOUS DAMPPROOFING,  
200mm ( 8" ) POURED CONC. FOUNDATION WALL WITH 20 MPa( 2900 Psi ) CONC. STRG.  
550 x200mm ( 22" x 8" ) U.N.O. CONCRETE KEYED FOOTINGS W/ CAPILLARY BREAK  
BACKFILL WITH NON-FROST SUSCEPTIBLE SOIL.

## 5A FOUNDATION INT. WALL FINISH (UN.FINISH AREA)

50mm XPS FOAM R10 ci.( DOWN TO FOOTING) (SEE SP2.1)  
ROXUL COMFORTBOARD 80(R12),  
OR APPROVED EQUIVALENT MATERIAL  
6 mil. VAPOUR BARRIER

## 5B FOUNDATION INT. WALL FINISH (FINISH AREA)

50mm XPS FOAM R10 ci.( DOWN TO FOOTING) (SEE SP2.1)  
38mm x 89mm (2x4) STUDS @ 610mm (24") O/C  
RSI 2.1 (R12) BATT. INSULATION  
12.7 mm DRYWALL FINISHED

## 5C FOUNDATION INT. WALL FINISH @ STAIR (SEE SP2.1)

50mm XPS FOAM R10 ci.( DOWN TO FOOTING)  
38mm x 89mm (2x4) STUDS @ 610mm (24") O/C  
RSI 2.1 (R12) BATT. INSULATION  
12.7 mm DRYWALL FINISHED

## 5D FOUNDATION SLAB ON GRADE (SEE SP2.1)

RSI 1.75 ci ( R10 ci ) 50mm RIGID INSULATION  
POURED CONCRETE FOUNDATION WALL SEE PLAN FOR THICKNESS

## 6 WEEPING TILE (SEE SP2 & OBC 9.14.3)

100mm ( 4" ) DIA. WEEPING TILE, min.150mm ( 6" ) CRUSHED STONE OVER AND BESIDE WEEPING TILES (CRUSH STONE TO COVER 50mm (2") OF FOOTING)

## 7 GARAGE EXTERIOR WALL (SIDING)

SIDING AS PER ELEVATIONS  
AIR BARRIER ON EXTERIOR  
11.1mm ( 7/16" ) OSB SHEATHING  
38mm x 89mm (2 x 4) OR 38mm x 140mm (2x6) STUDS @ 405 O/C AS PER PLAN

## 8 GARAGE EXTERIOR WALL (MASONRY)

MASONRY VENEER, 22 x 180 x 0.76mm ( 7/8" x 7" x 22 ga )  
GALV. METAL TIES @ 400mm (15 3/4" ) PROVIDE  
WEEPHOLES @ 800mm ( 30" ) O.C. HORIZ. @ BOTTOM COURSE ONLY & OVER OPENINGS PROVIDE BASE FLASHING UP MIN. 150mm ( 6" ) BEHIND AIR BARRIER. MIN. 150mm ( 6" ) CLEARANCE BETWEEN MASONRY AND GRADE. ( 9.20.6.4, 9.20.9.5, 9.20.13.5,9.20.13.6 )  
25mm AIR SPACE  
EXTERIOR AIR BARRIER (TYVEK)  
EXTERIOR OSB SHEATHING 11.1mm (7/16")  
38mmX 89mm or 38mm x140mm (2x6) STUDS AS PER PLAN @ 405 (16") O.C. U.N.O.  
12.7mm (1/2) INT. DRYWALL TAPED

## 9 GARAGE TO HOUSE WALL (OBC 9.10.9.16)

12.7mm ( 1/2" ) GYPSUM BD.  
6 mil. VAPOUR / AIR BARRIER (WARM SIDE),  
3.87 ( R22 ) BATT INSULATION IN WALL,  
12.7mm ( 1/2" ) GYPSUM BD.  
TAPED AND SEAL ALL JOINTS GAS TIGHT & VAPOURPROOF,

## 10 2 STOREY WALLS -

38mm x 140mm ( 2 x 6 ) SPF. # 2 FULL HEIGHT STUDS @ 405mm ( 16" ) O.C. C/W HORIZONTAL SOLID BLOCKING @ 1200mm ( 3'-11" ) O.C. VERTICALLY. WALL CONSTRUCTION SHALL CONFORM TO OBC 9.23.10.1( 2 )

## 10A 2 STOREY WALLS -

DOUBLE 38mm x 140mm ( 2 x 6 ) SPF. # 1/2 FULL HEIGHT STUDS @ 405mm ( 16" ) O.C. C/W HORIZONTAL SOLID BLOCKING @ 1200mm ( 3'-11" ) O.C. VERTICALLY. WALL CONSTRUCTION SHALL CONFORM TO OBC 9.23.10.1( 2 )

## 10B 2 STOREY WALLS -

38mm x 185mm ( 2 x 8 ) SPF. # 1/2 FULL HEIGHT STUDS @ 405mm ( 16" ) O.C. C/W HORIZONTAL SOLID BLOCKING @ 1/4 POINTS O.C. WALL CONSTRUCTION SHALL CONFORM TO OBC 9.23.10.1( 2 )

## 11 BEARING STUD PARTITION

38mm x 89mm ( 2 x 4 ) OR 38mm x 140mm ( 2 x 6 ) STUDS @ 406mm ( 16" ) O.C., (AS PER WORKING DRAWINGS)WITH 2 TOP PLATES AND SINGLE SILL PLATE TO MATCH STUD WIDTH  
SILL PLATE RAMSET TO SLAB @ 1800mm ( 6'-0" ) O.C.  
DAMPPROOFING MATERIAL BELOW PLATE (6mil. v.b)  
BASEMENT SLAB 75mm ( 3" ) 25MPa ( 3600 psi ) CONC. SLAB CONCRETE FOOTING AS PER PLAN

## 12 EXTERIOR WALL LESS THAN 1.2 M TO PROPERTY LINE (45 MINUTE F.R.R.)

EXTERIOR FINISH AS PER ELEVATION (OSB EW1a)  
EXTERIOR AIR BARRIER (TYVEK)  
EXTERIOR OSB SHEATHING 11.1mm (7/16")  
38mm x140mm (2x6) or 38mm X 89MM (2X4)STUDS AS PER PLAN @ 405 (16") O.C. U.N.O.  
BATT. INSULATION AS PER PLANS  
6 mil. VAPOUR BARRIER (HEATED SPACE ONLY)  
15.8mm ( 5/8" ) TYPE 'X' INT. DRYWALL FINISH (TAPED IN GARAGE)

## 13 EXTERIOR NON-COMBUSTIBLE CLAD WALL LESS THAN 0.6M TO PROPERTY LINE (45 MINUTE F.R.R.)

EXTERIOR FINISH AS PER ELEVATION  
12.7 EXTERIOR GRADE DRYWALL (FOR SIDING ONLY)  
EXTERIOR AIR BARRIER (TYVEK)  
12.7mm (1/2") EXTERIOR GRADE  
EXTERIOR OSB SHEATHING 11.1mm (7/16")  
38mm x140mm (2x6) or 38mm X 89MM (2X4)STUDS AS PER PLAN @ 405 (16") O.C. U.N.O.  
RSI 3.87 (R22) or RSI 2.1 (R12) BATT. INSULATION CONFORMING TO CAN/ULC -S702 AND HAVING A MASS OF 4.8 kg/m2 FOR 150mm THICKNESS & 2.8 kg/m2 FOR 89mm THICKNESS  
6 mil. VAPOUR BARRIER (HEATED SPACE ONLY)  
15.8mm ( 5/8" ) TYPE 'X' INT. DRYWALL FINISH (TAPED IN GARAGE)

## 14 CONVENTIONAL ROOF FRAMING

38 mm X 140 mm (2" X 6") SPR. RAFTERS @406 mm (16") O.C.,  
38 mm X 184 mm (2" X 8") RIDGE BD., HIP & VALLEY RAFTERS  
38 mm X 89 mm (2" X 4") COLLAR TIES @ MIDSPAN. CEILING JOISTS TO BE 38 mm X 89 mm (2" X 4") @ 406 mm (16") O.C. FOR A MAX. 2430 mm (8'-0") SPAN & 38 mm X 140 mm (2" X 6") @ 406 mm (16") O.C. FOR A MAX. 4450 mm (14'-7") SPAN. RAFTERS FOR BUILT-UP ROOF TO BE 38 mm X 89 mm (2" X 4") @ 610 mm (24") O.C. W/ A 38 mm X 89 mm (2" X 4") COLLAR TIES AS REQUIRED FOR STABILITY.

## 15 EXPOSED FLOOR (CANTILEVERED)

19 mm (3/4") SHEATHING (DET. 4/SP5)  
FILL CAVITY WITH FOAM INSULATION (min. R-31)  
11.1 (7/17") OSB  
AIR BARRIER SEALED TO PREP AT PLATE  
ALUM. FLAT STOCK

## 16 PROTECTION FROM DAMPNES (OBC 9.23.2.3)

WOOD FRAMING MEMBERS THAT ARE NOT PRESSURE TREATED AND ARE IN CONTACT WITH CONCRETE THAT IS LESS THAN 150mm ( 6" ) ABOVE GROUND OR SLAB, PROVIDE 6 mil. POLYETHYLENE FILM OR No. 50 ( 45lb ) ROLL ROOFING DAMPPROOFING BETWEEN WOOD AND CONCRETE.

## 17 PORCH WOOD POST (SEE SP8/SP4)

3- 38mm x 140mm ( 2 x 6 ) PRESSURE TREATED WOOD POST WITH 2- SIMPSON STRONG TIE A23 METAL CLIPS , ANCHORED TO BEAM AND POST W/ 4-10DIA.x40mm NAILS EACH SIDE, ANCHORED TO SLAB W/ 2-HILTI PINS DIA 0.138x32mm lg. EACH SIDE . PROVIDE MOISTURE BREAK (ROOF SHINGLE OR OTHER) BETWEEN POST & PORCH

## 18 SILL PLATE @ FOUNDATION (SEE SP2.1)

38mm x 140mm ( 2 x 6 ) SILL PLATE (SIDING) 38mm X 89 ( 2x4)( BRICK) WITH 12.7 mm (1/2") DIA. ANCHOR BOLTS, 300mm ( 12" ) LONG, MIN. 100mm IN CONC. @ 1830mm ( 6'-0" ) O.C. , PLATE SITTING ON SILL GASKET , AIR BARRIER AND CONCRETE WALL.

## 19 ALL STAIRS (EXTERIOR & INTERIOR)

MIN. RISE = 125mm ( 4 7/8" ) MAX. RISE = 200mm ( 7 7/8" )  
MIN. RUN = 255mm ( 10" ) MAX. RUN = 355mm ( 14" )  
CIRCULAR STAIRS  
MIN. TREAD = 255mm ( 10" ) min.. TREAD MEASURED 300mm FROM CENTER LINE OF INSIDE HANDRAIL  
MIN. RUN = 150mm ( 5 7/8" ) AT THE NARROW END OF THE TREAD  
MIN. HEADROOM = 1950mm ( 6'-5" )  
MIN. WIDTH = 860mm ( 2'-10" )  
NOSING ( Max. curved or beveled edge ) = 25mm ( 1" )

## 20 GUARDS/HANDRAILS

ALL GUARDS AND HANDRAILS ARE TO COMPLY WITH THE REQUIREMENTS OF THE O.B.C SUBSECTION 9.8.7 AND 9.8.8  
GUARD @ INT. LANDING/STAIR OR FLOORS = 900mm (2'-11")  
HANDRAIL @ INT. STAIR...MIN = 865 (2'-10") MAX = 965mm (3'-2")  
GUARD/HANDRAIL @ EXT. LANDING/BALCONY (Greater than 1800mm above finish grade) = 1070mm (3'-6")  
GUARD/HANDRAIL @ EXT. LANDING/STAIR = 900mm (2'-11")  
HANDRAIL @ EXT. STAIR...MIN = 865 (2'-10") MAX = 965mm (3'-2")  
PICKETS MAX. 100mm (4") BETWEEN

## 21 BLOCK VENEER WALL (INTERIOR)

100mm ( 4" ) CONCRETE BLOCK TO SUPPORT BRICK ABOVE. AIR SPACE, METAL TIES, BLDG. PAPER ETC... AS PER NOTE  
EXCEPT NO WEEP HOLES OR FLASHING.

## 22 PORCH SLAB (SEE SP-2F)

130mm ( 5" ) POURED CONC. 32MPa ( 4650 psi ) @ 28 DAYS  
PORCH SLAB WITH 6% AIR CONTENT +/- 1%, CLASS 2 EXPOSURE W/C RATIO =0.45 WITH 10M REBAR @ 400 O/C (16") EACH WAY WITH MIN. 50mm ( 2" ) CONCRETE COVER BOTTOM FROM THE BOTTOM OF THE SLAB TO THE FIRST LAYER OF BARS AND THE SECOND LAYER OF BARS LAID DIRECTLY ON TOP OF THE LOWER LAYER IN THE OPPOSITE DIRECTION, 75mm ( 3" ) MIN. SLAB BEARING, 10 M DOWELS 600mm x 600mm ( 23 5/8" x 23 5/8" ) @ 400mm ( 16" ) O.C. AROUND PERIMETER. REINFORCING STEEL GRADE 400 - CAN/CSA-G30.18-M

## 23 GARAGE SLAB (OBC 9.16.2.2.)

100mm ( 4" ) CONC. SLOPED BACK TO FRONT. AS PER PLAN ,CONC. STRG 32 MPa (4650 psi) @ 28 DAYS WITH 6% ±15 AIR CONTENT , MAX W/C RATIO 0.04, MAX. SLUMP - 75mm, CLASS 'C2' EXPOSURE  
COMPACTED NON FROST SUSCEPTIBLE FILL

## 24 BASEMENT SLAB (OBC 9.16.2.2. & SP2)

75 mm ( 3" ) CONCRETE SLAB, CONC. STRG 25 MPa (3625 psi) @ 28 DAYS  
ON MIN. 100 mm (4") OF COARSE GRANULAR

## 25 STEP FOOTINGS (OBC 9.15.3.9)

HORIZONTAL STEP = 600mm ( 23 5/8" ) MIN.  
VERTICAL STEP = 600mm ( 23 5/8" ) MAX.

## 26 COLD CELLAR

FULL HEIGHT INSULATION ON INTERIOR SIDE OF FOUNDATION WALLS SEPARATING HEATED SPACE FROM COLD CELLAR. INSULATED DOOR WITH WEATHER STRIPPING. C/W VENT W/ PAINTED INSECT SCREEN, LIGHT FIXTURES AND FLOOR DRAIN.

## 27 FRAMED FLOORS (OBC 9.30.6.1 , 9.23.13.3,4,5)

FLOOR FINISHING (ON MIN. 15.9mm ( 5/8" ) PANEL TYPE UNDERLAY FOR CERAMIC TILE )  
19mm ( 3/4" ) T&G SUBFLOOR  
PRE- ENGINEERED FLOOR JOIST SPACING AS PER MANUFACTURERS DRAWINGS  
19mm x 65 mm (1x3) STRAPPING @ 405mm (16") O/C  
12.7mm (1/2") DRYWALL (FINISH AS PER SPECIFICATIONS)

## 28 PROVIDE 38 X 89 SOLID BLOCKING AT 1200mm ( 3'-11 1/4" ) O.C. BELOW WALLS RUNNING PARALLEL TO JOISTS. (OBC 9.23.9.8)

## 29 GRABS BARS (OBC 9.5.2.3 , SEE SP-10D)

ADD GRAB BAR REINFORCEMENT IN STUD WALL FOR MAIN BATHROOM

## 30 ATTIC ACCESS (OBC 9.19.2)

ATTIC ACCESS HATCH 500mm x 700mm ( 19 3/4" x 27" ) WITH WEATHER STRIPPING AND INSULATED.

## 31 DROP IN TUB AS PER PLANS (OBC 9.29.2.1)

CERAMIC TILE DECK W/ 2 ROWS OF TILE  
ON WALL AROUND DECK MINIMUM 400mm ( 1'-4" ) HIGH

## 32 FREE STANDING TUB AS PER PLANS

PROVIDE TILE FROM FLOOR TO 400mm (16") ABOVE TUB RIM FOR TUBS 400mm (16")OR LESS FROM WALL

## 33 CAPPED DRYER, INTAKE OR EXHAUST VENT. MAX. UNPROTECTED OPENING AREA OF 130 cm2 ( 20 sq. in. ) (OBC 9.10.15.4(5))

## 34 LINEN CLOSET 5 SHELVES MIN. 350mm ( 1'-2" ) DEEP.

## 35 19mm x 89mm ( 1 x 4 ) BOTH SIDES OF STEEL BEAM.

## 36 GARAGE DOORS SHALL BE EXTERIOR TYPE SELF CLOSING DOORS AND WEATHERSTRIPPED. PROVISIONS RESISTANCE TO FORCED ENTRY SHALL BE PROVIDE AS PER O.B.C 9.7

## 37 WOOD PLATES ON STEEL BEAMS TO BE RAMSET , SCREWED OR BOLTED @ 405mm (16") O/C

## 38 TYPICAL PARTY WALL (OBC ASSEMBLY W15d) (SP3a -1)

2-15.9mm TYPE 'X' GYPSUM BOARD  
FRAMING (STUD SIZE AS PER PLAN) @ 405 O.C.  
90mm SOUND BATTS.  
25mm AIR SPACE  
38x90 STAGGERED FRAMING @ 405 O.C. 2-15.9mm TYPE 'X' GYPSUM BOARD

2	ISSUED FOR CONSTRUCTION	APR 28/22
1	STRUCTURAL LETTER	FEB 15/22
No	Revision	Date By



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SITE: VISTA STAGE 1  
BROOKLINE STAGE 1  
QUINN'S POINTE ST4

TITLE TYPICAL UNIT  
NOMENCLATURE

FILENAME:  
ETH060-TAHOE 4-ALL-2022.DWG

MODEL (EXECUTIVE TOWNHOMES)

Scale 1:75

TAHOE 4 2022  
ELEV.- BA, CA, DA  
(2022 STANDARD DRAWING)

dwg #  
SP-0

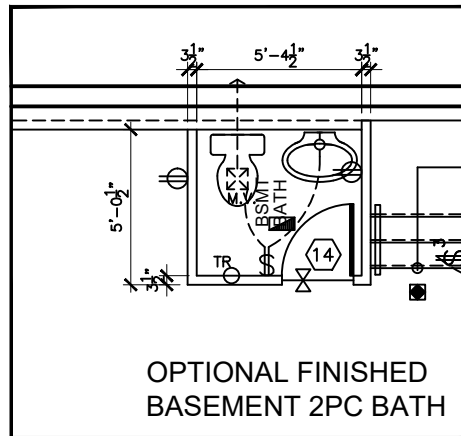






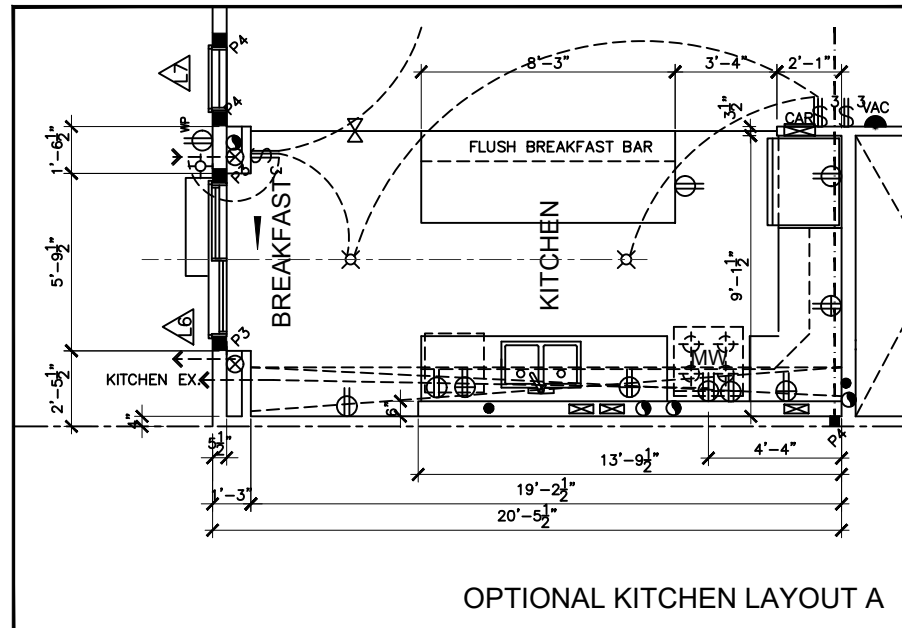




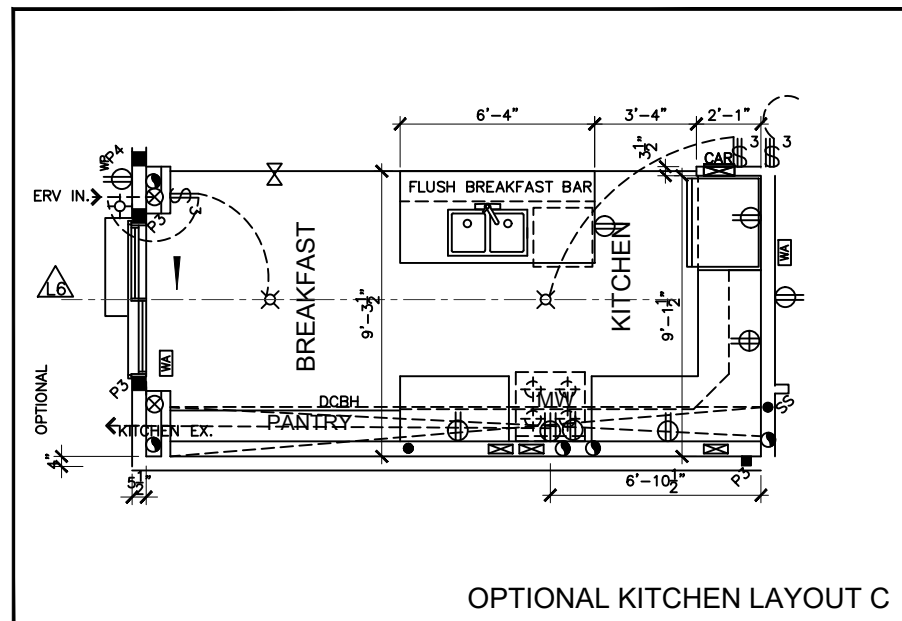


OPTIONAL FINISHED  
BASEMENT 2PC BATH

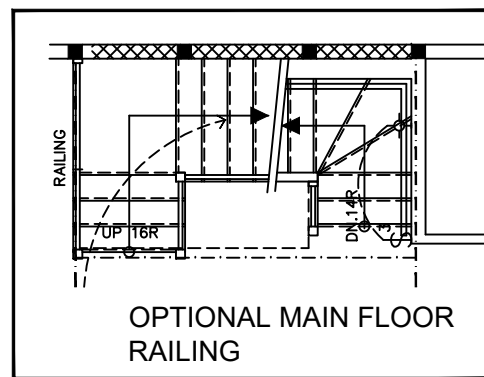
BASEMENT OPTIONS



OPTIONAL KITCHEN LAYOUT A

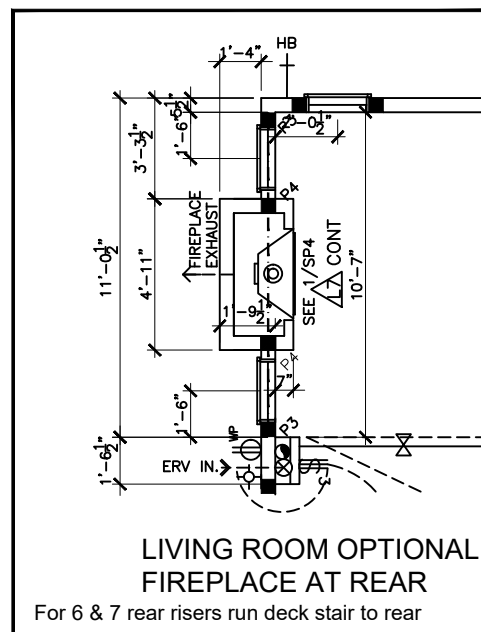


OPTIONAL KITCHEN LAYOUT C

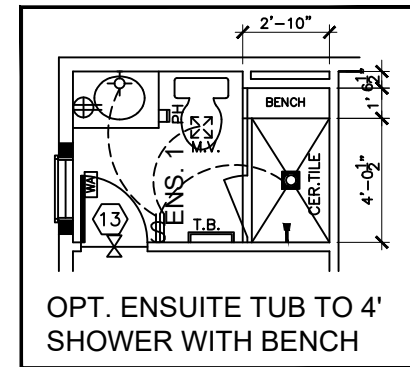


OPTIONAL MAIN FLOOR  
RAILING

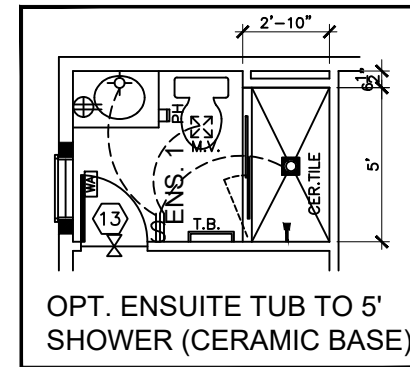
GROUND FLOOR  
OPTIONS



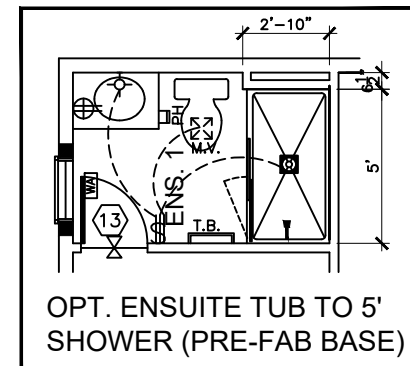
LIVING ROOM OPTIONAL  
FIREPLACE AT REAR  
For 6 & 7 rear risers run deck stair to rear



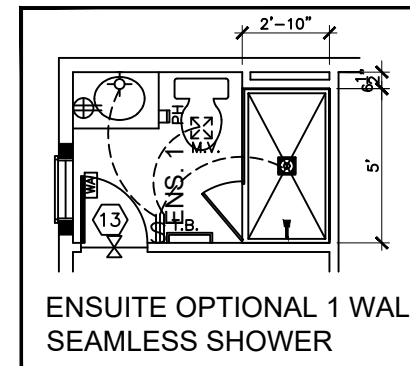
OPT. ENSUITE TUB TO 4'  
SHOWER WITH BENCH



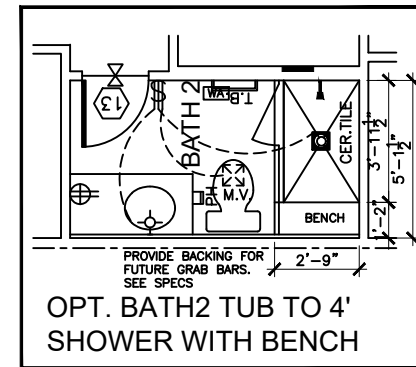
OPT. ENSUITE TUB TO 5'  
SHOWER (CERAMIC BASE)



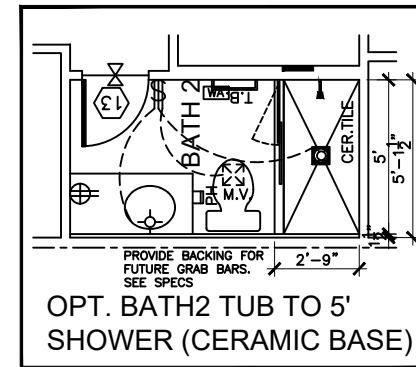
OPT. ENSUITE TUB TO 5'  
SHOWER (PRE-FAB BASE)



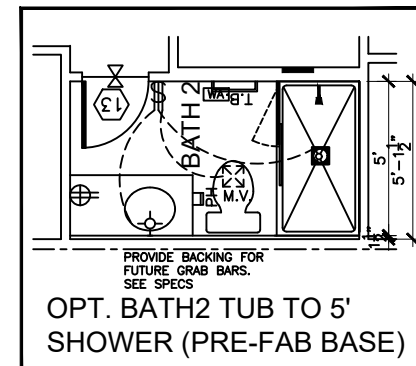
ENSUITE OPTIONAL 1 WALL  
SEAMLESS SHOWER



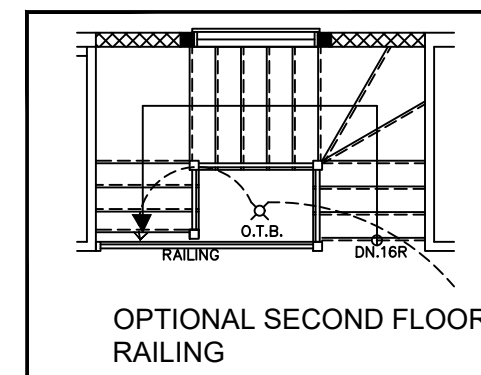
OPT. BATH2 TUB TO 4'  
SHOWER WITH BENCH



OPT. BATH2 TUB TO 5'  
SHOWER (CERAMIC BASE)



OPT. BATH2 TUB TO 5'  
SHOWER (PRE-FAB BASE)



OPTIONAL SECOND FLOOR  
RAILING

SECOND FLOOR  
OPTIONS

2	ISSUED FOR CONSTRUCTION	APR 28/22
1	STRUCTURAL LETTER	FEB 15/22
No	Revision	Date By



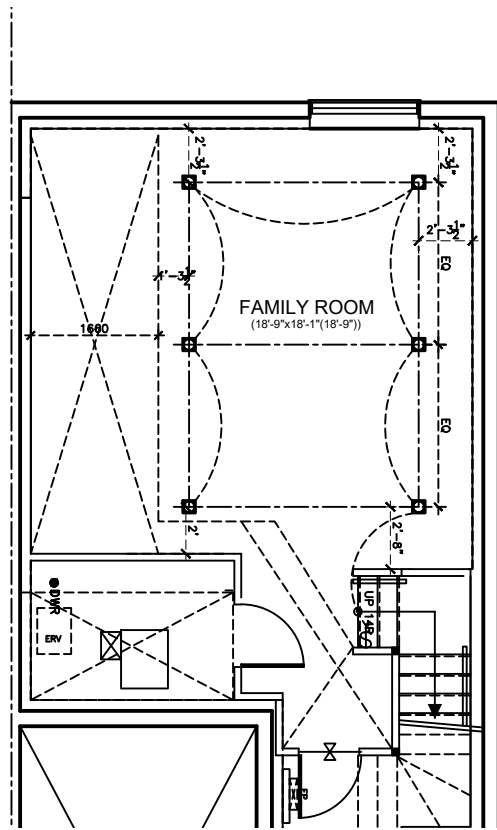
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SITE: VISTA STAGE 1  
BROOKLINE STAGE 1  
QUINN'S POINTE ST4

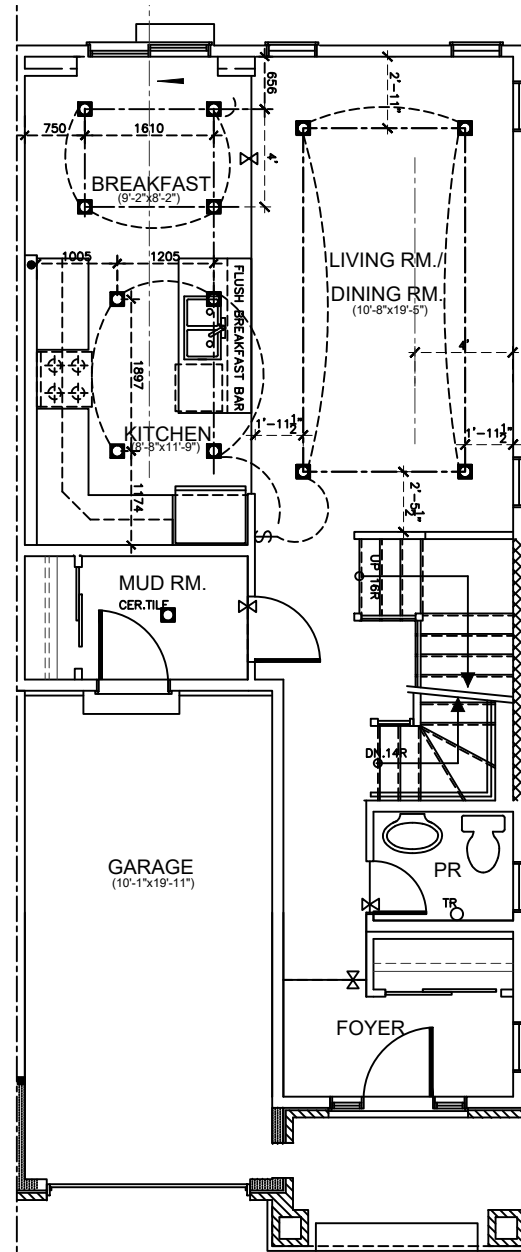
TITLE FLEX OPTIONS

FILENAME:  
ETH060-TAHOE 4-ALL-2022.DWG  
MODEL (EXECUTIVE TOWNHOMES)  
TAHOE 4 2022  
ELEV.- BA, CA, DA  
(2022 STANDARD DRAWING)

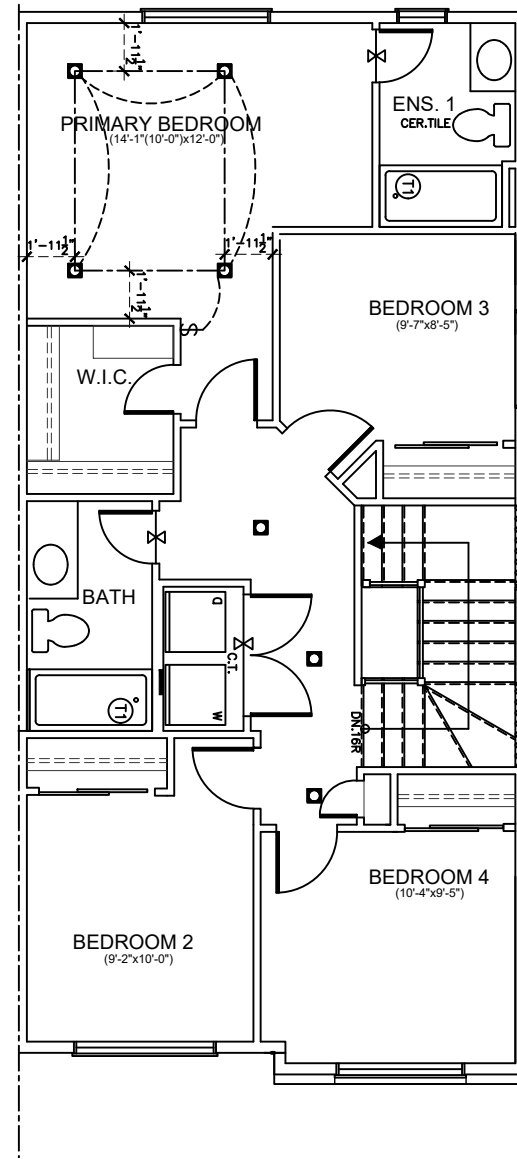
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BASEMENT FLOOR PLAN

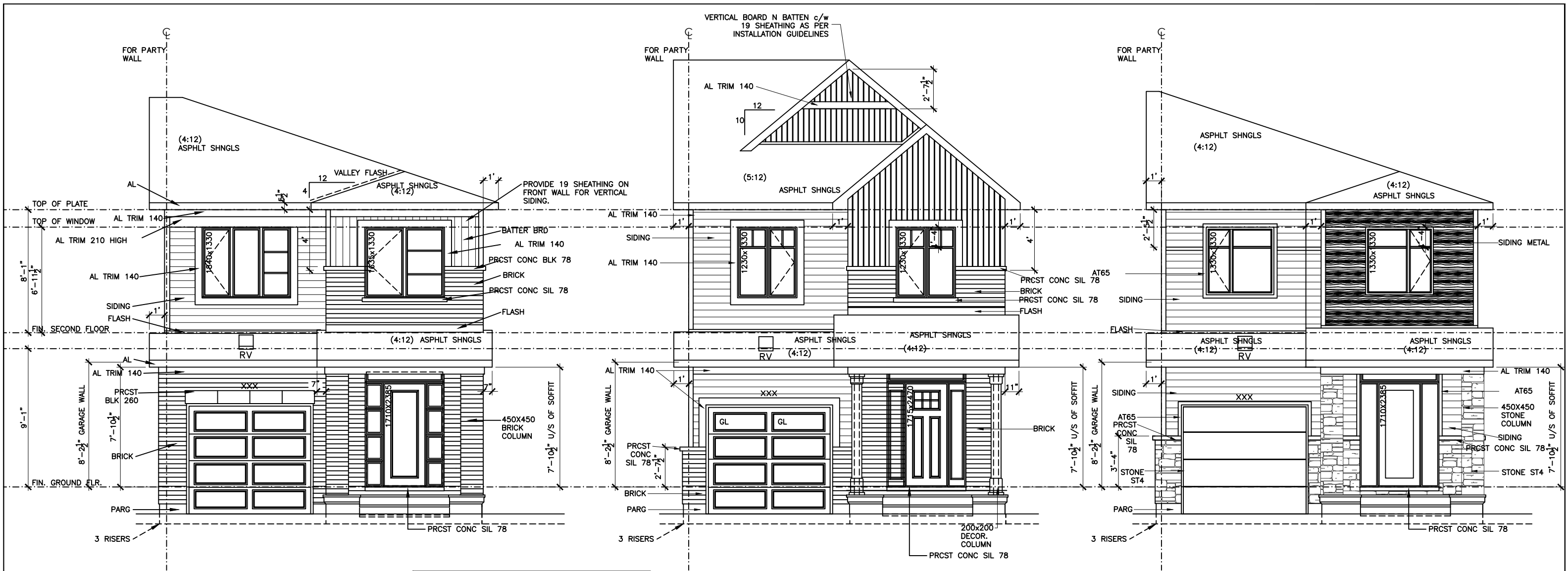


GROUND FLOOR PLAN.



SECOND FLOOR PLAN.

1		STRUCTURAL LETTER	FEB 15/22
No	Revision	Date	By
			
CONFIDENTIAL			
STRUCTURAL FRAMING LEGEND: SEE DWG A3 ELEVATION LEGEND: SEE DWG A4 FLOOR PLAN LEGEND: SEE DWG SP-1 DR/WIN LEGEND: SEE DWG SP-7* FOR ADDED INFO., ABBREV'S, SYMBOLS: SEE SPECS. SP-*			
<b>TITLE CEILING/POTLIGHT OPTIONS</b> <b>ELEV. 'A'</b>			
FILENAME: ETH060-TAHOE 4-ALL-2022.DWG			
MODEL (EXECUTIVE TOWNHOMES) <b>THE TAHOE 4 2021</b> ELEV.- BA, CA, DA (2022 STANDARD DRAWING)		Scale N.T.S. dwg # <b>C-1</b>	



FRONT ELEVATION  
EL. 'BA' - END  
PRAIRIE

FRONT ELEVATION  
EL. 'CA' - END  
ARTS & CRAFTS

FRONT ELEVATION  
EL. 'DA' - END  
MODERN

\*\* USE 19 SHEATHING BEHIND VERTICAL SIDING AS PER SP-2a \*\*

\*\* ALL FASCIA BOARD 140 \*\*



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SITE: VISTA STAGE 1  
BROOKLINE STAGE 1  
QUINN'S POINTE ST4

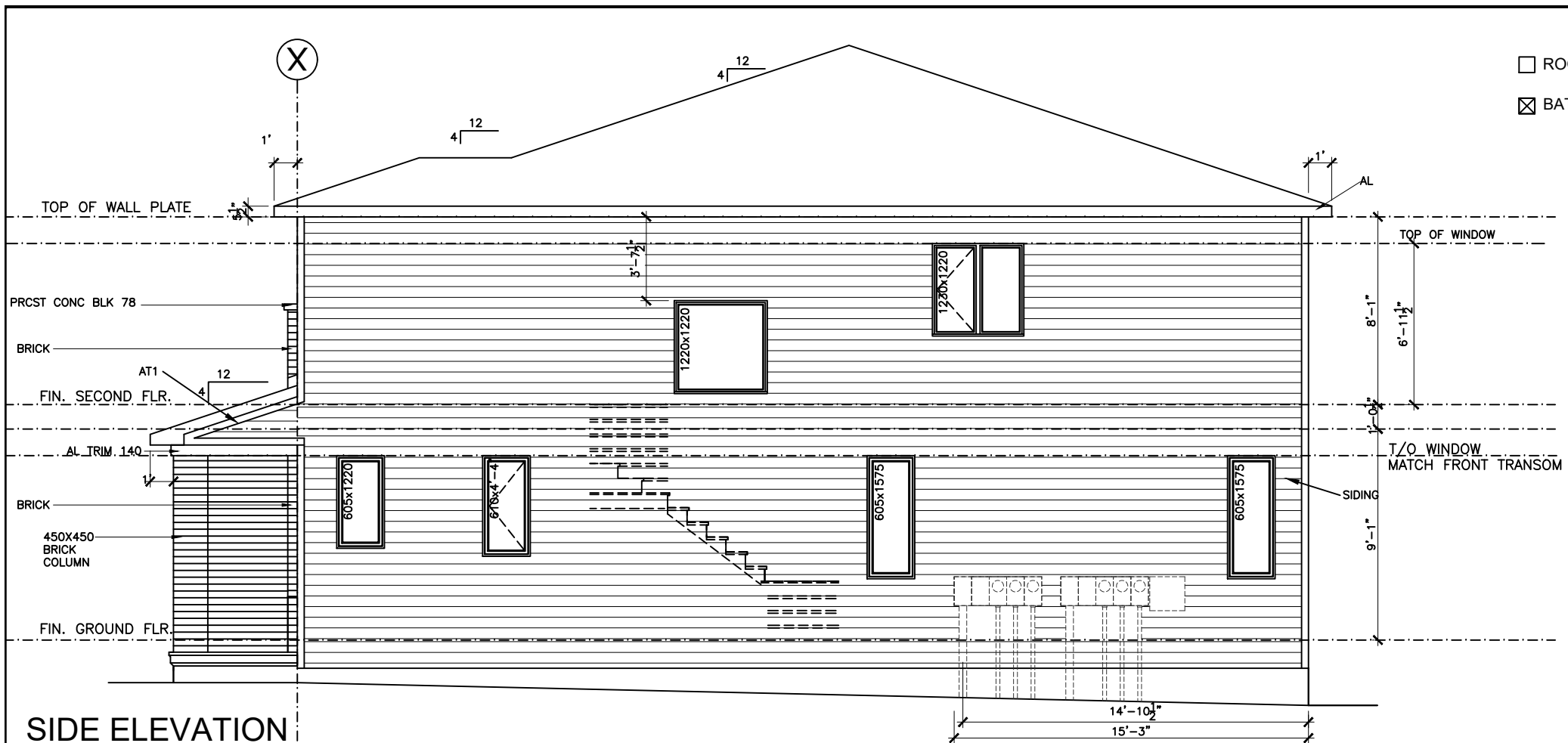
TITLE FRONT ELEVATION  
ELEV.-'BA','CA' & 'DA'

FILENAME:  
ETH060-TAHOE 4-ALL-2022.DWG

MODEL (EXECUTIVE TOWNHOMES)  
**TAHOE 4 2022**  
ELEV.- BA, CA, DA  
(2022 STANDARD DRAWING)

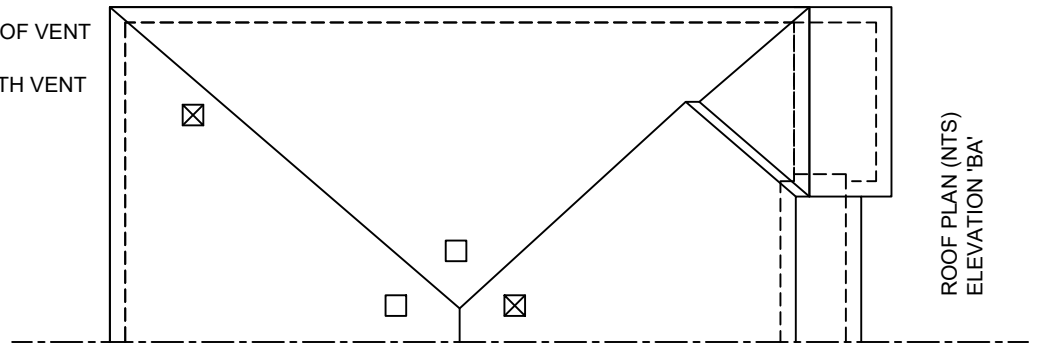
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**A-4a**

No	Revision	Date	By
2	ISSUED FOR CONSTRUCTION	APR 28/22	
1	STRUCTURAL LETTER	FEB 15/22	



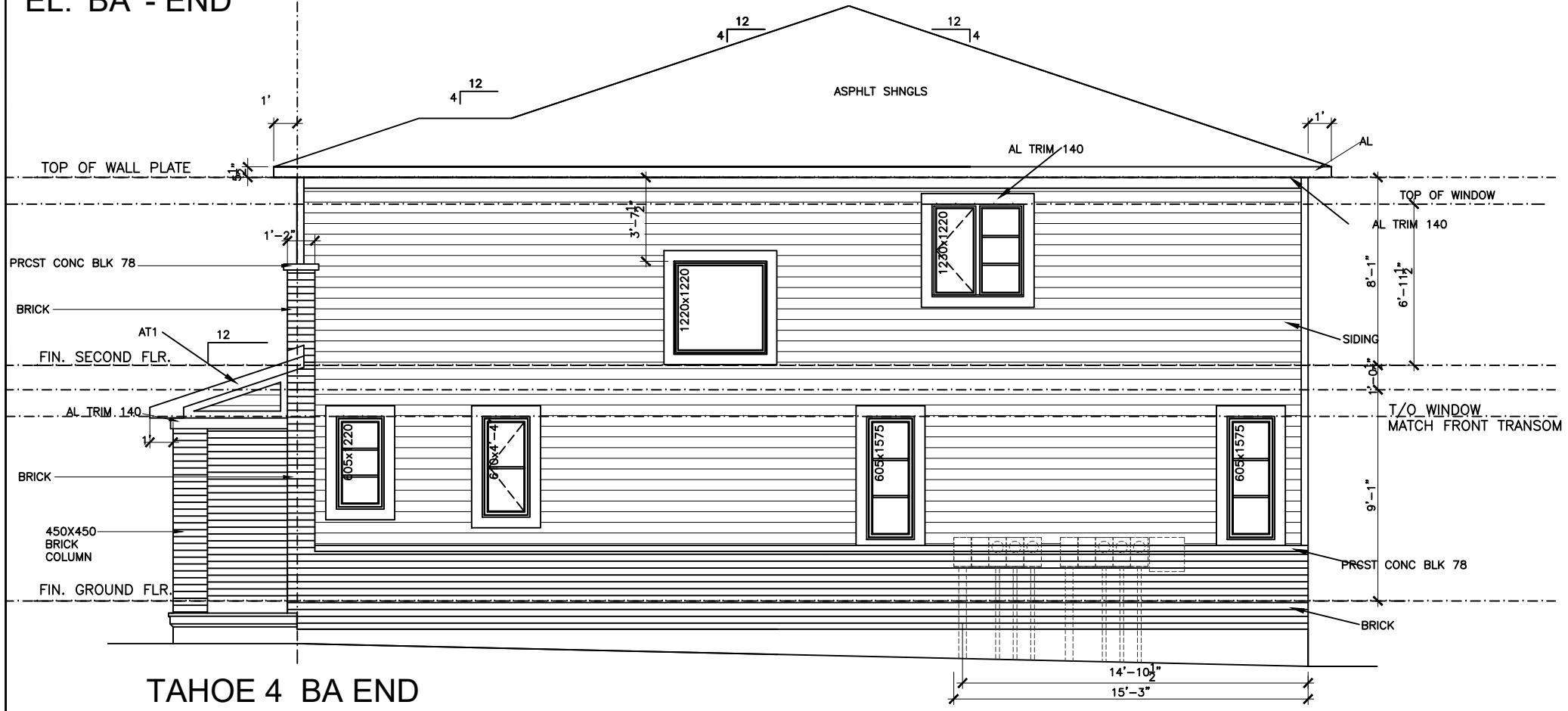
SIDE ELEVATION  
EL. 'BA' - END

- ROOF VENT
- BATH VENT



GENERAL ROOF NOTE:  
ALL VENTS TO BE LOCATED MIN 1800 FROM EAVES,  
RAKES AND GABLES  
NO VENTS SHOULD BE LOCATED LESS THAN 1800  
FROM ANY RIDGE, VALLEY OR HIP.

AREA OF EXPOSED BUILDING FACE	81.01 m <sup>2</sup>
x 7% (LIMITING DISTANCE @ 1.2m)	x0.07%
MAX. UNPROTECTED AREA ALLOWED	5.67 m <sup>2</sup>
UNPROTECTED AREA PROVIDED	5.50 m <sup>2</sup>



TAHOE 4 BA END  
EXTRA BRICK SIDE ELEVATION

No	Revision	Date	By
2	ISSUED FOR CONSTRUCTION	APR 28/22	
1	STRUCTURAL LETTER	FEB 15/22	

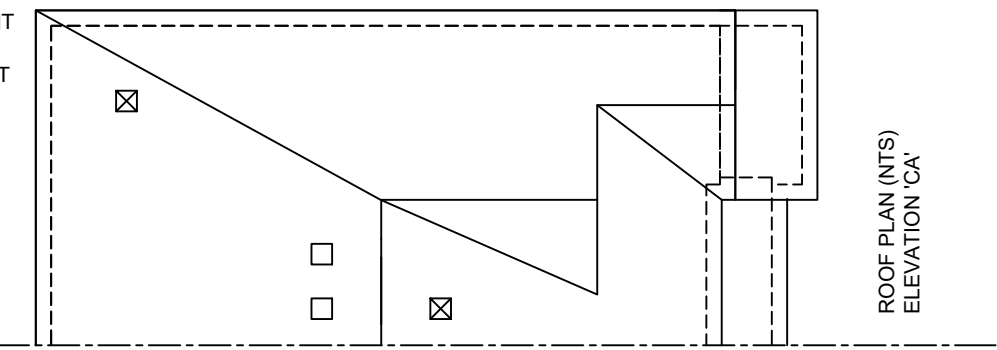
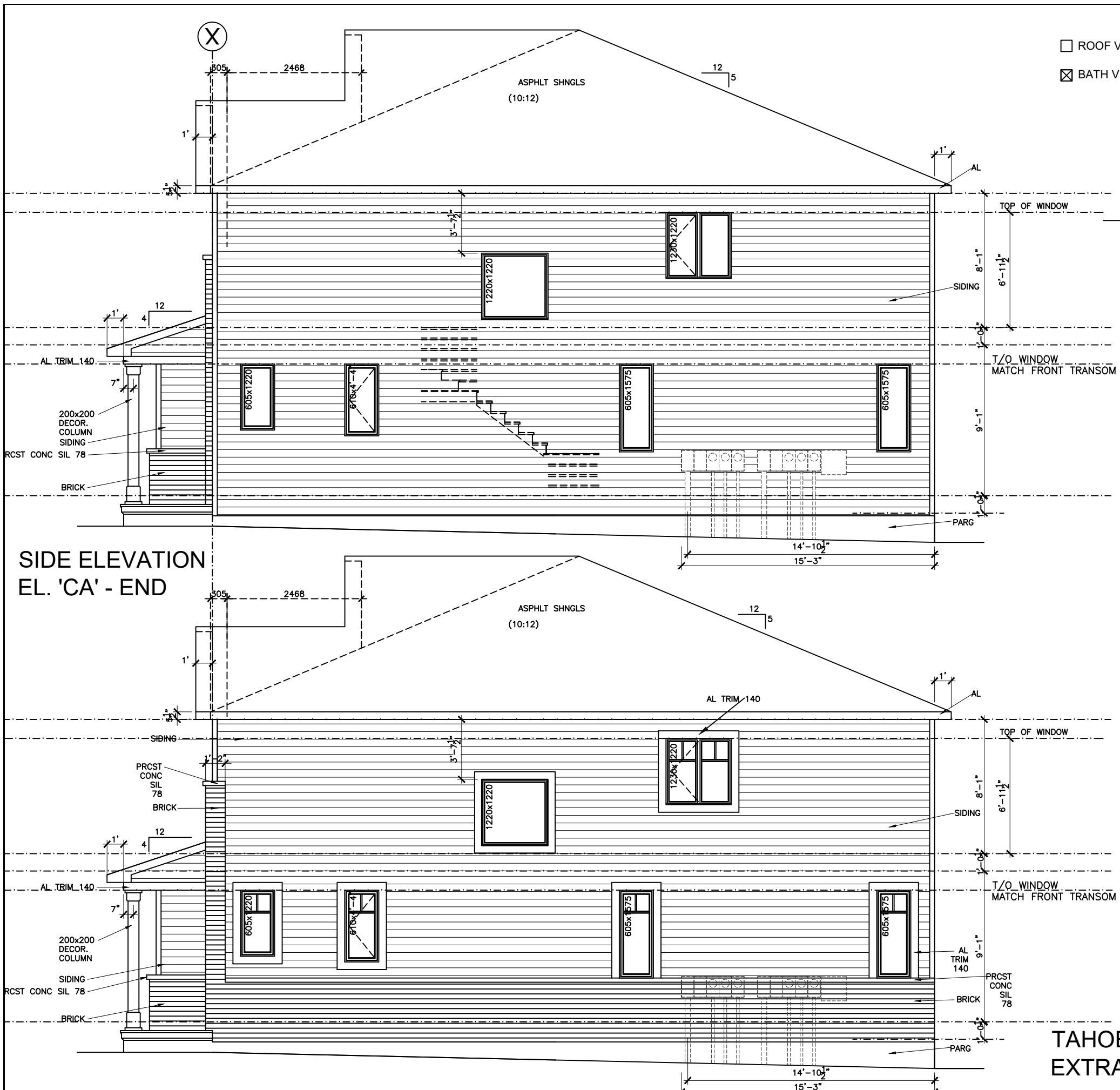


**CONFIDENTIAL**

SITE: VISTA STAGE 1  
BROOKLINE STAGE 1  
QUINN'S POINTE ST4

TITLE SIDE ELEVATION & ROOF PLAN  
ELEV.-'BA' / EXTRA BRICK

FILENAME: ETH060-TAHOE 4-ALL-2022.DWG	Scale 1:75
MODEL (EXECUTIVE TOWNHOMES)	dwg # A-5a
TAHOE 4 2022	
ELEV.- BA, CA, DA	
(2022 STANDARD DRAWING)	



**GENERAL ROOF NOTE:**  
 ALL VENTS TO BE LOCATED MIN 1800 FROM EAVES, RAKES AND GABLES  
 NO VENTS SHOULD BE LOCATED LESS THAN 1800 FROM ANY RIDGE, VALLEY OR HIP.

AREA OF EXPOSED BUILDING FACE	83.74 m <sup>2</sup>
x 7% (LIMITING DISTANCE @ 1.2m)	x0.07%
MAX. UNPROTECTED AREA ALLOWED	5.86 m <sup>2</sup>
UNPROTECTED AREA PROVIDED	5.50 m <sup>2</sup>

**SIDE ELEVATION  
 EL. 'CA' - END**

**TAHOE 4 CA END  
 EXTRA BRICK SIDE ELEVATION**

2 ISSUED FOR CONSTRUCTION		APR 28/22
1 STRUCTURAL LETTER		FEB 15/22
No	Revision	Date By

**minto Communities**

**CONFIDENTIAL**

SITE: VISTA STAGE 1  
 BROOKLINE STAGE 1  
 QUINN'S POINTE ST4

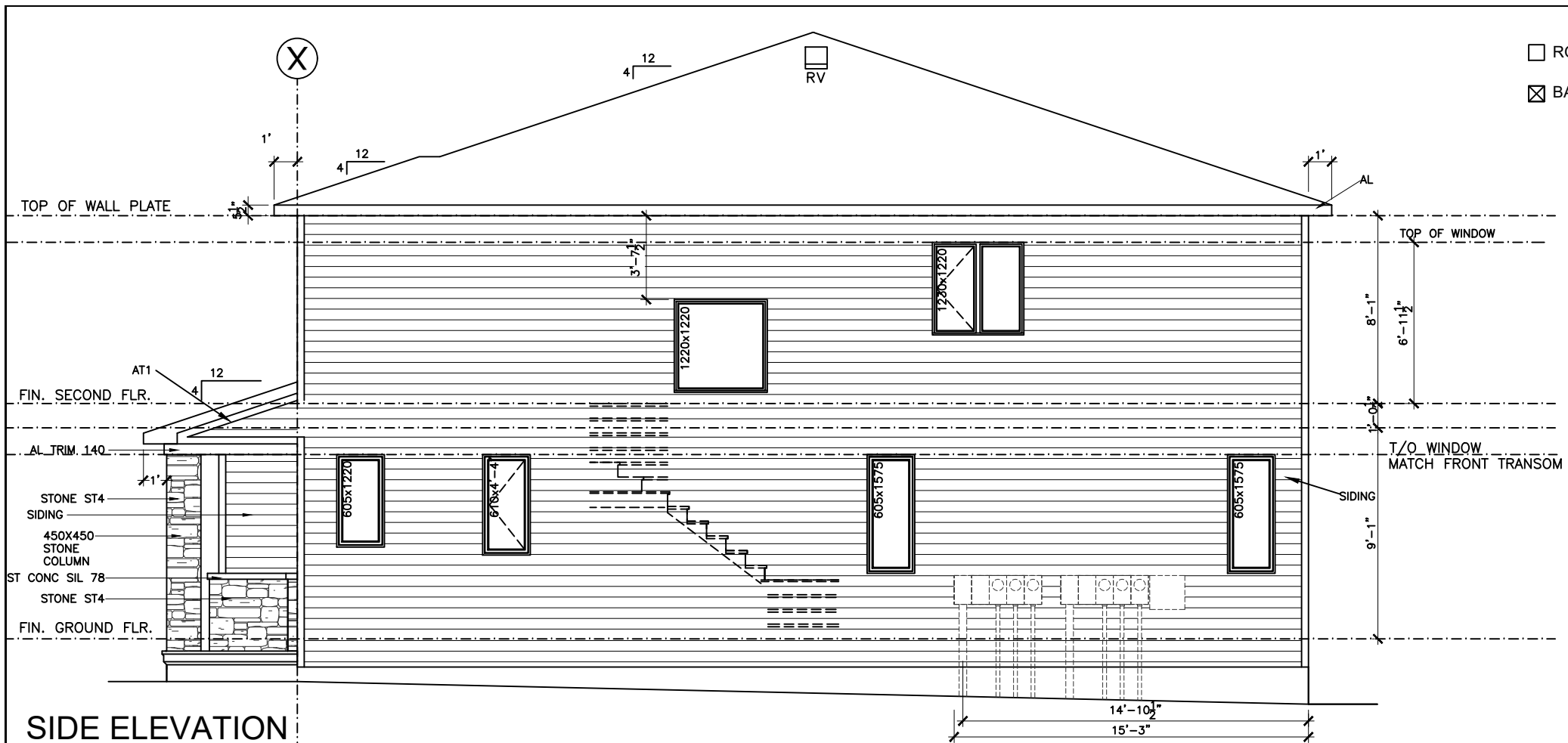
TITLE: SIDE ELEVATION & ROOF PLAN  
 ELEV.-'CA' / EXTRA BRICK

FILENAME: ETH060-TAHOE 4-ALL-2022.DWG

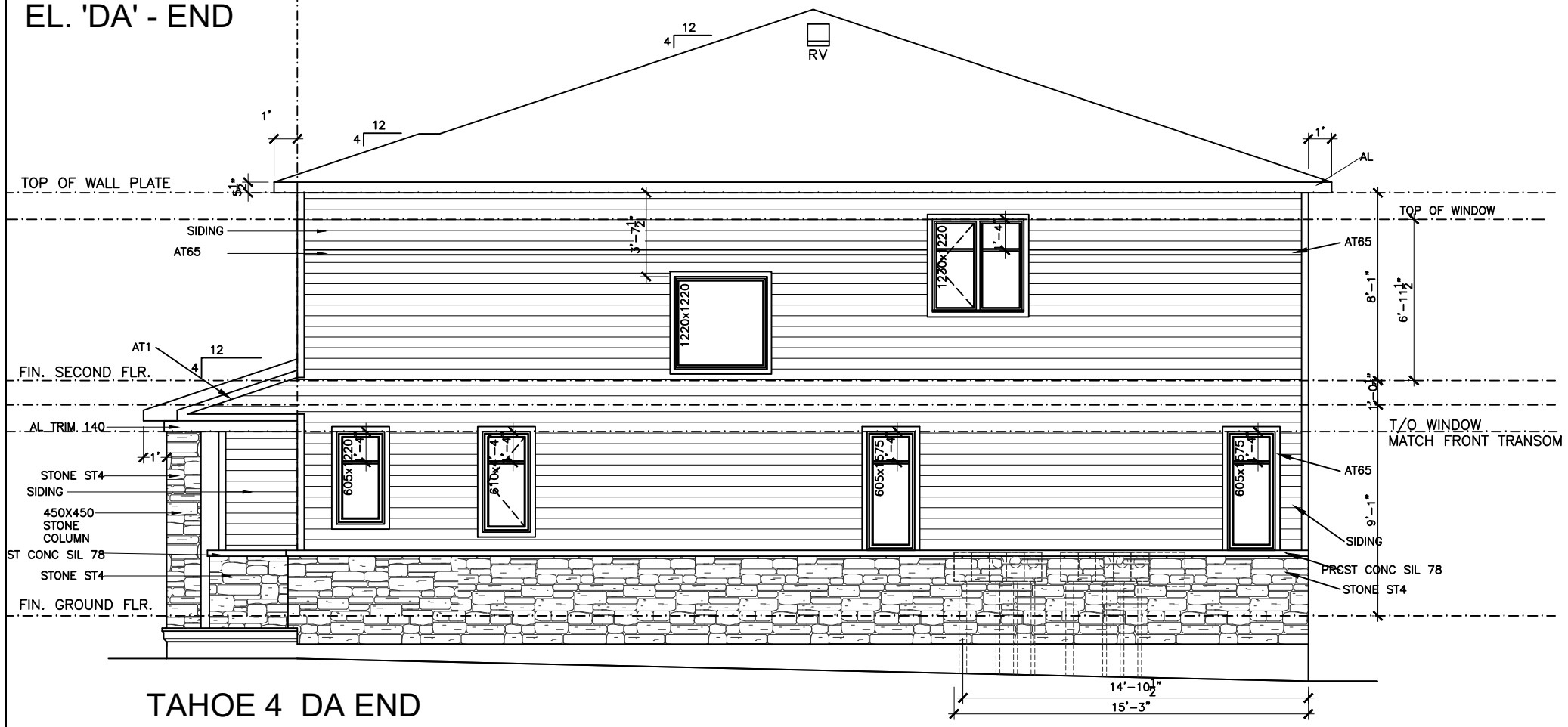
MODEL (EXECUTIVE TOWNHOMES)

TAHOE 4 **2022**  
 ELEV.- BA, CA, DA  
 (2022 STANDARD DRAWING)

Scale 1:75  
 dwg # A-5b

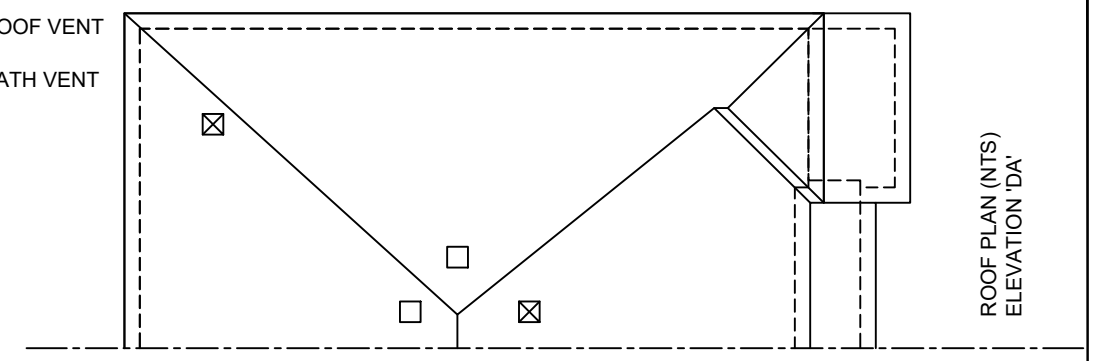


**SIDE ELEVATION  
EL. 'DA' - END**



**TAHOE 4 DA END  
EXTRA BRICK SIDE ELEVATION**

- ROOF VENT
- BATH VENT



ROOF PLAN (NTS)  
ELEVATION 'DA'

**GENERAL ROOF NOTE:**  
ALL VENTS TO BE LOCATED MIN 1800 FROM EAVES,  
RAKES AND GABLES  
NO VENTS SHOULD BE LOCATED LESS THAN 1800  
FROM ANY RIDGE, VALLEY OR HIP.

AREA OF EXPOSED BUILDING FACE	83.12 m <sup>2</sup>
x 7% (LIMITING DISTANCE @ 1.2m)	x0.07%
MAX. UNPROTECTED AREA ALLOWED	5.81 m <sup>2</sup>
UNPROTECTED AREA PROVIDED	5.50 m <sup>2</sup>



**CONFIDENTIAL**

SITE: VISTA STAGE 1  
BROOKLINE STAGE 1  
QUINN'S POINTE ST4

TITLE SIDE ELEVATION & ROOF PLAN  
ELEV.-'DA' / EXTRA BRICK

FILENAME:  
ETH060-TAHOE 4-ALL-2022.DWG

MODEL (EXECUTIVE TOWNHOMES)

TAHOE 4 **2022**  
ELEV.- BA, CA, DA  
(2022 STANDARD DRAWING)

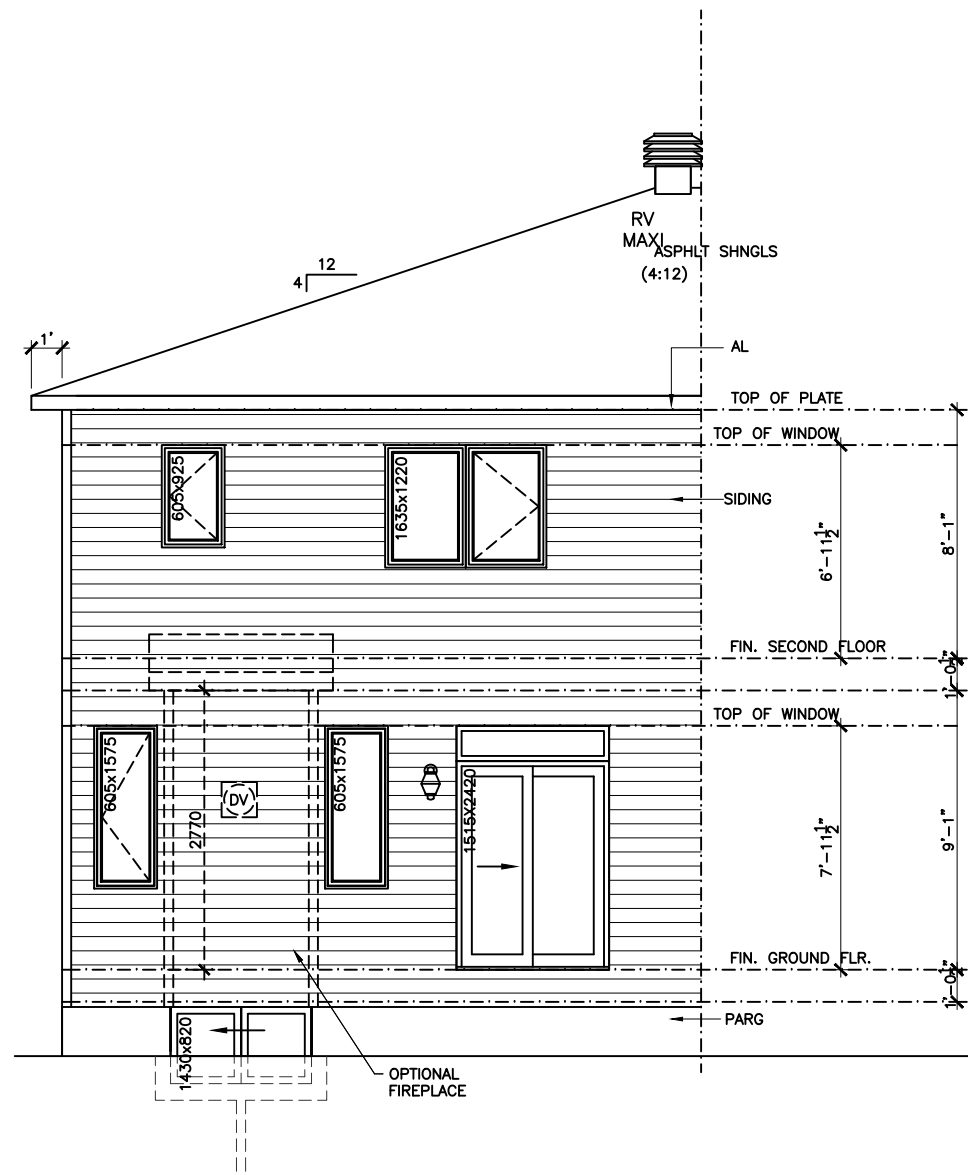
Scale 1:75

dwg #

A-5c

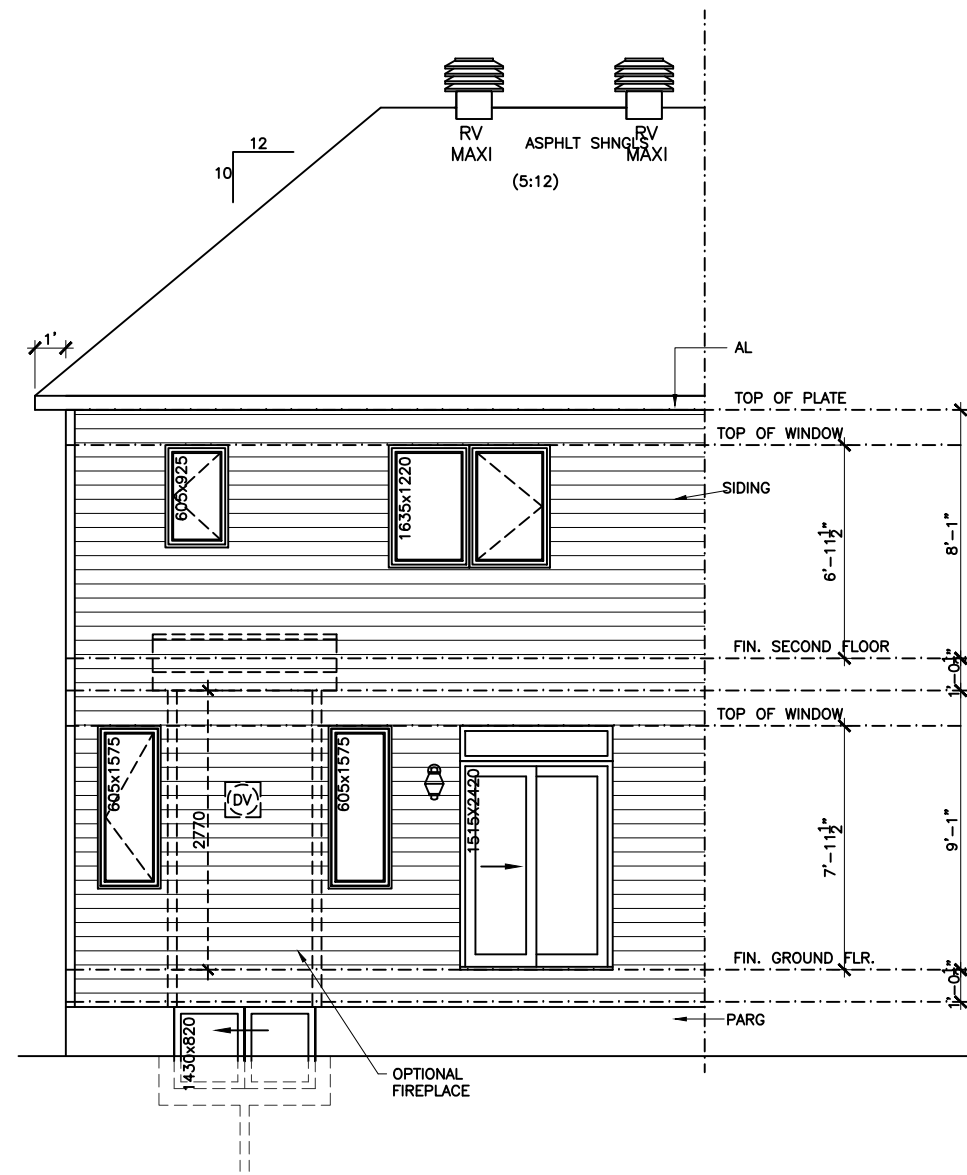
No	Revision	Date	By
2	ISSUED FOR CONSTRUCTION	APR 28/22	
1	STRUCTURAL LETTER	FEB 15/22	





REAR ELEVATION  
EL. 'BA', 'DA' - END

\*\* ALL FASCIA BOARD 140 \*\*



REAR ELEVATION  
EL. 'CA' - END

No	Revision	Date	By
2	ISSUED FOR CONSTRUCTION	APR 28/22	
1	STRUCTURAL LETTER	FEB 15/22	

**minto**  
Communities

**CONFIDENTIAL**

SITE: VISTA STAGE 1  
BROOKLINE STAGE 1  
QUINN'S POINTE ST4

TITLE REAR ELEVATIONS  
ELEV.-'BA','CA' & 'DA'

FILENAME:  
ETH060-TAHOE 4-ALL-2022.DWG

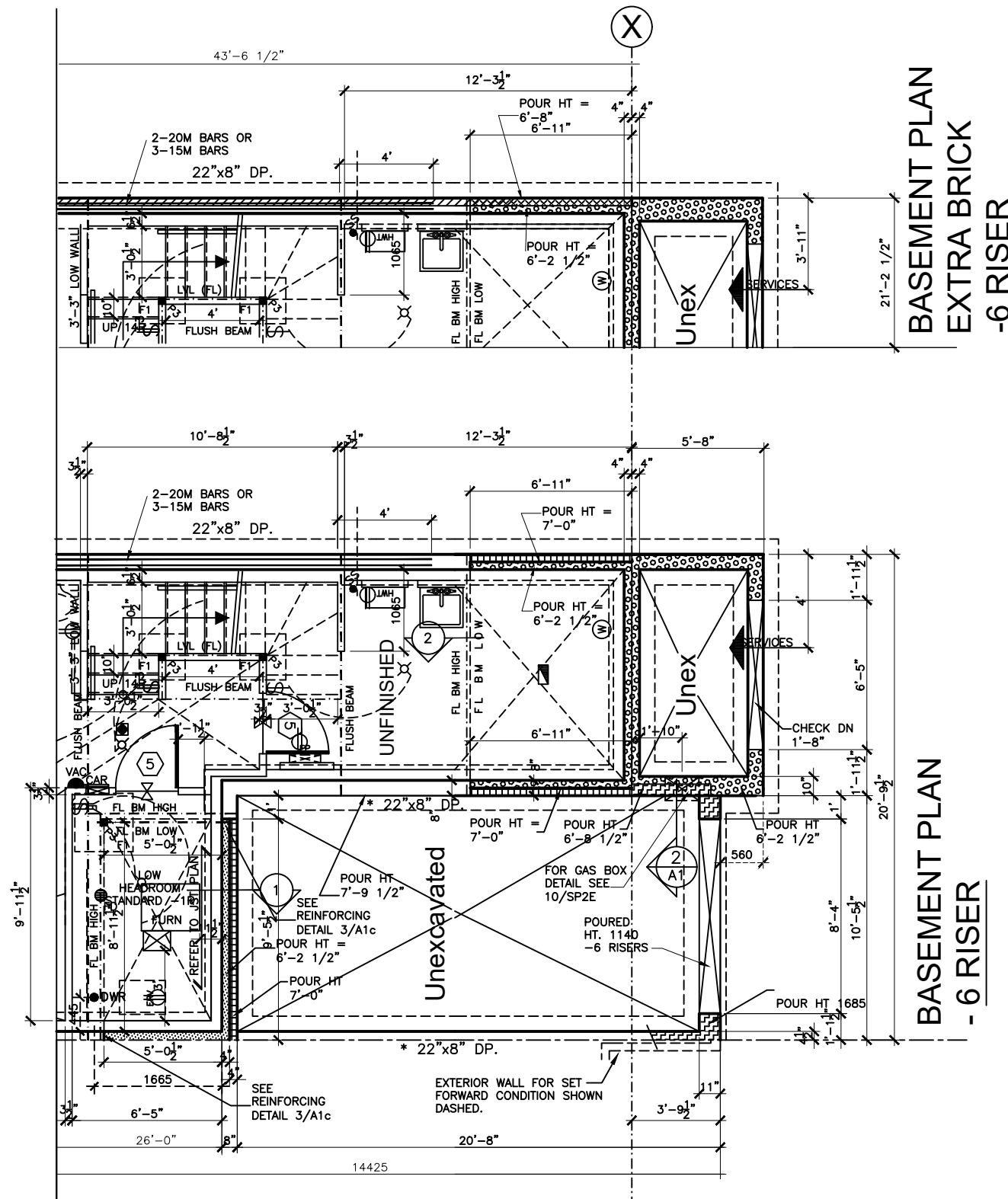
MODEL (EXECUTIVE TOWNHOMES)  
TAHOE 4 **2022**  
ELEV.- BA, CA, DA  
(2022 STANDARD DRAWING)

Scale 1:75  
dwg #  
**A-6a**



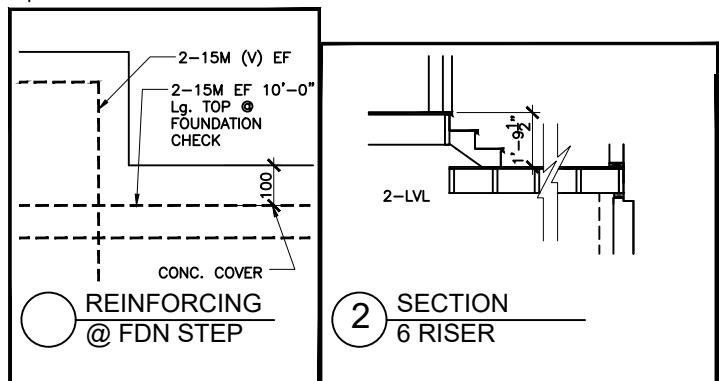
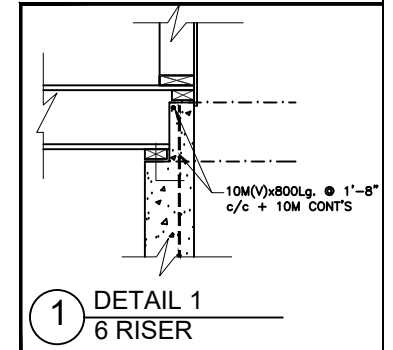






**BASEMENT PLAN  
EXTRA BRICK  
-6 RISER**

**BASEMENT PLAN  
- 6 RISER**



**CONFIDENTIAL**

SITE: VISTA STAGE 1  
BROOKLINE STAGE 1  
QUINN'S POINTE ST4

TITLE PARTIAL FOUNDATION PLANS  
6 RISER

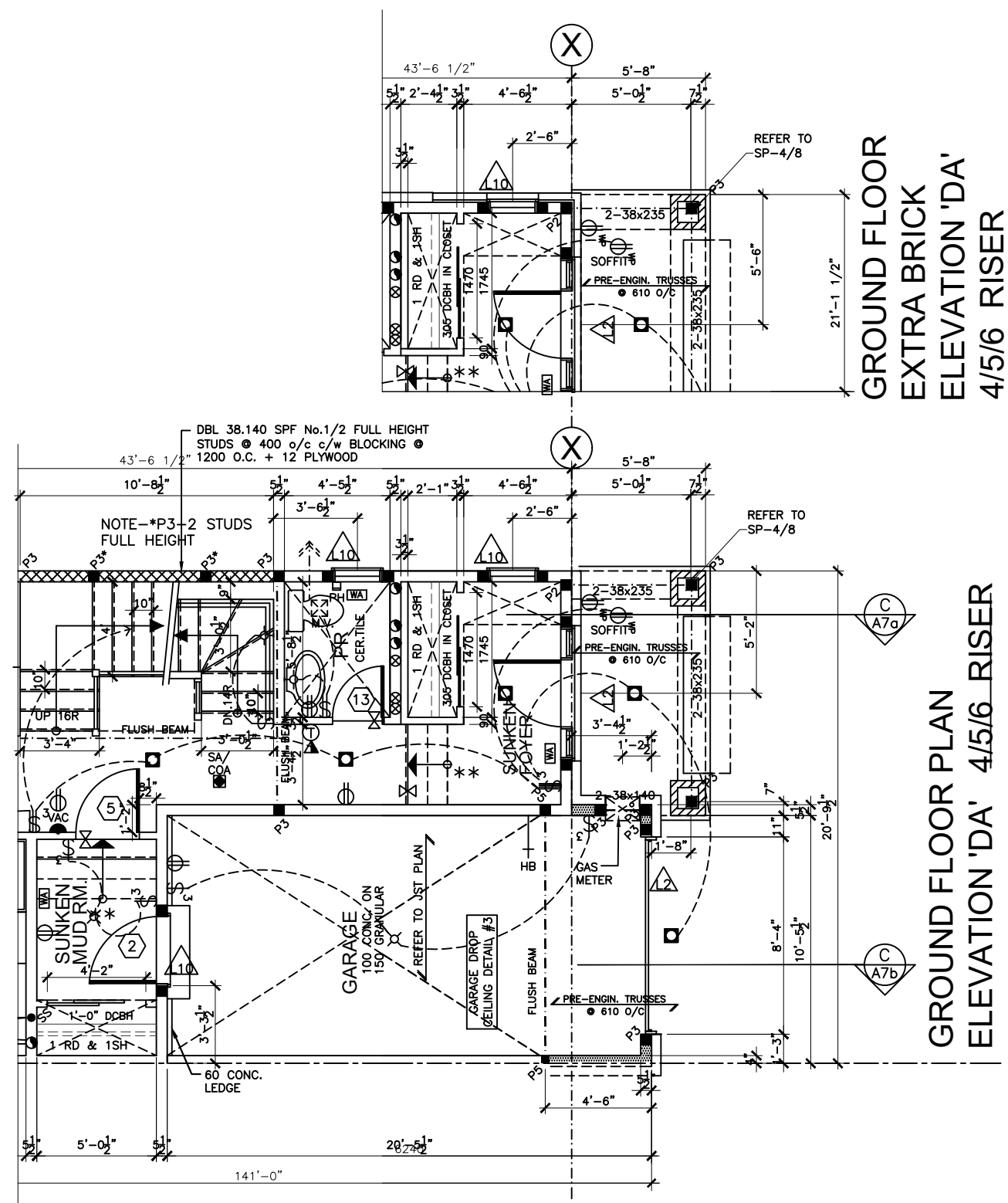
FILENAME: ETH060-TAHOE 4-ALL-2022.DWG

MODEL (EXECUTIVE TOWNHOMES)  
**TAHOE 4 2022**  
ELEV.- BA, CA, DA  
(2022 STANDARD DRAWING)

Scale 1:75  
dwg # **A-1c**

No	Revision	Date	By
3	FOUNDATION REINFORCING ADDED	MAY 18/22	MC
2	ISSUED FOR CONSTRUCTION	APR 28/22	
1	STRUCTURAL LETTER	FEB 15/22	





GROUND FLOOR  
EXTRA BRICK  
ELEVATION 'DA'  
4/5/6 RISER

GROUND FLOOR PLAN  
ELEVATION 'DA' 4/5/6 RISER



**CONFIDENTIAL**

SITE: VISTA STAGE 1  
BROOKLINE STAGE 1  
QUINN'S POINTE ST4

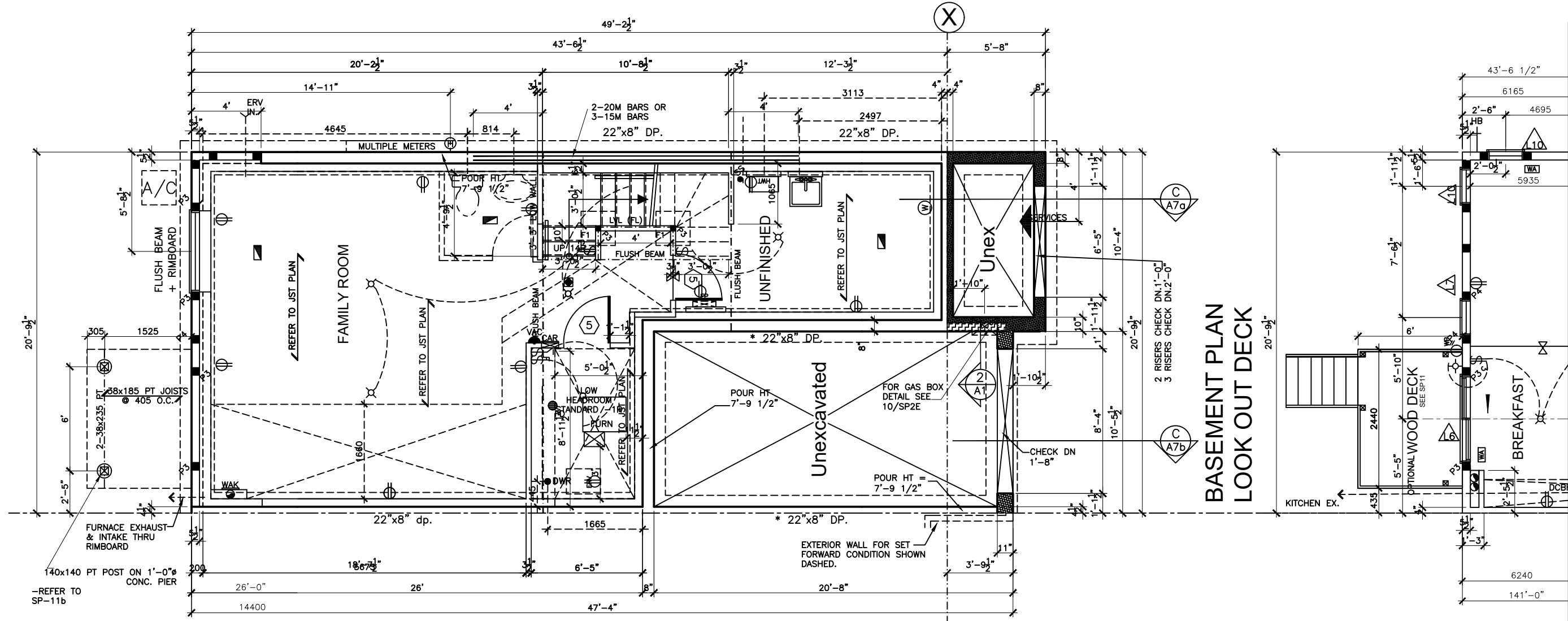
TITLE PARTIAL GROUND FLOOR PLANS  
4/5/6 RISERS

FILENAME:  
ETH060-TAHOE 4-ALL-2022.DWG

MODEL (EXECUTIVE TOWNHOMES) Scale 1:75  
TAHOE 4 **2022**  
ELEV.- BA, CA, DA  
(2022 STANDARD DRAWING)

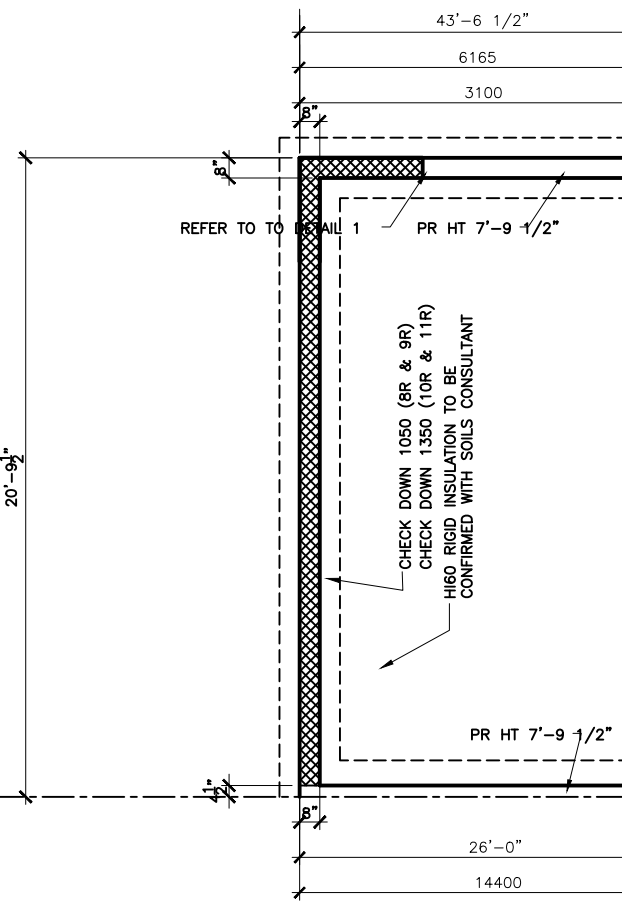
No	Revision	Date	By
2	ISSUED FOR CONSTRUCTION	APR 28/22	
1	STRUCTURAL LETTER	FEB 15/22	

dwg #  
**A-1e**

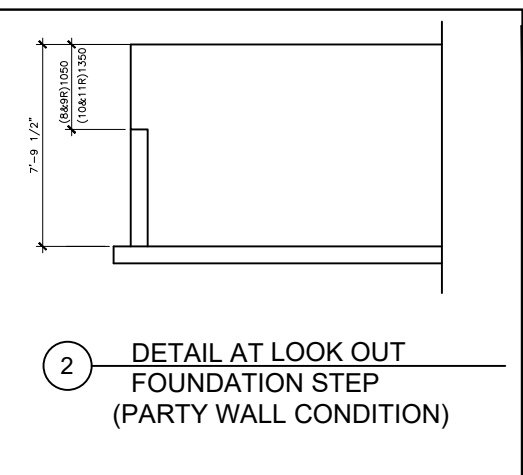
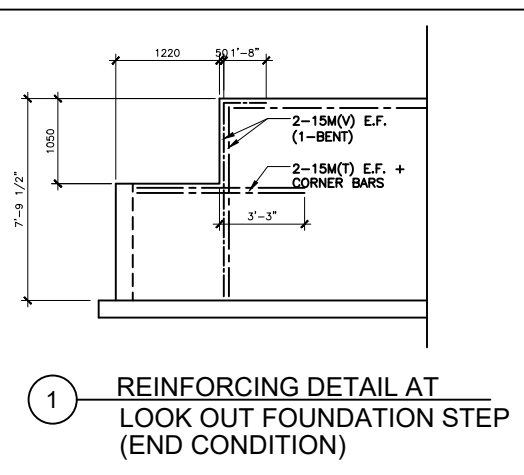


**BASEMENT PLAN  
LOOK OUT DECK**

**PARTIAL GROUND FLOOR PLAN  
LOOKOUT DECK**



**PARTIAL BASEMENT PLAN  
LOOKOUT DECK**



NOTES:  
ALL WOOD POST LOCATIONS TO BE BLOCKED SOLID THRU FLOOR STRUCT. ON TO A SIMILAR POST BELOW OR ON TO A STEEL/WOOD BEAM OR ON TO THE CONC. FDN WALL

\* INDICATES FOOTING WIDTH ALONG SHARED WALLS ASSUMING ADJACENT UNIT IS "MIRROR IMAGE"

No	Revision	Date	By
3	FOUNDATION REINFORCING ADDED	MAY 18/22	MC
2	ISSUED FOR CONSTRUCTION	APR 28/22	
1	STRUCTURAL LETTER	FEB 15/22	

**CONFIDENTIAL**

SITE: VISTA STAGE 1  
BROOKLINE STAGE 1  
QUINN'S POINTE ST4

TITLE: PARTIAL PLANS  
LOOK OUT DECK

FILENAME: ETH060-TAHOE 4-ALL-2022.DWG

MODEL (EXECUTIVE TOWNHOMES)  
**TAHOE 4 2022**  
ELEV.- BA, CA, DA  
(2022 STANDARD DRAWING)

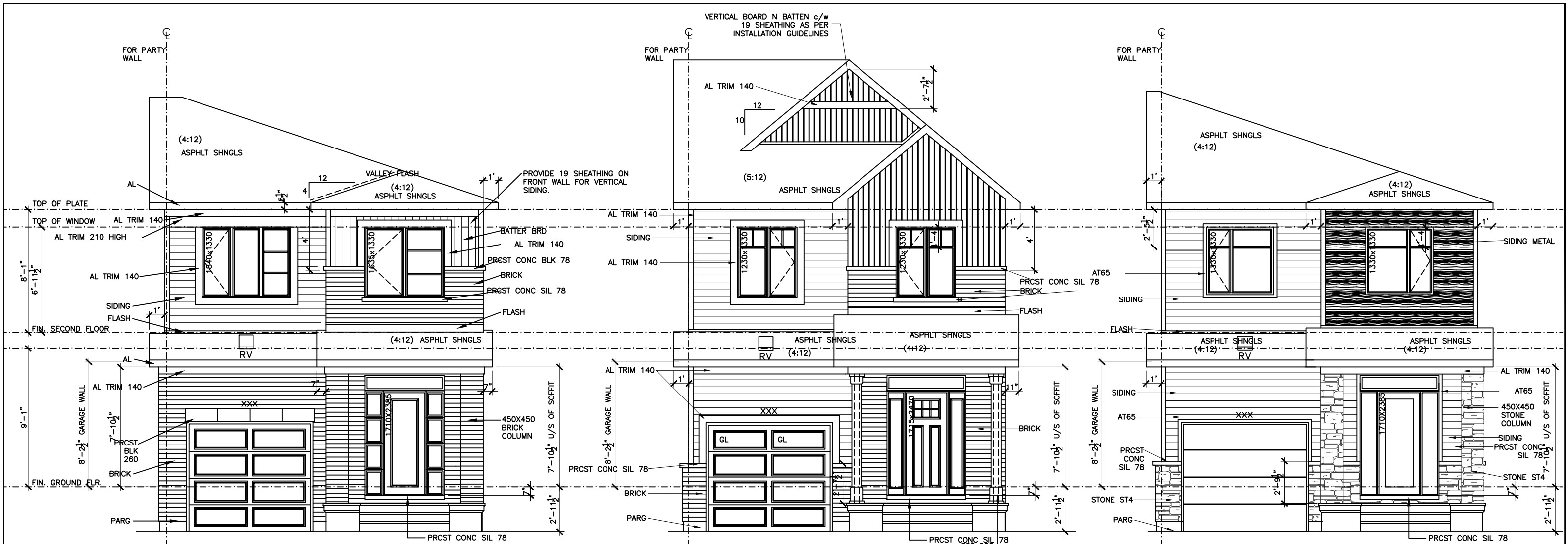
Scale 1:75  
dwg # A-1f











**FRONT ELEVATION  
EL. 'BA' - END  
PRAIRIE  
- 4 RISER (3 EXT. & 1 INT. RISERS)**

**FRONT ELEVATION  
EL. 'CA' - END  
ARTS & CRAFTS  
- 4 RISER (3 EXT. & 1 INT. RISERS)**

**FRONT ELEVATION  
EL. 'DA' - END  
MODERN  
- 4 RISER (3 EXT. & 1 INT. RISERS)**

\*\* USE 19 SHEATHING BEHIND VERTICAL SIDING AS PER SP-2a \*\*

\*\* ALL FASCIA BOARD 140 \*\*



**CONFIDENTIAL**

SITE: VISTA STAGE 1  
BROOKLINE STAGE 1  
QUINN'S POINTE ST4

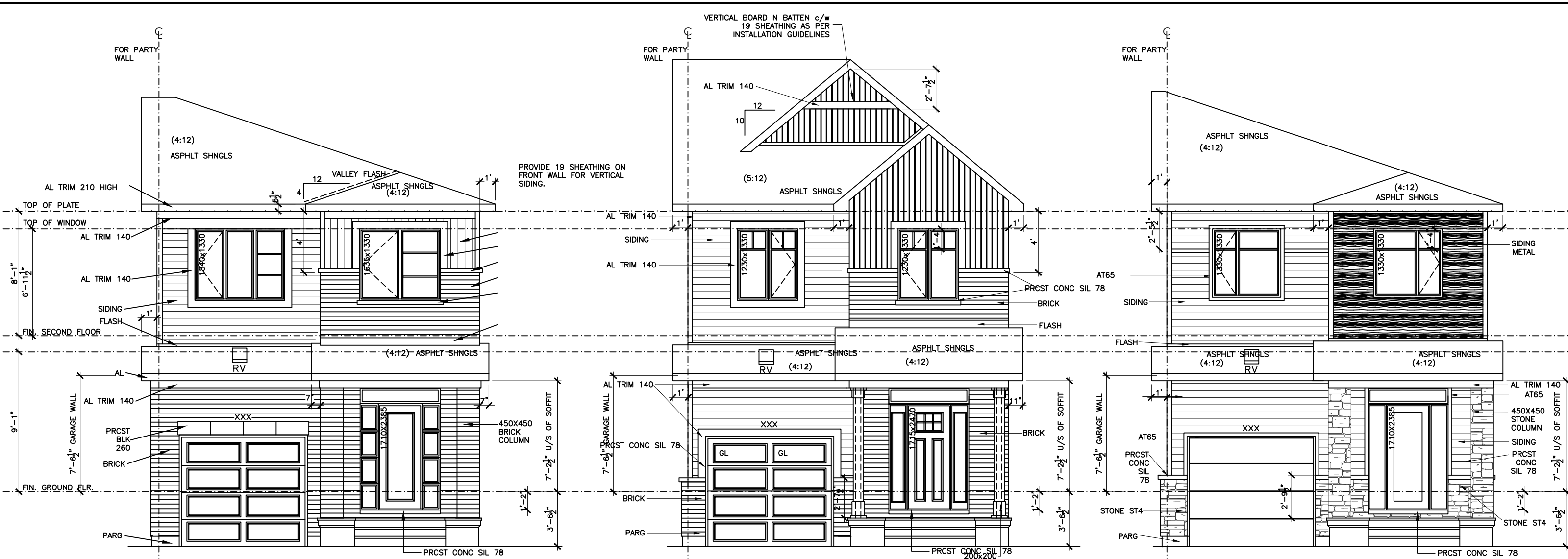
TITLE FRONT ELEVATION  
ELEV.-'BA','CA' & 'DA' (4 RISER)

FILENAME:  
ETH060-TAHOE 4-ALL-2022.DWG

MODEL (EXECUTIVE TOWNHOMES)  
**TAHOE 4 2022**  
ELEV.- BA, CA, DA  
(2022 STANDARD DRAWING)

Scale 1:75  
dwg #  
**A-4b**

No	Revision	Date	By
2	ISSUED FOR CONSTRUCTION	APR 28/22	
1	STRUCTURAL LETTER	FEB 15/22	



**FRONT ELEVATION  
EL. 'BA' - END  
PRAIRIE  
- 5 RISER (3 EXT. & 2 INT. RISERS)**

\*\* USE 19 SHEATHING BEHIND VERTICAL SIDING AS PER SP-2a \*\*

**FRONT ELEVATION  
EL. 'CA' - END  
ARTS & CRAFTS  
- 5 RISER (3 EXT. & 2 INT. RISERS)**

**FRONT ELEVATION  
EL. 'DA' - END  
MODERN  
- 5 RISER (3 EXT. & 2 INT. RISERS)**

\*\* ALL FASCIA BOARD 140 \*\*



**CONFIDENTIAL**

SITE: VISTA STAGE 1  
BROOKLINE STAGE 1  
QUINN'S POINTE ST4

TITLE FRONT ELEVATION  
ELEV.-'BA','CA' & 'DA' (5 RISER)

FILENAME:  
ETH060-TAHOE 4-ALL-2022.DWG

MODEL (EXECUTIVE TOWNHOMES)

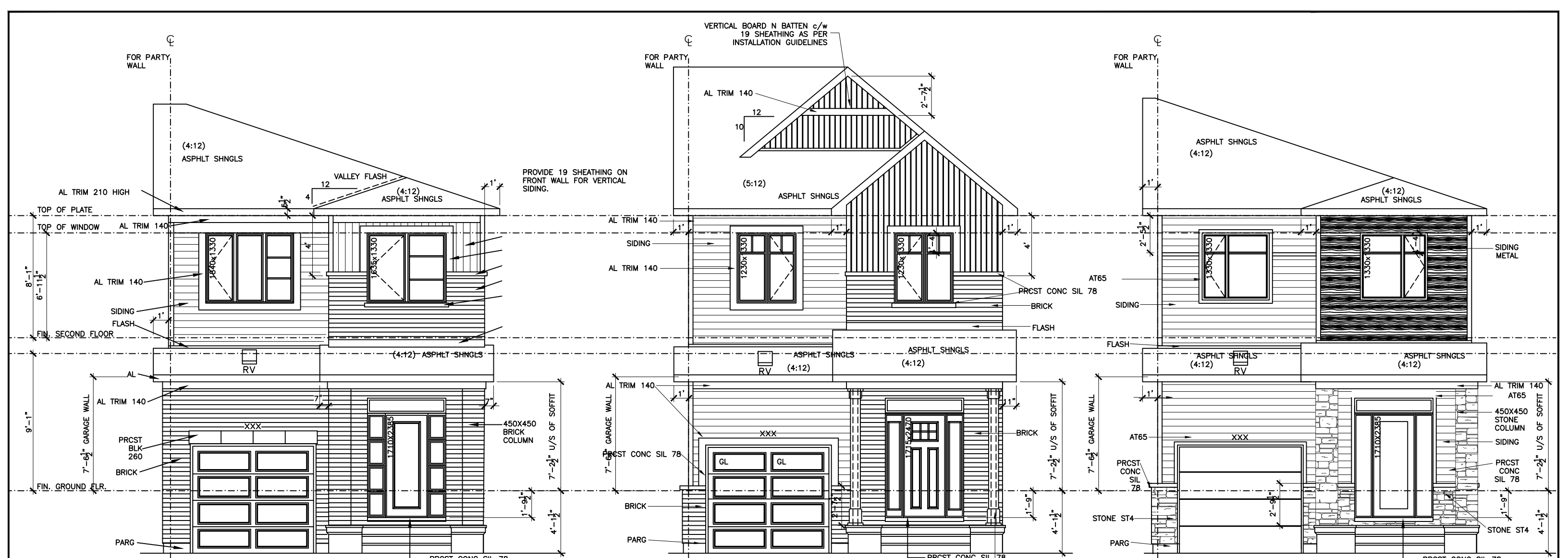
TAHOE 4 **2022**  
ELEV.- BA, CA, DA  
(2022 STANDARD DRAWING)

Scale 1:75

dwg #

**A-4c**

No	Revision	Date	By
2	ISSUED FOR CONSTRUCTION	APR 28/22	
1	STRUCTURAL LETTER	FEB 15/22	



**FRONT ELEVATION  
EL. 'BA' - END  
PRAIRIE  
- 6 RISER (3 EXT. & 3 INT. RISERS)**

**FRONT ELEVATION  
EL. 'CA' - END  
ARTS & CRAFTS  
- 6 RISER (3 EXT. & 3 INT. RISERS)**

**FRONT ELEVATION  
EL. 'DA' - END  
MODERN  
- 6 RISER (3 EXT. & 3 INT. RISERS)**

**\*\* USE 19 SHEATHING BEHIND VERTICAL SIDING AS PER SP-2a \*\***

**\*\* ALL FASCIA BOARD 140 \*\***



**CONFIDENTIAL**

SITE: VISTA STAGE 1  
BROOKLINE STAGE 1  
QUINN'S POINTE ST4

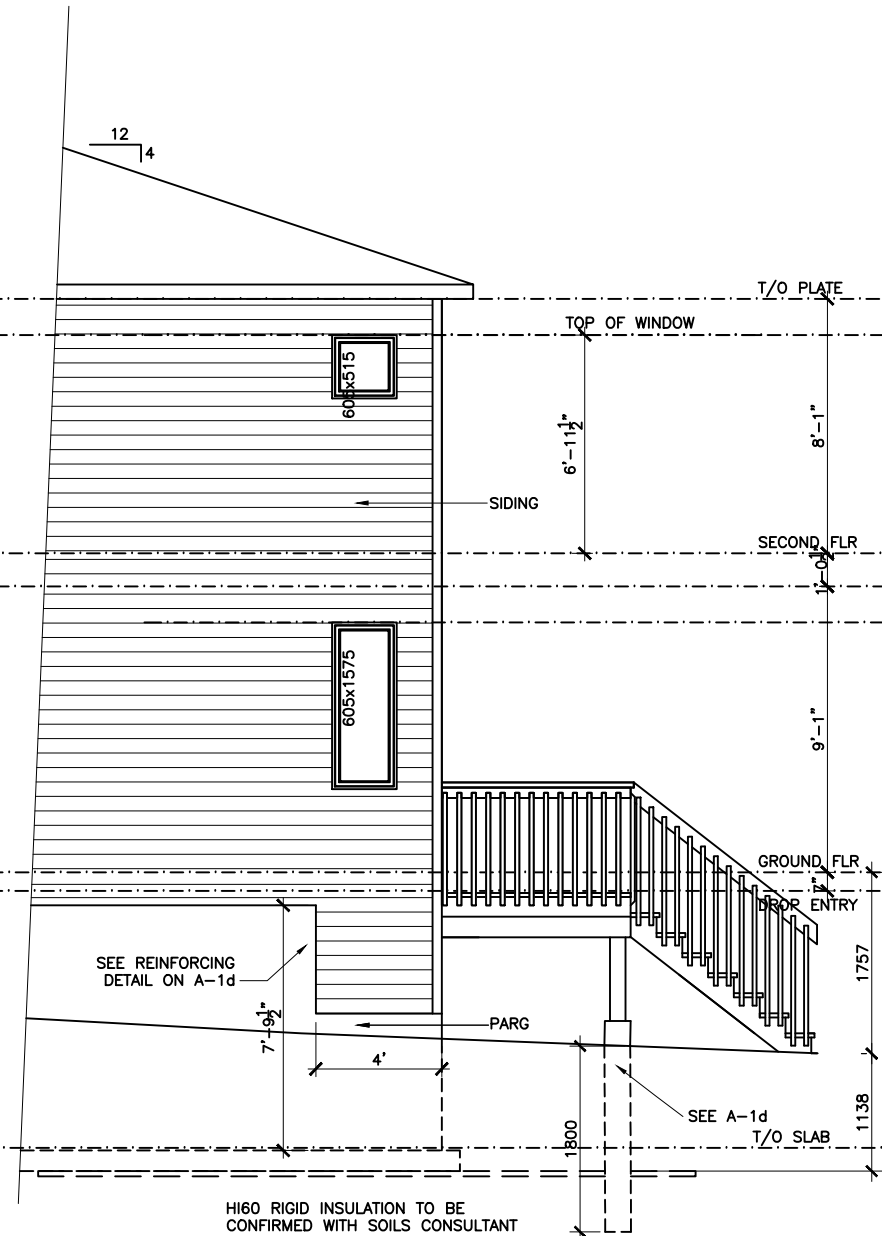
TITLE FRONT ELEVATION  
ELEV.-'BA','CA' & 'DA' (6 RISER)

FILENAME:  
ETH060-TAHOE 4-ALL-2022.DWG

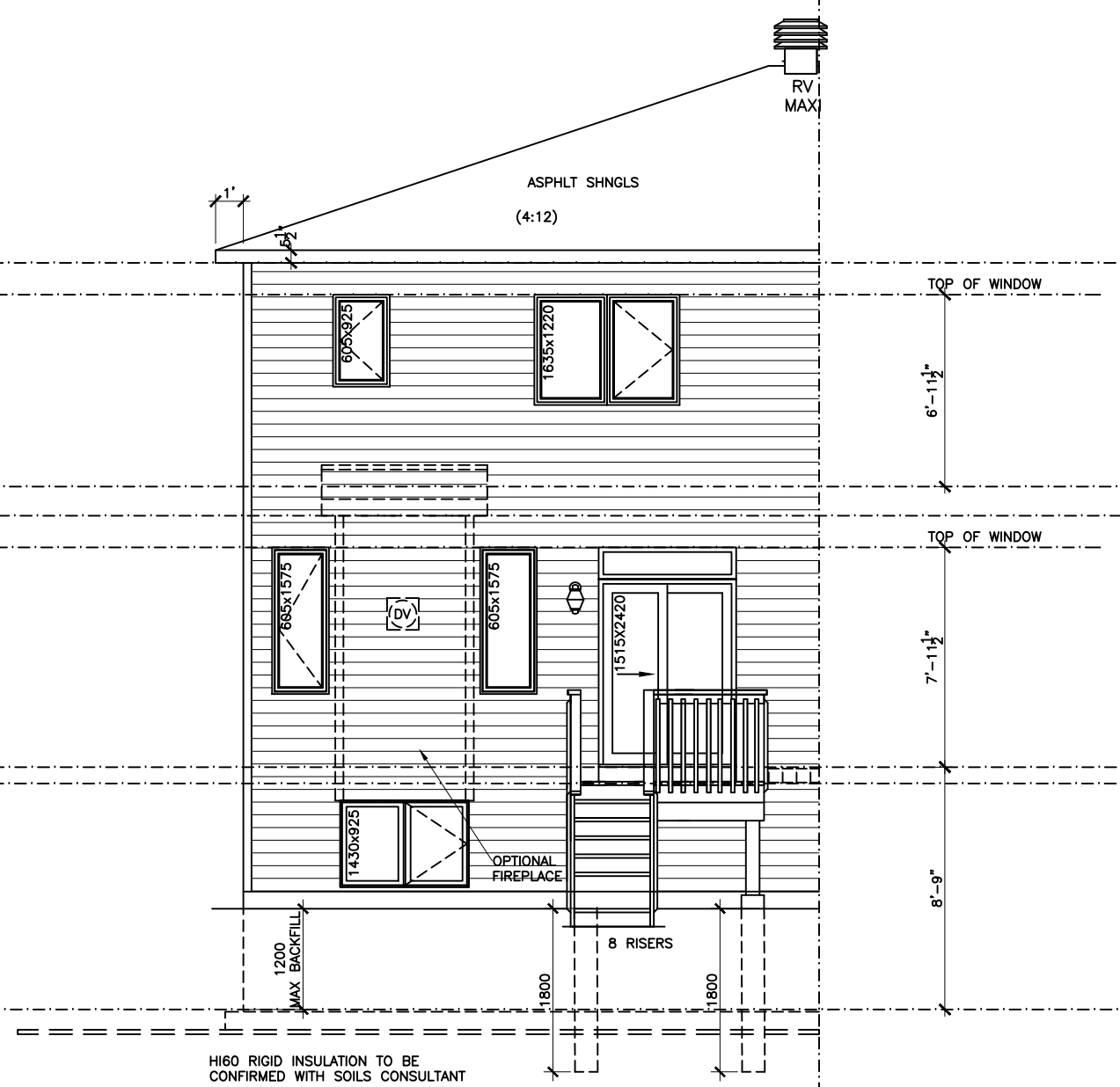
MODEL (EXECUTIVE TOWNHOMES)  
**TAHOE 4 2022**  
ELEV.- BA, CA, DA  
(2022 STANDARD DRAWING)

Scale 1:75  
dwg # **A-4d**

No	Revision	Date	By
2	ISSUED FOR CONSTRUCTION	APR 28/22	
1	STRUCTURAL LETTER	FEB 15/22	



PARTIAL END ELEVATION  
LOOK OUT DECK



REAR ELEVATION  
LOOK OUT DECK-END UNIT



**CONFIDENTIAL**

SITE: VISTA STAGE 1  
BROOKLINE STAGE 1  
QUINN'S POINTE ST4

TITLE REAR & SIDE ELEVATIONS  
LOOK OUT DECK

FILENAME:  
ETH060-TAHOE 4-ALL-2022.DWG

MODEL (EXECUTIVE TOWNHOMES)

TAHOE 4 2022  
ELEV.- BA, CA, DA  
(2022 STANDARD DRAWING)

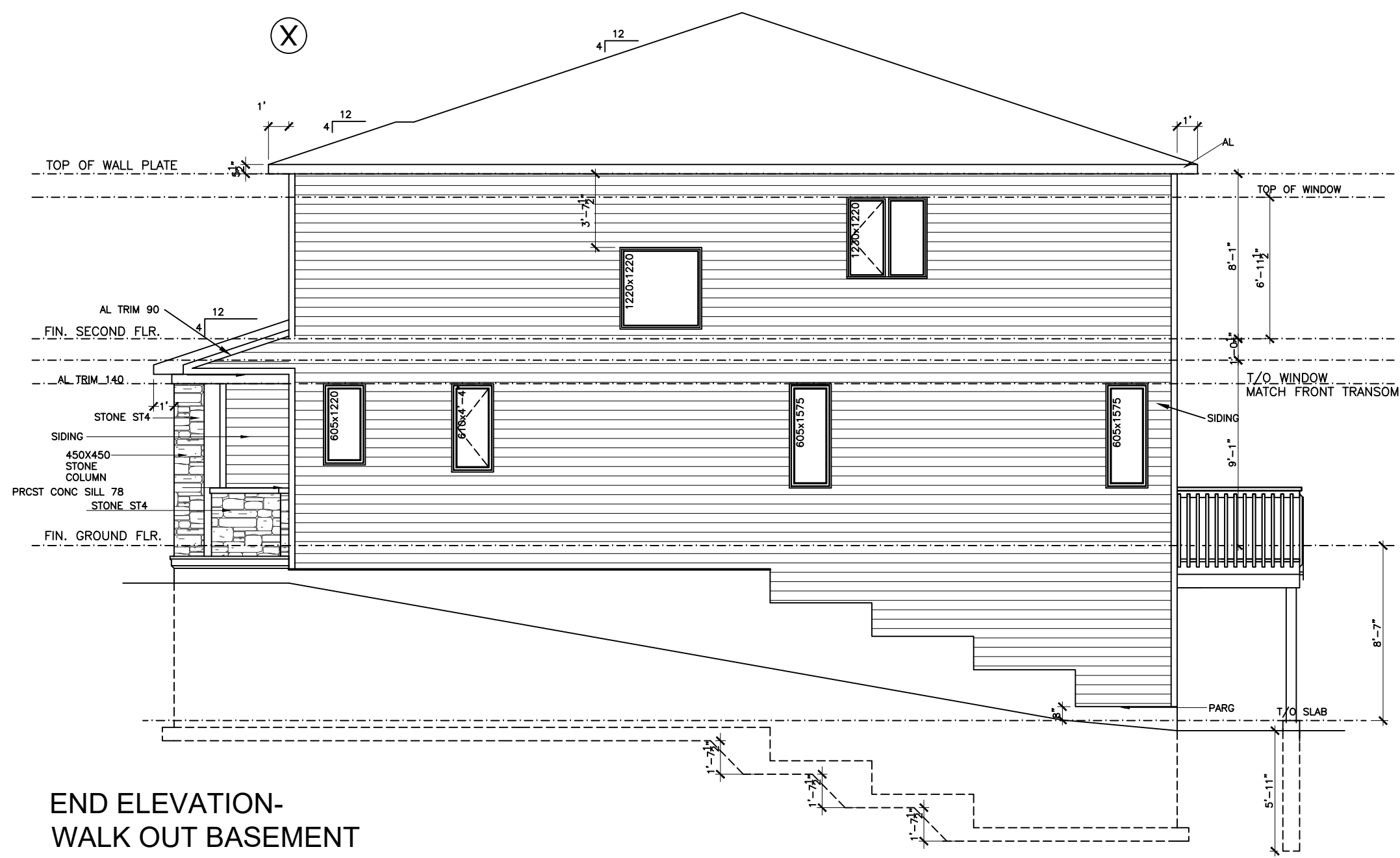
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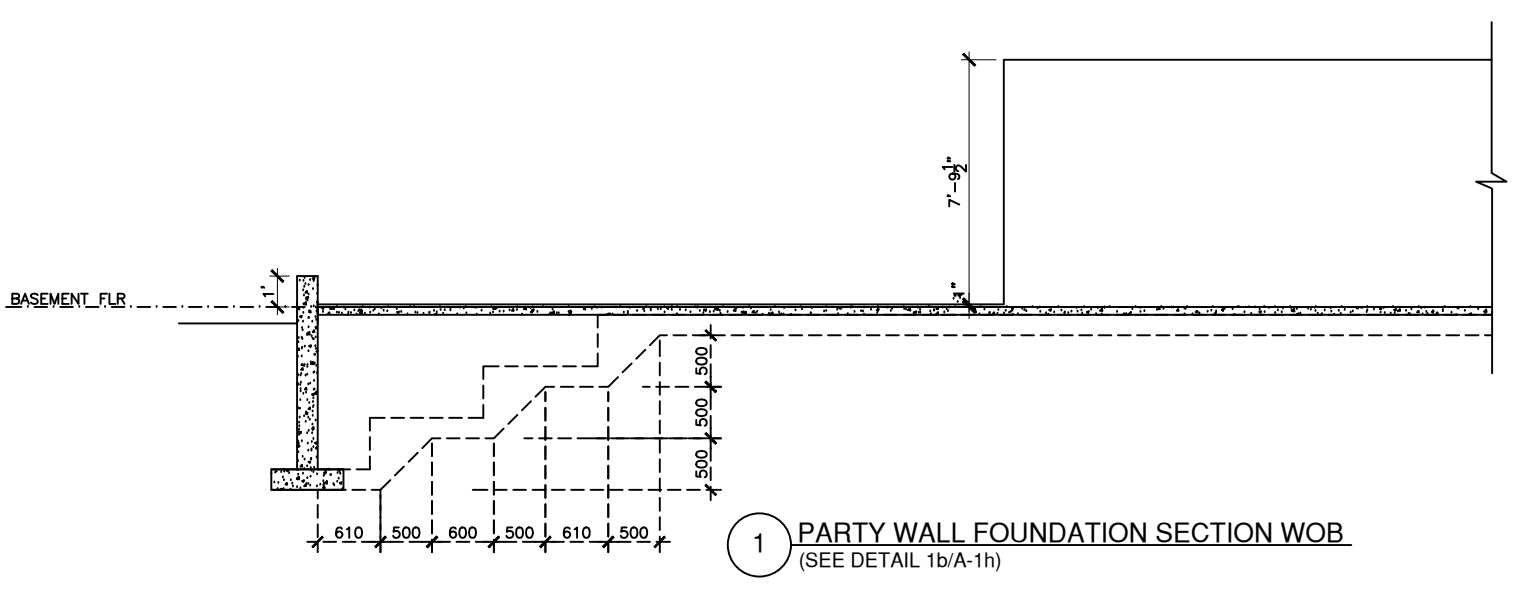
A-5d

No	Revision	Date	By
2	ISSUED FOR CONSTRUCTION	APR 28/22	
1	STRUCTURAL LETTER	FEB 15/22	

(X)



END ELEVATION-  
WALK OUT BASEMENT



1 PARTY WALL FOUNDATION SECTION WOB  
(SEE DETAIL 1b/A-1h)



**CONFIDENTIAL**

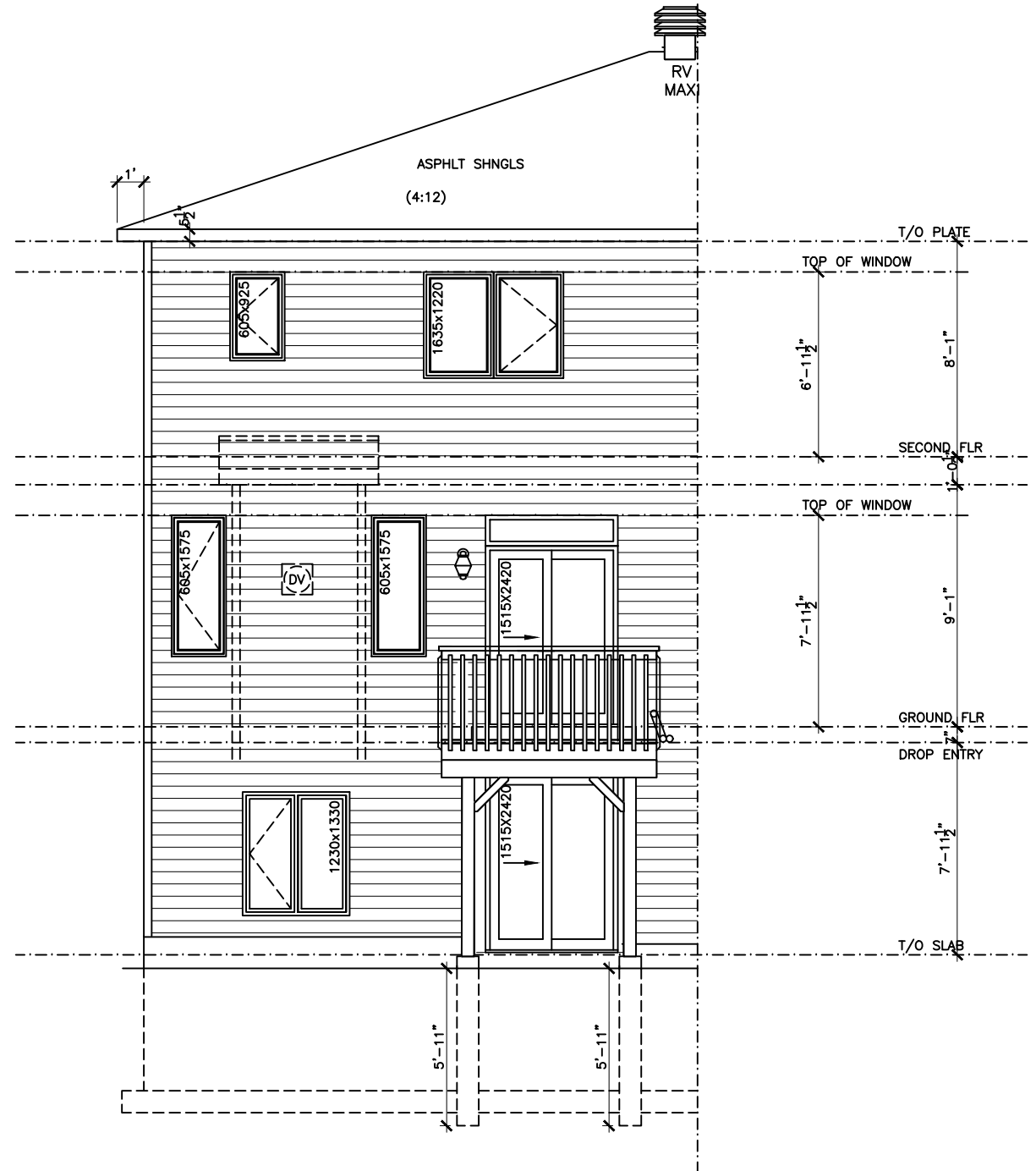
SITE: VISTA STAGE 1  
BROOKLINE STAGE 1  
QUINN'S POINTE ST4

TITLE SIDE ELEVATIONS  
WALK-OUT BASEMENT

FILENAME:  
ETH060-TAHOE 4-ALL-2022.DWG

MODEL (EXECUTIVE TOWNHOMES)	Scale 1:75
<b>TAHOE 4 2022</b>	dwg #
ELEV.- BA, CA, DA	<b>A-5e</b>
(2022 STANDARD DRAWING)	

No	Revision	Date	By
2	ISSUED FOR CONSTRUCTION	APR 28/22	
1	STRUCTURAL LETTER	FEB 15/22	



REAR ELEVATION  
WALK OUT BASEMENT -END UNIT



**CONFIDENTIAL**

SITE: VISTA STAGE 1  
BROOKLINE STAGE 1  
QUINN'S POINTE ST4

TITLE REAR ELEVATIONS  
WALK-OUT BASEMENT

FILENAME:  
ETH060-TAHOE 4-ALL-2022.DWG

MODEL (EXECUTIVE TOWNHOMES) Scale 1:75

TAHOE 4 **2022**  
ELEV.- BA, CA, DA  
(2022 STANDARD DRAWING) dwg # A-5f

No	Revision	Date	By
2	ISSUED FOR CONSTRUCTION	APR 28/22	
1	STRUCTURAL LETTER	FEB 15/22	





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TO COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES  
MUST BE REPORTED DIRECTLY TO SRN ARCHITECTS INC.

NO.	DATE	ISSUED FOR
1	05-JUL-22	FOR CLIENT REVIEW

ADDITIONAL NOTES:

**PRELIMINARY, NOT FOR  
CONSTRUCTION**  
ALL AREAS CALCULATIONS ARE  
PRELIMINARY

NO.	DATE	REVISION COMMENT:

**SRN**  
ARCHITECTS  
8395 JANE STREET, SUITE 203  
VAUGHAN, ONTARIO L4K 5Y2  
PHONE: 905-417-5515 FAX: 905-417-5517

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CLIENT:  
**Minto Communities Canada**  
200-180 Kent Street  
Ottawa, Ontario K1P 0B6

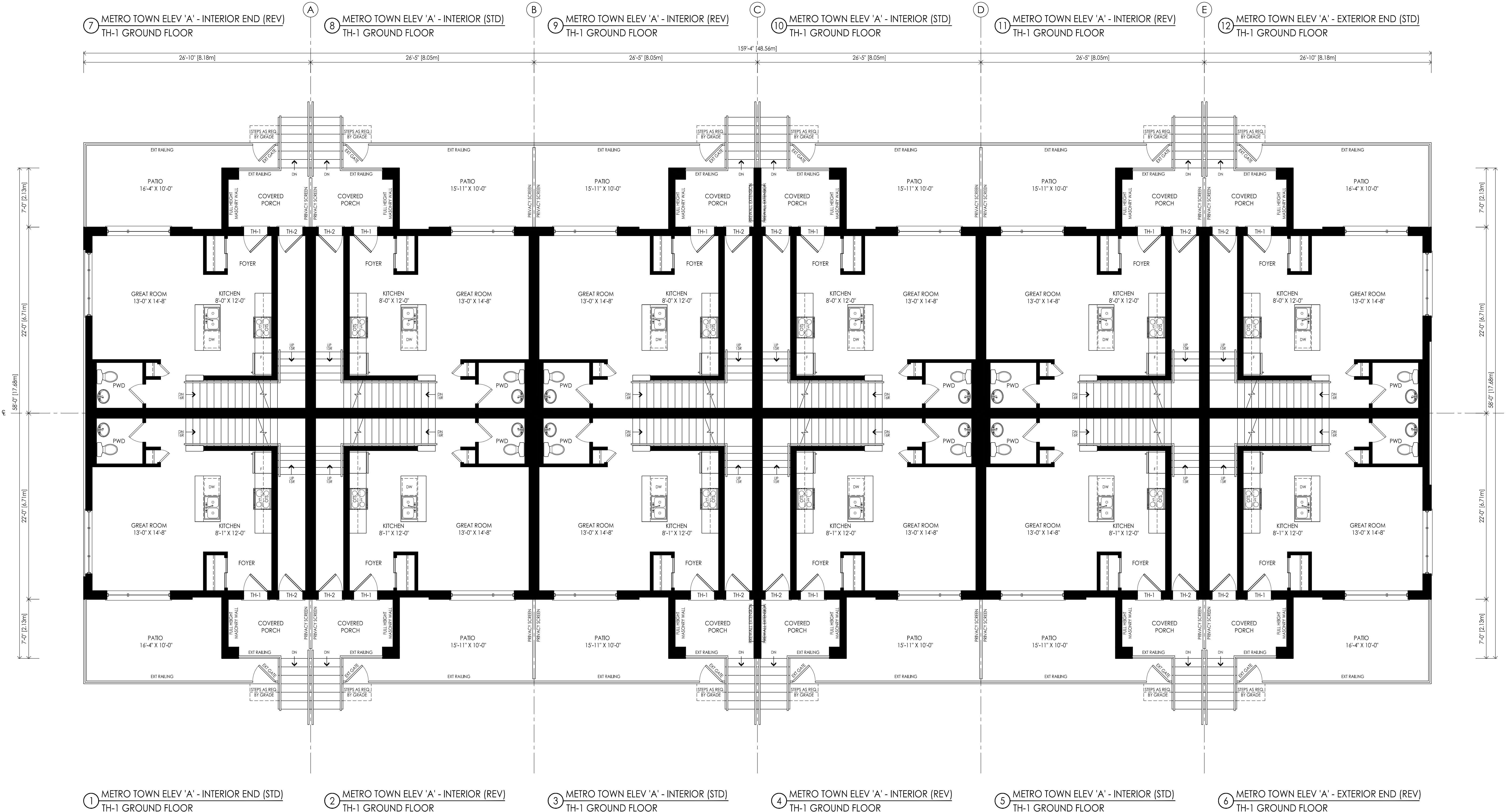
PROJECT:  
**Barrhaven Town Centre - Anthem**  
Ottawa, Ontario

DRAWING TITLE:  
**GROUND FLOOR PLAN**

DATE: 2022-07-04 SCALE: 3/16"=1'-0"

DRAWN BY: AB CHECKED BY: GR

PROJECT NUMBER: S21001 DRAWING NUMBER: A2



① METRO TOWN ELEV 'A' - INTERIOR END (STD)  
TH-1 GROUND FLOOR  
② METRO TOWN ELEV 'A' - INTERIOR (REV)  
TH-1 GROUND FLOOR  
③ METRO TOWN ELEV 'A' - INTERIOR (STD)  
TH-1 GROUND FLOOR  
④ METRO TOWN ELEV 'A' - INTERIOR (REV)  
TH-1 GROUND FLOOR  
⑤ METRO TOWN ELEV 'A' - INTERIOR (STD)  
TH-1 GROUND FLOOR  
⑥ METRO TOWN ELEV 'A' - EXTERIOR END (REV)  
TH-1 GROUND FLOOR

**GROUND FLOOR - TYPICAL BLOCK ELEV 'A'**  
Building Area: 7010.67 SF / 651.32 m<sup>2</sup>







THESE DRAWINGS ARE NOT TO BE SCALED.  
ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR PRIOR  
TO COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES  
MUST BE REPORTED DIRECTLY TO SRN ARCHITECTS INC.

NO.	DATE	ISSUED FOR
1	05-JUL-22	FOR CLIENT REVIEW

ADDITIONAL NOTES:



EXTERIOR FRONTAGE - TYPICAL BLOCK ELEV 'A'

**PRELIMINARY, NOT FOR CONSTRUCTION**  
ALL AREAS CALCULATIONS ARE PRELIMINARY

NO.	DATE	REVISION COMMENT:



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CLIENT:  
**Minto Communities Canada**  
200-180 Kent Street  
Ottawa, Ontario K1P 0B6

PROJECT:  
**Barrhaven Town Centre - Anthem**  
Ottawa, Ontario

DRAWING TITLE:  
**EXTERIOR FRONTAGE**

DATE: 2022-07-04 SCALE: 3/16"=1'-0"  
DRAWN BY: AB CHECKED BY: GR  
PROJECT NUMBER: S21001 DRAWING NUMBER: A6

THESE DRAWINGS ARE NOT TO BE SCALED.  
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MUST BE REPORTED DIRECTLY TO SRN ARCHITECTS INC.

NO.	DATE	ISSUED FOR
1	05-JUL-22	FOR CLIENT REVIEW

ADDITIONAL NOTES:



INTERIOR FRONTAGE - TYPICAL BLOCK ELEV 'A'

**PRELIMINARY, NOT FOR CONSTRUCTION**  
ALL AREAS CALCULATIONS ARE PRELIMINARY

NO.	DATE	REVISION COMMENT:



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CLIENT:  
**Minto Communities Canada**  
200-180 Kent Street  
Ottawa, Ontario K1P 0B6

PROJECT:  
**Barrhaven Town Centre - Anthem**  
Ottawa, Ontario

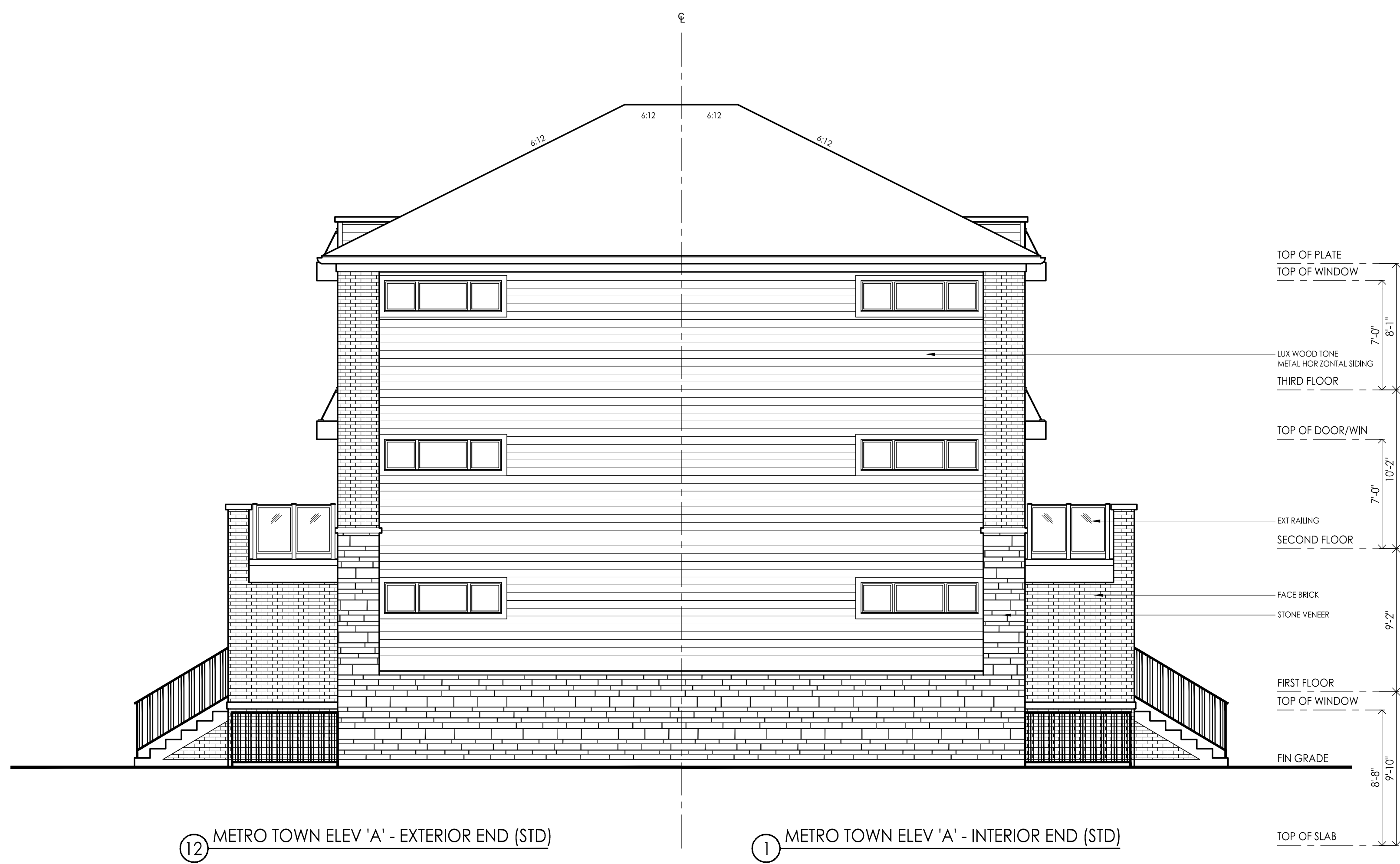
DRAWING TITLE:  
**INTERIOR FRONTAGE**

DATE: 2022-07-04 SCALE: 3/16"=1'-0"  
DRAWN BY: AB CHECKED BY: GR  
PROJECT NUMBER: **S21001** DRAWING NUMBER: **A7**

THESE DRAWINGS ARE NOT TO BE SCALED.  
ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR PRIOR TO COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES MUST BE REPORTED DIRECTLY TO SRN ARCHITECTS INC.

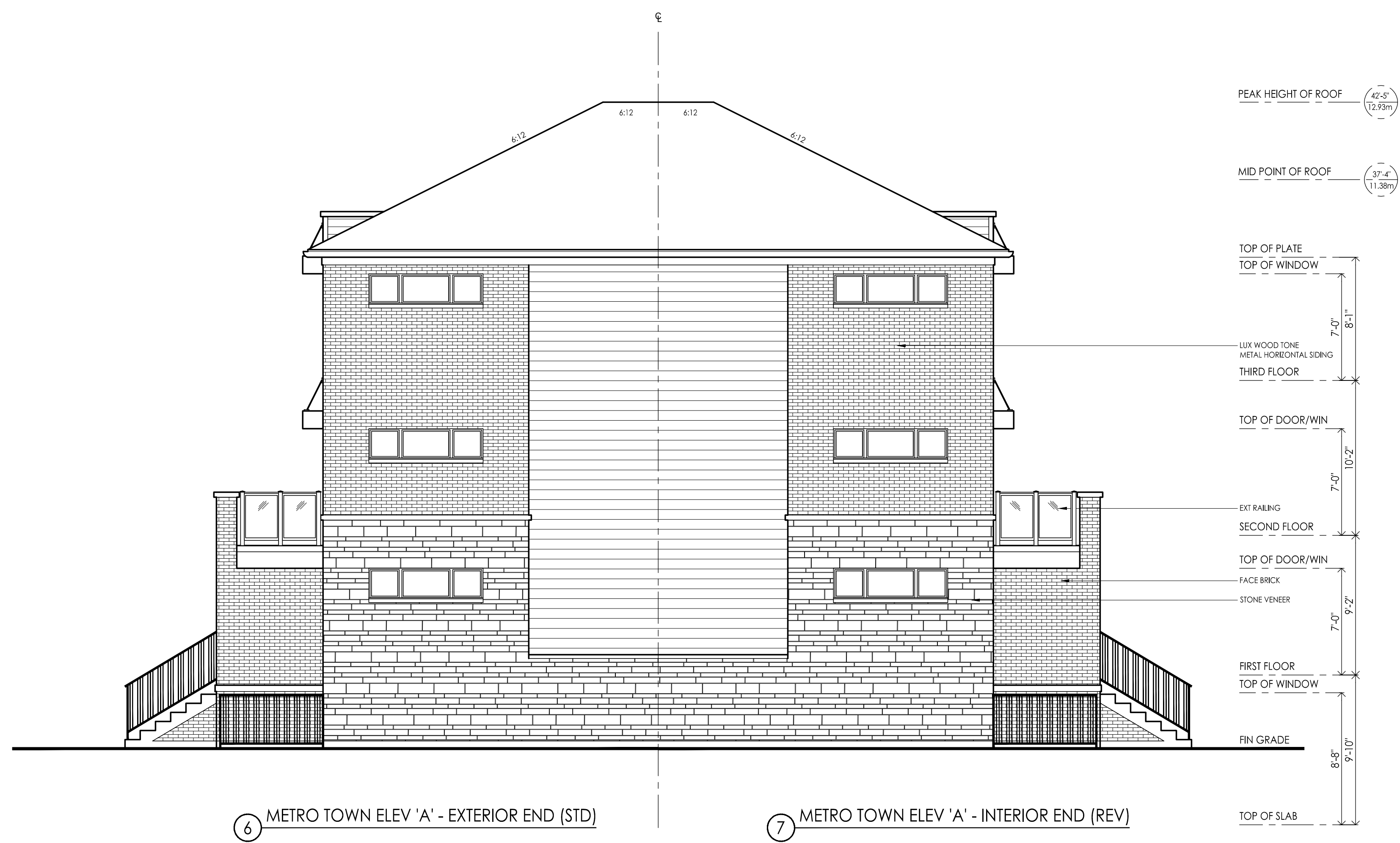
NO.	DATE	ISSUED FOR
1	05-JUL-22	FOR CLIENT REVIEW

ADDITIONAL NOTES:



12 METRO TOWN ELEV 'A' - EXTERIOR END (STD)      1 METRO TOWN ELEV 'A' - INTERIOR END (STD)

INTERIOR FLANKAGE - TYPICAL BLOCK ELEV 'A'



6 METRO TOWN ELEV 'A' - EXTERIOR END (STD)      7 METRO TOWN ELEV 'A' - INTERIOR END (REV)

EXTERIOR FLANKAGE - TYPICAL BLOCK ELEV 'A'

**PRELIMINARY, NOT FOR CONSTRUCTION**  
ALL AREAS CALCULATIONS ARE PRELIMINARY

NO.	DATE	REVISION COMMENT

**SRN ARCHITECTS**  
8395 JANE STREET, SUITE 203  
VAUGHAN, ONTARIO L4K 5Y2  
PHONE: 905-417-5515 FAX: 905-417-5517

CLIENT:  
**Minto Communities Canada**  
200-180 Kent Street  
Ottawa, Ontario K1P 0B6

PROJECT:  
**Barrhaven Town Centre - Anthem**  
Ottawa, Ontario

DRAWING TITLE:  
**FLANKAGE ELEVATIONS**

DATE: 2022-07-04	SCALE: 3/16"=1'-0"
DRAWN BY: AB	CHECKED BY: GR
PROJECT NUMBER: S21001	DRAWING NUMBER: A8



6			
5			
4			
3			
2			
1	ISSUED FOR TENDER	MAR 24/22	
No.	Revision	Date	By



ROUGH OPENING HEIGHTS		
2030 DOOR (80")	DOOR TYPE	(R.O.H.)
	SWINGING	2108 mm
SLIDING	2145 mm	
2440 DOOR (96")	DOOR TYPE	(R.O.H.)
	SWINGING	2490 mm
SLIDING	2555 mm	



## CAMBRIDGE END ELEVATION 'AA', 'AB', 'BA' & 'BB'

ARCHITECTURAL LEGEND	STRUCTURAL LEGEND	STRUCTURAL FRAMING SCHEDULE	COMPLIANCE PACKAGE FOR SPACE HEATING EQUIPMENT OBC TABLE 3.1.1.2.A																										
<p><b>ARCHITECTURAL LEGEND</b></p> <p> Attic Access 500 x 700 min. (Insulated &amp; weatherstripped)</p> <p> Medicine Cabinet</p> <p> Change between floor finishes</p> <p> Door schedule key (numbered)</p> <p> Dropped Ceiling Bulkhead 240 unless noted otherwise</p> <p> Deep</p> <p> Laundry Tub</p> <p> Microwave</p> <p> Optional</p> <p> Paper Holder</p> <p> Rod &amp; Shelf</p> <p> Rough Opening Height</p> <p> Rough Opening Width</p> <p> Resilient Vinyl Flooring</p> <p> Roof Vent</p> <p> Towel Bar</p> <p> Towel Ring</p> <p> Typical</p> <p> Unless noted otherwise</p>	<p><b>STRUCTURAL LEGEND</b></p> <p> ANCH. Anchor</p> <p> B.C. Bottom chord</p> <p> BLK. Blocking</p> <p> BM.POCK. Beam pocket</p> <p> B/S Both Sides</p> <p> C.J. Control Joint</p> <p> Cont. Continuous</p> <p> D.J. Double joist</p> <p> DR. Dropped beam</p> <p> FL. Flush beam</p> <p> FTG. Footing</p> <p> I.F. Inside face</p> <p> MH. Metal hangers</p> <p> O.F. Outside face</p> <p> O.C. On center</p> <p> PL. Plate</p> <p> ST. BM. Steel Beam</p> <p> STIF PL. Stiffener Plate</p> <p> T&amp;B Top and Bottom</p> <p> T&amp;G Tongue &amp; Groove</p> <p> T.J. Triple joist</p> <p> Wood lintel</p> <p> Masonry lintel</p>	<p><b>STRUCTURAL FRAMING SCHEDULE</b></p> <p>For Steel Framing Layout, Beam/Column/Plate Connection Details, see Structural Dwg's ST- * (Also Specs SP-1 &amp; SP-4).</p> <p><b>STEEL LINTEL</b></p> <p>S1 - L 90x90x6 S2 - L 90x90x8 S3 - L 100x90x6 S4 - L 125x90x8 S5 - L 125x90x10 S6 - L 200x100x12 S7 - L 150x100x10 (L.L.V.) 200mm BEARING S8 - L 100x90x8</p> <p><b>WOOD LINTEL</b></p> <p>L1 - 2-38x235 w/ 12.7 PLYWOOD SPACER L2 - 2-38x235 L3 - 3-38x235 L4 - 3-38x235 c/w 2-12.7 PLYWOOD SPACERS &amp; 2 ROWS OF 90mm C.W.N. @ 200 c/c B/S L5 - 3-38x286 c/w 2-12.7 PLYWOOD SPACERS &amp; 2 ROWS OF 90mm C.W.N. @ 200 c/c B/S L6 - 2-45x240 M.L. L7 - 3-45x240 M.L. L8 - 2-38x286 L9 - 3-38x286 L10 - 2-38x185</p> <p>PROVIDE 'P2' POST BOTH ENDS OF LINTEL UNLESS NOTED OTHERWISE</p> <p><b>POSTS</b></p> <p>P1(8) - 75 Ø STEEL TELEPOST (8 Feet Max) P1(9) - 75 Ø STEEL TELEPOST (9 Feet Max) P2 - 2-38x89 or 2-38x140 P3 - 3-38x89 or 3-38x140 P4 - 4-38x89 or 4-38x140 P5 - 5-38x89 or 5-38x140 P6 - 6-38x89 or 6-38x140 P11 - HEAVY DUTY STEEL POST, CAPACITY = 55 KN P12 - ADJUSTABLE HSS, CAPACITY 100 KN</p> <p>HSS 73 OD - HSS 73 O.D. X 4.8 + 12mm PLATE TOP &amp; BOT. HSS 89 OD - HSS 89 O.D. X 4.8 + 12mm PLATE TOP &amp; BOT. HSS 76 - HSS 76.2 X 76.2 X 4.8 + 12mm PLATE TOP &amp; BOT. HSS 89 - HSS 89 X 89 X 4.8 + 12mm PLATE TOP &amp; BOT. HSS 102 - HSS 102 X 102 X 4.8 + 12mm PLATE TOP &amp; BOT.</p> <p>ANCHOR POST TO FOUNDATION W/ 2-12Ø WEDGE ANCHORS PROVIDE 'P2' UNDER ALL DOUBLE JOISTS &amp; TRUSSES U.N.O.</p> <p><b>FOOTINGS</b></p> <p>ALL FOOTINGS DESIGNED FOR ALLOWABLE SOIL CAP.= 100kpa</p>	<p><b>COMPLIANCE PACKAGE FOR SPACE HEATING EQUIPMENT OBC TABLE 3.1.1.2.A</b></p> <table border="1" style="width: 100%;"> <thead> <tr><th>COMPONENTS</th><th>PACKAGE A1</th></tr> </thead> <tbody> <tr><td>CEILING WITH ATTIC MIN. RSI / R VALUE</td><td>RSI 10.56 (R60)</td></tr> <tr><td>CEILING W/O ATTIC MIN. RSI / R VALUE</td><td>RSI 5.46 (R31)</td></tr> <tr><td>EXPOSED FLOOR MIN. RSI / R VALUE</td><td>RSI 5.46 (R31)</td></tr> <tr><td>WALLS ABOVE GRADE MIN. RSI / R VALUE</td><td>RSI 3.87 (R22)</td></tr> <tr><td>BASEMENT WALLS MIN. RSI / R VALUE</td><td>RSI 3.54ci (R20)</td></tr> <tr><td>BASEMENT SLAB &gt;600mm BELOW GRADE MIN. RSI / R VALUE</td><td>-</td></tr> <tr><td>BASEMENT SLAB ≤600mm BELOW GRADE MIN. RSI / R VALUE</td><td>RSI 1.76 (R10)</td></tr> <tr><td>EDGE OF SLAB ≤ 600mm BELOW GRADE WALL MIN. RSI / R VALUE</td><td>RSI 1.76 (R10)</td></tr> <tr><td>WINDOWS/PATIO DOORS MAX. U-ENERGY RATING</td><td>U- 1.6 ER 25</td></tr> <tr><td>SPACE HEATING EQUIPMENT MAX. AFUE</td><td>96%</td></tr> <tr><td>HRV MIN. EFFICIENCY</td><td>75%</td></tr> <tr><td>HOT WATER HEATERS MIN. EFFICIENCY</td><td>0.80 EF</td></tr> </tbody> </table>	COMPONENTS	PACKAGE A1	CEILING WITH ATTIC MIN. RSI / R VALUE	RSI 10.56 (R60)	CEILING W/O ATTIC MIN. RSI / R VALUE	RSI 5.46 (R31)	EXPOSED FLOOR MIN. RSI / R VALUE	RSI 5.46 (R31)	WALLS ABOVE GRADE MIN. RSI / R VALUE	RSI 3.87 (R22)	BASEMENT WALLS MIN. RSI / R VALUE	RSI 3.54ci (R20)	BASEMENT SLAB >600mm BELOW GRADE MIN. RSI / R VALUE	-	BASEMENT SLAB ≤600mm BELOW GRADE MIN. RSI / R VALUE	RSI 1.76 (R10)	EDGE OF SLAB ≤ 600mm BELOW GRADE WALL MIN. RSI / R VALUE	RSI 1.76 (R10)	WINDOWS/PATIO DOORS MAX. U-ENERGY RATING	U- 1.6 ER 25	SPACE HEATING EQUIPMENT MAX. AFUE	96%	HRV MIN. EFFICIENCY	75%	HOT WATER HEATERS MIN. EFFICIENCY	0.80 EF
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<p><b>ELECTRICAL LEGEND</b></p> <p> Duplex Outlet (G.F.I. in all bathrooms)</p> <p> Split Duplex Outlet</p> <p> Duplex outlet upper 1/2 switched</p> <p> Weather proof duplex outlet</p> <p> 220 V outlet</p> <p> Electric vehicle charging rough-in c/w 27mm conduit to 200amp panel</p> <p> Central vacuum outlet</p> <p> Single pole switch</p> <p> 3 way switch</p> <p> 4 way switch</p> <p> Furnace switch</p> <p> Double gang switch</p> <p> Triple gang switch</p> <p> Ceiling light fixture</p> <p> Standard potlight 4" (clg. mtd)</p> <p> Pucklight</p> <p> Wall mounted light fixture</p> <p> PH.CELL Photocell</p> <p> Interconnected smoke detector on each floor and in each bedroom with visual signal. Carbon monoxide detector on each floor containing bedrooms</p> <p> Electrical panel</p> <p> Hydro meter</p> <p> Range</p> <p> Refrigerator</p> <p> Dishwasher</p> <p> Dryer</p> <p> Washer</p> <p> Door chime/buzzer</p> <p> Thermostat</p>	<p><b>MECHANICAL LEGEND</b></p> <p> Cold air return grill</p> <p> Cold air return duct in wall</p> <p> Warm air duct</p> <p> Warm air diffuser</p> <p> Warm air supply in cabinet toe kick or wall</p> <p> Warm air diffuser in ceiling</p> <p> Fireplace chimney</p> <p> FURN. Furnace</p> <p> Exhaust vent</p> <p> Gas meter</p> <p> Water meter</p> <p> SERVICES Service entry</p> <p> FD Floor drain</p> <p> SS Soil stack</p> <p> DWR Drain water heat recovery pipe installed on soil stack.</p> <p> HWT Hot Water Tank</p> <p> Hose bib (FROST FREE)</p> <p> Shower head</p> <p> A/C Air Conditioning</p> <p> BBQ Barbeque Gas Line</p> <p> Heat Recovery Ventilator</p> <p> Tankless Hot Water Tank c/w</p> <p> Drain Pan</p> <p> Mechanical vent</p>	<p><b>FINISHED BUILDING AREA</b></p> <table border="1" style="width: 100%;"> <tr><td>GROUND FL. (excl. Garage)</td><td>33.52m<sup>2</sup> (360.8ft<sup>2</sup>)</td><td>34.18m<sup>2</sup> (368.0ft<sup>2</sup>)</td></tr> <tr><td>SECOND FL. (excl. O.T.B.)</td><td>54.20m<sup>2</sup> (583.4ft<sup>2</sup>)</td><td>54.20m<sup>2</sup> (583.4ft<sup>2</sup>)</td></tr> <tr><td>THIRD FL. (excl. O.T.B.)</td><td>54.20m<sup>2</sup> (583.4ft<sup>2</sup>)</td><td>54.20m<sup>2</sup> (583.4ft<sup>2</sup>)</td></tr> <tr><td>Total (excl O.T.B. &amp; Garage)</td><td>141.92m<sup>2</sup> (1527.6ft<sup>2</sup>)</td><td>142.58m<sup>2</sup> (1534.8ft<sup>2</sup>)</td></tr> </table>	GROUND FL. (excl. Garage)	33.52m <sup>2</sup> (360.8ft <sup>2</sup> )	34.18m <sup>2</sup> (368.0ft <sup>2</sup> )	SECOND FL. (excl. O.T.B.)	54.20m <sup>2</sup> (583.4ft <sup>2</sup> )	54.20m <sup>2</sup> (583.4ft <sup>2</sup> )	THIRD FL. (excl. O.T.B.)	54.20m <sup>2</sup> (583.4ft <sup>2</sup> )	54.20m <sup>2</sup> (583.4ft <sup>2</sup> )	Total (excl O.T.B. & Garage)	141.92m <sup>2</sup> (1527.6ft <sup>2</sup> )	142.58m <sup>2</sup> (1534.8ft <sup>2</sup> )	<p><b>DOOR SCHEDULE</b></p> <p> DOOR NUMBER FOLLOWED BY 'A' DENOTES 2440 (96") HIGH DOOR</p> <p> EXTERIOR DOOR INSULATED MIN RSI 0.7, (R4) 815x2030x45 (32"x80"x1-3/4")</p> <p> DOOR 910x2030x35 (36"x80"x1-3/8")</p> <p> DOOR 815x2030x35 (32"x80"x1-3/8")</p> <p> DOOR 760x2030x35 (30"x80"x1-3/8")</p> <p> DOOR 710x2030x35 (28"x80"x1-3/8")</p> <p> DOOR 610x2030x35 (24"x80"x1-3/8")</p> <p> DOOR 460x2030x35 (18"x80"x1-3/8")</p> <p> EXTERIOR FRENCH OR GARDEN DOOR 815x2030x45 (32"x80"x1-3/4")</p> <p> EXTERIOR HOLLOW METAL DOOR 815x2030x45 (32"x80"x1-3/4")</p> <p> FIRE-RATED METAL DOOR W/ 20 MIN. FIRE PROTECTION RATING OR EQUAL AND 38mm (1-1/2") THICK WOOD FRAME. PROVIDE SELF CLOSING DEVICE.</p> <p> EXTERIOR DOOR INSULATED MIN RSI 0.7, (R4) 860x2030x45 (34"x80"x1-3/4")</p> <p> EXTERIOR DOOR INSULATED MIN RSI 0.7, (R4) 910x2030x45 (36"x80"x1-3/4")</p>														
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Client <b>MINTO COMMUNITIES</b>	Sheet Title <b>LEGEND, AREAS &amp; REVISIONS</b>	REGISTERED PERSON: D.W. CASSIDY & CO. ARCHITECTURAL TECHNOLOGISTS FIRM BCIN 28461	Project No. <b>2021-29</b>
Project <b>AVENUE TOWNS CITY OF OTTAWA BACK-TO-BACK TOWNS</b>	Scale <b>1 : 75</b>	I <u>JAMIE LOPES</u> have reviewed and take responsibility for this design.	OBC <b>2012</b>
	Date <b>MARCH 2021</b>	Signature 	Revision No. <b>R0</b>
	Checked by <b>AMM</b>	BCIN <u>28757</u> Date: <b>MAR. 14, 2022</b>	Drawing No. <b>1</b>
	<b>CAMBRIDGE END</b>		

CASSIDY & CO.

**ARCHITECTURAL TECHNOLOGISTS**

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# CONSTRUCTION NOTES

UNLESS OTHERWISE NOTED 1 MAY 2017  
2012 OBC O. REG. 332/12 (REVISED)

ALL CONSTRUCTION PRACTICES TO COMPLY WITH ONTARIO BUILDING CODE (O.B.C.) REGULATIONS  
ALL DIMENSIONS GIVEN FIRST IN METRIC (mm) FOLLOWED BY IMPERIAL.

**1 ROOF CONSTRUCTION (SEE SP2 & 7/SP4)**  
ASPHALT SHINGLES  
APPROVED EAVES PROTECTION TO EXTEND MIN. 900mm (2'-11") UP ROOF SURFACE TO LINE NOT LESS THAN 300mm (12") BEYOND INNER FACE OF EXTERIOR WALL FOR ROOF SLOPES LESS THAN 8:12. (OBC 9.26.5)  
11.1 (7/16") OSB SHEATHING W/ 'H' CLIP EDGE SUPPORT  
PRE-ENGINEERED TRUSSES BRACED AS PER MANUFACTURES SPECIFICATIONS & DETAIL 7/SP4  
RSI 10.56 (R60) ROOF INSULATION  
19 x 65 (1x3) STRAPPING @405 O/C  
6 mil. AIR/VAPOUR BARRIER  
12.7mm (1/2") INT. DRYWALL FINISH  
- PRE-FINISHED ALUM. VENTED SOFFIT & PREFINISHED ALUM. FASCIA.  
ATTIC VENTILATION 1:300 OF INSULATED CEILING AREA UNIFORMLY DISTRIBUTED ON OPPOSITE SIDES OF THE BUILDING WITH NO LESS THAN 25% AT EAVES AND 25% THE SOFFIT (OBC 9.19.1.2)

**2 EXTERIOR WALL CONSTRUCTION (VINYL SIDING)**  
VINYL SIDING AS PER ELEVATIONS (SEE SP2)  
EXTERIOR AIR BARRIER (TYVEK)  
EXTERIOR OSB SHEATHING 11.1mm (7/16")  
38mm x140mm (2x6) STUDS @ 405 (16") O.C. U.N.O.  
RSI 3.87 (R22) BATT. INSULATION  
6 mil. VAPOUR BARRIER  
12.7mm (1/2) INT. DRYWALL FINISH

**2A EXTERIOR WALL CONSTRUCTION (COMPOSITE SIDING)**  
COMPOSITE SIDING AS PER ELEVATIONS  
38x65 (2x3) STRAPPING AS PER MANUF. SPECS  
EXTERIOR AIR BARRIER (TYVEK)  
EXTERIOR OSB SHEATHING 11.1mm (7/16") (20mm OSB FOR VERT. SIDING)  
38mm x140mm (2x6) STUDS @ 405 (16") O.C. U.N.O.  
RSI 3.87 (R22) BATT. INSULATION  
6 mil. VAPOUR BARRIER  
12.7mm (1/2) INT. DRYWALL FINISH

**3 EXTERIOR WALL CONSTRUCTION (MASONRY)**  
MASONRY VENEER, 22 x 180 x 0.76mm (7/8" x 7" x 22 ga) (SEE SP2)  
GALV. METAL TIES @ 400mm (15 3/4") PROVIDE WEEPHOLES @ 800mm (30") O.C. HORIZ. @ BOTTOM COURSE ONLY & OVER OPENINGS PROVIDE BASE FLASHING UP MIN. 150mm (6") BEHIND AIR BARRIER. MIN. 150mm (6") CLEARANCE BETWEEN MASONRY AND GRADE. (9.20.6.4, 9.20.9.5, 9.20.13.5,9.20.13.6)  
25mm AIR SPACE  
EXTERIOR AIR BARRIER (TYVEK)  
EXTERIOR OSB SHEATHING 11.1mm (7/16")  
38mm x140mm (2x6) STUDS @ 405 (16") O.C. U.N.O.  
RSI 3.87 (R22) BATT. INSULATION  
6 mil. VAPOUR BARRIER  
12.7mm (1/2) INT. DRYWALL FINISH

**4 INTERIOR STUD PARTITIONS**  
12.7mm (1/2") INT. DRYWALL ON BOTH SIDES (FOR FIN. AREAS)  
2 TOP PLATES & 1 BOTTOM PLATE TO MATCH STUD WIDTH.  
**LOAD BEARING WALLS**  
38mm x 89mm (2 x 4) OR 38mm x 140mm (2 x 6) @ 406mm (16") O.C.  
**NON-LOAD BEARING WALLS**  
38mm x 89mm (2 x 4) OR 38mm x 140mm (2 x 6) @ 610mm (2'-0") O.C. (405 (16") IN BATHROOMS)

**5 FOUNDATION WALL (SOIL BEARING CAPACITY 100 kPa)**  
200mm (8") POURED CONC. FOUNDATION WALL (SEE SP2a)  
WITH 20 MPa (2900 Psi) CONC. STRG.  
550 x200mm (22" x 8") U.N.O. CONCRETE KEYED FOOTINGS U.N.O.  
BACKFILL WITH NON-FROST SUSCEPTIBLE SOIL.

**5A RESERVED**

**5B RESERVED**

**5C RESERVED**

**5D FOUNDATION SLAB ON GRADE (SEE SP2a)**  
RSI 1.75 ci (R10 ci) 50mm RIGID INSULATION  
POURED CONCRETE FOUNDATION WALL SEE PLAN FOR THICKNESS

**6 RESERVED**

**7 GARAGE EXTERIOR WALL (SIDING)**  
SIDING AS PER ELEVATIONS  
AIR BARRIER ON EXTERIOR  
11.1mm (7/16") OSB SHEATHING  
38mm x 89mm (2 x 4) OR 38mm x 140mm (2x6) STUDS @ 405 O/C AS PER PLAN  
12.7mm DRYWALL TAPED

**8 GARAGE EXTERIOR WALL (MASONRY)**  
MASONRY VENEER, 22 x 180 x 0.76mm (7/8" x 7" x 22 ga)  
GALV. METAL TIES @ 400mm (15 3/4") PROVIDE WEEPHOLES @ 800mm (30") O.C. HORIZ. @ BOTTOM COURSE ONLY & OVER OPENINGS PROVIDE BASE FLASHING UP MIN. 150mm (6") BEHIND AIR BARRIER. MIN. 150mm (6") CLEARANCE BETWEEN MASONRY AND GRADE. (9.20.6.4, 9.20.9.5, 9.20.13.5,9.20.13.6)  
25mm AIR SPACE  
EXTERIOR AIR BARRIER (TYVEK)  
EXTERIOR OSB SHEATHING 11.1mm (7/16")  
38mmX 89mm or 38mm x140mm (2x6) STUDS AS PER PLAN @ 405 (16") O.C. U.N.O.  
12.7mm (1/2) INT. DRYWALL TAPED

**9 GARAGE TO HOUSE WALL (OBC 9.10.9.16)**  
12.7mm (1/2") GYPSUM BD.  
6 mil. VAPOUR / AIR BARRIER (WARM SIDE),  
3.87 (R22) BATT INSULATION IN WALL,  
12.7mm (1/2") GYPSUM BD.  
TAPED AND SEAL ALL JOINTS GAS TIGHT & VAPOURPROOF,

**10 2 STOREY WALLS -**  
38mm x 140mm (2 x 6) SPF. # 2 FULL HEIGHT STUDS  
@ 405mm (16") O.C. C/W HORIZONTAL SOLID BLOCKING  
@ 1200mm (3'-11") O.C. VERTICALLY. WALL CONSTRUCTION SHALL CONFORM TO OBC 9.23.10.1(2)

**10A 2 STOREY WALLS -**  
DOUBLE 38mm x 140mm (2 x 6) SPF. # 1/2 FULL HEIGHT STUDS  
@ 405mm (16") O.C. C/W HORIZONTAL SOLID BLOCKING  
@ 1200mm (3'-11") O.C. VERTICALLY. WALL CONSTRUCTION SHALL CONFORM TO OBC 9.23.10.1(2)

**10B 2 STOREY WALLS -**  
38mm x 185mm (2 x 8) SPF. # 1/2 FULL HEIGHT STUDS  
@ 405mm (16") O.C. C/W HORIZONTAL SOLID BLOCKING  
@ 1/4 POINTS O.C. WALL CONSTRUCTION SHALL CONFORM TO OBC 9.23.10.1(2)

**11 BEARING STUD PARTITION**  
38mm x 89mm (2 x 4) OR 38mm x 140mm (2 x 6)  
STUDS @ 406mm (16") O.C., (AS PER WORKING DRAWINGS) WITH 2 TOP PLATES AND SINGLE SILL PLATE TO MATCH STUD WIDTH  
SILL PLATE RAMSET TO SLAB @ 1800mm (6'-0") O.C.  
DAMPPOOFING MATERIAL BELOW PLATE (6mil. v.b)  
BASEMENT SLAB 75mm (3") 25MPa (3600 psi) CONC. SLAB  
CONCRETE FOOTING AS PER PLAN

**12 EXTERIOR WALL LESS THAN 1.2 M TO PROPERTY LINE (45 MINUTE F.R.R.)**  
EXTERIOR FINISH AS PER ELEVATION (SEE SP3) (OSB EW1a)  
EXTERIOR AIR BARRIER (TYVEK)  
EXTERIOR OSB SHEATHING 11.1mm (7/16")  
38mm x140mm (2x6) or 38mm X 89MM (2X4) STUDS AS PER PLAN @ 405 (16") O.C. U.N.O.  
BATT. INSULATION AS PER PLANS  
6 mil. VAPOUR BARRIER (HEATED SPACE ONLY)  
15.8mm (5/8") TYPE 'X' INT. DRYWALL FINISH (TAPED IN GARAGE)

**13 EXTERIOR NON-COMBUSTIBLE CLAD WALL LESS THAN 0.6M TO PROPERTY LINE (45 MINUTE F.R.R.)**

EXTERIOR FINISH AS PER ELEVATION  
12.7 EXTERIOR GRADE DRYWALL (FOR SIDING ONLY)  
EXTERIOR AIR BARRIER (TYVEK)  
12.7mm (1/2") EXTERIOR GRADE  
EXTERIOR OSB SHEATHING 11.1mm (7/16")  
38mm x140mm (2x6) or 38mm X 89MM (2X4) STUDS AS PER PLAN @ 405 (16") O.C. U.N.O.  
RSI 3.87 (R22) or RSI 2.1 (R12) BATT. INSULATION  
CONFORMING TO CAN/ULC -S702 AND HAVING A MASS OF 4.8 kg/m2 FOR 150mm THICKNESS & 2.8 kg/m2 FOR 89mm THICKNESS  
6 mil. VAPOUR BARRIER (HEATED SPACE ONLY)  
15.8mm (5/8") TYPE 'X' INT. DRYWALL FINISH (TAPED IN GARAGE)

**14 CONVENTIONAL ROOF FRAMING**  
38 mm X 140 mm (2" X 6") SPR. RAFTERS @406 mm (16") O.C.,  
38 mm X 184 mm (2" X 8") RIDGE BD., HIP & VALLEY RAFTERS  
38 mm X 89 mm (2" X 4") COLLAR TIES @ MIDSPAN. CEILING JOISTS TO BE 38 mm X 89 mm (2" X 4") @ 406 mm (16") O.C. FOR A MAX. 2430 mm (8'-0") SPAN & 38 mm X 140 mm (2" X 6") @ 406 mm (16") O.C. FOR A MAX. 4450 mm (14'-7") SPAN.  
RAFTERS FOR BUILT-UP ROOF TO BE 38 mm X 89 mm (2" X 4") @ 610 mm (24") O.C. W/ A 38 mm X 89 mm (2" X 4") COLLAR TIES AS REQUIRED FOR STABILITY.

**15 EXPOSED FLOOR (CANTILEVERED)**  
19 mm (3/4") SHEATHING (DET. 6/SP5)  
FILL CAVITY WITH FOAM INSULATION  
11.1 (7/17") OSB  
AIR BARRIER SEALED TO PREP AT PLATE  
ALUM. FLAT STOCK

**16 PROTECTION FROM DAMPNES (OBC 9.23.2.3)**  
WOOD FRAMING MEMBERS THAT ARE NOT PRESSURE TREATED AND ARE IN CONTACT WITH CONCRETE THAT IS LESS THAN 150mm (6") ABOVE GROUND OR SLAB, PROVIDE 6 mil. POLYETHYLENE FILM OR No. 50 (45lb) ROLL ROOFING DAMPPROOFING BETWEEN WOOD AND CONCRETE.

**17 PORCH WOOD POST (SEE SP8/SP4))**  
3- 38mm x 140mm (2 x 6) PRESSURE TREATED WOOD POST WITH 2- SIMPSON STRONG TIE A23 METAL CLIPS, ANCHORED TO BEAM AND POST W/ 4-10DIA.x40mm NAILS EACH SIDE, ANCHORED TO SLAB W/ 2-HILTI PINS DIA 0.138x32mm lg. EACH SIDE. PROVIDE MOISTURE BREAK (ROOF SHINGLE OR OTHER) BETWEEN POST & PORCH

**18 SILL PLATE @ FOUNDATION (SEE SP2)**  
38mm x 140mm (2 x 6) SILL PLATE (SIDING) 38mm X 89 (2x4) (BRICK) WITH 12.7 mm (1/2") DIA. ANCHOR BOLTS, 300mm (12") LONG, MIN. 100mm IN CONC. @ 1830mm (6'-0") O.C., PLATE SITTING ON SILL GASKET, AIR BARRIER AND CONCRETE WALL.

**19 ALL STAIRS (EXTERIOR & INTERIOR)**  
MIN. RISE = 125mm (4 7/8") MAX. RISE = 200mm (7 7/8")  
MIN. RUN = 255mm (10") MAX. RUN = 355mm (14")  
MIN. TREAD = 235mm (9 1/4") MAX. TREAD = 355mm (14") FOR CURVED STAIRS  
MIN. RUN = 150mm (5 7/8")  
MIN. AVERAGE RUN = 200mm (7 7/8")  
MIN. HEADROOM = 1950mm (6'-5")  
MIN. WIDTH = 860mm (2'-10")  
NOSING (Max. curved or beveled edge) = 25mm (1")

**20 GUARDS/HANDRAILS**  
ALL GUARDS AND HANDRAILS ARE TO COMPLY WITH THE REQUIREMENTS OF THE O.B.C SUBSECTION 9.8.7 AND 9.8.8  
GUARD @ INT. LANDING/STAIR OR FLOORS = 900mm (2'-11")  
HANDRAIL @ INT. STAIR...MIN = 865 (2'-10") MAX = 965mm (3'-2")  
GUARD/HANDRAIL @ EXT. LANDING/BALCONY  
(Greater than 1800mm above finish grade) = 1070mm (3'-6")  
GUARD/HANDRAIL @ EXT. LANDING/STAIR = 900mm (2'-11")  
HANDRAIL @ EXT. STAIR...MIN = 865 (2'-10") MAX = 965mm (3'-2")  
PICKETS MAX. 100mm (4") BETWEEN

**21 BLOCK VENEER WALL (INTERIOR)**  
100mm (4") CONCRETE BLOCK TO SUPPORT BRICK ABOVE. AIR SPACE, METAL TIES, BLDG. PAPER ETC... AS PER NOTE 3) EXCEPT NO WEEP HOLES OR FLASHING.

**22 PORCH SLAB (SEE SP-2F)**  
130mm (5") POURED CONC. 32MPa (4650 psi) @ 28 DAYS  
PORCH SLAB WITH 6% AIR CONTENT +/- 1%, CLASS 2 EXPOSURE W/C RATIO =0.45 WITH 10M REBAR @ 400 O/C (16") EACH WAY WITH MIN. 50mm (2") CONCRETE COVER BOTTOM FROM THE BOTTOM OF THE SLAB TO THE FIRST LAYER OF BARS AND THE SECOND LAYER OF BARS LAID DIRECTLY ON TOP OF THE LOWER LAYER IN THE OPPOSITE DIRECTION, 75mm (3") MIN. SLAB BEARING, 10 M DOWELS 600mm x 600mm (23 5/8" x 23 5/8") @ 400mm (16") O.C. AROUND PERIMETER. REINFORCING STEEL GRADE 400 - CAN/CSA-G30.18-M

**23 GARAGE SLAB (OBC 9.16.2.2.)**  
100mm (4") CONC. SLOPED BACK TO FRONT. AS PER PLAN, CONC. STRG 32 MPa (4650 psi) @ 28 DAYS WITH 6% ±15 AIR CONTENT, MAX W/C RATIO 0.04, MAX. SLUMP - 75mm, CLASS 'C2' EXPOSURE  
COMPACTED NON FROST SUSCEPTIBLE FILL

**24 BASEMENT SLAB (OBC 9.16.2.2, & SP2)**  
75 mm (3") CONCRETE SLAB, CONC. STRG 25 MPa (3625 psi) @ 28 DAYS  
ON MIN. 100 mm (4") OF COARSE GRANULAR

**25 STEP FOOTINGS (OBC 9.15.3.9)**  
HORIZONTAL STEP = 600mm (23 5/8") MIN.  
VERTICAL STEP = 600mm (23 5/8") MAX.

**26 COLD CELLAR**  
FULL HEIGHT INSULATION ON INTERIOR SIDE OF FOUNDATION WALLS SEPARATING HEATED SPACE FROM COLD CELLAR. INSULATED DOOR WITH WEATHER STRIPPING. C/W VENT W/ PAINTED INSECT SCREEN, LIGHT FIXTURES AND FLOOR DRAIN.

**27 FRAMED FLOORS (OBC 9.30.6.1, 9.23.13.3,4,5)**  
FLOOR FINISHING (ON MIN. 15.9mm (5/8") PANEL TYPE UNDERLAY FOR CERAMIC TILE)  
19mm (3/4") T&G SUBFLOOR  
PRE-ENGINEERED FLOOR JOIST SPACING AS PER MANUFACTURERS DRAWINGS  
19mm x 65 mm (1x3) STRAPPING @ 405mm (16") O/C  
12.7mm (1/2") DRYWALL (FINISH AS PER SPECIFICATIONS)

**28 PROVIDE 38 X 89 SOLID BLOCKING AT 1200mm (3'-11 1/4") O.C. BELOW WALLS RUNNING PARALLEL TO JOISTS. (OBC 9.23.9.8)**

**29 GRABS BARS (OBC 9.5.2.3, SEE SP-10D)**  
ADD GRAB BAR REINFORCEMENT IN STUD WALL FOR MAIN BATHROOM

**30 ATTIC ACCESS (OBC 9.19.2)**  
ATTIC ACCESS HATCH 500mm x 700mm (19 3/4" x 27") WITH WEATHER STRIPPING AND INSULATED.

**31 DROP IN TUB AS PER PLANS (OBC 9.29.2.1)**  
CERAMIC TILE DECK W/ 2 ROWS OF TILE  
ON WALL AROUND DECK MINIMUM 400mm (1'-4") HIGH

**32 FREE STANDING TUB AS PER PLANS**  
PROVIDE TILE FROM FLOOR TO 400mm (16") ABOVE TUB RIM FOR TUBS 400mm (16") OR LESS FROM WALL

**33 CAPPED DRYER, INTAKE OR EXHAUST VENT. MAX. UNPROTECTED OPENING AREA OF 130 cm2 (20 sq. in.) (OBC 9.10.15.4(5))**

**34 LINEN CLOSET 5 SHELVES MIN. 350mm (1'-2") DEEP.**

**35 19mm x 89mm (1 x 4) BOTH SIDES OF STEEL BEAM.**

**36 GARAGE DOORS SHALL BE EXTERIOR TYPE SELF CLOSING DOORS AND WEATHERSTRIPPED. PROVISIONS RESISTANCE TO FORCED ENTRY SHALL BE PROVIDE AS PER O.B.C 9.7**

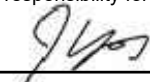
**37 WOOD PLATES ON STEEL BEAMS TO BE RAMSET, SCREWED OR BOLTED @ 405mm (16") O/C**


**38 TYPICAL PARTY WALL (OBC ASSEMBLY W15d) (SP3a -1)**  
2-15.9mm TYPE 'X' GYPSUM BOARD  
FRAMING (STUD SIZE AS PER PLAN) @ 405 O.C.  
90mm SOUND BATTS.  
25mm AIR SPACE  
38x90 STAGGERED FRAMING @ 405 O.C. 2-15.9mm TYPE 'X' GYPSUM BOARD

No.	Revision	Date	By
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1	ISSUED FOR TENDER	MAR 24/22	

Client	MINTO COMMUNITIES	
Project	AVENUE TOWNS CITY OF OTTAWA BACK-TO-BACK TOWNS	

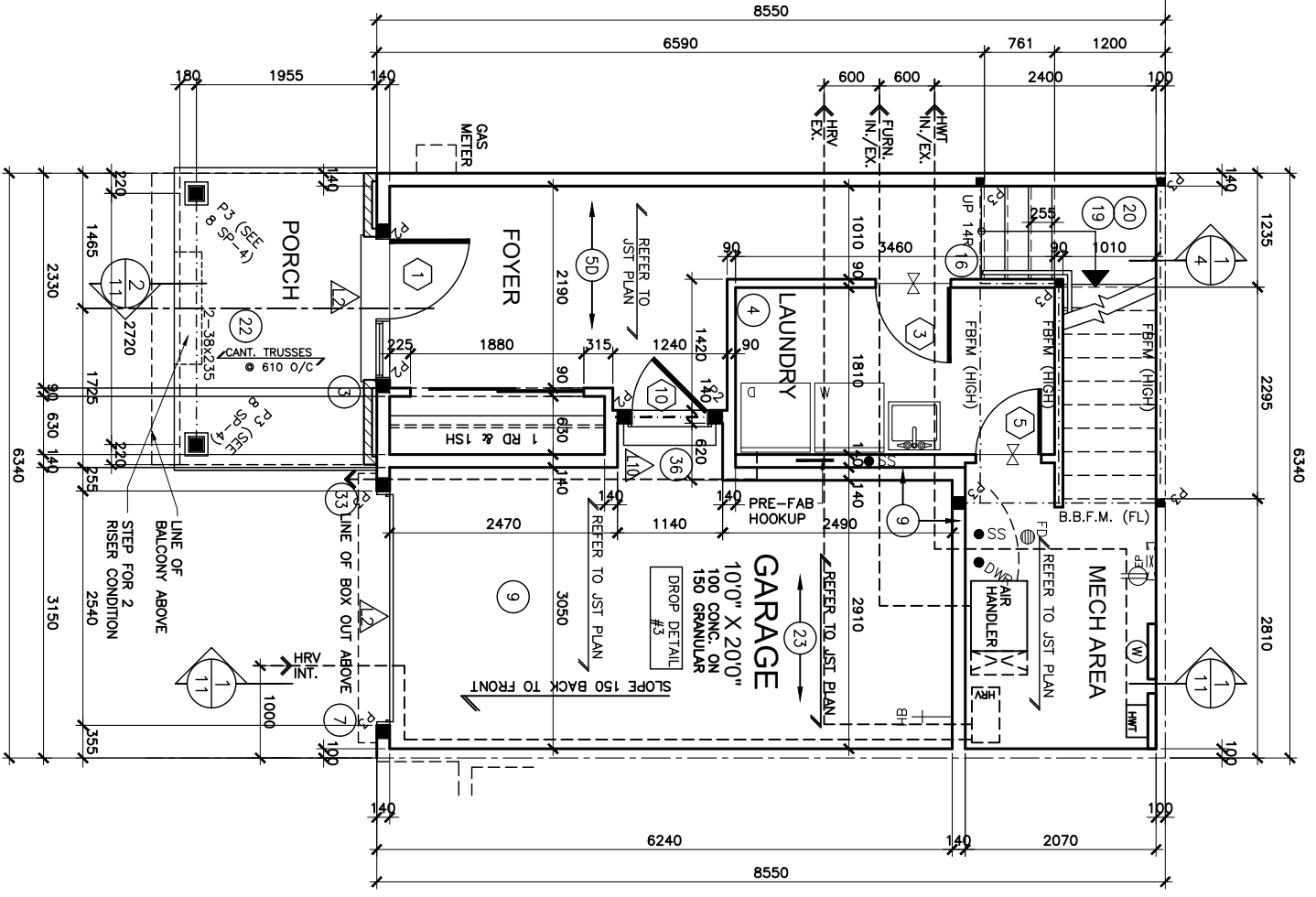
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Scale	1 : 75	Drawn by SST
Date	MARCH 2021	Checked by AMM
CAMBRIDGE END		

REGISTERED PERSON: D.W. CASSIDY & CO. ARCHITECTURAL TECHNOLOGISTS FIRM BCIN 28461
I <u>JAMIE LOPES</u> have reviewed and take responsibility for this design.
Signature 
BCIN 28757 Date: MAR. 14, 2022

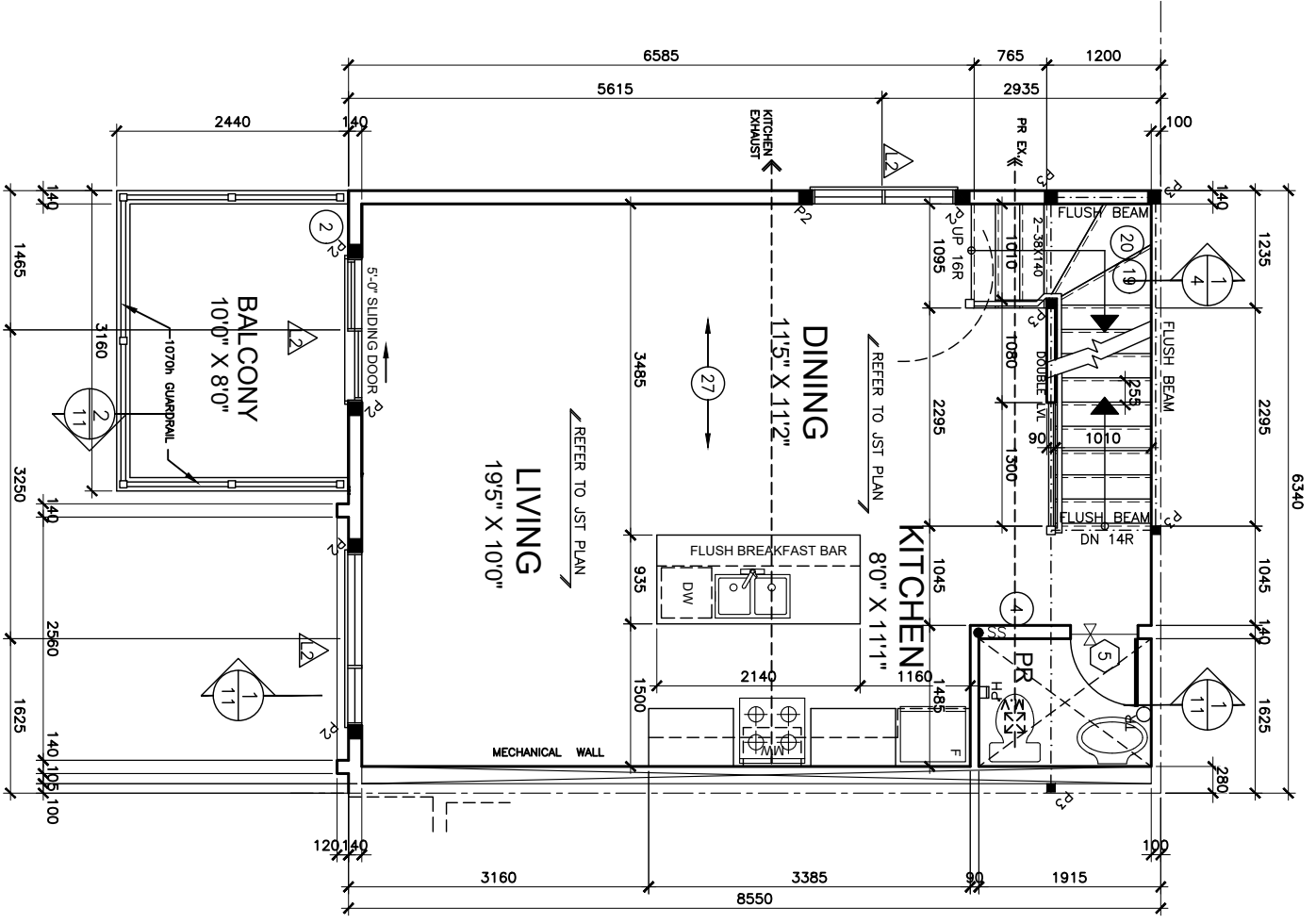
 60 RANDALL DRIVE SUITE 11 AJAX, ONTARIO L1S 6L3 PH (905) 619-1270 FAX (905) 619-1269	Project No. 2021-29
	OBC 2012
	Revision No. R0
	Drawing No. 2



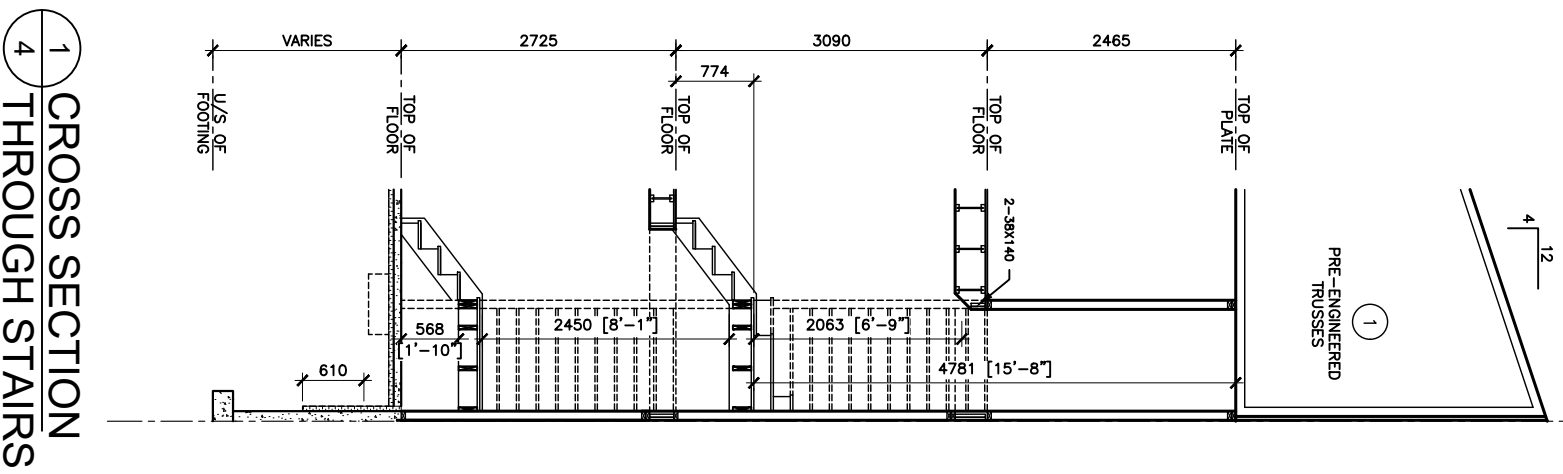
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**GROUND FLOOR PLAN 'AA' & 'AB'**



**SECOND FLOOR PLAN 'AA' & 'AB'**



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**MINTO COMMUNITIES**

Project  
**AVENUE TOWNS  
CITY OF OTTAWA  
BACK-TO-BACK TOWNS**

Sheet Title  
**GROUND & SECOND FLOOR PLAN ELEVATION 'AA' & 'AB'**

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**1 : 75**

Date  
**MARCH 2021**

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**AMM**

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FIRM BCIN 28461**

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Signature [Signature]  
BCIN 28757 Date: MAR. 14, 2022

**CASSIDY & CO.**  
**ARCHITECTURAL TECHNOLOGISTS**

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AJAX, ONTARIO  
L1S 6L3  
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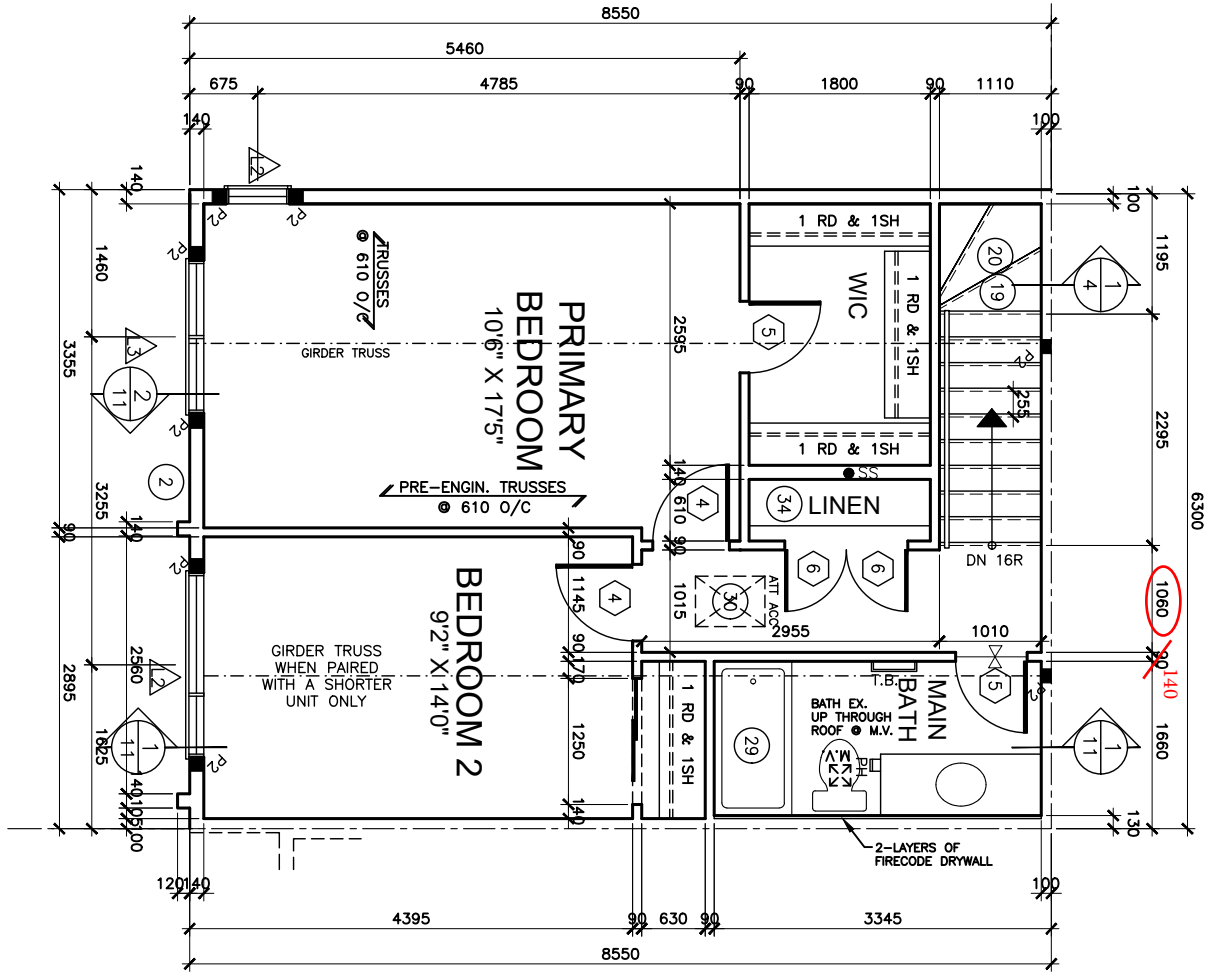
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**2021-29**

OBC  
**2012**

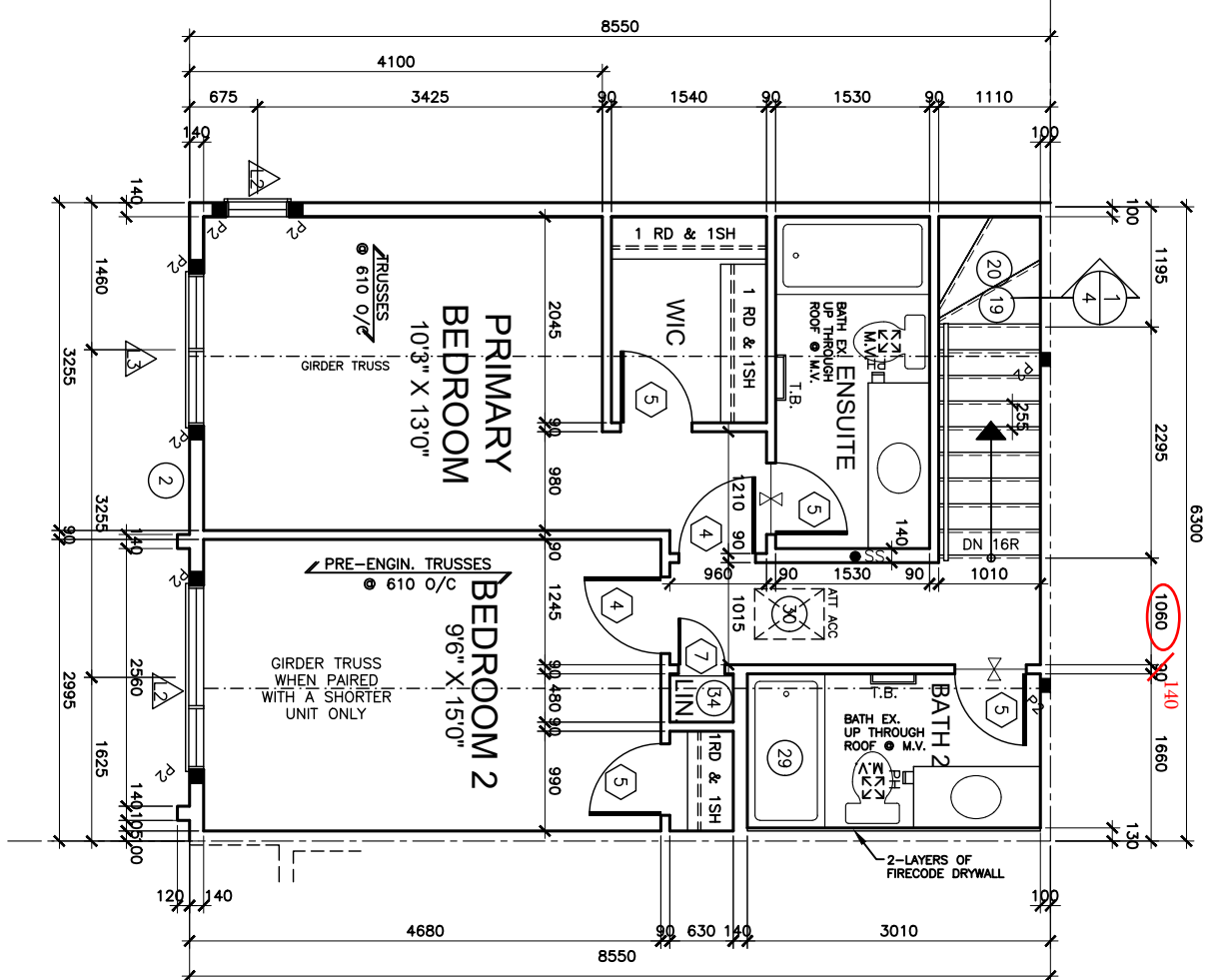
Revision No.  
**R0**

Drawing No.  
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No.	Revision	Date
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ALT. THIRD FLOOR PLAN 'AA' & 'AB'



NOTE :  
FOR WINDOW SIZES OR STRUCTURAL INFORMATION NOT SHOWN, REFER TO UNIT WORKING DRAWINGS

NOTE :  
ADD GRAB BAR REINFORCEMENT IN STUD WALLS FOR MAIN BATHROOM AS PER O.B.C. 9.5.2.3.

Client	MINTO COMMUNITIES
Project	AVENUE TOWNS CITY OF OTTAWA BACK-TO-BACK TOWNS
Sheet Title	THIRD FLOOR PLAN ELEVATION 'AA' & 'AB'
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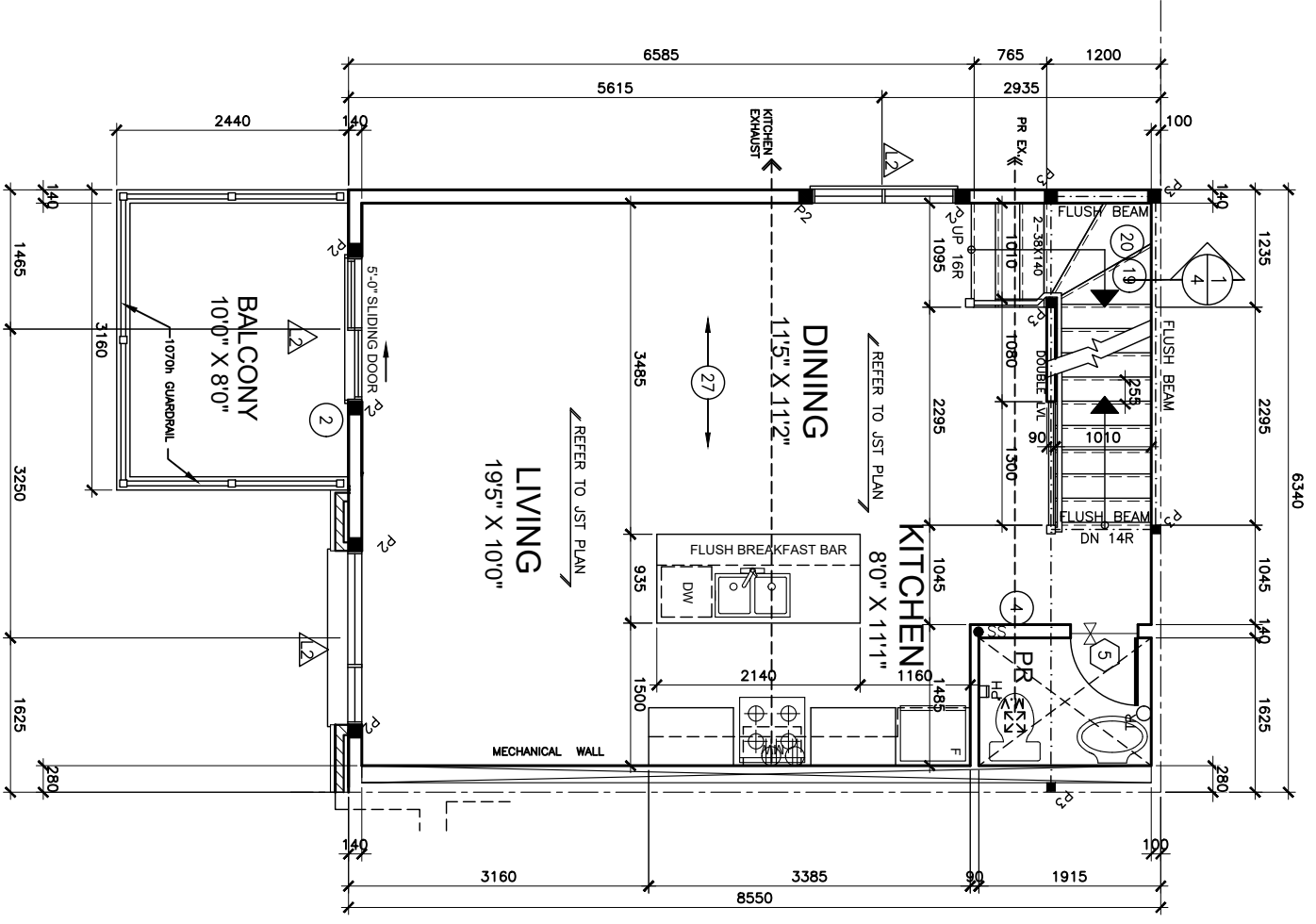
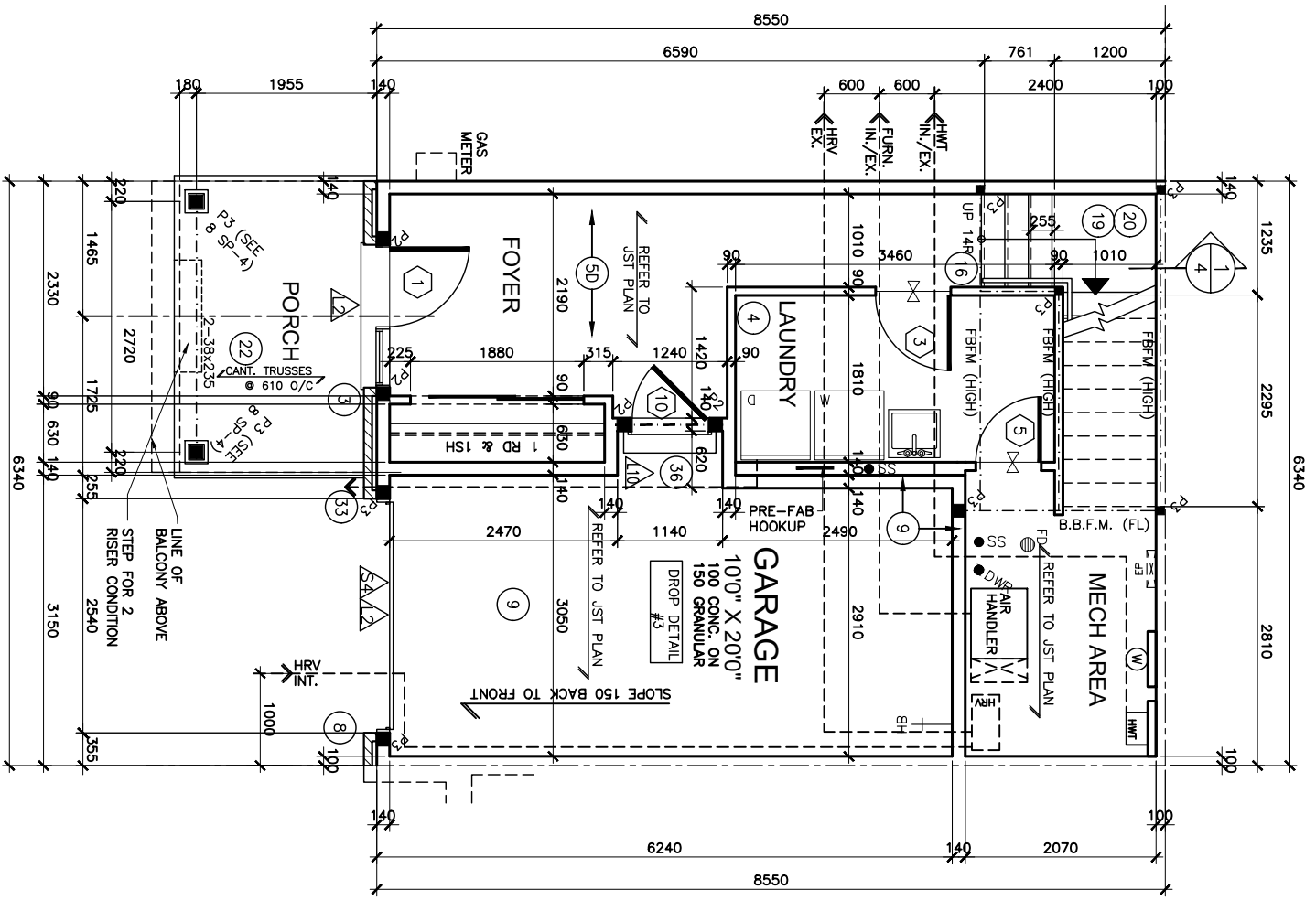
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Revision No.	R0
Drawing No.	5

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No.	Revision	Date
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NOTE :  
 MAIN FLR TO SECOND FLR: STAIR DESIGN IS BASED ON A 255 RUN

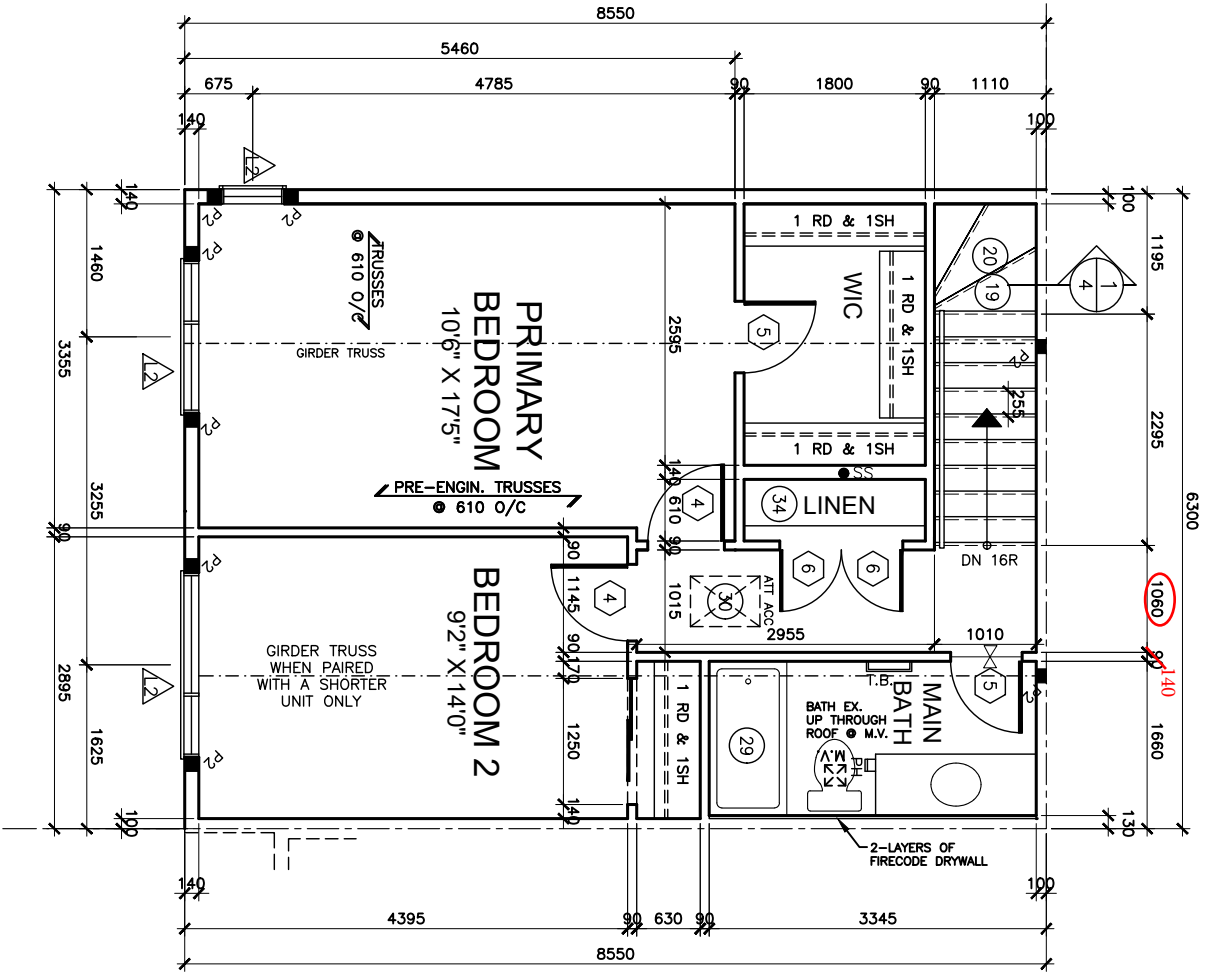
NOTE :  
 ALL FLOOR JOIST BLOCKING, BRIDGING, CANTILEVERING & REINFORCEMENT TO BE INSTALLED AS PER ENG. FLOOR MANUF. LAYOUTS, SPECIFICATIONS & DETAILS

GROUND FLOOR PLAN 'BA' & 'BB'

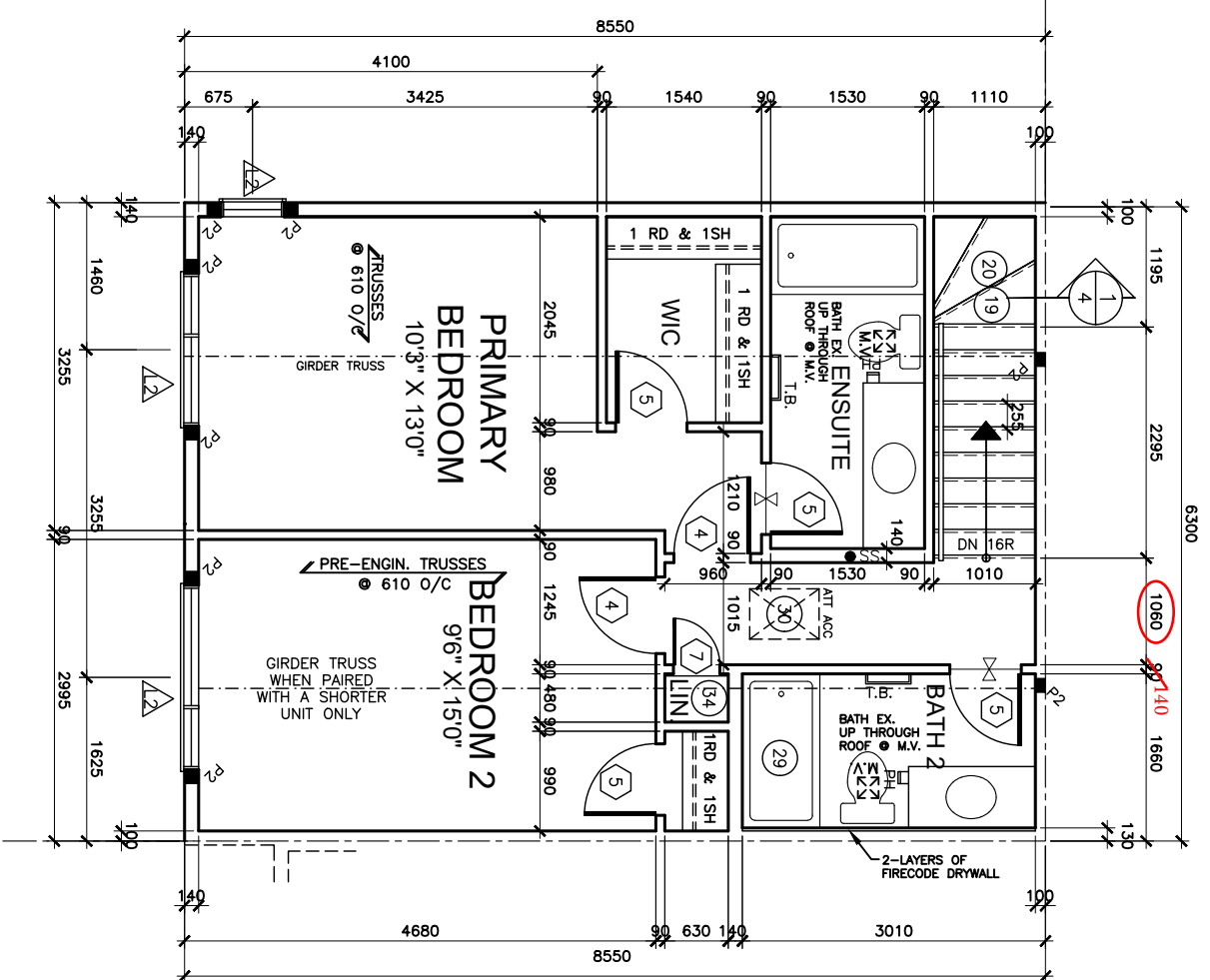
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Client <b>MINTO COMMUNITIES</b>	Sheet Title <b>GROUND &amp; SECOND FLOOR PLANS ELEVATION 'BA' &amp; 'BB'</b>		REGISTERED PERSON: D.W. CASSIDY & CO. ARCHITECTURAL TECHNOLOGISTS FIRM BCIN 28461	Project No. <b>2021-29</b>
	Project <b>AVENUE TOWNS CITY OF OTTAWA BACK-TO-BACK TOWNS</b>	Scale <b>1 : 75</b>		
	Date <b>MARCH 2021</b>	Checked by <b>AMM</b>	I <u>JAMIE LOPES</u> have reviewed and take responsibility for this design.	Drawing No. <b>6</b>
	CAMBRIDGE END		Signature <u>JL</u> BCIN 28757 Date: MAR. 14, 2022	
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THIRD FLOOR PLAN 'BA' & 'BB'



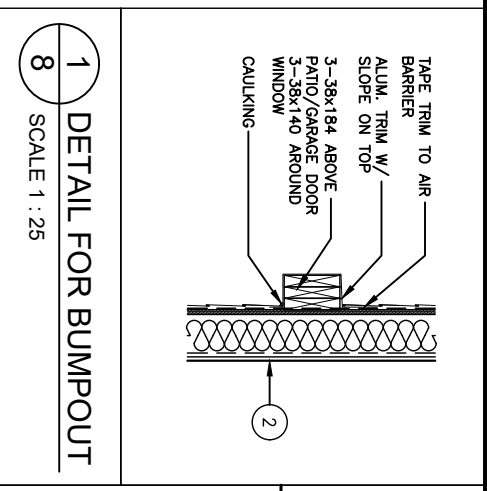
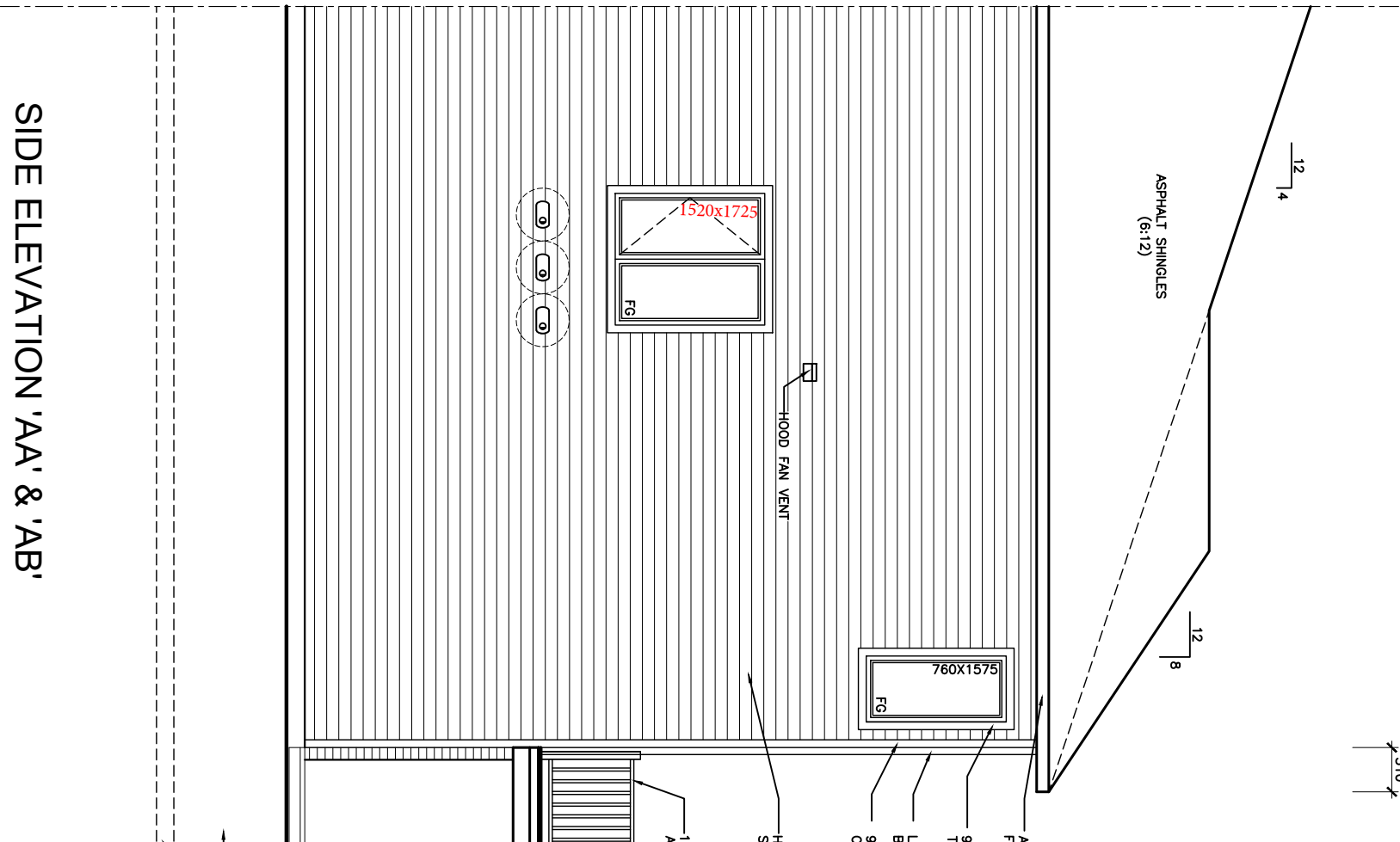
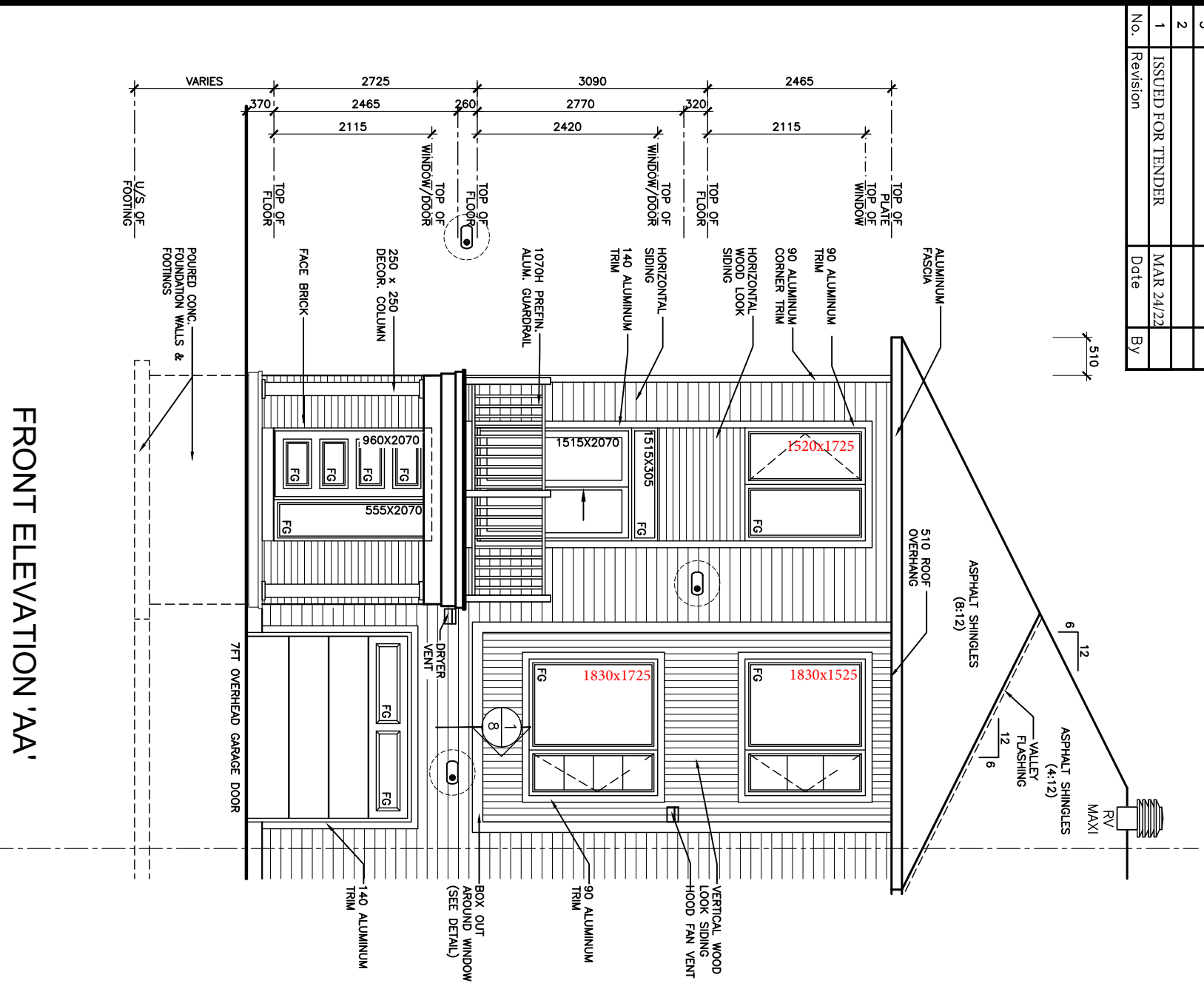
ALT. THIRD FLOOR PLAN 'BA' & 'BB'

NOTE :  
FOR WINDOW SIZES OR STRUCTURAL INFORMATION NOT SHOWN, REFER TO UNIT WORKING DRAWINGS

NOTE :  
ADD GRAB BAR REINFORCEMENT IN STUD WALLS FOR MAIN BATHROOM AS PER O.B.C. 9.5.2.3.

Client <b>MINTO COMMUNITIES</b>	Sheet Title <b>THIRD FLOOR PLANS ELEVATION 'BA' &amp; 'BB'</b>		REGISTERED PERSON: D.W. CASSIDY & CO. ARCHITECTURAL TECHNOLOGISTS FIRM BCIN 28461	Project No. <b>2021-29</b>
	Project <b>AVENUE TOWNS CITY OF OTTAWA BACK-TO-BACK TOWNS</b>	Scale <b>1 : 75</b>		
	Date <b>MARCH 2021</b>	Checked by <b>AMM</b>	Signature <i>[Signature]</i>	Drawing No. <b>7</b>
	<b>CAMBRIDGE END</b>		BCIN <b>28757</b> Date: <b>MAR. 14, 2022</b>	
			<b>CASSIDY &amp; CO.</b> ARCHITECTURAL TECHNOLOGISTS 60 RANDALL DRIVE SUITE 11 AJAX, ONTARIO L1S 6L3 PH (905) 619-1270 FAX (905) 619-1269	

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FRONT ELEVATION 'AA'

SIDE ELEVATION 'AA' & 'AB'

\*\*\*SAME DEPTH UNITS ON SIDE\*\*\*

Client	MINTO COMMUNITIES
Project	AVENUE TOWNS CITY OF OTTAWA BACK-TO-BACK TOWNS

Sheet Title	FRONT & SIDE ELEVATION ELEVATION 'AA'	
Scale	1 : 75	Drawn by SST
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CAMBRIDGE END		

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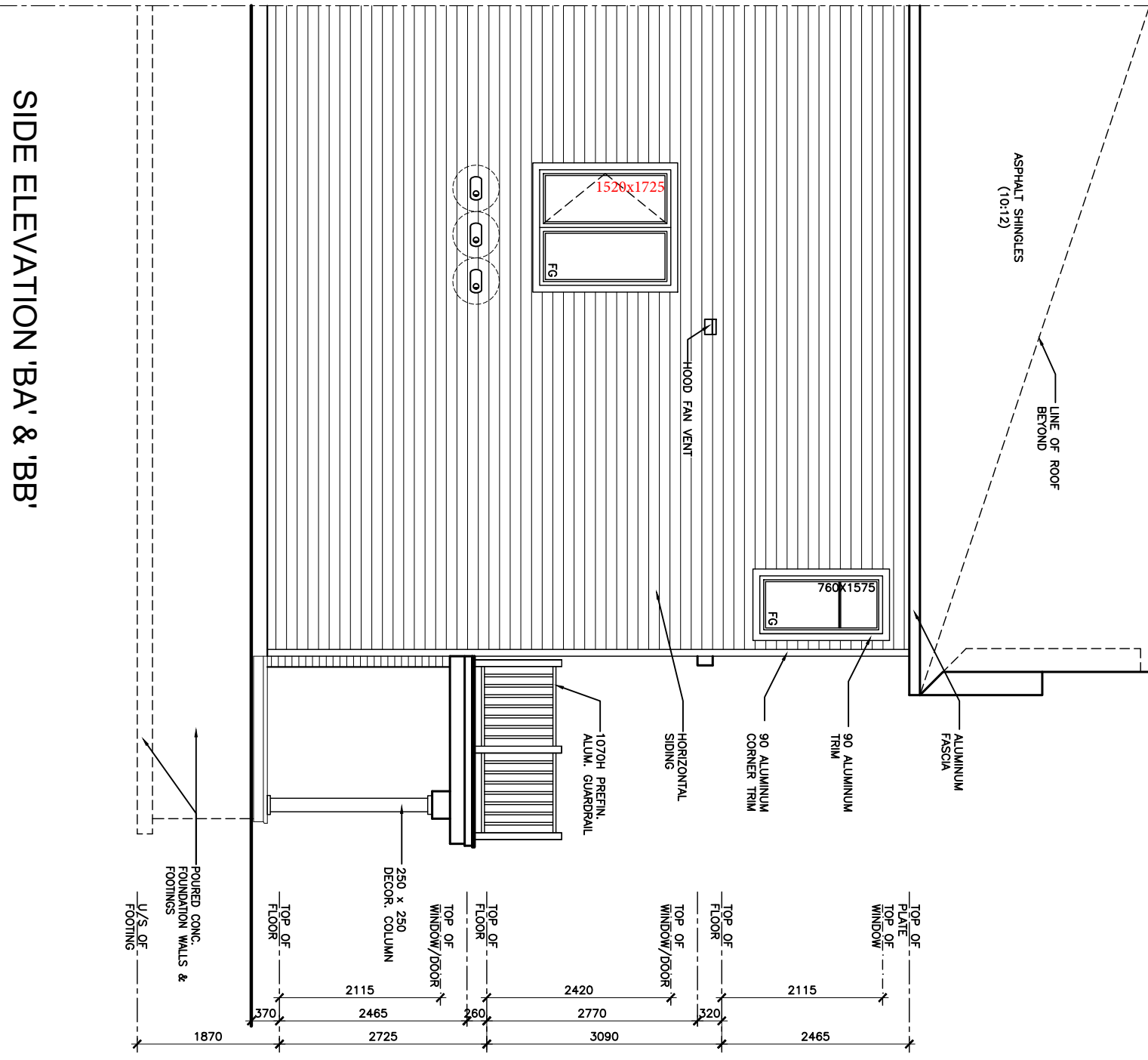
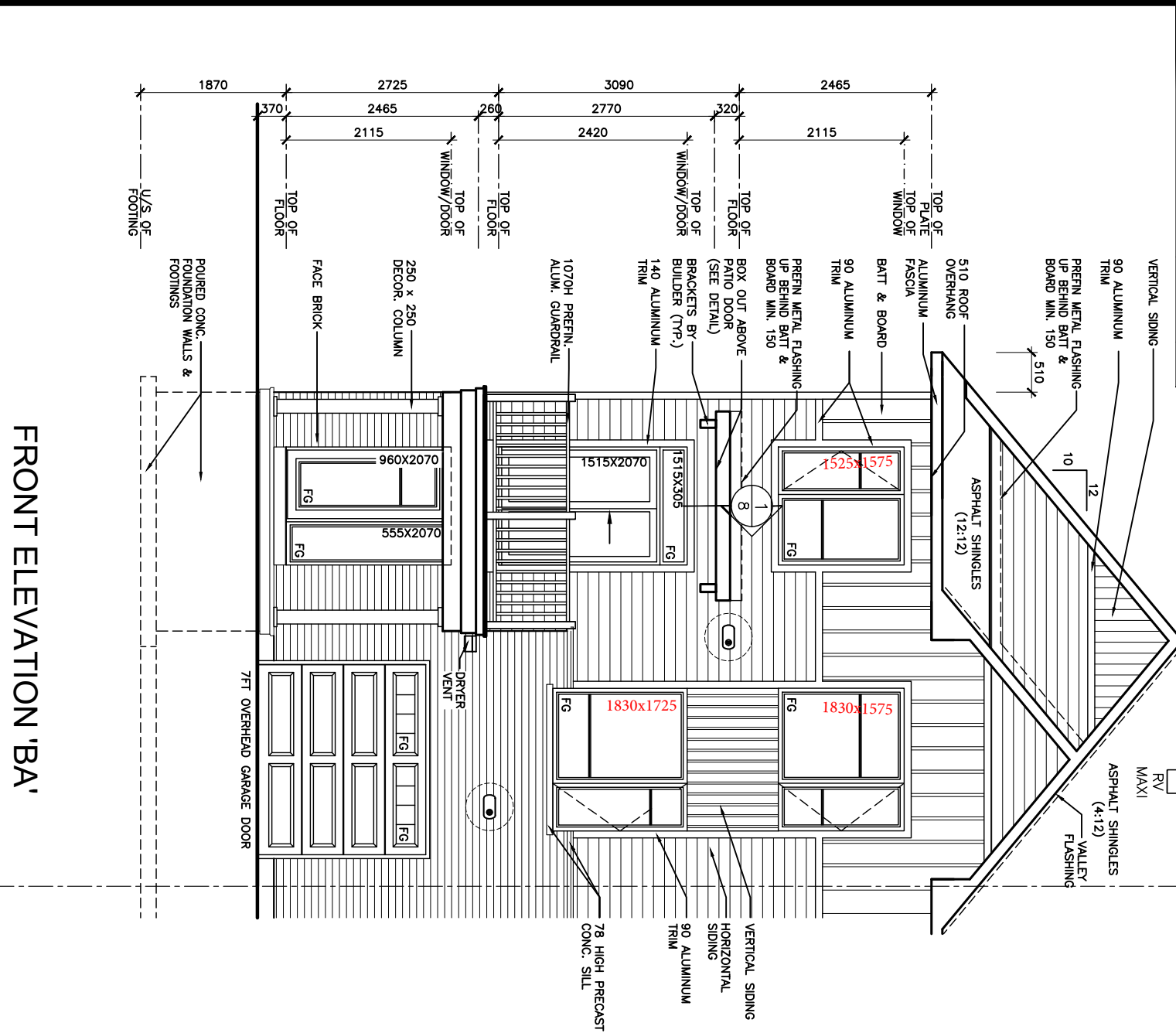
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60 RANDALL DRIVE SUITE 11  
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Project No.	2021-29
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Revision No.	R0
Drawing No.	8



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**\*\*SAME DEPTH UNITS ON SIDE\*\***

FRONT ELEVATION 'BA'

SIDE ELEVATION 'BA' & 'BB'

Client	MINTO COMMUNITIES
Project	AVENUE TOWNS CITY OF OTTAWA BACK-TO-BACK TOWNS

Sheet Title	FRONT & SIDE ELEVATION ELEVATION 'BA'	
Scale	1 : 75	Drawn by SST
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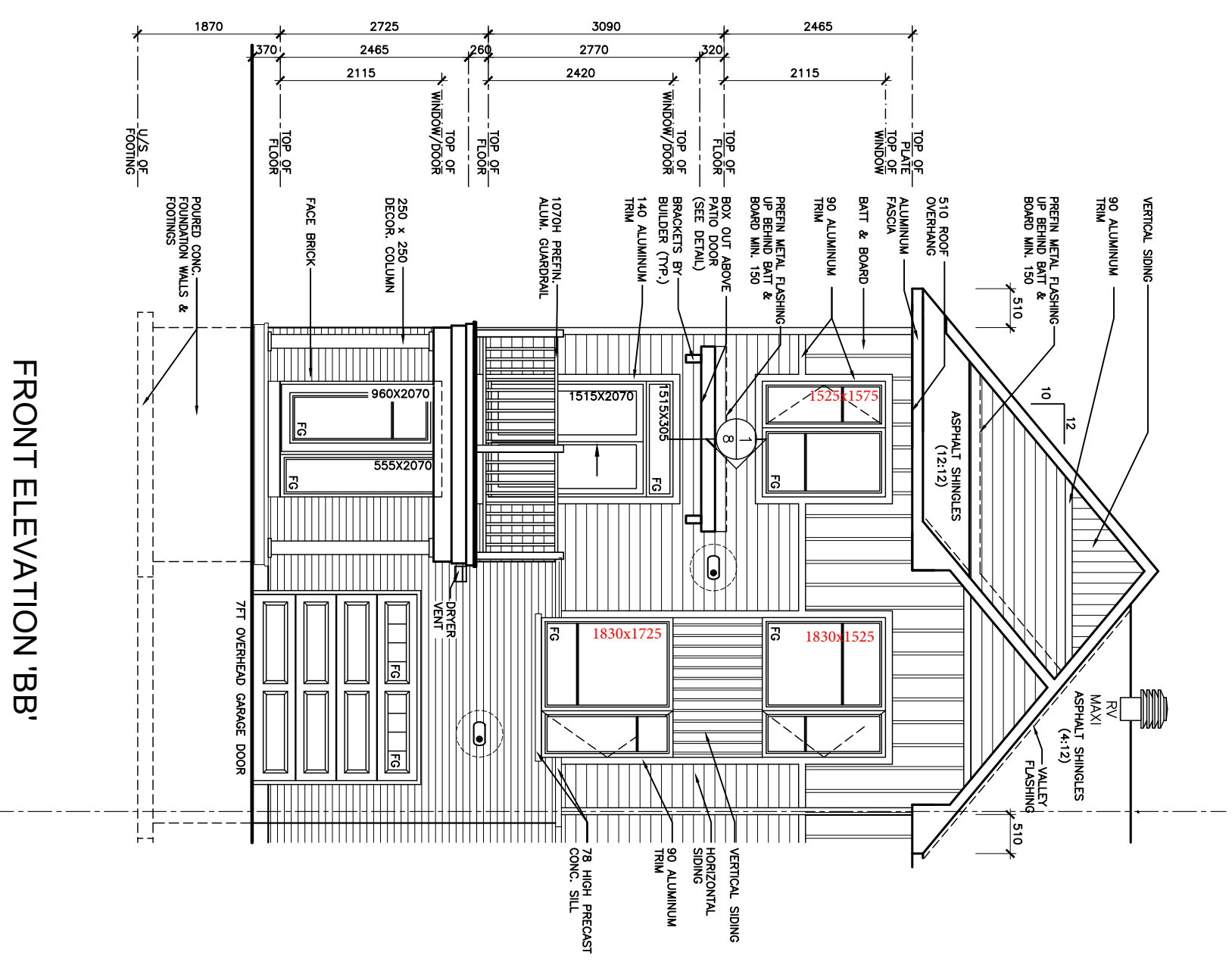
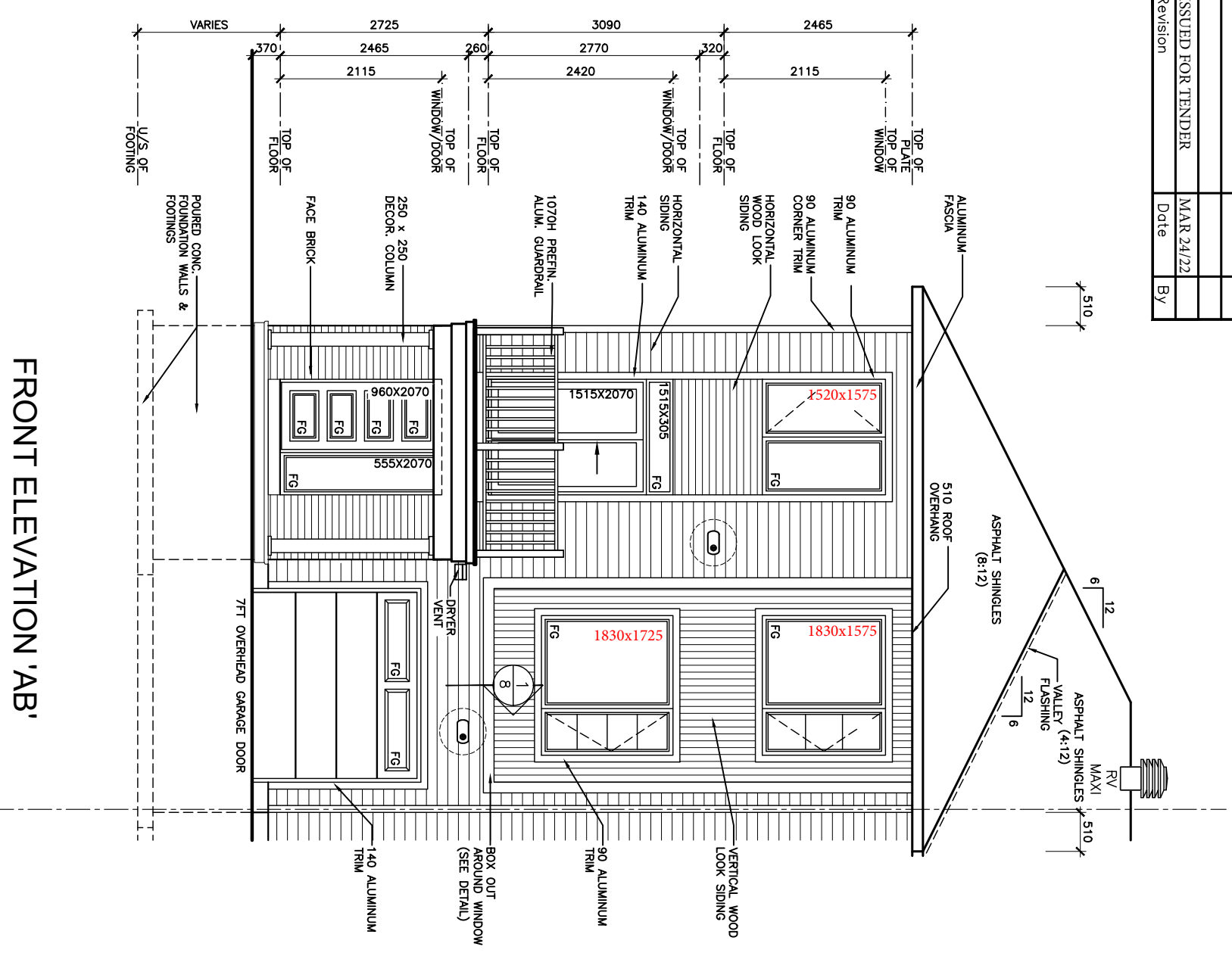
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60 RANDALL DRIVE SUITE 11  
AJAX, ONTARIO  
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Project No.	2021-29	
OBC	2012	Revision No. R0
Drawing No.	9	

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**\*\*SMALLER UNIT ON SIDE\*\***

**FRONT ELEVATION 'AB'**

**FRONT ELEVATION 'BB'**

Client	MINTO COMMUNITIES
Project	AVENUE TOWNS CITY OF OTTAWA BACK-TO-BACK TOWNS

Sheet Title	FRONT ELEVATION ELEVATION 'AB' & 'BB'	
Scale	1 : 75	Drawn by SST
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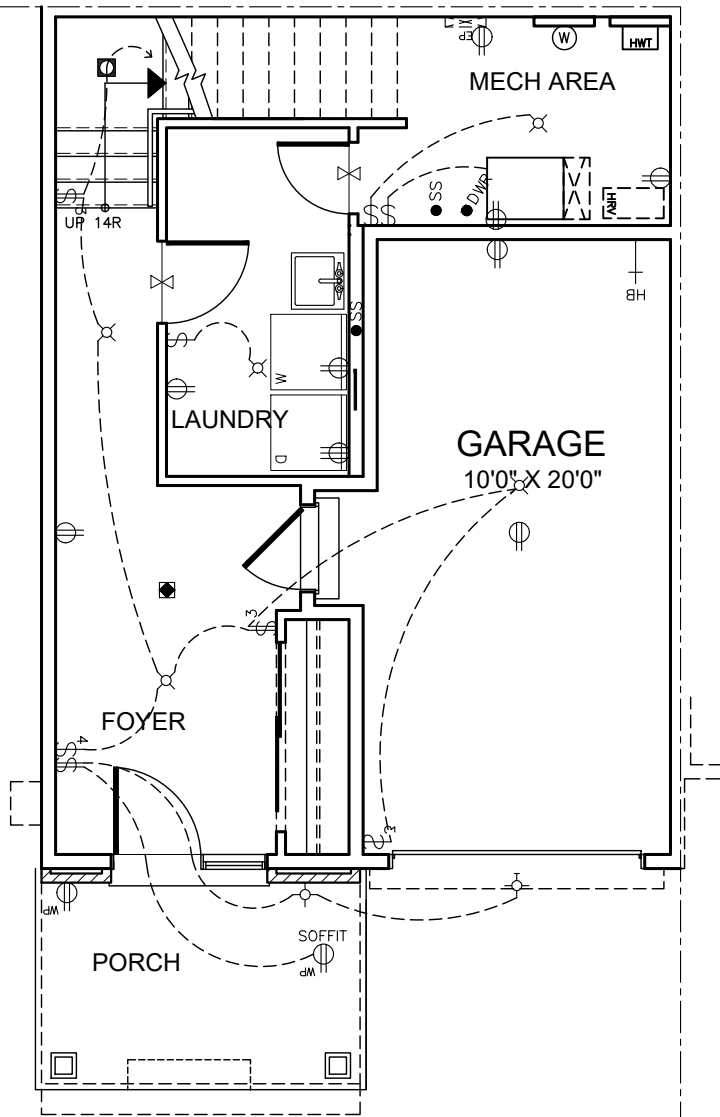
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BCIN 28757 Date: MAR. 14, 2022

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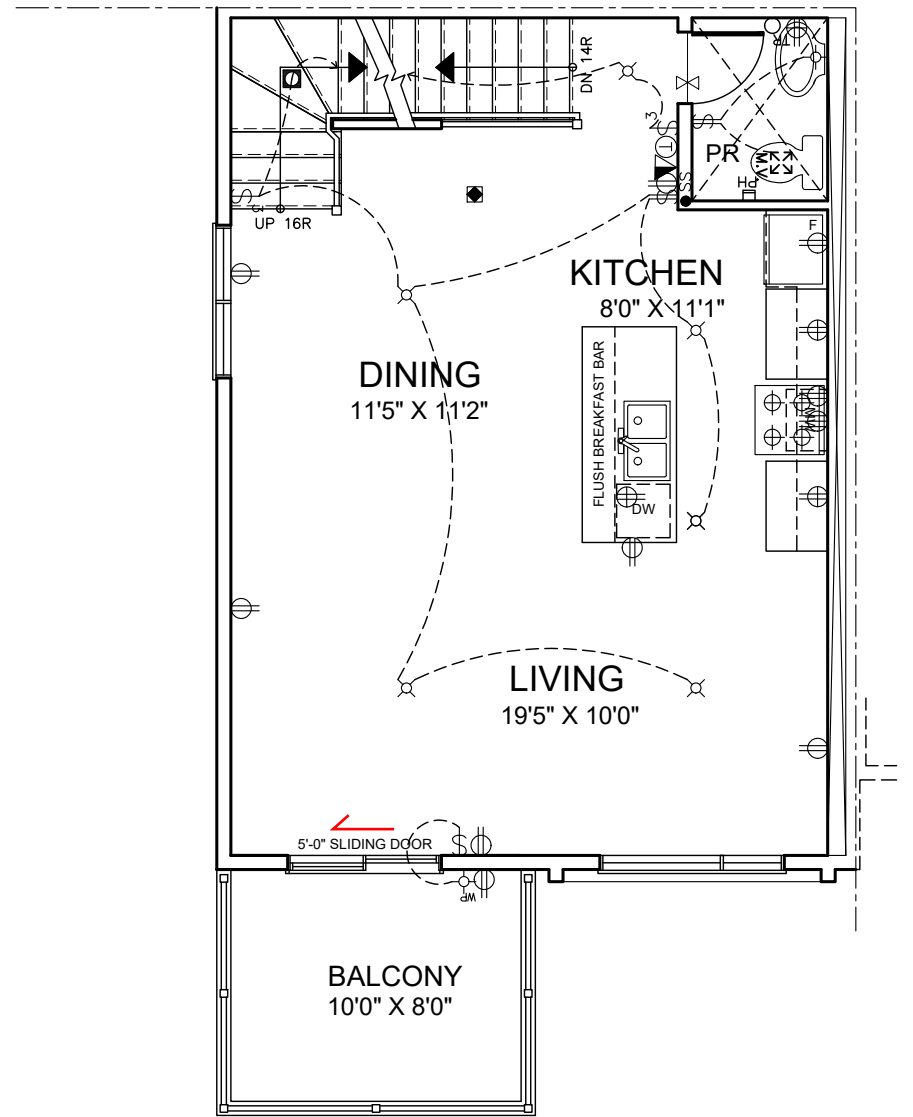
60 RANDALL DRIVE SUITE 11  
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Project No.	2021-29
OBC	2012
Revision No.	R0
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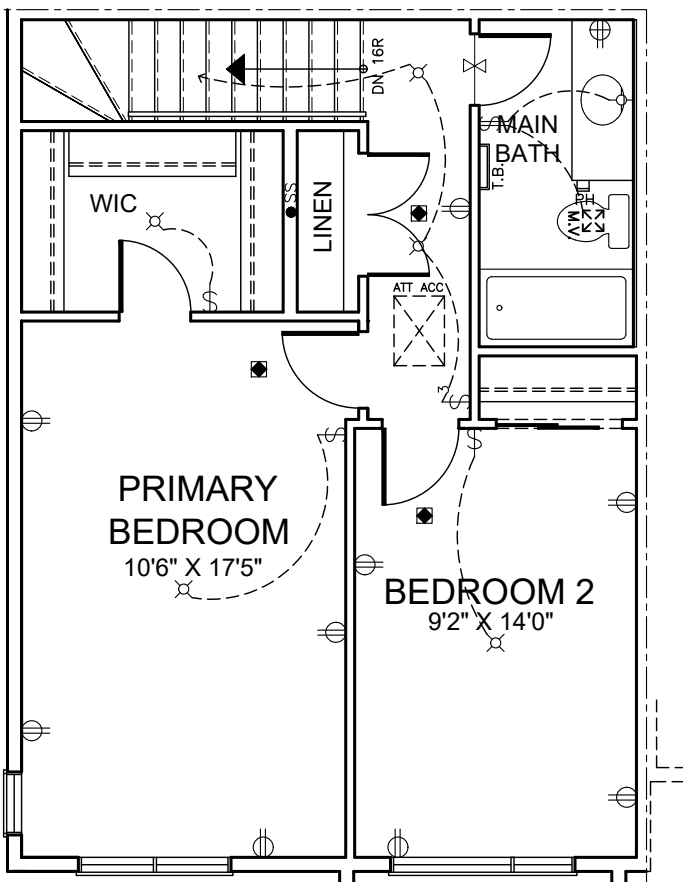




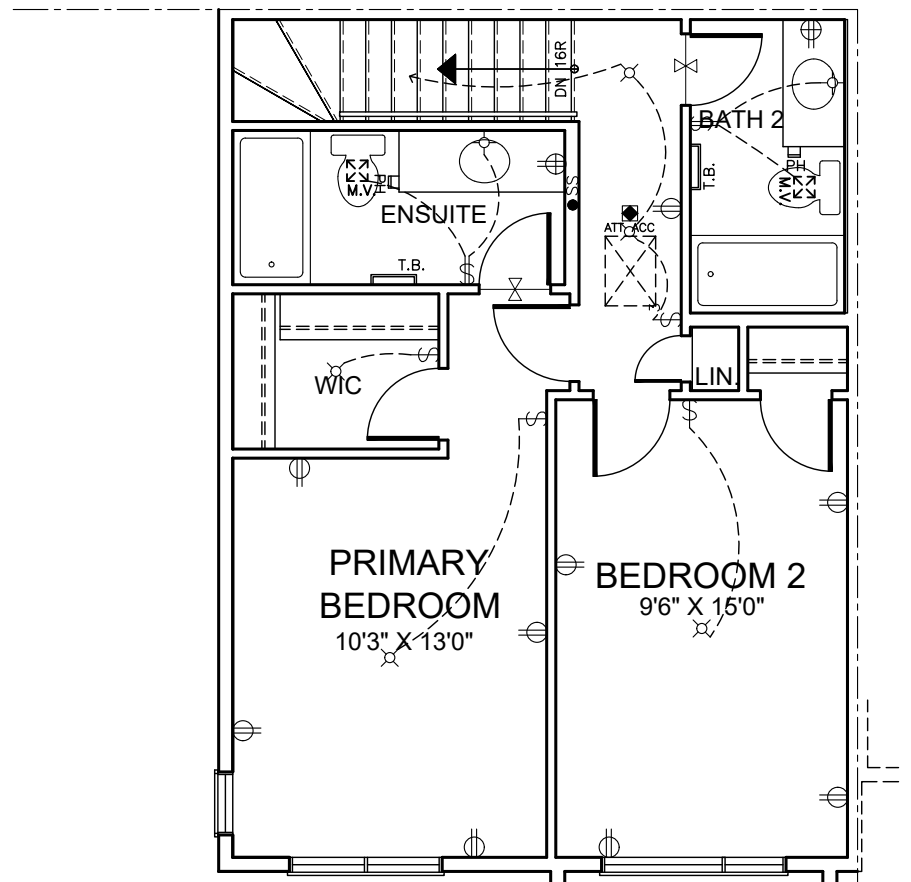
GROUND FLOOR PLAN 'AA'



SECOND FLOOR PLAN 'AA'



THIRD FLOOR PLAN 'AA'



ALT. THIRD FLOOR PLAN 'AA'

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ELECTRICAL PLANS FOR  
OTHER ELEVATIONS TO  
BE SIMILAR

Client	MINTO COMMUNITIES		
Project	AVENUE TOWNS CITY OF OTTAWA BACK-TO-BACK TOWNS		
Sheet Title	ELECTRICAL PLANS		
Scale	1 : 75	Drawn by	SST
Date	MARCH 2021	Checked by	AMM
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## **Appendix E**

Building Component  
Calculations

## ROOM BY ROOM CALCULATIONS - CAMBRIDGE

Note: Ceiling Height 8' 1" (Ground floor) 9' 1" (Second floor) and 8' 1" (Third floor)

### Kitchen / Breakfast / Living / Dining Room

Floor Area (sq.m) 46.7

	Width	Height	Area	
Window 1 (front)	1.8	1.7	3.2	
Window 2 (side)	1.5	1.7	2.6	
Patio Door (front)	1.5	2.1	3.2	
			8.9	Total Window Area
			19.05%	% of Floor Area

	Width	Height	Area	
Exterior Door	0	0	0	
			0	Total Door Area
			0.00%	% of Floor Area

	Width	Height	Area	Area minus windows/doors	
Exterior Wall (front)	6.3	2.8	17.45	11.14	
Exterior Wall (side)	7.4	2.8	20.50	17.91	
				11.14	Total Exterior Wall Area
				23.86%	% of Floor Area

### Bedroom 2

Floor Area (sq.m) 11.9

	Width	Height	Area	
Window 1	1.8	1.5	2.7	
			2.7	Total Window Area
			22.69%	% of Floor Area

	Width	Height	Area	
Exterior Door	0	0	0	
			0	Total Door Area
			0.00%	% of Floor Area

	Width	Height	Area	Area minus windows/doors	
Exterior Wall (front)	2.9	2.5	7.25	4.55	
				4.55	Total Exterior Wall Area
				38.24%	% of Floor Area

### Primary Bedroom

Floor Area (sq.m) 17.1

	Width	Height	Area	
Window 1 (front)	1.5	1.7	2.55	
Window 2 (side)	0.76	1.6	1.216	
			2.55	Total Window Area
			14.91%	% of Floor Area

	Width	Height	Area	
Exterior Door	0	0	0	
			0	Total Door Area
			0.00%	% of Floor Area

	Width	Height	Area	Area minus windows/doors	
Exterior Wall (front)	3.4	2.5	8.50	5.95	
Exterior Wall (side)	5.5	2.5	13.75	12.53	
				5.95	Total Exterior Wall Area
				34.80%	% of Floor Area

**TABLE 13: BUILDING COMPONENT TEMPLATE**

Architect:  
 Location: Arcadia Stage 6  
 Building Type: Avenue Town  
 Block Number: Blocks 10, 13, 16  
 Front Façade Noise Level (dBA) 69

JLR No: 26299-006  
 Prepared by: Thomas Blais  
 Checked by: Lee Jablonski

ROOM	# OF COMPONENTS	ROOM FLOOR AREA (M <sup>2</sup> )	WINDOW AREA (M <sup>2</sup> )	W/RFA %	DOOR AREA (M <sup>2</sup> )	D/RFA %	EXT. WALL AREA (M <sup>2</sup> )	EW/RFA %	REQUIRED AIF*	WINDOW		EXT. DOOR		EXT. WALL		CEILING/ROOF	
										Type	AIF**	Type	AIF***	Type	AIF****	Type	AIF*****
Primary Bedroom	4	17.1	2.6	15%	-	-	6.0	35%	37	6(24)6	37	-	-	EW2	37	-	-
Bedroom 2	2	11.9	2.7	23%	-	-	4.6	38%	34	6(20)6	34	-	-	EW1	35	-	-
Kitchen / Breakfast / Living / Dining Room	4	46.7	8.9	19%	-	-	11.1	24%	32	6(6)6	32	-	-	EW1	37	-	-

\* Taken from Table 10.5: AIF required for Road and Rail Traffic Noise Cases

\*\* Taken from Table 10.6: Acoustic Insulation Factor for various types of windows (example: 2(100)2 denotes 2 mm glass (100 mm space) 2 mm glass).

\*\*\* Taken from Table 10.9: Acoustic Insulation Factor for various types of exterior doors

\*\*\*\* Taken from Table 10.7: Acoustic Insulation Factor for various types of exterior walls

\*\*\*\*\* Taken from Table 10.8: Acoustic Insulation Factor for various ceiling-roof combinations (only for aircraft noise)

Exterior Door Details

All prime doors should be fully weatherstripped. Except as noted specifically below, doors shall not have inset glazing:

D1 denotes 44 mm hollow-core wood door (up to 20% of area glazed).

D2 denotes 44 mm glass-fibre reinforced plastic door with foam or glass-fibre insulated core (up to 20% area glazed).

D3 denotes 35 mm in solid slab wood door.

D4 denotes 44 mm steel door with foam or glass-fibre insulated core.

D5 denotes 44 mm solid slab door.

sd denotes storm door of wood or aluminum with openable glazed sections.

Exterior Wall Details

The common structure of walls EW1 to EW5 is composed of 12.7 mm gypsum board, vapour barrier, and 38x89 mm studs with 50 mm (or thicker) mineral wool or glass fibre batts in the inter-stud cavities.

EW1 denotes the above plus sheathing, plus wood siding or metal siding and fibre backer board.

EW2 denotes the above plus rigid insulation (25-50mm), and wood siding or metal siding and fibre backer board.

EW2 also denotes exterior wall described in EW1 with the addition of rigid insulation (25-50mm) between the sheathing and the external finish.

EW3 denotes simulated mansard with structure as the above plus sheathing, 38 x 89 mm framing, sheathing and asphalt roofing material.

EW4 denotes the above plus sheathing and 20 mm stucco.

EW5 denotes the above plus sheathing, 25 mm air space, 100 mm brick veneer.

EW6 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50mm), 100 mm back-up block, 100 mm face brick.

EW6 also denotes an exterior wall conforming to rainscreen design principles and composed of same gypsum board and rigid insulation with 100 mm concrete block, 25 mm air space, and 100 mm brick veneer.

EW7 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50mm), 140 mm back-up block, 100 mm face brick.

EW8 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50mm), 200 mm concrete.

R denotes the mounting of the interior gypsum board on resilient clips

**ROOM BY ROOM CALCULATIONS - TAHOE 4**

Note: Ceiling Height 9' 1" (first floor) and 8' 1" (second floor)

**Kitchen / Breakfast / Living / Dining Room**

Floor Area (sq.m)	39			
	Width	Height	Area	
Window 1 (rear)	0.6	1.6	1.0	
Window 2 (rear)	0.6	1.6	1.0	
Patio Door (rear)	1.5	2.4	3.6	
Window 3 (side)	0.6	1.6	1.0	
Window 4 (side)	0.6	1.6	1.0	
	7.5		Total Window Area	
	19.28%		% of Floor Area	
	Width	Height	Area	
Exterior Door	0	0	0	
	0		Total Door Area	
	0.00%		% of Floor Area	
	Width	Height	Area	Area minus windows/doors
Exterior Wall (rear)	6.3	2.8	17.64	12.04
Exterior Wall (side)	5.9	2.8	16.52	14.60
	26.64		Total Exterior Wall Area	
	68.31%		% of Floor Area	

**Bedroom 4**

Floor Area (sq.m)	9.3			
	Width	Height	Area	
Window 1 (front)	1.635	1.33	2.17455	
	2.17455		Total Window Area	
	23.38%		% of Floor Area	
	Width	Height	Area	
Exterior Door	0	0	0	
	0		Total Door Area	
	0.00%		% of Floor Area	
	Width	Height	Area	Area minus windows/doors
Exterior Wall (front)	3.2	2.5	8.00	5.83
Exterior Wall (side)	3.7	2.5	9.25	7.08
	12.90		Total Exterior Wall Area	
	138.72%		% of Floor Area	

**Bedroom 2**

Floor Area (sq.m)	8.4			
	Width	Height	Area	
Window 1	1.84	1.33	2.4472	
	2.4472		Total Window Area	
	29.13%		% of Floor Area	
	Width	Height	Area	
Exterior Door	0	0	0	
	0		Total Door Area	
	0.00%		% of Floor Area	
	Width	Height	Area	Area minus windows/doors
Exterior Wall (front)	2.8	2.5	7.00	4.55
	4.55		Total Exterior Wall Area	
	54.20%		% of Floor Area	

**Bedroom 3**

Floor Area (sq.m)	7.5			
	Width	Height	Area	
Window 1 (side)	1.23	1.22	1.5006	
	1.5006		Total Window Area	
	20.01%		% of Floor Area	
	Width	Height	Area	
Exterior Door	0	0	0	
	0		Total Door Area	
	0.00%		% of Floor Area	
	Width	Height	Area	Area minus windows/doors
Exterior Wall (side)	3.4	2.5	8.50	7.00
	7.00		Total Exterior Wall Area	
	93.33%		% of Floor Area	

**Primary Bedroom**

Floor Area (sq.m)	15.6			
	Width	Height	Area	
Window 1 (rear)	1.635	1.22	1.9947	
	1.9947		Total Window Area	
	12.79%		% of Floor Area	
	Width	Height	Area	
Exterior Door	0	0	0	
	0		Total Door Area	
	0.00%		% of Floor Area	
	Width	Height	Area	Area minus windows/doors
Exterior Wall (rear)	4.3	2.5	10.75	10.75
	10.75		Total Exterior Wall Area	
	68.91%		% of Floor Area	



**TABLE 14: BUILDING COMPONENT TEMPLATE**

Architect:  
 Location: Arcadia Stage 6  
 Building Type: Executive Townhouse (Tahoe)  
 Block Number: Blocks 1 & 2  
 Front Façade Noise Level (dBA) 69

JLR No: 26299-006  
 Prepared by: Thomas Blais  
 Checked by: Lee Jablonski

ROOM	# OF COMPONENTS	ROOM FLOOR AREA (M <sup>2</sup> )	WINDOW AREA (M <sup>2</sup> )	W/RFA %	DOOR AREA (M <sup>2</sup> )	D/RFA %	EXT. WALL AREA (M <sup>2</sup> )	EW/RFA %	REQUIRED AIF*	WINDOW		EXT. DOOR		EXT. WALL		CEILING/ROOF	
										Type	AIF**	Type	AIF***	Type	AIF****	Type	AIF*****
Master Bedroom	2	15.6	2.0	13%	-	-	10.8	69%	34	6(6)6	34	-	-	EW2	35	-	-
Bedroom 2	2	8.4	2.4	29%	-	-	4.6	54%	34	6(24)6	34	-	-	EW1	34	-	-
Kitchen / Breakfast / Living / Dining Room	4	39.0	7.5	19%	-	-	26.6	68%	32	6(6)6	32	-	-	EW1	33	-	-
Bedroom 3	2	7.5	1.5	20%	-	-	7.0	93%	34	6(16)6	34	-	-	EW3	36	-	-
Bedroom 4	3	9.3	2.2	23%	-	-	12.9	139%	36	6(30)6	36	-	-	EW4	37	-	-

\* Taken from Table 10.5: AIF required for Road and Rail Traffic Noise Cases

\*\* Taken from Table 10.6: Acoustic Insulation Factor for various types of windows (example: 2(100)2 denotes 2 mm glass (100 mm space) 2 mm glass).

\*\*\* Taken from Table 10.9: Acoustic Insulation Factor for various types of exterior doors

\*\*\*\* Taken from Table 10.7: Acoustic Insulation Factor for various types of exterior walls

\*\*\*\*\* Taken from Table 10.8: Acoustic Insulation Factor for various ceiling-roof combinations (only for aircraft noise)

Exterior Door Details

All prime doors should be fully weatherstripped. Except as noted specifically below, doors shall not have inset glazing:

D1 denotes 44 mm hollow-core wood door (up to 20% of area glazed).

D2 denotes 44 mm glass-fibre reinforced plastic door with foam or glass-fibre insulated core (up to 20% area glazed).

D3 denotes 35 mm in solid slab wood door.

D4 denotes 44 mm steel door with foam or glass-fibre insulated core.

D5 denotes 44 mm solid slab door.

sd denotes storm door of wood or aluminum with openable glazed sections.

Exterior Wall Details

The common structure of walls EW1 to EW5 is composed of 12.7 mm gypsum board, vapour barrier, and 38x89 mm studs with 50 mm (or thicker) mineral wool or glass fibre batts in the inter-stud cavities.

EW1 denotes the above plus sheathing, plus wood siding or metal siding and fibre backer board.

EW2 denotes the above plus rigid insulation (25-50mm), and wood siding or metal siding and fibre backer board.

EW2 also denotes exterior wall described in EW1 with the addition of rigid insulation (25-50mm) between the sheathing and the external finish.

EW3 denotes simulated mansard with structure as the above plus sheathing, 38 x 89 mm framing, sheathing and asphalt roofing material.

EW4 denotes the above plus sheathing and 20 mm stucco.

EW5 denotes the above plus sheathing, 25 mm air space, 100 mm brick veneer.

EW6 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50mm), 100 mm back-up block, 100 mm face brick.

EW6 also denotes an exterior wall conforming to rainscreen design principles and composed of same gypsum board and rigid insulation with 100 mm concrete block, 25 mm air space, and 100 mm brick veneer.

EW7 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50mm), 140 mm back-up block, 100 mm face brick.

EW8 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50mm), 200 mm concrete.

R denotes the mounting of the interior gypsum board on resilient clips

## ROOM BY ROOM CALCULATIONS - CAMBRIDGE

Note: 10' 2" (Second floor) and 8' 1" (Third floor)

### Kitchen / Breakfast / Living / Dining Room

Floor Area (sq.m)

32

	Width	Height	Area	
Window 1 (front)	2.3	1.7	4.0	
Window 2 (side)	2.3	0.6	1.4	
Patio Door (front)	1.8	2.1	3.8	
			9.2	Total Window Area
			28.60%	% of Floor Area

	Width	Height	Area	
Exterior Door	0	0	0	
			0	Total Door Area
			0.00%	% of Floor Area

	Width	Height	Area	Area minus windows/doors	
Exterior Wall (front)	8.2	3.1	25.42	17.67	
Exterior Wall (side)	4	3.1	12.40	11.00	
				17.67	Total Exterior Wall Area
				55.23%	% of Floor Area

### Bedroom 2

Floor Area (sq.m)

10.7

	Width	Height	Area	
Window 1	1.8	1.3	2.34	
			2.34	Total Window Area
			21.87%	% of Floor Area

	Width	Height	Area	
Exterior Door	0	0	0	
			0	Total Door Area
			0.00%	% of Floor Area

	Width	Height	Area	Area minus windows/doors	
Exterior Wall (front)	3.4	2.5	8.50	6.16	
				6.16	Total Exterior Wall Area
				57.57%	% of Floor Area

### Primary Bedroom

Floor Area (sq.m)

16.6

	Width	Height	Area	
Window 1 (front)	2.3	1.3	2.99	
Window 2 (side)	2.3	0.6	1.38	
			2.99	Total Window Area
			18.01%	% of Floor Area

	Width	Height	Area	
Exterior Door	0	0	0	
			0	Total Door Area
			0.00%	% of Floor Area

	Width	Height	Area	Area minus windows/doors	
Exterior Wall (front)	4.3	2.5	10.75	7.76	
Exterior Wall (side)	3.9	2.5	9.75	8.37	
				7.76	Total Exterior Wall Area
				46.75%	% of Floor Area

**TABLE 15: BUILDING COMPONENT TEMPLATE**

Architect:  
 Location: Arcadia Stage 6  
 Building Type: Metro Town  
 Block Number: TE1 - TE14  
 Front Façade Noise Level (dBA) 69

JLR No: 26299-006  
 Prepared by: Thomas Blais  
 Checked by: Lee Jablonski

ROOM	# OF COMPONENTS	ROOM FLOOR AREA (M <sup>2</sup> )	WINDOW AREA (M <sup>2</sup> )	W/RFA %	DOOR AREA (M <sup>2</sup> )	D/RFA %	EXT. WALL AREA (M <sup>2</sup> )	EW/RFA %	REQUIRED AIF*	WINDOW		EXT. DOOR		EXT. WALL		CEILING/ROOF	
										Type	AIF**	Type	AIF***	Type	AIF****	Type	AIF*****
Primary Bedroom	4	16.6	3.0	18%	-	-	7.8	47%	37	6(30)6	37	-	-	EW3	39	-	-
Bedroom 2	2	10.7	2.3	22%	-	-	6.2	58%	34	6(16)6	34	-	-	EW2	35	-	-
Kitchen / Breakfast / Living / Dining Room	4	32.0	9.2	29%	-	-	17.7	55%	32	6(16)6	32	-	-	EW1	33	-	-

\* Taken from Table 10.5: AIF required for Road and Rail Traffic Noise Cases

\*\* Taken from Table 10.6: Acoustic Insulation Factor for various types of windows (example: 2(100)2 denotes 2 mm glass (100 mm space) 2 mm glass).

\*\*\* Taken from Table 10.9: Acoustic Insulation Factor for various types of exterior doors

\*\*\*\* Taken from Table 10.7: Acoustic Insulation Factor for various types of exterior walls

\*\*\*\*\* Taken from Table 10.8: Acoustic Insulation Factor for various ceiling-roof combinations (only for aircraft noise)

Exterior Door Details

All prime doors should be fully weatherstripped. Except as noted specifically below, doors shall not have inset glazing:

D1 denotes 44 mm hollow-core wood door (up to 20% of area glazed).

D2 denotes 44 mm glass-fibre reinforced plastic door with foam or glass-fibre insulated core (up to 20% area glazed).

D3 denotes 35 mm in solid slab wood door.

D4 denotes 44 mm steel door with foam or glass-fibre insulated core.

D5 denotes 44 mm solid slab door.

sd denotes storm door of wood or aluminum with openable glazed sections.

Exterior Wall Details

The common structure of walls EW1 to EW5 is composed of 12.7 mm gypsum board, vapour barrier, and 38x89 mm studs with 50 mm (or thicker) mineral wool or glass fibre batts in the inter-stud cavities.

EW1 denotes the above plus sheathing, plus wood siding or metal siding and fibre backer board.

EW2 denotes the above plus rigid insulation (25-50mm), and wood siding or metal siding and fibre backer board.

EW2 also denotes exterior wall described in EW1 with the addition of rigid insulation (25-50mm) between the sheathing and the external finish.

EW3 denotes simulated mansard with structure as the above plus sheathing, 38 x 89 mm framing, sheathing and asphalt roofing material.

EW4 denotes the above plus sheathing and 20 mm stucco.

EW5 denotes the above plus sheathing, 25 mm air space, 100 mm brick veneer.

EW6 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50mm), 100 mm back-up block, 100 mm face brick.

EW6 also denotes an exterior wall conforming to rainscreen design principles and composed of same gypsum board and rigid insulation with 100 mm concrete block, 25 mm air space, and 100 mm brick veneer.

EW7 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50mm), 140 mm back-up block, 100 mm face brick.

EW8 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50mm), 200 mm concrete.

R denotes the mounting of the interior gypsum board on resilient clips

**ROOM BY ROOM CALCULATIONS - REAR LANE TOWN***Note: Ceiling Height 8' 1" (first floor) and 9' 1" (second floor) and 8' 1" (third floor)***Kitchen / Living Room / Dining Room**

Floor Area (sq.m) 68.8

	Width	Height	Area	
Window 1 (Front)	2.1	1.7	3.7	
Window 2 (front)	1.5	1.7	2.6	
Window 3 (side)	0.8	1.7	1.3	
Window 4 (side)	0.8	1.7	1.3	
			8.93	Total Window Area
			12.98%	% of Floor Area

	Width	Height	Area	
Exterior Door	0	0	0	
			0	Total Door Area
			0.00%	% of Floor Area

	Width	Height	Area	Area minus windows/doors	
Exterior Wall (front)	5.8	2.8	16.07	9.76	
Exterior Wall (side)	11.9	2.8	32.96	30.34	
				40.10	Total Exterior Wall Area
				58.29%	% of Floor Area

**Bedroom 2 (option)**

Floor Area (sq.m) 8.8

	Width	Height	Area	
Window 1 (front)	2.1	1.6	3.36	
			3.36	Total Window Area
			38.21%	% of Floor Area

	Width	Height	Area	
Exterior Door	0.0	0.0	0	
	0.0	0.0	0	
			0	Total Door Area
			0.00%	% of Floor Area

	Width	Height	Area	Area minus windows/doors	
Exterior Wall (front)	3.0	2.5	7.40	4.03	
				4.03	Total Exterior Wall Area
				45.82%	% of Floor Area

**Primary Bedroom**

Floor Area (sq.m) 11.8

	Width	Height	Area	
Window 1 (front)	1.8	1.6	2.76	
Window 2 (side)	0.8	1.6	1.20	
			3.95	Total Window Area
			33.50%	% of Floor Area

	Width	Height	Area	
Exterior Door	0	0	0	
			0	Total Door Area
			0.00%	% of Floor Area

	Width	Height	Area	Area minus windows/doors	
Exterior Wall (front)	3.4	2.5	8.38	5.62	
Exterior Wall (side)	3.5	2.5	8.63	7.43	
				13.06	Total Exterior Wall Area
				110.64%	% of Floor Area

**TABLE 16: BUILDING COMPONENT TEMPLATE**

Architect:  
 Location: Arcadia Stage 6  
 Building Type: Rear Lane Townhouse  
 Block Number: Blocks 3, 4, 5  
 Front Façade Noise Level (dBA): 70

JLR No: 26299-006  
 Prepared by: Thomas Blais  
 Checked by: Lee Jablonski

ROOM	# OF COMPONENTS	ROOM FLOOR AREA (M <sup>2</sup> )	WINDOW AREA (M <sup>2</sup> )	W/RFA %	DOOR AREA (M <sup>2</sup> )	D/RFA %	EXT. WALL AREA (M <sup>2</sup> )	EW/RFA %	REQUIRED AIF*	WINDOW		EXT. DOOR		EXT. WALL		CEILING/ROOF	
										Type	AIF**	Type	AIF***	Type	AIF****	Type	AIF*****
Primary Bedroom	4	11.8	4.0	34%	-	-	13.1	111%	38	6(70)6	38	-	-	EW4	38	-	-
Kitchen / Living Room / Dining Room	2	68.8	8.9	13%	-	-	40.1	58%	30	2(13)2	30	-	-	EW1	39	-	-
Bedroom 2 (option)	3	8.8	3.4	38%	-	-	4.0	46%	37	6(70)6	37	-	-	EW3	39	-	-

\* Taken from Table 10.5: AIF required for Road and Rail Traffic Noise Cases

\*\* Taken from Table 10.6: Acoustic Insulation Factor for various types of windows (example: 2(100)2 denotes 2 mm glass (100 mm space) 2 mm glass).

\*\*\* Taken from Table 10.9: Acoustic Insulation Factor for various types of exterior doors

\*\*\*\* Taken from Table 10.7: Acoustic Insulation Factor for various types of exterior walls

\*\*\*\*\* Taken from Table 10.8: Acoustic Insulation Factor for various ceiling-roof combinations (only for aircraft noise)

Exterior Door Details

All prime doors should be fully weatherstripped. Except as noted specifically below, doors shall not have inset glazing:

D1 denotes 44 mm hollow-core wood door (up to 20% of area glazed).

D2 denotes 44 mm glass-fibre reinforced plastic door with foam or glass-fibre insulated core (up to 20% area glazed).

D3 denotes 35 mm in solid slab wood door.

D4 denotes 44 mm steel door with foam or glass-fibre insulated core.

D5 denotes 44 mm solid slab door.

sd denotes storm door of wood or aluminum with openable glazed sections.

Exterior Wall Details

The common structure of walls EW1 to EW5 is composed of 12.7 mm gypsum board, vapour barrier, and 38x89 mm studs with 50 mm (or thicker) mineral wool or glass fibre batts in the inter-stud cavities.

EW1 denotes the above plus sheathing, plus wood siding or metal siding and fibre backer board.

EW2 denotes the above plus rigid insulation (25-50mm), and wood siding or metal siding and fibre backer board.

EW2 also denotes exterior wall described in EW1 with the addition of rigid insulation (25-50mm) between the sheathing and the external finish.

EW3 denotes simulated mansard with structure as the above plus sheathing, 38 x 89 mm framing, sheathing and asphalt roofing material.

EW4 denotes the above plus sheathing and 20 mm stucco.

EW5 denotes the above plus sheathing, 25 mm air space, 100 mm brick veneer.

EW6 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50mm), 100 mm back-up block, 100 mm face brick.

EW6 also denotes an exterior wall conforming to rainscreen design principles and composed of same gypsum board and rigid insulation with 100 mm concrete block, 25 mm air space, and 100 mm brick veneer.

EW7 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50mm), 140 mm back-up block, 100 mm face brick.

EW8 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50mm), 200 mm concrete.

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## **Appendix F**

Canada Mortgage and  
Housing (CMHC) Table A2  
and Table A3

**Table A1:** Standard source spectrum for calculating Acoustic Insulation Factor (AIF)

Frequency (Hz)	Source Sound Pressure Level	A-weighted Source Sound Pressure Level
100	66.1	47
125	69.1	53
160	71.4	58
200	71.9	61
250	71.6	63
315	71.6	65
400	71.8	67
500	71.2	68
630	70.9	69
800	70.8	70
1000	70.0	70
1250	69.4	70
1600	69.0	70
2000	68.8	70
2500	68.7	70
3150	67.8	69
4000	67.0	68
5000	65.5	66

Note: Values in the second and third columns of this table are  $\frac{1}{3}$ -octave band sound pressure levels expressed in dB.

**Table A2:** Approximate conversion from STC to AIF for windows and doors

Window (or door) Area Expressed as Percentage of Room Floor Area	Acoustic Insulation Factor (AIF)
80.0	STC-5
63.0	STC-4
50.0	STC-3
40.0	STC-2
32.0	STC-1
25.0	STC
20.0	STC+1
16.0	STC+2
12.5	STC+3
10.0	STC+4
8.0	STC+5
6.3	STC+6
5.0	STC+7
4.0	STC+8

Note: For area percentages not listed in the table, use the nearest listed value.

Examples: For a window whose area = 20% of the room floor area and STC = 32, the AIF is  $32 + 1 = 33$ .  
 For a window whose area = 60% of the room floor area and STC = 29, the AIF is  $29 - 4 = 25$ .

**Table A3:** Approximate conversion from STC to AIF for exterior walls and ceiling-roof systems.

Exterior Wall Area Expressed as Percentage of Room Floor Area	Acoustic Insulation Factor (AIF)
200.0	STC-10
160.0	STC-9
125.0	STC-8
100.0	STC-7
80.0	STC-6
63.0	STC-5
50.0	STC-4
40.0	STC-3
32.0	STC-2
25.0	STC-1
20.0	STC
16.0	STC+1
12.5	STC+2
10.0	STC+3
8.0	STC+4

Note: For area percentages not listed in the table, use the nearest listed value.

Example: For a wall whose area = 120% of room floor area and STC = 48, the AIF is  $48 - 8 = 40$ .

Note: For ceiling-roof systems,  $AIF = STC - 7$ .

**Figure A1:** Worksheet for Calculating AIF from Transmission Loss Data

Frequency (Hz)	A-weighted Source Sound Pressure Level (dB) (A)	Sound Transmission Loss (dB) (B)	A-weighted Indoor Sound Pressure Level (dB) (C = A-B)	Energy Equivalent of Indoor SPL (D = $10^{(C-10)}$ )
100	47	24	23	200
125	53	26	27	501
160	58	19	39	7 943
200	61	21	40	10 000
250	63	20	43	19 953
315	65	20	45	31 623
400	67	25	42	15 849
500	68	30	38	6 310
630	69	33	36	3 981
800	70	37	33	1 995
1000	70	39	31	1 259
1250	70	41	29	794
1600	70	43	27	501
2000	70	44	26	398
2500	70	45	25	316
3150	89	43	26	398
4000	68	37	31	1 259
5000	88	35	31	1 259
Sum of values in column D:				104 539 = E

Calculated indoor A-weighted sound level:  $10 \log_{10} (E) = 50.2 = F$

AIF (component area = 80% of floor area):  $(77 - F) = 26.8 = G$

Component Area as a Percentage of Room Floor Area	Acoustic Insulation Factor (AIF)
6.3	(G + 11) = 38
8.0	(G + 10) = 37
10.0	(G + 9) = 36
12.5	(G + 8) = 35
16.0	(G + 7) = 34
20.0	(G + 6) = 33
25.0	(G + 5) = 32
32.0	(G + 4) = 31
40.0	(G + 3) = 30
50.0	(G + 2) = 29
63.0	(G + 1) = 28
80.0	(G ) = 27
100.0	(G - 1) = 26
125.0	(G - 2) = 25
160.0	(G - 3) = 24





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