

**MINTO COMMUNITIES INC.
HARMONY STAGE 1 – BLOCK 104
DETAILED NOISE CONTROL STUDY**

July 2018

Prepared for:

MINTO COMMUNITIES INC.
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Prepared by:

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JLR No.: 24051-003

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1.0 INTRODUCTION

Minto Communities Inc. (Minto) retained the services of J.L. Richards & Associates Limited (JLR) to assess the potential environmental noise impact on the proposed stacked townhome development referred to as Harmony Stage 1 – Block 104, located at 4025 Strandherd Drive in the Barrhaven South Community (BSC) in the City of Ottawa.

This study is prepared to satisfy the Ministry of Environment (MOE) 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 3.2 Noise Control Detailed Study Requirements in support of the Site Plan Application.

2.0 PROJECT DESCRIPTION

The lands subject of this Study, identified on Figure 1 (refer to attached) as Harmony Stage 1 – Block 104, are bounded by Chakra Street to the north, Chapman Mills Drive to the west, a future transitway to the south, and future residential development to the east. The proposed development has an area of approximately 0.32 ha and consists of two stacked townhome blocks consisting of 12 units each for a total of 24 units on site.

Appendix 'A' includes the overall Harmony Draft Plan of Subdivision. The proposed stacked townhome development Block is referred to as Block 104.

3.0 TRANSPORTATION NOISE SOURCE

The transportation noise sources for this study include Chapman Mills Drive, and the proposed BRT. Drawing N1 (refer to Appendix 'B') shows the location of the existing and proposed roadways in relation to the proposed development. Strandherd Drive is outside the 100 m range of influence; therefore, it is not considered a noise source for the purposes of this study.

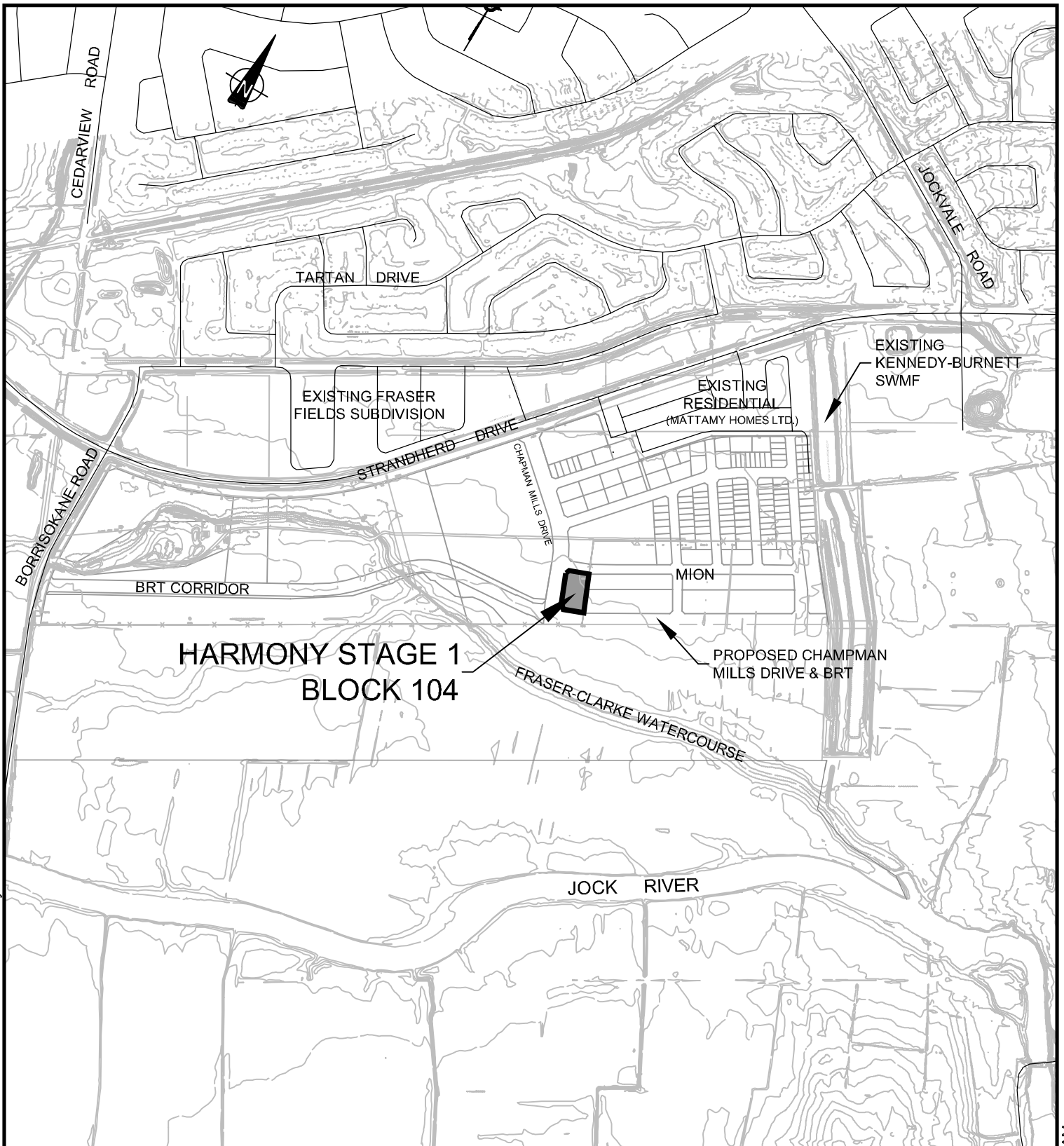
3.1 Transportation Sound Level Criteria

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:

<u>Receiver Location</u>	<u>Criteria</u>	<u>Time Period</u>
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)

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.

File Location: R:\24000\24051 LD Minto Clarke\24051-003 Harmony Condo Block\JLR DWG\Civil\24051-003 C LOCATION PLAN.DWG



PROJECT:

MINTO COMMUNITIES INC.
HARMONY STAGE 1 - BLOCK 104
PART OF 4025 STRANDHERD DRIVE, OTTAWA

DRAWING:

LOCATION PLAN



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DESIGN: JW
DRAWN: TB
CHECKED: JW

JLR NO: 24051-003

DRAWING NO.:

FIGURE 1

PLOT DATE: March 1, 2018 8:43:47 AM

HARMONY STAGE 1 – BLOCK 104

DETAILED NOISE CONTROL STUDY

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. For the purpose of this study the amenity space identified on Drawing N1 is considered the only OLA for the Harmony Stage 1 – Block 104. The point of assessment was chosen to be the middle of the amenity space as shown on Drawing N1.

For indoor noise impact, the point of assessment at the Plane of Window (POW) will be the middle of each floor as calculated from the building elevation drawings provided by Minto (refer to Appendix 'C').

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, noise attenuation (control) measures may not be required.

The following tables outline noise attenuation measures 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">- Reference to specific noise mitigation measures in the development.- Whether noise is expected to increase in the future.- That there is a need to maintain mitigation.
Shared outdoor amenity areas		
Earth berms (sound barriers)		
Acoustic Barriers (acoustic barriers)		

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DETAILED NOISE CONTROL STUDY

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: <ul style="list-style-type: none"> - Reference to specific noise mitigation measures in the development. - Whether noise is expected to increase in the future. - That there is a need to maintain mitigation.
Enhanced construction techniques and construction quality		
Earth berms (sound barriers)		
Indoor isolation – air conditioning and ventilation, enhanced dampening materials (indoor isolation)		

The following tables outline the noise level limits 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.

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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. Sample templates of the notices that could be registered on Title as presented in the City of Ottawa ENCG (Part 4 Appendix 'A').

Detailed wording for clauses should be provided as part of the Detailed Noise Control Study completed in support of the Site Plan Application. Clauses are to be worded to describe the mitigation measures and noise conditions applicable where MOE and City of Ottawa noise criteria are exceeded.

3.3 Prediction of Noise Levels (Transportation)

3.3.1 Road Traffic Data

The following traffic data was used to predict noise levels:

Table 5: Road Traffic Data to Predict Noise Levels

	Chapman Mills Drive
Total Traffic Volume (AADT)	12,000
Day/Night Split (%)	92/8
Medium Trucks (%)	7
Heavy Trucks (%)	5
Posted Speed (km/hr)	50
Road Gradient (%)	1
Road Classification	2-Lane Major Collector (2-UMCU)

Schedule 'E' and Annex 1 of the City of Ottawa Official Plan (May 2003) were utilized to determine the correct 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 Bus Rapid Transit Corridor Data

Figure 1 shows the location of the Bus Rapid Transit (BRT) Corridor in relation to the proposed residential development. The City has classified this corridor as a Bus Rapid Transit Corridor. The following data was used to predict noise levels:

Table 6: Bus Rapid Transit Corridor Data to Predict Noise Levels

	Bus Rapid Transit Corridor
Total Traffic Volume (AADT)	258
Day/Night Split (%)	74/26
Medium Trucks (%)	100
Heavy Trucks (%)	0
Posted Speed Limit (km/hr)	80
Road Gradient (%)	1

The assumed posted speed limit along the dedicated BRT corridor is 80 km/hr. Appendix 'D' includes a summary of the information provided by the City specific to the Bus Rapid Transit Corridor, including how the AADT value and the day/night split was calculated.

The computer program Stamson is used to predict noise levels associated with the bus rapid transit corridor.

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 'E'.

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Table 7: Predicted Noise Levels (Transportation)

Receiver No. and File Names	Receiver Description and Location	Noise Levels (dBA)	
		Daytime	Nighttime
R1 condoR1	Outdoor Living Area of Harmony Stage 1 – Block 104 (Amenity Area) at a distance of 25.5 m from the centreline of Chapman Mills Drive and 54.1 m from the centreline of the BRT.	61.65	n/a
R2a condoR2a	Plane of Window (Lower Unit, 12A) fronting on Chapman Mills Drive & BRT at a distance of 24.6 m from the centreline of Chapman Mills Drive and the BRT.	63.26	56.98
R2b condoR2b	Plane of Window (Upper Unit, 12B) fronting on Chapman Mills Drive and the BRT at a distance of 24.6 m from the centreline of Chapman Mills Drive and the BRT.	63.59	57.76
R3a condor3a	Plane of Window (Lower Unit, 4A) fronting on Chapman Mills Drive at a distance of 19.9 m from the centreline of Chapman Mills Drive and 85.1 m from the centreline of the BRT.	64.20	56.65
R3b condor3b	Plane of Window (Upper Unit, 4B) fronting on Chapman Mills Drive at a distance of 19.9 m from the centreline of Chapman Mills Drive and 85.1 m from the centreline of the BRT.	64.46	57.35

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
Amenity Area	No	No	No	A	No
Plane of Window (Units 1A, 1B, 2A, 2B, 3A, 3B, 4A, 4B, 5A, 5B, 6A, 6B, 7A, 7B, 8A, 8B, 9A, 9B, 10A, 10B, 11A, 11B, 12A, 12B)	No	No	Yes	B	No

JLR calculated predicted mitigated noise levels using 2.2 m and 2.5 m high noise barriers. Detailed calculations are included in Appendix 'F'. Table 9 summarizes the predicted freefield daytime noise level at receiver R1 and the mitigated noise level resulting from the inclusion of the possible noise attenuation barriers, as shown on Drawing N1. Calculations indicate that a 2.5 m high noise barrier for the Harmony Stage 1 – Block 104 Amenity Area will mitigate noise levels to 54.58 dBA.

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Table 9: Noise Attenuation Due to Assessed Barriers

Receiver No. and File Name	Receiver Location	Daytime Noise Level (dBA)	Attenuated Leq 16 hr (dBA) with a 2.2 m High Barrier	Attenuated Leq 16 hr (dBA) with a 2.5 m High Barrier	Receiver Ground Elevation (m)	Barrier Base Elevation + Barrier Height = Top of Barrier (m)
R1 R1BR22 R1BR25	Amenity Area	61.65	55.70	54.58	93.97	93.80 + 2.5 = 96.30

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

The intent of the Block 104 Amenity Area is to be a shared inviting open space with landscaping where residents of Block 104 can gather to enjoy the outdoors and feel connected to the neighbourhood. Construction of a noise barrier will always interfere with this goal. However, in this instance, the construction of a noise barrier to achieve a 1.5 dBA noise reduction may be interpreted as an invasive treatment for nominal benefit. Rather than prescriptively recommending that a noise barrier be installed, a short discussion is presented identifying administrative and economic challenges of this solution.

1. Administrative Challenges –

Inconsistent Application of Interpretation: The Amenity area is a shared space exclusively for residents of Block 104 but is not a private rear yard and should not be treated as such. By definition, the Amenity Area more closely reflects a City park or school yard, rather than a private rear yard. Parks and school yards are generally not subject to the rigorous noise examination as private rear yards. In this case, the amenity space fits the model of a park/school yard rather than a private rear yard.

Arbitrary Size Limit: The City's Zoning By-Law defines an Amenity Area as "...the total passive or active recreational area provided on a lot for the personal, shared or communal use of the residents of a building or buildings, and includes balconies, patios, rooftop gardens and other similar features, but does not include indoor laundry or locker facilities." By this definition all landscaped/grassed areas, regardless of size are Amenity Areas. Therefore, the only reason the "labelled" Amenity Area requires a noise assessment is due to its size. Each of the 24 units will have a private balcony which are anticipated to be the most used amenity space on the site and will add overall outdoor space for the residents as a private amenity space. From a zoning perspective the Amenity Area does not require any form of noise mitigation, however, strictly due to its size and location the proposed shared amenity area surpasses the area requirements of the Environmental Noise Control Guidelines (ENCG) triggering a noise assessment. The balconies do not require mitigation from transportation noise sources, due to their size.

Amenity Area location is the Result of City Consultation: City staff encouraged Minto, as part of the pre-consultation follow-up email dated January 15, 2018 (included in Appendix 'H'), to "incorporate landscaping and/or increased setbacks in order to minimize the impact of parking along Chapman Mills..." thereby creating an amenity

area adjacent to a noise source. Regardless, Minto tried its best to locate the Amenity Area between the buildings to reduce the exposure angles to the noise source. Minto's decision to respond to City suggestions for Site Plan modifications created an amenity space where none existed before. Given the nominal exceedance of the noise criteria, it is our opinion that cooperation with City staff should not be met with additional administrative requirements.

Barrier will Partition the Site from the Community: Construction of a noise barrier would create a closed off area that would not be enjoyable to use by interfering with the movement and views of the residents and would separate the Amenity Area from the neighbourhood. Furthermore, a noise barrier would negatively contribute to the urban design of the site and neighbourhood, as well as reduce safe access along the pathways and minimize the area available for landscaping.

2. Economic Challenges –

Additional Cost to Further Revise the Site Plan: Different building orientations have previously been explored by Minto. After integrating the City's pre-consultation recommendations, the current Site Plan provides the preferred building orientation for all parties. Revising the Site Plan, would cause undue construction delay for Minto as well as exponentially increasing costs associated with Block 104 redesign. It is JLR's opinion that additional costs to review alternative Site Plan arrangements are an excessive attempt to meet a 1.5 dBA noise reduction in the amenity area.

Minor Variance: Minto could apply for a Minor Variance to remove the Amenity Area requirement. This process is predicted to be more affordable than constructing a noise barrier. Removing the Amenity Area is not Minto's preferred approach. Minto would rather keep the Amenity area for the enjoyment of the residents. The City's Minor Variance application fee is \$2,500 and is much less than the noise barrier installation.

Given the above challenges and nominal benefit of trying to achieve at least 60 dBA (a 1.5 dBA noise reduction), it is recommended that the noise barrier be eliminated as a requirement for the site development.

3.5 Summary of Findings (Building Component)

Building Component analysis is not required since the Plane of Window (i.e., see Table 8, R3B) noise levels are below the minimum Building Component threshold of 65 dBA.

Minto provided floor plan and building elevation drawings, for the 'Jasmine', 'Rooibos', 'Matcha' and 'Chai' units. Floor and elevation drawings are included in Appendix 'C'. These units are considered representative units for a typical Minto stacked townhome development. The 'Jasmine' and 'Rooibos' could be expected to represent the end units and the 'Rooibos' and 'Matcha' could be expected to represent the interior units.

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

Minto's standard exterior wall construction is 38 x 148 mm complete with 140 mm fibre insulation, siding, 19 mm sheathing, 12.7 mm gypsum board, and often a brick veneer on the exterior lower level wall.

4.0 OPINION OF PROBABLE COSTS (OPC) FOR MITIGATION MEASURES

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

Table 10: Opinion of Probable Costs for Mitigation Measures

Item	Cost per Unit	Estimated Quantity	Estimated Sub-Total
Noise Barrier (2.5m High)	\$450/m	31 m	\$13,950
Estimated Total			\$13,950

5.0 CONCLUSION AND RECOMMENDATIONS

Predicted noise levels are expected to exceed the City of Ottawa ENCG and MOE criteria for daytime outdoor living areas for the proposed amenity space adjacent to Chapman Mills Drive, and the proposed BRT. To address these exceedances, Minto has revised the site 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. Calculations indicate that a 2.5 m high noise barrier will satisfactorily mitigate noise levels for the amenity area. Although a 2.2 m high barrier will help to mitigate the noise levels, it will not mitigate the noise sufficiently enough to meet the MOE's and City's criteria. Regardless, it is recommended that no noise barrier be constructed so that the residents can enjoy the outdoor Amenity Area with minimal interference due to road/transitway traffic.

Standard wall and window construction details that Minto utilize for their residential units, as presented with their elevation drawings, will exceed the minimum requirements to mitigate the exterior noise levels to meet the MOE and City of Ottawa indoor noise criteria.

5.1 Indoor Noise Control Features

5.1.1 Forced Air Heating System

The following Units/Lots shall be fitted with a forced air heating system, with the provision for the future installation of central air conditioning:

- Units 1A, 1B, 2A, 2B, 3A, 3B, 4A, 4B, 5A, 5B, 6A, 6B;
- Units 7A, 7B, 8A, 8B, 9A, 9B, 10A, 10B, 11A, 11B, 12A, 12B.

5.2 Warning Clauses

5.2.1 Warning Clause Type A

Clause A is to be registered on Title for the outdoor amenity space of Block 104 (Units 1A, 1B, 2A, 2B, 3A, 3B, 4A, 4B, 5A, 5B, 6A, 6B, 7A, 7B, 8A, 8B, 9A, 9B, 10A, 10B, 11A, 11B, 12A, 12B, inclusive):

“Purchasers/tenants are advised that, 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.”

5.2.2 Warning Clause Type B

- Clause B is to be registered on Title for Units 1A, 1B, 2A, 2B, 3A, 3B, 4A, 4B, 5A, 5B, 6A, 6B, 7A, 7B, 8A, 8B, 9A, 9B, 10A, 10B, 11A, 11B, 12A, 12B, inclusive:

“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;*
- *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 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.

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

HARMONY STAGE 1 – BLOCK 104 DETAILED NOISE CONTROL STUDY

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J.L. RICHARDS & ASSOCIATES LIMITED

Prepared by:



Thomas Blais, A.Sc.T.
J.L. Richards & Associates Limited

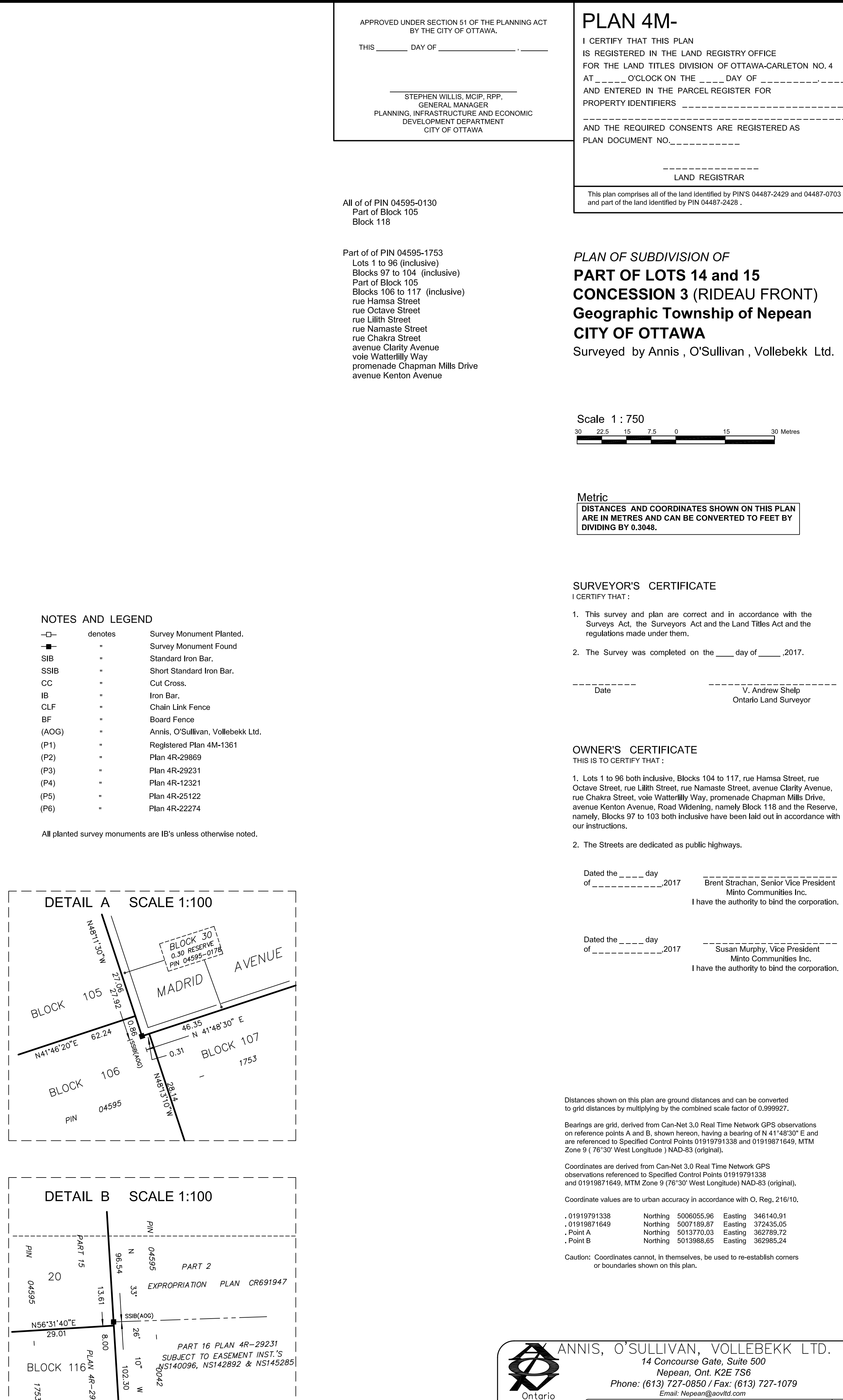
Reviewed by:



Lee Jablonski, P.Eng.
J.L. Richards & Associates Limited

Appendix A

Draft Plan of Subdivision



This plan comprises all of the land identified by PIN'S 04487-2429 and 04487-0703 and part of the land identified by PIN 04487-2428 .

Scale 1:750

Metric

DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.
--

SURVEYOR'S CERTIFICATE

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 ____, 2017.

Date

V. Andrew Shep
Ontario Land Surveyor

OWNER'S CERTIFICATE

THIS IS TO CERTIFY THAT :

1. Lots 1 to 96 both inclusive, Blocks 104 to 117, rue Hamsa Street, rue Octave Street, rue Lilith Street, rue Namaste Street, avenue Clarity Avenue, rue Chaikra Street, voie Waterlilly Way, promenade Chapman Mills Drive, avenue Kenton Avenue, Road Wildering, namely Block 118 and the Reserve, namely, Blocks 97 to 103 both inclusive have been laid out in accordance with our instructions.

2. The Streets are dedicated as public highways.

Dated the ____ day
of _____, 2017

Brent Strachan, Senior Vice President
Minto Communities Inc.
I have the authority to bind the corporation.

Dated the ____ day
of _____, 2017

Susan Murphy, Vice President
Minto Communities Inc.
I have the authority to bind the corporation.

ances shown on this plan are ground distances and can be converted
ed distances by multiplying by the combined scale factor of 0.999927.

ings are given, derived from Can-Net 8.0 Real Time Network GPS observations
reference points A, B, C, shown here, having a bearing of $14^{\circ}42'30''$ and
reference points D, E, F, shown here, having a bearing of $101^{\circ}18'46''$. NTM
of $1^{\circ}37'30''$ West and $43^{\circ}30''$ North (original).

ordinates are derived from Can-Net 8.0 Real Time Network GPS
observations referenced to Specified Control Points 0191971338
0191971649, MTM Zone 9 (76°30' West) NAD-83 (original).

ordinate values are to arc accuracy in accordance with O. Mev, 216.0.

0191971338	Northing	5000595.96	Easting	344160.91
0191971649	Northing	5007188.67	Easting	372425.05
0191981748	Northing	5013770.03	Easting	362768.72
North D	Northing	5013988.05	Easting	362926.24

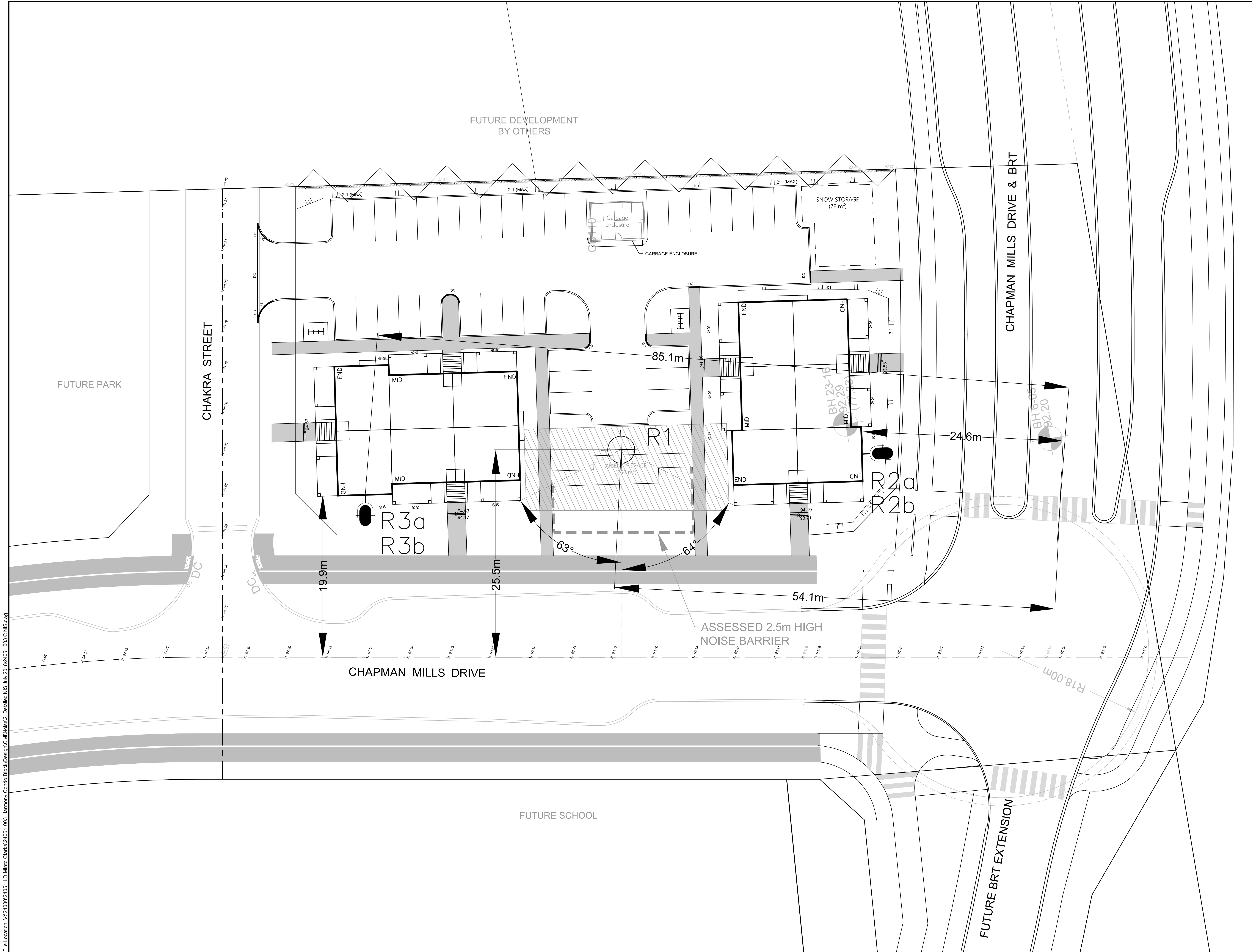
Notes: Coordinates can, in themselves, be used to re-establish corners
or boundaries shown on this plan.

NIS, O'SULLIVAN, VOLLEBEKK LTD.
14 Concourse Gate, Suite 500
Nepean, Ont. K2E 7S6
Phone: (613) 727-0850 / Fax: (613) 727-1079
Email: Nepean@avotld.com

Appendix B

Noise Receiver Locations –
Drawing N1

File Location: V:\24000\24051 LD Minto Clarke\24051-003 Harmony Condo Block\Design\Civil\Noise\2 Detailed NIS July 2018\24051-003 C NIS.dwg



KEYPLAN

LEGEND

- OUTDOOR RECEIVER
- INDOOR RECEIVER
- ANGLE OF NOISE SOURCE TO RECEIVER
- ASSESSED NOISE BARRIER (2.5m)

1	ISSUED WITH DETAILED NOISE CONTROL STUDY	28/02/18
No.	ISSUE / REVISION	DD/MM/YY

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

SCALE: 1:200

CLIENT:

minto Communities

CONSULTANT:

J.L. Richards
ENGINEERS • ARCHITECTS • PLANNERS

CONSULTANT:

PROFESSIONAL STAMP

PROJECT NORTH

PROJECT:

MINTO COMMUNITIES INC.
HARMONY STAGE 1
BLOCK 104
4025 STRANDHERD DRIVE

DRAWING:

DETAILED NOISE CONTROL RECEIVER LOCATIONS

DESIGN:	TB
DRAWN:	TB
CHECKED:	LJ
JLR #:	24051-003

DRAWING #:

N1

PLOT DATE: July 18, 2018 4:34:25 PM

Appendix C

Building Elevation Drawings
2016 Infusion Terrace

- The Matcha
- The Rooibos
- The Jasmine
- The Chai

F1

TYPICAL 45 MIN. RATED FLOOR
FRR 45MIN., N1/FCA 45-01

UNDERLAY FOR:
VINYL FLOOR- 6.3mm
CERAMIC TILE- 15.9mm w\4mm GAP
BETWEEN SHEETS
CARPET- UNDERPAD

19mm T&G SUBFLOOR (HIGH DENSITY)
JOISTS AS PER NASCOR DRAWINGS
RESILIENT CHANNELS @ 405mm O.C.
15.9 FIRECODE 'C' DRYWALL

F2

TYPICAL 1 HR. RATED FLOOR
FRR 1HR, STC 61, IIC 30, OBC SB3-F15c

UNDERLAY FOR:
VINYL FLOOR -6.3mm
CERAMIC TILE- 15.9mm w\4mm GAP
BETWEEN SHEETS
CARPET - UNDERPAD
25mm GYPCRETE
6mm ACCOUSTIC MAT
19mm T&G SUBFLOOR (HIGH DENSITY)
JOISTS AS PER NASCOR DRAWINGS
90mm SOUND BATTS
RESILIENT CHANNELS @ 405mm O.C.
2-15.9 TYPE 'X' GYPSUM BD., BOTH LAYERS
JOINTS TO BE TAPED

W1

RATED WALL-
FRR 1HR, OBC SB3-W1d
15.8 TYPE 'X' GYPSUM BD.
38x90/ 38x140 FRAMING @405 O/C
15.8 TYPE 'X' GYPSUM BD.

W2

STAIR WALL-
FRR 1HR, STC 55, OBC SB3-W6a
2-15.8 TYPE 'X' GYPSUM BD.
RESILIENT CHANNEL @405 O.C.
(ON KITCHEN SIDE)
38x90 or 38x140 FRAMING @405 O/C
90mm ACCOUSTIC BATTS,
FLEXIBATT
2-15.8 TYPE 'X' GYPSUM BD.

W3

RATED WALL-
FRR 1HR, OBC SB3-W1d
15.8 TYPE 'X' GYPSUM BD.
38x90 FRAMING @405 O/C
2-15.8 TYPE 'X' GYPSUM BD.
ON STAIR SIDE

16mm TYPE 'X' GYPSUM, CONT.
FULL HEIGHT w\ CORNERS TAPED
or CAULKED. FASTEN TO STUD.

STORAGE

38x140 STUDS

LOWER
HALL

STEEL COLUMN
(89x89x4.8mm)

BATHROOM

PW1

90 PARTY WALL-
FRR 1HR, OBC SB3-W15a
O.B.C. ASSEMBLY - W15a
2-15.9mm TYPE 'X' GYPSUM BD.
38x89 FRAMING @ 405 O.C. w\
90mm SOUND BATTS
25mm AIR SPACE
38x89 FRAMING @ 405 O.C. w\
90mm SOUND BATTS
2-15.9mm TYPE 'X' GYPSUM BD.
GROUND FLOOR FRAMING @ 305 O.C.

PW2

140 PARTY WALL-
FRR 1HR, OBC SB3-W15a
O.B.C. ASSEMBLY - W15a
2-15.9mm TYPE 'X' GYPSUM BD.
38x140 FRAMING @ 405 O.C. w\
90mm SOUND BATTS
25mm AIR SPACE
38x140 FRAMING @ 405 O.C. w\
90mm SOUND BATTS
2-15.9mm TYPE 'X' GYPSUM BD.



- NOTES
- 1.DRYWALL AT PARTY WALLS AND EXTERIOR WALLS SHALL EXTEND THRU ALL PARTITIONS AND POSTS TO MAINTAIN FIRE RATING.
 2. PROVIDE 15.9mm FIRECODE DRYWALL ON ALL EXTERIOR WALLS (1 HR RATING CONTINUOUS)
 3. PROVIDE 1HR RATED CEILING CONTINUOUS UNLESS NOTED OTHERWISE.
 4. ELECTRICAL BOXES ON PARTY WALLS TO BE SEALED TYPE BOXES.
 5. REFER TO TERRACE HOME DRAWING SPECIFICATIONS, SP-* FOR ADDITIONAL INFORMATION.

12	REVISED W2 FRAMING	NOV 23/16	KO
11	REVISED F1 LABEL	OCT 17/16	KO
10	ISSUED FOR PERMIT	JUN 09/16	KO
9	W4 ASSEMBLY REMOVED	APR 26/16	KO
8	REISSUED FOR CONSTRUCTION	APR 14/16	KO
7	ISSUED FOR PERMIT	APR 01/16	KO
6	REVISED FRAMING SIZES	MAY 21/15	KO
5	ISSUED FOR FOOTPRINT	MAY 20/15	KO
4	ISSUED FOR CONSTRUCTION	FEB 06/15	KO
3	ISSUED FOR STRUCTURAL LETTER & PERMIT	OCT 10/14	KO
2	ISSUED FOR TENDER	OCT 06/14	KO
1	ISSUED FOR STRUCTURAL REVIEW	SEP 10/14	KO
No	Revision	Date	By

OTTAWA-CARLETON STANDARD CONDOMINIUM PLAN NO.938
PART 3 , SHEET ____ OF _____ SHEETS



CONFIDENTIAL

STRUCTURAL FRAMING LEGEND:SEE DWG A5
ELEVATION FINISHES LEGEND: SEE DWG A6
FLOOR PLAN LEGEND: SEE DWG SP-1
DR/WIN LEGEND: SEE DWG SP-7*
FOR ADDED INFO., ABBREV'S,
SYMBOLS: SEE SPECS. SP-*

TITLE
NOTES

FILENAME: infusion-flr.dwg

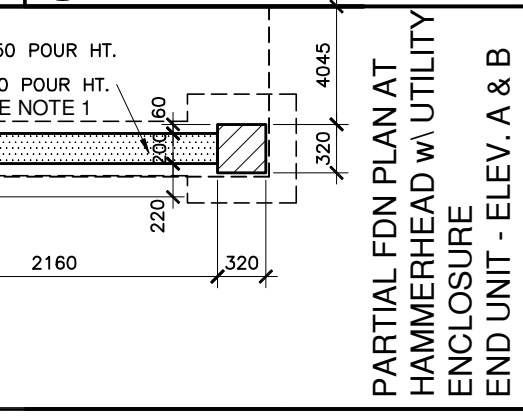
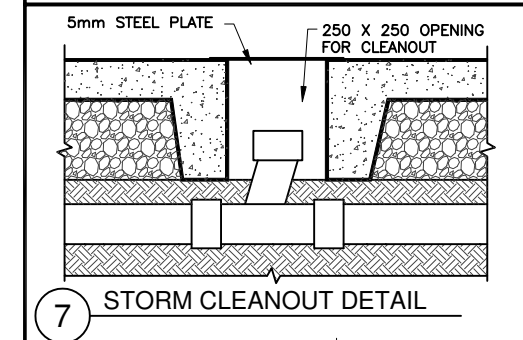
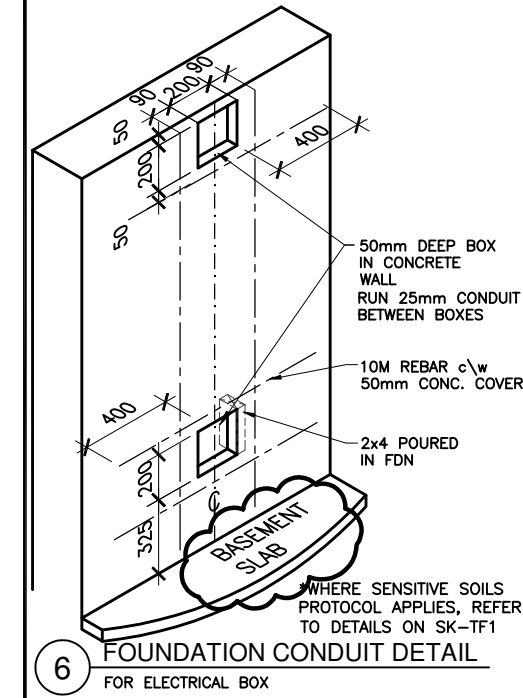
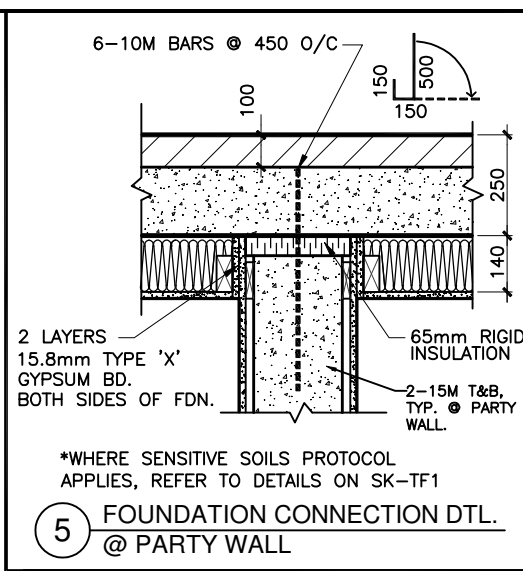
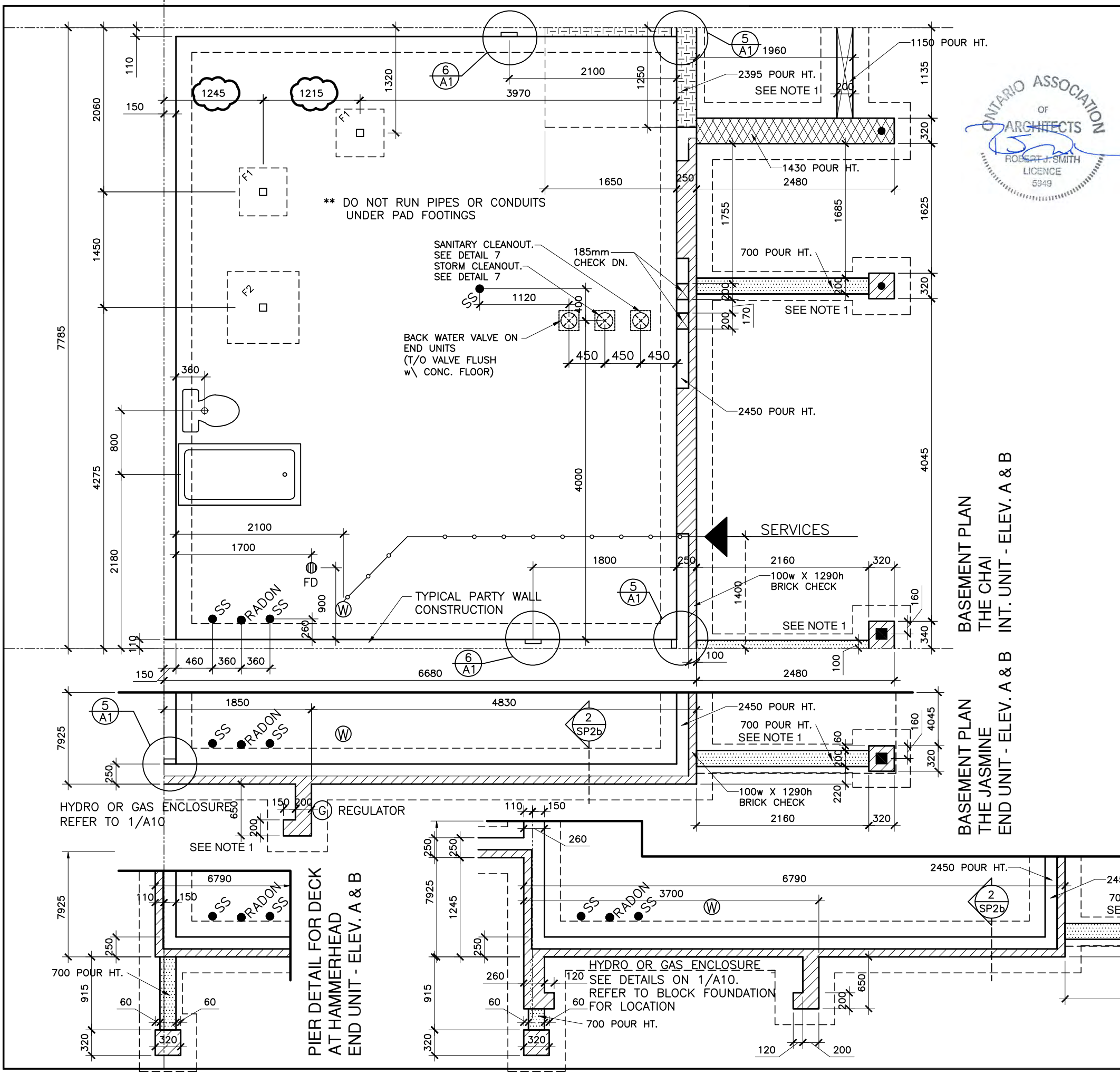
2016-INFUSION TERRACE
**THE MATCHA,
THE ROOIBOS,
THE JASMINE, THE CHAI**
ELEV. A & B
(2016 STANDARD DRAWING)

Scale

1:50

dwg #

A-0



FOOTING SCHEDULE

—ALL WALL FOOTINGS TO BE 600x200 DP UNLESS NOTED OTHERWISE

—FOUNDATION WALLS TO HAVE 2-15M (T&B) CONT'S + CORNER BARS

—PROVIDE 75mm CONCRETE COVER TO BOTTOM BARS

—FOR FROST PROTECTION AND INSULATION REQUIREMENTS, SEE GEOTECHNICAL REPORTS AND RECOMMENDATIONS.

F1 - 600x600x300 dp
2-15M(B)x450lg. E.W.

F2 - 965x965x300 dp
3-15M(B)x815lg. E.W.

NOTES

1. WHERE SENSITIVE SOILS PROTOCOL APPLIES, REFER TO FOOTING SIZES AND SCHEDULE ON FOUNDATION PLAN SK-TF1 AND THE GEOTECHNICAL REPORT AND MEMO PREPARED BY THE GEOTECHNICAL CONSULTANT.

2. ALL WING WALLS TO HAVE 2000mm COVERAGE or USE 50mm HI60 RIGID INSULATION, EXTEND 600mm BEYOND EDGE OF FOOTING ALL SIDES.

3. CONCRETE STRENGTH FOR FOUNDATION WALLS & FOOTINGS TO BE 20MPa @ 28 DAYS (MIN.) EXTERIOR CONCRETE TO HAVE 7% ±1% AIR ENTRAINMENT.

4. REFER TO ENGINEER'S DETAIL FOR PIPES THROUGH FOOTINGS.

20	DETAIL 6 CLARIFIED	OCT 18/16	MC
19	REVISED CENTRE OF POST DIMENSION	OCT 17/16	KO
18	REVISED/ADD DIMENSION @ PORCH PIER	JUN 22/16	KO
17	ISSUED FOR PERMIT	JUN 09/16	KO
16	ADDED RATED DRYWALL TO DETAIL 5	APR 26/16	KO
15	REISSUED FOR CONSTRUCTION	APR 14/16	KO
14	ISSUED FOR PERMIT	APR 01/16	KO
13	ADDED SENSITIVE SOILS REFERENCE	MAR 31/16	KO
12	REVISED POUR HT. FOR PRECAST STEP	DEC 18/15	KO
11	RELOCATED WATER METER	OCT 19/15	KO
10	ISSUED FOR FOOTPRINT	MAY 20/15	KO
9	ADDED SOIL STACK	APR 13/15	KO
8	ADDED DIMENSIONS, CLARIFIED PIERS	APR 09/15	KO
7	ADDED PIER	APR 07/15	KO
6	REVISED DIMENSION, ADDED POUR HT.	APR 02/15	KO
5	REVISED POUR HT.	MAR 17/15	KO
4	ISSUED FOR CONSTRUCTION	FEB 06/15	KO
3	ISSUED FOR STRUCTURAL LETTER & PERMIT	OCT 10/14	KO
2	ISSUED FOR TENDER	OCT 06/14	KO
1	ISSUED FOR STRUCTURAL REVIEW	SEP 10/14	KO
No	Revision	Date	By

OTTAWA-CARLETON STANDARD CONDOMINIUM PLAN NO.938
PART 3 , SHEET ____ OF ____ SHEETS

beinspired

CONFIDENTIAL

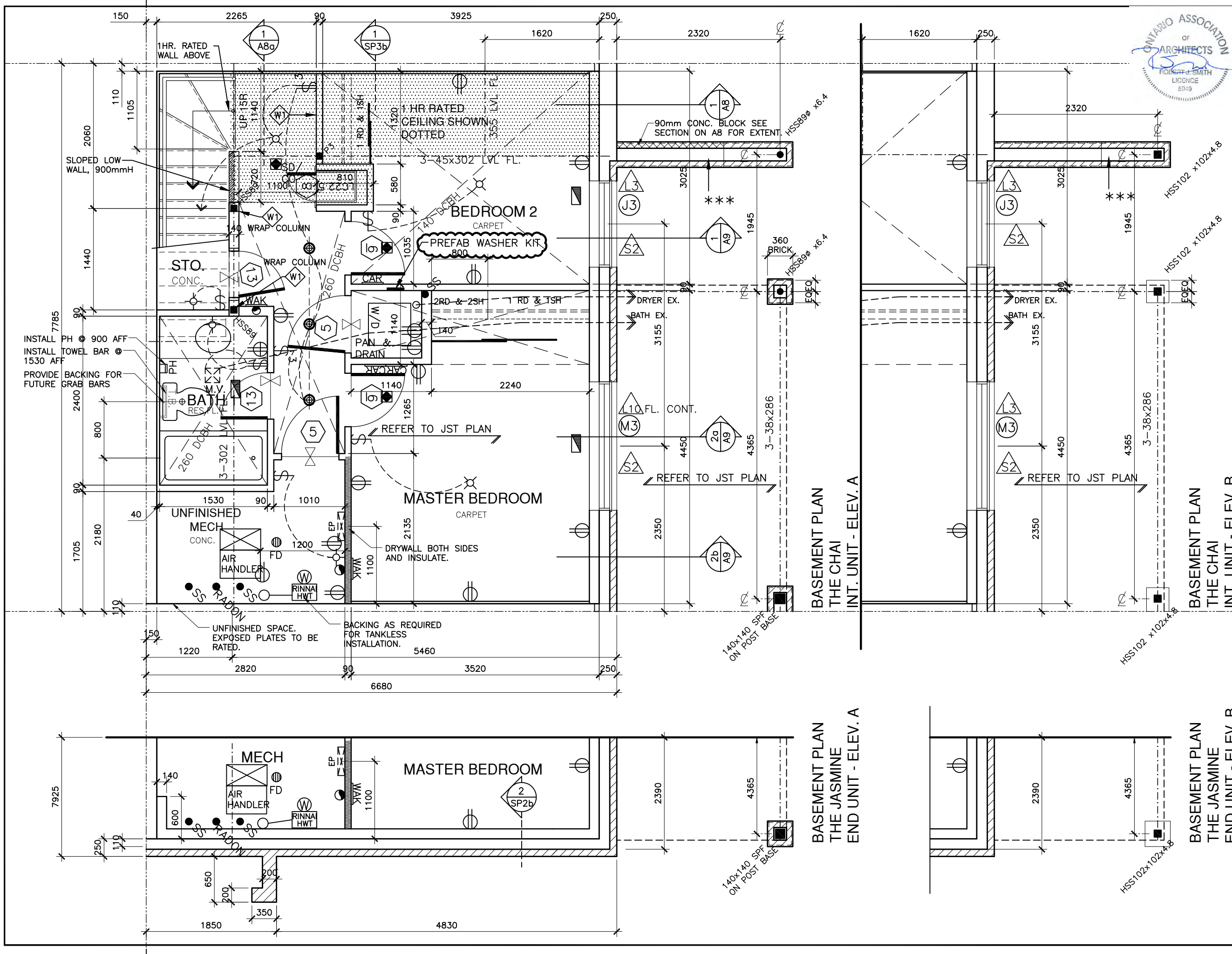
STRUCTURAL FRAMING LEGEND: SEE DWG A5
ELEVATION FINISHES LEGEND: SEE DWG A6
FLOOR PLAN LEGEND: SEE DWG SP-1
DR/WIN LEGEND: SEE DWG SP-7*
FOR ADDED INFO., ABBREV'S, SYMBOLS: SEE SPECS. SP-*

TITLE
FOUNDATION PLANS

FILENAME: infusion-flr.dwg

2016-INFUSION TERRACE
THE MATCHA,
THE ROOIBOS,
THE JASMINE, THE CHAI
ELEV. A & B
(2016 STANDARD DRAWING)

Scale
1:50
dwg #
A-1



NOTES

- 1.DRYWALL AT PARTY WALLS AND EXTERIOR WALLS SHALL EXTEND THRU ALL PARTITIONS AND POSTS TO MAINTAIN FIRE RATING.
2. PROVIDE 15.9mm FIRECODE DRYWALL ON ALL EXTERIOR WALLS (1 HR RATING CONTINUOUS)
3. PROVIDE 1HR RATED CEILING CONTINUOUS UNLESS NOTED OTHERWISE.
4. ELECTRICAL BOXES ON PARTY WALLS TO BE SEALED TYPE BOXES.

ELECT. PANEL DETAIL

BACKING AT 1320 & 1780 HT.

38x140 STUD

610

*** BRICK CAVITY WALL C/W DUR-O-WAL GALVANIZED AT EACH 4TH COURSE (FIRE-RESISTANCE RATING 72 min.) AS PER SB-2-TABLE 2.1.1

No	Revision	Date	By
26	ADDED LOCATION FOR WASHER KIT	NOV 18/16	KO
25	MOVED WARM AIR IN HALLWAY	OCT 19/16	KO
24	REVISED STAIR WALL TO 140	OCT 17/16	KO
23	ADDED DIMENSIONS	SEP 26/16	KO
22	ADDED LAUNDRY PAN, ADDED DIMENSIONS, REMOVED EP NOTE	AUG 30/16	KO
21	REVISED POST TO HSS	AUG 09/16	KO
20	ISSUED FOR PERMIT	JUN 09/16	KO
19	REISSUED FOR CONSTRUCTION	APR 14/16	KO
18	ISSUED FOR PERMIT	APR 01/16	KO
17	TOWEL BAR INSTALL HEIGHT ADDED	FEB 08/16	KO
16	TOILET PAPER HOLDER HEIGHT ADDED	DEC 11/15	KO
15	ELEVATION B DETAIL ADDED	NOV 20/15	MC

OTTAWA-CARLETON STANDARD CONDOMINIUM PLAN NO.938
PART 3 , SHEET ____ OF ____ SHEETS

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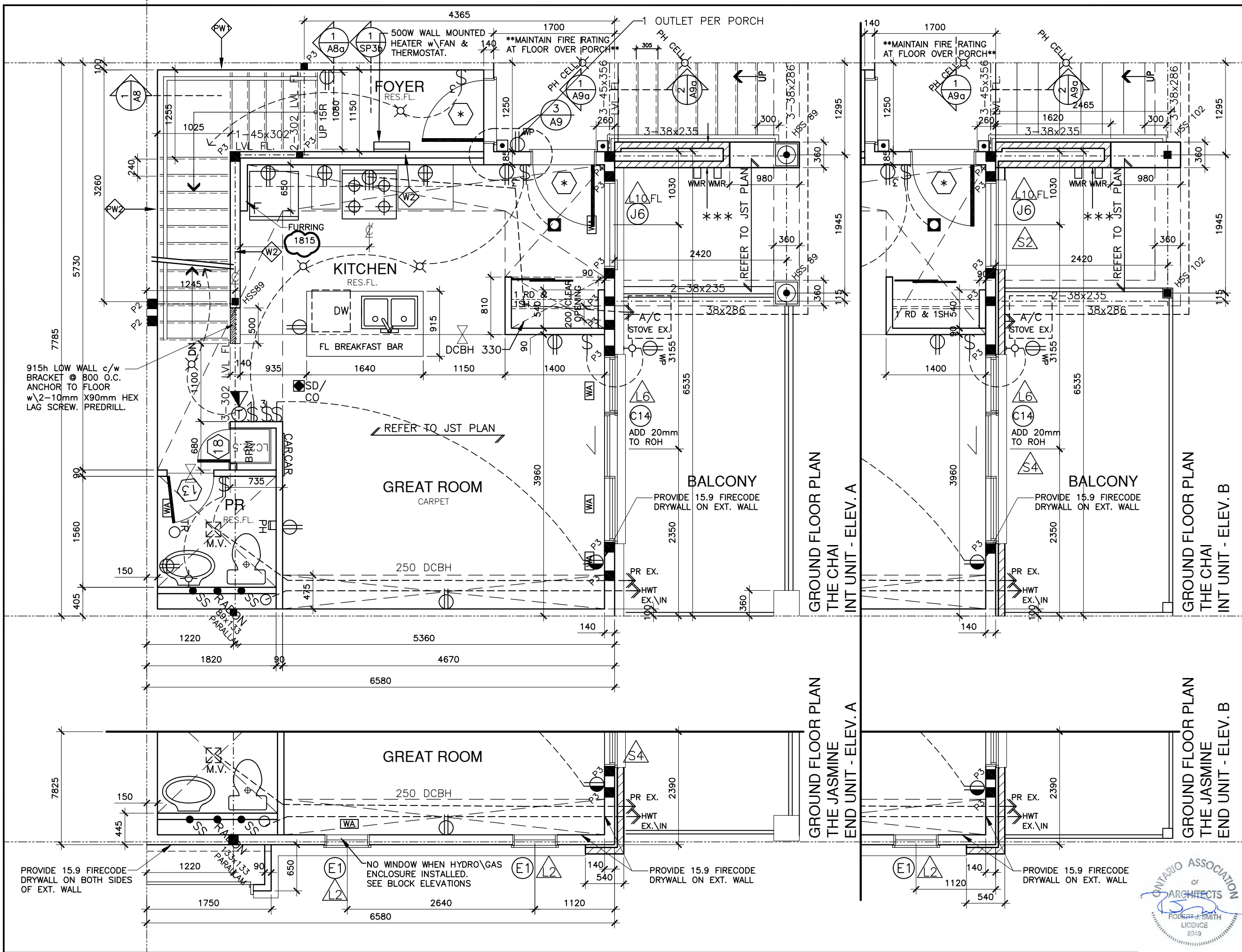
STRUCTURAL FRAMING LEGEND:SEE DWG A5
ELEVATION FINISHES LEGEND: SEE DWG A6
FLOOR PLAN LEGEND: SEE DWG SP-1
DR/WIN LEGEND: SEE DWG SP-7*
FOR ADDED INFO., ABBREV'S, SYMBOLS: SEE SPECS. SP-*

TITLE
BASEMENT PLANS

FILENAME: infusion-flr.dwg

2016-INFUSION TERRACE
**THE MATCHA,
THE ROOIBOS,
THE JASMINE, THE CHAI
ELEV. A & B
(2016 STANDARD DRAWING)**

Scale
1:50
dwg #
A-2



- NOTES:
- 1 HOUR CONTINUOUS RATED CEILING WITH BOTH LAYERS OF DRYWALL TAPED. THIS FLOOR.
 - RATED DRYWALL SHALL BE CONTINUOUS AND EXTEND THROUGH ALL PARTITIONS AND BULKHEADS ABUTTING PARTY WALL AND EXTERIOR WALLS.
 - INSULATE ALL PLUMBING DRAINS AND STACKS FOR SOUND.
 - PROVIDE 15.9mm FIRECODE DRYWALL ON ALL EXTERIOR WALLS CONTINUOUS (1HR RATING).
 - ELECTRICAL AND PHONE/CABLE BOXES IN PARTY WALLS AND CEILING TO BE SEALED TYPE BOXES.
 - EXIT STAIR AND PORCH DESIGNED FOR LIVE LOAD OF 100psf AS PER PART 4 REQUIREMENTS.

* PROVIDE A 865mm 45min RATED DOOR & FRAME COMPLETE WITH CLOSER, R.O. 900 w x 2095 h. SEE SP-3b

*** BRICK CAVITY WALL C/W DUR-O-WAL 140 TWIN TRUSS EHGALVANIZED AT EACH 4TH COURSE (FIRE-RESISTANCE RATING 72 min.) AS PER SB-2-TABLE 2.1.1

OTTAWA-CARLETON STANDARD CONDOMINIUM PLAN NO.938
PART 3, SHEET ____ OF ____ SHEETS

25	ADDED CENTRE OF STOVE DIMENSION	JAN 05/17	KO
24	REVISED WALL THK, RECENTER HSS	NOV 23/16	KO
4-23 COMPRESSED			
3	ISSUED FOR STRUCTURAL LETTER & PERMIT	OCT 10/14	KO
2	ISSUED FOR TENDER	OCT 06/14	KO
1	ISSUED FOR STRUCTURAL REVIEW	SEP 10/14	KO
No	Revision	Date	By

OTTAWA-CARLETON STANDARD CONDOMINIUM PLAN NO.938
PART 3, SHEET ____ OF ____ SHEETS



STRUCTURAL FRAMING LEGEND: SEE DWG A5
ELEVATION FINISHES LEGEND: SEE DWG A6
FLOOR PLAN LEGEND: SEE DWG SP-1
DR/WIN LEGEND: SEE DWG SP-7*
FOR ADDED INFO., ABBREV'S, SYMBOLS: SEE SPECS. SP-*

TITLE
GROUND FLOOR PLANS

FILENAME: infusion-flr.dwg
2016-INFUSION TERRACE
THE MATCHA,
THE ROOIBOS,
THE JASMINE, THE CHAI
ELEV. A & B
(2016 STANDARD DRAWING)

Scale
1:50
dwg #
A-3

PARTIAL BASEMENT PLAN
THE CHAI \ THE JASMINE
ELEV. A & B

PARTIAL SECOND FLOOR PLAN
THE MATCHA \ THE ROIBOS
ELEV. A (B similar)

PARTIAL FOUNDATION PLAN THE CHAI \ THE JASMINE ELEV. A & B

PARTIAL GROUND FLOOR PLAN
THE CHAI \ THE JASMINE
ELEV. A (B similar)

- NOTES:
1. 1 HOUR CONTINUOUS RATED CEILING WITH BOTH LAYERS OF DRYWALL TAPED. THIS FLOOR.
 2. RATED DRYWALL SHALL BE CONTINUOUS AND EXTEND THROUGH ALL PARTITIONS AND BULKHEADS ABUTTING PARTY WALL AND EXTERIOR WALLS.
 3. INSULATE ALL PLUMBING DRAINS AND STAKES FOR SOUND.
 4. PROVIDE 15.9mm FIRECODE DRYWALL ON ALL EXTERIOR WALLS CONTINUOUS (1HR RATING).
 5. ELECTRICAL AND PHONE\CABLE BOXES IN PARTY WALLS AND CEILING TO BE SEALED TYPE BOXES.
 6. EXIT STAIR AND PORCH DESIGNED FOR LIVE LOAD OF 100psf AS PER PART 4 REQUIREMENTS.

 PROVIDE A 865mm 45min RATED DOOR
& FRAME COMPLETE WITH CLOSER,
R.O. 900 w x 2095 h. SEE SP-3b

*** BRICK CAVITY WALL C/W
DUR-O-WAL 140 TWIN TRUSS
EHGALVANIZED AT EACH 4TH COURSE
(FIRE-RESTANCE RATING 72 min.) AS
PER SB-2-TABLE 2.1.1

11	REVISED FOUNDATION DIMENSION	NOV 15/16	KO
10	ADDED OUTLET AT PORCH	JUL 05/16	KO
9	ISSUED FOR PERMIT	JUN 09/16	KO
8	REISSUED FOR CONSTRUCTION	APR 14/16	KO
7	ISSUED FOR PERMIT	APR 01/16	KO
6	EXTENDED LVL, REVISED POSTS	DEC 11/15	KO
5	FOYER MASONRY WALL REVISED	DEC 02/15	KO
4	REDUCED BRICK OPENING TO ALLOW FOR 1 HANDRAIL	NOV 24/15	KO
3	ISSUED FOR FOOTPRINT	MAY 20/15	KO
2	ISSUED FOR CONSTRUCTION	FEB 06/15	KO
1	ISSUED FOR STRUCTURAL REVIEW	JAN 20/15	KO
No	Revision	Date	By

OTTAWA-CARLETON STANDARD CONDOMINIUM PLAN NO.938
PART 3 , SHEET ____ OF _____ SHEETS



STRUCTURAL FRAMING LEGEND:	SEE DWG A5
ELEVATION FINISHES LEGEND:	SEE DWG A6
FLOOR PLAN LEGEND:	SEE DWG SP-1
DR/WIN LEGEND:	SEE DWG SP-7*
FOR ADDED INFO., ABBREV'S,	
SYMBOLS:	SEE SPECS. SP-

TITLE

PARTIAL FLOOR PLANS
FOR SINGLE WIDE FOYER

FILENAME: infusion-flr.dwg

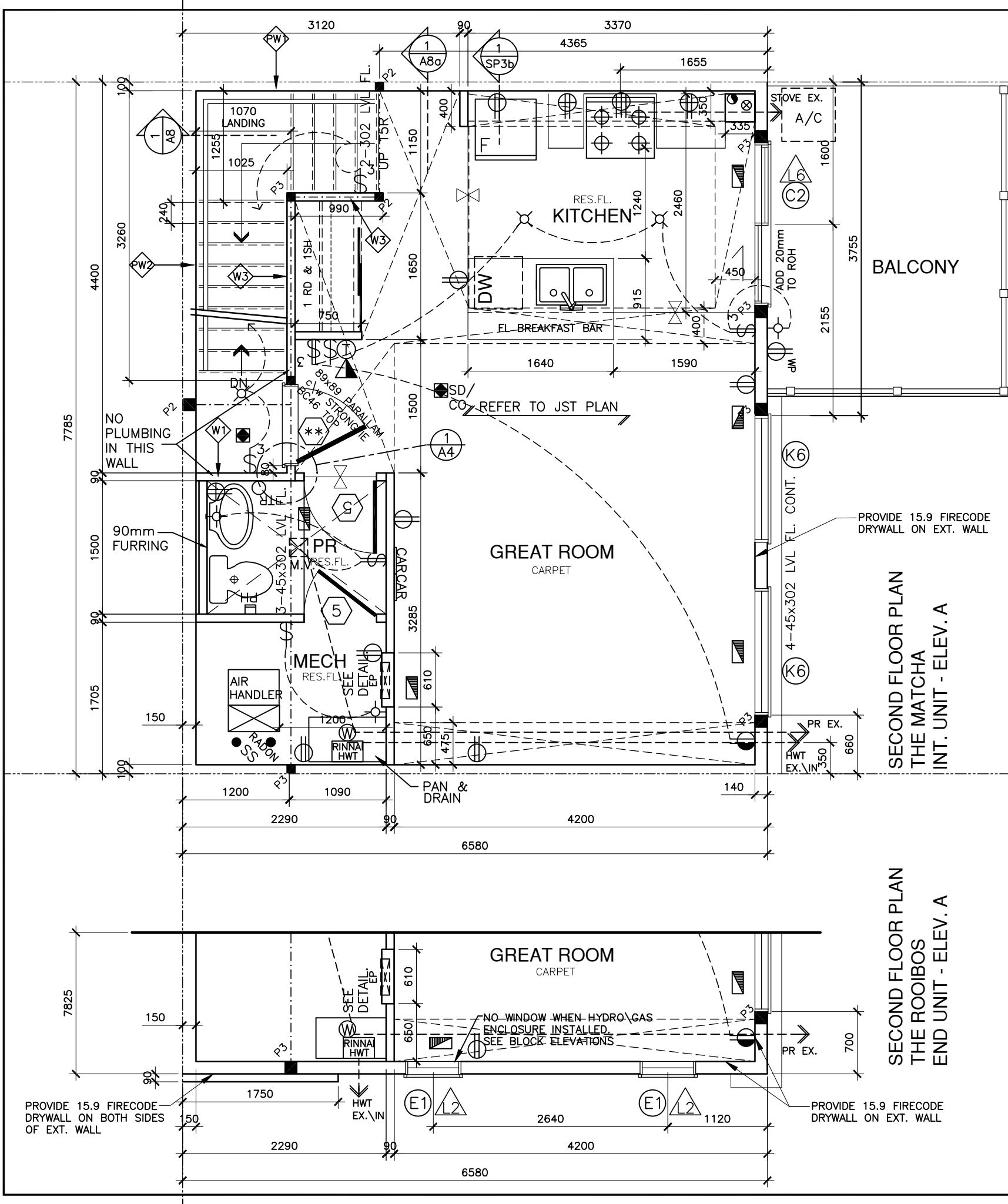
2016—INFUSION TERRACE
THE MATCHA,
THE ROOIBOS,
THE JASMINE, THE CHAI
ELEV. A & B
(2016 STANDARD DRAWING)

Scale	1:50
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dwg #	
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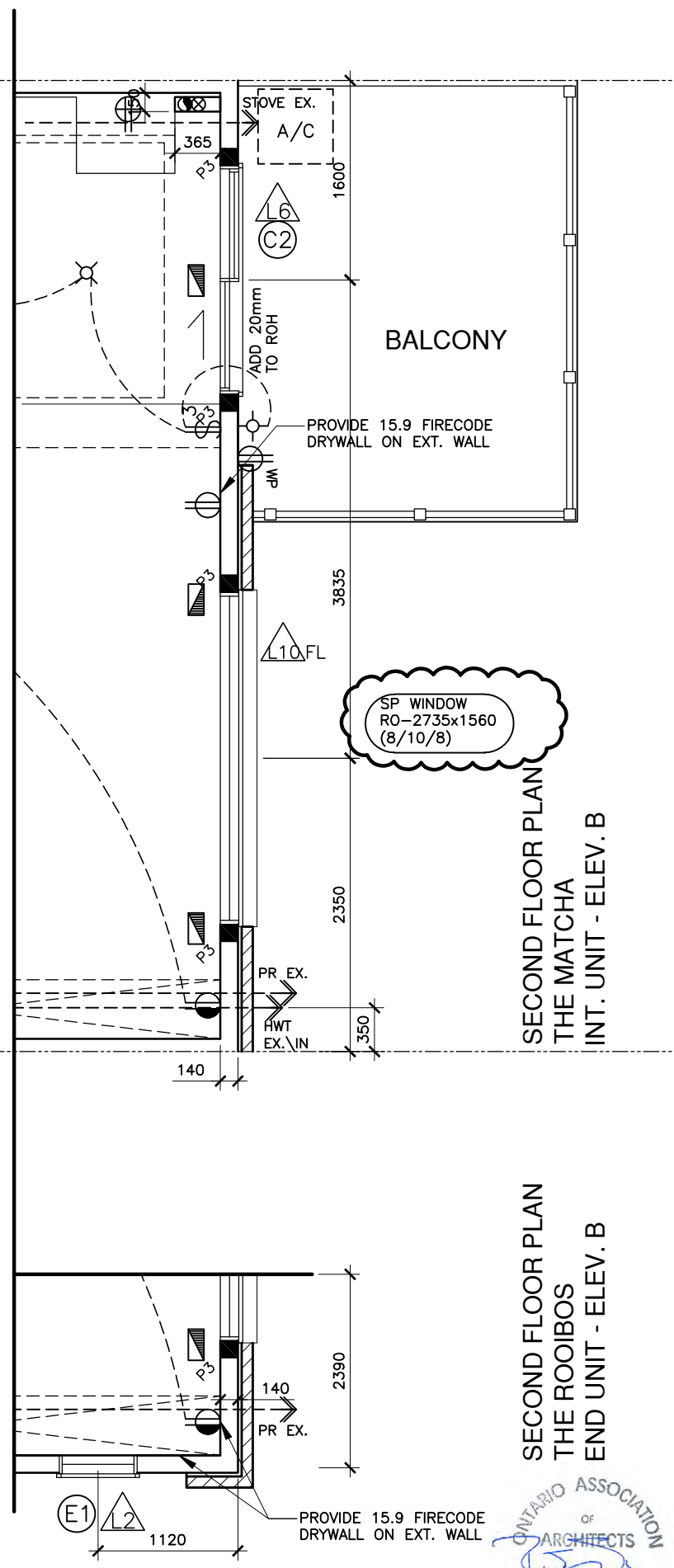
A-3a





SECOND FLOOR PLAN
THE MATCHA
INT. UNIT - ELEV. A

SECOND FLOOR PLAN
THE ROOIBOS
END UNIT - ELEV. A



SECOND FLOOR PLAN
THE MATCHA
INT. UNIT - ELEV. B

SECOND FLOOR PLAN
THE ROOIBOS
END UNIT - ELEV. B

NOTES:

- 45 MIN. CONTINUOUS RATED CEILING THIS FLOOR.
- RATED DRYWALL SHALL BE CONTINUOUS AND EXTEND THROUGH ALL PARTITIONS AND BULKHEADS ABUTTING PARTY WALL AND EXTERIOR WALLS.
- INSULATE ALL PLUMBING DRAINS AND STACKS FOR SOUND.
- PROVIDE 15.9mm FIRECODE DRYWALL ON ALL EXTERIOR WALLS CONTINUOUS (1HR RATING).
- ELECTRICAL AND PHONE\CABLE BOXES IN PARTY WALLS AND CEILING TO BE SEALED TYPE BOXES.

** PROVIDE A 865mm 45min RATED DOOR & FRAME COMPLETE WITH CLOSER, R.O. 900 w x 2095 h

RATED DOOR & FRAME
DOOR CASING w/
BLOCKING

CAULKING

15.8 TYPE 'X' GYPSUM BD
CONTINUOUS THRU WALL.

1 STAIR WALL AT DOOR RATING
DETAIL

23	ADDED WINDOW R.O.	MAR 24/17	PS
22	ADDED P3	NOV 30/16	KO
21	ADDED DETAIL 1	SEP 26/16	KO
20	RELOCATED LIGHT	SEP 06/16	KO
19	ADDED DIMENSION	AUG 30/16	KO
18	ADDED POST CONNECTOR CLIP	AUG 09/16	KO
17	ISSUED FOR PERMIT	JUN 09/16	KO
16	REISSUED FOR CONSTRUCTION	APR 14/16	KO
15	ISSUED FOR PERMIT	APR 01/16	KO
14	ADD FURRING IN POWDER ROOM	JAN 26/16	KO
13	OUTLETS & PLUGS RELOCATED	DEC 21/15	MC
12	REVISED WINDOW DIMENSIONS, ADDED DCBH FOR END, REVISED LANDING	DEC 18/15	KO
11	REVISED DIMENSION	DEC 14/15	KO
10	CLARIFIED WINDOW HT, MOVED WATER METER	OCT 19/15	KO
9	REVISED DCBH, ADDED FLOORING	JUL 29/15	KO
8	ADDED P2 NOTE	MAY 27/15	KO
7	ISSUED FOR FOOTPRINT	MAY 20/15	KO
No	Revision	Date	By

OTTAWA-CARLETON STANDARD CONDOMINIUM PLAN NO.938
PART 3 , SHEET ____ OF ____ SHEETS

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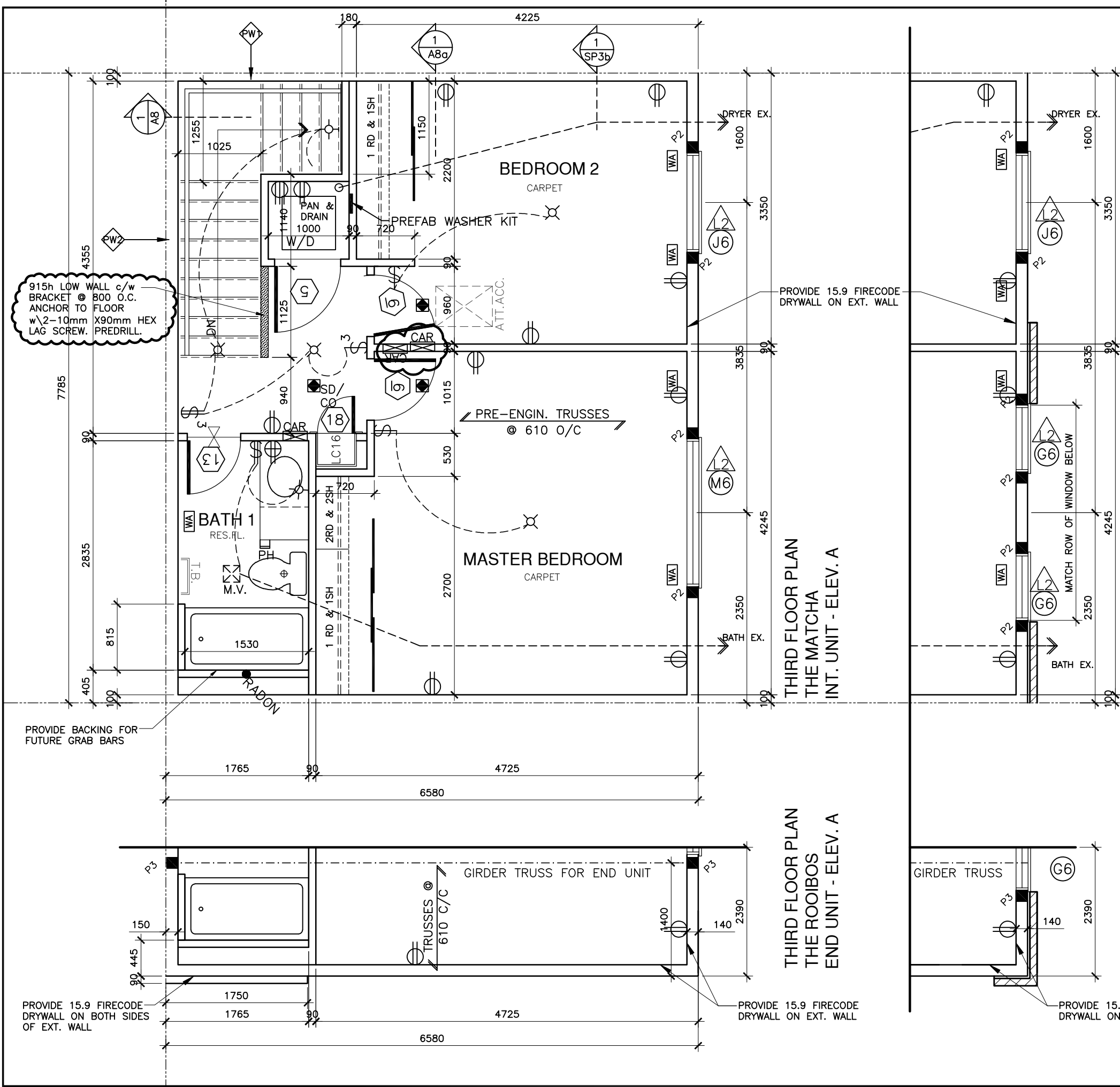
STRUCTURAL FRAMING LEGEND: SEE DWG A5
ELEVATION FINISHES LEGEND: SEE DWG A6
FLOOR PLAN LEGEND: SEE DWG SP-1
DR/WIN LEGEND: SEE DWG SP-7*
FOR ADDED INFO., ABBREV'S, SYMBOLS: SEE SPECS. SP-*

TITLE
SECOND FLOOR PLANS

FILENAME: infusion-flr.dwg

2016-INFUSION TERRACE
THE MATCHA,
THE ROOIBOS,
THE JASMINE, THE CHAI
ELEV. A & B
(2016 STANDARD DRAWING)

Scale
1:50
dwg #
A-4



STRUCTURAL FRAMING SCHEDULE		
For Steel Framing Layout, Beam/Column/Plate Connection Details, see Structural Dwg's ST- * (Also Specs SP-1 & SP-4).		
STEEL LINTEL		
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
WOOD LINTEL		
L1	-	2-38x235 w/ 12.7 PLYWOOD SPACER
L2	-	2-38x235
L3	-	3-38x235
L4	-	3-38x235 c/w 2-12.7 PLYWOOD SPACERS & 2 ROWS OF 90mm C.W.N. @ 200 c/c B/S
L5	-	3-38x286 c/w 2-12.7 PLYWOOD SPACERS & 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	-	2-45x302 M.L.
PROVIDE 'P2' POST BOTH ENDS OF LINTEL UNLESS NOTED OTHERWISE		
POSTS		
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
HSS 73 OD	-	HSS 73 O.D. X 4.8 + 12mm PLATE TOP & BOT.
HSS 89 OD	-	HSS 89 O.D. X 6.4 + 12mm PLATE TOP & BOT.
HSS 76	-	HSS 76.2 X 76.2 X 4.8 + 12mm PLATE TOP & BOT.
HSS 89	-	HSS 89 X 89 X 4.8 + 12mm PLATE TOP & BOT.
HSS 102	-	HSS 102 X 102 X 4.8 + 12mm PLATE TOP & BOT.
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 UNLESS NOTED OTHERWISE ON THE GEOTECHNICAL REPORT.		

14	ADDED FASTENING INFO FOR BRACKET	NOV 09/16	KO
13	ADDED DIMENSION	AUG 30/16	KO
12	ISSUED FOR PERMIT	JUN 09/16	KO
11	REISSUED FOR CONSTRUCTION	APR 14/16	KO
10	ISSUED FOR PERMIT	APR 01/16	KO
9	MOVED WASHER KIT	DEC 14/15	KO
8	REVISED DIMENSION	NOV 06/15	KO
7	REVISED HVAC, MOVED OUTLET, ADDED WASHER KIT, LOW WALL BRACKET	JUL 29/15	KO
6	ADDED WARM AIR	MAY 27/15	KO
5	ISSUED FOR FOOTPRINT	MAY 20/15	KO
4	ISSUED FOR CONSTRUCTION	FEB 06/15	KO
3	ISSUED FOR STRUCTURAL LETTER & PERMIT	OCT 10/14	KO
2	ISSUED FOR TENDER	OCT 06/14	KO
1	ISSUED FOR STRUCTURAL REVIEW	SEP 10/14	KO
No	Revision	Date	By

OTTAWA-CARLETON STANDARD CONDOMINIUM PLAN NO.938
PART 3 , SHEET ____ OF ____ SHEETS



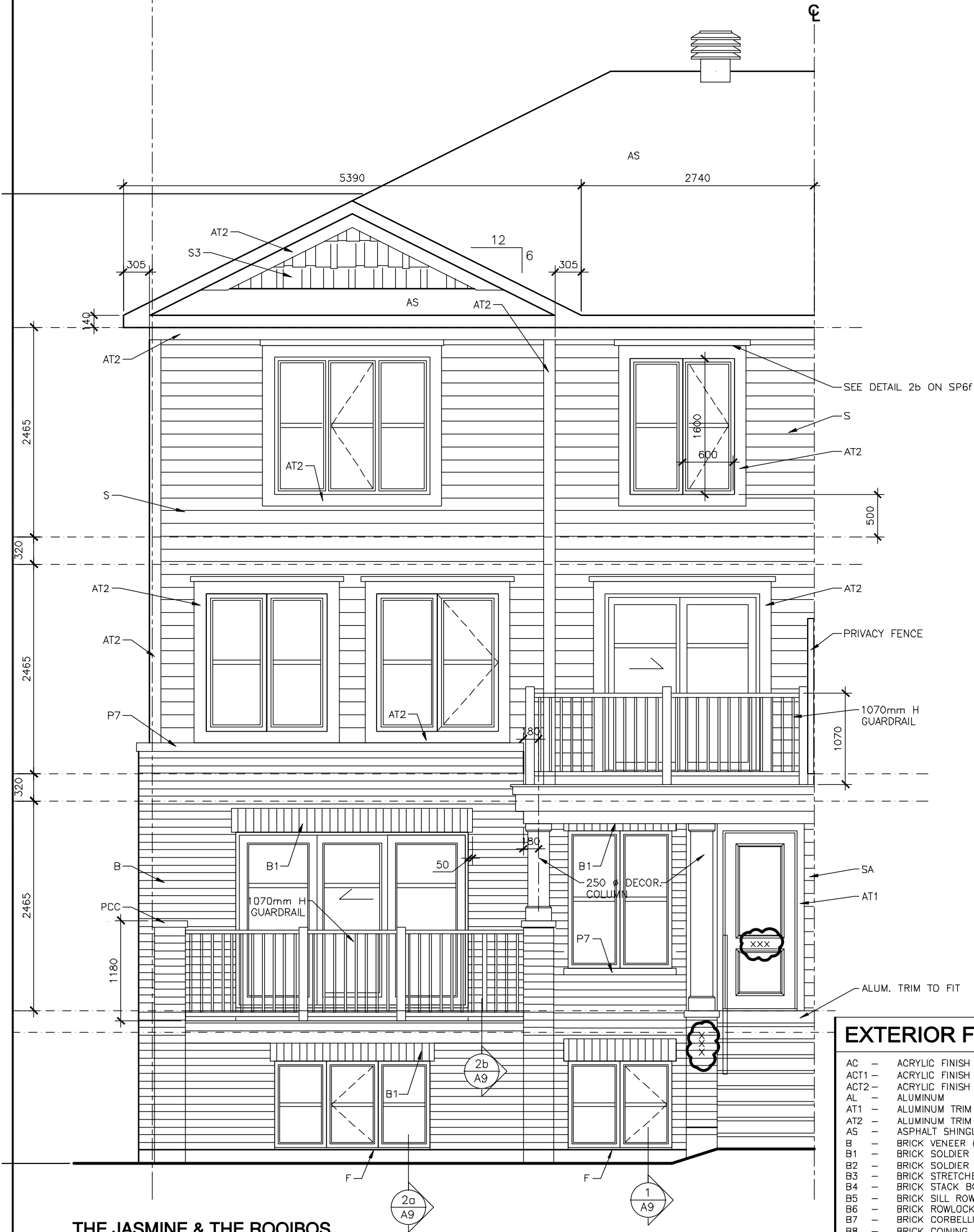
STRUCTURAL FRAMING LEGEND: SEE DWG A5
ELEVATION FINISHES LEGEND: SEE DWG A6
FLOOR PLAN LEGEND: SEE DWG SP-1
DR/WIN LEGEND: SEE DWG SP-7*
FOR ADDED INFO., ABBREV'S, SYMBOLS: SEE SPECS. SP-*

TITLE
THIRD FLOOR PLANS

FILENAME: infusion-flr.dwg
2016-INFUSION TERRACE
THE MATCHA,
THE ROOIBOS,
THE JASMINE, THE CHAI
ELEV. A & B
(2016 STANDARD DRAWING)

Scale
1:50
dwg #
A-5





THE JASMINE & THE ROOIBOS
FRONT ELEVATION A -END UNIT

EXTERIOR FINISHES

- AC - ACRYLIC FINISH
- ACT1 - ACRYLIC FINISH TRIM (90mm)
- ACT2 - ACRYLIC FINISH TRIM (140mm)
- AL - ALUMINUM
- AT1 - ALUMINUM TRIM (90mm)
- AT2 - ALUMINUM TRIM (140mm)
- AS - ASPHALT SHINGLES
- B - BRICK VENEER (nominal size = 260x80)
- B1 - BRICK SOLDIER COURSE
- B2 - BRICK SOLDIER COURSE (20mm projection)
- B3 - BRICK STRETCHER COURSE
- B4 - BRICK STACK BOND
- B5 - BRICK SILL ROWLOCK (SLOPED)
- B6 - BRICK ROWLOCK
- B7 - BRICK CORBELLING
- B8 - BRICK COINING (20mm projection)
- B9 - BRICK HERRINGBONE
- +20 - MASONRY PROJECTING 20mm
- 20 - MASONRY RECESSED 20mm
- CBP1 - CEMENT BOARD PANEL
- CBT* - CEMENT BOARD TRIM - WIDTH AS NOTED
- CBT1 - CEMENT BOARD TRIM - 90mm
- CBS - CEMENT BOARD SIDING
- EB - EXTRA BRICK
- F - FLASHING
- HP - HARDBOARD PANEL TEXTURED
- P - PARGING
- PCS - POURED CONCRETE SILL (ONE PIECE)
- PC - PRECAST CONC. BLOCK SHAPE (SEE DWG)
- PCC - PRECAST CAP TO MATCH BRICK COURSING
- P1 - PRECAST CONC. SILL 60mm HIGH
- P2 - PRECAST CONC. KEYSTONE
- P3 - PRECAST CONC. BLOCK 260mm SQ. MATCH PROJECTION OF SOLDIER COURSE
- P4 - PRECAST CONC. BLOCK 260mm HIGH
- P5 - PRECAST CONC. BLOCK 290mm HIGH
- P6 - PRECAST CONC. BLOCK 150mm HIGH
- P7 - PRECAST CONC. BLOCK 78mm HIGH
- P8 - PRECAST CONC. SILL 78mm HIGH
- PTW - PRESSURE TREATED WOOD
- RV - ROOF VENT
- S - SIDING HORIZONTAL (VINYL)
- SA - SIDING (ALUMINUM)
- SV - SIDING VERTICAL (VINYL)
- S1 - SIDING HALF ROUND PANELS
- S2 - SIDING SHAKE (VINYL)
- S3 - SIDING STAGGERED SHAKE (VINYL)
- SH1 - SHUTTERS (500 mm)
- SH2 - SHUTTERS (350 mm)
- ST - STONE VENEER
- ST1 - STONE VENEER STACK BOND
- ST2 - STONE VENEER SOLDIER COURSE
- ST3 - STONE VENEER PROJECTION
- U.P.O. - UNPROTECTED OPENING (SEE OBC 9.10.14)
- VF - VALLEY FLASHING
- VT - VINYL TRIM
- WT - WOOD TRIM
- XXX - ADDRESS LOCATION



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STRUCTURAL FRAMING LEGEND: SEE DWG A5
ELEVATION FINISHES LEGEND: SEE DWG A6
FLOOR PLAN LEGEND: SEE DWG SP-1
DR/WIN LEGEND: SEE DWG SP-7*
FOR ADDED INFO., ABBREV'S, SYMBOLS: SEE SPECS. SP-*

TITLE
THE JASMINE & THE ROOIBOS
FRONT ELEVATION A -END UNIT

FILENAME: infusion-elev.dwg

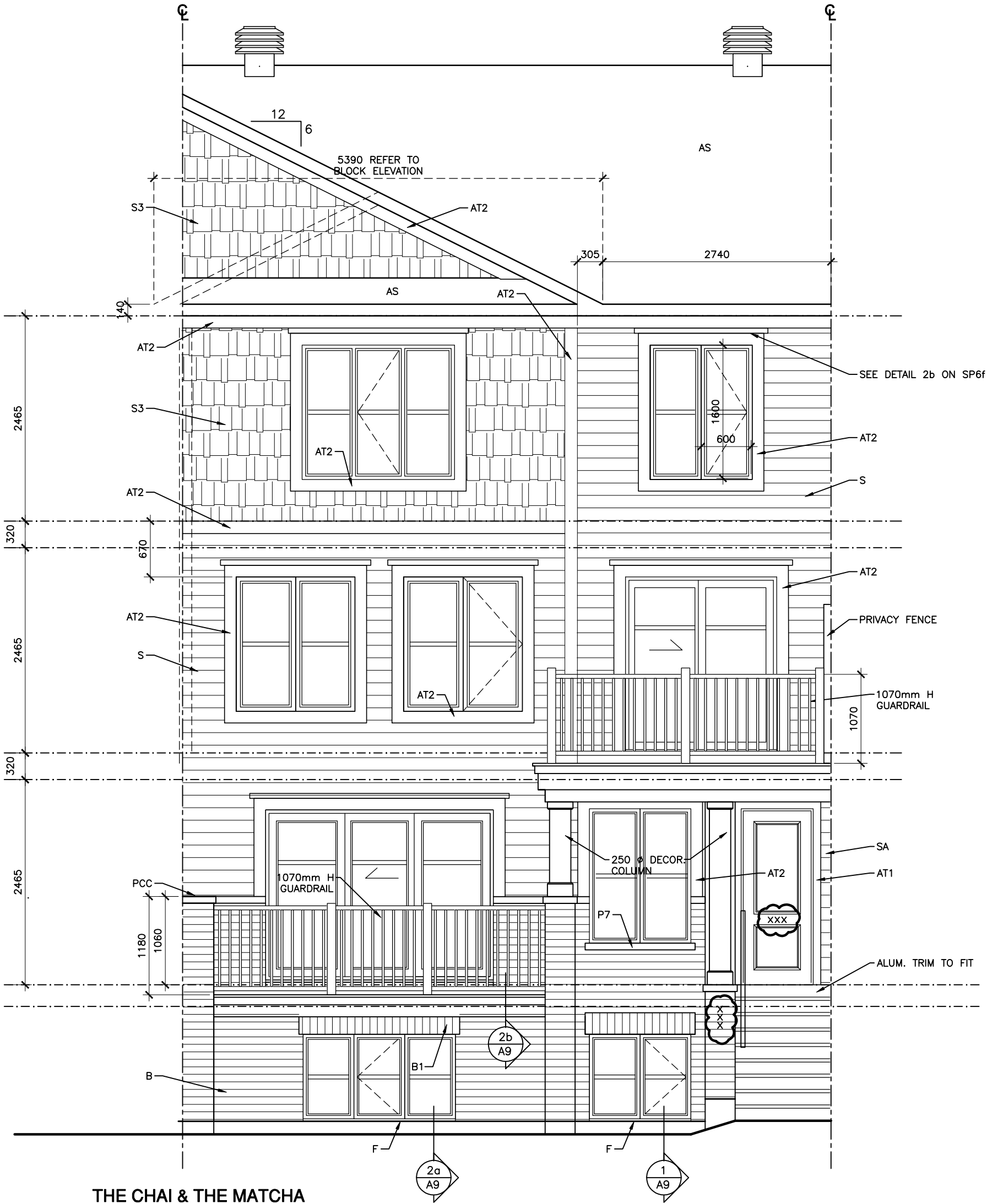
Scale
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dwg #
A-6
THE MATCHA,
THE ROOIBOS,
THE JASMINE, THE CHAI
ELEV. A & B
(2016 STANDARD DRAWING)

14	ISSUED FOR PERMIT	JUN 09/16	KO
13	ADDRESS LOCATION ADDED	JUN 07/16	MC
12	REISSUED FOR CONSTRUCTION	APR 14/16	KO
11	ISSUED FOR PERMIT	APR 01/16	KO
10	ADDED DIMENSION BRICK EXTENT	DEC 04/15	KO
9	CLARIFIED MATERIALS ON LEGEND	OCT 26/15	KO
8	MOVED WINDOW OPERATORS	JUL 29/15	KO
7	ADDED ROOF VENTS	JUN 23/15	KO
6	REVISED EXTERIOR FINISH LEGEND	MAY 21/15	KO
5	ISSUED FOR FOOTPRINT	MAY 20/15	KO
4	ISSUED FOR CONSTRUCTION	FEB 06/15	KO
3	ISSUED FOR STRUCTURAL LETTER & PERMIT	OCT 10/14	KO
2	ISSUED FOR TENDER	OCT 06/14	KO
1	ISSUED FOR STRUCTURAL REVIEW	SEP 10/14	KO
No	Revision	Date	By

OTTAWA-CARLETON STANDARD CONDOMINIUM PLAN NO.____
PART III , SHEET ____ OF _____ SHEETS





THE CHAI & THE MATCHA
FRONT ELEVATION A - INT. UNIT



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STRUCTURAL FRAMING LEGEND: SEE DWG A5
ELEVATION FINISHES LEGEND: SEE DWG A6
FLOOR PLAN LEGEND: SEE DWG SP-1
DR/WIN LEGEND: SEE DWG SP-7*
FOR ADDED INFO., ABBREV'S, SYMBOLS: SEE SPECS. SP-*

TITLE
THE CHAI & THE MATCHA
FRONT ELEVATION A - INT. UNIT

FILENAME: infusion-elev.dwg

Scale
1:50

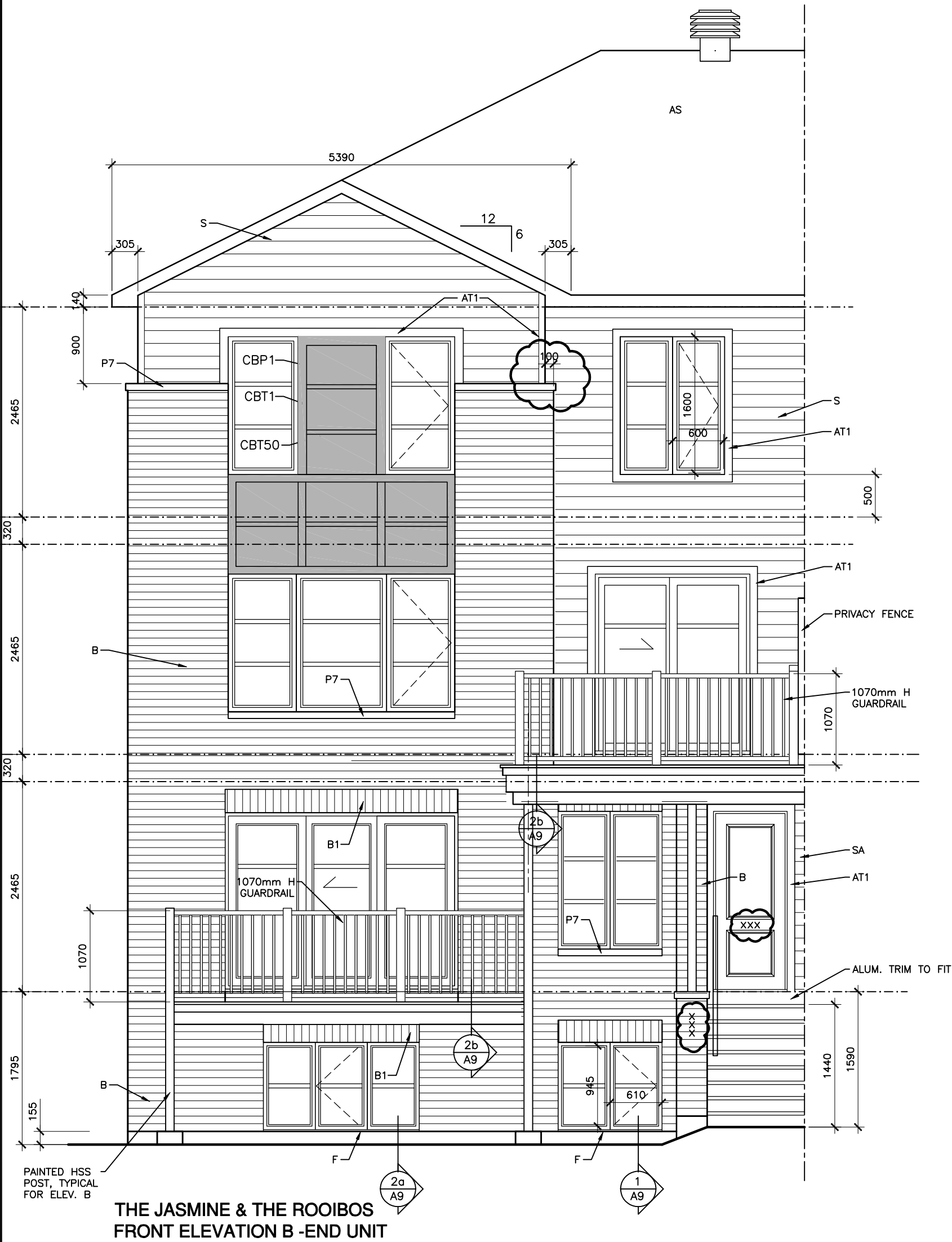
dwg #
A-6a

2016-INFUSION TERRACE
THE MATCHA,
THE ROOIBOS,
THE JASMINE, THE CHAI
ELEV. A & B
(2016 STANDARD DRAWING)

12	ISSUED FOR PERMIT	JUN 09/16	KO
11	ADDRESS LOCATION ADDED	JUN 07/16	MC
10	REISSUED FOR CONSTRUCTION	APR 14/16	KO
9	ISSUED FOR PERMIT	APR 01/16	KO
8	ADDED GABLE DIMENSION	SEP 02/15	KO
7	MOVED WINDOW OPERATORS	JUL 29/15	KO
6	ADDED ROOF VENTS	JUN 23/15	KO
5	ISSUED FOR FOOTPRINT	MAY 20/15	KO
4	ISSUED FOR CONSTRUCTION	FEB 06/15	KO
3	ISSUED FOR STRUCTURAL LETTER & PERMIT	OCT 10/14	KO
2	ISSUED FOR TENDER	OCT 06/14	KO
1	ISSUED FOR STRUCTURAL REVIEW	SEP 10/14	KO
No	Revision	Date	By

OTTAWA-CARLETON STANDARD CONDOMINIUM PLAN NO.____
PART III , SHEET ____ OF ____ SHEETS





CONFIDENTIAL

STRUCTURAL FRAMING LEGEND: SEE DWG A5
ELEVATION FINISHES LEGEND: SEE DWG A6
FLOOR PLAN LEGEND: SEE DWG SP-1
DR/WIN LEGEND: SEE DWG SP-7*
FOR ADDED INFO., ABBREV'S, SYMBOLS: SEE SPECS. SP-*

TITLE
**THE JASMINE & THE ROOIBOS
FRONT ELEVATION B -END UNIT**

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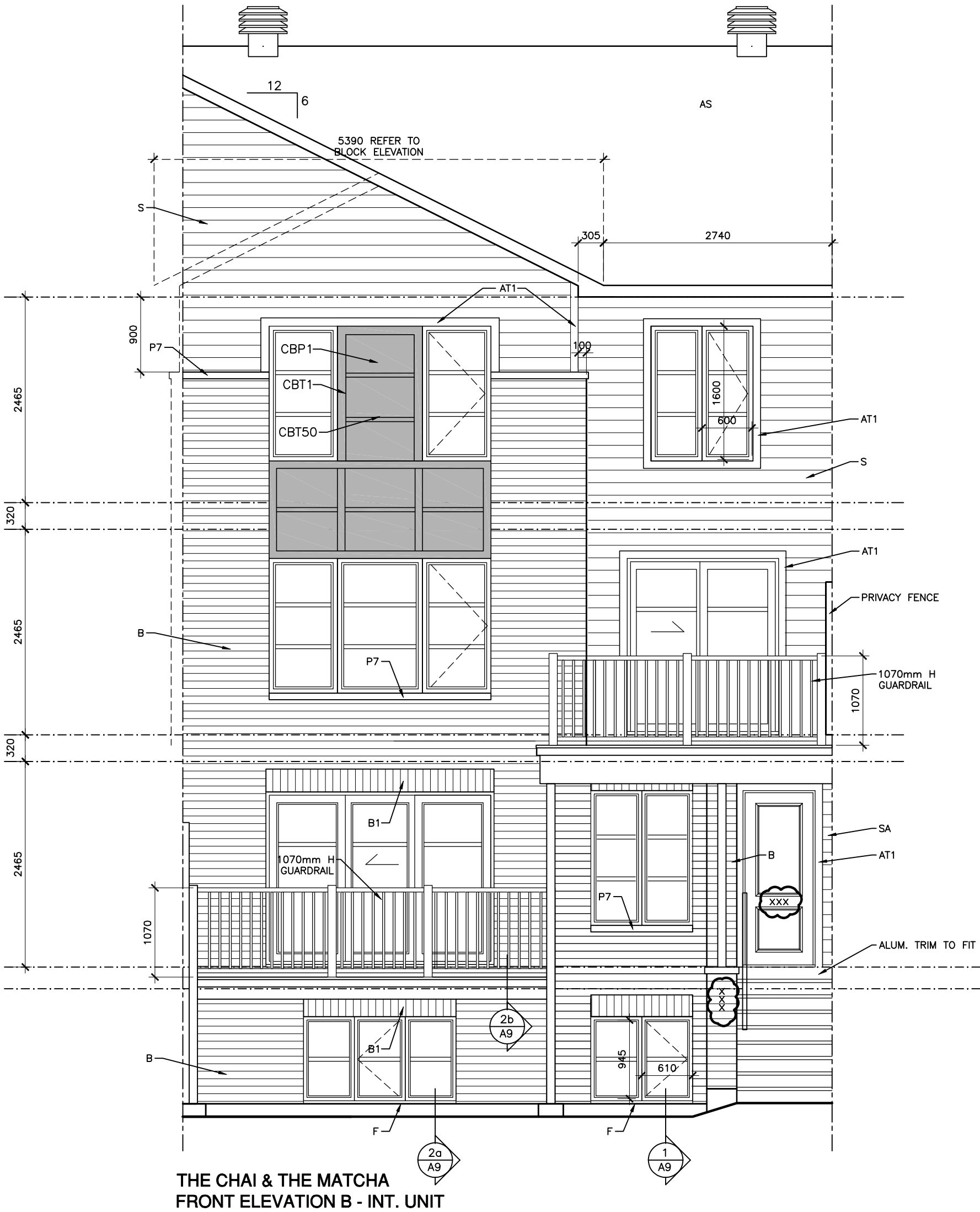
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2016-INFUSION TERRACE

dwg #
A-6b
THE MATCHA,
THE ROOIBOS,
THE JASMINE, THE CHAI
ELEV. A & B
(2016 STANDARD DRAWING)

13	ADDED DIMENSION FOR BRICK	SEP 13/16	KO
12	ISSUED FOR PERMIT	JUN 09/16	KO
11	ADDRESS LOCATION ADDED	JUN 07/16	MC
10	REISSUED FOR CONSTRUCTION	APR 14/16	KO
9	ISSUED FOR PERMIT	APR 01/16	KO
8	MOVED WINDOW OPERATORS	JUL 29/15	KO
7	ADDED ROOF VENTS	JUN 23/15	KO
6	ADDED WINDOW OPERATOR	MAY 21/15	KO
5	ISSUED FOR FOOTPRINT	MAY 20/15	KO
4	ISSUED FOR CONSTRUCTION	FEB 06/15	KO
3	ISSUED FOR STRUCTURAL LETTER & PERMIT	OCT 10/14	KO
2	ISSUED FOR TENDER	OCT 06/14	KO
1	ISSUED FOR STRUCTURAL REVIEW	SEP 10/14	KO
No	Revision	Date	By

OTTAWA-CARLETON STANDARD CONDOMINIUM PLAN NO. _____
PART III , SHEET ____ OF _____ SHEETS





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STRUCTURAL FRAMING LEGEND: SEE DWG A5
ELEVATION FINISHES LEGEND: SEE DWG A6
FLOOR PLAN LEGEND: SEE DWG SP-1
DR/WIN LEGEND: SEE DWG SP-7*
FOR ADDED INFO., ABBREV'S, SYMBOLS: SEE SPECS. SP-*

TITLE
**THE CHAI & THE MATCHA
FRONT ELEVATION B - INT. UNIT**

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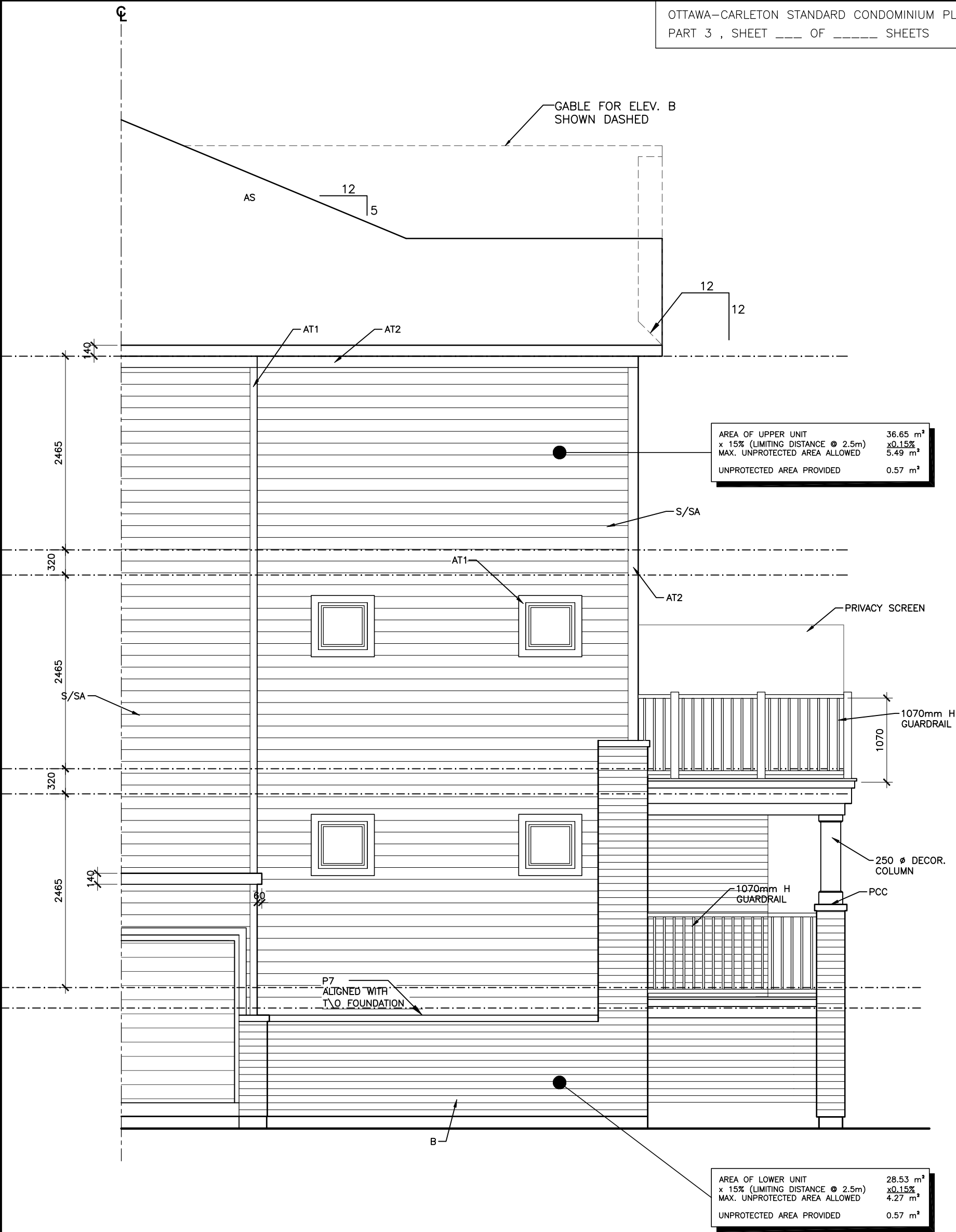
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dwg #
A-6c
THE MATCHA,
THE ROOIBOS,
THE JASMINE, THE CHAI
ELEV. A & B
(2016 STANDARD DRAWING)

12	ISSUED FOR PERMIT	JUN 09/16	KO
11	ADDRESS LOCATION ADDED	JUN 07/16	MC
10	REISSUED FOR CONSTRUCTION	APR 14/16	KO
9	ISSUED FOR PERMIT	APR 01/16	KO
8	ADDED GABLE DIMENSION	SEP 02/15	KO
7	MOVED WINDOW OPERATORS	JUL 29/15	KO
6	ADDED ROOF VENTS	JUN 23/15	KO
5	ISSUED FOR FOOTPRINT	MAY 20/15	KO
4	ISSUED FOR CONSTRUCTION	FEB 06/15	KO
3	ISSUED FOR STRUCTURAL LETTER & PERMIT	OCT 10/14	KO
2	ISSUED FOR TENDER	OCT 06/14	KO
1	ISSUED FOR STRUCTURAL REVIEW	SEP 10/14	KO
No	Revision	Date	By

OTTAWA-CARLETON STANDARD CONDOMINIUM PLAN NO.____
PART III , SHEET ____ OF ____ SHEETS





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STRUCTURAL FRAMING LEGEND: SEE DWG A5
ELEVATION FINISHES LEGEND: SEE DWG A6
FLOOR PLAN LEGEND: SEE DWG SP-1
DR/WIN LEGEND: SEE DWG SP-7*
FOR ADDED INFO., ABBREV'S, SYMBOLS: SEE SPECS. SP-*

TITLE
**THE JASMINE & THE ROOIBOS
SIDE ELEVATION A - END UNIT**

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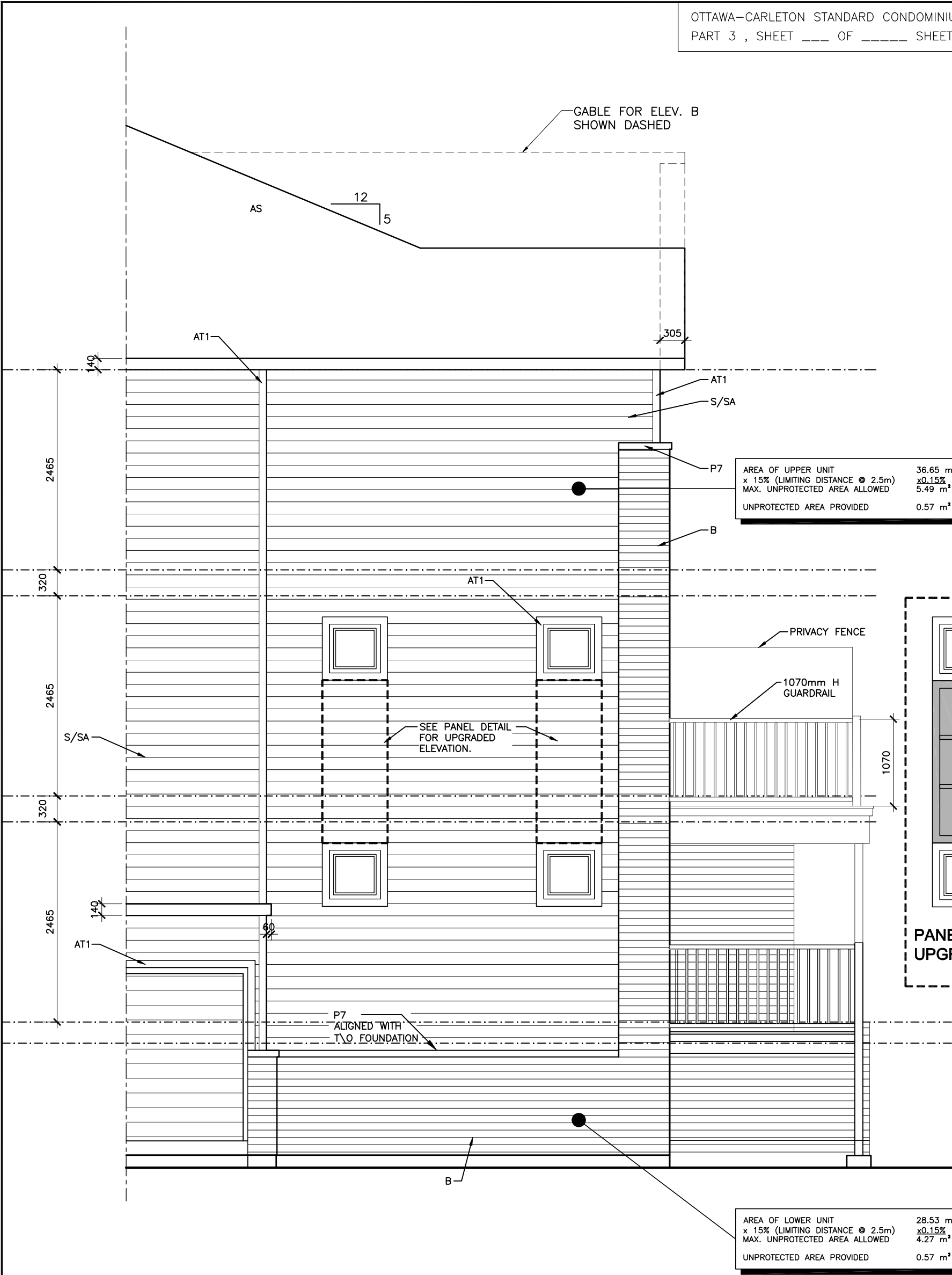
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2016-INFUSION TERRACE

dwg #
A-7
THE MATCHA,
THE ROOIBOS,
THE JASMINE, THE CHAI
ELEV. A & B
(2016 STANDARD DRAWING)

10	ISSUED FOR PERMIT	JUN 09/16	KO
9	REISSUED FOR CONSTRUCTION	APR 14/16	KO
8	ISSUED FOR PERMIT	APR 01/16	KO
7	REVISED ROOF SLOPE	JUL 29/15	KO
6	ADDED NOTE FOR P7 HEIGHT	MAY 27/15	KO
5	ISSUED FOR FOOTPRINT	MAY 20/15	KO
4	ISSUED FOR CONSTRUCTION	FEB 06/15	KO
3	ISSUED FOR STRUCTURAL LETTER & PERMIT	OCT 10/14	KO
2	ISSUED FOR TENDER	OCT 06/14	KO
1	ISSUED FOR STRUCTURAL REVIEW	SEP 10/14	KO
No	Revision	Date	By

OTTAWA-CARLETON STANDARD CONDOMINIUM PLAN NO.____
PART III , SHEET ____ OF _____ SHEETS





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STRUCTURAL FRAMING LEGEND: SEE DWG A5
ELEVATION FINISHES LEGEND: SEE DWG A6
FLOOR PLAN LEGEND: SEE DWG SP-1
DR/WIN LEGEND: SEE DWG SP-7*
FOR ADDED INFO., ABBREV'S, SYMBOLS: SEE SPECS. SP-*

TITLE
**THE JASMINE & THE ROOIBOS
SIDE ELEVATION B - END UNIT**

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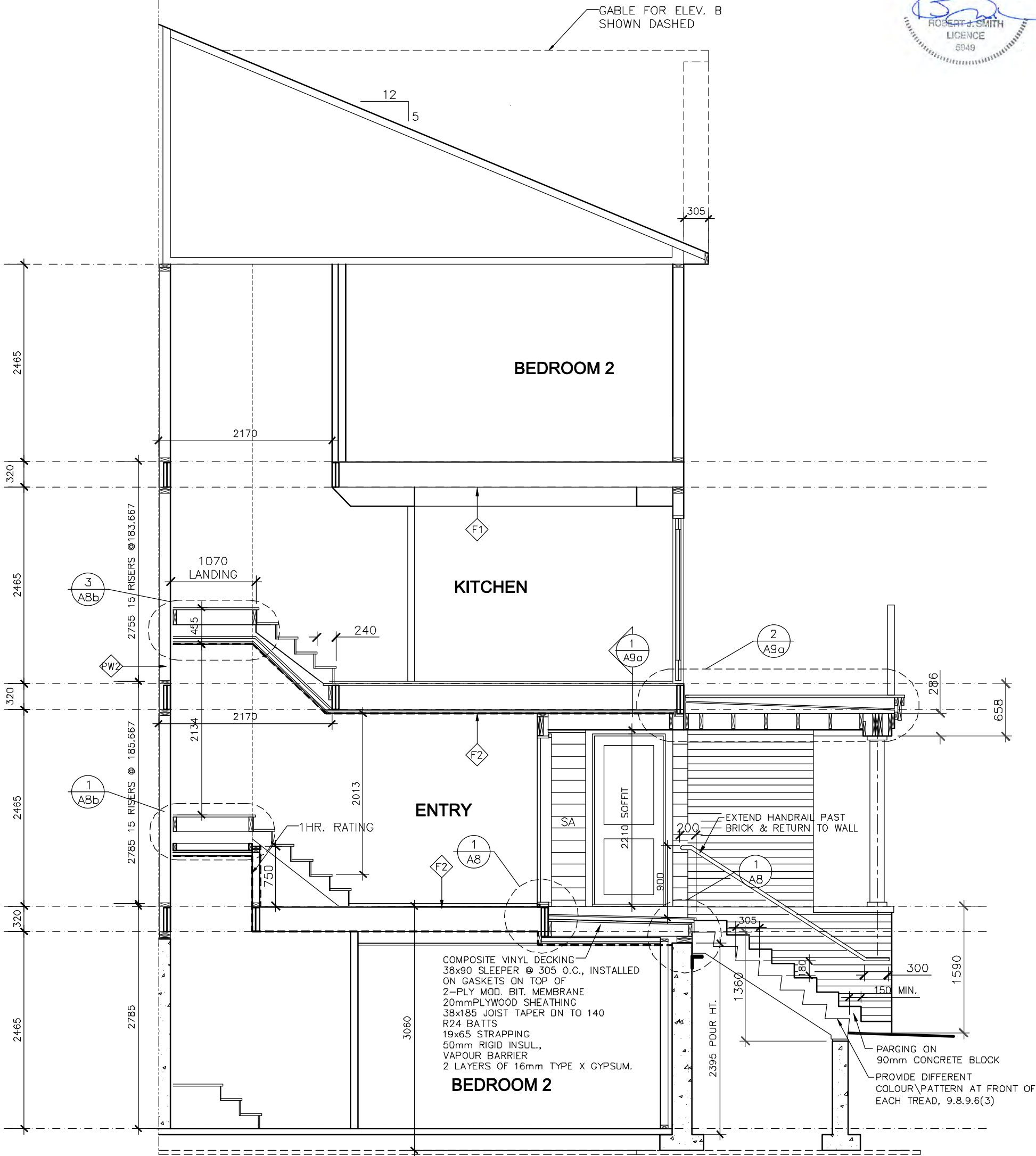
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2016-INFUSION TERRACE

dwg #
A-7a
THE MATCHA,
THE ROOIBOS,
THE JASMINE, THE CHAI
ELEV. A & B
(2016 STANDARD DRAWING)

10	ISSUED FOR PERMIT	JUN 09/16	KO
9	REISSUED FOR CONSTRUCTION	APR 14/16	KO
8	ISSUED FOR PERMIT	APR 01/16	KO
7	REVISED ROOF SLOPE	JUL 29/15	KO
6	ADDED NOTE FOR P7 HEIGHT	MAY 27/15	KO
5	ISSUED FOR FOOTPRINT	MAY 20/15	KO
4	ISSUED FOR CONSTRUCTION	FEB 06/15	KO
3	ISSUED FOR STRUCTURAL LETTER & PERMIT	OCT 10/14	KO
2	ISSUED FOR TENDER	OCT 06/14	KO
1	ISSUED FOR STRUCTURAL REVIEW	SEP 10/14	KO
No	Revision	Date	By

OTTAWA-CARLETON STANDARD CONDOMINIUM PLAN NO._____
PART III , SHEET ____ OF _____ SHEETS





CONFIDENTIAL

STRUCTURAL FRAMING LEGEND: SEE DWG A5
ELEVATION FINISHES LEGEND: SEE DWG A6
FLOOR PLAN LEGEND: SEE DWG SP-1
DR/WIN LEGEND: SEE DWG SP-7*
FOR ADDED INFO., ABBREVS.,
SYMBOLS: SEE SPECS. SP-*

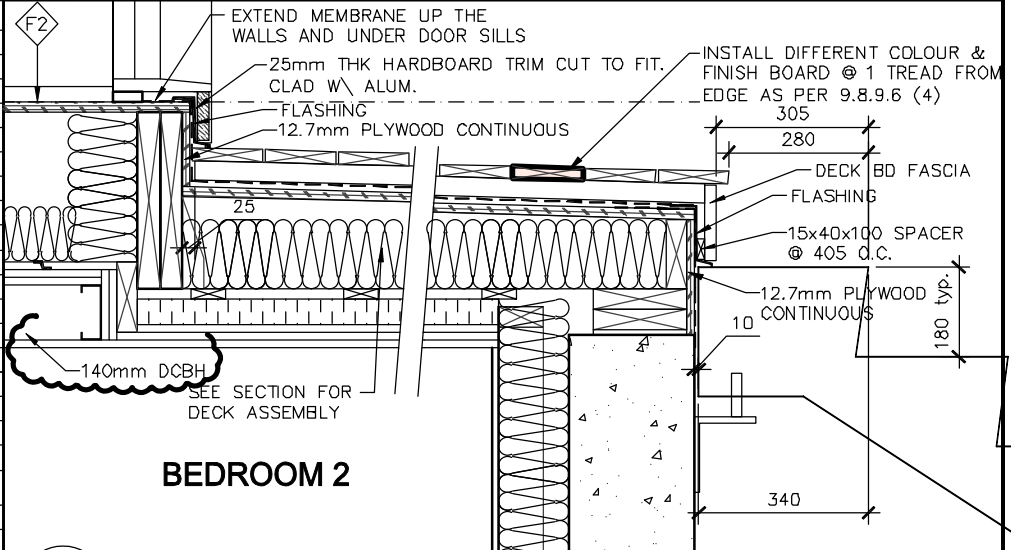
TITLE
**CROSS SECTION
ELEVATION A (B similar)**

FILENAME: infusion-sect.dwg

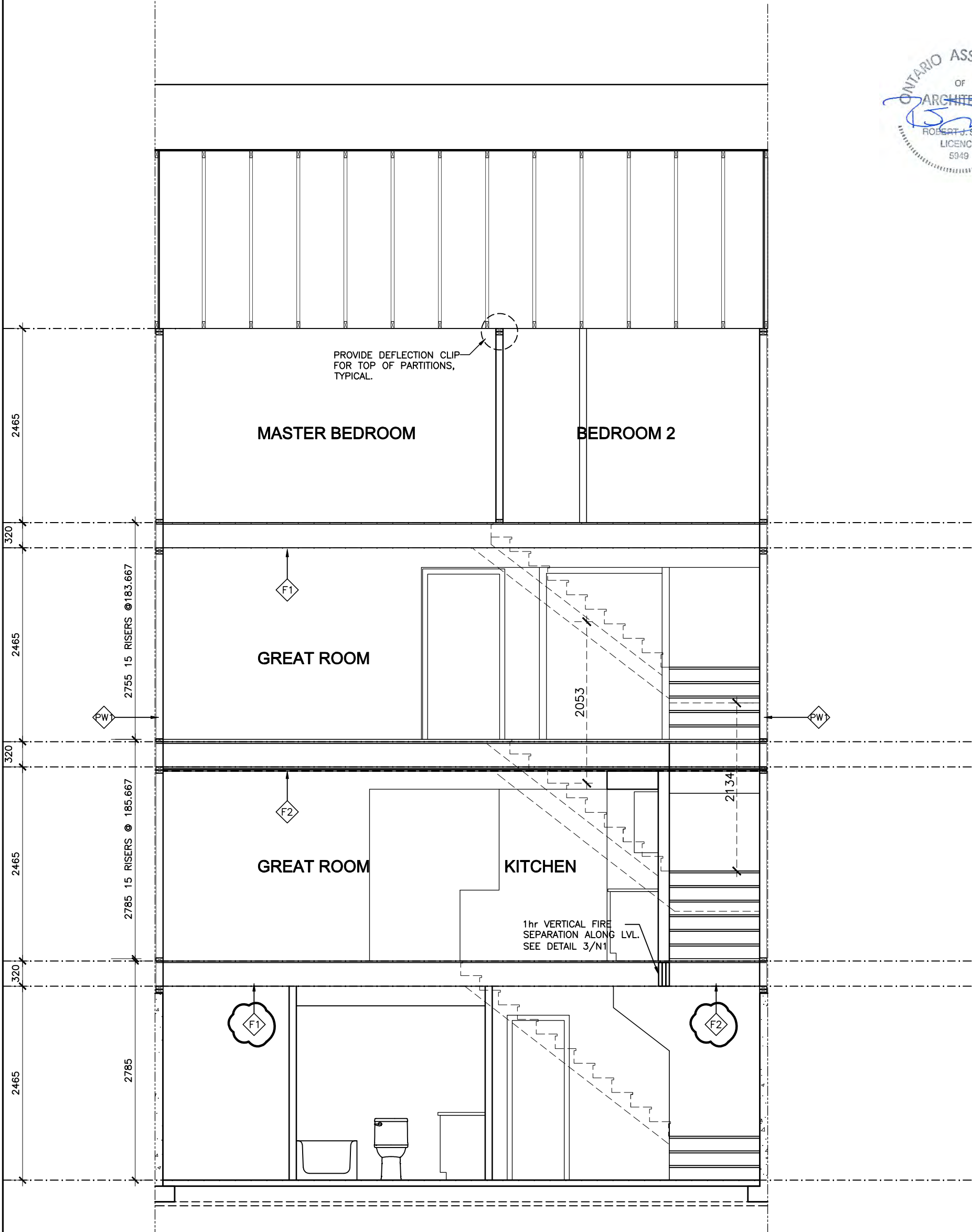
Scale
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2016-INFUSION TERRACE
**THE MATCHA,
THE ROOIBOS,
THE JASMINE, THE CHAI**
ELEV. A & B
(2016 STANDARD DRAWING)

21	ADDED DROP DIMENSION	SEP 26/16	KO
20	CLARIFIED DROP CEILING	SEP 20/16	KO
19	ADDED PLYWOOD	SEP 07/16	KO
18	CLARIFIED REFERENCE	AUG 30/16	KO
17	ADDED DIMENSION	JUL 28/16	KO
16	REVISED DETAIL REFERENCE	JUL 21/16	KO
15	ISSUED FOR PERMIT	JUN 09/16	KO
14	REVISED ROOF SLOPE TO MATCH ELEV.	MAY 05/16	KO
13	ADDED TREAD & LANDING NOTE	APR 29/16	KO
12	ISSUED FOR PERMIT	APR 01/16	KO
11	CLARIFIED HANDRAIL EXTENSIONS	NOV 20/15	KO
10	ADDED CONC. BLOCK NOTE	OCT 29/15	KO
9	DETAILS ADDED, MATERIALS REVISED	JUL 10/15	KO
8	REVISED PORCH ASSEMBLY	JUL 02/15	BS
7	REMOVED MAILBOXES	MAY 27/15	KO
6	ISSUED FOR FOOTPRINT	MAY 20/15	KO
5	REVISED PRECAST STAIR DIMENSIONS	APR 02/15	KO
4	ISSUED FOR CONSTRUCTION	FEB 06/15	KO
3	ISSUED FOR STRUCTURAL LETTER & PERMIT	OCT 10/14	KO
2	ISSUED FOR TENDER	OCT 06/14	KO
1	ISSUED FOR STRUCTURAL REVIEW	SEP 10/14	KO
No	Revision	Date	By

OTTAWA-CARLETON STANDARD CONDOMINIUM PLAN NO.____
PART III , SHEET ____ OF _____ SHEETS



1 ENTRY STAIR DETAILS



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CONFIDENTIAL

STRUCTURAL FRAMING LEGEND: SEE DWG A5
ELEVATION FINISHES LEGEND: SEE DWG A6
FLOOR PLAN LEGEND: SEE DWG SP-1
DR/WIN LEGEND: SEE DWG SP-7*
FOR ADDED INFO., ABBREVS, SYMBOLS: SEE SPECS. SP-*

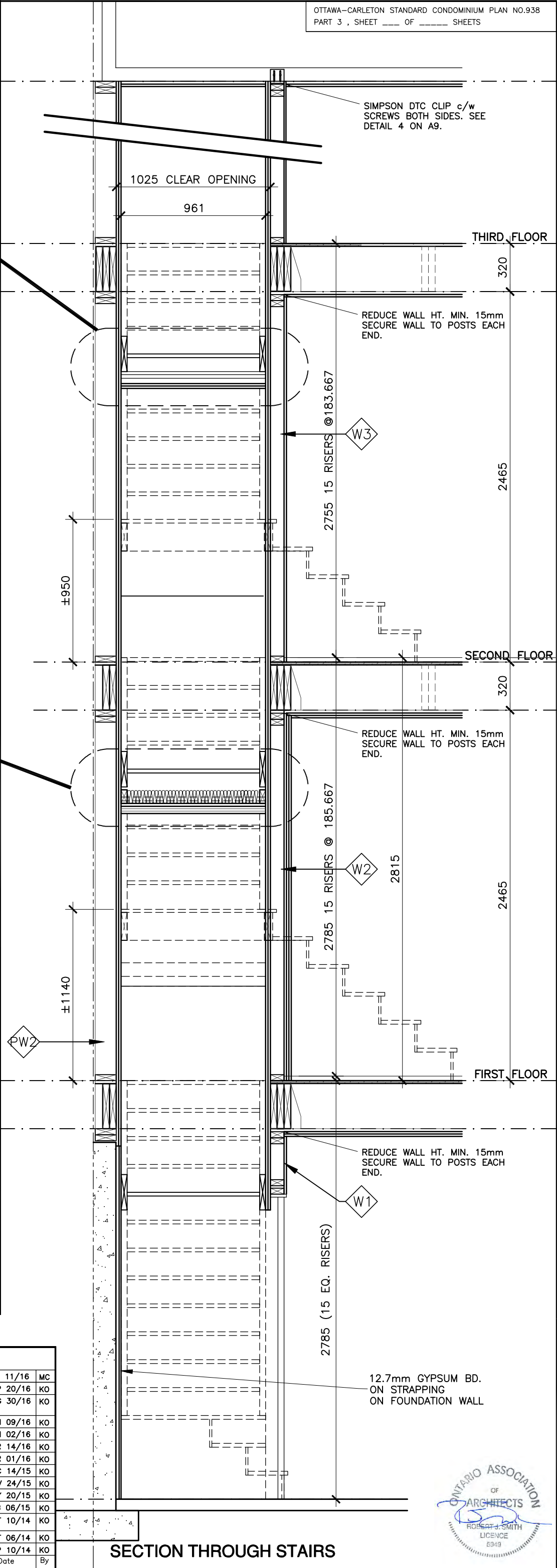
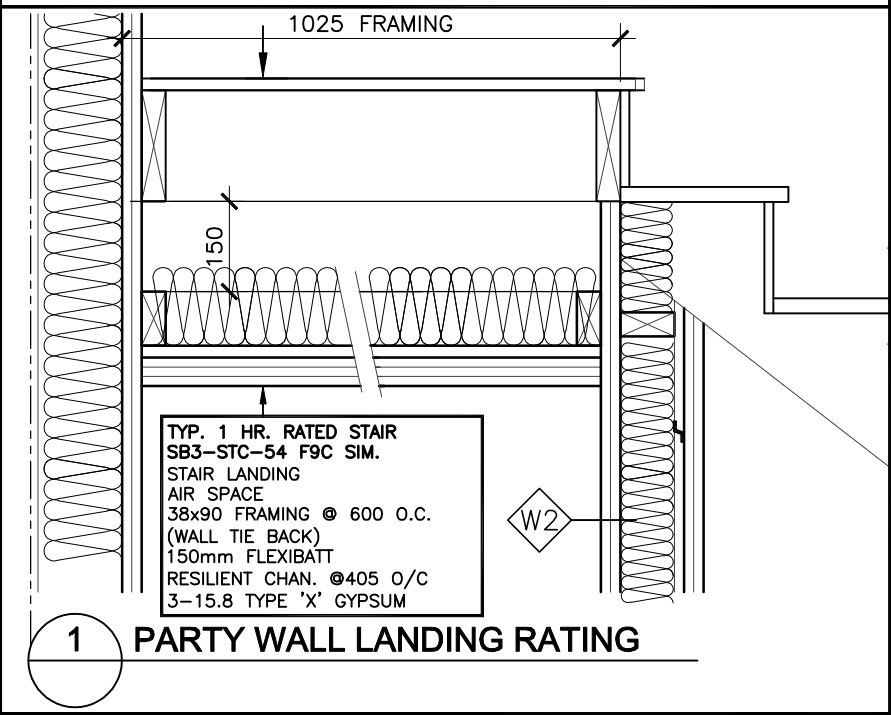
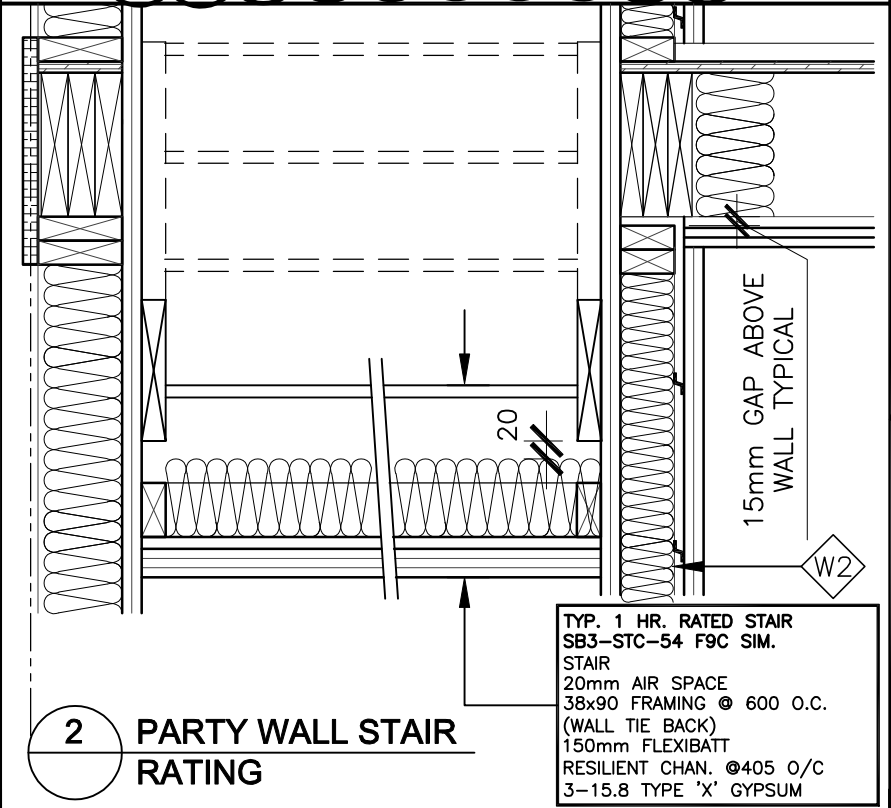
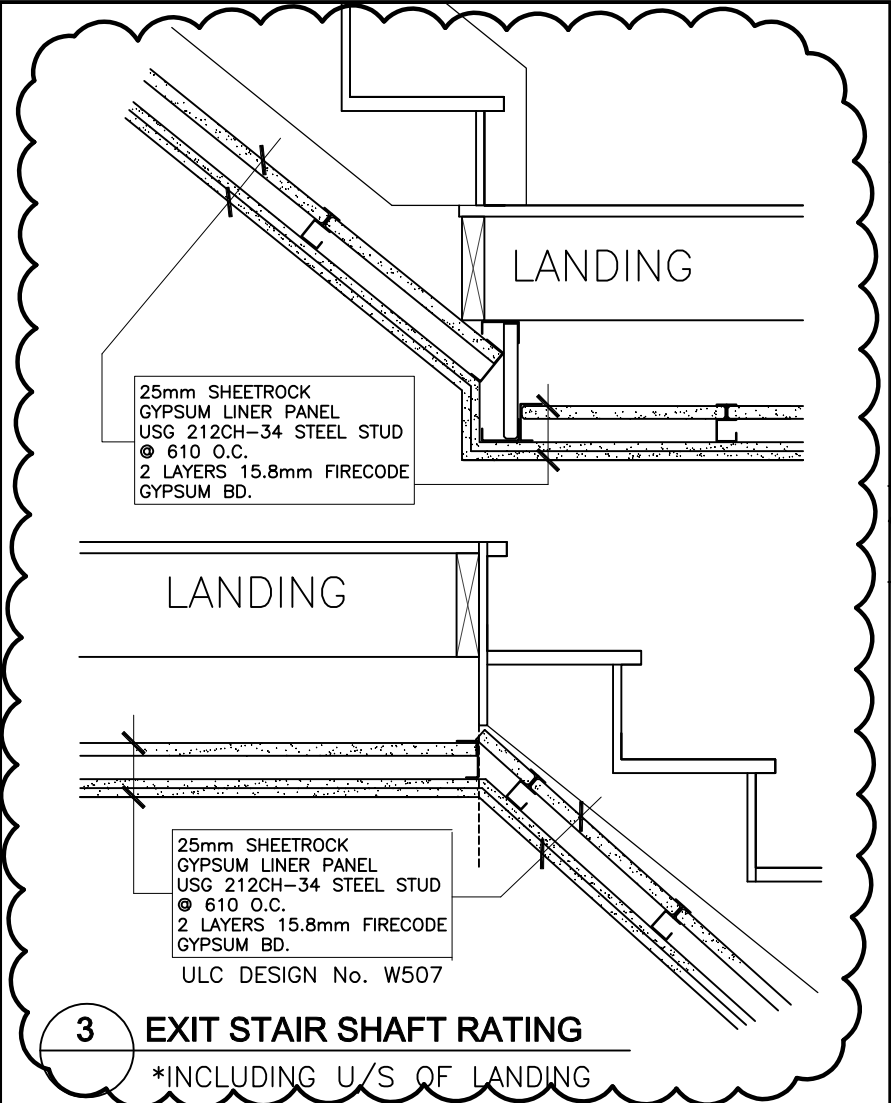
TITLE
**CROSS SECTION
ELEVATION A & B**

FILENAME: **infusion-sect.dwg**

Scale
1:50
2016-INFUSION TERRACE

dwg #
A-8a
THE MATCHA,
THE ROOIBOS,
THE JASMINE, THE CHAI
ELEV. A & B
(2016 STANDARD DRAWING)

9	ISSUED FOR PERMIT	JUN 09/16	KO
8	REISSUED FOR CONSTRUCTION	APR 14/16	KO
7	ISSUED FOR PERMIT	APR 01/16	KO
6	CLARIFIED FIRE SEPARATION	MAY 27/15	KO
5	ISSUED FOR FOOTPRINT	MAY 20/15	KO
4	ISSUED FOR CONSTRUCTION	FEB 06/15	KO
3	ISSUED FOR STRUCTURAL LETTER & PERMIT	OCT 10/14	KO
2	ISSUED FOR TENDER	OCT 06/14	KO
1	ISSUED FOR STRUCTURAL REVIEW	SEP 10/14	KO
No	Revision	Date	By
OTTAWA-CARLETON STANDARD CONDOMINIUM PLAN NO. _____ PART III , SHEET ____ OF _____ SHEETS			



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TITLE
**STAIR SECTION
ELEVATION A & B**

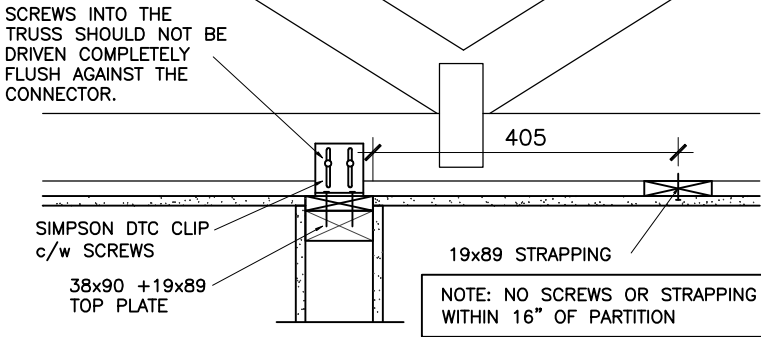
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Scale
1:25

dwg #
A-8b
THE MATCHA,
THE ROOIBOS,
THE JASMINE, THE CHAI
ELEV. A & B
(2016 STANDARD DRAWING)

14	RATING DETAIL AT LANDING CLARIFIED	nov 11/16	MC
13	REMOVED DEFLECTION CLIP AT FLOORS	SEP 20/16	KO
12	CLARIFIED DEFLECTION CLIP & RATING & WALL HT.	AUG 30/16	KO
11	ISSUED FOR PERMIT	JUN 09/16	KO
10	INCREASE SOUND INSUL THICKNESS	JUN 02/16	KO
9	REISSUED FOR CONSTRUCTION	APR 14/16	KO
8	ISSUED FOR PERMIT	APR 01/16	KO
7	HEIGHT OF LANDING ADDED	DEC 14/15	KO
6	ADDED DETAIL 1	NOV 24/15	KO
5	ISSUED FOR FOOTPRINT	MAY 20/15	KO
4	ISSUED FOR CONSTRUCTION	FEB 06/15	KO
3	ISSUED FOR STRUCTURAL LETTER & PERMIT	OCT 10/14	KO
2	ISSUED FOR TENDER	OCT 06/14	KO
1	ISSUED FOR STRUCTURAL REVIEW	SEP 10/14	KO
No	Revision	Date	By

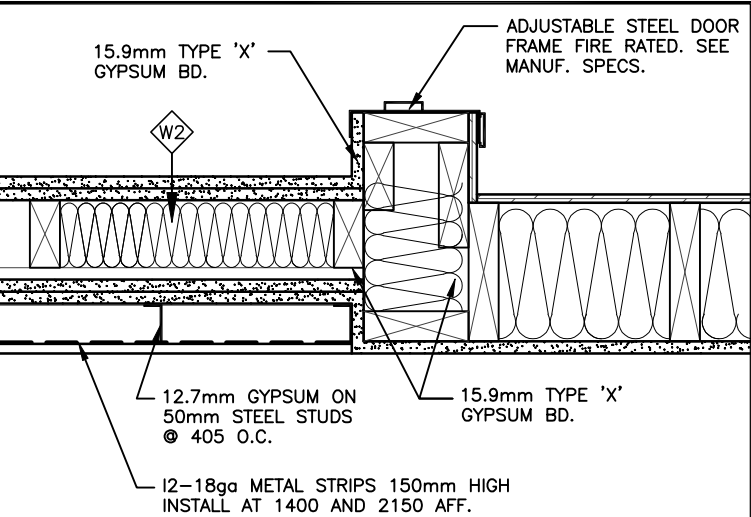
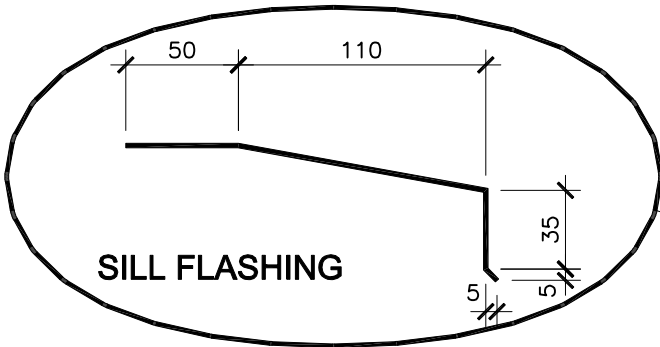




(THIRD FLOOR WALLS)

4 DEFLECTION CLIP AT TRUSSES FOR NON LOADBEARING WALLS

1:10



3 PLAN DETAIL AT ENTRY DOOR

1:10



OTTAWA-CARLETON STANDARD CONDOMINIUM PLAN NO.938
PART 3 , SHEET ____ OF ____ SHEETS

13	REVISED STRAP TIE OVER WINDOW, CLARIFIED DCBH	SEP 20/16	KO
12	ISSUED FOR PERMIT	JUN 09/16	KO
11	ADDED STRAP TIE OVER WINDOWS	JUN 02/16	KO
10	REISSUED FOR CONSTRUCTION	APR 14/16	KO
9	ISSUED FOR CONSTRUCTION	APR 01/16	KO
8	REVISED LOWER DECK BEAM DETAIL	MAR 08/16	KO
7	ADDED NOTE FOR METAL STRIPS	JAN 05/15	KO
6	ISSUED FOR FOOTPRINT	MAY 20/15	KO
5	CLARIFIED DETAILS	MAY 08/15	KO
4	ISSUED FOR CONSTRUCTION	FEB 06/15	KO
3	ISSUED FOR STRUCTURAL LETTER & PERMIT	OCT 10/14	KO
2	ISSUED FOR TENDER	OCT 06/14	KO
1	ISSUED FOR STRUCTURAL REVIEW	SEP 10/14	KO
No	Revision	Date	By

OTTAWA-CARLETON STANDARD CONDOMINIUM PLAN NO.____
PART III , SHEET ____ OF ____ SHEETS

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CONFIDENTIAL

STRUCTURAL FRAMING LEGEND: SEE DWG A5
ELEVATION FINISHES LEGEND: SEE DWG A6
FLOOR PLAN LEGEND: SEE DWG SP-1
DR/WIN LEGEND: SEE DWG SP-7*
FOR ADDED INFO., ABBREV'S, SYMBOLS: SEE SPECS. SP-*

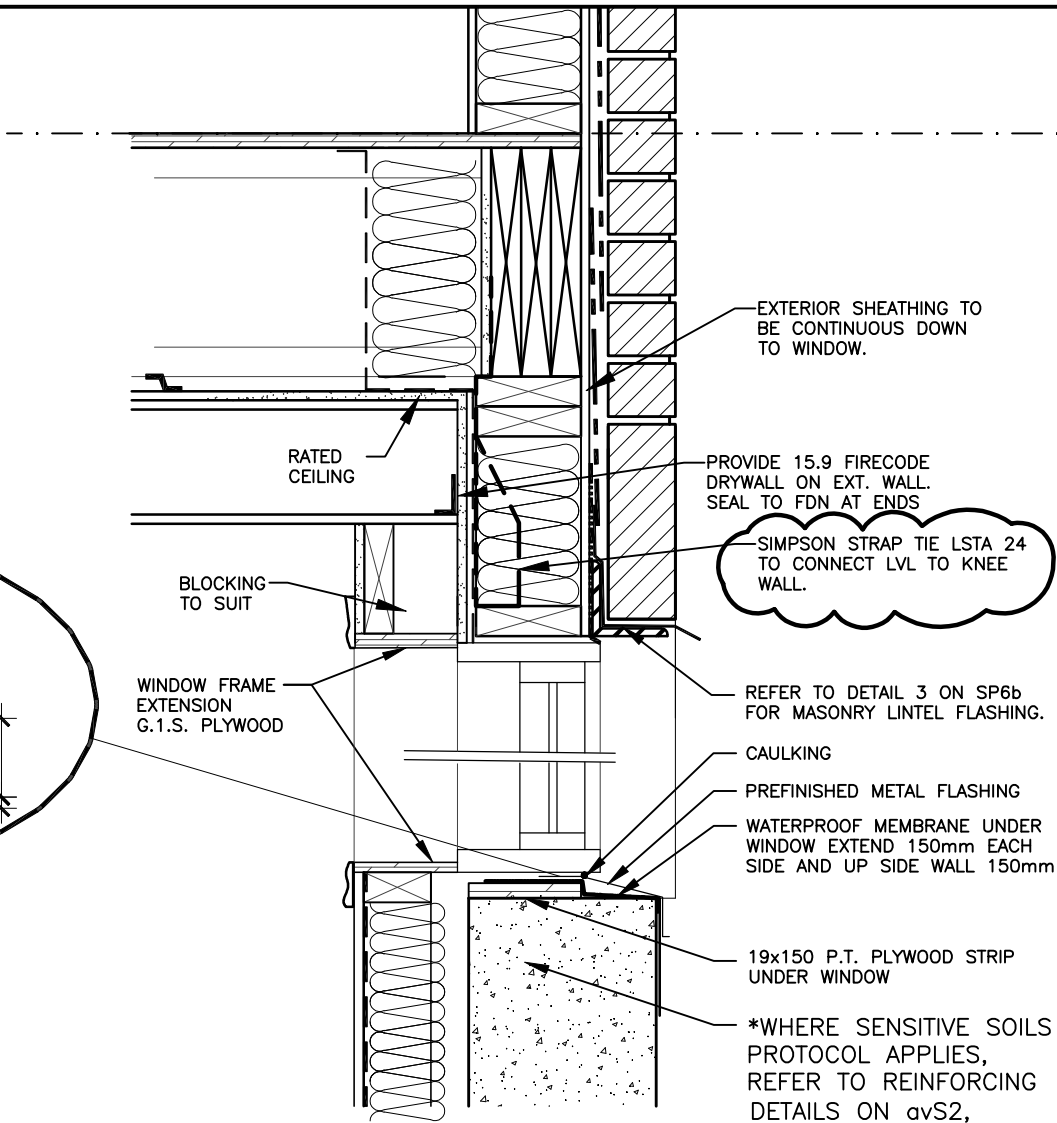
DETAILS
ELEVATION A & B

FILENAME: infusion-sect.dwg

Scale 2016-INFUSION TERRACE

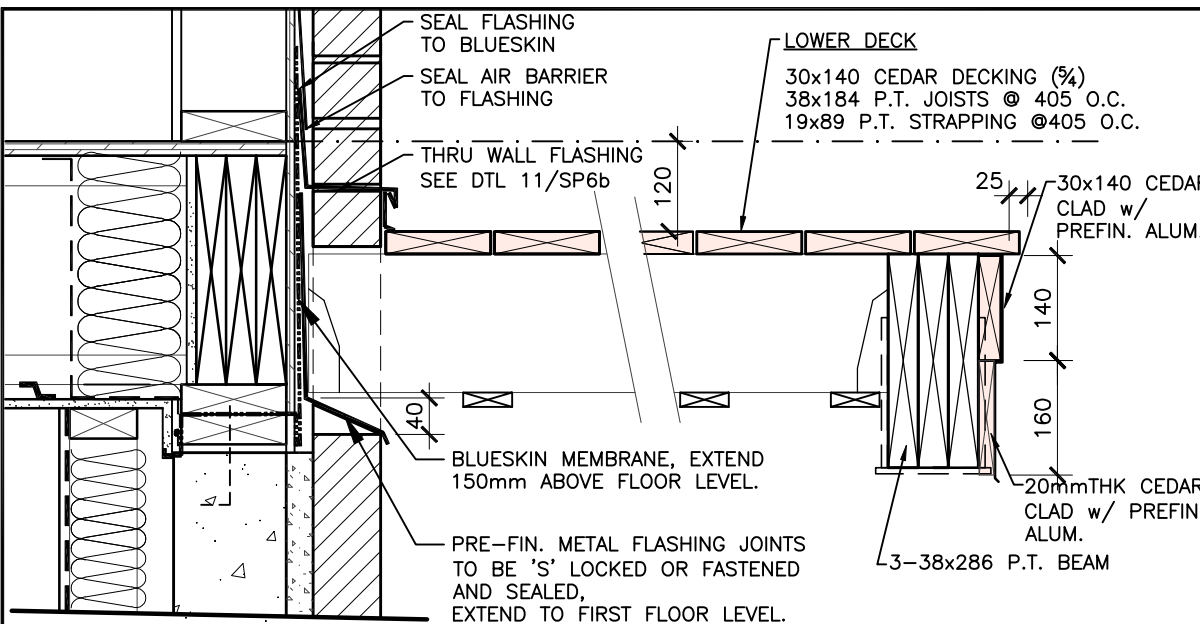
NTS
THE MATCHA,
THE ROOIBOS,
THE JASMINE, THE CHAI
ELEV. A & B
(2016 STANDARD DRAWING)

A-9



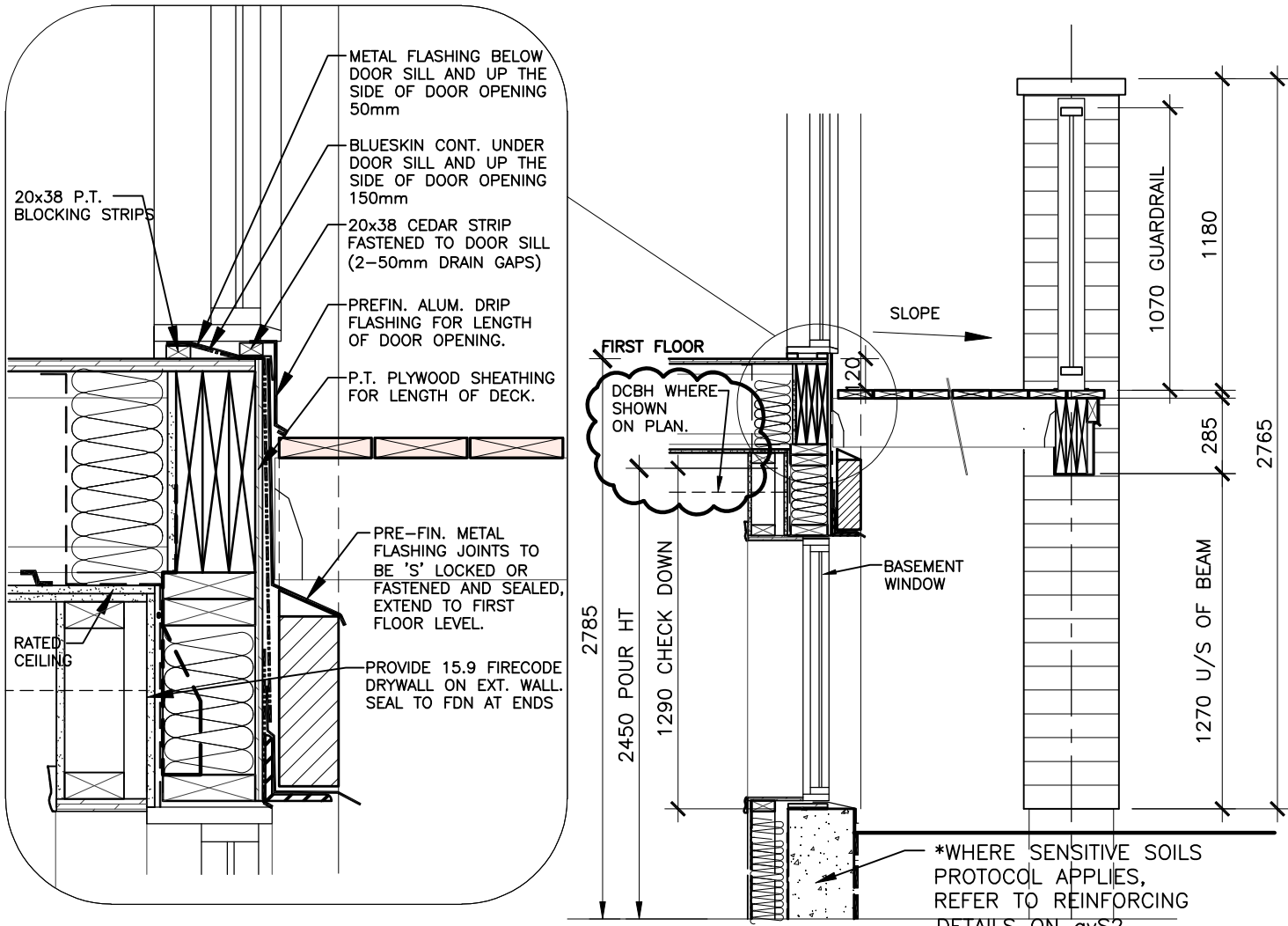
1 SECTION BASEMENT WINDOW

1:10



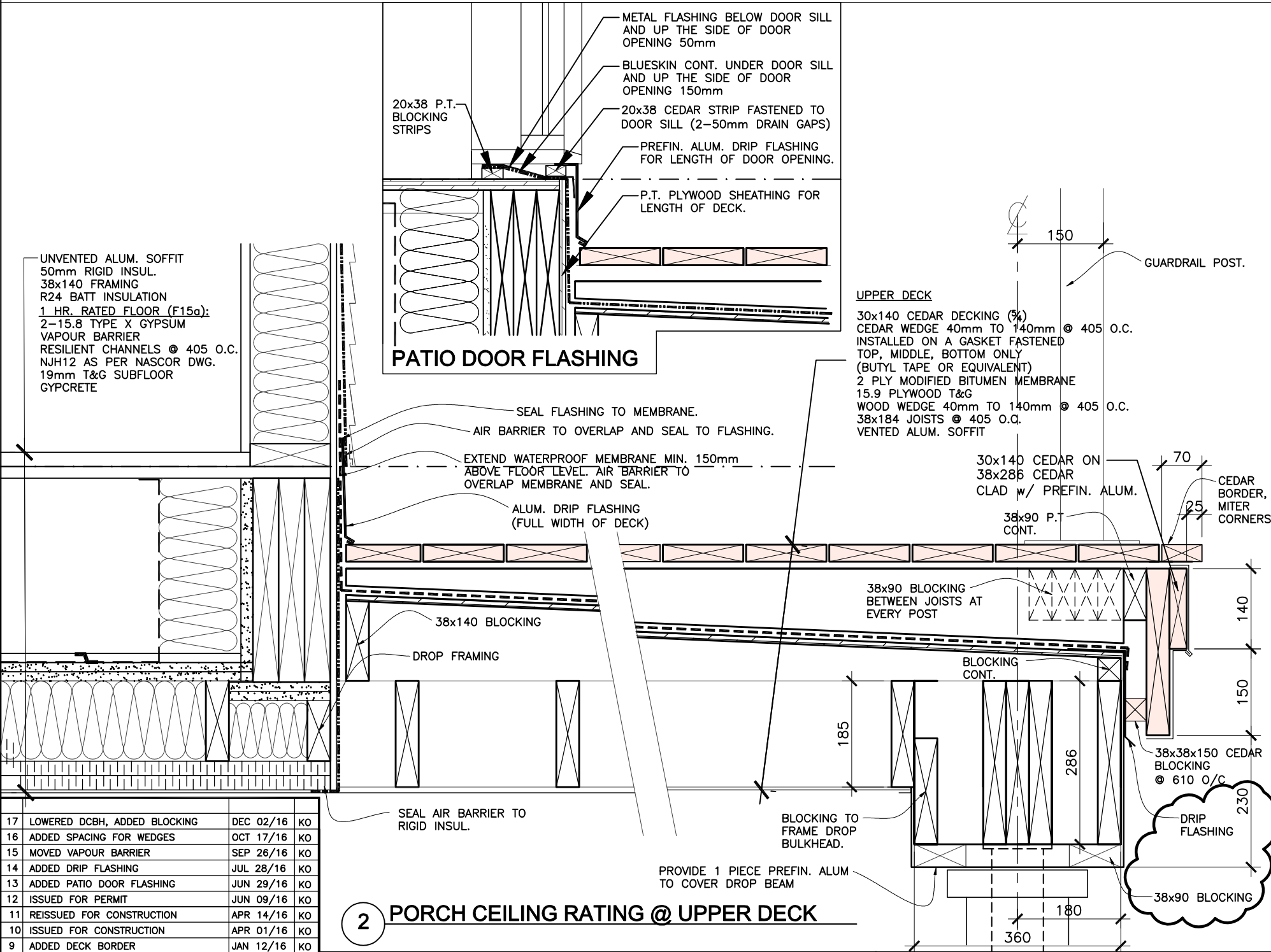
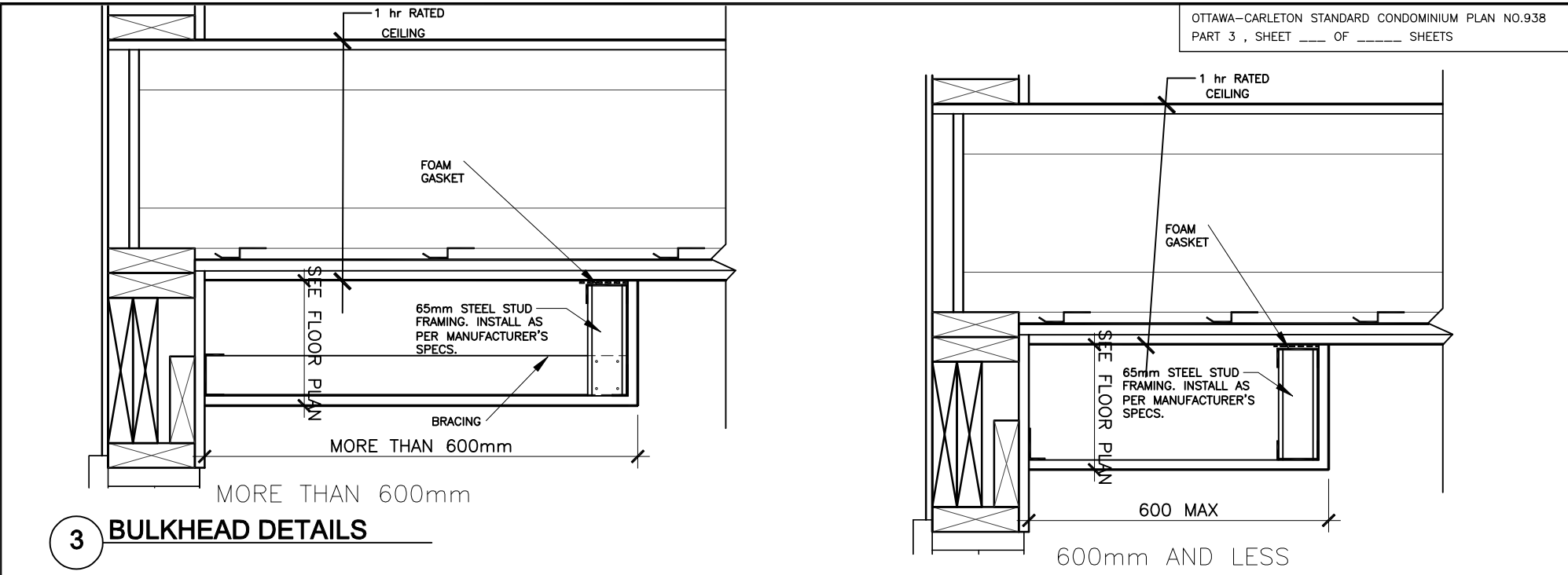
2b SECTION THROUGH LOWER DECK AT BRICK

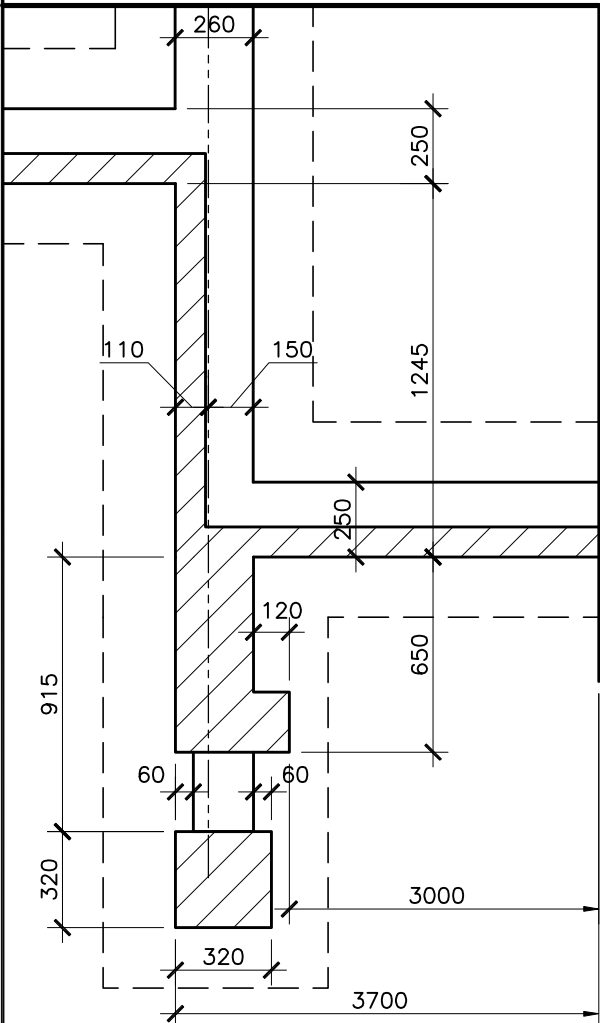
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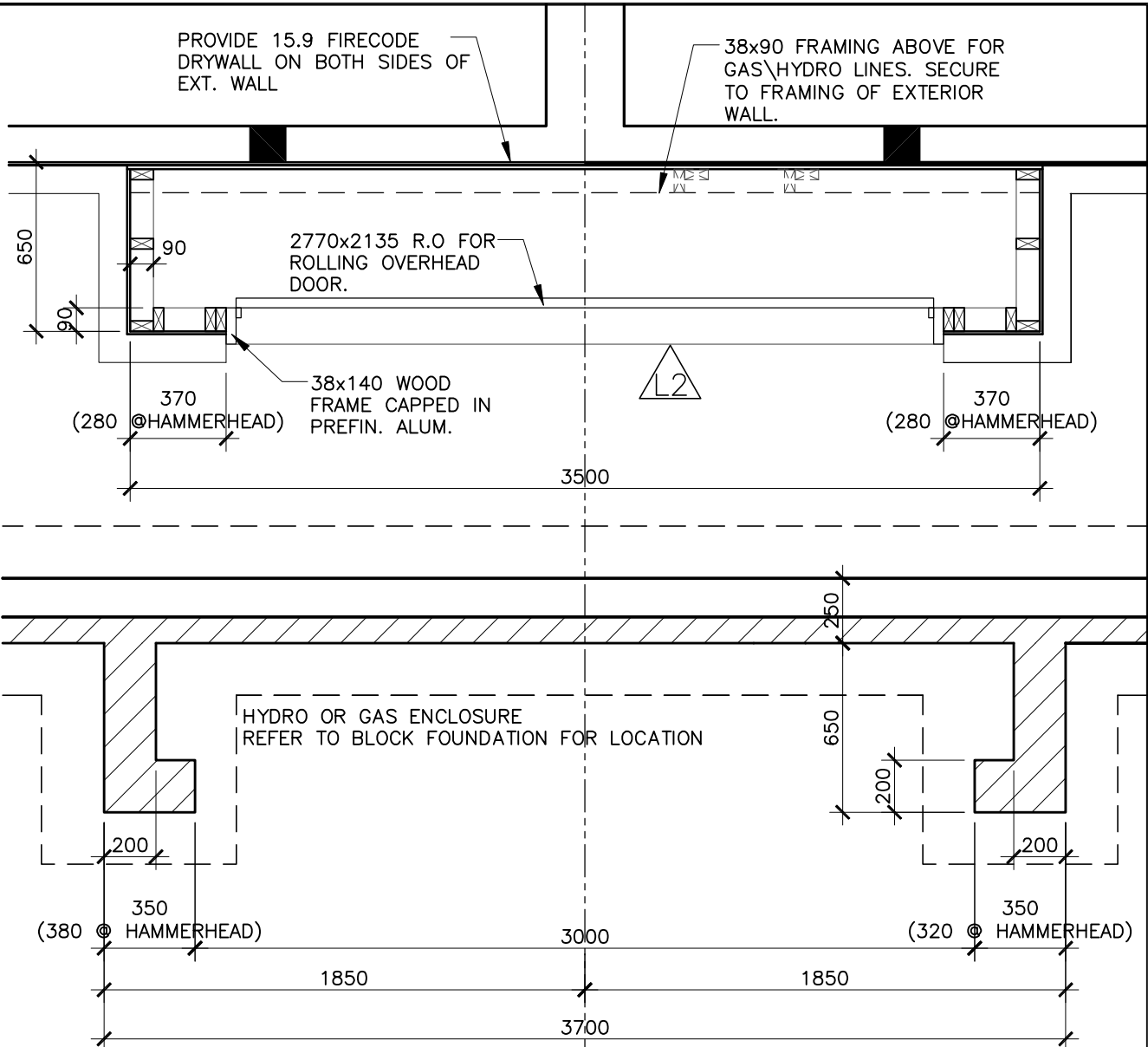
2a SECTION THROUGH LOWER DECK AT PATIO DOOR

1:25

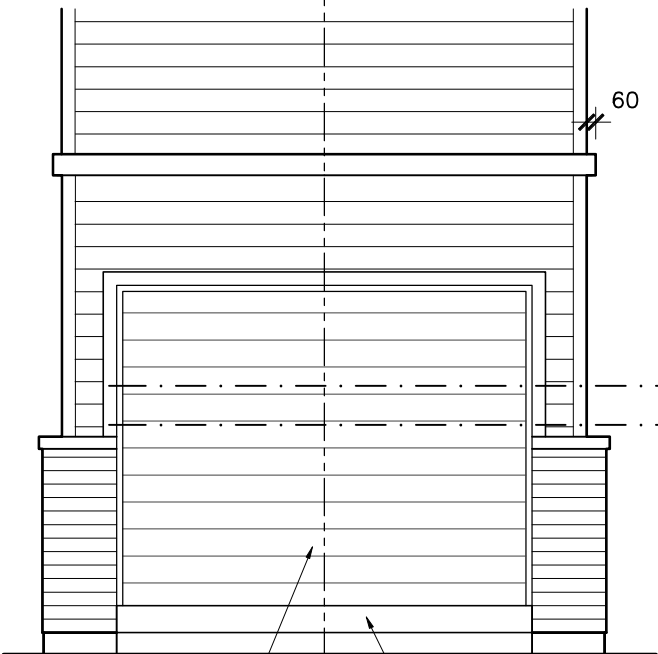




PLAN AT HAMMERHEAD UNIT
1:25



PLAN AT END UNIT
1:25



2770x2135 R.O. FOR ROLLING OVERHEAD DOOR.
ELEVATION
1:50

9	ISSUED FOR PERMIT	JUN 09/16	KO
8	REISSUED FOR CONSTRUCTION	APR 14/16	KO
7	ISSUED FOR CONSTRUCTION	APR 01/16	KO
6	ISSUED FOR FOOTPRINT	MAY 20/15	KO
5	CLARIFIED FOUNDATION DETAILS	APR 09/15	KO
4	ISSUED FOR CONSTRUCTION	FEB 06/15	KO
3	ISSUED FOR STRUCTURAL LETTER & PERMIT	OCT 10/14	KO
2	ISSUED FOR TENDER	OCT 06/14	KO
1	ISSUED FOR STRUCTURAL REVIEW	SEP 10/14	KO
No	Revision	Date	By

OTTAWA-CARLETON STANDARD CONDOMINIUM PLAN NO.____
PART III , SHEET ____ OF _____ SHEETS



CONFIDENTIAL

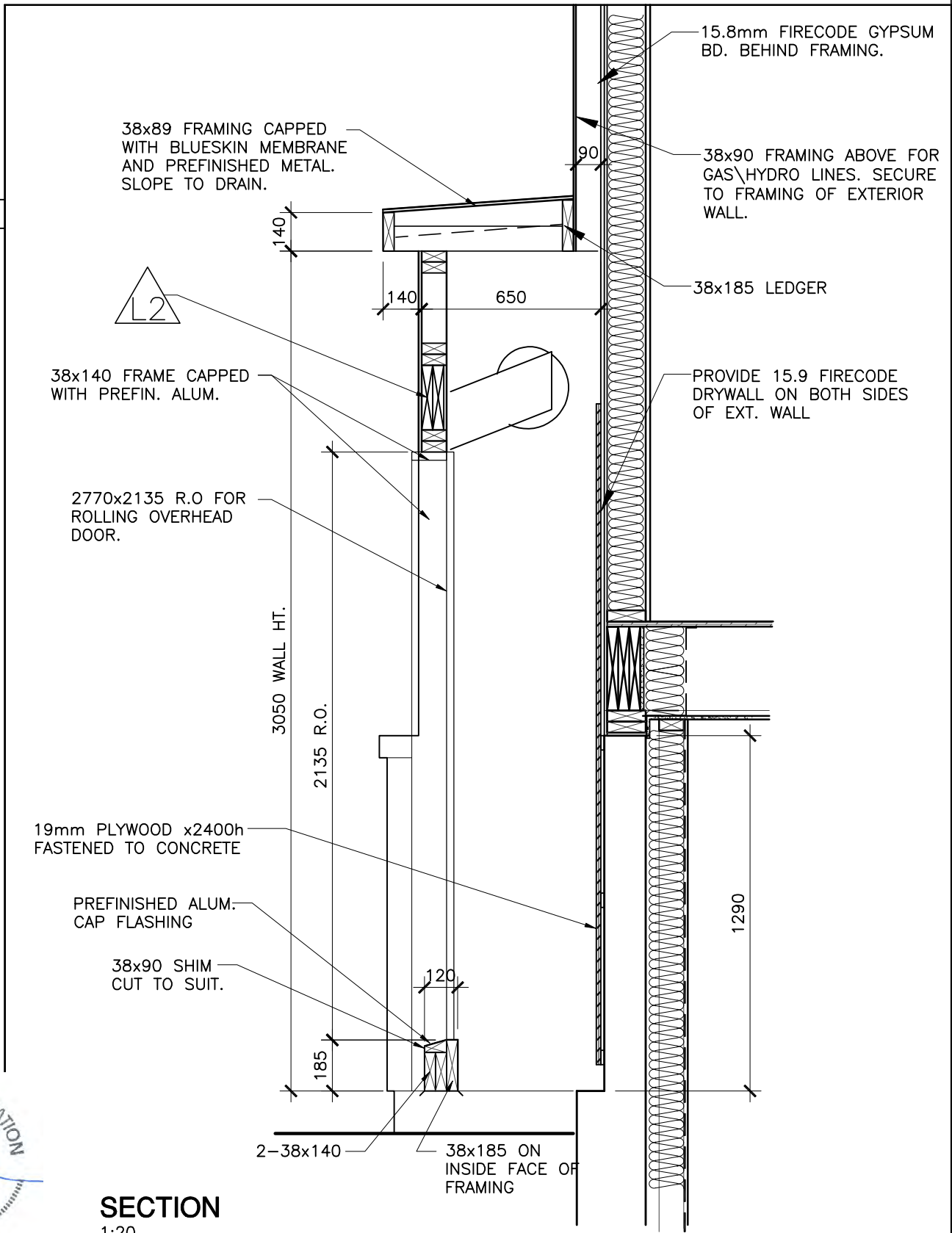
STRUCTURAL FRAMING LEGEND: SEE DWG A5
ELEVATION FINISHES LEGEND: SEE DWG A6
FLOOR PLAN LEGEND: SEE DWG SP-1
DR/WIN LEGEND: SEE DWG SP-7*
FOR ADDED INFO., ABBREV'S, SYMBOLS: SEE SPECS. SP-*

TITLE
**HYDRO\GAS ENCLOSURE
DETAILS ELEVATION A & B**

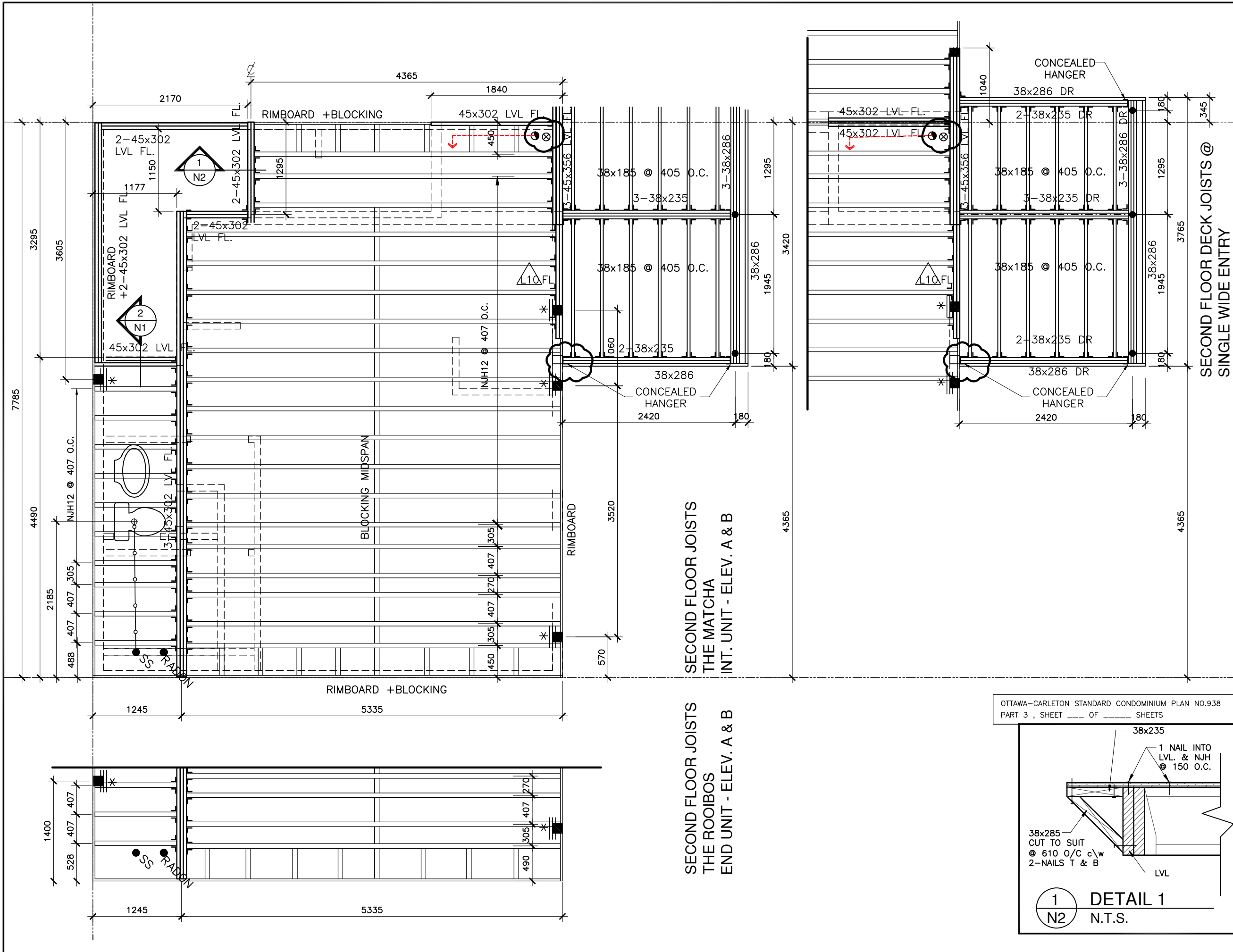
FILENAME: infusion-sect.dwg

Scale
NTS

dwg #
A-10
(2016 STANDARD DRAWING)



SECTION
1:20



NASCOR NOTES

DESIGN ASSUMPTIONS :
LOADS :
Live : Floors - 40 psf
Decks - 3.6 kPa
Dead : 26 psf (15 dead +11 gypcrete)
DEFLECTION CRITERIA : L/360 LIVE
L/240 TOTAL

SOLID BLOCKING REQUIRED UNDER ALL POSTS.

PROVIDE SOLID BLOCKING @ 405 O/C UNDER ALL NON LOAD BEARING PARTITIONS PARALLEL TO JOISTS

JOISTS - NJH12 @ 405 O/C U.N.O.

SUBFLOOR - 3/4" OSB GLUED AND NAILED U.N.O

ALL LVL'S TO BE 45X302 LVL 2.OE WEST FRASER:
CMC 12904-R U.N.O.

FASTEN 2 PLY 12" 2.OE LVL WITH 2 ROWS OF 3.5" NAILS STAGGERED AT 12" c/c.

FASTEN 3 PLY LVL WITH 2 ROWS 3.5" NAILS @ 10" O.C. BOTH SIDES.

FASTEN ALL LJ AND TJ WITH 3.5" NAILS 8" c/c TOP AND BOTTOM CHORDS - ALTERNATE SIDES

REFER TO KOTT TABLE FOR MULTIPLE MEMBER CONNECTIONS

 **NASCOR**
KOTT LUMBER COMPANY
3228 MOODIE DRIVE
NEPEAN ONTARIO
TELEPHONE 1-613-838-2775
FAX 1-613-838-4751

17	REVISED LVL FASTENING	JAN 18/17	KO
16	LVL BOLTING NOTE	OCT 20/16	KO
15	ADDED CONCEALED HANGERS	OCT 17/16	KO
14	CLARIFIED DETAIL 1, HVAC	SEP 26/16	KO
13	HANGERS CLARIFIED	SEP 08/16	MC
12	ADDED BLOCKING DIMENSIONS & NOTE	AUG 30/16	KO
11	REISSUED FOR CONSTRUCTION	APR 14/16	KO
10	ISSUED FOR PERMIT	APR 01/16	KO
9	CLARIFIED DECK FRAMING FOR SINGLE WIDTH ENTRY, EXTENDED LVL	DEC 11/15	KO
8	ADDED L10 LINTEL AS PER FLOOR PLAN ADDED LVL AS PER KOTT LAYOUT	OCT 19/15	KO
7	CLARIFIED DECK FRAMING	JUL 29/15	KO
6	ADDED LVL'S AT STAIRS	MAY 27/15	KO
5	ISSUED FOR FOOTPRINT	MAY 20/15	KO
4	ISSUED FOR CONSTRUCTION	FEB 06/15	KO
3	ISSUED FOR STRUCTURAL LETTER & PERMIT	OCT 10/14	KO
2	ISSUED FOR TENDER	OCT 06/14	KO
1	ISSUED FOR STRUCTURAL REVIEW	SEP 10/14	KO
No	Revision	Date	By

OTTAWA-CARLETON STANDARD CONDOMINIUM PLAN NO. _____
PART III , SHEET ____ OF _____ SHEETS

 **beinspired**
CONFIDENTIAL

STRUCTURAL FRAMING LEGEND: SEE DWG A5
ELEVATION LEGEND: SEE DWG A5
FLOOR PLAN LEGEND: SEE DWG SP-1
DR/WIN LEGEND: SEE DWG SP-7*
FOR ADDED INFO., ABBREV'S, SYMBOLS: SEE SPECS. SP-*

TITLE
SECOND FLOOR JOIST PLANS

FILENAME: infusion-nasc.dwg

2014-INFUSION TERRACE	Scale
THE MATCHA, THE ROOIBOS, THE JASMINE, THE CHAI ELEV. A & B (2014 STANDARD DRAWING)	1:50 dwg # N2

NASCOR NOTES

DESIGN ASSUMPTIONS :
LOADS :
Live : Floors - 40 psf
Decks -3.6 kPa
Dead :15psf
DEFLECTION CRITERIA : L/360 LIVE
L/240 TOTAL

SOLID BLOCKING REQUIRED UNDER ALL POSTS.

PROVIDE SOLID BLOCKING @ 405 O/C UNDER ALL NON
LOAD BEARING PARTITIONS PARALLEL TO JOISTS

JOISTS - NJH12 @ 405 O/C U.N.O.

SUBFLOOR - 3/4" OSB GLUED AND NAILED U.N.O.

ALL LVL'S TO BE 45X302 LVL 2.0E WEST FRASER:
CCMC 12904-R U.N.O.

FASTEN 2 PLY 12" 2.0E LVL WITH 2 ROWS OF 3.5" NAILS
STAGGERED AT 12"c/c.
FASTEN 3 PLY WITH 2 ROWS OF 3.5" NAILS @ 10" O.C.,
BOTH SIDES.

FASTEN ALL DJ AND TJ WITH 3.5" NAILS 8"c/c TOP AND
BOTTOM CHORDS - ALTERNATE SIDES

REFER TO KOTT TABLE FOR MULTIPLE MEMBER CONNECTIONS

 **NASCOR**
KOTT LUMBER COMPANY
3228 MOODIE DRIVE
NEPEAN ONTARIO
TELEPHONE 1-613-838-2775
FAX 1-613-838-4751

19	REVISED LVL FASTENING	JAN 18/17	KO
18	CLARIFIED LVL BOLTING NOTE	NOV 18/16	KO
17	LVL BOLTING NOTE	OCT 21/16	KO
16	MOVED WARM AIR	SEP 26/16	KO
15	ADDED BLOCKING DIMENSIONS & HVAC	AUG 30/16	KO
14	ADDED DIMENSIONS FOR BLOCKING	JUN 22/16	KO
13	REISSUED FOR CONSTRUCTION	APR 14/16	KO
12	ISSUED FOR PERMIT	APR 01/16	KO
11	CLARIFIED LVL's	NOV 10/15	KO
10	ADDED LVL NOTE	OCT 26/15	KO
9	REVISED HVAC FROM SITE MEETING	JUL 29/15	KO
8	REVISED TO TRIPLE LVL	JUN 01/15	KO
7	ADDED LVL'S AT STAIRS, ADDED WA	MAY 27/15	KO
6	ISSUED FOR FOOTPRINT	MAY 20/15	KO
5	COORDINATION w\ HVAC SHOP DWG	MAR 17/15	KO
4	ISSUED FOR CONSTRUCTION	FEB 06/15	KO
3	ISSUED FOR STRUCTURAL LETTER & PERMIT	OCT 10/14	KO
2	ISSUED FOR TENDER	OCT 06/14	KO
1	ISSUED FOR STRUCTURAL REVIEW	SEP 10/14	KO
No	Revision	Date	By

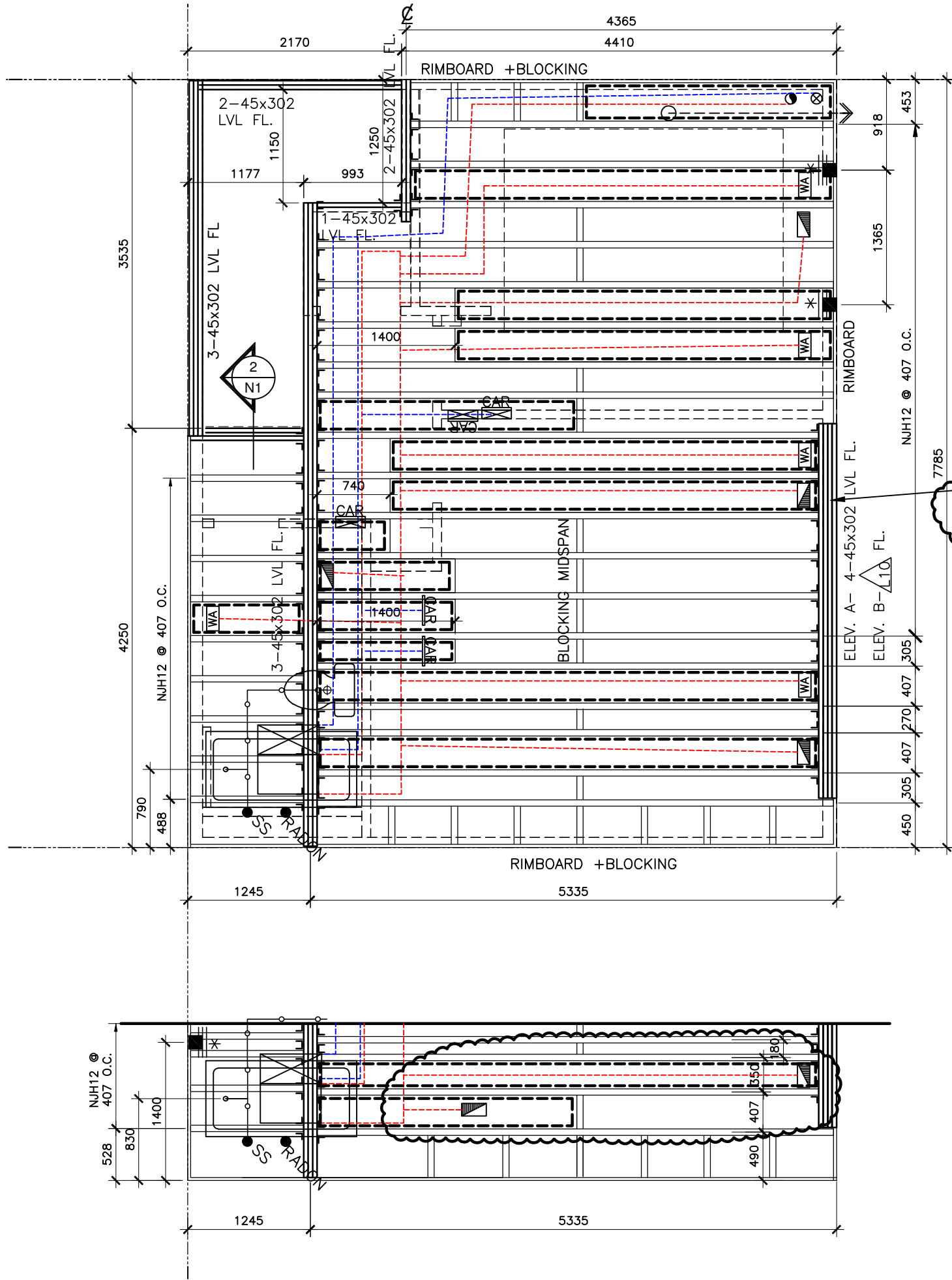
 **beinspired**
CONFIDENTIAL

STRUCTURAL FRAMING LEGEND: SEE DWG A5
ELEVATION LEGEND: SEE DWG A5
FLOOR PLAN LEGEND: SEE DWG SP-1
DR/WIN LEGEND: SEE DWG SP-7*
FOR ADDED INFO., ABBREV'S,
SYMBOLS: SEE SPECS. SP-*

TITLE
**THIRD FLOOR JOIST
PLANS**

FILENAME: infusion-nasc.dwg

2014-INFUSION TERRACE	Scale
THE MATCHA, THE ROOIBOS, THE JASMINE, THE CHAI ELEV. A & B (2014 STANDARD DRAWING)	1:50
	dwg #
	N3



THIRD FLOOR JOISTS
THE MATCHA
INT. UNIT - ELEV. A & B

THIRD FLOOR JOISTS
THE ROOIBOS
END UNIT - ELEV. A & B

Appendix D

City of Ottawa Bus Rapid Transit
Corridor Data

Appendix 'D' – Rapid Transit Corridor Data to Predict Noise Levels

Calculation for Total Traffic Volume (AADT) and Day/Night Split

The following information was provided by Colin Simpson in an email dated September 23, 2011:

“5 minute headways should be assumed in each direction using 60' articulated buses with 30 minute headways between 2am and 5am for the night-time Leq dBA calculations.”

This information was utilized in the following calculation:

Daytime: 16 hrs = 192 buses

Nighttime: 8 hrs = $5 \times 12 = 60$ buses plus $3 \times 2 = 66$ buses

Total = $192 + 66 = 258$ buses

Therefore, 74% 26% split

Speed Limit

In an email dated September 28, 2011, Colin Simpson indicated that a speed limit of 80 km/hr for the bus rapid transit corridor should be assumed.

Medium/Heavy Truck Percentages

A medium/heavy truck ratio of 90/10 was utilized as STAMSON does not permit an input of 100% medium truck traffic.

From: Kate Whitfield
To: Colin Simpson
Date: 12/16/2013 3:14 PM
Subject: RE: Data for Bus Rapid Transit Corridor - Riverside South Phase 13

Thank you for this.

Phase 13 is actually tucked closer to the future bus rapid transitway and not up against Earl Armstrong so we are probably only in the position to apply one scenario. This information is helpful though as we move forward.

Regards,

Kate

>>> "Simpson, Colin" <Colin.Simpson@ottawa.ca> 12/16/2013 1:56 PM >>>

Hi Kate, sorry for my delay in getting back to you.

Yes, the data inputs I gave you back in 2011 associated with the rapid transit corridor near River Road and Earl Armstrong are still valid. This corridor hasn't changed in the 2013 TMP compared to the 2008 TMP:
http://ottawa.ca/sites/ottawa.ca/files/tmpmap1_rapid_transit.pdf

What has changed is a new "affordable" rapid transit plan which calls for interim Transit Priority buses on Earl Armstrong as shown in the following link:
http://ottawa.ca/sites/ottawa.ca/files/tmpmap2_rapid_ttpn.pdf

For your purposes, you should consider both scenarios. The inputs for the ultimate rapid transit corridor that I gave you last time and also the interim plan to have a high frequency of buses on Earl Armstrong. For the interim plan, you could just model Earl Armstrong to have a higher than normal heavy vehicle composition to account for the buses. I recall the default STAMSON model to include 5% heavy vehicles. You may want to up that to 7% or something justifiable to account for the buses. Earl Armstrong will likely become a truck route after it is extended to Bank Street with its new bridge over the Rideau River anyway. The "affordable" plan is what is expected to be in place in the year 2031 while there is no time frame for the full network concept except that it is likely beyond 2031 which is why it would be good to consider both scenarios for noise purposes.

You can give me a call if you want to discuss further. Regards, - cs

Colin Simpson, MCIP RPP
Senior Project Manager, Transportation - Strategic Planning Unit
Planning and Growth Management Department
City of Ottawa, 110 Laurier Ave West, 4th Floor, K1P 1J1
Fax: (613) 580-2578
Tel: (613) 580-2424 ext. 27881
colin.simpson@ottawa.ca

From: Kate Whitfield [<mailto:KWhitfield@jrichards.ca>]
Sent: December 10, 2013 1:33 PM
To: Simpson, Colin
Subject: Data for Bus Rapid Transit Corridor - Riverside South Phase 13

Good afternoon,

In Sept 2011, you helped me with some data associated with the rapid transit corridor near Riverside South Phase 9 (i.e., in the River Road / Earl Armstrong area) for a noise study. You indicated "5 minute headways should be assumed in each direction using 60' articulated buses with 30 min headways between 2am and 5am for the night-time Leq dBA calculations." You also said that we should assume a speed limit of 80 km/hr for the bus rapid transit corridor. We are now working on a noise study for Phase 13. Can you please confirm whether or not this data is still correct?

Regards,

Kate

Kate Whitfield, MCIP, RPP, P. Eng., LEED-AP
Planner/ Civil Engineer
J.L. Richards & Associates Limited
864 Lady Ellen Place, Ottawa, ON K1Z 5M2
Tel: 613-728-3571 Fax: 613-728-6012

From: "Simpson, Colin" <Colin.Simpson@ottawa.ca>
To: Kate Whitfield <KWhitfield@JLRICHARDS.CA>, "Blaszynski, Ed" <Ed.Blaszyns...>
CC: Jonathan Parraga <JParraga@JLRICHARDS.CA>
Date: 9/28/2011 9:18 AM
Subject: RE: RSDC Phase 9

You should assume 80 km/hr.

-----Original Message-----

From: Kate Whitfield [mailto:KWhitfield@JLRICHARDS.CA]
Sent: September 28, 2011 9:09 AM
To: Simpson, Colin; Blaszynski, Ed
Cc: Jonathan Parraga
Subject: RE: RSDC Phase 9

Great.

Any chance that you know the speed limit for the buses in the BRT?

Regards,

Kate

>>> "Simpson, Colin" <Colin.Simpson@ottawa.ca> 9/26/2011 4:14 PM >>>
Yes, these assumptions look good and are consistent with Table 1.7 of the ENCG. Regards, - cs

-----Original Message-----

From: Kate Whitfield [mailto:KWhitfield@JLRICHARDS.CA]
Sent: September 26, 2011 9:50 AM
To: Simpson, Colin; Blaszynski, Ed
Cc: Jonathan Parraga
Subject: RE: RSDC Phase 9

Colin,

Thank you for sending us the BRT assumptions.

We have put together a table with the roadway assumptions for Riverside South Phase 9 (i.e., AADT and speed limit) based on the Official Plan and the Dillon Transportation Impact Study. Could you please review the assumptions and let me know if they are acceptable?

Regards,

Kate

Kate Whitfield, MCIP, RPP, P. Eng., LEED-AP Planner/ Civil Engineer
J.L. Richards & Associates Limited
864 Lady Ellen Place, Ottawa, ON K1Z 5M2
Tel: 613-728-3571 Fax: 613-728-6012
www.jlrichards.ca

>>> Jonathan Parraga 9/26/2011 9:35 AM >>>
Ed,

Thank you.

Jonathan Párraga, P.Eng.
Senior Civil Engineer
J.L. Richards & Associates Limited
864 Lady Ellen Place, Ottawa, ON K1Z 5M2
Tel: 613-728-3571 Fax: 613-728-6012
www.jlrichards.ca (<http://www.jlrichards.ca/>)

>>>>

From: "Blaszynski, Ed" <Ed.Blaszynski@ottawa.ca> To: Jonathan Parraga
<JParraga@JLRICHARDS.CA>
Date: 9/26/2011 9:31 AM
Subject: RE: RSDC Phase 9

Jonathan,
See attached assumptions. If you required any further information,
contact Colin Simpson.

Ed Blaszynski
Project Manager, Transportation
Development Review (Suburban Services)
Planning and Growth Management Department City of Ottawa
tel: 613-580-2424, ext. 27598
fax: 613- 560-6006
e-mail: Ed.Blaszynski@ottawa.ca

From: Jonathan Parraga [mailto:JParraga@JLRICHARDS.CA]
Sent: September 22, 2011 9:52 AM
To: Blaszynski, Ed
Cc: Kate Whitfield; Lee Jablonski; Mary Jarvis
Subject: RSDC Phase 9

Ed,

We are looking to set up a design meeting with the City to confirm
assumptions/variables for the Noise study for the RSDC Phase 9
development. Would you be available next Wednesday (Sept. 28) in the am
?

Regards,

Jonathan Párraga, P.Eng.

Senior Civil Engineer

J.L. Richards & Associates Limited
864 Lady Ellen Place, Ottawa, ON K1Z 5M2
Tel: 613-728-3571 Fax: 613-728-6012
www.jlrichards.ca (<http://www.jlrichards.ca/>)

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tlphone (au numro prcit) ou par courriel, puis supprimer sans dlai la version originale de la communication ainsi que toutes ses copies. Je vous remercie de votre collaboration.

From: [Hall, James](#)
To: [Thomas Blais](#)
Subject: RE: Minto Clarke Lands Draft Plan Feasibility Study Traffic Data assumptions
Date: February 25, 2016 11:31:29 AM
Attachments: [image004.png](#)
[City of Ottawa ENCG - January 2016.pdf](#)

Hi Tom,

No problem. I know we're working on getting them on the external website, but the document needs to go through accessibility and translation services first; this can be a long process.

Please see the attached. If you have any questions, please let me know.

Jim

James (Jim) Hall, P.Eng.

Project Manager Infrastructure Approvals

Development Review (Suburban Services)

Gestionnaire de projet, Approbation des demandes d'infrastructure

Examen des demandes d'aménagement (Services suburbains)



City of Ottawa | Ville d'Ottawa

☎ 613.580.2424 ext./poste 27508

ottawa.ca/planning / ottawa.ca/urbanisme

From: Thomas Blais [mailto:tblais@jlrichards.ca]
Sent: Thursday, February 25, 2016 11:28 AM
To: Hall, James
Subject: RE: Minto Clarke Lands Draft Plan Feasibility Study Traffic Data assumptions

Hi James,

Can you please send me a pdf copy of the approved January 2016 environmental noise control guidelines.

Thanks

Tom

Thomas Blais, A.Sc.T.
Geographic Information Systems Technologist

J.L. Richards & Associates Limited
864 Lady Ellen Place, Ottawa, ON K1Z 5M2
Tel: 613-728-3571 Fax: 613-728-6012



**J.L. Richards
& Associates Limited**
ENGINEERS • ARCHITECTS • PLANNERS



From: Carter, Riley [mailto:Riley.Carter@ottawa.ca]
Sent: February 25, 2016 8:00 AM
To: Thomas Blais
Cc: Lee Jablonski; Hilary MacKay
Subject: RE: Minto Clarke Lands Draft Plan Feasibility Study Traffic Data assumptions

Hi Tom,

I asked James Hall to review the assumptions since he will be doing the review of the study. He confirmed the below information is correct and added the use of the R/T Custom data input can be used for the buses, thus allowing 100% medium truck (actually, there is a template for buses), and that the newly approved guidelines (January 2016) must be followed.

If you need any additional information while preparing this noise study please contact James.

Thanks,

Riley

From: Thomas Blais [<mailto:tblais@jrichards.ca>]

Sent: Monday, February 22, 2016 9:39 AM

To: Carter, Riley

Cc: Lee Jablonski; Hilary MacKay

Subject: Minto Clarke Lands Draft Plan Feasibility Study Traffic Data assumptions

Hi Riley,

Per our conversation on Friday, here are the traffic and transit data assumptions that we have compiled for the Minto Clark Lands feasibility study. Can you please review and confirm that they are acceptable.

	Strandherd Drive	Chapman Mills Drive
		40m
Right-of-Way Width	44.5m	(including transit way)
Road Class	4 Lane Urban Divided Arterial	2 Lane Major Collector
Total Traffic Volume (AADT)	35,000	12,000
Day/Night Split (%)	92/8	92/8
Medium Trucks (%)	7	7
Heavy Trucks (%)	5	5
Posted Speed (km/hr)	70	50
Road Gradient (%)	1	1

	Bus Rapid Transit Corridor
Total Traffic Volume (AADT)	258
Day/Night Split (%)	74/26
Medium Trucks (%)	90
Heavy Trucks (%)	10
Posted Speed (km/hr)	80

Calculation for Total BRT Volume (AADT) and Day/Night Split

-

The following information was provided by Colin Simpson in an email dated September 23, 2011:

“5 minute headways should be assumed in each direction using 60’ articulated buses with 30 minute headways between 2am and 5am for the night-time Leq dBA calculations.”

This information was utilized in the following calculation:

Daytime: 16 hrs = 192 buses

Nighttime: 8 hrs = $5 \times 12 = 60$ buses plus $3 \times 2 = 6$ buses

Total = $192 + 66 = 258$ buses

Therefore, 74% 26% split

Speed Limit

In an email dated September 28, 2011, Colin Simpson indicated that a speed limit of 80 km/hr for the bus rapid transit corridor should be assumed.

Medium/Heavy Truck Percentages

A medium/heavy truck ratio of 90/10 was utilized as STAMSON does not permit an input of 100% medium truck traffic.

Thanks

Tom

Thomas Blais, A.Sc.T.

Geographic Information Systems Technologist

J.L. Richards & Associates Limited
864 Lady Ellen Place, Ottawa, ON K1Z 5M2
Tel: 613-728-3571 Fax: 613-728-6012



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Appendix E

Transportation Noise Source
Predictions

- Detailed Predicted
Noise Level Calculations

STAMSON 5.0 NORMAL REPORT Date: 17-07-2018 15:56:35
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r1.te Time Period: Day/Night 16/8 hours
Description: Harmony Block 104 ola r1

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

Car traffic volume : 9715/845 veh/TimePeriod *
Medium truck volume : 773/67 veh/TimePeriod *
Heavy truck volume : 552/48 veh/TimePeriod *
Posted speed limit : 50 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): 12000
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: CMD (day/night)

Angle1 Angle2 : -64.00 deg 63.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 25.50 / 25.50 m
Receiver height : 1.50 / 4.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: CMD (day)

Source height = 1.50 m

ROAD (0.00 + 61.54 + 0.00) = 61.54 dBA

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

-64 63 0.66 67.51 0.00 -3.83 -2.15 0.00 0.00 0.00 61.54

Segment Leq : 61.54 dBA

Total Leq All Segments: 61.54 dBA

Results segment # 1: CMD (night)

Source height = 1.50 m

ROAD (0.00 + 54.22 + 0.00) = 54.22 dBA

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

-64	63	0.57	59.91	0.00	-3.62	-2.07	0.00	0.00	0.00	54.22
-----	----	------	-------	------	-------	-------	------	------	------	-------

Segment Leq : 54.22 dBA

Total Leq All Segments: 54.22 dBA

RT/Custom data, segment # 1: brt (day/night)

1 - Bus:

Traffic volume : 192/66 veh/TimePeriod

Speed : 80 km/h

Data for Segment # 1: brt (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 : 54.10 / 54.10 m

Receiver height : 1.50 / 4.50 m

Topography : 1 (Flat/gentle slope; no barrier)

Reference angle : 0.00

Results segment # 1: brt (day)

Source height = 0.50 m

RT/Custom (0.00 + 45.72 + 0.00) = 45.72 dBA

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

0	90	0.66	59.44	-9.25	-4.47	0.00	0.00	0.00	45.72
---	----	------	-------	-------	-------	------	------	------	-------

Segment Leq : 45.72 dBA

Total Leq All Segments: 45.72 dBA

Results segment # 1: brt (night)

Source height = 0.50 m

RT/Custom (0.00 + 44.53 + 0.00) = 44.53 dBA

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

0	90	0.60	57.81	-8.91	-4.37	0.00	0.00	0.00	44.53
---	----	------	-------	-------	-------	------	------	------	-------

Segment Leq : 44.53 dBA

Total Leq All Segments: 44.53 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 61.65
(NIGHT): 54.66

STAMSON 5.0 NORMAL REPORT Date: 14-02-2018 11:23:22
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: condor2a.te Time Period: Day/Night 16/8 hours
Description: Harmony Condo Block ila R2a lower condo

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

Car traffic volume : 9715/845 veh/TimePeriod *
Medium truck volume : 773/67 veh/TimePeriod *
Heavy truck volume : 552/48 veh/TimePeriod *
Posted speed limit : 50 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): 12000
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: CMD (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 : 24.60 / 24.60 m
Receiver height : 2.90 / 0.68 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: CMD (day)

Source height = 1.50 m

ROAD (0.00 + 62.65 + 0.00) = 62.65 dBA

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

-90	90	0.62	67.51	0.00	-3.48	-1.39	0.00	0.00	0.00	62.65
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Segment Leq : 62.65 dBA

Total Leq All Segments: 62.65 dBA

Results segment # 1: CMD (night)

Source height = 1.50 m

ROAD (0.00 + 54.89 + 0.00) = 54.89 dBA

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

-90	90	0.66	59.91	0.00	-3.57	-1.46	0.00	0.00	0.00	54.89
-----	----	------	-------	------	-------	-------	------	------	------	-------

Segment Leq : 54.89 dBA

Total Leq All Segments: 54.89 dBA

RT/Custom data, segment # 1: brt (day/night)

1 - Bus:

Traffic volume : 192/66 veh/TimePeriod

Speed : 80 km/h

Data for Segment # 1: brt (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 : 24.60 / 24.60 m
Receiver height : 2.90 / 0.68 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: brt (day)

Source height = 0.50 m

RT/Custom (0.00 + 54.46 + 0.00) = 54.46 dBA

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

-90	90	0.65	59.44	-3.54	-1.44	0.00	0.00	0.00	54.46
-----	----	------	-------	-------	-------	------	------	------	-------

Segment Leq : 54.46 dBA

Total Leq All Segments: 54.46 dBA

Results segment # 1: brt (night)

Source height = 0.50 m

RT/Custom (0.00 + 52.79 + 0.00) = 52.79 dBA

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

-90	90	0.66	57.81	-3.57	-1.46	0.00	0.00	0.00	52.79
-----	----	------	-------	-------	-------	------	------	------	-------

Segment Leq : 52.79 dBA

Total Leq All Segments: 52.79 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 63.26
(NIGHT): 56.98

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: condor2b.te Time Period: Day/Night 16/8 hours

Description: Harmony Condo Block 11a R2b upper condo

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

Car traffic volume : 9715/845 veh/TimePeriod *
Medium truck volume : 773/67 veh/TimePeriod *
Heavy truck volume : 552/48 veh/TimePeriod *
Posted speed limit : 50 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): 12000
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: CMD (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 : 24.60 / 24.60 m
Receiver height : 5.70 / 8.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: CMD (day)

Source height = 1.50 m

ROAD (0.00 + 62.98 + 0.00) = 62.98 dBA

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

-90	90	0.53	67.51	0.00	-3.30	-1.24	0.00	0.00	0.00	62.98
-----	----	------	-------	------	-------	-------	------	------	------	-------

Segment Leq : 62.98 dBA

Total Leq All Segments: 62.98 dBA

Results segment # 1: CMD (night)

Source height = 1.50 m

ROAD (0.00 + 55.72 + 0.00) = 55.72 dBA

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

-90	90	0.45	59.91	0.00	-3.12	-1.08	0.00	0.00	0.00	55.72
-----	----	------	-------	------	-------	-------	------	------	------	-------

Segment Leq : 55.72 dBA

Total Leq All Segments: 55.72 dBA

RT/Custom data, segment # 1: brt (day/night)

1 - Bus:

Traffic volume : 192/66 veh/TimePeriod

Speed : 80 km/h

Data for Segment # 1: brt (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 : 24.60 / 24.60 m

Receiver height : 5.70 / 8.50 m

Topography : 1 (Flat/gentle slope; no barrier)

Reference angle : 0.00

Results segment # 1: brt (day)

Source height = 0.50 m

RT/Custom (0.00 + 54.78 + 0.00) = 54.78 dBA

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

-90	90	0.56	59.44	-3.36	-1.29	0.00	0.00	0.00	54.78
-----	----	------	-------	-------	-------	------	------	------	-------

Segment Leq : 54.78 dBA

Total Leq All Segments: 54.78 dBA

Results segment # 1: brt (night)

Source height = 0.50 m

RT/Custom (0.00 + 53.49 + 0.00) = 53.49 dBA

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

-90	90	0.48	57.81	-3.18	-1.14	0.00	0.00	0.00	53.49
-----	----	------	-------	-------	-------	------	------	------	-------

Segment Leq : 53.49 dBA

Total Leq All Segments: 53.49 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 63.59
(NIGHT): 57.76

STAMSON 5.0 NORMAL REPORT Date: 14-02-2018 11:50:22
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: condor3a.te Time Period: Day/Night 16/8 hours
Description: Harmony Condo Block ila R3a lower condo

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

Car traffic volume : 9715/845 veh/TimePeriod *
Medium truck volume : 773/67 veh/TimePeriod *
Heavy truck volume : 552/48 veh/TimePeriod *
Posted speed limit : 50 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): 12000
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: CMD (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 : 19.90 / 19.90 m
 Receiver height : 2.90 / 0.68 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

Results segment # 1: CMD (day)

Source height = 1.50 m

ROAD (0.00 + 64.14 + 0.00) = 64.14 dBA

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

-90	90	0.62	67.51	0.00	-1.99	-1.39	0.00	0.00	0.00	64.14
-----	----	------	-------	------	-------	-------	------	------	------	-------

Segment Leq : 64.14 dBA

Total Leq All Segments: 64.14 dBA

Results segment # 1: CMD (night)

Source height = 1.50 m

ROAD (0.00 + 56.42 + 0.00) = 56.42 dBA

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

-90	90	0.66	59.91	0.00	-2.04	-1.46	0.00	0.00	0.00	56.42
-----	----	------	-------	------	-------	-------	------	------	------	-------

Segment Leq : 56.42 dBA

Total Leq All Segments: 56.42 dBA

RT/Custom data, segment # 1: brt (day/night)

1 - Bus:

Traffic volume : 192/66 veh/TimePeriod

Speed : 80 km/h

Data for Segment # 1: brt (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 : 85.10 / 85.10 m
Receiver height : 2.90 / 0.68 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: brt (day)

Source height = 0.50 m

RT/Custom (0.00 + 45.58 + 0.00) = 45.58 dBA

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

-90 90 0.65 59.44 -12.42 -1.44 0.00 0.00 0.00 45.58

Segment Leq : 45.58 dBA

Total Leq All Segments: 45.58 dBA

Results segment # 1: brt (night)

Source height = 0.50 m

RT/Custom (0.00 + 43.84 + 0.00) = 43.84 dBA

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

-90 90 0.66 57.81 -12.51 -1.46 0.00 0.00 0.00 43.84

Segment Leq : 43.84 dBA

Total Leq All Segments: 43.84 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 64.20
(NIGHT): 56.65

MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: condor3b.te Time Period: Day/Night 16/8 hours

Description: Harmony Condo Block 11a R3b upper condo

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

Car traffic volume : 9715/845 veh/TimePeriod *
Medium truck volume : 773/67 veh/TimePeriod *
Heavy truck volume : 552/48 veh/TimePeriod *
Posted speed limit : 50 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): 12000
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: CMD (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 : 19.90 / 19.90 m
Receiver height : 5.70 / 8.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: CMD (day)

Source height = 1.50 m

ROAD (0.00 + 64.39 + 0.00) = 64.39 dBA

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

-90	90	0.53	67.51	0.00	-1.88	-1.24	0.00	0.00	0.00	64.39
-----	----	------	-------	------	-------	-------	------	------	------	-------

Segment Leq : 64.39 dBA

Total Leq All Segments: 64.39 dBA

Results segment # 1: CMD (night)

Source height = 1.50 m

ROAD (0.00 + 57.05 + 0.00) = 57.05 dBA

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

-90	90	0.45	59.91	0.00	-1.78	-1.08	0.00	0.00	0.00	57.05
-----	----	------	-------	------	-------	-------	------	------	------	-------

Segment Leq : 57.05 dBA

Total Leq All Segments: 57.05 dBA

RT/Custom data, segment # 1: brt (day/night)

1 - Bus:

Traffic volume : 192/66 veh/TimePeriod

Speed : 80 km/h

Data for Segment # 1: brt (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 : 85.10 / 85.10 m

Receiver height : 5.70 / 8.50 m

Topography : 1 (Flat/gentle slope; no barrier)

Reference angle : 0.00

Results segment # 1: brt (day)

Source height = 0.50 m

RT/Custom (0.00 + 46.35 + 0.00) = 46.35 dBA

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

-90	90	0.56	59.44	-11.79	-1.29	0.00	0.00	0.00	46.35
-----	----	------	-------	--------	-------	------	------	------	-------

Segment Leq : 46.35 dBA

Total Leq All Segments: 46.35 dBA

Results segment # 1: brt (night)

Source height = 0.50 m

RT/Custom (0.00 + 45.52 + 0.00) = 45.52 dBA

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

-90	90	0.48	57.81	-11.16	-1.14	0.00	0.00	0.00	45.52
-----	----	------	-------	--------	-------	------	------	------	-------

Segment Leq : 45.52 dBA

Total Leq All Segments: 45.52 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 64.46
(NIGHT): 57.35

Appendix F

Transportation Noise Source
Predictions

- Detailed Predicted Mitigated
Noise Level Calculations

STAMSON 5.0 NORMAL REPORT Date: 18-07-2018 08:57:47
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r1_22.te Time Period: Day/Night 16/8 hours
Description: Harmony Block 104 ola R1 with 2.2m barrier

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

Car traffic volume : 9715/845 veh/TimePeriod *
Medium truck volume : 773/67 veh/TimePeriod *
Heavy truck volume : 552/48 veh/TimePeriod *
Posted speed limit : 50 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): 12000
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: CMD (day/night)

Angle1 Angle2 : -64.00 deg 63.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 25.50 / 25.50 m
Receiver height : 1.50 / 4.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -64.00 deg Angle2 : 63.00 deg
Barrier height : 2.20 m
Barrier receiver distance : 10.16 / 10.16 m
Source elevation : 93.67 m
Receiver elevation : 93.94 m
Barrier elevation : 93.80 m
Reference angle : 0.00

Results segment # 1: CMD (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 ! 1.53 ! 95.33

ROAD (0.00 + 55.58 + 0.00) = 55.58 dBA

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

-64 63 0.53 67.51 0.00 -3.52 -2.03 0.00 0.00 -6.38 55.58

Segment Leq : 55.58 dBA

Total Leq All Segments: 55.58 dBA

Results segment # 1: CMD (night)

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 ! 4.50 ! 3.34 ! 97.14

ROAD (0.00 + 54.22 + 0.00) = 54.22 dBA

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

-64 63 0.44 59.91 0.00 -3.31 -1.95 0.00 0.00 -0.19 54.46*
-64 63 0.57 59.91 0.00 -3.62 -2.07 0.00 0.00 0.00 54.22

* Bright Zone !

Segment Leq : 54.22 dBA

Total Leq All Segments: 54.22 dBA

RT/Custom data, segment # 1: brt (day/night)

1 - Bus:

Traffic volume : 192/66 veh/TimePeriod

Speed : 80 km/h

Data for Segment # 1: brt (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 : 54.10 / 54.10 m
 Receiver height : 1.50 / 4.50 m
 Topography : 2 (Flat/gentle slope; with barrier)
 Barrier angle1 : 0.00 deg Angle2 : 90.00 deg
 Barrier height : 2.20 m
 Barrier receiver distance : 10.16 / 10.16 m
 Source elevation : 93.14 m
 Receiver elevation : 93.94 m
 Barrier elevation : 93.78 m
 Reference angle : 0.00

Results segment # 1: brt (day)

Source height = 0.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
0.50	1.50	1.32	95.10

0.50	1.50	1.32	95.10
------	------	------	-------

RT/Custom (0.00 + 40.14 + 0.00) = 40.14 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.56	59.44	-8.68	-4.29	0.00	0.00	-6.32	40.14

0	90	0.56	59.44	-8.68	-4.29	0.00	0.00	-6.32	40.14
---	----	------	-------	-------	-------	------	------	-------	-------

Segment Leq : 40.14 dBA

Total Leq All Segments: 40.14 dBA

Results segment # 1: brt (night)

Source height = 0.50 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
0.50	4.50	3.76	97.54

0.50	4.50	3.76	97.54
------	------	------	-------

RT/Custom (0.00 + 44.53 + 0.00) = 44.53 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.56	59.44	-8.68	-4.29	0.00	0.00	-6.32	40.14

0	90	0.47	57.81	-8.18	-4.13	0.00	0.00	-0.62	44.88*
0	90	0.60	57.81	-8.91	-4.37	0.00	0.00	0.00	44.53

* Bright Zone !

Segment Leq : 44.53 dBA

Total Leq All Segments: 44.53 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 55.70
(NIGHT): 54.66

STAMSON 5.0 NORMAL REPORT Date: 18-07-2018 08:58:54
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r1_25.te Time Period: Day/Night 16/8 hours
Description: Harmony Block 104 ola R1 with 2.5m barrier

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

Car traffic volume : 9715/845 veh/TimePeriod *
Medium truck volume : 773/67 veh/TimePeriod *
Heavy truck volume : 552/48 veh/TimePeriod *
Posted speed limit : 50 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): 12000
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: CMD (day/night)

Angle1 Angle2 : -64.00 deg 63.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 25.50 / 25.50 m
Receiver height : 1.50 / 4.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -64.00 deg Angle2 : 63.00 deg

Barrier height : 2.50 m
 Barrier receiver distance : 10.16 / 10.16 m
 Source elevation : 93.67 m
 Receiver elevation : 93.94 m
 Barrier elevation : 93.80 m
 Reference angle : 0.00

Results segment # 1: CMD (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 ! 1.53 ! 95.33

ROAD (0.00 + 54.44 + 0.00) = 54.44 dBA

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

-----+-----+-----+-----
 -64 63 0.51 67.51 0.00 -3.48 -2.01 0.00 0.00 -7.58 54.44
 -----+-----+-----+-----

Segment Leq : 54.44 dBA

Total Leq All Segments: 54.44 dBA

Results segment # 1: CMD (night)

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 ! 4.50 ! 3.34 ! 97.14

ROAD (0.00 + 54.22 + 0.00) = 54.22 dBA

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

-----+-----+-----+-----
 -64 63 0.42 59.91 0.00 -3.27 -1.93 0.00 0.00 -1.92 52.79*
 -64 63 0.57 59.91 0.00 -3.62 -2.07 0.00 0.00 0.00 54.22
 -----+-----+-----+-----

* Bright Zone !

Segment Leq : 54.22 dBA

Total Leq All Segments: 54.22 dBA

RT/Custom data, segment # 1: brt (day/night)

1 - Bus:

Traffic volume : 192/66 veh/TimePeriod

Speed : 80 km/h

Data for Segment # 1: brt (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 : 54.10 / 54.10 m
Receiver height : 1.50 / 4.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : 0.00 deg Angle2 : 90.00 deg
Barrier height : 2.50 m
Barrier receiver distance : 10.16 / 10.16 m
Source elevation : 93.14 m
Receiver elevation : 93.94 m
Barrier elevation : 93.78 m
Reference angle : 0.00

Results segment # 1: brt (day)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
-----+-----+-----+-----
0.50 ! 1.50 ! 1.32 ! 95.10

RT/Custom (0.00 + 39.47 + 0.00) = 39.47 dBA

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

0 90 0.54 59.44 -8.58 -4.26 0.00 0.00 -7.13 39.47

Segment Leq : 39.47 dBA

Total Leq All Segments: 39.47 dBA

Results segment # 1: brt (night)

Source height = 0.50 m

Barrier height for grazing incidence

Source	! Receiver	! Barrier	! Elevation of
Height (m)	! Height (m)	! Height (m)	! Barrier Top (m)
0.50 !	4.50 !	3.76 !	97.54

RT/Custom (0.00 + 44.53 + 0.00) = 44.53 dBA

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

0	90	0.45	57.81	-8.08	-4.09	0.00	0.00	-1.03	44.61*
0	90	0.60	57.81	-8.91	-4.37	0.00	0.00	0.00	44.53

* Bright Zone !

Segment Leq : 44.53 dBA

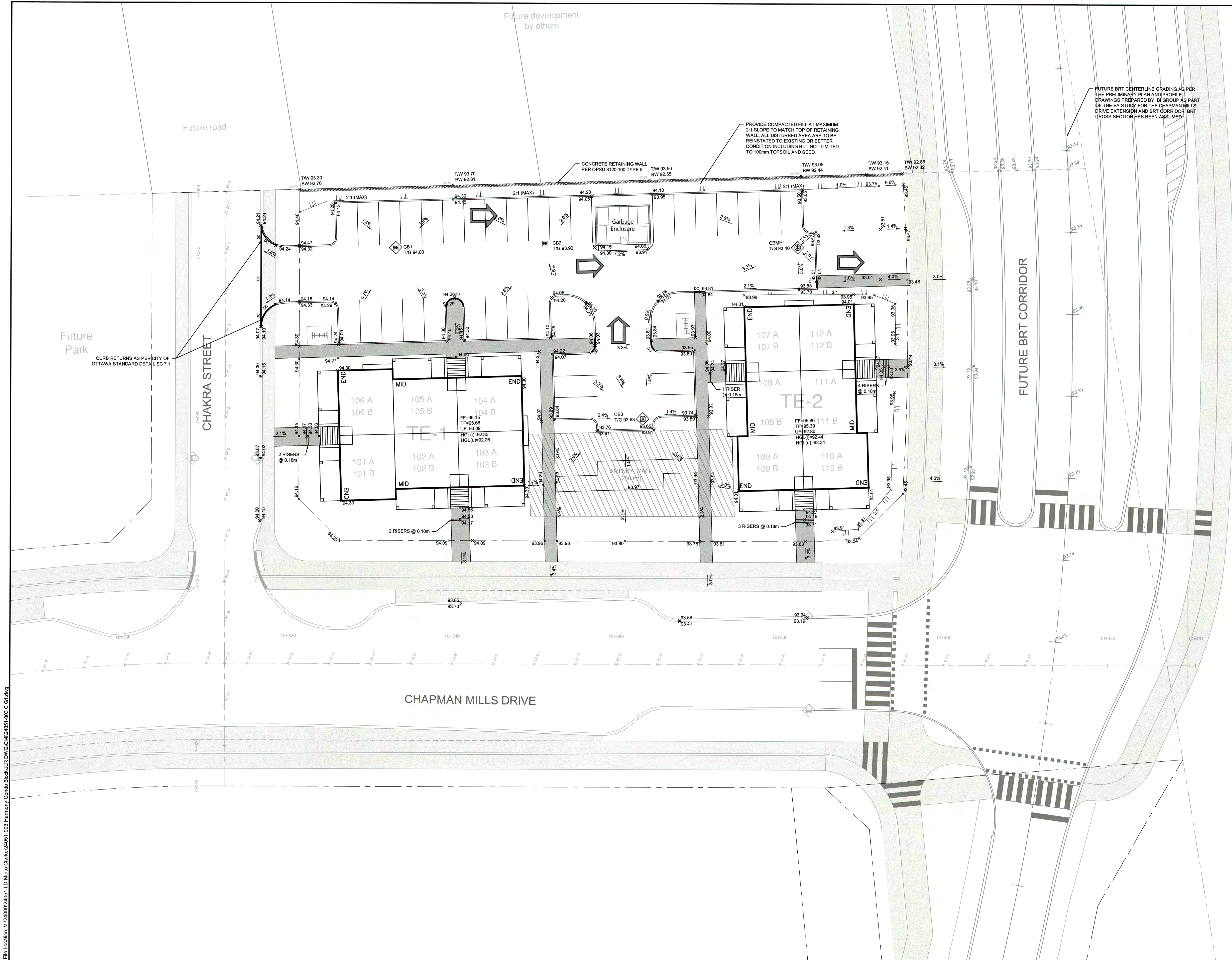
Total Leq All Segments: 44.53 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 54.58
(NIGHT): 54.66

Appendix G

Grading Plan (G1)

File Location: V:\24000\24051 LD Minto Clarke\24051-003 Harmony Condo Block JLR DWG\Civil\24051-003.C.G1.dwg



KEYPLAN

LEGEND

- PROPOSED ELEVATION
- EXISTING ELEVATION
- EXISTING GROUND FROM AOV FROM DECEMBER 2016 AND MARCH 2017 SURVEY
- CONCEPTUAL FUTURE BRT FINISHED GRADE ELEVATION
- TOP OF RETAINING WALL ELEVATION
- BOTTOM OF RETAINING WALL
- CONCRETE RETAINING WALL c/w WOOD PRIVACY SCREEN
- PROPOSED TERRACING (MAX 3:1)
- SURFACE SLOPE
- FLOW DIRECTION
- EMERGENCY OVERLAND FLOW DIRECTION (>100 YEAR)
- FINISHED FLOOR ELEVATION
- TOP OF FOUNDATION ELEVATION
- UNDERSIDE OF FOOTING ELEVATION
- HYDRAULIC GRADE LINE (UNDER INTERIM CONDITIONS)
- HYDRAULIC GRADE LINE (UNDER ULTIMATE CONDITIONS)
- ASPHALT WALKWAY
- CONCRETE SURFACE (HARMONY STAGE 1)
- CONCRETE RISERS
- CONCRETE BARRIER CURB
- DEPRESSED CURB
- BICYCLE RACK

2	RE-ISSUED FOR SITE PLAN APPROVAL - 2nd SUBMISSION	05/07/18
1	ISSUED FOR SITE PLAN SUBMISSION	08/03/18
No.	ISSUE / REVISION	DD/MM/YY

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

SCALE: 1:200

CLIENT: **minto Communities**

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

CONSULTANT:

PROFESSIONAL STAMP

LICENSED PROFESSIONAL ENGINEER
H. R. MACKAY
100186588
JULY 2018
PROVINCE OF ONTARIO

PROJECT NORTH

PROJECT: **MINTO COMMUNITIES INC. HARMONY STAGE 1 BLOCK 104**
4025 STRANDHERD DRIVE

DRAWING: **GRADING PLAN**

DESIGN: JW	DRAWING #:
DRAWN: CJM	G1
CHECKED: HM	
JLR #: 24051-003	

PLOT DATE: July 2, 2018 11:08:10 AM

Appendix H

City of Ottawa
Pre-Consultation
Correspondence

From: [Thomas Couper](#)
To: [Gregory Winters](#); [Hilary MacKay](#); [Ryan James](#)
Subject: FW: 4025 Strandherd Drive - Preconsultation Followup
Date: January 22, 2018 9:21:44 AM
Attachments: [Pre-applicationMemo_4025Strandherd18122017.pdf](#)
[Studies and plans list.pdf](#)

Good Morning All,

I am forwarding on the comments we have received from the City regarding our Harmony Stage 1 Condos. Please let me know if you have any questions. I will be sending out the Site Plan shortly.

Cheers,



Thomas Couper
Land Development Coordinator
Minto Communities - Canada
200-180 Kent St, Ottawa, ON, K1P 0B6
T 613.782.5720 | F 613.782.2416
minto.com

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From: Renaud, Jean-Charles [mailto:Jean-Charles.Renaud@ottawa.ca]
Sent: Monday, January 15, 2018 12:41 PM
To: Thomas Couper <TCouper@minto.com>
Cc: Hugo Lalonde <HLalonde@minto.com>; Baggs, Rosanna <Rosanna.Baggs@ottawa.ca>; Sharif, Sharif <sharif.sharif@ottawa.ca>
Subject: 4025 Strandherd Drive - Preconsultation Followup

Good morning Thomas,

Further to our meeting on December 11, 2017, regarding a proposal to construct a pair of new, 12-

unit apartment buildings, please find below an overview of what was discussed.

Official Plan and Zoning

- Official Plan: Designated “General Urban” under [Schedule B](#)
- Secondary Plan: Designated “Residential” under [Schedule A5](#) of the South Nepean Secondary Plan – [Area 8](#)
- Zoning: Residential Fourth Density, Subzone Z ([R4Z](#))

Planning (JC Renaud)

- The Secondary Plan encourages minimized setbacks to the main street (Chapman Mills) and discourages parking areas next to the main street. Incorporate landscaping and/or increased setbacks in order to minimize the impact of parking along Chapman Mills.
- The Secondary Plan attaches much importance to the main street and its high quality of urban design and presence. This potentially being the first development to be approved on the main street, staff will be looking for it to set the stage for what this main street was intended to be. Enhanced streetscaping, lighting, built form should be sought.
- Please minimize the amount of siding and increase the amount of brick type materials facing both Chapman Mills frontages. Given the site’s exposure to these streets, all four building façades should seek this enhancement.
- Be aware of the placement of the amenity area and its requirement for noise walls. Noise walls will be discouraged along Chapman Mills.
- Please relocate the southernmost pathway to be in line with the sidewalk on the east side of the northernmost building. Also include a similar sidewalk on the east side of the southernmost building.
- The following minor variances were mentioned. Please be aware of Bill 73, which may or may not affect you. Bill 73 places a two-year freeze on any application for minor variance from zoning by-law provisions that have been amended in response to an application by an owner, commencing on the passing of the zoning amendment.
 - Location of garbage enclosure
 - Parking space No.1 being located in the front yard

Engineering (Golam Sharif)

- The engineering memo is attached.

Transportation / Noise (Rosanna Baggs)

- A transportation impact assessment screening form was sent to Rosanna Baggs. No triggers were satisfied, therefore no further action is required.
- The access as shown on the plan is too small. Please provide appropriate radii
- TWSIs will be required on the entrance sidewalk on the public ROW.

Trees

- Barrhaven falls well below the City’s current urban canopy target of 30%. The site plan should be modified to include the planting of medium to large species of trees, in order to address the City’s canopy target, to provide shading, and to mitigate the contribution of the development to the urban heat island effect.

Development Applications Required

- [Site Plan Control](#), Manager Approved, Public Consultation
- [Plan of Condominium](#)
- The required plans and studies for the site plan control application are included in the attachment. You can reference the Guide to Preparing Studies and Plans in the link below.
<http://ottawa.ca/en/development-application-review-process-0/guide-preparing-studies-and-plans>

I also encourage you to discuss the proposal with the area Councillor Jan Harder and local community associations.

I trust this information is helpful. Please do not hesitate to contact me if you have questions or require clarification.

JC

Jean-Charles Renaud, MCIP/MICU, RPP/UPC

Planner | *Urbaniste*

Development Review, South | *Examen des projets d'aménagement, Sud*

Planning, Infrastructure and Economic Development Department | *Services de la planification, de l'infrastructure et du développement économique*

City of Ottawa | *Ville d'Ottawa*

110 Laurier Avenue West. Ottawa, ON | *110, avenue. Laurier Ouest. Ottawa (Ontario) K1P 1J1*

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ottawa.ca/planning / ottawa.ca/urbanisme

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