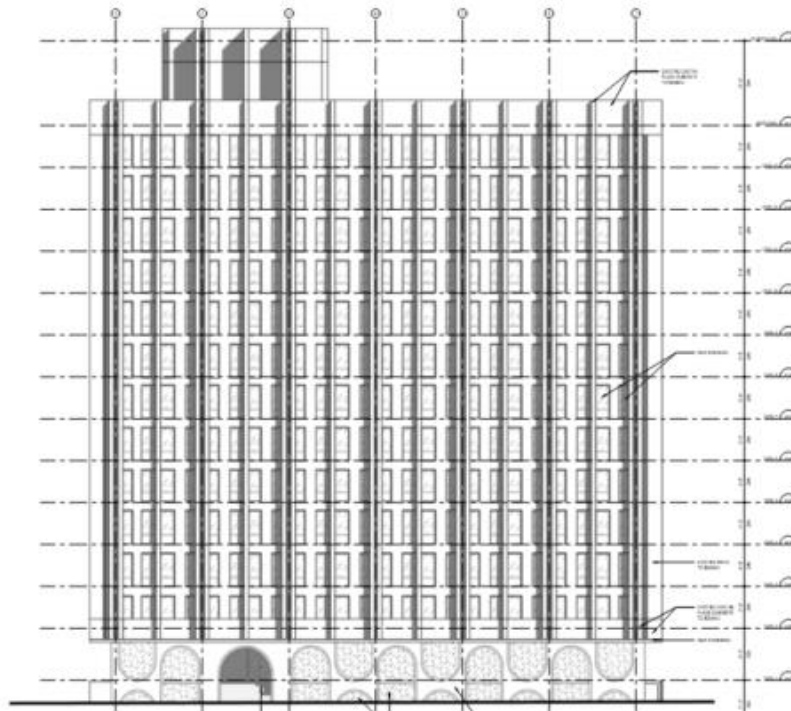


# SITE SERVICING REPORT

## 130 SLATER STREET



Project No.: CCO-24-2792

Prepared for:

KTS Properties

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Gatineau, QC, J8Z 1W2

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March 8, 2024

Revised: June 19, 2024

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## 1.0 PROJECT DESCRIPTION

### 1.1 Purpose

Egis Canada (Egis) has been retained by KTS Properties to prepare this Site Servicing Report in support of the Site Plan Control process for the development located at 130 Slater Street within the City of Ottawa.

The main purpose of this report is to present a servicing design for the development in accordance with the recommendations and guidelines provided by the City of Ottawa (City), the Rideau Valley Conservation Authority (RVCA), and the Ministry of the Environment, Conservation and Parks (MECP). This report will address the water, sanitary, and storm sewer servicing for the development, ensuring that existing and available services will adequately service the proposed development.

This report should be read in conjunction with the following drawings:

- CCO-24-2792, C101 – Site Servicing Plan

### 1.2 Site Description

Figure 1: Site Map



The subject property, herein referred to as the site, is located at 130 Slater Street within the Somerset ward. The site covers approximately **0.16 ha** and is located along Slater Street. The site is zoned for Mixed-Use Downtown use (MD). See Site Location Plan in Appendix A for more details.



### 1.3 Proposed Development and Statistics

The development proposes to convert the existing building from commercial use into a residential mixed-use building. Above and underground parking areas will continue to be provided from Laurier Avenue West via 219 Laurier Ave W, from Slater Street via 140 Slater Street, and from Slater Street via 100 Slater Street.

### 1.4 Existing Conditions and Infrastructure

The site is currently developed containing a commercial building, above parking areas, and an underground parking garage. Based on available City as-builts, the building is currently serviced via a 150 mm diameter water service connected to the 381 mm diameter watermain within Slater Street, a 200 mm diameter sanitary service connected to the 1200 mm diameter sanitary sewer within Slater Street, and a 200 mm diameter storm sewer connected to the 675 mm diameter storm sewer within Slater Street. Refer to existing mechanical plan included in Appendix B for reference.

Sewer and watermain mapping collected from the City of Ottawa indicate that the following services exist across the property frontages within the adjacent municipal rights-of-way(s):

- ❖ Slater Street
  - 610 mm diameter unlined cast-iron watermain, a
  - 381 mm diameter unlined cast-iron watermain, a
  - 1200 mm diameter brick sanitary sewer tributary to the Rideau Canal Interceptor, a
  - 3000 mm diameter combined sewer, and a
  - 675 mm diameter concrete storm sewer, which outlets at the Rideau Canal approximately 670 m downstream.

### 1.5 Approvals

The proposed development is subject to the City of Ottawa site plan control approval process. Site plan control requires the City to review, provided concurrence and approve the engineering design package. Permits to construct can be requested once the City has issued a site plan agreement.

An Environmental Compliance Approval (ECA) through the Ministry of Environment, Conservation and Parks (MECP) is not anticipated to be required since the existing storm and sanitary laterals are proposed to be retained and therefore exempted under O.Reg 525/98 s. 2 (1)1.

## 2.0 BACKGROUND STUDIES, STANDARDS, AND REFERENCES

### 2.1 Background Reports / Reference Information

As-built drawings of existing services, provided by the City of Ottawa Information centre, within the vicinity of the proposed site were reviewed in order to identify infrastructure available to service the proposed development.

A topographic survey (161614767-110) of the site was completed by Stantec Geomatics Ltd and dated December 6th, 2023.

### 2.2 Applicable Guidelines and Standards

#### City of Ottawa:

- ◆ Ottawa Sewer Design Guidelines, City of Ottawa, SDG002, October 2012. (**Ottawa Sewer Guidelines**)
  - Technical Bulletin ISTB-2014-01 City of Ottawa, February 2014. (**ISTB-2014-01**)
  - Technical Bulletin PIEDTB-2016-01 City of Ottawa, September 2016. (**PIEDTB-2016-01**)
  - Technical Bulletin ISTB-2018-01 City of Ottawa, January 2018. (**ISTB-2018-01**)
  - Technical Bulletin ISTB-2018-04 City of Ottawa, March 2018. (**ISTB-2018-04**)
  - Technical Bulletin ISTB-2019-02 City of Ottawa, February 2019. (**ISTB-2019-02**)
- ◆ Ottawa Design Guidelines – Water Distribution City of Ottawa, July 2010. (**Ottawa Water Guidelines**)
  - Technical Bulletin ISD-2010-2 City of Ottawa, December 15, 2010. (**ISD-2010-2**)
  - Technical Bulletin ISDTB-2014-02 City of Ottawa, May 2014. (**ISDTB-2014-02**)
  - Technical Bulletin ISTB-2018-02 City of Ottawa, March 2018. (**ISTB-2018-02**)
  - Technical Bulletin ISTB-2021-03 City of Ottawa, August 2021. (**ISTB-2021-03**)

#### Ministry of Environment, Conservation and Parks:

- ◆ Stormwater Planning and Design Manual, Ministry of the Environment, March 2003. (**MECP Stormwater Design Manual**)
- ◆ Design Guidelines for Sewage Works, Ministry of the Environment, 2008. (**MECP Sewer Design Guidelines**)

#### Other:

- ◆ Water Supply for Public Fire Protection, Fire Underwriters Survey, 2020. (**FUS Guidelines**)

### **3.0 PRE-CONSULTATION SUMMARY**

A pre-consultation meeting was held with City staff on December 21<sup>st</sup>, 2023, regarding the proposed site servicing. Specific design parameters to be incorporated within this design include the following:

- Provide the proposed and existing sanitary sewer release rates to City staff in order to compare and evaluate capacity.
- If existing sewer laterals are to be reused, provided there is capacity, a CCTV inspection and report is required to ensure existing services are in good working order.
- A hydrant coverage figure shall be provided and demonstrate there is adequate fire protection for the proposal per Technical Bulletin ISTB-2018-02.
- Exposure separation distances shall be defined on a figure to support the FUS calculation and required fire flow (RFF).
- Hydrant capacity shall be assessed to demonstrate the RFF can be achieved.

The notes from the City of Ottawa can be found in Appendix B.

## 4.0 WATER SERVICING

### 4.1 Existing Watermain

The site is located within the 1W pressure zone, as per the Water Distribution System mapping included in Appendix C. There is an existing 381 mm diameter unlined cast iron watermain and a 610 mm diameter unlined cast iron watermain within Slater Street.

### 4.2 Proposed Water Servicing

The building is currently serviced by a 150 mm diameter water service at the north-east corner of building, connected to the 381 mm diameter watermain within Slater Street. Refer to the existing mechanical plan located in Appendix B for reference.

In accordance with Section 4.3.1 of the guidelines, service areas with a basic day demand greater than 50 m<sup>3</sup>/day require a redundant connection to the municipal system. The redundancy is proposed to be provided via a new independent 150 mm diameter water service connection to the existing 610 mm diameter watermain within Slater Street. The City has provided information indicating that the watermain within the south sidewalk is schedule to be replaced between Metcalfe and O'Connor. Since this watermain services several buildings on the south side of Slater, this work provides an opportunity to construct the proposed water connection. The new water service will be installed just east of the existing water service located at the northeast corner of the building. Refer to the Servicing Plan for additional information.

The Fire Underwriters Survey 2020 (FUS) method was utilized to determine the required fire flow for the site. The 'C' factor (type of construction) for the FUS calculation was determined to be 0.8 (non-combustible type). The total floor area ('A' value) for the FUS calculation was determined to be 5,897.4 m<sup>2</sup>. The results of the calculations yielded a required fire flow of 12,000 L/min. A fire flow of 9,000 L/min was calculated using the Ontario Building Code (OBC) criteria. The detailed calculations for the FUS and OBC can be found in Appendix C.

The water demands for the proposed building have been calculated to adhere to the Ottawa Design Guidelines – Water Distribution manual and can be found in Appendix C. The results have been summarized in **Table 1**, below.

**Table 1: Water Supply Design Criteria and Water Demands**

<b>Site Area</b>	0.16 ha
<b>Residential</b>	280 L/person/day
<b>Commercial</b>	28,000 L/ha/day
<b>Bachelor/1 Bedroom Apartment</b>	1.4 persons/unit

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<b>2 Bedroom Apartment</b>	2.1 persons/unit
<b>3 Bedroom Apartment</b>	3.1 persons/unit
<b>Maximum Daily Peaking Factor</b>	3.5 x avg day (Residential) 1.5 x avg. day (Commercial)
<b>Maximum Hour Peaking Factor</b>	5.3 x avg day (Residential) 1.8 x avg. day (Commercial)
<b>Average Day Demand (L/s)</b>	1.10
<b>Maximum Daily Demand (L/s)</b>	3.74
<b>Peak Hourly Demand (L/s)</b>	5.64
<b>FUS Fire Flow Requirement (L/s)</b>	200 (12,000 L/min)

The City provided the estimated water pressures at both for the average day scenario, peak hour scenario and the max day plus fire flow scenario for the demands indicated by the correspondence in Appendix C. The resulting pressures for the boundary conditions results are shown in **Table 2**, below.

**Table 2: Boundary Conditions Results**

<b>Scenario</b>	<b>Proposed Demands (L/s)</b>	<b>Connection HGL 381 mm Watermain (m H<sub>2</sub>O)*/kPa</b>	<b>Connection HGL 610 mm Watermain (m H<sub>2</sub>O)*/kPa</b>
<b>Average Day Demand</b>	1.10	47.7 / 468.0	53.7 / 526.8
<b>Max Daily + Fire Flow Demand</b>	3.74 + 200 = 203.74	40.6/ 398.0	47.4 / 465.0
<b>Peak Hour Demand</b>	5.64	39.0 / 382.7	45.0 / 441.5

*\*Adjusted for an estimated watermain elevation of 67.8 m for the 381 mm dia watermain and 61.8 m for the 610 mm dia watermain.*

The normal operating pressure range is anticipated to be 383 kPa to 527 kPa and will not be less than 275 kPa (40 psi) or exceed 689 kPa (100 psi). The proposed watermains will meet the minimum required 20 psi (140 kPa) from the **Ottawa Water Guidelines** at the ground level under maximum day demand and fire flow conditions.

To confirm the adequacy of fire flow to protect the proposed development, public fire hydrants within 150 m of the proposed building were analysed per City of Ottawa **ISTB 2018-02** Appendix I Table 1. Based on City guidelines (**ISTB-2018-02**), the existing hydrants can provide adequate fire protection to the proposed development. The results are summarized in **Table 3**, below.

**Table 3: Fire Protection Confirmation**

Building	Fire Flow Demand (L/min)	Fire Hydrant(s) within 75m (Class AA – 5,700 L/min)	Fire Hydrant(s) within 150m (Class AA - 3,800 L/min)	Combined Fire Flow (L/min)
130 Slater St	12000	2 (Blue, Class AA)	1 (Blue, Class AA)	15,200
<i>*Hydrant Classes per Table 4.10 within Section 4.5.3. of the Ottawa Design Guidelines – Water Distribution</i>				

## 5.0 SANITARY SERVICING

### 5.1 Existing Sanitary Sewers

There is an existing 1200 mm diameter brick sanitary sewer within Slater Street and an existing 3000 mm diameter concrete combined sewer within Slater Street.

### 5.2 Proposed Sanitary Servicing

The building is currently serviced by a 200 mm diameter sanitary service at the north-east corner of building, connected to the 1200 mm diameter watermain within Slater Street. Refer to the existing mechanical plan located in Appendix B for reference.

No changes to the existing sanitary servicing are proposed.

**Table 4: Sanitary Design Criteria**

Design Parameter	Value
Site Area	0.16 ha
Residential	280 L/person/day
Commercial	28,000 L/ha/day
Bachelor & 1 Bedroom Apartment	1.4 persons/unit
2 Bedroom Apartment	2.1 persons/unit
3 Bedroom Apartment	3.1 persons/unit
Residential Peaking Factor	3.45
Institutional/Commercial Peaking Factor	1.0-1.5
Extraneous Flow Allowance	0.33 L/s/ha

**Table 6**, below, summarizes the existing and estimated wastewater flow from the proposed development. Refer to Appendix D for detailed calculations.



**Table 5: Summary of Estimated Sanitary Flow**

Design Parameter	Existing Total Flow (L/s)	Proposed Total Flow (L/s)
Total Estimated Average Dry Weather Flow	0.42	1.10
Total Estimated Peak Dry Weather Flow	0.63	3.67
Total Estimated Peak Wet Weather Flow	0.67	3.71

Based on coordination with City staff, there are no capacity concerns with the proposed sanitary flow. Refer to Appendix D for reference.

The full flowing capacity of a 200 mm diameter service at an assumed 0.1% slope is estimated to be **10.82 L/s** and at an assumed 1% slope is **34.22 L/s**. Per **Table 5**, a peak wet weather flow of **3.71 L/s** will be conveyed within the 200 mm diameter service, therefore, the existing system is expected to be adequately sized for the development.

## **6.0 STORM SEWER SERVICING**

### **6.1 Existing Storm Sewers**

Storm runoff from the site is currently tributary to the Ottawa River West sub watershed. There is an existing 675 mm diameter concrete storm sewer within Slater Street.

### **6.2 Proposed Storm Servicing**

The building is currently serviced by a 150 mm diameter storm service at the north-east corner of building, connected to the 675 mm diameter storm sewer within Slater Street. Refer to the existing mechanical plan located in Appendix B for reference.

No changes to the existing storm servicing are proposed.

## **7.0 EROSION AND SEDIMENT CONTROL**

### **7.1 Temporary Measures**

Before construction begins, temporary silt fence, straw bale or rock flow check dams will be installed at all natural runoff outlets from the property. It is crucial that these controls be maintained throughout construction and inspection of sediment and erosion control will be facilitated by the Contractor or Contract Administration staff throughout the construction period.

Silt fences will be installed where shown on the final engineering plans, specifically along the downstream property limits. The Contractor, at their discretion or at the instruction of the City, Conservation Authority or the Contract Administrator shall increase the quantity of sediment and erosion controls on-site to ensure that the site is operating as intended and no additional sediment finds its way off site. The rock flow, straw bale & silt fence check dams and barriers shall be inspected weekly and after rainfall events. Care shall be taken to properly remove sediment from the fences and check dams as required. Fibre roll barriers are to be installed at all existing curb inlet catchbasins and filter fabric is to be placed under the grates of all existing catchbasins and manholes along the frontage of the site and any new structures immediately upon installation. The measures for the existing/proposed structures is to be removed only after all areas have been paved. Care shall be taken at the removal stage to ensure that any silt that has accumulated is properly handled and disposed of. Removal of silt fences without prior removal of the sediments shall not be permitted.

Although not anticipated, work through winter months shall be closely monitored for erosion along sloped areas. Should erosion be noted, the Contractor shall be alerted and shall take all necessary steps to rectify the situation. Should the Contractor's efforts fail at remediating the eroded areas, the Contractor shall contact the City and/or Conservation Authority to review the site conditions and determine the appropriate course of action. As the ground begins to thaw, the Contractor shall place silt fencing at all required locations as soon as ground conditions warrant. Please see the *Site Grading, Drainage Plan* and *Sediment & Erosion Control Plan* for additional details regarding the temporary measures to be installed and their appropriate OPSD references.

### **7.2 Permanent Measures**

Rip-rap will be placed at all locations that have the potential for concentrated flow. It is crucial that the Contractor ensure that the geotextile is keyed in properly to ensure runoff does not undermine the rip rapped area. Additional rip rap is to be placed at erosion prone locations as identified by the Contractor / Contract Administrator / City or Conservation Authority.

It is expected that the Contractor will promptly ensure that all disturbed areas receive topsoil and seed/sod and that grass be established as soon as possible. Any areas of excess fill shall be removed or levelled as soon as possible and must be located a sufficient distance from any watercourse to ensure that no sediment is washed out into the watercourse. As the vegetation growth within the site provides a key component to the control of sediment for the site, it must be properly maintained once established. Once the construction is complete, it will

be up to the landowner to maintain the vegetation and ensure that the vegetation is not overgrown or impeded by foreign objects.

## 8.0 SUMMARY

- The development proposes to convert the existing building from commercial use into a residential mixed-use building. Above and underground parking areas will continue to be provided from Laurier Avenue West via 219 Laurier Ave W, from Slater Street via 140 Slater Street, and from Slater Street via 100 Slater Street.
- The building is currently serviced by a 150 mm diameter water service at the north-east corner of building, connected to the 381 mm diameter watermain within Slater Street. Site redundancy is proposed to be provided via a secondary 150 mm diameter water service located at the north-east corner of the building and connected to the existing 610 mm diameter water service within Slater Street.
- The building is currently serviced by a 200 mm diameter sanitary service at the north-east corner of building, connected to the 1200 mm diameter watermain within Slater Street. No changes to the existing sanitary servicing are proposed.
- The building is currently serviced by a 150 mm diameter storm service at the north-east corner of building, connected to the 675 mm diameter storm sewer within Slater Street. No changes to the existing storm servicing are proposed.

## 9.0 RECOMMENDATIONS

Based on the information presented in this report, we recommend that City of Ottawa approve this Servicing and Stormwater Management Report in support of the proposed building conversion at 130 Slater Street.

This report is respectfully being submitted for approval.

Regards,

Egis Canada Ltd.



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## **10.0 STATEMENT OF LIMITATIONS**

This report was produced for the exclusive use of KTS Properties. The purpose of the report is to assess the existing stormwater management system and provide recommendations and designs for the post-construction scenario that are in compliance with the guidelines and standards from the Ministry of the Environment, Conservation and Parks, City of Ottawa and local approval agencies. Egis Canada reviewed the site information and background documents listed in Section 2.0 of this report. While the previous data was reviewed by Egis Canada and site visits were performed, no field verification/measures of any information were conducted.

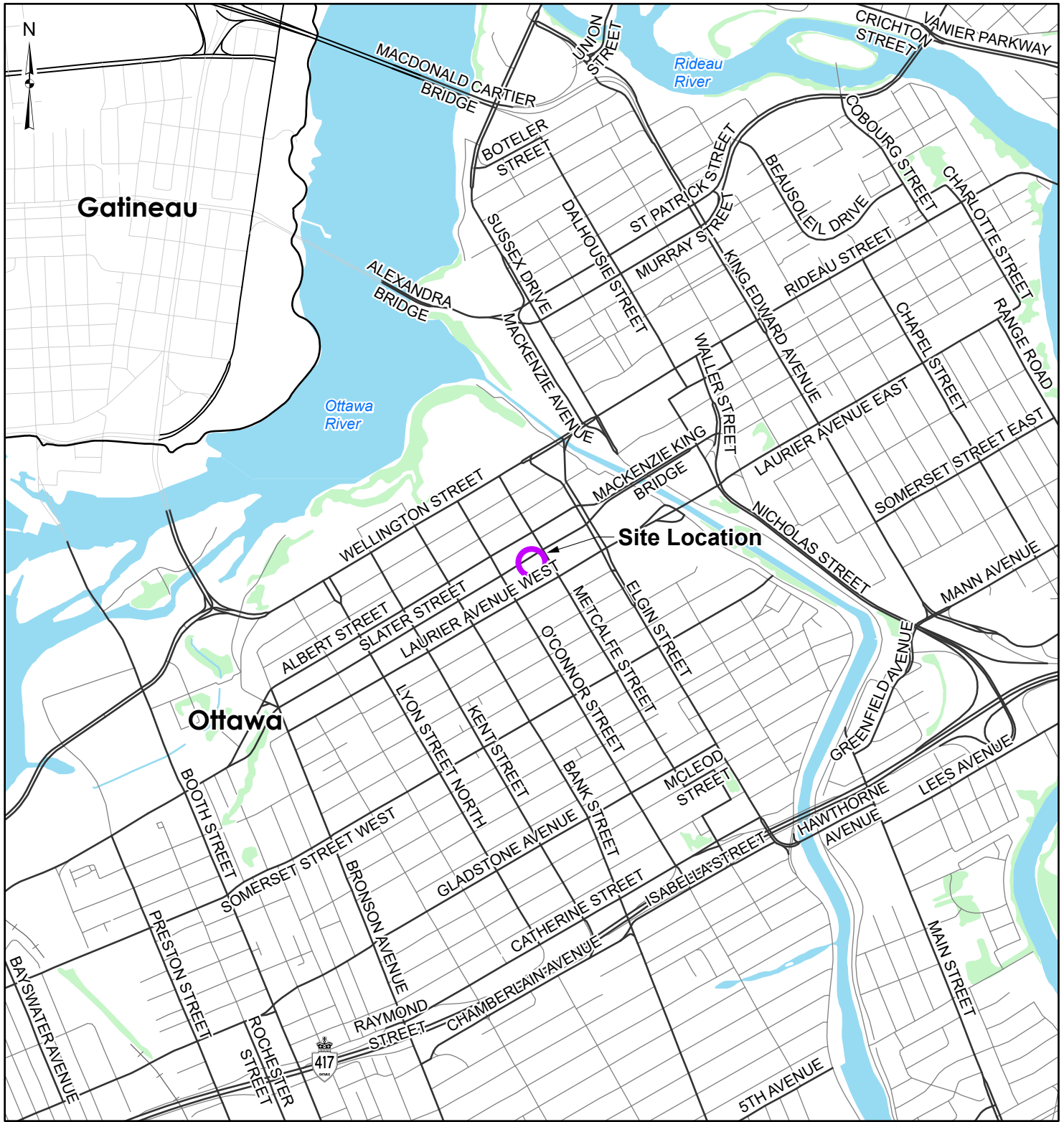
Any use of this review by a third party, or any reliance on decisions made based on it, without a reliance report is the responsibility of such third parties. Egis Canada accepts no responsibility for damages, if any, suffered by any third party as a result of decisions or actions made based on this review.

The findings, conclusions and/or recommendations of this report are only valid as of the date of this report. No assurance is made regarding any changes in conditions subsequent to this date. If additional information is discovered or becomes available at a future date, Egis Canada should be requested to re-evaluate the conclusions presented in this report, and provide amendments, if required.












## APPENDIX A KEY PLAN



**LEGEND**

-  Site Location
-  Local Road
-  Major Road
-  Railroad
-  Watercourse
-  Waterbody
-  Wooded Area

**REFERENCE**

GIS data provided by the Ontario Ministry of Natural Resources and Forestry, 2024.



<b>CLIENT:</b>	<b>KTS PROPERTIES</b>	
<b>PROJECT:</b>	<b>130 SLATER STREET</b>	
<b>TITLE:</b>	<b>SITE LOCATION</b>	
<b>PROJECT NO.:</b>	CCO-24-2792	<b>FIGURE:</b>
<b>Date</b>	Jan., 23, 2024	<b>1</b>
<b>GIS</b>	AH	
<b>Checked By</b>	AG	

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## **APPENDIX B BACKGROUND DOCUMENTS**

Paul Black  
Fotenn Planning + Design  
Via email: [black@fotenn.com](mailto:black@fotenn.com)

**Subject: Pre-Consultation: Meeting Feedback  
Proposed Site Plan Control Application – 130 Slater Street**

Please find below information regarding next steps as well as consolidated comments from the above-noted pre-consultation meeting held on December 21, 2023.

**Pre-Consultation Preliminary Assessment**

1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input checked="" type="checkbox"/>	5 <input type="checkbox"/>
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One (1) indicates that considerable major revisions are required while five (5) suggests that the proposal appears to meet the City's key land use policies and guidelines. This assessment is purely advisory and does not consider technical aspects of the proposal or in any way guarantee application approval.

**Next Steps**

1. A review of the proposal and materials submitted for the above-noted pre-consultation has been undertaken. Please proceed to complete a Phase 3 Pre-consultation Application Form and submit it together with the necessary studies and/or plans to [planningcirculations@ottawa.ca](mailto:planningcirculations@ottawa.ca).
2. In your subsequent pre-consultation submission, please ensure that all comments or issues detailed herein are addressed. A detailed cover letter stating how each issue has been addressed must be included with the submission materials. Please coordinate the numbering of your responses within the cover letter with the comment number(s) herein.
3. Please note, if your development proposal changes significantly in scope, design, or density before the Phase 3 pre-consultation, you may be required to complete or repeat the Phase 2 pre-consultation process.

**Supporting Information and Material Requirements**

1. The attached **Study and Plan Identification List** outlines the information and material that has been identified, during this phase of pre-consultation, as either required (R) or advised (A) as part of a future complete application submission.
  - a. The required plans and studies must meet the City's Terms of Reference (ToR) and/or Guidelines, as available on [Ottawa.ca](http://Ottawa.ca). These ToR and Guidelines outline

the specific requirements that must be met for each plan or study to be deemed adequate.

### **Consultation with Technical Agencies**

1. You are encouraged to consult with technical agencies early in the development process and throughout the development of your project concept. A list of technical agencies and their contact information is enclosed.

### **Planning**

1. General comments:
  - Overall, this is a great project. The City is supportive of office-to-residential conversions in the Downtown Core, which will bring much needed housing in this area.
  - The subject property is designated Mainstreet Corridor within the Downtown Core Transect Policy Area in the Official Plan, and further subject to the Central and East Downtown Secondary Plan, where the subject property is designated 'Downtown Mixed-Use' within Core Character Area.
2. Office-to-residential conversions and November 8, 2023 Council approved Report:
  - Please review Staff recommendations approved by Council on November 8<sup>th</sup> as it relates to this office-to-residential conversion proposal and as it relates to the timing of the SPC application: [Report \(escribemeetings.com\)](https://www.escribemeetings.com).
  - General zoning permissions are anticipated to include provisions where existing situation (including parking – but not including amenity space) are deemed to comply with zoning – but please review specifically when report goes public. The anticipated timing for a report to Committee is February 2024.
    - The second recommendation to Council:
      - to introduce Zoning By-law Amendment to generally permit office-to-residential conversions as-of-right so that their performance standards are deemed to be compliant following a change of use, provided the building is not expanding its envelope in any direction and the primary use prior to conversion was office, school, place of worship or hotel, and to implement the Omnibus Zoning By-law Amendment Report in Q1 2024.
      - to eliminate the “how” (e.g., private, public, indoors, outdoors) requirements for amenity space for office-to-residential conversion projects on the condition that the total required amenity space is still met, considering the challenges of altering the floorplan of an office building in order to create residential units.

- The third recommendation to Council:
  - to approve a scoped list of minimum required submission materials for conversions that do not expand its envelope in any direction, with a focus on the provincially mandated requirements, legal requirements, and materials that ensure appropriate infrastructure is available to service the site. The scoped list will include: Zoning Confirmation Letter, Survey Plan, Servicing Study (Assessment of Adequacy of Public Services), Phase One Environmental Site Assessment, Record of Site Condition, Site Plan, and Architectural Building Elevation. Where exterior works are taking place (window replacement, roof or landscaping work, sidewalk or right-of-way work), the following materials could be asked to be provided: Grade Control and Drainage Plan, including rooftop drainage plan, TDM Measures Checklist and TDM-Supportive Development Design and Infrastructure Checklist, and Urban Design Brief. Staff would retain the authority to request additional plans and studies depending on the scope of the application.
  - to apply the “Site Plan Control – Standard” application fee for conversion projects with a building envelope that remains unchanged, considering less time-consuming and resource-intensive approach with the scoped list of required submission materials.
- As per the fourth recommendation to Council, the threshold for Record of Site Condition requirement may be revisited and exempt office-to-residential conversions for buildings taller than six storeys.
- The fifth recommendation speaks to Stormwater management requirements for office-to-residential conversions. Relief could be provided in instances where there are no significant changes to the hard surface on-site, and stormwater management will be required where the post-conversion stormwater runoff rate is greater than the pre-conversion rate.

### 3. Policy Framework comments:

- Current zoning non-compliances associated with the conversion of the building, including the surface parking lot discussed during the formal pre-consult meeting, will be covered in the upcoming omnibus zoning amendment (aimed for February 2024). The upcoming omnibus zoning amendment will include specific zoning provisions for the amenity area for office-to-residential conversions as well.
- Central and East Downtown Secondary Plan requires that:
  - The developments within Downtown Mixed-Use designation and Core Character Area provide active uses along the entire ground floor frontage.

- The City will require a minimum sidewalk width of 3 metres along all streets, as per the Downtown Moves: Transforming Ottawa's Streets study. This may be increased without amendment.
- As per discussions with ROW group, a ROW widening will be taken where portions of the building do not exist within the ROW.
- As per Table 3a of the Official Plan, staff would encourage a minimum 5% proportion of large-household dwellings with three or more bedrooms or an equivalent floor area suitable for families. Although there is not a defined equivalent in the Official Plan, staff would not consider the two-bedroom + den units as equivalent since there are no windows in den (could not be used as a bedroom), and the size seems less than a viable option for a household that would otherwise be found in a greenfield low-rise dwelling.
- Active transportation choices should be prioritized through the redevelopment of sites within the downtown core. There are currently 171 bicycle parking spaces provided whereas 102 are required as per Zoning By-law. However, Staff expect a 1:1 bike parking-to-dwelling unit ratio to be provided.
- Please, clarify why the rooftop of the building won't be used as an outdoor amenity space. Please consider the introduction of sustainable design features, such as the application of green roofs on the rooftops. As a minimum, cool roof to reduce ambient surface temperature to minimize the urban heat island effect should be provided as per the Official Plan (Section 11.1).

#### 4. Plans:

- Staff would like to see how the proposal responds to Accessibility Design Standards (ADS Checklist is provided with this feedback). If direct accessible access to commercial units is not possible from Slater Street, please describe how it would be provided alternatively.
- Please explore the potential for street trees along Slater or advise if existing space and future Slater Street design is prohibitive to street trees.
- Normally, we require separate garbage rooms for commercial and residential. Please detail in submission how garbage will be collected for each. If residential waste is anticipated to be done through municipal collection, please dimension on plans the waste storage room, bin size, door openings, and path of travel, as per the waste guidelines - [Solid Waste Collection Guidelines for Multi-Unit Residential Development \(ottawa.ca\)](http://ottawa.ca)
- Please, provide landscaping details on the provided Site Plan.
- Provide measurements of spaces and aisles in parking garage and at grade.



- Provide measurements that demonstrate compliance of bicycle parking with zoning by-law.
5. Procedural:
- A Standard Site Plan Control application and fee are required for the proposal, given that there are currently no proposed building additions or new storeys being added.
  - A scoped list of required materials as per Report recommendations has been reflected in the provided SPIL.
  - Staff are anticipating that omnibus zoning amendment proceed for office-to-residential conversions will proceed in February 2024.
  - Community Benefits Charges won't apply.

### **Urban Design**

#### Comments:

6. This proposal does not run along or does not meet the threshold in one of the City's Design Priority Areas and need not attend the City's UDRP. Staff will be responsible for evaluating and providing design direction.
7. We generally appreciate the design approach taken for the ground floor; however, we recommend the applicant investigate the addition of an accessible entrance from Slater to provide a more suitable connection to the public right of way appropriate for the new use.
8. This is an exciting project in an area full of potential. We look forward to helping you achieve its goals with the highest level of design resolution. We are happy to assist and answer any questions regarding the above. Good luck.

### **Engineering**

#### Comments:

1. Provide proposed sanitary sewer release rate and existing release rate to compare the increase (or decrease) in flows and evaluate capacity. Please reach out to Infrastructure Project Manager.
2. Water Supply Redundancy: Residential buildings with a basic day demand greater than 50m<sup>3</sup>/day (0.57 L/s) are required to be connected to a minimum of two water services separated by an isolation valve to avoid a vulnerable service area as per the Ottawa Design Guidelines - Water Distribution, WDG001, July 2010 Clause 4.3.1 Configuration.

3. If existing sewer laterals are to be reused, provided there is capacity, a CCTV inspection and report is required to ensure existing services are in good working order/condition. Located services to be placed on existing condition plan.
4. Please review Technical Bulletin ISTB-2018-02, maximum fire flow hydrant capacity is provided in Section 3 Table 1 of Appendix I. A hydrant coverage figure shall be provided and demonstrate there is adequate fire protection for the proposal. Two or more public hydrants are anticipated to be required to handle fire flow.
5. Boundary conditions are required to confirm that the required fire flows can be achieved as well as availability of the domestic water pressure on the City street in front of the development. Please provide the following information to the City of Ottawa via email to request water distribution network boundary conditions for the subject site. Please note that once this information has been provided to the City of Ottawa it takes approximately 5-10 business days to receive boundary conditions.
  - Type of Development and Units
  - Site Address
  - A plan showing the proposed water service connection location.
  - Average Daily Demand (L/s)
  - Maximum Daily Demand (L/s)
  - Peak Hour Demand (L/s)
  - Fire Flow (L/min)

[Fire flow demand requirements shall be based on ISTB-2021-03]

Exposure separation distances shall be defined on a figure to support the FUS calculation and required for flow (RFF).

Hydrant capacity shall be assessed to demonstrate the RFF can be achieved. Please identify which hydrants are being considered to meet the RFF on a fire hydrant coverage plan as part of the boundary conditions request.

### **List of required reports and plans**

#### **PLANS:**

- Existing Conditions and Removals Plan
- Site Servicing Plan (if new services are proposed)
- Road Reinstatement Plan (if new services are proposed)
- Topographical survey

#### **REPORTS:**

- Record of Site Condition (RSC)

- Site Servicing Report
- Noise Control Study
- Phase I ESA (include discussions on RSC requirement)
- Phase II ESA (Depending on recommendations of Phase I ESA)

Feel free to contact Mohammed Fawzi/Amy Whelan, Infrastructure Project Managers, for follow-up questions.

### **Noise**

Comments:

1. A **Transportation Noise Assessment** is required as the subject development is located within 100 metres from the **right-of-way of**: an existing or proposed Arterial Road.
2. A **Stationary Noise Assessment** is required in order to assess the noise impact of the proposed sources of stationary noise (mechanical HVAC system/equipment) of the development onto the surrounding residential area to ensure the noise levels do not exceed allowable limits specified in the City Environmental Noise Control Guidelines.

Feel free to contact Mohammed Fawzi/Amy Whelan IPM for follow-up questions.

### **Transportation**

- **TIA Screening Form, Received December 11, 2023**
- **Design Concept, Dated November 28, 2023**

### **General Comments**

9. Streetscaping along Slater Street is targeted to start 2-3 years.

#### **LN06806**

Forecast ID	LN06806
Type of Work	Streetscaping
Project Type	Growth
STATUS	Planned
Construction Year	2-3 Years
Delivered By	IS
CLIENT	Transportation Planning, Neighbourhood Traffic Calming Branch (PIED)
Construction Contract	CP000317
Project Manager	Pulsifer, Andrew

10. Watermain Renewal along Slater Street is targeted to start 2-3 years.

#### **LN06903**

Forecast ID	LN06903
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Type of Work	Watermain Renewal
Project Type	Renewal
STATUS	Planned
Project Manager	Pulsifer, Andrew
CLIENT	Asset Management Service - Water Resources Planning & Engineering Branch (IWSD)
Construction Year	2-3 Years
Project Status Number	

11. The Screening Form has indicated that TIA Triggers have been met. However, the proposal is an exemption from TIA requirements as per Council approved office-to-residential conversions report.
12. Slater Street is designated as an Arterial Road within the City's Official Plan with a ROW protection limit . Maximum land requirement from property abutting existing ROW 1.25 metres between Bronson Avenue and Elgin Street . The Certified Ontario Land Surveyor is to confirm the ROW protected limits and any portion that may fall within the private property. As per discussions with ROW group, a ROW widening will be taken where there is space that is not occupied by part of the building.
13. Ensure that potential tenants who are not assigned a parking space are aware that on street parking is not a viable option for tenants.
14. All underground and above ground building footprints and permanent walls need to be shown on the plan to confirm that any permanent structure does not extend either above or below into the sight triangles and/or future road widening protection limits.
15. The Owner shall be required to enter into maintenance and liability agreement for all pavers, plant and landscaping material placed in the City right-of-way and the Owner shall assume all maintenance and replacement responsibilities in perpetuity.
16. For any planter boxes/trees on the City's road right-of-way, an Encroachment Agreement along with a Maintenance Agreement will be required.
17. Bicycle parking spaces are required as per Section 111 of the Ottawa Comprehensive Zoning By-law. Bicycle parking spaces should be in safe, secure places near main entrances and preferably protected from the weather.
18. Should the property Owner wish to use a portion of the City's Road allowance for construction staging, prior to obtaining a building permit, the property Owner must obtain an approved Traffic Management Plan from the Manager, Traffic Management, Transportation Services Department. The city has the right for any reason to deny use of the Road Allowance and to amend the approved Traffic Management Plan as required.



Feel free to contact Wally Dubyk, Transportation Project Manager, for follow-up questions.

### **Environment and Trees**

Comments:

19. Try to figure out how to add as much locally appropriate native vegetation (trees, shrubs and plants) as possible.
20. Review and incorporate design elements (especially for the glass) from the City's Bird Safe Design Guidelines into their proposal's design.

Feel free to contact Sami Rehman, Environmental Planner, or Mark Richardson, Forester, for follow-up questions.

### **Parkland**

Comments:

21. Cash-in-lieu of Parkland (CILP) will be required prior to the registration of a Site Plan Agreement.
22. On November 8, 2023, City Council directed staff to implement a 'Financial Incentive Pilot Program for Office-to-Residential Conversions'. Council's direction is as follows:
  - a. To reduce the CILP cap for residential uses to 8%, on the condition that a building permit for the project is issued within 6 months of a Site Plan Approval, with the possibility of a singular extension of 3 months.
  - b. The program will apply in Ward 14 only.
  - c. The program will run for 2 years, after which it must be reconsidered by Council.
23. PFP requests the following information to confirm and calculate the parkland dedication:
  - d. Lot area of the site to be re-developed, in square meters
  - e. Number of residential units proposed.
  - f. Total building Gross Floor Area (GFA)
  - g. GFA of the area to be converted from office-to-residential.
  - h. GFA of other uses within the building. Please indicate if the other uses are existing or proposed.

Feel free to contact Kimberley Baldwin, Parks Planner, for follow-up questions.

### **Conservation Authority**

N/A

### **Community issues**

Comments (provided by Jack Hanna, Centretown Community Association representative):

24. Proposal is considered an exciting idea. There are not lot of buildings downtown that have the footprint that aligns to a conversion.
25. 1:1 bike parking ratio is encouraged. It starts to be a minimum in downtown now. There is a tendency to go even higher than that.
26. Visitor parking (20 spaces) is appreciated to accommodate the needs of older tenants and ease of providing services to them.
27. Outdoor amenity space will be very bleak being surrounded by tall buildings.
28. Streetscape experience: anything that can be done to animate the street and addition of greenery is highly desired/recommended.
29. Ground floor accessibility from the street is desirable.

### **Other**

30. The High Performance Development Standard (HPDS) is a collection of voluntary and required standards that raise the performance of new building projects to achieve sustainable and resilient design. The HPDS was passed by Council on April 13, 2022.
  - a. At this time, the HPDS is not in effect and Council has referred the 2023 HPDS Update Report back to staff with direction to bring forward an updated report to Committee with recommendations for revised phasing timelines, resource requirements and associated amendments to the Site Plan Control By-law by no later than Q1 2024.
  - b. Please refer to the HPDS information attached and [ottawa.ca/HPDS](http://ottawa.ca/HPDS) for more information.

Should there be any questions, please do not hesitate to contact myself or the contact identified for the above areas / disciplines.

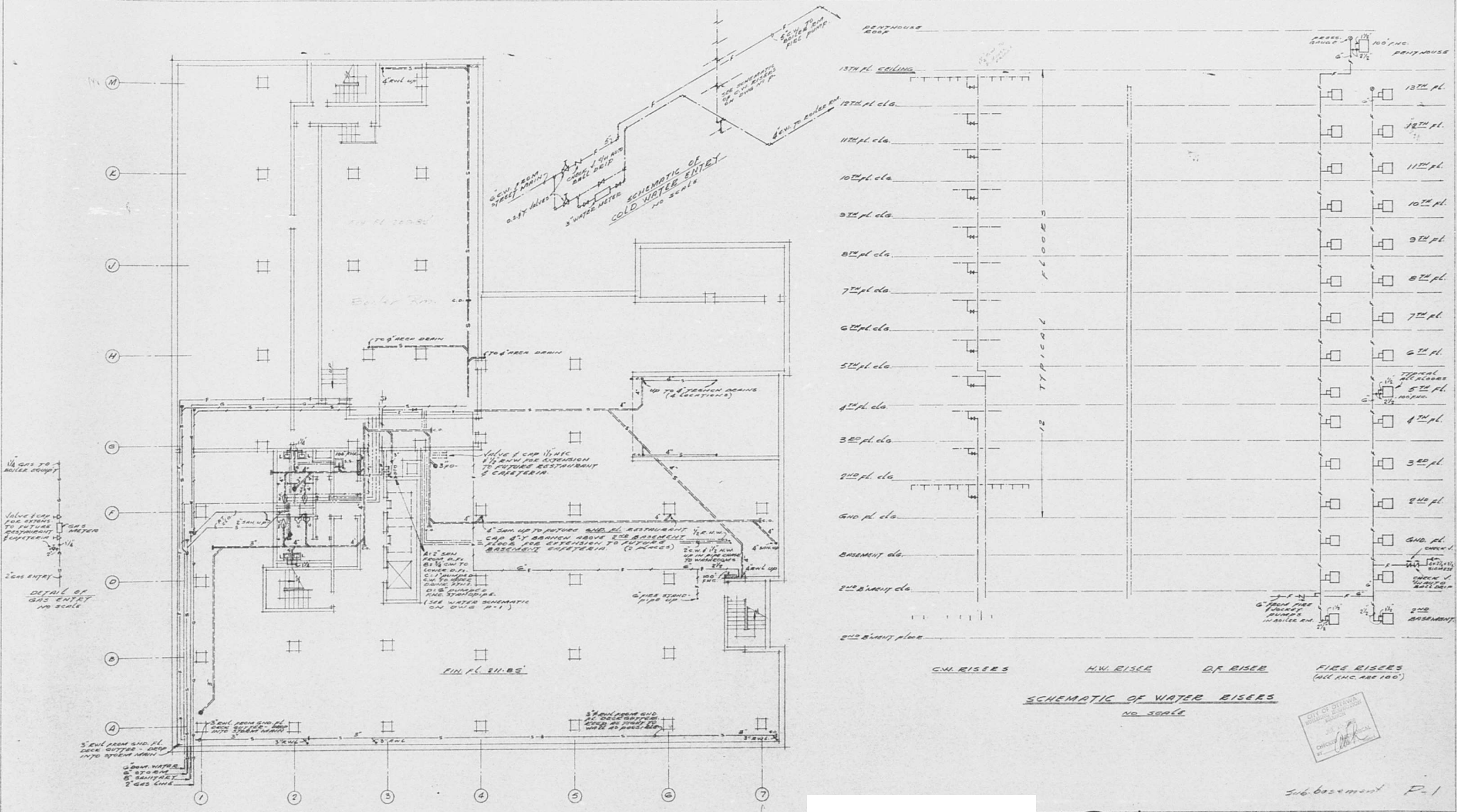
Yours Truly,



M Masha Wakula

c.c. Erin O'Connell  
Sami Rehman  
Christopher Moise  
Mohammed Fawzi  
Amy Whelan  
Wally Dubyk  
Kim Baldwin  
Mark Richardson





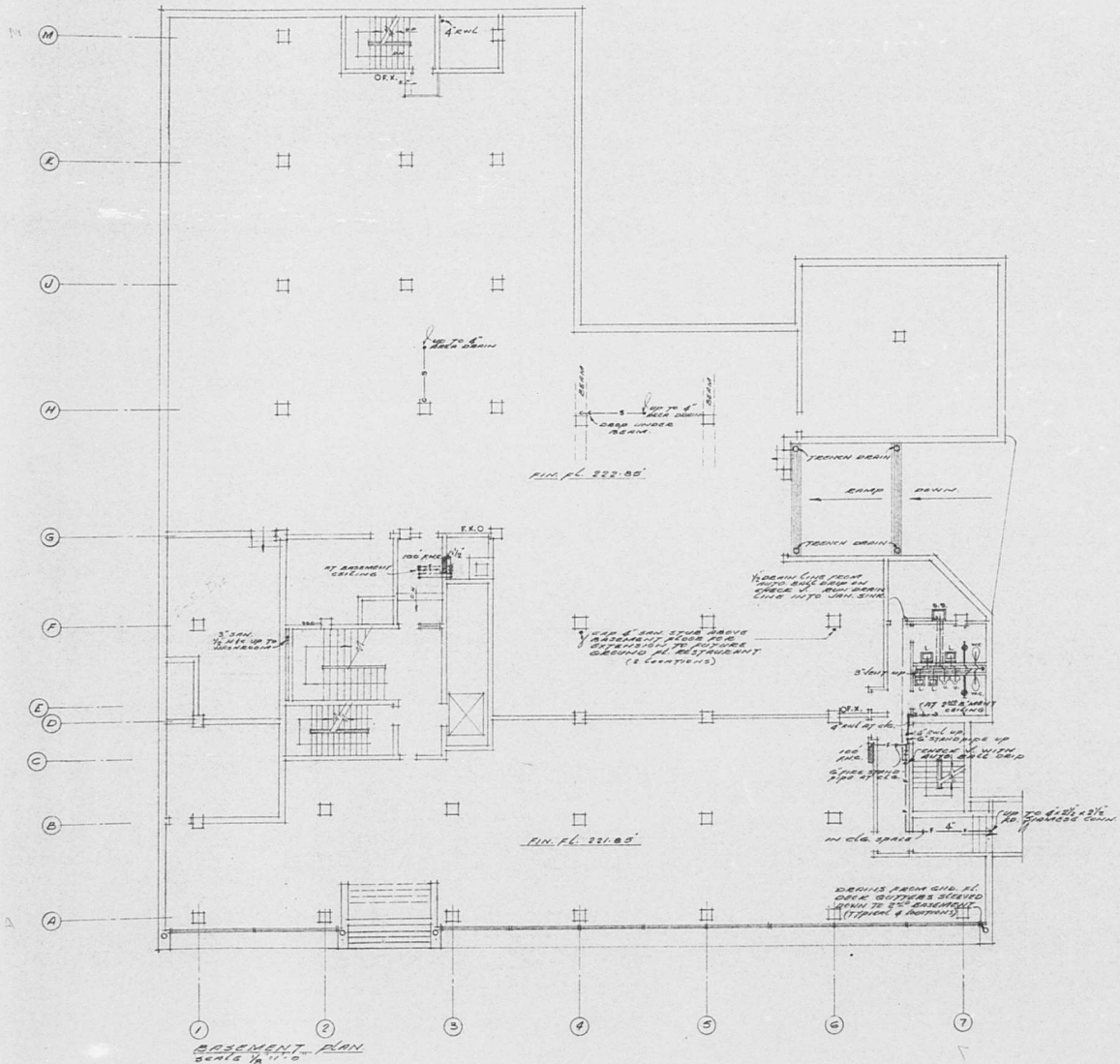
2ND BASEMENT  
Scale 1/8" = 1'-0"

SCHEMATIC OF WATER RISERS  
NO SCALE



Sub-basement P-1

	DOUGLASS & EDSS ARCHITECTS 675 CHURCH AVENUE W. OTTAWA ONTARIO	PLUMBING & DRAINAGE 222 BASEMENT PLAN DOM. WATER SCHEMATIC	106 ST 0-204 ONE NO.
	BEATS, DONALD L., ARCHT. BERT, MARCEL, ARCHT. CONSULTING ENGINEERS OTTAWA MONTREAL 1441 111	OFFICE BUILDING SLATER STREET OTTAWA ONTARIO	P-1 D



BASEMENT PLAN  
SCALE 1/8" = 1'-0"

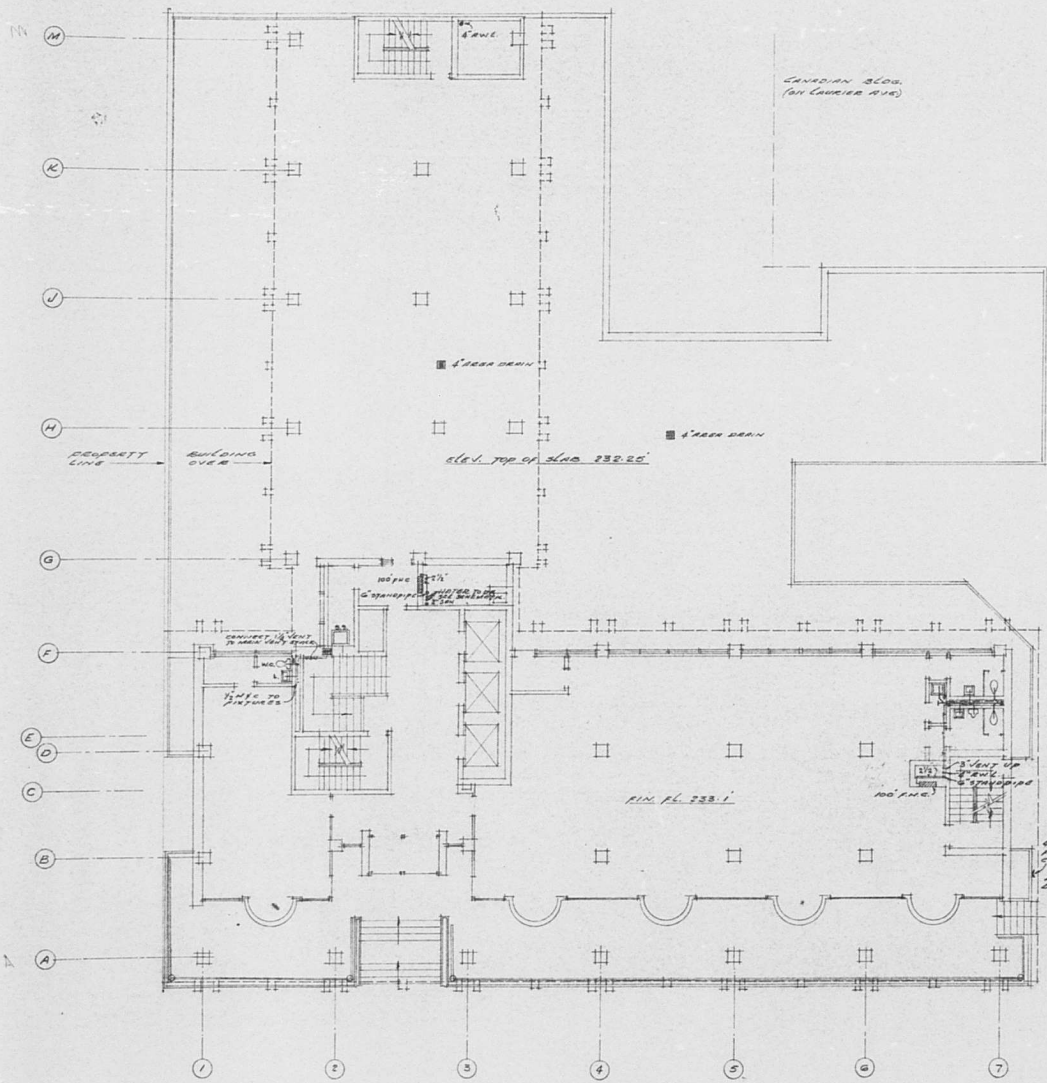


Basement P-2

REVISIONS

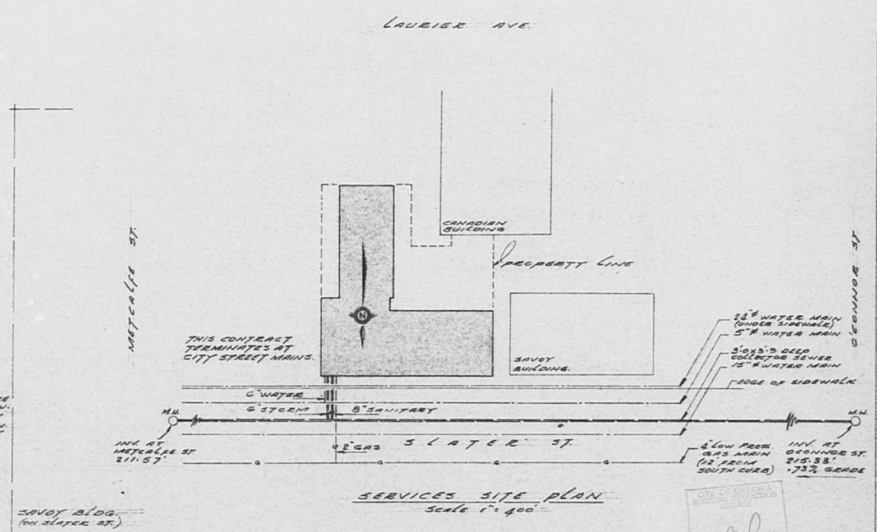


DOUGLASS I BOSS ARCHITECTS 575 LAURIER AVE W. OTTAWA ONTARIO	OWN. R.T.D. CAN.	OFFICE BUILDING 5 LATER STREET OTTAWA ONTARIO	DATE D.W.G. NO
ALAN SWELLEY PRISON CITY ENGINEERS OTTAWA	OWN. MAY 22 1966	PLUMBING DRAINAGE BASEMENT PLAN	P-2



GROUND FLOOR  
scale 1/8" = 1'-0"

100-100-100



SERVICES SITE PLAN  
Scale 1" = 400'

2nd Fl. P.3



DOUGLASS & BOSS  
ARCHITECTS  
575 LAURIER AVE. W.  
OTTAWA ONTARIO  
1958

DRUG. E.I.D.  
ENR.  
OFFICE BUILDING  
3 LAYERS STREET  
OTTAWA ONTARIO  
PLUMBING & DRAINAGE  
GROUND FLOOR PLAN  
SERVICES SITE PLAN  
P.3



**figuri**  
architects  
collective

**FOTENN**  
Planning + Design

**K T S**  
PROPERTIES



CONCEPT DESIGN

# 130 Slater Street Residential Conversion

Project #: 2332

2023-12-21

**PRE-CONSULTATION MEETING**





## PROJECT DESCRIPTION

The building at 130 Slater Street was designed by architects Douglas & Ross in 1966 and is known as "The National Building". It is currently a 13-storey multi-tenant commercial/office building with two basement levels, one of which is partly an underground parking area. There is also a mechanical penthouse on the roof. The building is "T" shaped with its east-west axis fronting onto Slater Street and its north-south axis located on the back side.

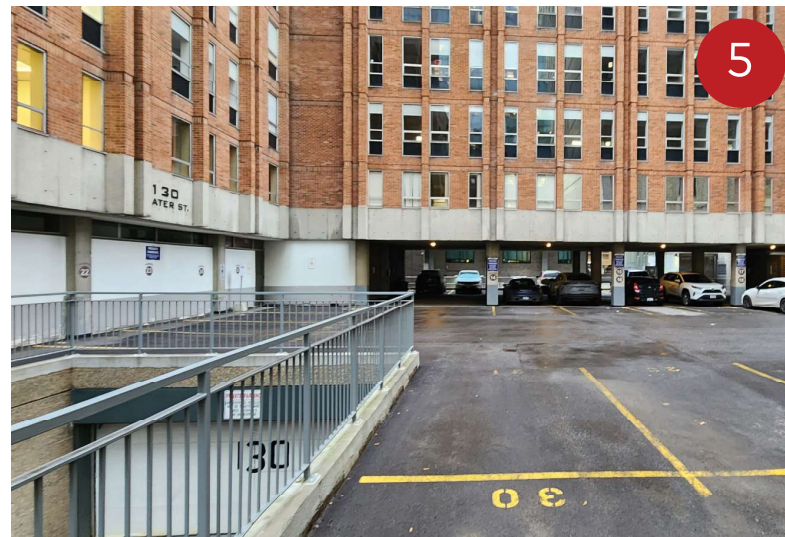
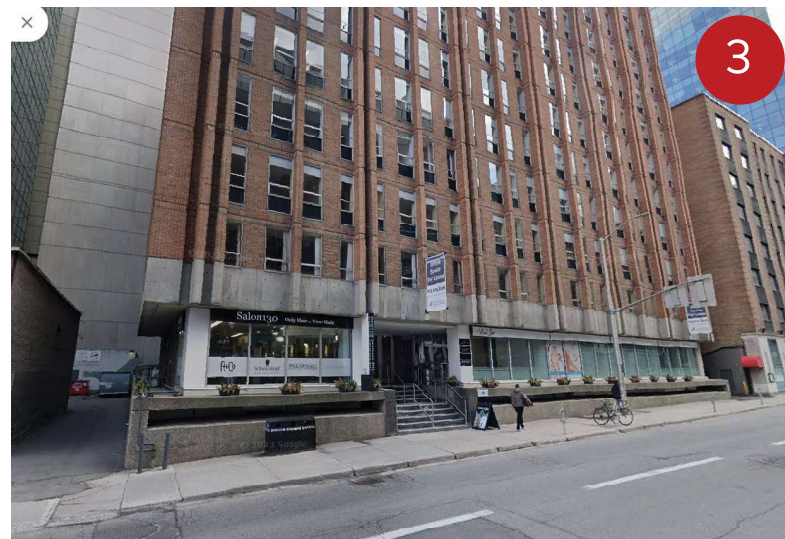
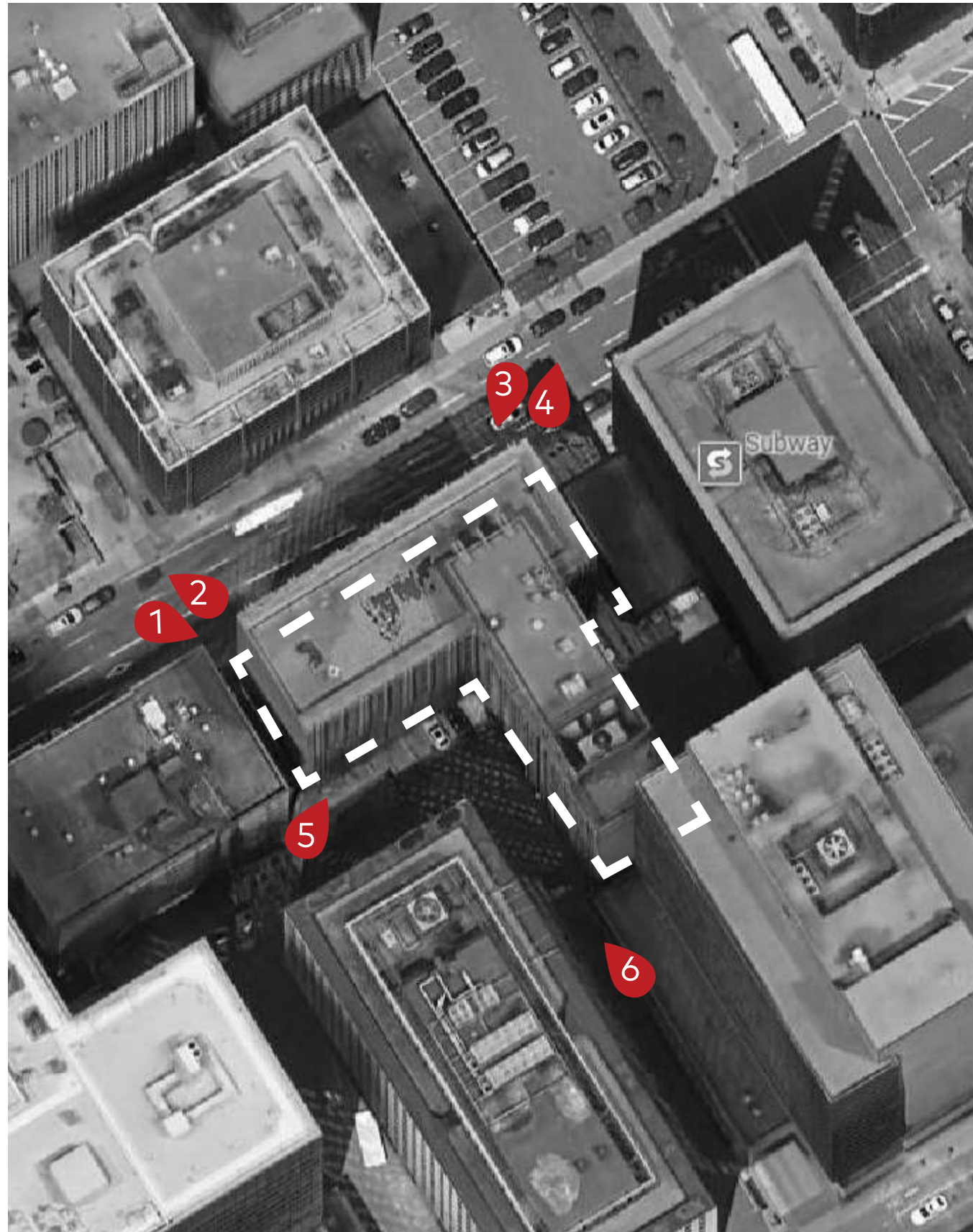
The scope of work involves the conversion of the existing building into a new mixed-use residential building. It is anticipated that the ground floor level will be designed for new uses to support the residential programming, and commercial tenant space. The two basement levels currently housing parking and mechanical spaces will be partially maintained, and the existing commercial tenant space will be converted into amenity space. Floors 2-13 will be residential apartment units including open-concept studios, 1-bedroom, and 2-bedroom units.

## DESIGN GOALS:

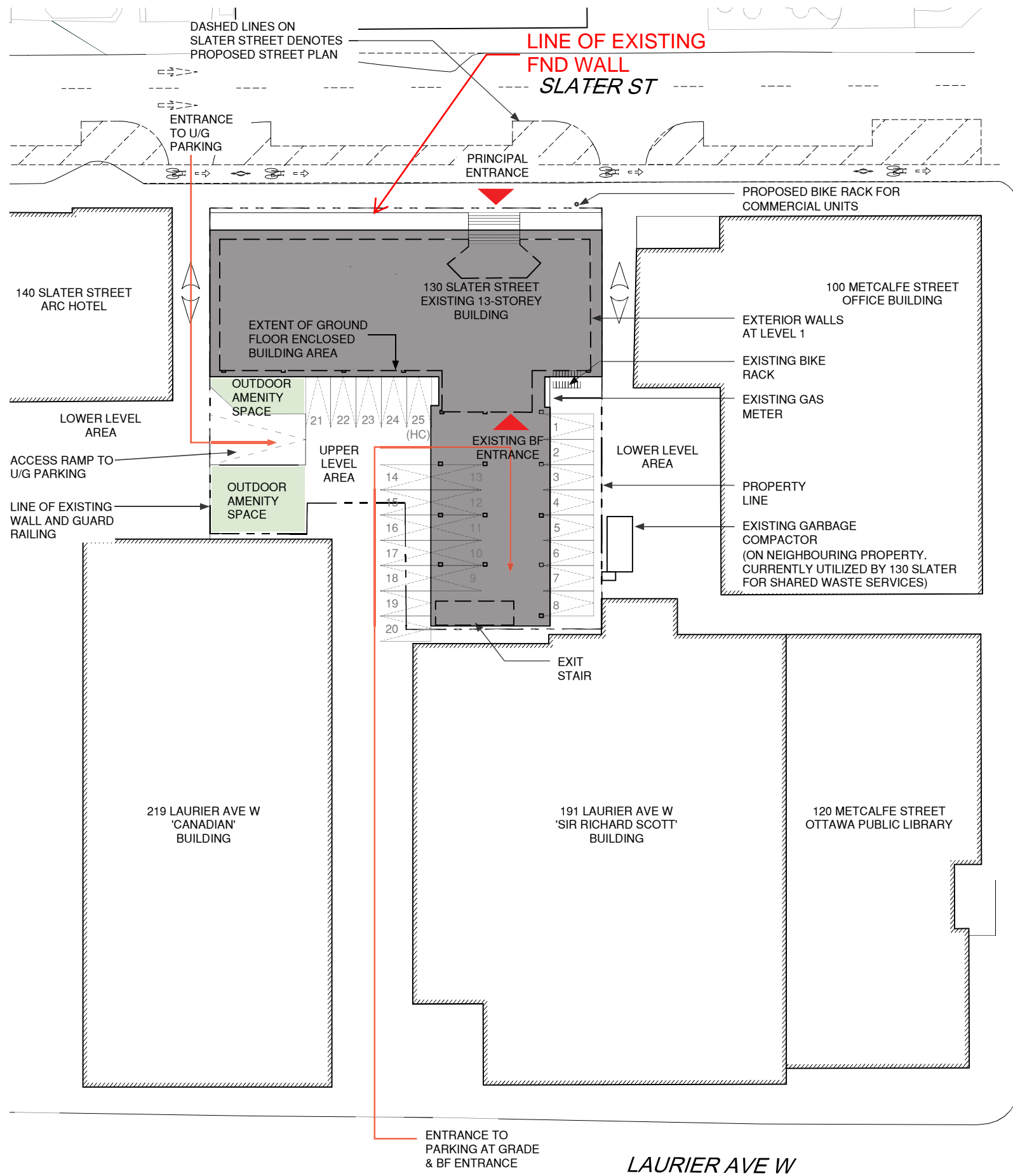
- 1 Amenity spaces that attracts tenants
- 2 200+ dwelling units
- 3 Energy efficiency target
- 4 Re-design of facade at street level





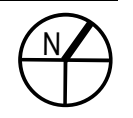


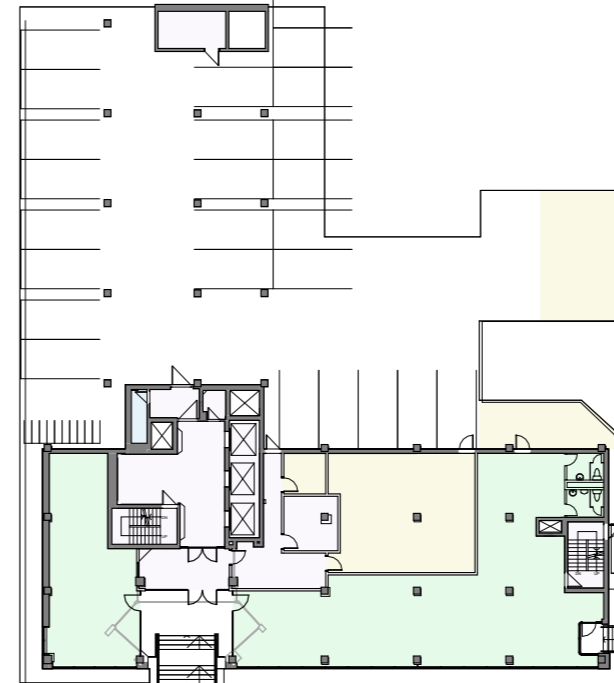
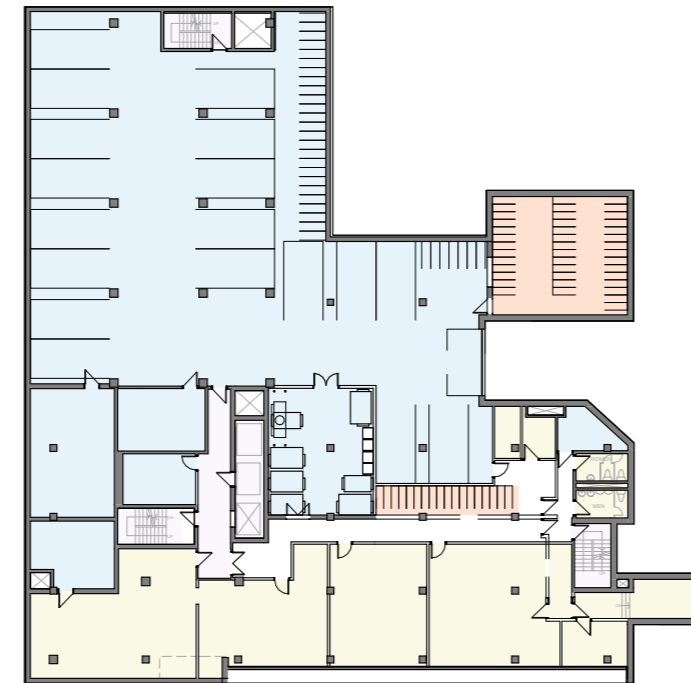
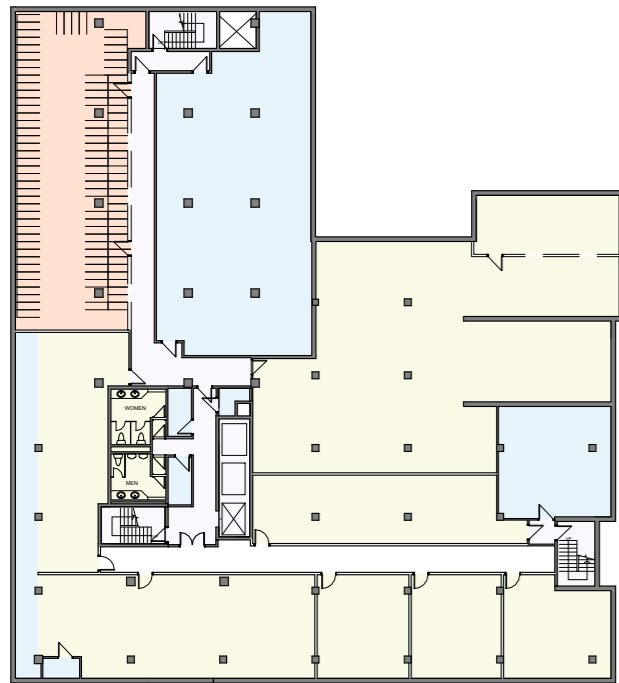




<b>DESCRIPTION:</b>		
Project Location: 130 Slater Street City / Borough: Ottawa / Central Year of Construction: 1966 Lot number: 49 and Part of 48 Registered Plan No.: 3922		
<b>ZONING:</b>		
Current Zoning: Mixed-Use Downtown (MD S37) Usage: Apartment Dwelling, High Rise Personal Service Business (conditional)		
<b>SITE:</b>	<b>ZONING REQUIREMENTS</b>	<b>PROPOSED</b>
	Lot Area: No minimum	+/- 1560m <sup>2</sup> (existing unchanged)
	Front Setback (min): No minimum	+/- 0.95m (existing unchanged)
	Side Yard Setback (min): No minimum	0m (existing unchanged)
	Rear Setback (min): No minimum	0m (existing unchanged)
<b>PARKING:</b>		
	Parking spaces Residential (min/max): 0 / 1.5 per unit	23 (18 parking garage, 5 above)
	Visitor Parking spaces (min): 0.1 / unit	20 (all above grade)
	Bicycle Parking Residential (min): 0.5 per unit = 102	204
	Bicycle Parking Retail (min): 1 / 250m <sup>2</sup>	1
<b>BUILDING:</b>		
	Height (min/max): 150m above sea level	+/- 46m to t/o PH (existing)
	Storey (min/max): n/a	13 (existing)
	Building Footprint (min/max): n/a	+/- 1000m <sup>2</sup> (existing)
<b>UNITS &amp; AMENITY SPACE</b>		
	Dwelling Unit Count: n/a	204
	Amenity Space (min): 6m <sup>2</sup> x 204 Units = 1224m <sup>2</sup>	+/- 1230m <sup>2</sup>

METCALFE ST





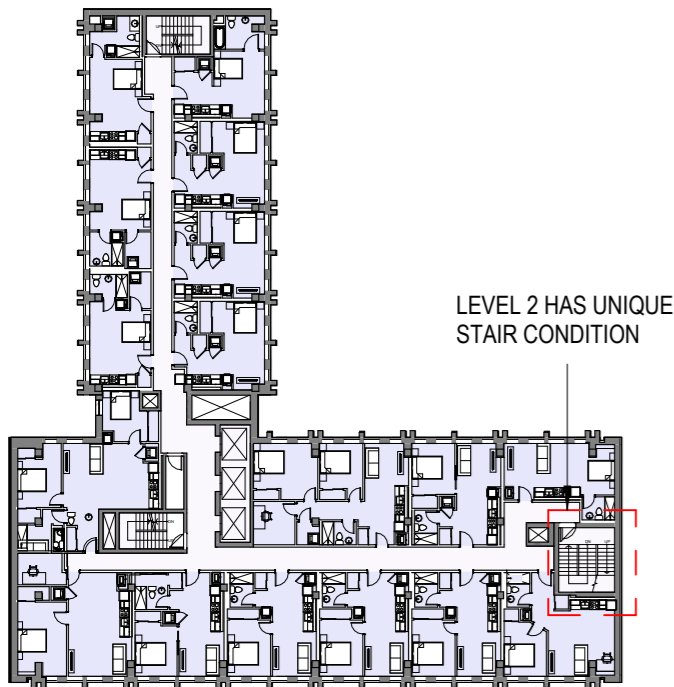
1 SUB-BASEMENT PLAN  
005 ÉCHELLE / SCALE: 1:500

2 BASEMENT PLAN  
005 ÉCHELLE / SCALE: 1:500

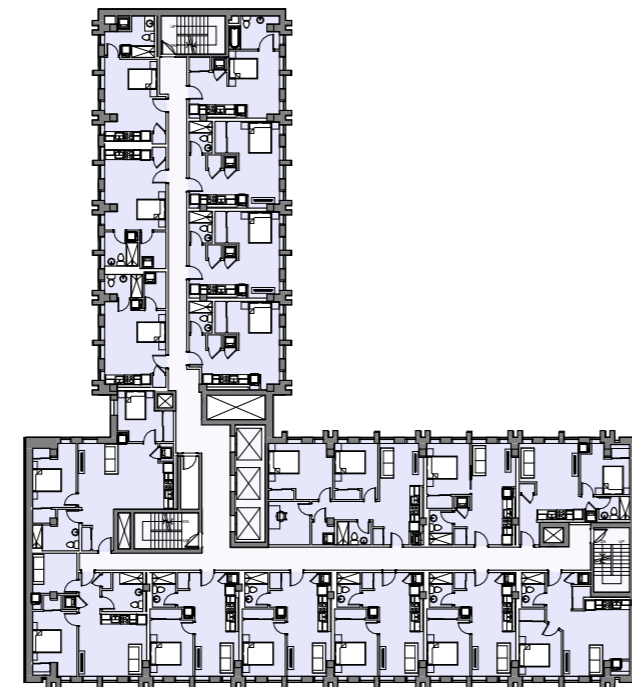
3 GROUND FLOOR  
005 ÉCHELLE / SCALE: 1:500

AREA TYPE	AREA	Area (ft2)
AMENITY	1231.0 m <sup>2</sup>	13250
BIKE STORAGE	251.0 m <sup>2</sup>	2702
CIRCULATION	1521.9 m <sup>2</sup>	16382
LEASABLE - COMMERCIAL	258.4 m <sup>2</sup>	2781
LEASABLE - SUITES (204 UNITS)	8194.7 m <sup>2</sup>	88207
SERVICE	1275.8 m <sup>2</sup>	13733
271	12732.9 m <sup>2</sup>	137055

PARKING SCHEDULE	
Type	
2.6m x 5.2m	
43	
Bicycle Space 500x1500	
172	
Bicycle Space 600x1800	
32	

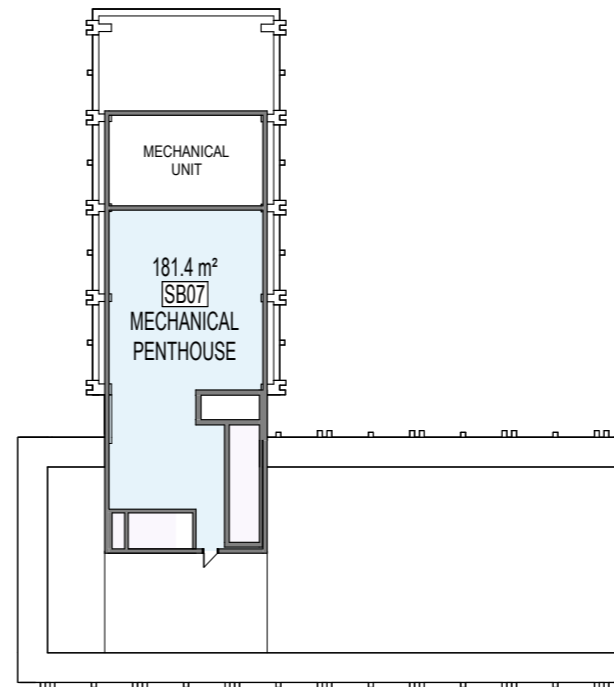


LEVEL 2 HAS UNIQUE STAIR CONDITION



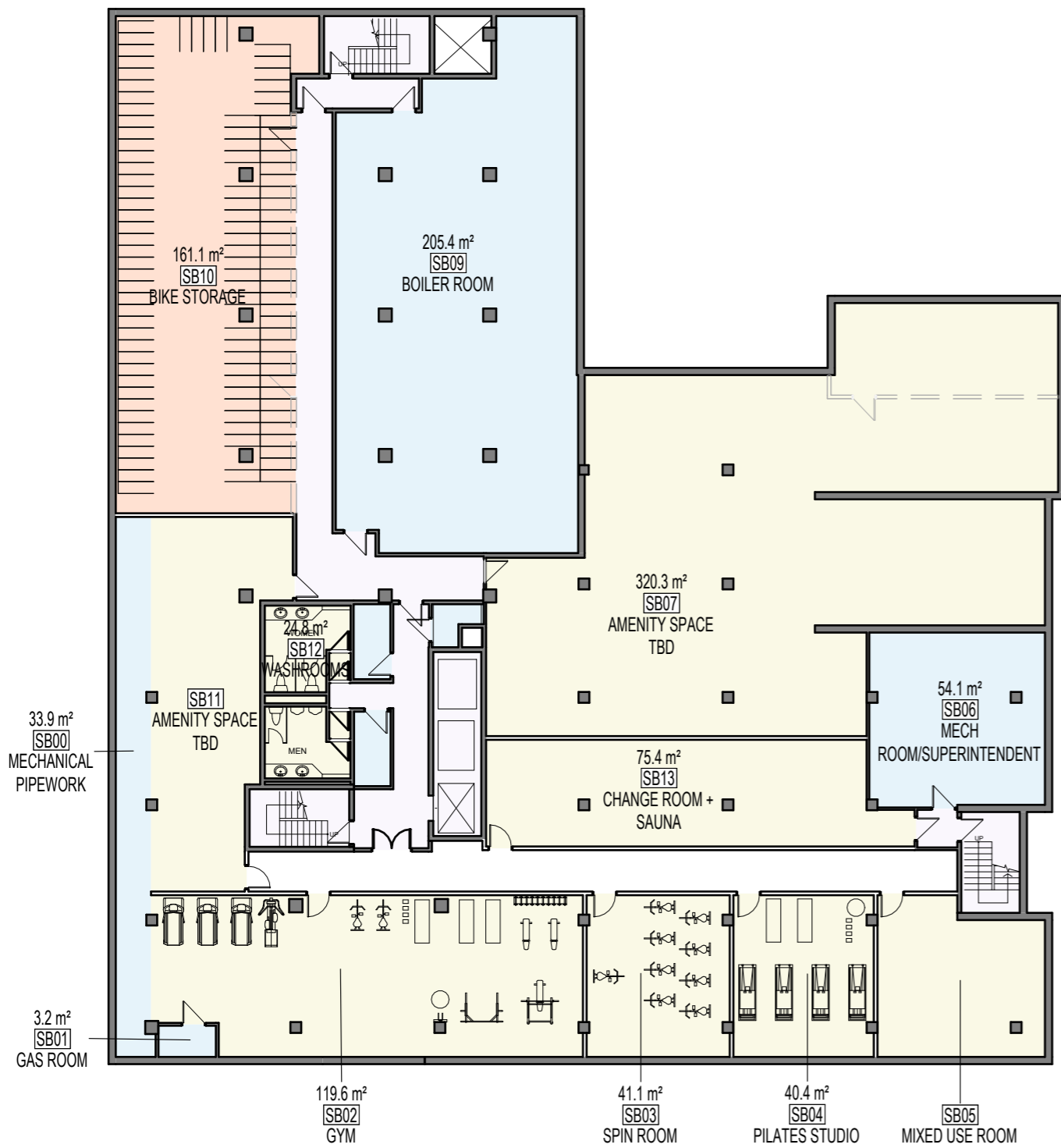
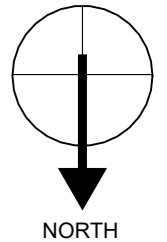
4 LEVEL 2 PLAN  
005 ÉCHELLE / SCALE: 1:500

5 LEVELS 3-13 (TYPICAL FLOOR PLAN)  
005 ÉCHELLE / SCALE: 1:500



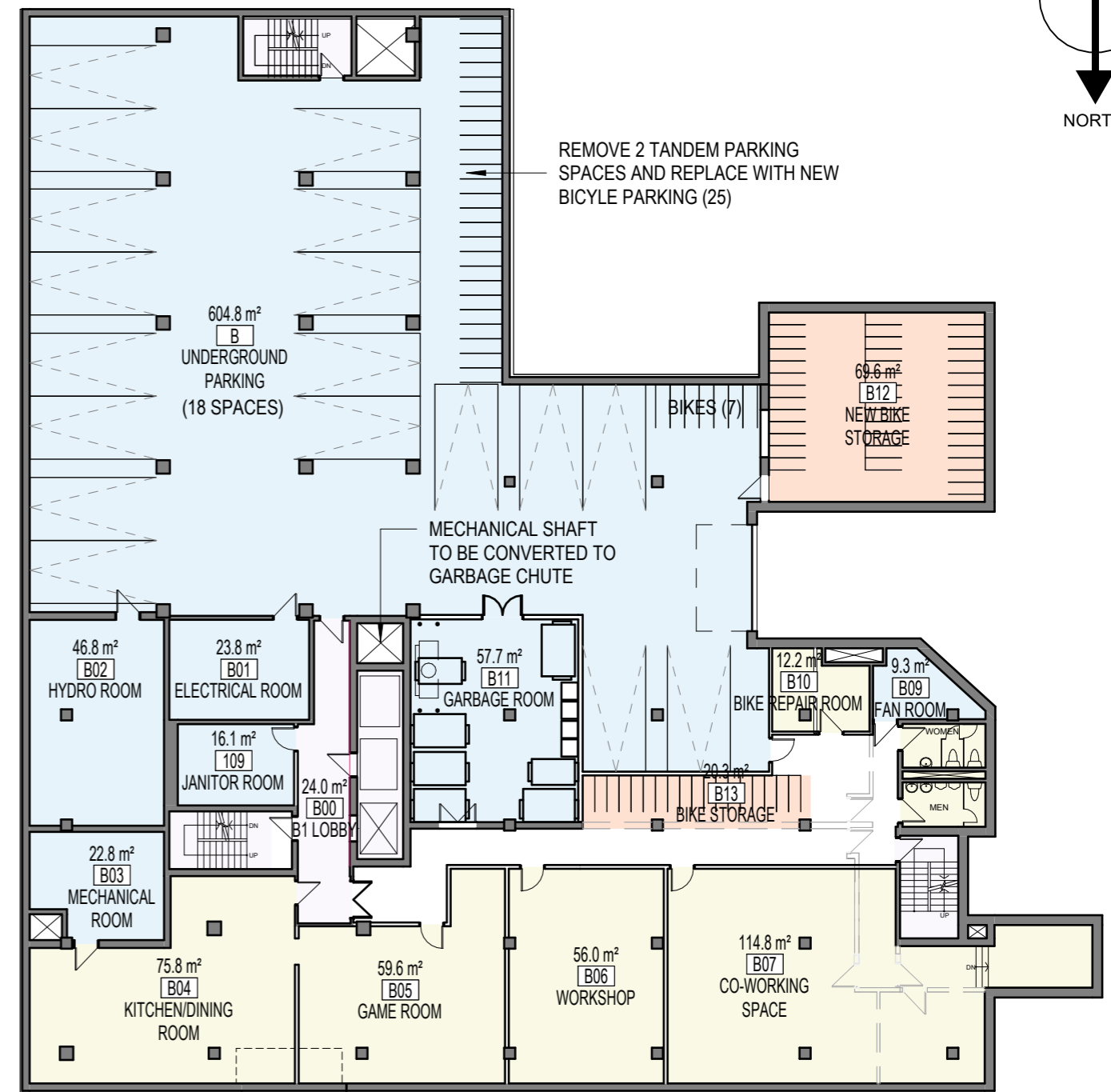
6 ROOF/PENTHOUSE PLAN  
005 ÉCHELLE / SCALE: 1:500





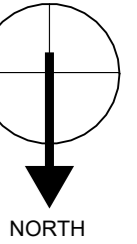
**SUB-BASEMENT**

1 : 250



**BASEMENT**

1 : 250



### AMENITY ROOM SCHEDULE

Name	Programmed Area (ft <sup>2</sup> )	Area (ft <sup>2</sup> )	Programmed Area	Proposed Area
<b>SUB-BASEMENT</b>				
AMENITY SPACE TBD		3447		320.3 m <sup>2</sup>
WASHROOMS	267	267	24.8 m <sup>2</sup>	24.8 m <sup>2</sup>
CHANGE ROOM + SAUNA	400	812	37.2 m <sup>2</sup>	75.4 m <sup>2</sup>
GYM	800	1287	74.3 m <sup>2</sup>	119.6 m <sup>2</sup>
SPIN ROOM	300	442	27.9 m <sup>2</sup>	41.1 m <sup>2</sup>
PILATES STUDIO	300	435	27.9 m <sup>2</sup>	40.4 m <sup>2</sup>
MIXED USE ROOM		478		44.4 m <sup>2</sup>
AMENITY SPACE TBD		803		74.6 m <sup>2</sup>
<b>BASEMENT</b>				
BIKE REPAIR ROOM	80	131	7.4 m <sup>2</sup>	12.2 m <sup>2</sup>
WASHROOMS	156	156	14.5 m <sup>2</sup>	14.5 m <sup>2</sup>
KITCHEN/DINING ROOM	800	816	74.3 m <sup>2</sup>	75.8 m <sup>2</sup>
CO-WORKING SPACE	800	1235	74.3 m <sup>2</sup>	114.8 m <sup>2</sup>
WORKSHOP	600	603	55.7 m <sup>2</sup>	56.0 m <sup>2</sup>
GAME ROOM	600	641	55.7 m <sup>2</sup>	59.6 m <sup>2</sup>
<b>Level 1</b>				
DOG WASH	80	80	7.4 m <sup>2</sup>	7.4 m <sup>2</sup>
LOUNGE	600	786	55.7 m <sup>2</sup>	73.1 m <sup>2</sup>
OUTDOOR AMENITY SPACE		291		27.1 m <sup>2</sup>
OUTDOOR AMENITY SPACE		538		50.0 m <sup>2</sup>
	5782	13250	537.2 m <sup>2</sup>	1231.0 m <sup>2</sup>



TYPICAL UNIT LAYOUT FLOORS 2-13 (12 TOTAL)

NUMBER	TYPE	AREA	Area (ft2)
301	1BD	38.4 m <sup>2</sup>	414
302	1BD	44.3 m <sup>2</sup>	477
303	1BD	37.9 m <sup>2</sup>	408
304	1BD	38.9 m <sup>2</sup>	419
305	2BD + DEN	66.8 m <sup>2</sup>	719
306	1BD	38.9 m <sup>2</sup>	419
308	1BD	38.9 m <sup>2</sup>	419
309	STUDIO	33.4 m <sup>2</sup>	359
310	1BD	38.9 m <sup>2</sup>	419
311	1BD+DEN-BF	53.5 m <sup>2</sup>	576
312	2BD - BF	64.6 m <sup>2</sup>	695
315	STUDIO	32.0 m <sup>2</sup>	344
317	STUDIO	33.4 m <sup>2</sup>	359
318	STUDIO	28.6 m <sup>2</sup>	308
319	STUDIO BF	31.1 m <sup>2</sup>	335
320	STUDIO	31.1 m <sup>2</sup>	335
322	STUDIO	29.5 m <sup>2</sup>	318
17		680.3 m <sup>2</sup>	7323

**UNIT STATISTICS**

(12 FLOORS x 17 UNITS/FLOOR) = 204 UNITS  
 GROSS RENTABLE SPACE = +/- 8,302 m<sup>2</sup> (89,366 ft<sup>2</sup>)

**UNIT TYPE MIX**

STUDIO	72	35 %
STUDIO BF	12	6 %
1 BEDROOM	84	41 %
1 BEDROOM BF	0	0 %
1 BD+DEN BF	12	6 %
2 BEDROOM BF	12	6 %
LARGE UNITS	12	6 %

**MINIMUM AREA REQUIREMENTS**

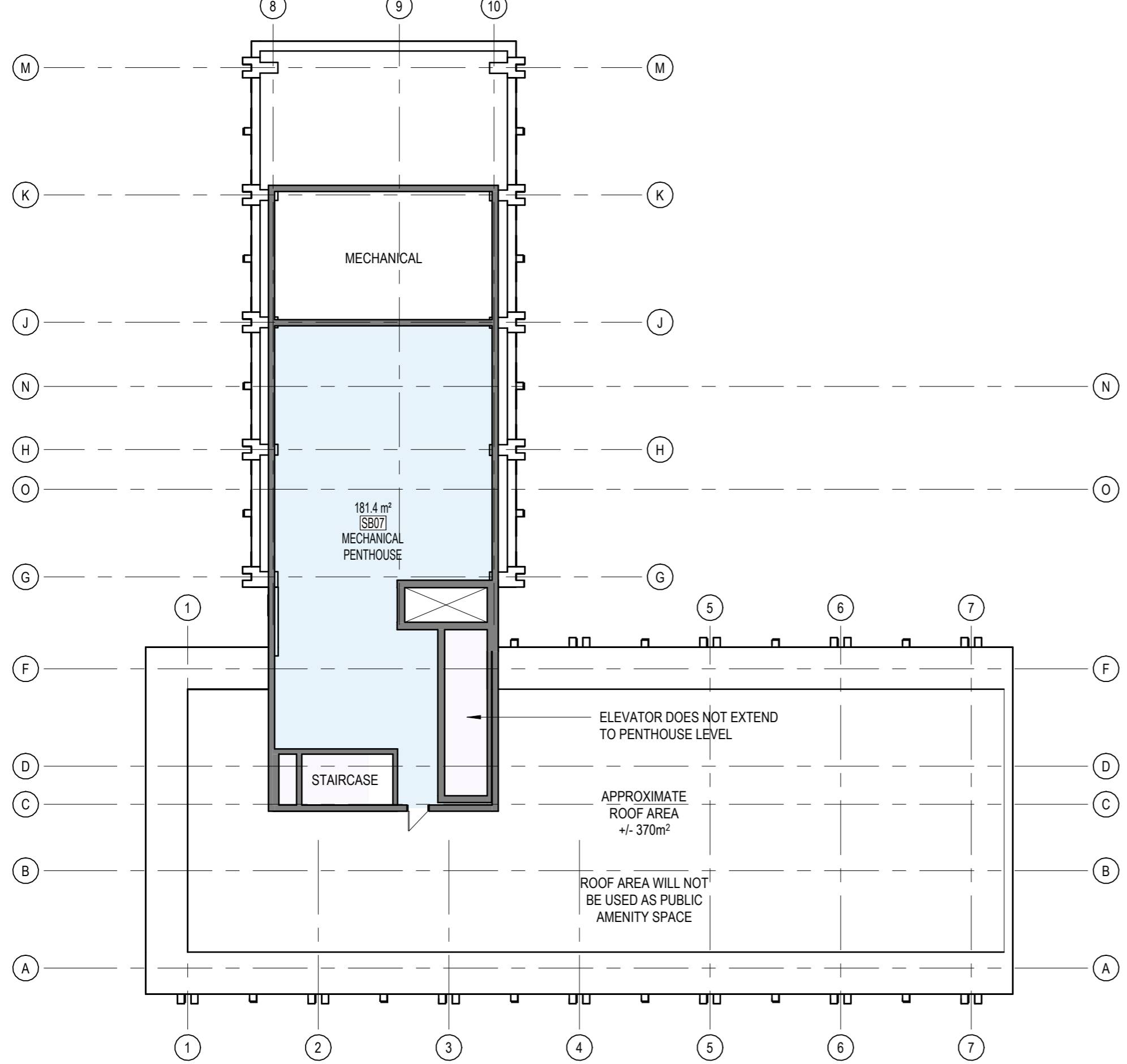
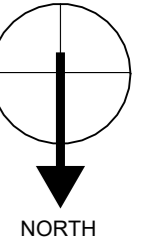
- KITCHEN - 3.7m<sup>2</sup>
- LIVING ROOM - 11.0m<sup>2</sup>
- DINING - 3.25m<sup>2</sup>
- BEDROOM- 8.8m<sup>2</sup>
- COMBINED (STUDIO)- 13.5m<sup>2</sup>

**BUILDING CODE NOTES:**

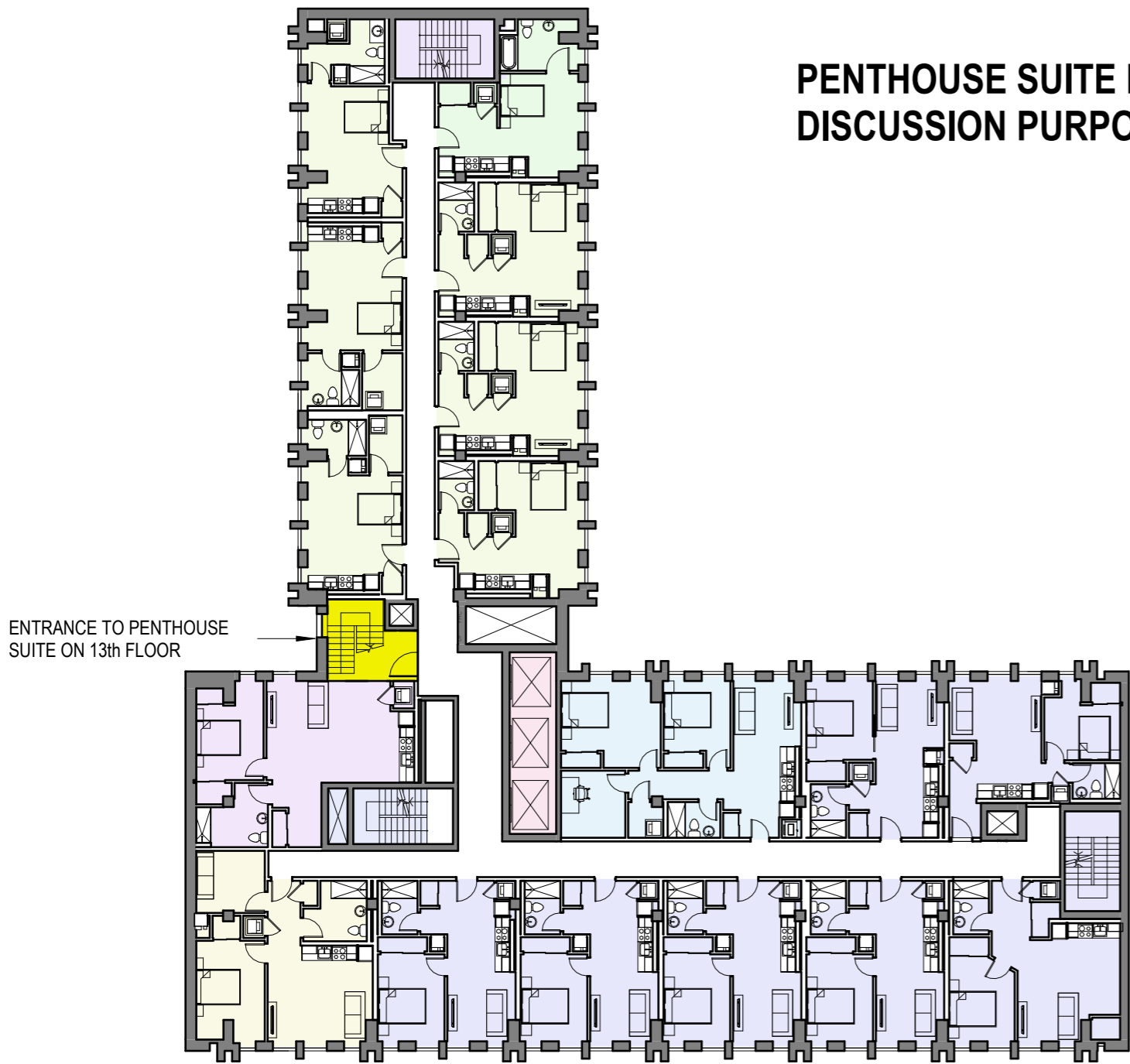
1. OBC REQUIRES MIN. 15% OF UNITS TO BE BARRIER-FREE.
2. BARRIER-FREE UNITS MUST BE EVENLY DISTRIBUTED THROUGHOUT THE BUILDING AND REPRESENT THE UNIT TYPES AVAILABLE.

**CITY OF OTTAWA ZONING & BYLAW NOTES:**

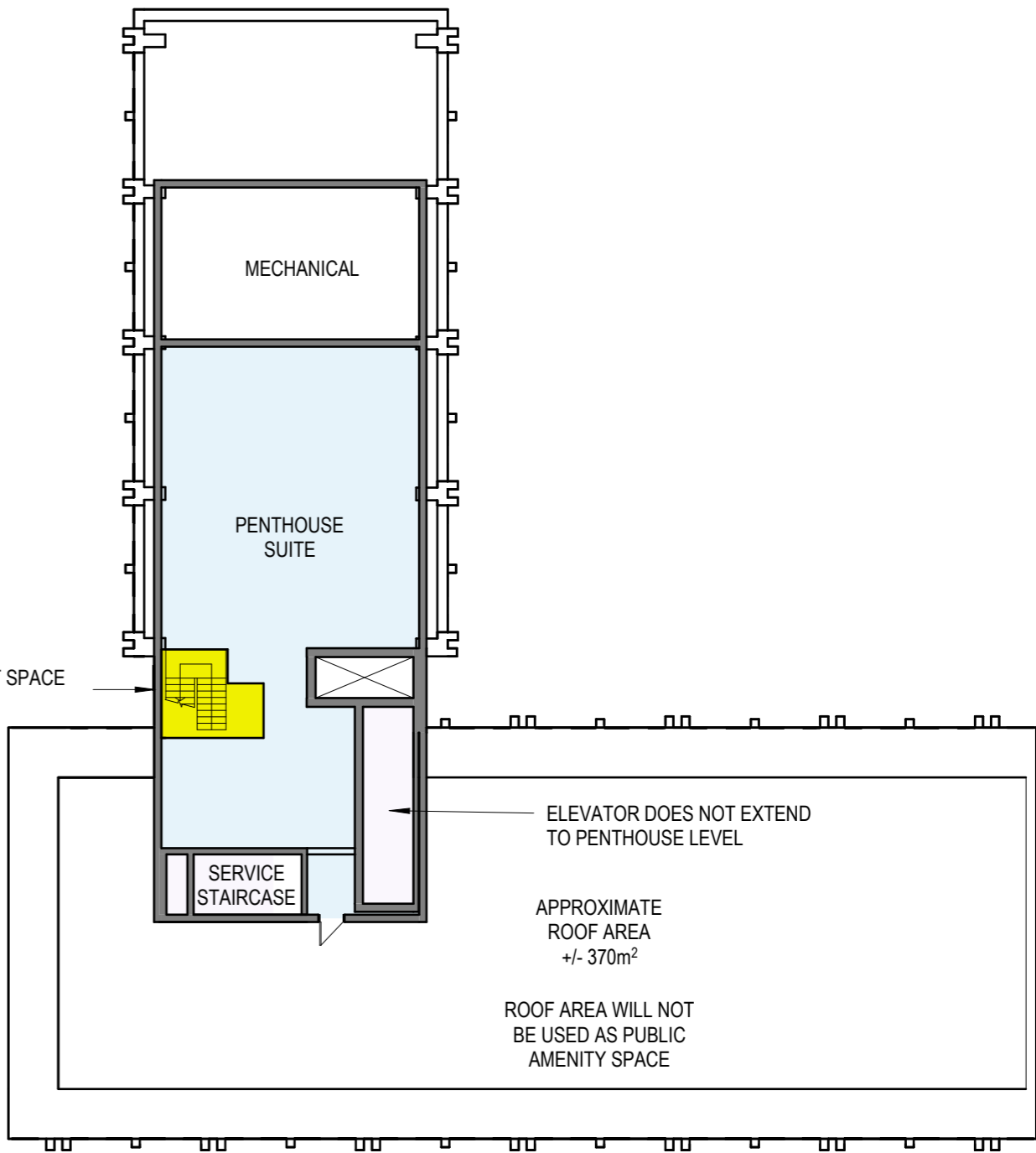
1. THE CITY OF OTTAWA OFFICIAL PLAN REQUIRES MINIMUM 5% OF UNITS TO BE "LARGE UNITS" CONSISTING OF 3-BEDROOMS, OR EQUIVALENT SIZE (i.e. 2-BD + DEN)
2. TOTAL AMENITY AREA REQUIRED - 6m<sup>2</sup> PER UNIT = 6x204 = 1224m<sup>2</sup>  
 MINIMUM 50% OF REQUIRED AMENITY AREA TO BE COMMUNAL, AND AGGREGATED INTO AREAS UP TO 54m<sup>2</sup>. WHERE MORE THAN ONE AGGREGATED AREA IS PROVIDED, AT LEAST ONE MUST BE MINIMUM 54m<sup>2</sup>



# PENTHOUSE SUITE FOR DISCUSSION PURPOSES ONLY

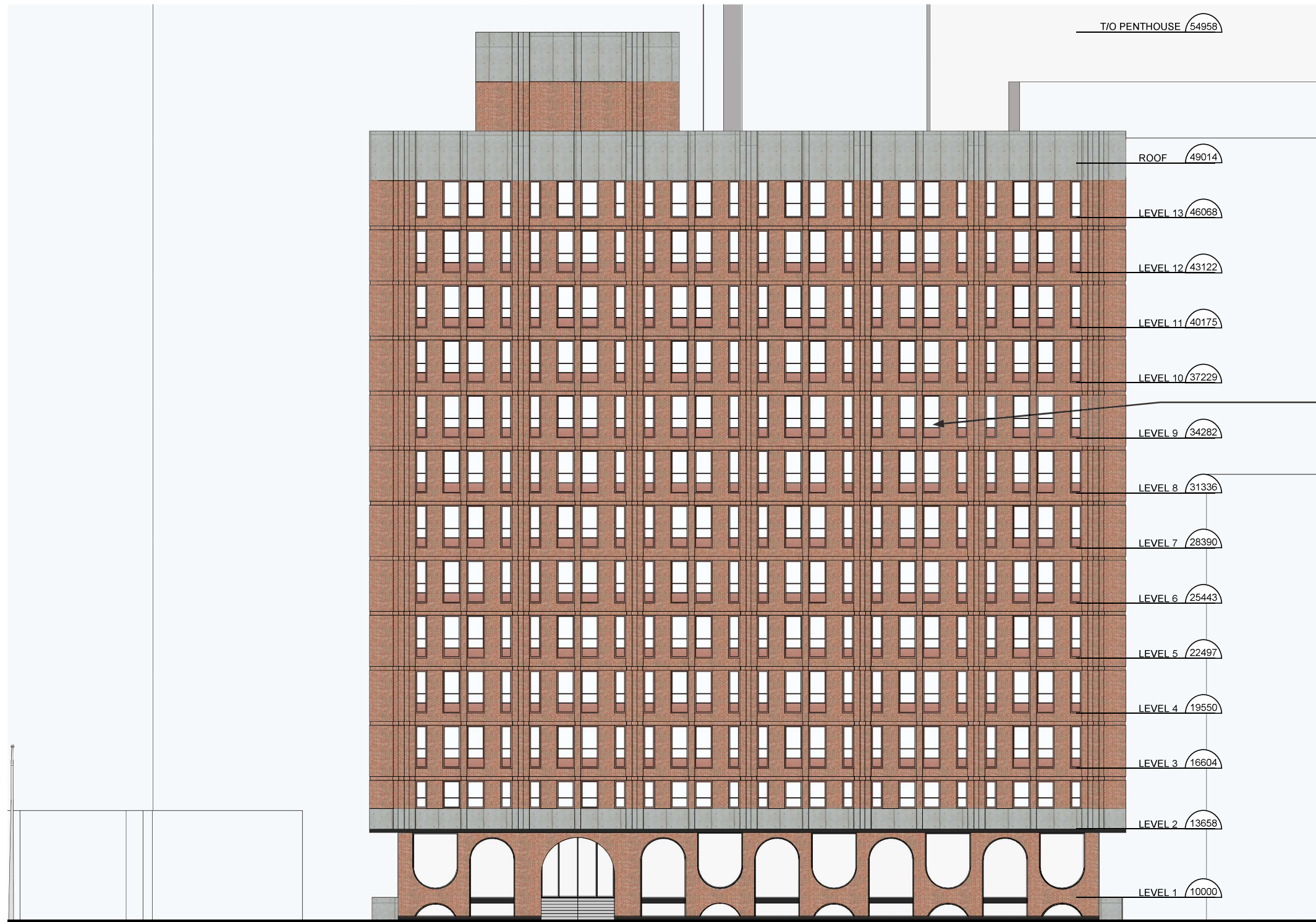


LEVEL 13 CONCEPT DESIGN  
1 : 250



PENTHOUSE CONCEPT DESIGN  
1 : 250





**NOTES**

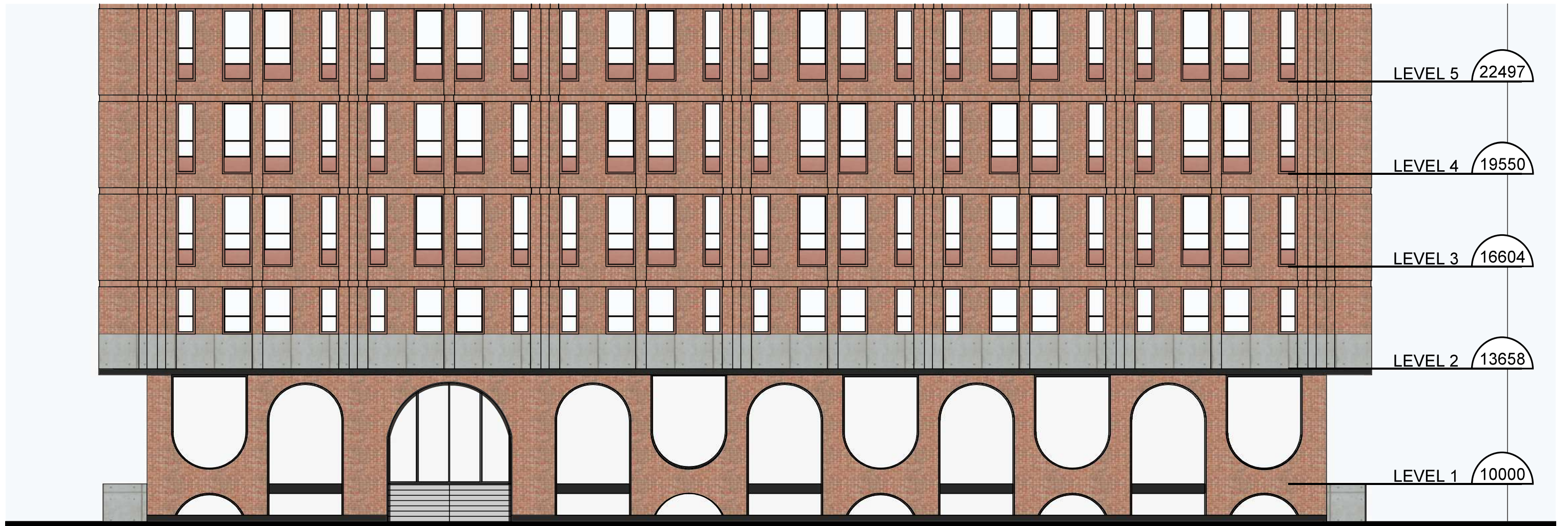
1. ALL EXISTING WINDOWS TO BE REPLACED.
2. ALLOW FOR INTAKE AND EXHAUST VENTS FOR SUITE HEAT PUMPS.
3. OPERABLE WINDOWS TO HAVE A MECHANISM CAPABLE OF CONTROLLING THE OPENABLE PART OF THE WINDOW SO AS TO LIMIT ANY CLEAR UNOBSTRUCTED OPENING TO A SIZE THAT WILL PREVENT THE PASSAGE OF A SPHERE HAVING A DIAMETER MORE THAN 100mm.
4. EXISTING BRICK EXTERIOR TO REMAIN.

NEW WINDOW FRAME EXTENSION FEATURE.



A North Elevation  
A01 Scale: 1:250





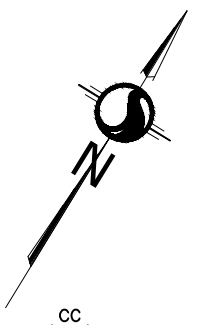




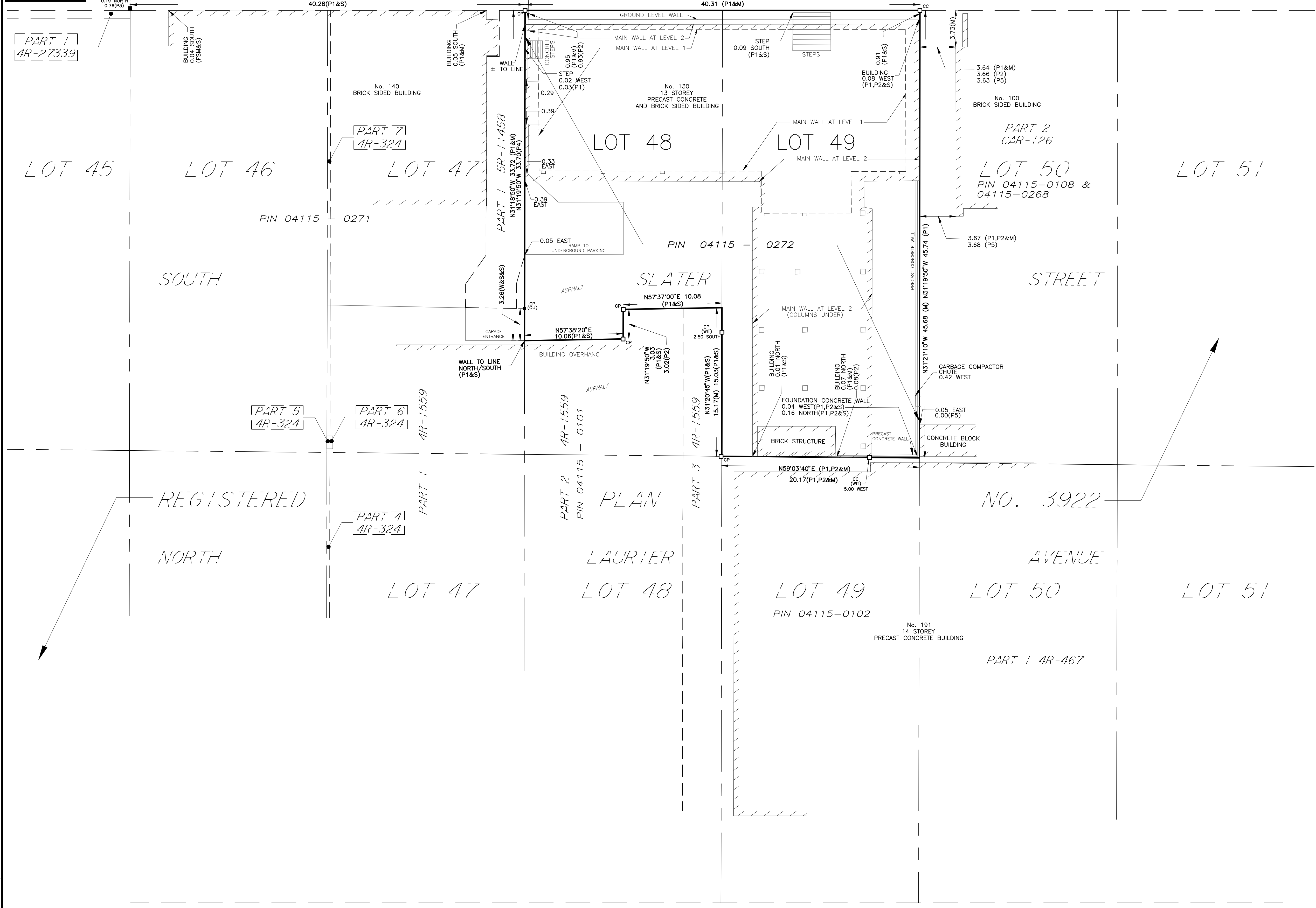


ASSOCIATION OF ONTARIO  
LAND SURVEYORS  
PLAN SUBMISSION FORM  
V-50477

THIS PLAN IS NOT VALID  
UNLESS IT IS AN EMBOSSED  
ORIGINAL COPY  
ISSUED BY THE SURVEYOR



SLATER STREET  
(DEDICATED BY REGISTERED PLAN NO. 3922)  
PIN 04115-0304



**SURVEYOR'S REAL PROPERTY REPORT**  
PART 1 - PLAN OF SURVEY  
**LOT 49 AND PART OF LOT 48**  
**SOUTH SLATER STREET**  
**REGISTERED PLAN No. 3922**

CITY OF OTTAWA  
Scale 1:200  
5 0 5 10 METRES

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

**GRID SCALE CONVERSION**  
DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 1.0000.

**BEARING NOTE**  
BEARINGS ARE ASTRONOMIC AND ARE REFERRED TO THE SOUTHERN LIMIT OF SLATER STREET HAVING A BEARING OF N 58° 34' 30" E AS SHOWN ON PLAN BY WEBSTER & SIMMONDS SURVEYING LTD. DATED APRIL 21, 1999.

**NOTE**  
THIS PLAN OF SURVEY IS TO BE READ IN CONJUNCTION WITH THE REPORT SUMMARY NOTED AS PART 2 HEREON.  
THIS REPORT CAN ONLY BE UPDATED BY THIS OFFICE. NO ADDITIONAL PRINTS OF THIS ORIGINAL REPORT WILL BE ISSUED SUBSEQUENT TO THE DATE OF CERTIFICATION.  
ALL TIES ARE MINIMUM UNLESS OTHERWISE NOTED.  
ALL TIES TO CURVED BOUNDARY ARE RADIAL TO ARC.  
RISK OF UNDERGROUND SERVICES, MONUMENTATION PLANTED ACCORDINGLY.

**PART 2**  
This Report was prepared for **KATASA GROUP** and the undersigned accepts no responsibility for the use by other parties.  
1. REGISTERED RIGHTS-OF-WAY/EASEMENTS  
No rights-of-way or easements were found to be registered against the subject property.  
2. PROPERTY IMPROVEMENTS  
This is a foundation survey only.  
3. COMPLIANCE WITH MUNICIPAL ZONING BYLAWS  
Compliance is not certified by this report.  
4. ADDITIONAL REMARKS  
None.

**LEGEND**

SYMBOL	DENOTES	FOUND MONUMENTS
■	SET MONUMENTS	
□	IRON BAR	
○	ROUND IRON BAR	
⊖	STANDARD IRON BAR	
⊕	SHORT STANDARD IRON BAR	
⊗	CUT CROSS	
⊙	CONCRETE PIN	
○	WITNESS	
○	PROPERTY IDENTIFICATION NUMBER	
○	MEASURED	
○	INSTRUMENT	
○	PROPORTIONED	
○	ORIGIN UNKNOWN	
○	STANTEC GEOMATICS LTD.	
○	PLAN BY WEBSTER & SIMMONDS SURVEYING LTD.	
○	DATED 21 APRIL 1999.	
○	PLAN CAR-126	
○	PLAN SR-11458	
○	PLAN 4R-1559	
○	SURVEYOR'S REAL PROPERTY REPORT BY FAIRHALL, MOFFATT & WOODLAND LIMITED.	
○	DATED APRIL 12, 2000.	

**SURVEYOR'S CERTIFICATE**  
I CERTIFY THAT:  
1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT AND THE REGULATIONS MADE UNDER THEM.  
2. THE SURVEY WAS COMPLETED ON THE 5TH DAY OF DECEMBER, 2023.

December 06, 2023  
DATE

*R.G. Bennett*  
R.G. BENNETT  
ONTARIO LAND SURVEYOR

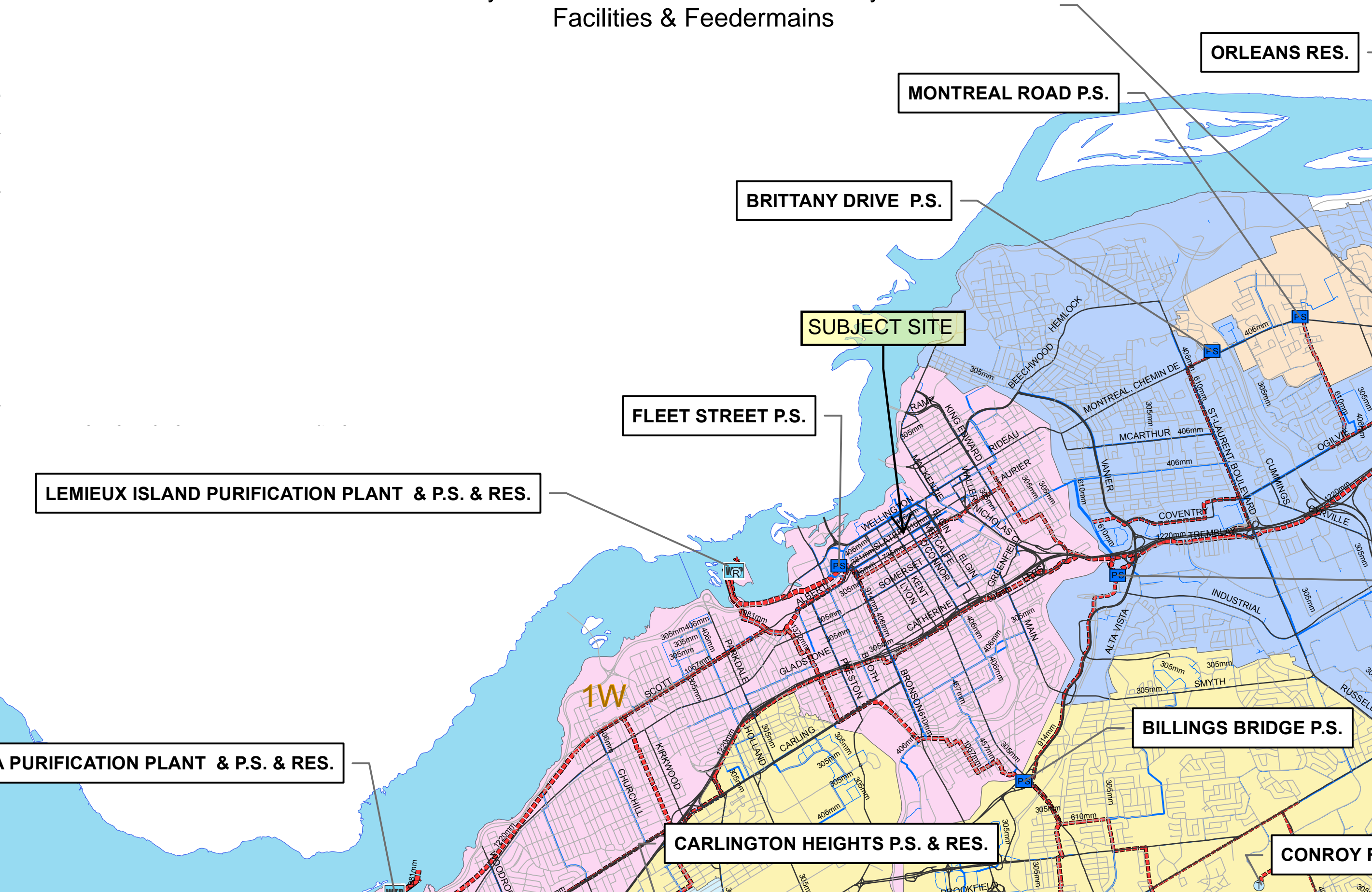
SRO MAP COORD.-367675, 5031484

**Stantec Geomatics Ltd.**  
CANADA LANDS SURVEYORS  
ONTARIO LAND SURVEYORS  
1331 CLYDE AVENUE, SUITE 300  
OTTAWA, ONTARIO, K2C 3G4  
TEL: 416.724.4400  
stantec.com

DRAWN: ZF CHECKED: CT PWC: CT FIELD: AW PROJECT No.: 161614767-110

## APPENDIX C WATERMAIN CALCULATIONS

# City of Ottawa - Water Distribution System Facilities & Feeder mains



ORLEANS RES.

MONTREAL ROAD P.S.

BRITTANY DRIVE P.S.

SUBJECT SITE

FLEET STREET P.S.

LEMIEUX ISLAND PURIFICATION PLANT & P.S. & RES.

BILLINGS BRIDGE P.S.

A PURIFICATION PLANT & P.S. & RES.

CARLINGTON HEIGHTS P.S. & RES.

CONROY P.S.



## COO-24-2792 - 130 Sater Street - Water Demands

Project:	130 Sater Street
Project No.:	COO-24-2792
Designed By:	AJG
Checked By:	RDF
Date:	June 19, 2024
Site Area:	0.156 gross ha

Residential	NUMBER OF UNITS	UNIT RATE	
Single Family	homes	3.4	persons/unit
Semi-detached	homes	2.7	persons/unit
Townhouse	homes	2.7	persons/unit
Bachelor Apartment	84 units	1.4	persons/unit
1 Bedroom Apartment	84 units	1.4	persons/unit
2 Bedroom Apartment	24 units	2.1	persons/unit
3 Bedroom Apartment	12 units	3.1	persons/unit
Average Apartment	units	1.8	persons/unit
Total Population	323 persons		
Amenity	1231 m2		
Commercial	258 m2		
Industrial - Light	m2		
Industrial - Heavy	m2		

### WATER DEMAND DESIGN FLOWS PER UNIT COUNT

DEMAND TYPE	AMOUNT	UNITS	
Residential	280	L/c/d	
Industrial - Light	35,000	L/gross ha/d	
Industrial - Heavy	55,000	L/gross ha/d	
Shopping Centres	2,500	L/(1000m <sup>2</sup> /d)	
Hospital	900	L/(bed/day)	
Schools	70	L/(Student/d)	
Trailer Park with no Hook-Ups	340	L/(space/d)	
Trailer Park with Hook-Ups	800	L/(space/d)	
Campgrounds	225	L/(campsite/d)	
Mobile Home Parks	1,000	L/(Space/d)	
Motels	150	L/(bed-space/d)	
Hotels	225	L/(bed-space/d)	
Tourist Commercial	28,000	L/gross ha/d	
Other Commercial	28,000	L/gross ha/d	
WATER DEMAND DESIGN FLOWS PER UNIT COUNT	Residential	1.05	L/s
	Commercial/Industrial/Institutional	0.05	L/s

### MAXIMUM DAILY DEMAND

DEMAND TYPE	AMOUNT	UNITS	
Residential	3.5	x avg. day	L/c/d
Industrial	1.5	x avg. day	L/gross ha/d
Commercial	1.5	x avg. day	L/gross ha/d
Institutional	1.5	x avg. day	L/gross ha/d
MAXIMUM DAILY DEMAND	Residential	3.67	L/s
	Commercial/Industrial/Institutional	0.07	L/s

### MAXIMUM HOUR DEMAND

DEMAND TYPE	AMOUNT	UNITS	
Residential	5.3	x avg. day	L/c/d
Industrial	1.8	x max. day	L/gross ha/d
Commercial	1.8	x max. day	L/gross ha/d
Institutional	1.8	x max. day	L/gross ha/d
MAXIMUM HOUR DEMAND	Residential	5.51	L/s
	Commercial/Industrial/Institutional	0.13	L/s

WATER DEMAND DESIGN FLOWS PER UNIT COUNT  
QTY OF OTTAWA - WATER DISTRIBUTION GUIDELINES, JULY 2010

WATER DEMAND DESIGN FLOWS PER UNIT COUNT	1.10	L/s
MAXIMUM DAILY DEMAND	3.74	L/s
MAXIMUM HOUR DEMAND	5.64	L/s

## 000-24-2792 - 130 Slater Street - OBC Fire Calculations

Project:	130 Slater Street
Project No.:	000-24-2792
Designed By:	AJG
Checked By:	RDF
Date:	June 19, 2024

### Ontario 2006 Building Code Compendium (Div. B - Part 3)

#### Water Supply for Fire-Fighting - Residential & Commercial Building

Building is classified as Group : C & D (from table 3.2.2.55)

Building is of noncombustible construction or of heavy timber construction conforming to Article 3.1.4.6. Floor assemblies are fire separations but with no fire-resistance rating. Roof assemblies, mezzanines, loadbearing walls, columns and arches do not have a fire-resistance rating.

From Div. B A-3.2.5.7. of the Ontario Building Code - 3. Building On-Site Water Supply:

(a)  $Q = K \times V \times S_{tot}$

where:

Q = minimum supply of water in litres

K = water supply coefficient from Table 1

V = total building volume in cubic metres

$S_{tot}$  = total of spatial coefficient values from the property line exposures on all sides as obtained from the formula:

$S_{tot} = 1.0 + [S_{side1} + S_{side2} + S_{side3} + \dots \text{etc.}]$

K	16	(from Table 1 pg A-31) (Worst case occupancy {E/ F2} 'K' value used)
V	184,582	(Total building volume in m <sup>3</sup> .)
$S_{tot}$	2.0	(From figure 1 pg A-32)
Q =	5,906,638.52 L	

			From Figure 1 (A-32)
Shorth	1 m	0.5	
Seast	0 m	0.5	
South	0 m	0.5	
Swest	0 m	0.5	

\* approximate distances

From Table 2: Required Minimum Water Supply Flow Rate (L/s)

9000 L/min if Q > 270,000 L  
2378 gpm

## 000-24-2792 - 130 Sater Street - Fire Underwriters Survey

Project: 130 Sater Street  
 Project No.: 000-24-2792  
 Designed By: AJG  
 Checked By: RDF  
 Date: June 19, 2024

### From the Fire Underwriters Survey (2020)

From Part II – Guide for Determination of Required Fire Flow Copyright I.S.O.:  
 City of Ottawa Technical Bulletin ISTB-2018-02 Applied Where Applicable

#### A. BASE REQUIREMENT (Rounded to the nearest 1000 L/min)

F = 220 x C x v<sup>A</sup> Where: F = Required fire flow in liters per minute  
 C = Coefficient related to the type of construction.  
 A = The total floor area in square meters (including all storey's, but excluding basements at least 50 percent below grade) in the building being considered.

Construction Type Non-Combustible Construction

C 0.8 A 14,198.7 m<sup>2</sup>  
 Total Floor Area (per the 2020 FUS Page 20 - Total Effective Area) 5,897.4 m<sup>2</sup> \* Unprotected Vertical Openings

Calculated Fire Flow 13,515.8 L/min  
 14,000.0 L/min

#### B. REDUCTION FOR OCCUPANCY TYPE (No Rounding)

From Page 24 of the Fire Underwriters Survey:  
 Limited Combustible -15%

Fire Flow 11,900.0 L/min

#### C. REDUCTION FOR SPRINKLER TYPE (No Rounding)

Fully Supervised Sprinklered -50%

Reduction -5,950.0 L/min

#### D. INCREASE FOR EXPOSURE (No Rounding)

	Separation Distance (m)	Cons. of Exposed Wall	Length Exposed Adjacent Wall (m)	Height (Stories)	Length-Height Factor	
Exposure 1	10.1 to 20	Fire Resistive - Non Combustible (Unprotected Openings)	36	11	396.0	8%
Exposure 2	3.1 to 10	Fire Resistive - Non Combustible (Unprotected Openings)	40	18	720.0	11%
Exposure 3	0 to 3	Fire Resistive - Non Combustible (Unprotected Openings)	57.5	19	1092.5	15%
Exposure 4	0 to 3	Fire Resistive - Non Combustible (Unprotected Openings)	20	8	160.0	15%
					% Increase*	49%

Increase\* 5,831.0 L/min

#### E. Total Fire Flow (Rounded to the Nearest 1000 L/min)

Fire Flow 11,781.0 L/min  
 Fire Flow Required\*\* 12,000.0 L/min

\* In accordance with Part II, Section 4, the Increase for separation distance is not to exceed 75%

\*\* In accordance with Section 4 the Fire flow is not to exceed 45,000 L/min or be less than 2,000 L/min

## 000-24-2792 - 130 Slater Street - Boundary Condition Unit Conversion

---

Project: 130 Slater Street  
 Project No.: 000-24-2792  
 Designed By: AJG  
 Checked By: RDF  
 Date: June 19, 2024

---

### Boundary Conditions Unit Conversion

---

#### SLATER ST - 381mm WATERMAIN

Scenario	Height (m)	Elevation (m)	m H <sub>2</sub> O	PSI	kPa
Avg. DD	115.5	67.8	47.7	67.9	468.0
Fire Flow (200 L/s or 12,000 L/min)	108.4	67.8	40.6	57.8	398.4
Peak Hour	106.8	67.8	39.0	55.5	382.7

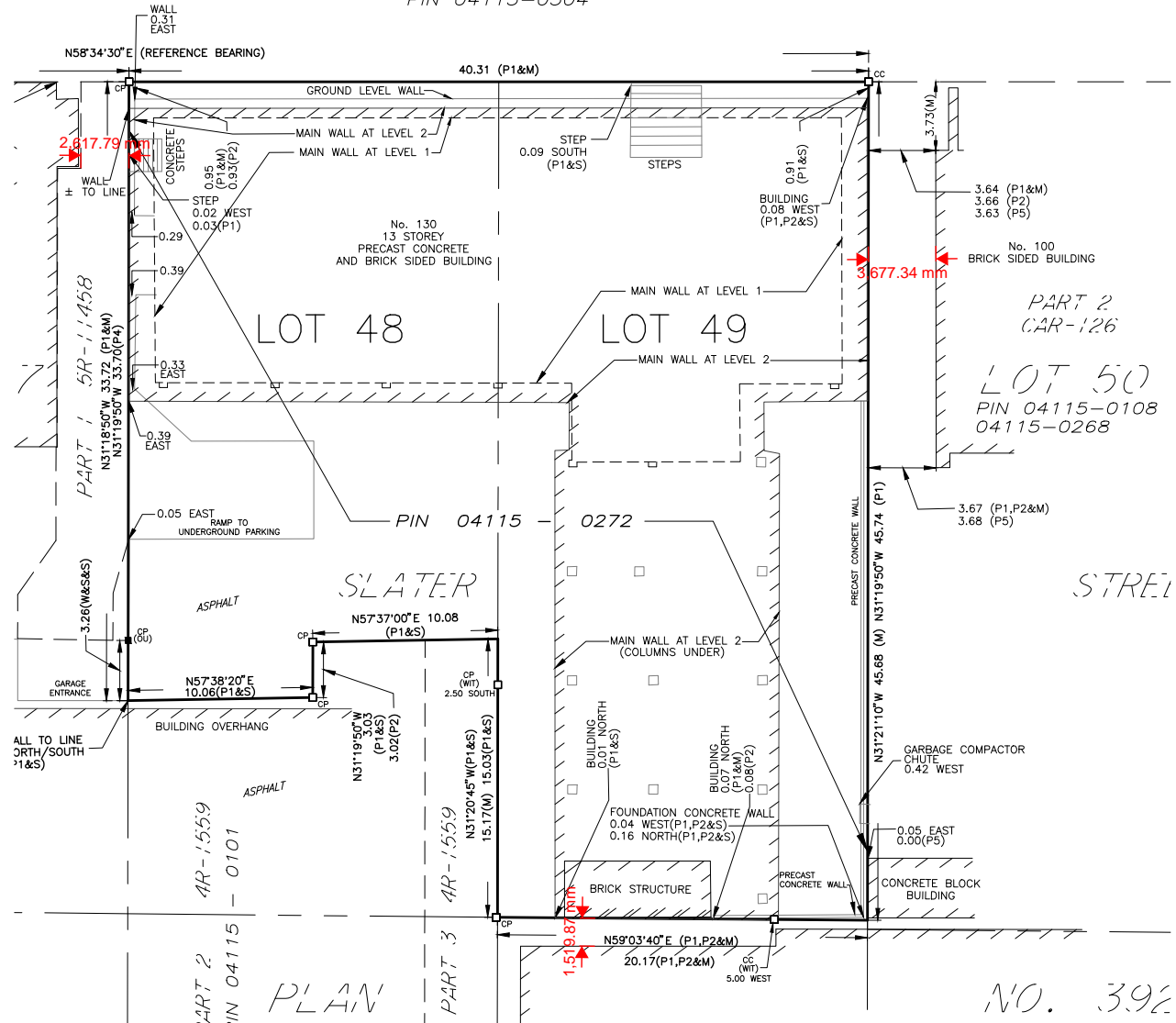
#### SLATER ST - 610mm WATERMAIN

Scenario	Height (m)	Elevation (m)	m H <sub>2</sub> O	PSI	kPa
Avg. DD	115.5	61.8	53.7	76.4	526.8
Fire Flow (200 L/s or 12,000 L/min)	109.2	61.8	47.4	67.4	465.0
Peak Hour	106.8	61.8	45.0	64.0	441.5

# 130 Slater Street Exposure Distances



SLATER STREET  
(DEDICATED BY REGISTERED PLAN NO. 3922)  
PIN 04115-0304





# 130 Slater Street Hydrant Coverage Figure



## RAPER Mitch

---

**From:** RAPER Mitch  
**Sent:** June 19, 2024 10:45 AM  
**To:** RAPER Mitch  
**Subject:** FW: 24-2792 - 130 Slater - Boundary Condition Request  
**Attachments:** 130 Slater Street REVISED June 2024.pdf



### Mitch Raper

Engineering Intern, North America  
Phone: +1 343-764-2090, Mobile: +1 613-315-9801

---

**From:** Fawzi, Mohammed <[mohammed.fawzi@ottawa.ca](mailto:mohammed.fawzi@ottawa.ca)>  
**Sent:** Thursday, June 13, 2024 4:49 PM  
**To:** VALENTI Francis <[Francis.VALENTI@egis-group.com](mailto:Francis.VALENTI@egis-group.com)>  
**Cc:** Whelan, Amy <[amy.whelan@ottawa.ca](mailto:amy.whelan@ottawa.ca)>; GOSLING Alison <[Alison.GOSLING@egis-group.com](mailto:Alison.GOSLING@egis-group.com)>  
**Subject:** RE: 24-2792 - 130 Slater - Boundary Condition Request

Hi Francis,

The following are boundary conditions, HGL, for hydraulic analysis at 130 Slater Street (zone 1W) assumed to be connected via two existing connections to 381mm and 610mm watermains on Slater Street (see attached PDF for location).

#### Both Connections:

Minimum HGL: 106.8m

Maximum HGL: 115.5m

#### Connection 1 (381mm watermain):

Max Day + Fire Flow (200 L/s): 108.4m

#### Connection 2 (610mm watermain):

Max Day + Fire Flow (200 L/s): 109.2m

These are for current conditions and are based on computer model simulation.

*Disclaimer: The boundary condition information is based on current operation of the city water distribution system. The computer model simulation is based on the best information available at the time. The operation of the water distribution system can change on a regular basis, resulting in a variation in boundary conditions. The physical properties of watermains deteriorate over time, as such must be assumed in the absence of actual field test data. The variation in physical watermain properties can therefore alter the results of the computer model simulation.*

Best Regards,

**Mohammed Fawzi, P.Eng.**

Project Manager, Infrastructure - Gestionnaire de projet, Projets d'infrastructure  
Development Review All Wards (DRAW) | Direction de l'examen des projets d'aménagement - Tous les  
quartiers (EPATQ)  
Planning, Development and Building Services Department (PDBS)| Direction générale des services de la  
planification, de l'aménagement et du bâtiment (DGSPAB)  
City of Ottawa | Ville d'Ottawa  
110 Laurier Avenue West | 110 Avenue Laurier Ouest  
Ottawa, ON K1P 1J1  
613.580.2424 ext./poste 20120, [Mohammed.Fawzi@ottawa.ca](mailto:Mohammed.Fawzi@ottawa.ca)

---

**From:** GOSLING Alison <[Alison.GOSLING@egis-group.com](mailto:Alison.GOSLING@egis-group.com)>  
**Sent:** Monday, June 10, 2024 1:51 PM  
**To:** Fawzi, Mohammed <[mohammed.fawzi@ottawa.ca](mailto:mohammed.fawzi@ottawa.ca)>; VALENTI Francis <[Francis.VALENTI@egis-group.com](mailto:Francis.VALENTI@egis-group.com)>  
**Cc:** Whelan, Amy <[amy.whelan@ottawa.ca](mailto:amy.whelan@ottawa.ca)>  
**Subject:** RE: 24-2792 - 130 Slater - Boundary Condition Request

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Hi Mohammed,

Yes, it will be.

Thank you,



**Alison Gosling, P.Eng.**  
Project Engineer, Land Development, North America  
Phone: +1 613-714-4629

---

**From:** Fawzi, Mohammed <[mohammed.fawzi@ottawa.ca](mailto:mohammed.fawzi@ottawa.ca)>  
**Sent:** Monday, June 10, 2024 1:32 PM  
**To:** VALENTI Francis <[Francis.VALENTI@egis-group.com](mailto:Francis.VALENTI@egis-group.com)>  
**Cc:** GOSLING Alison <[Alison.GOSLING@egis-group.com](mailto:Alison.GOSLING@egis-group.com)>; Whelan, Amy <[amy.whelan@ottawa.ca](mailto:amy.whelan@ottawa.ca)>  
**Subject:** RE: 24-2792 - 130 Slater - Boundary Condition Request

Thanks Francis. I'll provide the results when available.

As a side note – will the redundant service be connected independently to the watermain? I recall I had a comment that the redundant service cannot be shared with the adjacent property.

Thanks Francis.

Best Regards,

**Mohammed Fawzi, P.Eng.**

Project Manager, Infrastructure - Gestionnaire de projet, Projets d'infrastructure

Development Review All Wards (DRAW) | Direction de l'examen des projets d'aménagement - Tous les quartiers (EPATQ)

Planning, Development and Building Services Department (PDBS) | Direction générale des services de la planification, de l'aménagement et du bâtiment (DGSPAB)

City of Ottawa | Ville d'Ottawa

110 Laurier Avenue West | 110 Avenue Laurier Ouest

Ottawa, ON K1P 1J1

613.580.2424 ext./poste 20120, [Mohammed.Fawzi@ottawa.ca](mailto:Mohammed.Fawzi@ottawa.ca)

---

**From:** VALENTI Francis <[Francis.VALENTI@egis-group.com](mailto:Francis.VALENTI@egis-group.com)>

**Sent:** Thursday, June 6, 2024 2:28 PM

**To:** Fawzi, Mohammed <[mohammed.fawzi@ottawa.ca](mailto:mohammed.fawzi@ottawa.ca)>

**Cc:** GOSLING Alison <[Alison.GOSLING@egis-group.com](mailto:Alison.GOSLING@egis-group.com)>

**Subject:** RE: 24-2792 - 130 Slater - Boundary Condition Request

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**ATTENTION : Ce courriel provient d'un expéditeur externe. Ne cliquez sur aucun lien et n'ouvrez pas de pièce jointe, excepté si vous connaissez l'expéditeur.**

Good afternoon Mohammed,

We've made some updates to our water demand and fire flow calculations in response to the comments we received on our previous submission, and we'd like to request updated boundary conditions.

The connections (dual) will be to the existing 381 mm and 610 mm watermains within Slater Street.

- The estimated fire flow is 12,000 L/min based on the 2020 FUS
- Average daily demand: 1.10 L/s
- Maximum daily demand 3.74 L/s
- Maximum hourly daily 5.64 L/s

Please find attached a map showing the connection locations, as well as detailed calculations for the demands listed above.

Thank you,



**Francis Valenti, EIT**

Engineering Intern, North America

Phone: +1 613-714-6895, Mobile: +1 613-808-2123

---

**From:** Fawzi, Mohammed <[mohammed.fawzi@ottawa.ca](mailto:mohammed.fawzi@ottawa.ca)>  
**Sent:** Tuesday, February 27, 2024 2:15 PM  
**To:** GOSLING Alison <[Alison.GOSLING@egis-group.com](mailto:Alison.GOSLING@egis-group.com)>  
**Cc:** Whelan, Amy <[amy.whelan@ottawa.ca](mailto:amy.whelan@ottawa.ca)>  
**Subject:** RE: 24-2792 - 130 Slater - Boundary Condition Request

Hi Alison,

The following are boundary conditions, HGL, for hydraulic analysis at 130 Slater Street (zone 1W) assumed to be connected via two existing connections to 381mm and 610mm watermains on Slater Street (see attached PDF for location).

Both Connections:

Minimum HGL: 106.8m

Maximum HGL: 115.5m

Connection 1 (381mm watermain):

Max Day + Fire Flow (166.67L/s): 108.8m

Connection 2 (610mm watermain):

Max Day + Fire Flow (166.67L/s): 109.4m

These are for current conditions and are based on computer model simulation.

*Disclaimer: The boundary condition information is based on current operation of the city water distribution system. The computer model simulation is based on the best information available at the time. The operation of the water distribution system can change on a regular basis, resulting in a variation in boundary conditions. The physical properties of watermains deteriorate over time, as such must be assumed in the absence of actual field test data. The variation in physical watermain properties can therefore alter the results of the computer model simulation.*

Best Regards,

**Mohammed Fawzi, P.Eng.**

Project Manager

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

Development Review - Central Branch

City of Ottawa | Ville d'Ottawa

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

613.580.2424 ext./poste 20120, [Mohammed.Fawzi@ottawa.ca](mailto:Mohammed.Fawzi@ottawa.ca)

**\*\*Please note that due to the current situation, I am working remotely. Email is currently the best way to contact me\*\***



---

**From:** GOSLING Alison <[Alison.GOSLING@egis-group.com](mailto:Alison.GOSLING@egis-group.com)>  
**Sent:** February 27, 2024 12:06 PM  
**To:** Fawzi, Mohammed <[mohammed.fawzi@ottawa.ca](mailto:mohammed.fawzi@ottawa.ca)>  
**Cc:** Whelan, Amy <[amy.whelan@ottawa.ca](mailto:amy.whelan@ottawa.ca)>  
**Subject:** RE: 24-2792 - 130 Slater - Boundary Condition Request

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Good afternoon Mohammed,

Have you heard back about these boundary conditions?'

Thank you,



Alison Gosling, P.Eng.  
Project Engineer, Land Development  
Phone: +1.613.714.4629

---

**From:** Fawzi, Mohammed <[mohammed.fawzi@ottawa.ca](mailto:mohammed.fawzi@ottawa.ca)>  
**Sent:** Wednesday, February 7, 2024 9:17 AM  
**To:** GOSLING Alison <[Alison.GOSLING@egis-group.com](mailto:Alison.GOSLING@egis-group.com)>  
**Cc:** Whelan, Amy <[amy.whelan@ottawa.ca](mailto:amy.whelan@ottawa.ca)>  
**Subject:** RE: 24-2792 - 130 Slater - Boundary Condition Request

Thanks for the heads up.

Best Regards,

**Mohammed Fawzi, P.Eng.**

Project Manager  
Planning, Infrastructure and Economic Development Department - Services de la planification, de l'infrastructure et du développement économique  
Development Review - Central Branch  
City of Ottawa | Ville d'Ottawa  
110 Laurier Avenue West Ottawa, ON | 110, avenue. Laurier Ouest. Ottawa (Ontario) K1P 1J1  
613.580.2424 ext./poste 20120, [Mohammed.Fawzi@ottawa.ca](mailto:Mohammed.Fawzi@ottawa.ca)

**\*\*Please note that due to the current situation, I am working remotely. Email is currently the best way to contact me\*\***

---

**From:** GOSLING Alison <[Alison.GOSLING@egis-group.com](mailto:Alison.GOSLING@egis-group.com)>  
**Sent:** February 7, 2024 8:56 AM  
**To:** Fawzi, Mohammed <[mohammed.fawzi@ottawa.ca](mailto:mohammed.fawzi@ottawa.ca)>  
**Cc:** Whelan, Amy <[amy.whelan@ottawa.ca](mailto:amy.whelan@ottawa.ca)>  
**Subject:** RE: 24-2792 - 130 Slater - Boundary Condition Request

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Perfect. Thank you.

Just a heads up that "McIntosh Perry" is being rebranded to "Egis Canada". You will start to see us change our email addresses as well as our report and drawing formats. Otherwise there is no change to our company.



Alison Gosling, P.Eng.  
Project Engineer, Land Development  
Phone: +1.613.714.4629

---

**From:** Fawzi, Mohammed <[mohammed.fawzi@ottawa.ca](mailto:mohammed.fawzi@ottawa.ca)>  
**Sent:** Tuesday, February 6, 2024 1:54 PM  
**To:** GOSLING Alison <[Alison.GOSLING@egis-group.com](mailto:Alison.GOSLING@egis-group.com)>  
**Cc:** Whelan, Amy <[amy.whelan@ottawa.ca](mailto:amy.whelan@ottawa.ca)>  
**Subject:** RE: 24-2792 - 130 Slater - Boundary Condition Request

**!! Courriel externe - Merci d'être prudent avec les liens et les pièces jointes !! External email - Please be careful with links and attachments !!**

Hi Alison,

This to confirm your request has been received. Results will be forwarded when available.

Thank you.

Best Regards,

**Mohammed Fawzi, P.Eng.**

Project Manager  
Planning, Infrastructure and Economic Development Department - Services de la planification, de l'infrastructure et du développement économique  
Development Review - Central Branch  
City of Ottawa | Ville d'Ottawa  
110 Laurier Avenue West Ottawa, ON | 110, avenue. Laurier Ouest. Ottawa (Ontario) K1P 1J1  
613.580.2424 ext./poste 20120, [Mohammed.Fawzi@ottawa.ca](mailto:Mohammed.Fawzi@ottawa.ca)

**\*\*Please note that due to the current situation, I am working remotely. Email is currently the best way to contact me\*\***

---

**From:** GOSLING Alison <[Alison.GOSLING@egis-group.com](mailto:Alison.GOSLING@egis-group.com)>  
**Sent:** February 6, 2024 12:52 PM  
**To:** Fawzi, Mohammed <[mohammed.fawzi@ottawa.ca](mailto:mohammed.fawzi@ottawa.ca)>  
**Subject:** 24-2792 - 130 Slater - Boundary Condition Request

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Hi Mohammed,

We would like to request updated boundary conditions for the proposed development at 130 Slater Street. The proposed development proposes to convert an existing office building into a mixed-use building as such we are currently evaluating the existing service laterals.

Based on City as built, the development is serviced by a 150 mm diameter service lateral connected to the 381 mm diameter watermain within Slater St. In addition, GeoOttawa indicates that there might be a secondary water connection on the west side of the building which is shown connected to the 610 mm diameter watermain within Slater St. For the purpose of boundary conditions, we would like to request watermain pressures from both connection points (Connection #1 and Connection #2) understanding that there will be no new connections proposed to the 610 mm diameter watermain.

- The estimated fire flow is 10,000 L/min based on the 2020 FUS
- Average daily demand: 1.10 L/s
- Maximum daily demand 3.21 L/s
- Maximum hourly daily 4.84 L/s

Attached is a map showing the proposed connection location along with the calculations prepared for the demands listed above.

Please let me know if you have any questions.

Thank you,



Alison Gosling, P.Eng.  
Project Engineer, Land Development  
Phone: +1.613.714.4629

---

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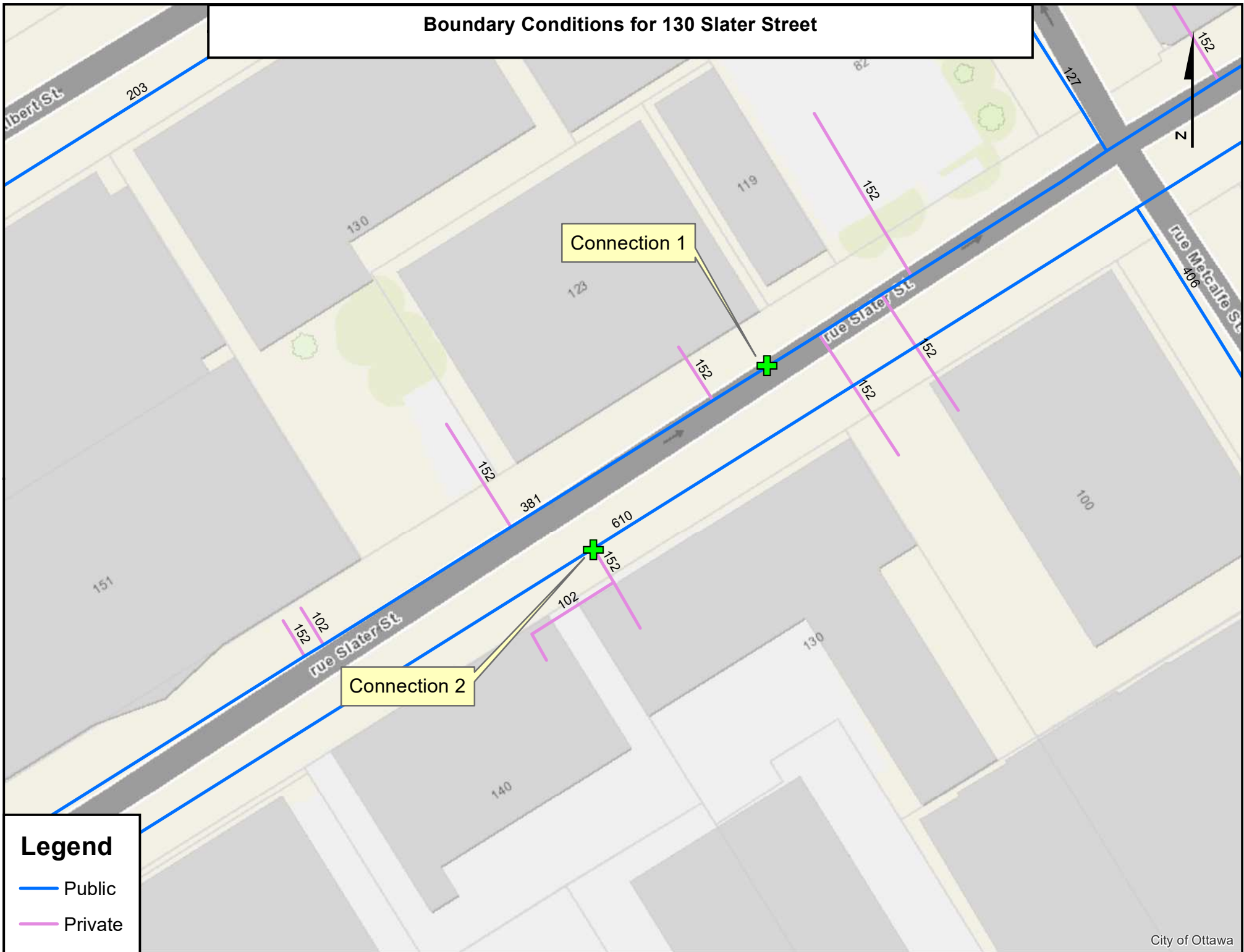
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# Boundary Conditions for 130 Slater Street



## GOSLING Alison

---

**From:** alison.gosling@egis-group.com  
**Subject:** RE: 24-2792 130 Slater - Coordination on Comment 15

---

**From:** Sean Fright <sfright@figurr.ca>  
**Sent:** Tuesday, June 11, 2024 1:27 PM  
**To:** GOSLING Alison <alison.gosling@egis-group.com>  
**Subject:** RE: 24-2792 130 Slater - Coordination on Comment 15

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Hi Alison,

This email is written in response to comment #15 from the City of Ottawa Phase 3 pre-Consultation: Review Feedback for Proposed Site Plan Control – 130 Slater Street, dated May 24, 2024, File No.:PC2024-0169.

**The building at 130 Slater is of non-combustible construction, and the proposed renovation will include a supervised sprinkler system as per 3.2.4.10. of the OBC.**

Please let us know if you have any questions or require any further information,

Regards,

**Sean Fright, OAA**

Architect | Project Manager

# fig.35

**FIG. 1**

190 Somerset St W #206  
Ottawa ON K2P 0J4  
T 613 695-6122 x 135  
M 613 863-3213

**FIG. 2**

3550, Saint-Antoine O.  
Montréal QC H4C 1A9  
T 514 861-5122



[figurr.ca](http://figurr.ca)

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## APPENDIX D SANITARY CALCULATIONS

## 24-2792 - 130 Slater Street - Existing Sanitary Demands

Project:	130 Slater Street		
Project No.:	24-2792		
Designed By:	AJG		
Checked By:	RDF		
Date:	March 7, 2024		
Site Area	0.156	Gross ha	
Average Apartment		1.80	Persons per unit
2 Bedroom		2.10	Persons per unit
Total Population	0	Persons	
Commercial	12804	m <sup>2</sup>	

### DESIGN PARAMETERS

Institutional/Commercial Peaking Factor	1.5	
Residential Peaking Factor	3.80	* Using Harmon Formula = $1+(14/(4+P^{0.5}))$ *0.8 where P = population in thousands, Harmon's Correction Factor = 0.8
Mannings coefficient (n)	0.013	
Demand (per capita)	280	L/day
Infiltration allowance	0.33	L/s/Ha

### EXTRANEOUS FLOW ALLOWANCES

Infiltration / Inflow	Flow (L/s)
Dry	0.01
Wet	0.04
<b>Total</b>	<b>0.05</b>

### AVERAGE DAILY DEMAND

DEMAND TYPE	AMOUNT	UNITS	POPULATION / AREA	Flow (L/s)
Residential	280	L/c/d	0	0.00
Industrial - Light**	35,000	L/gross ha/d		0
Industrial - Heavy**	55,000	L/gross ha/d		0
Commercial / Amenity	2,800	L/(1000m <sup>2</sup> /d)	12804	0.41
Restaurant	125	L/(9.2m <sup>2</sup> /d)		0
Schools	70	L/(Student/d)		0
Trailer Parks no Hook-Ups	340	L/(space/d)		0
Trailer Park with Hook-Ups	800	L/(space/d)		0
Campgrounds	225	L/(campsite/d)		0
Mobile Home Parks	1,000	L/(Space/d)		0
Motels	150	L/(bed-space/d)		0
Hotels	225	L/(bed-space/d)		0
Office	75	L/7.0m <sup>2</sup> /d		0
Tourist Commercial	28,000	L/gross ha/d		0
Other Commercial	28,000	L/gross ha/d		0

AVERAGE RESIDENTIAL FLOW	0.00	L/s
PEAK RESIDENTIAL FLOW	0.00	L/s
AVERAGE ICI FLOW	0.41	L/s
PEAK INSTITUTIONAL/COMMERCIAL FLOW	0.62	L/s
PEAK INDUSTRIAL FLOW	0.00	L/s
TOTAL PEAK ICI FLOW	0.62	L/s

### TOTAL SANITARY DEMAND

TOTAL ESTIMATED AVERAGE DRY WEATHER FLOW	0.42	L/s
TOTAL ESTIMATED PEAK DRY WEATHER FLOW	0.63	L/s
TOTAL ESTIMATED PEAK WET WEATHER FLOW	0.67	L/s

## 24-2792 - 130 Slater Street - Sanitary Demands

Project:	130 Slater Street		
Project No.:	24-2792		
Designed By:	AJG		
Checked By:	RDF		
Date:	March 7, 2024		
Site Area	0.156	Gross ha	
Bachelor	84	1.40	Persons per unit
1 Bedroom	84	1.40	Persons per unit
2 Bedroom	24	2.10	Persons per unit
3 Bedroom	12	3.10	Persons per unit
Total Population	323	Persons	
Amenity	1231	m <sup>2</sup>	
Commercial	258	m <sup>2</sup>	

### DESIGN PARAMETERS

Institutional/Commercial Peaking Factor	1	
Residential Peaking Factor	3.45	* Using Harmon Formula = $1 + (14 / (4 + P^{0.5})) * 0.8$ where P = population in thousands, Harmon's Correction Factor = 0.8
Mannings coefficient (n)	0.013	
Demand (per capita)	280	L/day
Infiltration allowance	0.33	L/s/Ha

### EXTRANEOUS FLOW ALLOWANCES

Infiltration / Inflow	Flow (L/s)
Dry	0.01
Wet	0.04
<b>Total</b>	<b>0.05</b>

### AVERAGE DAILY DEMAND

DEMAND TYPE	AMOUNT	UNITS	POPULATION / AREA	Flow (L/s)
Residential	280	L/c/d	323	1.05
Industrial - Light**	35,000	L/gross ha/d		0
Industrial - Heavy**	55,000	L/gross ha/d		0
Commercial / Amenity	2,800	L/(1000m <sup>2</sup> /d)	1489	0.05
Restaurant	125	L/(9.2m <sup>2</sup> /d)		0
Schools	70	L/(Student/d)		0
Trailer Parks no Hook-Ups	340	L/(space/d)		0
Trailer Park with Hook-Ups	800	L/(space/d)		0
Campgrounds	225	L/(campsite/d)		0
Mobile Home Parks	1,000	L/(Space/d)		0
Motels	150	L/(bed-space/d)		0
Hotels	225	L/(bed-space/d)		0
Office	75	L/7.0m <sup>2</sup> /d		0
Tourist Commercial	28,000	L/gross ha/d		0
Other Commercial	28,000	L/gross ha/d		0

AVERAGE RESIDENTIAL FLOW	1.05	L/s
PEAK RESIDENTIAL FLOW	3.61	L/s
AVERAGE ICI FLOW	0.05	L/s
PEAK INSTITUTIONAL/COMMERCIAL FLOW	0.05	L/s
PEAK INDUSTRIAL FLOW	0.00	L/s
TOTAL PEAK ICI FLOW	0.05	L/s

### TOTAL SANITARY DEMAND

TOTAL ESTIMATED AVERAGE DRY WEATHER FLOW	1.10	L/s
TOTAL ESTIMATED PEAK DRY WEATHER FLOW	3.67	L/s
TOTAL ESTIMATED PEAK WET WEATHER FLOW	3.71	L/s

## Alison Gosling

---

**From:** Fawzi, Mohammed <mohammed.fawzi@ottawa.ca>  
**Sent:** February 7, 2024 9:18 AM  
**To:** Alison Gosling  
**Cc:** Whelan, Amy  
**Subject:** RE: 24-2792 130 Slater St - Sanitary Capacity Analysis

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Hi Alison,

This is to confirm there are no sanitary capacity concerns.

Thank you.

Best Regards,

**Mohammed Fawzi, P.Eng.**

Project Manager  
Planning, Infrastructure and Economic Development Department - Services de la planification, de l'infrastructure et du développement économique  
Development Review - Central Branch  
City of Ottawa | Ville d'Ottawa  
110 Laurier Avenue West Ottawa, ON | 110, avenue. Laurier Ouest. Ottawa (Ontario) K1P 1J1  
613.580.2424 ext./poste 20120, [Mohammed.Fawzi@ottawa.ca](mailto:Mohammed.Fawzi@ottawa.ca)

**\*\*Please note that due to the current situation, I am working remotely. Email is currently the best way to contact me\*\***

---

**From:** Fawzi, Mohammed  
**Sent:** February 6, 2024 11:15 AM  
**To:** Alison Gosling <a.gosling@mcintoshperry.com>  
**Cc:** Whelan, Amy <amy.whelan@ottawa.ca>  
**Subject:** RE: 24-2792 130 Slater St - Sanitary Capacity Analysis

Hi Alison,

Thank you for your email. I'll be in touch once I hear back.

Best Regards,

**Mohammed Fawzi, P.Eng.**  
Project Manager



Planning, Infrastructure and Economic Development Department - Services de la planification, de l'infrastructure et du développement économique  
Development Review - Central Branch  
City of Ottawa | Ville d'Ottawa  
110 Laurier Avenue West Ottawa, ON | 110, avenue. Laurier Ouest. Ottawa (Ontario) K1P 1J1  
613.580.2424 ext./poste 20120, [Mohammed.Fawzi@ottawa.ca](mailto:Mohammed.Fawzi@ottawa.ca)

**\*\*Please note that due to the current situation, I am working remotely. Email is currently the best way to contact me\*\***

---

**From:** Alison Gosling <[a.gosling@mcintoshperry.com](mailto:a.gosling@mcintoshperry.com)>  
**Sent:** February 5, 2024 12:49 PM  
**To:** Fawzi, Mohammed <[mohammed.fawzi@ottawa.ca](mailto:mohammed.fawzi@ottawa.ca)>  
**Subject:** 24-2792 130 Slater St - Sanitary Capacity Analysis

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Good afternoon Mohammed,

In accordance with the preconsultation notes, we are reaching out in regards to the proposed sanitary flows for the 130 Slater St development. The development proposes to convert an existing office building into a mixed-use building. The estimated existing and proposed demands are below and attached. Can asset management please review and confirm whether there is capacity in the municipal system for the increased flow?

**Existing:**

TOTAL ESTIMATED AVERAGE DRY WEATHER FLOW	0.42	L/s
TOTAL ESTIMATED PEAK DRY WEATHER FLOW	0.63	L/s
TOTAL ESTIMATED PEAK WET WEATHER FLOW	0.67	L/s

**Proposed:**

TOTAL ESTIMATED AVERAGE DRY WEATHER FLOW	1.10	L/s
TOTAL ESTIMATED PEAK DRY WEATHER FLOW	3.67	L/s
TOTAL ESTIMATED PEAK WET WEATHER FLOW	3.71	L/s

Please let me know if you have any questions.

Thank you,

**Alison Gosling, P.Eng.**

**Project Engineer, Land Development**

T. 613.714.4629

[a.gosling@mcintoshperry.com](mailto:a.gosling@mcintoshperry.com) | [www.mcintoshperry.com](http://www.mcintoshperry.com)

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Platinum  
member

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**APPENDIX E**  
**CITY OF OTTAWA DESIGN CHECKLIST**

# City of Ottawa

## 4. Development Servicing Study Checklist

The following section describes the checklist of the required content of servicing studies. It is expected that the proponent will address each one of the following items for the study to be deemed complete and ready for review by City of Ottawa Infrastructure Approvals staff.

The level of required detail in the Servicing Study will increase depending on the type of application. For example, for Official Plan amendments and re-zoning applications, the main issues will be to determine the capacity requirements for the proposed change in land use and confirm this against the existing capacity constraint, and to define the solutions, phasing of works and the financing of works to address the capacity constraint. For subdivisions and site plans, the above will be required with additional detailed information supporting the servicing within the development boundary.

### 4.1 General Content

Criteria	Location (if applicable)
<input type="checkbox"/> Executive Summary (for larger reports only).	N/A
<input type="checkbox"/> Date and revision number of the report.	On Cover
<input type="checkbox"/> Location map and plan showing municipal address, boundary, and layout of proposed development.	Appendix A
<input type="checkbox"/> Plan showing the site and location of all existing services.	Site Servicing Plan (C101)
<input type="checkbox"/> Development statistics, land use, density, adherence to zoning and official plan, and reference to applicable subwatershed and watershed plans that provide context to which individual developments must adhere.	1.1 Purpose 1.2 Site Description 6.0 Storm Sewer Servicing
<input type="checkbox"/> Summary of pre-consultation meetings with City and other approval agencies.	Appendix B
<input type="checkbox"/> Reference and confirm conformance to higher level studies and reports (Master Servicing Studies, Environmental Assessments, Community Design Plans), or in the case where it is not in conformance, the proponent must provide justification and develop a defensible design criteria.	1.1 Purpose 1.2 Site Description 6.0 Storm Sewer Servicing
<input type="checkbox"/> Statement of objectives and servicing criteria.	3.0 Pre-Consultation Summary

<input type="checkbox"/> Identification of existing and proposed infrastructure available in the immediate area.	N/A
<input type="checkbox"/> Identification of Environmentally Significant Areas, watercourses and Municipal Drains potentially impacted by the proposed development (Reference can be made to the Natural Heritage Studies, if available).	N/A
<input type="checkbox"/> Concept level master grading plan to confirm existing and proposed grades in the development. This is required to confirm the feasibility of proposed stormwater management and drainage, soil removal and fill constraints, and potential impacts to neighbouring properties. This is also required to confirm that the proposed grading will not impede existing major system flow paths.	N/A
<input type="checkbox"/> Identification of potential impacts of proposed piped services on private services (such as wells and septic fields on adjacent lands) and mitigation required to address potential impacts.	N/A
<input type="checkbox"/> Proposed phasing of the development, if applicable.	N/A
<input type="checkbox"/> Reference to geotechnical studies and recommendations concerning servicing.	Section 2.0 Background Studies, Standards and References
<input type="checkbox"/> All preliminary and formal site plan submissions should have the following information: <ul style="list-style-type: none"> <li>○ Metric scale</li> <li>○ North arrow (including construction North)</li> <li>○ Key plan</li> <li>○ Name and contact information of applicant and property owner</li> <li>○ Property limits including bearings and dimensions</li> <li>○ Existing and proposed structures and parking areas</li> <li>○ Easements, road widening and rights-of-way</li> <li>○ Adjacent street names</li> </ul>	Site Servicing Plan (C101)



## 4.2 Development Servicing Report: Water

Criteria	Location (if applicable)
<input type="checkbox"/> Confirm consistency with Master Servicing Study, if available	N/A
<input type="checkbox"/> Availability of public infrastructure to service proposed development	Section 4.2
<input type="checkbox"/> Identification of system constraints	N/A
<input type="checkbox"/> Identify boundary conditions	Appendix C
<input type="checkbox"/> Confirmation of adequate domestic supply and pressure	Section 4.2, Appendix C
<input type="checkbox"/> Confirmation of adequate fire flow protection and confirmation that fire flow is calculated as per the Fire Underwriter's Survey. Output should show available fire flow at locations throughout the development.	Appendix C
<input type="checkbox"/> Provide a check of high pressures. If pressure is found to be high, an assessment is required to confirm the application of pressure reducing valves.	N/A
<input type="checkbox"/> Definition of phasing constraints. Hydraulic modeling is required to confirm servicing for all defined phases of the project including the ultimate design	N/A
<input type="checkbox"/> Address reliability requirements such as appropriate location of shut-off valves	N/A
<input type="checkbox"/> Check on the necessity of a pressure zone boundary modification.	N/A
<input type="checkbox"/> Reference to water supply analysis to show that major infrastructure is capable of delivering sufficient water for the proposed land use. This includes data that shows that the expected demands under average day, peak hour and fire flow conditions provide water within the required pressure range	Appendix C, Section 4.2

<input type="checkbox"/> Description of the proposed water distribution network, including locations of proposed connections to the existing system, provisions for necessary looping, and appurtenances (valves, pressure reducing valves, valve chambers, and fire hydrants) including special metering provisions.	Site Servicing Plan (C101)
<input type="checkbox"/> Description of off-site required feeder mains, booster pumping stations, and other water infrastructure that will be ultimately required to service proposed development, including financing, interim facilities, and timing of implementation.	N/A
<input type="checkbox"/> Confirmation that water demands are calculated based on the City of Ottawa Design Guidelines.	Appendix C
<input type="checkbox"/> Provision of a model schematic showing the boundary conditions locations, streets, parcels, and building locations for reference.	N/A

#### 4.3 Development Servicing Report: Wastewater

Criteria	Location (if applicable)
<input type="checkbox"/> Summary of proposed design criteria (Note: Wet-weather flow criteria should not deviate from the City of Ottawa Sewer Design Guidelines. Monitored flow data from relatively new infrastructure cannot be used to justify capacity requirements for proposed infrastructure).	Section 5.2
<input type="checkbox"/> Confirm consistency with Master Servicing Study and/or justifications for deviations.	N/A
<input type="checkbox"/> Consideration of local conditions that may contribute to extraneous flows that are higher than the recommended flows in the guidelines. This includes groundwater and soil conditions, and age and condition of sewers.	N/A
<input type="checkbox"/> Description of existing sanitary sewer available for discharge of wastewater from proposed development.	Section 5.2

<input type="checkbox"/> Verify available capacity in downstream sanitary sewer and/or identification of upgrades necessary to service the proposed development. (Reference can be made to previously completed Master Servicing Study if applicable)	Section 5.2
<input type="checkbox"/> Calculations related to dry-weather and wet-weather flow rates from the development in standard MOE sanitary sewer design table (Appendix 'C') format.	N/A
<input type="checkbox"/> Description of proposed sewer network including sewers, pumping stations, and forcemains.	Section 5.2
<input type="checkbox"/> Discussion of previously identified environmental constraints and impact on servicing (environmental constraints are related to limitations imposed on the development in order to preserve the physical condition of watercourses, vegetation, soil cover, as well as protecting against water quantity and quality).	N/A
<input type="checkbox"/> Pumping stations: impacts of proposed development on existing pumping stations or requirements for new pumping station to service development.	N/A
<input type="checkbox"/> Forcemain capacity in terms of operational redundancy, surge pressure and maximum flow velocity.	N/A
<input type="checkbox"/> Identification and implementation of the emergency overflow from sanitary pumping stations in relation to the hydraulic grade line to protect against basement flooding.	N/A
<input type="checkbox"/> Special considerations such as contamination, corrosive environment etc.	N/A

#### 4.4 Development Servicing Report: Stormwater Checklist

Criteria	Location (if applicable)
<input type="checkbox"/> Description of drainage outlets and downstream constraints including legality of outlets (i.e. municipal drain, right-of-way, watercourse, or private property)	Section 6.0 Stormwater Sewer Design
<input type="checkbox"/> Analysis of available capacity in existing public infrastructure.	N/A
<input type="checkbox"/> A drawing showing the subject lands, its surroundings, the receiving watercourse, existing drainage patterns, and proposed drainage pattern.	N/A
<input type="checkbox"/> Water quantity control objective (e.g. controlling post-development peak flows to pre-development level for storm events ranging from the 2 or 5-year event (dependent on the receiving sewer design) to 100-year return period); if other objectives are being applied, a rationale must be included with reference to hydrologic analyses of the potentially affected subwatersheds, taking into account long-term cumulative effects.	N/A
<input type="checkbox"/> Water Quality control objective (basic, normal or enhanced level of protection based on the sensitivities of the receiving watercourse) and storage requirements.	N/A
<input type="checkbox"/> Description of the stormwater management concept with facility locations and descriptions with references and supporting information.	Section 6.0 Storm Sewer Servicing
<input type="checkbox"/> Set-back from private sewage disposal systems.	N/A
<input type="checkbox"/> Watercourse and hazard lands setbacks.	N/A
<input type="checkbox"/> Record of pre-consultation with the Ontario Ministry of Environment and the Conservation Authority that has jurisdiction on the affected watershed.	N/A
<input type="checkbox"/> Confirm consistency with sub-watershed and Master Servicing Study, if applicable study exists.	N/A
<input type="checkbox"/> Storage requirements (complete with calculations) and conveyance capacity for minor events (1:5-year return period) and major events (1:100-year return period).	N/A

<input type="checkbox"/> Identification of watercourses within the proposed development and how watercourses will be protected, or, if necessary, altered by the proposed development with applicable approvals.	N/A
<input type="checkbox"/> Calculate pre-and post development peak flow rates including a description of existing site conditions and proposed impervious areas and drainage catchments in comparison to existing conditions.	N/A
<input type="checkbox"/> Any proposed diversion of drainage catchment areas from one outlet to another.	N/A
<input type="checkbox"/> Proposed minor and major systems including locations and sizes of stormwater trunk sewers, and stormwater management facilities.	N/A
<input type="checkbox"/> If quantity control is not proposed, demonstration that downstream system has adequate capacity for the post-development flows up to and including the 100-year return period storm event.	N/A
<input type="checkbox"/> Identification of potential impacts to receiving watercourses	N/A
<input type="checkbox"/> Identification of municipal drains and related approval requirements.	N/A
<input type="checkbox"/> Descriptions of how the conveyance and storage capacity will be achieved for the development.	N/A
<input type="checkbox"/> 100-year flood levels and major flow routing to protect proposed development from flooding for establishing minimum building elevations (MBE) and overall grading.	N/A
<input type="checkbox"/> Inclusion of hydraulic analysis including hydraulic grade line elevations.	N/A



<input type="checkbox"/> Description of approach to erosion and sediment control during construction for the protection of receiving watercourse or drainage corridors.	Section 7.0 Sediment & Erosion Control
<input type="checkbox"/> Identification of floodplains – proponent to obtain relevant floodplain information from the appropriate Conservation Authority. The proponent may be required to delineate floodplain elevations to the satisfaction of the Conservation Authority if such information is not available or if information does not match current conditions.	N/A
<input type="checkbox"/> Identification of fill constraints related to floodplain and geotechnical investigation.	N/A

#### 4.5 Approval and Permit Requirements: Checklist

The Servicing Study shall provide a list of applicable permits and regulatory approvals necessary for the proposed development as well as the relevant issues affecting each approval. The approval and permitting shall include but not be limited to the following:

Criteria	Location (if applicable)
<input type="checkbox"/> Conservation Authority as the designated approval agency for modification of floodplain, potential impact on fish habitat, proposed works in or adjacent to a watercourse, cut/fill permits and Approval under Lakes and Rivers Improvement Act. The Conservation Authority is not the approval authority for the Lakes and Rivers Improvement Act. Where there are Conservation Authority regulations in place, approval under the Lakes and Rivers Improvement Act is not required, except in cases of dams as defined in the Act.	N/A
<input type="checkbox"/> Application for Certificate of Approval (CofA) under the Ontario Water Resources Act.	N/A
<input type="checkbox"/> Changes to Municipal Drains.	N/A
<input type="checkbox"/> Other permits (National Capital Commission, Parks Canada, Public Works and Government Services Canada, Ministry of Transportation etc.)	N/A

## 4.6 Conclusion Checklist

Criteria	Location (if applicable)
<input type="checkbox"/> Clearly stated conclusions and recommendations	Section 8.0 Summary Section 9.0 Recommendations
<input type="checkbox"/> Comments received from review agencies including the City of Ottawa and information on how the comments were addressed. Final sign-off from the responsible reviewing agency.	All are stamped
<input type="checkbox"/> All draft and final reports shall be signed and stamped by a professional Engineer registered in Ontario	All are stamped