

Phoenix Homes

Design Brief

1773 & 1767 Baseline

December 2025

Design Brief

1773 & 1767 Baseline

December 2025

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30297182.05



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Storm Sewer Design Sheet
30297182-500 Storm Drainage Area Plan
Modified Rational Method SWM Calculations
Runoff Coefficient Calculations
Watt's Adjustable Flow Control Roof Drain Spec
IPEX Spec Sheet

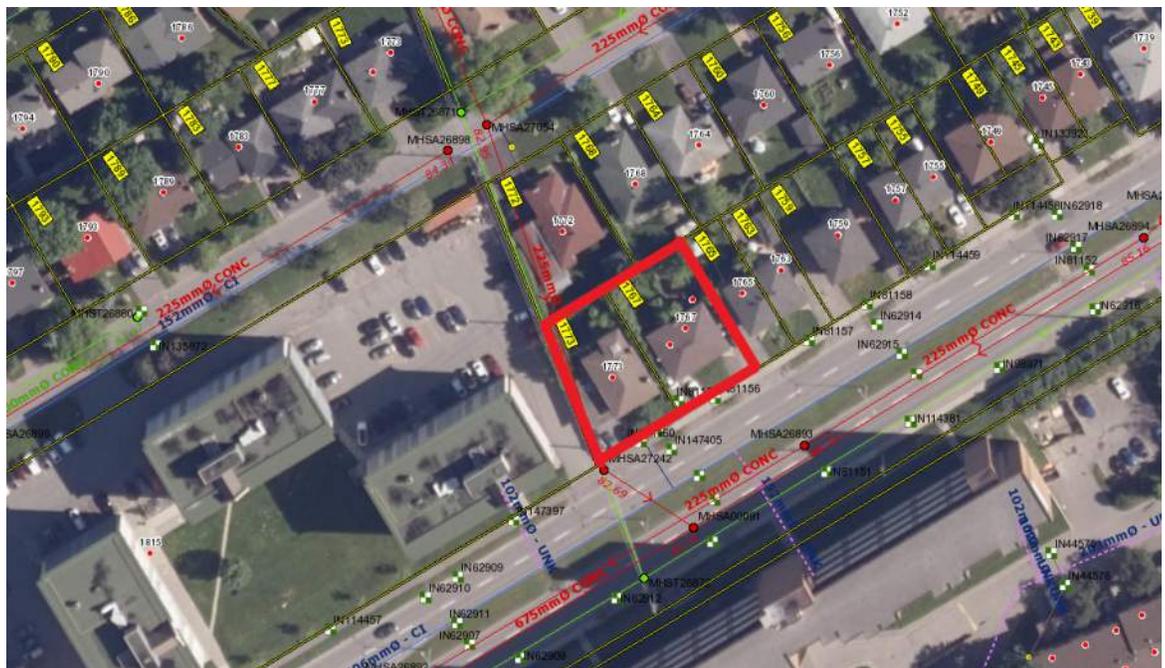
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1 INTRODUCTION

1773 & 1767 Baseline Road is located on the north side of Baseline Road, between the intersection with Navaho Drive to the west and Ferguson Street to the east, in Ottawa, Ontario. This proposed site is abutted by an apartment complex to the west, residential to the east and north, and Baseline Road to the south. Arcadis Professional Services (Canada) Inc. (formerly IBI Group) has been retained by Phoenix Homes to provide professional engineering services for 1773 & 1767 Baseline Road. The subject site is approximately 0.11 ha and consists of one 5-storey apartment building to be completed in one phase. Refer to key plan on **Figure 1.1** for Site location.

Figure 1.1 Site Location



1.1 Geotechnical Concerns

A separate geotechnical report will be completed for the site by others.

The objective of the investigation report will include:

- Determination of the subsoil and groundwater conditions;
- Provision of geotechnical recommendations pertaining to the design and development of the subject site including construction considerations.

Among other items, the report will comment on the following:

- Site grading;
- Foundation design;
- Pavement structure;
- Infrastructure construction;
- Groundwater control;

The report will conclude if the subject site is considered suitable for the proposed development.

1.2 Easements

There is an existing storm and sanitary sewer running through the west portion of the site. These sewers are in a 6.1m subject agreement easement NST. CR375146E. Sewers and other underground infrastructure will not be proposed inside the easement.

Easement lines are shown on drawing C-001 General Plan of Services as well as on the Topographic Plan of Survey prepared by AOV, both included in **Appendix A**.

2 WATER DISTRIBUTION

2.1 Existing Conditions

1773 & 1767 Baseline Road will be serviced with potable water from the City of Ottawa's existing water mains. There is an existing 400 mm diameter watermain inside Baseline Road adjacent to the site. This watermain falls within the City of Ottawa's pressure district Pressure Zone 2W which will provide the water supply to the site.

2.2 Design Criteria

2.2.1 Water Demands

The proposed development plan includes x residential units. The population for apartment buildings is assumed at 1.4 persons per unit for 1-bedroom units, and 2.1 persons per unit for 2-bedroom units as found in Table 4.1 of the Design Guidelines. Per unit population density and consumption rates are taken from Tables 4.1 and 4.2 at the Ottawa Design Guidelines – Water Distribution and are summarized as follows:

- Residential Average Day Demand 280 l/cap/day
- Residential Peak Daily Demand 700 l/cap/day
- Residential Peak Hour Demand 1540 l/cap/day

A water demand calculation sheet is included in **Appendix B** and the total water demands are summarized as follows:

- Average Day 0.23 l/s
- Maximum Day 0.57 l/s
- Peak Hour 1.25 l/s

2.2.2 System Pressures

The 2010 City of Ottawa Water Distribution Guidelines states that the preferred practice for the design of a new distribution system is to have normal operating pressures range between 345 kPa (50 psi) and 552 kPa (80 psi) under maximum daily flow conditions. Other pressure criteria identified in the guidelines are as follows:

Minimum Pressure Minimum system pressure under peak hour demand conditions shall not be less than 276 kPa (40 psi).

Fire Flow During the period of maximum day demand, the system pressure shall not be less than 150 kPa (21 psi) during a fire flow event.

Maximum Pressure Maximum pressure at any point in the distribution system in unoccupied areas shall not exceed 689 kPa (100 psi). In accordance with the Ontario Building/Plumbing Code the maximum pressure should not exceed 552 kPa (80 psi) in occupied areas. Pressure reduction controls may be required for buildings when it is not possible/feasible to maintain the system pressure below 552 kPa.

2.2.3 Fire Flow Rate

The Ontario Building Code (OBC) was used to determine the fireflow for the site per City of Ottawa technical bulletin 2024-05. The calculations result in a fire flow of 6,300 L/min (105.0 L/s) based on noncombustible building construction. A copy of the OBC calculation is included in **Appendix B**.

2.2.4 Boundary Conditions

The City of Ottawa has provided hydraulic boundary conditions for the connection to Baseline Road. The boundary conditions are based on the water demand and fire flow rates provided. A copy of the boundary conditions received October 21, 2025 is included in **Appendix B** and is summarized as follows:

SCENARIO	HYDRAULIC HEAD (M)
Maximum HGL	132.4
Peak Hour	126.2
Max Day + Fire Flow (66.7 l/s)	125.7

2.3 Proposed Water Plan

The site will be serviced by one 150mm diameter watermain from Baseline Road. There are two existing small-diameter water services for the existing buildings onsite that will need to be abandoned. There is sufficient hydrant coverage for the site, including one directly in front of the building, therefore no new hydrants are proposed.

Per Section 2.2.4, the building will need a fire flow of up to 6,300 L/min. With at least one hydrant within 75m of the building and two additional within 300m, the capacity needed to deliver the required fire flow to the structures are being provided in accordance with Technical Bulletin ISTB-2018-02 dated March 21, 2018. Furthermore, the fire dept. connection for each building is also located within 45m of a hydrant.

HYDRANT AVAILABILITY				
BUILDING ID	FIRE FLOW DEMAND (L/MIN)	FIRE HYDRANT(S) WITHIN 75M (5,700 L/MIN)	FIRE HYDRANT(S) WITHIN 300M (2,800 L/MIN)	AVAILABLE FLOW (L/MIN)
Apartment	6,300	1	2	11,300

For the purposes of this report, assuming a minimal loss within the service connection the pressures within the site can be estimated as follows:

Minimum Pressure (Peak Hour) – The minimum peak hour pressure on the site can be estimated as HGL 126.2m – meter elevation of 88.5m = 37.7m or 369.8 kPa which exceeds the minimum requirement of 276 kPa. The pressure on the top floor can be estimated as 126.2m – 104.62m = 21.58m or 211.7 KPa which is below the minimum of 276 kPa and will require a water pump.

Fire Flow – The max day plus fire flow can be estimated as HGL 125.7 – ground floor elevation plus 0.4m 88.5 = 37.2m or 364.9 KPa which exceeds the minimum of 150kPa.

Max HGL (High Pressure Check) – The high-pressure check can be estimated as HGL 132.4 – (lowest level) 88.1 = 44.3m or 434.6 KPa which is below the maximum of 552 kPa, therefore a pressure reducing valve is not required.

The above results indicate the municipal infrastructure can support the proposed development.

3 WASTEWATER

3.1 Existing Conditions

There is an existing 225mm concrete sanitary sewer in an easement on the west side of the subject site, as well as an existing 225mm and 675mm concrete sanitary in Baseline Road. There is currently 0.12 L/s of residential wastewater flow offsite from the two existing residential houses.

3.2 Design Criteria

The sanitary sewers for the subject site will be based on the City of Ottawa design criteria. It should be noted that the sanitary sewer design for this study incorporates the latest City of Ottawa design parameters identified in Technical Bulletin ISTB-2018-01. Some of the key criteria will include the following:

- Commercial/Institutional flow 28,000 l/ha/d
- Residential flow 280 l/c/d
- Peaking factor 1.5 if ICI in contributing area >20%
1.0 if ICI in contributing area <20%
- Infiltration allowance 0.33 l/s/ha
- Velocities 0.60 m/s min. to 3.0 m/s max.

3.3 Recommended Wastewater Plan

Wastewater flows have been calculated for the subject site, see detailed Sanitary Sewer Design Sheet in **Appendix C**.

As discussed in Section 3.1, there is an existing 225mm sanitary sewer located through an easement on the subject site. As shown in the sanitary sewer design sheet (included in **Appendix C**), the residential wastewater effluent will increase from 0.12 L/s to 0.86L/s. The City of Ottawa is asked to comment on if the existing 225mm sanitary sewer has sufficient capacity for the proposed redevelopment.

4 SITE STORMWATER MANAGEMENT

4.1 Existing Conditions

There is an existing 750mm concrete storm sewer in an easement on the west side of the subject site, as well as an existing 1500mm concrete sanitary in Baseline Road. There are currently two catchbasins onsite, one in the driveway of 1767 Baseline Road and the other on the front lawn.

The front of the site currently drains towards a series of catchbasins in drive aisles and front lawns, as well as Heron Road ROW. The rear of the site flows to an informal swale near the back property line and offsite to the western private property. Stormwater from private properties to the north and east also enter this swale. Currently, no known flow control measures have been implemented.

4.2 Design Criteria

The stormwater management infrastructure was designed per the City of Ottawa 2012 Sewer Design Guidelines. Previous consultation with the City has also confirmed water quantity and quality requirements for this site, as summarized below,

- Design Storm 1:5-year return (Ottawa)
- Rational Method Sewer Sizing
- Initial Time of Concentration 10 minutes
- Runoff Coefficients
 - Softscape Areas C = 0.20
 - Hardscape Areas C = 0.90
- Pipe Velocities 0.80 m/s to 3.0 m/s
- Minimum Pipe Size 250 mm diameter (200 mm CB Leads)

4.3 Stormwater Management

The subject site is identified on the City of Ottawa's official Plan (OP) Schedule C15, classified as lands within the urban boundary and is subject to development. This site is designed to have minimal impact on adjacent properties grading, drainage, access, circulation, and privacy. This will be achieved by means of Water Quantity Controls.

4.3.1 Stormwater Quantity Control

Stormwater effluent from the subject site is proposed to be limited to a 5-year design storm with a runoff coefficient of 0.5 and a time of concentration of 10 minutes for all storm events up to and including the 100-year event.

The release rate can be therefore calculated as follows,

$$\begin{aligned}
 Q_{\text{restricted}} &= 2.78 \times C \times i_{5\text{yr}} \times A && \text{where:} \\
 C &= \text{Runoff coefficient} = 0.50 \\
 i_{5\text{yr}} &= \text{Intensity of 5-year storm event (mm/hr)} \\
 &= 998.071 \times (T_c + 6.053)^{0.814} = 104.19 \text{ mm/hr; where } T_c = 10 \text{ minutes} \\
 A &= 0.11 \text{ Ha}
 \end{aligned}$$

$$\begin{aligned}
 Q_{\text{restricted}} &= 2.78 \times C \times i_{5\text{yr}} \times A \\
 &= 2.78 \times 0.50 \times 104.19 \times 0.11 \\
 &= 15.93 \text{ L/s}
 \end{aligned}$$

It is therefore proposed to restrict the 100-year stormwater outflow from the subject site to 15.93 L/s. This will be achieved through a combination of inlet control devices (ICD's), surface storage where possible, and roof storage.

Surface flows in excess of the site's allowable release rate will be stored on site and gradually released into the minor system to respect the site's allowable release rate. The average rooftop retention depth located within the building area will be limited to 75mm during a 1:100-year event as shown on the ponding plan located in **Appendix D** and grading plans located in **Appendix E**.

Some stormwater from adjacent lands currently flow through the subject site as part of an overland flow route. The overland flow route has been maintained as part of the proposed grading. Any water over and above the 100-year storm event storage volume will continue to flow overland along the existing flow route, while quantities below the 100-year level of storage provided will be captured and released into the municipal storm sewer at a restricted rate.

Along the perimeter of the site, the opportunity to capture and store runoff is limited due to grading constraints and building geometry. These areas will discharge uncontrolled to Heron Road and existing catchbasins. These areas are located at the perimeter of the site where it is necessary to tie into public boulevards and adjacent properties or in areas where ponding stormwater is undesirable.

Based on the proposed site plan, the total uncontrolled area has been calculated to be 0.0153 Ha. For the detailed storm drainage area plan for the site, refer to Drawing 500 in **Appendix D**.

Based on a 1:100-year event, the flow from the 0.0153 Ha uncontrolled area to the west can be determined as:

$$\begin{aligned}
 Q_{\text{uncontrolled}} &= 2.78 \times C \times i_{100\text{yr}} \times A \quad \text{where:} \\
 C &= \text{Average runoff coefficient} = 0.42 \times 1.25 = 0.525 \text{ (100 year C-value)} \\
 i_{100\text{yr}} &= \text{Intensity of 100-year storm event (mm/hr)} \\
 &= 1735.688 \times (T_c + 6.014)^{0.820} = 178.56 \text{ mm/hr; where } T_c = 10 \text{ minutes} \\
 A &= \text{Uncontrolled Area} = 0.0153 \text{ Ha}
 \end{aligned}$$

Therefore, the uncontrolled release rate can be determined as:

$$\begin{aligned}
 Q_{\text{uncontrolled1}} &= 2.78 \times C \times i_{100\text{yr}} \times A \\
 &= 2.78 \times 0.525 \times 178.56 \times 0.0153 \\
 &= 3.99 \text{ L/s}
 \end{aligned}$$

Similarly, a ramp to the underground parking garage is also present onsite and will be unrestricted:

$$\begin{aligned}
 Q_{\text{uncontrolled2}} &= 2.78 \times C \times i_{100\text{yr}} \times A \\
 &= 2.78 \times 1.00 \times 178.56 \times 0.0078 \\
 &= 3.87 \text{ L/s}
 \end{aligned}$$

The Maximum allowable release rate from the site can be determined by subtracting the Uncontrolled release rate from the minor system restricted flow rate.

$$\begin{aligned}
 Q_{\text{max}} &= Q_{\text{restricted}} - Q_{\text{uncontrolled1}} - Q_{\text{uncontrolled2}} \\
 Q_{\text{max}} &= 15.93 \text{ L/s} - 3.99 \text{ L/s} - 3.87 \text{ L/s} \\
 Q_{\text{max}} &= 8.07 \text{ L/s}
 \end{aligned}$$

Therefore, the total restricted flow rate through the minor system will be the design flow rate of **8.07 L/s**. This will be achieved using Inlet Control Devices and surface ponding. A summary of the ICD's, their corresponding storage requirements, storage availability, and associated drainage areas has been provided below.

DRAINAGE AREA	ICD RESTRICTED FLOW (L/s)	100 YEAR STORAGE REQUIRED (m ³)	2 YEAR STORAGE REQUIRED (m ³)	STORAGE PROVIDED (m ³)
ROOF	2.00	20.77	5.48	28.13
CB1	6.00	2.70	0.06	2.76
TOTAL	8.00	23.47	5.54	30.89

Detailed stormwater management calculations for the 2-year event, 100-year event, and stress test (100-year plus 20%) event can be found in **Appendix D**.

There will be no 2-year surface ponding per the modified rational method calculations.

A 0.3m freeboard from downstream high points/maximum ponding elevations to first floor building opening is maintained in all scenarios including emergency overflow conditions.

Refer to the geotechnical report for information regarding foundation drainage. Foundation drainage systems are to be independent and connected to the storm service downstream of any stormwater management control device.

Detailed roof design to be completed by others at a later date. Roof design is to adhere to the requirements of this report (notably, the stormwater capacity and release rate) as well as any requirements in the Ontario Building Code (scupper details, emergency overflow, etc). Roof drain flow controls to be Watts Adjustable Accutrol Weir or equivalent (specification sheet found in **Appendix D**).

5 SEDIMENT AND EROSION CONTROL PLAN

5.1 General

During construction, existing stream and conveyance systems can be exposed to significant sediment loadings. Although construction is only a temporary situation, it is proposed to introduce a number of mitigative construction techniques to reduce unnecessary construction sediment loadings. These will include:

- groundwater in trench will be pumped into a filter mechanism prior to release to the environment;
- bulkhead barriers will be installed at the nearest downstream manhole in each sewer which connects to an existing downstream sewer;
- seepage barriers will be constructed in any temporary drainage ditches; and
- silt sacks will remain on open surface structure such as manholes and catchbasins until these structures are commissioned and put into use.
- Prior to roads having a granular base, construction traffic exiting the site to be directed to a mud mat to reduce sediment tracked offsite

5.2 Trench Dewatering

During construction of municipal services, any trench dewatering using pumps will be discharged into a filter trap made up of geotextile filters and straw bales similar in design to the OPSD 219.240 Dewatering Trap. These will be constructed in a bowl shape with the fabric forming the bottom and the straw bales forming the sides. Any pumped groundwater will be filtered prior to release to the existing surface runoff. The contractor will inspect and maintain the filters as needed including sediment removal and disposal and material replacement as needed.

5.3 Bulkhead Barriers

At the first manhole constructed immediately upstream of an existing sewer, a ½ diameter bulkhead will be constructed over the lower half of the outletting sewer. This bulkhead will trap any sediment carrying flows, thus preventing any construction –related contamination of existing sewers. The bulkheads will be inspected and maintained including periodic sediment removal as needed.

5.4 Seepage Barriers

These barriers will consist of both the Light Duty Straw Bale Barrier as per OPSD 219.100 or the Light Duty Silt Fence Barrier as per OPSD 219.110 and will be installed in accordance with the sediment and erosion control drawing. The barriers are typically made of layers of straw bales or geotextile fabric staked in place. All seepage barriers will be inspected and maintained as needed.

5.5 Surface Structure Filters

All catchbasins, and to a lesser degree manholes, convey surface water to sewers. However, until the surrounding surface has been completed these structures will be covered to prevent sediment from entering the minor storm sewer system. Until rear yards are sodded or until streets are asphalted and curbed, all catchbasins and manholes will be equipped with geotextile filter socks. These will stay in place and be maintained during construction and build until it is appropriate to remove them.

6 CONCLUSIONS & RECOMMENDATIONS

6.1 Conclusions

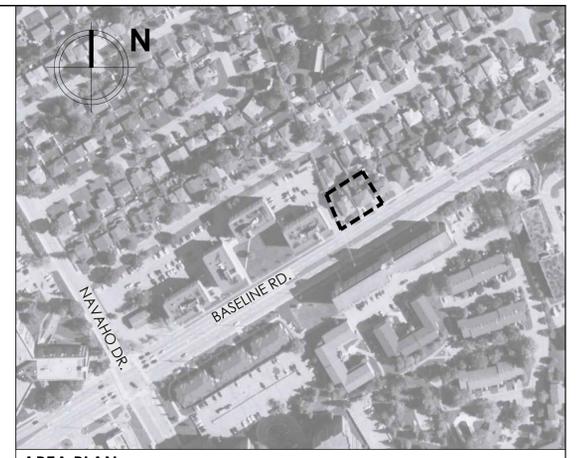
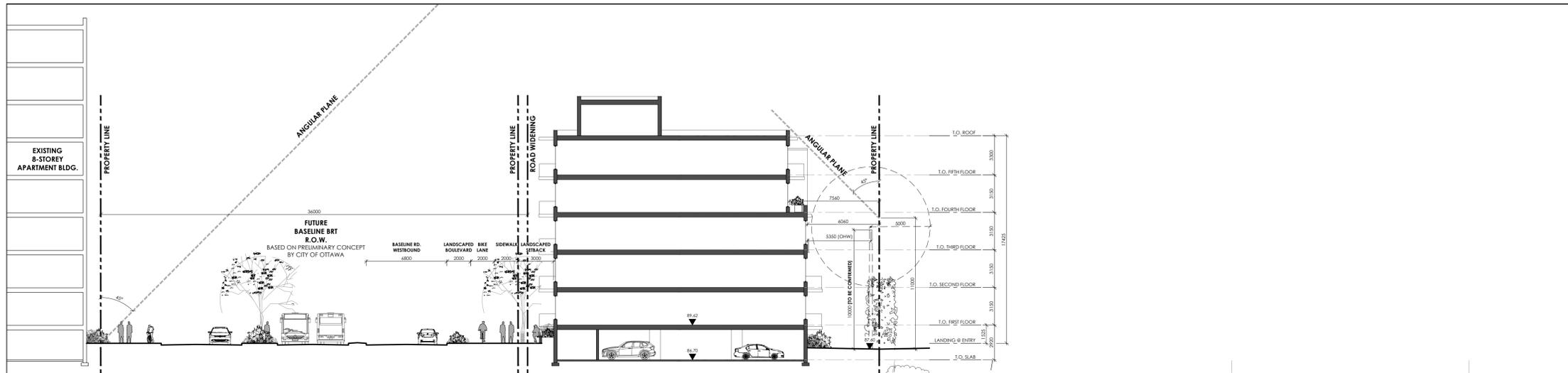
This report and the accompanying working drawings clearly indicate that the proposed development meets the requirements of the stakeholder regulators, including the City of Ottawa..

There is a reliable water supply available adjacent to the proposed development; a wastewater outlet is available adjacent to the site; local storm sewers have been installed adjacent to the site.

6.2 Recommendations

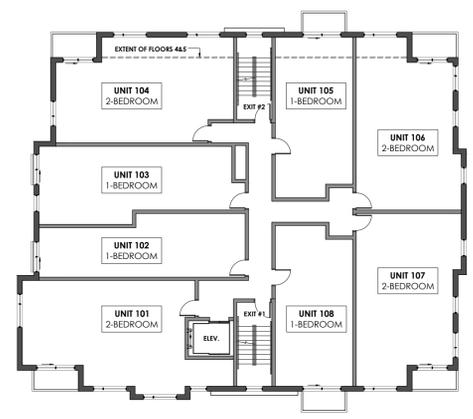
It is recommended that the regulators review this submission with an aim of providing the requisite approvals to permit the owners to proceed to the construction stage of the subject site.

Appendix A

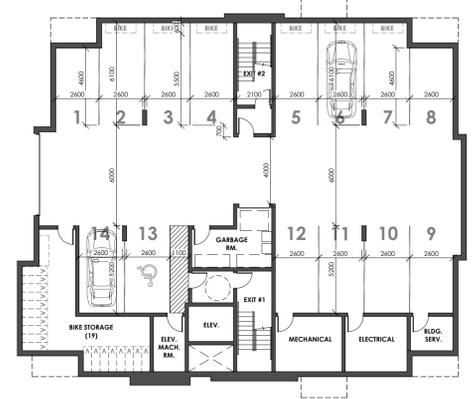


AREA PLAN: SCALE: NTS

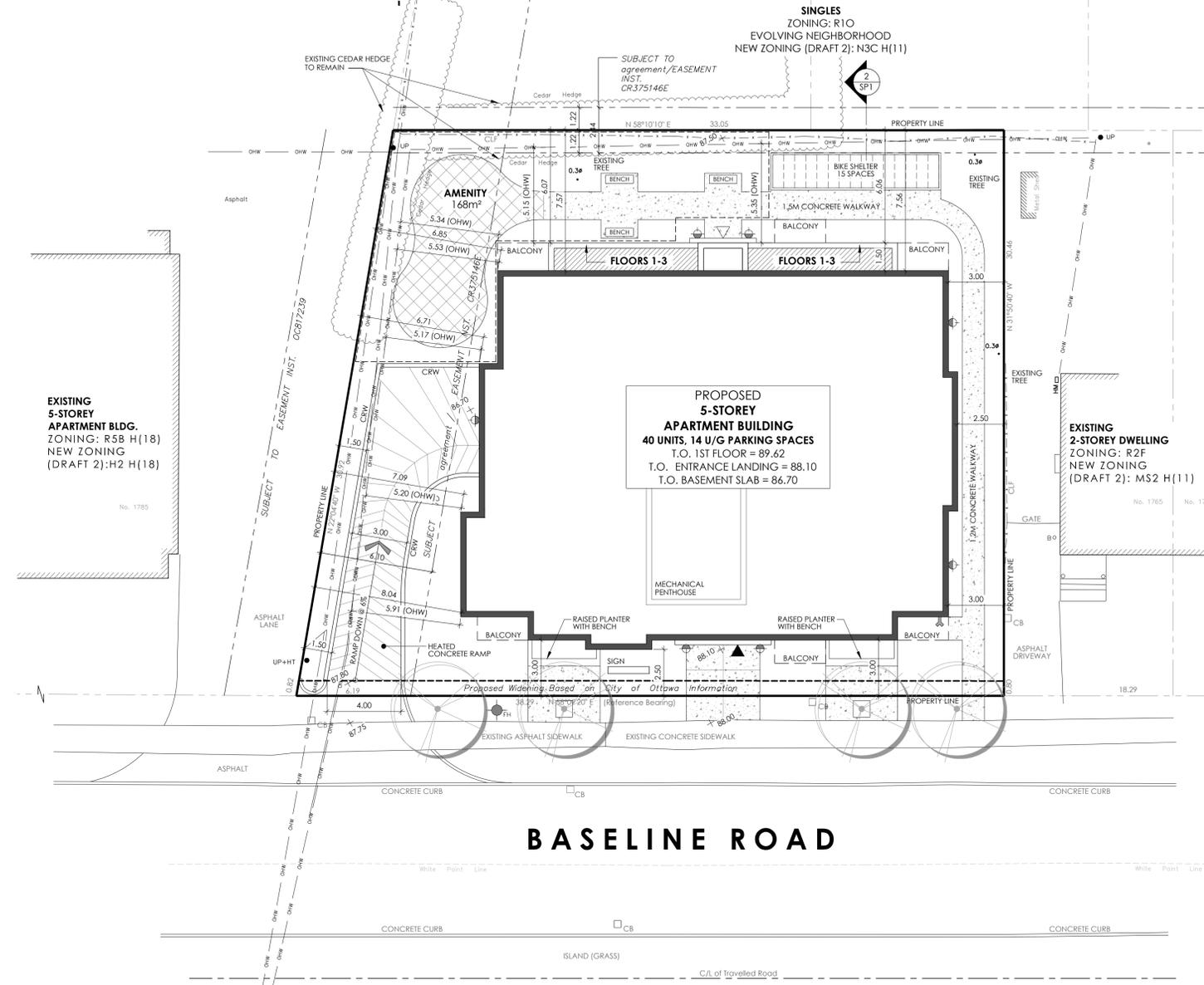
2 SITE SECTION SCALE: 1:200



3 FLOOR PLAN | FLOORS 1-3 SCALE: 1:200



4 BASEMENT PLAN SCALE: 1:200



SITE INFORMATION:
 SITE AREA = 0.11ha (0.27 Acres)
 ZONING: 1773 WOODROFFE = R2A, 1767 WOODROFFE = R2F[S55]
 NEW ZONING (DRAFT 2): MS2 H(11)
 PROPOSED ZONING: MS2 H(11)
 REQUIRED: PROVIDED:
 LOT WIDTH (MIN.): 38.29 m
 LOT AREA (MIN.): 1,086.92 m²
 BUILDING HEIGHT (MAX.): 17.50 m
 FRONT YARD (MIN.): 2.50 m
 REAR YARD (MIN.): 6.06 m
 INTERIOR SIDE YARD (MIN.): 2.50 m

PARKING REQUIREMENTS: SCHEDULE 1A AREA 'B'
 MID-RISE APARTMENT BUILDING (40 UNITS)
 PARKING REQUIRED= 0.5/d.u. + 0.2/d.u. VISITORS = 20 + 8 = 28 SPACES
 TOTAL PARKING REQUIRED= 28 SPACES
 TOTAL PARKING PROVIDED= 14 SPACES (0.35 SPACES/ UNIT)

BICYCLE PARKING REQUIREMENTS:
 BICYCLE PARKING REQUIRED= 0.5/d.u. x 40 d.u. = 20 SPACES
 BICYCLE PARKING PROVIDED= 40 SPACES (25 INDOOR + 15 EXT. SHELTER)

AMENITY SPACE REQUIREMENTS:
 AMENITY SPACE REQUIRED = 6m²/d.u. x 40 d.u. = 240m²
 50% COMMUNAL AMENITY AREA REQUIRED = 120m²
 COMMUNAL AMENITY AREA PROVIDED = 168m²
 PRIVATE AMENITY AREA PROVIDED = 116m² (BALCONIES/ TERRACES)
 TOTAL AMENITY AREA PROVIDED = 284m²

LEGEND/ ABBREVIATIONS:
 D.C. DEPRESSED CURB
 CRW CONCRETE RETAINING WALL
 WJ WROUGHT IRON
 TWSI TACTILE WALKING SURFACE INDICATOR
 CONC. CONCRETE
 ASPH. ASPHALT
 CLF CHAIN LINK FENCE
 OHW OVERHEAD WIRES
 GAS METERS LOCATION
 BUILDING SERVICES LOCATION (IN LOWER LEVEL)
 WALL MOUNTED LIGHT FIXTURE
 FIRE HYDRANT
 GRADE ELEVATION- FOR ARCHITECTURAL INTENT & COORDINATION ONLY. REFER TO GRADING PLAN FOR FINAL GRADES.
 LIGHT STANDARD
 TWSI
 SIAMMEE CONNECTIONS
 TRANSFORMER
 PRINCIPAL ENTRANCE
 SECONDARY ENTRANCE

NOTE:
 SITE PLAN TO BE READ IN CONJUNCTION WITH:
 - SITE SERVICING AND GRADING PLANS PREPARED BY ARCADIS.
 - LANDSCAPE PLAN PREPARED BY
NOTE:
 SITE BOUNDARIES DERIVED FROM:
 TOPOGRAPHIC PLAN OF SURVEY OF
 LOTS 351 and 352
 REGISTERED PLAN 372115
 CITY OF OTTAWA
 Surveyed by Arnis, O'Sullivan, Volebekk Ltd.
 DATED: 2025/03/28



M. David Blakely Architect Inc.
 2200 Prince of Wales Dr., Suite 101, Ottawa, Ontario
 Phone (613) 226-8811 Fax (613) 226-7942 K2E 6Z9

GENERAL NOTES:
 1. THE CONTRACTOR IS RESPONSIBLE FOR CHECKING AND VERIFYING ALL DIMENSIONS. ANY DISCREPANCY MUST BE REPORTED TO M. DAVID BLAKELY ARCHITECT INC.
 2. ALL WORK AND MATERIALS TO BE IN COMPLIANCE WITH ALL CODES, REGULATIONS, & BY-LAWS.
 3. ADDITIONAL DRAWINGS MAY BE ISSUED FOR CLARIFICATION TO ASSIST THE PROPER EXECUTION OF WORK. SUCH DRAWINGS WILL HAVE THE SAME HEADING AND INTENT AS IF THEY WERE INCLUDED WITH THE PLANS IN CONTRACT DOCUMENTS.
 4. DO NOT SCALE DRAWINGS.
 5. THIS DRAWING SHALL NOT BE USED OR COPIED WITHOUT THE AUTHORIZATION OF THE ARCHITECT.
 6. THIS DRAWING SHALL NOT BE USED FOR PERMIT OR CONSTRUCTION UNLESS THE DRAWING BEARS THE ARCHITECT'S SEAL AND SIGNATURE.

OWNER: LANDSCAPE ARCHITECT:
ARCHITECT: M. DAVID BLAKELY ARCHITECT INC. 2200 PRINCE OF WALES DR., SUITE 101 OTTAWA, ON K2E 6Z9 (613) 226-8811
CIVIL ENGINEER:
SURVEYOR: ANNIS O'SULLIVAN VOLLEBEKK LTD. 14 CONCORSE GATE, SUITE 500 NEPEAN, ON K2E 7S6 (613) 227-0550

SEAL

NO.	DATE	DESCRIPTION	BY	INT.
1.	10/04/25	FOR COORDINATION	MB	
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A B C
 A - DETAIL NUMBER
 B - SHEET NUMBER (DETAIL REQUIRED)
 C - SHEET NUMBER (DETAIL LOCATION)

PROJECT: 1773 & 1767 BASELINE ROAD OTTAWA, ONTARIO
CLIENT:

DRAWING TITLE: SITE PLAN
DATE: APRIL 2019
SCALE: 1 : 150
SHEET NO.: SP1
DRAWN BY: mdb
CHECKED: MDB

TOPOGRAPHIC PLAN OF SURVEY OF
LOTS 351 and 352
REGISTERED PLAN 372115
CITY OF OTTAWA
 Surveyed by Annis, O'Sullivan, Vollebek Ltd.

Scale 1 : 150
 0 4.5 9 13.5 18 22.5 27 31.5 36 Metres

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

Surveyor's Certificate
 I CERTIFY THAT:
 1. This survey and plan are correct and in accordance with the Surveys
 Act and the Surveyors Act and the regulations made under them.
 2. The survey was completed on the 19th day of March, 2025.

2025/03/28 Date
 D.S. McMoran
 Ontario Land Surveyor

Notes & Legend

—□—	Denotes	Survey Monument Planted
—■—	Denotes	Survey Monument Found
SIB	Standard Iron Bar	
SSIB	Short Standard Iron Bar	
IB	Iron Bar	
CP	Concrete Pin	
(WIT)	Witness	
(AOG)	Annis, O'Sullivan, Vollebek Ltd.	
Meas.	Measured	
Prop.	Proportioned	
(P1)	Registered Plan 372115	
(P2)	(AOG) Plan, November 15, 1990	
(P3)	Plan 4R-22510	
(P4)	Plan 4R-8091	
○ MH-S	Maintenance Hole (Sanitary)	
○ VC	Valve Chamber (Watermain)	
—G—	Underground Gas	
—W—	Underground Water	
—OW—	Overhead Wires	
○ UP	Utility Pole	
□ CB	Catch Basin	
○ FH	Fire Hydrant	
○ WV	Water Valve	
○ GV	Gas Valve	
○ GM	Gas Meter	
○ HM	Hydro Meter	
○ B	Bollard	
CLF	Chain Link Fence	
BF	Board Fence	
RWS	Stone Retaining Wall	
○	Diameter	
○	Location of Elevations	
○	Top of Concrete Curb Elevation	
○	Top of Stone Retaining Wall Elevation	
○	Centreline	
○	Deciduous Tree	
NTS	Not to Scale	

Bearings are grid, derived from Can-Net 2016 Real Time Network GPS observations, MTM Zone 9 (76°30' West Longitude) NAD-83 (original).
 For bearing comparisons, a rotation of 0°34'10" counter-clockwise was applied to bearings on P1 & P4, a rotation of 0°36'10" counter-clockwise was applied to bearings on P2 & P3.

Please note that the legal description for Lot 352 (PIN 03993-0172) is not subject to the easement purported in the Instrument CR375146E. The Land Registry Office and the legal community are of the opinion that the easements purported in Instrument CR375146E are not a valid easement. We recommended that legal counsel be obtained regarding the validity of the easement.

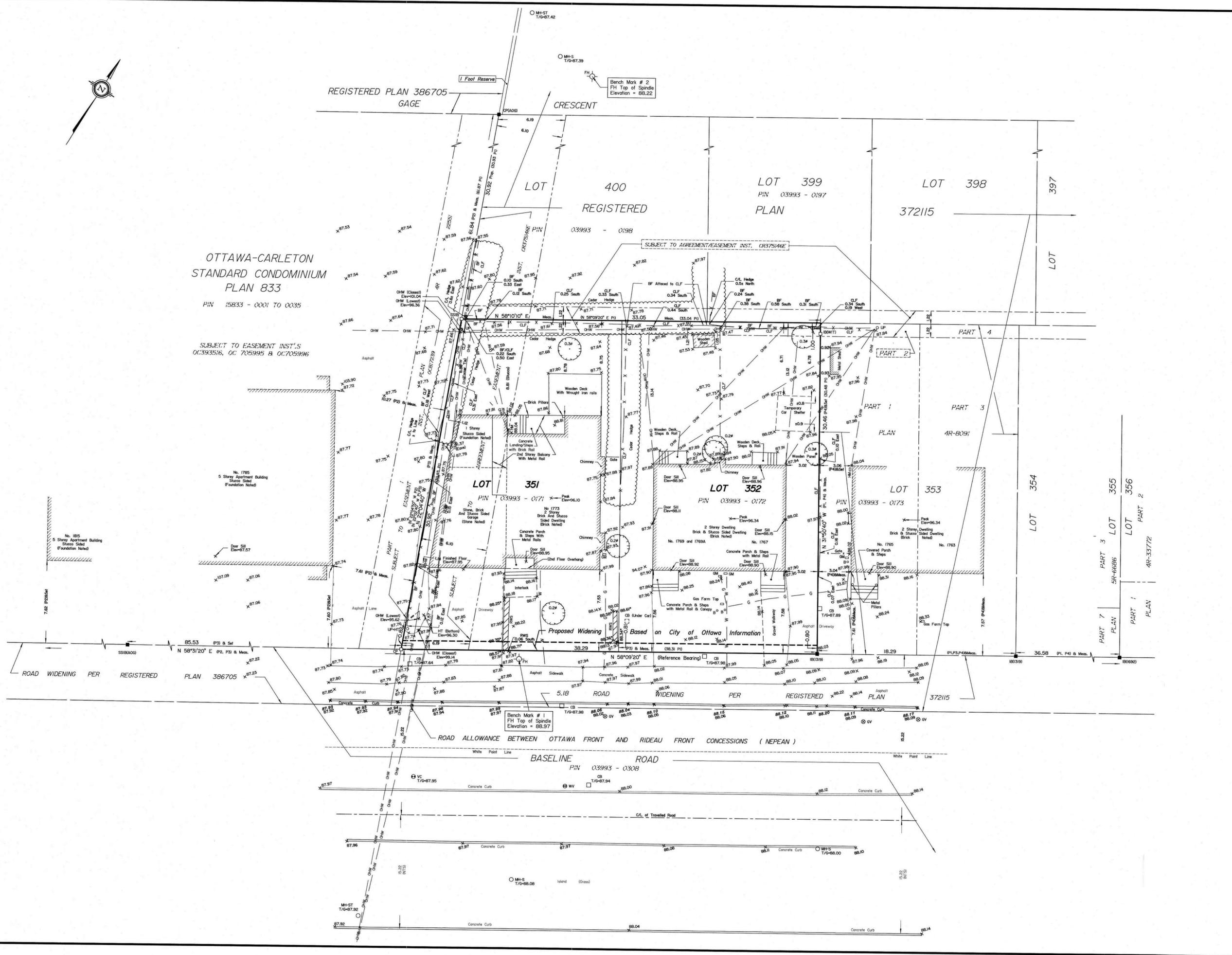
ELEVATION NOTES
 1. Elevations shown are geodetic, derived from City of Ottawa benchmark No. 3695, having an elevation of 86.752 metres, and are referred to the CGVD28 geodetic datum.
 2. It is the responsibility of the user of this information to verify that the job benchmark has not been altered or disturbed and that its relative elevation and description agrees with the information shown on this drawing.

UTILITY NOTES
 1. This drawing cannot be accepted as acknowledging all of the utilities and it will be the responsibility of the user to contact the respective utility authorities for confirmation.
 2. Only visible surface utilities were located.
 3. Underground utilities shown on this plan were marked on the ground by an unknown third party.
 4. A field location of underground plant by the pertinent utility authority is mandatory before any work involving breaking ground, probing, excavating etc.

Topographic data was collected under winter conditions. Snow cover and ice preclude determining location and elevation of some topographical data that is otherwise visible.



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



OTTAWA-CARLETON
 STANDARD CONDOMINIUM
 PLAN 833
 PIN 15833 - 0001 TO 0035

SUBJECT TO EASEMENT INST.'S
 OC393516, OC 705995 & OC705996

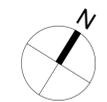
SUBJECT TO AGREEMENT/EASEMENT INST. CR375146E

Based on City of Ottawa Information

ROAD ALLOWANCE BETWEEN OTTAWA FRONT AND RIDEAU FRONT CONCESSIONS (NEPEAN)

BASELINE ROAD
 PIN 03993 - 0308

17/03/2025 10:46:25 AM C:\Users\j... \Documents\17032025\17032025 T.F.dwg

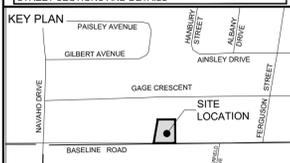


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ISSUES		
No.	DESCRIPTION	DATE
1	ISSUED FOR SPA	2025-12-18

SEE 010, 011, 012 FOR NOTES, LEGEND, CB TABLE, STREET SECTIONS AND DETAILS



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PROJECT
**1773 & 1767 BASELINE ROAD
 OTTAWA, ONTARIO**

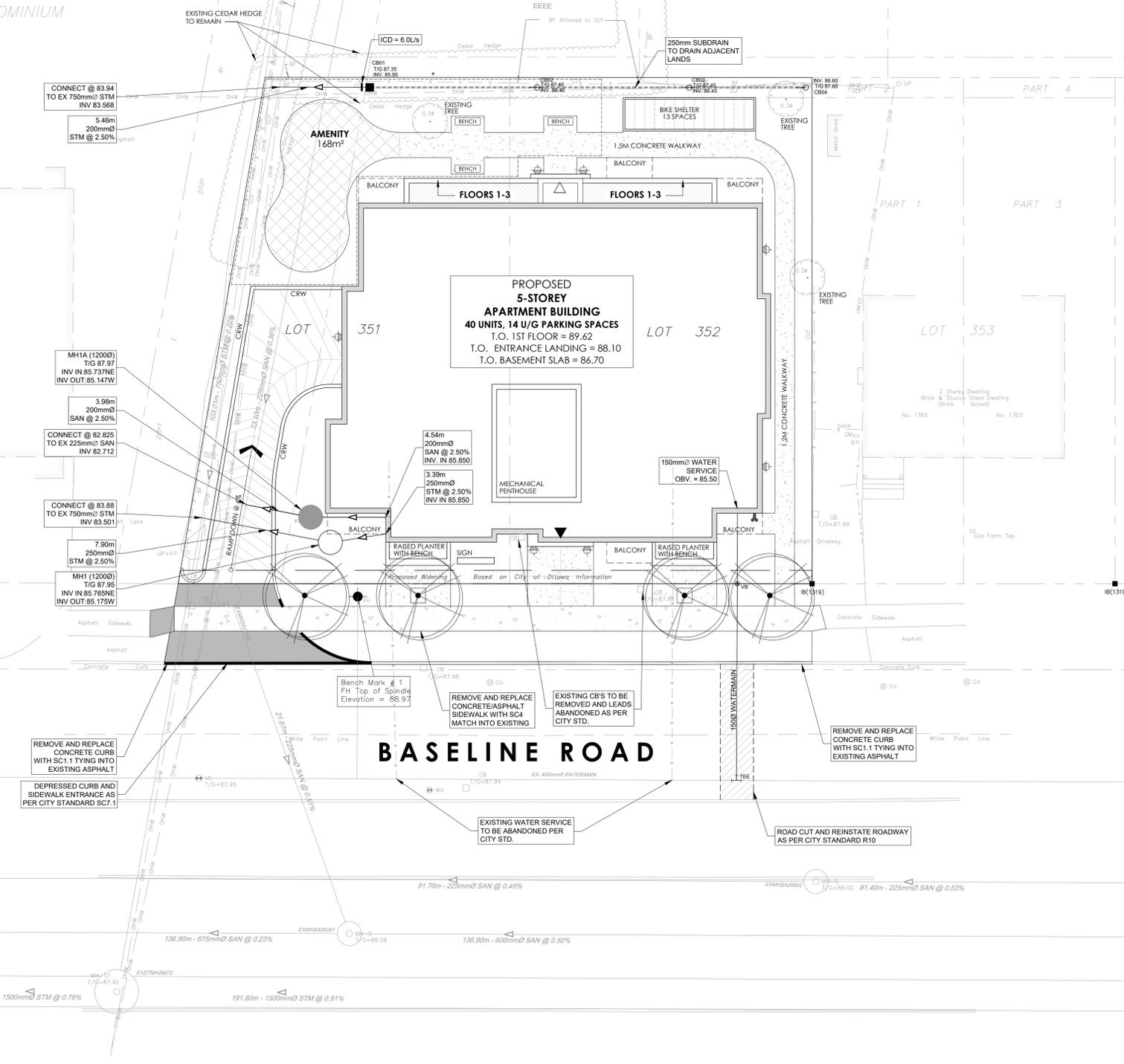
PROJECT NO:
30297182
 DRAWN BY: **D.P.S.** CHECKED BY: **D.G.Y.**
 PROJECT MGR: **D.G.Y.** APPROVED BY: **S.E.L.**

SHEET TITLE
SITE SERVICING PLAN

SHEET NUMBER **C-001** ISSUE **1**

OTTAWA-CARLETON
 STANDARD CONDOMINIUM
 PLAN 833

No. 1785
 5 Storey Apartment Building
 (Structure Sited)
 (Foundation Noted)



File Location: J:\9999_Proposals\Proposals\2024_Proposal1 - Land Engineering Proposals\EP-2024-032 - 1773 & 1767 Baseline Road\Design Files\LAYOUTS\C-001 SITE SERVICING PLAN.dwg
 Last Saved: December 18, 2025, by slamad3150
 Plotted: December 18, 2025, 3:12:31 PM by Slama, Don
 D07-XX-XX-XXXX
 XXXXX

Appendix B



ARCADIS IBI GROUP
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 Ottawa, Ontario K1S 5N4 Canada
 arcadis.com

WATERMAIN DEMAND CALCULATION SHEET

WATERMAIN DEMAND CALCULATION SHEET
 1773 Baseline Rd | Phoenix Homes
 x-6.0 | Rev #1 | 2025-09-17
 Prepared By: SL | Checked By: DY

NODE	RESIDENTIAL				NON-RESIDENTIAL (ICI)			AVERAGE DAILY DEMAND (l/s)			MAXIMUM DAILY DEMAND (l/s)			MAXIMUM HOURLY DEMAND (l/s)			FIRE DEMAND (l/min)
	1 Bedroom Apartment	2 Bedroom Apartment	3 Bedroom Apartment	POPULATION	INDUST. (ha)	COMM. (m2)	INSTIT. (pp)	RESIDENTIAL	ICI	TOTAL	RESIDENTIAL	ICI	TOTAL	RESIDENTIAL	ICI	TOTAL	
1773 Baseline	20	20		70.0				0.23		0.23	0.57		0.57	1.25		1.25	6,300

POPULATION DENSITY		WATER DEMAND RATES		PEAKING FACTORS		FIRE DEMANDS	
1 Bedroom Apartment	1.4 persons/unit	Residential	280 l/cap/day	Maximum Daily		Single Family	
2 Bedroom Apartment	2.1 persons/unit	Commercial Shopping Center	2,500 L/(1000m2)/day	Residential	2.5 x avg. day	Semi Detached & Townhouse	
3 Bedroom Apartment	3.1 persons/unit	Institutional	75 l/cap/day	Commercial	1.5 x avg. day	Medium Density	6,300 L/min
				Maximum Hourly			
				Residential	2.2 x avg. day		
				Commercial	1.8 x avg. day		



ARCADIS IBI GROUP
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 ibigroup.com

IBI GROUP

OBC WATER SUPPLY CALCULATIONS

1773 Baseline | Phoenix Homes
 x-6.0 | Rev #1 | 2025-09-17
 Prepared By: SL | Checked By: DY

OBC Tables and Figures

Required Fire Water Supply (Q) per OBC:

$Q = K V S_{tot}$	Q = Minimum Supply of water in litres
	K = Water Supply Coefficient from Table 1
	V = Total Building Volume in Cubic Meters
	S_{tot} = Total of Spaital coefficient values from property line exposures on all sides
	$S_{tot} = 1.0 + [S_{side\ 1} + S_{side\ 2} + \dots]$

Water Supply Coefficient (K)

Building Group Classification:	C - Residential Occupancies
From Table 1, K =	23

Building Volume (V)

Block 11 (10 Units)	
Floor Area	480 m ²
No. Floors	5
height =	3 m per floor
Building Volume (V):	7200 m ³

Spatial Coefficient (S):

Side	Dist	S_{coeff}
Front	20+	0
Back	14.6	0
Left	16.3	0
Right	5.6	0.5
Total		0.5

Therefore $S_{tot} = 1.5$

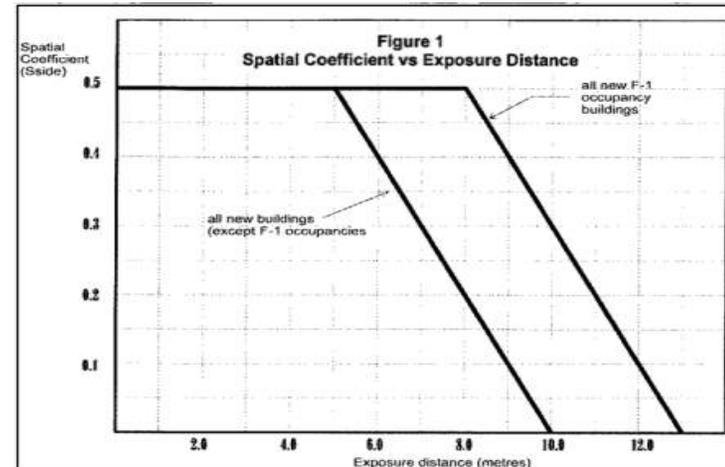
Required Fire Water Supply (Q) per OBC:

$Q = K V S_{tot}$
$Q = (23) (7200) (1.5)$
$Q = 248400$
From Table 2: $Q > 190000\ L$ & $< 270000\ L$
Therefore Target Flow = 6300 l/min

Type of Construction	Classification by Group or Division in Accordance with Table 3.1.2.1. of the Building Code				
	A-2 B-1 B-2 B-3 C D	A-4 F-3	A-1 A-3	E F-2	F-1
Building is of noncombustible construction with fire separations and fire-resistance ratings provided in accordance with Subsection 3.2.2., including loadbearing walls, columns and arches.	10	12	14	17	23
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.	16	19	22	27	37
Building is of combustible construction with fire separations and fire-resistance ratings provided in accordance with Subsection 3.2.2., including loadbearing walls, columns and arches. Noncombustible construction may be used in lieu of fire-resistance rating where permitted in Subsection 3.2.2.	18	22	25	31	41
Building is of combustible construction. 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.	23	28	32	39	53
Column 1	2	3	4	5	6

Part 3 Buildings under the Building Code	Required Minimum Water Supply Flow Rate, L/min
One-storey building with building area not exceeding 600 m ²	1 800
All other buildings	2 700 (if $Q \leq 108\ 000\ Lj^{0.5}$)
	3 600 (if $Q > 108\ 000\ L$ and $\leq 135\ 000\ Lj^{0.5}$)
	4 500 (if $Q > 135\ 000\ L$ and $\leq 162\ 000\ Lj^{0.5}$)
	5 400 (if $Q > 162\ 000\ L$ and $\leq 190\ 000\ Lj^{0.5}$)
	6 300 (if $Q > 190\ 000\ L$ and $\leq 270\ 000\ Lj^{0.5}$)
	9 000 (if $Q > 270\ 000\ Lj^{0.5}$)

<https://www.buildingcode.online/11.html>



Labadie, Sam

From: Rasool, Rubina <Rubina.Rasool@ottawa.ca>
Sent: October 21, 2025 9:07 AM
To: Labadie, Sam
Cc: Yannoulopoulos, Demetrius
Subject: RE: 1773 Baseline - Boundary Condition Request
Attachments: 1773 Baseline Road October 2025.pdf

Arcadis Warning: Exercise caution with email messages from external sources such as this message. Always verify the sender and avoid clicking on links or scanning QR codes unless certain of their authenticity.

Hello,

Please see below the WBC.

The following are boundary conditions, HGL, for hydraulic analysis at 1773 Baseline Road (zone 2W2C) assumed to be connected via the 406 mm watermain on Baseline Road. (see attached PDF for location).

Minimum HGL = 126.2 m

Maximum HGL = 132.4 m

Max Day + Fire Flow (105.0 L/s) = 125.7 m

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.

Thank you,
Simone

Rubina

Rubina Rasool
Project Manager
Planning, Infrastructure and Economic Development Department
Development Review – West Branch
City of Ottawa
110 Laurier Avenue West Ottawa, ON K1P 1J1
613-580-2424 Ext. 24221
rubina.rasool@ottawa.ca

Classified as City of Ottawa - Internal / Ville d'Ottawa - classé interne

From: Labadie, Sam <samantha.labadie@arcadis.com>
Sent: October 06, 2025 10:17 AM
To: Rasool, Rubina <Rubina.Rasool@ottawa.ca>
Cc: demetrius.yannoulopoulos <demetrius.yannoulopoulos@arcadis.com>
Subject: RE: 1773 Baseline - Boundary Condition Request

CAUTION: This email originated from an External Sender. Please do not click links or open attachments unless you recognize the source.

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.

Thanks Rubina. We're getting mixed requests from the city recently, some strongly prefer OBC for buildings under 9,000 L/min per tech bulletin 2024-05. If there's an issue, let us know.

Wanted to make sure this request wasn't lost.

Sam Labadie P.Eng
Civil Engineer
Arcadis Professional Services (Canada) Inc.
Suite 500, 333 Preston Street | Ottawa | ON | K1S 5N4 | Canada
C: +1 613 899 5717
www.arcadis.com



From: Rasool, Rubina <Rubina.Rasool@ottawa.ca>
Sent: October 6, 2025 10:09 AM
To: Labadie, Sam <samantha.labadie@arcadis.com>
Cc: Yannoulopoulos, Demetrius <demetrius.yannoulopoulos@arcadis.com>
Subject: RE: 1773 Baseline - Boundary Condition Request

Arcadis Warning: Exercise caution with email messages from external sources such as this message. Always verify the sender and avoid clicking on links or scanning QR codes unless certain of their authenticity.

Hi Sam,

I have received your request for water boundary conditions. Typically, the Water Distribution team requires the demands in FUS for internal use; however, I am seeing if they are able to also accept the demands in OBC. OBC demands can be used for the site plan analysis provided they meet our technical memos/guidelines.

Thanks,

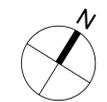
Rubina

Rubina Rasool
Project Manager
Planning, Infrastructure and Economic Development Department
Development Review – West Branch
City of Ottawa

Appendix C

Appendix D

LOCATION				AREA (Ha)																RATIONAL DESIGN FLOW												SEWER DATA												
STREET	AREA ID	FROM	TO	C=	C=	C=	C=	C=	C=	C=	C=	C=	C=	C=	C=	C=	C=	C=	IND	CUM	INLET	TIME	TOTAL	i (2)	i (5)	i (10)	i (100)	2yr PEAK	5yr PEAK	10yr PEAK	100yr PEAK	FIXED FLOW		DESIGN	CAPACITY	LENGTH	PIPE SIZE (mm)			SLOPE	VELOCITY	AVAIL CAP (2yr)		
				0.20	0.55	0.56	0.60	0.67	0.48	0.65	0.69	0.70	0.77	0.81	0.84	0.87	0.88	0.90	2.78AC	2.78AC	(min)	IN PIPE	(min)	(mm/hr)	(mm/hr)	(mm/hr)	(mm/hr)	FLOW (L/s)	FLOW (L/s)	FLOW (L/s)	FLOW (L/s)	IND	CUM	FLOW (L/s)	(L/s)	(m)	DIA	W	H	(%)	(m/s)	(L/s)	(%)	
AMENITY AREA		CB1	EX			0.03												0.05	0.05	10.00	0.05	10.05	76.81	104.19	122.14	178.56	3.59	4.87	5.70	8.34			0.00	4.87	54.10	5.46	200				2.50	1.668	49.23	91.01%
BUILDING		BLDG	MH1															0.15	0.15	10.00	0.03	10.03	76.81	104.19	122.14	178.56	11.53	15.64	18.34	26.81			0.00	15.64	98.09	3.39	250				2.50	1.936	82.45	84.05%
		MH1	EX															0.00	0.15	10.03	0.07	10.10	76.69	104.04	121.96	178.29	11.51	15.62	18.31	26.77			0.00	15.62	98.09	7.90	250				2.50	1.936	82.47	84.08%
Definitions: Q = 2.78CiA, where: Q = Peak Flow in Litres per Second (L/s) A = Area in Hectares (Ha) i = Rainfall intensity in millimeters per hour (mm/hr) [i = 732.951 / (TC+6.199)^0.810] 2 YEAR [i = 998.071 / (TC+6.053)^0.814] 5 YEAR [i = 1174.184 / (TC+6.014)^0.816] 10 YEAR [i = 1735.688 / (TC+6.014)^0.820] 100 YEAR				Notes: 1. Mannings coefficient (n) = 0.013																Designed: MP						No.		Revision						Date										
																				Checked: SL						1.		Submission No. 1 for City Review						2025-12-18										
																				Dwg. Reference: 30297182-500																								
																										File Reference: 30297182-05								Date: 2025-12-18		Sheet No: 1 of 1								

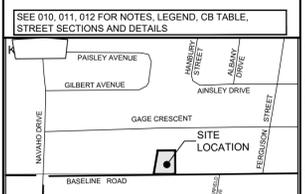


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ISSUES

No.	DESCRIPTION	DATE
1	ISSUED FOR SPA	2025-12-18



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 Ottawa ON K1S 5N4 Canada
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PROJECT
**1773 & 1767 BASELINE ROAD
 OTTAWA, ONTARIO**

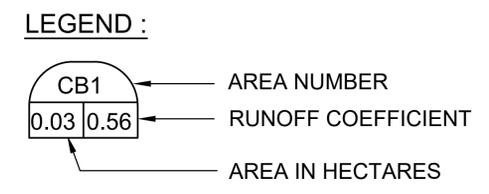
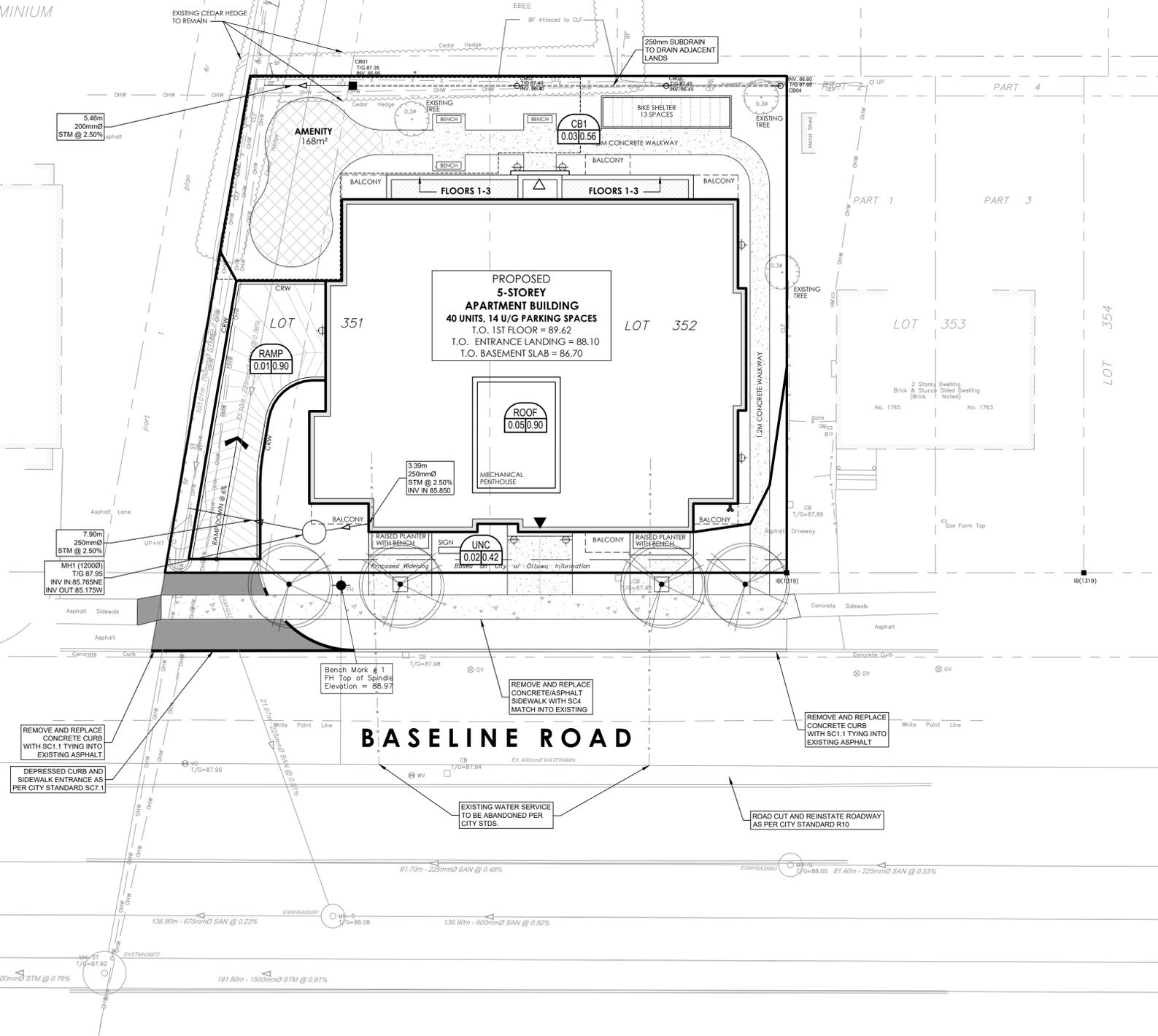
PROJECT NO:
30297182

DRAWN BY: D.P.S.	CHECKED BY: D.G.Y.
PROJECT MGR: D.G.Y.	APPROVED BY: S.E.L.

SHEET TITLE
**SITE STORM DRAINAGE AREA
 PLAN**

SHEET NUMBER C-500	ISSUE 1
------------------------------	-------------------

OTTAWA-CARLETON
 STANDARD CONDOMINIUM
 PLAN 833



File Location: J:\9999\Proposals\Proposals2024\Proposals1 - Land Engineering\Proposals\EP-2024-032 - 1773 & 1767 Baseline Road\Design Files\Layouts\C-500 SITE STORM DRAINAGE AREA PLAN.dwg Last Saved: December 18, 2025 2:21:02 PM by Surina, Don
 D07-XX-XX-XXXX
 XXXXX



STORMWATER MANAGEMENT

Formulas and Descriptions

$i_{2yr} = 1:2 \text{ year Intensity} = 732.951 / (T_c + 6.199)^{0.810}$
 $i_{5yr} = 1:5 \text{ year Intensity} = 998.071 / (T_c + 6.053)^{0.814}$
 $i_{100yr} = 1:100 \text{ year Intensity} = 1735.688 / (T_c + 6.014)^{0.820}$
 $T_c = \text{Time of Concentration (min)}$
 $C = \text{Average Runoff Coefficient}$
 $A = \text{Area (Ha)}$
 $Q = \text{Flow} = 2.78CiA \text{ (L/s)}$

Maximum Allowable Release Rate

Restricted Flowrate (based on C=0.50 Tc=10min)

$C = 0.5$
 $T_c = 10 \text{ min}$
 $i_{5yr} = 104.19 \text{ mm/hr}$
 $A_{site} = 0.11 \text{ Ha}$

$Q_{restricted} = 15.93 \text{ L/s}$

*UNC Uncontrolled Release ($Q_{uncontrolled} = 2.78 * C * i_{100yr} * A_{uncontrolled}$)*

$C = 0.53$
 $T_c = 10 \text{ min}$
 $i_{100yr} = 178.56 \text{ mm/hr}$
 $A_{uncontrolled} = 0.0153 \text{ Ha}$

$Q_{uncon} = 3.99 \text{ L/s}$

*RAMP Uncontrolled Release ($Q_{uncontrolled} = 2.78 * C * i_{100yr} * A_{uncontrolled}$)*

$C = 1.00$
 $T_c = 10 \text{ min}$
 $i_{100yr} = 178.56 \text{ mm/hr}$
 $A_{uncontrolled} = 0.0078 \text{ Ha}$

$Q_{uncon} = 3.87 \text{ L/s}$

Maximum Allowable Release Rate ($Q_{max \text{ allowable}} = Q_{restricted} - Q_{uncontrolled}$)

$Q_{max \text{ allowable}} = 8.07 \text{ L/s}$

MODIFIED RATIONAL METHOD (100-Year, & 2-Year Ponding)

Drainage Area		ROOF			
Area (Ha)	0.05				
C =	1.00	Restricted Flow Q_r (L/s) = 2.00			
100-Year Ponding					
T_c Variable (min)	i_{100yr} (mm/hour)	Peak Flow $Q_p = 2.78 * C * i_{100yr} * A$ (L/s)	Q_r (L/s)	$Q_p - Q_r$ (L/s)	Volume 100yr (m ³)
56	58.83	8.18	2.00	6.18	20.758
58	57.32	7.97	2.00	5.97	20.768
59	56.60	7.87	2.00	5.87	20.770
60	55.89	7.77	2.00	5.77	20.770
62	54.54	7.58	2.00	5.58	20.763

Storage (m ³)				
Overflow	Required	Surface	Sub-surface	Balance
0.00	20.77	28.13		0.00

Drainage Area		ROOF			
Area (Ha)	0.05				
C =	0.90	Restricted Flow Q_r (L/s) = 2.00			
2-Year Ponding					
T_c Variable (min)	i_{2yr} (mm/hour)	Peak Flow $Q_p = 2.78 * C * i_{2yr} * A$ (L/s)	Q_r (L/s)	$Q_p - Q_r$ (L/s)	Volume 2yr (m ³)
23	47.66	5.96	2.00	3.96	5.47
24	46.37	5.80	2.00	3.80	5.47
25	45.17	5.65	2.00	3.65	5.48
26	44.03	5.51	2.00	3.51	5.47
27	42.95	5.37	2.00	3.37	5.46

Storage (m ³)				
Overflow	Required	Surface	Sub-surface	Balance
0.00	5.48	28.13		0.00

Drainage Area		CB1			
Area (Ha)	0.03				
C =	0.70	Restricted Flow Q_r (L/s) = 6.00			
100-Year Ponding					
T_c Variable (min)	i_{100yr} (mm/hour)	Peak Flow $Q_p = 2.78 * C * i_{100yr} * A$ (L/s)	Q_r (L/s)	$Q_p - Q_r$ (L/s)	Volume 100yr (m ³)
5	242.70	14.17	6.00	8.17	2.451
7	211.67	12.36	6.00	6.36	2.670
8	199.20	11.63	6.00	5.63	2.702
9	188.25	10.99	6.00	4.99	2.695
11	169.91	9.92	6.00	3.92	2.587

Storage (m ³)				
Overflow	Required	Surface	Sub-surface	Balance
0.00	2.70	2.12	0.64	0.00

*Vol of CB+TCB*2

Drainage Area		CB1			
Area (Ha)	0.03				
C =	0.56	Restricted Flow Q_r (L/s) = 6.00			
2-Year Ponding					
T_c Variable (min)	i_{2yr} (mm/hour)	Peak Flow $Q_p = 2.78 * C * i_{2yr} * A$ (L/s)	Q_r (L/s)	$Q_p - Q_r$ (L/s)	Volume 2yr (m ³)
-1	192.83	9.01	6.00	3.01	-0.18
0	167.22	7.81	6.00	1.81	0.00
1	148.14	6.92	6.00	0.92	0.06
2	133.33	6.23	6.00	0.23	0.03
3	121.46	5.67	6.00	-0.33	-0.06

Storage (m ³)				
Overflow	Required	Surface	Sub-surface	Balance
0.00	0.06	2.12	0.64	0.00

RUNOFF COEFFICIENT CALCULATION SHEET

RESTRICTED

CB1	Area (m²)	C
Softscape	166	0.20
Hardscape	177	0.90
Total	343	0.56

UNRESTRICTED

UNC	Area (m²)	C
Softscape	106	0.20
Hardscape	47	0.90
Total	153	0.42



Adjustable Accutrol Weir

Tag: _____

Adjustable Flow Control for Roof Drains

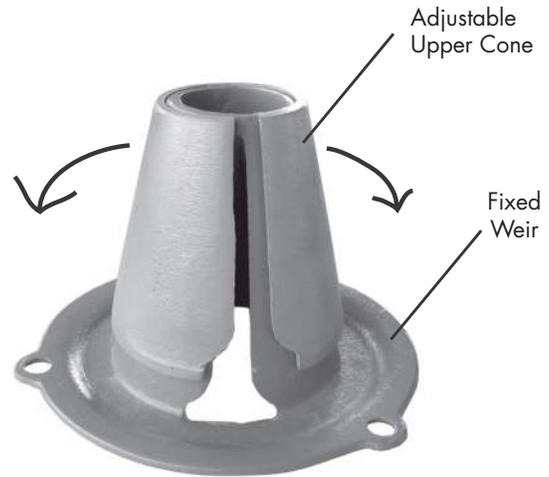
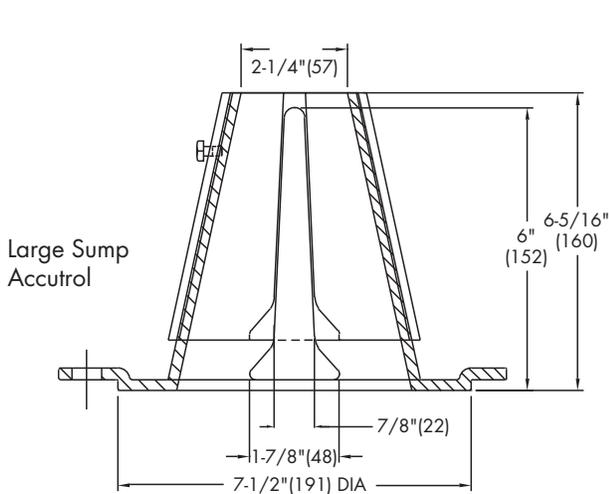
ADJUSTABLE ACCUTROL (for Large Sump Roof Drains only)

For more flexibility in controlling flow with heads deeper than 2", Watts Drainage offers the Adjustable Accutrol. The Adjustable Accutrol Weir is designed with a single parabolic opening that can be covered to restrict flow above 2" of head to less than 5 gpm per inch, up to 6" of head. To adjust the flow rate for depths over 2" of head, set the slot in the adjustable upper cone according to the flow rate required. Refer to Table 1 below.
 Note: Flow rates are directly proportional to the amount of weir opening that is exposed.

EXAMPLE:

For example, if the adjustable upper cone is set to cover 1/2 of the weir opening, flow rates above 2" of head will be restricted to 2-1/2 gpm per inch of head.

Therefore, at 3" of head, the flow rate through the Accutrol Weir that has 1/2 the slot exposed will be:
 [5 gpm (per inch of head) x 2 inches of head] + 2-1/2 gpm (for the third inch of head) = 12-1/2 gpm.



1/2 Weir Opening Exposed Shown Above

TABLE 1. Adjustable Accutrol Flow Rate Settings

Weir Opening Exposed	1"	2"	3"	4"	5"	6"
	Flow Rate (gallons per minute)					
Fully Exposed	5	10	15	20	25	30
3/4	5	10	13.75	17.5	21.25	25
1/2	5	10	12.5	15	17.5	20
1/4	5	10	11.25	12.5	13.75	15
Closed	5	5	5	5	5	5

Job Name _____
 Job Location _____
 Engineer _____

Contractor _____
 Contractor's P.O. No. _____
 Representative _____

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.

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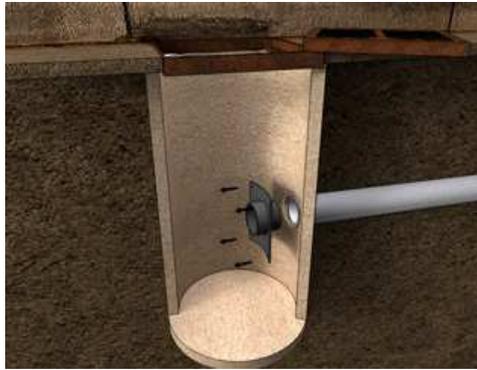
Square CB Installation Notes:

1. Materials and tooling verification:
 - Tooling: impact drill, 3/8'' concrete bit, torque wrench for 9/16'' nut, hand hammer, level, and marker.
 - Material: (4) concrete anchor 3/8x3-1/2, (4) washers, (4) nuts
2. Use the mounting wall plate to locate and mark the hole (4) pattern on the catch basin wall. You should use a level to ensure that the plate is at the horizontal.
3. Use an impact drill with a 3/8'' concrete bit to make the four holes at a minimum of 1-1/2'' depth up to 2-1/2''. Clean the concrete dust from the holes.
4. Install the anchors (4) in the holes by using a hammer. Put the nuts on the top of the anchors to protect the threads when you will hit the anchors with the hammer. Remove the nuts on the ends of the anchors
5. Install the wall mounting plate on the anchors and screw the nut in place with a maximum torque of 40 N.m (30 lbf-ft). There should be no gap between the wall mounting plate and the catch basin wall.
6. From ground above using a reach bar, lower the device by hooking the end of the reach bar to the handle of the LMF device. Align the triangular plate portion into the mounting wall plate. Push down the device to be sure it has centered in to the wall mounting plate and has created a seal.



Round CB Installation Notes: (Refer to square install notes above for steps 1 , 3, & 4)

2. Use spigot catch basin wall plate to locate and mark the hole (4) pattern on the catch basin wall. You should use a level to ensure that the plate is at the horizontal.
5. Install the CB spigot wall plate on the anchors and screw the 4 nuts in place with a maximum torque of 40 N.m (30 lb-ft). There should be no gap between the CB spigot wall plate and the catch basin wall.
6. Apply solvent cement on the hub of the universal mounting plate and the spigot of the spigot CB wall plate. Slide the hub over the spigot. Make sure the universal mounting plate is at the horizontal and its hub is completely inserted onto the spigot. Normally, the corners of the universal mounting plate hub adapter should touch the catch basin wall.
7. From ground above using a reach bar, lower the ICD device by hooking the end of the reach bar to the handle of the ICD device. Align the triangular plate portion into the mounting wall plate. Push down the device to be sure it has centered into the mounting plate and has created a seal.



CAUTION/WARNING/DISCLAIM:

- Verify that the inlet(s) pipe(s) is not protruding into the catch basin. If it is, cut it back so that the inlet pipe is flush with the catch basin wall.
- Any required cement in the installation must be approved for PVC.
- The solvent cement should not be used below 0°C (32°F) or in a high humidity environment. Please refer to the IPEX solvent cement guide to confirm required curing times or attend the IPEX [Online Solvent Cement Training Course](#).
- Call your IPEX representative for more information or if you have any questions about our products.

IPEX TEMPEST Inlet Control Devices Technical Specification

General

Inlet control devices (ICD's) are designed to provide flow control at a specified rate for a given water head level and also provide odour and floatable control where specified. All ICD's will be IPEX Tempest or approved equal.

All devices shall be removable from a universal mounting plate. An operator from street level using only a T-bar with a hook will be able to retrieve the device while leaving the universal mounting plate secured to the catch basin wall face. The removal of the TEMPEST devices listed above must not require any unbolting or special manipulation or any special tools.

High Flow (HF) Sump devices will consist of a removable threaded cap which can be accessible from street level with out entry into the catchbasin (CB). The removal of the threaded cap shall not require any special tools other than the operator's hand.

ICD's must have no moving parts.

Materials

ICD's are to be manufactured from Polyvinyl Chloride (PVC) or Polyurethane material, designed to be durable enough to withstand multiple freeze-thaw cycles and exposure to harsh elements.

The inner ring seal will be manufactured using a Buna or Nitrile material with hardness between Duro 50 and Duro 70.

The wall seal is to be comprised of a 3/8" thick Neoprene Closed Cell Sponge gasket which is attached to the back of the wall plate.

All hardware will be made from 304 stainless steel.

Dimensioning

The Low Medium Flow (LMF), High Flow (HF) and the High Flow (HF) Sump shall allow for a minimum outlet pipe diameter of 200mm with a 600mm deep Catch Basin sump.

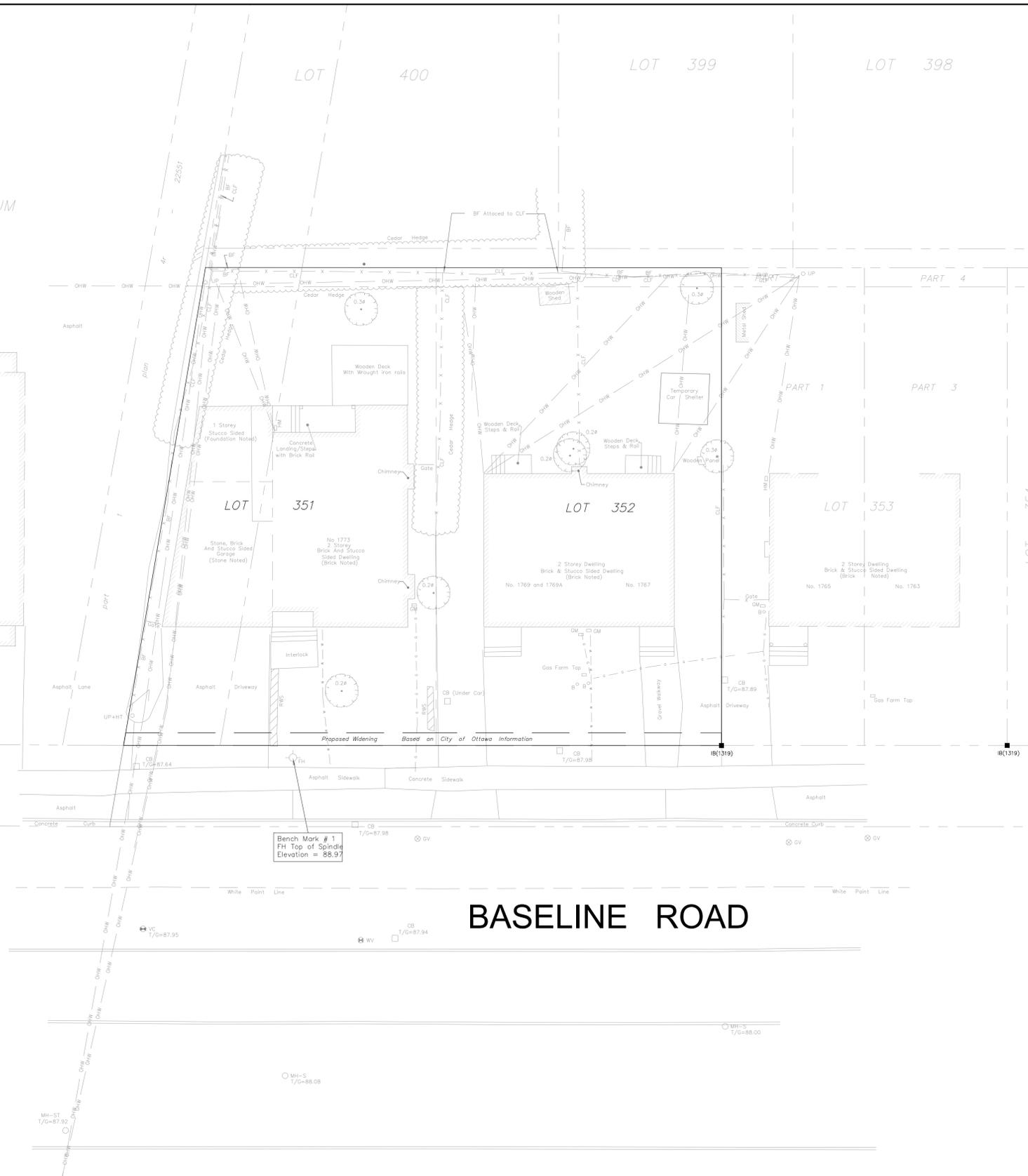
Installation

Contractor shall be responsible for securing, supporting and connecting the ICD's to the existing influent pipe and catchbasin/manhole structure as specified and designed by the Engineer.

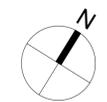


Appendix E

OTTAWA-CARLETON
STANDARD CONDOMINIUM
PLAN 833



BASELINE ROAD



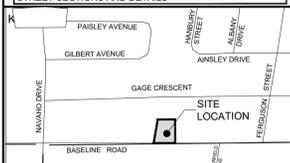
CLIENT
PHOENIX HOMES
18A Bentley Ave Ottawa, ON K2E 6T8

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SEE 010, 011, 012 FOR NOTES, LEGEND, CB TABLE, STREET SECTIONS AND DETAILS



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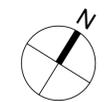
PROJECT
1773 & 1767 BASELINE ROAD
OTTAWA, ONTARIO

PROJECT NO:
30297182
DRAWN BY: D.P.S. CHECKED BY: D.G.Y.
PROJECT MGR: D.G.Y. APPROVED BY: S.E.L.

SHEET TITLE
EXISTING CONDITIONS

SHEET NUMBER
C-EXCON ISSUE
1

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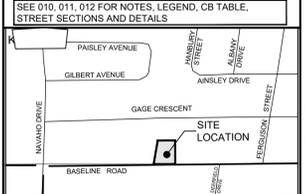


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1	ISSUED FOR SPA	2025-12-18



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Meos	Measured
Prop.	Proportioned
(P1)	Registered Plan 372115
(P2)	(AOG) Plan, November 15, 1990
(P3)	Plan 4R-22510
(P4)	Plan 4R-8091
MH-S	Maintenance Hole (Sanitary)
VC	Valve Chamber (Watermain)
G	Underground Gas
W	Underground Water
OHW	Overhead Wires
UP	Utility Pole
CB	Catch Basin
FH	Fire Hydrant
WV	Water Valve
GV	Gas Valve
GM	Gas Meter
HM	Hydro Meter
B	Boltard
CLF	Chain Link Fence
BF	Board Fence
RWS	Stone Retaining Wall
D	Diameter
L	Location of Elevations
CE	Top of Concrete Curb Elevation
TE	Top of Stone Retaining Wall Elevation
C/L	Centreline
T	Deciduous Tree

SEAL

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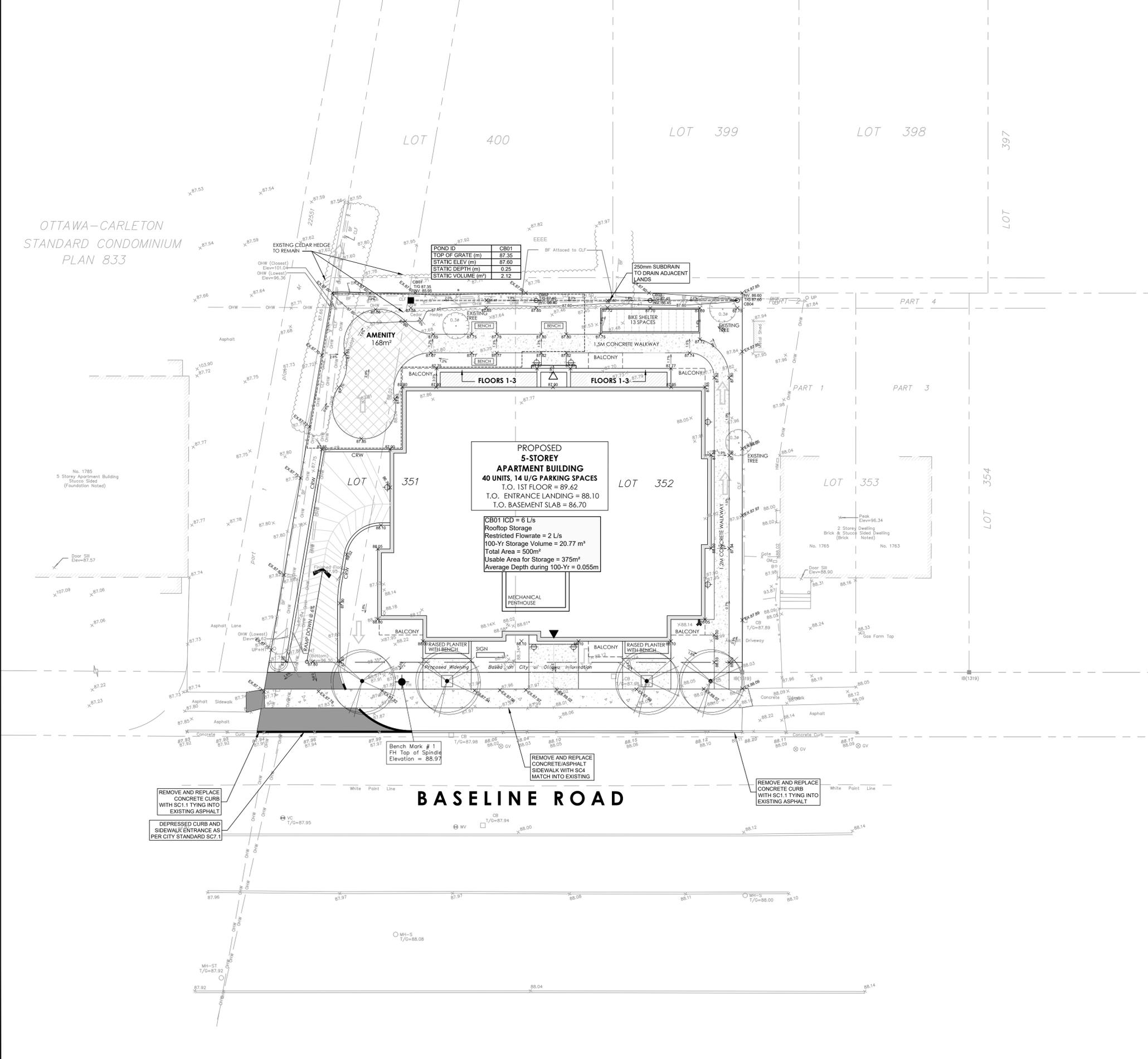
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SHEET TITLE
SITE GRADING PLAN

SHEET NUMBER **ISSUE**

C-200 1

GRADING LEGEND



OTTAWA-CARLETON
STANDARD CONDOMINIUM
PLAN 833

No. 1785
5 Storey Apartment Building
Stucco Sided
(Foundation Notes)

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