Minto Communities

Design Brief

178-200 Isabella

November 2026

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1 INTRODUCTION

The purpose of this report is to outline the required municipal services, including water supply, stormwater management and wastewater disposal, needed to support the redevelopment of the subject property. The property is approximately 0.22 hectares in area and is located at the following current municipal addresses, 178-200 Isabella Street. The site is bound by Isabella Street to the north, existing residential and commercial properties to the east, west and south. Please refer to Figure below for location.

Site Location



Minto Communities proposes to construct a 19 storey residential building with 229 units. The proposed development also includes 2 levels of underground parking. Vehicular access to the site will be from Isabella Street. Please refer to Site Plan, located in **Appendix A**, for more information. The site currently consists of empty lots. All existing structures within the subject property have been previously removed.

1.1 Pre-Consultation Meeting

A pre-consultation with the City of Ottawa was held on October 16, 2025, where, amongst other items, the servicing of the proposed development was discussed. Minutes of that meeting have been included in **Appendix A**.

1.2 Geotechnical Concerns

A geotechnical report entitled “Geotechnical Report – Proposed Multi-Storey Building – 178-200 Isabella Street and 205 Pretoria Avenue – Ottawa, Ontario – PG5043-1 Revision 3” dated December 10, 2025, by Paterson Group Inc. has been prepared for the subject site.

The objective of the investigation report 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 comments on the following:

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

The report concludes that the subject site is considered suitable for the proposed development.

2 WATER DISTRIBUTION

2.1 Existing Conditions

As previously noted, the site is located on Isabella Street. The Isabella Street ROW currently contains two watermains.

An existing 1200 mm diameter backbone watermain is located within the north half of the Isabella Street ROW. No connections to this watermain are proposed; however, at the time of Site Plan Application a plan for protecting this watermain during construction of building services will need to be provided.

The local watermain in front of the proposed building is a 127 mm main, which increases to a 152 mm main on the west side of the building, which connects to a 305 mm main on Bank Street. On the east side of the proposed building, the 127 mm main increases to a 203 mm main approximately 20 meters west of O'Connor Street, where it connects to a 406 mm watermain.

The watermains fall within the City of Ottawa's pressure zone 1W which will provide the water supply to the site.

2.2 Design Criteria

2.2.1 Water Demands

The population for apartment buildings is assumed at 1.8 persons per unit as found in Table 4.1 of the Design Guidelines. A watermain demand calculation sheet is included in **Appendix B** and the total water demands are summarized as follows:

- Average Day 1.34 l/s
- Maximum Day 3.34 l/s
- Peak Hour 7.35 l/s

2.2.2 System Pressures

The 2010 City of Ottawa Water Distribution Guidelines states that the preferred practice for 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 where it is not possible/feasible to maintain the system pressure below 552 kPa.

2.2.3 Fire Flow Rate

The required fire flow rate has been determined with the Fire Underwriters (FUS) method. The calculation uses a non-combustible building type with protected openings as confirmed by the building architect which results in a required fire flow rate of 6,000 l/min or 100 l/s. A copy of the correspondence confirming the building type is included in **Appendix B**.

2.2.4 Boundary Conditions

As part of the Assessment of Adequacy, boundary conditions were requested based upon three scenarios: a connection to the 305mm watermain in Bank Street, a connection to the 152mm watermain in Isabella Street or a connection to the 127mm watermain in Isabella Street.

Based upon a review of the boundary conditions provided it was determined that a connection to the 127mm watermain provided insufficient pressure. A connection to the proposed upsized 152mm watermain was found to be adequate.

Updated boundary conditions have been requested from the city for the current site plan, in which the city reconfirmed that upsizing to a 152mm watermain is still necessary. A copy of the current boundary conditions are included in **Appendix B** and the boundary condition for twin connections to the upsized 152mm watermain is summarized as follows:

BOUNDARY CONDITIONS	
SCENARIO	Hydraulic Head
Maximum HGL	114.7m
Minimum HGL (Peak Hour)	106.3m
Max Day + Fire Flow (152mm main)	102.9m

2.3 Proposed Water Plan

Two proposed 150mm diameter water services will connect the building to the municipal system. It is proposed to provide a connection to the upsized 152mm watermain in Isabella Street for redundancy purposes, see General Plan of Services, drawing C-001 in **Appendix A**. A proposed valve box separates the two connections. Two existing fire hydrants are expected to provide fire flow coverage for the site, as can be seen on the General Plan of Services. 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 106.3m – meter elevation (assumed to be 1m above level P1) 63.7m = 42.6m or 417.9 kPa which exceeds the minimum requirement of 276 kPa. The pressure on the top floor can be estimated as 106.3m – 123.25m = <0m, which is below the minimum of 276 kPa and will require a water booster pump.

Fire Flow – On Isabella St, the max day plus fire flow can be estimated as HGL 102.9m – ground floor 67.70 = 35.2m or 345.3 KPa which exceeds the minimum of 150kPa.

Max HGL (High Pressure Check) – The high-pressure check can be estimated as HGL 114.7 – lowest level) 67.70 = 47.0m or 461.1 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.

Two hydrants are available to service the subject property as seen on the General Plan of Services.

Both hydrants are within 75m of the building's Siamese connection. With 2 AA hydrants within 75m of the building the minimum number of hydrants needed to deliver the required fire flow to the structure is being provided in accordance with Technical Bulletin ISTB-2018-02 dated March 21, 2018.

BUILDING ID	FIRE FLOW DEMAND (L/MIN)	FIRE HYDRANT(S) WITHIN 75M (5,700 L/MIN)	FIRE HYDRANT(S) WITHIN 150M (3,800 L/MIN)	COMBINED FIRE FLOW (L/MIN)
178-200 Isabella	6,000	2	0	11,400

3 WASTEWATER

3.1 Existing Conditions

Isabella Street currently contains two combined sewers and no dedicated sanitary sewer.

An existing 1500 mm diameter brick combined sewer is located within the north half of the Isabella Street ROW. No connections to this sewer are proposed.

South of the above noted trunk combined sewer, to which the proposed building will connect, exists a 300mm clay combined sewer. The upstream limit of said clay sewer is at the western property line of the subject site.

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:

- Residential flow — 280l/c/d
- ICI Peaking factor — 1.5 if ICI in contributing area >20%
1.0 if ICI in contributing area <20%
- Residential Peaking Factor — Modified Harmon Formula
- Infiltration allowance — 0.33 l/s/ha
- Velocities — 0.60 m/s min. to 3.0 m/s max.

Given the above criteria, total wastewater flow from the proposed development will be about 4.63L/s, the detailed sanitary sewer calculations are included in **Appendix C**. A 200 mm dia sanitary service connection will provide sufficient capacity for the site.

3.3 Recommended Wastewater Plan

Please refer to the General Plan of Services C-001 in **Appendix A** for connection location details. Given that the building is proposing to connect to a proposed manhole which connects to the extreme upper end of the 300mm combined sewer, and where no known surcharge conditions exist downstream, and that the existing storm flows tributary to the combined sewer will be significantly reduced as part of this redevelopment, sufficient capacity exists to support the flows for the subject site. Per the city feedback form, the combined wastewater and stormwater flows must be equal or less than the current 2-year combined release rate. More detailed discussion and calculations on the combined rate are in Section 4.

4 SITE STORMWATER MANAGEMENT

4.1 Existing Conditions

Isabella Street currently contains two combined sewers and no dedicated storm sewer.

As noted in section 3.1 an existing 1500 mm diameter brick combined sewer is located within the north half of the Isabella Street ROW. No connections to this sewer are proposed.

South of the above noted trunk combined sewer, to which the proposed building will connect, exists a 300mm clay combined sewer. The upstream limit of said clay sewer is at the western property line of the subject site.

4.2 Design Criteria

Criteria for the stormwater management of existing infill sites outletting to combined sewers within the City of Ottawa are as follows;

- Existing adjacent storm sewers were designed to a 2-year level of service
- Site to be designed to limit the 100-year post development flow to a maximum of the 2-year pre-development flow (storm and sanitary flows combined).
- Pre-development flow to use a maximum C of 0.4 and a minimum TC of 10 min.

Some of the key design criteria include the following:

• Design Storm	1:2-year return (Ottawa)
• Sewer Sizing	
• Initial Time of Concentration	10 minutes
• Runoff Coefficients	
- Softscape Areas	C = 0.20
- Hardscape Areas	C = 0.90
- Roof	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 Proposed Minor System

The proposed design for this site shows a storm sewer connection along with some uncontrolled surface drainage entering into the 300mm clay combined sewer within Isabella Street ROW Using the above-noted criteria, a 300 mm dia storm service lateral can provide sufficient capacity for the site. A storm sewer design sheet and the associated storm sewer drainage area plan are included in **Appendix D**. Please refer to the General Plan of Services C-001 for connection location details.

4.4 Stormwater Management

The subject site will be limited to a release rate established using the criteria described in section 4.2. This will be achieved through a duplex storm pump system set to discharge at the identified release rate. When rainfall events generate flows that are more than the site's allowable release rate excess volume will be stored within the cistern.

At certain locations within the site, the opportunity to capture runoff is limited due to grading constraints and building geometry. These locations are generally located at the perimeter of the site where it is necessary to tie into public boulevards and adjacent properties, and it is not always feasible to capture stormwater runoff.

Some stormwater from adjacent lands currently flow through the subject site as part of an overland flow route. A series of CBs at the rear property line are proposed to capture this flow and direct uncontrolled along the East property line to the Municipal ROW.

These "uncontrolled" areas total 0.01 hectares. The runoff from the remaining site will be collected and discharged into the cistern, sized to accommodate inflow during the 1:100-year event with no overflow leaving the site.

The restricted release rate for the 0.24 Ha site as noted previously is limited to the 2yr flow with C-=0.4

$\mathbf{Q_{restricted}}$ = **2.78** x **C** x $\mathbf{i_{2yr}}$ x **A** where:

C = **0.4**

$\mathbf{i_{2yr}}$ = Intensity of 2-year storm event (mm/hr)

= $732.951 \times (T_c + 6.119)^{0.810}$ = 76.81 mm/hr; where T_c = 10 minutes

$\mathbf{Q_{restricted}}$ = **18.79 L/s**

As noted above, a portion of the site will be left to discharge to the surrounding boulevards and roadways uncontrolled.

Based on a 1:100 year event, the flow from the two uncontrolled areas can be determined as:

$\mathbf{Q_{uncontrolled}}$ = **2.78** x **C** x $\mathbf{i_{100yr}}$ x **A** where:

$\mathbf{C_{100}}$ = Average runoff coefficient of uncontrolled area = 0.2*1.25 = 0.25

$\mathbf{i_{100yr}}$ = Intensity of 100-year storm event (mm/hr)

= $1735.688 \times (T_c + 6.014)^{0.820}$ = 178.56 mm/hr; where T_c = 10 minutes

$\mathbf{A_{1+2}}$ = Uncontrolled Area = 0.01 Ha

Therefore, the uncontrolled release rate can be determined as:

$\mathbf{Q_{uncontrolled}}$ = **1.24 L/s**

Additionally, since the site outlets to a combined sewer, the sanitary discharge rate must be subtracted from the overall release rate. The wastewater flow has been calculated to be 4.63 L/s.

The maximum allowable release rate from the remainder of the site can then be determined as:

$$Q_{max\ allowable} = Q_{restricted} - Q_{uncontrolled} - Q_{sanitary}$$

$$= 18.79\ L/s - 1.24\ L/s - 4.63\ L/s = \mathbf{12.92\ L/s}$$

As noted in the preconsult notes, any excess storm water runoff up to the 100-year event is to be stored on-site, in order to not surcharge the downstream municipal storm sewer system. For this site a building cistern will be used, no roof top or surface storage will be employed. A duplex storm pump will be designed to limit discharge from the tank to 12.9 L/s to meet the maximum allowable release rate to the storm sewer system. The Modified Rational Method was used to identify the required storage, the MRM spreadsheet in **Appendix D** identifies the required storage to accommodate the 1:100yr and 1:2yr events. The following table summarizes the on-site storage requirements during both the events.

AREA	TRIBUTARY AREA	AVAILABLE STORAGE (M^3)	100-YEAR STORM		2-YEAR STORM	
			RESTRICTED FLOW (L/S)	REQUIRED STORAGE (M^3)	RESTRICTED FLOW (L/S)	REQUIRED STORAGE (M^3)
Cistern	0.21	74.5	12.9	74.3	12.9	17.6
Unrestricted	0.01		1.24		1.24	
Sanitary Flow			4.63		4.63	
TOTAL	**0.22**	**74.5**	**18.77**	**74.3**	**18.77**	**17.6**

In all instances the required storage is met with the building cistern.

As demonstrated above, the proposed site controls will restrict the 100-year storm event runoff from the site into the existing combined sewer system to 12.90 L/s. Restricted stormwater will be contained onsite by the building cistern. Should a more extreme event occur, or should a roof inlet become blocked, scuppers will provide for overflow to the street. In the unlikely event the duplex pump system fails, or the storm service lateral is blocked, an emergency overflow from the building cistern (CB1) to the street is provided.

Refer to 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.

5 SEDIMENT AND EROSION CONTROL PLAN

5.1 General

During construction, existing stream and storm water conveyance systems can be exposed to significant sediment loadings. A number of construction techniques designed to reduce unnecessary construction sediment loading may be used such as;

- Filter socks will remain on open surface structures such as manholes and catchbasins until these structures are commissioned and put into use.
- Installation of silt fence, where applicable, around the perimeter of the proposed work area.

The Erosion and Sedimentation Control measures are detailed in drawing C-900 in **Appendix E**.

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 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.

5.4 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.

5.5 Mud Mats

To reduce the amount of sediment tracked offsite onto municipal roads, construction traffic is to be directed to exit the site on a 150mm pad made of 50mm clear stone and placed on non-woven geotextile, known as a “mud mat”. The pad is to be maintained until onsite roads have a granular base.

6 CONCLUSIONS & RECOMMENDATIONS

6.1 Conclusions

Municipal water, wastewater and stormwater systems required to accommodate the proposed development are available to service the proposed development. Prior to construction, existing sewers will be surveyed, and CCTV inspected to assess sewer condition.

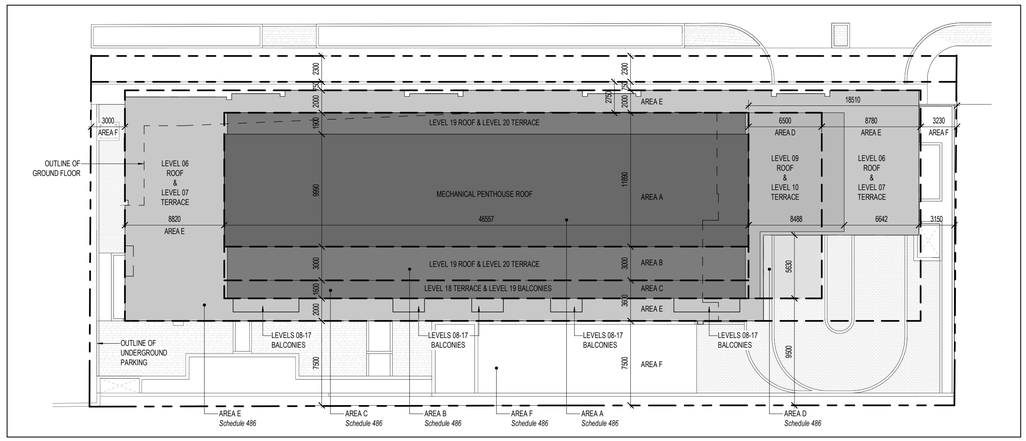
This report has demonstrated sanitary and storm flows from the subject site can be accommodated by the existing 300 mm dia combined sewer in Isabella Street. However, a reliable water supply, including fire flow is not presently available from the existing watermains fronting the site. In order to provide a reliable water supply to the site a new 150 mm dia watermain needs to be constructed between Bank and O'Connor Streets to replace the aged 125 mm pipe. Also, the proposed servicing requirements have been established in accordance with MECP and City of Ottawa current level of service requirements.

The use of lot conveyance controls and end of pipe controls outlined in the report will result in effective treatment of surface stormwater runoff from the site. Adherence to the sediment and erosion control plan during construction will minimize harmful impacts on surface water.

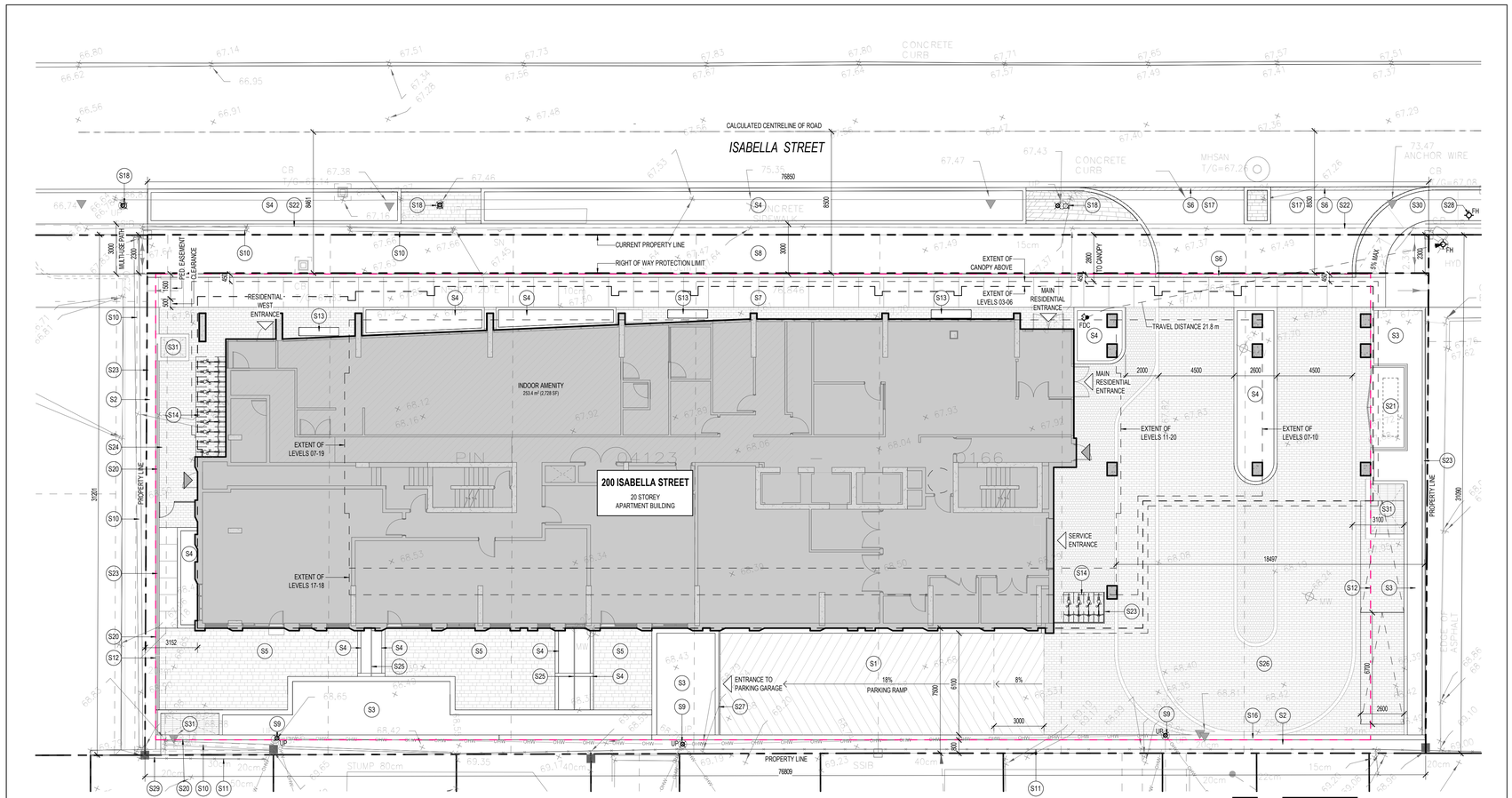
6.2 Recommendations

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



3 SP-01 ZONING SETBACK PLAN
SCALE: 1 : 250



1 SP-01 SITE PLAN
SCALE: 1 : 150

UNIT COUNT

NAME	L01	L02	L03	L04	L05	L06	L07	L08	L09	L10	L11	L12	L13	L14	L15	L16	L17	L18	L19	TOTAL COUNT	PERCENTAGE
STUDIO	0	6	7	7	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	34	15%
1-BED	1	4	7	7	7	7	8	7	7	7	7	7	7	7	7	7	7	0	0	111	47%
1-BED + DEN	0	2	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	8	3%
2-BED	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	57	24%
2-BED + DEN	0	1	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	9	4%
3-BED	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	2	2	15	6%
TOTAL	3	15	20	20	20	20	12	12	12	11	11	11	11	11	11	11	11	6	6	234	100%

GROSS BUILDING AREA

LEVEL	AREA	AREA (SF)
LEVEL 01	926.2 m²	9,969 SF
LEVEL 02	1,053.4 m²	11,339 SF
LEVEL 03	1,322.9 m²	14,240 SF
LEVEL 04	1,322.9 m²	14,240 SF
LEVEL 05	1,322.9 m²	14,240 SF
LEVEL 06	1,322.9 m²	14,240 SF
LEVEL 07	863.8 m²	9,297 SF
LEVEL 08	863.7 m²	9,297 SF
LEVEL 09	863.7 m²	9,297 SF
LEVEL 10	768.4 m²	8,271 SF
LEVEL 11	768.4 m²	8,271 SF
LEVEL 12	768.4 m²	8,271 SF
LEVEL 13	768.4 m²	8,271 SF
LEVEL 14	768.4 m²	8,271 SF
LEVEL 15	768.4 m²	8,271 SF
LEVEL 16	768.4 m²	8,271 SF
LEVEL 17	768.4 m²	8,271 SF
LEVEL 18	694.5 m²	7,475 SF
LEVEL 19	694.5 m²	7,475 SF
LEVEL 20	468.1 m²	5,039 SF
TOTAL	17,866.6 m²	192,314 SF
LEVEL P1	2,056.9 m²	22,140 SF
LEVEL P2	2,056.9 m²	22,140 SF
TOTAL	4,113.8 m²	44,281 SF
TOTAL	**21,980.4 m²**	**236,595 SF**

GROSS LEASABLE AREA

LEVEL	AREA	AREA (SF)
LEVEL 01	229.5 m²	2,470 ft²
LEVEL 02	882.1 m²	9,495 ft²
LEVEL 03	1,194.7 m²	12,860 ft²
LEVEL 04	1,194.7 m²	12,860 ft²
LEVEL 05	1,194.7 m²	12,860 ft²
LEVEL 06	1,194.5 m²	12,857 ft²
LEVEL 07	745.5 m²	8,024 ft²
LEVEL 08	755.9 m²	8,136 ft²
LEVEL 09	765.4 m²	8,132 ft²
LEVEL 10	672.7 m²	7,241 ft²
LEVEL 11	672.7 m²	7,241 ft²
LEVEL 12	672.7 m²	7,241 ft²
LEVEL 13	671.5 m²	7,228 ft²
LEVEL 14	672.7 m²	7,241 ft²
LEVEL 15	672.7 m²	7,241 ft²
LEVEL 16	672.7 m²	7,241 ft²
LEVEL 17	672.7 m²	7,241 ft²
LEVEL 18	598.9 m²	6,447 ft²
LEVEL 19	598.8 m²	6,446 ft²
TOTAL	14,725.0 m²	158,498 ft²

COMMUNAL AMENITY

LEVEL	AREA	AREA (SF)
LEVEL 01	347.7 m²	3,742 SF
LEVEL 20	455.3 m²	4,901 SF
TOTAL	803.0 m²	8,643 SF

GFA (CITY OF OTTAWA)

LEVEL	AREA	AREA (SF)
LEVEL 01	218.1 m²	2,347 SF
LEVEL 02	842.7 m²	9,071 SF
LEVEL 03	1,139.7 m²	12,268 SF
LEVEL 04	1,139.7 m²	12,268 SF
LEVEL 05	1,139.7 m²	12,268 SF
LEVEL 06	1,139.5 m²	12,265 SF
LEVEL 07	722.7 m²	7,779 SF
LEVEL 08	733.1 m²	7,891 SF
LEVEL 09	732.7 m²	7,886 SF
LEVEL 10	650.9 m²	7,006 SF
LEVEL 11	650.9 m²	7,006 SF
LEVEL 12	650.9 m²	7,006 SF
LEVEL 13	649.7 m²	6,993 SF
LEVEL 14	650.9 m²	7,006 SF
LEVEL 15	650.9 m²	7,006 SF
LEVEL 16	650.9 m²	7,006 SF
LEVEL 17	650.9 m²	7,006 SF
LEVEL 18	577.6 m²	6,217 SF
LEVEL 19	577.6 m²	6,217 SF
TOTAL	14,169.1 m²	152,515 SF

BICYCLE PARKING

LEVEL	COUNT
LEVEL 01	14
LEVEL P1	236
TOTAL	250

PRIVATE AMENITY

LEVEL	AREA	AREA (SF)
LEVEL 01	210.9 m²	2,270 SF
LEVEL 03	3.6 m²	39 SF
LEVEL 04	3.6 m²	39 SF
LEVEL 05	3.6 m²	39 SF
LEVEL 06	3.6 m²	39 SF
LEVEL 07	220.4 m²	2,372 SF
LEVEL 08	27.9 m²	301 SF
LEVEL 09	27.9 m²	301 SF
LEVEL 10	62.2 m²	670 SF
LEVEL 11	27.9 m²	301 SF
LEVEL 12	27.9 m²	301 SF
LEVEL 13	27.9 m²	301 SF
LEVEL 14	27.9 m²	301 SF
LEVEL 15	27.9 m²	301 SF
LEVEL 16	27.9 m²	301 SF
LEVEL 17	27.9 m²	301 SF
LEVEL 18	66.6 m²	716 SF
LEVEL 19	66.6 m²	716 SF
TOTAL	892.5 m²	9,607 SF

VEHICLE PARKING

LEVEL	TYPE	COUNT
LEVEL P1	RESIDENTIAL	19
LEVEL P1	VISITOR	22
LEVEL P2	RESIDENTIAL	57
TOTAL		98



2 SP-01 LOCATION PLAN
SCALE: NTS

SITE STATISTICS

Current Zoning Designation:	GM[2012] S486
Lot Width:	76.85 m
Total Lot Area:	2,391.05 m²
Average Existing Grade:	68.04 m

Proposed Development - 19 Storey High-Rise Apartment Building

No. of units 234 Units

Zoning Mechanism	Required	Provided
Minimum Lot Width *Table 187(b)*	No Minimum	76.85 m
Minimum Lot Area *Table 187(a)*	No Minimum	2,388.61 m²
Min. Front Yard Setback *Schedule 486*	0.75 m for the first 6 storeys 2.75 m at 7+ storeys	0.75 m for the first 6 storeys 2.75 m at 7+ storeys
Min. Interior Side Yard Setback (East) *Schedule 486*	3 m for the first 6 storeys 11.78 m at 7-9 storeys 18.28 m at 10+ storeys	3.15 m for the first 6 storeys 9.79 m at 7-9 storeys 18.28 m at 10+ storeys
Min. Interior Side Yard Setback (West) *Schedule 486*	3 m for the first 6 storeys 11.82 m at 7+ storeys	3 m for the first 6 storeys 11.82 m at 7+ storeys
Min. Rear Yard Setback *Schedule 486*	7.5 m for the first 6 storeys 9.5 m at 7-17 storeys 11.1 m at 18 storeys 14.3 m at 19 storeys	7.5 m for the first 6 storeys 9.5 m at 7-17 storeys 11.1 m at 18 storeys 14.3 m at 19 storeys
Maximum Building Height *Schedule 486*	60 m or 19 storeys	58.8 m / 19 storeys
Parking Space Rates (Residents) *101 (Sch. 1A - Area X) | Section 101(3)* *Section 101(6)(c)(i)*	100 Spaces *0 spaces for the first 12 units* *0.5 spaces / unit for 222 units* *- 10% of required parking spaces*	76 Spaces
Minimum Visitor Parking Rates *101 (Sch. 1A - Area X) | Section 102(2)*	22 Spaces *0 spaces for first 12 units* *0.1 spaces / unit for 222 units*	22 Spaces
Bicycle Parking Rates (Residents) *Table 111A(b)(i) (Sch. 1 - Area X)*	117 Spaces *0.5 spaces / unit for 234 units*	250 Spaces
Total Amenity Area *Table 137(4)(f)*	1,404 m² *6 m² / unit for 234 units*	1,695.5 m²
Communal Amenity Area *Table 137(4)(f)*	702 m² *Min. 50% of Total Amenity Area*	803.0 m²

SITE PLAN SYMBOLS LEGEND

- BUILDING ENTRANCE
- BUILDING EXIT
- INTERLOCKING STONE PAVERS
- FDC FIRE DEPARTMENT CONNECTION
- BICYCLE PARKING
- NEW LIGHT STANDARD
- PROPERTY LINE
- UP EXISTING UTILITY POLE TO REMAIN
- UP UTILITY POLE TO BE REMOVED/RELOCATED
- FH NEW FIRE HYDRANT LOCATION
- FH FIRE HYDRANT TO BE REMOVED/RELOCATED
- SETBACK LINE
- OHW OVERHEAD WIRES

PLAN OF SURVEY OF
LOTS 11, 12, 13, 14, 15, 16, & 17
AND PART OF THE 15 FOOT LANE
SOUTH ISABELLA STREET
REGISTERED PLAN 34325
CITY OF OTTAWA

STANTEC GEOMATICS LTD. 2019

SURVEY INFO
SCALE: 1 : 1

OWNER ISATORIA LIMITED PARTNERSHIP
SUITE 200, 180 KENT ST, OTTAWA ON, K1P 0B6

APPLICANT MINTO GROUP
SUITE 200, 180 KENT ST, OTTAWA ON, K1P 0B6

ARCHITECT PROJECT1 STUDIO
SUITE 300, 260 ST PATRICK ST, OTTAWA ON, K1N 5K5

SURVEYOR STANTEC GEOMATICS LTD.
SUITE 300, 1131 CLYDE AVE, OTTAWA ON, K2C 3G4

LANDSCAPE DTAH
SUITE 600, 425 ADELAIDE ST W, TORONTO ON, M5V 3C1

CIVIL ARCADIS PROFESSIONAL SERVICES INC.
SUITE 500, 333 PRESTON ST, OTTAWA ON, K1S 5N4

TRAFFIC J.L. RICHARDS
SUITE 1000, 343 PRESTON ST, OTTAWA ON, K1S 1N4

NOISE/WIND GRADIENT WIND
127 WALGREEN RD, OTTAWA ON, K0A 1L0

SITE PLAN NOTES

S1 CONCRETE SURFACE c/w HERRINGBONE SURFACE & INTEGRATED SNOWMELT
S2 SOFT LANDSCAPING, REFER TO LANDSCAPE
S3 RAISED PLANTER, REFER TO LANDSCAPE
S4 PLANTING BED, REFER TO LANDSCAPE
S5 PATIO c/w CONCRETE UNIT PAVING, REFER TO LANDSCAPE
S6 DEPRESSED CURB, REFER TO CIVIL
S7 PROPOSED SIDEWALK, REFER TO CIVIL
S8 SOFT LANDSCAPING, FUTURE MULTI-USE PATHWAY, REFER TO LANDSCAPING & CIVIL
S9 UTILITY POLE TO BE REMOVED/RELOCATED
S10 EXISTING STONE RETAINING WALL w/ STEEL FENCE TO BE DEMOLISHED, REFER TO CIVIL
S11 EXISTING BOARD FENCE TO BE DEMOLISHED
S12 LINE DENOTES EXTENT OF PARKING LEVEL BELOW
S13 BENCH, REFER TO LANDSCAPE
S14 BICYCLE PARKING
S16 CAST-IN-PLACE CONCRETE RETAINING WALL, REFER TO CIVIL
S17 VEHICULAR CONCRETE PAVING, REFER TO CIVIL
S18 NEW LIGHT STANDARD AS PER CITY OF OTTAWA STANDARDS, REFER TO ELECTRICAL & CIVIL
S20 CONCRETE UPSTAND
S21 GAS PAD IN LOUVRED FINISHED DOGHOUSE
S22 EXISTING CONCRETE SIDEWALK TO BE REMOVED
S23 PRIVACY FEATURE SCREEN, REFER TO LANDSCAPE
S24 GATE, REFER TO LANDSCAPE
S25 PRIVACY SCREEN, REFER TO LANDSCAPE
S26 CONCRETE UNIT PAVING, REFER TO LANDSCAPE
S27 PAINTED STEEL GUARD
S28 FUTURE HYDRANT RELOCATION BY OTHERS
S29 CONCRETE RETAINING WALL TIED BACK INTO EXISTING RETAINING WALL, REFER TO CIVIL & LANDSCAPE
S30 TIE CONCRETE SIDEWALK INTO EXISTING
S31 AREA WELL GRATE

GENERAL ARCHITECTURAL NOTES:

1. This drawing is the property of the Architect and may not be reproduced or used without the expressed consent of the Architect.
2. Drawings are not to be scaled. The Contractor is responsible for checking and verifying all levels and dimensions and shall report all discrepancies to the Architect and obtain clarification prior to commencing work.
3. Upon notice in writing, the Architect will provide written/graphic clarification or supplementary information regarding the intent of the Contract Documents.
4. The Architectural drawings are to be read in conjuction with all other Contract Documents including Project Manuals and the Structural, Mechanical and Electrical Drawings.
5. Positions of exposed or finished Mechanical or Electrical devices, fittings and fixtures are indicated on the Architectural Drawings. Locations shown on the Architectural Drawings shall govern over Mechanical and Electrical Drawings. Mechanical and Electrical items not clearly located will be located as directed by the Architect.
6. These documents are not to be used for construction unless specifically noted for such purpose.

21	ISSUED FOR SITE PLAN CONTROL	26-11-12
20	ISSUED FOR COORDINATION	26-10-30
19	ISSUED FOR COORDINATION	26-10-28
18	ISSUED FOR CLIENT REVIEW	26-10-23
17	ISSUED FOR COORDINATION	26-10-16
16	ISSUED FOR CLIENT REVIEW	26-10-16
15	ISSUED FOR COORDINATION	26-10-14
14	ISSUED FOR COORDINATION	26-10-07
13	ISSUED FOR COORDINATION	26-09-23
11	ISSUED FOR COORDINATION	26-09-08
9	ISSUED FOR COORDINATION	26-07-29
8	ISSUED FOR COORDINATION	26-07-08
7	ISSUED FOR COORDINATION	26-07-03
5	REISSUED FOR SITE PLAN CONTROL	26-04-16
4	ISSUED FOR COORDINATION	26-04-14
3	ISSUED FOR COORDINATION	26-04-10
2	ISSUED FOR COORDINATION	26-04-01
1	ISSUED FOR SITE PLAN CONTROL	26-01-30

ISSUE RECORD

ONTARIO ASSOCIATION OF ARCHITECTS
EVAN M. KOOLWINE
LICENCE
7370

project1 studio
Project1 Studio Incorporated
| 613.884.3939 | mail@project1studio.ca

200 ISABELLA STREET

200 Isabella Street
Ottawa, ON
K1S 1V7

PROJ	SCALE	DRAWN	REVIEWED
2516	NOTED	BH/JDH	RMK

SITE PLAN

SP-01

File No.: PC2025-0258

October 27, 2025

Kevin A. Harper
Isatoria Limited Partnership
Via email: kharper@minto.com

Subject: Pre-Consultation: Meeting Feedback
Proposed Site Plan Control Application – 178-200 Isabella Street

Please find below information regarding next steps as well as consolidated comments from the above-noted pre-consultation meeting held on October 16, 2025.

Pre-Consultation Preliminary Assessment

Next Steps

1. A review of the proposal and materials submitted for the above-noted pre-consultation has been undertaken. For your next submission, please submit the required Application Form, together with the necessary studies and/or plans to planningcirculations@ottawa.ca, copy (cc:) to the file lead and planning support.

2. In your subsequent pre-consultation or application submission, please ensure that all comments or issues detailed herein are addressed. A detailed cover letter stating how each issue has been addressed is requested 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 it is recommended that a subsequent pre-consultation application be submitted.

4. If the Urban Design Review Panel (UDRP) Report is listed as a required submission material in the Study and Plan Identification List, the applicant must visit the UDRP prior to formally submitting the planning application. The UDRP report is required for the application to be considered complete.

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. 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

Comments:

1. Subject site:

    a. The subject site is located within the Glebe neighbourhood east of Bank Street. It is a lot assembly of 178, 180, 182 and 200 Isabella Street, which are interior lots located on the south side of Isabella Street. The site is rectangular shaped with approximately 2,391 square metres in size with 77 metres of frontage along Isabella Street.

    b. The site is currently vacant.

    c. The site is located on an arterial road that runs perpendicular to Bank Street and abuts Highway 417.

2. Proposal:

    a. This is a Phase 1 pre-consultation for a Site Plan Control application to facilitate the construction of a 19-storey high-rise residential building consisting of 229 units, and a two-level underground parking garage with 103 vehicular parking spaces and 158 bicycle parking spaces.

3. Policies:

    a. Official Plan: Inner Urban Transect, Neighbourhood Designation, Evolving Neighbourhood Overlay

        i. Located along a Transit Priority Corridor (see OP Schedule C2)

        ii. Highway 417 is identified as a Scenic Route (see OP Schedule C13)

        iii. Isabella Street is subject to a 18m Right-of-Way protection (despite Scheudle C16, and as per the new Transportation Master Plan that went to council July 23, 2025).

iv. Isabella Street is also subject to an approved functional design (RMA-2020-TPC-003)

v. Approximately 600m east of the subject site is a Major Pathway along the Rideau Canal (see OP Schedule C3)

b. Bank Street in the Glebe Secondary Plan: North Gateway Policy Area

i. Any future development will require active frontages on Isabella Street(see Section 3.1.3 (8)).

ii. Subject to site-specific policies outlined in Section 3.1.3

4. Staff support the development of a 19-storey building on the subject site, as reflected in the previous Zoning By-law Amendment approval (File No. D02-02-20-0086).

5. Has there been reconsideration to introduce commercial on the ground floor? The site is located 50m from Bank Street, a mainstreet corridor, where retail and mixed-use is directed. Staff would support extending mixed-use buildings along this part of Isabella.

a. Staff support some flexibility to have non-residential options in the future if amenity area is proposed instead. However, please ensure that the project will not be deficient in amenity area if it is converted into non-residential in the future.

6. In the materials submitted with the pre-consultation package, it appears that there is only one door facing Isabella (for the amenity area). Provide a door that leads to the main lobby on the front façade facing Isabella to contribute to the active frontages along Isabella required by the Secondary Plan.

a. An entrance from Isabella will be more visible, especially with the support beam blocking sight of the current side lobby entrance.

b. Residents walking from Bank Street will have quicker and more convenient access to the main lobby if there is an entrance on Isabella.

7. Parking access:

a. Staff appreciate that the parking access has come a long way since previous iterations of the site plan.

b. There is concern about the 12m+ wide private approach that is being proposed. Please consider a design that consolidates the driveway to a maximum of 6m wide. Minimize conflict between pedestrians/cyclists crossing the driveway and vehicles entering and exiting the site.

c. There are some concerns about the circulation and traffic safety of the visitor parking spaces. If these spaces are to remain, please consider how to thoughtfully screen them from the abutting property.

8. Parking garage:

    a. Please consider moving the accessible parking spaces closer to the elevator lobby.

    b. Identify on the parking plans which spaces are visitor parking spaces. The Zoning By-law Exception 2912 says that visitor parking spaces may be reduced to a minimum length of 4.9m in length and 2.4m in width.

9. Front yard:

    a. Please demonstrate how the front yard setback at the ground floor is enough space for a quality public realm, and that there is enough space behind the MUP for grading, snow storage, benches, utilities, and other requirements, as discussed during the review of the Zoning By-law. An increased stepback at the first floor might be requested if the current setback is not sufficient to accommodate a quality public realm.

10. Rear yard:

    a. Staff look forward to reviewing a Site Plan of the entire property. Staff will look to ensure that there is adequate landscaping in this area that it relates well to the neighbouring properties to the south.

11. Right-of-way:

    a. Isabella Street is to undergo a transportation design and re-construction project with an unknown completion date. The timing and cost of all works in the City's right-of-way as it relates to the the noted project will require further discussion through the Site Plan Control application process.

12. Waste management:

    a. Is waste going to be managed privately or by the City?

    b. Staff have some concerns regarding the discussed movement and function of the waste collection, and would be looking to discuss this further.

    c. Consider ways to address waste management such that the site design can improve the traffic circulation and reduce the number and width of vehicular egresses/private approaches.

13. Bicycle parking:

a. Please provide at least a 1:1 ratio for bicyle parking.

Please feel free to contact Margot Linker, Planner II, Development Review Central, for follow-up questions.

Urban Design

Comments:

14. An Urban Design Brief is required. Please see attached customized Terms of Reference to guide the preparation.

    a. The Urban Design Brief should be structured by generally following the headings highlighted under Section 3 – Contents of these Terms of Reference.

15. Urban Design Review Panel was deferred to the Site Plan Control process as part of the rezoning application and staff appreciate the applicant's willingness to attend. A UDRP Report will be required as part of a complete submission.

16. Additional drawings and studies are required as shown on the SPIL. Please follow the terms of references (Planning application submission information and materials | City of Ottawa) to prepare these drawings and studies. These include:

    a. Site Plan

    b. Landscape Plan

    c. Building Elevations

    d. Conceptual Floorplans

    e. Sun Shadow Analysis

    f. Wind Analysis (Type 2)

    g. Public realm

    h. UDRP requirements

Preliminary Design Comments:

17. The site is located in a prominent location and the proposed development will be viewed from various vantage points, design excellence is expected.

18. Staff are pleased to hear the mechanical penthouse is going to be screened and integrated into the top of tower.

19. Staff are pleased to hear that the proposal plans to integrate a variety of 2 and 3-bedroom units.

20. Staff are also pleased to see a variety of amenity offerings between the ground floor and the roof top areas. The concept of a rentable terrace is interesting as an amenity and should be explored further in lieu of private balconies. Staff would also encourage fewer private balconies where possible.

21. Although urban design staff are supportive of the make-up of uses within the ground floor, staff have concerns with the impact of the vehicle entry, pick-up drop off, and surface parking areas proposed as they limit the amount of active frontage along Isabella Street. Please reduce this impact and explore bringing some of these back-of-house functions to the rear portions of the property.

22. Please ensure that the design creates a distinction between the podium and tower, including insetting the floor directly above the podium level.

23. Underside of parking area should be considered in the overall design strategy.

24. Soil volumes should be built up in the rear to support significant planting for screening to residential properties as discussed as part of the rezoning process.

25. Please consider the use of high-quality materials prevalent within the area in the design the project.

26. Please provide nigh-time views in the requested Urban Design Brief.

Please feel free to contact Nader Kadri, Planner III, Urban Design, for follow-up questions.

Engineering

Comments:

27. General Information:

    a. Any utilities installed within the existing Right of Way or road modifications within the existing Right of Way, or shoring system with tie backs encroaching on existing ROW shall require Municipal Consent. The installation of any structure, footing, geo-membrane or perforated pipe encroaching into the existing ROW shall not be permitted in the absence of Municipal Consent Approval.

    b. It is the sole responsibility of the applicant to investigate the location of existing underground utilities in the proposed servicing area and submit a request for locates to avoid conflict(s). The location of existing utilities and services shall be documented on an Existing Conditions Plan.

c. Any easements on the subject site shall be identified and respected by any development proposal and shall adhere to the conditions identified in the easement agreement. A legal survey plan shall be provided and all easements shall be clearly detailed on appropriate engineering plans.

d. Deep excavation and dewatering operations have the potential to cause damages to the neighboring adjacent buildings/ City infrastructure. Construction activities (excavation, dewatering, vibrations associated with construction, etc.) shall not impact on any adjacent buildings and infrastructure.

e. All underground and above ground building footprints and permanent walls need to be shown on the plans to confirm that any permanent structure does not extend either above or below into the existing property lines and sight triangles.

f. Record drawings and utility plans are also available for purchase from the City (Contact the City's Information Centre by email at InformationCentre@ottawa.ca or by phone at (613) 580-424 x.44455).

28. The Stormwater Management Criteria, for the subject site, is to be based on the following:

    a. Application of IDF information derived from the Meteorological Services of Canada rainfall data, taken from the MacDonald Cartier Airport, collected 1966 to 1997.

    b. For combined sewer areas; use a maximum C = 0.4, with a minimum time of concentration of 10 minutes.

    c. The 100-year post-development combined (storm and sanitary) release rate for the site shall be equal to or less than 2-year pre-development combined release rate. Flows to the combined sewer in excess of the 2-year combined release rate, up to and including the 100-year storm event, must be detained on site.

29. Combined Sewer

    a. 225mm dia. Clay Combined Sewer (c. 1900) is available within the Isabella Street ROW

    b. 1500mm dia. Brick Combined Sewer (c. 1899) is available within the Isabella Street ROW

    c. Provide existing servicing information and the recommended location for the proposed connections. Services should ideally be grouped in a common trench to minimize the number of road cuts.

30. Connections to trunk sewers and easement sewers are typically not permitted unless authorized by Asset Management.

31. Storm and sanitary service laterals shall incorporate monitoring manholes which shall be located in an accessible location on private property near the property line (ie. Not within a parking area, garage ramp or private approach limit). Where underground parking extends to lot line a cast in place monitoring maintenance hole is required within the underground parking garage structure.

32. Sewer connections to be made above the springline of the sewermain as per:

    i. Std Dwg S11.1 for flexible main sewers – connections made using approved tee or wye fittings.

    ii. Std Dwg S11 (For rigid main sewers) – lateral must be less that 50% the diameter of the sewermain,

    iii. Std Dwg S11.2 (for rigid main sewers using bell end insert method) – for larger diameter laterals where manufactured inserts are not available; lateral must be less that 50% the diameter of the sewermain,

    iv. Connections to manholes permitted when the connection is to rigid main sewers where the lateral exceeds 50% the diameter of the sewermain. – Connect obvert to obvert with the outlet pipe unless pipes are a similar size.

33. MECP Environmental Compliance Approval shall be required for proposed development service connections of controlled storm water works to the combined sewer. A Ministry contact has been provided below but please work with City staff on the need (or not) of an application.

    a. Patrick Lalonde at (613) 521-3450 or Patrick.Lalonde@ontario.ca

34. Water

    a. A 127 mm dia. UCI watermain (1892) is available within the Isabella Street ROW.

    b. 1220 mm dia. watermain (1960) is located within the Isabella Street ROW. This watermain shall remain protected at all times.

    c. ISTB-2021-03: Industrial, commercial, institutional service areas with a basic day demand greater than 50 m^3/day (0.57 L/s) and residential areas serving 50 or more dwellings shall be connected with a minimum of two watermains, separated by an isolation valve, to avoid the creation of a vulnerable service area.

35. Vibration and settlement monitoring on Backbone Watermain: A 1220mm dia. backbone watermain is located within the Isabella Street ROW. Please note that to ensure the integrity of the nearby watermain the applicant shall develop a Vibration and Settlement Monitoring Program. A Vibration and Settlement Monitoring Specialist Engineer shall undertake monitoring, develop a vibration and settlement monitoring plan, and prepare a protection plan, an emergency response plan, ensure conformance and shall issue a certificate of general conformance. The Vibration and settlement Monitoring Specialist Engineer shall be a licensed engineer in the Province of Ontario with a minimum of five years of experience in the field of vibration and settlement monitoring. Vibration and settlement monitors are to be to be placed directly on the watermain. The maximum peak particle velocities are to be in accordance with Table 1 of the City of Ottawa Specification F-1201.

    i. Note: In addition to requirement of a vibration specialist engineer required to design and monitor vibration, a certificate of liability insurance shall be submitted to the City wherein the Owner is the named insured and the City of Ottawa is an additional insured. The limits of the policy shall be in the amount of $25,000,000 and shall be kept in full force and effect for the term of the construction work. It is a conditon, vetted through Water Department and Legal.

    https://documents.ottawa.ca/sites/default/files/documents/enviro_noise_guide_en.pdf

36. As per the approved assessment of adequacy of public services report prepared for the ZBLA D02-02-20-0086, it is proposed to upgrade the 127mm UCI watermain fronting the property as part of this project

37. Existing water services are to be blanked at the watermain.

38. Water Data Card (future requirement)

39. Water Boundary condition requests must include the location of the service (map or plan with connection location(s) indicated) and the expected loads required by the proposed development, including calculations. Please provide the following information:

    i. Location of service

    ii. Type of development

    iii. The amount of fire flow required (per OBC or FUS).

    iv. Average daily demand: ___ l/s.

    v. Maximum daily demand: ___l/s.

vi. Maximum hourly daily demand: ___ l/s.

40. Stormwater

a. A Stormwater Management Report (SWM) shall be provided based on the Stormwater Management Criteria detailed above.

Underground Storage:
Please note that the Modified Rational Method for storage computation in the Sewer Design Guidelines was originally intended to be used for above ground storage (i.e. parking lot) where the change in head over the orifice varied from 1.5 m to 1.2 m (assuming a 1.2 m deep CB and a max ponding depth of 0.3 m). This change in head was small and hence the release rate fluctuated little, therefore there was no need to use an average release rate.

When underground storage is used, the release rate fluctuates from a maximum peak flow based on maximum head down to a release rate of zero. This difference is large and has a significant impact on storage requirements. We therefore require that an average release rate equal to 50% of the peak allowable rate shall be applied to estimate the required volume. Alternatively, the consultant may choose to use a submersible pump in the design to ensure a constant release rate.

In the event that there is a disagreement from the designer regarding the required storage, The City will require that the designer demonstrate their rationale utilizing dynamic modelling, that will then be reviewed by City modellers in the Water Resources Group.

Provide information on type of underground storage system including product name and model, number of chambers, chamber configuration, confirm invert of chamber system, top of chamber system, required cover over system and details, interior bottom slope (for self-cleansing), chart of storage values, length, width and height, capacity, entry ports (maintenance) etc. UG storage to provide actual 2- and 100-year event storage requirements.

With regards to all proposed UG storage, ground water levels (and in particular HGW levels) will need to be reviewed to ensure that the proposed system does not become surcharged and thereby ineffective.

Rooftop Storage:

If rooftop control and storage is proposed as part of the SWM solutions sufficient details (Cl. 8.3.8.4) shall be discussed and document in the report and on the plans. Roof drains are to be connected downstream of any incorporated ICDs within the SWM system and not to the foundation drain system. Provide a Roof Drain Plan as part of the submission.

Please note that the minimum orifice dia. for a plug style ICD is 83mm and the minimum flow rate from a vortex ICD is 6 L/s in order to reduce the likelihood of plugging.

41. Quality Control

    Quality control is only required should surface parking be proposed - 80% TSS removal as per City of Ottawa, MOE and Rideau Valley Conservation Authority. Please consult with the local conservation authority (RVCA) regarding water quality criteria prior to submission of a Site Plan Control Proposal application to establish any water quality control restrictions, criteria and measures for the site. Correspondence and clearance shall be provided in the Appendix of the report.

42. Geotechnical

    A Geotechnical Study/Investigation shall be prepared in support of this development proposal.

    Reducing the groundwater level in this area can lead to potential damages to surrounding structures due to excessive differential settlements of the ground. The impact of groundwater lowering on adjacent properties needs to be discussed and investigated to ensure there will be no short term and long-term damages associated with lowering the groundwater in this area.

    Geotechnical Study shall be consistent with the Geotechnical Investigation and Reporting Guidelines for Development Applications. See the Studies Plans and Identification List for more information.

    If Sensitive marine clay soils are present in this area that are susceptible to soil shrinkage that can lead to foundation and building damages. All six (6) conditions listed in the Tree Planting in Sensitive Marine Clay Soils-2017 Guidelines are required to be satisfied. Note that if the plasticity index of the soil is determined to be less than 40% a minimum separation between a street tree and the proposed building foundations of 4.5m will need to be achieved. A memorandum addressing the Tree in Clay Soil Guidelines prepared by a geotechnical engineer is required to be provided to the City.

    https://ottawa.ca/en/city-hall/planning-and-development/community-plans-and-design-guidelines/design-and-planning/completed-guidelines/tree-planting-sensitive-marine-clay-soils-2017-guidelines

43. Grading

    a. Post-development site grading shall match existing property line grades to minimize disruption to the adjacent residential properties. A **topographical plan of survey** shall be provided as part of the submission and a note provided on the plans.

b. Encroachment or alteration will not be permitted within any easements including but not limited to drainage easements, access easements, utility easements or any other easements without authorization from easement owner.

c. No adverse alterations of existing grading and drainage patterns are permitted

d. No excess drainage to be directed towards adjacent properties

44. Fire-fighting flow rate(s)

a. Please review Technical Bulletin ISTB-2024-05, 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.

b. Fire flow demand requirements shall be based on IWSTB-2024-05. Please note that the FUS method should only be used if the OBC method indicates more than 9,000 L/min.

c. Exposure separation distances shall be defined on a figure to support the FUS calculation and required fore flow (RFF) (*only if applicable as per 17.b.

d. 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.

45. CCTV

CCTV sewer inspections documenting the pre and post construction conditions of City owned Infrastructure will be required.

46. Road Reinstatement

Where the proposed development requires three or more road cuts, either a full road width or full lane width 40 mm asphalt overlay will be required, as per amended Road Activity By- Law 2003-445 and City Standard Detail Drawing R10. The amount of overlay will depend on condition of roadway and width of roadway(s).

47. Erosion and Sediment Control Plan is required.

48. Construction constraints

a. 1220 Watermain within the Isabella Street ROW

b. Combined Sewer within the Isabella Street ROW

49. New ROW cross-sections will be required for the proposed watermain renewal project.

50. Capital Works Projects

    There is a capital works project (LN60353 – Adrian Munteanu Adrian.Munteanu@ottawa.ca (City Project Manager)) scheduled near the subject site, which indicates a Road, Sewer, Water renewals planned for implementation within the next 2-3 years. It is recommended the applicant coordinate accordingly with the Project Manager.

51. Exterior Site Lighting

    Any proposed light fixtures (both pole-mounted and wall mounted) must be part of the approved Site Plan. All external light fixtures must meet the criteria for Full Cut-off Classification as recognized by the Illuminating Engineering Society of North America (IESNA or IES) and must result in minimal light spillage onto adjacent properties (as a guideline, 0.5 fc is normally the maximum allowable spillage). In order to satisfy these criteria, the please provide the City with a Certification (Statement) Letter from an acceptable professional engineer stating that the design is compliant.

52. Environmental Site Assessment

A Phase I ESA is required to be completed in accordance with Ontario Regulation 153/04 in support of this development proposal to determine the potential for site contamination. Depending on the Phase I recommendations a Phase II ESA may be required.

The Phase I ESA shall provide all the required Environmental Source Information as required by O. Reg. 153/04. ERIS records are available to public at a reasonable cost and need to be included in the ESA report to comply with O.Reg. 153/04 and the Official Plan. The City will not be in a position to approve the Phase I ESA without the inclusion of the ERIS reports.

Official Plan Section 4.8.4:

https://ottawa.ca/en/city-hall/planning-and-development/official-plan-and-master-plans/official-plan/volume-1-official-plan/section-4-review-development-applications#4-8-protection-health-and-safety

Please feel free to contact Brett Hughes, Infrastructure Project Manager, for follow-up questions.

Noise

Comments:

53. A Noise Study is required for the proposed development.

    Please feel free to contact Brett Hughes, Infrastructure Project Manager, for follow up questions.

Transportation

Comments:

54. Right-of-way protection (Isabella).

    a. See Schedule C16 of the Official Plan.

    b. Any requests for exceptions to ROW protection requirements must be discussed with Transportation Planning and concurrence provided by Transportation Planning management.

55. Isabella Street is identified for future reconstruction. As the timing is unknown, the applicant should proceed with a long-term interim frontage design (active transportation).

56. Ensure that on-site movement doesn't conflict with any proposed parking stalls.

57. A TIA is warranted, please proceed to **Step 2; TIA Scoping report**. The application will not be deemed complete without Step 2 being submitted at least 14 calendar days prior to a Phase 3 pre-consultation or formal application. A **TIA Strategy report (Step 3)** with the Synchro files will be required at the formal application. Refer to the City of Ottawa website for the updated TIA process: Transportation Impact Assessment Guidelines | City of Ottawa.

Feel free to contact Mike Giampa, Transportation Project Manager, for follow-up questions.

Environment

Comments:

58. There are no triggers for an Environmental Impact Study.

59. Bird-Safe Design Guidelines - Please review and incorporate bird safe design elements, where feasible. Some of the risk factors include glass and related design traps such as corner glass and fly-through conditions, ventilation grates and open pipes, landscaping, light pollution. More guidance and solutions are available in the guidelines which can be found here:

https://documents.ottawa.ca/sites/documents/files/birdsafedesign_guidelines_en.pdf

60. Please consider if there are features that can be added reduce the urban heat island effect (see OP 10.3). For example, this impact can be reduced by adding large canopy trees, green rooves or vegetation walls, or incorporating building with low heat absorbing materials.

Feel free to contact Matthew Hayley, Environmental Planner, for follow-up questions.

Forestry

Comments:

61. A Tree Conservation Report and Landscape Plan will be required, showing existing, protected trees within and bordering the site, and detailing tree removals, impacts, & protection measures. The Landscape Plan must provide details on proposed plantings, including the soil volumes created to support tree planting and retention. Please refer to the detailed guidelines below.

62. Given the uncertainty around the reconstruction of Isabella St, the timeline and method of implementing the previously-approved tree plantings will have to be determined through this process.

63. The following Tree Conservation Report (TCR) guidelines have been adapted from the Schedule E of the Tree Protection By-law – for more information on these requirements please contact julian.alvarez-barkham@ottawa.ca

    a. A Tree Conservation Report (TCR) must be supplied for review along with the suite of other plans/reports required by the City.

        i. An approved TCR is a requirement of Site Plan approval.

    b. Any removal of privately-owned trees 10cm or larger in diameter within the urban area, or city-owned trees of any diameter requires a tree permit issued under the Tree Protection Bylaw (Bylaw 2020 – 340); the permit will be based on an approved TCR and made available at or near plan approval.

    c. The TCR must contain 2 separate plans:

        i. Plan/Map 1 - show existing conditions with tree cover information.

        ii. Plan/Map 2 - show proposed development with tree cover information.

d. The TCR must list all trees on site, as well as off-site trees if the CRZ (critical root zone) extends into the developed area, by species, diameter, and health condition.

    i. For ease of review, the Planning Forester suggests that all trees be numbered and referenced in an inventory table.

e. Please identify trees by ownership – private onsite, private on adjoining site, city owned, co-owned (trees on a property line)

f. If trees are to be removed, the TCR must clearly show where they are, and document the reason they cannot be retained.

    i. Compensation may be required for the removal of city owned trees.

g. The removal of trees on a property line will require the permission of both property owners.

h. All retained trees must be shown, and all retained trees within the area impacted by the development process must be protected as per City guidelines available on the Tree Protection Specification or by searching Ottawa.ca.

    i. The location of tree protection fencing must be shown on the plan.

    ii. Show the critical root zone of the retained trees.

i. As per the Official Plan §4.8.2, the retention of healthy trees must be prioritized wherever possible. Please seek opportunities for retention of trees that will contribute to the design and function of the site.

64. The following Landscape Plan (LP) guidelines have been adapted from Schedule E of the Tree Protection By-law – for more information on these requirements please contact julian.alvarez-barkham@ottawa.ca

    a. Please ensure any retained trees are shown on the LP.

    b. Minimum Setbacks

        i. Maintain 1.5m from sidewalk or MUP/cycle track or water service laterals.

        ii. Maintain 2.5m from curb.

        iii. Coniferous species require a minimum 4.5m setback from curb, sidewalk, or MUP/cycle track/pathway.

        iv. Maintain 7.5m between large growing trees, and 4m between small growing trees. Park or open space planting should consider 10m

spacing, except where otherwise approved in naturalization / afforestation areas.

v. Adhere to Ottawa Hydro's planting guidelines (species and setbacks) when planting around overhead primary conductors.

b. Tree specifications

i. Minimum stock size: 50mm tree caliper for deciduous, 200cm height for coniferous.

ii. Maximize the use of large deciduous species wherever possible to maximize future canopy coverage.

c. Tree planting on city property shall be in accordance with the City of Ottawa's Tree Planting Specification; and if possible, include watering and warranty as described in the specification.

d. No root barriers, dead-man anchor systems, or planters are permitted.

e. No tree stakes unless necessary (and only 1 on the prevailing winds side of the tree)

f. Hard surface planting

i. If there are hard surface plantings, a planting detail must be provided.

ii. Curb style planter design is highly recommended.

iii. No grates are to be used and if guards are required, City of Ottawa standard (which can be provided) shall be used.

c. Trees are to be planted at grade.

d. Soil Volume - Please demonstrate as per the **Landscape Plan Terms of Reference** that the available soil volumes for new plantings will meet or exceed the following:

Tree Type/Size	Single Tree Soil Volume (m^3)	Multiple Tree Soil Volume (m^3/tree)
Ornamental	15	9
Columnar	15	9
Small	20	12
Medium	25	15
Large	30	18

Conifer	25	15

i. It is strongly suggested that the proposed species list include a column listing the available soil volume.

e. Sensitive Marine Clay - Please follow the City's 2017 Tree Planting in Sensitive Marine Clay guidelines.

f. The City requests that consideration be given to planting native species wherever there is a high probability of survival to maturity.

g. Efforts shall be made to provide as much future canopy cover as possible at a site level, through tree planting and tree retention. The Landscape Plan shall show/document that the proposed tree planting and retention will contribute to the City's overall canopy cover over time. **Please provide a projection of the future canopy cover for the site to 40 years.**

Feel free to contact Julian Alvarez-Barkham, Forester, for follow-up questions.

Parkland

Comments:

65. The application, at time of pre-consultation submission, is subject to parkland dedication/conveyance requirements in accordance with the City of Ottawa Parkland Dedication By-law No. 2022-280, as amended.

66. Cash-in-lieu of Parkland (CILP) will be required, at the rate specified in the Parkland Dedication By-law No.2022-280, as amended.

    a. CILP rate for residential uses > 18 units/net ha = one hectare per 1,000 net residential units but shall not exceed a maximum of 10% of the gross land area where the land is less than or equal to five hectares.

67. CILP payment, plus applicable appraisal fee(s), will be due prior to registration of a Site Plan Agreement.

68. Please note, if the proposed unit count, land use changes or gross floor area changes, then the parkland dedication and conveyance requirement will be re-evaluated accordingly.

Feel free to contact Mike Russett, Parks Planner, for follow-up questions.

Community issues

Glebe Community Association Comments:

69. A strong consideration should be given to the pedestrian realm and that significant commercial need not be part of ground floor as long as the building and landscaping presents as something residents will actually want to walk by and look at.

70. Ensure the survival of any street trees as these encourage walking and cycling.

71. Please provide careful consideration to the ingress/egress and how this may impact pedestrian and cyclist movement.

72. The GCA strongly encourages the city to ensure that the planned MUP be prioritized to facilitate walking/biking and therefore reduced car reliance. It is absolutely critical that this infrastructure keep pace as we intensify. New residents having to rely on cars for most of their trips = gridlock.

    a. This should also actually assist development of projects on Chamberlain/Isabella that could be made more viable as they will require less costly parking that prospective tenants/owners demand in the absence of this infrastructure (and good transit, but that's another issue).

Other

73. 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 and will be applicable to Site Plan Control and Plan of Subdivision applications.

    a. The HPDS was passed by Council on April 13, 2022, but is not in effect at this time, as Council has referred the 2023 HPDS Update Report back to staff with the direction to bring forward an updated report to Committee at a later date. The timing of an updated report to Committee is unknown at this time, and updates will be shared when they are available.

    b. Please refer to the HPDS information at ottawa.ca/HPDS for more information.

74. Under the Affordable Housing Community Improvement Plan, a Tax Increment Equivalent Grant (TIEG) program was created to incentivize the development of affordable rental units. It provides a yearly fixed grant for 20 years. The grant helps offset the revenue loss housing providers experience when incorporating affordable units in their developments.

    a. To be eligible for the TIEG program you must meet the following criteria:

        i. the greater of five units OR 15 per cent of the total number of units within the development must be made affordable

ii. provide a minimum of 15 per cent of each unit type in the development as affordable

iii. enter into an agreement with the city to ensure the units maintain affordable for a minimum period of 20 years at or below the city-wide average market rent for the entire housing stock based on building form and unit type, as defined by the Canada Mortgage and Housing Corporation

iv. must apply after a formal Site Plan Control submission, or Building Permit submission for projects not requiring Site Plan Control, and prior to Occupancy Permit issuance

b. Please refer to the TIEG information *at Affordable housing community improvement plan / Plan d'améliorations communautaires pour le logement abordable for more details or contact the TIEG coordinator via email at affordablehousingcip@ottawa.ca.*

Submission Requirements and Fees

1. Site Plan Control – Complex application.
    a. Additional information regarding fees related to planning applications can be found here.
2. The attached **Study and Plan Identification List** outlines the information and material that has been identified 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. These ToR and Guidelines outline the specific requirements that must be met for each plan or study to be deemed adequate.
3. All of the above comments or issues should be addressed to ensure the effectiveness of the application submission review.

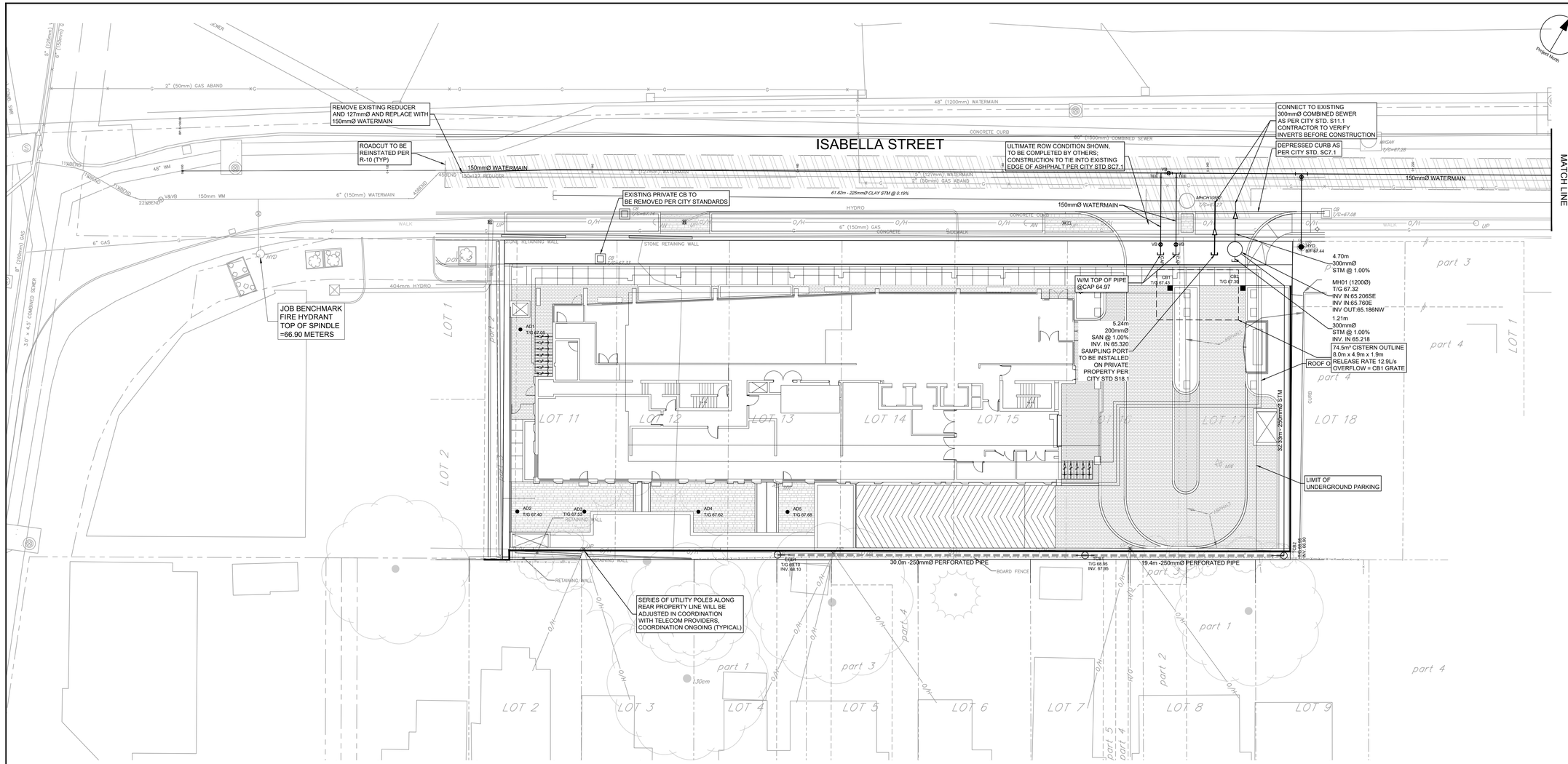
Should there be any questions, please do not hesitate to contact myself or the contact identified for the above areas / disciplines.

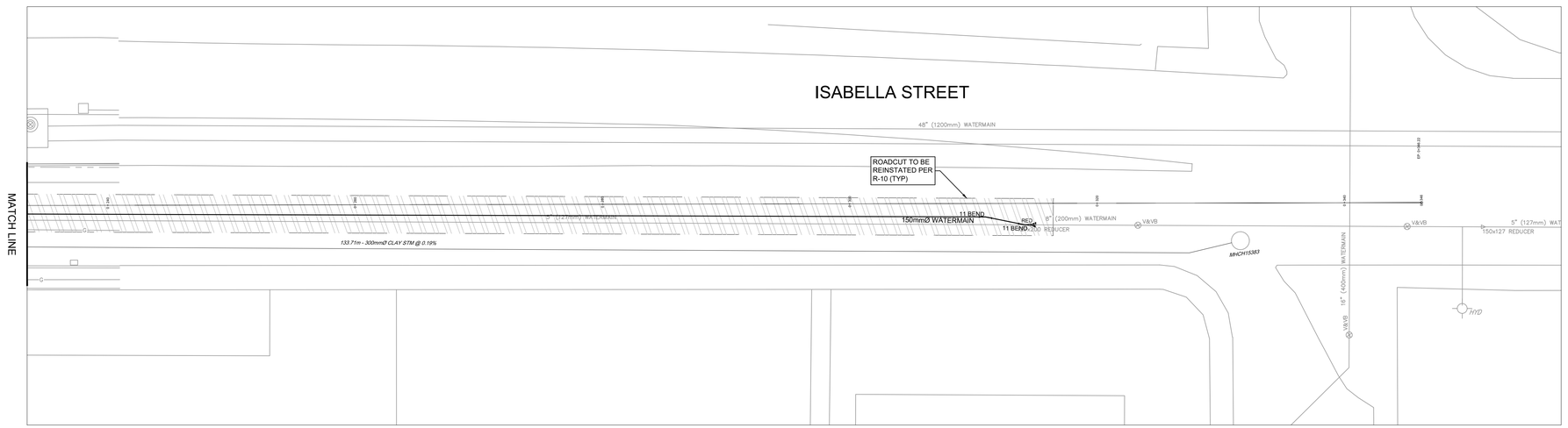
Yours Truly,
Margot Linker, Planner II

Encl. Studies and Plans Identification List (SPIL)
ADS Site Plan Checklist
HPDS Example Checklist
HPDS Overview for Applicants
Supplementary Development Information
List of Technical Agencies

c.c. Ann O'Connor, Planner III
Spencer Mulvaney, Planner I
Brett Hughes, Infrastructure Project Manager
Amy Whelan, Infrastructure Project Manager
Mike Giampa, Senior Transportation Project Manager
Nader Kadri, Urban Design Planner III
Julian Alvarez-Barkham, Planning Forester
Mike Russett, Parks Planner III
Matthew Hayley, Environmental Planner III
Amy MacPherson, Environmental Planner II

Carolyn Mackenzie, Glebe Community Association
Bob Brocklebank, Glebe Community Association





CLIENT

minto Communities

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formerly IBI Group Professional Services (Canada) Inc.

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ISSUES

No.	DESCRIPTION	DATE
1	ISSUED FOR RE-ZONING	2020:09:11
2	REISSUED FOR RE-ZONING	2023:08:16
3	REISSUED FOR RE-ZONING	2023:09:28
4	SUBMISSION FOR SPA	2026:01:30
5	REVISED PER CITY COMMENTS	2026:04:02
6	REVISED PER NEW SITE PLAN	2026:04:17
7	REVISED PER NEW SITE PLAN	2026:11:12

SEAL

LICENSED PROFESSIONAL ENGINEER
S. E. LABADIE
100214983
2026-11-12
PROVINCE OF ONTARIO

ARCADIS
333 Preston Street - Suite 500
Ottawa ON K1S 5N4 Canada
tel 613 225 1311
www.arcadis.com

PROJECT
178-200 ISABELLA

PROJECT NO:
124875

DRAWN BY:	CHECKED BY:
D.P.S.	**D.V.**
PROJECT MGR:	APPROVED BY:
S.E.L.	**S.E.L.**

SHEET TITLE
SITE SERVICING PLAN

SHEET NUMBER	ISSUE
C-001	7

SCALE CHECK 1" = 10mm XXXXX

D07-12-26-0009

File Location: J:\124875_Isabella\Sh7.0_Production\7.03_Design\04_CivilSheets\C-001.dwg Last Saved: November 12, 2026, by vaghela44623 Plotted: November 12, 2026 4:59:37 PM by Vaghela, Devdatsinh

Appendix B

Labadie, Sam

From: Hughes, Brett <brett.hughes@ottawa.ca>
Sent: February 24, 2026 12:47 PM
To: Vaghela, Devdatsinh
Cc: Labadie, Sam; Whelan, Amy
Subject: RE: 178-200 Isabella - Boundary Condition Request
Attachments: CCS_124875_Water_Demands_2026-01-15.pdf; CCS_124875_FUS_Fireflow_2026-01-15.pdf; Location.pdf; 178-200 Isabella Street REVISED February 2026.pdf

Follow Up Flag: Follow up
Flag Status: Completed

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Devdatsinh,
Apologies for the delay, the original Boundary Condition Confirmation request came back negative, however once we received the formal submission materials for this SPC application's completeness check, the proposed 152mm water main replacement became clear, and we modified our model and re-ran the Boundary Condition Confirmation accordingly. Please be sure to revise the Servicing Report to include this email correspondence in the Appendix, as per the City's Terms of Reference.

The following are boundary conditions, HGL, for hydraulic analysis at 178-200 Isabella Street (zone 1W) assumed to be *a dual connection* to the **new upsized 152mm** watermain on Isabella Street. (see attached PDF for connection location and proposed watermain upgrades).

Minimum HGL = 106.3 m
Maximum HGL = 114.7 m
Max day + Fire flow (100 L/s) = 102.9 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. Fire Flow analysis is a reflection of available flow in the watermain; there may be additional restrictions that occur between the watermain and the hydrant that the model cannot take into account.

Regards,
Brett Hughes
Project Manager, Infrastructure Approvals
Development Review Central
PLANNING, DEVELOPMENT & BUILDING SERVICES (PDBS)
110 Laurier Ave West | 4th Floor | Ottawa, ON | K1P 1J1
City of Ottawa | Ville d'Ottawa
613.580.2424 ext./poste 76665

From: Vaghela, Devdatsinh <devdatsinh.vaghela@arcadis.com>
Sent: January 22, 2026 2:48 PM
To: Hughes, Brett <brett.hughes@ottawa.ca>
Cc: Labadie, Sam <samantha.labadie@arcadis.com>
Subject: Re: 178-200 Isabella - 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.

Good Afternoon Brett,

Please use 6000 L/min for FUS. The 6300 number is an error on my side.

Regards,
Devdatsinh Vaghela
Civil Engineering Technologist
Arcadis Professional Services (Canada) Inc.
Suite 500, 333 Preston Street | Ottawa | ON | K1S 5N4 | Canada

www.arcadis.com





From: Hughes, Brett <brett.hughes@ottawa.ca>
Sent: January 22, 2026 1:41 PM
To: Vaghela, Devdatsinh <devdatsinh.vaghela@arcadis.com>
Cc: Labadie, Sam <samantha.labadie@arcadis.com>
Subject: RE: 178-200 Isabella - Boundary Condition Request

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Good afternoon Devdatsinh,
Are you able to confirm the fire flow? The FUS calculations indicate 6000 L/min but the verbiage below references 6,300 L/min. Please confirm.

Regards,
Brett Hughes
Project Manager, Infrastructure Approvals
Development Review Central
PLANNING, DEVELOPMENT & BUILDING SERVICES (PDBS)
110 Laurier Ave West | 4th Floor | Ottawa, ON | K1P 1J1
City of Ottawa | Ville d'Ottawa
613.580.2424 ext./poste 76665

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

---

From: Vaghela, Devdatsinh <devdatsinh.vaghela@arcadis.com>
Sent: January 15, 2026 4:00 PM
To: Hughes, Brett <brett.hughes@ottawa.ca>
Cc: Labadie, Sam <samantha.labadie@arcadis.com>
Subject: 178-200 Isabella - Boundary Condition Request

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Hi Brett,

We are the civil engineers for a proposed Site Plan Control Application at 178-200 Isabella Street. We are requesting boundary conditions for a new residential Nineteen-storey building. A location sketch is attached. There are two fire hydrants within 75 meters of the building, both on Isabella street.

A copy of the anticipated water demands and fireflows are attached and summarized as follows;

Avg Day = 1.34 l/s
Max day = 3.34 l/s
Peak Hour = 7.35 l/s
Fireflow = 6,300 L/min

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ARCADIS PROFESSIONAL SERVICES (CANADA) INC.
500-333 Preston Street
Ottawa, Ontario K1S 5N4 Canada
arcadis.com

WATERMAIN DEMAND CALCULATION SHEET

178-200 Isabella | Minto Communities
124875-6.04.04 | Rev #1 | 2026-01-30
Prepared By: DV | Checked By: SL

NODE	RESIDENTIAL				NON-RESIDENTIAL (ICI)			AVERAGE DAILY DEMAND (l/s)			MAXIMUM DAILY DEMAND (l/s)			MAXIMUM HOURLY DEMAND (l/s)			FIRE DEMAND (l/min)
	SINGLE FAMILY UNITS	Town	Apt	POPULATION	INDUST. (ha)	COMM. (ha)	INSTIT. (ha)	RESIDENTIAL	ICI	TOTAL	RESIDENTIAL	ICI	TOTAL	RESIDENTIAL	ICI	TOTAL	
Site			229	412.20				1.34		1.34	3.34		3.34	7.35		7.35	6,000
TOTAL			**229**	**412.20**						**1.34**			**3.34**			**7.35**	

ASSUMPTIONS

POPULATION DENSITY

Single Family	3.4 persons/unit
Townhouse	2.7 persons/unit
Appartment (average)	1.8 persons/unit

WATER DEMAND RATES

Residential	280 l/cap/day
Commercial Shopping Center	2,500 L/(1000m2)/day

PEAKING FACTORS

Maximum Daily		
	Residential	2.5 x avg. day
	Commercial	1.5 x avg. day
Maximum Hourly		
	Residential	2.2 x max. day
	Commercial	1.8 x max. day

FIRE DEMANDS

Single Family	10,000 l/min (166.7 l/s)
Semi Detached & Townhouse	10,000 l/min (166.7 l/s)
Medium Density	15,000 l/min (250 l/s)

Outlook

RE: 200 Isabella - Building Questions

From Labadie, Sam <samantha.labadie@arcadis.com>
Date Thu 2026-01-15 12:29 PM
To Ryan Koolwine <Koolwine@project1studio.ca>; Bailey Haskins <Haskins@project1studio.ca>; Jason Hiebert <Hiebert@project1studio.ca>
Cc KHarper <KHarper@minto.com>; Vaghela, Devdatsinh <devdatsinh.vaghela@arcadis.com>

Excellent, thank you

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

ARCADIS

Logo Logo Logo Logo

From: Ryan Koolwine <Koolwine@project1studio.ca>
Sent: January 15, 2026 12:26 PM
To: Labadie, Sam <samantha.labadie@arcadis.com>; Bailey Haskins <Haskins@project1studio.ca>; Jason Hiebert <Hiebert@project1studio.ca>
Cc: KHarper <KHarper@minto.com>; Vaghela, Devdatsinh <devdatsinh.vaghela@arcadis.com>
Subject: RE: 200 Isabella - Building Questions

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Hi Sam,

Yes, they will be protected. We do not foresee having any interconnected floor spaces in the project.

Ryan Koolwine

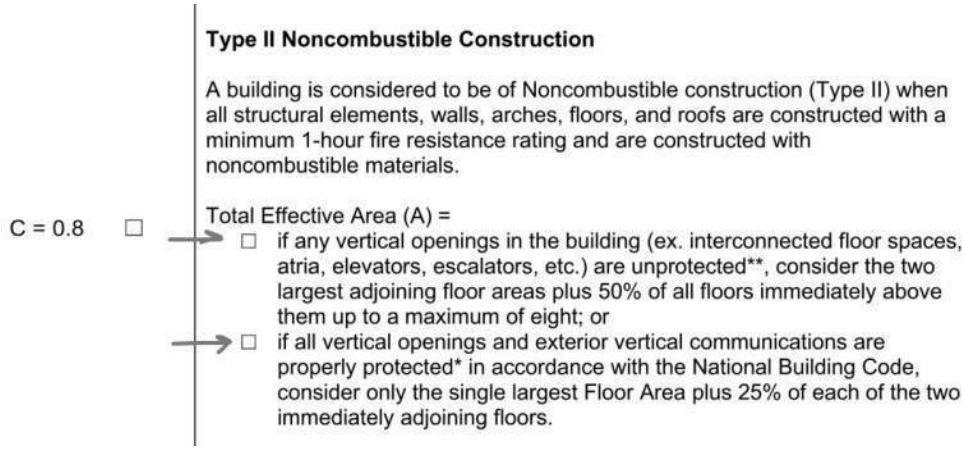
project1studio | 613 884-3939 x1

From: Labadie, Sam <samantha.labadie@arcadis.com>
Sent: January 15, 2026 12:24 PM
To: Ryan Koolwine <Koolwine@project1studio.ca>; Bailey Haskins <Haskins@project1studio.ca>; Jason Hiebert <Hiebert@project1studio.ca>

Cc: KHarper <KHarper@minto.com>; Vaghela, Devdatsinh <devdatsinh.vaghela@arcadis.com>
Subject: RE: 200 Isabella - Building Questions

Hi Ryan,

We can wait for the signature, it may be a comment but easy enough to address afterward. We do need to know if all vertical openings are protected or not as shown as shown below:



Thanks,

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: Ryan Koolwine <Koolwine@project1studio.ca>
Sent: January 15, 2026 11:53 AM
To: Labadie, Sam <samantha.labadie@arcadis.com>; Bailey Haskins <Haskins@project1studio.ca>; Jason Hiebert <Hiebert@project1studio.ca>
Cc: KHarper <KHarper@minto.com>; Vaghela, Devdatsinh <devdatsinh.vaghela@arcadis.com>
Subject: RE: 200 Isabella - Building Questions

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Hi Sam,

Sorry for the delay.

- This building will be Type II (Non-Combustible Construction). That said, I would prefer to have the Mechanical Consultant sign this form if required.
- As Kevin mentioned, the cistern will be pumped. I also wanted to point out that we do have an opportunity to store water on the upper roof as well as on the terraces on Level 07, if this helps.

Cheers,

Ryan Koolwine

project1studio | 613 884-3939 x1

From: Labadie, Sam <samantha.labadie@arcadis.com>
Sent: January 14, 2026 4:19 PM
To: Ryan Koolwine <Koolwine@project1studio.ca>; Bailey Haskins <Haskins@project1studio.ca>
Cc: KHarper <KHarper@minto.com>; Vaghela, Devdatsinh <devdatsinh.vaghela@arcadis.com>
Subject: 200 Isabella - Building Questions

Hi Project1 team,

Are you able to confirm the below, ideally for end of day tomorrow?

- Please fill out the attached FUS Declaration for fireflow. In our meetings it was confirmed that the building would be non-combustible, but we do need to know if there are unprotected openings or not. During rezoning it was declared that all vertical openings are protected.
- I believe it was mentioned in the meeting that the cistern holding stormwater would be pumped, can you confirm that is the case? A pumped cistern can be smaller than a gravity-draining cistern.

Thank you,

Sam Labadie P.Eng
Civil Engineer
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FIRE UNDERWRITERS SURVEY
178-200 Isabella | Minto Communities
124875 -6.04.04 | Rev #1 | 2026-01-30
Prepared By: DV | Checked By: SL

STEP	Contents	Description		Adjustment Factor		Result	
1	**Building A** 19-storey residential **Total Effective Floor Area**	Total Floor Area 4 Total Floor Area 3 Total Floor Area 5	1307.2 1307.2 1307.2		1 0.25 0.25	1307.2 326.8 326.8 **1960.8**	m2 m2 m2 m2
2	**Type of Construction**	**Type V** Wood Frame **Type III** Ordinary Construction **Type II** Noncombustible Construction **Type I** Fire Resistive Construction	1.5 1.0 0.8 0.6	Type II Noncombustible Construction	0.8		
3	**Required Fire Flow**	RFF = 220C√A, rounded to nearest 1000 L/min				**8000**	L/min
4	**Occupancy and Contents**	Noncombustible Contents Limited Conbustible Contents Combustible Contents Free Burning Contents Rapid Burning Contents	-25% -15% 0% 15% 25%	Limited Conbustible Contents	-15%	-1200	L/min
	Fire Flow					**6800**	L/min
5	**Automatic Sprinkler Protection**	Automatic Sprinkler Conforming to NFPA 13 Standard Water Supply for both the system and Fire Department Hose Lines Fully Supervised System	-30% -10% -10%	Yes No No	-30%	-2040	L/min
	Total Sprinkler Adjustment					**-2040**	L/min
6	**Exposure Adjustment**	Based on **Table 6** Exposure Adjustement Charges for Subject Building					
	North	Separation (m) Length X Height Factor (m.storeys) Construction Type	30+			0	L/min
	South	Separation (m) Length X Height Factor (m.storeys) Construction Type	9 11.4 Type V	With unprotected opening	15%	1020	L/min
	East	Separation (m) Length X Height Factor (m.storeys) Construction Type	30+			0	L/min
	West	Separation (m) Length X Height Factor (m.storeys) Construction Type	22 48.0 Type III	With unprotected opening	2%	136	L/min
	Total Exposure Adjustment					**1156**	L/min
7	**Total Required Fire Flow**					**5916**	L/min
		Rounded to Nearest 1000 L/min				**6000**	L/min
						100	L/s

Notes 1. Fire flow calculation are based on Fire Underwriters Survey version 2020.

2. If any vertical opening in the building are unprotected (e.g. interconnected floor spaces, elevators etc.), consider the two largest adjoining floor area plus 50% of all floors immediately above them up to a maximum of eight.

Appendix C

ARCADIS PROFESSIONAL SERVICES (CANADA) INC.
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SANITARY SEWER DESIGN SHEET

178-200 Isabella Street
CITY OF OTTAWA
Minto Communities

LOCATION				RESIDENTIAL										ICI AREAS								INFILTRATION ALLOWANCE			FIXED FLOW (L/s)		TOTAL FLOW	PROPOSED SEWER DESIGN						
				AREA	UNIT TYPES				AREA	POPULATION		RES	PEAK	AREA (Ha)						ICI	PEAK	AREA (Ha)		FLOW				CAPACITY	LENGTH	DIA	SLOPE	VELOCITY	AVAILABLE CAPACITY	
STREET	AREA ID	FROM MH	TO MH	w/ Units (Ha)	SF	SD	TH	APT	w/o Units (Ha)	IND	CUM	PEAK FACTOR	FLOW (L/s)	INSTITUTIONAL IND	INSTITUTIONAL CUM	COMMERCIAL IND	COMMERCIAL CUM	INDUSTRIAL IND	INDUSTRIAL CUM	PEAK FACTOR	FLOW (L/s)	IND	CUM	(L/s)	IND	CUM	(L/s)	(L/s)	(m)	(mm)	(%)	(full) (m/s)	L/s	(%)
178-200 Isabella		Building	EX Comb	0.22				229		412.2	412.2	3.41	4.56									0.22	0.22	0.07	0.00	0.0	4.63	34.22	5.07	200	1.00	1.055	29.59	86.46%

Design Parameters:

Residential			ICI Areas			
SF	3.4	p/p/u				
TH	2.7	p/p/u	INST	28,000	L/Ha/day	
SD	1.4	p/p/u	COM	28,000	L/Ha/day	
APT	1.8	p/p/u	IND	35,000	L/Ha/day	MOE Chart
Other	60	p/p/Ha		17000	L/Ha/day	

Notes:

1. Mannings coefficient (n) = 0.013
2. Demand (per capita): 280 L/day 200 L/day
3. Infiltration allowance: 0.33 L/s/Ha
4. Residential Peaking Factor:
   Harmon Formula = 1+(14/(4+(P/1000)^0.5))0.8
   where K = 0.8 Correction Factor
5. Commercial and Institutional Peak Factors based on total area, 1.5 if greater than 20%, otherwise 1.0

Designed: DV
Checked: SL
Dwg. Reference: 124875-C-001

No.	Revision	Date
1.	Issued for Re-Zoning Application	2020-09-11
2.	Re-Issued for Re-Zoning Application	2023-08-04
3.	Issued for SPA	2026-01-30
4.	Revised Per City Comments	2026-04-01

File Reference: 124875.7.03
Date: 2026-04-01
Sheet No: 1 of 1

Appendix D

ARCADIS PROFESSIONAL SERVICES (CANADA) INC.
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Ottawa, Ontario K1S 5N4 Canada
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STORM SEWER DESIGN SHEET

178-200 Isabella Street
City of Ottawa
Minto Communities

LOCATION				AREA (Ha)										RATIONAL DESIGN FLOW														SEWER DATA							
STREET	AREA ID	FROM	TO	C= 0.20	C= 0.25	C= 0.40	C= 0.50	C= 0.57	C= 0.65	C= 0.69	C= 0.70	C= 0.76	C= 0.90	IND 2.78AC	CUM 2.78AC	INLET (min)	TIME IN PIPE	TOTAL (min)	i (2) (mm/hr)	i (5) (mm/hr)	i (10) (mm/hr)	i (100) (mm/hr)	2yr PEAK FLOW (L/s	5yr PEAK FLOW (L/s)	10yr PEAK FLOW (L/s)	100yr PEAK FLOW (L/s)	FIXED FLOW IND	FIXED FLOW CUM	DESIGN FLOW (L/s)	CAPACITY (L/s)	LENGTH (m)	PIPE SIZE (mm) DIA	PIPE SIZE (mm) W	PIPE SIZE (mm) H	SLOPE (%)	VELOCITY (m/s)	AVAIL CAP (2yr) (L/s)	AVAIL CAP (2yr) (%)
178-200 Isabella		Building	MH01										0.21	0.53	0.53	10.00	0.01	10.01	76.81	104.19	122.14	178.56	40.35	54.75	64.18	93.82	0.00	0.00	40.35	100.88	1.21	300			1.00	1.383	60.53	60.00%
178-200 Isabella		TCB	MH01	0.01										0.01	0.01	10.00	0.24	10.24	76.81	104.19	122.14	178.56	0.43	0.58	0.68	0.99	0.00	0.00	0.43	113.80	32.33	250			3.37	2.246	113.38	99.62%
178-200 Isabella		MH01	EX Comb											0.00	0.53	10.01	0.05	10.07	76.75	104.12	122.05	178.43	40.75	55.28	64.81	94.74	0.00	0.00	40.75	100.88	4.51	300			1.00	1.383	60.13	59.60%

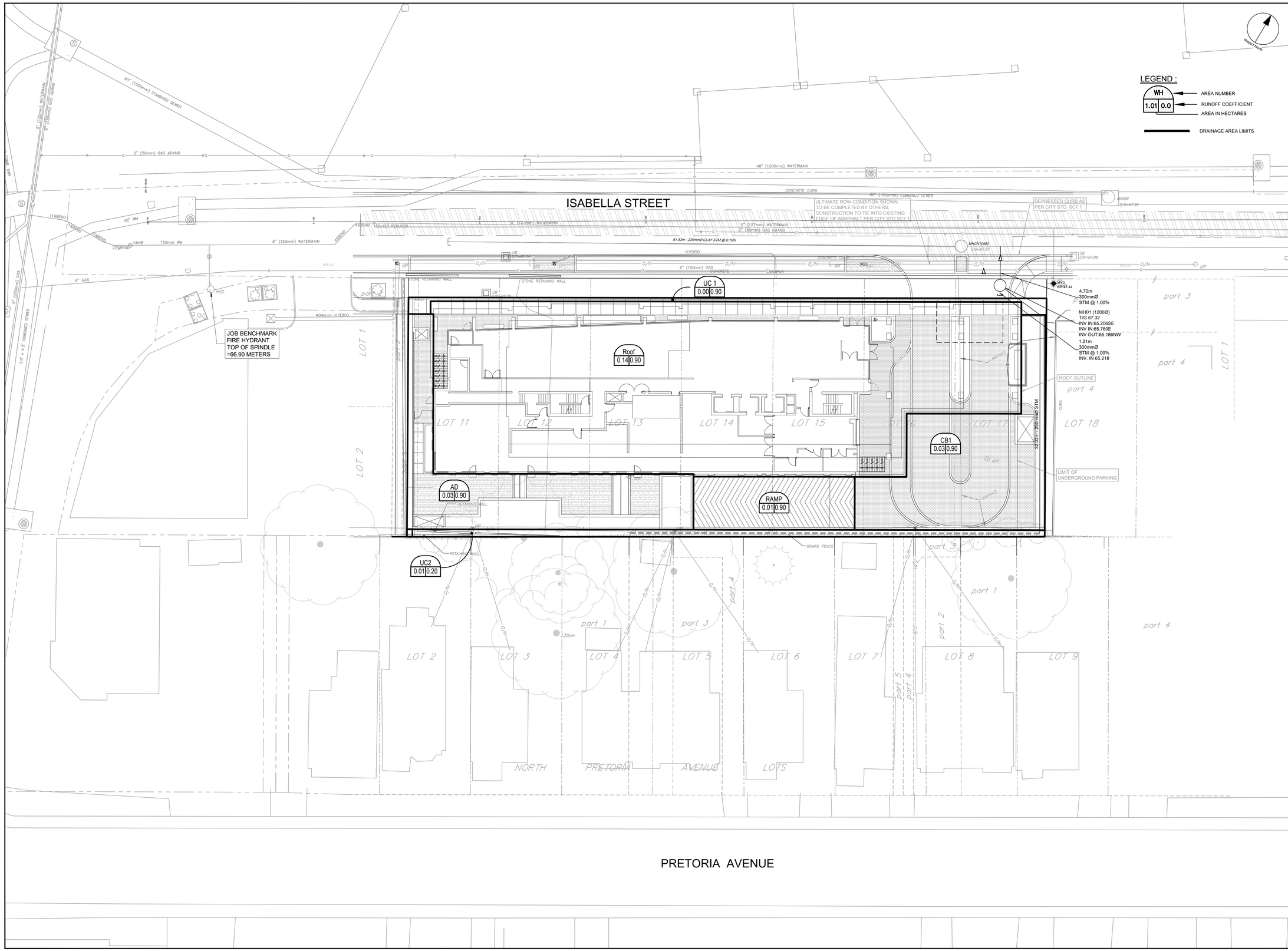
Definitions:
Q = 2.78CiA, where:
Q = Peak Flow in Litres per Second (L/s)
A = Area in Hectares (Ha)
i = Rainfall intensity in millimeters per hour (mm/hr)
[i = 732.951 / (TC+6.199)^0.810] 2 YEAR
[i = 998.071 / (TC+6.053)^0.814] 5 YEAR
[i = 1174.184 / (TC+6.014)^0.816] 10 YEAR
[i = 1735.688 / (TC+6.014)^0.820] 100 YEAR

Notes:
1. Mannings coefficient (n) = 0.013

Designed: DV
Checked: SL
Dwg. Reference: 124875-500

No.	Revision	Date
1.	Issued for Re-Zoning Application	2020-09-11
2.	Re-Issued for Re-Zoning Application	2023-08-04
3.	Issued for SPA	2026-01-30
4.	Revised Per City Comments	2026-04-01

File Reference: 124875.7.03
Date: 2026-04-01
Sheet No: 1 of 1



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minto Communities

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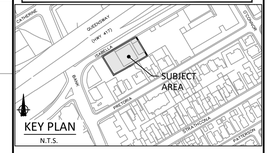
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ISSUES

No.	DESCRIPTION	DATE
1	ISSUED FOR RE-ZONING	2020:09:11
2	REISSUED FOR RE-ZONING	2023:08:16
3	REISSUED FOR RE-ZONING	2023:09:28
4	SUBMISSION FOR SPA	2026:01:30
5	REVISED PER CITY COMMENTS	2026:04:02
6	REVISED PER NEW SITE PLAN	2026:04:17
7	REVISED PER NEW SITE PLAN	2026:11:12

SEE 010 & 011 FOR NOTES, LEGEND AND DETAILS



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1:200 0 2 6 10m

SEAL

LICENSED PROFESSIONAL ENGINEER
S. É. LABADIE
100214983
2026-11-12
PROVINCE OF ONTARIO

ARCADIS
333 Preston Street - Suite 500
Ottawa ON K1S 5N4 Canada
tel 613 225 1311
www.arcadis.com

PROJECT
178-200 ISABELLA

PROJECT NO: 124875	
DRAWN BY: **D.P.S.**	CHECKED BY: **D.V.**
PROJECT MGR: **S.E.L.**	APPROVED BY: **S.E.L.**

SHEET TITLE
STORM DRAINAGE AREA PLAN

SHEET NUMBER
C-500

ISSUE
7

SCALE CHECK
1 in
15mm
XXXXX

D07-12-26-0009

File Location: J:\124875_Isabella\St\7.0_Production\7.03_Design\04_Civil\Sheets\C-500.dwg Last Saved: November 12, 2026, by vaghela4923 Plotted: November 12, 2026 4:58:46 PM by Vaghela, Devalsinh

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Formulas and Descriptions

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

Maximum Allowable Release Rate

Restricted Flowrate ($Q_{restricted} = 2.78*C*i_{2yr}*A_{site}$ based on C=0.50, Tc=10min)

C =	0.4	
T_c =	10	min
i_{2yr} =	76.81	mm/hr
A_{site} =	0.220	Ha

$Q_{restricted}$ =	18.79	L/s

Uncontrolled Release ($Q_{uncontrolled} = 2.78*1.25*C*i_{100yr}*A_{uncontrolled}$)

UN1			UN2		
C =	0.25		C =	1.00	
T_c =	10	min	T_c =	10	min
i_{100yr} =	178.56	mm/hr	i_{100yr} =	178.56	mm/hr
$A_{uncontrolled}$ =	0.01	Ha	$A_{uncontrolled}$ =	0.00	Ha
$Q_{uncontrolled}$ =	1.24	L/s	$Q_{uncontrolled}$ =	0.00	L/s

Sanitary Flow

$Q_{sanitary}$ =	4.63	L/s

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

$Q_{max\ allowable}$ =	12.92	L/s

SWM Statistics of Modified Site Areas

Controlled	Area	ICD Flow
Cistern	0.210	12.900
Sum	**0.21**	**12.90**

Uncontrolled	Area	Flow
A1	0.010	1.24
A2	0.000	0.00
Sanitary		4.63
Sum	**0.01**	**5.87**
Total Sum	**0.220**	**18.771**
Allowable		**18.79**
		TRUE

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MODIFIED RATIONAL METHOD (100-Year, 5-Year & 2-Year Ponding)

Drainage Area	*Cistern*			
Area (Ha)	0.210	Restricted Flow ICD_{Actual} (L/s)=	12.90	
C =	1.00	Restricted Flow $Q_{r\ for\ swm\ calc}$ (L/s)=	12.90	50% reduction considered if drained by gravity

100-Year Ponding						100-Year +20% Ponding		
T_c *Variable* (min)	i_{100yr} (mm/hour)	*Peak Flow* $Q_p = 2.78xCi_{100yr}A$ (L/s)	Q_r (L/s)	$Q_p - Q_r$ (L/s)	*Volume 100yr* (m^3)	*100YR* Q_p *20%* (L/s)	*Qp - Qr* (L/s)	*Volume 100+20* (m^3)
37	79.42	46.36	12.90	33.46	74.29			
38	77.93	45.50	12.90	32.60	74.32			
39	76.51	44.67	12.90	31.77	**74.34**	53.60	40.70	**95.24**
40	75.15	43.87	12.90	30.97	74.33			
41	73.83	43.10	12.90	30.20	74.30			

Storage (m^3)					100+20		
Overflow	**Required**	**Surface**	**Sub-surface**	**Balance**	**Overflow**	**Required**	**Balance**
0.00	74.34	0.00	74.5	0.00	0.00	95.24	20.74

convert to flow with peak Tc (L/s) 8.86

overflows to: Offsite

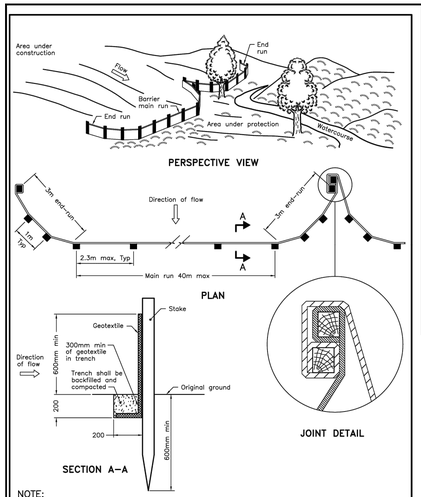
Drainage Area	*Cistern*		
Area (Ha)	0.210		
C =	0.90	Restricted Flow Q_r (L/s)=	12.90

2-Year Ponding					
T_c *Variable* (min)	i_{2yr} (mm/hour)	*Peak Flow* $Q_p = 2.78xCi_{2yr}A$ (L/s)	Q_r (L/s)	$Q_p - Q_r$ (L/s)	*Volume 2yr* (m^3)
14	64.23	33.75	12.90	20.85	17.51
15	61.77	32.45	12.90	19.55	17.60
16	59.50	31.26	12.90	18.36	**17.63**
17	57.42	30.17	12.90	17.27	17.61
18	55.49	29.15	12.90	16.25	17.55

Storage (m^3)				
Overflow	**Required**	**Surface**	**Sub-surface**	**Balance**
0.00	17.63	0.00	74.5	0.00

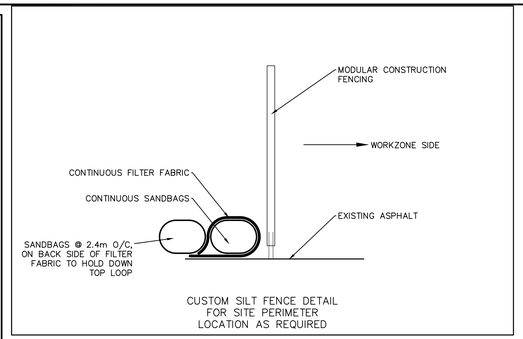
overflows to: Offsite

Appendix E



NOTE:
A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2021	Rev 3
LIGHT–DUTY SILT FENCE BARRIER		
OPSD 219.110		



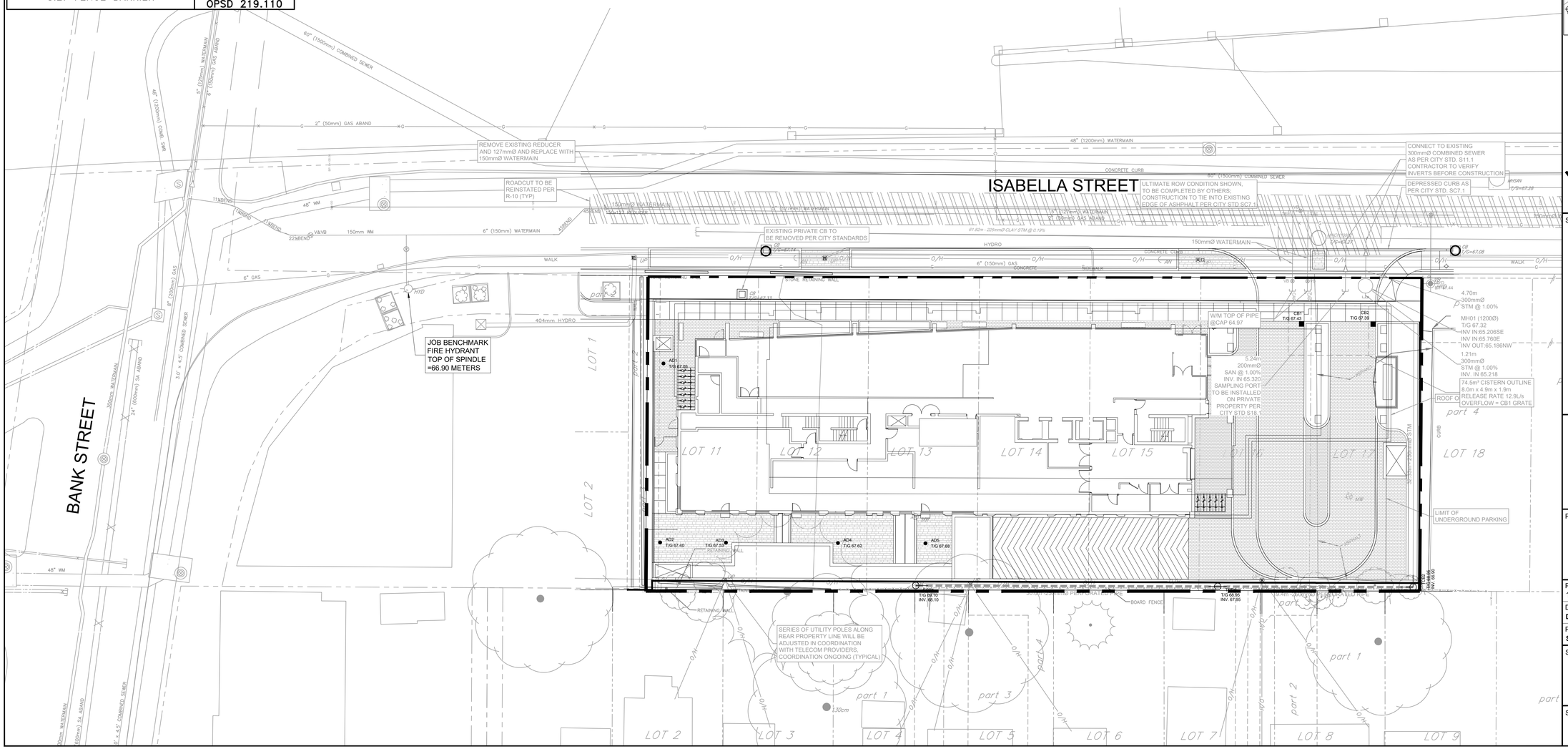
CUSTOM SILT FENCE DETAIL
FOR SITE PERIMETER
LOCATION AS REQUIRED

LEGEND :

- LIGHT DUTY SILT FENCE AS PER OPSD-219.110
- CUSTOM SILT FENCE (SEE DETAIL)
- STRAW BALE CHECK DAM AS PER OPSD-219.180
- ROCK CHECK DAM AS PER OPSD-219.210
- SILT SACK PLACED UNDER EXISTING CB COVER
- TEMPORARY MUD MAT 0.15m THICK 50mm CLEAR STONE ON NON WOVEN FILTER CLOTH (15.0 × 2.0)

NOTES:

1. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE, DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY,
2. SILT FENCE TO BE ERECTED PRIOR TO EARTH WORKS BEING COMMENCED. SILT FENCE TO BE MAINTAINED UNTIL VEGETATION IS ESTABLISHED OR UNTIL START OF SUBSEQUENT PHASE.
3. STRAW BALE SEDIMENT TRAPS TO BE CONSTRUCTED IN EXISTING ROAD SIDE DITCHES. TRAPS TO REMAIN AND BE MAINTAINED UNTIL VEGETATION IS ESTABLISHED.
4. SILT SACK TO BE PLACED AND MAINTAINED UNDER COVER OF ALL CATCHBASINS. GEOTEXTILE SILT SACK IN STREET CBs TO REMAIN UNTIL ALL CURBS ARE CONSTRUCTED. GEOTEXTILE FABRIC IN RYCBs TO REMAIN UNTIL VEGETATION IS ESTABLISHED. ALL CATCHBASINS TO BE REGULARLY INSPECTED AND CLEANED, AS NECESSARY, UNTIL SOD AND CURBS ARE CONSTRUCTED.
5. CONTRACTOR TO PROVIDE DETAILS ON LOCATION(S) AND DESIGN OF DEWATERING TRAP(S) PRIOR TO COMMENCING WORK. CONTRACTOR ALSO RESPONSIBLE FOR MAINTAINING TRAP(S) AND ADJUSTING SIZE(S) IF DEEMED REQUIRED BY THE ENGINEER DURING CONSTRUCTION.
6. CONTRACTOR TO PROTECT EXISTING CATCHBASINS WITH FILTER CLOTH UNDER THE COVERS TO TRAP SEDIMENTATION. REFER TO IDENTIFIED STRUCTURES.
7. WORKS NOTED ABOVE ARE TO BE INSTALLED, INSPECTED, MAINTAINED AND ULTIMATELY REMOVED BY SERVICING CONTRACTOR.
8. THIS IS A "LIVING DOCUMENT" AND MAY BE MODIFIED IN THE EVENT THE PROPOSED CONTROL MEASURES ARE INSUFFICIENT





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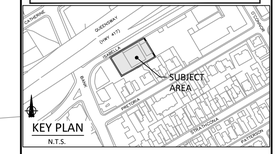
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Arcadis Professional Services (Canada) Inc.

ISSUES

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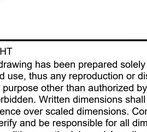
SEE 010 & 011 FOR NOTES, LEGEND AND DETAILS



NOT FOR CONSTRUCTION

1:200 0 2 6 10m

SEAL



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www.arcadis.com

PROJECT
178-200 ISABELLA

PROJECT NO: 124875	
DRAWN BY: **D.P.S.**	CHECKED BY: **D.V.**
PROJECT MGR: **S.E.L.**	APPROVED BY: **S.E.L.**

SHEET TITLE
EROSION AND SEDIMENTATION CONTROL PLAN

SHEET NUMBER	ISSUE
C-900	7

SCALE CHECK 1 in 13mm XXXXX

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D07-12-26-0009

GENERAL LEGEND

- LIMIT OF CONSTRUCTION
- PHASING LINE
- BARRIER CURB
- MOUNTABLE CURB
- DEPRESSED BARRIER CURB
- CONCRETE SIDEWALK
- TACTILE WALKING SURFACE INDICATOR
- ASPHALT SIDEWALK / PATHWAY
- BUS STOP CONCRETE / ASPHALT

SERVICING LEGEND

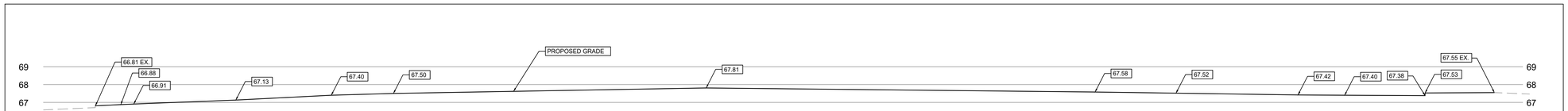
- MH118A — SANITARY MANHOLE
- 200mmØ SAN — SANITARY SEWER
- MH109 / MH118 — STORM MANHOLE
- 825mmØ STM — STORM SEWER - LESS THAN 900Ø
- 900mmØ STM — STORM SEWER - 900Ø AND GREATER
- 200Ø WATERMAIN — WATERMAIN
- CB100, T/G 104.10 — STREET CATCHBASIN C/W TOP OF GRATE
- CICB101, G/G 104.25 — CURB INLET CATCHBASIN C/W GUTTER GRADE
- DCB100, T/G 104.10 — DOUBLE CATCHBASIN C/W TOP OF GRATE
- DCICB101, G/G 104.25 — DOUBLE CURB INLET CATCHBASIN C/W GUTTER GRADE
- DI101, T/G 103.59 — DITCH INLET MANHOLE C/W TOP OF GRATE
- CBMH101, T/G 103.59 — CATCHBASIN MANHOLE C/W TOP OF GRATE
- RYCB, T/G 104.35 — REAR YARD CATCHBASIN IN ROAD CONNECTING STRUCTURE C/W SOLID GRATE
- T/G 104.35, INV 103.35 — REAR YARD "TEE" CATCHBASIN (300Ø) C/W TOP OF GRATE AND INVERT OUT
- T/G 104.50, INV 103.50 — REAR YARD "END" CATCHBASIN (300Ø) C/W TOP OF GRATE AND INVERT OUT
- T/G 104.35, INV 103.35 — REAR YARD "CUSTOM ANGLED " CATCHBASIN (450Ø) C/W TOP OF GRATE AND INVERT OUT
- T/G 104.35, INV 103.35 — REAR YARD "THREE WAY" CATCHBASIN (450Ø) C/W TOP OF GRATE AND INVERT OUT
- PERFORATED REAR YARD SUBDRAIN
- 300mmØ CSP — CSP CULVERT C/W DIAMETER
- VB — VALVE AND VALVE BOX
- V&VC — VALVE AND VALVE CHAMBER
- PARK VALVE CHAMBER C/W SERVICE POST
- HYD 104.35 — FIRE HYDRANT C/W BOTTOM OF FLANGE ELEVATION
- 200Ø WM — RED — 150Ø WM — WATERMAIN REDUCER
- 2 VBENDS — VERTICAL BEND LOCATION
- SIAMESE CONNECTION (IF REQUIRED)
- M — METER (IF REQUIRED)
- RM — REMOTE METER (IF REQUIRED)
- A — WATERMAIN IDENTIFICATION (IF REQUIRED)
- P — PIPE CROSSING IDENTIFICATION (IF REQUIRED)
- SINGLE SERVICE LOCATION
- DOUBLE SERVICE LOCATION
- SINGLE SERVICE LOCATION (REQUIRES FOUNDATION SLEEVE)
- BH 12, 102.00 — INFERRED REFUSAL (SEE GEOTECHNICAL REPORT)
- HGL 101.79 — 100 YEAR STORM HYDRAULIC GRADE LINE AT MANHOLE
- USF 101.79 — UNDERSIDE OF FOOTING ELEVATION
- CLAY SEAL IN SEWER / WATERMAIN TRENCH

NOTES :

1. ALL MATERIALS AND CONSTRUCTION IS TO BE IN ACCORDANCE WITH THE CURRENT CITY OF OTTAWA STANDARD DRAWINGS & SPECIFICATIONS OR OPSD/OPSS IF CITY DRAWINGS AND SPECIFICATIONS DO NOT APPLY.
2. THE POSITION OF UNDERGROUND AND ABOVE GROUND SERVICE, UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH SERVICE, UTILITIES AND STRUCTURES IS NOT GUARANTEED. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING SERVICES AND UTILITIES PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL REPORT ALL CONFLICTS, DISCOVERIES OF ERROR AND DISCREPANCIES TO THE ENGINEER.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT AND ASSUME RESPONSIBILITY FOR ALL UTILITIES WHETHER OR NOT SHOWN ON THESE DRAWINGS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT ALL LANDS BEYOND THE SITE LIMITS. ANY AREAS BEYOND THE SITE LIMITS, WHICH ARE DISTURBED DURING CONSTRUCTION, SHALL BE REPAIRED AND RESTORED TO ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE ADJACENT LAND OWNER, THE OWNER, THE OWNERS REPRESENTATIVES AND/OR THE AUTHORITY HAVING JURISDICTION AT THE EXPENSE OF THE CONTRACTOR.
6. WHERE NECESSARY, THE CONTRACTOR SHALL IMPLEMENT A TRAFFIC MANAGEMENT PLAN TO THE SATISFACTION OF THE CITY OF OTTAWA. ALL CONSTRUCTION SIGNAGE MUST CONFORM TO THE LATEST VERSION OF THE M.T.O. MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. ALL TEMPORARY TRAFFIC CONTROL MEASURES MUST BE REMOVED UPON THE COMPLETION OF THE WORKS.
7. SHOULD ANY BURIED ARCHAEOLOGICAL REMAINS BE FOUND ON THE PROPERTY DURING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL NOTIFY THE OWNER TO CONTACT THE HERITAGE OPERATIONS UNIT OF THE ONTARIO MINISTRY OF CULTURE MUST BE NOTIFIED IMMEDIATE, AND WORK WITHIN THE AREA SHALL BE CEASED UNTIL FURTHER NOTICE.
8. FOR GEOTECHNICAL INFORMATION REFER TO GEOTECHNICAL REPORT PG5043-1 PREPARED BY PATERSON GROUP.

   CAR ONLY PARKING AREA : (500mm)
   50mm - SUPERPAVE 12.5 ASPHALTIC CONCRETE
   150mm - OPSS GRANULAR "A" CRUSHED STONE
   300mm - OPSS GRANULAR "B" TYPE II

   ACCESS LANES AND HEAVY TRUCK LOADING/ PARKING AREA : (690mm)
   40mm - SUPERPAVE 12.5 ASPHALTIC CONCRETE
   50mm - SUPERPAVE 19.0 ASPHALTIC CONCRETE
   150mm - OPSS GRANULAR "A" CRUSHED STONE
   450mm - OPSS GRANULAR "B" TYPE II
9. FOR GEODETIC BENCHMARK AND GEOMETRIC LAYOUT OF STREET AND LOTS, REFER TO TOPOGRAPHICAL SURVEY AND PLAN OF SUBDIVISION PREPARED BY STANTEC BENCHMARK BASED ON CAN-NET VIRTUAL REFERENCE SYSTEM NETWORK.
10. FOR SITE PLAN INFORMATION, REFER TO SITE PLAN PREPARED BY PROJECT 1 STUDIO
11. THESE DRAWINGS ARE NOT TO BE SCALED OR USED FOR LAYOUT PURPOSES
12. ROADWAY SECTIONS REQUIRING GRADE RAISE TO PROPOSED SUB GRADE LEVEL TO BE FILLED WITH ACCEPTABLE NATIVE EARTH BORROW OR IMPORTED OPSS SELECTED SUBGRADE MATERIAL IF NATIVE MATERIAL IS DEFICIENT AS PER RECOMMENDATION OF GEOTECHNICAL ENGINEER.
13. IN AREAS WHERE EXISTING GROUND IS BELOW THE PROPOSED ELEVATION OF SEWER AND WATERMAINS, GRADE RAISING AND FILLING IS TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT. AS PER CITY GUIDELINES ALL WATERMAINS IN FILL AREAS ARE TO BE TIED WITH RESTRAINING JOINTS AND THRUST BLOCKS.
14. THE CONTRACTOR SHALL IMPLEMENT THE EROSION AND SEDIMENT CONTROL PLAN PRIOR TO THE COMMENCEMENT OF ANY SITE CONSTRUCTION. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED TO THE SATISFACTION OF THE ENGINEER, OR ANY REGULATORY AGENCY. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL VEGETATION IS ESTABLISHED OR UNTIL THE START OF A SUBSEQUENT PHASE.
15. CONTRACTORS SHALL BE RESPONSIBLE FOR KEEPING CLEAN ALL ROADS WHICH BECOME COVERED IN DUST, DEBRIS AND/OR MUD AS A RESULT OF ITS CONSTRUCTION OPERATIONS.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL BEDDING OR ADDITIONAL STRENGTH PIPE SHOULD THE MAXIMUM OPSD TRENCH WIDTH BE EXCEEDED.
17. ALL PIPE, CULVERTS, STRUCTURES REFER TO NOMINAL INSIDE DIMENSIONS.
18. SHOULD CLAY SEALS BE REQUIRED, THEY SHALL BE INSTALLED AS PER THE RECOMMENDATIONS WITHIN THE GEOTECHNICAL REPORT.
19. UNLESS SPECIFICALLY NOTED OTHERWISE, PIPE MATERIALS SHALL BE AS FOLLOWS;
    -WATERMAINS TO BE PVC DR18
    -SANITARY SEWER TO BE PVC DR35
    -PERFORATED STORM SEWERS IN REAR YARDS AND LANDSCAPE AREAS TO BE HDPE
    -STORM SEWERS 375mm DIAMETER AND LESS TO BE PVC DR35
    -STORM SEWERS 450mm DIAMETER AND GREATER TO BE CONCRETE, CLASS AS PER OPSD 807.010 OR 807.030, OR HIGHER
    FOR SHALLOW SEWERS, REFER TO CITY STANDARD S35.
20. ALL CONNECTIONS TO EXISTING WATERMAINS ARE TO BE COMPLETED BY CITY FORCES. CONTRACTOR IS TO EXCAVATE, BACKFILL, COMPACT AND REINSTATE.
21. ANY WATERMAIN WITH LESS THAN 2.4m AND ANY SEWER WITH LESS THAN 2.0m DEPTH OF COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22 OR AS APPROVED BY THE ENGINEER.
22. ALL FIRE HYDRANTS AS PER CITY STANDARD W19, c/w 150mmØ LEAD UNLESS OTHERWISE SPECIFIED.
23. ALL STUBBED SEWERS SHALL HAVE PRE-MANUFACTURED CAPS INSTALLED.
24. ALL CATCHBASINS SHALL HAVE A 600mm SUMP. ALL CATCHBASIN MANHOLES, AND ALL STORM MANHOLES WITH OUTLETTING PIPE SIZES LESS THAN 900mm, SHALL HAVE A 300mm SUMP.
25. ALL SANITARY MANHOLES IN PONDING AREAS SHALL BE EQUIPPED WITH A WATERTIGHT COVER.
26. ALL LEADS FOR STREET CATCHBASIN'S AND CURB INLET CATCHBASIN'S CONNECTED TO MAIN SHALL BE 200mmØ PVC DR35 @ MIN 2% SLOPE UNLESS NOTED OTHERWISE. ALL LEADS FOR RYCB'S CONNECTED TO MAIN SHALL BE 200mmØ PVC DR35 @ MIN 1% SLOPE UNLESS NOTED OTHERWISE.
27. UNLESS SPECIFICALLY NOTED OTHERWISE, ALL STREET CATCHBASINS SHALL BE INSTALLED WITH TWO - 3.0m MINIMUM SUBDRAINS INSTALLED LONGITUDINALLY, PARALLEL WITH THE CURB. ALL CATCHBASINS IN ASPHALT AREAS, NOT ADJACENT TO A CURB, SHALL BE INSTALLED WITH FOUR - 3.0m MINIMUM SUBDRAINS INSTALLED ORTHOGONALLY.
28. INLET CONTROL DEVICES SHALL BE INSTALLED PRIOR TO COMPLETING THE ROAD BASE (GRANULAR A).
29. ALL SEWER SERVICE LATERALS WITH MAINLINE CONNECTIONS DEEPER THAN 5.0m REQUIRE A CONTROLLED SETTLEMENT JOINT.
30. EACH BUILDING SHALL BE EQUIPPED WITH A SANITARY AND STORM SEWER BACKWATER VALVE AND CLEAN-OUT ON ITS PRIMARY SERVICE, IF REQUIRED BY ONTARIO BUILDING CODE (BY OTHERS).
31. THE SUBGRADE OF ALL STRUCTURES, PIPE, ROADS, SIDEWALKS, WALKWAYS, AND BUILDINGS SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
32. TOP COURSE ASPHALT SHALL NOT BE PLACED UNTIL THE FINAL CCTV INSPECTION AND NECESSARY REPAIRS HAVE BEEN COMPLETED TO THE SATISFACTION OF THE ENGINEER AND THE CITY OF OTTAWA.
33. ALL RETAINING WALLS GREATER THAN 1.0m IN HEIGHT SHALL BE DESIGNED BY A QUALIFIED STRUCTURAL ENGINEER.
34. ALL RETAINING WALLS GREATER THAN 0.6m IN HEIGHT REQUIRE A GUARD. ANY GUARD ON A RETAINING WALL GREATER THAN 1.0m IN HEIGHT SHALL BE DESIGNED BY THE QUALIFIED STRUCTURAL ENGINEER RESPONSIBLE FOR THE WALL DESIGN.
35. UPON COMPLETION OF A RETAINING WALL, THE CONTRACTOR SHALL REQUEST A CONFORMANCE CERTIFICATE FROM THE QUALIFIED ENGINEER RESPONSIBLE FOR THE WALL DESIGN.



SECTION A:A
(FRONT PROPERTY LINE, FOR VISUAL DEMONSTRATION)
N.T.S.

CLIENT

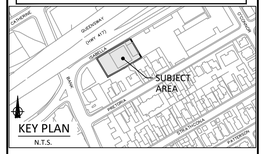
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ISSUES

No.	DESCRIPTION	DATE
1	ISSUED FOR RE-ZONING	2020:09:11
2	REISSUED FOR RE-ZONING	2023:08:16
3	REISSUED FOR RE-ZONING	2023:09:28
4	SUBMISSION FOR SPA	2026:01:30
5	REVISED PER CITY COMMENTS	2026:04:02
6	REVISED PER NEW SITE PLAN	2026:04:17
7	REVISED PER NEW SITE PLAN	2026:11:12

SEE 010 & 011 FOR NOTES, LEGEND AND DETAILS



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SEAL



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PROJECT
178-200 ISABELLA

PROJECT NO: 124875

DRAWN BY:	CHECKED BY:
D.P.S.	**D.V.**
PROJECT MGR: **S.E.L.**	APPROVED BY: **S.E.L.**

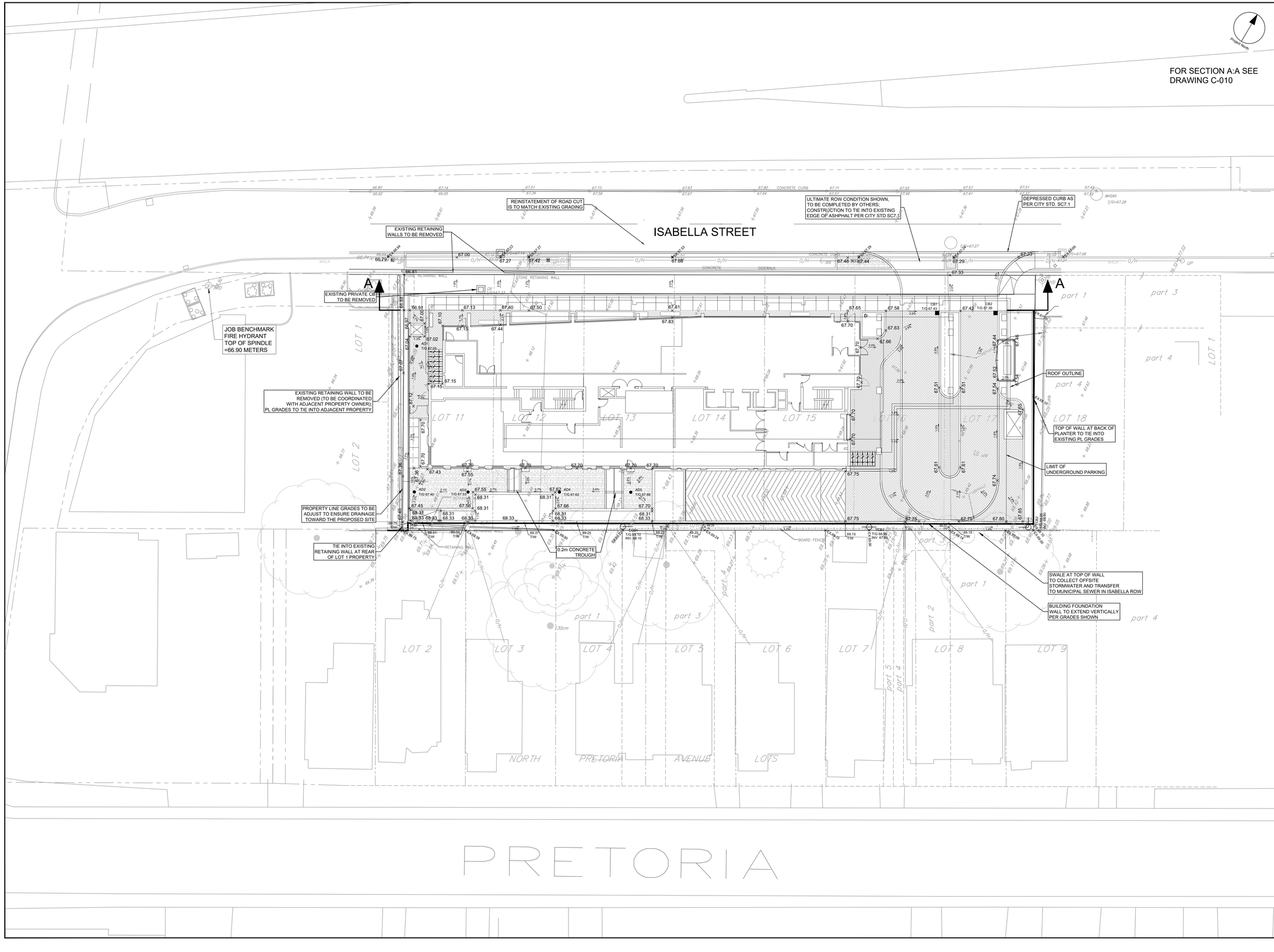
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NOTES & LEGEND

SHEET NUMBER	ISSUE
C-010	7

SCALE CHECK 1:n 10mm XXXXX

D07-12-26-0009

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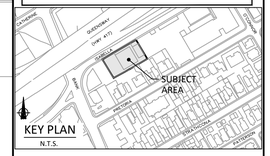
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SEE 010 & 011 FOR NOTES, LEGEND AND DETAILS



NOT FOR CONSTRUCTION

1:200 0 2 6 10m

SEAL

LICENSED PROFESSIONAL ENGINEER
S. E. LABADIE
100214983
2026-11-12
PROVINCE OF ONTARIO

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www.arcadis.com

PROJECT
178-200 ISABELLA

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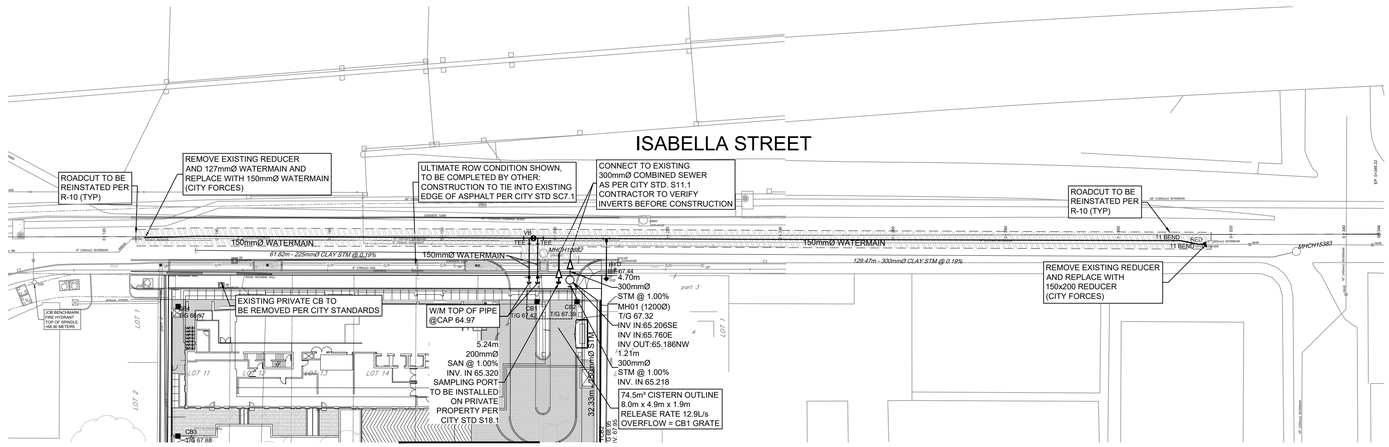
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SITE GRADING PLAN

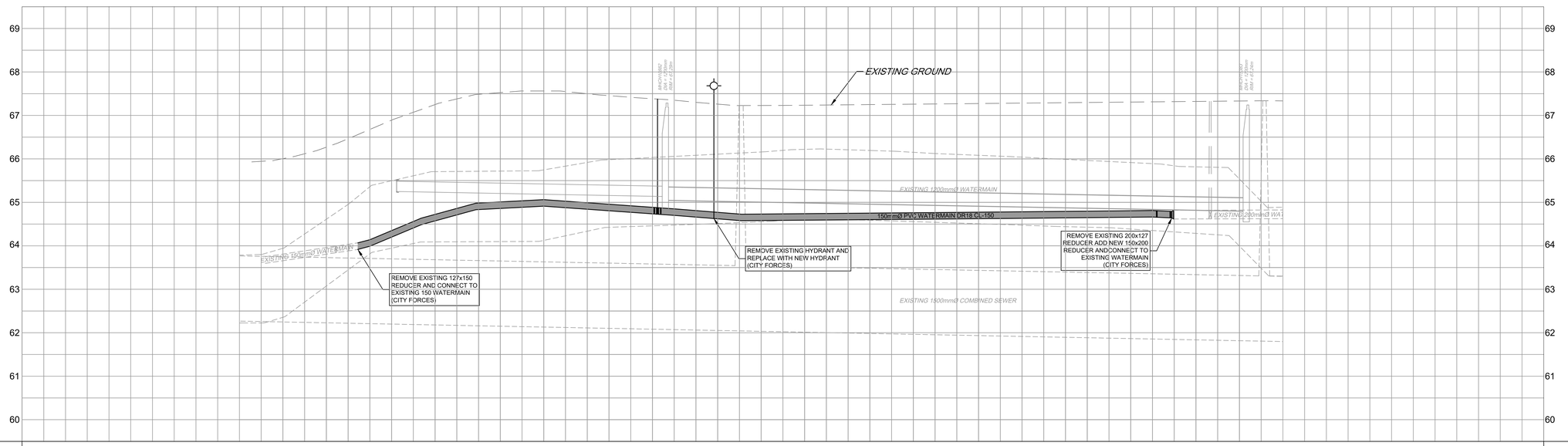
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C-200	7

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D07-12-26-0009


ISABELLA STREET
ROADCUT TO BE REINSTATED PER R-10 (TYP)
REMOVE EXISTING REDUCER AND 127mmØ WATERMAIN AND REPLACE WITH 150mmØ WATERMAIN (CITY FORCES)
ULTIMATE ROW CONDITION SHOWN, TO BE COMPLETED BY OTHER: CONSTRUCTION TO TIE INTO EXISTING EDGE OF ASPHALT PER CITY STD SC7.1
CONNECT TO EXISTING 300mmØ COMBINED SEWER AS PER CITY STD. S11.1 CONTRACTOR TO VERIFY INVERTS BEFORE CONSTRUCTION
150mmØ WATERMAIN
61.82m - 225mmØ CLAY STM @1.79%
150mmØ WATERMAIN
129.47m - 300mmØ CLAY STM @ 0.19%
150mmØ WATERMAIN
ROADCUT TO BE REINSTATED PER R-10 (TYP)
REMOVE EXISTING REDUCER AND REPLACE WITH 150x200 REDUCER (CITY FORCES)
EXISTING PRIVATE CB TO BE REMOVED PER CITY STANDARDS
W/M TOP OF PIPE @CAP 64.97
5.24m 200mmØ SAN @ 1.00% INV. IN 65.320 SAMPLING PORT TO BE INSTALLED ON PRIVATE PROPERTY PER CITY STD S18.1
4.70m 300mmØ STM @ 1.00% MH01 (1200Ø) T/G 67.32 INV IN:65.206SE INV IN:65.760E INV OUT:65.186NW
1.21m 300mmØ STM @ 1.00% INV. IN 65.218
74.5m³ CISTERN OUTLINE 8.0m x 4.9m x 1.9m RELEASE RATE 12.9L/s OVERFLOW = CB1 GRATE
CONT'D ON DWG 124875-C-001


EXISTING GROUND
EXISTING 1200mmØ WATERMAIN
150mmØ PVC WATERMAIN DR18 C-150
EXISTING 150mmØ WATERMAIN
EXISTING 200mmØ WATERMAIN
EXISTING 1500mmØ COMBINED SEWER
REMOVE EXISTING 127x150 REDUCER AND CONNECT TO EXISTING 150 WATERMAIN (CITY FORCES)
REMOVE EXISTING HYDRANT AND REPLACE WITH NEW HYDRANT (CITY FORCES)
REMOVE EXISTING 200x127 REDUCER ADD NEW 150x200 REDUCER ANDCONNECT TO EXISTING WATERMAIN (CITY FORCES)

| | | |