

Minto Communities

Design Brief

178-200 Isabella

April 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.

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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 $C=0.4$

$$\begin{aligned}
 Q_{\text{restricted}} &= 2.78 \times C \times i_{2\text{yr}} \times A && \text{where:} \\
 C &= 0.4 \\
 i_{2\text{yr}} &= \text{Intensity of 2-year storm event (mm/hr)} \\
 &= 732.951 \times (T_c + 6.119)^{0.810} = 76.81 \text{ mm/hr; where } T_c = 10 \text{ minutes} \\
 Q_{\text{restricted}} &= 18.79 \text{ L/s}
 \end{aligned}$$

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:

$$\begin{aligned}
 Q_{\text{uncontrolled}} &= 2.78 \times C \times i_{100\text{yr}} \times A && \text{where:} \\
 C_{100} &= \text{Average runoff coefficient of uncontrolled area} = 0.2 \times 1.25 = 0.25 \\
 i_{100\text{yr}} &= \text{Intensity of 100-year storm event (mm/hr)} \\
 &= 1735.688 \times (T_c + 6.014)^{0.820} = 178.56 \text{ mm/hr; where } T_c = 10 \text{ minutes} \\
 A_{1+2} &= \text{Uncontrolled Area} = 0.01 \text{ Ha}
 \end{aligned}$$

Therefore, the uncontrolled release rate can be determined as:

$$Q_{\text{uncontrolled}} = 1.24 \text{ L/s}$$

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:

$$\begin{aligned}
 Q_{\text{max allowable}} &= Q_{\text{restricted}} - Q_{\text{uncontrolled}} - Q_{\text{sanitary}} \\
 &= 18.79 \text{ L/s} - 1.24 \text{ L/s} - 4.63 \text{ L/s} = \mathbf{12.92 \text{ L/s}}
 \end{aligned}$$

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.

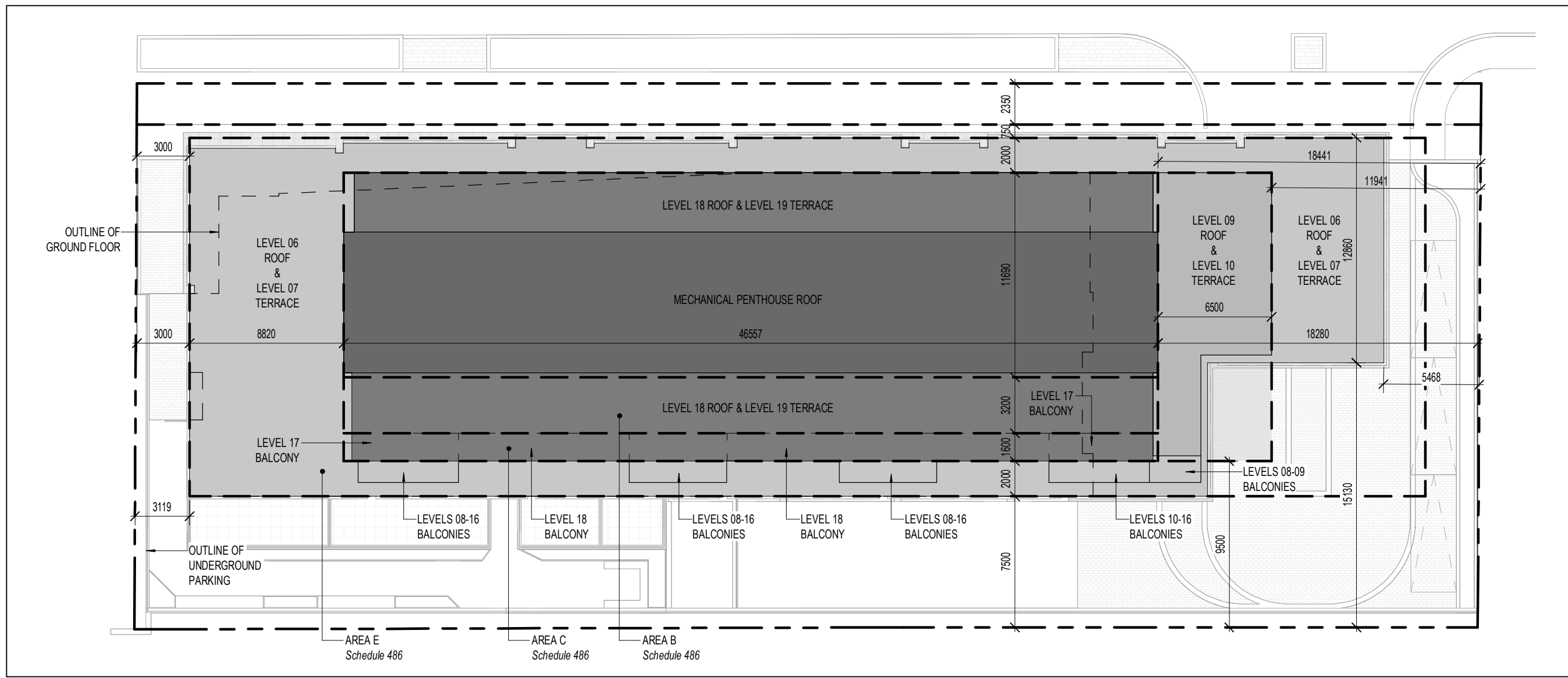
This report has demonstrated sanitary and storm flows from the subject site can be accommodated by the existing 300 mm dia combined sewer in Isabella Street. However, a reliable water supply, including fire flow is not presently available from the existing watermains fronting the site. In order to provide 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 ZONING SETBACK PLAN
SP-01 SCALE: 1 : 250

UNIT COUNT																				
NAME	L01	L02	L03	L04	L05	L06	L07	L08	L09	L10	L11	L12	L13	L14	L15	L16	L17	L18	TOTAL COUNT	PERCENTAGE
STUDIO	0	8	9	9	9	9	0	0	0	0	0	0	0	0	0	0	0	0	44	19%
1-BED	1	2	4	4	4	4	6	6	5	7	7	7	7	7	7	7	0	0	85	37%
1-BED + DEN	0	3	3	3	3	3	2	2	3	0	0	0	0	0	0	0	0	0	22	10%
2-BED	2	2	3	3	3	3	4	4	4	3	3	3	3	3	3	3	3	3	55	24%
3-BED	1	1	2	2	2	2	2	2	0	0	1	1	1	1	1	1	3	3	23	10%
TOTAL	4	16	21	21	21	21	12	12	12	11	11	11	11	11	11	11	6	6	229	100%

VEHICLE PARKING		
LEVEL	TYPE	COUNT
ENTRY	SHORT-TERM PARKING	3
LEVEL P1	RESIDENTIAL	22
LEVEL P1	VISITOR	22
LEVEL P2	RESIDENTIAL	65
TOTAL		102

BICYCLE PARKING	
LEVEL	COUNT
LEVEL 01	8
LEVEL P1	234
TOTAL	242

GROSS BUILDING AREA		
LEVEL	AREA	AREA (SF)
LEVEL 01	752.8 m²	8,103 SF
LEVEL 02	1,032.4 m²	11,113 SF
LEVEL 03	1,307.2 m²	14,071 SF
LEVEL 04	1,307.2 m²	14,070 SF
LEVEL 05	1,307.2 m²	14,070 SF
LEVEL 06	1,307.2 m²	14,070 SF
LEVEL 07	846.0 m²	9,106 SF
LEVEL 08	846.0 m²	9,106 SF
LEVEL 09	846.0 m²	9,106 SF
LEVEL 10	761.0 m²	8,191 SF
LEVEL 11	761.0 m²	8,191 SF
LEVEL 12	761.0 m²	8,191 SF
LEVEL 13	761.0 m²	8,191 SF
LEVEL 14	761.0 m²	8,191 SF
LEVEL 15	761.0 m²	8,191 SF
LEVEL 16	761.0 m²	8,191 SF
LEVEL 17	724.1 m²	7,794 SF
LEVEL 18	675.9 m²	7,286 SF
LEVEL 19	349.9 m²	3,767 SF
TOTAL	16,629.9 m²	179,000 SF
LEVEL P1	1,995.7 m²	21,374 SF
LEVEL P2	1,995.7 m²	21,374 SF
TOTAL	3,991.4 m²	42,747 SF
TOTAL	20,621.2 m²	222,933 SF

GFA (CITY OF OTTAWA)		
LEVEL	AREA	AREA (SF)
LEVEL 01	293.5 m²	3,159 SF
LEVEL 02	837.8 m²	9,018 SF
LEVEL 03	1,141.3 m²	12,284 SF
LEVEL 04	1,141.3 m²	12,284 SF
LEVEL 05	1,141.3 m²	12,284 SF
LEVEL 06	1,141.3 m²	12,284 SF
LEVEL 07	726.2 m²	7,839 SF
LEVEL 08	726.2 m²	7,839 SF
LEVEL 09	726.2 m²	7,839 SF
LEVEL 10	659.9 m²	7,103 SF
LEVEL 11	659.9 m²	7,103 SF
LEVEL 12	659.9 m²	7,103 SF
LEVEL 13	659.9 m²	7,103 SF
LEVEL 14	659.9 m²	7,103 SF
LEVEL 15	659.9 m²	7,103 SF
LEVEL 16	659.9 m²	7,103 SF
LEVEL 17	622.1 m²	6,686 SF
LEVEL 18	575.7 m²	6,197 SF
LEVEL 19	287.9 m²	3,097 SF
TOTAL	13,697.8 m²	147,442 SF

PRIVATE AMENITY		
LEVEL	AREA	AREA (SF)
LEVEL 01	77.3 m²	832 SF
LEVEL 02	227.0 m²	2,443 SF
LEVEL 03	24.0 m²	258 SF
LEVEL 04	24.0 m²	258 SF
LEVEL 05	24.0 m²	258 SF
LEVEL 06	24.0 m²	258 SF
LEVEL 07	24.0 m²	258 SF
LEVEL 08	24.0 m²	258 SF
LEVEL 09	24.0 m²	258 SF
LEVEL 10	24.0 m²	258 SF
LEVEL 11	24.0 m²	258 SF
LEVEL 12	24.0 m²	258 SF
LEVEL 13	24.0 m²	258 SF
LEVEL 14	24.0 m²	258 SF
LEVEL 15	24.0 m²	258 SF
LEVEL 16	24.0 m²	258 SF
LEVEL 17	31.7 m²	341 SF
LEVEL 18	49.9 m²	537 SF
LEVEL 19	63.8 m²	687 SF
TOTAL	632.8 m²	6,812 SF

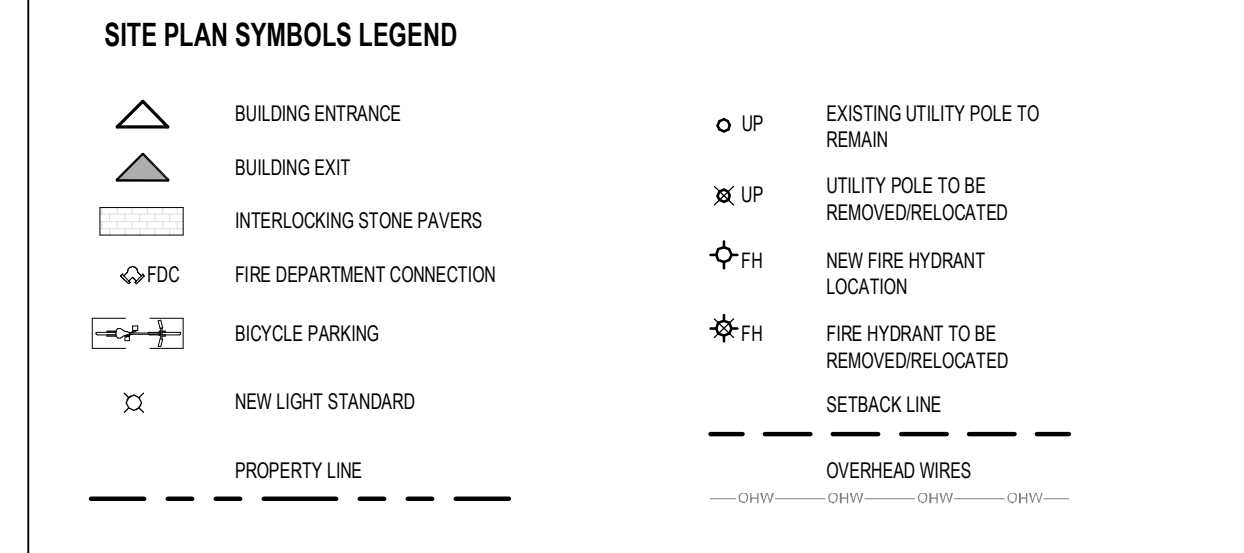
COMMUNAL AMENITY		
LEVEL	AREA	AREA (SF)
LEVEL 01	407.1 m²	4,382 SF
LEVEL 19	584.5 m²	6,289 SF
TOTAL	991.6 m²	10,671 SF



2 LOCATION PLAN
SP-01 SCALE: NTS

SITE STATISTICS	
Current Zoning Designation:	GMA(2017) S486
Lot Width:	76.65 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	229 Units	
Zoning Mechanism	Required	Provided
Minimum Lot Width Table 187(b)	No Minimum	76.65 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 m for the first 6 storeys 11.78 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 14.3 m at 18 storeys	7.5 m for the first 6 storeys 9.5 m at 7-17 storeys 14.5 m at 18 storeys
Maximum Building Height Schedule 486	60 m or 19 storeys	60 m / 19 storeys
Parking Space Rates (Residents) 101 (Sch. 1A - Area X), Section 101(3), Section 101(6)	88 Spaces 0.5 spaces / unit for 217 units -10% of required parking spaces	77 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 217 units	22 Spaces
Bicycle Parking Rates (Residents) Table 111A(4)(b) (Sch. 1 - Area X)	115 Spaces 0.5 spaces / unit for 229 units	242 Spaces
Total Amenity Area Table 1374(4)(i)	1,374 m² 6 m² / unit for 229 units	1,594.3 m²
Communal Amenity Area Table 1374(4)(i)	687 m² Min. 50% of Total Amenity Area	961.5 m²

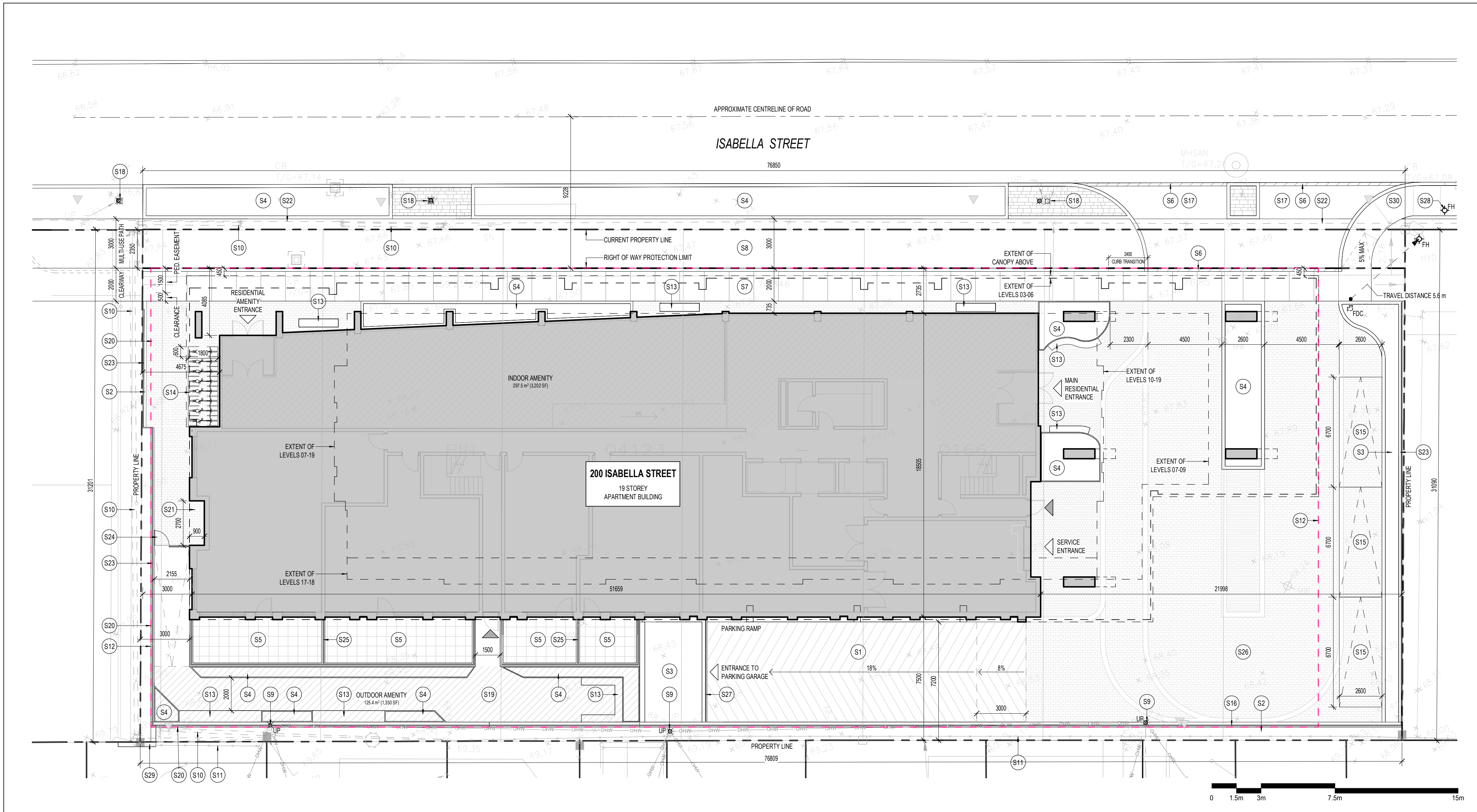


PLAN OF SURVEY OF LOTS 11, 12, 13, 14, 15, 16, & 17 AND PART OF THE 10 FOOT WIDE SOUTH ISABELLA STREET REGISTERED PLAN S425 CITY OF OTTAWA STANTEC GEOMATICS LTD. 2019

SURVEY INFO SCALE: 1 : 1

OWNER ISATORIA LIMITED PARTNERSHIP SUITE 200, 180 KENT ST. OTTAWA ON K1P 0E6
 APPLICANT MINTO GROUP SUITE 200, 180 KENT ST. OTTAWA ON K1P 0E6
 ARCHITECT PROJECT1 STUDIO SUITE 300, 260 ST PATRICK ST. OTTAWA ON K1W 9K5
 SURVEYOR STANTEC GEOMATICS LTD. SUITE 300, 131 CLYDE AVE. OTTAWA ON K2C 3G4
 LANDSCAPE DTAH SUITE 100, 425 KENNEL CREEK ST W. TORONTO ON M5V 3C1
 CIVIL ARCADES PROFESSIONAL SERVICES INC. SUITE 300, 333 PRESTON ST. OTTAWA ON K1S 9M4
 TRAFFIC J.L. RICHARDS SUITE 1000, 343 PRESTON ST. OTTAWA ON K1S 1N4
 NOISEWIND 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
 - S15 SHORT-TERM 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
 - S19 CONCRETE WALKWAY, REFER TO LANDSCAPE
 - S20 CONCRETE URSTAND
 - S21 GAS PAD, REFER TO MECHANICAL
 - 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 THE CONCRETE SIDEWALK INTO EXISTING



1 SITE PLAN
SP-01 SCALE: 1 : 150

GENERAL ARCHITECTURAL NOTES:

- This drawing is the property of the Architect and may not be reproduced or used without the expressed consent of the Architect.
- 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.
- Upon notice in writing, the Architect will provide written clarification or supplementary information regarding the intent of the Contract Documents.
- The Architectural drawings are to be read in conjunction with all other Contract Documents including Project Manuals and the Structural, Mechanical and Electrical Drawings.
- 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.
- These documents are not to be used for construction unless specifically noted for such purpose.

3 REISSUED FOR SITE PLAN CONTROL 26-04-10
 2 REISSUED FOR SITE PLAN CONTROL 26-04-01
 1 ISSUED FOR SITE PLAN CONTROL 26-01-30

ISSUE RECORD



200 ISABELLA STREET
 200 Isabella Street
 Ottawa, ON
 K1S 1V7

PROJ SCALE DRAWN REVIEWED
 2516 NOTED BH/JDH RMK

SITE PLAN

SP-01

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 setback 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 bicycle 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 inseting 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 than 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 than 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 m³/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 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 condition, 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

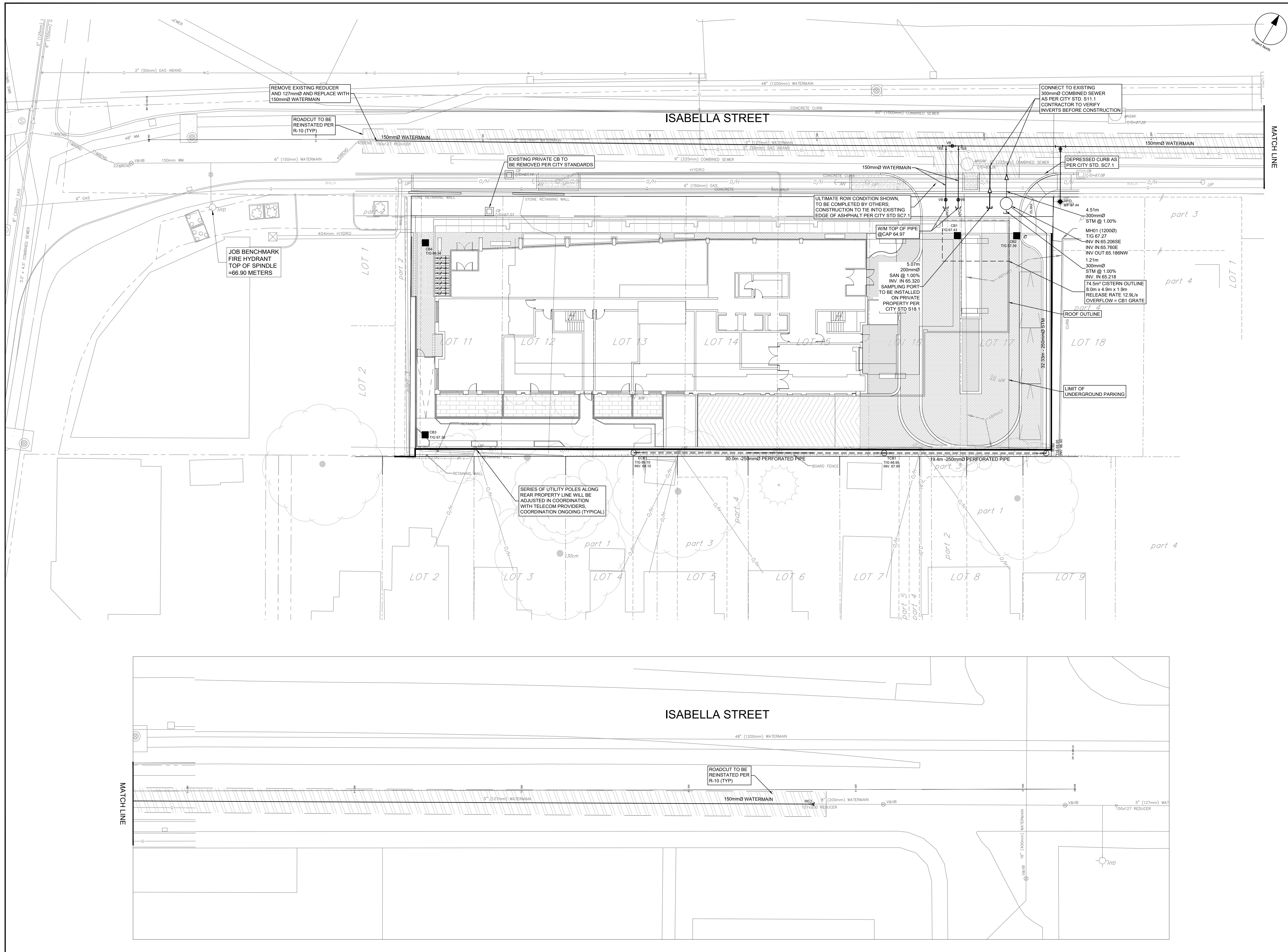
Encl. Studies and Plans Identification List (SPIL)
ADS Site Plan Checklist
HPDS Example Checklist
HPDS Overview for Applicants
Supplementary Development Information
List of Technical Agencies



178-200 Isabella Street_UDB TOR

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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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

SEE 010 & 011 FOR NOTES, LEGEND AND DETAILS

KEY PLAN
 N.T.S.

NOT FOR CONSTRUCTION

1:200

SEAL

 S. E. LABADIE
 100214983
 2026-04-17
 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
SITE SERVICING PLAN

SHEET NUMBER C-001	ISSUE 6
------------------------------	-------------------

File Location: J:\124875_Isabella\377_0_Production\7_03_Design\04_Civil\Sheets\C-001.dwg | Last Saved: April 1, 2026, by sumad3150 | Printed: April 16, 2026, 3:37:37 PM by Suma, Don

1" = XXXXX
 D07-12-26-0009

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

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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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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.

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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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		WATER DEMAND RATES		PEAKING FACTORS		FIRE DEMANDS
Single Family	3.4 persons/unit	Residential	280 l/cap/day	Maximum Daily		Single Family 10,000 l/min (166.7 l/s)
Townhouse	2.7 persons/unit			Residential	2.5 x avg. day	
		Commercial Shopping Center	2,500 L/(1000m2)/day	Commercial	1.5 x avg. day	Semi Detached & Townhouse 10,000 l/min (166.7 l/s)
Apartment (average)	1.8 persons/unit			Maximum Hourly		
				Residential	2.2 x max. day	
				Commercial	1.8 x max. day	Medium Density 15,000 l/min (250 l/s)



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



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:

Type II Noncombustible Construction

A building is considered to be of Noncombustible construction (Type II) when all structural elements, walls, arches, floors, and roofs are constructed with a minimum 1-hour fire resistance rating and are constructed with noncombustible materials.

Total Effective Area (A) =

C = 0.8 → if any vertical openings in the building (ex. interconnected floor spaces, atria, elevators, escalators, etc.) are unprotected**, consider the two largest adjoining floor areas plus 50% of all floors immediately above them up to a maximum of eight; or

→ if all vertical openings and exterior vertical communications are properly protected* in accordance with the National Building Code, consider only the single largest Floor Area plus 25% of each of the two immediately adjoining floors.

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

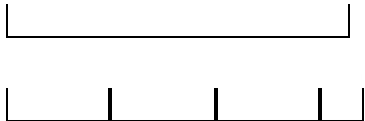
Hi Project1 team,

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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STEP	Contents	Description	Adjustment Factor	Result	
1	Building A 19-storey residential	Total Floor Area 4	1307.2	1307.2 m2	
		Total Floor Area 3	1307.2	326.8 m2	
		Total Floor Area 5	1307.2	326.8 m2	
	Total Effective Floor Area			1960.8	m2
2	Type of Construction	Type V Wood Frame 1.5 Type III Ordinary Construction 1.0 Type II Noncombustible Construction 0.8 Type I Fire Resistive Construction 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	-25%	Limited Combustible Contents -15%	-1200 L/min
		Limited Combustible Contents	-15%		
		Combustible Contents	0%		
		Free Burning Contents	15%		
	Rapid Burning Contents	25%			
Fire Flow				6800 L/min	
5	Automatic Sprinkler Protection	Automatic Sprinkler Conforming to NFPA 13	-30%	Yes -30%	-2040 L/min
		Standard Water Supply for both the system and Fire Department Hose Lines	-10%	No	
		Fully Supervised System	-10%	No	
Total Sprinkler Adjustment				-2040 L/min	
6	Exposure Adjustment				
	Based on Table 6 Exposure Adjustment Charges for Subject Building				
	North	Separation (m)	30+		0 L/min
		Length X Height Factor (m.storeys)			
		Construction Type			
	South	Separation (m)	9	With unprotected opening 15%	1020 L/min
Length X Height Factor (m.storeys)		11.4			
Construction Type		Type V			
East	Separation (m)	30+		0 L/min	
	Length X Height Factor (m.storeys)				
	Construction Type				
West	Separation (m)	22	With unprotected opening 2%	136 L/min	
	Length X Height Factor (m.storeys)	48.0			
	Construction Type	Type III			
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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 Ottawa, Ontario K1S 5N4 Canada
 arcadis.com

SANITARY SEWER DESIGN SHEET
 175-200 Isabella Street
 CITY OF OTTAWA
 Mintso Communities

LOCATION				RESIDENTIAL						ICI AREAS						INFILTRATION ALLOWANCE				FIXED FLOW (L/s)			TOTAL FLOW		PROPOSED SEWER DESIGN								
STREET	AREA ID	FROM MH	TO MH	AREA w/ Units (Ha)	UNIT TYPES			AREA w/o Units (Ha)	POPULATION		RES PEAK FACTOR	PEAK FLOW (L/s)	INSTITUTIONAL		COMMERCIAL		INDUSTRIAL		ICI PEAK FACTOR	PEAK FLOW (L/s)	AREA (Ha)		IND	CUM	TOTAL FLOW (L/s)	CAPACITY (L/s)	LENGTH (m)	DIA (mm)	SLOPE (%)	VELOCITY (m/s)	AVAILABLE CAPACITY		
					SF	SD	TH		APT	IND			CUM	IND	CUM	IND	CUM	IND			CUM	IND									CUM	IND	CUM
175-200 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:				Notes:						Designed:						Revision				Date													
Residential ICI Areas				1. Manning's coefficient (n) = 0.013						2. Demand (per capita): 280 L/day						3. Infiltration allowance: 0.33 L/s/ha				4. Residential Peak Factor:			Harmon Formula = $1 + (14/4 + (P/1000)^{0.5}) \times 0.8$			5. Commercial and Institutional Peak Factors based on total area.			1.5 if greater than 20%, otherwise 1.0				
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																												
Other	60	p/p/ha		17000	L/ha/day																												
				MOE Chart						Dwg. Reference: 124875-C-001						File Reference: 124875.7.03				Date: 2026-04-01			Sheet No: 1 of 1										

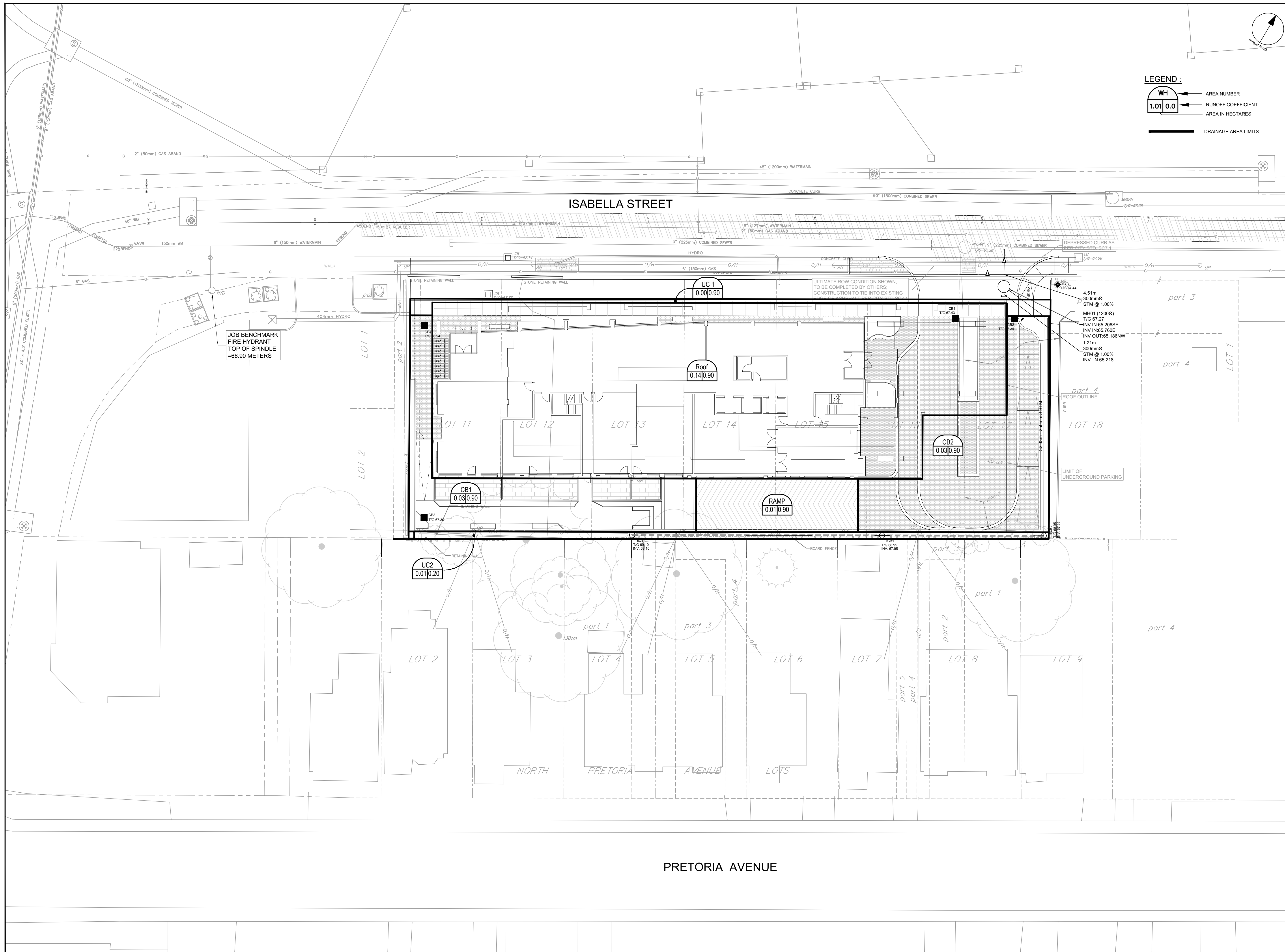
Appendix D



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=	C=	C=	C=	C=	C=	C=	C=	C=	C=	C=	C=	IND	CUM	INLET	TIME	TOTAL	I (2)	I (5)	I (10)	I (100)	2yr PEAK	5yr PEAK	10yr PEAK	100yr PEAK	FIXED FLOW	DESIGN	CAPACITY	LENGTH	PIPE SIZE (mm)			SLOPE	VELOCITY	AVAIL CAP (2yr)				
				0.20	0.25	0.40	0.50	0.57	0.65	0.69	0.70	0.76	0.90			2.78AC	2.78AC	(min)	IN PIPE	(min)	(mm/hr)	(mm/hr)	(mm/hr)	(mm/hr)	FLOW (L/s)	FLOW (L/s)	FLOW (L/s)	FLOW (L/s)	IND	CUM	FLOW (L/s)	(L/s)	(m)	DIA	W	H	(%)	(m/s)	(L/s)	(%)		
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		T/CB	MH01	0.01											0.01	0.01	10.00	0.24	10.24	76.81	104.19	122.14	178.56	0.43	0.56	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:				Notes:												Designed:												Revision														
Q = 2.78QA, where:				1. Mannings coefficient (n) = 0.013												DV												No.														
Q = Peak Flow in Litres per Second (L/s)																												1. Issued for Re-Zoning Application														
A = Area in Hectares (Ha)																												2. Re-issued for Re-Zoning Application														
i = Rainfall intensity in millimeters per hour (mm/hr)																												3. Issued for SPA														
[i = 732.951 / (TC+6.199)^0.814]																												4. Revised Per City Comments														
[i = 998.071 / (TC+6.053)^0.814]																																										
[i = 1174.184 / (TC+6.014)^0.816]																																										
[i = 1735.688 / (TC+6.014)^0.820]																																										
2 YEAR																																										
5 YEAR																																										
10 YEAR																																										
100 YEAR																																										
																Dwg. Reference: 124875-500												File Reference: 124875.7.03														
																												Date: 2026-04-01														
																												Sheet No: 1 of 1														



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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

SEE 010 & 011 FOR NOTES, LEGEND AND DETAILS

NOT FOR CONSTRUCTION

1:200

SEAL

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 6
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 D07-12-26-0009
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Formulas and Descriptions

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

Maximum Allowable Release Rate

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

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

$Q_{restricted} = 18.79 \text{ L/s}$

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

UN1
 $C = 0.25$
 $T_c = 10 \text{ min}$
 $i_{100yr} = 178.56 \text{ mm/hr}$
 $A_{uncontrolled} = 0.01 \text{ Ha}$

$Q_{uncontrolled} = 1.24 \text{ L/s}$

UN2
 $C = 1.00$
 $T_c = 10 \text{ min}$
 $i_{100yr} = 178.56 \text{ mm/hr}$
 $A_{uncontrolled} = 0.00 \text{ Ha}$

$Q_{uncontrolled} = 0.00 \text{ L/s}$

Sanitary Flow

$Q_{sanitary} = 4.63 \text{ L/s}$

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

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

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



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 = 2.78 x C i _{100yr} A (L/s)	Q _r (L/s)	Q _p - Q _r (L/s)	Volume 100yr (m ³)	100YRQ _p 20% (L/s)	Q _p - Q _r (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			

Drainage Area		Cistern			
Area (Ha)	0.210	Restricted Flow Q _r (L/s)=	12.90		
C =	0.90				
2-Year Ponding					
T _c Variable (min)	i _{2yr} (mm/hour)	Peak Flow Q _p = 2.78 x C i _{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

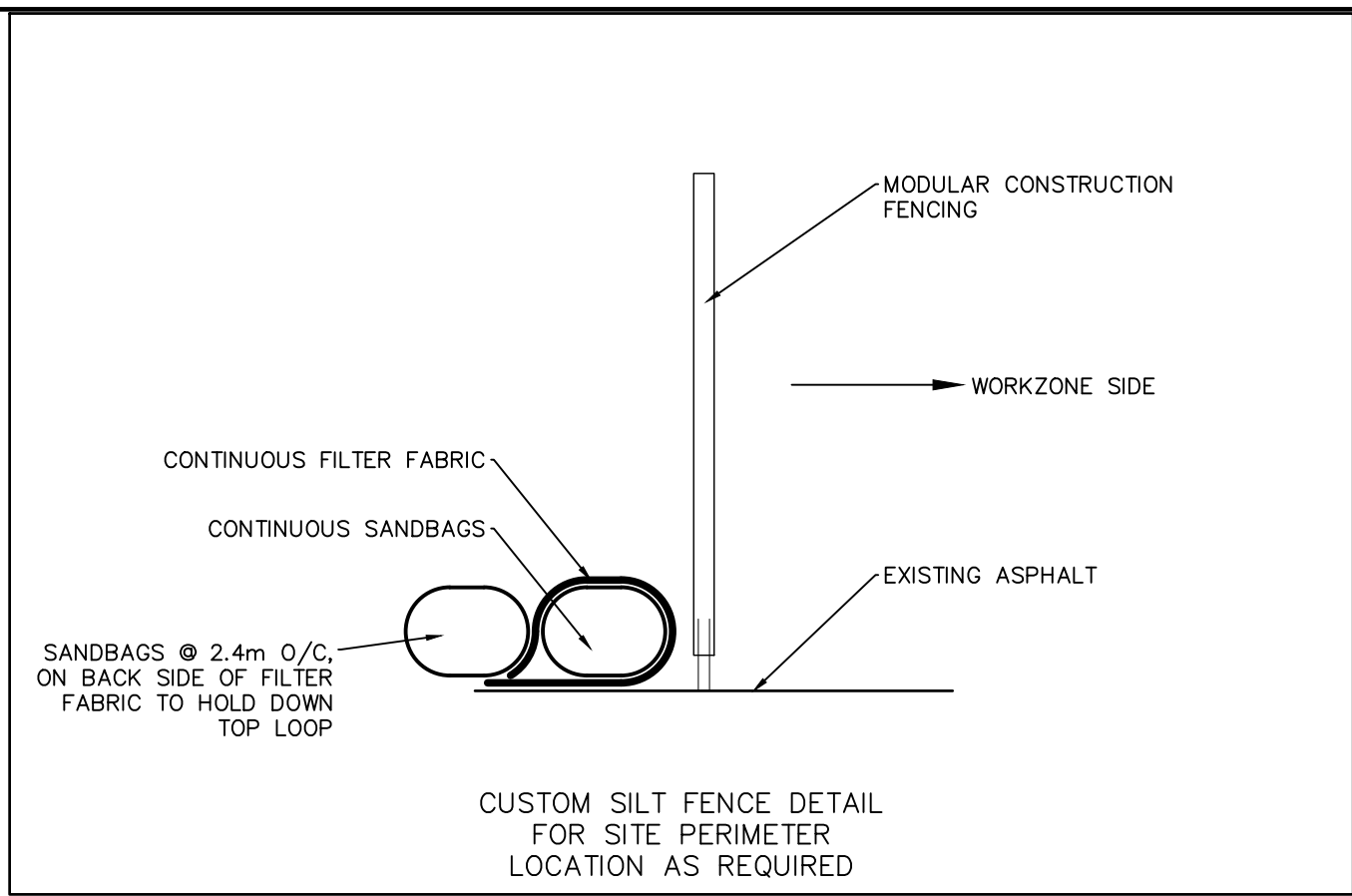
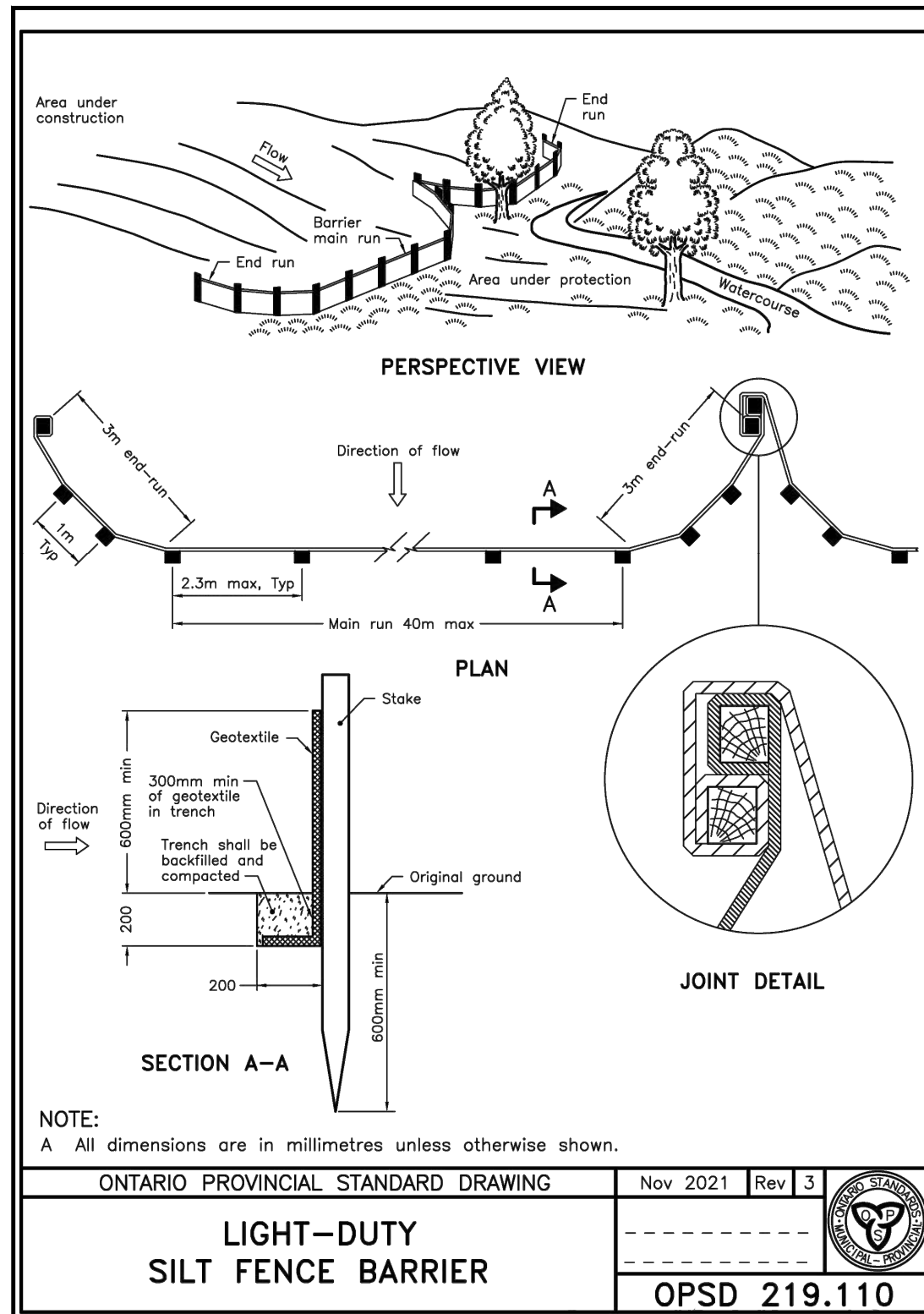
Storage (m ³)					100+20		
Overflow	Required	Surface	Sub-surface	Balance	Overflow	Required	Balance
0.00	74.34	0.00	74.5	0.00	0.00	95.24	20.74
						convert to flow with peak Tc (L/s)	8.86

overflows to: Offsite

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

overflows to: Offsite

Appendix E



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

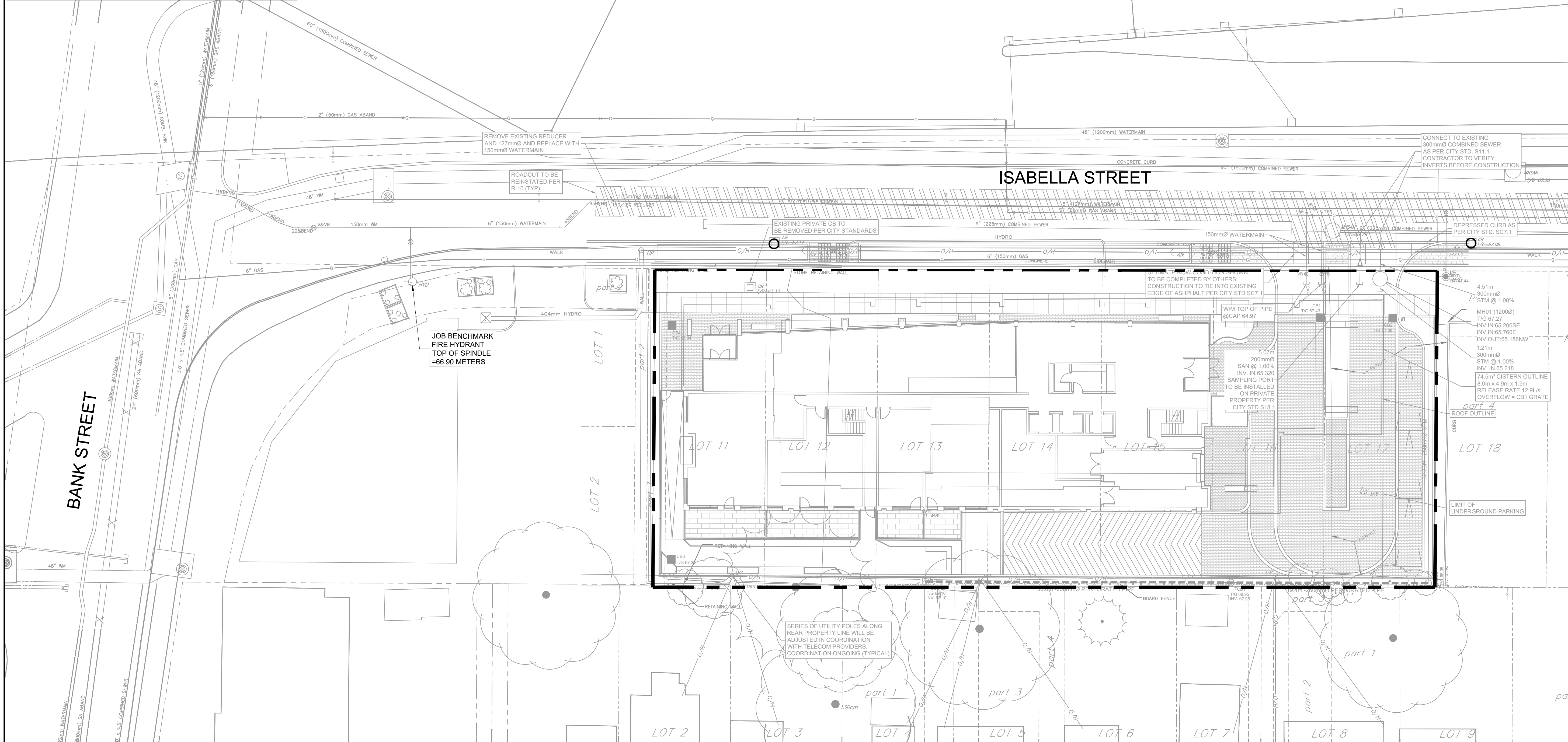
NOTES:

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 C&S 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

ONTARIO PROVINCIAL STANDARD DRAWING Nov 2021 Rev 3

LIGHT-DUTY SILT FENCE BARRIER

OPSD 219.110



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minto Communities

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	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

SEE 010 & 011 FOR NOTES, LEGEND AND DETAILS

KEY PLAN

N.T.S.

NOT FOR CONSTRUCTION

1:200

0 2 4 6 8 10m

SEAL

LICENSÉ PROFESSIONNEL INGÉNIEUR

S. E. LABADIE

100214983

2026-04-02

PROVINCE OF ONTARIO

ARCADIS

333 Preston Street - Suite 500
Ottawa ON K1S 5N4 Canada
tel 613 225 1311
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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

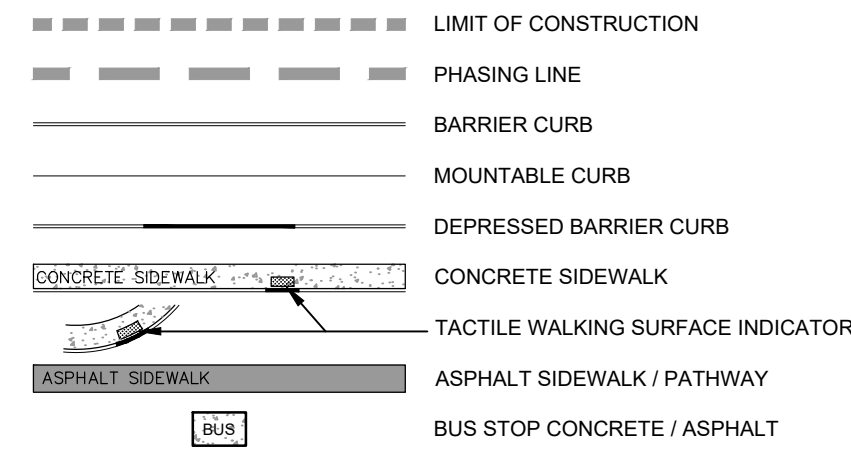
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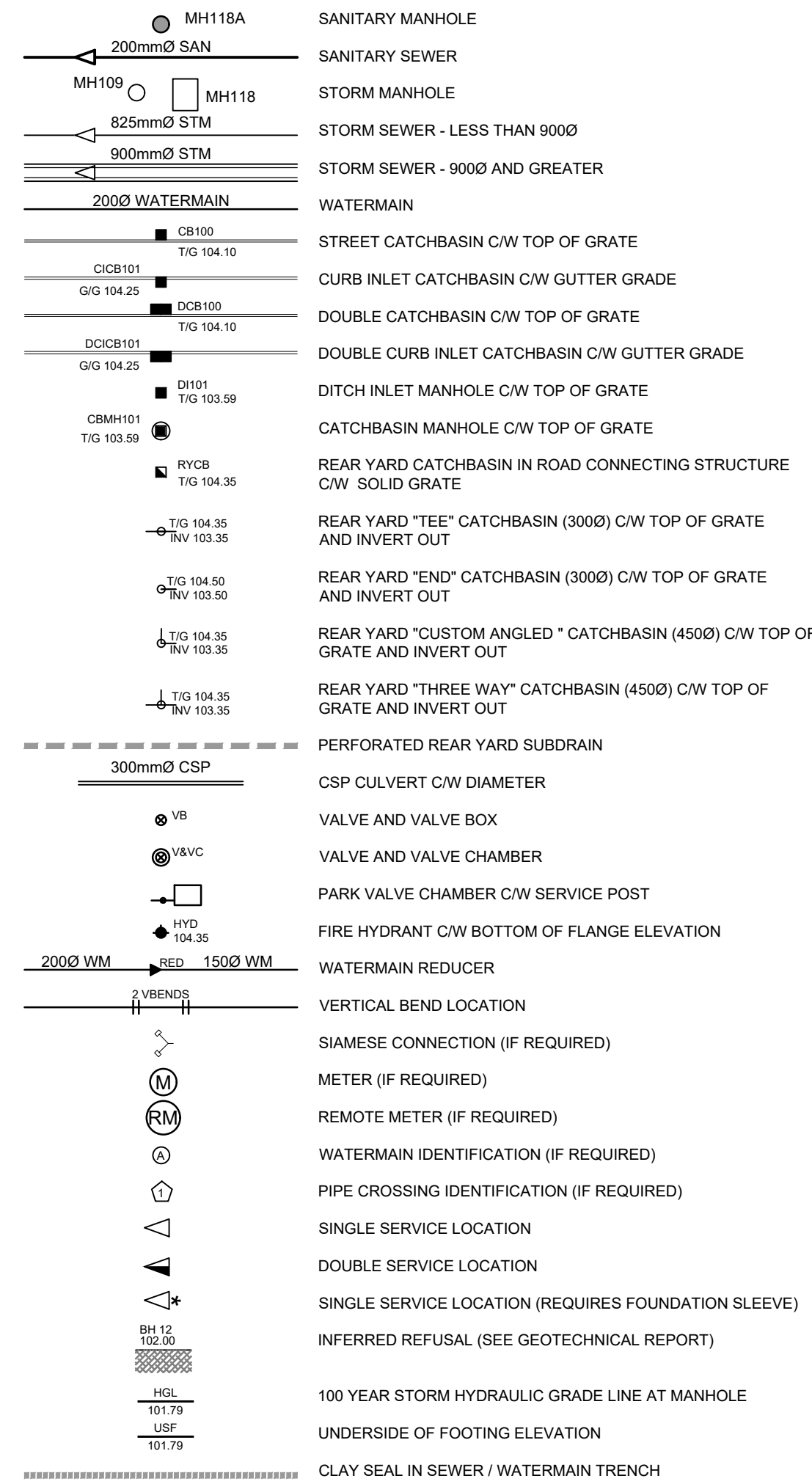
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GENERAL LEGEND



SERVICING LEGEND



NOTES :

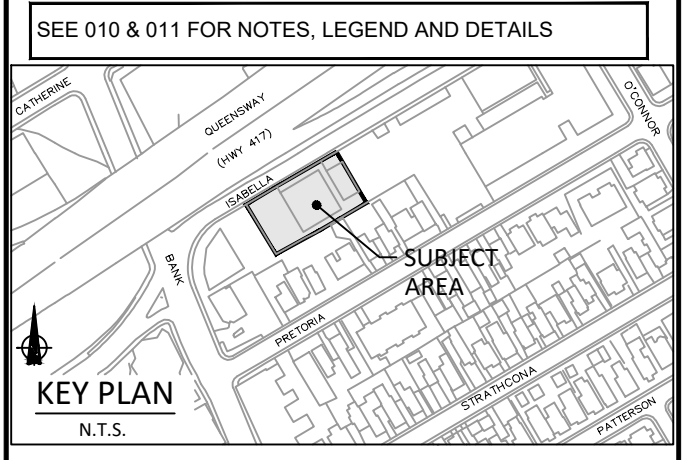
- ALL MATERIALS AND CONSTRUCTION IS TO BE IN ACCORDANCE WITH THE CURRENT CITY OF OTTAWA STANDARD DRAWINGS & SPECIFICATIONS OR OPSD/OPSS IF CITY DRAWINGS AND SPECIFICATIONS DO NOT APPLY.
- THE POSITION OF UNDERGROUND AND ABOVE GROUND SERVICE, UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT 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.
- THE CONTRACTOR SHALL REPORT ALL CONFLICTS, DISCOVERIES OF ERROR AND DISCREPANCIES TO THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT AND ASSUME RESPONSIBILITY FOR ALL UTILITIES WHETHER OR NOT SHOWN ON THESE DRAWINGS.
- 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.
- 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.
- 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.
- 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
- 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.
- FOR SITE PLAN INFORMATION, REFER TO SITE PLAN PREPARED BY PROJECT 1 STUDIO
- THESE DRAWINGS ARE NOT TO BE SCALED OR USED FOR LAYOUT PURPOSES
- 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.
- 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.
- 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.
- 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.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL BEDDING OR ADDITIONAL STRENGTH PIPE SHOULD THE MAXIMUM OPSD TRENCH WIDTH BE EXCEEDED.
- ALL PIPE, CULVERTS, STRUCTURES REFER TO NOMINAL INSIDE DIMENSIONS.
- SHOULD CLAY SEALS BE REQUIRED, THEY SHALL BE INSTALLED AS PER THE RECOMMENDATIONS WITHIN THE GEOTECHNICAL REPORT.
- 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.
- ANY CONNECTIONS TO EXISTING WATERMAINS ARE TO BE COMPLETED BY CITY FORCES. CONTRACTOR IS TO EXCAVATE, BACKFILL, COMPACT AND REINSTATE.
- 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.
- ALL FIRE HYDRANTS AS PER CITY STANDARD W19, c/w 150mmØ LEAD UNLESS OTHERWISE SPECIFIED.
- ALL STUBBED SEWERS SHALL HAVE PRE-MANUFACTURED CAPS INSTALLED.
- 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.
- ALL SANITARY MANHOLES IN PONDING AREAS SHALL BE EQUIPPED WITH A WATERTIGHT COVER.
- ALL LEADS FOR STREET CATCHBASINS AND CURB INLET CATCHBASINS 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.
- 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.
- INLET CONTROL DEVICES SHALL BE INSTALLED PRIOR TO COMPLETING THE ROAD BASE (GRANULAR A).
- ALL SEWER SERVICE LATERALS WITH MAINLINE CONNECTIONS DEEPER THAN 5.0m REQUIRE A CONTROLLED SETTLEMENT JOINT.
- 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).
- THE SUBGRADE OF ALL STRUCTURES, PIPE, ROADS, SIDEWALKS, WALKWAYS, AND BUILDINGS SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
- 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.
- ALL RETAINING WALLS GREATER THAN 1.0m IN HEIGHT SHALL BE DESIGNED BY A QUALIFIED STRUCTURAL ENGINEER.
- 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.
- UPON COMPLETION OF A RETAINING WALL, THE CONTRACTOR SHALL REQUEST A CONFORMANCE CERTIFICATE FROM THE QUALIFIED ENGINEER RESPONSIBLE FOR THE WALL DESIGN.



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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



NOT FOR CONSTRUCTION



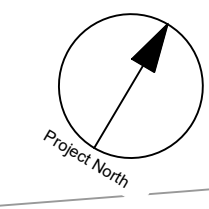
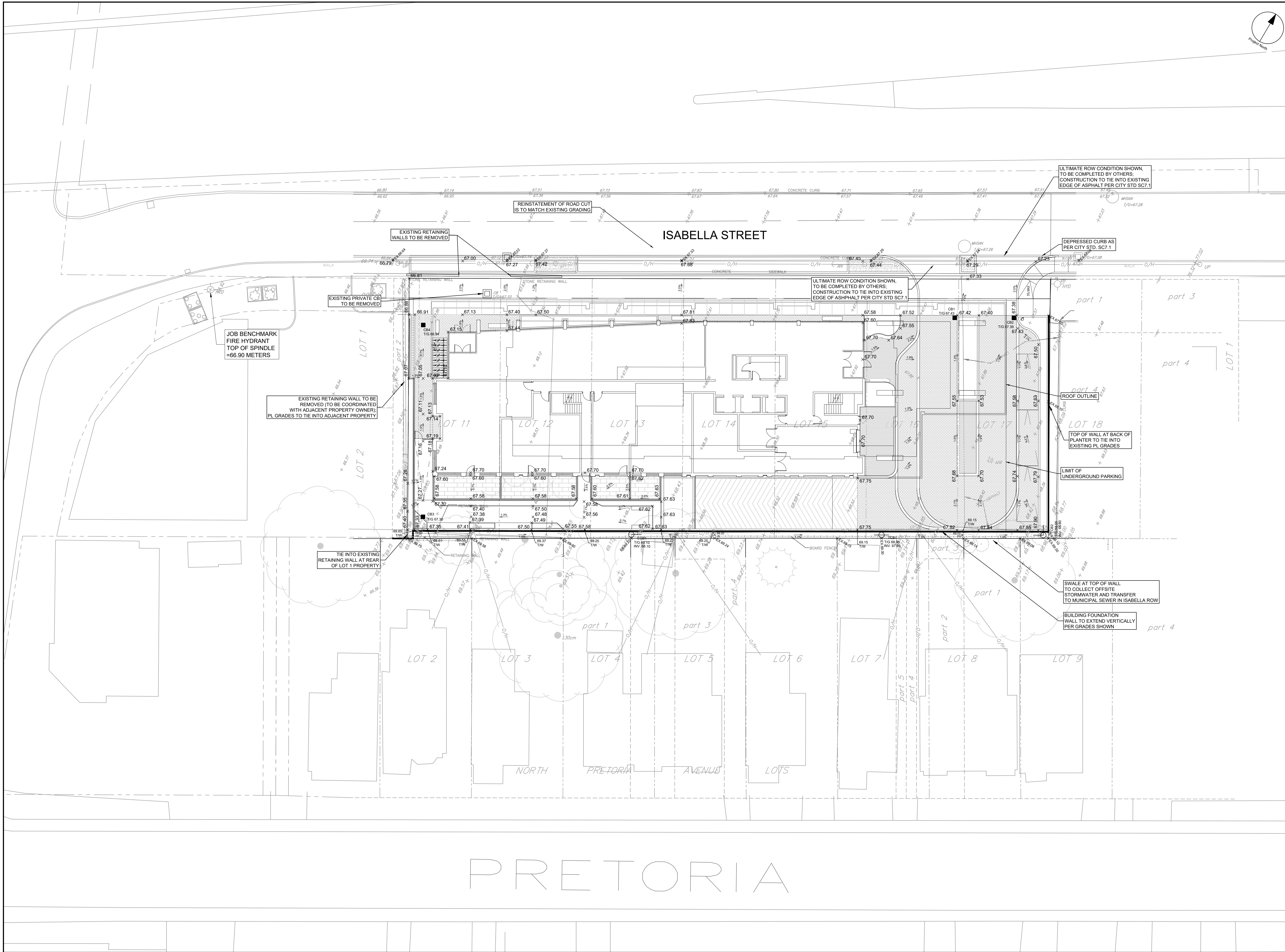
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PROJECT
178-200 ISABELLA

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

SHEET TITLE
NOTES & LEGEND

SHEET NUMBER C-010	ISSUE 6
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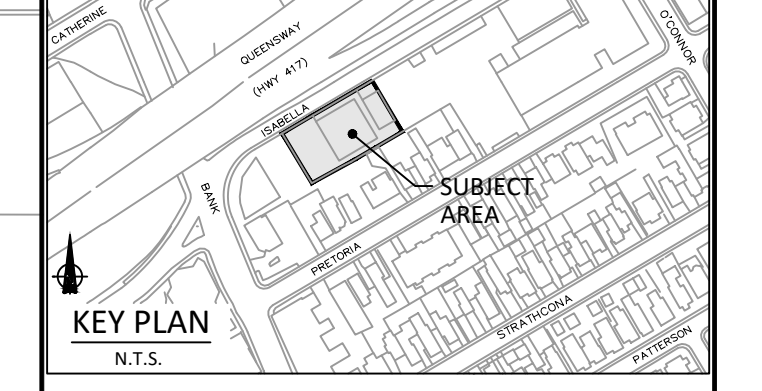
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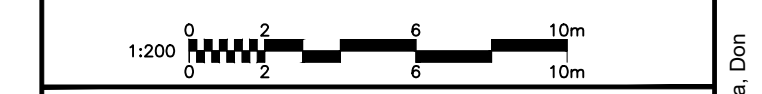
ISSUES

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SEE 010 & 011 FOR NOTES, LEGEND AND DETAILS



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PROJECT
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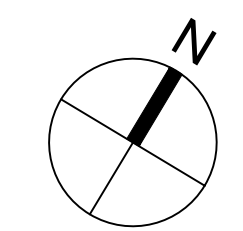
PROJECT NO: 124875
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PROJECT MGR: S.E.L.

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SHEET TITLE
 SITE GRADING PLAN

SHEET NUMBER C-200 **ISSUE** 6

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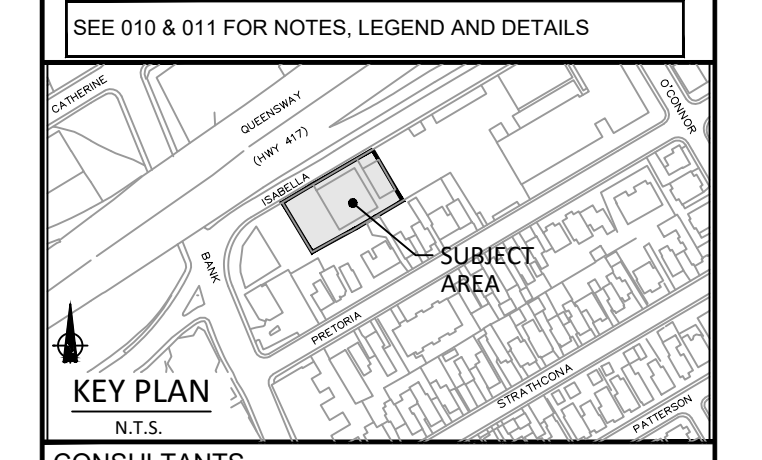


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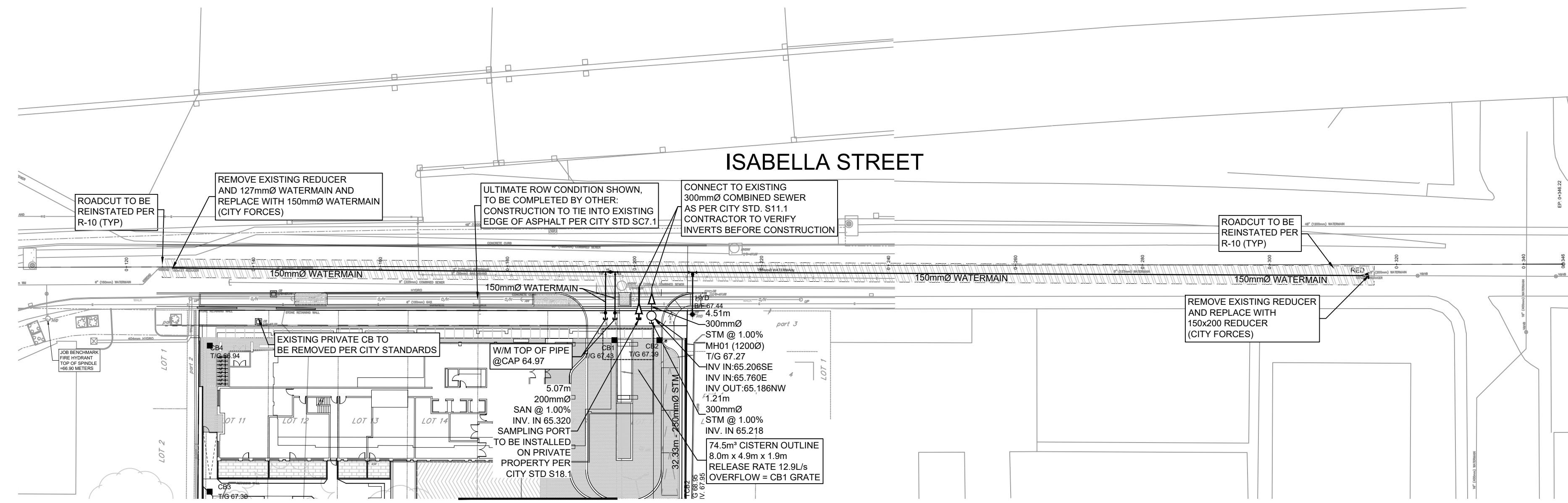
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ISSUES

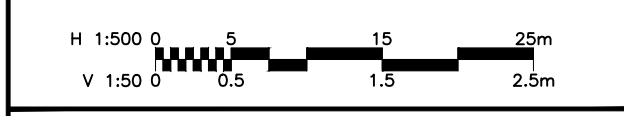
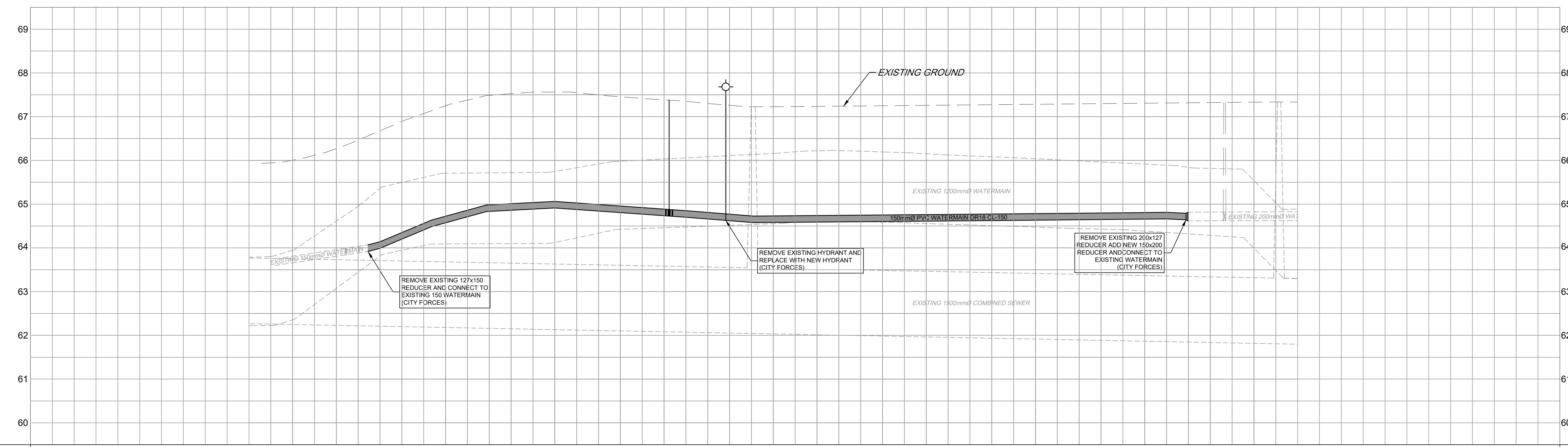
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CONSULTANTS



CONT'D ON DWG 124875-C-001



SEAL

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ROAD GRADE	TOP OF WATERMAIN	STM SEWER INVERT	SAN SEWER INVERT	STATION
65.900				0+100
66.190				0+120
66.270				0+125
66.786	64.088			0+127
67.071	64.140			0+140
67.276	64.650			0+160
67.659	64.638			0+180
67.862	64.881			0+200
67.991	65.010			0+220
67.464	65.062			0+240
67.366	64.991			0+260
67.350	64.464			0+280
67.227	64.882			0+300
67.228	64.872			0+320
67.229	64.731			0+340
67.238	64.178			
67.244	64.227			
67.246	64.231			
67.256	64.748			
67.263	64.764			
67.268	64.772			
67.277	64.783			
67.287	64.802			
67.297	64.804			
67.302	64.812			
67.307	64.816			
67.316	64.821			
67.321	64.826			
67.326	64.836			
67.333	67.333			

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
ISABELLA STREET

SHEET NUMBER
C-100

ISSUE
6