Claridge Homes

4624 Spratt Road

Design Brief

March 30, 2026

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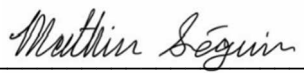

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1 Introduction

1.1 Purpose

The purpose of this Design Brief is to provide stakeholder regulators with the project background together with the design philosophy and criteria incorporated in the site plan design. This report will provide a logical framework to assist reviewers with evaluation of the design of the development.

1.2 Background

The Riverside South Community, formerly known as South Urban Community (SUC), is a part of the former City of Gloucester. The Council of the City of Gloucester adopted the first Official Plan for the community in September 1990. The original concept plan for the community served as the basis for both a Gloucester and a Regional OPA. A Master Drainage Plan (MDP) for the community was formulated in June 1992 based on the preliminary land use plan prepared by J. Bousfields and Associates Ltd. in December 1991.

The South Urban Community became a part of the City of Ottawa through amalgamation in 2001 and the new Official Plan of the City of Ottawa designated the areas as “General Urban Area” and “Employment Area” with some adjustments to the urban boundaries. In 2003, the City of Ottawa initiated a Community Design Plan (CDP) for the Riverside South area. The basis of the CDP is the land use plan for the community, which has evolved over time and has changed significantly since the original plan prepared in early 1990’s.

The South Urban Community River Ridge Master Infrastructure Plan (SUC RR MIP) prepared by Ainley Graham and Associates in 1994 presented a preferred servicing strategy for potable water, sanitary and storm infrastructure in the Riverside South community. The Riverside South Infrastructure Servicing Study Update (ISSU) was issued in 2008 as an update to the SUC RR MIP, to account for modifications to the MDP and CDP since 1994. For reference, a copy of the 2016 Riverside South Community Design Plan – Land Use Plan is included in **Appendix A**.

1.3 Previous Studies

The following report has been referenced prior to completing this assessment:

- Assessment of Adequacy of Public Services, Claridge Homes Phase 3 Lands – 4623 Spratt Road, Claridge Homes (Spratt Road) Inc. – Riverside South Community (IBI September 2020).
- Riverside South Development Corporation (RSDC) Riverside South Community Phase 9 Design Report (J.L. Richards & Associates Limited, 2012). This report provides details on the proposed water supply, waste water disposal, major and minor storm systems with proposed connections for the subject lands.
- Riverside South Community Infrastructure Servicing Study Update (RSCISSU), Stantec Consulting Ltd., September 30, 2008

1.4 Subject Property

The property covers about 2.4 ha. It is located to the north of the future BRT corridor and west of Spratt Road and east of the RSDC Phase 9 community as shown in Figure 1.1. The current draft plan of subdivision for the subject property is included in **Appendix A.**

The proposed development includes 10 stacked townhouses block and a total of 120 units.

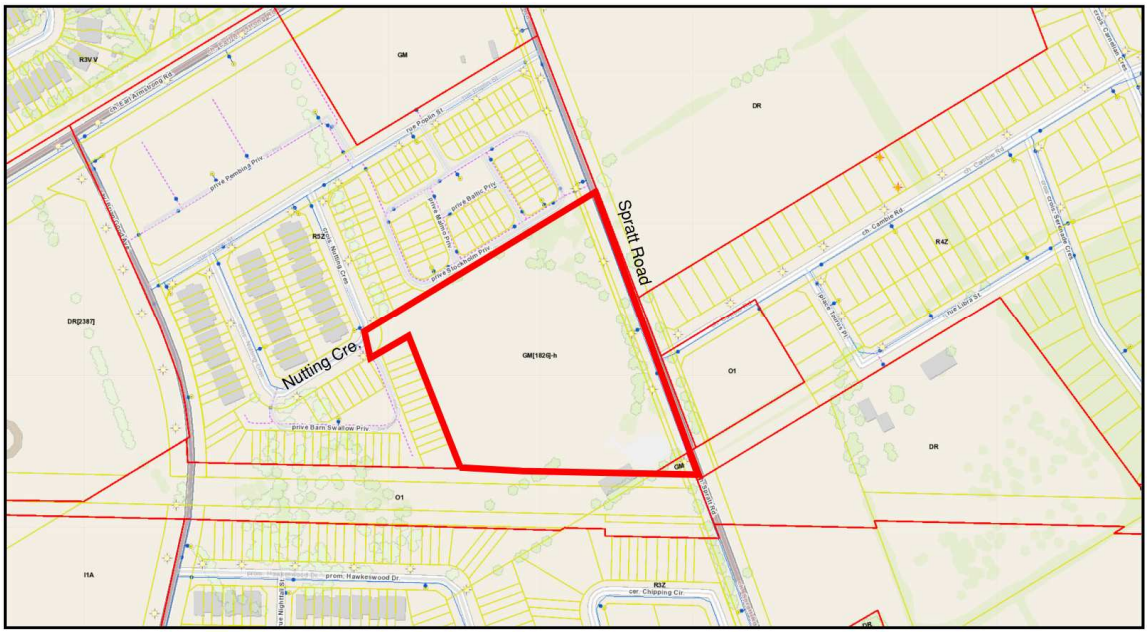


Figure 1.1 Site Location Map

1.5 Existing Infrastructure

Figure 3.1 Water Servicing Plan, Figure 4.1 Sanitary Servicing Plan and Figure 5.1 Storm Servicing Plan from Riverside South Community Phase 9 Design Report shows the location of existing major municipal infrastructure in the vicinity of the 4624 Spratt development. During construction of the subdivision development, RSDS's Phase 9, servicing stubs for storm and sanitary services were left at the servicing corridor of the subject land along Nutting Crescent in order to service the subject site..

1.6 Pre-Consultation

There was a pre-consultation meeting with the City of Ottawa on September 29, 2020. The following are some of the topics reviewed and discussed:

- Zoning information
- Official plan
- Infrastructure

- Park Requirements
- Noise Study needed
- Traffic Study needed
- Geotechnical Conditions

It should be noted that consultation with the Rideau Valley Conservation Authority will be scheduled forthwith.

1.7 Existing Topography

The property is generally flat throughout the site, with a slightly higher southeast corner. Contours for the site are approximately at the 91 - 92 m elevation. A 3-4m high stockpile of fill exists in the north-central portion of the site.

1.8 Geotechnical Considerations

The following geotechnical investigation report has been prepared by Paterson Group

- Report No. PG5641-1 Rev 1 dated January 16, 2026 for the subject property.

Among other items, the reports comments on the following:

- Site Grading
- Foundation Design
- Pavement Design
- Sub-Surface Conditions
- Groundwater Control
- Corrosion Potential
- Trees
- Site Services
- Seismic Design

In general, the subsurface profile encountered topsoil, underlain by sandy silt. Underlying the sandy silt, silty clay to clayed silt and glacial till deposit was encountered.

1.9 Watercourses and Setbacks

There are no identified Municipal Drains or watercourses within proximity to this subject development.

2 Water Supply

2.1 Existing Conditions

There is an existing 300 mm diameter watermain along Spratt Road. Figure 3.1, included in **Appendix B** shows the location of the proposed watermains for Riverside South Community Phase 9.

2.2 Design Criteria

2.2.1 Water Demands

Water demands have been calculated for the site based on per unit population density and consumption rates taken from Tables 4.1 and 4.2 of the City of Ottawa Design Guidelines – Water Distribution and are summarized as follows:

- Single Family 3.4 person per unit
- Townhouse and Semi-Detached 2.7 person per unit
- Average Apartment 1.8 person per unit
- Residential Average Day Demand 280 l/cap/day
- Residential Peak Daily Demand 700 l/cap/day
- Residential Peak Hour Demand 1, 540 l/cap/day
- ICI Average Day Demand 28,000 l/gross ha/day
- ICI peak Daily Demand 42,000 l/gross ha/day
- ICI Peak Hour Demand 50,400 l/gross ha/day

Residential units in the subject site consists of stacked townhouses. A watermain demand calculation sheet is included in Appendix B. The total water demands are summarized as follows:

- Average Day 0.91 l/s
- Maximum Day 2.18 l/s
- Peak Hour 3.39 l/s

2.2.2 System Pressure

The 2010 City of Ottawa Design Guidelines – Water Distribution, Clause 4.2.2 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 140 kPa (20 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 Rates

The site consists of 10 stacked townhouse blocks. Fire Underwriters Survey (FUS) calculations have been done for Building F which is the central townhouse block with the most exposures to adjacent buildings. The calculations result in a maximum fire flow requirement of 11,000 l/min for Building F; a copy of the FUS calculation is included in Appendix B.

2.2.4 Boundary Conditions

The City of Ottawa has provided two boundary conditions for this development on Spratt Road and Nutting Crescent. There are pre- and post-configuration values provided, with the pre-configuration values considerably lower than the post-SUC Zone. As the re-configuration of the area, scheduled for the end of 2027 (or later), is expected to occur while this site is fully constructed. The water analysis is carried out under existing conditions. A copy of the Boundary Condition is included in Appendix A and summarized as follows:

CRITERIA	HYDRAULIC HEAD - SUC RECONFIGURATION		HYDRAULIC HEAD – EXISTING CONDITIONS	
	Spratt Road	Nutting Cre.	Spratt Road	Nutting Cre.
Max HGL (Basic Day)	147.3 m	147.3 m	130.8 m	130.8 m
Peak Hour	145.4 m	145.4 m	125.0 m	125.0 m
Max Day + Fire (14,000 l/m)	141.5 m	125.1 m	123.1 m	106.7 m

2.2.5 Hydraulic Model

A computer model for the subject site has been developed using the InfoWater program by Innovyze. The model includes boundary conditions for the proposed connections on Spratt Road. Given the small distance between the two connections, the same boundary conditions were used at both locations.

2.3 Proposed Water Plan

2.3.1 Hydraulic Analysis

A 200 mm watermain is proposed with the first connection to the existing 300mm watermain at Spratt Road, and extends through the site with a second connection to the 300mm watermain on Spratt Road, at the southern entrance to the site. Refer to the general plan of services Drawing C-001 for detailed watermain layout for the subject site.

The hydraulic model was run under basic day conditions to determine the maximum pressure for the site. The minimum pressure for the site is determined in the peak hour analysis using the provided boundary condition. The model was run under the max day plus fire (11,000 L/min) to determine the available fire flow at the hydrant locations. Results of the analysis for the site are summarized in Section 2.3.2 and the water model schematic and model results are included in Appendix B.

2.3.2 Modelling Results

The hydraulic model was run under basic day, maximum day with fire flows and under peak hour conditions. Results of the hydraulic model are included in Appendix B and summarized as follows:

Scenario	Existing Conditions
Basic Day (Max HGL) Pressure Range	384.13 to 387.56 kPa
Peak Hour (Min HGL) Pressure Range	327.26 to 330.69 kPa
Max Day + 11,000 l/min Fire Flow – Min. Fire Flow	184 l/s

A comparison of the results and design criteria is summarized as follows:

Maximum Pressure	All nodes have basic day pressures under 552 kPa under both pressure zone scenarios, therefore pressure reducing control is not required for this development.
Minimum Pressure	All nodes in the model exceed the minimum value of 276 kPa (40 psi) under both SUC Zone Reconfiguration and existing conditions.
Fire Flow	Under SUC Zone Reconfiguration scenario, all fire nodes exceed the fire flow requirement of 183.3 l/s (11,000 l/min).

3 Sanitary Sewers

3.1 Existing Conditions

As noted earlier in Section 1.5, sanitary flows from the subject site are routed to RSDC's Phase 9 lands with a sanitary connection to the existing manhole MH31 located at Nutting Crescent. General Plan of Services C-001 included in **Appendix A** shows the existing sanitary stub location.

3.2 RSDC's Phase 9 Design (J.L. Richards, 2012)

Drainage area plan Figure 4.1 and the sanitary sewer design sheet for the above noted project have been included in **Appendix C** as they demonstrate that the whole of the subject land has been included in the design calculations for the sanitary sewers within RSDC's Phase 9. The subject land is identified as drainage area Claridge Commercial.

3.3 Design Criteria

All on-site sewers have been designed to City of Ottawa and MOE design criteria which include but are not limited to the below listed criteria. A copy of the detailed sanitary tributary area plan 400 and the sanitary sewer design sheets are included in **Appendix C** illustrate the population densities and sewers which provide the necessary outlets.

- Average residential flow = 280 l/c/d
- Peak residential flow factor = (Harmon Formula) x 0.80
- Average commercial flow = 28,000 l/s/ha
- Peak ICI flow factor = 1.5 if ICI area is ≤ 20% total area

  1.0 if ICI area is > 20% total area
- Inflow and Infiltration Rate = 0.33 l/s/ha
- Minimum Full Flow Velocity = 0.60 m/s
- Maximum Full Flow Velocity = 3.0 m/s
- Minimum Pipe Size = 200 mm diameter

In accordance with the City of Ottawa Sewer Design Guidelines Table 4.2, the following density rates are estimated for the subject site:

- Two-bedroom stacked town units = 2.1

3.4 Recommended Sanitary Plan

Detailed sanitary sewer drainage area plan Drawing C-400 and the Sanitary Design Sheets are included in **Appendix C**. A 200mm diameter sanitary main is proposed to bring the sanitary flows from the site to the existing 200mm stub at Nutting Crescent, with 150mm diameter services to each corner of the stacked townhouse blocks.

According to the RSDC Phase 9 sanitary sewer design sheet, the allocated sanitary flow for the site is 3.47 L/s. The calculated sanitary flow for the proposed site plan is 3.93 L/s. The outlet pipe for the site has a capacity of 19.66 L/s, which can sufficiently accommodate the slightly increased flow. The downstream sewers through RSDC Phase 9 all have a residual capacity that exceeds 0.46 L/s. Therefore, the increase in flow on the existing system is considered negligible, and the subject development will have no negative impacts on downstream infrastructure. A copy of the RSDC sanitary sewer design sheet is included in **Appendix C**.

4 Minor Storm Sewers

4.1 Existing Conditions

As noted in Section 1.5, storm flows from the subject site outlet to existing stub at Nutting Crescent. Figure 5.1 shows the location of the existing storm sewers in this area.

There are no existing municipal drains, watercourses or recognized drainage features on the subject lands as noted in the RSDC Phase 9 design report.

4.2 RSDC's Phase 9 Design (J.L. Richard's, 2012)

Drainage area plan Figure 5.1 and the storm sewer design sheet for this project have been included in **Appendix D** as they demonstrate that the whole of the subject land has been included in the design calculations for the storm sewers within RSDC's Phase 9. The subject land is identified as drainage area Claridge Commercial.

4.3 Minor Storm Sewer Design Criteria

The minor system storm sewers for the subject site are proposed to be sized based on the rational method, applying standards of both the City of Ottawa and MECP. Some of the key criteria for this site include the following:

- Sewer Sizing: Rational Method
- Design Return Period: 1:2 year (local streets/parking lots)
- Initial Time of Concentration 10 minutes
- Manning's: 0.013
- Minimum Velocity: 0.80 m/s
- Maximum Velocity: 3.00 m/s

Pipe Diameter (mm)	Minimum Slope (%)
250	0.43
300	0.34
375	0.25
450	0.20
525	0.16
600	0.13
675	0.11
750 and larger	0.10

4.4 Proposed Minor Storm Plan

As outlined in Section 4.2, the development of RSDC Phase 9 has included the expected stormwater servicing needs of the subject property. The existing 900mm diameter storm sewers constructed downstream of the site were sized to provide the needed capacity for minor storm runoff from the subject site. Minor storm runoff from the subject site will be directed to the existing 750mmØ sewer stub located at the servicing corridor northwest of the site along Nutting Crescent.

Using the criteria identified in Section 4.2, the proposed on-site storm sewers were sized accordingly. A detailed storm sewer design sheet and the associated storm sewer drainage area plan is included in **Appendix D**. The general plan of services Drawing C-001, depicting all on-site storm sewers can be found in **Appendix A**.

According to Table 5.3 in RSDC Phase 9 Design Report, the allowable inlet capture rate is identified to be 77 L/s/ha, see **Appendix D**. The total allowable release rate for the subject site is calculated to be 77 L/s/ha X 2.36 ha = 181.72 L/s. Inlet control devices (ICDs) are proposed across the site to maximize the use of available on-site storage and control surcharge of the minor system during infrequent storm events.

The owner of the site will be responsible for regular maintenance of the on-site sewers, catch basins and inlet control devices (ICDs). Maintenance includes but is not limited to the cost of regular cleaning of the structures and ICDs as necessary. The site owner will also be responsible for replacement of damaged or missing catch basin structures, grates or ICDs as needed.

5 Stormwater Management

5.1 Background

The subject site is located to the north of the future BRT corridor and west of Spratt Road and east of the RSDC Phase 9 community and is tributary to the Pond 1 Stormwater Facility. This facility was designed and constructed in the early 1990s to provide erosion control, along with water quality and quantity control for its tributary area. Therefore, no further requirements in terms of storm runoff quality and quantity control are expected for the subject lands tributary to Pond 1. The stormwater management strategy for the subject site was outlined in the following reports:

- Riverside South Development Corporation (RSDC) Riverside South Community Phase 9 Design Report (J.L. Richards & Associates Limited, 2012). This report provides details on the proposed water supply and major and minor storm systems with proposed connections for the subject lands.
- Riverside South Community Infrastructure Servicing Study Update (RSCISSU), Stantec Consulting Ltd., September 30, 2008

Details of the subject site parameters, on-site storage available, and restricted minor system rates are discussed in Section 5.4.

5.2 Objective

The purpose of this evaluation is to prepare the dual drainage design, including the minor and major system, in conformance with City of Ottawa Sewer Design Guidelines (OSDG). The design includes the assignment of inlet control devices, maximum depth and velocity of flow on the surface and hydraulic grade line analysis.

5.3 Dual Drainage Design

The subject site is designed with dual drainage features, accommodating minor and major system flow. During frequent storm events, the effective runoff of a catchment area is directly released via catchbasin inlets to the network of storm sewers, called the minor system. During less frequent storm events, the balance of the flow (in excess of the minor flow) is accommodated by a system of rear yard swales and street segments, called the major system.

The private drive aisles and parking lots within the subject site features a sawtooth profile. The sawtooth profile facilitates surface storage based on a maximum of 350 mm separation between the low point at the catchbasin and the high overflow point at the downstream end of the segment. The assigned size of the inlet control devices (ICDs) for the subject site was optimized using PCSWMM. ICDs are incorporated into the stormwater management design to protect the minor system from surcharge during infrequent storm events. The ICDs used for the subject site are summarized in Table 5-2 and provided in the CB Table presented on Drawing C-010.

The dual drainage system has been evaluated using the fully dynamic PCSWMM model for both the hydrologic and hydraulic analysis. The PCSWMM hydrologic evaluation offers single storm event flow generation and routing. The major system evaluation is fully dynamic and based on typical road cross sections and road profiles.

The allowable release rate of 77 L/s/ha to the minor system stated in the Phase 9 design report is less than the peak runoff during the 2 year design storm event. As such, it is expected that some ponding will occur during the

2-year design storm event. In order to optimize ponding during 2-year event, some underground storage system will be provided. Further details of the dual drainage design are discussed in Section 5.4.1. Major flow up to 100-year storm event will be restricted and detained on-site. The emergency overflow from the subject site will outlet Spratt Road via the proposed entrance, refer to Drawing C-600.

5.4 Stormwater Evaluation

5.4.1 Hydrologic Evaluation

Land use, selected modeling routines, and input parameters are discussed in the following sections for the subject site only. The main hydrologic parameters for the subject site are summarized below.

Storms and Drainage Area Parameters

The main hydrology parameters are summarized below and in Table 5-1.

- **Design storms:** The site was evaluated using the following storms:
    - 2 year, 3 hour Chicago storm events with a 10 minute time step;
    - 100 year 3 hour Chicago storm event with a 10 minute time step; and
    - 100 year 3 hour Chicago storm event + 20% increase in intensity with a 10 minute time step.
- **Area:** Drainage areas have been divided into sub-drainage areas based on the proposed minor system network of storm sewers and the rational method spreadsheet. Drainage areas included in the modeling correspond to the catchment areas shown on Drawing C-500.
- **Imperviousness:** The imperviousness values are based on the runoff coefficients, which were determined by obtaining the footprint of the model units intended for the site and placing the maximum footprint on the lots. PCSWMM provides an opportunity to specify direct and indirect routing to a pervious or impervious area. For this evaluation, all drainage areas were assumed to be 100% routed to an outlet.
- **Infiltration:** Infiltration losses were selected to be consistent with the OSDG. The Horton values are as follows: Max. infiltration rate = 76.2 mm/h, Min. infiltration rate = 13.2 mm/h, Decay constant = 4.14 1/hr.
- **Subcatchment Width:** The catchment width was based on the conveyance route length of the drainage area and multiplied by two. The multiplier of two was only used if the drainage area had runoff contribution from both sides of the drainage area. This approach is consistent with the OSDG.
- **Slope:** The average surface slope was based upon the average slope for both impervious and pervious area. Based on the surface grading of the subject site an average slope of 1% has been used for subcatchment flow routing.
- **Initial Abstraction (Depression Storage):** Detention storage depths of 1.57 mm and 4.67 mm were used for impervious and pervious areas, respectively. These values are consistent with the OSDG.
- **Manning's Roughness:** Manning's roughness coefficients of 0.013 and 0.25 were used for impervious and pervious areas, respectively.
- **Baseflow:** No baseflow components were assumed for any of the areas contributing runoff to the minor system within the PCSWMM model.

- **Major System Storage and Routing:** The subject site is comprised of sawtooth parking areas and grass swales in the rear of lots. For drainage areas with sawtoothing, flow is attenuated within low points with potential overflow cascading to the next segment downstream. The total volume at each low point, up to the overflow depth, is the maximum static storage. Static ponding depths and static storage are shown on the ponding plan presented on Drawing C-600. The available storage in the sawtoothed grass swales in the rear of lots has been taken into consideration as part of the analysis.

  For areas with ponding, the minor system capture is set to utilize storage during the 100 year design storm, while minimizing ponding during the 2 year event. Cascading overflow from a low point to a downstream segment utilizes the static storage available plus an additional amount of storage equivalent to the depth required for the flow to cascade over the downstream high point. The attenuation in street sags was evaluated to account for static storage and, if overflow occurs, dynamic storage.

  For areas with sawtoothing, simulations were based on the constraint that during the 100 year design storm the maximum depth of ponding (including cascading flow where applicable) does not exceed 0.35 m. The surface storages for parking lots were modeled in PCSWMM using stage storage curves. The surface storages for street segments were modeled in PCSWMM using a combination of nodes with inverts corresponding to CB grill (T/G) elevations, and links with corresponding cross-sections. The evaluation was undertaken assuming dynamic flow conditions. It should be noted that the visual interpretation of street links in the model is based on illustrating street nodes along the center of the road. However, the invert elevations are modified to correspond to the CB grill elevations as indicated above.

  Rear yards were considered independently of street segments. Storage volumes in rear yards were accounted for as available on-site storage. Simulations were based on the total interception of runoff by the storm inlets. This was done by specifying a subcatchment outlet in the model at the same node as the rear yard ICD outlet link. Overflow from the rear yards cascades to the next downstream segment and then ultimately to a major system road segment via swales.

- **Minor system capture:** The minor system capture for the subject site is based on 77 l/s/ha as per the Phase 9 design report corresponding to a total release rate of 181.72 L/s for the 2.36 ha site. Reference information is provided within **Appendix D**. This will be achieved through a combination of inlet control devices (ICD's) at inlet locations, surface storage where possible and underground storage in oversized storm pipes where required. Surface flows in excess of the site's allowable release rate will be stored on site in strategic surface storage areas or oversized underground pipes and gradually released into the minor system to respect the site's allowable release rate.

  ICD's have been modeled in PCSWMM as circular orifices with the discharge coefficient set to 0.61 in accordance with the OSDG. The ICD size, head and flow are presented in Table 5-2 and provided on the CB table presented on Drawing C-010.

  Additionally, a future 0.311 ha commercial development (Subcatchment EXT) located at the south east corner of the site has been included in the assessment. Minor system capture from this area has been assumed as 28 L/s (77 L/s/ha + 16%) with 100 year on site storage provided to contain any excess flow.

Summary of Modeling Files

For ease of review, the following is a reference list of the computer modeling files provided as part of the digital submission.

PCSWMM

- 135856-4624Spratt-Sub4_3H2CHI_V01.pcz – 2 year 3 hour Chicago
- 135856-4624Spratt-Sub4_3H100CHI_V01.pcz – 100 year 3 hour Chicago
- 135856-4624Spratt-Sub4_3H120CHI_V01.pcz – 100 year 3 hour Chicago increased by 20%

Table 5-1 Hydrologic Parameters – Subcatchment Summary Table

Drainage Area ID	Area (ha)	Downstream Segment ID	Receiving MH (Sewer Node)	Impervious Ratio (%)	Subcatchment Width (m)	Available Static Storage (m^3)(1)
EXT(2)	0.311	OUT	MH06	79	27	100 year on-site
MH05	0.233	MH07	CBMH16	71	130	64.2
CBMH16	0.027	CB11	CBMH16	21	30	4.1
CB11	0.059	CBMH19	MH17	40	50	12.2
CBMH19	0.022	MH30	CBMH19	13	20	7.1
MH30	0.167	MH07	CBMH19	66	70	17.8
MH07	0.171	MH10	MH20	66	90	47.3
MH34	0.401	MH10	MH34	40	220	11.9
MH10	0.182	MH02	MH34	66	120	82.8
MH13	0.073	CB01	MH14	21	60	15.9
MH02	0.182	CBMH04	MH02	83	80	40.2
CB01	0.174	CBMH04	CBMH04	44	135	18.3
CBMH04	0.075	CBMH01	CBMH04	79	50	58.0
CBMH01	0.309	OUT	CBMH01	79	150	123.9

(1) The available on-site static storage is based on Drawing C-600
(2) Future Commercial Development

5.4.2 Results of Hydrologic Evaluation

In PCSWMM, the hydraulic grade line (minor system) and major system are simulated simultaneously. The allowable minor system release rate for the 2.36 ha site is 181.72 L/s according to the Phase 9 design report.

Based on the flow allowance for the site, inlet control devices are proposed to control flows to the minor system. ICD characteristics are shown in Table 5-2 and included on Drawing C-010. Modelling results show the peak flow from the site to the receiving storm sewer at 177.21 L/s, meeting the allowable release rate from the site.

Table 5-2 Inlet Control Device Summary

Location	Contributing Drainage Area (ha)	100 Year Release Rate (L/s)	100 Year Dynamic Head (m)	ICD Orifice Size (mm dia.)
CB08	0.073	20	1.10	94
MH03	0.740	43	3.80	102
CBMH20	0.275	44	3.88	102
MH34	0.583	44	3.91	102
EXT(1)	0.311	28(2)	N/A	N/A

(1) Future Commercial Development
(2) External drainage area restricted to 28 l/s (77 l/s/ha + 16%)

Modeling results for the 2 year design storm event are summarized in Table 5-3. Given the allowable release rate of 77 L/s/ha for the site is less than the peak runoff from the 2 year design storm event, some surface ponding will occur. Some proposed storm sewers have been increased in size to provide additional underground storage and limit the duration ponding during the 2 year design storm event to less than 1 hour.

Table 5-3 Hydraulic Modeling Results for 2 year Design Storm Event

Drainage Area ID	Location	Available Static Storage (m^3)	Available Static Depth (m)	Maximum Depth of Ponding (Static and Dynamic) at Low Point (m)	Cascading Flow (L/s)	Duration (hr:min)(1)
EXT(2)	External	100 year on-site	N/A	N/A	N/A	N/A
MH05	Parking	64.2	0.35	0.07	0	0:25
CBMH16	Rear Lot	4.1	0.28	0.00	0	0:00
CB11	Rear Lot	12.2	0.30	0.02	0	0:10
CBMH19	Rear Lot	7.1	0.30	0.00	0	0:00
MH30	Parking	17.8	0.25	0.06	0	0:40
MH07	Parking	47.3	0.30	0.05	0	0:29
MH34	Rear Lot	11.9	0.20	0.00	0	0:00
MH10	Parking	82.8	0.30	0.07	0	0:41
MH13	Landscaped Area	15.9	0.25	0.00	N/A	0:00
MH02	Parking	40.2	0.30	0.05	0	0:28
CB01	Rear Lot	18.3	0.25	0.00	0	0:00
CBMH04	Parking	58.0	0.30	0.03	0	0:12
CBMH01	Parking	123.9	0.30	0.06	0	0:38

(1) Duration of surface ponding exceeding 0.01 m

(2) Future Commercial Development

Modelling results for the 100 year design storm and stress test events are summarized in Table 5-4. During the 100 year event, maximum depths do not exceed 0.35 m and no major flow leaves the site. During the stress test event, 46 L/s leaves the site at drainage area CBMH01 and ponding elevations do not encroach on structures as shown on Drawing C-600.

Table 5-4 Hydraulic Modeling Results for 100 year and Stress Test Design Storm Events

Drainage Area ID	Location	Available Static Storage (m^3)	Available Static Depth (m)	100 Year 3 Hour Chicago			100 Year 3 Hour Chicago + 20%		
				Maximum Depth of Ponding (Static and Dynamic) at Low Point (m)	Cascading Depth (m)	Cascading Flow (l/s)	Maximum Depth of Ponding (Static and Dynamic) at Low Point (m)	Cascading Depth (m)	Cascading Flow (l/s)
EXT(1)	External	100 year on-site	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MH05	Parking	64.2	0.35	0.33	0.00	0	0.37	0.02	25
CBMH16	Rear Lot	4.1	0.28	0.21	0.00	0	0.25	0.00	0
CB11	Rear Lot	12.2	0.30	0.22	0.00	0	0.27	0.00	0
CBMH19	Rear Lot	7.1	0.30	0.25	0.00	0	0.29	0.00	1
MH30	Parking	17.8	0.25	0.28	0.03	17	0.31	0.06	58
MH07	Parking	47.3	0.30	0.31	0.01	2	0.36	0.06	49
MH34	Rear Lot	11.9	0.20	0.34	0.14	27	0.40	0.20	72
MH10	Parking	82.8	0.30	0.30	0.00	1.41	0.34	0.04	102
MH13	Landscaped Area	15.9	0.25	0.00	N/A	N/A	0.10	N/A	N/A
MH02	Parking	40.2	0.30	0.29	0.00	0	0.37	0.07	94
CB01	Rear Lot	18.3	0.25	0.28	0.03	1	0.35	0.10	13
CBMH04	Parking	58.0	0.30	0.26	0.00	0	0.37	0.07	81
CBMH01	Parking	123.9	0.30	0.28	0.00	0	0.36	0.06	66

(1) Future Commercial Development

5.4.3 Results of Hydraulic Evaluation

The hydraulic grade line (HGL) was analyzed using PCSWMM for the 100-year, 3-hour Chicago storm, the governing storm event for the subdivision. The corresponding stress test (100-year 3-hour Chicago storm + 20%) was also simulated. The HGL elevations are presented in the following Table 5-5, along with a comparison of under-side of footing (USF) elevations. Maintenance holes (sewer nodes) locations are shown on Drawing C-500.

The boundary condition at the minor system outlet for the 100-year and stress-test design storm events has been set to 87.46 m based on the RSS Phase 9 100-year maximum HGL analysis. For the 2 year design storm event, the boundary condition has been set to normal depth. Reference information is provided within **Appendix E**.

Table 5-5 Hydraulic Grade Line Modelling Results

PCSWMM MH (Sewer Node)	USF (m)	Storm Hydraulic Grade Line			
		100 Year 3 Hour Chicago		100 Year 3 Hour Chicago + 20%	
		HGL (m)	USF – HGL (m)	HGL (m)	USF – HGL (m)
MH05	89.44	87.71	1.73	87.71	1.73
MH06	89.34	87.69	1.65	87.69	1.65

PCSWMM MH (Sewer Node)	USF (m)	Storm Hydraulic Grade Line			
		100 Year 3 Hour Chicago		100 Year 3 Hour Chicago + 20%	
		HGL (m)	USF – HGL (m)	HGL (m)	USF – HGL (m)
MH07	89.29	87.58	1.71	87.58	1.71
CB06	N/A	91.47	N/A	91.50	N/A
CBMH16	N/A	91.46	N/A	91.50	N/A
MH17	N/A	91.45	N/A	91.50	N/A
MH18	N/A	91.45	N/A	91.49	N/A
CBMH19	N/A	91.45	N/A	91.49	N/A
CBMH20	N/A	91.44	N/A	91.48	N/A
MH30	89.39	87.46	1.93	87.46	1.93
MH08	N/A	87.55	N/A	87.56	N/A
MH09	89.29	87.54	1.75	87.54	1.75
MH10	89.29	87.54	1.75	87.57	1.72
MH34	N/A	91.45	N/A	91.50	N/A
MH11	N/A	87.52	N/A	87.56	N/A
CBMH04	N/A	91.31	N/A	91.40	N/A
CBMH01	N/A	91.31	N/A	91.40	N/A
MH02	N/A	91.31	N/A	91.40	N/A
MH03	N/A	91.31	N/A	91.40	N/A
MH12	N/A	87.51	N/A	87.61	N/A
MH25	89.09	88.25	0.84	88.25	0.84
MH26	89.09	87.91	1.18	87.91	1.18
MH13	89.09	87.50	1.59	87.61	1.48
MH14	89.09	87.48	1.61	87.58	1.51

The HGL results presented in Table 5-5 indicates that the minimum 0.30 m clearance between the USF and HGL is maintained across the subject site for the 100-year 3-hour Chicago and 100-year 3-hour Chicago increased by 20% storm event.

6 Conveyance Controls

6.1 General

Besides source controls, the development also proposes to use several conveyance control measures to improve runoff quality. These will include:

- flat vegetated swales;
- catchbasin and maintenance hole sumps; and
- pervious rear yard drainage.

6.2 Flat Vegetated Swales

The development will make use of relatively flat vegetated swales where possible, to encourage infiltration and runoff treatment.

6.3 Catchbasins

All catchbasins within the development, either rear yard or street, will be constructed with minimum 600 mm deep sumps. These sumps trap pollutants, sand, grit and debris which can be mechanically removed prior to being flushed into the minor pipe system. Both rear yard and street catchbasins will be fabricated to OPSD 705.010 or 705.020. All storm sewer maintenance holes servicing local sewers less than 900 mm diameter shall be constructed with a 300 mm sump as per City standards.

6.4 Previous Landscaped Area Drainage

Some of the landscaped area swales make use of a filter wrapped perforated drainage pipe constructed below the rear yard swale. This perforated system is designed to provide some ground water recharge and generally reduce both volumetric and pollutant loadings that enter the minor pipe system.

7 Sediment and Erosion Control Plan

7.1 General

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

- Until the local storm sewers are constructed, groundwater in trenches will be pumped into a filter mechanism prior to release to the environment. After construction of the storm water facility, any construction dewatering will be routed to the nearest storm sewer.
- bulkhead barriers will be installed at the nearest downstream manhole in each sewer which connects to an existing downstream sewer.
- Should the storm and sanitary sewer connections be made in advance of the final ICD installations within the development, temporary ICD's shall be placed in the last manhole prior to connection to existing sewers. The temporary ICD shall be sized to the design flow rate with a 2.0m head.
- seepage barriers will be constructed in any temporary drainage ditches.
- sediment capture filter socks will remain on open surface structures such as maintenance holes and catchbasins until these structures are commissioned and put into use; and
- silt fence on the site perimeter.

7.2 Trench Dewatering

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.

For pumping rates between 50,000 to 400,000 liters per day, registration on the Environmental and Sector Registry (EASR) is required.

7.3 Bulkhead Barriers

Although the storm sewers eventually outlet into a sediment forebay, a ½ diameter bulkhead will be constructed over the lower half of the outletting sewers to reduce sediment loadings during construction. These bulkheads will trap any sediment laden flows, thus preventing any construction-related contamination into existing sewers. The bulkheads will be inspected and maintained including periodic sediment removal as needed.

7.4 Seepage Barriers

In order to further reduce sediment loading to the stormwater management facility and existing watercourses, seepage barriers will be installed on any surface water courses at appropriate locations that may become evident during construction. These barriers will be Light Duty Straw Bale Barriers per OPSD 219.100 and Heavy-Duty Silt Fence Barriers per OPSD 219.130; locations are shown on the Sediment and Erosion Control Plan included in Appendix F. They are typically made of layers of straw bales or geotextile fabric staked in place. All seepage barriers will be inspected and maintained as needed.

7.5 Surface Structure Filters

All catchbasins, and to a lesser degree, manholes, convey surface water to sewers. Until streets are asphalted and curbed where required, all manholes will be constructed with sediment capture filter socks located between the structure frame and cover. These will stay in place and be maintained during construction and build until it is appropriate to remove same.

8 Roads and Noise Attenuation

Vehicular access to 4624 Spratt Road is provided by two private entrances from Spratt Road. All private drive aisles are 6.7m width asphalt. The roads have been designed (by others) to accommodate public garbage collection routes and fire truck movements.

All public spaces within the private development are barrier free and accessible. There are no accessible units within the development, as each unit is serviced by stairs.

There are 144 residence parking spaces and 24 visitor parking spaces provided for this development. There are no accessible parking spaces provided.

There are 60 bicycle parking spaces provided throughout the development.

An environmental noise attenuation study has been provided for this development. The study has been prepared by IBI Group.

9 Soils

Paterson Group Inc. was retained to prepare a geotechnical investigation for the proposed residential development for 4624 Spratt Road. The objectives of the investigation were to prepare a report to:

- Determine the subsoil and groundwater conditions at the site by means of test pits and boreholes and,
- To provide geotechnical recommendations pertaining to the design of the proposed development, including construction considerations.

The geotechnical report PG5641-1 Rev 1 was prepared by Paterson Group in January 2026. The report contains recommendations which include, but are not limited to the following:

- The maximum permissible grade raise is 3.0m
- In areas where finished grade exceeds grade raise limits, geotechnical reviews are required
- Fill placed below the foundations to meet OPSS Granular 'A' or Granular 'B' Type II placed in 200 mm lifts compacted to 98% SPMDD.
- Fill for roads to be suitable native material in 300mm lifts compared to 95% SPMDD

Pavement Structure – Car Parking Areas:

Local Road	Thickness
Asphaltic Concrete	50mm
OPSS Granular A Base	150mm
OPSS Granular B Type II Subbase	300mm

Pavement Structure – Local Roadways:

Local Road	Thickness
Asphaltic Concrete	90mm
OPSS Granular A Base	150mm
OPSS Granular B Type II Subbase	450mm

- Pipe bedding and cover: The pipe bedding for sewer and water pipes placed on a relatively dry, undisturbed subgrade surface should consist of at least 150 mm of OPSS Granular A material. Where the bedding is located within the firm grey silty clay, the thickness of the bedding material should be increased to a minimum of 300 mm. The cover material, which should consist of OPSS Granular A, should extend from the spring line of the pipe to 300 mm above the obvert of the pipe. The material should be placed in 300 mm thick lifts and compacted to a minimum of 95% of its SPMDD.

In general, the grading plan for 4624 Spratt Road adheres to the grade raise constraints noted above. A copy of the grading plans is included in **Appendix D**.

10 Conclusion

This report has illustrated that watermains and storm and sanitary sewers can be extended to service the subject lands in accordance with the approved adjacent developments, the ISSU and the deviation report. The water, wastewater, and stormwater systems required to develop 4624 Spratt Road are designed in accordance with MECP and the City of Ottawa's current level of service requirements.

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

An ECA from the MECP is not required for this development.

Regulatory review and permits from the Rideau Valley Conservation are not required for this development.

Final detail design will be subject to governmental approval prior to construction, including but not limited to the following:

- Commence Work Order: City of Ottawa
- Watermain Approval: City of Ottawa

Appendix A

- **RSDC Land Use Plan**
- **RSDC Phase 9 - Plan of Subdivision Northeast**
- **Site Plan**
- **Legal Plan**
- **General Plan of Services**

Riverside South / Riverside-sud

SECONDARY PLAN - VOLUME 2

Schedule A - Designation Plan

PLAN SECONDAIRE - VOLUME 2

Annexe A - Plan de désignation

0 125 250 500 750 1,000 m

Planning, Real Estate and Economic Development Department, Geospatial Analytics, Technology and Solutions
Direction générale de la planification, de l'immobilier et du développement économique
Analyse géospatiale, technologie et solutions

Vimy Memorial Bridge / Pont commémoratif Vimy

LEITRIM ROAD REALIGNMENT
NOUVEAU TRACÉ DU CHEMIN LEITRIM

SPRATT ROAD EXTENSION/
PROLONGEMENT DE CHEMIN SPRATT

MAIN STREET/
RUE PRINCIPALE

Town Centre Boundary
Limite du centre ville

Airport Operating Influence Zone
Zone d'influence d'exploitation de l'aéroport

EARL ARMSTRONG

SPRATT

SHORELINE

CANYON WALK

BOWESVILLE

LIMEBANK

RIVIÈRE RIDEAU RIVER

ruisseau Mosquito Creek

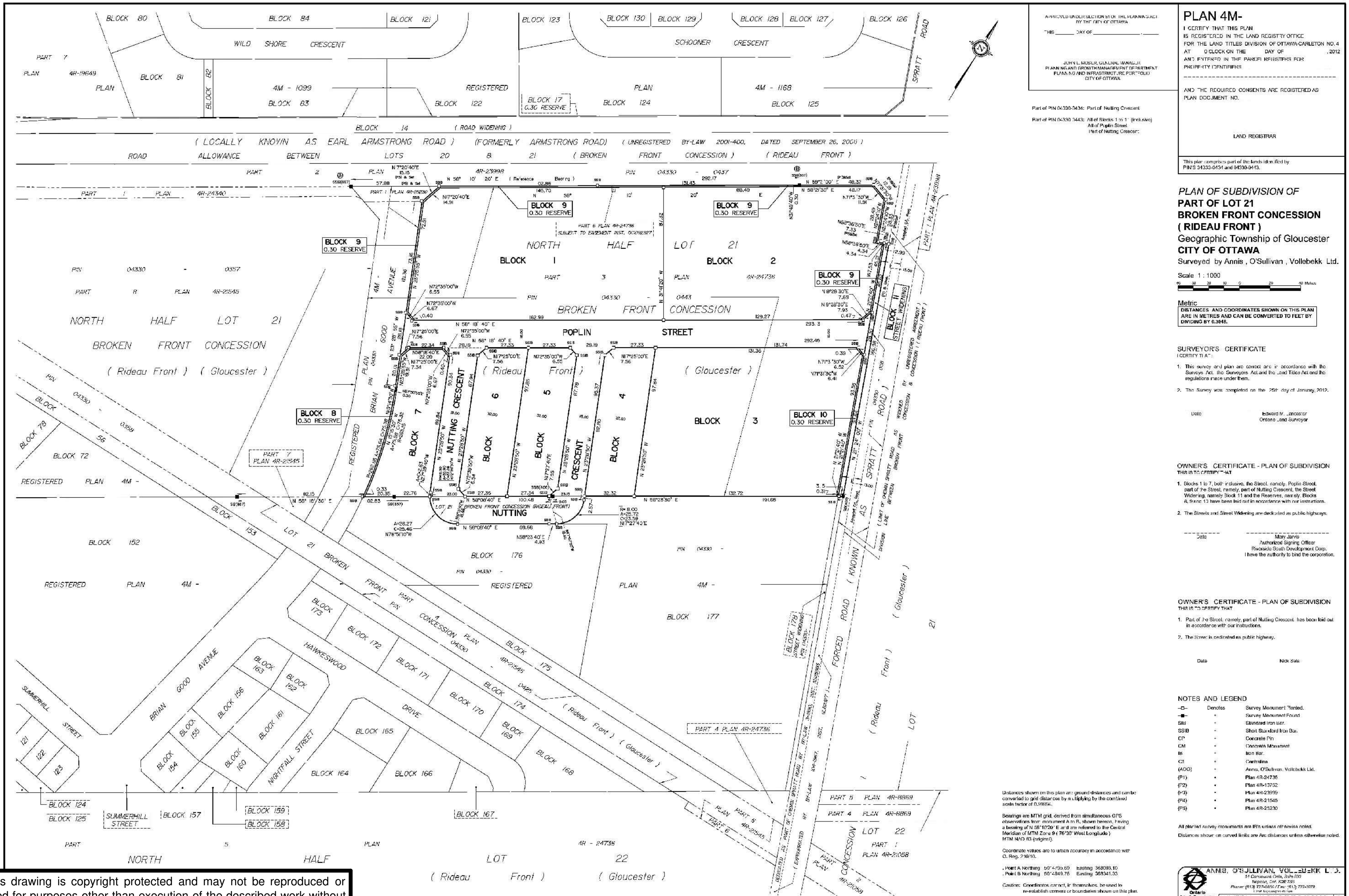
COLLECTOR/ COLLECTRICE 'A'
COLLECTOR/ COLLECTRICE 'B'
COLLECTOR/ COLLECTRICE 'C'
COLLECTOR/ COLLECTRICE 'D'
COLLECTOR/ COLLECTRICE 'E'
COLLECTOR/ COLLECTRICE 'F'
COLLECTOR/ COLLECTRICE 'G'
COLLECTOR/ COLLECTRICE 'H'
COLLECTOR/ COLLECTRICE 'I'
COLLECTOR/ COLLECTRICE 'J'

DESIGNATION / DÉSIGNATION

- LD - Neighbourhood - Low Density / Quartier de faible densité
- MDI - Neighbourhood - Medium Density I / Quartier de densité moyenne I
- MDII - Neighbourhood - Medium Density II / Quartier de densité moyenne II
- HD - Neighbourhood - High Density / Quartier de densité élevéé
- TC - Town Centre / Centre ville
- NC - Commercial - Neighbourhood / Commercial quartier
- LC - Commercial - Local / Commercial local
- IL - Industrial and Logistics / Industrie et Logistique
- I/F - Institutional / Firehall / Institutionnel / Caserne de pompiers
- FC / FP / EC / EP - Schools - Secondary - Elementary / Écoles - secondaire - élémentaire
- Future O-Train Station Area / Zone des stations futures de l'O-Train
- DP - Park - District / Parc secteur
- CP - Park - Community / Parc communautaire
- NP - Park - Neighbourhood / Park quartier
- SP - Park - Parkette / Mini-parc
- OS - Passive Open Space(s) / Espace(s) de détente
- NEA - Natural Environment Area / Zone écologique naturelle
- SWM - Stormwater Management Facility / Installation de gestion des eaux pluviales
- UNF - Urban Natural Feature / Caractéristique naturelle zone urbaine
- UC - Green Transportation and Utility Corridor(s) / Transport vert et couloir(s) de(s) service(s) public(s)
- P&R - Park and Ride / Parc-o-bus
- Multi-Use Pathway / Sentier polyvalent

- Transfer Station / Station de correspondance
- Future O-Train Station / Station O-Train (futur)
- O-Train and Station / O-Train et station
- Transitway – at grade / Transitway – Voie à niveau
- Scenic Route / Route panoramique
- Main Street / Rue principale
- Transit Street / Rue longeant la Ligne Trillium, où circulent les autobus
- Secondary Plan Boundary / Limite du Plan secondaire

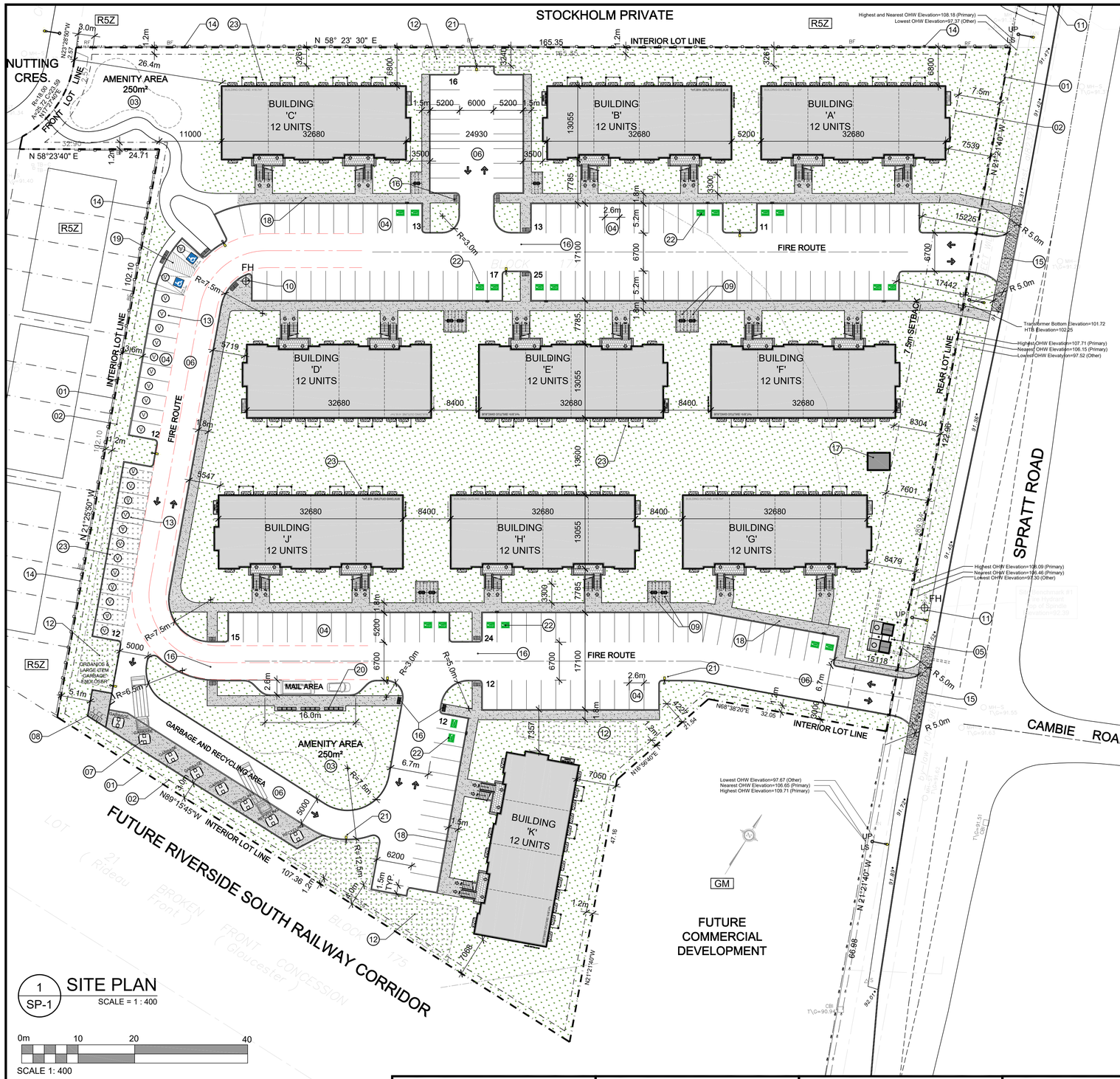
Consolidation and Amendments / Amendment au plan directeur approuvé



PROJECT:	DRAWING:		DRAWING NO.:
RIVERSIDE SOUTH PHASE 9 CITY OF OTTAWA	COPY OF PLAN OF SUBDIVISION NORTHEAST	DESIGN: OTHER	**FIGURE 1.2b**
		DRAWN: OTHER	
		CHECKED: J.L.P.	JLR NO:
		PLOTTED: Oct16,2012	21464-09

File Location: V:\21464-09.LD\21464-09 P Fig1_2.dwg

STOCKHOLM PRIVATE



1 / SP-1 SITE PLAN
SCALE = 1 : 400

0m 10 20 40
SCALE 1: 400

KEY PLAN

PROJECT INFORMATION

Zoning By-law 2008-250 Consolidation — GM — SITE AREA 2.0 ha. — 20,759.0 m² / 223,448 ft²

ZONING	REQUIRED	PROVIDED
ZONE: PLANNED UNIT DEVELOPMENT	GM	GM
BUILDING HEIGHT	18.0m	9.3m
BUILDING HEIGHT: ACCESSORY USE STRUCTURE	6.0m	3.6m
DENSITY - MAXIMUM FLOOR SPACE INDEX	2.0	0.6
FRONT YARD SETBACK: NUTTING CRESCENT	3.0m	26.4m
INTERIOR YARD SETBACK - BUILDINGS UNDER 11m IN HT.	1.2m	6.8m
INTERIOR YARD SETBACK - BUILDINGS OVER 11m IN HT.	3.0m	n/a
REAR YARD SETBACK ABUTTING A STREET : SPRATT ROAD	7.5m	___m
BUILDING SETBACK TO A PRIVATE WAY	1.8m	3.9m
BUILDING SEPARATION (UNDER 14.5m HT.)	1.2m	___m
AMENITY AREA - TOTAL 6.0m² PER UNIT	720.0m²	3,700.0m²
AMENITY AREA - 50% COMMUNAL PER UNIT	360.0m²	400.0m²
VEHICLE PARKING: RESIDENTIAL - 1.2 PER UNIT	144	158
VEHICLE PARKING: VISITOR - 0.2 PER UNIT	24	24
BICYCLE PARKING - RESIDENTIAL - 0.5 PER UNIT	60	60
AISLE & DRIVEWAY MINIMUM / MAXIMUM WIDTH	6.0m / 6.7m	6.2m / 6.7m
MINIMUM WIDTH OF LANDSCAPED AREA - ABUTTING A RESIDENTIAL ZONE	3.0m	3.6m
MINIMUM WIDTH OF LANDSCAPED AREA - ABUTTING A STREET	3.0m	12.0m
MINIMUM WIDTH OF LANDSCAPED AREA - AROUND A PARKING LOT	3.0m	3.0m

DRAWING NOTES

1. PROPERTY LINE
2. BUILDING SETBACKS
3. REQUIRED AMENITY AREA
4. PARKING SPACE: STANDARD SIZE 2.6 x 5.2 METRES
5. PROPOSED HYDRO TRANSFORMER / SWITCHGEAR
6. ASPHALT DRIVING SURFACE
7. IN GROUND WASTE BINS
8. ORGANIC WASTE / OVER SIZED GARBAGE ENCLOSER 2.1m HIGH OPAQUE SCREEN AROUND PERIMETER
9. BICYCLE PARKING SPACES (6) WITH RACK
10. PROPOSED HYDRANT
11. EXISTING FIRE HYDRANT
12. SEASONAL SNOW STORAGE
13. VISITOR PARKING SPACE: 2.6 x 5.2 METRES
14. EXISTING BOARD FENCE TO REMAIN
15. DEPRESSED STREET CURB, SIDEWALK TO BE CONTINUOUS AND DEPRESSED @ DRIVEWAY, AS PER OTTAWA DETAIL SC7.1
16. DEPRESSED CURB AND TWSI AT ALL CROSSINGS
17. 3.2m x 4.2m ELECTRICAL SHED
18. 1.8m / 1.5m WIDE CONCRETE WALK
19. ACCESSIBLE PARKING SPACE WITH ACCESS AISLE, DEPRESSED CURB AND TWSI
20. CANADA POST MAIL BOXES
21. PROPOSED SITE LIGHTING, SEE ELECTRICAL SITE PLAN
22. ELECTRICAL VEHICLE SPACE: 2 PER BUILDING
23. TEMPORARY SNOW STORAGE

RETAINING WALL, SEE CIVIL
PROPOSED CONCRETE BUS PAD
1.0m X 1.0m EASEMENT FOR BUS PAD
1.8m WIDTH ASPHALT THROUGH SITE CONNECTION PATH

SITE PLAN LEGEND

- CONCRETE WALK / PATH
- SOFT LANDSCAPING
- SNOW STORAGE (TEMPORARY AS NOTED)
- ASPHALT WALK / PATH
- BIKE RACK / BIKE PARKING SPOT
- TWO WAY VEHICLE CIRCULATION
- MAIN ENTRANCE
- PROPERTY LINE
- ZONING SETBACKS
- STANDARD PARKING SPACE
- VISITOR PARKING SPACE
- ACCESSIBLE PARKING SPACE

GROSS BUILDING - AREAS

(CITY OF OTTAWA'S DEFINITION)

PROPOSED BUILDING 'A'	1,256.0 m²	13,520 ft²
PROPOSED BUILDING 'B'	1,256.0 m²	13,520 ft²
PROPOSED BUILDING 'C'	1,256.0 m²	13,520 ft²
PROPOSED BUILDING 'D'	1,256.0 m²	13,520 ft²
PROPOSED BUILDING 'E'	1,256.0 m²	13,520 ft²
PROPOSED BUILDING 'F'	1,256.0 m²	13,520 ft²
PROPOSED BUILDING 'G'	1,256.0 m²	13,520 ft²
PROPOSED BUILDING 'H'	1,256.0 m²	13,520 ft²
PROPOSED BUILDING 'J'	1,256.0 m²	13,520 ft²
PROPOSED BUILDING 'K'	1,256.0 m²	13,520 ft²
TOTAL PROPOSED AREA	12,560.0 m²	135,200 ft²

UNIT STATISTICS

2 BEDROOM UNIT — 120

CAR PARKING

REQUIRED by ZONING BY-LAW

RESIDENCE	- 1.2 PER UNIT	144
VISITOR	- 0.2 PER DWELLING UNIT	24
TOTAL		168

PROVIDED

RESIDENCE	- 1.31 PER UNIT	158
VISITOR	- 0.2 PER DWELLING UNIT	24
TOTAL		182

BICYCLE PARKING

REQUIRED - 0.5 PER UNIT — 60

PROVIDED — 60

WASTE COLLECTION

GUIDELINES

GARBAGE	- 0.231 YARDS³ / UNIT	28 YARDS³
RECYCLING (GMP)	- 0.018 YARDS³ / UNIT	2 YARDS³
RECYCLING (FIBRE)	- 0.062 YARDS³ / UNIT	7.4 YARDS³
ORGANICS	- 240L CONTAINER / 50 UNITS	3 x 240L

	REQUIRED	PROVIDED
GARBAGE	5 EARTHBINS	5 EARTHBINS
RECYCLING (GMP)	1 EARTHBINS	1 EARTHBINS
RECYCLING (FIBRE)	2 EARTHBINS	2 EARTHBINS
ORGANICS	3 x 240L BINS	3 x 240L BINS
LARGE ITEM GARBAGE	N/A	8 m² *EARTHBINS= (6.5 YARDS³)

SNOW STORAGE

TEMPORARILY STORED AND TRUCKED OFF SITE

REQUIRED AMENITY SPACE

6.0 m² PER UNIT=	720.0 m²	
50% COMMUNAL AMENITY AREA =	360.0 m²	

PROVIDED AMENITY SPACE

PRIVATE BALCONY / PATIOS =	2,600 m²	
COMMUNAL EXTERIOR AREA=	500.0 m²	
TOTAL =	3,100 sq. m.	

SITE COVERAGE

BUILDING FOOTPRINT =	20.2%	4,187.0 sq. m.	
DRIVING SURFACE =	28.3%	5,885.0 sq. m.	
LANDSCAPE AREA =	51.5%	10,687.0 sq. m.	
TOTAL =	100.0%	20,759.0 sq. m.	

IT IS THE RESPONSIBILITY OF THE APPROPRIATE CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS ON SITE AND TO REPORT ALL ERRORS AND/OR OMISSIONS TO THE ARCHITECT.

ALL CONTRACTORS MUST COMPLY WITH ALL PERTINENT CODES AND BY-LAWS.

THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION UNTIL SIGNED BY THE ARCHITECT.

DO NOT SCALE DRAWINGS.

NOTATION SYMBOLS:

- (00) INDICATES DRAWING NOTES, LISTED ON EACH SHEET.
- ◇ 00 INDICATES ASSEMBLIE TYPE; REFER TO TYPICAL ASSEMBLIES SCHEDUAL.
- ⬡ 00 INDICATES WINDOW TYPE; REFER TO WINDOW ELEVATIONS AND DETAILS ON A900 SERIES.
- (000) INDICATES DOOR TYPE; REFER TO DOOR SCHEDULE AND DETAILS ON A900 SERIES.
- DETAIL NUMBER / TITLE / SCALE / DETAIL REFERENCE PAGE (00 / A000)

No.	DESCRIPTION	DATE
7	ISSUED FOR OWNER / CONSULTANT REVIEW	Feb. 04, 2026
6	REVISED LAYOUT ISSUED FOR REVIEW	Oct. 16, 2025
5	ISSUED FOR SITE PLAN 3rd REVIEW RESPONSE	MAR 29 2023
4	ISSUED FOR SITE PLAN 2nd REVIEW RESPONSE	JAN 05 2023
3	ISSUED FOR SITE PLAN 1st REVIEW RESPONSE	JUL 07 2022
2	ISSUED FOR CONSULTANT REVIEW	OCT 15 2021
1	ISSUED FOR PRELIMINARY REVIEW	FEB 26 2021

REVISIONS:

ARCHITECT SEAL: SEAL DATE: STAMP DATE

NORTH ARROW:

CLIENT: CLARIDGE HOMES

ARCHITECT:
rla/architecture
roderick lahey architect inc.
56 beech street, ottawa, ontario K1S 3J6
t. 613.724.9932 f. 613.724.1209 rlaarchitecture.ca

PROJECT TITLE:
4624 SPRATT ROAD
OTTAWA ONTARIO

SHEET TITLE:
SITE PLAN

DRAWN: R.V. — CHECKED: RV

SCALE: 1:400 — SHEET No. SP-1

PROJECT No. 2033

D07-12-22-0021

LEGAL DESCRIPTION
PLAN OF SURVEY OF
PART OF BLOCK 177
REGISTERED PLAN 4M-1470
CITY OF OTTAWA
Surveyed by Annis, O'Sullivan, Vollebekk Ltd.

TRANSPORTATION ENGINEER
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Mobile:
Email: ben.pascoloneveu@arcadis.com

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Landscape Architects
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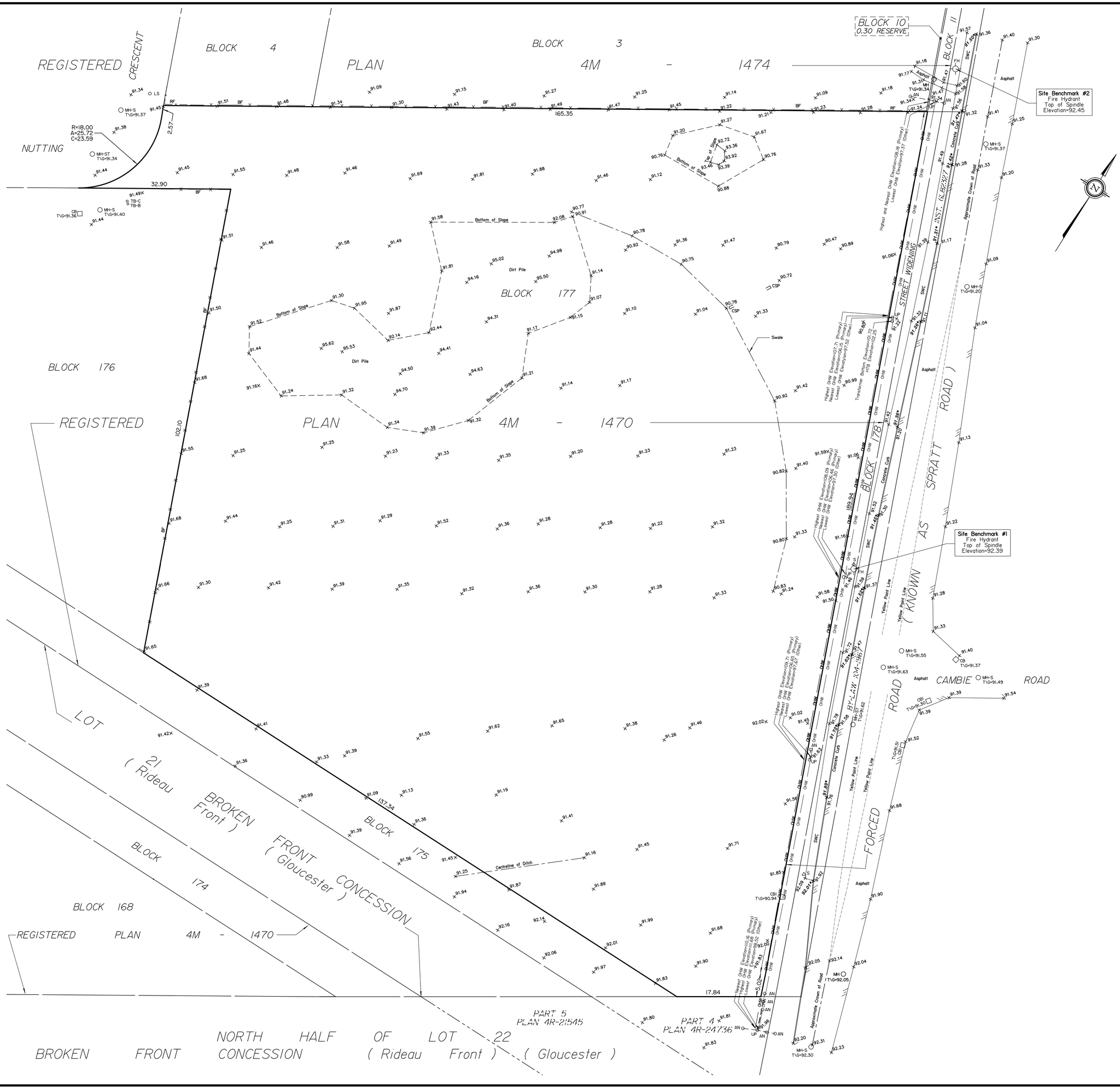

TOPOGRAPHIC SKETCH OF

4624 Spratt Road
CITY OF OTTAWA

Prepared by Annis, O'Sullivan, Vollebekk Ltd.

Scale 1 : 400

16 12 8 4 0 8 16 Metres

Metric

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

Notes & Legend

Denotes		
FH	"	Fire Hydrant
MH-ST	"	Maintenance Hole (Storm Sewer)
MH-S	"	Maintenance Hole (Sanitary)
MH	"	Maintenance Hole (Unidentified)
OHW	"	Overhead Wires
CB	"	Catch Basin
CBI	"	Catch Basin Inlet
CSP	"	Corrugated Steel Pipe
TB-B	"	Bell Terminal Box
TB-C	"	Cable Terminal Box
S	"	Sign
BF	"	Board Fence
RF	"	Rail Fence
SWC	"	Concrete Sidewalk
HTB	"	Hydro Transformer Bolt
UP	"	Utility Pole
AN	"	Anchor
LS	"	Light Standard
+ 65.00	"	Location of Elevations
+ 65.00*	"	Top of Concrete Curb Elevation

Caution

This is NOT a Plan of Survey and shall not be used except for the purpose indicated in the title block.

Boundary information compiled from Registered Plans 4M-1470 and 4M-1474.

ELEVATION NOTES

1. Elevations shown are geodetic and are referred to the CGVD28 geodetic datum.
2. It is the responsibility of the user of this information to verify that the job benchmark has not been altered or disturbed and that it's relative elevation and description agrees with the information shown on this drawing.

UTILITY NOTES

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

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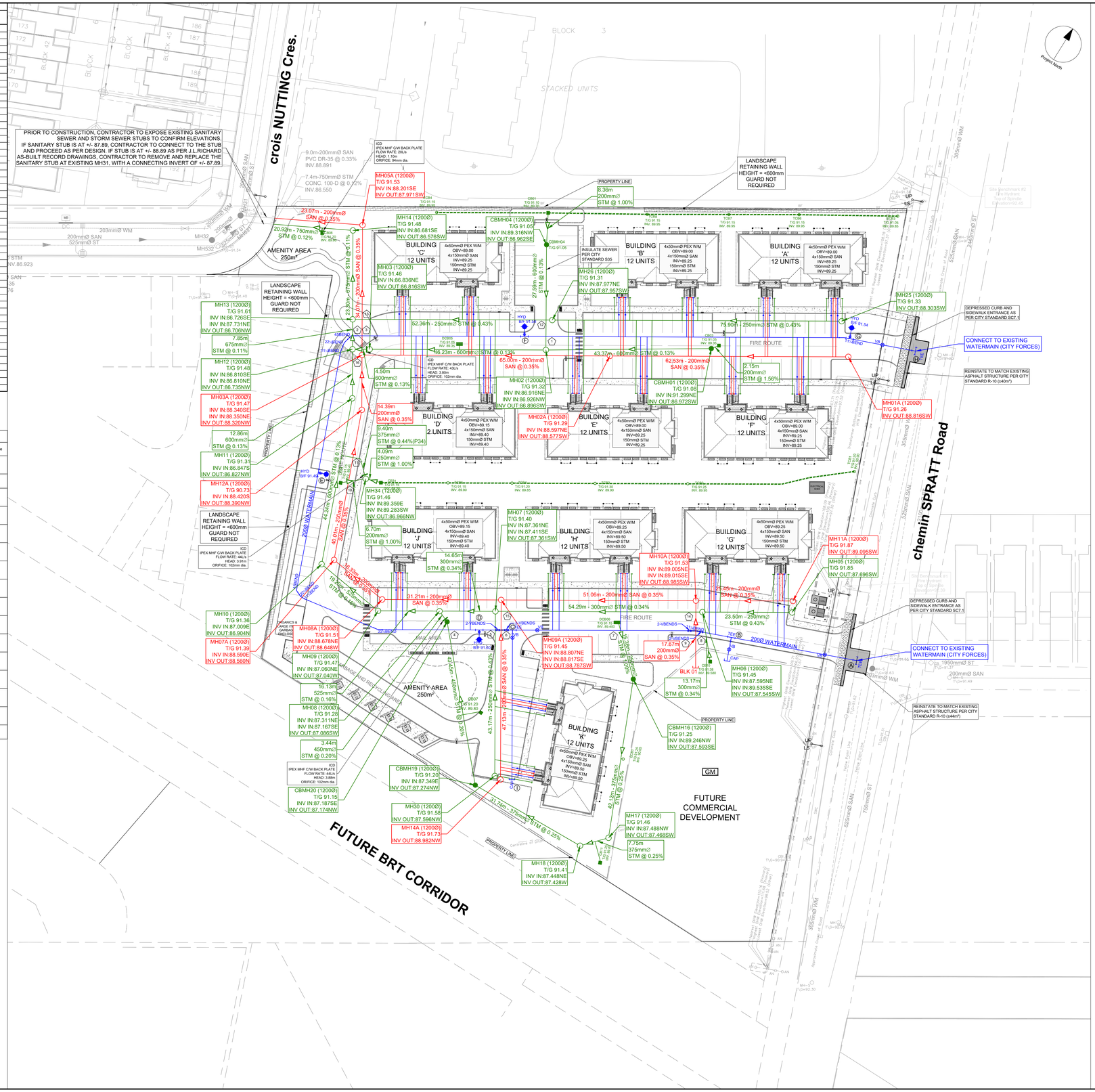
Nepean, Ont. K2E 7S6
Phone: (613) 727-0850 / Fax: (613) 727-1079
Email: Nepean@aovltd.com
Ontario Land Surveyors

Job No. 22080-21 Claridge Blk177 4M-1470 SK F AR

WATERMAIN SCHEDULE					
	Station	Description	Finished Grade	Top of Watermain	As Built Watermain
A	0+000	TEE	±91.53	±89.126	
	0+008.52	VB	91.67	89.267	
	0+020.00		91.60	89.202	
B	0+033.44	TEE	91.53	89.126	
	0+040.00		91.49	89.089	
	0+041.31	VBEND	91.48	89.080	
	0+042.01	VBEND	91.48	88.450	
	0+043.01	11 BEND	91.47	88.450	
	0+044.01	VBEND	91.47	88.450	
	0+044.71	VBEND	91.47	89.050	
	0+060.00		91.25	88.946	
	0+063.20		91.20	88.803	
	0+080.00		91.46	89.061	
	0+084.50		91.53	89.130	
C	0+090.98	TEE	91.45	89.049	
	0+092.28	VBEND	91.43	89.032	
	0+092.98	VBEND	91.42	88.340	
	0+094.48	VBEND	91.40	88.340	
	0+095.18	VBEND	91.39	88.994	
D	0+099.71	HYD TEE	91.34	88.935	
	0+120.00		91.38	88.978	
	0+126.25	11 BEND	91.39	88.992	
	0+138.72		91.47	89.072	
	0+147.15	11 BEND	91.51	89.112	
	0+148.40	11 BEND	91.51	89.110	
	0+150.25	45 BEND	91.51	89.114	
	0+160.00		91.45	89.052	
	0+177.53	45 BEND	91.34	88.941	
E	0+181.63	HYD TEE	91.33	88.926	
	0+182.80		91.32	88.922	
	0+200.00		91.42	89.020	
	0+213.99	11 BEND	91.50	89.100	
	0+216.49	22 BEND	91.53	89.131	
	0+219.04	45 BEND	91.65	89.246	
	0+226.45		91.47	89.074	
	0+240.00		91.25	88.852	
	0+247.44		91.13	88.730	
	0+260.00		91.27	88.872	
F	0+264.46	HYD TEE	91.32	88.922	
	0+275.53		91.38	88.982	
	0+280.00		91.35	88.950	
	0+300.00		91.21	88.809	
	0+315.47		91.10	88.699	
	0+320.00		91.12	88.724	
	0+340.00		91.23	88.833	
	0+348.26	11 BEND	91.28	88.879	
G	0+349.77	HYD TEE	91.29	88.890	
	0+358.54	VB	91.35	88.952	
H	0+367.33	TEE	±91.17	±88.772	
I	0+000	CAP	91.74	89.341	
	0+037.23	VB	91.51	89.111	
C	0+039.23	TEE	91.45	89.049	

PIPE INTERFERENCE TABLE				
Crossing No.	PIPE 1	PIPE 2	Clearance	
1	WTR Bottom 88.73	STM Top 87.63	1.10	
2	WTR Bottom 89.01	STM Top 87.51	1.50	
3	WTR Bottom 88.95	SAN Top 88.51	0.45	
4	WTR Bottom 88.73	STM Top 87.72	1.00	
5	WTR Bottom 88.76	STM Top 87.72	1.05	
WATERMAIN CROSSING BELOW PER W25 C/W INSULATION PER W22	6	SAN Bottom 88.84	WTR Top 88.34	0.50
7	STM Bottom 89.37	WTR Top 88.81	0.56	
8	STM Bottom 89.54	WTR Top 89.09	0.46	
WATERMAIN CROSSING BELOW PER W25 C/W INSULATION PER W22	9	SAN Bottom 89.04	WTR Top 88.54	0.50
10	STM Bottom 89.32	SAN Top 88.69	0.63	
11	SAN Bottom 88.46	STM Top 87.67	0.79	
12	STM Bottom 87.92	STM Top 87.63	0.28	
13	SAN Bottom 88.28	STM Top 88.03	0.25	
14	SAN Bottom 89.02	STM Top 87.85	1.17	
15	SAN Bottom 88.82	STM Top 87.67	1.15	
17	SAN Bottom 88.31	STM Top 87.51	0.80	



CLIENT

CLARIDGE HOMES

210 Gladstone Ave. Ottawa, On K0P 0Y6

Arcadis Professional Services (Canada) Inc.
formerly IBI Group Professional Services (Canada) Inc

ISSUES

No.	DESCRIPTION	DATE
5	SUBMISSION No.1 FOR ITY REVIEW	2026-03-30
6		
7		
8		

NOT FOR CONSTRUCTION

SEE Ø10, FOR NOTES, LEGEND, CB TABLE, STREET SECTIONS AND DETAILS

1:500 0 5 10 15 25m

SEAL

LICENSED PROFESSIONAL ENGINEER
I.D. K. Tannoulopoulos
2026-03-30
PROVINCE OF ONTARIO

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PROJECT
4624 SPRATT ROAD

4624 SPRATT ROAD

PROJECT NO: 30260954	
DRAWN BY: **EH/DD**	CHECKED BY: **A.S.**
PROJECT MGR: **R.M.**	APPROVED BY: **R.M.**

SHEET TITLE
GENERAL PLAN OF SERVICES

SHEET NUMBER	ISSUE
C-001	1

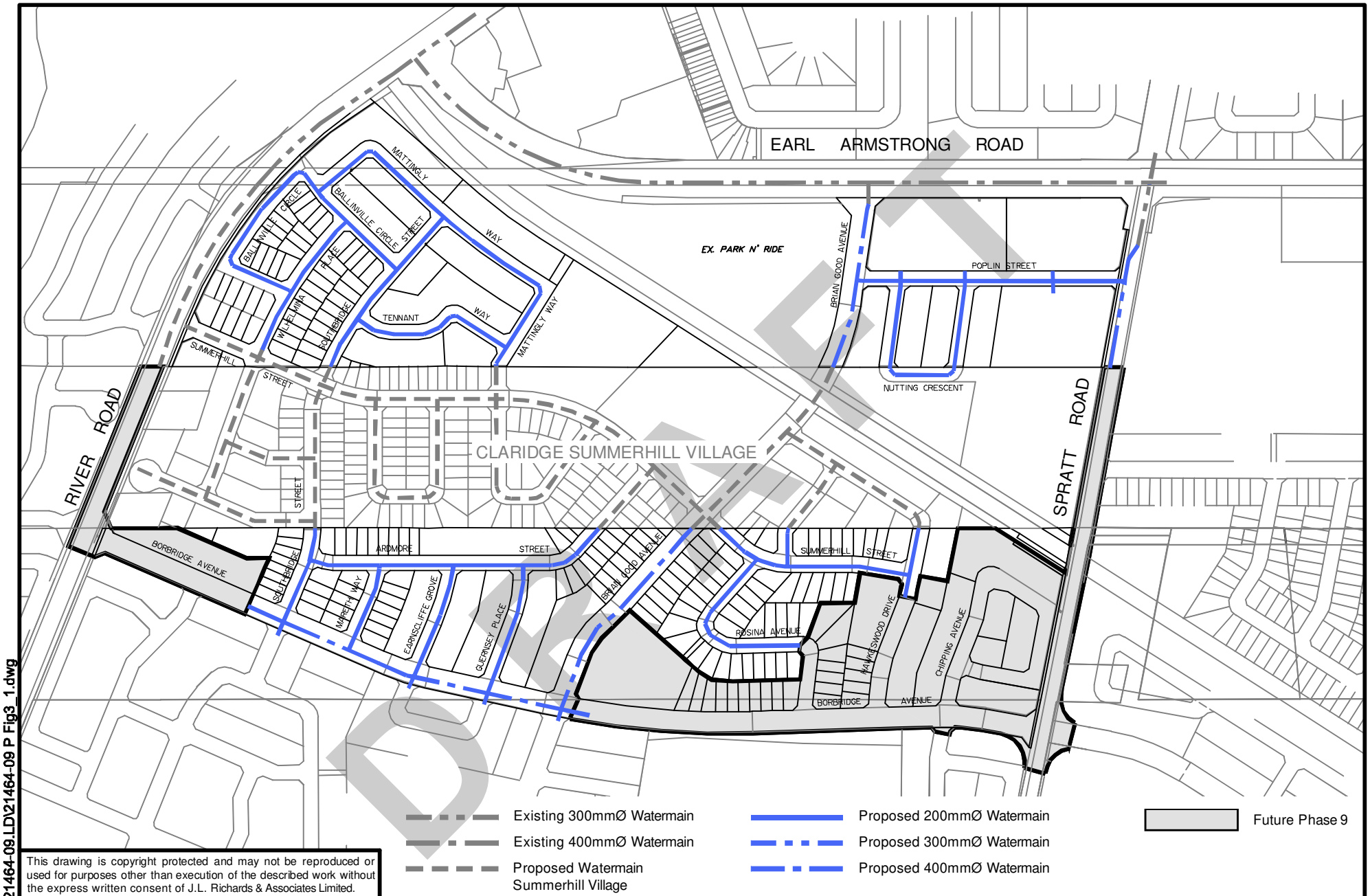
CITY PLAN No. 18727 CITY FILE No. D07-12-22-0021

SCALE CHECK

File Location: C:\DATA\cutt\Jobs\6f5c76a4bd0f749589\cas5183a8b1a835\cabs4f\esb.60bf44af-c1e6-40ca-8979-a13c881003ce\Project Files\10_WIP\04_CIVIL\Sheets\C-001 SERVICING PLAN.dwg Last Saved: March 30, 2026, by dcrea5754 Plotted: Monday, March 30, 2026 5:32:11 PM by acesuser

Appendix B

- **RSDC Phase 9 – Figure 3.1 Water Servicing Plan**
- **City of Ottawa Boundary Conditions**
- **Watermain Demand Calculation Sheet**
- **FUS Fire Flow Requirement Calculation**
- **Modeling Output Files**



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PROJECT:
RIVERSIDE SOUTH
PHASE 9
CITY OF OTTAWA

DRAWING:
WATER SERVICING
PLAN

DESIGN: J.L.P.
DRAWN: T.B.
CHECKED: J.L.P.
PLOTTED: Oct09,2012

DRAWING NO.:
FIGURE 3.1

JLR NO:
21464-09

File Location: V:\21464-09.LD\21464-09 P Fig3_1.dwg

Boundary Conditions
4624 Spratt Road

Provided Information

Scenario	Demand	
	L/min	L/s
Average Daily Demand	63	1.05
Maximum Daily Demand	158	2.63
Peak Hour	347	5.78
Fire Flow Demand #1	14,000	233.33

Location

Results – Existing Conditions

Connection 1 – Spratt Rd.

Demand Scenario	Head (m)	Pressure[1] (psi)
Maximum HGL	130.8	55.8
Peak Hour	125.0	47.6
Max Day plus Fire 1	123.1	44.8

Ground Elevation = 91.5 m

Connection 2 – Nutting Cres.

Demand Scenario	Head (m)	Pressure[1] (psi)
Maximum HGL	130.8	56.5
Peak Hour	125.0	48.3
Max Day plus Fire 1	106.7	22.2

Ground Elevation = 91.1 m

Results – SUC Zone Reconfiguration

Connection 1 – Spratt Rd.

Demand Scenario	Head (m)	Pressure[1] (psi)
Maximum HGL	147.3	79.3
Peak Hour	145.4	76.6
Max Day plus Fire 1	141.5	71.0

Ground Elevation = 91.5 m

Connection 2 – Nutting Cres.

Demand Scenario	Head (m)	Pressure[1] (psi)
Maximum HGL	147.3	80.0
Peak Hour	145.4	77.3
Max Day plus Fire 1	125.1	48.4

Ground Elevation = 91.1 m

Notes

1. As per the Ontario Building Code in areas that may be occupied, the static pressure at any fixture shall not exceed 552 kPa (80 psi.) Pressure control measures to be considered are as follows, in order of preference:
    a. If possible, systems to be designed to residual pressures of 345 to 552 kPa (50 to 80 psi) in all occupied areas outside of the public right-of-way without special pressure control equipment.
    b. Pressure reducing valves to be installed immediately downstream of the isolation valve in the home/ building, located downstream of the meter so it is owner maintained.

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.

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WATERMAIN DEMAND CALCULATION SHEET
4624 Spratt Road | Claridge Homes
135856 | Rev #1 | 2026-02-18
Prepared By: AS | Checked By: RM

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	Townhouse	3 bedroom UNITS	2 bedroom UNITS	1 bedroom UNITS	POPULATION	INDUST. (ha)	COMM. (ha)	INSTIT. (ha)	RESIDENTIAL	ICI	TOTAL	RESIDENTIAL	ICI	TOTAL	RESIDENTIAL	ICI	TOTAL	
J10																			
J12				24		50.40				0.16		0.16	0.41		0.41	0.90		0.90	
J14				24		50.40				0.16		0.16	0.41		0.41	0.90		0.90	
J16				24		50.40				0.16		0.16	0.41		0.41	0.90		0.90	
J18																			
J20				12		25.20				0.08		0.08	0.20		0.20	0.45		0.45	
J22																			
J24								0.3100			0.09	0.09		0.13	0.13		0.24	0.24	
J26				12		25.20				0.08		0.08	0.20		0.20	0.45		0.45	
J28				12		25.20				0.08		0.08	0.20		0.20	0.45		0.45	
J30				12		25.20				0.08		0.08	0.20		0.20	0.45		0.45	
TOTAL				**120**		**252.00**		**0**		**0.82**	**0.09**	**0.91**	**2.04**	**0.13**	**2.18**	**4.49**		**3.39**	

ASSUMPTIONS

POPULATION DENSITY

Single Family	3.4 persons/unit	2 Bedroom Units	2.1 persons/unit	
Townhouse	2.7 persons/unit	1 Bedroom Units	1.8 persons/unit	
3 Bedroom Units	3.1 persons/unit			

WATER DEMAND RATES

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

PEAKING FACTORS

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

FIRE DEMANDS

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

ARCADIS PROFESSIONAL SERVICES (CANADA) INC.
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Ottawa, Ontario K1S 5N4 Canada
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FIRE UNDERWRITERS SURVEY
4624 Spratt Road | Claridge Homes
135856 6.0 | Rev #1 | 2026-02-02
Prepared By: AS | Checked By: RM

STEP	Contents	Description		Adjustment Factor		Result	
1	**Building F** (2-storey)	1st Floor Area	419			419	m2
		2nd Floor Area	418			418	m2
	Total Effective Floor Area	(Storage space exceeding 3m in height, floor area X 3)				**837**	m2
2	**Type of Construction**	**Type V** Wood Frame	1.5	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				
3	**Required Fire Flow**	RFF = 220C√A, rounded to nearest 1000 L/min				**10000**	L/min
4	**Occupancy and Contents**	Noncombustible Contents	-25%	Limited Conbustible Contents	-15%	-1500	L/min
		Limited Conbustible Contents	-15%				
		Combustible Contents	0%				
		Free Burning Contents	15%				
		Rapid Burning Contents	25%				
	Fire Flow					**8500**	L/min
5	**Automatic Sprinkler Protection**	Automatic Sprinkler Conforming to NFPA 13	-30%	Yes	-30%	-2550	L/min
		Standard Water Supply for both the system and Fire Department Hose Lines	-10%	Yes	-10%	-850	L/min
		Fully Supervised System	-10%	No			
	Total Sprinkler Adjustment					**-3400**	L/min
6	**Exposure Adjustment**	Based on **Table 6** Exposure Adjustement Charges for Subject Building					
	North	Separation (m)	28.0	With unprotected opening	10%	850	L/min
		Length X Height Factor (m.storeys)	212.55				
		Construction Type	Type V				
	South	Separation (m)	7.5	With unprotected opening	20%	1700	L/min
		Length X Height Factor (m.storeys)	212.55				
		Construction Type	Type V				
	East	Separation (m)	6.4	With unprotected opening	19%	1615	L/min
		Length X Height Factor (m.storeys)	84.5				
		Construction Type	Type V				
	West	Separation (m)	7.2	With unprotected opening	19%	1615	L/min
		Length X Height Factor (m.storeys)	84.5				
		Construction Type	Type V				
	Total Exposure Adjustment					**5780**	L/min
7	**Total Required Fire Flow**					**10880**	L/min
		Rounded to Nearest 1000 L/min				**11000**	L/min
						183	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.


Stockholm Pvt
Gothenburg Pvt
Baltic Pvt
Malmo Pvt
Spratt Rd
Cambie Rd
CONN1
P11
J10
P13
J12
P15
J14
P17
J16
P19
J18
P21
J20
P23
J22
P25
J28
P27
J30
P29
J24
P31
J26
P41
CONN3
J36
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

		ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (kPa)
1	☐	J10	0.00	91.40	130.80	386.09
2	☐	J12	0.16	91.30	130.80	387.07
3	☐	J14	0.16	91.35	130.80	386.58
4	☐	J16	0.16	91.50	130.80	385.11
5	☐	J18	0.00	91.25	130.80	387.56
6	☐	J20	0.08	91.55	130.80	384.62
7	☐	J22	0.00	91.35	130.80	386.58
8	☐	J24	0.09	91.50	130.80	385.11
9	☐	J26	0.08	91.60	130.80	384.13
10	☐	J28	0.08	91.40	130.80	386.09
11	☐	J30	0.08	91.60	130.80	384.13
12	☐	J36	0.00	91.50	130.80	385.11

		ID	Demand (L/s)	Elevation (m)	Head (m)	Pressure (kPa)
1	☐	J10	0.00	91.40	125.00	329.25
2	☐	J12	0.90	91.30	125.00	330.22
3	☐	J14	0.90	91.35	125.00	329.71
4	☐	J16	0.90	91.50	125.00	328.24
5	☐	J18	0.00	91.25	125.00	330.69
6	☐	J20	0.45	91.55	125.00	327.75
7	☐	J22	0.00	91.35	125.00	329.71
8	☐	J24	0.24	91.50	125.00	328.26
9	☐	J26	0.45	91.60	125.00	327.28
10	☐	J28	0.45	91.40	125.00	329.22
11	☐	J30	0.45	91.60	125.00	327.26
12	☐	J36	0.00	91.50	125.00	328.27

Peak Hour Pipe Report

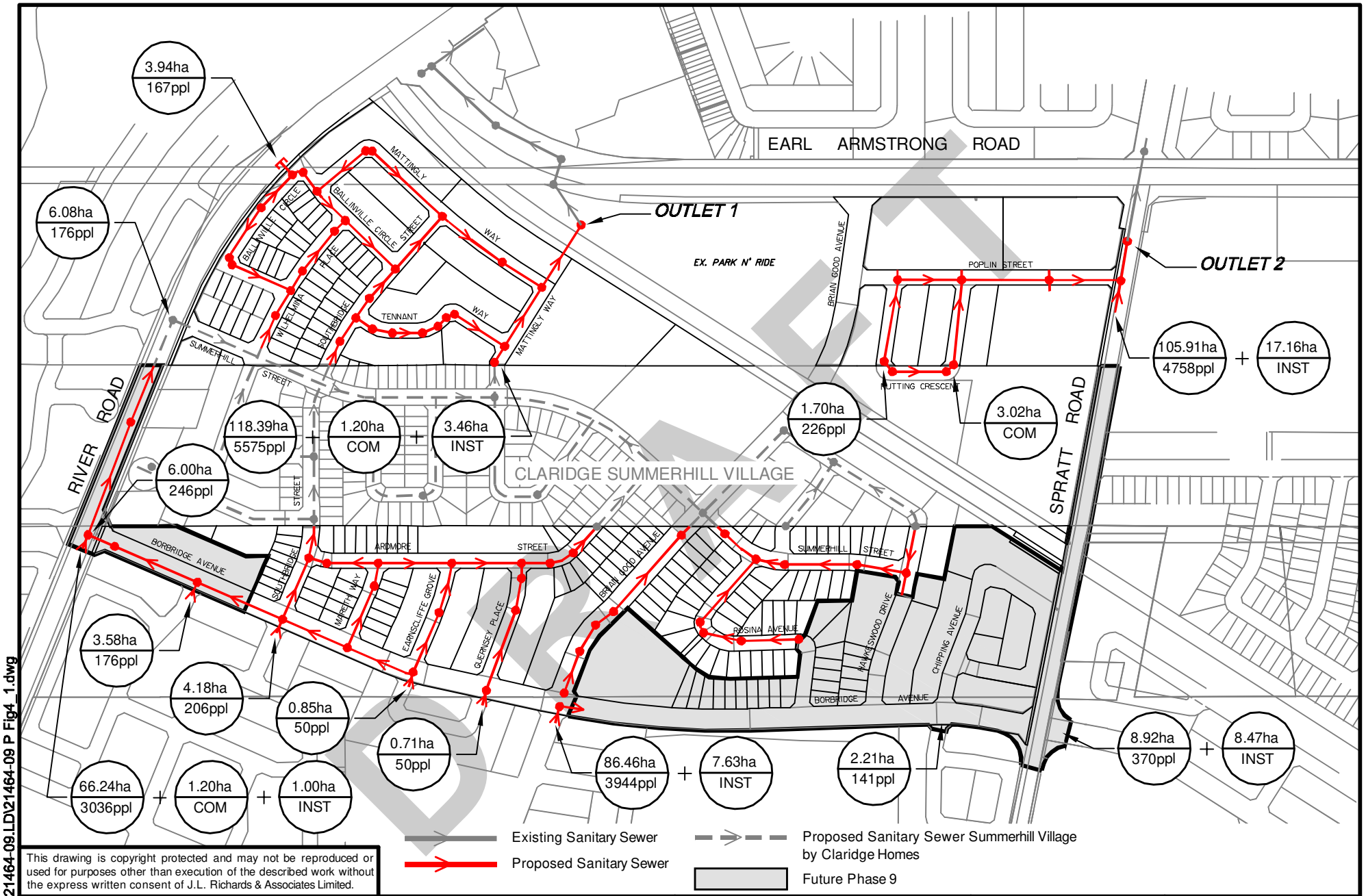
		ID	From Node	To Node	Length (m)	Diameter (mm)	Roughness	Flow (L/s)	Velocity (m/s)	Headloss (m)	HL/1000 (m/k-m)	Status	Flow Reversal Count
1		P11	CONN1	J10	1.00	204.00	110.00	2.45	0.07	0.00	0.06	Open	0
2		P13	J10	J12	19.07	204.00	110.00	2.45	0.07	0.00	0.06	Open	0
3		P15	J12	J14	83.80	204.00	110.00	1.55	0.05	0.00	0.03	Open	0
4		P17	J14	J16	47.22	204.00	110.00	0.65	0.02	0.00	0.00	Open	0
5		P19	J16	J18	36.85	204.00	110.00	-0.25	0.01	0.00	0.00	Open	0
6		P21	J18	J20	31.38	204.00	110.00	-0.25	0.01	0.00	0.00	Open	0
7		P23	J20	J22	50.54	204.00	110.00	-0.70	0.02	0.00	0.01	Open	0
8		P25	J22	J28	8.73	204.00	110.00	-0.70	0.02	0.00	0.01	Open	0
9		P27	J28	J30	39.23	204.00	110.00	0.45	0.01	0.00	0.00	Open	0
10		P29	J28	J24	57.54	204.00	110.00	-1.60	0.05	0.00	0.03	Open	0
11		P31	J24	J26	16.68	204.00	110.00	-1.84	0.06	0.00	0.04	Open	0
12		P39	CONN3	J36	1.00	204.00	110.00	2.29	0.07	0.00	0.05	Open	0
13		P41	J36	J26	18.28	204.00	110.00	2.29	0.07	0.00	0.05	Open	0

Max Day + Fire

		ID	Static Demand (L/s)	Static Pressure (kPa)	Static Head (m)	Fire-Flow Demand (L/s)	Residual Pressure (kPa)	Hydrant Available Flow (L/s)	Hydrant Pressure at Available Flow (kPa)
1	☐	J14	0.41	311.12	123.10	183.30	235.18	276.14	149.96
2	☐	J18	0.00	312.10	123.10	183.30	222.31	252.58	149.96
3	☐	J22	0.00	311.12	123.10	183.30	235.83	276.97	149.96

Appendix C

- **RSDC Phase 9 Figure 4.1 Sanitary Servicing Plan**
- **RSDC Phase 9 Sanitary Drainage Plan**
- **RSDC Phase 9 Sanitary Sewer Design Sheet**
- **Sanitary Drainage Area Plan Drawing 400**
- **Sanitary Sewer Design Sheet**



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

PROJECT:
RIVERSIDE SOUTH
PHASE 9
CITY OF OTTAWA

DRAWING:
SANITARY
SERVICING PLAN

DESIGN: G.D.
DRAWN: T.B.
CHECKED: J.L.P.
PLOTTED: Oct09,2012

DRAWING NO.:
FIGURE 4.1

JLR NO:
21464-09

File Location: V:\21464-09.LD\21464-09 P Fig4_1.dwg

EXISTING RESIDENTIAL

PUFFIN COURT

BLOCK 85

BLOCK 84

BLOCK 80

BLOCK 94

EARL ARMSTRONG ROAD

PHASE 9

SPRATT ROAD

POPLIN STREET

BRIAN COXALL AVENUE

NUTTING CRESCENT

FUTURE PHASE 8

FUTURE COMMERCIAL (BY OTHERS)

FUTURE RESIDENTIAL (BY OTHERS)

EX. PARK+ RIDE

FUTURE RTC

TRANSIT CORRIDOR

SUMMERHILL VILLAGE BY OTHERS

HAWKESWOOD DRIVE

CHIPPING AVENUE

LEGEND

- PROPOSED ELBOW CATCHBASIN
- PROPOSED TEE CATCHBASIN
- CATCH BASIN
- HYDRANT
- SANITARY SEWER & MANHOLE
- LOT NUMBER
- DRAINAGE BOUNDARY
- AREA IN HECTARES / NUMBER OF UNITS
- PHASING LIMIT

NO.	ISSUE	DATE
9	ISSUED FOR MYLARS	AUG. 23, 2012
8	REVISED STORM SEWER ON SPRATT ROAD AND STUBS ON POPLIN STREET	JUNE 27, 2012
7	ISSUED FOR CONSTRUCTION	MAY 30, 2012
6	REVISED PER CITY COMMENTS & LEGAL	MAY 18, 2012
5	REVISED PER CITY COMMENTS / TENDER	MAR. 05, 2012
4	REVISED PER CITY COMMENTS	DEC. 09, 2011
3	REVISED PER CITY COMMENTS	SEPT. 06, 2011
2	REVISED PER CITY COMMENTS & LEGAL	APR. 28, 2011
1	SUBMITTED TO CITY FOR REVIEW	OCT. 13, 2010

SCALE: 1:1000

RIVERSIDE SOUTH DEVELOPMENT CORPORATION (RSDC)

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J.L.Richards
ENGINEERS·ARCHITECTS·PLANNERS

PROFESSIONAL STAMP

PROJECT NORTH

PROJECT:
RIVERSIDE SOUTH
PHASE 9

CITY OF OTTAWA

DRAWING:
SANITARY
DRAINAGE PLAN

DESIGN: G.D.	DRAWING NO.: D2-SAN
DRAWN: T.S.	
CHECKED: J.P.	JLR NO: 21464-09
PLOTTED: Aug 23, 2012	

File Location: V:\21464.09 LDS\21464.09 C D-SAN.dwg

J.L.Richards
ENGINEERS · ARCHITECTS · PLANNERS

CITY OF OTTAWA
RIVERSIDE SOUTH DEVELOPMENT CORPORATION
RIVERSIDE SOUTH PHASE 9

SANITARY SEWER CALCULATION SHEET

DESIGN PARAMETERS

Population Density (Singles)	=	3.2	pers/unit	Commercial	=	50,000	L/d/ha (Peaking Factor = 1.5)
Population Density (Stacks, Towns)	=	2.4	pers/unit	Institutional	=	50,000	L/d/ha (Peaking Factor = 1.5)
Population Density (Mixed)	=	1.9	pers/unit	Light Industrial	=	35,000	L/d/ha (Peaking Factor = Per MOE Graph)
Per Capita Flow (Residential)	=	350	L/cap/d	Infiltration (Residential)	=	0.28	L/s/ha
				Manning's Coefficient, n	=	0.013	

LEGEND

DENOTES FUTURE OR EXISTING SEWERS, AND EXTERNAL FLOWS

BY: G.C. Dumencu, EIT	**PROJECT:** Riverside South Development Corporation Riverside South Phase 9			
CHECKED: J.L. Párraga, P.Eng.	**LOCATION:** City of Ottawa			
JLR NO.: 21464-09	**DATE:** Oct-11	**REVISED:** Apr-11 Aug-11	**REVISED:** Dec-11 Feb-12	**REVISED:** May-12 Jun-12	**REVISED:** Sep-12 FINAL

STREET	PHASE	MH NUMBER		RESIDENTIAL									COMMERCIAL			INSTITUTIONAL				ICI	INFILTRATION				Peak Design Flow (L/s)	Qd/Qcap	SEWER DATA						UPSTREAM					DOWNSTREAM					REMARKS	CAPACITY OK?
				NUMBER OF UNITS					CUMULATIVE		Peaking Factor	Pop. Flow (L/s)	Area (ha)	Cum. Area (L/s)	Comm. Flow (L/s)	Area (ha)	Cum. Area (ha)	Peaking Factor	Institut. Flow (L/s)	Peak ICI Flow (L/s)	Total Area (ha)	Cum. Area (ha)	Infiltration Flow (L/s)				Dia. (mm)	Slope (%)	Q full (L/s)	V full (m/s)	V partial (m/s)	Length (m)	Prop. Centreline	Obvert Drop	Obvert	Invert	Cover	Prop. Centreline	Obvert Drop	Obvert	Invert	Cover		
		FROM	TO	Singles	Towns	Stacks	Total Units	Pop. (people)	Area (ha)	Pop. (people)	Area (ha)																																	
Southeast Quadrant																																											
FUTURE (STANTEC 2c & 2d)	FUT	STUB	150							3,944	86.46	3.34	53.34				7.63	7.63		6.62	6.62	7.63	94.09	26.35	86.31	0.56	525	0.12	155.42	0.70	0.72	20.62	91.00		88.235	87.710	2.77	91.00		88.210	87.685	2.79	Stantec OBV 88.21	Y
BORBRIDGE AVE	FUT 9	150	214						0.15	3,944	86.61	3.34	53.34				1.06	8.69		7.54	7.54	1.21	95.30	26.68	87.57	0.56	525	0.12	155.42	0.70	0.73	63.48	91.00		88.210	87.685	2.79	90.85		88.134	87.609	2.72		Y
BORBRIDGE AVE	FUT 9	214	213	2			2	6	0.41	3,950	87.02	3.34	53.42					8.69		7.54	7.54	0.41	95.71	26.80	87.76	0.56	525	0.12	155.42	0.70	0.73	113.90	90.85		88.134	87.609	2.72	91.52		87.997	87.472	3.52		Y
BORBRIDGE AVE	FUT 9	213	160	8			8	26	0.70	3,976	87.72	3.34	53.73					8.69		7.54	7.54	0.70	96.41	26.99	88.26	0.57	525	0.12	155.42	0.70	0.72	114.99	91.52		87.997	87.472	3.52	92.40		87.859	87.334	4.54		Y
ROSINA AVENUE	FUT 9	163 (E)	162	1			1	3	0.13	3	0.13	4.00	0.05									0.13	0.13	0.04	0.09	0.00	200	1.17	37.01	1.14	0.18	9.18	92.30		89.000	88.800	3.30	92.40		88.893	88.693	3.51		Y
ROSINA AVENUE	FUT 9	162	161	1			1	3	0.13	6	0.26	4.00	0.10									0.13	0.26	0.07	0.18	0.00	200	1.17	37.01	1.14	0.27	9.18	92.40		88.893	88.693	3.51	92.35		88.785	88.585	3.56		Y
ROSINA AVENUE	FUT 9	161	160	5			5	16	0.38	22	0.64	4.00	0.36									0.38	0.64	0.18	0.54	0.01	200	1.17	37.01	1.14	0.42	79.17	92.35		88.785	88.585	3.56	92.40		87.859	87.659	4.54		Y
BORBRIDGE AVE	FUT 9	160	190						0.22	3,998	88.58	3.33	53.99					8.69		7.54	7.54	0.22	97.27	27.24	88.77	0.57	525	0.12	155.42	0.70	0.72	85.95	92.40		87.859	87.334	4.54	92.50		87.756	87.230	4.74		Y
HAWKESWOOD DRIVE	FUT 9	180 (S)	193		4		4	10	0.14	10	0.14	4.00	0.16									0.14	0.14	0.04	0.19	0.01	200	0.65	27.59	0.85	0.25	30.67	92.10		88.554	88.353	3.55	91.88		88.354	88.154	3.53		Y
HAWKESWOOD DRIVE	FUT 9	193	193A	1	12		13	32	0.89	42	1.03	4.00	0.67									0.89	1.03	0.29	0.96	0.04	200	0.40	21.64	0.67	0.35	19.51	91.88		88.354	88.154	3.53	91.93		88.276	88.076	3.65		Y
HAWKESWOOD DRIVE	FUT 9	193A	192							42	1.03	4.00	0.67										1.03	0.29	0.96	0.04	200	0.40	21.64	0.67	0.35	59.06	91.93		88.276	88.076	3.65	92.52		88.039	87.839	4.48		Y
HAWKESWOOD DRIVE	FUT 9	192	191	1	2		3	8	0.13	50	1.16	4.00	0.80									0.13	1.16	0.32	1.13	0.05	200	0.40	21.64	0.67	0.38	16.50	92.52		88.039	87.839	4.48	92.39		87.973	87.773	4.42		Y
HAWKESWOOD DRIVE	FUT 9	191	190	3	4		7	19	0.35	69	1.51	4.00	1.11									0.35	1.51	0.42	1.54	0.07	200	0.40	21.64	0.67	0.40	54.60	92.39		87.973	87.773	4.42	92.50		87.756	87.555	4.74		Y
BORBRIDGE AVE	FUT 9	190	212						0.20	4,067	90.29	3.33	54.81					8.69		7.54	7.54	0.20	98.98	27.71	90.07	0.58	525	0.12	155.42	0.70	0.73	84.27	92.50		87.756	87.230	4.74	92.60		87.655	87.130	4.95		Y
CHIPPING AVENUE	FUT 9	205 (W)	204		11		11	26	0.41	26	0.41	4.00	0.43									0.41	0.41	0.11	0.54	0.03	200	0.33	19.66	0.61	0.27	70.71	92.88		89.524	89.324	3.36	92.64		89.290	89.090	3.35		Y
CHIPPING AVENUE	FUT 9	204	203		6		6	14	0.33	41	0.74	4.00	0.66									0.33	0.74	0.21	0.87	0.04	200	0.33	19.66	0.61	0.32	14.50	92.64		89.290	89.090	3.35	92.70		89.242	89.042	3.46		Y
CHIPPING AVENUE	FUT 9	203	202		12		12	29	0.36	70	1.10	4.00	1.13									0.36	1.10	0.31	1.44	0.07	200	0.33	19.66	0.61	0.37	47.30	92.70		89.242	89.042	3.46	92.58		89.086	88.886	3.49		Y
CHIPPING AVENUE	FUT 9	202	201		12		12	29	0.40	98	1.50	4.00	1.59									0.40	1.50	0.42	2.01	0.10	200	0.33	19.66	0.61	0.41	58.85	92.58		89.086	88.886	3.49	92.70		88.892	88.692	3.81		Y
CHIPPING AVENUE	FUT 9	205 (E)	206						0.02		0.02	4.00										0.02	0.02	0.01	0.01	0.00	200	0.33	19.66	0.61	0.02	8.04	92.88		89.488	89.288	3.39	92.86		89.461	89.261	3.40		Y
CHIPPING AVENUE	FUT 9	206	207		9		9	22	0.35	22	0.37	4.00	0.35									0.35	0.37	0.10	0.45	0.02	200	0.33	19.66	0.61	0.25	76.26	92.86		89.461	89.261	3.40	92.77		89.210	89.010	3.56		Y
CHIPPING AVENUE	FUT 9	207	208		1		1	2	0.08	24	0.45	4.00	0.39									0.08	0.45	0.13	0.51	0.03	200	0.33	19.66	0.61	0.25	10.84	92.77		89.210	89.010	3.56	92.75		89.174	88.974	3.58		Y
CHIPPING AVENUE	FUT 9	208	209		14		14	34	0.44	58	0.89	4.00	0.93									0.44	0.89	0.25	1.18	0.06	200	0.33	19.66	0.61	0.36	62.33	92.75		89.174	88.974	3.58	92.47		88.968	88.768	3.50		Y
CHIPPING AVENUE	FUT 9	209	201		1		1	2	0.05	60	0.94	4.00	0.97									0.05	0.94	0.26	1.23	0.06	200	0.33	19.66	0.61	0.38	23.07	92.47		88.968	88.768	3.50	92.70		88.892	88.692	3.81		Y
CHIPPING AVENUE	FUT 9	201	200		3		3	7	0.10	166	2.54	4.00	2.68									0.10	2.54	0.71	3.39	0.17	200	0.33	19.66	0.61	0.45	17.53	92.70		88.892	88.692	3.81	92.36		88.834	88.634	3.53		Y
CHIPPING AVENUE	FUT 9	200	212		6		6	14	0.25	180	2.78	4.00	2.92									0.25	2.78	0.78	3.70	0.10	200	1.24	38.13	1.18	0.76	46.65	92.36		88.834	88.634	3.53	92.60	0.600	88.255	88.055	4.35		Y
FUTURE DEVELOPMENT	FUT	STUB	212		59		59	141	2.21	141	2.21	4.00	2.28									2.21	2.21	0.62	2.90	0.15	200	0.33	19.66	0.61	0.46	20.78	92.68		87.723	87.523	4.96	92.60		87.655	87.455	4.95		Y
BORBRIDGE AVE	FUT 9	212	211						0.03	4,388	95.31	3.30	58.61					8.69		7.54	7.54	0.03	104.00	29.12	95.27	0.61	525	0.12	155.42	0.70	0.73	20.11	92.60		87.655	87.130	4.95	92.47		87.631	87.106	4.84		Y
BORBRIDGE AVE	FUT 9	211	7						0.27	4,388	95.58	3.30	58.61					8.69		7.54	7.54	0.27	104.27	29.20	95.35	0.61	525	0.12	155.42	0.70	0.73	97.77	92.47		87.631	87.106	4.84	93.00		87.513	86.988	5.49	Stantec OBV 87.51	Y
SPRATT ROAD (STANTEC 3a)	FUT	STUB	7							370	8.92	4.00	6.00				8.47	8.47		7.35	7.35	8.47	17.39	4.87	18.22	0.12	525	0.12	155.42	0.70	0.48	20.96	93.00		87.539	87.014	5.46	93.00		87.513	86.988	5.49		Y
SPRATT ROAD	FUT	7	2						1.41	4,758	105.91	3.26	62.93					17.16		14.90	14.90	1.41	123.07	34.46	112.28	0.72	525	0.12	155.42	0.70	0.74	549.08	93.00		87.513	86.988	5.49	91.35		86.855	86.330	4.50		Y
Northeast Quadrant (Flow East to Spratt Road via Poplin Street)																																											
NUTTING CRESCENT	9	33 (W)	34						0.02		0.02	4.00										0.02	0.02	0.01	0.01	0.00	200	2.00	48.39	1.49		12.36	91.35		88.629	88.429	2.72	91.35		88.382	88.182	2.97		Y
NUTTING CRESCENT	9	34	23		24		24	58	0.75	58	0.77	4.00	0.93									0.75	0.77	0.22	1.15	0.05	200	0.40	21.64	0.67	0.39	106.50	91.35		88.382	88.182	2.97	91.10		87.956	87.756	3.14		Y
POPLIN STREET	9	23	22		2		2	5	0.29	62	1.06	4.00	1.01									0.29	1.06	0.30	1.31	0.06	200	0.40	21.64	0.67	0.40	83.73	91.10		87.956	87.756	3.14	91.20		87.621	87.421	3.58		Y
CLARIDGE RESIDENTIAL	FUT IBI	STUB	33 (E)			94	94	226	1.70	226	1.70	4.00	3.66									1.70	1.70	0.48	4.13	0.21	200	0.33	19.66	0.61	0.49	9.00	91.35		88.562	88.362	2.79	91.35		88.533	88.333	2.82		Y
NUTTING CRESCENT	9	33 (E)	32	2			2	5	0.20	231	1.90	4.00	3.74									0.20	1.90	0.53	4.27	0.15	200	0.65	27.59	0.85	0.63	66.94	91.35		88.533	88.333	2.82	91.37		88.098	87.898	3.27		Y
NUTTING CRESCENT	9	32	31						0.02	231	1.92	4.00	3.74									0.02	1.92	0.54	4.27	0.20	200	0.40	21.64	0.67	0.53	9.86	91.37		88.098	87.898	3.27	91.37		88.058	87.858	3.31		Y
CLARIDGE COMMERCIAL	FUT IBI	STUB	31									4.00		3.02	3.02	2.62					2.62	3.02	3.02	0.85	3.47	0.18	200	0.33	19.66	0.61	0.46	9.01	91.37		88.088	87.888	3.28	91.37		88.058	87.859	3.31		Y
NUTTING CRESCENT	9	31	22		23		23	55	0.69	286	2.61	4.00	4.63		3.02	2.62					2.62	0.69	5.63	1.58	8.83	0.41	200	0.40	21.64	0.67	0.64	109.38	91.37		88.058	87.858	3.31	91.20		87.621	87.421	3.58		Y
POPLIN STREET	9	22	22A		1		1	2	0.11	351	3.78	4.00	5.68		3.02	2.62					2.62	0.11	6.80	1.90	10.21	0.47	200	0.40	21.64	0.67	0.66	38.16	91.20		87.621	87.421	3.58	91.00		87.468	87.268	3.53		Y
FUTURE STACKS	FUT 9	STUB (N)	22A			106	106	254	1.41	254	1.41	4.00	4.12									1.41	1.41	0.39	4.52	0.23	200	0.33	19.66	0.61	0.51	9.00	91.10		87.911	87.712	3.19	91.00	0.413	87.881	87.681	3.12	INV to INV drop = 0.413 m < 0.6 m (no drop pipe req'd)	Y
POPLIN STREET	9	22A	21						0.11	605	5.30	3.93	9.63		3.02	2.62					2.62	0.11	8.32	2.33	14.58	0.67	200	0.40	21.64	0.67	0.71	59.61	91.00		87.468	87.268	3.53	91.09		87.230	87.030	3.86		Y
FUTURE STACKS	FUT 9	STUB (S)	21			104	104	250	1.30	250	1.30	4.00	4.04									1.30	1.30	0.36	4.41	0.22	200	0.33	19.66	0.61	0.49	9.00	91.27		87.259	87.059	4.01	91.09		87.230	87.030	3.86		Y
FUTURE COMMERCIAL	FUT 9	STUB (N)	21									4.00		1.23	1.23	1.07					1.07	1.23	1.23	0.34	1.41	0.07	200	0.33	19.66	0.61	0.36	9.00	91.27		87.259	87.059	4.01	91.09		87.230	87.030	3.86		Y
POPLIN STREET	9	21	2						0.16	855	6.76	3.84	13.30		4.25	3.69					3.69	0.16	11.01	3.08	20.08	0.31	300	0.40	63.80	0.87	0.79	93.77	91.09		87.230	86.930	3.86	91.35		86.855	86.555	4.50		Y
SPRATT ROAD	9	2	1 (AECOM STUB)						0.28	5,613	112.95	3.20	72.71		4.25	3.69		17.16		14.90	18.59	0.28	134.36	37.62	128.92	0.83	525	0.12	155.42	0.70	0.78	41.25	91.35		86.855	86.330	4.50	91.08	1.130	86.805	86.280	4.27	Ex. Aecom Stub INV 85.15	Y
SPRATT ROAD	9	1 (AECOM STUB)	EX. (STANTEC 111)						1.38	5,613	114.33	3.20	72.71		4.25	3.69		17.16		14.90	18.59	1.38	135.74	38.01	129.31	0.83	525	0.12	155.42	0.70	0.78		91.08	AECOM STUB INV.	**85.150**									
								STANTEC POP	**6,216**												STANTEC AREA	**146.27**		**137.40**																			

ARCADIS PROFESSIONAL SERVICES (CANADA) INC.
500-333 Preston Street
Ottawa, Ontario K1S 5N4 Canada
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SANITARY SEWER DESIGN SHEET

4624 Spratt Road
Claridge Homes
CITY OF OTTAWA

LOCATION				RESIDENTIAL										ICI AREAS								INFILTRATION ALLOWANCE			FIXED FLOW (L/s)		TOTAL FLOW	PROPOSED SEWER DESIGN							
				AREA w/ Units (Ha)	UNIT TYPES				AREA w/o Units (Ha)	POPULATION		RES PEAK FACTOR	PEAK FLOW (L/s)	AREA (Ha)						ICI PEAK FACTOR	PEAK FLOW (L/s)	AREA (Ha)		FLOW				CAPACITY	LENGTH	DIA	SLOPE	VELOCITY (full)	AVAILABLE CAPACITY	
STREET	AREA ID	FROM MH	TO MH		SF	TH/SD	1 Bed APT	2 Bed APT		IND	CUM			INSTITUTIONAL IND	INSTITUTIONAL CUM	COMMERCIAL IND	COMMERCIAL CUM	INDUSTRIAL IND	INDUSTRIAL CUM			IND	CUM	(L/s)	IND	CUM	(L/s)	(L/s)	(m)	(mm)	(%)	(m/s)	L/s	(%)
		MH11A	MH10A	0.18				12		25.2	25.2	3.69	0.30	0.00	0.0	0.00	0.0	0.00	0.0	1.00	0.00	0.18	0.2	0.06	0.00	0.0	0.36	20.24	25.45	200	0.35	0.624	19.88	98.22%
		BLK 01	MH10A						0.31	18.6	18.6	3.71	0.22	0.00	0.0	0.00	0.0	0.00	0.0	1.00	0.00	0.31	0.3	0.10	0.00	0.0	0.33	20.24	17.67	200	0.35	0.624	19.92	98.39%
		MH10A	MH09A	0.24				12		25.2	69.0	3.63	0.81	0.00	0.0	0.00	0.0	0.00	0.0	1.00	0.00	0.24	0.7	0.24	0.00	0.0	1.05	20.24	51.06	200	0.35	0.624	19.19	94.81%
		MH14A	MH09A	0.22				12	0.013	25.2	25.2	3.69	0.30	0.00	0.0	0.00	0.0	0.00	0.0	1.00	0.00	0.24	0.2	0.08	0.00	0.0	0.38	20.24	47.13	200	0.35	0.624	19.86	98.12%
		MH09A	MH08A	0.17				12		25.2	119.4	3.58	1.38	0.00	0.0	0.00	0.0	0.00	0.0	1.00	0.00	0.17	1.1	0.37	0.00	0.0	1.76	20.24	31.21	200	0.35	0.624	18.48	91.31%
		MH08A	MH07A						0.09	0.0	119.4	3.58	1.38	0.00	0.0	0.00	0.0	0.00	0.0	1.00	0.00	0.09	1.2	0.40	0.00	0.0	1.79	20.24	16.33	200	0.35	0.624	18.46	91.17%
		MH07A	MH12A						0.11	0.0	119.4	3.58	1.38	0.00	0.0	0.00	0.0	0.00	0.0	1.00	0.00	0.11	1.3	0.44	0.00	0.0	1.82	20.24	40.01	200	0.35	0.624	18.42	90.99%
		MH12A	MH03A						0.02	0.0	119.4	3.58	1.38	0.00	0.0	0.00	0.0	0.00	0.0	1.00	0.00	0.02	1.4	0.45	0.00	0.0	1.83	20.24	14.39	200	0.35	0.624	18.41	90.95%
		MH01A	MH02A	0.53				44		92.4	92.4	3.60	1.08	0.00	0.0	0.00	0.0	0.00	0.0	1.00	0.00	0.53	0.5	0.17	0.00	0.0	1.25	20.24	62.53	200	0.35	0.624	18.99	93.81%
		MH02A	MH03A	0.43				32		67.2	159.6	3.55	1.83	0.00	0.0	0.00	0.0	0.00	0.0	1.00	0.00	0.43	1.0	0.32	0.00	0.0	2.15	20.24	65.00	200	0.35	0.624	18.09	89.38%
		MH03A	MH05A						0.03	0.0	279.0	3.47	3.14	0.00	0.0	0.00	0.0	0.00	0.0	1.00	0.00	0.03	2.3	0.77	0.00	0.0	3.91	20.24	34.07	200	0.35	0.624	16.33	80.66%
		MH05A	EXBLK						0.04	0.0	279.0	3.47	3.14	0.00	0.0	0.00	0.0	0.00	0.0	1.00	0.00	0.04	2.4	0.79	0.00	0.0	3.93	20.24	23.07	200	0.35	0.624	16.31	80.59%

Design Parameters:

Residential			ICI Areas			
SF	3.4	p/p/u				
TH/SD	2.7	p/p/u	INST	28,000	L/Ha/day	
1 Bed	1.4	p/p/u	COM	28,000	L/Ha/day	
2 Bed	2.1	p/p/u	IND	35,000	L/Ha/day	MOE Chart
Other	60	p/p/Ha		17000	L/Ha/day	

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

Designed: AS/RM
Checked: RM/DY
Dwg. Reference: 135856-400

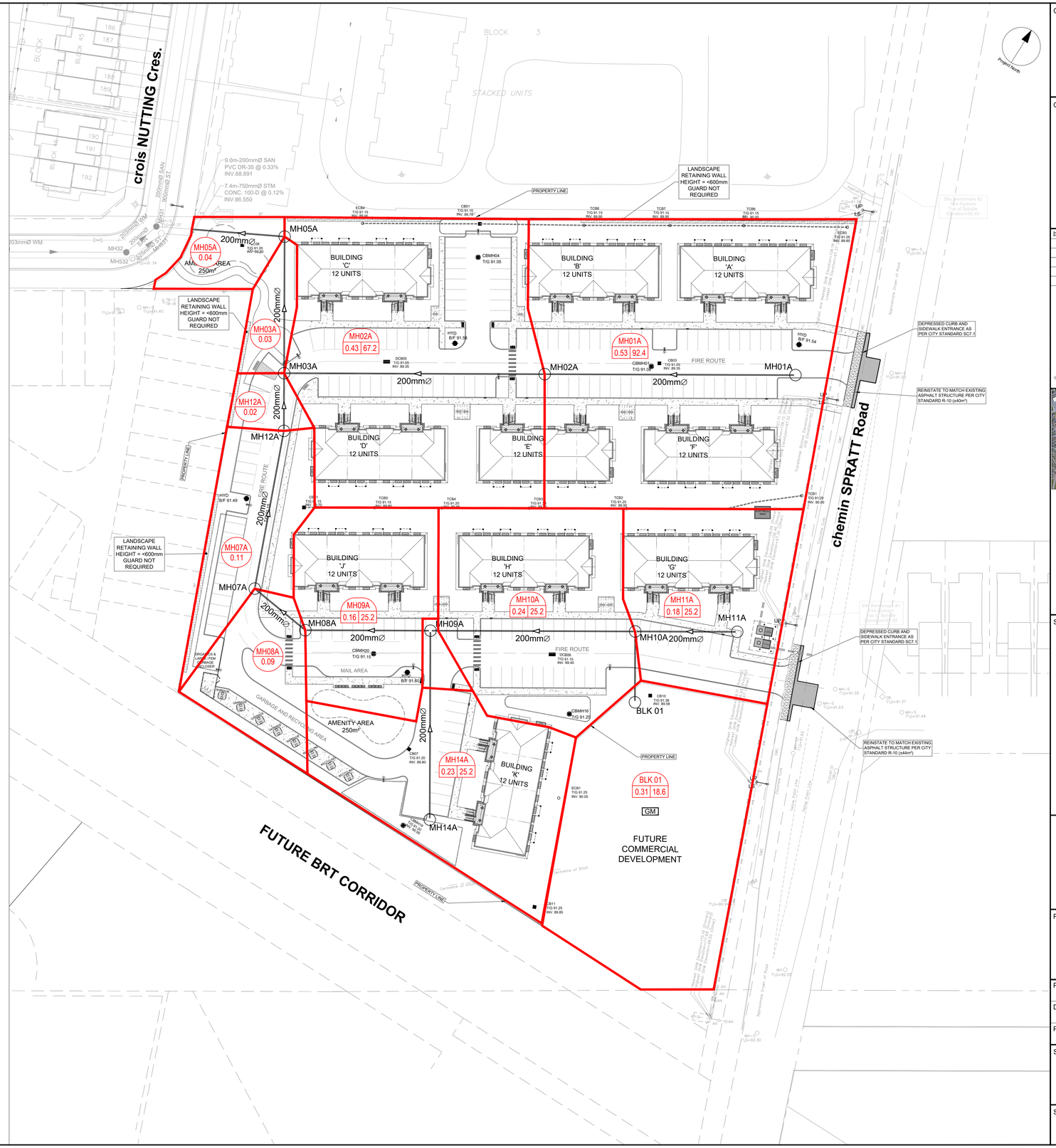
No.	Revision	Date
1.	Design Brief - Submission No. 1	2026-02-26

File Reference: 135856-6.04.04 | **Date:** 2026-02-26 | **Sheet No:** 1 of 1

LEGEND :

MH01A
0.53 | 92.4
- AREA NUMBER
- POPULATION
- AREA IN HECTARES

MH05A
0.04
- AREA NUMBER
- POPULATION



CLIENT

CLARIDGE HOMES

210 Gladstone Ave. Ottawa, On K0P 0Y6

ISSUES

No.	DESCRIPTION	DATE
5	SUBMISSION No.1 FOR ITY REVIEW	2026-03-30
6		
7		
8		

NOT FOR CONSTRUCTION

SEE Ø10, FOR NOTES, LEGEND, CB TABLE, STREET SECTIONS AND DETAILS

1:500 0 5 10 15 25m

SEAL

LICENSED PROFESSIONAL ENGINEER
L.D. Yannoulopoulos
2026-03-30
PROVINCE OF ONTARIO

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

PROJECT

4624 SPRATT ROAD

4624 SPRATT ROAD

PROJECT NO: 30260954	
DRAWN BY: **EH/DD**	CHECKED BY: **A.S.**
PROJECT MGR: **R.M.**	APPROVED BY: **R.M.**

SHEET TITLE

SANITARY DRAINAGE AREA PLAN

SHEET NUMBER	ISSUE
C-400	1

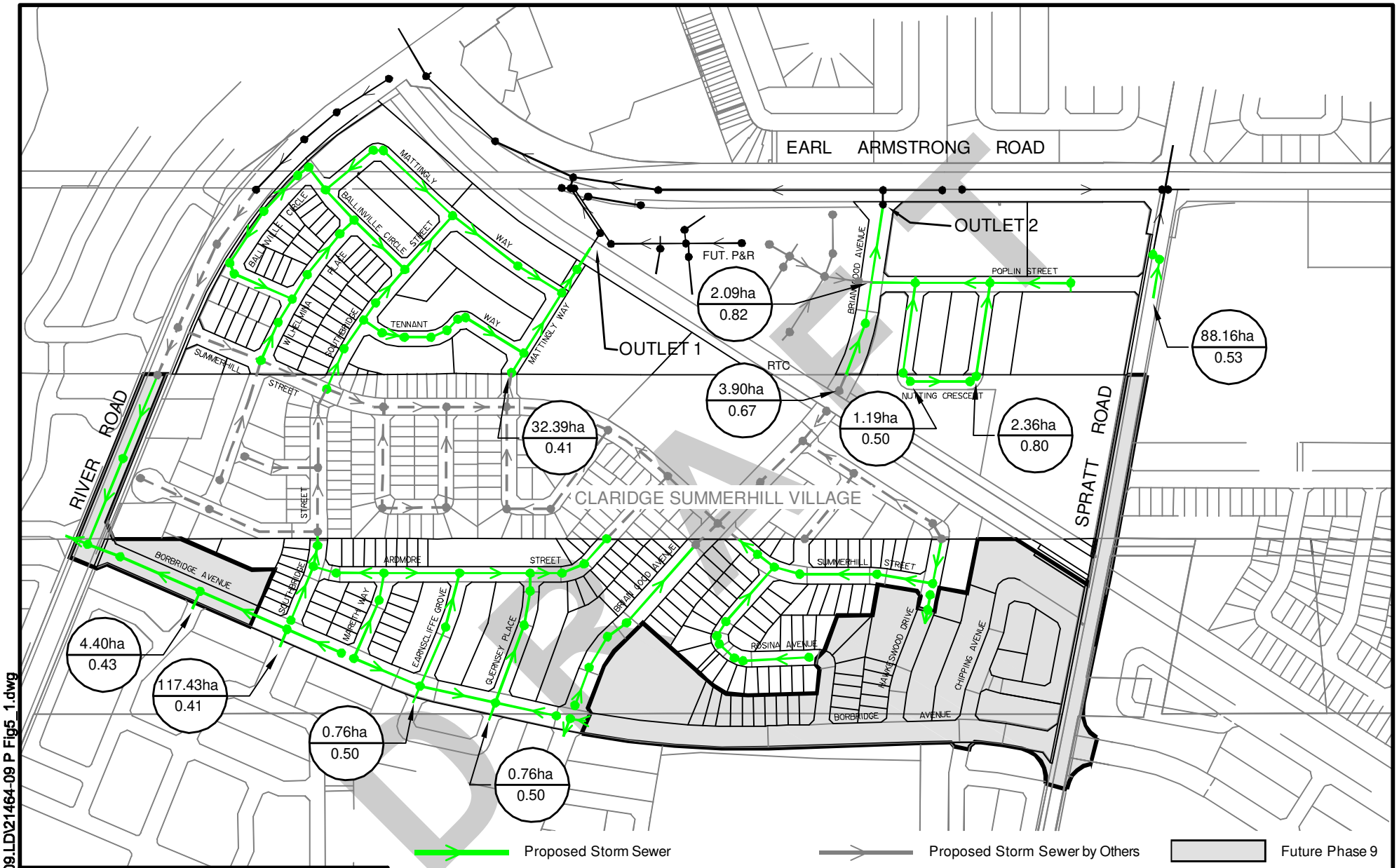
SCALE CHECK

CITY PLAN No. 18727 CITY FILE No. D07-12-22-0021

File Location: C:\DATA\ot\Jobs\85c76a4bc6d74f9689ca5183a8db1a835\cads\files\b.60bf45af-c1e6-40ca-8f79-a13c381003ce\Project Files\10_WIP\04_CIVIL\Sheets\C-400 SANITARY DRAINAGE AREA PLAN.dwg Last Saved: March 30, 2026, by donedi5754 Plotted: Monday, March 30, 2026 5:32:21 PM by aoesaser

Appendix D

- **RSDC Phase 9 - Figure 5.1 Storm Servicing Plan**
- **RSDC Phase 9 - Storm Drainage Plan**
- **RSDC Phase 9 - Storm Sewer Design Sheet**
- **RSDC Phase 9 - Figure 5.2 Storm Drainage Plan**
- **RSDC Phase 9 - Table 5.3 Allowable Inlet Capture Rate**
- **Storm Drainage Area Plan Drawing 500**
- **Ponding Plan 600**
- **Storm Sewer Design Sheet**



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

PROJECT: RIVERSIDE SOUTH PHASE 9
CITY OF OTTAWA

DRAWING: STORM SERVICING PLAN

DESIGN: G.D.
DRAWN: K.T.K.
CHECKED: J.L.P.
PLOTTED: Oct09,2012

DRAWING NO.: **FIGURE 5.1**
JLR NO: 21464-09

File Location: V:\21464-09.LD\21464-09 P Fig5_1.dwg

EXISTING RESIDENTIAL

PUFFIN COURT

BLOCK 85

BLOCK 84

BLOCK 80

EARL ARMSTRONG ROAD

SPRATT ROAD

POPLIN STREET

NUTTING CRESCENT

CHIPPING AVENUE

HAWKESWOOD DRIVE

EX. PARK + RIDE

FUTURE RTC

FUTURE RESIDENTIAL (BY OTHERS)

FUTURE COMMERCIAL (BY OTHERS)

FUTURE PHASE 8

SUMMERHILL VILLAGE BY OTHERS

Inlet Capture Rate
77 l/s/ha x 2.36ha =
181.72 l/s

LEGEND

- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- INTERCONNECTED ROADWAY CB C/W ONE 20.0L/S IPEX TYPE 'A' ICD (OR CITY APPROVED EQUIVALENT)
- CATCH BASIN WITH INDIVIDUAL 20.0 L/S IPEX TYPE 'A' ICD (OR CITY APPROVED EQUIVALENT)
- CATCH BASIN WITH INDIVIDUAL 13.4 L/S CUSTOM MADE ICD (OR CITY APPROVED EQUIVALENT)
- PROPOSED ELBOW CATCHBASIN
- PROPOSED TEE CATCHBASIN
- HYDRANT
- STORM SEWER & MANHOLE
- 250mmø PERFORATED PIPE AS PER CITY OF OTTAWA STANDARD S29
- LOT NUMBER
- DRAINAGE BOUNDARY
- DRAINAGE BOUNDARY BY OTHERS
- AREA IN HECTARES
- RUNOFF COEFFICIENT
- PIPE REACH UPSTREAM MANHOLE TO DOWNSTREAM MANHOLE
- PHASING LIMIT

NO.	ISSUE	DATE
9	ISSUED FOR MYLARS	AUG. 23, 2012
8	REVISED STORM SEWER ON SPRATT ROAD AND STUBS ON POPLIN STREET	JUNE 27, 2012
7	ISSUED FOR CONSTRUCTION	MAY 30, 2012
6	REVISED PER CITY COMMENTS & LEGAL	MAY 18, 2012
5	REVISED PER CITY COMMENTS / TENDER	MAR. 05, 2012
4	REVISED PER CITY COMMENTS	DEC. 09, 2011
3	REVISED PER CITY COMMENTS	SEPT. 06, 2011
2	REVISED PER CITY COMMENTS & LEGAL	APR. 28, 2011
1	SUBMITTED TO CITY FOR REVIEW	OCT. 13, 2010

SCALE: 1:1000

RIVERSIDE SOUTH DEVELOPMENT CORPORATION (RSDC)

J.L.Richards
ENGINEERS·ARCHITECTS·PLANNERS
J.L. Richards & Associates Limited
864 Lady Ellen Place
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K1Z 5M2
Tel: 613 728 3571
Fax: 613 728 6012

PROFESSIONAL STAMP: J.L. PARRISH 100056079 Jul-08-27 PROVINCE OF ONTARIO

PROJECT NORTH

PROJECT: RIVERSIDE SOUTH PHASE 9

CITY OF OTTAWA

DRAWING: STORM DRAINAGE PLAN

DESIGN: G.D.	DRAWING NO.: D2-STM
DRAWN: T.S.	
CHECKED: J.P.	JLR NO.: 21464-09
PLOTTED: Aug 23, 2012	

File Location: V:\21464-09\1\D2\21464-09 D2-STM.dwg

IBI GROUP
400-333 Preston Street
Ottawa, Ontario K1S 5N4 Canada
tel 613 225 1311 fax 613 225 9868
ibigroup.com

STORM SEWER DESIGN SHEET

Spratt Road Zens
City of Ottawa
Claridge Homes

LOCATION				AREA (Ha)										RATIONAL DESIGN FLOW														SEWER DATA								
STREET	AREA ID	FROM	TO	C= 0.20	C= 0.25	C= 0.30	C= 0.50	C= 0.57	C= 0.65	C= 0.69	C= 0.70	C= 0.76	C= 0.90	IND 2.78AC	CUM 2.78AC	INLET (min)	TIME IN PIPE	TOTAL (min)	i (2) (mm/hr)	i (5) (mm/hr)	i (10) (mm/hr)	i (100) (mm/hr)	2yr PEAK FLOW (L/s)	5yr PEAK FLOW (L/s)	10yr PEAK FLOW (L/s)	100yr PEAK FLOW (L/s)	FIXED FLOW IND	FIXED FLOW CUM	DESIGN FLOW (L/s)	CAPACITY (L/s)	LENGTH (m)	PIPE SIZE (mm) DIA	PIPE SIZE (mm) W	PIPE SIZE (mm) H	SLOPE (%)	VELOCITY (m/s)	AVAIL CAP (2yr) (L/s)	AVAIL CAP (2yr) (%)
Nutting Cresent	MH100, MH100C,D	MH100	MH101				0.07						0.06	0.25	0.25	10.00	0.90	10.90	76.81	104.19	122.14	178.56	19.00	25.78	30.22	44.18	0.00	0.00	19.00	59.68	44.03	300			0.35	0.818	40.68	68.16%
	MH130	MH130	MH131										0.05	0.13	0.13	10.00	0.50	10.50	76.81	104.19	122.14	178.56	9.61	13.03	15.28	22.34	0.00	0.00	9.61	59.68	24.42	300			0.35	0.818	50.07	83.90%
	MH131	MH131	MH132									0.34		0.72	0.84	10.50	1.48	11.98	74.95	101.64	119.13	174.13	63.21	85.72	100.48	146.87	0.00	0.00	63.21	91.46	71.39	375			0.25	0.802	28.24	30.88%
		MH132	MH101											0.00	0.84	11.98	0.10	12.08	69.95	94.78	111.05	162.27	59.00	79.94	93.67	136.87	0.00	0.00	59.00	91.46	4.60	375			0.25	0.802	32.45	35.49%
	MH101	MH101	MH102										0.10	0.25	1.34	12.08	1.33	13.40	69.66	94.37	110.58	161.57	93.41	126.56	148.29	216.68	0.00	0.00	93.41	179.46	64.02	525			0.16	0.803	86.05	47.95%
	MH109, MH109B	MH109	MH110				0.12					0.30		0.80	0.80	10.00	0.11	10.11	76.81	104.19	122.14	178.56	61.49	83.42	97.79	142.96	0.00	0.00	61.49	91.46	5.24	375			0.25	0.802	29.96	32.76%
	MH110	MH110	MH111										0.14	0.35	1.15	10.11	0.99	11.10	76.39	103.62	121.47	177.57	87.92	119.26	139.80	204.37	0.00	0.00	87.92	133.02	47.97	450			0.20	0.810	45.10	33.90%
	MH111	MH111	MH112			0.12								0.10	1.25	11.10	0.20	11.30	72.84	98.74	115.72	169.13	91.12	123.52	144.77	211.58	0.00	0.00	91.12	133.02	9.80	450			0.20	0.810	41.89	31.50%
		MH112	MH113											0.00	1.25	11.30	0.39	11.68	72.16	97.81	114.62	167.51	90.27	122.36	143.39	209.56	0.00	0.00	90.27	133.02	18.77	450			0.20	0.810	42.75	32.14%
	CBMH9. CBMH9B	CBMH9	MH113				0.10					0.13		0.41	0.41	10.00	0.78	10.78	76.81	104.19	122.14	178.56	31.77	43.10	50.53	73.86	0.00	0.00	31.77	59.68	38.44	300			0.35	0.818	27.91	46.77%
	MH113	MH113	MH114									0.20		0.42	2.09	11.68	0.80	12.48	70.89	96.07	112.57	164.51	147.97	200.52	234.97	343.36	0.00	0.00	147.97	179.46	38.39	525			0.16	0.803	31.49	17.55%
		MH114	MH102											0.00	2.09	12.48	0.18	12.66	68.43	92.69	108.60	158.67	142.84	193.47	226.68	331.19	0.00	0.00	142.84	179.46	8.65	525			0.16	0.803	36.62	20.41%
	MH102	MH102	MH103										0.10	0.25	3.68	13.40	0.51	13.91	65.81	89.09	104.36	152.45	242.07	327.72	383.90	560.79	0.00	0.00	242.07	402.33	26.84	750			0.12	0.882	160.25	39.83%
	MH103	MH103	MH104										0.42	1.05	4.73	13.91	0.63	14.55	64.46	87.24	102.19	149.26	304.85	412.61	483.29	705.90	0.00	0.00	304.85	402.33	33.60	750			0.12	0.882	97.47	24.23%
		MH104	*EX Stub*											0.00	4.73	14.55	0.46	15.00	62.86	85.05	99.61	145.47	297.28	402.23	471.08	687.98	0.00	0.00	297.28	402.33	24.13	750			0.12	0.882	105.05	26.11%
						0.12	0.29					0.97	0.87	4.73	TRUE																	750						

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

Notes:
1. Mannings coefficient (n) = 0.013

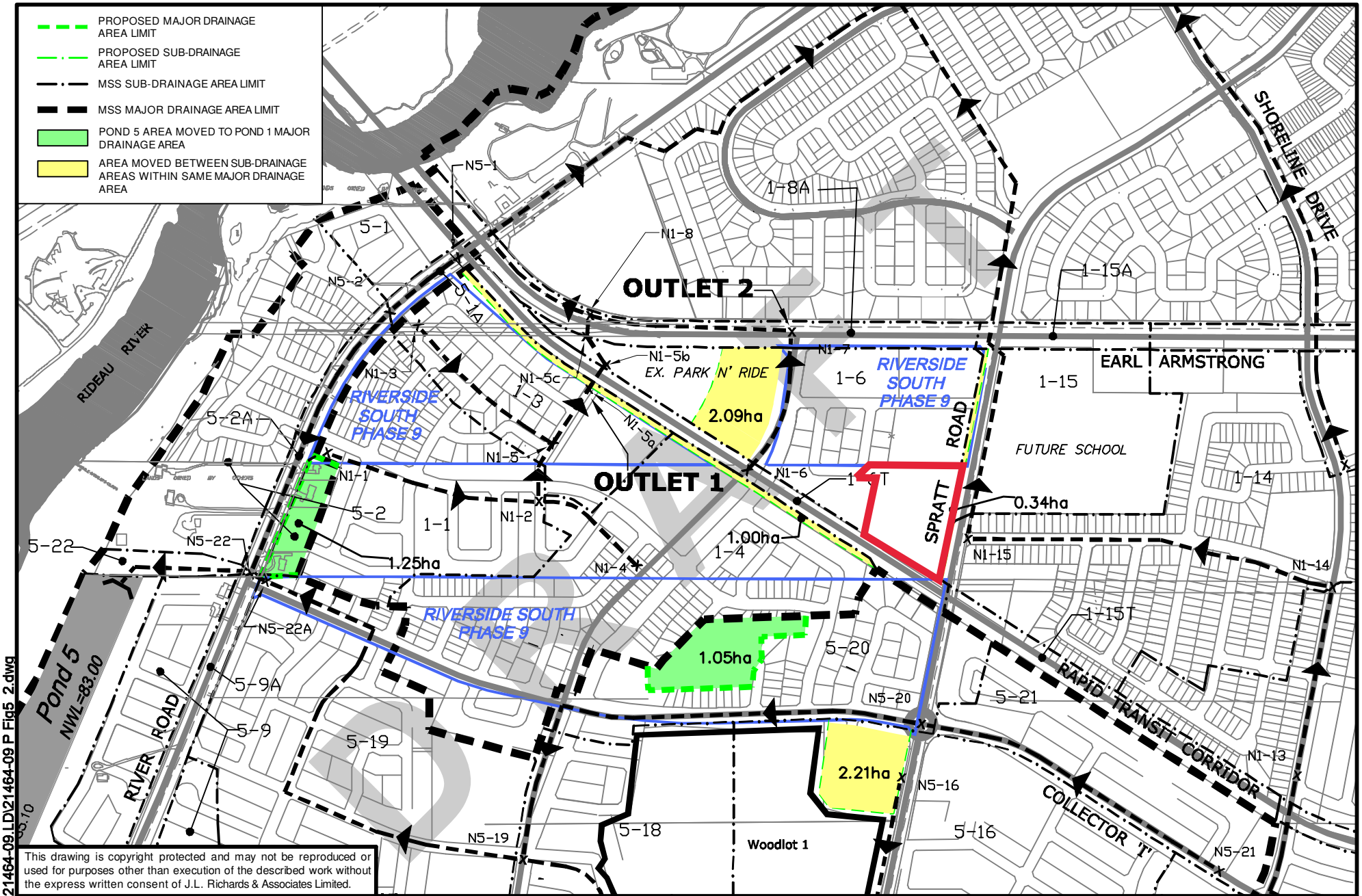
Designed: W.Z. & R.M.

Checked: D.G.Y.

Dwg. Reference: 135856-500

No.	Revision	Date
1.	Servicing Brief - Submission No. 1	2021-11-29

File Reference: 135856.6.04.04
Date: 2021-11-29
Sheet No: 1 of 1



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864 Lady Ellen Place
Ottawa, ON Canada
K1Z 5M2
Tel: 613 728 3571
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PROJECT:
RIVERSIDE SOUTH PHASE 9
CITY OF OTTAWA

DRAWING:
STORM DRAINAGE PLAN

DESIGN: OTHER
DRAWN: T.B.
CHECKED: J.L.P.
PLOTTED: Oct05,2011

DRAWING NO.:
FIGURE 5.2

JLR NO:
21464-09

File Location: V:\21464-09.LD\21464-09 P Fig5 2.dwg

Table 5.2: Storm Runoff Coefficients

Land Use Description	Runoff Coefficient, C
Residential - Low Density	0.40
Residential - Medium Density	0.50
Residential - High Density	0.60
Core Area	0.80
Commercial Area	0.80
Employment Lands	0.70
Schools	0.40
Institutional (other than school)	0.60
Collector Road/Transitway ROW	0.67
Parkland/Open Space/Hydro/Pipeline Corridor	0.20

Table 5.3: Allowable Inlet Capture Rates

Subcatchment Area ID	Inlet Capture Rate	Subcatchment Area ID	Inlet Capture Rate
1-1	68 L/s/ha	5-1	100 L/s/ha
1-3	57 L/s/ha	5-1A	221 L/s/ha
1-4	83 L/s/ha	5-2	62 L/s/ha
1-6	77 L/s/ha	5-2A	179 L/s/ha
1-6T	151 L/s/ha	5-19	58 L/s/ha
1-15	136 L/s/ha	5-20	77 L/s/ha

5.3.3 Major System

The RSCISSU provides specific design guidelines with regard to on-site storage requirements (refer to Appendix 'F'). On this basis, the provision of 50 m^3/ha of road sag storage is required for all subcatchment areas (i.e., subcatchment areas 1-1 to 1-6, inclusive) that are tributary to the noted outlets in order to meet the RSCISSU requirements. A discussion of major overland flow for RSDC Phase 9 and Claridge Homes Summerhill Village lands is provided in Section 5.5, with detailed calculations included in Appendix 'G'.

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

STORM SEWER DESIGN SHEET

4624 Spratt Road
Claridge Homes
CITY OF OTTAWA

LOCATION				AREA (Ha)											RATIONAL DESIGN FLOW													SEWER DATA								
STREET	AREA ID	FROM	TO	C= 0.29	C= 0.35	C= 0.40	C= 0.48	C= 0.51	C= 0.54	C= 0.66	C= 0.70	C= 0.75	C= 0.78	C= 1.00	IND 2.78AC	CUM 2.78AC	INLET (min)	TIME IN PIPE	TOTAL (min)	i (2) (mm/hr)	i (5) (mm/hr)	i (10) (mm/hr)	i (100) (mm/hr)	2yr PEAK FLOW (L/s)	5yr PEAK FLOW (L/s)	10yr PEAK FLOW (L/s)	100yr PEAK FLOW (L/s)	FIXED FLOW IND	FIXED FLOW CUM	DESIGN FLOW (L/s)	CAPACITY (L/s)	LENGTH (m)	PIPE SIZE (mm) DIA	PIPE SIZE (mm) W	PIPE SIZE (mm) H	SLOPE (%)	VELOCITY (m/s)	AVAIL CAP (2yr) (L/s)	AVAIL CAP (2yr) (%)
		MH05	MH06												0.00	0.00	10.00	0.49	10.49	76.81				0.00						0.00	40.68	23.50	250			0.43	0.803	40.68	100.00%
	External Commercial	CB	MH06									0.31			0.60	0.60	10.00	0.27	10.27	76.81				46.33						46.33	58.82	13.17	300			0.34	0.806	12.49	21.23%
		MH06	MH07												0.00	0.60	10.49	1.12	11.61	74.98				45.23						45.23	58.82	54.29	300			0.34	0.806	13.59	23.10%
		MH30	MH07												0.00	0.00	10.00	0.90	10.90	76.81				0.00						0.00	40.68	43.17	250			0.43	0.803	40.68	100.00%
		MH07	MH08												0.00	0.60	11.61	0.30	11.91	71.13				42.91						42.91	58.82	14.65	300			0.34	0.806	15.91	27.05%
	MH05	DCB06	CBMH16								0.23				0.45	0.45	10.00	0.21	10.21	76.81				34.38						34.38	62.04	15.36	250			1.00	1.224	27.66	44.59%
	CBMH16	CBMH16	MH17		0.03										0.03	0.48	10.21	0.88	11.08	76.01				36.24						36.24	91.46	42.12	375			0.25	0.802	55.22	60.37%
	CB11	MH17	MH18				0.06								0.08	0.56	11.08	0.16	11.25	72.88				40.58						40.58	91.46	7.75	375			0.25	0.802	50.87	55.63%
	CBMH19	MH18	CBMH19	0.02											0.02	0.57	11.25	0.66	11.90	72.33				41.44						41.44	91.46	31.74	375			0.25	0.802	50.01	54.68%
	MH30	CBMH19	CBMH20							0.17					0.31	0.88	11.25	0.89	12.14	72.33				64.01						64.01	133.02	43.45	450			0.20	0.810	69.01	51.88%
	MH07	CBMH20	MH08							0.17					0.31	1.20	11.90	0.07	11.98	70.19				84.00						84.00	133.02	3.44	450			0.20	0.810	49.01	36.85%
		MH08	MH09												0.00	1.80	11.98	0.33	12.31	69.97				125.95						125.95	179.46	16.13	525			0.16	0.803	53.51	29.82%
		MH09	MH10												0.00	1.80	12.31	0.40	12.71	68.94				124.10						124.10	179.46	19.20	525			0.16	0.803	55.36	30.85%
	MH34	CB31	MH34				0.40								0.53	0.53	10.00	0.06	10.06	76.81				41.00						41.00	62.04	4.09	250			1.00	1.224	21.04	33.92%
	MH10	CB04	MH34							0.18					0.33	0.33	10.00	0.11	10.11	76.81				25.68						25.68	34.22	6.70	200			1.00	1.055	8.54	24.96%
		MH34	MAIN												0.00	0.87	10.06	0.20	10.25	76.59				66.49						66.49	91.46	9.40	375			0.25	0.802	24.97	27.30%
		MH10	MH11												0.00	2.67	12.71	0.93	13.64	67.76				180.80						180.80	230.96	44.24	600			0.13	0.791	50.16	21.72%
		MH11	MH12												0.00	2.67	13.64	0.27	13.91	65.17				173.89						173.89	230.96	12.86	600			0.13	0.791	57.06	24.71%
	CBMH01	CBMH01	MH02									0.31			0.65	0.65	10.00	0.91	10.91	76.81				49.64						49.64	230.96	43.37	600			0.13	0.791	181.31	78.51%
	CB01	CB01	CBMH04					0.17							0.24	0.24	10.00	0.13	10.13	76.81				18.51						18.51	34.22	8.36	200			1.00	1.055	15.70	45.90%
	CBMH04	CBMH04	MH02									0.08			0.17	0.41	10.13	0.58	10.71	76.30				31.12						31.12	230.96	27.59	600			0.13	0.791	199.84	86.53%
	MH02	MH02	MH03										0.18		0.39	1.44	10.71	0.97	11.69	74.17				107.14						107.14	230.96	46.23	600			0.13	0.791	123.82	53.61%
		MH03	MH12												0.00	1.44	11.69	0.09	11.78	70.88				102.39						102.39	230.96	4.50	600			0.13	0.791	128.57	55.67%
		MH12	MH13												0.00	4.11	13.91	0.17	14.08	64.46				265.11						265.11	290.85	7.85	675			0.11	0.787	25.74	8.85%
		MH25	MH26												0.00	0.00	10.00	1.58	11.58	76.81				0.00						0.00	40.68	75.90	250			0.43	0.803	40.68	100.00%
		MH26	MH13												0.00	0.00	11.58	1.09	12.66	71.24				0.00						0.00	40.68	52.36	250			0.43	0.803	40.68	100.00%
		MH13	MH14												0.00	4.11	14.08	0.49	14.57	64.03				263.35						263.35	290.85	23.30	675			0.11	0.787	27.50	9.45%
		MH14	*EXBLK*		0.07										0.07	4.18	14.57	0.41	14.98	62.80				262.55						262.55	402.33	21.50	750			0.12	0.882	139.78	34.74%
				0.02	0.10	0.00	0.46	0.17	0.00	0.52	0.54	0.39	0.18	0.000	4.18	TRUE																					
														0.00	Uncontrolled Area Offsite																						
														2.38	Controlled Area Onsite																						

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

Notes:
1. Mannings coefficient (n) = 0.013

Designed: AS/RM
Checked: RM/DY
Dwg. Reference: 135856-500

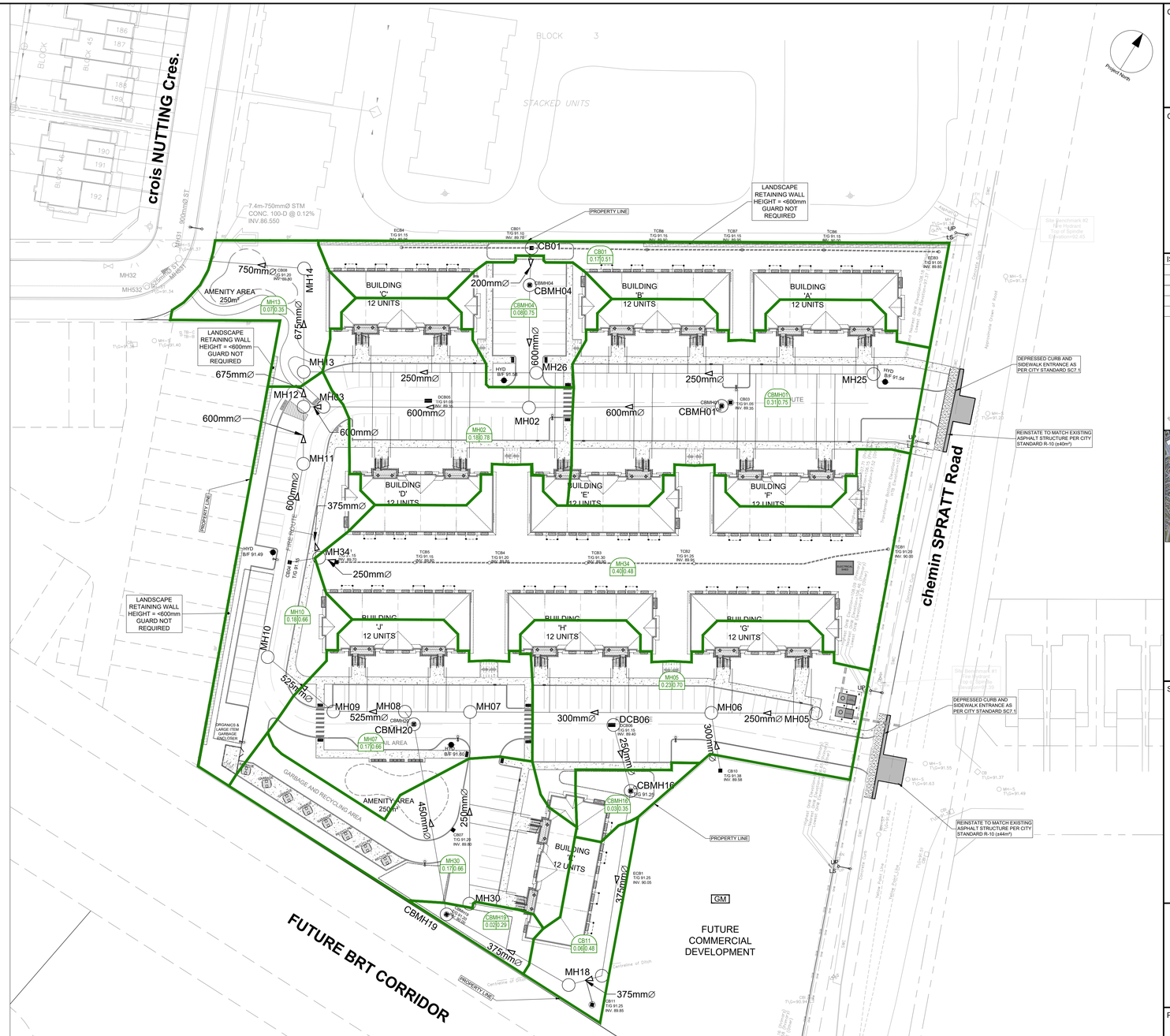
No.	Revision	Date
1.	Serviceability Report - Submission No. 1	2026-02-26

File Reference: 135856-6.04.04
Date: 2026-02-26
Sheet No: 1 of 1

LEGEND :

CBMH01
0.31|0.75

- AREA NUMBER
- RUNOFF COEFFICIENT
- AREA IN HECTARES



CLIENT

CLARIDGE HOMES

210 Gladstone Ave. Ottawa, On K0P 0Y6

ISSUES

No.	DESCRIPTION	DATE
5	SUBMISSION No.1 FOR ITY REVIEW	2026-03-30
6		
7		
8		

NOT FOR CONSTRUCTION

SEE Ø10, FOR NOTES, LEGEND, CB TABLE, STREET SECTIONS AND DETAILS

1:500 0 5 15 25m

SEAL

LICENCED PROFESSIONAL ENGINEER
I.D. S. Tannoulopoulos
2026-03-30
PROVINCE OF ONTARIO

ARCADIS

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

PROJECT

4624 SPRATT ROAD

4624 SPRATT ROAD

PROJECT NO: 30260954	
DRAWN BY: **EH/DD**	CHECKED BY: **A.S.**
PROJECT MGR: **R.M.**	APPROVED BY: **R.M.**

SHEET TITLE

STORM DRAINAGE AREA PLAN

SHEET NUMBER	ISSUE
C-500	1

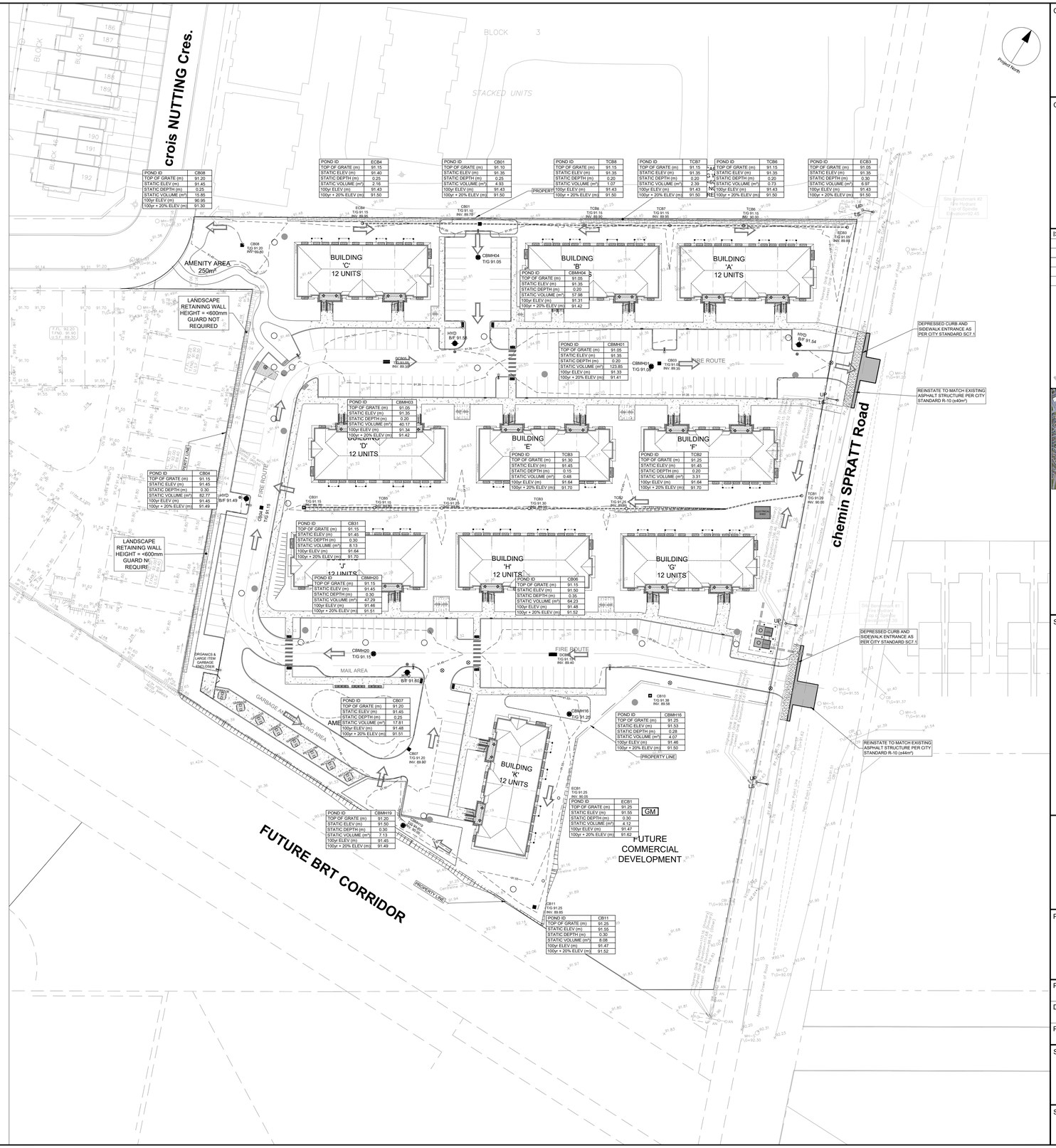
SCALE CHECK

CITY PLAN No. 18727 CITY FILE No. D07-12-22-0021

File Location: C:\DARoot\Jobs\9f5c79a4bdcf74f969ca5183d6b1a835\autofiles\b 60f4f54af-c1ef-40ca-8f79-a13c381003ce\Project Files\10_WIP\04_CIVIL\Sheets\C-500 STORM DRAINAGE AREA PLAN.dwg Last Saved: March 30, 2026, by dored5754 Plotted: Monday, March 30, 2026 5:32:26 PM by acesuser

PONDING LEGEND

- PROPOSED DITCH C/W FLOW DIRECTION AND SLOPE
- SLOPE C/W FLOW DIRECTION
- MAJOR OVERLAND FLOW ROUTE
- PROPOSED SPOT GRADE
- PROPOSED SWALE GRADE
- PROPOSED SWALE HIGH POINT GRADE
- FULL STATIC PONDING GRADE
- RETAINING WALL C/W TOP OF WALL
- TERRACING 3:1 MAXIMUM UNLESS NOTED OTHERWISE



CLIENT

CLARIDGE HOMES

210 Gladstone Ave. Ottawa, On K0P 0Y6

Arcadis Professional Services (Canada) Inc.
formerly IBI Group Professional Services (Canada) Inc

ISSUES

No.	DESCRIPTION	DATE
5	SUBMISSION No.1 FOR ITY REVIEW	2026-03-30
6		
7		
8		

NOT FOR CONSTRUCTION

SEE Ø10, FOR NOTES, LEGEND, CB TABLE, STREET SECTIONS AND DETAILS

SEAL

LICENSED PROFESSIONAL ENGINEER
L.D. S. Tannoulopoulos
2026-03-30
PROVINCE OF ONTARIO

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

PROJECT

4624 SPRATT ROAD

4624 SPRATT ROAD

PROJECT NO: 30260954	
DRAWN BY: **EH/DD**	CHECKED BY: **A.S.**
PROJECT MGR: **R.M.**	APPROVED BY: **R.M.**

SHEET TITLE

PONDING PLAN

SHEET NUMBER	ISSUE
C-600	1

SCALE CHECK

CITY PLAN No. 18727 CITY FILE No. D07-12-22-0021

File Location: C:\DARcot\Jobs\05c75b4dbdd749588ad5183d8b1a835\aa4d1ea5\files\b.60bf45a4-c1e6-40ca-8f79-a13c381003ce\Project Files\10_WIP\04_CIV\1LSheet\C-600 PONDING PLAN.dwg Last Saved: March 30, 2026, by dorie5754 Plotted: Monday, March 30, 2026 5:32:31 PM by aoesaser

Plotted: Monday, March 30, 2026 5:32:31 PM by aoesaser

Appendix E

- **RSDC Phase 9 - 1:100 Year HGL Analysis**

J.L.Richards
ENGINEERS · ARCHITECTS · PLANNERS

CITY OF OTTAWA

RIVERSIDE SOUTH PHASE 9
RIVERSIDE SOUTH DEVELOPMENT CORPORATION
JLR NO. 21464-09

STORM SEWER DESIGN SHEET AND HYDRAULIC GRADE LINE ANALYSIS
1:100 YEAR IDF CURVE

Designed by: GD
Checked by: JLP
Date: Oct-11
Revised: Apr-11, Aug-11, Dec-11, Feb-12, May-12, Jun-12, Sep-12

100 YEAR IDF CURVE
Manning's Coefficient (n) = 0.013

LEGEND
(grey) DENOTES FUTURE OR EXISTING SEWERS, AND EXTERNAL FLOWS

Drainage areas, 1:100 yr peak flow generation, ICDs and 1:100 yr peak flow

STREET	PHASE	MH FROM	MH TO	0.20	0.40	0.45	0.50	0.60	0.67	0.70	0.80	Total Area (ha)	Cum. Area (ha)	2.78AR	Cum. 2.78AR	Time (min)	100-Yr Intens. (mm/hr)	Peak Flow (L/s)	ICD @ 13.4 L/s	ICD @ 20 L/s	ICD Flow (L/s)	Cum. ICD Flow (L/s)	Front & Rear Yards (L/s)	Q_d/Q_{cap}
Northeast Quadrant (Flow North to Earl Armstrong via Brian Good Avenue)																								
FUTURE COMMERCIAL	FUT 9	STUB (N)	521								1.23	1.23	1.23	2.74	2.74	17.92	128.45	351.37				94.71	94.71	0.38
FUTURE STACKS	FUT 9	STUB (S)	521				1.30					1.30	1.30	1.81	1.81	17.75	129.19	233.44				100.10	100.10	0.56
POPLIN STREET	9	521	522A				0.34					0.34	2.87	0.47	5.02	**17.92**	128.45	644.18		2.00	40.00	234.81	234.81	0.50
																19.02								
FUTURE STACKS	FUT 9	STUB (N)	522A						1.41			1.41	1.41	2.63	2.63	13.15	154.11	404.74				108.57	108.57	0.60
POPLIN STREET	9	522A	522				0.06					0.06	4.34	0.08	7.72	**19.02**	123.77	956.09	1.00		13.40	356.78	356.78	0.64
CLARIDGE RESIDENTIAL	FUT IBI	STUB	533 (E)				1.19					1.19	1.19	1.65	1.65	15.00	142.89	236.36				91.63	91.63	0.51
NUTTING CRESCENT	9	533 (E)	532										1.19		1.65	15.00	142.89	236.36		1.00	20.00	111.63	111.63	0.62
NUTTING CRESCENT	9	532	531										1.19		1.65	16.45	135.28	223.77				111.63	111.63	0.62
																16.65								
CLARIDGE COMMERCIAL	FUT IBI	STUB	531								2.36	2.36	2.36	5.25	5.25	20.83	116.89	613.51				181.72	181.72	0.45
NUTTING CRESCENT	9	531	522				0.72					0.72	4.27	1.00	7.90	**20.83**	116.89	923.83	2.00	1.00	46.80	340.15	340.15	0.48
																22.59								
POPLIN STREET	9	522	523				0.30					0.30	8.91	0.42	16.05	**22.59**	110.96	1780.32	1.00	1.00	33.40	730.33	730.33	0.57
																23.92								
NUTTING CRESCENT	9	533 (W)	534													10.00	178.56							
NUTTING CRESCENT	9	534	523				0.59					0.59	0.59	0.82	0.82	10.26	176.23	144.53	1.00	1.00	33.40	33.40	33.40	0.28
																12.00								
POPLIN STREET	9	523	511				0.16					0.16	9.66	0.22	17.09	**23.92**	106.90	1826.74	1.00	2.00	53.40	817.13	817.13	0.64
																24.70								
BRIAN GOOD AVE	IBI	IBI MH 151	STUB (IBI)						3.90			3.90	3.90	7.26	7.26	15.00	142.89	1038.00				506.60	506.60	0.56
																15.24								
BRIAN GOOD AVE	9	STUB (IBI)	513										3.90		7.26	**15.24**	141.58	1028.45				506.60	506.60	0.56
BRIAN GOOD AVE	9	513	512										3.90		7.26	15.59	139.67	1014.60				506.60	506.60	0.56
BRIAN GOOD AVE	9	512	511				0.32					0.32	4.22	0.44	7.71	16.31	135.98	1048.22		2.00	40.00	546.60	546.60	0.61
																17.12								
PARK 'N RIDE	FUT	STUB (FUT. P&R)	511						(at C=0.823)		2.09	2.09	2.09	4.78	4.78	11.50	165.92	793.39				160.93	160.93	0.37
																11.68								
BRIAN GOOD AVE	9	511	EX. MH 102 (AECOM)				0.26					0.26	16.23	0.36	29.94	**24.70**	104.67	3133.67		2.00	40.00	1564.66	1564.66	0.67
												STANTEC AREA	**12.58**			**25.90**			ALLOW. ICD CAPTURE			**1538.31**		
			TOTAL AREAS				5.24		5.31		5.68								STANTEC CAPTURE			**1183.26**		
Northeast Quadrant (Flow North to Earl Armstrong via Spratt Road)																								
STANTEC (N1-11 to N1-15)	FUT		505									87.62	87.62	128.10	128.10	39.80	75.41	9660.53				7490.32	7490.32	0.88
SPRATT ROAD	FUT	505	504										87.62		128.10	39.80	75.41	9660.53				7490.32	7490.32	0.62
SPRATT ROAD	FUT	504	503										87.62		128.10	40.32	74.72	9571.43				7490.32	7490.32	0.62
SPRATT ROAD	9	503	502							0.23		0.23	87.85	0.45	128.55	40.87	74.00	9513.02		2.00	40.00	7530.32	7530.32	0.62
SPRATT ROAD	9	502	501										87.85		128.55	41.45	73.26	9417.87				7530.32	7530.32	0.62
SPRATT ROAD	9	501	EX. STUB (AECOM)										87.85		128.55	41.51	73.18	9407.34				7530.32	7530.32	0.92
SPRATT ROAD	9	EX. STUB (AECOM)	EX. (STANTEC 1-EX)						1.10	0.31		1.41	89.26	2.65	131.20	41.58	73.10	9590.24		2.00	232.50	7762.82	7762.82	0.95
												STANTEC AREA	**89.60**			**42.36**			ALLOW. ICD CAPTURE			**7756.26**		
			TOTAL AREAS						1.10	0.54									STANTEC CAPTURE			**7802.50**		

Sewer data, upstream and downstream

STREET	MH FROM	MH TO	Dia (mm)	Slope (%)	Q full (L/s)	V full (m/s)	V partial (m/s)	Depth of Flow (m)	V surch (m/s)	Length (m)	Flow Time (min)	U/S Ex. Ground	U/S Prop. Centreline	U/S Obvert Drop	U/S Obvert	U/S Invert	U/S Cover	D/S Ex. Ground	D/S Prop. Centreline	D/S Obvert Drop	D/S Obvert	D/S Invert	D/S Cover
FUTURE COMMERCIAL	STUB (N)	521	600	0.15	248.09	0.85	0.81	0.256	0.32	6.50	0.13	91.50	91.21		87.249	86.640	3.96	90.80	91.09		87.239	86.630	3.85
FUTURE STACKS	STUB (S)	521	525	0.16	179.46	0.80	0.83	0.283	0.45	11.50	0.24	91.50	91.21	0.780	88.038	87.504	3.17	90.80	91.09		88.019	87.486	3.07
POPLIN STREET	521	522A	825	0.10	469.99	0.85	0.87	0.411	0.43	56.62	1.11	90.80	91.09		87.239	86.401	3.85	90.80	91.20		87.184	86.345	4.02
FUTURE STACKS	STUB (N)	522A	525	0.16	179.46	0.80	0.83	0.299	0.49	6.50	0.13	92.50	91.32		87.194	86.660	4.12	90.80	91.20		87.184	86.649	4.02
POPLIN STREET	522A	522	825	0.14	560.31	1.02	1.08	0.478	0.65	37.27	0.61	90.80	91.09		87.184	86.345	3.91	91.50	91.35	0.014	87.132	86.293	4.22
CLARIDGE RESIDENTIAL	STUB	533 (E)	525	0.16	179.46	0.80			0.41	7.50	0.16	90.88	91.35		87.442	86.908	3.91	91.50	91.35		87.430	86.896	3.92
NUTTING CRESCENT	533 (E)	532	525	0.16	179.46	0.80	0.83	0.304	0.50	69.92	1.45	91.50	91.35		87.432	86.898	3.92	91.00	91.37		87.320	86.787	4.05
NUTTING CRESCENT	532	531	525	0.16	179.46	0.80	0.83	0.304	0.50	9.56	0.20	91.00	91.37		87.320	86.787	4.05	91.25	91.37		87.305	86.771	4.07
CLARIDGE COMMERCIAL	STUB	531	750	0.12	402.33	0.88			0.40	7.38	0.14	90.80	91.37		87.312	86.550	4.06	91.25	91.37		87.303	86.541	4.07
NUTTING CRESCENT	531	522	900	0.14	706.64	1.08	1.09	0.439	0.52	113.69	1.76	91.25	91.37		87.305	86.390	4.07	90.80	91.20		87.146	86.230	4.05
POPLIN STREET	522	523	1200	0.10	1286.19	1.10	1.16	0.646	0.63	87.79	1.33	90.80	91.20		87.146	85.926	4.05	90.40	91.10		87.058	85.838	4.04
NUTTING CRESCENT	533 (W)	534	375	0.26	93.27	0.82				12.67	0.26	91.50	91.35		87.565	87.184	3.79	91.50	91.35		87.532	87.151	3.82
NUTTING CRESCENT	534	523	375	0.43	119.94	1.05	0.90	0.137	0.29	110.23	1.75	91.50	91.35		87.532	87.151	3.82	90.40	91.10		87.058	86.677	4.04
POPLIN STREET	523	511	1200	0.10	1286.19	1.10	1.17	0.695	0.70	51.71	0.78	90.40	91.10		87.058	85.838	4.04	90.30	90.30		87.006	85.787	3.29
BRIAN GOOD AVE	IBI MH 151	STUB (IBI)	1050	0.10	900.87	1.01			0.57	14.41	0.24				87.134	86.067		91.50	90.80		87.120	86.053	3.68
BRIAN GOOD AVE	STUB (IBI)	513	1050	0.10	900.87	1.01	1.05	0.565	0.57	21.42	0.35	91.50	90.80		87.120	86.053	3.68	90.90	90.56		87.098	86.031	3.46
BRIAN GOOD AVE	513	512	1050	0.10	900.87	1.01	1.05	0.565	0.57	43.46	0.72	90.90	90.56		87.098	86.031	3.46	90.60	90.05		87.055	85.988	3.00
BRIAN GOOD AVE	512	511	1050	0.10	900.87	1.01	1.05	0.597	0.61	48.74	0.81	90.60	90.05		87.055	85.988	3.00	90.30	90.30		87.006	85.939	3.29
PARK 'N RIDE	STUB (FUT. P&R)	511	675	0.25	438.47	1.19			0.44	13.00	0.18		90.19		87.035	86.350	3.15	90.30	90.30		87.003	86.317	3.30
																					AECOM INV.	**86.317**	
BRIAN GOOD AVE	511	EX. MH 102 (AECOM)	1500	0.10	2332.02	1.28	1.35	0.914	0.86	92.00	1.20	90.30	90.30		87.006	85.482	3.29	89.75	89.86		86.914	85.390	2.95
																					AECOM INV.	**85.390**	
STANTEC (N1-11 to N1-15)		505	2100	0.22	8484.36	2.37	2.66	1.558	2.10									91.74			86.721	84.587	5.02
SPRATT ROAD	505	504	2400	0.22	12113.35	2.59	2.75	1.366	1.60	81.03	0.52	91.74			86.721	84.283	5.02	91.53			86.543	84.104	4.99
SPRATT ROAD	504	503	2400	0.22	12113.35	2.59	2.75	1.366	1.60	85.00	0.55	91.53			86.543	84.104	4.99	91.32			86.356	83.917	4.96
SPRATT ROAD	503	502	2400	0.22	12113.35	2.59	2.69	1.390	1.61	90.00	0.58	91.32			86.356	83.917	4.96	91.15			86.158	83.719	4.99
SPRATT ROAD	502	501	2400	0.22	12113.35	2.59	2.69	1.390	1.61	10.09	0.06	91.15			85.669	83.719	5.48	91.15			85.647	83.697	5.50
SPRATT ROAD	501	EX. STUB (AECOM)	2400	0.10	8166.82	1.75	1.99	1.829	1.61	7.09	0.07	91.15			86.135	83.697	5.01	91.08			86.128	83.690	4.95
SPRATT ROAD	EX. STUB (AECOM)	EX. (STANTEC 1-EX)	2400	0.10	8166.82	1.75	2.00	1.878	1.66	82.29	0.78	91.08			86.128	83.690	4.95	91.42			86.038	83.600	5.38
															AECOM STUB INV.	**83.690**					EX. INV.	**83.600**	

Head loss calculation and 1:100 yr HGL elevations

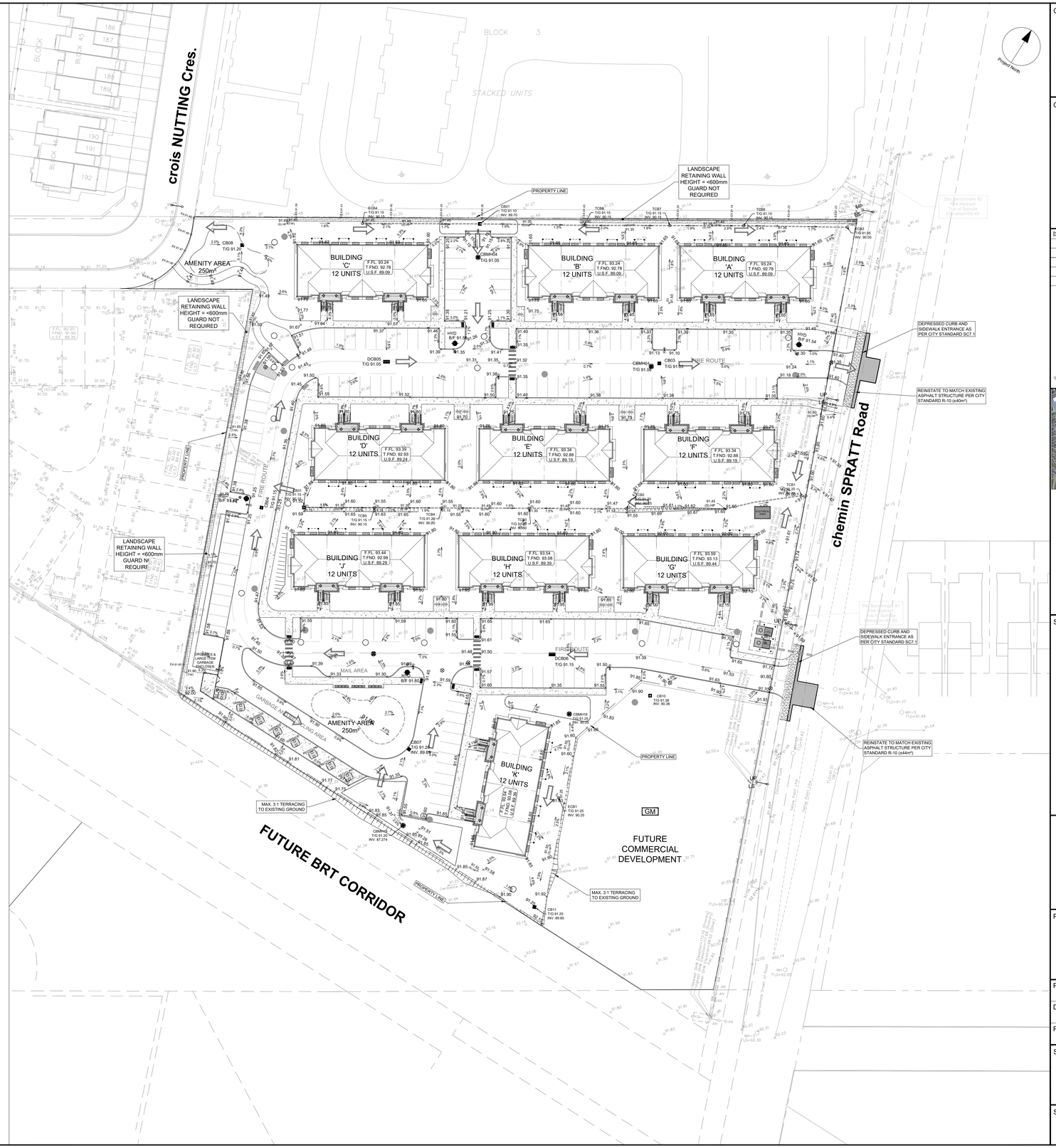
STREET	MH FROM	MH TO	f	L/D	K Friction	$V^2/2g$ (m)	Major Losses (m)	Minor Losses Straight	Minor Losses Expans.	Minor Losses Bend	Minor Losses (m)	Total Losses (m)	Applied Losses (m)	HGL U/S (m)	HGL D/S (m)
FUTURE COMMERCIAL	STUB (N)	521	0.025	10.663	0.265	0.005	0.001			0.007	0.007	0.009	0.009	87.429	87.420
FUTURE STACKS	STUB (S)	521	0.026	21.560	0.560	0.035	0.020			0.047	0.047	0.067		88.038	88.019
POPLIN STREET	521	522A	0.022	67.550	1.508	0.009	0.014	0.001			0.001	0.015	0.015	87.420	87.405
FUTURE STACKS	STUB (N)	522A	0.026	12.186	0.316	0.012	0.004			0.016	0.016	0.020	0.020	87.424	87.405
POPLIN STREET	522A	522	0.022	44.464	0.993	0.021	0.021	0.003			0.003	0.024	0.024	87.589	87.565
NUTTING CRESCENT	533 (E)	532	0.026	131.084	3.402	0.013	0.043			0.004	0.004	0.047	0.047	87.513	87.466
NUTTING CRESCENT	532	531	0.026	17.923	0.465	0.013	0.006			0.004	0.004	0.010	0.010	87.466	87.456
NUTTING CRESCENT	531	522	0.022	124.333	2.696	0.014	0.037			0.014	0.014	0.051	0.051	87.456	87.405
POPLIN STREET	522	523	0.020	72.006	1.419	0.020	0.028	0.003			0.003	0.031	0.031	87.405	87.373
NUTTING CRESCENT	533 (W)	534	0.029	33.255	0.965									87.565	87.532
NUTTING CRESCENT	534	523	0.029	289.318	8.400	0.004	0.037			0.006	0.006	0.043	0.043	87.532	87.373
POPLIN STREET	523	511	0.020	42.413	0.836	0.025	0.021			0.025	0.025	0.046	0.046	87.373	87.327
BRIAN GOOD AVE	STUB (IBI)	513	0.021	20.079	0.414	0.016	0.007			0.001	0.001	0.007	0.007	87.355	87.348
BRIAN GOOD AVE	513	512	0.021	40.739	0.839	0.016	0.014			0.001	0.001	0.014	0.014	87.362	87.348
BRIAN GOOD AVE	512	511	0.021	45.688	0.941	0.019	0.018	0.003			0.003	0.021	0.021	87.348	87.327
BRIAN GOOD AVE	511	EX. MH 102 (AECOM)	0.018	60.367	1.104	0.038	0.041	0.006			0.006	0.047	0.047	87.327	87.280
												HGL @ N1-7 (per Stantec)			87.280
STANTEC (N1-11 to N1-15)		505	0.016			0.224			0.224	0.228	0.452	0.452	0.452	87.383	86.931
SPRATT ROAD	505	504	0.016	33.231	0.520	0.131	0.068	0.020			0.020	0.088	0.088	86.931	86.844
SPRATT ROAD	504	503	0.016	34.859	0.545	0.131	0.072	0.020			0.020	0.091	0.091	86.844	86.752
SPRATT ROAD	503	502	0.016	36.909	0.577	0.133	0.077			0.073	0.073	0.149	0.149	86.752	86.603
SPRATT ROAD	502	501	0.016	4.138	0.065	0.133	0.009			0.073	0.073	0.081	0.081	86.603	86.521
SPRATT ROAD	501	EX. STUB (AECOM)	0.016	2.908	0.045	0.133	0.006	0.020			0.020	0.026	0.026	86.521	86.495
SPRATT ROAD	EX. STUB (AECOM)	EX. (STANTEC 1-EX)	0.016	33.748	0.528	0.141	0.074	0.021			0.021	0.095	0.095	86.495	86.400
												HGL @ EX. BOX (per Stantec)			86.400

Appendix F

- **Grading Plan Drawing 200**
- **Erosion and Sedimentation Control Plan Drawing 900**

PONDING LEGEND

2.0%	PROPOSED DITCH C/W FLOW DIRECTION AND SLOPE
2.0%	SLOPE C/W FLOW DIRECTION
	MAJOR OVERLAND FLOW ROUTE
91.75	PROPOSED SPOT GRADE
x91.25 (S)	PROPOSED SWALE GRADE
x91.30 (HP)	PROPOSED SWALE HIGH POINT GRADE
91.45 TOW	RETAINING WALL C/W TOP OF WALL
	TERRACING 3:1 MAXIMUM UNLESS NOTED OTHERWISE



1:500 0 5 15 25m

CLIENT

CLARIDGE HOMES

210 Gladstone Ave. Ottawa, On K0P 0Y6

ISSUES

No.	DESCRIPTION	DATE
5	SUBMISSION No.1 FOR ITY REVIEW	2026-03-30
6		
7		
8		

NOT FOR CONSTRUCTION

SEAL

LICENCED PROFESSIONAL ENGINEER
I.D. S. Tannoulopoulos
2026-03-30
PROVINCE OF ONTARIO

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

PROJECT
4624 SPRATT ROAD
4624 SPRATT ROAD

PROJECT NO: 30260954	
DRAWN BY: **EH/DD**	CHECKED BY: **A.S.**
PROJECT MGR: **R.M.**	APPROVED BY: **R.M.**

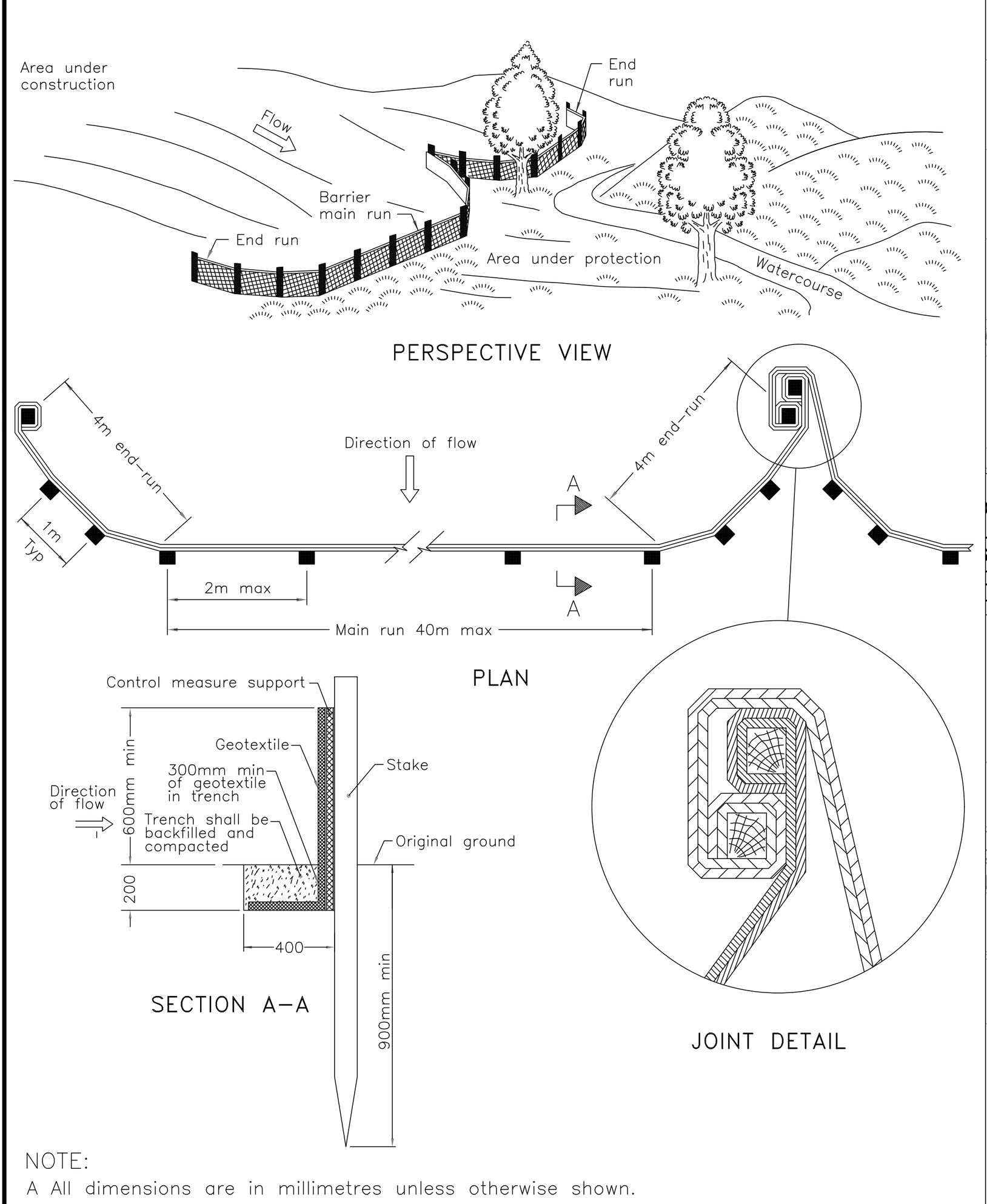
SHEET TITLE
GRADING PLAN

SHEET NUMBER	ISSUE
C-200	1

SCALE CHECK 1:500 @ ANSI D

CITY PLAN No. 18727 CITY FILE No. D07-12-22-0021

File Location: C:\DARoot\Jobs\9f5c76a4bdd7495695ca5183d6b1a935\acadfiles\b 60f4f54af-c1ef-40ca-8f79-a13c281003ce\Project Files\10_WIP\04_CIVIL\Sheets\C-200 GRADING PLAN.dwg Last Saved: March 30, 2026, by donie05754 Plotted: Monday, March 30, 2026 5:32:17 PM by aoessaer

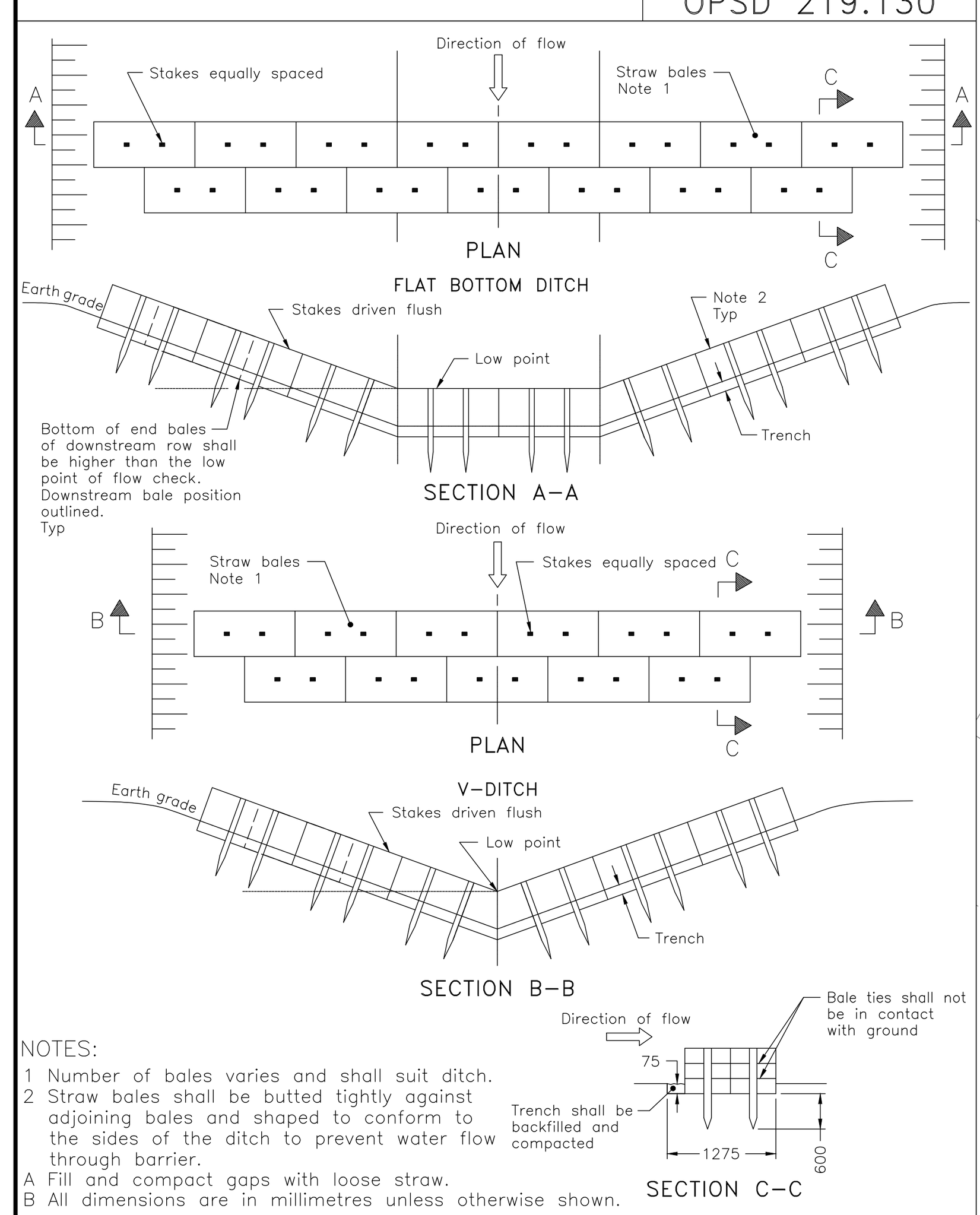


NOTE:
A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING | Nov 2021 | Rev 3

HEAVY-DUTY SILT FENCE BARRIER

OPSD 219.130

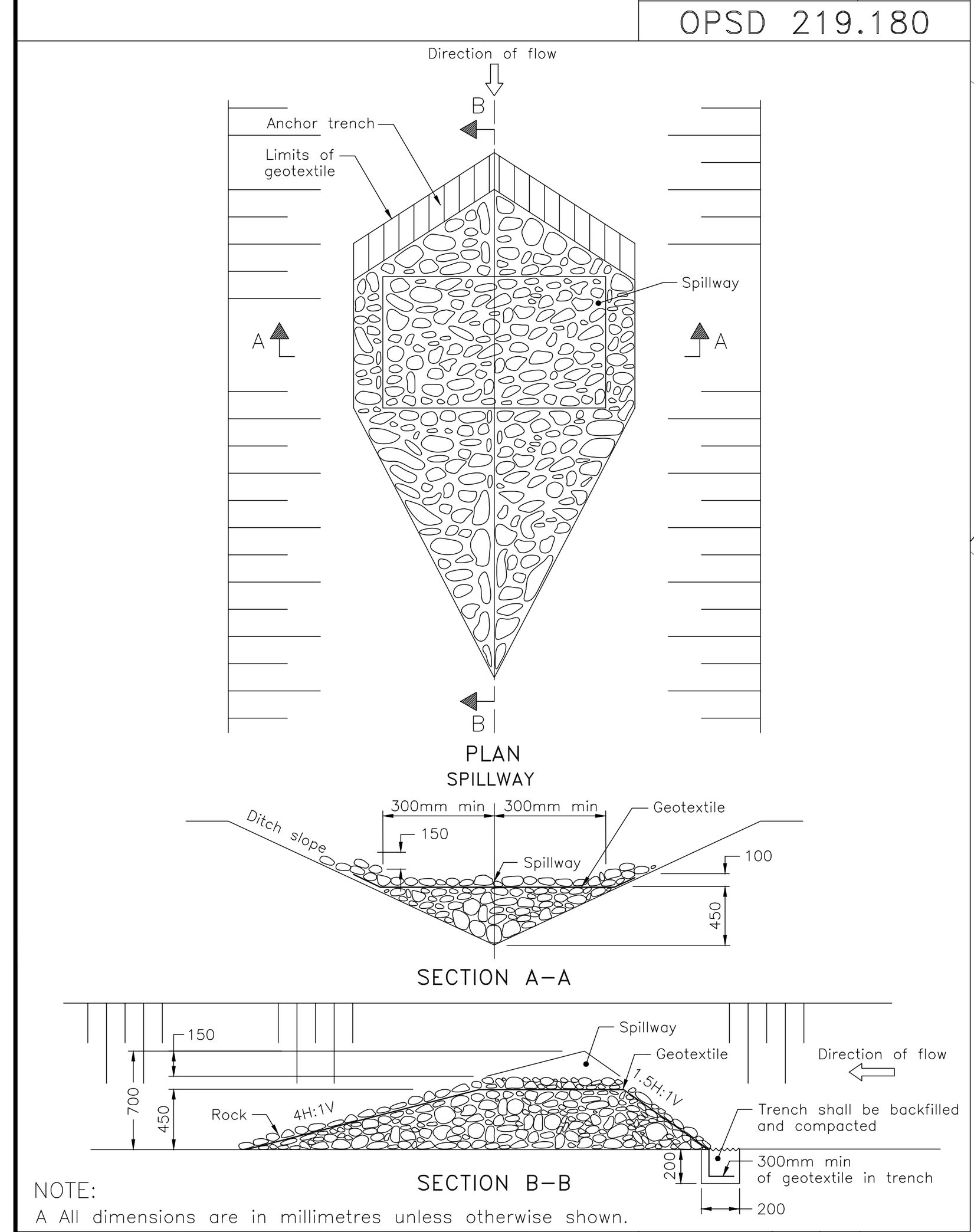


NOTES:
1 Number of bales varies and shall suit ditch.
2 Straw bales shall be butted tightly against adjoining bales and shaped to conform to the sides of the ditch to prevent water flow through barrier.
A Fill and compact gaps with loose straw.
B All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING | Nov 2021 | Rev 3

STRAW BALE FLOW CHECK DAM

OPSD 219.180

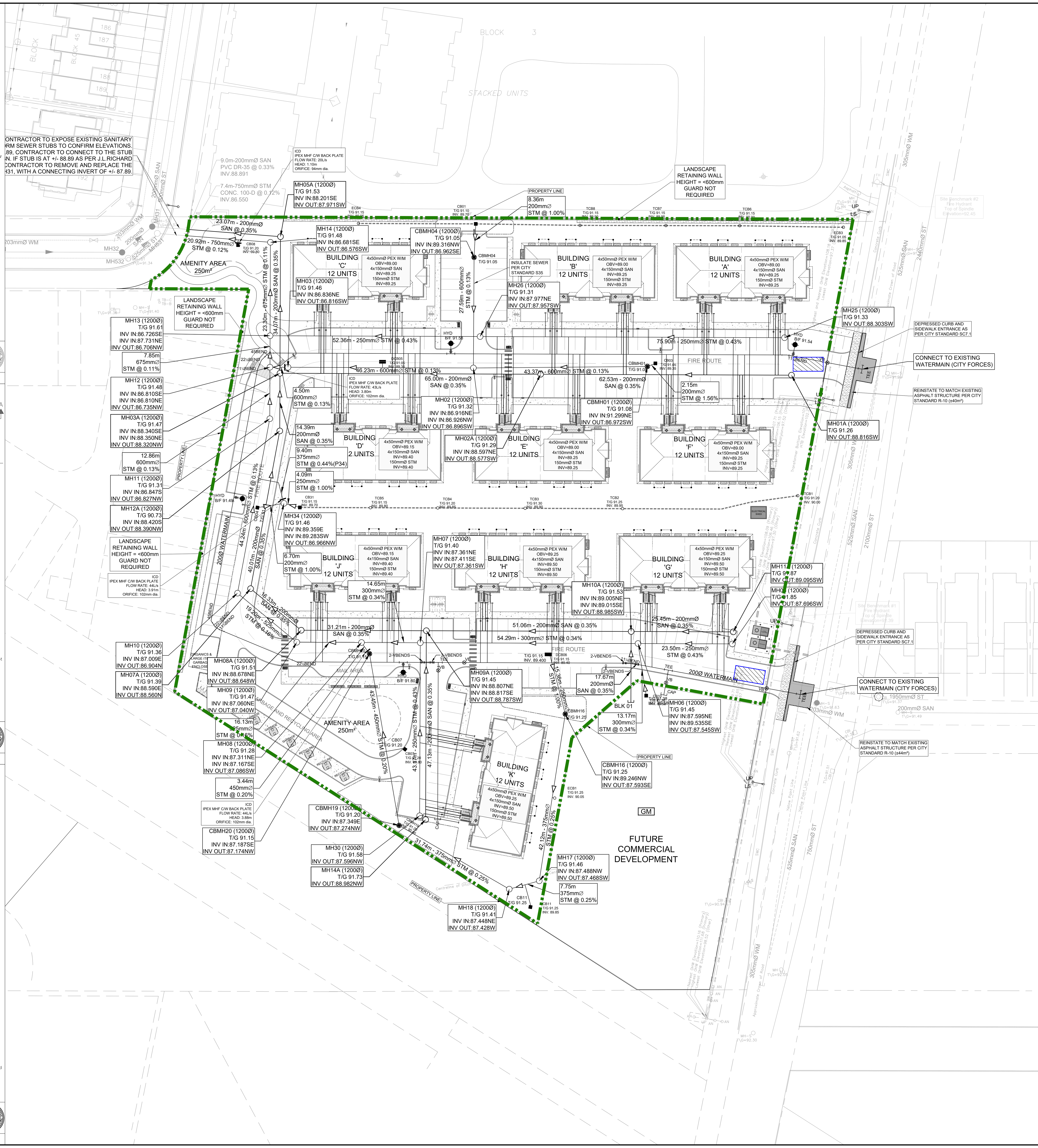


NOTE:
A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING | Nov 2022 | Rev 3

TEMPORARY ROCK FLOW CHECK DAM V-DITCH

OPSD 219.210



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. FILTER CLOTH TO BE PLACED AND MAINTAINED UNDER COVER OF ALL PROPOSED CATCHBASINS AFTER BASE COURSE, AND EXISTING CATHBASINS IDENTIFIED OUTSIDE OF CONSTRUCTION LIMIT. FILTER CLOTH IN STREET CB'S TO REMAIN UNTIL ALL CURBS ARE CONSTRUCTED. FILTER CLOTH IN RYCB'S 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. WORKS NOTED ABOVE ARE TO BE INSTALLED, INSPECTED, MAINTAINED AND ULTIMATELY REMOVED BY SERVICING CONTRACTOR.
7. THIS IS A "LIVING DOCUMENT" AND MAY BE MODIFIED IN THE EVENT THE PROPOSED CONTROL MEASURES ARE INSUFFICIENT.

LEGEND:

- HEAVY DUTY SILT FENCE AS PER OPSD-219.130
- SNOW FENCE
- STRAW BALE CHECK DAM AS PER OPSD-219.180
- ROCK CHECK DAM AS PER OPSD-219.210
- FILTER CLOTH PLACED UNDER EXISTING CB COVER
- TEMPORARY MUD MAT 0.15m THICK 50mm CLEAR STONE ON NON WOVEN FILTER CLOTH (15.0m, 7.0m)

CLIENT

CLARIDGE HOMES

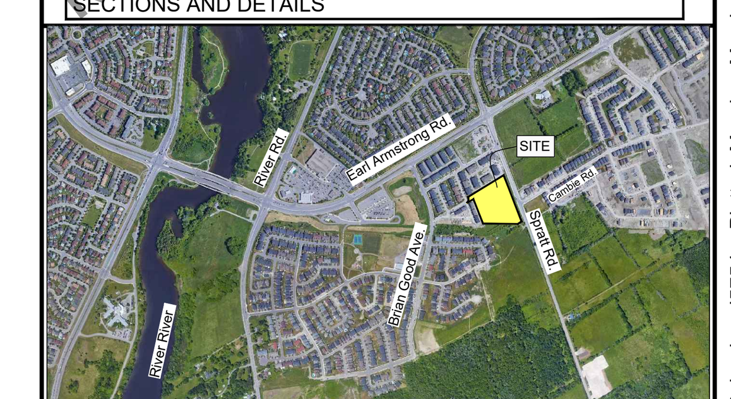
210 Gladstone Ave. Ottawa, On K0P 0Y6

ISSUES

No.	DESCRIPTION	DATE
5	SUBMISSION No.1 FOR ITY REVIEW	2026-03-30
6		
7		
8		

NOT FOR CONSTRUCTION

SEE C-010, FOR NOTES, LEGEND, CB TABLE, STREET SECTIONS AND DETAILS



CONSULTANTS

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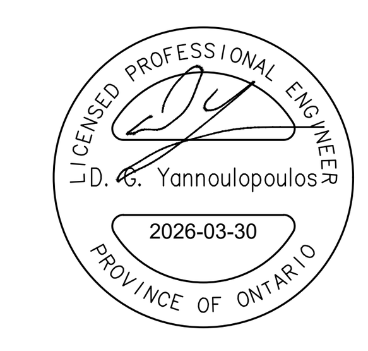
SEAL



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PROJECT

4624 SPRATT ROAD

4624 SPRATT ROAD

PROJECT NO:	
30260954	
DRAWN BY: EH/DD	CHECKED BY: A.S.
PROJECT MGR: R.M.	APPROVED BY: R.M.

SHEET TITLE

EROSION - SEDIMENTATION PLAN

SHEET NUMBER: C-900 | ISSUE: 1

CITY PLAN No. 18727 CITY FILE No. D07-12-22-0021

Last Saved: March 30, 2026, by donedi5764 Plotted: Monday, March 30, 2026 5:32:35 PM by aceuser