

re: **Geotechnical Design Summary Details**
Proposed Residential Development
5331 Fernbank Road – Ottawa, Ontario

to: Claridge Homes – **Marc St. Pierre** – marc.stpierre@claridgehomes.com

date: November 18, 2025

file: PG5683-MEMO.02 Revision 4

Further to your request and authorization, Paterson Group (Paterson) prepared the current memorandum to provide a grading, servicing and landscape review for the proposed residential development. The following memorandum should be read in conjunction with the Geotechnical Investigation Report (Paterson Report PG5683-1 Revision 1, dated November 13, 2025).

1.0 Grading Review

Paterson reviewed the following drawings prepared by Novatech for the aforementioned development:

- Grading Plan – Project No. 121011-00 - Drawing No. 121011-GR1 - Revision 6 dated November 14, 2025.
- Grading Plan – Project No. 121011-00 - Drawing No. 121011-GR2 - Revision 6 dated November 14, 2025.

1.1 Residential Grading

Based on the grading plans provided, the proposed grading for the majority of the residential lots/blocks within the subject site are considered acceptable and in compliance with our permissible grade raise recommendations. Minor exceedances were observed at within a small number of blocks where the front grades have marginally exceeded our permissible grade raise recommendations. The minor exceedances are not significant enough to require lightweight fill (LWF) along the building perimeters. However, one unit will require LWF beneath the front porch. Table 1, attached to the current memorandum, provides a grading summary and engineered fill required below the proposed USF levels across the subject site.

1.2 Right-of-Way Grading

Based on the grading plans provided, the proposed grading for the entirety of the rights-of-way (ROWS) and parking areas within the subject site are considered acceptable and in compliance with our permissible grade raise recommendations.



2.0 Servicing Review

Paterson reviewed the following drawings prepared by Novatech for the aforementioned development:

- General Plan of Services – Project No. 121011-00 - Drawing No. 121011-GP1 – Revision 6 dated November 14, 2025.
- General Plan of Services – Project No. 121011-00 - Drawing No. 121011-GP2 – Revision 6 dated November 14, 2025.

2.1 Lateral Support

Based on the above-noted site servicing plan, the site servicing layout does not impede the lateral support zones of any adjacent buildings/structures and is in conformance with our recommendations.

2.2 Frost Protection

From our review of the above-noted site servicing plan, a number of servicing pipe sections are not provided with sufficient soil cover of 2.1 m for adequate frost protection (measured from the proposed ground surface to the pipe obvert). Reference should be made to the marked-up servicing plans which show the areas with insufficient soil cover, attached to the current report.

For services with less than 2.1 m soil cover, a combination of soil cover and rigid insulation should be used, as detailed in Table 1 below.

Table 1 – Rigid Insulation Recommendations for Pipes with Reduced Soil Cover			
Thermal Condition	Soil Cover Provided (mm)	Insulation Dimensions	
		Thickness (mm)	Extension (mm)
Unheated	1800-2000	25	Extend 600 mm horizontally beyond edge of the pipe
	1500-1800	50	Extend 900 mm horizontally beyond edge of the pipe
	1200-1500	75	Extend 1200 mm horizontally beyond edge of the pipe

Alternatively, instead of extending the rigid insulation 600 to 1200 mm beyond the edge of the pipe, the rigid insulation can be “boxed” around the pipe by transitioning from horizontal to vertical placement of the rigid insulation and extending to the invert pipe elevation, effectively forming a box of rigid insulation around the pipe. In this case, the rigid insulation should still be extended far enough to provide adequate spring-line and cover backfill material around the pipe.



It should be noted that the elevations of the watermain profiles are not available at the current time. Based on the pipe crossing obvert elevations, it is anticipated that all watermains will be provided with sufficient soil cover for frost protection (without insulation). Paterson should review the watermain elevations for verification, once available.

3.0 Landscaping Considerations

3.1 Tree Planting Restrictions

Paterson completed a soils review of the site to determine applicable tree planting setbacks, in accordance with the City of Ottawa Tree Planting in Sensitive Marine Clay Soils (2017 Guidelines) for trees planted within a public right-of-way (ROW). Atterberg limits testing was completed for recovered silty clay samples at selected locations throughout the subject site

Grain size distribution and hydrometer testing was also completed on selected soil samples. The above-noted test results were completed on samples taken at depths between the anticipated underside of footing elevation and a 3.5 m depth below finished grade. The results of our testing are presented in Paterson Report PG5683-1, dated March 5, 2021.

Based on the results of the Atterberg limit testing mentioned above, the plasticity index was found to be less than 40% in all the tested clay samples. In addition, based on the clay content found in the clay samples from the grain size distribution test results, moisture levels and consistency, the silty clay across the subject site is considered low to medium sensitivity clay and should not be designated as sensitive marine clays.

Low to Medium Sensitivity Clays

A low to medium sensitivity clay soil was encountered between the anticipated design underside of footing elevations and 3.5 m below finished grade as per City Guidelines for the entire site. Based on our Atterberg limits test results, the modified plasticity index does not exceed 40% across the site. The following tree planting setback is recommended for the entire subject site due to the presence of low to medium sensitivity clays. Large trees (mature height over 14 m) can be planted within these areas provided a tree to foundation setback equal to the full mature height of the tree can be provided (e.g. in a park or other green space). Tree planting setback limits may be reduced to 4.5 m for small (mature height up to 7.5 m) and medium size trees (mature tree height 7.5 to 14 m), provided that the conditions noted below are met.

- The underside of footing (USF) is 2.1 m or greater below the lowest finished grade must be satisfied for footings within 10 m from the tree, as measured from the centre of the tree trunk and verified by means of the Grading Plan as indicated procedural changes below.



- A small tree must be provided with a minimum of 25 m³ of available soil volume while a medium tree must be provided with a minimum of 30 m³ of available soil volume, as determined by the Landscape Architect. The developer is to ensure that the soil is generally uncompacted when backfilling in street tree planting locations.
- The tree species must be small (mature tree height up to 7.5 m) to medium size (mature tree height 7.5 m to 14 m) as confirmed by the Landscape Architect
- The foundation walls are to be reinforced at least nominally (minimum of two upper and two lower 15M bars in the foundation wall).
- Grading surrounding the tree must promote drainage to the tree root zone (in such a manner as not to be detrimental to the tree).

It is well documented in the literature, and it is our experience, that fast-growing trees located near buildings founded on cohesive soils that shrink on drying can result in long-term differential settlements of the structures. Tree varieties that have the most pronounced effect on foundations are seen to consist of poplars, willows and some maples (i.e., Manitoba Maples) and, as such, they should not be considered in the landscaping design.

3.2 Aboveground Swimming Pools, Hot Tubs, Decks and Additions

The in-situ soils are considered to be acceptable for in-ground swimming pools. Above ground swimming pools must be placed at least 5 m away from the residence foundation and neighboring foundations. Otherwise, pool construction is considered routine and can be constructed in accordance with the manufacturer's requirements.

Additional grading around the hot tub should not exceed permissible grade raises. Otherwise, hot tub construction is considered routine and can be constructed in accordance with the manufacturer's specifications.

Additional grading around proposed deck or addition should not exceed permissible grade raises. Otherwise, standard construction practices are considered acceptable.

3.3 Landscaping Review

Paterson reviewed the following drawings prepared by James B. Lennox & Associates (JBLA) for the aforementioned development:

- Landscape Plan (North-West) – Project No. 21-CLG-2163 - Drawing No. L.1 – Revision 1 dated November 18, 2025.
- Landscape Plan (South-East) – Project No. 21-CLG-2163 - Drawing No. L.2 – Revision 5 dated November 18, 2025.



Based on the above-noted drawing, a minimum setback of 4.5 m from the nearest building foundation is provided for the majority of the proposed trees at the subject site. However, a small number of trees are not provided with the required 4.5 m setback. Reference should be made to the marked-up landscaping plans which show the trees with an insufficient setback, attached to the current memorandum.

Per discussion with JBLA, the proposed trees will consist of Japanese Lilac trees with a shallow, non-aggressive root system. Furthermore, it is understood that the remainder of the conditions noted in Subsection 3.1 of the current report will be incorporated into the design of the proposed development.

Accordingly, the proposed landscaping design is acceptable from a geotechnical perspective and is in conformance with Paterson's recommendations provided in the aforementioned geotechnical investigation report.

We trust that the current submission meets your immediate requirements.

Best Regards,

Paterson Group Inc.

Owen R. Canton, B.Eng.



Scott S. Dennis, P.Eng.

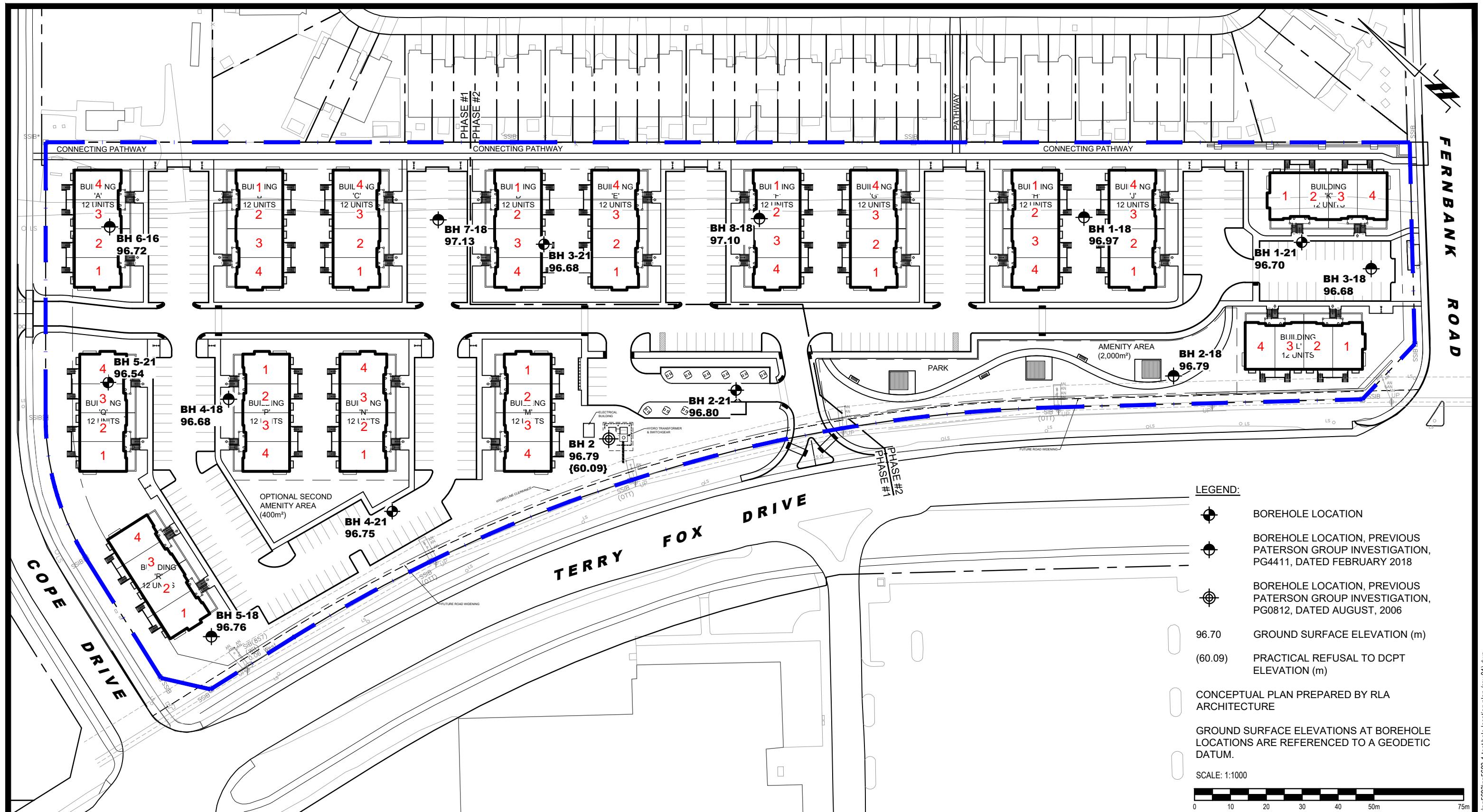
Attachments:

- Table 1 – Summary of Lot Grading
- Drawing PG5683-3 – Unit Numbering Plan
- Marked Up Servicing Plans
- Marked Up Landscaping Plans

PG5683 - Table 1 - Summary of Design Details

Claridge Homes - 5331 Fernbank Road

Building Number	Unit Number	Original GS Front	Proposed GS Front	Original GS Side	Proposed GS Side	Original GS Rear	Proposed GS Rear	Underside of Footing Elevation	Bearing Resistance Value at SLS	Seismic Site Class	Engineered Fill Thickness (Above Original GS)	Engineered Fill Thickness Side (Original GS)	Engineered Fill Thickness Rear (Original GS)	Permissible Grade Raise	Above Permissible Grade Raise Front	Above Permissible Grade Raise Side	Above Permissible Grade Raise Rear	Minimum Thickness LWF in Front Porches (If Applicable)	Minimum Thickness LWF and Extents
		(m)	(m)	(m)	(m)	(m)	(m)	(m)	(kPa)		(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	
BLDG A	1	96.30	97.65	96.30	97.35	96.45	97.35	95.38	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	2	96.21	97.65	N/A	N/A	96.40	97.35	95.38	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	3	96.21	97.65	N/A	N/A	96.50	97.35	95.38	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	4	96.80	97.65	97.50	97.35	96.90	97.35	95.38	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
BLDG B	1	97.17	97.67	97.25	97.38	97.18	97.38	95.40	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	2	96.36	97.67	N/A	N/A	96.45	97.38	95.40	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	3	96.70	97.67	N/A	N/A	96.50	97.38	95.40	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	4	96.60	97.67	96.55	97.38	96.55	97.38	95.40	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
BLDG C	1	96.45	97.71	96.45	97.40	96.45	97.40	95.45	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	2	96.42	97.71	N/A	N/A	96.36	97.40	95.45	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	3	96.42	97.71	N/A	N/A	96.36	97.40	95.45	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	4	97.03	97.71	97.25	97.40	97.03	97.40	95.45	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
BLDG D	1	97.15	97.81	97.28	97.55	97.10	97.55	95.54	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	2	96.55	97.81	N/A	N/A	96.43	97.55	95.54	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	3	96.50	97.81	N/A	N/A	96.45	97.55	95.54	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	4	96.45	97.81	96.45	97.55	96.45	97.55	95.54	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
BLDG E	1	96.55	97.87	96.55	97.57	96.60	97.57	95.61	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	2	96.39	97.87	N/A	N/A	96.39	97.57	95.61	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	3	96.39	97.88	N/A	N/A	96.39	97.57	95.61	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	4	97.05	97.88	97.14	97.57	97.11	97.57	95.61	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
BLDG F	1	97.10	98.00	97.50	97.74	97.10	97.74	95.73	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	2	96.47	98.00	N/A	N/A	96.46	97.74	95.73	120	E	n/a	n/a	n/a	1.50	0.03	n/a	n/a	n/a	n/a
	3	96.50	98.00	N/A	N/A	96.70	97.74	95.73	120	E	n/a	n/a	n/a	1.50	0.00	n/a	n/a	n/a	n/a
	4	96.60	98.00	96.60	97.74	96.65	97.74	95.73	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
BLDG G	1	96.66	98.09	96.66	97.79	96.66	97.79	95.84	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	2	96.67	98.09	N/A	N/A	96.68	97.79	95.84	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	3	96.80	98.10	N/A	N/A	96.98	97.79	95.84	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	4	97.05	98.10	97.36	97.79	97.11	97.79	95.84	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
BLDG H	1	97.00	98.17	97.15	97.90	96.95	97.90	95.91	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	2	96.60	98.17	N/A	N/A	96.80	97.90	95.91	120	E	n/a	n/a	n/a	1.50	0.07	n/a	n/a	1.0	n/a
	3	96.60	98.17	N/A	N/A	96.70	97.90	95.91	120	E	n/a	n/a	n/a	0.07	n/a	n/a	1.0	n/a	n/a
	4	96.60	98.17	96.60	97.90	96.60	97.90	95.91	120	E	n/a	n/a	n/a	0.07	n/a	n/a	1.0	n/a	n/a
BLDG J	1	96.60	98.23	96.60	97.94	96.60	97.94	95.97	120	E	n/a	n/a	n/a	1.50	0.13	n/a	n/a	1.0	n/a
	2	96.65	98.23	N/A	N/A	96.65	97.94	95.97	120	E	n/a	n/a	n/a	1.50	0.08	n/a	n/a	1.0	n/a
	3	96.90	98.23	N/A	N/A	96.80	97.94	95.97	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	4	97.05	98.23	97.20	97.94	96.90	97.94	95.97	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
BLDG K	1	96.90	97.99	96.90	97.99	97.15	97.99	95.73	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	2	96.85	97.99	N/A	N/A	97.15	97.99	95.73	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	3	96.52	97.99	N/A	N/A	97.20	97.99	95.73	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	4	96.90	97.99	96.95	97.90	97.40	97.99	95.73	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
BLDG L	1	96.60	98.04	96.50	97.95	96.50	98.04	95.78	120	E	n/a	n/a	n/a	1.50	n/a	n/a	n/a	n/a	n/a
	2	96.60	98.04	N/A	N/A	96.55	98.04</td												



PATERSON GROUP

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OTTAWA, ON
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11x17

CLARIDGE HOMES
GEOTECHNICAL INVESTIGATION
PROPOSED RESIDENTIAL DEVELOPMENT
5331 FERNBANK ROAD

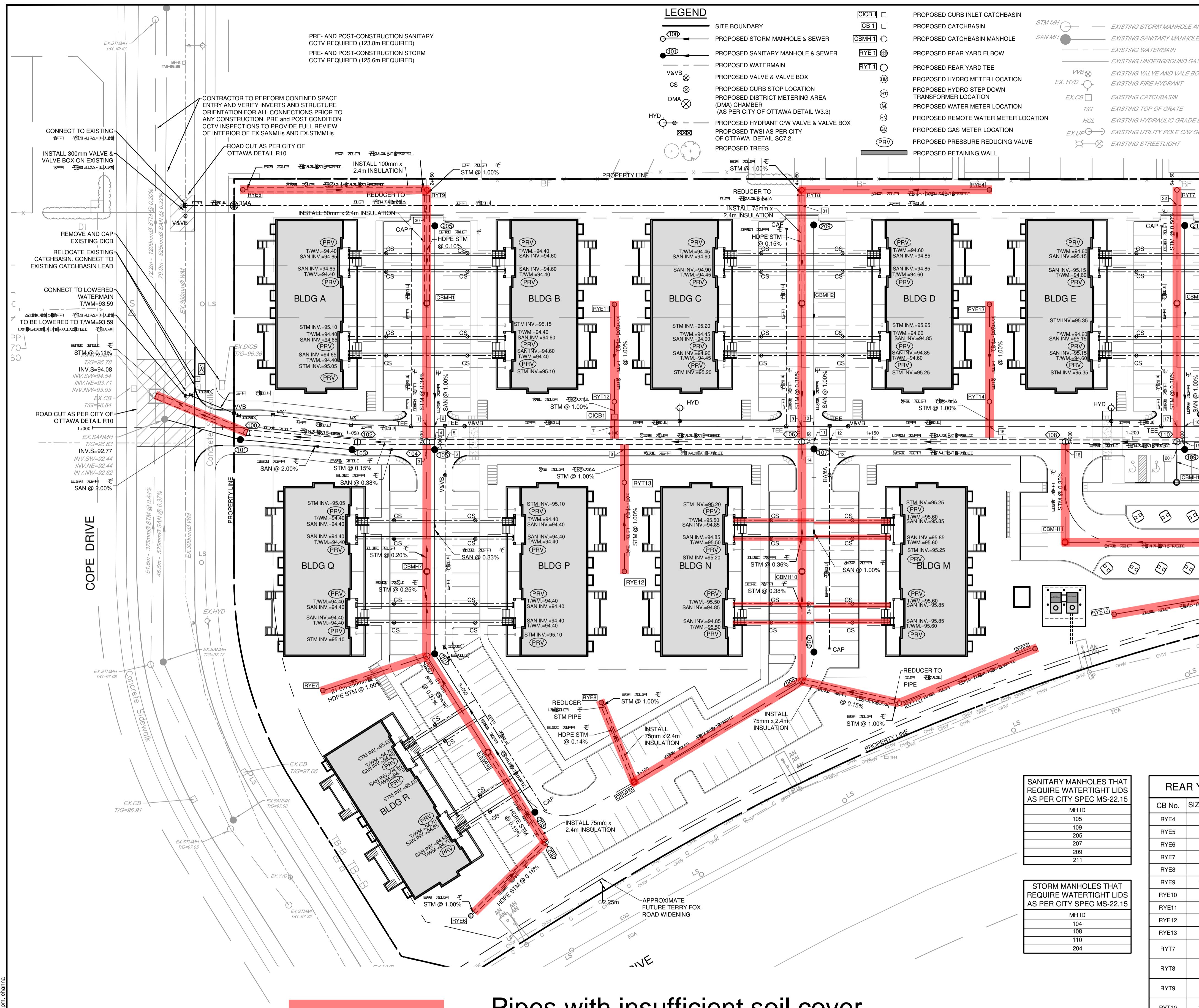
OTTAWA,

ONTARIO	Scale: 1:1000	Date: 02/2021
	Drawn by: NFRV	Report No.: PG5683-1
	Checked by: VD	Dwg. No.: PG5683-3
	Approved by: DJG	Revision No.: 1

title.

UNIT NUMBERING PLAN

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- Pipes with insufficient soil cover

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

6.	REVISED SITE PLAN SUBMISSION
5.	RE-ISSUED FOR TENDER
4.	ISSUED FOR TENDER
3.	REVISED PER CITY COMMENTS
2.	REVISED PER CITY COMMENTS
1.	ISSUED FOR CITY OF OTTAWA REVIEW
No.	REVISION

			SCALE
NOV 14/25	DDB		1:400
JAN 18/24	DDB		
MAY 20/22	DDB		
FEB 17/22	DDB		1:400
NOV 5/21	DDB		
JUN 2/21	DDB		

DESIGN	FOR REVIEW
BM	
CHECKED	
DDB	
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ATE	
CHECKED	
BM	
APPROVED	

SW=95

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 <p> ECH Landscape Architects Cowpland Drive Ottawa K2M 1P6 (613) 254-9643 (613) 254-5867 ovatech-eng.com </p>	<p> CITY OF OTTAWA 5331 FERNBANK ROAD IRON VALLEY 2 </p> <hr/> <p>DRAWING NAME</p> <p>GENERAL PLAN OF S</p>
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SERVICES	
	PROJECT No.
	121011-00
	REV
	REV # 6
	DRAWING No.
	121011-001

SANITARY MANHOLES THAT REQUIRE WATERTIGHT LIDS AS PER CITY SPEC MS-22.15	
MH ID	
105	
109	
205	
207	
209	
211	

STORM MANHOLES THAT REQUIRE WATERTIGHT LIDS AS PER CITY SPEC MS-22.15	
MH ID	
104	
108	
110	

REAR YARD CATCHBASIN TABL			
3 No.	SIZE(mm)	T/G ELEV(m)	INVERT
YE4	300	96.90	NW=95.
YE5	300	96.85	SE=95.
YE6	300	97.40	E=94.9
YE7	1200	97.14	SE=95.

YE9	1200	97.35	NW=95
YE10	300	97.37	SE=95
YE11	300	97.14	SW=95
YE12	300	97.16	NE=95
YE13	300	97.31	SW=95
YT7	300	97.15	SW=95 SE=95
YT8	300	96.90	SW=94 SE=94
YT9	300	96.85	SW=94 NW=94
YT10	1200	97.32	NW=95 SE=95
YT12	300	97.07	NE=95 SW=95
YT13	300	97.17	SW=95 NE=95
YT14	300	97.29	NE=95 SW=95

CATCHBASIN TABLE					
CB No.	SIZE(mm)	STATION	T/G ELEV(m)	INVERT(m)	ICD DIA.(mm)
CB1	600 x 600	1+019.60	0.00		
CBMH1	1500	2+025.87	96.74	SW=94.77 NE=94.77	105mm PLATE
CBMH2	1500	4+025.87	96.84	SW=94.86 NE=94.86	80mm PLATE

CBMH3	1200	6+025.86	97.10	SW=94.85 NE=95.03	TEMPEST LMF VORTEX 101
CBMH7	1200	3+025.66	96.78	SW=94.65 NE=94.58	
CBMH8	1200	3+062.79	96.92	S=94.85 N=94.85	
CBMH9	1200	3+097.52	97.14	E=95.17 NE=95.17	
CBMH10	1200	3+157	96.86	SW=94.85 NE=94.85	
CBMH11	1800	5+017.92	97.08	NE=94.90 SE=94.95	
CBMH13	1200	1+208.45	97.23	NE=94.91	
CICB1	600 x 600	1+100.41	97.14	NE=95.42 SW=95.42	

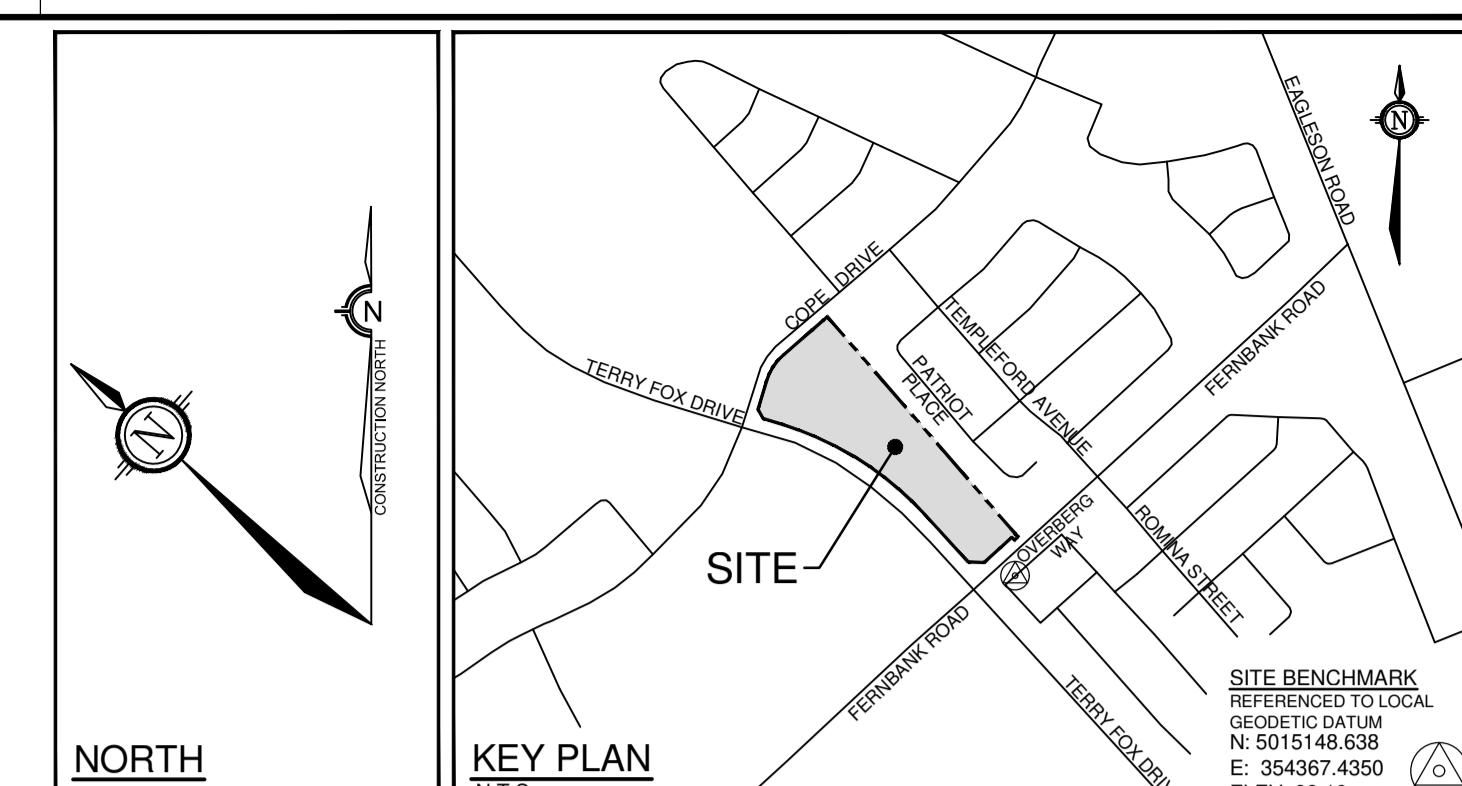
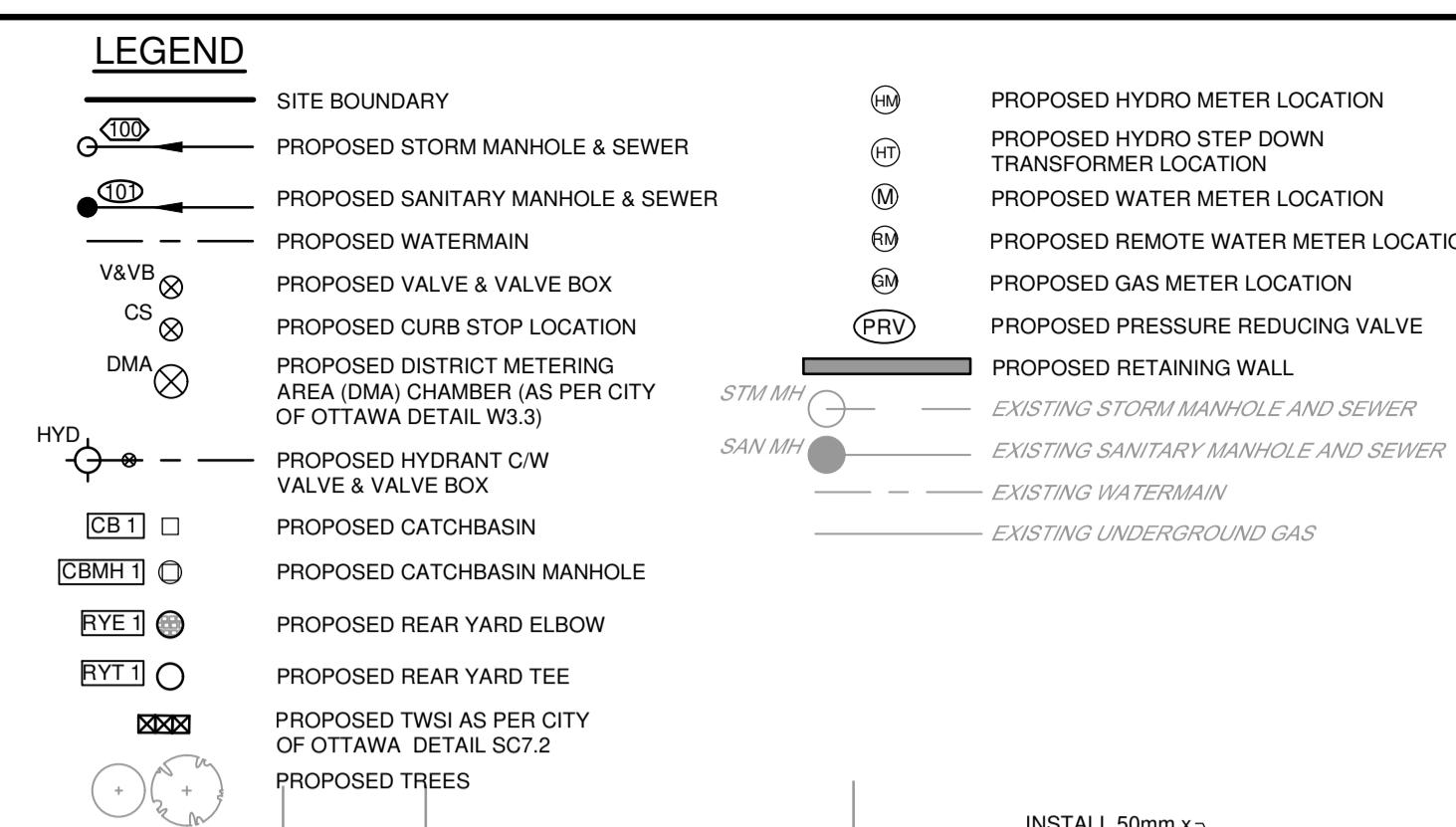
**CITY OF OTTAWA
5331 FERNBANK ROAD
IRON VALLEY 2**

SERVICES	
PROJECT No.	121011-00
REV	REV # 6
DRAWING No.	121011-001

MATCHLINE: REFER TO 121011-GP1 FOR CONTINUATION

- Pipes with insufficient soil cover

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS,
WATERMAINS, SEWERS AND OTHER
UNDERGROUND AND OVERGROUND UTILITIES AND
STRUCTURES IS NOT NECESSARILY SHOWN ON
THE CONTRACT DRAWINGS, AND WHERE SHOWN,
THE ACCURACY OF THE POSITION OF SUCH
UTILITIES AND STRUCTURES IS NOT GUARANTEED.
BEFORE STARTING WORK, DETERMINE THE EXACT
LOCATION OF ALL SUCH UTILITIES AND
STRUCTURES AND ASSUME ALL LIABILITY FOR
DAMAGE TO THEM.



SAN MANHOLE TABLE				
MANHOLE ID	SIZE(mm)	STATION	T/G ELEV(m)	INVERT(m)
109	1200	1+210.01	97.35	SE=94.20 NW=94.17 NE=94.23
111	1200	1+282.11	97.43	SE=94.47 NW=94.44 NE=94.50
113	1200	1+340.05	97.54	NW=94.66 SE=94.69
115	1200	1+351.12	97.60	NE=94.77 NW=94.74
117	1200	1+359.04	97.67	SW=94.80 SE=94.86 NE=94.83
211	1200	6+040.80	97.33	SW=94.66
213	1200	8+040.80	97.50	SW=94.93
215	1200	9+031.37	97.51	SW=95.12
217	1200	1+403.45	97.70	NW=95.30

STM MANHOLE TABLE				
MANHOLE ID	SIZE(mm)	STATION	T/G ELEV(m)	INVERT(m)
108	1200	1+187.05	97.28	SE=94.60 SW=94.83 NW=94.53
110	1200	1+208.53	97.36	SE=94.65 NE=94.88 NW=94.65 SW=94.88
112	1200	1+280.61	97.47	SE=94.94 NE=95.02 NW=94.79
114	1200	1+339.26	97.55	NW=95.09 SE=95.09
116	1200	1+351.13	97.61	NE=95.12 NW=95.12
118	1200	1+358.97	97.67	SE=95.50 NE=95.50 SW=95.15
206	1200	1+407.25	97.76	NW=95.75 SW=95.75

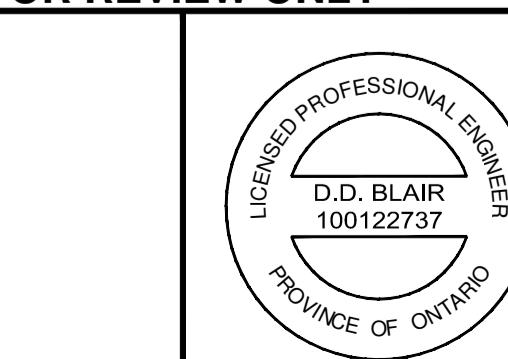
PIPE CROSSING TABLE			
CROSSING #	WATERMAIN	SANITARY	STORM
16		INV = 94.09 OBV = 94.29	INV = 94.83 OBV = 95.13
17	INV = 93.53 OBV = 93.73		INV = 94.89 OBV = 95.19
18	INV = 93.53 OBV = 93.73	INV = 94.27 OBV = 94.47	
19		INV = 94.24 OBV = 94.44	INV = 94.65 OBV = 95.18
20		INV = 94.17 OBV = 94.37	INV = 94.89 OBV = 95.19
21	INV = 94.78 OBV = 94.98		INV = 95.87 OBV = 96.12
22		INV = 94.36 OBV = 94.56	INV = 95.06 OBV = 95.31
23	INV = 93.80 OBV = 94.00		INV = 95.03 OBV = 95.33
24	INV = 93.80 OBV = 94.00	INV = 94.54 OBV = 94.74	
25		INV = 94.51 OBV = 94.71	INV = 94.94 OBV = 95.32
26	INV = 94.87 OBV = 95.07		INV = 96.03 OBV = 96.28
27		INV = 94.84 OBV = 95.04	INV = 95.56 OBV = 95.86
*28	INV = 94.25 OBV = 94.35	INV = 94.87 OBV = 95.07	
*29	INV = 94.25 OBV = 94.35		INV = 95.56 OBV = 95.86
32	INV = 94.40 OBV = 94.60		INV = 95.13 OBV = 95.38

CATCHBASIN TABLE					
CB No.	SIZE(mm)	STATION	T/G ELEV(m)	INVERT(m)	ICD DIA.(mm)
CBMH3	1200	6+025.86	97.10	SW=94.98 NE=95.03	TEMPEST LMF VORTEX 101
CBMH4	1500	8+025.86	97.31	SW=95.12 NE=95.20	80mm PLATE
CBMH5	1500	9+021.47	97.38	SW=95.56 NE=95.56	108mm PLATE
CBMH11	1800	5+017.92	97.08	NE=94.90 SE=94.95	
CBMH12	1200	5+054.40	97.55	NW=95.15 SW=95.15	
CBMH13	1200	1+208.45	97.23	NE=94.91	
CBMH14	1200	1+256.96	97.23	NE=95.09 SW=95.09	
CBMH15	1200	1+390.18	97.50	SE=95.67 NW=95.62	
CICB2	600x600	1+316.65	97.59	NE=96.04 SW=96.04	

SANITARY MANHOLES THAT REQUIRE WATERTIGHT LIDS AS PER CITY SPEC MS-22.15	
MH ID	
109	
211	
213	
215	
217	

STORM MANHOLES THAT REQUIRE WATERTIGHT LIDS AS PER CITY SPEC MS-22.15	
MH ID	
108	
110	
114	

* WATERMAIN CROSSING AS PER W25 &
PROVIDE THERMAL INSULATION AS PER
WHERE THERE IS LESS THAN 2.4m CO



NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

<p>CITY OF OTTAWA 5331 FERNBANK ROAD IRON VALLEY 2</p>	
DRAWING NAME	PROJECT No.
121011	
REV	REV
DRAWING No.	
121011.C	

DRAWING NAME

GENERAL PLAN OF SERVICES

PLANA1.DWG - 84

121011-GP2
#18539



- Indicates the minimum 4.5 m setback from building foundation is not provided.

GENERAL NOTES:

- It is the responsibility of the appropriate contractor or official to report any errors, omissions or discrepancies on this plan with actual site conditions to the Landscape Architect before proceeding with construction.
- The contractor is to notify all utility companies and authorities prior to any excavation and ascertain locations of underground services.
- The contractor is to reinstate all areas and items damaged as a result of construction activity.
- The contractor is to comply with all pertinent codes and by-laws.
- The contractor is to maintain a positive surface run-off throughout the entire construction period.
- The Landscape Architect is not responsible for subsurface conditions.
- The contractor is to identify all existing trees to remain on site with the Landscape Architect prior to construction.
- The contractor is to stake the proposed location of all plant material in conjunction with the Landscape Architect prior to excavation.
- Minimum distances for selected deciduous trees are as follows:
 - Sidewalks 1m
 - Underground Infrastructure 1.5m
 - Fire Hydrant 2.5m
 - Street Light 2.5m for Small Trees, 5m for Large/Medium Trees
- All trees within 1m of underground utility trenches are to be excavated by hand.
- Remove all protective wrapping from tree trunks after installation.
- Staking of trees shall only be performed if necessary.
- Ensure that mulch is pulled back a min. distance of 75mm from base of tree trunk.

LEGAL DESCRIPTION

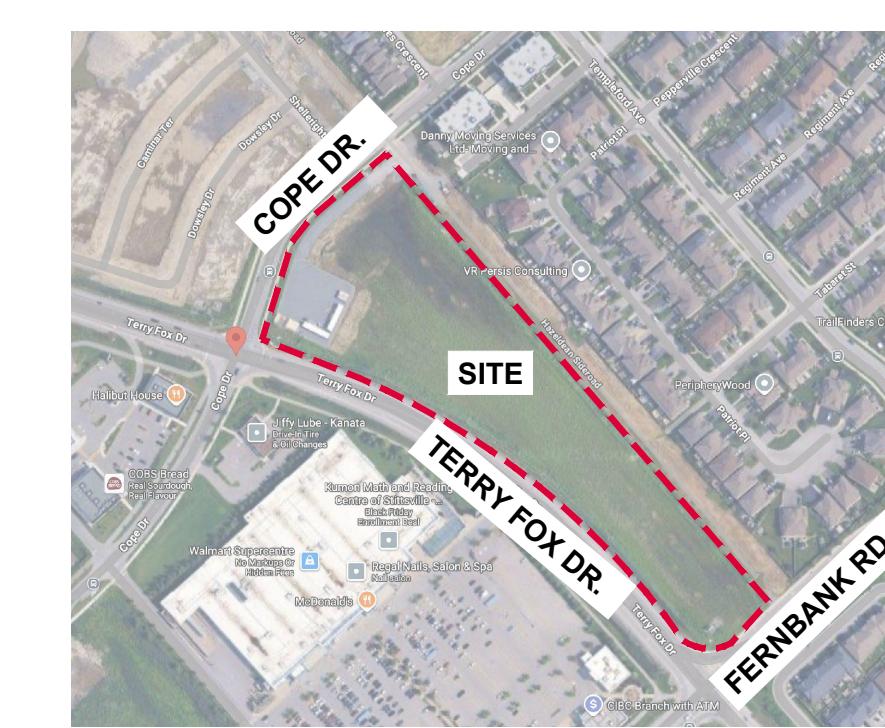
TOPOGRAPHICAL PLAN OF
PART OF LOT 30 CONCESSION 10, GOULBURN,
PART 1 PLAN 4R17373, EXCEPT PART 4, PLAN 4R20112;
OTTAWA.
SUBJECT TO AN EASEMENT IN FAVOUR OF HYDRO OTTAWA
LIMITED OVER PARTS 5, 6, 7, 8 AND 9 PLAN 4R20112 AS IN
OC455206.

ROAD ALLOWANCE BETWEEN LOTS 30 AND 31 CONCESSION 10,
GOULBURN
LYING BETWEEN PARTS 3 AND 4 ON 4R17373 AND PART 2 ON
PLAN 4R20112, AS CLOSED BY N599928;
OTTAWA

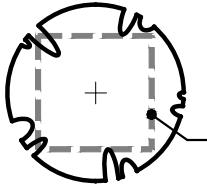
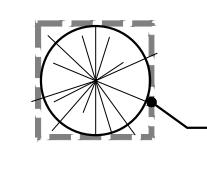
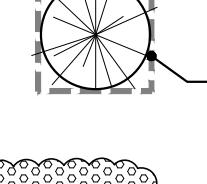
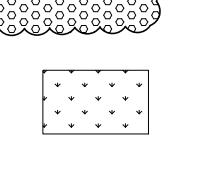
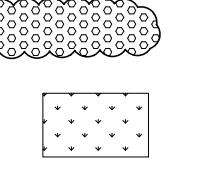
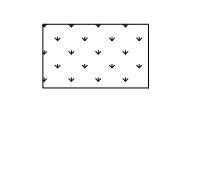
PART OF LOT 31, CONCESSION 10, GOULBURN,
PART 1 ON PLAN 4R1934
CITY OF OTTAWA

Prepared by Annis, O'Sullivan, Vollebekk Ltd.
Field Work Completed December 14, 2020

40 YEAR CANOPY CALCULATION:	
- 36,789m ²	Site Limit of Work
- (24) Large Deciduous Trees Proposed (154m ² /ea.)	
- (38) Coniferous Trees Proposed (79m ² /ea.)	
- (30) Medium Deciduous Trees Proposed (79m ² /ea.)	
- (113) Small Deciduous Trees Proposed (7m ² /ea.)	
= 9,859m ²	canopy cover = 26.8% canopy cover
*Large deciduous tree calculated at 14m spread, Large coniferous trees at 10m spread, Medium deciduous tree calculated at 10m spread, Small deciduous tree calculated at 3m spread	



KEY MAP

CLIENT	
 CLARIDGE HOMES	
CONSULTANTS	
ARCHITECTS:	RLA ARCHITECTURE ROBENOK LUNI ARCHITECT INC. 96 BEECH STREET, OTTAWA, ONTARIO K1S 3J8 Tel: (613) 224-9002
CIVIL ENGINEERS:	NOVATECH ENGINEERS, PLANNERS & LANDSCAPE ARCHITECTS SUITE 200, 1600 BELL COWLAND DRIVE, OTTAWA, ONTARIO K2B 1P6 Tel: (613) 224-9043
SURVEYOR:	Annis O'Sullivan Vollebekk Ltd. Ontario Land Surveyors 14 Concourse Gate, Suite 500, Nepean, Ontario K2B 7S6 Tel: (613) 727-0950
LEGEND	
 PROPOSED DECIDUOUS TREE  REQUIRED SOIL VOLUME AT A 1.5m DEPTH	
 PROPOSED CONIFEROUS TREE  REQUIRED SOIL VOLUME AT A 1.5m DEPTH	
 PROPOSED SHRUBS	
 PROPOSED SOD	
1 ISSUED FOR SITE PLAN APPROVAL No. Issue	11/18/2025 LC JL Date MM/DD/YY DR CK
JAMES B. LENNOX & ASSOCIATES INC. LANDSCAPE ARCHITECTS	
3332 CARLING AVE. OTTAWA, ONTARIO K2H 5A8 Tel: (613) 722-5168 Fax: (866) 343-3942	
PROJECT	
IRON VALLEY 2 TERRACE HOMES 5331 FERNBANK ROAD OTTAWA, ONTARIO	
DRAWING	
LANDSCAPE PLAN	
STAMP	SCALE AS SHOWN
START DATE JUNE, 2021	
PROJECT NO. 21-CLG-2163	
PROJECT NORTH	DRAWING NO.
 ASSOCIATION OF LANDSCAPE ARCHITECTS ONTARIO MEMBER	
PLOT SIZE ARCH-D	
L.1	

