FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT REPORT

Block 297, Plan 20M-1217

Town of Oakville
Regional Municipality of Halton

Prepared for
Valgo Limited

Town File:
Urbantech File #: 24-804

First Submission: April 2025

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1. Introduction

This report provides functional servicing design and stormwater management information in support of the site plan application for the proposed stacked townhouse residential development located east of Meadowridge Drive in between Wheat Boom Drive and Perkins Way in the Town of Oakville, Regional Municipality of Halton. The legal description of the property is Block 297, Plan 20M-1217.

The servicing and development concepts presented in this report are based on the site plan prepared by KNYMH Inc. and are an extension of the information contained in the following reports:

- Final Argo (Joshua Creek) EIR/FSS Addendum #2 (Urbantech, August 2023)
- Geotechnical Investigation by DS Consultants Ltd. (August 2022)
- Pond 54 SWM Report by Urbantech (June 2023)

This study presents the recommended stormwater management and municipal servicing scheme for the development of the subject site. This report is also applicable for future revisions of the plan, assuming the revisions are in general conformance with the servicing and stormwater management concepts outlined in the FSR. The design information presented in this report considers the following guidelines:

- Town of Oakville Development Engineering Procedures and Guidelines
- Regional Municipality of Halton Water and Wastewater Linear Design Manual

This report and the supporting documents do not provide design information pertaining to the internal servicing of the proposed development. As part of the civil engineering design, a set of storm, sanitary, and water connections will be provided for the block to the limit of the underground parking structure, beyond which it will be the responsibility of the building mechanical engineer to design the internal servicing concept, in conformance with the servicing and grading design.

1.1. Subject Site

The subject site is approximately 0.44 hectares and is bounded by Wheat Boom Drive to the north, Perkins Way to the south, Meadowridge Drive to the west, and by NHS Block 298 to the east. The site's legal description is Block 297, Plan 20M-1217, Concession 1, North of Dundas Street, within the Town of Oakville, Regional Municipality of Halton. The proposed development is comprised of three 4-storey Stacked Back-to-Back Townhouse buildings, totalling 60 units.

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2. Grading and Storm Drainage

2.1. Site Grading Design

The site grading design considers the following requirements and constraints:

- Conformance to the Town of Oakville's grading criteria
- Matching existing boundary grading conditions
- Maintaining required drainage boundaries
- Providing minimum cover on proposed servicing
- Providing overland flow conveyance for major storm conditions

The site grading is generally constrained by the existing Meadowridge Drive, Wheat Boom Drive, and Perkins Way right-of-way grades, and by the existing grades along the property line to the east. The proposed private road is graded to match existing conditions at the proposed driveway entrance locations along Wheat Boom Drive and Perkins Way. Refer to Drawing **GR-1** for further details.

2.2. Minor System Drainage

The site is designed to capture the minor system storm drainage flows via roof drains and ground level area drains. The internal storm sewer network is to be designed by the building's mechanical engineer. The proposed site will outlet to existing storm control manholes MH1330 on Perkins Way and will ultimately drain to the existing stormwater management facility, Pond 54.

The 5-year storm design sheet is included in **Appendix A**.

Refer to Drawings **SP-1** & **STM-1** for further details.

2.3. Major System Drainage

Major system drainage, for flows in excess of the 5-year rainfall event, are directed overland to the Perkins Way and Meadowridge Drive right-of-ways, ultimately directed to the Pond 54 overland spillway.

Localized low points along the private road and parking area, necessitated by grading and architectural constraints, are designed to spill towards Perkins Way, with a maximum ponding elevation of 25cm in the unlikely event that the drains become blocked. As these areas will be privately owned and maintained, the level of service will be the responsibility of the condo corporation.

Refer to Drawing **GR-1** for further details.

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2.4. Stormwater Management

Quality and quantity control for the subject property are provided by SWM Pond 54 which is sized to accommodate major and minor system flows from Block 297. For additional details regarding Pond 54 refer to the approved Pond 54 SWM Report by Urbantech (June 2023).

2.5. Low Impact Development Measures

The use of LIDs within the site plan area is limited due to the urban/high-density nature of the development required by the zoning and accepted through the draft plan approval. Opportunities for infiltration-based LID measures are not feasible due to the underground parking structure which spans across the majority of the site's area. Where possible, clean drainage will be directed to green/landscaped areas for filtration and evapo-transpiration. Excess runoff on the landscaped areas will be collected through subdrains and directed to the underground parking drainage system. A small area between the property lines and underground parking structure will be landscaped and may provide opportunities for additional evapo-transpiration and infiltration.

3. SANITARY SERVICING

Sanitary drainage will be directed to existing sanitary control manhole MH1220A on Perkins Way, provided as part of the overall Argo (Joshua Creek) subdivision. The design of the internal sanitary sewer network for both buildings will be the responsibility of the mechanical engineer.

Sanitary drainage is conveyed via existing sewers to the existing Regional Pump Station at William Cutmore Boulevard and Dundas Street which has capacity to service the subject property (analysis completed as part of overall subdivision design). The Argo (Joshua Creek) subdivision sanitary design assumed a population of 243 for Block 297 (95 units assumed at 2.555 persons per unit). The proposed site plan has an estimated population of 162 (60 units at 2.7 persons per unit). Therefore, the existing sanitary sewers have capacity for the proposed development.

The subdivision sanitary sewer design sheet and proposed sanitary demand calculations are included in **Appendix A**.

Refer to Drawings **SP-1** & **SAN-1** for further details.

4. WATER DISTRIBUTION

The subject property is located entirely within Pressure Zone 4 of Halton Region's water distribution system. As part of the overall Argo (Joshua Creek) subdivision design, a

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200mm watermain stub has been extended into Block 297 from the 200mm watermain on Perkins Way for servicing of this block. An additional 150mm water service is proposed to be branched off the existing 200mm watermain stub using a tee connection in order to provide separate domestic and fire services to the building as per Region of Halton's standard RH-409.01.

Existing fire hydrants on Perkins Way, Meadowridge Drive, and Wheat Boom Drive will provide fire protection for the proposed development.

Refer to Drawing **SP-1** for details.

5. Erosion and Sediment Control

An earthworks program is not proposed for this site as the commencement of construction will consist of excavation of majority of the site for the construction of the underground parking structure. A sediment fence is proposed around the perimeter of the site and sediment traps are proposed on all nearby catch basins to ensure silt-laden runoff does not enter the municipal storm drainage system.

Refer to Drawing **ESC-1** for proposed sediment control measures and notes.

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6. Conclusion

The proposed stacked townhouse residential development by Valgo Ltd. as illustrated on the site plan prepared by KNYMH Inc. can be adequately serviced via the existing storm, sanitary and water distribution infrastructure and does not adversely impact any of the surrounding infrastructure or properties.

Andrew McLennan, P.Eng.
Project Manager

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Appendix A:

5-year Storm Sewer Design Sheet

17-563 - Sanitary Sewer Design Sheet

Sanitary Demand Calculations

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STORM SEWER DESIGN SHEET

5 Year Storm

Joshua Creek - Block 297

Town of Oakville

PROJECT DETAILS

Project No: 24-804
Date: 7-Apr-25
Designed by: JM
Checked by: AM

DESIGN CRITERIA

Min. Diameter =	300	mm	Rainfall Intensity =	A / (Tc+B)^c
Mannings 'n'=	0.013			
Starting Tc =	10	min	A =	1170
			B =	5.8
Factor of Safety =	20	%	c =	0.843

NOMINAL PIPE SIZE USED

STREET	FROM MH	TO MH	AREA (ha)	RUNOFF COEFFICIENT "R"	'AR'	ACCUM. 'AR'	RAINFALL INTENSITY (mm/hr)	FLOW (m3/s)	CONSTANT FLOW (m3/s)	ACCUM. CONSTANT FLOW (m3/s)	TOTAL FLOW (m3/s)	LENGTH (m)	SLOPE (%)	PIPE DIAMETER (mm)	FULL FLOW CAPACITY (m3/s)	FULL FLOW VELOCITY (m/s)	INITIAL Tc (min)	TIME OF CONCENTRATION (min)	ACC. TIME OF CONCENTRATION (min)	PERCENT FULL (%)
DRAINAGE TO POND 54																				
EXT 4A		FUT MH	4.91	0.68	3.34	3.34														
EXT 4B		FUT MH	19.29	0.69	13.31	13.31														
EXT 5		FUT MH	5.58	0.74	4.13	4.13														
MEADOWRIDGE DR	FUT MH	102	0.56	0.75	0.42	21.20	77.7	4.573			4.573	141.3	0.75	1200x1800 (BOX)	7.282	3.37	19.17	0.70	19.87	63%
PEONY PATH	201w	146	0.33	0.65	0.21	0.21	114.2	0.068			0.068	43.2	1.00	300	0.097	1.37	10.00	0.53	10.53	70%
PEONY PATH	146	102				0.21	111.1	0.066			0.066	13.5	1.00	300	0.097	1.37	10.53	0.16	10.69	68%
MEADOWRIDGE DR	102	1020	0.22	0.75	0.17	21.58	75.9	4.547			4.547	72.2	0.50	1200x1800 (BOX)	5.946	2.75	19.87	0.44	20.31	76%
HYDRANGEA GDS	204w	147	0.23	0.65	0.15	0.15	114.2	0.047			0.047	37.8	1.00	300	0.097	1.37	10.00	0.46	10.46	49%
HYDRANGEA GDS	147	1020				0.15	111.5	0.046			0.046	19.2	1.00	300	0.097	1.37	10.46	0.23	10.69	48%
MEADOWRIDGE DR	1020	106	0.22	0.75	0.17	21.89	74.8	4.548			4.548	76.4	0.50	1200x1800 (BOX)	5.946	2.75	20.31	0.46	20.77	77%
WHEAT BOOM DRIVE	103w	106	**0.56**	0.75	0.42	0.42	114.2	0.133			0.133	85.1	0.50	450	0.202	1.27	10.00	1.12	11.12	66%
EXT 2		PLUG3	2.85	0.80	2.28	2.28														
EXT 3		PLUG3	0.77	0.78	0.60	0.60														
WHEAT BOOM DRIVE	PLUG3	104	0.34	0.75	0.26	3.14	114.2	0.995			0.995	122.7	2.80	750	1.863	4.22	10.00	0.48	10.48	53%
WHEAT BOOM DRIVE	104	105	0.31	0.75	0.23	3.37	111.3	1.042			1.042	94.7	2.00	750	1.574	3.56	10.48	0.44	10.93	66%
WHEAT BOOM DRIVE	105	106	0.05	0.75	0.04	3.41	108.8	1.030			1.030	31.4	1.00	825	1.435	2.69	10.93	0.19	11.12	72%
LANE 195	107	108	0.42	0.80	0.34	0.34	114.2	0.107			0.107	86.8	1.50	375	0.215	1.94	10.00	0.74	10.74	50%
LANE 195	108	109	0.06	0.75	0.05	0.38	109.9	0.116			0.116	13.7	1.50	375	0.215	1.94	10.74	0.12	10.86	54%
LANE 195	109	112	0.03	0.75	0.02	0.40	109.2	0.122			0.122	26.7	1.00	375	0.175	1.59	10.86	0.28	11.14	70%
PERKINS WAY	110	111	0.33	0.80	0.26	0.26	114.2	0.084			0.084	71.6	2.25	300	0.145	2.05	10.00	0.58	10.58	58%
LANE 196		111	0.05	0.80	0.04	0.04														
PERKINS WAY	111	112	0.28	0.80	0.22	0.53	110.8	0.162			0.162	85.6	2.25	375	0.263	2.38	10.58	0.60	11.18	62%
LANE 196		112	0.05	0.80	0.04	0.04														
PERKINS WAY	112	113	0.04	0.75	0.03	1.00	107.5	0.299			0.299	38.8	0.50	600	0.434	1.54	11.18	0.42	11.60	69%
MULLER LANE	115	119	0.47	0.80	0.38	0.38	114.2	0.119			0.119	76.5	1.00	375	0.175	1.59	10.00	0.80	10.80	68%

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STORM SEWER DESIGN SHEET

5 Year Storm

Joshua Creek - Block 297

Town of Oakville

PROJECT DETAILS

Project No: 24-804
Date: 7-Apr-25
Designed by: JM
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DESIGN CRITERIA

Min. Diameter =	**300**	**mm**	**Rainfall Intensity =**	**A / (Tc+B)^c**
Mannings 'n'=	**0.013**			
Starting Tc =	**10**	**min**	**A =**	**1170**
			B =	**5.8**
Factor of Safety =	**20**	**%**	**c =**	**0.843**

NOMINAL PIPE SIZE USED

STREET	FROM MH	TO MH	AREA (ha)	RUNOFF COEFFICIENT "R"	'AR'	ACCUM. 'AR'	RAINFALL INTENSITY (mm/hr)	FLOW (m3/s)	CONSTANT FLOW (m3/s)	ACCUM. CONSTANT FLOW (m3/s)	TOTAL FLOW (m3/s)	LENGTH (m)	SLOPE (%)	PIPE DIAMETER (mm)	FULL FLOW CAPACITY (m3/s)	FULL FLOW VELOCITY (m/s)	INITIAL Tc (min)	TIME OF CONCENTRATION (min)	ACC. TIME OF CONCENTRATION (min)	PERCENT FULL (%)
DEMPSTER LANE	117	120	0.50	0.80	0.40	0.40	114.2	0.127			0.127	84.0	1.00	450	0.285	1.79	10.00	0.78	10.78	45%
WELSMAN GRDS	118	119	0.11	0.75	0.08	0.08	114.2	0.026			0.026	30.9	0.50	600	0.434	1.54	10.00	0.34	10.34	6%
WELSMAN GRDS	119	120	0.11	0.75	0.08	0.54	109.5	0.165			0.165	44.0	0.50	600	0.434	1.54	10.80	0.48	11.28	38%
WELSMAN GRDS	120	131	0.10	0.75	0.08	1.02	107.0	0.302			0.302	44.0	0.75	600	0.532	1.88	11.28	0.39	11.67	57%
EXT 1		PLUG4	4.87	0.74	3.60	3.60														
COURTLEIGH TR	PLUG4	127	0.33	0.75	0.25	3.85	97.2	1.040			1.040	16.5	0.50	1050	1.931	2.23	13.33	0.12	13.45	54%
COURTLEIGH TR	127	128				3.85	96.7	1.034			1.034	57.7	0.50	1050	1.931	2.23	13.45	0.43	13.88	54%
COURTLEIGH TR	128	129	0.17	0.75	0.13	3.98	94.9	1.049			1.049	11.0	0.50	1050	1.931	2.23	13.88	0.08	13.97	54%
COURTLEIGH TR	129	130	0.30	0.75	0.23	4.20	94.6	1.104			1.104	71.7	0.75	1050	2.365	2.73	13.97	0.44	14.40	47%
COURTLEIGH TR	125	126	0.18	0.75	0.14	0.14	114.2	0.043			0.043	41.9	0.50	525	0.304	1.40	10.00	0.50	10.50	14%
COURTLEIGH TR	126	130	0.17	0.75	0.13	0.26	111.3	0.081			0.081	66.6	0.70	525	0.360	1.66	10.50	0.67	11.16	23%
ANTHONIA TR	121	122	0.43	0.75	0.32	0.32	114.2	0.102			0.102	71.9	1.50	375	0.215	1.94	10.00	0.62	10.62	48%
ANTHONIA TR	122	123	0.76	0.75	0.57	0.89	110.6	0.274			0.274	96.0	1.00	525	0.430	1.99	10.62	0.81	11.42	64%
ANTHONIA TR	123	124	0.23	0.75	0.17	1.07	106.2	0.314			0.314	16.4	1.00	600	0.614	2.17	11.42	0.13	11.55	51%
ANTHONIA TR	124	130	0.09	0.75	0.07	1.13	105.6	0.332			0.332	32.6	1.00	600	0.614	2.17	11.55	0.25	11.80	54%
ANTHONIA TR	130	131	0.53	0.75	0.40	6.00	92.8	1.546			1.546	139.1	1.50	1050	3.344	3.86	14.40	0.60	15.00	46%
LANE 196	145	131	0.24	0.80	0.19	0.19	114.2	0.061			0.061	71.1	1.00	525	0.430	1.99	10.00	0.60	10.60	14%
ANTHONIA TR	131	132	0.16	0.75	0.12	7.32	90.6	1.843			1.843	51.8	0.50	1200	2.757	2.44	15.00	0.35	15.36	67%
ANTHONIA TR	132	140				7.32	89.3	1.817			1.817	18.5	0.50	1350	3.774	2.64	15.36	0.12	15.48	48%
BLOCK 297 (MIXED USE)	**1330**	**133**	**0.38**	**0.90**	**0.34**	**0.34**	**114.2**	**0.109**	0.000	0.000	**0.109**	**11.2**	**0.50**	**450**	**0.202**	**1.27**	**10.00**	**0.15**	**10.15**	**54%**
PERKINS WAY	133	134	0.26	0.75	0.20	0.54	113.3	0.169			0.169	65.1	0.50	525	0.304	1.40	10.15	0.77	10.92	56%
PERKINS WAY	134	136	0.24	0.75	0.18	0.72	108.9	0.217			0.217	66.9	0.50	600	0.434	1.54	10.92	0.73	11.65	50%
PERKINS WAY	135n	136	0.17	0.75	0.13	0.13	114.2	0.040			0.040	49.0	0.50	375	0.124	1.12	10.00	0.73	10.73	33%
LANE 197	137	138	0.35	0.80	0.28	0.28	114.2	0.089			0.089	69.9	1.00	525	0.430	1.99	10.00	0.59	10.59	21%
ANTHONIA TR	136	138	0.12	0.80	0.10	0.94	105.1	0.274			0.274	30.5	0.50	600	0.434	1.54	11.65	0.33	11.98	63%
ANTHONIA TR	138	139	0.12	0.80	0.10	1.32	103.4	0.378			0.378	22.0	0.50	675	0.594	1.66	11.98	0.22	12.20	64%
ANTHONIA TR	139	140				1.32	102.3	0.374			0.374	12.0	0.50	675	0.594	1.66	12.20	0.12	12.32	63%
PERKINS WAY	CBMH 1	113	0.07	0.75	0.05	0.05	114.2	0.017			0.017	12.6	1.00	300	0.097	1.37	10.00	0.15	10.15	17%
MEADOWRIDGE DR	106	113	**0.21**	0.75	0.16	25.88	73.7	5.297			5.297	67.6	0.25	1500x2400 (BOX)	8.269	2.30	20.77	0.49	21.26	64%
MEADOWRIDGE DR	113	140	0.52	0.75	0.39	27.32	72.6	5.507			5.507	137.5	0.25	1500x2400 (BOX)	8.269	2.30	21.26	1.00	22.26	67%
POND 54	140	HW1	0.23	0.75	0.17	36.13	70.4	7.065			7.065	77.2	0.25	1500x3000 (BOX)	10.903	2.42	22.26	0.53	22.79	65%
PERKINS WAY	135s	141	0.69	0.75	0.52	0.52	114.2	0.164			0.164	113.5	0.30	525	0.236	1.09	10.00	1.74	11.74	70%
PERKINS WAY	141	142				0.52	104.6	0.150			0.150	8.1	0.30	525	0.236	1.09	11.74	0.12	11.86	64%
PERKINS WAY	142	143	0.15	0.75	0.11	0.63	104.0	0.182	0.141	0.141	0.323	59.0	0.30	675	0.460	1.29	11.86	0.76	12.63	70%
MEADOWRIDGE DR	143	144	0.31	0.75	0.23	0.86	100.3	0.240		0.141	0.381	95.7	0.50	675	0.594	1.66	12.63	0.96	13.59	64%
POND 54	144	HW1				0.86	96.1	0.230		0.141	0.371	21.0	0.50	675	0.594	1.66	13.59	0.21	13.80	62%

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SANITARY SEWER DESIGN SHEET

ARGO (JOSHUA CREEK) LIMITED

REGIONAL MUNICIPALITY OF HALTON

PROJECT DETAILS

Project No: 17-563
Date: Nov 2022
Designed by: SL
Checked by: SR

DESIGN CRITERIA

Min Diameter =	200	mm	Avg. Domestic Flow =	275.0	l/c/d
Mannings 'n'=	0.013		Infiltration =	0.286	l/s/ha
Min. Velocity =	0.6	m/s	Max. Peaking Factor =	4.50	
Max. Velocity =	3.0	m/s	Min. Peaking Factor=	2.00	
Factor of Safety =	20	%			

NOMINAL PIPE SIZE USED

			RESIDENTIAL							COMMERCIAL/INDUSTRIAL/INSTITUTIONAL						FLOW CALCULATIONS							PIPE DATA					
STREET	FROM MH	TO MH	AREA (ha)	ACC. AREA (ha)	UNITS (#)	DENSITY (P/ha)	DENSITY (P/unit)	POP	ACCUM. RES. POP.	AREA (ha)	ACC. AREA (ha)	EQUIV. POP. (p/ha)	FLOW RATE (l/s/ha)	EQUIV. POP.	ACCUM. EQUIV. POP.	INFILTRATION (l/s)	TOTAL ACCUM. POP.	PEAKING FACTOR	RES. FLOW (l/s)	COMM. FLOW (l/s)	ACCUM. COMM. FLOW (l/s)	TOTAL FLOW (l/s)	SLOPE (%)	PIPE DIAMETER (mm)	FULL FLOW CAPACITY (l/s)	FULL FLOW VELOCITY (m/s)	ACTUAL VELOCITY (m/s)	PERCENT FULL (%)
DUNDAS STREET TRUNK																												
ANTHONIA TRAIL	101A	102A	0.34	0.34		135		46	46							0.1	46	4.32	0.6			0.7	1.50	200	40.2	1.3	0.5	2%
ANTHONIA TRAIL	102A	103A	0.53	0.87		135		72	118							0.2	118	4.22	1.6			1.8	1.00	200	32.8	1.0	0.6	6%
ANTHONIA TRAIL	103A	104A	0.13	1.00		135		18	136							0.3	136	4.20	1.8			2.1	1.00	200	32.8	1.0	0.6	6%
ANTHONIA TRAIL	104A	105A	0.15	1.15		135		21	157							0.3	157	4.18	2.1			2.4	3.00	200	56.8	1.8	0.9	4%
ANTHONIA TRAIL	105A	112A		1.15					157							0.3	157	4.18	2.1			2.4	1.00	200	32.8	1.0	0.6	7%
COURTLEIGH TRAIL	106A	107A	0.70	0.70		55		39	39							0.2	39	4.34	0.5			0.7	1.75	200	43.4	1.4	0.5	2%
	107A	112A																					2.00	200				
EXTERNAL AREA 1	PLUG 4	108A	5.38	5.38		135		727	727							1.5	727	3.89	9.0			10.5	0.40	200	20.7	0.7	0.7	51%
COURTLEIGH TRAIL	108A	109A	0.48	5.86		135		65	792							1.7	792	3.86	9.7			11.4	0.50	200	23.2	0.7	0.7	49%
COURTLEIGH TRAIL	109A	110A	0.21	6.07		135		29	821							1.7	821	3.85	10.1			11.8	0.50	200	23.2	0.7	0.7	51%
COURTLEIGH TRAIL	110A	111A	0.23	6.30		135		32	853							1.8	853	3.84	10.4			12.2	0.75	200	28.4	0.9	0.8	43%
COURTLEIGH TRAIL	111A	112A		6.30					853							1.8	853	3.84	10.4			12.2	2.00	200	46.4	1.5	1.2	26%
MULLER LANE	113A	118A	0.46	0.46		135		63	63							0.1	63	4.29	0.9			1.0	1.30	200	37.4	1.2	0.5	3%
DEMPSTER LANE	115A	119A	0.50	0.50		135		68	68							0.1	68	4.29	0.9			1.1	1.50	200	40.2	1.3	0.5	3%
WELSMAN GARNDENS	117A	118A	0.15	0.15		135		21	21							0.0	21	4.38	0.3			0.3	1.50	200	40.2	1.3	0.3	1%
WELSMAN GARNDENS	118A	119A	0.23	0.84		135		32	116							0.2	116	4.23	1.6			1.8	1.00	200	32.8	1.0	0.5	5%
WELSMAN GARNDENS	119A	120A	0.14	1.48		135		19	203							0.4	203	4.15	2.7			3.1	1.50	200	40.2	1.3	0.8	8%
ANTHONIA TRAIL	112A	120A	0.70	8.15		135		95	1105							2.3	1105	3.77	13.3			15.6	1.50	200	40.2	1.3	1.2	39%
ANTHONIA TRAIL	120A	121A	0.26	9.89		135		36	1344							2.8	1344	3.71	15.9			18.7	1.20	200	35.9	1.1	1.1	52%
ANTHONIA TRAIL	121A	128A		9.89					1344							2.8	1344	3.71	15.9			18.7	1.50	200	40.2	1.3	1.2	47%
MIXED USE - BLOCK 297	**1220A**	**122A**	**0.00**	**0.00**	**95**	**0**	**2.555**	**243**	**243**	**0.00**	**0.00**	**0**	**0.000**	**0**	**0**	**0.0**	**243**	**4.12**	**3.2**	**0.0**	**0.0**	**3.2**	**2.00**	**200**	**46.4**	**1.5**	**0.8**	**7%**
PERKINS WAY	122A	123A	1.02	1.02		135		138	381							0.3	381	4.03	4.9			5.2	1.00	200	32.8	1.0	0.8	16%
PERKINS WAY	123A	124A	1.00	2.02		135		135	516							0.6	516	3.97	6.5			7.1	0.50	200	23.2	0.7	0.6	31%
PERKINS WAY	124A	125A	0.04	2.06		135		6	522							0.6	522	3.96	6.6			7.2	0.50	200	23.2	0.7	0.6	31%
PERKINS WAY	125A	126A	0.18	2.24		135		25	547							0.6	547	3.95	6.9			7.5	0.50	200	23.2	0.7	0.6	32%
MEADOWRIDGE DRIVE	126A	127A	0.31	2.55		135		42	589							0.7	589	3.94	7.4			8.1	0.50	200	23.2	0.7	0.7	35%
MEADOWRIDGE DRIVE	127A	128A	0.39	2.94		135		53	642							0.8	642	3.92	8.0			8.8	0.50	200	23.2	0.7	0.7	38%
MEADOWRIDGE DRIVE	128A	132A	0.87	13.70		135		118	2104							3.9	2104	3.57	23.9			27.8	0.50	250	42.0	0.9	0.9	66%
PERKINS WAY	129A	130A	0.87	0.87		135		118	118							0.2	118	4.22	1.6			1.8	2.00	200	46.4	1.5	0.7	4%
PERKINS WAY	130A	131A	0.04	0.91					118							0.3	118	4.22	1.6			1.8	1.80	200	44.0	1.4	0.7	4%
PERKINS WAY	131A	132A		0.91					118							0.3	118	4.22	1.6			1.8	1.00	200	32.8	1.0	0.6	6%
MEADOWRIDGE DRIVE	132A	133A	0.23	14.84		135		32	2254							4.2	2254	3.54	25.4			29.7	0.50	250	42.0	0.9	0.9	71%
MEADOWRIDGE DRIVE	133A	138A		14.84					2254							4.2	2254	3.54	25.4			29.7	0.50	250	42.0	0.9	0.9	71%
EXTERNAL AREA 3		1340A	2.85	2.85		40		114	114							0.8	114	4.23	1.5			2.3						
EXTERNAL AREA 2-DUNOAK		1340A	1.02	1.02		135		138	138							0.3	138	4.20	1.8			2.1						
WHEAT BOOM DRIVE	1340A	134A	0.50	4.37		135		68	320							1.2	320	4.07	4.1			5.4	3.00	200	56.8	1.8	1.1	9%
WHEAT BOOM DRIVE	134A	135A	0.46	4.83		135		63	383							1.4	383	4.03	4.9			6.3	2.50	200	51.9	1.7	1.1	12%
PARK		247	4.47	4.47		40		179	179							1.3	179	4.17	2.4			3.7						
	247	135A		4.47					179							1.3	179	4.17	2.4			3.7	1.00	200	32.8	1.0	0.7	11%
WHEAT BOOM DRIVE	135A	138A		9.30					562							2.7	562	3.95	7.1			9.7	1.20	200	35.9	1.1	1.0	27%

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SANITARY SEWER DESIGN SHEET

ARGO (JOSHUA CREEK) LIMITED

REGIONAL MUNICIPALITY OF HALTON

PROJECT DETAILS

Project No: 17-563
Date: Nov 2022
Designed by: SL
Checked by: SR

DESIGN CRITERIA

Min Diameter =	200	mm	Avg. Domestic Flow =	275.0	l/c/d
Mannings 'n'=	0.013		Infiltration =	0.286	l/s/ha
Min. Velocity =	0.6	m/s	Max. Peaking Factor =	4.50	
Max. Velocity =	3.0	m/s	Min. Peaking Factor=	2.00	
Factor of Safety =	20	%			

NOMINAL PIPE SIZE USED

			RESIDENTIAL							COMMERCIAL/INDUSTRIAL/INSTITUTIONAL						FLOW CALCULATIONS							PIPE DATA					
STREET	FROM MH	TO MH	AREA (ha)	ACC. AREA (ha)	UNITS (#)	DENSITY (P/ha)	DENSITY (P/unit)	POP	ACCUM. RES. POP.	AREA (ha)	ACC. AREA (ha)	EQUIV. POP. (p/ha)	FLOW RATE (l/s/ha)	EQUIV. POP.	ACCUM. EQUIV. POP.	INFILTRATION (l/s)	TOTAL ACCUM. POP.	PEAKING FACTOR	RES. FLOW (l/s)	COMM. FLOW (l/s)	ACCUM. COMM. FLOW (l/s)	TOTAL FLOW (l/s)	SLOPE (%)	PIPE DIAMETER (mm)	FULL FLOW CAPACITY (l/s)	FULL FLOW VELOCITY (m/s)	ACTUAL VELOCITY (m/s)	PERCENT FULL (%)
EXTERNAL AREA 4		PLUG 5	35.00	35.00				3150	3150							10.0	3150	3.42	34.3			44.3						
MEADOWRIDGE DRIVE	PLUG 5	136A	0.36	35.36		135		49	3199							10.1	3199	3.42	34.8			44.9	0.75	300	83.7	1.2	1.2	54%
MEADOWRIDGE DRIVE	136A	137A	0.68	36.04		135		92	3291							10.3	3291	3.41	35.7			46.0	0.50	300	68.4	1.0	1.0	67%
MEADOWRIDGE DRIVE	137A	138A		36.04					3291							10.3	3291	3.41	35.7			46.0	0.50	300	68.4	1.0	1.0	67%
WHEAT BOOM DRIVE	138A	EX133A	0.69	60.87		55		38	6145							17.4	6145	3.16	61.8			79.2	0.50	375	124.0	1.1	1.2	64%
HYDRANGEA GARDENS	139A	EX401A	0.97	0.97		55		54	54							0.3	54	4.31	0.7			1.0	1.00	200	32.8	1.0	0.5	3%
PEONY PATH	142A	EX404A	1.11	1.11		55		62	62							0.3	62	4.29	0.8			1.2	1.00	200	32.8	1.0	0.5	4%
LOON LANE	145A	146A	0.65	0.65		55		36	36							0.2	36	4.34	0.5			0.7	1.00	200	32.8	1.0	0.4	2%
LOON LANE	146A	EX405A	0.60	1.25		55		33	69							0.4	69	4.28	0.9			1.3	1.00	200	32.8	1.0	0.5	4%
PELICAN PASSAGE	148A	149A	0.70	0.70		55		39	39							0.2	39	4.34	0.5			0.7	1.00	200	32.8	1.0	0.4	2%
PELICAN PASSAGE	149A	EX406A	0.70	1.40		55		39	78							0.4	78	4.27	1.1			1.5	1.00	200	32.8	1.0	0.5	4%
EXTERNAL AREA 5		151A	0.42	0.42		55		24	24							0.1	24	4.37	0.3			0.5						
DOVE DRIVE	151A	152A	0.77	1.19		55		43	67							0.3	67	4.29	0.9			1.3	1.00	200	32.8	1.0	0.5	4%
DOVE DRIVE	152A	153A	0.30	1.49		55		17	84							0.4	84	4.26	1.1			1.6	1.00	200	32.8	1.0	0.5	5%
DOVE DRIVE	153A	155A	0.05	1.54					84							0.4	84	4.26	1.1			1.6	1.00	200	32.8	1.0	0.5	5%
LYNX GARNDENS	154A	155A	1.11	1.11		55		62	62							0.3	62	4.29	0.8			1.2	1.00	200	32.8	1.0	0.5	4%
LYNX GARNDENS	155A	EX 407A	0.43	3.08		55		24	170							0.9	170	4.17	2.3			3.1	0.50	200	23.2	0.7	0.5	14%
EXTERNAL AREA 6		PLUG 2	0.84	0.84		90		76	76							0.2	76	4.27	1.0			1.3						
HAWK ROAD	PLUG 2	156A	0.56	1.40		55		31	107							0.4	107	4.24	1.4			1.8	1.00	200	32.8	1.0	0.6	6%
HAWK ROAD	156A	158A		1.40					107							0.4	107	4.24	1.4			1.8	1.00	200	32.8	1.0	0.6	6%
EXTERNAL AREA 7		157A	2.40	2.40		70		168	168							0.7	168	4.17	2.2			2.9						
EXTERNAL AREA 8		157A	4.15	4.15		40		166	166							1.2	166	4.18	2.2			3.4						
EXTERNAL AREA 9		157A	28.35	28.35		100		2835	2835							8.1	2835	3.46	31.2			39.4						
EXTERNAL AREA 10		157A	18.15	18.15		100		1815	1815							5.2	1815	3.62	20.9			26.1						
EXTERNAL AREA 11		157A	9.03	9.03		100		903	903							2.6	903	3.83	11.0			13.6						
EXTERNAL AREA 12		157A	278.40	278.40				14276	14276							79.6	14276	2.80	127.2			206.8						
WILLIAM CUTMORE BOULEVARD	157A	158A	0.59	341.07		55		33	20196							97.5	20196	2.65	170.2			267.8	0.30	600	336.3	1.2	1.3	80%
WILLIAM CUTMORE BOULEVARD	158A	159A	0.22	342.69		55		13	20316							98.0	20316	2.65	171.1			269.1	0.30	600	336.3	1.2	1.3	80%
WILLIAM CUTMORE BOULEVARD	159A	EX2001A	0.78	343.47		55		43	20359							98.2	20359	2.64	171.4			269.6	0.30	600	336.3	1.2	1.3	80%
SANITARY LOCAL SEWERS																												
WILLIAM CUTMORE BOULEVARD	MH157A	MH158A	0.59	0.59		55		33	33							0.2	33	4.35	0.5			0.6	1.00	200	32.8	1.0	0.4	2%
WILLIAM CUTMORE BOULEVARD	MH158A	MH159A	0.22	0.81		55		13	46							0.2	46	4.32	0.6			0.9	1.00	200	32.8	1.0	0.4	3%
WILLIAM CUTMORE BOULEVARD	MH159A	EX 2001A	0.78	1.59		55		43	89							0.5	89	4.26	1.2			1.7	1.00	200	32.8	1.0	0.5	5%
WHEAT BOOM DRIVE	MH138A	EX 133A	0.69	0.69		55		38	38							0.2	38	4.34	0.5			0.7	2.50	200	51.9	1.7	0.5	1%

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URBANTECH

SANITARY DEMAND CALCULATIONS

Project Name: Block 297
Municipality: Region of Halton
Project No.: 24-804
Date: 7-Apr-25

Existing Site

Site	Block 297
Existing Land Use	Undeveloped
Site Area (ha)	0.44
Residential Unit Sewage Flow (L/p/s)	0.003183
Infiltration Allowance (L/ha/s)	0.286
Residential Population (ppl/unit)*	2.7
Residential Land Use Area (ha)	0.70

*All factors, densities, and caclulations are as per The Region of Halton Water and Wastewater Linear Design Manual Version 5, October 2019

**Residential population equivalency factor assumed conservatively to be 2.7 ppu as the density of the proposed development is larger than section 2.3.2. of the Linear Design Manual.*

Proposed Site Architectural Site Stats: 26-Mar-25

Average Dry Weather Flow

Units	60
Residential Population	162
Residential Sewage Flow (L/s)	0.52

Peaking Factor

Kav	1.00
Harmon Peaking Factor, M	4.18
Peak Residential Flow (L/s)	2.16

Proposed Infiltration

Site Area (ha)	0.44
Infiltration (L/s) (Infiltration Allowance 0.286 L/ha/s)	0.13

Total Flows

Peak Commercial Flow (L/s)	2.16
Infiltration (L/s)	0.13
Total Sanitary Flow (L/s)	2.28

Appendix B:

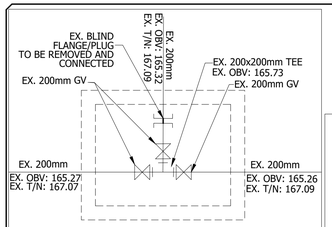
Servicing Plan SP-1

Grading Plan GR-1

Storm Drainage Plan STM-1

Sanitary Drainage Plan SAN-1

Erosion & Sediment Control Plan ESC-1



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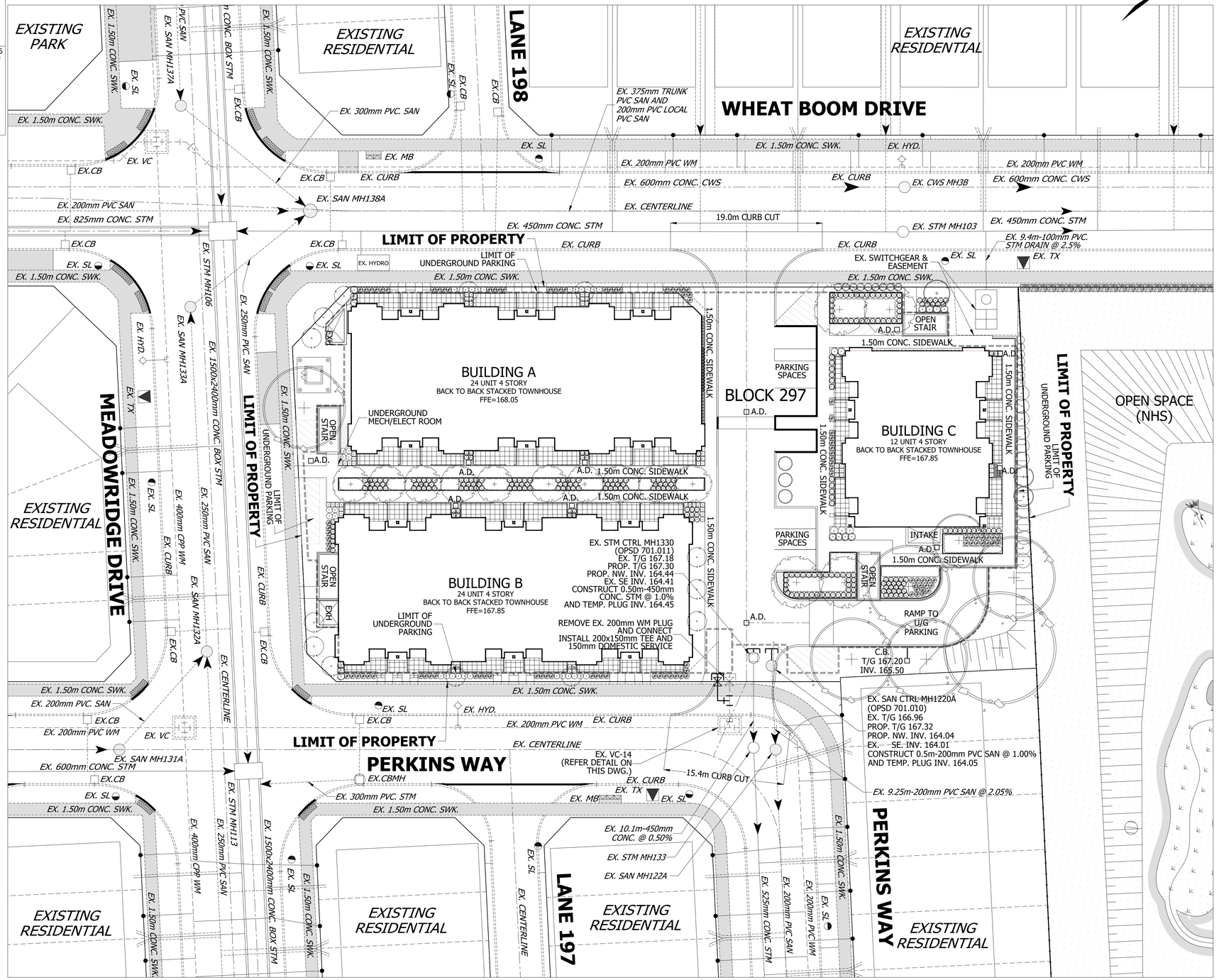
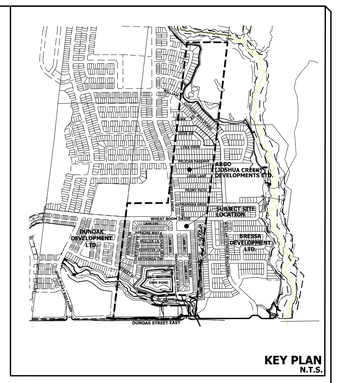




KEY PLAN
N.T.S.

LEGEND

- CONCRETE CURB, TWO-STAGE BARRIER (TOWN STD. 6-1)
- BARRIER FREE CURB RAMP (OPSD 310.033)
- PROPOSED STORM SEWER AND MANHOLE
- PROPOSED SANITARY SEWER AND MANHOLE
- EXISTING SEWER AND STORM MANHOLE
- EXISTING SANITARY SEWER AND MANHOLE
- AREA DRAIN
- EXISTING SINGLE CATCHBASIN
- EXISTING DOUBLE CATCHBASIN
- EXISTING HYDRANT & VALVE
- PROPOSED HYDRANT & VALVE
- VALVE AND BOX
- 2400mm VALVE CHAMBER (STD RH 402.010)
- EX. TRANSFORMER
- EX. STREET LIGHT
- UNIT PAVING (BY OTHERS)
- PEDESTRIAN CONCRETE PAVING (BY OTHERS)
- VEHICULAR CONCRETE PAVING (BY OTHERS)
- OAKVILLAGE PHASE 3A
- 100mm WATER METER
- BACKFLOW PREVENTER

NOTES:

1. FOR DETAILS OF EXISTING SEWERS REFER TO PROJECT 17-563 BY URBANTECH CONSULTING.
2. NEW WATER SERVICING TO BE BUILT WITH PHYSICAL SEPARATION FROM LIVE WATER SERVICING FOR TESTING PURPOSES.
3. ANY CONNECTION TO AN EXISTING SERVICE PREVIOUSLY INSTALLED SHALL BE SWABBED, FLUSHED AND SAMPLED BY THE REGION AT THE SOLE EXPENSE OF THE APPLICANT.

BENCHMARK NOTE:

ELEVATIONS ARE GEODETIC AND ARE REFERRED TO TOWN OF OAKVILLE BENCHMARK O.B.M. # 309 HAVING AN ORTHOMETRIC ELEVATION OF 171.84 METRES. ELEVATIONS ARE REFERENCED TO THE CANADIAN GEODETIC VERTICAL DATUM OF 1928, 1978 ADJUSTMENT (CGVD-1928:1978).

CUT CROSS SET IN MOST WESTERLY CORNER OF CONCRETE BASE OF TRANSFORMER CABINET No. 15870 ON THE SOUTH EAST SIDE OF WHEAT BOOM DRIVE, BETWEEN LOTS 60 AND 61, PLAN 20M-1173, 140M NORTH EAST OF THE INTERSECTION OF WHEAT BOOM DRIVE AND SUNFLOWER DRIVE.

No.	REVISION	DATE	BY
4			
3			
2			
1	FIRST SUBMISSION	APRIL 2025	A.M.

VALERY GROUP
JOSHUA CREEK - BLOCK 297
60 UNIT CONDOMINIUM

OAKVILLE
REGIONAL MUNICIPALITY OF HALTON
TOWN OF OAKVILLE

MUNICIPAL PLANNING No. ####
REGION NO. SP ####
SITE PLAN NO. SP ####

MUNICIPAL
APPROVED IN PRINCIPAL SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO TOWN STANDARDS AND SPECIFICATIONS.
SIGNED _____ DATE _____
MANAGER OF DEVELOPMENT ENGINEERING

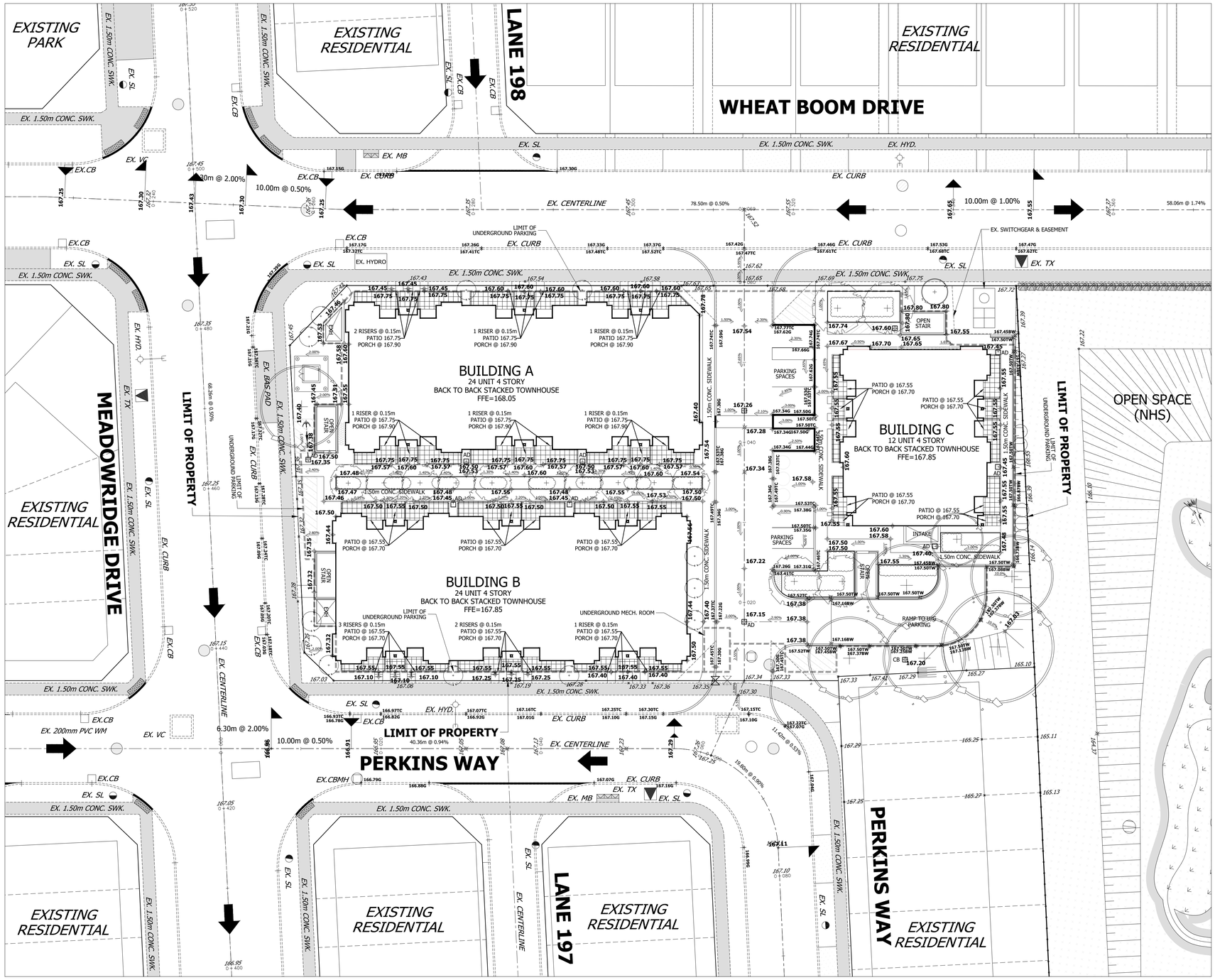
REGIONAL
SEE REGIONAL APPROVAL BLOCK ON THIS DRAWING.

URBANTECH®
Urbantech® Consulting
A Division of Leighton-Zac Ltd.
3760 14th Avenue, Suite 301,
Markham, ON. L3R 3T7
TEL 905.946.9461 • urbantech.com

LICENSED PROFESSIONAL ENGINEER
A.M.R. MCLENNAN
100509390
APR 7, 2025
PROVINCE OF ONTARIO

SERVICING PLAN

DESIGNED:	A.M.	CHECKED:	A.M.	PROJECT No.:	24-804
DRAWN:	J.M.	DATE:	APRIL 2025	SHEET No.:	
SCALE:	1:250			DRAWING No.:	SP-1



KEY PLAN
N.T.S.

LEGEND

- CONCRETE CURB, TWO-STAGE
- BARRIER (TOWN STD. 6-1)
- BARRIER FREE CURB RAMP (OPSD 310.033)
- STORM MANHOLE
- SANITARY MANHOLE
- AREA DRAIN
- EX. SINGLE CATCHBASIN
- EX. DOUBLE CATCHBASIN
- HYDRANT & VALVE
- VALVE AND BOX
- EX. TRANSFORMER
- EX. STREET LIGHT
- PEDESTRIAN DECORATIVE UNIT PAVING (BY OTHERS)
- 249.76 / 247.00 MAXIMUM 3:1 SLOPE
- EXISTING CONTOUR AND ELEVATION
- +240.71 PROPOSED ELEVATION
- +240.71TC PROPOSED TOP OF CURB ELEVATION
- +240.71G PROPOSED GUTTER ELEVATION
- +(240.71) FUTURE ELEVATION
- +169.99 EXISTING ELEVATION
- PROP. OVERLAND FLOW DIRECTION
- EX. OVERLAND FLOW DIRECTION
- PROP. EMERGENCY FLOW DIRECTION
- PLANTING AREA (BY OTHERS)

BENCHMARK NOTE:

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No.	REVISION	DATE	BY
3			
2			
1	FIRST SUBMISSION	APR. 2025	A.M.

VALERY GROUP
JOSHUA CREEK - BLOCK 297
60 UNIT CONDOMINIUM

OAKVILLE

REGIONAL MUNICIPALITY OF HALTON
TOWN OF OAKVILLE

REGION NO. SP ####

MUNICIPAL PLANNING No. ######### SITE PLAN NO. SP ####

MUNICIPAL

APPROVED IN PRINCIPAL SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO TOWN STANDARDS AND SPECIFICATIONS.

SIGNED_____ DATE_____

MANAGER OF DEVELOPMENT ENGINEERING

REGIONAL

DESIGN OF SANITARY AND WATER SERVICES APPROVED SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO HALTON REGION STANDARDS & SPECIFICATIONS & LOCATION APPROVAL FROM AREA MUNICIPALITY.

SIGNED_____ DATE_____

LEGISLATIVE & PLANNING SERVICES DEPARTMENT

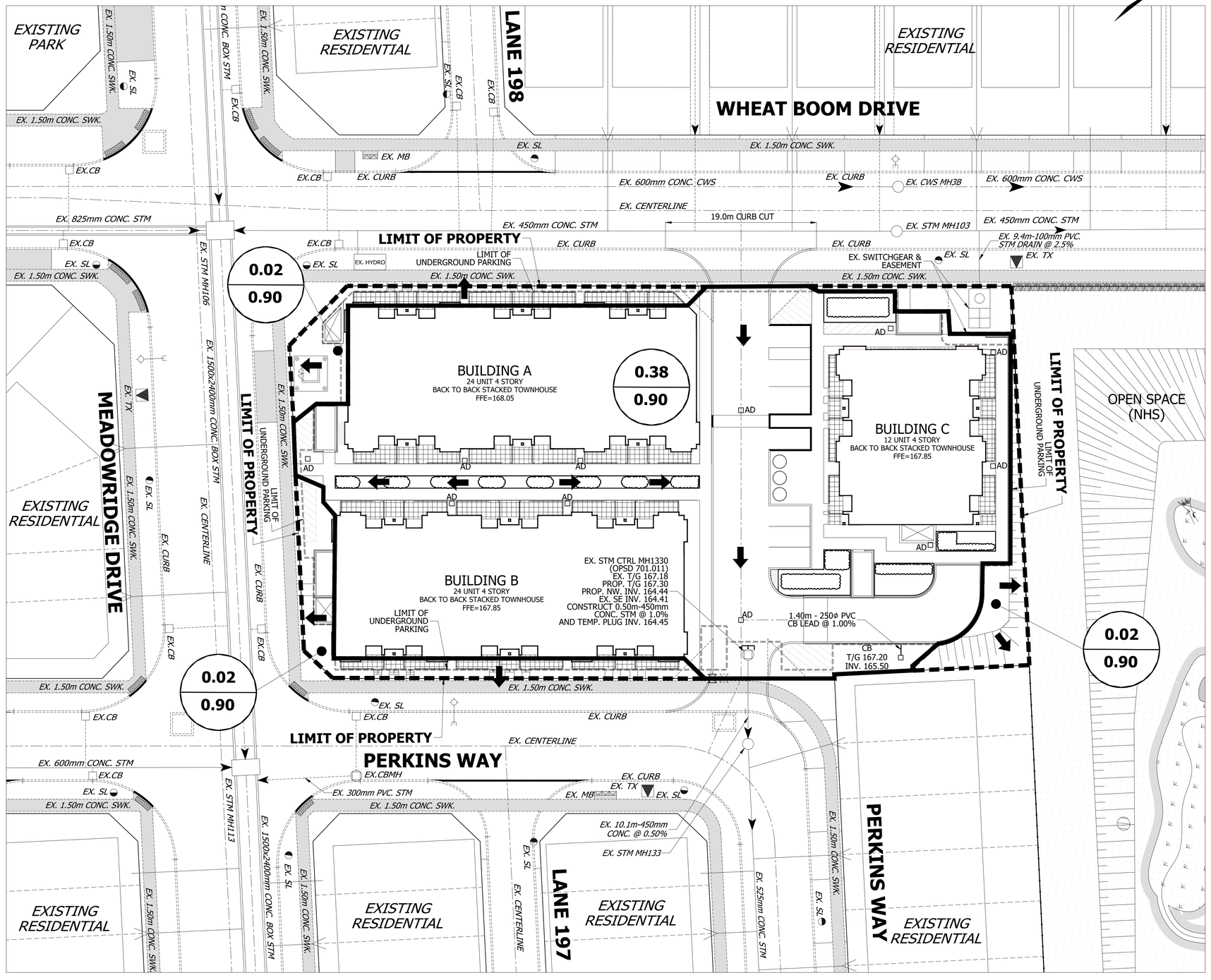
URBANTECH®

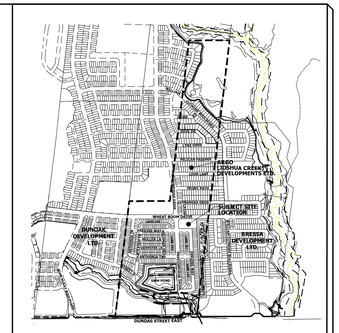
Urbantech® Consulting
A Division of Leighton-Zec Ltd.
3760 14th Avenue, Suite 301,
Markham, ON. L3R 3T7
TEL 905.946.9461 • urbantech.com

LICENSED PROFESSIONAL ENGINEER
A.M.R. MCLENNAN
100509390
APR. 7, 2025
PROVINCE OF ONTARIO

GRADING PLAN

DESIGNED:	A.M.	CHECKED:	A.M.	PROJECT No.:	24-804
DRAWN:	J.M.	DATE:	APRIL 2025	SHEET No.:	
SCALE:	1:250			DRAWING No.:	GR-1





KEY PLAN
N.T.S.

LEGEND

- 177.00 — EXISTING GROUND CONTOUR AND ELEVATION
- PROPOSED STORM SEWER & FLOW DIRECTION
- EXISTING STORM SEWER & FLOW DIRECTION
- SINGLE CATCHBASIN / AREA DRAIN
- DOUBLE CATCHBASIN / AREA DRAIN
- 0.26. / 0.75* — DRAINAGE AREA (ha) FOR MINOR SYSTEM (5 YEAR) FLOW / RUNOFF COEFFICIENT
- MINOR SYSTEM DRAINAGE BOUNDARY (CONTROLLED)
- MINOR SYSTEM DRAINAGE BOUNDARY (UNCONTROLLED)
- OVERLAND FLOW ROUTE

NOTES:

1. FOR DETAILS OF EXISTING SEWERS REFER TO PROJECT 17-563 BY URBANTECH CONSULTING.
2. NEW WATER SERVICING TO BE BUILT WITH PHYSICAL SEPARATION FROM LIVE WATER SERVICING FOR TESTING PURPOSES.
3. ANY CONNECTION TO AN EXISTING SERVICE PREVIOUSLY INSTALLED SHALL BE SWABBED, FLUSHED AND SAMPLED BY THE REGION AT THE SOLE EXPENSE OF THE APPLICANT.

BENCHMARK NOTE:

ELEVATIONS ARE GEODETIC AND ARE REFERRED TO TOWN OF OAKVILLE BENCHMARK O.B.M. # 309 HAVING AN ORTHOMETRIC ELEVATION OF 173.84 METRES. ELEVATIONS ARE REFERENCED TO THE CANADIAN GEODETIC VERTICAL DATUM OF 1928, 1978 ADJUSTMENT (CGVD-1928:1978).

CUT CROSS SET IN MOST WESTERLY CORNER OF CONCRETE BASE OF TRANSFORMER CABINET No. 15870 ON THE SOUTH EAST SIDE OF WHEAT BOOM DRIVE, BETWEEN LOTS 60 AND 61, PLAN 20M-1173, 140M NORTH EAST OF THE INTERSECTION OF WHEAT BOOM DRIVE AND SUNFLOWER DRIVE.

No.	REVISION	DATE	BY
3			
2			
1	FIRST SUBMISSION	APRIL 2025	A.M.

VALERY GROUP
JOSHUA CREEK - BLOCK 297
60 UNIT CONDOMINIUM

OAKVILLE
REGIONAL MUNICIPALITY OF HALTON
TOWN OF OAKVILLE

REGION NO. SP ####
MUNICIPAL PLANNING No. ######### SITE PLAN NO. SP ####

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A.M.R. MCLENNAN
100509390
APR 7, 2025
PROVINCE OF ONTARIO

STORM DRAINAGE PLAN

DESIGNED:	A.M.	CHECKED: A.M.	PROJECT No.: 24-804
DRAWN:	J.M.	DATE: APRIL 2025	SHEET No.:
SCALE: 1:250			DRAWING No.: STM-1

EXISTING PARK

EX. 1.50m CONC. SWK.

EX. SL

EX. SAN MH137A

EX. 1.50m CONC. SWK.

EX. 1.50m CONC. SWK.

EX. 200mm PVC SAN

EX. SAN MH138A

EX. 300mm PVC. SAN

EXISTING RESIDENTIAL

EX. SL

LANE 198

EX. 375mm TRUNK PVC SAN AND 200mm PVC LOCAL PVC SAN

EXISTING RESIDENTIAL

WHEAT BOOM DRIVE

EX. SL

EX. 1.50m CONC. SWK.

EX. MB

EX. CURB

EX. 600mm CONC. CWS

EX. CURB

EX. CWS MH3B

EX. 600mm CONC. CWS

EX. CENTERLINE

LIMIT OF PROPERTY

EX. CURB

EX. CURB

EX. SL

EX. TX

EX. SL

EX. HYDRO

EX. 1.50m CONC. SWK.

EX. 1.50m CONC. SWK.

EX. SL

EX. 1.50m CONC. SWK.

EX. SAN MH133A

EX. 250mm PVC SAN

LIMIT OF PROPERTY

EX. 1.50m CONC. SWK.

BUILDING A
24 UNIT 4 STORY
BACK TO BACK STACKED TOWNHOUSE
FFE=168.05

0.44ha
368 | 162

BLOCK 297

BUILDING C
12 UNIT 4 STORY
BACK TO BACK STACKED TOWNHOUSE
FFE=167.85

LIMIT OF PROPERTY

OPEN SPACE (NHS)

MEADOWRIDGE DRIVE

EX. TX

EX. SL

EX. 1.50m CONC. SWK.

EX. CURB

EX. 250mm PVC SAN

EX. SAN MH132A

EXISTING RESIDENTIAL

BUILDING B
24 UNIT 4 STORY
BACK TO BACK STACKED TOWNHOUSE
FFE=167.85

EX. CENTERLINE

EX. 1.50m CONC. SWK.

EX. 200mm PVC SAN

EX. SAN MH131A

EX. SL

EX. 1.50m CONC. SWK.

EX. 250mm PVC SAN

LIMIT OF PROPERTY

EX. CENTERLINE

PERKINS WAY

EX. CURB

EX. TX

EX. MB

EX. SL

EX. SAN MH122A

EX. 1.50m CONC. SWK.

EX. SL

EX. 1.50m CONC. SWK.

EX. SL

EX. 1.50m CONC. SWK.

EX. CENTERLINE

LANE 197

EX. 200mm PVC SAN

EX. SL

EX. 1.50m CONC. SWK.

PERKINS WAY

EXISTING RESIDENTIAL

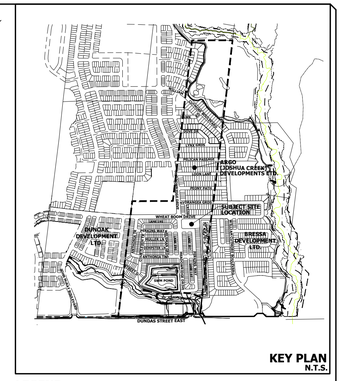
EXISTING RESIDENTIAL

EXISTING RESIDENTIAL

EX. SAN CTRL MH1220A
(OPSD 701.010)
EX. T/G 166.96
PROP. T/G 167.32
PROP. NW. INV. 164.04
EX. SE. INV. 164.01
CONSTRUCT 0.5m-200mm PVC SAN @ 1.00%
AND TEMP. PLUG INV. 164.05

EX. 9.25m-200mm PVC SAN @ 2.05%

1



KEY PLAN
N.T.S.

LEGEND

- PROPOSED SANITARY SEWER & FLOW DIRECTION
- EXISTING SANITARY SEWER & FLOW DIRECTION
- 0.10Ha — DRAINAGE AREA (ha)
- 70 | 7 — POPULATION / POPULATION PER Ha (P/Ha)
- SANITARY DRAINAGE AREA BOUNDARY
- FUTURE PHASE

NOTES:

1. FOR DETAILS OF EXISTING SEWERS REFER TO PROJECT 17-563 BY URBANTECH CONSULTING.
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3. ANY CONNECTION TO AN EXISTING SERVICE PREVIOUSLY INSTALLED SHALL BE SWABBED, FLUSHED AND SAMPLED BY THE REGION AT THE SOLE EXPENSE OF THE APPLICANT.

BENCHMARK NOTE:

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No.	REVISION	DATE	BY
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1	FIRST SUBMISSION	APRIL 2025	A.M.

VALERY GROUP
JOSHUA CREEK - BLOCK 297
60 UNIT CONDOMINIUM

OAKVILLE

REGIONAL MUNICIPALITY OF HALTON
TOWN OF OAKVILLE

REGION NO. SP ####
MUNICIPAL PLANNING No. ######### SITE PLAN NO. SP ####

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MANAGER OF DEVELOPMENT ENGINEERING

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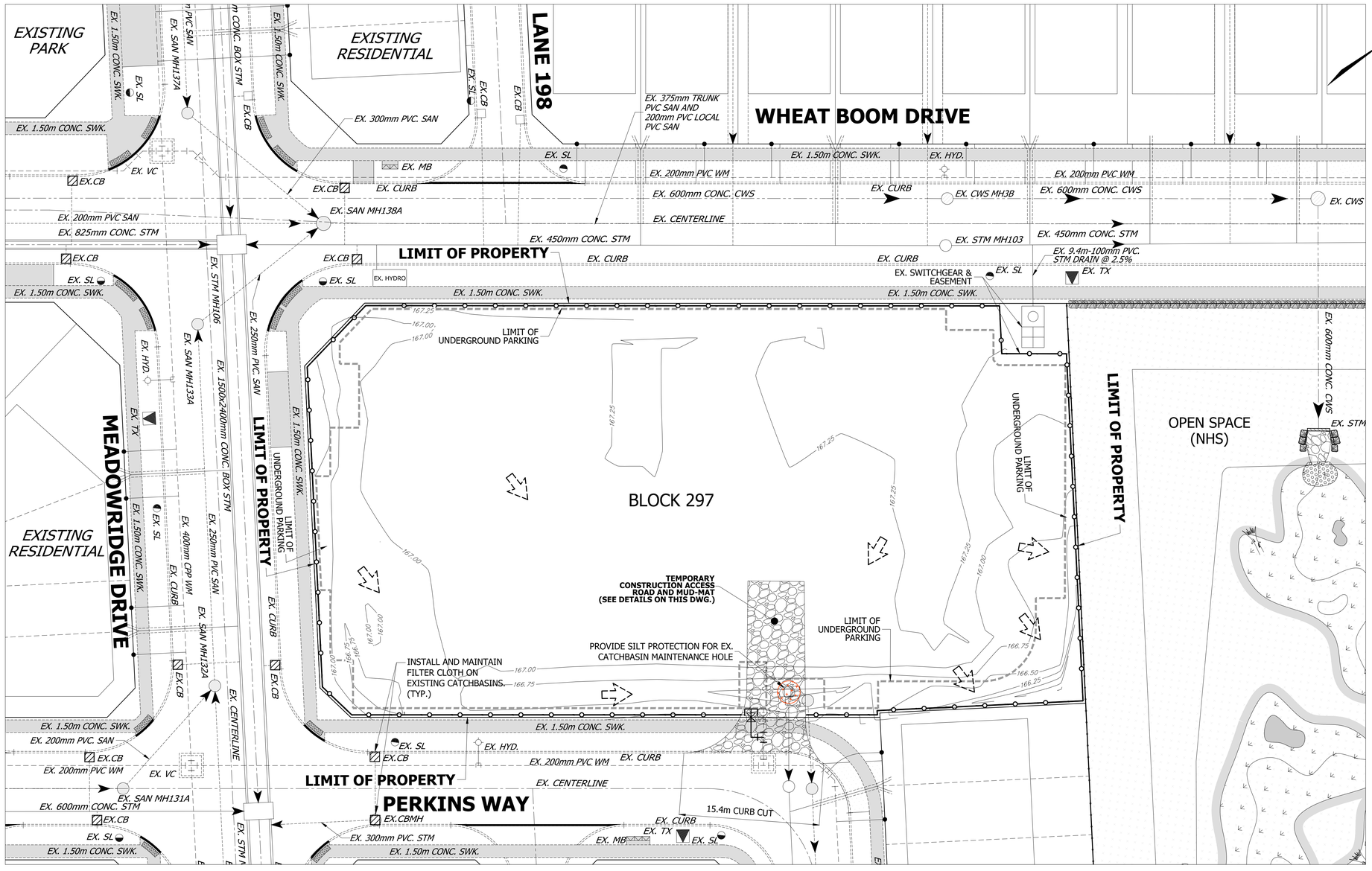
LICENSED PROFESSIONAL ENGINEER
A.M.R. MCLENNAN
100509390
APR. 7, 2025
PROVINCE OF ONTARIO

SANITARY DRAINAGE PLAN

DESIGNED:	A.M.	CHECKED:	A.M.
DRAWN:	J.M.	DATE:	APRIL 2025
SCALE:	1:250		

PROJECT No.: 20-804
SHEET No.:
DRAWING No.: **SAN-1**



KEY PLAN
N.T.S.

LEGEND

- PROPOSED SEDIMENT FENCE
- ROCK CHECK DAM
- 177.00 EXISTING CONTOUR AND ELEVATION
- +179.00 PROPOSED ELEVATION
- EXISTING FLOW DIRECTION
- EXISTING DRAINAGE DIVIDE

NOTES:

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No.	REVISION	DATE	BY
4			
3			
2	FIRST SUBMISSION	APRIL 2025	A.M.

VALERY GROUP
JOSHUA CREEK - BLOCK 297
60 UNIT CONDOMINIUM

OAKVILLE

REGIONAL MUNICIPALITY OF HALTON
TOWN OF OAKVILLE

REGION NO. SP ####
MUNICIPAL PLANNING No. #### SITE PLAN NO. SP ####

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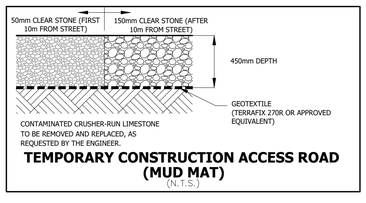
LICENSED PROFESSIONAL ENGINEER
A.M.R. MCLENNAN
100509390
APR. 7, 2025
PROVINCE OF ONTARIO

EROSION & SEDIMENT CONTROL PLAN

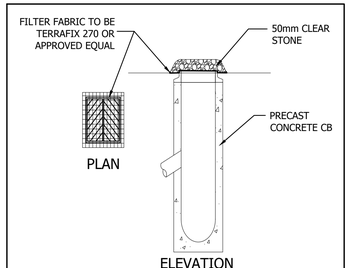
DESIGNED:	A.M.	CHECKED:	A.M.	PROJECT No.:	24-804
DRAWN:	J.M.	DATE:	APRIL 2025	SHEET No.:	
SCALE:	1:250			DRAWING No.:	**ESC-1**

EROSION & SEDIMENT CONTROL NOTES

1. CONSTRUCTION ACCESS AT PRIVATE LANEWAY TO BE INSTALLED FOR SITE ACCESS. REFER TO DETAIL ON THIS DRAWING.
2. SEDIMENT FENCES TO BE INSTALLED AT LOCATION SHOWN ON THE PLAN. REFER TO DETAIL ON THIS DRAWING.
3. IN ADDITION TO THE LOCATIONS SHOWN ON THIS DRAWING, ALL PROPOSED CATCHBASINS AND AREA DRAINS ARE TO BE PROTECTED WITH FILTER CLOTH OR APPROVED EQUIVALENT. THESE ARE TO BE REGULARLY CLEANED/MAINTAINED THROUGHOUT CONSTRUCTION AND REMOVED ONLY UPON THE DIRECTION OF THE SITE ENGINEER OF RECORD.
4. THE OWNERS SHALL AGREE THAT ALL DISTURBED LANDS LEFT VACANT FOR SIX (6) MONTHS FOLLOWING COMPLETION OF OVERALL GRADING, SHALL BE COVERED WITH TOPSOIL TO A MINIMUM DEPTH OF 150MM, SEEDED, MAINTAINED AND SIGNED TO PROHIBIT DUMPING AND TRESPASSING, TO THE SATISFACTION OF THE TOWN OF OAKVILLE AND REGION OF HALTON.
5. TOPSOIL STOCKPILES THAT REMAIN UNRESTORED FOR MORE THAN 30 DAYS SHALL BE SEEDED.
6. ALL EXPOSED AREAS NOT SUBJECT TO ACTIVE CONSTRUCTION WITHIN 30 DAYS ARE TO BE RE-VEGETATED AS PER OPSS 572 IMMEDIATELY UPON COMPLETION OF AREA GRADING. ALL AREAS REGULATED BY THE GRAND RIVER CONSERVATION AUTHORITY SHOULD BE STABILIZED AS SOON AS POSSIBLE AND NO LONGER THAN SIXTY (60) DAYS AFTER DISTURBANCE.
7. VEGETATION SHALL BE COMPLETED BY THE BEGINNING OF SEPTEMBER TO ALLOW FOR SUFFICIENT TIME FOR THE VEGETATION TO TAKE ROOT. 150MM TOPSOIL DEPTH SHALL BE USED AND HYDROSEEDED WITH TYPE 1-UPLAND SEED MIX.
8. MONTHLY EROSION AND SEDIMENT CONTROL INSPECTION REPORTS (QUARTERLY DURING PERIODS OF INACTIVITY OR HOUSE CONSTRUCTION) ARE TO BE SUBMITTED TO THE AUTHORITY. THESE REPORTS ARE TO BE BASED ON FREQUENT INSPECTIONS PARTICULARLY AFTER SIGNIFICANT STORM EVENTS. THE REPORTS ARE TO BE SUBMITTED UNTIL THE SITE HAS BEEN BUILT OUT (90-100%) AND STABILIZED.
9. THE CONTRACTOR SHALL ENDEAVOR TO PREVENT MUD TRACKING ONTO EXISTING RIGHT-OF-WAYS AND SHALL PROVIDE FOR CLEAN UP AT THEIR OWN EXPENSE AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE TO CONTROL DUST IN THE PROJECT AND HE SHALL PROVIDE, AT HIS OWN EXPENSE, CONTROLLING MEASURES AS DIRECTED BY THE ENGINEER AND THE CITY.
10. AREAS TO BE SEEDED SHALL BE MONITORED FOR SUCCESSFUL ESTABLISHMENT AND RE-SEEDED AS REQUIRED.
11. ALL EROSION AND SEDIMENT CONTROLS ARE TO BE INSTALLED ACCORDING TO THE APPROVED PLANS PRIOR TO COMMENCEMENT OF ANY EARTH MOVING WORK ON THE SITE AND SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS ARE STABILIZED WITH THE INTENDED GROUND COVER.
12. EROSION AND SEDIMENT CONTROLS SHALL BE INSPECTED BY THE BUILDER/DEVELOPER:
    - I. WEEKLY
    - II. BEFORE AND AFTER ANY PREDICTED RAINFALL EVENT
    - III. FOLLOWING AN UNPREDICTED RAINFALL EVENT
    - IV. DAILY, DURING EXTENDED DURATION RAINFALL EVENTS
    - V. AFTER SIGNIFICANT SNOW MELT EVENTS
13. EROSION AND SEDIMENT CONTROLS SHALL BE MAINTAINED IN PROPER WORKING ORDER AT ALL TIMES. DAMAGED OR CLOGGED DEVICES SHALL BE REPAIRED WITHIN 48 HOURS.
14. WHERE A SITE REQUIRES DEWATERING AND WHERE THE EXPELLED WATER CAN BE FREELY RELEASED TO A SUITABLE RECEIVER, THE EXPELLED WATER SHALL BE TREATED TO CAPTURE SUSPENDED PARTICLES GREATER THAN 40 MICRON IN SIZE. THE CAPTURED SEDIMENT SHALL BE DISPOSED OF PROPERLY PER MOECC GUIDELINES. THE CLEAN EXPELLED WATER SHALL FREELY RELEASE TO A SUITABLE RECEIVER THAT DOES NOT CREATE DOWNSTREAM ISSUES INCLUDING BUT NOT LIMITED TO EROSION, FLOODING - NUISANCE OR OTHERWISE, INTERFERENCE ISSUES, ETC.
15. EXISTING STORM SEWER AND DRAINAGE DITCHES ADJACENT TO THE WORKS SHALL BE PROTECTED AT ALL TIMES FROM THE ENTRY OF SEDIMENT/SILT THAT MAY MIGRATE FROM THE SITE. FOR STORM SEWERS: ALL INLETS (REAR LOT CATCHBASINS, ROAD CATCHBASINS, PIPE INLETS, ETC.) MUST BE SECURED/FITTED WITH SILTATION CONTROL MEASURES. FOR DRAINAGE DITCHES: THE INSTALLATION OF ROCK CHECK DAMS, SILTATION FENCE, SEDIMENT CONTAINMENT DEVICES MUST BE INSTALLED TO TRAP AND CONTAIN SEDIMENT. THESE SILTATION CONTROL DEVICES SHALL BE INSPECTED AND MAINTAINED PER ITEMS B AND C ABOVE.
16. IN THE EVENT OF A SPILL (RELEASE OF DELETERIOUS MATERIAL) ON OR EMANATING FROM THE SITE, THE OWNER OR OWNERS AGENT SHALL IMMEDIATELY NOTIFY THE MOECC AND FOLLOW ANY PRESCRIBED CLEAN UP PROCEDURE. THE OWNER OR OWNERS AGENT WILL ADDITIONALLY IMMEDIATELY NOTIFY THE TOWN.



TEMPORARY CONSTRUCTION ACCESS ROAD (MUD MAT)
(N.T.S.)



CATCHBASIN SILT PROTECTION
(N.T.S.)