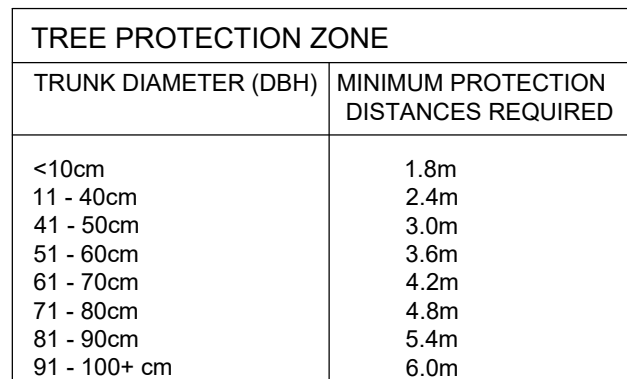




NOTE:
TREE ROOTS TYPICALLY SPREAD WELL BEYOND THE DRIPLINES OF TREES, UP TO 3.5 TIMES THE DRIPLINE RADIUS, AND ARE LOCATED PREDOMINANTLY WITHIN THE TOP INCHES OF SOIL BY MAINTAINING A ONE METRE ZONE OUTSIDE THE DRIPLINE OF THE TREE CANOPY UNDISTURBED BY CONSTRUCTION ACTIVITY, THE ROOTS MAY BENEFIT FROM RAINFALL DIVERTED BY THE CANOPY.

ADJACENT LANDS

PROPERTY LINE

LANDS TO BE SUBDIVIDED/UNDER CONSTRUCTION

PROTECT ROOT ZONES OF TREES ON ADJACENT PROPERTY.

AREA WITHIN FENCE TO BE LEFT UNDISTURBED TO ALLOW FOR NATURAL REGENERATION

2.44m HIGH T-BAR STAKES, 3.0m MAX ON CENTRE.

PAIGE WIRE FARM FENCE: 7 STRAND 1.2m HIGH, 8 GAUGE WIRE. PROTECTIVE FENCING IS TO BE NOT LESS THAN 1.0m OUTSIDE OF TREE DRIPLINES UNLESS APPROVED BY CONSULTANT. FENCING MUST BE STRETCHED TO ACHIEVE TENSION.

2.44m HIGH, 150mm ØGDAR POSTS, 20m MAX ON CENTRE, AND AT ALL CHANGES IN HORIZONTAL AND VERTICAL ALIGNMENT.

TEMPORARY PROTECTIVE FENCING

1. ALL TREE PRETECTION WITHIN THE PROJECT AREA DIRECTED BY THE STANDARD SPECIFICATION FOR PROTECTION OF TREES APPENDIX C (UNADJUSTED TREE DAMAGE (SPECIAL PROVISIONS IN TENDER) AND ANY ADDITIONAL MEASURES STATED ON THIS PLAN.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT THEY ARE AWARE OF ALL MEASURES REQUIRED TO PROTECT TREES WITHIN THE PROJECT AREA.
3. BEFORE THE START OF ANY WORK, THE CONTRACTOR, SITE INSPECTOR AND LANDSCAPE ARCHITECT WILL MEET ON SITE WITH THE COMMUNITY SERVICES REPRESENTATIVE TO REVIEW ALL TREE PROTECTION MEASURES REQUIRED TO PROTECT TREES.
4. THE COMMUNITY SERVICES REPRESENTATIVE WILL PROVIDE A LIST OF ALL ACTIVITIES WHICH MUST BE AVOIDED TO PROTECT TREES WITHIN THE PROJECT AREA TO ANY WORK BEING CARRIED OUT AT THE START OF THE PROJECT. ADJUSTMENTS TO THIS LIST WILL BE MADE AS REQUIRED THROUGHOUT THE PROJECT (PRIOR TO ANY WORK BEING CARRIED OUT) TO REFLECT ANY CHANGES TO THE PROJECT. THE CONTRACTOR MUST COMPLY WITH ALL REQUIREMENTS SET OUT BY THE COMMUNITY SERVICES REPRESENTATIVE TO ENSURE THAT ALL REQUIREMENTS CONCERNING TREE PROTECTION ARE UNDERSTOOD AND BEING MET.
5. EXCEPT UNDER WRITTEN AUTHORITY OF THE CONSULTANT, THE CONTRACTOR WILL NOT ENTER ANY OF THE AREAS OF THE PROJECT WHERE TREE PROTECTION ZONES, WHERE CONSTRUCTION ACTIVITIES ARE APPROVED THE CONTRACTOR WILL ADHERE TO THE REQUIREMENTS WITHIN THE STANDARD SPECIFICATION FOR PROTECTION OF TREES APPENDIX C.
6. ALL WORK AROUND WITHIN THE PROJECT LIMITS, TREES WILL BE REVIEWED AND APPROVED BY THE CONSULTANT IN THE FIELD BEFORE ANY WORK IS CARRIED OUT, UNLESS APPROVED BY THE CONSULTANT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY NECESSARY APPROVALS FROM THE CONSULTANT TO THE AGREED WORK PLAN AROUND TREES WILL OCCUR WITHOUT APPROVED BY THE CONSULTANT.
7. ALL TREES TO BE SAVED SHALL BE FULLY PROTECTED WITH PROTECTIVE FENCING INSTALLED AS PER THE LOCATION SHOWN ON THE PLAN AND DETAIL. FENCING LOCATION TO BE APPROVED UPON REQUEST BY THE CONSULTANT. THE CONTRACTOR SHALL REMAIN IN PLACE UNTIL THE COMPLETION OF THIS PROJECT, UNLESS APPROVED.
8. ALL DAMAGE TO TREES WILL BE REPORTED TO THE CONSULTANT IMMEDIATELY BY THE CONTRACTOR'S FOREMAN.
9. ALL TREE TRUNKS NEGATIVELY IMPACTED BY CONSTRUCTION WORKS SHALL BE REPLACED WITH A SPECIES TO THE SATISFACTION OF THE CITY OF WATERLOO AT A MINIMUM 10CM CALIPER SIZE.

THE PREPARATION OF THE TREE MANAGEMENT PLAN HAS BEEN COORDINATED WITH THE PREPARATION OF THE GRADING CONTROL PLAN AND EROSION & SEDIMENT CONTROL PLAN. THE PLANS HAVE BEEN REVIEWED BY THE LANDSCAPE ARCHITECTURE AND ENGINEERING CONSULTANTS. THE RELEVANT FEATURES OF THESE PLANS ARE IN CONFORMITY WITH EACH OTHER.

NO SERVICING, GRADING OR OTHER CONSTRUCTION ACTIVITY IS TO BEGIN UNTIL THE INSTALLATION OF THE TREE PROTECTION FENCING AND ANY OTHER PROTECTION MEASURES HAVE BEEN CERTIFIED BY THE LANDSCAPE ARCHITECT. ALL TEMPORARY PROTECTION FENCING SHALL REMAIN IN PLACE UNTIL FINISH LANDSCAPING. PROTECTION FENCING SHALL NOT BE ALTERED OR RELOCATED UNLESS AUTHORIZED IN WRITING BY THE LANDSCAPE ARCHITECT.

FOR SILT FENCING DETAILS REFER TO EROSION AND SEDIMENT CONTROL PLAN BY CIVIL. FOR SERVICING AND GRADING INFORMATION, REFER TO CONCURRENT SUBMISSION BY CIVIL.

1. THE PREPARATION OF THE TREE PRESERVATION PLAN HAS BEEN COORDINATED WITH THE PREPARATION OF THE GRADING CONTROL PLAN AND EROSION & SEDIMENT CONTROL PLAN. THE TREE PRESERVATION PLAN SHALL BE REVIEWED BY THE LANDSCAPE ARCHITECT AND ENGINEERING CONSULTANTS. THE RELEVANT FEATURES OF THESE PLANS ARE IN CONFORMITY WITH EACH OTHER.
2. NO SURVEYING, GRADING OR OTHER CONSTRUCTION ACTIVITY IS TO BEGIN UNTIL THE INSTALLATION OF THE TREE PROTECTION FENCING AND ANY OTHER PROTECTION MEASURES HAVE BEEN CERTIFIED BY THE LANDSCAPE ARCHITECT. PROTECTION FENCING SHALL NOT BE ALTERED OR REMOVED WITHOUT THE WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT THEY ARE AWARE OF ALL MEASURES BEING TAKEN TO PROTECT ALL TREES IDENTIFIED.
4. ALL DAMAGE TO TREES WILL BE REPORTED TO THE CONSULTANT IMMEDIATELY BY THE CONTRACTOR'S FOREPERSON.
5. FOR SILT FENCING DETAILS REFER TO EROSION AND SEDIMENT CONTROL PLAN BY CIVIL.
6. FOR SERVITING AND GRADING INFORMATION, REFER TO DRAWINGS BY CIVIL.

				Legend	
				Health and Structural Condition	Recommended Action
				E - Excellent	P - Protect, monitor and maintain.
				G - No defects, well-developed crown	R - Remove
				F - Minor defects or symptoms of disease	Rc - Remove due to construction
				P - Major defects or symptoms of disease	* - Remove with municipal approval
				Dead	** - Remove with neighbours approval
					T - Transplant
Summary					
TOTAL	50	P	Protect, monitor and maintain		
	3	R	Remove (dead / hazard)		
	37	Rc	Remove due to construction		

Tree Inventory												
Species of significant size 10cm DBH or greater												
Site Date: September 30, 2022												
Field Personnel: Rebecca Egger, ISA Certified Arborist												
Tree locations tagged												
Tree No	Botanical Name	Common Name	Stems	DBH (cm)	Location				Comments	Recommend Action	Reason	
					Municipal Property	Subject Property	Shared	Adjacent Property (6m to PL)				
					Diplicate Radius (m)	Heart Condition	Structure Condition					
913	<i>Malus sp</i>	Crabapple	1	28								
914	<i>Pinus nigra</i>	Austrian Pine	1	40	6	F	G	Suckering from trunk	P			
915	<i>Pinus nigra</i>	Austrian Pine	1	33	4	F	F		P			
916	<i>Malus sp</i>	Crabapple	2	26, 18	6	F-G	F	Low crotch, pruned stub	P			
917	<i>Pinus nigra</i>	Austrian Pine	1	55	7	F-P	F	Lower limb dieback	P			
918	<i>Pinus nigra</i>	Austrian Pine	1	50	5	F-P	F	Lower limb dieback, slight lean	P			
919	DEAD										Dead	
920	<i>Pinus nigra</i>	Austrian Pine	1	37	3	P	P		P			
921	<i>Acer saccharinum</i>	Silver Maple	1	65	8	F-G	G	Uneven canopy	P			
922	<i>Acer saccharinum</i>	Silver Maple	1	84	9	G	G	Leaf scorch	P			
923	<i>Pinus nigra</i>	Austrian Pine	1	38	5	F	G		P			
924	<i>Pinus nigra</i>	Austrian Pine	1	35	4	F-P	F		P			
925	<i>Pinus nigra</i>	Austrian Pine	1	48	7	F	G		P			
926	<i>Malus sp</i>	Crabapple	1	45	5	F-P	F-P	Major trunk crack	P			
927	<i>Picea glauca</i>	White Spruce	1	11	2	P	P		P			
928	<i>Pinus nigra</i>	Austrian Pine	1	45	7	F-G	F-G		P			
929	<i>Pinus nigra</i>	Austrian Pine	1	36	5	P	P		P			
930	<i>Malus sp</i>	Crabapple	1	45	7	P	P	Significant crown dieback	P			
931	<i>Malus sp</i>	Crabapple	4	12, 15, 15, 20	4	G	G	Canopy compromised by adj. tree	P			
932	<i>Acer platanoides</i>	Norway Maple	1	50	5	G	G	Exposed roots	P			
933	<i>Acer platanoides</i>	Norway Maple	1	45	5	G	G	Exposed roots	P			
934	<i>Acer platanoides</i>	Norway Maple	1	40	8	F-G	G	Inferior crown dieback	P			
935	<i>Malus sp</i>	Crabapple	2	25, 28	4	F-G	F-G	Large stem pruned, large growth at trunk base	P			
936	<i>Pinus nigra</i>	Austrian Pine	1	45	6	F-P	P		P			
937	<i>Pinus nigra</i>	Austrian Pine	1	45	5	F	F	Trunk bend (planned on slope)	P			
938	<i>Pinus nigra</i>	Austrian Pine	1	45	5	P	P		P			
939	<i>Pinus nigra</i>	Austrian Pine	1	45	4	F	F	Co-dominant leader, canopy compromised	P			
940	<i>Acer platanoides</i>	Norway Maple	1	50	5	G	G	Exposed roots	P			
941	<i>Acer platanoides</i>	Norway Maple	1	40	4	G	G	Exposed roots	P			
942	<i>Malus sp</i>	Crabapple	3	18, 22, 20	6	F	F	Uneven crown, large stems removed	Re			
943	<i>Acer platanoides</i>	Norway Maple	1	45	8	G	G		Re			
944	<i>Acer platanoides</i>	Norway Maple	1	40	4	P	P	Trunk damage, very thin crown	P			
945	<i>Pinus nigra</i>	Austrian Pine	1	40	3	F-P	P	Co-dominant leader, uneven canopy	P			
946	<i>Pinus nigra</i>	Austrian Pine	1	44	4	F	F	Co-dominant leader	P			
947	<i>Acer saccharinum</i>	Silver Maple	1	35	5	F	F	Broken limbs, uneven canopy	P			
948	<i>Pinus nigra</i>	Austrian Pine	1	44	4	P	P		P			
949	<i>Pinus nigra</i>	Austrian Pine	5	50	7	F-P	P		P			
950	<i>Malus sp</i>	Crabapple	4	12, 25, 20, 20	5	P	P	Significant crown dieback	P			
951	<i>Acer saccharum</i>	Sugar Maple	1	15	4	G	G		P			
952	<i>Acer saccharum</i>	Sugar Maple	1	18	5	G	G		P			
953	<i>Acer rubrum</i>	Red Maple	1	18	4	F-G	G	Thinning canopy	P			
954	<i>Pinus nigra</i>	Austrian Pine	1	33	4	P	F-P		Re			
955	<i>Pinus nigra</i>	Austrian Pine	1	40	6	F	F		P			
956	<i>Pinus nigra</i>	Austrian Pine	1	29	7	F-G	F-G		P			
957	<i>Pinus strobus</i>	White pine	1	20	4	G	G		P			
958	<i>Pinus sylvestris</i>	Scots Pine	1	18	3	G	G	CL	P			
959	<i>Pinus sylvestris</i>	Scots Pine	1	22	4	G	G		P			
960	<i>Pinus strobus</i>	White pine	1	14	3.5	G	G	Bend in trunk	P			
961	DEAD										big not used	
962	<i>Acer platanoides</i>	Norway Maple	1	30	4	G	G		Re			
963	<i>Pinus nigra</i>	Austrian Pine	1	36	4	F	F	Vines on trunk	P			
964	<i>Pinus nigra</i>	Austrian Pine	1	35	6	F	F	Vines on trunk	P			
965	<i>Pinus nigra</i>	Austrian Pine	1	60	5	P	P	Trunk lean	P			
966	<i>Alnus serrulata</i>	Hazer Alder	50	10 to 18	6	G	G	Growing together	Re			
967	<i>Alnus serrulata</i>	Hazer Alder	1	35	4	G	G		Re			
968	<i>Picea glauca</i>	White spruce	1	18	3	G	G	Wasp nest	P			
969	<i>Picea glauca</i>	White spruce	1	18	3.5	G	G	Large animal hole at trunk base	Re			
970	<i>Alnus serrulata</i>	Hazer Alder	1	16	5	G	G	Suckering at base	Re			
971	<i>Alnus serrulata</i>	Hazer Alder	1	13	3	G	G	Suckering at base	Re			
972	<i>Acer rubrum x saccharinum</i>	Red/Silver maple cross	1	65	8	G	F	Leaf fall some broken branches. Grinding roots	Re			
973	<i>Picea glauca</i>	White spruce	1	12	2	P	P		Re			
974	<i>Picea glauca</i>	White spruce	1	25	4	G	G		Re			
975	<i>Pinus strobus</i>	White pine	1	15	3	P	G		P			
976	<i>Pinus strobus</i>	White pine	1	10	2	G	G		P			
977	<i>Pinus strobus</i>	White pine	1	10	3	G	G		P			
978	<i>Pinus strobus</i>	White pine	1	18	4	G	G	browning needles	P			
979	<i>Pinus strobus</i>	White pine	4	4 @ 12	4	P	F	Weak branch connections to trunk	Re			
980	<i>Pinus nigra</i>	Austrian Pine	1	47	5	P	P		Re			
981	<i>Pinus nigra</i>	Austrian Pine	1	50	8	P	P		P			
982	<i>Pinus nigra</i>	Austrian Pine	1	43	7	P	P		P			
983	DEAD	DEAD									Dead	
984	<i>Pinus nigra</i>	Austrian Pine	1	44	7	F-G	F-G		Re			
985	<i>Acer saccharinum</i>	Silver maple	1	50	8	G	G		Re			
986	<i>Acer saccharinum</i>	Silver maple	1	50	8	G	G	Some lower limbs removed	Re			
987	<i>Acer platanoides</i>	Norway Maple	1	55	10	G	G	Some weak branch connections	Re			
988	<i>Acer platanoides</i>	Norway Maple	1	7	7	F	F	Some inner canopy dieback	P			
989	<i>Acer platanoides</i>	Norway Maple	1	65	10	G	G		P			
990	<i>Acer saccharinum</i>	Silver maple	1	80	10	F-G	G	Low crotch	P			
991	<i>Acer pinckianus</i>	Norway Maple	1	50	8	G	G		P			
992	<i>Acer platanoides</i>	Norway Maple	1	80	8	F-G	F-G	Trunk decay, fruiting bodies	P			
993	<i>Acer platanoides</i>	Norway Maple	1	90	9	F-G	F-G	Some lower limbs removed	Re			
996	<i>Pinus nigra</i>	Austrian Pine	1	40	6	F	F		Re			
997	<i>Pinus nigra</i>	Austrian Pine	1	45	7	VP	VP		P			
998	<i>Pinus nigra</i>	Austrian Pine	1	38	6	F	F		Re			
999	<i>Pinus nigra</i>	Austrian Pine	1	45	6	G	G		Re			
775	<i>Pinus nigra</i>	Austrian Pine	1	50	6	F	F		P			
776	<i>Pinus nigra</i>	Austrian Pine	1	50	6	F-P	F-P	Leaning	P			
777	<i>Pinus nigra</i>	Austrian Pine	1	50	8	P	P	Vines	P			
778	<i>Pinus nigra</i>	Austrian Pine	1	55	7	F-P	F-P	Topped	P			
779	<i>Pinus glauca</i>	White spruce	2	10, 15	5	F	F		P			

Legend

1. DRAWINGS NOT TO BE USED FOR CONSTRUCTION UNLESS AUTHORIZED BY THE LANDSCAPE ARCHITECT
2. CONTRACTOR SHALL REPORT ANY DISCREPANCIES BETWEEN THE DRAWINGS AND SITE CONDITIONS PRIOR TO COMMENCEMENT OF THE WORK
3. ALL UTILITY LOCATES ARE THE RESPONSIBILITY OF THE CONTRACTOR. HAND DIG WITHIN THE LIMITS RECOMMENDED BY THE SERVICE UTILITY. UTILITY CONFLICTS WITH PROPOSED TREE LOCATIONS MUST BE REPORTED IMMEDIATELY TO THE LANDSCAPE ARCHITECT
4. BASE DRAWING PROVIDED BY DIAMOND SCHMITT ARCHITECTS.

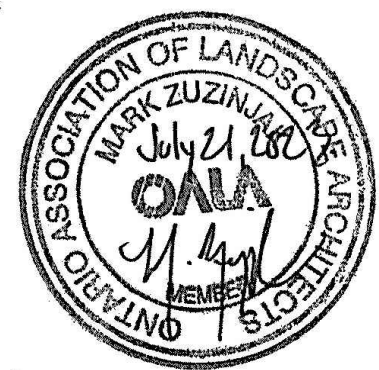
5. VEGETATION INVENTORY BY GSP GROUP INC.

6. FOR GRADING INFORMATION REFER TO DRAWING BY MTE. FOR SERVICING INFORMATION REFER TO DRAWINGS BY MTE.

7. LANDSCAPE DRAWINGS SHOW ENGINEERING INFORMATION FOR DESIGN PURPOSES ONLY. DO NOT CONSTRUCT ENGINEERING WORKS FROM THESE DRAWINGS.

UW NEW STUDENT RESIDENCE
UNIVERSITY OF WATERLOO
WATERLOO, ONTARIO

ISSUED FOR SITE PLAN
APPROVAL, NOT FOR
CONSTRUCTION



DATE	ISSUE	BY
Nov 21/22	Issued for Costing	SDK
May 26/23	Revised and Re-Issued	MS
July 21, 2023	ISSUED FOR ZONING BYLAW AMENDMENT	MZ

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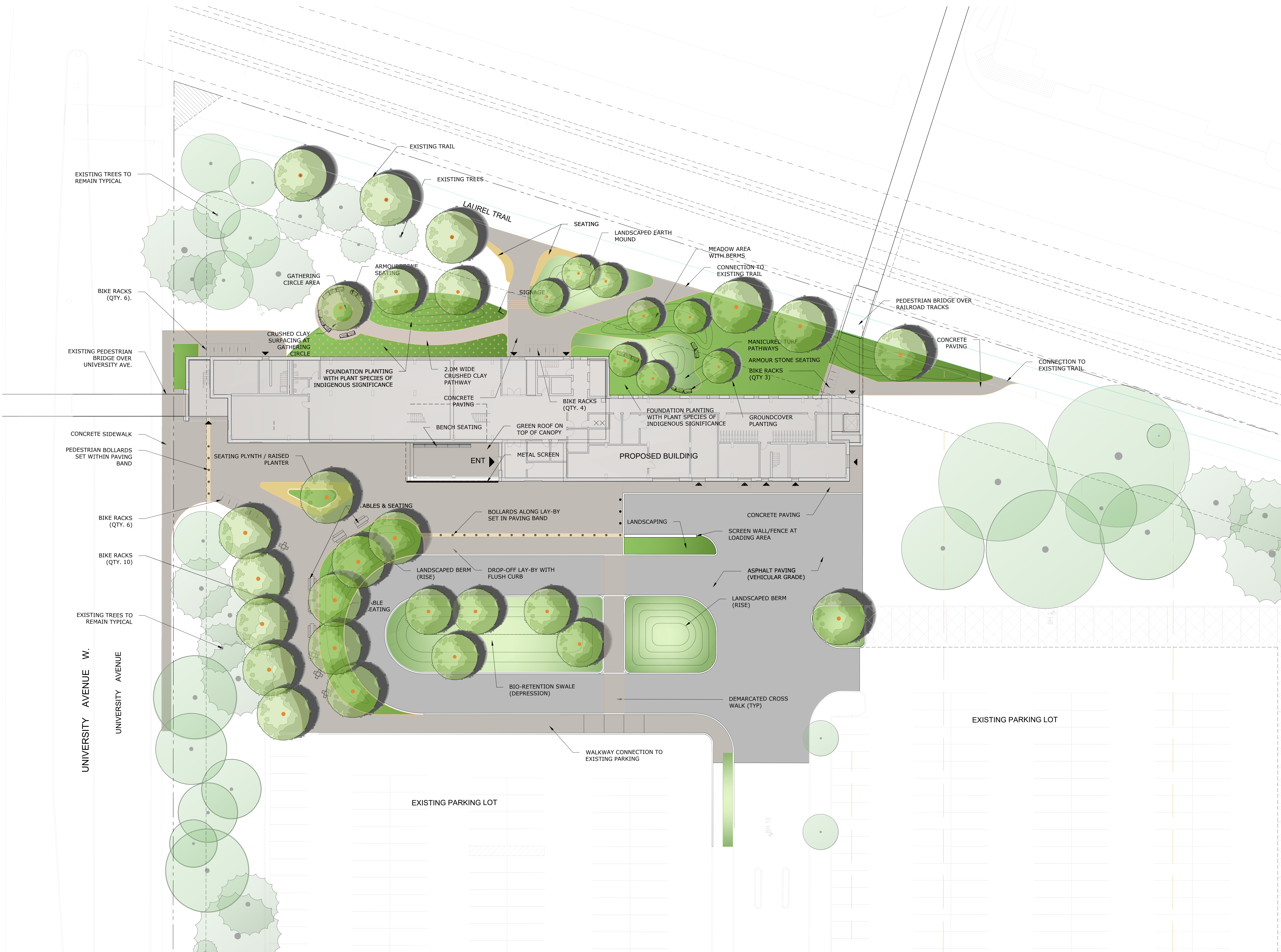
201-72 Victoria Street South
Kitchener, Ontario N2C 4T9
T 519 563 8885
F 519 563 8643

182 Locke Street South, Suite 440
Hamilton, Ontario L8P 4A0
T 905-572 1477

www.gsparcloids.ca

Issued: November 21, 2022	Drawn By: CZ
Scale: N/A	Project No.: 222096

10.1



KEY PLAN

N.T.S.

Legend

- EXISTING TREES
- PROPOSED TREES
- SOD
- PLANTING BED
- CONCRETE PAVING
- UNIT PAVING
- ASPHALT PAVING
- CRUSHED CLAY SURFACING
- PROPOSED BUILDING
- PROPOSED ARMOURSTONE SEATING
- PROPOSED BENCH SEATING
- BOLLARDS
- BIKE RACKS
- PATIO TABLES & CHAIRS
- TABLE SEATING

NOTE:
1. TOTAL QUANTITY OF PROPOSED BIKE RACKS IS 29 PROVIDING SPACE FOR 58 BIKES.

GENERAL NOTES:

- DRAWINGS NOT TO BE USED FOR CONSTRUCTION UNLESS AUTHORIZED BY THE LANDSCAPE ARCHITECT
- CONTRACTOR SHALL REPORT ANY DISCREPANCIES BETWEEN THE DRAWINGS AND SITE CONDITIONS PRIOR TO COMMENCEMENT OF THE WORK
- ALL UTILITY LOCATES ARE THE RESPONSIBILITY OF THE CONTRACTOR. HAND DIG WITHIN THE LIMITS RECOMMENDED BY THE SERVICE UTILITY. UTILITY CONFLICTS WITH PROPOSED TREE LOCATIONS MUST BE REPORTED IMMEDIATELY TO THE LANDSCAPE ARCHITECT
- BASE DRAWING PROVIDED BY DIAMOND SCHMITT ARCHITECTS.
- VEGETATION INVENTORY BY GSP GROUP INC.
- FOR GRADING INFORMATION REFER TO DRAWING BY MTE. FOR SERVICING INFORMATION REFER TO DRAWINGS BY MTE.
- LANDSCAPE DRAWINGS SHOW ENGINEERING INFORMATION FOR DESIGN PURPOSES ONLY. DO NOT CONSTRUCT ENGINEERING WORKS FROM THESE DRAWINGS.

LANDSCAPE PLAN
UW NEW STUDENT RESIDENCE
UNIVERSITY OF WATERLOO
WATERLOO, ONTARIO

ISSUED FOR SITE PLAN
APPROVAL, NOT FOR
CONSTRUCTION



DATE	ISSUE	BY
Nov 21/22	Issued for Costing	SKK
May 12, 2023	Issued for Costing	MS
May 24, 2023	Issued for Coordination	MS
May 26, 2023	Re-issued for 3D Report	MS
July 21, 2023	ISSUED FOR ZONING BYLAW AMENDMENT	NE

DATE	REVISIONS	BY

201-575-0000
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www.gspgroup.ca

Date: November 21, 2023
Scale: 1:200

Drawn By: MS, SKK
Project No.: 22288

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