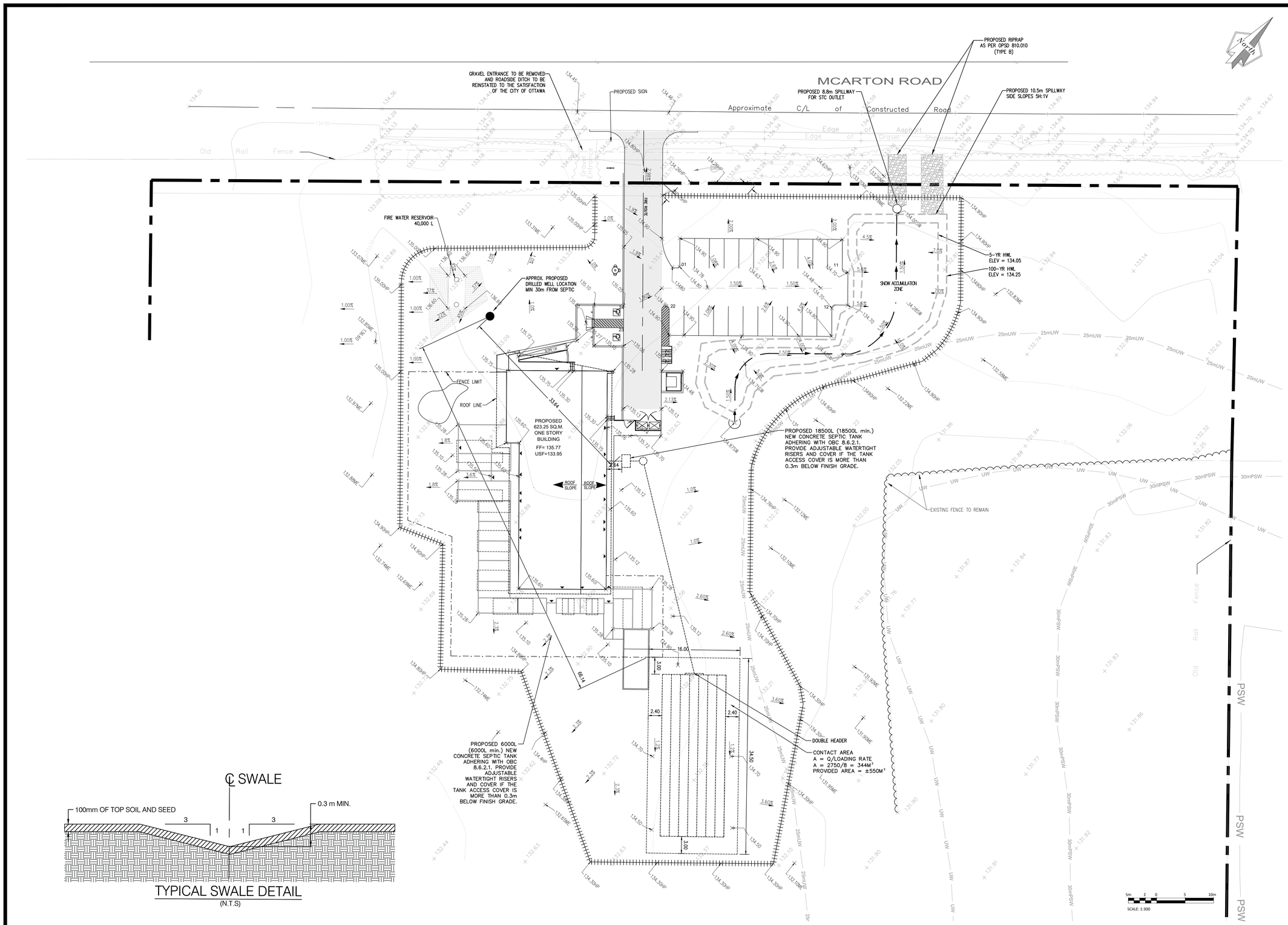

TYPICAL SWALE DETAIL
(N.T.S)

GENERAL NOTES:

1. ALL WORK TO CONFORM TO THE LATEST MUNICIPAL STANDARDS, THE PROVINCIAL STANDARD DRAWINGS AND SPECIFICATIONS (OPSD AND OPSS), AND WHERE APPLICABLE / REQUIRED, LOCAL UTILITY STANDARDS AND THE ONTARIO MINISTRY OF TRANSPORTATION STANDARDS WILL APPLY.
2. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE "ONTARIO OCCUPATIONAL HEALTH AND SAFETY ACT" AND ITS LATEST AMENDMENTS. THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE CONSTRUCTOR AS DEFINED IN THE ACT.
3. SHOULD DEEPLY BURIED ARCHEOLOGICAL REMAINS BE FOUND ON THE PROPERTY DURING CONSTRUCTION ACTIVITIES THE HERITAGE OPERATIONS UNIT OF THE ONTARIO MINISTRY OF CULTURE MUST BE NOTIFIED IMMEDIATELY (416-314-7148). IN THE EVENT THAT HUMAN REMAINS ARE ENCOUNTERED DURING SOIL STRIPPING ACTIVITIES, BOTH THE ONTARIO MINISTRY OF CULTURE, AND THE REGISTRAR OR DEPUTY REGISTRAR OF THE CEMETERIES REGULATION UNIT OF THE MINISTRY OF CONSUMER AND COMMERCIAL RELATIONS (416-326-8392), SHOULD BE NOTIFIED IMMEDIATELY AS WELL AS THE LOCAL POLICE.
4. ALL TEMPORARY TRAFFIC CONTROL AND SIGNAGE DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT ONTARIO TRAFFIC MANUAL – BOOK 7 – TEMPORARY CONDITIONS (LATEST EDITION).
5. THE CONTRACTOR SHALL RECTIFY ANY DISTURBED AREAS TO ITS ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE GOVERNING AUTHORITIES.
6. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL DRAWINGS, REPORTS AND SPECIFICATIONS THAT RELATE TO THIS PROJECT.
7. FOR LEGAL SURVEY AND TOPOGRAPHIC INFORMATION REFER TO PLAN PREPARED BY JOHN H. KENNEDY – DATED NOVEMBER 14, 2018.
8. ALL DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.
9. THE CONTRACTOR IS TO REPORT ALL DISCOVERIES OF ERRORS, OMISSIONS OR DISCREPANCIES TO THE ENGINEER AS APPLICABLE. LOST TIME DUE TO FAILURE OF THE CONTRACTOR TO: 1) CONFIRM UTILITY LOCATIONS, AND 2) NOTIFY THE ENGINEER OF POSSIBLE CONFLICTS, PRIOR TO CONSTRUCTION, WILL BE TO THE CONTRACTOR'S PERIL AND EXPENSE.
10. THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL EXISTING UTILITIES WITHIN THE SITE AND ADJACENT WORK AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES TO THE SATISFACTION OF THE GOVERNING AUTHORITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES DISTURBED DURING CONSTRUCTION, TO THE SATISFACTION OF THE GOVERNING AUTHORITY.
11. ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED OTHERWISE.
12. THERE WILL BE NO SUBSTITUTION OF MATERIALS OR SPECIFIED PRODUCTS UNLESS PRIOR WRITTEN APPROVAL IS RECEIVED FROM THE ENGINEER.
13. ALL CONSTRUCTION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE RECOMMENDATIONS MADE IN THE LATEST GEOTECHNICAL REPORT, SITE SERVICING REPORT AS WELL AS THE STORMWATER MANAGEMENT REPORT FOR THIS SITE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN THE LATEST COPIES OF SAID REPORTS.
14. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING, AND BEARING THE COSTS OF, ALL REQUIRED PERMITS, UNLESS SPECIFIED OTHERWISE.
15. ALL NECESSARY CLEARING AND GRUBBING SHALL BE COMPLETED BY THE CONTRACTOR. THE CONTRACTOR MUST OBTAIN APPROVAL FROM THE CONTRACT ADMINISTRATOR AND/OR THE MUNICIPALITY PRIOR TO ANY TREE CUTTING / REMOVAL.
16. THE CONTRACTOR SHALL PROVIDE THE ENGINEER PERTINENT AS-BUILT MEASUREMENTS, NOTES AND MARK-UPS TO ENABLE THE ENGINEER TO REVIEW AND PREPARE AS-BUILT GRADING AND SITE SERVICING PLANS.
17. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT THE SITE BENCHMARK(S) HAS NOT BEEN ALTERED OR DISTURBED AND THAT IT'S RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION DEPICTED ON THIS PLAN.
18. ANY EXISTING OR DISCOVERED WELLS OR MONITORING WELLS FOUND ON THE PROPERTY WILL NEED TO BE PROPERLY ABANDONED IN ACCORDANCE WITH O. REG. 903 AND ITS AMENDMENTS.

GRADING NOTES:

1. ALL CONCRETE CURBS TO CONFORM TO OPSS AND OPSD STANDARDS. ALL ON-SITE CURBS TO BE BARRIER TYPE WITH DEPRESSIONS AS NOTED ON THE PLANS.
2. GEOTECHNICAL INVESTIGATION FOR THIS PROJECT WAS PREPARED BY TERRAPEX ENVIRONMENTAL LTD. , DATED JANUARY, 10, 2020 AND AND HYDROGEOLOGICAL STUDY FOR THIS PROJECT WAS PREPARED BY GEOFIRMA ENGINEERING LTD.APRIL, 30, 2020.
3. PAVEMENT STRUCTURE FOR PARKING AREA AND ACCESS LANES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RECOMMENDATIONS OUTLINED IN THE GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT AND SHALL CONSIST OF THE FOLLOWING:
4. LIGHT DUTY PAVEMENT (INCLUDING PARKING AREAS AND ACCESS LANES)
   - 50 MM HL3 ASPHALTIC CONCRETE PG58-34 (OPSS 310) 92 – 96.5% MRD
   - 150 MM OPSS GRANULAR A BASE (OPSS 1010) 100% SPMDD
   - 250 MM OPSS GRANULAR B TYPE II SUBBASE (OPSS 1010) 100% SPMDD
5. ALL PAVEMENT MARKINGS AND SITE SIGNAGE SHALL BE PLACED AS PER THE "SITE PLAN". LINE PAINTING AND DIRECTIONAL SYMBOLS SHALL BE APPLIED WITH A MINIMUM OF TWO COATS OF ORGANIC SOLVENT PAINT.
6. REFER TO SITE PLAN FOR DIMENSIONS AND SITE DETAILS.
7. STEP JOINTS ARE TO BE USED WHERE PROPOSED ASPHALT MEETS EXISTING ASPHALT. ALL JOINTS MUST BE SEALED.
8. ALL CONCRETE CURBS SHALL BE INSTALLED AS PER OPSD 600.11.
9. ALL CONCRETE FOR CURBS/SIDEWALKS SHALL CONSIST OF NORMAL PORTLAND CEMENT WITH A MINIMUM STRENGTH OF 32MPA AT 28 DAYS, CLASS C-2 EXPOSURE AS PER CSA A23.1 STANDARDS. THE INSTALLATION OF ANY CONCRETE WORK SHALL BE IN ACCORDANCE WITH OPSS 1350 AND THE LATEST CSA CAN-A23.1/A23.2 SPECIFICATIONS.
10. CONTRACTOR TO SUPPLY SUITABLE FILL MATERIAL WHERE REQUIRED TO ROUGH GRADE THE SITE. ALL IMPORTED FILL MATERIAL TO BE APPROVED BY THE GEOTECHNICAL ENGINEER.
11. CONTRACTOR TO HAUL EXCESS MATERIAL OFFSITE AS NECESSARY TO GRADE SITE TO MEET THE PROPOSED GRADES. ALL EXCESS MATERIAL TO BE HAULED OFFSITE AND DISPOSED OF FOLLOWING MOECC'S PUBLICATION 9603E: "THE MANAGEMENT OF EXCESS SOIL – A GUIDE FOR BEST MANAGEMENT PRACTICES – DATED APRIL 2016". CONTRACTOR IS TO PROVIDE TO THE ENGINEER PROOF THAT EXCESS FILL WAS PROPERLY DISPOSAL OF, INCLUDING QUANTITIES AND INFORMATION ON RECEIVER SITE AND OWNER'S ACKNOWLEDGEMENT. SHOULD THE CONTRACTOR DISCOVER ANY HAZARDOUS MATERIALS, OR CONTAMINATED SOIL/GROUNDWATER, CONTRACTOR IS TO NOTIFY THE ENGINEER IMMEDIATELY FOR INSTRUCTIONS. ENGINEER AND CONTRACTOR TO DETERMINE APPROPRIATE DISPOSAL METHOD/LOCATION.
12. ANY FILL MATERIAL REQUIRED WITHIN THE PARKING AREAS AND BUILDING FOOTPRINT AREAS, SHALL CONFORM TO THE GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT AND SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER IN REGARD TO TYPE OF FILL, LIFTS, METHODOLOGY OF PLACEMENT AND COMPACTION AND FINAL LEVEL OF COMPACTION.
13. ALL UTILITY DUCTS ARE TO BE INSTALLED PRIOR TO CONSTRUCTION OF THE PARKING AREA AND ROAD BASE.
14. CONTRACTOR TO PREPARE SUBGRADE, INCLUDING PROOFROLLING, TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER PRIOR TO PLACING ANY GRANULAR SUBBASE MATERIAL.
15. ANY SELECT SUBGRADE, AND GRANULAR BASE MATERIAL (GRANULAR A OR B) IS TO BE SUPPLIED, PLACED AND COMPACTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT AND APPROVED BY THE GEOTECHNICAL ENGINEER. UPON REQUEST, CONTRACTOR WILL PROVIDE TO ENGINEER SAMPLES OF ANY GRANULAR BASE MATERIAL USED FOR THIS PROJECT AND IN SUFFICIENT QUANTITY TO ALLOW TESTING (GRADATION, PROCTOR, ETC.) AND CERTIFICATION BY THE GEOTECHNICAL ENGINEER.
16. GRANULAR MATERIAL TO CONSTRUCT THE PAVEMENT STRUCTURE BASE AND SUBBASE GRANULAR MATERIALS SHALL CONFORM TO OPSS FORM 1010 MATERIAL SPECIFICATIONS. COMPACTION OF THE GRANULAR PAVEMENT MATERIALS SHALL BE CARRIED OUT IN MAXIMUM 200 MM THICK LOOSE LIFTS TO 100% OF ITS SPMDD USING SUITABLE VIBRATORY COMPACTION EQUIPMENT.
17. THE GRANULAR BASE SHALL ONLY BE PLACED UPON APPROVAL BY THE GEOTECHNICAL ENGINEER OF GRANULAR SUBBASE.
18. THE ASPHALT MATERIAL IS ONLY TO BE PLACED ONLY UPON APPROVAL BY THE GEOTECHNICAL ENGINEER OF GRANULAR BASE.
19. CONTRACTOR IS TO SUPPLY, PLACE AND COMPACT THE ASPHALT MATERIAL IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT. UPON REQUEST, CONTRACTOR WILL PROVIDE TO ENGINEER SAMPLES OF ASPHALT MATERIAL USED FOR THIS PROJECT AND IN SUFFICIENT QUANTITY TO ALLOW TESTING (GRADATION, ASPHALT CONTENT, ETC.) AND CERTIFICATION BY THE GEOTECHNICAL ENGINEER.
20. THE JOB MIX FORMULA (JMF) OF THE ASPHALTIC CONCRETE SHALL BE IN ACCORDANCE WITH OPSS 1150 FOR MATERIAL SPECIFICATION FOR HOT MIX ASPHALT. THE ASPHALTIC CONCRETE SHOULD BE PLACED IN ACCORDANCE TO OPSS 310 FOR CONSTRUCTION SPECIFICATION FOR HOT MIX ASPHALT. THE ASPHALTIC CONCRETE SHOULD COMPACTED TO A MINIMUM OF 92% OF THE MAXIMUM RELATIVE DENSITY (MRD). THE JMF AND ITS CONSTITUENTS SHOULD BE REVIEWED, TESTED AND APPROVED BY A GEOTECHNICAL ENGINEER PRIOR TO DELIVERY TO THE SITE.
21. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING LINE AND GRADE IN ACCORDANCE WITH THE PLANS, AND FOR PROVIDING TO THE ENGINEER WITH VERIFICATION PRIOR TO PLACEMENT ANY GRANULAR BASE, ASPHALT AND CONCRETE AS PART OF THE PROJECT.
22. ANY DITCHES/SWALES DISTURBED DURING THE SERVICING AND GRADING OPERATIONS ARE TO BE REINSTATED TO THEIR ORIGINAL CONDITION AND ENSURE PROPER CONVEYANCE OF FLOWS.
23. ALL RE-GRADED OR DISTURBED AREAS IN EXISTING PUBLIC RIGHTS-OF-WAY ARE TO BE FINISHED WITH SOD SET OVER 100MM TOPSOIL.
24. ANY RETAINING WALLS HIGHER THAN 1.0M SHALL BE DESIGNED AND APPROVED BY A STRUCTURAL ENGINEER. ANY REQUIRED FENCING IS TO BE INSTALLED IN ACCORDANCE TO THE SITE PLAN, WHERE APPLICABLE.

No	DATE	ISSUED FOR	App.
1	2020/07/03	SITE PLAN CONTROL	A.A.
2			
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4			
5			

No	DATE	REVISION	App.
1			
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Legend

KASTONE CONSTRUCTION MANAGEMENT

OTTAWA VALLEY WILD BIRD CARE CENTRE

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Stamps

ADVANCED PROFESSIONAL ENGINEERING H. H. ALMANSOURI 100106389 PROVINCE OF ONTARIO

Project
OTTAWA VALLEY WILD BIRD CARE CENTRE
8520 McArton Road, Ottawa, ON.

Title	Drawn /: A.A.	Scale
GRADING PLAN	Verif. /: H.A.	1:300
Date: 2020/07/03	Revision: 0	Drawing # GR-1