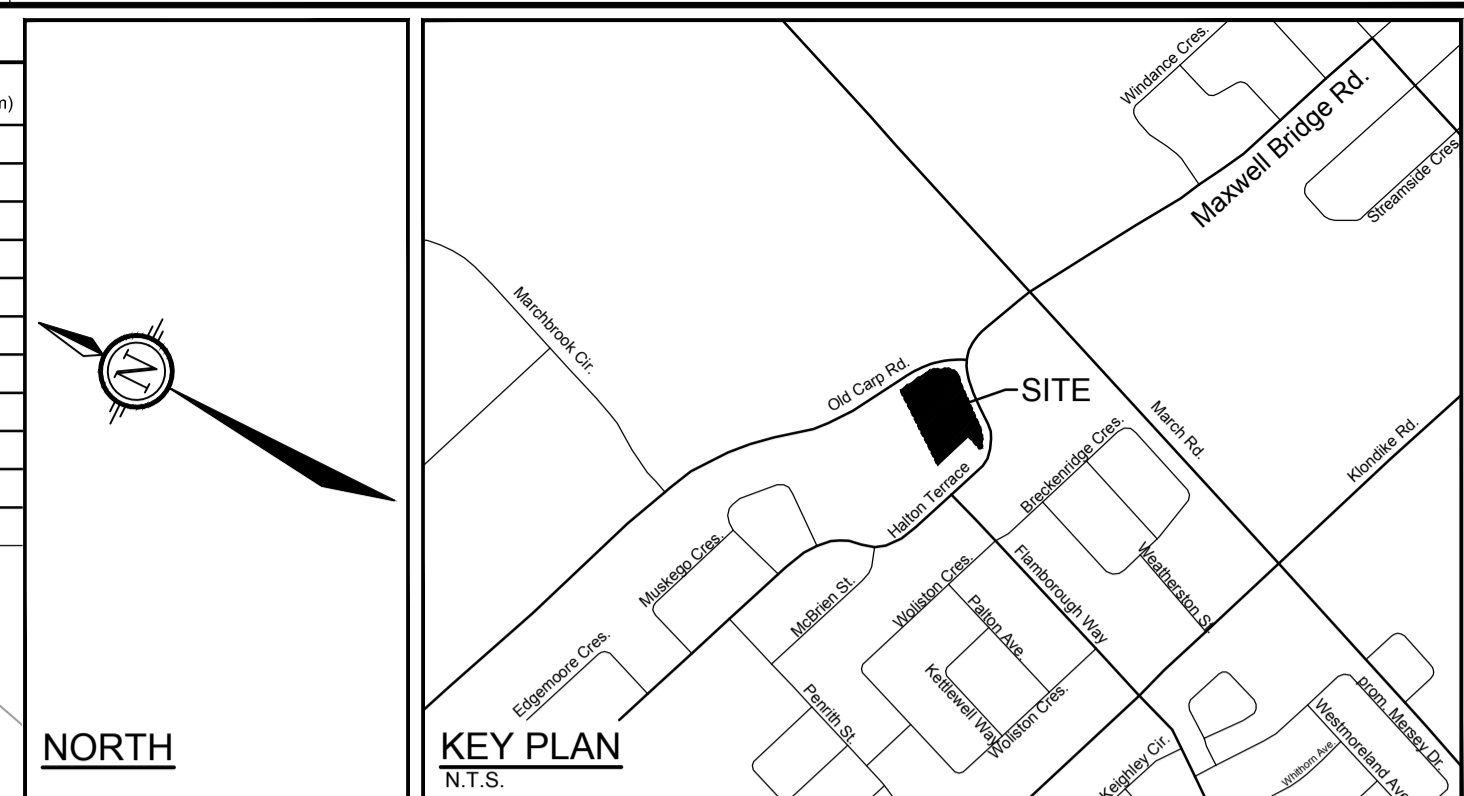


MORGAN'S GRANT SWMF

PONDING						
PONDING ID	STRUCTURE	100 YEAR PONDING ELEVATION	100 YEAR PONDING DEPTH (m)	100 YEAR +20% PONDING ELEVATION	100 YEAR +20% PONDING DEPTH (m)	MAX STATIC PONDING DEPTH (m)
P1	CB1	83.43	0.11	83.48	0.16	83.45
P2	CB2	85.24	0.29	85.26	0.31	85.25
P3	CB3	85.36	0.31	85.39	0.34	85.35
P4	LC1	83.21	0.08	83.30	0.17	83.28
P5	LC2	83.21	0.08	83.30	0.17	83.43
P6	RY2	83.21	0.08	83.30	0.17	83.28
P7	RY3	83.21	0.08	83.30	0.17	83.30
P8	RY4	83.81	0.16	83.85	0.20	83.95
P9	RY5	83.81	0.16	83.85	0.20	83.95
P10	RY6	83.81	0.16	83.85	0.20	83.95
P11	RY7	83.81	0.21	83.85	0.25	83.95



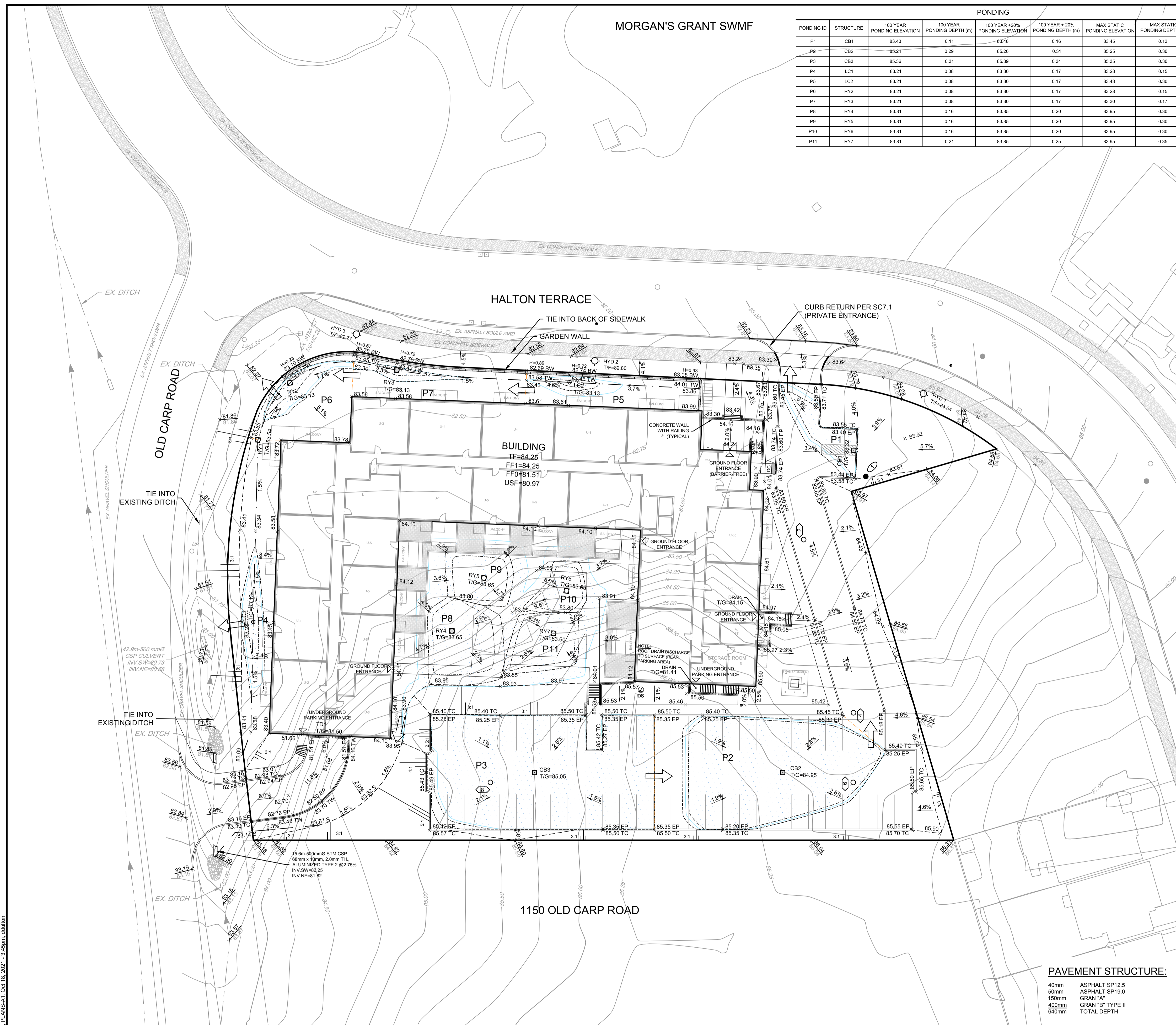
- LEGEND**
- 2.5% PROPOSED GRADE AND DIRECTION OF FLOW
 - 105.59 x PROPOSED ELEVATION
 - 106.53 PROPOSED ELEVATION EXISTING ELEVATION
 - x55.69 EXISTING SPOT ELEVATION
 - 56.13 85 EXISTING ELEVATION AT BACK OF SIDEWALK
 - 55.00 EXISTING CONTOUR ELEVATION
 - MAJOR OVERLAND FLOW DIRECTION
 - 3:1 TERRACE GRADE (3:1 MAX)
 - SWALE AND TERRACE
 - MAX STATIC PONDING LIMITS
 - 100-YR PONDING LIMITS
 - 100-YR +20% PONDING LIMITS
 - HYD T/F=83.84 HYDRANT WITH TOP OF FLANGE ELEVATION
 - 100 SANITARY MANHOLE
 - 100 STORM MANHOLE
 - CB6 T/G=55.48 CATCHBASIN WITH TOP OF GRATE ELEVATION CB WITH ICD
 - LC1 T/G=56.48 LANDSCAPE TYPE CATCHBASIN WITH TOP OF GRATE ELEVATION
 - VB VALVE & VALVE BOX LOCATION
 - FF= FINISHED FLOOR
 - TF= TOP OF FOUNDATION
 - USF= UNDERSIDE OF FOOTING
 - EP EDGE OF PAVEMENT
 - TC TOP OF CURB
 - DS ROOFTOP DOWNSPOUT LOCATION

- GENERAL NOTES:**
- DIMENSIONS AND LAYOUT INFORMATION SHALL BE CONFIRMED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
 - THE ORIGINAL TOPOGRAPHY AND GROUND ELEVATIONS, SERVICING AND SURVEY INFORMATION SHOWN ON THIS PLAN ARE SUPPLIED FOR INFORMATION PURPOSES ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE ACCURACY OF ALL INFORMATION OBTAINED FROM THIS PLAN.
 - CO-ORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
 - BEFORE COMMENCING CONSTRUCTION, PROVIDE PROOF OF COMPREHENSIVE ALL RISK AND OPERATIONAL LIABILITY INSURANCE INCLUDING BLASTING. INSURANCE POLICY TO NAME THE OWNER, ENGINEER AND THE CITY AS CO-INSURED. AMOUNT OF INSURANCE TO BE SPECIFIED BY OWNER'S AGENT.
 - CONNECT TO EXISTING SYSTEMS AS DETAILED, INCLUDING ALL RESTORATION WORK NECESSARY TO REINSTATE SURFACES TO EXISTING CONDITIONS OR BETTER.
 - DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME ALL RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THESE DRAWINGS.
 - OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS BEFORE COMMENCING CONSTRUCTION.
 - RESTORE ALL TRENCHES AND SURFACE FEATURES TO EXISTING CONDITIONS OR BETTER AND TO THE SATISFACTION OF CITY OF OTTAWA AUTHORITIES.
 - ASPHALT RESTORATION SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA DETAIL R-10.
 - THICKNESS OF GRANULAR MATERIAL AND ASPHALT LAYERS TO MATCH EXISTING.
 - BOULEVARDS SHALL BE REINSTATED WITH 100mm OF TOPSOIL, SEED AND MULCH.
 - REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL UNLESS OTHERWISE INSTRUCTED BY ENGINEER.
 - ALL ELEVATIONS ARE GEODETIC AND UTILIZE METRIC UNITS.
 - REFER TO GEOTECHNICAL INVESTIGATION PG4872-1 (DATED MAY 3, 2019), PREPARED BY PATERSON GROUP FOR SUBSURFACE CONDITIONS AND CONSTRUCTION RECOMMENDATIONS.
 - PERFORATED PIPE SUB-DRAINS TO BE PROVIDED AT SUBGRADE LEVEL EXTENDING FROM THE ROADSIDE CATCHBASIN FOR A DISTANCE OF 3.0m, PARALLEL TO THE CURB IN TWO DIRECTIONS.

- GRADING AND PAVEMENT NOTES:**
- ALL TOPSOIL, ORGANIC OR DELETERIOUS MATERIAL MUST BE ENTIRELY REMOVED FROM BENEATH THE PROPOSED HARD SURFACE (i.e. PAVEMENT, CURB, SIDEWALK, ETC.) AREAS AS DIRECTED BY THE SITE ENGINEER OR GEOTECHNICAL ENGINEER.
 - EXPOSED SUBGRADES IN PROPOSED PAVED AREAS SHOULD BE HEAVILY PROOF ROLLED WITH A LARGE (10 TON) VIBRATORY STEEL DRUM ROLLER UNDER DRY CONDITIONS AND INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF GRANULARS.
 - ANY SOFT AREAS EVIDENT FROM THE PROOF ROLLING SHOULD BE SUB-EXCAVATED AND REPLACED WITH SUITABLE MATERIAL THAT IS FROST COMPATIBLE WITH THE EXISTING SOILS AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
 - THE GRANULAR BASE SHOULD BE PLACED IN MAXIMUM 300mm LIFTS AND COMPACTED TO AT LEAST 100% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE. ANY ADDITIONAL GRANULAR FILL USED BELOW THE PROPOSED PAVEMENT SHOULD BE PLACED IN MAXIMUM 300mm LIFTS AND COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE.
 - ROADWAY SUBGRADE TO BE INSPECTED BY THE GEOTECHNICAL ENGINEER AT THE TIME OF CONSTRUCTION TO REVIEW IF A WOVEN GEOTEXTILE IS REQUIRED BELOW THE GRANULAR MATERIALS, AND TO CONFIRM THE DEPTH AND COMPACTION OF GRANULAR 'B'.
 - PRIOR TO PLACEMENT OF TOPLIFT, THE CONTRACTOR SHALL ADJUST ALL STRUCTURES TO FINAL GRADE PER CITY OF OTTAWA STANDARDS.
 - MINIMUM OF 2% GRADE FOR ALL GRASS AREAS UNLESS OTHERWISE NOTED.
 - MAXIMUM TERRACING GRADE TO BE 3:1 UNLESS OTHERWISE NOTED.
 - ALL GRADES BY CURBS ARE EDGE OF PAVEMENT GRADES UNLESS OTHERWISE INDICATED.
 - ALL CURBS SHALL BE BARRIER CURB UNLESS OTHERWISE NOTED AND CONSTRUCTED PER CITY OF OTTAWA STANDARD (SC-1).
 - REFER TO LANDSCAPE PLAN FOR PLANTING AND OTHER LANDSCAPE FEATURE DETAILS.

PAVEMENT STRUCTURE:

- 40mm ASPHALT SP12.5
- 50mm ASPHALT SP19.0
- 150mm GRAN "A"
- 400mm GRAN "B" TYPE II
- 640mm TOTAL DEPTH



NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMANS, 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.

No.	REVISION	DATE	BY
1.	CITY SUBMISSION	OCT 19/21	MAB

SCALE	
1:300	
0 3 6 9 12	

DESIGN	
DTD	
CHECKED	LWR
DRAWN	
CHECKED	DTD
APPROVED	MAB
	JGR

FOR REVIEW ONLY

LICENCED PROFESSIONAL ENGINEER

L.R. WILSON
100160065
PROVINCE OF ONTARIO

LICENCED PROFESSIONAL ENGINEER

M.A. BISSETT
2021.10.19
PROVINCE OF ONTARIO

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Ottawa, Ontario, Canada K2M 1P6
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Facsimile (613) 254-5867
Website www.novatech-eng.com

CITY OF OTTAWA
1104 HALTON TERRACE

GRADING PLAN

PROJECT No.	119024
REV	REV # 1
DRAWING No.	119024-GR

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