

**GENERAL NOTES:**

- COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
- DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THIS DRAWING.
- OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
- BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE, ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR \$2,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS CO-INSURED.
- RESTORE ALL DISTURBED AREAS ON-SITE AND OFF-SITE, INCLUDING TRENCHES AND SURFACES ON PUBLIC ROAD ALLOWANCES TO EXISTING CONDITIONS OR BETTER TO THE SATISFACTION OF MUNICIPAL AUTHORITIES.
- REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL, ORGANIC MATERIAL AND DEBRIS UNLESS OTHERWISE INSTRUCTED BY ENGINEER. EXCAVATE AND REMOVE FROM SITE ANY CONTAMINATED MATERIAL. ALL CONTAMINATED MATERIAL SHALL BE DISPOSED OF AT A LICENSED LANDFILL FACILITY.
- ALL ELEVATIONS ARE GEODETIC.
- REFER TO GEOTECHNICAL REPORT (No. 18111016, DATED SEPTEMBER, 2019), PREPARED BY GOLDER FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS, AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
- REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARDSURFACE AREAS AND DIMENSIONS.
- REFER TO THE 'SITE SERVICING AND STORMWATER MANAGEMENT REPORT' (R-2019-157) PREPARED BY NOVATECH.
- SAW CUT AND KEY/GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE-IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).
- PROVIDE LINE/PARKING PAINTING.
- CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GRADING PLAN INDICATING THE AS-BUILT ELEVATION OF EVERY DESIGN GRADE SHOWN ON THIS PLAN.
- MVCA REGULATORY FLOODPLAIN AND REGULATORY LIMITS SHOWN ARE APPROXIMATE ONLY. INFORMATION IS TAKEN FROM MVCA SHIRLEY'S BROOK FLOOD RISK MAPS DATED DECEMBER 2017.
- TOPOGRAPHIC MAPPING INFORMATION SHOWN IS FROM CITY OF OTTAWA 1:1000 TOPOGRAPHIC MAPPING.
- REFER TO LANDSCAPE PLAN FOR REQUIRED TREE PROTECTION FENCING LOCATION AND DETAILS.

**GRADING NOTES:**

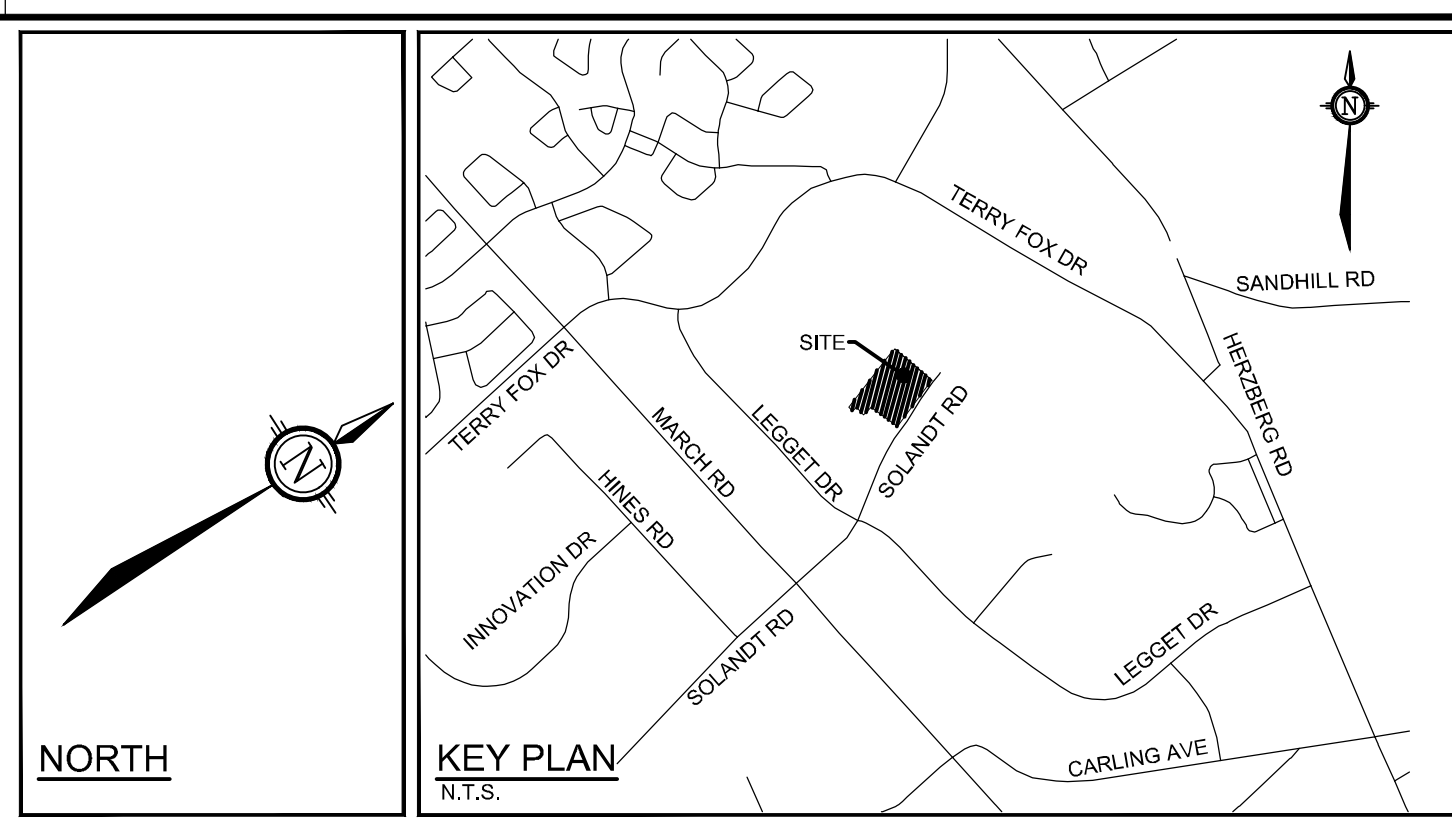
- ALL TOPSOIL, ORGANIC OR DELETERIOUS MATERIAL MUST BE ENTIRELY REMOVED FROM BENEATH THE PROPOSED BUILDING AND PAVED AREAS.
- EXPOSED SUBGRADES IN PROPOSED PAVED AREAS SHOULD BE PROOF ROLLED WITH A LARGE STEEL DRUM ROLLER AND INSPECTED BY THE GEOTECHNICAL CONSULTANT.
- ANY SOFT AREAS EVIDENT FROM THE PROOF ROLLING SHOULD BE SUBEXCAVATED AND REPLACED WITH SUITABLE MATERIAL THAT IS FROST COMPATIBLE WITH THE EXISTING SOILS.
- THE GRANULAR BASE AND SUBBASE SHOULD BE COMPACTED TO AT LEAST 100% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE. ANY ADDITIONAL GRANULAR FILL USED BELOW THE PROPOSED PAVEMENT SHOULD BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE.
- GRADE AND/OR FILL BEHIND PROPOSED CURB AND BETWEEN BUILDINGS AND CURBS, WHERE REQUIRED TO PROVIDE POSITIVE DRAINAGE.
- MINIMUM OF 2% GRADE FOR ALL GRASS AREAS UNLESS OTHERWISE NOTED.
- ALL GRADES BY CURBS ARE EDGE OF PAVEMENT GRADES UNLESS OTHERWISE INDICATED.
- ALL CURBS SHALL BE BARRIER CURB (150mm) UNLESS OTHERWISE NOTED AND CONSTRUCTED AS PER CITY OF OTTAWA STANDARDS (SC1.1).
- REFER TO LANDSCAPE PLAN FOR PLANTING AND OTHER LANDSCAPE FEATURE DETAILS.
- CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GRADING PLAN INDICATING THE AS-BUILT ELEVATION OF EVERY DESIGN GRADE SHOWN ON THIS PLAN.

**EROSION AND SEDIMENT CONTROL NOTES:**

- THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE, DURING CONSTRUCTION ACTIVITIES. THIS INCLUDES LIMITING THE AMOUNT OF EXPOSED SOIL, USING FILTER CLOTH UNDER THE GRATES OF CATCH BASINS AND MANHOLES AND INSTALLING SILT FENCES AND OTHER EFFECTIVE SEDIMENT TRAPS.
- ALL EROSION AND SEDIMENT CONTROLS ARE TO BE INSTALLED TO THE SATISFACTION OF THE ENGINEER AND THE CITY OF OTTAWA. THEY ARE TO BE APPROPRIATE TO THE SITE CONDITIONS, PRIOR TO UNDERTAKING ANY SITE ALTERATIONS (FILLING, GRADING, REMOVAL OF VEGETATION, ETC.) AND DURING ALL PHASES OF SITE PREPARATION AND CONSTRUCTION. THESE PRACTICES ARE TO BE IMPLEMENTED IN ACCORDANCE WITH THE CURRENT BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL AND SHOULD INCLUDE AS A MINIMUM THOSE MEASURES INDICATED ON THE PLAN.
- TO PREVENT SURFACE EROSION FROM ENTERING ANY DITCH OR STORM SEWER SYSTEM DURING CONSTRUCTION, FILTER CLOTH AND/OR CATCH BASIN INSERTS, WILL BE PLACED UNDER GRATES OF CATCH BASINS AND STRUCTURES. A LIGHT DUTY SILT FENCE BARRIER WILL ALSO BE INSTALLED AROUND THE CONSTRUCTION AREA. THESE CONTROL MEASURES WILL REMAIN IN PLACE UNTIL VEGETATION HAS BEEN ESTABLISHED AND CONSTRUCTION IS COMPLETE.
- THE SEDIMENT CONTROL MEASURES SHALL ONLY BE REMOVED WHEN, IN THE OPINION OF THE ENGINEER, THE MEASURES ARE NO LONGER REQUIRED. NO CONTROL MEASURES MAY BE PERMANENTLY REMOVED WITHOUT PRIOR AUTHORIZATION FROM THE ENGINEER.
- THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER ANY ACCIDENTAL DISCHARGE OF SEDIMENT MATERIAL INTO ANY DITCH OR STORM SEWER SYSTEM. APPROPRIATE RESPONSE MEASURES, INCLUDING ANY REPAIRS TO EXISTING CONTROL MEASURES OR THE IMPLEMENTATION OF ADDITIONAL CONTROL MEASURES, SHALL BE CARRIED OUT BY THE CONTRACTOR WITHOUT DELAY.
- THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.
- ROADWAYS ARE TO BE SWEEP AS REQUIRED OR AS DIRECTED BY THE ENGINEER AND/OR MUNICIPALITY.
- THE CONTRACTOR SHALL ENSURE PROPER DUST CONTROL IS PROVIDED WITH THE APPLICATION OF WATER (AND IF REQUIRED, CALCIUM CHLORIDE) DURING DRY PERIODS.

**PAVEMENT STRUCTURES:**  
(AS PER GEOTECHNICAL REPORT)

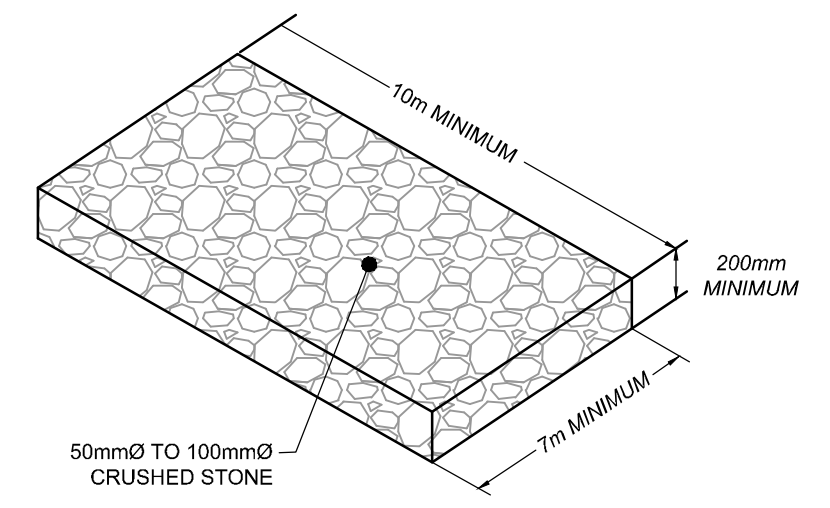
- CAR PARKING AREAS  
50mm SUPERPAVE 12.5 SURFACE COURSE  
150mm OPSS GRANULAR 'A' BASE  
300mm OPSS GRANULAR 'B' TYPE II SUBBASE
- ACCESS & TRUCK TRAFFIC AREAS  
40mm SUPERPAVE 12.5 SURFACE COURSE  
50mm SUPERPAVE 10.0 BINDER COURSE  
150mm OPSS GRANULAR 'A' BASE  
450mm OPSS GRANULAR 'B' TYPE II SUBBASE



**LEGEND**

- PROPERTY LINE
- PROPOSED ELEVATION
- EXISTING ELEVATION
- EXISTING ELEVATION
- PROPOSED TOP OF CURB ELEVATION
- GRADE AND DIRECTION
- MAXIMUM 3:1 OR 2:1 SIDESLOPE
- DIRECTION OF MAJOR OVERLAND FLOW
- PROPOSED SANITARY MANHOLE
- PROPOSED CATCHBASIN MANHOLE
- PROPOSED STORM MANHOLE
- PROPOSED CATCHBASIN
- PROPOSED VALVE AND VALVE BOX
- PROPOSED SIAMSE CONNECTION
- PROPOSED SILT FENCE
- PROPOSED BARRIER CURB
- PROPOSED DEPRESSED CURB
- PROPOSED INLET CONTROL DEVICE
- PROPOSED ROOF DRAIN
- PROPOSED FINISHED FLOOR ELEVATION
- PROPOSED BUILDING ENTRANCE
- APPROXIMATE PONDING LIMITS AND ELEVATIONS
- EXISTING CONCRETE CURB
- EXISTING SANITARY MANHOLE
- EXISTING CATCHBASIN MANHOLE
- EXISTING STORM MANHOLE
- EXISTING CATCHBASIN
- EXISTING HYDRANT & VALVE
- EXISTING FENCE
- EXISTING LIGHT STANDARD
- EXISTING MAJOR CONTOUR (1.0m INTERVAL)
- EXISTING MINOR CONTOUR (0.25m INTERVAL) (FROM 1:1000 TOPO MAPPING)
- MVCA REGULATORY FLOODPLAIN (APPROXIMATE)
- MVCA REGULATORY LIMIT (APPROXIMATE)
- PROPOSED MUD MAT (REFER TO DETAIL)

| SURFACE STORAGE TABLE |                                  |                                    |   |                                     |
|-----------------------|----------------------------------|------------------------------------|---|-------------------------------------|
| LOCATION              | APPROXIMATE 5 YEAR PONDING DEPTH | APPROXIMATE 100 YEAR PONDING DEPTH | APPROXIMATE 100 YEAR PONDING SURFACE AREA | APPROXIMATE 100 YEAR PONDING VOLUME |
| CB1                   | 12 cm                            | 26 cm                              | 1185 m <sup>2</sup>                       | 130 m <sup>3</sup>                  |
| CB2                   | 8 cm                             | 22 cm                              | 445 m <sup>2</sup>                        | 35 m <sup>3</sup>                   |
| CB3                   | 12 cm                            | 26 cm                              | 1220 m <sup>2</sup>                       | 110 m <sup>3</sup>                  |
| CBMH1<br>CBMH2        | 3 cm                             | 17 cm                              | 800 m <sup>2</sup>                        | 60 m <sup>3</sup>                   |
| CB4                   | 6 cm                             | 20 cm                              | 225 m <sup>2</sup>                        | 15 m <sup>3</sup>                   |
| CBMH3                 | -                                | 1 cm                               | 3 m <sup>2</sup>                          | NEGLIGIBLE                          |
| CBMH4                 | -                                | 1 cm                               | 3 m <sup>2</sup>                          | NEGLIGIBLE                          |
| CB5                   | -                                | 14 cm                              | 200 m <sup>2</sup>                        | 10 m <sup>3</sup>                   |

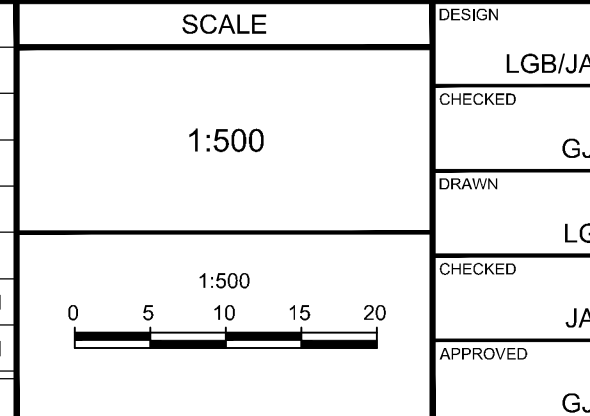


**MUD MAT DETAIL**  
NOT TO SCALE

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  |
|-----|-------------------------------|-------------|-----|
| 2.  | REVISED PER CITY COMMENTS     | JAN 17/2020 | GJM |
| 1.  | ISSUED FOR SITE PLAN APPROVAL | OCT 09/2019 | GJM |

| DESIGN   | LGB/JAG |
|----------|---------|
| CHECKED  | GJM     |
| DRAWN    | LGB     |
| CHECKED  | JAG     |
| APPROVED | GJM     |



**FOR REVIEW ONLY**

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LOCATION  
CITY OF OTTAWA  
2707 SOLANDT ROAD

DRAWING NAME  
**GRADING AND EROSION SEDIMENT CONTROL PLAN**

PROJECT No.  
119110-00

REV #  
REV # 2

DRAWING No.  
119110-GR