

MUD MAT DETAIL
NOT TO SCALE

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 \$5,000,000.00. 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 THE CITY OF OTTAWA AND ENGINEER.
- 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 INVESTIGATION REPORT (FILE NO. 329062.001), DATED FEBRUARY 22, 2024, PREPARED BY PINCHIN LTD., 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 HARD SURFACE AREAS AND DIMENSIONS.
- REFER TO DEVELOPMENT SERVICING STUDY & STORMWATER MANAGEMENT REPORT (R-2023-111) PREPARED BY NOVATECH.
- REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARD SURFACE AREAS AND DIMENSIONS.
- COMPLETE ALL WORKS IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS USING THE CURRENT GUIDELINES, BYLAWS AND STANDARDS INCLUDING MATERIALS OF CONSTRUCTION, DISINFECTION AND ALL RELEVANT REFERENCES TO OPSS, OPSD, & AWWA GUIDELINES - ALL CURRENT VERSIONS AND AS AMENDED.
- 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 THE CITY OF OTTAWA AND ENGINEER.

GRADING NOTES:

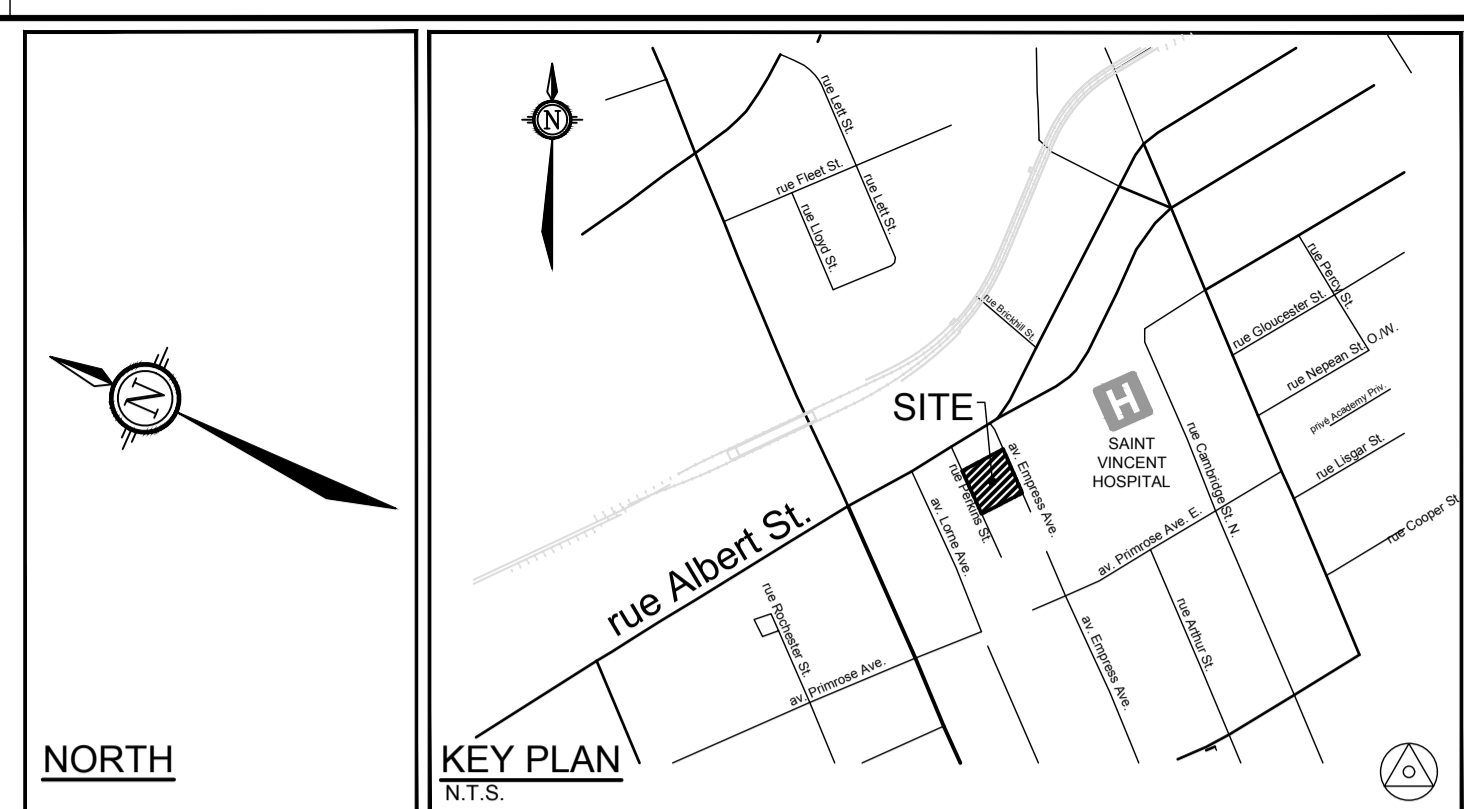
- ALL TOPSOIL, ORGANIC OR DELETERIOUS MATERIAL MUST BE ENTIRELY REMOVED FROM BENEATH THE PROPOSED PAVED AREAS AS DIRECTED BY THE SITE ENGINEER OR GEOTECHNICAL ENGINEER.
- EXPOSED SUBGRADES IN PROPOSED PAVED AREAS SHOULD BE PROOF ROLLED WITH A LARGE STEEL DRUM ROLLER AND INSPECTED BY THE GEOTECHNICAL 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 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 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE.
- 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.
- CURBS SHALL BE 150mm BARRIER CURB AS PER CITY OF OTTAWA STANDARD SC1.1 ON EMPRESS AVENUE AND MOUNTABLE CURB AS PER CITY OF OTTAWA STANDARD SC1.3 ON PERKINS STREET.
- REFER TO LANDSCAPE PLAN FOR PLANTING AND OTHER LANDSCAPE FEATURE DETAILS.
- CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GRADING PLAN INDICATING AS-BUILT ELEVATIONS OF ALL DESIGN GRADES SHOWN ON THIS PLAN.

EROSION AND SEDIMENT CONTROL NOTES:

- 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 STORM SEWER SYSTEM DURING CONSTRUCTION, FILTER BAGS WILL BE PLACED UNDER GRATES OF NEARBY CATCHBASINS AND STRUCTURES. A LIGHT DUTY SILT FENCE BARRIER WILL ALSO BE INSTALLED AROUND THE CONSTRUCTION AREA (WHERE APPLICABLE). THESE CONTROL MEASURES WILL REMAIN IN PLACE UNTIL 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 DISCHARGES OF SEDIMENT MATERIAL INTO ANY 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 SWEEPED 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.

Erosion and Sediment Control Responsibilities:

ESC Measure	Symbol	Specification	Installation Responsibility	During Construction		After Construction Prior to Final Acceptance		After Final Acceptance	
				Inspection/Maintenance Frequency	Approval to Remove	Removal Responsibility	Inspection/Maintenance Responsibility		
Silt Fence		OPSD 219.110	Developer's Contractor	Weekly (as a minimum)	Consultant	Developer's Contractor			N/A
Filter Fabric		Location as Indicated in ESC Note #3	Developer's Contractor	Weekly (as a minimum)	Consultant	Developer's Contractor			N/A
Mud Mat		Drawing Details	Developer's Contractor	Weekly (as a minimum)	Developer's Contractor	Developer's Contractor			N/A
Dust Control		Location as Required Around Site	Developer's Contractor	Weekly (as a minimum)	Consultant	Developer's Contractor			N/A
Stabilized Material Stockpiling		Location as Required by Contractor	Developer's Contractor	Weekly (as a minimum)	Developer's Contractor	Developer's Contractor			N/A
Sediment Basin (for flows being pumped out of excavations)		Location as Required by Contractor	Developer's Contractor	After Every Rainstorm	Developer's Contractor	Developer's Contractor			N/A



LEGEND

- PROPERTY LINE
- PROPOSED ELEVATION
- EXISTING ELEVATION
- PROPOSED TOP OF WALL ELEVATION
- PROPOSED BOTTOM OF WALL ELEVATION
- GRADE AND DIRECTION
- DIRECTION OF MAJOR SYSTEM OVERLAND FLOW
- PROPOSED CONTROLLED FLOW ROOF DRAIN
- PROPOSED DECK DRAIN (SEE MECHANICAL FOR DETAILS)
- PROPOSED ROOFTOP SCUPPER LOCATION
- REMOVAL AND/OR ABANDONMENT
- PROPOSED VALVE AND VALVE BOX
- APPROXIMATE PONDING LIMITS
- EXISTING EDGE OF PAVEMENT
- EXISTING VALVE & VALVE BOX
- EXISTING HYDRANT
- EXISTING COMBINED MH
- EXISTING CATCHBASIN
- EXISTING UTILITY POLE
- EXISTING FENCE

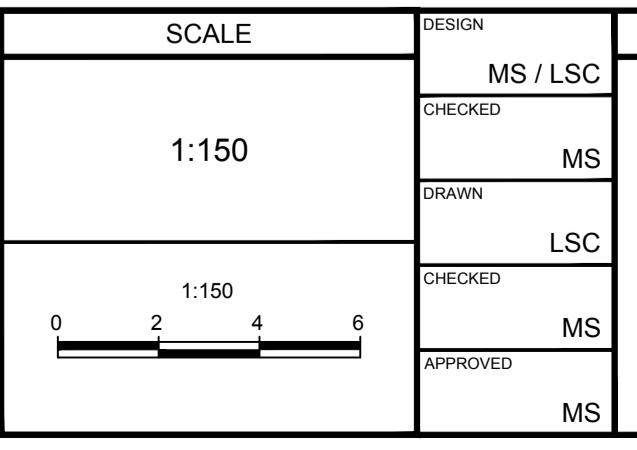
ROOF DRAIN TABLE: AREA R1 to R7 (FOR DRAINS RD1 to RD7)

AREA ID	ROOF DRAIN No. (WATTS MODEL)	WEIR SETTING	1.5 YEAR RELEASE RATE	APPROX. 5 YR PONDING DEPTH	1:100 YEAR RELEASE RATE	APPROX. 100 YR PONDING DEPTH
R1	RD 1 (RD-100-A-ADJ)	1/4 EXPOSED	0.79 L/S	10 cm	0.95 L/S	14 cm
R2	RD 2 (RD-100-A-ADJ)	1/4 EXPOSED	0.79 L/S	10 cm	0.87 L/S	13 cm
R3	RD 3 (RD-100-A-ADJ)	CLOSED	0.32 L/S	11 cm	0.32 L/S	15 cm
R4	RD 4 (RD-100-A-ADJ)	1/4 EXPOSED	0.79 L/S	11 cm	0.95 L/S	14 cm
R5	RD 5 (RD-100-A-ADJ)	1/2 EXPOSED	0.95 L/S	11 cm	1.26 L/S	15 cm
R6	RD 6 (RD-100-A-ADJ)	1/2 EXPOSED	0.87 L/S	9 cm	0.95 L/S	13 cm
R7	RD 7 (RD-100-A-ADJ)	CLOSED	0.32 L/S	11 cm	0.32 L/S	14 cm
TOTALS			4.83 L/S		4.99 L/S	

* REFER TO THE DEVELOPMENT SERVICING STUDY AND STORMWATER MANAGEMENT REPORT (R-2023-111) PREPARED BY NOVATECH FOR DRAINAGE AREA IDENTIFIERS AND STORMWATER MANAGEMENT DETAILS.
 ** ALL CONTROLLED FLOW ROOF DRAINS FOR THE UPPER ROOF OF THE BUILDING ARE TO BE WATTS ACCUTROL ADJUSTABLE ROOF DRAINS WITH WEIR SETTINGS AS INDICATED IN THE TABLE ABOVE.

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
5	REVISED PER CITY COMMENTS	NOV 5/24	MS
4	ISSUED FOR SPC APPLICATION	AUG 09/24	MS
3	ISSUED FOR TENDER	JULY 30/24	MS
2	ISSUED FOR BUILDING PERMIT	JUNE 14/24	MS
1	ISSUED FOR COORDINATION	JUNE 05/24	MS



FOR REVIEW ONLY

DESIGN: MS / LSC
 CHECKED: MS
 DRAWN: LSC
 CHECKED: MS
 APPROVED: MS

LICENSED PROFESSIONAL ENGINEER
 M. SAVIC
 100102651
 11/05/24
 PROVINCE OF ONTARIO

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 Engineers, Planners & Landscape Architects
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 Ottawa, Ontario, Canada K2M 1P6
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 Facsimile: (613) 254-5867
 Website: www.novatech-eng.com

LOCATION
CITY OF OTTAWA
10 EMPRESS AVE

DRAWING NAME
GRADING, EROSION AND SEDIMENT CONTROL PLAN

PROJECT No. 121234
 REV # 5
 DRAWING No. 121234-GR
 PLAN #19176

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