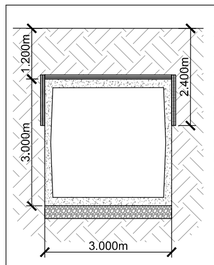
SITE SERVICING NOTES:

1. Elevations shown on plans are geodetic in meters and taken from topographical survey drawing by Arpentage Dutrisac Surveying Inc. July 2013.
2. Project T.B.M. (Temporary Benchmark). Nail in Utility Pole on East side of Rockdale Road Elev. = 78.39.
3. All water works to respect requirements of the City of Ottawa and to conform to the latest revision of Standard Tendering Documents as prepared by city.
4. All catch basin manholes and sewers work to be constructed as per the requirements of the City of Ottawa.
5. Pipes sizes shall be as shown on drawing.
6. Pipes material to be as follows:
   - storm sewer - PVC SDR28
   - watermain - PVC DR18
   - sanitary sewer - SDR 35
   - sub-drain - flexible perforated heavy duty polyethylene pipe c/w polyester sock filter by BIG'O' or equivalent.
7. All water services shall have 2.4 m frost cover minimum.
8. Existing services and utilities shown on this drawing are taken from best available records but are not complete. Contractor is required to check in field for location and all elevation of pipes and check with utility companies before digging or ordering any material. Advise engineer of any discrepancies for recommendations and directions, prior to ordering any materials or starting any work.
9. Geotechnical Report, perform by Morey Associates Ltd. (report# 013300, written September 2013), forms part of our specifications and requirements. Contractor must be fully cognizant of its content and respect its recommendations.
10. Stormwater Management Report by Blanchard Letendre Engineering Ltd., forms part of our specifications and requirements. The contractor must be fully cognizant of its content and respect its recommendations.
11. All plumbing and electrical work to be coordinated with civil engineering.
12. Notify engineer for inspection prior to backfilling or covering any pipes or appurtenances.
13. Contractor to respect grading around building to be 0.15m minimum below top of foundation or any siding or finish wall material.
14. All works for private approach including any temporary construction access to the site lane shall be constructed in accordance with requirements of the City of Ottawa standards.
15. Contractor to prevent erosion and sedimentation damages by installing geosocks under cover of existing down stream catch basins and also take necessary measures to prevent erosion and sediment deposit on adjacent property. Provide also straw wall with pickets & geotextile at perimeter of property.
16. All pipe bedding to be as per the City of Ottawa requirements and as specified in geotechnical report.
17. Contractor to obtain clearance certificate from all agencies, authorities and utility company prior to making any excavation. Provide copy of clearance certificate to engineer prior to start of construction.
18. MH#1 & MH#2 are to be as per OPSD 705.010. MH#3 is to be as per OPSD 701.015 complete with transition slab, 1200mm diameter riser and 1200mm diameter precast flat cap.
19. All catch basin manholes shall be cleaned and empty annually for the purpose of capturing sediment.
20. Refer to site plan by Blanchard Letendre Engineering Ltd. for details of curb radius, dimensions of lanes, parking stalls, set back requirements and site data.
21. Location of street water is approximate and contractor to verify the exact distance and elevation.
22. Contractor to perform all testing verification, cleaning and preparation as per the requirements of the City of Ottawa before final approval.
23. Major overland flow is @ an elevation of 77.65 m.
24. Asphalt details and road foundation, as well as parking foundation should be as per details on SS3.
25. Proposed grade elevations to match existing elevations at property line or as per plan.
26. All proposed grades greater than 7% are proposed average grades. Contractor to use construct slope using terracing.



TYP. UNDERGROUND WATER STORAGE INSULATION

TANK NOTES:

1) TWO 50000L PRECAST CONCRETE TANKS BY WILKINSON HEAVY PRECAST LTD. (OR EQUIVALENT) TO BE USED FOR FIRE WATER STORAGE. TANKS ARE TO BE CONNECTED WITH EACH OTHER WITH 200mm PIPE. HYDRANT TO BE INSTALLED DIRECTLY ABOVE TANK AS SHOWN ON C300.

2) TANKS TO BE COVERED IN 4" OF RIGID INSULATION IN A "U" SHAPE UP TOP A DEPTH OF 2.4m UNDER FINISHED GRADE.

3) TANKS TO BE INSTALLED IN ACCORDANCE WITH RECOMMENDED INSTALLATION PROCEDURES AS SEEN IN WILKINSON INSTALLATION GUIDELINES AND LIFTING ASSEMBLY INSTRUCTIONS.

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M CON

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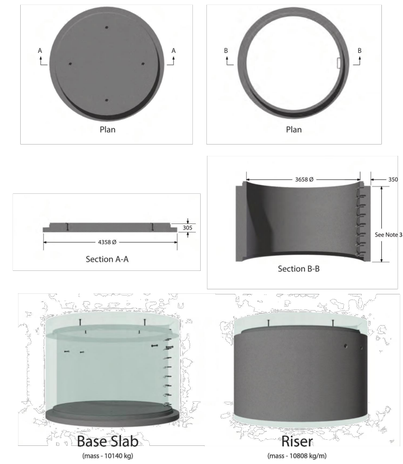


Maintenance Hole 3600mm Riser and Base Slab

Notes
1. Manufactured in accordance with OPSD 701.081.
2. See page 43 for maximum pipe size and alignment angles.
3. Available riser section heights : 305, 610, 914, 1219, 1524, 1829, and 2440.
4. Maintenance hole steps (circular hollow aluminum) as per OPSD 405.010.
5. All dimensions are in millimeters unless otherwise shown.

GENERAL NOTES

DESIGN PROVISIONS:

1. THE DESIGN SHOWN ON THESES DRAWINGS IS FOR THE RECON PRECAST CONCRETE BLOCK WALL SYSTEM ONLY. ALL OTHER COMPONENTS, INCLUDING BACKFILL, DRAINAGE AND LANDSCAPING TO BE DESIGNED BY OTHERS. THE FOLLOWING EFFECTIVE STRENGTH PARAMETERS WERE ASSUMED IN THE PREPARATION OF THE STRUCTURAL CALCULATIONS FOR THE RECON RETAINING WALL SYSTEM:

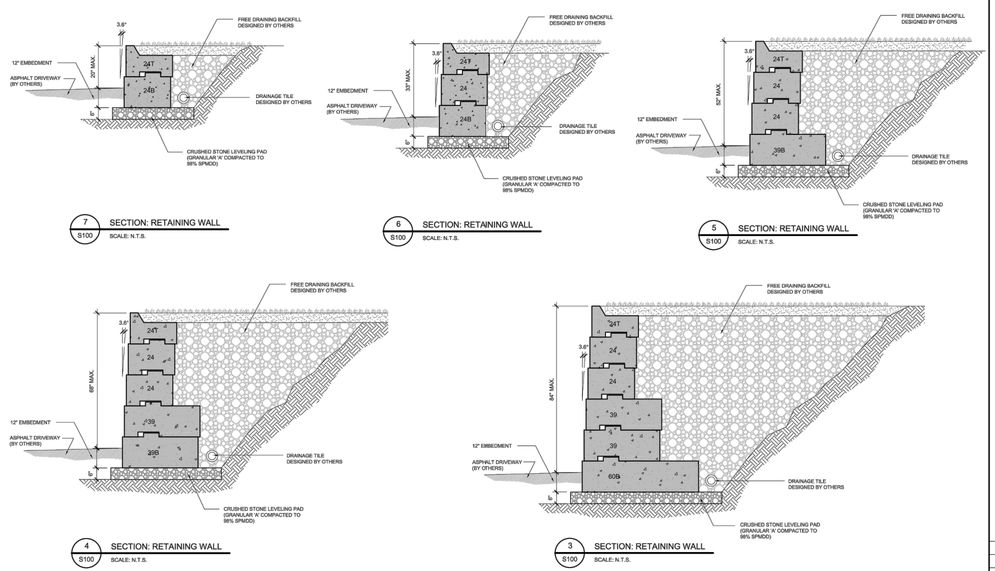
	φ	c	γ	SOIL TYPE
RETAINED SOIL (WALL 1)	32°	0 PSF	22 kN/m³	GRANULAR BACKFILL
FOUNDATION SOIL (BELOW LEVELING PAD	30°	0 PSF	18 kN/m³	ONSITE LEAN CLAY
LEVELING PAD	40°	0 PSF	21 kN/m³	CRUSHED STONE

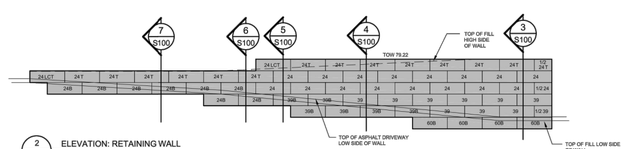
SOILS INFORMATION OBTAINED FROM SLOPE STABILITY ASSESSMENT REPORT PREPARED BY MOREY ASSOCIATES LIMITED DATED MAY 7, 2021. FOUNDATION SOILS SHALL BE EVALUATED BY A GEOTECHNICAL ENGINEER OR OWNERS REPRESENTATIVE TO ENSURE THAT BEARING SOILS MEET OR EXCEED THE DESIGN CONDITIONS OR ASSUMPTIONS.

2. THE WALLS ARE DESIGNED TO MEET THE FOLLOWING DESIGN PARAMETERS AND MAXIMUM SURCHARGE LOADINGS:

UNIT TYPE:	RECON SERIES 50
REINFORCEMENT:	GRAVITY (WALL 1)
DESIGN METHOD:	NCMA 2009 (3RD EDITION)
LIVE LOAD:	12kPa (WALL 1)
DEAD LOAD:	NONE
BACK SLOPE:	NONE
SEISMIC:	0.32G
HYDROSTATIC:	N/A (DRAINAGE PROVIDED)

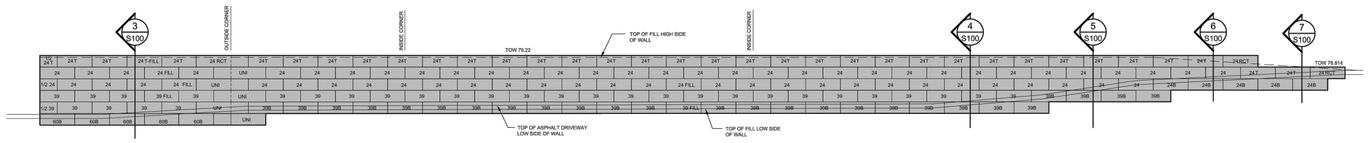
3. LEVELING PAD TO BEAR ON UNDISTURBED NATIVE MATERIAL WITH MINIMUM ALLOWABLE BEARING STRENGTH OF 100 kPa. OWNER TO RETAIN SERVICES OF A GEOTECHNICAL ENGINEER TO PROVIDE WRITTEN CONFORMATION OF BEARING PRIOR PLACEMENT OF LEVELING PAD.
4. WALL 1 IS DESIGNED AS A GRAVITY WALL.
5. WALL 1 SHALL BE BACKFILLED AT A 1H:1V EXTENDING OFF THE BACK OF THE BOTTOM UNIT WITH 100% FREE DRAINING, WASHED, ANGULAR CRUSHED STONE.
6. SEE MANUFACTURER INFORMATION FOR ADDITIONAL CONSTRUCTION DETAILS FOR THE RECON RETAINING WALL SYSTEM. THE MANUFACTURER INFORMATION SHALL ACCOMPANY THE CONSTRUCTION PLANS.
7. UPON EXCAVATION, WHERE UNSUITABLE SOILS ARE FOUND, SUBCUT TO DEPTH "D" AS REQUIRED BY THE ONSITE GEOTECHNICAL ENGINEER AND REPLACE WITH SUITABLE COMPACTED STRUCTURAL FILL TO ACHIEVE THE REQUIRED BEARING CAPACITY. THE FILL SHALL BE INSTALLED AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
8. APPROXIMATE LIMITS OF EXCAVATION VARIES WHERE SUBCUT IS REQUIRED. ACTUAL LIMITS AND SIDE SLOPES SHALL BE DETERMINED BY OSHA REGULATIONS AND MATCH FIELD CONDITIONS AS DETERMINED BY THE CONTRACTOR.
9. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL PROVINCIAL AND CITY REGULATIONS AND CODES AS WELL AS OSHA STANDARDS.
10. THE WALLS SHALL BE CONSTRUCTED WITH RECON UNITS USING 3.6° BATTER.
11. INSPECT EXCAVATION SLOPES FOR ACTIVE SEEPAGE AND PLACE ADDITIONAL DRAINS WHERE SEEPAGE OCCURS.
12. DO NOT BRING HEAVY COMPACTION OR PAVING EQUIPMENT WITHIN 3' OF THE BACK OF THE RECON RETAINING WALL.
13. THE LEVELING PAD SHALL BE CONSTRUCTED WITH A MINIMUM 6" OF CRUSHED STONE(GRANULAR 'A' COMPACTED TO 98%SPMDD).
14. RECON UNITS:
    A. RECON WALL UNITS HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 27.5 MPa. STANDARD WEIGHT CONCRETE SHALL HAVE A 6% AIR ENTRAINMENT BY VOLUME, EIGHT OF CONCRETE SHALL BE 2320 kg/m³.
    B. TEXTURE ON THE FACE OF THE BLOCK SHALL BE WEATHERED EDGE.

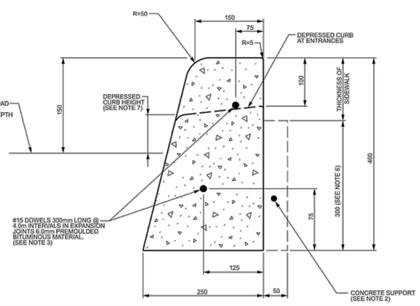




RECON BLOCK	METRIC BLOCK NAME	DIMENSIONS (WxHxD)	WEIGHT
24	60	48"x18"x24"	≈1411 lbs
39	100	48"x18"x39"	≈2201 lbs
60B	150	48"x18"x60"	≈3115 lbs

LEGEND
B: BOTTOM BLOCK
T: TOP BLOCK
RCT: RIGHT CORNER TOP
LCT: LEFT CORNER TOP
UNI: UNIVERSAL CORNER BLOCK
FILL: FITTING BLOCK





CONCRETE BARRIER CURB

NOTES:
1. THE FULL CURB DEPTH SHALL BE CARRIED THROUGH THE DEPRESSED ACCESS CROSSING.
2. A CONCRETE SUPPORT IS REQUIRED WHEN BUILT ADJACENT TO THE SIDEWALK.
3. IF AN EXTRUSION CURBING MACHINE IS USED, THE EXPANSION BITUMINOUS MATERIAL AND THE #15 DOWELS ARE TO BE PLACED AT THE END OF THE EXTRUSION.
4. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
5. DUMMY JOINTS SHALL BE 25mm DEEP, FRONT, BACK AND TOP OF SECTION AT 4m SPACING OR MATCH JOINTING WHERE SIDEWALK IS ADJACENT.
6. FOR DEPRESSED CURB AT ENTRANCES USE 250.
7. DEPRESSED CURB HEIGHT - FOR PEDESTRIAN CURB RAMPS 0 TO 6 mm AND FOR PRIVATE ENTRANCES 0 TO 13mm.

N.T.S.

Ottawa	CONCRETE BARRIER CURB FOR GRANULAR BASE PAVEMENT (MODIFIED OPSD-600.110)	DATE: JANUARY 2003 / REV. DATE: MARCH 2021 / DWG. No.: SC1.1

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#4		
#3		
#2		
#1	ISSUED FOR CITY COMMENTS 6	26/03/2020

No.	DATE	REVISIONS	BY
2	SEPT 07/21	RE-ISSUED FOR APPROVAL	ME
1	SEPT 03/21	ISSUED FOR APPROVAL	ME

PROJECT NORTH

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PROJECT:
NEW 12-UNIT APARTMENT BUILDING
5574 ROCKDALE RD, VARS ON, K0A 3H0

PROJECT
172 ST. THOMAS ROAD, RETAINNG WALL

DRAWING:
NOTES & DETAILS

DRAWING
GENERAL NOTES, ELEVATIONS & SECTIONS

DRAWN:	M. EPPICH
DESIGNED:	K.W./G.D.
DATE:	AUG 31/21
SCALE:	AS SHOWN
PROJECT No:	21-2247
DRAWING No.	S100

PAPER FORMAT:	18x24
DRAWN BY:	BF + GB
CHECKED BY:	G.B.
DATE:	02-2022
SCALE:	AS INDICATED
PROJECT #:	19-276

DRAWING #: C500

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April 13, 2022