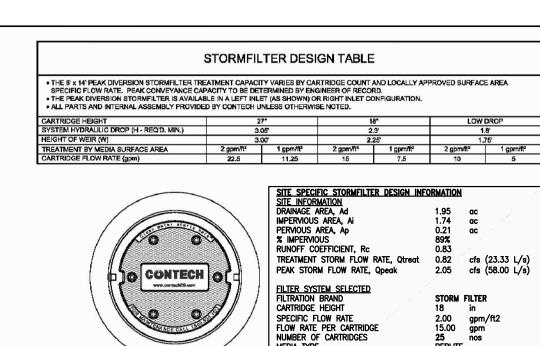


TYPICAL DETAIL - NOT FOR CONSTRUCTION

CONTACT MANUFACTURER FOR DETAILED DESIGN AND SUBMIT SHOP DRAWINGS PRIOR TO CONSTRUCTION



FRAME AND COVER

PERFORMANCE SPECIFICATION
FILTER CAPITRIDGES STALL BE MEDIA-FILLED, PASSIVE, SIPHON ACTUATED, RADIAL FLOW, AND SELF CLEANING. RADIAL MEDIA
DEPTH SHALL BE 7-NCHES. FILTER MEDIA CONTACT TIME SHALL BE AT LEAST 37 SECONDS.
SPECIFIC FLOW RATE SHALL BE 2 GPM/SF (MAXIMUM). SPECIFIC FLOW RATE IS THE MEASURE OF THE FLOW (GPM) DIVIDED BY THE
MEDIA SURFACE CONTACT AREA (SP). MEDIA VOLUMETRIC FLOW RATE SHALL BE 6 GPM/SF OF MEDIA (MAXIMUM).

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH () ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH FOR FABRICATION DEAWINGS WITH DEFINITED STRUCTURE DIMENSIONS AND YEIGHTS, FLASE CONTACT YOUR CONTECT
REPRESENTATIVE. www.Goribches.com
 STORMEILTER WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN
THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
 STRUCTURES SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0° - 5° AND GROUNDWATER ELEVATION AT,
OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
CASTINGS SHALL MEET AASHTO MS08 AND BE CAST WITH THE CONTECH LOGO.

INSTALLATION NOTES

A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.

B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMFILTER STRUCTURE (LIFTING CLUTCHES PROVIDED).

C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL SECTIONS AND ASSEMBLE STRUCTURE.

D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES, MATCH OUTLET PIPE INVERT WITH OUTLET BAY FLOOR.

E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF. . CONTRACTOR TO REMOVE THE TRANSFER HOLE COVER WHEN THE SYSTEM IS BROUGHT ONLINE.

CENTECH* ENGINEERED SOLUTIONS LLC

Design Specific Geometric Information

DuraHold w/ Geogrid

1830 (72)

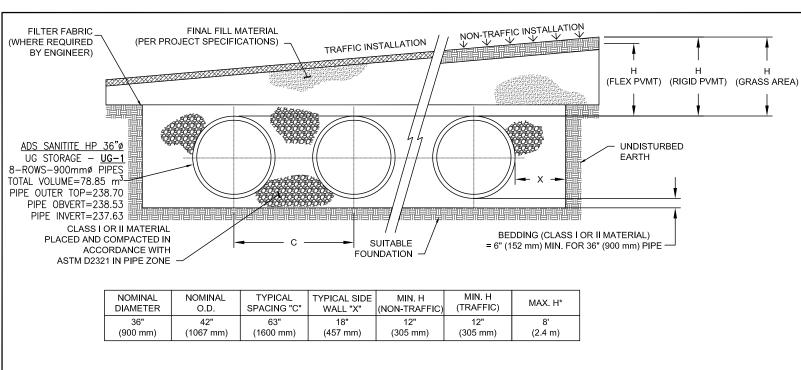
www.ContechES.com Centre Pointe Dr., Suite 400, West Chester, OH 4500

THE STORMWATER MANAGEMENT STORMFILTER 8' x 14' PEAK DIVERSION STORMFILTER STANDARD DETAIL

Geogrid Type and Manufacturer

Minimum Geogrid LTDS kN/m (lb/ft)

See Notes



* MAXIMUM FILL HEIGHTS OVER MANIFOLD FITTINGS. CONTACT MANUFACTURER'S REPRESENTATIVE FOR INSTALLATION CONSIDERATIONS WHEN COVER EXCEEDS 8 FT (2.4 m).

OPSS 350 AND MANUFACTURER'S SPECIFICATIONS.

STAMPED CONCRETE TYPICAL DETAIL

ALL REFERENCES TO CLASS I OR II MATERIAL ARE PER ASTM D2321 "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION. 2. ALL RETENTION AND DETENTION SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, LATEST EDITION AND THE

E FILTER FABRIC: A GEOTEXTILE FABRIC MAY BE USED AS SPECIFIED BY THE ENGINEER TO PREVENT THE MIGRATION OF FINES FROM

FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE. THE

CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE

ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED

THE NATIVE SOIL INTO THE SELECT BACKFILL MATERIAL.

CONCRETE WITH STAMPED FINISH.

(REFER GEOTECH REPORT)

TO BE SPECIFIED BY OWNER

SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (102 mm) FOR 4"-24" (100-600 mm); 6" (152 mm) FOR 30-60" (750-900 mm). 7. <u>INITIAL BACKFILL:</u> SUITABLE MATERIAL SHALL BE CLASS I OR II IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" (152 mm) ABOVE MANUFACTURER'S PUBLISHED INSTALLATION GUIDELINES. CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE MEASURES SHOULD BE TAKEN TO PREVENT THE MIGRATION OF DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. NATIVE FINES INTO THE BACKFILL MATERIAL, WHEN REQUIRED. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321,

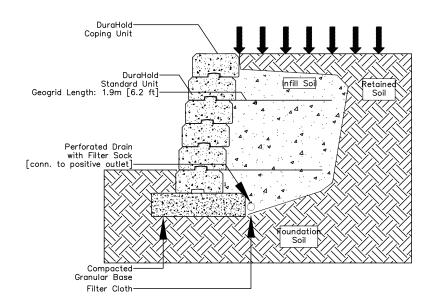
> 8. COVER: MINIMUM COVER OVER ALL RETENTION/DETENTION SYSTEMS IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" (305 mm) FROM TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER IS 12" (305 mm) UP TO 36" (900 mm) DIAMETER PIPE AND 24" (610 mm) OF COVER FOR 42-60" (1050-1500 mm) DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT MAXIMUM FILL HEIGHT LIMITED TO 8 FT (2.4 m) OVER FITTINGS FOR STANDARD INSTALLATIONS. CONTACT A SALES REPRESENTATIVE

6. <u>BEDDING:</u> SUITABLE MATERIAL SHALL BE CLASS I OR II. THE

CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL

INSTALLATION CONSIDERATIONS. ADS SANITITE UNDERGROUND STORAGE SYSTEM TYPICAL DETAIL (NTS)





Maximum Slope Above Wall	Horiz	ontal	Maximum Slope Below Wall	N	one
Max. Surcharge Above Wall kPa (lb/sq.ft)	Traffic Si 12 kPa (25		Depth of Embedment mm (in)	305	(12)
Batter of Wall	7.1.	2 °	Compacted Base Dimension mm (in)	1228 × 305	5 (48 x 12)
Design Specif	ic Soil Informa	ation			
			Soil Region		
	Infill	Retained	Foundation	Base	Drainage
Description (by USCS)	GW Well graded, free draining Granular	CL Inorganic Clays Low Plasticity	CL Inorganic Clays Low Plasticity	GW Well graded, free draining Granular	see infill
Effective Internal Friction Angle	35°	28 °	28 °	39°	NR
Moist Unit Weight kN/cu.m (lb/cu.ft)	22 (140)	20 (127)	20 (127)	22 (140)	NR
Effective Cohesion kPa (lb/sq.ft)	NR	NR	NR	NR	NR
Soil Notes	Placed in 150mm (6") lifts and	Undisturbed dense soil or	Allowable bearing cap.must exceed	Crushed Gravel (free draining)	Gravel infill must be well graded,

compacted to 95% well compacted Eng. fill.

SPD. Into since the compacted to 95% and the compacted Eng. fill.

SPD. Into since the control of the compacted to 95% and the Notes:

1. This design meets or exceeds the minimum factors of safety required by Risi Stone Systems based on the design parameters listed above. The analysis was performed as outlined in the National Concrete Masonry Association Design Manual for Segmental Retaining Walls, Second Edition. This is a typical, non site-specific Design.

2. No analysis of global stability, total or differential settlement, or seismic effects has been performed.

3. This design is only provided to illustrate the general arrangement of the SRW structure for preliminary costing and This design is only provided to illustrate the general arrangement of the SRW structure for preliminary costing and

3. This design is only provided to illustrate the general arrangement of the SKW structure for preliminary costing and feasibility purposes only. This drawing is not for construction. A qualified Engineer must be retained to provide the Final Design prior to construction.
4. Structures such as handralis, guardralis, fences, terraces, and site conditions such as water applications, drainage and soil conditions, additional live and dead loads, etc., have significant effects on the wall design and have not been taken into account in this typical section. When accounted for in the Final Design, other conditions and elements may result in additional design measures (geogrid, drainage, etc) and cost.
5. For geogrid reinforced structures, a minimum Long Term Allowable Design Strength of 14 kN/m was assumed. Contact your manufacturer or Risi Stone Systems for a list of approved geogrid reinforcements.

Retaining Wall

| DuraHold® Geogrid Section 1830mm (6.00ft)

Key Map: BASE INFORMATION TAKEN FROM DRAWING(S) BY OTHERS. FLORA DESIGNS INC. DOES NOT ASSUME ANY RESPONSIBILITY FOR ERRORS, OMISSIONS OR ACCURACY F THE INFORMATION. DRAWINGS SHALL ONLY BE USED FOR GUIDELINE PURPOSES. LEGAL PROPERTY DESCRIPTION: ALL OF PIN 14350-0359 (LT) PART OF LOT 3 **CONCESSION 6** GEOGRAPHIC TOWNSHIP OF ALBION TOWN OF CALEDON REGIONAL MUNICIPALITY OF PEEL

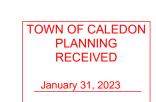
BEARINGS ARE GRID BEARINGS AND ARE DERIVED FROM GPS OBSERVATIONS AND ARE REFERRED TO THE UTM PROJECTION, ZONE 17. NAD 83-CSRS (2010) ADJUSTMENT.

BENCHMARK NOTE: STATION No. 758056: CONCRETE BRIDGE CARRYING HIGHWAY 50 OVER CPR, 2.0 KM SOUTH OF JUNCTION OF HIGHWAY 50 AND KING STREET IN THE TOWN OF CALEDON (BOLTON) AND 0.4 KM NORTH OF SOUTH JUNCTION OF HIGHWAY 50 AND HEALY ROAD. TABLET IS SET HORIZONTALLY IN N.E. FACE OF FOOTING OF PIER COLUMN (2ND SOUTH EAST OF TRACKS), 1.4m BELOW TOP OF FOOTING, 1.8m SOUTH EAST OF NORTH WEST. END, 73 CM ABOVE GROUND LEVEL AND 4.3 KM EAST OF CENTERLINE OF HIGHWAY 50.

<u>VERTICAL (GEOIDAL) CONTROL DATA:</u> DATUM: CGVD28:28 VERTICAL ORDER: FIRST ORDER ELEVATION: 251.263m

TB1 = CUT CROSS IN SIDEWALK, 239.58m TBM2 - CUT CROSS IN SIDEWALK, 238.59m.

SURVEY INFORMATION NOTE: REFER TO LEGAL AND TOPOGRAPHIC SURVEY DRAWING PREPARED BY VAN HARTEN SURVEYING INC., ONTARIO LAND SURVEYORS, O.L.S. PROJECT # 28021-20 FOR SURVEY INFORMATION INCLUDING BEARING, EASEMENTS AND BENCHMARK REFERENCES.



JAN 29, 2023	ISSUED FOR 4th SITE PLAN APPLICATION CIRCULATION		4. CP
MAR 03, 2022	ISSUED FOR 3rd SITE PLAN APPLICATION CIRCULATION		3. CP
AUG 25, 2021	ISSUED FOR 2nd SITE PLAN APPLICATION CIRCULATION		2. CP
	ISSUED FOR SITE PLAN APPLICATION		1. CP
Date Revisions	DESCRIPTION S:	Cı	HECKED B

NOTE: Contractor is to check and verify all dimensions and conditions on the project, and is immediately report any discrepancies to the Architect and Engineer before proceeding with the





Project: PROPOSED MARRIOTT HOTEL

12476 HIGHWAY 50, , CALEDON, ON

Drawing Title: SITE SERVICING NOTES & DETAILS

SHEET NUMBER	00.0
Scale as noted	CHECKED BY CP
JOB NUMBER FD-020398	Drawn By yg

55-2

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	COVET					
•	, o -		S Inc. III	ation Note 1		
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	 	150	-			
	150	15	<u>50</u>			
	2					
		1				
T = thickness of insulation	L	SKIKIS	Embi	edment, bedding, cover backfill material, Note		
	S	ECTION A-				
NOTES:	TYPICAL PII	DE INCLUA	TION DETAIL	1		

b) Rigid — OPSD 802.030, 802.031, 802.032, 802.033, 802.050, 802.051, 802.052, and 802.053. A Minimum insulation thickness shall be 50mm. B Joints shall be staggered for multiple insulation sheets.

ONTARIO PROVINCIAL STANDARD DRAWING INSULATION FOR SEWERS AND WATERMAINS IN SHALLOW TRENCHES

C All dimensions are in millimetres unless otherwise shown.

OPSD 1109.030

Nov 2015 Rev 0 Y THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.

SEE ASTM D2321.

TYPICAL DETAIL - NOT FOR CONSTRUCTION CONTACT MANUFACTURER FOR DETAILED DESIGN AND **VERIFICATION OF DESIGN ASSUMPTIONS INCLUDING** SOIL PARAMETERS AND ACTUAL TRAFFIC LOADING

RisiStone retaining wall systems 8500 Leslie Street, Suite 390 Thornhill, ON Canada L3T 7M8 Phone:905.882.5898 Fax: 905.882.4556

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Site: Surcharge — Clays Infill: Granular DH1RBQAI183