

SIMPLE INFILL DETENTION METHOD (SIDM)

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THE APPLICATION OF SIDM TO NON-BONDED RESIDENTIAL INFILL LOT PROJECTS (ONLY) WILL RESULT IN DETENTION FACILITY DESIGNS THAT SUFFICIENTLY MITIGATE THE STORMWATER IMPACTS RELATED TO INCREASES IN IMPERVIOUS AREAS. COMPLIANCE WITH SIDM FOR THESE PROJECTS SATISFIES THE DETENTION AND OUTFALL CHANNEL/FLOOD PROTECTION REQUIREMENTS OF THE STORMWATER MANAGEMENT ORDINANCE (SWMO – FAIRFAX COUNTY, VIRGINIA - CODE OF ORDINANCES, CHAPTER 124), THE PUBLIC FACILITIES MANUAL (PFM), AND THE VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS MINIMUM STANDARD #19. THE APPLICATION OF SIDM IS STRICTLY SUBJECT TO THE SPECIFIED DESIGN AND USE LIMITATIONS OF THE METHODOLOGY.

SIDM DESIGN TOOLS AND STANDARD DETAILS HAVE BEEN DEVELOPED FOR THE FOLLOWING STANDARD DETENTION PRACTICES AND FACILITY TYPES: URBAN BIORETENTION PLANTER BOX (UPB1 & UPB2), BIORETENTION-DETENTION RAIN GARDEN (RG), AND UNDERGROUND PIPE DETENTION (UPD). ALSO, THE UPB1, UPB2, AND RG FACILITIES ARE ELIGIBLE FOR VIRGINIA RUNOFF REDUCTION METHOD (VRRM) LEVEL 1 WATER QUALITY CREDIT, AS VRRM BIORETENTION #1 PRACTICE 6.A, PER THE VIRGINIA DEQ STORMWATER DESIGN SPECIFICATION NO. 9 (DEQ-9).

DESIGN REQUIREMENTS:

GENERAL – EACH OF THE STANDARD DETENTION FACILITIES HAS A FACILITY-SPECIFIC STANDARD DESIGN CALCULATIONS SPREADSHEET AND STANDARD DESIGN PLAN SHEET WITH WHICH THE FACILITY MUST BE DESIGNED. THE STANDARD PRETREATMENT/OUTLET PROTECTION DETAILS (PLAN) SHEET, AND STANDARD GENERAL SITE SWM/BMP DATA (PLAN) SHEET (THIS SHEET) MUST ALSO BE INCLUDED IN THE DESIGN. THE DESIGN CALCULATIONS MUST FIRST BE EXTRACTED FROM THE FACILITY'S CALCULATIONS SPREADSHEET, AND THEN INSERTED ONTO THE FACILITY'S DESIGN SHEET (PER THE SPECIFIC INSTRUCTIONS CONTAINED IN THE AUTOCAD FILE FOR EACH INDIVIDUAL FACILITY'S DESIGN SHEET).

FACILITY SIZING – THE DESIGNER MUST ENTER LIMITED DATA ON THE DesignCalcs TAB OF A FACILITY'S DESIGN CALCULATIONS SPREADSHEET IN ORDER TO SIZE AN INDIVIDUAL FACILITY, AND EACH FACILITY-TYPE SPREADSHEET ALLOWS TWO OR MORE (DEPENDING ON THE TYPE) OF THE SAME FACILITY TYPE TO BE DESIGNED FOR AN INDIVIDUAL LOT. ANY ONE OR MORE OF THE STANDARD FACILITY TYPES MAY BE PROPOSED IN A DETENTION DESIGN FOR AN INDIVIDUAL LOT. THEN, FOR EACH DIFFERENT FACILITY TYPE PROPOSED, AND THE CORRESPONDING SPREADSHEET NEEDED FOR THAT DESIGN, THE TOTAL ADDITIONAL IMPERVIOUS SURFACE CREATED BY THE PROPOSED LAND DISTURBANCE MUST BE ENTERED, AS WELL AS THE PORTION OF THIS ONSITE TOTAL THAT THE DESIGNER WISHES TO ALLOCATE TO THE PARTICULAR FACILITY TYPE. (THIS ALLOCATION IS TYPICALLY BASED ON THE DESIGNER'S PROPOSED LOCATION FOR A FACILITY, AND THE DRAINAGE AREA THAT IS OR CAN BE DIRECTED TO THAT LOCATION.) THE REMAINDER OF THE DATA THE DESIGNER MUST ENTER TO SIZE A FACILITY ARE FACILITY-TYPE SPECIFIC, AND ARE IDENTIFIED BELOW FOR EACH FACILITY TYPE, ALONG WITH SOME ADDITIONAL DESIGN LIMITATIONS:

- UPB1 & UPB2 – UP TO FIVE (UPB1) OR THREE (UPB2) OF THESE FACILITIES CAN BE DESIGNED FOR A SINGLE LOT WITH ONE SPREADSHEET PER FACILITY TYPE; REMAINING GENERAL DATA ENTRY: YES OR NO, FOR BMP CREDIT CLAIM; REMAINING INDIVIDUAL FACILITY DATA ENTRIES: ID NUMBER (AND/OR LETTERS), IMPERVIOUS AREA DRAINED TO FACILITY, PROPOSED FACILITY WIDTH, AND PROPOSED SOIL MEDIA DEPTH (UPB2); ONLY ROOF AREA (UPB1) OR ONSITE IMPERVIOUS AREA (UPB2) IS PERMITTED TO DRAIN TO THESE FACILITY TYPES. WITH NO MORE THAN 2,500 SQ. FT. (UPB1) OR 5,500 SQ. FT. (UPB2) ALLOWED TO DRAIN TO AN INDIVIDUAL FACILITY; UPB1 IS THE ONLY FACILITY TYPE ALLOWED TO BE LOCATED WITHIN 10 FEET OF A RESIDENTIAL STRUCTURE, WHILE UPB2 MUST BE LOCATED AT LEAST 10 FEET FROM A RESIDENTIAL STRUCTURE.
- RG – UP TO THREE OF THESE FACILITIES CAN BE DESIGNED FOR A SINGLE LOT WITH ONE SPREADSHEET; REMAINING GENERAL DATA ENTRY: TOTAL ONSITE AREA (IMPERVIOUS + PERVIOUS) DRAINED TO FACILITY TYPE; REMAINING INDIVIDUAL FACILITY DATA ENTRIES: ID NUMBER (AND/OR LETTERS), ONSITE IMPERVIOUS + TOTAL (IMPERVIOUS + PERVIOUS) AREAS DRAINED TO FACILITY, AND PROPOSED SOIL MEDIA DEPTH FOR FACILITY; ONLY ONSITE IMPERVIOUS + PERVIOUS AREA IS PERMITTED TO DRAIN TO THIS FACILITY TYPE; NO MORE THAN 5,500 SQ. FT. OF IMPERVIOUS AREA, PLUS PERVIOUS AREA AT NO MORE THAN DOUBLE THE ACTUAL IMPERVIOUS AREA, ALLOWED TO DRAIN TO AN INDIVIDUAL FACILITY; THIS FACILITY TYPE MUST BE LOCATED AT LEAST 10 FEET FROM A RESIDENTIAL STRUCTURE.
- UPD – UP TO TWO OF THESE FACILITIES CAN BE DESIGNED FOR A SINGLE LOT WITH ONE SPREADSHEET; REMAINING INDIVIDUAL FACILITY DATA ENTRIES: ID NUMBER (AND/OR LETTERS), ONSITE IMPERVIOUS AREA DRAINED TO FACILITY, AND PROPOSED DIAMETER, MATERIAL & ROW LENGTH FOR FACILITY (NOTE: ROW LENGTH CAN BE ITERATED TO OPTIMIZE TOTAL REQUIRED EQUIVALENT PIPE LENGTH); ONLY ONSITE IMPERVIOUS AREA IS PERMITTED TO DRAIN TO THIS FACILITY TYPE; NO LESS THAN 600 SQ. FT. NOR MORE THAN 25,000 SQ. FT. OF IMPERVIOUS AREA IS ALLOWED TO DRAIN TO AN INDIVIDUAL FACILITY; ALLOWED PIPE DIAMETERS LIMITED TO 24", 30" & 36"; AND ALLOWED MATERIALS LIMITED TO HDPE, PP & CAP, WITH SMOOTH PIPE BOTTOMS REQUIRED; THIS FACILITY TYPE MUST BE LOCATED AT LEAST 10 FEET FROM A RESIDENTIAL STRUCTURE.

FACILITY DETAILS – THE STANDARD DESIGN (PLAN) SHEET FOR EACH FACILITY TYPE CONTAINS STANDARD NOTES AND SPECIFICATIONS, AS WELL AS STANDARD GENERALIZED TYPICAL PLAN & SECTION DETAIL DRAWINGS. THE DESIGNER'S DIRECT INPUT ON ALL DESIGN SHEETS THEN CONSISTS OF INSERTING DESIGN DATA TABLES DEVELOPED IN THE CORRESPONDING STANDARD DESIGN CALCULATIONS SPREADSHEET, AND PROVIDING THE DRAINAGE AREA MAP(S) FOR THE PROPOSED PROJECT. THE REQUIREMENTS FOR THE DRAINAGE MAP(S) ARE DEFINED IN THE GENERAL NOTES SECTION OF EACH DESIGN SHEET, AND THE DESIGNER MAY ALSO CHOOSE TO PROVIDE SUPPLEMENTAL SITE-SPECIFIC OR PROJECT-SPECIFIC CALCULATIONS AND/OR NOTES. SPACE HAS BEEN RESERVED ON EACH DESIGN SHEET FOR THE DESIGN DATA TABLE INSERTS, AND FOR THE DESIGNER'S DRAINAGE MAP(S) AND ADDITIONAL CALCULATIONS/NOTES. SOME FACILITY-SPECIFIC DETAILS THE DESIGNER MUST INCORPORATE INTO THE SCALED

DRAINAGE AREA MAP(S) – BESIDES DRAINAGE AREA BOUNDARIES/MEASUREMENTS AND OUTLET DETAILS – OR ADDITIONAL CALCULATIONS/NOTES ARE:

- UPB1 & UPB2 – DEPICTED FACILITY LOCATIONS, LENGTH/WIDTH DIMENSIONS, AND LOCATIONS OF FLOW STRUCTURES & PRETREATMENT DEVICES; DEPICTED LOCATION OF EACH FRONT WALL (FW); CALL-OUTS FOR PROPOSED SOIL MEDIA DEPTH IF > 18" (UPB1) OR > APPLICABLE MINIMUM DEPTH (UPB2); STRUCTURE/FOUNDATION CALCULATIONS, NOTES, SPECIFICATIONS AND DETAIL DRAWINGS.
- RG – DEPICTED FACILITY LOCATIONS AND SHAPES/CONTAINMENT BERMS, SURFACE AREA MEASUREMENTS, AND LOCATIONS OF FLOW STRUCTURES & PRETREATMENT DEVICES/PRACTICES; CALL-OUTS FOR PROPOSED SOIL MEDIA DEPTH IF > 24".
- UPD – DEPICTED FACILITY LOCATIONS AND LAYOUTS (INCLUDING PIPE LENGTHS (INDIVIDUAL SEGMENTS & TOTAL) AND NUMBER OF ROWS), AND LOCATIONS OF FLOW CONTROL STRUCTURE, OTHER FLOW STRUCTURES, AND PRETREATMENT DEVICES; CALL-OUTS FOR PROPOSED SYSTEM PIPE SIZE & MATERIAL; FLOW CONTROL STRUCTURE SECTIONS IF DIFFERENT THAN STANDARD SECTIONS; GROUNDWATER/BEDROCK LOCATIONS AND/OR SYSTEM ANCHORAGE DESIGNS.

THE DESIGNER MUST ENTER LIMITED DATA ON THE DesignData & DesignData-2 TABS OF A FACILITY'S DESIGN CALCULATIONS SPREADSHEET IN ORDER TO PREPARE THE REQUIRED DESIGN DATA TABLES FOR INSERTION ON THE CORRESPONDING DESIGN SHEET. THE DesignData TAB INCLUDES THE DESIGN DATA TABLE AND THE PRETREATMENT/OUTLET TABLE, WHILE THE DesignData-2 TAB CONTAINS THE STRUCTURE LOCATION TABLE. SOME TABLE DATA ARE GENERATED BY THE SPREADSHEET, BUT THE DESIGNER MUST COMPLETE THE TABLES AS FOLLOWS:

- UPB1 & UPB2 – DESIGN DATA: DESIGN ELEVATIONS FOR THREE KEY LOCATIONS; PRETREATMENT/OUTLET: DRAINAGE AREA SOURCE (UPB2), PRETREATMENT PRACTICE SELECTION (UPB1), AND OUTLET PROTECTION SELECTION; STRUCTURE LOCATION; CENTERLINE LOCATIONS OR OFFSET DISTANCES FOR FLOW STRUCTURES; RECOMMENDED PLANT LIST ALSO INCLUDED IN SPREADSHEET, BUT PROPOSED PLANTING PLAN TO BE INCLUDED ON LANDSCAPING PLAN SHEET FOR PROJECT.
- RG – DESIGN DATA: DESIGN ELEVATIONS FOR THREE KEY LOCATIONS; PRETREATMENT/OUTLET: DRAINAGE AREA SOURCE, PRETREATMENT PRACTICE & OUTLET PROTECTION SELECTIONS; STRUCTURE LOCATION; OFFSET DISTANCES FOR FLOW STRUCTURES; RECOMMENDED PLANT LIST ALSO INCLUDED IN SPREADSHEET, BUT PROPOSED PLANTING PLAN TO BE INCLUDED ON LANDSCAPING PLAN SHEET FOR PROJECT.
- UPD – DESIGN DATA: DESIGN ELEVATIONS FOR THREE KEY LOCATIONS, AND DRAINAGE AREA SOURCE & FACILITY CONFIGURATION SELECTIONS; PRETREATMENT/OUTLET: OUTLET PROTECTION SELECTIONS, AND MINIMUM GROUND COVER DEPTHS; STRUCTURE LOCATION: OFFSET DISTANCES FOR

EXCAVATION PIT OR TRENCH LOCATION, AND FOR FLOW CONTROL STRUCTURE & OUTLET DISCHARGE LOCATIONS.

STANDARD PRETREATMENT/OUTLET PROTECTION (POP) DETAILS SHEET – CONTAINS THE NOTES, SPECIFICATIONS AND DETAIL DRAWINGS FOR ALL ALLOWED POP PRACTICES. NOT ALL PRETREATMENT PRACTICES ARE AVAILABLE FOR EACH FACILITY TYPE, BUT ALL OUTLET PROTECTION PRACTICES ARE AVAILABLE FOR EACH (ALTHOUGH CONTRIBUTING IMPERVIOUS AREA LIMITATIONS APPLY); THERE IS NO DESIGNER DATA ENTRY REQUIRED FOR THIS SHEET.

STANDARD GENERAL SITE SWM/BMP DATA (GSD) SHEET (THIS SHEET) – CONTAINS STANDARD NOTES, BUT MOST OF THE CONTENT MUST BE PROVIDED BY THE DESIGNER. THE STANDARD NOTES INCLUDE THIS SIDM DESCRIPTION & INSTRUCTIONS, AND DESIGN NOTES THAT ARE COMMON TO MULTIPLE IF NOT ALL FACILITY TYPES. THE DESIGNER'S CONTENT RESPONSIBILITIES INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:

- EXISTING & PROPOSED IMPERVIOUS AREA SKETCHES/CALCULATIONS; REQUIRED PORTIONS OF VRRM SPREADSHEET; OVERLAND RELIEF NARRATIVE AND ANALYSIS; OVERALL DRAINAGE AREA MAP, INCLUDING OFFSITE TOPOGRAPHY; LOCATION ASSESSMENTS FOR FACILITIES & SITE OUTFALLS (INCLUDING DESCRIPTIONS OF DOWNSTREAM RECEIVING SYSTEMS AND POTENTIAL IMPACTS TO ADJACENT PROPERTY STRUCTURES).

TERMS OF USE:

APPLICATION OF SIDM TO A PROJECT IMPLIES ACCEPTANCE OF THE FOLLOWING TERMS OF USE (SEE LAND DEVELOPMENT SERVICES TECHNICAL BULLETIN ATTACHMENT A, FOR MORE DETAILS):

- THE ESTABLISHED DESIGN DETAILS, LIMITATIONS, SPECIFICATIONS, ETC., FOR THE INCLUDED FACILITY TYPES SHALL NOT BE VIOLATED WHEN SIDM IS APPLIED. THE STANDARD DESIGN SPREADSHEETS AND PLAN SHEETS, OR PARTS THEREOF, CREATED FOR SIDM ARE NOT TRANSFERABLE, AND SHALL NOT BE TRANSFERRED, TO ANY OTHER SWM/BMP PRACTICES OUTSIDE OF SIDM.
- THE DESIGN STANDARDS OF THE FACILITY TYPES AND PRACTICES INCLUDED IN SIDM HAVE BEEN FULLY VETTED BY THE COUNTY. THE INDIVIDUAL ASSUMPTIONS, CODE INTERPRETATIONS, METHODOLOGIES, LIMITATIONS, ETC. INCLUDED IN SIDM DESIGN STANDARDS ARE ONLY VALID WHEN CONSIDERED TOGETHER WITHIN SIDM, AND MAY NOT BE VALID WHEN CONSIDERED SEPARATELY OR IN ANY OTHER COMBINATION OUTSIDE OF SIDM.
- SIDM MUST BE USED TO DESIGN FACILITIES THAT PROVIDE 100% OF A PROJECT'S REQUIRED DETENTION AND/OR RUNOFF REDUCTION, WHEN APPLIED. MIXING OTHER DETENTION OR RUNOFF REDUCTION PRACTICES WITH THE PRACTICES AND FACILITY TYPES INCLUDED IN SIDM IS NOT PERMITTED.

GENERAL NOTES

1. THE TRADITIONAL SWMO 124-4-4 AND PFM 6-0203 & 0204 COMPUTATIONS AND NARRATIVES ASSOCIATED WITH EVALUATING OUTFALL CHANNEL & FLOOD PROTECTION ADEQUACY IS NOT REQUIRED WHEN SIDM IS APPROPRIATELY APPLIED TO A PROJECT; NOR IS THE TRADITIONAL SWMO 124-2-7.B AND TECHNICAL BULLETIN 04-06 WATER QUANTITY (SWM) NARRATIVE REQUIRED.

2. THE DATA/INFORMATION REQUIRED TO SUPPORT THE PROJECT'S WATER QUALITY EVALUATION MUST BE PROVIDED ON THIS SHEET (GSD SHEET 1 OF 2), WHERE INDICATED, AND INCLUDES THE WATER QUALITY (BMP) NARRATIVE (PER PFM 6-0402.B.9), THE VRRM (PER SWMO 124-4-3.A) SPREADSHEET ANALYSIS SUMMARY TABLES (VRRM SUMMARY TABLES), AND, IF OFFSITE NUTRIENT CREDITS ARE NEEDED TO FULFILL THE WATER QUALITY REQUIREMENTS, THE OFFSITE NUTRIENT CREDIT RESERVATION LETTER (PER SWMO 124-2-7.B.9).

3. THE VRRM SUMMARY TABLES - SITE SUMMARY, SITE COMPLIANCE SUMMARY & DRAINAGE AREA SUMMARY (FOUND ON THE "SUMMARY" TAB OF THE VRRM SPREADSHEET) - MUST BE EXTRACTED FROM THE SPREADSHEET AND INSERTED ONTO THE ADJACENT "VRRM ANALYSIS RESULTS" SPACE AT THE IDENTIFIED INSERTION POINTS. THE SUMMARY TAB'S PRINT SETTING FOR "SCALING" MUST BE ADJUSTED TO 70%, AND THE "PAPER SIZE" SETTING MUST BE CHANGED TO LEGAL. A PDF PRINTER, SUCH AS "MICROSOFT PRINT TO PDF", MUST ALSO BE SELECTED. THE RESULTING PDF FILE MUST BE SPLIT INTO INDIVIDUAL SHEETS THAT WILL THEN NEED TO BE CONVERTED TO TIFF FILES FOR IMPORTING INTO AUTOCAD. THE IMPORTED SHEETS WILL NEED TO BE APPROPRIATELY TRIMMED OR CLIPPED TO PROPERLY FIT IN THE PROVIDED SPACE.

4. THE "D.A. A" TAB SHOULD BE USED FOR THE AGGREGATE BIORETENTION FACILITY (UPB1 + UPB2 + RG) CALCULATIONS FOR THE PROJECT SITE. THESE BMP CALCULATIONS MUST ALSO BE EXTRACTED FROM THE SPREADSHEET AND INSERTED AT THE IDENTIFIED POINT (BELOW THE CALCULATION HEADINGS) ON THE ADJACENT "VRRM ANALYSIS RESULTS" SPACE, BUT ULTIMATELY ONLY THE "6. BIORETENTION" & "6.a BIORETENTION #1 ..." ROWS ARE REQUIRED. THE D.A. A TAB'S PRINT SETTING FOR "SCALING" MUST BE ADJUSTED TO 65%, AND THE "PAPER SIZE" SETTING MUST BE CHANGED TO LEDGER. A PDF PRINTER, SUCH AS "MICROSOFT PRINT TO PDF", MUST ALSO BE SELECTED. THE RESULTING PDF FILE MUST BE SPLIT TO OBTAIN INDIVIDUAL SHEET 3 THAT WILL THEN NEED TO BE CONVERTED TO A TIFF FILE FOR IMPORTING INTO AUTOCAD. THE IMPORTED SHEET WILL NEED TO BE APPROPRIATELY TRIMMED OR CLIPPED TO FIT IN THE PROVIDED SPACE.

5. THE IMPERVIOUS AREA SKETCHES AND CALCULATIONS, OVERALL SITE AND OFFSITE DRAINAGE MAP, OVERLAND RELIEF NARRATIVE AND ANALYSIS, AND LOCATION ASSESSMENTS FOR THE FACILITIES AND SITE OUTFALLS MUST BE PROVIDED ON THE NEXT SHEET (GSD SHEET 2 OF 2). NOTE THAT AN ADDITIONAL GSD SHEET 3 MAY BE INCLUDED, IF ABSOLUTELY NEEDED.

A. REASONABLY-SCALED SKETCHES OF THE PROJECT'S EXISTING AND PROPOSED IMPERVIOUS SURFACE CONDITIONS MUST BE PROVIDED, ALONG WITH CORRESPONDING MEASUREMENTS AND CALCULATIONS (PER SWMO 124-2-7.B.8). THE PROPOSED TOTAL ADDITIONAL OR NET ADDITIONAL IMPERVIOUS PROJECT AREA IS THE KEY DESIGN PARAMETER USED FOR SIZING SIDM FACILITIES.

B. A DRAINAGE MAP DEPICTING THE BOUNDARY OF THE TOTAL AREA THAT DRAINS TO AND THROUGH THE SITE, AS WELL AS A REASONABLE PORTION OF THE DOWNSTREAM AREA TO AND THROUGH WHICH THE SITE DRAINS, MUST BE PROVIDED (PER SWMO 124-2-7.B.8).

C. OVERLAND RELIEF MUST BE ANALYZED TO DEMONSTRATE ALL OFFSITE 100-YR FLOW ENTERING THE SITE WILL BE APPROPRIATELY MANAGED THROUGH THE SITE, AND, ALONG WITH 100-YR FLOWS FROM THE SITE, WILL BE APPROPRIATELY DISCHARGED TO DOWNSTREAM PROPERTIES (PER PFM 6-1500 AND 6-0203.5).

D. FACILITY AND SITE OUTFALL LOCATIONS MUST BE EVALUATED TO ENSURE ALL REQUIRED OFFSETS ARE MET, AND DISCHARGES FROM FACILITY OVERFLOWS AND OTHER PLANNED AND/OR EXISTING SITE OUTFLOW LOCATIONS WILL NOT CREATE OR EXACERBATE ANY DOWNSTREAM (ESPECIALLY IMMEDIATE DOWNSTREAM) PROBLEMS (PER SWMO 124-2-7.B.8 & 10 AND PFM 6-0202).

VIRGINIA RUNOFF REDUCTION METHOD (VRRM) ANALYSIS RESULTS

DEQ Virginia Runoff Reduction Method Re-Development Compliance Spreadsheet - Version 3.0
BMP Design Specifications List: 2013 Draft Stds & Specs

Site Summary
Project Title: NA
Date: NA

Total Rainfall (in):	43
Total Disturbed Acreage:	0.00

Site Land Cover Summary

Pre-ReDevelopment Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	% of Total
Forest/Open (acres)	0.00	0.00	0.00	0.00	0.00	0
Managed Turf (acres)	0.00	0.00	0.00	0.00	0.00	0
Impervious Cover (acres)	0.00	0.00	0.00	0.00	0.00	0
					0.00	0

Post-ReDevelopment Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	% of Total
Forest/Open (acres)	0.00	0.00	0.00	0.00	0.00	0
Managed Turf (acres)	0.00	0.00	0.00	0.00	0.00	0
Impervious Cover (acres)	0.00	0.00	0.00	0.00	0.00	0
					0.00	0

Site Tv and Land Cover Nutrient Loads

	Final Post-Development (Post-ReDevelopment & New Impervious)	Post-Development	Post-Development (New Impervious)	Adjusted Pre-ReDevelopment
Site Rv	--	--	--	--
Treatment Volume (ft ³)	--	--	--	--
TP Load (lb/yr)	--	--	--	--

	Pre-ReDevelopment TP Load per acre (lb/acre/yr)	Final Post-Development TP Load per acre (lb/acre/yr)	Post-ReDevelopment TP Load per acre (lb/acre/yr)
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Drainage Area Summary

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	Total
Forest/Open (acres)	0.00	0.00	0.00	0.00	0.00	0.00
Managed Turf (acres)	0.00	0.00	0.00	0.00	0.00	0.00
Impervious Cover (acres)	0.00	0.00	0.00	0.00	0.00	0.00
Total Area (acres)	0.00	0.00	0.00	0.00	0.00	0.00

Drainage Area Compliance Summary

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	Total
TP Load Reduced (lb/yr)	0.00	0.00	0.00	0.00	0.00	0.00
TN Load Reduced (lb/yr)	0.00	0.00	0.00	0.00	0.00	0.00

Stormwater Best Management Practices (RR = Runoff Reduction)

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft ³)	Runoff Reduction (ft ³)	Remaining Runoff Volume (ft ³)	Total BMP Treatment Volume (ft ³)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed by Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
6. Bioretention (RR)													
6.a. Bioretention #1 or Micro-Bioretention #1 or Urban Bioretention (Spec #9)	40			0	0	0	0	25	0.00	> 0.00	0.00	0.00	

WATER QUALITY (BMP) NARRATIVE: (AND ANY OTHER NOTES/CALCULATIONS INTENDED TO SUPPORT COMPLIANCE WITH THE WATER QUALITY REQUIREMENTS)

OFFSITE NUTRIENT CREDIT RESERVATION LETTER

CERTIFICATION OF NO CHANGE
I HEREBY CERTIFY THAT NO CHANGES HAVE BEEN MADE TO, OR ARE PROPOSED FOR, THE GENERAL SITE SWM/BMP DATA (GSD SHEET 1 OF 2) NOTES, SPECIFICATIONS OR DETAILS, AND NO CHANGES HAVE BEEN MADE TO, OR ARE PROPOSED FOR, THE DESIGN CALCULATIONS GENERATED FOR THIS PROJECT BY THE VRRM SPREADSHEET.

SIGNATURE _____
DESIGNER _____
NAME _____ DATE _____

DESIGN ENGINEER / SURVEYOR

PROFESSIONAL SEAL

FIRM NAME: _____ ADDRESS: _____ PHONE NO: _____ FAX NO: _____ EMAIL: _____ PROJ. MANAGER: _____

PROFESSIONAL SEAL

DATE _____

PROJECT NAME

GENERAL SITE SWM/BMP DATA (GSD SHEET 1 OF 2)

FAIRFAX COUNTY STANDARD DESIGN SHEETS FOR INFILL LOTS

DISTRICT VIRGINIA FAIRFAX COUNTY, VIRGINIA

SHEET ___ OF ___