

VTRANS FRP BMP Summary Sheet

Site name: Rest Area Pond Retrofit

Watershed: Allen Brook

Approximate address:	Williston Information Center I-89 Williston, VT 05495	MS4 Impervious Owner(s):	VTrans / Town of Williston	Ownership of Land where BMP is located:	VTrans

Proposed BMP type:	Detention Basin
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Site Map



Proposed BMP details

Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$157,529
Drainage area (acres)	26.80
Total impervious cover managed by BMP (acres)	4.42
Total impervious cover managed by BMP (% of drainage area)	16.49%
VTRANS impervious cover managed (acres)	4.42
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.67
Percent of VTrans High-Flow Target Managed (%)	23.77%
Cost Notes	--

BMP Description

Retrofit existing pond to meet CPv standards.

VTRANS FRP BMP Summary Sheet

Site name: Town Office

Watershed: Allen Brook

Approximate address:	I-89 South of Rest Area Williston, VT 05496	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Proposed BMP details	
Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$31,920
Drainage area (acres)	2.22
Total impervious cover managed by BMP (acres)	0.37
Total impervious cover managed by BMP (% of drainage area)	16.57%
VTRANS impervious cover managed (acres)	0.37
Managed impervious cover owed by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.06
Percent of VTrans High-Flow Target Managed (%)	1.98%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand media to detain the CPv.

VTRANS FRP BMP Summary Sheet

Site name: WCA_1

Watershed: Allen Brook

Approximate address:	I-89 South of Oak Hill Rd Williston, VT 05495	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Site Map



Proposed BMP details

Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$91,716
Drainage area (acres)	4.25
Total impervious cover managed by BMP (acres)	0.68
Total impervious cover managed by BMP (% of drainage area)	16.09%
VTRANS impervious cover managed (acres)	0.68
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.18
Percent of VTrans High-Flow Target Managed (%)	3.67%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand media to detain the CPv.

VTRANS FRP BMP Summary Sheet

Site name: WCA_2

Watershed: Allen Brook

Approximate address:	I-89 North of Rest Area Williston, VT 05496	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Site Map



Proposed BMP details

Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$25,000
Drainage area (acres)	2.51
Total impervious cover managed by BMP (acres)	0.44
Total impervious cover managed by BMP (% of drainage area)	17.35%
VTRANS impervious cover managed (acres)	0.44
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.04
Percent of VTrans High-Flow Target Managed (%)	2.34%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand media to detain the CPv.

VTRANS FRP BMP Summary Sheet

Site name: WCA_3

Watershed: Allen Brook

Approximate address:	I-89 North of Rest Area Williston, VT 05496	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Site Map



Proposed BMP details

Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$25,000
Drainage area (acres)	2.32
Total impervious cover managed by BMP (acres)	0.55
Total impervious cover managed by BMP (% of drainage area)	23.92%
VTRANS impervious cover managed (acres)	0.55
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.03
Percent of VTrans High-Flow Target Managed (%)	2.98%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand media to detain the CPv.

VTRANS FRP BMP Summary Sheet

Site name: WCA_4

Watershed: Allen Brook

Approximate address:	I-89 North of Rest Area Williston, VT 05496	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Site Map



Proposed BMP details

Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$52,848
Drainage area (acres)	3.25
Total impervious cover managed by BMP (acres)	0.71
Total impervious cover managed by BMP (% of drainage area)	21.80%
VTRANS impervious cover managed (acres)	0.71
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.10
Percent of VTrans High-Flow Target Managed (%)	3.81%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand media to detain the CPv.

VTRANS FRP BMP Summary Sheet

Site name: VTrans Median A

Watershed: Allen Brook

Approximate address:	I-89 South of Route 2 Williston, VT 05498	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Site Map



Proposed BMP details

Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$60,480
Drainage area (acres)	1.28
Total impervious cover managed by BMP (acres)	0.30
Total impervious cover managed by BMP (% of drainage area)	23.60%
VTRANS impervious cover managed (acres)	0.30
Managed impervious cover owed by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac- ft)	0.12
Percent of VTrans High- Flow Target Managed (%)	1.63%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand media to detain the CPv.

VTRANS FRP BMP Summary Sheet

Site name: VTrans Median B

Watershed: Allen Brook

Approximate address:	I-89 South of Route 2 Williston, VT 05498	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Site Map



Proposed BMP details

Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$40,680
Drainage area (acres)	0.73
Total impervious cover managed by BMP (acres)	0.21
Total impervious cover managed by BMP (% of drainage area)	28.74%
VTRANS impervious cover managed (acres)	0.21
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.08
Percent of VTrans High-Flow Target Managed (%)	1.12%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand media to detain the CPv.

VTRANS FRP BMP Summary Sheet

Site name: VTrans Median E

Watershed: Allen Brook

Approximate address:	I-89 South of Oak Hill Rd Williston, VT 05495	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Site Map



Proposed BMP details

Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$43,704
Drainage area (acres)	1.17
Total impervious cover managed by BMP (acres)	0.30
Total impervious cover managed by BMP (% of drainage area)	25.61%
VTRANS impervious cover managed (acres)	0.30
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.08
Percent of VTrans High-Flow Target Managed (%)	1.62%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand media to detain the CPv.

VTRANS FRP BMP Summary Sheet

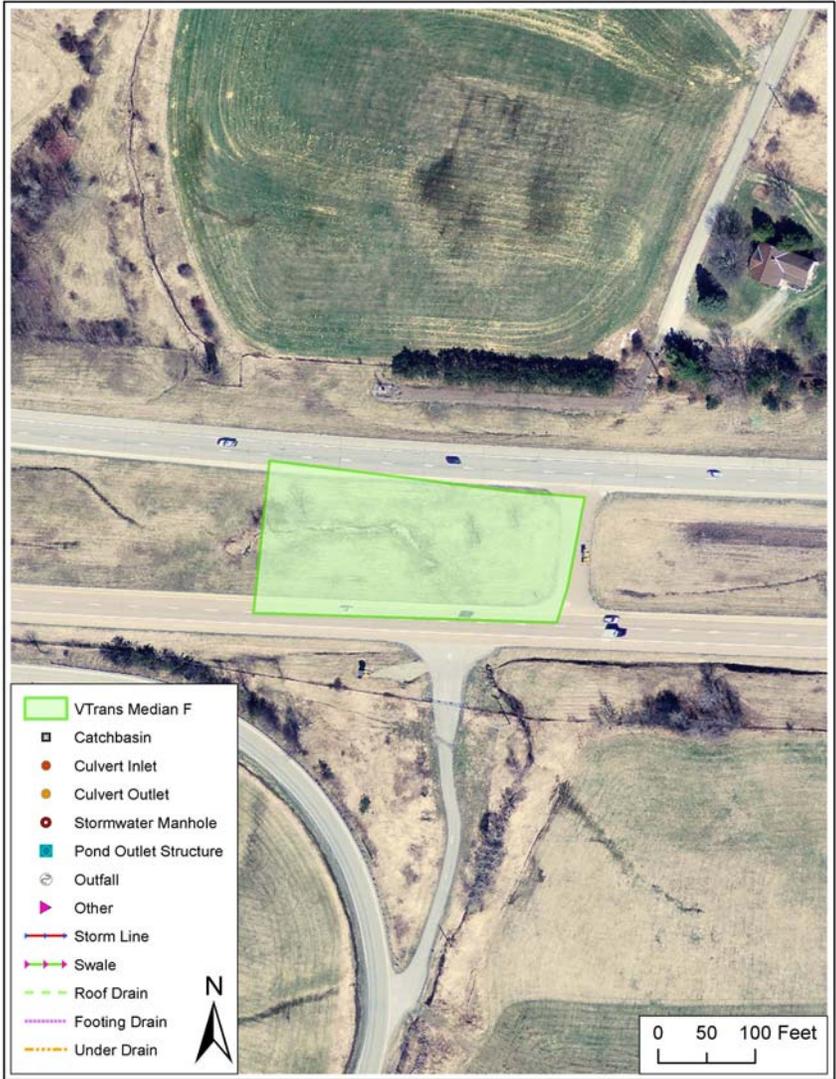
Site name: VTrans Median F

Watershed: Allen Brook

Approximate address:	I-89 South of Oak Hill Rd Williston, VT 05495	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Site Map



Proposed BMP details

Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$44,460
Drainage area (acres)	1.07
Total impervious cover managed by BMP (acres)	0.20
Total impervious cover managed by BMP (% of drainage area)	18.88%
VTRANS impervious cover managed (acres)	0.20
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.09
Percent of VTrans High-Flow Target Managed (%)	1.08%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand media to detain the CPv.

VTRANS FRP BMP Summary Sheet

Site name: VTrans Median G

Watershed: Allen Brook

Approximate address:	I-89 South of Oak Hill Rd Williston, VT 05495	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Site Map



Proposed BMP details

Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$61,080
Drainage area (acres)	1.54
Total impervious cover managed by BMP (acres)	0.32
Total impervious cover managed by BMP (% of drainage area)	20.61%
VTRANS impervious cover managed (acres)	0.32
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.12
Percent of VTrans High-Flow Target Managed (%)	1.71%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand media to detain the CPv.

VTRANS FRP BMP Summary Sheet

Site name: VTrans Median H

Watershed: Allen Brook

Approximate address:	I-89 South of Oak Hill Rd Williston, VT 05495	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Site Map



Proposed BMP details

Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$58,824
Drainage area (acres)	1.30
Total impervious cover managed by BMP (acres)	0.25
Total impervious cover managed by BMP (% of drainage area)	18.95%
VTRANS impervious cover managed (acres)	0.25
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.11
Percent of VTrans High-Flow Target Managed (%)	1.33%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand media to detain the CPv.

VTRANS FRP BMP Summary Sheet

Site name: VTrans Median I

Watershed: Allen Brook

Approximate address:	I-89 South of Oak Hill Rd Williston, VT 05495	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Site Map



Proposed BMP details

Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$70,152
Drainage area (acres)	1.65
Total impervious cover managed by BMP (acres)	0.37
Total impervious cover managed by BMP (% of drainage area)	22.24%
VTRANS impervious cover managed (acres)	0.37
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.13
Percent of VTrans High-Flow Target Managed (%)	1.98%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand media to detain the CPv.

VTRANS FRP BMP Summary Sheet

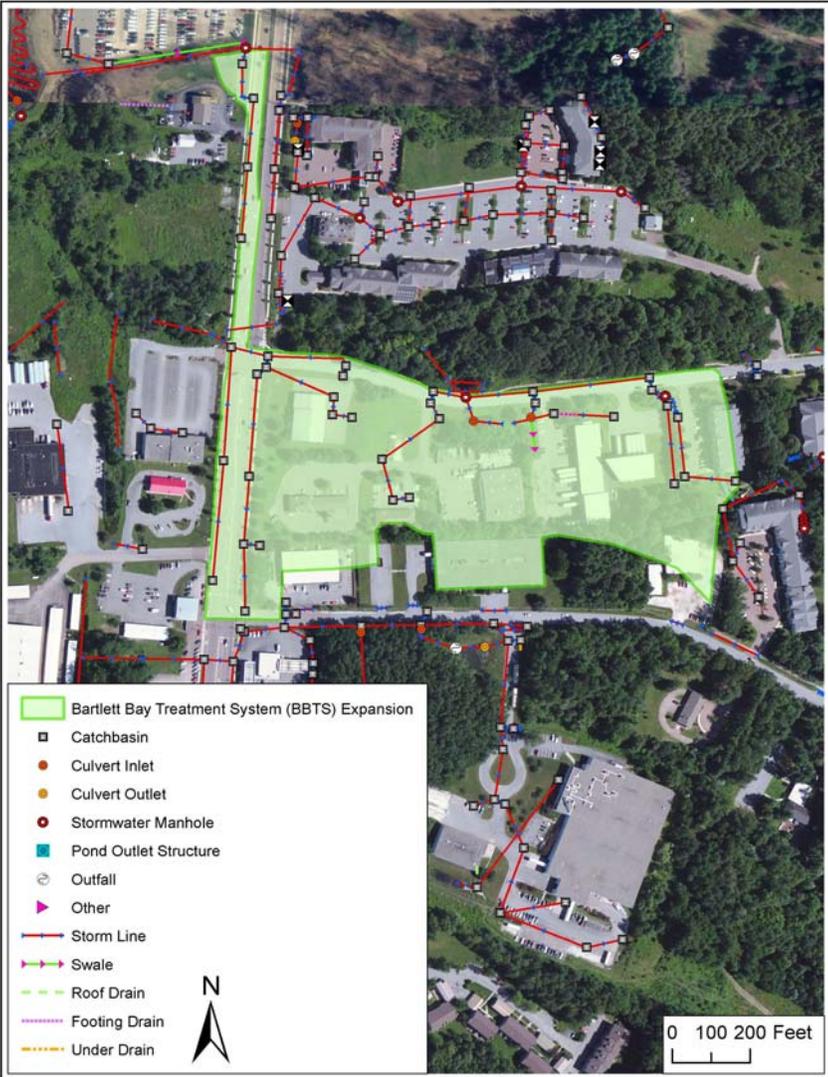
Site name: Bartlett Bay Treatment System (BBTS) Expansion

Watershed: Bartlett Brook

Approximate address:	Shelburne Rd / Harbor View Rd South Burlington, VT 05403	MS4 Impervious Owner(s):	VTrans/ South Burlington	Ownership of Land where BMP is located:	South Burlington
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Proposed BMP type:	Underground Detention Chamber in ROW
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Site Map	Proposed BMP details
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Permit #	5625-9010, 2-0180, 2-0153
Estimated project cost (rounded to nearest \$1,000)	\$378,260
Drainage area (acres)	16.06
Total impervious cover managed by BMP (acres)	9.18
Total impervious cover managed by BMP (% of drainage area)	57.18%
VTRANS impervious cover managed (acres)	1.88
Managed impervious cover owed by VTrans (% of total managed impervious cover)	20.4%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.55
Percent of VTrans High-Flow Target Managed (%)	100.00%
Cost Notes	Cost share with City

BMP Description

Route CPv storm to BBTS Wetland and add forebay.

VTRANS FRP BMP Summary Sheet

Site name: 1690 Shelburne Rd

Watershed: Bartlett Brook

Approximate address:	1690 Shelburne Rd South Burlington, VT 05403	MS4 Impervious Owner(s):	VTrans/ South Burlington	Ownership of Land where BMP is located:	VTrans/ Developer- Pizzagalli
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Proposed BMP type:	Underground Detention Chamber in ROW
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Proposed BMP details	
Permit #	5625-9010
Estimated project cost (rounded to nearest \$1,000)	\$199,361
Drainage area (acres)	0.81
Total impervious cover managed by BMP (acres)	0.42
Total impervious cover managed by BMP (% of drainage area)	51.33%
VTRANS impervious cover managed (acres)	0.42
Managed impervious cover owed by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.04
Percent of VTrans High-Flow Target Managed (%)	22.20%
Cost Notes	--

BMP Description

Detain unmanaged portion of Route 7 with underground detention in ROW.

VTRANS FRP BMP Summary Sheet

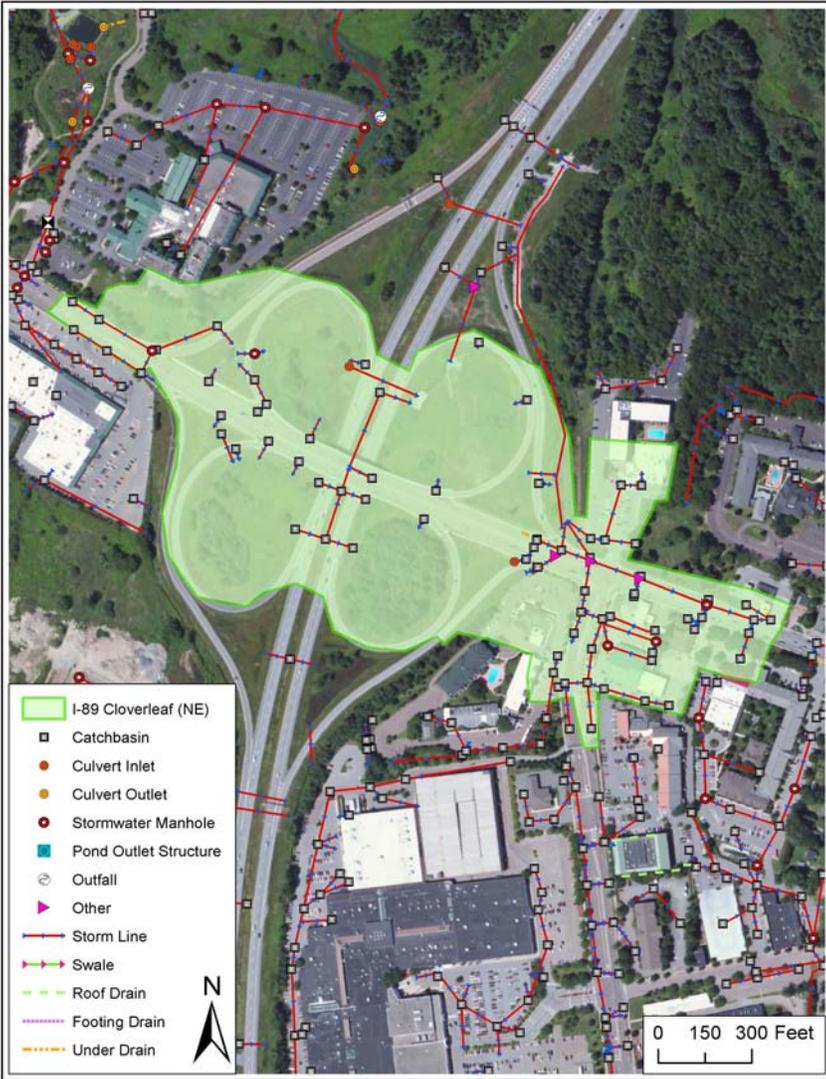
Site name: I-89 cloverleaf (NE)

Watershed: Centennial Brook

Approximate address:	I-89 Cloverleaf South Burlington, VT 05403	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Underground Detention Chamber				
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Site Map	Proposed BMP details
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Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$432,000
Drainage area (acres)	39.17
Total impervious cover managed by BMP (acres)	13.80
Total impervious cover managed by BMP (% of drainage area)	35.22%
VTRANS impervious cover managed (acres)	4.98
Managed impervious cover owed by VTrans (% of total managed impervious cover)	36.1%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	2.36
Percent of VTrans High-Flow Target Managed (%)	58.70%
Cost Notes	--

BMP Description

Create new underground detention chambers. Max det. time=48.8 hrs; max. ponding depth=8'

VTRANS FRP BMP Summary Sheet

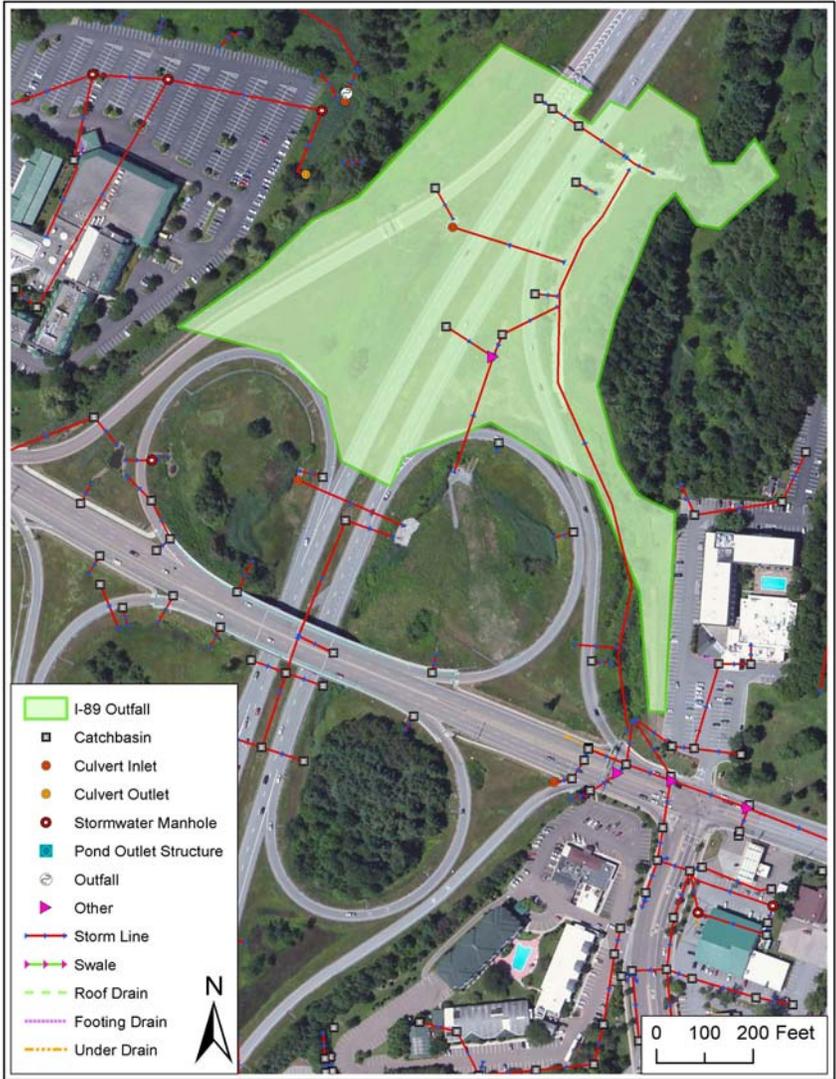
Site name: I-89 Outfall

Watershed: Centennial Brook

Approximate address:	I-89 North of Cloverleaf South Burlington, VT 05403	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Detention Basin				
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Site Map



Proposed BMP details

Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$1,419,000
Drainage area (acres)	13.07
Total impervious cover managed by BMP (acres)	2.82
Total impervious cover managed by BMP (% of drainage area)	21.60%
VTRANS impervious cover managed (acres)	2.77
Managed impervious cover owned by VTrans (% of total managed impervious cover)	98.2%
Runoff Channel Protection Volume (CPv) Storage (ac- ft)	2.87
Percent of VTrans High- Flow Target Managed (%)	32.70%
Cost Notes	Requires private land easement

BMP Description

Create new detention basin. Max det. time= 46.6 hr; max. ponding depth=12'

VTRANS FRP BMP Summary Sheet

Site name: Fairview Dr

Watershed: Indian Brook

Approximate address:	Main Street and Athens Drive Essex Junction, VT 05452	MS4 Impervious Owner(s):	Essex Junction Village/ VTrans/ Town of Essex	Ownership of Land where BMP is located:	Village
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Proposed BMP type:	Gravel Wetland
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Site Map



Proposed BMP details

Permit #	1-1074 SN002
Estimated project cost (rounded to nearest \$1,000)	\$290,000
Drainage area (acres)	29.40
Total impervious cover managed by BMP (acres)	4.13
Total impervious cover managed by BMP (% of drainage area)	14.04%
VTRANS impervious cover managed (acres)	0.72
Managed impervious cover owned by VTrans (% of total managed impervious cover)	17.4%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.67
Percent of VTrans High-Flow Target Managed (%)	17.40%
Cost Notes	Cost share with Village and Town

BMP Description

Regrade existing detention area, add terraced WQ bays, and replace existing culvert. Stabilize eroded outfall on North side of Main St. Install new culvert under Main St. to direct North side of Main St. to basin.

VTRANS FRP BMP Summary Sheet

Site name: I-289/Route 15 North

Watershed: Indian Brook

Approximate address:	I-289 / Route 15 North Essex Junction, VT 05452	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans ROW
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Proposed BMP type:	Median Filter
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Site Map

Proposed BMP details



Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$34,260
Drainage area (acres)	2.78
Total impervious cover managed by BMP (acres)	0.85
Total impervious cover managed by BMP (% of drainage area)	30.64%
VTRANS impervious cover managed (acres)	0.85
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.12
Percent of VTrans High-Flow Target Managed (%)	20.70%
Cost Notes	--

BMP Description

Retrofit existing median swale with CPv volume control sand filter.

VTRANS FRP BMP Summary Sheet

Site name: I-289/Route 15 South

Watershed: Indian Brook

Approximate address:	I-289 / Route 15 South Essex Junction, VT 05452	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans ROW
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Proposed BMP type:	Median Filter
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Site Map



Proposed BMP details

Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$28,880
Drainage area (acres)	2.15
Total impervious cover managed by BMP (acres)	0.76
Total impervious cover managed by BMP (% of drainage area)	35.31%
VTRANS impervious cover managed (acres)	0.76
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.10
Percent of VTrans High-Flow Target Managed (%)	18.50%
Cost Notes	--

BMP Description

Retrofit existing median swale with CPv volume control sand filter.

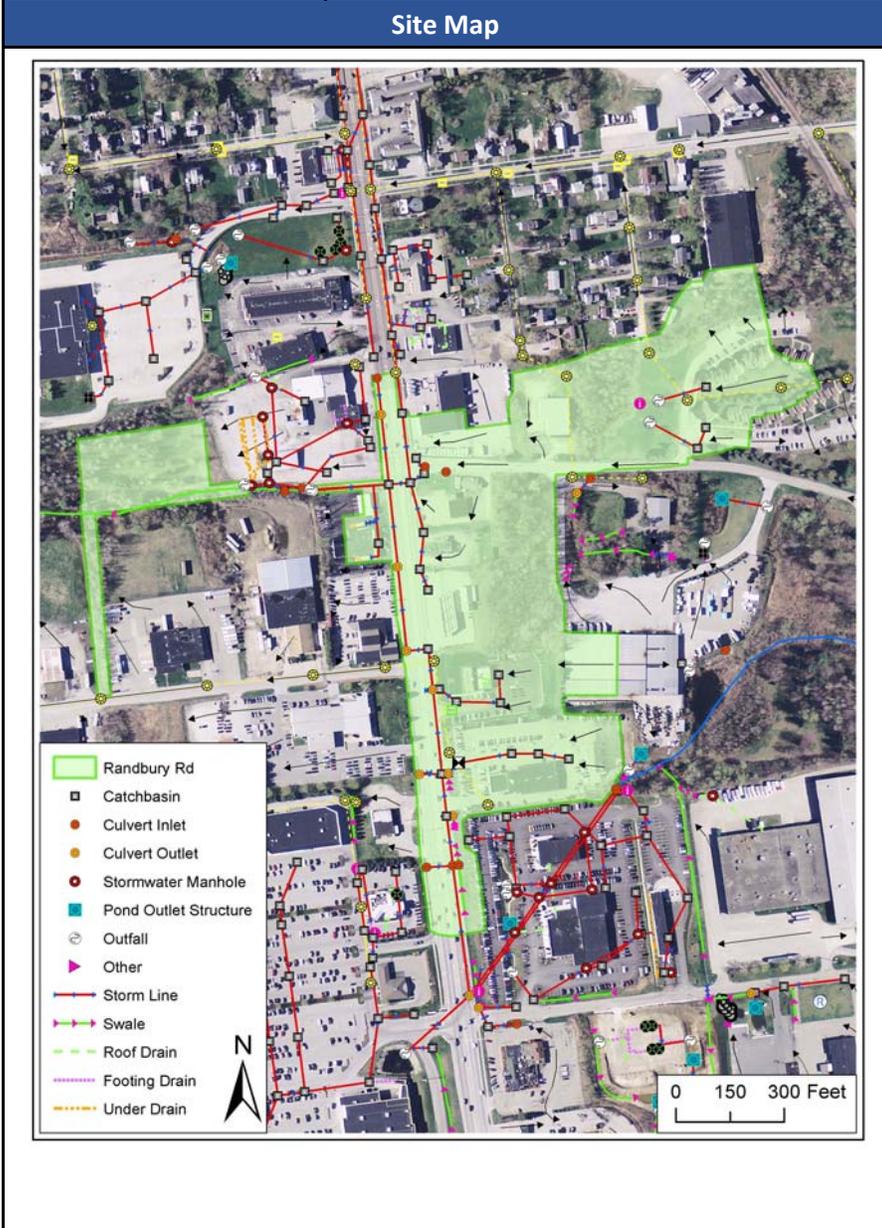
VTRANS FRP BMP Summary Sheet

Site name: **Randbury Rd**

Watershed: **Moon Brook**

Approximate address:	Randbury Rd Rutland, VT 05701	MS4 Impervious Owner(s):	VTrans/ Town of Rutland	Ownership of Land where BMP is located:	VTrans/ Town of Rutland/ Private
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Proposed BMP type:	Gravel Wetland				
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Proposed BMP details	
Permit #	NP/ New Road Project (Construction Permit)
Estimated project cost (rounded to nearest \$1,000)	\$279,262
Drainage area (acres)	23.10
Total impervious cover managed by BMP (acres)	10.95
Total impervious cover managed by BMP (% of drainage area)	47.42%
VTRANS impervious cover managed (acres)	2.29
Managed impervious cover owed by VTrans (% of total managed impervious cover)	20.9%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.83
Percent of VTrans High-Flow Target Managed (%)	196.90%
Cost Notes	Cost share with Town

BMP Description

Create new gravel wetland. Possible landfill waste site (infiltration restrictions). Redevelopment will involve new road, which needs to be accounted for in design.

VTRANS FRP BMP Summary Sheet

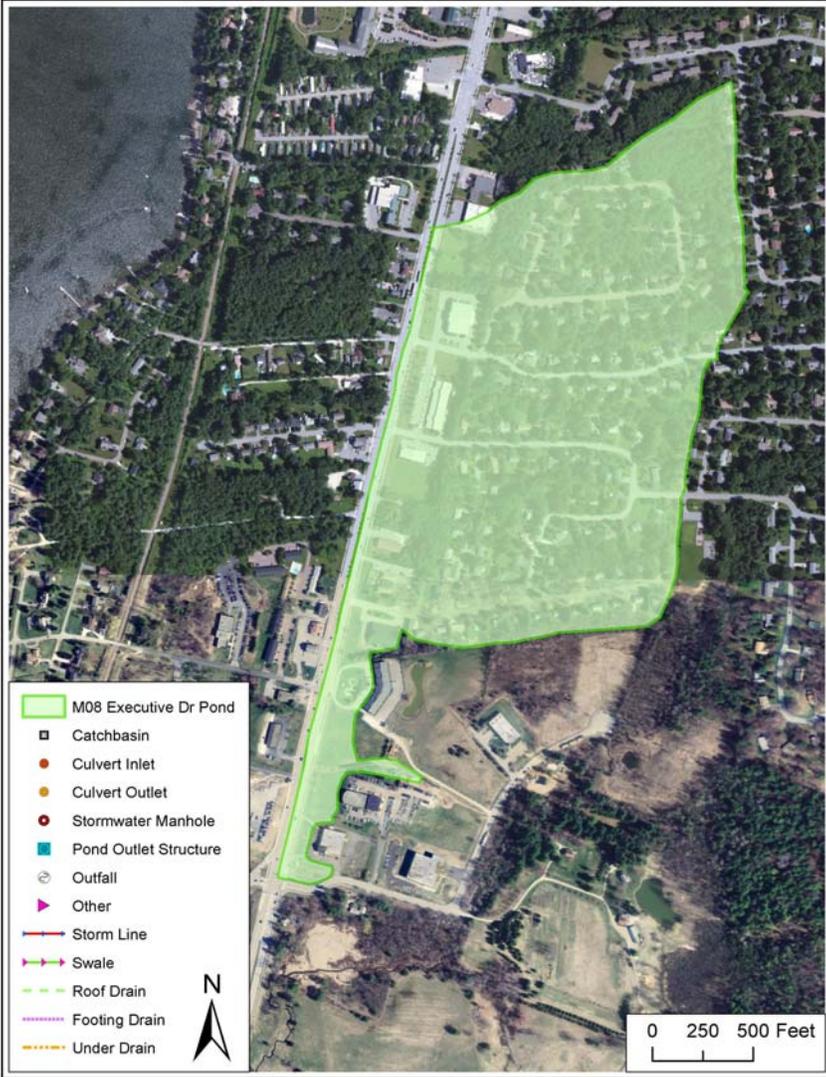
Site name: M08 Executive Dr Pond

Watershed: Munroe Brook

Approximate address:	Executive Dr Shelburne, VT 05482	MS4 Impervious Owner(s):	Town of Shelburne/ VTrans	Ownership of Land where BMP is located:	Non-VTrans
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Proposed BMP type:	Retrofit Detention Pond				
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Site Map	Proposed BMP details
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Permit #	1-1291
Estimated project cost (rounded to nearest \$1,000)	\$25,000
Drainage area (acres)	91.10
Total impervious cover managed by BMP (acres)	21.34
Total impervious cover managed by BMP (% of drainage area)	23.42%
VTRANS impervious cover managed (acres)	2.71
Managed impervious cover owned by VTrans (% of total managed impervious cover)	12.7%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.54
Percent of VTrans High-Flow Target Managed (%)	49.00%
Cost Notes	--

BMP Description

Reduce pond outlet orifice size. BMP Drainage area of pond M08 (Executive Dr Pond) was modified to reduce the need for expansion. Proposed drainage area modified by WCA.

VTRANS FRP BMP Summary Sheet

Site name: By Danform Shoes

Watershed: Munroe Brook

Approximate address:	Shelburne Rd Shelburne, VT 05482	MS4 Impervious Owner(s):	Town of Shelburne/ VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Underground Detention
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Site Map



Proposed BMP details

Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$102,322
Drainage area (acres)	4.89
Total impervious cover managed by BMP (acres)	2.84
Total impervious cover managed by BMP (% of drainage area)	57.98%
VTRANS impervious cover managed (acres)	2.12
Managed impervious cover owned by VTrans (% of total managed impervious cover)	74.9%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.14
Percent of VTrans High-Flow Target Managed (%)	38.40%
Cost Notes	--

BMP Description

Create new underground detention chambers. Reroute drainage from west side of Shelburne Rd to this grassed area mostly in ROW.

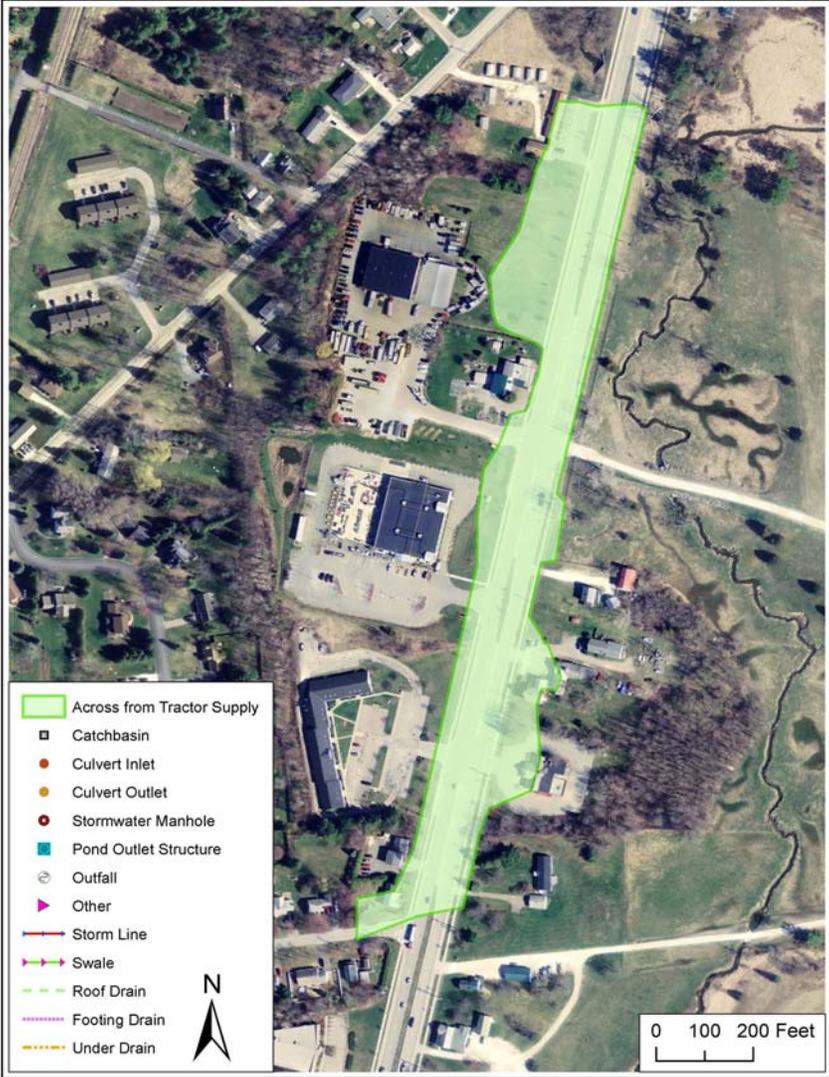
VTRANS FRP BMP Summary Sheet

Site name: Across from Tractor Supply Watershed: Munroe Brook

Approximate address:	Shelburne Rd Shelburne, VT 05482	MS4 Impervious Owner(s):	Town of Shelburne/ VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Gravel Wetland				
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Site Map	Proposed BMP details
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Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$479,857
Drainage area (acres)	6.78
Total impervious cover managed by BMP (acres)	3.77
Total impervious cover managed by BMP (% of drainage area)	55.55%
VTRANS impervious cover managed (acres)	2.85
Managed impervious cover owned by VTrans (% of total managed impervious cover)	75.6%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.54
Percent of VTrans High-Flow Target Managed (%)	51.50%
Cost Notes	--

BMP Description

Create new linear gravel wetland primarily in ROW across Shelburne Rd from Tractor Supply. Reroute short stretch of stormlines that drain to the north of this area.

VTRANS FRP BMP Summary Sheet

Site name: Exit 13

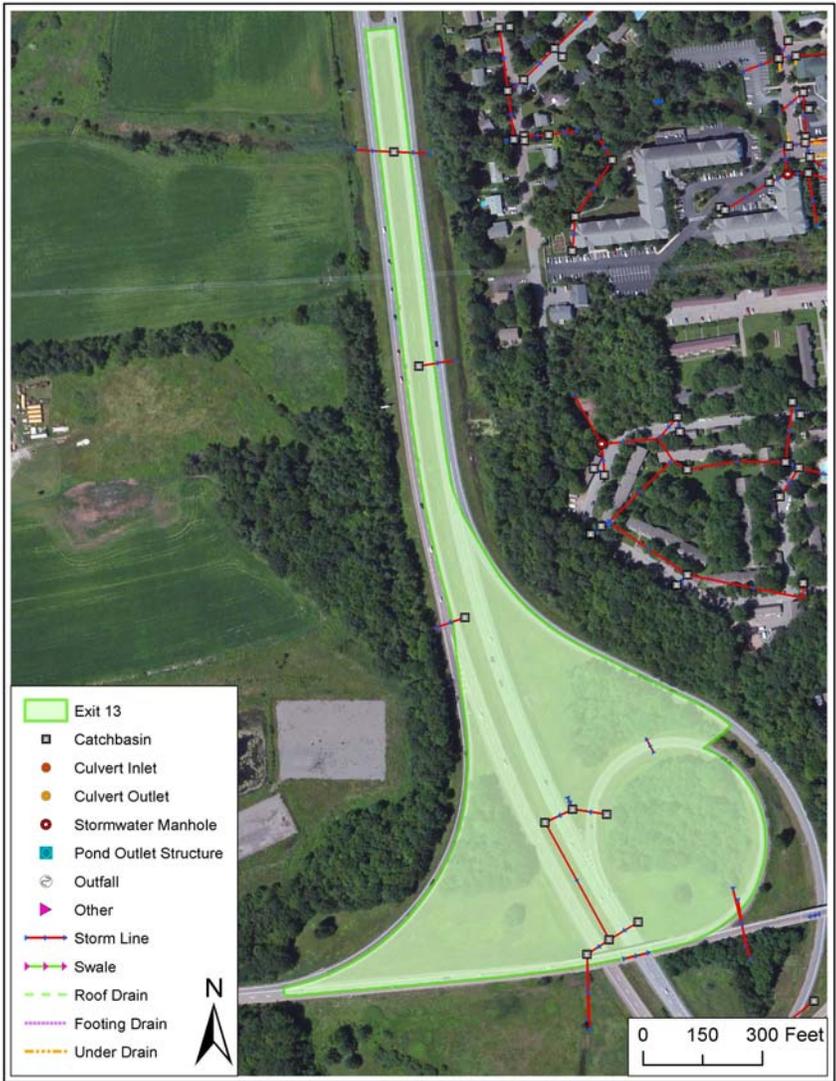
Watershed: Potash Brook

Approximate address:	I-89 Exit 13 South Burlington, VT 05403	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Gravel Wetland
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Site Map

Proposed BMP details



Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$218,795
Drainage area (acres)	16.72
Total impervious cover managed by BMP (acres)	4.77
Total impervious cover managed by BMP (% of drainage area)	28.55%
VTRANS impervious cover managed (acres)	4.77
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.57
Percent of VTrans High-Flow Target Managed (%)	9.71%
Cost Notes	--

BMP Description

Propose new gravel wetland in depressed triangle greenspace between ramps. Reroute several culverts to this area.

VTRANS FRP BMP Summary Sheet

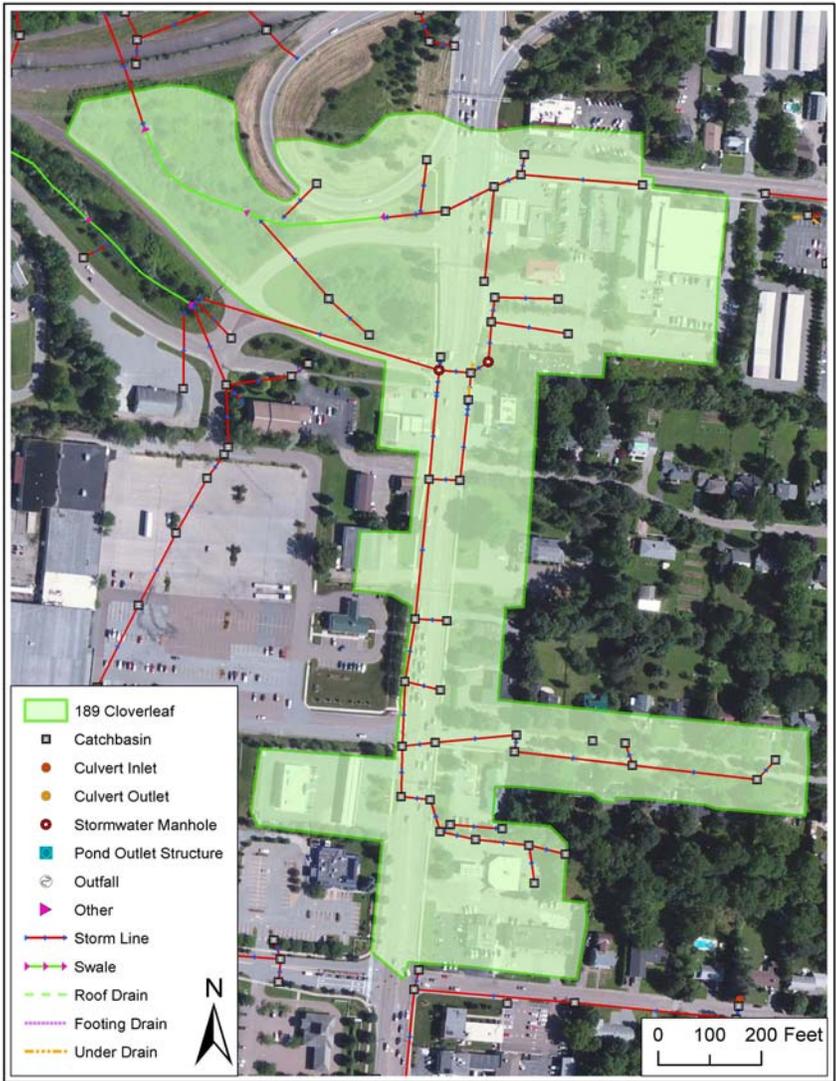
Site name: 189 Cloverleaf

Watershed: Potash Brook

Approximate address:	I-189 and Shelburne Rd South Burlington, VT 05403	MS4 Impervious Owner(s):	VTrans/ City of South Burlington	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Detention Basin				
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Site Map	Proposed BMP details
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Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$59,015
Drainage area (acres)	21.25
Total impervious cover managed by BMP (acres)	11.53
Total impervious cover managed by BMP (% of drainage area)	54.26%
VTRANS impervious cover managed (acres)	3.46
Managed impervious cover owned by VTrans (% of total managed impervious cover)	30.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	1.13
Percent of VTrans High-Flow Target Managed (%)	7.03%
Cost Notes	Cost share with City

BMP Description

Add outlet structure to area that is already depressed to detain stormwater. Reroute stormline from Shelburne Rd to this area.

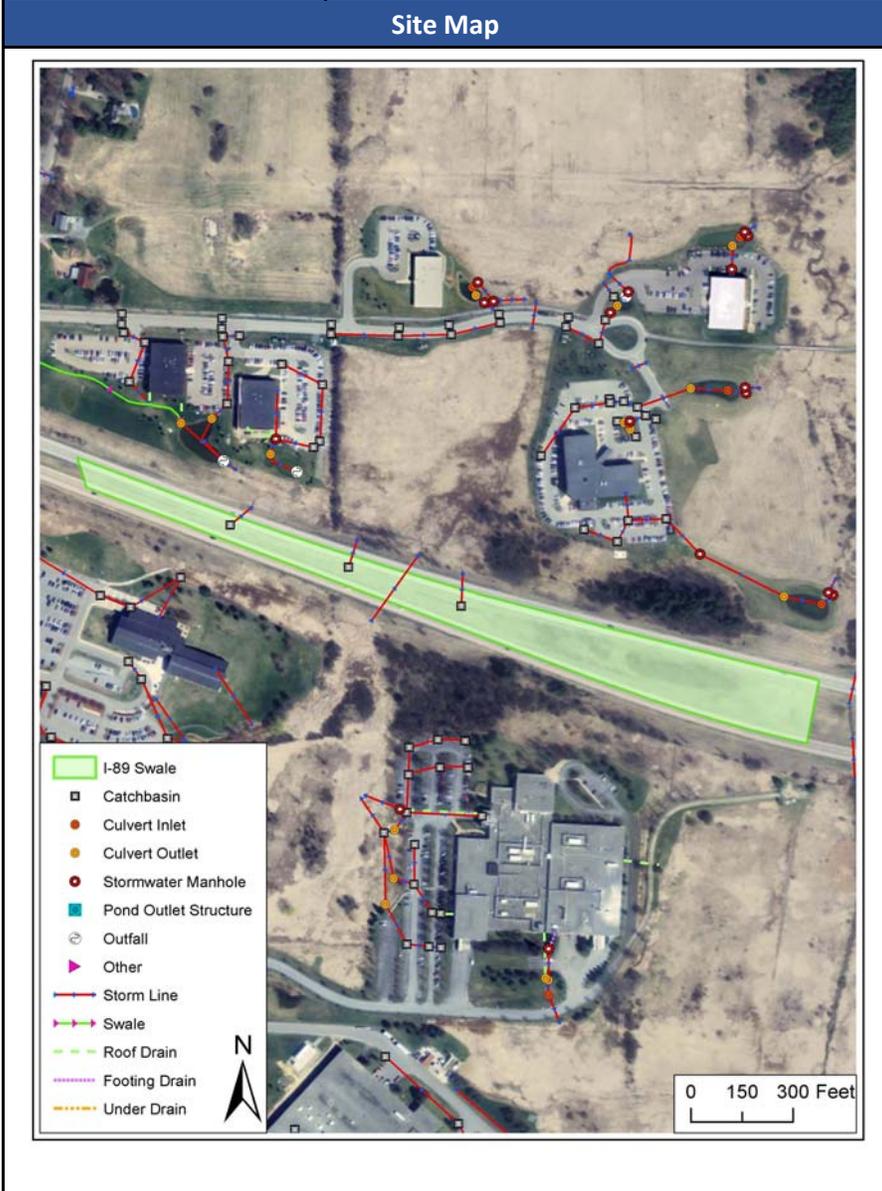
VTRANS FRP BMP Summary Sheet

Site name: I-89 Swale

Watershed: Potash Brook

Approximate address:	I-89 North of Hinesburg Rd South Burlington, VT 05403	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter				
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Proposed BMP details	
Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$129,349
Drainage area (acres)	6.28
Total impervious cover managed by BMP (acres)	1.80
Total impervious cover managed by BMP (% of drainage area)	28.62%
VTRANS impervious cover managed (acres)	1.80
Managed impervious cover owed by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.53
Percent of VTrans High-Flow Target Managed (%)	3.60%
Cost Notes	--

BMP Description

Construct median filter in depressed area between north and south I-89 lanes. Reroute several culverts.

VTRANS FRP BMP Summary Sheet

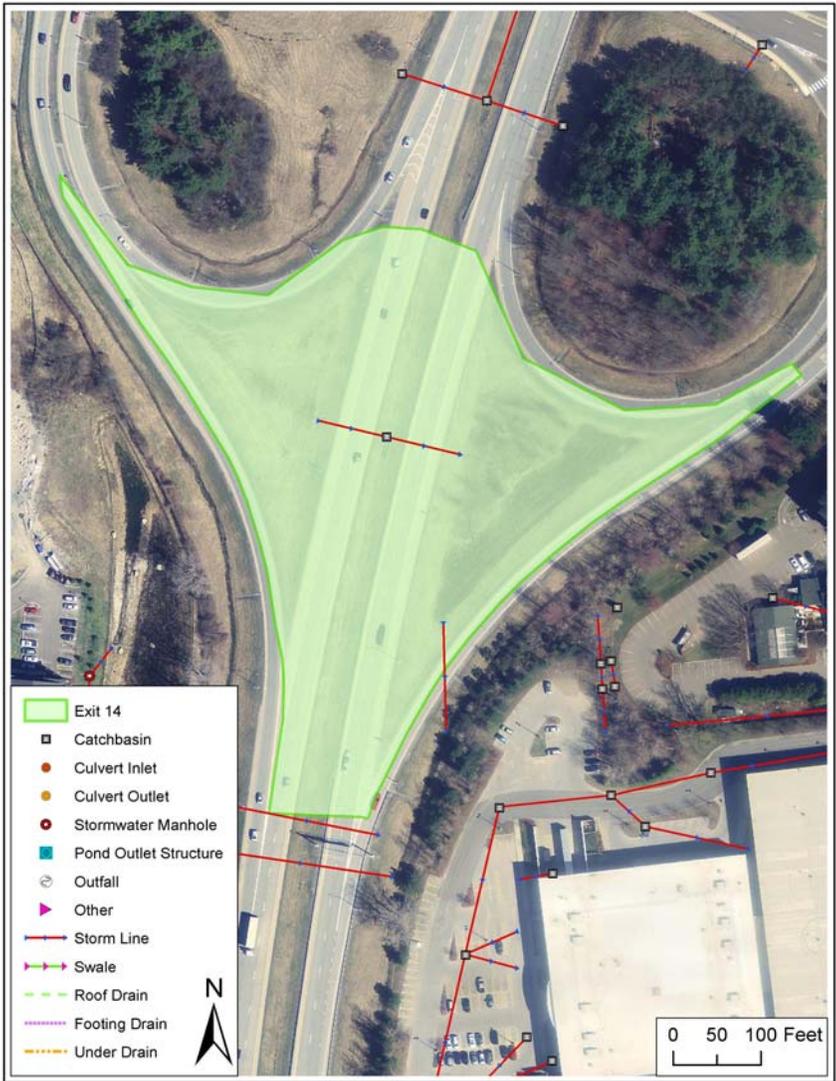
Site name: Exit 14

Watershed: Potash Brook

Approximate address:	I-89 Exit 14 South Burlington, VT 05403	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Gravel Wetland				
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Site Map



Proposed BMP details

Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$131,085
Drainage area (acres)	4.91
Total impervious cover managed by BMP (acres)	1.81
Total impervious cover managed by BMP (% of drainage area)	36.94%
VTRANS impervious cover managed (acres)	1.81
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.29
Percent of VTrans High-Flow Target Managed (%)	3.68%
Cost Notes	--

BMP Description

Propose new gravel wetland in depressed triangle greenspace between ramps. Reroute several culverts to this area.

VTRANS FRP BMP Summary Sheet

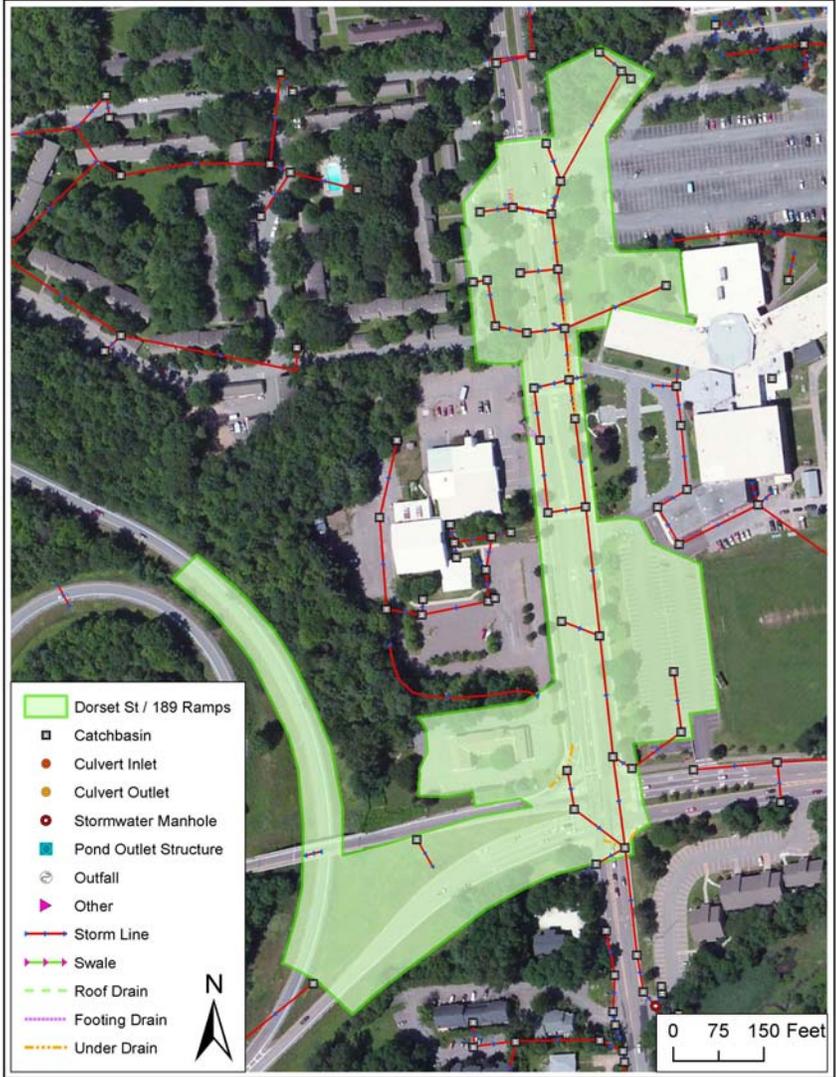
Site name: Dorset St / 189 Ramps

Watershed: Potash Brook

Approximate address:	Dorset St / Kennedy Dr South Burlington, VT 05403	MS4 Impervious Owner(s):	VTrans/ City of South Burlington	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Detention Basin				
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Site Map



Proposed BMP details

Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$100,993
Drainage area (acres)	9.36
Total impervious cover managed by BMP (acres)	5.57
Total impervious cover managed by BMP (% of drainage area)	59.51%
VTRANS impervious cover managed (acres)	1.09
Managed impervious cover owned by VTrans (% of total managed impervious cover)	19.6%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.35
Percent of VTrans High-Flow Target Managed (%)	2.22%
Cost Notes	Cost share with City

BMP Description

Detain stormwater from a large section of Dorset St. Intercept stormline near Kennedy Dr and reroute to the area between 189 ramps.

VTRANS FRP BMP Summary Sheet

Site name: Queen City Pk Rd

Watershed: Potash Brook

Approximate address:	Queen City Park Rd South Burlington, VT 05403	MS4 Impervious Owner(s):	VTrans/ City of South Burlington	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Detention Basin
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Site Map

Proposed BMP details



Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$99,227
Drainage area (acres)	6.51
Total impervious cover managed by BMP (acres)	2.92
Total impervious cover managed by BMP (% of drainage area)	44.89%
VTRANS impervious cover managed (acres)	0.43
Managed impervious cover owned by VTrans (% of total managed impervious cover)	14.7%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.45
Percent of VTrans High-Flow Target Managed (%)	0.88%
Cost Notes	--

BMP Description

Add detention to existing depressed area where stormlines already outfall. Drainage from Shelburne Rd is assumed to be already rerouted to larger depression to the north (see project entitled 189 Cloverleaf).

VTRANS FRP BMP Summary Sheet

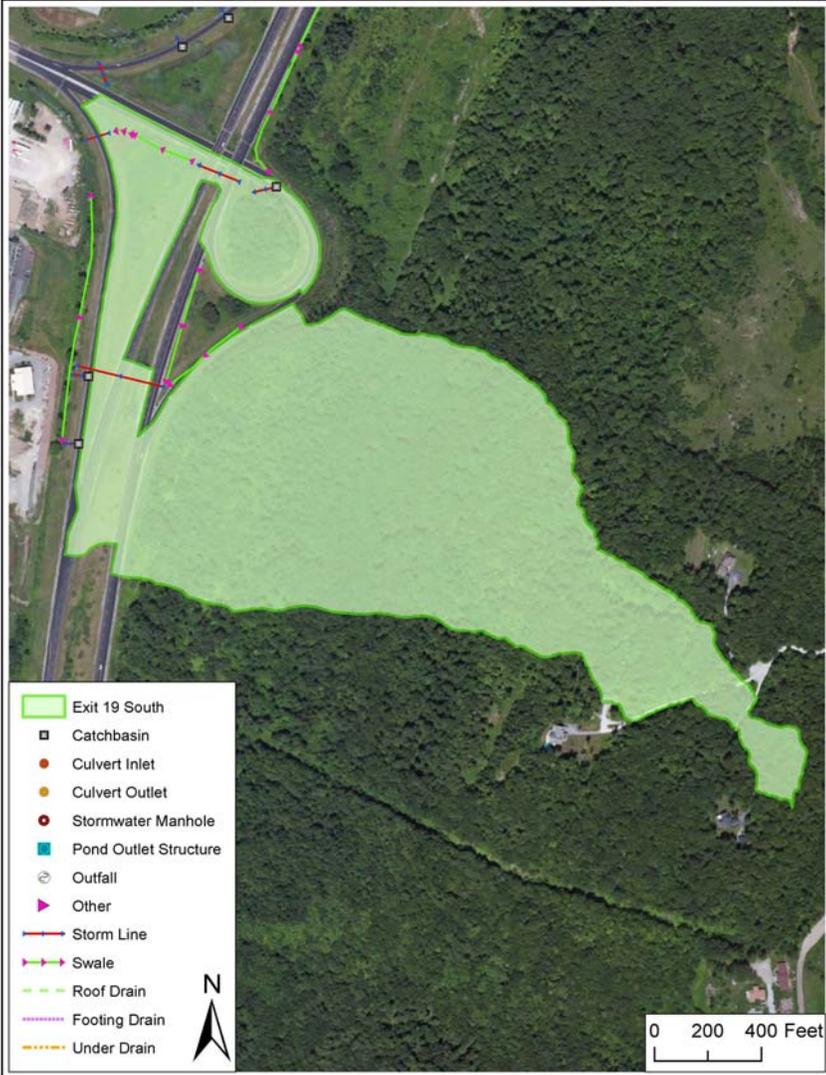
Site name: Exit 19 South

Watershed: Rugg Brook

Approximate address:	I-89 Exit 19 St Albans City, VT 05478	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Detention
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Site Map	Proposed BMP details
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Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$270,000
Drainage area (acres)	57.94
Total impervious cover managed by BMP (acres)	3.78
Total impervious cover managed by BMP (% of drainage area)	6.52%
VTRANS impervious cover managed (acres)	3.67
Managed impervious cover owned by VTrans (% of total managed impervious cover)	97.2%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	2.07
Percent of VTrans High-Flow Target Managed (%)	26.72%
Cost Notes	Joint MS4 (75% Share)

BMP Description

Proposed a new stormwater detention pond in ROW with approximately 2.0 ac-ft of storage.

VTRANS FRP BMP Summary Sheet

Site name: Access Rd. East

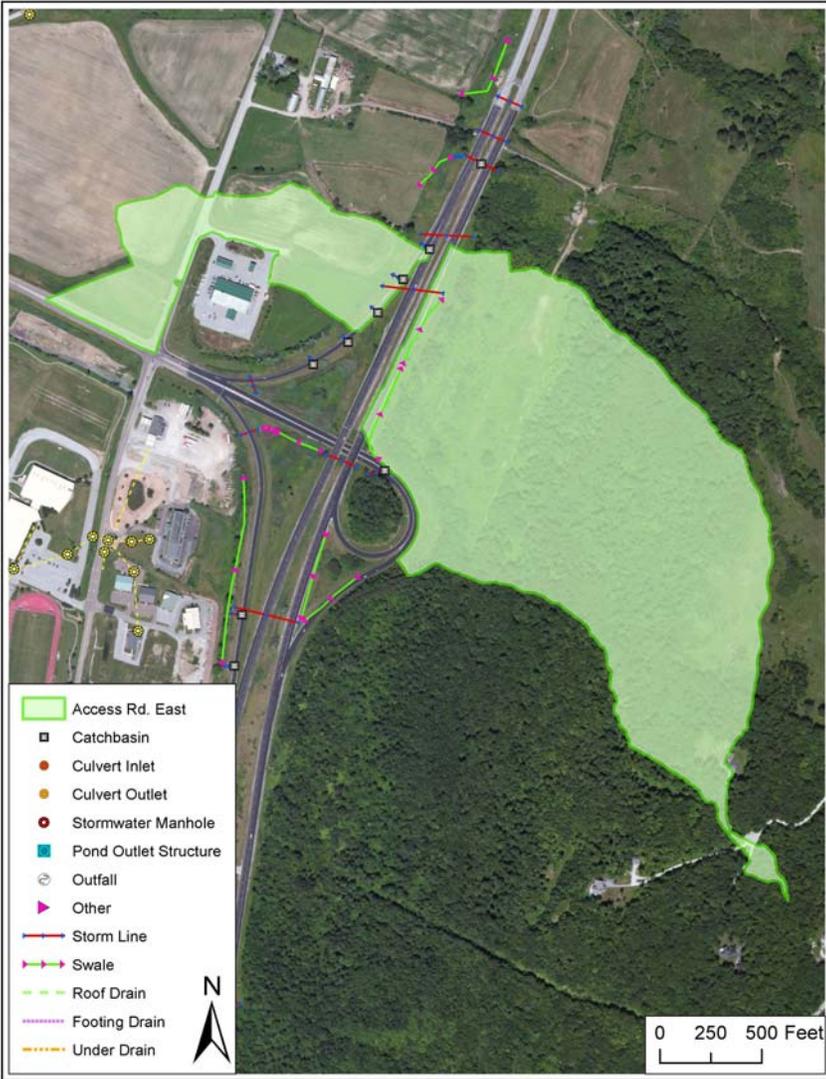
Watershed: Rugg Brook

Approximate address:	I-89 Exit 19 Access Road East St Albans City, VT 05478	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans/ Private
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Proposed BMP type:	Detention
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Site Map

Proposed BMP details



Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$410,000
Drainage area (acres)	85.13
Total impervious cover managed by BMP (acres)	2.75
Total impervious cover managed by BMP (% of drainage area)	3.24%
VTRANS impervious cover managed (acres)	2.42
Managed impervious cover owned by VTrans (% of total managed impervious cover)	87.8%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	1.82
Percent of VTrans High-Flow Target Managed (%)	17.60%
Cost Notes	Joint MS4 (50% share)

BMP Description

Propose a new a new stormwater detention basin with a stone bed and micropool to improve water quality benefits. The location of the proposed BMP is on land that is currently owned by a local farmer and within the VTrans ROW

VTRANS FRP BMP Summary Sheet

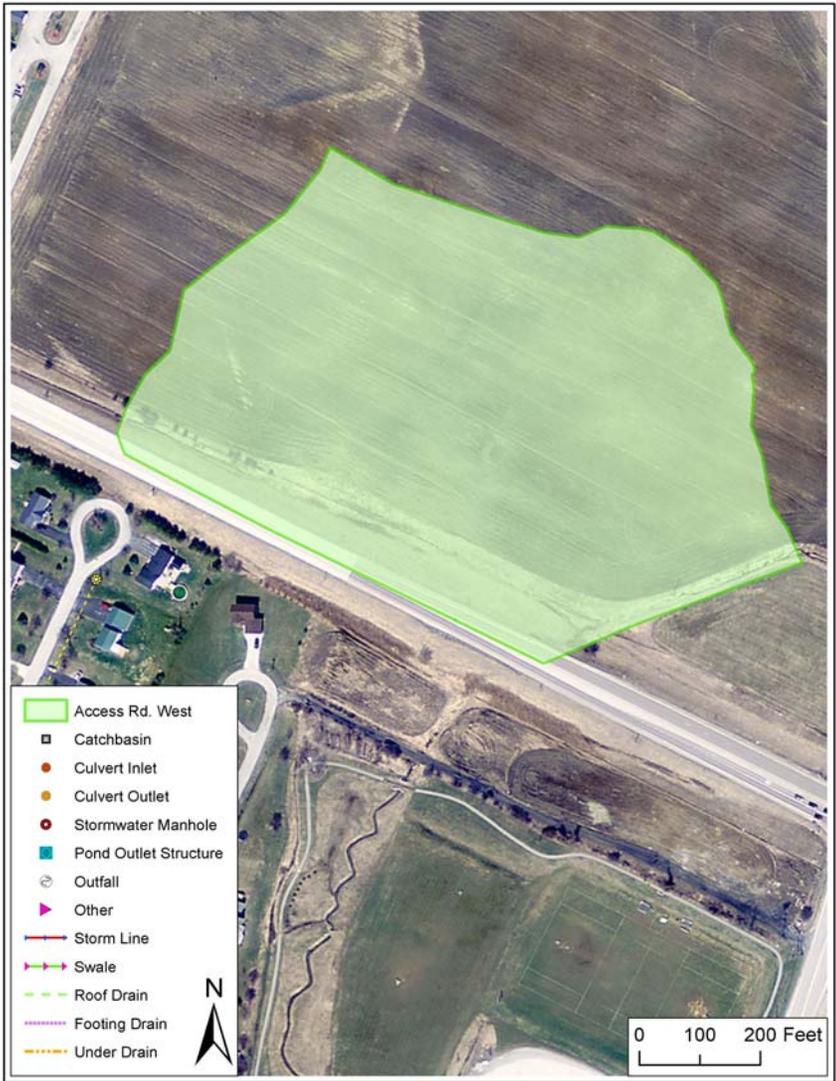
Site name: Access Rd. West

Watershed: Rugg Brook

Approximate address:	I-89 Exit 19 Access Road West St Albans City, VT 05478	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans/ Private
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Proposed BMP type:	Detention
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Site Map



Proposed BMP details

Permit #	Drains Portion of 1-1428
Estimated project cost (rounded to nearest \$1,000)	\$125,000
Drainage area (acres)	13.70
Total impervious cover managed by BMP (acres)	0.55
Total impervious cover managed by BMP (% of drainage area)	4.03%
VTRANS impervious cover managed (acres)	0.55
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.65
Percent of VTrans High-Flow Target Managed (%)	4.02%
Cost Notes	Joint MS4 (50% share)

BMP Description

Create new detention BMP to collect drainage from the roadway and the upslope field before draining to a culvert under the Access Rd. BMP will provide CPv storage and water quality treatment. Project located within the VTrans ROW, but has potential for cost-sharing as the BMP would treat drainage from privately owned cropland within the Town.

VTRANS FRP BMP Summary Sheet

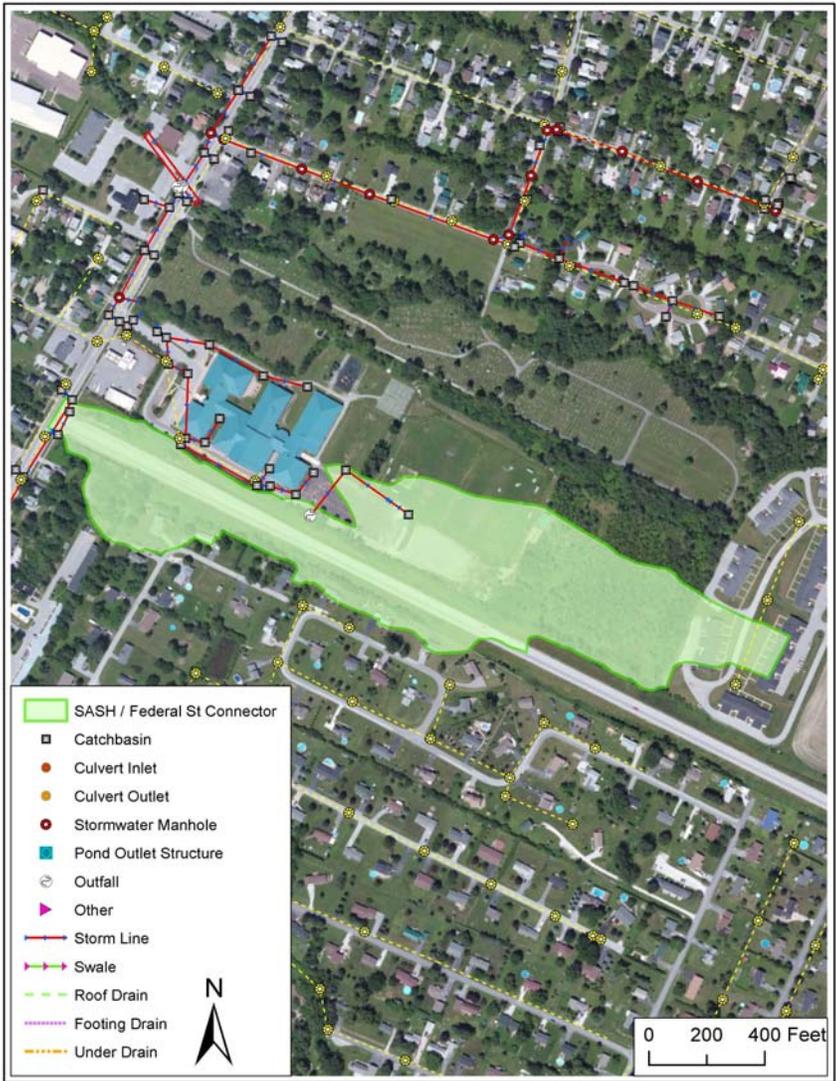
Site name: SASH / Federal St Connector

Watershed: Rugg Brook

Approximate address:	St Albans State Hwy St Albans City, VT 05478	MS4 Impervious Owner(s):	St. Albans City/ VTrans	Ownership of Land where BMP is located:	VTrans/ Private
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Proposed BMP type:	Detention
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Site Map



Proposed BMP details

Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$34,758
Drainage area (acres)	21.12
Total impervious cover managed by BMP (acres)	4.89
Total impervious cover managed by BMP (% of drainage area)	23.14%
VTRANS impervious cover managed (acres)	1.20
Managed impervious cover owned by VTrans (% of total managed impervious cover)	24.5%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.36
Percent of VTrans High-Flow Target Managed (%)	8.73%
Cost Notes	Joint MS4 (25% Share)

BMP Description

Incorporate detention of SASH runoff with Federal Street Connector Project.

VTRANS FRP BMP Summary Sheet

Site name: SDC87

Watershed: Rugg Brook

Approximate address:	I-89 Median South of Exit 19 St Albans City, VT 05478	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Site Map



Proposed BMP details

Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$36,264
Drainage area (acres)	4.92
Total impervious cover managed by BMP (acres)	0.92
Total impervious cover managed by BMP (% of drainage area)	18.76%
VTRANS impervious cover managed (acres)	0.92
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.13
Percent of VTrans High-Flow Target Managed (%)	6.72%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand medium to detain the CPv.

VTRANS FRP BMP Summary Sheet

Site name: SDC83b

Watershed: Rugg Brook

Approximate address:	I-89 Median South of Exit 19 St Albans City, VT 05478	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Site Map

Proposed BMP details



Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$21,704
Drainage area (acres)	1.80
Total impervious cover managed by BMP (acres)	0.36
Total impervious cover managed by BMP (% of drainage area)	20.13%
VTRANS impervious cover managed (acres)	0.36
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.08
Percent of VTrans High-Flow Target Managed (%)	2.64%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand medium to detain the CPv.

VTRANS FRP BMP Summary Sheet

Site name: SDC27

Watershed: Rugg Brook

Approximate address:	I-89 Median South of Exit 19 St Albans City, VT 05478	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Site Map	Proposed BMP details
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Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$17,953
Drainage area (acres)	1.61
Total impervious cover managed by BMP (acres)	0.43
Total impervious cover managed by BMP (% of drainage area)	26.40%
VTRANS impervious cover managed (acres)	0.43
Managed impervious cover owed by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.06
Percent of VTrans High-Flow Target Managed (%)	3.10%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand medium to detain the CPv.

VTRANS FRP BMP Summary Sheet

Site name: SDC280

Watershed: Rugg Brook

Approximate address:	I-89 Median South of Exit 19 St Albans City, VT 05478	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Site Map



Proposed BMP details

Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$17,817
Drainage area (acres)	2.13
Total impervious cover managed by BMP (acres)	0.37
Total impervious cover managed by BMP (% of drainage area)	17.43%
VTRANS impervious cover managed (acres)	0.37
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.06
Percent of VTrans High-Flow Target Managed (%)	2.70%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand medium to detain the CPv.

VTRANS FRP BMP Summary Sheet

Site name: SDC347

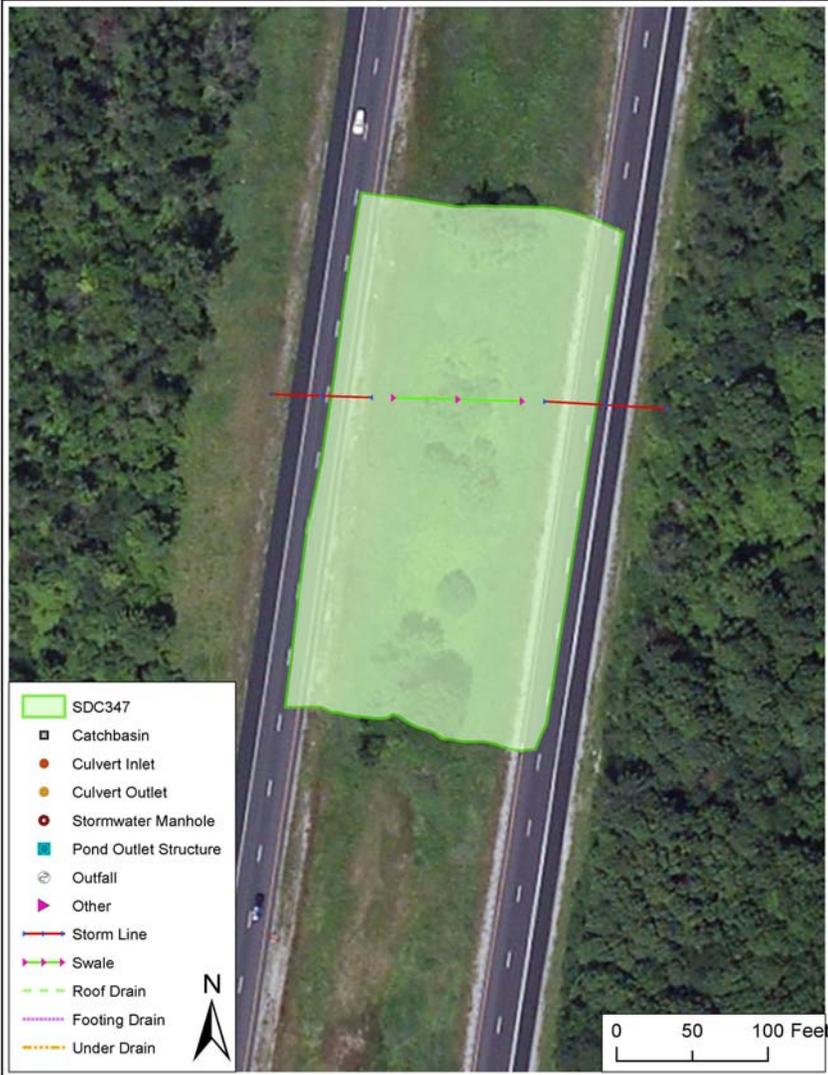
Watershed: Rugg Brook

Approximate address:	I-89 Median South of Exit 19 St Albans City, VT 05478	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Site Map

Proposed BMP details



Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$16,952
Drainage area (acres)	1.40
Total impervious cover managed by BMP (acres)	0.30
Total impervious cover managed by BMP (% of drainage area)	21.70%
VTRANS impervious cover managed (acres)	0.30
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.06
Percent of VTrans High-Flow Target Managed (%)	2.21%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand medium to detain the CPv.

VTRANS FRP BMP Summary Sheet

Site name: SDC83a

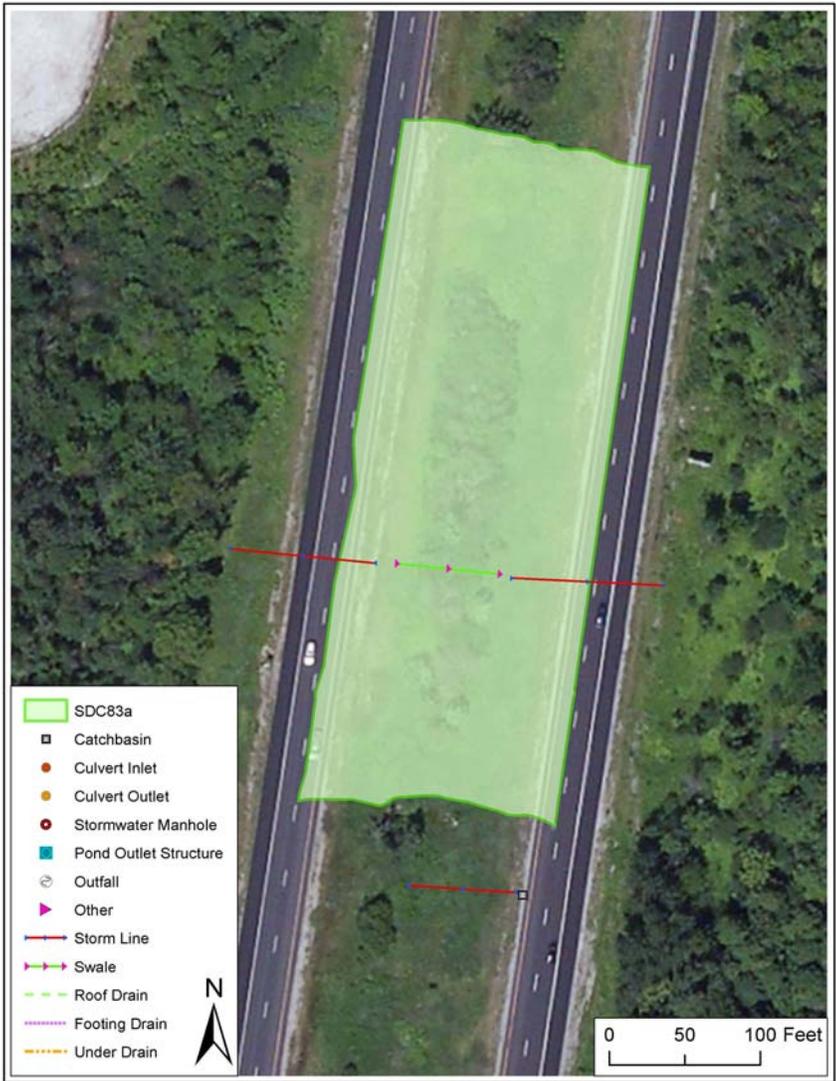
Watershed: Rugg Brook

Approximate address:	I-89 Median South of Exit 19 St Albans City, VT 05478	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Site Map

Proposed BMP details



Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$16,471
Drainage area (acres)	1.71
Total impervious cover managed by BMP (acres)	0.27
Total impervious cover managed by BMP (% of drainage area)	15.77%
VTRANS impervious cover managed (acres)	0.27
Managed impervious cover owed by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.06
Percent of VTrans High-Flow Target Managed (%)	1.96%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand medium to detain the CPv.

VTRANS FRP BMP Summary Sheet

Site name: SDC342

Watershed: Rugg Brook

Approximate address:	I-89 Median South of Exit 19 St Albans City, VT 05478	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Site Map

Proposed BMP details



Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$15,327
Drainage area (acres)	1.60
Total impervious cover managed by BMP (acres)	0.31
Total impervious cover managed by BMP (% of drainage area)	19.43%
VTRANS impervious cover managed (acres)	0.31
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.05
Percent of VTrans High-Flow Target Managed (%)	2.26%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand medium to detain the CPv.

VTRANS FRP BMP Summary Sheet

Site name: SDC29

Watershed: Rugg Brook

Approximate address:	I-89 Median South of Exit 19 St Albans City, VT 05478	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Site Map

Proposed BMP details



Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$15,327
Drainage area (acres)	2.25
Total impervious cover managed by BMP (acres)	0.41
Total impervious cover managed by BMP (% of drainage area)	18.17%
VTRANS impervious cover managed (acres)	0.41
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.05
Percent of VTrans High-Flow Target Managed (%)	2.97%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand medium to detain the CPv.

VTRANS FRP BMP Summary Sheet

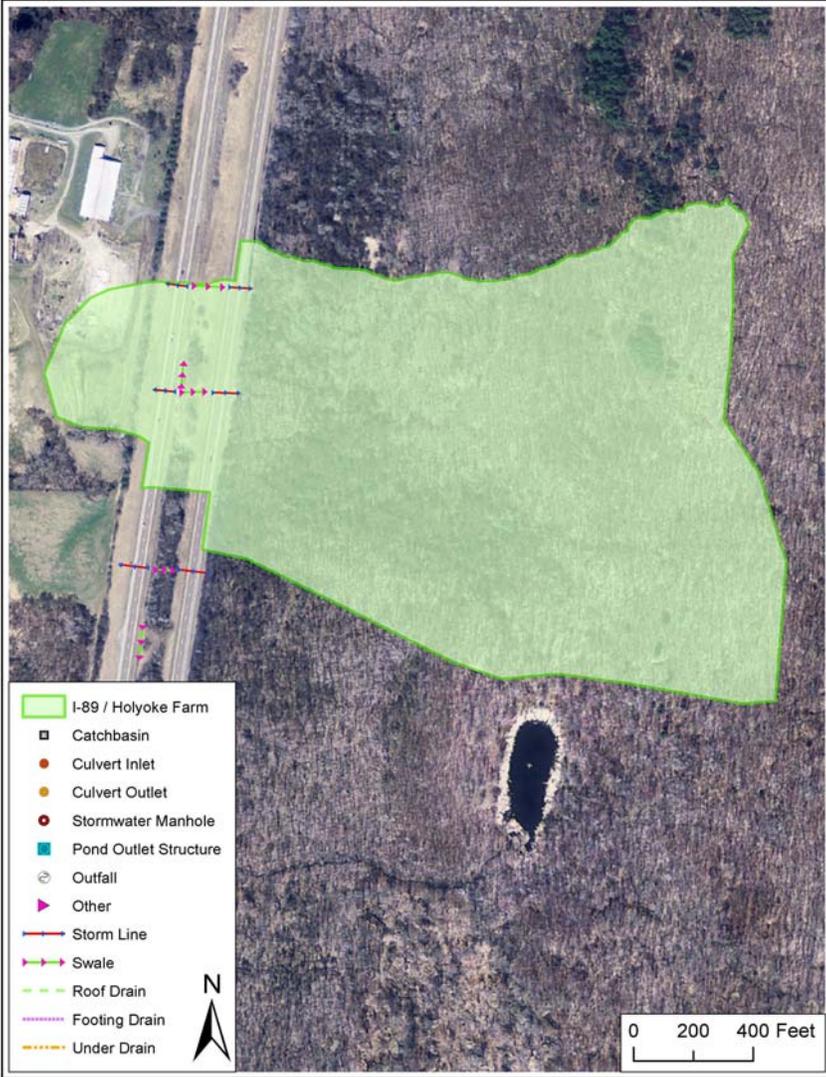
Site name: I-89 / Holyoke Farm

Watershed: Rugg Brook

Approximate address:	Holyoke Farm Dr St Albans City, VT 05478	MS4 Impervious Owner(s):	St. Albans City / VTrans	Ownership of Land where BMP is located:	Private
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Proposed BMP type:	Infiltration
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Site Map	Proposed BMP details
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Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$185,080
Drainage area (acres)	61.83
Total impervious cover managed by BMP (acres)	0.50
Total impervious cover managed by BMP (% of drainage area)	0.80%
VTRANS impervious cover managed (acres)	0.25
Managed impervious cover owned by VTrans (% of total managed impervious cover)	49.9%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	1.43
Percent of VTrans High-Flow Target Managed (%)	1.80%
Cost Notes	Joint MS4 (50% share)

BMP Description

Create new 15,000 sq-ft infiltration basin. Reseed surface with grass for ease of maintenance. Below the surface would be 3 feet of drain stone on top of the native soil. The basin will detain and filter the 1-year design storm volume (CPv).

VTRANS FRP BMP Summary Sheet

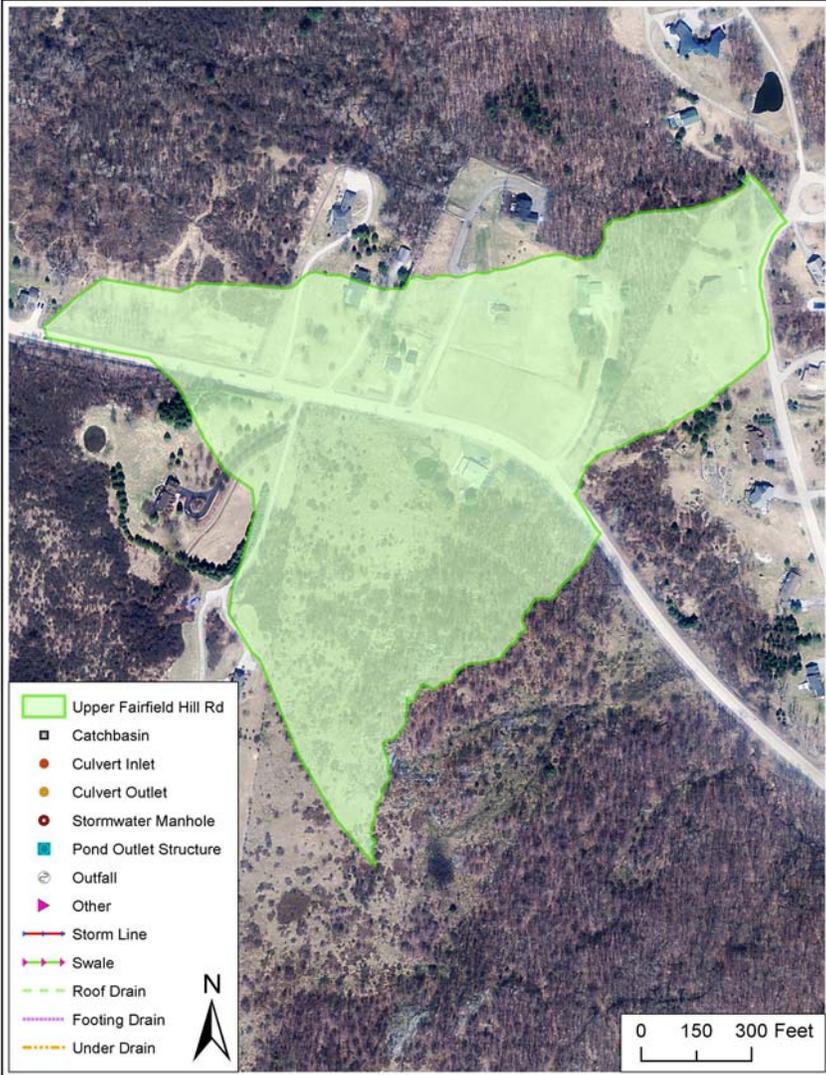
Site name: Upper Fairfield Hill Rd

Watershed: Stevens Brook

Approximate address:	Fairfield Hill Rd St Albans City, VT 05478	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans/ Private
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Proposed BMP type:	Detention Basin				
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Site Map	Proposed BMP details
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Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$163,761
Drainage area (acres)	34.26
Total impervious cover managed by BMP (acres)	3.36
Total impervious cover managed by BMP (% of drainage area)	9.80%
VTRANS impervious cover managed (acres)	1.15
Managed impervious cover owned by VTrans (% of total managed impervious cover)	34.4%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	1.28
Percent of VTrans High-Flow Target Managed (%)	22.70%
Cost Notes	Cost share with Town

BMP Description

Create new detention basin on private parcel within the Town to capture and detain a 34 acre drainage area. Private land would need to be acquired in order to implement the BMP. Project will require new culvert to capture drainage on south side of Fairfield.

VTRANS FRP BMP Summary Sheet

Site name: Fairfield Rd / I-89

Watershed: Stevens Brook

Approximate address:	Fairfield Hill Rd St Albans City, VT 05478	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Detention Basin				
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Site Map	Proposed BMP details
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Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$108,532
Drainage area (acres)	28.92
Total impervious cover managed by BMP (acres)	2.07
Total impervious cover managed by BMP (% of drainage area)	7.16%
VTRANS impervious cover managed (acres)	0.85
Managed impervious cover owned by VTrans (% of total managed impervious cover)	40.8%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.68
Percent of VTrans High-Flow Target Managed (%)	16.60%
Cost Notes	Cost share with Town

BMP Description

A water quality/flow detention retrofit is proposed within the I-89 ROW designed to capture runoff from a 28 ac area including a portion of Fairfield Rd (VT-36) and Town residences along the road. Project requires a new culvert under Fairfield Rd to route flow from the north side of VT-36 into the facility.

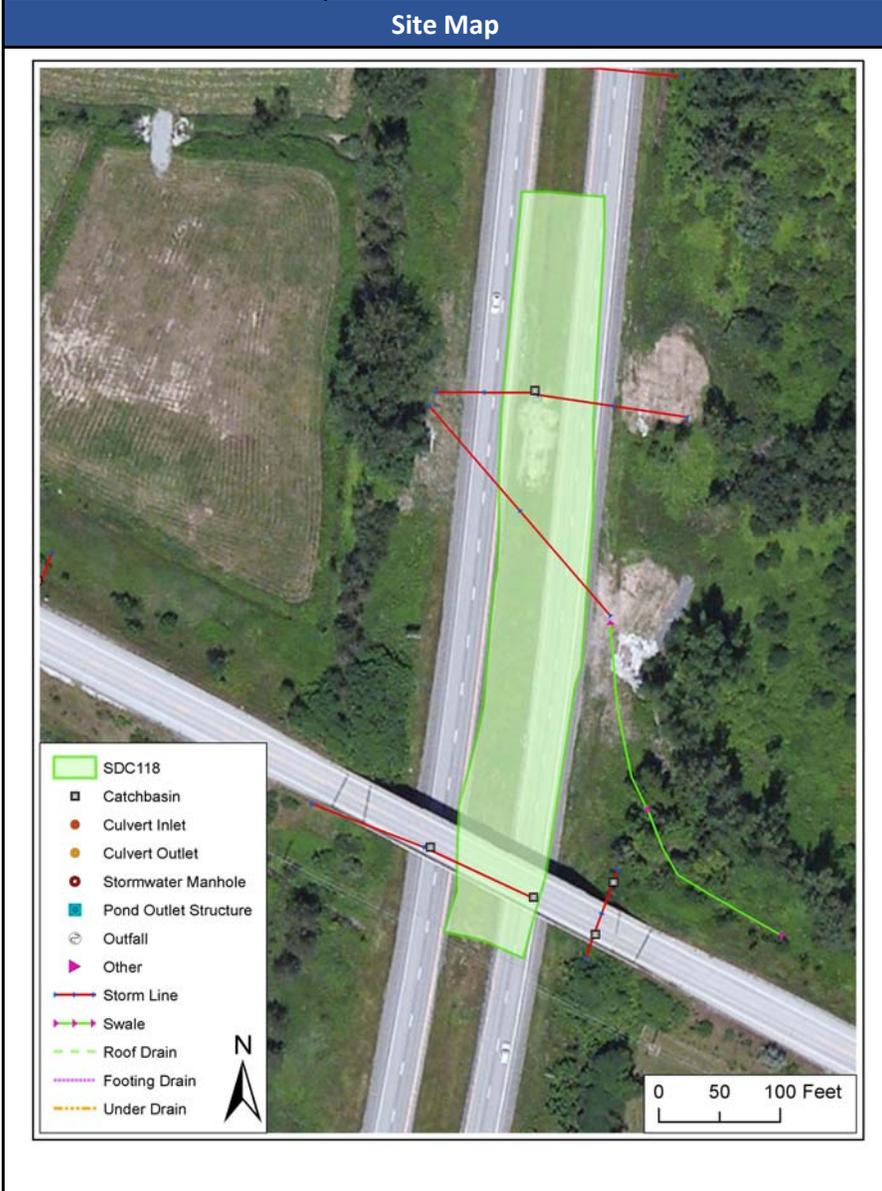
VTRANS FRP BMP Summary Sheet

Site name: SDC118

Watershed: Stevens Brook

Approximate address:	I-89 Median North of Exit 19 St Albans City, VT 05478	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Proposed BMP details	
Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$28,177
Drainage area (acres)	1.08
Total impervious cover managed by BMP (acres)	0.55
Total impervious cover managed by BMP (% of drainage area)	50.88%
VTRANS impervious cover managed (acres)	0.55
Managed impervious cover owed by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.06
Percent of VTrans High-Flow Target Managed (%)	10.70%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand medium to detain the CPv.

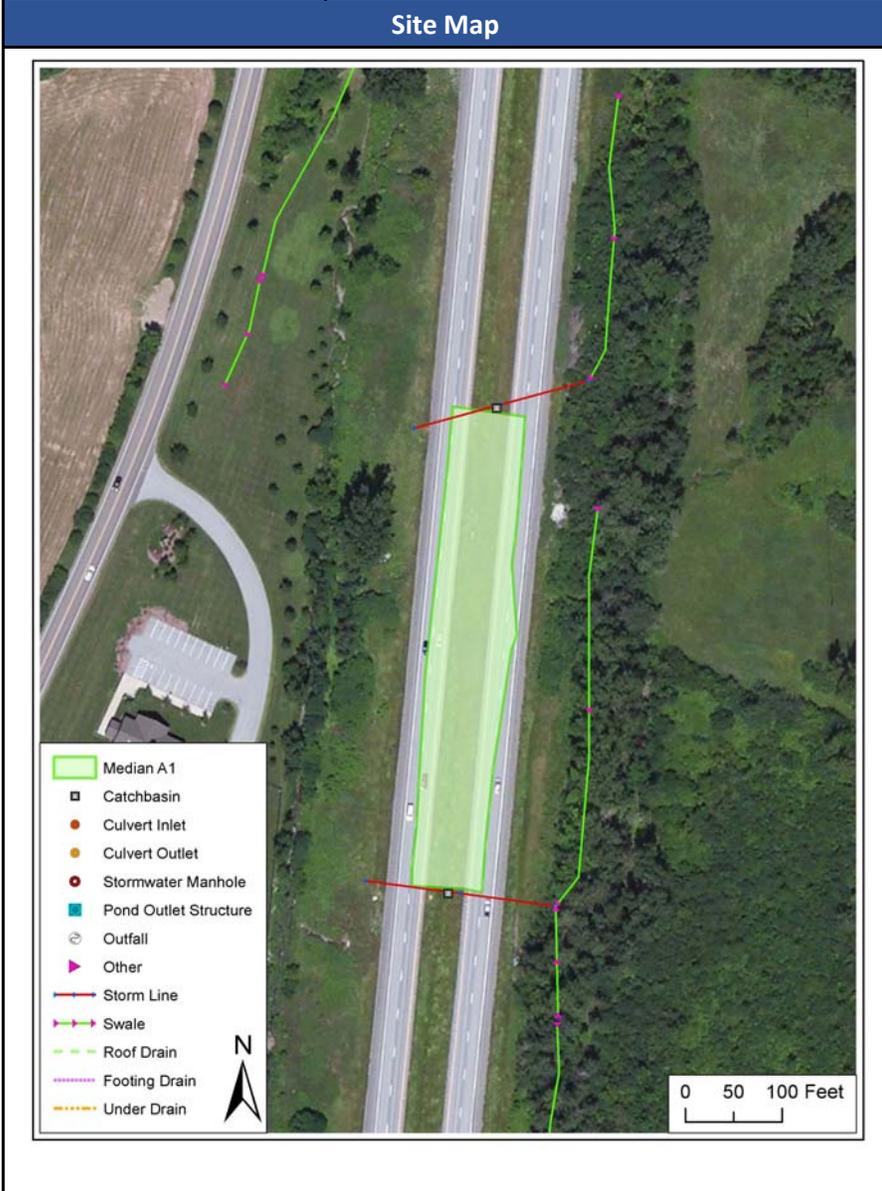
VTRANS FRP BMP Summary Sheet

Site name: Median A1

Watershed: Stevens Brook

Approximate address:	I-89 Median North of Exit 19 St Albans City, VT 05478	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Proposed BMP details	
Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$27,336
Drainage area (acres)	0.90
Total impervious cover managed by BMP (acres)	0.42
Total impervious cover managed by BMP (% of drainage area)	46.45%
VTRANS impervious cover managed (acres)	0.42
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.06
Percent of VTrans High-Flow Target Managed (%)	8.20%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand medium to detain the CPv.

VTRANS FRP BMP Summary Sheet

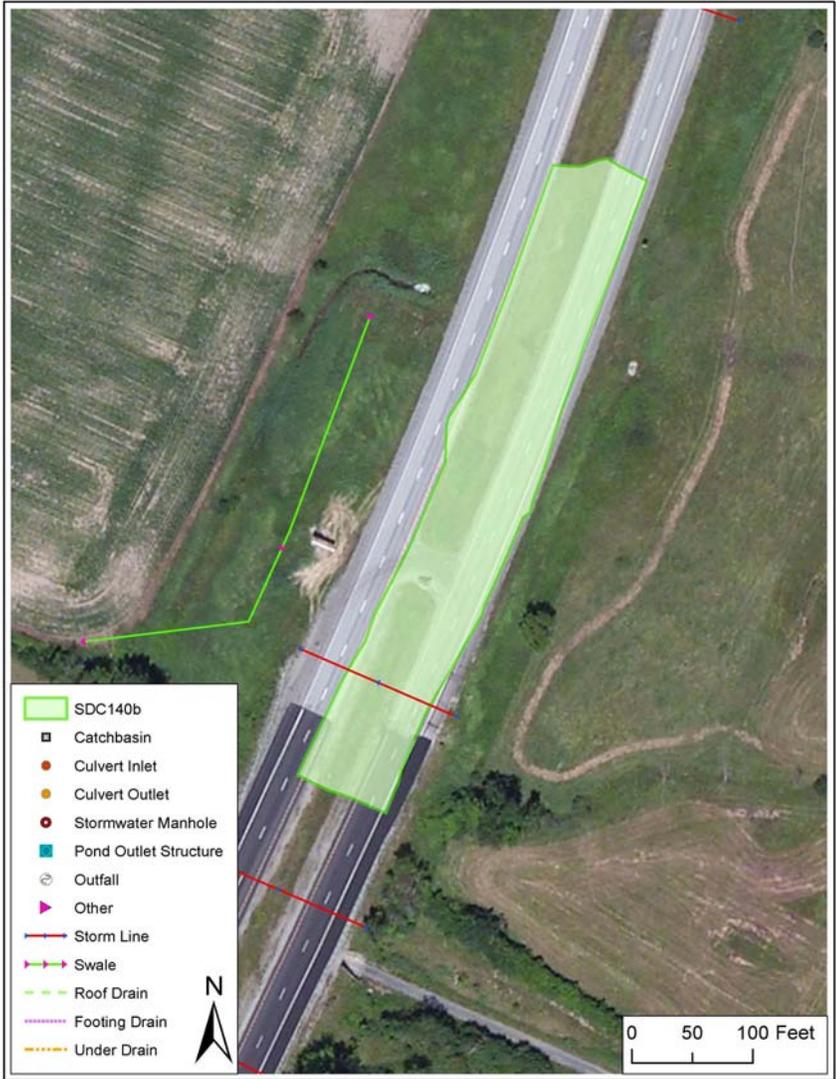
Site name: SDC140b

Watershed: Stevens Brook

Approximate address:	I-89 Median North of Exit 19 St Albans City, VT 05478	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Site Map



Proposed BMP details

Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$26,128
Drainage area (acres)	1.00
Total impervious cover managed by BMP (acres)	0.50
Total impervious cover managed by BMP (% of drainage area)	50.43%
VTRANS impervious cover managed (acres)	0.50
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.05
Percent of VTrans High-Flow Target Managed (%)	9.90%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand medium to detain the CPv.

VTRANS FRP BMP Summary Sheet

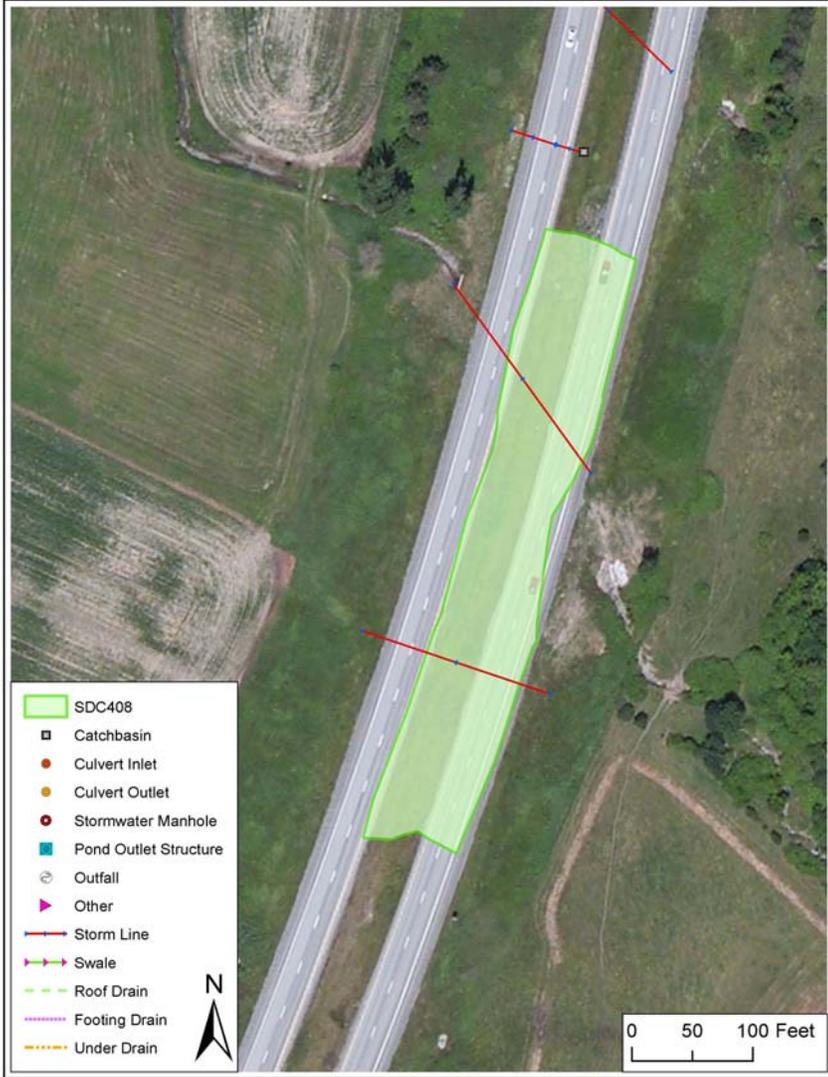
Site name: SDC408

Watershed: Stevens Brook

Approximate address:	I-89 Median North of Exit 19 St Albans City, VT 05478	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Site Map



Proposed BMP details

Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$22,673
Drainage area (acres)	0.94
Total impervious cover managed by BMP (acres)	0.47
Total impervious cover managed by BMP (% of drainage area)	49.96%
VTRANS impervious cover managed (acres)	0.47
Managed impervious cover owed by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.05
Percent of VTrans High-Flow Target Managed (%)	9.20%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand medium to detain the CPv.

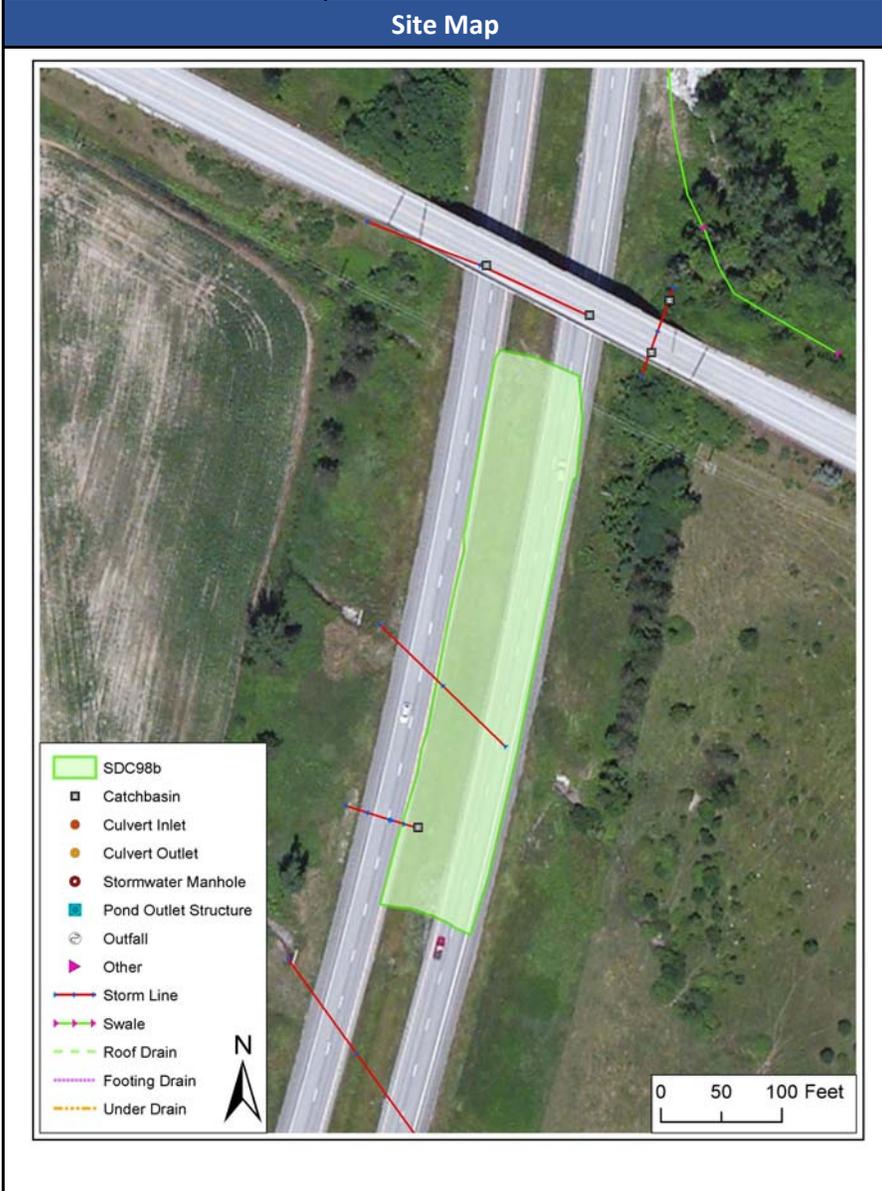
VTRANS FRP BMP Summary Sheet

Site name: SDC98b

Watershed: Stevens Brook

Approximate address:	I-89 Median North of Exit 19 St Albans City, VT 05478	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Proposed BMP details	
Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$21,798
Drainage area (acres)	0.85
Total impervious cover managed by BMP (acres)	0.42
Total impervious cover managed by BMP (% of drainage area)	49.03%
VTRANS impervious cover managed (acres)	0.42
Managed impervious cover owed by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.05
Percent of VTrans High-Flow Target Managed (%)	8.20%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand medium to detain the CPv.

VTRANS FRP BMP Summary Sheet

Site name: Median A2

Watershed: Stevens Brook

Approximate address:	I-89 Median North of Exit 19 St Albans City, VT 05478	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Site Map



Proposed BMP details

Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$20,834
Drainage area (acres)	0.65
Total impervious cover managed by BMP (acres)	0.30
Total impervious cover managed by BMP (% of drainage area)	45.46%
VTRANS impervious cover managed (acres)	0.30
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.04
Percent of VTrans High-Flow Target Managed (%)	5.80%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand medium to detain the CPv.

VTRANS FRP BMP Summary Sheet

Site name: SDC105b

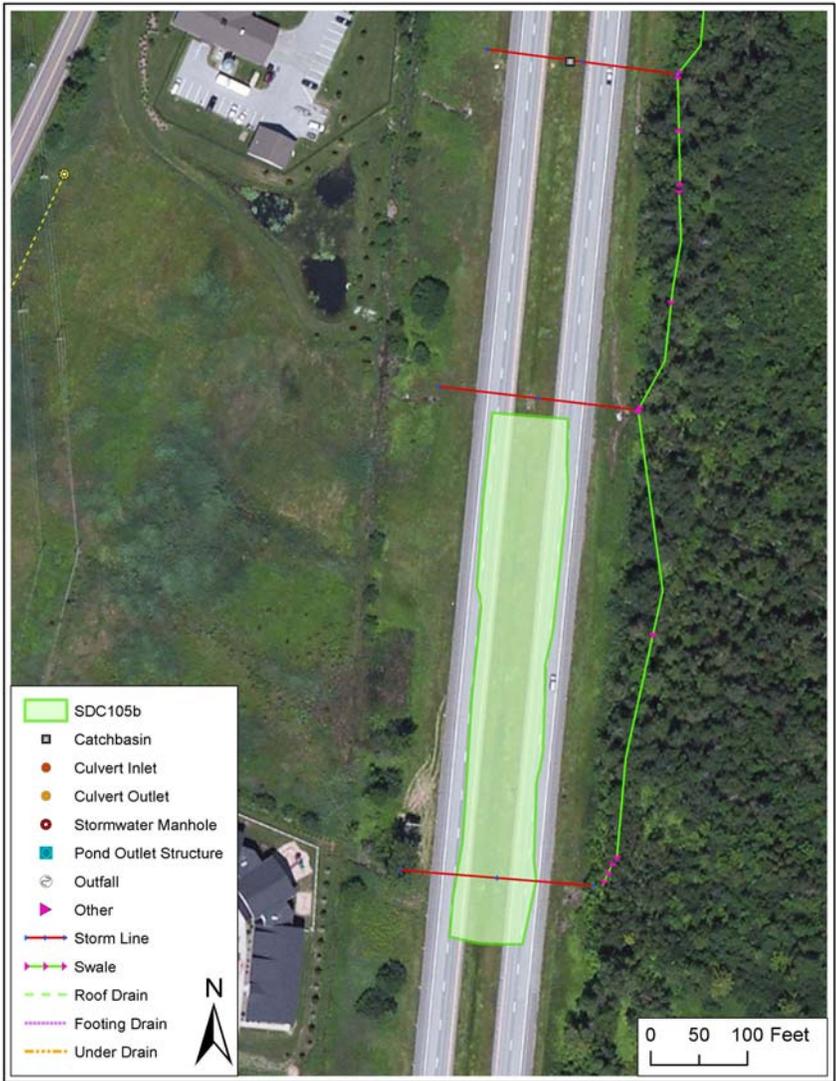
Watershed: Stevens Brook

Approximate address:	I-89 Median North of Exit 19 St Albans City, VT 05478	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Site Map

Proposed BMP details



Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$25,840
Drainage area (acres)	0.99
Total impervious cover managed by BMP (acres)	0.53
Total impervious cover managed by BMP (% of drainage area)	53.31%
VTRANS impervious cover managed (acres)	0.53
Managed impervious cover owned by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.05
Percent of VTrans High-Flow Target Managed (%)	10.40%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand medium to detain the CPv.

VTRANS FRP BMP Summary Sheet

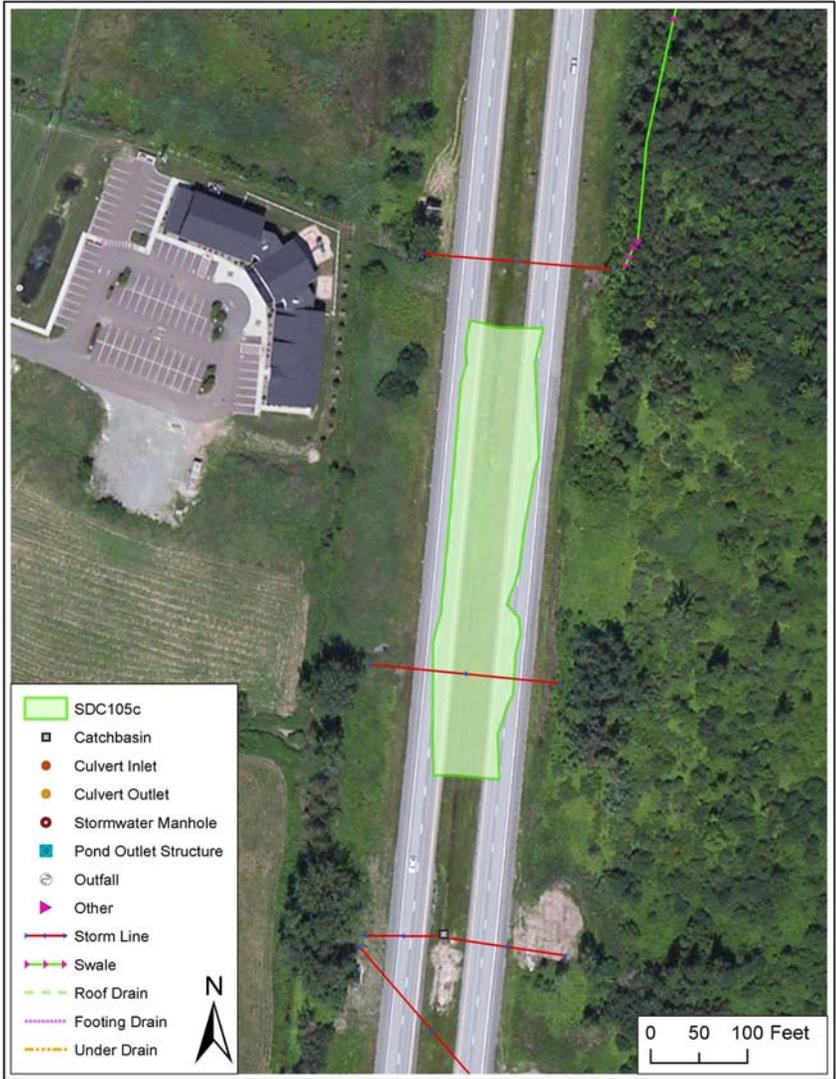
Site name: SDC105c

Watershed: Stevens Brook

Approximate address:	I-89 Median North of Exit 19 St Albans City, VT 05478	MS4 Impervious Owner(s):	VTrans	Ownership of Land where BMP is located:	VTrans
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Proposed BMP type:	Median Filter
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Site Map



Proposed BMP details

Permit #	NP
Estimated project cost (rounded to nearest \$1,000)	\$19,926
Drainage area (acres)	0.84
Total impervious cover managed by BMP (acres)	0.44
Total impervious cover managed by BMP (% of drainage area)	52.05%
VTRANS impervious cover managed (acres)	0.44
Managed impervious cover owed by VTrans (% of total managed impervious cover)	100.0%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.04
Percent of VTrans High-Flow Target Managed (%)	8.60%
Cost Notes	--

BMP Description

Create new median filter with subsurface sand medium to detain the CPv.

VTRANS FRP BMP Summary Sheet

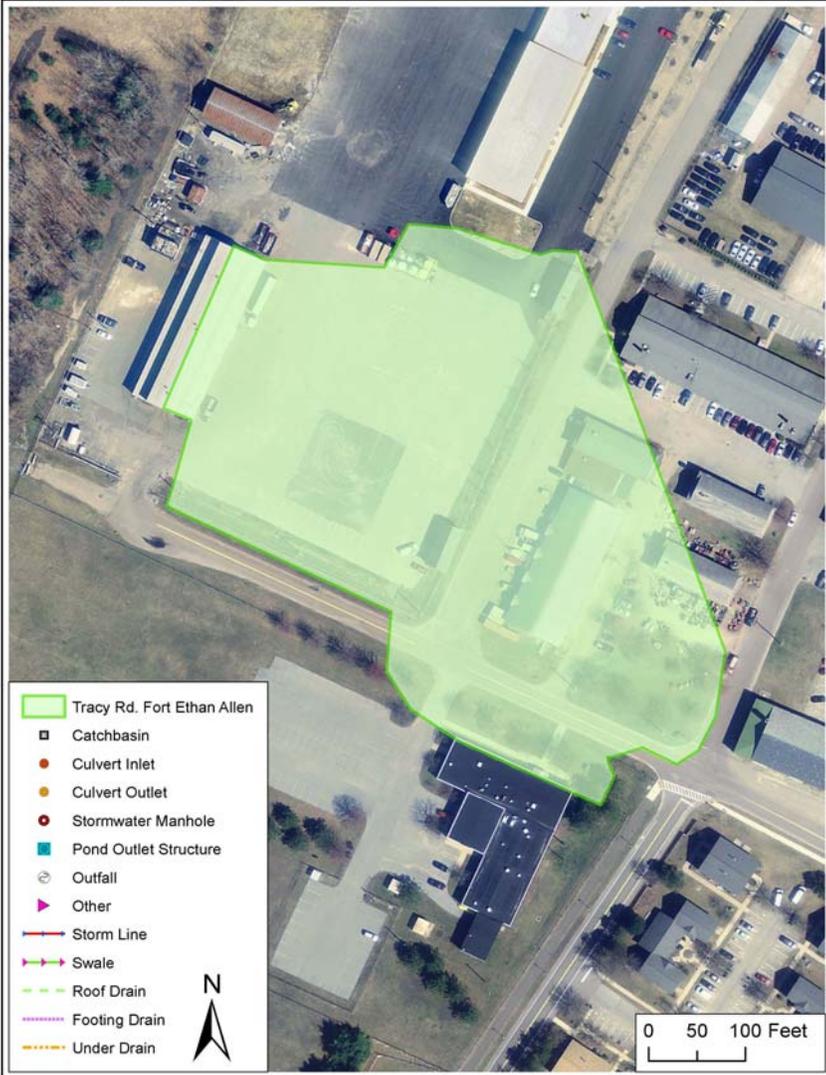
Site name: Tracy Rd. Fort Ethan Allen

Watershed: Sunderland Brook

Approximate address:	Tracy Rd Colchester, VT 05446	MS4 Impervious Owner(s):	VTrans/ Colchester	Ownership of Land where BMP is located:	VTrans/ Colchester
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Proposed BMP type:	Infiltration Trench
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Site Map	Proposed BMP details
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Permit #	6363-INDS
Estimated project cost (rounded to nearest \$1,000)	\$54,000
Drainage area (acres)	4.97
Total impervious cover managed by BMP (acres)	3.89
Total impervious cover managed by BMP (% of drainage area)	78.33%
VTRANS impervious cover managed (acres)	2.31
Managed impervious cover owned by VTrans (% of total managed impervious cover)	59.4%
Runoff Channel Protection Volume (CPv) Storage (ac-ft)	0.43
Percent of VTrans High-Flow Target Managed (%)	287.90%
Cost Notes	Cost share with Town

BMP Description

Retrofit existing grass swale on the VTrans site along Tracy Road. Expand existing swale, add a 2 foot deep stone subsurface infiltration gallery. The surface would remain as grass and riser pipes would connect drainage into the deeper stone gallery for easier maintenance. Move existing fence closer to the road. The contributing drainage comes from the Town of Colchester and VTrans impervious; a cost share is recommended. On a runoff volume basis, the Town of Colchester contributes 0.195 ac-ft versus 0.23 ac-ft from VTrans owned land.