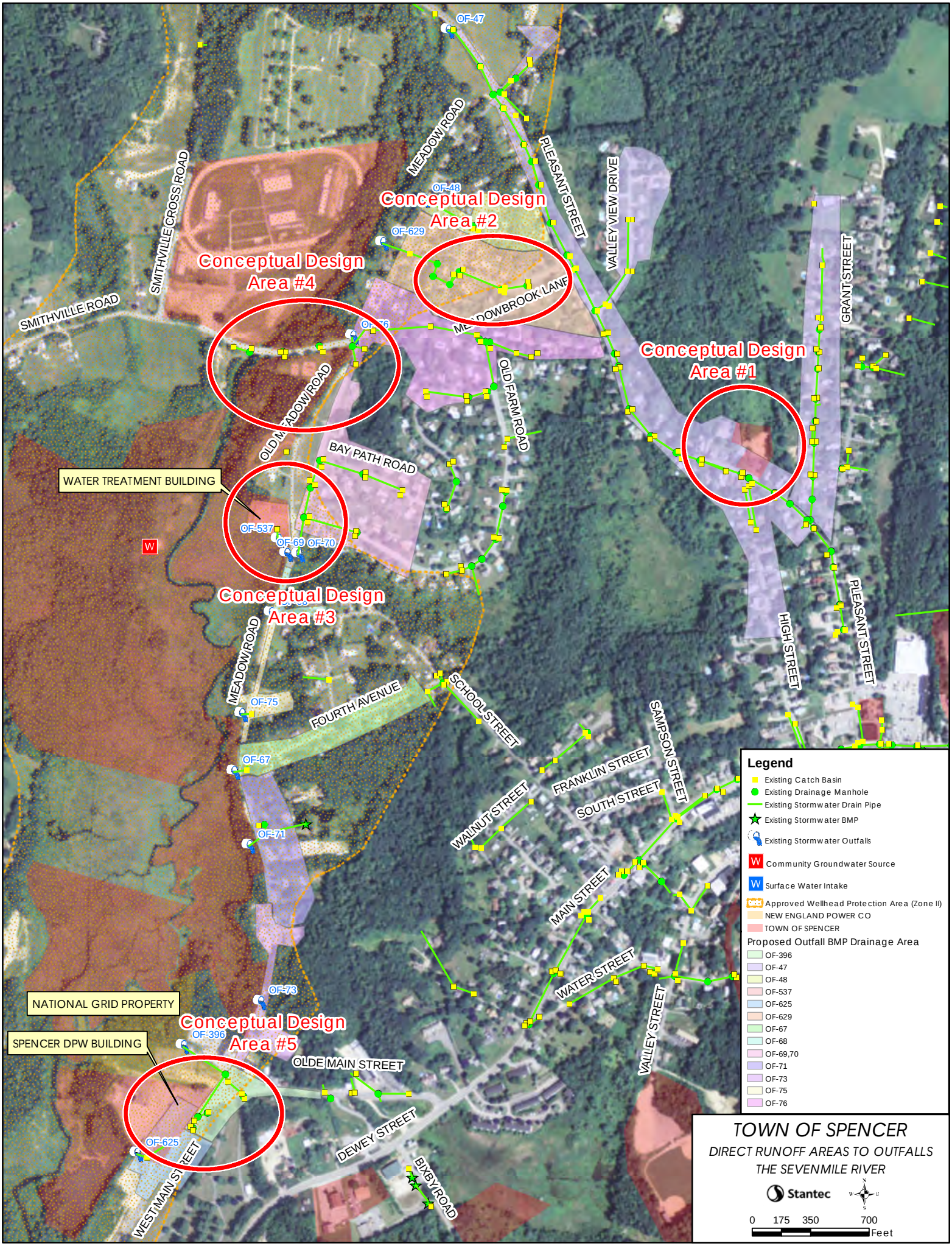

Conceptual Design Area #1
Conceptual Design Area #2
Conceptual Design Area #3
Conceptual Design Area #4
Conceptual Design Area #5
WATER TREATMENT BUILDING
NATIONAL GRID PROPERTY
SPENCER DPW BUILDING
OF-47
OF-48
OF-629
OF-537
OF-69
OF-70
OF-75
OF-67
OF-71
OF-73
OF-396
OF-625
MEADOW ROAD
SMITHVILLE CROSS ROAD
SMITHVILLE ROAD
PLEASANT STREET
VALLEY VIEW DRIVE
GRANT STREET
MEADOWBROOK LANE
OLD FARM ROAD
OLD MEADOW ROAD
BAY PATH ROAD
HIGH STREET
SCHOOL STREET
FOURTH AVENUE
FRANKLIN STREET
SAMPSON STREET
WALNUT STREET
SOUTH STREET
MAIN STREET
WATER STREET
VALLEY STREET
OLDE MAIN STREET
DEWEY STREET
BIXBY ROAD
WEST MAIN STREET
Legend
Existing Catch Basin
Existing Drainage Manhole
Existing Stormwater Drain Pipe
Existing Stormwater BMP
Existing Stormwater Outfalls
Community Groundwater Source
Surface Water Intake
Approved Wellhead Protection Area (Zone II)
NEW ENGLAND POWER CO
TOWN OF SPENCER
Proposed Outfall BMP Drainage Area
OF-396
OF-47
OF-48
OF-537
OF-625
OF-629
OF-67
OF-68
OF-69,70
OF-71
OF-73
OF-75
OF-76
TOWN OF SPENCER
DIRECT RUNOFF AREAS TO OUTFALLS
THE SEVENMILE RIVER
Stantec
0 175 350 700
Feet

Discharge ID: OF-47

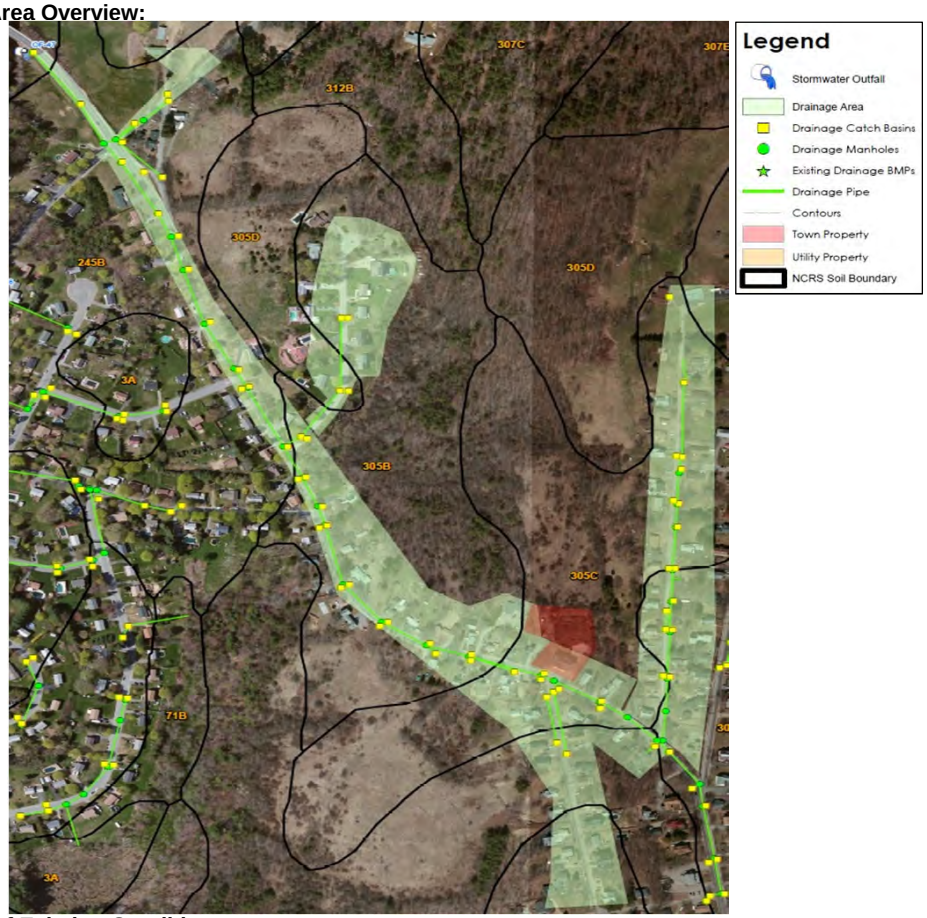
Location: Off Pleasant Street north-west of the intersection with Wire Village Road

Soil Description:

245 B, C Hinckley loamy sand

305B, C, D Paxton fine sandy loam

Drainage Area Overview:



Summary of Existing Conditions:

NCRS Soil Identifier Code[1]	Approximate Depth to GWT[1]	Hydrologic Soil Group[1]	Outfall Material[2]	Outfall Pipe Diameter *(inches)*[2]	Discharge to[2]:	Drainage Area (Acres)	Surface Area Pervious (%)	Surface Area Impervious (%)	Impervious Runoff Volume[3] (ft^3)		Total Runoff Volume (ft^3)		Weighted Cn Value	10 yr Storm[4] (cfs)
									0.5"	1"	0.5"	1"		
305B,C, 305D; 245B,C	18-37 inches >80 inches	C, A	Concrete	30	River	35.7	64%	36%	23,022	46,044	64,714	129,428	73	117

Structural BMP Options:

Option 1: At intersection of Pleasant St. and High St. the installation of a bioretention system on Town land appears feasible to capure and treat the stormwater first flush with an overflow into the existing stormwater system. Onsite soil testing will be required to determine the feasibility of adding additional infiltration systems due to the Paxton soil type.

Option 2: Areas along Pleasant St. with Hinckley soil identified would be suitable for implementation of infiltration pratices at multiple points along the existing stormwater drainage system. These infiltration system can be installed within the Town road layout and will be sized to handle portions of the stormwater runoff.

All proposed stormwater treatment systems will be designed to provide adequate pretreatment prior to the stormwater best management pratice.

Notes:

(1) Information obtained from NRCS soil web survey

(2) Information taken from Town outfall GIS database

(3) Impervious runoff includes approximate areas from rooftops, driveways, and roadways.

(4) 10 year storm runoff assumes a rainfall intensity of 4.5 inches per hour.

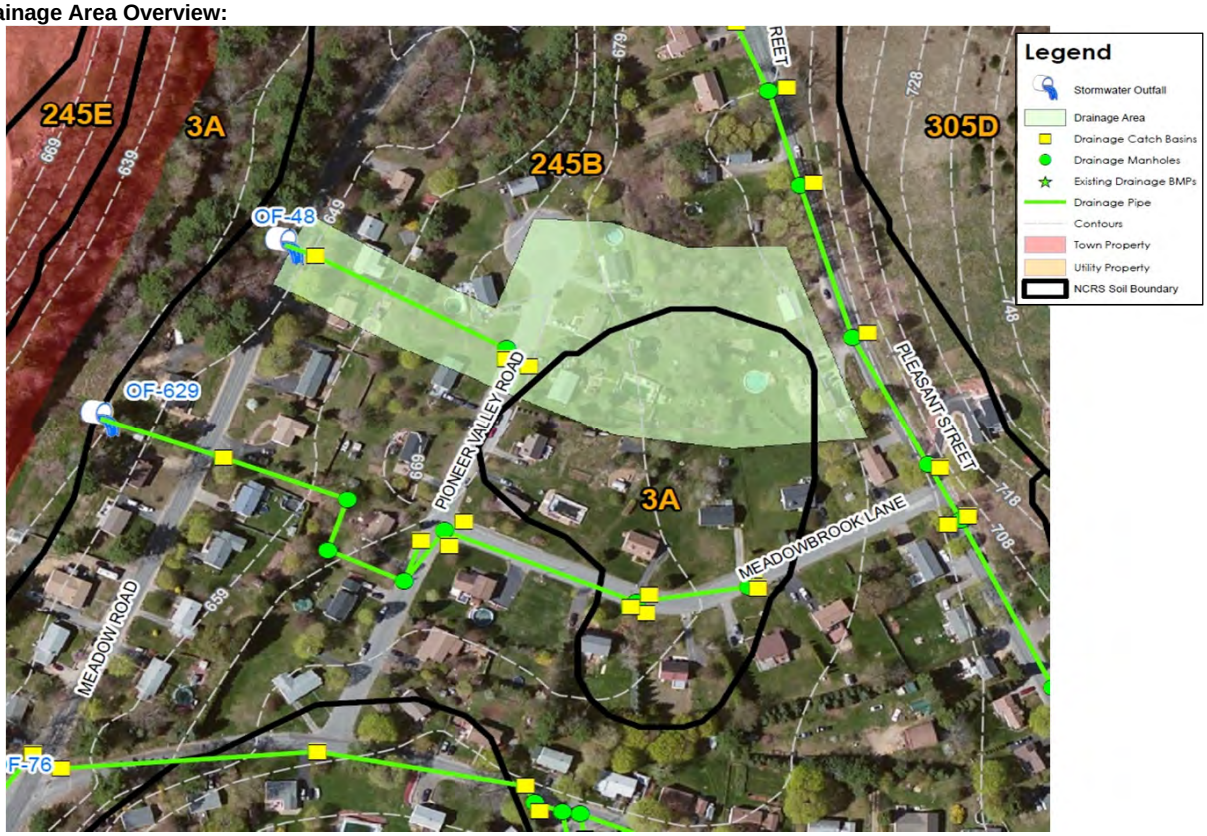
Discharge ID: OF-48

Location: Off Meadow Road across road from property #84

Soil Description:

Majority of drainage area is 245B Hinckley loamy sand, 3-8 percent slopes. South east corner is 3A Scarboro and walpole soils, 0-3 percent slope with hydrologic soil group A/D. Depth to gwt between 0-12 inches.

Drainage Area Overview:



Summary of Existing Conditions:

NCRS Soil Identifier Code[1]	Approximate Depth to GWT[1]	Hydrologic Soil Group[1]	Outfall Material[2]	Outfall Pipe Diameter (inches)[2]	Discharge to[2]:	Drainage Area (Acres)	Surface Area Pervious (%)	Surface Area Impervious (%)	Impervious Runoff Volume[3] (ft^3)		Total Runoff Volume (ft^3)		Weighted Cn Value	10 yr Storm[4] (cfs)
									0.5"	1"	0.5"	1"		
245B, 3A	>80 inches; 0-12 inches	A; A/D	unk	unk	unk	3.0	61%	39%	2,180	4,360	5,530	11,060	61	8.41

Structural BMP Options:

An area along Meadow Drive with Hinckley soil identified would be suitable for the implementation of an infiltration system in the road as there is no Town land available nearby and the soil changes to type 3A near the outfall outlet, which would not be a suitable soil for infiltration.

Onsite testing will be required to determine the feasibility of an infiltration system.

All proposed stormwater treatment systems will be designed to provide adequate pretreatment prior to the stormwater best management pratice.

Notes:

(1) Information obtained from NRCS soil web survey

(2) Information taken from Town outfall GIS database

(3) Impervious runoff includes approximate areas from rooftops and roadways.

(4) 10 year storm runoff assumes a rainfall intensity of 4.5 inches per hour.

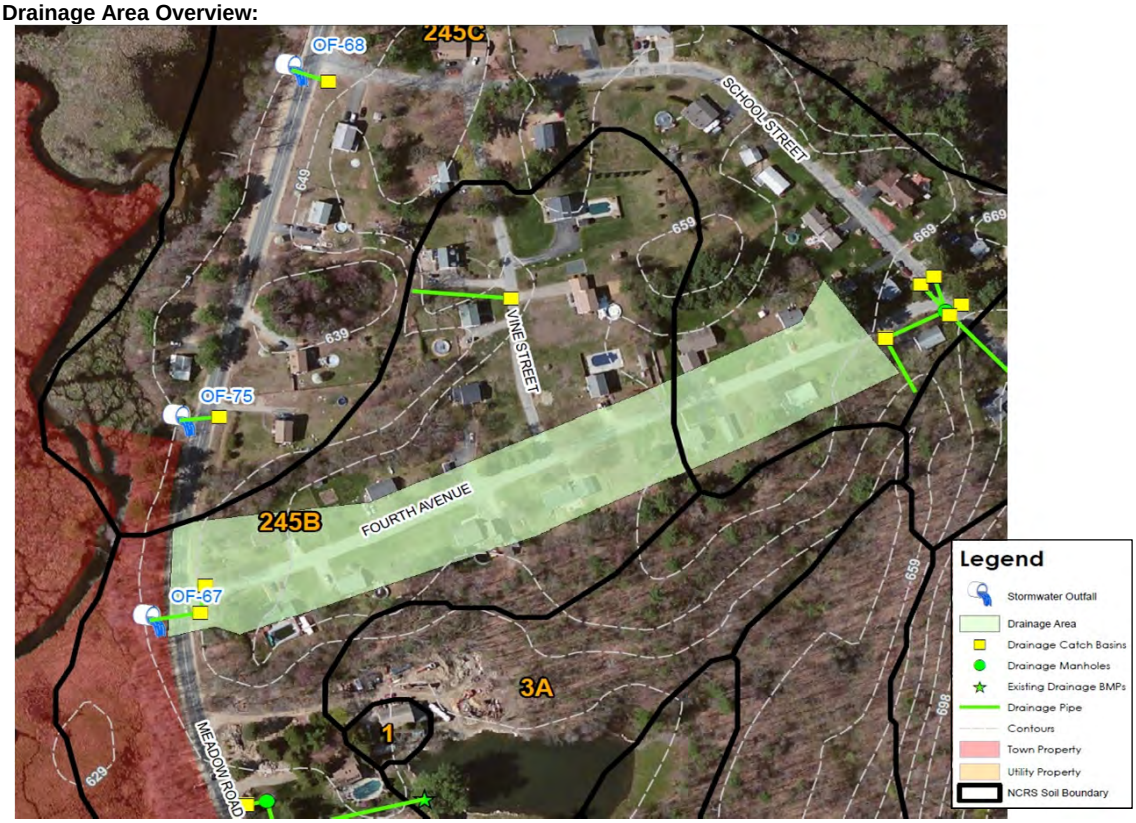
Discharge ID: OF-67

Location: Off Meadow Road across from intersection with 4th Avenue

Soil Description:

245B Hinckley loamy sand, 3-8 percent slopes for the western two thirds of the drainage area. 245C Hinckley loamy sand 8-15 percent slopes for eastern third of drainage area.

Drainage Area Overview:



Summary of Existing Conditions:

NCRS Soil Identifier Code[1]	Approximate Depth to GWT[1]	Hydrologic Soil Group[1]	Pipe Material[2]	Pipe Diameter (inches)[2]	Discharge to[2]:	Drainage Area (Acres)	Surface Area Pervious (%)	Surface Area Impervious (%)	Impervious Runoff Volume[3] (ft^3)		Total Runoff Volume (ft^3)		Weighted Cn Value	10 yr Storm[4] (cfs)
									0.5"	1"	0.5"	1"		
245B; 245C	>80 inches	A	CM	12	Wetland	4.4	64%	36%	2,865	5,731	8,061	16,122	59	12

Structural BMP Options:

Hinckley soil is suitable for infiltration and there is Town land available from the roadway to the river. Infiltration systems could be installed within the road prior to the outfall and / or utilize available Town land for a longer treatment train, such as bioretention area with overflow to infiltration system, then excess overflow to the river. Onsite testing will be required to determine the feasibility of an infiltration system.

All proposed stormwater treatment systems will be designed to provide adequate pretreatment prior to the stormwater best management pratice.

Notes:

(1) Information obtained from NRCS soil web survey

(2) Information taken from Town outfall GIS database

(3) Impervious runoff includes approximate areas from rooftops, driveways, and roadways.

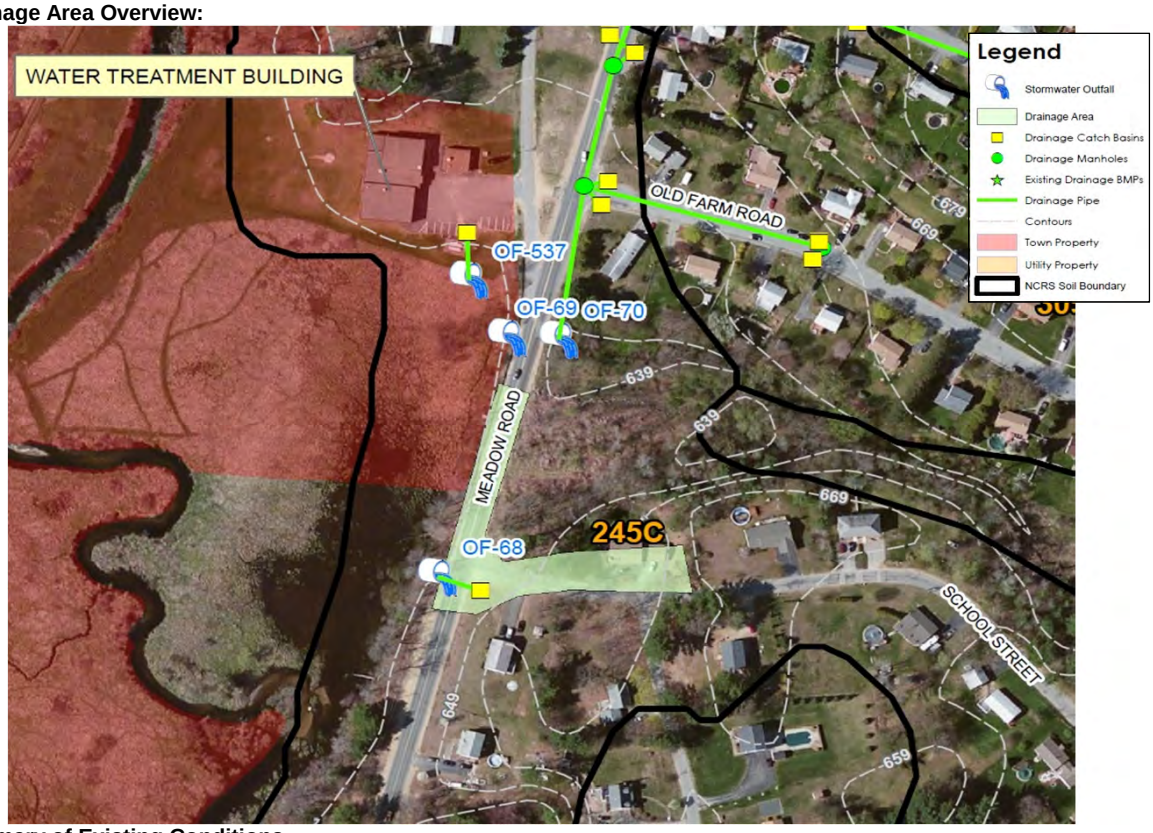
(4) 10 year storm runoff assumes a rainfall intensity of 4.5 inches per hour.

Discharge ID: OF-68

Location: Off Meadow Road near intersection with School Street

Soil Description:
245C Hinckley loamy sand,8-15 percent slopes.

Drainage Area Overview:



Summary of Existing Conditions:

NCRS Soil Identifier Code[1]	Approximate Depth to GWT[1]	Hydrologic Soil Group[1]	Pipe Material[2]	Pipe Diameter (inches)[2]	Discharge to[2]:	Drainage Area (Acres)	Surface Area Pervious (%)	Surface Area Impervious (%)	Impervious Runoff Volume[3] (ft^3)		Total Runoff Volume (ft^3)		Weighted Cn Value	10 yr Storm[4] (cfs)
									0.5"	1"	0.5"	1"		
245C	>80 inches	A	CM	15	Wetland	0.8	13%	87%	1,209	2,418	1,389	2,779	88	3

Structural BMP Options:

An area along Meadow Drive where the Hinckley soil is identified would be suibtable for the implementation of an infiltration system in the road since there is no Town land available. Excess runoff could be diverted to the existing stormwater system.

Onsite testing will be required to determine the feasibility of an infiltration system.

All proposed stormwater treatment systems will be designed to provide adequate pretreatment prior to the stormwater best management pratice.

Notes:

(1) Information obtained from NRCS soil web survey

(2) Information taken from Town outfall GIS database

(3) Impervious runoff includes approximate areas from rooftops, driveways, and roadways.

(4) 10 year storm runoff assumes a rainfall intensity of 4.5 inches per hour.

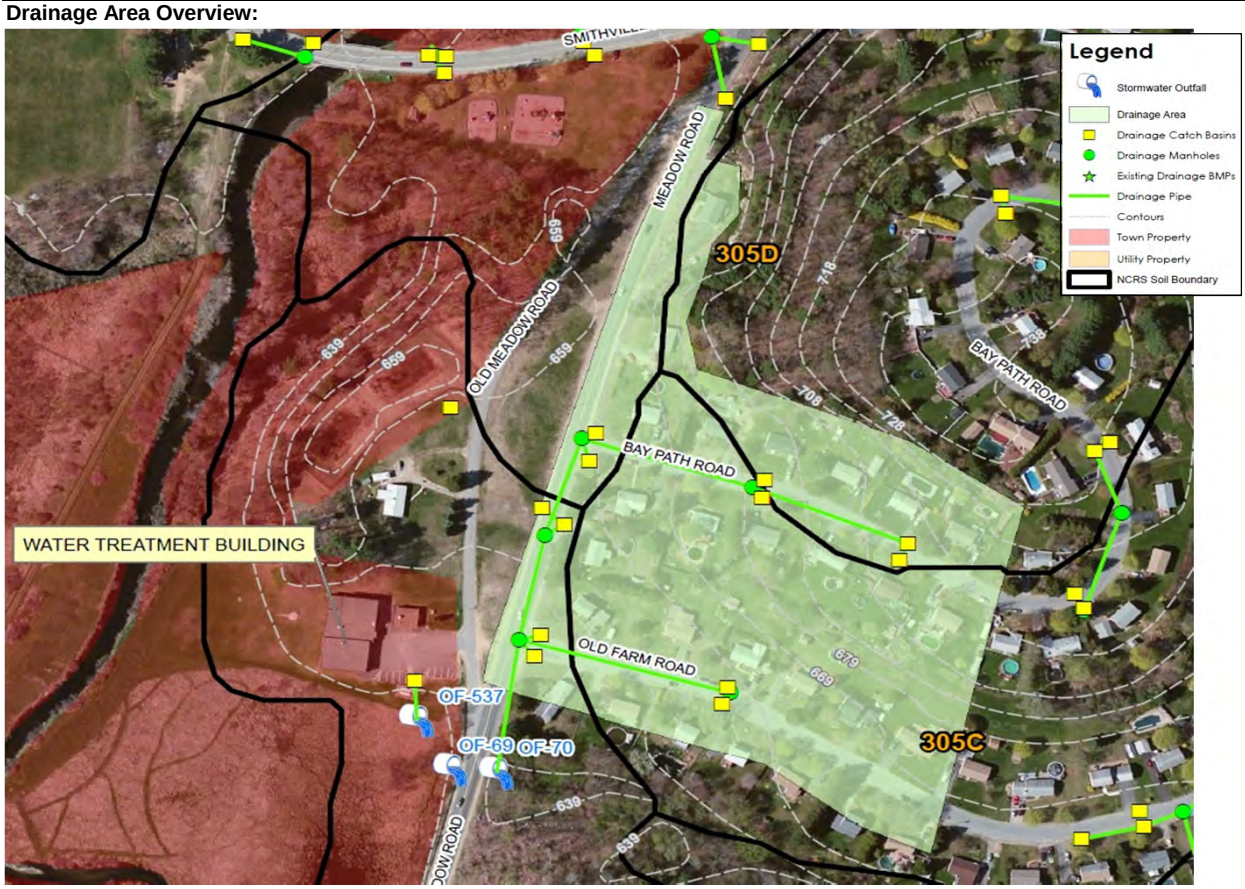
Discharge ID: OF-69, 70

Location: Off Meadow Road, south of the intersection of Meadow Road and Old Meadow Road

Soil Description:

The outfall is located in 245C Hinckley loamy sand,8-15 percent slopes which is suitable for infiltration. The drainage area is 305C mostly 305C Paxton fine sandy loam, 8 to 15 percent slopes with a small portion to the north of 305D and 245B soils.

Drainage Area Overview:



Summary of Existing Conditions:

NCRS Soil Identifier Code[1]	Approximate Depth to GWT[1]	Hydrologic Soil Group[1]	Outfall Pipe Material[2]	Outfall Pipe Diameter *(inches)*[2]	Discharge to[2]:	Drainage Area (Acres)	Surface Area Pervious (%)	Surface Area Impervious (%)	Impervious Runoff Volume[3] (ft^3)		Total Runoff Volume (ft^3)		Weighted Cn Value for Drainage Area	10 yr Storm[4] (cfs)
									0.5"	1"	0.5"	1"		
305C, D; 245B, C	18 to 37 inches; >80 inches	C; A	CM	12; 36	Stream; detention area	11.1	68%	32%	6,414	12,828	20,090	40,181	57	28

Structural BMP Options:

OF-69 borders Town owned property and is located in the 245C hinckley soil. A larger bioswale followed by an exfiltration system is proposed.

Could be sized provide treatment for drainage outfall OF-537 which handles flow from the Spencer Water Treatment Plan site.

Flow from OF-70 could be handled by a smaller infiltration system located in the roadway layout. Onsite testing will be required to determine the feasibility of an infiltration system in either location.

All proposed stormwater treatment systems will be designed to provide adequate pretreatment prior to the stormwater best management pratice.

Notes:

(1) Information obtained from NRCS soil web survey for drainage area

(2) Information taken from Town outfall GIS database

(3) Impervious runoff includes approximate areas from rooftops, driveways, and roadways.

(4) 10 year storm runoff assumes a rainfall intensity of 4.5 inches per hour.

Discharge ID: OF-71

Location: Off Meadow Road across from property #38

Soil Description:

Drainage area is mostly 245B Hinckley loamy sand, 3-8 percent slopes with an area of 307C to sw corner, and soils 1 and 3A to north east corner. OF-245B is located in soil 245B.

Drainage Area Overview:

Summary of Existing Conditions:

NCRS Soil Identifier Code[1]	Approximate Depth to GWT[1]	Hydrologic Soil Group[1]	Outfall Pipe Material[2]	Outfall Pipe Diameter (inches)[2]	Discharge to[2]:	Drainage Area (Acres)	Surface Area Pervious (%)	Surface Area Impervious (%)	Impervious Runoff Volume[3] (ft^3)		Total Runoff Volume (ft^3)		Weighted Cn Value	10 yr Storm[4] (cfs)
									0.5"	1"	0.5"	1"		
245B 307C 1 3A	>80 inches	A	CM	36	Wetland	5.0	78%	22%	2,041	4,081	9,152	18,305	52	12

Structural BMP Options:

OF-71 is located on Town property and is within the hinckley loamy sand soil type. A bioswale followed by exfiltration and overflow is proposed near outfall pipe location.

Onsite testing will be required to determine the feasibility of an infiltration system in either location.

All proposed stormwater treatment systems will be designed to provide adequate pretreatment prior to the stormwater best management pratice.

Notes:

(1) Information obtained from NRCS soil web survey

(2) Information taken from Town outfall GIS database

(3) Impervious runoff includes approximate areas from rooftops, driveways, and roadways.

(4) 10 year storm runoff assumes a rainfall intensity of 4.5 inches per hour.

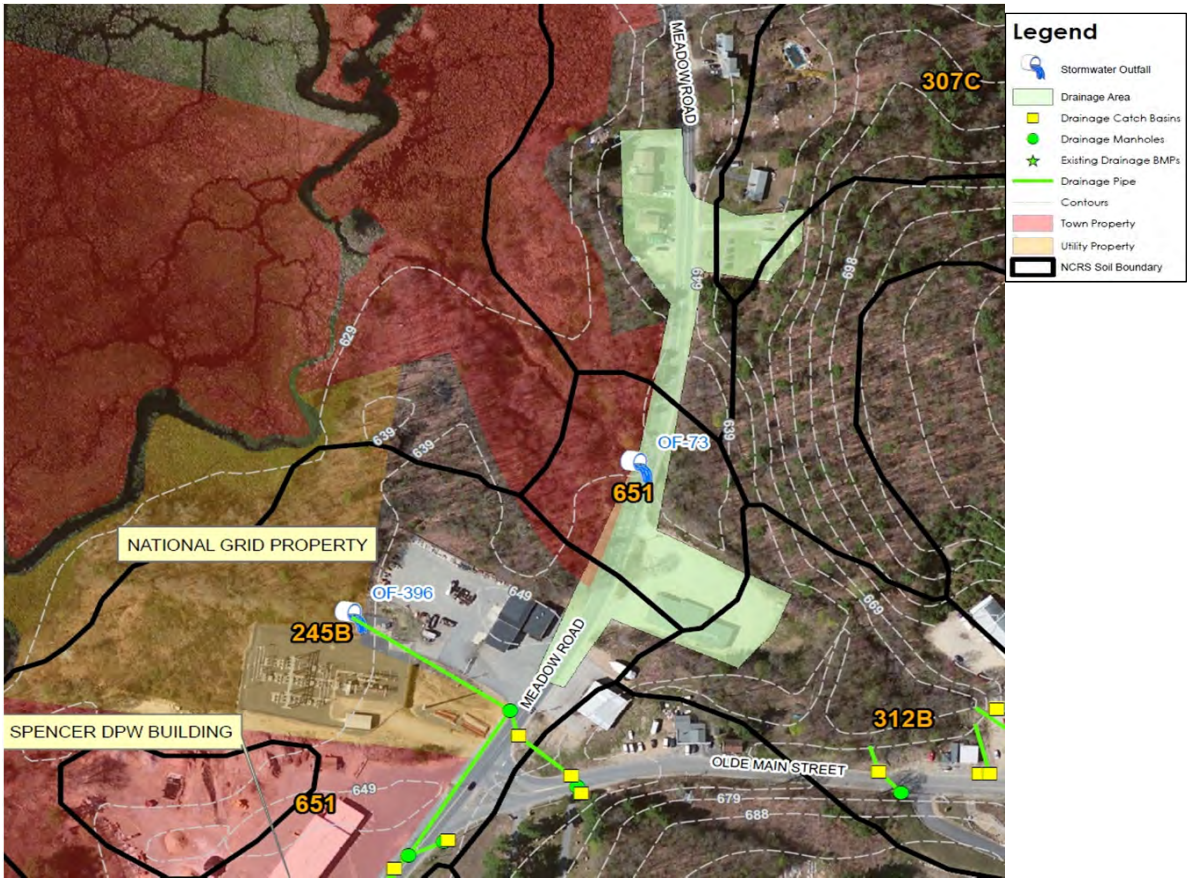
Discharge ID: OF-73

Location: Off Meadow Road north of property #9 Meadow Road

Soil Description:

Drainage area is mostly a combination of 651 Udorthents, smoothed soil to the south and at the outfall location as well as hinckley loamy sand to the north.

Drainage Area Overview:



Summary of Existing Conditions:

NCRS Soil Identifier Code[1]	Approximate Depth to GWT[1]	Hydrologic Soil Group[1]	Outfall Pipe Material[2]	Outfall Pipe Diameter (inches)[2]	Discharge to[2]:	Drainage Area (Acres)	Surface Area Pervious (%)	Surface Area Impervious (%)	Impervious Runoff Volume[3] (ft^3)		Total Runoff Volume (ft^3)		Weighted Cn Value	10 yr Storm[4] (cfs)
									0.5"	1"	0.5"	1"		
651 245B 307C	>80 inches	A	unk	unk	unk	3.0	39%	61%	3,350	6,699	5,503	11,007	73	10

Structural BMP Options:

A bioswale followed by exfiltration and an overflow in the Town property past OF-73 is proposed. Onsite soil testing will be required to determine the extent of the Udorthents soil and the native soil type. If the depth of the ground water table is close to the surface a subsurface gravel wetland will be proposed.

All proposed stormwater treatment systems will be designed to provide adequate pretreatment prior to the stormwater best management pratice.

Notes:

(1) Information obtained from NRCS soil web survey

(2) Information taken from Town outfall GIS database

(3) Impervious runoff includes approximate areas from rooftops, driveways, and roadways.

(4) 10 year storm runoff assumes a rainfall intensity of 4.5 inches per hour.

Discharge ID: OF-75

Location: Off Meadow Road near property #53, north of intersection with 4th Avenue

Soil Description:
The drainage area and outfall are located in 245C Hinckley loamy sand,8-15 percent slopes which is suitable for infiltration.

Drainage Area Overview:

Summary of Existing Conditions:

NCRS Soil Identifier Code[1]	Approximate Depth to GWT[1]	Hydrologic Soil Group[1]	Outfall Pipe Material[2]	Outfall Pipe Diameter (inches)[2]	Discharge to[2]:	Drainage Area (Acres)	Surface Area Pervious (%)	Surface Area Impervious (%)	Impervious Runoff Volume[3] (ft^3)		Total Runoff Volume (ft^3)		Weighted Cn Value	10 yr Storm[4] (cfs)
									0.5"	1"	0.5"	1"		
245C	>80 inches	A	CM	12	Wetland	1.3	49%	51%	1,232	2,464	2,433	4,865	68	4

Structural BMP Options:

Areas along Meadow Rd. with the hinckley soil identified would be suitable for implementation of infiltration pratices at multiple points along the roadway. These infiltration system can be installed within the Town road layout and will be sized to handle portions of the stormwater runoff. of the stormwater runoff. Onsite testing will be required to determine the feasibility of an infiltration system. All proposed stormwater treatment systems will be designed to provide adequate pretreatment prior to the stormwater best management pratice.

Notes:

(1) Information obtained from NRCS soil web survey

(2) Information taken from Town outfall GIS database

(3) Impervious runoff includes approximate areas from rooftops, driveways, and roadways.

(4) 10 year storm runoff assumes a rainfall intensity of 4.5 inches per hour.

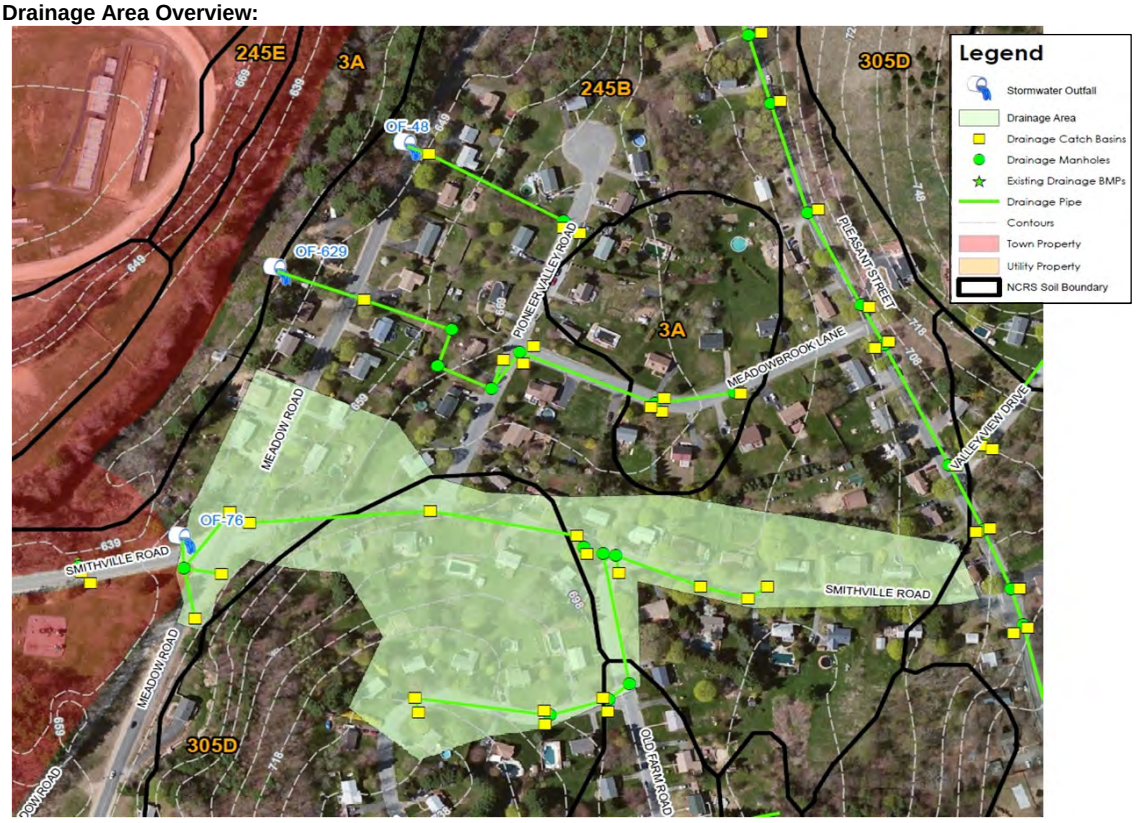
Discharge ID: OF-76

Location: Near intersection of Smithville Road and Meadow Road

Soil Description:

The outfall as well as the western and eastern portions of the drainage area are located in 245C hinckley loamy sand, 8-15 percent slopes. The middle half of the drainage area is located in 305C, D paxton fine sandy loam.

Drainage Area Overview:



Summary of Existing Conditions:

NCRS Soil Identifier Code[1]	Approximate Depth to GWT[1]	Hydrologic Soil Group[1]	Pipe Material[2]	Pipe Diameter (inches)[2]	Discharge to[2]:	Drainage Area (Acres)	Surface Area Pervious (%)	Surface Area Impervious (%)	Impervious Runoff Volume[3] (ft^3)		Total Runoff Volume (ft^3)		Weighted Cn Value	10 yr Storm[4] (cfs)
									0.5"	1"	0.5"	1"		
245B 305C,D	>80 inches	A	CM	12	Swale	11.6	70%	30%	6,273	12,545	21,110	42,220	56	29

Structural BMP Options:

Town property is near OF-76. A proposed bioswale on Town property followed by exfiltration and an overflow structure to the nearby land would be suitable for the hinckley loamy sand. Infiltration basins could be used alongside the roadway in areas to the west and east where the 245B soil is present. Onsite testing will be required to determine the feasibility of an infiltration system in either location to reduce the flow to OF-76.

All proposed stormwater treatment systems will be designed to provide adequate pretreatment prior to the stormwater best management pratice.

Notes:

(1) Information obtained from NRCS soil web survey

(2) Information taken from Town outfall GIS database

(3) Impervious runoff includes approximate areas from rooftops, driveways, and roadways.

(4) 10 year storm runoff assumes a rainfall intensity of 4.5 inches per hour.

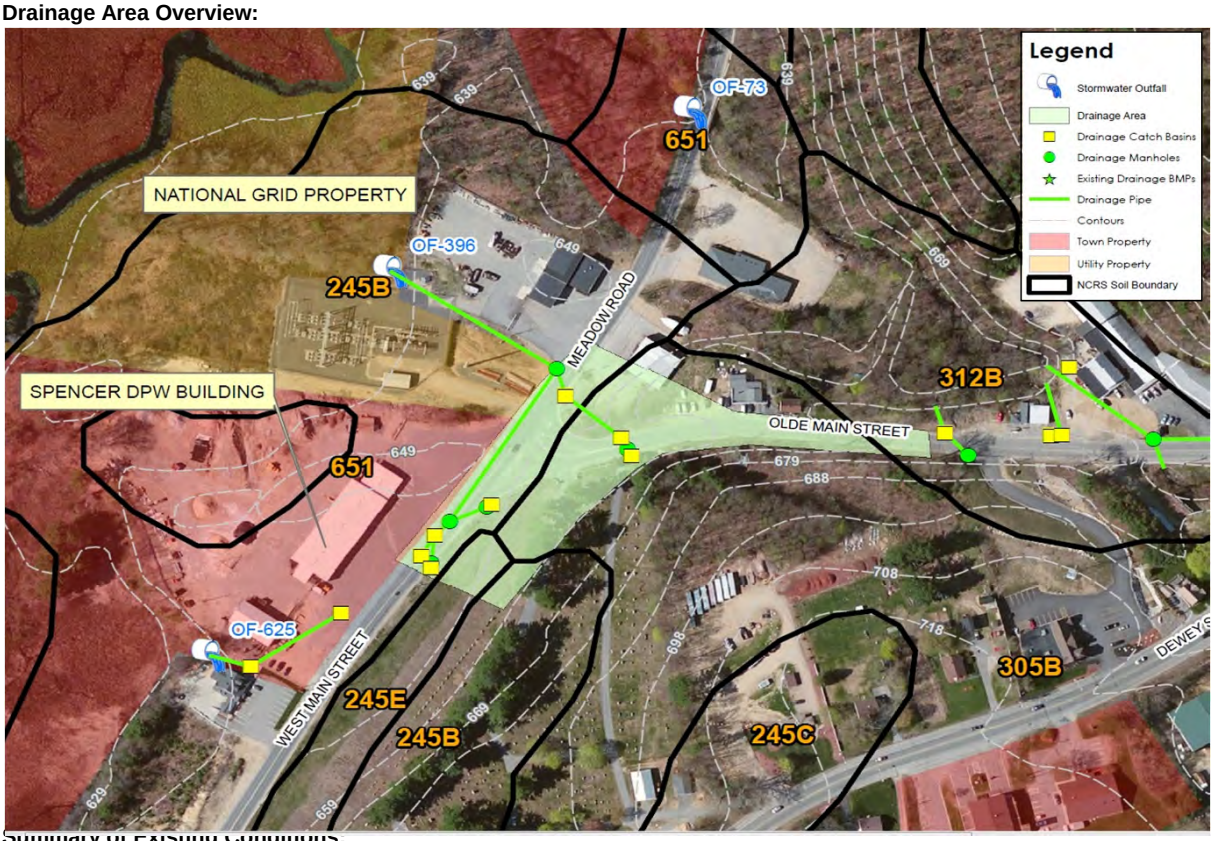
Discharge ID: OF-396

Location: Located to west, behind the National Grid property near intersection of Olde Main St and Meadow Rd

Soil Description:

The outfall and the western half of the drainage area shows 245B hinckley loamy sand with 3-8 percent slopes. The eastern half of the drainage area is mostly 305B with 312B at the eastern tip and 245B, E at the southern tip.

Drainage Area Overview:



Summary of Existing Conditions:

NCRS Soil Identifier Code[1]	Approximate Depth to GWT[1]	Hydrologic Soil Group[1]	Outfall Pipe Material[2]	Outfall Pipe Diameter (inches)[2]	Discharge to[2]:	Drainage Area (Acres)	Surface Area Pervious (%)	Surface Area Impervious (%)	Impervious Runoff Volume[3] (ft^3)		Total Runoff Volume (ft^3)		Weighted Cn Value	10 yr Storm[4] (cfs)
									0.5"	1"	0.5"	1"		
245B 245E 305B, 312B	>80 inches	A; A; C; C/D	unk	unk	unk	2.6	13%	87%	4,119	8,239	4,724	9,449	94	11

Structural BMP Options:

Option 1: The outfall is located on the National Grid property and has suitable soils and space assuming National Grid will allow the Town to construct a stormwater system on their property. Proposed would be the installation of a bioswale on the National Grid property followed by exfiltration and overflow structure. Onsite testing will be required to determine the feasibility of the soils and the depth to groundwater.

Option 2: The 245B-E soils along and adjacent to West Main St. are suitable for infiltration. If National Grid does not consent to the construction of a stormwater system on their property infiltration basins could be installed at multiple points along West Main St. within the suitable soils.

All proposed stormwater treatment systems will be designed to provide adequate pretreatment prior to the stormwater best management pratice.

Notes:

(1) Information obtained from NRCS soil web survey

(2) Information taken from Town outfall GIS database

(3) Impervious runoff includes approximate areas from rooftops, driveways, and roadways.

(4) 10 year storm runoff assumes a rainfall intensity of 4.5 inches per hour.

Discharge ID: OF-537

Location: OF-537 is located on the western side of the Water Treatment Plan property at 3 Old Meadow Rd.

Soil Description:
Drainage area and outfall location are within 245C hinckley loamy sand, 8-15 percent slopes.

Drainage Area Overview:

Summary of Existing Conditions:

NCRS Soil Identifier Code[1]	Approximate Depth to GWT[1]	Hydrologic Soil Group[1]	Outfall Pipe Material[2]	Outfall Pipe Diameter (inches)[2]	Discharge to[2]:	Drainage Area (Acres)	Surface Area Pervious (%)	Surface Area Impervious (%)	Impervious Runoff Volume[3] (ft^3)		Total Runoff Volume (ft^3)		Weighted Cn Value	10 yr Storm[4] (cfs)
									0.5"	1"	0.5"	1"		
245C	>80 inches	A	Concrete	48	River	1.2	44%	56%	1,170	2,340	2,094	4,189	85	4

Structural BMP Options:

Option 1: OF-537 is on Town owned property and is located within the 245C hinckley soil type. A bioswale followed by an exfiltration system is proposed and could be upsized to handle the flow from drainage outfalls OF-69 and OF-70 which handle flow from the adjacent drainage area. Overflow would discharge into the existing stormwater collection system.

Option 2: If the depth to the existing groundwater table is low a gravel wetland is proposed to handle the stormwater runoff from OF-537 and OF-69 / 70. gravel wetland with overflow routed to the existing stormwater system.

Onsite testing will be required to determine the feasibility of the proposed stormwater systems and depth to groundwater.

All proposed stormwater treatment systems will be designed to provide adequate pretreatment prior to the stormwater BMP.

Notes:

(1) Information obtained from NRCS soil web survey

(2) Information taken from Town outfall GIS database

(3) Impervious runoff includes approximate areas from rooftops, driveways, and roadways.

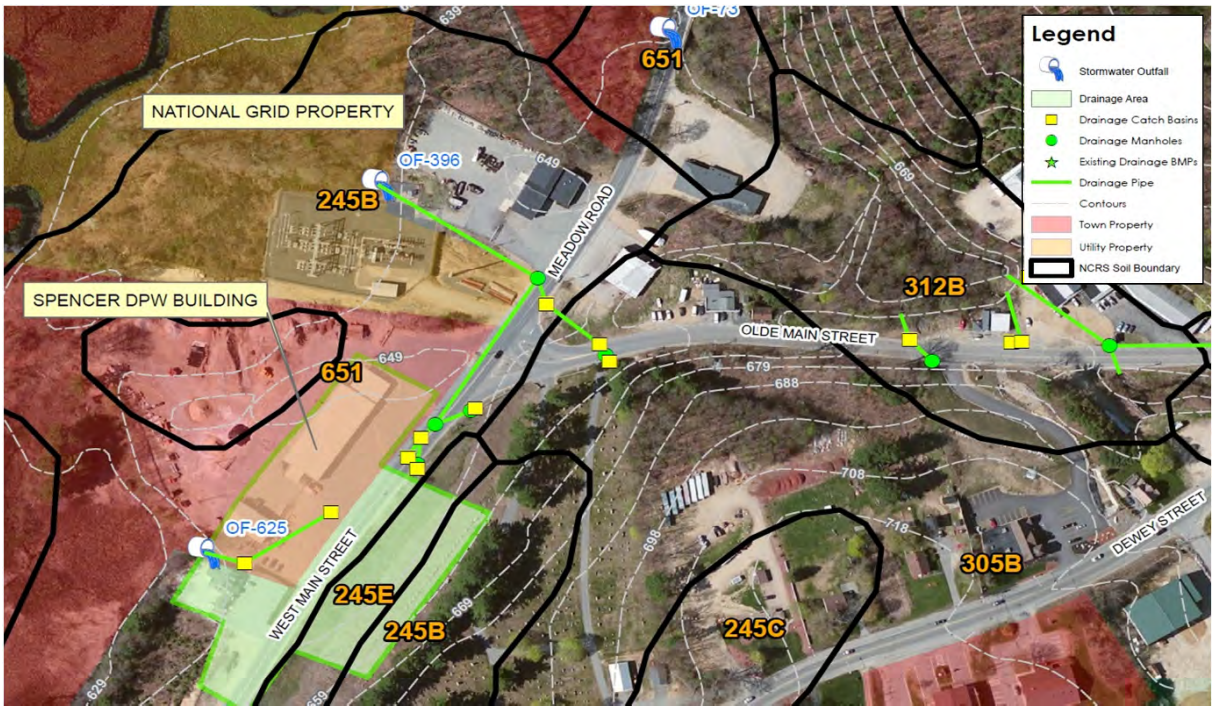
(4) 10 year storm runoff assumes a rainfall intensity of 4.5 inches per hour.

Discharge ID: OF-625

Location: Off West Main St to the south of the Spencer DPW Building at 157 Main St.

Soil Description:
245B and 245E hinckley loamy sand, 3-8 percent slopes and 15-35 percent slopes.

Drainage Area Overview:



Summary of Existing Conditions:

NCRS Soil Identifier Code[1]	Approximate Depth to GWT[1]	Hydrologic Soil Group[1]	Outfall Pipe Material[2]	Outfall Pipe Diameter (inches)[2]	Discharge to[2]:	Drainage Area (Acres)	Surface Area Pervious (%)	Surface Area Impervious (%)	Impervious Runoff Volume[3] (ft^3)		Total Runoff Volume (ft^3)		Weighted Cn Value	10 yr Storm[4] (cfs)
									0.5"	1"	0.5"	1"		
245B 245E	>80 inches	A	CM	6	Swale	3.6	62%	38%	2,467	4,935	6,578	13,156	79	13

Structural BMP Options:

The outfall is located on Town property and soils appear suitable. A bioswale followed by exfiltration and overflow into the existing stormwater system could be installed. Raingardens both to the south of the DPW building and centered in the parking lot could be installed to capture runoff from the parking area and the building rooftops. Onsite testing will be required to determine the feasibility of the soils and the depth to groundwater. All proposed stormwater treatment systems will be designed to provide adequate pretreatment prior to the stormwater BMP.

Notes:

(1) Information obtained from NRCS soil web survey

(2) Information taken from Town outfall GIS database

(3) Impervious runoff includes approximate areas from rooftops, driveways, and roadways.

(4) 10 year storm runoff assumes a rainfall intensity of 4.5 inches per hour.

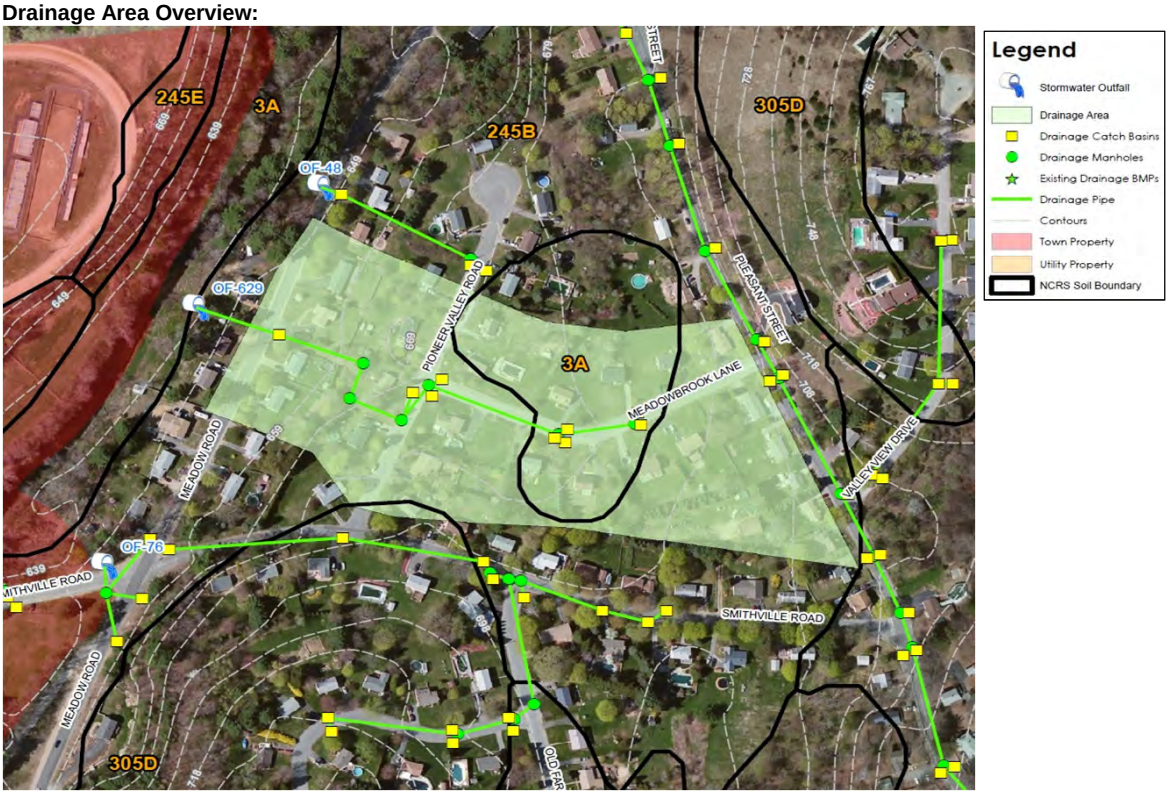
Discharge ID: OF-629

Location: Off Meadow Road near property #91.

Soil Description:

The drainage area is mostly 245B hinckley loamy sand, 3-8 percent slopes with a portion of soil 3A near the eastern half of the drainage area and at / west of the OF-629 location.

Drainage Area Overview:



Summary of Existing Conditions:

NCRS Soil Identifier Code[1]	Approximate Depth to GWT[1]	Hydrologic Soil Group[1]	Outfall Pipe Material[2]	Outfall Pipe Diameter (inches)[2]	Discharge to[2]:	Drainage Area (Acres)	Surface Area Pervious (%)	Surface Area Impervious (%)	Impervious Runoff Volume[3] (ft³)		Total Runoff Volume (ft³)		Weighted Cn Value	10 yr Storm[4] (cfs)
									0.5"	1"	0.5"	1"		
245B 3A	>80 inches	A	Concrete	48	River	12	81%	19%	4,239	8,478	22,080	44,159	71	39

Structural BMP Options:

Option 1: Along Pioneer Rd. and Meadow Rd. the hinckley soil identified would be suitable for infiltration pratices at multiple points along the existing stormwater drainage system and within the road layout to capture the first flush and to release excess overflow into the existing stormwater system.

Onsite soil testing will be required to determine the feasibility of infiltration in the proposed locations.

Option 2: If there is a stormwater drainage easement for the drainage pipe leading to OF-629 outlet a bioretention system could be installed at the outlet to handle the runoff. Onsite testing and further investigation into the stormwater drainage easement will be required.

All proposed stormwater treatment systems will be designed to provide adequate pretreatment prior to the stormwater BMP.

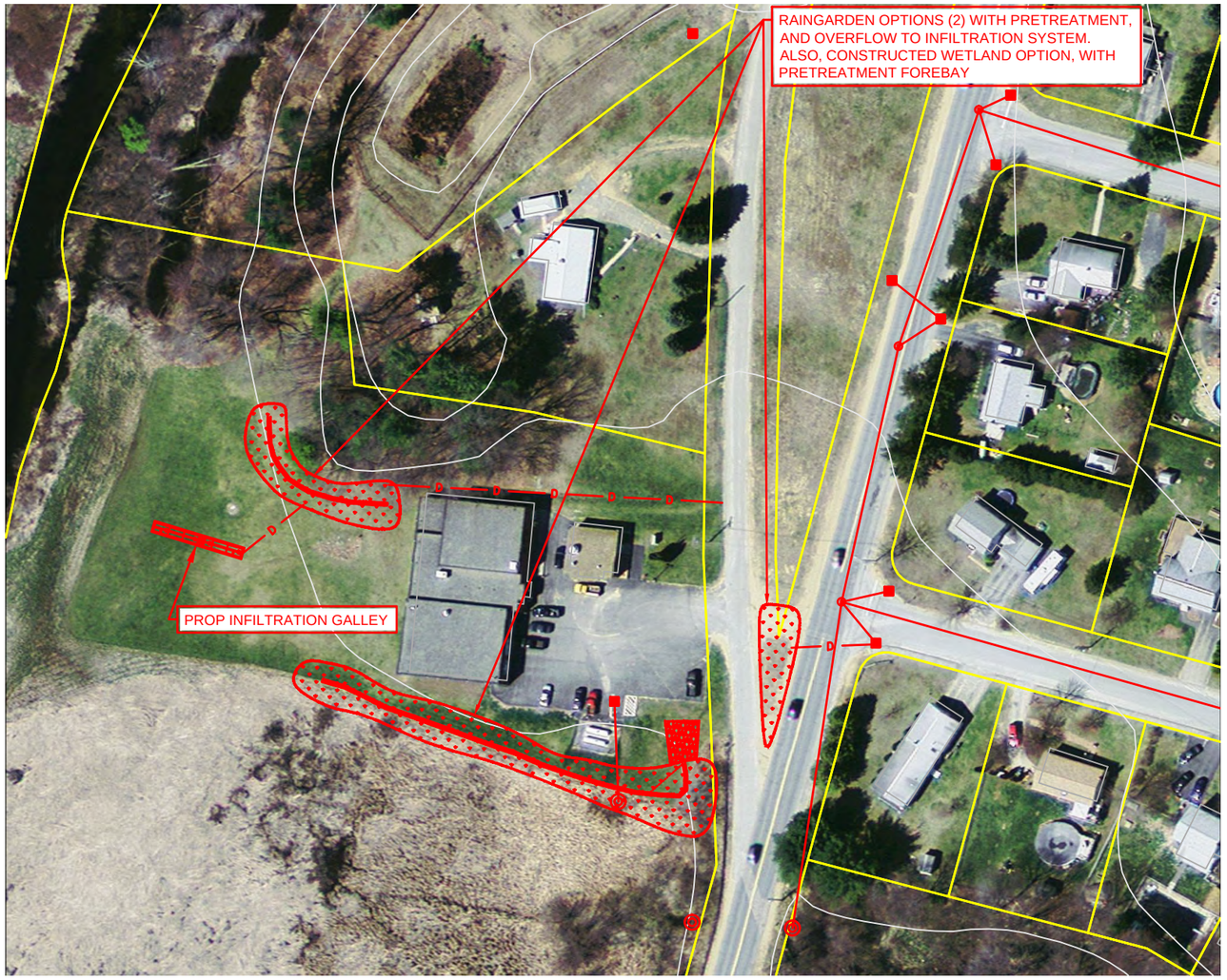
Notes:

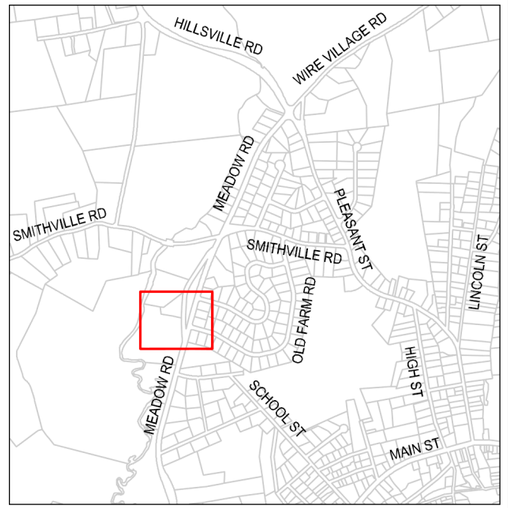
(1) Information obtained from NRCS soil web survey

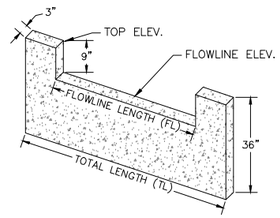
(2) Information taken from Town outfall GIS database

(3) Impervious runoff includes approximate areas from rooftops, driveways, and roadways.

(4) 10 year storm runoff assumes a rainfall intensity of 4.5 inches per hour.



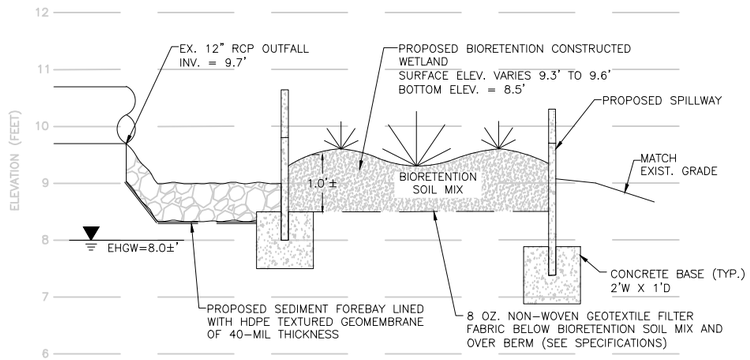




SPILLWAY LOCATION	TL	FL	FLOWLINE ELEV.
FOREBAY #6B OVERFLOW	10'	6'	ELEV.=9.2'
BMP #6B OVERFLOW	8'	3'	ELEV.=9.0'

PRECAST CONCRETE LEVEL SPREADER DETAIL

NOT TO SCALE



CROSS SECTION OF CONSTRUCTED WETLAND

NOT TO SCALE (ELEVATIONS SHOWN ARE RELATIVE AND NOT SITE SPECIFIC)

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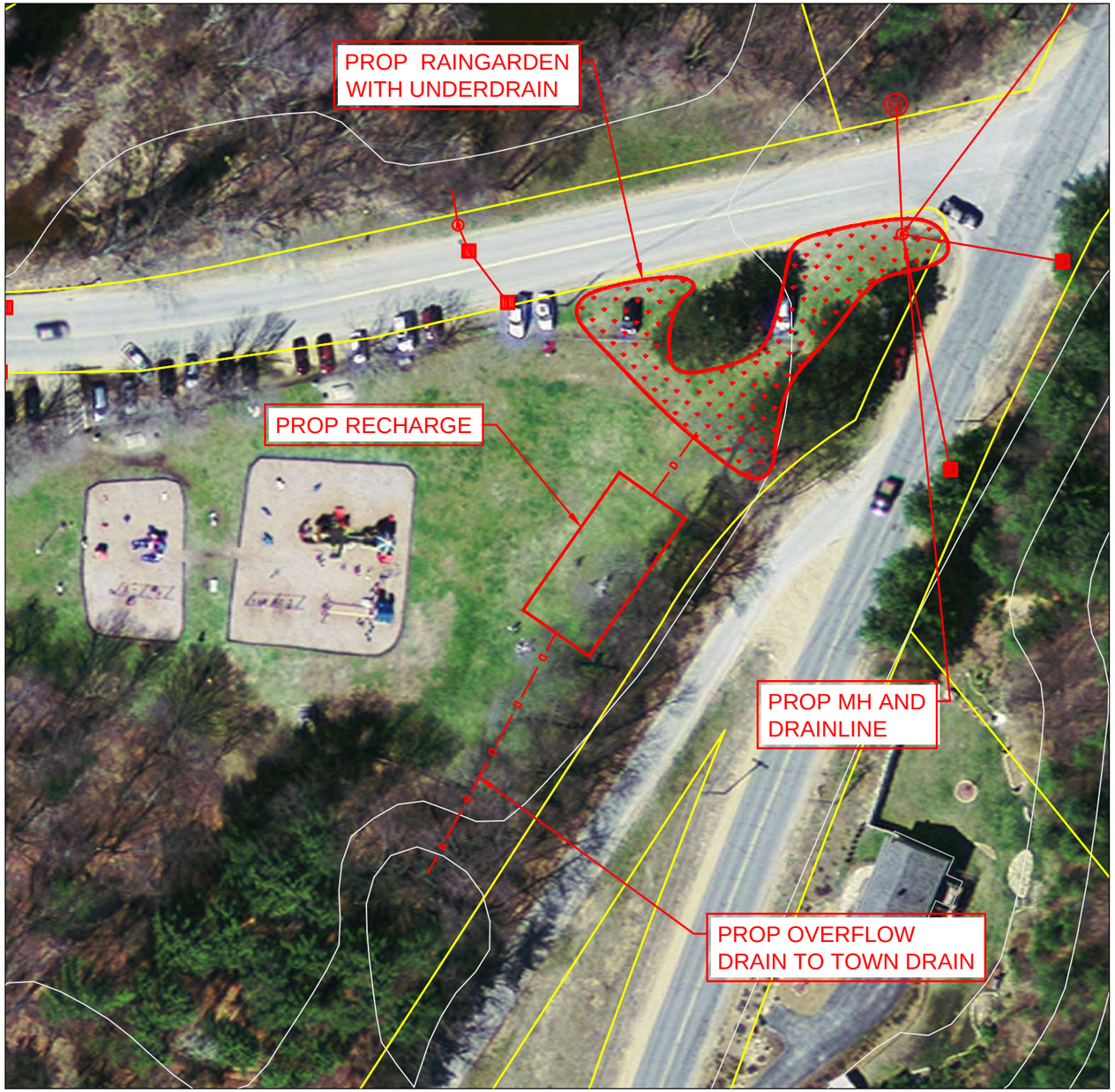
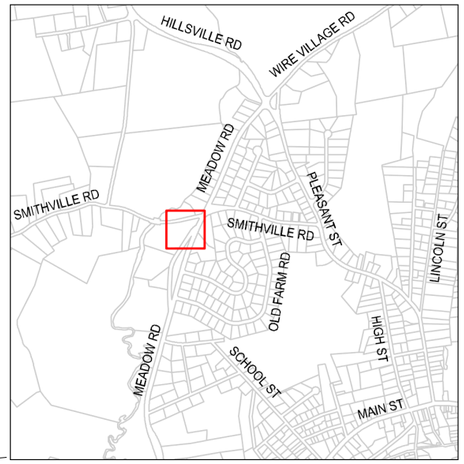
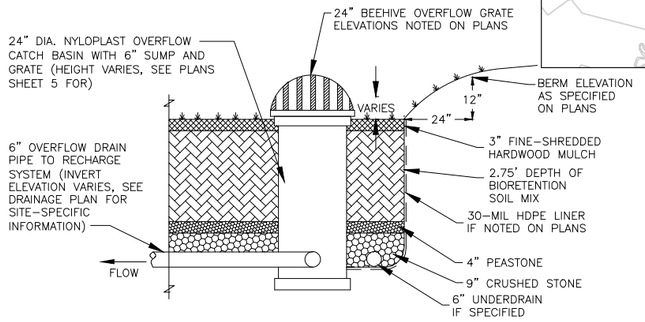
Figure No.

Title

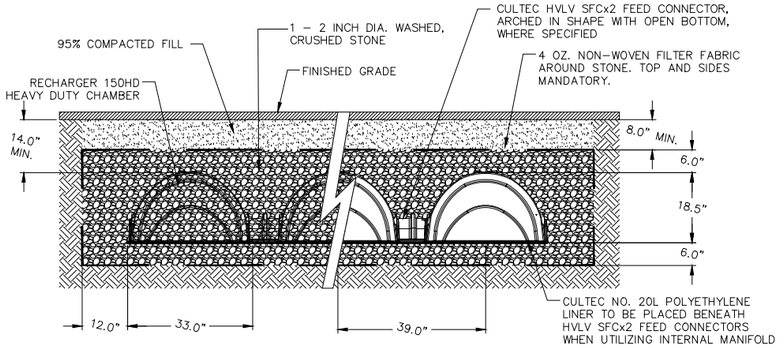
CONCEPTUAL DESIGN 3
WATER TREATMENT PLANT







OVERFLOW DETAIL FOR RAIN GARDENS
NOT TO SCALE



GENERAL NOTES

- RECHARGER 150HD BY CULTEC, INC. OF BROOKFIELD, CT.
- STORAGE PROVIDED = 4.89 CF/FT PER DESIGN UNIT.
- REFER TO CULTEC, INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
- USE RECHARGER 150HD HEAVY DUTY FOR TRAFFIC AND/OR H-25 APPLICATIONS.
- ALL RECHARGER 150HD HEAVY-DUTY UNITS ARE MARKED WITH A COLORED STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER.
- ALL RECHARGER 150HD CHAMBERS MUST BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

CULTEC RECHARGER 150HD TYPICAL CROSS-SECTION
NOT TO SCALE

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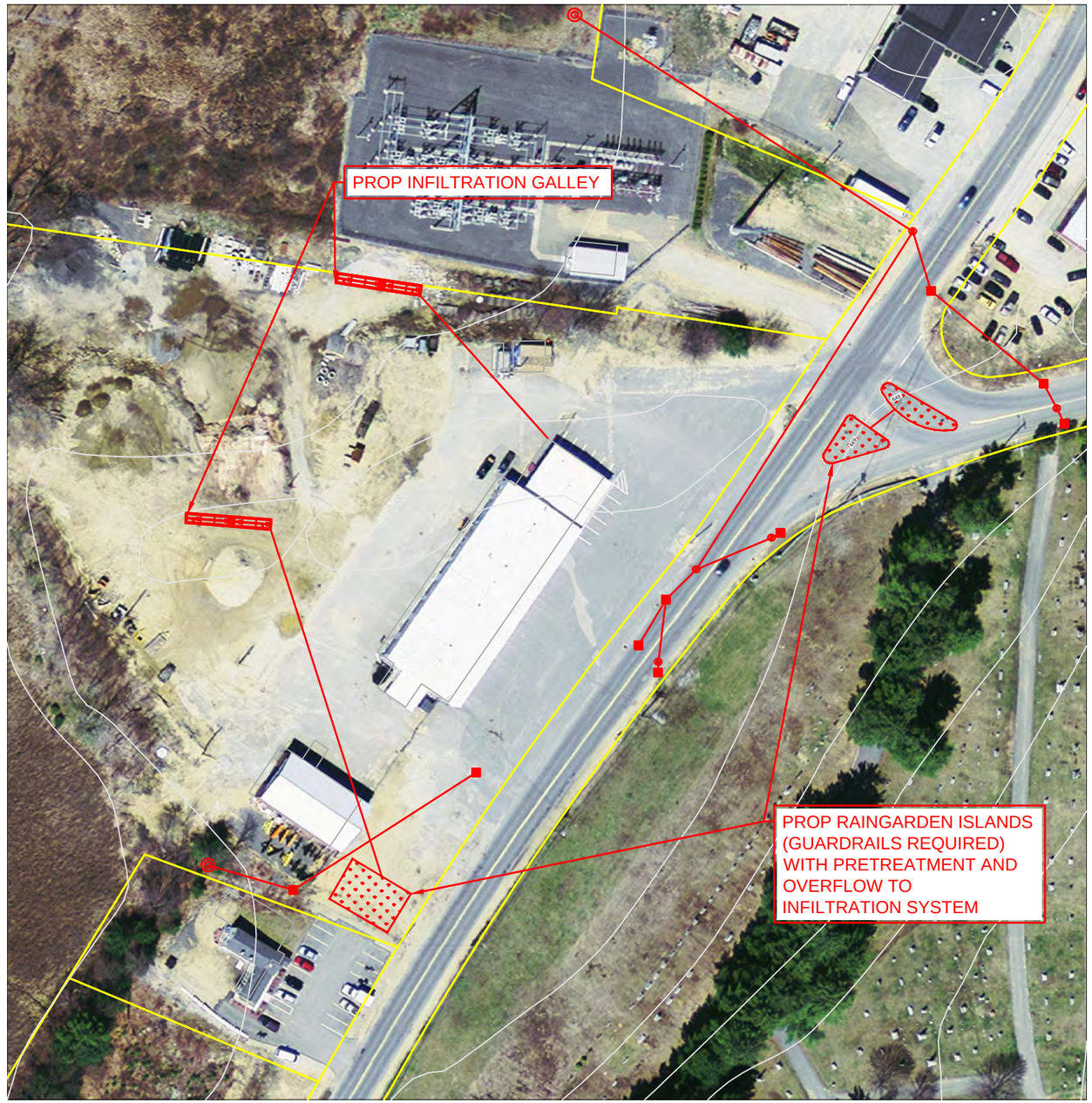
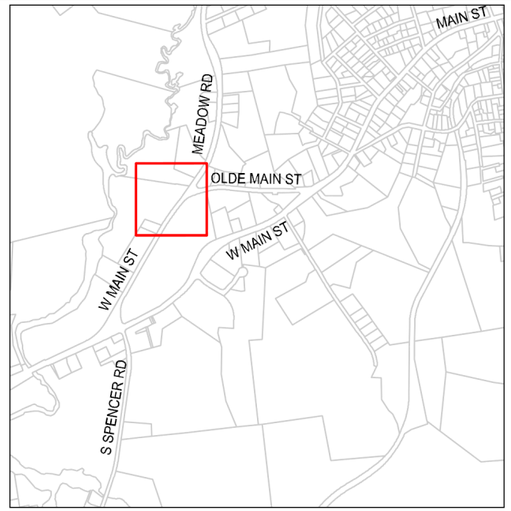
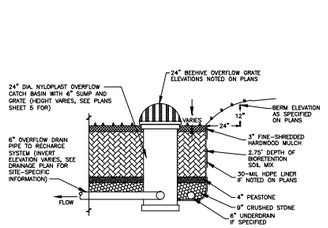
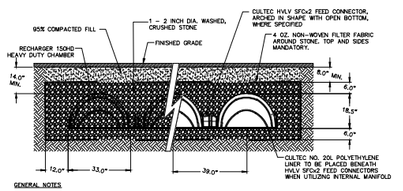
Title
CONCEPTUAL DESIGN 4
POWDER MILL PARK







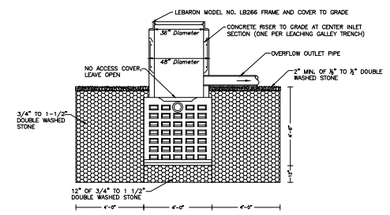
OVERFLOW DETAIL FOR RAIN GARDENS
NOT TO SCALE



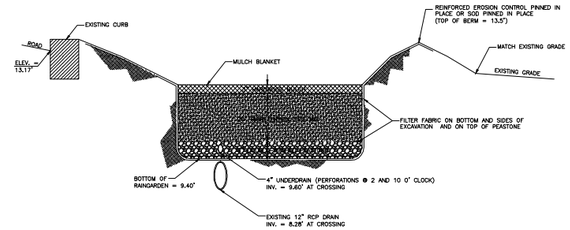
GENERAL NOTES

- RECHARGER 150HD BY CULTEC, INC. OF BROOKFIELD, CT.
- STORAGE PROVIDED = 4.89 CF/FT PER DESIGN UNIT.
- REFER TO CULTEC, INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
- USE RECHARGER 150HD HEAVY DUTY FOR TRAFFIC AND/OR H-25 APPLICATIONS.
- ALL RECHARGER 150HD HEAVY-DUTY UNITS ARE MARKED WITH A COLORED STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER.
- ALL RECHARGER 150HD CHAMBERS MUST BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

CULTEC RECHARGER 150HD TYPICAL CROSS-SECTION
NOT TO SCALE



TYPICAL CONCRETE CHAMBER CROSS-SECTION
NOT TO SCALE



RAIN GARDEN DETAIL
NOT TO SCALE

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CONCEPTUAL DESIGN 5
DPW PARKING LOT