

STEWARDSHIP PLAN FOR BIRCH PLAIN CREEK AREAS

Prepared and Adopted by

TOWN OF GROTON CONSERVATION COMMISSION

DECEMBER 2022

Town of Groton Conservation Commission

Established under the provisions of Connecticut General Statute 7-131a and Groton Town Charter Section 7.5 and the Town of Groton Guidebook to Agencies, Authorities, Boards, Commissions, Committees and Councils including the Authorized ABCs

Larry Dunn, Chairman
Brae Rafferty, Vice Chairman
Michele Fitzpatrick, Secretary
Kristin Distante, Member
Thomas Olson, Member
Anne Schmidt, Member

1. INTRODUCTION

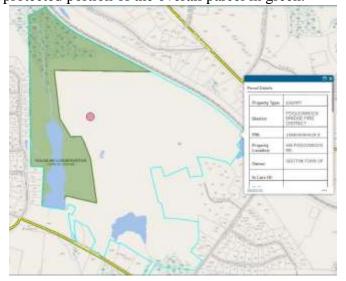
A. PROPERTY DESCRIPTION

The Birch Plain Creek area properties consist of three parcels PIN 169809050131E, 168808984028E, and 168812856575E located along Birch Plain Creek from the Amtrak rail line on the north, crossing Poquonnock Road south towards the Sparkle Lake Conservation Area and easterly from the Groton City line. It is comprised of 43.0, 38.8, and 30.1 parcels respectively, including mature woodlands and wetland features formed by Birch Plain Creek which runs through the center of the properties, and feeding streams, which then flow into Baker Cove to the south. None of the parcels have obvious boundary markings. Appendix A provides the detailed deed descriptions and survey maps of the parcels.

B. OWNERSHIP & LAND USE HISTORY

PIN 169809050131E was obtained by the Town of Groton from Peter, John and Janet Johl by a Superior Court directed Certificate of Taking executed in August 1975 under the redevelopment provisions of Connecticut General Statues Section 8-129 Chapter 130, with compensation provided. The associated plan is entitled "Land at Birch Plain Creek Groton CT to be acquired for open space".

PIN 168808984028E – at 500 Poquonnock Road this 123.23 acre parcel is primarily the Catherine Kolnaski Magnet School, but within this parcel is a 38.8-acre section established as a special conservation area by easement to the State of Connecticut. This unique designation was established by the Connecticut Attorney General Release of Dedication of 19 December 2018 (Groton Town Deeds Book 1208 Pg 270-274) which established a Conservation and Public Recreation Easement for this parcel. This parcel abuts the Johl property to the north, across Poquonnock Road, and is located in the Town of Groton, abutting the City of Groton boundary line which is to the west. Additionally, the City of Groton owns an open space parcel PIN 168808795182E to the west of this parcel. The conservation area was initially named the Kolnaski Conservation Area, but was subsequently renamed the Sassacus Nature Preserve. The below map shows the protected portion of the overall parcel in green.



PIN 168812856575E – abuts the Johl property to the west with 30.1 acres; was obtained by the town in 1989 from Peter Johl by a foreclosure action. The land has remained vacant and undeveloped since it was taken, and is located in the City of Groton.

C. CURRENT LAND USES

The parcels have remained vacant since the town took ownership, and have not seen any improvements. In the summer of 2019, it was noted that an encampment of homeless families was using a portion of the property abutting the Faith Lutheran Church, and continues to be occupied and monitored by the Groton Town Police and Social Services Department (see photo below).



D. RESTRICTIONS

There are currently no restrictions or postings on the parcels.

E. NATURAL SYSTEM VALUE

The Town of Groton Open Space Conservation Plan established a methodology for determining an economic model for valuation of various properties from a conservation perspective. A key element of the model is the Natural System Value (NSV) of a parcel. The NSV provides quantification of the value to the town based on open space natural benefits such as: water filtration and impact on water supply, water quality, disturbance mitigation, biological control, wildlife habitat, soil formation/retention, and pollination benefits. The relative NSV between parcels provides insight into how the Stewardship plan is designed and what restrictions should be employed.

This parcel was evaluated in 2021 with a comparative NSV valuation of \$4,271/acre, which is in the upper quarter of all Groton open space parcels. *The reader is cautioned that this NSV valuation is not comparable to any land valuation, assessment, appraisal or real estate sale pricing.*

F. BASEMAP



2. STEWARDSHIP GOALS

A. IDENTIFICATION OF RESOURCE CONCERNS

There is evidence of significant dumping near the tree line at the Electric Boat Parking access point (noted in the picture below), while the rest of the parcel appears to be undisturbed natural woodland and wetlands.





B. TOWN GOALS

This open space is being maintained in its natural state to support the town's overall carbon sequestration bank and watershed protection of Birch Plain Creek. The Eastern Connecticut Conservation District has established an action plan for improving the protection of Bakers Cove and the Birch Plain Creek watershed, which this property is a significant component.

C. SOCIAL STAKEHOLDER ANALYSIS

There is an on-going effort by local conservation groups to establish a hiking path, around the Sassacus Nature Preserve (see photo below), and then continue east on the Kolnaski Magnet School property and south along Birch Plain Creek to the Sparkle Lake Conservation Area, as part of a proposed Groton Cross Town Greenway; currently, no easements or major improvements have been made to support this effort. The remainder of the parcel is contiguous with the natural woodland abutting the property to the west, as noted in the below photos.







Additionally, the Eastern Connecticut Conservation District has coordinated establishment of the Baker Cover Watershed Committee which involves members from the City and Town of Groton Public Works, Groton Utilities, State of Connecticut Department of Energy and Environmental Protection (DEEP), Groton New London Airport, Groton Shellfish Commission, Groton Conservation Commission and Groton Open Space Association. The purpose of the group is found at their website https://conservect.org/eastern/watershed-committees/ and as summarized below:

Baker Cove Watershed Committee was formed with the purpose of reducing fecal coliform The bacteria in Groton's Baker Cove, which is impaired for direct shellfish consumption.

The committee is comprised of interested parties who wish to take local control over improving water quality in Baker Cove. Ideally, the committee will include members from the general public, school groups, local government and non-profit organizations, commerce and industry and other local neighborhood groups and Associations.

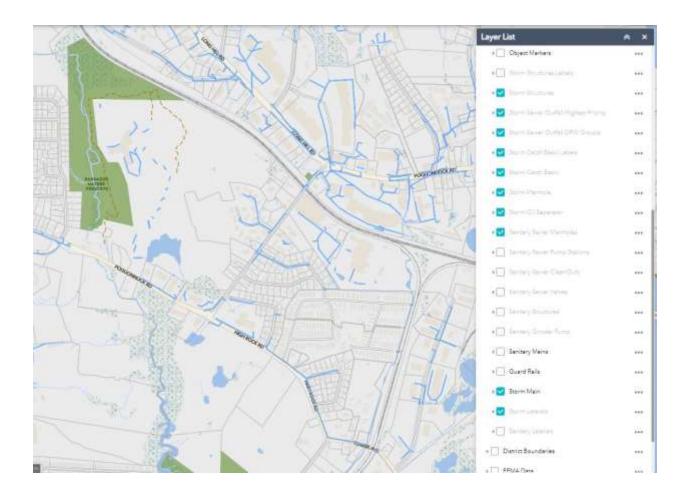
The committee will assist in improving water quality in Baker Cove by implementing recommendations from the Baker Cove Abbreviated Watershed-Based Plan (Table 7) Baker Cove WBP (https://portal.ct.gov/DEEP/Watershed-Watershed-Management-Plans-and-Documents#bakercove) to reduce or eliminate non-point sources of pollution. Some activities may include planning rain gardens and riparian buffers, conducting shoreline clean-ups and holding workshops, as well as spearheading continued efforts to control non-migratory Canada Geese populations.

Additionally, Groton Public Works Department is monitoring the 500 Poquonnock Road property in the area abutting 560 Poquonnock Road for any leaching of an old asphalt scrap pile, and similarly at 456 Poquonnock Road for any leaching of an old coal and ash pile. Both of these sites require no further remediation and are only in a watch status for potential missed contaminates, as noted by the Public Works Director at the 28 September 2021 Town Council Committee of the Whole Meeting (https://www.youtube.com/watch?v=4YaCIo3qaUo video point 3:46:10) and the Connecticut DEEP List of Contaminated or Potentially Contaminated Sites in Connecticut (https://portal.ct.gov/DEEP/Remediation--Site-Clean-Up/List-of-Contaminated-or-Potentially-Contaminated-Sites-in-Connecticut).

D. LANDSCAPE SCALE CONSERVATION

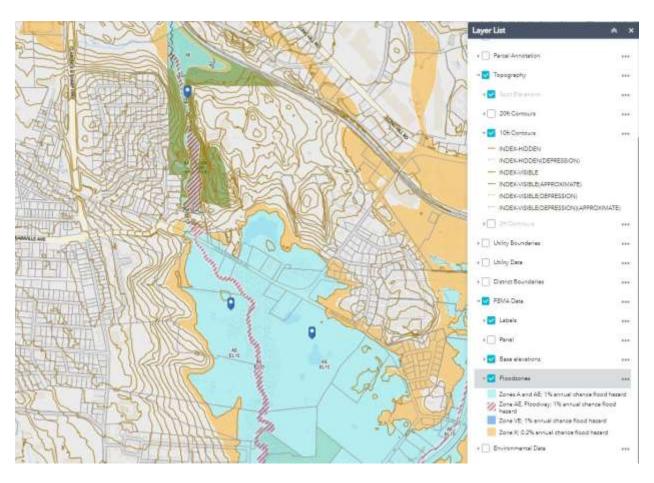
As this property has significant habitat and resiliency attributes, it is being maintained in its natural state primarily for its woodland carbon sequestration value, and protecting wetlands feeding into the Birch Plain Creek and Baker Cove watershed.

It is also noted that under the Town of Groton Municipal Separate Storm Sewer System (MS4) program general permit, there are some storm water structures and outfalls on the parcel boundaries, as noted in the below map, that require monitoring on a minimum five-year basis to ensure the integrity of stormwater runoff controls preventing damage to the local ecosystem.



3. EXISTING NATURAL RESOURCE CONDITIONS

A. HYDROLOGY & TOPOGRAPHY MAP

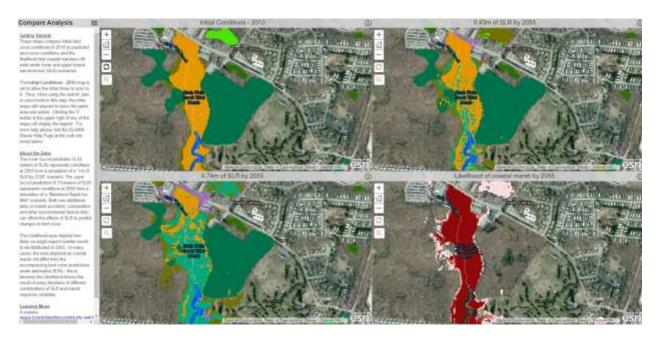


B. HYDROLOGY & TOPOGRAPHY SUMMARY

The Sassacus Nature Preserve contains steep landscapes to the north of Poquonnock Road, while the Johl properties to the south of the road a both essentially level FEMA Flood Zone AE areas, with an up-slopping to the west.

The below analysis, conducted by SLAMM, shows there is a high likelihood of coastal marsh development over a significant portion of the property in the next 30 years due to sea-level rise, as noted by the red and pink areas in the lower right-hand side map.

Compare Analysis for Birch Plain Creek south of Poquonnock Road:



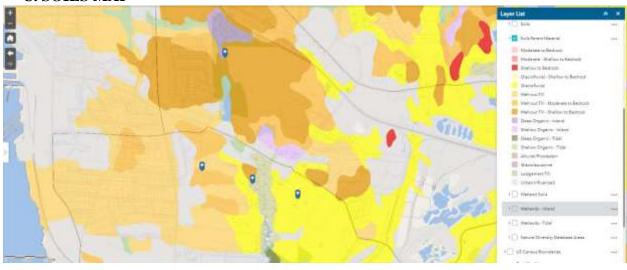
Additional information on anticipatory actions that can be taken is available at the following websites:

https://longislandsoundstudy.net/research-monitoring/slamm/

http://cteco.uconn.edu/projects/slamm/index.htm#slamm

https://clear.uconn.edu/webinars/CLEARseries19/slr-along-coast.htm

C. SOILS MAP



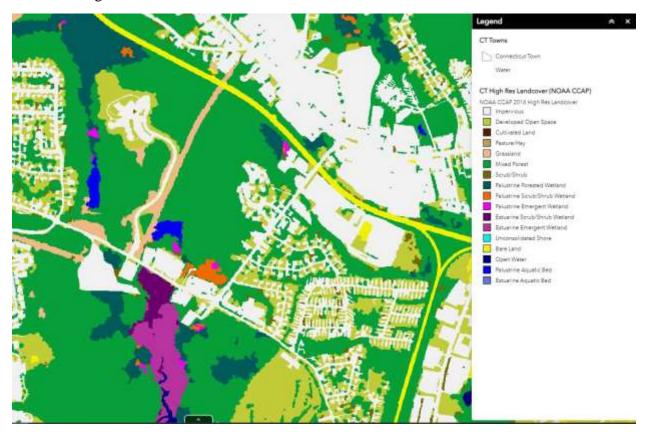
D. SOILS SUMMARY

Over the four parcels are a number of typical glacial soils.

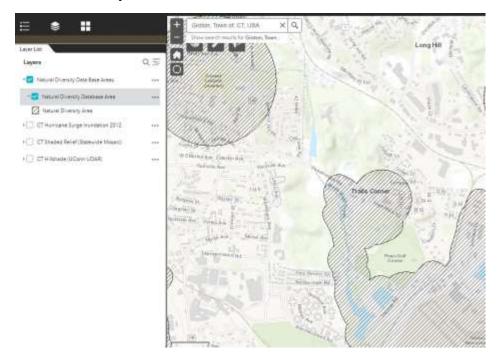
E. STANDS MAP

Three maps are readily available that demonstrate the overall conservation value of the property.

Land Coverage:



Natural Diversity Database Areas:



Resilient Land Map:



F. STANDS SUMMARIES

As this property has substantial habitat and resiliency attributes along Birch Plain Creek. It is being maintained primarily for its woodland carbon sequestration value, and wetland support of the Baker Cove watershed.

G. HISTORICAL AERIAL PHOTOGRAPH MAPS

1934 Aerial:



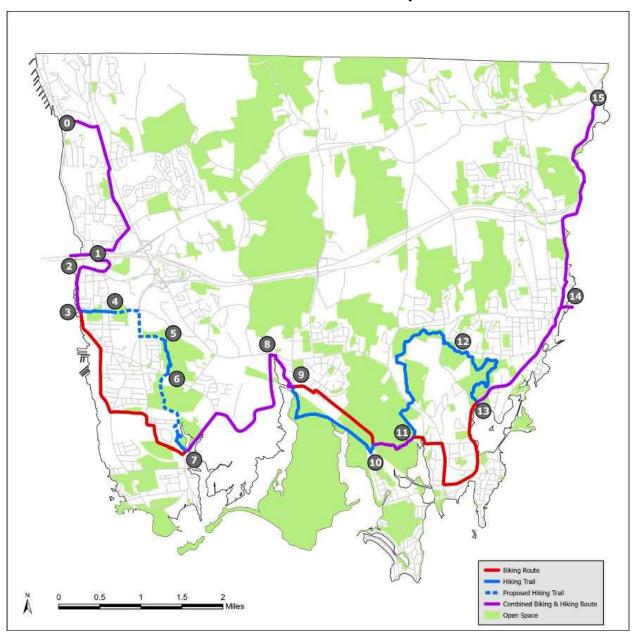
1990 Aerial:



H. HISTORICAL & RECREATIONAL SUMMARY

There are no known historical sites, ruins, cemeteries or reactional points of interest on this parcel. Some stone wall sections do remain on the property. A hiking trail on the nature preserve was established in 2020, and can form a backbone for a western cross town hiking trail and is designated as part of the Groton Cross Town Greenway approved in 2022. See map below.

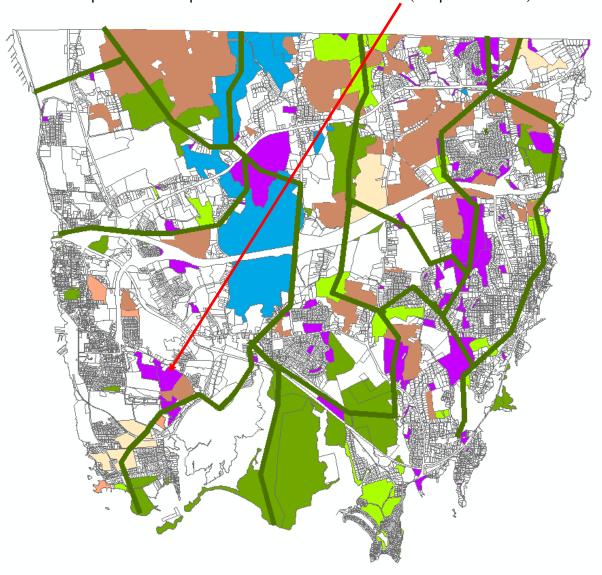
Groton Cross Town Greenway



4. MANAGEMENT RECOMMENDATIONS

The following improvements are to be considered:

- Continue to support the Baker Cove Watershed Committee
- General appearance/clean up
- Boundary markings
- Signage
- Public use encouragement only on established trails
- Establish Cross Town Greenway walking trail to connect with the Sparkle Lake Conservation Area
- Invasive plant controls
- Wildlife habitat enhancements
- Incorporation of the parcel into the Western Greenbelt (see picture below)



A. 10 YEAR MANAGEMENT TIMELINE

Year	Location	Activity	Permits/Notices	Potential Partners	Project Lead	Status
On- going	All Parcels	Support Baker Cove Watershed Base Plan Actions	TBD	Baker Cove Working Group	ECCD	
2023	Public Entrances	Area Cleanup	NA		Volunteer Coordinator	
2024	All Parcels	Mark and verify boundary	NA		Volunteer Coordinator	
2024	All Parcels	Survey area residents for their interests in improving open space usage, signage needs and additional expansion of the Cross Town Greenway hiking trail to Sparkle Lake	NA	Parks & Rec	Volunteer Coordinator	
2023	All Parcels	Survey area for signage needs to discourage dumping and contamination	NA	Public Works	Volunteer Coordinator	
2023	All Parcels	Survey area for any needed wetland invasives (i.e. phragmites) control efforts	NA	Public Works	Volunteer Coordinator	
On- going	Full Property	Conduct MS-4 Audit utilizing Appendix B	NA	Public Works	Volunteer Coordinator	
2024	All Parcels	Consider further investigation of sealevel rise impact on each parcel	NA	Long Island Sound Study	Volunteer Coordinator	

B. SPECIAL CONTACTS AND FUNDING

The Eastern Connecticut Conservation District in coordination with CT DEEP has obtained funding to support various monitoring and cleanup efforts for the entire Baker Cove Watershed, and the Conservation Commission participates in regular meetings of the Watershed Committee.

5. EVALUATION

As these open space area parcels are a fully mature natural woodland and wetland, retaining this character for supporting the town's carbon sequestration bank and Birch Plain Creek/Baker Cove Watershed protection are the primary goals for measurement of success for this property. The primary evaluation method is accomplishment of the Bake Cove Base Plan Action Plan.

6. REVISION HISTORY

November 2021 – updated for name change, climate change impacts, environmental monitoring update and additional management plan actions.

October 2022 – added boundary information appendix, Cross Town Greenway and MS-4 survey information and audit appendix.

December 2022 – deleted parcel 0 Litton Avenue from the management plan, based upon the Town Council Committee of the Whole Referral 2022-712, on 15 Nov 2022, NOT to record the parcel as protected open space.

Appendix A

Boundary Information for Parcels

The Birch Plain Creek area properties consist of three parcels PIN 169809050131E, 168808984028E, and 168812856575E located along Birch Plain Creek. Survey maps for the parcels have not been obtained nor generated for some the parcels, with the exception of the Sassacus Conservation area, and 0 Litton Ave; thus only the individual deed descriptions of each parcel are available, as provided below.

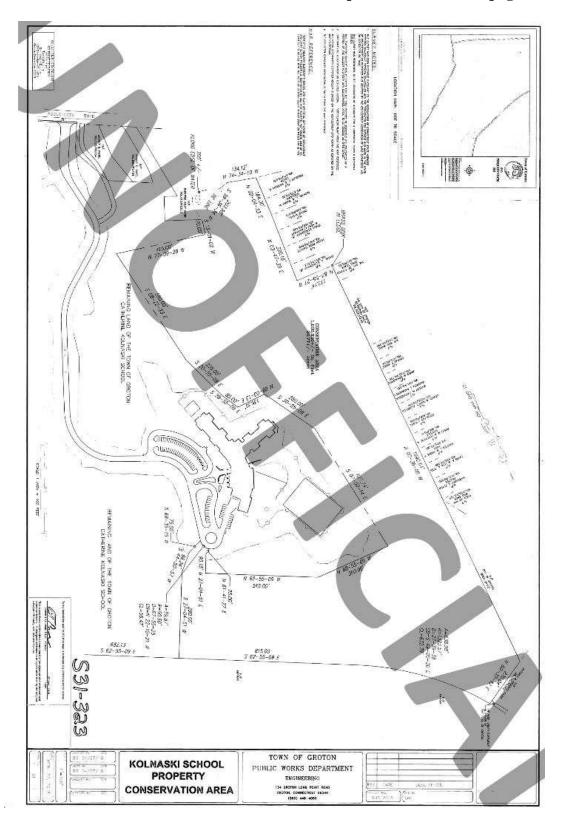
PIN 169809050131E (Johl East)

Beginning at a point on the Road, at the northwest corner herein described parcel of land, and the northeest corner of land of the City of Groton: thence S 58° 26' side of Poquonnock Road thence S 37° .87 fact slong land or cy and Sidney Axelrod to an iron pine: NE 225.07 feet slong lead of thence S 67° Sidney Axelrod to an iron pipa-Lawrence H. Bentley thence S 37° W 199.92 feet along land of cla Atlanuic District the Lutheran Church-Missouri Synod to an iron pir 28" E 253.24 feet along land of said to an iron pipe; 13' 14" E 394.33 feet along land of said Lutheran Ch 36" E 55.59 feet along the south side of Poquent 12" E 596.40 feet along the south side of High Rock Road to a point of curvature; thence southeasterly 359.98 feet along a curve having a radius of 2,750.00 feet, a contral angle of 7° 30' 00",

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and having its center lying to the southwest, along the
  south side of High Rock Road to a point of tangency;
          thence S 54° 24' 12" E 11.95 feet along the south side
 of High Rock Road;
thence S 30° 29' 29" W 35.73 feet along a stone wall,
 bounded easterly by High Rock Road and land of Theodore R.
 Ackley and John E. Ackley;
thence S 32° 49' 41" W 50.99 feet along the stone wall;
thence S 29° 43' 12" W 84.61 feet along the stone wall;
thence S 31° 32' 25" W 54.96 feet along the stone wall;
thence S .43° 38' 53" W 59.71 feet along the line of an
 old fence:
         thence S 43° 03' 16" W 92.83 feet along the line of an
 old fence;
         thence S 43° 33' 11" W 168.32 feet along the the of an
 old fence;
          thence S 33° 12' 54" W 38.26 feet along
                                                                                                    ne of an
 old fence;
         thence S 29° 10' 23" W 41.19 feet along
                                                                                               line of an
 old fence;
         thence S 28° 16' 48" W 115.61 feet
                                                                              ong the line of an
 old fence;
         thence S 29° 36' 17" W 95.16 feet al
                                                                                 ong the line of an
 old fence;
         thence S 34° 45' 08" W 198.14
                                                                             along the line of an
 old fence:
        thence S 31° 12' 48" W 59.2 feet along the line of an
thence S 28° 30' 31" W 120 feet, more or less, along the line of an old fence to the ancheast corner of the herein described parcel of land, the land preceding courses being bounded by land of Theodore. Ackley and John E. Ackley; thence westerly 715 feet, more or less, along the line of an old fence to Birch Plain Creek, bounded southerly by land of Theodore R. Adaly and John E. Ackley; thence northerly Along the east side of Birch Plain Creek and along the center line of Birch Plain Creek and flong the original center line of Birch Plain Creek 2,550 feet, more or less, to the land of the City of Groton, bounded westerly by Birch Plain Creek, remaining land of Peter R. Johl, John H. Johl and Janet P. Oll Weissman and land of General Dynamics Corporation:
 old fence:
Corporation: 18' 18' E 267 feet, more or less, along land of the City of Groton to the point of beginning.
Together with a small island measuring approximately 30 feet by 45 feet near the southwest corner of the herein
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Containing altogether 1,851,300 square feet, more or less, or approximately 42.50 acres.

PIN 168808984028E (Sassacus Conservation Area) Map Recorded Book 31 page 323



PIN 168812856575E (Johl West)

Beginning at the north corner of the herein conveyed parcel of land at the intersection of the southwest line of Poquonnock Road and the southeast line of Rainville Avenue; thence southwesterly 222 feet, more or less, along Rainville Avenue; thence southwesterly 170 feet, more or less, along land of Irene M. Mundell; thence southeasterly 265 feet, more or less, along land of Groton Town House Apartments and land of Sidney Axelrod, Michael A. Rakosky and Ronald Rakosky; thence southwesterly 420 feet, more or less, along land of said Axelrod & Rakosky's to a wall corner; thence southeasterly 189.6 feet, more or less, along land of said Axelrod & Rakosky's to a wall corner; thence southeasterly 374.5 feet, more or less, along land of said Axelrod & Rakosky's and a stone wall; thence southeasterly 126 feet, more or less, along land of the Town of Groton and a stone wall; thence southerly 323 feet, more or less, along land of the Town of Groton and a stone wall; thence southeasterly 80 feet, more or less, along land of the Town of Groton and a stone wall; thence easterly 1160 feet, more or less, along land of the Town of Groton marked in part by a stone wall; thence northerly 900 feet, more or less, along the west bank of Birch Plain Creek; thence northeasterly, northerly and northwesterly 350 feet, more or less, along the center line of Birch Plain Creek and bounded generally easterly by land of the Town of Groton; thence westerly 890 feet, more or less, along land of General Dynamics Corporation; thence northerly 720 feet, more or less, along land of General Dynamics Corporation; thence westerly and northwesterly 340 feet, more or less, along Poquonnock Road to the point of beginning.

Containing 29.5 acres, more or less.

Municipal Separate Storm Sewer Systems (MS4) Dedicated Open Space Audit Guide

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ASS Maintenance Activities - Records Review	9	No N/A comments	2	2
s there a pain, tracking system, and documentation in place for maintenance activities?	0	П	а	О
for there maintenance Standard operating procedures (SOPs), or a Stewardship Plan in place that is effective?	0	п	п	σ.
s there a Connecticut regulated waste or hazardous waste management plan (if applicable)?	0	.0	О	
Has the facility Starmwater Polistion Prevention Plan (SWPPP) been reviewed and updated (if appraisable)?	0		а	10
Are there in field inspection sheets (if applicable)?	0		D	o
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or managements source to expense to submarks. Sometime training conducted and documented is stormwater management and/or pollution prevention training conducted and documented.	+	1		()
for applicable seasonal employees and volunteer Stewards? Is stormwater management and/or pollution prevention training conducted and documented	-	D (0 0	0/ 0
or applicable new employees, and volunteer Stewards?	3		1	J.
is stormwater management and/or pollution prevention training required for applicable	0	D	D	D
Contractor employees, it applicable;	+	+		
Does site stormwater drain into an onsite water body?			D	
is the stormwater drainage system (statch basins, manholes, putfails, and conveyance siping) proposity maintained and in good condition?		ם	П	D
Are stormwater treatment structures (ratio basin inserts, hydrodynamic separators, etc.)			П	п
is catch basin cleaning tracked and documented?	0		0	0
he beer an inventory of UD systems (ex. pervious pavement, detention basins, subsurface nofitration systems, etc.)?	0		0	D
Are inspections of LID systems executed and documented?	0	0	П	a.
Ve LID systems properly maintained?	Н		П	П
Pevennent Operation and Maintenance	-	-	0	1
s perchent sweeping documented?		-	0	3 0
B yard waste (leaves, grass critically, etc.) properly managed and disposed of ? An except sont of decision activities?				1 0
Perticide Harbidge and Settliner Spelication and Management	+	+		3
Are there program management plans in place? Application Plan? Integrated Plant Management (IPM) Program?			D	(3)
Do all applicators have state certification?			0	0
Are applications of posticides, herbicides, and fortilizers tracked and documented?			D	
Have applicators also been trained in stermwater pollution prevention?	0		п	П
is there proper storage for all materials? Are there any signs of leaks or solls?			D	O
Are Best Management Practices (BMPs) during application in place and documented?	0		D	Π.

Are lights posted encouraging cowners to pickup after pets? Are lights posted encouraging cowners to pickup after pets? Are pet waster receptacter/Chapp aveallable and maintained? Do water four icongregate onsite? We any messure taken to deter their presence? Do water four icongregate onsite? We any messure taken to deter their presence? Do outdoor trach and recycle bins have covers? Are dumpsters kept covered? Are dumpsters water the stormwaster of an ange system? Confirmed and Material Storage Are there are yes one of each year and disposed of? Are there are yes one of each year and disposed and storage Are there are yes one deals which each and storage personal and Material Storage Are there are yes one deals which each and storage personal and Material Storage Are there are yes one deals which each and storage here are yes one deals and storage and an area of a size of a	
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Are spill kits readily available where significant quantities of chemicas are stored?	
b secondary containment provided for 110% of oil storage containers and liquid forms of pool	0
Are there floor drains near any of the various chemicals stored onstant if so, does the floor \Box \Box \Box	0
Are Porta Jone properly managed during high wind events to prevent from tipping over?	0
Wastewater Discharge Permits and BMPs	
is fine suppriess for discharge water contained, lested, and properly disposed of?	
Does boiler blawdown discharge to the sanitary sewer? If so, is it permitted?	0 0
Are with descenaed at permitted Societies?	0
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is there a collete is kitchen onsite? If so, is the facility registered under the CT DEPP General — — — — — — — — — — — — — — — — — — —	0
to there a greace removal system present (i.e. a greace interceptor or an automatic greace \(\) \(\text	0
Additional Observations:	