

**VILLAGE OF HUNTINGTON BAY**

**MS4 PERMIT # NYR200A29**

**STORMWATER MANAGEMENT PLAN (SWMP)**

**2017 ANNUAL UPDATE**

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DRAFT REPORT

## **1.0 Street Maintenance**

### **General:**

The Village of Huntington Bay owns and maintains approximately 4.9 miles of roadways. The Village roadways are tributary to subsurface leaching basins and catch basins. These basins serve the dual purpose of flood control and protection of water quality. If the stormwater system is not properly maintained the capacity of the system to control street flooding will be directly impacted. In addition the system will not function as a water quality treatment device. Each basin receives first flush runoff from the streets that would ultimately discharge to the Harbor or Bay if the basins are not functional. First flush runoff contains up to 90% of the pollutant loading from a drainage basin. The basins capture sediments, oils, greases, nutrients and bacteria.

The locations of existing catch basins and drainage areas in the Village of Huntington Bay are depicted on Sheets 1 -5 Tributary Analysis Plans dated 7/15/99 last updated 6/15/11 prepared by Vollmuth & Brush.

Catch basins and leaching pools are impacted by excessive buildup of sediment and materials which clog catch basins and ultimately decrease the leaching rates of connected structures. It is therefore important that the connected catch basins be inspected on an annual basis and serviced to remove accumulated debris. In addition the connected leaching pools require periodic maintenance inspections to remove accumulated sediments.

### **1.1 Implementation:**

#### **1.1 Catch Basin Inspections:**

The Village of Huntington Bay will maintain an inspection record of all Village owned and/or maintained catch basins. For the purposes of this implementation, leaching pools with grate inlets will also be considered “catch basins”. The inspection will occur annually during the months of March and April.

##### **1.1.1 Inspection Method:**

Each catch basin will be visually inspected for standing water or excessive floatable material. The depth below grade of standing water will be recorded on the inspection form. This inspection will also report the presence of petroleum sheen in the basin.

Each catch basin will be measured to determine accumulation of sediment. The depth below grade of the sediment will be recorded. In addition the depth below the outlet will be recorded.

All catch basins which have sediment accumulations of more than 1/3 of the free depth between the outlet and bottom of the catch basin will be scheduled for maintenance cleaning. Maintenance cleaning should occur within 90 days of the inspection period.

Catch basins which are inspected and determined to have a significant floating layer of petroleum will be cleaned using an absorbent pad removed and disposed of prior to the next rainfall event.

Leaching catch basins/pools which are holding water more than 48 hours measured to be 1/2 of the effective depth of the leaching pool/basin will be scheduled for reinspection after (7) days of dry weather. If the standing water persists in the basin after the (7) day period it will be scheduled for a maintenance cleaning.

Maintenance of catch basins will include vacuum removal of accumulated sediment and to reestablish leaching. If the vacuum procedure removes more than 1 ft of sand below the bottom of the pool it will be replaced with clean sand to maintain the structure.

The Village is responsible for the inspection and maintenance of the following stormwater inlets and associated systems:

		<b>Inventory Label</b>
Village ROWs:	76 inlets	V#
Wincoma Association ROWs:	14 inlets	VW#
Baycrest Association ROWs:	14 inlets	VB#
Nathan Hale Association ROWs:	2 inlets	VN#
Bay Hills Association ROWs:	23 inlets	VBH#
Site Plan Required:	2 inlets	VA#

A total of 131 stormwater inlets will be inspected and maintained by the Village. This is a significant increase in responsibility. As a result of the decision by Village Trustees the number of basins municipally maintained increases from 69 to 131.

A total of 181 catch basin inlets were inventory located and labeled. The remaining inlets are privately maintained.

**1.1.2 Reporting Method:**

The catch basin inspection will be reported on the attached data sheet. The Village will maintain a record of maintenance on each catch basin within the Village maintained collection system. The maintenance record will include quantity of material removed from each basin.

**1.1.3 2016 Reporting Period Goal**

During the 2016/2017 reporting period the Village will monitor the status of the markers to confirm that they are properly adhering to the basins. In addition the updated Catch Basin Inventory will be available in Village Hall. A copy of the map and inventory list will be posted on the web site. The residents of the Village will be notified via web site posting that reporting of flooding, illicit discharges or catch basin structural issues to the Village administration should include the Label # data to improve response to the issue from Village staff.

During the 2016 reporting period the Village will utilize the inventory listing, map and label data to closely monitor contractor cleaning and billing for work completed.

The Village Trustees have agreed to move forward with the installation of additional FABCO inlet filters to pretreat stormwater prior to Harbor Discharge. During the 2016 reporting period the (4) inlets at the intersection of Kanes Lane and East Shore Road will be retrofitted with filters designed to reduce Pathogen discharges to the Harbor.

**1.1.4 2016 Progress**

A total of 181 Inlet labels were applied in 2015 and monitored in 2016. The labels have been useful in identification of basins requiring maintenance. In addition, they are potentially useful if a resident wants to report a illicit discharge or a functional problem at a basin. The label adherence has been good at the basins with less than 5% damaged/missing.

The Village Highway Trustee inspected 131 inlets and directed the maintenance contractor to service 81 inlets (62% of the basins required service cleaning). A total of 67 yds (80 tons) of material was removed and disposed of by the contractor at 110 Sand, Farmingdale NY.

The village installed (3) FABCO filter inserts in east shore road inlets which discharge to the Harbor. The inserts are specifically designed to reduce coliform bacteria discharge to the Harbor. The basins were serviced twice during the 2016 reporting period by FABCO. FABCO reports the following:

Date	V1 (lbs)	V2 (lbs)	V3 (lbs)	Filter Status
4/1/16	0	0	0	New Cartridges installed
7/27/16	22	53	11	No change
11/1/16	25	45	9	No change
4/19/17	18	42	13	All Cartridges replaced

A total of 238 lbs of material were removed from the insert locations between 4/1/16 – 4/19/17 period. The cartridges which are designed to remove pathogens were replaced

because they had reach capacity. The installations are reducing contaminate discharge to the Harbor.

The Kanes Lane intersection filter inserts were not installed during the 2016 Reporting Period. Investigation of the intersection piping and inlets resulted in a determination that the Inlet V-4 would require complete removal and replacement. The Inlet is a not a standard size and shape and FABCO is unable to provide a functional insert. The location will require the installation of a double catch basin inlet. The estimated cost of the program therefore increased significantly to a value of approximately \$35,000. The Village Budget during the 2016 reporting period did not include sufficient money for the retrofit. The budget for retrofit work was impacted in 2016 by the cost of responding to the NYSDEC request for additional survey data of inlet and piping which was not anticipated.

### **1.1.5 2017 Reporting Period Goals**

Continue to monitor the catch basin labels and replace missing/damaged labels.

Continue to inspect the basins and service as required. The contractor partially complied with the reporting chart information required to properly report maintenance to the Village. The total amount of material removed was provided by the contractor and the basin ID data cleaned was reported. The material removal per basin was not reported and the cleaning data needs have improved tracking. The Village Administrator will link final payment of invoice to a properly completed form. A copy of the MS4 Inspection and Maintenance Reporting Table is attached to this report.

The (3) FABCO inserts will continue to be serviced in 2017. The Retrofit Program is designed to reduce discharge of Pathogens to the Harbor which is classified as an impaired water. (refer to Section 1.1). There are a total of (11) inlets which have been identified within the East Shore Road which discharge to the Harbor.

The Village will determine if there is grant money available to assist in the funding of the East Shore inlet inserts. The plan goal continues to be the installation of the (5) inserts at the Kanes Lane intersection within the 2017 reporting period if the funds are identified.

### **1.2 Leaching Basin Inspections:**

In cases where leaching basins receive discharge from properly maintained catch basins the potential for sediment/oil clogging of the soils which provide percolation is reduced. Catch basins however are not 100% effective in removing materials. Leaching basins therefore over time will accumulate sediment which impacts the efficiency of disposal.

### **1.2.1 Inspection Method:**

Leaching basins shall be inspected every (3) years to determine if excessive sediment is present. The basins will be opened and measured to determine if there is standing water 48 hours after a storm event of more than 0.5 inches. Leaching pools that have more than 50% of the depth impacted by standing water will be scheduled for a reinspection after (7) days of dry weather. If the basin continues to have a standing water elevation of more than 50 % of its depth it will be scheduled for cleaning.

Cleaning of leaching pools will be accomplished using a vacuum truck to remove accumulated sediment and restore leaching.

### **1.2.2 Reporting Method:**

The leaching basin inspection will be reported on the attached data sheet. The Village will maintain a record of maintenance on each leaching basin within the Village maintained collection system. The maintenance record will include quantity of material removed from each basin.

### **1.2.3 2016 Reporting Period Goals**

During the 2016/2017 reporting period the Village will continue with the inspection process. Where feasible the leaching basins connected to inlets will be inspected for accumulation of material. It should be noted that material accumulation is not expected if catch basins are properly maintained. A reduction in stormwater system function will result in Street flooding. The new label system will allow residents to report flooding to the Village. Reports of flooding will be followed up with inspection of the inlet and leaching basin to determine if maintenance is necessary.

### **1.2.4 2016 Progress**

The inspection of connected leaching basins was not completed in the reporting period. The catch basin inlet maintenance program did not indicate a need during the reporting period to inspect and clean a leaching basin. The indicator of an impacted leaching pool is a catch basin which surcharge floods at grade. If the catch basin is clear of debris the leaching pool is impacted and requires inspection and cleaning.

### **1.2.5 2017 Goal**

The goal during the 2017 reporting period will be to inspect catch basins after a substantial rainfall event. The Village will visually inspect catch basins after a rainfall event of more than 2 inches in 24 hours. If there are inlets which are surcharged at grade

the reference Inlet ID will be reported to the Village Engineer. The Village Engineer will schedule an inspection of the leaching pools connected to the inlet. If the leaching pools required service they will be scheduled for pump out. This represents a change in monitoring method that is based on focusing the maintenance effort based on leaching pool inspections in problem areas.

## **2.0 Winter Roadway Maintenance:**

The roadways within the Village are tributary to catch basins and leaching pools. In addition there are portions of the Village where roadways may overflow into the surrounding surface waters of the Bay and Harbor during significant storm events. Excessive application of sand and deicing salts to the roadways in the Village could result in water quality impacts to the Bay and Harbor. In addition, excessive sand application will increase the frequency and cost of catch basin and leaching pool maintenance.

The Village of Huntington Bay purchases and stores salt and sand in Town of Huntington facilities. There is no storage of salt or sand within the Village boundaries. The Town of Huntington is a participating member of the MS4 program and therefore it is assumed that the materials are properly stored and protected.

The Village does not own or operate salt spreaders, snow plows or sanders. The Village contracts with a vendor/contractor for winter roadway maintenance. The vendor utilizes the Village material stockpile stored at the Town of Huntington facility. The Village purchases the sand and salt from the same vendor utilized by the Town. It is in the best interest of the Village to monitor the amount of salt and sand applied by the contractor. Excessive application/use of sand and salt will increase annual maintenance costs to the Village.

### **2.1 Implementation:**

The contractor/vendor selected for the winter maintenance of the roadways within the Village will be required to confirm that he is familiar with the NYSDEC Best Management Practices regarding application of the materials.

The application of the materials to Village roadways will be monitored to determine if excessive salt or sand has been applied by the vendor/contractor.

The MSDS sheets for the salt purchased for application to Village roadways will be reviewed for contaminants of concern.

### **2.2 2016 Reporting Period Goals**

The existing salt purchase and storage program will continue. Material will not be stored or stockpiled within the Village. The approved Town of Huntington yard will be utilized.

### **2.3 2016 Progress**

The Village purchased 330 tons (275 cubic yards) of sand/salt from Power Crush, Inc. in the months of January and March, 2017. During the January and February snow events, the Village used approximately 35 yards of the sand salt mixture. This mixture is stored at the Town of Huntington facility on Oakwood Road, Huntington.

The application of salt and sand to the Village roads is monitored by the Village to control costs. The fringe benefit to the monitoring is the reduced application quantity. The application amount has continued to decrease and it is assumed that it is weather related. The 2016-2017 reporting period was a relatively mild winter.

### **2.4 2017 Reporting Period Goals**

The Village will continue to monitor the application rate of the material. The Town storage system and approved vendor will be continue to be utilized. The Village will implement a contractor payment condition that includes reporting of dates of application and estimated quantity of material utilized.

### **3.0 Street Sweeping**

The removal of accumulated sand and debris from Village Maintained roadways is important to the reduction of the pollutant loading to the catch basins and leaching systems which provide drainage and disposal of runoff. In addition, the removal of the material reduces the potential for sand and silt runoff to the Bay and Harbor Areas.

#### **3.1 Implementation:**

The Village of Huntington Bay retains a contractor for the removal of accumulated sand and silt on the roadways. Roadways are visually inspected by the Village Highway Superintendent to determine need for removal. At a minimum all Village roadways are swept once per year.

#### **3.2 2016 Reporting Period Goals**

The 2016/2017 reporting period goal is to achieve the goal set in 2015. The Village will request/require that the contractor fill out tickets listing which roadways were swept, date of work, disposal quantity and disposal site. Contractor payment will be withheld pending receipt of the proper documentation.

### **3.3 2016 Progress**

The Village owned and maintained roadways were swept during the reporting period. A total of 24 cu.yds. approximately 28 tons of sand and material was removed from the Village ROW areas during April 2016. The material was transported for disposal at 110 Sand, in Farmingdale NY a NYS Lic. Facility.

### **3.4 2017 Reporting Period Goals**

The Village will continue to monitor sweeping program efficiency. In addition the Contractor will be required to submit brief summary of the roadways swept, dates of sweeping and disposal quantity and tickets during the 2017 reporting period.

### **4.0 Village Vehicle Maintenance:**

The Village of Huntington Bay Police vehicles are maintained at licensed facilities outside of the Village. On site maintenance of vehicles including car washing does not occur within the Village. The Village does not own or operate additional vehicles.

### **5.0 Dog Waste Program**

The Village has adopted a local law regarding dog waste which requires the removal and disposal of feces by the pet owners. (Section 20-11). It is important to encourage residents to comply with the regulations to reduce the loading of fecal bacteria to Huntington Harbor and Huntington Bay.

#### **5.1 2016 Reporting Period Goal**

Install the Bay Hills Dog Waste Bag Station prior to August 1<sup>st</sup> 2016. The Village will continue to replace bags on an as needed basis at all station locations.

#### **5.2 2016 Progress**

The Bay Hills Association selected a location for the Dog Waste Bag Station and it has reportedly been installed.

### **5.3 2017 Reporting Period Goal**

The Village will install and maintain a dog waste bag station on East Shore Road. Continue to monitor the use of bags at the existing locations in the Village. Determine if additional enforcement measures are necessary regarding resident's failure to pick up and properly dispose of pet waste.

### **6.0 Goose Feeding Prohibition**

It is important to limit the quantities of goose feces which are discharged to the Huntington Harbor and Huntington Bay. Runoff which contains goose waste creates additional fecal bacterial loading to the surrounding surface waters.

The Village of Huntington Bay adopted a new local law 12/13/11 (filed with NYS 12/21/11) which prohibits the feeding of geese and other waterfowl within the Village.

It should be noted that the Village does not own or control significant non roadway property. Therefore the control of geese populations within the Village requires actions by private landowners and Associations. In both cases geese droppings adversely impact the ability to utilize/enjoy private yards and Association beaches. The Village will explore successful methods of geese control that have been utilized in Huntington Harbor and Huntington Bay area of adjacent Villages. If the Village can implement the control measure along a ROW area to control geese on adjacent private property it will be considered by the Trustees.

### **6.1 2016 Reporting Period Goal**

During the 2016/2017 reporting period the Village will continue to explore the issue of goose control. MS4 areas tributary to the Harbor and Bay will be contacted to determine if they have discovered an effective means of control that would work with the Village boundaries.

### **6.2 2016 Progress**

The Village has not identified an effective means of goose control that will work within the Village Boundaries. The primary areas of concern continue to be on private property.

The impact of goose droppings on surface water quality in the Village may be linked to the recent Cyanobacteria (Blue Green Algae) bloom in Willow Pond. On 4/17/17 the Suffolk County notified the Village the algae is present in Willow Pond. Human and domestic pet warning notices were posted around the pond by Suffolk County. Willow Pond is a private surface water surrounded by private property. Geese are utilizing the Pond and private yard areas year round. The droppings from the geese are impacting Pond water quality.

The bacteria associated with droppings may also be contributing to the beach closures which occurred in 2016 within the Village.

### **6.3 2017 Reporting Period Goals**

As previously noted the Village does not own or maintain property which is significant habitat for geese. The issue is confined to private property within the Village. The Village will continue to research control measures that can be recommended to private property owners.

### **7.0 Fertilizer Application**

The discharge of stormwater runoff to the tidal and freshwater wetlands and surface waters located within or adjacent to the Village of Huntington Bay can adversely impact the water quality and habitat. It is therefore desirable to reduce overall fertilizer use within the Village of Huntington Bay.

The Village authorized the Cornell Cooperative Exchange IDDE inspection contract proposal which will include discussion of methods to reduce Fertilizer use on Private property. A representative from Cornell will chair a presentation at Village Hall. The Village will invite residents and Association members to the meeting.

During the 2015 reporting period Village authorized the Cornell Cooperative Exchange IDDE inspection contract proposal which includes discussion of methods to reduce Fertilizer use on Private property. A representative from Cornell will chair a presentation at Village Hall. The Village will invite residents and Association members to the meeting. The IDDE portion of the contract was completed in March 2015. The training session will be scheduled during the 2016/2017 reporting period.

### **7.1 2016 Reporting Period Goal**

Complete the 2015 Goal which includes the Cornell training session regarding IDDE and fertilizer application reduction methods.

### **7.2 2016 Progress**

The educational program was not completed in the 2016 reporting period. The program was scheduled to be held in March at the newly renovated Village Hall. The Village Hall completion was delayed and the program was not held.

### **7.3 2017 Reporting Period Goals**

Schedule the educational meeting with residents regarding fertilizer control. Encourage homeowners to limit use of fertilizer in proximity to surface water and roadways.

Homeowners with maintained yard areas adjacent to surface waters will be encouraged to eliminate fertilizer use within 30 ft of the edge of maintained lawn.

The Village as part of the site plan approval process will explore the feasibility of adding a landscape restriction to properties which abut surface water. A non-fertilizer dependent interface a minimum of 10 ft wide will be considered along the edge of properties adjacent to the water. The Village at the present time reviews applications adjacent to surface waters and requires that runoff be 100 % collected from landscape yards to prevent overland flow to surface water.

## **8.0 Illicit Discharge Detection**

A comprehensive study was completed on 12/1/09 by the Cornell Cooperative Extension of Suffolk County of potential illicit discharges within the Village of Huntington Bay. The study provides locations of all outfalls within the Village. The results of the study did not identify the presence of an illicit discharge to the surface waters within/adjacent to the Village. It is important to identify and eliminate illicit discharges to the Village owned stormwater system. Discharges of contaminants to leaching pools and drains can potentially result in contamination of the Harbor and Bay.

Cornell Cooperative Exchange completed an update of the IDDE survey in 2015. The results of the study indicate that:

There were 52 outfalls previously reported in the previous IDDE Study

The preliminary results indicate that 20 of the 2009 outfalls have been eliminated. The elimination is based on removal of the outfall or reclassification of the outfall. There were outfalls designated under the previous IDDE which were retaining wall drains which do not qualify as an outfall or potential illicit discharge source.

A total of (6) new outfalls were mapped under the study.

The total number of outfalls mapped in the Village is 38. The study did not identify discharges under dry weather conditions which qualify as an illicit discharge. The discharges appear to primarily private property stormwater discharges.

## **8.1 2016 Reporting Period Goals**

Review the data provided by Cornell under the IDDE program and compare the outfall locations to the inventory location of roadway stormwater inlets. The catch basin inventory indicates that there are (11) inlets which discharge to the Harbor. The inlets are being retrofitted with filter inserts to reduce Pathogen discharges to the Harbor. If additional Village inlets are connected to the outfalls located under the IDDE program the retrofit program may need to be expanded.

## **8.2 2016 Progress**

The Village of Huntington received a notification from the Town of Huntington 8/16/16 that an illicit discharge was occurring at a property located at 1 Shore Drive. Investigation of the property by the Village Building Inspector determined that the discharge was from a basement groundwater dewatering system (sump pump). Discharges associated with sump pumps (groundwater discharge) are not considered an illicit discharge under the regulations. The sump discharge was routed to the Town of Huntington Beach access corridor. The homeowner was notified by the Village that corrective action was required to remove the discharge. As a result of the notice the homeowner's engineer designed a sump discharge leaching system which was installed on site.

In this case the notification system worked between the Town and Village proved to be functional. The discharge was investigated and it was determined that it was not an illicit discharge per regulation. The Village however determined that the discharge was non-compliant with regulations and instructed the homeowner to take corrective action.

## **8.3 2017 Reporting Period Goals**

The IDDE study training program of residents did not occur as a result of scheduling issues at the Village Hall which was under construction during the 2016 reporting period. The Village will schedule the meeting in 2017.

## **9.0 Public Participation and Comment**

It is important to inform and educate the Village Residents regarding the MS4 Stormwater Management Program. Residents within the Village of Huntington Bay can assist in the development of program goals which may significantly improve water quality in the Bay and Harbor. In addition, as residents become educated regarding the implementation of best management practices to improve stormwater quality it is likely that contaminant loading to the surrounding surface waters will be reduced.

It is the intent of the Village to organize an IDDE training meeting and invite representatives of each private Association to the meeting. It is hoped that this training session will serve the purpose of increased public participation in the goals of the SWMP.

### **9.1 2016 Reporting Period Goals**

The training session will occur during the 2016/2017 Reporting Period.

### **9.2 2016 Progress**

The training session was delayed in 2016 as a result of Village Hall Construction. During the course of the 2016 reporting period the Village Engineer on a consistent basis

explained the importance of enforcement of the MS4 development guidelines in the review and approval of applications within the Village.

The Village Engineer updated the Board of Trustees in January regarding the progress towards the Stormwater Management Plan Goals. In addition, during site plan public hearings the Village Engineer makes an effort to educate the applicant and meeting attendees regarding the importance of controlling runoff.

### **9.3 2017 Reporting Period Goal**

The IDDE training session will be scheduled in 2017. This meeting will also be utilized to review the residential use of fertilizers in the Village.

### **10.0 On Site Sanitary Systems**

The Village of Huntington Bay does not contain sanitary sewers. The sanitary waste generated by residences and beach clubs within the Village discharge sanitary waste to on site septic systems. The on site septic systems are under the direct supervision of the Suffolk County Department of Health Services.

The water quality of Huntington Harbor and Bay is impacted by pathogen. The presence of E coli bacteria above NYSDEC Water Quality and SCDHS standards has resulted in closure of shell fishing and beach uses. The sources of bacteria include stormwater runoff which contains wildfowl and dog waste contamination, illicit discharges of sanitary waste and non compliant poorly operating on site sanitary systems. The Village of Huntington Bay has taken action to reduce the direct discharge of stormwater to the surrounding surface water via the enforcement of a strict on site leaching design criteria. In addition, the Village has installed roadway leaching systems in Village and Association ROWs to reduce roadway discharge to the surface water. New Code sections have been adopted to prohibit feeding of wildfowl and dog waste bag stations have been installed. Discharge mapping and the IDDE program is in place to monitor all direct discharges to the surface waters.

There is a possibility that there are existing poorly functioning on site sanitary systems within the Village which contribute to water quality issues in the surrounding surface waters. The Village requires that applications for Building Permits and Site Plans comply with SCDHS criteria regarding on site sanitary systems. The SCDHS requires that existing septic systems be inspected and repaired/replaced in accordance with the attached Memorandums. These Memorandums are summarized below:

*If the CO for the house/structure was issued prior to 1973 and the applicant is increasing the number of bedrooms a SCDHS approval is required. The definition of bedrooms is provided in the attached memos.*

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*If the CO for the house is post 1973 and the renovation will result in more than 4 bedrooms. The only caveat is a renovation where the applicant can produce a SCDHS approval that shows the system installed was for more than 4 bedrooms.*

*All apartment applications in our Village require SCDHS approval.*

*Full house demolition and reconstruction.*

*The existing system needs to be moved.*

These SCDHS requirements however do not address homes/structures having a CO that predates 1973, which are proposing renovations that do not increase the number of bedrooms. There are renovations of homes in the Village which meet the criteria for Site Plan approval review (20%) modification of floor area and/or Waterfront Zone that were constructed over 40 years ago that are not proposing addition of a bedroom and do not meet the SCDHS threshold criteria requiring review. These applicants are not required to establish that their existing on site sanitary system is fully operational and compliant with the current SCDHS regulations. There is a potential that the existing systems are not operating correctly and do not have sufficient capacity for the single family home or structure.

The Village Building Inspector and Administrator will document that each Site Plan applicant has received the Site Plan check list and septic system conditions. A list of properties which have been subject to the Village requirement will be maintained to judge/document the effectiveness of the provision.

A copy of the Site Plan and Steep Slope Check list including the septic provisions will be posted on the web site.

All Site Plan applications submitted to the Village of Huntington Bay must comply with the attached SCDHS Memorandum Requirements which are summarized below:

- *If the CO for the house/structure was issued prior to 1973 and the applicant is increasing the number of bedrooms a SCDHS approval is required. The definition of bedrooms is provided in the attached memos.*
- *If the CO for the house is post 1973 and the renovation will result in more than 4 bedrooms a SCDHS approval is required. The only caveat is a renovation where the applicant can produce a SCDHS approval that shows the system installed was for more than 4 bedrooms.*
- *All apartment applications in our Village require SCDHS approval.*
- *Full house demolition and reconstruction of a new home will require a SCDHS approval.*

- *The relocation of an existing system requires SCDHS approval.*

Site Plan Applications submitted to the Village of Huntington Bay must comply with the following SWMP Criteria:

*If your Certificate of Occupancy predates 1973, and your existing septic system is located within 300 ft of surface water including freshwater and tidal wetlands, and you are increasing and/or modifying/constructing sufficient floor area to trigger a Site Plan Review, you must submit a SCDHS “Certification of Existing Surface Subsurface Disposal and Water Supply Facilities for a Single Family Home” Form WWM-072. The Certificate of Inspection must be completed by a qualified professional retained by the applicant.*

In the event that the Certificate of Inspection indicates that the existing sanitary system requires modifications, upgrades, repairs and/or replacement the applicant will be required to obtain a “SCDHS Certificate of Constructed Works” approval prior to issuance of a new CO.

This requirement has been implemented during the 2014 Reporting Period. Applicants are proactively addressing the requirement and submitting applications for upgrade of their systems as part of the Site Plan review process.

The Village Building Inspector and Engineer have included the review of the existing sanitary systems for properties within the waterfront area. Impacted applicants have agreed to the required upgrade of their sanitary system or provided information which supports that they have a compliant system.

### **10.1 2016 Reporting Period Goal**

The 2015 record keeping goal will be achieved during the 2016/2017 reporting period.

### **10.2 2016 Progress**

During the Site Plan review process the Village Engineer reviews the proposed plans and history of CO to determine if a new system is required. From a qualitative review perspective the process has resulted in an increase in the number of new system installations. In most cases the systems are included on the initial site plan application.

The Village Building Inspector ensures that each Building Permit application includes approved SCDHS sanitary system plans.

### 10.3 2017 Reporting Period Goals

Suffolk County is in the process of adopting new sanitary regulations which will require that homeowners install a new innovative system to remove nitrogen prior to discharge to the groundwater.

The Village will encourage homeowners with onsite sanitary systems within 300 ft of a surface water to consider voluntary installation of the new systems as a means of improving the environment. The Village criteria which modified/strengthened the SCDHS will continue to be applied for properties within 300 ft of a surface water.

### 11.0 Retrofit Program Plan Report

In compliance with the NYR 20A292 Requirements the Village of Huntington Bay prepared and submitted a Retrofit Program Plan to the NYSDEC Division of Water Permits on 9/26/14. The NYSDEC has determined that Huntington Harbor is a Pathogen Impaired Watershed.

The Retrofit Program Provided Information Regarding:

- Dog Waste Runoff
- Waterfowl and Geese Control
- On Site Sanitary Systems
- Illicit Discharges
- Stormwater Management

#### **The following Data was provided to the NYSDEC**

VHB Tributary Area to the Harbor:	144 Acres
Number of Residences within the Tributary Area:	183
Three non- Residential uses identified:	
Huntington Bay Yacht Club	
Wincoma Association Beach	
Wincoma Association Dock	

The Report included the required Maps:

Figure 1:	Village of Huntington Bay
Figure 2:	Illicit Discharge Outfall Study
Figure 3:	Aerial Map

The NYSDEC did not issue a corrective action mitigation report.

On a proactive basis the Village will begin retrofitting the (11) inlets located in East Shore Road which discharge to the Harbor. (CB Inlet # 1, 2, 3, 4, 5, 6, 7, 9, 10, 176, 177).

Inlet #177 is a roadway overflow basin that will take flow when the intersection basins (#1, #2, & #3 are overwhelmed/flooded) The inlets will be fitted with FABCO pretreatment filter inserts designed to remove pathogens from stormwater. The retrofit program is a multi year commitment and is budget dependent.

The Village authorized the installation of inserts in CB locations #1, #2, #3. The first (3) installations will be monitored to determine if there are adverse operational considerations that will be associated with the inserts.

During 2015 the NYSDEC requested a more accurate GPS location of catch basin inlets within the Village. The data submitted to the NYSDEC was not sufficient for their mapping program.

During the 2015 reporting period the Village installed (3) FABCO catch basin inserts designed to reduce Pathogen discharge to the Harbor. CB #1, #2, #3 were retrofitted with the inserts and are being monitored.

### **11.1 2016 Reporting Period Goals**

The catch basins inlets within the Village which are tributary to the Harbor will be located using a more accurate survey quality GPS system. The data will be provided to the NYSDEC as requested.

The Village has authorized the installation of (4) additional FABCO inserts at the intersection of Kaness Lane and East Shore Road. (CB #4, #5, #6, #7).

### **11.2 2016 Progress**

All inlets located within the tributary area of the Huntington Harbor were located using survey quality GPS equipment. The locations were reported to the NYSDEC. The NYSDEC (8/4/16) required that the locations of the installations be GIS mapped including the existing piping. V&B conducted field inspections and measurements to map the locations of the existing interconnection pipes between the inlets and the Harbor discharge points. The updated information was submitted to the NYSDEC on (11/8/16). No additional comments or information requests from the NYSDEC have been received.

The FABCO filters installed at inlets V1, V2 and V3 have been monitored. The accumulated debris has been removed and the filters have been replaced once during the reporting period. A total of 238 lbs of material was removed from the filters.

The Kaness Lane intersection filter inserts were not installed during the 2016 Reporting Period. Investigation of the intersection piping and inlets resulted in a determination that the Inlet V-4 would require complete removal and replacement. The Inlet is a not a standard size and shape and FABCO is unable to provide a functional insert. The location will require the installation of a double catch basin inlet. The estimated cost of the program therefore increased significantly to a value of approximately \$35,000. The

Village Budget during the 2016 reporting period did not include sufficient money for the retrofit. The budget for retrofit work was impacted in 2016 by the cost of responding to the NYSDEC request for additional survey data of inlet and piping which was not anticipated.

### **11.3 2017 Reporting Period Goal**

The Village of Huntington Bay is committed to installing the proposed filter inserts in the Roadway Inlets which discharge to the Harbor. The 2017 Budget does not include sufficient money for the full installation at Kaness Lane. The Village Engineer will determine if there are other revenue sources which could be utilized to offset the cost of the program.

The Village will consider moving forward with engineering design and bidding of the proposed improvements necessary to install the inserts within the Harbor tributary area. This data will be utilized to establish Budget values for stormwater improvements.

### **12.0 Village Hall Renovation**

The Village of Huntington Bay is renovating the existing Village Hall. The renovation includes additional floor area and modification of the bathroom. As part of the renovation the existing sanitary system will be replaced with a new system compliant with Suffolk County Department of Health Services requirements. The existing sanitary system was cleaned and tested for contamination prior to removal. The system was tested and the SCDHS approved the removal without soil remediation. In addition the renovation work included removal of a historically abandoned subsurface gas tank. The tank had been abandoned without benefit of SCDHS inspection. The abandoned tank was removed during the renovation process and the soils were tested for contamination. No historical contamination was found in the soils and the SCDHS did not require remediation.

The site plan associated with the Village Hall renovation includes modification of the parking area, installation of an ADA ramp and increased roof coverage. The plan includes installation of additional stormwater drainage to accommodate the new coverage.

### **12.1 2016 Reporting Period Goals**

During the 2016/2017 Reporting Period the new sanitary system will be installed and inspected by Vollmuth & Brush and the SCDHS. The installed system final approval will be a goal during the reporting period.

The proposed stormwater systems will be installed consistent with the site plan. Inspection of the system during the installation process will be a reporting period goal.

## **12.2 2016 Status**

The Village Hall renovation status is 95% complete. The new sanitary system and stormwater drainage systems and water system have been installed.

## **13.0 GIS Mapping of Village Conveyance System**

The Village owned/maintained stormwater inlets have been previously located using GPS and establishing the Latitude and Longitude locations. The GPS data was collected for all inlets within the Village regardless of ownership. During the 2015/2016 reporting period it became evident that the GPS locations collected were not sufficiently accurate to utilize in a GIS data base. The location issues were discovered in response to NYSDEC Retrofit Program comments/requests for information. The inlets within the Harbor tributary area were not accurately located for download into the NYSDEC database. The data was updated for the Harbor Tributary Area using survey quality GPS location equipment and the data was released to the NYSDEC. Approximately 33% of the inlets have been located. All discharges were located under the IDDE Program update during the update to GIS accuracy.

### **13.1 2016 Reporting Period Goal**

All inlets within the Village will be located using GPS survey quality instruments. This will allow the data to be downloaded to GIS mapping systems. The location work will be completed during the months when leaf cover is minimal to increase efficiency and accuracy.

The data will also be cross referenced to the IDDE program data to determine which inlets may have surface water discharges. This work may take a two year period to complete because of a potential need to flow test.

### **13.2 2016 Status**

As previously noted the inlet locations and piping systems associated with discharges to the Harbor were GIS located and mapped in response to the NYSDEC request/requirement. The remaining inlet locations were mapped using a non-survey level instrument for latitude and longitude. The location data is sufficient for maintenance purposes and included field references (house number, photographs etc). The survey quality mapping during the 2016 reporting period was been delayed for budgetary reasons.

### **13.3 2017 Reporting Period Goal**

The locations of the inlets will be updated using survey level GIS equipment budget permitting during this reporting period. The updated accuracy is desirable to insure that the data can be shared with the NYSDEC for accurate GIS mapping.

### **14.0 Willow Pond**

Willow Pond is a privately owned and maintained freshwater within the Village of Huntington Bay. The 3.5 acre surface area pond is owned by (5) residents. The pond receives stormwater runoff from approximately 25 acres of residential property and during significant storm events receives overflow runoff from Wincoma Association roadways.

On 4/27/17 Suffolk County Department of Health notified the Village that Cyanobacteria (blue green algae) had been detected in the Pond at sufficient concentration to result in a required posting to protect humans and domestic pets. Skin/dermal contact with the water should be avoided and pets should be treated for potential toxic effects if they drink water from the Pond.

### **14.1 2017 Reporting Period Goal**

As noted Willow Pond is a privately owned and maintained surface water. The Village will provide assistance to the residents in selection of potential mitigation methods. The costs of mitigation will not be a Village expense. At this time the residents are considering aeration, chemical treatment, pulse flushing and geese control during the winter months. The Village engineer will monitor the results of the mitigation and if appropriate suggest additional solutions.