

August 31, 2023

Ms. Jean M. Bubon, AICP
Town Planner
Town of Sturbridge
301 Main Street
Sturbridge, MA 01566

**Re: Stormwater Management Standards Compliance Memo
Cornerstone Bank – Proposed ITM Drive-Thru Improvements
200 Charlton Rd, Sturbridge, MA 01566
CMG ID 2023-128**

Dear Ms. Bubon,

On behalf of Cornerstone Bank (applicant), CMG is writing you this letter to describe the proposed canopy/ATM improvements at 200 Charlton Road (Site) in Sturbridge, Massachusetts as it relates to compliance with the Massachusetts Stormwater Management Standards.

The approximately 4.2-acre Site, identified as assessor parcel 208-02611-200 is located in the Industrial Park (IP) Zoning District. An existing 4,725 +/- s.f. Cornerstone Bank is located in the southeastern portion of the site along the Charlton Road (Route 20) frontage. Paved parking and access driveways surround the facility, which includes drive-through lanes associated with two (2) existing ATM's and a teller window located on western side of the existing bank. The rear portion (northwestern portion) of the site consists of a pond and wetland tributary associated with Hobb's Brook. The limits of the resource areas were delineated by Goddard Consulting on May 30, 2023 and outlined in a Wetland Border Report, dated June 6, 2023.

The site's existing stormwater management system currently contains multiple catch basins located within the limits of the rear paved parking area. The catch basins are conveyed via underground piping to a headwall that discharges towards the wetlands in the rear of the property. CMG is unaware of existing underground infiltration or detention BMPs associated with the on-site stormwater management system.

The applicant is proposing to modify the existing drive-thru facilities associated with ATM's and a bank teller window. The improvements will include demolishing the existing ATM's, associated paved access drive, and associated canopy. New ITM's will be constructed towards the rear of the property with a new canopy and reconfigured paved drive-through lanes. The applicant is not proposing any improvements associated with the on-site stormwater management system; however, the following improvements are proposed to remain compliant with the Massachusetts Stormwater Regulations under a redevelopment project:

1. The modifications to the paved drive-thru access will result in a decrease in impervious area in comparison to pre-development conditions. A summary of Pre-Development & Post-Development drainage areas is included as Table No. 1. CMG is also supplying drainage area maps to further outline the drainage area calculations as **Attachment #1**.

2. In order to further promote infiltration, a landscape plan is included as part of the plan set which details plantings in all proposed landscape areas.
3. As a preventative measure for the proposed work, a Soil Erosion and Sedimentation Control Plan (SESC) is included as part of the plan set. BMP's associated with the proposed improvements include catch basin inlet protection utilizing silt sacks and straw wattles.
4. Lastly, a construction phase Stormwater Pollution Prevention Plan (SWPPP) and Long-Term Operations and Maintenance Plan (O&M) are included as **Attachments 3 & 4**.

Stormwater Management Standards

The following is a summary of the project's compliance with the MA Stormwater Management Standards as a "redevelopment" project:

Standard 1: No New Untreated Discharges

- There will be no new untreated stormwater discharges as a result of this project.

Standard 2: Peak Rate Attenuation

- Post-development peak discharge rates will not exceed pre-development peak discharge rates as there is a net decrease to Site impervious areas.

Standard 3: Recharge

- Final stormwater recharge volumes will match existing conditions recharge as there is a net decrease to Site impervious areas and there are no proposed changes to the existing stormwater management system.

Standard 4: Water Quality

- Water Quality from stormwater runoff will be improved once the improvements are completed as a result of the decrease in impervious area.

Standard 5: Land Uses with Higher Potential Pollutant Loads

- Not applicable. The proposed improvements are not associated with a LUHPPL.

Standard 6: Critical Areas

- Although no work is proposed within a Wetland Protection Act Jurisdictional Area, wetland resource areas are located downgradient from the limit of disturbance. As a result, erosion control practices are in place to protect the bordering resource areas as a result of the proposed site improvements. Details of the proposed erosion control procedures are included in the associated plan set and attached Construction Phase SWPPP.

Standard 7: Redevelopment and Other Projects Subject to the Standards only to the Maximum Extent Practicable

- The project will comply with the Stormwater Management Standards to the maximum extent practicable as no new impervious areas are proposed and no changes to the existing stormwater management system are proposed.
- Standards 1, 8, 9, & 10 are fully met

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control

- A Site specific “Construction Period Pollution Prevention Plan” is provided as Appendix B outlining erosion control procedures for the contractor to follow during construction.
- Proposed ITM improvements are < 1 Acre therefore the EPA NPDES Construction Stormwater General Permit is not required.

Standard 9: Operation and Maintenance Plan

- A “Long Term Operation and Maintenance Plan” is provided as Appendix C which outlines long term stormwater management best management practices for the existing stormwater BMP’s located on-site.

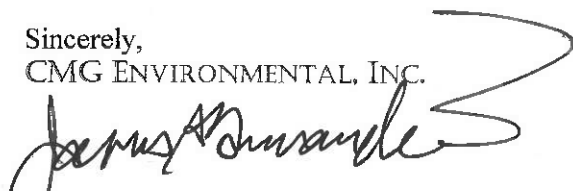
Standard 10: Prohibition of Illicit Discharges

- An illicit discharge statement is provided within the Long-Term Operation and Maintenance Plan and will be signed by the Owner upon completion of the project.


CMG believes the project is in compliance with the Massachusetts Stormwater Management Standards as a limited redevelopment project and will result in an improvement to Site stormwater management. A copy of the “Checklist for Stormwater Report” is provided as **Attachment 2**.

Please do not hesitate to contact us if you have any questions.

Sincerely,
CMG ENVIRONMENTAL, INC.



James Bernardino, P.E.
Principal Engineer



Robert Lussier, E.I.T.
Project Engineer II

Attachment 1

Table No. 1 - Drainage Area Calculations
D – 1: Pre-Development Drainage Figure
D – 2: Post-Development Drainage Figure

**TABLE NO. 1
DRAINAGE AREA CALCULATIONS
CORNERSTONE BANK
PROPOSED ITM DRIVE-THRU IMPROVEMENTS
200 CHARLTON RD, STURBRIDGE, MA**

PRE-DEVELOPMENT DRAINAGE AREAS (s.f.)

On-Site Area	Soil Type C				Watershed Total
	Impervious	Gravel	Grass/Ldscp	Woods	
1	9,765		1,973		11,738
2	31,922		9,670		41,592
Total					
	41,687	0	11,643	0	53,330 s.f.
Total Site Area=					53,330 s.f.
Total Impervious=					1.22 Ac
Total Open Space =					
		41,687 s.f.			
			11,643 s.f.		

POST-DEVELOPMENT DRAINAGE AREAS (s.f.)

On-Site Area	Soil Type C				Watershed Total
	Impervious	Gravel	Grass/Ldscp	Woods	
1A	9,312		3,304		12,616
2A	30,201		10,513		40,714
Total					
	39,513	0	13,817	0	53,330 s.f.
Total Site Area=					53,330 s.f.
Total Impervious=					1.22 Ac
Total Open Space =					
		39,513 s.f.			
			13,817 s.f.		

LEGEND

- MON MONUMENT
- N.F. NOT FOUND
- N/F NOW OR FORMERLY
- EX. EXISTING
- PROP. PROPOSED
- INV. INVERT
- 100 EXISTING CONTOURS
- 100x0 PROPOSED CONTOURS
- 100x0 SPOT GRADE
- TREELINE
- UTILITY POLE
- BIT. BITUMINOUS
- CONC. CONCRETE
- SURFACE RUNOFF FLOW DIRECTION
- WATERSHED SUBCATCHMENT
- POND AREA
- OFF-SITE STORMWATER OUTFALL LOCATION
- 1S WATERSHED BOUNDARY
- TIME OF CONCENTRATION FLOW PATH

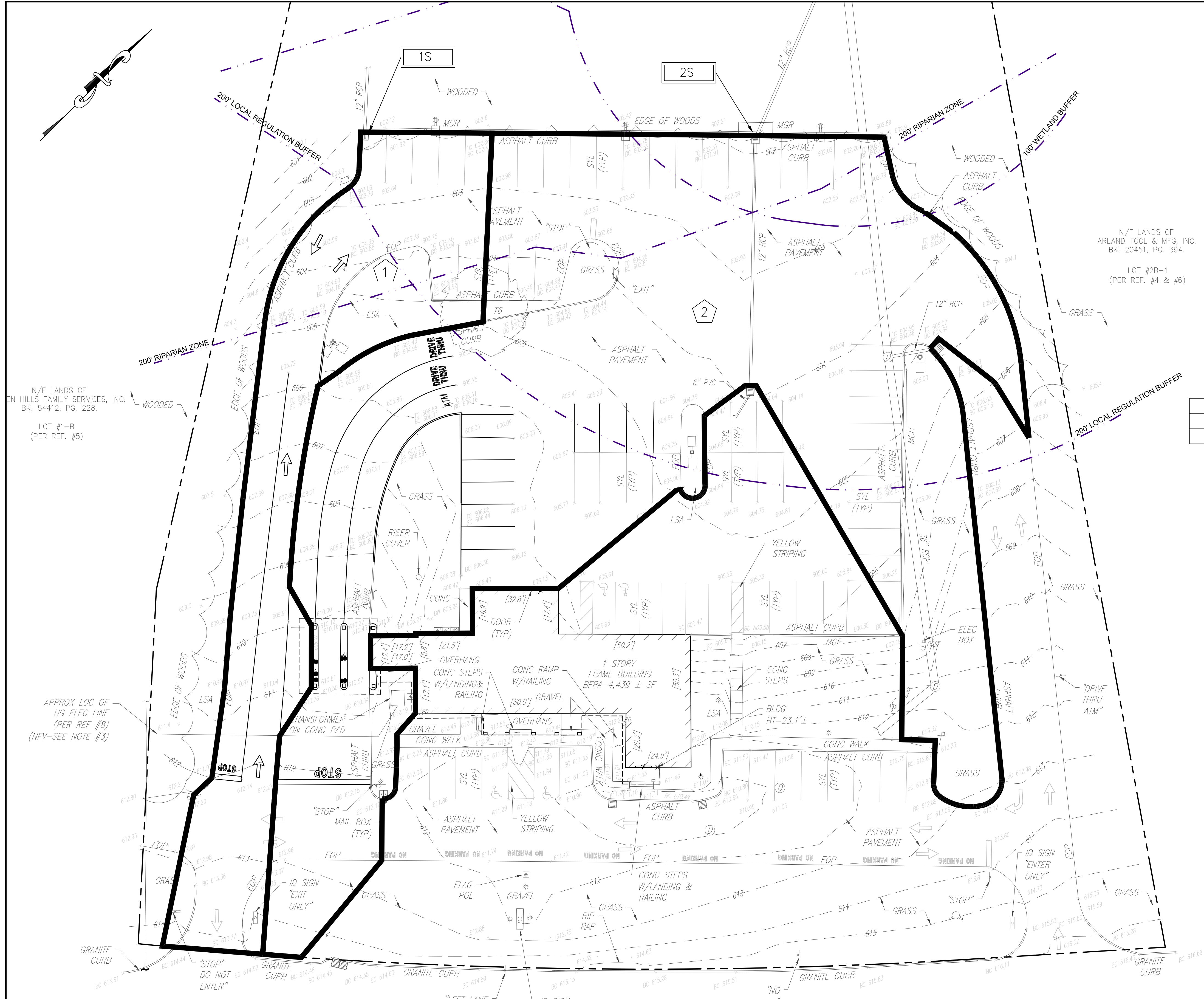
N/F LANDS OF
ARLAND TOOL & MFG. INC.
BK. 20451, PG. 394.

LOT #2B-1
(PER REF. #4 & #6)

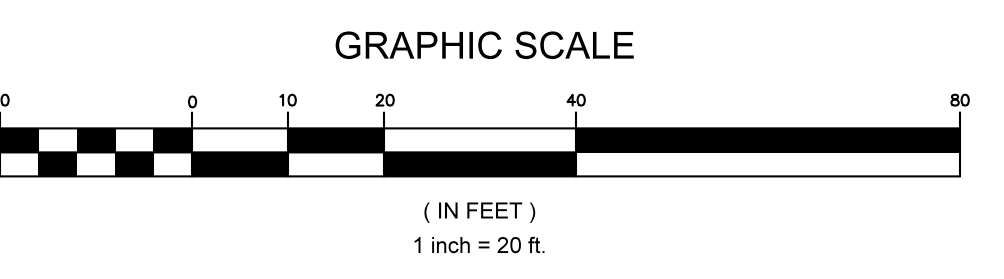
N/F LANDS OF
EN HILLS FAMILY SERVICES, INC.
BK. 54412, PG. 228.

LOT #1-B
(PER REF. #5)

	TOTAL	IMPERVIOUS	GRASS/LANDSCAPING
AREA 1 PRE	11,738 SQFT	9,765 SQFT	1,973 SQFT
AREA 2 PRE	41,592 SQFT	31,923 SQFT	9,670 SQFT
TOTAL	53,331 SQFT	41,915 SQFT	11,416 SQFT



CHARLTON ROAD
(A.K.A. ROUTE 20)
(PUBLIC - VARIABLE WIDTH R.O.W.)
TWO WAY TRAFFIC (ASPHALT ROADWAY)



DIG SAFE NOTE (1-888-344-7233):
CONTRACTOR REQUIRED TO NOTIFY DIG SAFE* 72 HOURS PRIOR TO ANY ON-SITE EXCAVATION OR CONSTRUCTION AT 1-888-344-7233. CONTRACTOR SHALL ALSO NOTIFY LOCAL WATER AND SEWER DEPARTMENTS TO MARK OUT THEIR UTILITIES.

NO.	DATE	DESCRIPTION	BY	CHKD

PROPOSED ITM DRIVE-THRU IMPROVEMENTS
200 CHARLTON ROAD, STURBRIDGE, MA 01566

CORNERSTONE BANK
253-257 MAIN STREET
SOUTHBRIDGE, MA 01550

ENGINEERING SERVICES
ENVIRONMENTAL SERVICES
67 Hall Road
Sturbridge, MA 01566
Phone: 774-241-0901
fax: 774-241-0906



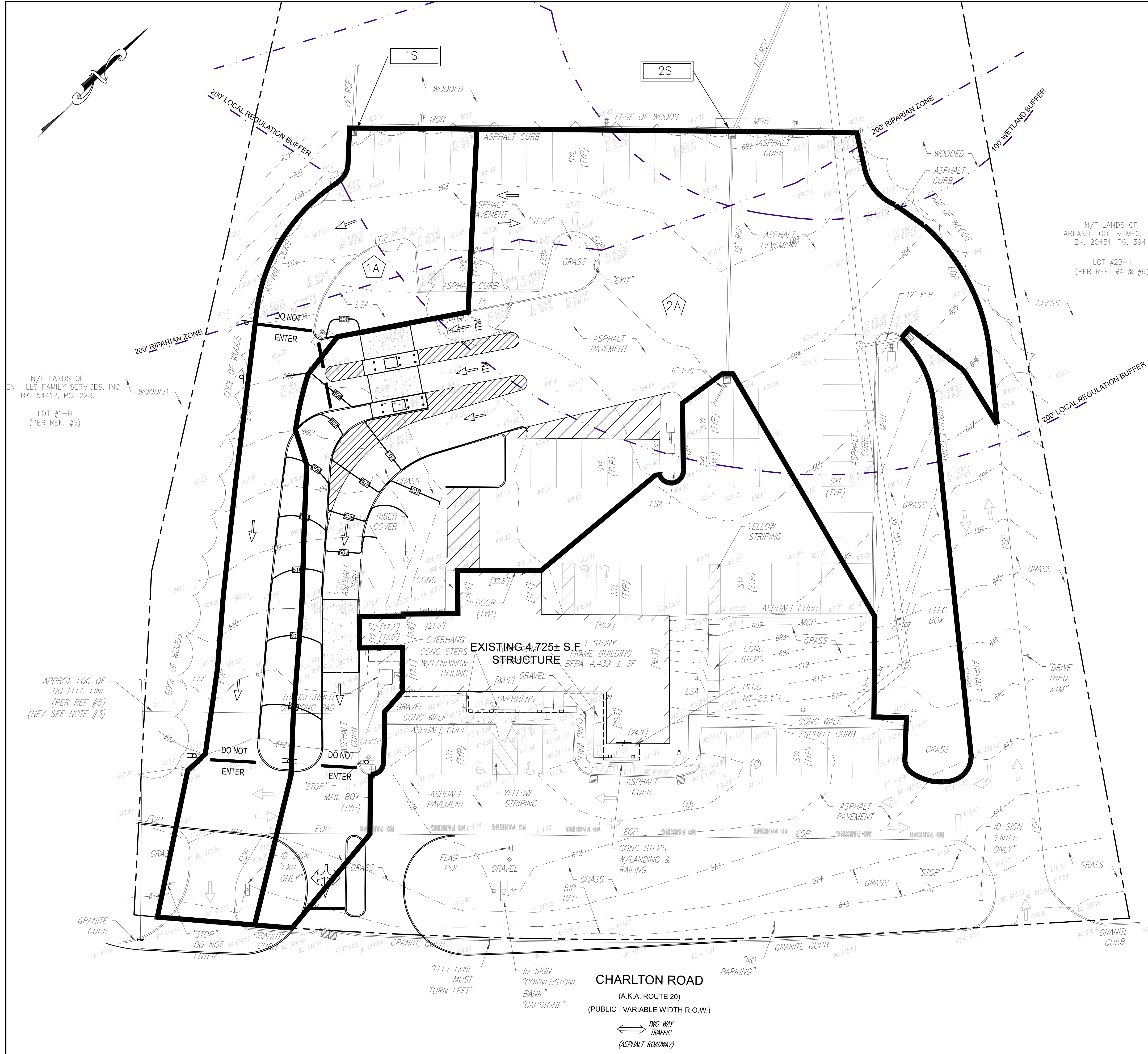
ISSUE DATE: 8/15/2023
DRAWN BY: RP CHECKED BY: JAB
SCALE: 1" = 20'
PROJECT NO.: 2023-128

PRE-DEVELOPMENT DRAINAGE FIGURE

LEGEND

- MON MONUMENT
- N.F. NOT FOUND
- N/F NOW OR FORMERLY
- EX. EXISTING
- PROP. PROPOSED
- INV. INVERT
- 100 EXISTING CONTOURS
- 100x0 PROPOSED CONTOURS
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- SURFACE RUNOFF FLOW DIRECTION
- ⬆ WATERSHED SUBCATCHMENT
- ⬆ POND AREA
- ⬆ OFF-SITE STORMWATER OUTFALL LOCATION
- WATERSHED BOUNDARY
- TIME OF CONCENTRATION FLOW PATH

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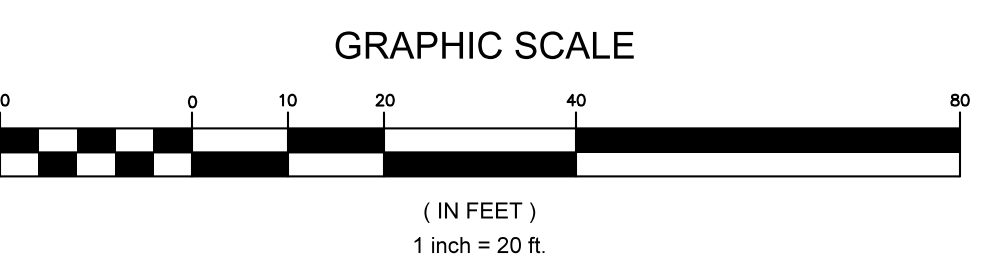
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	TOTAL	IMPERVIOUS	GRASS/LANDSCAPING
AREA 1 PRE	11,738 SQFT	9,765 SQFT	1,973 SQFT
AREA 1 POST	12,616 SQFT	9,312 SQFT	3,304 SQFT
△	878 SQFT	-453 SQFT	1,331 SQFT

	TOTAL	IMPERVIOUS	GRASS/LANDSCAPING
AREA 2 PRE	41,592 SQFT	31,923 SQFT	9,670 SQFT
AREA 2 POST	40,714 SQFT	30,201 SQFT	10,513 SQFT
△	-878 SQFT	-1,721 SQFT	843 SQFT

APPROX LOC OF
UG ELEC LINE
(PER REF #8)
(NFV-SEE NOTE #3)



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(A.K.A. ROUTE 20)
(PUBLIC - VARIABLE WIDTH R.O.W.)
←→ TWO WAY TRAFFIC (ASPHALT ROADWAY)

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PROJECT: **PROPOSED ITM DRIVE-THRU IMPROVEMENTS**
200 CHARLTON ROAD, STURBRIDGE, MA 01566

PREPARED FOR: **CORNERSTONE BANK**
253-257 MAIN STREET
SOUTHBRIDGE, MA 01550

ENGINEERING SERVICES
ENVIRONMENTAL SERVICES
67 Hall Road
Sturbridge, MA 01566
Phone: 774-241-0901
fax: 774-241-0906



ISSUE DATE: 8/15/2023
DRAWN BY: RP CHECKED BY: JAB
SCALE: 1" = 20'
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POST-DEVELOPMENT DRAINAGE FIGURE

D-2.0

Attachment 2

MA-DEP Stormwater Checklist



Checklist for Stormwater Report

A. Introduction

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A Stormwater Report must be submitted with the Notice of Intent permit application to document compliance with the Stormwater Management Standards. The following checklist is NOT a substitute for the Stormwater Report (which should provide more substantive and detailed information) but is offered here as a tool to help the applicant organize their Stormwater Management documentation for their Report and for the reviewer to assess this information in a consistent format. As noted in the Checklist, the Stormwater Report must contain the engineering computations and supporting information set forth in Volume 3 of the [Massachusetts Stormwater Handbook](#). The Stormwater Report must be prepared and certified by a Registered Professional Engineer (RPE) licensed in the Commonwealth.

The Stormwater Report must include:

- The Stormwater Checklist completed and stamped by a Registered Professional Engineer (see page 2) that certifies that the Stormwater Report contains all required submittals.¹ This Checklist is to be used as the cover for the completed Stormwater Report.
- Applicant/Project Name
- Project Address
- Name of Firm and Registered Professional Engineer that prepared the Report
- Long-Term Pollution Prevention Plan required by Standards 4-6
- Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan required by Standard 8²
- Operation and Maintenance Plan required by Standard 9

In addition to all plans and supporting information, the Stormwater Report must include a brief narrative describing stormwater management practices, including environmentally sensitive site design and LID techniques, along with a diagram depicting runoff through the proposed BMP treatment train. Plans are required to show existing and proposed conditions, identify all wetland resource areas, NRCS soil types, critical areas, Land Uses with Higher Potential Pollutant Loads (LUHPPL), and any areas on the site where infiltration rate is greater than 2.4 inches per hour. The Plans shall identify the drainage areas for both existing and proposed conditions at a scale that enables verification of supporting calculations.

As noted in the Checklist, the Stormwater Management Report shall document compliance with each of the Stormwater Management Standards as provided in the Massachusetts Stormwater Handbook. The soils evaluation and calculations shall be done using the methodologies set forth in Volume 3 of the Massachusetts Stormwater Handbook.

To ensure that the Stormwater Report is complete, applicants are required to fill in the Stormwater Report Checklist by checking the box to indicate that the specified information has been included in the Stormwater Report. If any of the information specified in the checklist has not been submitted, the applicant must provide an explanation. The completed Stormwater Report Checklist and Certification must be submitted with the Stormwater Report.

¹ The Stormwater Report may also include the Illicit Discharge Compliance Statement required by Standard 10. If not included in the Stormwater Report, the Illicit Discharge Compliance Statement must be submitted prior to the discharge of stormwater runoff to the post-construction best management practices.

² For some complex projects, it may not be possible to include the Construction Period Erosion and Sedimentation Control Plan in the Stormwater Report. In that event, the issuing authority has the discretion to issue an Order of Conditions that approves the project and includes a condition requiring the proponent to submit the Construction Period Erosion and Sedimentation Control Plan before commencing any land disturbance activity on the site.



Checklist for Stormwater Report

B. Stormwater Checklist and Certification

The following checklist is intended to serve as a guide for applicants as to the elements that ordinarily need to be addressed in a complete Stormwater Report. The checklist is also intended to provide conservation commissions and other reviewing authorities with a summary of the components necessary for a comprehensive Stormwater Report that addresses the ten Stormwater Standards.

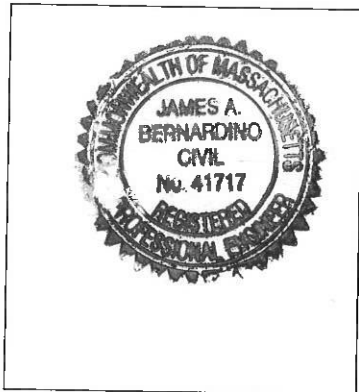
Note: Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the item is not applicable (N.A.) and provide the reasons for that determination.

A complete checklist must include the Certification set forth below signed by the Registered Professional Engineer who prepared the Stormwater Report.

Registered Professional Engineer's Certification

I have reviewed the Stormwater Report, including the soil evaluation, computations, Long-term Pollution Prevention Plan, the Construction Period Erosion and Sedimentation Control Plan (if included), the Long-term Post-Construction Operation and Maintenance Plan, the Illicit Discharge Compliance Statement (if included) and the plans showing the stormwater management system, and have determined that they have been prepared in accordance with the requirements of the Stormwater Management Standards as further elaborated by the Massachusetts Stormwater Handbook. I have also determined that the information presented in the Stormwater Checklist is accurate and that the information presented in the Stormwater Report accurately reflects conditions at the site as of the date of this permit application.

Registered Professional Engineer Block and Signature



James A. Bernardino 8/31/23
Signature and Date

Checklist

Project Type: Is the application for new development, redevelopment, or a mix of new and redevelopment?

- New development
- Redevelopment
- Mix of New Development and Redevelopment



Checklist for Stormwater Report

Checklist (continued)

LID Measures: Stormwater Standards require LID measures to be considered. Document what environmentally sensitive design and LID Techniques were considered during the planning and design of the project:

- No disturbance to any Wetland Resource Areas
- Site Design Practices (e.g. clustered development, reduced frontage setbacks)
- Reduced Impervious Area (Redevelopment Only)
- Minimizing disturbance to existing trees and shrubs
- LID Site Design Credit Requested:
 - Credit 1
 - Credit 2
 - Credit 3
- Use of “country drainage” versus curb and gutter conveyance and pipe
- Bioretention Cells (includes Rain Gardens)
- Constructed Stormwater Wetlands (includes Gravel Wetlands designs)
- Treebox Filter
- Water Quality Swale
- Grass Channel
- Green Roof
- Other (describe): _____

Standard 1: No New Untreated Discharges

- No new untreated discharges
- Outlets have been designed so there is no erosion or scour to wetlands and waters of the Commonwealth
- Supporting calculations specified in Volume 3 of the Massachusetts Stormwater Handbook included.



Checklist for Stormwater Report

Checklist (continued)

Standard 2: Peak Rate Attenuation

- Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding.
- Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm.
- Calculations provided to show that post-development peak discharge rates do not exceed pre-development rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24-hour storm.

Standard 3: Recharge

- Soil Analysis provided.
- Required Recharge Volume calculation provided.
- Required Recharge volume reduced through use of the LID site Design Credits.
- Sizing the infiltration, BMPs is based on the following method: Check the method used.
 - Static
 - Simple Dynamic
 - Dynamic Field¹
- Runoff from all impervious areas at the site discharging to the infiltration BMP.
- Runoff from all impervious areas at the site is *not* discharging to the infiltration BMP and calculations are provided showing that the drainage area contributing runoff to the infiltration BMPs is sufficient to generate the required recharge volume.
- Recharge BMPs have been sized to infiltrate the Required Recharge Volume.
- Recharge BMPs have been sized to infiltrate the Required Recharge Volume *only* to the maximum extent practicable for the following reason:
 - Site is comprised solely of C and D soils and/or bedrock at the land surface
 - M.G.L. c. 21E sites pursuant to 310 CMR 40.0000
 - Solid Waste Landfill pursuant to 310 CMR 19.000
 - Project is otherwise subject to Stormwater Management Standards only to the maximum extent practicable.
- Calculations showing that the infiltration BMPs will drain in 72 hours are provided.
- Property includes a M.G.L. c. 21E site or a solid waste landfill and a mounding analysis is included.

¹ 80% TSS removal is required prior to discharge to infiltration BMP if Dynamic Field method is used.



Checklist for Stormwater Report

Checklist (continued)

Standard 3: Recharge (continued)

- The infiltration BMP is used to attenuate peak flows during storms greater than or equal to the 10-year 24-hour storm and separation to seasonal high groundwater is less than 4 feet and a mounding analysis is provided.
- Documentation is provided showing that infiltration BMPs do not adversely impact nearby wetland resource areas.

Standard 4: Water Quality

The Long-Term Pollution Prevention Plan typically includes the following:

- Good housekeeping practices;
 - Provisions for storing materials and waste products inside or under cover;
 - Vehicle washing controls;
 - Requirements for routine inspections and maintenance of stormwater BMPs;
 - Spill prevention and response plans;
 - Provisions for maintenance of lawns, gardens, and other landscaped areas;
 - Requirements for storage and use of fertilizers, herbicides, and pesticides;
 - Pet waste management provisions;
 - Provisions for operation and management of septic systems;
 - Provisions for solid waste management;
 - Snow disposal and plowing plans relative to Wetland Resource Areas;
 - Winter Road Salt and/or Sand Use and Storage restrictions;
 - Street sweeping schedules;
 - Provisions for prevention of illicit discharges to the stormwater management system;
 - Documentation that Stormwater BMPs are designed to provide for shutdown and containment in the event of a spill or discharges to or near critical areas or from LUHPPL;
 - Training for staff or personnel involved with implementing Long-Term Pollution Prevention Plan;
 - List of Emergency contacts for implementing Long-Term Pollution Prevention Plan.
- A Long-Term Pollution Prevention Plan is attached to Stormwater Report and is included as an attachment to the Wetlands Notice of Intent.
 - Treatment BMPs subject to the 44% TSS removal pretreatment requirement and the one inch rule for calculating the water quality volume are included, and discharge:
 - is within the Zone II or Interim Wellhead Protection Area
 - is near or to other critical areas
 - is within soils with a rapid infiltration rate (greater than 2.4 inches per hour)
 - involves runoff from land uses with higher potential pollutant loads.
 - The Required Water Quality Volume is reduced through use of the LID site Design Credits.
 - Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if applicable, the 44% TSS removal pretreatment requirement, are provided.



Checklist for Stormwater Report

Checklist (continued)

Standard 4: Water Quality (continued)

- The BMP is sized (and calculations provided) based on:
 - The ½" or 1" Water Quality Volume or
 - The equivalent flow rate associated with the Water Quality Volume and documentation is provided showing that the BMP treats the required water quality volume.
- The applicant proposes to use proprietary BMPs, and documentation supporting use of proprietary BMP and proposed TSS removal rate is provided. This documentation may be in the form of the propriety BMP checklist found in Volume 2, Chapter 4 of the Massachusetts Stormwater Handbook and submitting copies of the TARP Report, STEP Report, and/or other third party studies verifying performance of the proprietary BMPs.
- A TMDL exists that indicates a need to reduce pollutants other than TSS and documentation showing that the BMPs selected are consistent with the TMDL is provided.

Standard 5: Land Uses With Higher Potential Pollutant Loads (LUHPPLs)

- The NPDES Multi-Sector General Permit covers the land use and the Stormwater Pollution Prevention Plan (SWPPP) has been included with the Stormwater Report.
- The NPDES Multi-Sector General Permit covers the land use and the SWPPP will be submitted **prior to** the discharge of stormwater to the post-construction stormwater BMPs.
- The NPDES Multi-Sector General Permit does **not** cover the land use.
- LUHPPLs are located at the site and industry specific source control and pollution prevention measures have been proposed to reduce or eliminate the exposure of LUHPPLs to rain, snow, snow melt and runoff, and been included in the long term Pollution Prevention Plan.
- All exposure has been eliminated.
- All exposure has **not** been eliminated and all BMPs selected are on MassDEP LUHPPL list.
- The LUHPPL has the potential to generate runoff with moderate to higher concentrations of oil and grease (e.g. all parking lots with >1000 vehicle trips per day) and the treatment train includes an oil grit separator, a filtering bioretention area, a sand filter or equivalent.

Standard 6: Critical Areas

- The discharge is near or to a critical area and the treatment train includes only BMPs that MassDEP has approved for stormwater discharges to or near that particular class of critical area.
- Critical areas and BMPs are identified in the Stormwater Report.



Checklist for Stormwater Report

Checklist (continued)

Standard 7: Redevelopments and Other Projects Subject to the Standards only to the maximum extent practicable

- The project is subject to the Stormwater Management Standards only to the maximum Extent Practicable as a:
- Limited Project
 - Small Residential Projects: 5-9 single family houses or 5-9 units in a multi-family development provided there is no discharge that may potentially affect a critical area.
 - Small Residential Projects: 2-4 single family houses or 2-4 units in a multi-family development with a discharge to a critical area
 - Marina and/or boatyard provided the hull painting, service and maintenance areas are protected from exposure to rain, snow, snow melt and runoff
 - Bike Path and/or Foot Path
 - Redevelopment Project
 - Redevelopment portion of mix of new and redevelopment.
- Certain standards are not fully met (Standard No. 1, 8, 9, and 10 must always be fully met) and an explanation of why these standards are not met is contained in the Stormwater Report.
- The project involves redevelopment and a description of all measures that have been taken to improve existing conditions is provided in the Stormwater Report. The redevelopment checklist found in Volume 2 Chapter 3 of the Massachusetts Stormwater Handbook may be used to document that the proposed stormwater management system (a) complies with Standards 2, 3 and the pretreatment and structural BMP requirements of Standards 4-6 to the maximum extent practicable and (b) improves existing conditions.

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control

A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan must include the following information:

- Narrative;
 - Construction Period Operation and Maintenance Plan;
 - Names of Persons or Entity Responsible for Plan Compliance;
 - Construction Period Pollution Prevention Measures;
 - Erosion and Sedimentation Control Plan Drawings;
 - Detail drawings and specifications for erosion control BMPs, including sizing calculations;
 - Vegetation Planning;
 - Site Development Plan;
 - Construction Sequencing Plan;
 - Sequencing of Erosion and Sedimentation Controls;
 - Operation and Maintenance of Erosion and Sedimentation Controls;
 - Inspection Schedule;
 - Maintenance Schedule;
 - Inspection and Maintenance Log Form.
- A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan containing the information set forth above has been included in the Stormwater Report.



Checklist for Stormwater Report

Checklist (continued)

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control (continued)

- The project is highly complex and information is included in the Stormwater Report that explains why it is not possible to submit the Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan with the application. A Construction Period Pollution Prevention and Erosion and Sedimentation Control has **not** been included in the Stormwater Report but will be submitted **before** land disturbance begins.
- The project is **not** covered by a NPDES Construction General Permit.
- The project is covered by a NPDES Construction General Permit and a copy of the SWPPP is in the Stormwater Report.
- The project is covered by a NPDES Construction General Permit but no SWPPP been submitted. The SWPPP will be submitted BEFORE land disturbance begins.

Standard 9: Operation and Maintenance Plan

- The Post Construction Operation and Maintenance Plan is included in the Stormwater Report and includes the following information:
 - Name of the stormwater management system owners;
 - Party responsible for operation and maintenance;
 - Schedule for implementation of routine and non-routine maintenance tasks;
 - Plan showing the location of all stormwater BMPs maintenance access areas;
 - Description and delineation of public safety features;
 - Estimated operation and maintenance budget; and
 - Operation and Maintenance Log Form.
- The responsible party is **not** the owner of the parcel where the BMP is located and the Stormwater Report includes the following submissions:
 - A copy of the legal instrument (deed, homeowner's association, utility trust or other legal entity) that establishes the terms of and legal responsibility for the operation and maintenance of the project site stormwater BMPs;
 - A plan and easement deed that allows site access for the legal entity to operate and maintain BMP functions.

Standard 10: Prohibition of Illicit Discharges

- The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges;
- An Illicit Discharge Compliance Statement is attached;
- NO Illicit Discharge Compliance Statement is attached but will be submitted **prior to** the discharge of any stormwater to post-construction BMPs.

Attachment 3

Construction Period Stormwater Pollution Prevention Plan “SWPPP”

**Construction Period
Erosion and Sediment Control
Stormwater Pollution Prevention Plan
(SWPPP)
“Cornerstone Bank”
Proposed ITM Drive-Thru Improvements
#200 Charlton Road
Sturbridge, MA 01566**

August 2023

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**Stormwater Pollution Prevention Plan (SWPPP)
For Construction Activities
Cornerstone Bank
#200 Charlton Road
Sturbridge, MA 01566
August 2023**

Responsible Party/ Property Owner:

Southbridge Savings Bank
P.O. Box 370
Southbridge, MA 01550
p. (800) 939-9103 ext.71056

Project Manager:	Arthur Breault Facilities Manager (800) 939-9103 x71056 ABreault@cornerstonebank.com	Site Engineer:	CMG Engineering 67 Hall Road Sturbridge, MA 01566 Tel: (774) 241-0901
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Project Description:

Proposed scope of work will include the demolition of the existing ATM/Teller Canopy Structure and the associated concrete islands, along with removal of a large portion of the existing pavement. A new canopy structure and concrete islands will be erected for ITM machines, with this addition being located to the north of the existing bank building. This structure will be completely detached. New pavement, new pavement striping, and minor grading will be conducted as needed based on the existing conditions. All of the proposed work in exception to some minor striping work will take place outside of the 200' Sturbridge Local Bylaw Buffer. The area of disturbance is less than 1 acre, therefore, coverage under the NPDES Construction General Permit is not required.

Soil disturbing activities will include: pavement removal, demolition of the existing ATM islands and associated canopy, installation of new canopy and ITM's, installation of new pavement, and installation of landscaping.

Supporting Documents:

- "Cornerstone Bank – Proposed ITM Drive-Thru Improvements", drawn by CMG, dated 8/31/2023.

Sequence of Major Activities:

The order of activities will be as follows:

1. Conduct a pre-construction meeting with applicable town staff, peer review consultants, and engineer of record.
2. Obtain all applicable permits from town and state before starting any work on the site.
3. Install erosion controls as shown on the plan and details.
4. Disconnect applicable utilities and services to the existing canopy structure. Once utilities are properly terminated, contractor may demolish existing site features shown on the demo plan.
5. Rough grade the site as shown on the grading plan.
6. Construct the proposed ITM drive-thru improvements per the site plan.
7. Install all subsurface utilities.
8. Finalize proposed site improvements per the approved site plan. Install ground cover treatment per the landscape plan to stabilize any disturbed areas.
9. Coordinate final approvals with engineer of record & applicable town departments. As-built survey and inspections will be required prior to final approval by the town departments.
10. Remove all erosion control measures from the site and properly dispose of measures off-site.

Designation of Project Supervisors:

Stormwater Team – Project Contractor will be the designated “Project Supervisor” and responsible for compliance with erosion control inspections, stormwater system protection, and maintenance of entrance driveway & drainage system during construction until completion of the project.

Erosion and Sediment Controls:

All on-site Construction Activities and Erosion & Sediment Controls are to be conducted, installed, and maintained in accordance with this SWPPP.

Catch Basin Inlet Protection – Install Silt Sack inlet protection in catch basins as shown on the approved SESC plan. Clean, or remove and replace, the inlet protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised. Where there is evidence of sediment accumulation adjacent to the inlet protection measure, remove the deposited sediment by the end of the same business day in which it is found or by the end of the following business day if removal by the same business day is not feasible.

Stockpiling or Storage of Excavated Materials – Completely surround temporary material stockpiles with silt fence to prevent transportation of sediment.

- Stockpiles shall be located outside of delineated wetland jurisdictional areas.
- Surround all stockpiles with straw bales if on-site > 1 week.

Dust Control – Precautions shall be taken to prevent dust from becoming a nuisance to abutting property owners. Pavements adjoining the excavation shall be broomed on a daily basis. All earth stockpiles should be covered and/or kept moist at all times. To further control dust, calcium chloride (ASTM D-98, Type I) may be used over certain areas of the site, as directed by the engineer. Additionally, all dump trucks hauling material to and from the site shall be covered with a tarpaulin. The contractor shall maintain and inspect, on a daily basis, the adequacy of dust control measures and correct any deficiencies immediately.

Temporary Stabilization – Top soil stock piles and disturbed portions of the site where construction activity ceases for at least 21 days will be stabilized with temporary seed and mulch no later than 14 days from the last construction activity in that area. The temporary seed and mulch procedures and specifications shall be in accordance with the landscape architect’s recommendations. Areas of the site which are to be paved will be temporarily stabilized by applying geotextile and stone sub-base until bituminous pavement can be applied.

Pavement Maintenance – The contractor shall sweep paved roadways adjacent to the site on a routine basis to prevent tracking of mud onto public roadways and washing of mud into waterways.

Permanent Stabilization – Disturbed portions of the site where construction activities permanently cease shall be stabilized with permanent seed no later than 14 days after the last construction activity. The permanent seed & mulch specifications and procedure shall be in accordance with the landscape architect's recommendations.

Waste Disposal:

Waste Materials – All waste materials will be collected and stored in a securely lidded metal dumpster. The dumpster shall meet all Commonwealth of Massachusetts solid waste management regulations. The dumpster will be emptied a minimum of once per week or more often if necessary. No construction waste materials will be buried on-site. All personnel will be instructed regarding the correct procedure for waste disposal. Notices stating these practices will be posted in the office trailer and the contractor will be responsible for seeing that these procedures are followed.

Hazardous Waste – All hazardous waste materials will be disposed of in the manner specified by the Commonwealth of Massachusetts regulations. Site personnel will be instructed in these practices and the contractor will be responsible for seeing that these procedures are followed.

Sanitary Waste – All sanitary waste will be collected from the portable unit a minimum of three times per week by a licensed sanitary waste management contractor as required by local regulation.

Maintenance/Inspection Requirements:

- All control measures will be **inspected** by site contractors at least **following every runoff-producing rainfall, but in no case less than once a week.**
- Any mud or sediment that is tracked onto public roadways will be removed immediately.
- All measures will be maintained in good working order; if a **repair** is necessary, it will be initiated **within 24 hours** of report.
- Following the final removal of any erosion and sediment control devices, sediment deposits shall be graded in a manner to meet existing topography.

Daily Site Contractor Visual Inspection:

- **Catch Basin Inlet Protection** will be visually inspected by site contractors daily for depth of sediment, tears, to see if the fabric is securely attached to the inlet grate.

Weekly Site Contractor Inspection:

- **Catch Basin Inlet Protection** will be inspected and recorded by site contractor weekly for depth of sediment, tears, to see if the fabric is securely attached to the inlet grate. *Built up sediment will be removed from the Silt Sack when it has reached $\frac{1}{4}$ of the effective storage capacity.
- **Temporary and permanent seeding and planting** will be inspected **weekly**, at a minimum, by site contractors for bare spots, washouts, and healthy growth.

Compliance w/ Long Term Operation & Maintenance Plan:

- Refer to Site specific “Long Term Operation and Maintenance Plan” for post-construction stormwater management requirements.

Attachment A

**Inspection and Maintenance Report Form
&
Stormwater Inspection Figure**

Weekly Storm water Construction Site Inspection Report 200 CHARLTON ROAD - STURBRIDGE, MA

General Information				
Project Name	Cornerstone Bank – Proposed ITM Drive-Thru Improvements			
MassDEP File Number:	DEP FILE No. CE ___ - ___ N/A			
Date of Inspection		Start/End Time		
Inspector's Name(s) & Contact Information				
Type of Inspection: <input type="checkbox"/> Regular <input type="checkbox"/> Pre-storm event <input type="checkbox"/> During storm event <input type="checkbox"/> Post-storm event				
Weather Information				
Has there been a storm event since the last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide: Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):				
Weather at time of this inspection? <input type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input type="checkbox"/> Rain <input type="checkbox"/> Sleet <input type="checkbox"/> Fog <input type="checkbox"/> Snowing <input type="checkbox"/> High Winds <input type="checkbox"/> Other: Temperature:				
Have any discharges occurred since the last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe:				
Are there any discharges at the time of inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe:				
	Site – Specific BMPs	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	Catch Basin Inlet Protection	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	Roadway Sweeping	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	Stockpile & Staging Areas	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Print name and title: _____

Signature: _____ **Date:** _____

Attachment 4

Long-Term Operation & Maintenance Plan

STORM WATER MANAGEMENT SYSTEM LONG-TERM OPERATION & MAINTENANCE PLAN

August 31, 2023

**Cornerstone Bank
Proposed ITM Drive-Thru Improvements
#200 Charlton Road
Sturbridge, MA**

Prepared For:

Cornerstone Bank
253 – 257 Main Street
Southbridge, MA 01550

Prepared By:

CMG Environmental, Inc.
67 Hall Road
Sturbridge, MA 01566
Phone: (774) 241-0901

CMG ID 2023-128

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**Long Term Operation & Maintenance Plan
Site Stormwater Management System**

**Cornerstone Bank
#200 Charlton Road
Sturbridge, MA**

Operation and Maintenance (O&M) Plan

The purpose of this Storm Water Management System Operation and Maintenance Plan is to prevent erosion, sedimentation, pollution or other deterioration of the storm water management system and resource areas located on and adjacent to the site property located at **#200 Charlton Road in Sturbridge, MA** (the “Site”). The storm water management system shall be maintained properly to assure its continued performance.

Responsible Party:

Cornerstone Bank
253 – 257 Main Street
Southbridge, MA 01550
p. (800) 939-9103 ext. 71056

Storm water Management System Owner: (same as above)

Site subject to Wetlands Protection Act: YES

The “Responsible Party” Shall:

- Prepare and submit an “**Operation and Maintenance (O & M) Compliance Statement**” (see **Attachment #1**) upon completion of site construction activities.
- Implement the routine and non-routine operation, maintenance, and inspection tasks in accordance with the procedures specified in this document to ensure that all storm water management systems function as designed;
- Maintain a log of all operation and maintenance (O & M) activities for the last five (5) years, including inspections, repairs, replacement and disposal (for disposal, the log shall indicate the type of material and disposal location);
- Make this log available to **Town of Sturbridge** official representatives upon request;
- Agree to notify in writing all “future property owners” of the presence of the storm water management system and the requirement for proper operation and maintenance.

“**Cornerstone Bank**” maintains a contract with the following companies:

Landscaping & Pavement Maintenance: _____

Snow Removal & Plowing: _____

Storm Water System Maintenance: _____

Table No. 1
#200 Charlton Road, Sturbridge, MA
Proposed ITM Drive-Thru Improvements

STORMWATER SYSTEM INSPECTION AND MAINTENANCE SCHEDULE		
Best Management Practice (BMP)	Inspection Frequency	Maintenance Frequency
STRUCTURAL BMPs		
Catch Basins	Four (4) Times / Year	Remove Sediment Four (4) Times / Year or if Sediment Depth Reaches 50% of Sump (End of Foliage & Snow Removal Seasons)
NON-STRUCTURAL STORMWATER CONTROLS		
Landscaping	Four (4) Times / Year	Seasonally As Needed
Roadway / Driveway Sweeping	Two (2) Times /Year	Seasonally As Needed
Snow Removal	Seasonally As Needed	In Accordance with M.G.L. Title XIV. Public Ways and Works; Chapter 85

STRUCTURAL STORMWATER BMP MAINTENANCE:

Deep Sump Catch Basin(s):

- Inspect or clean catch basin(s) at least four (4) times per year, including the end of the foliage and snow removal seasons.
- Inspection shall occur by probing the structure with a rod to determine the depth of accumulated sediment.
- Sediments must be removed four (4) times per year or whenever the depth of sediment is greater than or equal to one half of the depth from the bottom of the invert of the lowest pipe in the basin. At a minimum, cleaning shall occur twice a year during the spring and fall.
- The structure will be cleaned of water and sand/debris with the use of a vacuum truck. Material removed from the structure will be disposed of legally off-site by the vendor.
- Unless there is evidence that they have been contaminated by a spill or other means, catch basin cleanings may be taken to a landfill or other facility permitted by MassDEP to accept solid waste.

NON- STRUCTURAL STORM WATER MANAGEMENT CONTROLS:

Non-Structural Control Measures & Stormwater Treatment

Landscape & Pavement Maintenance:

- **No debris, refuse or other materials**, including but not limited to landscaping debris, leaves, shrubs and tree trimmings, logs, bricks, stone or trash shall be deposited within the vegetated wetland.
- The use of pesticides, herbicides, and fertilizers on the site shall be prohibited as all site improvements are located within WsPA Jurisdictional Areas.
- Pavement areas will be swept seasonally as necessary to remove accumulated winter sand and salt and fall leaves, and shall be swept as required to remove litter. Collected material will be properly disposed of off-site.

Trash Removal

- Inspect on-site area for litter and trash as needed. Any accumulated trash, litter, and discarded materials in this area will be removed and will be disposed of at a suitable location on a weekly basis.

HAZARDOUS WASTE / OIL SPILL RESPONSE PROCEDURE

Initial Notification. In the event of a spill of hazardous waste or oil the facility manager or supervisor will be notified immediately by telephone.

Assessment – Initial Containment. The supervisor or manager will assess the incident and initiate control measures. The supervisor will first contact the **Town of Sturbridge Fire Department** and then notify the **Town of Sturbridge Police Department**. The Fire Department is ultimately responsible for matters of public health and safety and should be notified immediately.

Fire Department Telephone: 911 (Emergency); (508) 347-2525 (Non-Emergency)

Police Department Telephone: 911 (Emergency); (508) 347-2525 (Non-Emergency)

Further Notification. Based on the assessment by the Fire Chief, additional notification to a clean up contractor may be made. The Massachusetts Department of Environmental Protection and the EPA may be notified depending upon the nature and severity of the spill. The Fire Chief will be responsible for determining the level of clean up and notification required.

SNOW MANAGEMENT PLAN:

- No snow storage shall be located within or “deposited” within wetland resource areas on or off-site.
- No salt shall be used to treat unpaved areas during snow and ice conditions. The storage of all “de-icing” chemicals and treatment products is to be inside the building.
- If Site snow storage interferes with driveway maneuvers or sight distances (i.e. blocking of travel aisles, sight distance, or parking) the snow pile will be either removed or reduced legally in a legal manner by the snow plow vendor within 24-hours.
- Pavement areas will be swept seasonally as necessary to remove accumulated winter sand and salt and fall leaves, and shall be swept as required to remove litter. Collected material will be properly disposed of off-site.

INSPECTIONS / RECORDKEEPING:

Routine Inspections:

Routine inspections and maintenance to be conducted with the frequency described in this Operation and Maintenance Plan. All repairs and maintenance activities regarding the stormwater management system should be recorded and provided to the Sturbridge Conservation Commission upon request. An example inspection form is provided in **Attachment #2**.

Recordkeeping

Records of all drainage system inspections and maintenance shall be kept on file for a period of at least **five (5) years**.

Attachment #1

Illicit Discharge Compliance Statement

Illicit Discharge Compliance Statement
Site Storm Water Management System
Cornerstone Bank
Proposed ITM Drive-Thru Improvements
#200 Charlton Road
Sturbridge, MA

Responsible Party:

Cornerstone Bank

253 – 257 Main Street

Southbridge, MA 01550

p. (800) 939-9103 ext. 71056

Storm Water Management System Owner: (same as above)

Site subject to Wetlands Protection Act: YES

The above listed “responsible party” is responsible for implementation of this “Long-Term Operation and Maintenance Plan” and certifies that:

- The site has been inspected for erosion and appropriate steps have been taken to permanently stabilize any eroded areas;
- All aspects of storm water BMPs have been inspected for damage, wear and malfunction, and appropriate steps have been taken to repair or replace the system or portions of the system so that the storm water at the site may be managed in accordance with:
 - MA-DEP Stormwater Management Standards, revise date January 2, 2008;
- There is no record or knowledge of illicit discharges to the on-site stormwater management system;
- All “future property owners” must be notified of their continuing legal responsibility to operate and maintain the Site Stormwater Management System.
- The “Long-Term Operation and Maintenance Plan” for the storm water BMPs is being implemented.

Signature of Responsible Party:

Cornerstone Bank

Date

Attachment #2

Stormwater Management System Quarterly Inspection Form

Inspection Form - Storm Water Management System
Cornerstone Bank
Proposed ITM Drive-Thru Improvements
#200 Charlton Road, Sturbridge, MA

QUARTERLY INSPECTION AND MAINTENANCE REPORT

Jan.-Mar. Apr.-Jun. July-Sep. Oct. – Dec.

Note: This Log should be copied prior to use. Note Additional Comments on back of Form.

Inspector's Name: _____ Date: _____ Time: _____ am/pm

Inspector's Qualifications: _____

Days Since Last Rainfall: _____

Amount of Last Rainfall: _____ inches

Item/Condition to be Checked	Maintenance Required		Corrective Action & Date
	No	Yes	
Catch Basins			
Parking Lot / Driveway Sweeping			*Sweep Seasonally – As Needed
Landscaping / Trash Removal			
Snow Removal (seasonal)			*All De-icing chemical storage to be inside building

Additional Comments: _____