

## **Background Materials for April 5, 2021**

### **Agenda Items #1 through #9**

#### **Persons may join the meeting and/or public hearing by either of the following:**

*Join ZOOM Webinar from your computer:*

<https://us02web.zoom.us/j/81613481196?pwd=bDkxQzBYUj4TG1SYWFiNGpRL1VLQT09>

*Join by phone:* US: +1 301 715 8592

*Webinar ID:* 816 1348 1196 *Passcode:* 823695

#### **Channel 15/Facebook Streaming:**

***The Cable Studio staff have indicated that this meeting will NOT be viewable on Channel 15 since the School Committee is meeting.***

During the meeting, persons who are not joining the meeting, but watching via the online streaming may submit questions or comments via the Google Form or the dedicated email address: [SHPlanBoard@southhadley.ma.gov](mailto:SHPlanBoard@southhadley.ma.gov)

#### ***Agenda Item #1: Open Comment Period***

This 10-minute period is set aside for the public to offer comments on items not on the March 22<sup>nd</sup> agenda – in accordance with the adopted policy which is posted on the Planning & Conservation Department page of the Town's website at the following link:

<https://southhadley.org/DocumentCenter/View/8160/Policy-on-Open-Comment-Period---As-Adopted-2021-03-08>

One email has been received by the Board requesting that the Board mandate all new structures have solar ready roofs.

**ACTION NEEDED:** Allow members of the public to offer comments.

#### ***Agenda Item #2 – Minutes***

The Planning & Conservation staff have emailed a draft of the following minutes for the Board's review:

March 4th Special Meeting (2nd revision)

March 18th Special Meeting

March 22nd Regular Meeting

**ACTION NEEDED:** The Board needs to vote to approve the minutes as submitted or with edits.

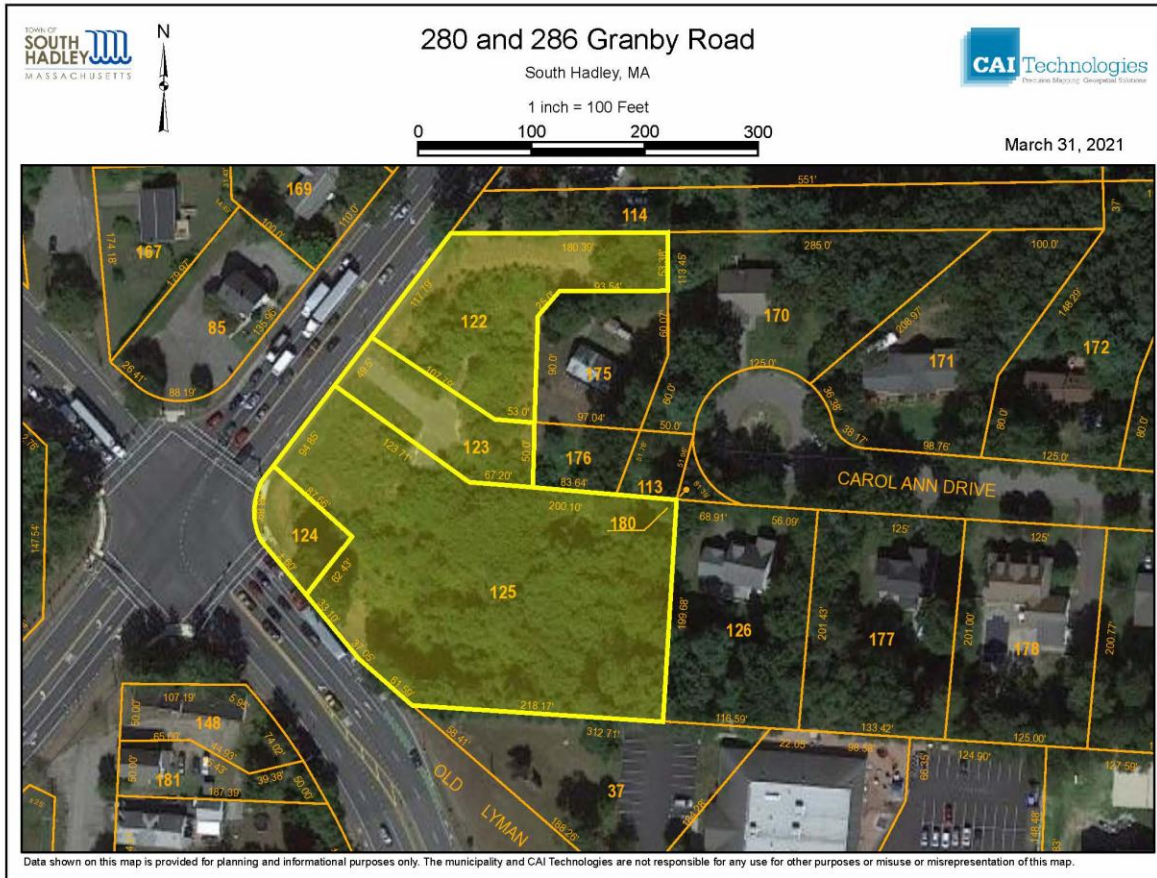
#### ***Agenda Item #3 – Correspondence***

A list of correspondence is attached.

**ACTION NEEDED:** No action is required.

**Agenda Item #4 – Deferral/Continuation of Public Hearing on Zoning Map Amendment Request**

33 Granby Road, LLC submitted a request to change the zoning on 4 parcels to Business A. The properties have frontage on Route 202 and Route 33 (see aerial photo below). The smallest of the



parcels is zoned Business A while the other three are in the Residence A-1 zoning district. Pursuant to Chapter 40A, Section 5, MGL, the Selectboard referred it to the Planning Board for a public hearing and a report to Town meeting.

A public hearing was scheduled and advertised for April 5, 2021 at 6:45 p.m. However, on March 30, 2021, the applicant requested that the hearing be continued (deferred) until April 26, 2021 as they were in the process of submitting a second request for several adjacent properties and it would be more appropriate to have the hearings on all of the parcels held concurrently. Since the request was submitted well before the 72-hour time limit set by the Planning Board policy, a notice was posted of the deferral/continuation request and the certified abutters were notified.

**ACTION NEEDED:** Vote to defer the public hearing – without opening the hearing – until Monday April 26, 2021 at 7:30 p.m.

***Agenda Item #5 – Review of Master Plan Update***

As discussed at the meeting on March 30, 2021, since the public hearing on the zoning map amendment is to be deferred until April 26, 2021 and the public hearing on the Stormwater Management Bylaw rewrite is not scheduled to begin until 7:45 p.m., it would be a good opportunity for the Board to continue with their review of the Master Plan Update. It is noted that the Board ended their review on March 30<sup>th</sup> at the beginning of Section 6 – Implementation Plan (page 64). As this is the Board’s initial review of the Master Plan Update, public comments are not being taken at this time. It is vital that the Board fully understand the report’s content before taking comments on the draft. **HOWEVER**, it is noted and emphasized that following the Board’s completion of their review, they will have public meetings for public comment and input including but not limited to a formal public hearing. There is no intention for the Board to rush through the adoption process. A copy of the draft Master Plan Update is posted on the Planning & Conservation Department page of the Town’s website at the following link:

<https://www.southhadley.org/1078/2020-Master-Plan-Update>

Anyone wishing to submit comments on this draft are welcome and encouraged to do so. Comments may be submitted by letter or by using the following email address:

[SHPlanBoard@southhadleyma.gov](mailto:SHPlanBoard@southhadleyma.gov)

**ACTION NEEDED:** Review and offer edits or comments on Section 6 of the Master Plan Update Report.

***Agenda Item #6 – Public Hearing – Stormwater Management Bylaw*** ***Time: 7:45 p.m.***

As the Board is aware, as part of an MVP Action Grant, the Town engaged Scott Turner of Environmental Partners to provide assistance in revising the Town’s Stormwater Management Bylaw (Chapter 200 of the Town Code) to comply with new Federal requirements and to address local concerns particularly as they relate to climate change. This effort has led to a proposed rewrite of the Stormwater Management Bylaw which will require Town Meeting to approve a warrant article (a General Bylaw action). The article will propose to repeal the existing Stormwater Management Bylaw in its entirety and replace it with a new Stormwater Management Bylaw. The purpose of this public hearing is to solicit public comments on the proposal. To aid in review of the proposed rewrite and to show the differences between the existing Stormwater Management Bylaw and the proposed revision, an annotated copy of the Stormwater Management Bylaw is posted on the Planning & Conservation Department page of the Town’s website at the following link:

<https://southhadley.org/DocumentCenter/View/8164/Proposed-Annotated-Stormwater-Management-Bylaw-2021-03-10>

The public hearing has been advertised for April 5, 2021 at 7:45 p.m. (see the attached legal notice).

Anne Capra, Conservation Administrator/Assistant Planner has taken the lead on this project from writing the Action Grant application through selection of the consultant to preparation of the annotated version the proposed rewrite. She will provide an overview of the proposal and answer questions anyone may have at the public hearing.

**ACTION NEEDED:** Conduct the Public Hearing.

***Agenda Item #7 – Recommendation on Repeal/Replace Stormwater Management Bylaw***

Though this proposed article is not a Zoning Bylaw or Zoning Map amendment, since it is to be offered by the Planning Board, it is customary for the Planning Board to provide a report and recommendation to Town Meeting on the proposal. Therefore, the Board needs to indicate if they wish to proceed with and support the proposal. A draft report will be provided for the Board to consider either at the April 12, 2021 or April 26, 2021 meeting for your consideration.

**ACTION NEEDED:** Vote to support (or not) the proposed revision to the Stormwater Management Bylaw.

***Agenda Item #8 - Planning & Conservation Department Report***

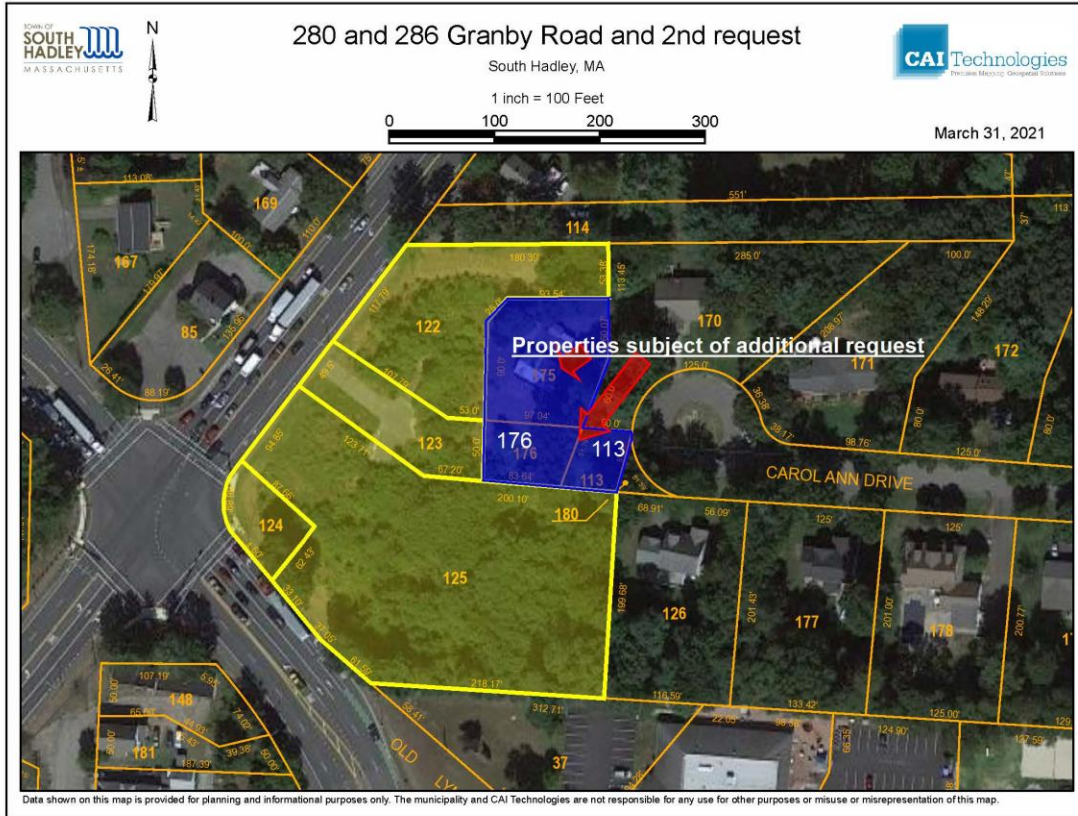
The Planning & Conservation Department staff will provide a report on the following items:

***a. Development Activity***

- Senior Center Sign Illumination: Application materials for an illuminated sign at the new Senior Center has been electronically submitted. This matter will be scheduled for the April 12<sup>th</sup> meeting. Application materials are posted on the Planning & Conservation Department page of the Town's website at the following link:  
<https://www.southhadley.org/DocumentCenter/View/8256/Dayton-Street---Senior-Center-Sign---Application-Packet>
- Hylemon Chiropractic Sign Replacement: Application materials for a new illuminated sign at the Hylemon Chiropractic office at 281 Granby Road have been submitted. This matter will be scheduled for the April 12<sup>th</sup> meeting. Application materials are posted on the Planning & Conservation Department page of the Town's website at the following link:  
<https://www.southhadley.org/DocumentCenter/View/8255/Sign---Granby-Road-281---Applicaiton-Packet---Hylemon-Chiropractic>
- Skinner Woods: The project engineer has been making revision to his submittal and this matter will likely be scheduled for endorsement at the April 26<sup>th</sup> Planning Board meeting.
- Rocky's Hardware: We have received the Site Plan Review and Stormwater Management Permit applications and plans for this project. The public hearing is scheduled for Monday April 26, 2021 at 6:30 p.m. Application materials are posted on the Planning & Conservation Department page of the Town's website at the following link:  
<https://www.southhadley.org/1090/Newton-Street-501---SPR-Rockys-Hardware>
- McKinley Avenue Duplex. A developer is proposing to construct a two-family dwelling on a lot on McKinley Avenue. Comments were provided on their initial draft of their submittal. However, since no application has been submitted and the April 26<sup>th</sup> meeting agenda is very full, a public hearing on this matter will not occur until at least May.

b. Bylaw and Map Amendments

- As noted earlier, the public hearing on the Route 202/Route 33 zoning map amendment request was deferred at the applicant's request because they intended to submit a request for zoning map amendments regarding three other parcels. The second request has been submitted for a change in the zoning for properties near Route 202 and Route 33 (see aerial photo below). The Selectboard is anticipated to refer the matter to the Planning



Board for public hearing at their April 6<sup>th</sup> meeting. Therefore, this matter will be scheduled for a public hearing on April 26, 2021 at 7:30 p.m. This request will be heard in conjunction with the previous request which was to be heard April 5<sup>th</sup> but is being deferred until April 26, 2021.

As noted in the aerial photo, the second request is for three parcels identified in blue. While one parcel “touches” Carol Ann Drive”, the amount of frontage is insufficient to provide any motorized vehicle access.

- Stormwater Management Bylaw Rewrite. To be considered under Agenda Items #6 and #7 above.

c. Master Plan Update

- As the Board is aware, the Master Plan Update Advisory Committee has recommended the draft Update to the Planning Board for their review and consideration. The Board met

on January 21, 2021, February 4, 2021, March 4, 2021. And March 18, 2021 to review the Master Plan Update. Additional Planning Board meetings were scheduled to complete the first round of the Board's review of the Master Plan Update on the following dates – to be held at 6:00 p.m. for approximately 2 hours each night:

- Tuesday March 30, 2021
- Monday April 5, 2021 (as part of the Board's special meeting)
- Monday April 12, 2021 (as part of the Board's regular meeting to the extent time is available)
- Thursday April 22, 2021 (may be cancelled depending on the results of the review on April 12, 2021)

Several boards have submitted comments and questions regarding the update in response to meetings with the Master Plan Implementation Committee. The staff is compiling these comments and they were provided to the Board for review prior to the March 18th meeting – to review them in a piecemeal fashion would be disruptive and counterproductive. However, the Board has not reached the point of reviewing the comments yet.

d. Planning Board Meeting Schedule

As set at the December 14, 2020 meeting, the remaining regular meeting schedule through April 30, 2021 is as follows:

- ~~Monday, January 25, 2021~~
- ~~Monday, February 8, 2021~~
- ~~Monday, February 22, 2021~~
- ~~Monday, March 8, 2021~~
- ~~Monday, March 22, 2021~~
- Monday, April 12, 2021
- Monday, April 26, 2021

e. Planning & Conservation Department Grant Activity

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**Agenda Item #8 – Other New Business**

I have included this agenda item for Board members to bring up new items (for discussion and future consideration) that are not on the agenda and which the Chair could not reasonably expect to be discussed/considered as of the date which the agenda was posted.

Additionally, this is an opportunity for the representatives on various committees and the PVPC Commissioner/Alternate Commissioner to make reports to the Board. The reports should be less than 3 minutes each.

# **SOUTH HADLEY PLANNING BOARD**

## **LIST OF CORRESPONDENCES**

**March 23-31 2021**

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### **Letters & Memos**

- Letter received March 29, 2021 from James Channing, 33 Granby Road LLC, requesting a continuation of the public hearing scheduled to open on April 5, 2021 to consider zoning map amendments for property located at the southeast corner of Granby Road (202) and Willimansett Street (Route 33)
- Application for Site Plan review received March 29, 2021 for proposed commercial development at 501 Newton Street
- Application for a Stormwater Management Permit received March 31, 2021 for proposed commercial development at 501 Newton Street.
- Illuminated Sign request received for illumination of one wall sign at the new senior center located at 45 Dayton Street.
- Illuminated Sign request received for a new replacement illuminated wall sign at 281 Granby Road

### **Legal Notices**

#### ***Amherst***

- Notice received March 24, 2021 from the Amherst Planning Board for a public hearing on April 7, 2021 to consider a site plan to construct a handicap accessible ramp and repair stairs at the John Musante Health Center located at Boltwood Walk

#### ***Chicopee***

- Notice received March 29, 2021 from the Chicopee Planning Board for a public hearing on April 8, 2021 to consider a zone change from business A to residential A to allow for a subdivision at Knapp Street

#### ***Granby***

- Notice received March 29, 2021 from the Granby Planning Board for a public hearing on April 12, 2021 to consider amendments to the Granby Zoning Bylaw and Granby Zoning Map

#### ***Hadley***

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#### ***Holyoke***

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### **Publications**

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BRAD HUTCHISON, Chair  
DIANE SUPCZAK-MULVANEY, Vice-Chair  
JOANNA BROWN, Clerk  
MELISSA O'BRIEN, Member  
NATE THERIEN, Member  
MICHAEL ADELMAN, Associate Member

RICHARD HARRIS, Director of Planning & Conservation  
rharris@southhadleyma.gov

**TOWN OF SOUTH HADLEY  
NOTICE OF PLANNING BOARD PUBLIC HEARING  
Relative to Proposed Repeal and Replacement of Stormwater Management By-Law**

Pursuant to the provisions of the South Hadley General By-Laws and the Governor's Executive Orders pertaining to public gatherings during the COVID 19 State of Emergency, will hold a virtual public hearing on Monday, April 5, 2021 at 7:45 p.m. to discuss a proposed amendment to the Town's General Bylaws to repeal Chapter 200 (Stormwater Management Bylaw) in its entirety as presently written and replace said Chapter 200 with a new Stormwater Management Bylaw to bring the Town's bylaws in compliance with the requirements of the 2016 Massachusetts Small MS4 General Permit for the control of stormwater runoff and illicit connections and discharges from new and redevelopment projects.. The public hearing will be conducted virtually/online using the Zoom Webinar platform and persons may join the meeting by either joining Zoom Webinar or by phone. At present, the log in information is as follows:

URL to join:

<https://us02web.zoom.us/j/81613481196?pwd=bDkxQzBYUj4TG1SYWFiNGpRL1VLQT09>

Or join by phone: US: +1 301 715 8592

Webinar ID: 816 1348 1196 Passcode: 823695

However, interested persons should review the agenda for the meeting which will be posted on the Town's website no later than Thursday April 1, 2021 for any updated log in information for the meeting.

The complete materials (including text and maps, if any) relative to the proposed new Stormwater Management Bylaw are available are on file in the Planning & Conservation Department Office (Room U6) in Town Hall. The annotated draft of the proposed new Stormwater Management Bylaw is also posted on the Planning & Conservation Department Page of the Town's website [www.southhadleyma.gov](http://www.southhadleyma.gov) in a Section titled "Proposed Bylaw Amendments" in a subsection titled "General Bylaw Amendments". Any person interested in, or wishing to be heard regarding, this request should appear/join the hearing at the time and in the manner designated.

Joanna Brown, Clerk  
South Hadley Planning Board

Publication: Friday, March 12, 2021  
Friday, March 19, 2021



Legend/Explanation for changes notations

The following document provides an annotated copy of Chapter 200 South Hadley Stormwater Management Bylaw as it is proposed to be rewritten under a proposed Town Meeting Warrant Article.

Text to be deleted is generally identified using “strikethrough” as shown below:

~~Chapter 200 Stormwater Management Bylaw~~

Text to be added is generally identified using “underline” and/or “yellow highlight” as shown below:

Chapter 200 Stormwater Management Bylaw

# Chapter 200

## Stormwater Management

~~[HISTORY: Adopted by the Town Meeting of the Town of South Hadley 1-11-2017 STM by Art. 14. Amendments noted where applicable.]~~

### GENERAL REFERENCES

~~Penalties and enforcement — See Ch. 46.~~

~~Wetlands — See Ch. 240.~~

~~Zoning — See Ch. 255.~~

~~Conservation Commission regulations — See Ch. 305.~~

~~Subdivision regulations — See Ch. 360.~~

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### Article I

#### Purpose and Authority

#### § 200-1 Purpose.

A. ~~A.~~ — The purpose of this bylaw is to better manage land development in order to protect, maintain, and enhance the public health, safety, and general welfare of the citizens, property owners and businesses of South Hadley by establishing minimum requirements and procedures to control the adverse impacts associated with stormwater runoff pre- and post-construction and site development.

A.B. ~~This bylaw is also enacted to regulate illicit connections and discharges to South Hadley's Municipal Separate Storm Sewer System (MS4). Regulation of Illicit Connections and Discharges to the Municipal Separate Storm Sewer System (MS4) is necessary for the protection of South Hadley's water bodies and groundwater and to safeguard public health, safety, welfare and the environment.~~

C. ~~B.~~ The proper management of stormwater runoff and illicit discharges will meet the following objectives:

- (1) Reduce the adverse water quality impacts of stormwater discharges to rivers, lakes, reservoirs and streams in order to attain federal water quality standards;
- (2) Prevent the discharge of pollutants, including hazardous chemicals, into stormwater runoff;
- (3) Minimize the volume and rate of stormwater which is discharged to rivers, streams, reservoirs, lakes and combined sewers that flows from any site during and following development;
- (4) Prevent erosion and sedimentation from land development, and reduce stream channel erosion caused by increased runoff;

- (5) Provide for the protection and recharge of groundwater aquifers and maintain the base flow of streams;
- (6) Provide stormwater facilities that are attractive, maintain the natural integrity of the environment, and are designed to protect public safety;
- (7) Maintain or reduce pre-development runoff characteristics after development to the extent feasible;
- (8) Minimize damage to public and private property from flooding;
- (9) Ensure that these management controls are properly maintained; and
- (10) Provide construction site management practices for waste materials and debris.

D. This bylaw establishes the Town of South Hadley's legal authority to inspect and require the removal of illicit discharges into the Municipal Separate Storm Sewer System (MS4).

### §200-X Authority

The Stormwater Management bylaw is hereby established in the Town of South Hadley, Massachusetts. This bylaw is adopted under authority granted by the Home Rule Amendment of the Massachusetts Constitution, the Home Rule statutes, and pursuant to the rules and regulations of the federal Clean Water Act found at 40 CFR 122.34. This bylaw shall take effect upon its approval by the Attorney General and publications as provided by Massachusetts General Laws chapter 40, section 32, provided however, that any continuous legally permitted activities in operation on that day may continue.

### § 200-2 **Enforcement.**

The South Hadley Planning Board shall administer, implement and enforce this bylaw. Any powers granted to or duties imposed upon the Planning Board may be delegated in writing by the Planning Board to employees or agents of the Town of South Hadley.

## Article II **Definitions**

### § 200-3 **Terms defined.**

The following definitions describe the meaning of the terms used in this bylaw:

#### **ADVERSE IMPACT**

Any deleterious effect on waters or wetlands, including their quality, quantity, surface area, species composition, aesthetics or usefulness for human or natural uses, which are or may potentially be harmful or injurious to human health, welfare, safety or property, to biological productivity, diversity, or stability or which unreasonably interfere with the enjoyment of life or property, including outdoor recreation.

#### **AUTHORIZED ENFORCEMENT AGENCY**

Refers to the Planning Board, its employees or agents designated to enforce this bylaw. The Planning Board may delegate this authority in writing to employees or agents of the Town of South Hadley.

## **BEST MANAGEMENT PRACTICES (BMPs)**

~~Structural or biological devices that temporarily store or treat urban stormwater runoff to reduce flooding, remove pollutants, and provide other amenities. They can also be nonstructural practices that reduce pollutants at their source. BMPs are described in a stormwater design manual as defined and designated herein.~~ A structural or nonstructural technique for managing stormwater to prevent or reduce nonpoint source pollutants from entering surface waters or ground waters. A structural stormwater best management practice includes a basin, discharge outlet, swale, rain garden, biofilter, or other stormwater treatment practice or measure either alone or in combination including without limitation any discharge pipe, overflow pipe, conduit, weir control structure that (a) is not naturally occurring; (b) is not designed as a wetland replication area; and (c) has been designed, constructed, and installed for the purpose of conveying, collecting, storing, discharging, recharging, or treating stormwater. Nonstructural stormwater best management practices include source control and pollution prevention measures.

## **CONSTRUCTION ACTIVITY**

Disturbance of the ground by removal of vegetative surface cover or topsoil, grading, excavation, clearing or filling.

## **DESIGN STORM**

A rainfall event of specified size and return frequency that is used to calculate the runoff volume and peak discharge rate to a BMP.

## **DETENTION**

The temporary storage of storm runoff in a BMP, which is used to control the peak discharge rates and which provides gravity settling of pollutants.

## **DEVELOPMENT PERMIT**

Any approval by the Planning Board, including, but not limited to, a definitive plan or Form H plan under the Subdivision Regulations,<sup>[1]</sup> or site plan review, special permit, or earth removal, fill, or excavation permit under the Zoning Bylaw.<sup>[2]</sup>

## **DISTURBANCE**

Any land clearing, grading, bulldozing, digging or similar activities, including any activities not exempt under Article **III** of this bylaw.

## **DRAINAGE AREA**

That area contributing runoff to a single point measured in a horizontal plane, which is enclosed by a ridgeline.

## **DRY WELL**

Similar to an infiltration trench but smaller with inflow from a pipe; commonly covered with soil and used for drainage areas of less than one acre such as roadside inlets and rooftop runoff.

## **EASEMENT**

A grant or reservation by the owner of land for the use of such land by others for a specific purpose or purposes, and which must be included in the conveyance of land affected by such easement.

## **EROSION CONTROL**

The prevention or reduction of the movement of soil particles of rock fragments carried by stormwater runoff.

## **FLOW ATTENUATION**

Prolonging the flow time of runoff to reduce the peak discharge.

## **HYDROLOGY MODEL**

May include one of the following:

- A. TR-20, a watershed hydrology model developed by the Natural Resources Conservation Service Act that is used to route a design storm hydrograph through a pond;
- B. TR-55, or Technical Release 55, "Urban Hydrology for Small Watersheds," is a publication developed by the Natural Resources Conservation Service to calculate stormwater runoff and aid in designing detention basins;
- C. HydroCAD;
- D. Any alternative stormwater management tool or model ~~model~~ as approved and deemed acceptable by the ~~Town Engineer~~ Director of Planning and Conservation or their designee, including computer programs specifically designed to simulate stormwater flow characteristics.-

## **ILLICIT CONNECTION**

A surface or subsurface drain or conveyance, which allows an illicit discharge into the municipal storm drain system, including, without limitation sewage, process wastewater, or wash water and any connections from indoor drains, sinks, or toilets, regardless of whether said connection was previously allowed, permitted, or approved before the effective date of this bylaw.

## **ILLICIT DISCHARGE**

Direct or indirect discharge to the municipal storm drain system that does not consist entirely of stormwater, except as exempted in Section 200-4. The term does not include a discharge in compliance with the an NPDES Storm Water Discharge Permit or a Surface Water Discharge Permit, or resulting from firefighting activities exempted pursuant to Section 200-4 of this bylaw.

## **IMPERVIOUS SURFACES**

Areas, such as pavement or rooftops, which prevent the infiltration of water into the soil.

## **INFILTRATION**

The downward movement of water from the surface to the subsoil.

## **INFILTRATION TRENCH**

A stormwater management excavation filled with aggregate which removes both soluble and particulate pollutants. Trenches are not intended to trap coarse sediments.

## **LOW IMPACT DEVELOPMENT (LID) TECHNIQUE**

Stormwater management practices that are modeled to mimic natural hydrologic features. Low impact development techniques manage rainfall at the source using uniformly distributed decentralized micro-scale controls. Low impact development techniques use small cost-effective landscape features located at the site level. Refer to the most recent version of Massachusetts Stormwater Design Manual for examples of LID Techniques.

## **MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) or MUNICIPAL STORM DRAIN SYSTEM or MUNICIAPL STORM SEWER SYSTEM**

A conveyance or system of conveyances designed or used for collecting or conveying stormwater, including any road with a drainage system, municipal street, catch basins, gutter, curb, inlet, piped storm drain, pumping facility, retention or detention basin, natural or man-made or altered drainage channel, ditch, reservoir, and other drainage structure that together comprise the storm drainage system owned or operated by the Town of South Hadley.

## **OUTFALL**

The terminus of a storm drain or other stormwater structure where the contents are released.

## **PEAK DISCHARGE**

The maximum instantaneous rate of flow during a storm, usually in reference to a specific design storm event.

## **PERMEABLE SOILS**

Soil materials with a sufficiently rapid infiltration rate so as to greatly reduce or eliminate surface and stormwater runoff. These soils are generally classified as NRCS hydrologic soil types A and B.

## **PERSON**

Any individual, group of individuals, association, partnership, corporation, company, business, organization, trust, estate, administrative agency, public or quasi-public corporation or body, the commonwealth or political subdivision thereof.

## **REDEVELOPMENT**

The development, replacement, rehabilitation, expansion, demolition or phased projects that disturb the ground surface or increase the impervious area on previously developed or disturbed sites. Standards for redevelopment only apply to those portions of a parcel or property that have been previously altered by human activities.

## **RETENTION**

The holding of runoff in a basin without release except by means of evaporation, infiltration, or emergency bypass.

## **START OF CONSTRUCTION**

The first land-disturbing activity associated with a development, including land preparation such as clearing, grading and filling; installation of streets and walkways; excavation for basements, footings, piers or foundations; erection of temporary forms; and installation of accessory buildings such as

garages.

## **STORMWATER DESIGN MANUAL**

Any single manual or set of multiple volumes of manuals promulgated by the Massachusetts Department of Environmental Protection (or a successor agency) which sets forth best management practices, stormwater management design concepts, and/or stormwater management standards which must be adhered to in the management of stormwater resulting from development activity. A copy of the current stormwater design manual shall be kept on file in the office of the Planning Board.

## **SWALE**

A natural depression or wide shallow ditch used to temporarily store, route, or filter runoff.

## **TOXIC OR HAZARDOUS CHEMICALS, MATERIAL OR WASTE**

Any material which, because of its quantity, concentration, chemical, corrosive, flammable, reactive, toxic, infectious or radioactive characteristics, either separately or in combination with any substance or substances, constitutes a present or potential threat to human health, safety, welfare, or to the environment. Toxic or hazardous materials include any synthetic organic chemical, petroleum product, heavy metal, radioactive or infectious waste, acid, alkali, and any substance defined as toxic or hazardous under MGL c. 21C and c. 21E, and regulations at 310 CMR 30.000 and 310 CMR 40.000.

## **Article III Applicability**

### **§ 200-4 Compliance required.**

- A. Prior to the issuance of any site plan approval or development permit for any proposed development listed below resulting in a land disturbance of one acre or greater, a stormwater management permit, or a waiver of the requirement for a stormwater management permit, must be approved by the Planning Board or its designee under this bylaw. No person shall, on or after the effective date of this bylaw, initiate any land clearing, land grading, earth moving or development activities without first complying with this bylaw.
- B. The following uses and activities shall be required to submit drainage reports, plans, construction drawings, specifications and as-constructed information in conformance with the requirements of this bylaw:
  - (1) Subdivisions and construction activities of any kind disturbing one or more acres, including multiple separate disturbances of less than one acre in discontinuous locations or on different schedules, if the activities are part of a larger common plan of development.

C. The bylaw shall be applicable to any discharges to the municipal separate storm sewer systems.

D. The following activities are prohibited:

(1) Illicit Discharges. No person shall dump, discharge, cause, or allow to be discharged any pollutant or non-stormwater discharge into the municipal separate storm sewer system (MS4), into a watercourse, or into the waters of the Commonwealth.

(2) No person shall construct, use, allow, maintain, or continue any illicit connection to the municipal storm

drain system, regardless of whether the connection was permissible under applicable law, regulation or custom at the time of connection.

(3) No person shall obstruct or interfere with the normal flow of stormwater into or out of the municipal storm drain system without prior written approval from the Planning Board or Superintendent of the Department of Public Works.

**§ 200-5 Exemptions.**

The following activities are exempt from the requirements for submittal and approval of a stormwater management plan under Article IV, but must comply with the stormwater performance standards in Article VI:

- A. Any agricultural activity which is consistent with an approved soil conservation plan prepared or approved by the Natural Resources Conservation Service;
- B. Any logging which is consistent with a timber management plan approved under the Forest Cutting Practices Act by the authorized state agency;
- C. Additions or modifications to existing residential structures disturbing less than one acre;
- D. Developments that disturb less than one acre of land, provided that they are not part of a larger common development plan;
- E. Repairs and maintenance to any stormwater collection system, sanitary sewer collection system, or roadway system deemed necessary by the South Hadley Department of Public Works;
- F. Any emergency activity that is immediately necessary for the protection of life, property or the environment, as determined by the Department of Public Works or its designee;
- G. Residential uses disturbing less than one acre; and
- H. Repairs and maintenance of municipal facilities (buildings and grounds, fields, etc.) which do not involve a change in flow of stormwater runoff onto adjoining property.

I. Any work of projects for which the required permit applications have been submitted to the Planning Board, Board of Selectman, Zoning Board of Appeals, and Conservation Commission before the effective date of this bylaw.

J. Municipal roadway maintenance when conducted in accordance with an approved Stormwater Pollution Prevention Plan, prepared in accordance with the Stormwater Regulation promulgated under this Bylaw.

K. Discharge or flow resulting from firefighting activities.

L. The following non-stormwater discharges or flows are exempt from the prohibition of non-stormwater discharges provided that the source is not a significant contributor of a pollutant to the municipal storm drain system:

- Water line flushing



- Landscape irrigation
- Diverted stream flows
- Rising groundwater
- Uncontaminated groundwater infiltration (as defined at 40 CFR § 35.2005(20))
- Uncontaminated pumped groundwater
- Discharge from potable water sources
- Foundation drains
- Air conditioning condensation
- Irrigation water, springs
- Water from crawl space pumps
- Footing drains
- Lawn watering
- Individual resident car washing
- Flows from riparian habitats and wetlands
- De-chlorinated swimming pool discharges
- Street wash waters
- Residential building wash waters without detergents

§ 200-6 **Stormwater design manual.**

- A. The stormwater design manual as defined and described in § 200-3 is hereby incorporated by reference as part of this bylaw, and shall furnish additional policy, criteria and information, including specifications and standards, for the proper implementation of the requirements of this bylaw.
- B. This manual includes a list of acceptable stormwater treatment practices, including the specific design criteria for each stormwater practice. The manual may be updated and expanded from time to time, based on improvements in engineering, science, monitoring and local maintenance experience, at the discretion of the South Hadley Department of Public Works, its designee, or the Massachusetts Department of Environmental Protection. Stormwater treatment practices that are designed and constructed in accordance with these design and sizing criteria will be presumed to meet the minimum water quality performance standards. Unique site circumstances, as determined by the ~~Town Engineer~~ Director of Planning and Conservation or their Designee, may require design and sizing which exceed the minimum water quality performance standards.
- C. Applicants shall include Low Impact Development Best Management practices in their site designs as described in the Massachusetts Stormwater Design Manual. In the event that Low Impact Development Best Management practices are not feasible, applicants shall provide justification regarding why these practices are not appropriate based on the site's size, shape, topography, soil conditions, etc.
- D. In addition to the requirements described in the Stormwater Design Manual, all stormwater best management practices must also be designed to meet the performance standards described in Section 2.3.6.a.ii.3 and 2.3.6.a.ii.4 of the Massachusetts Small Municipal Storm Sewer Systems (MS4) permit for new development and redevelopment projects.

§ 200-7 **Erosion and sediment control guidelines.**

To furnish additional policy, criteria and information, including specifications and standards, for the proper implementation of the requirements of this bylaw for erosion and sediment control, the Erosion and Sediment Control Guidelines for Urban and Suburban Areas and Nonpoint Source Pollution Management Guidelines as promulgated by the Massachusetts Department of Environmental Protection or its successor organization are incorporated into and made part of this bylaw. All erosion and sedimentation control plans shall be developed consistent with the requirements the Stormwater Design Manual as well as Section 2.3.5.c.iii and Section 2.3.5.c.iv of the Massachusetts Small Municipal Storm Sewer Systems (MS4) permit.

Article IV  
**Permit Procedures and Requirements**

§ 200-8 **Permit required.**

No landowner or land operator shall receive any of the building, grading, or other land development permits required for land disturbance activities, and no landowner shall commence land disturbance activities, without approval of a stormwater management permit from the Planning Board and meeting the requirements of this bylaw.

§ 200-9 **Application requirements.**

**[Amended 1-10-2018 STM by Art. 3]**

- A. Rules and regulations. The Planning Board shall adopt rules and regulations setting forth reasonable and necessary application requirements and processing procedures. These procedures shall provide for a reasonable and timely review of all applications in accordance with the Stormwater Management Bylaw.
- B. Applications to conform. All applications for permits under this Stormwater Management Bylaw shall demonstrate conformity to this Stormwater Management Bylaw and must conform to the Planning Board's rules and regulations unless a waiver is being requested or has been granted.
- C. The applicant may request, and the South Hadley Planning Board may grant, a waiver from any information requirements it judges to be unnecessary to the review of a particular plan.

§ 200-10 **Review and approval of permits or waivers.**

- A. The procedures for review and approval of stormwater management permits shall be consistent with the review procedures of the Planning Board for other land development permits such as site plan review, special permit, or definitive subdivision plans. ~~as appropriate to the use/activity.~~
- B. The Planning Board shall refer copies of the stormwater management permits to the ~~Town Engineer~~ Director of Planning and Conservation or their designee and other appropriate Town boards/departments for review, and shall consider any comments submitted by the Director of Planning and Conservation or their designee ~~Town Engineer~~ and other appropriate Town boards/departments during the review period.
- C. The Planning Board shall hold a public hearing within 65 days of the receipt of a complete application and shall take final action within 21 days from the close of the hearing unless such time is extended by agreement between the applicant and the Planning Board. Notice of the public hearing shall be given by publication in a local paper of general circulation, by posting and by first-class mailings to abutters at least seven days prior to the hearing. When the application is part of a definitive subdivision plan, site

plan, or special permit application, the notice and hearing for the stormwater permit requested under ~~†This BYLAW shall be carried out concurrently with~~ as part of the notice and hearing for the any other application submitted to the Planning Board unless requested otherwise by the applicant.

- D. Notification of project changes must be submitted to the Planning Board following the procedures for new submittals. However, the Planning Board may waive, as it determines consistent with the purposes of this bylaw, parts of the otherwise required procedures. Project changes consist of revisions to the proposed plans that results in an approximately 10% change in total land alteration from the previous application or any addition, removal or change to proposed stormwater best management practices.

**§ 200-11 Criteria for review of permit applications.**

In addition to other criteria used by the South Hadley Planning Board in making permit decisions, for the uses/activities specified in this bylaw, the Planning Board must also find that the stormwater management and erosion and sediment control plan submitted with the permit application meets the following criteria:

- A. The stormwater management and erosion and sediment control plan are consistent with the purposes and objectives of this bylaw in Article **I**;
- B. Provisions for stormwater management meet the performance standards described in Article **VI**;
- C. Provisions for stormwater management meet the requirements described in Section 2.3.6.a of the Massachusetts MS4 permit. In some cases, these requirements exceed the requirement of the Stormwater Design Manual.
- D. Provisions for stormwater management shall utilize Low Impact Design concepts as described in the Stormwater Design Manual.
- ~~C. Provisions~~ E. Provisions for erosion and sediment control meet the design requirements in Article **VII**.
- F. Provisions for erosion and sedimentation control meet the design requirements in Section 2.3.5.c of the Massachusetts MS4 permit.

**§ 200-12 Planning Board action.**

- A. The Planning Board's action, rendered in writing, shall consist of either:
- (1) Approval of the stormwater management permit application based upon determination that the proposed plan meets the purposes in Article **I** and the standards in Article **VI** and design requirements in Article **VII** and will adequately protect the Town of South Hadley's water resources and is in compliance with the requirements set forth in this bylaw;
  - (2) Approval of the stormwater management permit application subject to any conditions, modifications or restrictions required by the Board which will ensure that the project meets the purposes in Article **I** and the standards in Article **VI** and design requirements in Article **VII** and adequately protects the Town of South Hadley's water resources, as set forth in this bylaw;
  - (3) Disapproval of the stormwater management permit application based upon a determination that the proposed plan, as submitted, does not meet the purposes in Article **I** and the standards in Article **VI** and/or design requirements in Article **VII** or adequately protect the Town of South Hadley's water

resources, as set forth in this bylaw.

- B. Failure of the Board to take final action upon an application within the time specified above shall be deemed ~~to be an~~ approval of said application. Upon certification by the Town Clerk that the allowed time has passed without Board action, the Board must issue a stormwater management permit.

**§ 200-13 Inspections.**

- A. No Plan will be approved without adequate provision for inspection of the property before development activity commences. The applicant shall arrange with the Department of Public Works, and other departments as appropriate, for scheduling the following inspections:

- (1) Initial inspection; prior to approval of any plan.
  - (2) Erosion and sediment control inspections; ~~after~~ prior to site clearing, after rough grading and final grading to ensure erosion and sediment control practices are in accord with the plan. Site clearing will not commence without prior installation of erosion and sedimentation controls. Site clearing will not commence without prior inspection and approval of erosion and sedimentation controls by the Department of Public Works or its designee, as appropriate.
  - (3) Inspection of the excavation of any infiltration drainage best management practices such as subsurface infiltration fields, drywells, bioretention basins, infiltration swales, etc. This inspection will confirm that soil conditions in the excavation are suitable and/or conducive for stormwater infiltration.
  - (3) Bury inspection; prior to backfilling of any underground drainage or stormwater conveyance structures.
  - (4) Final inspection; when all work, including construction of stormwater management facilities and landscaping, has been completed. Final inspection shall include a full, dated TV inspection of all stormwater pipes installed at the discretion of the Director of Public Works.
- B. The Department of Public Works or its agent shall inspect the work and either approve it or notify the applicant in writing in what respects there has been a failure to comply with the requirements of the approved plan. Any portion of the ~~work which does not comply~~ work, which does not comply, shall be promptly corrected by the applicant or the applicant will be subject to the bonding provisions of Article IX or the penalty provisions of Article X. The Town may conduct random inspections to ensure effective control of erosion and sedimentation during all phases of construction.

- C. After the stormwater management system has been constructed and before any surety has been released, all applicants are required to submit "as built" plans for any stormwater management facilities or practices after final construction is completed. As-built plans must be submitted within two years of completion of construction. The system shall be inspected to confirm its as-built features.

**§ 200-14 Right of entry for inspection.**

When any new drainage control facility is installed on private property, or when any new connection is made between private property and a public drainage control system or sanitary sewer, the filing of an application shall be deemed as the property owner's permission to the South Hadley Department of Public Works or its designee for the right to enter the property at reasonable times and in a reasonable manner for the purpose of

the inspection. This includes the right to enter a property when it has a reasonable basis to believe that a violation of this bylaw is occurring or has occurred, and to enter when necessary for abatement of a public nuisance or correction of a violation of this bylaw.

**§ 200-15 Fees.**

The Planning Board shall establish a schedule for application fees, inspection fees, and review fees and appropriate application forms.

- A. The application fee shall be paid in full along with the application required under this bylaw.
- B. In addition to an application fee, the Planning Board may also charge an application review fee under MGL c. 44, § 53G to cover third-party review, if needed.
- C. Inspection fee. The fee for site inspections shall be based on the fee structure established by the South Hadley Planning Board in the Regulations. The fee shall be paid to prior to initiation of any work on the site which requires compliance with the provisions of this bylaw.

## Article V

### **Stormwater Management and Erosion and Sediment Control Plan**

**§ 200-16 Contents.**

The application for a stormwater management permit shall consist of the submittal of a stormwater management and erosion and sediment control plan, prepared by a professional engineer licensed by the Commonwealth of Massachusetts, which meets the design requirements provided by this bylaw. The plan shall include a description of the proposed project, sufficient information to evaluate the environmental characteristics of the affected and adjacent areas, the potential impacts of the proposed development on water resources; and the effectiveness and acceptability of measures proposed for managing stormwater runoff. The plan must be designed to meet the Massachusetts Stormwater Management Standards as set forth in Article VI of this bylaw, ~~and~~ the stormwater design manual as previously referenced, and Section 2.3.5 of Massachusetts MS4 permit. The applicant shall certify on the drawings that all clearing, grading, drainage, construction, and development shall be conducted in strict accordance with the plan. The minimum information submitted for support of a stormwater management plan shall be as follows:

- A. Contact information: the name, address, and telephone number of all persons having a legal interest in the property and the tax reference number and parcel number of the property or properties affected;
- B. A locus map;
- C. An existing conditions plan, stamped by a Registered Land Surveyor including existing topography wetlands resources (if any), special flood zones or 100-year flood plain, topography at one-foot contours, site details, utilities.
- C. The existing zoning and land use at the site;
- D. The proposed ~~land use~~ condition site plan including the layout of the project, proposed buildings, parking areas, sidewalks, driveways, etc.;
- E. The projects property lines, surveyed by a Registered Land Surveyor in the Commonwealth of Massachusetts;

**FE.** The location(s) of existing and proposed easements;

**GF.** The location of existing and proposed utilities;

**H.** The locations of proposed Low Impact Development and green infrastructure best management practices.

**GI.** The site's existing and proposed topography, with contours at ~~two~~one-foot intervals;

**HJ.** Proposed limits of disturbance;

**K.** Information regarding whether the site is located in a watershed that drains to an impaired water;

**LI.** Estimate of the total area expected to be disturbed by excavation, grading or other construction activities;

**MJ.** A written description of the existing site hydrology including drainage subcatchment areas, flow paths, soil types, curve numbers, and peak flows for each subcatchment area;

**NK.** A description and delineation of existing stormwater conveyances, impoundments, and wetlands on or adjacent to the site or into which stormwater flows;

**OL.** A delineation of one-hundred-year floodplains, if applicable;

**PM.** Habitats mapped by the Massachusetts Natural Heritage and Endangered Species Program as endangered, threatened or of special concern, estimated habitats of rare wildlife and certified vernal pools, and priority habitats of rare species within 500 feet of any construction activity;

**QN.** Estimated seasonal high groundwater elevation in areas to be used for stormwater retention, detention, or infiltration. Seasonal high groundwater shall be determined by a Licensed Soil Evaluator and based on soil mottles or other methods observed in the field. When appropriate, the Frimpter method can be used to determine seasonal high groundwater; :-

**RO.** The existing and proposed vegetation and ground surfaces, with runoff coefficients for each;

**SP.** A drainage area map showing pre- and post-construction watershed boundaries, drainage area and stormwater flow paths, including municipal drainage system flows;

**TQ.** A description and drawings of all components of the proposed stormwater management system, including:

- (1) Locations, cross sections, and profiles of all brooks, streams, drainage swales and their method of stabilization;
- (2) All ~~measures~~ proposed stormwater best management practices designed for the detention, retention or infiltration of water. Low Impact Development (LID) practices shall be the preferred method of managing stormwater;

- (3) All ~~measures~~ best management practices designed for the protection of water quality;
- (4) The structural details for all components of the proposed drainage systems and stormwater management facilities;
- (5) Notes on drawings specifying materials to be used, construction specifications, and expected hydrology, with supporting calculations demonstrating compliance with the requirements of the Stormwater Design Manual as well as the MS4 permit;
- (6) Proposed improvements, including location of buildings or other structures, impervious surfaces, and drainage facilities, if applicable;
- (7) Any other information requested by the ~~stormwater authority~~ Planning Board.

UR. Hydrologic and hydraulic design calculations for the pre-development and post-development conditions for the design storms specified in this regulation. Such calculations shall include:

- (1) Description of the design storm frequency, intensity and duration. Rainfall intensities, as defined by the NOAA Atlas 14 Point Precipitation Frequency Estimates, shall be used for purposes of performing drainage calculations;
- (2) Time of concentration;
- (3) Soil runoff curve number (RCN) based on land use and soil hydrologic group;
- (4) Peak runoff rates and total runoff volumes for each watershed area;
- (5) Information on construction measures used to maintain the infiltration capacity of the soil where any kind of infiltration is proposed;
- (6) Infiltration rates, where applicable;
- (7) Culvert capacities;
- (8) Flow velocities;
- (9) Data on the ~~increase~~ change in rate and volume of runoff for the specified design storms to all design points. Projects shall be designed to result in no net increase in peak flows<sup>SDT3</sup> to any design point; and
- (10) Documentation of sources for all computation methods and field test results.
- (11) Sizing calculations for all Stormwater Best Management Practices indicating required and proposed BMP sizing.
- (12) The location of soil test pits at locations consistent with the requirements of the Stormwater Design Manual.
- (13) Stormwater Management Checklist as described in the Stormwater Design Manual.

**VS.** Post-development downstream analysis, if deemed necessary by the stormwater authority. The downstream analysis will evaluate the hydrologic impacts of the project downstream of the project to a location where the watershed to project size is approximately equal to 10:1;

**W.** Narrative description of how the proposed project will accommodate anticipated changes in climate change. This narrative should include a description of how the proposed stormwater management facilities will accommodate an increase in rainfall intensities anticipated through the year 2070. This narrative should also include a description regarding how proposed impervious surfaces will be designed to mitigate anticipated heat impacts including increased vegetation, reduced impervious surfaces, or designing light colored surfaces with high Solar Reflectance Values to reduce light/heat absorption. The narrative should also outline steps taken to minimize proposed impervious surfaces.

**XT.** Soils information from test pits performed at the location of proposed stormwater management facilities, including soil descriptions, depth to seasonal high groundwater, depth to bedrock, and infiltration rates. Soils information will be based on site test pits logged by a Massachusetts registered soil evaluator, a Massachusetts registered sanitarian, or a Massachusetts registered professional engineer. All test pits should include estimated seasonal high groundwater elevations as determined using soil mottles, Frimpter, or another suitable method, as well as soil infiltration rates. ;

**YU.** Landscaping plan describing the woody and herbaceous vegetative stabilization and management techniques to be used within and adjacent to the stormwater practices;

**ZV.** Drainage patterns and approximate slopes anticipated after major grading activities;

**AAW.** A description of provisions for project phasing, if appropriate;

**BBX.** Erosion and sediment control plan, consisting of:

- (1) Location and details of erosion and sediment control measures with a narrative of the construction sequence/phasing of the project, including both operation and maintenance for structural and nonstructural measures, interim grading, and material stockpiling areas;
- (2) Path and mechanism to divert uncontaminated water around disturbed areas, to the maximum extent practicable;
- (3) Location and description of and implementation schedule for temporary and permanent seeding, vegetative controls, and other stabilization measures;
- (4) A description of construction and waste materials expected to be stored on-site. The plan shall include a description of controls to reduce pollutants from these materials, including storage practices to minimize exposure of the materials to stormwater, and spill prevention and response.

**(5) A description of methods to minimize land disturbance.**

**(6) A description of site perimeter controls.**

**(7) A description of slope stabilization.**



(8) Stabilized construction site entrances and exits to prevent off-site tracking of sediment.

(9) A description of storm drain inlet protection.

(10) A description of temporary sedimentation basins.

(11) A description of the locations of proposed waste control including discarded building materials, concrete truck wash out areas, chemicals, litter, and sanitary wastes. These areas are prohibited from discharging to the MS4 or any surrounding wetlands or surface waters.

(12) Appropriate erosion and sedimentation control notes including notes that require no land clearing is to be undertaken prior to installation or erosion and sedimentation control measures

(13) A description of the operation plan for the construction site.

(14) A description of planned temporary Best Management Practices.

(15) A description of site stabilization following construction.

(16) A description of the inspection of stormwater controls at regular intervals.

CC∓. Testing results and documentation. Results and documentation of any tests as required by the DEP, DPW, and/or Board of Health shall be included. Further, any such tests shall be witnessed by an authorized representative of the Town of South Hadley DPW and/or Board of Health.

## Article VI Performance Standards

### § 200-17 Purpose.

To prevent the adverse impacts of stormwater runoff, the stormwater performance standards in this Article VI must be met at new development and redevelopment sites. These standards apply to construction activities as described under § 200-4.

### § 200-18 Minimum control requirements.

- A. Projects must meet the standards of the Massachusetts Stormwater Management Standards as promulgated by the Massachusetts DEP as well as section 2.3.6 of the Massachusetts MS4 permit. A copy of these standards is maintained by the office of the Planning Board.
- B. When the proposed discharge may have an impact upon a sensitive receptor, including streams, storm sewers, and/or combined sewers, the Planning Board may require an increase in these minimum requirements, based on existing stormwater system capacity and standards of other Town boards, including, but not limited to, the Board of Health and the Conservation Commission.

### § 200-19 Stormwater management measures.

- A. Stormwater management measures shall be required to satisfy the minimum control requirements and shall be implemented in the following order of preference:
  - (1) Infiltration, flow attenuation, and pollutant removal of runoff on-site to existing areas with grass, trees, and similar vegetation and through the use of open vegetated swales and natural depressions. Low

Impact Development strategies are preferred over conventional collect and convey systems including minimizing impervious surfaces, incorporating stormwater management facilities into landscaping islands, bioretention basins pervious pavers, etc.;

- (2) Re-use Use of stormwater generated on site to replace water used in industrial processes or for irrigation;
  - (3) Stormwater detention structures for the temporary storage of runoff which is designed so as not to create a permanent pool of water;
  - (4) Stormwater retention structures for the permanent storage of runoff by means of a permanent pool of water; and
  - (5) Retention and evaporation of stormwater on rooftops or in parking lots.
- B. Infiltration practices shall be utilized to ~~reduce runoff volume increases~~ retain the one-inch volume of rainfall that falls on impervious surfaces on-site. A combination of successive practices may be used to achieve the applicable minimum control requirements. In the event that the one-inch volume of rainfall cannot be retained on-site, a justification shall be provided by the applicant ~~shall be provided by the applicant for rejecting each practice~~ based on site conditions.
- C. Best management practices shall be employed to minimize pollutants in stormwater runoff prior to discharge into a separate storm drainage system or water body, consistent with the requirements of the Stormwater Design Manual as well as the Massachusetts MS4 permit.
- D. All stormwater management facilities shall be designed to provide an emergency overflow system, and incorporate measures to provide a nonerosive velocity of flow along its length and at any outfall.
- E. The designed release rate of any proposed stormwater structure shall be designed to prevent ~~modified if~~ any increase in flooding or stream channel erosion would result at a downstream dam, highway, structure, or normal point of restricted stream flow.
- F. A decentralized approach to stormwater management, including installing different Best Management Practices throughout the site, should be included. Traditional collect and convey systems should be minimized.

#### § 200-20 **Specific design criteria.**

Additional policy, criteria, and information, including specifications and design standards, may be found in the Stormwater Design Manual and the erosion and sediment control guidance documents and may also be utilized.

##### A. Infiltration systems.

- (1) Infiltration systems shall be equipped with clean-washed stone and/or filter fabric adjacent to the soil or other sediment removal mechanisms;
- (2) Infiltration systems greater than three feet deep shall be located at least 10 feet from basement walls;
- (3) Due to the potential for groundwater contamination from dry wells, they shall not be an acceptable

method for management of runoff containing pollutants, unless stormwater discharges to dry wells are pretreated consistent with the Stormwater Design Manual or Massachusetts MS4 permit prior to discharge to each dry well;

- (4) Infiltration systems designed to handle runoff from commercial or industrial impervious parking areas shall be a minimum of 100 feet from any drinking water supply well;
  - (5) Infiltration systems shall not be used as sediment control basins during construction. The bottoms of all infiltration facilities shall be protected from heavy equipment during construction; ~~unless specific plans are included to restore or improve the basin surface;~~
  - (6) Infiltration basins shall be constructed with a three-foot minimum separation between the bottom of the structure and the seasonal high groundwater elevation, as determined by a ~~certified~~ licensed soil evaluator; and
  - (7) Infiltration basins shall be designed with an overflow route from the basin to the downstream design point ~~Provisions shall be made for safe overflow passage,~~ in the event of a storm which exceeds the capacity of an infiltration system.
- B. Retention and detention ponds shall be designed and constructed in accordance with the criteria set forth in the stormwater design manual.
- C. The applicant shall ~~give consideration in any plan to incorporating the use of~~ utilize natural topography and land cover such as natural swales and depressions as they exist prior to development to the degree that they can accommodate the additional flow of water.
- D. The Planning Board shall give preference to the use of swales in place of the traditional use of curbs and gutters based on a case-by-case review of stormwater management plans by the ~~Town Engineer~~ Director of Planning and Conservation or their designee and Planning Board.
- E. The applicant shall consider public safety in the design of any stormwater facilities. The banks of detention, retention, and infiltration basins shall be sloped at a gentle grade into the water as a safeguard against personal injury, to encourage the growth and stabilization of vegetation and to allow the alternate flooding and exposure of areas along the shore. Basins shall have a minimum 4:1 slope to a depth two feet below the control elevation. Side slopes must be stabilized and planted with vegetation to prevent erosion and provide pollutant removal. ~~The banks of detention and retention areas shall be designed with sinuous rather than straight shorelines so that the length of the shoreline is maximized, thus offering more space for the growth of vegetation.~~
- F. Where a stormwater management plan involves direction of some or all runoff off of the site, it shall be the responsibility of the applicant to obtain from adjacent property owners any easements or other necessary property interests concerning ~~flowage of~~ the discharge of -water to adjacent properties. Approval of a stormwater management plan does not create or affect any such rights.
- G. All applicants for projects which involve the storage or use of hazardous or toxic chemicals, materials or waste shall incorporate handling and storage best management practices that prevent such chemicals, materials and waste from contaminating runoff discharged from a site into infiltration systems, receiving

water bodies or storm drains, and shall include a list of such chemicals, materials and waste and their amounts in the application. When appropriate, gate valves or other structures shall be incorporated into the design in order to stop the discharge of any hazardous or toxic materials from the property.

- H. Runoff from parking lots shall be treated by oil and water separators or other controls to remove oil and sediment prior to discharge to any stormwater best management practices consistent with the Stormwater Design Manual and section 2.3.6 of the Massachusetts MS4 permit;
- I. The basic design criteria methodologies, and construction specifications, subject to the approval of the Planning Board and ~~Town Engineer~~ Director of Planning and Conservation or their designee, shall be those generally found in the most current edition of the stormwater design manual as well as section 2.3.6 the Massachusetts MS4 permit.
- J. Protection of the public water supply (including retention of the recharge of the groundwater supply) is vital to the health and safety of the Town. Accordingly, the stormwater management system and site grading must be designed to maximize recharge of stormwater runoff into the groundwater. No runoff originating within the DEP Zone II or DEP Zone III of the Dry Brook Public Water Supply Well is to be diverted out of said Zone II and Zone III, unless the Planning Board, based on the recommendations of an independent peer review engineer, determines that such 100% retention of runoff is not feasible due to the unique characteristics of the project site, grants a waiver to this requirement, and the applicant provides what the Planning Board determines to be reasonable and appropriate mitigation. **[Added 5-8-2019 ATM by Art. 22]**
- K. South Hadley contains water bodies that are classified as impaired waters. The applicant should determine whether or not the proposed project is located within a watershed that discharges to an impaired water. In the event a project is located within a watershed that discharges to an impaired water, the applicant shall determine the pollutant causing the impairment and design the project's stormwater best management practices to optimize removal for that pollutant. Projects that are located in watersheds discharging to waterbodies that are impaired for Phosphorus or Nitrogen should include best management practices that are optimized to reduce phosphorus or nitrogen consistent with Appendixes F and H of Massachusetts MS4 permit. The applicant should consult the most recent "Integrated List of Waters" for Massachusetts to determine the list of impaired waters for South Hadley.

## Article VII

### Design Requirements for Erosion and Sediment Control Plan

#### § 200-21 Requirements.

The design requirements of the erosion and sediment control plan are:

- A. ~~A.~~ — Minimize total area of disturbance.
- ~~A.B.~~ Install erosion and sedimentation controls prior to any land clearing.
- B. ~~C.~~ — Sequence activities to minimize simultaneous areas of disturbance.
- ~~C.~~ — ~~Minimize peak rate of runoff in accordance with the MA DEP Stormwater Management Standards.~~

- D. Minimize soil erosion and control sedimentation during construction. Prevention of erosion is preferred over sedimentation control.
- E. Divert uncontaminated water around disturbed areas.
- ~~F. Maximize groundwater recharge.~~
- FG. Install and maintain all erosion and sediment control measures in accordance with the manufacturer's specifications and good engineering practices.
- GH. Prevent off-site transport of sediment.
- HI. Protect and manage on- and off-site material storage areas (overburden and stockpiles of dirt, borrow areas, or other areas used solely by the permitted project are considered a part of the project).
- IJ. Comply with applicable federal, state and local laws and regulations, including waste disposal, sanitary sewer or septic system regulations, and air quality requirements, including dust control.
- JK. Prevent adverse impact from the proposed activities to habitats mapped by the Massachusetts Natural Heritage and Endangered Species Program as endangered, threatened or of special concern, estimated habitats of rare wildlife and certified vernal pools, and priority habitats of rare species.
- KL. Institute interim and permanent stabilization measures. The measures shall be instituted on a disturbed area as soon as practicable but no more than 14 days after construction activity has temporarily or permanently ceased on that portion of the site.
- LM. Properly manage on-site construction and waste materials.
- MN. Prevent off-site vehicle tracking of sediments through the design, installation, and maintenance of construction entrances.~~s.~~

## Article VIII Maintenance.

### § 200-22 **Operation, maintenance and inspection agreement.**

- A. Prior to any site work for which stormwater management is required, the Planning Board shall require the applicant or owner to execute an operation, maintenance and inspection agreement binding on all subsequent owners of land served by the private stormwater management facility. The agreement shall be designed to ensure that water quality standards are met in all seasons and throughout the life of the system. Such agreement shall provide for access to the facility at reasonable times for regular inspections by the Town or its authorized representative and for regular or special assessments of property owners to ensure that the facility is maintained in proper working condition to meet design standards and any provision established. The agreement shall include:
  - (1) The name(s) of the owner(s) for all components of the system.
  - (2) Maintenance agreements that specify:

- (a) The names and addresses of the person(s) responsible for operation and maintenance.
  - (b) The person(s) responsible for financing maintenance and emergency repairs.
  - (c) A maintenance schedule for all drainage structures, including swales and ponds, consistent with the requirements of the Stormwater Design Manual.
  - (d) A list of easements, with the purpose and location of each.
  - (e) The signature(s) of the owner(s).
- (3) Stormwater management easements as necessary for:
- (a) Access for facility inspections and maintenance.
  - (b) Preservation of stormwater runoff conveyance, infiltration, and detention areas and facilities, including flood routes for the one-hundred-year storm event.
  - (c) Direct maintenance access by heavy equipment to structures requiring regular cleanout.
- (4) Stormwater management easement requirements.
- (a) The purpose of each easement shall be specified in the maintenance agreement signed by the property owner.
  - (b) Stormwater management easements are required for all areas used for off-site stormwater control, unless a waiver is granted by the Town of South Hadley.
  - (c) Easements shall be recorded with the Registry of Deeds prior to issuance of a certificate of completion.
- (5) Changes to operation and maintenance plans.
- (a) The owner(s) of the stormwater management system must notify the Planning Department/DPW of changes in ownership or assignment of financial responsibility.
  - (b) The maintenance schedule in the maintenance agreement may be amended to achieve the purposes of this bylaw by mutual agreement of the Planning Board/DPW and the responsible parties. Amendments must be in writing and signed by all responsible parties. Responsible parties must include the owner(s), persons with financial responsibility, and persons with operational responsibility. A copy of any such approved amendments shall be filed with the office of the Planning Board by the owner(s) of the stormwater management system.
- B. The agreement shall be recorded by the applicant and/or owner in the land records of the Registry of Deeds.
- C. The agreement shall also provide that if, after notice by the Planning Board or Department of Public Works to correct a violation requiring maintenance work, satisfactory corrections are not made by the owner(s) within 30 days, the Department of Public Works may perform, but is not required to do so, all

necessary work to place the facility in proper working condition. The owner(s) of the facility shall be assessed the cost of the work and any penalties.

§ 200-23 **Maintenance responsibility.**

- A. The owner of the property on which work has been done pursuant to this bylaw for private stormwater management facilities, or any other person or agent in control of such property, shall maintain in good condition and promptly repair and restore all grade surfaces, walls, drains, dams and structures, vegetation, erosion and sediment control measures and other protective devices. Such repairs or restoration and maintenance shall be in accordance with approved plans.
- (1) If the DPW has reason to believe that the facilities are not properly maintained or need repair, the DPW may require such tests/inspections as the DPW Superintendent deems necessary. The party responsible for maintenance of the facilities shall undertake the test/inspections required by the DPW Superintendent within the reasonable time set forth by the DPW Superintendent. A copy of all results and documentations of the tests/inspections shall be submitted to the DPW Superintendent within seven calendar days of their completion.
- (2) If the tests/inspections required under Subsection A(1) demonstrate that repairs or modifications of the facilities are necessary, the party responsible for maintaining the facilities shall make the necessary repairs/remedial actions as necessary within such time period as directed by the DPW Superintendent. Any such time period shall be reasonable and be set in consideration of the degree of complexity and cost for their undertaking, but also in consideration of the potential for impact on the environment and public health for delays in implementation.
- B. A maintenance schedule shall be developed for the life of any stormwater management facility and shall state the maintenance to be completed, the time period for completion, and who shall be legally responsible to perform the maintenance. This maintenance schedule shall be included with the stormwater management permit application.
- C. Records of installation are to be maintained in perpetuity. All records of maintenance and inspections must be retained for a minimum of three years by the owner as measured from the date of the maintenance activity or inspection. A copy of all maintenance and inspection records and reports shall be submitted to the DPW Superintendent within 30 calendar days of completion of the maintenance activity or inspection.
- D. Failure to adhere to approved maintenance practices (including, but not limited to, schedules) is considered a violation of the stormwater permit.

## Article IX Performance Guarantees

§ 200-24 **Requirements.**

- ~~A. A.~~ —The Planning Board shall require from the developer/applicant/owner a financial guarantee in a form acceptable to the Planning Board prior to any site work for the construction of a development requiring a stormwater management facility. The amount of the financial guarantee shall be in the amount set by the Planning Board, but shall not be less than the total estimated construction cost of the stormwater management facility. The financial guarantee so required in this article shall include

provisions relative to forfeiture for failure to complete work specified in the approved stormwater management and erosion and sediment control plan, compliance with all of the provisions of this bylaw and other applicable laws and regulations, and any time limitations. The financial guarantee shall not be fully released without a final inspection of the completed work by the ~~Town Engineer~~ Director of Planning and Conservation or their designee, submission of "as-built" plans, and certification of completion by the Planning Board of the stormwater management facilities being in compliance with the approved plan and the provisions of this bylaw.

- ~~BB.~~ The performance guarantee required under this bylaw may be in addition to the performance guarantee required for the development under any other Town bylaw or regulation. The Planning Board may, at its sole discretion, allow the performance guarantee required under another South Hadley bylaw or regulation to substitute for the performance guarantee required under this bylaw if the Board determines the two guarantees serve the same function, the purposes of this bylaw are adequately furthered, and the ~~Town Engineer~~ Director of Planning and Conservation or their designee does not object to the substitution.
- C. The performance guarantee is intended to be used for ensuring that the stormwater management system functions as designed. In the event the Planning Board determines (based on input from the ~~Town Engineer~~ Director of Planning and Conservation or their designee and/or a consultant engineer retained by the Planning Board) that the system is not functioning as designed (such as, retaining water in the detention basins for a period of time longer than anticipated or at levels higher than anticipated), the Board may utilize proceeds of the performance guarantee to have work undertaken to remedy the deficiencies. Terms of the performance guarantee shall be spelled out in a performance guarantee agreement. If the Planning Board determines that a third-party engineer should review the site and make recommendations as to whether the system needs to be modified and/or identify modifications needed to achieve the stormwater management system's goals, the Board may utilize portions of the performance guarantee for employment of such an engineer. If this review determines that the system needs to be modified to achieve the stormwater management system's goals, the developer is required to make such modifications as so directed.

## Article X Enforcement and Penalties

### § 200-25 Enforcement authority.

The ~~Planning Board and~~ Department of Public Works Superintendent shall ~~have~~ share enforcement authority and may delegate said authority to appropriate Town officials, including, but not limited to, the ~~Town Planner and the~~ Director of Planning and Conservation or their designee ~~Town Engineer~~. ~~Enforcement authority will rest with the Planning Board up until the time that the Planning Board has approved the construction of the project and returned any unused portion of the performance guarantee to the applicant. Upon notification of the DPW Superintendent by the Town Planner that the above mentioned has occurred, enforcement authority thereafter will rest with the DPW Superintendent.~~

### § 200-26 Violations.

Any development activity that has commenced or is conducted contrary to this bylaw may be restrained by injunction or otherwise abated in a manner provided by law.

### § 200-27 Notice of violation.



~~A.~~ When the ~~Planning Board~~ Department of Public Works Superintendent determines that an activity is not being carried out in accordance with the requirements of this bylaw, it shall issue a written notice of violation to the owner of the property. The notice of violation ~~may~~ shall contain:

~~1. A.~~ The name and address of the owner applicant;

~~2. B.~~ The address, when available, or the description of the building, structure, or land upon which the violation is occurring;

~~3. C.~~ A statement specifying the nature of the violation;

~~4. D.~~ A description of the remedial measures necessary to bring the development activity into compliance with this bylaw and a time schedule for the completion of such remedial action;

~~5. E.~~ A statement of the penalty or penalties that shall or may be assessed against the person to whom the notice of violation is directed;

~~6. F.~~ A statement that the determination of violation may be appealed to the municipality by filing a written notice of appeal within 15 days of service of notice of violation.

7. A statement requiring the elimination of illicit connections or discharges to South Hadley's MS4 system.

#### § 200-28 **Stop-work orders.**

Persons receiving a notice of violation will be required to halt all construction activities. This "stop-work order" will be in effect until the ~~Planning Board~~ Department of Public Works Superintendent confirms that the development activity is in compliance and the violation has been satisfactorily addressed. Failure to address a notice of violation in a timely manner can result in civil, criminal, or monetary penalties in accordance with the enforcement measures authorized in this bylaw.

#### § 200-29 **Criminal and civil penalties.**

Any person who violates any provision of this bylaw, valid regulation, or the terms or conditions in any permit or order prescribed or issued thereunder shall be subject to a fine not to exceed \$300 per lot for each day such violation occurs or continues or be subject to a civil penalty, which may be assessed in an action brought on behalf of the Town of South Hadley in any court of competent jurisdiction.

#### § 200-30 **Noncriminal disposition of violations.**

As an alternative to criminal prosecution or civil action, the Town of South Hadley may elect to utilize the noncriminal disposition procedure set forth in South Hadley bylaws.<sup>[4]</sup> The penalty for the first violation shall be \$100. The penalty for the second violation shall be \$200. The penalty for the third and subsequent violations shall be \$300. Each day or part thereof that such violation occurs or continues shall constitute a separate offense.

#### § 200-31 **Restoration of lands.**

Any violator shall be required to restore land to its undisturbed condition or another solution deemed appropriate by the Planning Board. In the event that restoration is not undertaken within a reasonable time after notice, the Department of Public Works may, but shall not be required to do so, take necessary corrective action, the cost of which shall become a lien upon the property until paid.

§ 200-32 **Holds on occupancy permits.**

Occupation permits will not be granted until corrections to all stormwater practices have been made and accepted by the Planning Board.

Article XI

Illicit Discharges

200-33 Illicit discharges to MS4 system

Any property owner or party, who illegally discharges non-stormwater pollutants, including sanitary sewer discharges, as described in this Bylaw, must eliminate discharges to the MS4 system within 60 days of identification. Failure to eliminate discharges to the MS4, or remove illicit connections, will result in Enforcement and Penalties as described in Article X.