

### **AGENDA**

### **Stormwater Management Committee**

Tuesday, December 14, 2010 2<sup>nd</sup> Floor Meeting Room, Town Hall 1 Library St., Georgetown, Ma. Starting Time 9:00 a.m.

#### **OLD BUSINESS**

- 1. Meeting Minutes November 23, 2010 [Exhibit 1]
- 2. 2003 NPDES Phase I Small MS4 Stormwater Permit Annual Reports MVPC [Exhibit 2]

#### **NEW BUSINESS**

- 1. NPDES Phase 2 Small MS4 Year | Permit requirements and Cost Implications [Exhibit 3]
- 2. CPC Application Matching funds for 2011 NPDES Phase 2 Small MS4 Stormwater Permit [Exhibit 4]
- 3. Draft Stormwater and Erosion Control Bylaw [Exhibit 5]
- 4. Planning Board revisions to Subdivision Control Regulations [Exhibit 6]
- 5. Stormwater Seminar Topic Selection Survey VHB & HW [Exhibit 7]
- 6. Georgetown Water Department Rules and Regulations [Exhibit 8]
- 7. Other funding opportunities (i.e. Coastal Pollution Remediation Grant Program, Chapter 90,...) [Exhibit 9]

Next Meeting Date - January 11th, 2011

\* A full and complete copy of the attached documents is available on the Town's Web-site under the Stormwater Management Committee — Agenda for 12-14-10

# **EXHIBIT I**



# Stormwater Management Committee MEETING MINUTES Memorial Town Hall Third Floor Meeting Room 11/23/10

9:00 AM

Present:

Nicholas Cracknell, Chair; Michael Farrell vice

Chair; Steven Przyjemski, Clerk, Pete Durkee, Deb

Rogers

**Others Present:** 

Al McIntosh, MVPC; Peter Phippen, MVPC, Harry

LaCortiglia, PB and CPC Committee; George

Comiskey, PRCWA.

#### **Election:**

Mike Farrell makes motion to elect Nicholas Cracknell as the Chair, Mike Farrell as the Vice-Chair, and Steven Przyjemski as Clerk. Deb Rogers seconded the motion and the motion was <u>approved</u> by a unanimous vote 5-0.

#### **Board Business**

Al McIntosh gives an overview to the group of the intension of the NPDES Phase 2 Small MS4 Stormwater Permit with the new requirements to be carried out in the next 5 years.

After some delay, the EPA is now re-activating the Stormwater Management Program and the Town will need to submit a NOI that includes a commitment to implement control measures, implement measures to prevent contamination, and control pre and post development contamination and erosion. The new regulation encourage town to have good house keeping procedures in place for things like town maintenance and landscaping, sand and salting of roadways, and storage of potential contaminants.

The educational requirements will need to be more then just flyers that the town has done in the past. For example, BMPS for basement storage will likely be needed as sump pumps cannot discharge into the town's drainage system.

Al McIntosh describes how the mapping will need to be updated with new development, outfalls, catch basins, and drains. The town is in good shape in terms of mapping the catch basins, drainage manhole covers and outfall locations, however, we will now need to map the connection network for the entire sub-basin catchment area. This may include dye testing, smoke test, visual inspections and plan review. Naturally, this will be a big component of our planning process so we will need to figure out how it will be accomplished and funded by the town. Al noted that some towns are using Chapter 90 funds to support this type of planning. Al also noted that once the new US Census data is complied, the urbanized area may be adjusted to include new areas of town. The new NOI will also include periodic outfall testing for pollutants so Deb and Peter will

coordinate on their existing contracts for testing to evaluate how this will be best accomplished.

Al McIntosh describes how the town will be required to pass a Bylaw to deal with pre and post construction erosion. The town does have existing regulations that deal with erosion but these will need to be evaluated to determine if they are sufficient to meet the requirements. Potential new Bylaws (Stormwater Bylaw) or modification of existing Bylaw may be needed and the Planning Office could take the lead with this requirement given their recent efforts to implement LID drainage systems in the Zoning and Subdivision Regulations.

Peter Durkee describes how we are behind on 2 annual reports (2009-2010) and Al McIntosh said he will take the lead in assisting the town with filing the reports. Al will send out a questionnaire to the group to help collect the information needed for the reports. Activities like the recent improvements to the OSRD bylaw continued street sweeping operations, the water conservation efforts and hazardous waster collections all need to be included in the report.

The SMC discussed a request Nick Cracknell to submit a CPC suggestion to the CPC looking for funding for the stormwater work required under the NOI. We will request that the CPC provide an opportunity for the SMC to present the full request in January; once the scope, schedule and budget have been clarified. Eventually,

Steven Przyjemski <u>moved</u> to authorize Nick to submit a CPC suggestion request to the CPC for partial funding for the update of Georgetown's 2010 NPDES Phase 2 Small MS4 Stormwater Permit on behalf of the SMC. Deb Rogers seconded the motion and the motion was <u>approved</u> by a unanimous vote.

As an aside, Deb Rogers will look into the possibility of reducing sampling required by the State at the landfill. If the State agree to reducing the required sampling maybe this money could be used to help fund the Phase 2 stormwater work.

Al McIntosh will get a better feel for what is needed to comply with the new requirements and get back to the committee with some estimates of how much compliance will cost.

The next meeting has been scheduled for December  $14^{th}$  at  $9:00 \text{ a.m.} - 2^{nd}$  Floor of the Town Hall.

Steven Przyjemski <u>moved</u> to adjourn. Deb Rogers seconded the motion and the motion was <u>approved</u> by a unanimous vote.

# **EXHIBIT 2**

## REQUEST FOR INFORMATION - for Georgetown Stormwater Annual Reports 2009 & 2010

Please provide to MVPC (through Nick Cracknell, Georgetown Town Planner) the specific Georgetown Board/Dept. information requested below. This information will be used by MVPC to prepare Georgetown's Stormwater Phase II 2009 & 2010 Annual Reports for submittal to EPA.

#### Reporting Periods:

2009 Annual Report (*Annual Report #6*): April 1, 2008 – March 31, 2009 2010 Annual Report (*Annual Report #7*): April 1, 2009 – March 31, 2010

### Planning Board/Town Planner

- 1. List (by project name, street location, and acreage) any development or redevelopment projects (subdivision or site plan) that were reviewed, permitted, and/or constructed in each of the two time periods noted above. We'll make note of the fact that that the Planning Board and Town Planner worked collaboratively to ensure that the development plans were consistent and compliant with the Town's construction and post-construction stormwater runoff and erosion control regulations.
- Identify any development projects where more creative, non-traditional design resulted in the preservation of open space or incorporation of low impact development practices. (For example, Open Space Residential Design). Identify the type and acreage of open space preserved. Identify LID practice(s) used – e.g., rain garden, permeable pavement, rain barrels, grassed swales, etc.).
- 3. Identify any strengthening or improvements to Subdiv. Rules & Regs, Site Plan Review, Erosion Control Bylaw, etc.
- 4. (From Assessor). Identify number and acreage of parcels under APR, 61A, 61B
- 5. List (by name and date) any professional training workshops or seminars sponsored or attended by PB members or Town Planner to enhance their understanding of stormwater best management practices for example, workshops on LID, greenscaping, smart growth, sustainable development, pollution prevention, etc.

### **Conservation Commission/Agent**

- 1. List (by project name, street location, and acreage) any development or redevelopment project for which an Order of Conditions was issued.
- 2. Identify any strengthening or improvement to local wetland bylaw & regulations
- 3. Identify any wetland enforcement actions that resulted in degraded habitat restoration.
- Identify any new land acquisitions (via gift, tax title, or purchase) as permanently-protected open space. List by property name, street location, acreage, general habitat type (e.g., open meadow, mixed forest and wetland), passive recreation uses (if any)
- 5. List (by name and date) any professional training workshops or seminars sponsored or attended by ConCom members or Conservation Agent to enhance their understanding of stormwater best management practices for example, workshops on LID, greenscaping, smart growth, sustainable development, pollution prevention, etc.

#### **Board of Health/Agent**

- 1. Identify number of septic systems that were upgraded. (Were any of these located near sensitive water resources such as Rock & Pentucket Ponds, Parker River, Penn Brook, Town wells, etc.?)
- 2. Identify any homeowner education initiatives by BOH on proper septic system operation & maintenance for example, educational pamphlets mailed or handed out
- 3. Identify (by date, location, and licensed waste contractor) any Household Hazardous Waste collection events held. Identify number of households participating, as well as general types and quantity (total lbs.) of waste materials collected.
- 4. Identify efforts (if any) to enforce new Illicit Discharge Detection & Elimination (IDDE) Regulation, adopted by BOH on 3-28-05.
- 5. Identify any other BOH enforcement actions aimed at preventing or mitigating a water pollution problem or threat
- 6. List (by name and date) any professional training workshops or seminars sponsored or attended by ConCom members or Conservation Agent to enhance their understanding of stormwater best management practices for example, workshops on LID, greenscaping, smart growth, sustainable development, pollution prevention, etc.

#### **Highway Department**

- 1. Were municipal catch basins, drain manholes, and outfall pipes inspected and cleared of accumulated sediment and debris periodically to ensure their proper operation? On average, how many catch basins were cleaned out annually? What percent of total? Which areas of town?
- 2. Did the Highway Dept. install any educational storm drain markers or stencil messages ("Don't Dump Drains To Pond")
- 3. At the Town Highway Garage, were sand piles, salt piles, and containers of chemicals (automotive fluids, paints, cleaners & solvents, etc.) all stored safely on an *im*permeable surface, such as concrete or asphalt, <u>and</u> under cover, so as not to be exposed to the elements and thus be susceptible to running off into nearby wetlands and waterways?
- 4. Were Highway Dept. employees given instruction on proper sanding & salting practices (so as not to apply excessive amounts of either material)? Were they instructed on the safe storage and handling of other potential pollutants, such as those listed in #2 above?
- 5. List (by name and date) any professional training workshops or seminars attended by Highway Dept. personnel to enhance their understanding of stormwater best management practices for example, proper DPW sanding & deicing operations, highway infrastructure operation & maintenance practices, pollution prevention practices, etc.

Water Department – any activities related to water pollution prevention?

Park Department – any activities related to water pollution prevention?

Other Boards/Departments?

# 2008-2010 Stormwater Management – Open Space Acquisitions and Management

### I. OPEN SPACE/ CONSERVATION-RELATED ACQUISITIONS:

April 1, 2008-March 31, 2009 inclusive purchases\*

16 - 11F purchased 07/15/2008 4.51 acres

16-12 purchased 09/30/2008 10 acres

\* 9A- 8F purchased 07/19/2007 7.84 acres may or may not have been included in the '07 MS4 Report

TOTAL = 14.51 acres

121

April 1, 2009-March 31, 2010 inclusive purchases

10-4 purchased 07/09/2009 14 acres

10-8B purchased 07/09/2009 9.65 acres

TOTAL = 23.65 acres

#### 2. UNPROTECTED OPEN SPACE:

Total Private Chapter 61 Land = 414 acres

Total Public School Land = 77 acres

Total Public Town Land = 62 acres

Total Unprotected Open Space = 553 acres

### 3. PERMANENTLY PROTECTED OPEN SPACE:

Total Public Conservation Land = 706 acres

Total Public Recreational Land = 141 acres

Total Public Water Conservation Land = 134 acres

Total Private Non-Profit Conservation Land = 33 acres

Total Private Conservation Land = 13.5 acres

Total State Conservation Land = 1,060 acres

Total Protected Open Space = 2,074 acres

9A-8F purchased 07/19/2007 7.84 acres (may or may not have been included in the '07 MS4 Report)

April 1, 2008-March 31, 2009 inclusive purchases

16 -11F purchased 07/15/2008 4.51 acres

16-12 purchased 09/30/2008 10 acres

April 1, 2009-March 31, 2010 inclusive purchases

10-4 purchased 07/09/2009 14 acres

10-8B purchased 07/09/2009 9.65 acres

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+		FISCAL 2012							
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י ער	3	3 F 258 ANDOVER ST LLC	258	ANDOVER ST	61B	118.81	114.81	8050	29927/600
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: -	112	MOREHOUSE	41	JEWETT ST	61A	5.6	4	- 1	12617/319
17	108	BATEMAN	77	JEWETT ST	61A	13.51	12.59		10385/074
5	67	TARR/MCCLELLAN		JACKMAN ST	61A	31.35	31.35		13559/506
210	5 (0	WOODMAN/TSPLIAKIS/MILLEN	99	JACKMAN ST	61A	15.32	10		29203/626
2 0	2		56	JACKMAN ST	61A	35.22	34.22		29203/626
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31 ACK	SWAN	RI ACKSWAN GOI F COURSE DO NOT RELEASE GEORGETOWN CLUB'S 61B LIEN UNTIL 2015	GEOR	GETOWN CLUB'S 6	318 LIEI	UNTIL 201	<u>5</u>		

# **EXHIBIT 3**

# Stormwater 2005 Price List Phase II NPDES



Time is running out! Massachusetts Phase II (MS4) municipalities must implement their stormwater management plans by May of 2008. CEI prepared the following "menu" of implementation actions we could assist you with. Contact Rebecca Balke, P.E., 800-725-2550 X308 or rbalke@ceiengineers.com if you would like assistance with any implementation or need a proposal from CEI.

Туре	Implementation Activity	Ар	proximate Cost
1	Public Education & Outreach		
	A. Public Workshop on Stormwater (per workshop)	\$	1,200
	B. Display in Library or Town Hall	\$	1,500
	C. Stormwater Website (initial cost)	\$	7,500
2	Public Participation / Involvement		
	A. Flyers, Brochures, other Mailing Materials (originals)	\$	1,000
3	Illicit Discharge Detection / Elimination		
	A. IDDE Plan	\$	1,500 - 2,500
	B. IDDE Investigation (per day cost for avg. 15 sites with GPS)	\$	650 - 1,500
	C. Stormwater Discharge GIS Base Plan	\$	850 - 2,500
	D. Other Field Services (per day)	\$	750
	E. Training of staff in illicit discharge detection	\$	750
	F. Regulatory modifications (see 5 below)		
4	Construction Site Runoff Control		
	A. Inspection Guidelines	\$	500
•	B. Training In-House Inspectors	\$	750
•	C. Outside Inspection (per site per day)	\$	200 - 500
5	Post Construction Runoff Control		,
	A. Regulatory Modifications (including erosion and sediment		
	control and illicit discharge bylaws)	\$	*
	B. Outside Plan Review		*
	C. Training for In-House Plan Review	\$	1,500
	D. BMP Design		*
-	E. Inspection Guidelines	\$	500
	F. Training In-House Inspectors	\$	750
	G. Outside Inspection (per site per day)	\$	200 - 500
6	Pollution Prevention / Housekeeping		
Ū	A. Facility Inventories and Audits	\$	1,500 - 3,000
	B. Employee Training	\$	650 - 1,500
7	Reporting		
,	A. Annual Report Preparation	\$	1,500 - 3,000
•	B. Recycling Facility or POTW SWPP	\$	2,500 - 3,500
	C. Historic and Endangered Species Review	\$	1,000 – 3,500
8	Other Related Engineering Services		
v	A. Hydraulic Modeling / CIP for Drainage System	\$	*
	B. Watershed Modeling and TMDL	\$	*

<sup>\*</sup> Costs dependent on too many variables to give a range, please call for specific estimate.

# **EXHIBIT 4**

### **GCPC Project Suggestion Form**

The Community Preservation Act provides funding for three core community concerns:

- Acquisition and preservation of open space
- Creation and support of community housing

Acquisition and preservation of historic buildings and landscapes

The three core concerns provide guidelines for the use of CPA funds. Projects must meet specific legal requirements to be eligible for funding by the CPA.

Your suggestions for CPA projects are welcome. Input from the citizens for Georgetown will not only help to create new projects but also help to determine which projects are needed and wanted.

Name: <b>Mana</b> ge	Nicholas Cracknell, Chair (on behalf of the Gement Committee)	eorgeto	wn Stormwa	ter
Address	s: Memorial Town Hall, One Library Street, Geor	getown	, MA 01833	
Phone:	978-352-5755			
Phase public construction with the requirement of the comment of the complex of t	The Georgetown Stormwater Management Cot the CPC provide partial funding for the update I Small MS4 Stormwater Permit. In particular, the ducation and outreach; a detailed illicit dischange to the runoff control and post-construction on prevention to the Town's ponds, stream, rive uirements of the Permit, the SMC is also request ack valley Planning Commission as well as the ssion and Highway Department in order to proving services will enable the Town to avoid non-coment of Environmental Protection and Environment the the planning process, adopt the required by mit with the Conservation Commission by the female of the services of the planning process.	of Geo he Perr rge and runoff rs and sting st Plannii vide ma complia nental i	orgetown's 20 mit includes: delimination control bylav wetlands. In aff assistance issues we rotection Agnot file a Noti-	enhanced program; ws; and, completing from the conservation ces. These with the gency and to
Are you wi	lling to be the Contact person for the project:	⊠Yes	☐ No	
Have you	already contacted a town board about the project:	⊠Yes	☐ No	
If so which	board: Stormwater Management Committee			
	mation on the eligible uses of CPA funds please visit the Georgetov			

# **EXHIBIT 5**

### Chapter 57

#### **EROSION CONTROL**

§ 57-1. Permit required; findings.

§ 57-3. Adoption of regulations by Conservation Commission.

§ 57-2. Effect on other legislation.

§ 57-4. Violations and penalties.

[HISTORY: Adopted by the Town of Georgetown 5-24-1993 Annual Town Meeting, Art. 30. Amendments noted where applicable.]

#### **GENERAL REFERENCES**

Earth removal — See Ch. 49. Wetlands protection — See Ch. 161. Subdivision regulations — See Ch. 365.

Lufkins Brook Conservation Area — See Ch. 535.

#### § 57-1. Permit required; findings.

- A. No person may develop by constructing a road or driveway or by constructing a dwelling or other structure for human occupation, including commercial and industrial purposes, without submitting a plan of the area to be worked to the Conservation Commission for approval to be signified by issuance of an erosion control permit.
- B. Such permit shall not be issued unless the Commission finds the following:
  - (1) No larger area shall be developed than that on which construction can be completed rapidly so that large areas are not left bare and exposed for long periods.
  - (2) Grading shall be kept at a minimum. Where possible, only undesirable trees shall be removed.
  - (3) Runoff shall be controlled and conveyed into storm sewers or other outlets so it will not erode the land or cause off-site damage.
  - (4) Critical areas shall be protected during construction with mulch or temporary crop covers and with mechanical measures such as diversions and prepared outlets.
  - (5) Sediment basins shall be constructed where necessary to detain runoff and to trap sediment during construction.
  - (6) Safe off-site disposal of runoff shall be provided, including the increased runoff resulting from construction.
  - (7) Permanent vegetation and erosion control structures, where necessary, shall be installed as soon as possible.

#### § 57-2. Effect on other legislation.

Nothing in this chapter shall be construed to supersede the provisions of Chapter 365, Subdivision of Land Regulations of the Planning Board, or provisions of Chapter 161, Wetland Protection.

#### § 57-3. Adoption of regulations by Conservation Commission.

The Commission may adopt regulations to carry out the provisions of this chapter.

#### § 57-4. Violations and penalties.

Whoever violates any of the provisions of this chapter or any regulation adopted under its provisions shall be fined not more than three hundred dollars (\$300.). Each day that such violation continues shall constitute a separate offense. Such fine may be recovered by an agent appointed in writing by vote of the Commission. This chapter may also be enforced by the Building Inspector or any police officer.

ARTICLE: To see if the Town will vote to amend the BY-LAWS of the TOWN OF GEORGETOWN, by replacing Chapter 57 "Erosion Control" with "Stormwater and Erosion Control" as stated below:

### ARTICLE XXVII. Stormwater and Erosion Control Bylaw

Section I. Purpose

A. The purpose of this Bylaw is to protect, maintain and enhance the public health, safety, environment and general welfare of the Town by establishing minimum requirements and procedures to control the adverse effects of soil erosion and sedimentation, construction site runoff, increased post-development stormwater runoff and nonpoint source pollution associated with new development and redevelopment. It has been determined that proper management of stormwater runoff will minimize damage to public and private property and infrastructure, safeguard the public health, safety, environment and general welfare of the public, protect water and aquatic resources, protect and enhance wildlife habitat, and promote groundwater recharge to protect surface and groundwater drinking supplies. This Bylaw seeks to meet that purpose through the following objectives:

- Establish a mechanism by which the municipality can monitor and ensure compliance with requirements of its National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems and other applicable State and Federal mandates.
- Establish decision-making processes surrounding land development activities that protect the integrity of the watershed and preserve the health of water resources.
- 3. Require that new development, redevelopment and other land alteration activities maintain the after-development runoff characteristics as equal to or less than the pre-development runoff characteristics where appropriate in order to reduce flooding, stream bank erosion, siltation, nonpoint source pollution, property damage, and to maintain the integrity of stream channels and aquatic habitats.
- 4. Establish minimum post-development stormwater management standards and design criteria for the regulation and control of stormwater runoff quantity and quality; Establish minimum design criteria for the protection of properties and aquatic resources downstream from land development and land conversion activities from damages due to alterations in volume, velocity, frequency, duration, and peak flow rate of storm water runoff; Establish minimum design criteria for measures to eliminate or minimize to the extent feasible nonpoint source pollution from stormwater runoff which would otherwise degrade water quality.
- 5. Establish design and application criteria for the construction and use of structural stormwater control facilities that can be used to meet or exceed the minimum post-development stormwater management standards.
- 6. Encourage the use of nonstructural stormwater management, better site design practices or "low-impact development practices", such as reducing impervious cover, increasing site-wide infiltration, and preserving open space and other natural areas, to the maximum extent practicable.
- 7. Promote water conservation through the re-use of stormwater for irrigation.

- 8. Establish provisions that require practices that eliminate soil erosion and sedimentation and control the volume and rate of stormwater runoff resulting from land disturbance activities.
- 9. Establish provisions to ensure that soil erosion and sedimentation control measures and stormwater runoff control practices are incorporated into the site planning and design process and are implemented and maintained.
- 10. Establish provisions for the long-term responsibility for and maintenance of structural stormwater control facilities and nonstructural stormwater management practices to ensure that they continue to function as designed, are maintained, and pose no threat to public safety or the environment.
- 11. Establish provisions to ensure there is an adequate funding mechanism, including surety, for the proper review, inspection and long-term maintenance of stormwater facilities implemented as part of this Bylaw.
- 12. Establish administrative procedures for the submission, review, approval or disapproval of stormwater management plans, erosion and sediment controls, and for the inspection of approved active projects, and long-term follow up; Establish certain administrative procedures and fees for the submission, review, approval, or disapproval of stormwater plans, inspection of construction sites, and the inspection of approved projects.
- 13. Ensure that construction and waste materials, toxic materials, hazardous materials, and other pollutants are prevented from mixing with stormwater runoff, which would degrade water quality.
- 14. Establish the Town of Georgetown's legal authority and capacity to ensure compliance with the provisions of this By-Law through funding, permitting, inspection, monitoring, and enforcement.
- B. Nothing in this Bylaw is intended to replace the requirements of the Town of Georgetown Zoning Bylaw, the Mass Wetlands Protection Act, the Town of Georgetown General Bylaw, any other Bylaw that may be adopted by the Town of Georgetown, or any Rules and Regulations adopted there under.

#### Section II Definitions

The following definitions shall apply in the interpretation and implementation of this Bylaw. Additional definitions may be adopted by separate regulation:

ALTER: Any activity that will measurably change the ability of a ground surface area to absorb water, will change existing surface drainage patterns, or will increase or decrease the rate or volume of flow from a site.

BEST MANAGEMENT PRACTICE (BMP): Structural, non-structural and managerial techniques that are recognized to be the most effective and practical means to prevent and/or reduce increases in stormwater volumes and flows, reduce point source and nonpoint source pollution, and promote stormwater quality and protection of the environment. "Structural" BMPs are devices that are engineered and constructed to provide temporary storage and treatment of stormwater runoff. "Nonstructural" BMPs use natural measures to reduce pollution levels, do not require extensive construction efforts, and/or promote pollutant reduction by eliminating the pollutant source.

BETTER SITE DESIGN: Site design approaches and techniques, including low-impact development (LID) that can reduce a site's impact on the watershed through the use of nonstructural stormwater management practices. Better site design includes conserving

and protecting natural areas and green space, reducing impervious cover, using natural features for stormwater management, and providing site-wide infiltration.

DEVELOPMENT: Any construction that disturbs or alters a parcel of land.

DISTURBANCE OF LAND: Any action causing removal of vegetation or a change in the position, location, or arrangement of soil, sand, rock, gravel or similar earth material.

EXEMPT USE: Any use subject to the provisions of M.G.L. chapter 40A, section 3.

INFILTRATION: The act of conveying surface water into the ground to permit groundwater recharge and the reduction of stormwater runoff from a project site.

LOW IMPACT DEVELOPMENT (LID): An ecosystem-based approach to land development and stormwater management that ensures that each development site is designed to protect, or restore, the natural hydrology of the site.

MASSACHUSETTS STORMWATER MANAGEMENT STANDARDS: The latest version as may be amended from time to time of the Stormwater Management Standards and accompanying Stormwater Handbook issued by the Department of Environmental Protection pursuant to authority under the Wetlands Protection Act, M.G.L. c. 131, § 40, and the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26-53. The Stormwater Management Standards are incorporated in the Wetlands Protection Act Regulations, 310 CMR 10.05(6)(k) and the Water Quality Certification Regulations, 314 CMR 9.06(6)(a).

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) or MUNICIPAL STORM DRAIN SYSTEM: The system of conveyances designed or used for collecting or conveying stormwater, including any road with a drainage system, street, gutter, curb, inlet, piped storm drain, pumping facility, retention or detention basin, natural or manmade or altered drainage channel, reservoir, and other drainage structure that together comprise the storm drainage system owned or operated by the Town of Georgetown.

NONPOINT SOURCE POLLUTION: Pollution from many diffuse sources caused by rainfall, snowmelt, or other method of pollutant transport moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into water resource areas. Normal Maintenance: Activities that are regularly scheduled to maintain the health and condition of a landscaped area. Examples include removal of weeds or invasive species, pruning, mowing, raking, and other activities that are done at regular intervals within the course of a year.

PRE-DEVELOPMENT: The conditions that exist prior to the proposed disturbance activity. Where phased development or plan approval occurs (preliminary grading, roads and utilities, etc.), the existing conditions at the time prior to the first plan submission shall establish pre-development conditions.

POST-DEVELOPMENT: The conditions that reasonably may be expected or anticipated to exist after completion of the land development activity in accordance with approved plans on a specific site or tract of land. Post-development refers to the phase of a new

development or redevelopment project after completion, and does not refer to the construction phase of a project.

RECHARGE: The replenishment of underground water reserves.

REDEVELOPMENT: Any construction, alteration, improvement, repaving, or resurfacing on a previously-developed site.

RUNOFF: Rainfall or snowmelt water flowing over the ground surface or other source which may result in transport of pollutants.

SITE: The entire parcel of land being developed.

STOCKPILING: The storage of unsecured material for future use, excluding the storage of materials 10 cubic yards or less secured and utilizing erosion controls to prevent erosion of material.

STORMWATER MANAGEMENT: The use of structural or non-structural practices that are designed to control or treat stormwater runoff pollutant loads, discharge volumes, and/or peak flow discharge rates. Stormwater Management includes the use of Low-Impact Development (LID) management practices.

STORMWATER MANAGEMENT PERMIT (SMP): A permit issued by the Planning Board / Conservation Commission (PGA), after review of an application, plans, calculations, and other supporting documents, which is designed to protect the environment of the Town from the deleterious effects of uncontrolled and untreated stormwater runoff.

#### Section III. Authority

This By-Law is adopted under authority granted by the Home Rule Amendment of the Massachusetts Constitution and the Home Rule statutes, and pursuant to the regulations of the federal Clean Water Act found at 40 CFR 122.34., and as authorized by the residents of the Town of Georgetown at Town Meeting dated \_\_\_\_\_

#### Section IV. Applicability

A. This By-Law shall be applicable to all new development and redevelopment, land disturbance and any other activity that will result in an increased amount of stormwater runoff or pollutants flowing from a parcel of land, that exceed any of the Storm Water Management Permit thresholds in Section IV.B, unless exempt pursuant to Section V of this By-Law. This By-Law shall apply to land or parcels of land that are held in common ownership (including ownership by related or jointly-controlled persons or entities) as of the effective date of this By-Law, if the total land-disturbing activities on said land or parcels, considered as a whole, would presently or ultimately exceed the minimum thresholds in Section IV.B and are not exempted by Section V. A development shall not be segmented or phased in a manner to avoid compliance with this By-Law.

B. Storm Water Management Permit Thresholds - A Storm Water Management Permit shall be required for any of the following, except for an activity exempt per Section V:

1. Minor Permit:

- a) The creation of new impervious area, or expansion of existing impervious area, greater than 200 square feet and less than 2,500 square feet.
- b) Disturbance of land exceeding 1,000 square feet in area and not exceeding 5,000 square feet or 10% of a parcel, whichever is less.
- c) Stockpiling of material.

#### 2. Major Permit:

- a) Construction of any new dwelling or new dwelling replacing an existing dwelling in conformance with Article VIII, Section V.B.1.a of the Georgetown Zoning By-Laws:
- b) Any land disturbance exceeding an area of 5,000 square feet, or more than 20% of a parcel or lot, whichever is less.
- c) Any activity that will disturb land with a 10% or greater slope or where an area is proposed to have a 10% or greater finished slope, and where the land disturbance is greater than or equal to 2,500 square feet within the sloped area.
- d) Creation of new impervious surface area, or expansion of existing impervious area, greater than 2,500 square feet.
- e) The addition or on-site redistribution of more than 100 cubic yards of earth materials including, but not limited to, sand, gravel, stone, soil, loam, clay, sod, fill and mineral products.

#### Section V. Exemptions

Exemptions from this By-Law apply to the following activities, provided that a project is solely comprised of any one of these activities:

- A. Activities that require Site Plan Review, Definitive Subdivision or Special Permit Approval from the Planning Board.
- B. As authorized in the NPDES General Permit for Stormwater Discharges for Small MS4s for Massachusetts, an activity that is wholly subject to jurisdiction under the Wetlands Protection Act and demonstrates compliance with Massachusetts storm water standards as reflected in an issued Order of Conditions, provided that the activity also demonstrates compliance with any additional performance standards contained in the Regulations promulgated to implement this By- Law
- C. Normal maintenance and improvement of land in agricultural use as defined by the Wetlands Protection Act Regulations at 310 CMR 10.04 ("Agricultural");
- D. Normal maintenance of Town owned public land, ways and appurtenances;
- E. Repair, replacement, or reconstruction of an existing driveway provided that erosion control measures are utilized to prevent runoff and sediment from entering a traveled way or adjacent properties.
- F. Any work or projects for which all necessary approvals and permits were issued before the effective date of this By-Law.
- G. Normal maintenance of existing landscaping, gardens or lawn areas associated with a single family dwelling provided erosion control measures are utilized to prevent runoff and sediment from entering a traveled way or adjacent properties.
- H. Construction of any fence that will not alter existing terrain or drainage patterns.
- Repair or replacement of septic systems or wells when approved by the Board of Health for the protection of public health on lots having an existing dwelling provided that the Board of Health determines:

- 1. there is minimal grading as defined in Title 5 of the State Environmental Code, 310 CMR 15.000;
- 2. there is no change or expansion of use as defined by Title 5, and
- 3. the work includes the use of BMPs to prevent erosion, sedimentation, and release of pollutants.
- J. Construction of utilities (gas, water, wastewater systems, electric, telephone, cable television, etc.) other than drainage which will not alter terrain, ground cover, or drainage patterns, so long as BMPs are used to prevent erosion, sedimentation and release of pollutants.
- K. Emergency repairs to any existing utilities (gas, water, wastewater systems, electric, telephone, cable television, etc.) and emergency repairs to any stormwater management facility or practice that poses a threat to public health or safety, designated by the PGA. Where such activity is subject to the jurisdiction of the Conservation Commission, the work shall not proceed without the issuance of an Emergency Certification by the Commission.
- L. The maintenance, reconstruction or resurfacing of any public way; and the installation of drainage structures or utilities within or associated with public ways that have been approved by the appropriate authorities provided that written notice be filed with the PGA fourteen days (14) prior to commencement of activity;
- M. The removal of earth products undertaken in connection with an agricultural use if the removal is necessary for or directly related to planting, cultivating or harvesting or the raising or care of animals

#### Section VI. Administration

- A. The Planning Board / Conservation Commission (PGA) shall be responsible for the administration, implementation, and enforcement of this By-Law. Any powers granted to or duties imposed upon the PGA may be delegated in writing by the PGA to its employees or agents or other municipal employees as appropriate.
- C. Stormwater & Erosion Control Regulations ("Regulations"). The PGA may adopt, and periodically amend, rules and regulations relating to the terms, conditions, definitions, enforcement, fees (including application, inspection, and/or consultant fees), delegation of authority, procedures and administration of this By-Law after conducting a public hearing to receive comments on the proposed rules and regulations or any proposed revisions. Such hearing dates shall be advertised in a newspaper of general local circulation at least seven (7) days prior to the hearing date. Failure of the PGA to promulgate such rules and regulations or a legal declaration of their invalidity by a court shall not act to suspend or invalidate the effect of this By-Law.
- D. Massachusetts Stormwater Handbook. The PGA will utilize the policy, criteria and information including specifications and standards of the most recent edition of the Massachusetts Stormwater Handbook for execution of the provisions of this By-Law. Unless otherwise specified in the Regulations, stormwater management practices that are designed, constructed, and maintained in accordance with these design and sizing criteria will be presumed to be protective of Massachusetts water quality standards.
- E. Stormwater Management Permit. The PGA shall have the authority to issue a Stormwater Management Permit (SMP) for projects exceeding the thresholds defined in Section IV.B. of this By-Law and not otherwise exempted by Section V.

- further violations or to compel the person to perform abatement or remediation of the violation.
- C. The PGA, or an authorized agent of the PGA, may issue a written order to enforce the provisions or this By-Law or the Regulations, which may include requirements to:
  - 1. Cease and desist from land-disturbing activity until there is compliance with the By-Law or provisions of an approved Stormwater Management Permit;
  - 2. Maintain, install or perform additional erosion and sediment control measures:
  - 3. Perform monitoring, analyses, and reporting;
  - 4. Remediate erosion and sedimentation resulting directly or indirectly from land-disturbing activity;
  - 5. Comply with requirements in the Stormwater Management Permit for operation and maintenance of stormwater management systems; and,
  - 6. Remediate adverse impacts resulting directly or indirectly from malfunction of the stormwater management systems. If the PGA or its authorized agent determines that abatement or remediation is required, the order shall set forth a deadline by which such abatement or remediation must be completed.
- D. Criminal Penalties. Any person who violates any provisions of this By-Law, regulation, order or permit issued hereunder, shall be punished by a fine of not more than \$300. Each day a violation exists shall constitute a separate violation.
- E. Non-Criminal Disposition. As an alternative to criminal prosecution or civil action, the Town may utilize the non-criminal disposition procedure set forth in M.G.L. Ch. 40, §21D and Article V of the Town By-Laws, in which case any police officer of the Town of Georgetown, the Conservation Commission, or Building Inspector and such other persons as are authorized by the PGA shall be the enforcing person. If non-criminal disposition is used, any person who violates any provision of this By-Law, regulation, order or permit issued there under, shall be punished as follows:
  - 1. First Violation: Warning
  - 2. Second violation: \$100
  - 3. Third violation: \$200
  - 4. Fourth and subsequent violations: \$300
  - 5. Each day a violation exists shall constitute a separate violation
- F. Remedies Not Exclusive. The remedies listed in this By-Law are not exclusive of any other remedies available to the PGA or the Town under any applicable federal, state or local law.

#### Section IX. Severability

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The invalidity of any section, provision, paragraph, sentence, or clause of this By-Law shall not invalidate any section, provision, paragraph, sentence, or clause thereof, nor shall it invalidate any permit or determination that previously has been issued.

# **EXHIBIT 6**

# TOWN OF GEORGETOWN PLANNING BOARD NOTICE OF PUBLIC HEARING

In accordance with the provisions of M.G.L. Chapter 41, Section 81Q, the Georgetown Planning Board will hold a public hearing to amend the following sections of the Subdivision Regulations - Chapter 365 of the Town Code of the Georgetown:

Amendments:	§365-24.3(a) Submission to other boards; §365-35.C. & E. Top sheet requirements by time of public hearing; §365-65. Fire alarm boxes; §365-50. Water mains, valves and hydrants; Fee Regulations for Modifications (Subsection 3); §365-18.A. (2) Contents of preliminary plan – attachments; §365-20.A. & B. Examination of preliminary plan; §365-24.3. Submission to other boards; §365-34.C.9. Top sheet; §365-36.A, D, F, I, K & L Design standards; §365-37.C. Subdivision of two or fewer lots -courts; §365-38.C. Subdivision of five or fewer lots – lanes; §365-39.C.I, C.3., and F Attachments; §365-44.B. Gravel, loam and suitable seed; §365-51.E. Street construction standards and specifications; §365-6. One Building per lot; Planning Board approval; §365-32(c) Bond or deposit for construction of ways and installation of services; §365-27(c) Release of lots or security; Forms; Sketch B; and, §365-28. Bond or Deposit for Construction of Ways and Installation of Services.  A full and complete copy of the proposed amendments can be inspected at the Planning Office Monday through Thursday from 9:00 a.m. to 2:00 p.m. Any person interested in being heard on the subject should appear the public hearing.
Date/Time	December 8, 2010, 8:00 p.m.
Location	Georgetown Town Hall, Third Floor, 1 Library Street Georgetown, MA 01833

Persons needing special accommodations and / or those interested in viewing the application materials should contact the Georgetown Planning Department at (978) 352-5713.

Hugh Carter, Chair, Georgetown Planning Board

Bill To:

Hugh Carter, Chairman Georgetown Planning Board Georgetown Town Hall,

l Library Street

Georgetown, MA 01833

#### **Chapter 365: SUBDIVISION REGULATIONS**

[HISTORY: Adopted by the Planning Board 12-20-1972. Amendments noted where applicable.]

#### **GENERAL REFERENCES**

Building construction — See Ch. 29.
Earth removal — See Ch. 49.
Erosion control — See Ch. 57.
Wetlands protection — See Ch. 161.
Zoning — See Ch. 165.
Flood hazards — See Ch. 420.
Building and occupancy permits — See Ch. 510.
Curb cut permits — See Ch. 515.

**ARTICLE I General Provisions** Editor's Note: The first set of Subdivision Regulations was adopted 9-23-1952; the second set adopted December 1953; the third set December 1954; the fourth set 6-15-1955.

#### § 365-1. Term defined.

#### [Amended 10-25-2000]

As used in these regulations, the following terms shall have the meanings indicated:

COURT — A street which, by its location and design, serves as the sole means of access to no more than two residential lots, and which has no potential to serve additional lots.

LANE — A street which, by its location and design, serves as the sole means of access to no more than five residential lots, and which has no potential to serve additional lots.

SUBDIVISION — The word "subdivision" as used in these regulations shall have the meaning as defined in MGL c. 41, § 81L.

#### § 365-2. Submission of plan required.

No person shall make a subdivision of any land in Georgetown unless he has first submitted to the Planning Board a plan for its approval and the Board has approved such plan in the manner provided by law and these regulations (MGL c. 41, § 810). No person shall proceed with the improvement or sale of lots in a subdivision or the construction of ways or the installation of municipal services therein unless and until a definitive plan of such subdivision has been submitted and approved by the Board as hereinafter provided.

#### § 365-3. Plan approval not way or improvement acceptance.

Approval of a plan by the Planning Board shall not be deemed acceptance by the Town of Georgetown of any way or other public improvement shown on the plan.

#### § 365-4. Waiver of compliance.

The Board may, in any particular case, waive strict compliance with these regulations where such action is in the public interests and not inconsistent with the intent and purpose of the Subdivision Control Law (MGL c. 41, § 81R).

#### § 365-5. Forms and exhibits.

Forms and exhibits attached to these regulations are a part thereof. Editor's Note: The forms and exhibits referred to in this chapter are on file in the Planning Board office.

§ 365-6. One building per lot; Planning Board approval.

Comment [BU1]: The Board may want to change this if the ZBA is still going to be the permit granting authority for multiple physiciple structures under Section 165-281

Not more than one building designed or available for use for dwelling purposes shall be erected or placed or converted to such on any lot in a subdivision or elsewhere in town without the consent of the Planning Board. Such consent may be conditional upon the providing of adequate ways furnishing access to each site for such building in the same manner as otherwise required for lots within a subdivision (MGL c. 40, § 81Q).

#### § 365-7. Removal of soil, loam, sand or gravel.

The approval of the subdivision plan does not authorize violation of Chapter 49, Earth Removal. The only removal of soil, loam, sand or gravel authorized by the approval of a plan is within the fifty-foot right-of-way and then only to the depth shown on the profile plan of the way (§ 365-42).

#### § 365-8. Plans violating other laws.

No subdivision plan shall be deemed to comply with these regulations if construction under the plan appears to violate any state law or regulation or any Georgetown Bylaw or any regulation of any town board, commission or officer. Such a plan will be treated as a preliminary plan until the apparent illegality is cleared up.

#### § 365-9. Reimbursement by applicant for costs.

Applicant shall reimburse the Town of Georgetown for any costs for studies made in connection with approval of the plan or correction of problems encountered during construction.

#### § 365-10. Cautionary signs; indemnification.

The Planning Board may cause to be erected cautionary signs on the subdivision, such as "No occupancy permit has been granted for this dwelling," which shall not be disturbed by the subdivider. The subdivider by filing a plan for approval under these regulations thereby agrees to hold the Town of Georgetown, its officers, servants, agents or any members of its boards and commissions acting on its behalf and individually harmless for any damages that may be suffered as a result of its or their actions or inactions.

#### § 365-11. Severability.

The provisions of these regulations are severable, and any invalidity of one part shall not affect the validity of any other part. In case for any reason any part or parts of these regulations should be held to be invalid, such invalidity shall not affect the remainder.

#### § 365-12. Supersession of other regulations.

These regulations supersede all previous regulations as to plans submitted after their effective date as provided in MGL c. 41, § 81Q.

#### **ARTICLE II Plans Not Requiring Approval**

#### § 365-13. Manner of submission of plan.

#### [Amended 4-9-1990 (Amdt. I); 12-21-1995 (Amdt. J); 10-25-2000]

Any person wishing to cause to be recorded a plan of land situated in Georgetown who believes that his plan does not require approval because of the provisions of the definition of "subdivision" in MGL c. 41 § 81L, shall submit his plan to the Planning Board with three copies, with an administrative fee and project review fee conforming to the most recent schedule of fees set forth in the Fee Regulations, by delivering it to a meeting of the Board or by mailing it by registered mail to the Planning Board, care of the Town Clerk, in which case the date of mailing shall be the date of submission of such plan as provided by MGL c. 41, § 81O, in either case accompanied by Form A (MGL c. 41, § 81Q).

#### § 365-14. Written notice to Town Clerk.

- A. The applicant shall also give written notice to the Town Clerk as provided in MGL c. 41, § 81T, by:
  - (1) Delivery, in which case the Town Clerk will upon request give a written receipt; or
  - (2) By certified mail.
- B. Form B may be used for the purpose of notice.
- C. The notice shall describe the land sufficiently for identification. A reference to the Assessor's Map showing the sheet number and lot number shall constitute sufficient description of the land.
- D. The notice shall state the date when such plan was submitted to the Planning Board and shall state the name and address of the owner of such land.

#### § 365-15, Endorsement.

The Planning Board will then endorse the plan "approval under the Subdivision Control Law not required" or proceed otherwise in accordance with MGL c. 41, § 81P.

#### **ARTICLE III Preliminary Plan**

#### § 365-16. Submission of plan prior to definitive plan required.

Any person, before submitting his definitive plan for approval, may submit to the Planning Board and to the Board of Health a preliminary plan as hereinafter defined. Preliminary subdivision plan submittal shall be made at a scheduled meeting of the Board. No submittal by mail or another department will be accepted.

#### § 365-17. Written notice to Town Clerk.

In such case, the applicant shall also give written notice to the Town Clerk as provided in MGL c. 41, § 81S, by delivery, in which case the Town Clerk will upon request give a written receipt, or by certified mail. Form D may be used for the purpose of notice.

#### § 365-18. Contents of preliminary plan; attachments.

- A. A preliminary plan shall not be deemed to have been submitted to the Planning Board unless:
  - (1) It has the following attached to it as described in § 365-22:
    - (a) Assessor's Map (§ 365-22B).
    - (b) USGS Map (§ 365-22D).
    - (c) Deed (§ 365-22E).
    - (d) Georgetown map (§ 365-22F).
  - (2) It contains the following as described in Article V:
    - (a) Site survey map (§ 365-39B) which shall be entitled a "preliminary plan."
    - (b) Watershed outline\_drainage and infiltration plan, as described in § 365-39C(1).

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- (c) Wetlands protection statement (§ 365-39D).
- (d) Floodplain statement (§ 365-39E).
- (3) In the alternative it contains the contents required by MGL c. 41, § 81L, under the definition of preliminary plan.

- B. In either case the preliminary plan shall be accompanied by Form C (MGL c. 41, § 81Q).
- C. Administrative fee and project review fee conforming to the most recent schedule of fees set forth in the Fee Regulations must be submitted with the application. [Added 10-25-2000]

#### § 365-19, Planning Board action.

The Planning Board will act on the preliminary plan as provided by MGL c. 41, § 81S.

- A. Normally a first conference will be held to acquaint the Board with the general character of the development, the intent of the developer and to acquaint the developer with the overall requirements of the Board and its regulations.
- B. Normally a second conference will follow review of the preliminary plan by the Board and other interested agencies at which the Board may indicate required or suggested desirable changes and/or modifications.
- C. Tentative approval of a definitive plan does not constitute a waiver of the Board's right to require further changes in the plan nor does it constitute approval of the subdivision.
- D. When a preliminary plan has been submitted to the Planning Board and written notice has been given to the Town Clerk, such plan and the definitive plan evolved the refrom shall be governed by the regulations in effect at the time of the submission of the preliminary plan, provided that the definitive plan is duly submitted within seven months from the date on which the preliminary plan was submitted (MGL c. 41, § 81Q).

#### § 365-20. Examination of preliminary plan.

#### [Added 7-18-1973 (Amdt. B)]

A. Soil map will be examined for problem areas. Percentage of existing capacity of utilities that is used will be studied. Past problems in the area will be discussed with town department heads. The Comprehensive Plan will be checked as to planned roads and circulation system and other matters. Vegetation and topography, including wetlands and resource areas, will be checked. Safe exits from roads, including sight distance and grade will be studied. Open space and density of area will be studied. Preliminary plan will be sent to the Conservation Commission and Board of Health for review and comments. Test pit may be required if a road is planned for a swampy, flood prone or ledgy area. Existing drainage problems will be examined to ensure there is no increase in speed of runoff at exit points. All existing streams shall enter and exit subdivision at their original locations.

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- B. The subdivision proposal will be reviewed by the Planning Board to assure that: [Added 7-18-1975 (Amdt. C)]
  - All such proposals are consistent with the need to minimize flood damage, <u>optimize</u> water use and <u>promote infiltration</u>;
  - (2) All public utilities and facilities, such as sewer, gas, electrical and water systems, are located, elevated and constructed to minimize or eliminate flood damage; and
  - (3) Adequate drainage <u>and infiltration</u> is provided so as to reduce exposure to flood hazards <u>and conserve water for public use and safety as well as environmental benefit.</u>

#### **ARTICLE IV Definitive Plan Procedure**

#### § 365-21. Submission to Planning Board; notice requirements.

A. The applicant shall submit his plan as defined in Article V with the papers required under § 365-22 to the Planning Board by delivering it to a meeting of the Board; Form E may be used for the purpose. If an agent is named, notice sent to him will be deemed notice to the applicant unless subsequently the name of a new agent is submitted and its receipt acknowledged by the Planning Board. [Amended 4-3-1996]

- B. A copy of the plan and of the advertisement of public hearing referred to in § 365-26 shall also be filed with the Board of Health (MGL c. 41, § 81U).
- C. The applicant shall also give written notice to the Town Clerk as provided in MGL c. 41, § 81T, by delivery, in which case the Town Clerk will upon request give a written receipt, or by certified mail. Form F may be used for the purpose of notice. The notice shall:
  - (1) Describe the land sufficiently for identification. A reference to the Assessor's Map showing the sheet number and lot number of the plan shall constitute sufficient description of the land.
  - (2) State the date when such plan was submitted to the Planning Board.
  - (3) State the name and address of the owner of such land.

#### § 365-22. Papers required.

The applicant shall also submit to the Planning Board with the plan as defined in Article V the following (MGL c. 41, § 81Q):

- A. A list of abutters according to the most recent tax list, with their addresses (so that notice can be sent).
- B. A tracing or copy of relevant part of the Assessor's Map, showing limits of subdivision and lots of abutters, with names of owners, with proposed roads superimposed by an engineer, size 81/2 by 11 or a multiple thereof (for posting in the town office), scale to be the same as that portion of Assessor's Map where the subdivision is proposed. [Amended 4-26-1995]
- C. Administrative fee and project review fee conforming to the most recent schedule of fees set forth in the Fee Regulations must be submitted with the application. [Amended 7-18-1973 (Amdt. B); 12-3-1986 (Amdt. E); 8-19-1987 (Amdt. G); 4-9-1990 Amdt. I); 12-21-1995 (Amdt. J); 4-3-1996; 1-27-1999; 10-25-2000; 6-10-2009]
- D. Copy of part of United States Geological Survey Map, scale one inch equals 1,000 feet, showing limits of subdivision, with proposed roads superimposed by an engineer, size 81/2 by 11 or a multiple thereof. (A copy of part of the town floodplain map may be used for the purpose.)
- E. Copy from the Registry of Deeds of the deed to the current owner of the land.
- F. Copy of map of Georgetown, scale one inch equals 1,000 feet, as prepared by the Planning Board, showing limits of the subdivision and proposed layout of streets, prepared by an engineer (so map can be updated).

#### § 365-23. Issuance or receipt for submission of required papers.

#### [Added 10-7-1987 (Amdt. H); amended 4-3-1996]

No plan shall be deemed to have been submitted to the Planning Board within the meaning of MGL c. 41, § 81O, unless it contains all pertinent information and plan detail required by these regulations. Definitive subdivision plan submittal shall be made at a scheduled meeting of the Board. No submittal by mail or to another department will be accepted. Fee and accompanying documents must be provided at time of submittal in order for plan to be accepted.

#### § 365-24. Submission to other boards.

- A. Applicant shall send a copy of the cover page as described in § 365-39A and a copy of the notice of public hearing as described in § 365-26 to each of the boards and officers described in Subsections B and C of this section.
- B. Top sheet:
  - (1) The applicant shall, within three days after submission to the Planning Board, submit

two copies of the top sheet as described in § 365-34 to the following, who shall keep one copy for their records and enter their requirements on the other for submission to the Planning Board, together with a letter containing their approval, disapproval or comments.

- (2) It is to the applicant's advantage to see that such response is in the hands of the Planning Board by the time of the public hearing in order to expedite action on the plan. No final approval shall be granted until such responses are on file.
- (3) The linen top sheet shall be corrected to reflect such changes by the time of the public hearing.
  - (a) Fire Chief, as to number and location of fire alarm boxes and tie-in to existing system.
  - (b) Board of Water Commissioners, as to size of water mains, <u>water conservation</u> measures, location of hydrants, tie-in to existing water system, <u>etc. Lot numbers</u> from the Assessors Office shall <u>indicate the permanent street address</u> [See § 365-34C(3),] [Amended 8-19-1987 (Amdt. G)]
  - (c) Manager of Municipal Light Department, as to number of poles and number and location of streetlights.
  - (d) Highway surveyor, as to proposed road and street drainage system.
  - (e) Water Conservation Committee as to low impact development techniques and water conservation best management practices per the Water Conservation and Stormwater Recharge Guidelines for New Developments
- C. Applicant shall submit to the Conservation Commission for review the top sheet, USGS map, site survey map, watershed outline and drainage plan, Wetlands Protection Law and Chapter 160, Wetlands Protection, of the Code of the Town of Georgetown, and floodplain statement. Applicant shall submit to the Building Inspector, for review, the top sheet.

#### § 365-25. Posting in town offices.

`The applicant shall see to it that a copy of the cover page and of the Assessor's Map and notice of hearing is posted in the town office not later than seven days prior to the date of public hearing. A copy of the plan as defined in Article V shall be filed with the Town Clerk and shall be a public record.

#### § 365-26. Notice of public hearing.

#### [Amended 4-26-1995]

A notice of public hearing, as prepared by the Planning Board, shall be advertised at the expense of the applicant by the Planning Board and copies of the advertisement given to the abutters and to the applicant by the Board as provided in MGL c. 41, § 81T. Certified mail or other proof of notification shall be postmarked or dated at least 14 days prior to the hearing date.

#### § 365-27. Bond or deposit for construction of ways and installation of services.

Editor's Note: Former § 365-27, Procedure when using outside consultants, added 4-9-1990 (Amdt. I), was repealed 10-25-2000. Said amendment also renumbered the subsequent sections.

- A. Before approval of the plan, the Planning Board will require provisions for the construction of ways and the installation of municipal services in accordance with these regulations, such construction and installation to be secured by a covenant (Form G) or contract (Form I) with deposit or bond as provided in MGL c. 41, § 81U.
- B. Applicant should sign Form G or Form I for this purpose.

Comment [BU2]/ Issues related to the type of security need to be discussed.

Draft Subdivision Regulations

12/6/2010

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C. It a bond or deposit is to be used, the applicant shall be prepared to discuss the amount of such security and the basis for it, based on estimated costs, by the date of the public hearing. An amount equal to double the estimated construction cost shall be deemed adequate security.

Comment [BU3]: The multiplier should be discussed.

#### § 365-28. Extension of time for action on plan.

If an extension of time is needed to complete action on the plan, the applicant may file a request within 60 days of the date of submission of the plan and may use Form H for the purpose.

Comment [BU4]: We might want to clarify how an extension request will be administered.

#### § 365-29. Time limit for action on plan.

- A. After the public hearing and after the report from the Board of Health or the lapse of 45 days from the date of filing with such Board without such report, the Planning Board will take action as required by MGL c. 41, § 81U, including:
  - (1) Filing a certificate of its action with the Town Clerk; and
  - (2) Sending a notice of such action to the applicant at the address of the agent to receive notice stated in the application.
- B. Before recording, street numbers shall be placed on the linen plan.

#### § 365-30. Plan endorsement.

#### [Amended 7-18-1973 (Amdt. B)]

If no notice of appeal is received during the 20 days next after receipt by the Town Clerk and recording by him of notice from the Planning Board of approval of the plan, the plan will be endorsed by the Planning Board and the certificate of no appeal will be signed on the plan by the Town Clerk. Failure by the applicant to appeal constitutes acceptance of the conditions of approval. No plan shall be endorsed until all papers are in order, the plan has been corrected, fees have been paid and all laws, bylaws, regulations and orders have been complied with.

#### § 365-31. Recording of plan; copies.

- A. The Planning Board upon receiving from the applicant the estimated cost of recording and obtaining the copies described below shall thereupon record the plan in the Registry of Deeds, together with the covenant not to convey, Form G, if applicable, and any agreement with the Planning Board that is to be recorded.
- B. The applicant shall furnish to the Planning Board two copies of the plan from the Registry of Deeds within three days after recording. The applicant shall furnish the agent of the Board of Health one copy before he applies for a sewage works construction permit. The applicant shall furnish one copy of the plan to the Building Inspector before he applies for a building permit. The expense shall be borne by the applicant. The applicant shall furnish one copy of the plan as built as provided in § 365-66, including location of gas lines. The applicant shall furnish one copy of the plan to the Assessors drawn to their scale showing lots and streets.

#### § 365-32. Release of lots or security.

#### [Amended 8-19-1987 (Amdt. G)]

- A. To obtain a release or partial release of all lots or all security, the applicant shall submit Form J, with attachments, to the Planning Board and shall also mail or submit a copy of Form J to the Town Clerk as provided in MGL c. 41, § 81U. The Board has 45 days in which to act after receipt by the Town Clerk of notice of completion.
- B. No subdivision will be deemed to have been completed until all the items and approvals on Form J have been completed. No lot will be released as completed on a street that does not

have a through exit that has a first coat of bituminous concrete or a temporary turnaround so paved.

- C. An amount of money to be determined by the Board but not less than \$5 per linear foot of roadway shall be deposited in a savings account in a bank in Georgetown in the name of the town for a period of one year after release of all lots and until road is accepted by vote of the Town Meeting to cover repairs and to correct problems. Thereafter the deposit shall be turned over to the town treasury. [Amended 8-19-1987 (Amdt. G)]
- D. Final completion of the improvements shall not be considered until one year after the installation of the finished road surface or until acceptance of the road by the Town Meeting, whichever comes earlier.

Comment [BU5]: This figure should be updated.

#### ARTICLE V Contents of Definitive Plan Editor's Note: See MGL c. 41, § 81Q.

#### § 365-33. General description of contents.

The definitive plan consists of a top sheet, as described in § 365-34, which meets the design standards of § 365-36, which may contain more than one sheet and which is designed to be recorded at the Registry of Deeds and whose prime purpose is to be used for the conveyance of lots and as a permanent record of the final engineering design of the subdivision, and the following attachments, as described in § 365-39, which, unless otherwise specified, shall be in the same scale as the definitive plan but which need not be on linen. One sheet or plan may meet more than one requirement but it shall be labeled to show its purpose, such as "Site Survey Map."

#### § 365-34. Top sheet.

- A. The top sheet of the definitive plan shall be signed and sealed by a registered professional engineer (as to drainage, etc.) and by a registered land surveyor (as to lot layout, etc.). It shall comply with the rules of the Registers of Deeds and be eligible for recording. The scale shall be one inch to each 40 feet, unless the Board, prior to submission, authorizes a different scale. Sheet size preferably shall be 24 inches by 36 inches and shall not exceed 30 inches by 42 inches. See MGL c. 112, § 81D, definition of "practice of land surveying." [Amended 7-18-1973 (Amdt. B)]
- B. The top sheet of the plan shall contain a title block six inches by six inches in the lower right-hand corner suitably filled out except for notations by the Board in accordance with the title block, the form for which is on file in the Planning Board office.
- C. The top sheet of the plan shall contain:
  - (1) An insert location plat at a scale of one inch equals 1,000 feet.
  - (2) North point, the existing and proposed lines and widths of streets, lines and areas of lots, lines of easements and lines and areas of any public area within the subdivision. The size, shape, width, frontage and use of lots shall be in compliance with applicable provisions of Chapter 165, Zoning, or with a variance from the Board of Appeals. The location, use, size and outline of existing buildings shall be shown. Show recorded contiguous plans or subdivisions, giving registry numbers. [Amended 7-18-1973 (Amdt. B)]
  - (3) Proposed street names, which shall be in pencil until approved by the Planning Board. To prevent confusion, no street name shall be similar to any existing street in Georgetown. It is suggested that dead-end streets be called "way" or "lane." Use permanent street address as lot number. [Amended 12-3-1986 (Amdt. E)]
  - (4) Names of all abutters from the most recent tax list.
  - (5) Note to Registry of Deeds or land court. See accompanying municipal lien certificate

- stating all taxes, assessments and charges have been paid to date, as per MGL c. 60, § 23. [Amended 4-26-1995]
- (6) Profile plan, which may be separate, showing intersection of pavement of subdivision road with existing streets carried back 200 feet along each street.
- (7) Standard highway bounds shall be shown at all intersections of streets with each other, at all points of change in direction of curvature of streets and at all outer plan boundary lines. See § 365-62.
- (8) A sidewalk shall be down on one side of each street, five feet in width. See § 365-52A, B and C. [Amended 7-18-1973 (Amdt. B)]
- (9) Curved vertical granite curbing, having a width at the top of four inches V4X18, nominal depth 18 inches, cut to the curb radius with the face outside, meeting the specifications in Fletcher's 1970 Standardized Granite Highway Products, shall be installed on all intersections, unless waived by the Board in writing (e.g. to enable low impact development stormwater practices), on the curve and extending six feet beyond the tangent points and on all inside curves wherever the interior angle is less than 110° and on all finished grades over 5%. [Amended 7-18-1973 (Amdt. B)]
- (10) Easements for water mains, storm drains, utilities and other purposes and their appurtenances shall be provided where such are located outside the street line and shall be at least twenty-feet wide. Where a subdivision is traversed by an open watercourse, drainage way, channel or stream, the Board shall require that there be provided a stormwater easement or drainage right-of-way of adequate width (minimum 30 feet) to conform substantially to the lines of such watercourse, drainage way, channel or stream and to provide for the entrance of construction and maintenance equipment. Existing streams and watercourses, including adjacent existing natural waterways and proposed system of drainage, including off-site drainage system, shall be shown. (See also § 365-60.) Consideration shall be given and may be required by the Board to establish conservation and/or recreation easements (such as bridle paths or footpaths). Label easements shown on plan: easement to Town of Georgetown.

  [Amended 12-3-1986 (Amdt. E)]
- (11) Sufficient data to determine readily the location, bearing and length of every street line, lot line and boundary lines, and to reproduce the same on the ground, all bearings to be referred to true meridian. Floodplain contour shall be indicated and labeled on each lot where applicable.
- (12) A detailed profile of proposed streets and drainage systems on a horizontal scale of 40 feet to an inch and a vertical scale of four feet to an inch, unless otherwise authorized; all elevations to refer to United States Coast and Geodetic Survey Bench Marks. The profile shall show the existing ground on the center line in a solid black line, the existing right side in a short dash line and the existing left side in a long dash line; the proposed grade shall be shown in a heavy black line with the elevation shown at each fifty-foot station, with the rate of grade indicated. Invert grades shall be marked at changes in grade. This may be shown on a separate sheet. The maximum velocity shall be 15 feet per second and the minimum velocity shall be three feet per second. Detail of manholes shall be shown unless a standard design is shown and used.

#### § 365-35. Top sheet requirements by time of public hearing.

By the time of the public hearing, the following, which shall be paid for by the developer, shall be shown on the top sheet of the plan:

A. The location, grade and size of water mains and tie-in to town system as determined by the Board of Water Commissioners; or if town water is not to be used, the proposed water supply system. The minimum diameter of the water mains shall be eight inches. Deleted: drainageway

Deleted: drainageway

- B. The location of hydrants as determined by the Superintendent of the Water Department. The center of the front of each lot shall be no more than 500 feet from a hydrant.
- C. The exact location of streetlights as determined by the manager of the Municipal Light Department. Streetlights shall be paid for by the developer. Underground distribution systems shall be provided for any and all utility services, including electrical and telephone services. Poles and any associated overhead structures of a design approved by the Planning Board after consultation with the Electric Light Manager shall be provided for police and fire alarm boxes (as provided in Subsection E) and any similar municipal equipment and for use for street lighting. [Amended 12-3-1986 (Amdt. E); 4-9-1990 (Amdt. I)]
- D. The location of a bench mark with its height above mean sea level given, related to USCGS data. See § 365-39H.
- E. The location of fire alarm boxes and tie-in to existing system, as determined by the Fire Chief.
- F. The location of underground lines as described in Subsection G. [Added 8-19-1987 (Amdt.
- G. Show the location of underground lines, including proposed present or future water, electric, telephone, fire alarm, drainage, gas and cable television, on the plan and on cross section of the street (Sketch B revised 1-14-2009) using these guidelines: Water mains shall have a minimum of five feet of cover and shall be placed in the grass strip between the sidewalk and the road. All other aspects and plans for the water services shall conform to the specifications of the Georgetown Water Department and shall be approved by the Water Superintendent prior to installation. All other utility services shall conform with and receive approval of the respective utility prior to installation. All appropriate safety standards and procedures shall be incorporated into the plans. [Added 8-19-1987 (Amdt. G); amended 4-3-1996]
- H. Individual lot and road closure calculations shall be submitted the Board of Review. [Added 4-3-19961

#### § 365-36. Design standards.

- A. Streets shall be continuous and in alignment with existing streets as far as possible. Streets within the subdivision shall be projected to connect with existing or proposed streets on adjoining property which come up to the boundary line. If adjoining property is not subdivided, but is, in the opinion of the Board, suitable for eventual development, provision shall be made for proper projection of streets into such property by the subdivision to the exterior boundary thereof. Streets with temporary dead-ends, laid out to permit future projection, shall conform to the provisions of alignment, width and grade that would be applicable to such streets if extended. Street lines shall be laid out so as to intersect as nearly as possible at right angles. The Board may require the developer to pay for stop or similar traffic signs. There shall be a minimum offset of at least 125 feet for streets. Streets shall be oriented to meet existing streets suitable in the opinion of the Planning Board as to width and condition and running in both directions. This generally would be an accepted street with a fifty-foot right-of-way and a twenty-six-foot pavement. Under certain circumstances width of street may be reduced by the Board to reduce stormwater impacts and to promote low impact development techniques. [Amended 7-18-1973 (Amdt. B); 4-9-1990 (Amdt. I)]
- B. Reserve strips or barriers prohibiting access streets or adjoining property will not be permitted.
- C. Grades of all streets shall be the reasonable minimum but shall not be less than 0.75% nor more than 6%. All changes in grade exceeding 1/4 of 1% shall be connected by vertical curves of sufficient length to afford, in the opinion of the Board, adequate sight distance. Subdivision streets shall be nearly level, with no grade less than 0.75% nor more than 1.25% for a distance of 200 feet back from intersection. [Amended 7-18-1973 (Amdt. B); 12-3-1986 (Amdt. E)]

Deleted: streetlighting

Comment [t6]: 26 feet was retail a starting point for negotiation.

D. Dead-end streets shall terminate in a turnaround with a diameter of at least 120 feet to the outside of the layout of the street. They shall have a four-foot wide sidewalk and a six-inch curb on the outside with a three-foot planting strip next to the sidewalk. If the center is larger and unpaved, the sidewalk may go through the center with the permission of the Board. A separate design plan shall show catch basins and drainage/infiltration and erosion control program. The pavement shall slope to facilitate drainage and infiltration. No dead-end street or complex of streets connected to a dead-ended street shall exceed a sum of 500 feet in the RA District, 800 feet in the RB District and 1,000 feet in the RC District in total length measured from the center line of the through way. For street layouts falling in two districts, the more restrictive length applies.

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E. The minimum width of street rights-of-way shall be 50 feet. They shall be designed as shown in Sketch B of § 365-51C(1). Greater width shall be required by the Board when deemed necessary for present and future vehicular travel. Low impact development stormwater best management practices may be located in the rights-of-way.

Comment [t7] This is new...

Comment [18]. Check size to enable narrower streets

Comment [19]: Same as above

- F. The minimum center-line radii of curved streets shall be 150 feet. In case of reverse curves a minimum of 100 feet shall be required. All curved streets must be designed to permit safe vehicular travel.
- G. Street rights-of-way at intersections shall be curved to a radius of not less than 30 feet for right angle intersections; and 50 feet on one side and ten-foot radii on the other side at other intersections. No street except for courts, shall intersect any other street at less than 60°. Courts shall have a grade of not more than 4% for a distance of at least 75 feet from the intersection. Street jogs with center-line offsets of less than 125 feet shall be prohibited. [Amended 12-3-1986 (Amdt. E); 10-25-2000]
- H. Clear sight distance.
  - (1) Each street shall have a clear sight distance at 4.5 feet above the pavement measured at the center line of the pavement of 200 feet vertically. Horizontal sight distance shall be measured as follows: [Amended 4-26-1995]

Design Speed (mph)	Sight Distance (feet)
30	200
40	325
50	475

(Midrange design speed calculated at faster speed.)

- (2) The same shall apply at intersections with existing streets viewed from the subdivision street.
- (3) The subdivider shall file a covenant in the Registry of Deeds to run with the land that the lot owner of a corner or other lot shall not limit the view of coming traffic as described herein or as further provided by the Planning Board. The covenant shall be accompanied by or include an easement holding the town or any of its servants or agents harmless if they enter to remove any obstruction or vegetation in case of failure of the owner to comply. Such entry may be made without notice or consent. [Added 7-18-1973 (Amdt. B); amended 12-3-1986 (Amdt. E); 4-9-1990 (Amdt. I)]
- I. Catch basins. Catch basins shall be required on both sides of the roadway at intervals of not more than 350 feet or in the case of ways having a grade of less than 1.25%, intervals of not less than 300 to 325 feet. Catch basins shall be placed at intersecting ways that are sloped to the intersection, including at town accepted ways. Each catch basin shall be placed so that it intercepts surface water and the Board may require that they be moved or lowered to do this. No catch basin shall be installed within the width of a driveway or in front of such width. Catch basins shall be designed as shown in Sketch A of § 365-51B. Deep sump catch basins shall

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be at least six feet deep and four feet in diameter by inside measurements. They shall be constructed with standard cement concrete blocks and mortar, brick and mortar or of reinforced concrete. Each catch basin shall have an isolated granite curb inlet, equal to Fletcher's Type, V4X18, with an end block at each end.

- J. Storm drains. Storm drains shall be no less than 12 inches inside diameter and shall be of greater size when required by the Board. The subdivider may be required to furnish calculations to justify the size of storm drains. Normally storm drains shall be at least 15 inches in diameter when more than three catch basins are connected. Storm drains shall be of reinforced concrete pipe.
- K. Culverts and equalizers. Profile plans shall show proposed grading and/or headwalls of culverts and equalizers. If a headwall is to be used, it shall have a wing on either side of the same dimensions, set at a forty-five- to sixty-degree angle. Slopes shall be loamed and seeded to the satisfaction of the Board. A guard fence of a design approved in advance by the Board shall be installed on the edge of the way, unless waived by the Board in writing. The plan shall be designed to protect the traveling public, prevent creation of an attractive nuisance to children, prevent erosion and prevent silting or clogging of the stream and culvert or equalizer. The applicant shall submit engineering data to justify his plan. Bridge and culvert crossings that require U.S. Army Corps of Engineers approval should meet regulatory stream crossing standards and in the case of priority habitat for listed wildlife species facilitate wildlife crossing per Massachusetts Endangered Species Habitat standards. To expedite approval, the applicant shall submit a copy of his plan to the Conservation Commission. Approval of the plan by the Planning Board shall constitute compliance with the Chapter 49, Earth Removal, but a subsequent notice of intent may be required under the Wetlands Protection Law (MGL c. 131, § 40) and Chapter 161, Wetlands Protection, of the Code of Town of Georgetown.
- L. Open spaces and natural features. The Board may require, as provided in MGL c. 41, § 810, the plan to show, in proper cases, a park or parks suitably located for playground or recreation purposes or for providing light and air and not unreasonable in area in relation to the area of the land being subdivided and the prospective uses of such land, and if so determined, the Board shall by appropriate endorsement on the plan require that no building may be erected on such park or parks for a period of not more than three years without its approval, in cases where land is set aside as part of a Open Space Residential Design subdivision under Chapter 165 Article VII, land shall be protected in perpetuity. Due regard shall be shown for all natural features such as large trees, watercourses, scenic points, historic spots and other community assets which, if preserved, will add attractiveness to the neighborhood. This rule shall not be construed to require, as a condition for the approval of a plan, that any of the land within such subdivision be dedicated to the public use or conveyed or released to the town for use as a public way, public park or playground or for any other public purpose, without just compensation to the owner thereof.
- M. The minimum area of a subdivision excluding the road and turnaround shall be not less than double the applicable minimum lot size. (In other words, every subdivision should have an area for a minimum of two lots.) The Planning Board may require wording to ensure that the road and access is conveyed along with the lot, and may require a turnaround at certain points. [Added 12-3-1980 (Amdt. D); amended 12-21-1995 (Amdt. J)]

#### § 365-37. Subdivision of two or fewer lots; courts.

[Added 10-25-2000 Editor's Note: This amendment also renumbered former §§ 365-38 through 365-70 as § 365-40 through 365-72. ]

For preliminary and definitive plans creating no more than two residential lots, the following regulations shall apply:

- A. Preliminary plans. The plan shall comply with Article III, Preliminary Plan, of these regulations.
- B. Definitive plans. The plan shall comply with Article IV, Definitive Plan Procedure, of these

regulations.

C. Contents of definitive plan. The plan shall comply with Article V, Contents of Definitive Plan, of these regulations, with the following exceptions:

## Minimum Design Standards for Courts (Design Speed: 20 miles per hour)

30
18
12%
1%
200
NA
NA
30
15
120
100
500
2
NA
NA

#### [Amended 12-3-2009]

#### NOTES:

\*As an alternative to a cul-de-sac, the Board will allow a T- or Y-shaped turnaround of a design that would permit a vehicle with a forty-seven-foot outside turning radius and a width of eight feet to reverse its direction without backing more than once.

\*\*As measured along the center line of the proposed street from the sideline (right-of-way line) of the existing street intersected, to the P.C. of the proposed cul-de-sac throat or to the P.C. of the proposed T-type or hammerhead turnaround.

D. Curbing is not required on courts except that Modified Cape Cod berm shall be required on courts at intersections and on grades greater then 4%.

#### § 365-38. Subdivision of five or fewer lots; lanes.

#### [Added 10-25-2000]

For preliminary and definitive plans creating no more than five residential lots, the following regulations shall apply:

- A. Preliminary plans. The plan shall comply with Article III, Preliminary Plan, of these regulations.
- B. Definitive plans. The plan shall comply with Article IV, Definitive Plan Procedure, of these regulations.
- C. Contents of definitive plan. The plan shall comply with Article V, Contents of Definitive Plan, of these regulations with the following exceptions:

Minimum Design Standards for Lanes (Design Speed: 25 miles per hour)

Comment [t10]: Too much?

Minimum right-of-way width (feet)	40
Minimum pavement width (feet)	20
Maximum grade	10%
Minimum grade	1%
Minimum sight distance at intersection (feet)	200
Minimum radius of centerline curve (feet)	100
Minimum length of vertical curve (feet)	100
Minimum property line radius at intersection (feet)	30
Minimum curb radius at intersection	20
Cul-de-sac right-of-way diameter (feet)	120
Cul-de-sac outside paving diameter (feet)	100
Maximum length of cul-de-sac (feet)	500*
Shoulders (feet of gravel, each side)	2
Sidewalks, one side (feet). Not required where the street with which it intersects does not have a sidewalk and will not have a sidewalk in the foreseeable future	5
NOTE:	

\*As measured along the center line of the proposed street from the sideline (right-of-way line) of the existing street intersected, to the P.C. of the proposed cul-de-sac throat or to the P.C. of the proposed T-type or hammerhead turnaround.

#### § 365-39. Attachments.

There shall be attached the following:

- A. Cover page. A cover page shall contain the name of the subdivision, owner, developer, location map, number of total acres, number of lots planned, number of dwelling units planned, type of sewage disposal planned, type of water supply, name of designer, engineer, land surveyor, zoning district.
- B. Site survey map. A site survey map shall contain a title block, bar scale, north point, permanent monument with its height above mean sea level related to USCGS data, existing and proposed topography based on a current survey showing date of survey, contours at twofoot intervals, existing watercourses and drainage ditches, including direction of flow, with existing spot elevations from their respective source of entrance into the subdivision to their respective termination or exit there from, swamps, other bodies of water and low areas subject to flooding, all existing drainage structures with elevations, natural and historic features, major site features such as rock ridges and ledge outcroppings, outline of existing and proposed buildings, driveways, streets, trails, etc., exact location of percolation tests and of test pits, if any have been taken, with attached table showing date of test, reading of maximum groundwater table elevation and core samples, all related to USCGS data, floodplain zoning limits, adjacent developments. Proposed streets, driveways, building locations and lot lines shall be shown in a general manner. Scale shall be one inch equals 40 feet unless the Board previously authorizes a different scale. It shall show existing streets in or within 100 feet of the subdivision, indicating location and name, type surface and width of pavement and right-of-way, profiles within subdivision, spot elevations outside to define grades. It shall show existing utilities, size, type and location as to water mains, drains and culverts, wells, septic tanks (fields), gas, electric, telephone, cable television and other overhead or underground utilities. [Amended 7-18-1973 (Amdt. B); Amended 1-14-2009]]

C. Watershed outline and drainage plan.

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- (1) A plan shall show the outline of watershed and sub-watershed areas carried out to an existing stream or drainage system even though beyond the limits of the subdivision. An insert may be necessary to show this clearly. Aquifer protection zones shall also be shown. Existing drains and culverts and proposed culverts and drainage system, including direction of flow, shall be shown. Existing perennial and intermittent stream courses and proposed changes shall be shown. Streams within 200 feet of the limits of the subdivision shall be shown. It shall show subsurface drainage, downstream restrictions that could cause backup of water or could impede drainage. Proper connections shall be shown with any existing drains in adjacent streets or easements where they may exist and prove adequate to accommodate the drainage flow from the subdivision, and in the absence of such facilities or the adequacy of the same, it shall be the responsibility of the developer to extend drains from the subdivision as required to properly dispose of all drainage from said subdivision in a manner determined by the Board.
- (2) An applicant shall, before final approval of a subdivision, submit runoff calculations computed by a qualified registered engineer of the maximum surface drainage which will be shed by the road systems and area within the subdivision and demonstrate to the reasonable satisfaction of the Planning Board that:
  - (a) The drainage system within the subdivision is adequate to carry off surface drainage caused by rain, snow and ice without flooding of roads, sidewalks or adjacent property within the subdivision. Consideration should be given to the requirements of drainage from individual lots into the system, where needed. However, such use by private parties must receive prior approval from the Board of Health.
  - (b) The drainage system, although adequate for the purposes described in this section above, will not wrongfully discharge such surface water upon or flood the property of others which is located outside of the subject subdivision.
  - (c) The drainage system, although adequate to satisfy the provisions above, will not wrongfully overburden continuous existing drainage systems, either natural or artificial, located outside the subject development, with the result that such off-site drainage systems wrongfully flood or overflow the property of others located either outside or within the subject development.
- (3) Stormwater planning and design standards. [Added 4-26-1995]
  - (a) Water quantity and water quality control are important components in stormwater management planning and implementation. Equally important are the overall plans for capture and disposal of drainage water. The Planning Board shall participate with other boards and the Highway Surveyor to ensure that systems approved for installation are consistent with health, safety and environmental concerns of the community. Stormwater design shall meet published Department of Environmental Protection stormwater management standards (Massachusetts Stormwater Handbook (2008)) as amended from time to time. The approach to controlling and treating stormwater runoff and the kind, number and locations of facilities will be evaluated. Facilities which have short life expectancies, low effectiveness and high operation and maintenance costs will generally not be acceptable to the Planning Board. De-centralized, low impact development stormwater systems are preferred. Low impact development stormwater management techniques such as rain gardens, cisterns, vegetated swales, etc. promote infiltration on site and reduce offsite flooding impacts.
  - (b) The following shall constitute the Planning Board's basis for the planning and preparation of stormwater control plans.
    - [1] Maintenance of existing drainage patterns. Drainage easements, acceptable

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- to the Planning Board, will be required where changes in watershed drainage patterns result in new discharges of stormwater onto downstream owners or where flows are changed from overland sheet flow to concentrated flow, unless the applicant can demonstrate to the satisfaction of the Planning Board that there will be no significant impact from discharges for the two-year, ten-year, fifty-year and one-hundred-year, twenty-four-hour storms.
- [2] Hydrologic and hydraulic analysis of proposed drainage systems. The applicant will identify the upstream and on-site drainage areas and perform a downstream analysis to determine where conditions such as lack of channel capacity or constrictions in the system exist, and which could result in problems such as but not limited to increasing water levels on adjacent properties, flooding of roads or septic systems, channel scouring or destruction of aquatic habitat.
- [3] Sediment and erosion control plan. An engineering plan, stamped by a Massachusetts registered professional engineer, must be prepared for sediment and erosion control, including measures to control sediment and dust at all access points, stabilization practices which will be implemented to reduce erosion of soil from disturbed areas and to collect sediment-laden runoff water during construction and a plan showing final stabilization practices after construction is complete. Accompanying the submission shall be a schedule showing anticipated construction dates and the timing sequence of implementation of the proposed sediment and erosion control practices.
- [4] Operation and maintenance plans. A plan which outlines how stormwater, sedimentation and erosion control facilities are to be maintained must be submitted with the final definitive subdivision plans. The plans must include operation and maintenance of both temporary and permanent practices and facilities implemented for the periods during construction and after project completion when accepted by the town. Unless otherwise waived, the following requirements apply to all projects under the jurisdiction of the Georgetown Planning Board, MGL c. 41. These requirements are based upon the minimum level of stormwater management needed to meet criteria established by Section 6217 of the Coastal Zone Management Act (1990) and the Department of Environmental Protection Stormwater Management Handbook (2008).
  - [a] Water quantity.
    - Proposed projects must control post development peak discharge rates from the two-year and fifty-year storm events at predevelopment levels.
    - [iii] Where downstream analysis of the one-hundred-year storm event indicate existing or potential future problems from excess runoff generated by development of the watershed, the control of peak discharges for the one-hundred-year storm shall be required to mitigate the downstream impacts.
    - [iii] The discharge from any stormwater facility must be conveyed through properly constructed water-control facilities which provide for non-erosive flows during storm events. Street drains (storm drains, catch basins, etc.) shall be designed using the <u>fifty-year</u> storm as a minimum level of protection. Other stormwater conveyance systems such as but not limited to road culverts,

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detention ponds and channels shall, as a minimum, accommodate the runoff from a hundred-year storm event. If important or high-risk facilities such as roadways, dwellings, commercial and industrial buildings or sanitary facilities might be threatened by uncontained flows or flooding from higher frequency storms, a higher design standard may be applied.

Deleted: one-hundred-year storm frequency

Deleted: fifty

Deleted: shall

- [iv] All stormwater detention basins and similar structural facilities which store water, and/or where failure could result in damage to the facility or to downstream areas, must be constructed to safely accommodate discharges from the one-hundred-year storm event. A plan or profile of each proposed detention facility shall show the following: [Amended 4-3-1996]
  - [A] \{a\} Depth to seasonal high groundwater and date of observation.
  - [B] \{b\} A section through the stone infiltration trench if proposed.
  - [C] \{c\} Details of the outlet structure.
  - [D] \{d\} Specific dimensions of the proposed emergency spillway.
  - [E] \{e\} Velocity reduction structures if the scope of the inlet pipe is greater than 2% or if the velocity of flow in or out of the basin is greater than five feet per second.
  - [F] \{f\} Inlet and outlet piping.
  - [G] \{g\} Headwalls.
  - [H] \{h\} Emergency overflow.
  - (ii) Other, such as earth berm details, anti-seep collar and a headwall plan view should be included on the detail sheet.
- [v] Applicants must demonstrate that the above requirements are met by submitting pre- and post development composite hydrographs. An acceptable methodology for determining runoff volumes, peak discharge rates and storage requirements are the Soil Conservation Service's revised Technical Release 55 (TR-55). More suitable for some analysis is TR-20 where multiple or complex watersheds occur. The twenty-four-hour, TYPE III distribution storm must be analyzed when using the SCS method. For pavement drainage calculations needed to size roadway storm drains and similar components, the Rational Method is the preferred technique.
- [b] Water quality.
  - [i] Water quality management facilities shall be designed to treat the volume of runoff calculated by multiplying one inch by the total impervious area contained within the project area or the standards outlined in the Department of Environmental Protection Stormwater Management Handbook, which ever is greater. An additional volume increase for 10 years of sediment storage must be added to this volume capacity. This volume calculation is a

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design standard which must be applied as specified in the following practices.

- (iii) Wet ponds must have a permanent pool volume at least equal to the quantity volume described in Subsection C(3)(b)[4][b][i]. The length to width ratio measured from the stormwater inlet to the pond outlet shall be at least 3:1 with an average permanent pool depth of three to six feet.
- [iiii] Extended detention dry ponds must detain the water volume for a minimum of 36 hours (full volume to drawdown time). Two stage basins utilizing the lower stage for water quality and the upper stage for floodwater detention are acceptable. Basin bottoms shall not be closer than one foot to the seasonal high ground water level. The minimum length to width ratio shall be 3:1. A six-inch layer of loam (measured once compacted) shall be applied to the basin floor and sides and seeded to appropriate grass species.
- [iv] Infiltration practices must be designed to infiltrate the stormwater quantity volume within 72 hours. Appropriate sediment removal techniques must be applied prior to stormwater entering the infiltration facility. The minimum distance between the bottom of the infiltration facility and the seasonal high groundwater level shall be three feet.
- [v] Vegetated swales shall be designed to carry the runoff volume at velocities not greater than [15] feet per second and at a depth of not more than four inches. The maximum design (bank full) velocity for any vegetated swale shall not exceed five feet per second. High groundwater levels or bedrock shall occur at least two feet below the bottom of the vegetated swale.
- [vi] Stormwater discharges to certain critical areas but not limited to swimming beaches or drinking water supplies may require a higher design level to control the effects of potential pollutants such as bacteria, nutrients, soluble metals, organic compounds and toxics. The amount of impervious surface area and the scope of the proposed project all generally dictate the kind and magnitude of practices needed to achieve a goal of removing a high percentage of total suspended solids. Sites having impervious drainage areas less than 0.25 acres in size may find that vegetated swales, filter strips or other low impact development stormwater management techniques are sufficient to treat stormwater discharges. Larger drainages will usually require more complex systems to treat the proportionally larger volumes of stormwater.
- [vii] Stormwater drainage catch basins shall be deep sump and be equipped with gasoline traps of a type acceptable to the Board.
- (4) In complying with provisions of this Subsection C, the applicant for approval must submit with his definitive plan the following detail:
  - (a) With respect to the area within the development:
    - [1] Runoff data and computations of storm sewers or open ditch directional requirements, based on a minimum of a ten-year storm period.

Comment [111]: The stormwater handbook talks about removal rates. It would dovetall water quality requirements to the stormwater management landbook.

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**Deleted:** a minimum of 100 feet in length and

Comment [t12]; This rate should be adjusted

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- [2] Design of stormwater storage, detention and infiltration facilities intended as a flood-control measure, if any.
- [3] Profiles and cross sections of waterways and drainage lines off the roadways will be shown as far as necessary to ensure that flooding will not occur.
- (b) With respect to the area outside the development:
  - [1] An estimate based upon engineering studies and measurements of the additional capacity of all seasons of off-site drainage facilities, either natural or artificial, to which the drainage facilities of the subject development will be connected.
  - [2] Topography of upstream and downstream drainage areas adjacent to and affected by the subdivision. Contour interval to be determined by Planning Board.
- (5) If the Planning Board determines that the provisions in the applicant's definitive plan for disposal of surface drainage do not satisfy the requirements of this regulation, the Planning Board may require that the applicant provide suitable off-site drainage facilities outside the area of the development which is shown on the applicant's plot plan so that surface drainage may be adequately and properly accommodated and disposed of to the reasonable satisfaction of the Planning Board. The applicant must furnish to the Planning Board a plan showing the design of such off-site drainage facilities and the certificate of a competent qualified engineer that in his opinion the design of such off-site drainage facilities is adequate to accommodate and dispose of the maximum surface drainage which may be shed by the area shown upon applicant's plot plan.
- (6) There shall be shown proposed elevations, slopes and grades of proposed changes of stream courses. Structural details, including slopes, grades, sizes, elevations, material, design capacity and proposed velocity shall be shown. Notes on the plan shall indicate vegetative or other treatment that will be used to stabilize disturbed areas and erosion during construction.
- D. Wetland Protection Law and Bylaw statement. There shall be attached a statement setting forth whether the plan involves the removal, filling, dredging or altering of any bank, meadow or swamp bordering on any stream or pond or any land subject to flooding, whether within the subdivision or not, and if so shall state whether or not such area is or may be significant to private, public or ground water supply or to flood control or to prevention of pollution and in what manner it may be significant. See MGL c. 131, § 40, and Chapter 161, Wetlands Protection, of the Code of the Town of Georgetown. [Amended 12-3-1986 (Amdt. E)]
- E. Floodplain statement. There shall be attached a statement setting forth whether or not any part of the subdivision area is shown as within the floodplain district on the floodplain zoning map as on file in the office of the Town Clerk, and if so, the relevant floodplain contour shall be shown on the plan. See § 165-28 of Chapter 165, Zoning.

	be shown on the plan.	See § 165-28 of Chapter 165	5, Zoning.		
<u>F.</u>			a statement describing comporter best management techni	-	
	promote land protection	on, a reduction in impervious a	area, infiltration and water con	<u>iservation.</u>	Formatted: Font color: Auto
<u>G</u> ,	"The attached plan co		atement signed by the design of the Georgetown Subdivision ollows:"		Deleted: F
	Signed	Sealed	19		
	Designer				
<u>H,</u>	Applicant shall submit	the following receipt (Form R	): This will acknowledge recei	p <u>t</u> of <b>[</b>	Deleted: G

		greed to comply with said regulations and to comply with the definitive plan as the Planning Board.	
Signed	•	19	
Applica			
shown by 4, 1980)	y the a to be i	e statement. There shall be attached a statement stating which lots, if any, are pplicable FIRM map of FEMA (Community Panel 250081, effective date June n the one-hundred-year-flood level, and such line shall be shown on the [Added 12-3-1986 (Amdt. E)]	Deleted: H
		diment control plans. [Added 4-3-1996]	{ Deleted:
(1) The	defini	tive plan shall contain provisions for erosion and sediment control which fully following principals:	
• •	Plan	and utilize land and water resources giving prime consideration to site bility and soil limitations based on soil surveys and interpretations.	
(b)	Deve	lop an overall plan for land use, erosion control and water management.	
(c)	Prote	ct adjoining property from damage or hazard from land-disturbing operations.	
	poss		
(e)	Limit use.	clearing, grading and slope modifications to those consistent with good land	
(f)		serve and utilize existing vegetative cover to fullest extent possible.	
(g)		e permanent vegetative plantings that are compatible with specific soil and site itlons.	
(h)	Cont	rol erosion and runoff.	
(i)	Prote	ect surface and subsurface waters from pollution.	
(j)	Cont	rol dust and tracking of mud from property.	
(k)	Prote	ect stockpiles from wind and water erosion.	
	A de	ore sheets of the definitive plan shall contain the following information: scription of the sequence of construction, anticipated starting and completion s, and best management practices which will be applied to control erosion and mentation, including but not limited to:  Site mobilization and access.	
•	[2]	Installation of temporary erosion and sediment control measures.	
	[3]	Tree cutting, clearing and grubbing.	
	[4]	Sediment basin installation.	
	[5]	Roadway rough construction.	
	[6]	Drainage system construction.	
	[7]	Utilities installation.	
	[8]	Roadway base and bender construction.	

- [9] Curb and sidewalk construction.
- [10] Site cleanup, including removal of stones, stumps and other temporarily stored materials.
- [11] Finish slope grading, stabilization, top soiling, liming, fertilizing and seeding.

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- [12] Final completion of drainage system and sediment control practices.
- [13] Removal of temporary erosion control structures and facilities.
- (b) A plan or plans showing:
  - [1] The area to be disturbed during construction (limits of work).
  - [2] Areas where earth or other site materials will be temporarily stockpiled.
  - [3] Areas to be used for disposal of stone if on site.
  - [4] Location of temporary and permanent erosion and sediment control measures, including sediment basins, stormwater control basins, diversions, rip-rap and waterways.
  - [5] Location of temporary access and work roads.

K. GIS mapping. [Added 10-25-2000]

Submissions shall be on two Compact Disks or DVD media. An alternative media for the submission of this data may be requested by the applicant and agreed to by the Planning Board prior to approval or endorsement. Acceptable file formats include: AutoCAD \*.dwg, AutoCAD \*.dxf, or other GIS compatible file format. The files must be identical to the relevant significant features on the printed plan and contain all factual information included on the written plan. The submission will be forwarded to the Regional Planning Commission (Merrimack Valley Planning Commission). The RPC shall review the submission and within 10 business days shall notify the Planning Board that the submission does or does not comply with the standard. Upon project completion a digital submission of the "as-built" plan conforming to the above requirements is required for final release of the performance bond associated with any project.

- (1) All digital mapping data must be delivered in the Massachusetts State Plane Coordinate system with a horizontal datum of NAD83, units of U.S. survey feet and a vertical datum of NAVD 88. Each plan must include a minimum of one survey-derived (bearings & distances listed) reference to a permanent in-ground feature such as a catch basin, manhole, stone bound, municipal benchmark or other readily identifiable marker. The permanent in-ground feature should appear on the plan in its' as-built location and include sufficient bearings and distances to be able to locate the feature relative to the property parcel(s). The latitude and longitude of the in-ground feature must be provided with survey grade accuracy (generally accepted to be accuracy of plus or minus one foot).
- (2) Each feature type must be organized in the CAD or GIS data structure as a separate layer. These may include but are not limited to separate layers for: parcel boundaries, dimensions, buildings, roads, road centerlines, surface water, and wetlands. Multiple features represented in a single CAD layer or GIS file will not be accepted. Any features submitted in the electronic plan must be represented in their entirety in an individual layer. All data shall be topologically clean, meaning that polygons are closed (no overshoots or undershoots) and lines connect at nodes.
- (3) Documentation of the data format must be provided with a description of the CAD layers and list of the types of features placed in each layer. Submission of multiple files must

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also include a list of the files and a description of their content.

- (4) The data submitted must include documentation, the name of the person(s) responsible for preparing the data, contact information, an estimation of the horizontal and vertical accuracy. Also included must be:
  Date of submission; Street address of submitted plan; Map and lot of submitted plan; type of lot adjustment (new lot, subdivision, lot line correction, lot combination, easement, other describe); Name of engineering firm or survey company providing plan.
- (5) Failure to submit such disks to the Planning Board shall be cause for the Planning Board to rescind approval or not to endorse said plan.
- (6) In addition to the above file format requirements, all as-built plans shall be submitted in PDF format. All disks shall be of high quality, free from any and all defects and viruses, and labeled as to their contents. Disks shall be prepared with a back up and be sequentially numbered. The applicant shall provide to the Planning Board a descriptive list of all files submitted, which documents file contents and intended use. [Amended 12-3-2008]

#### **ARTICLE VI Construction**

#### § 365-40. Subdivision permit required.

Before commencement of construction, the developer shall obtain a subdivision permit from the Planning Board. This shall be kept displayed in a prominent place near an entrance road to the subdivision. The Planning Board may give notice of charges and, not sooner than 24 hours later, hold a hearing and after sustaining the charges may revoke the permit for violation of any provisions of these regulations or of any state law or regulation or town bylaw or regulation or of any order issued there under. No construction shall proceed in a subdivision unless a valid subdivision permit is in effect. A subdivision permit shall expire two years after its issue, but the developer may apply for a new subdivision permit.

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#### § 365-41. Erosion control program.

- A. Before issuance of a subdivision permit, the developer shall obtain approval of an erosion control program for the area he intends to work. Editor's Note: See Ch. 57, Erosion Control. This area shall be specified and may include only the part within the right-of-way or may include all or part of the lots. In the latter case the developer shall obtain a release under § 365-42 of this chapter to comply with Chapter 49, Earth Removal, if necessary to sever or strip soil, loam, sand or gravel.
- B. The following factors shall be considered in such a program:
  - (1) No larger area shall be developed than that on which construction can be completed rapidly so that large areas are not left bare and exposed for long periods.
  - (2) Grading shall be kept at a minimum. Where possible, only undesirable trees shall be removed.
  - (3) Runoff shall be controlled and conveyed into storm sewers or other outlets so it will not erode the land or cause off-site damage.
  - (4) Critical areas shall be protected during construction with mulch or temporary crop covers and with mechanical measures such as diversions and prepared outlets.
  - (5) Sediment basins shall be constructed where necessary to detain runoff and to trap sediment during construction.

- (6) Safe off-site disposal of runoff shall be provided, including the increased runoff resulting from construction.
- (7) Permanent vegetation and erosion control structures, where necessary, shall be installed as soon as possible.
- C. Construction which involves the alteration of the bank of a stream or otherwise is in an area that is significant to groundwater supply, etc., may require the filing of a notice of intent under MGL c. 131, § 40.

#### § 365-42. Earth removal release.

Removal, including severing and stripping of soil, loam, sand or gravel outside the fifty-foot right-of-way would constitute a violation of Chapter 49, Earth Removal, unless in compliance with the requirements of an approved subdivision plan. Such illegal removal may come into question in connection with §§ 365-58, 365-60 and 365-61. Accordingly, the subdivider should obtain a written earth removal release from the Planning Board to remove soil, loam, sand or gravel from specified lots in such cases. The release should be drafted by the subdivider and should specify what is to be done as to each such lot. This release relieves the subdivider of liability under Chapter 49, Earth Removal. The subdivider shall not excavate outside the row after being ordered to cease by the Planning Board.

#### § 365-43. Inspections.

- A. The subdivider will be responsible for seeing to it that the agent of the Planning Board is present to inspect during the following stages of construction: §§ 365-47, 365-48, 365-49, 365-51A through F, I and K, 365-52 and 365-56. No succeeding operation or phase of an operation shall commence until the previous phase has been approved by the Board or its agent, as shown by signature on utility inspection card. The card shall be displayed in a conspicuous place on the premises during construction. Work done under other sections will be inspected after it has been completed.
- B. The subdivision may be inspected at any time by any officer or board of the town or any agent of such officer or board.
- C. The subdivider shall reimburse the town for the cost of inspection when billed by the Planning Board, any payment to be current before any lots are released.

#### § 365-44. Gravel, loam and suitable seed.

- A. "Gravel" is defined as consisting of hard durable stone and coarse sand practically free from loam and clay, uniformly graded and containing no stone having any dimensions greater than 31/2 inches. When spread on the road and rolled, it shall form a stable foundation. The grading shall conform to the following requirements: passing three-eighths-inch sieve 70% maximum; passing No. 10 sieve 50% maximum; passing No. 200 sieve 5% maximum. No stone used in the subgrade of a street shall have any dimension greater than six inches. The subdivider shall notify the agent of the Planning Board as to the source of the gravel.
- B. Loam.
  - (1) This shall consist of <u>fertile</u>, friable natural topsoil typical of the locality, without admixture of subsoil, refuse or other foreign materials, and shall be obtained from a well-drained arable site. It shall be such a mixture of sand, silt and clay particles as to exhibit sandy and clayey properties in about equal proportions. It shall be reasonably free of stumps, roots, heavy or still clay, stones larger than one inch in diameter, lumps, coarse sand, noxious weeds, sticks, brush or other litter. Prior to stripping, the loam shall have demonstrated by the occurrence upon it of healthy crops, grass or other vegetative growth that it is reasonably well drained and that it does not contain toxic amounts of either acid or alkaline elements.

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(2) The loam shall contain not less than 4% or more than 20% organic matter as determined by the loss on ignition of oven-dried samples. Test samples shall be oven-dried to a constant weight at a temperature of 221° F. Loam shall be applied at a minimum of 6" (measured once settled) and shall conform to M1.05.0 of the MassHighway (MassDOT) standard specifications.

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(3) "Suitable seed" as used in these regulations shall mean seed approved as to type by Essex Conservation District with a preference for deep-rooted, drought-tolerant perennial grasses. [Added 7-18-1973 (Amdt. B)]

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#### § 365-45. Removal of trees.

Care shall be taken not to remove an excessive amount of trees since the subdivider may be required to furnish new trees under § 365-54.

#### § 365-46. Setting of stakes.

The subdivider shall indicate the limits of the location of ways shown on the plan at points of curvature (P.C.'s) and points of tangent (P.T.'s) with stakes on the ground as work progresses and shall reset stakes as necessary so that location of the way may be readily determined. Sufficient grade stakes shall be set up by a registered professional engineer.

#### § 365-47. Removal and burial of stumps and debris.

#### [Amended 12-21-1995 (Amdt. J)]

The entire area of each street shall be first cleared of all stumps, brush, roots, boulders, like material and all trees not designated or intended for preservation. The burial of stumps, woody debris is prohibited. Burial of boulders in excess of 24 inches diameter may only be buried in a site approved by the Planning Board or its agent and must be shown on the subdivision's as-built plan.

#### § 365-48. Excavation and filling of roadways.

#### [Amended 7-18-1973 (Amdt. B)]

The full length and width of the proposed roadway pavement area and extra two feet on either side of the pavement area, for a total of 30 feet, shall be excavated or filled, as necessary, to a depth of at least 12 inches below the bottom of the subgrade as shown on the profile. However, if the soil is soft and spongy or contains undesirable material, such as clay, sand pockets, peat, stones over six inches in diameter or any other material detrimental to the subgrade, such material shall be removed and replaced with suitable well-compacted material. There shall be no stone over 18 inches in diameter in the area between three feet and one foot below the finish grade. The subdivider shall not excavate within the right-of-way below the existing natural level without the approval of the Planning Board or its agent and shall cease to excavate when ordered to do so. This is designed to prevent excavation of good earth below the existing ground level where such earth would have to be replaced later to obtain the proper grade level. When three or more feet of fill are added, it shall be compacted at each foot of fill.

#### § 365-49. Roadway center lines; turnaround diameter.

Roadways shall be constructed for the full length of all streets within the subdivision shown on the plan. The center line of such roadways shall coincide with the center line of the street rights-of-way unless a minor variance is specifically approved by the Board. Minimum outside diameter of roadway pavement area within turnarounds on dead-end streets, if allowed, shall be 108 feet.

#### § 365-50. Water mains, valves and hydrants.

[Amended 10-25-2000]

Water mains, valves and hydrants shall be installed to the satisfaction of the Board of Water Commissioners and shall include water service from the main to the property line. Water mains and similar matters shall be identical to that installed by the town and shall conform to the requirements of said Board. A certificate of completion under this section is required from that Board. Hydrants shall not be required for courts if the terminus of the court is within 300 feet of an existing, operable fire hydrant as determined by the Board of Water Commissioners.

#### § 365-51. Street construction standards and specifications.

- A. Storm drains and manholes and catch basins shall be constructed as shown on the plan and shall not be backfilled until inspected by the agent of the Board. See § 365-36J and K. Storm drains shall be set with a transit or laser, not with string. [Amended 7-18-1973 (Amdt. 8)]
- B. Each catch basin shall be built as shown in Sketch B and as described in § 365-36l. They shall be inspected by the agent before covering.
- C. Gravel.
  - (1) There shall be a total of twelve (12) inches of compacted gravel base provided as required in Sketch "B" provided in two compacted lifts of six (6) inches each. Compaction shall be ninety five percent (95%) of theoretical density.

#### [Amended 1-14-2009]

- D. Isolated curb inlets shall be installed at each catch basin, granite curb corners installed, as described § 365-36I.
- E. All streets shall be paved with plant mixed Type I bituminous concrete, the first course to be 21/2 inches in depth in place when compacted, except that in industrial or commercial district it shall be four inches. The course shall be rolled with either tandem or three-wheel rollers of sufficient weight to produce a compaction of not less than 95% of the density obtained from laboratory compaction of a mixture composed of the same materials in like proportions and to produce a true surface conforming to the cross-section of the road. No bituminous material shall be placed unless the surface upon which it is to be applied is at true grade and dry and the temperature is at least 50°F and rising. The minimum width of the pavement shall meet specified dimensions. All materials to be used on the construction shall be subject to the approval of the highway surveyor and of the Planning Board. [Amended 12-5-1986 (Amdt. E); 2-18-1987 (Amdt. F); [Amended 12-3-2009] Pervious pavement is also permitted and shall be constructed to the most recent and acceptable industry standards.
- F. Frames and grates shall be set to the finished grade.
- G. Catch basins, drains and equalizer pipes shall be kept clean continuously until the street is accepted, and shall work adequately. See § 365-361.
- H. Street name signs identical to those used by the town and satisfactory to the Board shall be erected on all street corners. A private way sign, consisting of letters three inches high, shall be posted along with the street signs until the right-of-way is accepted by town meeting. The developer is responsible for replacing lost or stolen signs required by these regulations until the right-of-way is accepted by town meeting. Other traffic signs may be required by the Board. From the time the construction of streets commence until the time final approval is requested, a temporary sign of wood or masonite may be used and shall be kept in place. [Amended 12-21-1995 (Amdt. J)]
- I. The second course of 11/2 inches residential, two inches for industrial and commercial of plan mixed Type I bituminous concrete shall be put down in the same manner as the first course. This shall not be done until the bulk of the use of the street by heavy vehicles has ceased, as determined by the Board. The first course shall be swept clean prior to the putting down of the second course, and a tack coat must be applied continuously the entire width and length of the road to ensure proper bonding to the two faces. A leveling course may be required prior to the installation of the second course. [Amended 2-18-1987 (Amdt. F)]

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- J. Street construction shall conform to the typical road cross section shown in Sketch B of these regulations.
- K. A curb of vertical granite to a height of six inches shall be placed on the pavement at both edges of the roadway before the second coat of bituminous concrete is put down. Curbing shall have a minimum width at the top of four inches and a nominal depth of 18 inches. In the event that the Planning Board waives the vertical granite curbing requirement to allow sloped granite curbing or no curbing (to promote natural drainage and low impact development best management practices), the construction standards for installation shall conform to Sketch

#### [Amended 4-26-1995; Amended 1-14-2009]]

#### § 365-52. Sidewalks.

Editor's Note: Required by § 365-34C(8).

- A. All materials shall be removed for the full width of the sidewalk, that is five feet, to a subgrade eight inches below the finish grade as shown on cross section and all soft spots and other undesirable material below such subgrade shall be replaced with a good binding material and rolled
- B. This excavated area then shall be filled with six inches of gravel as defined above and rolled with a pitch toward the curb of not less than 1/8 inch nor greater than 3/8 inch to the foot.
- C. Surfacing forms shall be set to grade, filled with one inch of binder course compacted bituminous concrete.
- D. The second course of one inch finish course bituminous concrete shall be applied to the sidewalk except that two inches shall be applied at driveway entrances. Driveway aprons shall be paved within the right-of-way. Curb cuts shall not exceed 20 feet for driveways. However, if a granolithic surface is desired, specifications of the Massachusetts Department of Public Works shall be complied with as to both this subsection and Subsection D. Sidewalk pavement shall be applied by machine.

#### § 365-53. Slopes and shoulders.

- A. Slopes adjoining shoulders referred to in Subsection B of this section where topsoil has been removed or where fill has been added shall be covered with loam to a depth of not less than six inches and seeded with grass suitable to the Board or otherwise fixed to prevent erosion to the satisfaction of the Board. If retaining walls are necessary in the opinion of the Board, they shall be constructed of reinforced concrete, stone, brick or other materials deemed suitable by the Board.
- B. Level shoulders shall extend two feet beyond the pavement, and slopes joining shoulders within the fifty-foot right-of-way shall not be steeper than three horizontal to one vertical in earth, nor more than 3/4 to one in ledge.

#### § 365-54. Planting of shade trees required.

#### [Amended 4-3-1996]

Where, in the opinion of the Planning Board, existing trees are inadequate adjacent to the right-of-way, shade trees having a diameter of at least two inches and of a variety suitable in such opinion shall be planted. Such planted trees shall usually be spaced not more than 40 feet apart, in 1/2 cubic yard of topsoil satisfactory to the Board. The Board may require welling of existing trees. A temporary tree planting easement shall be granted to the Town of Georgetown for six feet on each side of the right-of-way to allow for street tree planting at the proper time. The temporary easement shall expire 24 months after the layout has been accepted by the town. Selected deciduous trees, approved by the Board, may be planted in the grass strip located between the sidewalk and road, or may be planted in the temporary tree planting easement parallel to the proposed right-of-way.

#### § 365-55. Area between sidewalk and curb.

The area between the sidewalk and the curb shall be not less than five feet and shall be loamed by at least six inches of loam as defined above, which shall be spread to grade, seeded and rolled to the satisfaction of the Board.

#### § 365-56. Driveways.

The installation of driveways shall be done under the direction of the agent of the Board. The location of driveways shall conform to the drainage system so as not to interfere with the drainage of the roadway. Driveway aprons shall be paved by the developer or owner from the existing edge of the pavement to the property line.

#### § 365-57. Clearing of stream obstructions.

The subdivider shall clear <u>artificial obstructions</u>, <u>subject to MGL c. 131, § 40</u>, to the <u>satisfaction of</u> the Planning Board as <u>approved</u> by the Conservation Commission any portion of any stream running through the property that has been disturbed by the subdivider. (MGL c. 270, § 16, prohibits the deposit of debris, etc., within 20 yards of inland waters.)

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#### § 365-58. Clear sight line to be maintained.

The subdivider shall clear bushes, etc., at the intersection of streets, including existing streets, so as to furnish a clear sight line in either direction for entering traffic. If the view is obstructed by high shoulders on the existing street he shall remove such shoulders, unless the Selectmen object. A sketch of the proposed work, approved by the Planning Board, shall be submitted to the Selectmen. Their assent shall constitute compliance with Chapter 49, Earth Removal.

#### § 365-59. Slope reduction.

If the slope of a lot at a distance of 20 feet back from the street line, that is the edge of the fifty-foot right-of-way, is greater than four horizontal to vertical, the subdivider shall submit to the Board a plan or proposal to reduce it to four to one, and after approval or modification the subdivider shall carry it out. Approval of the proposal shall constitute compliance with Chapter 49, Earth Removal. The Board may require guardrails where it deems necessary, whether required by MGL c. 84, § 27A, or not. Where topsoil has been removed from such slopes or fill has been added, loam to a depth of not less than six inches shall be spread and grass seeded or it shall be otherwise fixed to prevent erosion to the satisfaction of the Board. The subdivider hereby grants to the Town of Georgetown the right to enter upon any such lot for the purpose of constructing such slope.

#### § 365-60. Correction of drainage problems.

After the street has been paved, the Board may require prior to release of any lot or thereafter correction of any drainage problems, including but not limited to the installation of berms in front of driveways or lawns. The Board may require that a plan or proposal be prepared to correct wet pockets on lots and after approval by the Board be carried out by the subdivider. Approval of such proposal shall constitute compliance with Chapter 49, Earth Removal. The subdivider hereby grants to the Town of Georgetown the right to enter upon such lot for the purpose of making such correction.

#### § 365-61. When lots considered complete.

No lot shall be considered complete until all stumps, brush, roots and like material and all trees, rocks and boulders not intended for preservation by the subdivider shall have been removed and disposed of in a manner and place satisfactory to the Planning Board. Any fire hazard shall be removed promptly to the satisfaction of the Fire Chief. This section does not authorize violation of Chapter 49, Earth Removal, that is, it does not authorize the removal, including severing and

stripping, of soil, loam, sand or gravel on such lot. No occupancy permit will be issued by the Building Inspector until he has received approval from the Planning Board that the slopes on the lot adjacent to the row have been completed to the satisfaction of the Board.

#### § 365-62. Standard highway bounds.

Standard highway bounds six inches by six inches by four feet shall be installed as shown on the plan. See § 365-34C(7). That is, all intersections of streets with each other, at all points of change in direction of curvature of streets and at all outer plan boundary lines. A certificate from a registered professional engineer or registered land surveyor that he has set such bounds in compliance with this regulation shall be filed with the Board. Such bounds shall not be installed until all construction work which would disturb or destroy bounds is completed.

#### § 365-63. Bench marks and property bounds.

- A. Bench mark shall be of granite, shall extend at least five feet into the ground and shall have a disc. A certificate of a registered land surveyor shall be placed on the as built plan described in § 365-66 which shall certify as to the location of the bench mark and its height related to USGS bench mark. [Added 7-18-1973 (Amdt. B)]
- B. Each lot shall be bounded on each corner by a property bound. Bound will not protrude more than six inches above the ground. Lot boundary markers will be either granite or concrete, at least six inches square and four feet long; or iron pipe at least 11/2 inches in diameter and four feet long. A certificate from a registered professional engineer or registered land surveyor stating that he has set such bounds in compliance with this regulation shall be filed with the Board. Such bounds shall not be installed until all construction work which would disturb or destroy bounds is completed.

#### § 365-64. Streetlights and poles.

Streetlights and poles shall be installed and a certificate that they have been installed and paid for to the satisfaction of the manager of the Municipal Light Department shall be furnished to the Planning Board.

#### § 365-65. Fire alarm boxes.

Fire alarm boxes shall be installed as shown on the plan and tied in to the existing town system, if available, and a certificate that this has been done and paid for to the satisfaction of the Fire Chief shall be furnished to the Planning Board.

#### § 365-66. Plan amendments.

#### [Amended 7-18-1973 (Amdt. B)]

If any engineering changes have been approved by the Board after the plan is recorded, the subdivider shall have prepared an amendment to the plan suitable for recording. After signature by the Board, he shall record it and give a copy to the Board. In any event a copy of the plan as built shall be filed with the Planning Board upon completion of the subdivision on Mylar. This shall include location of gas pipes, elevation of inverts, road grades, final grading contours and ties, including house connections for water and easements.

#### § 365-67. Occupancy permits.

A. A vote by the Planning B "To release under § 36 Plan, namely, lo	5-61 of the regulations the follow	ing lots on plan in Plan Book
shall be deemed a noti frontage to such lots ha	ice to the Building Inspector that a ave been completed in complianc	all stages of the way furnishing e with the subdivision regulations
12/6/2010	28	Draft Subdivision Regulations

of the Planning Board up to and including the putting down of the base coat of bituminous concrete to the satisfaction of the Board with reference to the requirements of §§ 165-95 and 165-96 of Chapter 165, Zoning.

- B. The fact of release of a lot from a covenant not to convey shall not by itself indicate such compliance unless a statement is added to the release "Such lots are also released under § 365-67" since the lot may have been released upon bond or deposit without construction of the way under MGL c. 41, § 81U.
- C. The Building Inspector shall withhold an occupancy permit for a building in a subdivision from any person who is in violation of any provision of Chapter 165, Zoning, Chapter 29, Building Construction and Chapter 49, Earth Removal, or of MGL c. 131, § 40, or of any regulation or order issued there under, or of any regulations of the Board of Health or of the State Sanitary Code of the Massachusetts Department of Public Health. Notice from the board, inspector, officer or agent having jurisdiction under such law, bylaw, regulation or order shall authorize such withholding until notice of correction. Any person aggrieved by such withholding may appeal to the Board of Appeals as provided in MGL c. 40A, § 13.
- D. No occupancy permit shall be issued by the Building Inspector until a plot plan signed by a registered professional engineer or registered land surveyor is submitted showing the boundaries of the lot and the location of all structures and the sewage disposal system for that lot.

#### § 365-68. Clear sight line at intersections required.

A clear sight line shall occur at intersection of streets, including existing streets, and the subdivider shall clear bushes or slopes, if necessary, obtaining any necessary permission if required. (See also §§ 365-36H and 365-58.)

#### § 365-69. Drainage facilities.

- A. Drain facilities. Storm drains, culverts and related installations, including catch basins, gutters and manholes shall be installed, kept clean continuously and in good working order within the subdivision as necessary, in the Board's opinion, to permit unimpeded flow of all natural watercourses, to ensure adequate drainage of all low points along streets, to control erosion and to intercept stormwater runoff along streets at intervals reasonably related to the extent and grade of the area drained. Proper connections shall be made with any existing drains in adjacent streets or easements where they may exist and prove adequate to accommodate the drainage flow from the subdivision, and in the absence of such facilities, or the adequacy of the same, it shall be the responsibility of the subdivider to extend drains from the subdivision as required to properly dispose of all drainage from said subdivision in a manner determined proper by the Board. Where adjacent property is not subdivided, provision shall be made for extension of utility systems by continuing appropriate drains and water mains to the exterior boundaries of the subdivision of such size and grade as will allow for their proper projection and with such accessories and appurtenances deemed appropriate by the Water Superintendent. Drains shall not be backfilled until inspected. An as-built drainage plan shall be submitted to the Planning Board prior to paving. All discrepancies between design and actual construction must be noted and approval for the changes must be obtained from the Planning Board or its agent prior to paving. [Amended 12-21-1995 (Amdt. J)]
- B. Where, after the subdivision plan is approved, it develops at a wetlands protection hearing under MGL c. 131, § 40, that a different size culvert is required or other change necessary, the plan shall be revised by the engineer for the subdivider and the plan amended accordingly and the change recorded at the Registry of Deeds.
- C. If at any time before the street is accepted by the town the drainage system fails to work adequately, the subdivider shall be responsible for necessary correction, including design, different installation or additional facilities.

Deleted: thereunder

#### § 365-70. Floodplain restrictions.

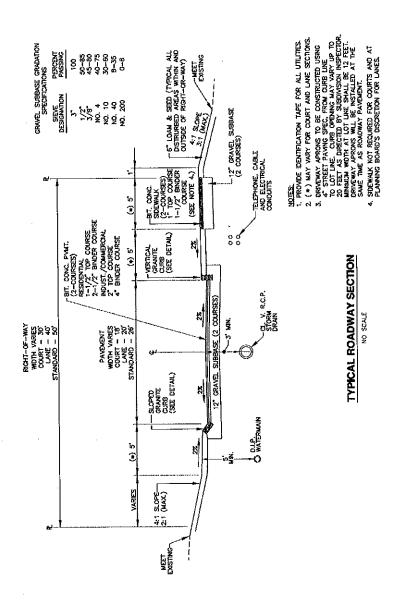
#### [Added 6-18-1975 (Amdt. C)]

No subdivision may be constructed on land in any floodplain area having special flood hazards as identified by the Administrator as provided in 24 CFR 1910.3(b) without having been reviewed by the Planning Board as provided in the last sentence of § 365-20 of these regulations.

#### § 365-71. Hours for road construction.

#### [Added 12-21-1995 (Amdt. J)]

Hours of operation for road construction will be Monday through Friday from 7:00 a.m. to 6:00 p.m. and on Saturday from 7:00 a.m. to 1:00 p.m.



# 48" PRECAST CONCRETE CATCH BASIN DETAIL NO SCALE

6. USE LEBRON UF-248 OR EQUAL FRAME AND GRATE.

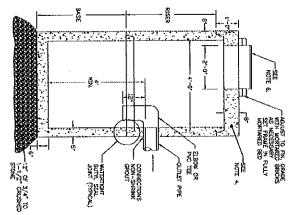
NOTES:

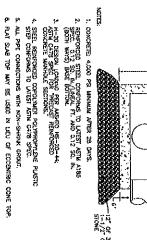
COMMERTE 4,000 PSI MINIMUM ATTER 28 DAYS.

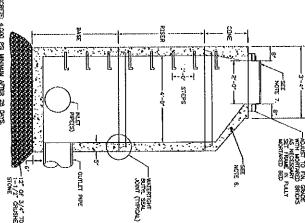
RENEWROOD STEE, COMPORAS TO LATEST ASSIM A185
SEPEC. 0.12 SO. IN.A.DACH. FT. MOD 0.12 SO. IN.
(SOTH MASS) BEST STOTE SEPEC. SERVICE DE 200-44;
COMPORTE MANAGE SERVINORE IRRIPORCO.

A. ECCOMINGO COME TOP MAY BE USED IN LEE OF FLAT TOP.

5. CATCH SIGNIS AT CLIEB HIRES REQUIRE THE PLACEMENT OF VERTICAL GRANTE CAME INLESS AND 3-PLANGE FRAMES.

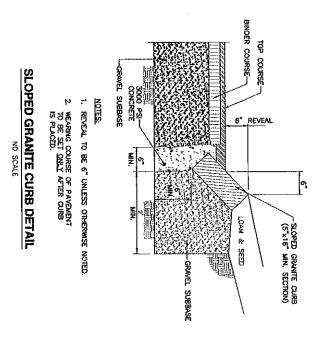


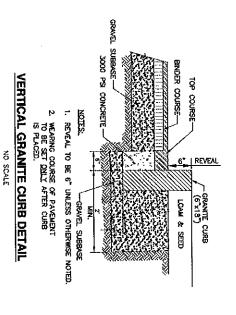




USE LEBARON UK-110A OR EQUAL FRAME AND COVER (STAMPED "DRAIN").

48" PRECAST CONCRETE
DRAIN MANHOLE DETAIL
NO SCALE





Comment [t14]: What about a no cure detail whis might be important to profest edge of pavement.

SLOPED TO VERTICALGRANITE **CURB TRANSITION DETAIL** 

NO SCALE

1. REVEAL TO BE 6" UNLESS OTHERWISE NOTED.

2. WEARING COURSE OF PAVEMENT TO BE SET ONLY AFTER CURB IS PLACED.

NOTES 6"

SEC TON GRANITE CURB INLET DETAIL ELEVATION 2'--0"

SKANITE CURB

Comment [t15]: It would be not to have a pervious pavement defail here

CONSTRUCTION SPECIFICATIONS

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.

2. LENGTH - AS REQUIRED, BUT NOT LESS THAN 75 FEET.

3. THICKNESS - NOT LESS THAN SIX (6) INCHES.

4. WIDTH - PIFTEEN(15) FEET MINIMUM.

5. MAINTENANCE — THE ENTRANCE SHALL BE MAINTANED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERFONC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAVOUT OF MAY MEASURES USED TO THAY SEDMENT, ALL SEDMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOYED IMMEDIATELY.

PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EVERY SIGNIFICANT RAIN EVENT.

CONSTRUCTION ENTRANCE DETAIL

15'-0 MIN. ž PLAN VIEW PROFILE 75" MIN 75° MIN. EXISTING PAVENENT EXISTING PAVEMENT

34

# **EXHIBIT 7**

## **Stormwater Seminar Topic Selection Questionnaire**

Georgetown's Stormwater Management Committee teamed with a consortium of stormwater professionals from Vanasse Hangen Brustlin, Inc., The Center for Watershed Protection, Horsley Witten Group, Inc., and Stacey DePasquale Engineering on a Grant Proposal to the Department of Environmental Protection under its 319 Stormwater Grant Program to provide free Stormwater Training Seminars across the state. The Grant has been successfully funded and as a teaming partner we are looking to provide an individualized stormwater training seminar in our area. We are reaching out to our members, residents, municipalities, businesses and local agency representatives to determine exactly what stormwater topics are of most concern and what would be the most desired topic(s) for training. The teaming partners listed are able to provide seminars and training on a variety of stormwater topics ranging from Stormwater Utility development to reducing runoff from your property. A list of potential topics is attached. Please list the top 4 topics that you would like to see at a seminar, and indicate whether you would prefer a full 4-hour training session, or a 1-hour topic/training session. The goal is to customize the training for our region/area needs and your input will help greatly towards this effort. Thank you for your time and assistance.

- Funding Stormwater Management (Enterprise Funds/Fees/Utilities) Completing feasibility studies; steps to setting up a stormwater Utility, other funding options for your municipality.
- 2. Low Impact Development (LID) Design and Implementation for Residential and Nonresidential Properties Stormwater retrofits for stormwater management for residential/municipal/commercial/ industrial/institutional properties.
- 3. Planning and Designing Better Development Sites- Learn through case studies how to review zoning codes and ordinances to minimize impervious cover and promote conservation of natural areas.
- **4. Stormwater Ordinances/Bylaws/Subdivision Regulations** Key areas to focus on when changing ordinances/bylaws for improved stormwater management.
- 5. Green Streets Design and Implementation Learn how to design, incorporate, and maintain landscaped stormwater management systems in roadway layouts.
- 6. Reducing Pollutant Loads and Runoff from your Home or Business How to reduce pollutants such as bacteria, phosphorus, nitrogen, and sediment from runoff.
- 7. Overview of the Stakeholder Process and Stormwater Educational Materials How to access and use readily available stormwater educational materials.
- 8. Illicit Discharge Detection and Elimination Planning and implementing an effective illicit discharge detection and elimination program including bylaw/ordinance development
- **9. Planning a Public Stormwater Event –** Information, ideas and guidelines for planning an outreach and/or public participation event.
- 10. Porous Pavements Technology, installation, maintenance, state-of-the-art technical and practical information.

#### Massachusetts 319 Statewide Stormwater Seminar Series

- 11. Bioretention for Stormwater Management—Technology, installation, maintenance, state-of-the-art technical and practical information.
- 12. Rainwater Recovery Rainwater reuse, concept, design, implementation.
- **13. Massachusetts Stormwater Regulations** Understanding and implementing the Massachusetts Stormwater Performance Standards.
- 14. Stormwater Retrofitting for Low Impact Development— Modifying existing or incorporating new stormwater treatment practices in existing stormwater management systems.
- 15. Conducting a Environmentally Sensitive Design Site Planning Roundtable Learn how to quickly evaluate your community's development regulations from the perspective of environmentally sensitive design, and hear about a consensus process.
- 16. Choosing the Right Stormwater Treatment Practice Learn appropriate stormwater treatment practice selection based on several factors, including land use, physical feasibility, climate / regional factors, watershed factors (including TMDLs), stormwater management capability, pollutant removal, and community / environmental factors.
- **17. Stormwater Design in Cold Climates** Learn specific stormwater system design requirements for northern climates.
- **18. Stormwater Design in Coastal Climates** Learn specific stormwater system design requirements for coastal climates.
- 19. Building an Effective Stormwater Maintenance Program Minimize future maintenance through the planning, design, review, construction and post construction phases of stormwater management. Instruction on designing a maintenance tracking system, establishing maintenance easements and agreements, and developing inspection checklists.

20. Flood Control	/FEMA Maps/ Natura	l Hazard Mitigation –	Learn methods to redu	Jce
the effects of	flood waters and pla	nning techniques to	avoid flood impacts.	

21. Other/Comments:	 	 	

#### Massachusetts 319 Statewide Stormwater Seminar Series

Preferred Training Sessions (please list in order of preference)

١.	Funding Stormwater Management (Enterprise Funds/Fees/Utilities)	VANT.

Preferred Session Length: 1 hour topic Session

4-hour training

session

2. Stormwater Retrofitting for Low Impact Development

Preferred Session Length:

1 hour topic Session

4-hour training

session

Rainwater Recovery

Preferred Session Length:

1 hour topic Session

4-hour training

session

4. Porous Pavements

Preferred Session Length:

1 hour topic Session

4-hour training

session

Scheduling Preference (Circle preferred):

Spring 2011

Fall 2011

# **EXHIBIT 8**

# TOWN OF GEORGETOWN WATER DEPARTMENT RULES AND REGULATIONS

Revised February 1, 1986 by the Board of Water Commissioners

ARTICLE 1. The following rules and regulations and all subsequent changes, amendments and additions there to shall constitute a part of the contract with every person, corporation and property owner supplied with water from the Town of Georgetown Water Department. Everyone using such supply shall be considered as having expressed consent to be bound by these rules.

#### PERMIT FOR SERVICE CONNECTION

ARTICLE 2. All persons desiring service shall make application at the Water Department Office on permit forms provided for that purpose, which shall be filled out and signed by the property owner or his authorized agent, and the required fee paid.

#### PIPING WITHIN STREET LINES

ARTICLE 3. Water services up to and including 2" in diameter shall be installed and maintained by the Water Department from the water main to and including the curb stop. Services larger than 2" may be installed by the Water Department or, at the opinion of the Water Superintendent, by other qualified persons with the consent of and under the supervision of the Water Department. The cost of all labor, materials and roadway repairs shall be born by the applicant. This shall be in addition to the service permit fee.

#### PIPING ON PRIVATE PROPERTY

ARTICLE 4. The property owner shall be responsible for the installation of the service from the property line to the building or other location approved by the Water Department.

The proposed service location, method of installation and materials to be installed must be approved by the Water Department before installation is started. In general pipes shall not be installed under paved areas or exposed locations subject to freezing. All piping shall have a minimum cover of five (5) feet. The piping shall be inspected by the water department before any backfilling takes place.

#### **CURB BOX**

ARTICLE 5. It shall be the responsibility of the owner to prevent damage to the curb box during construction on the property and to notify the department if the Top of the Box is not at final finished Ground Grade, and easily accessible to the employees of the Water Department.

#### **CELLAR VALVE**

ARTICLE 6. The Water Department shall install a valve, at the customer's expense, in the cellar or service entrance immediately adjacent to the water meter.

#### METER LOCATION

ARTICLE 7. The water meter shall be furnished and installed by the Georgetown Water Department in a location selected by the Supt. No meter will be installed in a location subject to freezing or damage. The meter shall be easily accessible to the Department for maintenance and reading of the meter.

#### WATER CONSERVATION

ARTICLE 8. Plumbing fixtures and appliances installed in new buildings shall meet the following water efficiency criteria as a condition of connection to, and utilization of the Georgetown municipal water supply:

#### **INDOORS**

- Toilets shall meet the EPA WaterSense high-efficiency standard of 1.28 gallons per flush or less.
- Showerheads shall meet the EPA WaterSense standard of 2.0 gpm or less.
- Faucet flow in bathroom sinks shall not exceed 1.0 gpm.
- Faucet flow in kitchen sinks shall not exceed 1.5 gpm.
- Clothes washers shall have an EnergyStar Water Factor of 5.0 or less.
- Dishwashers shall have an EnergyStar rating of 5.0 gallons per cycle or less.
- Every new dwelling unit except those in apartment buildings with a centralized water heating system shall have its own dedicated water meter.

#### **OUTDOORS**

• Irrigation systems using municipal water shall not be installed without the written consent of the Water Commissioners.

Requests for waivers from the above water efficiency requirements must be addressed in writing to the Georgetown Water Commissioners, 1 Moulton Street, Georgetown, MA 01833.

#### FINAL APPROVAL

ARTICLE 9. The water shall not be turned on until the installation has been approved by the Supt. and all charges for the service paid in full.

#### SPECIAL CONDITIONS

ARTICLE 10. Special conditions encountered at the site which may vary with the conditions as set forth here-in shall be referred to the Superintendent or his Agent, who shall decide on the methods of installation to be followed.

#### RESPONSIBILITY FOR MAINTENANCE

ARTICLE 11. Owners shall maintain in good condition all pipes, fittings, meters and other equipment installed inside the property line and shall protect the same from freezing or other damage. They shall be responsible for all damage and cost of repairs and shall notify the Water Department immediately of any occurrence. All repairs shall be carried out under the supervision of the Water Department. Failure to do so shall justify the shutting off of water to the premises.

#### INSPECTION OF PREMISES

ARTICLE 12. The Board or its agents may, at any reasonable time, enter the premises of the water taker for the purpose of examining the water pipes and fixtures.

#### INTERRUPTION OF SERVICE

ARTICLE 13. The Water Department may at any time, shut off the water temporarily to make repairs or changes to its piping system, or for any other necessary purpose. It may also shut off for non-payment of rates or other charges, or for failure to observe these rules and regulations. Neither the Town nor its Board of Water Commissioners shall be liable for any damage caused by so doing, nor shall a consumer be entitled to any discount or rebate by reason thereof.

It shall be understood, however that whenever practical consumers will be given notice of the intention to shut off the water.

#### WATER PRESSURE

ARTICLE 14. The Board makes no guarantee on the water pressure and assumes no responsibility for any fluctuations thereof.

#### RESPONSIBILITY FOR WATER CHARGES

ARTICLE 15. The record owner of the property to which water is furnished shall, in all cases, be liable for the water or material furnished. When ownership changes, the name and address of the new owner should be given to thee Water Office promptly so that bills may be properly rendered. Failure of the owner or consumer to receive a bill does not relieve the owner from the obligation of its payment, nor from the consequences of its non-payment.

#### TURNING OFF AND ON

ARTICLE 16. No owner, consumer or any unauthorized person shall shut-off or turn on the water at the curb stop. Application to the Water Department must be made for this operation and a charge shall be made.

#### FIRE HYDRANTS

ARTICLE 17. No person, without the written permission of the Superintendent, shall open a hydrant, or any fixture intended for fire protection, for any purpose other than the extinguishment of a fire.

#### WATER MAINS

ARTICLE 18. The Board of Water Commissioners shall approve the size and type of pipe, the number and location of all valves, hydrants and fittings, and the time and method of installation, pressure testing and the disinfection of all water mains in both public and private ways.

No connections shall be made to any existing main except by the Water Department or, with its specific approval and supervision, by other qualified workers.

All work in connection with the maintenance and repairs to privately owned water mains shall be performed with the approval and supervision of the Water Department, and all costs shall be paid by the owner.

The Board reserves the right to withhold the supply of water to any main unless and until all of the above conditions have been met.

#### FIRE AND SPRINKLER SERVICE

ARTICLE 19. Any fire protection system supplied with water from the Georgetown Water Department shall not be connected to any other source of water whereby the town water system could be contaminated.

No water shall be drawn from the fire service pipes for any purpose except for the extinguishing of fires or necessary testing of the system.

Any violations of these regulations shall be cause to shut off the water until the owner removes all illegal piping and guarantees that the offense will not be repeated.

#### **CROSS CONNECTIONS**

ARTICLE 20. No one shall install or allow to exist any physical connection between the water supply of the Town and any other private water supply.

No cross connection, as defined by Section 22 of the Drinking Water Regulations of Massachusetts, shall be allowed.

Violations shall be just cause to shut off the water until the full extent of the Drinking Water Regulations have been complied with.

#### WATER METERS

ARTICLE 21. All new services shall be metered with remote reading registers.

All existing services that are not so metered shall have such a meter installed by the Water Department at its discretion.

- Department ALL applicable laws for hunting on public lands in Massachusetts shall apply.
- 4) Other activities which the Water Commission determines, with certainty, will have no adverse impacts to the public water supply and may have beneficial environmental impacts.
- C) Nearly all of the Georgetown Water Department land is considered within priority habitat for rare wildlife species. The TAKING or DISTURBING of rare species is not allowed under the Massachusetts Endangered Species Act (MESA) and violators are subject to fines and/or imprisonment. The Georgetown Water Department routinely monitors these areas and will report violations to local and State environmental authorities.
- D) Generally, Water Department land is available to the general public for passive recreational activities such as hiking, cross country skiing, mountain biking, etc.

The Water Department may waive any general rules or adopt different or additional or special rules or restrictions for individual parcels or groups of parcels within the municipal Georgetown Water Department properties. The Water Department may enter into separate agreements with parties, organizations or individuals involved in long term activities on Georgetown Water Department properties. Such LONG TERM AGREEMENTS shall be reviewed annually and may be modified or revoked as the Water Department may deem necessary for the protection of the public water supply.

# **EXHIBIT 9**



#### THE COMMONWEALTH OF MASSACHUSETTS

EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS OFFICE OF COASTAL ZONE MANAGEMENT 251 Causeway Street, Suite 800, Boston, MA 02114-2136 (617) 626-1200 FAX: (617) 626-1240

## The Massachusetts Office of Coastal Zone Management Announces Availability of Funding through the **Coastal Pollutant Remediation Grant Program**

### **November 24, 2010**

The Massachusetts Office of Coastal Zone Management (CZM) is pleased to announce the availability of up to \$375,000 in funding through the Coastal Pollutant Remediation (CPR) Grant Program. The CPR program provides funding to municipalities located within the Massachusetts coastal watershed for the assessment and remediation of stormwater pollution from paved surfaces. In addition, CPR funds may be used for the design, installation, and upgrade of boat waste pumpout facilities.

Municipalities may request up to \$125,000 for stormwater remediation or boat pumpout projects. Project proponents must provide a 25% match of the total project cost. CPR applications are due on January 7, 2011, and all projects must be completed by June 30, 2011. To view the Request for Responses (RFR), visit www.comm-pass.com and search for solicitation number ENV 11 CZM 03.

All applicants to the CPR program are subject to Governor Patrick's Commonwealth Capital Program criteria. Commonwealth Capital scores will account for 30% of the project evaluation, thus participation in this program is strongly encouraged. For more information on Commonwealth Capital and to obtain an application, visit www.mass.gov and search for Commonwealth Capital.

For more information on the CPR program, including examples of recent projects, grant writing resources, and a list of eligible municipalities, visit www.mass.gov/czm/cprgp.htm. For specific questions about the CPR RFR, please contact:

> Jan P. Smith Coastal Habitat and Water Quality Program Manager 251 Causeway Street, Suite 800 Boston, MA 02114 (phone) 617-626-1231 (email) jan.smith@state.ma.us