

## **CODES AND ORDINANCES COMMITTEE**

Of the Rochester City Council

**Thursday August 6, 2015**

City Council Chambers

31 Wakefield Street, Rochester, NH

7:05 PM

### **Committee Members Present**

Councilor Peter Lachapelle, Chair  
Councilor Elaine Lauterborn, Vice Chair  
Councilor Donna Bogan  
Councilor Robert Gates  
Councilor Ray Varney

### **Others Present**

Kelly Walters, City Clerk  
Terence O'Rourke  
Councilor Gray  
Councilor Keans  
Seth Creighton, Chief Planner  
Michael Bezanson, City Engineer  
John Ford, Resident Larraine  
Edgecombe, Resident  
Pat Wilson, Resident

## **MINUTES**

### **1. Call to Order**

Councilor Lachapelle called the Codes and Ordinance Committee meeting to order at 7:05 PM. Kelly Walters, City Clerk, took a silent roll call. All Committee members were present.

### **2. Public Input**

John Ford, 29 Forest Park Drive, addressed the Committee. He distributed a map of Forest Park Drive and called attention to the lots of land next to his property. He stated that a resident of 161 Milton Road has been discharging a weapon on/off for about a year and half. This has become an annoyance to the neighborhood and a safety issue for the children in the area. He believed the gun shots were being fired from the owner's driveway into a riverbank. More recently, the target practicing has increased with a more powerful sounding rifle. Mr. Ford voiced his concerns to the Rochester Police Department, but was told that the property owner was within his legal rights to use his rifle. He attended the meeting to find out if anything could be done to resolve this issue.

Attorney O'Rourke informed the Committee that he visited 161 Milton Road in Rochester earlier that day, along with members of the Building, Zoning, and Licensing Services Department. They found that the firing range being used supersedes the 300 feet State requirement and the shots are

fired into a small graveled hill. Attorney O'Rourke did not find any safety issues related to this firing range. He added that no "shooting" laws are being violated. The State law has limited the local governments from further regulating the use of firearms. He said the noise issues fall under another State law which again precludes the City from taking any action; however, the neighbors with whom the Building, Zoning, and Licensing Services spoke with earlier in the day did not have any noise complaints.

Attorney O'Rourke stated that the resident who is shooting off firearms has welcomed his neighbors to visit and see the firing range for themselves. He said the property owner is open for discussions with the neighborhood; however, so far no one from the neighborhood has contacted him. Attorney O'Rourke suggested that one of the Building, Zoning, and Licensing Services staff could mediate any communication between this property owner and the neighborhood, if necessary. The Committee had a lengthy discussion about the matter.

Lorraine Edgecombe, 58 Forest Park, addressed the Committee. She expressed her concern about children finding their way into the wooded area where shots are being fired. She agreed that this is a dangerous situation. Councilor Keans asked if the landowner had posted the land as "private property" or with signs that read "do not trespass." Mr. Ford replied that the property owner may have posted such signs many years ago, but did not believe the signs are posted now. The Committee discussed the matter further. It was determined that the State laws do not prohibit this activity and there is no recourse to for the residents at this time.

Councilor Lachapelle closed the Public Input portion of the meeting. **Note:** Councilor Gray informed the Committee that Patricia Wilson, 50 Forest Park Drive, arrived after the public input session; however, she wished to complain about the property located at 161 Milton Road, relative to the firearms matter. The discussion had already taken place and Councilor Gray told Ms. Wilson that he would relay her concerns to the Committee.

### **3. Approval of the Codes and Ordinances Committee Minutes**

- **June 4, 2015**

Councilor Gates **MOVED** to **ACCEPT** the Codes and Ordinance Committee meeting minutes of June 4, 2015. Councilor Bogan seconded the motion. The **MOTION CARRIED** by a unanimous voice vote.

### **4. Green Infrastructure Grant - Chapter 50**

Councilor Lachapelle said Chapter 50 is now available for review. He said the amended version of Chapter 50 had been worked on and reviewed by the Conservation Commission as well as the Planning Board.

Seth Creighton, Chief Planner, gave a brief overview of the project to rewrite Chapter 50 of the General Ordinances entitled *Stormwater Management and Erosion Control*. He noted that the City Council had approved using the Green Infrastructure Grant. He also noted that two of the key staff members involved with obtaining the grant and working on the material no longer work for the City of Rochester. He said that along with the proposed amendment to Chapter 50 there are two proposed changes to the Site Plan Regulations and Subdivision Regulations, which can be found attached to this set of minutes.

Mr. Creighton explained the benefits of using more of the natural land and adding plants for stormwater management, instead of the more conventional stormwater system that has proven not to work. He said the proposed amendments are derived from the best management practices for stormwater which have been adopted by the State of New Hampshire.

Councilor Gates asked if these regulations were created more for private developers or if they would include homeowners. Mr. Creighton replied that the regulations are for the development of land disturbing 5,000 square feet of existing or new impervious area and it is almost always a developer because not many homeowners meet this requirement.

Councilor Varney asked if all of the technical information could be found within Chapter 50 of the General Ordinances, or is some of the information found in another part of the General Ordinances. Mr. Creighton replied that all the information could be found in Chapter 50.

Councilor Varney suggested sending the proposed changes out to some of the local engineering firms for comment. Mr. Creighton concurred.

Councilor Keans said Section 50.8, "Standards for Redevelopment," does not mention "single family" dwelling. She asked what if a single-family dwelling meets the 5,000 square foot threshold. Mr. Creighton stated that section 50.8 deals specifically with redevelopment. Councilor Lauterborn questioned if the impervious area on a single-family unit would include the roof and the driveway. Mr. Creighton replied yes, and any other structure built on the lot, such as a shed.

Councilor Gates asked for a clear definition about "disturbed area" or "land disturbance." Mr. Bezanson, City Engineer, replied it is defined in

Chapter 50.14 (l) as follows: *Disturbed Area or Land Disturbance – An area where the natural vegetation has been removed exposing the underlying soil or where vegetation has been covered.*

Councilor Varney said there are existing subdivisions, with 1-acre lots [undeveloped], located in the Agricultural Zone. He asked if someone wished to construct a single-family home on such a lot, would the regulations of Chapter 50 apply in those cases. Mr. Creighton agreed to get back to the Committee with an answer to this question.

Councilor Lauterborn **MOVED** to send the final proposed version of Chapter 50 to the full City Council for a first reading and to refer the matter to a public hearing. Councilor Gates seconded the motion. The **MOTION CARRIED** by a unanimous voice vote. Mr. Creighton suggested allowing the engineering firm who was involved with the rewrite of this ordinance to attend a City Council meeting in order to answer questions about the draft ordinance. Councilor Varney said it would be a good idea, but to wait until the matter is at the public hearing.

## **5. Discussion - Fireworks**

Councilor Lachapelle received a few phone complaints about fireworks being set off during the July 4<sup>th</sup> weekend. Councilor Lachapelle said the fireworks ordinance seems strict enough for the City of Rochester. Councilor Varney said the Police Department reported 13 complaints following the July 4<sup>th</sup> weekend; however, not all have been substantiated.

Councilor Varney said the City is depending on the police officers to respond to complaints about fireworks and determine if the fireworks being set off are in compliance with the existing City ordinance. He said a permit application approved by the Fire Department would seem more efficient. He said in this way, a firefighter would inspect the site ahead of time to ensure there is enough space to set off fireworks. The Committee briefly discussed the idea. This matter will stay in Committee. Councilor Varney said the City should do a better job of informing the public of the existing fireworks ordinance, especially since fireworks cannot be set off in the streets of Rochester. Councilor Lachapelle requested a detailed report for the next meeting regarding the fireworks complaints from the Fire Department and the Police Department, from June 1<sup>st</sup> until the end of August.

## **6. Discussion – Panhandling**

The Committee discussed the problems occurring with panhandlers in the City of Rochester. Councilor Lachapelle referred to the written complaints

found in the packet. The Committee briefly discussed the aggressive behavior of some of the panhandlers. Councilor Lachapelle said the City of Rochester offers services for those in needy situations and if people would give to the services rather than to the needy people themselves the problem would go away. Councilor Varney said thousands of communities are educating the public and posting signage to decrease panhandling. Councilor Lauterborn said there are basically two reasons a person gives money to a panhandler. The first is that they believe that the panhandler is homeless or, second, because they are afraid.

Councilor Lachapelle said any signage must be consistent throughout the City. Councilor Keans did not believe spending money on signs would resolve the issue. Councilor Bogan countered that signage would help with informing the tourist. Councilor Gray said it would make sense for the Chamber of Commerce to get involved and encourage businesses to post such signs; the City should not be involved with paying for the signs or providing informational cards to the public.

Attorney O'Rourke suggested that Todd Marsh, Welfare Director, and the City Manager could work on a public announcement regarding panhandling. Councilor Gates suggested that a public announcement should be made at City Council meetings. Councilor Varney added that a five-minute video or screen shot of how to stop panhandling could be broadcast prior to each City Council meeting. Attorney O'Rourke suggested sending out a press release.

The Committee debated the matter and talked about the legalities of the issue. It was determined that this discussion would be brought to the next Regular City Council meeting under the Codes and Ordinances Committee Report to review some of these suggestions. Councilor Lachapelle requested the panhandling signs be included with the minutes.

## **7. Certification of Chapter 42 - Separate Attachment to the Packet**

Councilor Gates **MOVED** to certify the electronic version of Chapter 42. Councilor Lauterborn seconded the motion. The **MOTION CARRIED** by a unanimous voice vote.

Councilor Varney asked how these amendments would be advertized, especially the sign ordinance. Ms. Walters said that a press release would be sent out soon. Councilor Varney suggested that the Planning Department should inform the Chamber of Commerce and the Rotary of the changes, as well.

Councilor Lauterborn asked if these amendment changes were in effect now. Councilor Varney replied yes; however, the word should be given out as much as possible.

## **8. Other**

No discussion.

## **9. Adjournment**

Councilor Gates **MOVED** to **ADJOURN** the Codes and Ordinances Committee meeting at 8:30 PM. Councilor Bogan seconded the motion. The **MOTION CARRIED** by a unanimous voice vote.

Respectfully submitted,

Kelly Walters  
City Clerk

## **Addendums to the Codes and Ordinances minutes:**

- Memorandum regarding Chapter 50, *Stormwater Management and Erosion Control* P. 7
- Proposed Chapter 50: *Stormwater Management and Erosion Control* P. 8
- Proposed Changes to Subdivision Regulations – Section 5.4 *Drainage* P. 36
- Proposed Changes to Site Plan Regulations – Section 13 *Stormwater Management* P. 41
- Posters to stop panhandling P. 44



## City of Rochester, New Hampshire

### PUBLIC WORKS DEPARTMENT

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### INTEROFFICE MEMORANDUM

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**TO:** Daniel Fitzpatrick, City Manager

**FROM:** Michael Bezanson, PE, City Engineer 

**DATE:** July 29, 2015

**SUBJECT:** Ordinance Revisions for the Codes and Ordinances Committee -  
Chapter 50, Stormwater Management and Erosion Control  
Site Plan Regulations - Art. III, Sec. 13 "Stormwater Management"  
Subdivision Regulations - Section 5.4 "Drainage"

**CC:** John Storer, PE, Director of City Services  
James Campbell, Director of Planning & Development  
James Grant, Director of Building, Zoning and Licensing Services  
Terence O'Rourke, City Attorney

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Attached are proposed ordinance and regulation changes to address stormwater management in the City. The City of Rochester currently addresses stormwater mitigation practices in several documents and regulations, including the Site Plan Regulations, Subdivision Regulations, Public Works Infrastructure Design Standards, and Chapter 50 of the City Ordinances. Staff have found these documents to be outdated; the adopted/recommended Best Management Practices are no longer the best options for sizing and treating stormwater runoff, which is resulting in the approval of subpar stormwater systems that are stressing the existing public drainage systems and degrading wetlands, rivers, and aquifers, all of which increase economic stresses and health-related costs. Additionally, these documents were not all created or updated simultaneously, resulting in inconsistencies and outdated references between the documents.

The Conservation Commission and Planning Board have been involved in drafting the revisions, and both groups support the changes proposed to Chapter 50 and the Site Plan and Subdivision Regulations. Before the effort to revise the Ordinance and Regulations began a year ago, the City Council supported the need and effort to make the revisions.

Please forward the attached documents to the Codes and Ordinances Committee for review. Thank you.

**CHAPTER 50: STORMWATER MANAGEMENT AND EROSION CONTROL****TABLE OF CONTENTS FOR ORGANIZATIONAL PURPOSES ONLY**

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### 50.1 **Purpose and Objectives.**

This Ordinance provides for the health, safety, and general welfare of the citizens of the City of Rochester through the regulation of discharges into stormwater drainage systems, groundwater, waterbodies, streams, and wetlands within the City of Rochester in a manner compliant with the requirements of State and Federal law, including the provisions of the Federal Stormwater Management Legislation for Municipal Separate Storm Sewer Systems (MS4s), as amended. The objectives are to:

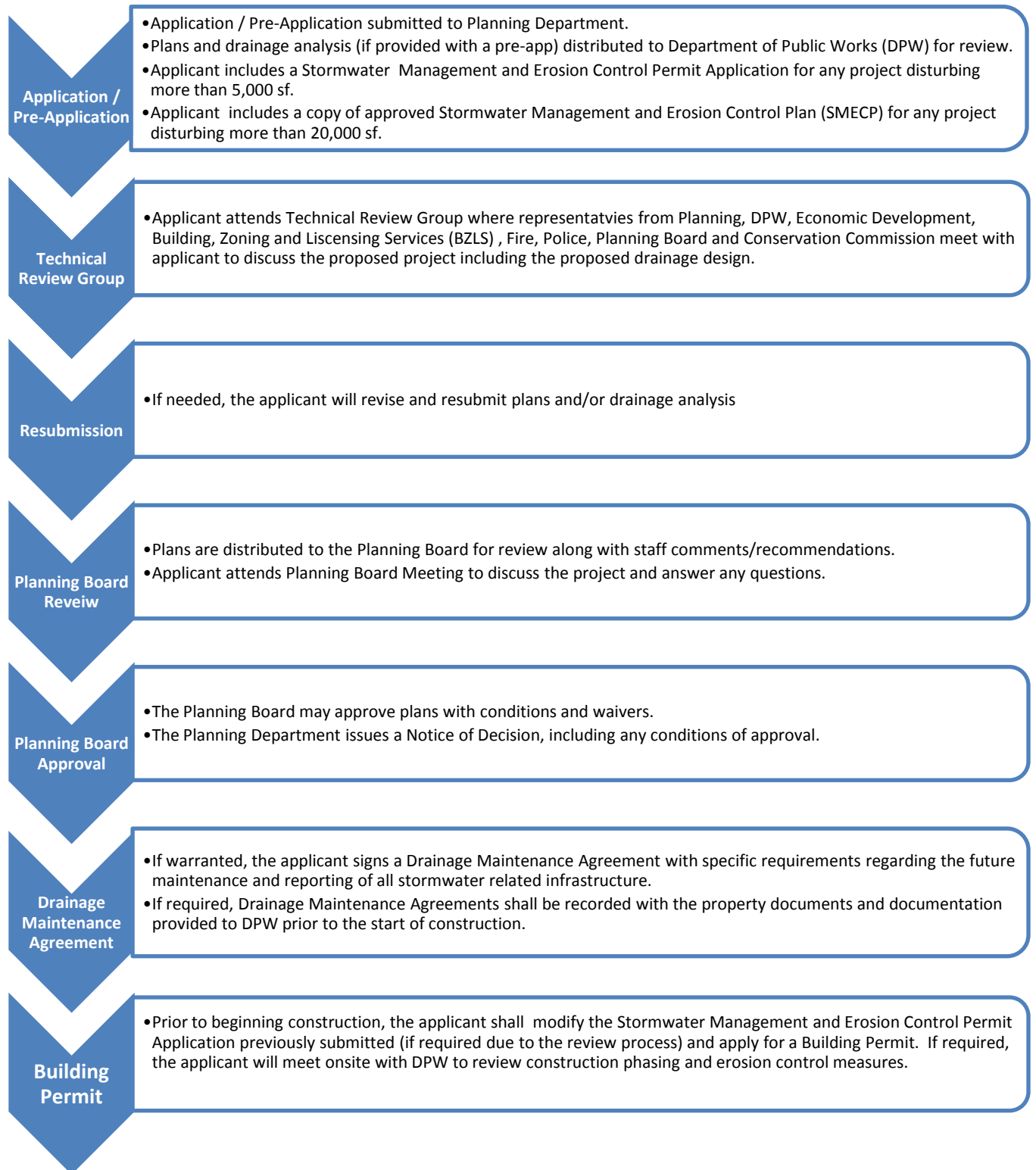
- Prohibit unpermitted discharges;
- Set forth the legal authority and procedures to carry out all inspection, monitoring, and enforcement activities necessary to ensure compliance with this Ordinance and applicable State and Federal law; and
- Establish new design and construction standards for stormwater drainage systems to improve stormwater management, minimize future costs to the City, protect the integrity of the City's water resources, and be compliant with this Ordinance and State and Federal laws. These standards shall be incorporated into the existing Site Plan and Subdivision Review standards and review processes governing new construction, as well as building permits where applicable site disturbance is involved.

### 50.2 **Application. Review. Approval and Recordation Process**

- (a) New construction and redevelopment projects requiring building permits where applicable site disturbance is involved are required to apply for a Stormwater Management and Erosion Control Permit (SWP) per Applicability Standards detailed in Section 50.5.

This includes 4 categories of applications detailed in attached Figures:

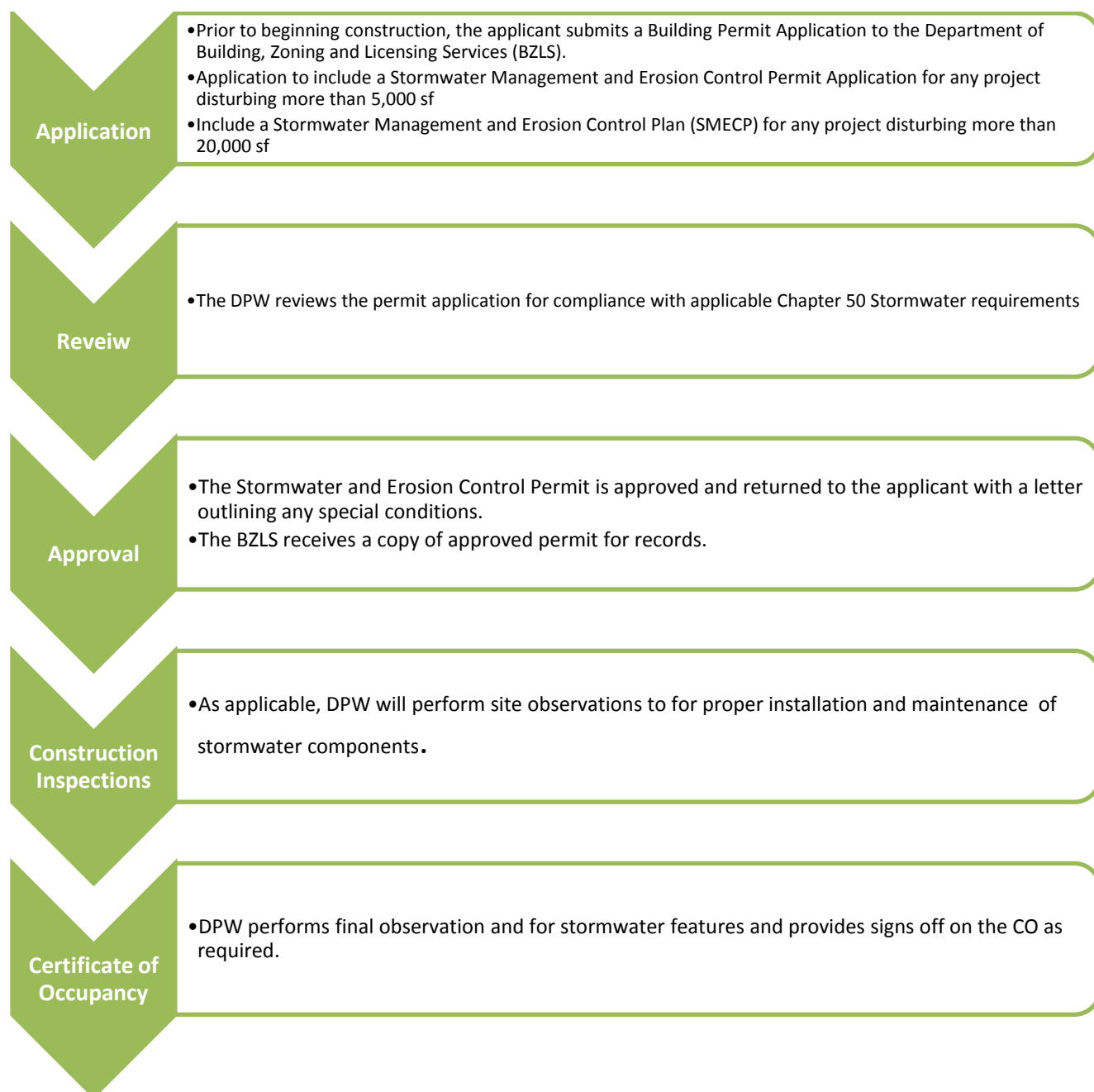
1. Major Site Plan Review conducted by the Planning Board (Figure 1)
  2. Major Subdivision Review conducted by the Planning Board (Figure 1)
  3. Minor Site Plan Review conducted by the Department of Public Works (Figure 2)
  4. Building Permits review conducted by the Department of Public Works (Figure 3)
- (b) Where proposed projects trigger both applicability thresholds of this Ordinance and require Site Plan and/or Subdivision approval by the Planning Board, the review and approval of the Stormwater Management and Erosion Control Plan (SMECP) shall be done concurrently by the Planning Board and Department of Public Works (DPW) and Planning Board shall consider DPW recommendations.
- (c) At the discretion of the Planning Board, a third party, technical review may be required of any SMECP prepared under these regulations. The technical review shall be performed by a qualified professional consultant, as determined by the Planning Board, such expense shall be borne by the applicant.
- (d) After final Planning Board approval, and as established in the Notice of Decision, the owner of record of the property shall record at the Registry of Deeds documentation sufficient to provide notice to all persons that may acquire any property subject to the requirements and responsibilities described within the approved SMECP including the operation and maintenance requirements of all Best Management Practices (BMPs) (see RSA 477:3-a). The notice shall comply with the applicable requirements for recording contained in RSA 477 and 478.

**Figure 1: Major Site Plans and Subdivisions Application Process**

See Construction Inspections and Certificate of Occupancy requirements of Figure 3 for additional process after Building Permit.

**Figure 2: Minor Site Plans Application Process**

See Construction Inspections and Certificate of Occupancy requirements of Figure 3 for additional process after Building Permit.

**Figure 3: Building Permit Application Process**

### 50.3 **Provisions and Standards for Post-Construction Stormwater Management**

- (a) The provisions and standards of this section are implemented for the purpose of:
1. Managing stormwater runoff to protect water quality and quantity.
  2. Minimizing pollutant contributions to a water body that is or may become impaired.
  3. Improving water quality of runoff discharged to drainage systems, surface water bodies or wetlands.
  4. Taking preventative measures to avoid runoff volumes and peak flow rates to an adjacent property that are in excess of runoff volumes and peak flow rates currently being discharged under existing developed or undeveloped conditions.
- (b) All development subject to these regulations shall comply with the requirements of the following Critical Core Elements described below:
1. Applicability Standards
  2. Minimum Thresholds for Applicability
  3. Best Management Practices (BMP)
  4. Applicability for Redevelopment
  5. Stormwater Management and Erosion Control Plan (SMECP) Approval and Recordation
  6. Maintenance Criteria
  7. Inspection of Infrastructure

### 50.4 **Authority, Jurisdiction, Severability, and Amendments.**

- (a) Authority is based on the following NH statutes that enable local regulation of stormwater as a component of zoning and land use.
- RSA 674:16 – Grant of Power
  - RSA 674:17 – Purposes of Zoning Ordinances
  - RSA:21 – Innovative Land Use Controls
  - RSA 674:36 – Subdivision Regulations
  - RSA 674:44 – Site Plan Review Regulations

#### Additional Authority for Regulation of Stormwater Discharge

- RSA 149-I:6 provides municipal authority to regulate stormwater, independent of land use regulations.
- This Ordinance is adopted pursuant to the authority vested in the following:
  - The City Council pursuant to RSA 47:13, RSA 47:17, VII, VIII, and XVIII, RSA 149-I:3, RSA 38:26, RSA 149:I:6;
  - The Planning Board pursuant to RSA 674:35 and 36, RSA 674:44, and RSA 155-E:11; and
  - The Office of Code Enforcement pursuant to RSA 147:1 and 147:14.

The Ordinance shall become effective upon adoption by the City of Rochester City Council, in accordance with the statutory sections identified above.

(b) Jurisdiction.

1. This Ordinance shall pertain to all land within the boundaries of the City of Rochester, New Hampshire.
2. In any case where a provision of the Ordinance is found to be in conflict with a provision of any other Ordinance, regulation, code, or covenant in effect in the City of Rochester or with any State Statute, with particular reference to NHRSA Chapter 676:14 and 674:16 and 674:17 and the relevant sections therein, the provision which is the more restrictive shall prevail.

(c) Severability.

1. The invalidity of any section, subsection, paragraph, sentence, clause, phrase, or word of this Ordinance shall not be held to invalidate any other section, subsection, paragraph, sentence, clause, phrase, or word of this Ordinance.

(d) Amendments.

1. This Ordinance may be amended by the approval of the City Council, based on recommendations of both the Department of Public Works and the Planning Board.

**50.5 Applicability Standards Requiring a Stormwater Management and Erosion Control Permit (SWP) and Stormwater Management and Erosion Control Plan (SMECP)**

This Ordinance shall apply to any action that will hinder, alter, add to, or modify the existing stormwater flow, drainage, and/or related infrastructure and any discharges into the stormwater drainage system, waterbodies, streams, and wetlands within the City of Rochester.

The provisions of this Ordinance shall apply to all Major and Minor Site Plan and Major subdivision review and approval processes as defined within the Site Plan Review Regulations under the jurisdiction of the Planning Board and shall be subject to concurrent review with the Department of Public Works.

Except for those activities specifically permitted by this Ordinance listed in Section 50.5(a) below, no person shall alter land or engage in any land disturbance activity within a Critical Area or cause more than 5,000 square feet of disturbance without first obtaining a Stormwater Management and Erosion Control Permit (SWP) for land proposed to be altered or which will be affected by such activity. The owner or owner's agent shall be required to apply to the Department of Public Works (DPW) and obtain such permit from the Department prior to undertaking any such action. Refer to the definition of Critical Area and Land Disturbance in the Definitions Section at the end of this Chapter.

Nothing in this Ordinance shall be a defense from non-compliance associated with a stricter standard set forth in a federal NPDES permit and/or imposed under the New Hampshire Department of Environmental Services programs.

(a) Exemptions

The following allowed activities listed in (1) through (7) below are exempt from the requirements of this Ordinance.

1. Small projects that will result in less than 5,000 square feet of disturbed area and are located outside of Critical Areas do not require a permit providing minimum

protections and management are applied. Refer to Design Standards for Temporary Erosion Controls in Section 50.6

2. Normal maintenance and improvement of land in agricultural use provided in the ***Manual of Best Management Practices for Nutrient Management*** as established by NH Dept. of Agriculture, Markets and Food dated June 2011, or as amended.
3. Maintenance of existing landscaping, gardens, or lawn areas.
4. The construction of any fence that will not alter existing terrain or drainage patterns.
5. Construction of utilities (gas, water, sewer, electric, telephone, etc.) other than drainage, disturbing less than 20,000 contiguous square feet, within the limits of an existing paved roadway that will not increase impervious area, or permanently change drainage patterns, and where construction trenches are paved at the end of each working day.
6. Emergency repairs to any stormwater management facility or practice that poses a threat to public health or safety, or as deemed necessary by the Department of Building, Zoning and Licensing Services (BZLS) and DPW.
7. Disturbance solely related to pavement reclamation and/or repaving of a street or road.

(b) Minimum Thresholds that Trigger a Need for a **Stormwater Management and Erosion Control Plan (SMECP)**

Proposed projects meeting one or more of the following conditions listed below must also, as part of the Stormwater Management and Erosion Control Permit (SWP) application review process, submit a Stormwater Management and Erosion Control Plan (SMECP), unique to the site, to the Department of Planning and Development for distribution to the DPW for any tract of land being developed, redeveloped, or subdivided within the boundaries of Rochester:

1. A cumulative disturbed area exceeding 20,000 square feet that is not part of a Larger Plan of Development.
2. A subdivision of more than three building lots (i.e., Major Subdivision).
3. Phasing of more than three contiguous lots per year of an existing or proposed subdivision.
4. Construction of utilities (gas, water, sewer, electric, telephone, etc.) requiring contiguous ground disturbance of greater than 20,000 square feet unless the disturbance is proposed within the limits of an existing paved roadway utilizing a contractor with no history of erosion concerns.
5. Proposed work in or adjacent to a Critical Areas.



## 50.6 **Erosion Control Standards During Construction**

- (a) The following standards shall be applied in project planning and shall be implemented prior to and during construction activity (these standards are in addition to requirements that may be found in other sections of the Site Plan, Subdivision, and other Land Use Regulations or Ordinances). Measures when indicated to be used below shall meet at a minimum, the design standards for Best Management Practices as set forth in the ***New Hampshire Stormwater Manual Volume 3*** (2008 as updated) a copy of which is available at [www.des.nh.gov/organizations/divisions/water/stormwater/manual.htm](http://www.des.nh.gov/organizations/divisions/water/stormwater/manual.htm).
1. Whenever practical, natural vegetation shall be retained, protected, or supplemented. Stripping of vegetation shall be done in a manner that minimizes soil erosion.
  2. The area of disturbance shall be kept to a minimum and be limited to an area only large enough to accommodate construction activities for a particular construction phase.
  3. Measures shall be taken to control erosion within the project area. Sediment in runoff water shall be trapped and retained within the project area. Wetland areas and surface waters shall be protected from sediment. Soil disturbance shall be avoided within established buffer setbacks as defined and consistent with the provisions included in the Conservation Overlay District (Zoning Ordinance 42.12).
  4. Off-site surface water and runoff from undisturbed areas shall be diverted away from Disturbed Areas where feasible or measures to convey stormwater through the Project Area without causing erosion of sediment must be included. Integrity of downstream drainage systems shall be maintained.
  5. Erosion and sediment control measures shall be installed prior to any soil disturbance and must be reviewed and approved by DPW prior to any land disturbance.
  6. Perimeter site controls shall not be placed within wetland areas, stream channels or wetland buffers.
  7. Disturbed Areas shall be either temporarily or permanently stabilized by measures consistent with the ***NHDES Stormwater Manual*** guidelines. In areas where final grading has not occurred, temporary stabilization measures should be in place within 7 calendar days for exposed soil areas that are within 100 feet of a surface water body or a wetland and no more than fourteen (14) calendar days for all other areas. Permanent stabilization should be in place within three (3) calendar days following completion of final grading of exposed soil areas.
  8. All temporary erosion and sediment control measures shall be maintained in functioning condition until final site stabilization is accomplished. A proposed BMP inspection schedule in accordance with the ***New Hampshire Stormwater Manual Volume 2*** guidelines (2008 as updated) shall be included in the Stormwater Management and Erosion Control Plan (SMECP) submittal.
  9. For construction during the winter season an erosion and sedimentation control plan and timeline shall be submitted by September 1 to the DPW.

10. Additional temporary stabilization for the winter season consistent with NHDES guidelines shall be in place for disturbed areas that are not permanently stabilized by October 1, or at the discretion of DPW.
11. Stabilization measures shall be provided with the submission for any disturbance on slopes equal to or steeper than 3:1.
12. All temporary erosion and sediment control measures shall be removed after final site stabilization unless the measures are intended to be left in place and approved by DPW on a case by case basis. Trapped sediment and other disturbed soil areas resulting from the removal of temporary measures shall be permanently stabilized within 30 days unless conditions dictate otherwise.
13. Sediment Basins: For projects proposing to disturb and expose soils in areas of 10 acres or more at one time, a temporary sediment basin must be provided with storage for a calculated volume of runoff from a drainage area from a 2-year, 24-hour storm, or equivalent control measures, where attainable, until final stabilization of the site. Alternatively, the sediment basin can be sized to provide 3,600 cubic feet of storage per acre of drainage area, until final stabilization of the site. In determining appropriate locations and number of sediment basin(s) needed, the operators may consider such factors as erodibility of site soils, slope lengths, available area on-site, construction period and other unique site considerations.
14. Use of temporary sediment basins should avoid any additional vegetation clearing or site disturbance not otherwise needed for post-construction. Sediment basin locations must be reviewed by DPW prior to construction and must consider the potential for offsite impacts including public safety, especially as it relates to sediment movement and/or sediment basin failure and alternative sediment controls approved by DPW must be used where site limitations preclude a safe design.

#### 50.7 **Standards for New Development**

##### (a) Performance Specifications

1. All proposed stormwater practices and measures shall be installed and maintained in accordance with manufacturers' specifications and performance specification in the ***New Hampshire Stormwater Manual*** (2008 as updated) a copy of which is available from the NHDES website at:  
[www.des.nh.gov/organization/divisions/water/stormwater/manual.htm](http://www.des.nh.gov/organization/divisions/water/stormwater/manual.htm)
2. Alternate stormwater practice design standards may be accepted at the discretion of the DPW and may include techniques or practices in use and accepted by other jurisdictions, (i.e. state agencies, municipalities, EPA) that have been demonstrated to have treatment benefits in accordance with the Goals of this Ordinance. This may include promising innovative practices (proprietary and non-proprietary) allowing for the continued advancement of the practice.
3. The DPW and/or Planning Board reserve the right to request that the applicant cover expenses for a third-party engineer or consultant, hired by the City, to perform review of alternative stormwater practice design standards in addition to water quality monitoring and/or site inspections to ensure sensitive resources are adequately protected where proposed projects are deemed to pose a higher risk of potential impacts due to factors including but not limited to the project size, location, duration and history of the contractor's performance.

4. To show that a proposed development has met a standard to the maximum extent practicable (MEP), the applicant must demonstrate the following: (1) all reasonable efforts have been made to meet the standard, (2) a complete evaluation of all possible management measures has been performed, and (3) if full compliance cannot be achieved, the highest practicable level of management is being implemented.

(b) Water Quality Protection

All aspects of the application shall be designed to protect the quality of groundwater, waterbodies, streams and wetlands within the City of Rochester as follows:

1. Runoff from impervious surfaces shall be treated to achieve a load reduction of 80% Total Suspended Solids (appropriate Water Quality Volume to be provided) and at least 50% of both total nitrogen and total phosphorus using appropriate treatment measures, as specified in the **NH Stormwater Manual** Volumes 1 and 2, **(2008 as updated)** or other equivalent means accepted by NHDES or EPA. Where practical, the use of natural, vegetated filtration and/or infiltration BMPs or subsurface gravel wetlands for water quality treatment is preferred given its relatively high nitrogen removal efficiency. Alternate measures may be accepted at the discretion of the DPW and may include techniques or practices in use and accepted by other jurisdictions, (i.e. state agencies, municipalities, EPA) that have been demonstrated to have equivalent removal efficiencies in accordance with the Goals of this Ordinance.
2. All storage facilities for fuel, chemicals, chemical or industrial wastes, and biodegradable raw materials shall meet the regulations of the New Hampshire Department of Environmental Services (NHDES) including but not limited to those involving Underground Storage Tanks, Above Ground Storage Tanks, hazardous Waste and Best Management Practices for Groundwater Protection (Env-Wq 401).

(c) Stormwater Management Systems

All proposed stormwater management and treatment systems shall meet the following performance standards.

1. Existing surface waters including lakes, ponds, rivers, perennial and intermittent streams, and wetlands (including vernal pools) shall be protected by the minimum buffer setbacks as specified in the Conservation Overlay District Zoning Ordinance. Stormwater management BMPs shall be located outside the specified buffer zone unless otherwise approved by the Planning Board. Alternatives to stream and wetland crossings that eliminate or minimize environmental impacts shall be considered whenever possible. When necessary, as determined by the Planning Board or their representative, stream and wetland crossings shall comply with state stream crossing rules (Env-Wt 900), as appropriate, and, the recommended design standards to minimize impacts to flow and enhance animal passage (see the University of New Hampshire **Stream Crossing Guidelines** (May 2009, as updated) available from the UNH Environmental Research Group website at [http://www.unh.edu/erg/stream\\_restoration/nh\\_stream\\_crossing\\_guidelines\\_unh\\_web\\_rev\\_2.pdf](http://www.unh.edu/erg/stream_restoration/nh_stream_crossing_guidelines_unh_web_rev_2.pdf)).
2. Low Impact Development (LID) site planning and design strategies must be used to the maximum extent practicable (MEP) in order to reduce the generation of the stormwater runoff volume for both new development and redevelopment projects. An applicant must document in writing why LID strategies are not appropriate if not

used to manage stormwater and such documentation be approved by DPW during review of the Stormwater Management System.

3. All stormwater treatment areas shall be planted with native plantings appropriate for the site conditions: grasses, shrubs, trees and/or other native plants in sufficient numbers and density to prevent soil erosion and to achieve the water quality treatment requirements of this section.
4. All infiltration areas that receive rainfall runoff must be designed to drain within a maximum of 72 hours for water quality and flooding control.
5. Salt storage areas shall be located under cover and loading/offloading areas shall be designed and maintained such that untreated runoff is not discharged to receiving waters. Snow storage areas shall be located such that no direct untreated discharges to receiving waters are possible from the storage site. Runoff from snow and salt storage areas shall enter treatment areas as specified above before being discharged to receiving waters or allowed to infiltrate into the groundwater. See NHDES guidance fact sheet on road salt and snow disposal at <http://des.nh.gov/organization/commissioner/pip/factsheets/wmb/index.htm>.
6. Runoff shall be directed into recessed vegetated and landscape areas designed for treatment and/or filtration to the MEP to minimize Effective Impervious Cover (EIC) and reduce the need for irrigation systems.
7. All newly generated stormwater, whether from new development or expansion of existing development (redevelopment), shall be treated on the development site. Runoff shall not be discharged from the development site to downstream outlets including, but not limited to, municipal drainage systems, privately owned drainage systems (whether enclosed or open drainage), surface water bodies, or wetlands, in excess volume than currently discharges under the existing conditions (developed condition or undeveloped condition).
8. Measures shall be taken to control the post-development peak rate runoff so that it does not exceed pre-development runoff for the 2-year, 10-year, 25-year, 50-year, 24-hour storm events. For sites where infiltration is limited or not practicable, the applicant must demonstrate that the project will not create or contribute to water quality impairment. Infiltration structures shall be in locations with the highest permeability on the site. In the event that these areas are needed for other use, documentation must be provided to DPW detailing the reason for which the infiltration structures are located outside the highest permeability area and that the permeability of the soil is sufficient for the intended use.
9. The physical, biological and chemical integrity of the receiving waters shall not be degraded by the stormwater runoff from the development site to the MEP.
10. The design of the stormwater management systems shall take into account upstream and upgradient runoff that flows onto, over, or through the site to be developed or re-developed, and provide for this contribution of runoff.
11. For large projects adding greater than or equal to 10 acres of impervious cover, or projects located in known areas of flooding concern, or specifically within the 100-year floodplain, the applicant shall submit a supplementary report that describes how the project will not increase the future flooding potential and complies with the AOT requirements pertaining to floodplain impacts as described in Env-Wq 1503.09,

regardless of whether an AOT permit is required.

12. Access for maintenance of stormwater facilities must be included as part of the design, where necessary. Access easements may be required.
13. Seasonal high water table elevations must be accounted for in all BMP designs as specified in the ***NH Stormwater Manual* Volume 2, (2008 as updated)**.

## 50.8 **Standards for Redevelopment**

### (a) Redevelopment Criteria

Redevelopment is defined as any construction, alteration, or improvement that disturbs a total of 5,000 square feet or more of existing impervious area where the existing land use is commercial, industrial, institutional, governmental, recreational, or multifamily residential. The permitting authority may take into consideration prior projects or multiphase projects in determining if the redevelopment threshold has been met. Efforts to reduce the amount of existing impervious cover may not be subject to all parts of the ordinance. Building demolition is included as an activity defined as “redevelopment.” Building renovation is not considered redevelopment provided the footprint of the existing building or structure to be renovated is not altered or expanded.. Similarly, removal of roadway materials down to the erodible soil surface is an activity defined as “redevelopment,” but simply resurfacing of a roadway surface is not. In order for a project to be considered redevelopment, no net increase in impervious area is permitted.

Because redevelopment may present a wide range of constraints and limitations, some flexibility in meeting the minimum standards may be warranted along with an evaluation of options that looks to achieve the broader watershed goals and local resource protection initiatives. Stormwater requirements for redevelopment will vary based upon the amount of site surface area that is covered by existing impervious surfaces.

### (b) Stormwater Management Requirements for Redevelopment

1. For sites meeting the definition of a redevelopment project and having less than 40% existing impervious surface coverage, it is generally considered that adequate space exists to apply the same stormwater management standards as as new development projects. The applicant must satisfactorily demonstrate that impervious area reduction, LID strategies and BMPs have been implemented on-site to the maximum extent practicable.
2. For sites meeting the definition of a redevelopment project and having more than 40% existing impervious surface coverage, it is recognized that the available space for BMPs will be limited and thus greater flexibility in meeting the stormwater management standards will be needed as to not prevent redevelopment. Therefore, stormwater design shall implement measures that result in disconnection or treatment of at least 30% of the existing impervious cover as well as 100% of the proposed impervious surfaces and pavement areas through the application of LID.

## 50.9 **Stormwater Management and Erosion Control Permit Submittal Requirements**

### (a) Permit Application

Projects proposing at least 5,000 square feet of disturbance that are not otherwise an

exemption as listed in Section 50.5(a), applicants must submit a completed Stormwater and Erosion Control Permit (SWP) application to the DPW. In addition a Stormwater Management and Erosion Control Plan (SMECP) is required in accordance with 50.5(b). The SMECP shall contain the information as outlined in 50.9 (b) below.

(b) Stormwater Management and Erosion Control Plan (SMECP)

At a minimum, the following items should be included in a Stormwater Management and Erosion Control Plan (SMECP). Additional requirements may be found in this and other sections of the Site Plan, Subdivision, or Other Land Use Regulations. If the project is part of a formal Planning Board Approval process, documents must be submitted for consideration as part of the initial application process.

1. Narrative Stormwater Management and Erosion Control Report that contains the following items:
  - A. Description of construction period and earth movement schedule including anticipated project start and completion dates, sequence and duration of grading and construction activities, sequence and timing of installation and/or application of soil erosion and sediment control measures as well as sequence for final stabilization of the project site.
  - B. Description of the onsite and adjacent wetlands, streams, water bodies or other natural resources including methods used to identify these resources and a description of any buffer setbacks that may apply, steep slopes, critical habitat, existing vegetation, 100-year floodplain limits and whether any downstream water bodies are listed as impaired and their impairment according to DES' most recent 303(d) list.
  - C. Description of existing drainage patterns, receiving water bodies or drainage infrastructure and soil types for recharge potential.
  - D. Subwatershed area limits including any offsite and upstream areas contributing flow to shared drainage channels and/or infrastructure.
  - E. Description of proposed changes in impervious cover areas and any changes in pre and post-development drainage patterns.
  - F. Methods and assumptions used to calculate pre-and post-development runoff volume, peak discharge, and discharge velocity for the specified design storm events.
  - G. Description of Low Impact Development (LID) measures that were considered and are proposed to limit the development footprint, preserve existing vegetation and mimic existing hydrology to the extent feasible. Describe LID measures that were considered but determined not to be feasible.
  - H. Describe measures and calculations for proposed measures used to achieve no net increase in runoff volumes leaving the site.
  - I. If an increase in post-development runoff volume is anticipated due to limited applicability for LID measures and site constraints, provide an assessment and supporting calculations to demonstrate no adverse impacts to downstream infrastructure, adjacent properties or aquatic habitat.

- J. Descriptions, details, and design criteria and calculations for all structural, non-structural, permanent, and temporary erosion and sedimentation control measures and BMPs. This information should include seeding mixtures and rates, types of sod, methods of seedbed preparation, expected seeding dates (or limitations on seeding timeframes), type and rate of lime and fertilizer application, and type and quantity of mulching for temporary and permanent control facilities.
  - K. Where proposed changes are anticipated within mapped limits of the 100-year floodplain, provide hydrologic and hydraulic analysis to show no net increase in flood elevations for the 100-year flood.
  - L. Proposed schedule for the inspection and maintenance of all erosion control measures onsite prior to achieving final site stabilization. Inspections must be conducted by a 3rd party, qualified professional such as a PE, CPESC, CPSWQ at least once every 7 calendar days, or once every 14 calendar days and within 24 hours after a storm event of 0.25 inches or greater.
  - M. Describe procedures for removing temporary erosion control measures and removal of accumulated sediment captured by such measures.
  - N. Calculations for the infiltration or exfiltration system. These calculations should also account for frozen ground conditions, when the devices may not function at their optimal design.
  - O. Any other specific study, calculation, or investigation as requested by the City
  - P. Describe procedures to limit and/or optimize the use of deicing materials and minimize offsite increases in chloride levels in adjacent surface and ground water.
  - Q. Describe the procedures that will be implemented to control waste such as discarded building materials, concrete truck washout, chemicals, litter and sanitary waste during the construction process that may cause adverse impacts to water quality.
  - R. Provide a Maintenance and Inspection Plan for post-construction monitoring of stormwater BMPs to ensure long-term performance and functionality including details of each BMP, who will be responsible for inspections and maintenance, proposed schedule of maintenance, documentation of how reports will be complete, submittal procedures and contingency plans if future maintenance is required.
  - S. Copies of pertinent State and Federal Permits
2. Site Plan Drawings and Supporting Details containing the following items:
- A. Locus map showing property boundaries.
  - B. North arrow, scale, date.
  - C. Property lines.
  - D. Easements.
  - E. Structures, roads, and utilities.
  - F. Topographic contours at two-foot (2') intervals.

- G. Critical areas.
- H. Within the project area and 200 feet outside of project boundary, limits of surface waters, wetlands, and drainage patterns and watershed boundaries.
- I. Existing Vegetation.
- J. Extent of 100-year floodplain boundaries if published or determined.
- K. Soils information for proposed disturbed areas from a National Cooperative Soil Survey (NCSS) soil series map (web based or hard copy) or a High Intensity Soil Map of the site, prepared in accordance with Society of Soil Scientists of Northern New England (SSSNE) Special Publication No. 1. Highly erodible soils shall be determined by soil series.
- L. Areas of soil disturbance.
- M. Areas of cut and fill.
- N. Locations of earth stockpiles.
- O. Locations of equipment storage and staging.
- P. Locations of proposed construction and/or vehicle or equipment fueling areas.
- Q. Stump disposal plan.
- R. Highlighted areas of poorly and very poorly drained soils.
- S. Highlighted areas of poorly and/or very poorly drained soils proposed to be filled.
- T. Locations of all permanent control measures.
- U. Identification of permanent snow storage areas.
- V. Identification of snow management measures during construction.
- W. Identification of all permanent control measures and responsibility for continued maintenance.
- X. Plans showing the entire drainage area affecting or being affected by the development of the site. Proposed lot boundaries and drainage areas shall be clearly shown on the Plan.
- Y. The direction of flow of runoff through the use of arrows shall clearly be shown on the Plan.
- Z. The location, elevation, and size of all existing and proposed catch basins, drywells, drainage ditches, swales, retention basins, and storm sewers shall be shown on the Plan.

#### 50.10 **Installation, Construction, Maintenance, and Inspection Requirements and Responsibility**

##### (a) Requirements

1. Site development shall not begin before the SMECP has been reviewed and approved by the City. Best Management Practices shall be installed as designed and scheduled as a condition of final approval of the SMECP. In cases where a SWPPP is provided (and likely prepared for the NPDES NOI and contains the majority of the information required in the SMECP) the SWPPP shall be implemented as a condition of final approval of the SMECP. In addition, site development shall not begin until a NOI has been acknowledged by the EPA (if



applicable), and NHDES has been contacted regarding impaired waters in accordance with a NOI (if applicable).

2. The Department of Public Works or Department of Planning and Development may require a bond or other security with surety conditions in an amount satisfactory to the City, providing for the actual construction, installation, and removal of such measures within a period specified by the City and expressed in the bond or the security.
3. The Department of Planning and Development, Department of Public Works, and/or Office of Code Enforcement may require the owner or his/her authorized agent to deposit in escrow with the City an amount of money sufficient to cover the City's cost for inspection and any professional assistance required for site compliance and monitoring.
4. The owner of record of the property shall record the Notice of Decision and a Stormwater Maintenance Agreement. at the Registry of Deeds. The Stormwater Maintenance Agreement shall include the Maintenance and Inspection Plan for post-construction monitoring of stormwater BMPs to ensure long-term performance and functionality including details of each BMP, who will be responsible for inspections and maintenance, proposed schedule of maintenance, documentation of how reports will be complete, submittal procedures and contingency plans if future maintenance is required. The Notice of Decision and Stormwater Maintenance Agreement shall be attached to the property deed and apply to all persons that may acquire any property subject to the Notice of Decision.

(b) Responsibility

1. **Commercial and Industrial Development and/or Redevelopment.** The applicant, owner, and owner's legally designated representative (if any) shall all hold responsibility for implementing the SMECP). This includes but is not limited to the installation, construction inspection and maintenance of all stormwater management and erosion control measures required by the provisions of this Ordinance.
2. **Residential Development and Redevelopment.** The applicant is responsible for implementing the SMECP.. Excluding any post-development requirements of plan implementation, there are two ways for the City to consider an applicant to be removed as the responsible party (the applicant may also be required to comply with other regulating entities' additional requirements):
  - A. The applicant completes the project in a manner satisfactory to the City and if a NOI has been filed for the project, the NOI permittee files a Notice of Termination (NOT) with the EPA in accordance with the terms of the Federal requirements.
  - B. The applicant passes legal responsibility for the Plan to another competent party. In the case of a new subdivision where lots may be transferred to a different entity for construction of the buildings, it is the applicant's responsibility to ensure that the applicant has a legal basis to require compliance by the new entity.
3. **Individual Homeowner Development.** The homeowner or a homeowner who has taken control of a subdivided property bears responsibility for compliance with

the approved SMECP. If the homeowner is contracting building services to another person or entity, the homeowner may choose to pass legal responsibility of compliance to the contracted entity. If the responsibility is not passed, the homeowner remains the responsible party and must comply with the terms of the original Plan.

(c) Preconstruction Meeting

1. The applicant and the applicant's engineer (or technical representative) may be required to schedule and attend a mandatory preconstruction meeting with DPW at least one week prior to commencement of construction. All required documents to be recorded, escrow deposits and bonding must be in place prior to the scheduled meeting. Three copies of the SMECP (including the SWPPP and NOI if required), up-to-date construction schedule, and associated construction documents must be provided at that time. The SMECP must bear the seal and signature of the New Hampshire Registered Professional Engineer preparing the documents. The SMECP may be combined with the SWPPP if labeled as both and meeting the requirements of both. Prior to commencement of construction, the Department of Planning and Development will confirm that the documents submitted meet the conditions of Planning Board approval. An appropriate notation will be made on the "official" construction set used by the Code Enforcement and Public Works Departments. (Note: Preconstruction conferences will typically not be required for construction of one single-family home or one residential duplex, not part of a larger plan of construction.)
2. The Department of Planning and Development and/or Department of Public Works reserve the right to prepare and request the applicant's acknowledgement of a preconstruction checklist.

(d) Post-Construction Operation and Maintenance

1. **Stormwater Discharges Associated with Commercial/Industrial Activities.** Each commercial and industrial facility approved under this Ordinance is required to perform annual site inspections (at a minimum). Such site inspections must be documented and at a minimum should include: review of stormwater flow paths; condition of any sediment or contaminant control devices; water quality; corrective actions and time frames if unacceptable water quality runoff is noted; and the name and position of the inspector. Results of each inspection must be submitted to the Department of Public Works by the end of each calendar year..
2. **Notification for Spills or Other Non-Stormwater Discharges.** As soon as any applicant, owner, owner's agent, or designated person responsible for a facility, site, activity, or operation has information of any known or suspected release of pollutants or non-stormwater discharges which are resulting or may result in illicit discharges or pollutants discharging into stormwater, the municipal storm drain system, State waters, or waters of the United States, said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release to minimize the effects of the discharge. If said individual is not competent to assess, contain, or clean-up, that person shall immediately notify another competent individual or firm. If the substance poses an immediate health or safety concern (emergency situation), the City of Rochester Emergency Services must immediately be notified and then notification shall be made to the City of Rochester Office of Building, Zoning and Licensing Services and the Department of Public Works. Notifying the City of

Rochester does not preclude, supersede or provide any liability coverage for any Federal or State required notifications related to material spills. In non-emergency situations notification should be made as soon as possible; however, no later than the next business day post event.

(e) Providing Site Access for Maintenance and Inspection

1. Municipal staff or their designated agent shall have site access to complete routine inspections to ensure compliance with the approved stormwater management and sediment and erosion control plans. Such access shall be implied with the issuance of a Stormwater and Erosion Control Permit and/or as indicated in development approvals. Such inspections shall be performed at a time agreed upon with the landowner. If permission to inspect is denied by the landowner it shall be deemed a violation of the approval. In addition, municipal staff or their designated agent shall secure an administrative inspection warrant from the district or superior court under RSA 595-B Administrative Inspection Warrants. Expenses associated with inspections shall be the responsibility of the applicant/property owner.

**50.11 Illicit Discharge, Connections and Protection**

Municipal Separate Storm Sewer Systems (MS4s) within “urbanized areas” (UA), as defined by the Bureau of Census, fall under mandatory regulation under EPA Phase II Stormwater Management Regulations. Within the UA, all roads and streets and associated drainage systems, both open and closed, fall under regulation. Map 1 depicts the two urbanized areas in Rochester. However, all land in Rochester shall comply with this section.

(a) Prohibition of Illegal Discharges

1. No person shall discharge or cause to be discharged into the municipal storm drain system or watercourses any materials, including but not limited to, pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards. The commencement, conduct, or continuance of any illegal discharge to the storm drain system is prohibited except as follows:
  - A. Water line flushing or other potable water sources, landscape irrigation or lawn watering, diverted stream flows, rising groundwater, uncontaminated groundwater infiltration to storm drains, uncontaminated pumped groundwater, foundation or footing drains (not including active groundwater dewatering systems), crawl space pumps, air conditioner condensate, springs, non- commercial washing of vehicles, material riparian habitat or wetland flows, dechlorinated swimming pool water (less than one ppm chlorine), fire- fighting activities, street wash waters and residential building wash waters without detergents and any other water source not containing pollutants.
    - i. Discharges specified in writing by the City and other governing bodies as being necessary to protect public health and safety.
    - ii. Dye testing is an allowable discharge, but requires written and verbal notification to the Department of Public Works at least ten (10) days prior to testing. The Department of Public Works reserves the right to require additional information prior to testing and such information shall be provided at least two (2) business days prior to testing.

2. Any non-stormwater discharge permitted under an NPDES stormwater discharge, waiver, or Consent Order issued to the discharger and administered under the authority of the EPA, provided that the discharger is in full compliance with all requirements of the permit, waiver or order and other applicable laws and regulations, and, provided that written approval has been granted for any discharge to the storm sewer system.

(b) Prohibition of Illicit Connections

1. The construction, use, maintenance, or continued existence of illicit connections to the storm drain system is prohibited. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
2. A person is considered to be in violation of this Ordinance if the person connects a line conveying sewage to the MS4 or allows such a connection to continue.

(c) Watercourse Protection.

1. Requirements and Compliance

- A. Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse within the property free of trash, debris, excessive vegetation, and other obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse. In addition, the owner or lessee shall maintain existing privately owned structures within or adjacent to a watercourse so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse. MS4 permit compliance may require additional BMP's to enhance control of increased discharges to impaired water.
- B. As all land within the City of Rochester is to comply with this section additional BMPs or enhanced control of an existing discharge may be required. The applicant must demonstrate that there is no net increase in loading from the drainage system to the impaired water of the pollutant(s) for which the waterbody is impaired.
- C. Documenting that the pollutant(s) for which the waterbody is impaired is not present in the discharge and retain documentation of this finding and submit it with the Stormwater Management and Erosion Control Permit Application and SMECP (if required).
- D. All projects requiring a Stormwater Management and Erosion Control Permit (SWP) must submit specific site information as requested on the Chapter 50 Checklist. The Chapter 50 Checklist may be obtained from the Department of Public Works and may be amended from time to time by the Department of Public Works to correlate to changes in local, state and federal requirements.

## 50.12 **Waivers**

### (a) Waiver Option for Small Development Projects

At the request of an applicant, the Planning Board may grant a waiver to any or all stormwater standards for projects that: disturb less than 5,000 square feet; create less than 5,000 square feet of new impervious surface; and do not disturb land within 100 feet of a surface water body or wetland.

### (b) Conditions for Granting of Waivers

The Planning Board shall have the authority to grant or deny a request for a Waiver pursuant to the provisions of Site Plan and Subdivision Regulations. In order for the Planning Board to issue a waiver, the applicant must demonstrate and the Board must find that the application meets the minimum criteria listed below and, if granted, will be considered conditions of approval:

1. An applicant must demonstrate by submitting an analysis and/or written rationale, with supporting calculations and site plan, that any relief or divergence from Chapter 50 requirements, through the Waiver process, is based on no other feasible alternative.
2. A decision to grant a Waiver and relieve the applicant from, or reduction in, a specific requirement or standard of Chapter 50 must ensure that the proposed outcome will be consistent with the goals, purpose and provisions of this Ordinance.
3. The grant or denial of a Waiver by the Planning Board may be appealed to the Superior Court, as provided for in RSA 677:15.

### (c) Off-Site Mitigation

1. In cases where the applicant demonstrates, to the satisfaction of the Planning Board, that on-site treatment has been implemented to the maximum extent possible or is not feasible, off-site mitigation will be an acceptable alternative if implemented within the same subwatershed, within the project's drainage area or within the drainage area of the receiving water body. To comply with local watershed objectives the mitigation site should be situated in the same subwatershed as the development and impact/benefit the same receiving water.
2. Off-site mitigation shall be equivalent to no less than the total area of impervious cover NOT treated on-site.
3. An approved off-site location must be identified, the specific management measures identified, and an implementation schedule developed in accordance with Planning Board review. The applicant must also demonstrate that there are no downstream drainage or flooding impacts as a result of not providing on-site management for large storm events.

## 50.13 **Enforcement and Penalties**

- (a) The Department of Building, Zoning and Licensing Services, DPW Director, City Engineer, or their designee, as the case may be and subject to the provisions below, shall be able to enforce all aspects of this Ordinance. In that regard, said official(s) shall be empowered hereby to invoke any and all statutory enforcement prerogatives that may be applicable to the purported violation as it relates to the Plan submitted hereunder or activity regulated hereby. By way of illustration and not by way of limitation, it is contemplated that the following statutory enforcement

prerogatives would apply:

Type of Proposal	Applicable Board or Authority	Applicable Enforcement Statute
Site Plan/Subdivision Proposals	Planning Board	RSA 676:15, 16, 17, 17-a, &17-b
Proposals affecting single existing tracts	Building, Zoning and Licensing/ Planning Board	RSA 147:9RSA 676:17, RSA 673:1(V), and RSA 676
Proposals affecting existing public roads or public stormwater systems in place	City Council/DPW	RSA 47:17, RSA 25:9-V-a.
Proposals affecting any water/sewer infrastructure in place	City Council/DPW	RSA 38:26, II, and RSA 149-I:6,III
Proposals involving Earth Material Removal Permits or other mining activities regulated by RSA 155-E	Planning Board	RSA 155-E:10

- (b) The Department of Building, Zoning and Licensing Services, DPW Director, Health Officer, or their designee is authorized by means of this Ordinance to take any action to enforce the condition hereof and to act on behalf of the various boards or agencies identified above, depending on the nature or form of the conduct constituting the alleged violation. It is intended that said Office Department of Building, Zoning and Licensing Services, DPW Director, Health Officer, or their designee shall have the authority to seek individual specific remedies, including, where appropriate, injunctive relief, the issuance of Notices of Violation, the pursuit of civil and/or criminal sanctions, or, without limitation, any other sanction as authorized by applicable law, regulation or statute, and said Officer(s) are hereby designated as the appropriate designee of any board or agency having jurisdiction, whenever there is reason to believe that a violation of any of the provisions of this Ordinance or any permit issued hereunder has taken place. Nothing herein shall be interpreted to limit or otherwise curtail any statutory authority which such board or agency is entitled to exercise independent of this Ordinance.
- (c) Nothing in this section is intended to limit, in any way, the Department of Building, Zoning and Licensing Services, DPW Director, Health Officer, or their designee from exercising any authority that State law allows them to exercise on behalf of any State agency which has preemptive or concurrent jurisdiction over any conduct that would be considered a violation of this Ordinance. Notwithstanding anything to the contrary, nothing herein is deemed to require the City to undertake any action beyond the minimum required by federal and state stormwater regulations and the City's NPDES Permit, as applicable. Nevertheless, the City maintains its rights to undertake any requirements beyond the federal and state minimums subject to the City's sole discretion.

50.14 **Abbreviations and Definitions (all definitions apply to the singular and plural form)**

- (a) **Best Management Practice (BMP)** - A proven or accepted structural, non- structural, or vegetative measure; the application of which reduces erosion, sediment, or peak storm discharge, or improves the quality of stormwater runoff.
- (b) **Bioretention** - A water quality practice that utilizes vegetation and soils to treat urban stormwater runoff by collecting it in shallow depressions, before filtering through an engineered bioretention planting soil media.
- (c) **Buffer** - A designated protected area along a watercourse or wetland where development is restricted or prohibited. See the City's Conservation Overlay District Ordinance for specific details on buffer setbacks and permitted uses adjacent to various water and wetland resources. Buffers protect and physically separate a resource from development. Buffers also provide stormwater control flood storage and habitat values.
- (d) **Cease and Desist** - Document issued related to a parcel or activity in violation of the City of Rochester Stormwater Management and Erosion Control Ordinance and/or the City of Rochester Site Plan, Subdivision, other Land Use Regulations or Ordinances, or plans approved there under.
- (e) **Certified Soil Scientist** - A qualified professional in soil classification and mapping who is certified by the State of New Hampshire Board of Natural Scientists.
- (f) **City Inspector** - A City representative from the Department of Public Works, Code Enforcement, Community Development, or their designee.
- (g) **Contiguous** - Any actual or proposed terrain disturbance within 5 years before the terrain alteration activity for which a permit is sought begins or within 5 years after the terrain alteration activity covered by a site specific permit ends shall be deemed part of the total project and included in the calculation of the amount of contiguous area disturbed.
- (h) **Critical Areas** - Disturbances of any size meeting any one of the following criteria:
  - 1. Within the limits of buffer areas as defined by the Conservation Overlay District Ordinance for the protection of permanent or intermittent vernal pools, streams, bog, other water bodies and jurisdictional wetland areas as determined by poorly or very poorly drained soils ; or
  - 2. Disturbed areas exceeding 2,000 square feet in highly erodible soils; or
  - 3. Disturbed areas with a slope length exceeding 25 feet on slopes greater than 15 percent.
- (i) **Development** - Any construction or land disturbance or grading activities other than for agricultural and silvicultural practices.
- (j) **Department of Public Works (DPW)** - The term "DPW" when contained in this Ordinance, is intended to refer to and identify the City Engineer or any qualified professional engineering consultant which the City Council, City Administrator, Planning Board, Department of Building, Zoning and Licensing Services, DPW Director, or designees engage(s) for the purpose of reviewing any application or plan submitted in accordance with this Ordinance or determining compliance herewith, when, in their judgment, such review is appropriate or necessary in order to ensure compliance with this Ordinance or determine if the provisions hereof have been violated.

- (k) **Disconnected Impervious Area** – The portion of Impervious Cover area that is not hydraulically connected to a receiving body of surface water by means of continuous paved surfaces, gutters, drain pipes or other conventional conveyance.
- (l) **Disturbed Area or Land Disturbance**- An area where the natural vegetation has been removed exposing the underlying soil or where vegetation has been covered.
- (m) **Effective Impervious Cover (EIC)** – The portion of Impervious Cover area that is hydraulically connected to the receiving body of surface water by means of continuous paved surfaces, gutters, drain pipes or other conventional conveyance. IC that is treated by LID as per Chapter 50 is considered to be disconnected. EIC is the area resulting from Impervious Cover area minus Disconnected Impervious Area minus Treated Area.
- (n) **Environmental Protection Agency (EPA)** - The Federal agency of the United States responsible for implementing the Clean Water Act, including the National Pollutant Discharge Elimination System (NPDES) program.
- (o) **Erosion** -The detachment and movement of soil or rock fragments by water, wind, ice, or gravity.
- (p) **Filtration** - The process of physically or chemically removing pollutants from runoff. Practices that capture and store stormwater runoff and pass it through a filtering media such as sand, organic material, or the native soil for pollutant removal. Stormwater filters are primarily water quality control devices designed to remove particulate pollutants and, to a lesser degree, bacteria and nutrients.
- (q) **Groundwater Recharge** - The process by which water seeps into the ground and eventually replenishes groundwater aquifers and surface waters such as lakes, streams, and the oceans. Groundwater recharge maintains flow in streams and wetlands and preserves water table levels that support drinking water supplies.
- (r) **Groundwater Recharge Volume (Rev)** - The post-development design recharge volume (i.e., on a storm event basis) required to minimize the loss of annual pre-development groundwater recharge. The Rev is determined as a function of annual pre-development recharge for site-specific soils or surficial materials, average annual rainfall volume, and amount of impervious cover on a site.
- (s) **Highly Erodible Soil** - Any soil with an erodibility class (K factor) greater than or equal to 0.43 in any layer as identified in the Strafford County Soil Survey.
- (t) **Impaired Water** - Those water bodies not meeting water quality standards as identified by NHDES and listed as impaired and as Category 5 waters on their 303(d) list which is periodically updated.
- (u) **Impervious Cover (IC)** - Those surfaces that cannot effectively infiltrate rainfall consisting of surfaces such as building rooftops, pavement, sidewalks, driveways, compacted gravel (e.g., driveways and parking lots).
- (v) **Infiltration** - the process of runoff percolating into the ground (subsurface materials). Stormwater treatment practices designed to capture stormwater runoff and infiltrate it into the ground over a period of days.
- (w) **Larger Plan of Development** – A project in which different parts of the property of properties are planned to be developed, or actually are developed , in geographical or time-base phases.
- (x) **Low Impact Development (LID)** - Low impact development is a site planning and design strategy intended to maintain or replicate predevelopment hydrology through the use of site planning, source control, and small-scale practices integrated

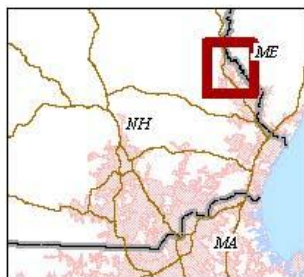
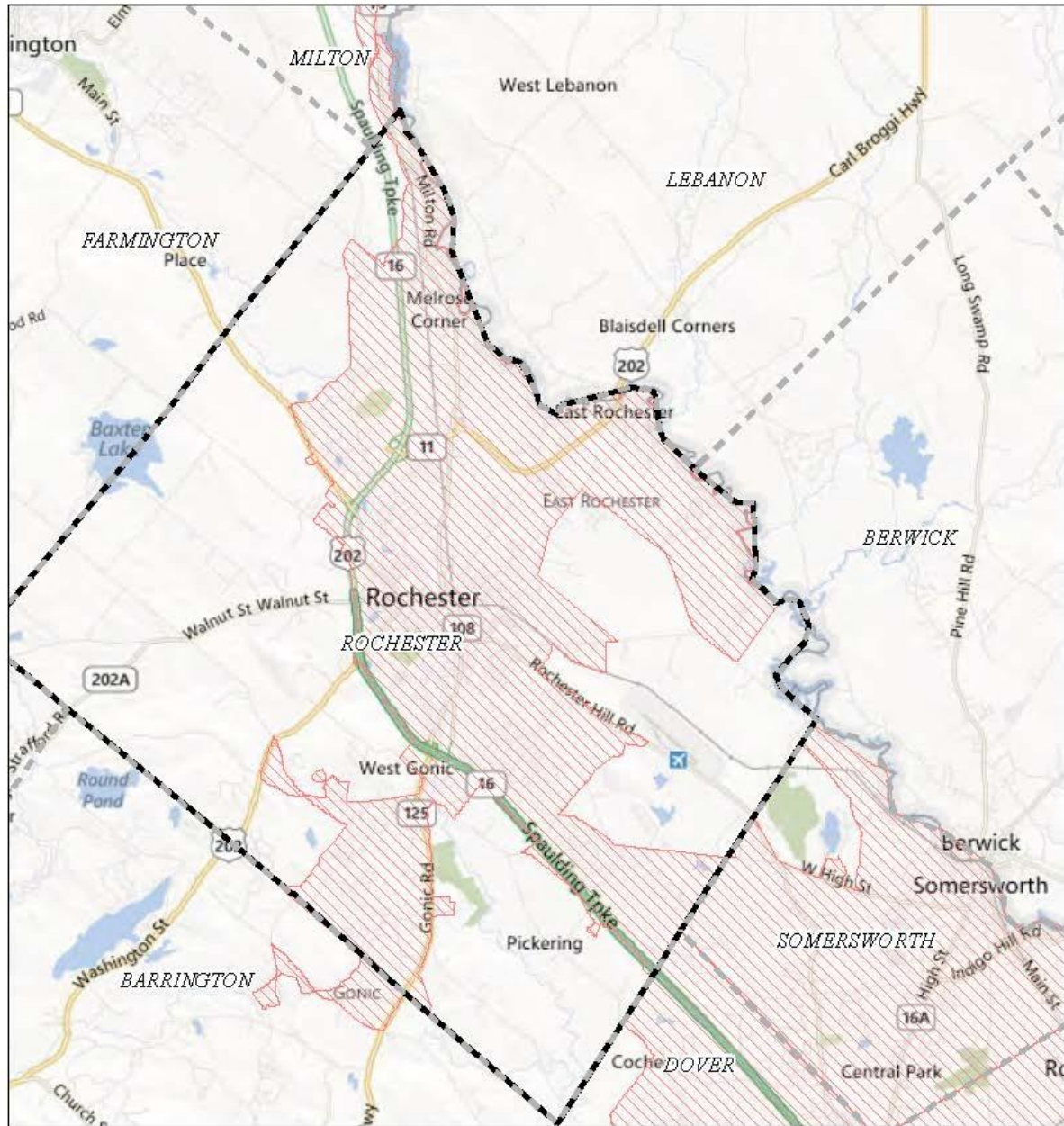


throughout the site to prevent, infiltrate and manage runoff as close to its source as possible. Examples of LID strategies are pervious pavement, rain gardens, green roofs, bioretention basins and swales, filtration trenches, and other functionally similar BMPs located near the runoff source.

- (y) **Mitigation** - Activities, strategies, policies, programs, actions that, over time, will serve to avoid, minimize, or compensate for (by treating or removing pollution sources) the impacts to or disruption of water quality and water resources.
- (z) **National Pollutant Discharge Elimination System (NPDES)** - An EPA Clean Water Act Permit program.
- (aa) **Native Vegetation and Plantings** - Plants that are indigenous to the region, adapted to the local soil and rainfall conditions, and require minimal supplemental watering, fertilizer, and pesticide application.
- (bb) **Notice of Intent (NOI)** - Document to apply for coverage under the EPA's Construction General Permit for stormwater discharges from construction activities.
- (cc) **Notice of Termination (NOT)** - Document to end coverage of a construction activity under EPA's Construction General Permit.
- (dd) **Pollutant** - Sediments, total suspended solids (TSS), phosphorus, nitrogen, metals, pathogens, floatable debris, thermal impacts, and oil and other petroleum products. Pollutant also means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. This term does not mean water, gas, other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil or gas production and disposed of in a well, if the well used either to facilitate production or for disposal purposes is approved by authority of the State of New Hampshire and if the State determines that such injection or disposal will not result in the degradation of ground or surface water resources.
- (ee) **Pollutant Load** - An amount of pollutants that is introduced into a receiving water body.
- (ff) **Project Area** - The area within the subdivision or site plan boundaries plus any areas with associated off-site improvements.
- (gg) **Qualified Professional** - A person knowledgeable in the principles and practice of stormwater management and erosion and sedimentation control, including Certified Professional in Erosion and Sediment Control (CPESC), Certified Professional in Storm Water Quality (CPSWQ) or licensed Professional Engineer.
- (hh) **Retention** - The amount of precipitation on a drainage area that does not escape as runoff. It can be expressed as the difference between total precipitation and total runoff from an area.
- (ii) **Sediment** - Solid material, either mineral or organic, that is in suspension, is transported, or has been moved from its site of origin by erosion.
- (jj) **Stabilized** - When the soil erosion rate approaches that of undisturbed soils.
- (kk) **Stormwater Management and Erosion Control Plan (SMECP)** - A plan which may be required by the City which outlines project features, proposed temporary and permanent erosion control features, maintenance schedules and practices, and design basis used to establish temporary and permanent stormwater design features.
- (ll) **Stormwater Management and Erosion Control Permit (SWP)** - A permit issued by


the City of Rochester per the requirements outlined in this Ordinance.

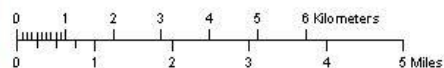
- (mm) **Stormwater Pollution Prevention Plan (SWPPP)** - A plan required by a federal NPDES permit or otherwise required by the Environmental Protection Agency (EPA) that clearly describes appropriate pollution control measures that include a description of all pollution control measures (i.e., BMPs) that will be implemented as part of the construction activity to control pollutants in stormwater discharges and describes the interim and permanent stabilization practices for the site.
- (nn) **Stormwater Runoff** - The water from precipitation that is not absorbed, evaporated, or otherwise stored within the contributing drainage area.
- (oo) **Stream** - Channelized areas of flowing water occurring for sufficient time to develop and maintain defined channels but may not flow at all times of the year. Includes, but is not limited to, all perennial and intermittent streams located on U.S. Geological Survey Maps.
- (pp) **Total Suspended Solids (TSS)** - The total amount of soils particulate matter which is suspended in the water column.
- (qq) **Treated Area** - The area of Impervious Cover from which stormwater runoff is treated by a stormwater BMP as per the requirements of Chapter 50.
- (rr) **Water Quality Volume** - The storage needed to capture and treat 90% of the average annual stormwater runoff volume. In New Hampshire, this equates to 1-inch of runoff from impervious surfaces.
- (ss) **Watershed** - All land and water area from which runoff may run to a common (design) discharge point.



**NPDES Phase II Stormwater Program  
Automatically Designated MS4 Areas**

**Rochester NH**

 Regulated Area (2000 + 2010 Urbanized Area)



Town Population: **29,732**  
Regulated Population: **24,369**  
(Populations estimated from 2010 Census)



Urbanized Areas, Town Boundaries:  
US Census (2000, 2010)  
Base map © 2010 Microsoft Corporation  
and its data suppliers

US EPA Region 1 GIS Center Map #8824, 11/19/2012

**Map 1: City of Rochester “Urbanized Areas” 11/19/12**

# Proposed Changes to Subdivision Regulation - Section 5.4 “Drainage”

These changes are proposed in order to make the Subdivision Regulations consistent with the proposed changes being made to Chapter 50 of the City Ordinances.



#### **5.4 ~~Drainage~~Stormwater Management**

~~5.4.1 The drainage systems of the proposed subdivision shall provide a permanent retention and/or temporary detention to cause no more than zero percent increase in runoff either during construction or once construction is completed for: a) all subdivisions that involve a new street; and b) any frontage subdivision when stipulated by the Planning Board based upon topography, soils, cumulative impact from multiple frontage lots and other considerations. The Planning Board may modify this requirement for subdivisions with a new street in urban or other appropriate situations where: a) there will be a zero percent increase in peak flow runoff onto neighboring lots; and b) the City Engineer states that the existing City drainage system is sufficient to handle the runoff. [16]~~

~~5.4.2 A stormwater analysis report describing the impacted watershed, projected runoff and any downstream impacts shall be submitted along with engineering plans, and must include sample calculations for sizing pipe.~~

~~5.4.3 The stormwater drainage system shall be separate from the sanitary sewer system.~~

~~5.4.4 Adequate drainage systems shall be designed to take care of the surface and subsurface water of the street and adjacent land.~~

##### **5.4.5**

~~(a) Street drainage design on minor streets in the Agricultural Zoning District shall be of the type known as an open system consisting of ditches, swales and culverts. A closed drainage system may be required by the Planning Board after receiving comments from the City Engineer based upon such factors as intensity of use, drainage characteristics of the area, and adjacent construction. [16]~~

~~(b) Street drainage design in all locations except (a) above shall be a closed system of the type known as a "manhole system." A manhole system is one in which water is collected in catch basins at the curb line and empties into an intermediate manhole in a main drain laid in the street.~~

~~5.4.6 At the requirement of the City Engineer, a drainage design shall be permitted to run across a street on the surface, but shall be directed into catch basins and piped underground, or in the case of minor streets in the Agriculture Zone, into ditches or swales.~~

~~5.4.7 Lots shall be laid out and graded to eliminate flood or stagnant water pools. No water shall be permitted to run across a street on the surface, but shall be directed into catch basins and piped underground, or in the case minor streets in the Agricultural District, into ditches or swales.~~

~~5.4.8 Stormwater shall be piped or directed to enter the nearest adequate natural water course or drainage system. If necessary, proper easements must be secured by the Applicant in the name of the City of Rochester.~~



~~5.4.9 The quantity of storm water carried by the system shall be determined by the TR 20/TR 55 Method. The Rational Method may be used when approved by the City Engineer. The design of storm drainage shall be based upon the 25 year, 10 year, and 2 year storm events, and for bridges a fifty year storm. The following formula shall be used in the design of storm water systems: [16]~~

FORMULA:  $Q = i \cdot c \cdot a$

~~Q = runoff, cubic feet per second  
i = intensity of rainfall, in inches per hour for duration equal to time of concentration  
c = runoff coefficient expressing the ratio of rate of runoff to rate of rainfall  
a = area of watershed in acres~~

~~5.4.10 The average rainfall intensity in inches per hour shall be obtained from Exhibit E (See Appendix).~~

~~5.4.11 The percentages of roofs and pavements shall be based upon the following:~~

	<u>Roof and Pavement (percent)</u>
Residential lot size 30,000 ft <sup>2</sup> or less	24
Residential—1 acre	24
Residential—2 acres	46
Business	70
Industrial	65

~~5.4.12 The runoff coefficients are:~~

Roof and pavement areas	0.90
Park, lawn and meadows	0.30*
Wooded areas	0.20*
Urban built-up areas	0.90

~~\*land has over 10% slope, these values shall be increased by 0.10.~~

~~5.4.13 Inlet time shall be 20 minutes except along existing brook courses, where periods of 30 minutes or longer shall be used. The time of flow is estimated by standard hydraulic flow formulae.~~

~~5.4.14 All drainage pipes shall: a) be either Class IV reinforced concrete pipe or smooth walled corrugated plastic pipe (CPP); b) have a minimum diameter of 12 inches; and c) have at least 2 feet of appropriate cover. For drainage pipes located under roadways, there shall be at least 2 feet of appropriate cover below subgrade for Class IV reinforced concrete pipe and at least 2.5 feet (but 3 feet is encouraged and may be required under certain circumstances) of appropriate cover below subgrade for~~



~~CPP. In general, they shall be designed to flow full with the hydraulic gradient at the crown. In determining the capacity of concrete drainage pipes, the Manning formula shall be used, with the coefficient of friction "n" equal to 0.013. The minimum velocity at design flow shall be 2.5 fps and the maximum 12 fps, unless otherwise approved by the Board. Manhole invert "in" must be higher than invert "out" (0.10' minimum drop).~~  
[16]

~~5.4.15 In a subdivision with a closed drainage system, storm water runoff shall not be permitted to flow upon the surface for a longer distance than 300 feet before it enters the underground system. Catch basins shall be located on both sides of the roadway on continuous grades at intervals of not more than 300 feet, at all low points in the roadway, and near the corners of the roadway at intersecting streets.~~

~~5.4.16 Where public drainage systems exist with adequate reserve capacity, connection thereto may be made, subject to the approval of the City Engineer.~~

~~5.4.17 Where adjacent property is not subdivided, provision shall be made for extension of the drainage system.~~

~~5.4.18 Where existing drainage systems discharge onto the property being subdivided, provision shall be made for accepting that drainage into the proposed drainage system.~~

~~5.4.19 In a closed system, all catch basins shall be connected to the drainage system through manholes. Manholes shall be provided at all changes in alignment, grade or drain pipe size. The maximum distance between manholes shall not exceed 300 feet.~~

~~5.4.20 Private drains may be connected to the public storm water system if construction and materials are approved by the City Engineer. A plan of private drains shall be furnished to the City Engineer.~~

~~5.4.21 Private drains shall be so located on the lot and so constructed such that no seepage from any on-lot sewage disposal system shall enter the private drain.~~

~~5.4.22 In cases where earth, grass lined and stone paved open channels are used for minor roads in the Agricultural District, side slopes shall be designed to ensure soil stability and to provide for the safety of children. A typical channel section shall have a flat bottom and side slopes of one vertical on two horizontal with the top of the slope at least one foot higher than the design water surface. The maximum allowable design velocity shall be 3 fps in earth or grass lined channels, and 8 fps. in stone lined channels. A coefficient of friction "n" equal to 0.030 shall be used for both the earth and stone paved channels.~~

~~5.4.23 Headwalls, at least one foot larger at all points than the pipe, shall be placed on the upstream side where any open channel crosses under a street or proposed street.~~

~~5.4.24 Sod or stone or riprap shall be provided in the ditches where soil or velocity condition warrant protection from erosion. Energy dissipaters or check dams shall be placed every fifty feet in ditches where grade exceeds 5 percent.~~



~~5.4.25 Driveway culverts (12-inch minimum diameter) along streets shall extend 5 feet beyond both sides of driveway unless concrete headwalls are provided. It is the property owner's responsibility to provide stormwater ditches along driveways to protect roadways from water runoff. The property owner is responsible for maintenance and future replacement of a culvert under a driveway.~~

#### 5.4.1 References

The design and implementation of stormwater management systems shall be guided by the following documents, as appropriate. The requirements of the New Hampshire Stormwater Manual apply to all sites regardless of area of disturbance (alteration of terrain permits are required only for sites with at least 100,000 square feet of disturbance).

- a) Chapter 50 Stormwater Management and Erosion Control of the City of Rochester Code of Ordinances, most recent version.
- b) New Hampshire Department of Environmental Services, Alteration of Terrain Program, New Hampshire Stormwater Manual, Volume 2 Post Construction Best Management Practices Selection and Design, or most recent version. (<http://des.nh.gov/organization/divisions/water/stormwater/manual.htm>.)
- c) New Hampshire Department of Environmental Services, Alteration of Terrain Program, New Hampshire Stormwater Manual, Volume 3 Construction Phase Erosion and Sediment Controls, or most recent version.
- d) New Hampshire Department of Environmental Services, Env-Wt 900 Stream Crossing Guidelines, or most recent version. (<http://des.nh.gov/organization/commissioner/legal/rules/documents/env-wt900.pdf>)

#### 5.4.2 Miscellaneous Provisions

- (1) Refer to Chapter 50, Section 50.2, Figure 1 for the application and review process for Major Subdivision Review.
- (2) Low Impact Development (LID) site planning and design strategies must be used to the maximum extent practicable (MEP) in order to reduce the generation of the stormwater runoff volume for both new development and redevelopment projects. An applicant must document in writing why LID strategies are not appropriate if not used to manage stormwater.
- (3) Where there is a conflict in the Site Plan Regulations and Chapter 50, the latter holds precedent.

### **5.5 Water**

5.5.1 Public water mains shall be not less than 12 inches in nonresidential subdivisions and not less than eight inches in residential subdivisions except on short cross-connections of 500 feet or less, in which case they may be reduced to 6 inches.



# Proposed Changes to Site Plan Regulation - Section 13 “Stormwater Management”

These changes are proposed in order to make the Site Plan Regulations consistent with the proposed changes being made to Chapter 50 of the City Ordinances.

## **SECTION 13 - STORMWATER MANAGEMENT**

### **(A) References.**

The design and implementation of stormwater management systems shall be guided by the following documents, as appropriate. The requirements of the New Hampshire Stormwater Manual apply to all sites regardless of area of disturbance (alteration of terrain permits are required only for sites with at least 100,000 square feet of disturbance).

- (1) Chapter 50 Stormwater Management and Erosion Control of the City of Rochester Code of Ordinances, most recent version.
- (2) New Hampshire Department of Environmental Services, Alteration of Terrain Program, New Hampshire Stormwater Manual, Volume 2 Post Construction Best Management Practices Selection and Design, latest or most recent version.  
(<http://des.nh.gov/organization/divisions/water/stormwater/manual.htm>.)
- (3) New Hampshire Department of Environmental Services, Alteration of Terrain Program, New Hampshire Stormwater Manual, Volume 3 Construction Phase Erosion and Sediment Controls, latest or most recent version.
- ~~(4) All requirements of the NHDES Env-Wt 900 regarding the crossing of streams.~~
- (4) New Hampshire Department of Environmental Services, Env-Wt 900 Stream Crossing Guidelines, or most recent version.  
(<http://des.nh.gov/organization/commissioner/legal/rules/documents/env-wt900.pdf>)

### **(B) Miscellaneous provisions**

- ~~(1) Where a development is traversed by a watercourse or drainage way, the Planning Board may require a storm water easement or drainage right-of-way, measuring at least 25 feet in width.~~
- ~~(2) It is the policy of the City of Rochester to not require fences around drainage basins.~~
- ~~(3) In order to create a smooth and safe transition between newly graded areas and adjoining properties, there shall be no significant grading within 5 feet of any side or rear property line.~~
- ~~(4) The use of~~
- (1) Refer to Chapter 50, Section 50.2, Figure 1 for the application and review process for Major Site Plan Review, and to Figure 2 for Minor Site Plan Review.
- (2) Low Impact Development (LID) site planning and design strategies for must be used to the maximum extent practicable (MEP) in order to reduce the generation of the stormwater management is encouraged. LID is an alternative design approach that minimizes disturbance to the natural drainage patterns on the landscape, provides for high water quality discharge, and results in significant groundwater recharge. It reduces the amount of runoff volume for both new development and thus the need for irrigation. The techniques

include biofilters, raingardens, shallow swales, subsurface infiltration devices/drywells, and others.

- ~~(5) No additional burden may be placed on neighboring properties unless an easement is obtained from those property owners.~~
- ~~(6) If down gradient public drainage structures are not capable of handling the~~redevelopment projects. An applicant must document in writing why LID strategies are not appropriate if not used to manage~~stormwater runoff, the applicant may be required to upgrade such facilities at his/her own expense.~~
- (3) Where there is a conflict in the Site Plan Regulations and Chapter 50, the latter holds precedent.



