The Commonwealth of Massachusetts
Board of Building Regulations and Standards
Massachusetts State Building Code, 780 CMR

Building Permit Application To Construct, Repair, or Renovate a Dwelling Or Demolish a Building

FOR MUNICIPALITY USE
Revised Mar 2011

This Section For Official Use Only

Building Permit Number: _____ Date Applied: _____

Building Official (Print Name) _____ Signature _____ Date _____

SECTION 1: SITE INFORMATION

1.1 Property Address: _____

1.1a Is this an accepted street? yes_____ no_____

1.2 Assessors Map & Parcel Numbers

Map Number _____ Parcel Number _____

1.3 Zoning Information:

Zoning District _____ Proposed Use _____

1.4 Property Dimensions:

Lot Area (sq ft) _____ Frontage (ft) _____

1.5 Building Setbacks (ft)

Front Yard		Side Yards		Rear Yard	
Required	Provided	Required	Provided	Required	Provided

1.6 Water Supply: (M.G.L c. 40, §54)
Public ☐ Private ☐

1.7 Flood Zone Information:
Zone: ___ Outside Flood Zone? Check if yes☐

1.8 Sewage Disposal System:
Municipal ☐ On site disposal system ☐

SECTION 2: PROPERTY OWNERSHIP[1]

2.1 Owner[1] of Record:

Name (Print) _____ City, State, ZIP _____

No. and Street _____ Telephone _____ Email Address _____

SECTION 3: DESCRIPTION OF PROPOSED WORK[2] (check all that apply)

New Construction ☐ | Existing Building ☐ | Owner-Occupied ☐ | Repairs(s) ☐ | Alteration(s) ☐ | Addition ☐

Demolition ☐ | Accessory Bldg. ☐ | Number of Units_____ | Other ☐ Specify:_____

Brief Description of Proposed Work[2] –If Demolishing a Building, Give a Description of Future Proposed Use of Property: _____

SECTION 4: ESTIMATED CONSTRUCTION COSTS

Item	Estimated Costs: (Labor and Materials)	Official Use Only
1. Building	$	1. Building Permit Fee: $_____ Indicate how fee is determined:
2. Electrical	$	☐ Standard City/Town Application Fee
3. Plumbing	$	☐ Total Project Cost[3] (Item 6) x multiplier _____ x_____
4. Mechanical (HVAC)	$	2. Other Fees: $_____
5. Mechanical (Fire Suppression)	$	List: _____
6. **Total Project Cost:**	$	Total All Fees: $_____
		Check No. _____ Check Amount: _____ Cash Amount: _____
		☐ Paid in Full ☐ Outstanding Balance Due: _____

SECTION 5: CONSTRUCTION SERVICES

5.1 Construction Supervisor License (CSL)

Name of CSL Holder

No. and Street

City/Town, State, ZIP

Telephone Email address

License Number Expiration Date

List CSL Type (see below) _____

Type	Description
U	Unrestricted (Buildings up to 35,000 cu. ft.)
R	Restricted 1&2 Family Dwelling
M	Masonry
RC	Roofing Covering
WS	Window and Siding
SF	Solid Fuel Burning Appliances
I	Insulation
D	Demolition

5.2 Registered Home Improvement Contractor (HIC)

HIC Company Name or HIC Registrant Name

No. and Street

City/Town, State, ZIP Telephone

HIC Registration Number Expiration Date

Email address

SECTION 6: WORKERS' COMPENSATION INSURANCE AFFIDAVIT (M.G.L. c. 152. § 25C(6))

Workers Compensation Insurance affidavit must be completed and submitted with this application. Failure to provide this affidavit will result in the denial of the Issuance of the building permit.

Signed Affidavit Attached? Yes ..... ☐ No ..... ☐

SECTION 7a: OWNER AUTHORIZATION TO BE COMPLETED WHEN OWNER'S AGENT OR CONTRACTOR APPLIES FOR BUILDING PERMIT

I, as Owner of the subject property, hereby authorize _____ to act on my behalf, in all matters relative to work authorized by this building permit application.

Owner's Name - Print and Signature Date

SECTION 7b: OWNER[1] OR AUTHORIZED AGENT DECLARATION

By entering my name below, I hereby attest under the pains and penalties of perjury that all of the information contained in this application is true and accurate to the best of my knowledge and understanding.

Owner or Authorized Agent's Name - Print and Signature Date

NOTES:

1. An Owner who obtains a building permit to do his/her own work, or an owner who hires an unregistered contractor (not registered in the Home Improvement Contractor (HIC) Program), will ***not*** have access to the arbitration program or guaranty fund under M.G.L. c. 142A. Other important information on the HIC Program can be found at www.mass.gov/oca Information on the Construction Supervisor License can be found at www.mass.gov/dps

2. When substantial work is planned, provide the information below:

Total floor area (sq. ft.) _____ (including garage, finished basement/attics, decks or porch)

Gross living area (sq. ft.) _____ Habitable room count _____

Number of fireplaces _____ Number of bedrooms _____

Number of bathrooms _____ Number of half/baths _____

Type of heating system _____ Number of decks/ porches _____

Type of cooling system _____ Enclosed _____ Open _____

3. "Total Project Square Footage" may be substituted for "Total Project Cost"

The Commonwealth of Massachusetts
Department of Industrial Accidents
1 Congress Street, Suite 100
Boston, MA 02114-2017
www.mass.gov/dia

Workers' Compensation Insurance Affidavit: General Businesses.
TO BE FILED WITH THE PERMITTING AUTHORITY.

Applicant Information **Please Print Legibly**

Business/Organization Name: _____

Address: _____

City/State/Zip: _____ Phone #: _____

Are you an employer? Check the appropriate box:

1. ☐ I am a employer with _____ employees (full and/or part-time).*
2. ☐ I am a sole proprietor or partnership and have no employees working for me in any capacity. [No workers' comp. insurance required]
3. ☐ We are a corporation and its officers have exercised their right of exemption per c. 152, §1(4), and we have no employees. [No workers' comp. insurance required]**
4. ☐ We are a non-profit organization, staffed by volunteers, with no employees. [No workers' comp. insurance req.]

Business Type (required):

5. ☐ Retail
6. ☐ Restaurant/Bar/Eating Establishment
7. ☐ Office and/or Sales (incl. real estate, auto, etc.)
8. ☐ Non-profit
9. ☐ Entertainment
10. ☐ Manufacturing
11. ☐ Health Care
12. ☐ Other _____

*Any applicant that checks box #1 must also fill out the section below showing their workers' compensation policy information.
**If the corporate officers have exempted themselves, but the corporation has other employees, a workers' compensation policy is required and such an organization should check box #1.

I am an employer that is providing workers' compensation insurance for my employees. Below is the policy information.

Insurance Company Name: _____

Insurer's Address: _____

City/State/Zip: _____

Policy # or Self-ins. Lic. # _____ Expiration Date: _____

Attach a copy of the workers' compensation policy declaration page (showing the policy number and expiration date).

Failure to secure coverage as required under Section 25A of MGL c. 152 can lead to the imposition of criminal penalties of a fine up to $1,500.00 and/or one-year imprisonment, as well as civil penalties in the form of a STOP WORK ORDER and a fine of up to $250.00 a day against the violator. Be advised that a copy of this statement may be forwarded to the Office of Investigations of the DIA for insurance coverage verification.

I do hereby certify, under the pains and penalties of perjury that the information provided above is true and correct.

Signature: _____ Date: _____

Phone #: _____

Official use only. Do not write in this area, to be completed by city or town official.

City or Town: _____ Permit/License # _____

Issuing Authority (circle one):
1. Board of Health 2. Building Department 3. City/Town Clerk 4. Licensing Board 5. Selectmen's Office
6. Other _____

Contact Person: _____ Phone #: _____

Town of Dighton, Massachusetts

TAX STATUS APPLICATION FORM

In order to process your application request efficiently and promptly we ask that you provide us with the following information. **One form must be filled out completely for each parcel(s) owned by you and any other parties involved.**

Date of request:_____
Requested by:
Name: _____
Address: _____
Telephone Number: _____
Assessed Owner of Building & Land:_____
Current Owner: _____
(If different from the Assessed owner building & land)

Personal Property Owner:_____
Business name
Personal Property Bill #_____

Property Address: _____

To Be *Completed* and *Initialed* by the Assessors Office
Chapter Land ☐**Yes** ☐ **No**
Assessor's Reference (M&L):___-____-_____
If a developer or contractor is involved in this project then this section must be completed.
Contractor/Business Name _____Business ID_____
Business Address _____Phone Number_____
Contact person _____
(SIGNATURE REQUIRED TO COMPLETE TAX STATUS)
I hereby attest that all the information provided herein is true and complete to the best of my knowledge.
_____Petitioner

For Office use only: _____
Tax Office Initials_____
Real Estate Amt. Due_____
Personal Property Amt. Due_____
Motor Vehicle Amt. Due_____
Tax Title Amt. Due_____
Sewer Amt. Due_____

Please Note: You must contact the office that is requesting the Tax Status Report for any questions or information relating to this form.

DISTRICT OR USE	Min. Lot Area (sq. ft.)	Min. Lot Frontage (ft.)	Min. Front Setback (ft.)	Min. Side Yard (ft.)	Min Rear Yard (ft.)	Max. Bldg. Coverage (% of lot)	Min. Distance betw. bldgs. (ft.)	Max. Bldg. Ht. (ft.)	Max. # of Stories	Max. Ht. of Projections (ft.)	Other Requirements
Single family dwelling, all districts	35,000	175	55	15	15	25	10	35	2.5	40	Lots without water or sewer shall have a min. area of 43,560 sq. ft. and 250 ft. of frontage
Other permitted uses in Residence District	35,000	175	55	15	15	25	10	35	2	65	same as above
Other permitted uses in Open Recreation District	35,000	175	55	15	15	15	10	35	2.5	40	
Other permitted uses in Business District	18,750	150	75	30	30	30	10	35	1	65	
Other permitted uses in Industrial District	60,000	250	100	100	75	35	10	65	any	65	Side yard of 50 ft. required when abutting land zoned Ind.

TOWN OF DIGHTON
BUILDING INSPECTOR
979 SOMERSET AVENUE
DIGHTON, MA 02715
508-669-4524

MEMO

FROM: BUILDING COMMISSIONER

DATE: MAY 1, 2013

RE: BUILDING & ELECTRICAL PERMITS

Please be advised the original Building and Electrical Permit Cards will be required to be displayed on site and visible from the street once the building is weather tight. Failure to have the original Permit Card for Inspector signatures on site will result in a failed inspection.

Please note: the re-inspection fee will be required to be paid in the Office prior to a re-inspection request.

TOWN OF DIGHTON
BUILDING COMMISSIONER

1111 SOMERSET AVENUE
DIGHTON, MA 02715
774-872-0944

REQUIRED DEPARTMENTAL SIGN-OFFS FOR NEW CONSTRUCTION & SOLAR PROJECTS

ADDRESS:_____

* Board of Selectmen
Contact Information:
Leonard E. Hull, Jr. – Telephone# 774-872-0912 Signature/Date

* Tax Collector
Contact Information:
Paul Reynolds – Telephone# 774-872-0922 Signature/Date

* Board of Health
Contact Information:
Todd Pilling – Telephone# 774-872-0943 Signature/Date

* Zoning Board of Appeals – **If Applicable – By Board of Appeals Permit Only**
Contact Information:
Kerry Easterday – Telephone# 774-872-0923 Signature/Date

* Planning Department – **If Applicable – Commercial or By Planning Board Permit Only**
Contact Information:
Kerrie Easterday – Telephone# 774-872-0923 Signature/Date

* Assessors' Department
Contact Information:
Stephanie Schecter – Telephone# 774-872-0927 Signature/Date

* Conservation
Contact Information:
Lisa Caledonia – Telephone# 774-872-0946 Signature/Date

* Sewer Department
Contact Information:
Dianne Curtis – Telephone# 774-872-0917 Signature/Date

* Electrical Inspector
Contact Information:
Thomas Ross – Telephone# 774-872-0944 Signature/Date

* Fire Department
Contact Information:
Eric Gagnon – Telephone# 774-872-0702 Signature/Date

* Plumbing Department/Commercial Only
Contact Information:
Raymond Hague – Telephone# 774-872-0944 Signature/Date

* North Dighton Water Department
Contact Information:
Dick Treacy - Telephone# 508-822-1820 Signature/Date

* Dighton Water Department
Contact Information:
Derek Lach – Telephone# 508-824-9390 Signature/Date

****PLEASE NOTE SIGNATURE REQUIRED ONLY IF APPLICABLE****

TOWN OF DIGHTON
BUILDING INSPECTOR

1111 SOMERSET AVENUE
DIGHTON, MA 02715

DRIVEWAY PERMIT

DATE: _____

NAME: _____

PROPOSED ADDRESS: _____

CONTACT PHONE NUMBER: _____

ATTACH A COPY OF THE SITE PLAN TO THIS DRIVEWAY PERMIT APPLICATION

SIGNATURE OF APPLICANT

_____

OFFICAL USE ONLY:

APPROVED AS SHOWN ON SITE PLAN
OR
APPROVED WITH THE FOLLOWING CONDITIONS.

_____ TOWN NOT RESPONSIBLE FOR ROAD SIGNAGE, BLIND DRIVE ETC.

_____ NATURAL FLOW OF WATER CANNOT BE ALTERED TO SEND FLOW INTO THE STREET.

_____ NO WATER MAY BE PUMPED OR PIPED INTO THE STREET.

_____ INSTALL PIPE UNDER DRIVEWAY AT ROAD

_____ DO NOT DISTURB TOWN PROPERTY, NO FILL, OR REGRADING

_____

TOM FERRY – 774-218-5339
HIGHWAY SUPERINTENDENT

TOWN OF DIGHTON
BUILDING INSPECTOR
979 SOMERSET AVENUE
DIGHTON, MA 02715
Tel# - 508-669-4524
Fax# - 508-669-5027

January 2, 2018

Attn: All Contractors and Homeowners

Re: High Efficiency HVAC Units

Due to changes throughout the years regarding energy efficiency, most heating and ventilating equipment has increased both in popularity and efficacy. With high efficient equipment having an efficiency rating of 90% and higher, a common by-product of combustion is condensate in the exhaust stream. That is the reason you see HVAC equipment exhausted through PVC piping instead of conventional steel venting. With a typical unit creating just under a gallon of liquid per hour of run time, you can imagine that there is a significant amount of liquid discharged in a 24 hour period. This situation can create a problem when units are located in spaces that are not insulated, attics in particular can pose a problem when condensate has a potential to freeze. Walk-out style basements with uninsulated stick framed walls have also have posed a problem. These situations can cause property and/or equipment damage, especially since homes have become extremely tight and uninsulated spaces are no longer affected by heat losses from the living areas of the interior of the home.

Therefore we are requiring that each HVAC unit located in any uninsulated area be supported by documentation from the manufacturer specifically indicating such installation is allowed. We will only accept a manufacturer's letter or the manufacturers installation instructions, either method must be specific to the installed unit and indicate make and model of the equipment.

Thanks for your anticipated cooperation, proper building planning is necessary, equipment will not be allowed to be installed in these areas unless manufacturer support is submitted in writing.

James D Aguiar, Jr.

Building Commissioner

Dighton Board of Health
Sanitation Facilities Regulation

1. **Purpose.**
   The purpose of this regulation is to provide adequate sanitation facilities for all employees that work where onsite septic or sewer and related facilities are not currently available.

2. **Required facilities.**
   A. Any project or outdoor affair which requires work without bathroom facilities for a period of four hours or longer per day shall provide sanitary facilities as approved by the Board of Health.

   B. The sanitary facility shall be delivered, maintained, and picked up by a Town of Dighton permitted septic hauler.

   C. The sanitary facilities shall remain on-site for the duration of the project or outdoor affair and be easily accessible.

   D. The sanitary facility shall be serviced, maintained and well supplied to provide a clean space with the necessary accessories to provide proper use of the unit.

   E. The sanitary facility shall be a minimum of 10 feet from any property line and shall not cause a nuisance to abutting properties.

   F. Hand Sanitizer shall be supplied with all temporary sanitary facilities.

   G. All portable toilets utilized in conjunction with the preparation, service or consumption of food for a temporary food service permit shall be equipped with , or shall be accompanied by, an approved hand washing / hand sanitizing station.

3. **Violations and penalties.**
   Failure to comply with these regulations shall be subject to a fine of $100. Each day in violation shall constitute a separate offense.

4. **Effective Date:**
   This regulation shall take effect on January 1, 2019

Thomas J. Pires

Matthew Tanis

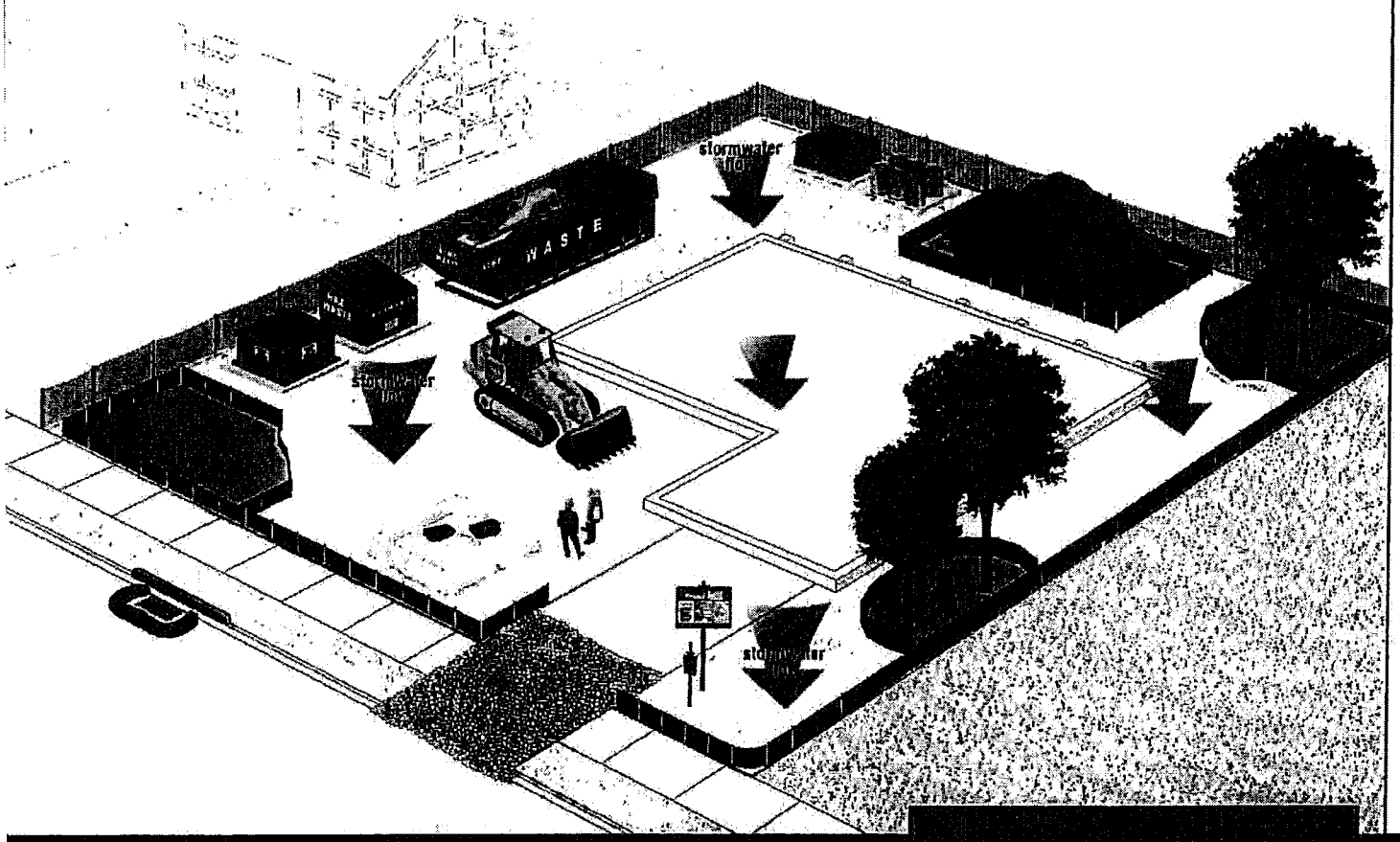
Kevin Bernardo

A TRUE COPY ATTEST
Susana Medeiros
TOWN CLERK

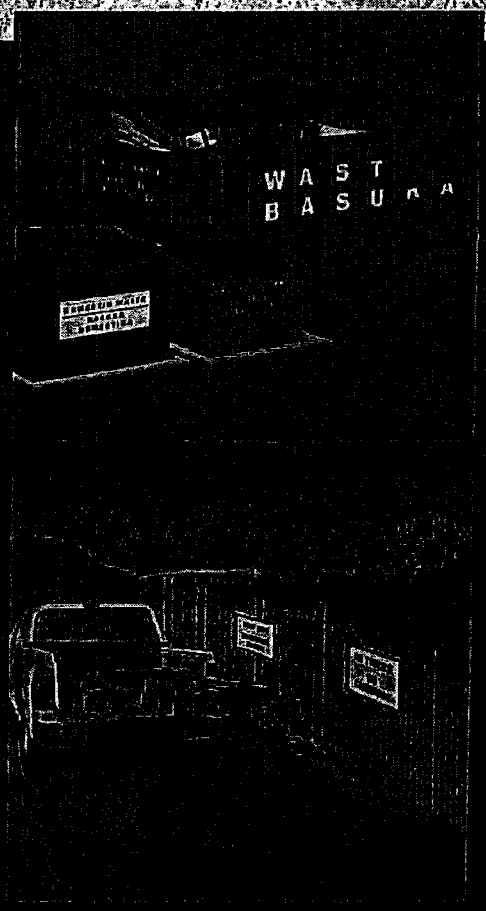
RECEIVED
2018 DEC 24 AM 10: 18
TOWN CLERK
DIGHTON, MA
BY

EPA 830-F-15-001
December 2015

United States Environmental Protection Agency



Stormwater Pollution Prevention for Small Residential Construction Sites



EPA's Construction General Permit (CGP) Small Residential Lot Stormwater Pollution Prevention Plan (SWPPP) Template

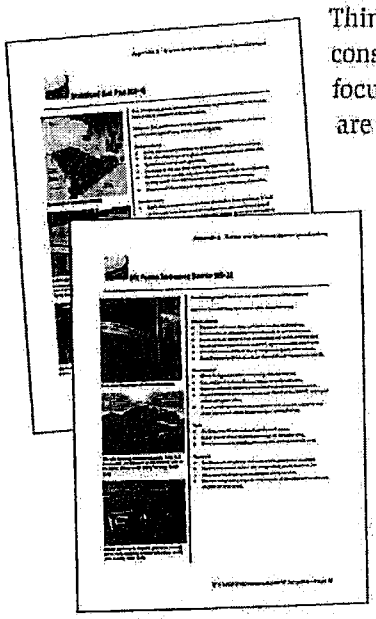
Who needs to seek coverage under the EPA CGP?

Stormwater discharges from construction activities that disturb one or more acres, or smaller sites disturbing less than one acre that are part of a common plan of development or sale, are regulated under the National Pollutant Discharge Elimination System (NPDES) stormwater permitting program. Prior to the start of construction, construction operators must obtain coverage under an NPDES permit, which is administered either by the state (if it is authorized to operate the NPDES program) or EPA. Where EPA is the permitting authority, operators may seek coverage under the EPA CGP. The CGP requires operators of construction sites to meet effluent limits (i.e., through the implementation of erosion and sediment controls) and requires operators to develop a SWPPP detailing erosion and sediment controls and pollution prevention measures that will be implemented to meet the requirements of the CGP.

What is the Small Residential Lot SWPPP Template?

The Small Residential Lot SWPPP Template is designed to help operators of small residential sites develop a streamlined SWPPP that meets the minimum requirements of EPA's CGP. This simplified template does not change, relax, or modify any existing conditions in the CGP, including the requirement to submit a Notice of Intent (NOI) for permit coverage.

How does it work?



Think of the Small Residential Lot SWPPP Template as a 1040EZ tax form for small construction sites. All of the same requirements apply, but compliance options are focused on only those controls that apply to small residential lot construction, and they are presented in a simplified, user-friendly format.

The Small Residential Lot SWPPP Template streamlines SWPPP development by providing a simplified menu of erosion and sediment control and pollution prevention practices that operators can select from to complete a SWPPP consistent with the minimum requirements in the CGP.

Easy to Use BMP Menu

The Small Residential Lot SWPPP Template provides operators with a walk-through menu of typical erosion and sediment control and pollution prevention practices (i.e., Best Management Practices or BMPs) appropriate for small construction sites.

Illustrated Appendix with Pull-Out BMP Spec Sheets

Clear, step-by-step BMP spec sheets for each practice you choose are provided in an illustrated appendix that you may edit based on your site-specific conditions.

Does my project qualify for EPA's Small Residential Lot SWPPP Template?

In order to use EPA's streamlined template, your site must meet a series of criteria, including:

- ✔ **Projects must disturb less than one acre of land;**
- ✔ **Projects must be located outside of sensitive areas (areas with endangered species concerns, historic preservation issues, wetlands, etc.);**
- ✔ **Projects must not cause disturbance within 50 ft of a water of the U.S.;**
- ✔ **Projects must not require the use of chemical treatment for stormwater; and**
- ✔ **Projects must not disturb steep slopes.**

To access EPA's streamlined Small Residential Lot SWPPP Template, visit:
www.epa.gov/national-pollutant-discharge-elimination-system-npdes/stormwater-discharges-construction-activities

10 Steps to Stormwater Pollution Prevention on Small Residential Construction Sites

Stormwater management on small residential construction sites need not be complicated.

1 Protect Any Areas Reserved for Vegetation or Infiltration and Preserve Existing Trees
If you will be installing infiltration-based features such as rain gardens or bioswales, make sure these areas are designated as off limits to avoid compaction.

Save time and money by preserving existing mature trees during construction. Preserving mature trees minimizes the amount of soil that needs to be stabilized once construction is complete, and minimizes the amount of runoff during and after construction activity.

2 Stockpile Your Soil
EPA's CGP requires operators to preserve native topsoil on site unless infeasible and protect all soil storage piles from run-on and runoff. For smaller stockpiles, covering the entire pile with a tarp may be sufficient.

3 Protect Construction Materials from Run-On and Runoff
At the end of every workday and during precipitation events, provide cover for materials that could leach pollutants.

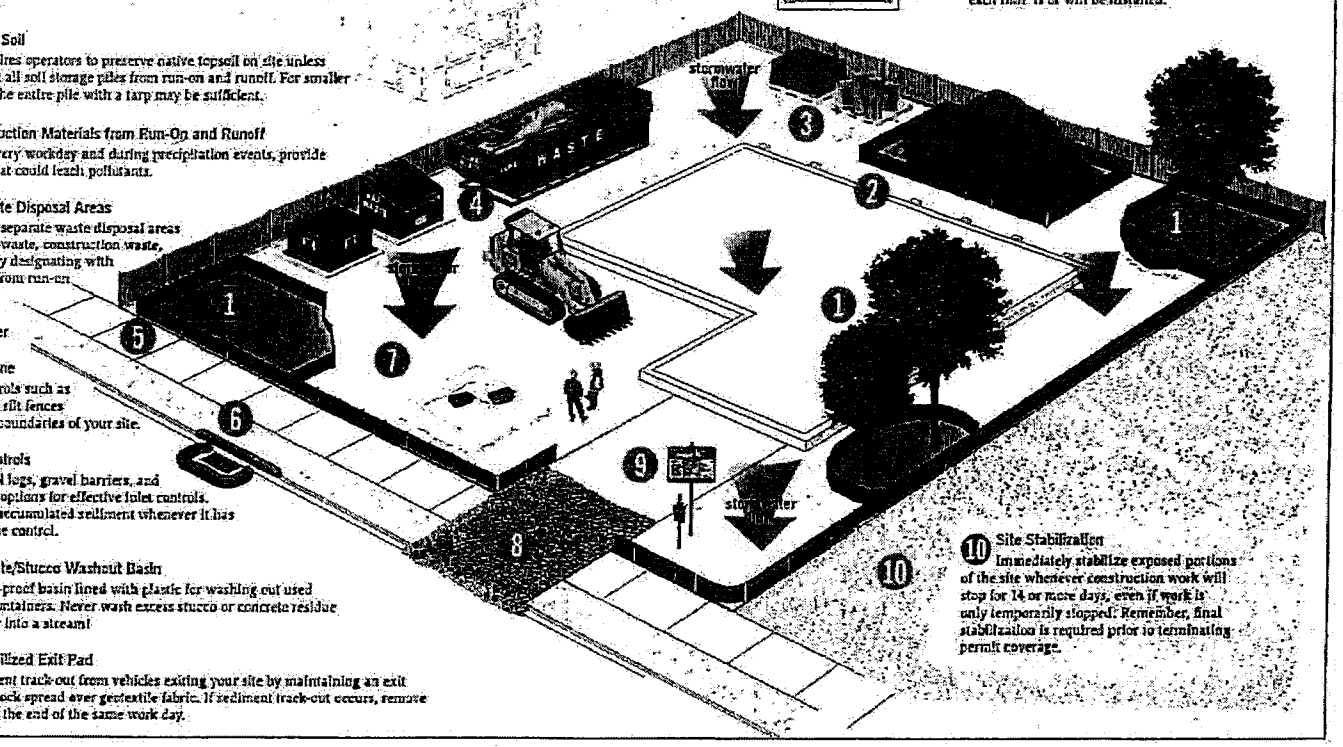
4 Designate Waste Disposal Areas
Clearly identify separate waste disposal areas on site for hazardous waste, construction waste, and domestic waste by designating with signage, and protect from run-on and runoff.

5 Install Perimeter Controls on Downhill Lot Line
Install perimeter controls such as sediment filter logs or silt fences around the downhill boundaries of your site.

6 Install Inlet Controls
Sediment control logs, gravel barriers, and sand or rock bags are options for effective inlet controls. Make sure to remove accumulated sediment whenever it has reached halfway up the control.

7 Install a Concrete/Stucco Washout Basin
Designate a leak-proof basin lined with plastic for washing out used concrete and stucco containers. Never wash excess stucco or concrete residue down a storm drain or into a stream!

8 Maintain a Stabilized Exit Pad
Minimize sediment track-out from vehicles exiting your site by maintaining an exit pad made of crushed rock spread over geotextile fabric. If sediment track-out occurs, remove deposited sediment by the end of the same work day.



9 Post Your NOI and Keep an Up-to-Date Copy of Your SWPPP on Site
Post a sign or other notice of your permit coverage, including your NPDES tracking number and site contact information. Also, keep a copy of your complete and up-to-date SWPPP on site and easily accessible, including site maps showing where each BMP is or will be installed.

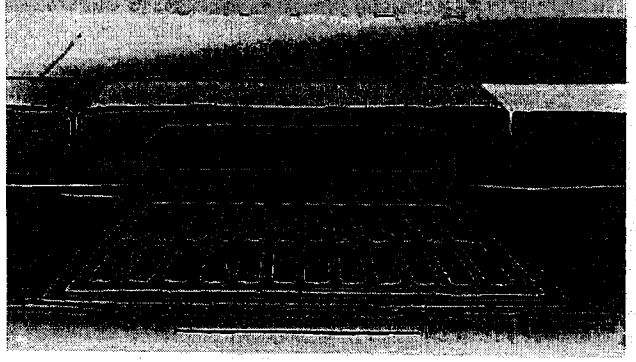
10 Site Stabilization
Immediately stabilize exposed portions of the site whenever construction work will stop for 14 or more days, even if work is only temporarily stopped. Remember, final stabilization is required prior to terminating permit coverage.

What Is Stormwater Pollution?

Stormwater is rain or snowmelt that flows over the ground. As stormwater runs over impervious surfaces, like driveways, roofs, sidewalks, and streets, it can pick up pollutants that have collected on these surfaces—such as motor oil, fertilizers, pesticides, and trash—and deposit them into catch basins.

Stormwater flows into the storm drain system and is discharged, without treatment, into nearby waterways, including the Charles, Neponset, and Mystic rivers, and Boston Harbor.

Property owners are responsible for all pollutants leaving their property, including pollutants in stormwater. Here are some things you and your employees can do to prevent stormwater pollution.



tributed by _____

Property Maintenance Tips

- Sweep outdoor areas daily for trash and litter control. Do *not* dispose of trash in catch basins.
- Provide trash receptacles in highly visible locations and outdoor receptacles for cigarette butts, particularly in employee break areas.
- Keep the area surrounding your dumpster clean and the lid closed. Make sure the clean-out plug is properly secured to prevent leaking.
- If you must hose down an area, don't use detergents or chemical cleaners to wash sidewalks or driveways.
- Dispose of all waste wash water in a janitorial sink or a floor drain that is properly connected to the sewer system. Never pour wash water onto a parking lot, alleyway, sidewalk, or street, as these areas ultimately drain to local waterways.

How to Dispose of Hazardous Waste

Never dump hazardous waste—including chemicals, automotive fluids, paint, and commercial waste—**into catch basins**. Dispose of hazardous waste properly.

If you are unsure as to how to dispose of a certain material, consult the manufacturer of the product or call the Massachusetts Hazardous Waste Hotline for Businesses at 617-292-5898.

Reminders for Restaurants and Food Establishments

- Properly maintain any grease traps in your establishment, in accordance with Boston Water and Sewer Commission (BWSC) regulations.
- Dispose of cooking oil and grease properly either in a receptacle designed to contain grease or by hiring a waste hauler.
- Do not pour oil and grease into sinks, floor drains, catch basins, or onto the ground.
- Wash garbage cans, floor mats, and kitchen equipment in designated wash areas that drain to the sewer system.

Help Prevent Stormwater Pollution

- Don't dump into catch basins.
- Keep property clear of trash and debris.
- Keep dumpster area clean.
- Provide trash receptacles for customers.
- Dispose of wash water properly.
- Stencil storm drains on your property.

Don't Dump!

DON'T DUMP
DRAINS TO BOSTON HARBOR

Protect Local Waterways.

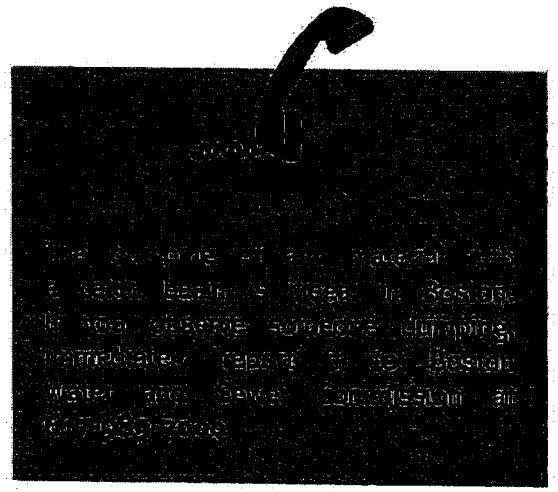
Storm Drain Stenciling Program

Maintenance and cleaning of catch basins not located on a public street are the responsibility of the property owner. No material should ever be dumped into a catch basin.

To help to educate employees and discourage illegal dumping, property owners may wish to stencil their catch basins with a "Don't Dump" message. BWSC will loan "Don't Dump" stencils to interested business owners.

For owners planning new or resurfacing of existing parking lots, permanent "Don't Dump" castings are available for purchase. For further information, contact the Commission's Communications Department at 617-989-7000.

When It Rains, It Drains.
Protect Our Local Waterways.



tributed by _____

Boston Water and Sewer Commission

Community Services Department
617-989-7000

980 Harrison Avenue
Boston, MA 02119-2540
www.bwsc.org

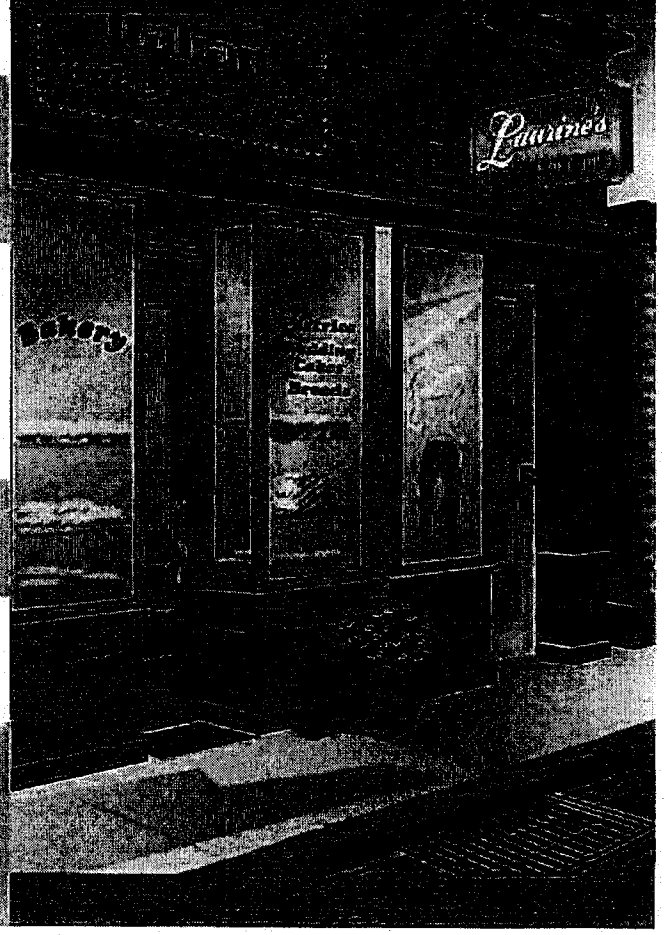
Martin J. Walsh
Mayor, City of Boston

Henry F. Vitale
Executive Director/CFO and Treasurer

2014

Boston Water and Sewer Commission

Stormwater Management for Small Businesses



Pollution Prevention for Businesses

How Businesses Can Use Pollution Prevention for a Cleaner

<insert Town Name>

What is Pollution Prevention?

Pollution prevention (P2) is a combination of activities that reduce or eliminate the amount of possible chemical contaminants at the business or prevent these chemicals from entering the environment or waste stream.

A successful Pollution Prevention program will consider how to use raw materials, water energy, and other resources more efficiently, how to substitute less harmful substances for more hazardous ones, and examine whether toxic substances can be eliminated from the business.

> ***P2 can best be accomplished using these three methods:***
>
> - ***source reduction***
> - ***reuse/recycling***
> - ***energy recovery.***

Source reduction is the preferred method of P2 and allows for the most significant improvements in environmental protection by avoiding the generation of waste in the first place. Reuse/ recycling and energy recovery are also good tools to reduce potential environmental problems, and also can be used to lower the cost of business.

Why Is Pollution Prevention Important?

Any chemicals or wastes at your business that are exposed to rainwater will run off into the soil or into our town's storm drains, then into nearby lakes and streams.

Our municipal stormwater system was originally designed to carry runoff efficiently away from roads and buildings, then to deliver that runoff to ponds, lakes and streams. Since our storm drain system does not have any built-in treatment, whatever gets into our storm drains gets into our environment, with the potential to damage our local ponds and streams.

That's why P2 is so important: it reduces the amount of pollution going to our local waterways.

What Are the Business Benefits of Using Pollution Prevention?

P2's economic benefits include greater business efficiency, increased competitiveness, and reduced costs for regulatory monitoring and compliance. By preventing the generation of waste, P2 can also reduce or eliminate long term liabilities, clean-up, storage, and disposal costs.

And by preventing pollution there is a greater likelihood that your company will be in compliance with local, state, and federal statutes.

How Can A Business Start Using Pollution Prevention?

P2 for your business can be accomplished through methods such as source reduction, reuse/recycling, and energy recovery. While each business is different, each of these methods can be implemented anywhere.

Source Reduction

- Incorporating environmental considerations into the designing of products, buildings, and manufacturing systems enables them to be more resource-efficient.
- Rethinking daily operations and maintenance activities can help industries eliminate wasteful management practices that increase costs and cause pollution.
- Controlling the amount of water used in cleaning or manufacturing can produce less wastewater.
- Re-engineering and redesigning a facility or certain operation can take advantage of newer, cleaner and more efficient process equipment.
- Buying the correct amount of raw material will decrease the amount of excess materials that are discarded (for example, paints that have a specified shelf life).

Reuse/Recycling

- Using alternative materials for cleaning, coating, lubrication, and other production processes can provide equivalent results while preventing costly hazardous waste generation, air emissions, and worker health risks.
- Using "green" products decreases the use of harmful or toxic chemicals (and are more energy efficient than other products).
- One company's waste may be another company's raw materials. Finding markets for waste can reduce solid waste, lessen consumption of virgin resources, increase income for sellers, and provide an economical resource supply for the buyers.

Energy Recovery

- Using energy, water, and other production inputs more efficiently keeps air and water clean, reduces emissions of greenhouse gases, cuts operating costs, and improves productivity.

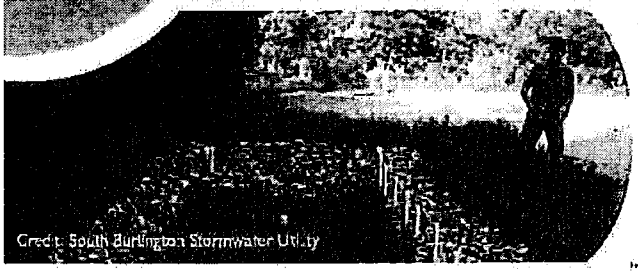
What Are the Environmental Benefits of Using Pollution Prevention?

Using P2 can benefit your community both environmentally and economically. P2's health and environmental benefits include cleaner air and water, fewer greenhouse gas emissions, less toxic waste to manage, less solid waste going to landfills, greater workplace safety, and better stewardship of natural resources.

This can also lead to a reduction in workplace exposures to hazardous materials, which can positively affect your workers' health and productivity.

What you can do as a Developer

U.S. EPA | STORMWATER OUTREACH AT EPA NEW ENGLAND


Credit: South Burlington Stormwater Utility

STORMWATER *is a leading cause of poor water quality. Rain or melted snow runs down driveways, sidewalks and streets carrying oil, dirt and other pollutants into nearby waterways. Polluted runoff, which can cause erosion and flooding, runs into waterways and degrades plants, fish, shellfish and other wildlife. In water used for recreation, the runoff can lead to illness, and people who eat contaminated fish can also become sick. Untreated stormwater can also contaminate drinking water sources.*

NTRO:

evelopment has sprawled across New England over the past few decades, consuming farms and forests two times fast as the population is growing. Past development practices have created more roads, driveways and roofs so at water that used to seep into the ground now runs across pavement, picking up chemicals and pollutants. This ormwater then flows into nearby waterways, both polluting them and scouring their banks. Local zoning often intentionally encourages sprawl, but this is beginning to change. Some developers are leading the way with better – d often cheaper – ways to develop. Here are some of their practices:

ISE INNOVATIVE EVELOPMENT PRACTICES:

elect your site wisely — Developing in an already-eveloped area can lower infrastructure costs because wer, water, utilities and roads may be available.

hoose the areas of your site to develop carefully — You n avoid putting the development where it will have an fect on important natural resources. In addition, you n cluster buildings and leave at least half of the property ndeveloped so that it can handle rainwater through natu-l resources. This will reduce costs and add to open space.

se Low Impact Development (LID) practices — Roads, rking lots and other non-porous areas are the larg-t contributors to stormwater runoff. Generally the s porous the area, the worse the condition of nearby aterways. Low Impact Development allows devel-ed land to handle rain more like how it was handled fore the site was developed. The goal is to mimic a e's predevelopment hydrology by infiltrating, filtering, oring, evaporating and detaining stormwater runoff.

ddress barriers early — Developers interest-in LID are often concerned about cost, cold eather, drinking water and public safety. Many of ese concerns need not represent barriers:

- **Costs** — An EPA study found grading, landscaping, paving and infrastructure costs were lower for LID than conventional development. These low-impact development techniques can also eliminate or reduce the size of stormwater systems, leaving more open space for buildable lots.

- *Cold weather* — Most LID stormwater approaches monitored by the University of New Hampshire Stormwater Center worked well year-round. Porous pavement in particular was found to be especially effective in winter.

- *Drinking water* — The UNH Stormwater Center found that filtering stormwater through infiltration practices removes pollution, and on occasion, can reduce contaminant levels beyond requirements. Furthermore, infiltration replenishes groundwater for future use. In certain areas, including those where groundwater is a source of drinking water or those identified as sensitive groundwater areas, infiltration without treating the water first may not be appropriate. In some cases, stormwater infiltration may be regulated as well under the Safe Drinking Water Act. Developers should contact state or regional authorities before they use infiltration practices.

- *Public safety* — Studies have shown narrower streets can provide ample access, parking and circulation for residents and emergency vehicles. Some studies have shown that narrower streets are associated with less traffic, slower speeds and fewer accidents.

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www.epa.gov/region1/

EPA TOLL-FREE CUSTOMER SERVICE
1-888-EPA-7341

LEARN MORE AT:
www.epa.gov/region1/topics/water/stormwater.html

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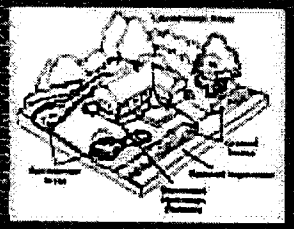
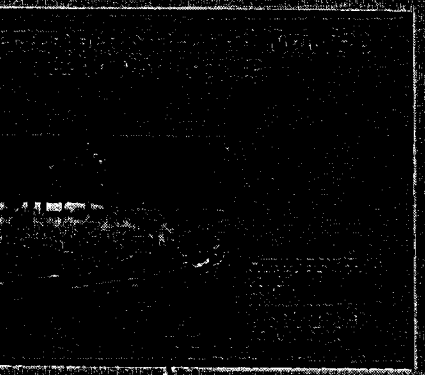
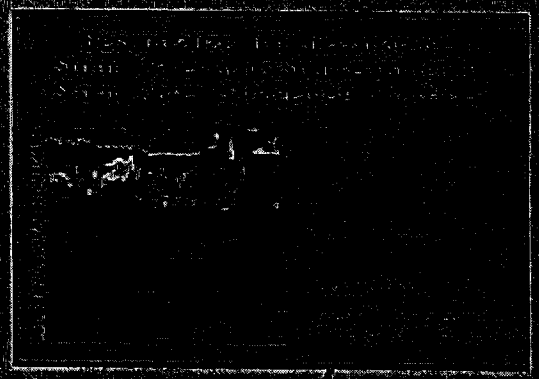
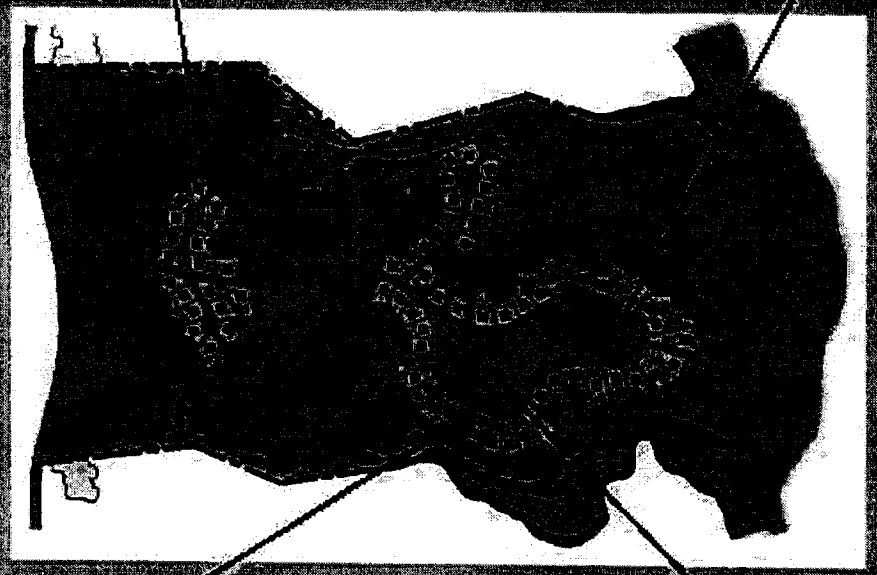
November 2010

LID Site Planning and Design Concepts

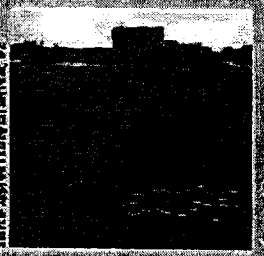








Protect and Incorporate Natural Systems as Design Elements

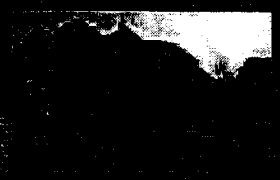


Wetland System
Pattie Cousins
Geneva, IL

stributed by _____

What is Low Impact Development (LID)?

Ever wish you could simultaneously lower your site infrastructure costs, protect the environment, and increase your project's marketability? With LID techniques, you can. LID is an ecologically friendly approach to site development and storm water management that aims to mitigate development impacts to land, water, and air. The approach emphasizes the integration of site design and planning techniques that conserve the natural systems and hydrologic functions of a site.



Residential Lot with Bioretention

Somerset Development Project, Prince George's County, MD

LID Benefits

In addition to the practice just making good sense, LID techniques can offer many benefits to a variety of stakeholders.

Developers

- Reduce land clearing and grading costs
- Potentially reduce infrastructure costs (streets, curbs, gutters, sidewalks)
- Reduce storm water management costs
- Potentially reduce impact fees and increase lot yield
- Increase lot and community marketability

Municipalities

- Protect regional flora and fauna
- Balance growth needs with environmental protection
- Reduce municipal infrastructure and utility maintenance costs (streets, curbs, gutters, sidewalks, storm sewer)
- Increase collaborative public/private partnerships

Environment

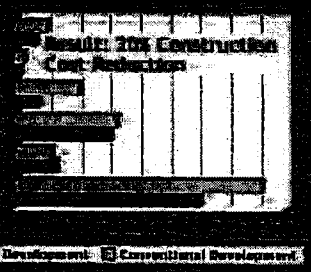
- Preserve integrity of ecological and biological systems
- Protect site and regional water quality by reducing sediment, nutrient, and toxic loads to water bodies
- Reduce impacts to local terrestrial and aquatic plants and animals
- Preserve trees and natural vegetation

Case Study

Kensington Estates is a conventional development on 24 acres consisting of 101 single family homes in Prince George's County, MD. A study was conducted to redesign the site using a new state storm water model and to illustrate the full range of LID practices and technologies available to developers.

Overall, the redesigned LID site could have:

- [illegible]
- [illegible]
- [illegible]
- [illegible] and eliminated curb, gutter and piped storm [illegible]
- [illegible]



Cost Comparison: LID vs. Conventional Development

For More Information

- Low Impact Development Center
  http://www.lowimpactdevelopment.org/
- Prince George's County, Maryland
  http://www.co.pg.md.us/county.com
- Health Care in Center Toolbox Services
  http://www.toolbox.org/
- U.S. EPA
  http://www.epa.gov/owow/nps/urban.html

Builder's Guide to Low Impact Development

Would you be interested in saving upwards of $70,000* per mile in street infrastructure costs by eliminating one lane of on-street parking on residential streets?

Did you know that communities designed to maximize open space and preserve mature vegetation are highly marketable and command higher lot prices?

Are you aware that most homeowners perceive Low Impact Development practices, such as bioretention, as favorable since such practices are viewed as additional builder landscaping?

Did you know that by reducing impervious surfaces, disconnecting runoff pathways, and using on-site infiltration techniques, you can reduce or eliminate the need for costly storm water ponds?

stributed by _____

As an owner, operator, or supervisor of a construction site, you may be held financially responsible for any environmental damage caused by your subcontractors or employees!

'lan In Advance to Prevent Pollution:

Remove existing vegetation only as needed.

Schedule excavation, grading, and paving operations for dry weather periods.

Designate a specific area of the site, well away from storm drains or waterways, for material storage and equipment maintenance.

Educate your employees and subcontractors about stormwater management requirements and their pollution prevention responsibilities.

Have extra erosion controls (such as hay bales and silt fence/silt socks) on site in case of any emergency.

Develop and implement an effective combination of erosion and sediment controls for the site.

housekeeping can significantly reduce pollutant discharges from your construction site.

Please follow the suggestions below to keep local waterways free from pollutants.

- Protect all storm drain inlets and streams located near the site.
- Limit access to and from the site and stabilize construction entrances and exits.
- Sweep frequently.
- Protect stockpiles by storing under a roof, impermeable tarp, or plastic sheeting.
- Do not store or stockpile materials near a storm drain, wetland or stream.
- Perform major maintenance and repairs of vehicles off site.
- Wash out concrete mixers only in designated washout areas away from resources, and set up small mixers on tarps.
- Remove trash, debris, and wastes on a regular basis and ensure that dumpsters are covered.
- Clean up small spills immediately using dry cleanup methods, such as an absorbent. Sweep as soon as possible.
- Prevent erosion by implementing soil stabilization practices such as mulching, temporary or permanent seeding.
- Maintain all haybales and silt fence to make sure no materials are getting beyond them; replace if necessary.

You are subject to coverage under the EPA NPDES Construction General Permit (CGP) if greater than 1 acre of disturbance is proposed and stormwater may leave your site. This permit requires a Stormwater Pollution Prevention Plan (SWPPP) before ANY work begins.

The SWPPP is a plan to control stormwater discharges from your construction site. It is broader and more complicated than a typical erosion and sediment control plan, and contains more information. The SWPPP needs to be updated as work progresses, and the plan MUST be available on site.

For more information on SWPPP development and the CGP Notice of Intent process refer to: **www.epa.gov/npdes/stormwater/cgp.**

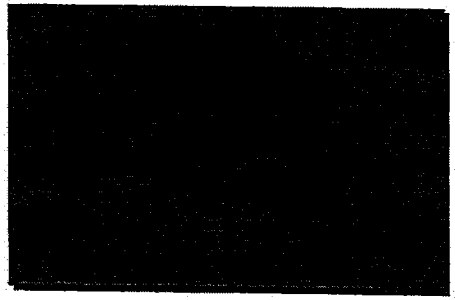
For any disturbance within the Wachusett Reservoir watershed greater than 1 acre, you most likely will also need to complete a BRP WM09 permit issued through the Mass Department of Environmental Protection as well **(www.mass.gov/dep/water/approvals/surffms.htm#npdes2).**

If you don't have Construction General Permit coverage, you could be fined up to $32,500 per day!

... most common source of pollution
sociated with construction activities
sedimentation caused by erosion.

ailure to maintain adequate Erosion
id Sediment Controls (ESCs) at
onstruction sites often results in
diment discharges into the storm
ain system. In the Wachusett
eservoir watershed, most storm
ains flow directly into lakes,
reams and rivers – and then into the
'achusett Reservoir, a drinking water
pply for 2.2 million Massachusetts
sidents.

nce this discharge reaches
aterways, it creates problems such
turbidity (cloudiness of the water)
id chemical changes to the water.
ese changes effect drinking water
uality and can even kill fish and
her aquatic wildlife.



Ideally, the only thing that should leave your project's site and enter a storm drain is rainwater – clean, uncontaminated rainwater. An effective stormwater management program is one in which ALL potential pollutants are recognized and a plan is designed to control or prevent them. As a result, you will ensure the safety of the public and preserve the quality of local waters.

For a more comprehensive list of Best Management Practices and stormwater guidance for the construction industry, go to the EPA's website at: www.epa.gov and search "construction stormwater."

Wachusett Reservoir Watershed
Department of Conservation and Recreation
Division of Water Supply Protection
180 Beaman Street
West Boylston, MA 01583
508-792-7806
www.mass.gov/dcr/watersupply.htm

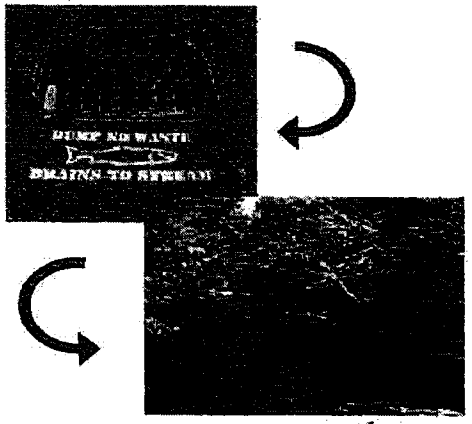
May 2012

dcr
Massachusetts

General Construction and Site Supervision Stormwater Tips

The Wachusett Reservoir is only a storm drain away.

What goes in here ...



... comes out here.

Allowing stormwater with sediment or pollutants to leave your construction site and enter into a storm drain or waterway is against federal, state, and some local laws!

d runoff management

here soils are exposed to water, wind, or
, erosion can result.

pical non-structural BMPs that can be
plemented to limit erosion and control
diment include:
eaving as much vegetation onsite as
ssible
Minimizing the length of time bare soil is
posed
Diverting or preventing runoff from
wing across exposed areas
tabilizing disturbed soils as soon as
ssible

ust control

ust comes from smokestacks and vents,
ockpiles, cleared ground, gravel roads, and
en areas.

on-structural methods to control dust
clude:
toring all materials, products, and waste
side the facility
Routine cleaning of vents and filters
praying controlled amounts of
contaminated stormwater to dampen dust-
nerating areas
Regular sweeping

stormwater discharges (illicit discharges)

Your site's stormwater system is designed to handle stormwater, but is not designed to handle illicit discharges like sewage and septic flows, washwater, spills and other dumped materials.

Non-structural BMPs for non-stormwater discharges include:
- Inspecting and testing floor drains, sinks, and process drains; eliminating connections to storm sewers, surface or subsurface drains
- Preventing mixing of non-stormwater and stormwater discharges; once mixed, the discharge cannot be managed as stormwater and requires different permits. Illicit discharges are not authorized under the industrial stormwater permit.

Brought to you by the Town of

MassDEP

STORMWATER POLLUTION PREVENTION FOR INDUSTRIAL SITES

Contaminated stormwater is a source of pollutants in many of our ponds, lakes, rivers and streams.

Storm drains carry runoff from streets, urban centers, and industrial sites, and open spaces into streams, creeks, and rivers.

Industrial operations are only one contributor to this problem, but they are known to be a source of heavy metals, oily wastes, and other substances.

Reducing or eliminating the exposure of industrial operations to rainfall and runoff is a proven way to reduce pollution into our surface waters.

ıat is a Stormwater ollution Prevention Plan?

Stormwater Pollution Prevention Plan WPPP) describes how you are going to duce or eliminate stormwater pollution ɔm your industrial operations.

deral stormwater regulations require ıny kinds of industrial facilities to take ɛps to prevent storm water pollution.

ısed upon SIC codes and stormwater posure, your facility may need to be vered under the Multi Sector General rmit (MSGP.)

so, you need to prepare a SWPPP that is part a collection of Best Management actices (pollution control measures) like ɛ ones described in this brochure.

r more information on coverage under the ulti Sector General Permit, see ɛps://www.epa.gov/npdes/stormwater-scharges-industrial-activities#msgp.

How Do I Prevent Stormwater Pollution at My Industrial Operations?

Salt Storage

Any facility using salt must manage it to prevent contact with stormwater.

Usual BMPs include covering salt piles and placing an impervious pad under salt storage and work areas.

Additional BMPs to manage salt storage:
- Use environmentally-friendly de-icing products
- Apply de-icing products sparingly
- Sweep up salt that is tracked out of the storage area
- Train employees about proper salt application and storage

Employee training program

Employee training is crucial to making sure these BMPS actually reduce pollution. Training should occur at least once a year and can be achieved by through formal classes, in-house training sessions, webinars, and on-the-job training.

Spill prevention and response procedure

A spill prevention and response procedure enables your staff to quickly and consistently respond to any spills that may occur.

Typical spill prevention and response procedures include:
- Identifying potential discharge locations
- Identifying monitoring locations or surface waters that may be impacted by emergency firefighting techniques
- Training employees in proper prevention and response techniques
- Developing and implementing proper material handling, storage, and cleanup procedures
- Posting contact information for all individuals who need to be notified in the event of a spill
- Promptly reporting and documenting any spills or leaks to appropriate individuals

Adapted from the Minnesota Pollution Control Agency (www.pca.state.mn.us) *Industrial Stormwater Best Management Practices Guidebook*, v. 1.1, April 2015