



• CONSERVATION • BOARD •

Stormwater & Erosion Control

Burlington is well known as a community with a high quality of life, small and cohesive neighborhoods, a vibrant downtown and waterfront – all within a spectacular setting on the shores of Lake Champlain. This deserving reputation is due in part to the City's small size, entrepreneurial spirit, respect for its environment, civic-minded citizens and activist government. One of the many factors that makes Burlington such a great place to live, work and visit is the community's attention to detail, and respect for its setting, heritage and quality urban design.

Burlington's Design Review process strives to protect the city's unique qualities and strong sense of place by carrying out citywide development and design objectives. The purpose of this *Development Review Guide* is to help applicants in preparing projects to be reviewed by the City's Conservation Board. Through materials such as this, the Department of Planning & Zoning seeks to make information available well before the final design of a project, saving the applicant, and the city, time and money.

Proper management of urban stormwater is critically important for Burlington and many other communities. There are really two issues: water quality and water quantity. As rainwater washes over the surface of the ground, it picks-up pollutants including animal waste, lawn fertilizers and pesticides, gasoline and motor oil, and sediments. These pollutants may be carried away and deposited into the City's stormwater system or Lake Champlain. As more of our community is covered with buildings and pavement, less water is able to soak directly into the ground, but must run off these impervious surfaces. The result is often more water running across the land or down the street overwhelming natural and constructed collection systems, and flooding and erosion of urban streams. From beach closures and water quality for drinking and fishing, to algae blooms and the cost of municipal water bills, this problem affects all of us.

The Burlington Conservation Board (BCB) conducts environmental/conservation reviews of proposed development and makes recommendations to the Development Review Board (DRB), the Burlington City Council, and other city government organizations. Because of the City's location on Lake Champlain, and because stormwater runoff and soil erosion from construction and urban development can cause significant pollution, the BCB has special concerns for stormwater and erosion, both during construction and after development is complete.



STORMWATER MANAGEMENT

The review and permitting of development for its effect on stormwater runoff happens in two basic ways. The State of Vermont requires a stormwater discharge permit for most new and redevelopment projects that involve two or more acres of impervious surface. Permit applications are reviewed by the VT Dept. of Environmental Conservation under Vermont's 2002 Stormwater Management Rules and Guidance. For projects involving less than two acres of impervious surface, the Burlington Department of Public Works (DPW) operates a stormwater management system under a General Permit issued by the VT Agency of Natural Resources (ANR). The City requires that applicants meet "as best possible" the requirements of Vermont's 2002 Stormwater Management Rules and Guidance. Many of the larger land development projects in Burlington, including those subject to Major Impact Review, are reviewed by the Burlington Conservation Board as well as DPW for stormwater related impacts. With the technical expertise provided by DPW staff, the Conservation Board will make comments and recommendations to the City's Development Review Board prior to the approval of a zoning permit.



BCB's publication *Burlington Guidelines for Stormwater Pollutant Reduction* provides information on nonstructural stormwater management techniques and is available through the Burlington Dept. of Planning & Zoning at www.ci.burlington.vt.us/planning/cb/stormwater/management.html.

EROSION AND SEDIMENT CONTROL

Prevention of erosion and sediment delivery into stormwater facilities, waterways, and Lake Champlain, particularly during construction, is a major concern of the BCB. Once the ground has been disturbed, rainfall and runoff begin to erode the soil and wash it off of the construction site, onto streets, and into local waterways and stormwater facilities. Whether that disturbance is clearing, cutting, filling, trenching, grading, or landscaping, all of these activities have the potential to create erosion and generate sediment that can leave the site. This clogs catch basins and retention ponds, and affects the habitat for many aquatic species.



These issues are addressed through an Erosion Prevention and Sediment Control Plan (EPSCP). The Vermont ANR requires an EPSCP for new and redevelopment projects of five or more acres under its Construction General Permit. This requirement may extend to projects as small as one acre in the future. The BCB considers it essential that all projects it reviews include a proper erosion prevention and sediment control plan that is integrated into the project plan.

Your presentation to the BCB should include an EPSCP. For complete information on preparing an EPSCP, consult the *VT Handbook for Soil Erosion and Sediment Control on Construction Sites*, available through the ANR Water Quality Division, 802-241-3770, and www.vtwaterquality.org/stormwater/htm/sw.cgp.htm.

In addition to the state requirement for an EPSCP, the BCB has adopted the following policies and conditions for erosion and sediment control during construction:

- The owner/contractor are responsible for preventing erosion and the transport of sediment onto City streets, sidewalks or stormwater facilities, or into the waters of the State, and the owner/contractor shall take any and all steps necessary to abate such erosion and to clean up all resulting sediment;
- Construction vehicles shall not park on City owned green space.
- The owner/contractor shall maintain project erosion control devices/measures and perform daily cleanup of any resulting sedimentation.
- When mulch is used, straw is recommended instead of wet or old hay. Mulch shall be secured to prevent blow-away;

- The owner/contractor are responsible for reestablishing all existing and proposed green space. In areas where revegetation with grass proves difficult with seeding and mulch, turf replacement is recommended.
- If grass revegetation has not been successfully established by November 1, the owner/contractor shall apply erosion matting no later than November 15, and return in spring to seed and mulch.

SUBMISSION REQUIREMENTS

While the BCB encourages informal conversations with applicants early in the permit process as possible, the BCB will only make formal recommendations to the Development Review Board (DRB) based on review of complete and detailed stormwater management plans, the same plans reviewed by the DPW and DRB. In this review, the BCB strongly encourages the applicant to:

- Reduce impervious surface to the extent possible;
- Use effective innovative techniques such as source reduction and non-structural measures to the extent possible;
- Include a plan for long-term operation and maintenance of stormwater facilities; and,
- Obtain a state-approved Erosion Prevention and Sediment Control Plan (EPSCP) and Stormwater Discharge Permit (if applicable).

ADDITIONAL INFORMATION

general information regarding city zoning permits

- **Burlington Dept. of Planning & Zoning**
149 Church St., Burlington, VT 05401
802.865.7188 www.ci.burlington.vt.us/planning/

general information regarding city building permits

- **Burlington Dept. of Public Works**
645 Pine St., Burlington, VT 05401
802.863.9094 www.dpw.ci.burlington.vt.us/

state regulations and permits

- **VT Dept. of Environmental Conservation**
Water Quality Division, Stormwater Section
103 South Main Street, Building 10 North
Waterbury, VT 05671-0408
802.241.3770 www.vtwaterquality.org/stormwater.htm

In accordance with the Americans with Disabilities Act (ADA) of 1992, it is the policy of the City of Burlington not to discriminate on the basis of disability in offering benefits, services, programs, and activities.

This information can be made available in alternative media forms for people with disabilities. Reasonable accommodation shall be made upon request to insure that all benefits, services, programs, and activities offered by the City are fully accessible to all individuals. For information, call 865-7188 (865-7144 TTY). EOE.