RETAINING WALL PERMITS

Use this packet for preparation of an application for a permit for the construction, installation, repair or replacement of retaining walls located within shore impact or bluff impact zones.

Complete and sign enclosed applications to the District office for review and approval. Applications must be signed by the property owner or governmental unit (if applicable). Complete applications will include: (1) signed application; (2) necessary maps, diagrams and any necessary product specifications or calculations in duplicate; and (3) permit application/field inspection fees. Additional information may be required by the District after initial review.

Applications are usually reviewed within 14 days, however the District reserves the right to allow 60 days for approval from receipt of completed application. Once all plans and other permit requirements are met, the Board of Managers or their Designee will approve your permit. You can pick up the signed permit at the District office or we can mail it to you by request. PRWD Staff will inform you within ten (10) days with a written notice of any deficiencies in your application and ask you to make necessary changes.

In reviewing and approving applications, the following will be taken into consideration:

**General Conditions:**

Retaining walls in the shore impact zone are allowed only for the purposes of correcting existing slope instability or erosion; the base of such walls must be above the highest known water level. Design plans for retaining walls must comply with accepted engineering practices.

Additionally, topographic alterations (grading and filling) within the bluff impact zone will require a stormwater management plan. For development adjacent to a bluff or steep slope, drainage from hard surfaces should direct runoff away from the bluff or steep slope.

The action will not result in increases in stormwater discharge rates to adjoining properties or to waters of the state for the 5-year, 25-year, and 100-year- 24-hour rainfall events, and must utilize standard procedures for controlling runoff rates, nutrients, and sediments.

**Proposed actions involving retaining walls in the shore or bluff impact zones must include with the signed permit application the following:**

A. Grading and Sediment Erosion Control Plan
B. Site evaluation and construction plans designed and signed by an appropriate registered professional. Plans must show property lines; the ordinary high water elevations; floodplain elevations of lake or streambank and contour elevations; cross section detailing the proposed project including dimensions (height, width, length)
C. a structural analysis/stability documentation (design calculations by a professional engineer) which shows that the wall will withstand expected ice and wave action, and earth pressure.
D. construction material specifications
E. stormwater management plan if located within a bluff impact zone.

**Shore Impact Zone** (setback from ordinary high water level):
- General development lake— 37.5 feet; Recreational development lake— 50 feet; Environmental Development Lake— 75 feet; unsewered rivers— 50 feet; sewered rivers— 37.5 feet

**Bluff Impact Zone:** Hill, cliff or embankment located within the shoreland area and draining to a water body, having a slope rising at least 25 feet above the ordinary high water level of the waterbody and where the grade of the slope from the toe of the bluff to any point 25 feet or more above the OHW averages 30% or greater and the land located within 20ft from the top of the bluff.
EROSION & SEDIMENT CONTROL PLAN

The goal of this plan is to prevent erosion from occurring and keep sediment on the site during active construction.

This is accomplished by minimizing: (1) the area and duration of exposed soil and unstable soil conditions; (2) off-site sediment transport on trucks and equipment; (3) work in and adjacent to water bodies and wetlands; (4) soil compaction. In addition, maintain stable slopes, and avoid steep slopes and the need for high cuts and fills.

Natural site topography and soil conditions must be considered to reduce erosion and sedimentation during construction and after project completion. Erosion and sediment control measures must be installed prior to land altering activities and routinely inspected and maintained during the project until final turf and ground cover has been established. The project site must be inspected after every rainfall event exceeding 0.5 inches and implement erosion and sediment control measures as addressed as needed. The project must be phased as best as possible to minimize disturbed areas and removal of existing vegetation until necessary for project progress. In order to ensure that sediment is retained on-site, the District may require the permit applicant to provide additional erosion control measures where site conditions warrant. Temporary erosion and sediment control measures (i.e., silt fence, rock access drives) must be removed after all disturbed areas have been stabilized.

All disturbed areas must be restored at a minimum with seed and disced mulch, sod, wood-fiber blanket, or be hard surfaced within 2 weeks from the completion of land alteration. For areas altered with a slope of 3:1 or greater, restoration with sod or wood fiber blanket is required. Typically, restoration with seed and disced mulch must be completed not later than September 15. Areas to be restored with sod must be completed by October 15. Both of these restoration dates are in accordance with Natural Resource Conservation Service requirements.

EROSION AND SEDIMENT CONTROL PLAN MUST INCLUDE:

1. Existing and proposed topographic map which clearly indicates all hydrologic features (i.e., ditches, grass channels, swales, perennial/intermittent streams, wetlands, lakes, ponds, floodplains, culverts, and storm sewers) and areas where grading will expose soils to erosive conditions. The plan must also indicate the direction of all site runoff.
2. Identification of all temporary erosion control measures which will remain in place until permanent vegetation is established for the construction site, including entryways onto sites and for work areas within open water. Examples include, but are not limited to: seeding, mulching, sodding, silt fence, erosion control matting, access drives (rocked filter dike at construction site entrance). Work proposed within open water areas (e.g., installation of a storm sewer outfall) floatation silt curtain must be used.
3. Location and dimensions of all temporary soil or dirt stockpiles.
4. A detailed schedule indicating dates and sequence of land alteration activities; implementation, maintenance and removal of sediment and erosion control measures; and permanent site stabilization measures.
5. Name, address, and phone number of party responsible for maintenance of all erosion control measures.
6. A detailed description of how erosion control, sediment control and soil stabilization measures implemented pursuant to the plan will be monitored, maintained, and removed.
7. Identification of all permanent erosion control measures such as vegetation, outfall spillways, and rip-rap shoreline protection, and their locations.
8. Copy of MPCA Notification of application for an NPDES general permit for projects one acre or more of graded area.
9. Tabulation of all earthwork cut-and-fill volumes and computation of any floodplain volume and/or wetland area changes.

All actions and plans must utilize standards and procedures for controlling runoff rates, nutrients, and sediments as described in the “Protecting Water Quality in Urban Areas” manual (MPCA, 2000) as revised.