



Engineering Department

Stormwater Design Standards

Single Family Residential

Information in this document is for informational and reference purposes only. Such information is subject to change.

Last Revised: 3/15/2015

Proposed drainage plans and calculations shall be prepared in accordance with the approved Stormwater Management Plan for the applicable subdivision plat. If no Stormwater Management Plan exists, proposed surface drainage must be indicated on the site plan based on final grade.

1. General

- 1.1 Owner's name, address, phone number, email list on plan.
- 1.2 Graphic scale not less than one inch to 50 feet (1" = 50')
- 1.3 North arrow and legend included on plan.
- 1.4 Completed MPCA Subdivision Registration application and submitted to MPCA.
- 1.5 Completed Grading/ Erosion and Sediment Control Permit application included in submission.

2. Existing Site Conditions

- 2.1 Boundary lines of proposed plan clearly indicated.
- 2.2 All adjacent areas to the site which may be affected by land disturbing activity.
- 2.3 Existing surface features including roads, trees, and other buildings in the area.
- 2.4 Acreage and lot dimensions.
- 2.5 Location, dimensions, and total area of existing structures. (Houses, garages, decks, storage sheds, porches, retaining walls, etc.)
- 2.6 Existing topography with a contour interval appropriate to the topography of the land.
 - 2.6.1 Significant topographical or physical features of the site.
 - 2.6.2 Identification of all steep slopes, ravines and bluffs.
- 2.7 Drainage features such as ponds, wetlands, infiltration areas, ditches, drainage ways, etc. clearly illustrated.
 - 2.7.1 Identification of any landlocked or poorly draining areas.
 - 2.7.2 Normal water level and 100-year flood elevation of wetlands, flood plains, and water bodies.
- 2.8 Location and purpose of existing easement clearly indicated.

3. Final Site Conditions

- 3.1 Minimum building setback lines as required by the zoning ordinance.
- 3.2 Proposed drainage and utility easements are shown and labeled on the plan.
 - 3.2.1 Applicant to obtain necessary easements to permit runoff to flow onto properties from owner(s).
 - 3.2.2 Easement documents signed and submitted to Engineering Department with recording fee.
- 3.3 Directional flow arrows of finished grading showing flows onto, across, or off the project site.
 - 3.3.1 Elevations of any site overflows clearly marked.

- 3.3.2 Control and spot elevations for drainage ways are shown.
- 3.4 Building pads are shown and type of structure to be built is shown
- 3.5 Proposed lowest floor/opening elevation, top of foundation, and elevation of lot corners clearly indicated on plan.
 - 3.5.1 Floor elevation and grade adjacent to building must be minimum of 2' above 100-year water level.
 - 3.5.2 Floor elevation and grade adjacent to building must be a minimum 1' above emergency overflow elevation.
- 3.6 Foundation elevation shall be between 18" and 32" above sidewalk grade, as measured at the front most corner of the garage closest to the site property line, for all lots platted prior to April 1st, 2008.
 - 3.6.1 Certification of foundation elevation by licensed land surveyor or engineer shall be submitted prior to foundation wall inspection.
- 3.7 All Lots platted after April 1st, 2008 must conform to the foundation elevation and structure type as specified on subdivision approval.
- 3.8 Certification of foundation elevation by licensed land surveyor or engineer shall be submitted prior to foundation wall inspection.
 - 3.8.1 Foundation elevations varying from approved proposal shall submit a new site plan by a licensed land surveyor or engineer.
- 3.9 Top of foundation must be a minimum of 6" above grade directly adjacent to foundation, and 1' above grade 10' from the foundation. (grade at 10 feet from building must be 1 foot below top of foundation)

4. Stormwater Pollution Prevention Plan (SWPPP)

- 4.1 Schedule of anticipated start date and installation of erosion and sediment control best management practices.
- 4.2 Provisions for maintenance and inspection of erosion and sediment control BMP's clearly indicated on plan.
- 4.3 Maintenance and inspections conducted in compliance with most recent MPCA Construction Activity Permit timeline requirements.
- 4.4 Plan for temporary stabilization methods clearly indicated.
- 4.5 A description of proposed permanent stabilization measures to be taken, including specifications, times frames/scheduling, and responsible party.
 - 4.5.1 Plan for temporary and permanent winter erosion and sediment control for projects that extend or start after November 15th.
- 4.6 Locations of all proposed land disturbances and any phasing of the activities.
- 4.7 Locations and specification of perimeter control method shown on plan.
- 4.8 Locations and protection of all temporary stockpiles.
- 4.9 Location and dimension of temporary rock construction entrance(s).
- 4.10 Location and specification of inlet protection in downstream catch basin(s).
- 4.11 Plan for all dewatering activities.
- 4.12 Plan for all concrete washout containment, no concrete waste shall contact ground.
- 4.13 Measures to manage all solid and liquid wastes from construction and building activity clearly indicated.
 - 4.13.1 In compliance with most recent MPCA Construction Activity Permit (Part IV. F. Pollution Prevention Management Measures.)
- 4.14 Plan for keeping street clear of tracking clearly indicated on plan, including timeframe.