

Stormwater Review Checklist

To be Completed & Signed by Applicant

General

Comments

- | | | |
|---|--------------------------|-------------|
| 1. Project or plat name | <input type="checkbox"/> | <hr/> |
| 2. Location Map | <input type="checkbox"/> | <hr/> |
| 3. Proprietor's name, address, phone number, and e-mail address | <input type="checkbox"/> | <hr/> <hr/> |
| 4. Engineer/Architect/Surveyor's name, address, phone number, and e-mail address | <input type="checkbox"/> | <hr/> <hr/> |
| 5. North arrow and scale (scale is required to be 1 inch = 100 feet or larger) | <input type="checkbox"/> | <hr/> <hr/> |
| 6. Project or plat boundary | <input type="checkbox"/> | <hr/> |
| 7. Identification of all adjoining parcels by address | <input type="checkbox"/> | <hr/> |
| 8. Lot dimensions (scaled or computed) | <input type="checkbox"/> | <hr/> |
| 9. Lot numbers (individual addresses if a Plat, PUD, or Site Condo) | <input type="checkbox"/> | <hr/> <hr/> |
| 10. Building setback lines | <input type="checkbox"/> | <hr/> |

Topographical

- | | | |
|--|--------------------------|-------------------|
| 11. Existing buildings (label those under construction with address and proposed lowest foundation opening elevations) | <input type="checkbox"/> | <hr/> <hr/> <hr/> |
| 12. Existing and proposed roads (name, ROW width, and type of surface) | <input type="checkbox"/> | <hr/> <hr/> |

13. Existing **and** proposed land surface contours
(minimum 2.0 foot contour interval referenced to a
national datum) ☐ _____

14. No slopes greater than 1 or 3 without structural
improvements ☐ _____

15. Available soils data, soil boring logs, and locations
(include ground elevation and water table information) ☐ _____

Drainage

16. Offsite watershed areas (with boundaries and acreage
to be shown in drainage calcs) ☐ _____

17. Existing creeks, streams, ditches, and other surface
drainage ways. ☐ _____

18. All existing storm sewer and structures (with proper
labeling of type, size, invert elevation, and ownership). ☐ _____

19. County, municipal, MDOT, and private drains
(permission required to connect). ☐ _____

20. Proposed drainage systems (clearly identify all open
and enclosed portions, size, inverts, grade, and proposed
ownership). ☐ _____

21. 100 year established or localized floodplain contour
(if applicable). ☐ _____

22. Wetland boundaries with determination date and
company. ☐ _____

23. Existing and proposed utilities. ☐ _____
24. Proposed stormwater detention/infiltration basins. ☐ _____
25. Site's stormwater runoff discharge location
(including roof water). ☐ _____

26. All soil erosion controls shown on the plan. ☐ _____

Stormwater Drainage Calculation Package

- | | | |
|---|--------------------------|-------------------------------------|
| 27. On-site sewers designed for 10-year storm event. | <input type="checkbox"/> | <hr/> |
| 28. Flood protection from 100-year storm event. | <input type="checkbox"/> | <hr/> |
| 29. Provide minimum basement elevations. | <input type="checkbox"/> | <hr/> |
| 30. A topographic map with site delineated in relation to watershed. | <input type="checkbox"/> | <hr/> <hr/> |
| 31. Calculations of peak discharge for a range of storms up to and including the 100-year storm for any natural water courses and/or county drains passing through the proposed development, including area of upstream watershed | <input type="checkbox"/> | <hr/> <hr/> <hr/> <hr/> <hr/> |
| 32. Normal, design and 100-year water elevations, including overland flow routes shown on the topographic map. | <input type="checkbox"/> | <hr/> <hr/> <hr/> |
| 33. Drainage area map that clearly shows subcatchment boundaries, acreages, and flow paths of tributary areas to each point of discharge from the development, including tributary areas originating outside of the development. Also identify tributary areas to inlets, culverts, and other stormwater BMPs | <input type="checkbox"/> | <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> |
| 34. Documentation and/or calculations required to demonstrate an adequate outlet, including the sizes and locations of upstream and downstream culverts serving drainage routes into and out of the development site. | <input type="checkbox"/> | <hr/> <hr/> <hr/> <hr/> <hr/> |
| 35. Calculations of stormwater rates and volumes for each point of discharge or treatment train for pre-development and postdevelopment conditions for the design storms. | <input type="checkbox"/> | <hr/> <hr/> <hr/> <hr/> |
| 36. BMP design calculations. | <input type="checkbox"/> | <hr/> |
| 37. Groundwater mounding calculations (when required). | <input type="checkbox"/> | <hr/> <hr/> |

38. Design summary report, including at a minimum:
description of stormwater management plan for the site,
identified contributing areas with land cover types, soils and
runoff coefficients, times-of-concentration, runoff volumes,
peak discharges, design high water levels, sewer hydraulic
grade line, required storage volumes, and volumes provided.

| | |
|--------------------------|---|
| <input type="checkbox"/> | <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> |
|--------------------------|---|

39. Sealed by Professional Engineer on company letterhead
with date performed.

| | |
|--------------------------|-------------|
| <input type="checkbox"/> | <hr/> <hr/> |
|--------------------------|-------------|

Projects Impacting County Drains

40. Refer to Kent County Drain Commission for
requirements and approval.

| | |
|--------------------------|-------------|
| <input type="checkbox"/> | <hr/> <hr/> |
|--------------------------|-------------|

Detention/Infiltration Base

41. Required volume/release rate.

| | |
|--------------------------|-------|
| <input type="checkbox"/> | <hr/> |
|--------------------------|-------|

42. Adequate volume provided.

| | |
|--------------------------|-------|
| <input type="checkbox"/> | <hr/> |
|--------------------------|-------|

43. Side slopes including surface treatments.

| | |
|--------------------------|-------|
| <input type="checkbox"/> | <hr/> |
|--------------------------|-------|

44. Overflow spillway & emergency overflow floodway.

| | |
|--------------------------|-------|
| <input type="checkbox"/> | <hr/> |
|--------------------------|-------|

45. Hydraulic calculations for transfer or outlet pipe.

| | |
|--------------------------|-------|
| <input type="checkbox"/> | <hr/> |
|--------------------------|-------|

46. Outlet control structure detail (scaled with hydraulic
information matching calculations).

| | |
|--------------------------|-------------|
| <input type="checkbox"/> | <hr/> <hr/> |
|--------------------------|-------------|

47. Minimum basement floor elevations & minimum
building opening elevations established.

| | |
|--------------------------|-------------|
| <input type="checkbox"/> | <hr/> <hr/> |
|--------------------------|-------------|

48. Underground detention storage details (if applicable).
Plans must indicate inspection ports and that system will be
inspected during installation.

| | |
|--------------------------|-------------------|
| <input type="checkbox"/> | <hr/> <hr/> <hr/> |
|--------------------------|-------------------|

Easements

49. Existing and proposed utility easements (labeled with
dimensions, purpose, and easement recipient).

| | |
|--------------------------|-------------|
| <input type="checkbox"/> | <hr/> <hr/> |
|--------------------------|-------------|

50. Existing and proposed drainage easements.

| | |
|--------------------------|-------|
| <input type="checkbox"/> | <hr/> |
|--------------------------|-------|

51. Offsite drainage easements or right-of-way. ☐ _____
52. Existing and proposed access to the property and drainage structures. ☐ _____

Maintenance

53. Identification of the agency, association, or private party proposed to assume ownership of the drainage system (including the detention and/or infiltration basins). ☐ _____

54. Identified access routes for trucks and maintenance equipment, including fences and gates. ☐ _____

55. Proper siting of BMPs for accessibility. ☐ _____
56. Design of BMP elements to minimize amount of maintenance required (e.g. filters on small orifices, etc.). ☐ _____

57. Design details to illustrate maintenance features (e.g. removable grates or rails, locks, access platforms, etc.). ☐ _____

Fee

58. Permit fee. ☐ _____
59. Recording fee. ☐ _____

I certify that the Stormwater Pollution Prevention Plan being submitted has been reviewed using this checklist:

(Print Name)

(Date)

(Signature)