LAND DISTURBANCE PERMIT DRAINAGE REVIEW CHECKLIST

Project Name: ____________________________________________    Tax ID #: __________________________

Project Number: _____________________________    Date: ________________________________

Applicant: ___________________________________    Signature: _____________________________

Firm: _______________________________________   Phone: ________________________________

Accepted/Denied by: ___________________________________________________________

Address All Items Marked With an "X"

____ 1. Minimum culvert size shall be 18” and maximum velocity shall be 15 ft. /sec.

____ 2. Locate catch basins as with 600 feet maximum spacing, designed for 10-year storm with a maximum gutter spread of 8 feet.

____ 3. Show nearest existing catch basin along all roads that development connects with.

____ 4. Provide design calculations for all storm drainage pipes. Storm drainage pipes shall be designed for 25-year storm frequency.

____ 5. Culverts beneath roads shall be designed to convey the 100-year storm. Show analysis/effects of 100 year storm.

____ 6. Provide design calculations for all ditches and channels. Ditches and channels shall be designed for 25-year storm frequency.

____ 7. Provide back water effect due to constriction of pipes in ditches or swales. Limit backwater to property line.

Storm Drainage Plan

____ 8. Show existing and proposed contours, clearly distinguishable.

____ 9. Identify drainage structures as existing or proposed.

____ 10. Show drainage easements, drawn with width dimensions specified. Typical D.E. width is 20 ft minimum.

____ 11. Delineate and label any flood zone within the site.

____ 12. Label roadway highpoints on the center line of the roadway.

____ 13. Show the limits of proposed construction to be permitted.

____ 14. Profile all existing/proposed storm pipes above which land disturbance will occur.

____ 15. Reference all storm drainage structures (i.e., catch basins, drop inlets, headwalls...etc.) to Sandy Springs or any other standard (G.D.O.T., etc.) or provide complete detail(s) if not a public standard.
16. Storm drainage structures are not allowed within the radius of a curb.

17. Provide outlet velocity at outlet structures. (i.e. storm drainage profile).

18. Storm drainage structures shall discharge into natural draws or drainage channels/swales.

19. For all permit revisions, submit a letter stating the proposed changes. These changes should be highlighted on all sheets affected.

**Storm Drainage Pipe Design**

20. 30" maximum cross drain pipe draining through Sandy Springs standard catch basins or drop inlets. When larger diameter is required, provide design and detail of all structures.

21. Storm drain cross section:
   A. Minimum pipe cover
      1. Storm drains: 18 inches outside roadway, 36 inches within roadway (See standard 600).
      2. Berming or trenching is not allowed to achieve minimum or maximum cover
   B. Minimum pipe slopes:
      1. Concrete or smooth walled HDPE 0.5%
      2. CMP 1.0%

22. All storm crossings under roadways shall be reinforced concrete pipe, class per Standard 573.

23. Storm pipe material types, directional changes, slope changes or transitions are permitted only at drainage structure with surface access (i.e., junction box with manhole, catch basin, etc.). Concrete collars are not acceptable at transitions.

24. Show size, material type, class or gauge, percent slope and length of all pipes.

25. Provide invert elevations and top elevations of drainage structures.

26. Anchor collars are required on storm pipes when the slope is greater than 30%.

27. Cite Standard 573 for storm sewer pipes (C.M.P. pipe shall be half coated with a paved invert.)

**Ditches and Swales**

28. All proposed swales and ditches shall have cross sections, centerline profiles, flow volumes and velocities shown on plans.

29. If velocity in ditch is greater than 3 ft. /sec., ditch shall be paved with a non-erodible material.

**Storm Drain Structures**

30. Show drainage area, Q25 and headwater elevation at the inlet of all storm drain structures (include accumulative areas and Q's and longitudinal system).

31. Indicate the type and Fulton County standard number (or other) for inlet and outlet structures of all pipes.

32. All pre-cast M.H. shall be provided with a minimum of 9 inches clearance on each side of connecting pipe between all cut-outs or penetration.

33. Use online catch basins except for cul-de-sac applications in which one foot offset is required.
34. Show concrete spillway at the end of curb and gutter (as per G.D.O.T. Standard 9013, type III) where applicable.

35. Use concrete flared end sections at driveway crossings within the right-of-way and other applications adjacent to vehicular traffic (Ref. G.D.O.T. Standard 1120).

36. Professional's seal and signature required on plans and reports.