



## City of Newnan Stormwater Management

Received: \_\_\_\_\_

Due: \_\_\_\_\_

### Stormwater Management Plan Review Checklist

Project Name: \_\_\_\_\_

#### **GENERAL INFORMATION:**

1. \_\_\_\_\_ Master detention with Hydrology Report/Stormwater Management Report referenced on front cover (if applicable).
2. \_\_\_\_\_ Development plans must include the following minimum plans and details:
  - Grading and Stormwater Drainage Plan
  - Stormwater Profiles and details
  - Landscaping Plan
3. \_\_\_\_\_ Hydrology Report and/or Stormwater Management Plan if site is greater than 1 acre disturbed or greater than 5,000 sq. feet impervious area.

#### **STORMWATER DRAINAGE PLAN**

4. \_\_\_\_\_ Show all streams, perennial and intermittent, water Courses, drainage ditches and exiting topography within 200' of the site. Include a statement about state waters whether or not within 200 feet of the site, if within 200', they must be shown on the plan with appropriate buffers and setbacks.
5. \_\_\_\_\_ Show all existing stormwater conveyances and structural control facilities.
6. \_\_\_\_\_ Show all stormwater management facilities, including the location of nonstructural site design features and the placement of existing and proposed structural stormwater controls, including design water surface elevations, storage volumes available from zero to maximum head, location of inlet and outlets, location of bypass and discharge systems, and all orifice/restrictor sizes.



**Only Rain Down the Storm Drain!!**





## City of Newnan Stormwater Management

7. \_\_\_\_ Show total acreage, total disturbed acreage, total drainage acreage (on site and off site), total bypass acreage.
8. \_\_\_\_ For detention ponds, show a twenty (20) foot access easement to the pond, and a ten (10) foot maintenance easement around the pond's perimeter.
9. \_\_\_\_ Pipes and junctions boxes need to be labeled as necessary for cross referencing profiles.
10. \_\_\_\_ Minimum pipe size is 18" (15" for private property)
11. \_\_\_\_ Show 100 year flood elevation in permanent detention ponds.
12. \_\_\_\_ Storm Sewer Easements – existing and proposed drainage system (min. 10' past ending of pipe), min. 20' wide centered on pipe may be larger for larger pipes
13. \_\_\_\_ Pipe selection: for pipes within the ROW, material selection and installation specifications, per GDOT and the "Blue Book"
14. \_\_\_\_ 1.0 feet of freeboard is required between the 100-year elevation and the top of the dam.
15. \_\_\_\_ Show any groundwater recharge areas

### **STORMWATER PROFILES AND PIPE CHART**

16. \_\_\_\_ Show cross-section and profile drawings and design details for each of the structural stormwater controls in the system. Include existing grade, proposed grade, and any utility conflicts.
17. \_\_\_\_ Show 25-year HGL must be shown without pressure.
18. \_\_\_\_ Pipes and junction boxes need to be labeled as necessary for cross referencing drainage plans.



***Only Rain Down the Storm Drain!!***





## City of Newnan Stormwater Management

19. \_\_\_\_ Show the size, material, length and slope for all existing and proposed storm drain pipes.
20. \_\_\_\_ Minimum pipe slope is 0.5% or a minimum velocity of 2.5 feet/sec, whichever is greater.
21. \_\_\_\_ Maximum pipe velocity is 15 feet/sec
22. \_\_\_\_ Include Manning's coefficient
23. \_\_\_\_ Show gutter spread and gutter flow.
24. \_\_\_\_ Show discharge velocity and Energy Dissipation, with Type 1 riprap for large pipe outlets. (Headwall for any outlet with >48" outlet)
25. \_\_\_\_ Show invert elevations (in and out) and rim elevations, invert drop (min. 0.1'), use concrete splash pad for larger drops.
26. \_\_\_\_ Show safety ledge for deep manholes.

### **STORMWATER DETAILS**

27. \_\_\_\_ Show any necessary structure details (Headwalls, Inlets, Curbs, Flumes, Curb & Gutter, Catch Basins, Retaining walls, etc.
28. \_\_\_\_ Show Outlet Control Structure details (cross sections), these must match details in Hydro Report/Stormwater Management Plan Report.
29. \_\_\_\_ Show ditch and channel details and cross sections
30. \_\_\_\_ Pipe construction details (bedding class, backfill methods, Min. 2' cover for RCP and 3' cover for all other, compaction standards).
31. \_\_\_\_ Grate Inlets 1019A type E with hood and grate, 1019A type B with concrete top.



***Only Rain Down the Storm Drain!!***





## *City of Newnan Stormwater Management*

32. \_\_\_\_ Provide a detail of the grease recycling receptacle storage area and cover along with method of spill prevention. This is considered a hot spot as well as the dumpster pad. Drains cannot connect to sanitary sewer or storm drains and must be filtered prior to discharge.

### **LANDSCAPING PLAN**

33. \_\_\_\_ No trees, shrubs, or any type of woody vegetation is to be planted on a pond embankment.
34. \_\_\_\_ no trees or shrubs within 15 feet of the toe of slope of a dam.
35. \_\_\_\_ No trees or shrubs with long tap roots within the vicinity of the earthen dam or embankment, or subsurface drainage facilities.
36. \_\_\_\_ No trees or shrubs within 25 feet of perforated pipes.
37. \_\_\_\_ Keep maintenance areas open to allow future access for pond maintenance.

### **HYDROLOGY REPORT/STORMWATER MANAGEMENT REPORT**

**\*ONLY REQUIRED FOR DISTURBED ACREAGE >1.0 OR 5,000 SF OF IMPERVIOUS SURFACE**

38. \_\_\_\_ The Hydrology Report shall be in accordance with the Georgia Stormwater Management (GSMM) Manual, including but not limited to all design recommendations and credit calculations.
39. \_\_\_\_ Post developed Q's less than pre-developed when exit site? If not, is there an easement or large river?
40. \_\_\_\_ Check adequacy of Time of Concentration (min of 5 minutes), "C" factors and Drainage Areas, P values, storm type, shape factor, etc.



***Only Rain Down the Storm Drain!!***





## City of Newnan Stormwater Management

41. \_\_\_\_ SCS Method for detention analysis, Rational Method for pipes
  
42. \_\_\_\_ Specify the type of sizing criteria:
  - Water Quality (Does off-site area affect and how deal with it?)
  - Channel Protection
  - Overbank Flood Protection
  - Extreme Flood Protection
  
43. \_\_\_\_ Topographic map of existing site conditions with the drainage basin boundaries indicated
  
44. \_\_\_\_ Total site acreage, total drainage acreage, total offsite drainage acreage, total onsite drainage acreage, acreage by basins.
  
45. \_\_\_\_ Delineate all perennial and intermittent streams and other surface water features that contribute to site.
  
46. \_\_\_\_ Delineate all perennial and intermittent streams and other surface water features that receive drainage waters which is to address each and every point or area along the project's site's boundaries at which runoff will exit the property.
  
47. \_\_\_\_ Total area of post-development impervious surfaces and other land cover areas for each sub-basin affected by the project.
  
48. \_\_\_\_ Calculations for determining the runoff volumes that need to be addressed for each sub-basin for the development project to meet the post-development stormwater management performance criteria in Section 10-165 of the SWMM.
  
49. \_\_\_\_ Documentation and calculations for any applicable site design credits that are being utilized.
  
50. \_\_\_\_ Provide a narrative describing how the selected structural stormwater controls will be appropriate and effective.



**Only Rain Down the Storm Drain!!**





## *City of Newnan Stormwater Management*

51. \_\_\_\_ Provide a hydrologic and hydraulic analysis of the stormwater management system for all applicable design storms (including state-storage or outlet rating curves, and inflow and outflow hydrographs).
52. \_\_\_\_ Documentation and supporting calculations to show that the stormwater management system adequately meets the post-development stormwater management performance criteria in Section 10-165.
53. \_\_\_\_ Where applicable, a narrative describing how the stormwater management systems correspond with any watershed protection plans and/or local greenspace protection plan.
54. \_\_\_\_ A downstream peak flow analysis which includes the assumptions, results and supporting calculations to show safe passage of post-development design flows downstream.
55. \_\_\_\_ Identify the parts or components of a stormwater management facility or practice that need to be regularly or periodically inspected and maintained, and the equipment and skills or training necessary.
56. \_\_\_\_ Include an inspection and maintenance schedule, maintenance tasks, responsible parties for maintenance, funding, access and safety issues.
57. \_\_\_\_ Include a signed copy of the Stormwater Facility Maintenance Agreement.
58. \_\_\_\_ The applicant shall certify and provide documentation that all other applicable environmental permits have been acquired for the site.
59. \_\_\_\_ Include the Stormwater Quality Site Development Review Tool with at least 80% TSS Removal
60. \_\_\_\_ Include details of all facility structures (OCS, Flumes, Dams, Retaining Walls, etc.)



***Only Rain Down the Storm Drain!!***

