



DeKalb County Planning & Sustainability Department

178 Sams Street, Decatur,
GA 30030

Michael L. Thurmond
Chief Executive Officer

Cedric Hudson
Interim Director

LAND DEVELOPMENT – STORMWATER MANAGEMENT REVIEW CHECKLIST (Land Development Section's)

This checklist shall be submitted with your documents/drawings. Answers shall be provided to all items as “no” or “yes”; and if “no”, you must explain why the item in question is not applicable.

Project Name: _____

Date: _____

Address: _____

Parcel #: _____

Name of Design professional _____ Signature _____ Seal _____

Date: _____

Note: Plans must adhere to guidelines in the Georgia Stormwater Management Manual (GSMM) Volume I,II and III, as well as DeKalb County Government Ordinances: Chapter 14, 22.5 and 27

INFORMATION TO BE SHOWN ON THE PLANS AND HYDROLOGY/STORMWATER MGT REPORT	IS ITEM ADDRESSED?		IF NO, EXPLAIN
1. Address all applicable items on the Land Development - Site Plan Review checklist	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
2. Development name on the cover of the report	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
3. Engineer's seal, signature, address and telephone number on the cover of the report	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
4. Developer's name, address, and telephone number on the cover of the report	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
5. Date on the cover of the report vicinity map in the report	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
6. Vicinity map in the report	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
7. Add revision date(s) on the cover of the report	NO <input type="checkbox"/>	YES <input type="checkbox"/>	



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8. Provide statement of post-construction pond/storm water drainage ownership in the hydrology/stormwater mgt report	NO <input type="checkbox"/>	YES <input type="checkbox"/>																																																																									
9. Provide a recorded Stormwater Detention Facility Inspection and Maintenance Agreement which must include the required exhibits as well as the post construction inspection, operation and maintenance plans	NO <input type="checkbox"/>	YES <input type="checkbox"/>																																																																									
10. A stream buffer variance is required for encroachment into the stream buffers	NO <input type="checkbox"/>	YES <input type="checkbox"/>																																																																									
11. Contact the Army Corps of Engineers (ACoE) for permit determination/approval. ACoE approval is required prior to stormwater plan approval if it applies to the proposed scope of work.	NO <input type="checkbox"/>	YES <input type="checkbox"/>																																																																									
12. Provide flood study per the Flood Plain Management Ordinance and in accordance with FEMA approved methodology if it applies. IF a LOMR or CLOMR, etc. is needed, the Applicant must send documents to FEMA w/copy sent along with plans.	NO <input type="checkbox"/>	YES <input type="checkbox"/>																																																																									
13. Does your submittal/hydrology report address the following: runoff reduction volume (RRV), channel protection volume, over-bank flood protection, extreme flood protection, and ten-percent downstream analysis?	NO <input type="checkbox"/>	YES <input type="checkbox"/>																																																																									
14. Provide RRV, WQV and CPV calculations. If RRV is not included provide detailed technical justification based on soil characteristics and or site topography related to best practices for runoff reduction volume	NO <input type="checkbox"/>	YES <input type="checkbox"/>																																																																									
15. Provide executive summary of the report's findings to include a table similar to:	NO <input type="checkbox"/>	YES <input type="checkbox"/>																																																																									
<table border="1" style="width: 100%; border-collapse: collapse; font-size: 8pt;"> <thead> <tr> <th style="width: 10%;">Basin</th> <th style="width: 10%;">Drainage Area</th> <th style="width: 10%;">Return Frequency Storm (yrs)</th> <th style="width: 10%;">Precipitation Value for 24 hour Event (inches)</th> <th style="width: 10%;">Pre-development Flow (cfs)</th> <th style="width: 10%;">Post-development Flow (cfs)</th> <th style="width: 10%;">Ponding Elevation (ft MSL)</th> <th style="width: 10%;">Storage (cubic feet)</th> </tr> </thead> <tbody> <tr><td></td><td></td><td style="text-align: center;">1</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td style="text-align: center;">2</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td style="text-align: center;">5</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td style="text-align: center;">10</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td style="text-align: center;">25</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td style="text-align: center;">50</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td style="text-align: center;">100</td><td></td><td></td><td></td><td></td><td></td></tr> <tr style="border: 2px solid green;"> <td style="border: 2px solid green;">10% D.S.</td> <td style="border: 2px solid green;"></td> <td style="border: 2px solid green; text-align: center;">100</td> <td style="border: 2px solid green;"></td> <td style="border: 2px solid green;"></td> <td style="border: 2px solid green;"></td> <td style="border: 2px solid green;"></td> <td style="border: 2px solid green;"></td> </tr> </tbody> </table>	Basin	Drainage Area	Return Frequency Storm (yrs)	Precipitation Value for 24 hour Event (inches)	Pre-development Flow (cfs)	Post-development Flow (cfs)	Ponding Elevation (ft MSL)	Storage (cubic feet)			1								2								5								10								25								50								100						10% D.S.		100								
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16. DeKalb County requires post development release flow rates not to exceed pre-development flows	NO <input type="checkbox"/>	YES <input type="checkbox"/>																																																																									



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<p>17. Include a narrative paragraph/summary in the report that includes a description of existing site, soils, slopes, vegetative cover, and proposed improvements, methodologies and procedures, calculations, summary of results and a conclusion detailing the findings of the drainage investigation.</p>	<p>NO</p> <input type="checkbox"/>	<p>YES</p> <input type="checkbox"/>	
<p>18. Discuss both existing and proposed drainage patterns, land use, land cover, land slopes, hydrologic soil group, segmented times of concentration, and the method for estimating storm water runoff (S.C.S.). Incorporate Green Infrastructure/Low Impact Development practices where practical.</p>	<p>NO</p> <input type="checkbox"/>	<p>YES</p> <input type="checkbox"/>	
<p>19. County codes require that the curve number for wooded condition be used for ALL onsite basin. No weighted curve number needs to be calculated for the pre-development basin(s), simply use the CN for wooded condition.</p>	<p>NO</p> <input type="checkbox"/>	<p>YES</p> <input type="checkbox"/>	
<p>20. For subdivisions, the maximum lot coverage required by the zoning codes must be used for each proposed lot, as the total impervious area for the hydrology study.</p> <p>If the maximum lot coverage is not used, then the square footage of proposed impervious accounted for each lot must be indicated and the final plat must then specify that maximum impervious surfaces to be created on the lot(s). The building permit drawings for each lot must then reflect the same value(s).</p>	<p>NO</p> <input type="checkbox"/>	<p>YES</p> <input type="checkbox"/>	
<p>21. State the existing and proposed impervious surface by acre and percent of site for each basin.</p>	<p>NO</p> <input type="checkbox"/>	<p>YES</p> <input type="checkbox"/>	
<p>22. Provide a breakdown of proposed impervious surface by roofs, roads, sidewalks, access drives, driveways, etc.</p>	<p>NO</p> <input type="checkbox"/>	<p>YES</p> <input type="checkbox"/>	
<p>23. Delineate all drainage areas/basins to include offsite drainage and bypass.</p>	<p>NO</p> <input type="checkbox"/>	<p>YES</p> <input type="checkbox"/>	
<p>24. Detailed pre and post developed drainage area maps are required. Drainage areas/basins must be clearly delineated (use color and hatch if necessary), and must show the CN values, acreage, study point, and TC flow path for each drainage area/basin. Each drainage area/basin must be labelled as onsite, offsite, or bypass as applicable.</p>	<p>NO</p> <input type="checkbox"/>	<p>YES</p> <input type="checkbox"/>	



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25. Explain the chosen CN values used and provide detail calculations for the weighted CN values for each basin	NO	YES	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
26. Provide a list or table of the rainfall values used. Use 3.36 inch as the value for the one year (1-year) precipitation depth when using the Annual Maximum time series, or use the Partial Duration time series http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=ga : NOAA ATLAS 14 POINT PRECIPITATION FREQUENCY ESTIMATES.	NO	YES	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
27. The SCS method and other approved methodologies are required for detention analysis.	NO	YES	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
28. A 10% downstream analysis is required. Provide basin drainage showing the drainage area/basin clearly delineated (use color and hatch if necessary), and must show the CN values, acreage, study point, and TC flow path for each drainage area/basin. Provide peak flow analysis results with and without detention to the labelled study point.	NO	YES	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
29. The 10% downstream analysis must specifically prove and state that no structures (businesses, homes, culverts, streets, etc.) between the analysis points will be adversely impacted by the increase in site runoff based on hydrograph timings to the 10% downstream study point.	NO	YES	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
30. Provide fore-bay calculations (o. l"/acre of impervious area)	NO	YES	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
31. Provide WQV and/or CPV orifice sizing calculations for the 24-hour drawdown	NO	YES	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
32. Round orifice size up or down to the next whole number (e.g. computed = 2.6", round to 3") for WQv and CPv orifices sizing	NO	YES	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
33. Provide the detailed calculations for CPv (required and provided), RRv (required and provided), Orifice sizing, Green Infrastructure/Low Impact Development.	NO	YES	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
34. Provide stage-storage report, pond report, hydrographs, and any other outputs from the model, showing input values/parameters used, assumption made, etc.	NO	YES	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



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The volume required by the hydrology shall reconcile with the grading on your drawings			
35. Provide 50% of net WQV as dead pool storage for Wet Extended Detention pond.	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
36. Micro pool pond required (for less than 10 acre drainage areas). Show 25-30% of net WQV as dead pool storage.	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
37. Show that the 100-year storm, including offsite pass-through, is safely passed around or through the pond and through the emergency overflow weir. Otherwise, show how the offsite will be managed.	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
38. Disturbed bypass areas greater than 10% of the drainage basin require water quality treatment. (however, the County may require bypass less than 10% to address water quality)	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
39. Extended dry detention may be used to fully meet CPV, Qp25 and Qf (The 100-year, 24-hour storm event) requirements only	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
40. Extended dry detention must be used in conjunction with other onsite BMPs to meet the 80% TSS water quality requirements of the GSMM	NO <input type="checkbox"/>	YES <input type="checkbox"/>	



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<p>41. Include Outlet Control Structure (OCS) and pond cross section details in BOTH the hydrology report and in the plan set.</p> <p>a) The OCS detail must show the following:</p> <ul style="list-style-type: none"> • Show OCS plan view with dimensions • Show OCS front view, with orifices diameter and weirs length (information shall be reconciled with hydrology report) • Show bottom and top elevation of OCS • Show trash rack (Trash rack must have 10 times the surface area of the orifice it protects. Flat is not allowed for public single-family residential developments) • Show raised lid with ring and cover <p>b) The Pond x-section details must show:</p> <ul style="list-style-type: none"> ▪ The top of dam and bottom of pond elevations ▪ The 100-yr volume and elevation ▪ The RRv/WQv and Water Surface Elevation (WSE) ▪ The forebay volume, its top of dam elevation, spillway and bottom elevation ▪ Micropool bottom elevation, volume and WSE for volume provided ▪ The x-section must show both ends/edges of the ponds ▪ Show a safety bench if the pond is deeper than 4' or required slopes of greater than 3:1. ▪ Show and dimension the aquatic bench ▪ standard 10' embankment berm width and minimum slopes of 3:1 per GSMM 	<p>NO</p> <p style="text-align: center;"><input type="checkbox"/></p>	<p>YES</p> <p style="text-align: center;"><input type="checkbox"/></p>	
<p>42. If CPV is waived, then the 2 through 25 year attenuation is required as well as safely passing the 100 year storm</p>	<p>NO</p> <p style="text-align: center;"><input type="checkbox"/></p>	<p>YES</p> <p style="text-align: center;"><input type="checkbox"/></p>	
<p>43. Provide a wetland seeding schedule for extended detention wet pond BOTH the hydrology report and in the plan set.</p>	<p>NO</p> <p style="text-align: center;"><input type="checkbox"/></p>	<p>YES</p> <p style="text-align: center;"><input type="checkbox"/></p>	
<p>44. Add note to plan set/on grading sheet: "No woody vegetation is allowed within 15' of the downstream toe of earthen embankment". (i.e. stumps, etc)</p>	<p>NO</p> <p style="text-align: center;"><input type="checkbox"/></p>	<p>YES</p> <p style="text-align: center;"><input type="checkbox"/></p>	
<p>45. Provide construction detail for emergency spillway in</p>	<p>NO</p> <p style="text-align: center;"><input type="checkbox"/></p>	<p>YES</p> <p style="text-align: center;"><input type="checkbox"/></p>	



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46. For earthen pond embankments, use impervious cut-off trench with anti-seep collar to restrict piping of soils through embankment	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
47. Add note to plan/on grading sheet: “The pond’s maintenance under drain is intended to drain the pond for infrequent maintenance and inspection purposes. The gate valve must be closed immediately after construction of the pond. After construction is completed, it can only be opened upon authorization by the DeKalb County Land Development Department.”	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
48. Provide pond under drain (drain pipe with 3” mm. gate valve located in OCS). Also, provide manufacturer and maintenance spec	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
49. Show the forebay volume calculation (0.1” per impervious acre). Indicate and show volume provided	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
50. If WQV and CPV requirements are met, the only additional requirements are flood control for the 25-year event and safe passage of the 100-year event.	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
51. Show/indicate required micropool (25-30% of net WQV); indicate volume provided	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
52. For redevelopment projects other than stormwater hotspots, if less than 40 % of the site is being disturbed only that portion of the property is required to meet the stormwater compliance regulations. The hydrology analysis will model the whole site , however only the area disturbed will be treated as wooded for the pre-developed conditions.	NO <input type="checkbox"/>	YES <input type="checkbox"/>	