APPENDIX I

EXISTING CONDITIONS ANALYSIS	
	Provide topographic plan of existing conditions. Show the following on the map: a. Delineate drainage boundaries (including offsite areas draining onto site) and label/name each drainage basin the same as each basin is labeled/named in calculations and output appearing elsewhere in the report. b. Indicate acreage of each drainage basin. c. Indicate the curve number (CN) for each drainage basin. d. Indicate the time of concentration (Tc) and its flow path for each drainage basin. e. Indicate land cover condition for each drainage basin. f. Indicate all state waters and other surface water features. g. Indicate existing stormwater management facilities and conveyances.
	Provide a summary table showing the following parameters for each drainage basin: label/name of drainage basin, acreage, CN, and Tc.
	Provide a summary table of peak flow rates from each delineated drainage basin for 1, 2, 5, 10, 25, 50, and 100-year storm events.
	Provide hydrograph output for each delineated drainage basin for the 1, 2, 5, 10, 25, 50, and 100-year storm events.
	Provide CN calculations for each drainage basin, according to current NRCS guidance.
	Provide Tc calculations for each drainage basin, according to current NRCS guidance.
	Provide rainfall depths for each storm event using NOAA Atlas 14 data.
	Provide the assumed rainfall distribution.
	Provide information about soils within and upstream of the site.
	Provide a statement about whether the site is located in a watershed protection district.
POST DEVELOPMENT CONDITIONS ANALYSIS	
	Provide topographic map of developed conditions. Show the following on the map: a. Delineate drainage boundaries (including offsite areas draining onto site) and label/name each drainage basin the same as each basin is labeled/named in calculations and output appearing elsewhere in the report. b. Indicate acreage of each drainage basin. c. Indicate the CN for each drainage basin. d. Indicate the Tc and its flow path for each drainage basin. e. Indicate land cover condition for each drainage basin. f. Delineate and label/name each stormwater management facility. g. Indicate all outflow locations for each stormwater management facility. h. Indicate portions of the site that will not drain to any stormwater management facility (i.e. bypass areas). i. Indicate any portions of the site that will be used for conservation area credits.
	Provide a summary table showing the following parameters for each drainage basin: label/name of drainage basin, acreage, CN, and Tc.
	Provide a summary table of peak flow rates from each drainage basin for the 1, 2, 5, 10, 25, 50, and 100-year storm events.
	Provide a summary table for each stormwater management facility, showing its discharge peak flow rate, maximum ponding elevation, and freeboard for the 1, 2, 5, 10, 25, 50, and 100-year storm events.
	Demonstrate compliance with runoff reduction and water quality criteria per the Georgia Stormwater Management Manual (GSMM). If runoff reduction is infeasible for any portion of the site, provide justification. Provide geotechnical testing information (e.g. infiltration rates, groundwater elevations, bedrock elevations) as appropriate to support the proposed design and/or infeasibility.
	Demonstrate compliance with channel protection criteria per the GSMM. If channel protection should be waived, provide justification. As appropriate, provide calculations and output to demonstrate proper design of channel stabilization and energy dissipation measures (e.g. velocities, shear stresses, Froude numbers).

	Demonstrate compliance with the overbank and extreme flood protection criteria per the GSMM. Justify any expected increases in peak flow rates or flood elevations due to development of the site. For each stormwater management facility, provide at least 1.0 ft of freeboard during the 100-year storm event, and adequate overflow structures to accommodate larger storms or clogged conditions. As appropriate, provide calculations and output to verify water surface elevations, freeboard, etc.
	Provide a downstream hydrologic assessment in general accordance with the process described in GSMM 3.1.9.2. Clearly identify the zone of influence, tributary junctions (as appropriate), and 10-percent point for each significant discharge from the site. Explain the expected impact to downstream properties, infrastructure, and the environment. Provide supporting calculations and output.
	Provide details and calculations for all runoff reduction and water quality facilities. Specify permanent soil stabilization and vegetation as appropriate.
	Provide a completed copy of the current GSMM Stormwater Quality Site Development Review Tool, and an accompanying map showing locations of Best Management Practices (BMPs), drainage basins, bypass areas, and conservation areas. Note that a properly-recorded conservation easement will be required for any proposed conservation area credit.
	Provide hydrograph output for the 1, 2, 5, 10, 25, 50, and 100-year storm events, for each drainage basin, stormwater management facility (i.e. routed hydrograph), combination, junction, reach, etc.
	Provide CN calculations for each drainage basin, according to current NRCS guidance.
	Provide Tc calculations for each drainage basin, according to current NRCS guidance.
	For each stormwater management facility, provide Stage/Storage/Outflow tabulation and outlet configuration data.
	For each stormwater management facility, provide details for outlet control structures, emergency spillways, sediment forebays, maintenance drains, anti-clogging measures, trash racks, etc. in the plans and stormwater management report / hydrology study. Ensure details are consistent between plans and reports, and that they can be easily correlated.
	When conservation easements are proposed, provide copies of easement documentation (e.g. agreements, plats) in the plans and stormwater management report / hydrology study. Clearly delineate the limits of the conservation easement on the plan.
	Provide a Stormwater Maintenance Agreement.
	Provide a Floodplain Indemnification Document, if applicable.