

**CHARLOTTE ENGINEERING DEPARTMENT**  
**LAND DEVELOPMENT REVIEW**  
**Storm Drainage As-Built Plan Checklist<sup>2014</sup>**

**Project Name** \_\_\_\_\_ **Date Reviewed** \_\_\_\_\_  
**Reviewer** \_\_\_\_\_ **Phone No.** \_\_\_\_\_  
**Contact** \_\_\_\_\_ **Phone No.** \_\_\_\_\_

**GENERAL SUBMITTAL REQUIREMENTS**

- \_\_\_\_\_ Provide an electronic (PDF) copy of as-built plans of constructed structures, pipes, channels, and drainage easements sealed by a professional surveyor.
- \_\_\_\_\_ All associated storm water easements will be shown on the as-built plat which carries public runoff and has been captured in a public drainage easement which agrees with the same easements shown on the approved plat, as well as all required Post Construction Controls Easements per the regulations
- \_\_\_\_\_ Title block with site name, location, vicinity map and a description of Phase and Map being reviewed.
- \_\_\_\_\_ Subdivision as-built plans require the associated plats to be submitted with as-built plan for review. (All drainage systems within full plat must have completed as-built information).
- \_\_\_\_\_ A supplemental digital file is needed for City records and will be uploaded to Accela in AutoCAD format shown with the layer configurations described in Section 11.4 of the PCCO Administrative Manual.
- \_\_\_\_\_ All storm system structures identified and labeled the same as the approved plan. All structure elevations are to include an invert elevation, a top of grate (at grade) elevation and any opening elevations used for storm water intake purposes (NAVD 88). All data is to be verified to the closest hundredth of a foot (0.01).
- \_\_\_\_\_ All storm system pipes identified and labeled the same as the approved plan with upstream and downstream invert elevations (NAVD 88), the total length of the pipe run from end to end, with the calculated slope. All data is to be verified to the closest hundredth of a foot (0.01).
- \_\_\_\_\_ Legible scale

**STORM DRAIN SYSTEMS**

- \_\_\_\_\_ Pipe inverts, lengths, sizes, slopes and type of material.
- \_\_\_\_\_ Rim elevations (center of grate at lip) and invert elevations.
- \_\_\_\_\_ Grate elevations for grated yard inlets, throat opening dimensions and inverts for “slab type” yard inlets. Note: Provide sufficient spot elevations for finish grade around inlet to confirm that the required sump has been provided.
- \_\_\_\_\_ A minimum of 2 feet of cover must be provided in Public Rights of way or provide verification that Class IV Reinforced Concrete Pipe was installed.

**DITCH AND CHANNEL SECTIONS (Receiving one acre or more of drainage area)**

- \_\_\_\_\_ Provide ditch/channel cross-sections plotted to scale, 100 feet maximum intervals, minimum of 2 per ditch with adequate spot elevations that defines the ditch section and slope as required by the approved subdivision plan. Label distances between spot elevations on the cross sections.
- \_\_\_\_\_ Cross sections are to be shown and labeled on the plan.
- \_\_\_\_\_ In case of 100+1 Overland Relief Channel
  - \_\_\_ Cross-sections at back of curb (beginning of channel), front of building pad(s), and back of building pad(s).
  - \_\_\_ 1’ minimum freeboard at building pad(s)

Note: Any new or revised storm drainage systems or easements shown on as-built plans may require a subdivision plan revision along with engineering calculations and drainage area maps.