TOWN *of*
WAKE FOREST

301 S. Brooks Street
Wake Forest, NC 27587
t 919.435.9400

www.wakeforestnc.gov

As-Built Submittal Requirements

Introduction

The following requirements for submittal of CAD data have been prepared for the purpose of incorporating the digital submittal information into the Town's Geographic Information System (GIS) base mapping, so that accurate data may become available to emergency responders, Town staff, engineers, and the larger development community.

- CAD file must contain public utility infrastructure and plat information within a single drawing in DWG format. Files in DXF, DWF, or DGN format are not acceptable. Drawing must be "stand-alone" without the necessity of attaching Reference or XREF files, or modifying and levels and layers. CAD file must be saved as 2010 version or earlier. Current GIS does not support newer versions at this time.

- The CAD data is not meant to be printed. As such, it should not be all inclusive of the information displayed on the plan sheets. Objects normally set up in the layout tab ("paper space") for the purposes of plotting plan sheets, such as title blocks, page borders, legends, vicinity maps, and north arrows, should NOT be included in the CAD file. Callout detail boxes also should not be included.

- CAD data must be drawn at full scale (1:1), and oriented to NC Grid North.

- The data must be tied to Town monumentation data, in real world coordinates, and spatially referenced to the Town's GIS projected coordinate system: North American Datum 1983 (NAD 83), NC State Plane, FIPS 3200; Units: US Feet.

- All polygons must close without overlaps. All lines must be snapped at their endpoints and free of gaps or dangles. Annotation text that breaks the continuity of lines should be shifted out of the way of the line.

- Public/private utility infrastructure and plat information must be organized into separate layers according to feature type, and drawn as polylines (except for annotation). All layers must be turned on and visible/unfrozen. Layer names should be intuitive and descriptive of the objects on that layer. Features must be clearly segregated into their appropriate layer, and not appear on other unrelated layers. Remnants of lines or points used in the development of the drawing but not representative of actual real-world features (trim lines, transit points, etc.) should be removed from the drawing. Existing infrastructure should be on separate layers from proposed infrastructure and should be differentiated as such in layer names (i.e. "EXIST_WATER_MAIN" versus "PROP_WATER_MAIN"). Features that should appear in the drawing on separate layers are listed below. Any additional features not listed are optional and must also be on separate layers with clear, understandable layers names. Existing elevation contours are not needed, and should not be included within the provided file.

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Public and Private Storm Water Drainage System

Structures/Points:

- All structures should be points or blocks under the same layer.
- The attributes of the points are to include those listed below.
  - o Structure Name
  - o Invert Elevation
  - o Structure Description
- A sample table of the attributes can be found below:

Sample Table

Point No.	Northing	Easting	Elevation	Description*

*OEP, FES, HW, SI, JB, DI, CI, CB, UG JB

Pipes/Lines:

- All pipes should be lines under the same layer.
- The attributes of the pipes should include the following:
  - o Pipe ID
  - o Upstream structure ID
  - o Upstream invert
  - o Downstream structure ID
  - o Downstream invert
  - o Pipe diameter
  - o Pipe material
- A sample table of the attributes can be found below:

Sample Table

Link ID	From		To		Diameter	Material*
	Structure ID	Invert	Structure ID	Invert		

*RCP, CSP, HDPE, PVC, DIP