

SECTION 10000 RECORD DRAWING CHECKLIST

Clarifications in italics added July 2018

All entities who construct public infrastructure, private streets, private storm drain collection systems and travel lanes, shall submit to the Town of Cary a certified set of record drawings and a *USB (flash/thumb) drive* with files in (.PDF) format of each sheet, signed and sealed by the NCPE and/or NCPLS, as a part of the Town's acceptance process. Each sheet of the record drawing set shall be clearly labeled as "record drawing". Plan sheets shall be 24" X 36" or 22" X 34". One copy of final record drawings are required. Mylars are not required. (.PDF) files should not exceed 1.5 MB and naming of files shall indicate sheet title, type of sheet and sheet number.

Record drawings must be submitted and approved prior to acceptance of the improvements or issuance of a certificate of occupancy. In addition, all entities shall submit an electronic CADD drawing file(s) of the NCPLS certified post-construction survey. *For all structures and appurtenances requiring coordinate submission according to the checklist below, an electronic coordinate file (.txt) shall be submitted in the format of P,N,E,Z,D (Point Number, Northing, Easting, Elevation, Description). The descriptions used shall be common industry abbreviated terms (MH, CB, FH, WV, WM, CO, etc.)*

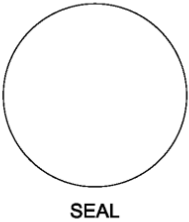
The following check list must be attached to each set of record drawings submitted for approval. Each blank must be initialed by the applicant as being included on the record drawings or marked N/A if not applicable to the project. In addition, the record drawing page number where the associated information can be found shall be included or marked N/A. All applicable information listed below must be included on all record drawings.

10010 RECORD DRAWING INFORMATION

Project Name: _____
TOC Plan #: _____
Submitted by: _____
Sealing Engineer: _____
NCPE License #: _____
Phone #: _____
Transmittal Date: _____

This record drawing certification stamp is to be placed on each sheet, the information filled in, stamped and certified.

RECORD DRAWING CERTIFICATION	
Firm Name :	_____
Address :	_____
Name / Title :	_____
Signature :	_____
I hereby certify to the best of my knowledge and belief that this record drawing is based on actual field survey information provided by _____ dated _____ and accurately represents the final condition of this project. The constructed improvements have been field verified and conform to all the provisions of the Town of Cary.	
Water Permit #	_____
Sewer Permit #	_____
Reclaimed Water Permit #	_____



10020 DATA

Pg #

- ____ A. Total quantity of infrastructure chart
- _____ Streets (List lengths individually: Public, Private and/or Fire Lane)
 - _____ Water mains (Identify size and length)
 - _____ Sewer mains (Identify size and length)
 - _____ Storm pipe (Identify size and length)
 - _____ Reclaimed water mains (Identify size and length)
 - _____ Number of valves (For each size)
 - _____ Number of fire hydrants
 - _____ Number of manholes
 - _____ Number of stop signs
 - _____ Other (Any additional appurtenances)
 - _____ Sidewalks
 - _____ Greenways / Multi-use trails
 - _____ Greenway structures (bridges & culverts)

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10030 GENERAL INFORMATION

Pg

- ___ ___ A. Seal and signature of North Carolina registered PE, PLS and/or RLA responsible for record drawings on each sheet
- ___ ___ B. Statement designating drawings are "Record Drawing" on each sheet
- ___ ___ C. Copy of recorded plat indicating all easements (including sight distance & greenway easements) and right of way
- ___ ___ D. Base mapping data
 - ___ Horizontal tie to North American Datum (NAD83/Suffix year)
(This datum to be consistent with projects approved plan)
 - ___ 500 scale vicinity map
 - ___ Scale of drawings and bar scale
 - ___ North arrow
 - ___ Vertical tie to North American Vertical Datum of 1988 (NAVD88)
 - ___ All easements identified and dimensioned. Include legal reference (deed, BOM, page #)

10040 STREETS (Public, Private, Greenway, Sidewalk or Fire Lane)

Pg

- ___ ___ A. Horizontal alignment with radii, P.C.'s, and P.T.'s of all curves
- ___ ___ B. Vertical alignment with centerline grades, vertical curve lengths and station and elevation of all PVC's and PVT's and centerline profile
- ___ ___ C. Dimensioned right of way and street widths
- ___ ___ D. Pavement design (actual) and typical cross section
- ___ ___ E. Horizontal and vertical sight lines
- ___ ___ F. Engineering Certification for retaining walls (if applicable)
 - ___ Statement "built as designed" or include sealed record drawing
- ___ ___ G. Official street names on each applicable sheet

10050 STORM DRAINAGE

Pg #

- ___ ___ A. Plan and profile
- ___ ___ B. Pipe slope and length labeled
- ___ ___ C. Pipe material labeled
- ___ ___ D. Pipe size labeled
- ___ ___ E. Size & material of riprap dissipation pad (if applicable)
- ___ ___ F. Outline of 100 year flood plain / floodway
- ___ ___ G. Show permanent storm water best management practice
- ___ ___ H. Locations - survey grade NAD83 coordinates and NAVD88 elevations certified by a NCPLS for each of the following:
 - ___ ___ Structure Tops \ Rims (with elevations labeled in profile)
 - ___ ___ Structure Inverts (with elevations labeled in profile)
- ___ ___ I. BMP certification when completed
- ___ ___ J. Certification by NCPE of construction in accordance with the approved plans, calculations and hydraulic grade lines
 - ___ ___ Certification on the plans
 - ___ ___ A separate certification sheet shall be provided
- ___ ___ K. A separate, recorded easement dedication plat for utility extensions outside right of way

10060 WATER SYSTEM

Pg #

- ___ ___ A. Plan and profile
- ___ ___ B. Pipe material and pressure class labeled
- ___ ___ C. Pipe size labeled
- ___ ___ D. Restrained joint pipe length labeled (if applicable)
- ___ ___ E. Separation from sanitary sewer, storm, reclaimed water and gas shown on plans
- ___ ___ F. Locations - survey grade NAD83 coordinates and NAVD88 elevations certified by a NCPLS for each of the following:
 - ___ ___ Valves
 - ___ ___ Fittings
 - ___ ___ Fire hydrants
 - ___ ___ Blow-offs
 - ___ ___ Meters
 - ___ ___ Air release valves
 - ___ ___ Marker balls
- ___ ___ G. Certification by NCPE of construction in accordance with the water extension permit
 - ___ ___ Certification on the plans
 - ___ ___ A separate certification sheet shall be provided
- ___ ___ H. A separate, recorded easement dedication plat for utility extensions outside right of way or offsite

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10070 SANITARY SEWER SYSTEM

Pg #

- ___ ___ A. Plan and profile
- ___ ___ B. Pipe slope and length labeled
- ___ ___ C. Pipe material and dimension ratio or pressure class labeled
- ___ ___ D. Pipe size labeled
- ___ ___ E. Separation from potable water, storm, reclaimed water and gas shown on plans
- ___ ___ F. 100-year flood plain elevation
- ___ ___ G. Horizontal control (angles at manholes)
- ___ ___ H. Locations - survey grade NAD83 coordinates and NAVD88 elevations certified by a NCPLS for each of the following:
 - ___ ___ Clean outs
 - ___ ___ Manhole top/rims (with elevations labeled in profile)
 - ___ ___ Manhole inverts in and out (elevations only and labeled in profile)
- ___ ___ I. Certification by NCPE of construction in accordance with the sanitary sewer extension permit
 - ___ ___ Certification on the plans
 - ___ ___ A separate certification sheet shall be provided
- ___ ___ J. A separate, recorded easement dedication plat for utility extensions outside right of way or offsite

10080 RECLAIMED WATER SYSTEM

Pg #

- ___ ___ A. Plan and profile
- ___ ___ B. Pipe material, dimension ratio, and pressure class labeled
- ___ ___ C. Pipe size labeled
- ___ ___ D. Separation from potable water, sanitary sewer, storm and gas shown on plans
- ___ ___ E. Locations - survey grade NAD83 coordinates and NAVD88 elevations certified by a NCPLS for each of the following:
 - ___ ___ Valves
 - ___ ___ Marker balls
 - ___ ___ Blow-offs
 - ___ ___ Meters
 - ___ ___ Air release valves
- ___ ___ F. Certification by NCPE of construction in accordance with the reclaimed water extension permit
 - ___ ___ Certification on the plans
 - ___ ___ A separate certification sheet shall be provided
- ___ ___ G. A separate, recorded easement dedication plat for utility extensions outside right of way or offsite

10090 FORCE MAINS

Pg #

- ___ ___ A. Plan and profile
- ___ ___ B. Pipe material labeled
- ___ ___ C. Pipe size labeled
- ___ ___ D. Restrained joint pipe length labeled (if applicable)
- ___ ___ E. Separation from potable water, gravity sanitary sewer, storm, reclaimed water, and gas shown on plans
- ___ ___ F. Locations - survey grade NAD83 coordinates and NAVD88 elevations certified by a NCPLS for each of the following:
 - ___ ___ Valves
 - ___ ___ Marker balls
 - ___ ___ Meters
 - ___ ___ Air release valves
- ___ ___ G. Certification by NCPE of construction in accordance with the sewer extension permit
 - ___ ___ Certification on the plans
 - ___ ___ A separate certification sheet shall be provided
- ___ ___ H. A separate, recorded easement dedication plat for utility extensions outside right of way or offsite.

10100 PUMP STATIONS

Pg #

- ___ ___ A. Site plan and design drawings
- ___ ___ B. Pump station design capacity
- ___ ___ C. Pump type and manufacture
- ___ ___ D. Locations - survey grade NAD83 coordinates and NAVD88 elevations certified by a NCPLS for each of the following:
 - ___ ___ Manhole / Wet Well Top/Rim (with elevation labeled on plan)
 - ___ ___ Inverts in and out (elevations only, labeled in profile)
- ___ ___ E. Certification by NCPE of construction in accordance with the sewer extension permit
 - ___ ___ Certification on the plans
 - ___ ___ A separate certification sheet shall be provided

TOWN OF CARY USE ONLY

Reviewed by: _____ Date: _____
Approved: _____ Returned: _____

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