

I. Typical Permits & Encroachments: The following list are some the required permits, encroachments, documents and aspects that must be obtained and/or submitted as part of the technical approval of the project. The required permits, encroachments, documents and aspects are to be uploaded through the City of Concord Planning Department's on-line submission web site as part of the site Zoning Clearance permit in PDF format.

Please note that this list is not comprehensive; other permits or encroachments may be required by federal, state and/or local agencies. Please contact City of Concord Engineering Department at 704-920-5425 for more information regarding the general requirements.

1) **Public Wastewater Collection System Permit:** The Wastewater Collection System Extension or Modification permit application package will need to be submitted as part of the technical review. The "Authorization to Construct" permit will not be issued until after full technical approval has been obtained and the pre-construction requirements have been fulfilled per City of Concord Code of Ordinance Chapter 62, Article 3.

The following Wastewater Collection System Extension or Modification permit application package is to be uploaded through the City of Concord Planning Department's on-line submission web site as part of the site Zoning Clearance permit in PDF format:

- An executed **2017 Wastewater Collection System Extension or Modification (2017 WWCSEM Form)** permit application
- Sealed pump station design calculations with the supporting documents, and gravity sewer capacity calculations, as applicable.
- A digital copy of the sealed engineering drawings in PDF format as specified by City of Concord Planning Department.

The permit application fees that will be assessed as part of the Zoning Clearance permit through Accela (Reference the City of Concord's most current Fiscal Year Fees and Charges Schedule for the Engineering Fees at www.concordnc.gov and the applicable forms can be obtained from the City of Concord Engineering web page at the following link: <https://www.concordnc.gov/Departments/Engineering/Forms-Downloads>)

2) **Public Water Distribution System Permits:** - The Public Water Distribution System Extension or Modification permit application package will need to be submitted as part of the technical review. The "Authorization to Construct" permit will not be issued until after full technical approval has been obtained and the pre-construction requirements have been fulfilled per City of Concord Code of Ordinance Chapter 62, Article 3.

The following Public Water Distribution System Extension or Modification permit application package is to be uploaded through the City of Concord Planning Department's on-line submission web site as part of the site Zoning Clearance permit in PDF format:

- An executed **2019 Water Distribution System Extension or Modification (2019 WSDEM Form)** permit application
- An executed **City of Concord Water System –Supplied Information Form (WSSI Form)**
- Sealed water distribution system hydraulic analysis calculations with the supporting documents.
- A digital copy of the sealed engineering drawings in PDF format as specified by City of Concord Planning Department.

The permit application fees that will be assessed as part of the Zoning Clearance permit through Accela (Reference the City of Concord's most current Fiscal Year Fees and Charges Schedule for the Engineering Fees at www.concordnc.gov and the applicable forms can be obtained from the City of Concord Engineering web page at the following link: <https://www.concordnc.gov/Departments/Engineering/Forms-Downloads>)

Please note that in accordance to the latest February 16, 2016 ruling from DOI, the greater of either the needed fire flow in accordance to IFC 2015 Appendix B section B105.3 or the needed sprinkler system demand will determine the needed fire flow (NFF) in gpm at 20 psi. Therefore, the water system design and supporting design calculations will need to verify the proposed water distribution system will provide the

minimum fire demand (NFF) during peak water demand in gpm at 20 psi in accordance with IFC 2015 Appendix B section B105.3 and Title 15A NCAC 18C.

- 3) **Private Water Distribution System Permits: (*As applicable)** The sealed private water system hydraulic calculations that confirm the peak potable and the fire lines during peak potable demand can meet the system requirements are to be uploaded through the City of Concord Planning Department's on-line submission web site as part of the site Zoning Clearance permit and must be submitted digitally in PDF format.
As of 6-21-16 NCDEQ will permit all private water system that are not deemed permitted by regulation. Although the proposed water service lines and fire system extensions will not require a NCDEQ permit, a Cabarrus County Construction permit will be required from the County and the County plumbing inspection staff and City Fire Prevention will be providing oversight inspection of the private fire lines and building service lines. Please note that the service will still need to pass all testing requirements and fire prevention requirements.
Please note that in accordance to the latest February 16, 2016 ruling from DOI, the greater of either the needed fire flow in accordance to IFC 2015 Appendix B section B105.3 or the needed sprinkler system demand will determine the needed fire flow (NFF) in gpm at 20 psi. Therefore, the water system design and supporting design calculations will need to verify the proposed water distribution system will provide the minimum fire demand (NFF) during peak water demand in gpm at 20 psi in accordance with IFC 2015 Appendix B section B105.3 and Title 15A NCAC 18C.
- 4) **NCDEQ DWQ Wetland Unit 404 & US Army Corps of Engineers 401 Wetland permits, as applicable: (*As applicable)** Please submit a digital copy in PDF format of the **NCDEQ DWQ Wetland Unit & US Army Corps of Engineers 404 permit and approved plans** to the City of Concord. The proposed site improvements that impact wetlands must be design and installed in accordance with the applicable wetland permits. Please contact NCDEQ Division of Water Quality Mooresville Regional Office at 610 East Center Ave., Mooresville, NC 28115, or Phone: 704/663-1699 for more information regarding the general requirements.
- 5) **Off-site Easement Acquisition: (*As applicable)** Provide legal documentation that the developer acquired off-site easement have been obtained and can be transferred to the City post construction.
- 6) **Sedimentation & Erosion Control Permits: (*As applicable)** Provide a digital copy in PDF format of the complete Sedimentation & Erosion Control permit approval. A Sedimentation & Erosion Control permit can be obtained from the North Carolina Department of Environment Quality, Division of Energy, Mineral, and Land Resources, Land Quality Section, Mooresville Regional Office at 610 East Center Ave., Mooresville, NC 28115. Please contact Land Quality Section at 704-663-1699 for further information.
- 7) **Private Wastewater Collection System Permit: (*As applicable)** The "Authorization to Construct" permit for the private sewer extension will need to be obtained from the NCDEQ DWR Division of Water Resources; Mooresville Regional Office after technical approval is obtained.
In order for the City to provide you with the required a "Willingness to serve" letter and the City's downstream sewer capacity assurance FTSE form and fulfill the WSACC flow acceptance and WSACC FTSE request in your behalf letter; submit a digital copy of the following in PDF format through the City of Concord Planning Department's on-line submission web site, Accela:
 - An executed NCDEQ DWR Fast track permit application with all applicable attachments.
 - A digital copy of the sealed engineering drawings in PDF format as specified by City of Concord Planning Department.

- 8) **FEMA Flood Study, as applicable: (*As applicable)** All proposed alterations, to the existing 100 year flood plain that will alter the current conditions including but not limit fill, cuts, etc, will warrant a flood study. This sealed flood study with applicable attachments must be submitted to City of Concord and FEMA, as applicable, for review and approval prior to initiating any construction activity within the flood plain.
- 9) **NCDOT or City of Concord Driveway permit: (*As applicable)** Submit the executed permit application with the related documents and plans. All proposed roadway improvement drawings as also to be submitted for formal review and approval by the City.
- 10) **NCDOT Utility Encroachment Agreements: (*As applicable) The proposed public main extension that is located on a State maintained road will require the submission of a NCDOT Three-party Utility Encroachment agreement to NCDOT.**

Submit a digital copy of the following in PDF format through the City of Concord Planning Department's on-line submission web site, Accela:

- An execute **NCDOT Three-Party Utility Encroachment agreement** for the proposed utility encroachment
- The sealed utility encroachment drawings with applicable cover page, utility extension in plan and profile view sheet(s), and detail(s) of the proposed extension located in the NCDOT public right-of-way.
- The **NCDEQ Sedimentation and Erosion Control permit** approval.
- Legal documentation of any required permanent easements and/or temporary construction easement acquisition(s) from the affected property owners, as applicable.

Please note that the sealed utility drawings must include general location map of project, NCDOT road name and SR number, rights-of-way line and width, edge of pavement, the casing pipe length and diameter, the dimensions location and size of the receiving pit and bore pit, the length of ductile iron carrier pipe, the open cut areas of the pavement, and the location and size of the existing utilities or storm drainage systems, as applicable.

The sealed encroachment drawing must be to scale and must meet the following minimum drawing requirements, including a cover page with the general location map of proposed crossing and site development, and the applicable details associated with the utility extension and roadway crossing.

The utility drawings must incorporate the following specific information into the plan and profile view drawings, as applicable:

- NCDOT road name and SR number,
- Rights-of-way line and width;
- Existing and proposed edge of pavement;
- Existing water main location, diameter and pipe material;
- Other existing utilities with diameter, type and pipe material,
- The proposed casing pipe, material, length and diameter, as applicable
- The proposed diameter, type, and length of the restrained ductile iron carrier pipe with all applicable fittings.
- Dimensions location and size of the proposed trenched excavations (length, width, & depth); and label receiving pit and bore pit as applicable,
- Proposed open cut areas of any paved areas and lane delineations (***Please note that open cuts may be rejected by NCDOT and the designs should eliminate any open pavement cuts or mitigate the proposed open pavement cuts.***)
- Location, type, dimensions, pipe material and ownership of all other existing utilities or storm drainage systems,

- **A plan and profile view of the proposed utility encroachment within the road right of way to 10-ft outside of the NCDOT public road right of way. The location of the other utilities, existing pavement, etc. must be included in this drawing.**
- **The theoretical 1:1 excavation limit as measure from the bottom of the proposed trench to final ground**
 - Traffic Control plan
 - The applicable utility detail sheet
- A complete active shoring design, as applicable. (If Theoretical 1:1 excavation limit extends into the existing pavement, then an active shoring design is to be submitted. An active shoring design shall consist of a subsurface investigation (soils testing report), sealed shoring design calculations, and the shoring design.