

**A Guide to Obtaining Approvals and
Permits for Your Commercial Project**

***WINSTON-SALEM/FORSYTH COUNTY
INSPECTIONS DIVISION***



100 E. First Street, Suite 328

Winston-Salem, NC 27101

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www.inspectnet.org

Hours of Operation: 7:45 am – 4:45 pm

What Is A Building Permit?

The WS/FC Inspections Division is here to help you apply for and obtain the permits needed to begin your commercial construction project. A building permit is more than a permission slip for construction, it is a step in a larger process that will help achieve not only the successful completion of your project, but will promote the safety and quality of the work on your job site. Also in obtaining your commercial building permit you will have enlisted the assistance of our staff and our field inspectors who will ensure the compliance of the work performed on your site with the North Carolina Building Codes.

Permits are required for the demolition, renovations, construction, or change of use of a commercial property. Most commercial construction projects will require that a licensed general contractor perform or directly supervise all work allowed under a commercial permit. There are two exceptions:

- 1) projects with a total cost less than \$30,000, including labor and materials; and,
- 2) owners who superintend work on buildings they own and intend to use for their own **occupancy** (not for speculative purposes, lease, or rent).

Even if you are an unlicensed contractor or an owner superintending work on your own building, the Inspections Division highly recommends that you enlist the services of an architect or an engineer. A thorough examination of your building's existing condition by a licensed architect, engineer or builder may save you money and time by identifying potential problems with your structure. These problems may include:

- 1) Structural defects, health and safety hazards.
- 2) Faulty or defective electrical wiring.
- 3) Inadequate restroom facilities.
- 4) Insufficient heating and air conditioning systems.

- 5) Location and size of egress doors, travel distances to exits, and door hardware that does not comply with building code standards.
- 6) Non-existent fire alarm, smoke detection, emergency lighting, or fire extinguishing equipment.

These are only a few of the items that will be shown on the building plans submitted for review to our office. If these items are not shown on the plans, then their absence or their non-compliance with the North Carolina Building Code will be noted during the field inspections performed after the permits have been issued. It is often much more expensive to repair, replace or correct a code problem after work has already been performed on the defective or non-compliant items.

Before you hire a design professional to draw your building plans, you should check and make sure that the intended use of your building is a use allowed in that specific zoning location.

Building Use and Occupancy

Many times buildings change owners or tenants but the type of business, or **occupancy** of the building, remains the same. In a situation where the type of use or business has not changed zoning questions are more easily answered. If a building's **occupancy** is changed then our zoning plans examiners will determine if the desired "change of use" is allowed in that zoning area.

Change of Use

Winston-Salem's architecture represents a broad and diverse history blending creativity, style and utility. The wide variety of buildings that give Winston-Salem its vibrant architectural appearance often started their lives serving an entirely different purpose than they do now....., a factory building may now be condos or lofts, a bed and breakfast might have been a home, a church now fills abandoned warehouse space, your favorite restaurant may have been an office building. The zoning process an owner must go through to alter the **occupancy** of a structure is called "change of use."

To determine if the intended use of your building is allowed in its current location complete a "Change of Use/Occupance" form under "Forms" on our website and:

- 1) Call or email our zoning plans examiners. They are:
Jeff Vaughn – 336-727-2626
jeffv@cityofws.org

Fred Holbrook –336-727-2595
fredh@cityofws.org

Have your physical street address or your tax block and lot number available. Using this information, our plans examiners can tell you if the desired building **occupancy** is allowed at this location under WS/FC's zoning guidelines. When you call give our zoning plans examiners the following information.

- 1) The previous use of the building.
- 2) Length of time of the previous use.
- 3) If the previous use has been discontinued, for what length of time.
- 4) If the building has not been in continuous use, then how long has it been vacated.

Preliminary Reviews

After a) determining your building's intended use; b) finding out if that use is allowed in a specific zoning district; and c) meeting with your design professional, you should have a reasonable idea of what it will take to get the building and site ready for your business to operate there. Your design professional will be working on a set of building plans for you. It may be a good time for a preliminary design review. This is a service our plans review team offers, by appointment only, that will help ensure that we are all on the same page. It is a chance for you, your designer, and our plans review team to meet at the Inspections Office and chart the direction, progress, code issues, and permitting and inspection processes that affect your building project. Soon after this meeting you should be ready to formally submit plans for review.

Frequently Asked Questions

Q. When do I need to get a permit?

The permit must be approved and issued prior to the start of any work on the building or site.

Q. Where do I go to get my permit?

Permits are issued at the WS/FC Inspections Division Offices. We are located on the 3rd floor of the Bryce A. Stuart Municipal Building.

Our address is:

WS/FC Inspections Division
100 E. First Street, Suite 328
Winston-Salem, NC 27101.

Our offices are open from 7:45 am – 4:45 pm.

Q. What information do I need to provide when I apply for a permit?

You must bring seven complete sets of your construction drawings. Plus, one additional site plan and landscaping plan. A complete set of plans includes:

- Appendix B (See definitions at end)
- Zoning (Landscaping and site plans)
- Building
- Electrical
- Mechanical
- Plumbing
- Fire safety

Our office will require that you fill out a Building Permit Application and a Workers Compensation Affidavit.

If your project is on a site served by a septic tank, you will need construction authorization from the Forsyth County Department of Environmental Health (336-703-3225).

If your site is served by public water or sewer you will need to call Bob Kitchins (336-734-1332) in our Utilities Department. If you plan to offer any beverage or food services at your location you must also contact Tony Gagliardi (336-703-0225) at the Forsyth County Health Department. (Some occupancy types that typically involve food and beverage services are: Bars and Restaurants, Day Care Facilities, Assisted Living and Extended Care Facilities, Convenience Markets, and Church Fellowship Halls. These are only some of the uses that require Health Department approval.)

Q. Can I draw my own plans?

We strongly recommend that you hire a design professional. Not only will this person be adept at drawing plans, their business keeps them up-to-date on zoning and building requirements, and they are familiar with our plans

review process. If you do draw the plans yourself they must be of draftsman quality with a minimum size of 18" x 24". If the plans are computer generated the minimum size is 11" x 17".

Plans for mechanical, electrical and plumbing systems must be drawn by a licensed design professional, or by the licensed trades contractor performing the systems installation. Our Plans Review Department reserves the right to refuse acceptance of plans that are too complex for the preparer's qualifications.

Most commercial plans will require the seal of a North Carolina registered design professional. Here are some of the exceptions:

- An institutional or commercial building project with either a value of \$90,000 or less, or which does not exceed 2,500 square feet of gross floor area.
- An owner may personally prepare the drawings and specifications for a building intended for his personal occupancy.

There are other exceptions that can be confirmed with a call to the plan review coordinator. (336-727-2328)

Q. How long will it take for my plans to be reviewed?

We pride ourselves on our prompt and thorough plan review. We make every effort to complete initial review for new construction within ten working days, and upfits within five working days. Please remember, the more complete and correct your plans are, the quicker the plan review process is. Also, always designate a contact person. Hopefully this person will have access to fax and emails as well as the telephone, and can take advantage of our "InspectNet" website to track plans status.

Q. How do I know what guidelines to use to complete my project?

The rules and regulations are very complex. The books that contain all the rules fill several book shelves in our offices. This is why design professionals and licensed builders can be so important. Their education, experience and professional associations require a knowledge of the rules and require a certain level of competence. Their duties require their familiarity with building codes and with local zoning ordinances. If you do choose to draw your own plans or handle your own construction project here are some references you may need.

The N. C. Building Code

The N.C. Accessibility Code (This text covers our requirements for the Americans with Disabilities Act)

- Available at the bookstore at Forsyth Technical Community College
- Available online at www.ncbuildingcodes.com

The Unified Development Ordinance (Winston-Salem’s Zoning Guidelines)

- Available at www.cityofws.org – go to the Planning Department’s website and link on to the UDO

Q. How much will my permits cost?

Most of our “Building” permits are based on the value of the work being performed. “Trades” permits (electrical, plumbing, HVAC) are based on types and quantities of fixtures installed. Our Erosion Control fees are based on the amount of land disturbed by the construction activities or by the locations of the activities, (floodplains, watersheds, etc....). Our office provides a fee schedule for these and other permitting types such as Zoning, Fire, and Boards of Adjustment. This fee schedule is provided in pamphlet form, from our office, or you can view this fee schedule on our website, www.inspectnet.org.

Q. Do I need a special license to operate my own business?

Businesses operating within the City of Winston-Salem are required to possess a current Privilege License. This license to operate your business may be obtained from the City of Winston-Salem Revenue Department. The Revenue Department address is:

Bryce A. Stuart Municipal Building
100 E. First Street, Suite 121
Winston-Salem, North Carolina 27101

The annual cost of a Privilege License is \$50.00. For more information contact the Revenue Department at 336-747-6954. A Privilege License from the Revenue Department only provides approval for you or your company to engage in the business for which the license is issued. You must still have zoning and building approval from the Inspections Department for your business to occupy the structure(s) at your chosen site.

Q. When do I need to request inspections for my work?

The permit holder or his subcontractors are responsible for notifying the inspectors when work is ready for inspection. Inspections can be requested over the internet @ www.inspectnet.org or by calling (336-727-2624.) Before you request an inspection make sure that your building permit is posted in a conspicuous location, visible from the street, and that an approved copy of your building plan is onsite. If you are renovating an existing building make sure those areas for inspection are not locked and that a safe access to these areas is maintained. If you are unsure whether specific items require inspections, call the appropriate inspector whose name is highlighted in the handouts that will be presented to you when your permit is issued. Please remember that our customer service clerks and our “InspectNet” system only allow for inspection requests. If comments affecting individual inspections are needed please enter them with your requests, or relay that

information to our clerks. If you need to schedule inspections at a specific time, please contact the appropriate inspector directly, after you have requested the inspection.

Q. When is the best time to contact an inspector?

Our inspectors have office phones and mobile phones. The best time to ask questions about specific jobs or to get building code clarifications is when they are in the office. Those times are 7:00 – 7:30 am and 3:00 – 4:00 pm.

Always have the permit number and the property address available. If you must leave a message please add your name and a phone number where you can be reached.

Q. How can I keep track of my job's inspections results?

The Inspections Divisions website, www.inspectnet.org is an excellent tool to monitor the status of your application/permit and job. Before your first inspection request you should download and print the instructions for use of the Inspectnet system, then create an account and begin using it to monitor the status and progress of your job. The instructions will serve as a guide on the initial and continued use of the system. If questions or problems arise, you can call (336-734-1247) and speak with our Records Specialist, who will be happy to assist you. Also please be aware that our inspectors will leave approved or disapproved stickers on the job box or a smooth surface closest to the entry point of the building. This surface could be a placard placed at a prominent location for this purpose, or a window where the stickers are visible. If the inspection is disapproved, the sticker will be used to attach a corrections list for your project.

Q. Do I get anything to show that my job is completed?

As your final inspections are completed, your inspections record is updated in our system. Also a distinctive sticker for final inspections will be posted on your site at the same location as the previous building and trades stickers. This

“Final” sticker provides a space for approval for each of the inspections areas involved to sign off on your project. After all required inspections have been approved you will be issued a C.O., (Certificate of Occupancy). This document testifies that all building and zoning requirements have been met and the occupancy of your building is approved.

Q. What happens when my job is completed?

Who turns on the power?

Once all required inspections have passed, our permitting system automatically sends a request for power to the electrical utility company for your area. You will need to allow sufficient time for the request to be sent, received and processed by the utility provider before expecting electrical power to be turned on. Before beginning your construction project you should contact all the utility providers for that location and make sure applications for their service have been completed.

Q. Do I need a special license to build my own building?

There is an exception in the building code for licensing requirements for a building permit if the applicant **owns and will occupy** the building and property for his or her own use, and not for lease. If these criteria are not met, a building contractor’s license is required. Commercial permits for mechanical, electrical, and plumbing work may only be issued to applicants licensed in the applicable trade. The work done by the owner/occupant must still meet the requirements of the State Building Code.

Q. Are there departments other than Inspections that I need to consult about my project?

Each project is different. An advance call to our office will help us guide you in the proper steps to contact other departments whose services or approvals you may need.

Below is a list of some of these departments and their contact numbers.

City of Winston-Salem

Addresses, Ben Stamey – 747-7048, Planning, City-County, Suite 201, Bryce A. Stuart Municipal Building, 100 E. First Street

Business License, Revenue, Financial Management Services, Suite 121, Bryce A. Stuart Municipal Building – 747-6954

Business Development, Suite 158, City Hall – 727-8040

Downtown Development, Suite 158, City Hall – 727-2741

Engineering, Suite 235, Bryce A. Stuart Municipal Building – 727-2141

Erosion Control, Suite 328, Bryce A. Stuart Municipal Building – 727-2388

Fire Marshall, Public Safety Center – 773-7971

Permits, Building Permit, Suite 328, Bryce A. Stuart Municipal Building – 727-2624

Streets/Stormwater, Suite 337 City Hall – 748-3070

Transportation, Suite 307, Bryce A. Stuart Municipal Building – 727-2707

Revenue, Financial Management Services, Suite 121, Bryce A. Stuart Municipal Building – 747-6958

Utilities, Suite 131, City Hall South – 727-8418

Water/Sewer Billing & Customer Service, Financial Mgt. Services/Revenue, Suite 121, Bryce A. Stuart Municipal Building – 727-2355

Zoning Board of Adjustment, Inspections, Suite 328, Bryce A. Stuart Municipal Building – 727-2101

Forsyth County

Business License, Forsyth County Tax Office, FCGC, 201 N. Chestnut St. – 703-2300

Environment Affairs, 537 N. Spruce St. – 703-2440

Forsyth County Fire Marshall's Office – 727-8084

Health Department, Environmental, 799 Highland Ave. – 703-3225

Perk Test, Land, Environmental Health – 703-3224

Planning, City-County, Suite 201, City Hall South, 100 E. First Street – 727-2087

North Carolina/U.S. Government

Alcohol Law Enforcement, N.C. – Black-Phillips-Smith Government Center, 2301 N. Patterson Ave. – 761-2255

Business License/Secretary of State – 1-800-228-8443

Transportation, N.C. Department of, District Engineer, 375 Silas Creek Pkwy – 703-6600

Q. What if I want to install a sign to advertise my business?

You can come to our office to complete an application form for a **Sign Permit**. You must provide all required information including Contractor ID # (if needed), address, contact person and telephone number. Our application forms are also available at www.Inspectnet.org. The plan size must be 11” x 17” or larger, and we require four (4) sets including the site plan. The site plan must show a view of the property from above and all structures and existing signs on the site. The plan must show a footing detail for a ground sign and a view of the subgrade structure. Ground signs above the height of 6 feet need to be designed by an engineer licensed in North Carolina. On ground signs less than 6 feet, the plans of the proposed sign must show the entire sign from subgrade to top of sign. Ground signs are not allowed in all zoning districts. Please check with our office to make sure your type of sign is allowed in the intended district prior to preparing your plans. Wall signs also need to be permitted, and you should provide plans showing the message on the sign and what it will look like after it has been installed. Wall sign plans need to show a side view of the sign and a mounting detail, a drawing that highlights the projection measured from the wall to the sign face, and how the sign will be supported. The plans should have the contact person listed. Once we have approved the plans the contact person will be notified that the job is ready for permitting. This process normally takes 10

working days or less; also during this process if there are concerns or problems with the review, we will contact the appropriate person with our concerns.

Definitions

Accessibility Code: In North Carolina the Accessibility Code applies to all commercial buildings in some capacity. This code lists items which have to come into compliance to make your building more accessible for persons with disabilities. This is **not** the American with Disabilities Act. This is a code that provides a uniform set of guidelines to make buildings and facilities accessible to and usable by persons with disabilities.

Appendix ‘B’: An appendix ‘B’ is required to be on all plans. The appendix ‘B’ is a building code summary form. Important information is required to be recorded on the form such as; Square footage, building type of construction, occupancy type and number of occupants, fire district, thermal envelope of structure, fire protection information, designer information, parking information, fire ratings of the structure and many more items. The information on this form helps us apply the appropriate codes while reviewing the plans for code compliance.

Awning: An architectural projection that provides weather protection, identity or decoration and is wholly supported by the building to which it is attached. An awning is comprised of a lightweight, rigid skeleton structure over which a covering is attached.

Boarding House: An owner-occupied residential building, or part thereof, in which lodging is provided to not more than eight (8) residents occupying separate living units on a weekly or longer basis. (See also the definition of Rooming House)

Building Line: The line established by law, beyond which a building shall not extend, except as specifically provided by law.

Building Plans: This set of plans will show all construction being performed. Building plans can be simple for small projects with few changes to a structure, or we may receive massive plans for major projects. Even on small projects a floor plan showing exiting, exit lighting and all sales counters, racks, desks, etcetera, is required. Also required is a building code summary called “Appendix B”. The appendix B tells us where changes will be made and what type of construction is intended, and the size and intended use of the building. The plans must always show the proper layout, orientation of accessible fixtures, and required parking and paths of travel as shown in the N. C. Accessibility Code.

Canopy: An architectural projection that provides weather protection, identity or decoration and is supported by the building to which it is attached and at the outer end by one or more stanchions. A canopy is comprised of a rigid structure over which a covering is attached.

Change of Use (Building): In building terms this is when a building goes from one occupancy type to another. An example would be a single family residence being changed to a business or a retail outlet. Another would be a building use changing from business or office space to assembly (Church, restaurant, etc....)

Change of Use (Zoning): A change of use occurs anytime the use of land, a structure, or even part of a structure changes from one specific use to another. A zoning permit is required prior to any change of use.

Construction Documents: Written, graphic and pictorial documents prepared or assembled for describing the design, location and physical characteristics of the elements of a project necessary for obtaining a building permit.

Contractor: In general terms this is the person who is going to perform or superintend the work. It could be a building, electrical, plumbing, mechanical contractor or other person you have a formal

agreement with to do the work. Contractors are required to get permits in their own or their business name. When inspectors are on job sites and code issues arise the inspector will contact the contractor whose name appears on the permit.

Court: An open, uncovered space, unobstructed to the sky, bounded on three or more sides by exterior building walls or other enclosing devices.

Dwelling: A building that contains one or two dwelling units used, intended, or designed to be used, rented, leased, let or hired out to be occupied for living purposes.

Dwelling Unit: A single unit providing complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation.

Existing Structure: A structure erected prior to the date of adoption of the appropriate code, or one for which a legal building permit has been issued.

Habitable Space: A space in a building for living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, storage or utility spaces and similar areas are not considered habitable spaces.

Historical Buildings: Buildings that are listed in or eligible for listing in the National Register of Historic Places, or designated as historic under an appropriate state or local law.

Marquee: A permanent roofed structure attached to and supported by the building and that projects into the public right of way.

Non-conforming Use: This is a use which is not allowed under the current zoning regulations, but is still legally existing because the property has been continuously used (without a lapse of 365

consecutive days) for that same use since prior to the effective date of the applicable zoning regulations.

Occupant Load: This is the number of persons allowed at any one time in a building or space. This is based on the square footage and use of the space. The most common places you see occupant load cards are in restaurants, bars and assembly areas.

Occupancy: This is how the space is intended to be used. It can be business, mercantile, assembly or some other use that would be allowed by the building code and zoning ordinances at this location.

Occupiable Space: A room or enclosed space designed for human occupancy in which individuals congregate for amusement, educational or similar purposes or in which occupants are engaged at labor, and which is equipped with means of egress and light and ventilation facilities meeting the requirements of this code.

Owner: This is the person who owns the building, property, or business for which the work is being done.

Permit: An official document or certificate issued by the authority having jurisdiction which authorizes performance of a specified activity. Permits issued by our office are: Building, Mechanical, Electrical, Plumbing, Zoning, Demolition, Fire, Grading and Erosion Control.

Plan Review: This is the process of reviewing plans for code compliance. This helps to insure that the plans submitted meet all applicable codes and zoning requirements and that plan copies are viewed by our building, electrical, mechanical, plumbing, zoning, health, erosion control, fire, and utilities departments.

Repair: The reconstruction or renewal of any part of an existing building for the purpose of its maintenance.

Rooming House: A residential building, or part thereof, in which lodging is provided to not more than eight (8) residents occupying

separate living units on a weekly or longer basis. See also the definition of Boarding House) A rooming house may be made up of **Living Units** which are an area or room(s) of a building which is used as a place for residents to live and sleep where residents do not have free access to all building areas and share one or more common bathrooms or kitchens.

Shell Buildings: Shell buildings are structures which may or may not have mechanical, electrical or plumbing systems present. When shell permits are requested generally the future tenant is not known. The owner does this to get an early start on the construction project. Sometimes the building may be speculative, meaning no systems will be put into the building until a tenant is signed. At times an owner may have a shell structure with electrical, mechanical and plumbing and complete architectural drawings for minimum compliance. Certificates of Occupancy (CO) are not issued on shell structures simply because they are not complete with regard to life safety, sanitation and zoning requirements. After a builder finishes a building by acquiring upfit permits for each tenant space, and all permits have had their required inspections and passed them, then a CO can be issued to each upfit permit.

Tent: Any structure, enclosure or shelter which is constructed of canvas or pliable material supported in any manner except by air or the contents it protects.

U.D.O. – Unified Development Ordinance: An Ordinance designed by Winston-Salem’s Planning Department and approved by our City Council and our County Commissioners. This Ordinance provides zoning, land development, architectural, and environmental guidelines that are intended to promote the health, safety and general welfare of our public while adhering to the objectives of our published City and County growth plans.

Construction Documents Checklist

Grading and Civil Plans:

- Name of the project, use group and type of construction.
- Name, address and phone number of owner, developer, or person assuming financial responsibility.
- Each drawing must be signed, sealed and dated by a professional architect or engineer, registered in the State of North Carolina.
- North arrow.
- Area locator map showing location within city or county boundaries.
- Lot and block of the existing tract of record, zoning of the parcel and proposed address if assigned.
- Setbacks and location of all easements including ingress, egress, sanitary sewer, stormwater and utility.
- Storm water drainage system.
- Drawn to scale from 1"=20' up to 1" = 60'
- Finished floor elevation as related to the USGS benchmark.
- Site drainage, including contours, established elevations, benchmark and detention plan.
- Location of utility poles and stormwater inlets (including pipe size) located in public right of way.
- Location of existing structures and other features on site.
- Street names and locations including right of way and centerline.
- Location and elevation of 100-year floodplain or floodway.

Landscaping Plan(s):

- Location, general type and viability of existing vegetation, including trees to be preserved.
- Location of all plant and other landscaping material including, but not limited to, materials such as earth berms, walls, fences, screens, sculptures, fountains, street furniture, lights, courts and paved areas.

- Plant schedules with the botanical and common names, general description (i.e. canopy, understory, ornamental or evergreen, shrub, grass etc.) and size and spacing.
- The person, architect, firm or company responsible for the Landscape Plan.
- A minimum scale of 1" = 50' (preferably larger).
- Areas to be screened.
- Required buffer yards.
- Sight triangles and related landscaping.

Site Development Plan(s):

- A minimum scale of 1" = 50' (preferably larger).
- Areas to be screened.
- Required buffer yards.
- Maintain the required percentage of pervious surface.
- Calculations for required parking and number of spaces provided, parking layout with full dimensions of parking spaces, circulation and location of accessible parking spaces and ramps.
- Existing and proposed access driveway locations and dimensions.

Site Utilities Plan:

- Location and size of existing and proposed utilities including electric, gas, sanitary sewer, waterlines, meters and service entrances.
- Project description: (e.g. remodeling existing retail store into a Mexican restaurant or converting existing business office into a daycare facility)
- Location and size of existing water main to include connections for SPR,DOM & IRR systems.
- Locations and size of new water main to include connections for SPR,DOM & IRR systems.
- Location, size, type and configuration of water meters and backflow preventers.
- Location and size of existing sewer main to include connections and clean outs.

Building plan(s) – International Building Code or Rehabilitation Code:

The items listed below are the minimum requirements to begin review.

- Appendix 'B' - Fill out completely
- Height of structures.
- Foundation plan and specifications per Chapter 18.
- Floor plan including height and area requirements per Chapter 5.
- Structural and/or framing plan including load design per Chapter 16.
- Building elevations and sections.
- Wall section details and UL numbers for rated walls.
- Door schedule including all fire rated assemblies.
- Egress requirements per Chapter 10 including corridors, occupancy load, stairs, guards and handrails, window schedules.
- Accessibility requirements per N. C. Accessibility Code.
- Special use requirements per Chapter 4.
- Metal building certification. Must include structural analysis calculations if designed to minimum code requirements and must have engineered footing, details and complete sealed floor plans.
- Elevator plans and specifications.
- Facade and sign plans and details.
- Swimming pool details per Chapter 31 and ANSI/NSPI-1
- Life Safety Plan

Plumbing Plan(s) – International Plumbing Code:

The items listed below are the minimum requirements to begin review.

- Plan view and riser diagram showing method and size of supply, waste and vent per Chapters 6, 7 and 9. Clean out locations per Chapter 7.
- Material schedule per Chapter 3.
- Fixture schedule and minimum facilities per Chapter 4.

- Accessibility requirements per the N.C. Accessibility Code.
- Traps, interceptors and valves, including backwater per Chapter 10.
- Backflow preventers per Chapter 6.

Mechanical Plan(s) – International Mechanical Code:

The items listed below are the minimum requirements to begin review.

- Gas piping layout indicating size, distance to meter and loads.
- Gas piping material, connection, valves and vented chases.
- Appliance location and specifications of equipment.
- Combustion air requirements per Chapter 7.
- Air distribution system layout and specifications of ductwork.
- Kitchen equipment including hood and duct system specification per Chapter 5.
- Outside air calculation as per Chapter 4.
- Fire/smoke damper locations and details.

Electrical Plan(s) – National Electric Code:

The items listed below are the minimum requirements to begin review.

- Riser diagram including size of service entrance, voltage and phase, feeder and subfeed conductor size and ampacities, and number of conductors in each raceway.
- Power plans – Complete with panel, electrical room and service locations.
- Panel schedule to include size, number of circuits, grounding conductor size.
- Wiring method.
- Legend of symbols.
- Hazardous location, dust, fumes, explosives and vapors.
- Exit and egress lighting with foot-candles and power source.
- Ground fault circuit interrupters.

- Fault current available at the transformer(s) and systems design.

Fire Suppression Plan(s):

- Street name and layout including north arrow.
- Riser diagram showing, as applicable: gate valves, standpipe, backflow preventer, check valves, fire department connection, elevations, main drain, and pipe material.
- Fire service main burial depth, fire hydrants, material specifications, and signpost indicating valves.
- Hazard design, density, remote area sprinkler specifications, hanger type and spacing.
- Fire alarm interior, exterior and supervision.

Please be aware that fire suppression plans vary greatly depending upon the intended occupancy and type of construction of a building. The items listed above include only very basic suggestions for fire safety systems. Almost all fire suppression or alarm systems must be sealed by a North Carolina registered professional engineer. Fees for plan review and permits are listed in the brochures offered in the Inspection's Division office. Also offered are fee schedules for initial and annual inspections that fire department personnel are required by law to perform. These inspections include facilities such as: Commercial properties, day cares and group or foster homes. Inspections can result in citations and fines for fire/life safety violations. Questions pertaining to these fines or inspection/plan review fees should be directed to the Winston-Salem Fire Marshall's office (336-773-7972.)

Storm Water Calculations:

All construction drawings must contain storm water calculations. All civil plans must show new contours, if any, in order to verify direction of runoff from the site and the point of discharge. If no site work is to be done and existing flow paths will not be altered, it should be so noted on the plans.

