

BUILDING INSPECTIONS

General Information

Department Head: Paxton Arthurs (since 1998)
Location: Central Permitting Building, 204 East Academy St, Asheboro, NC 27203
Phone Numbers: Main Number: 318-6565
Paxton Arthurs: 318-6560
Building Inspections: 318-6564
Electrical Inspections: 318-6562
Plumbing/Heating Inspections: 318-6563
Fax : 318-6495

Mission

To protect the public safety, health, and general welfare of the citizens and visitors to Randolph County through the administration and enforcement of the State Building, Electrical, Mechanical, and Plumbing Codes.

Summary

Permits for building, electrical, mechanical, plumbing, and insulation work are issued and the inspection of each trade at various stages of construction is conducted. State law mandates this process and all work is inspected for compliance with the N.C. State Building Codes. All inspectors that work for the department are required to be certified by the N.C. Code Officials Qualification Board. The Inspection Department is located at 204 East Academy Street in Asheboro. Office hours are Monday through Friday from 8 a.m. to 5 p.m. Inspectors can be reached between 8 and 9 a.m. and between 4 and 5 p.m. There are 12 positions allocated to this department.

Overview

This department is regulated by North Carolina's State Building Codes and is overseen by the N.C. Department of Insurance. North Carolina has had a State Building Code since 1936. The N.C. General Assembly, during its 1979 session, mandated that counties and cities with a population of 75,000 or more begin to enforce the State Building Code, effective July 1, 1979. Randolph County did not have a building inspections program at that time, although we had been doing electrical inspections since approximately 1936. In March of 1979, the County Commissioners created the building inspections program and consolidated it with the zoning inspections program. They placed both programs in the Health Department, located on Cox Street, behind the Courthouse. At this time they also adopted a building permit fee schedule and determined the basis for determining the valuation for building permits. (See attached.) The four inspectors who were hired initially were Bill McDaniel, John Hancock, Larry Trotter, and Eugene Havens. The building permit fee schedule has been revised at various times over the years. It was last revised May 1, 2005. (See attached.)

In 1981, the County opened a satellite office for Building Inspections in a County-owned building at 402 Balfour Drive in Archdale. At that time it was manned by one inspector. This office was expanded to ultimately be manned by two permit technicians and three inspectors

(one building, one electrical and one plumbing / mechanical). This office was closed in September 2010 due to slowed economic conditions.

In April of 1983, Bob Crumley, County Manager, presented an administrative reorganization proposal to the County Commissioners. The reorganization involved creating two new departments: Property Development (including Building Inspections and Planning & Zoning), to be headed by Hal Johnson of the Health Department; and Emergency Services (including Fire Marshal, EMS, and a new position of administrative assistant), which would create a new position of Emergency Services Director. The Commissioners approved this reorganization, with the directive that the changes were to be implemented as soon as feasible and practical.

During the 1987-88 budget process, Frank Willis, County Manager, separated Building Inspections and Planning & Zoning into two different departments, effective July 1, 1987. Bill McDaniel was named as Chief Building Inspector and made department head of the newly created Building Inspections Department. Hal Johnson remained department head for Planning & Zoning.

In 1998, Bill McDaniel left Building Inspections to become department head for Public Buildings – Maintenance. Paxton Arthurs was then promoted to department head for Building Inspections.

Inspectors have historically used radios for communication, but they are no longer relying on these radios. The County’s contract for placement of a radio communication antenna on a tower has expired, and it would be expensive to renew the contract. The inspectors now use mobile phones to communicate.

The Building Inspections Department has 11 vehicles allocated for its use—9 for inspectors, one for Paxton Arthurs, department head, and one as a spare. These vehicles are listed below:

Make	Model	Mileage	Assigned to
Ford Ranger	2007 Pickup	74,423	Dave Hawk
Ford Ranger	2007 Pickup	69,516	Jeff Stout
Ford Ranger	2006 Pickup	76,573	Paxton Arthurs
Ford Ranger	2006 Pickup	68,348	Brian Heilig
Ford Ranger	2006 Pickup	102,021	Danny Keye
Chevy Silverado	2005 Pickup	129,963	Ronnie Cranford
Chevy Silverado	2004 Pickup	50,317	John Hancock
Chevy Silverado	2004 Pickup	132,240	Bobby Everhart
Ford F-150	2003 Pickup	131,284	Danny York
Chevy Silverado	2002 Pickup	27,744	Brian Underwood
Ford F-150	1999 Pickup	143,794	Spare

Service Area: Inspections

Mission

To provide prompt and thorough inspections of permitted work to ensure compliance with the State Building Codes.

Summary

The Inspections service area is responsible for providing inspections, documenting results, and providing answers to code questions. There are a total of 9 full-time inspectors in the County's jurisdiction. Three of these inspect building and insulation; three inspect plumbing and mechanical; and three inspect electrical work. Additional inspections are made by the plan reviewer and director. This service area has 9.4 allocated positions.

Operations

During the 2002-03 budget deliberations, the Building Inspections Department was allocated an additional inspector, bringing their number of full-time inspectors up to 9. This additional inspector made it possible for the plan reviewer, who had been assisting with field inspections, to remain in the office to work primarily on plan review. Of the six inspectors, two are building inspectors, two are electrical inspectors, and two are plumbing / mechanical inspectors. Three inspectors work the northwest quadrant of the county (north of Hwy 64 and west of Hwy 220 Bypass), three inspectors work the northeast quadrant (north of Hwy 64 and east of Hwy 220 Bypass), and three inspectors work the southern half of the county (south of Hwy 64). From time to time, inspectors who are cross-trained (certified in more than one area) may do an inspection for another inspector (because of uneven workload that day, when two inspections are due at the same job site, etc.).

Randolph County Building Inspections does inspections for all the municipalities with the exception of Asheboro. The County keeps all the fees collected for these inspections.

The main telephone numbers for this department go to an automated attendant, which lists 3 prompts:

- Speak to an inspector (If this prompt is chosen, the caller then chooses which specialty; then, from that specialty, the caller chooses the individual inspector. Before transferring the caller to that individual, the attendant gives the caller that inspector's direct number so that future calls will not have to be routed through the automated attendant.)
- Schedule an inspection (These calls automatically go to a technician, although anyone in the department can schedule an inspection.)
- Have a question (These calls automatically go to a technician to either answer the question or forward it to the correct person)

This system was set up because the department was receiving complaints from callers about busy phone lines. Whenever possible, employees distribute business cards that list all inspectors and their direct lines.

Randolph County attempts to conduct all inspections on the same day for requests that are received in the Central Permit Office by 8:30 a.m. Prior to 2005, this cut-off time was 9:00, but that did not allow for last-minute scheduling, and inspectors were being delayed in getting out of the office to do their inspections. All inspections requested after 8:30 a.m. will be performed no later than 5:00 p.m. the following working day, if possible. At no time should an inspection fail to be performed within 3 working days from its request. Inspectors are in the office from 8:00-9:00 a.m. and from 4:00-5:00 p.m. to schedule work and to answer questions. Each morning the inspectors collect all requests and schedule their work for that day. They compare their lists to see if there are two inspections scheduled for the same site or to see if one workload is light and another is heavy. They may share or trade work to help each other and to even out the workload.

When a contractor is ready for an inspection, he will notify Inspections, usually by calling. He must give the permit number, the type of inspection he is requesting, and any other pertinent information (time of day the job will be ready, where the key can be found, etc.). The permit number for that project is entered into the computer to generate a worksheet that will include all the information that was keyed in at the time the permit was first issued along with the results of any previous inspections that have been performed. This worksheet is then given to the appropriate inspector as a notice that the job is ready for an inspection.

During the day, each inspector will complete his inspection forms (types of inspections performed, whether approved or rejected, and whether a rejection fee will be charged). At the end of the day, these forms are given to the property development technician, who keys in the information.

Inspections are usually done in the following order, although some variations are possible:

- Footings/saw service
- Foundation
- Rough-in for mechanical, plumbing, electrical
- Framing
- Rough-in for insulation
- Final for mechanical, plumbing, electrical (no particular order for these)
- Fire (if commercial), zoning (if applicable)
- Environmental Health (if well or if restaurant or other food service)

At the conclusion of all work done under a permit, the appropriate inspector will make a final inspection, and if he finds that the completed work complies with all applicable State and local regulations and with the terms of the permit, he will issue a Certificate of Compliance.

Certifications

The County may hire inspectors who are not certified by the N.C. Department of Insurance (DOI), but they cannot sign off on any work until they apply for and receive a probationary certificate from DOI. They then have a maximum of two years in which to receive their standard certification. Otherwise, DOI will mail the county manager and the inspector a notice that the inspector may no longer do inspections.

An employee hired without certifications must at least have experience in the field of inspections for which he was hired. He will accompany another inspector in his area until his probationary certificate is granted, generally about 2 weeks, to become familiar with the territory and the work. Even if a new hire has his certification(s), he will ride with another inspector for a few days for orientation.

There are 3 levels of certifications: basic, intermediate, and unlimited. The level of certification determines what size building (both in terms of stories and square footage) an inspector can inspect. In order to be state-certified for each of the 3 levels, an inspector must take and pass coursework, offered at various community colleges, to be eligible to sit for the state exam. There is one course per level, and the community college provides the state with pass/fail information. The state exam is administered by a third party testing company and is offered in various cities throughout the State. An individual may retake the state exam if he fails it. If he fails it twice, he must retake the community college coursework and reapply to take the state exam.

The County pays the cost of the coursework and the state exam. Once an inspector is certified, the County pays an annual fee for the renewal of that certification. The County also pays for the department's membership in each specialty's state association.

Most of our current inspectors are certified in more than one area and are working on others. In 2002 a state law was passed that requires mobile home inspections to be done by someone who is certified in building, electrical, plumbing, and mechanical.

Performance Measurements

Inspectors keep a manual daily log of their work with results (passed, failed, carried over, mileage, etc.). The department head keys this information into a spreadsheet monthly to get monthly results for each inspector and for the whole department and also to get year-to-date information for each inspector and for the whole department. (See attached spreadsheet.) This spreadsheet provides information that can be used to calculate measures for Goal 1 of this service area.

Goal 1: To provide a timely and accurate inspection of buildings for compliance with the State Plumbing, Heating, Electrical, Mechanical and Building Codes

Measurements for this goal were chosen from Performance and Cost Data Phase III County Services, a 1999 publication of the Institute of Government (IOG) in Chapel Hill. This publication compiled results of an IOG performance measurement survey of selected medium and smaller county building inspection departments. Randolph County's Building Inspections department head felt it would be a good idea to use measurements that were already being tracked by many other counties and deemed valid by the IOG. It also gave him a way to compare Randolph's performance to that of other counties. We can look at statistics in the study, and we can contact individual counties to see what their current figures are.

- **Percent of inspections performed within 1 working day of request** – The IOG survey showed that larger counties averaged 96% for this measure, while medium and smaller counties averaged 77%. Randolph County’s initial goal (2002-03) for this measure was 95%. Last year (2009-10) the actual percentage achieved by Randolph County was 99%. If this percentage were to drop significantly, it could be an indicator that the workload has increased to the point that there is a backlog and another inspector is needed. It could mean that an inspector is not being as productive as he should be, or it could be an indicator of another problem. In any event, it would provide a trigger for the department head to investigate the data to determine the cause.
- **Number of inspections** – This figure tells us about growth and economic conditions in the county. The numbers from year to year can be used to project revenue for the coming year.
- **Average number of inspections per inspector per day** – Not only do the figures for this measure tell us about the productivity of our inspectors, but we can compare them to what inspectors are doing in other counties. This measure also lets us see if the numbers for each of our inspectors are consistent with those of his co-workers. If one inspector is averaging 5 or 6 inspections per day and all other inspectors are averaging 10, there is a problem of some kind. In the IOG study, medium to smaller counties averaged 10.3 inspections per inspector per day, while large counties averaged 12.1. Last year (2009-10) Randolph County averaged 7.0 inspections per day.
- **Percent of inspections that are re-inspections** – This measure is used as a review tool. If inspectors are passing almost every inspection, it may be that they are too lenient in their interpretation of the building codes. The opposite could also be true. Again, these figures show whether there is consistency among the inspectors. Is one inspector’s re-inspection rate much higher or much lower than that of the other inspectors? In the IOG study, medium to smaller counties had an average re-inspection rate of 31%, while large counties had 23.8%. Last year (2009-10) Randolph County had a re-inspection rate of 21.4%.

Goal 2: To interpret code requirements and provide citizens with information

- **Percent of applicant evaluations that rate service as satisfactory or higher** – Evaluations are obtained from the departmental customer satisfaction surveys that are mailed out and returned anonymously. Each month the department head randomly chooses contractors whose applications were finalized the previous month and mails them the survey. The survey has three sections that correspond to the three service areas of the department. So the same survey is used as a performance measurement tool for all three service areas. Last year (2009-10) Randolph County had a satisfaction rating of 99.0%.

Service Area: Permitting

Mission

To provide courteous service and a straightforward process for homeowners and contractors to obtain the necessary construction permits.

Summary

The Permitting service area is responsible for issuing the various permits and assisting applicants in this process. This area is the primary duty of two technicians who work out of the satellite office in Archdale. Another technician who works in the Asheboro office assists in this area by issuing permits on mailed-in applications. The Director spends a portion of his time in this area, as well. This service area has 3.40 positions allocated to it.

Overview

Randolph County is one of the first counties in North Carolina to have a centralized permitting program. This program was written in-house by Computer Services staff and initiated in 1991 because Randolph County wanted to make the permit process more convenient and accessible to the public. All permitting is coordinated through a computerized land records and permitting management system. It is designed to streamline the total development permitting process by integrating all development data by parcel number. All levels of county permitting, including zoning, septic tank applications, well applications, building, electrical, plumbing, mechanical (heating and air conditioning), and 911 addressing can be obtained at centrally managed locations.

State Building Codes

The State Building Codes require building permits for any job that is either over \$5,000 or that involves load-bearing, plumbing, electrical, or mechanical work. Persons acting as general contractors must be licensed to work on projects that are over \$30,000. A property owner may act as the general contractor without a license as long as the building is intended for his own personal use. An unlicensed individual may act as general contractor for a modular home if he obtains a \$5000 surety bond. Anyone doing plumbing, electrical, or mechanical work must be licensed unless they are doing work on their own home. No license is required for insulation work. Farm buildings outside of municipalities are exempt from the State Building Codes.

Permit Process

The permit process begins with a property development application (PDA), at which time a permit number is assigned. The PDA provides all pertinent information related to a job and lists all the different permits that will be required for that job. All permits for that property will use the same permit number.

The zoning permit is issued first, then the septic tank application. The applicant must call Environmental Health to come out to do a soil evaluation for the septic system. If the septic

application is approved, Environmental Health gives a clearance letter to the applicant, who must present this letter in order to get the building permit. (The actual septic system permit is issued directly to the applicant by Environmental Health.) Once the building permit has been issued, the subcontractors can get the electrical, plumbing, mechanical, and insulation permits. When permits are printed, a receipt is automatically generated. If the applicant is using the County's prepay system, he will be faxed the receipt as confirmation of his permit(s).

A well permit, in most cases, may be obtained during any phase of the construction process. However, there are some areas of the county that have known flow problems. In these cases, the County requires that the well be approved (volume verified) prior to the issuance of a building permit.

There are times when another agency is involved in a building project and certain documents must be filed and approvals given before the project can proceed or any permits can be issued. For instance, when more than one acre of land is disturbed, the applicant must file an erosion control plan with the N.C. Department of Natural Resources. There may be watershed or impervious surface issues involved. Environmental Health must approve floor plans for restaurants. And each municipality enforcing zoning regulations must issue a zoning permit and clearance prior to the Central Permit Office's issuance of a building permit within the municipality's corporate or extra-territorial zoning jurisdiction.

Near the end of the project, the general contractor may apply for temporary power on the building. Inspections must call the power company to authorize them to provide the temporary power, which is generally for a period of time between 30 and 90 days. If needed, this service can be extended another 30-60 days. Once a week, the Asheboro technician generates a report that shows temporary power expirations. Those contractors are contacted to determine if they need an extension on the temporary power or if they are ready for final inspections. If they have already received an extension and are not ready for final inspections, Inspections will call the power company to return to the job site and remove the meter.

Permit Fee Schedule

The current permit fee schedule was adopted by the County Commissioners April 4, 2005, effective May 1, 2005. This fee schedule (see attached) includes information on both residential and commercial buildings and on every kind of work inspectors are involved with. Permits may expire if work is discontinued for an extended period of time.

Prepayment System

In order to accommodate contractors who do not want to come to our office each time they apply for a permit, the County Commissioners, on May 6, 2002, voted to allow the Central Permit office to set up a prepayment system whereby contractors can deposit a certain amount of money with the County and draw upon their account. The County purchased a software package (QuickBooks) that facilitates the tracking of these escrow amounts.

When this prepayment system was approved, Inspections sent a letter to all known contractors in the county concerning this service. There are 79 contractors currently using this

system. Most of these are subcontractors, as they generally apply for permits much more frequently than do general contractors.

Once an application for prepayment has been approved, an account with a zero balance is opened in the contractor's name. His account number is the same as his license number. An annual processing fee of \$12 is applied to each account on January 1 of each subsequent year. In order for prepayment money to be applied towards a permit, an application must be received by fax. If an account does not have enough funds to cover a permit request, the application will be marked "insufficient funds" and faxed back to the contractor. Funds from the account can be refunded only if the account has been closed. In order to close an account, the contractor must send a request in writing.

All the technicians and the Director work with this program. The Asheboro technician does a daily reconciliation of prepayment transactions. At the first of each month she sends each contractor a monthly statement showing all transactions that occurred in his account during the previous month. If an account maintains a zero balance, it is taken out of the system.

Mobile Home Permits

For the placement of a mobile home, a setup permit is issued rather than a building permit. A setup contractor must be licensed. If the homeowner comes in to get the permit, he must provide the contractor's name and license number. After the setup permit is issued, the subcontractors (plumbing, electrical, heating and air) can get their permits.

Modular Home Permits

For the placement of a modular home, a setup permit is issued rather than a building permit, and a blanket fee of \$400 is charged, which includes base permit fees for plumbing, heating, and electrical. Although fees are paid up front, licensed sub-contractors are still required to complete a permit application so that licensing requirements are documented.

Performance Measurements

All permit information can be found in the PICK system. The department head generates a report each quarter to determine the total number of permits issued that quarter and the value of both total permits and commercial permits. Construction values are based on square footage estimates; mobile homes and modular homes are not included in values because they cannot be retrieved from the PICK system.

Goal: To provide a quick and convenient process for applicants to obtain the various electrical, plumbing, and mechanical permits

- **Percent of applicant evaluations that rate services as satisfactory or higher** – This part of the customer satisfaction survey is used to evaluate the customer service received from employees involved in the process. The survey, which is returned anonymously, is a useful customer service tool for the department and tells us where and how we need to improve. Last year (2009-10) surveys reported a satisfaction rate of 99.3%.

- **Number of permits issued** – This measure shows the actual workload of the service area and could be useful in determining whether the workload has increased to the point of needing another employee. The historical data for permits issued can also help in estimating the amount of revenue to budget for each fiscal year.
- **Value of total permits in millions** – The Building Inspections department head does not use this information himself, but he continues to track it for the benefit of those working with development, growth and planning.
- **Percent of construction value that is commercial** – This figure shows the percentage that commercial construction is of the total construction and helps to demonstrate the balance between residences and commercial buildings.

Service Area: Plan Review

Mission

The mission of the Plan Review area is to verify code compliance and identify code deficiencies prior to construction, by providing a timely and thorough plan review of both commercial and residential projects.

Summary

The Plan Review service area is responsible for reviewing construction drawings, organizing submitted drawings, and guiding applicants in this process. The County has one designated plan reviewer. This person reviews all plans except for residential projects that are issued to a licensed general contractor. The Director spends some of his time on plan review. This service area has 1.20 allocated positions.

Operations

Residential plans (floor plans or blueprints) must be submitted for approval if no licensed contractor is involved. For non-conventional construction (log house, post and beam, etc.), the homeowner must hire an engineer to design the plans.

All commercial plans must be approved. If the project is over 2,500 square feet in size or over \$90,000 in value, the plans have to be sealed by an engineer or an architect. On certain large projects, the N.C. Department of Insurance must also approve the plans. Plans must be approved before a building permit is issued.

The plan reviewer must be certified in all the permit specialty areas in order to review commercial plans. He makes sure that plans meet all the State Building Codes and that they have been appropriately sealed. He also makes sure any other requirements such as erosion control plans have been met. He may ask other inspectors to review certain aspects of plans for confirmation. All residential plans brought into the Archdale office are reviewed by the Archdale building inspector.

The County requires two sets of residential plans; one set is returned and one is kept. A third set of plans is required for commercial projects, as one set must be forwarded to the fire marshal for his approval. The County keeps residential plans for a few months. We keep commercial plans for one year. Plans for government jobs must be kept permanently.

Since the plan reviewer is certified in all permitting areas, he can serve as a backup for the field inspectors. However, most of his spare time is spent in creating informational pamphlets and brochures that answer questions for citizens and give detailed instructions on such projects as building a deck or a storage building, testing gas lines, etc. He is also in the process of developing these pamphlets in Spanish. As these items are created, they are being added to the department's website.

Performance Measurements

All information on plan review (date received plan, date completed review, kind of plan reviewed) is keyed into the computer daily, and a report is generated from Cyclone quarterly that gives the workload data.

Goal: To guide citizens in the plan review and permitting process and to discuss requirements

- **Percent of applicant evaluations that rate service as satisfactory or higher** – This is the general survey that goes out to random applicants. The plan review section of the survey will not apply to all applicants. Residential plan reviews are not required if the permit is issued to a licensed general contractor.

Goal: To review plans to ensure compliance with State Building Codes

- **Percent of plans reviewed within three working days** – With only one staff member working full-time in this service area, the department head felt that three working days would be a reasonable amount of time in which to review a plan once it was submitted. During the busier construction seasons, there may be more plans submitted than usual, making it difficult to get all plans reviewed within three working days. Last year, the percentage of plans reviewed within three days was 100%.
- **Number of residential plans reviewed and Number of commercial plans reviewed** – These measures provide information as to what kinds of construction is taking place in Randolph County and can be useful to those involved with development, growth, and planning. Also, if the percent of plans reviewed within three working days continued to drop and the number of plans reviewed continued to increase, those figures combined would be evidence to support the addition of more staff in this service area.