Plans Submittal Requirements for Commercial Projects

MECKLENBURG COUNTY CodeEnforcement

Prepared by Mecklenburg County Land Use
and Environmental Services Agency
Code Enforcement Department
700 North Tryon Street
Charlotte, North Carolina 28202

Revised August 2002
Revised March 2005
Revised December 2006
Revised May 2007
Revised December 2007
Revised June 2008
Revised July 2008
Revised September 2008
Revised October 2008
Revised December 2008
Revised January 2009
Revised February 2009
Revised July 2009
Revised October 2009
Revised November 2009
Revised December 2009
Revised April 2010
Revised June 2010
Revised July 2010
Revised February 2011

The Commercial Projects Plan Summary has been developed to give you a clear understanding of the minimum requirements for submitting your project plans for review and to receive permits. This summary is divided into two categories: How the System Works which provides comprehensive information on the plan review and permitting services offered and programs available to the customer and Commercial Construction for FULL/ADDITION (New Structure) and TENANT-UPFIT/ALTERATION/ RENOVATION. Each category lists the necessary information that shall be provided from the designer(s) for the project by construction discipline. Including all of the minimum information that is applicable to your project will allow the plan examiners to efficiently review your submission and provide written comments.

Please Note: If you omit information that is indicated as necessary, your plans will be returned without review and your project may be delayed.

This document has been edited by the Department to reflect current processes.
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Please direct any questions or comments to:
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700 North Tryon Street, P.O. Box 31097 Charlotte, NC 28202
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For the latest updates look us up at:
www.meckpermit.com

HOW THE SYSTEM WORKS –

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Plan Review and Permitting Services

HOW THE SYSTEM WORKS

GENERAL DESCRIPTION

All commercial construction, including industrial, institutional, condos, apartments, sports facilities, and school construction within Mecklenburg County including Charlotte and the incorporated towns of Cornelius, Huntersville, Matthews, Pineville, Mint Hill, and Davidson, shall use these procedures and requirements. The office location is at 700 North Tryon Street, Charlotte, North Carolina 28202.

NOTE: The towns of DAVIDSON, HUNTERSVILLE and CORNELIUS perform their own zoning approval. Customers shall have their Building Permit application forms signed off by the specific town's administrator prior to the plans being submitted for review. Davidson: (704) 892-5131; Cornelius: (704) 892-6031; Huntersville: (704) 875-6541.

Overview

(Full details on the services are available in the Detail Descriptions of Plan Review and Permitting Services section below)

Plan Review and Permitting Services

The commercial plan review division provides plan review and permitting services for all commercial projects in Mecklenburg County. There are several options available for projects and their required plan review.

OnSchedule Review - The primary plan review system is called OnSchedule review. OnSchedule review is an appointment-based, plan review system that allows customers to know when their projects will be reviewed. It is necessary for the customer to submit an OnSchedule application through the Electronic Plans Management system to obtain a plan review appointment. Once the plans have been submitted, the review takes place on the scheduled review date. If the plans are disapproved, they are returned to the customer for revisions and resubmittal. If the plans are approved, a permit will be issued.

Express Review - Another option for plan review is the Express Review program. This is an optional review process that requires all drawings to be sealed. The sealholders of record must be present at the time of review. There is an hourly plan review fee in addition to the regular permitting fees. It is necessary for the customer to submit an Express Review application through the Electronic Plans Management system to obtain an Express Review plan review appointment. Once the appointment has been established, the design team (sealholders of record) will meet at the Mecklenburg County Code Enforcement offices for the plan review. The project leader/contact person will be responsible for ensuring all required sealholders are present, the required number of drawing sets is provided and all applicable paperwork is completed. The plans are reviewed for code compliance. Minor redlines are allowed to be made by the appropriate sealholder and, if the drawings are approved and all outside agencies have given necessary approvals, a permit will be issued within 48 hours. If drawings are unable to be approved at the time of the meeting, resubmittals will be made through the OnSchedule process.

REHAB Code Team - Mecklenburg County REHAB code specialists administer the NC REHAB code through preliminary review of projects and plan review of projects for compliance with the

code. Projects that utilize the North Carolina Rehabilitation (REHAB) Code will submit their project through the OnSchedule Plan Review system, but will be scheduled to be reviewed by the REHAB code team. It is necessary for the customer to submit an OnSchedule application through the Electronic Plans Management system to obtain a REHAB preliminary review appointment and a plan review appointment.

Mega Projects – Mega projects are defined as:

- Any high rise project (bldg with height at or above 75 feet above Fire Department access, as defined by the Building Code);
- Any assembly project w/ a gross square foot area of 100,000sf or larger;
- Any mixed use project with a gross square foot area of 200,000sf or larger;
- Any commercial or industrial projects with a gross square foot area of 300,000sf or larger;
- Any institutional project with two smoke compartments or a gross sq ft area of 50,000sf or larger;
- Other projects of similar size or complexity, requiring staff resources comparable to the above, as determined by the Director or his designee.

Projects that meet these criteria will follow the guidelines for submitting a Mega project. This process differs from OnSchedule in the way fees are collected, plans are submitted and meetings are scheduled. This classification was created as a way to move large, complicated projects through the plan review process efficiently. To begin the process, it is necessary for the customer to submit an OnSchedule application through the Electronic Plans Management system to begin the Mega plan review process.

Commercial Technical Assistance Center - Small projects may consider the Commercial Technical Assistance Center (CTAC) review process. This process primarily accepts upfits, renovations and alterations of Business and Mercantile occupancies. The size of the project, based on square footage is flexible from 2,500 – 10,000 square feet. Office/Warehouse projects are allowed in the system under certain conditions. This review process can typically be turned around in 5-7 business days. Requirements for submittal are two sets of drawings that include an Appendix B, a completed Building Permit application (with all applicable contractor information provided), a completed self – gatekeeping checklist, and an Address Verification form. Please see the Commercial Technical Assistance Center (CTAC) section below for additional review.

The CTAC area answers general code questions by phone 704-336-3829 x 4 or in person, at our offices, 700 N Tryon Street 1st Floor.

Interior and Total Demolition Permits – These permits are issued through the Commercial Technical Assistance Center (CTAC). For interior demolition that does not affect structural elements, permits can be submitted and will be issued in 24-48 hours.

Total Demolition Permits must be obtained prior to the demolition of any existing building or structure located in the City, Towns or County. The Commercial Technical Assistance Center (CTAC) issues demolition Permits. Prior to the issuance of the permit, approval must be obtained from the Mecklenburg County Health Department and the Department of Environmental Protection (MCDEP). You will have to submit a NESHAP (National Emission Standard for Hazardous Air Pollutants) notification form to Mecklenburg County Air Quality in order to obtain its approval. The form must be submitted at least ten days before any demolition begins.

Required forms for demolition permits are a building permit application, address verification form, Vector form and NESHAP form. These forms may be found by clicking the links or in our lobby.

Renovation projects with the removal of asbestos - You are required to submit a NESHAP notification form to Mecklenburg County Department of Environmental Protection for any renovation project in which the removal of asbestos is necessary. This form must be submitted at least ten working days prior to the start of any asbestos removal.

Sub-Permits - Stand-alone permits may be issued for minor work on a case-by-case basis. Commercial Sub-permits are handled through the Commercial Technical Assistance Center (CTAC). Customers are required to come in person to our offices at 700 N Tryon Street, 1st Floor. The appropriate sub-permit application must be completed and signed and accompanied by a completed and signed address verification form. If the sub-permit is for work being performed on a project under construction, please bring a copy of the approved drawings in order to verify the work being permitted. If the work being requested on the sub-permit application requires drawings, the customer will be notified and the customer will need to submit drawings for review, either through OnSchedule Review or CTAC review.

Sub-permits can also be submitted through the TIP program. Mecklenburg County requires contractors to have a permit for certain projects and now it is an easy online process. The contractor Trades Internet Permits (TIP) online process allows you to enter details of the work being performed for projects that do not require a Building permit, pay the permit fee and print the permits.

Revisions to Approved Plans - When a permit has been issued for project construction and changes are required in the approved design before the project is completed, revisions to approved plans must be submitted. The plans will be reviewed through the same process as they originally were (i.e., if they went through OnSchedule or Express review, submit an OnSchedule application and follow those requirements. If they went through CTAC review, submit through CTAC. Upon plan submittal, submit the approved field drawings and only those sheets that have been revised. Revisions must be clouded and revised dates modified. The number of sets of drawings varies depending on the number of reviewers affected. Your Coordinator will inform you of the required number of sets. If it is a CTAC review, the number of sets will be two. The drawings shall be 18” x 24” minimum. If the changes are approved, the field set will be revised to reflect the approved changes and released for construction. **There is a charge for this service**. The charge for the review is $145.00 per hour, per trade.

Preliminary Review - A preliminary review meeting may be performed before the actual design is submitted for permitting. Potential code problem areas for the project being submitted for review/permitting should be identified by the designer. A preliminary review shall be performed for phased construction to determine the required phases and their associated design/drawings submittal requirements, submittal scheduling, and handling of code concerns for the actual review/permitting and the development of a Project Permit Master Plan for mega-projects. For projects utilizing phase construction, there should be an entry meeting prior to each submittal, and an exit meeting at the conclusion of the review cycle. The meetings are scheduled in advance and can be scheduled Monday - Friday. Contact an OnSchedule Coordinator for an appointment at (704) 336-3837, ext. 1.

Professional Certification – This is an option that allows professionals, qualified by the department as the designers of record to certify compliance, to hold a 90% preliminary review and receive a conditional permit as outlined in the Professional Certification Program document.

3rd Party Review - This option allows for contracting with department-approved third parties on specific qualified projects. Please contact Patrick Granson, Interim Director of Commercial and Residential Plan Review and Permitting, for additional information on this process at 704-432-0081.

Special Inspections: Please refer to www.meck-si.com for comprehensive information relating to projects that require special inspections per Chapter 17 of NCSBC.

Programs

A/E Pass Rate Program - The A/E (Architect and Engineer) Pass Rate Incentives program goal is to support A&E's by moving them up in the plan review process because they take the profession and the OnSchedule process seriously, and have earned resulting high pass rates. Conversely, those professionals who abuse the OnSchedule process will move back, until they improve. Individuals will be placed into four categories based on their pass rate, Superior, Successful, Not Yet Graded and Poor.

There are tools available to assist in moving projects through the plan review process. They include:

Approved as Noted – Approved as Noted (AAN) is utilized by plans examiners to move projects through the plan review process. AAN items are minor code issues that may be marked up by the plans examiner so the plan review may be approved. Items include notes regarding hardware will comply with accessibility and finishes will comply with section 803. For more involved items, the plans examiner will contact the sealholder to discuss the item(s) to obtain agreement with the changes prior to the changes being made.

Interactive Review - The Interactive Review Strategy was developed as part of the 2008 Commercial Plan Review Revisions. The intention is for Interactive Review to reduce the number of review cycles needed during a review by encouraging communication between the reviewer and the designer of record during the first review cycle. The expectation is this communication will clarify questions and allow a response to correct the code issue(s) at hand. Utilization of Interactive Review will reduce the overall time to obtain an approved set of drawings. This initiative will apply to projects that typically take 1 – 8 hours of review.

Failures not a Failure – Failures not a Failure are 17 items that have been identified as code defect items; however, they are not a chargeable item against the pass rate to the architect, engineer, or designer. They are items may be non code compliant due to the actions of other trades or local ordinances. The item will need to be corrected, and the plan will be disapproved, however, the disapproval will not be counted against the sealholder. If there are other items that are not considered a failure not a failure that need to be addressed on the plans, the disapproval will count against the pass rate.

Superior performers have tools available to them to assist them in the plan review process. They include:

Priority Review – This program allows Superior Performing teams to schedule an appointment for the 2nd review where the sealholder will be present for the review and can answer questions as they arise.

Walk Thru via CTAC Review – This program allows Superior Performing teams to submit small projects through the CTAC area and wait for the plan review to be completed. The sealholders must be present for the review and the permit application must be complete.

Review Schedule Preference – Review Schedule Preference give Superior Performing teams the ability to be scheduled first each day, giving them the first choice of the available times.

Conditional Review Program - The Conditional Review Program allows projects that have Superior Performing design teams and High Performing Contractors the ability to begin work in the field on code compliant areas of the project while noted non-code compliant areas will be addressed through plan review. The program requires agreement between all parties and requires the Conditional Review Form to be completed as part of the process.

Team Plan Review Program - This program allows Superior Performing teams to request the appropriate trade inspector(s) to be present at a preliminary review and subsequent plan review to discuss key code related items which may arise during the construction of the project. This is a premium service that will be charged additional fees above and beyond the traditional permitting fees. The charges will follow the pricing guidelines for the Inspection by Appointment program.

Collaborative Review Program - This program allows Superior and Successful Performing teams the ability for the Plans Examiners and Architects/Engineers to discuss code related issues during the design of the project, prior to formal plan review. The level of formal plan review at the conclusion of the design of the project will be directly related to the level of "collaboration" performed during the design of the project. This is a premium service that will be charged at an hourly rate, similar to the Mega Review process.

Poor performers have programs designed to assist them prepare for the plan review process. They include:

Peer Review Program - This program requires poor performing individuals to obtain a peer review on their project prior to the required preliminary review. The peer reviewer will review the project and complete a Peer Review Form that will be submitted by the poor performing individual at the preliminary review meeting.

Preliminary Review Adv App B meeting - This program requires poor performing individuals to attend a preliminary review meeting prior to the scheduled review date of the project. This meeting gives an opportunity for the poor performing individual to walk through their code logic for the project and identify any potential pitfalls that could arise during the review of the project. The peer review form is submitted at this meeting.

Auto Delay Program - This program will automatically delay the scheduling of projects that are submitted by a poor performing team.

Other Programs

Electronic Plan Management (EPM) - The Electronic Plan Management System (EPM) is a work flow tool that will allow architects, engineers, and designers the ability to oversee their projects through the plan review and permitting department from their offices.

This application has features that allow you to submit commercial applications online and provides real-time tracking of your project as it progresses from estimation, scheduling, gate, plan review to permits. It is necessary to create an account for the firm prior to submitting an OnSchedule application. OnSchedule applications are not allowed to be faxed or dropped off. They must be submitted through EPM.

Gatekeeper Information - Beginning July 1, 2009, commercial projects entering the Mecklenburg County Code Enforcement Plan Review process will no longer be subject to a formal gatekeeping review. Customers will be responsible for reviewing the self-gatekeeping checklist to ensure all necessary information is present on the construction drawings and all necessary accompanying paperwork is incorporated into the submittal sets.

Green Permit Rebate Program - Promoting energy conservation and resource management through sustainable building practices. Mecklenburg County is projected to have a 50% population increase in the next 25 years. The County has adopted the 2015 Community Vision to protect our natural resources. To achieve this goal, the County must work with the development community to undertake growth in a sustainable manner. To encourage building practices which minimize impact on our natural resources, Mecklenburg County is now offering rebates of up to 25% of the permit fee for projects which receive certification from one of the specified programs.

Policies/Procedures

Abandoned Plans – Projects will be considered abandoned if, after receiving automated notice from the County that a plan review cycle is complete or a project is ready for permit issuance, no activity (drawings resubmitted or permit taken out) is taken on the owners part for 120 calendar days. Subject to customer notice 10 calendar days in advance, drawings not picked up by customers within 30 calendar days of review completion, will be destroyed. This applies to projects not ready for permitting (not passing plan review). Plan review comments will be retained in the OnSchedule project record. Permit ready projects will be held for 120 calendar days before destroying plans. Visit the Abandoned Plans page on www.meckpermit.com for more information.

Revised Fee Policy/Abandoned Plans Policy - Beginning March 1, 2009, all OnSchedule Plan Review projects will be required to pay the estimated permit fee based on the estimated construction cost provided on the OnSchedule application prior to submitting the project for plan review. The fees may be paid by the Owner, Owner's representative, Architect, Engineer, or contractor. For new construction, please see our chart for square footage cost. This is located on www.meckpermit.com under the Publications Page under Building Permit Fee Calculations.

Code Defect Library - The code defect library has been created from a list of the most common technical code defects in each trade. The intent of this information is to assist in the education and clarification of common code defects found on job sites and in the review of plans.

Definitions:

Upfit (First Time Interior Completion) - The first upfit to a virgin shell space. Must provide a copy of the approved shell drawings for the entire building.

Work on a Previously Occupied Existing Building - The modifying of space(s) to create more or less tenant space(s). The reworking of previously occupied space, but the space and use remain the same.

Addition - An existing building that is added on to for more space, more tenants etc.

Change of Use - The changing of classification of a building or space within a building and requires the building to meet the requirements of all current codes for the new use.

New Construction:

Full - A project from the site work through the completion of work required for tenant occupancy.

Footing/Foundation - A project that only includes the footings, foundations and possibly slab.

Shell with Footing/Foundation - A project that includes the footings, foundations, slab, and shell structure.

Shell with Footing/Foundation Previously Approved-A project that includes the shell structure, however, the footings and foundations have been approved in a previous package.

Shell/Core with Footing/Foundation - A project that includes the footings, foundations, slab, and shell with the core of the building.

Shell/Core with Footing/Foundation Previously Approved- A project that includes the shell with the core of the building, however, the footings and foundations have been approved in a previous package.

Mega-Project - Mega projects are those identified as unusually large or complex in nature. Some examples would be High Rise, Large Schools, Malls, Large Mix Use Project, Airports, Stadiums, Waste Water Treatment Plants, and Arenas. A project may also be determined to be a mega by the plans examiners upon examination of an OnSchedule Plans Submittal Form. This can be based on the Square Footage of an

unlimited size building or special requirements that are addressed in Chapter 5 of the North Carolina Building Code. Some examples would be Atriums, Special Amusement Events and Air Craft hangers.

Detailed Descriptions

Plan Review and Permitting Services

OnSchedule Review

OnSchedule Plan review is the plan review option that gives customers the ability to control their permitting and construction schedule. With OnSchedule Plan Review, customers will know exactly when a review will be performed and how long it will take.

The vast majority of projects too large or complex for CTAC Review will be channeled through the OnSchedule Plan Review program. Conducted by a team of reviewers, most OnSchedule Plan Reviews will entail no more than eight hours of review time in each trade. The most crucial step in the process is the assigning of the required review time.

A Step-by-Step Process

Step 1

Submit an OnSchedule application through the Electronic Plan Management system. Once the OnSchedule application has been submitted, a project number will be assigned. The project number is required to track your project. The project number must be provided when inquiring about your project. The Plans Examiners will determine the length of review time needed. If you have questions, you may call one of the **OnSchedule Coordinators at 704-336-3837, ext. 1**

Step 2

Review Slot notification:

If the submitted data is **sufficient,** the notification of the review slot, the fee to be paid prior to submittal, and the number of drawings needed for the review will be on the customer's dashboard in the Electronic Plan Management system (EPM). The customer will confirm or reject the date. If the date is rejected, the coordinator will reschedule the review slot and a new notification will be sent. If the date is accepted, the project will become ready to be submitted on the appropriate date.

If the submitted data is **insufficient** to enable the Plans Examiner to assign a review time, the contact person will be notified through the Electronic Plan Management system requesting additional information. If a Preliminary Review is needed, an OnSchedule Coordinator will contact the contact person to schedule this meeting.

Step 3

Gatekeeping:

All documents for OnSchedule Review must be accompanied by the completed self gatekeeping checklist and be submitted to the OnSchedule Coordinator by noon the working day before the date of scheduled review. On the self-gatekeeping checklist each item should be evaluated and a check should be placed in either the Included Column or the N/A Column as applicable. Every project is different and will require different items. This form should be completed by the Sealholder responsible for the submittal package. If a sealholder is not required, it should be completed by the designer responsible for the submittal package. If items are missing from the submittal package that requires the review to be stopped, the review will be disapproved and the disapproval will be counted against the A/E Pass Rate. This form must be submitted with the submittal package.

Prior to entering the system, all projects will be briefly screened by the coordinator for adequacy of plans submittal requirement compliance. Incomplete projects will not be accepted into the system and will be returned to the customer. The customer is expected to wait during the gatekeeping process of the project. All plans entering the system shall be complete and bound in appropriate sets (minimum 18" x 24"), **not to exceed 40 lbs. per volume**. Please note the Architect or lead Designer will be our point of contact.

NOTE: Drawings that are submitted that state NOT FOR CONSTRUCTION or FOR PLAN REVIEW ONLY will be returned WITHOUT ANY PLAN REVIEW FOR CODE COMPLIANCE. Drawings submitted for review shall be finalized design drawings ready "FOR CONSTRUCTION."

OnSchedule reviews:

1. Failure to correctly submit the documents by at least one business day (by noon) prior to the date the review begins will result in charges of $145.00 per hour, per trade. You must change a scheduled review at least five business days prior to scheduled date or risk paying the fee if we cannot fill the time slotted for review with other bookings.
2. Beginning March 1, 2009, permit fees must be paid prior to submittal in order to be accepted. The OnSchedule Coordinator notifies the customer of the fee due when the project is scheduled for review.

For Charlotte-Mecklenburg Projects, The Following Are Required:

1. A completed building permit application with its valid address verification form. The permit shall be complete with all contractors' license numbers, designated costs, and permit type, etc. NOTE: for multiple buildings or tenants there shall be a permit for every tenant and every building. You must complete the PROJECT SUBMITTAL form that applies to the type of permit you are requesting. You shall have a completed address verification form from Mapping/GIS (call Addressing at 704 336-6175 for requests) before entering the process. The coordinator will ask for the completed and signed address verification form before the plans for the projects are accepted into the system for review.
2. Construction documents with complete Building Code Summary (Appendix B) and the site and landscape plans. (Site, zoning, architectural documents, structural, fire protection, utilities-fire, plumbing, mechanical, and electrical plans.) The number of sets of construction documents shall be as advised by the Coordinator at the time the project is booked for review.
3. If the address is in the City of Charlotte or its ETJ, **an additional one set of site plans are required for City Engineering** in order to determine site improvements required for this project. City Engineering will notify the customer of the applicable requirements.

4. If the project is one that requires review by the Department of Insurance (DOI), and the Office of the State Fire Marshal (OSFM), their approval shall be received before the permit(s) will be issued. Typical OSFM project review includes buildings over 20,000 sq. ft. owned by City or County governments.
5. Institutional projects will require the customer to obtain a review by the Department of Facilities Services (DFS). A separate set of construction documents must be submitted directly to DFS by the customer.

Customers should note it is critical to successfully complete gatekeeping before noon the working day before your schedule review. These are important items, however they are not the only items needed. Please refer to the self-gatekeeping checklist for more information.

Step 4

The coordinator assigns the reviews and/or holds required on the projects to be cleared before any permit(s) may be issued. The required plans examiners perform the plan review. A computer-generated notification is forwarded to the examiner's work plate in the order received. After reviewing the drawings for code compliance, the examiner will enter results in the computer. The customers may review comments and project status online. For disapproved projects, the POSSE System will email comments to the lead Designers as each discipline closes. For project status, contact your coordinator or by Internet at www.meckpermit.com.

Plans are Approved:

When all reviews are completed (approved or disapproved), the POSSE System notifies the coordinator, who then notifies the project's contact person that the documents are ready to be picked up. A permit will be issued within 48 hours, subject to completion of the permit application and outside agency approval. Once your project is approved and the permit is ready to be released, you will be required to pay all associated fees from the permitting process or charge it to your account before the permit will be released. The department's permitting software provides the minimum construction cost (based on ICC standards), which is used to verify the minimum permit cost. The drawings are sent to the Commercial Permit counter to hold for customer pick up. When you pick up the drawings, they are logged out to you and released to your custody.

Please recognize that although we interact with some outside agencies; we have **no control** over other agencies' work scheduling or requirements. Plans are sent to City Engineering daily. It is the customer's responsibility to provide submittals and obtain their approvals before a permit will be issued from the OSFM, the Health Department, and others, if required.

Contractors must be bonded to work in Mecklenburg County.

Plans are not Approved:

When a project fails in any trade, it is the customer's responsibility to have the drawings corrected and resubmitted for plan review. It is highly recommend that you submit the re-review form for an appointment, immediately after you are notified to pick up documents. If there are any questions about the code or interpretations, contact the plan examiner(s) who reviewed the drawings. They will discuss the needs and evaluate options, if you propose them. They will not

recommend design changes; they will only review your proposed design for code compliance, not for design quality.

When resubmitting drawings, ALL revised sheets shall be submitted at the same time. Return all sets of the original drawings with the revised drawings. Re-submittals shall be accompanied by written responses to all Plan Review comments. Revisions on plans **shall be clouded and dated**. The coordinator will screen the revisions for re-submittal requirement compliance. Incomplete re-submittals will be returned to the customer. If your project exceeds two reviews, you will need to pay a re-review fee of $145.00 per hour, per discipline. Additionally, if a sheet(s) are significantly revised or reissued in total after the first review, the same re-review fee of $145.00 will be charged as above.

Your assigned coordinator is your representative within the system and is your contact for all issues relating to your project status. If you have questions on code needs or interpretations, contact the plan examiner(s) assigned to your project.

Express Plan Review

Express Plan Review is an optional plan review service that enables projects that are within the program's scope to accelerate the normal plan review process. This service will speed up the review process time from weeks to a single review session and in most cases, permits can be issued within two business days. This service does not guarantee permits if the plans do not meet the necessary requirements of respective codes and ordinances.

Note: You may not submit a project through both the Express Review Program and the regular OnSchedule permitting system, or any other plan review stream (ie: CTAC, Rehab, or Mega).

Express Review provides scheduling for plan review and approval for tenant upfits, interior alterations, change of use permits, and for certain categories of new construction (see page 2). New Construction Express Review services include not only complete project plan review for two business day permitting, but also partial project plan review. Partial plan reviews include: staged construction (shell, footing and foundation), trade reviews only (B/E/M/P/F/Z), revisions to plans disapproved through the standard review process, and revisions to previously approved plans. Partial Express Plan Review **may not** result in two business days permitting. These services are provided as a response to the request of the construction/development community.

General Provisions

Availability:	Tuesday	8:30 am, 9:45 am, 11:00 am, 1:15 pm, 2:30 pm, 3:45 pm
	Wednesday	8:30 am, 9:45 am, 11:00 am, 1:15 pm, 2:30 pm, 3:45 pm
	Thursday	8:30 am, 9:45 am, 11:00 am, 1:15 pm, 2:30 pm, 3:45 pm

Scheduling: A completed Express Plan Review application shall be forwarded to the Express Review Coordinator for processing and booking. Please see, "Express Review Process" below for more detailed information for the required documentation needed to complete your booking.

Booking: The applicant will be contacted by the Express Review Coordinator once the application and documentation is reviewed and the proposed project is determined

to be a candidate for Express Review. A verbal confirmation as well as a faxed confirmation will be made identifying the date and time your project is scheduled for review. A non-refundable fee of $100.00 is to be paid if the appointment is cancelled or moved for any reason. The fee can be paid at any time prior to cancellation or rescheduling of the appointment, but must be paid no later than 2 business days after the appointment has been cancelled or moved. The appointment will not be rescheduled until the fee has been received.

Cancellation: Notice must be given 5 working days in advance of the appointment time.

Note: If cancellation notice is not given within the described guidelines above, the applicant is responsible for paying a cancellation fee. The fee shall be based on the number of hours scheduled for the appointment.
Note: If an appointment is booked within 2 working days of the appointment time, the same cancellation policy applies.

Fees: Beginning January 1, 2009, the Express Review Fee must be paid at conclusion of the Express Review appointment. Beginning March 1, 2009, the permit fee must be paid prior to the start of the Express Review appointment. Failure to remit funds to Code Enforcement for services rendered will result in a discontinuance of all future services of the Department until the fees are paid. Fees may be paid by check, bond, or credit card (Mastercard/Visa/Discover). A bond account may need to be set up with the Revenue Collection department prior to the Express Review appointment. Checks are payable to: Mecklenburg County

Contact: Cheryl Baines Dixon, Express Review Coordinator

Address: Land Use and Environmental Services
Code Enforcement Division
700 North Tryon Street
Charlotte, North Carolina 28202

Phone: (704) 336-3837
Fax: (704) 602-6969

OVERVIEW

Projects permitted on a case by case basis, based on preliminary review include:

Restaurants, Schools, Change of Use (requiring site plans), Conditional Zoning, Multi-Family

Projects not permitted at this time under Express Review:

High Rise, Communication Towers, Projects for DOI, Daycares, Large Assembly
Adult Establishments, Hazardous

Note: Contact the Express Review Coordinator for new construction that requires review/approval from other agencies (Planning, UMUD, MUDD, Transportation, Environmental Health, City Engineering, etc.) Approval from these agencies will need to be obtained prior to building permit issuance.
Note: Exceptions to the above project types may be evaluated on a case by case basis by the Core Process Manager of Commercial Permits if they believe the project fits the program well.

Cost: $1,200.00 per hour for interior work $1,500.00 per hour for exterior work Beginning January 1, 2009, payment is due at the conclusion of the Express

Review appointment

Re-Review: If projects are turned down, a re-review may be scheduled based on availability of appointment times. The per hour cost is the same as the original review. Projects may also be resubmitted for review under the regular system for revisions. In this case, please submit drawings as outlined on the OnSchedule Re-Review form to the Coordinator.

Plan Submittal: NOTE: All plans (including Landscape) must be signed and sealed by the appropriate professional, licensed by the State of North Carolina. EXCEPTION: Low Voltage fire alarm and sprinkler shop drawings are not required to be sealed. Supply to these systems must be signed and sealed.

Requirements:

At the Scheduled Appointment

- Bring the number of sets of drawings as indicated on the Express Review confirmation fax. Plans must be signed and sealed by the appropriate professional. Minimum size of plans is 18" x 24". No half size sets.
- 4 Specification Manuals (if applicable)
- Each seal holder represented on the plans must be present.
- A completed Building Permit Application.
- If a project is located in a jurisdiction which oversees zoning, zoning sign off from that jurisdiction must be obtained on the Building Permit Application. (ie: Huntersville, Cornelius, Davidson)
- If the project is in the Town of Huntersville, a Letter of Submission is required from the Town of Huntersville Planning Department.

Scheduling an Appointment Time

1. Submit the Express Review Application. This may be submitted through the Electronic Plans Management system (EPM). The contact person must be completely knowledgeable about the project and be able to make administrative decisions such as scheduling appointments. This is typically the architect or project manager. Accurately describe the proposed work, be complete and specific, and include any specialized design components or features. The more information supplied on the application, the higher the probability for success at the time of review. Failure to accurately describe the project may result in an inability to schedule the project. If you wish, you may contact the Express Review Coordinator at (704) 336-3837 to determine available times. NOTE: Available times are given as a courtesy. Actual dates and times will be given when the project is ready to be booked for review.

2. After receiving the completed forms, one reviewer from each trade will evaluate the request and will indicate an estimated time needed to complete the review or will request a preliminary review. This decision is based on the information submitted on the application.

3. If the project is suitable for Express Review, the Express Review Coordinator will contact the applicant by phone to discuss scheduling either a preliminary review appointment or an Express Review appointment.

   NOTE: A preliminary/scope of work review will be scheduled for new construction projects and on upfit projects as the reviewers deem necessary. The preliminary /scope of work review meeting is designed to give the reviewers an opportunity to see the scope of work for the project. It gives the designers an opportunity to discuss any items which may pose a problem at the time of the Express Review. The preliminary reviews are on Tuesday and Thursday afternoons. One complete set of plans is required and designers are encouraged to attend. Plans are not required to be 100% complete however they must represent a solid scope of work.

   NOTE: A project may be required to be phased in order to meet the goals of the Express Review program.

   Phased construction projects: If a project is separated into phases(footing/foundation, shell, shell w/core, upfit), for the Express Review Program, each phase is a separate project and beginning the process through Express Review does not guarantee that each phase will qualify for Express Review. It is possible that the footing/foundation can be done through Express Review, while the shell or shell w/core will not be able to be done through Express Review.

   NOTE: A Final Express Review meeting will not be scheduled until after the preliminary/scope of work review meeting has been held.

   NOTE: If it is determined at the preliminary/scope of work review meeting that a project will not fit into the scope of the Express Review Program, the contact person will be informed and it will be necessary for the project to go through regular channels for permitting.

4. If a preliminary review meeting is held, the Express Review appointment will be scheduled at the conclusion of the meeting if the project has been approved for the Express Review program.

5. The EPM system will notify the customer of the scheduled review date, fees, and submission requirements. Once this date is accepted, the customer will be responsible for all financial responsibilities associated with the Express Review appointment. If the date needs to be rescheduled, it is necessary to follow the cancellation policy listed above.

6. Express Plan Review MAY NOT be used in conjunction with the Regular Permitting system. A project may not be booked for an Express Review and simultaneously placed through the regular permitting system. Once discovery of this is made, the Express Review will be cancelled, and the applicant will be held responsible for payment of fees incurred. Removal from the Express Review program for 1 year may also result.

Time of Express Review

At the time of the Express Review, the applicant shall be completely prepared. This entails the following:

- Arriving at the appropriate appointment time, as indicated on the Express Review Confirmation fax. If a party is not prepared, they will be asked to reschedule the appointment and be required to pay for the lost appointment time. A grace period of no more than 15 minutes will be allowed.

- Having the specified number of complete sets of plans assembled(stapled), sealed, and ready for review. Seals may be blueline copied. Minimum size of plans is 18" x 24".

- The individual project designers whose professional seals are on the project (engineer, architect, landscape architect, sprinkler designer, etc.) shall be in attendance. This requirement is to meet the legal requirements for the minor "red-lining" of plans when necessary. NOTE: If a seal holder is unable to attend, another seal holder in the same firm may fill in, but they must bring their own seal to seal any changes made to the plans. Owners are encouraged to attend but are not required to be present.

- A completed Building Permit Application. A Building Permit can not be issued if the Building Permit Application is not complete. If a project is located in a jurisdiction which oversees zoning, zoning sign off from that jurisdiction must be obtained on the Building Permit Application. If the contractors are not named on the Building Permit Application at the time of the Express Review, this information must be provided prior to a permit being issued.

- All documents for Express Review must be accompanied by the completed self gatekeeping checklist and be submitted to the Express Review Coordinator at the time of the Express Review. On the self-gatekeeping checklist each item should be evaluated and a check should be placed in either the Included Column or the N/A Column as applicable. Every project is different and will require different items. This form should be completed by the Sealholder responsible for the submittal package. If a sealholder is not required, it should be completed by the designer responsible for the submittal package. If items are missing from the submittal package that requires the review to be stopped, the review will be disapproved and the disapproval will be counted against the A/E Pass Rate. This form must be submitted with the submittal package.

Failure to comply with the following requirements will result in immediate rejection without review and the applicant will be charged the amount of time scheduled for the appointment.

- Not having the correct number of complete, properly bound, sealed plan sets, layers not printed, or improperly bound sets.
- Not having the designers of record or acceptable replacement present.
- Arriving late for the scheduled appointment.
- If the project is in the Town of Huntersville, a Letter of Submission from the Town of Huntersville Planning Department is required.
- Scope of work on plans is different from the scope of work described on the Express Review Application.

PLEASE BE PREPARED AND ON TIME.

Plans should rarely be denied if all requested information is submitted as required. However, if Express Plan Review results in a rejected set of plans, then permits cannot be issued until all outstanding issues have been resolved. If plans are denied, the applicant may opt to be re-reviewed at another express review time or may elect to submit the plans into the standard department process, which would then have standard processing review times and fees for completion. (Generally 5 working days for revisions.)

Designers/Contractors continually unprepared for Express Review appointments may be eliminated from the Express Review process.

Permit Issuance

Permits will be issued within 2 business days of plan approval. Permits can not be issued if the Building Permit Application is not complete, if there are outstanding problems with agencies other than Mecklenburg County Code Enforcement, if the Express Review Fees have not been paid, or if named contractors are not licensed in the State of North Carolina or do not hold a current Surety Bond with our department. Please remember it is the customer's responsibility to have all approvals needed for permit issuance. These include, but are not limited to, City Engineering, County Land Development, Environmental Health, Pools, Air Quality, etc.

Fees

Beginning January 1, 2009, the Express Review Fee must be paid at conclusion of the Express Review appointment. Beginning March 1, 2009, the permit fee must be paid prior to the start of the Express Review appointment. Failure to remit funds to Code Enforcement for services rendered will result in a discontinuance of all future services of the Department until the fees are paid. Fees may be paid by check, bond, or credit card (Mastercard/Visa/Discover). A bond account may need to be set up with the Revenue Collection department prior to the Express Review appointment. Please contact the Express Review Coordinator with any questions regarding this matter.

Checks should be made payable to: Mecklenburg County

Plans

Beginning January 1, 2009, approved and disapproved plans for which a permit has not yet been issued will only be held for 30 days. After 30 days the plans may be destroyed. Any approved plans older than 120 days will be considered abandoned and will be destroyed if unclaimed. Fees will be retained by Mecklenburg County per the Abandoned Plans Policy.

REHAB Review

REHAB review is similar to OnSchedule Plan review. The major difference is the NC REHAB code specialist team will perform the review after a preliminary review has been held. The most crucial step in the process is the assigning of the required review time.

A Step-by-Step Process

Step 1

Submit an OnSchedule application through the Electronic Plan Management system. Please indicate the NC REHAB code will be used for the design and review. Once the OnSchedule application has been submitted, a project number will be assigned. The project number is required to track your project. The project number must be provided when inquiring about your project. The Plans Examiners will determine the length of review time needed. If you have questions, you may call the REHAB OnSchedule Coordinator at 704-336-3837.

Step 2

Preliminary Review Slot notification:

The REHAB OnSchedule Coordinator will contact the customer to schedule a preliminary code review with the REHAB code specialists. The purpose of this meeting is to go over the project and ensure it is a good candidate to utilize the NC REHAB Code. This preliminary review meeting also familiarizes the team with the project prior to plan review submittal, and any code issues may be identified and discussed at this meeting.

Step 3

Review Slot notification:

If the submitted data is **sufficient,** the notification of the review slot, the fee to be paid prior to submittal, and the number of drawings needed for the review will be on the customer's dashboard in the Electronic Plan Management system (EPM). The customer will confirm or reject the date. If the date is rejected, the coordinator will reschedule the review slot and a new notification will be sent. If the date is accepted, the project will become ready to be submitted on the appropriate date.

If the submitted data is **insufficient** to enable the Plans Examiner to assign a review time, the contact person will be notified through the Electronic Plan Management system requesting additional information.

Step 4

Gatekeeping:
All documents for OnSchedule Review must be accompanied by the completed self gatekeeping checklist and be submitted to the OnSchedule Coordinator by noon the working day before the date of scheduled review. On the self-gatekeeping checklist each item should be evaluated and a check should be placed in either the Included Column or the N/A Column as applicable. Every project is different and will require different items. This form should be completed by the Sealholder responsible for the submittal package. If a sealholder is not required, it should be completed by the designer responsible for the submittal package. If items are missing from the submittal package that requires the review to be stopped, the review will be disapproved and the disapproval will be counted against the A/E Pass Rate. This form must be submitted with the submittal package.

Prior to entering the system, all projects will be briefly screened by the coordinator for adequacy of plans submittal requirement compliance. Incomplete projects will not be accepted into the system and will be returned to the customer. The customer is expected to wait during the gatekeeping process of the project. All plans entering the system shall be complete and bound in

appropriate sets (minimum 18" x 24"), **not to exceed 40 lbs. per volume**. Please note the Architect or lead Designer will be our point of contact.

NOTE: Drawings that are submitted that state NOT FOR CONSTRUCTION or FOR PLAN REVIEW ONLY will be returned WITHOUT ANY PLAN REVIEW FOR CODE COMPLIANCE. Drawings submitted for review shall be finalized design drawings ready "FOR CONSTRUCTION."

OnSchedule reviews:

1. Failure to correctly submit the documents by at least one business day (by noon) prior to the date the review begins will result in charges of $145.00 per hour, per trade. You must change a scheduled review at least five business days prior to scheduled date or risk paying the fee if we cannot fill the time slotted for review with other bookings.
2. Beginning March 1, 2009, permit fees must be paid prior to submittal in order to be accepted. The OnSchedule Coordinator notifies the customer of the fee due when the project is scheduled for review.

For Charlotte-Mecklenburg Projects, The Following Are Required:

1. A completed building permit application with its valid address verification form. The permit shall be complete with all contractors' license numbers, designated costs, and permit type, etc. NOTE: for multiple buildings or tenants there shall be a permit for every tenant and every building. You must complete the PROJECT SUBMITTAL form that applies to the type of permit you are requesting. You shall have a completed address verification form from Mapping/GIS (call Addressing at 704 336-6175 for requests) before entering the process. The coordinator will ask for the completed and signed address verification form before the plans for the projects are accepted into the system for review.
2. Construction documents with complete Building Code Summary (Appendix B) and the site and landscape plans. (Site, zoning, architectural documents, structural, fire protection, utilities-fire, plumbing, mechanical, and electrical plans.) The number of sets of construction documents shall be as advised by the Coordinator at the time the project is booked for review.
3. If the address is in the City of Charlotte or its ETJ, **an additional one set of site plans are required for City Engineering** in order to determine site improvements required for this project. City Engineering will notify the customer of the applicable requirements.
4. If the project is one that requires review by the Department of Insurance (DOI), and the Office of the State Fire Marshal (OSFM), their approval shall be received before the permit(s) will be issued. Typical OSFM project review includes buildings over 20,000 sq. ft. owned by City or County governments.
5. Institutional projects will require the customer to obtain a review by the Department of Facilities Services (DFS). A separate set of construction documents must be submitted directly to DFS by the customer.

Customers should note it is critical to successfully complete gatekeeping before noon the working day before your schedule review. These are important items, however they are not the only items needed. Please refer to the *self-gatekeeping checklist* ***for more information.***

Step 5

The coordinator assigns the reviews and/or holds required on the projects to be cleared before any permit(s) may be issued. The required plans examiners perform the plan review. A

computer-generated notification is forwarded to the examiner's work plate in the order received. After reviewing the drawings for code compliance, the examiner will enter results in the computer. The customers may review comments and project status online. For disapproved projects, the POSSE System will email comments to the lead Designers as each discipline closes.

For project status, contact your coordinator or by Internet at www.meckpermit.com.

Plans are Approved:

When all reviews are completed (approved or disapproved), the POSSE System notifies the coordinator, who then notifies the project's contact person that the documents are ready to be picked up. A permit will be issued within 48 hours, subject to completion of the permit application and outside agency approval. Once your project is approved and the permit is ready to be released, you will be required to pay all associated fees from the permitting process or charge it to your account before the permit will be released. The department's permitting software provides the minimum construction cost (based on ICC standards), which is used to verify the minimum permit cost. The drawings are sent to the Commercial Permit counter to hold for customer pick up. When you pick up the drawings, they are logged out to you and released to your custody.

Please recognize that although we interact with some outside agencies; we have **no control** over other agencies' work scheduling or requirements. Plans are sent to City Engineering daily. It is the customer's responsibility to provide submittals and obtain their approvals before a permit will be issued from the OSFM, the Health Department, and others, if required.

Contractors must be bonded to work in Mecklenburg County.

Plans are not Approved:

When a project fails in any trade, it is the customer's responsibility to have the drawings corrected and resubmitted for plan review. It is highly recommend that you submit the re-review form for an appointment, immediately after you are notified to pick up documents. If there are any questions about the code or interpretations, contact the plan examiner(s) who reviewed the drawings. They will discuss the needs and evaluate options, if you propose them. They will not recommend design changes; they will only review your proposed design for code compliance, not for design quality.

When resubmitting drawings, ALL revised sheets shall be submitted at the same time. Return all sets of the original drawings with the revised drawings. Re-submittals shall be accompanied by written responses to all Plan Review comments. Revisions on plans **shall be clouded and dated**. The coordinator will screen the revisions for re-submittal requirement compliance. Incomplete re-submittals will be returned to the customer. If your project exceeds two reviews, you will need to pay a re-review fee of $145.00 per hour, per discipline. Additionally, if a sheet(s) are significantly revised or reissued in total after the first review, the same re-review fee of $145.00 will be charged as above.

Your assigned coordinator is your representative within the system and is your contact for all issues relating to your project status. If you have questions on code needs or interpretations, contact the plan examiner(s) assigned to your project.

Mega Project Review

Mega Projects are defined as:

- Any high rise project (bldg with height at or above 75 feet above Fire Department access, as defined by the Building Code);
- Any assembly project w/ a gross square foot area of 100,000sf or larger;
- Any mixed use project with a gross square foot area of 200,000sf or larger;
- Any commercial or industrial projects with a gross square foot area of 300,000sf or larger;
- Any institutional project with two smoke compartments or a gross sq ft area of 50,000sf or larger;
- Other projects of similar size or complexity, requiring staff resources comparable to the above, as determined by the Director or his designee.

Mega Accounts:

The Department of Code Enforcement requires that an account be established in order to proceed with the Mega Project Program. The owner, lead designer, or lead design firm may create this account. If the lead design firm has an existing account, it is the responsibility of the lead designer to notify the Mega Plan Coordinator. This account is a Land Use Bond account through the LUESA Revenue Collection Department. The Mega Account shall be set up after the initial Project Entrance Meeting with the review team. Mega Project Accounts are required to be established through the LUESA Revenue Collection Department. You may contact them at 704-336-3801 for account options. For information on setting up a bond, please visit our web site www.meckpermit.com , and look under Forms.

Fees:

Customers will be invoiced monthly for Mega Project fees. Detailed billing information will be available from Revenue Collection upon request.

An hourly charge of $145.00 will be assessed for the time associated with staff review, pre-review, or other administrative duties by the reviewer on the project. If necessary, management time spent for project meetings, preliminary code reviews, plan review, or other problem resolutions will require a separate hourly charge. Additional fees will be charged to the project account for attorneys or consultants required by Code Enforcement to resolve specific issues with a project. The hours will be billed in half-hour increments. Plans Examiners will track time dedicated to the review of the project daily.

Mega Projects will still be subject to phased construction fees if applicable.

Mega Project charges must be current prior to permit issuance.

Step by Step process

Step 1

A Point Person on the Designer side will be needed to help coordinate all presentations, preliminary reviews, and facilitate the Mega projects through the plans review system. This point person will submit an OnSchedule application with an Address Verification Form. The Address Verification Form must have the customer portion completed and signed upon

submittal. OnSchedule applications are submitted online through the Electronic Plan Management system (EPM).

Step 2

Entrance Meeting:

The Mega Plan Coordinator will schedule an entrance meeting with the design team, the master plan coordinator and the plans examiners. The intention of this meeting is for the design team to meet with the reviewers to openly discuss the design and code logic for the project. At the conclusion of this meeting, the plans examiners will determine the length of review time needed. If you have questions, you may call one of the Mega Plan Coordinators at 704-336-3837. There is not a charge for this meeting.

Step 3

Review Slot notification:

The Mega Plan Coordinator will call the point person with notification of the review slot and the number of drawings needed for the review (submittal package) and the number of hours scheduled.
An account must be in place prior to further meetings with Mecklenburg County Code Enforcement. From this point forward, time devoted to the review and discussion of the project will be chargeable.

Step 4

Gating Meeting:

A Formal Entry Presentation is required on all Mega projects with all designers and Plans Examiners present. All Gatekeeping functions will be handled at the meeting. In the event that there are scheduling conflicts, those trades may hold breakout entry meetings with the full understanding that any failure to pass the Gatekeeping will result in halting the entire project until all submittal requirements are met. The Project will then need to re-schedule a review date. Notification of cancellation must be received two weeks prior to submittal date. If notification of cancellation is not received, the designer will be charged $145.00 per hour for each scheduled B/E/M/P review.

Additional meetings may be scheduled prior to or after the gating meeting as requested by the design team or as required by the review team.

Step 5

Submittal:
All plans entering the system shall be complete and bound in appropriate sets (minimum 18” x 24”), not to exceed 40 lbs. per volume. Please note the Architect or lead Designer will be our point of contact. Please sign in so that you are processed when it is your turn for your project.

NOTE: Drawings that are submitted that state NOT FOR CONSTRUCTION or FOR PLAN REVIEW ONLY will be returned WITHOUT ANY PLAN REVIEW FOR CODE COMPLIANCE. Drawings submitted for review shall be finalized design drawings ready "FOR CONSTRUCTION."

For Charlotte-Mecklenburg Projects, The Following Are Required:

1. A completed building permit application with its valid address verification form. The permit shall be complete with all contractors' license numbers, designated costs, and permit type, etc. NOTE: for multiple buildings or tenants there shall be a permit for every tenant and every building.
2. Construction documents with complete Building Code Summary (Appendix B) and the site and landscape plans. (Site, zoning, architectural documents, structural, fire protection, utilities-fire, plumbing, mechanical, and electrical plans.) The number of sets of construction documents shall be as advised by the Mega Plan Coordinator at the time the project is booked for review.
3. If the address is in the City of Charlotte or its ETJ, an additional one set of site plans are required for City Engineering in order to determine site improvements required for this project. City Engineering will notify the customer of the applicable requirements.
4. If the project is one that requires review by the Department of Insurance (DOI), and the Office of the State Fire Marshal (OSFM), their approval shall be received before the permit(s) will be issued. Typical OSFM project review includes buildings over 20,000 sq. ft. owned by City or County governments.
5. Institutional projects will require the customer to obtain a review by the Department of Facilities Services (DFS). A separate set of construction documents must be submitted directly to DFS by the customer.

Customers should note it is critical to successfully complete submittal before noon the working day before your schedule review.

Step 6

The mega plan coordinator assigns the project tracking number once the plans are in house. The project contact representative is informed of this number by automated email when the coordinator enters the project into the system. The coordinator assigns the reviews and/or holds required on the projects to be cleared before any permit(s) may be issued. The project number is required to track your project. The project number must be provided when inquiring about your project. The required plans examiners perform the plan review. A computer-generated notification is forwarded to the examiner's work plate in the order received. After reviewing the drawings for code compliance, the examiner will enter results in the computer. The customers may review comments and project status online. For disapproved projects, the Land Development System will email comments to the lead Designers as each discipline closes. For project status, contact your coordinator or by Internet at www.meckpermit.com.

Plans are Approved:

When all reviews are completed (approved or disapproved), the Land Development System notifies the coordinator, who then notifies the project's contact person that the documents are ready to be picked up. Once your project is approved and the permit is ready to be released, you will be required to pay all associated fees from the permitting process or charge it to your account before the permit will be released. The department's permitting software provides the

minimum construction cost (based on ICC standards), which is used to verify the minimum permit cost. The drawings are sent to the Commercial Permit counter to hold for customer pick up. When you pick up the drawings, they are logged out to you and released to your custody.

Please recognize that although we interact with some outside agencies; we have no control over other agencies' work scheduling or requirements. Plans are sent to City Engineering daily. It is the customer's responsibility to provide submittals and obtain their approvals before a permit will be issued from the OSFM, the Health Department, and others, if required.

All Contractors named on the permit application must be licensed and bonded to work in Mecklenburg County.

Construction documents shall be picked up within five days of notification.
If no response is received the submitted project shall be discarded (recycled).

Plans are not Approved:

When a project fails in any trade, an exit meeting will be scheduled with the disapproved trade(s) and the designer(s). This meeting will be scheduled through the Mega Plan Coordinator. If there are any questions about the code or interpretations, the plans examiner will discuss and evaluate options, if you propose them. They will not recommend design changes; they will only review your proposed design for code compliance, not for design quality. At the conclusion of the meeting, the customer will take the drawings. It is the customer's responsibility to have the drawings corrected and resubmitted for plan review. It is highly recommend that you submit the re-review form for an appointment, immediately after you are notified to pick up documents.

When resubmitting drawings, a Re-entry Meeting shall be scheduled through the OnSchedule Coordinator. All Plan Examiners and Designers necessary shall attend this meeting. A scoping letter of all revisions to the project shall be submitted along with the revised drawings showing clouded changes. All Gatekeeping functions will take place as a part of this meeting and be included in the time estimated for the review. In the event that there are scheduling conflicts, those trades may hold breakout re-entry meetings with the full understanding that any failure to pass Gatekeeping will result in halting the entire project until all submittal requirements are met. The project will then need to re-schedule a review date. ALL revised sheets shall be submitted at the same time. Return all sets of the original drawings with the revised drawings. Completed revisions will be given to the coordinators for entry into the Land Development system and distribution of work. Incomplete re-submittals will be returned to the customer.
Your assigned coordinator is your representative within the system and is your contact for all issues relating to your project status. If you have questions on code needs or interpretations, contact the plan examiner(s) assigned to your project.

CTAC Review

Small projects will be channeled through Commercial Technical Assistance Center (CTAC).

A Step-by-Step Process

Step 1

- Submit project to a CTAC coordinator. You will need to submit the following:
- 2 sets of drawings with a completed Appendix B
- 1 completed Building Permit application(with contractor/sub-contractors/cost of construction)
- 1 address verification form
- 1 completed Plan Submittal for CTAC Plan Review form
- 1 completed Self-Gatekeeping Checklist. On the self-gatekeeping checklist each item should be evaluated and a check should be placed in either the Included Column or the N/A Column as applicable. Every project is different and will require different items. This form should be completed by the Sealholder responsible for the submittal package. If a sealholder is not required, it should be completed by the designer responsible for the submittal package. If items are missing from the submittal package that requires the review to be stopped, the review will be disapproved and the disapproval will be counted against the A/E Pass Rate. This form must be submitted with the submittal package.

Step 2

Once project is accepted, the review is performed on a first-in, first out basis.

Step 3

CTAC review is typically a 5-day review process and approved projects will be issued permits at the time of approval, subject to permit application completion.

Disapproved projects will be returned with comments summarizing the defects.

Project Types

The following project list indicates projects generally thought to be eligible for Commercial Walk-Through Review (CTAC Review). Note: Customers should confirm eligibility for CTAC review in advance. Those projects which CTAC cannot review will be referred to the On-Schedule Plan Review system. The CTAC plans examiners will make the final decision/determination of specific project eligibility.

- Handicapped Ramps
- Deck Additions
- Interior Upfits, Business and Mercantile occupancy, 10,000 sf and less(May go to 5000 or 7500 square feet depending on CTAC workload)
- Business and Mercantile renovations of areas up to 10,000 sf
- Small additions, up to 400 sf*
- Accessory buildings up to 400 sf*
- Bathroom additions and renovations up to 1000 sf*
- Minor fire/smoke repairs and minor structural fire repair*
- Special events and amusements (tents, haunted houses, NCAA events, golf events, NASCAR events, NBA events, NFL events)
- Interior pre-fabricated offices (modular petitioning)
- Canopies
- Co-locations on communication towers
- Grease interceptors

- Oil/water separators
- Adding new plumbing, electrical, and mechanical (less than 5000 sf)
- Pedestrian bridges not connected to buildings
- Parking lots
- Facade changes*
- Hood replacements
- Above ground tanks
- Pools (only if part of a pre-approved project by Zoning)
- Office/Warehouse with an office area up to 5000 square feet and warehouse area unlimited with no work being performed in the warehouse area
- Retaining walls that are not part of the construction of the building (stand alone walls)

*Projects within the following Zoning Districts are not eligible for the Walk-Through Process: Historic Landmark, Historic District, MUDD, UMDD, PED, TOD, & UR.

The Walk-Through Process (CTAC Review) will not review projects that are:

- Change of occupancies/use
- Assembly occupancy
- Medical offices
- Daycare
- Hazardous occupancies and equipment
- Factory/industrial occupancies
- Dry cleaners using hazardous materials
- Live/Work Units
- High Piled Storage (Over 10')

Interior Demolition Permits

Interior Demolition Permits are submitted through the Commercial Technical Assistance Center. To obtain an interior demolition permit the following steps should be followed:

- Complete building permit application
- Obtain and complete an address verification form
- Sign in for CTAC at the Commercial Counter
- A representative from CTAC will speak with you in regards to the work that is being performed under the permit.
- If it is appropriate, the permit will be authorized and issued within 24-48 hours.

Total Demolition Permits

Total Demolition Permits must be obtained prior to the demolition of any existing building or structure located in the City, Towns or County. The Commercial Technical Assistance Center (CTAC) issues demolition Permits. Prior to the issuance of the permit, approval must be obtained from the Mecklenburg County Health Department and the Department of Environmental Protection (MCDEP). You will have to submit a NESHAP (National Emission Standard for Hazardous Air Pollutants) notification form to Mecklenburg County Air Quality in order to obtain its approval. The form must be submitted at least ten days before any demolition begins.

To obtain a total demolition permits the following steps should be followed:

- Complete a building permit application
- Obtain and complete an address verification form
- Complete a Vector form
- Complete a NESHAP form
- Sign in for CTAC at the Commercial Counter
- A representative from CTAC will speak with you in regards to the work that is being performed under the permit.
- If everything is complete, the forms will be accepted and routed to the appropriate agencies.
- Once approval is given by all agencies, the permit will be issued. Please expect this process to take 5-10 days.

Renovation projects with the removal of asbestos - You are required to submit a NESHAP notification form to Mecklenburg County Department of Environmental Protection for any renovation project in which the removal of asbestos is necessary. This form must be submitted at least ten working days prior to the start of any asbestos removal.

Sub Permits

There are two options to submit a single trade permit for issuance:

- Through the Commercial Technical Assistance Center (CTAC)
- Through TIP

CTAC – To submit a sub permit through CTAC:

- Complete the appropriate sub permit application (electrical, mechanical, plumbing)
- Obtain and complete an address verification form
- Sign in for CTAC at the Commercial Counter
- A representative from CTAC will speak with you in regards to the work that is being performed under the permit.
- If it is appropriate, the permit will be authorized and issued within 24-48 hours.
- If the work being requested on the sub-permit application requires drawings, the customer will be notified and the customer will need to submit drawings for review, either through OnSchedule Review or CTAC review

Note: If the sub-permit is for work being performed on a project under construction, please bring a copy of the approved drawings in order to verify the work being permitted.

TIP - Mecklenburg County requires contractors to have a permit for certain projects and now it is an easy online process. The contractor Trades Internet Permits (TIP) online process allows you to enter details of the work being performed for projects that do not require a Building permit, pay the permit fee and print the permits.

The benefits of obtaining a permit from this website are:

• The primary contractor may submit, pay for, and print a permit for projects such as change-outs, without staff intervention, 24 hours a day, seven days a week.

• Primary contractor should apply and pay for all sub-trades. Mechanical contractor is considered to be the primary contractor when the project requires Mechanical, Electrical & Plumbing work. Plumbing contractor is the primary contractor for electric water heater change-outs. Electrical may be the primary only on projects not requiring mechanical or plumbing work, such as a service upgrade.

• Upon completing the on-line process, a contractor can immediately request inspections as soon as the work is performed. The county will send certified inspector(s) to verify code compliance.

• Because of an increase in permit fees taking effect July 1, 2009, individual permits will now start at $60. For projects that require both an electrical and mechanical permit, for example, the cost would be at least $120. Contractors who use TIP will be charged $90 - a savings of $30. A larger project would incur higher permit fees.

• The "Submit Permit Application" is available if your project is outside of the scope of the TIP process.

For more information contact RTAC 704-432-7822

Revisions to Approved Plans

Revisions to Approved Plans must be submitted when a permit has been issued for project construction and changes are required in the approved design before the project is completed. The plans will be reviewed through the same process as they originally approved, with the same coordinator and same plans examiners as reasonably possible. The vast majority of revisions to approved plans are handled through a “pool” service time, where drawings are submitted and will be reviewed as time allows within a 5 day period.

A Step-by-Step Process

Step 1

Submit an OnSchedule/Express Review/REHAB application through the Electronic Plan Management system. Once the application has been submitted, a project number will be assigned. The project number is required to track your project. The project number must be provided when inquiring about your project. The Plans Examiners will determine the length of review time needed. If you have questions, you may call one of the **OnSchedule Coordinators at 704-336-3837, ext. 1**

Step 2

Review Slot notification:

If the submitted data is **sufficient,** the notification of the review slot, the fee to be paid prior to submittal, and the number of drawings needed for the review will be on the customer’s dashboard in the Electronic Plan Management system (EPM). The customer will confirm or

reject the date. If the date is rejected, the coordinator will reschedule the review slot and a new notification will be sent. If the date is accepted, the project will become ready to be submitted on the appropriate date.

If the submitted data is **insufficient** to enable the Plans Examiner to assign a review time, the contact person will be notified through the Electronic Plan Management system requesting additional information. If a Preliminary Review is needed, an OnSchedule Coordinator will contact the contact person to schedule this meeting.

Step 3

Gatekeeping:
All documents for Revision to Approved Plans Review must be accompanied by the completed self gatekeeping checklist and be submitted to the OnSchedule Coordinator by noon the working day before the date of scheduled review. On the self-gatekeeping checklist each item should be evaluated and a check should be placed in either the Included Column or the N/A Column as applicable. Every project is different and will require different items. This form should be completed by the Sealholder responsible for the submittal package. If a sealholder is not required, it should be completed by the designer responsible for the submittal package. If items are missing from the submittal package that requires the review to be stopped, the review will be disapproved and the disapproval will be counted against the A/E Pass Rate. This form must be submitted with the submittal package.

Prior to entering the system, all projects will be briefly screened by the coordinator for adequacy of plans submittal requirement compliance. Incomplete projects will not be accepted into the system and will be returned to the customer. The customer is expected to wait during the gatekeeping process of the project. All plans entering the system shall be complete and bound in appropriate sets (minimum 18" x 24"), **not to exceed 40 lbs. per volume**. Please note the Architect or lead Designer will be our point of contact.

NOTE: Drawings that are submitted that state NOT FOR CONSTRUCTION or FOR PLAN REVIEW ONLY will be returned WITHOUT ANY PLAN REVIEW FOR CODE COMPLIANCE. Drawings submitted for review shall be finalized design drawings ready "FOR CONSTRUCTION."

OnSchedule reviews:

1. Failure to correctly submit the documents by at least one business day (by noon) prior to the date the review begins will result in charges of $145.00 per hour, per trade. You must change a scheduled review at least five business days prior to scheduled date or risk paying the fee if we cannot fill the time slotted for review with other bookings.
2. Beginning March 1, 2009, permit fees must be paid prior to submittal in order to be accepted. The OnSchedule Coordinator notifies the customer of the fee due when the project is scheduled for review.

For Charlotte-Mecklenburg Projects, The Following Are Required:

1. A completed building permit application with its valid address verification form. The permit shall be complete with all contractors' license numbers, designated costs, and permit type, etc. NOTE: for multiple buildings or tenants there shall be a permit for every tenant and every building. You must complete the PROJECT SUBMITTAL form that applies to the type of permit you are requesting. You shall have a completed address verification form from

Mapping/GIS (call Addressing at 704 336-6175 for requests) before entering the process. The coordinator will ask for the completed and signed address verification form before the plans for the projects are accepted into the system for review.

2. Construction documents with complete Building Code Summary (Appendix B) and the site and landscape plans. (Site, zoning, architectural documents, structural, fire protection, utilities-fire, plumbing, mechanical, and electrical plans.) The number of sets of construction documents shall be as advised by the Coordinator at the time the project is booked for review.
3. If the address is in the City of Charlotte or its ETJ, **an additional one set of site plans are required for City Engineering** in order to determine site improvements required for this project. City Engineering will notify the customer of the applicable requirements.
4. If the project is one that requires review by the Department of Insurance (DOI), and the Office of the State Fire Marshal (OSFM), their approval shall be received before the permit(s) will be issued. Typical OSFM project review includes buildings over 20,000 sq. ft. owned by City or County governments.
5. Institutional projects will require the customer to obtain a review by the Department of Facilities Services (DFS). A separate set of construction documents must be submitted directly to DFS by the customer.

Customers should note it is critical to successfully complete gatekeeping before noon the working day before your schedule review. These are important items, however they are not the only items needed. Please refer to the *self-gatekeeping checklist* ***for more information.***

Step 4

The coordinator assigns the reviews and/or holds required on the projects to be cleared before any permit(s) may be issued. The required plans examiners perform the plan review. A computer-generated notification is forwarded to the examiner's work plate in the order received. After reviewing the drawings for code compliance, the examiner will enter results in the computer. The customers may review comments and project status online. For disapproved projects, the Land Development System will email comments to the lead Designers as each discipline closes.
For project status, contact your coordinator or by Internet at www.meckpermit.com.

Plans are Approved:

When all reviews are completed (approved or disapproved), the Land Development System notifies the coordinator, who then notifies the project's contact person that the documents are ready to be picked up. A permit will be issued within 48 hours, subject to completion of the permit application and outside agency approval. Once your project is approved and the permit is ready to be released, you will be required to pay all associated fees from the permitting process or charge it to your account before the permit will be released. The department's permitting software provides the minimum construction cost (based on ICC standards), which is used to verify the minimum permit cost. The drawings are sent to the Commercial Permit counter to hold for customer pick up. When you pick up the drawings, they are logged out to you and released to your custody.

Please recognize that although we interact with some outside agencies; we have **no control** over other agencies' work scheduling or requirements. Plans are sent to City Engineering daily. It is

the customer's responsibility to provide submittals and obtain their approvals before a permit will be issued from the OSFM, the Health Department, and others, if required.

Contractors must be bonded to work in Mecklenburg County.

The fees associated with Revisions to Approved Plans are $145.00 per hour, per trade.

Plans are not Approved:

When a project fails in any trade, it is the customer's responsibility to have the drawings corrected and resubmitted for plan review. It is highly recommend that you submit the re-review form for an appointment, immediately after you are notified to pick up documents. If there are any questions about the code or interpretations, contact the plan examiner(s) who reviewed the drawings. They will discuss the needs and evaluate options, if you propose them. They will not recommend design changes; they will only review your proposed design for code compliance, not for design quality.

When resubmitting drawings, ALL revised sheets shall be submitted at the same time. Return all sets of the original drawings with the revised drawings. Re-submittals shall be accompanied by written responses to all Plan Review comments. Revisions on plans **shall be clouded and dated**. The coordinator will screen the revisions for re-submittal requirement compliance. Incomplete re-submittals will be returned to the customer. If your project exceeds two reviews, you will need to pay a re-review fee of $145.00 per hour, per discipline. Additionally, if a sheet(s) are significantly revised or reissued in total after the first review, the same re-review fee of $145.00 will be charged as above.
Your assigned coordinator is your representative within the system and is your contact for all issues relating to your project status. If you have questions on code needs or interpretations, contact the plan examiner(s) assigned to your project.

Preliminary Review

Availability: Preliminary Review appointments are scheduled on a first come first serve basis. The lead time is generally 1 - 2 weeks depending the on the number of requested trades.

Scheduling: To schedule a Preliminary Plan Review, please complete the Preliminary Review Form and fax to 704-602-6969. An OnSchedule Coordinator will contact you to schedule a date and time.

Video Conferencing: Video Conferencing is available on a case by case basis, depending on availability.

Questions: Please contact an OnSchedule Coordinator at 704-336-3837 x 1 x 1.

How To Prepare for a Preliminary Plan Review

Your content should include the following:

- Use group

- Areas of hazardous or classification of use

- Construction type
- Sprinkled/non-sprinkled
- Allowable height and area calculations
- Separation of uses and tenants
- Fire resistance rating requirements
- Means of egress review – occupancy load, exit requirements and locations, exit component requirements, dead-end conditions, etc.
- Other special requirements

- Uses, institutional, atrium, mezzanine

- Phasing of construction outline, if applicable

The format – use a format which is most appropriate for your project, or that you feel the most comfortable. Whichever format you select, your project should include the following:

- Reference specific sections to verify code source
- Walk through your logic; provide outline of all disciplines
- Include your calculation backup (height and area compliance, occupancy load for egress, mixed use calculation, etc.)
- Be prepared to discuss the intended sequence of occupancy if the project requires a Master Plan.

If you believe you may be a candidate, or plan to apply for our Express Review Program, please let staff know up front.

To make the most of your meeting, discuss both the code review and the plan; plan may be in schematic or design development level, just so they include:

- Exit locations
- Site plan, when appropriate
- Separation conditions
- Room titles and uses
- Door swings, etc.

Request the presence of the appropriate disciplines, building, electrical, mechanical, plumbing, zoning and fire.

Provide an agenda for the meeting when applying for a preliminary review meeting. This agenda is beneficial for the plans examiners to best utilize the time allotted for the preliminary review.

It may be appropriate for the owner to attend if the code interpretation will deal heavily with use, process, or materials.

Bring proposed solutions – the code official will tell you what he thinks.

Seek agreement on the review, or identify areas requiring revision or further definition.

At the Conclusion of Your Preliminary Plan Review

Confirm the permit application process.

Confirm the construction document content to be submitted.

Complete follow-up meeting notes in detail, confirming any agreements or required revisions. Please include signature lines for each reviewer to sign off on your meeting notes.

Professional Certification

PROGRAM DESCRIPTION

Introduction
The Code Enforcement Department is interested in providing customers with another plan review option and more control over permitting time, while at the same time promoting professional responsibility for code compliance. To that end, Code Enforcement proposes initiating a commercial plan review Professional Certification Program component as a regular option available to projects with teams composed of qualifying professionals as the designers of record.

The proposed Professional Certification Program is the successor to the Commercial Permits Pilot Program Stages 1 & 2. The latter program is 3 years old and, though having seen limited use in the context of overall commercial plan review volume, has consistently exhibited an extremely low defect rate.

The idea for this new program is very simple.

a) professionals qualify to participate in the program
b) preliminary plan reviews are required at drawing 90% completion stage
c) professionals provide a certification statement on code compliance on the 100% permit drawings
d) the building permit is issued on application

The program will be available to all project types, subject to consensus being reached on the code logic presented in the preliminary review at 90% completion. Projects requiring review by the Department of Insurance or other authorities, may participate if a letter of approval from those authorities is presented at the preliminary review.

How the program will work
The Commercial Plan Review Professional Certification Program would consist of the following:

1. Projects must be submitted by qualifying professionals. Where review of more than one discipline is involved, each discipline must have a qualifying professional.
2. The qualifying professional must be the designer of record, that is, the professional sealing the construction documents.
   Exception: where a professional firm's Professional Certification Program qualifying professional certifies another professional designer of record's work within that firm, both parties shall seal the construction documents. The qualifying professional's seal shall indicate it covers code compliance issues, in language stipulated by Code Enforcement.

In this case only, the certification statement signature shall be labeled "signature of qualifying professional".

3. A preliminary code review with Department staff will be required at the 90% drawing completion stage. The preliminary review will be detailed and each professional shall provide a typewritten outline or notes summarizing their code logic.
4. Plans must be submitted with a statement, by the designer of record in each discipline, certifying compliance with NCSBC. Only the attached Department certification statement may be used.
5. Other earlier preliminary reviews may be requested by the design team as they feel appropriate, but a preliminary review at 90% drawing completion is required.
6. Permits will be issued the same day if applied for by noon. Permits applied for after noon will be issued the following day.
7. Construction may proceed at the risk of correcting changes found later by code enforcement officials (CEO).
8. Items identified by CEO's as not in compliance with code requirements, must be brought into compliance, regardless of whether or not they are in place in the field.
9. There is no fee for Commercial Permits Professional Certification Program projects, other than the normal building permit fee.
10. Definitions:

a.) 90% preliminary review drawing content: set must include 100% code compliance on key life safety issues, including: use declaration, construction type, fire ratings, fire separation, means of egress, special use requirements, and accessibility.

b.) What will be considered a major oversight or strike:

- strikes only accumulate after the permit is issued
- strikes may consist of any of the following.

  - Any key life safety issues missed

  - Details commented on in the 90% meeting which are subsequently not addressed in the permit drawings

- A strike is a project event that falls in the above criteria, not each individual oversight or detail in error.

How professionals qualify for participation

1. Qualifying professionals must:
   - Hold a license as a North Carolina Architect or Engineer
   - pass the NC Building Officials Level III class and test for their particular discipline
   - pass the NC Building Officials Law and Administration class and test
   - pass the NC Building Officials Level III certification exam, for their particular discipline
   - provide to Code Enforcement a copy of the pre-certification letter from the Code Qualification Board, as a Level III Code Official, for their particular discipline
2. Professional Certification Program qualified participants who perform poorly, will be subject to disqualification from the program.

3. The criteria for disqualification will be 3 projects showing major oversights in adherence to process or code requirements (also referred to as strikes). Disqualification will be for a minimum of 1 year. Reinstatement will be through a joint interview with, and at the discretion of, the head of commercial plan review, the CPM of the affected trade, and the Director of Code Enforcement.
4. Benefits
    - for owners, an expedited permitting process
    - for owners, fewer code related field problems and delays in construction
    - for Code Enforcement, a higher level of code compliant documents submitted for permitting
    - for Code Enforcement, a decrease in projects requiring 2nd, 3rd and 4th reviews
    - for professionals, a marketing edge as a qualifier for the Professional Certification Program.
5. Program initiation date. This program is effective immediately.

Certification Statement Form

3rd Party Review

Program Description: to provide added inspection or plan review services, utilizing part time or independent contractor CEO resources.

1. **Background**

Last summer, the General Assembly passed initiatives removing conflict of interest criteria as a roadblock to the use of independent contractor (3rd party) code enforcement officials (CEO) by the Department. However, this legislation was written generically excluding some elements which we wish to incorporate in a Department policy. Specifically, the legislation makes no reference to the use of NC licensed architects and engineers.
In order to develop a comprehensive policy, the Department held 5 management meetings to outline concerns and policy needs. During the fall, these points were reviewed with Bobbie Shields, as well as CEO's on staff. The policy was further refined, reviewed with the BDC on 11/8/99 and became effective on January 4, 2000. The Department is in the process now of seeking 3 or 4 large projects on which to test the proposed program.

This program will be a premium service for a premium fee.

1. Customers participating

- Customers would voluntarily enter into an agreement with E&BS for added inspections or plan review services.
- The added inspections or plan review will be a premium service, with fees charged in addition to any regular project permit fee.

2.Who may participate as CEO's in the Added Inspections or Plan Review Program

• By law, anyone may participate who does not have a conflict of interest, that is;
    a) has not worked for the owner or developer in the last two years
    b) is not related to the owner or developer
    c) does not have a commercial interest in the project

• NC licensed architects or engineers, holding a standard level III (by Certification Exam) in their areaof work.

• CEO's who have formerly worked for Mecklenburg County as CEO's in plan review or inspections,provided their field or office experience qualifies them for the specific project type.
• CEO's who work for Mecklenburg County as part time employees, provided their field or office experience qualifies them for the specific project type.

3. How the overall Added Inspections or Plan Review Program works

• Project defined as: work on a defined site agreed to by Director and Core Process Manager's (CPM),and assigned to the independent contractor 3rd party CEO, or part time employee CEO.
- Exact project type range subject to pilot testing
- single family residential is excluded from the program

• Independent contractor (3rd party) CEO enters into a contract with Mecklenburg County for a specific project
- in lieu of this, E&BS may assign a part time inspector to perform the CEO work

• The cost of the contract or part time labor is passed along to the owner
• Fee setting: premium fee for premium service
• Selection of engineers as independent contractor CEO's
- Based on experience in discipline in question
- Experience in project type to be inspected; (Min. X Projects)
- Interview with core process manager (CPM), inspector, plan review rep (trade specific), and Director

• Architect selection as independent contractor CEO's: same as above
• Discipline: as in express review, to be 3 strikes and you're out:
- with automatic referral to Qualification Board and Licensing Board

• Contract to name the independent contractor CEO person or part time employee CEO:
- This person to be among interviewees

• independent contractor CEO is the one with:
- Level III experience
- A or E NC license

• Contract form as stipulated by the County Attorney
• "Ground Rules" meeting to be held with formal documentation/meeting notes of CEO concerns and "To Do's"
• Contract Scope
- Mix of min Hrs/Wk to be approved by Department
- Plus additional hours owner will request

• E&O conditions as stipulated by County Attorney:
- Same for Conflict of Interest Verification

• Availability
- During project: stipulated to be immediate
- After project completed: strictly records based

• Misrepresentation in interview may be cause for termination

4. How independent contractor CEO/part time employee CEO plan review works in this program

• independent contractor CEO answers to an assigned plan reviewer
• E&BS designate reviewer is point person on:
- Grey areas
- Disputes / interpretations
- Consistency

- It is not another check of the review

• Plan Review process:
  - Plans reside with independent contractor reviewer
  - Questions move directly between professional team and independent contractor reviewer

• revisions to approved plans included on an added service basis

5. How independent contractor CEO/part time employee CEO field inspections works in this program

• independent contractor CEO answers to an assigned inspector
• formal weekly/biweekly reports submitted
• Department field CEO's responsibility include:
  - Receive/review reports
  - Visit site on regular basis (Biweekly/weekly)
  - Quality control
  - Point person on consistency

• Primary inspector named in the contract, backup agreed to:
  - independent contractor CEO will propose a backup/coverage plan for acceptance by E&BS
  - Backup copied on reports
• The Department will stipulate scope and content of independent contractor CEO report
  - Date/time
  - Exact location of inspection
  - Inspect type
  - Conditions
  - Report to be signed and sealed A/E
  - Other to be determined
• Independent contractor CEO site visits to be recorded
  - minimum hours per week on site agreed to
  - maintain log book on site
  - extra charge to owner if service is in excess of hours/ week limit
• Owner may request work be extended to upfits; the Department must approve making the independent contractor CEO available.
• Inspection results are entered under the contracted inspectors name

6. Other

• Regular department CEO's must do either plan review or inspection, that is, a project may not have both plan review and field inspections done by an independent contractor CEO
• Define gross negligence: either
  a.) Significant oversight impacting life safety
b.) Pattern of lesser oversights indicating lax, or improper code enforcement

Phased Construction

Phased Construction - Very Large projects are allowed to be broken into smaller pieces to assist design and construction needs. Breaking down a project into small logical construction/permit phases allows construction while finalizing the design requirements. The designer is proceeding at his/her own risk.

If previous phases do not meet code for the final design, the project may require extensive reconstruction and modification to complete the work to meet the final design code requirements. The phases are footing/foundation, structural frame, shell, and shell with core. Phased construction **requires an additional fee (fast track fees)** beyond standard full construction cost fee(s). Each additional phase will require a separate fee. See the LUESA fee ordinance for information on Fast Track fees. When phasing a project, it is considered to be a fast track project. A preliminary review is required to determine phases, information required, and timetables. **Entry and exit reviews may be required on extremely large projects by the plans examiners.**

Some projects, considered mega-projects, will require a Project Permit Master Plan. A Master Plan packet will be forwarded to the established contact and should be considered prior to the preliminary meeting. Designers are expected to discuss a Master Plan template at the preliminary review meeting. A signed Master Plan must be in place before the OnSchedule Coordinator will schedule review time for the shell/core portion of phased construction. This Master Plan will then be utilized to establish a hierarchy of individual permits which will dictate when Certificates of Occupancy will be issued for portions of the project. More information about the Project Permit Master Plan program can be found on www.meckpermit.com**.**

FOOTING/FOUNDATION

Footing/Foundation: The following is a **general** definition of a footing/foundation of a building as defined by Mecklenburg County Code Enforcement. The definition consists of 4 parts: Building, Electrical, Mechanical and Plumbing.

Note:

1. This document explains the type/amount of work allowed for phased construction. It does not change the submittal requirements necessary for permitted work that is explained in the Plan Submittal Requirements Document, which also applies to all phased construction. This information begins on page 20.
2. Permit and plan must agree in scope.
3. **NO TENANT RELATED WORK IS ALLOWED WITH THIS PERMIT.**
4. **Documents/Plans will not be accepted for review that exceed the minimum phase design requirements listed below.**

Building:

The footing/foundation of a building includes the following:

- Footings
- Foundation
- Slab (as desired by the customer)

Electrical:

1. Footing/Foundation: Permit Options: No Work/No Permit/No Inspections, Footing/Foundation/Slab: Permit Options: Empty Conduits that are underground and/or in slab only will be permitted. The footing/foundation/slab permit DOES NOT include

subsequent floors, only the lowest slab conduits and ground grid. The conduits are installed entirely at the risk of the designer and contractor.
2. Empty Conduits in decks: If above the lowest slab conduit is desired show type, size, and location. Permitting is required for each floor individually. The conduits are installed entirely at the risk of the designer and contractor.

Mechanical:

NO HVAC EQUIPMENT, FLUES OR GAS PIPING ABOVE GRADE WILL BE ALLOWED.
The Mechanical Plans Reviewer or Mechanical Chief may allow exceptions on a case by case basis.

Plumbing:

Plumbing is limited to the building drain and associated piping below the concrete slab. **NO PIPING EQUIPMENT OR FIXTURES ABOVE THE SLAB ALLOWED.**

NOTE: The Plumbing Plans Reviewer **does not** review for fixture counts at this phase. Fixture counts are reviewed during upfit review where the type of occupancy is known. Dotted in fixtures and piping (future or anticipated) shown on the shell drawings shall not be reviewed for code compliance.

The Plumbing Plans Reviewer or Plumbing Chief may allow exceptions on a case by case basis.

STRUCTURAL FRAME

Structural Frame: The following is a **general** definition of a structural frame of a building as defined by Mecklenburg County Code Enforcement. The definition consists of 4 parts: Building, Electrical, Mechanical and Plumbing.

Note:

1. This document explains the type/amount of work allowed for phased construction. It does not change the submittal requirements necessary for permitted work that is explained in the Plan Submittal Requirements Document, which also applies to all phased construction. This information begins on page 20.
2. Permit and plan must agree in scope.
3. **NO TENANT RELATED WORK IS ALLOWED WITH THIS PERMIT.**
4. **Documents/Plans will not be accepted for review that exceed the minimum phase design requirements listed below.**

Building:

The structural frame of a building includes the following:

- Footings
- Foundation
- Structural frame including any fireproofing relating to structure.
- Slab (as desired by the customer)

Electrical:

1. Footing/Foundation: Permit Options: No Work/No Permit/No Inspections, Footing/Foundation/Slab: Permit Options: Empty Conduits that are underground and/or in slab only will be permitted. The footing/foundation/slab permit DOES NOT include subsequent floors, only the lowest slab conduits and ground grid. The conduits are installed entirely at the risk of the designer and contractor.
2. Empty Conduits in decks: If above the lowest slab conduit is desired, you must show type, size, location. Permitting is required for each floor individually. The conduits are installed entirely at the risk of the designer and contractor.
3. Structural Frame: Empty conduit in poured structural frame is allowed. Permitting is required for each floor individually. The conduits are installed entirely at the risk of the designer and contractor.

Mechanical:

NO HVAC EQUIPMENT, FLUES OR GAS PIPING ABOVE GRADE WILL BE ALLOWED.
The Mechanical Plans Reviewer or Mechanical Chief may allow exceptions on a case by case basis.

Plumbing:

Plumbing is limited to the building drain and associated piping below the concrete slab. **NO PIPING EQUIPMENT OR FIXTURES ABOVE THE SLAB ALLOWED.**

NOTE: The Plumbing Plans Reviewer **does not** review for fixture counts at this phase. Fixture counts are reviewed during upfit review where the type of occupancy is known. Dotted in fixtures and piping (future or anticipated) shown on the shell drawings shall not be reviewed for code compliance.

The Plumbing Plans Reviewer or Plumbing Chief may allow exceptions on a case by case basis.

SHELL

Shell: The following is a **general** definition of a shell of a building as defined by the Mecklenburg County Code Enforcement Chiefs. The definition consists of 4 parts: Building, Electrical, Mechanical and Plumbing.

Note:

1. This document explains the type/amount of work allowed for phased construction. It does not change the submittal requirements necessary for permitted work that is explained in the Plan Submittal Requirements Document, which also applies to all phased construction. This information begins on page 20.
2. Permit and plan must agree in scope.
3. If a sprinkler system is installed during the winter months, a heating system may be installed to prevent freezing pipes. The Electrical and /or Mechanical Plan Reviewer or the Electrical/Mechanical Chief may allow for this exception on a case by case basis.
4. **NO TENANT RELATED WORK IS ALLOWED WITH THIS PERMIT.**

5. **Documents/Plans will not be accepted for review that exceed the minimum phase design requirements listed below.**
6. For mega-projects requiring a Master Plan, no shell or shell/core review times will be scheduled prior to the submission of a signed Master Plan Agreement.

Building:

The shell of a building includes the following:

- Footings
- Foundation
- Structural frame including any fireproofing relating to structure.
- Floor slab/deck
- Exterior insulation
- Exterior walls including all exterior windows and doors
- Roof

Electrical:

1. Footing/Foundation: Permit Options: No Work/No Permit/No Inspections, Footing/Foundation/Slab: Permit Options: Empty Conduits that are underground and/or in slab only will be permitted. The footing/foundation/slab permit DOES NOT include subsequent floors, only the lowest slab conduits and ground grid. The conduits are installed entirely at the risk of the designer and contractor.
2. Empty Conduits in decks: If above the lowest slab conduit is desired, you must show type, size, location. Permitting is required for each floor individually. The conduits are installed entirely at the risk of the designer and contractor.
3. Structural Frame: Empty conduit in poured structural frame is allowed. Permitting is required for each floor individually. The conduits are installed entirely at the risk of the designer and contractor.
4. House panel (located on the exterior or exterior access only electrical room) to supply the exterior lights, receptacles and required loads (i.e. fire alarm, fire pump, and accessories).

Mechanical:

(See Mechanical Code Interpretation dated July 1, 1997)
NO HVAC EQUIPMENT, FLUES OR GAS PIPING ABOVE GRADE WILL BE ALLOWED.
The Mechanical Plans Reviewer or Mechanical Chief may allow exceptions on a case by case basis.

Plumbing:

(See Plumbing Code Interpretation dated March 19, 2001)
Plumbing is limited to the building drain and associated piping below the concrete slab, a water distribution MAIN with associated service valves, a building sewer, a building water service, and roof drains/scuppers. **NO PIPING EQUIPMENT OR FIXTURES ABOVE THE SLAB ALLOWED.**

NOTE:

1. A pressure reducing valve (PVR) may be required if the pressure exceeds

80 psi.

2. The Plumbing Plans Reviewer **does not** review for fixture counts at this phase. Fixture counts are reviewed during upfit review where the type of occupancy is known. Dotted in fixtures and piping (future or anticipated) shown on the shell drawings shall not be reviewed for code compliance.

The Plumbing Plans Reviewer or Plumbing Chief may allow exceptions on a case-by-case basis.

Fire:

At the shell phase CFD requires full compliance with the NC State Fire Code and referenced standards.

SHELL WITH CORE

Shell with Core: The following is a **general** definition of a shell of a building with a core, as defined by the Mecklenburg County Code Enforcement Chiefs. The definition consists of four parts: Building, Electrical, Mechanical and Plumbing.

Definition of a "CORE": The common areas that are used by all the building tenants and visitors. The common areas consist of, but are not limited to, the following:

1. Stairs
2. Elevators
3. Bathrooms
4. Corridors
5. Electrical Room

During a preliminary plan review meeting, the extent of the Building Shell with a Core shall be defined with the appropriate Plan Reviewers. To set up a Preliminary Plan Review meeting please call an OnSchedule Coordinator at 704-336-3837.

For mega-projects requiring a Master Plan, no shell or shell/core review times will be scheduled prior to the submission of a signed Master Plan Agreement.

NOTE:

1. This document explains the type/amount of work allowed for phased construction. It does not change the submittal requirements necessary for permitted work. That is explained in the Plan Submittal Requirements Document, which also applies to all phased construction. This information begins on page 20.
2. Permit and plan must agree in scope.
3. **NO TENANT RELATED WORK IS ALLOWED WITH THIS PERMIT.**
4. **Documents/Plans will not be accepted for review that exceed the minimum phase design requirements listed below.**

Building:

The shell with a core of a building includes the following:

- Footings
- Foundation
- Structural frame, including any fireproofing relating to structure.
- Floor slab/deck
- Exterior insulation
- Exterior walls, including all exterior windows and doors

- Roof
- Bathrooms relating to the use by all the building tenants
- Elevators and Elevator shaft(s)
- Exit stairs and stair shaft(s)

Electrical:

1. Footing/Foundation: Permit Options: No Work/No Permit/No Inspections, Footing/Foundation/Slab: Permit Options: Empty Conduits that are underground and/or in slab only will be permitted. The footing/foundation/slab permit DOES NOT include subsequent floors, only the lowest slab conduits and ground grid. The conduits are installed entirely at the risk of the designer and contractor.
2. Empty Conduits in decks: If as above, the lowest slab conduit is desired, you must show type, size, location. Permitting is required for each floor individually. The conduits are installed entirely at the risk of the designer and contractor.
3. Structural Frame: Empty conduit in poured structural frame is allowed. Permitting is required for each floor individually. The conduits are installed entirely at the risk of the designer and contractor.
4. House panel (located on the exterior or exterior access only electrical room) to supply the exterior lights, receptacles and required loads (i.e. fire alarm, fire pump, and accessories).
5. The service to the building, core feeders, core panels, core lighting, core receptacles, core equipment, and core HVAC. Core is a separated (from tenant) common space.

Mechanical:

(See Mechanical Code Interpretation dated March 4,2000, updated on March 4, 2004)
Core Facilities (Def.): A space that contains adequate plumbing fixtures for the floor, is directly accessible through direct openings or corridors from all tenant spaces, and is fully handicapped accessible.
The Mechanical Plans Reviewer or Mechanical Chief may allow exceptions on a case-by-case basis.

Multi-Story (Central HVAC)
Mechanical systems shall consist of the supply/return duct, HVAC equipment, gas piping, bathroom exhaust, and water heater flue installed within and limited to the Core space and may include major trunk duct system to tenant spaces. It shall not include branch duct systems to diffusers within tenant spaces.

Single-Story:
Mechanical systems are limited to the supply/return duct, HVAC equipment, gas piping, bathroom exhaust, and water heater flue installed within and limited to the CORE space. No HVAC EQUIPMENT, FLUES, OR GAS PIPING ABOVE GRADE designed to serve any space(s) other than the Core will be allowed.

Exception:

1. *Buildings utilizing a central HVAC system may stub trunk duct into future tenant space(s) and duct SHALL terminate at the VAV box or cap for future tenant upfit work/permit.*

2. *Where there is the need to provide a shell structure with a conditioned corridor and/or elevator(s) and without core restrooms (provided within tenant spaces), the designer shall designate the submittal "Shell with Core, NO RESTROOMS."*

Plumbing:

(See Plumbing Code Interpretation dated March 4, 2000, updated on March 24, 2004) Plumbing is limited to the building drain and associated piping below the concrete slab (CORE ONLY), a water distribution MAIN (above or below the slab) with associated service valves (only), a building sewer, a building water service, and roof drains/scuppers. It also includes DRY/WET upfit stacks and DWV or water distribution piping installed within and limited to the CORE space. NO piping (except Dry/Wet stacks), equipment or piping above the slab, located outside the core space, serving the tenant space is allowed.

The Plumbing Plans Reviewer or Plumbing Chief may allow exceptions on a case-by-case basis.

Exception: Where there is the need to provide a shell structure with a conditioned corridor and/or elevator(s) and without core restrooms (provided within the tenant space), the designer shall designate the submittal "Shell with Core, NO RESTROOMS."

Fire:

At the shell/core phase, CFD requires full compliance with the NC State Fire Code and referenced standards.

ENERGY CODE REQUIREMENTS

When Required:

New Construction: Compliance with the Energy Code is required on any new construction project receiving its building permit after 7/1/96.

Renovation: Compliance with the Energy Code is required on renovation of any building that received its original building permit after 7/1/96. Compliance is not required on any other renovation except for the electrical work. Where the existing luminaries are simply relocated and refurbished, no electrical compliance is required. Where the luminaries are replaced with new luminaries, all the new luminaries must comply with the applicable use requirements of the Energy Code.

Upfit: Compliance with the Energy Code is required on an upfit if the building shell received its original building permit after 7/1/96. Compliance is not required on other upfits except for the electrical work. Where the existing luminaries are simply relocated and refurbished, no compliance is required. Where the luminaries are replaced with new luminaries, all new luminaries must comply with the requirements of the Energy Code.

General Requirements

New construction shall meet the requirements of the Energy Code, except for those buildings or portions of buildings intended primarily for manufacturing or industrial processing (See Energy Code for specific exceptions, electrical not exempted.) Shell buildings are exempt from

thermal envelope provisions until a permit application is submitted for heating and/or cooling system. Additions shall comply with the requirements for new construction if the new assemblies, systems or equipment can independently satisfy the Energy Code without requiring modifications to existing components that remain in place.

Architectural Documents

Demonstrate compliance with the thermal envelope provisions of the Energy Code by one of these methods:

1. **Prescriptive** – Provide a complete description of each assembly listed in the Building Code Summary and certify compliance by the responsible designer.
2. **Performance -** Provide a summary sheet from the ASHRAE/IESNA 90.1 computer program and certify compliance by the responsible designer

Mechanical

Demonstrate compliance with the building mechanical systems and equipment provisions of the Energy Code by one of these methods:

1. **Prescriptive** – Provide complete description of design conditions and equipment efficiencies listed in the Building Code Summary and certify compliance by the responsible designer.
2. **Performance -** Provide summary sheet from the ASHRAE/IESNA 90.1 computer program and certify compliance by the responsible designer.

Electrical

Demonstrate compliance with the electrical power and lighting provisions of the Energy Code by one of these methods:

1. **Prescriptive** – Provide complete description of lighting and equipment motor schedules listed in the Building Code Summary and certify compliance by the responsible designer.
2. **Performance -** Provide summary sheet from the ASHRAE/IESNA 90.1 computer program and certify compliance by the responsible designer.

Energy Code General Requirements For Existing Buildings

Alteration, repair, or rehabilitation may be made to existing buildings without requiring the entire building to comply with the requirements of the Energy Code, provided you meet the minimum standards of the code under which the building was built. Portions of renovation shall comply with the requirements for new construction if the new assemblies, systems or equipment can independently satisfy the Energy Code without requiring modifications to existing components that remain in place.

CODES

FYI: You may purchase the ***Necessary Codes*** by contacting:

International Code Council
www.iccsafe.org
900 Montclair Road
Birmingham, AL 35213
(800) 786-4452

COMMERCIAL CONSTRUCTION – Full Permit and additions

FULL PERMIT AND ADDITIONS

The following checklist is to be used for the review of all new (**FULL AND ADDITION**) commercial construction projects. **Construction documents shall be complete relative to the requirements listed below when submitted for permit review. Incomplete drawings will be returned without a review**. Construction changes after a permit is issued require re-review of the drawings with the proposed changes. This may void the original permit with a new permit issued only after the design changes are approved and may be subject to additional fees based on the additional work. The drawing submittal requirements, as listed below, are divided into **General Requirements, Site, Architectural, Structural, Plumbing, Mechanical, Electrical and Fire Protection. Drawings are expected to be one of the standard scales.**

Note: The information is required for each respective discipline; however, in most cases, it need not be within the disciplines drawings nor repeated within the disciplines drawings, if the information exists within the drawing set.

General Requirements

___ a. A Building permit application shall be completed in its **entirety** and shall accompany each submittal for review (minimum one (1) permit per building). This includes designating contractors, costs and the specific use of the property. Permit applications will NOT be accepted until complete.

___ b. New buildings and additions **shall be accompanied by an address verification form issued by GIS**. All documents shall be dated and signed by the designer. Professional seals, when required, shall appear on all sheets and be signed and dated by the designer. Note: wet seals are not required on our copies. The originals must be sealed and signed before printing.

___ c. Submit copies for each discipline, along with two additional copies, to office and field of all project drawings (minimum size 18" x 24") drawn to scale in U.S. Units must have sufficient detail to fully indicate the nature and scope of work to be permitted. Drawings that are not legible or have text that is too small to read will be returned without review.

___ d. For projects involving new construction or additions within the City of Charlotte, you must submit six additional site plans with applicable driveway permits.

___ e. Building Code Summary (Appendix B) shall be reproduced on the drawings (first or second sheet) with all applicable sections completely filled out, including the Energy Code calculations/data. The Electrical and Mechanical portions may be on their respective design documents. Building Code Summary shall be sealed if other sheets of the plan are sealed. Special inspection: provide scope of special inspection for the code summary appendix.

___ f. All documents and specifications shall contain information (in the form of notes or otherwise) on the technical properties of building materials to be used, when such properties are essential to show compliance with technical building codes.

___ g. For new construction project located within the City of Charlotte, street addresses shall be posted in accordance with Chapter 19 of the City Code.

Reference Documents

When previously approved documents (Drawings and/or Specifications) are referenced from your submittal documents, you shall provide approved field set for review information. Field set may be original or reproduction; however, it shall bear plan review stamp and signatures of examiners.

When doing the first upfit in a shell building, provide a copy of the original approved shell drawings.

Site and Zoning Plans **(Refer To General Requirements)**

Note: The information is required for each respective discipline; however, in most cases it need not be within the discipline's drawings nor repeated within the discipline's drawings if the information exists within the drawing set.

___ a. Site plans shall be prepared to scale, with legend, north arrow, and vicinity map. All drawings shall be sealed, signed, and dated, by the project designer.
___ b. Show the correct street address, parcel number, and zoning on the site plans.
___ c. Show and identify all property lines and rights-of-way, with distance from property lines and adjacent buildings on site plans.
___ d. Show handicapped parking spaces and signage per NCSBC Chapter 11 and on site plan
___ e. Show handicapped curb cuts and access ways to the building
___ f. Show all existing and proposed driveway entrances.
___ g. Identify adjacent land uses and zoning.
___ h Show all easements, flood ways, and required buffers
___ i. Show existing and proposed utilities (with backflow preventers) to serve the site.
___ j. Show existing and proposed grades.
___ k. Identify all borrow and spoil areas.
___ l. Show details, sections, and elevations needed for construction.
___ m. Provide approved conditional district plans before the project can be reviewed.
___ n. Show all buffer and screening landscaping, including plant locations, sizes and species.
___ o. Show all required parking and loading spaces and calculations.

***The City of Charlotte Zoning Ordinance can be accessed via the Internet at*:** http://www.charmeck.org/Departments/Planning/Home.htm

Engineering Land Development Commercial Requirements

The Land Development Review consists of the following requirements:

Erosion Control/Grading

Erosion control plan is required for sites with land disturbances over one acre.

Drainage and Detention

Drainage review and approval is required for 20,000 square feet of impervious surface or if drainage systems connect into public drainage systems.

SITE AND ZONING PLANS cont….

Floodway Requirements (www.stormwaterservices.com)

___ a. If project involves land activities within a FEMA regulated floodplain, you must provide a Floodlands Development Permit Application, which must be approved by Mecklenburg County Storm Water Services before a grading permit may be issued.

___ b. If project is located within a 100 + 1 or FEMA floodplain, show required floor elevations.

___ c. Optionally, for a FEMA regulated floodplain, applicant may show provisions for flood-proofing the building.

___ d. An Elevation Certificate or Flood-proofing Certificate must be submitted and approved by Mecklenburg County Stormwater Services before occupancy can be granted.

___ e. Mechanical equipment must be installed a minimum of one foot above the FLUM (Floodplain Land Use and Management) 100 year flood elevations (refer to Floodplain Regulations, Article 5, Section 20, Paragraph 5).

Swim Buffer Guidelines

Landscape Plan Requirements (City Of Charlotte Only)

____ a. Landscape plans (in City of Charlotte projects). Tree planting landscape plans are required for projects within the City of Charlotte. (See Chapter 21 of City Code for details of Charlotte Tree Ordinance.)

Driveway

A Street and Driveway Access Permit is required when a new street or commercial driveway is being connected to an existing public street, an existing commercial driveway is being modified, or the use of the property has changed.

___ a. Building permits will not be approved until the City or County has approved the driveway permit.

___ b. The designer is required to show on the driveway permit plans the plan view and profile for the roadway for a distance of ten times the speed limit (in feet) in both directions. Cross-sections on fifty-foot intervals are required for the distance of the road improvements.

___ c. The surveyor is responsible for accurately portraying the road right-of-way on the plans. The right-of-way must be researched and a true representation given of the land rights as recorded in the Deed of Registrar Office. When in doubt or when ambiguous documentation exists, the road right-of-way should be assumed to be ditch-line to ditch-line.

___ d. For projects outside the City of Charlotte jurisdiction and when additional right-of-way and construction easements are needed to complete the driveway improvements, the affected land owners must agree in writing before the County will approve the driveway permit. If the developer is unsuccessful in negotiating with the affected owners for the land, the County may condemn the land for the necessary improvements. If all other requirements have been met, the County will approve the driveway permit when the developer provides funds to the County for the condemnation process to begin. In the event that the developer cannot obtain the additional right-of-way and the County chooses not to condemn, the County will approve a variance in access and/or roadway design standards.

ARCHITECTURAL PLANS (Refer to General Requirements)

Note: The information is required for each respective discipline; however, in most cases it need not be within the discipline's drawings nor repeated within the discipline's drawings if the information exists within the drawing set.

___ a. Show architectural floor plans of each floor. Indicate and reproduce the approved tested hourly rating, number and location of all rated members and assemblies (i.e. walls, columns, beams, floor and ceiling, and ceiling and roof fire-rated design assemblies). Show all fire-rated walls (both existing and new) with their ratings if not shown elsewhere. Drawings submitted without required fire-rated walls shown will be rejected. Residential buildings must show sound transmission requirements per Chapter 12 NCSBC.

___ b. Show the square footage of each floor on the corresponding floor plans.

___ c. Identify the names and uses of each room.

___ d. Indicate door schedule(s) that define the applicable rated doors, frames, and hardware.

___ e. All glass schedules.

___ f. Show elevations with dimensions defining overall building height, floor-to-floor heights, or heights to ridge and eave as applicable to the type of building construction proposed.

___ g. Provide basement percentage below grade calculations.

___ h. Indicate roof slopes, drainage system and sized through-wall scuppers, if applicable to the project. (See examples in Plumbing ITEM K.)

___ i. Show fixed seating for assembly occupancy to allow determination of occupancy posting.

___ j. Show wall sections with proposed material sizes, construction, and fire-rated assemblies.

___ k. Show proposed plumbing fixtures and privacy screens on the plans.

___ l. If masonry construction is proposed, include the following information:
- ___ Type of brick ties and spacing of weep holes
- ___ Control joints
- ___ Placement of wall flashing, reinforcement per ACI 530.

___ m. If appropriate for the proposed occupancy, show the extent of the hazardous locations and submit complete data on the type and the amount of materials stored, processed, manufactured, or used in the manufacturing of products in this facility. And, indicate if such materials are corrosive, poisonous, under pressure, in a liquid or gaseous state, radioactive or have other relevant properties. (Ref. NCSBC Sec. 414 (or NCSBC 2006 equivalent) and NFPA 30.) Provide Material Safety Data Sheets. See fire protection requirements.

___ n. Show the floor slab vapor barrier.

___ o. Show Foundation water proofing, if applicable

___ p. For pre-engineered metal buildings see department policy and indicate choice of either option A or option B and provide the required information, submit the manufacturer's letter of engineering certification, a sealed foundation plan, complete architectural plans, and the Metal Building Plans, if required. The Metal Building Plans, if required, shall state model number, size, column reactions, and design loads for the building. The foundation plans, when required by General Statutes, shall be designed by a registered architect or engineer and show the size and reinforcement of footings or turndown slab. Specify reinforcing and anchor bolt layout and sizes for the building.

ARCHITECTURAL PLANS cont…

___ q. All penetrations of fire rated construction must be per manufacturer details. The details shall meet or exceed the rating of construction being penetrated and shall be provided to the inspector in the field. The penetration details shall be exactly as tested by an approved testing laboratory or agency, and they shall include their system numbers. New penetrations of existing fire rated walls and assemblies shall be shown with appropriate designs.

___ r. All fabric awnings or canopies shall be accompanied by a letter of certification of fire resistance from the manufacturer. Fabric awnings and canopies shall meet ground snow loads of Chapter12 and be constructed to support all live and dead loads according to Chapter 16 North Carolina State Building Code (or NCSBS 2006 equivalent).

___ s. Show Penthouse drawings.

___ t. Provide on the drawings the calculations for the means of egress widths for the entire floor occupancy load and the existing capacity of all exits, including all stairs, doors, corridors, and ramped exits. (See Chapter 10 of the NC State Building Code - or NCSBC 2006 equivalent).

___ u. On any I-2 (hospital) drawing, provide the colored life safety drawings approved from North Carolina Division of Health Service Regulation (DHSR).

___ v. Show attic ventilation louvers and vent sizes.

STRUCTURAL PLANS (Refer to General Requirements)

Note: The information is required for each respective discipline; however, in most cases it need not be within the discipline's drawings nor repeated within the discipline's drawings, if the information exists within the drawing set.

___ a. Show foundation plans showing the proposed slab elevations and types of foundation (i.e. mat foundation, caissons, spread footings, etc.).

___ b. Provide preliminary soil analysis data done by a Registered Engineering Testing Company, if required.

___ c. Indicate dimensions of foundations.

___ d. Show type, size, and location of piling and pile caps for pile foundation.

___ e. Indicate Grade Beam sizes.

___ f. Indicate a footing schedule defining footing sizes and the required reinforcing.

___ g Show the established footing depth below grade.

___ h. Indicate the thickness of the floor slab, size of reinforcing, slab elevations, and type and details of foundations.

___ i. Indicate location, size, and amount of reinforcing steel.

___ j. Show foundation corner reinforcing bars and minimum overlapping (as applicable to project structure).

___ k. Provide strength of concrete according to design and soil reports.

___ l. Show beams, joists, girders, rafters, and/or truss layouts and details of connections, structural steel stud gage, and gauge size, connections.

___ m. Indicate the sizes and species of all members and their respective design strength.

___ n Show all columns, girders, joists, purlins, beams, and base plates. For wood construction show all headers.

___ o. Provide a complete lintel schedule.

STRUCTURAL PLANS cont…

___ p. Indicate the type of anchoring for steel bearing directly on masonry.

___ q. Indicate design dead and live, wind, snow, seismic loads for floors areas, roofs, balconies, porches, breezeways, corridors, stairs, mezzanines, and platforms. Show concentrated loads, i.e. file rooms, machinery and forklift areas, if greater than those shown on the Code Summary Sheet. Identify shear walls, bracing, strapping fastening, reinforcement, and any special anchoring required.

___ r. Indicate on roof framing plan where concentrated loads (mechanical equipment, cranes, etc.) may be placed.

___ s. Indicate on foundation and framing plans the location and lateral load resisting system. (Show walls, braced frames, moment connections, etc.)

FIRE PROTECTION (Sprinklers) (Refer to General Requirements)

Note: The information is required for each respective discipline; however, in most cases it need not be within the discipline's drawings nor repeated within the discipline's drawings, if the information exists within the drawing set.

___ a. Complete a sprinkler design criteria and include it on the first plan of the sprinkler drawings.

___ b. Show floor plans for each floor with sprinkler piping layout, pipe sizes, pipe hanger details, piping materials, doors, walls and room identities.

___ c. Show ceiling plans with sprinkler head(s) layout, walls, soffits, openings, doors, dimensions and room identities.

___ d. Verify system design by providing hydraulic calculations, along with providing the following:

____ Hydrant test within past 12 months

____ 10 percent safety margin

____ Type of backflow preventer or reduced pressure zone showing equivalent foot loss.

____ Fire pump summary.

___ e. Note the type of Sprinkler System used (13, 13R, ESFR, 231, or OTHER).

___ f. For Residential Occupancy, i.e. Apartments, Condos, show sprinkler head location at breezeways, if applicable.

___ g. Indicate the approved 3rd party testing agency (ie. UL, FM, etc.), their test # and hourly ratings of all new and/or affected rated members and assemblies (i.e. columns, beams, floor/ceiling, and ceiling/roof fire-rated design assemblies). Show all new and/or affected fire-rated walls with their ratings, if not shown elsewhere.

___ h. All penetrations of fire-rated construction must be per manufacturer details. The details shall meet or exceed ratings of construction being penetrated and shall be provided to the inspector in the field. Penetration details shall be exactly as tested by an approved testing laboratory or agency and shall include their system numbers. New penetrations of existing fire-rated walls and assemblies shall be shown with appropriate designs.

___ i. Commodity class and height of any storage.

___ j. MSDS Sheets on any Hazardous Materials.

___ k. Where special Temperature-rated or high temperature sprinklers are required, show sprinkler type(s) per area, office size, cut sheets with K-factor, water requirements, spray pattern, coverage, and other pertinent data.

___ l. Provide seismic information on Appendix B.

FIRE PROTECTION (Fire Alarm) (Refer to General Requirements)

Note: The information is required for each respective discipline; however, in most cases it need not be within the discipline's drawings nor repeated within the discipline's drawings, if the information exists within the drawing set.

___ a. A floorplan.
___ b. Locations of alarm-initiating and notification appliances.
___ c. Alarm control and trouble signaling equipment.
___ d. Annunciation.
___ e. Power connection.
___ f. Details of ceiling height and construction.
___ g. The interface of fire safety control functions.

Provide a Fire alarm riser showing connection to a UL approved central station. Show tamper switches on both OS and Y valves of backflow prevention device, unless shown elsewhere.

Alarm Drawing Submittal Process for Unlinked Installations

Alarm installations and upgrades to existing buildings that are not a part of or linked to any other Construction permit and that involve the installation of over ten devices (including panel), shall be submitted to the CTAC review process of Mecklenburg County Code Enforcement.

SITE UTILITIES (Fire Protection) (Refer To General Requirements)

Note: The information is required for each respective discipline; however, in most cases it need not be within the discipline's drawings nor repeated within the discipline's drawings, if the information exists within the drawing set.

___ a. A site plan shall be provided with Fire Department connection and all hydrants shown.
___ b. Show the size of city main.
___ c. Identify test hydrants and give flow, and pressure data for each.
___ d. Show the circulating or dead-end main and the distance to circulating main, if it is the dead-end.
___ e. Indicate the Valve type and size. Valve types include:
  ___ Control valves
  ___ Fire Department connection check valve
___ f. Show size, type, and depth of underground piping (from city main to the inside of the building). Provide:
  ___ Underground piping connection detail
  ___ Detail of stub-up for hydrant
  ___ Blocking
  ___ Rodding and rod size
  ___ Clearance (12" or 18" minimum from wall)
___ g. Show backflow prevention devices on fire lines and if installed above ground, how heated to 40°F.
___ h. Indicate the distance and location of all fire hydrants. Allowed distances are:
  ___ 200 feet maximum from Fire Department connection
  ___ 750 feet to the most remote point of the building as the truck travels
___ i. Indicate any other water supply (i.e. wells, tanks, etc.) where applicable.

SYSTEM CALCULATIONS (Fire Protection) (Refer to General Requirements)

Note: The information is required for each respective discipline; however, in most cases it need not be within the discipline's drawings nor repeated within the discipline's drawings, if the information exists within the drawing set.

Hydraulically calculated and pipe schedule fire systems should be designed with a ten percent safety margin for all new buildings and additions to existing buildings. Calculations for hydraulic systems should include:

___ a. Flow and pressure at each flowing sprinkler head
___ b. Flow diagram for a grid system.

FIRE PROTECTION PLANS (Full, Shell and additions)

Note: The information is required for each discipline; however, normally it need not be within the discipline nor repeated within the discipline('s) drawings, if the information exists somewhere in the drawing set.

___ a. A sprinkler design criteria shall be completed and included on the first plan of the sprinkler drawings.
___ b. Show floor plans for each floor with sprinkler piping layout, pipe sizes, pipe hanger details, piping materials, doors, walls, and room names and numbers, if not shown elsewhere.
___ c. Show ceiling plans with sprinkler head(s) layout, walls, soffits, openings, doors, dimensions, and room name and numbers, if not shown elsewhere.
___ d. Verify system design by providing hydraulic calculations along with the following information
____ Provide hydrant test within past 12 months
____ Ten percent safety margins
____ Type of backflow preventer or reduced pressure zone showing equivalent foot loss.
____ Fire pump summary.
___ e. All fire pump designs submitted with the city shall be designed to 100% rating of the fire pump.
____ For fire pump supplying standpipes in a highrise:
The fire pump shall be sized by the standpipes as followed:
500 gpm for the first standpipe and
250 gpm for each additional not to exceed 1250 gpm.

Exception: When the system demand does not exceed 80% of the available city supply, the fire pump design can go up to 150% rate capacity per NFPA 20.

___ f. Show the type of Sprinkler System used 13, 13R, ESFR, 231, or OTHER
___ g. For Residential Occupancy (Apartments, Condos), show sprinkler head location at breezeways, if applicable.
___ h. Indicate the UL/FM # hourly rating of all rated members and assemblies, i.e. columns, beams, floor and ceiling and ceiling and roof fire-rated design assemblies. Show all fire-rated walls (both existing and new) with their ratings, if not showed elsewhere. Plans submitted without fire-rated walls shown will be rejected.
___ i. All penetrations of fire-rated construction must be per manufacturer details. The details shall meet or exceed ratings of construction being penetrated and shall be provided to the inspector in the field. Penetration details shall be exactly as tested by an approved

FIRE PROTECTION PLANS (Full, Shell and additions)(cont…)

testing laboratory or agency and shall include their system numbers. New penetrations of existing fire-rated walls and assemblies shall be shown with appropriate designs.

___ j. Show a fire alarm riser showing connection to a UL approved central station. Show tampers on both OS and Y valves of backflow prevention device where not shown elsewhere.

___ k. Show commodity class and height of any storage.

___ l. Show MSDS sheets on any hazardous materials.

___ m. Where special temperature-rated or high temperature sprinklers are required, provide the sprinkler type(s) per area, orifice size, cut sheets with K-factor, water requirements, spray pattern, coverage, and other data.

___ n. The Charlotte Fire Department requires hydraulic calculations within 90 days of permit issuance. Hydraulic calculations may be faxed to 704-432-0174 or emailed to ariggins@ci.charlotte.nc.us.

___ o. Provide seismic information on Appendix B.

UTILITIES SITE PLAN (Fulls, Shells and additions) (Refer to General Requirements)

Note: The information is required for each discipline; however, normally it need not be within the discipline nor repeated within the discipline('s) drawings, if the information exists somewhere in the drawing set.

___ a. A site plan shall be provided with Fire Department connection and all hydrants shown.

___ b. Show the size of city main.

___ c. Identify test hydrants and give flow and pressure data for each.

___ d. Show the circulating or dead-end main and the distance to circulating main, if it is the dead-end.

___ e. Indicate the Valve type and size. Valve types include:
- ___ Control valves
- ___ Fire Department connection check valve

___ f. Indicate the size, type, and depth of underground piping (from the city main to the inside of the building). Provide:
- ___ Underground piping connection
- ___ Detail of stub-up
- ___ Blocking
- ___ Rodding and rod size
- ___ Clearance (12" or 18" minimum from wall)

___ g. Show backflow prevention devices on fire lines and, if installed above ground, how heated to 40 degrees F.

___ h. Indicate the distance and location of all fire hydrants. Allowed distances are:
- ___ 200 feet maximum from Fire Department connection
- ___ 750 feet to the most remote point of the building as the truck travels

___ i. Indicate any other water supply (i.e. wells, tanks, etc.), where applicable.

SYSTEM CALCULATIONS (Fulls, Shells and additions) (Refer to General Requirements)

Note: The information is required for each discipline; however, normally it need not be within the discipline nor repeated within the discipline('s) drawings, if the information exists somewhere in the drawing set.

SYSTEM CALCULATIONS(cont…)

Hydraulically calculated and pipe schedule systems should be designed with a ten percent safety margin for all new buildings and additions to existing buildings. Calculations for hydraulic systems should include:

___ a. Flow and pressure at each flowing sprinkler head
___ b. Flow diagram for a grid system.

PLUMBING PLANS (Refer to General Requirements)

Note: The information is required for each respective discipline; however, in most cases it need not be within the discipline's drawings nor repeated within the disciplines, if the information exists within the drawing set (except as noted).

____ a. Show a Site Utilities Plan if not provided with the Civil Drawings.
____ 1. Show the domestic water, fire, and irrigation services.
____ 2. Show the location of the water meters, backflow protection type, and location.
____ 3. Show the Sanitary Sewer service from building to CMUD or to other approved system.

____ b. Show interceptors as applicable to project and size by flow rate. (i. e. grease, oil, lint, acid, and sand).

____ c. Provide plumbing plan layouts for each floor. These shall show the water distribution drain-waste-vent piping, details, notes, legends, and schedules necessary to define the system being installed.

____ d. Show the location of all major components required for a complete system.

____ e. Provide fixture and equipment schedule showing fixture number and detailed descriptions of hot water, cold water, waste and vent connection sizes, and other pertinent data.

____ f. Identify all fixtures on floor plans and in riser diagrams with the plumbing fixture schedule number.

____ g. Show the Supply and Waste/Vent piping on the floor plans. All pipe sizes shall be clearly shown. In congested areas, isometrics shall be required (i.e. restaurants, grocery stores).

____ h. On buildings two stories and above, provide isometric diagrams and/or schematic riser diagrams for Supply and Waste/Vent piping and identify them by number (e.g. R1, R2, etc.). Show where all riser base terminations connect to the building drain, along with all interconnecting piping on each floor plan. All pipe sizes shall be clearly defined.

____ i. Show the water, sanitary drain-waste-vent piping, and storm leaders/drains. Indicate sizes and materials for above/below grade.

____ j. Show slope of horizontal sanitary and storm drains > or = 3" diameter, if different than 1/8" per foot.

____ k. Indicate roof drains and emergency roof drains/scuppers with the areas they impact. (Note: Emergency = Secondary = Overflow.) See "Roof Drainage Examples" below:

Roof Drain - 6" RD (16880 SF)
Emergency Roof Drain - 6" ERD (8180 SF)
Parapet Wall Scupper - 8" x 5" WS (4000 SF)
Emergency Scupper - 8" x 7" ES (4200 SF)

____ l. Show toilet room layouts at sufficient scale for dimensions and details to be ascertained.

____ m. Show drinking fountain locations.

____ n. All penetrations of fire-rated construction must be per manufacturer details. The details shall meet or exceed rating of construction being penetrated and shall be provided to

Plumbing Plans (cont…)

the inspector in the field. The penetration details shall be exactly as tested by an approved testing laboratory or agency, and they shall include their system numbers.

____ o. Room names and numbers for each floor should be on a floorplan for each level.

____ p. Provide minimum facilities calculations on the plan sheet with the building information from the Code Summary Sheet.

Column line notation, if provided on the Architectural/Structural plans, shall be indicated on the plumbing plans.

MECHANICAL PLANS (Refer to General Requirements)

Note: The information is required for each respective discipline; however, in most cases it need not be within the discipline's drawings nor repeated within the disciplines, if the information exists within the drawing set (except as noted below).

____ a Show code-required wall louvers, penetrations, and fans.

____ b Indicate roof-mounted equipment locations.

____ c. Show all mechanical equipment, piping, ductwork (above/below slab) on the mechanical floor and/or roof plan.

____ d. Provide mechanical plans for each floor and the roof. These shall show the ductwork layouts, schedules, notes, legends, piping schematics, and details necessary to define the system being installed.

____ e. Indicate air distribution devices showing cfm for supply, return, and exhaust devices.

____ f. Indicate the location of all equipment components required for a complete system.

____ g. Show the smoke ventilation of Atriums and pressurization of High Rise stairwells, as defined in NCSBC.

____ h. Show condensation drains, primary and secondary, from the unit to the point of discharge

____ I. Indicate toilet exhaust requirements.

____ j. Show mechanical room layouts at sufficient scale for dimensions and details to be ascertained.

____ k. Show the size of duct runs.

____ l. Indicate controls for fan shutdown: emergency manual and automatic smoke detection.

____ m. Show the location of all UL 555 certified fire dampers, ceiling radiation dampers, smoke dampers, and fire doors.

____ n. Show all fire-rated and smoke-rated walls (both existing and new) with their ratings on the mechanical plans.

____ o. All penetrations of fire-rated construction must be per manufacturer details.

____ p. Room names and numbers for each floor should be on a floor plan for each level.

____ q. Provide outside air ventilation rate per the NCSMC Chapter 4.

____ r. Column line notations, if provided on the architectural/structural plans, shall be identified on the mechanical plans.

____ s. Provide gas piping layout on the floor plan for each floor. If it is a multi story building, all gas piping shall be shown per floor. Floor plans and risers if multi-floor shall be provided. Include pipe sizes, wc, and material. Provide a schedule of connected equipment, total BTUH demand, total equivalent length, and most remote gas appliance.

ELECTRICAL PLANS (Refer to General Requirements)

___ a. Provide panel schedules with circuit and feeder loading, overcurrent protection, and (NEC 220) load summary(s) for all new and/or affected panels and services (loading has to be evaluated by highest phase); include fault current data, short circuit ratings, and fault current protection co-ordination. Show "point of utility" on drawings.

___ b. Provide a single line riser diagram showing all new and/or affected services, feeders, wire sizes and insulation types, and conduit sizes and types.

___ c. Indicate number of services and their physical locations, for the entire building; clearly indicate mains and characteristics.

___ d. Indicate the grounding electrode conductor size with new and/or affected services and transformers; where necessary provide details or notes on methods.

___ e. Show physical locations of all new and/or affected panels and switchgear (indicate front).

___ f. Indicate receptacle plans with circuitry.

___ g. Indicate lighting plans with circuitry.

___ h. Show electrical plans for each affected floor and roof.

___ i. Show wiring method(s), conduit sizes and types, termination temperature (60°, 75°, 90°) requirements, conductor sizes, and insulation types.

___ j. Indicate the design and or operation for any of the following applicable life safety systems: emergency generators, smoke evacuation, shaft pressurization and relief, smoke detection, egress and emergency lighting, and fire alarm.

___ k. Indicate how special needs, such as classified (hazardous), corrosive and patient care, are treated. Provide detailed plan of classified areas, the classifications, and how complied with (i. e. hangers, waste treatment and collection, per NFPA 820), flammable dusts, gases or liquids, spray booths, vehicle servicing and parking, etc.).

___ l. Indicate all HVAC nameplate data. Indicate all major appliance and/or equipment (any use besides cord and plug connected to general use receptacle), and nameplate data (i. e. voltage, phasing, HP, KVA, FLA, RLA, etc.).

___ m. Indicate all motor horse power ratings, if not supplied elsewhere.

___ n. Indicate the approved 3rd party testing agency (i.e. UL, FM, etc.), their test # and hourly ratings of all new and/or affected rated members and assemblies (i.e. columns, beams, floor/ceiling, and ceiling/roof fire-rated design assemblies). Show all new and/or affected fire-rated walls with their ratings, if not shown elsewhere.

___ o. All penetrations of fire-rated construction must be per manufacturer details. The details shall meet or exceed ratings of construction being penetrated and shall be provided to the inspector in the field. Penetration details shall be exactly as tested by an approved testing laboratory or agency and shall include their system numbers. New penetrations of existing fire-rated walls and assemblies shall be shown with appropriate designs.

___ p. Provide all applicable NCSBC, Energy Code compliance data on the Building Code Summary sheet or on the electrical plans.

___ q. All submittals must include LISTING and LABELING STATEMENT. Example: ***All electrical materials, devices, appliances, and equipment shall be label-listed by a North Carolina approved third party testing agency***. If another statement is used, it shall have equivalent content to the above example.

Be sure that everything you provide is applicable to the description of your job. The intent for the review is that the submittal is a complete working plans, so that all code requirements can be examined.

CHARLOTTE-MECKLENBURG UTILITIES (CMUD)

Backflow Prevention Service Application

A Backflow Prevention Service Application shall be submitted with plans involving review by CMUD Backflow Prevention staff, as well as with payment of water connection fees. The information on this application will help in deciding the hazard classification of your facility. In the event that the information provided is inaccurate or undergoes changes, the hazard classification and the type of backflow prevention assembly required may be revised. When no information is provided, the location will be classified as a high hazard. If you have any questions, please contact the Backflow Prevention Section at (704) 336-2997. Keep a copy for your records. Refer to ***http://backflow.charmeck.org*** for all relevant forms and information relevant for plan development and permitting.

DEMOLITION

Demolition Permits must be obtained prior to the demolition of any existing building or structure located in the City, Towns, or County. The Code Enforcement Department issues demolition Permits. Prior to the issuance of the permit, approval must be obtained from the Mecklenburg County Health Department and the Department of Environmental Protection (MCDEP). You will have to submit a NESHAP (National Emission Standard for Hazardous Air Pollutants) notification form to MCDEP in order to obtain its approval. The form must be submitted at least ten days before any demolition begins.

NOTE: For existing buildings, the designer may choose to use either the North Carolina Rehabilitation Code or Chapter 34 of the North Carolina State Building Code. The designer shall indicate the choice on the Building Code Summary Sheet and provide an alternate code compliance summary, if applicable. It is recommended that a Preliminary Code Review be conducted with the Department on these projects.

The following checklist is to be used for all commercial tenant upfits, alteration, and renovation as applicable to your project. Work Permitted consists of renovation, modification, or completion of existing space in a building or structure. This work may involve removal of existing interiors and/or the installation of new interior work, such as lighting, heating/cooling equipment and distribution, wall (rated and non-rated), toilets, corridors, exit ways, and other common or special built-in furnishings required by the tenant.

The drawings submitted shall include as a minimum:
What is existing and how will this tenant modify it or stay within the original design intent. **Drawings shall be complete and relative to the requirements listed below when submitted for review/permit. Incomplete drawings will be returned without a review**. Major revisions, which require a re-review after permit issuance, may cause the permit to be nullified and require resubmittal and be subject to additional fees. The requirements are divided into **General Requirements, Site, Architectural, Structural, Plumbing, Mechanical, Electrical, and Fire Protection.**

Note: The information is required for each discipline; however, normally it need not be within a discipline's drawings nor repeated within the discipline's drawings, if the information exists elsewhere in the drawing set.

COMMERCIAL UPFIT, ALTERATION, OR RENOVATION:

GENERAL REQUIREMENTS

___ a. A building permit application shall be completed in its entirety and shall accompany each submittal for review. This includes designating contractor's costs and the specific use of the property. Permit applications will NOT be accepted until complete.

___ b. All project drawings shall be (Minimum size is 18" x 24") drawn to scale in U.S. Units must have sufficient detail to fully indicate the nature and scope of work to be performed. Drawings that are not legible will be returned without review.

___ c. All drawings shall be dated and signed by the designer. Professional seals, when required, shall appear on all sheets and be signed and dated by the designer.

___ d. Building Code Summary shall be reproduced on the drawings (first or second sheet) with all applicable sections completely filled, out including the Energy Code calculations/data. The Electrical and Mechanical portions may be on their respective design documents.

___ e. If the work involves only a portion of a building, a key plan shall be provided showing the entire building with the area of new construction highlighted.

___ f. All drawings and specifications shall contain information (in the form of notes or otherwise) on the properties of the building materials to be used, where such properties are essential to show compliance with technical building codes.

___ g. All penetrations of fire-rated construction must be per manufacturer details. The details shall meet or exceed ratings of construction being penetrated and shall be provided to the inspector in the field. Penetration details shall be exactly as tested by an approved testing laboratory or agency and shall include their system numbers. New penetrations of existing fire-rated walls and assemblies shall be shown with appropriate designs.

___ h. Drawings shall be complete when submitted for plan review/permitting. Incomplete drawings will be returned without a review. Revisions that require a re-review are handled as revisions to approved drawings and will be subject to additional fees.

___ i. Show location of concentrated loads and total loads.

Referenced Documents

When previously approved documents (drawings and/or specifications) are referenced from your submittal documents, you must provide an approved field set for review information. The field set may be an original or a reproduction; however, it must bear the plan review stamp and signatures of examiners.

SITE AND ZONING PLANS (Refer to General Requirements)

The City of Charlotte Zoning Ordinance can be accessed via the Internet at: http://www.charmeck.org/Departments/Planning/Home.htm

ARCHITECTURAL (Drawings and Specifications) (Refer to General Requirements)

Note: The information is required for each discipline; however, normally it need not be within a discipline's drawings nor repeated within the discipline's drawings, if the information exists elsewhere in the drawing set.

___ a. Show architectural floor plans for each floor, indicating the location and ratings of all **fire-rated walls**.

___ b. Demolition plans shall identify all work areas and identify all existing equipment, materials, etc.

___ c. Show the access to all new HVAC equipment.

___ d. Show the name and use of each room.

___ e. Show a door schedule that defines the applicable rated doors, frames, and hardware.

___ f. If the building has more than one tenant, indicate the occupancy use and hourly-rating separating tenants.

___ g. Indicate the UL/FM # hourly rating of all rated members and assemblies, i.e. columns, beams, floor and ceiling, and ceiling and roof fire-rated design assemblies. Show all fire-rated walls (both existing and new) with their ratings, if not shown elsewhere. Drawings submitted without fire-rated walls shown will be rejected.

___ h. All penetrations of fire-rated construction must be per manufacturer details. The details shall meet or exceed ratings of construction being penetrated and shall be provided to the inspector in the field. Penetration details shall be exactly as tested by an approved testing laboratory or agency and shall include their system numbers. New penetrations of existing fire-rated walls and assemblies shall be shown with appropriate designs.

___ i. Show all hazards and the extent of their area and classifications.

___ j. Indicate on roof framing plan where concentrated loads (mechanical equipment, cranes, etc.) may be placed.

___ k. On any I-2 (hospital), provide the colored life safety drawings from North Carolina Division of Health Services Regulations.

FIRE PROTECTION PLANS (Upfit, Alteration, Renovation, and Remodel only)

Note: The information is required for each discipline; however, normally it need not be within a discipline's drawings nor repeated within the discipline's drawings, if the information exists elsewhere in the drawing set.

___ a. Show ceiling plans with sprinkler heads' layout, walls, soffits, openings, doors, dimensions, and room names and numbers, if not shown elsewhere.

___ b. Show a completed sprinkler design data sheet on the first sheet of the sprinkler drawings.

___ c. Indicate the UL/FM # hourly rating of all rated members and assemblies, i.e. columns, beams, floor and ceiling, and ceiling and roof fire-rated design assemblies. Show all fire-rated walls (both existing and new) with their ratings, if not shown elsewhere. Drawings submitted without fire-rated walls shown will be rejected.

___ d. All penetrations of fire-rated construction must be per manufacturer details. The details shall meet or exceed ratings of construction being penetrated and shall be provided to the inspector in the field. Penetration details shall be exactly as tested by an approved testing laboratory or agency and shall include their system numbers. New penetrations of existing fire-rated walls and assemblies shall be shown with appropriate designs.

___ e. Provide fire alarm riser diagram showing connection to UL approved central station. Show tamper switches on both OS and Y valves of backflow prevention device unless shown elsewhere.

FIRE PROTECTION (Fire Alarm) (Refer to General Requirements)

Note: The information is required for each respective discipline; however, in most cases it need not be within the discipline's drawings nor repeated within the discipline's drawings, if the information exists within the drawing set.

___ a. A floorplan.
___ b. Locations of alarm-initiating and notification appliances.
___ c. Alarm control and trouble signaling equipment.
___ d. Annunciation.
___ e. Power connection.
___ f. Details of ceiling height and construction.
___ g. The interface of fire safety control functions.

Provide a Fire alarm riser showing connection to a UL approved central station. Show tamper switches on both OS and Y valves of backflow prevention device, unless shown elsewhere.

Alarm Drawing Submittal Process for Unlinked Installations

Alarm installations and upgrades to existing buildings that are not a part of or linked to any other Construction permit and involve the installation of over ten devices (including panel), shall be submitted to the CTAC review process of Mecklenburg County Code Enforcement.

SYSTEM CALCULATIONS (Only required for new and more than 20 heads added)

Note: The information is required for each discipline; however, normally it need not be within the discipline nor repeated within the discipline's drawings, if the information exists somewhere in the drawing set.

Hydraulically calculated and pipe schedule systems should be designed with a ten percent safety margin for all new buildings and additions to existing buildings. Calculations for hydraulic systems should include:

___ a. Flow and pressure at each flowing sprinkler head
___ b. Flow diagrams for a grid system.
___ c. The Charlotte Fire Department requires fire sprinkler, standpipe, and alarm shop drawings be submitted within 90 days of permit issuance.

PLUMBING PLANS (Refer to General Requirements)

Note: The information is required for each respective discipline; however, in most cases it need not be within the discipline's drawings nor repeated within the discipline, if the information exists within the drawing set (except as noted below).

____ a. Show and identify type of backflow preventers required.
____ b. Show interceptors as applicable to project
____ c. Provide plumbing plan layouts for each floor. These shall show the water supply, drain-waste-vent piping, fixture schedule, details, notes, legends, and other schedules necessary to define the system being installed.
____ d. Show the location of all major components required for a complete system (i.e. water heater, boiler, etc.).
____ e. Provide fixture and equipment schedule showing fixture number, description, hot water, cold water, waste and vent connection sizes, and other pertinent data.
____ f. Identify all fixtures on floor plans and in riser diagrams with the plumbing fixture schedule number.
____ g. On single-story buildings (with no basement plumbing), Supply and Waste/Vent piping may be shown on the floor plans. All pipe sizes shall be clearly shown. In congested areas, where in the opinion of the plans examiner, the plans are not clearly delineated, isometrics may be needed (i.e. restaurant).
____ h. On buildings two stories and above, provide isometric diagrams and/or schematic riser diagrams for Supply and Waste/Vent piping and identify them by number (e.g. R1, R2, etc.). Show where all the riser base terminations connect to the building drain along with all interconnecting piping on each floor plan. All pipe sizes shall be clearly defined.
____ i. Show the water and sanitary drain-waste-vent piping. Indicate sizes and materials for above/below grade.
____ j. Show all new and existing fixtures that are being used to meet the minimum fixture count for the space. Identify which are for men and women and which meet handicapped requirements per the latest edition in force at the time of review. Designer is responsible for providing all existing plans that show toilets that affect the minimum fixture count.
____ k. Show connection points to existing water and sewer/vent piping. Show sizes of existing lines.
____ l. Show toilet room layouts at sufficient scale for dimensions and details to be ascertained.
____ m. Show drinking fountain locations.
____ n. All penetrations of fire rated construction must be per manufacturer details. The details shall meet or exceed ratings of construction being penetrated and shall be provided to the inspector in the field. Penetration details shall be exactly as tested by an approved testing laboratory or agency and shall include their system numbers. New penetrations of existing fire-rated walls and assemblies shall be shown with appropriate designs.
____ o. Room names and numbers for each floor should be on a floor plan for each level.

MECHANICAL PLANS (Refer to General Requirements)

Note: The information is required for each respective discipline; however, in most cases it need not be within the discipline's drawings nor repeated within the discipline, if the information exists within the drawing set (except as noted below).

____ a. Show code-required wall louvers, penetrations, and fans.
____ b. Indicate roof-mounted equipment curbs.

MECHANICAL PLANS(cont)…

____ c. Show all new mechanical equipment, piping, and ductwork (above/below slab).
____ d. Provide mechanical plans for each floor and the roof, where new work is being done. These shall show the ductwork layouts, schedules, notes, legends, piping schematics, and details as necessary to define the system being installed.
____ e. Indicate air distribution devices showing CFM for supply, return, and exhaust devices.
____ f. Indicate the location of all new and existing equipment components required for a complete system.
____ g. Demolition plans that identify all work areas and existing equipment, materials, etc. to be demolished.
____ h. Show condensation drainage for any new equipment. Primary and secondary drains (if provided) shall be shown from point of origin to termination.
____ i. Indicate toilet exhaust requirements.
____ j. Show mechanical room layouts at sufficient scale for dimensions and details to be ascertained.
____ k. Show the size of all new duct runs and transition sizes to existing ductwork. Identify any existing ductwork being utilized.
____ l. Indicate controls for fan shutdown: emergency manual and automatic smoke detection.
____ m. Show the location of all UL 555 certified fire dampers, ceiling radiation dampers, smoke dampers, and fire doors. Provide typical details.
____ n. Show all fire-rated and smoke-rated walls (both existing and new) with their ratings on the mechanical plans.
____ o. All penetrations of fire-rated construction must be per manufacturer details.
____ p. Room names and numbers for each floor must be on the floor plan for each level
____ q. Provide gas piping layout. Show connections to the existing system (if applicable). Provide pipe sizes, w.c., and material. Provide schedule of connected equipment (new and existing), total BTUH demand, total equivalent length, and most remote gas appliance.

ELECTRICAL (Tenant upfit, alteration, or renovation) (Refer to General Requirements)

___ a. Provide panel schedules with circuit and feeder loading, overcurrent protection, and (NEC 220) load summary(s) for all new and/or affected panels and services (loading has to be evaluated by highest phase); include fault current data, short circuit ratings and fault current protection co-ordination. Show "point of utility" on drawings.
___ b. Provide a single line riser diagram showing all new and/or affected services, feeders, wire sizes and insulation types, and conduit sizes and types.
___ c. Indicate number of services and their physical locations, <u>for the entire building</u>; clearly indicate mains and characteristics.
___ d. Indicate the grounding electrode conductor size with new and/or affected services and transformers; where necessary provide details or notes on methods.
___ e. Show physical locations of all new and/or affected panels and switchgear (indicate front).
___ f. Indicate receptacle plans with circuitry.
___ g. Indicate lighting plans with circuitry.
___ h. Show electrical plans for each affected floor and roof.

ELECTRICAL PLANS(cont)…

___ i. Show wiring method(s), conduit sizes and types, termination temperature (60, 75, 90 degrees) requirements, conductor sizes, and insulation types.

___ j. Indicate the design and or operation for any of the following applicable life safety systems: emergency generators, smoke evacuation, shaft pressurization and relief, smoke detection, egress and emergency lighting, and fire alarm.

___ k. Indicate how special needs, such as classified (hazardous), corrosive, and patient care, are treated. Provide detailed plan of classified areas, the classifications, and how you complied with them (i.e. hangers, waste treatment and collection, per NFPA 820), flammable dusts, gases or liquids, spray booths, vehicle servicing and parking, etc.).

___ l Indicate all HVAC nameplate data. Indicate all major appliance and/or equipment (any use besides cord and plug connected to general use receptacle) and nameplate data (i. e. voltage, phasing, HP, KVA, FLA, RLA, etc.).

___ m. Indicate all motor horse power ratings, if not supplied elsewhere.

___ n. Indicate the approved 3rd party testing agency (i.e. UL, FM, etc.), their test # and hourly ratings of all new and/or affected rated members and assemblies (i.e. columns, beams, floor/ceiling, and ceiling/roof fire-rated design assemblies). Show all new and/or affected fire-rated walls with their ratings if not shown elsewhere.

___ o. All penetrations of fire-rated construction to be per manufacturer details. The details shall meet or exceed ratings of construction being penetrated and shall be provided to the inspector in the field. Penetration details shall be exactly as tested by an approved testing laboratory or agency and shall include their system numbers. New penetrations of existing fire-rated walls and assemblies shall be shown with appropriate designs.

___ p. Provide all applicable NCSBC, Energy Code compliance data on the Building Code Summary sheet or on the electrical plans.

___ q. All submittals must include LISTING and LABELING STATEMENT. Example: All electrical materials, devices, appliances, and equipment shall be label-listed by a North Carolina approved third party testing agency. If another statement is used, it shall have equivalent content to the above example.

___ r. Show intended building use(s) and existing characteristics, if not shown elsewhere.

___ s. Show all modifications to existing or planned tenant space, if not shown elsewhere.

PROVIDE ALL DETAILS THAT ARE APPLICABLE TO DESCRIBE YOUR JOB. THE INTENT OF THE REVIEW IS FOR THE SUBMITTAL TO BE A COMPLETE WORKING PLAN, SO THAT ALL CODE REQUIREMENTS CAN BE EXAMINED.