

CONSTRUCTION DOCUMENTS CHECKLIST

To be completed by the Designer and reviewed for accuracy by the UNC Planning Manager.

for **PROJECT:** _____

PREPARED BY: _____ **date:** _____
(name of Designer)

_____ **phone no.** _____
(name of Design firm)

UNC PLANNING MANAGER REVIEWER: _____ **date:** _____

PART I – GENERAL INFORMATION:

1. Design Team:

Architect/Contact/Phone No./email: _____

Civil/Contact/Phone No./email: _____

Structural/Contact/Phone No./email: _____

Mechanical/Contact/Phone No./email: _____

Electrical/Contact/Phone No./email: _____

Plumbing/Contact/Phone No./email: _____

Asbestos & HazMat/Contact/Phone No./email: _____

Landscaping/Contact/Phone No./email: _____

Other Consultants: _____

2. Construction Information:

Construction Type (check all that apply):

New Construction , Newly Acquired Building , Building Addition , Renovation , Demolition

Overall Square Footage: _____ ; Assignable Square Footage: _____ ; Number of Floors: _____

Construction Funding (receipt of State-Appropriated): _____

Maintenance/Upkeep Funding (receipt of State-Appropriated): _____

PART II – PERMITS/APPROVALS SECURED (copies attached)

- 1 Department of Insurance (DOI)
- 2 Department of Labor (DOL) Not Required:
- 3 Office of State Construction (OSC) Not Required:
- 4 Town of Chapel Hill:
 - A. Site Development Plan Not Required:
 - B. Driveway Permit Not Required:
 - C. Pavement Cuts/ Utility Crossing Not Required:
 - D. Traffic Plan Not Required:
 - E. Zoning Compliance Permit (ZCP) / Special Use Permit (SUP) Not Required:
- 5 Department of Transportation (DOT):
 - A. Encroachment Permit Not Required:
 - B. Driveway Permit Not Required:
- 6 Department of Environment and Natural Resources (DENR) Not Required:
- 7 Orange County Water and Sewer Authority Approval (OWASA) Not Required:
- 8 Orange County Department of Health Not Required:
- 9 Department of Facilities Services (DFS) Not Required:
- 10 NC Division of Air Quality Permit Not Required:
- 11 Historical Preservation / University Preservation Architect Review Not Required:
- 12 University Storm Water Manager Review Not Required:

PART III – SPECIAL CONDITIONS AND FRONT-END DOCUMENTS

1. THE FOLLOWING DOCUMENTS ARE INCLUDED IN THE BID PACKAGE:

- MBE Requirements.
- UNC Construction Administration Supplementary General Conditions (*Current version available from Construction Management, call 966-1476*).
- Subsurface investigation performed and included.

- Asbestos Survey.
- Lead Paint Survey.
- Rock Allowance.
- Bid Form.
- Responsibility for payment of all temporary utilities (**power, steam/condensate, chillwater**)

2. THE FOLLOWING REQUIREMENTS ARE CLEARLY IDENTIFIED IN THE DOCUMENTS:

- Alternates - must include on the BID FORM and provide a unique section in the specifications.
- Unit Prices – must include on the BID FORM and provide a unique section in the specifications.
- Professional Surveying for all new and existing utilities.

Testing Requirements clearly identified for:

- Soils
- Concrete
- Masonry
- Structural Steel
- Pipe welding
- ASBESTOS**
- LEAD PAINT**
- Utilities
- Fire Alarm system
- Telecommunications Cable

Independent/ 3rd Party commissioning of (check all that apply):

- Fire Alarms
- Automatic Sprinkler System
- HVAC Sequence of Operation
- Cleaning Steam Piping
- Steam blow-down
- Hot Water Distribution Piping
- Chill water flushing
- OWASA Domestic Water & Sewer Requirements

PART IV – ADVANCE PLANNING

1. **THE FOLLOWING ITEMS ARE CLEARLY IDENTIFIED IN THE DOCUMENTS AS “BY OTHERS” ; “BY OWNER” ; “BY UNC” ; “FBO” ; “NIC” ; etc. (PROVIDE LIST AND BUDGET AMOUNT):**

BY UNC

<u>BY UNC?</u> (Yes/No/ NR)	<u>DESCRIPTION</u>	<u>\$ BUDGET</u>	<u>FAC. SER.</u> (Yes/No/ NR)
_____	SOILS AND MATERIALS TESTING	_____	_____
_____	ASBESTOS ABATMENT SAM AND "CLEARENANCES"	_____	_____
_____	LEAD PAINT INSPECTION AND MONITORING	_____	_____
_____	TREE PROTECTION	_____	_____
_____	LOGGING MATS	_____	_____
_____	SUPPLYING AND SPREADING TOPSOIL	_____	_____
_____	LANDSCAPING	_____	_____
_____	ELECTRICAL WORK (DESCRIPTION ATTACHED)	_____	_____
_____	MECHANICAL / HVAC WORK (DESCRIPTION ATTACHED)	_____	_____
_____	EQUIPMENT (LIST ATTACHED)	_____	_____
_____	FURNITURE	_____	_____
_____	ARTWORK	_____	_____
_____	WINDOW TREATMENT	_____	_____
_____	INTERIOR SIGNAGE	_____	_____
_____	TEMPORARY SIGNAGE	_____	_____
_____	DIRECTORY	_____	_____
_____	EXTERIOR SIGNAGE & PLAQUES	_____	_____
_____	KEYING OF BUILDING	_____	_____
_____	TELECOMMUNICATIONS/DATA CABLE	_____	_____
_____	UNC ONE CARD	_____	_____
_____	A.D.A. CARD ACCESS REQUIREMENTS	_____	_____
_____	SALVAGE MATLS/EQUIPMENT (DESCRIPTION ATTACHED)	_____	_____
_____	A/V TECHNOLOGY, "SMART CLASSROOMS"	_____	_____

2. SITE CONSIDERATIONS:

- Location and type of perimeter construction fence is shown.
- Pedestrian traffic plan including any needed signage is provided.

- Location and amount of contractor parking is shown.
- Contractor Lay-down & staging area is shown.
- Contractor access to the site is clearly identified.
- Erosion control plan is provided.
- Tree protection plan.
- Traffic Plan.
- Pedestrian Plan.
- Utility impacts/disruptions coordinated with Academic Calendar and adjacent facilities.
- Public notices/ temporary signage.
- Fire lane and fire hydrant access.
- Dumpster and recycling bin access.
- Water meter reading access.
- Site lighting.
- Emergency call boxes.
- Existing utility manhole and valve box access.
- Existing loading dock access.

3. EXISTING UTILITY MODIFICATIONS:

a. *Which of the following utilities require relocation?*

- CW
- STEAM
- WATER
- SANITARY SEWER
- POWER
- TELEPHONE
- DATA
- NATURAL GAS
- STORM SEWER
- EMERGENCY CALL BOXES
- HOT WATER
- FIRE ALARM SYSTEM

b. *What are the restrictions for interrupting the relocated services? (Clearly identify impacts to adjacent facilities).*

SERVICE

RESTRICTIONS

CONTACT / PHONE NO.

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

- All temporary provisions or sequencing of the work required to adhere to the utility restrictions noted above are clearly identified in the documents and briefly described below (*relying on “boiler plate” language in the General Conditions is NOT adequate*).

- The Designer has verified the as-built information provided by UNC is consistent with the actual physical information surveyed at the site (i.e. all valve boxes found at the site agree with the as-built info; actual locations of manholes are as shown on the plans; curb inlets and street lights are all shown on the plans, etc.)

4. COORDINATION WITH THE FOLLOWING ADJACENT PROJECT(S) HAS BEEN CONSIDERED:

PART V – CONSTRUCTION DOCUMENTS

1. Designers will use the UNC Fire Alarm System Guideline Specifications included in the UNC Design and Construction Guidelines (See Chapter IV Section C 2)
2. Designers will insert a copy of the UNC General Requirements into the construction specifications
3. All parking deck structures will be designated as ‘wet/damp’ environments and all life safety devices installed in these areas must be specifically approved for use in such environments
4. Fire pumps must have an uninterruptible power supply per NC DOI fire code. This service will be provided by an emergency generator
5. Rated doors and frames must be installed in rated walls regardless if the building contains a full fire alarm and sprinkler system even if the sprinkler has a deluge system. (See Chapter 7 of the NC State Building Code)
6. The electrical subcontractor shall submit for approval by the designer and provide all fire alarm devices and equipment required to provide a fully functioning fire alarm system in accordance with the fire alarm system plans and specifications. All fire alarm system duct smoke detectors shall be provided and wired by the electrical subcontractor and installed by the mechanical subcontractor unless otherwise noted. SEE MECHANICAL DRAWINGS FOR LOCATIONS AND INSTALLATION DETAILS OF DUCT SMOKE DETECTORS.
7. All projects with new plumbing systems will require the following flushing procedures after initial debris and sediment flushing, cleaning and disinfection:

Building Water System Flushing of all end point devices used for potable water intended for human consumption (After disinfection of the water main)

1. Leave a message on Gary Shaver's phone (843-7313) when building flushing will begin. Identify the building and the site contact information in the message.
2. Flush each end point device at highest flow for 10 minutes to clear debris. If the building has booster pumps, ensure these pumps are running at the highest normal pressure that the building will use during its life.

Notes for devices with aerators:

- i. Remove aerators from devices that have them before starting the 10 min. flush on that device.
- ii. Flush at highest flow without aerators for 10 minutes.

iii. Clean aerators and replace after this 10 minute flush.

3. Next, post paper signs to indicate that the fixtures are to be left on for flushing.
4. Set all potable fixtures to run cold water at low flow. A trickle is fine. Even a flow as low as 2 drips per second is sufficient. Run the water for a continuous 72 hours.
5. After 72 hours, restore all fixtures to the normal operating mode.
6. Leave a message on Gary Shaver's phone when the flushing is complete.

Suggestions:

- Occasionally, check the devices to ensure that flow is maintained continuously and that the aerators have not plugged up. If plugged, remove aerators, clean with water, replace and continue flushing.
- Especially at the start of the extended flushing, verify that all of the drains are operating properly with no overflow.
- Control water flow at the fixtures themselves and not the shut off valves preceding the fixtures.
- For some fixtures, tape or some other method may be needed to hold the fixture handles/paddles in the "on" position.
- Consider unplugging the compressors to water cooling devices before running continuously.
- Determine if metered devices can be set to operate in a continuous flow mode.
- For devices that mix hot and cold automatically, flush as normally dispensed at a low flow