



Document Number	Project SOP, D.10.01
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Related Policies and Procedures	Facilities Project Transition Policy

1. Purpose/Introduction

To establish a standard operating practice to promote stewardship in the management and transition of the University’s physical environment projects from the Facilities Design & Construction Department to the Facilities Operations Department in order to achieve the following objectives:

- Improve collaboration and communication between Facilities Operations and Facilities Design & Construction during the construction phase,
- Ensure a clear handoff at project turnover,
- Enhance overall customer service for occupants at move-in, and
- Better enable Facilities Operations to properly operate and maintain the facility at optimum efficiency.

2. Scope

This SOP shall apply to all projects executed by the Facilities Design & Construction Department (FDC), all Capital Facilities Foundation projects, all Dining Services projects (including those performed by a Contractor under contract to Chartwells/Compass Group or the current food service vendor), all Housing & Residence Life projects, all Facilities Operations projects, all bookstore vendor projects, and any other entity’s projects on the University’s campus.

3. Definitions

- 3.1 **Beneficial Occupancy** is requested by the Owner and is occupancy or partial occupancy of the building after all life safety items have been completed as determined by the State Construction Office. Life safety items include but not limited to fire alarm, sprinkler, egress and exit lighting, fire rated walls, egress paths and security. [SCO OC-15 24th Edition January 2013]
- 3.2 **Commissioning** is a quality assurance process that verifies and documents that building components and systems operate in accordance to the Owner’s project requirements and the project design documents. [SCO OC-15 24th Edition January 2013]
- 3.3 **Designer Final Inspection** is the inspection performed by the design team to determine the completeness of the project in accordance with approved plans and specifications. This inspection occurs prior to SCO Final Inspection. [SCO OC-15 24th Edition January 2013]

- 3.4 **Measurement & Verification** is the methodology, measurements, inspections, and mathematical calculations to determine if actual project utility consumption equals that predicted by the Designer's Energy Model.
- 3.5 **Project** is a capital or non-capital construction, renovation, alteration, upfit, etc. endeavor managed by the UNCG Facilities Design & Construction Department (FDC) or other entity listed in the Scope of this SOP.
- 3.6 **Project Acceptance** is the official date established by FDC, sometimes in conjunction with the State Construction Office (SCO), on which responsibility is transferred from the Contractor/FDC to Facilities Operations for maintenance, operations, security, insurance, etc.
- 3.7 **Punch List** is a list of incomplete work or unacceptable work that the Contractor must resolve prior to receiving Final Payment. Facilities Operations prefers that all Punch List work be satisfactorily completed prior to Turnover.
- 3.8 **SCO Final Inspection** is the inspection performed by the State Construction Office to determine the completeness of the project in accordance with NC Building Codes and approved plans and specifications. [SCO OC-15 24th Edition January 2013]
- 3.9 **Turnover** is the official date that FDC turns over responsibility of a completed project to Facilities Operations and is usually the same date as Project Acceptance.

4. Procedural Steps

This SOP is comprised of the following procedures organized alphabetically.

- 4.1 Attic Stock
 - 4.1.1 Facilities Operations will periodically review and update attic stock (also known as maintenance stock) requirements in the UNCG Design & Construction Guidelines. Typical attic stock items include:
 - 4.1.1.1 Carpet
 - 4.1.1.2 Floor Tile
 - 4.1.1.3 Ceiling Tile
 - 4.1.1.4 Wall Tile (Ceramic, glass, etc.)
 - 4.1.1.5 Wall Covering
 - 4.1.1.6 HVAC Air Handling Unit Filters
 - 4.1.1.7 Fire alarm devices for final, as-built system.
 - 4.1.1.8 Fire sprinkler system spare heads, head removal tool, etc.
 - 4.1.1.9 Spare Door Hardware (locksets, cylinders, exit devices, etc.)
 - 4.1.2 Per UNCG Environmental Health & Safety requirements, attic stock cannot be stored in a mechanical/electrical room in the building. Therefore, the facility must include a separate storage room for attic stock. Attic stock storage could also be combined with general storage like classroom furniture, items for surplus, etc. Coordinate with the Office of Space Utilization and Planning and the University Architect to determine the impact of this requirement on Assignable Square Footage (ASF) and Gross Square Footage (GSF).
 - 4.1.3 During attic stock turnover, Facilities Operations personnel will sign and date a receipt prepared by the delivering party documenting what was turned over and quantities turned over.

- 4.2 Cleaning at Turnover (Final Contractor Cleaning)
 - 4.2.1 Facilities Operations personnel will recommend to project managers that for large projects, generally referred to as “capital” projects, Final Contractor cleaning shall be performed by a cleaning company, not the General Contractor.
 - 4.2.2 For small projects, funds could be included in the project budget to pay UNCG Facility Services to perform final cleaning.

- 4.3 Commissioning Planning & Execution
 - 4.3.1 For commissioning to be successful, Facilities Operations will participate in the scoping of project commissioning services, including which systems are included in the Commissioning Plan. FDC will invite Facilities Operations to the commissioning kickoff meeting when the Commissioning Agent is first retained. Commissioning utilities metering is important because accurate information is needed for Measurement & Verification. The Commissioning Agent will develop and solicit Designer and Owner input for the M&V Plan.
 - 4.3.2 Facilities Operations will review and approve the Controls Submittal prior to Designer approval.
 - 4.3.3 For projects with complex HVAC controls and complex sequences of operation, Facilities Operations will participate in checking actual operation before turnover. Also, Facilities Operations will ensure trends are set up, including Measurement & Verification trends.
 - 4.3.4 Facilities Operations will participate in functional testing of systems and equipment as needed. Facilities Operations’ participation in the following are required:
 - 4.3.4.1 Generator Load Testing.
 - 4.3.4.2 Fire alarm device testing, including NFPA 72 testing, as described below in “Fire Alarm Inspections and Programming.”
 - 4.3.4.3 Fire Sprinkler Testing (NFPA 13).
 - 4.3.5 Opposite-Season Commissioning
 - 4.3.5.1 For large (capital) projects, Facilities Operations will participate in opposite-season commissioning with the Contractor, Designer, and the Commissioning Agent.

- 4.4 Custodial Equipment and Supplies
 - 4.4.1 Custodial equipment and supplies are usually paid for by a separate setup or stocking fund (the non-recurring portion of the Building Reserve Fund) and will be acquired and placed by Facilities Operations.

- 4.5 Documentation (Project Documentation)
 - 4.5.1 Facilities Operations personnel request that Operations & Maintenance Manuals be provided prior to training, which typically occurs prior to turnover.
 - 4.5.2 Operation& Maintenance Manuals must include specific Preventive Maintenance information so Facilities Operations can enter it into TMA (Time and Materials Accounting), the computerized maintenance management system.
 - 4.5.3 O&M Manuals shall include specialty flooring information and/or specific floor care needs for occupants.
 - 4.5.4 Facilities Operations will track all final Contractor and manufacturer warranty dates.

- 4.6 Door Hardware, Cores, and Keying
 - 4.6.1 In order to ensure successful implementation, Facilities Operations personnel will participate in keying/security meetings with occupants during each phase of project development.
 - 4.6.2 The Corbin Factory will perform all keying to the existing UNCG Corbin key system, but only after review and approval by the University Locksmith. All permanent cylinders and keys will be delivered to and installed by the University Locksmith.
 - 4.6.3 All keys will be 12 bow and VKCO from Factory.

- 4.7 Energy Model
 - 4.7.1 The Designer is required to update the energy model at each phase of design, including the changes made from one phase to the next.
 - 4.7.2 Facilities Operations will receive and archive a list of assumptions used in the energy model, including specific occupant counts assumed for each space, hours of operation and space temperature setpoints in accordance with the University's Standards of Comfort Policy.
 - 4.7.3 At the end of the design process, Facilities Operations will receive and archive the Construction Documents (CD) energy model output, including monthly energy/utility consumption and costs based on the applicable utility rate schedules. The University needs accurate information in order to request and establish the operating budget for the facility.
 - 4.7.4 Facilities Operations will compare the actual energy/utility consumption and costs to that predicted by the energy model and will provide feedback to FDC on results. For large (capital) projects, the Designer will do the same on at least a quarterly basis during the first year of occupancy.

- 4.8 Fire Alarm Inspections & Programming
 - 4.8.1 For large (capital) projects, the project pays for UNCG's Life Safety Shop to program Contact ID information at the UNCG Police Building and to confirm each device. The Associate Vice Chancellor for Facilities must approve this project expenditure.
 - 4.8.2 Life Safety Shop personnel shall participate in both the Contractor's 100% fire alarm device testing and the Designer's NFPA 72 fire alarm testing.

- 4.9 Inspections
 - 4.9.1 For large (capital) projects, FDC and Facilities Operations will collaborate and agree on a schedule of monthly walkthroughs of the project. Facilities Operations will provide to FDC a list of items/comments/questions in writing promptly after the monthly walkthrough. The walkthrough schedule shall include the following specific inspections:
 - 4.9.1.1 Underground Site Utilities prior to Covering Up
 - 4.9.1.2 Above-Ceiling Inspections
 - 4.9.1.3 In-Wall Rough Ins
 - 4.9.1.4 Inspection of plant material, like trees and shrubs, prior to Contractor installation.
 - 4.9.1.5 Door hardware typical lockset mockup prior to Contractor installation of all hardware.
 - 4.9.1.6 Landscaping Inspection at least sixty (60) days prior to turnover.
 - 4.9.1.7 Floor Finish Inspection, including carpet, VCT, etc.

- 4.9.1.8 Roof and exterior walls inspection.
- 4.9.2 For small projects, Facilities Operations personnel will participate in the Designer's Pre-Final Inspection.
- 4.9.3 11-Month Warranty Inspection
 - 4.9.3.1 Prior to finalizing the Design Contract, the FDC Project Manager will consult with the Director of Facilities Operations to determine if an eleven-month warranty inspection will be required. For roofing projects, this inspection may be a twenty-three-month warranty inspection.
 - 4.9.3.2 At project turnover, both FDC and Facilities Operations will flag and track the future month that the 11-month Warranty Inspection should be scheduled and the Designer contact information. This inspection is to remain a joint responsibility, so the University does not miss the opportunity for requiring the Contractor to correct defective work at no cost.
 - 4.9.3.3 FDC will schedule the 11-Month Warranty Inspection (or a 23-month Roofing Warranty Inspection) in coordination with Facilities Operations.

- 4.10 Irrigation to Establish Landscaping
 - 4.10.1 At a minimum, projects with landscaping are to include temporary irrigation. Permanent irrigation is preferred by Facilities Operations, but same may eliminate a LEED point for projects pursuing LEED certification. A smart irrigation controller with ET (EvapoTranspiration) intelligence may qualify for the same LEED point. Irrigation system requirements should be discussed with FDC during the design phase, including a determination of feasibility.
 - 4.10.2 Irrigation shall be separately metered with a water meter reading in cubic feet regardless of whether the irrigation is temporary or permanent.

- 4.11 Measurement & Verification (Utilities/Energy Consumption)
 - 4.11.1 For Measurement & Verification to be successful, Facilities Operations will review the Commissioning Agent's or Designer's M&V Plan and provide input concerning which systems are included in the M&V Plan.
 - 4.11.2 Facilities Operations personnel will participate in the M&V Kickoff Meeting.
 - 4.11.3 Facilities Operations Personnel will coordinate with the FDC Project Manager to ensure the designer and contractor are using the newest version of the Utility Meter Setup Guide, which is currently posted as Appendix A of the Design and Construction Guidelines on the FDC website.
 - 4.11.4 Facilities Operations will compare the actual energy/utility consumption and costs to that predicted by the Designer's energy model and will provide feedback to FDC on results. For large (capital) projects, the Designer will do the same on at least a quarterly basis during the first year of occupancy.

- 4.12 Pest Control
 - 4.12.1 The Contractor shall be required to perform initial pest control prior to turnover. In the past, ants, mice, rats, etc. have been discovered in the building/project. As a last resort, if the Contractor does not perform complete pest management, Facilities Operations can have the service performed and the Contractor can be backcharged. If desired and requested, FDC could include this in the project budget as an Owner-provided service.

- 4.12.2 Facilities Operations will contract for ongoing pest management services. Coordination between FDC and Facilities Operations needs to occur early enough to incorporate completed projects into the rolling existing University pest management contract.
 - 4.12.3 Facilities Operations will define and periodically update pest management specifics in the UNCG Design & Construction Guidelines.
- 4.13 Punch List
- 4.13.1 Prior to project acceptance, Facilities Operations will add items for Punch List consideration through the monthly project walkthrough process.
 - 4.13.2 FDC will require the Designer to keep ALL Punch List items on the list and check off items as they are completed, including how the items were resolved. Punch List format will be determined jointly by FDC and Facilities Operations.
- 4.14 Recycling & Trash Containers
- 4.14.1 Exterior recycling and trash receptacles are usually included in the project contract.
 - 4.14.2 Interior receptacles, if none are left over, are usually paid for by a separate setup or stocking fund (the non-recurring portion of the Building Reserve Fund) and will be acquired and placed by Facilities Operations.
 - 4.14.3 Exterior dumpsters are usually paid for by a separate setup or stocking fund (the non-recurring portion of the Building Reserve Fund) and will be acquired and placed by Facilities Operations.
- 4.15 Signage and Room Numbers
- 4.15.1 Facilities Operations Buildings & Trades personnel will review the Contractor's signage submittal prior to Designer approval.
- 4.16 Soap Dispensers and Paper Towel Dispensers
- 4.16.1 Soap dispensers and paper towel dispensers are usually Owner-furnished and Contractor-installed.
 - 4.16.2 Georgia-Pacific enMotion® is the current campus standard paper towel dispenser.
 - 4.16.3 If more than twenty-five (25) enMotion® paper towel dispensers are involved in a project, FDC will coordinate with Facility Services to determine how to acquire the dispensers. It may be necessary for FDC to issue a Purchase Authorization for a large quantity of enMotion® dispensers, which means the project will pay for the dispensers.
- 4.17 Training
- 4.17.1 In order for all pertinent Facilities Operations personnel to participate, FDC will provide sufficient notice of training in order to coordinate and agree on suitable dates and times. Usually the training sessions include building-specific information, but not detailed "how to" instructions like how to change the seals on a pump.
 - 4.17.2 Facilities Operations will participate in the following training sessions conducted and videotaped by the Contractor:
 - 4.17.2.1 General orientation to the building and its systems/infrastructure
 - 4.17.2.2 Mechanical/HVAC/Controls
 - 4.17.2.3 Electrical
 - 4.17.2.4 Plumbing

- 4.17.2.5 Lighting Controls
- 4.17.2.6 Fire Alarm
- 4.17.2.7 Security and/or Access Control Systems
- 4.17.2.8 Specialty systems or equipment like pool water treatment

4.18 Turnover Date Notification

- 4.18.1 Facilities Operations is responsible for Operations & Maintenance starting the day the project is accepted. Therefore, FDC will provide Facilities Operations sufficient notification of the impending acceptance date, with earlier notice required for large (capital) projects.
- 4.18.2 FDC will provide utility account information to Facilities Operations prior to turnover. This includes obtaining information from the Contractor concerning utility accounts initiated by the Contractor that need to be transferred to the Owner for continuity.

4.19 Warranty Items

- 4.19.1 Prior to project acceptance, FDC will provide Facilities Operations with complete Contractor/Subcontractor contact information.
- 4.19.2 At project acceptance, the FDC Project Manager will provide exact expiration dates for all Contractor warranties. Also, FDC will provide roof warranties, both Contractor and manufacturer. Manufacturer warranties for specific equipment, like compressors, are included in the Operations & Maintenance Manuals.
- 4.19.3 Facilities Operations will handle warranty items after turnover and track them. This includes contacting the Contractor/Subcontractor directly to report warranty issues.
 - 4.19.3.1 For elevators, FDC will notify Facilities Operations of any upgrades, renovations, or new installations. The University’s elevator maintenance contract is bid out every three years and during the one-year Contractor warranty period the elevator cannot be repaired by the company holding the maintenance contract.
 - 4.19.3.2 Facilities Operations will review and update required response time in the Design & Construction Guidelines, e.g. on site within two (2) hours of call to handle elevator issues.
- 4.19.4 If the Contractor does not respond in a timely manner or effectively, then Facilities Operations will request FDC assistance.

5. Revision Table

Revision #	Section #	Summary of Changes	Approval Date
D.10.01		To establish a SOP to promote stewardship in the management and transition of the University’s physical environment projects from the Facilities Design & Construction Department to the Facilities Operations Department.	06/24/20