

APPENDIX E

Authorization of New Capital Improvements Projects - The University of North Carolina at Chapel Hill, the University of North Carolina at Charlotte, and the University of North Carolina at Greensboro

The University of North Carolina at Chapel Hill, the University of North Carolina at Charlotte, and the University of North Carolina at Greensboro have requested authority to establish new capital improvements projects.

UNC-Chapel Hill - Medical Biomolecular Research Building Energy Conservation: This project includes design and implementation of energy conservation measures. The implementation will allow the University's Enterprise Building Management System to further monitor and control the Medical Biomolecular Research Building heating, ventilation, and air conditioning systems by expanding the existing Direct Digital Control Building Automation System to local terminal units. Airflow reduction and conversion of laboratory spaces to variable air volume will be part of the project and will result in significant reduction of energy consumption in the building. The project, estimated to cost \$1,500,000 and funded from facilities and administrative receipts, will be completed by July 2016.

UNC-Chapel Hill - Genetic Medicine Building - Vivarium Equipment: This project will purchase new vivarium equipment to improve the quality of animal care in this facility. Specific equipment purchases include installation of a reverse osmosis watering system, animal isolation cubicles and autoclave, and purchase of new rodent cages. The project, estimated to cost \$3,200,000 and funded from facilities and administrative receipts, will be completed by January 2015.

UNC-Chapel Hill - Davis Library Life/Safety Improvements: This project will address life/safety building code deficiencies, including the installation of a wet pipe sprinkler system for the entire building. Davis Library was completed in 1983 and contains 430,141 square feet. The project, estimated to cost \$7,000,000 and funded from facilities and administrative receipts, will be completed by July 2016.

UNC-Chapel Hill - North Branch - Replacement of 1928 Storm Water Trunk Line: This project will replace an existing 42-inch pipe that is part of the North Branch storm water system that runs under Kenan Stadium with a new 60-inch pipe and repair an existing parallel 42-inch pipe. The pipeline to be replaced was installed in 1928 and is in very poor condition. The increased pipe size is necessary to alleviate flooding of upstream buildings during heavy rain events. This project is identified as critical in the Storm Water Master Plan Phase One. Construction documents were developed in 2010. The project includes rebuilding the playing field in Kenan Stadium. The project, estimated to cost \$4,260,000 and funded by a combination of facilities and administrative receipts and gifts, will be complete by July 2015.

UNC-Charlotte - Campus Infrastructure Renewal: This project includes a number of urgently needed projects that will renew aging capital infrastructure on campus: replacement of steam to water heat exchangers in Friday, McEniry and Smith Buildings and installation of a new gas-fired water boiler plant in McEniry which will serve all three buildings. This project

APPENDIX E

will also replace a 1971 air distribution system, hot water piping, lights and controls on floors 5-8 of the Atkins Library. This upgrade provides systems compatible with the 1999 Library addition and corrects stairwell deficiencies noted by the North Carolina Department of Insurance (DOI) inspections. This project, estimated to cost \$2,150,000 and funded from FY2013 carry forward funds, will be completed by July 2015.

UNC-Charlotte - South Entrance Roadway Improvements: This project will install a traffic signal at Highway 49 and Cameron Boulevard (South Entrance). Also included are extensive road widening and sidewalk installation on Cameron Boulevard from Chancellor's Place to Highway 49 and installation of a left turn from eastbound W.T. Harris Boulevard into campus on Alumni Way (formerly Toby Creek Road). The project, estimated to cost \$3,500,000 and funded from FY2014 carry forward funds, will be completed by July 2015.

UNC-Greensboro - Tower Village Fire Alarm Replacement: This project will replace the existing fire alarm system with an addressable fire alarm system and advanced mass notification system as well as correcting ADA deficiencies. Tower Village is a three-floor, 396-bed, 95,378 square-foot residence hall. The project will be scheduled so that construction can be completed in the summer of 2015 while the building is unoccupied. The project, estimated to cost \$1,400,000 and funded from housing receipts, will be completed by August 2015.

Authorization to Increase the Scope of Capital Improvements Projects - The University of North Carolina at Chapel Hill

The University of North Carolina at Chapel Hill has requested authority to increase the scope of the following previously approved capital improvements projects.

Vivarium Equipment Replacement - Taylor Hall: This project, authorized in November 2012 at \$4,847,000 provided funding to renovate the vivarium cage washing area. This request will provide the additional funds required for a comprehensive renovation of Taylor Hall vivarium to improve the quality of animal care for the Division of Laboratory Animal Medicine. This request will increase the project cost by \$3,500,000 to a total of \$8,347,000 and will be funded from facilities and administrative receipts. The project will be completed in April 2016.

Mary Ellen Jones Building Renovations, Phase I - Vivarium Renovation: This previously authorized project (April 2013) will replace building HVAC, electrical, plumbing, and life safety systems and renovate 41,320 square feet on multiple levels in the Mary Ellen Jones Building (built in 1978, 223,994 square feet, 11-story, occupied by the School of Medicine). Work will include roof and window replacement, asbestos abatement, updating of interior finishes, and code and accessibility improvements. The initial project, estimated to cost \$45,000,000, is funded from facilities and administrative receipts. The design for the project is currently underway. This request will provide additional funding required to replace the building envelope and for a comprehensive renovation to the vivarium located on the ground floor of the building. The renovation of the vivarium will improve the quality of animal care for the Division of Laboratory Animal Medicine. This request will increase the

APPENDIX E

project cost by \$18,681,005 to a total of \$63,681,005 and will be funded from facilities and administrative receipts. The project will be completed in August 2016.

Howell Hall Renovation: This renovation project was initially authorized in March 2013 at \$8,015,726. This requested increase in scope will provide additional funding for installation of five new laboratories for the Department of Psychology and renovations to address energy code and laboratory operation efficiencies affecting approximately 28,200 square feet of the original building (constructed in 1906). The labs will be outfitted with fume hoods, along with a high-velocity exhaust, new generator, transformer, and structural modifications to existing floor and ceilings. Renovations include building envelope remediation and window repairs and replacements required to meet the energy code. This request will increase the project cost by \$4,284,274 to a total of \$12,300,000 and will be funded from facilities and administrative receipts. The project will be completed in May 2015.

UNC-Chapel Hill - Lighting Upgrades in Campus Parking Facilities: In October 2011 UNC-Chapel Hill received an authorization of \$1,500,000 to study replacement of existing lighting in eleven campus parking decks with LED lighting. The study indicated significant energy savings with the use of LED lighting. During the study, a number of electrical system deficiencies were also identified in the Dogwood Parking Deck (on Manning Drive serving the UNC Hospitals). Plans have been prepared and are ready to advertise for bids for lighting replacement and correction of electrical deficiencies in the Dogwood Deck. The cost estimate for all the work required in the Dogwood Deck is \$2,500,000 of which \$700,000 represents the cost of LED lighting (an investment with a nine-year payback in energy savings). In order to proceed with the project, an increase in project authority of \$1,500,000 is required. The total project, estimated to cost \$3,000,000 and funded by parking system receipts, will be complete by March 2015.

It is recommended that these projects and methods of funding be authorized and reported to the Office of State Budget and Management as non-appropriated projects that will not require additional debt burden on state appropriations.

APPENDIX E



North Carolina Department of Administration

Pat McCrory, Governor
Bill Daughtridge, Jr., Secretary

State Construction Office
Gregory A. Driver, PE, Director

OC-25: 201360500228
Proposed Capital Improvement Project
Biennium: 2011-2013

STATE DEPARTMENT: Educational Institutions (Universities)
INSTITUTION OR AGENCY: UNC Chapel Hill
PROJECT IDENTIFICATION: Medical Biomolecular Research Building Energy Conservation
PROJECT TYPE: Science/Research Bldg.
CLASSIFICATION: Energy Conservation

PROJECT DESCRIPTION AND JUSTIFICATION: Implementation of energy conservation measures as identified in the Investment Grade Audit. The implementation will allow the University's Enterprise Building Management System to further monitor and control the building heating, ventilation, and air conditioning systems by expanding the existing Direct Digital Control Building Automation System to local terminal units. Airflow reduction and conversion of laboratory spaces to variable air volume will be part of the project. Compliance with GS 143-135.35 - 143-135.40, Sustainable, Energy Efficient Buildings, will be required.

<u>ITEM</u>	<u>QTY</u>	<u>UNIT</u>	<u>COST PER UNIT</u>	<u>TOTAL</u>
3. Building Construction (existing)	1.0	Lump Sum	\$1,100,000	\$1,100,000
10. Other	1.0	Lump Sum	\$150,000	\$150,000
ESTIMATED CONSTRUCTION COST:				\$1,250,000

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DESIGN FEE	9% (% of Estimated Construction Costs)	\$112,500
PRECONSTRUCTION COSTS	0% (% of Estimated Construction Costs [1% for CM@Risk])	\$0
COMMISSIONING FEE	1.5% (0.5% simple, 1% moderate, 1.5% complex)	\$18,750
SPECIAL INSPECTIONS/MATERIALS	0% (1.25% Estimated)	\$0
SUSTAINABILITY	0% (3% LEED Gold, 2% LEED Silver)	\$0
ADVANCE PLANNING	2% (% of Estimated Costs - includes programming, feasibility, analysis)	\$25,000
CONTINGENCIES	5% (% of Estimated Costs [3% New or 5% R&R])	\$62,500
ESTIMATED COSTS	(Estimated Construction Costs + Design Fee + Preconstruction + Commissioning + Special + Sustainability + Advance Planning + Contingencies)	\$1,468,750

Escalation %= percent per month multiplied by the number of months:

(From Est. Date to mid-point of construction) = 18 months @ 0.04%

ESCALATION COST INCREASE = (Total of Estimated Construction Costs x Escalation %) **\$10,575**

TOTAL ESTIMATED PROJECT COSTS (Estimated Construction Costs + Escalation Cost increase) **\$1,479,000**

COMMENTS:

1. [2014-03-08 11:11:51] mkonishi - Create

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North Carolina Department of Administration

Pat McCrory, Governor
Bill Daughtridge, Jr., Secretary

State Construction Office
Gregory A. Driver, PE, Director

OC-25: 201360500231
Proposed Capital Improvement Project
Biennium: 2011-2013

STATE DEPARTMENT: Educational Institutions (Universities)
INSTITUTION OR AGENCY: UNC Chapel Hill
PROJECT IDENTIFICATION: Genetic Medicine Building Vivarium Cages and Equipment
PROJECT TYPE: Science/Research Bldg.
CLASSIFICATION: Other

PROJECT DESCRIPTION AND JUSTIFICATION: This project entails the purchase and installation of vivarium equipment to improve the quality of animal care in this facility. Specific equipment purchases include installation of a reverse osmosis watering system, animal isolation cubicles and autoclave, and purchase of new rodent cages.

Compliance with GS 143-135.35 - 143-135.40, Sustainable, Energy Efficient Buildings, is not required.

<u>ITEM</u>	<u>QTY</u>	<u>UNIT</u>	<u>COST PER UNIT</u>	<u>TOTAL</u>
3. Building Construction (existing)	1.0	Lump Sum	\$50,000	\$50,000
10. Other	1.0	Lump Sum	\$100,000	\$100,000
1. Fixed	1.0	Lump Sum	\$2,800,000	\$2,800,000
ESTIMATED CONSTRUCTION COST:				\$2,950,000

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DESIGN FEE	3% (% of Estimated Construction Costs)	\$88,500
PRECONSTRUCTION COSTS	0% (% of Estimated Construction Costs [1% for CM@Risk])	\$0
COMMISSIONING FEE	0% (0.5% simple, 1% moderate, 1.5% complex)	\$0
SPECIAL INSPECTIONS/MATERIALS	0% (1.25% Estimated)	\$0
SUSTAINABILITY	0% (3% LEED Gold, 2% LEED Silver)	\$0
ADVANCE PLANNING	0% (% of Estimated Costs - includes programming, feasibility, analysis)	\$0
CONTINGENCIES	5% (% of Estimated Costs [3% New or 5% R&R])	\$147,500
ESTIMATED COSTS	(Estimated Construction Costs + Design Fee + Preconstruction + Commissioning + Special + Sustainability + Advance Planning + Contingencies)	\$3,186,000

Escalation %= percent per month multiplied by the number of months:

(From Est. Date to mid-point of construction) = 0 months @ 0.00%

ESCALATION COST INCREASE = (Total of Estimated Construction Costs x Escalation %) **\$0**

TOTAL ESTIMATED PROJECT COSTS (Estimated Construction Costs + Escalation Cost increase) **\$3,186,000**

COMMENTS:

1. [2014-03-09 09:13:44] mkonishi - Create

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Pat McCrory, Governor
Bill Daughtridge, Jr., Secretary

State Construction Office
Gregory A. Driver, PE, Director

OC-25: 201360500225
Proposed Capital Improvement Project
Biennium: 2011-2013

STATE DEPARTMENT: Educational Institutions (Universities)
INSTITUTION OR AGENCY: UNC Chapel Hill
PROJECT IDENTIFICATION: Davis Library Sprinklers
PROJECT TYPE: Library/LRC
CLASSIFICATION: Code Compliance

PROJECT DESCRIPTION AND JUSTIFICATION: This project will address life/safety code deficiencies, including the installation of a wet pipe sprinkler system for the entire building (430,141 square feet).
Compliance with GS 143-135.35 - 143-135.40, Sustainable, Energy Efficient Buildings, is not required.

<u>ITEM</u>	<u>QTY</u>	<u>UNIT</u>	<u>COST PER UNIT</u>	<u>TOTAL</u>
7. Fire Suppression and Alarm Systems	1.0	Lump Sum	\$5,200,000	\$5,200,000
9. Associated Construction Costs	1.0	Lump Sum	\$500,000	\$500,000
10. Other	1.0	Lump Sum	\$700,000	\$700,000
ESTIMATED CONSTRUCTION COST:				\$6,400,000

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DESIGN FEE	7% (% of Estimated Construction Costs)	\$448,000
PRECONSTRUCTION COSTS	0% (% of Estimated Construction Costs [1% for CM@Risk])	\$0
COMMISSIONING FEE	0% (0.5% simple, 1% moderate, 1.5% complex)	\$0
SPECIAL INSPECTIONS/MATERIALS	0% (1.25% Estimated)	\$0
SUSTAINABILITY	0% (3% LEED Gold, 2% LEED Silver)	\$0
ADVANCE PLANNING	1% (% of Estimated Costs - includes programming, feasibility, analysis)	\$64,000
CONTINGENCIES	5% (% of Estimated Costs [3% New or 5% R&R])	\$320,000
ESTIMATED COSTS	(Estimated Construction Costs + Design Fee + Preconstruction + Commissioning + Special + Sustainability + Advance Planning + Contingencies)	\$7,232,000

Escalation %= percent per month multiplied by the number of months:

(From Est. Date to mid-point of construction) = 24 months @ 0.12%

ESCALATION COST INCREASE = (Total of Estimated Construction Costs x Escalation %) **\$208,281**

TOTAL ESTIMATED PROJECT COSTS (Estimated Construction Costs + Escalation Cost increase) **\$7,440,000**

COMMENTS:

1. [2014-03-08 10:25:45] mkonishi - Create

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State Construction Office
Gregory A. Driver, PE, Director

OC-25: 201360500229
Proposed Capital Improvement Project
Biennium: 2011-2013

STATE DEPARTMENT: Educational Institutions (Universities)
INSTITUTION OR AGENCY: UNC Chapel Hill
PROJECT IDENTIFICATION: North Branch - Replacement of 1928 Stormwater Trunkline
PROJECT TYPE: Area Drainage
CLASSIFICATION: Deferred/Preventive Maintenance

PROJECT DESCRIPTION AND JUSTIFICATION: This project will address the recurring stormwater flooding at the Kenan Stadium facility. Past flooding resulted in significant damage to the facility. The existing 42" pipe under the Kenan Football Field will be replaced with a new 60" pipe. In addition, repairs to an existing stormwater pipe between the field and the stands and field turf replacement will be part of the project. Compliance with GS 143-135.35 - 143-135.40, Sustainable, Energy Efficient Buildings, will not be required.

<u>ITEM</u>	<u>QTY</u>	<u>UNIT</u>	<u>COST PER UNIT</u>	<u>TOTAL</u>
2. Site Work	1.0	Lump Sum	\$1,400,000	\$1,400,000
1. Utility Services	1.0	Lump Sum	\$1,600,000	\$1,600,000
10. Other	1.0	Lump Sum	\$540,000	\$540,000
ESTIMATED CONSTRUCTION COST:				\$3,540,000

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DESIGN FEE	9% (% of Estimated Construction Costs)	\$318,600
PRECONSTRUCTION COSTS	0% (% of Estimated Construction Costs [1% for CM@Risk])	\$0
COMMISSIONING FEE	0% (0.5% simple, 1% moderate, 1.5% complex)	\$0
SPECIAL INSPECTIONS/MATERIALS	0% (1.25% Estimated)	\$0
SUSTAINABILITY	0% (3% LEED Gold, 2% LEED Silver)	\$0
ADVANCE PLANNING	1% (% of Estimated Costs - includes programming, feasibility, analysis)	\$35,400
CONTINGENCIES	10% (% of Estimated Costs [3% New or 5% R&R])	\$354,000
ESTIMATED COSTS	(Estimated Construction Costs + Design Fee + Preconstruction + Commissioning + Special + Sustainability + Advance Planning + Contingencies)	\$4,248,000

Escalation %= percent per month multiplied by the number of months:

(From Est, Date to mid-point of construction) = 0 months @ 0.00%

ESCALATION COST INCREASE = (Total of Estimated Construction Costs x Escalation %) **\$0**

TOTAL ESTIMATED PROJECT COSTS (Estimated Construction Costs + Escalation Cost increase) **\$4,248,000**

COMMENTS:

1. [2014-03-11 16:25:36] broenigk - Save
2. [2014-03-08 11:24:24] mkonishi - Create

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APPENDIX E

**New Capital Improvement Project
Consultation Required per Section 6.5.(d)(4) of S.L. 2011-145¹**

Department/Institution: University of North Carolina at Charlotte Advance Planning Request: _____
 New Capital Projects: X

Project Title: Campus Infrastructure Renewal

Project Cost: \$2,150,000

Source of Funds: FY 2013 Carry-forward

For each advance planning project or capital construction project, please provide the following:

1. A detailed project description and justification:
 The project includes a number of urgently needed projects that will renew aging capital infrastructure on campus. It includes replacement of steam to water heat exchangers in Friday, McEniry and Smith Buildings as well as installation of a new gas fired water boiler plant in McEniry which will serve all three buildings. This project will replace 1971 air distribution, hot water piping, lights and controls on floors 5 - 8 of the Atkins Library. This upgrade provides systems compatible with 1999 library addition and corrects stairwell deficiencies noted by DOI inspections.
2. An estimate of acquisition, planning, design, site development, construction, contingency and other related costs (Answer for capital construction only)
 Design \$215,000 Contingency \$96,750 Construction \$1,838,250
3. An estimated schedule of cash flow requirements over the life of the project (Answer for capital construction only):

FY14 Q4	\$21,500	FY15 Q1	\$104,814		FY15 Q2	\$34,938
FY15 Q3	\$994,374	FY15 Q4	\$994,374			
4. An estimated schedule for the completion of the project:

Design Start	4/15/14	Construction Start	1/1/15
Construction complete	6/30/15	Occupy	6/30/15
5. An estimate of maintenance and operating costs, including personnel, covering the first five years of operation (Answer for capital construction only): NA
6. An estimate of revenues, if any, likely to be derived from the project, covering the first five years of operation (Answer for capital construction only): NA
7. An explanation of the means of financing: FY2013 Carry-forward funds

¹ Section 6.5(d)(4) of S.L. 2011-145 requires the Office of State Budget and Management (OSBM) to consult with the Appropriations Committee of the House of Representatives and the Appropriations/Base Budget Committee of Senate on all new advanced planning and capital improvement projects funded from gifts, grants, receipts, special funds, self-liquidating indebtedness, and other funds or any combination of funds for projects not specifically authorized by the General Assembly. This requirement includes projects authorized by the Board of Governors of the University of North Carolina. Each project must include a description for each proposed capital project as delineated in G.S 143C-8-6(e).

APPENDIX E

**New Capital Improvement Project
Consultation Required per Section 6.5.(d)(4) of S.L. 2011-145¹**

Department/Institution: University of North Carolina at Charlotte Advance Planning Request: _____
 Project Title: South Entrance Roadway Improvements New Capital Projects: X
 Project Cost: \$3,500,000
 Source of Funds: FY 2014 Carry-forward

For each advance planning project or capital construction project, please provide the following:

1. A detailed project description and justification:

This project installs a traffic signal at Highway 49 and Cameron Boulevard (South Entrance). It includes extensive road widening and sidewalk installation on Cameron Boulevard from Chancellor's Place to Highway 49. It also includes installation of a left turn from east bound W.T. Harris Boulevard into campus on Alumni Way (formerly Toby Creek Road).

2. An estimate of acquisition, planning, design, site development, construction, contingency and other related costs (Answer for capital construction only)

Design \$332,000 Contingency \$151,000 Construction \$3,017,000

3. An estimated schedule of cash flow requirements over the life of the project (Answer for capital construction only):

FY15 Q1	\$196,875	FY15 Q2	\$65,625	FY15 Q3	\$1,618,750
FY15 Q4	\$1,618,750				

4. An estimated schedule for the completion of the project:

Design Start	7/1/14	Construction Start	1/1/15
Construction complete	6/30/15	Occupy	7/1/15

5. An estimate of maintenance and operating costs, including personnel, covering the first five years of operation (Answer for capital construction only): NA

6. An estimate of revenues, if any, likely to be derived from the project, covering the first five years of operation (Answer for capital construction only): NA

7. An explanation of the means of financing: FY 2014 Carry-forward

¹ Section 6.5(d)(4) of S.L. 2011-145 requires the Office of State Budget and Management (OSBM) to consult with the Appropriations Committee of the House of Representatives and the Appropriations/Base Budget Committee of Senate on all new advanced planning and capital improvement projects funded from gifts, grants, receipts, special funds, self-liquidating indebtedness, and other funds or any combination of funds for projects not specifically authorized by the General Assembly. This requirement includes projects authorized by the Board of Governors of the University of North Carolina. Each project must include a description for each proposed capital project as delineated in G.S 143C-8-6(e).

APPENDIX E

The University of North Carolina
Request for New or Increase in Capital Improvement Project

Institution: UNC Greensboro Advance Planning Request: X
New Capital Project*:

Increase in Authorization from: \$ 100,000 to \$

Project Title: Tower Village Fire Alarm Replacement

Project Cost: \$1,400,000

Source of Funds: Housing Receipts

*If this project has previously had advance planning authority, please identify code/item number under which that authority is carried. Code Item

For each advance planning project or capital construction project, please provide the following:

1. A detailed project description and justification:
This project consists of replacing an old fire alarm with an addressable fire alarm system and advanced mass notification system as well as ADA compliance items. This is a 3-floor, 396-bed, 95,378 gsf residence hall. Project construction must be done in the summer of 2015 while the building is unoccupied.
2. An estimate of acquisition, planning, design, site development, construction, contingency and other related costs (Answer for capital construction only and include a completed OC-25 form)
3. An estimated schedule of cash flow requirements over the life of the project by FY quarters (Answer for capital construction only):
4. An estimated schedule for the completion of the project:
Estimated time of project completion is August, 2015.
5. An estimate of maintenance and operating costs and source of funding to support these costs, including personnel, covering the first five years of operation (Answer for capital construction only):
.
6. An estimate of revenues, if any, likely to be derived from the project, covering the first five years of operation (Answer for capital construction only):
7. An explanation of the means of financing:
Housing Receipts budgeted for this project.

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North Carolina Department of Administration

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OC-25: 201360500226
Proposed Capital Improvement Project
Biennium: 2011-2013

STATE DEPARTMENT: Educational Institutions (Universities)
INSTITUTION OR AGENCY: UNC Chapel Hill
PROJECT IDENTIFICATION: Vivarium Equipment Replacement
PROJECT TYPE: Science/Research Bldg.
CLASSIFICATION: Major Renovations

PROJECT DESCRIPTION AND JUSTIFICATION: Comprehensive renovation of Taylor Hall vivarium to improve the quality of animal care for the Division of Laboratory Animal Medicine.
Compliance with GS 143-135.35 - 143-135.40, Sustainable, Energy Efficient Buildings, will be required.

<u>ITEM</u>	<u>QTY</u>	<u>UNIT</u>	<u>COST PER UNIT</u>	<u>TOTAL</u>
3. Building Construction (existing)	1.0	Lump Sum	\$3,400,000	\$3,400,000
10. Other	1.0	Lump Sum	\$1,300,000	\$1,300,000
1. Fixed	1.0	Lump Sum	\$2,400,000	\$2,400,000
2. Moveable	1.0	Lump Sum	\$100,000	\$100,000
ESTIMATED CONSTRUCTION COST:				\$7,200,000

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DESIGN FEE	9% (% of Estimated Construction Costs)	\$648,000
PRECONSTRUCTION COSTS	0% (% of Estimated Construction Costs [1% for CM@Risk])	\$0
COMMISSIONING FEE	1% (0.5% simple, 1% moderate, 1.5% complex)	\$72,000
SPECIAL INSPECTIONS/MATERIALS	0% (1.25% Estimated)	\$0
SUSTAINABILITY	0% (3% LEED Gold, 2% LEED Silver)	\$0
ADVANCE PLANNING	0% (% of Estimated Costs - includes programming, feasibility, analysis)	\$0
CONTINGENCIES	5% (% of Estimated Costs [3% New or 5% R&R])	\$360,000
ESTIMATED COSTS	(Estimated Construction Costs + Design Fee + Preconstruction + Commissioning + Special + Sustainability + Advance Planning + Contingencies)	\$8,280,000

Escalation %= percent per month multiplied by the number of months:

(From Est, Date to mid-point of construction) = 0 months @ 0.00%

ESCALATION COST INCREASE = (Total of Estimated Construction Costs x Escalation %) **\$0**

TOTAL ESTIMATED PROJECT COSTS (Estimated Construction Costs + Escalation Cost increase) **\$8,280,000**

COMMENTS:

1. [2014-03-10 08:33:57] broenigk - Save
2. [2014-03-08 10:41:18] mkonishi - Create

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Gregory A. Driver, PE, Director

OC-25: 201360500212
Proposed Capital Improvement Project
Biennium: 2011-2013

STATE DEPARTMENT: Educational Institutions (Universities)
INSTITUTION OR AGENCY: UNC Chapel Hill
PROJECT IDENTIFICATION: Mary Ellen Jones Renovation - Phase I
PROJECT TYPE: Lab Bldg. (non-Educ.)
CLASSIFICATION: Repairs, Reroofing, Renovations

PROJECT DESCRIPTION AND JUSTIFICATION: This project will replace air handlers, electrical infrastructure, fire pump, and other building systems and equipment, renovate four floors for new research laboratory space and the vivarium. In addition, this project will address code deficiencies and deferred maintenance items. The project will also replace the existing exterior precast panels and install a new exterior glass curtain wall. The interior renovated area will be approximately 155,000 GSF.

Compliance with GS 143-135.35 - 143-135.40, Sustainable, Energy Efficient Buildings, will be required.

<u>ITEM</u>	<u>QTY</u>	<u>UNIT</u>	<u>COST PER UNIT</u>	<u>TOTAL</u>
3. Building Construction (existing)	1.0	Lump Sum	\$48,000,000	\$48,000,000
9. Associated Construction Costs	1.0		\$0	\$0
10. Other	1.0	Lump Sum	\$4,000,000	\$4,000,000
1. Fixed	1.0	Lump Sum	\$1,000,000	\$1,000,000
2. Moveable	1.0	Lump Sum	\$1,000,000	\$1,000,000
ESTIMATED CONSTRUCTION COST:				\$54,000,000

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APPENDIX E

DESIGN FEE	9.7%	(% of Estimated Construction Costs)	\$5,238,000
PRECONSTRUCTION COSTS	0.90%	(% of Estimated Construction Costs [1% for CM@Risk])	\$486,000
COMMISSIONING FEE	1.1%	(0.5% simple, 1% moderate, 1.5% complex)	\$594,000
SPECIAL INSPECTIONS/MATERIALS	0.80%	(1.25% Estimated)	\$432,000
SUSTAINABILITY	0.5%	(3% LEED Gold, 2% LEED Silver)	\$270,000
ADVANCE PLANNING	0.30%	(% of Estimated Costs - includes programming, feasibility, analysis)	\$162,000
CONTINGENCIES	4.5%	(% of Estimated Costs [3% New or 5% R&R])	\$2,430,000
ESTIMATED COSTS	(Estimated Construction Costs + Design Fee + Preconstruction + Commissioning + Special + Sustainability + Advance Planning + Contingencies)		\$63,612,000

Escalation %= percent per month multiplied by the number of months:

(From Est, Date to mid-point of construction) = 17 months @ 0.00%

ESCALATION COST INCREASE = (Total of Estimated Construction Costs x Escalation %) **\$0**

TOTAL ESTIMATED PROJECT COSTS (Estimated Construction Costs + Escalation Cost increase) **\$63,612,000**

COMMENTS:

1. [2014-03-11 08:39:21] mkonishi - Save
2. [2013-10-03 16:35:11] mkonishi - Create

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APPENDIX E



North Carolina Department of Administration

Pat McCrory, Governor
Bill Daughtridge, Jr., Secretary

State Construction Office
Gregory A. Driver, PE, Director

OC-25: 201360500224
Proposed Capital Improvement Project
Biennium: 2011-2013

STATE DEPARTMENT: Educational Institutions (Universities)
INSTITUTION OR AGENCY: UNC Chapel Hill
PROJECT IDENTIFICATION: Howell Hall Renovation
PROJECT TYPE: General Bldg.
CLASSIFICATION: Repairs, Reroofing, Renovations

PROJECT DESCRIPTION AND JUSTIFICATION: To Improve accessibility, egress, and program requirements for the Psychology Department. To determine needed space improvements and cost of those improvements; and to determine if Howell Hall is the best available option for meeting department teaching, research, and faculty requirements. In addition, there will be the installation of 5 new laboratories with fumehoods, along with high velocity exhaust system, new generator, transformer, and structural modifications to the existing floors and ceilings. Included will also be a building envelop remediation and widow repair/replacement required to meet the new energy code and laboratory efficiencies.

<u>ITEM</u>	<u>QTY</u>	<u>UNIT</u>	<u>COST PER UNIT</u>	<u>TOTAL</u>
3. Building Construction (existing)	1.0	Lump Sum	\$9,200,000	\$9,200,000
10. Other	1.0	Lump Sum	\$1,646,562	\$1,646,562
ESTIMATED CONSTRUCTION COST:				\$10,846,562

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DESIGN FEE	7.5% (% of Estimated Construction Costs)	\$813,492
PRECONSTRUCTION COSTS	0% (% of Estimated Construction Costs [1% for CM@Risk])	\$0
COMMISSIONING FEE	0.5% (0.5% simple, 1% moderate, 1.5% complex)	\$54,232
SPECIAL INSPECTIONS/MATERIALS	0.40% (1.25% Estimated)	\$43,386
SUSTAINABILITY	0% (3% LEED Gold, 2% LEED Silver)	\$0
ADVANCE PLANNING	0% (% of Estimated Costs - includes programming, feasibility, analysis)	\$0
CONTINGENCIES	5% (% of Estimated Costs [3% New or 5% R&R])	\$542,328
ESTIMATED COSTS	(Estimated Construction Costs + Design Fee + Preconstruction + Commissioning + Special + Sustainability + Advance Planning + Contingencies)	\$12,300,000

Escalation %= percent per month multiplied by the number of months:

(From Est, Date to mid-point of construction) = 0 months @ 0.00%

ESCALATION COST INCREASE = (Total of Estimated Construction Costs x Escalation %) **\$0**

TOTAL ESTIMATED PROJECT COSTS (Estimated Construction Costs + Escalation Cost increase) **\$12,300,000**

COMMENTS:

1. [2014-03-05 14:13:45] jguerrie - Submit
2. [2014-03-05 14:12:43] jguerrie - Create

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OC-25: 20136050024
Proposed Capital Improvement Project
Biennium: 2011-2013

STATE DEPARTMENT: Educational Institutions (Universities)
INSTITUTION OR AGENCY: UNC Chapel Hill
PROJECT IDENTIFICATION: Lighting Upgrade for Dogwood Parking Deck
PROJECT TYPE: Parking Deck
CLASSIFICATION: Energy Conservation

PROJECT DESCRIPTION AND JUSTIFICATION: This project consist of lighting systems and associated utilities for upgrading high pressure sodium (HPS) fixtures to high efficiency LED lighting throughout the Dogwood parking deck. Emergency and egress lighting (stairwells, egress paths, etc.) are included, but pathways and roadways adjacent to the deck are excluded.

<u>ITEM</u>	<u>QTY</u>	<u>UNIT</u>	<u>COST PER UNIT</u>	<u>TOTAL</u>
Planning/Construction Reserve	1.0	Each	\$25,750	\$25,750
Campus Infrastructure Fees (5.5%)	1.0	Each	\$155,000	\$155,000
Building Electrical	1.0	Each	\$2,401,140	\$2,401,140
ESTIMATED CONSTRUCTION COST:				\$2,581,890

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CONTINGENCIES	5%	(% of Estimated Construction Costs [3% New or 5% R&R])	\$129,094
DESIGN FEE	8.6%	(% of Estimated Construction Costs + Contingencies)	\$233,144
COMMISSIONING FEE	0.5%	(0.5% simple, 1% moderate, 1.5% complex)	\$13,554
ADVANCE PLANNING	3.2%	(includes programming, feasibility, analysis)	\$86,751
FIXED OWNER COSTS			\$0
ESTIMATED COSTS	(Estimated Construction Costs + Contingencies + Design Fee)		\$3,044,433

Escalation %= percent per month multiplied by the number of months:

(From Est. Date to mid-point of construction) = 0 months @ 0.00%

ESCALATION COST INCREASE = (Total of Estimated Construction Costs x Escalation %) **\$0**

TOTAL ESTIMATED PROJECT COSTS (Estimated Construction Costs + Escalation Cost increase) **\$3,044,000**

COMMENTS:

1. [2013-02-01 11:55:43] alopez - Reject
2. [2013-02-01 11:55:33] alopez - OC-25 (not just backup) should reflect a breakdown of costs. Please revise and resubmit. Thanks!
3. [2012-09-18 10:07:41] apiran - Submit
4. [2012-09-18 10:07:10] apiran - Save
5. [2012-09-18 10:06:54] apiran - Please refer to p43-p44 of the attached document for the detailed cost estimate of Dogwood Parking Deck.
6. [2012-09-13 14:42:57] apiran - Create

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