

Authorization of New Capital Improvements Projects – Appalachian State University and East Carolina University

Appalachian State University and East Carolina University have requested authority to establish new capital improvements projects.

ASU – Steam Distribution System Replacement and Repair: This project will replace or repair the steam distribution and condensate return lines running along Bodenheimer Drive and from the Steam Plant to the Holmes Center. Work will include associated road, drive, and walk replacement. The project, estimated to cost \$4,500,000 and funded from steam utility trust fund receipts, will be complete by the beginning of fall semester 2015.

ECU – Minges Natatorium Lighting and Acoustical Improvements: This project will make lighting and acoustical improvements at Minges Natatorium (built in 1965, 14,000 square feet, one-story) which is located within the Minges Coliseum complex. Lighting improvements will meet current NCAA light-level standards, improve swimmer safety and enhance facility energy efficiency. Acoustical improvements will include a new curved slat ceiling and spray-on soundproofing material. The project, estimated to cost \$490,000 and funded from athletic receipts, will be complete by August 2014.

It is recommended that these projects be authorized and that the methods of financing as proposed by ASU and ECU be approved.

APPENDIX D

STATE OF NORTH CAROLINA - DEPARTMENT OF ADMINISTRATION
STATE CONSTRUCTION OFFICE
PROPOSED REPAIR & RENOVATION OR CAPITAL IMPROVEMENT PROJECT
BIENNIUM 2013 - 2015

Form OC-25

(Rev 05/12)

DEPARTMENT and DIVISION: ASU Physical Plant DATE: 10/21/13
PROJECT IDENTIFICATION: SCO ID # 13-10207-01A ASU # 2013007 - Bodenhiemer Drive Condensate System Upgrade
PROJECT CITY or LOCATION: Appalachian State University, Boone, NC
PROJECT DESCRIPTION & JUSTIFICATION: Scope of project includes steam & condensate replacement along Bodenheimer Drive from Appalachian Heights to the existing steam vault located on River St. The Scope of work includes trenching, installing 2400 lf of condensate piping; insulation, 5 new steam trap stations; and repaving. Project includes one bid alternate - to replace 350lf of condensate piping to Walker Hall.

(Definitions/explanations are provided on pg 2 to assist in completion of this form.)

CURRENT ESTIMATED CONSTRUCTION COST

	QTY	UNIT	COST PER UNIT	TOTAL
A. Land Requirement				\$0
B. Site Preparation				
1. Demolition (Road/sidewalk)	2750	LF	\$ 45.00	\$123,750
2. Site Work (trenching)	2750	LF	\$ 30.00	\$82,500
3. Site Work (paver replacement)	8000	sf	\$ 25.00	\$200,000
C. Construction				
1. Utility Services	2750	lf	\$ 213.00	\$585,750
2. Building Construction (new space)				\$0
3. Building Construction (existing)				\$0
4. Plumbing (new space)				\$0
5. HVAC (new space)				\$0
6. Electrical (Includes TV & Radio Studio)				\$0
7. Fire Supression and Alarm Systems				\$0
8. Telephone, Data, Video				\$0
9. Associated Construction Costs (Hazmat allowance)	1	ls	\$ 25,000.00	\$25,000
10. Other: Rock Allowance	1	ls	\$ 33,000.00	\$33,000
D. Equipment				
1. Fixed				\$0
2. Moveable				\$0

ESTIMATED CONSTRUCTION COSTS

\$1,050,000

Items below may be calculated by percentage or lump sum. If using lump sum, make entry in \$ field.

DESIGN FEE	9 %	(% of Estimated Construction Costs)	\$94,500
PRECONSTRUCTION COSTS	%	(% of Estimated Construction Costs [1% for CM@Risk])	\$0
COMMISSIONING	%	(0.5% simple; 1.0% moderate; 1.5% complex)	\$0
SPECIAL INSPECTIONS/MATERIALS	1.25 %	(1.25% estimated)	\$13,125.00
SUSTAINABILITY	%	(3% LEED Gold, 2% LEED Silver)	\$0
ADVANCE PLANNING	%	Includes programming, feasibility, analysis (% of Estimated Construction Costs)	\$0
CONTINGENCIES	5 %	(% of Estimated Construction Costs [3% New or 5% R&R])	\$52,500
ESTIMATED COSTS		(% of Estimated Construction Costs + Contingencies + Design Fee)	\$1,157,625

Escalation = percent per month multiplied by number of months

(From Est. Date to mid-point of construction) = _____ months _____ % per month

General Bldgs: 0-17 mos = 0%; 18-23 mos = .04%; 24-35 mos = .12%; 36-47 mos = .16%; 48-60 mos = .18%

Health Bldgs: 0-5 mos = .18%; 6-11 mos = .22 %; 12-17 mos = .26%; 18-23 mos = .29%; 24-35 mos = .33%; 36-47 mos = .36%; 48-60 mos = .38%

ESCALATION COST INCREASE (Total of Estimated Costs x Escalation %)

TOTAL ESTIMATED PROJECT COSTS (Estimated Costs + Escalation Cost Increase)

\$0

\$1,157,625

APPROVED BY: _____

TITLE _____

DATE _____

(Governing Board or Agency Head)

APPENDIX D

STATE OF NORTH CAROLINA - DEPARTMENT OF ADMINISTRATION
STATE CONSTRUCTION OFFICE
PROPOSED REPAIR & RENOVATION OR CAPITAL IMPROVEMENT PROJECT
BIENNIUM 2013 - 2015
DEFINITIONS OR EXPLANATIONS

Form OC-25

(Rev 05/12)

(Items not listed below are presumed to be self-explanatory. Questions may be directed to the State Construction Office.)

Item on Form	Definition/Explanation
CURRENT ESTIMATED CONSTRUCTION COST	Attach basis and justification for estimate. Include description, quantities, units, special
A. Land Requirement	Includes purchase and acquisition costs (title search, filing fees, other legal fees, etc.)
B. 1. Demolition	Includes but may not be limited to lead and/or asbestos testing and removal, building or interior space demolition in whole or part.
B. 2. Site Work	Includes but may not be limited to grading, excavating, poor soils and/or rock removal, utilities relocation, roads, walks, parking, streambank repairs, stormwater management, retaining walls, rainwater harvesting systems, landscaping.
C. 1. Utility Services	Attach explanation of any special building, mechanical, or electrical service requirements with appropriate distance to existing buildings, water, gas, electrical or other utility service.
C. 9. Associated Construction Costs	Includes but may not be limited to construction fire alarm testing, utility shut downs, utilities, signage, security, displaced parking, staging, lock cores, keys, State Construction Office charges.
C. 10. Other	List other significant sources of cost not included elsewhere. Additional lines may be added if needed.
PRECONSTRUCTION COSTS	Includes but may not be limited to land surveys, lead/asbestos surveys, environmental assessments, copying, postage, costs of print advertising, and destructive testing. For CM at Risk, preconstruction costs are consistent with the requirements of the preconstruction services agreement.
CONTINGENCIES	Unanticipated or unforeseen conditions including but not limited to design error and omissions, concealed site conditions, utility conflicts, and extended overhead resulting from weather or other delay.

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BIENNIUM 2013 - 2015

Form OC-25

(Rev 05/12)

DEPARTMENT and DIVISION: ASU Physical Plant DATE: 10/21/13
PROJECT IDENTIFICATION: ASU # 2013008 - Steam and Condensate Upgrade from Central Steam Plant to Holms Convocation
PROJECT CITY or LOCATION: Appalachian State University, Boone, NC

PROJECT DESCRIPTION & JUSTIFICATION: This project is being designed as one project, phased for construction over 2 summers. Phase I scope includes replacement of 280 LF of steam and condensate lines and is estimated to cost \$1M. Phase II includes 750 LF of direct buried lines from the steam plant to the Holmes Center and is estimated to cost \$2.2M.

(Definitions/explanations are provided on pg 2 to assist in completion of this form.)

CURRENT ESTIMATED CONSTRUCTION COST

	QTY	UNIT	COST PER UNIT	TOTAL
A. Land Requirement				\$0
B. Site Preparation				
1. Demolition (Road/sidewalk)	1000	LF	\$ 50.00	\$50,000
2. Site Work (trenching)	1000	LF	\$ 30.00	\$30,000
3. Site Work (paver replacement)	8000	sf	\$ 25.00	\$200,000
C. Construction				
1. Utility Services	1000	lf	\$ 1,600.00	\$1,600,000
2. Building Construction (new space)				\$0
3. Building Construction (existing)				\$0
4. Plumbing (new space)	1500	lf	\$ 600.00	\$900,000
5. HVAC (new space)				\$0
6. Electrical (Includes TV & Radio Studio)				\$0
7. Fire Supression and Alarm Systems				\$0
8. Telephone, Data, Video				\$0
9. Associated Construction Costs (Hazmat allowance)	1	ls	\$ 30,000.00	\$30,000
10. Other: <u>Rock Allowance</u>	1	ls	\$ 50,000.00	\$50,000
D. Equipment				
1. Fixed				\$0
2. Moveable				\$0

ESTIMATED CONSTRUCTION COSTS

Items below may be calculated by percentage or lump sum. If using lump sum, make entry in \$ field.

DESIGN FEE	10 %	(% of Estimated Construction Costs)	\$286,000
PRECONSTRUCTION COSTS	%	(% of Estimated Construction Costs [1% for CM@Risk])	\$0
COMMISSIONING	%	(0.5% simple; 1.0% moderate; 1.5% complex)	\$0
SPECIAL INSPECTIONS/MATERIALS	1.25 %	(1.25% estimated)	\$35,750.00
SUSTAINABILITY	0 %	(3% LEED Gold, 2% LEED Silver)	\$0
ADVANCE PLANNING	%	Includes programming, feasibility, analysis (% of Estimated Construction Costs)	\$0
CONTINGENCIES	5 %	(% of Estimated Construction Costs [3% New or 5% R&R])	\$143,000
ESTIMATED COSTS		(% of Estimated Construction Costs + Contingencies + Design Fee)	\$3,181,750

Escalation = percent per month multiplied by number of months

(From Est. Date to mid-point of construction) = _____ months _____ % per month

General Bldgs: 0-17 mos = 0%; 18-23 mos = .04%; 24-35 mos = .12%; 36-47 mos = .16%; 48-60 mos = .18%

Health Bldgs: 0-5 mos = .18%; 6-11 mos = .22 %; 12-17 mos = .26%; 18-23 mos = .29%; 24-35 mos = .33%; 36-47 mos = .36%; 48-60 mos = .38%

ESCALATION COST INCREASE (Total of Estimated Costs x Escalation %)

TOTAL ESTIMATED PROJECT COSTS (Estimated Costs + Escalation Cost Increase)

APPROVED BY: _____ TITLE _____ DATE _____
(Governing Board or Agency Head)

APPENDIX D

STATE OF NORTH CAROLINA - DEPARTMENT OF ADMINISTRATION
STATE CONSTRUCTION OFFICE
PROPOSED REPAIR & RENOVATION OR CAPITAL IMPROVEMENT PROJECT
BIENNIUM 2013 - 2015
DEFINITIONS OR EXPLANATIONS

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(Rev 05/12)

(Items not listed below are presumed to be self-explanatory. Questions may be directed to the State Construction Office.)

Item on Form	Definition/Explanation
CURRENT ESTIMATED CONSTRUCTION COST	Attach basis and justification for estimate. Include description, quantities, units, special
A. Land Requirement	Includes purchase and acquisition costs (title search, filing fees, other legal fees, etc.)
B. 1. Demolition	Includes but may not be limited to lead and/or asbestos testing and removal, building or interior space demolition in whole or part.
B. 2. Site Work	Includes but may not be limited to grading, excavating, poor soils and/or rock removal, utilities relocation, roads, walks, parking, streambank repairs, stormwater management, retaining walls, rainwater harvesting systems, landscaping.
C. 1. Utility Services	Attach explanation of any special building, mechanical, or electrical service requirements with appropriate distance to existing buildings, water, gas, electrical or other utility service.
C. 9. Associated Construction Costs	Includes but may not be limited to construction fire alarm testing, utility shut downs, utilities, signage, security, displaced parking, staging, lock cores, keys, State Construction Office charges.
C. 10. Other	List other significant sources of cost not included elsewhere. Additional lines may be added if needed.
PRECONSTRUCTION COSTS	Includes but may not be limited to land surveys, lead/asbestos surveys, environmental assessments, copying, postage, costs of print advertising, and destructive testing. For CM at Risk, preconstruction costs are consistent with the requirements of the preconstruction services agreement.
CONTINGENCIES	Unanticipated or unforeseen conditions including but not limited to design error and omissions, concealed site conditions, utility conflicts, and extended overhead resulting from weather or other delay.

STATE OF NORTH CAROLINA - DEPARTMENT OF ADMINISTRATION
STATE CONSTRUCTION OFFICE
PROPOSED REPAIR & RENOVATION OR CAPITAL IMPROVEMENT PROJECT
BIENNIUM 2013 - 2015

Form OC-25
(Rev 05/12)

DEPARTMENT and DIVISION: East Carolina University DATE: 10/14/13
PROJECT IDENTIFICATION: Minges Natatorium Lighting and Acoustical Improvements
PROJECT CITY or LOCATION: Greenville, NC
PROJECT DESCRIPTION & JUSTIFICATION: The existing Minges Natatorium was built in 1965 and consists of a lap pool and dive pool and is approximately 14,000 SF in size. Planned renovation is for lighting and acoustical improvements for aesthetics, safety, and functionality of the Natatorium. Lighting upgrades included are for improved coverage, meeting NCAA standards, swimmer comfort & safety, energy savings, and better maintenance access. Acoustical upgrades included are for new curved slat ceiling over both pools to improve acoustics and lighting reflection and new spray-on soundproofing on remaining ceiling and wall surfaces to replace original deteriorating sound panels and associated concrete repairs.

(Definitions/explanations are provided on pg 2 to assist in completion of this form.)

CURRENT ESTIMATED CONSTRUCTION COST

	QTY	UNIT	COST PER UNIT	TOTAL
A. Land Requirement				\$0
B. Site Preparation				
1. Demolition				\$2,838
2. Site Work				\$0
C. Construction				
1. Utility Services				\$0
2. Building Construction (Acoustical Improvements)	1	LS	\$ 200,000.00	\$200,000
4. Plumbing				\$0
5. HVAC				\$0
6. Electrical (Lighting Improvements)	1	LS	\$ 220,000.00	\$220,000
7. Fire Suppression and Alarm Systems				\$0
8. Telephone, Data, Video				\$0
9. Associated Construction Costs				\$0
10. Other: <u>Concrete Repair & Coating</u>	1	LS		\$20,000
D. Equipment				
1. Fixed				\$0
2. Moveable				\$0

ESTIMATED CONSTRUCTION COSTS

\$442,838

Items below may be calculated by percentage or lump sum. If using lump sum, make entry in \$ field.

DESIGN FEE	<u>5.65</u> %	(% of Estimated Construction Costs)	\$25,020
PRECONSTRUCTION COSTS		(% of Estimated Construction Costs [1% for CM@Risk])	\$0
COMMISSIONING		(0.5% simple; 1.0% moderate; 1.5% complex)	\$0
SPECIAL INSPECTIONS/MATERIALS		(1.25% estimated)	\$0
SUSTAINABILITY		(3% LEED Gold, 2% LEED Silver)	\$0
ADVANCE PLANNING		Includes programming, feasibility, analysis (% of Estimated Construction Costs)	\$0
CONTINGENCIES	<u>5</u> %	(% of Estimated Construction Costs [3% New or 5% R&R])	\$22,142
ESTIMATED COSTS		(% of Estimated Construction Costs + Contingencies + Design Fee)	\$490,000

Escalation = percent per month multiplied by number of months

(From Est. Date to mid-point of construction) = 10 months 0 % per month

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Health Bldgs: 0-5 mos = .18%; 6-11 mos = .22%; 12-17 mos = .26%; 18-23 mos = .29%; 24-35 mos = .33%; 36-47 mos = .36%; 48-60 mos = .38%

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

TOTAL ESTIMATED PROJECT COSTS (Estimated Costs + Escalation Cost Increase) **\$490,000**

APPROVED BY: _____ TITLE Director, Facilities Engineering & Arch Ser DATE _____
(Governing Board or Agency Head)

STATE CONSTRUCTION ~~APPENDIX~~ D
PROPOSED REPAIR & RENOVATION OR CAPITAL IMPROVEMENT PROJECT
BIENNIUM 2013 - 2015

(Rev 05/12)

DEFINITIONS OR EXPLANATIONS

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