

CONTRACT MODIFICATION AGREEMENT

Date: 1/14/2026
Contract No.: VTS-965-2019
Modification No.: Two (2)
Issued By: Virginia Polytechnic Institute and State University (Virginia Tech)
Contractor: Johnson Controls, Inc.
Commodity: Boiler and Furnace Maintenance

This Supplemental Agreement is entered into pursuant to the provisions of the basic contract.

Description of Modification:

The purpose of this modification is to incorporate the equipment located in the Undergraduate Science Laboratory Building (USLB) into this contract. The price for this addition will be \$23,000.00, bringing the new total for our 2025-2026 maintenance agreement, covered under Virginia Tech Purchase Order P4644759, to \$398,000.00.

Except as provided herein, all terms and conditions of Contract Number VTS-965-2019, as heretofore changed, remain unchanged and in full force and effect.

Contractor

Virginia Tech

Signed by:
By: Randal Tickle
(Signature)
Randal Tickle Service Manager
Name and Title

DocuSigned by:
By: Reed Nagel
5EF51DA320D049B...
Reed Nagel
Assistant Vice President and
Director of Procurement



Procurement

300 Turner Street NW
North End Center, Ste 2100
Blacksburg, Virginia 24061
P: (540) 231-6221 F: (540) 231-9628
www.procurement.vt.edu

April 28, 2025

Johnson Controls, Inc
William Jefferson
3826 Thirlane Rd NW Ste 1
Roanoke, VA 24019

Dear William,

Subject: Contract Renewal Letter

Virginia Tech Contract #: VTS-965-2019
Commodity/Service: Furnace, Boiler and Mechanical Equipment Full Maintenance Services
Renewal Period: 9/5/25 - 9/4/26
Renewal #: (3 of 5) one-year renewal

In accordance with the renewal provision of the original contract, the university would like to renew the contract for an additional term. Please advise concerning your intention by signing in the appropriate space below. A signed copy of this letter should be received in Procurement by 9/1/25.

If allowed by the contract, price adjustments must be requested at the time of renewal in accordance with the contract documents. Price adjustments are not automatic or retroactive and are only implemented upon request by the vendor at the time of renewal.

In addition, review the attached form which shows your company information as listed in the university's vendor database. If any of this information has changed, make corrections directly on the form, and return with this letter. It is essential this information be accurate for payments to be processed in a timely manner.

Virginia Tech recommends that our vendors utilize the Wells One AP Control Payment System for payment of all invoices and strongly encourages all vendors under contract with the university to participate in this program. If your firm is not enrolled in the program, refer to our website: <http://www.procurement.vt.edu/Vendor/WellsOne.html> or contact me directly for more information.

Sincerely,

Chad Dalton
Systems and Contracts Lead
(540) 231-9129

Johnson Controls, Inc **agrees** to renew the contract under the terms and conditions of the subject contract.

Signed by:
Authorized Signature: Bruce Allen Darden Date: 4/28/2025
Name: Bruce Allen Darden Title: Branch Service Manager
(please print)

We currently participate in the Wells One Program: _____

We would like to participate in the Wells One Program: _____

Approved: _____
DocuSigned by:
Reed Nagel
5EF51DA320D049B...
Director of Procurement
Date: 4/28/2025



Procurement

300 Turner Street NW
North End Center, Ste 2100
Blacksburg, Virginia 24061
P: (540) 231-6221 F: (540) 231-9628
www.procurement.vt.edu

August 28, 2024

Johnson Controls Inc
Eric Gunn
3826 Thirlane Rd NW Ste 1
Roanoke, VA 24019

Dear Eric,

Subject: Contract Renewal Letter

Virginia Tech Contract #: VTS-965-2019
Commodity/Service: Furnace, Boiler and Mechanical Equipment Full Maintenance Services
Renewal Period: 9/5/24 - 9/4/25
Renewal #: (2 of 5) one-year renewal

In accordance with the renewal provision of the original contract, the university would like to renew the contract for an additional term. Please advise concerning your intention by signing in the appropriate space below. A signed copy of this letter should be received in Procurement by ASAP.

If allowed by the contract, price adjustments must be requested at the time of renewal in accordance with the contract documents. Price adjustments are not automatic or retroactive and are only implemented upon request by the vendor at the time of renewal.

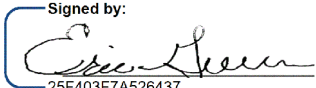
In addition, review the attached form which shows your company information as listed in the university's vendor database. If any of this information has changed, make corrections directly on the form, and return with this letter. It is essential this information be accurate for payments to be processed in a timely manner.

Virginia Tech recommends that our vendors utilize the Wells One AP Control Payment System for payment of all invoices and strongly encourages all vendors under contract with the university to participate in this program. If your firm is not enrolled in the program, refer to our website: <http://www.procurement.vt.edu/Vendor/WellsOne.html> or contact me directly for more information.

Sincerely,

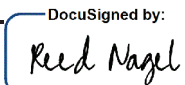
Chad Dalton
Procurement Contract Support Specialist
(540) 231-9129

Johnson Controls Inc **agrees** to renew the contract under the terms and conditions of the subject contract.

Signed by: 
Authorized Signature: _____ Date: 8/28/2024
Name: Eric Gunn Title: Branch Service Manager
(please print)

We currently participate in the Wells One Program: _____

We would like to participate in the Wells One Program: _____

DocuSigned by: _____
Approved:  _____
5EF51DA320D049B...
Director of Procurement
Date: 8/28/2024

Building #	Building	QTY	EQUIPMENT DESCRIPTION	MAKE	MODEL NO.	SERIAL NO.	2024-2025 Pricing Schedule	Special Notes
554	Alphin Stuart Arena 500 PLANTATION RD	1	Unit Heater	Trane	GPN004AAF1000D	F03L40505	\$ 411.78	
		1	Furnace	Reznor	ACUB120	BDB-01477	\$ 422.77	
	1	Furnace	Reznor	ACUB090	BDB-01476	\$ 422.77		
	1	Water Heater	A.O. Smith	BTH120970	ML030015608	\$ 195.50		
	1	Tube Heater	Reznor	VR75	BCI80U2N69118X	\$ 314.03		
	1	Tube Heater	Reznor	VR75	BCI80U2N69117X	\$ 314.03		
	1	Tube Heater	Reznor	VR75	BCI80U2N69130X	\$ 314.03		
	1	Tube Heater	Reznor	VR75	????????	\$ 314.03		
1	A/C Split System	Trane	TTA090A400FA	3474YF1AD	\$ 706.25			
1	A/C Split System	Trane	TTA150B400EA	347400IAD	\$ 706.25			
548	Architecture Research & Demonstration 185 INVENTIVE LN	1	Gas Boiler	H.B. Smith	G220-S/W-10 HIS	R91 50	\$ 3294.21	
		1	Unit Heater	Modine	BAESOAC	????????	\$ 384.90	
	1	Unit Heater	Modine	BAESOAC	????????	\$ 384.90		
	1	Unit Heater	Modine	BAESOAC	????????	\$ 384.90		
	1	Unit Heater	Modine	BAESOAC	????????	\$ 384.90		
	1	Unit Heater	Modine	BAESOAC	????????	\$ 384.90		
	1	Unit Heater	Modine	BAESOAC	????????	\$ 384.90		
	1	Unit Heater	Modine	BAESOAC	????????	\$ 384.90		
???	Brooks Forest Products Center	1	Thermal Storage	Megatherm	5C-24-100-36H	85008	\$ 384.90	
1	Brooks Forest Products Center	1	Electric Boiler	Chromalox	CES-24	N-8045-W81	\$ 4158.09	
176	Burruss Hall 800 DRILLFIELD DR	1	Electric Boiler	Latner	57511W	53861	\$ 2647.83	
141	Dry Rendering Facility 285 DUCK POND DR	1	Water Heater	Lochinvar	SNA285-125	JO9C10121203	\$ 353.13	
333	Geotechnical Research Lab 260 INVENTIVE LN	1	Duct Heater	Reznor	SC175-6-2	????????	\$ 353.13	
		1	Duct Heater	Reznor	SC175-6-2	????????	\$ 353.13	
	1	Duct Heater	Reznor	SC300-6	????????	\$ 353.13		
	1	Water Heater	Bradford White	RG24056N	PB38976200	\$ 353.13		
	1	A/C Split System	Trane	TTA120B300DA	23346WSAD	\$ 706.25		
1	A/C Split System	Trane	TTA120B300DA	23345X1AD	\$ 706.25			
1	A/C Split System	Trane	TTA180B300DA	23341BMAD	\$ 706.25			
124A	GreenHouse #6 (Washington St.) 201 GARDEN LN	1	Unit Heater	Trane	GTAB-0220S1	J82B-03144	\$ 228.49	
		1	Unit Heater	Trane	GTAB-0220S1	????????	\$ 228.49	
	1	Unit Heater	Trane	GPAP-0120SA	J81L-05728	\$ 228.49		
	1	Unit Heater	Trane	GPAP-0120SB	J82B-03142	\$ 228.49		
???	Greenhouse Complex STR. Building	1	Unit Heater	Dayton	4E456A	A98G007695	\$ 267.59	
1	Unit Heater	Dayton	4LX48A	????????	\$ 267.59			
241	Grounds Building 185 STERRETT DR	1	Boiler	Burnham	V-907	7596781	\$ 4342.59	
274	The Grove 730 DUCK POND DR	1	Boiler	H.B. Smith	19A, Series S/W-5	FA2000-320 P	\$ 4342.59	
459	Health and Safety Building 575 BEAMER WAY	1	Boiler	Burnham	V-910	7590636	\$ 4342.59	
179	Henderson Hall 195 ALUMNI MALL	1	Boiler	Weil-McLain	1788	????????	\$ 4771.48	
116	Institute for Critical Technology and Applied Science II (ICTAS II)	1	Unfired Steam Generator	Cemline	H120USG1060	24-X-63	\$ 353.13	
142	Infectious Disease Research Facility 295 DUCK POND DR	1	Boiler	Aerco	MLX-757	757-09-0181	\$ 2132.20	
		1	Boiler	Aerco	MLX-757	757-09-0178	\$ 2132.20	
		1	Boiler	Aerco	MLX-757	757-09-0179	\$ 2132.20	
	1	Water Heater	A.O. Smith	BTH150A100	1121M002111	\$ 353.13		
	1	Water Heater	A.O. Smith	BTH120A100	1121M001396	\$ 353.13		
1	Incinerator	Reznor	UDAP100	????????	\$ 353.13			
461	Material Management 625 BEAMER WAY	1	Boiler	Knight Commercial	KBN500	D10H10127678	\$ 2359.47	
1	Boiler	Knight Commercial	KBN500	D10H10127694	\$ 2359.47			
139	Mining and Minerals Lab 740 PLANTATION RD	1	Gas Heater	Trane	GPND0004AD	F06K41272	\$ 248.04	
		1	Gas Heater	Trane	GPND0004AD	F06K41273	\$ 248.04	
		1	Gas Heater	Trane	GPND0004AD	F06K41274	\$ 248.04	
		1	Gas Heater	Trane	GPND0004AD	F06K41275	\$ 248.04	
		1	Gas Heater	Hastings	CF-40-G21	52091	\$ 248.04	
1	Moore House (Psychological Services Center)	1	Gas Boiler	H.B. Smith	GB100-W-121NTD	GB2001-1913	\$ 3746.31	
455	Parking Services 505 BEAMER WAY	1	Gas Boiler	Burnham	FD/10	34000715	\$ 2941.09	
1	Plant Pathology Building	1	Gas Boiler	National US Crane	0-4102	137255	\$ 4444.01	
1	Water Heater	Rheem	G75-125	URNG 1199G00954	\$ 377.56			
275	Solitude	1	Gas Boiler	Weil-McLain	CG1-8PIN	????????	\$ 2941.09	

	705 WEST CAMPUS DR							
190A	South Gate Addition (Public Safety Building)	1	Gas Boiler	Peerless	TC-04	No Serial #	\$ 2934.98	
	330 STERRETT DR							
	SW Chiller Plant	1	Gas Boiler	Bryan	BE150W4T10	99436	\$ 4406.13	
	SW Chiller Plant	1	Gas Boiler	Bryan	BE150W4T11	99439	\$ 4406.13	
242	Sterrett Facility Complex	1	Gas Boiler	H.B. Smith	28A-S/W-10	N2003-1071	\$ 4172.75	
	230 STERRETT DR							
	Structures and Materials Lab	1	Gas Unit Heater	Dayton	3E368E	LOOGO15988	\$ 201.61	
		1	Gas Unit Heater	Dayton	3E368E	KOOGO11548	\$ 201.61	
		1	Gas Unit Heater	Dayton	3E3690	Q8959137	\$ 201.61	
		1	Gas Unit Heater	Dayton	3E3690	Q8959467	\$ 201.61	
		1	Gas Unit Heater	Dayton	3E3690	Q8959457	\$ 201.61	
		1	Gas Unit Heater	Dayton	3E3690	Q8959470	\$ 201.61	
		1	Gas Unit Heater	Dayton	3E3690	Q8959455	\$ 201.61	
		1	Gas Overhead Furnace	Trane	TDD120C960B0	????????	\$ 201.61	
		1	Gas Overhead Furnace	York	P4HFD20N12501	????????	\$ 201.61	
146B	Veterinary Medicine (IDU on Price's Fork)	1	Gas Boiler	Superior	#4-5304	12123	\$ 4323.04	
		1	Water Heater	PVI	40P250AG	508124502	\$ 353.13	
	Veterinary Medicine (IDU on Price's Fork)	1	Gas Boiler	Columbia	146769	156789	\$ 4323.04	
	Veterinary Medicine (IDU on Price's Fork)	1	Gas Boiler	Columbia	146767	156787	\$ 4323.04	
		1	Gas Heater	Dayton		????????	\$ 267.59	
	Veterinary Medicine (HOS Building)	1	Gas Heater	Reznor	XL60-3	AME31G8N31452	\$ 353.13	
441	Veterinary Medicine (CMMID)	1	Gas Boiler	Bryan	CLM150-S-150FDG	97871	\$ 4734.82	
	Veterinary Medicine (CMMID)	1	Gas Boiler	Bryan	CLM150-S-150FDG	97871	\$ 4734.82	
	Veterinary Medicine (CMMID)	1	Gas Boiler	Bryan	CLM150-S-150FDG	97871	\$ 4734.82	
	Veterinary Medicine (CMMID)	1	Gas Boiler	Bryan	CLM150-S-150FDG	97871	\$ 4734.82	
	Veterinary Medicine (CMMID)	1	Gas Boiler	Bryan	CLM150-S-150FDG	????????	\$ 4734.82	
	Veterinary Medicine (Poultry Virus Holding A)	1	Gas Furnace	Heil	NTC61100KFA1	L9823 44523	\$ 372.68	
	Veterinary Medicine (Poultry Virus Holding B)	1	Gas Furnace	Heil	NUGE125LH82	L912920865	\$ 372.68	
	Veterinary Medicine (Poultry Virus Holding C)	1	Gas Furnace	Heil	NUGE125LH32	L922236069	\$ 372.68	
	Veterinary Medicine (Aquatic Medicine Lab)	1	Gas Heater	Dayton	3E368E	E02G002995	\$ 339.69	
	Aquaculture Facility	1	Gas Heater	Modine	BDP250AE1785NBAN	43100917092219-5117	\$ 339.69	
	Veterinary Medicine (Virus Isolation Bldg 2)	1	Gas Boiler	5	39713	????????	\$ 4098.22	
		1	Gas Duct Heater	Trane	HMG200HS VSPGI1N		\$ 353.13	
		1	Gas Duct Heater	AAON	RM-010-8-0-BB02-549	200810-AMGJ45750	\$ 353.13	
	Veterinary Medicine (Virus Isolation Bldg 3)	1	Gas Heater	Reznor	XL60-3	AME31G8N31447	\$ 219.94	
		1	Gas Heater	Reznor	XL60-3	AME31G8N31449	\$ 219.94	
		1	Gas Heater	Reznor	XL60-3	AME31G8N31453	\$ 219.94	
		1	Gas Heater	Reznor	XL60-3	AME31G8N31446	\$ 219.94	
		1	Gas Heater	Reznor	XL60-3	AME31G8N31451	\$ 219.94	
		1	Gas Heater	Reznor	XL60-3	AME31G8N31444	\$ 219.94	
		1	Gas Heater	Reznor	XL60-3	????????	\$ 219.94	
		1	Gas Heater	Dayton	#NULL!	C8819338	\$ 219.94	
		1	Gas Heater	Dayton	#NULL!	C8819345	\$ 219.94	
	Veterinary Medicine (Virus Isolation Bldg 4)	1	Gas Heater	Reznor	XL60-3	AME31G8NO1445	\$ 219.94	
		1	Gas Heater	Reznor	XL60-3	AUD3163NO42	\$ 219.94	
		1	Gas Heater	Reznor	XL30-3	AKA31G8NO1469	\$ 219.94	
		1	Gas Heater	Reznor	XL30-3	AKA31G8NO1465	\$ 219.94	
		1	Gas Heater	Reznor	XL30-3	AKA31G8NO1470	\$ 219.94	
		1	Gas Heater	Reznor	XL30-3	AKA31G8NO1467	\$ 219.94	
		1	Gas Heater	Reznor	XL30-3	AKA31G8NO1468	\$ 219.94	
		1	Gas Heater	Reznor	XL30-3	AKA31G8NO1466	\$ 219.94	
		1	Gas Heater	Reznor	XL30-3	????????	\$ 219.94	
		1	Gas Heater	Modine	PA30-AB	5012011289	\$ 219.94	
		1	Gas Heater	Trane	GPNC003AAB10000	A84E10861	\$ 219.94	
	Veterinary Medicine (Poultry Virus Holding)	1	Gas Heater	Dayton	#NULL!	19343	\$ 353.13	
150A	Veterinary Medicine (Instructional Addition) (VMIA)	1	Clean Steam Generator	Field Verify	Field Verify	Field Verify	\$ 542.52	
249	Visitor and Undergraduate Admissions Center	1	Gas Boiler	Lochinvar	KBN601	K10H10162882	\$ 1974.57	
		1	Gas Boiler	Lochinvar	KBN601	K10H10162883	\$ 1974.57	
	925 PRICES FORK RD	1	Water Heater	AO Smith	BTF80-200	1050M001105	\$ 522.97	
	Agronomy Farm	1	Gas Boiler	Burnham	4FWH-127A-50-C-PF	????????	\$ 2751.69	
		1	Heater	Sterling	11QVF075N	????????	\$ 372.68	
	Poultry Brooder (Hatchery)	1	Gas Boiler	Columbia	MPH-40	????????	\$ 3976.03	
220	Aquatics and Fisheries Research Center	1	Furnace	Reznor	SCB125-6	????????	\$ 810.11	
		1	Furnace	Reznor	SCB125-6	????????	\$ 810.11	
	1709 RESEARCH CENTER DR	1	Heater	Dayton	4LX51	????????	\$ 386.12	
		1	Heater	Dayton	4LX52	????????	\$ 386.12	
		1	Heater	Dayton	4LX53	????????	\$ 386.12	
		1	Heater	Modine	HD100	????????	\$ 386.12	

		1	Air Handler	York	????????	????????	\$ 353.13	
		1	Hanging Heater	Reznor	UDAS45-S	EBNK799EL29672XTE	\$ 248.04	
		1	Hanging Heater	Reznor	UDAS45-S	????????	\$ 248.04	
		1	Water Heater	Bradford White	EF100T1993X2	LK35112884	\$ 202.83	
		1	Water Heater	Bradford White	EF100T1993X3	LK35112881	\$ 202.83	
		1	Water Heater	AO Smith	BPD-75-101	F07A001165	\$ 273.70	
		1	Tube Heater	Space Ray	????????	????????	\$ 202.83	
190	Southgate Food Proc.	1	Gas Boiler	Weil-McLane	988	CP7084152	\$ 3692.55	
	Southgate Food Proc.	1	Gas Boiler	Weil-McLane	988	CP7084153	\$ 3692.55	
		1	Gas Unit Heater	Modine	PA30AB	????????	\$ 422.77	
		1	Gas Unit Heater	Modine	BAH180AF	SP010582	\$ 422.77	
		1	Gas Unit Heater	Modine	BAH180AF	SP010582	\$ 422.77	
	Southgate Food Proc.	1	Water Heater / DHW Boiler	Lochinvar	AWN286PM	1726106612257	\$ 422.77	
	Southgate Food Proc.	1	Water Heater / DHW Boiler	Lochinvar	AWN286PM	1726106612256	\$ 422.77	
295	Golf Club House	1	Oil Boiler	Weil-McLain	P-WGO-3	3	\$ 2359.47	Basic Coverage
	1085 DUCK POND DR							
250C	The Inn at VT	1	Gas Boiler	H.B. Smith	28A-S/W-14	N2004-282	\$ 3407.85	
	901 PRICES FORK RD							
	901 PRICES FORK RD	1	Gas Boiler	H.B. Smith	28A-S/W-14	N2004-281	\$ 3407.85	
		1	Hot Water Pumps	Taco	F15013E2LAL1IOA	????????	\$ 372.68	
		1	Hot Water Pumps	Taco	F15013E2LAL1IOA	????????	\$ 372.68	
		1	Water Heater	PVI	1500 P600A-TP	1203111875	\$ 489.98	
		1	Water Heater	PVI	1500 P600A-TP	1203111874	\$ 489.98	
		1	Humidifier	Armstrong	EHU-703	240021-10-1-04	\$ 444.77	
186	Rector Field House	1	Boiler	PK Thermific	N3000MFD	GY32-17-39948	\$ 3501.93	
	230 BEAMER WAY	1	Boiler	PK Thermific	N3000MFD	GY32-17-39947	\$ 3501.93	
		1	Water Heater	Lochinvar	RS065-96445	1.74111E+12	\$ 489.98	
335	CAUS Vibration Testing	1	Hanging Heater	Field Verify	HDS100AS0111	39010017050809-1025	\$ 248.04	
	165 INVENTIVE LN	1	Hanging Heater	Field Verify	HDS100AS0112	????????	\$ 248.04	
		1	Hanging Heater	Field Verify	HDS100AS0113	????????	\$ 248.04	
		1	Hanging Heater	Field Verify	HDS100AS0114	????????	\$ 248.04	
125	Fralin Insectary	1	Clean Steam Generator	Field Verify	Field Verify	Field Verify	\$ 542.52	
	101 Garden Lane							
450	Pig Barn 450	1	Clean Steam Generator	Field Verify	Field Verify	Field Verify	\$ 542.52	
	Swine Center?	1	Clean Steam Generator	Field Verify	Field Verify	Field Verify	\$ 542.52	
170	Surge Building	1	Package Unit	York	YPAL0105	Field Verify	\$ 8240.42	
	400 Stanger Street	1	Package Unit	York	YPAL0105	Field Verify	\$ 8240.42	
	Temporary Recreation Facility	14	Gas-Fired Tubular Heater	Sunstar	TBD	TBD	\$ 4076.22	
	Created VT Temporary Recreation Facility.							
	BETR Building	1	Gas-Fired Tubular Heater	Space Ray	TBD	TBD	\$ 422.77	
		1	Gas-Fired Tubular Heater	Space Ray	TBD	TBD	\$ 422.77	
		1	Gas-Fired Furnace	Daikin	DM96VCO403BNAA	1910750111	\$ 411.78	
	MRL Building @ Kentland	1	Gas-Fired Water Heater	AO Smith	BTH500A301	1938116371008	\$ 384.90	
	MRL Building @ Kentland	1	Gas-Fired Boiler	Lochinvar	FTX850L	1938116370513	\$ 3746.31	
	MRL Building @ Kentland	1	Gas-Fired Boiler	Lochinvar	FTX850L	1938116370512	\$ 3746.31	
	Venture Out Center	1	Gas-Fired Water Heater	State	SBS-75-76-NE400	1946117106563	\$ 384.90	
	Student Athletic Performance Center	1	Gas-Fired Water Heater	Aerco	INN106N	G20-0985	\$ 384.90	
	Student Athletic Performance Center	1	Gas-Fired Boiler	Lochinvar	FTX850L	2014-118840906	\$ 3746.31	
	Student Athletic Performance Center	1	Gas-Fired Boiler	Lochinvar	FTX850L	2014-118840907	\$ 3746.31	
		1	Gas-Fired Water Heater	Aerco	INN106N	G20-0986	\$ 384.90	
	Weaver Baseball Center	1	Gas-Fired Water Heater	State	SUF-119-300-NEA300	1746108245939	\$ 384.90	
	Architecture Annex	1	Gas-Fired Boiler	Lochinvar	CHN0652	2129125220417	\$ 3976.03	
	Architecture Annex	1	Gas-Fired Boiler	Lochinvar	CHN0652	2129125220418	\$ 3976.03	
	Media Building	1	Gas-Fired Boiler	Lochinvar	CHN0402	2129125278336	\$ 3976.03	
	Media Building	1	Gas-Fired Boiler	Lochinvar	CHN0402	2129125278337	\$ 3976.03	
1300	5076 Whitethorne Road	1	Gas-Fired Furnace	TBD	TBD	TBD	\$ 647.60	
328	609 Plantation Road	1	Gas-Fired Furnace	TBD	TBD	TBD	\$ 647.60	
329	601 Plantation Road	1	Gas-Fired Furnace	TBD	TBD	TBD	\$ 647.60	
330	509 Plantation Road	1	Gas-Fired Furnace	TBD	TBD	TBD	\$ 647.60	
331	109 Plantation Road	1	Gas-Fired Furnace	TBD	TBD	TBD	\$ 647.60	

340	1010 Old Mill Road	1	Gas-Fired Furnace	TBD	TBD	TBD	\$ 647.60	
345	2507 Glade Road	1	Gas-Fired Furnace	TBD	TBD	TBD	\$ 647.60	
	Equipment Count	278				Total Equipment Cost (2024-2025)	\$ 290,900.00	
							Disc. Not Incl.	2% pre-pay



Procurement

300 Turner Street NW
North End Center, Ste 2100
Blacksburg, Virginia 24061
P: (540) 231-6221 F: (540) 231-9628
www.procurement.vt.edu

May 17, 2023

Johnson Controls Inc
Anne Arrington
3826 Thirlane Rd NW Ste 1
Roanoke, VA 24019

Dear Anne,

Subject: Contract Renewal Letter

Virginia Tech Contract #: VTS-965-2019
Commodity/Service: Furnace, Boiler and Mechanical Equipment Full Maintenance Services
Renewal Period: 9/5/23 - 9/4/24
Renewal #: (1 of 5) one-year renewal

In accordance with the renewal provision of the original contract, the university would like to renew the contract for an additional term. Please advise concerning your intention by signing in the appropriate space below. A signed copy of this letter should be received in Procurement by 6/15/23.

If allowed by the contract, price adjustments must be requested at the time of renewal in accordance with the contract documents. Price adjustments are not automatic or retroactive and are only implemented upon request by the vendor at the time of renewal.

In addition, review the attached form which shows your company information as listed in the university's vendor database. If any of this information has changed, make corrections directly on the form, and return with this letter. It is essential this information be accurate for payments to be processed in a timely manner.

Virginia Tech recommends that our vendors utilize the Wells One AP Control Payment System for payment of all invoices and strongly encourages all vendors under contract with the university to participate in this program. If your firm is not enrolled in the program, refer to our website: <http://www.procurement.vt.edu/Vendor/WellsOne.html> or contact me directly for more information.

Sincerely,

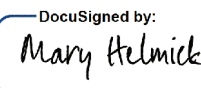
Chad Dalton
Procurement Contract Support Specialist
(540) 231-9129

Johnson Controls Inc **agrees** to renew the contract under the terms and conditions of the subject contract.

Authorized Signature:  _____ Date: 7/28/2023
Name: Anne Arrington _____ Title: Service Manager
6589FA9D85EA4B1...
(please print)

We currently participate in the Wells One Program: _____

We would like to participate in the Wells One Program: _____

Approved:  _____
45C0F5F337E04D0...
Director of Procurement
Date: 8/7/2023

CONTRACT MODIFICATION AGREEMENT

Date: November 11, 2019
Contract No.: VTS-965-2019
Modification No.: One (1)
Issued By: Virginia Polytechnic Institute and State University (Virginia Tech)
Contractor: Johnson Controls, Inc.
Commodity: Boiler and Furnace Maintenance

This Supplemental Agreement is entered into pursuant to the provisions of the basic contract.

Description of Modification:


Add/Remove the equipment in various locations per the attached proposal effective November 16, 2019.

Except as provided herein, all terms and conditions of Contract Number VTS-965-2019, as heretofore changed, remain unchanged and in full force and effect.

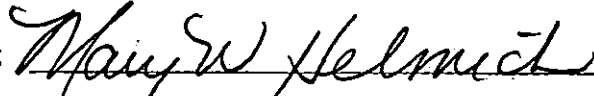
Contractor

Virginia Tech

By:


(Signature)
Jim Glover Branch Service Manager
Name and Title

By:


Mary W. Helmick
Director of Procurement

Planned Service Proposal



PLANNED SERVICE AGREEMENT CHANGE REQUEST

CUSTOMER
VIRGINIA TECH, DEPARTMENT OF
FACILITIES

LOCAL JOHNSON CONTROLS OFFICE
3826 THIRLANE RD NW, SUITE 1
ROANOKE, VA 24019

AGREEMENT START DATE:
09/05/2019

PROPOSAL DATE:
01/11/2019

ESTIMATE NO:
1-13MT4T9U



Partnering with you to deliver value-driven solutions

A Planned Service Agreement with Johnson Controls provides you with a customized service strategy designed around the needs of your facility. Our approach features a combination of scheduled, predictive and preventative maintenance services that focus on your goals.

As your building technology services partner, Johnson Controls delivers an unmatched service experience delivered by factory-trained, highly skilled technicians who optimize operations of the buildings we work with, creating productive and safe environments for the people within.

By integrating our service expertise with innovative processes and technologies, our value-driven planned service solutions deliver sustainable results, minimize equipment downtime and maximize occupant comfort.



**JOHNSON CONTROLS PLANNED SERVICE CHANGE PROPOSAL
PREPARED FOR VIRGINIA TECH, DEPARTMENT OF FACILITIES**

Change Proposal Date: November 8, 2019

Virginia Tech, Department of Facilities
Attn: Kim Briele
230 Sterrett Drive
Sterrett Facilities Complex
Blacksburg, VA 24061

RE: VT Contract VTS-965-2019, change request

Dear Ms. Briele,

Thank you for choosing Johnson Controls, Inc. to provide maintenance services for your facilities.

This proposal outlines scope changes to your existing Furnace, Boiler & Mechanical Equipment maintenance services contract VTS-965-2019. Changes in scope are outlined in the attached Schedule A, equipment list, but highlights are as follows:

- Proposed equipment changes will take effect for the 2nd year term of September 5, 2019 through September 4, 2020.
- The change in scope results in a *net price increase* of **\$ 34,143.60** for the services rendered during this term.
- The equipment & sites being added as well as the existing equipment to be modified are outlined in the attached Schedule A, equipment list.
- All other items and conditions associated with contract VTS-965-2019 shall remain the same.

To approve this change request, please sign below. If you require us to reference a purchase order on our invoices that is different from our original agreement, please provide a copy of that document along with this notice.

Thank you again for your business and we look forward to continuing as your building services provider. Please contact me if you have any questions.

Sincerely,

Customer Signature: _____

John R. Weeks
Account Manager
(540) 521-9752
John.robert.weeks@jci.com

Customer Name: _____

Customer Title: _____

PO/Requisition#: _____

Date: _____

**JOHNSON CONTROLS PLANNED SERVICE CHANGE PROPOSAL
PREPARED FOR VIRGINIA TECH, DEPARTMENT OF FACILITIES**

Schedule A, Equipment List (changes in yellow)

Existing Site, Equipment Added

Building #	Building	QTY	EQUIPMENT DESCRIPTION	MAKE	MODEL NO.	SERIAL NO.	2019 Pricing
584	Aquaculture Facility	1	Gas Heater	Modine	BDP250AE1785NBAN	43100917092219-5117	\$245.00

New Site & Equipment

150A	Veterinary Medicine (Instructional Addition) (VMIA)	1	Clean Steam Generator	TBD	TBD	TBD	\$395.00
------	---	---	-----------------------	-----	-----	-----	----------

Existing Site, Equipment Added

220	Aquatics and Fisheries Research Center	1	Furnace	Reznor	SCB125-6	TBD	\$586.50
		1	Heater	Dayton	4LX52	TBD	\$280.50
	1709 RESEARCH CENTER DR	1	Heater	Dayton	4LX53	TBD	\$280.50
		1	Unit Heater	Reznor	F75-E-4	TBD	\$321.30
		1	Unit Heater	Reznor	F75-E-5	TBD	\$321.30
		1	Unit Heater	Reznor	F75-E-6	TBD	\$321.30

New Site & Equipment

119	Steger North & South (Bioinformatics Institute)	1	Clean Steam Generator	TBD	TBD	TBD	\$395.00
120		1	Clean Steam Generator	TBD	TBD	TBD	\$395.00
	1015 LIFE SCIENCE CIR SW	1	Clean Steam Generator	TBD	TBD	TBD	\$395.00
		1	Clean Steam Generator	TBD	TBD	TBD	\$395.00
		1	Clean Steam Generator	TBD	TBD	TBD	\$395.00
		1	Clean Steam Generator	TBD	TBD	TBD	\$395.00
		1	Clean Steam Generator	TBD	TBD	TBD	\$395.00
		1	Clean Steam Generator	TBD	TBD	TBD	\$395.00

Existing Site, Equipment Updated

190	Southgate Food Proc.	1	Gas Boiler	Weil-McLane	988	CP7084152	\$2652.00
		1	Gas Boiler	Weil-McLane	988	CP7084153	\$2652.00
		1	Water Heater / DHW Boiler	Lochinvar	AWN286PM	1726106612257	\$357.00
		1	Water Heater / DHW Boiler	Lochinvar	AWN286PM	1726106612256	\$357.00
		1	Gas Boiler	Ajax	HNG400	49184	\$(2,600.00)
		1	Water Heater	PVI	2500-2N500A-TP	98659044	\$(220.00)

New Site & Equipment

186	Rector Field House	1	Boiler	PK Thermific	N3000MFD	GY32-17-39948	\$2652.00
	230 BEAMER WAY	1	Boiler	PK Thermific	N3000MFD	GY32-17-39947	\$2652.00
		1	Water Heater	Lochinvar	RIS065-96445	1.74111E+12	\$357.00

**JOHNSON CONTROLS PLANNED SERVICE CHANGE PROPOSAL
PREPARED FOR VIRGINIA TECH, DEPARTMENT OF FACILITIES**

New Sites & Equipment

Building	Building	QTY	EQUIPMENT DESCRIPTION	MAKE	MODEL NO.	SERIAL NO.	2019 Pricing
125	Fralin Insectiary 101 Garden Lane	1	Clean Steam Generator	TBD	TBD	TBD	\$395.00
450	Pig Barn 450 Swine Center?	1	Clean Steam Generator	TBD	TBD	TBD	\$395.00
		1	Clean Steam Generator	TBD	TBD	TBD	\$395.00
170	Surge Building 400 Stanger Street	1	Package Unit	York	YPAL0105	TBD	\$7495.00
		1	Package Unit	York	YPAL0105	TBD	\$7495.00
335	CAUS Vibration Testing	1	Hanging Heater	TBD	HDS100AS0111	39010017050809-1025	\$178.50
	165 INVENTIVE LN	1	Hanging Heater	TBD	HDS100AS0112	TBD	\$178.50
		1	Hanging Heater	TBD	HDS100AS0113	TBD	\$178.50
		1	Hanging Heater	TBD	HDS100AS0114	TBD	\$178.50

Price Change Breakdown:

Base Contract Escalation (2%) – \$ 159,050.00 + 2% =	\$ 3,181.00
Aquaculture Changes – ADD	\$ 245.00
VMIA – ADD	\$ 395.00
Aquatics & Fisheries – ADD	\$ 2,111.40
Steger North/South – ADD	\$ 3,160.00
Southgate Center – ADD	\$ 3,198.00
Rector Field House – ADD	\$ 5,661.00
Fralin Insectiary – ADD	\$ 395.00
Pig Barn 450 – ADD	\$ 790.00
Surge Building – ADD	\$ 14,990.00
CAUS Vibration Testing – ADD	\$ 714.00
Subtotal Contract Changes (2019)	\$ 34,840.40
2018 PO Amount (2% Discount Applied)	\$ 155,869.00
Proposed 2019 Contract Amount	\$ 193,890.40
Less 2% Pre-Pay Discount	\$ (3,877.80)
Discounted 2019 PO Amount	\$ 190,012.60
Net Total Contract Changes (2019)	\$ 34,143.60

COMMONWEALTH OF VIRGINIA

STANDARD CONTRACT

Contract Number: VTS-965-2019

This contract entered into this 5th day of September 2018 by Johnson Controls, Inc. hereinafter called the "Contractor" and Commonwealth of Virginia, Virginia Polytechnic Institute and State University called "Virginia Tech."

WITNESSETH that the Contractor and Virginia Tech, in consideration of the mutual covenants, promises and agreements herein contained, agree as follows:

SCOPE OF CONTRACT: The Contractor shall provide Furnace, Boiler and Mechanical Equipment Full Maintenance Services to Virginia Tech as set forth in the Contract Documents.

PERIOD OF CONTRACT: From 9/5/18 through 9/4/23. With the option for five (5) one (1) year renewals.

COMPENSATION AND METHOD OF PAYMENT: The Contractor shall be paid by Virginia Tech in accordance with the Contract Documents.

CONTRACT DOCUMENTS: The Contract Documents shall consist of this signed contract, Request for Proposal (RFP) number 0055426 dated 3/26/18, the proposal submitted by the Contractor dated 4/20/18 and Virginia Tech's letters dated 5/30/18 and 8/27/18 and the contractor's responses dated 6/14/18, 8/17/18 and 8/31/18, all of which Contract Documents are incorporated herein.

In WITNESS WHEREOF, the parties have caused this Contract to be duly executed intending to be bound thereby.

Contractor
By: John R. Weeks
(Signature)
John R. Weeks Account Executive
Name and Title

Virginia Tech
By: Mary W. Helmick
Mary W. Helmick
Director of Procurement



Request for Proposal # 0055426

For

Furnace, Boiler and Mechanical Equipment Full
Maintenance Services

March 26, 2018

Note: This public body does not discriminate against faith-based organizations in accordance with the *Code of Virginia*, § 2.2-4343.1 or against a bidder or offeror because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment.

RFP 0055246
GENERAL INFORMATION FORM

QUESTIONS: All inquiries for information regarding this solicitation should be directed to: Reed Nagel
Phone: (540) 231-5420 e-mail: nagelr@gmail.com

DUE DATE: Proposals will be received until April 20, 2018 at 3:00 PM. Failure to submit proposals to the correct location by the designated date and hour will result in disqualification.

ADDRESS: Proposals should be mailed or hand delivered to: Virginia Polytechnic Institute and State University (Virginia Tech), Procurement Department (MC 0333) North End Center, Suite 2100, 300 Turner Street NW, Blacksburg, Virginia 24061. Reference the due date and hour, and RFP Number in the lower left corner of the return envelope or package.

Please note that USPS is delivered to a central location and is not delivered directly to Procurement. Allow extra time if sending proposal via USPS. It is the vendor's responsibility to ensure proposals are received in the Procurement office at the appropriate date and time for consideration.

PRE-PROPOSAL CONFERENCE: A pre-proposal conference will be held on April 2, 2018 at 9:00am. See section X., Pre-proposal Conference for additional information.

TYPE OF BUSINESS: (Please check all applicable classifications). If your classification is certified by the Virginia Department of Small Business and Supplier Diversity (SBSD), provide your certification number: _____. For assistance with SWaM certification, visit the SBSD website at <http://sbsd.virginia.gov/>.

_____ **Large**

_____ **Small business** – An independently owned and operated business which, together with affiliates, has 250 or fewer employees or average annual gross receipts of \$10 million or less averaged over the previous three years. Commonwealth of Virginia Department of Small Business and Supplier Diversity (SBSD) certified women-owned and minority-owned business shall also be considered small business when they have received SBSD small business certification.

_____ **Women-owned business** – A business concern that is at least 51% owned by one or more women who are U. S. citizens or legal resident aliens, or in the case of a corporation, partnership, or limited liability company or other entity, at least 51% of the equity ownership interest is owned by one or more women who are citizens of the United States or non-citizens who are in full compliance with the United States immigration law, and both the management and daily business operations are controlled by one or more women who are U. S. citizens or legal resident aliens.

_____ **Minority-owned business** – A business concern that is at least 51% owned by one or more minority individuals (see Section 2.2-1401, Code of Virginia) or in the case of a corporation, partnership, or limited liability company or other entity, at least 51% of the equity ownership interest in the corporation, partnership, or limited liability company or other entity is owned by one or more minority individuals and both the management and daily business operations are controlled by one or more minority individuals.

COMPANY INFORMATION/SIGNATURE: In compliance with this Request for Proposal and to all the conditions imposed therein and hereby incorporated by reference, the undersigned offers and agrees to furnish the goods or services in accordance with the attached signed proposal and as mutually agreed upon by subsequent negotiation.

FULL LEGAL NAME (PRINT) (Company name as it appears with your Federal Taxpayer Number)		FEDERAL TAXPAYER NUMBER (ID#)	
BUSINESS NAME/DBA NAME/TA NAME (If different than the Full Legal Name)		BILLING NAME (Company name as it appears on your invoice)	
PURCHASE ORDER ADDRESS		PAYMENT ADDRESS	
CONTACT NAME/TITLE (PRINT)			E-MAIL ADDRESS
TELEPHONE NUMBER	TOLL FREE TELEPHONE NUMBER	FAX NUMBER TO RECEIVE E-PROCUREMENT ORDERS	

I acknowledge that I have received the following addendums posted for this solicitation.

1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ (Please check all that apply)

Is any member of the firm an employee of the Commonwealth of Virginia who has a personal interest in this contract pursuant to the Code of Virginia, 2.2 – 3102 - 3112

YES _____ NO _____

SIGNATURE _____ Date: _____

Revised 01/01/2018

I. PURPOSE:

The purpose of this Request for Proposal (RFP) is to solicit proposals to establish a contract through competitive negotiations for Furnace, Boiler and Mechanical Equipment Full Maintenance Services by Virginia Polytechnic Institute and State University (Virginia Tech), an agency of the Commonwealth of Virginia.

II. SMALL, WOMAN-OWNED AND MINORITY (SWAM) BUSINESS PARTICIPATION:

The mission of the Virginia Tech supplier opportunity program is to foster inclusion in the university supply chain and accelerate economic growth in our local communities through the engagement and empowerment of high quality and cost competitive small, minority-owned, women-owned, and local suppliers. Virginia Tech encourages prime suppliers, contractors, and service providers to facilitate the participation of small businesses, and businesses owned by women and minorities through partnerships, joint ventures, subcontracts, and other inclusive and innovative relationships.

III. CONTRACT PERIOD:

The term of this contract is for one (1) year(s), or as negotiated. There will be an option for four (4) one (1) year renewals, or as negotiated.

IV. BACKGROUND:

Virginia Polytechnic Institute and State University (Virginia Tech) is located in Blacksburg, Virginia, approximately 40 miles southwest of Roanoke, Virginia, the major commercial hub of the area. In addition to the university's main campus in Blacksburg, major off campus locations include twelve agriculture experiment research stations, the Marion duPont Scott Equine Medical Center and graduate centers in Roanoke and Fairfax, Virginia. Regularly scheduled air service is provided at the Roanoke Regional Airport.

Dedicated to its motto, Ut Prosim (That I May Serve), Virginia Tech takes a hands-on, engaging approach to education, preparing scholars to be leaders in their fields and communities. As the Commonwealth's most comprehensive university and its leading research institution, Virginia Tech offers 240 undergraduate degree programs to more than 31,000 students and manages a research portfolio of nearly \$513 million. The university fulfills its land-grant mission of transforming knowledge to practice through technological leadership and by fueling economic growth and job creation locally, regionally, and across Virginia.

V. EVA BUSINESS-TO-GOVERNMENT ELECTRONIC PROCUREMENT SYSTEM:

The eVA Internet electronic procurement solution streamlines and automates government purchasing activities within the Commonwealth of Virginia. Virginia Tech, and other state agencies and institutions, have been directed by the Governor to maximize the use of this system in the procurement of goods and services. *We are, therefore, requesting that your firm register as a vendor within the eVA system.*

There are transaction fees involved with the use of eVA. These fees must be considered in the provision of quotes, bids and price proposals offered to Virginia Tech. Failure to register within the eVA system may result in the quote, bid or proposal from your firm being rejected and the award made to another vendor who is registered in the eVA system.

Registration in the eVA system is accomplished on-line. Your firm must provide the necessary information. Please visit the eVA website portal at <http://www.eva.virginia.gov/pages/eva-registration-buyer-vendor.htm> and **register both with eVA and Ariba.** *This process needs to be*

completed before Virginia Tech can issue your firm a Purchase Order or contract. If your firm conducts business from multiple geographic locations, please register these locations in your initial registration.

For registration and technical assistance, reference the eVA website at: <http://www.eva.virginia.gov>, or call 866-289-7367 or 804-371-2525.

VI. CONTRACT PARTICIPATION:



It is the intent of this solicitation and resulting contract to allow for cooperative procurement. Accordingly, any public body, public or private health or educational institutions, or Virginia Tech's affiliated corporations and/or partnerships may access any resulting contract if authorized by the contractor.

Participation in this cooperative procurement is strictly voluntary. If authorized by the Contractor, the resultant contract may be extended to the entities indicated above to purchase at contract prices in accordance with contract terms. The Contractor shall notify Virginia Tech in writing of any such entities accessing the contract, if requested. No modification of this contract or execution of a separate contract is required to participate. The Contractor will provide semi-annual usage reports for all entities accessing the Contract, as requested. Participating entities shall place their own orders directly with the Contractor and shall fully and independently administer their use of the contract to include contractual disputes, invoicing and payments without direct administration from Virginia Tech. Virginia Tech shall not be held liable for any costs or damages incurred by any other participating entity as a result of any authorization by the Contractor to extend the contract. It is understood and agreed that Virginia Tech is not responsible for the acts or omissions of any entity, and will not be considered in default of the contract no matter the circumstances.

Please refer to Attachment B, Zone Map, if the offeror wishes to submit separate pricing structure based on approved zones for cooperative institutions. Refer to Attachment B for the approved Zone Map. If no other prices are offered, pricing provided will apply to all zones in the Commonwealth. If you wish to provide pricing for a zone other than which this solicitation originated, please indicate you are doing so in the response. If you anticipate pricing differentials for different zones, a separate pricing sheet must be submitted for each zone that includes appropriate pricing for that zone.

Use of this contract does not preclude any participating entity from using other contracts or competitive processes as the need may be.

VII. STATEMENT OF NEEDS:

A. SERVICE REQUIREMENTS:

The Contractor shall provide all supervision, labor, materials, tools, equipment, insurance and expertise required for the maintenance, service, and repair of the furnaces, boilers and other mechanical equipment listed in Attachment D. as required by Virginia Tech, in accordance with these specifications, including all accessories and incidentals necessary to perform the work.

B. QUALIFICATIONS:

The importance of maintaining this equipment in line with its original design and upgraded performance and in proper and safe operating condition requires the service to be performed by an experienced and competent Contractor who has satisfactorily maintained equipment of this type and to the degree included in these specifications.

1. The Contractor must have a minimum ten (10) years' experience as a company working in the furnace, boiler, and mechanical equipment repair and maintenance business. Virginia Tech shall not accept the experience of individual employees or combinations of employees as company experience.
2. The maintenance and repair mechanics used by the Contractor for the performance of this work shall be experienced and trained in the maintenance and repair of this type of equipment, and shall be capable and qualified in performing the work, and must have a minimum of five (5) years experience as a mechanic in the maintenance and repair of furnaces, boilers, and mechanical equipment. All Mechanics shall be uniformed with a visible picture ID while on campus.
3. Helpers shall be capable of providing assistance to the Mechanics and shall be equipped with all tools, equipment, safety equipment, and other incidentals necessary for the performance of the work. All Helpers shall be uniformed with a visible picture I.D. while on campus.
4. The Contractor shall have and maintain technical support personnel who are specifically trained and experienced in the maintenance and repair of equipment similar to the type covered by this contract. The Contractor's technical support personnel shall be available at all times to support or assist assigned mechanics.
5. Use of personnel without these qualifications may be considered on a case-by-case basis. A qualified Mechanic shall be present during the performance of any work under this contract. Qualifications for Mechanics shall be submitted and approved by Virginia Tech prior to performing any work under this contract.
6. Any changes that may occur in personnel during the term of this contract shall be submitted in writing by the Contractor to the Contract Administrator within five (5) working days of such change. All Mechanics' training and experience credentials shall be provided along with the notice of change in the mechanics' assignments. Virginia Tech shall notify the Contractor within five (5) working days after receipt of notice of mechanic change of approval or disapproval. Virginia Tech reserves the right to refuse assignment of any personnel deemed by Virginia Tech to have inadequate training, credentials, or who shows an inability to effectively maintain the equipment. Only those mechanics specifically named and approved by Virginia Tech shall be allowed to perform service under this

contract, excluding the 5-day notification of mechanic change period and the 5-day approval of change period.

C. PERFORMANCE LEVELS:

The furnace, boiler, and mechanical equipment under this contract shall be maintained and/or repaired as originally specified, designed, manufactured, installed and upgraded. All repairs and maintenance shall comply with all applicable codes and the authority having jurisdiction.

1. When, as a result of an examination, corrective action is found to be the responsibility of the Contractor, the Contractor should proceed immediately (after notifying appropriate Virginia Tech personnel) to make replacements, repairs and corrections. When such work is determined not to be the Contractor's responsibility, the contractor shall notify appropriate Virginia Tech personnel, provide an estimate and proceed with correction after receiving authorization to proceed.

D. STANDARDS:

All work shall be performed in a professional manner and in accordance with all state and local codes and requirements, as well as the standards of the following agencies, whichever is more stringent:

1. Building Officials and Code Administrators (BOCA)
2. American National Standards Institute (ANSI)
3. American Society for Testing and Materials (ASTM)
4. American Society for Mechanical Engineers (ASME)

E. MATERIAL AND WORKMANSHIP:

1. Materials and parts required for the performance of repair work under this contract must be of equivalent material, design as replaced material or part, new and shall be manufactured by or recommended by the same manufacturer of the equipment being repaired or serviced and complying with OEM specifications, or equivalent.
2. Unless prior written consent has been provided by Virginia Tech's Representative, used or reconditioned parts shall not be used.

F. GUARANTEE:

All work and materials supplied under this contract shall be guaranteed against defects resulting from the use of substandard materials, equipment, or workmanship for one year from the date of final acceptance by Virginia Tech. Any work that has to be corrected due to the Contractor's faulty workmanship, equipment, tools, or materials shall be done at no additional expense to Virginia Tech. The guarantee on materials is not applicable when the materials are supplied by anyone other than this Contractor, but the guarantee on workmanship still stands.

G. FURNACE, BOILER AND MECHANICAL EQUIPMENT FULL MAINTENANCE SERVICES:

This service shall include all modifications, replacements and maintenance needed to keep the equipment in operating condition according to the originally specified performance levels and standards of the industry. All work, including all service calls, shall be included in the lump sum price (as bid in Attachment D. Equipment Inventory/Price Schedule) unless specifically noted otherwise herein. The limits of the equipment to be included in the lump sum price (as bid in Attachment D. Equipment Inventory/Price Schedule) are as follows:

1. BOILERS AND DOMESTIC HOT WATER HEATERS

- a. All Boiler/Water Heater Types: All electrical controls, thermostats/aquastats and exhaust booster fans are included.
 - i. All Gas-Fired Appliances: Beginning at and including the main gas control valve on the supply line. Individual appliance gas regulators are not included.
 - ii. All Oil-Fired Appliances: Beginning at and including the oil filter at the inlet to the burner.
 - iii. All Combustion Appliances (Oil & Gas): Beginning with the combustion air connection to the boiler and ending with the exhaust vent connection of the boiler; includes combustion air filter (if applicable). Combustion air and exhaust vent piping not included.
 - iv. All Electric-Powered Appliances: Beginning at the incoming field-wired electrical strike connection to the equipment.
- b. Hot Water Boilers: Beginning with and including the make-up water system (including glycol make-up unit, if applicable), and including all wetted surfaces of the boiler (beginning at the hot water return inlet connection and ending at the hot water supply connection of the boiler). Includes condensate neutralization tank and condensate piping from the boiler to drain, if applicable. Circulating pump(s) not included.
- c. Domestic Hot Water Heater: Beginning with and including the make-up water system, and including all wetted surfaces of the water heater (beginning at the cold water make-up inlet connection and ending at the hot water supply connection of the water heater). Includes condensate neutralization tank and condensate piping from the boiler to drain, if applicable. Includes sacrificial anode, if applicable. Circulating pump(s) not included.
- d. Steam Boilers: Beginning with and including the boiler feed pump and ending at the point where the steam leaves the boiler. Includes make-up water filtration and/or softening equipment.
- e. Steam Generators: Beginning with and including the make-up water system and filtration/softening equipment.

2. FORCED AIR HEATERS (FURNACES, UNIT HEATERS, TUBE HEATERS, DUCT HEATERS, ETC.)

- a. All Forced Air Heaters: Beginning at the point where return air enters the furnace and ending at the point where the hot air leaves the furnace, including air filters, if applicable. All electrical controls and thermostats included.
 - i. All Gas-Fired Appliances: Beginning at and including the main gas control valve on the supply line. Individual appliance gas regulators are not included.
 - ii. All Oil-Fired Appliances: Beginning at and including the oil filter at the inlet to the burner.
 - iii. All Combustion Appliances (Oil & Gas): Beginning with the combustion air connection to the boiler and ending with the exhaust vent connection of the boiler; includes combustion air filter (if applicable). Combustion air and exhaust vent piping not included.
 - iv. All Electric-Powered Appliances: Beginning at the incoming field-wired electrical strike connection to the equipment.

3. HVAC EQUIPMENT

- a. All HVAC Equipment including but not limited to package units, A/C split systems and A/C heat pumps: Beginning at the point where return air enters the unit and ending at the point where the cool air leaves the unit, including air filters (if applicable), piping and refrigerant piping. All electrical controls, associated equipment and thermostats included
- b. Virginia Tech shall furnish all required refrigerant to contractor for installation as necessary.

4. MISCELLANEOUS EQUIPMENT

- a. Unfired Steam Generator: On the utility steam side beginning at the inlet steam connection flange and ending at the condensate outlet connection, including any steam control valves and condensate traps. On the clean steam side, starting at and including the make-up water filtration system and ending at the clean steam outlet connection. All electrical controls, thermostats and associated equipment are included.
- b. Humidifiers: Beginning with and including the make-up water filtration system for the humidifier and ending at the steam outlet connection. All electrical controls, thermostats and associated equipment are included. Each humidifier needs to be inspected and cleaned of all scale on a quarterly basis.
- c. Thermal Storage: Begin and end at water connections. Includes sacrificial anode, if applicable.

5. WATER TREATMENT SERVICES

- a. Water treatment services shall be provided for all steam boilers. Chemical levels shall be monitored monthly and additional chemicals provided as needed. Contractor shall maintain and repair chemical dispensing equipment.

H. TESTS AND INSPECTIONS:

Mechanic shall accompany Commonwealth of Virginia Boiler Inspector during annual and bi-annual inspections and provide combustion analyses as required.

I. EXTRA WORK:

1. Repairs which are needed due to vandalism, acts of God or catastrophic failure of burners or furnaces/boilers, or which are outside of the limits defined in Section VII.G shall not be included in the lump sum rates, but shall be purchased separately on an hourly basis according to the labor rates as bid herein. The overtime rate shall only apply for the extra work performed outside of the regular working hours and only if approved in advance by Virginia Tech. Hourly rates shall include all transportation, travel time, and other expenses. These will not be paid separately. It is Virginia Tech's intent to respond to trouble calls initially to determine necessary repair actions.
2. Special Events: Contractor may be required to provide a mechanic on site for special events at established hourly rates. Special events may include spring commencement, spring football game and all home football games.

J. RESPONSE TIME FOR CALLBACKS:

Except for emergencies, the contractor shall respond (i.e. be on site) to a request for maintenance or repair services within 24 hours of notification by Virginia Tech. In the event of an emergency situation, the contractor shall respond (i.e. be on site) within 2 hours of notification by Virginia Tech. Contractor shall have a full service shop located within 60 mile radius of Virginia Tech's main campus such that service is readily available to respond to callbacks.

K. REPORTS:

A written report shall be submitted to Virginia Tech upon the completion of, and on the same day as, a maintenance or service call. The report may be made on the Contractor's form, to be approved by Virginia Tech and shall include the following:

1. Company Name; Mechanic(s) Name(s); Helper(s) Name(s) (if applicable); Time and Date of Service or Repair Work.
2. Identification of Equipment Serviced or Repaired; Checklist of Examinations Made and Work Performed; Time Worked; Type and Quantity of Material and Parts Used.
3. Certification that work was performed in accordance with the specifications, signed by the Mechanic.
4. Needed repair work, problems, failures or malfunctions discovered during repair work.
5. Recommendations for extra inspection and testing if required.

K. LIMITS OF CONTRACTOR RESPONSIBILITY:

The contractor shall not be responsible for the following items:

1. Refractory repair or replacement

2. Complete burner failure
3. Tube failure or leaking tubes
4. Any single occurrence or failure or directly related components, beyond the first \$1,000.00.
5. All required refrigerant.

The above items may be purchased separately on an "Extra Work" basis according to the labor rates as bid herein.

L. PREPAYMENT:

Virginia Tech may wish to annually pre-pay for maintenance services. Vendor shall indicate pre-pay discount offered for annual pre-payment of maintenance services

VIII. PROPOSAL PREPARATION AND SUBMISSION:

A. SPECIFIC REQUIREMENTS

Proposals should be as thorough and detailed as possible so that Virginia Tech may properly evaluate your capabilities to provide the required goods or services. Offerors are required to submit the following information/items as a complete proposal:

1. PLAN FOR PROVIDING SERVICES

Describe your plan for providing furnace and boiler full maintenance and repair services. Include:

- a. A description of what specific services the Offeror proposes to provide to include but not be limited to proposed manpower to be used, when the services shall be performed, by whom, and the anticipated time durations for typical services. Offeror must also clearly identify all testing and maintenance services NOT included in the Offeror's proposal which are required by the applicable codes and which Virginia Tech should perform. Also describe your plan for handling after hours call backs.
- b. A description of all certification and reporting documentation to be provided by the Offeror in the performance of work included in this solicitation. Include samples of all Offeror's standard certifications, tags, and reports.
- c. Identification of applicable codes, regulations, standards and manufacturer's recommended practices to be followed by the Offeror in the performance of specific tasks proposed by the Offeror.
- d. List of service equipment to be used by the Offeror in the performance of work included in this solicitation.
- e. Details of how your mechanics shall communicate with Virginia Tech representative while on campus.
- f. Plan for increasing manpower when additional equipment is added to contract.

g. A sample service report as outlined in Section VII (K).

2. PRICE:

- a. Provide a price per year for each piece of equipment listed in Attachment D, Equipment Inventory/Price Schedule.
- b. Discuss price firmness and your plan for conveying price changes during renewal periods of any resulting contact.
- c. Describe your plan for pricing materials, parts and supplies when extra repair services described in Section V. are provided.

3. QUALIFICATIONS AND EXPERIENCE:

Describe your qualifications and experience in providing furnace and boiler full maintenance and repair services. Include:

- a. Complete and detailed description of the Offeror's qualifications and experience relative to the services described herein.
- b. Organization data, including size and structure of firm, joint venture and/or subcontractor arrangements if any, location of branch offices, and financial standing.
- c. Listing of Offeror's management and staff personnel to be used for this contract, designated by discipline and detailing qualifications and experience relative to the services described herein. Include a resume for each and proof of required certifications.
- d. The reference information requested in Attachment D.

4. PARTICIPATION OF SMALL, WOMEN-OWNED AND MINORITY-OWNED (SWaM) BUSINESS:

If your business cannot be classified as SWaM, describe your plan for utilizing SWaM subcontractors if awarded a contract. Describe your ability to provide reporting on SWaM subcontracting spend when requested. If your firm or any business that you plan to subcontract with can be classified as SWaM, but has not been certified by the Virginia Department of Small Business and Supplier Diversity (SBSD), it is expected that the certification process will be initiated no later than the time of the award. If your firm is currently certified, you agree to maintain your certification for the life of the contract. For assistance with SWaM certification, visit the SBSD website at <http://www.sbsd.virginia.gov/>

5. GENERAL INFORMATION FORM

The return of the General Information Form and addenda, if any, signed and filled out as required.

B. GENERAL REQUIREMENTS:

- 1. RFP Response: In order to be considered for selection, Offerors shall submit a complete response to this RFP to include:

- a. **One (1) original and Four (4) copies** of the entire proposal, including all attachments. Any proprietary information should be clearly marked in accordance with 2.e. below.
- b. **One (1) electronic copy** in WORD format or searchable PDF (*flash drive*) of the entire proposal as one document, INCLUDING ALL ATTACHMENTS. Any proprietary information should be clearly marked in accordance with 2.e. below.
- c. Should the proposal contain **proprietary information**, provide **one (1) redacted hard copy** of the proposal and attachments **with proprietary portions removed or blacked out**. This copy should be clearly marked “*Redacted Copy*” on the front cover. The classification of an entire proposal document, line item prices and/or total proposal prices as proprietary or trade secrets is not acceptable. Virginia Tech shall not be responsible for the Contractor’s failure to exclude proprietary information from this redacted copy.

Response shall be submitted to:

Virginia Polytechnic Institute and State University (Virginia Tech)
Procurement Department (MC 0333)
North End Center, Suite 2100
300 Turner Street NW
Blacksburg, Virginia 24061

Reference the Due Date and Hour, and RFP Number in the lower left hand corner of the return envelope or package.

No other distribution of the proposals shall be made by the Offeror.

2. PROPOSAL PREPARATION:

- a. Proposals shall be signed by an authorized representative of the Offeror. All information requested should be submitted. Failure to submit all information requested may result in Virginia Tech requiring prompt submission of missing information and/or giving a lowered evaluation of the proposal. Proposals which are substantially incomplete or lack key information may be rejected by Virginia Tech at its discretion. Mandatory requirements are those required by law or regulation or are such that they cannot be waived and are not subject to negotiation.
- b. Proposals should be prepared simply and economically providing a straightforward, concise description of capabilities to satisfy the requirements of the RFP. Emphasis should be on completeness and clarity of content.
- c. Proposals should be organized in the order in which the requirements are presented in the RFP. All pages of the proposal should be numbered. Each paragraph in the proposal should reference the paragraph number of the corresponding section of the RFP. It is also helpful to cite the paragraph number, subletter, and repeat the text of the requirement as it appears in the RFP. If a response covers more than one page, the paragraph number and subletter should be repeated at the top of the next page. The proposal should contain a table of contents which cross references the RFP requirements. Information which the offeror desires to present that does not fall within any of the requirements of the RFP should be inserted at an appropriate place or be attached at the end of the proposal and designated as additional material. Proposals

that are not organized in this manner risk elimination from consideration if the evaluators are unable to find where the RFP requirements are specifically addressed.

- d. Each copy of the proposal should be bound in a single volume where practical. All documentation submitted with the proposal should be bound in that single volume.
- e. Ownership of all data, material and documentation originated and prepared for Virginia Tech pursuant to the RFP shall belong exclusively to Virginia Tech and be subject to public inspection in accordance with the Virginia Freedom of Information Act. Trade secrets or proprietary information submitted by an Offeror shall not be subject to public disclosure under the Virginia Freedom of Information Act. However, to prevent disclosure the Offeror must invoke the protections of Section 2.2-4342F of the Code of Virginia, in writing, either before or at the time the data or other materials is submitted. The written request must specifically identify the data or other materials to be protected and state the reasons why protection is necessary. The proprietary or trade secret material submitted must be identified by some distinct method such as highlighting or underlining and must indicate only the specific words, figures, or paragraphs that constitute trade secret or proprietary information. The classification of an entire proposal document, line item prices and/or total proposal prices as proprietary or trade secrets is not acceptable and may result in rejection of the proposal.

3. ORAL PRESENTATION:

Offerors who submit a proposal in response to this RFP may be required to give an oral presentation of their proposal to Virginia Tech. This will provide an opportunity for the Offeror to clarify or elaborate on the proposal but will in no way change the original proposal. Virginia Tech will schedule the time and location of these presentations. Oral presentations are an option of Virginia Tech and may not be conducted. Therefore, proposals should be complete.

IX. SELECTION CRITERIA AND AWARD:

A. SELECTION CRITERIA:

Proposals will be evaluated by Virginia Tech using the following:

<u>Criteria</u>	<u>Maximum Point Value</u>
1. Quality of products/services offered and suitability for the intended purposes	20
2. Qualifications and experiences of Offeror in providing the goods/services	20
3. Specific plans or methodology to be used to provide the Services	20
4. Cost (or Price)	30
5. Participation of Small, Women-Owned and Minority (SWAM) Business	10
Total	<u>100</u>

B. AWARD:

Selection shall be made of two or more offerors deemed to be fully qualified and best suited among those submitting proposals on the basis of the evaluation factors included in the Request for Proposal, including price, if so stated in the Request for Proposal. Negotiations shall then be conducted with the offerors so selected. Price shall be considered, but need not be the sole determining factor. After negotiations have been conducted with each offeror so selected, Virginia Tech shall select the offeror which, in its opinion, has made the best proposal, and shall award the contract to that offeror. Virginia Tech may cancel this Request for Proposal or reject proposals at any time prior to an award. Should Virginia Tech determine in writing and in its sole discretion that only one offeror has made the best proposal, a contract may be negotiated and awarded to that offeror. The award document will be a contract incorporating by reference all the requirements, terms and conditions of this solicitation and the Contractor's proposal as negotiated. See Attachment C for sample contract form.

Virginia Tech reserves the right to award multiple contracts as a result of this solicitation.

X. OPTIONAL PRE-PROPOSAL CONFERENCE:

An optional pre-proposal conference will be held on April 2, 2018 at 9:00am in the Procurement Conference Room. The purpose of this conference is to allow potential Offerors an opportunity to present questions and obtain clarification relative to any facet of this solicitation.

While attendance at this conference will not be a prerequisite to submitting a proposal, offerors who intend to submit a proposal are encouraged to attend.

Bring a copy of this solicitation with you. Any changes resulting from this conference will be issued in a written addendum to this solicitation.

It is strongly recommended that you obtain a Virginia Tech parking permit for display on your vehicle prior to attending the conference. Parking permits are available from the Virginia Tech Parking Services Department located at 605 Research Center Drive, phone: (540) 231-3200, e-mail: parking@vt.edu.

XI. INQUIRIES:

All inquiries concerning this solicitation should be submitted in writing via email, citing the particular RFP section and paragraph number. All inquiries will be answered in the form of an addendum. Inquiries must be submitted by 3:00pm on April 4, 2018. Inquiries must be submitted to the procurement officer identified in this solicitation.

XII. INVOICES:

Invoices for goods or services provided under any contract resulting from this solicitation shall be submitted by email to vtinvoices@vt.edu or by mail to:

Virginia Polytechnic Institute and State University (Virginia Tech)
Accounts Payable
North End Center, Suite 3300
300 Turner Street NW
Blacksburg, Virginia 24061

XIII. METHOD OF PAYMENT:

Virginia Tech will authorize payment to the contractor as negotiated in any resulting contract from the aforementioned Request for Proposal.

Payment can be expedited through the use of the Wells One AP Control Payment System. Virginia Tech strongly encourages participation in this program. For more information on this program please refer to Virginia Tech's Procurement website: <http://www.procurement.vt.edu/vendor/wellsone.html> or contact the procurement officer identified in the RFP.

XIV. ADDENDUM:

Any ADDENDUM issued for this solicitation may be accessed at <http://www.apps.vpfin.vt.edu/html.docs/bids.php>. Since a paper copy of the addendum will not be mailed to you, we encourage you to check the web site regularly.

XV. COMMUNICATIONS:

Communications regarding this solicitation shall be formal from the date of issue, until either a Contractor has been selected or the Procurement Department rejects all proposals. Formal communications will be directed to the procurement officer listed on this solicitation. Informal communications, including but not limited to request for information, comments or speculations regarding this solicitation to any University employee other than a Procurement Department representative may result in the offending Offeror's proposal being rejected.

XVI. CONTROLLING VERSION OF SOLICITATION:

The posted version of the solicitation and any addenda issued by Virginia Tech Procurement Services is the mandatory controlling version of the document. Any modification of/or additions to the solicitation by the Offeror shall not modify the official version of the solicitation issued by Virginia Tech Procurement Services. Such modifications or additions to the solicitation by the Offeror may be cause for rejection of the proposal; however, Virginia Tech reserves the right to decide, on a case by case basis, in its sole discretion, whether to reject such a proposal.

XVII. TERMS AND CONDITIONS:

This solicitation and any resulting contract/purchase order shall be governed by the attached terms and conditions, see Attachment A.

XVIII. CONTRACT ADMINISTRATION:

- A. Kim Briele, Facilities Department, at Virginia Tech or their designee, shall be identified as the Contract Administrator and shall use all powers under the contract to enforce its faithful performance.
- B. The Contract Administrator, or their designee, shall determine the amount, quantity, acceptability, fitness of all aspects of the services and shall decide all other questions in connection with the services. The Contract Administrator, or their designee, shall not have authority to approve changes in the services which alter the concept or which call for an extension of time for this contract. Any modifications made must be authorized by the Virginia Tech Procurement Department through a written amendment to the contract.

XIX. ATTACHMENTS:

Attachment A - Terms and Conditions

Attachment B - Zone Map for Cooperative Contracts

Attachment C - Sample of Standard Contract Form

Attachment D - Furnace Boiler Equipment Inventory/ Price Schedule

ATTACHMENT A

TERMS AND CONDITIONS

RFP GENERAL TERMS AND CONDITIONS

See:

http://www.procurement.vt.edu/content/dam/procurement_vt_edu/docs/terms/GTC_RFP_01012018.pdf

ADDITIONAL TERMS AND CONDITIONS

- A. ADDITIONAL GOODS AND SERVICES:** The University may acquire other goods or services that the supplier provides other than those specifically solicited. The University reserves the right, subject to mutual agreement, for the Contractor to provide additional goods and/or services under the same pricing, terms and conditions and to make modifications or enhancements to the existing goods and services. Such additional goods and services may include other products, components, accessories, subsystems, or related services newly introduced during the term of the Agreement.

- B. AUDIT:** The Contractor hereby agrees to retain all books, records, and other documents relative to this contract for five (5) years after final payment, or until audited by the Commonwealth of Virginia, whichever is sooner. Virginia Tech, its authorized agents, and/or the State auditors shall have full access and the right to examine any of said materials during said period.

- C. AVAILABILITY OF FUNDS:** It is understood and agreed between the parties herein that Virginia Tech shall be bound hereunder only to the extent of the funds available or which may hereafter become available for the purpose of this agreement.

- D. CANCELLATION OF CONTRACT:** Virginia Tech reserves the right to cancel and terminate any resulting contract, in part or in whole, without penalty, upon 60 days written notice to the Contractor. In the event the initial contract period is for more than 12 months, the resulting contract may be terminated by either party, without penalty, after the initial 12 months of the contract period upon 60 days written notice to the other party. Any contract cancellation notice shall not relieve the Contractor of the obligation to deliver and/or perform on all outstanding orders issued prior to the effective date of cancellation.

- E. CONTRACT DOCUMENTS:** The contract entered into by the parties shall consist of the Request for Proposal including all modifications thereof, the proposal submitted by the Contractor, the written results of negotiations, the Commonwealth Standard Contract Form, all of which shall be referred to collectively as the Contract Documents.

- F. IDENTIFICATION OF BID/PROPOSAL ENVELOPE:** The signed bid or proposal should be returned in a separate envelope or package and identified as follows:

From: _____

Name of Bidder or Offeror	Due Date	Time Due
Street or Box No.	Solicitation Number	
City, State, Zip Code	Solicitation Title	

Name of Procurement Officer: _____

The envelope should be addressed to:

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY (Virginia Tech)
Procurement Department (MC 0333)
North End Center, Suite 2100
300 Turner Street NW
Blacksburg, Virginia 24061

The offeror takes the risk that if the envelope is not marked as described above, it may be inadvertently opened and the information compromised, which may cause the proposal to be disqualified. Bids or Proposals may be hand delivered to the designated location in the office issuing the solicitation. No other correspondence or other bids/proposals should be placed in the envelope.

G. NOTICES: Any notices to be given by either party to the other pursuant to any contract resulting from this solicitation shall be in writing, hand delivered or mailed to the address of the respective party at the following address

If to Contractor: Address Shown On RFP Cover Page
Attention: Name Of Person Signing RFP

If to Virginia Tech:

Virginia Polytechnic Institute and State University (Virginia Tech)
Attn: Reed Nagel
Procurement Department (MC 0333)
North End Center, Suite 2100
300 Turner Street NW
Blacksburg, Virginia 24061

and

Virginia Polytechnic Institute and State University (Virginia Tech)
Attn: Kim Briele
Facilities Department
230 Sterrett Drive
Blacksburg, Virginia 24061

H. SEVERAL LIABILITY: Virginia Tech will be severally liable to the extent of its purchases made against any contract resulting from this solicitation. Applicable entities described herein will be severally liable to the extent of their purchases made against any contract resulting from this solicitation.

I. CLOUD OR WEB HOSTED SOFTWARE SOLUTIONS: For agreements involving Cloud-based Web-hosted software/applications refer to link for additional terms and conditions: http://www.ita.vt.edu/purchasing/VT_Cloud_Data_Protection_Addendum_final03102017.pdf

SPECIAL TERMS AND CONDITIONS

- 1. **ADVERTISING:** In the event a contract is awarded for supplies, equipment, or services resulting from this solicitation, no indication of such sales or services to Virginia Tech will be used in product literature or advertising. The contractor shall not state in any of the advertising or product literature that the Commonwealth of Virginia or any agency or institution of the Commonwealth has purchased or uses its products or services.
- 2. **AS-BUILT DRAWINGS:** The contractor shall provide Virginia Tech a clean set of reproducible "as built" drawings and wiring diagrams, marked to record all changes made during installation or construction. The Contractor shall also provide Virginia Tech with maintenance manuals, parts lists and a copy of all warranties for all equipment. All "as built" drawings and wiring diagrams, maintenance manuals, parts lists and warranties shall be delivered to Virginia Tech upon completion of the work and prior to final payment.
- 3. **ASBESTOS:** The contractor is contracted by Virginia Tech to perform work in buildings where asbestos-containing materials (ACM) may be located. The contractor will be informed by the Virginia Tech project coordinator/manager of the location of suspect and known ACM in the work area(s) to which the contractor is assigned. The contractor shall under no circumstances damage or disturb suspect or known ACMs unless they have been specially retained to perform this work as a part of the contract and are legally qualified to perform this work. The contractor shall provide his/her employees asbestos awareness and other training or activities required by 29 CFR 1926.1101 for the safe performance of their work. The contractor shall submit to Virginia Tech Environmental Health & Safety Services (EHSS) for review and approval his written work practices, precautions, procedures, and engineering controls to be used during work that disturbs ACM prior to commencement of this work. Work will not proceed until the proposed work practices have been approved by EHSS.
- 4. **CONTRACTOR/SUBCONTRACTOR LICENSE REQUIREMENT:** By my signature on this solicitation, I certify that this firm/individual and/or subcontractor is properly licensed for providing the goods/services specified

Contractor Name: _____ Subcontractor Name: _____

License #: _____ Type: _____

- 5. **CONTRACTOR'S TITLE TO MATERIALS:** No materials or supplies for the work shall be purchased by the Contractor or by any Subcontractor subject to any chattel mortgage or under a conditional sales or other agreement by which an interest is retained by the seller. The contractor warrants that he has clear title to all materials and supplies for which he invoices for payment.
- 6. **CRIMINAL CONVICTION CHECKS:** All criminal conviction checks must be concluded prior to the Contractor's employees gaining access to the Virginia Tech Campus. Employees who have separated employment from Contractor shall undergo another background check prior to re-gaining access to the Virginia Tech campus. Contractor shall ensure subcontractors conduct similar background checks. Virginia Tech reserves the right to audit a contractor's background check process at any time. All employees have a duty to self-disclose any criminal conviction(s) occurring while assigned to the Virginia Tech campus. Such disclosure shall be made to Contractor, which in turn shall notify the designated Virginia Tech contract administrator within 5 days. If at any time during the term of the contract Virginia Tech discovers an employee has a conviction which raises concerns about university buildings, property, systems, or security, the contractor shall remove that employee's access to the Virginia Tech campus, unless Virginia Tech consents to such access in writing. Failure to comply with the terms of this provision may result in the termination of the contract.

7. **ELECTRICAL INSTALLATION:** All equipment/material shall conform to the latest issue of all applicable standards as established by National Electrical Manufacturer's Association (NEMA), American National Standards Institute (ANSI), and Underwriters' Laboratories, Incorporated (UL) or other Nationally Recognized Testing Laboratories (NRTL) currently listed with the US Department of Labor. All equipment and material, for which there are NEMA, ANSI, UL or other NRTL standards and listings, shall bear the appropriate label of approval for use intended.
8. **EXTRA CHARGES NOT ALLOWED:** The Proposal/Bid price shall be for complete installation ready for Virginia Tech use, and shall include all applicable freight and installation charges; extra charges will not be allowed.
9. **FINAL INSPECTION:** At the conclusion of the work, the contractor shall demonstrate to the authorized owner's representatives that the work is fully operational and in compliance with contract specifications and codes. Any deficiencies shall be promptly and permanently corrected by the contractor at the contractor's sole expense prior to final acceptance of the work.
10. **INSPECTION OF JOB SITE:** My signature on this solicitation constitutes certification that I have inspected the job site and am aware of the conditions under which the work must be accomplished. Claims, as a result of failure to inspect the job site, will not be considered by Virginia Tech.

11. **INSURANCE:**

By signing and submitting a Proposal/Bid under this solicitation, the offeror/bidder certifies that if awarded the contract, it will have the following insurance coverages at the time the work commences. Additionally, it will maintain these during the entire term of the contract and that all insurance coverages will be provided by insurance companies authorized to sell insurance in Virginia by the Virginia State Corporation Commission.

During the period of the contract, Virginia Tech reserves the right to require the contractor to furnish certificates of insurance for the coverage required.

INSURANCE COVERAGES AND LIMITS REQUIRED:

- A. Worker's Compensation - Statutory requirements and benefits.
- B. Employers Liability - \$100,000.00
- C. General Liability - \$1,000,000.00 combined single limit. Virginia Tech and the Commonwealth of Virginia shall be named as an additional insured with respect to goods/services being procured. This coverage is to include Premises/Operations Liability, Products and Completed Operations Coverage, Independent Contractor's Liability, Owner's and Contractor's Protective Liability and Personal Injury Liability.
- D. Automobile Liability - \$500,000.00
- E. Builders Risk – For all renovation and new construction projects under \$100,000 Virginia Tech will provide All Risk – Builders Risk Insurance. For all renovation contracts, and new construction from \$100,000 up to \$500,000 the contractor will be required to provide All Risk – Builders Risk Insurance in the amount of the contract and name Virginia Tech as additional insured. All insurance verifications of insurance will be through a valid insurance certificate.

The contractor agrees to be responsible for, indemnify, defend and hold harmless Virginia Tech, its officers, agents and employees from the payment of all sums of money by reason of any claim against them arising out of any and all occurrences resulting in bodily or mental injury or property damage that may happen to occur in connection with and during the performance of the contract, including but not limited to claims under the Worker's Compensation Act. The contractor agrees that it will, at all times, after the completion of the work, be responsible for, indemnify, defend and hold harmless Virginia Tech, its officers, agents and employees from all liabilities resulting from bodily or mental injury or property damage directly or indirectly arising out of the performance or nonperformance of the contract.

12. **LABELING OF HAZARDOUS SUBSTANCES:** If the items or products requested by this solicitation are "Hazardous Substances" as defined by the # 3.1-250 of the Code of Virginia (1950), as amended,

or # 1261 of Title 15 of the United States Code, then the offeror/bidder, by submitting its Proposal/Bid, certifies and warrants that the items or products to be delivered under this contract shall be properly labeled as required by the foregoing sections and that by delivering the items or products the offeror/bidder does not violate any of the prohibitions of # 3.1-252 of the Code of Virginia or Title 15 U.S.C. # 1263.

13. **Lead:** The contractor is contracted by Virginia Tech to perform work in buildings where lead-containing materials such as lead-based paint may be located. Work performed under this contract may impact these lead materials (for example, during building renovations), but does not include lead abatement or de-leading operations. The contractor will be informed by Virginia Tech project coordinator/manager of the location of suspect and known lead containing materials in the work area(s) to which the contractor is assigned. The contractor shall provide all training and equipment required by 29 CFR 1926.62 for the safe performance of the work. The contractor may not perform de-leading or lead abatement unless they hold a valid Virginia Lead Contractor license and have been specifically retained to perform this work as a part of the contract. The contractor shall submit to Virginia Tech Environmental Health and Safety Services (EHSS) Department for review and approval his written Lead Work Plan which outlines work practices, precautions, procedures, and engineering controls to be used during work that disturbs lead prior to commencement of this work. Work will not proceed until the Lead Work Plan has been approved by EHSS.
14. **MAINTENANCE MANUALS:** The contractor shall provide with each piece of equipment an operations and maintenance manual with wiring diagrams, parts list, and a copy of all warranties.
15. **MATERIALS CONTAINING ASBESTOS:** The offeror/bidder shall not incorporate any materials into the work containing asbestos. The offeror/bidder shall not incorporate any material known by the offeror/bidder to contain a substance known to be hazardous to health when the building is occupied unless specifically approved by Virginia Tech or required by the specifications. If the offeror/bidder becomes aware that a material required by the specifications contains asbestos, it shall notify Virginia Tech immediately and shall take no further steps to acquire or install any such material.
16. **MATERIAL SAFETY DATA SHEETS:** Material Safety Data Sheets and descriptive literature shall be provided with the Proposal/Bid for each chemical and/or compound offered. Failure on the part of the offeror/bidder to submit such data sheets may be cause for declaring the Proposal/Bid as nonresponsive.
17. **ORDERS:** Applicable departments, institutions, agencies and Public Bodies of the Commonwealth of Virginia may order by issuing a purchase order against any contract resulting from this solicitation.
18. **PRICE ESCALATION/DEESCALATION:** Price adjustments may be permitted only for changes in the contractor's cost of materials not to exceed the increase in the following index/indices: CPI-W Services. No price increases will be authorized for 365 calendar days after the effective date of the contract. Price escalation may be permitted only at the end of this period and each 365 days thereafter and only where verified to the satisfaction of the Virginia Tech Procurement Department. However, "across the board" price decreases are subject to implementation at any time and shall be immediately conveyed to Virginia Tech.
Contractor shall give not less than 30 days advance notice of any price increase to the Virginia Tech Procurement Department. Any approved price changes will be effective only at the beginning of the calendar month following the end of the full 30 day notification period. The contractor shall document the amount and proposed effective date of any general change in the price of materials. Documentation shall be supplied with the contractor's request for increase which will: (1) verify that the requested price increase is general in scope and not applicable just to Virginia Tech; and (2) verify the amount or percentage of increase which is being passed on to the contractor by the contractor's suppliers. The Virginia Tech Procurement Department will notify the Contractor in writing of the effective date of any increase which it approves. However, the Contractor shall fill all purchase orders received prior to

the effective date of the price adjustment at the old contract prices. The Contractor is further advised that decreases which affect the cost of materials are required to be communicated immediately to the Virginia Tech Procurement Department.

- 19. **PRIME CONTRACTOR RESPONSIBILITIES:** The contractor shall be responsible for completely supervising and directing the work under this contract and all subcontractors that he may utilize, using his best skill and attention. Subcontractors who perform work under this contract shall be responsible to the prime Contractor. The contractor agrees that he is as fully responsible for the acts and omissions of his subcontractors and of persons employed by them as he is for the acts and omissions of his own employees.
- 20. **REFERENCES:** Offerors/Bidders shall provide a list of at least three (3) references where similar goods and/or services have been provided. Each reference shall include the name of the organization, the complete mailing address, the name of the contact person and telephone number.

ORGANIZATION	ADDRESS	TELEPHONE
CONTACT PERSON		

1.		
2.		
3.		

- 21. **RENEWAL OF CONTRACT:**

This contract may be renewed by Virginia Tech for a period of 365 only under the terms and conditions of the original contract except as stated in A, B, C, & D below. Price increases may be negotiated only at the time of renewal. Written notice of Virginia Tech's intention to renew shall be given (approximately 90 days) prior to the expiration date of each contract period.

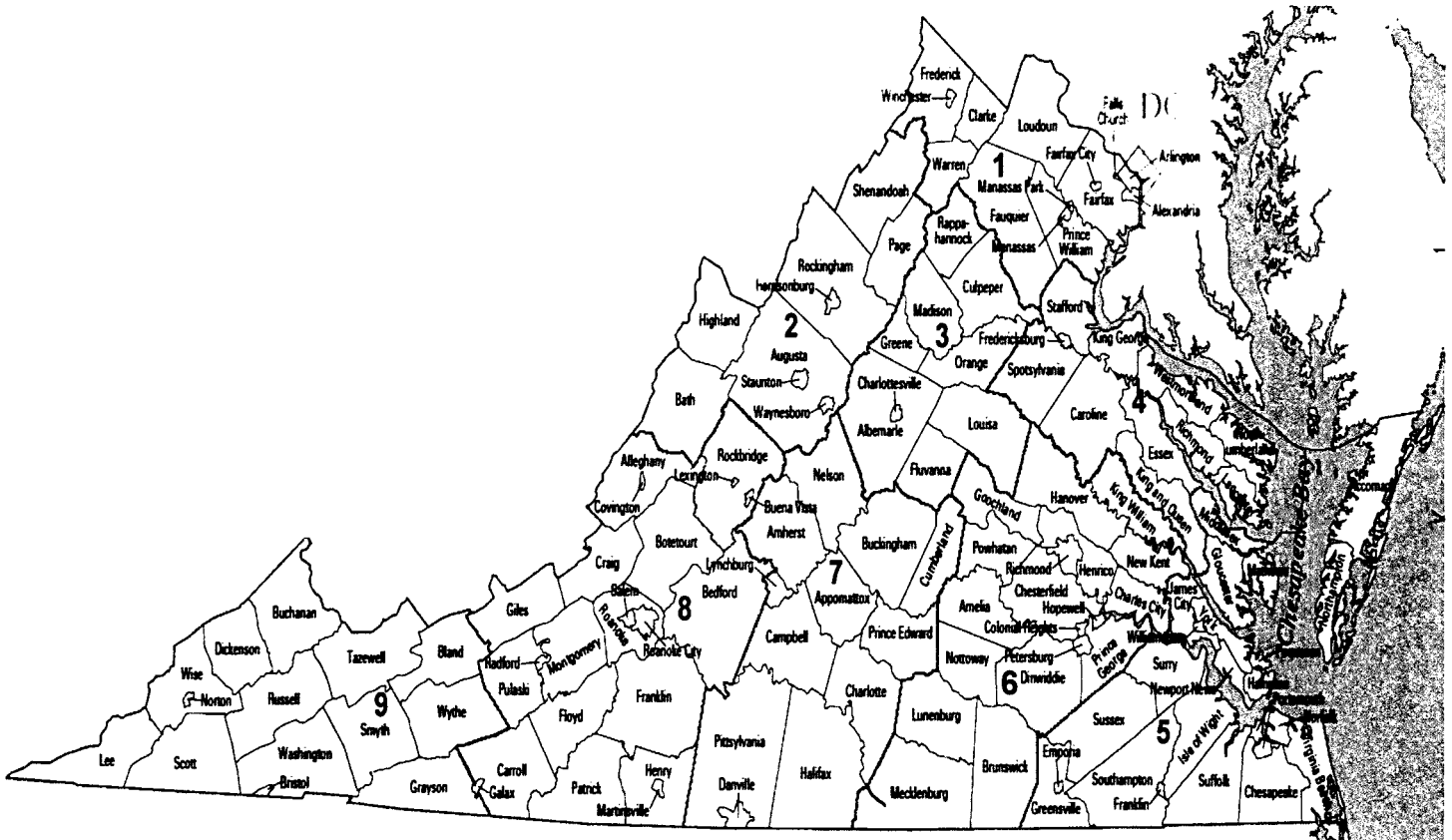
 - A. If Virginia Tech elects to exercise the option to renew the contract for an additional one-year period, the contract price(s) for the additional year shall not exceed the contract prices of the original contract increased/decreased by no more than the percentage increase/ decrease of the Services category category of the CPI-W section of the Consumer Price Index of the United States Bureau of Labor Statistics for the latest twelve months for which statistics are available.
 - B. If during the first one-year renewal Virginia Tech elects to exercise the option to renew the contract for the second additional one-year period, the contract price(s) for the second additional one-year period shall not exceed the contract price(s) of the first one-year renewal period increased/decreased by no more than the percentage increase/decrease of the Services category of the CPI-W section for the Consumer Price Index of the United States Bureau of Labor Statistics for the latest twelve months for which statistics are available.
 - C. If during the second one-year renewal Virginia Tech elects to exercise the option to renew the contract for the third additional one-year period, the contract price(s) for the third additional one-year period shall not exceed the contract price(s) of the second one-year renewal period increased/decreased by no more than the percentage increase/decrease of the Services category of the CPI-W section for the Consumer Price Index of the United States Bureau of Labor Statistics for the latest twelve months for which statistics are available.

D. If during the third one-year renewal Virginia Tech elects to exercise the option to renew the contract for the fourth additional one-year period, the contract price(s) for the fourth additional one-year period shall not exceed the contract price(s) of the third one-year renewal period increased/decreased by no more than the percentage increase/decrease of the Services category of the CPI-W section for the Consumer Price Index of the United States Bureau of Labor Statistics for the latest twelve months for which statistics are available.

22. **SAFETY:** The contractor bears sole responsibility for the safety of its employees. The contractor shall take all steps necessary to establish, administer, and enforce safety rules that meet the regulatory requirements of the Virginia Department of Labor and Industry (VDLI) and the Occupational Safety and Health Administration (OSHA). The contractor shall take steps as necessary to protect the safety and health of university employees, students, and visitors during the performance of their work. In addition, the contractor must also provide the university with a written safety program that it intends to follow in pursuing work under this contract. By entering into a contract with Virginia Tech, the contractor and its subcontractors agree to abide by the requirements described in Safety Requirements for Contractors and Subcontractors located on Virginia Tech's Environmental, Health and Safety Services (EHSS) web site at this URL http://www.ehss.vt.edu/programs/contractor_safety.php. A copy of the publication may also be obtained by contacting EHSS at 540/231- 5985. No work under this contract will be permitted until the university is assured that the contractor has an adequate safety program in effect.
23. **SIDEWALK POLICY:** Driving on sidewalks is allowed when there is no other way to get a needed vehicle to a designated place or building on campus. The vehicle operator shall be made aware that extreme caution shall be used to operate the vehicle in a way that will not be a hazard or hindrance to pedestrians using the walk. The contractor shall be responsible for any damage to turf and anything that is located adjacent to the walk. Parking an unattended vehicle on a sidewalk is strictly prohibited by State Law. The contractor is allowed to park a vehicle on a sidewalk if there is no other way to perform necessary work. The procedure to obtain a permit to operate a vehicle on sidewalks is the same as for the turf as outlined in Turf Policy. Any vehicle parked illegally on sidewalks shall be subject to ticketing, fines and towing if necessary.
24. **SUBCONTRACTS:** No portion of the work shall be subcontracted without prior written consent of Virginia Tech. In the event that the contractor desires to subcontract some part of the work specified herein, the contractor shall furnish Virginia Tech the names, qualifications and experience of their proposed subcontractors. The contractor shall, however, remain fully liable and responsible for the work to be done by his subcontractor(s) and shall assure compliance with all requirements of the contract.
25. **TURF POLICY:** Parking or driving on campus turf or sidewalk is strictly prohibited, except as specifically directed or otherwise allowed by the Physical Plant Grounds Department. In this case, a turf permit must be obtained from Virginia Tech Parking Services and displayed by the vehicle. Turf parking is not allowed under the canopy of any tree on campus. Any vehicle parked illegally on turf or sidewalks shall be subject to ticketing and fines.
26. **WORK SITE DAMAGES:** Any damage to existing utilities, equipment or finished surfaces resulting from the performance of this contract shall be repaired to the Owner's satisfaction at the contractor's expense.

ATTACHMENT B

Zone Map



Virginia Association of State College & University Purchasing Professionals (VASCUPP)

List of member institutions by zones

Zone 1

**George Mason University
(Fairfax)**

Zone 2

**James Madison University
(Harrisonburg)**

Zone 3

**University of Virginia
(Charlottesville)**

Zone 4

**University of Mary Washington
(Fredericksburg)**

Zone 5

**College of William and Mary
(Williamsburg)
Old Dominion University (Norfolk)**

Zone 6

**Virginia Commonwealth
University (Richmond)**

Zone 7

**Longwood University
(Farmville)**

Zone 8

**Virginia Military Institute
(Lexington)
Virginia Tech (Blacksburg)
Radford University (Radford)**

Zone 9

**University of Virginia - Wise
(Wise)**

The zone map is provided for the offeror to determine appropriate pricing structures based on approved zones for cooperative institutions. If no other prices are offered, pricing provided will apply to all zones in the Commonwealth. If you wish to provide pricing for a zone other than which this solicitation originated, please indicate you are doing so in the response. If you anticipate pricing differentials for different zones, a separate pricing sheet must be submitted for each zone that includes appropriate pricing for that zone

ATTACHMENT C

SAMPLE CONTRACT FORM

**Standard Contract form for reference only
Offerors do not need to fill in this form**

COMMONWEALTH OF VIRGINIA
STANDARD CONTRACT

Contract Number: _____

This contract entered into this ____ day of _____ 20____, by _____, hereinafter called the "Contractor" and Commonwealth of Virginia, Virginia Polytechnic Institute and State University called "Virginia Tech".

WITNESSETH that the Contractor and Virginia Tech, in consideration of the mutual covenants, promises and agreements herein contained, agrees as follows:

SCOPE OF CONTRACT: The Contractor shall provide the _____ to Virginia Tech as set forth in the Contract Documents.

PERIOD OF CONTRACT: From _____ through _____.

COMPENSATION AND METHOD OF PAYMENT: The Contractor shall be paid by Virginia Tech in accordance with the contract documents.

CONTRACT DOCUMENT: The Contract Documents shall consist of this signed contract, Request For Proposal Number _____ dated _____, together with all written modifications thereof and the proposal submitted by the Contractor dated _____ and the Contractor's letter dated _____, all of which Contract Documents are incorporated herein.

In WITNESS WHEREOF, the parties have caused this Contract to be duly executed intending to be bound thereby.

Contractor: _____ Virginia Tech

By: _____

By: _____

Title: _____

Title: _____

VIRGINIA TECH - AGREEMENT HVAC EQUIPMENT LIST

Building	Address	QTY	EQUIPMENT DESCRIPTION	MAKE	MODEL NO.	SERIAL NO.
Academic Buildings						
Alphin Stuart Livestock Teaching Arena	500 PLANTATION ROAD BLACKSBURG, VA 24061	1	Unit Heater	Trane	GPN004AAF1000D	F03L40505
		1	Furnace	Reznor	ACUB120	BDB-01477
		1	Furnace	Reznor	ACUB090	BDB-01476
		1	Water Heater	A.O. Smith	BTH120970	ML030015608
		1	Tube Heater	Reznor	VR75	BCI80U2N69118X
		1	Tube Heater	Reznor	VR75	BCI80U2N69117X
		1	Tube Heater	Reznor	VR75	BCI80U2N69130X
		1	Tube Heater	Reznor	VR75	Unknown
		1	A/C Split System 1 - Indoor Unit	Trane	Unknown	Unknown
		1	A/C Split System 1 - Outdoor Unit	Trane	TTA090A400FA	3474YF1AD
		1	A/C Split System 2 - Indoor Unit	Trane	Unknown	Unknown
		1	A/C Split System 2 - Outdoor Unit	Trane	TTA150B400EA	347400JAD
Architecture Research & Demonstration Facility	185 INVENTIVE LANE BLACKSBURG, VA 24061	1	Boiler	H.B. Smith	G220-S/W-10 HIS	R91 50
		1	Unit Heater	Modine	BAESOAC	Unknown
		1	Unit Heater	Modine	BAESOAC	Unknown
		1	Unit Heater	Modine	BAESOAC	Unknown
		1	Unit Heater	Modine	BAESOAC	Unknown
		1	Unit Heater	Modine	BAESOAC	Unknown
		1	Unit Heater	Modine	BAESOAC	Unknown
		1	Unit Heater	Modine	BAESOAC	Unknown
Brooks Forest Products Center	1650 RESEARCH CENTER DRIVE BLACKSBURG, VA 24061	1	Thermal Storage	Megatherm	5C-24-100-36H	85008
		1	Electric Boiler	Chromalox	CES-24	N-8045-W81
Burruss Hall	800 DRILLFEILD DRIVE BLACKSBURG, VA 24061	1	Electric Boiler	Latner	57511W	53861

VIRGINIA TECH - AGREEMENT HVAC EQUIPMENT LIST

Building	Address	QTY	EQUIPMENT DESCRIPTION	MAKE	MODEL NO.	SERIAL NO.
Dry Rendering Facility	285 DUCK POND DRIVE BLACKSBURG, VA 24061	1	Water Heater	Lochinvar	SNA285-125	JO9C10121203
Geotechnical Research Lab	260 INVENTIVE LANE BLACKSBURG, VA 24061	1	Duct Heater	Reznor	SC175-6-2	Unknown
		1	Duct Heater	Reznor	SC175-6-2	Unknown
		1	Duct Heater	Reznor	SC300-6	Unknown
		1	Water Heater	Bradford White	RG240S6N	PB38976200
		1	A/C Split System 1 - Indoor Unit	Trane	Unknown	Unknown
		1	A/C Split System 1 - Outdoor Unit	Trane	TTA120B300DA	23346W5AD
		1	A/C Split System 2 - Indoor Unit	Trane	Unknown	Unknown
		1	A/C Split System 2 - Outdoor Unit	Trane	TTA120B300DA	23345X1AD
		1	A/C Split System 3 - Indoor Unit	Trane	Unknown	Unknown
		1	A/C Split System 3 - Outdoor Unit	Trane	TTA180B300DA	23341BMAD
GreenHouse #6 (Washington St.)	201-A GARDEN LANE BLACKSBURG, VA 24061	1	Unit Heater	Trane	GTAB-0220S1	J82B-03144
		1	Unit Heater	Trane	GTAB-0220S1	Unknown
		1	Unit Heater	Trane	GPAP-0120SA	J81L-05728
		1	Unit Heater	Trane	GPAP-0120SB	J82B-03142
Greenhouse Complex STR. Building	101 GARDEN LANE BLACKSBURG, VA 24061	1	Unit Heater	Dayton	4E456A	A98G007695
		1	Unit Heater	Dayton	4LX48A	Unknown
Grounds Building	185 STERRETT DRIVE BLACKSBURG, VA 24061	1	Boiler	Burnham	V-907	7596781
The Grove	730 DUCK POND DRIVE BLACKSBURG, VA 24061	1	Boiler	H.B. Smith	19A, Series S/W-5	FA2000-320 P
Health and Safety Building	575 BEAMER WAY BLACKSBURG, VA 24061	1	Boiler	Burnham	V-910	7590636
Henderson Hall	195 ALUMNI HALL BLACKSBURG, VA 24061	1	Boiler	Weil-McLain	1788	Unknown

VIRGINIA TECH - AGREEMENT HVAC EQUIPMENT LIST

Building	Address	QTY	EQUIPMENT DESCRIPTION	MAKE	MODEL NO.	SERIAL NO.
Institute for Critical Technology and Applied Science II (ICTAS II)	1075 LIFE SCIENCE CIRCLE SW BLACKSBURG, VA 24061	1	Unfired Steam Generator	Cemline	H120USG1060	24-X-63
Infectious Disease Research Facility	295 DUCK POND DRIVE BLACKSBURG, VA 24061	1	Boiler	Aerco	MLX-757	757-09-0181
		1	Boiler	Aerco	MLX-757	757-09-0178
		1	Boiler	Aerco	MLX-757	757-09-0179
		1	Water Heater	A.O. Smith	BTH150A100	1121M002111
		1	Water Heater	A.O. Smith	BTH120A100	1121M001396
Incinerator	1704 PRICE'S FORK ROAD BLACKSBURG, VA 24061	1	Gas Heater	Reznor	UDAP100	Unknown
Material Management	625 BEAMER WAY BLACKSBURG, VA 24061	1	Boiler	Knight Commercial	KBN500	D10H10127678
		1	Boiler	Knight Commercial	KBN500	D10H10127694
Mining and Minerals Lab	740 PLANTATION ROAD BLACKSBURG, VA 24061	1	Gas Heater	Trane	GPND0004AD	F06K41272
		1	Gas Heater	Trane	GPND0004AD	F06K41273
		1	Gas Heater	Trane	GPND0004AD	F06K41274
		1	Gas Heater	Trane	GPND0004AD	F06K41275
		1	Gas Furnace	Hastings	CF-40-G21	52091
Moore House (Psychological Services Center)	3110 PRICE'S FORK ROAD BLACKSBURG, VA 24061	1	Gas Boiler	H.B. Smith	GB100-W-121NTD	GB2001-1913
Parking Services	505 BEAMER WAY BLACKSBURG, VA 24061	1	Gas Boiler	Burnham	FD/10	34000715
Plant Pathology Building	675 OLD GLADE ROAD BLACKSBURG, VA 24061	1	Gas Boiler	National US Crane	0-4102	137255
		1	Water Heter	Rheem	G75-125	URNG 1199G00954

VIRGINIA TECH - AGREEMENT HVAC EQUIPMENT LIST

Building	Address	QTY	EQUIPMENT DESCRIPTION	MAKE	MODEL NO.	SERIAL NO.
Solitude	705 WEST CAMPUS DRIVE BLACKSBURG, VA	1	Gas Boiler	Weil-McLain	CG1-8PIN	Unknown
South Gate Addition (Public Safety Building)	330 STERRETT DRIVE BLACKSBURG, VA 24061	1	Gas Boiler	Peerless	TC-04	No Serial #
SW Chiller Plant	2295 SMITHFIELD DRIVE BLACKSBURG, VA 24061	1	Gas Boiler	Bryan	BE150W4T10	99436
		1	Gas Boiler	Bryan	BE150W4T11	99439
Sterrett Facility Complex	230 STERRETT DRIVE BLACKSBURG, VA 24061	1	Gas Boiler	H.B. Smith	28A-S/W-10	N2003-1071
Structures and Materials Lab	255 INVENTIVE LANE BLACKSBURG, VA 24061	1	Gas Unit Heater	Dayton	3E368E	LOOGO15988
		1	Gas Unit Heater	Dayton	3E368E	KOOGO11548
		1	Gas Unit Heater	Dayton	3E3690	Q8959137
		1	Gas Unit Heater	Dayton	3E3690	Q8959467
		1	Gas Unit Heater	Dayton	3E3690	Q8959457
		1	Gas Unit Heater	Dayton	3E3690	Q8959470
		1	Gas Unit Heater	Dayton	3E3690	Q8959455
		1	Gas Overhead Furnace	Trane	TDD120C960BO	Unknown
		1	Gas Overhead Furnace	York	P4HFD20N12501	Unknown
Veterinary Medicine (IDU on Price Fork)	1410 PRICE'S FORK ROAD; BLDG 146B BLACKSBURG, VA 24061	1	Gas Boiler	Superior	#4-5304	12123
		1	Water Heater	PVI	40P250AG	508124502
		1	Gas Boiler	Columbia	146769	156789
		1	Gas Boiler	Columbia	146767	156787
		1	Gas Heater	Dayton		Unknown
Veterinary Medicine (Hos Building)	1410 PRICE'S FORK ROAD; BLDG 439A BLACKSBURG, VA 24061	1	Gas Heater	Reznor	XL60-3	AME31G8N31452
Veterinary Medicine (CMMID)	1410 PRICE'S FORK ROAD; BLDG 441A BLACKSBURG, VA 24061	1	Gas Boiler	Bryan	CLM150-S-150FDG	97871

VIRGINIA TECH - AGREEMENT HVAC EQUIPMENT LIST

Building	Address	QTY	EQUIPMENT DESCRIPTION	MAKE	MODEL NO.	SERIAL NO.
		1	Gas Boiler	Bryan	CLM150-S-150FDG	97871
		1	Gas Boiler	Bryan	CLM150-S-150FDG	97871
		1	Gas Boiler	Bryan	CLM150-S-150FDG	97871
		1	Gas Boiler	Bryan	CLM150-S-150FDG	Unknown
Veterinary Medicine (Poultry Virus Holding A)	1410 PRICE'S FORK ROAD; BLDG 442 BLACKSBURG, VA 24061	1	Gas Furnace	Heil	NTC61100KFA1	L9823 44523
Veterinary Medicine (Poultry Virus Holding B)	1410 PRICE'S FORK ROAD; BLDG 443 BLACKSBURG, VA 24061	1	Gas Furnace	Heil	NUGE125LH82	L912920865
Veterinary Medicine (Poultry Virus Holding C)	1410 PRICE'S FORK ROAD; BLDG 444 BLACKSBURG, VA 24061	1	Gas Furnace	Heil	NUGE125LH32	L922236069
Veterinary Medicine (Aquatic Medicine Lab)	1410 PRICE'S FORK ROAD; BLDG 445 BLACKSBURG, VA 24061	1	Gas Heater	Dayton	3E368E	E02G002995
Veterinary Medicine (Virus Isolation Bldg 2)	1410 PRICE'S FORK ROAD; BLDG 447 BLACKSBURG, VA 24061	1	Gas Boiler	5	39713	Unknown
		1	Gas Duct Heater	Trane	HMG200HS VSPGI1N	
		1	Gas Duct Heater	AAON	RM-010-8-0-BB02-549	200810-AMGJ45750
Veterinary Medicine (Virus Isolation Bldg 3)	1410 PRICE'S FORK ROAD; BLDG 448 BLACKSBURG, VA 24061	1	Gas Heater	Reznor	XL60-3	AME31G8N31447
		1	Gas Heater	Reznor	XL60-3	AME31G8N31449
		1	Gas Heater	Reznor	XL60-3	AME31G8N31453
		1	Gas Heater	Reznor	XL60-3	AME31G8N31446
		1	Gas Heater	Reznor	XL60-3	AME31G8N31451
		1	Gas Heater	Reznor	XL60-3	AME31G8N31444
		1	Gas Heater	Reznor	XL60-3	Unknown
		1	Gas Heater	Dayton	3E406	C8819338
		1	Gas Heater	Dayton	3E406	C8819345
Veterinary Medicine (Virus Isolation Bldg 4)	1410 PRICE'S FORK ROAD; BLDG 449 BLACKSBURG, VA 24061	1	Gas Heater	Reznor	XL60-3	AME31G8NO1445
		1	Gas Heater	Reznor	XL60-3	AUD3163NO42

VIRGINIA TECH - AGREEMENT HVAC EQUIPMENT LIST

Building	Address	QTY	EQUIPMENT DESCRIPTION	MAKE	MODEL NO.	SERIAL NO.
		1	Gas Heater	Reznor	XL30-3	AKA31G8NO1469
		1	Gas Heater	Reznor	XL30-3	AKA31G8NO1465
		1	Gas Heater	Reznor	XL30-3	AKA31G8NO1470
		1	Gas Heater	Reznor	XL30-3	AKA31G8NO1467
		1	Gas Heater	Reznor	XL30-3	AKA31G8NO1468
		1	Gas Heater	Reznor	XL30-3	AKA31G8NO1466
		1	Gas Heater	Reznor	XL30-3	Unknown
		1	Gas Heater	Modine	PA30-AB	5012011289
		1	Gas Heater	Trane	GPNC003AAB10000	A84E10861
Veterinary Medicine (Poultry Virus Holding)	1410 PRICE'S FORK ROAD; BLDG 146B BLACKSBURG, VA 24061	1	Gas Heater	Dayton	3E406	19343
Visitor and Undergrad Admissions Center	925 PRICE'S FORK ROAD BLACKSBURG, VA 24061	1	Gas Boiler	Lochinvar	KBN601	K10H10162882
		1	Gas Boiler	Lochinvar	KBN601	K10H10162883
		1	Water Heater	AO Smith	BTF80-200	1050M001105
Agronomy Farm	1008-A OLD MILL ROAD BLACKSBURG, VA 24061	1	Gas Boiler	Burnham	4FHW-127A-50-C-PF	Unknown
		1	Heater	Sterling	11QVF075N	Unknown
Poultry Brooder(Hatchery)	543 BEAMER WAY BLACKSBURG, VA 24061	1	Gas Boiler	Columbia	MPH-40	Unknown
Aquatics and Fisheries Research Center	1710 RESEARCH CENTER DRIVE BLACKSBURG, VA 24061	2	Furnace	Reznor	SCB125-6	Unknown
		3	Heater	Dayton	4LX51	Unknown
		1	Heater	Modine	HD100	Unknown
		4	Unit Heater	Reznor	F75-E-3	Unknown
Steger North & South (Bioinformatics Institute)	1015 LIFE SCIENCE CIRCLE SW BLACKSBURG, VA 24061	1	Humidifier	H-1 - NORTEC	Unknown	Unknown
		1	Humidifier	H-2 - NORTEC	Unknown	Unknown

VIRGINIA TECH - AGREEMENT HVAC EQUIPMENT LIST

Building	Address	QTY	EQUIPMENT DESCRIPTION	MAKE	MODEL NO.	SERIAL NO.
		1	Package Gas Heater	Trane	GRAA20GBAEON1BK	Unknown
		1	Package Gas Heater	Trane	GRAA20GBAEON1BK	Unknown
		1	Package Gas Heater	Trane	GRAA20GBAEON1BK	Unknown
		1	Package Gas Heater	Trane	GRAA20GBAEON1BK	Unknown
		1	Package Gas Heater	Trane	GRAA20GBAEON1BK	Unknown
		1	Package Gas Heater	Trane	GRAA20GBAEON1BK	Unknown
		1	Package Gas Heater	Trane	GRAA20GBAEON1BK	Unknown
		1	Package Gas Heater	Trane	GRAA20GBAEON1BK	Unknown
		1	Package Gas Heater	Trane	GRAA20GBAEON1BK	Unknown
		1	Package Gas Heater	Trane	GRAA20GBAEON1BK	Unknown
		1	Package Gas Heater	Trane	GRAA20GBAEON1BK	Unknown
		1	Gas Unit Heater	Sterling	QVEF-100	G02299721001001
		1	Gas Unit Heater	Sterling	QVEF-100	G02299721001002
		1	Gas Unit Heater	Sterling	QVEF-75	G02299721004003
		1	Gas Unit Heater	Sterling	QVEF-75	G02299721004001
		1	Gas Unit Heater	Sterling	QVEF-75	G02299721004002
		1	Gas Unit Heater	Sterling	QVEF-75	G02299721004004
		1	Gas Furnace	York	Unknown	Unknown
Lane Stadium - South End Zone	185 BEAMER WAY BLACKSBURG, VA 24061	1	Gas Boiler	RBI	33DB1950NASSS	30227108
		1	Gas Boiler	RBI	33DB1950NASSS	30227109
		1	Gas Boiler	RBI	33DB1500NASSS	20226981
		1	Gas Heater	Weather-Rite	MD124HHR	Unknown
		1	Water Heater	PVI	1250P900A-TP	202106400
Lane Stadium - West Side	185 BEAMER WAY BLACKSBURG, VA 24061	1	Gas Boiler	Bryan	RV800-W-FDG	92429
		1	Gas Boiler	Bryan	RV800-W-FDG-RC	92435
		1	Water Heater	State	SUE100240NE	F05MOO3574

VIRGINIA TECH - AGREEMENT HVAC EQUIPMENT LIST

Building	Address	QTY	EQUIPMENT DESCRIPTION	MAKE	MODEL NO.	SERIAL NO.
Burrows-Burleson Tennis Pavilion	570 BEAMER WAY BLACKSBURG, VA 24061	1	Gas Furnace	Carrier	58DHC095-LC	3791A07131
		1	Gas Furnace	Carrier	58DHC075-JC	3791A06896
		1	Gas Furnace	Carrier	58SSC075-GC	3591A09506
		1	Water Heater	Rheem	RD400-86A	1091D06244
		1	Water Heater	State	G5650XRRT	A04114704
		1	Radiant Tube Heater	Reznor	TR100-H	Unknown
		1	Radiant Tube Heater	Reznor	TR100-H	Unknown
		1	Radiant Tube Heater	Reznor	TR100-H	Unknown
		1	Radiant Tube Heater	Reznor	TR100-H	Unknown
		1	Radiant Tube Heater	Reznor	TR100-H	Unknown
		1	Radiant Tube Heater	Reznor	TR100-H	Unknown
		1	Radiant Tube Heater	Reznor	TR100-H	Unknown
		1	Radiant Tube Heater	Reznor	TR100-H	Unknown
		1	Radiant Tube Heater	Reznor	TR100-H	Unknown
		1	Radiant Tube Heater	Reznor	TR100-H	Unknown
		1	Radiant Tube Heater	Reznor	TR100-H	Unknown
		1	Radiant Tube Heater	Reznor	TR100-H	Unknown
		1	Radiant Tube Heater	Reznor	TR100-H	Unknown
		1	Radiant Tube Heater	Reznor	TR100-H	Unknown
						Subtotal
Dairy Science						
Farm House	1305 SOUTHGATE DRIVE BLACKSBURG, VA 24091	1	Furnace	Goodman	GMS80905CNBD	Unknown
Residence	654 BEAMER WAY BLACKSBURG, VA 24061	1	Furnace	Heil	NDGG100FD02	L893261087
Residence	1307 SOUTHGATE DRIVE BLACKSBURG, VA 24091	1	Furnace	Heil	NDGG100AF01	H446 98723
Kentland Milking Parlor/Admin Building	6090 DAIRY COMPLEX DRIVE BLACKSBURG, VA 24091	1	Outdoor Heat Pump 1	York	YHJD36S44S4A	W1L4188614
		1	Outdoor Heat Pump 2	York	YHJD42S44S4B	W1M4274089

VIRGINIA TECH - AGREEMENT HVAC EQUIPMENT LIST

Building	Address	QTY	EQUIPMENT DESCRIPTION	MAKE	MODEL NO.	SERIAL NO.
		1	Air Handler 1	York	MV12BN21CB	W1B3477095
		1	Air Handler 2	York	Unknown	Unknown
		1	Hanging Heater	Reznor	UDAS45-S	EBNK799EL29672XTE
		1	Hanging Heater	Reznor	UDAS45-S	Unknown
		1	Water Heater	Bradford White	EF100T1993X2	LK35112884
		1	Water Heater	Bradford White	EF100T1993X3	LK35112881
		1	Water Heater	AO Smith	BPD-75-101	F07A001165
		1	Tube Heater	Space Ray	Unknown	Unknown
						Subtotal
Dining						
Southgate Food Proc.	330 STERRETT DRIVE BLACKSBURG, VA 24061	1	Gas Boiler	Ajax	HNG400	49184
		1	Gas Unit Heater	Modine	PA30AB	Unknown
		1	Gas Unit Heater	Modine	BAH180AF	SP010582
		1	Gas Unit Heater	Modine	BAH180AF	SP010582
		1	Water Heater	PVI	2500-2N500A-TP	98659044
						Subtotal
Auxiliary						
Golf Club House	1085 DUCK POND DRIVE BLACKSBURG, VA 24091	1	Oil Boiler	Weil-McLain	P-WGO-3	3
The Inn at VT	901 PRICE'S FORK ROAD BLACKSBURG, VA 24061	1	Gas Boiler	H.B. Smith	28A-S/W-14	N2004-282
		1	Gas Boiler	H.B. Smith	28A-S/W-14	N2004-281
		1	Hot Water Pumps	Taco	F15013E2LAL1IOA	Unknown
		1	Hot Water Pumps	Taco	F15013E2LAL1IOA	Unknown
		1	Water Heater	PVI	1500 P600A-TP	1203111875
		1	Water Heater	PVI	1500 P600A-TP	1203111874
		1	Humidifier	Armstrong	EHU-703	240021-10-1-04

VIRGINIA TECH - AGREEMENT HVAC EQUIPMENT LIST

Building	Address	QTY	EQUIPMENT DESCRIPTION	MAKE	MODEL NO.	SERIAL NO.
						Subtotal



VIRGINIA TECH

Request for Proposal
Furnace, Boiler & Mechanical Equipment
Full Maintenance Services
RFP # 0055426



RFP Date: March 26, 2018

Addenda Acknowledged: none

Revision Date: August 17, 2018 (Rev2)

Submitted by:

John R. Weeks
Account Executive
Johnson Controls, Inc.
3826 Thirlane Road, Suite 1
Roanoke, VA 24019
Office: 540-561-6160
Mobile: [REDACTED]
Email: john.robert.weeks@jci.com

Presented to:

Virginia Polytechnic Institute & State University
Procurement Department (MC 0333)
North End Center, Suite 2100
300 Turner Street NW
Blacksburg, VA 24061

eVa Registration# [REDACTED]
Vendor# [REDACTED]
Ariba Network ID# [REDACTED]
DUNS# [REDACTED]
VA State Contractor (Class "A") [REDACTED]





April 20, 2018

Virginia Tech
Attn: Kim Briele, Contracts Administrator
Sterrett Facilities Complex
230 Sterrett Drive
Blacksburg, VA 24061

RE: RFP for Furnace, Boiler & Mechanical Equipment Full Maintenance Services

Dear Ms. Briele,

We commend Virginia Tech for giving great consideration to the upkeep of its facilities & equipment, and for ensuring the wellbeing and comfort of its students, faculty & staff. Our main goal is to ensure we help the University remain dedicated to its motto, Ut Prosim – That I May Serve. The systems and the programs you currently have in place, combined with our maintenance solutions, will create better environments and help you save money. Virginia Tech will have access to the best maintenance practices, the most engaging partnership approach, and our total commitment to your vision and goals. We would be honored to earn your business in delivering a comprehensive maintenance program for your furnaces, boilers & mechanical equipment across campus and surrounding locations.

To accomplish this we will provide a comprehensive maintenance program to improve utility and operational savings, efficiency, and reliability, thus extending the lifecycle of your investments in HVAC and mechanical equipment. We have enjoyed a service relationship with Virginia Tech for well over 15 years and have a deep working knowledge of the equipment being covered. Simply put, there is no one better prepared to drive a successful maintenance program. Virginia Tech will benefit from our extensive experience and successful implementation of similar maintenance programs across campus and beyond. Johnson Controls has the resources, capacity and capabilities to maintain all of your equipment in top working order. The University can be assured of having the right partner to deliver the right solutions. Our experienced team, trademark methodologies, and proven track record on similar projects make Johnson Controls uniquely qualified.

The local Johnson Controls Roanoke Branch Office will be responsible for the service delivery program of the listed equipment. Our Roanoke team will manage this project as specified herein with additional resources as required during peak maintenance seasons.

By partnering with Johnson Controls, you enter into a direct relationship with a Fortune 100 company - not a subsidiary or a distributor. You can be sure that our employees will be there to keep our commitments for many years to come.

The key personnel listed below, can answer any questions you might have regarding this solicitation.

Thank you for your consideration.

Sincerely,

John R. Weeks
Account Executive
(540) 521-9752
John.robert.weeks@jci.com

Jim Glover
Service Manager
(540) 521-7472
Raymond.james.glover@jci.com

RFP 0055246
GENERAL INFORMATION FORM

QUESTIONS: All inquiries for information regarding this solicitation should be directed to: Reed Nagel
Phone: (540) 231-5420 e-mail: nagelr@gmail.com

DUE DATE: Proposals will be received until April 20, 2018 at 3:00 PM. Failure to submit proposals to the correct location by the designated date and hour will result in disqualification.

ADDRESS: Proposals should be mailed or hand delivered to: Virginia Polytechnic Institute and State University (Virginia Tech), Procurement Department (MC 0333) North End Center, Suite 2100, 300 Turner Street NW, Blacksburg, Virginia 24061. Reference the due date and hour, and RFP Number in the lower left corner of the return envelope or package.

Please note that USPS is delivered to a central location and is not delivered directly to Procurement. Allow extra time if sending proposal via USPS. It is the vendor's responsibility to ensure proposals are received in the Procurement office at the appropriate date and time for consideration.

PRE-PROPOSAL CONFERENCE: A pre-proposal conference will be held on April 2, 2018 at 9:00am. See section X, Pre-proposal Conference for additional information.

TYPE OF BUSINESS: (Please check all applicable classifications). If your classification is certified by the Virginia Department of Small Business and Supplier Diversity (SBSD), provide your certification number: _____. For assistance with SWaM certification, visit the SBSB website at <http://sbsd.virginia.gov/>.

Large

Small business – An independently owned and operated business which, together with affiliates, has 250 or fewer employees or average annual gross receipts of \$10 million or less averaged over the previous three years. Commonwealth of Virginia Department of Small Business and Supplier Diversity (SBSD) certified women-owned and minority-owned business shall also be considered small business when they have received SBSB small business certification.

Women-owned business – A business concern that is at least 51% owned by one or more women who are U. S. citizens or legal resident aliens, or in the case of a corporation, partnership, or limited liability company or other entity, at least 51% of the equity ownership interest is owned by one or more women who are citizens of the United States or non-citizens who are in full compliance with the United States immigration law, and both the management and daily business operations are controlled by one or more women who are U. S. citizens or legal resident aliens.

Minority-owned business – A business concern that is at least 51% owned by one or more minority individuals (see Section 2.2-1401, Code of Virginia) or in the case of a corporation, partnership, or limited liability company or other entity, at least 51% of the equity ownership interest in the corporation, partnership, or limited liability company or other entity is owned by one or more minority individuals and both the management and daily business operations are controlled by one or more minority individuals.

COMPANY INFORMATION/SIGNATURE: In compliance with this Request for Proposal and to all the conditions imposed therein and hereby incorporated by reference, the undersigned offers and agrees to furnish the goods or services in accordance with the attached signed proposal and as mutually agreed upon by subsequent negotiation.

FULL LEGAL NAME (PRINT) (Company name as it appears with your Federal Taxpayer Number) Johnson Controls, Inc.		FEDERAL TAXPAYER NUMBER (ID#) <div style="background-color: black; width: 100px; height: 15px;"></div>	
BUSINESS NAME/DBA NAME/TA NAME (If different than the Full Legal Name)		BILLING NAME (Company name as it appears on your invoice) Johnson Controls, Inc.	
PURCHASE ORDER ADDRESS 3826 Thirlane Road, Suite 1 Roanoke, VA 24019		PAYMENT ADDRESS PO Box 730068 Dallas, TX 75373	
CONTACT NAME/TITLE (PRINT) John R. Weeks			E-MAIL ADDRESS john.robert.weeks@jci.com
TELEPHONE NUMBER 540-521-9752	TOLL FREE TELEPHONE NUMBER 540-561-6160	FAX NUMBER TO RECEIVE E-PROCUREMENT ORDERS 540-561-6556	

I acknowledge that I have received the following addendums posted for this solicitation.

1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ (Please check all that apply)

Is any member of the firm an employee of the Commonwealth of Virginia who has a personal interest in this contract pursuant to the Code of Virginia, 2.2 – 3102 - 3112

YES _____ NO X

SIGNATURE John R. Weeks Date: 04/20/2018

Revised 01/01/2018

TABLE OF CONTENTS

A. Cover Letter	i
B. General Information Form	ii
Required Proposal Information.....	3
Methodology for On-Going Maintenance Services (including PM equipment list & proposal)	3
Listing of Qualifications	45
<i>Company Awards and Recognition</i>	45
<i>Leadership</i>	45
<i>Diversity</i>	45
<i>Financial Qualifications and Stability</i>	47
<i>Bonding</i>	47
<i>Insurance Requirements</i>	48
<i>Technician Resumes</i>	49
Professional References	52
Firm Overview.....	54
Pricing.....	58

Appendix

APPENDIX A: SAMPLE SERVICE TICKETS
SAMPLE PM TASKING SHEETS



Improving Comfort + Efficiency + Reliability

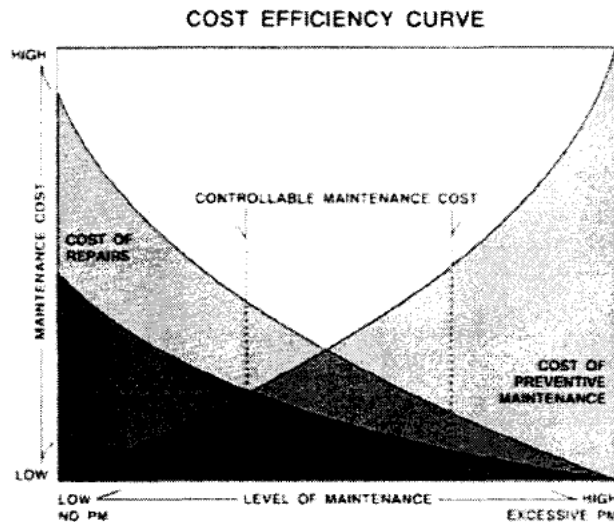


Methodology for On-Going Maintenance Services

Johnson Controls Service delivers the technical engineering solutions, which improve the reliability and efficiency of plants and systems. Through planned preventive maintenance regimes and new technology, such as remote monitoring, we deliver the optimum working environment, while also reducing maintenance costs and complying with statutory regulations and compliance.

Looking to the future- Optimizing your Maintenance Approach

The objective of maintenance optimization is to develop a sustainable maintenance program that will extend asset life and reduce overall facility operations costs.

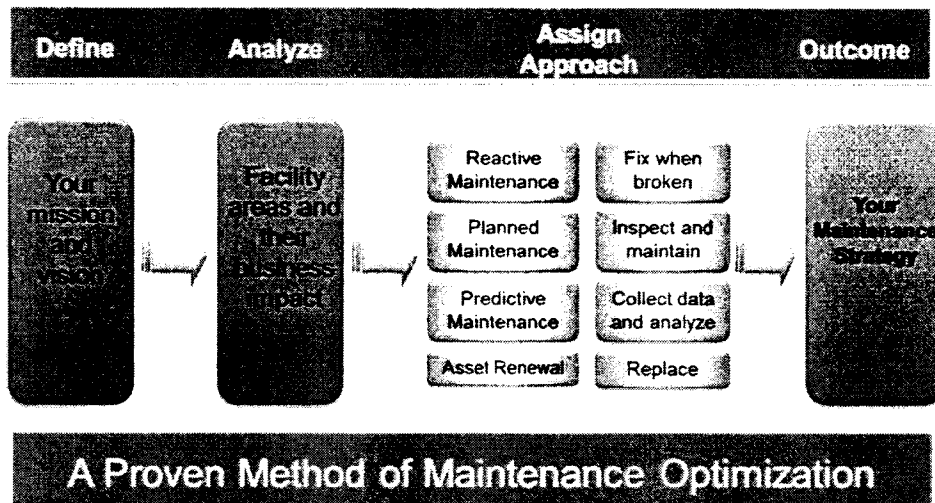


Studies have shown that optimizing your maintenance approach allows you to minimize repair costs & downtime and maximize the value of your preventive maintenance.

Maintenance optimization is achieved by applying the right level of maintenance to equipment, based on its age, condition and criticality to the facility, and the investment you've made in that equipment.



Improving Comfort + Efficiency + Reliability



Defining your facility mission and vision

- What are the goals and objectives of the enterprise?
- How does the facility support those enterprise goals and objectives?
- Establish performance metrics in areas that are critical to this support. Consider:
 - Maintenance cost
 - Equipment performance
 - Occupant comfort/satisfaction
 - Uptime/downtime/reliability
 - Mean time between failures /mean time to repair
 - Safety
- Establish metrics up front and evaluate on monthly or bi-monthly basis

Analyze your facility

- Identify critical areas. Consider impact of downtime on:
 - Enterprise goals/objectives and financial performance
 - Health and safety of occupants
 - Image and reputation
- Assess facility's energy and sustainability profile
 - What is the current energy performance of the building? Can it be improved?
 - What impact does the building have on the environment?
- Identify assets
 - What equipment do you have?
 - What is the age and condition of that equipment?
 - What areas does it serve?
 - What are current expenses for maintenance and repairs?
- Assess the risk profile of each asset. Consider:
 - Redundancy – if you have a backup, it lowers your risk

Improving Comfort + Efficiency + Reliability

- Cost of secondary damage – the higher the costs of secondary damage on failed equipment, the greater the risk impact of failure.
- Condition and age of machine – old or poorly maintained equipment carries higher risk because the chances of failure are higher.
- Availability of repair parts – finding parts for older machinery can be difficult, so broken equipment is more costly and time consuming to repair.
- Equipment environment and application – equipment in a harsh or dirty environment (such as outdoor cooling towers) wears out more quickly, which increases the risk of failure.
- Assign a maintenance approach

Based on your assessment, assign a maintenance strategy to each piece of equipment:

- Reactive maintenance
 - What is it? Fixing equipment only when it fails
 - When to use it? Can be more cost-effective for small, non-critical systems where failures are inexpensive and have few negative consequences
 - Disadvantages
 - Can lead to downtime and secondary damage on more complex systems
 - Will cost more overall for larger systems and critical equipment
 - May cause health and safety hazards
- Planned maintenance
 - What is it? Performing inspections and maintenance on scheduled basis to identify needed repairs
 - Why use it? Use on medium to large systems to minimize unplanned downtime and repair costs
 - Disadvantages
 - May be higher cost than reactive maintenance on smaller, non-critical systems
 - If maintenance schedule not properly tailored to condition or use of equipment, it can lead to over- or under-maintenance
 - May not catch all issues before failure
- Predictive maintenance
 - What is it? Tests that evaluate condition of equipment
 - Why use it? Use in conjunction with planned maintenance on critical systems or large/expensive equipment, where unscheduled downtime will be costly or impact mission of the organization
 - Disadvantages
 - Can lead to higher overall costs for smaller or non-critical systems
- Asset renewal
 - What is it? Replacing existing equipment with newer version
 - Why use it? In cases where organization is incurring significant repair costs, due to age and condition of equipment
 - Replacement can also provide secondary benefits like reduced energy consumption, occupant comfort
 - Disadvantages
 - May be more disruptive than other maintenance approaches



Improving Comfort + Efficiency + Reliability

- Typically a capital expense, rather than operational, which may require budgeting in advance or more stringent approvals

Outcome = optimized maintenance

Benefits:

- Reduced unscheduled downtime
- Reduced maintenance costs
- Reduced energy costs
- Extension in equipment life

Continue to monitor, refine performance metrics

Refine program over time by:

- Continuing to prioritize areas and equipment
- Focusing on repeat offenders and addressing root cause(s) of problems

Why us?

We are Extremely Competent: As a leader in providing HVAC systems and services, Johnson Controls is extremely capable to provide the County with an HVAC program that meets your needs. Most notably, we have an outstanding record of service nationally and locally from our more than 160 service branch offices. In addition, we have teams throughout the Region that are familiar with the process and procedures of working with local government facilities. Finally, we have a corporate commitment to create a more comfortable, safe and sustainable world, which parallels the intent of this RFP and the goals of the County.

We share common core values, in that we strive to exceed our customer's increasing expectations just as the county is dedicated to its citizens.

We feel that the qualifications highlighted below, among others in the body of this document, distinctly define why we are the best services provider.

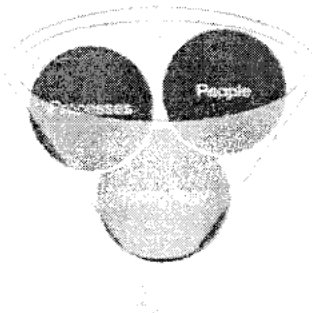
- Johnson Controls is one of the largest Mechanical and Controls Service Companies in the world. **We are the manufacturer of York HVAC equipment and Metasys Controls systems.**
- We have access to engineering resources no other company can match. This means you can expect a higher degree of factory-level expertise, responsiveness and safety
- We have the largest chiller vibration signature database in the world with over 500,000 signatures. This provides you with more representative signature comparisons to improve asset life and minimize downtime interruptions (no implementation costs – included in our Planned Service Agreement PSA)
- Our truck-based services are 100% company owned and operated, and have expanded to more than 160 branch locations and thousands of front-line service providers nationwide.
- Our latest technology deployment is Connected Chillers. All microprocessor-based York chillers can be connected to our Remote Operations Center and monitored 24/7. This information will better prepare our chiller technicians during their service visits and alert them during abnormal operating conditions.
- Johnson Controls Service Information Portal tool (Optional): Through the Johnson Controls customer portal, CBRE -County assigned personnel can access information related to their building(s) and service jobs, including details about service history, service requests, agreements, and invoices.



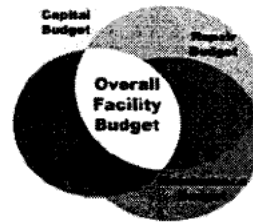
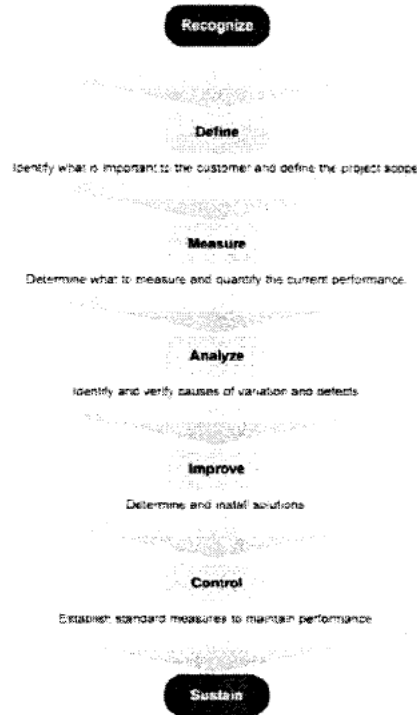
Improving Comfort + Efficiency + Reliability

- Our technicians are fully trained professionals, qualified to work on all manufacturers' equipment and CFC Certified - will service all refrigerants
- Our Johnson Controls Institute has been praised as one of the top training institutions in the corporate sector.
- We have extensive experience in servicing higher educational institutes and government markets.

Our investment in our people, processes, technology form the foundation of our service delivery, allowing us to meet and exceed our customers' needs in a safe environment. Our overall philosophy is focused on understanding our customer's objectives, developing solutions and delivering results that impact all facility budgets.



Johnson Controls



In Summary

Johnson Controls stands ready to develop a long lasting relationship with Rockbridge County in a way that will provide increased value relative to both companies and to the services provided. We will leverage our knowledge of similar portfolios, existing technology platforms, new technologies, continuous improvement processes, and cost containment / reduction opportunities that will exceed your goals and objectives.

We welcome the opportunity to sit down and work closely with CBRE to discuss ways to control and reduce the cost of ownership throughout the term of this agreement.



Executive Summary

PLANNED SERVICE PROPOSAL FOR VIRGINIA TECH

Dear Ms. Briele,

We value and appreciate your interest in Johnson Controls as a service provider for your building systems and are pleased to provide a value-driven maintenance solution for your facility. The enclosed proposal outlines the Planned Service Agreement we have developed on your facility.

Details are included in the Planned Service Agreement summary (Schedule A), but highlights are as follows:

- In this proposal we are offering a service agreement for 5 Years with up to 5, 1-year renewals for a total term of 10 years starting _____ and ending _____
- The agreement price for first year is \$160,050.00; see Schedule A, Supplemental Price and Payment Terms, for pricing in subsequent years
- The equipment options and number of visits being provided for each piece of equipment are described in Schedule A, Equipment list.

As a manufacturer of both mechanical and controls systems, Johnson Controls has the expertise and resources to provide proper maintenance and repair services for your facility.

Again, thank you for your interest in Johnson Controls and we look forward to becoming your building technology services partner.

Please contact me if you have any questions.

Sincerely,

John Weeks
Acct Exec Owner
(540) 521-9752



Improving Comfort + Efficiency + Reliability

Service Plan Methodology

As part of the delivery of this Planned Service Agreement, Johnson Controls will dedicate a local customer service agent responsible for having a clear understanding of the agreement scope, and your facility procedures and protocols.

A high-level overview around our service delivery process is outlined below including scheduling, emergency service, on-site paperwork, communication and performing repairs outside of the agreement scope.

Scheduling

Preventative maintenance service will be scheduled using our automated service management system. In advance of the scheduled service visit, our technician is sent a notice of service to a smartphone. Once the technician acknowledges the request, your customer service agent will call or e-mail your on-site contact to let you know the start date and type of service scheduled.

The technician checks in, wears personal protective equipment, performs the task(s) as assigned, checks out with you and asks for a screen capture signature on the smartphone device. A work order is then e-mailed, faxed or printed for your records.

Emergency Services

Emergency service can be provided 7 days a week, 24 hours a day, 365 days a year. During normal business hours, emergency service will be coordinated by the customer service agent. After hours, weekends and holidays, the emergency service number transfers to the Johnson Controls after-hours call center and on-call technicians are dispatched as needed.

Johnson Controls is committed to dispatching a technician within hours of receiving your call through the service line. A work order is e-mailed, faxed or printed for your records. Depending on the terms of your agreement, you may incur charges for after hour services.

Communication

A detailed communication plan will be provided to you so you know how often we will provide information to you regarding your Planned Service Agreement. The communication plan will also provide you with your main contacts at Johnson Controls.

Approval Process for Non-Covered Items

Johnson Controls will adhere to your procurement process. No work will be performed outside of the agreement scope without prior approval. Johnson Controls will work with you closely to ensure your procurement process is followed before any non-covered item work is started.



Summary of Services and Options

Comprehensive and Operational Inspections

During comprehensive and operational inspections, Johnson Controls will perform routine checks of the equipment for common issues caused by normal wear and tear on the equipment. Additional tests can be run to confirm the equipment's performance.

Routine maintenance, such as lubrication, cleaning and tightening connections, can be performed depending on the type of equipment being serviced. Routine maintenance is one of the keys to the five values of maintenance – it can help identify energy saving opportunities, reduce future repair costs, extend asset life, ensure productive environments, and promote health and safety.

Boiler Tube Brushing

Boiler heat transfer surfaces must be kept clean to provide for safe and economical boiler operation. During boiler operation deposits such as soot and scale can accumulate on boiler tubes, causing a loss in efficiency due to reduced heat transfer. This includes capacity reduction and high draft losses. Corrosive elements are often present in the scale, increasing the probability of tube failure. Extreme cases of boiler tube blockage can also create a safety or fire hazard. Johnson Controls technicians will brush the tubes, cleaning these surfaces. This improves heat transfer, optimizes efficiency, and reduces potential corrosion and safety issues. This service does not include chemical treatment required to control or eliminate biohazards such as Legionella unless chemical water treatment services have been added as a separate option.



Improving Comfort + Efficiency + Reliability

Summary

Thank you for considering Johnson Controls as your building technology services partner. The following agreement document includes all the details surrounding your Planned Service Agreement.

With planned service from Johnson Controls, you'll get a value-driven solution that can help optimize your building controls and equipment performance, providing dependability, sustainability and energy efficiency. You'll get a solution that fits your specific goals, delivered with the attention of a local service company backed by the resources of a global organization.

We'll be your building technology services partner



Improving Comfort + Efficiency + Reliability

Planned Service Agreement

Customer Name : VT STERRETT FACILITY COMPLEX
Address: 230 STERRETT DR BLACKSBURG, VA 24061-1031
Proposal Date: 04/20/2018
Estimate #: 1-T8NOB6G

Scope of Service

Johnson Controls, Inc. ("JCI") and the Customer (collectively the "Parties") agree Preventative Maintenance Services, as defined in Schedule A ("Services"), will be provided by JCI at the Customer's facility. This Planned Service Agreement, the Equipment List, Supplemental Price and Payment Terms, Terms and Conditions, and Schedules attached hereto and incorporated by this reference as if set forth fully herein (collectively the "Agreement"), cover the rights and obligations of both the Customer and JCI.

Extended Service Options for Premium Coverage

If Premium Coverage is selected, on-site repair services to the equipment will be provided as specified in this Agreement for the equipment listed in the attached Equipment List.

Equipment List

Only the equipment listed in the Equipment List will be covered as part of this Agreement. Any changes to the Equipment List must be agreed upon in writing by both Parties.

Term / Automatic Renewal

This Agreement takes effect on _____ and will continue until _____ ("Original Term"). The Agreement will automatically renew on a year-to-year basis after the Original Term ends unless the Customer or JCI gives the other written notice it does not want to renew. The notice must be delivered at least (45) days prior to the end of the Original Term or of any renewal period. The Original Term and any renewal periods are sometimes collectively referred to in this Agreement as the "Term". Renewal price adjustments are discussed in the Terms and Conditions.

Refrigerant Charges

Refrigerant is not included under this Agreement and will be billed separately to the Customer by JCI as applicable.



Improving Comfort + Efficiency + Reliability

Price and Payment Terms

The total Contract Price for JCI's Services during the 1st year of the Original Term is \$ 160,050.00. This amount will be paid to JCI in Annual installments. Pricing for each subsequent year of a multiyear original term is set forth in the Supplemental Price and Payment Terms. All payments will be due and payable within 30 days of the invoice date and such timely payment by Customer shall be a condition precedent to JCI's obligation to perform its Services. A penalty of one and a half percent (1.5%) of the amount due per month shall accrue for payments received after the payment due date. Renewal price adjustments are set forth in the Terms and Conditions.

Invoices will be sent to the following location:

VIRGINIA TECH UNIVERSITY
ATTN ACCOUNTS PAYABLE
201 SOUTHGATE CENTER
MAILCODE 0312
BLACKSBURG, VA 24061

- In lieu of paper invoices sent to the location above, invoices should be emailed to the following email address: _____

This proposal is valid for thirty days from the proposal date.

JOHNSON CONTROLS Inc.

By: John Weeks

By: _____

Signature: _____

Signature: _____

Title: Acct Exec Owner

Date: _____

Title: _____

Date: _____

Signature: _____

Customer PO#: _____

Title: _____

Date: _____

JCI Branch: JOHNSON CONTROLS ROANOKE VA CB - 0N34

Address: 3826 THIRLANE RD NW, SUITE 1

ROANOKE, VA 24019

Branch Phone: (866) 825-8870



© 2018 Johnson Controls - CUSTOMER CONFIDENTIAL
Do not copy (physically, electronically, or in any other media) without the express written permission of Johnson Controls

Request for Proposal
Virginia Tech
Furnace, Boiler & Mechanical Equipment
Full Maintenance Services

Improving Comfort + Efficiency + Reliability

Schedule A - Equipment List

VT ALPHIN STUART ARENA	BLACKSBURG, VA 24060
-------------------------------	-----------------------------

Furnace, All

Quantity: 2
 Coverage Level: Premium
 Equipment: Furnace
 Style: All
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset

Manufacturer

Model

Serial

Reznor

ACUB120

BDB-01477

Heater, Gas Infrared-All

Quantity: 4
 Coverage Level: Premium
 Equipment: Heater
 Style: Gas Infrared-All
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset

Manufacturer

Model

Serial

Reznor

VR75

UNKNOWN

Split System, Cooling with Electric Heat, <7.5 Tons

Quantity: 2
 Coverage Level: Premium
 Equipment: Split System
 Style: Cooling with Electric Heat
 Type: <7.5 Tons
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Electric Heating Comprehensive
 2 Operational (Mid Season -
 Cooling/Heating)
 1 Cooling Comprehensive
 4 Return Air Filter Change

Asset

Manufacturer

Model

Serial

Trane

TTA090A400FA

3474YF1AD

Unit Heater, Gas Fired, <300000 BTU

Quantity: 1
 Coverage Level: Premium
 Equipment: Unit Heater

Services Provided

1 Comprehensive



© 2016 Johnson Controls - CUSTOMER CONFIDENTIAL
 Do not copy (physically, electronically, or in any other media) without the express
 written permission of Johnson Controls

Request for Proposal
 Virginia Tech
 Furnace, Boiler & Mechanical Equipment
 Full Maintenance Services

Improving Comfort + Efficiency + Reliability

VT ALPHIN STUART ARENA		BLACKSBURG, VA 24060	
Style:	Gas Fired		
Type:	<300000 BTU		
Size:	NA		
Year to Be Activated:	Year 1		
Year to Be Inactivated:	Year 2		
Asset #	Manufacturer	Model #	Serial #
	Trane	GPN004AAF1000D	F03L40505

Water Heater, Gas, 150-300GAL		Services Provided	
Quantity:	1	1	Comprehensive
Coverage Level:	Premium		
Equipment:	Water Heater		
Style:	Gas		
Type:	150-300GAL		
Size:	NA		
Year to Be Activated:	Year 1		
Year to Be Inactivated:	Year 2		
Asset #	Manufacturer	Model #	Serial #
	AO Smith	BTH120970	ML030015608

VT ARCHITECTURE RESEARCH FACILITY		BLACKSBURG, VA 24061	
Boiler, Gas-Fired, Fire Tube, 51-150 HP		Services Provided	
Quantity:	1	1	Comprehensive
Coverage Level:	Premium		
Equipment:	Boiler		
Style:	Gas-Fired		
Type:	Fire Tube		
Size:	51-150 HP		
Year to Be Activated:	Year 1		
Year to Be Inactivated:	Year 2		
Asset #	Manufacturer	Model #	Serial #
	HB Smith	G220-S/W-10 HIS	R9150

Unit Heater, Gas Fired, <300000 BTU		Services Provided	
Quantity:	7	1	Comprehensive
Coverage Level:	Premium		
Equipment:	Unit Heater		
Style:	Gas Fired		
Type:	<300000 BTU		
Size:	NA		
Year to Be Activated:	Year 1		
Year to Be Inactivated:	Year 2		



© 2018 Johnson Controls - CUSTOMER CONFIDENTIAL
Do not copy (physically, electronically, or in any other media) without the express written permission of Johnson Controls

Request for Proposal
Virginia Tech
Furnace, Boiler & Mechanical Equipment
Full Maintenance Services

Improving Comfort + Efficiency + Reliability

VT ARCHITECTURE RESEARCH FACILITY		BLACKSBURG, VA 24061	
--	--	-----------------------------	--

Asset #	Manufacturer	Model #	Serial #
	Modine	BAESOAC	UNKNOWN

VT BROOKS FOREST PRODUCTS CENTER		BLACKSBURG, VA 24061-1072	
---	--	----------------------------------	--

Boiler, Electric, Water Tube, <50 HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Electric
 Type: Water Tube
 Size: <50 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Chromalox	CES-24	N-8045-W81

Expansion Tank

Quantity: 1
 Coverage Level: Premium
 Equipment: Expansion Tank
 Style: NA
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Operational

Asset #	Manufacturer	Model #	Serial #
		5C-24-100-36H	85008



Improving
Comfort + Efficiency + Reliability

VT BURRUSS HALL	BLACKSBURG, VA 24061-1052
------------------------	----------------------------------

Boiler, Electric, Water Tube, <50 HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Electric
 Type: Water Tube
 Size: <50 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Latner	57511W	53861

VT DRY RENDERING FACILITY	BLACKSBURG, VA 24061-1007
----------------------------------	----------------------------------

Water Heater, Gas, 150-300GAL

Quantity: 1
 Coverage Level: Premium
 Equipment: Water Heater
 Style: Gas
 Type: 150-300GAL
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Lochinvar Corporation	SNA285-125	JO9C10121203

VT GEOTECHNICAL RESEARCH LAB	BLACKSBURG, VA 24061-1014
-------------------------------------	----------------------------------

Furnace, All

Quantity: 3
 Coverage Level: Premium
 Equipment: Furnace
 Style: All
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Reznor	SC175-6-2	UNKNOWN



Improving Comfort + Efficiency + Reliability

VT GEOTECHNICAL RESEARCH LAB	BLACKSBURG, VA 24061-1014
-------------------------------------	----------------------------------

Split System, Cooling Only, 7.5-15 Tons

Quantity: 3
 Coverage Level: Premium
 Equipment: Split System
 Style: Cooling Only
 Type: 7.5-15 Tons
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

3 Operational (Mid Season - Cooling Only)
 1 Cooling Comprehensive

Asset #

Manufacturer

Model #

Serial #

Trane

TTA120B300DA

23346W5AD

Water Heater, Gas, 150-300GAL

Quantity: 1
 Coverage Level: Premium
 Equipment: Water Heater
 Style: Gas
 Type: 150-300GAL
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset #

Manufacturer

Model #

Serial #

Bradford White

RG240S6N

PB38976200

VT GREENHOUSE #6	BLACKSBURG, VA 24061-1011
-------------------------	----------------------------------

Unit Heater, Gas Fired, <300000 BTU

Quantity: 4
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: <300000 BTU
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset #

Manufacturer

Model #

Serial #

Trane

GTAB-0220S1

J82B-03144



Improving
Comfort + Efficiency + Reliability

VT GREENHOUSE COMPLEX STR. BLDG	BLACKSBURG, VA 24061-0001
--	----------------------------------

Unit Heater, Gas Fired, <300000 BTU

Quantity: 2
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: <300000 BTU
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Dayton	4LX48A	UNKNOWN

VT GROUNDS BUILDING	BLACKSBURG, VA 24061-1030
----------------------------	----------------------------------

Boiler, Gas-Fired, Water Tube, 51-150 HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: 51-150 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Burnham Commercial	V-907	7596781

VT THE GROVE	BLACKSBURG, VA 24061
---------------------	-----------------------------

Boiler, Gas-Fired, Water Tube, 51-150 HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: 51-150 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	HB Smith	19A, SERIES S/W-5	FA2000-320P



Improving
Comfort + Efficiency + Reliability

VT HEALTH & SAFETY BUILDING	BLACKSBURG, VA 24061-0001
--	----------------------------------

Boiler, Gas-Fired, Water Tube, 51-150 HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: 51-150 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Burnham Commercial	V-910	7590636

VT HENDERSON HALL	BLACKSBURG, VA 24061-0001
--------------------------	----------------------------------

Boiler, Gas-Fired, Water Tube, 51-150 HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: 51-150 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Weil Mclain	1788	UNKNOWN

VT ICTAS II	BLACKSBURG, VA 24061-1016
--------------------	----------------------------------

Heat Exchanger-All

Quantity: 1
 Coverage Level: Premium
 Equipment: Heat Exchanger-All
 Style: NA
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Cemline	H120USG1060	24-X-63



Improving Comfort + Efficiency + Reliability

VT INFECTIOUS DISEASE RESEARCH FACILITY

BLACKSBURG, VA 24061-1007

Boiler, Gas-Fired, High Efficiency, >10 HP

Quantity: 3
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: High Efficiency
 Size: >10 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset #

Manufacturer

Model #

Serial #

AERCO

MLX-757

757-09-0181

Water Heater, Gas, <150GAL

Quantity: 2
 Coverage Level: Premium
 Equipment: Water Heater
 Style: Gas
 Type: <150GAL
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset #

Manufacturer

Model #

Serial #

AO Smith

BTH150A100

1121M002111

VT INCINERATOR

BLACKSBURG, VA 24060-3836

Unit Heater, Gas Fired, <300000 BTU

Quantity: 1
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: <300000 BTU
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset #

Manufacturer

Model #

Serial #

Reznor

UDAP100

UNKNOWN



Improving
Comfort + Efficiency + Reliability

VT MATERIAL MANAGEMENT	BLACKSBURG, VA 24061-0001
-------------------------------	----------------------------------

Boiler, Gas-Fired, High Efficiency, >10 HP

Quantity: 2
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: High Efficiency
 Size: >10 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Knight	KBN500	D10H10127694

VT MINING & MINERALS LAB	BLACKSBURG, VA 24060
-------------------------------------	-----------------------------

Furnace, All

Quantity: 1
 Coverage Level: Premium
 Equipment: Furnace
 Style: All
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Hasting	CF-40-G21	52091

Unit Heater, Gas Fired, 300000-600000 BTU

Quantity: 4
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: 300000-600000 BTU
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Trane	GPND0004AD	F06K41273



Improving Comfort + Efficiency + Reliability

VT MOORE HOUSE (PSYCHOLOGICAL SERVICES CENTER)	BLACKSBURG, VA 24060-3728
---	----------------------------------

Boiler, Gas-Fired, Water Tube, 51-150 HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: 51-150 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	HB Smith	GB100-W-121NTD	GB2001-1913

VT PARKING SERVICES	BLACKSBURG, VA 24061-0001
----------------------------	----------------------------------

Boiler, Gas-Fired, Water Tube, <50HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: <50HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Burnham Commercial	FD/10	34000715

VT PLANT PATHOLOGY BUILDING	BLACKSBURG, VA 24061-1017
------------------------------------	----------------------------------

Boiler, Gas-Fired, Water Tube, <50HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: <50HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	National-US Radiator	0-4102	137255



© 2018 Johnson Controls - CUSTOMER CONFIDENTIAL
 Do not copy (physically, electronically or in any other media) without the express written permission of Johnson Controls

Request for Proposal
 Virginia Tech
 Furnace, Boiler & Mechanical Equipment
 Full Maintenance Services

Improving
Comfort + Efficiency + Reliability

VT PLANT PATHOLOGY BUILDING	BLACKSBURG, VA 24061-1017
------------------------------------	----------------------------------

Water Heater, Gas, <150GAL

Quantity: 1
 Coverage Level: Premium
 Equipment: Water Heater
 Style: Gas
 Type: <150GAL
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Rheem	G75-125	URNG 1199G00954

VT SOLITUDE	BLACKSBURG, VA 24061-1038
--------------------	----------------------------------

Boiler, Gas-Fired, Water Tube, <50HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: <50HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Weil Mclain	CG1-8PIN	UNKNOWN

VT SOUTH GATE ADDITION (PUBLIC SAFETY)	BLACKSBURG, VA 24061-1033
---	----------------------------------

Boiler, Gas-Fired, Water Tube, <50HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: <50HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Peerless	TC-04	NO SERIAL#



Improving Comfort + Efficiency + Reliability

VT SW CHILLER PLANT	BLACKSBURG, VA 24061-0001
----------------------------	----------------------------------

Boiler, Gas-Fired, Water Tube, 51-150 HP

Quantity: 2
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: 51-150 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Bryan Boilers	EB-150-W-4T11	99439

VT STERRETT FACILITY COMPLEX	BLACKSBURG, VA 24061-1031
-------------------------------------	----------------------------------

Boiler, Gas-Fired, Water Tube, 51-150 HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: 51-150 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	HB Smith	28A-S/W-10	N2003-1071

VT STRUCTURES & MATERIALS LAB	BLACKSBURG, VA 24061-1015
--	----------------------------------

Furnace, All

Quantity: 2
 Coverage Level: Premium
 Equipment: Furnace
 Style: All
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Trane	TDD120C960B0	UNKNOWN



Improving Comfort + Efficiency + Reliability

VT STRUCTURES & MATERIALS LAB	BLACKSBURG, VA 24061-1015
--	----------------------------------

Unit Heater, Gas Fired, 300000-600000 BTU

Quantity: 7
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: 300000-600000 BTU
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Dayton	3E3690	Q8959137

VT VETERINARY MEDICINE (IDU ON PRICES FORK)	BLACKSBURG, VA 24060-3831
--	----------------------------------

Boiler, Gas-Fired, Fire Tube, 151-300 HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Fire Tube
 Size: 151-300 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive
 1 Tube Brushing (Fire Tube - Gaskets not included)

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Superior Boiler	#4-5304	12123

Boiler, Gas-Fired, Water Tube, 51-150 HP

Quantity: 2
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: 51-150 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Columbia Boiler	146769	156789

Unit Heater, Gas Fired, <300000 BTU

Quantity: 1
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: <300000 BTU

Services Provided
 1 Comprehensive



Improving
Comfort + Efficiency + Reliability

VT VETERINARY MEDICINE (IDU ON PRICES FORK)	BLACKSBURG, VA 24060-3831		
Size: NA Year to Be Activated: Year 1 Year to Be Inactivated: Year 2			
Asset #	Manufacturer Dayton	Model # UNKNOWN	Serial # UNKNOWN

Water Heater, Gas, 150-300GAL		Services Provided	
Quantity: 1 Coverage Level: Premium Equipment: Water Heater Style: Gas Type: 150-300GAL Size: NA Year to Be Activated: Year 1 Year to Be Inactivated: Year 2		1	Comprehensive
Asset #	Manufacturer Pvi Industries Inc	Model # 40P250AG	Serial # 508124502

VT VETERINARY MEDICINE (HOS BUILDING)	BLACKSBURG, VA 24060-3831		
Unit Heater, Gas Fired, 300000-600000 BTU		Services Provided	
Quantity: 1 Coverage Level: Premium Equipment: Unit Heater Style: Gas Fired Type: 300000-600000 BTU Size: NA Year to Be Activated: Year 1 Year to Be Inactivated: Year 2		1	Comprehensive
Asset #	Manufacturer Reznor	Model # XL60-3	Serial # AME31G8N31452



© 2018 Johnson Controls - CUSTOMER CONFIDENTIAL
Do not copy (physically, electronically, or in any other media) without the express written permission of Johnson Controls

Request for Proposal
Virginia Tech
Furnace, Boiler & Mechanical Equipment
Full Maintenance Services

Improving
Comfort + Efficiency + Reliability

VT VETERINARY MEDICINE (CMMID)	BLACKSBURG, VA 24060-3831
---------------------------------------	----------------------------------

Boiler, Gas-Fired, Water Tube, <50HP

Quantity: 5
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: <50HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Bryan Boilers	CLM150-S-150FDG	97874

VT VETERINARY MEDICINE (POULTRY VIRUS A)	BLACKSBURG, VA 24060-3831
---	----------------------------------

Furnace, All

Quantity: 1
 Coverage Level: Premium
 Equipment: Furnace
 Style: All
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Heil	NTC61100KFA1	L9823 44523

VT VETERINARY MEDICINE (POULTRY VIRUS B)	BLACKSBURG, VA 24060-3831
---	----------------------------------

Furnace, All

Quantity: 1
 Coverage Level: Premium
 Equipment: Furnace
 Style: All
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Heil	NUGE125LH82	L912920865



Improving
Comfort + Efficiency + Reliability

VT VETERINARY MEDICINE (POULTRY VIRUS C)	BLACKSBURG, VA 24060-3831
---	----------------------------------

Furnace, All

Quantity: 1
 Coverage Level: Premium
 Equipment: Furnace
 Style: All
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset #

Manufacturer

Model #

Serial #

Heil

NUGE125LH32

L922236069

VT VETERINARY MEDICINE (AQUATIC MEDICINE LAB)	BLACKSBURG, VA 24060-3831
--	----------------------------------

Unit Heater, Gas Fired, <300000 BTU

Quantity: 1
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: <300000 BTU
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset #

Manufacturer

Model #

Serial #

Dayton

3E368E

E02G002995

VT VETERINARY MEDICINE (VIRUS ISOLATION BLDG 2)	BLACKSBURG, VA 24060-3831
--	----------------------------------

Boiler, Gas-Fired, Water Tube, <50HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: <50HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset #

Manufacturer

Model #

Serial #

39713

UNKNOWN

Unit Heater, Gas Fired, <300000 BTU



© 2018 Johnson Controls - CUSTOMER CONFIDENTIAL
 Do not copy (physically, electronically, or in any other media) without the express written permission of Johnson Controls

Request for Proposal
 Virginia Tech
 Furnace, Boiler & Mechanical Equipment
 Full Maintenance Services

Improving
Comfort + Efficiency + Reliability

VT VETERINARY MEDICINE (VIRUS ISOLATION BLDG 2)	BLACKSBURG, VA 24060-3831		
Quantity: 2 Coverage Level: Premium Equipment: Unit Heater Style: Gas Fired Type: <300000 BTU Size: NA Year to Be Activated: Year 1 Year to Be Inactivated: Year 2	Services Provided 1 Comprehensive		
Asset #	Manufacturer Trane	Model # HMG200HS VSPG11N	Serial # UNKNOWN

VT VETERINARY MEDICINE (VIRUS ISOLATION BLDG 3)	BLACKSBURG, VA 24060-3831		
Unit Heater, Gas Fired, <300000 BTU Quantity: 9 Coverage Level: Premium Equipment: Unit Heater Style: Gas Fired Type: <300000 BTU Size: NA Year to Be Activated: Year 1 Year to Be Inactivated: Year 2	Services Provided 1 Comprehensive		
Asset #	Manufacturer Dayton	Model # 3E406	Serial # C8819345

VT VETERINARY MEDICINE (VIRUS ISOLATION BLDG 4)	BLACKSBURG, VA 24060-3831		
Unit Heater, Gas Fired, <300000 BTU Quantity: 11 Coverage Level: Premium Equipment: Unit Heater Style: Gas Fired Type: <300000 BTU Size: NA Year to Be Activated: Year 1 Year to Be Inactivated: Year 2	Services Provided 1 Comprehensive		
Asset #	Manufacturer Trane	Model # GPNC003AAB10000	Serial # A84E10861



Improving
Comfort + Efficiency + Reliability

VT VETERINARY MEDICINE (POULTRY VIRUS HOLDING)	BLACKSBURG, VA 24060-3831
---	----------------------------------

Unit Heater, Gas Fired, <300000 BTU

Quantity: 1
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: <300000 BTU
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Dayton	3E406	19343

VT VISITOR & UNDERGRAD ADMISSIONS CTR	BLACKSBURG, VA 24060
--	-----------------------------

Boiler, Gas-Fired, High Efficiency, >10 HP

Quantity: 2
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: High Efficiency
 Size: >10 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Lochinvar Corporation	KBN601	K10H10162882

Water Heater, Gas, 150-300GAL

Quantity: 1
 Coverage Level: Premium
 Equipment: Water Heater
 Style: Gas
 Type: 150-300GAL
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	AO Smith	BTF80-200	1050M001105



Improving Comfort + Efficiency + Reliability

VT AGRONOMY FARM	BLACKSBURG, VA 24060-3702
-------------------------	----------------------------------

Boiler, Gas-Fired, Water Tube, <50HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: <50HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive
 1 Fireside Cleaning (gaskets not included)

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Burnham Commercial	4FHW-127A-50-C-PF	UNKNOWN

Unit Heater, Gas Fired, <300000 BTU

Quantity: 1
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: <300000 BTU
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Sterling Electric Inc	11QVF075N	UNKNOWN

VT POULTRY BROODER (HATCHERY)	BLACKSBURG, VA 24061-0001
--------------------------------------	----------------------------------

Boiler, Gas-Fired, Water Tube, <50HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: <50HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Fireside Cleaning (gaskets not included)
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Columbia Boiler	MPH-40	UNKNOWN



Improving Comfort + Efficiency + Reliability

VT AQUATICS & FISHERIES RESEARCH CTR

BLACKSBURG, VA 24060-6347

Furnace, All

Quantity: 2
 Coverage Level: Premium
 Equipment: Furnace
 Style: All
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Reznor	SCB125-6	UNKNOWN

Unit Heater, Gas Fired, <300000 BTU

Quantity: 8
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: <300000 BTU
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Dayton	4LXS1	UNKNOWN

VT STEGER NORTH & SOUTH (BIOINFORMATICS)

BLACKSBURG, VA 24061-1016

Humidifier All

Quantity: 8
 Coverage Level: Premium
 Equipment: Humidifier All
 Style: NA
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
H-1	Nortec Industries	UNKNOWN	UNKNOWN
H-2	Nortec Industries	UNKNOWN	UNKNOWN
H-3	Nortec Industries	UNKNOWN	UNKNOWN
H-4	Nortec Industries	UNKNOWN	UNKNOWN
SH-1	Dri-Steam	STS-800C	1114992-01-01
SH-2	Dri-Steam	STS-800C	1114992-02-01
SH-3	Dri-Steam	STS-400C	1114992-03-01
SH-4	Dri-Steam	STS-25C	1114992-04-01



Improving
Comfort + Efficiency + Reliability

VT STEGER NORTH & SOUTH (BIOINFORMATICS)	BLACKSBURG, VA 24061-1016
---	----------------------------------

VT SWINE CENTER	BLACKSBURG, VA 24060
------------------------	-----------------------------

Unit Heater, Gas Fired, <300000 BTU

Quantity: 8
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: <300000 BTU
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Modine	DJELL5FN-43	UNKNOWN

VT CASSELL COLISEUM	BLACKSBURG, VA 24061-1065
----------------------------	----------------------------------

Heat Exchanger-All

Quantity: 1
 Coverage Level: Premium
 Equipment: Heat Exchanger-All
 Style: NA
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
		SAUNATEC 42-480	UNKNOWN



Improving Comfort + Efficiency + Reliability

VT FOOTBALL LOCKER ROOM	BLACKSBURG, VA 24061-0001
--------------------------------	----------------------------------

Heat Exchanger-All

Quantity: 2
 Coverage Level: Premium
 Equipment: Heat Exchanger-All
 Style: NA
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
		SAUNATEC 42-480	5E05

VT LANE STADIUM	BLACKSBURG, VA 24061-1022
------------------------	----------------------------------

Air Handling Unit (AHU), Make-Up Air Unit (MAU), <15 HP

Quantity: 21
 Coverage Level: Premium
 Equipment: Air Handling Unit (AHU)
 Style: Make-Up Air Unit (MAU)
 Type: <15 HP
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Trane	GRAA20GBAEON1BK	UNKNOWN

Boiler, Gas-Fired, Water Tube, 51-150 HP

Quantity: 3
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: 51-150 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	RBI Futera III Series	33DB1950NASSS	30227109

Boiler, Gas-Fired, Water Tube, <50HP

Quantity: 2
 Coverage Level: Premium
 Equipment: Boiler

Services Provided

1 Comprehensive



© 2016 Johnson Controls - CUSTOMER CONFIDENTIAL
 Do not copy (physically, electronically, or in any other media) without the express written permission of Johnson Controls

Request for Proposal
 Virginia Tech
 Furnace, Boiler & Mechanical Equipment
 Full Maintenance Services

Improving Comfort + Efficiency + Reliability

VT LANE STADIUM		BLACKSBURG, VA 24061-1022	
Style: Gas-Fired			
Type: Water Tube			
Size: <50HP			
Year to Be Activated: Year 1			
Year to Be Inactivated: Year 2			
Asset #	Manufacturer	Model #	Serial #
	Bryan Boilers	RV800-W-FDG-RC	92435

Furnace, All		Services Provided	
Quantity: 1		1	Comprehensive
Coverage Level: Premium			
Equipment: Furnace			
Style: All			
Type: NA			
Size: NA			
Year to Be Activated: Year 1			
Year to Be Inactivated: Year 2			
Asset #	Manufacturer	Model #	Serial #
	JCI_YORK	UNKNOWN	UNKNOWN

Unit Heater, Gas Fired, <300000 BTU		Services Provided	
Quantity: 1		1	Comprehensive
Coverage Level: Premium			
Equipment: Unit Heater			
Style: Gas Fired			
Type: <300000 BTU			
Size: NA			
Year to Be Activated: Year 1			
Year to Be Inactivated: Year 2			
Asset #	Manufacturer	Model #	Serial #
	WeatherRite	MD124HHR	UNKNOWN

Unit Heater, Gas Fired, <300000 BTU		Services Provided	
Quantity: 6		1	Comprehensive
Coverage Level: Premium			
Equipment: Unit Heater			
Style: Gas Fired			
Type: <300000 BTU			
Size: NA			
Year to Be Activated: Year 1			
Year to Be Inactivated: Year 2			
Asset #	Manufacturer	Model #	Serial #
	Sterling Electric Inc	QVEF-100	G02299721001001



Improving Comfort + Efficiency + Reliability

VT LANE STADIUM	BLACKSBURG, VA 24061-1022
------------------------	----------------------------------

Water Heater, Gas, 150-300GAL

Quantity: 1
 Coverage Level: Premium
 Equipment: Water Heater
 Style: Gas
 Type: 150-300GAL
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	State Water Heater	SUE100240NE	F05MO03574

Water Heater, Gas, 301-450GAL

Quantity: 1
 Coverage Level: Premium
 Equipment: Water Heater
 Style: Gas
 Type: 301-450GAL
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Pvi Industries Inc	1250P900A-TP	202106400

VT BURROWS-BURLESON TENNIS PAVILION	BLACKSBURG, VA 24061-0001
--	----------------------------------

Furnace, All

Quantity: 3
 Coverage Level: Premium
 Equipment: Furnace
 Style: All
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Carrier	58SSC075-GC	3591A09506

Heater, Gas Infrared-All

Quantity: 13
 Coverage Level: Premium
 Equipment: Heater
 Style: Gas Infrared-All

Services Provided
 1 Comprehensive



© 2018 Johnson Controls - CUSTOMER CONFIDENTIAL
 Do not copy (physically, electronically, or in any other media) without the express written permission of Johnson Controls

Request for Proposal
 Virginia Tech
 Furnace, Boiler & Mechanical Equipment
 Full Maintenance Services

Improving Comfort + Efficiency + Reliability

VT BURROWS-BURLESON TENNIS PAVILION	BLACKSBURG, VA 24061-0001
--	----------------------------------

Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2
Asset #
Manufacturer
 Reznor

Model #
 TR100-H
Serial #
 UNKNOWN

Water Heater, Gas, 150-300GAL

Quantity: 2
 Coverage Level: Premium
 Equipment: Water Heater
 Style: Gas
 Type: 150-300GAL
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2
Asset #
Manufacturer
 State Water Heater

Services Provided
 1 Comprehensive
Model #
 G5650XRRT
Serial #
 A04114704

VT DAIRY SCIENCE (FARM HOUSE)	BLACKSBURG, VA 24060-5414
--------------------------------------	----------------------------------

Furnace, All

Quantity: 1
 Coverage Level: Premium
 Equipment: Furnace
 Style: All
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2
Asset #
Manufacturer
 Goodman MFG

Services Provided
 1 Comprehensive
Model #
 GMS80905CNBD
Serial #
 UNKNOWN





Improving Comfort + Efficiency + Reliability

VT DAIRY SCIENCE (RESIDENCE 1)	BLACKSBURG, VA 24061-0001
---------------------------------------	----------------------------------

Furnace, All

Quantity: 1
 Coverage Level: Premium
 Equipment: Furnace
 Style: All
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset #

Manufacturer

Model #

Serial #

Heil

NDGG100FD02

L893261087

VT DAIRY SCIENCE (RESIDENCE 2)	BLACKSBURG, VA 24060-5414
---------------------------------------	----------------------------------

Furnace, All

Quantity: 1
 Coverage Level: Premium
 Equipment: Furnace
 Style: All
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset #

Manufacturer

Model #

Serial #

Heil

NDGG100AF01

H44698723



Improving
Comfort + Efficiency + Reliability

VT KENTLAND MILKING PARLOR/ADMIN BLDG

BLACKSBURG, VA 24061-0001

Heater, Gas Infrared-All

Quantity: 1
Coverage Level: Premium
Equipment: Heater
Style: Gas Infrared-All
Type: NA
Size: NA
Year to Be Activated: Year 1
Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset #

Manufacturer

Model #

Serial #

Space-Ray

UNKNOWN

UNKNOWN

Split System, Cooling with Electric Heat, <7.5 Tons

Quantity: 2
Coverage Level: Premium
Equipment: Split System
Style: Cooling with Electric Heat
Type: <7.5 Tons
Size: NA
Year to Be Activated: Year 1
Year to Be Inactivated: Year 2

Services Provided

2 Operational (Mid Season -
Cooling/Heating)
1 Cooling Comprehensive
1 Electric Heating Comprehensive

Asset #

Manufacturer

Model #

Serial #

JCL_YORK

YHJD42544S4B/UNK
NOWN

W1M4274089/UNKNOWN

Unit Heater, Gas Fired, <300000 BTU

Quantity: 2
Coverage Level: Premium
Equipment: Unit Heater
Style: Gas Fired
Type: <300000 BTU
Size: NA
Year to Be Activated: Year 1
Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset #

Manufacturer

Model #

Serial #

Reznor

UDAS45-S

EBNK799EL29672XTE

Water Heater, Gas, <150GAL

Quantity: 3
Coverage Level: Premium
Equipment: Water Heater
Style: Gas
Type: <150GAL
Size: NA

Services Provided

1 Comprehensive



© 2018 Johnson Controls - CUSTOMER CONFIDENTIAL
Do not copy (physically, electronically, or in any other media) without the express
written permission of Johnson Controls

Request for Proposal
Virginia Tech
Furnace, Boiler & Mechanical Equipment
Full Maintenance Services



Improving Comfort + Efficiency + Reliability

VT KENTLAND MILKING PARLOR/ADMIN BLDG		BLACKSBURG, VA 24061-0001	
Year to Be Activated:	Year 1		
Year to Be Inactivated:	Year 2		
Asset #	Manufacturer	Model #	Serial #
	AO Smith	BPD-75-101	F07A001165



Improving
Comfort + Efficiency + Reliability

VT SOUTHGATE FOOD PROCESSING	BLACKSBURG, VA 24061-1033
-------------------------------------	----------------------------------

Boiler, Gas-Fired, Water Tube, <50HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: <50HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Ajax Boiler	HNG400	49184

Unit Heater, Gas Fired, <300000 BTU

Quantity: 3
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: <300000 BTU
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Modine	BAH180AF	SP010583

Water Heater, Gas, 301-450GAL

Quantity: 1
 Coverage Level: Premium
 Equipment: Water Heater
 Style: Gas
 Type: 301-450GAL
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Pvi Industries Inc	2500-2N500A-TP	98659044



© 2018 Johnson Controls - CUSTOMER CONFIDENTIAL
 Do not copy (physically, electronically, or in any other media) without the express
 written permission of Johnson Controls

Request for Proposal
 Virginia Tech
 Furnace, Boiler & Mechanical Equipment
 Full Maintenance Services
 Page 42

Improving Comfort + Efficiency + Reliability

VT GOLF CLUB HOUSE	BLACKSBURG, VA 24061-1009
---------------------------	----------------------------------

Boiler, Oil-Fired, Water Tube, <50 HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Oil-Fired
 Type: Water Tube
 Size: <50 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Weil Mclain	P-WGO-3	3

THE INN AT VIRGINIA TECH	BLACKSBURG, VA 24060
---------------------------------	-----------------------------

Boiler, Gas-Fired, Water Tube, 51-150 HP

Quantity: 2
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: 51-150 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	HB Smith	28A-S/W-14	N2004-282

Humidifier All

Quantity: 1
 Coverage Level: Premium
 Equipment: Humidifier All
 Style: NA
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Armstrong	EHU-703	240021-10-1-04

Pump, Hot Water, 11-50 HP

Quantity: 2
 Coverage Level: Premium
 Equipment: Pump

Services Provided

1 Comprehensive



Improving
Comfort + Efficiency + Reliability

THE INN AT VIRGINIA TECH		BLACKSBURG, VA 24060	
Style:	Hot Water		
Type:	11-50 HP		
Size:	NA		
Year to Be Activated:	Year 1		
Year to Be Inactivated:	Year 2		
Asset #	Manufacturer	Model #	Serial #
	Taco Pump	F15013E2LAL110A	UNKNOWN

Water Heater, Gas, 301-450GAL		Services Provided	
Quantity:	2	1	Comprehensive
Coverage Level:	Premium		
Equipment:	Water Heater		
Style:	Gas		
Type:	301-450GAL		
Size:	NA		
Year to Be Activated:	Year 1		
Year to Be Inactivated:	Year 2		
Asset #	Manufacturer	Model #	Serial #
	Pvi Industries Inc	1500 P600A-TP	I203111875



Improving Comfort + Efficiency + Reliability

Listing of Qualifications

Johnson Controls is a global leader in delivering both mechanical and technical services as well as integrated building control systems, mechanical equipment, fire alarm and life safety products, physical security systems. We provide solutions designed to improve the comfort, safety, and energy efficiency of non-residential buildings and residential properties. Revenues come from facilities management, technical services, installation of controls and equipment during the construction of new buildings, and the replacement and upgrade of HVAC controls and mechanical equipment in the existing buildings market, where the company's large base of current customers leads to repeat business. Customer relationships often span entire building lifecycles. The company's Building Efficiency business continues to lead the way in helping customers create safe, smart, integrated, earth-friendly "green" buildings, and provide ongoing services.

Through our technologies and solutions, we enhance the lifecycle of buildings, optimize operating costs, and promote building efficiency while producing sustainable energy and measurable environmental results.

Our financial muscle is balanced by a strong code of ethics. For the tenth year in a row, Johnson Controls has been named one of the "World's Most Ethical Companies" by the Ethisphere Institute. Corporate Responsibility Magazine has also recognized Johnson Controls as the #14 company in its annual "100 Best Corporate Citizens" list

Company Awards and Recognition

We believe in going above and beyond to deliver value to our shareholders, help our clients succeed and be outstanding leaders in our fields. In fact, we've been recognized for our leadership; the following is just a sampling of the awards and recognition we've received:

Leadership

- "100 Best Corporate Citizens," Corporate Responsibility magazine, since 2006.
- "World's Most Ethical Companies," Ethisphere magazine, since 2007.
- "Newsweek Green Rankings," Newsweek magazine, since 2009.
- "Sustainability Leader," Sustainable Asset Management, since 2008.
- Corporate Knights Global 100 Most Sustainable Corporations



Diversity

- Diversity Inc. 25 Noteworthy Company 2013
- One of only 18 U.S. firms in the Billion Dollar Roundtable, a group of companies that spend \$1 billion or more each year with certified women- and minority-owned suppliers
- 2012 Chrysler Supplier of the Year Award for Supplier Diversity
- 2012 Superior Award for Supplier Diversity Initiatives from Toyota North America
- 2011 Ford World Excellence Award for Supplier Diversity
- 011-2012 GI Jobs Top Military Friendly Employers



© 2018 Johnson Controls – CUSTOMER CONFIDENTIAL
Do not copy (physically, electronically or in any other media) without the express written permission of Johnson Controls

Request for Proposal
Virginia Tech
Furnace, Boiler & Mechanical Equipment
Full Maintenance Services

Improving Comfort + Efficiency + Reliability

- 2012 Best Diversity Companies Diversity/Careers in Engineering and Information Technology

Our experience, technological advantages, partnering approach, and total commitment to the Rockbridge County makes Johnson Controls unparalleled in our industry.

With over 130 years in the industry- we have experience in all types of installations around the world. We have over 18,000 maintenance contracts, nationwide. Johnson Controls has been involved in integrated control systems for over 130 years. The first electric thermostatic controls for commercial buildings were invented by Walter Johnson, the founder of our company Johnson Controls, Inc. in 1883. In the early 1980's, we introduced our first true, digital controller and in the 90's we introduced our first generation of Metasys Control Systems. Today, Metasys is the world's leading building automation system (BAS).

The scope of our installed base of legacy Metasys installations is significant.

We have hundreds of thousands of legacy N2-based field controllers remain installed today on Metasys systems that are 15-20 years old and still fully operational.

Over the life of 7 major BMS product lines spanning four decades, Johnson Controls has provided migration paths for systems that have allowed our customers to upgrade in a logical and strategic manner. Our BMS products keep pace with the evolving communication's technology.

Metasys systems are installed in major buildings throughout the world as documented in numerous case studies on our Web site at www.johnsoncontrols.com. We embrace open systems fully and have solutions across all major protocols. We support automation systems from Honeywell, Siemens, Trane, TAC, CSI, Alerton and others as required.

For decades, Johnson Controls building management system technology has provided a foundation for seamless updates. Today's Metasys® system not only delivers traditional building control capabilities, it's the one system with built-in integration and migration to Web-based architecture and wireless technologies. It protects existing investments with backwards and forwards compatibility, whether on legacy systems from Johnson Controls or other systems, including Siemens, Honeywell and Trane. All integrated into a common platform with a single user interface.

We have extensive experience in the largest, most complex installations, to the smallest, most simple chiller water plants, from world famous landmarks, like the Empire State Building, several iconic buildings around the world and stadiums and convention centers such as the Bird's Nest Olympic Stadium to the local school district around the corner.

Some of the most complex installations...include:

- multiple energy sources
- demanding conditions
- heat recovery
- sea water cooling
- dual duty applications
- ice thermal storage, etc.

We've done it all- no matter the situation of your site, we have the experience and will meet all your needs.



Improving Comfort + Efficiency + Reliability

Financial Qualifications and Stability

As a publicly owned corporation, Johnson Controls is subject to the full range of regulation by numerous federal and state agencies and other regulatory bodies. All information identified as required to be publicly disclosed (including financial statements) is included in the Company's Form 10-K annual report, a copy of which is available on the company's website, or free, at:

http://www.johnsoncontrols.com/content/us/en/investors/sec_filings.html.

Financial Soundness: Johnson Controls has a strong balance sheet with significant financial liquidity. As of September 30, 2014, Johnson Controls has over \$32.8 billion in total reported assets. In addition, the company continues to generate record revenue and profitability. For the fiscal year ended September 30, 2015, the company reported net revenue of \$32.7 billion. Johnson Controls has a long-term credit rating of Baa1 from Moody's Investors Services and BBB+ from Standard & Poor's Rating Service. Both credit rating agencies have a "stable" outlook for their respective ratings. This financial strength empowers Johnson Controls to fund its project development activities. It also gives the company access to the capital markets in order to generate liquidity so that the company can self-finance certain projects.

Profitability: Our financial strength provides assurance of our ability to support our customers. Johnson Controls' capacity to integrate a wide range of services into a cohesive, tailored value proposition for our customers truly differentiates us from our competitors. We have invested millions of dollars to create a robust operational, financial, and technical infrastructure, critical when managing large, widely distributed, and divergent sets of properties that constitute customer portfolios.

We continue to focus on profitable growth in all our businesses, as it allows us more opportunities to leverage our volume, leading to improved quality and efficiencies. This enables us to invest in innovation and improve our services, bringing more success to our customers. Our growth goals are supported by initiatives focusing on new technology, optimizing our resources and continuous improvement of quality, reliability and delivery. We are positioned for 10-15% annual growth through 2016.

Annual Reports

Johnson Controls is a publically traded company. All Johnson Controls Annual Reports are available on our website at

http://www.johnsoncontrols.com/content/us/en/investors/sec_filings.html

Bonding

Current bonding rating (maximum project size firm can bond)	\$100 Million
Current bonding capacity	\$100 Million single \$500 Million aggregate
Amount or percentage of bonding capacity currently obligated	Approx. \$250 Million
Current bonding rate	\$2.88/\$1,000

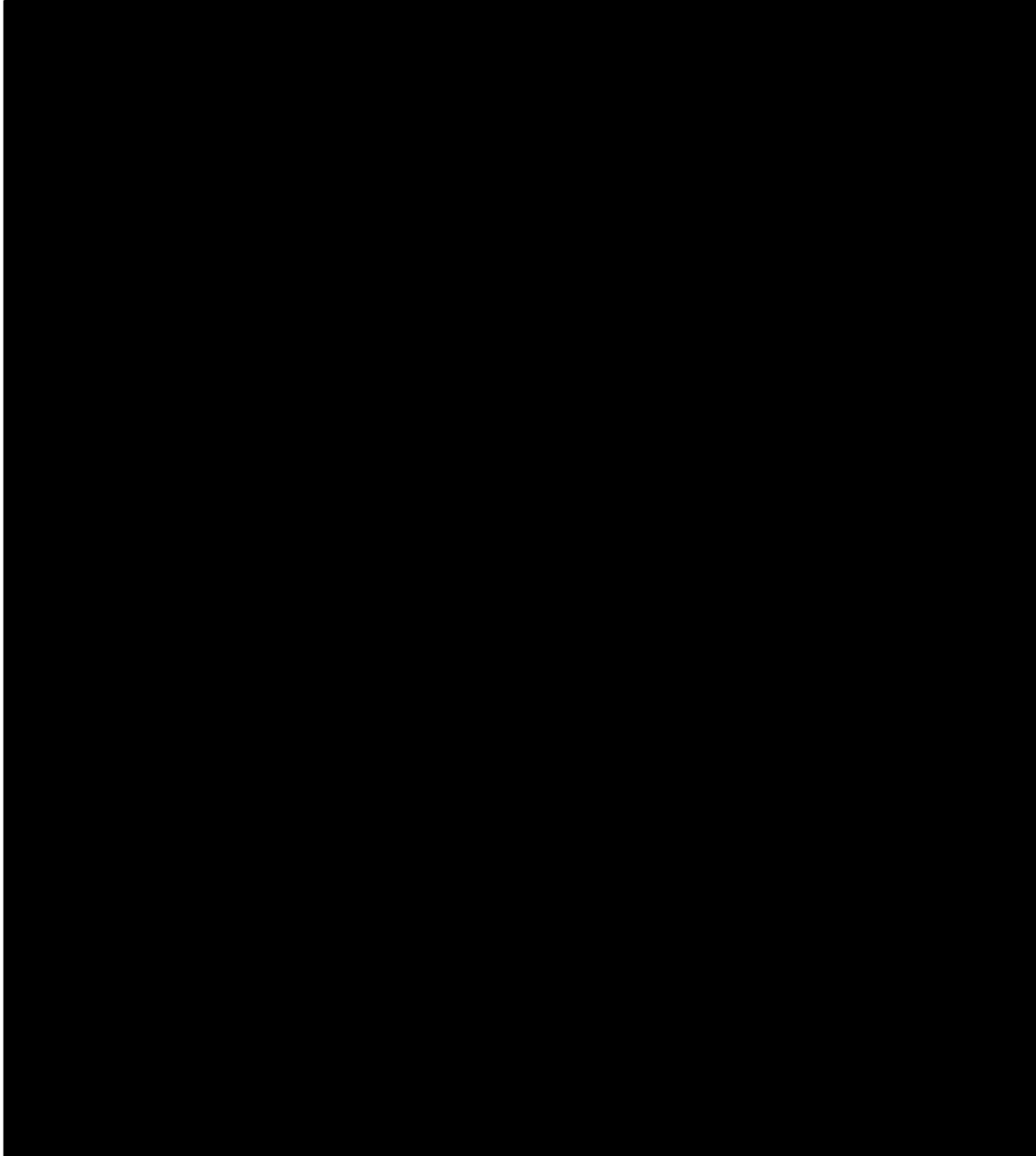


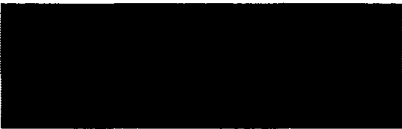
© 2016 Johnson Controls – CUSTOMER CONFIDENTIAL
Do not copy (physically, electronically, or in any other media) without the express written permission of Johnson Controls

Request for Proposal
Virginia Tech
Furnace, Boiler & Mechanical Equipment
Full Maintenance Services

Insurance Requirements

The SAMPLE Johnson Controls Certificate of Insurance, provided below demonstrates our ability to provide the proper insurance requirements of the RFP.



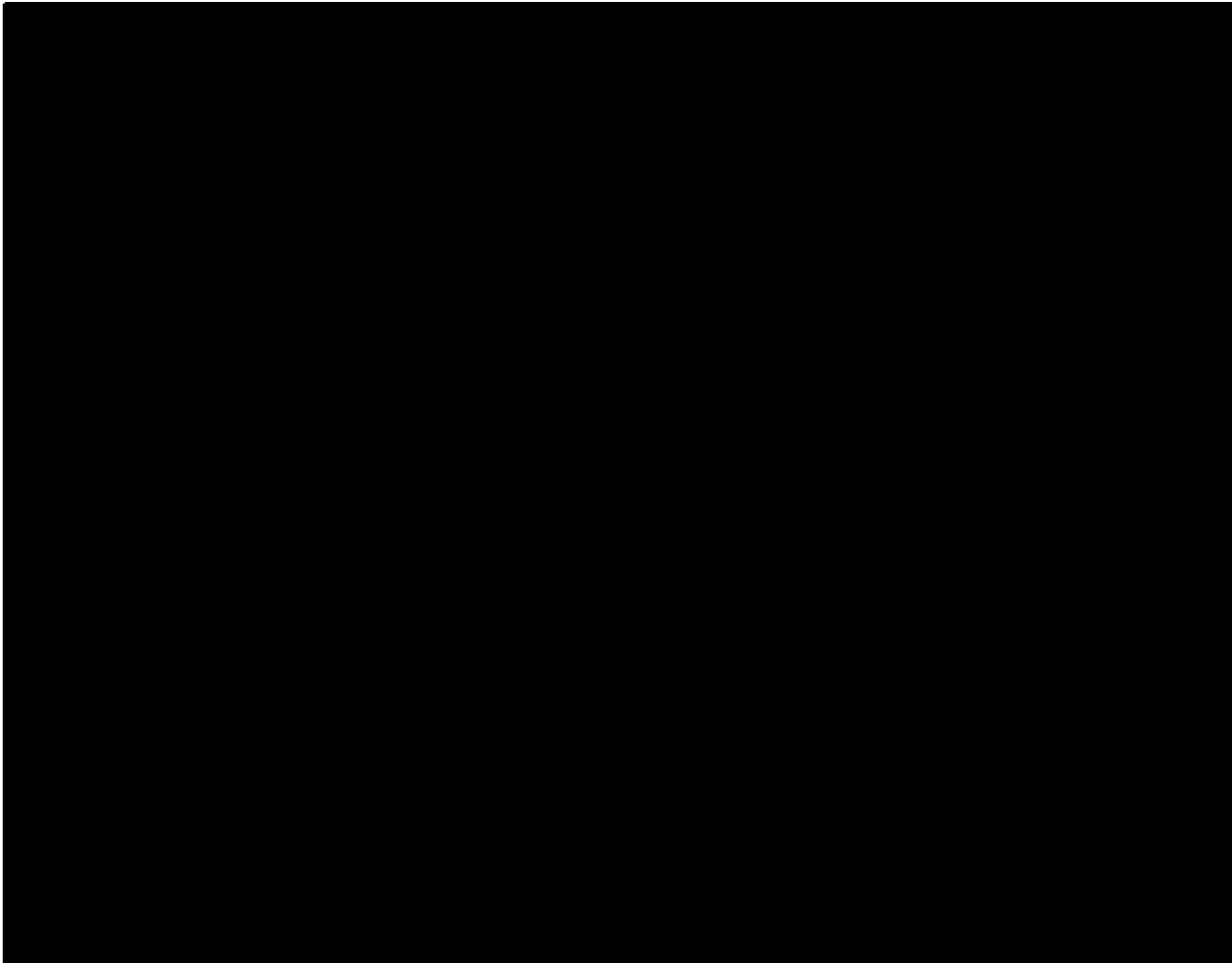
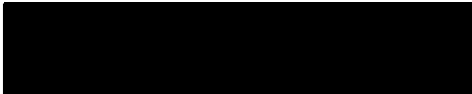


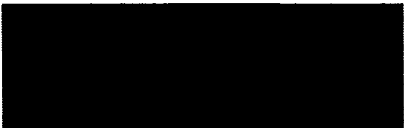
Improving Comfort + Efficiency + Reliability

Our team brings significant experience providing similar projects and services throughout the State of Virginia. Virginia Tech will benefit from the professionalism and expertise of our engineers, mechanics and technicians and personnel that will focus on your satisfaction with quality work, close coordination, and swift response from our local Roanoke branch office.

Resumes

Glenn Cox
HVAC Mechanical Forman

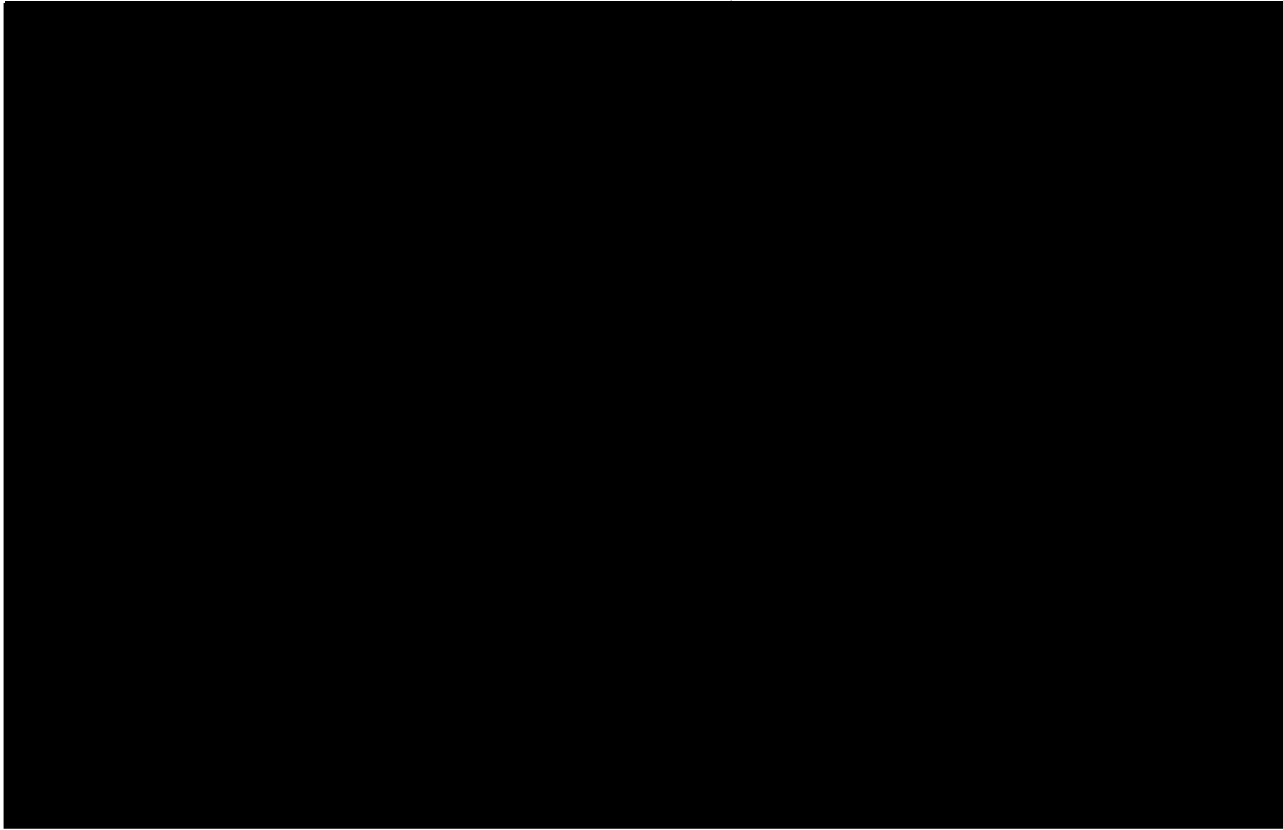
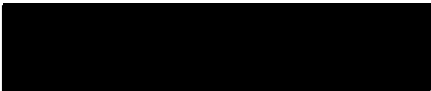




Improving Comfort + Efficiency + Reliability

Resumes

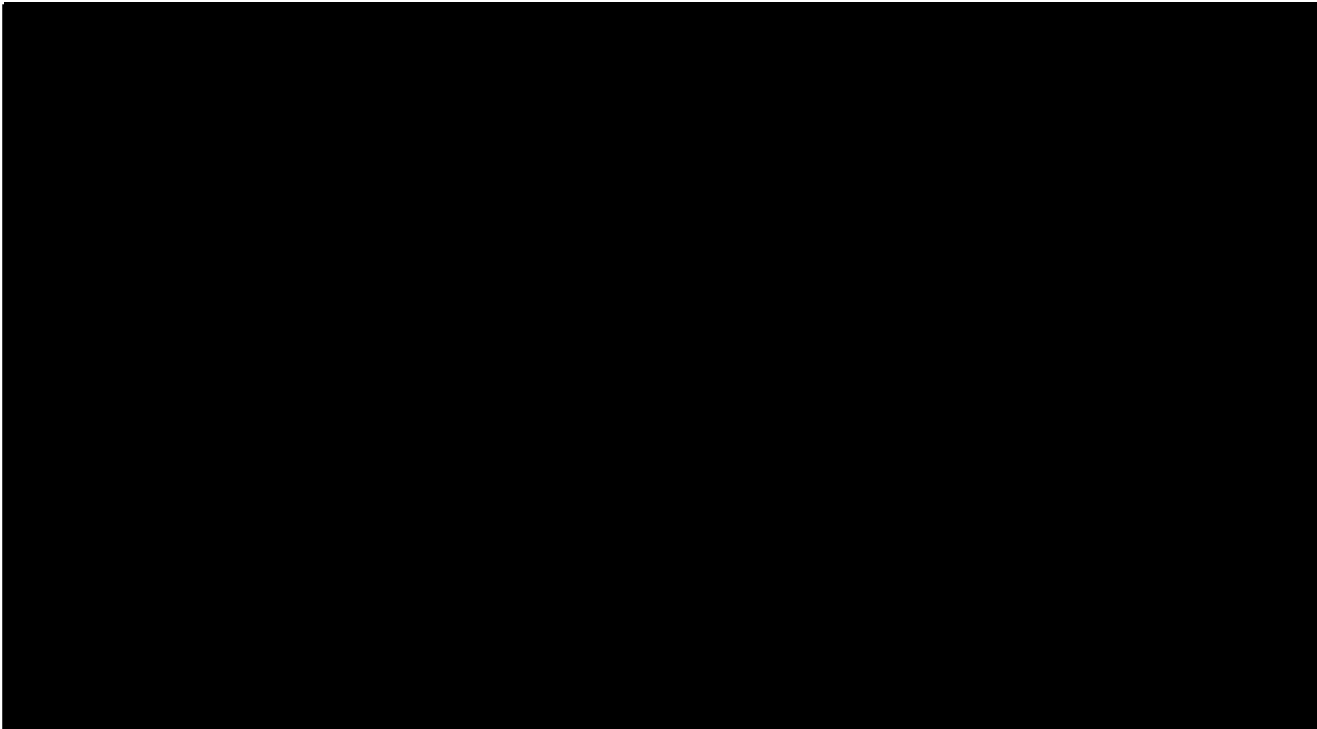
Joe Merkle
Lead HVAC Journeyman Mechanic



Improving
Comfort + Efficiency + Reliability

Resumes

Bruce Henson
Journeyman HVAC Mechanic



Other Technicians available as-needed (resumes available upon request)

Robbie Whitlock – Journeyman Mechanic
Robert Huff – Mechanical Apprentice
Rueben Shurtleff – Mechanical Apprentice



© 2016 Johnson Controls – CUSTOMER CONFIDENTIAL
Do not copy (physically, electronically or in any other media) without the express
written permission of Johnson Controls

Request for Proposal
Virginia Tech
Furnace, Boiler & Mechanical Equipment
Full Maintenance Services
Page 51

Professional References

Virginia Tech

Radford University

Improving
Comfort + Efficiency + Reliability

The Omni Homestead Resort

Revlon



© 2016 Johnson Controls – CUSTOMER CONFIDENTIAL
Do not copy (physically, electronically, or in any other media) without the express
written permission of Johnson Controls

Request for Proposal
Virginia Tech
Furnace, Boiler & Mechanical Equipment
Full Maintenance Services

Improving Comfort + Efficiency + Reliability

Firm Overview

Johnson Controls, a publicly held corporation, was founded in 1885. Since that time, Johnson Controls has traded on the New York Stock Exchange under ticker symbol JCI. Johnson Controls has served Virginia customers since 1904. We currently have 222 employees based in the state of Virginia, including more than xx in our Roanoke office.

Johnson Controls is a global leader in delivering both mechanical and technical services as well as integrated building control systems, mechanical equipment, fire alarm and life safety products, physical security systems. We provide solutions designed to improve the comfort, safety, and energy efficiency of non-residential buildings and residential properties. Revenues come from facilities management, technical services, installation of controls and equipment during the construction of new buildings, and the replacement and upgrade of HVAC controls and mechanical equipment in the existing buildings market, where the company's large base of current customers leads to repeat business. Customer relationships often span entire building lifecycles. The company's Building Efficiency business continues to lead the way in helping customers create safe, smart, integrated, earth-friendly "green" buildings, and provide ongoing services.

We sell our control systems, mechanical equipment, and services primarily through the company's extensive global network of sales and service offices. We sell some building controls, products, and mechanical systems to distributors of air-conditioning, refrigeration, and commercial heating systems throughout the world. In fiscal 2015, Johnson Controls derived approximately 45% of Building Efficiency's sales from HVAC products and installed control systems for construction and retrofit markets, including 15% of total sales related to new commercial construction. Approximately 55% of our sales in fiscal 2015 originated from service offerings.

We are a local and global leader that brings ingenuity to the places where people live, work, and travel. The company has more than 130,000 employees across all business divisions, serving customers from 1,500 office locations in 150 countries. Nationally, we have over 120 HVAC branches with 6,000 factory certified technicians to provide full service and response capabilities. We create a more comfortable, safe and sustainable world through our products and services for more than 200 million vehicles, 12 million homes and 1 million commercial buildings.

The company has established market leadership in all of our business units.

After a multi-year planning and integration process, Johnson Controls officially completed our merger with Tyco Business Systems on September 2nd, 2016. As a clarification, our company name remains Johnson Controls.

This is a significant turning point in our company's history. Our merger with Tyco Business Systems became complete and Johnson Controls is now the global leader in HVAC, Controls, Fire, Security and Power Solutions bringing new and innovative solutions to building technology,



Johnson Controls Service at a glance:

- We have more than 700 chiller technicians across North America.
- Our chiller technicians average 12 years of tenure with the company.
- To obtain Master Factory Trained Technician status, our chiller team professionals complete hundreds of hours of factory-specific training, over the course of several years.
- We have in excess of 500,000 signatures in our vibration analysis database.
- Our predictive diagnostics team has more than 50 years of collective experience.



© 2016 Johnson Controls – CUSTOMER CONFIDENTIAL
Do not copy (physically, electronically or in any other media) without the express written permission of Johnson Controls

Request for Proposal
Virginia Tech
Furnace Boiler & Mechanical Equipment
Full Maintenance Services

Improving Comfort + Efficiency + Reliability

construction management, integrated solutions, and even energy storage.

By uniting the two highly complementary businesses into a larger, more capable Johnson Controls, we have ensured that our corporation has the people, products and capabilities to win in the global marketplace to create more value for our customers.

In 2013, we set the goal of becoming the most operationally capable company in the world. Over the past three years, we've identified a common set of tools and processes that support our enterprise decisions and help us build core competencies in each functional area of the business, creating more value for our customers.

The newer, more diverse Johnson Controls that has risen from our merger with Tyco Business Systems has expanded our capabilities to ensure we can offer a greater breadth of services and solutions to our customers.

The new Johnson Controls paints an impressive picture:

- 130+ years of innovation
- Headquarters in: Milwaukee, WI; Cork, Ireland; Shanghai, China
- 4+ million customers globally
- 117,000 employees worldwide
- 200,000 locations worldwide
- Serving customers in 150+ countries

Johnson Controls Service delivers the technical engineering solutions, which improve the reliability and efficiency of plants and systems. Through planned preventative maintenance regimes and new technology, such as remote monitoring, we deliver the optimum working environment, while reducing maintenance costs and complying with statutory regulations.

Johnson Controls Service is devoted to creating and providing: Healthier environments; Energy savings; Operational savings; Occupant comfort and Sustainable solutions. We will match the right technician with the right job to ensure the highest level of service, safety, and expertise – every time. If it is inside your building, we know how it works and how to keep it running at peak performance. Johnson Controls has partnered with facility leaders for more than 130 years, providing professional service to key building equipment systems. Specifically, we can help you maintain, repair, retrofit, and replace the following:

EQUIPMENT SERVICING	<ul style="list-style-type: none"> ■ 24-Hour Emergency Service ■ 24-Hour Off-Site Monitoring ■ Air Handling Equipment ■ Automatic Temperature Controls ■ Boiler Maintenance & Upgrades ■ Centrifugal, Absorption, Screw, Scroll & Reciprocating Chillers ■ Coil Cleaning & Retrofits 	<ul style="list-style-type: none"> ■ Compressor Overhaul/Rebuild ■ Cooling Towers ■ Energy Management Systems ■ Fire Detection ■ Fume Hoods ■ Lighting Systems ■ Process & Refrigeration Systems ■ Pumps 	<ul style="list-style-type: none"> ■ Refrigerants Management ■ Rooftop Equipment ■ Seasonal Startup & Shutdown ■ Security & Card Access Systems ■ Terminal Equipment ■ Video Surveillance Systems
BUILDING AUTOMATION SYSTEM SERVICES	<ul style="list-style-type: none"> ■ ATC Calibration ■ Audit & System Optimization ■ Chiller Plant Automation Systems ■ Commissioning & Qualification Services ■ Custom Graphics ■ Database Management 	<ul style="list-style-type: none"> ■ Energy Monitoring ■ Engineering Services ■ Laboratory Control Systems ■ Network Diagnostics ■ Performance Diagnostics ■ Remote System Diagnostics ■ Remote System Monitoring 	<ul style="list-style-type: none"> ■ Remote System Operations ■ Systems Integration ■ System Maintenance ■ Training ■ Technical Support
MECHANICAL RETROFITS	<ul style="list-style-type: none"> ■ Boiler & Burner Upgrades ■ Chiller Tubes, High Efficiency ■ Cooling/Heating Coil Replacement 	<ul style="list-style-type: none"> ■ Optiview Graphic Control Center ■ Piping ■ Plumbing ■ Pneumatic to DDC Conversions 	<ul style="list-style-type: none"> ■ management & Containment Retrofits ■ Refrigerant Storage & Recovery ■ Sheet Metal



© 2016 Johnson Controls – CUSTOMER CONFIDENTIAL
Do not copy (physically, electronically or in any other media) without the express written permission of Johnson Controls

Request for Proposal
Virginia Tech
Furnace, Boiler & Mechanical Equipment
Full Maintenance Services

Improving Comfort + Efficiency + Reliability

SYSTEM ANALYSIS & TESTING FIRE & SECURITY SYSTEM SERVICES ENERGY SERVICES SPECIALTY SERVICES	<ul style="list-style-type: none"> ▪ Compressor Re-Stage & Engineering Services ▪ Driveline Retrofits ▪ Air & Water Balancing ▪ Alignment Services ▪ Bearing Inspection & Evaluation ▪ Critical Facility Cooling Analysis ▪ Chiller Vibration Analysis ▪ Compressor Internal Inspection ▪ Eddy Current Tube Analysis ▪ Energy Efficiency Audits ▪ Facility Performance Assessments ▪ Facility Performance Indexing ▪ Fan & Pump Vibration Analysis ▪ Flue Combustion Analysis 	<ul style="list-style-type: none"> ▪ Purge Unit Retrofits ▪ Refrigerant Conversions ▪ HVAC&R Systems Evaluation ▪ Indoor Air Quality Audits ▪ Infrared Testing ▪ Laser Alignment Services ▪ Lighting System Audits ▪ Lithium Bromide Analysis ▪ Lubrication Testing ▪ Mechanical System Training ▪ Motor Current Analysis ▪ NIST Traceable Calibrations ▪ Oil Analysis, Spectrochemical ▪ Operating Deflection Shape Analysis 	<ul style="list-style-type: none"> ▪ Solid State Starters ▪ Variable Air Volume Conversions ▪ Variable-Speed Drives ▪ Refrigerant Analysis ▪ Refrigerant Leak Testing ▪ Remote System Diagnostics ▪ Roof Top Unit Diagnostic & Performance Survey ▪ Structural Vibration Testing ▪ Temperature Mapping ▪ Ultrasonic Leak Detection ▪ Vibration Alarming & Online Equipment Monitoring ▪ Vibration Analysis ▪ Water Treatment & Analysis
	<ul style="list-style-type: none"> ▪ Central Station Monitoring ▪ Fire Alarm Safety Audit 	<ul style="list-style-type: none"> ▪ Fire Alarm Testing ▪ Security Inspection & Testing 	<ul style="list-style-type: none"> ▪ UL Listed Fire Alarm Monitoring
	<ul style="list-style-type: none"> ▪ Energy Audits ▪ EPA Energy Star Benchmarking 	<ul style="list-style-type: none"> ▪ LEED Certification Process/Audits ▪ Supply Side Management 	<ul style="list-style-type: none"> ▪ Performance Contracting
	<ul style="list-style-type: none"> ▪ Roof-top unit replacement (Expedited Service) ▪ Compressor Replacement & Rebuild 	<ul style="list-style-type: none"> ▪ Premium Coverage Preventative Maintenance Agreements ▪ Chiller Services & Repair 	<ul style="list-style-type: none"> ▪ Authorized York Factory Service ▪ Equipment Failure Analysis

Johnson Controls has been involved with maintaining and repairing HVAC and refrigeration systems since 1883. Warren Johnson and a group of Milwaukee investors established the Johnson Electric Service Company in 1885 to manufacture install and service automatic temperature regulation systems for buildings. Johnson Controls has operated under two former names; Johnson Electric Service Company July 31, 1900 to July 10, 1902 and Johnson Service Company July 10, 1902 to November 11, 1974.

The Building Efficiency group – the business unit responsible for executing service contracts – is a leading full-line service provider of mechanical equipment as well as building management systems, and fire and security systems. We are in the business of Building Efficiency. We deliver products, services and solutions that increase energy efficiency and lower operating costs in buildings for more than one million clients. We are the leader in designing, installing, and maintaining energy efficiency projects. We are a leading provider of equipment, controls and services for heating, ventilating, air-conditioning, and refrigeration. We have been involved in more than 500 renewable energy projects including solar, wind and geothermal technologies.

Johnson Controls provides our customers with a superior service experience because:

We are an OEM manufacturer

- As a factory-direct service provider, we have the most expertise and resources to develop a customized service approach for your facility.
- Global leader in Service with a local perspective.
- With over 160 service branches, no other company offers the level of building knowledge, facility equipment expertise or breadth of resources that you'll get from your local Johnson Controls office. At the same time, we take a unique approach tailored to your individual needs.

Our Commitment to Energy Efficiency

- Energy efficiency helps control rising energy costs, reduces environmental footprints, and increases the value and competitiveness of buildings. As the leader in energy efficiency,



© 2018 Johnson Controls – CUSTOMER CONFIDENTIAL
Do not copy (physically, electronically, or in any other media) without the express written permission of Johnson Controls

Request for Proposal
Virginia Tech
Furnace, Boiler & Mechanical Equipment
Full Maintenance Services

Improving Comfort + Efficiency + Reliability

we work with you to select the right pathway, to decide on the pace you'd like to set and then partner with you to achieve your efficiency and sustainability objectives.

Focus on Operational Excellence

- At Johnson Controls, we are committed to continuous operational improvement.
- We continually invest in operational upgrades and training to provide you with the most consistent and complete service experience possible.

A Deep Commitment to Customer Satisfaction

- At Johnson Controls, we are proud to provide the ultimate service experience.
- We regularly survey our customers to get feedback on our performance and use this feedback to continuously make improvements. Our goal is to deliver the most consistent and complete service experience possible.

Focus on Safety

- We understand that living safety is essential to our success.
- We've not only developed and implemented standards and processes to ensure the safety of our employees, but to protect the safety of our customers and their jobsites.

Ability to Create a Solid Business Partnership

- We understand that no two organizations have the same service requirements.
- Your local Johnson Controls team is committed to helping you create a support program built around your building performance requirements.



Pricing

Supplemental Price & Payment Terms (Applies to Multi-Year Contracts Only)

Pricing table – based upon (1) 5-year agreement and up to (5) optional 1-year renewals for a total of 10 years

Year	Total Annual Dollar Amount	Payment Frequency
Year1	\$ 160,050.00*	Annually
Year2	\$ Year1 + 2% +/- equipment/site changes	Annually
Year3	\$ Year2 + 2% +/- equipment/site changes	Annually
Year4	\$ Year3 + 2% +/- equipment/site changes	Annually
Year5	\$ Year4 + 2% +/- equipment/site changes	Annually
Year6	TBD	Annually
Year7	TBD	Annually
Year8	TBD	Annually
Year9	TBD	Annually
Year10	TBD	Annually

*A 2% pre-payment discount may be applied if paying in annual installments. The pricing given is based upon the equipment/site list as issued with RFP# 0055426. Equipment and/or site changes will be evaluated as-needed with VT personnel in accordance with the itemized equipment price list

Special Additions and Exceptions

SPECIAL SERVICES COVERED (not listed above):

- Water treatment services have been included for all steam boilers as specified in section VII, paragraph G.5. Chemical levels shall be monitored monthly and additional chemicals shall be provided as needed.
- Annual & bi-annual boiler testing and inspections shall be conducted with the Commonwealth of VA Boiler Inspector as specified in section VII, paragraph H. Combustion analysis reports shall be provided as required.

SERVICES NOT INCLUDED (specified in section VII, paragraph K):

- Refractory repair and/or replacement
- Complete burner failure
- Tube failure and/or leaking tubes
- Any single occurrence or failure of directly related components, beyond the first \$1,000.00
- All required refrigerant to be supplied the University



Improving Comfort + Efficiency + Reliability

EXTRA WORK PRICING STRUCTURE (outside scope of service)

- Mechanical labor to be provided using the following fully-burdened labor rates

Labor Category	Minimum Education/Certificate Level	Minimum Yrs Experience	Hourly Rate		
			REG	OT (1.5X)	DT (2.0X)
HVAC Journeyman Mechanic*	Journeyman License	5	\$110.00	\$165.00	\$220.00
HVAC Apprentice*	License or certification per jurisdiction	1	\$83.60	\$125.40	\$167.20
Certified Chiller Mechanic*	Journeyman License	5	\$118.80	\$178.20	\$237.60

*Labor rates quoted are in accordance with the local GSA rate scale

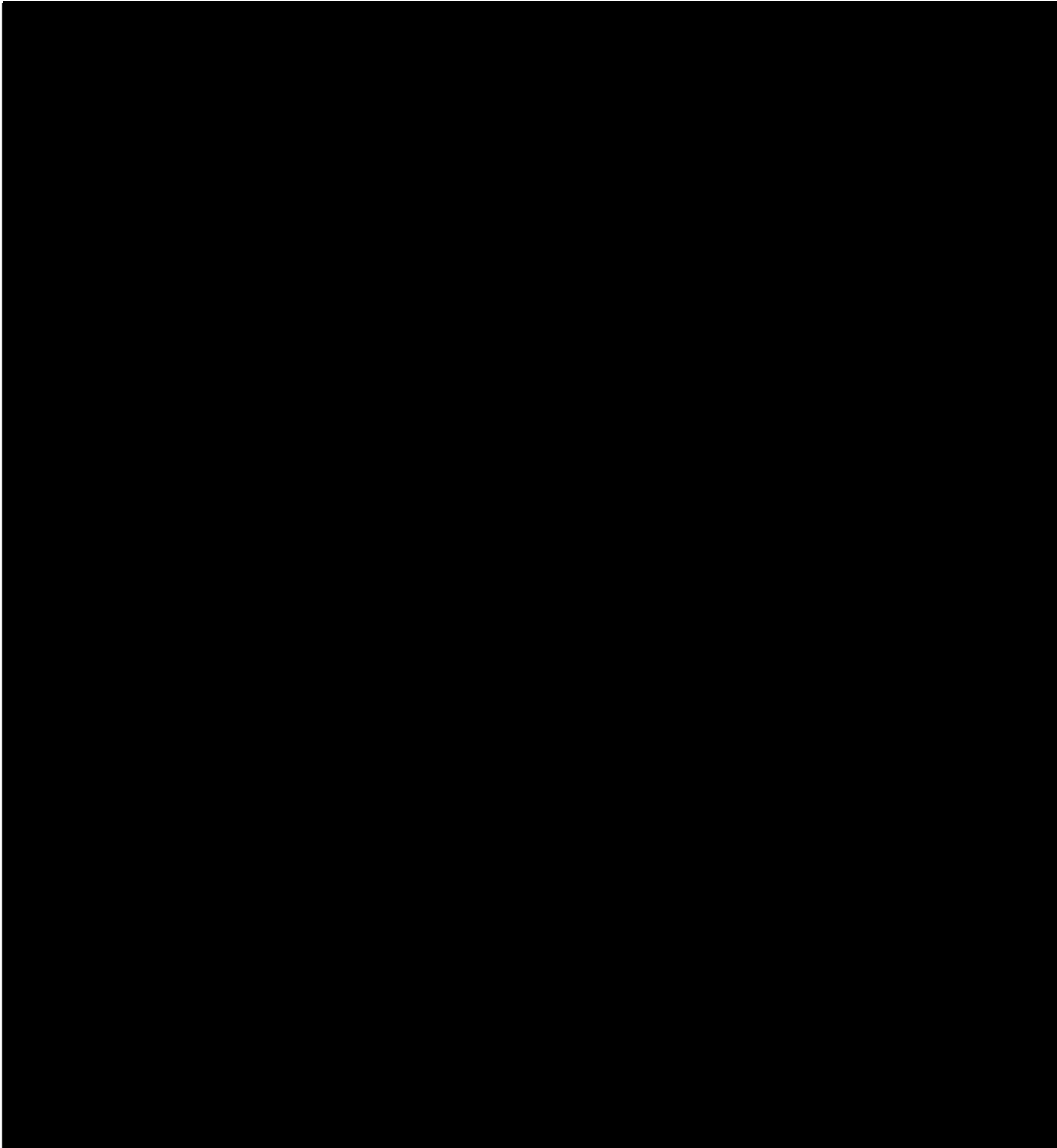
- Repair parts and/or materials to be provided at the following discounted rates:
 - Johnson Controls branded repair parts
 - LIST less 10% (\$0 to \$24,999.00)
 - LIST less 10% less 5% (\$25,000.00+)
 - Johnson Controls branded equipment (Air-Handlers, Chillers, Terminal Units, Commercial Unitary Equipment, etc.)
 - NALP less 50%
 - 3rd-Party repair parts
 - LIST – 5% (\$0 to \$24,999.00)
 - LIST – 10% (\$25,000.00+)



APPENDIX A



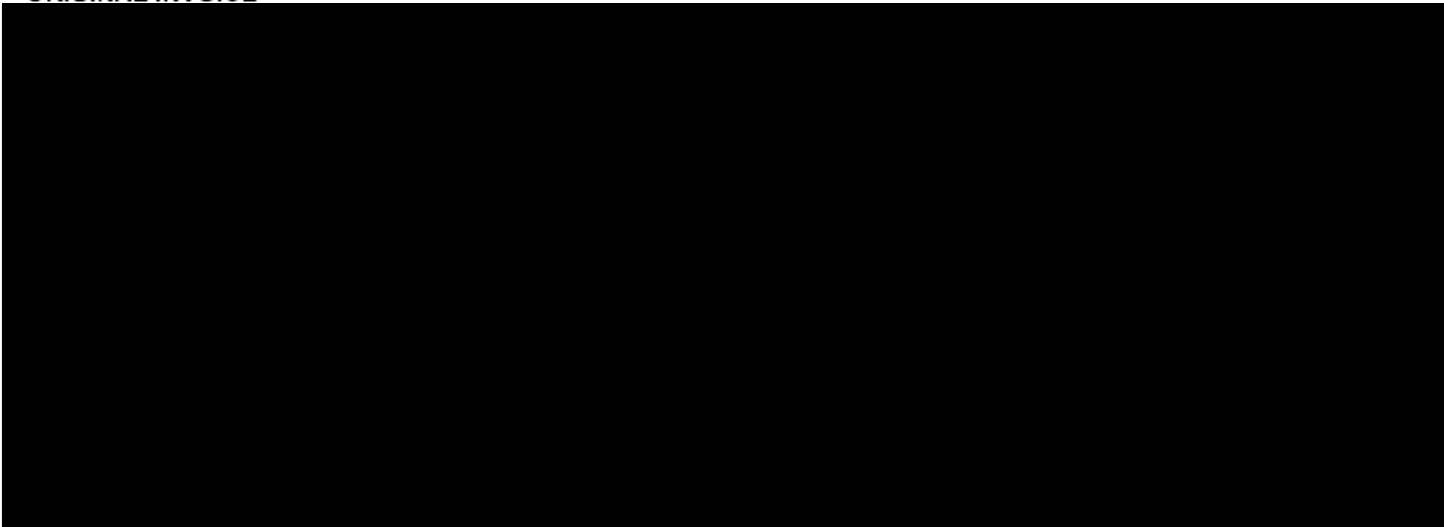
JOHNSON CONTROLS
Building Efficiency
Federal ID [REDACTED]





JOHNSON CONTROLS
Building Efficiency
Federal ID [REDACTED]

ORIGINAL INVOICE



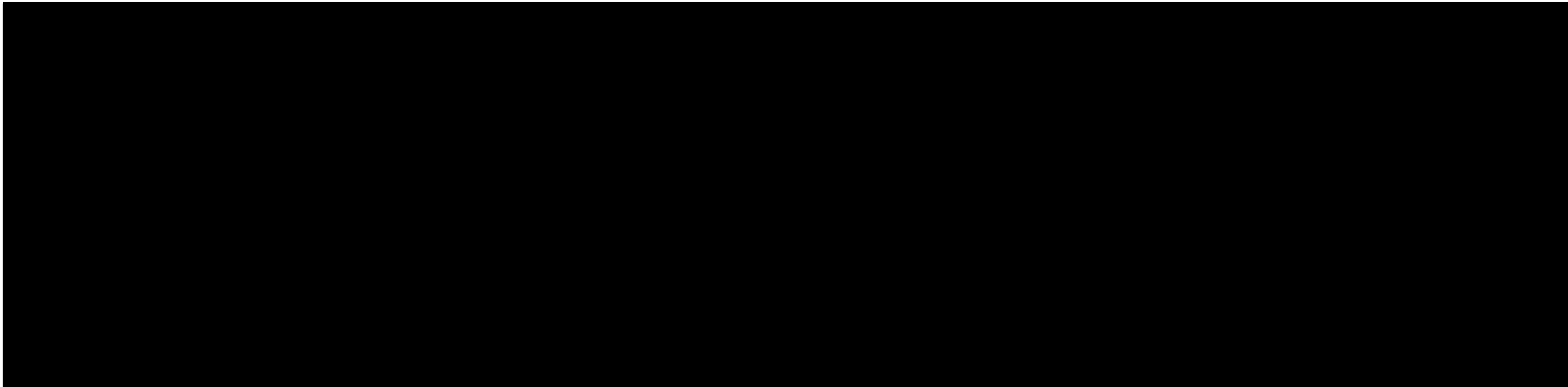
Direct Billing Inquiries: (866) 825-8870

Terms: If any invoice is not paid in full upon receipt, the Customer hereby agrees to pay interest at a rate of 1.5% per month (18% annually) upon the unpaid portion of the invoice. If action or suit is brought by Johnson Controls to collect any amount due or owing under this bill, Customer agrees to pay all costs of collection including attorney's fees.

All invoice payments greater than \$25,000 must be made via wire transfer, check or money order. Seller will not accept payment in the form of a credit card, debit card or other similar payment device on amounts greater than \$25,000.

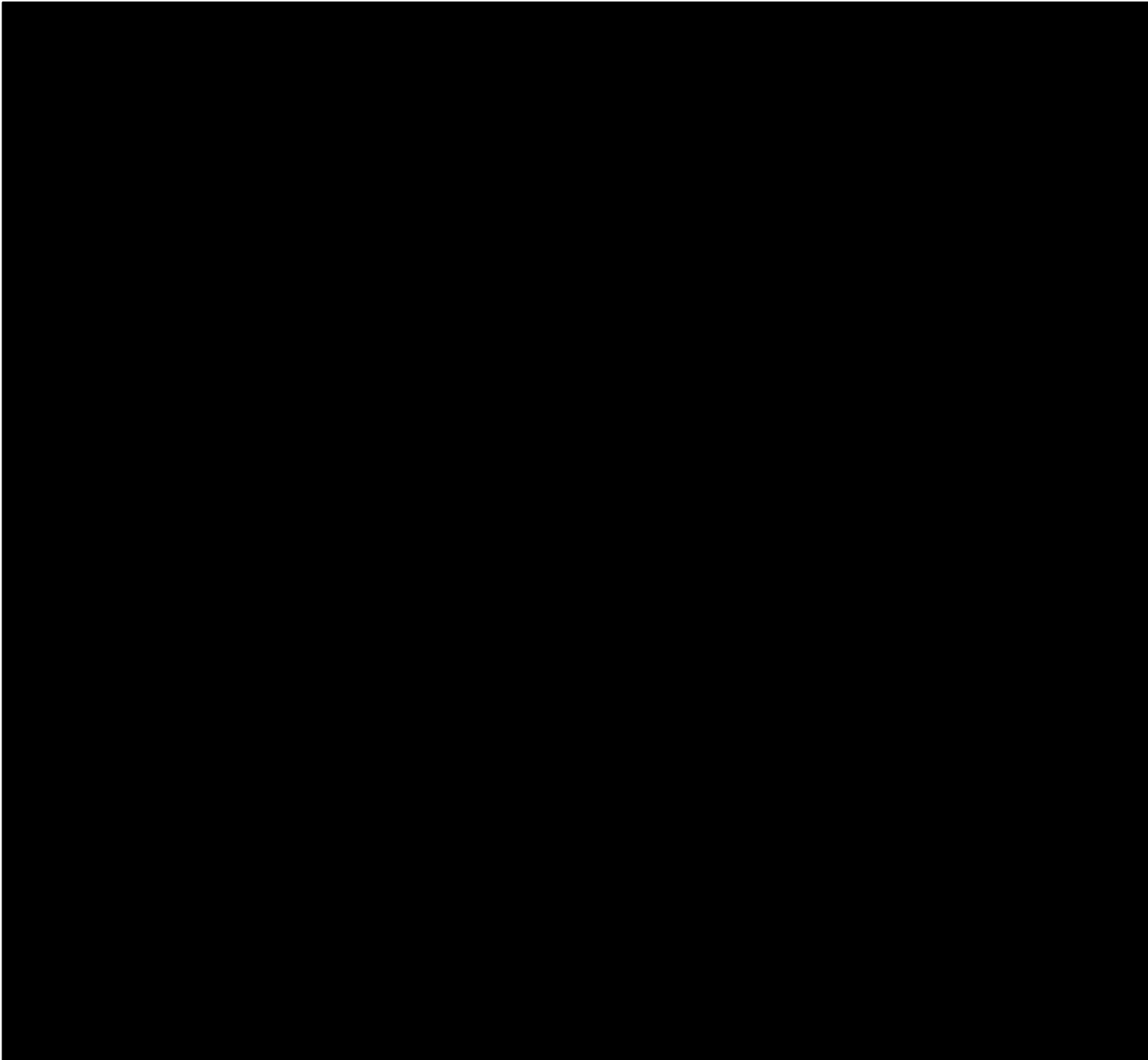
Disposable, Environmental & Usage (DEU) fee listed on this invoice may include charges for one or more of the following miscellaneous: Electrical, pneumatic, welding supplies, hardware materials, cleaning supplies, or refrigerant reclaim disposal. A lump sum charge was applied rather than itemizing usage.

We hereby certify that these goods are produced in compliance with all applicable requirements of sections 6, 7 and 12 of the Fair Labor Standards Act of 1938, as amended, and of regulations and orders of the Administrator of the Wage and Hour Division issued under section 14 thereof.





JOHNSON CONTROLS
Building Efficiency
Federal ID [REDACTED]



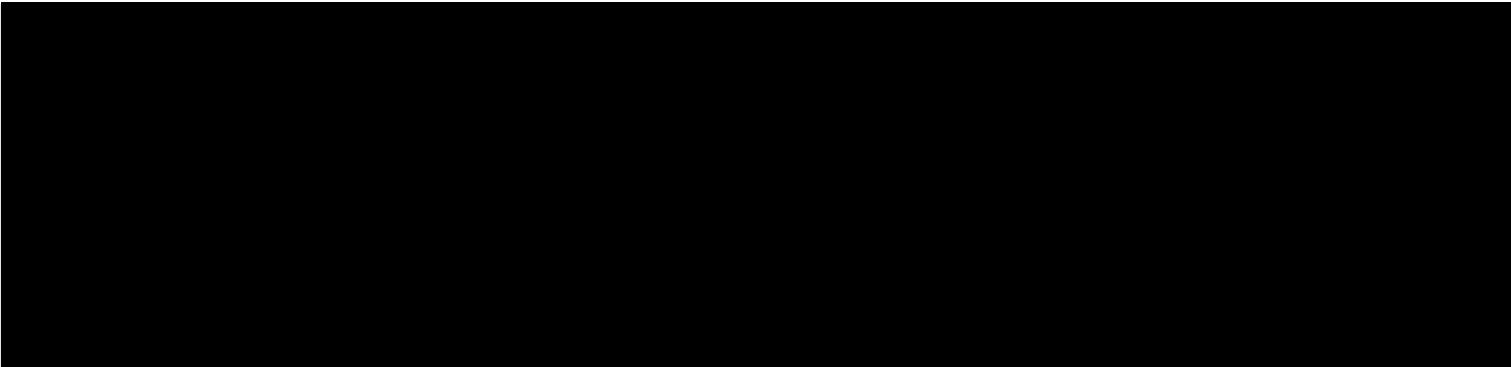
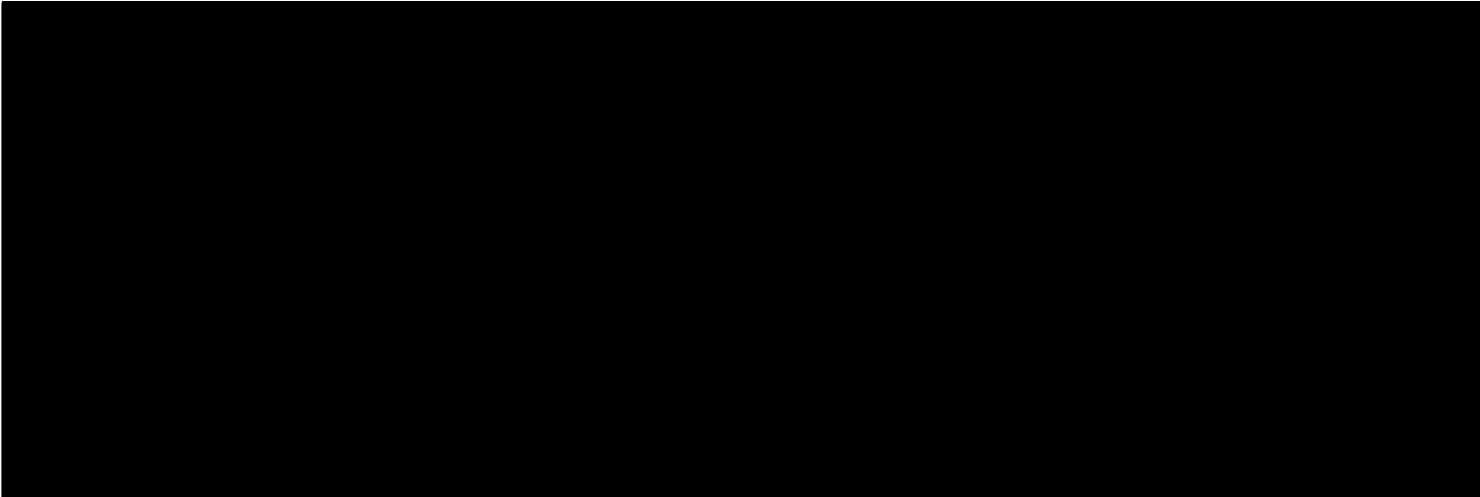
Direct Billing Inquiries: (866) 825-8870

Terms: If any invoice is not paid in full upon receipt, the Customer hereby agrees to pay interest at a rate of 1.5% per month (18% annually) upon the unpaid portion of the invoice. If action or suit is brought by Johnson Controls to collect any amount due or owing under this bill, Customer agrees to pay all costs of collection including attorney's fees.

All invoice payments greater than \$25,000 must be made via wire transfer, check or money order. Seller will not accept payment in the form of a credit card.



JOHNSON CONTROLS
Building Efficiency
Federal ID [REDACTED]



Boiler, Electric (Hot Water/Steam)

Operational

- Check with appropriate customer representative for operational deficiencies.
- Blow down low water cut-off.
- Check amperage.
- Check temperature and pressure.
- Check electrical connections.
- Check make-up water operation.
- Check for leaks.
- Check overall condition of unit.
- Clean area around equipment.
- Complete any required maintenance checklists, report observations to appropriate customer representative.

Comprehensive

- Check with appropriate customer representative for operational deficiencies.
- Check contactor(s).
- Check heating element(s) for continuity.
- Check and tighten electrical connections.
- Check all safeties.
- Check operating controls.
- Lift relief valve to ensure proper operation.
- Blow down low water cut-off.
- Check temperature and pressure.
- Check make-up water operation.
- Check for leaks.
- Check overall condition of unit.
- Clean area around equipment.
- Complete any required maintenance checklists, report observations to appropriate customer representative.

Boiler, Gas (Hot Water/Steam)

Operational

- | | |
|--------------------------|---|
| <input type="checkbox"/> | Check with appropriate customer representative for operational deficiencies. |
| <input type="checkbox"/> | Check gas pressure regulator. |
| <input type="checkbox"/> | Check ignition and flame safeguard. |
| <input type="checkbox"/> | Check flame quality. |
| <input type="checkbox"/> | Visually inspect combustion chamber, draft diverter and flue for accumulation of soot. |
| <input type="checkbox"/> | Check all safeties. |
| <input type="checkbox"/> | Check relief valves for leakage. |
| <input type="checkbox"/> | Assure fuel shutoff. |
| <input type="checkbox"/> | Blow down low water cut-off. |
| <input type="checkbox"/> | Check motor and fan bearing(s). Lubricate as required. |
| <input type="checkbox"/> | Check temperature and pressure. |
| <input type="checkbox"/> | Check electrical connections. |
| <input type="checkbox"/> | Check make-up water operation. |
| <input type="checkbox"/> | Check for leaks. |
| <input type="checkbox"/> | Check overall condition of unit. |
| <input type="checkbox"/> | Clean area around equipment. |
| <input type="checkbox"/> | Complete any required maintenance checklists, report observations to appropriate customer representative. |

Comprehensive

- | | |
|--------------------------|---|
| <input type="checkbox"/> | Check with appropriate customer representative for operational deficiencies. |
| <input type="checkbox"/> | Check contactor(s). |
| <input type="checkbox"/> | Check and tighten electrical connections. |
| <input type="checkbox"/> | Check gas pressure regulator. |
| <input type="checkbox"/> | Check and clean ignition and flame safeguard. |
| <input type="checkbox"/> | Clean combustion fan wheel. |
| <input type="checkbox"/> | Check flame quality. |
| <input type="checkbox"/> | Perform pilot turndown test (if applicable) |
| <input type="checkbox"/> | Visually inspect combustion chamber, draft diverter and flue for accumulation of soot. |
| <input type="checkbox"/> | Check all safeties. |
| <input type="checkbox"/> | Check operating controls. |
| <input type="checkbox"/> | Lift relief valve to ensure proper operation. |
| <input type="checkbox"/> | Blow down low water cut-off. |
| <input type="checkbox"/> | Clean low water cut-off. |
| <input type="checkbox"/> | Check motor and fan bearing(s). Lubricate as required |
| <input type="checkbox"/> | Check temperature and pressure. |
| <input type="checkbox"/> | Check make-up water operation. |
| <input type="checkbox"/> | Check for leaks. |
| <input type="checkbox"/> | Check overall condition of unit. |
| <input type="checkbox"/> | Clean area around equipment. |
| <input type="checkbox"/> | Complete any required maintenance checklists, report observations to appropriate customer representative. |

Boiler, Oil (Hot Water/Steam)

Operational

- Check with appropriate customer representative for operational deficiencies.
- Check fuel pressure regulator.
- Check igniter and flame safeguard.
- Check flame quality.
- Visually inspect combustion chamber, draft diverter and flue for accumulation of soot.
- Check all safeties.
- Check relief valves for leakage.
- Assure fuel shutoff.
- Blow down low water cut-off.
- Check motor and fan bearing(s). Lubricate as required.
- Check temperature and pressure.
- Check electrical connections.
- Check make-up water operation.
- Check for leaks.
- Check overall condition of unit.
- Clean area around equipment.
- Complete any required maintenance checklists, report observations to appropriate customer representative.

Comprehensive

- Check with appropriate customer representative for operational deficiencies.
- Check contactor(s).
- Check and tighten electrical connections.
- Check fuel pressure regulator.
- Check and clean ignitor and flame safeguard.
- Clean combustion fan wheel.
- Check and clean strainer(s).
- Replace fuel filter(s).
- Check and clean fuel nozzles.
- Check flame quality.
- Visually inspect combustion chamber, draft diverter and flue for accumulation of soot.
- Check all safeties.
- Check operating controls.
- Lift relief valve to ensure proper operation.
- Blow down low water cut-off.
- Check motor and fan bearing(s). Lubricate as required.
- Check temperature and pressure.
- Check make-up water operation.
- Check for leaks.
- Check overall condition of unit.
- Clean area around equipment.
- Complete any required maintenance checklists, report observations to appropriate customer representative.

Condenser, Air Cooled

Operational

- Check with appropriate customer representative for operational deficiencies.
- Check coil conditions.
- Visually check starter.
- Check condenser fan motor(s) and blade(s).
- Check for proper fan rotation.
- Visually inspect for refrigerant leaks.
- Check for unusual noise and vibration.
- Check overall condition of unit.
- Clean area around equipment.
- Complete any required maintenance checklists, report observations to appropriate customer representative.

Comprehensive

- Check with appropriate customer representative for operational deficiencies.
- Check and tighten electrical connections.
- Check coil conditions.
- Check starter.
- Check condenser fan motor(s) and blade(s).
- Lubricate as required.
- Check for proper fan rotation.
- Check for unusual noise and vibration.
- Check overall condition of unit.
- Clean area around equipment.
- Complete any required maintenance checklists, report observations to appropriate customer representative.

Heat Pump, Air Cooled

Operational

- Check with appropriate customer representative for operational deficiencies.
- Check system pressures and temperatures.
- Check refrigerant charge.
- Check compressor oil level(s).
- Inspect starter.
- Check crankcase heater.
- Visually inspect for refrigerant and oil leaks.
- Check condition of condenser coils.
- Check operation of reversing valve.
- Check condenser fan blades and motors.
- Check for proper condenser fan rotation.
- Check condition of evaporator coils.
- Check belt(s).
- Check filter(s).
- Check for proper fan operation.
- Check for unusual noise and vibration.
- Check overall condition of unit.
- Clean area around equipment.
- Complete any required maintenance checklists, report observations to appropriate customer representative.

Comprehensive

- Check with appropriate customer representative for operational deficiencies.
- Check system pressures and temperatures.
- Check refrigerant charge.
- Check compressor oil level(s).
- Inspect starter.
- Check crankcase heater.
- Visually inspect for refrigerant and oil leaks.
- Check and tighten electrical connections.
- Check condition of condenser coils.
- Check operation of reversing valve.
- Check condenser fan blades and motors.
- Check for proper condenser fan rotation.
- Check condition of evaporator coils.
- Change belt(s).
- Check filter(s).
- Check for proper fan operation. Lubricate as required.
- Clean condensate drain (if accessible).
- Check backup heat.
- Check defrost controls.
- Check for unusual noise and vibration.
- Check overall condition of unit.
- Clean area around equipment.
- Complete any required maintenance checklists, report observations to appropriate customer representative.

Furnace

Operational

- | | |
|--------------------------|---|
| <input type="checkbox"/> | Check with appropriate customer representative for operational deficiencies. |
| <input type="checkbox"/> | Check electrical connections. |
| <input type="checkbox"/> | Visual inspection of alignment (as applicable). |
| <input type="checkbox"/> | Check filter(s) |
| <input type="checkbox"/> | Check belt(s) (as applicable). |
| <input type="checkbox"/> | Check drive condition. |
| <input type="checkbox"/> | Check fan condition. |
| <input type="checkbox"/> | Check flame quality (as applicable). |
| <input type="checkbox"/> | Check for proper fan rotation. |
| <input type="checkbox"/> | Clean area around equipment. |
| <input type="checkbox"/> | Complete any required maintenance checklists, report observations to appropriate customer representative. |

Comprehensive

- | | |
|--------------------------|---|
| <input type="checkbox"/> | Check with appropriate customer representative for operational deficiencies. |
| <input type="checkbox"/> | Check electrical connections. |
| <input type="checkbox"/> | Visual inspection of alignment (as applicable). |
| <input type="checkbox"/> | Check filter(s) |
| <input type="checkbox"/> | Change belt(s) (as applicable). |
| <input type="checkbox"/> | Check drive condition. |
| <input type="checkbox"/> | Check fan condition. |
| <input type="checkbox"/> | Check flame quality (as applicable). |
| <input type="checkbox"/> | Check for proper fan rotation. |
| <input type="checkbox"/> | Clean area around equipment. |
| <input type="checkbox"/> | Complete any required maintenance checklists, report observations to appropriate customer representative. |

Infrared Heater, Gas

Comprehensive

- | | |
|--------------------------|---|
| <input type="checkbox"/> | Check with appropriate customer representative for operational deficiencies. |
| <input type="checkbox"/> | Check operating and safety controls, adjust as needed. |
| <input type="checkbox"/> | Clean pilot assembly, including electrode spark gap, orifice, and ignition wire. |
| <input type="checkbox"/> | Check and tighten electrical connections. |
| <input type="checkbox"/> | Inspect for leaks and report. |
| <input type="checkbox"/> | Check alignment of thermo-sensor bulb. |
| <input type="checkbox"/> | Check and clean pilot sight glass. |
| <input type="checkbox"/> | Clean area around equipment. |
| <input type="checkbox"/> | Complete any required maintenance checklists, report observations to appropriate customer representative. |

Heat Exchanger

Comprehensive

- | | |
|--------------------------|---|
| <input type="checkbox"/> | Check with appropriate customer representative for operational deficiencies. |
| <input type="checkbox"/> | Check operating and safety controls, adjust as needed. |
| <input type="checkbox"/> | Inspect for system leaks |
| <input type="checkbox"/> | Inspect structural elements and mounting points for vibration, corrosion, damage and secureness. (Document any prob |
| <input type="checkbox"/> | Check for fouling. |
| <input type="checkbox"/> | Confirm system flow. |
| <input type="checkbox"/> | Clean area around equipment. |
| <input type="checkbox"/> | Complete any required maintenance checklists, report observations to appropriate customer representative. |

Humidifier

Operational

- Check with appropriate customer representative for operational deficiencies.
- Check control valve(s).
- Check manifold.
- Check strainer.
- Check trap.
- Clean area around equipment.
- Complete any required maintenance checklists, report observations to appropriate customer representative.

Comprehensive

- Check with appropriate customer representative for operational deficiencies.
- Check control valve(s).
- Check manifold.
- Check strainer.
- Check trap.
- Clean area around equipment.
- Complete any required maintenance checklists, report observations to appropriate customer representative.

Radiant Heater

Operational

- Check with appropriate customer representative for operational deficiencies.
- Check for leaks.
- Check for unusual noise or vibration.
- Clean area around equipment.
- Complete any required maintenance checklists, report observations to appropriate customer representative.

Comprehensive

- Check with appropriate customer representative for operational deficiencies.
- Check for leaks.
- Cycle thermostat and check for proper operation.
- Check for unusual noise or vibration
- Clean area around equipment.
- Complete any required maintenance checklists, report observations to appropriate customer representative.

Unit Heater

Operational

- Check with appropriate customer representative for operational deficiencies.
- Cycle thermostat and check for proper operation.
- Check fan operation.
- Check for unusual noise or vibration.
- Clean area around equipment.
- Complete any required maintenance checklists, report observations to appropriate customer representative.

Comprehensive

- Check with appropriate customer representative for operational deficiencies.
- Cycle thermostat and check for proper operation.
- Check fan operation.
- Check for unusual noise or vibration.
- Clean area around equipment.
- Complete any required maintenance checklists, report observations to appropriate customer representative.

Pump

Operational

- Check with appropriate customer representative for operational deficiencies.
- Check for leaks.
- Check pressures.
- Visually inspect coupling.
- Check for unusual noise and vibration.
- Clean area around equipment.
- Complete any required maintenance checklists, report observations to appropriate customer representative.

Comprehensive

- Check with appropriate customer representative for operational deficiencies.
- Check amperage draw.
- Check for leaks.
- Check starter/contactors.
- Check and tighten electrical connections.
- Check coupling.
- Lubricate bearing(s).
- Check for unusual noise and vibration.
- Clean area around equipment.
- Complete any required maintenance checklists, report observations to appropriate customer representative.

Split System

Operational

- Check with appropriate customer representative for operational deficiencies.
- Check system pressures and temperatures.
- Check refrigerant charge.
- Check compressor oil level(s).
- Inspect starter.
- Check crankcase heater.
- Visually inspect for refrigerant and oil leaks.
- Check electrical connections.
- Check condition of condenser coils.
- Check condenser fan blades and motors.
- Check for proper condenser fan rotation.
- Check condition of evaporator coils.
- Check belt(s).
- Check filter(s).
- Check for proper fan operation.
- Check for unusual noise and vibration.
- Check overall condition of unit.
- Clean area around equipment.
- Complete any required maintenance checklists, report observations to appropriate customer representative.

Comprehensive

- Check with appropriate customer representative for operational deficiencies.
- Check system pressures and temperatures.
- Check refrigerant charge.
- Check compressor oil level(s).
- Inspect starter.
- Check crankcase heater.
- Visually inspect for refrigerant and oil leaks.
- Check and tighten electrical connections.
- Check condition of condenser coils.
- Check condenser fan blades and motors.
- Check for proper condenser fan rotation.
- Check condition of evaporator coils.
- Change belt(s).
- Check filter(s).
- Check for proper fan operation. Lubricate as required.
- Clean condensate drain (if accessible).
- Check for unusual noise and vibration.
- Check overall condition of unit.
- Clean area around equipment.
- Complete any required maintenance checklists, report observations to appropriate customer representative.

Water Heater, Electric

Operational

- Check with appropriate customer representative for operational deficiencies.
- Check amperage draw.
- Check temperature.
- Check condition of relief valve.
- Check for leaks.
- Check for unusual noise or vibration.
- Clean area around equipment.
- Complete any required maintenance checklists, report observations to appropriate customer representative.

Comprehensive

- Check with appropriate customer representative for operational deficiencies.
- Check amperage draw.
- Check temperature.
- Check and tighten electrical connections.
- Check continuity of heating element(s).
- Blow down tank.
- Lift relief valve to ensure proper operation.
- Check for leaks.
- Check for unusual noise or vibration.
- Clean area around equipment.
- Complete any required maintenance checklists, report observations to appropriate customer representative.

Water Heater, Oil

Operational

- Check with appropriate customer representative for operational deficiencies.
- Check temperature.
- Check condition of relief valve.
- Check for leaks.
- Visually inspect flame.
- Check for unusual noise or vibration.
- Clean area around equipment.
- Complete any required maintenance checklists, report observations to appropriate customer representative.

Comprehensive

- Check with appropriate customer representative for operational deficiencies.
- Check temperature.
- Check and tighten electrical connections.
- Clean nozzle.
- Change oil filter.
- Clean pump strainer.
- Check oil pressure.
- Clean flame sensor.
- Clean igniter.
- Blow down tank.
- Inspect water condition.
- Lift relief valve to ensure proper operation.
- Check for leaks.
- Check for unusual noise or vibration.
- Clean area around equipment.
- Complete any required maintenance checklists, report observations to appropriate customer representative.

Water Heater, Gas

Operational

- Check with appropriate customer representative for operational deficiencies.
- Check temperature.
- Check condition of relief valve.
- Check for leaks.
- Visually inspect flame.
- Check for unusual noise or vibration.
- Clean area around equipment.
- Complete any required maintenance checklists, report observations to appropriate customer representative.

Comprehensive

- Check with appropriate customer representative for operational deficiencies.
- Check temperature.
- Check and tighten electrical connections.
- Check gas pressure.
- Clean flame sensor.
- Clean igniter.
- Blow down tank.
- Inspect water condition.
- Lift relief valve to ensure proper operation.
- Check for leaks.
- Check for unusual noise or vibration.
- Clean area around equipment.
- Complete any required maintenance checklists, report observations to appropriate customer representative.



Johnson Controls, Inc.
3826 Thirlane Road, Suite 1
Roanoke, VA 24019
Phone: 540-362-5500
Fax: 540-561-0730

June 14, 2018

Virginia Tech Procurement Department
Attn: Reed Nagel
300 Turner Street, NW
North End Center, Suite 2100
Blacksburg, VA 24061

RE: VT RFP# 0055426 – Negotiation Question Responses

Dear Mr. Nagel:

Thank you for your interest in Johnson Controls as your furnace, boiler, and mechanical equipment maintenance services provider. This letter shall serve as a response to your negotiation questions dated May 30, 2018. We offer the following in reply:

1. Johnson Controls confirms that our emergency response plan includes having a qualified mechanic onsite within 2 hours of receiving the call. A primary technician will be assigned to Virginia Tech at the start of the contract with backup personnel as needed. On-call service is available for after-hours and emergency situations.
2. The details of our communication plan is as follows:
 - a. A Service Delivery Plan (SDP) is developed by our Customer Service Agent that outlines the schedule for routine maintenance services. In this case, the SDP will be organized by building and will include the maintenance tasks necessary for each piece of equipment at that site. Once a draft SDP is created, we will coordinate a kick-off meeting with Virginia Tech to set expectations and make adjustments to the schedule as needed. Once the SDP is finalized, we will schedule an internal meeting with all technicians that will be assigned to Virginia Tech so that contract expectations are clearly understood.
 - b. As for day-to-day communication, we have had past success with Virginia Tech contacting the primary technician first. Should the primary technician be unavailable, the second call should be placed to our local service Hotline where any one of three customer service representatives are available to take the call. If further escalation is required, additional contacts include the Account Manager and Service Manager. A formal call flow chart will be provided at the meeting scheduled for June 27, 2018.
3. Per the contract specifications, repair parts and/or materials for any single occurrence or failure up to the first \$1,000.00 have been included in the proposal. For occurrences or failures that will likely exceed \$1,000.00, we propose that a detailed labor and material repair quote be presented to Virginia Tech for review and that no work will be completed unless approved by Virginia Tech.



Johnson Controls, Inc.
 3826 Thirlane Road, Suite 1
 Roanoke, VA 24019
 Phone: 540-362-5500
 Fax: 540-561-0730

Virginia Tech will have the option of sourcing any 3rd-party material directly. If Johnson Controls parts and/or equipment is being presented, discounts off published list prices will be offered.

4. I am working on providing a cost breakdown per piece of equipment listed in the inventory. This will be sent separately from this letter but prior to the meeting on June 27, 2018.
5. Johnson Controls does have local engineering support. In addition to having a mechanical engineer on staff, we have any number of local partners to assist with and validate mechanical, electrical, and/or structural design requests
6. Regular & overtime rates offered in the proposal are clarified as follows:

Labor Category	Minimum Education/Certificate Level	Minimum Yrs Experience	Hourly Rate		
			REG	OT (1.5X)	DT (2.0X)
HVAC Journeyman Mechanic*	Journeyman License	5	\$110.00	\$165.00	\$220.00
HVAC Apprentice*	License or certification per jurisdiction	1	\$83.60	\$125.40	\$167.20
Certified Chiller Mechanic*	Journeyman License	5	\$118.80	\$178.20	\$237.60

*Labor rates quoted are in accordance with the local GSA rate scale

7. As equipment is added to the contract, we are committed to adding qualified personnel as needed to exceed the expectations set in the initial kick-off meeting. In addition to furnace and boiler mechanics, we currently staff certified chiller mechanics, HVAC and refrigeration mechanics, and HVAC apprentices. Johnson Controls is actively engaged in training our personnel as well as hiring local talent as needed to meet the needs of our customers.
8. In addition to standard HVAC maintenance equipment (electrical meters, refrigerant gauges, ladders, tools, etc.) we are prepared to source equipment as needed to complete our tasks in a safe and efficient manner. These include (but are not limited to): Scaffolding, scissor lifts, boom lifts, tube brushing machines, rigging equipment, etc.
9. All work performed under this contact shall be governed by current National (and local) electrical, mechanical, and building codes. With respect to annual boiler inspections, we will work with the AHJ so that furnace and boiler equipment is maintained in accordance with local standards. Johnson Controls is committed to completing our work in a safe manner. We hold regular safety training and are continually refining our processes so that we are meeting or exceeding OSHA standards for safety.



Johnson Controls, Inc.
 3826 Thirlane Road, Suite 1
 Roanoke, VA 24019
 Phone: 540-362-5500
 Fax: 540-561-0730

10. The chemical water treatment plan is presented as follows:

Campus	Building Name	System Treated	Service Frequency	Monthly Allowed Chemical Usage
Virginia and Maryland College of Veterinary Medicine	Building 441	5 – Bryan Steam Boilers	Monthly	1.5-5 gal. Formula PO-4 1.5-5 gal. Formula 83-M
	Building 447	1 – Fulton Steam Boiler	Monthly	0.5-5 gal. Formula PO-4 0.5-5 gal. Formula 83-M
	Building 148B	2 – Columbia Steam Boilers	Monthly	1.0-5 gal. Formula PO-4 1.0-5 gal. Formula 83-M
	IDU	1 – Superior Steam boiler	Monthly	1.0-5 gal. Formula PO-4 1.0-5 gal. Formula 83-M
Main Campus	Henderson Hall	1 – Weil McLain Steam Boiler	Monthly	1.0-5 gal. Formula PO-4 1.0-5 gal. Formula 83-M



Johnson Controls, Inc.
3826 Thirlane Road, Suite 1
Roanoke, VA 24019
Phone: 540-362-5500
Fax: 540-561-0730

Observations and Product Recommendations:

Program Goals:	Current operation has no pretreatment on makeup water allowing hardness to enter the feedwater system. The current water treatment program, when applied, uses only one multipurpose product which is not adequate to control and disperse deposits in the observed boilers. Our goal shall be to utilize 2 products in a dosing tank to emphasize additional polymers to assist in minimizing and removing system deposits. Per JCI, the steam is all enclosed and does not contact food or animals.
Building 441 Boilers	<ul style="list-style-type: none">* Annual Operation – High Pressure Steam* System dosing devices are in place* Softener pretreatment system not in place* System needs a 50 gallon tapered dosing tank with pump shelf lid* System needs alkalinity/sulfite/phosphate based inhibitor* Products: PO-4 (Inhibitor), fed at 30-60 ppm Phosphate 83-M (Sulfite and Polymer), fed at 30-60 PPM Sulfite
Building 447 Boiler	<ul style="list-style-type: none">* Annual Operation – High Pressure Steam* Functional system dosing devices not in place – dosing pump needed* Softener pretreatment system not in place* System needs a 50 gallon tapered dosing tank with pump shelf lid* System needs alkalinity/sulfite/phosphate based inhibitor* Products: PO-4 (Inhibitor), fed at 30-60 ppm Phosphate 83-M (Sulfite and Polymer), fed at 30-60 PPM Sulfite
Building 148B Boilers	<ul style="list-style-type: none">* Annual Operation – High Pressure Steam* System dosing devices are in place* Softener pretreatment system not in place* System needs a 50 gallon tapered dosing tank with pump shelf lid* System needs alkalinity/sulfite/phosphate based inhibitor* Products: PO-4 (Inhibitor), fed at 30-60 ppm Phosphate 83-M (Sulfite and Polymer), fed at 30-60 PPM Sulfite
Building IDU Boiler	<ul style="list-style-type: none">* Annual Operation – Low Pressure Steam* Functional system dosing devices not in place – dosing pump needed* Softener pretreatment system not in place* System needs a 50 gallon tapered dosing tank with pump shelf lid* System needs alkalinity/sulfite/phosphate based inhibitor* Products: PO-4 (Inhibitor), fed at 30-60 ppm Phosphate 83-M (Sulfite and Polymer), fed at 30-60 PPM Sulfite
Henderson Hall Boiler	<ul style="list-style-type: none">* Annual Operation – Low Pressure Steam* System dosing devices are in place* Softener pretreatment system not in place* System needs a 50 gallon tapered dosing tank with pump shelf lid* System needs alkalinity/sulfite/phosphate based inhibitor* Products: PO-4 (Inhibitor), fed at 30-60 ppm Phosphate 83-M (Sulfite and Polymer), fed at 30-60 PPM Sulfite



Johnson Controls, Inc.
3826 Thirlane Road, Suite 1
Roanoke, VA 24019
Phone: 540-362-5500
Fax: 540-561-0730

11. The period of performance as shown in the proposal is offered as a 1-year agreement with up to 4 optional 1-year renewals. A contract start date of July 1, 2018 has been offered to coincide with the University's fiscal year. However this date is negotiable.

Thank you for the opportunity to address your questions and for the opportunity to speak with you on June 27. Let me know if you need any additional information. I look forward to seeing you.

Kind regards,

A handwritten signature in cursive script that reads "John R. Weeks".

John R. Weeks
Account Executive
Johnson Controls, Inc.

cc. Jim Glover, Johnson Controls Service Manager



Procurement
300 Turner Street NW
North End Center, Ste 2100
Blacksburg, Virginia 24061
P: (540) 231-6221 F: (540) 231-9628
www.procurement.vt.edu

May 30, 2018

Johnson Controls, Inc.
Attn: John Weeks
3826 Thirlane Road, Suite 1
Roanoke, VA 24019

Dear Mr. Weeks:

Subject: Virginia Tech RFP #0055426
Thank you for submitting a proposal in response to the subject RFP.

We have reached the point in the evaluation process where we are ready to negotiate as provided for in the RFP. We are pleased to inform you that Johnson Controls has been selected for negotiations. Therefore, we would appreciate your response to the following:

1. Please confirm that your emergency response plan includes a mechanic on site within 2 hours.
2. Please provide your intentions for a communication plan.
3. Cost plus is not an allowable option for repair parts. Please provide an alternative cost plan for repair parts.
4. Please provide annual cost of service per piece of equipment listed in inventory.
5. Does your firm have local engineering support? If so, please discuss.
6. Please provide overtime rates or clarify that overtime rates are the same as those offered in the proposal.
7. Please indicate your plan to increase manpower as equipment is added to the contract.
8. Please indicate the service equipment that will be used for this contract.
9. Please indicate the codes and regulations that will govern work performed under this contract.
10. Please clarify the chemical water treatment option outlined on page 10 of your proposal.
11. Please clarify the period of the pricing offered on page 8 of your proposal.

Your response by 10:00 am June 13, 2018 would be greatly appreciated.

Sincerely,

Reed Nagel
Team Lead for Facilities Support



Johnson Controls, Inc.
3826 Thirlane Road, Suite 1
Roanoke, VA 24019
Phone: 540-362-5500
Fax: 540-561-0730

June 14, 2018

Virginia Tech Procurement Department
Attn: Reed Nagel
300 Turner Street, NW
North End Center, Suite 2100
Blacksburg, VA 24061

RE: VT RFP# 0055426 – Negotiation Question Responses

Dear Mr. Nagel:

Thank you for your interest in Johnson Controls as your furnace, boiler, and mechanical equipment maintenance services provider. This letter shall serve as a response to your negotiation questions dated May 30, 2018. We offer the following in reply:

1. Johnson Controls confirms that our emergency response plan includes having a qualified mechanic onsite within 2 hours of receiving the call. A primary technician will be assigned to Virginia Tech at the start of the contract with backup personnel as needed. On-call service is available for after-hours and emergency situations.
2. The details of our communication plan is as follows:
 - a. A Service Delivery Plan (SDP) is developed by our Customer Service Agent that outlines the schedule for routine maintenance services. In this case, the SDP will be organized by building and will include the maintenance tasks necessary for each piece of equipment at that site. Once a draft SDP is created, we will coordinate a kick-off meeting with Virginia Tech to set expectations and make adjustments to the schedule as needed. Once the SDP is finalized, we will schedule an internal meeting with all technicians that will be assigned to Virginia Tech so that contract expectations are clearly understood.
 - b. As for day-to-day communication, we have had past success with Virginia Tech contacting the primary technician first. Should the primary technician be unavailable, the second call should be placed to our local service Hotline where any one of three customer service representatives are available to take the call. If further escalation is required, additional contacts include the Account Manager and Service Manager. A formal call flow chart will be provided at the meeting scheduled for June 27, 2018.
3. Per the contract specifications, repair parts and/or materials for any single occurrence or failure up to the first \$1,000.00 have been included in the proposal. For occurrences or failures that will likely exceed \$1,000.00, we propose that a detailed labor and material repair quote be presented to Virginia Tech for review and that no work will be completed unless approved by Virginia Tech.



Johnson Controls, Inc.
 3826 Thirlane Road, Suite 1
 Roanoke, VA 24019
 Phone: 540-362-5500
 Fax: 540-561-0730

Virginia Tech will have the option of sourcing any 3rd-party material directly. If Johnson Controls parts and/or equipment is being presented, discounts off published list prices will be offered.

4. I am working on providing a cost breakdown per piece of equipment listed in the inventory. This will be sent separately from this letter but prior to the meeting on June 27, 2018.
5. Johnson Controls does have local engineering support. In addition to having a mechanical engineer on staff, we have any number of local partners to assist with and validate mechanical, electrical, and/or structural design requests
6. Regular & overtime rates offered in the proposal are clarified as follows:

Labor Category	Minimum Education/Certificate Level	Minimum Yrs Experience	Hourly Rate		
			REG	OT (1.5X)	DT (2.0X)
HVAC Journeyman Mechanic*	Journeyman License	5	\$110.00	\$165.00	\$220.00
HVAC Apprentice*	License or certification per jurisdiction	1	\$83.60	\$125.40	\$167.20
Certified Chiller Mechanic*	Journeyman License	5	\$118.80	\$178.20	\$237.60

*Labor rates quoted are in accordance with the local GSA rate scale

7. As equipment is added to the contract, we are committed to adding qualified personnel as needed to exceed the expectations set in the initial kick-off meeting. In addition to furnace and boiler mechanics, we currently staff certified chiller mechanics, HVAC and refrigeration mechanics, and HVAC apprentices. Johnson Controls is actively engaged in training our personnel as well as hiring local talent as needed to meet the needs of our customers.
8. In addition to standard HVAC maintenance equipment (electrical meters, refrigerant gauges, ladders, tools, etc.) we are prepared to source equipment as needed to complete our tasks in a safe and efficient manner. These include (but are not limited to): Scaffolding, scissor lifts, boom lifts, tube brushing machines, rigging equipment, etc.
9. All work performed under this contact shall be governed by current National (and local) electrical, mechanical, and building codes. With respect to annual boiler inspections, we will work with the AHJ so that furnace and boiler equipment is maintained in accordance with local standards. Johnson Controls is committed to completing our work in a safe manner. We hold regular safety training and are continually refining our processes so that we are meeting or exceeding OSHA standards for safety.



Johnson Controls, Inc.
 3826 Thirlane Road, Suite 1
 Roanoke, VA 24019
 Phone: 540-362-5500
 Fax: 540-561-0730

10. The chemical water treatment plan is presented as follows:

Campus	Building Name	System Treated	Service Frequency	Monthly Allowed Chemical Usage
Virginia and Maryland College of Veterinary Medicine	Building 441	5 – Bryan Steam Boilers	Monthly	1.5-5 gal. Formula PO-4 1.5-5 gal. Formula 83-M
	Building 447	1 – Fulton Steam Boiler	Monthly	0.5-5 gal. Formula PO-4 0.5-5 gal. Formula 83-M
	Building 146B	2 – Columbia Steam Boilers	Monthly	1.0-5 gal. Formula PO-4 1.0-5 gal. Formula 83-M
	IDU	1 – Superior Steam boiler	Monthly	1.0-5 gal. Formula PO-4 1.0-5 gal. Formula 83-M
Main Campus	Henderson Hall	1 – Weil McLain Steam Boiler	Monthly	1.0-5 gal. Formula PO-4 1.0-5 gal. Formula 83-M



Johnson Controls, Inc.
3826 Thirlane Road, Suite 1
Roanoke, VA 24019
Phone: 540-362-5500
Fax: 540-561-0730

Observations and Product Recommendations:

Program Goals:	Current operation has no pretreatment on makeup water allowing hardness to enter the feedwater system. The current water treatment program, when applied, uses only one multipurpose product which is not adequate to control and disperse deposits in the observed boilers. Our goal shall be to utilize 2 products in a dosing tank to emphasize additional polymers to assist in minimizing and removing system deposits. Per JCI, the steam is all enclosed and does not contact food or animals.
Building 441 Boilers	<ul style="list-style-type: none">* Annual Operation – High Pressure Steam* System dosing devices are in place* Softener pretreatment system not in place* System needs a 50 gallon tapered dosing tank with pump shelf lid* System needs alkalinity/sulfite/phosphate based inhibitor* Products: PO-4 (Inhibitor), fed at 30-60 ppm Phosphate 83-M (Sulfite and Polymer), fed at 30-80 PPM Sulfite
Building 447 Boiler	<ul style="list-style-type: none">* Annual Operation – High Pressure Steam* Functional system dosing devices not in place – dosing pump needed* Softener pretreatment system not in place* System needs a 50 gallon tapered dosing tank with pump shelf lid* System needs alkalinity/sulfite/phosphate based inhibitor* Products: PO-4 (Inhibitor), fed at 30-60 ppm Phosphate 83-M (Sulfite and Polymer), fed at 30-80 PPM Sulfite
Building 146B Boilers	<ul style="list-style-type: none">* Annual Operation – High Pressure Steam* System dosing devices are in place* Softener pretreatment system not in place* System needs a 50 gallon tapered dosing tank with pump shelf lid* System needs alkalinity/sulfite/phosphate based inhibitor* Products: PO-4 (Inhibitor), fed at 30-60 ppm Phosphate 83-M (Sulfite and Polymer), fed at 30-80 PPM Sulfite
Building IDU Boiler	<ul style="list-style-type: none">* Annual Operation – Low Pressure Steam* Functional system dosing devices not in place – dosing pump needed* Softener pretreatment system not in place* System needs a 50 gallon tapered dosing tank with pump shelf lid* System needs alkalinity/sulfite/phosphate based inhibitor* Products: PO-4 (Inhibitor), fed at 30-60 ppm Phosphate 83-M (Sulfite and Polymer), fed at 30-80 PPM Sulfite
Henderson Hall Boiler	<ul style="list-style-type: none">* Annual Operation – Low Pressure Steam* System dosing devices are in place* Softener pretreatment system not in place* System needs a 50 gallon tapered dosing tank with pump shelf lid* System needs alkalinity/sulfite/phosphate based inhibitor* Products: PO-4 (Inhibitor), fed at 30-60 ppm Phosphate 83-M (Sulfite and Polymer), fed at 30-80 PPM Sulfite



Johnson Controls, Inc.
3826 Thirlane Road, Suite 1
Roanoke, VA 24019
Phone: 540-362-5500
Fax: 540-561-0730

11. The period of performance as shown in the proposal is offered as a 1-year agreement with up to 4 optional 1-year renewals. A contract start date of July 1, 2018 has been offered to coincide with the University's fiscal year. However this date is negotiable.

Thank you for the opportunity to address your questions and for the opportunity to speak with you on June 27. Let me know if you need any additional information. I look forward to seeing you.

Kind regards,

A handwritten signature in cursive script that reads "John R. Weeks".

John R. Weeks
Account Executive
Johnson Controls, Inc.

cc. Jim Glover, Johnson Controls Service Manager



Johnson Controls, Inc.
3826 Thirlane Road, Suite 1
Roanoke, VA 24019
Phone: 540-362-5500
Fax: 540-561-0730

August 17, 2018

Virginia Tech Procurement Department
Attn: Reed Nagel
300 Turner Street, NW
North End Center, Suite 2100
Blacksburg, VA 24061

RE: VT RFP# 0055426 – Follow-Up Question Responses

Dear Mr. Nagel:

Thank you again for your continued interest in Johnson Controls as your furnace, boiler, and mechanical equipment service provider. As a follow up to our meeting on August 6, 2018, I offer the following responses in reply:

1. The proposed double-time rate would apply on any work performed on Sundays and/or any Union recognized holiday including:
 - a. New Year's Day
 - b. Memorial Day
 - c. 4th of July
 - d. Labor Day
 - e. Thanksgiving (Thursday and Friday)
 - f. Christmas Day
2. The limits of contractor responsibility as noted in the RFP specification under section VII, paragraph K, item 4 as "any single occurrence or failure or directly related components, beyond the first \$1,000.00" is to include parts & labor at the contracted rates. If an equipment and/or component failure is expected to exceed this limit, the repair shall be quoted to VT personnel and no work shall be completed prior to receiving written approval. A credit would be given on the quote for the \$1,000.00 allowance for parts & labor.
3. The individual site price list <attached> has been adjusted to reflect the 5-year agreement discounted price. In addition, a column has been added to several sites to propose a reduction in services in an effort to reduce cost. (These sites include: Architecture Research & Demonstration, Moore House, Parking Services, Vet Med IDU, Vet Med Virus Isolation 2, Agronomy, Hatchery, Golf Club House). This reduction in service includes providing basic preventative maintenance in lieu of full coverage for these sites.



Johnson Controls, Inc.
3826 Thirlane Road, Suite 1
Roanoke, VA 24019
Phone: 540-362-5500
Fax: 540-561-0730

4. It was discussed that equipment and/or buildings may be added or deleted at any time during the contract year. It is our understanding that the cost add or reduction would be pro-rated based upon where we are in the contract year. Since budgeting is due every May, we will make every effort to regularly review equipment lists with VT in anticipation of contract changes.

5. The revised proposal attached includes pricing for a 5-year agreement w/ up to 5 optional 1-year renewals for a total term of 10 years. It was discussed that after year 5, the equipment pricing and/or level of service would be re-evaluated.

Thank you for the opportunity to address your questions. Let me know if you need any additional information. I look forward to hearing from you

Kind regards,

A handwritten signature in cursive script that reads "John R. Weeks".

John R. Weeks
Account Executive
Johnson Controls, Inc.

cc. Jim Glover, Johnson Controls Service Manager

encl.



Procurement
300 Turner Street NW
North End Center, Ste 2100
Blacksburg, Virginia 24061
P: (540) 231-6221 F: (540) 231-9628
www.procurement.vt.edu

August 27, 2018

Johnson Controls, Inc.
Attn: John Weeks
3826 Thirlane Road, Suite 1
Roanoke, VA 24019

Dear Mr. Weeks:

Subject: Virginia Tech RFP #0055426

Thank you for submitting a proposal in response to the subject RFP.

We have reached the point in the evaluation process where we are ready to negotiate as provided for in the RFP. We are pleased to inform you that Johnson Controls has been selected for negotiations. Therefore, we would appreciate your response to the following:

1. Are there any additional forms or documents that you will require to be incorporated into the contract documents? If so, please submit.
2. Does Johnson Controls agree to provide monthly invoices with payment due thirty (30) days after receipt of invoice or goods/services, whichever is later?
3. Do you agree that you will be performing services as an Independent Contractor, Company, Corporation or other business entity and are not an employee of Virginia Tech or any other Commonwealth Entity?
4. Do you further agree that Virginia Tech will not withhold any income taxes from its payments to contractors nor will it provide any employment benefits to the contractor or contractor's employees?
5. Do you agree that the initial contract period shall be five (5) years?
6. Upon completion of the initial contract period, does Johnson Controls agree that the contract may be renewed by Virginia Tech upon written agreement of both parties for five (5) one (1) year periods, under the terms of the current contract?
7. Will Johnson Controls agree to participate in the Wells One AP Control Payment System?
8. Since our purchasing system requires precise and accurate information, please provide the following:

- a. Legal name of your company.
 - b. Trade name (DBA) if different from legal name.
 - c. Taxpayer identification Number.
 - d. Company name and address to which Virginia Tech should mail purchase orders.
 - e. Company name and address to which Virginia Tech should mail payments.
 - f. IRS W-9 form (Request for Taxpayer Identification Number and Certification).
9. Are you registered with and willing to participate in the eVA internet procurement solution described in the terms and conditions of the RFP?
10. Are you willing to rescind your Standard Terms and Conditions of Sale?
11. Does the vendor acknowledge, agree, and understand that the terms and conditions of the RFP # 0055426 shall govern the contract if a contract is awarded to your company?

Your response by 10:00 am August 31, 2018 would be greatly appreciated.

Sincerely,

Reed Nagel
Team Lead for Facilities Support



Johnson Controls, Inc.
3826 Thirlane Road, Suite 1
Roanoke, VA 24019
Phone: 540-362-5500
Fax: 540-561-0730

August 31, 2018

Virginia Tech Procurement Department
Attn: Reed Nagel
300 Turner Street, NW
North End Center, Suite 2100
Blacksburg, VA 24061

RE: VT RFP# 0055426 – Final Negotiation Question Responses

Dear Mr. Nagel:

We are thrilled to be part of the final negotiations for the subject referenced RFP. Thank you again for your continued interest in Johnson Controls as your furnace, boiler, and mechanical equipment service provider. As a follow up to your letter dated August 27, 2018, I offer the following responses in reply:

1. We do have forms that we'd like incorporated into the contract documents and they are as follows: 1) our "Schedule A" form which has been included in the formal RFP response. This includes the individual sites and equipment list with proposed service tasks. 2) The pricing summary page that explains the "extra pricing" procedure and proposed schedule of labor rates. These forms have been enclosed. It is also my assumption that explanations given in previous negotiation conversations will be incorporated into a "special conditions" section. i.e. holiday schedule, "extra pricing" explanation, etc.
2. Johnson Controls agrees to provide monthly invoices with payment terms of NET 30 after receipt of invoice or after goods/services are provided, whichever is later.
3. Johnson Controls agrees that we will be performing services as an independent contractor and are not considered an employee of Virginia Tech or any other Commonwealth Entity.
4. Johnson Controls further agrees that Virginia Tech will not withhold any income taxes from its payments to Johnson Controls nor will it provide any employment benefits to Johnson Controls or employees of Johnson Controls.
5. Johnson Controls agrees that the initial contract period shall be five (5) years.
6. Upon completion of the initial contract period, Johnson Controls agrees that the contract may be renewed by Virginia Tech upon written agreement between both parties for up to five (5), one (1) year periods, under the terms of the contract.



Johnson Controls, Inc.
3826 Thirlane Road, Suite 1
Roanoke, VA 24019
Phone: 540-362-5500
Fax: 540-561-0730

7. Johnson Controls will agree to participate in the Wells One AP Control Payment System. Please submit further details of this program for review.
8. Our business information is as follows:
 - a. Legal (trade) name: Johnson Controls, Inc.
 - b. Taxpayer ID: [REDACTED]
 - c. Submit purchase orders to:
 - i. Johnson Controls, Inc. 3826 Thirlane Road, Suite 1, Roanoke, VA 24019
 - ii. Fax: 540-561-6556
 - iii. Email: john.robert.weeks@jci.com
 - d. Submit payment to:
 - i. Johnson Controls, Inc., PO Box 730068, Dallas, TX 75373
 - e. W-9 form is attached
9. Johnson Controls is registered with and is willing to participate in the eVA internet procurement solution. Our eVA registration information is as follows:
 - a. Headquarters account code: [REDACTED]
 - b. Vendor/Customer: [REDACTED]
 - c. VA location ID: [REDACTED]
 - d. Ariba Network ID: [REDACTED]
10. Johnson Controls is willing to rescind our standard terms and conditions of sale.
11. Johnson Controls acknowledges, agrees, and understands that the terms and conditions of RFP# 0055426 shall govern the contract.

Thank you for the opportunity to address your questions. Let me know if you need any additional information. I look forward to hearing from you

Kind regards,

A handwritten signature in cursive script that reads "John R. Weeks".

John R. Weeks
Account Executive
Johnson Controls, Inc.

cc. Jim Glover, Johnson Controls Service Manager
encl.

Improving Comfort + Efficiency + Reliability

Schedule A - Equipment List

VT ALPHIN STUART ARENA	BLACKSBURG, VA 24060
-------------------------------	-----------------------------

Furnace, All

Quantity: 2
 Coverage Level: Premium
 Equipment: Furnace
 Style: All
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Reznor	ACUB120	BDB-01477

Heater, Gas Infrared-All

Quantity: 4
 Coverage Level: Premium
 Equipment: Heater
 Style: Gas Infrared-All
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Reznor	VR75	UNKNOWN

Split System, Cooling with Electric Heat, <7.5 Tons

Quantity: 2
 Coverage Level: Premium
 Equipment: Split System
 Style: Cooling with Electric Heat
 Type: <7.5 Tons
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Electric Heating Comprehensive
 2 Operational (Mid Season - Cooling/Heating)
 1 Cooling Comprehensive
 4 Return Air Filter Change

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Trane	TTA090A400FA	3474YF1AD

Unit Heater, Gas Fired, <300000 BTU

Quantity: 1
 Coverage Level: Premium
 Equipment: Unit Heater

Services Provided

1 Comprehensive



© 2018 Johnson Controls – CUSTOMER CONFIDENTIAL
 Do not copy (physically, electronically, or in any other media) without the express written permission of Johnson Controls

Request for Proposal
 Virginia Tech
 Furnace, Boiler & Mechanical Equipment
 Full Maintenance Services

Improving
Comfort + Efficiency + Reliability

VT ALPHIN STUART ARENA		BLACKSBURG, VA 24060	
Style:	Gas Fired		
Type:	<300000 BTU		
Size:	NA		
Year to Be Activated:	Year 1		
Year to Be Inactivated:	Year 2		
Asset #	Manufacturer	Model #	Serial #
	Trane	GPN004AAF1000D	F03L40505

Water Heater, Gas, 150-300GAL		Services Provided	
Quantity:	1	1	Comprehensive
Coverage Level:	Premium		
Equipment:	Water Heater		
Style:	Gas		
Type:	150-300GAL		
Size:	NA		
Year to Be Activated:	Year 1		
Year to Be Inactivated:	Year 2		
Asset #	Manufacturer	Model #	Serial #
	AO Smith	BTH120970	ML030015608

VT ARCHITECTURE RESEARCH FACILITY		BLACKSBURG, VA 24061	
Boiler, Gas-Fired, Fire Tube, 51-150 HP		Services Provided	
Quantity:	1	1	Comprehensive
Coverage Level:	Premium		
Equipment:	Boiler		
Style:	Gas-Fired		
Type:	Fire Tube		
Size:	51-150 HP		
Year to Be Activated:	Year 1		
Year to Be Inactivated:	Year 2		
Asset #	Manufacturer	Model #	Serial #
	HB Smith	G220-S/W-10 HIS	R9150

Unit Heater, Gas Fired, <300000 BTU		Services Provided	
Quantity:	7	1	Comprehensive
Coverage Level:	Premium		
Equipment:	Unit Heater		
Style:	Gas Fired		
Type:	<300000 BTU		
Size:	NA		
Year to Be Activated:	Year 1		
Year to Be Inactivated:	Year 2		



© 2018 Johnson Controls – CUSTOMER CONFIDENTIAL
Do not copy (physically, electronically or in any other media) without the express written permission of Johnson Controls

Request for Proposal
Virginia Tech
Furnace, Boiler & Mechanical Equipment
Full Maintenance Services

Improving
Comfort + Efficiency + Reliability

VT ARCHITECTURE RESEARCH FACILITY	BLACKSBURG, VA 24061
--	-----------------------------

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Modine	BAESOAC	UNKNOWN

VT BROOKS FOREST PRODUCTS CENTER	BLACKSBURG, VA 24061-1072
---	----------------------------------

Boiler, Electric, Water Tube, <50 HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Electric
 Type: Water Tube
 Size: <50 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Chromalox	CES-24	N-8045-W81

Expansion Tank

Quantity: 1
 Coverage Level: Premium
 Equipment: Expansion Tank
 Style: NA
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Operational

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
		5C-24-100-36H	85008



Improving Comfort + Efficiency + Reliability

VT BURRUSS HALL	BLACKSBURG, VA 24061-1052		
Boiler, Electric, Water Tube, <50 HP			
Quantity:	1	Services Provided	
Coverage Level:	Premium	1	Comprehensive
Equipment:	Boiler		
Style:	Electric		
Type:	Water Tube		
Size:	<50 HP		
Year to Be Activated:	Year 1		
Year to Be Inactivated:	Year 2		
Asset #	Manufacturer	Model #	Serial #
	Lattner	57511W	53861

VT DRY RENDERING FACILITY	BLACKSBURG, VA 24061-1007		
Water Heater, Gas, 150-300GAL			
Quantity:	1	Services Provided	
Coverage Level:	Premium	1	Comprehensive
Equipment:	Water Heater		
Style:	Gas		
Type:	150-300GAL		
Size:	NA		
Year to Be Activated:	Year 1		
Year to Be Inactivated:	Year 2		
Asset #	Manufacturer	Model #	Serial #
	Lochinvar Corporation	SNA285-125	JO9C10121203

VT GEOTECHNICAL RESEARCH LAB	BLACKSBURG, VA 24061-1014		
Furnace, All			
Quantity:	3	Services Provided	
Coverage Level:	Premium	1	Comprehensive
Equipment:	Furnace		
Style:	All		
Type:	NA		
Size:	NA		
Year to Be Activated:	Year 1		
Year to Be Inactivated:	Year 2		
Asset #	Manufacturer	Model #	Serial #
	Reznor	SCI75-6-2	UNKNOWN



© 2018 Johnson Controls – CUSTOMER CONFIDENTIAL
Do not copy (physically, electronically or in any other media) without the express written permission of Johnson Controls

Request for Proposal
Virginia Tech
Furnace, Boiler & Mechanical Equipment
Full Maintenance Services

Improving Comfort + Efficiency + Reliability

VT GEOTECHNICAL RESEARCH LAB	BLACKSBURG, VA 24061-1014
-------------------------------------	----------------------------------

Split System, Cooling Only, 7.5-15 Tons

Quantity: 3
 Coverage Level: Premium
 Equipment: Split System
 Style: Cooling Only
 Type: 7.5-15 Tons
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

3 Operational (Mid Season - Cooling Only)
 1 Cooling Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Trane	TTA120B300DA	23346WSAD

Water Heater, Gas, 150-300GAL

Quantity: 1
 Coverage Level: Premium
 Equipment: Water Heater
 Style: Gas
 Type: 150-300GAL
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Bradford White	RG240SGN	PB38976200

VT GREENHOUSE #6	BLACKSBURG, VA 24061-1011
-------------------------	----------------------------------

Unit Heater, Gas Fired, <300000 BTU

Quantity: 4
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: <300000 BTU
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Trane	GTAB-0220S1	J82B-03144



© 2018 Johnson Controls – CUSTOMER CONFIDENTIAL
 Do not copy (physically, electronically, or in any other media) without the express written permission of Johnson Controls

Request for Proposal
 Virginia Tech
 Furnace, Boiler & Mechanical Equipment
 Full Maintenance Services

Improving
Comfort + Efficiency + Reliability

VT GREENHOUSE COMPLEX STR. BLDG	BLACKSBURG, VA 24061-0001
--	----------------------------------

Unit Heater, Gas Fired, <300000 BTU

Quantity: 2
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: <300000 BTU
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Dayton	4LX48A	UNKNOWN

VT GROUNDS BUILDING	BLACKSBURG, VA 24061-1030
----------------------------	----------------------------------

Boiler, Gas-Fired, Water Tube, 51-150 HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: 51-150 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Burnham Commercial	V-907	7596781

VT THE GROVE	BLACKSBURG, VA 24061
---------------------	-----------------------------

Boiler, Gas-Fired, Water Tube, 51-150 HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: 51-150 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	HB Smith	19A, SERIES S/W-5	FA2000-320P



© 2018 Johnson Controls – CUSTOMER CONFIDENTIAL
 Do not copy (physically, electronically, or in any other media) without the express written permission of Johnson Controls

Request for Proposal
 Virginia Tech
 Furnace, Boiler & Mechanical Equipment
 Full Maintenance Services

Improving Comfort + Efficiency + Reliability

VT HEALTH & SAFETY BUILDING	BLACKSBURG, VA 24061-0001
--	----------------------------------

Boiler, Gas-Fired, Water Tube, 51-150 HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: 51-150 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Burnham Commercial	V-910	7590636

VT HENDERSON HALL	BLACKSBURG, VA 24061-0001
--------------------------	----------------------------------

Boiler, Gas-Fired, Water Tube, 51-150 HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: 51-150 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Weil Mclain	1788	UNKNOWN

VT ICTAS II	BLACKSBURG, VA 24061-1016
--------------------	----------------------------------

Heat Exchanger-All

Quantity: 1
 Coverage Level: Premium
 Equipment: Heat Exchanger-All
 Style: NA
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Cemline	H120USG1060	24-X-63



Improving Comfort + Efficiency + Reliability

VT INFECTIOUS DISEASE RESEARCH FACILITY	BLACKSBURG, VA 24061-1007
--	----------------------------------

Boiler, Gas-Fired, High Efficiency, >10 HP

Quantity: 3
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: High Efficiency
 Size: >10 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	AERCO	MLX-757	757-09-0181

Water Heater, Gas, <150GAL

Quantity: 2
 Coverage Level: Premium
 Equipment: Water Heater
 Style: Gas
 Type: <150GAL
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	AO Smith	BTH150A100	1121M002111

VT INCINERATOR	BLACKSBURG, VA 24060-3836
-----------------------	----------------------------------

Unit Heater, Gas Fired, <300000 BTU

Quantity: 1
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: <300000 BTU
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Reznor	UDAP100	UNKNOWN



Improving
Comfort + Efficiency + Reliability

VT MATERIAL MANAGEMENT	BLACKSBURG, VA 24061-0001
-------------------------------	----------------------------------

Boiler, Gas-Fired, High Efficiency, >10 HP

Quantity: 2
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: High Efficiency
 Size: >10 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Knight	KBN500	D10H10127694

VT MINING & MINERALS LAB	BLACKSBURG, VA 24060
-------------------------------------	-----------------------------

Furnace, All

Quantity: 1
 Coverage Level: Premium
 Equipment: Furnace
 Style: All
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Hasting	CF-40-G21	52091

Unit Heater, Gas Fired, 300000-600000 BTU

Quantity: 4
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: 300000-600000 BTU
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Trane	GPND0004AD	F06K41273



Improving Comfort + Efficiency + Reliability

VT MOORE HOUSE (PSYCHOLOGICAL SERVICES CENTER)	BLACKSBURG, VA 24060-3728
---	----------------------------------

Boiler, Gas-Fired, Water Tube, 51-150 HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: 51-150 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	HB Smith	GB100-W-121NTD	GB2001-1913

VT PARKING SERVICES	BLACKSBURG, VA 24061-0001
----------------------------	----------------------------------

Boiler, Gas-Fired, Water Tube, <50HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: <50HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Burnham Commercial	FD/10	34000715

VT PLANT PATHOLOGY BUILDING	BLACKSBURG, VA 24061-1017
------------------------------------	----------------------------------

Boiler, Gas-Fired, Water Tube, <50HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: <50HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	National-US Radiator	0-4102	137255



© 2016 Johnson Controls – CUSTOMER CONFIDENTIAL
 Do not copy (physically, electronically, or in any other media) without the express written permission of Johnson Controls

Request for Proposal
 Virginia Tech
 Furnace, Boiler & Mechanical Equipment
 Full Maintenance Services

Improving Comfort + Efficiency + Reliability

VT PLANT PATHOLOGY BUILDING	BLACKSBURG, VA 24061-1017
------------------------------------	----------------------------------

Water Heater, Gas, <150GAL

Quantity: 1
 Coverage Level: Premium
 Equipment: Water Heater
 Style: Gas
 Type: <150GAL
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Rheem	G75-125	URNG 1199G00954

VT SOLITUDE	BLACKSBURG, VA 24061-1038
--------------------	----------------------------------

Boiler, Gas-Fired, Water Tube, <50HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: <50HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Weil Mclain	CG1-8PIN	UNKNOWN

VT SOUTH GATE ADDITION (PUBLIC SAFETY)	BLACKSBURG, VA 24061-1033
---	----------------------------------

Boiler, Gas-Fired, Water Tube, <50HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: <50HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Peerless	TC-04	NO SERIAL#



Improving Comfort + Efficiency + Reliability

VT SW CHILLER PLANT	BLACKSBURG, VA 24061-0001
----------------------------	----------------------------------

Boiler, Gas-Fired, Water Tube, 51-150 HP

Quantity: 2
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: 51-150 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Bryan Boilers	EB-150-W-4T11	99439

VT STERRETT FACILITY COMPLEX	BLACKSBURG, VA 24061-1031
-------------------------------------	----------------------------------

Boiler, Gas-Fired, Water Tube, 51-150 HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: 51-150 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	HB Smith	28A-S/W-10	N2003-1071

VT STRUCTURES & MATERIALS LAB	BLACKSBURG, VA 24061-1015
--	----------------------------------

Furnace, All

Quantity: 2
 Coverage Level: Premium
 Equipment: Furnace
 Style: All
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Trane	TDD120C960B0	UNKNOWN



Improving
Comfort + Efficiency + Reliability

VT STRUCTURES & MATERIALS LAB	BLACKSBURG, VA 24061-1015
--	----------------------------------

Unit Heater, Gas Fired, 300000-600000 BTU

Quantity: 7
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: 300000-600000 BTU
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Dayton	3E3690	Q8959137

VT VETERINARY MEDICINE (IDU ON PRICES FORK)	BLACKSBURG, VA 24060-3831
--	----------------------------------

Boiler, Gas-Fired, Fire Tube, 151-300 HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Fire Tube
 Size: 151-300 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive
 1 Tube Brushing (Fire Tube - Gaskets not included)

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Superior Boiler	#4-5304	12123

Boiler, Gas-Fired, Water Tube, 51-150 HP

Quantity: 2
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: 51-150 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Columbia Boiler	146769	156789

Unit Heater, Gas Fired, <300000 BTU

Quantity: 1
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: <300000 BTU

Services Provided
 1 Comprehensive



Improving Comfort + Efficiency + Reliability

VT VETERINARY MEDICINE (IDU ON PRICES FORK)	BLACKSBURG, VA 24060-3831		
Size: NA Year to Be Activated: Year 1 Year to Be Inactivated: Year 2			
Asset #	Manufacturer	Model #	Serial #
	Dayton	UNKNOWN	UNKNOWN

Water Heater, Gas, 150-300GAL			
Quantity: 1 Coverage Level: Premium Equipment: Water Heater Style: Gas Type: 150-300GAL Size: NA Year to Be Activated: Year 1 Year to Be Inactivated: Year 2	Services Provided 1 Comprehensive		
Asset #	Manufacturer	Model #	Serial #
	Pvi Industries Inc	40P250AG	508124502

VT VETERINARY MEDICINE (HOS BUILDING)	BLACKSBURG, VA 24060-3831		
Unit Heater, Gas Fired, 300000-600000 BTU			
Quantity: 1 Coverage Level: Premium Equipment: Unit Heater Style: Gas Fired Type: 300000-600000 BTU Size: NA Year to Be Activated: Year 1 Year to Be Inactivated: Year 2	Services Provided 1 Comprehensive		
Asset #	Manufacturer	Model #	Serial #
	Reznor	XL60-3	AME31G8N31452



Improving
Comfort + Efficiency + Reliability

VT VETERINARY MEDICINE (CMMID)	BLACKSBURG, VA 24060-3831
---------------------------------------	----------------------------------

Boiler, Gas-Fired, Water Tube, <50HP

Quantity: 5
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: <50HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Bryan Boilers	CLM150-S-150FDG	97874

VT VETERINARY MEDICINE (POULTRY VIRUS A)	BLACKSBURG, VA 24060-3831
---	----------------------------------

Furnace, All

Quantity: 1
 Coverage Level: Premium
 Equipment: Furnace
 Style: All
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Heil	NTC61100KFA1	L9823 44523

VT VETERINARY MEDICINE (POULTRY VIRUS B)	BLACKSBURG, VA 24060-3831
---	----------------------------------

Furnace, All

Quantity: 1
 Coverage Level: Premium
 Equipment: Furnace
 Style: All
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Heil	NUGE125LH82	L912920865



© 2018 Johnson Controls – CUSTOMER CONFIDENTIAL
 Do not copy (physically, electronically or in any other media) without the express written permission of Johnson Controls

Request for Proposal
 Virginia Tech
 Furnace, Boiler & Mechanical Equipment
 Full Maintenance Services

Improving Comfort + Efficiency + Reliability

VT VETERINARY MEDICINE (POULTRY VIRUS C)	BLACKSBURG, VA 24060-3831
---	----------------------------------

Furnace, All

Quantity: 1
 Coverage Level: Premium
 Equipment: Furnace
 Style: All
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Heil	NUGE125LH32	L922236069

VT VETERINARY MEDICINE (AQUATIC MEDICINE LAB)	BLACKSBURG, VA 24060-3831
--	----------------------------------

Unit Heater, Gas Fired, <300000 BTU

Quantity: 1
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: <300000 BTU
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Dayton	3E368E	E02G002995

VT VETERINARY MEDICINE (VIRUS ISOLATION BLDG 2)	BLACKSBURG, VA 24060-3831
--	----------------------------------

Boiler, Gas-Fired, Water Tube, <50HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: <50HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
		39713	UNKNOWN

Unit Heater, Gas Fired, <300000 BTU



© 2018 Johnson Controls – CUSTOMER CONFIDENTIAL
 Do not copy (physically, electronically, or in any other media) without the express written permission of Johnson Controls

Request for Proposal
 Virginia Tech
 Furnace, Boiler & Mechanical Equipment
 Full Maintenance Services
 Page 29

Improving
Comfort + Efficiency + Reliability

VT VETERINARY MEDICINE (VIRUS ISOLATION BLDG 2)	BLACKSBURG, VA 24060-3831		
Quantity: 2 Coverage Level: Premium Equipment: Unit Heater Style: Gas Fired Type: <300000 BTU Size: NA Year to Be Activated: Year 1 Year to Be Inactivated: Year 2	Services Provided 1 Comprehensive		
Asset #	Manufacturer	Model #	Serial #
	Trane	HMG200HS VSPGIIN	UNKNOWN

VT VETERINARY MEDICINE (VIRUS ISOLATION BLDG 3)	BLACKSBURG, VA 24060-3831		
Unit Heater, Gas Fired, <300000 BTU			
Quantity: 9 Coverage Level: Premium Equipment: Unit Heater Style: Gas Fired Type: <300000 BTU Size: NA Year to Be Activated: Year 1 Year to Be Inactivated: Year 2	Services Provided 1 Comprehensive		
Asset #	Manufacturer	Model #	Serial #
	Dayton	3E406	C8819345

VT VETERINARY MEDICINE (VIRUS ISOLATION BLDG 4)	BLACKSBURG, VA 24060-3831		
Unit Heater, Gas Fired, <300000 BTU			
Quantity: 11 Coverage Level: Premium Equipment: Unit Heater Style: Gas Fired Type: <300000 BTU Size: NA Year to Be Activated: Year 1 Year to Be Inactivated: Year 2	Services Provided 1 Comprehensive		
Asset #	Manufacturer	Model #	Serial #
	Trane	GPNC003AAB10000	A84E10861



© 2018 Johnson Controls - CUSTOMER CONFIDENTIAL
Do not copy (physically, electronically, or in any other media) without the express written permission of Johnson Controls

Request for Proposal
Virginia Tech
Furnace, Boiler & Mechanical Equipment
Full Maintenance Services

Improving Comfort + Efficiency + Reliability

VT VETERINARY MEDICINE (POULTRY VIRUS HOLDING)	BLACKSBURG, VA 24060-3831
---	----------------------------------

Unit Heater, Gas Fired, <300000 BTU

Quantity: 1
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: <300000 BTU
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Dayton	3E406	19343

VT VISITOR & UNDERGRAD ADMISSIONS CTR	BLACKSBURG, VA 24060
--	-----------------------------

Boiler, Gas-Fired, High Efficiency, >10 HP

Quantity: 2
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: High Efficiency
 Size: >10 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Lochinvar Corporation	KBN601	K10H10162882

Water Heater, Gas, 150-300GAL

Quantity: 1
 Coverage Level: Premium
 Equipment: Water Heater
 Style: Gas
 Type: 150-300GAL
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	AO Smith	BTF80-200	1050M001105



Improving Comfort + Efficiency + Reliability

VT AGRONOMY FARM	BLACKSBURG, VA 24060-3702
-------------------------	----------------------------------

Boiler, Gas-Fired, Water Tube, <50HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: <50HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive
 1 Fireside Cleaning (gaskets not included)

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Burnham Commercial	4FHW-127A-50-C-PF	UNKNOWN

Unit Heater, Gas Fired, <300000 BTU

Quantity: 1
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: <300000 BTU
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Sterling Electric Inc	11QVF075N	UNKNOWN

VT POULTRY BROODER (HATCHERY)	BLACKSBURG, VA 24061-0001
--------------------------------------	----------------------------------

Boiler, Gas-Fired, Water Tube, <50HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: <50HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Fireside Cleaning (gaskets not included)
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Columbia Boiler	MPH-40	UNKNOWN



Improving Comfort + Efficiency + Reliability

VT AQUATICS & FISHERIES RESEARCH CTR	BLACKSBURG, VA 24060-6347
---	----------------------------------

Furnace, All

Quantity: 2
 Coverage Level: Premium
 Equipment: Furnace
 Style: All
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Reznor	SCB125-6	UNKNOWN

Unit Heater, Gas Fired, <300000 BTU

Quantity: 8
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: <300000 BTU
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Dayton	4LXS1	UNKNOWN

VT STEGER NORTH & SOUTH (BIOINFORMATICS)	BLACKSBURG, VA 24061-1016
---	----------------------------------

Humidifier All

Quantity: 8
 Coverage Level: Premium
 Equipment: Humidifier All
 Style: NA
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
H-1	Nortec Industries	UNKNOWN	UNKNOWN
H-2	Nortec Industries	UNKNOWN	UNKNOWN
H-3	Nortec Industries	UNKNOWN	UNKNOWN
H-4	Nortec Industries	UNKNOWN	UNKNOWN
SH-1	Dri-Steam	STS-800C	1114992-01-01
SH-2	Dri-Steam	STS-800C	1114992-02-01
SH-3	Dri-Steam	STS-400C	1114992-03-01
SH-4	Dri-Steam	STS-25C	1114992-04-01



Improving
Comfort + Efficiency + Reliability

VT STEGER NORTH & SOUTH (BIOINFORMATICS)	BLACKSBURG, VA 24061-1016
---	----------------------------------

VT SWINE CENTER	BLACKSBURG, VA 24060
------------------------	-----------------------------

Unit Heater, Gas Fired, <300000 BTU

Quantity: 8
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: <300000 BTU
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Modine	DJE1L5FN-43	UNKNOWN

VT CASSELL COLISEUM	BLACKSBURG, VA 24061-1065
----------------------------	----------------------------------

Heat Exchanger-All

Quantity: 1
 Coverage Level: Premium
 Equipment: Heat Exchanger-All
 Style: NA
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
		SAUNATEC 42-480	UNKNOWN



Improving
Comfort + Efficiency + Reliability

VT FOOTBALL LOCKER ROOM	BLACKSBURG, VA 24061-0001
--------------------------------	----------------------------------

Heat Exchanger-All

Quantity: 2
 Coverage Level: Premium
 Equipment: Heat Exchanger-All
 Style: NA
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
		SAUNATEC 42-480	5E05

VT LANE STADIUM	BLACKSBURG, VA 24061-1022
------------------------	----------------------------------

Air Handling Unit (AHU), Make-Up Air Unit (MAU), <15 HP

Quantity: 21
 Coverage Level: Premium
 Equipment: Air Handling Unit (AHU)
 Style: Make-Up Air Unit (MAU)
 Type: <15 HP
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Trane	GRAA20GBAEON1BK	UNKNOWN

Boiler, Gas-Fired, Water Tube, 51-150 HP

Quantity: 3
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: 51-150 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	RBI Futera III Series	33DB1950NASSS	30227109

Boiler, Gas-Fired, Water Tube, <50HP

Quantity: 2
 Coverage Level: Premium
 Equipment: Boiler

Services Provided
 1 Comprehensive



Improving Comfort + Efficiency + Reliability

VT LANE STADIUM		BLACKSBURG, VA 24061-1022	
Style:	Gas-Fired		
Type:	Water Tube		
Size:	<50HP		
Year to Be Activated:	Year 1		
Year to Be Inactivated:	Year 2		
Asset #	Manufacturer	Model #	Serial #
	Bryan Boilers	RV800-W-FDG-RC	92435

Furnace, All		Services Provided	
Quantity:	1	1	Comprehensive
Coverage Level:	Premium		
Equipment:	Furnace		
Style:	All		
Type:	NA		
Size:	NA		
Year to Be Activated:	Year 1		
Year to Be Inactivated:	Year 2		
Asset #	Manufacturer	Model #	Serial #
	JCL YORK	UNKNOWN	UNKNOWN

Unit Heater, Gas Fired, <300000 BTU		Services Provided	
Quantity:	1	1	Comprehensive
Coverage Level:	Premium		
Equipment:	Unit Heater		
Style:	Gas Fired		
Type:	<300000 BTU		
Size:	NA		
Year to Be Activated:	Year 1		
Year to Be Inactivated:	Year 2		
Asset #	Manufacturer	Model #	Serial #
	WeatherRite	MD124HHR	UNKNOWN

Unit Heater, Gas Fired, <300000 BTU		Services Provided	
Quantity:	6	1	Comprehensive
Coverage Level:	Premium		
Equipment:	Unit Heater		
Style:	Gas Fired		
Type:	<300000 BTU		
Size:	NA		
Year to Be Activated:	Year 1		
Year to Be Inactivated:	Year 2		
Asset #	Manufacturer	Model #	Serial #
	Sterling Electric Inc	QVEF-100	G02299721001001



Improving Comfort + Efficiency + Reliability

VT LANE STADIUM	BLACKSBURG, VA 24061-1022
------------------------	----------------------------------

Water Heater, Gas, 150-300GAL

Quantity: 1
 Coverage Level: Premium
 Equipment: Water Heater
 Style: Gas
 Type: 150-300GAL
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	State Water Heater	SUE100240NE	F05MO03574

Water Heater, Gas, 301-450GAL

Quantity: 1
 Coverage Level: Premium
 Equipment: Water Heater
 Style: Gas
 Type: 301-450GAL
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Pvi Industries Inc	1250P900A-TP	202106400

VT BURROWS-BURLESON TENNIS PAVILION	BLACKSBURG, VA 24061-0001
--	----------------------------------

Furnace, All

Quantity: 3
 Coverage Level: Premium
 Equipment: Furnace
 Style: All
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Carrier	58SSC075-GC	3591A09506

Heater, Gas Infrared-All

Quantity: 13
 Coverage Level: Premium
 Equipment: Heater
 Style: Gas Infrared-All

Services Provided

1 Comprehensive



© 2018 Johnson Controls – CUSTOMER CONFIDENTIAL
 Do not copy (physically, electronically or in any other media) without the express written permission of Johnson Controls

Request for Proposal
 Virginia Tech
 Furnace, Boiler & Mechanical Equipment
 Full Maintenance Services

Improving
Comfort + Efficiency + Reliability

VT BURROWS-BURLESON TENNIS PAVILION		BLACKSBURG, VA 24061-0001	
Type: NA			
Size: NA			
Year to Be Activated: Year 1			
Year to Be Inactivated: Year 2			
Asset #	Manufacturer	Model #	Serial #
	Reznor	TR100-H	UNKNOWN

Water Heater, Gas, 150-300GAL		Services Provided	
Quantity: 2		1	Comprehensive
Coverage Level: Premium			
Equipment: Water Heater			
Style: Gas			
Type: 150-300GAL			
Size: NA			
Year to Be Activated: Year 1			
Year to Be Inactivated: Year 2			
Asset #	Manufacturer	Model #	Serial #
	State Water Heater	G5650XRRT	A04114704

VT DAIRY SCIENCE (FARM HOUSE)		BLACKSBURG, VA 24060-5414	
Furnace, All		Services Provided	
Quantity: 1		1	Comprehensive
Coverage Level: Premium			
Equipment: Furnace			
Style: All			
Type: NA			
Size: NA			
Year to Be Activated: Year 1			
Year to Be Inactivated: Year 2			
Asset #	Manufacturer	Model #	Serial #
	Goodman MFG	GMS60905CNBD	UNKNOWN



Improving
Comfort + Efficiency + Reliability

VT DAIRY SCIENCE (RESIDENCE 1)		BLACKSBURG, VA 24061-0001	
Furnace, All		Services Provided	
Quantity:	1	1	Comprehensive
Coverage Level:	Premium		
Equipment:	Furnace		
Style:	All		
Type:	NA		
Size:	NA		
Year to Be Activated:	Year 1		
Year to Be Inactivated:	Year 2		
Asset #	Manufacturer	Model #	Serial #
	Heil	NDGG100FD02	L893261087

VT DAIRY SCIENCE (RESIDENCE 2)		BLACKSBURG, VA 24060-5414	
Furnace, All		Services Provided	
Quantity:	1	1	Comprehensive
Coverage Level:	Premium		
Equipment:	Furnace		
Style:	All		
Type:	NA		
Size:	NA		
Year to Be Activated:	Year 1		
Year to Be Inactivated:	Year 2		
Asset #	Manufacturer	Model #	Serial #
	Heil	NDGG100AF01	H44698723



© 2018 Johnson Controls – CUSTOMER CONFIDENTIAL
Do not copy (physically, electronically or in any other media) without the express written permission of Johnson Controls

Request for Proposal
Virginia Tech
Furnace, Boiler & Mechanical Equipment
Full Maintenance Services

Improving Comfort + Efficiency + Reliability

VT KENTLAND MILKING PARLOR/ADMIN BLDG	BLACKSBURG, VA 24061-0001
--	----------------------------------

Heater, Gas Infrared-All

Quantity: 1
 Coverage Level: Premium
 Equipment: Heater
 Style: Gas Infrared-All
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Space-Ray	UNKNOWN	UNKNOWN

Split System, Cooling with Electric Heat, <7.5 Tons

Quantity: 2
 Coverage Level: Premium
 Equipment: Split System
 Style: Cooling with Electric Heat
 Type: <7.5 Tons
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

2 Operational (Mid Season -
Cooling/Heating)
 1 Cooling Comprehensive
 1 Electric Heating Comprehensive

Asset #	Manufacturer	Model #	Serial #
	JCI_YORK	YHJD42S44S4B/UNK NOWN	W1M4274089/UNKNOWN

Unit Heater, Gas Fired, <300000 BTU

Quantity: 2
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: <300000 BTU
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

Asset #	Manufacturer	Model #	Serial #
	Reznor	UDAS45-S	EBNK799EL29672XTE

Water Heater, Gas, <150GAL

Quantity: 3
 Coverage Level: Premium
 Equipment: Water Heater
 Style: Gas
 Type: <150GAL
 Size: NA

Services Provided

1 Comprehensive



© 2018 Johnson Controls - CUSTOMER CONFIDENTIAL
 Do not copy (physically, electronically, or in any other media) without the express
 written permission of Johnson Controls

Request for Proposal
 Virginia Tech
 Furnace, Boiler & Mechanical Equipment
 Full Maintenance Services

Improving Comfort + Efficiency + Reliability

VT KENTLAND MILKING PARLOR/ADMIN BLDG		BLACKSBURG, VA 24061-0001	
Year to Be Activated:	Year 1		
Year to Be Inactivated:	Year 2		
Asset #	Manufacturer	Model #	Serial #
	AO Smith	BPD-75-101	F07A001165



© 2016 Johnson Controls – CUSTOMER CONFIDENTIAL
Do not copy (physically, electronically, or in any other media) without the express
written permission of Johnson Controls

Request for Proposal
Virginia Tech
Furnace, Boiler & Mechanical Equipment
Full Maintenance Services

Improving Comfort + Efficiency + Reliability

VT SOUTHGATE FOOD PROCESSING	BLACKSBURG, VA 24061-1033
-------------------------------------	----------------------------------

Boiler, Gas-Fired, Water Tube, <50HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: <50HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Ajax Boiler	HNG400	49184

Unit Heater, Gas Fired, <300000 BTU

Quantity: 3
 Coverage Level: Premium
 Equipment: Unit Heater
 Style: Gas Fired
 Type: <300000 BTU
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Modine	BAH180AF	SP010583

Water Heater, Gas, 301-450GAL

Quantity: 1
 Coverage Level: Premium
 Equipment: Water Heater
 Style: Gas
 Type: 301-450GAL
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided
 1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Pvi Industries Inc	2500-2NS00A-TP	98659044



© 2016 Johnson Controls - CUSTOMER CONFIDENTIAL
 Do not copy (physically, electronically, or in any other media) without the express written permission of Johnson Controls

Request for Proposal
 Virginia Tech
 Furnace, Boiler & Mechanical Equipment
 Full Maintenance Services

Improving Comfort + Efficiency + Reliability

VT GOLF CLUB HOUSE	BLACKSBURG, VA 24061-1009
---------------------------	----------------------------------

Boiler, Oil-Fired, Water Tube, <50 HP

Quantity: 1
 Coverage Level: Premium
 Equipment: Boiler
 Style: Oil-Fired
 Type: Water Tube
 Size: <50 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Well Mclain	P-WGO-3	3

THE INN AT VIRGINIA TECH	BLACKSBURG, VA 24060
---------------------------------	-----------------------------

Boiler, Gas-Fired, Water Tube, 51-150 HP

Quantity: 2
 Coverage Level: Premium
 Equipment: Boiler
 Style: Gas-Fired
 Type: Water Tube
 Size: 51-150 HP
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	HB Smith	28A-S/W-14	N2004-282

Humidifier All

Quantity: 1
 Coverage Level: Premium
 Equipment: Humidifier All
 Style: NA
 Type: NA
 Size: NA
 Year to Be Activated: Year 1
 Year to Be Inactivated: Year 2

Services Provided

1 Comprehensive

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model #</u>	<u>Serial #</u>
	Armstrong	EHU-703	240021-10-1-04

Pump, Hot Water, 11-50 HP

Quantity: 2
 Coverage Level: Premium
 Equipment: Pump

Services Provided

1 Comprehensive



© 2016 Johnson Controls - CUSTOMER CONFIDENTIAL
 Do not copy (physically, electronically, or in any other media) without the express written permission of Johnson Controls

Request for Proposal
 Virginia Tech
 Furnace, Boiler & Mechanical Equipment
 Full Maintenance Services

Improving
Comfort + Efficiency + Reliability

THE INN AT VIRGINIA TECH		BLACKSBURG, VA 24060	
Style:	Hot Water		
Type:	11-50 HP		
Size:	NA		
Year to Be Activated:	Year 1		
Year to Be Inactivated:	Year 2		
Asset #	Manufacturer	Model #	Serial #
	Taco Pump	F15013E2LAL110A	UNKNOWN

Water Heater, Gas, 301-450GAL		Services Provided	
Quantity:	2	1	Comprehensive
Coverage Level:	Premium		
Equipment:	Water Heater		
Style:	Gas		
Type:	301-450GAL		
Size:	NA		
Year to Be Activated:	Year 1		
Year to Be Inactivated:	Year 2		
Asset #	Manufacturer	Model #	Serial #
	PVI Industries Inc	1500 P600A-TP	1203111875



Pricing

Supplemental Price & Payment Terms (Applies to Multi-Year Contracts Only)

Pricing table – based upon (1) 5-year agreement and up to (5) optional 1-year renewals for a total of 10 years

Year	Total Annual Dollar Amount	Payment Frequency
Year1	\$ 160,050.00*	Annually
Year2	\$ Year1 + 2% +/- equipment/site changes	Annually
Year3	\$ Year2 + 2% +/- equipment/site changes	Annually
Year4	\$ Year3 + 2% +/- equipment/site changes	Annually
Year5	\$ Year4 + 2% +/- equipment/site changes	Annually
Year6	TBD	Annually
Year7	TBD	Annually
Year8	TBD	Annually
Year9	TBD	Annually
Year10	TBD	Annually

*A 2% pre-payment discount may be applied if paying in annual installments. The pricing given is based upon the equipment/site list as issued with RFP# 0055426. Equipment and/or site changes will be evaluated as-needed with VT personnel in accordance with the itemized equipment price list

Special Additions and Exceptions

SPECIAL SERVICES COVERED (not listed above):

- Water treatment services have been included for all steam boilers as specified in section VII, paragraph G.5. Chemical levels shall be monitored monthly and additional chemicals shall be provided as needed.
- Annual & bi-annual boiler testing and inspections shall be conducted with the Commonwealth of VA Boiler Inspector as specified in section VII, paragraph H. Combustion analysis reports shall be provided as required.

SERVICES NOT INCLUDED (specified in section VII, paragraph K):

- Refractory repair and/or replacement
- Complete burner failure
- Tube failure and/or leaking tubes
- Any single occurrence or failure of directly related components, beyond the first \$1,000.00
- All required refrigerant to be supplied the University



Improving Comfort + Efficiency + Reliability

EXTRA WORK PRICING STRUCTURE (outside scope of service)

- Mechanical labor to be provided using the following fully-burdened labor rates

Labor Category	Minimum Education/Certificate Level	Minimum Yrs Experience	Hourly Rate		
			REG	OT (1.5X)	DT (2.0X)
HVAC Journeyman Mechanic*	Journeyman License	5	\$110.00	\$165.00	\$220.00
HVAC Apprentice*	License or certification per jurisdiction	1	\$83.60	\$125.40	\$167.20
Certified Chiller Mechanic*	Journeyman License	5	\$118.80	\$178.20	\$237.60

*Labor rates quoted are in accordance with the local GSA rate scale

- Repair parts and/or materials to be provided at the following discounted rates:
 - Johnson Controls branded repair parts
 - LIST less 10% (\$0 to \$24,999.00)
 - LIST less 10% less 5% (\$25,000.00+)
 - Johnson Controls branded equipment (Air-Handlers, Chillers, Terminal Units, Commercial Unitary Equipment, etc.)
 - NALP less 50%
 - 3rd-Party repair parts
 - LIST – 5% (\$0 to \$24,999.00)
 - LIST – 10% (\$25,000.00+)



VIRGINIA TECH - AGREEMENT HVAC EQUIPMENT LIST

Building	QTY	EQUIPMENT DESCRIPTION	MAKE	MODEL NO.	SERIAL NO.	PRICING SCHEDULE	Reduced Service Cost (Basic Coverage)
Alphin Stuart Arena	1	Unit Heater	Trane	GPN004AAF1000D	F03L40505	\$ 290.00	
	1	Furnace	Reznor	ACUB120	BDB-01477	\$ 300.00	
	1	Furnace	Reznor	ACUB090	BDB-01476	\$ 300.00	
	1	Water Heater	A.O. Smith	BTH120970	ML030015608	\$ 150.00	
	1	Tube Heater	Reznor	VR75	BCI80U2N69118X	\$ 225.00	
	1	Tube Heater	Reznor	VR75	BCI80U2N69117X	\$ 225.00	
	1	Tube Heater	Reznor	VR75	BCI80U2N69130X	\$ 225.00	
	1	Tube Heater	Reznor	VR75	????????	\$ 225.00	
	1	A/C Split System	Trane	TTA090A400FA	3474YF1AD	\$ 500.00	
	1	A/C Split System	Trane	TTA150B400EA	347400JAD	\$ 500.00	
Architecture Research & Demonstration	1	Gas Boiler	H.B. Smith	G220-S/W-10 HIS	R91 50	\$ 2,330.00	\$ 1,530.00
	1	Unit Heater	Modine	BAESOAC	????????	\$ 275.00	
	1	Unit Heater	Modine	BAESOAC	????????	\$ 275.00	
	1	Unit Heater	Modine	BAESOAC	????????	\$ 275.00	
	1	Unit Heater	Modine	BAESOAC	????????	\$ 275.00	
	1	Unit Heater	Modine	BAESOAC	????????	\$ 275.00	
	1	Unit Heater	Modine	BAESOAC	????????	\$ 275.00	
	1	Unit Heater	Modine	BAESOAC	????????	\$ 275.00	
Brooks Forest Products Center	1	Thermal Storage	Megatherm	5C-24-100-36H	85008	\$ 255.00	
	1	Electric Boiler	Chromalox	CES-24	N-8045-W81	\$ 3,000.00	
Burruss Hall	1	Electric Boiler	Latner	57511W	53861	\$ 1,875.00	
Dry Rendering Facility	1	Water Heater	Lochinvar	SNA285-125	JO9C10121203	\$ 250.00	
Geotechnical Research Lab	1	3349.96	Reznor	SC175-6-2	????????	\$ 255.00	
	1	Duct Heater	Reznor	SC175-6-2	????????	\$ 255.00	
	1	Duct Heater	Reznor	SC300-6	????????	\$ 255.00	
	1	Water Heater	Bradford White	RG24056N	PB38976200	\$ 250.00	
	1	A/C Split System	Trane	TTA120B300DA	23346W5AD	\$ 500.00	
	1	A/C Split System	Trane	TTA120B300DA	23345X1AD	\$ 500.00	
	1	A/C Split System	Trane	TTA180B300DA	23341BMAD	\$ 500.00	
GreenHouse #6 (Washington St.)	1	Unit Heater	Trane	GTAB-0220S1	J82B-03144	\$ 163.75	
	1	Unit Heater	Trane	GTAB-0220S1	????????	\$ 163.75	
	1	Unit Heater	Trane	GPAP-0120SA	J81L-05728	\$ 163.75	
	1	Unit Heater	Trane	GPAP-0120SB	J82B-03142	\$ 163.75	

VIRGINIA TECH - AGREEMENT HVAC EQUIPMENT LIST

Building	QTY	EQUIPMENT DESCRIPTION	MAKE	MODEL NO.	SERIAL NO.	PRICING SCHEDULE	Reduced Service Cost (Basic Coverage)
Greenhouse Complex STR. Building	1	Unit Heater	Dayton	4E456A	A98G007695	\$ 190.00	
	1	Unit Heater	Dayton	4LX48A	????????	\$ 190.00	
Grounds Building	1	Boiler	Burnham	V-907	7596781	\$ 3,160.00	
The Grove	1	Boiler	H.B. Smith	19A, Series S/W-5	FA2000-320 P	\$ 3,170.00	
Health and Safety Building	1	Boiler	Burnham	V-910	7590636	\$ 3,170.00	
Henderson Hall	1	Boiler	Weil-McLain	1788	????????	\$ 5,460.00	
Institute for Critical Technology and Applied Science II (ICTAS II)	1	Unfired Steam Generator	Cemline	H120USG1060	24-X-63	\$ 250.00	
Infectious Disease Research Facility	1	Boiler	Aerco	MLX-757	757-09-0181	\$ 1,595.00	
	1	Boiler	Aerco	MLX-757	757-09-0178	\$ 1,595.00	
	1	Boiler	Aerco	MLX-757	757-09-0179	\$ 1,595.00	
	1	Water Heater	A.O. Smith	BTH150A100	1121M002111	\$ 250.00	
	1	Water Heater	A.O. Smith	BTH120A100	1121M001396	\$ 250.00	
Incinerator	1	Gas Heater	Reznor	UDAP100	????????	\$ 250.00	
Material Management	1	Boiler	Knight Commercial	KBN500	D10H10127678	\$ 1,670.00	
	1	Boiler	Knight Commercial	KBN500	D10H10127694	\$ 1,670.00	
Mining and Minerals Lab	1	Gas Heater	Trane	GPND0004AD	F06K41272	\$ 177.00	
	1	Gas Heater	Trane	GPND0004AD	F06K41273	\$ 177.00	
	1	Gas Heater	Trane	GPND0004AD	F06K41274	\$ 177.00	
	1	Gas Heater	Trane	GPND0004AD	F06K41275	\$ 177.00	
	1	Gas Heater	Hastings	CF-40-G21	52091	\$ 177.00	
Moore House (Psychological Services Center)	1	Gas Boiler	H.B. Smith	GB100-W-121NTD	GB2001-1913	\$ 2,650.00	\$ 1,850.00
Parking Services	1	Gas Boiler	Burnham	FD/10	34000715	\$ 1,950.00	\$ 1,395.00
Plant Pathology Building	1	Gas Boiler	National US Crane	0-4102	137255	\$ 3,000.00	
	1	Water Heater	Rheem	G75-125	URNG 1199G00954	\$ 255.00	

VIRGINIA TECH - AGREEMENT HVAC EQUIPMENT LIST

Building	QTY	EQUIPMENT DESCRIPTION	MAKE	MODEL NO.	SERIAL NO.	PRICING SCHEDULE	Reduced Service Cost (Basic Coverage)
Solitude	1	Gas Boiler	Weil-McLain	CG1-8PIN	????????	\$ 2,085.00	
South Gate Addition (Public Safety Building)	1	Gas Boiler	Peerless	TC-04	No Serial #	\$ 2,075.00	
SW Chiller Plant	1	Gas Boiler	Bryan	BE150W4T10	99436	\$ 3,117.50	
	1	Gas Boiler	Bryan	BE150W4T11	99439	\$ 3,117.50	
Sterrett Facility Complex	1	Gas Boiler	H.B. Smith	28A-S/W-10	N2003-1071	\$ 3,160.00	
Structures and Materials Lab	1	Gas Unit Heater	Dayton	3E368E	LOOGO15988	\$ 145.00	
	1	Gas Unit Heater	Dayton	3E368E	KOOGO11548	\$ 145.00	
	1	Gas Unit Heater	Dayton	3E3690	Q8959137	\$ 145.00	
	1	Gas Unit Heater	Dayton	3E3690	Q8959467	\$ 145.00	
	1	Gas Unit Heater	Dayton	3E3690	Q8959457	\$ 145.00	
	1	Gas Unit Heater	Dayton	3E3690	Q8959470	\$ 145.00	
	1	Gas Unit Heater	Dayton	3E3690	Q8959455	\$ 145.00	
	1	Gas Overhead Furnace	Trane	TDD120C960B0	????????	\$ 150.00	
	1	Gas Overhead Furnace	York	P4HFD20N12501	????????	\$ 150.00	
Veterinary Medicine (IDU on Price's Fork)	1	Gas Boiler	Superior	#4-5304	12123	\$ 5,000.00	\$ 3,900.00
	1	Water Heater	PVI	40P250AG	508124502	\$ 250.00	
	1	Gas Boiler	Columbia	146769	156789	\$ 5,000.00	\$ 3,900.00
	1	Gas Boiler	Columbia	146767	156787	\$ 5,000.00	\$ 3,900.00
	1	Gas Heater	Dayton		????????	\$ 190.00	
Veterinary Medicine (HOS Building)	1	Gas Heater	Reznor	XL60-3	AME31G8N31452	\$ 250.00	
Veterinary Medicine (CMMID)	1	Gas Boiler	Bryan	CLM150-S-150FDG	97871	\$ 3,587.00	
	1	Gas Boiler	Bryan	CLM150-S-150FDG	97871	\$ 3,587.00	
	1	Gas Boiler	Bryan	CLM150-S-150FDG	97871	\$ 3,587.00	
	1	Gas Boiler	Bryan	CLM150-S-150FDG	97871	\$ 3,587.00	
	1	Gas Boiler	Bryan	CLM150-S-150FDG	????????	\$ 3,587.00	
Veterinary Medicine (Poultry Virus Holding A)	1	Gas Furnace	Heil	NTC61100KFA1	L9823 44523	\$ 265.00	
Veterinary Medicine (Poultry Virus Holding B)	1	Gas Furnace	Heil	NUGE125LH82	L912920865	\$ 265.00	

VIRGINIA TECH - AGREEMENT HVAC EQUIPMENT LIST

Building	QTY	EQUIPMENT DESCRIPTION	MAKE	MODEL NO.	SERIAL NO.	PRICING SCHEDULE	Reduced Service Cost (Basic Coverage)
Veterinary Medicine (Poultry Virus Holding C)	1	Gas Furnace	Heil	NUGE125LH32	L922236069	\$ 265.00	
Veterinary Medicine (Aquatic Medicine Lab)	1	Gas Heater	Dayton	3E368E	E02G002995	\$ 240.00	
Veterinary Medicine (Virus Isolation Bldg 2)	1	Gas Boiler	5	39713	????????	\$ 2,900.00	\$ 1,500.00
	1	Gas Duct Heater	Trane	HMG200HS VSPGI1N		\$ 250.00	
	1	Gas Duct Heater	AAON	RM-010-8-0-8B02-549	200810-AMGJ45750	\$ 250.00	
Veterinary Medicine (Virus Isolation Bldg 3)	1	Gas Heater	Reznor	XL60-3	AME31G8N31447	\$ 160.00	
	1	Gas Heater	Reznor	XL60-3	AME31G8N31449	\$ 160.00	
	1	Gas Heater	Reznor	XL60-3	AME31G8N31453	\$ 160.00	
	1	Gas Heater	Reznor	XL60-3	AME31G8N31446	\$ 160.00	
	1	Gas Heater	Reznor	XL60-3	AME31G8N31451	\$ 160.00	
	1	Gas Heater	Reznor	XL60-3	AME31G8N31444	\$ 160.00	
	1	Gas Heater	Reznor	XL60-3	????????	\$ 160.00	
	1	Gas Heater	Dayton	3E406	C8819338	\$ 167.50	
	1	Gas Heater	Dayton	3E406	C8819345	\$ 167.50	
Veterinary Medicine (Virus Isolation Bldg 4)	1	Gas Heater	Reznor	XL60-3	AME31G8NO1445	\$ 155.00	
	1	Gas Heater	Reznor	XL60-3	AUD3163NO42	\$ 155.00	
	1	Gas Heater	Reznor	XL30-3	AKA31G8NO1469	\$ 155.00	
	1	Gas Heater	Reznor	XL30-3	AKA31G8NO1465	\$ 155.00	
	1	Gas Heater	Reznor	XL30-3	AKA31G8NO1470	\$ 155.00	
	1	Gas Heater	Reznor	XL30-3	AKA31G8NO1467	\$ 155.00	
	1	Gas Heater	Reznor	XL30-3	AKA31G8NO1468	\$ 155.00	
	1	Gas Heater	Reznor	XL30-3	AKA31G8NO1466	\$ 155.00	
	1	Gas Heater	Reznor	XL30-3	????????	\$ 155.00	
	1	Gas Heater	Modine	PA30-AB	5012011289	\$ 160.00	
	1	Gas Heater	Trane	GPNC003AAB10000	A84E10861	\$ 180.00	
Veterinary Medicine (Poultry Virus Holding)	1	Gas Heater	Dayton	3E406	19343	\$ 250.00	
Visitor and Undergraduate Admissions Center	1	Gas Boiler	Lochinvar	KBN601	K10H10162882	\$ 1,400.00	
	1	Gas Boiler	Lochinvar	KBN601	K10H10162883	\$ 1,400.00	
	1	Water Heater	AO Smith	BTF80-200	1050M001105	\$ 345.00	
Agronomy Farm	1	Gas Boiler	Burnham	4FHW-127A-50-C-PF	????????	\$ 1,900.00	\$ 1,345.00
	1	Heater	Sterling	11QVF075N	????????	\$ 250.00	

VIRGINIA TECH - AGREEMENT HVAC EQUIPMENT LIST

Building	QTY	EQUIPMENT DESCRIPTION	MAKE	MODEL NO.	SERIAL NO.	PRICING SCHEDULE	Reduced Service Cost (Basic Coverage)
	1	Package Gas Heater	Trane	GRAA20GBAEON1BK	????????	\$ 315.00	
	1	Package Gas Heater	Trane	GRAA20GBAEON1BK	????????	\$ 315.00	
	1	Package Gas Heater	Trane	GRAA20GBAEON1BK	????????	\$ 315.00	
	1	Package Gas Heater	Trane	GRAA20GBAEON1BK	????????	\$ 315.00	
	1	Package Gas Heater	Trane	GRAA20GBAEON1BK	????????	\$ 315.00	
	1	Package Gas Heater	Trane	GRAA20GBAEON1BK	????????	\$ 315.00	
	1	Package Gas Heater	Trane	GRAA20GBAEON1BK	????????	\$ 315.00	
	1	Package Gas Heater	Trane	GRAA20GBAEON1BK	????????	\$ 315.00	
	1	Gas Unit Heater	Sterling	QVEF-100	G02299721001001	\$ 250.00	
	1	Gas Unit Heater	Sterling	QVEF-100	G02299721001002	\$ 250.00	
	1	Gas Unit Heater	Sterling	QVEF-75	G02299721004003	\$ 250.00	
	1	Gas Unit Heater	Sterling	QVEF-75	G02299721004001	\$ 250.00	
	1	Gas Unit Heater	Sterling	QVEF-75	G02299721004002	\$ 250.00	
	1	Gas Unit Heater	Sterling	QVEF-75	G02299721004004	\$ 250.00	
	1	Gas Furnace	York	????????	????????	\$ 280.00	
Lane Stadium - South End Zone	1	Gas Boiler	RBI	33DB1950NASSS	30227108	\$ 2,500.00	
	1	Gas Boiler	RBI	33DB1950NASSS	30227109	\$ 2,500.00	
	1	Gas Boiler	RBI	33DB1500NASSS	20226981	\$ 2,500.00	
	1	Gas Heater	Weather-Rite	MD124HHR	????????	\$ 245.00	
	1	Water Heater	PVI	1250P900A-TP	202106400	\$ 200.00	
Lane Stadium - West Side	1	Gas Boiler	Bryan	RV800-W-FDG	92429	\$ 2,500.00	
	1	Gas Boiler	Bryan	RV800-W-FDG-RC	92435	\$ 2,500.00	
	1	Water Heater	State	SUE100240NE	F05MOO3574	\$ 245.00	
Burrows-Burleson Tennis Pavillion	1	Gas Furnace	Carrier	58DHC095-LC	3791A07131	\$ 430.00	
	1	Gas Furnace	Carrier	58DHC075-JC	3791A06896	\$ 430.00	
	1	Gas Furnace	Carrier	58SSC075-GC	3591A09506	\$ 430.00	
	1	Water Heater	Rheem	RD400-86A	1091D06244	\$ 305.00	
	1	Water Heater	State	G5650XRRT	A04114704	\$ 305.00	
	1	Radiant Tube Heater	Reznor	TR100-H	????????	\$ 150.00	
	1	Radiant Tube Heater	Reznor	TR100-H	????????	\$ 150.00	
	1	Radiant Tube Heater	Reznor	TR100-H	????????	\$ 150.00	
	1	Radiant Tube Heater	Reznor	TR100-H	????????	\$ 150.00	
	1	Radiant Tube Heater	Reznor	TR100-HR	????????	\$ 150.00	
	1	Radiant Tube Heater	Reznor	TR100-H	????????	\$ 150.00	
	1	Radiant Tube Heater	Reznor	TR100-H	????????	\$ 150.00	
	1	Radiant Tube Heater	Reznor	TR100-H	????????	\$ 150.00	

VIRGINIA TECH - AGREEMENT HVAC EQUIPMENT LIST

Building	QTY	EQUIPMENT DESCRIPTION	MAKE	MODEL NO.	SERIAL NO.	PRICING SCHEDULE	Reduced Service Cost (Basic Coverage)
	1	Radiant Tube Heater	Reznor	TR100-H	????????	\$ 150.00	
	1	Radiant Tube Heater	Reznor	TR100-H	????????	\$ 150.00	
	1	Radiant Tube Heater	Reznor	TR100-H	????????	\$ 150.00	
	1	Radiant Tube Heater	Reznor	TR100-H	????????	\$ 150.00	
	1	Radiant Tube Heater	Reznor	TR100-H	????????	\$ 150.00	
Dairy Science							
Dairy Science - Farm House	1	Furnace	Goodman	GMS80905CNBD	????????	\$ 265.00	
Dairy Science - Residence 1	1	Furnace	Heil	NDGG100FD02	L893261087	\$ 265.00	
Dairy Science - Residence 2	1	Furnace	Heil	NDGG100AF01	H446 98723	\$ 265.00	
Kentland Milking Parlor/Admin Building	1	Outdoor Heat Pump	York	YHJD36S44S4A	W1L4188614	\$ 400.00	
	1	Outdoor Heat Pump	York	YHJD42S44S4B	W1M4274089	\$ 400.00	
	1	Air Handler	York	MV12BN21CB	W1B3477095	\$ 250.00	
	1	Air Handler	York	????????	????????	\$ 250.00	
	1	Hanging Heater	Reznor	UDAS45-S	EBNK799EL29672XTE	\$ 175.00	
	1	Hanging Heater	Reznor	UDAS45-S	????????	\$ 175.00	
	1	Water Heater	Bradford White	EF100T1993X2	LK35112884	\$ 150.00	
	1	Water Heater	Bradford White	EF100T1993X3	LK35112881	\$ 150.00	
	1	Water Heater	AO Smith	BPD-75-101	F07A001165	\$ 195.00	
	1	Tube Heater	Space Ray	????????	????????	\$ 150.00	
Dining							
Southgate Food Proc.	1	Gas Boiler	Ajax	HNG400	49184	\$ 2,600.00	
	1	Gas Unit Heater	Modine	PA30AB	????????	\$ 300.00	
	1	Gas Unit Heater	Modine	BAH180AF	SP010582	\$ 300.00	
	1	Gas Unit Heater	Modine	BAH180AF	SP010582	\$ 300.00	
	1	Water Heater	PVI	2500-2N500A-TP	98659044	\$ 220.00	
Auxiliary							
Golf Club House	1	Oil Boiler	Weil-McLain	P-WGO-3	3	\$ 2,600.00	\$ 1,600.00
The Inn at VT	1	Gas Boiler	H.B. Smith	28A-S/W-14	N2004-282	\$ 2,540.00	
	1	Gas Boiler	H.B. Smith	28A-S/W-14	N2004-281	\$ 2,540.00	

