

Date of Issue: September 9, 2021

Department of General Services
Energy and Resource Management Office
401 North Street, Room 403 North Office, Harrisburg, PA 17120

Bulletin Number 2

on

Project No. GESA 2021-2 – Request for Quotes for a Guaranteed Energy Savings
Project at:

Department of Human Services, DHS Wernersville State Hospital, Pennsylvania

Quote Submission Deadline: Tuesday, October 12, 2021

Time of Opening: 2:00 PM

SITE VISIT INFORMATION

1. The site visits are now limited to four (4) people per company, per visit.
2. Drawings may be viewed during the site visits. Photos are allowed.

REQUEST FOR INFORMATION

1. The provided utility data Excel spreadsheet accounts for roughly 500,000 sq. ft. and the table provided as Attachment A in Bulletin 1 totals over 1,000,000 sq. ft. Which buildings/systems are included in the provided utility data Excel spreadsheet? Will the utility data for the remaining square footage be provided at some point? **The utility data is for the entire facility, heated & non heated.**
2. Will any of the buildings on campus not be included in the GESA project? **The buildings scheduled to be demolished and the buildings operated by DOC (buildings 18, 19, 27, 29 and 30) will not be included. Wernersville SH provides utilities up to the DOC operated building and it will remain that way; therefore, upgrades through a GESA would include service up to those buildings.**
3. Are any of the buildings on campus scheduled to be demolished? If so, which buildings? **Yes; see Attachment A of this bulletin.**
4. What are the typical operation schedules of each of the buildings? **Buildings 33, 34, 35 and 37 are on a 24/7 operation and all other buildings operate**

primarily from 7 am to 4 pm.

5. Which buildings are being cooled via the chiller and cooling tower systems across the complex as it stands today? **Buildings 34, 35 and 37 are cooled via a chiller & cooling tower at each building.**
6. Are there any pneumatics in any of the buildings today? **Buildings 3 and 5 have pneumatic controls.**
7. Please provide all available building drawings. **Drawings for buildings 34, 35 and 37 are available as .zip files on the GESA project website at: <https://www.dgs.pa.gov/Facilities/Energy-Savings-Program/Pages/Wernersville.aspx>**
8. What controls systems are currently in place today and when were they installed? **The building automation system (BAS) in use is Metasys and was installed in 2009 by Johnson Controls.**
9. Are there any mechanical systems that are not under control today? **The buildings part of the BAS are 34, 35 and 37 for A/C and heating.**
10. Are there any service contracts/agreements the facility uses to support site staff (mechanical, electrical, plumbing, automation, etc.)? If so, please provide the agreements with the details on pricing and scope of services. **Yes, please see Attachment B of this bulletin for details.**
11. Please provide steam trap information. **Steam trap information is available in Excel format on the GESA project website at: <https://www.dgs.pa.gov/Facilities/Energy-Savings-Program/Pages/Wernersville.aspx>**
12. If available, please provide the lighting line by line from the JCI GESA project. **This information is attached as Attachment C to this bulletin.**
13. Please provide a map of the steam supply and return. **A map is attached as Attachment D to this bulletin.**

A handwritten signature in black ink that reads "R. Tomlinson". The signature is written in a cursive style with a horizontal line underneath the name.

Rebecca Tomlinson, RFQ Coordinator
Energy & Resource Management Office

Please acknowledge receipt of Bulletin by email response to Becky Tomlinson at:
retomlinso@pa.gov

ATTACHMENT A
to
BULLETIN 2
for
GESA 2021-2 DHS Wernersville

WSH CAMPUS BUILDINGS/INFRASTRUCTURES-AUGUST 2013

<u>BLDG #</u>	<u>BLDG NAME/DESCRIPTION</u>	<u>PRESENT STATUS</u>
		O-OCCUPIED D-DEMOLISHED V-VACANT SD-SCHEDULE DEMO
		DOA- DEPARTMENT OF AG DOC-DEPT OF CORRECTIONS
#1	Main Building – Archive Collection	O
#2	East Hall	V-SD
#3	South Mountain Workshop-patient vocational services	O
#4	Parkside House	V-SD
#5	Berks Encore-Senior Citizens	O
#6	no building	D
#7	no building	D
#8	no building	D
#9	Quad Hall	V-SD
#10	no building	D
#11	Stone Barn	O
#12	Central Storeroom	O
#13	Maintenance Office/Garage	O
#14	Cold Storage & shops	O
#15	no building	D
#16	Fire House	O
#17A	Warehouse-storage	O
#17B	Block Building-DOA	V-SD
#17BB	Bickel Barn – DOA	V-SD
#17BMS	Bickel Maintenance Storage-DOA	V-SD
#17BPH	Bickel Pump house-DOA	V-SD
#17BST	Bickel Storage Tank-DOA	V-SD
#17BWS	Bickel Wagon Shed-DOA	V-SD
#17 CH	Celery House	V-SD

Next to South MT workshop

Access from Building #37

#17S5	Silo #5-DOA	V-SD
#17S6	Silo #6-DOA	V-SD
#17SH	Slaughterhouse, Potato shed	O
#17TS	Tractor Shed	O
#18	South Mountain-East-DOC	O
#19	South Mountain-West-DOC	O
#20A	Isolation	D
#20B	Maintenance Equip Storage, mattress shop	D
#22	Ridge Hall, Ward 17	V-SD
#23	Ward M	D
#24-CC	Coagulation Cutter	V-SD
#24-CB	Coagulation Basin	V-SD
#24-CDB	Control Disposal Plant	V-SD
#24-DB	Digester Bldg	V-SD
#24-DC	Dosing Chamber	V-SD
#24-FB	Filter Bed	V-SD
#24 FCT-1	Final Clarifier Tank #1 (North)	V-SD
#24 FCT-2	Final Clarifier Tank #2 (South)	V-SD
#24 PCT-1	Primary Clarifier Tank #1 (North)	V-SD
#24 PCT-2	Primary Clarifier Tank #2 (South)	V-SD
#24 PH	Pump House (sewage)	V-SD
#24 R-1	Backwash Tank (15,000 gal)	V-SD
#24 R-2	AGST (200,000 gal)	V-SD
#24SB1 to 6	Sludge Beds #1 to 6	V-SD
#24 SC	Screen Chamber	V-SD
#24 WFP	Water Filtration Plant	V-SD
#24 WSB	Water Setting Basin 1 & 2	V-SD
#24 WT 1	Ground Water Reservoir (500,000 gal)	V-SD
#24 WT 2	Ground Water Reservoir (500,000 gal)	V-SD

Detention Center

**ATTACHMENT B
to
BULLETIN 2
for
GESA 2021-2 DHS Wernersville**



FULLY EXECUTED
Purchase Order No: 4300664681
Original PO Effective Date: 06/15/2020
PO Issue Date: **06/15/2020**
Valid From: 07/01/2020 To 06/30/2021

Your SAP Vendor #: 130924

Supplier Name/Address:
BONFITTO INCORPORATED
1029 BROOKE BLVD
READING PA 19607-1657 US

Supplier Phone Number: 6107771333

Supplier Fax Number: 610-775-9610

Purchasing Agent

Name: Kelly Beers
Phone: 610.670.4128
Fax: 610.670.4103

Please Deliver To:
Wernersville State Hospital
160 Main Street
Wernersville PA 19565 US

Please Bill To:
Save time, reduce cost, get paid faster:
Email PDF invoice to 69180@pa.gov
<https://www.budget.pa.gov/Programs/Pages/e-Invoicing.aspx>

Or mail paper invoice to:
Commonwealth of Pennsylvania
PO Box 69180, Harrisburg, PA 17106

Purchase Order Description:
7210 High Pressure Steam Boiler FY 20

This Purchase Order is issued pursuant to the referenced Contract and constitutes the Suppliers authority to deliver the item(s) referenced below at the prices stated below to the location(s) identified above in accordance with the Contract terms and conditions.

Suppliers must provide four mandatory elements on PO invoices: PO Number, Invoice Date, Invoice Number, and Invoice Gross Amount. Failure to comply will result in the return of the invoice. Additional optional information such as supplier name, address, remit to information and PO Line Item information will improve invoice processing.

Item	Material/Service Desc	Qty	UOM	Delivery Date	Net Price	Price Unit	Total
1	Annual Routine Service Cost	1.000	Each	07/01/2020	3,500.00	1	3,500.00
	>>> Rel. ord. against contract 4400016148	Item	1				
2	Preventative Maintenance Labor Cost	50.000	Hour	07/01/2020	105.00	1	5,250.00
	>>> Rel. ord. against contract 4400016148	Item	2				
3	Emergency Service Labor Cost	25.000	Hour	07/01/2020	157.50	1	3,937.50

Information:

Total Amount:
SEE LAST PAGE FOR TOTAL OF ALL ITEMS

Currency: USD

Supplier's Signature _____

Title _____

Printed Name _____

Date _____



FULLY EXECUTED
Purchase Order No: 4300664681
Original PO Effective Date: 06/15/2020
PO Issue Date: **06/15/2020**
Valid From: 07/01/2020 To 06/30/2021

Supplier Name:
BONFITTO INCORPORATED

Item	Material/Service Desc	Qty	UOM	Delivery Date	Net Price	Price Unit	Total
>>> Rel. ord. against contract 4400016148 Item 3							
4	Parts (Based on Discounted Percentage)	5,000.000	Each	07/01/2020	1.00	1	5,000.00
>>> Rel. ord. against contract 4400016148 Item 4							

General Requirements for all Items:

Header Text

The Contractor shall provide annual routine service, preventive maintenance, and emergency service on one HURST 750 HP SCOTCH MARINE FIRETUBE HIGH PRESSURE STEAM BOILER equipped with a WEISHAAPT LOW NOX DUAL FUEL BURNER capable of combusting either #2 fuel oil or natural gas located at Wernersville State Hospital in building #33 (Boiler House).

Replaces FY 2019 PO4300624769

Contract Monitor: Richard Valko, Utilities Supervisor,
610-927-1091.

All Terms & Conditions associated with this contract / purchase remain in effect through this period.

Payment Provision: The Contractor will be reimbursed only for services actually accepted by Wernersville State Hospital.

The Contractor shall be paid upon satisfactory completion of work performed, and submission of an invoice on the contractor's letterhead.

The invoice is to be mailed to:

COMMONWEALTH OF PENNSYLVANIA – PO Invoice
P.O. Box 69180
Harrisburg, PA 17106

A copy of the invoice is also to be mailed to:

Department of Human Services
WERNERSVILLE STATE HOSPITAL
Attn: Accounting Dept.
160 Main Street
Wernersville, PA 19565

No further information for this PO.

Information:	Total Amount:	17,687.50
	Currency: USD	



FULLY EXECUTED
 Purchase Order No: 4300690250
 Original PO Effective Date: 03/17/2021
 PO Issue Date: 03/17/2021
 Valid From: 07/01/2021 To 06/30/2022

Your SAP Vendor #: 168866

Please Deliver To:
 Wernersville State Hospital
 160 Main Street
 Wernersville PA 19565 US

Supplier Name/Address:
 JOHNSON CONTROLS FIRE PROTECTION
 4700 WESTPORT DR
 MECHANICSBURG PA 17055-6788 US

Supplier Phone Number: 717-610-8100
 Supplier Fax Number: 717-610-8101

Please Bill To:
 Save time, reduce cost, get paid faster:
 Email PDF invoice to 69180@pa.gov
<https://www.budget.pa.gov/Programs/Pages/e-Invoicing.aspx>

Or mail paper invoice to:
 Commonwealth of Pennsylvania
 PO Box 69180, Harrisburg, PA 17106

Purchasing Agent

Name: Kelly Beers
 Phone: 610.670.4128
 Fax: 610.670.4103

Purchase Order Description:
 9212 WeSH Fire Alarm Services

This Purchase Order is issued pursuant to the referenced Contract and constitutes the Suppliers authority to deliver the item(s) referenced below at the prices stated below to the location(s) identified above in accordance with the Contract terms and conditions.

Suppliers must provide four mandatory elements on PO invoices: PO Number, Invoice Date, Invoice Number, and Invoice Gross Amount. Failure to comply will result in the return of the invoice. Additional optional information such as supplier name, address, remit to information and PO Line Item information will improve invoice processing.

Item	Material/Service Desc	Qty	UOM	Delivery Date	Net Price	Price Unit	Total
1	Fire Alarm Annual Inspection ESSENTIAL	1.000	Each	07/01/2021	7,104.94	1	7,104.94
	>>> Rel. ord. against contract 4400023962	Item	1				

Information:

Total Amount:
 SEE LAST PAGE FOR TOTAL OF ALL ITEMS

Currency: USD

Supplier's Signature _____

Title _____

Printed Name _____

Date _____



FULLY EXECUTED
 Purchase Order No: 4300690250
Original PO Effective Date: 03/17/2021
 PO Issue Date: **03/17/2021**
 Valid From: 07/01/2021 To 06/30/2022

Supplier Name:
JOHNSON CONTROLS FIRE PROTECTION

Item	Material/Service Desc	Qty	UOM	Delivery Date	Net Price	Price Unit	Total
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Item Text

78140000-ITQ-161

Acceptance Testing/System Commissioning

A thorough review, inspection and testing of the performance of an entire Security, Surveillance, Fire Detection, Fire Suppression, and/or other life protection system to make sure it meets all specification, intent of the design, operation and functional requirements, and the requirements of the end user/owner, along with any necessary, supporting documentation. This includes testing of a new installation (done outside of the contract) or a major renovation of an existing contract.

2	Quarter Inspec Sprinkler Wet ESSENTIAL	4.000	Each	07/01/2021	1,328.70	1	5,314.80
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Vendor Product No.: AUG, NOV, FEB, MAY

>>> Rel. ord. against contract 4400023962 Item 1

Item Text

78140000-ITQ-161

Acceptance Testing/System Commissioning

A thorough review, inspection and testing of the performance of an entire Security, Surveillance, Fire Detection, Fire Suppression, and/or other life protection system to make sure it meets all specification, intent of the design, operation and functional requirements, and the requirements of the end user/owner, along with any necessary, supporting documentation. This includes testing of a new installation (done outside of the contract) or a major renovation of an existing contract.

3	Inspec Sprinkler Backflow ESSENTIAL	1.000	Each	07/01/2021	164.80	1	164.80
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>>> Rel. ord. against contract 4400023962 Item 1

Information:

Total Amount:
SEE LAST PAGE FOR TOTAL OF ALL ITEMS

Currency: USD



FULLY EXECUTED
Purchase Order No: 4300690250
Original PO Effective Date: 03/17/2021
PO Issue Date: **03/17/2021**
Valid From: 07/01/2021 To 06/30/2022

Supplier Name:
JOHNSON CONTROLS FIRE PROTECTION

Item	Material/Service Desc	Qty	UOM	Delivery Date	Net Price	Price Unit	Total
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Item Text

78140000-ITQ-161

Acceptance Testing/System Commissioning

A thorough review, inspection and testing of the performance of an entire Security, Surveillance, Fire Detection, Fire Suppression, and/or other life protection system to make sure it meets all specification, intent of the design, operation and functional requirements, and the requirements of the end user/owner, along with any necessary, supporting documentation. This includes testing of a new installation (done outside of the contract) or a major renovation of an existing contract.

4	Alarm Detection and Monitoring ESSENTIAL	1.000	Each	07/01/2021	1,112.40	1	1,112.40
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>>> Rel. ord. against contract 4400023962 Item 2

Item Text

92120000-ITQ-163

Monitoring

On or Off-premise, central station monitoring of system alarms, troubles, or other events. Monitoring includes reporting of incidents by calling individuals on designated call lists and/or dispatching fire, police, or other emergency responders.

5	EQUIPMENT and/or ACCESSORIES w/o INSTALL	2,000.000	Each	07/01/2021	1.00	1	2,000.00
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>>> Rel. ord. against contract 4400023962 Item 4

Information:

Total Amount:
SEE LAST PAGE FOR TOTAL OF ALL ITEMS

Currency: USD



FULLY EXECUTED
 Purchase Order No: 4300690250
 Original PO Effective Date: 03/17/2021
 PO Issue Date: 03/17/2021
 Valid From: 07/01/2021 To 06/30/2022

Supplier Name:
 JOHNSON CONTROLS FIRE PROTECTION

Item	Material/Service Desc	Qty	UOM	Delivery Date	Net Price	Price Unit	Total
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Item Text

72100000-ITQ-166

Repair

Repairs are work performed on existing security, surveillance, and fire suppression systems for the purposes of a break/fix nature and include the replacement of like parts/components to return the systems to working order. This includes repairs needed on an emergency basis. Parts or components that must be replaced due to inoperability may be replaced with an updated part or component if the original part or component is no longer available.

This work cannot include replacement of the entire system or change or alter the system as it relates to its size, type, and capability.

6	LABOR RATE (Hourly) Sprinkler	10.000	Each	07/01/2021	165.00	1	1,650.00
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>>> Rel. ord. against contract 4400023962 Item 4

Item Text

72100000-ITQ-166

Repair

Repairs are work performed on existing security, surveillance, and fire suppression systems for the purposes of a break/fix nature and include the replacement of like parts/components to return the systems to working order. This includes repairs needed on an emergency basis. Parts or components that must be replaced due to inoperability may be replaced with an updated part or component if the original part or component is no longer available.

This work cannot include replacement of the entire system or change or alter the system as it relates to its size, type, and capability.

7	LABOR RATE (Hourly) Alarm	10.000	Each	07/01/2021	255.00	1	2,550.00
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>>> Rel. ord. against contract 4400023962 Item 4

Information:

Total Amount:
 SEE LAST PAGE FOR TOTAL OF
 ALL ITEMS

Currency: USD



FULLY EXECUTED
Purchase Order No: 4300690250
Original PO Effective Date: 03/17/2021
PO Issue Date: **03/17/2021**
Valid From: 07/01/2021 To 06/30/2022

Supplier Name:
JOHNSON CONTROLS FIRE PROTECTION

Item	Material/Service Desc	Qty	UOM	Delivery Date	Net Price	Price Unit	Total
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Item Text

72100000-ITQ-166

Repair

Repairs are work performed on existing security, surveillance, and fire suppression systems for the purposes of a break/fix nature and include the replacement of like parts/components to return the systems to working order. This includes repairs needed on an emergency basis. Parts or components that must be replaced due to inoperability may be replaced with an updated part or component if the original part or component is no longer available.

This work cannot include replacement of the entire system or change or alter the system as it relates to its size, type, and capability.

General Requirements for all Items:**Information:**

Total Amount:
SEE LAST PAGE FOR TOTAL OF ALL ITEMS

Currency: USD



FULLY EXECUTED
Purchase Order No: 4300690250
Original PO Effective Date: 03/17/2021
PO Issue Date: **03/17/2021**
Valid From: 07/01/2021 To 06/30/2022

Supplier Name:
JOHNSON CONTROLS FIRE PROTECTION

Header Text

Fire Alarm Services

DGS Contract # 4400023962

Quantities listed are estimates and may increase or decrease based on the needs of the facility.

Payment Provision: The contractor will be reimbursed only for commodities/services actually accepted by the Commonwealth of Pennsylvania.

Failure to submit invoices in compliance with the following instructions will result in the invoices being returned to the contractor and will substantially delay processing of payments. The contractor shall be paid upon satisfactory delivery/completion of work performed and submission of an invoice on the contractor's letterhead. The invoice should contain at minimum the information listed on the sample invoice – Supplier Sample Invoice can be found at <http://www.dgsweb.state.pa.us/comod/CurrentForms/SampleSupplierInvoice.doc>

Invoices are to be submitted monthly to the requisitioning agency comptroller at the following address:

DHS (Wernersville State Hospital)
Commonwealth of Pennsylvania – PO Invoice
PO Box 69180
Harrisburg, PA 17106

By email:
69180@pa.gov

This invoice will be used to verify that work has been completed.

An invoice marked "COPY" is to be sent to:

Wernersville State Hospital
160 Main Street
Attn: Accounting
Wernersville, PA 19565-0300

Questions, status updates and/or delivery updates regarding this PO should be directed to:

Van Carpenter
610-670-4123
vacarpente@pa.gov

No further information for this PO.

Information:

Total Amount:

19,896.94

Currency: USD



FULLY EXECUTED
 Purchase Order No: 4300693754
 Original PO Effective Date: 04/19/2021
 PO Issue Date: 04/19/2021
 Valid From: 07/01/2021 To 06/30/2022

Your SAP Vendor #: 447543

Please Deliver To:
 Wernersville State Hospital
 160 Main Street
 Wernersville PA 19565 US

Supplier Name/Address:
 PROASYS INC
 318 HENDEL ST
 SHILLINGTON PA 19607-2414 US

Please Bill To:
 Save time, reduce cost, get paid faster:
 Email PDF invoice to 69180@pa.gov
<https://www.budget.pa.gov/Programs/Pages/e-Invoicing.aspx>

Supplier Phone Number: 610-775-1505
 Supplier Fax Number: 610-775-8776

Or mail paper invoice to:
 Commonwealth of Pennsylvania
 PO Box 69180, Harrisburg, PA 17106

Purchasing Agent

Name: Kelly Beers
 Phone: 610.670.4128
 Fax: 610.670.4103

Purchase Order Description:
 8310 WeSH 2111 Water Treatment FY 21

This Purchase Order is issued pursuant to the referenced Contract and constitutes the Suppliers authority to deliver the item(s) referenced below at the prices stated below to the location(s) identified above in accordance with the Contract terms and conditions.

Suppliers must provide four mandatory elements on PO invoices: PO Number, Invoice Date, Invoice Number, and Invoice Gross Amount. Failure to comply will result in the return of the invoice. Additional optional information such as supplier name, address, remit to information and PO Line Item information will improve invoice processing.

Item	Material/Service Desc	Qty	UOM	Delivery Date	Net Price	Price Unit	Total
1	Water Treatment	4.000	Each	07/01/2021	3,375.00	1	13,500.00
	>>> Rel. ord. against contract 4400019228 Item 1						

Item Text
 4 quarterly payments

General Requirements for all Items:

Information:

Total Amount:
 SEE LAST PAGE FOR TOTAL OF ALL ITEMS

Currency: USD

Supplier's Signature _____

Title _____

Printed Name _____

Date _____



FULLY EXECUTED
Purchase Order No: 4300693754
Original PO Effective Date: 04/19/2021
PO Issue Date: **04/19/2021**
Valid From: 07/01/2021 To 06/30/2022

Supplier Name:
PROASYS INC

Header Text

Water Treatment Services

Quantities listed are estimates and may increase or decrease based on the needs of the facility.

Payment Provision: The contractor will be reimbursed only for commodities/services actually accepted by the Commonwealth of Pennsylvania.

Failure to submit invoices in compliance with the following instructions will result in the invoices being returned to the contractor and will substantially delay processing of payments. The contractor shall be paid upon satisfactory delivery/completion of work performed and submission of an invoice on the contractor's letterhead. The invoice should contain at minimum the information listed on the sample invoice – Supplier Sample Invoice can be found at <http://www.dgsweb.state.pa.us/comod/CurrentForms/SampleSupplierInvoice.doc>

Invoices are to be submitted monthly to the requisitioning agency comptroller at the following address:

DHS (Wernersville State Hospital)
Commonwealth of Pennsylvania – PO Invoice
PO Box 69180
Harrisburg, PA 17106

By email:
69180@pa.gov

This invoice will be used to verify that work has been completed.

An invoice marked "COPY" is to be sent to:

Wernersville State Hospital
160 Main Street
Attn: Accounting
Wernersville, PA 19565-0300

No further information for this PO.

Information:

Total Amount:

13,500.00

Currency: USD

HIGH PRESSURE STEAM BOILER SERVICE

This Solicitation is a re-bid of IFB 6100037983

WORK OBJECTIVE

The vendor shall provide annual routine service, preventive maintenance, and emergency service on one HURST 750 HP SCOTCH MARINE FIRETUBE HIGH PRESSURE STEAM BOILER equipped with a WEISHAAPT LOW NO_x DUAL FUEL BURNER capable of combusting either #2 fuel oil or natural gas located at Wernersville State Hospital in building #33 (Boiler House). This shall include all on-site service, troubleshooting, repair, part replacement, preventive maintenance, and labor needed to provide for a dependable, efficient, safe and fully functional boiler.

EQUIPMENT COVERED UNDER THIS CONTRACT

- Hurst 750 Horsepower Scotch Marine Firetube Boiler and boiler trim.
- Weishaupt Low NO_x Dual Fuel Burner with Weishaupt W-FM 100 Combustion Manager.
- Gordon Piatt Fuel Oil Transfer Pump platform.
- Fuel oil storage tanks with Pneumercator tank monitoring system.

A detailed equipment inventory list will be provided to the prospective bidder during the mandatory site visit. To arrange a site visit please contact Richard Valko in the Utilities Supervisor's office @ 610-927-1091. Prospective bidders who have a proof of visit from the previous IFB do not need to provide a new Proof of Visit form.

ANNUAL ROUTINE SERVICE (Tune-up & Inspection)

The vendor shall provide annual routine service once per year as recommended by the manufacturer and as required for boiler inspection. This service shall be scheduled and performed to coincide with the annual required boiler inspection and will be coordinated between Wernersville State Hospital, the contractor, and the boiler inspector so that the boiler internals and trim are open and prepared for inspection. This service shall be scheduled during normal working hours (Monday through Friday 7:00am – 3:00pm). The boiler inspector will be provided by Wernersville State Hospital. This service shall include:

- Open all waterside hand holes and manholes and thoroughly clean and flush with water.
- Open all fireside access doors and thoroughly brush and vacuum.
- Inspect all heating surfaces.
- Inspect all refractory.
- Replace water column sight glass and sight glass washers.
- Open all water column plugs and verify water column free of debris and obstructions.
- Open, clean and inspect primary and auxiliary low water cutouts.
- Open, clean and inspect high water cutout.
- Clean all combustion sights.
- Close waterside with all new gaskets.
- Close fireside using new gasketing as necessary.

- Fill boiler and perform hydrostatic test.
- Check all blow down valves.
- Clean or replace fuel filters.
- Clean fuel nozzles.
- Clean air register, blower wheel and air dampers.
- Clean flame scanner.
- Clean and inspect pilot assembly.
- Inspect and lubricate all motors.
- Inspect, lubricate and tighten all burner linkage.
- Inspect gas train valves and regulators.
- Inspect oil train valves and regulators.
- Inspect oil hoses.
- Verify all pressure gauges functional. Replace as needed.
- Inspect all contacts.
- Check burner management system.
- Test low water cutouts.
- Test safety valves.
- Test feed water regulating valve.
- Check operation of all limit controls.
- Test combustion for O₂, CO, CO₂, NO_x, smoke, draft, and stack temperature.
- Adjust burner management system for maximum efficiency.
- Provide a comprehensive written report.

PREVENTIVE MAINTENANCE

Preventive Maintenance is any maintenance or repair that can be scheduled and performed when the boiler is shutdown and not in service or will not affect operation of the boiler while in service. This service shall be scheduled and coordinated between Wernersville State Hospital and the vendor during normal working hours (Monday through Friday 7am – 3pm).

EMERGENCY SERVICE

Emergency Service is any maintenance or repair that is required upon failure or inoperability of the boiler while in service. The vendor shall provide 24 hour / 7 day per week emergency availability and response, including weekends and holidays. Service response time from the point of notification is 4 hours maximum.

PARTS

Replacement parts are to be original OEM parts and no after market or substitution of parts permitted unless approved by Wernersville State Hospital. Validation of OEM part replacements shall be documented and provided to Wernersville State Hospital.

QUALIFICATIONS

The Weishaupt Burner, as compared to commercial burners, requires a higher level of Service Technician knowledge and experience, including:

- Weishaupt 3LN Mixing Head adjustment and tuning to achieve required NOx emissions without FGR.
- Fine tuning of the Siemens Linkageless Control System, including setting a defined 10 point combustion curve for each fuel.
- Knowledge of the burner's oil circulation design.

All Service Technicians shall be factory certified by Weishaupt Corp. or its Authorized Representative to provide service, maintenance and training. The Vendor shall provide written documentation of these qualifications from Weishaupt Corp. or its Authorized Representative for each service technician. The Vendor must submit this documentation with its bid submission to be considered responsive.

Service technicians and technical support shall have or be capable of accessing all Hurst / Weishaupt software including proprietary upgrades, service manuals, O&M manuals and related factory service bulletins.

On-site technicians shall be "truck equipped" with common service parts, tools, etc. and readily have access to factory technical support.

CONTRACT PROCESSING

All services provided by the contractor shall be subject to review and approval by the Utilities Supervisor who is responsible for monitoring the work being performed under this contract on behalf of Wernersville State Hospital:

Richard Valko; Office Phone: (610) 927-1091;
Email: rvalko@pa.gov

All administrative, fiscal, and technical matters relating to this contract shall be directed to Karen Nicholas, Facility Financial Manager:

Department of Human Services
Wernersville State Hospital
160 Main Street
Wernersville, PA 19565-0300

Phone: (610) 670-4128
E-mail: knicholas@pa.gov

UNSATISFACTORY WORKMANSHIP

The Contract Administrator reserves the right to withhold payment for repetitive calls to correct the same deficiency or any other unsatisfactory workmanship. However, the Commonwealth assumes no responsibility for expenses so incurred in soliciting such assistance.

TERM

The anticipated term of this agreement is October 1, 2016 through June 30, 2017 and may be renewed for four (4) additional one year periods. Renewals may be exercised at the option of the Commonwealth and Wernersville State Hospital for the four (1) one-year periods. Price increase for renewal years may not exceed Consumer Price Index as established by the Bureau of Labor Statistics.

It shall be understood and agreed that any quantities listed in the proposal are estimated only and may be increased or decreased in accordance with the actual requirement of Wernersville State Hospital and that Wernersville State Hospital in accepting any bid or portion thereof contracts only

and agrees to purchase only the quantities as represent the actual requirements of Wernersville State Hospital.

BID

Annual Routine Service Costs: Vendors should submit total cost to include labor and parts required to perform this service. Price increase for renewal years may not exceed the Prevailing Wage Index as published on the Commonwealth Labor and Industry Index.

Preventative Maintenance Labor Cost: Preventative Maintenance is always scheduled for Monday through Friday (Non-Holiday) between 7am to 3pm. Labor hour cost should be calculated and bid accordingly. Price increase for renewal years may not exceed the Prevailing Wage Index as published on the Commonwealth Labor and Industry Index.

Emergency Service Labor Cost: Vendors should submit one blended rate for emergency service labor hours. Blended labor rate will include weekdays, nights, weekends and Holidays. Price increase for renewal years may not exceed the as established by the Prevailing Wage Index as published on the Commonwealth Labor and Industry Index.

Parts Cost: Parts quantity on the bid is an estimated yearly dollar amount. Awarded bidder will invoice based on Suggested Manufacturer's Price plus or minus a percentage of discount for this contract. Bidders should enter \$1.00 on this line item, so that the "total" for this line item equals the estimated dollar amount times \$1.00.

GENERAL INFORMATION

The contractor is responsible to carry all necessary insurance and liability coverage to cover this service and provide certification of such insurance.

TERMS AND CONDITIONS

The Standard Contract Terms and Conditions and the Department of Human Services addendum to the Terms and Conditions apply to this bid and any resulting purchase orders or contracts.

**PROOF OF VISIT
WERNERSVILLE STATE HOSPITAL
DEPARTMENT OF HUMAN SERVICES**

Vendor Section

Vendor's Name: _____

Address: _____

Vendor's Signature: _____

Vendor's Title: _____

Date: _____

**I. WERNERSVILLE STATE HOSPITAL
ESCORTED BY:**

Facility Representative's Signature: _____

Title: _____

Date Escorted: _____

SPECIAL NOTE TO VENDOR:

One signed copy of this proof of visit must be returned with your bid.

**MAINTENANCE, REPAIR AND TESTING SERVICES FOR
FIRE ALARM SYSTEMS
STATEMENT OF WORK**

SCOPE/OVERVIEW:

This contract will cover the Commonwealth agencies requirements for routine and preventative maintenance, repair and upgrades of Fire Alarm Systems for **Wernersville State Hospital**. It will also include monitoring, testing, annual inspection and cleaning of all equipment. Exclusions to these definitions include: design/build, alterations, cabling & Public Works projects.

TERM OF PURCHASE ORDER:

The terms of this agreement will be from July 1, 2017 to June 30, 2018. The Purchase Order may be renewed for four (4) additional years or until the end of the Master Contract which expires on February 28, 2021 at the option of the Commonwealth. A separate PO will be issued for each fiscal year and a new Quote must be provided by the vendor 30 days prior to the end of the current Purchase Order Term.

WORK ORDER AUTHORIZATION:

Prior to any and all work being performed contractor shall contact Andrew Boyer in order to confirm and authorize any and all work. All Work Order must be approved by Andrew Boyer in order for payment to be authorized.

SERVICE:

1. The contractor agrees to coordinate all routine service calls with the Institutional Safety Manager, Andrew Boyer. All full-day assignments are to be performed during normal working hours. Contractors must furnish all tools and materials necessary to perform services.
2. Contractors shall respond to service calls within two (2) hours from time of call for all emergencies. Emergency service must be available 24 hours a day, 7 days a week, 365 days a year.
3. Service Technicians shall exercise good judgment with regard to repairing versus replacing system components and shall be equipped with sufficiently complete line of parts to permit efficient repairs. However, repairs shall not be attempted if replacement is obviously the least costly alternative.
4. All assigned technicians shall be fully qualified in (Simplex and Ademco) systems.
5. To the extent possible, newly installed equipment shall be identical to items replaced. Components of another manufacture may be used, provided:
 - a. They are of good quality, guaranteed to provide a reasonable service life.
 - b. They are designed for the specific application to which they are being applied.
 - c. Their use does not require system modifications of adaption devices, etc. that increase the cost of installation beyond the cost of installing original equipment.
6. Technicians agree to inspect and clean indoor and outdoor cameras annually. An annual Inspection report must be submitted to the safety manager at the time of inspection.
7. The contractor agrees to cover all labor to troubleshoot problems, diagnose problems, and labor to replace failed devices.
8. Perform annual required testing and flow testing on the Fire System Sprinkler Pump per NFPA Standards.



EQUIPMENT COVERED:

Equipment covered includes all of the new recording equipment, Phillips switchers, and all of the outdoor cameras. It also includes all of the equipment associated with the (Simplex and Ademco) Systems. Equipment covered under this contract includes but is not limited to:

Fire Alarm:

TYPE OF SYSTEM	LOCATION	REMARKS
Simplex 4100	Bldgs 34, 35, 37	
Simplex 4100es	Bldgs 3, 26, 32	
Ademco Vista 5140XM	Bldg 1	Currently serviced by Simplex

PRICING:

Pricing for all replacement and repair parts provided through a maintenance agreement under the vendors master contract will be at current manufacturer catalog, where such pricing exists, or a percentage (%) off discount from the Supplier's current catalog list. Percentage of discount may vary according to category and product line awarded and must be specified. Discount percentage (%) can be increased, but not decreased, during the life of this contract. These pricing guidelines will be adhered to by the Contractors and shall apply to all Using Agencies. Bidders must enter the percentage discount off price list for all new, replacement or repair parts for each Manufacturer/OEM they represent on Attachment B, Tab 4, Manufacturer's Represented as entered on the Master Contract.

Bidders must enter their Labor Rate Cost Data Information.

JOB TITLE	RATE PER HOUR

REPAIR, PREVENTATIVE MAINTENANCE & UPGRADES:

For the purpose of this contract, repair, preventative maintenance, monitoring and upgrades are defined below:

Repair: Repairs are work performed on existing security and surveillance systems for the purposes of a break/fix nature and includes the replacement of like parts/components in order to return the systems to working order. This work cannot include replacement of the entire system or change or alter the system as it relates to its size, type, and capability. This includes repairs needed on an emergency basis. Parts or components that must be replaced due to inoperability may be replaced with an updated part or component if the original part or component is no longer available.

Preventative Maintenance: Preventative Maintenance are services performed on a routine basis, such as cleaning, inspection and testing of all systems and component parts for the purpose of allowing the systems or equipment to continue operating in the expected manner.

Upgrades: Upgrades to existing security and surveillance systems are permitted in order to update the existing equipment. This includes, but is not limited to: Software upgrades, installation of new cameras to existing cabling/wiring, etc. No new wiring or any other alteration to the building is permitted except to replace faulty or defective wiring as part of a repair as defined above.

Exclusions to the definition of repair, preventative maintenance and upgrades inch.1de:

Items not covered under repair or preventative maintenance include replacement of faulty wiring, water damage, acts of God, vandalism, lightning strikes, and any necessary lift equipment.

The exclusions listed above are not part of the scope of services included in this contract.

REPLACEMENT PARTS:

Parts that are provided in accordance with repair or preventative maintenance work under this contract must be equal to or better than O.E.M. specifications. Any permanent replacement of parts must be warranted per O.E.M specifications.

ELIGIBILITY REQUIREMENTS:

Bidders must be able to meet all of the requirements identified below and provide the appropriate documentation as identified. Failure to meet any of the requirements below will result in the supplier's bid being rejected for that Service Category.

Bidders must provide proof (by Letter) that they are an authorized dealer /service agent by each manufacturer to be found responsive.

Authorized dealers must submit a letter from the manufacturers certifying them as authorized dealers. Letters should include the representation that the manufacturer will honor all manufacturer warranties for equipment, supplies, components and parts provided by the bidder.

The bidder must have been in business for a minimum of two (2) years prior to submitting a bid. To meet the minimum of two (2) years in business qualification requirement, suppliers may submit documentation such as: Articles of incorporation, registration of a fictitious name, income tax return, Dunn & Bradstreet report, etc.

Bidders must be able to perform the services required within the category (ies) specified by the supplier in Attachment B, Bid Submittal Worksheet.



A Manufacturer/OEM must be able to directly or through its authorized dealer supply all equipment, supplies, components and parts required under the scope of the category(s) specified.

Authorized dealers who bid directly must be able to supply all equipment, supplies, components and parts required under the scope of the category(s) specified.

WORK LOCATION SECURITY:

The Contractors shall follow all required Security procedures at each worksite for signing in and out, obtaining and displaying vendor badges or other necessary Identification or other requirements deemed necessary by the Contracting agency. Particularly sensitive areas may require Commonwealth staff to accompany vendor representatives. These procedures must be adhered to.

CONFIDENTIALITY:

Cameras of any and all types are prohibited from the grounds. No individual may take any pictures or videos without the express permission of the Chief Executive Officer or designee.

Also, the **use** of the photographic capabilities of personal camera, picture, or video cellular telephones is prohibited on Commonwealth owned/leased property. Any individual caught taking pictures will be asked to delete all pictures in the presence of a Wernersville State Hospital employee. Should pictures not be able to be deleted, film and/or camera will be confiscated.

EMERGENCY RESPONSE AND REPAIR TIME:

In no event shall the lead technician assigned by the Contractor take longer than two (2) hours, or as specified in the Purchase Order, to arrive at the project location from the time notification is made to the Contractor of an emergency. Repair work shall be completed within the time specified in the Purchase Order by the Contracting Agency.

PAYMENT PROVISIONS:

Payment Provision: The contractor will be reimbursed only for commodities/services actually accepted by the Commonwealth of Pennsylvania. The contractor shall be paid upon satisfactory delivery/completion of work performed, and submission of an invoice on the contractor's Letterhead. The invoice should contain at minimum the information listed on the sample invoice provided (ATTACHMENT A).

Invoices must be submitted to

By US Mail: DHS (Facility Program)
Commonwealth of Pennsylvania – PO Invoice
PO Box 69180
Harrisburg, PA 17106

By Email: 69180@pa.gov
(Invoices Only)



**ATTACHMENT A
INVOICE**

Company Name

Invoice #: _____
 Customer _____
 Account #: _____
 Sales Order #: _____
 Quote #: _____
 Invoice Date: _____

Supplier Corporate Address: Company Name Street Address City, State, Zip Phone: _____ Fax: _____ SAP Vendor #	Supplier Remit Address: Company Name Street Address City, State, Zip Phone: _____ Fax: _____ SAP Vendor # <i>Make all checks payable to "Company Name"</i>
Bill to Address: Agency/Department Name and Facility/Institution Commonwealth of Pennsylvania PO BOX City, PA, Zip Tel #: _____	Ship to Address: Agency/Department Name and Facility/Institution Commonwealth of Pennsylvania PO BOX City, PA, Zip Tel #: _____
Comments or special instructions: 	

SAP PO NUMBER	PROCUREMENT CONTACT	SHIPPED VIA	FOB POINT	TERMS
				Net xx day Date of invoice receipt

SAP PO LINE ITEM #	SAP MATERIAL #	DESCRIPTION	QUANTITY SHIPPED	UNIT OF MEASURE	UNIT PRICE	TOTAL PRICE
TOTAL DUE:						

If you have any questions concerning this invoice, contact:

Name:	Email:
Tel:	Fax:

Notes:

SAP is our enterprise software system. To find out your SAP vendor numbers, please contact your procurement representative.

If applicable, shipping and handling must be a line item on the purchase order and invoice.

If applicable, additional documentation will be attached to this invoice as required.

If applicable, provide service dates within the comments and special instructions.

Recommendations when invoicing (not part of invoice template)

1. Do not submit invoices on colored paper (yellow, green, blue, etc.). Please submit on only black and white. Colored paper creates issues when they are imaged and delay the payment process.
2. Please insure that invoices are legible. If paper invoices are 'barely' legible, scanning the invoices make them less so and delay the payment process.

Investment Grade Energy Audit, Volume 1

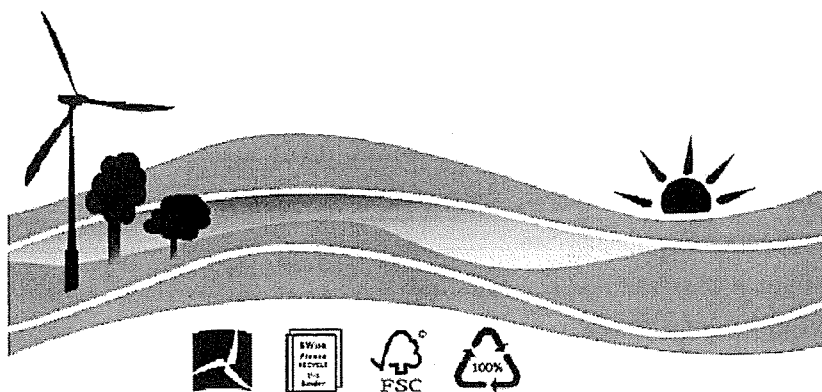
Wernersville State Hospital

Table of Contents

Schedule A: Equipment to be Installed by ESCO	1
Schedule B: Description of Premises; Pre-Existing Equipment Inventory	25
Schedule C: Energy Saving Guarantee	121
Schedule D: Compensation to ESCO	146
Schedule E: Baseline Energy Consumption	149
Schedule F: Savings Measurement & Calculation Formulae; Methodology to Adjust Baseline	159
Schedule G: Construction and Installation Schedule	203
Schedule H: Systems Start-Up and Commissioning; Operating Parameters of Installed Equipment	221
Schedule I: Standards of Comfort	255
Schedule J: ESCO's Maintenance Responsibilities	257
Schedule K: Agency's Maintenance Responsibilities	273
Schedule L: Facility Maintenance Checklist	275
Schedule M: ESCO's Training Responsibilities	277
Schedule N: Installment Purchase and Payment Schedule	279
Schedule O: Proposed Final Project Cost & Proposed Final Project Cash Flow Analysis	281
Schedule P: DGS Annual Reporting Requirements	284
Schedule Q: Hazardous Waste Materials	287
Schedule R: List of Approved Sub Contractors	289
Exhibit I: Performance Bond/Construction Bond	291
Exhibit II (i): Certificate of Acceptance—Technical Audit	293
Exhibit II (ii): Certificate of Acceptance—Installed Equipment	295
Exhibit III: Equipment Warranties	297



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Planned Service

CUSTOMER WERNERSVILLE STATE HOSPITAL
LOCAL JOHNSON CONTROLS OFFICE 7310 TILGHMAN ST STE 550 ALLENTOWN, PA, 181069047
DATE 9/1/2012



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 can help ensure your building is performing at optimum levels. 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.



2012-2013 1-5692122758

Executive Summary

PLANNED SERVICE PROPOSAL FOR WERNERSVILLE STATE HOSPITAL

Dear Steve,

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 15 Years - starting 9/1/2011 and ending 8/31/2026
- The agreement price for first year is \$63,749.79; 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,

Mark Held
Service Manager

Benefits of Planned Service

JOHNSON CONTROLS PLANNED SERVICE PROPOSAL
 PREPARED FOR WERNERSVILLE STATE HOSPITAL

Price and Payment Terms

The total Contract Price for JCI's Services during the 1st year of the Original Term is \$63,749.79. This amount will be paid to JCI in Annually 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.

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

JOHNSON CONTROLS Inc.

By: Mark Held

By:

Signature :

Signature:

Title: Service Manager

Date:

Title:

Date:

Signature:

Customer PO#:

Title: JCI Branch Manager

Date:

Proposal not valid until signed by JCI Branch Manager

JCI Branch: Allentown PA SVC - 0614

Address: 7310 TILGHMAN ST STE 550

ALLENTOWN PA 181069047

Branch Phone: (610) 391 2750

Customer Initials _____

JOHNSON CONTROLS PLANNED SERVICE PROPOSAL
 PREPARED FOR WERNERSVILLE STATE HOSPITAL

Schedule A

Equipment List (Selected Equipment to be serviced)

Site		Address			
WERNERSVILLE STATE HOSPITAL		PO BOX 300 WERNERSVILLE PA 19565-0300			
Qty	Equipment	Services Provided	# Per Year	Coverage Type	Extended Coverage
1	Block Hours - Mechanical Heavy			Premium	NA
Site		Address			
WERNERSVILLE ST HOSP EAST HALL		PO BOX 300 BLDG 3 EAST HALL WERNERSVILLE PA 19565-0300			
Qty	Equipment	Services Provided	# Per Year	Coverage Type	Extended Coverage
2	Controls (Controller/End Devices), Central Cooling Plant, Johnson Controls, 351-700 points			Premium	NA
		Operational	4		
Site		Address			
WERNERSVILLE ST HOSP HILL HALL		PO BOX 300 BLDG 31 HILL HALL WERNERSVILLE PA 19565-0300			
Qty	Equipment	Services Provided	# Per Year	Coverage Type	Extended Coverage



JOHNSON CONTROLS PLANNED SERVICE PROPOSAL
 PREPARED FOR WERNERSVILLE STATE HOSPITAL

2	Controls (Controller/End Devices), Central Cooling Plant, Johnson Controls, 351-700 points			Premium	NA
		Operational	4		
Site					
Address		WERNERSVILLE ST HOSP BOILER HOUSE PO BOX 300 BLDG 33 BOILER HOUSE WERNERSVILLE PA 19565-0300			
Qty	Equipment	Services Provided	# Per Year	Coverage Type	Extended Coverage
1	Boiler, Oil-Fired, Fire Tube, 301-600 HP			Premium	NA
		Combustion Analysis/Smoke Test	1		
		Tube Brushing (Fire Tube - Gaskets not included)	1		
		Operational	2		
Site					
Address		WERNERSVILLE ST HOSP SCHUYLKILL CENTER PO BOX 300 BLDG 34 SCHUYLKILL CENTER WERNERSVILLE PA 19565-0300			
Qty	Equipment	Services Provided	# Per Year	Coverage Type	Extended Coverage
1	Chiller, Water Cooled, Screw (Single Compressor), <250			Premium	NA



JOHNSON CONTROLS PLANNED SERVICE PROPOSAL
 PREPARED FOR WERNERSVILLE STATE HOSPITAL

	Tons				
		Seasonal Start-up	1		
		Seasonal Shut-down	1		
		Condenser Tube Brushing (removal and replacement of one head only)	1		
		Oil Sample and Analysis	1		
		Vibration Analysis	1		
		Gantry Setup (preparation for water box head removal)	1		
		Operational	3		
		Comprehensive	1		
1	Cooling Tower, Spray Distribution, <300 Tons			Premium	NA
		Operational	3		
		Comprehensive	1		
		Seasonal Shut-down	1		
		Seasonal Start-up	1		
		Tower Cleaning	1		
		Condenser Pump Strainer Cleaning	1		
2	Pump, Chilled Water, 11-50 HP			Premium	

JOHNSON CONTROLS PLANNED SERVICE PROPOSAL
 PREPARED FOR WERNERSVILLE STATE HOSPITAL

		Vibration Analysis	1		
		Operational	3		
		Comprehensive	1		
2	Pump, Condenser, 11-50 HP			Premium	
		Vibration Analysis	1		
		Operational	3		
		Comprehensive	1		
2	Pump, Variable Frequency Drive (VFD), 15-30 HP			Premium	
		Operational	4		
2	Controls (Controller/End Devices), Central Cooling Plant, Johnson Controls, 351-700 points			Basic	NA
		Operational	4		
Site					
Address					
WERNERSVILLE ST HOSP LEBANON CENTER		PO BOX 300 BLDG 35 LEBANON CENTER WERNERSVILLE PA 19565-0300			
Qty	Equipment	Services Provided	# Per Year	Coverage Type	Extended Coverage
1	Chiller, Water Cooled, Screw (Single Compressor), <250 Tons			Premium	NA

**JOHNSON CONTROLS PLANNED SERVICE PROPOSAL
PREPARED FOR WERNERSVILLE STATE HOSPITAL**

		Seasonal Shut-down	1		
		Seasonal Start-up	1		
		Gantry Setup (preparation for water box head removal)	1		
		Condenser Tube Brushing (removal and replacement of one head only)	1		
		Oil Sample and Analysis	1		
		Vibration Analysis	1		
		Operational	3		
		Comprehensive	1		
1	Cooling Tower, Spray Distribution, <300 Tons			Premium	NA
		Comprehensive	1		
		Seasonal Shut-down	1		
		Seasonal Start-up	1		
		Tower Cleaning	1		
		Condenser Pump Strainer Cleaning	1		
		Operational	3		
2	Pump, Chilled Water, 11-50 HP			Premium	
		Vibration Analysis	1		



JOHNSON CONTROLS PLANNED SERVICE PROPOSAL
 PREPARED FOR WERNERSVILLE STATE HOSPITAL

		Operational	3		
		Comprehensive	1		
2	Pump, Condenser, 11-50 HP			Premium	
		Vibration Analysis	1		
		Operational	3		
		Comprehensive	1		
2	Pump, Variable Frequency Drive (VFD), 15-30 HP			Premium	
		Operational	4		
2	Controls (Controller/End Devices), Central Cooling Plant, Johnson Controls, 351-700 points			Basic	NA
		Operational	4		
Site		Address			
WERNERSVILLE ST HOSP BERKS CENTER		PO BOX 300 BLDG 37 BERKS CENTER WERNERSVILLE PA 19565-0300			
Qty	Equipment	Services Provided	# Per Year	Coverage Type	Extended Coverage
1	Chiller, Water Cooled, Screw (Single Compressor), <250 Tons			Premium	NA
		Seasonal Shut-down	1		



**JOHNSON CONTROLS PLANNED SERVICE PROPOSAL
PREPARED FOR WERNERSVILLE STATE HOSPITAL**

		Seasonal Start-up	1		
		Gantry Setup (preparation for water box head removal)	1		
		Condenser Tube Brushing (removal and replacement of one head only)	1		
		Oil Sample and Analysis	1		
		Vibration Analysis	1		
		Operational	3		
		Comprehensive	1		
1	Cooling Tower, Spray Distribution, <300 Tons			Premium	NA
		Seasonal Shut-down	1		
		Seasonal Start-up	1		
		Tower Cleaning	1		
		Condenser Pump Strainer Cleaning	1		
		Operational	3		
		Comprehensive	1		
2	Pump, Chilled Water, 11-50 HP			Premium	
		Vibration Analysis	1		
		Operational	3		



JOHNSON CONTROLS PLANNED SERVICE PROPOSAL
 PREPARED FOR WERNERSVILLE STATE HOSPITAL

		Comprehensive	1		
2	Pump, Condenser, 11-50 HP			Premium	
		Vibration Analysis	1		
		Operational	3		
		Comprehensive	1		
3	Pump, Variable Frequency Drive (VFD), 15-30 HP			Premium	
		Operational	4		
3	Controls (Controller/End Devices), Central Cooling Plant, Johnson Controls, 351-700 points			Basic	NA
		Operational	4		
1	Controls (Controller/End Devices), Supervisory/Server/UI, Johnson Controls, 0-25000 points			Basic	NA
		Operational	4		

Customer Initials _____

JOHNSON CONTROLS PLANNED SERVICE PROPOSAL
 PREPARED FOR WERNERSVILLE STATE HOSPITAL

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

Year	Total Annual Dollar Amount	Payment Frequency
Year1 2011	\$61,893.00	Annually
Year2 2012	\$63,749.79	Annually
Year3 2013	\$65,662.28	Annually
Year4 2014	\$67,632.15	Annually
Year5 2015	\$69,661.12	Annually
Year6 2016	\$71,750.95	Annually
Year7 2017	\$73,903.48	Annually
Year8 2018	\$76,120.58	Annually
Year9 2019	\$78,404.20	Annually
Year10 2020	\$80,756.33	Annually
Year11 2021	\$83,179.02	Annually
Year12 2022	\$85,674.39	Annually
Year13 2023	\$88,244.62	Annually
Year14 2024	\$90,891.96	Annually
Year15 2025	\$93,618.72	Annually

Special Additions & Exceptions

**STATEMENT OF WORK
WATER TREATMENT SERVICES
INVITATION TO QUALIFY (ITQ) CONTRACT**

OVERVIEW: The purpose of this Water Treatment Services Invitation to Qualify (ITQ) is to qualify responsible and responsive Suppliers to perform services necessary to inspect and provide water treatment services for Commonwealth of Pennsylvania (CWOPA) facilities as requested by Commonwealth Agencies. In addition, Local Public Procurement Units, as defined by the Commonwealth Procurement Code, may use this contract in accordance with the COSTARS Provision contained in this document.

The Commonwealth has attempted to list specific services in this Statement of Work (SOW). Any services that are not listed, but would fall within the normal services of the category, may be provided under this contract. *Note: This is not a bulk chemical contract or an equipment purchasing contract. Any chemicals or equipment shall be secondary to the services provided on this contract as specified by the Using Agency, in their Scope of Work.*

Suppliers shall ensure that all required services being performed by their technicians are managed and supervised by a Certified Water Technologist (CWT) and/or a Water Treatment Chemist. In addition, Suppliers must have a Certified Water Technologist (CWT) and/or a Water Treatment Chemist employed by their company, and should make available, upon request, the number employed by their company.

ISSUING OFFICE: This ITQ is managed and issued by the Commonwealth of Pennsylvania, Department of General Services, Bureau of Procurement (BOP). All inquiries should be referred to:

Shelbie Pickering, Commodity Specialist
Department of General Services
Bureau of Procurement
Forum Place, 6th Floor
555 Walnut Street
Harrisburg, PA 17101
Telephone: (717) 703-2947
Email: spickering@pa.gov

QUALIFICATIONS: Contractors interested in becoming an ITQ Contractor must meet the following requirements. Failure to meet the below requirements will result in the application being rejected. Each Contractor that meets the minimum qualifications will be awarded a contract. Award of a contract to a Contractor is not a guarantee of business.

- A. Contractors must provide documentation showing two (2) years of experience in the appropriate commodity code selected under Service Categories;
- B. Suppliers must provide a copy of the PA Department of Environmental Protection's (DEP) Chapter 252 Laboratory Accreditation Certificate and Scope of Accreditation. Certificates must be active and include their Laboratory's Identification Number. The Commonwealth shall be under no obligation to obtain current and future certificates/accreditations from Suppliers. It is the responsibility of qualified Suppliers to continue to maintain an updated copy in the JAGGAER system for the length of their contract;

**STATEMENT OF WORK
WATER TREATMENT SERVICES
INVITATION TO QUALIFY (ITQ) CONTRACT**

- C. Suppliers must provide documentation they have a Certified Water Technologists (CWT) and/or a Water Treatment Chemist employed by their company;
- D. Contractors must select the county(ies) in which they can serve.

SERVICE CATEGORIES: Suppliers should select the appropriate commodity code under the Business Details section during the qualification process in JAGGAER. The Commonwealth has attempted to list specific services under each description. The Commonwealth may add additional commodity codes as the need arises. The table below lists the appropriate commodity code and description of service.

COMMODITY CODE	DESCRIPTION OF SERVICE
83101506-ITQ-232 Water Treatment Services	<ul style="list-style-type: none"> • This service category will cover Water Treatment Services for non-potable water systems (including services for Boiler Systems - Steam Generating Systems, HVAC Systems, Cooling Towers and Re-circulating Hot and Cold-Water Systems, Open and Closed Loops, etc.) at various CWOPA owned and leased facilities. In addition to normal business hours, Qualified Suppliers are responsible for providing service(s) at night, weekends and/or as an <i>emergency</i> on an as needed basis. • Service requirements will primarily be established by Commonwealth Agencies based on their specific location and specific system service requirements. • Qualified suppliers will perform an initial inspection of the system requiring service and develop a plan that includes the extent of services required. The initial site visit shall be at the supplier's expense.

1. GENERAL INFORMATION/REQUIREMENTS:

- A. Type of Contract.** Upon determination that the Contractor meets the ITQ requirements, the Commonwealth will issue a contract to the Contractor. Upon receipt of a Purchase Order (PO) issued under this Contract, the Contractor agrees to furnish the requested services to the Commonwealth agency issuing the PO.
- B. Order of Precedence.** If any conflicts or discrepancies should arise in the terms and conditions of this Contract, or the interpretation thereof, the order of precedence shall be: i. This Contract; ii. The data resident on the [ITQ web site](#) and incorporated herein by reference at the date of execution of the Contract or issuance of an RFQ off of this Contract, whichever is later, including but not limited to the promises and certifications the Contractor made in qualifying for the Contract;

If any conflicts or discrepancies should arise in the interpretation of a PO, the order of precedence shall be:

**STATEMENT OF WORK
WATER TREATMENT SERVICES
INVITATION TO QUALIFY (ITQ) CONTRACT**

- i. The consulting service category definitions, descriptions, qualification requirements, and contract terms and conditions set forth in the RFQ;
- ii. This Contract;
- iii. The PO and any attachment thereto, including: (1) the Contractor’s Proposal, as accepted by the Commonwealth; (2) the RFQ.

c. Bid Protest Procedure (April 2016) The Bid Protest Procedure is on the DGS website. [Click here](#)

d. COSTARS Purchasers. Section 1902 of the Commonwealth Procurement Code, 62 Pa.C.S. § 1902 (“Section 1902”), authorizes local public procurement units and state-affiliated entities (together, “COSTARS Members”) to participate in Commonwealth procurement contracts that the Department of General Services (“DGS”) may choose to make available to COSTARS Members. DGS has identified this ITQ as one which will be made available for COSTARS Members’ participation.

- a. Only those entities registered with DGS are authorized to participate as COSTARS Members in this Contract. A COSTARS Member may be either a local public procurement unit or a state-affiliated entity.
 1. A “local public procurement unit” is:
 - Any political subdivision (local government unit), such as a municipality, school district, or commission;
 - Any public authority (including authorities formed under the Municipality Authorities Act of 1955 or other authorizing legislation, such as the Public Transportation Law or the Aviation Code);
 - Any tax-exempt, nonprofit educational institution or organization;
 - Any tax-exempt, nonprofit public health institution or organization;
 - Any nonprofit fire, rescue, or ambulance company; and
 - Any other entity that spends public funds for the procurement of supplies, services, and construction (such as a council of governments, an area government, or an organization that receives public grant funds).

The Department reserves the right to review and determine eligible applicants as Local Public Procurement Units on a case-by-case basis.

2. A state-affiliated entity is a Commonwealth authority or other Commonwealth entity that is not a Commonwealth agency. The term includes:
 - The Pennsylvania Turnpike Commission;
 - The Pennsylvania Housing Finance Agency;
 - The Pennsylvania Municipal Retirement System;
 - The Pennsylvania Infrastructure Investment Authority;
 - The State Public School Building Authority;

**STATEMENT OF WORK
WATER TREATMENT SERVICES
INVITATION TO QUALIFY (ITQ) CONTRACT**

- The Pennsylvania Higher Education Facilities Authority, and
- The State System of Higher Education.

The COSTARS Program is not available for use by Executive Agencies and Independent Agencies as defined by the Commonwealth Procurement Code, or any agency or entity using funds appropriated to the Department of General Services through Capital Budget Project Itemization legislation for the procurement of furniture, fixtures, and equipment.

3. A complete list of local public procurement units and state-affiliated entities that have registered with DGS and that are authorized to procure items from the Contract can be found at <http://www.costars.state.pa.us/SearchCOMember.aspx>.
- b. COSTARS Members have the option to purchase from this Contract, from any DGS contract established exclusively for COSTARS Members in accordance with the requirements of Section 1902, from any other cooperative procurement contracts, or from their own procurement contracts established in accordance with the applicable laws governing such procurements. The Contractor understands and acknowledges that there is no guarantee that a COSTARS Member will place an order under this Contract, and that the decision to procure from this Contract is within the sole discretion of each COSTARS Member.
 - c. DGS is acting as a facilitator for COSTARS Members who may wish to purchase under this Contract. COSTARS Members that participate in this Contract and issue purchase orders (“POs”) to Contractors are third party beneficiaries who have the right to sue and be sued for breach of this Contract without joining the Commonwealth or DGS as a party. The Commonwealth will not intervene in any action between a Contractor and a COSTARS Member unless substantial interests of the Commonwealth are involved.
 - d. COSTARS Members electing to participate in this Contract will order items directly from the Contractor and be responsible for payment directly to the Contractor.
 - e. Those Contractors electing to permit COSTARS Members to procure from this Contract shall pay the Required Administrative Fee applicable to the Contractor’s classification:

Contractor Classification	Required Administrative Fee
DGS-verified Small Diverse Business Contractor	\$166
DGS Self-Certified Small Business Contractor	\$500
All Other Contractor	\$1,500

**STATEMENT OF WORK
WATER TREATMENT SERVICES
INVITATION TO QUALIFY (ITQ) CONTRACT**

1. Each Contractor electing to permit COSTARS Members to participate in the Contract must submit the COSTARS Program Election to Participate form with its bid submittal and pay the applicable Administrative Fee upon Contract award in order to sell the awarded items/services to COSTARS Members. If the Contractor is a Department of General Services Self-Certified Small Business or Department of General Services verified Small Diverse Business, a copy of its active Small Business Contracting Program certificate must be included with the bid submittal.

2. At the beginning of each Contract year and upon any Contract renewal, the Contractor shall submit a check for the required amount, payable to “Commonwealth of PA”. The Contractor must pay the Administrative Fee at each contract renewal date to continue to sell the awarded items/services to COSTARS Members.

- f. DGS has registered the COSTARS name and logo (together, the “COSTARS Brand”) as a trademark with the Pennsylvania Department of State. Therefore, the Contractor may use the COSTARS Brand only as permitted under in this Subsection.
 1. The Contractor shall pay the Administrative Fee covering its participation in the program, including without limitation any use of the COSTARS Brand, for each year of the Contract period. The fee is payable upon Contract award and prior to the renewal date for each succeeding Contract period.

 2. DGS grants the Contractor a nonexclusive license to use the COSTARS Brand, subject to the following conditions:
 - The Contractor agrees not to transfer to any third party, including without limitation any of its subcontractors or Contractors, any privileges it may have to use the COSTARS Brand under this Contract.
 - The Contractor agrees not to use the COSTARS Brand to represent or imply any Commonwealth endorsement or approval of its products or services.
 - The Contractor is permitted to use the COSTARS Brand in broadcast, or Internet media solely in connection with this Contract and any other Contract with the Commonwealth under which it has agreed to make sales to COSTARS Purchasers. The Contractor may use the COSTARS Brand on business cards, brochures, and other print publications so long as the purpose is to identify the Contractor as a COSTARS vendor, and only so long as the required Contract fee is kept current.
 - Should this Contract terminate for any reason, the Contractor agrees promptly to remove the COSTARS Brand from any and all print and electronic media and to refrain from using the COSTARS Brand for any purpose whatsoever from the date of Contract termination forward.
 - The Contractor agrees to defend, indemnify, and hold harmless the Commonwealth of Pennsylvania and DGS from and against all claims, demands,

**STATEMENT OF WORK
WATER TREATMENT SERVICES
INVITATION TO QUALIFY (ITQ) CONTRACT**

liabilities, obligations, costs, and expenses of any nature whatsoever arising out of or based upon the Contractor's use of the COSTARS Brand.

- The Contractor agrees it has no property rights in the use of the COSTARS Brand by virtue of this nonexclusive license. The Contractor expressly waives any claims, including without limitation due process claims that may otherwise be available under the law in the event of any dispute involving these terms of use.
- g. The Contractor shall furnish to the DGS COSTARS Program Office a quarterly electronic Contract sales report detailing the previous quarter's Contract purchasing activity, using the form and in the format prescribed by DGS. The Contractor shall submit its completed quarterly report no later than the fifteenth calendar day of the succeeding Contract quarter.
1. The Contractor shall submit the reports through the web-based COSTARS Contractors' Gateway of the PA Contractor Portal at <https://paContractorportal.state.pa.us/irj/portal/anonymous> , Enterprise Applications. If a Contractor does not have access to the Internet, the Contractor shall send the reports, using the form and in the format prescribed by DGS, on compact disc via US Postal Service to the DGS COSTARS Program Office, Bureau of Procurement, 6th Floor Forum Place, 555 Walnut Street, Harrisburg, PA 17101-1914.
 2. For each PO received, the Contractor shall include on the report the name and address of each COSTARS-Registered Purchaser that has used the Contract along with the sales date, and dollar volume of sales to the specific Purchaser for the reporting period.
 3. DGS may suspend the Contractor's participation in the COSTARS Program for failure to provide the Quarterly Sales Report within the specified time.
- h. Additional information regarding the COSTARS Program is available on the DGS COSTARS Website at www.costars.state.pa.us.
1. If the Contractor is aware of any qualified entity not currently registered and wishing to participate in the COSTARS Program, please refer the potential purchaser to the DGS COSTARS Website at www.costars.state.pa.us, where it may register by completing the online registration form and receiving DGS confirmation of its registration. To view a list of currently-registered COSTARS member entities, please visit the COSTARS website.
 2. Direct all questions concerning the COSTARS Program to:

Department of General Services
COSTARS Program
555 Walnut Street, 6th Floor
Harrisburg, PA 17101

**STATEMENT OF WORK
WATER TREATMENT SERVICES
INVITATION TO QUALIFY (ITQ) CONTRACT**

Telephone: 1-866-768-7827
E-mail GS-PACostars@pa.gov

- i. **COSTARS Program Election to Participate.** If the Contractor is willing to sell the awarded items/services at the same prices and/or discounts, and in accordance with the contractual terms and conditions, to COSTARS members, the Contractor should complete and return the COSTARS Program Election to Participate form which is an attachment to this ITQ. If the Contractor is asserting that it is a Department of General Services Certified Small Business, the Contractor must submit its active certification.

E. COSTARS Reporting Requirements. If you checked “Yes” in Step 6 when developing your qualification bid for the ITQ contract, you agreed to participate in the Commonwealth’s COSTARS program, and you are bound by the COSTARS Purchasers Provision contained within this Statement of Work. The requirement to report COSTARS sales to DGS’ COSTARS Program Office is contained in Section E of the COSTARS Purchasers Provision. By agreeing to participate in the COSTARS program, you are required to report COSTARS sales to DGS on a quarterly basis. Even if you had no COSTARS sales, you must file a report.

COSTARS sales for the ITQ contract can now be reported through the automated COSTARS sales reporting system located on the COSTARS website. Information required will be your vendor number, contract number, date of sale, customer name and the amount of the sale. It is also recommended that you record the COSTARS Member ID number. Detailed instructions appear below.

The deadline for submitting sales information is the 15th day of the month following the end of the quarter. Failure to report COSTARS sales is in breach of contract, and may result in DGS suspending your participation in the COSTARS program.

Note: This system is to be used to record sales to COSTARS members ONLY! ZERO sales for a particular quarter must also be reported.

INSTRUCTIONS FOR COSTARS SALES REPORTING FOR STATEWIDE CONTRACT CONTRACTORS

- Go to www.dgs.state.pa.us/costars. ‘Click’ on the Contractors button.
- ‘Click’ on the COSTARS Contractors’ Gateway link on the right. Click on the State Contract link.
- Enter your Vendor Number to gain access to the system. When your Vendor Number is found, you will be taken to the Sales Reporting Authorization screen.
- Enter your first and last name. ‘Click’ Continue.
- You will be taken to the Sales Reporting Screen. Select from the Contract Number dropdown the Contract Number you want to report sales for and then ‘click’ the Continue button located next to it.
- To enter a new Sale or to report “No Sales this Quarter”, ‘click’ on the Insert button at the top left.

**STATEMENT OF WORK
WATER TREATMENT SERVICES
INVITATION TO QUALIFY (ITQ) CONTRACT**

- Enter the Customer Name or part of the Customer Name into the Customer Search field. If you are reporting “NO SALES THIS QUARTER”, type NO SALES into the search field. ‘Click’ the Search button.
 - Select the Customer Name from the dropdown list, or select NO SALES THIS QUARTER. To proceed, you will need to ‘click’ on the Continue button to the right of the list. The system will locate the Customer Name in the Members database and will pre-fill the Address and County fields for you.
 - You will then enter a Sales Date and Sales Amount.
 - ‘Click’ on the Save button. The data is saved and immediately accessible by COSTARS Program staff. For your convenience, there is also a Sales Reporting Manual – for Statewide Contracts in the Resource Center on this site. For additional assistance or questions, please call 1-866-768-7827.
- F. New Equipment.** Unless otherwise specified in this ITQ, all products offered by Contractors must be new or remanufactured. A 'new' product is one that will be used first by the Commonwealth after it is manufactured or produced. A 'remanufactured' product is one which: 1) has been rebuilt, using new or used parts, to a condition which meets the original manufacturer's most recent specifications for the item; 2) does not, in the opinion of the Issuing Office, differ in appearance from a new item; and 3) has the same warranty as a new item. Unless otherwise specified in this invitation for bids, used or reconditioned products are not acceptable. This clause shall not be construed to prohibit Contractors from offering products with recycled content, provided the product is new or remanufactured.
- G. Post-Submission Descriptive Literature.** The Commonwealth may, during its evaluation of the bids, require any Contractor to submit cuts, illustrations, drawings, prints, test data sheets, specification sheets and brochures which detail construction features, design, components, materials used, applicable dimensions and any other pertinent information which the Issuing Office may require in order to evaluate the product(s) offered. The required information must be submitted within two (2) business days after notification from the Issuing Office. Failure to submit the required information prior to the expiration of the second business day after notification shall result in the rejection of the bid as non-responsive.
- H. Tie Bids/Quotes.** All tie bids/quotes will be broken by the Issuing Office.
- I. Prompt Payment Discounts.** Prompt payment discounts will not be considered in making an award. If prompt payment discounts are offered by any Contractor, however, the Issuing Office will take advantage of such offer

REQUEST FOR QUOTE (RFQ) PROCEDURES: Commonwealth agencies may issue an RFQ to qualified Suppliers, through the Commonwealth’s Custom Portal, powered by JAGGAER system. The requesting agencies may require the qualified Contractors to furnish, upon request, additional documentation in the RFQ. The qualified Contractors selected for the RFQ process will receive a Purchase Order (PO) and

**STATEMENT OF WORK
WATER TREATMENT SERVICES
INVITATION TO QUALIFY (ITQ) CONTRACT**

will supply the service to meet the specific requirements as indicated in the RFQ.

Agencies will make a best value selection based upon the criteria set forth in the RFQ. Best Value refers to the process of selecting the quote which provides the greatest value to the agency based on evaluating and comparing all pertinent criteria, including cost, so that the Contractor whose overall proposal best suits the agency's needs is selected for each individual project.



PLANNED SERVICE CONTINUATION

5/5/2021

Robert Rose
Wernersville St Hospital
160 Main St
Wernersville PA 19565-9490

Wernersville State Hospital HVAC / BAS 2021



Dear Robert:

Thank you for using Johnson Controls to provide the maintenance solution for your facility. We appreciate your business and look forward to continuing as your building technology services partner.

Per the terms of your Planned Service Agreement, we are entering year 11 of 15 Years. The total price for 9/1/2021 to 8/31/2022 is \$83,179.02, to be paid annually. Invoices will be sent to:

Wernersville State Hospital
160 Main St
Wernersville PA 19565

If you require a different requisition or purchase order number on our invoices than we used last year, please provide a copy of that document to us by 8/1/2021.

Again, thank you for your business and we look forward to serving you in the coming year. Please do not hesitate to call if I can assist you in any way.

Sincerely,
Johnson Controls

Mark Held
Johnson Controls, Inc.
7310 Tilghman St Ste 550
Allentown PA 18106-9047
Mark.n.held@jci.com
Phone: (866)412-8115

**JOHNSON CONTROLS PLANNED SERVICE PROPOSAL
PREPARED FOR WERNERSVILLE ST HOSP**

Price and Payment Terms

The total Contract Price for JCI's Services during the 1st year of the Original Term is \$34,763.74. This amount will be paid to JCI in Annually 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:

Wernersville State Hospital
P O Box 300

Wernersville PA 19565-0300

4 → Year 10

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

JOHNSON CONTROLS Inc.

By: Mark Held

By:

Signature :

Signature:

Title: Fld Svc ML1

Date:

Title:

Date:

Signature:

Customer PO#:

Title:

Date:

JCI Branch: Allentown PA Common Branch - 0N38

Address: 7310 TILGHMAN ST STE 550

ALLENTOWN PA 18106-9047

Branch Phone: (610) 391-2750

SENT

**JOHNSON CONTROLS PLANNED SERVICE PROPOSAL
PREPARED FOR WERNERSVILLE ST HOSP**

Schedule A

Equipment List (Selected Equipment to be serviced)

Site			Address				
WERNERSVILLE ST HOSP			PO BOX 300 WERNERSVILLE PA 19565-0300				
Site			Address				
WERNERSVILLE ST HOSP EAST HALL ✓			PO BOX 300 BLDG 3 EAST HALL WERNERSVILLE PA 19565-0300				
Qty	Equipment	Services Provided	# Per Year	Coverage Type	Extended Coverage	Year To Be Activated	Year To Be Deactivated
1	Controls (Controller/End Devices), Central Heating Plant, Johnson Controls, 351-700 points			Premium			
		Operational	1	+ B/U		✓	
Site			Address				
WERNERSVILLE ST HOSP PARKSIDE			PO BOX 300 BLDG 5 PARKSIDE HOUSE WERNERSVILLE PA 19565-0300				
Qty	Equipment	Services Provided	# Per Year	Coverage Type	Extended Coverage	Year To Be Activated	Year To Be Deactivated
1	Controls (Controller/End		✓	Premium			



**JOHNSON CONTROLS PLANNED SERVICE PROPOSAL
PREPARED FOR WERNERSVILLE ST HOSP**

	Devices), Central Heating Plant, Johnson Controls, 351-700 points						
		Operational	1			✓	
Site			Address				
WERNERSVILLE ST HOSP HILL HALL			✓ PO BOX 300 BLDG 31 HILL HALL WERNERSVILLE PA 19565-0300				
Qty	Equipment	Services Provided	# Per Year	Coverage Type	Extended Coverage	Year To Be Activated	Year To Be Deactivated
1	Controls (Controller/End Devices), Central Heating Plant, Johnson Controls, 351-700 points			Premium			
		Operational	1			✓	
Site			Address				
WERNERSVILLE ST HOSP SCHUYLKILL CENTER			✓ PO BOX 300 BLDG 34 SCHUYLKILL CENTER WERNERSVILLE PA 19565-0300				
Qty	Equipment	Services Provided	# Per Year	Coverage Type	Extended Coverage	Year To Be Activated	Year To Be Deactivated
2	Controls (Controller/End Devices), Supervisory/Server/UI,			Premium		✓	

**JOHNSON CONTROLS PLANNED SERVICE PROPOSAL
PREPARED FOR WERNERSVILLE ST HOSP**

	Johnson Controls, 0-25000 points						
		Operational Bac Rap	32 1			✓	
24	Controls (Controller/End Devices), Generic Input/Output, Johnson Controls, 0-20 points			Premium			
		Operational	1				
8	Controls (Controller/End Devices), Generic Input/Output, 3rd Party, 0-20 points			Premium			
		Operational	1				
Site				Address			
WERNERSVILLE ST HOSP LEBANON CENTER				PO BOX 300 BLDG 35 LEBANON CENTER WERNERSVILLE PA 19565-0300			
Qty	Equipment	Services Provided	# Per Year	Coverage Type	Extended Coverage	Year To Be Activated	Year To Be Deactivated
2	Controls (Controller/End Devices), Supervisory/Server/UI, Johnson Controls, 0-25000 points			Premium	✓		
		Operational Bac	32 1				

**JOHNSON CONTROLS PLANNED SERVICE PROPOSAL
PREPARED FOR WERNERSVILLE ST HOSP**

7	Controls (Controller/End Devices), Generic Input/Output, 3rd Party, 0-20 points			Premium			
		Operational	1		✓		
21	Controls (Controller/End Devices), Generic Input/Output, Johnson Controls, 0-20 points			Premium			
		Operational	1		✓		
1	Controls (Controller/End Devices), Central Heating Plant, Johnson Controls, 351-700 points			Premium			
		Operational	1		✓		
1	Controls (Controller/End Devices), Generic Input/Output, Johnson Controls, 0-20 points			Premium			
		Operational	1		✓		
Site			Address				
WERNERSVILLE ST HOSP BERKS CENTER ✓			PO BOX 300 BLDG 37 BERKS CENTER WERNERSVILLE PA 19565-0300				

**JOHNSON CONTROLS PLANNED SERVICE PROPOSAL
PREPARED FOR WERNERSVILLE ST HOSP**

Qty	Equipment	Services Provided	# Per Year	Coverage Type	Extended Coverage	Year To Be Activated	Year To Be Deactivated
2	Controls (Controller/End Devices), Supervisory/Server/UI, Johnson Controls, 0-25000 points			Premium			
		Operational <i>BLU</i>	<i>32</i> <i>1</i>				
1	Controls (Controller/End Devices), Central Heating Plant, Johnson Controls, 351-700 points			Premium			
		Operational	1				
44	Controls (Controller/End Devices), Generic Input/Output, Johnson Controls, 0-20 points	<i>N2 devices</i>		Premium			
		Operational	1				
4	Controls (Controller/End Devices), Generic Input/Output, Johnson Controls, 0-20 points			Premium			
		Operational	1				

**JOHNSON CONTROLS PLANNED SERVICE PROPOSAL
PREPARED FOR WERNERSVILLE ST HOSP**

Site	Address

Special Additions & Exceptions

TERMS AND CONDITIONS

DEFINITIONS

CONNECTED SERVICES are the services and related equipment that allow JCI to access, monitor, and trend data remotely, and which may be available for certain types of Covered Equipment.

CONTRACT PRICE means the price that Customer shall pay to JCI for the Services.

COVERED EQUIPMENT means the equipment for which Services are to be provided under this Agreement. Covered Equipment is set forth in Schedule A - Equipment List.

EQUIPMENT FAILURE means the failure, under normal and expected working conditions, of moving parts or electric or electronic components of the Covered Equipment that are necessary for its operation.

SCHEDULED SERVICE VISITS are the on-site labor visits required to perform JCI recommended inspections and preventive maintenance on Covered Equipment.

SCHEDULED SERVICE MATERIALS are the materials required to perform Scheduled Service Visits on Covered Equipment, unless excluded from the Agreement.

PREMISES means those Customer premises where the Covered Equipment is located.

REPAIR LABOR is the labor necessary to restore Covered Equipment to working condition following an Equipment Failure, but does not include services relating to total equipment replacement due to obsolescence or unavailability of parts.

CENTRAL STATION MONITORING means remote monitoring of Covered Equipment and/or systems including building automation, HVAC equipment, and fire alarm, intrusion, and/or other life safety systems for alarm and event notifications.

REMOTE OPERATING SERVICES means remote interrogation, modification and/or operation of building automation, HVAC equipment, and/or other Covered Equipment.

REPAIR MATERIALS are the parts and materials necessary to restore Covered Equipment to working condition following an Equipment Failure, but excludes total equipment replacement due to obsolescence or unavailability of parts, unless excluded from the Agreement. At JCI's option, Repair Materials may be new, used, or reconditioned.

SERVICES are the work, materials, labor, service visits, and repairs to be provided by JCI pursuant to this Agreement.

JCI'S SERVICES FOR COVERED EQUIPMENT

- 1. BASIC COVERAGE** means Scheduled Service Visits, plus Scheduled Service Materials (unless excluded from this Agreement). No parts, equipment, Repair Labor or Repair Materials are provided for under BASIC COVERAGE.
- 2. PREMIUM COVERAGE** means BASIC COVERAGE plus Repair Labor, plus Repair Materials (unless excluded from the Agreement).
- 3. EXTENDED SERVICE** means Services performed outside JCI's normal business hours and is available only if Customer has PREMIUM COVERAGE. Extended Service is available either 24/5 or 24/7, at Customer's election. The price for Extended Service, if chosen by Customer, is part of the total Contract Price.
- 4. CONNECTED SERVICES.** If Customer is receiving Connected Services on any Covered Equipment as more fully described in Schedule A, Customer may be required to allow JCI to install hardware and/or software to enable communication with Customer's Covered Equipment ("Gateway Device"). In order for JCI to deliver Connected Services on the Covered Equipment, Customer shall provide a secure Internet connection to allow remote access to the Gateway Device in order to remotely access, transmit, store, and trend data for the purposes of providing Services. JCI will not use Connected Services to remotely operate or make changes to Customer's Equipment. The Gateway Device shall remain JCI's property, and JCI may upon reasonable notice remove it at any time. JCI makes no any warranty or guarantee relating to the Connected Services.
- 5. CENTRAL STATION MONITORING OR REMOTE OPERATING SERVICES.** If Central Station Monitoring Services or Remote Operating Services are provided, Customer agrees to furnish JCI with a list of the names, titles, addresses, and phone numbers of all persons authorized to enter the Premises during periods when such premises are closed for



JOHNSON CONTROLS PLANNED SERVICE PROPOSAL PREPARED FOR WERNERSVILLE ST HOSP

business. If JCI's Services include "Central Station Monitoring Services with Open and Close," Customer also agrees to furnish JCI with Customer's daily and holiday opening and closing schedules.

- 6. CUSTOMER SERVICE INFORMATION PORTAL.** Customer may be able to utilize JCI's Customer Service Information Portal during the term of the Agreement, pursuant to the then applicable Terms of Use Agreement

A. INITIAL EQUIPMENT INSPECTION NECESSARY FOR PREMIUM COVERAGE

If Customer has ordered PREMIUM COVERAGE, JCI will inspect the Covered Equipment within forty-five (45) days of the date of this Agreement, or as seasonal or operational conditions permit. JCI will then advise Customer if JCI finds any Covered Equipment not in working order or in need of repair. With Customer's approval, JCI will perform the work necessary to put the Covered Equipment in proper working condition, subject to the terms of this Agreement. Customer will pay for such work at JCI's standard rates for parts and labor in effect at the time that the work is performed. If Customer does not want JCI to perform the work identified as necessary by JCI, any equipment thereby affected will be removed from the list of Covered Equipment, and the Contract Price will be adjusted accordingly. Should Customer not make JCI's recommended repairs or proceed with the modified PREMIUM COVERAGE, JCI reserves the right to invoice Customer for the cost of the initial equipment inspection.

B. OUT OF SCOPE SERVICES

If, during any Service Visit, JCI detects a defect in any of Customer's equipment that is not Covered Equipment under this Agreement (an "Out of Scope Defect"), JCI may (but shall have no obligation to) notify Customer of such Out of Scope Defect. If Customer elects for JCI to repair such Out of Scope Defect, or if JCI otherwise performs any Services or provides any materials, parts, or equipment outside the scope of the Services (collectively, "Out of Scope Services"), Customer shall direct JCI to perform such Out of Scope Services in writing, and Customer shall pay for such Out of Scope Services at JCI's standard fees or hourly rates. If, after receiving notice of an Out of Scope Defect, Customer elects not to engage JCI to repair such Out of Scope Defect, Customer shall defend and indemnify JCI from and against any and all losses, damages, claims, costs and expenses arising directly or indirectly out of such Out of Scope Defect. Any Out of Scope Services performed by JCI at the direction of Customer pursuant to this Section shall be subject to the terms of this Agreement.

C. ADDITIONAL TERMS RELATING TO CENTRAL STATION MONITORING OF INTRUSION, FIRE, AND OTHER LIFE SAFETY SYSTEMS

- 1. Alarm Dispatches.** JCI, upon receipt of an alarm or other signal from the Premises, shall make reasonable efforts to transmit the signal to the appropriate police, fire department, or other emergency response agency having jurisdiction (unless there is reason to believe that an emergency condition does not exist), and JCI shall make a reasonable effort to notify Customer or its designated representative by telephone, unless instructed to do otherwise by Customer in writing. JCI, upon receipt of an industrial process signal from the Premises, shall take reasonable steps to notify Customer's representative pursuant to Customer's written instructions. Customer acknowledges that if the signals transmitted from the Premises will be monitored in a monitoring facility not operated by JCI, the personnel in such monitoring facilities are not the agents of JCI, nor does JCI assume any responsibility for the manner in which such signals are monitored or the response to such signal.
- 2. Communications Media.** Customer acknowledges that monitoring of Covered Equipment requires transmission of signals over standard telephone lines and/or the Internet and that these modes of transmission may be interrupted, circumvented, or compromised, in which case no signal can be transmitted from the Premises to the monitoring facility. Customer understands that to allow the monitoring facility to be aware of such a condition, additional or alternative protection can be installed, such as line security devices, at Customer's cost and expense and for transmission via telephone line only. Customer acknowledges it is aware that line security devices are available and, unless expressly identified in Schedule A - Equipment List, has declined to purchase such devices. Customer further acknowledges that such additional protection is not available for Internet transmission under this Agreement.
- 3. False or Unnecessary Alarms and Service Calls.** At JCI's option, an additional fee may be charged for any false alarm or unnecessary Service Visit caused or necessitated by Customer. In addition, Customer shall be fully responsible and liable for any fines, penalties, or charges assessed as the result of any false alarm and shall reimburse JCI for any costs incurred by JCI in connection therewith.

D. EXCLUSIONS

- JCI's Services and warranty obligations expressly exclude:
 - the repair or replacement of ductwork, casings, cabinets, structural supports, tower fill/slats/basin, hydronic and pneumatic piping, and vessels, gaskets, and piping not normally replaced or maintained on a scheduled basis, and removal of oil from pneumatic piping;
 - disposal of hazardous wastes (except as otherwise expressly provided herein);
 - supplies, accessories, or any items normally consumed during the use of Covered Equipment, such as ribbons, bulbs and paper;
 - the furnishing of materials and supplies for painting or refinishing equipment;

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- (e) the repair or replacement of wire in conduit, buried cable/transmission lines, or the like, if not normally replaced or maintained on a scheduled basis; and
 - (f) replacement of obsolete parts.
2. JCI's Services and warranty obligations do not include repairs or service required as the result of:
- (a) abuse, misuse, alterations, adjustments, attachments, combinations, modifications, or repairs to Covered Equipment not performed, provided, or approved in writing by JCI;
 - (b) issues caused by or related to equipment not covered by this Agreement or attachments made to Covered Equipment;
 - (c) acts or omissions of the Customer, including but not limited to operator error, Customer's failure to conduct preventive maintenance, issues resulting from Customer's previous denial of JCI access to the Covered Equipment, and Customer's failure to keep the site clean and free of dust, sand, or other particles or debris, unless such conditions are previously expressly acknowledged by JCI in writing;
 - (d) use of the Covered Equipment in a manner or environment, or for any purpose, for which it was not designed by the manufacturer;
 - (e) issues resulting from site-related and environmental conditions, including but not limited to power failures and fluctuations in electrical current (or "power surges");
 - (f) the effects of erosion, corrosion, acid cleaning, or damage from unexpected or especially severe freezing weather;
 - (g) any other issues or failures not specifically covered by this Agreement; or
 - (h) any other issues caused by occurrences beyond JCI's reasonable control and without JCI's fault or negligence.

E. PAYMENT OBLIGATION

Customer shall pay all invoices when due in accordance with the payment terms provided for in the Agreement, and such payment is a condition precedent to JCI's obligation to perform Services under the Agreement. In issuing any purchase order related to this Agreement, and notwithstanding any language to the contrary therein, Customer acknowledges and agrees that any and all JCI invoices for an amount greater than \$25,000 shall be paid only via wire transfer, check, or money order. If this Agreement is renewed, JCI will provide Customer with notice of any adjustments in the Contract Price applicable to any renewal period no later than forty-five (45) days prior to the commencement of that renewal period. Unless Customer terminates the Agreement at least thirty (30) days prior to the start of such renewal period, the adjusted price shall be the price for the renewal period.

F. STANDARD OF CARE AND WARRANTIES

JCI warrants its Services will be provided in a good and workmanlike manner. JCI will promptly re-perform any non-conforming Services for no charge, as long as Customer provides written notice to JCI within one (1) calendar year from the date the Services were performed. If JCI installs or furnishes goods or equipment under this Agreement, and such goods or equipment are covered by an end-user warranty from their manufacturer, JCI will transfer the benefits of such warranty to Customer. Customer must promptly notify JCI in writing of any defect or non-conformance of the Services, parts, or equipment. Upon receipt of such written notice from Customer, JCI will repair or replace (at JCI's option) the defective equipment or re-perform the defective Services. These warranties do not extend to any Services or equipment that have been misused, altered, or repaired by Customer or third parties without the supervision of and prior written approval of JCI, or if JCI serial numbers or warranty decals have been removed or altered. All replaced parts or equipment shall become JCI's property. This warranty is not assignable. Warranty service will be provided during normal business hours, excluding holidays. The remedies set forth herein shall be Customer's sole and exclusive remedy with regards to any warranty claim under this Agreement. Any lawsuit based upon the warranty must be brought no later than one (1) year after the expiration of the applicable warranty period. This limitation is in lieu of any other applicable statute of limitations. **CUSTOMER FURTHER ACKNOWLEDGES AND AGREES THAT THESE WARRANTIES ARE JCI'S SOLE WARRANTIES AND ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.** Except with respect to goods or equipment manufactured by JCI and furnished to Customer hereunder, for which JCI shall provide its express written manufacturer's warranty, JCI shall not be considered a merchant or vendor of goods or equipment.

G. CUSTOMER OBLIGATIONS AND COMMITMENTS TO JCI

Customer warrants it has given JCI all information concerning the condition of the Covered Equipment.

The Customer agrees and warrants that, during the Term of this Agreement, Customer will:

- (1) operate the Covered Equipment according to the manufacturer's and/or JCI's recommendations;
- (2) keep accurate and current work logs and information about the Covered Equipment as recommended by the manufacturer and/or JCI;
- (3) provide an adequate environment for Covered Equipment as recommended by the manufacturer and/or JCI, including, but not limited to adequate space, electrical power, water supply, air conditioning, and humidity control;
- (4) notify JCI immediately of any Covered Equipment malfunction, breakdown, or other condition affecting the operation of the Covered Equipment;



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- (5) provide JCI with safe access to its Premises and Covered Equipment at all reasonable and necessary times for the performance of the Services;
- (6) allow JCI to start and stop, periodically turn off, or otherwise change or temporarily suspend equipment operations so that JCI can perform the Services required under this Agreement;
- (7) as applicable, provide proper condenser and boiler water treatment for the proper functioning of Covered Equipment;
- (8) carefully and properly set and test the intrusion alarm system each night or at such other time as Customer shall close the Premises;
- (9) obtain all necessary licenses and permits required for and pay all taxes associated with the Services;
- (10) notify JCI immediately of any claimed inadequacy in, or failure of, the Covered Equipment or other condition affecting the operation of the Covered Equipment;
- (11) furnish any necessary 110 volt A/C power and electrical outlets at its expense;
- (12) properly maintain, repair, service, and assure the proper operation of any other property, system, equipment, or device of Customer or others to which the Covered Equipment may be attached or connected, in accordance with manufacturer recommendations, insurance carrier requirements, or the requirements of any fire rating bureau, agency, or other authorities having jurisdiction thereof;
- (13) not tamper with, alter, adjust, disturb, injure, remove, or otherwise interfere with any Covered Equipment (including any related software) and not permit the same to be done; and
- (14) refrain from causing false alarms, and reimburse JCI for any fine, penalty, or fee paid by or assessed against JCI by any governmental or municipal agency as a result thereof.

Customer acknowledges that its failure to meet these obligations will relieve JCI of any responsibility for any Covered Equipment breakdown, or any necessary repair or replacement of any Covered Equipment. If Customer breaches any of these obligations, JCI shall have the right, upon written notice to Customer, to suspend its Services until Customer cures such breach. In addition, Customer shall be responsible for paying or reimbursing JCI for any costs associated with corrective work required as a result of Customer's breach of these obligations.

H. INDEMNITY

JCI and Customer shall each indemnify the other party and its officers, agents, directors, and employees, from any and all damages, losses, costs and expenses (including reasonable attorneys' fees) arising out of third party claims, demands, or suits for bodily injury (including death) or damage to tangible property to the extent arising out of the negligence or intentional misconduct of the indemnifying party or its employees or agents. Customer expressly agrees that JCI shall be responsible for injury, damage, or loss only to the extent caused directly by JCI's negligence or intentional misconduct. The obligations of JCI and Customer under this section are further subject to sections I and J below.

I. LIMITATION OF LIABILITY

NEITHER JCI NOR CUSTOMER WILL BE RESPONSIBLE TO THE OTHER FOR ANY SPECIAL, INDIRECT, PUNITIVE, OR CONSEQUENTIAL DAMAGES (INCLUDING BUT NOT LIMITED TO LOST PROFITS OR LOSS OF BUSINESS). JCI'S TOTAL LIABILITY TO CUSTOMER FOR DAMAGES RESULTING FROM ANY CAUSE WHATSOEVER SHALL BE LIMITED TO \$250,000. IN NO EVENT SHALL JCI'S INDEMNIFICATION OBLIGATION EXCEED THE AMOUNTS PAID TO JCI UNDER THIS AGREEMENT OR THE AMOUNT OF INSURANCE REQUIRED BY THIS AGREEMENT, WHICHEVER IS GREATER. CUSTOMER UNDERSTANDS THAT JCI IS NOT AN INSURER REGARDING THE WORK OR THE SERVICES. JCI SHALL NOT BE RESPONSIBLE FOR ANY DAMAGE OR LOSS THAT MAY RESULT FROM FIRE SAFETY OR SECURITY EQUIPMENT THAT FAILS TO PERFORM PROPERLY OR FAILS TO PREVENT A CASUALTY OR LOSS.

J. FORCE MAJEURE

JCI WILL NOT BE RESPONSIBLE FOR DAMAGE, LOSS, INJURY OR DELAY CAUSED BY CONDITIONS THAT ARE BEYOND THE REASONABLE CONTROL, AND WITHOUT THE INTENTIONAL MISCONDUCT OR NEGLIGENCE, OF JCI. SUCH CONDITIONS INCLUDE, BUT ARE NOT LIMITED TO: (A) ACTS OF GOD; (B) ACTS OF GOVERNMENT AGENCIES; (C) STRIKES; (D) LABOR DISPUTES; (E) FIRE; (F) EXPLOSIONS OR CASUALTIES; (G) THEFTS; (H) VANDALISM; (I) RIOTS OR WAR; (J) TERRORISM; AND (J) UNAVAILABILITY OF PARTS, MATERIALS, OR SUPPLIES.

K. RESOLUTION OF DISPUTES

If a dispute arises under this Agreement, the parties shall promptly attempt in good faith to resolve such dispute by negotiation. In the event the dispute is unable to be resolved, either party shall have the right to initiate arbitration by filing with the American Arbitration Association provided no other legal action has been previously filed. Upon filing of the arbitration, the AAA shall have the exclusive jurisdiction over the Dispute. Thus, either party may decide to file an action in a court of competent jurisdiction and if that court filing is the first legal proceeding filed, that court shall have jurisdiction over the Dispute to the exclusion of any arbitration. Arbitration shall be conducted in accordance with the then current arbitration rules of the American Arbitration Association or other arbitration service mutually agreed to by the parties. Arbitration must be completed within sixty (60) days after the Dispute is submitted to arbitration unless the parties mutually agree otherwise. The award rendered by the arbitrator shall be final, and judgment issued by the Arbitrator may be entered in accordance with applicable law in any court having competent jurisdiction. The party prevailing in the arbitration or court proceeding shall be entitled to an award of its reasonable costs, including reasonable attorneys' fees, incurred as a result of the Dispute. CUSTOMER MUST BRING ANY CLAIM AGAINST JCI WITHIN ONE (1) YEAR

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AFTER THE CLAIM AROSE. IF CUSTOMER DOES NOT, CUSTOMER WILL HAVE IRREVOCABLY WAIVED ITS RIGHT TO SUE JCI AND/OR INSTITUTE OTHER PROCEEDINGS, AND JCI SHALL HAVE NO LIABILITY TO CUSTOMER FOR SUCH CLAIM. TIME IS OF THE ESSENCE RELATIVE TO CUSTOMER PURSUING ANY SUCH CLAIM. THE PROVISIONS OF THIS AGREEMENT WHICH APPLY TO ANY CLAIM SHALL REMAIN IN EFFECT EVEN AFTER THE AGREEMENT IS TERMINATED. JCI AND CUSTOMER EACH WAIVE THEIR RIGHT TO A JURY TRIAL.

L. TERMINATION

1. Central Station Monitoring, Remote Operating Services, and Central Station Monitoring with Open or Close Services may be immediately canceled by either party if JCI's central station, connecting wires, or monitoring systems are destroyed by fire or other catastrophe, or where the Premises are so substantially damaged that it is impractical to continue Services.
2. If either party fails to perform any of its obligations under this Agreement, the other party shall provide written notice thereof to the party alleged to be in default. Should the party alleged to be in default fail to respond in writing or take action to cure the alleged default within ten (10) days of receiving such written notice, the notifying party may terminate this Agreement by providing written notice of such termination.
3. Upon termination of this Agreement for any reason, Customer shall pay to JCI all undisputed amounts owed through the date of termination within thirty (30) days of such termination. Customer shall also provide JCI with reasonable access to the Premises to remove the Gateway Device and any other JCI property and to un-program any intrusion, fire, or life safety system, as applicable. Customer shall be liable for all fees, costs, and expenses that JCI may incur in connection with the enforcement of this Agreement, including without limitation, reasonable attorney fees, collection agency fees, and court costs.
4. If the Agreement is for a multi-year term, either party may terminate the Agreement after the first full year of Services by giving the other party no less than forty-five (45) days written notice; provided, however, that if Customer has ordered PREMIUM COVERAGE, Customer may terminate the Agreement only upon JCI's written consent

M. ASBESTOS, MOLD AND HAZARDOUS MATERIALS

"Hazardous Materials" means any material or substance that, whether by its nature or use, is now or hereafter defined or regulated as a hazardous waste, hazardous substance, pollutant, or contaminant under any local, state, or federal law, regulation, or ordinance relating to or addressing public and employee health and safety and protection of the environment, or which is toxic, explosive, corrosive, flammable, radioactive, carcinogenic or otherwise hazardous or which is or contains petroleum, gasoline, diesel, fuel, another petroleum hydrocarbon product or polychlorinated biphenyls. "Hazardous Materials" specifically includes mold, lead-based paints, and asbestos-containing materials ("ACM").

Neither Customer nor JCI desires to or is licensed to undertake direct obligations relating to the identification, abatement, cleanup, control, removal or disposal of ACM. It is JCI's policy to seek certification for facilities constructed prior to 1982 that no ACM is present, and Customer shall provide such certification for buildings it owns, or aid JCI in receiving such certification from facility owners in the case of buildings that it does not own, if JCI will undertake Services in the facility that could disturb ACM.

JCI will be responsible for removing or disposing of any Hazardous Materials that it uses in providing the Services ("JCI Hazardous Materials") and for the remediation of any areas affected by the release of JCI Hazardous Materials. For other Hazardous Materials that may be present at its facilities ("Non-JCI Hazardous Materials"), Customer shall supply JCI with any information in its possession relating to the presence of Hazardous Materials if their presence may affect JCI's performance of the Services. If either Customer or JCI becomes aware of or suspects the presence of Non-JCI Hazardous Materials that may interfere with JCI's Services, it shall immediately stop the Services in the affected area and notify the other party. As between Customer and JCI, Customer shall be responsible at its sole expense for removing and disposing of Non-JCI Hazardous Materials from its facilities and for the remediation of any areas impacted by the release of the Non-JCI Hazardous Materials and must provide a certificate of abatement before JCI will be obligated to perform or continue its Services, unless JCI had actual knowledge that Non-JCI Hazardous Materials were present and acted in disregard of that knowledge, in which case (i) JCI shall be responsible at its sole expense for the remediation of any areas impacted by its release of such Hazardous Materials, and (ii) Customer shall remain responsible at its sole expense for the removal of Hazardous Materials that have not been released and for releases not resulting from JCI's performance of the Services. Customer shall defend and indemnify JCI against any losses, costs, damages, expenses, and claims arising out of its failure to comply with this Section M.

N. CUSTOMER DATA

Customer data is owned by and shall belong to Customer. JCI will access and use Customer data to provide Services to Customer. JCI will not disclose to any third party any individual Customer data acquired through performance of the Services without Customer's consent. Customer agrees that JCI and its subsidiaries, affiliates and approved third party contractors and developers may collect and use Customer data for any reason, as long as any external use of the data is on a de-identified basis that does not personally identify Customer or any individual. Customer hereby grants JCI a perpetual, worldwide, irrevocable, royalty free license to use, modify, manipulate, sublicense, and create derivative works from such data. JCI shall retain all rights to any intellectual property, data, materials and products created as a result of its performance of Services.

JOHNSON CONTROLS PLANNED SERVICE PROPOSAL PREPARED FOR WERNERSVILLE ST HOSP

O. JCI'S INTELLECTUAL PROPERTY

JCI shall retain all right, title and interest in any (a) work provided to Customer, including without limitation, all software source and object code, documentation, technical information or data, specifications and designs and any changes, improvements or modifications thereto ("Deliverables"), and (b) Know-How (defined below) employed by JCI in the creation of the Deliverables or performance of the Services, whether known to JCI prior to, or developed or discovered or acquired in connection with, the performance of its obligations under this agreement. Ownership of all Deliverables and Know-How shall vest solely in JCI and no Deliverables shall be deemed "works made for hire." Without limiting the generality of the foregoing, ownership of all source files used in the course of performing the Services shall remain the exclusive property of JCI. For purposes of this Agreement, "Know-How" means any know-how, processes, techniques, concepts, methodologies, tools, analytical approaches, database models and designs, discoveries, and ideas furnished, produced by, developed, or used by JCI in the creation or provision of the Deliverables or in the performance of the Services, and any changes, improvements, or modifications thereto or derivatives thereof.

P. MISCELLANEOUS PROVISIONS

1. All notices required to be given hereunder shall be in writing and shall be considered properly given if: (a) delivered in person, (b) sent via the United States Postal Service, postage prepaid, registered or certified with return receipt requested, (c) sent by overnight delivery service (e.g., FedEx, UPS), or (d) sent by facsimile, email or other electronic means and confirmed by facsimile, return email or telephone.
2. This Agreement may not be assigned by Customer without JCI's prior written consent. JCI shall have the right to assign this Agreement to any other person, firm, or corporation without Customer's consent. JCI shall also have the right, in its sole discretion, to subcontract any portion of the Services. This Agreement inures to the benefit of and is applicable to any assignees or subcontractors of JCI, and is binding upon Customer with respect to said assignees or subcontractors with the same force and effect as it binds Customer to JCI.
3. This Agreement shall be subject to and governed by the laws of the State where the Services are performed.
4. If any provision of this Agreement is found to be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby.
5. This Agreement is the entire contract between JCI and Customer and supersedes any prior oral understandings, written agreements, proposals, or other communications between the parties.
6. Customer acknowledges and agrees that any purchase order issued by Customer in connection with this Agreement is intended only to establish payment authority for Customer's internal accounting purposes and shall not be considered to be a counteroffer, amendment, modification, or other revision to the terms of this Agreement. No term or condition included or referenced in Customer's purchase order will have any force or effect and these terms and conditions shall control. Customer's acceptance of any Services shall constitute an acceptance of these terms and conditions. Any proposal for additional or different terms, whether in Customer's purchase order or any other document, unless expressly accepted in writing by JCI, is hereby objected to and rejected.
7. If there are any changes to Customer's facilities or operations, or to applicable regulations, laws, codes, taxes, or utility charges, that materially affect JCI's performance of the Services or its pricing thereof, JCI shall have the right to an equitable and appropriate adjustment to the scope, pricing, and other affected terms of this Agreement.

[END OF DOCUMENT]

**ATTACHMENT C
to
BULLETIN 2
for
GESA 2021-2 DHS Wernersville**

ECM #1: LIGHTING SYSTEM RETROFITS

1. Detailed description of the measure.

Lighting throughout the campus was evaluated to determine areas in which we will improve the quality of light and reduce electrical consumption. Although the majority of the buildings already *have upgraded to T8 fluorescent lighting and electronic ballast systems, an opportunity exists to improve the other lighting systems.*

The Hospital also has some incandescent lamps and high intensity discharge (HID) lighting. Some of the buildings still consist of T12 lamps and standard ballasts.

The steam tunnel, administration buildings, patient buildings, and mechanical rooms primarily have surface-industrial, surface-box fixtures or incandescent lamps. Exterior HID lighting consists of 75-watt and 100-watt wall-pack and 175-watt post-top metal halide lamps. Offices and general usage areas have two- or four-lamp surface or recessed fixtures. The boiler plant has 400-watt metal halide fixtures. The Laundry and Boiler House consists of 400-watt HID fixtures.

We recommend the installation of the latest technology, including electronic T8 ballasts and F25/T8 25-watt lamps, induction lighting to replace exterior HID, and compact fluorescent lamps and incandescent fixture replacements, where needed. The Laundry and Boiler House HID fixtures will be replaced with four-lamp F54/T5 54-watt fixtures with wire-guards.

In order to implement appropriate fluorescent lighting control throughout the included buildings, we recommend the installation of the Type-W occupancy sensors.

The new fluorescent lighting system will consist of high-frequency electronic ballasts with a minimum THD rating of less than 20%, a Class A sound rating and a ballast factor of at least 0.78. In addition, tandem wiring (wiring more than one fixture per ballast) has advantages in efficiency, cost effectiveness and future maintenance costs. As a standard for installing T8 lamps, we will provide a high-grade lamp that carries a higher CRI (75 or greater) and higher lumen output per-watt than the current T12 lamp type in use. We have specified a 4100K lamp that will pass the federal guidelines relating to hazardous waste, specifically minimal mercury content, as the standard.

In addition to the re-lamp and re-ballast of the straight tube fluorescent lamps, some of fixtures will receive replacement or retrofitting with highly reflective, white aluminum reflectors. These reflectors allow for the reduction of the overall quantity of lamps in the lighting system, while maintaining or improving the light output of the luminaries. A typical recessed troffer type fixture is easily retrofitted with a reflector. The implementation of reflectors can be more difficult when a surface-mounted type fixture is in use, which is mainly due to the interior depth and the mounting height of the fixture. A reflector acts as a mirror and "reflects" and redirects light that is typically lost in a fixture, thereby improving the overall efficiency of the fixture.

Type-W Sensors

The proposed Type W-sensor is comprised of dual-technology with ultrasonic and passive infrared sensing capability. These sensors will be installed on wall or ceiling in various use areas, controlling 2-16 lighting fixtures, with loads ranging from 62-watts to 1,000-watts per sensor.

The energy savings are derived from the reduced operating hours, savings are also realized by the reduction in demand (kW draw). At the peak demand occurrence each month, some of the spaces will be unoccupied, and thus provide a reduction in billing demand charges.

The new T8 lamps offer benefits such as:

- Improved color rendering above 75 (on a scale of 0-100).

- Virtual elimination of lamp burnouts for 3-5 years (based on burn-hours), reducing maintenance expenses and material purchases.
- The disposal of new, environmentally-friendly lamps that will not be considered hazardous waste because of their low mercury content.
- Improved lumen maintenance (lamps maintain their brightness better over the life of the lamp).

The Hospital will benefit from the lighting retrofits in the following areas:

- Enhanced lighting performance
- Energy savings
- Silent, flicker-free operation
- Cooler operation
- Five-year warranty (case by case)
- Lower maintenance costs
- Capital cost avoidance

Other significant benefits of implementing the proposed project include the following:

- Compliance with all lighting efficiency standards as set forth in the Federal Energy Policy Act of 1992 (EPACT).
- Improved maintenance of illumination levels between re-lamping due to the superior lumen maintenance characteristics of the proposed T8 lamps.
- Improved color rendition, more uniform illumination and heightened visual comfort levels. Studies indicate that proper lighting creates a more pleasant living environment.

Lighting Levels

Our proposed lighting system improvements will maximize savings while maintaining or improving existing light levels in each area. All installations will comply with IES standards. Post-retrofit light levels are typically increased because of the improved design and installation of newer equipment.

Abbreviations

This chart explains the abbreviations used in the proposed fixture summary for each building.

Pre Fixture Code	Pre Code Description	Post Fixture Code	Post Code Description
100Inc	100-watt Inc. Bulb	25CFL	25-watt Comp. Fluor.
100Inc	100-watt Inc. Bulb	50Hal	50 Halogen, Dimmable
100 Drum	100-watt Drum	2D13CFL	New 2-13Watt Drum Fixture
100 High Hat	100-watt High Hat	2-13W CFL High Hat-NF	New 2-13Watt Hardwired Down-light
100Inc	100-watt Inc. Bulb, Industrial	1F25T8LE, NF	New 1x4 1-Lamp 25Watt T8 Wrap with Reflector, NPB
100 Wall	100-watt Wall Sconce	2D13CFL	New 2-13Watt Sconce Fixture
150 inc	150-watt Inc, Industrial	2F25T8HE, NF	New 1x4 2-Lamp 25Watt T8 Wrap with Reflector, NPB
2-100 Drum	2-100-watt Drum	3D13CFL	New 3-13Watt Drum Fixture

Pre Fixture Code	Pre Code Description	Post Fixture Code	Post Code Description
300 Inc HB	300-watt Inc., HB	4F25T8, NF	New 1x4 4-Lamp 25Watt T8 Wrap, LPB
30 Circ	30Watt Circle line	2D13CFL	New 2-13Watt Drum Fixture
60Inc	60-watt Inc. Bulb	15CFL	15-watt Comp. Fluor.
75Inc	75-watt Inc. Flood	14LED	14-watt LED Screw-in Flood
90Inc	90-watt Inc. Flood	60Hal-FI	60-watt Halogen Flood
4F40T12	2x4 4-Lamp F40/34Watt T12	4F25T8LE	Retrofit to a 4-Lamp 25-watt T8 with LPB
4F40T12	2x4 4-Lamp F40/34Watt T12	3F232T8LE	Retrofit to a 3-Lamp 32-watt T8 with LPB, rewire and cover exposed socket with sticker
4F32T8	4x4 4-Lamp F32Watt T8, reflector existing	4F25T8LE	Retrofit to a 4-Lamp 25-watt T8 with LPB
4F40T12	2x4 4-Lamp F40/34Watt T12, refl. existing	2F25T8HE	Retrofit to a 2-Lamp 25-watt T8 with HPB and centering kit
4F40T12	2x4 4-Lamp F40/34Watt T12, high	4F28T8LE	Retrofit to a 4-Lamp 28-watt T8 with NPB, high
4F40T12	2x4 4-Lamp F40/34Watt T12	2F25T8HE, NF	New 1x4 2-Lamp 25Watt T8 Wrap with Reflector, NPB
4F40T12	2x4 4-Lamp F40/34Watt T12	2F25T8HE,REF	Retrofit to a 2-Lamp 25-watt T8 with HPB and centering reflector kit
4F32T8	2x4 4-Lamp F32Watt T8	4F25T8LE	Retrofit to a 4-Lamp 25-watt T8 with LPB
4F32T8	2x4 4-Lamp F32Watt T8	2F25T8HE,REF	Retrofit to a 2-Lamp 25-watt T8 with HPB and centering reflector kit
4F32T8	2x4 4-Lamp F32Watt T8	4F28T8	Relamp to a 4-Lamp 28-watt T8
3F40T12	2x4 3-Lamp F40/34Watt T12	3F28T8LE	Retrofit to a 3-Lamp 28-watt T8 with LPB
3F40T12	2x4 3-Lamp F40/34Watt T12	2F28T8HE	Retrofit to a 2-Lamp 28-watt T8 with HPB and centering kit
3F32T8	2x4 3-Lamp F32Watt T8	2F25T8HE, NF	New 1x4 2-Lamp 25Watt T8 Wrap with Reflector, NPB
3F40T12	2x4 3-Lamp F40/34Watt T12	2F28T8NE,REF	Retrofit to a 2-Lamp 28-watt T8 with NPB and centering reflector kit
3F40T12	2x4 3-Lamp F40/34Watt T12, dimming	2F28T8NE,REF	Retrofit to a 2-Lamp 28-watt T8 with HPB and centering reflector kit, Dimming with new circuit wiring for controls
3F32T8	2x4 3-Lamp F32Watt T8	3F25T8LE	Retrofit to a 3-Lamp 25-watt T8 with Low Power Ballast
3F32T8	2x4 3-Lamp F32Watt T8	2F25T8HE,REF	Retrofit to a 2-Lamp 25-watt T8 with HPB and centering reflector kit
3F32T8	2x4 3-Lamp F32Watt T8	3F28T8	Relamp to a 3-Lamp 28-watt T8
3F40T12	2x4 3-Lamp F40/34Watt T12, security	3F28T8LE	Retrofit to a 3-Lamp 28-watt T8 with LPB, security fixture
2F40T12	2x4 2-Lamp F40/34Watt T12	2F25T8LE	Retrofit to a 2-Lamp 25-watt T8 with LPB
13cfl	CFL Fixture	rel	Relamp if burned out, clean fixture
150HID	1-Lamp 150Watt HID Ext. Fixture	100MHPS-WP, Ext	New 1-Lamp 100-watt MH Canopy
100HID	1-Lamp 100Watt HID Ext. Fixture	40CFL-WP, Ext	New 1-Lamp 40-watt CFL Canopy
150HID	1-Lamp 150Watt HID Ext.	80CFL-WP, Ext	New 1-Lamp 80-watt CFL Canopy

Pre Fixture Code	Pre Code Description	Post Fixture Code	Post Code Description
Fixture			
2F32T8	2x4 2-Lamp F32Watt T8	2F25T8LE	Retrofit to a 2-Lamp 25-watt T8 with LPB
2F32T8	2x4 2-Lamp F32Watt T8	4F28T8LE, TAN	Retrofit to a 4-Lamp 28-watt T8 with LPB, tandem wiring two fixtures together
2F40T12	1x4 2-Lamp F40/34Watt T12	2F25T8LE	Retrofit to a 2-Lamp 25-watt T8 with LPB
2F40T12	1x4 2-Lamp F40/34Watt T12, high	2F28T8LE	Retrofit to a 2-Lamp 28-watt T8 with NPB, high
2F40T12	1x4 2-Lamp F40/34Watt T12	1F25T8LE, NF	New 1x4 1-Lamp 25Watt T8 Wrap with Reflector, NPB
2F40T12	1x4 2-Lamp F40/34Watt T12	2F28T8LE, NF, TAN	New 1x8 4-Lamp 28Watt T8 Wrap, LPB
2F32T8	1x4 2-Lamp F32Watt T8	1F25T8LE, NF	New 1x4 1-Lamp 25Watt T8 Wrap with Reflector, NPB
2F40T12	1x4 2-Lamp F40/34Watt T12	1F28T8LE, REF	Retrofit to a 1-Lamp 28-watt T8 with HPB and centering reflector kit
2F32T8	1x4 2-Lamp F32Watt T8, refl. existing	2F28T8LE	Retrofit to a 2-Lamp 28-watt T8 with NPB
2F40T12	1x4 2-Lamp F40/34Watt T12, butted	4F25T8LE, TAN	Retrofit to a 4-Lamp 25-watt T8 with LPB, tandem wiring two fixtures together
2F32T8	1x4 2-Lamp F32Watt T8	2F25T8LE	Retrofit to a 2-Lamp 25-watt T8 with LPB
2F32T8	1x4 2-Lamp F32Watt T8, high	2F28T8LE	Retrofit to a 2-Lamp 28-watt T8 with NPB, high
2F32T8	1x4 2-Lamp F32Watt T8	2F28T8	Relamp to a 2-Lamp 28-watt T8
2F32T8	1x4 2-Lamp F32Watt T8	4F25T8LE, TAN	Retrofit to a 4-Lamp 25-watt T8 with LPB, tandem wiring two fixtures together
2F40T12	1x4 2-Lamp F40/34Watt T12, security	2F28T8LE, security	Retrofit to a 2-Lamp 28-watt T8 with NPB, security fixture
1F40T12	1x4 1-Lamp F40/34Watt T12	1F25T8LE	Retrofit to a 1-Lamp 25-watt T8 with LPB
1F40T12	1x4 1-Lamp F40/34Watt T12, butted	2F25T8LE, TAN	Retrofit to a 2-Lamp 25-watt T8 with LPB, tandem wiring two fixtures together
1F32T8	1x4 1-Lamp F32Watt T8	1F25T8LE	Retrofit to a 1-Lamp 25-watt T8 with LPB
1F32T8	1x4 1-Lamp F32Watt T8	1F28T8	Relamp to a 1-Lamp 28-watt T8
1F32T8	1x4 1-Lamp F32Watt T8	2F25T8LE, TAN	Retrofit to a 2-Lamp 25-watt T8 with LPB, tandem wiring two fixtures together
2F96T12	1x8 2-Lamp F96Watt T12	4F28T8LE, KIT	Retrofit to a 4'-4Lamp 28-watt T8 with a low power ballast and conversion kit
2F96T12	1x8 2-Lamp F96Watt T12	2F25T8LE, HF	New 1x8 2-Lamp 25Watt T8 Wrap with Reflector, HPB
496T8	1x8 4-Lamp F96Watt T8	4F25T8LE, HF	New 1x8 4-Lamp 25Watt T8 Wrap with Reflector, HPB
2F96T8	1x8 2-Lamp F96Watt T8	2F25T8LE, HF	New 1x8 2-Lamp 25Watt T8 Wrap with Reflector, HPB
1F96T12	1x8 1-Lamp F96Watt T12	2F28T8LE, NF	Retrofit to a 2-Lamp 28-watt T8 with NPB and centering reflector kit
1F96T12	1x8 1-Lamp F96Watt T12	2F28T8LE, KIT	New 1x8 2-Lamp 28Watt T8 Wrap, NPB
1F96T8	1x8 1-Lamp F96Watt T8	2F25T8LE, HF	New 1x8 2-Lamp 25Watt T8 Wrap with Reflector, LPB

Pre Fixture Code	Pre Code Description	Post Fixture Code	Post Code Description
100HID	1Lamp 100HID Recessed	NF-SM-2L17T8	New Fixture with a 2-Lamp 17-watt T8 with low power ballast and centering reflector kit
250HID	1Lamp 250HID HighBay	NF-HB-3LT5HE	New 3-Lamp 54Watt T5 High Bay with wire-guard and lens, NPB
400HID	1Lamp 400HID HighBay	NF-HB-3LT5HE	New 4-Lamp 54Watt T5 High Bay with wire-guard and lens, NPB
2F30T12	1x3 2-Lamp F30Watt T12	2F25T8LE	Retrofit to a 2-Lamp 25-watt T8 with LPB
2F25T8	1x3 2-Lamp F25Watt T8	2F25T8LE	Retrofit to a 2-Lamp 25-watt T8 with LPB
1F30T12	1x3 1-Lamp F30Watt T12	1F25T8LE	Retrofit to a 1-Lamp 25-watt T8 with LPB
2F20T12	1x2 2-Lamp F20Watt T12	2F17T8LE	Retrofit to a 2-Lamp 17-watt T8 with LPB
NO CHANGE			
2F17T8	1x2 2-Lamp F17Watt T8	2F17T8LE	Retrofit to a 2-Lamp 17-watt T8 with LPB
1F20T12	1x2 1-Lamp F20Watt T12	1F17T8LE	Retrofit to a 1-Lamp 17-watt T8 with LPB
6F40T12	4x4 6-Lamp F40/34Watt T12	4F28T8LE	Retrofit to a 4-Lamp 28-watt T8 with LPB
6F32T8	1x8 6-Lamp F32Watt T8	6F28T8LE	Retrofit to a 6-Lamp 28-watt T8 with LPB
2F20T12	1x2 2-Lamp F30Watt T12	NF-V-1LT8HE	New 1-Lamp 17-watt T8 with HPB / Reflector
	Toggle Switch		Ceiling Mounted Occupancy Sensor
	Tunnel Lighting		Ceiling Mounted Occupancy Sensor, Tunnels
	Toggle Switch		Wall-mounted Occupancy Sensor
175HID	15' Pole with 175MH Posttop	NF-LED-3Bar	New LED 3-Bar Posttop Fixture, Spider Mount
175HID	25' Pole with 175MH Posttop	NF-LED-4Bar	New LED 4-Bar Posttop Fixture, Arm Mount
100 Drum	100-watt Drum	Remove	Remove Fixture and Secure
2F40T12	2x2 2-ULamp F40Watt T12	2F17T8NE, Ref	Retrofit to a 2-Lamp 17-watt T8 with NPB and centering reflector kit
3F40T12	2x2 3-Lamp F40Watt T12	2F17T8NE, Ref	Retrofit to a 2-Lamp 17-watt T8 with HPB and centering reflector kit
4F20T12	2x2 4-Lamp F20Watt T12	2F17T8NE, Ref	Retrofit to a 2-Lamp 17-watt T8 with NPB and centering reflector kit
2F40T12	2x2 2-ULamp F40Watt T12, Dimmer Courtrooms	3F17T8NE, Ref	Retrofit to a 3-Lamp 17-watt T8 with HPB and centering reflector kit, Dimming with new circuit wiring for controls
2F40T12	2x2 2-ULamp F40Watt T12, high	3F17T8NE, Ref	Retrofit to a 3-Lamp 17-watt T8 with LPB and centering reflector kit
2F40T12	2x2 2-ULamp F40Watt T12, high	NF-HB-2LT5HE	New 2-Lamp 54Watt T5 High Bay with wire-guard and lens, NPB
2F32T8	2x2 2-ULamp F32Watt T8	3F17T8NE, Ref	Retrofit to a 2-Lamp 17-watt T8 with a low power ballast and centering reflector kit
2F32T8	2x2 2-ULamp F32Watt T8, high	3F17T8NE, Ref	Retrofit to a 3-Lamp 17-watt T8 with LPB and centering reflector kit
vend - cold	Cold Vending Machine	Cool Miser	Cool Vending Controls
vend - snack	Snack Vending Machine	Snack Miser	Snack Vending Controls
150HID	1-Lamp 150Watt HID Ext.	100MHPS-WP, Ext	New 1-Lamp 100-watt MH Wall-pack

Pre Fixture Code	Pre Code Description	Post Fixture Code	Post Code Description
Fixture			
250HID	1-Lamp 250Watt HID Ext. Fixture	120IND-WP, Ext	New 1-Lamp 120-watt INDUCTION Wall-pack
100Inc	1-Lamp 100 Inc Ext. Fixture	26CFL-WP, Ext	New 1-Lamp 26-watt CFL Wall-pack
400HID	1-Lamp 400Watt HID Ext. Fixture	200IND-WP, Ext	New 1-Lamp 200-watt INDUCTION Wall-pack
100HID	1-Lamp 100Watt HID Ext. Fixture	52CFL-WP, Ext	New 2-Lamp 52-watt CFL Wall-pack
40W-Exit	30-watt Fluor. Exit Sign	XLED	New White Polycarbonate LED Exit Sign with Red Letters and Battery Backup
40W-Exit, EM	40-watt Fluor. Exit & Emergency	XLED, EM	New White Polycarbonate LED Exit Sign, Red Letters and Emergency Lights
18W-Exit	18-watt Fluor. Exit Sign	XLED	New White Polycarbonate LED Exit Sign with Red Letters and Battery Backup



Overview

The following is a brief design overview of the lighting system retrofit scope. For a complete detailed design, a line-by-line retrofit strategy is attached in the appendix.

- All bi-switched fixtures will be transformed to a checkerboard switching configuration, housing a single ballast per fixture.
- The general lay-in 4L & 3L T12 fixtures called for a reflector – de-lamp retrofit with 28-watt T8 lamps and normal power ballast.
- The general lay-in 4L & 3L T8 fixtures will match the T12s and receive a reflector – de-lamp retrofit with 28-watt T8 lamps and normal power ballast.
- The general lay-in or surface-mounted 2L and 1L T12 & T8 fixtures called for lamp for lamp retrofit with 28-watt T8 lamps and low power ballast, no de-lamping or reflector.
- Where U-bend T12 or T8 bulbs were found, a reflector will be used to convert the fixture to accommodate linear 2' T8 lamps and normal power ballast.
- Where 8' lamps were found, new fixtures will be installed that use 4' T8 lamps to achieve nominal inventory and energy savings.
- The older egg crate and dysfunctional fixtures will be replaced with new wraps, industrials and drums as applicable.
- The 60-100-watt incandescent bulbs generally found in closets and bathrooms will be converted to 25-watt CFLs or 26-39-watt drum fixtures.
- The 75 and 150-watt incandescent in utility spaces will be converted to a new 1x2 2L or 1x4 1L fixtures.
- The 75-watt floods will be replaced with a 14-watt Dimmable Par30 LED.
- The exits are already LED and do not need to be changed. Any older incandescent and fluorescent exits in the other buildings will be upgraded to match the current LED signs.
- Cracked and stained lenses will not be replaced unless the entire fixture is being replaced.
- New plastic tube guards will be furnished and installed where applicable by DC lighting safety codes.
- Exterior lighting (poles, wall-packs, canopies, etc) was evaluated, and we recommend a combination of induction fixtures and pulse start fixtures.
- The existing compact fluorescent fixtures will be re-lamped in kind and the fixtures wiped clean (no energy savings, but warranty cycle will be campus-wide).
- Occupancy and daylight sensors were recommended in buildings and tunnels where applicable.
- Dual-voltage "Advance" ballasts and Philips "28-watt" low mercury T8 lamps will be used in the lighting retrofit.
- All recommendations will maintain the proper lighting levels required by design and task area.

Building #1 – Administration

- The existing 2x4 4-Lamp F40/34Watt T12's will get new 1x4 2-Lamp 25Watt T8 Wraps with Reflectors and normal power ballasts.
- The existing 1x8 2-Lamp F96Watt T8's will get new 1x8 2-Lamp 25Watt T8 Wraps with Reflectors and high power ballasts.

- The existing 1x4 2-Lamp F40/34Watt T12 and 2x4 2-Lamp F32Watt T8's will be retrofitted to 2-Lamp 25-watt T8's with low power ballasts.

Proposed Lighting Fixture Summary for Building #1	
Fixture Description	Total
New 1-Lamp 80-watt CFL Canopy	1
New 1x4 1-Lamp 25Watt T8 Wrap with Reflector, NPB	5
New 1x4 2-Lamp 25Watt T8 Wrap with Reflector, NPB	26
New 1x8 2-Lamp 25Watt T8 Wrap with Reflector, HPB	12
New 2-13Watt Drum Fixture	4
New 2-Lamp 52-watt CFL Wall-pack	2
New 3-13Watt Drum Fixture	6
Retrofit to a 1-Lamp 17-watt T8 with LPB	1
Retrofit to a 2-Lamp 25-watt T8 with HPB and centering reflector kit	1
Retrofit to a 2-Lamp 25-watt T8 with LPB	12
Retrofit to a 4-Lamp 25-watt T8 with LPB	2
Grand Total	72

Building #3 – East Hall – South Workshop

- The existing 18-watt fluorescent Exit signs will be replaced with new white polycarbonate LED Exit signs with red letters and battery backup.
- The existing 1x4 1-Lamp F40/34Watt T12 and 1x4 1-Lamp F32Watt T8's will be retrofitted to 1-Lamp 25-watt T8's with low power ballasts.
- The existing 1x4 2-Lamp F40/34Watt T12 and 1x4 2-Lamp F32Watt T8's will be retrofitted to 2-Lamp 25-watt T8's with low power ballasts.

Proposed Lighting Fixture Summary for Building #3	
Fixture Description	Total
New 1x4 1-Lamp 25Watt T8 Wrap with Reflector, NPB	12
New 2-13Watt Drum Fixture	2
New White Polycarbonate LED Exit Sign with Red Letters and Battery Backup	37
Retrofit to a 1-Lamp 25-watt T8 with LPB	21
Retrofit to a 2-Lamp 25-watt T8 with HPB and centering reflector kit	5
Retrofit to a 2-Lamp 25-watt T8 with LPB	204
Grand Total	281

Building #5 – Parkside House Berks Co. Senior Citizen

- The existing 1x4 2-Lamp F40/34Watt T12 and 1x4 2-Lamp F32Watt T8's will be retrofitted to 2-Lamp 25-watt T8's with low power ballasts.
- The existing 1x8 2-Lamp F96Watt T12's will get new 1x8 2-Lamp 25Watt T8 Wraps with Reflectors and high power ballasts.
- The existing Industrial 100-watt incandescent bulbs and 1x4 2-Lamp F40/34Watt T12's will get new 1x4 1-Lamp 25Watt T8 wraps with reflectors and normal power ballasts.

Proposed Lighting Fixture Summary for Building #5	
Fixture Description	Total
New 1-Lamp 100-watt MH Canopy	3
New 1-Lamp 100-watt MH Wallpack	4
New 1-Lamp 120-watt Induction Wallpack	10
New 1x4 1-Lamp 25Watt T8 Wrap with Reflector, NPB	48
New 1x8 2-Lamp 25Watt T8 Wrap with Reflector, HPB	56
New White Polycarbonate LED Exit Sign with Red Letters and Battery Backup	12
Retrofit to a 1-Lamp 25-watt T8 with LPB	1
Retrofit to a 2-Lamp 25-watt T8 with LPB	73
Grand Total	207

Building #12 – Chapel & Cafeteria

- The existing 1x8 2-Lamp F96Watt T8 and 1x8 2-Lamp F96Watt T12's will get new 1x8 2-Lamp 25-watt T8 Wraps with Reflectors and high power ballasts.
- The existing 1x4 2-Lamp F40/34Watt T12 and 1x4 2-Lamp F32Watt T8's will be retrofitted to 2-Lamp 25-watt T8's with low power ballasts.
- The existing 1-Lamp 400HID HighBay's will get new 4-Lamp 54Watt T5 HighBay's with wire-guard, lens and normal power ballasts.

Proposed Lighting Fixture Summary for Building #12	
Fixture Description	Total
New 1x8 2-Lamp 25Watt T8 Wrap with Reflector, HPB	39
New 2-13Watt Drum Fixture	1
New 3-13Watt Drum Fixture	2
New 4-Lamp 54Watt T5 HighBay with wire-guard and lens, NPB	17
New White Polycarbonate LED Exit Sign with Red Letters and Battery Backup	4
Retrofit to a 2-Lamp 25-watt T8 with HPB and centering reflector kit	7
Retrofit to a 2-Lamp 25-watt T8 with LPB	25
Grand Total	95

Building #13 – Garage & Maintenance Office

- The existing 2x4 3-Lamp F32Watt T8's will be retrofitted to 2-Lamp 25-watt T8's with high power ballasts and centering reflector kits.
- The existing 1x4 2-Lamp F32Watt T8's will be retrofitted to 2-Lamp 25-watt T8's with low power ballasts.
- The existing 2x4 4-Lamp F32Watt T8's will be retrofitted to 4-Lamp 25-watt T8's with low power ballasts.

Proposed Lighting Fixture Summary for Building #13	
Fixture Description	Total
New 1x4 1-Lamp 25 Watt T8 Wrap with Reflector, NPB	3
New 2-13 Watt Sconce Fixture	8
New 3-13 Watt Drum Fixture	1
Retrofit to a 2-Lamp 25-watt T8 with HPB and centering reflector kit	28
Retrofit to a 2-Lamp 25-watt T8 with LPB	28
Retrofit to a 4-Lamp 25-watt T8 with LPB	15
Grand Total	83

Building #14 – Cold Storage, Maintenance Storeroom, Ingredient Room

- The existing 1x4 2-Lamp F40/34Watt T12 and 1x4 2-Lamp F32Watt T8's will be retrofitted to 2-Lamp 25-watt T8's with low power ballasts.
- The existing 1x8 2-Lamp F96Watt T12's will get new 1x8 2-Lamp 25-watt T8 wraps with reflectors and high power ballasts.
- The existing Industrial 100-watt incandescent bulbs will get new 1x4 1-Lamp 25-watt T8 wraps with reflectors and normal power ballasts.

Proposed Lighting Fixture Summary for Building #14	
Fixture Description	Total
New 1x4 1-Lamp 25Watt T8 Wrap with Reflector, NPB	35
New 1x4 2-Lamp 25Watt T8 Wrap with Reflector, NPB	12
New 1x8 2-Lamp 25Watt T8 Wrap with Reflector, HPB	45
New 2-13Watt Drum Fixture	3
New White Polycarbonate LED Exit Sign with Red Letters and Battery Backup	6
Retrofit to a 2-Lamp 25-watt T8 with HPB and centering reflector kit	10
Retrofit to a 2-Lamp 25-watt T8 with LPB	64
Retrofit to a 2-Lamp 25-watt T8 with LPB, tandem wiring two fixtures together	14
Grand Total	189

Building #16 – Firehouse

- The existing 1x4 2-Lamp F32Watt T8 and Industrial 100-watt Incandescent Bulbs will get new 1x4 1-Lamp 25Watt T8 Wraps with Reflectors and normal power ballasts.
- The existing 2x4 4-Lamp F40/34Watt T12's will be retrofitted to 4-Lamp 25-watt T8's with low power ballasts.
- The existing 2x4 4-Lamp F32Watt T8 and 2x4 3-Lamp F32Watt T8's will be retrofitted to 2-Lamp 25-watt T8's with high power ballasts and centering reflector kits.

Proposed Lighting Fixture Summary for Building #16	
Fixture Description	Total
New 1-Lamp 100-watt MH Wall-pack	2
New 1x4 1-Lamp 25Watt T8 Wrap with Reflector, NPB	17
New 1x8 2-Lamp 25Watt T8 Wrap with Reflector, HPB	1
Retrofit to a 2-Lamp 25-watt T8 with HPB and centering reflector kit	6
Retrofit to a 4-Lamp 25-watt T8 with LPB	8
Grand Total	34

Building #18 – South Mountain House East

- The existing 1x4 2-Lamp F40/34Watt T12 and 1x3 2-Lamp F30Watt T12's will be retrofitted to 2-Lamp 25-watt T8's with low power ballasts.
- The existing 2x4 4-Lamp F40/34Watt T12's will be retrofitted to 2-Lamp 25-watt T8's with high power ballasts and centering reflector kits.
- The existing 1-Lamp 250Watt HID Exterior Fixtures will get new 1-Lamp 120-watt Induction Wallpacks.

Proposed Lighting Fixture Summary for Building #18	
Fixture Description	Total
New 1-Lamp 100-watt MH Canopy	1
New 1-Lamp 100-watt MH Wallpack	4
New 1-Lamp 120-watt Induction Wallpack	16
New 1-Lamp 40-watt CFL Canopy	1
New 1x4 1-Lamp 25Watt T8 Wrap with Reflector, NPB	5
New 2-13Watt Drum Fixture	9
Retrofit to a 2-Lamp 17-watt T8 with LPB	5
Retrofit to a 2-Lamp 17-watt T8 with NPB and centering reflector kit	15
Retrofit to a 2-Lamp 25-watt T8 with HPB and centering reflector kit	126
Retrofit to a 2-Lamp 25-watt T8 with LPB	213
Retrofit to a 4-Lamp 25-watt T8 with LPB	17
Grand Total	412

Building #19 – South Mountain House West

- The existing 1x4 2-Lamp F40/34Watt T12 and 1x3 2-Lamp F30Watt T12's will be retrofitted to 2-Lamp 25-watt T8's with low power ballasts.
- The existing 2x4 4-Lamp F40/34Watt T12's will be retrofitted to 2-Lamp 25-watt T8's with high power ballasts and centering reflector kits.
- The existing 1-Lamp 250Watt HID Exterior Fixtures will get new 1-Lamp 120-watt Induction Wallpacks.

Proposed Lighting Fixture Summary for Building #19

Fixture Description	Total
New 1-Lamp 100-watt MH Canopy	1
New 1-Lamp 100-watt MH Wallpack	4
New 1-Lamp 120-watt Induction Wallpack	16
New 1-Lamp 40-watt CFL Canopy	1
New 1x4 1-Lamp 25Watt T8 Wrap with Reflector, NPB	5
New 2-13Watt Drum Fixture	9
Retrofit to a 2-Lamp 17-watt T8 with LPB	5
Retrofit to a 2-Lamp 17-watt T8 with NPB and centering reflector kit	15
Retrofit to a 2-Lamp 25-watt T8 with HPB and centering reflector kit	126
Retrofit to a 2-Lamp 25-watt T8 with LPB	213
Retrofit to a 4-Lamp 25-watt T8 with LPB	17
Grand Total	412

Building #24p – Water Filtration Plant

- The existing 1x4 2-Lamp F32Watt T8's will be retrofitted to 2-Lamp 25-watt T8's with low power ballasts.

Proposed Lighting Fixture Summary for Building #24p

Fixture Description	Total
Retrofit to a 2-Lamp 25-watt T8 with LPB	10

Building #'s 25a, 25b & 25c – Doc Cottage 1, 2, & 3

- The existing 100-watt Drums will get new 2-13Watt Drum Fixtures.
- The existing 100-watt Wall Sconces will get new 2-13Watt Sconce Fixtures.
- The existing 1x4 2-Lamp F40/34Watt T12's will be retrofitted to 2-Lamp 25-watt T8's with low power ballasts.

Proposed Lighting Fixture Summary for Building #'s 25a, 25b, & 25c

Fixture Description	Total
New 1-Lamp 26-watt CFL Wall-pack	6
New 2-13Watt Drum Fixture	62
New 2-13Watt Sconce Fixture	15
Retrofit to a 2-Lamp 25-watt T8 with LPB	12
Grand Total	95

Building #25e

- The existing 60-watt Incandescent Bulbs will either 27Watt CFL screw-in lamps, new 1x4 1-Lamp 25Watt T8 Industrial Fixtures, or new 1x4 1-Lamp 25Watt T8 Strip Fixtures.

- The existing 1x4 2-Lamp F32 Watt T8 will get new 1x4 1-Lamp 25Watt T8 industrial fixtures.

Proposed Lighting Fixture Summary for Building #25e

Fixture Description	Total
27Watt CFL Lamp Screw-in	9
New 1x4 1-Lamp 25Watt T8 Industrial Fixture	6
New 1x4 1-Lamp 25Watt T8 Strip Fixture	18
Grand Total	33

Building #25f – Wertz Cottage

- The existing 100-watt Drums will get new 2-13Watt Drum Fixtures.
- The existing 100-watt Wall Sconces will get new 2-13Watt Sconce Fixtures.
- The existing Industrial 100-watt Incandescent bulbs will get new 1x4 1-Lamp 25Watt T8 Wraps with Reflectors and normal power ballasts.
- The existing 1x2 2-Lamp F20Watt T12's will be retrofitted to 2-Lamp 17-watt T8's with low power ballasts.

Proposed Lighting Fixture Summary for Building #25f

Fixture Description	Total
New 1-Lamp 26-watt CFL Wall-pack	2
New 1x4 1-Lamp 25Watt T8 Wrap with Reflector, NPB	9
New 2-13Watt Drum Fixture	40
New 2-13Watt Hardwired Downlight	2
New 2-13Watt Sconce Fixture	16
Retrofit to a 2-Lamp 17-watt T8 with LPB	8
Grand Total	77

Building #26 – East Hall – Maintenance Shop

- The existing 1x4 2-Lamp F40/34Watt T12 and 1x4 2-Lamp F32Watt T8's will be retrofitted to 2-Lamp 25-watt T8's with low power ballasts.
- The existing 1x8 2-Lamp F96Watt T12's will get new 1x8 2-Lamp 25Watt T8 wraps with Reflectors and high power ballasts.
- The existing 100-watt Drums will get new 2-13Watt Drum Fixtures.
- The existing 30-watt fluorescent Exit signs will be replaced with new white polycarbonate LED Exit signs with red letters and battery backup.



Proposed Lighting Fixture Summary for Building #26

Fixture Description	Total
New 1x4 1-Lamp 25Watt T8 Wrap with Reflector, NPB	2
New 1x4 2-Lamp 25Watt T8 Wrap with Reflector, NPB	12
New 1x8 2-Lamp 25Watt T8 Wrap with Reflector, HPB	32
New 1x8 4-Lamp 25Watt T8 Wrap with Reflector, HPB	8
New 2-13Watt Drum Fixture	17
New 3-13Watt Drum Fixture	4
New White Polycarbonate LED Exit Sign with Red Letters and Battery Backup	17
Relamp if burned out, clean fixture	13
Retrofit to a 2-Lamp 25-watt T8 with LPB	69
Retrofit to a 3-Lamp 25-watt T8 with Low Power Ballast	6
Grand Total	180

Building #27 – Wayside Hall

- The existing 2x4 4-Lamp F40/34Watt T12's will be retrofitted to 2-Lamp 25-watt T8's with high power ballasts and centering reflector kits.
- The existing 1x4 2-Lamp F40/34Watt T12's will be retrofitted to 2-Lamp 25-watt T8's with low power ballasts.
- The existing Industrial 100-watt Incandescent Bulbs will get new 1x4 1-Lamp 25Watt T8 Wraps with Reflectors and normal power ballasts.
- Some of the existing 2x4 4-Lamp F40/34Watt T12's will get new 1x4 2-Lamp 25-watt T8 Wraps with Reflectors and normal power ballasts.
- The existing 1x4 1-Lamp F40/34Watt T12's will be retrofitted to 1-Lamp 25-watt T8's with low power ballasts.

Proposed Lighting Fixture Summary for Building #27

Fixture Description	Total
14-watt LED Screw-in Flood	20
25-watt Comp. Fluor.	9
New 1-Lamp 120-watt Induction Wallpack	4
New 1x4 1-Lamp 25Watt T8 Wrap with Reflector, NPB	62
New 1x4 2-Lamp 25Watt T8 Wrap with Reflector, NPB	34
New 3-13Watt Drum Fixture	8
Relamp if burned out, clean fixture	21
Retrofit to a 1-Lamp 25-watt T8 with LPB	62
Retrofit to a 2-Lamp 25-watt T8 with HPB and centering reflector kit	162
Retrofit to a 2-Lamp 25-watt T8 with LPB	34
Retrofit to a 2-Lamp 28-watt T8 with NPB and centering reflector kit	12
Grand Total	428

Building # 28 – Main Kitchen

- The existing 1x8 2-Lamp F96Watt T8's will get new 1x8 2-Lamp 25-watt T8 Wraps with Reflectors and high power ballasts.
- The existing Industrial 100-watt Incandescent Bulbs and 1x4 2-Lamp F40/34Watt T12's will get new 1x4 1-Lamp 25Watt T8 Wraps with Reflectors and normal power ballasts.
- The existing 1x4 2-Lamp F40/34Watt T12 and 1x4 2-Lamp F32Watt T8's will be retrofitted to 2-Lamp 25-watt T8's with low power ballasts.

Proposed Lighting Fixture Summary for Building # 28	
Fixture Description	Total
New 1x4 1-Lamp 25Watt T8 Wrap with Reflector, NPB	25
New 1x8 2-Lamp 25Watt T8 Wrap with Reflector, HPB	64
New 2-13Watt Drum Fixture	15
New White Polycarbonate LED Exit Sign with Red Letters and Battery Backup	2
Retrofit to a 1-Lamp 25-watt T8 with LPB	24
Retrofit to a 2-Lamp 17-watt T8 with LPB	1
Retrofit to a 2-Lamp 25-watt T8 with HPB and centering reflector kit	4
Retrofit to a 2-Lamp 25-watt T8 with LPB	17
Grand Total	152

Building # 29 – South Mountain Cafeteria

- The existing Industrial 100-watt Incandescent Bulbs and 1x4 2-Lamp F40/34Watt T12's will get new 1x4 1-Lamp 25Watt T8 Wraps with Reflectors and normal power ballasts.
- The existing 1x4 1-Lamp F40/34Watt T12, butted will be retrofitted to 2-Lamp 25-watt T8's with low power ballasts (tandem-wired).

Proposed Lighting Fixture Summary for Building # 29	
Fixture Description	Total
New 1x4 1-Lamp 25Watt T8 Wrap with Reflector, NPB	17
Retrofit to a 2-Lamp 25-watt T8 with LPB, tandem wiring two fixtures together	32
Grand Total	49

Building #30 – Brookside Building

- The existing 2x4 4-Lamp F40/34Watt T12, 2x4 4-Lamp F32Watt T8, and 2x4 3-Lamp F32Watt T8's will be retrofitted to 2-Lamp 25-watt T8's with high power ballasts and centering reflector kits.
- The existing 1x4 2-Lamp F40/34Watt T12 and 1x4 2-Lamp F32Watt T8's will be retrofitted to 2-Lamp 25-watt T8's with low power ballasts.
- The existing 2x4 4-Lamp F40/34Watt T12 (high) will be retrofitted to 4-Lamp 28-watt T8's with normal power ballasts (high).

- The existing Industrial 100-watt Incandescent Bulbs will get new 1x4 1-Lamp 25Watt T8 Wraps with Reflectors and normal power ballasts.

Proposed Lighting Fixture Summary for Building #30	
Fixture Description	Total
New 1-Lamp 100-watt MH Wall-pack	15
New 1-Lamp 26-watt CFL Wall-pack	6
New 1-Lamp 40-watt CFL Canopy	3
New 1x4 1-Lamp 25Watt T8 Wrap with Reflector, NPB	36
New 2-13Watt Drum Fixture	6
Retrofit to a 2-Lamp 17-watt T8 with a low power ballast and centering reflector kit	5
Retrofit to a 2-Lamp 17-watt T8 with HPB and centering reflector kit	12
Retrofit to a 2-Lamp 17-watt T8 with LPB	6
Retrofit to a 2-Lamp 17-watt T8 with NPB and centering reflector kit	18
Retrofit to a 2-Lamp 25-watt T8 with HPB and centering reflector kit	106
Retrofit to a 2-Lamp 25-watt T8 with LPB	65
Retrofit to a 2-Lamp 28-watt T8 with NPB, high	18
Retrofit to a 4-Lamp 25-watt T8 with LPB	4
Retrofit to a 4-Lamp 28-watt T8 with NPB, high	56
Grand Total	356

Building #31 – Hill Hall

- The existing 1x4 2-Lamp F32Watt T8's will get new 1x4 1-Lamp 25-watt T8 Wraps with Reflectors and normal power ballasts.
- The existing 30-watt Fluorescent Exit Signs will be replaced with new White Polycarbonate LED Exit Signs with red letters and battery backup.
- The existing 1x2 2-Lamp F20Watt T12's will be retrofitted to 2-Lamp 17-watt T8's with low power ballasts.
- The existing 2x4 4-Lamp F40/34Watt T12 and 2x4 3-Lamp F32Watt T8's will be retrofitted to 2-Lamp 25-watt T8's with high power ballasts and centering reflector kits.

Proposed Lighting Fixture Summary for Building #31	
Fixture Description	Total
25-watt Comp. Fluor.	8
New 1x4 1-Lamp 25Watt T8 Wrap with Reflector, NPB	69
New 2-13Watt Drum Fixture	2
New 3-13Watt Drum Fixture	8
New White Polycarbonate LED Exit Sign with Red Letters and Battery Backup	24
Retrofit to a 1-Lamp 25-watt T8 with LPB	3
Retrofit to a 2-Lamp 17-watt T8 with LPB	25
Retrofit to a 2-Lamp 25-watt T8 with HPB and centering reflector kit	21
Grand Total	160

Building #32 – Laundry

- The existing 1-Lamp 400HID HighBays will get new 4-Lamp 54Watt T5 HighBays with wire-guard, lens and normal power ballast.
- The existing 1x4 2-Lamp F40/34Watt T12's (high) will be retrofitted to 2-Lamp 28-watt T8's with normal power ballasts (high).

Proposed Lighting Fixture Summary for Building #32	
Fixture Description	Total
New 1-Lamp 26-watt CFL Wall-pack	6
New 1-Lamp 80-watt CFL Canopy	2
New 1x4 1-Lamp 25Watt T8 Wrap with Reflector, NPB	8
New 2-13Watt Drum Fixture	4
New 4-Lamp 54Watt T5 HighBay with wire-guard and lens, NPB	33
Retrofit to a 2-Lamp 25-watt T8 with LPB	9
Retrofit to a 2-Lamp 28-watt T8 with NPB, high	12
Retrofit to a 4-Lamp 25-watt T8 with LPB	4
Grand Total	78

Building #33 – Boiler House

- The existing 1x4 2-Lamp F32Watt T8's will be retrofitted to 2-Lamp 25-watt T8's with low power ballasts.
- The existing 100-watt Drums will get new 2-13Watt Drum Fixtures.
- The existing Industrial 150-watt Incandescent Bulbs will get new 1x4 2-Lamp 25Watt T8 Wraps with Reflectors and normal power ballasts.
- The existing 1-Lamp 400-watt HID HighBays will get New 1-Lamp 200-watt Induction Wallpacks.

Proposed Lighting Fixture Summary for Building #33	
Fixture Description	Total
New 1-Lamp 120-watt Induction Wallpack	3
New 1-Lamp 200-watt INDUCTION Wall-pack	22
New 1-Lamp 26-watt CFL Wall-pack	4
New 1x4 1-Lamp 25Watt T8 Wrap with Reflector, NPB	30
New 1x4 2-Lamp 25Watt T8 Wrap with Reflector, NPB	40
New 2-13Watt Drum Fixture	43
New 4-Lamp 54Watt T5 HighBay with wire-guard and lens, NPB	35
Retrofit to a 2-Lamp 17-watt T8 with LPB	1



Retrofit to a 2-Lamp 25-watt T8 with LPB	61
Grand Total	239

Building #34 – Schuylkill Center

- The existing 2x4 2-Lamp F32Watt T8, 1x4 2-Lamp F32Watt T8, and 1x3 2-Lamp F30Watt T12's will be retrofitted to 2-Lamp 25-watt T8's with low power ballasts.
- The existing 2x4 4-Lamp F32Watt T8's will be retrofitted to 2-Lamp 25-watt T8's with high power ballasts and centering reflector kits.
- The existing 1x4 1-Lamp F32Watt T8 and 1x3 1-Lamp F30Watt T12's will be retrofitted to 1-Lamp 25-watt T8's with low power ballasts.
- The existing 30-watt Fluorescent Exit Signs will be replaced with new White Polycarbonate LED Exit Signs with red letters and battery backup.

Proposed Lighting Fixture Summary for Building #34

Fixture Description	Total
New 1-Lamp 120-watt Induction Wallpack	7
New 1-Lamp 26-watt CFL Wall-pack	2
New 1x4 1-Lamp 25Watt T8 Wrap with Reflector, NPB	20
New 1x4 2-Lamp 25Watt T8 Wrap with Reflector, NPB	2
New 2-13Watt Drum Fixture	27
New 2-13Watt Hardwired Downlight	11
New 2-13Watt Sconce Fixture	11
New 3-13Watt Drum Fixture	30
New 3-Lamp 54Watt T5 HighBay with wire-guard and lens, NPB	25
New 4-Lamp 54Watt T5 HighBay with wire-guard and lens, NPB	32
New White Polycarbonate LED Exit Sign with Red Letters and Battery Backup	17
Retrofit to a 1-Lamp 25-watt T8 with LPB	93
Retrofit to a 2-Lamp 17-watt T8 with LPB	37
Retrofit to a 2-Lamp 17-watt T8 with NPB and centering reflector kit	29
Retrofit to a 2-Lamp 25-watt T8 with HPB and centering reflector kit	105
Retrofit to a 2-Lamp 25-watt T8 with LPB	626
Retrofit to a 3-Lamp 25-watt T8 with Low Power Ballast	10
Retrofit to a 4-Lamp 25-watt T8 with LPB, tandem wiring two fixtures together	30
Grand Total!	1114

Building #35 – Lebanon Center

- The existing 2x4 2-Lamp F32Watt T8, 1x4 2-Lamp F32Watt T8, and 1x3 2-Lamp F30Watt T12's will be retrofitted to 2-Lamp 25-watt T8's with low power ballasts.
- The existing 2x4 4-Lamp F32Watt T8's will be retrofitted to 2-Lamp 25-watt T8's with high power ballasts and centering reflector kits.
- The existing 1x4 1-Lamp F32Watt T8 and 1x3 1-Lamp F30Watt T12's will be retrofitted to 1-Lamp 25-watt T8's with low power ballasts.
- The existing 30-watt Fluorescent Exit Signs will be replaced with new White Polycarbonate LED Exit Signs with red letters and battery backup.

Proposed Lighting Fixture Summary for Building #35

Fixture Description	Total
New 1-Lamp 120-watt Induction Wallpack	7
New 1-Lamp 26-watt CFL Wall-pack	2
New 1x4 1-Lamp 25Watt T8 Wrap with Reflector, NPB	20
New 1x4 2-Lamp 25Watt T8 Wrap with Reflector, NPB	2
New 2-13Watt Drum Fixture	27
New 2-13Watt Hardwired Downlight	11
New 2-13Watt Sconce Fixture	11
New 3-13Watt Drum Fixture	30
New 3-Lamp 54Watt T5 HighBay with wire-guard and lens, NPB	25
New 4-Lamp 54Watt T5 HighBay with wire-guard and lens, NPB	32
New White Polycarbonate LED Exit Sign with Red Letters and Battery Backup	17
Retrofit to a 1-Lamp 25-watt T8 with LPB	93
Retrofit to a 2-Lamp 17-watt T8 with LPB	37
Retrofit to a 2-Lamp 17-watt T8 with NPB and centering reflector kit	29
Retrofit to a 2-Lamp 25-watt T8 with HPB and centering reflector kit	105
Retrofit to a 2-Lamp 25-watt T8 with LPB	626
Retrofit to a 3-Lamp 25-watt T8 with Low Power Ballast	10
Retrofit to a 4-Lamp 25-watt T8 with LPB, tandem wiring two fixtures together	30
Grand Total	1114

Building #37 – Berks Center

- The existing 2x4 2-Lamp F32Watt T8 and 1x4 2-Lamp F32Watt T8's will be retrofitted to 2-Lamp 25-watt T8's with low power ballasts.
- The existing 2x4 4-Lamp F32Watt T8 and 2x4 3-Lamp F32Watt T8's will be retrofitted to 2-Lamp 25-watt T8's with high power ballasts and centering reflector kits.
- The existing 300-watt Incandescent HighBay Bulbs will get new 1x4 4-Lamp 25Watt T8 Wraps with low power ballasts.
- The existing 1x3 1-Lamp F30Watt T12's will be retrofitted to 1-Lamp 25-watt T8's with low power ballasts.

Proposed Lighting Fixture Summary for Building #37

Fixture Description	Total
New 1x4 1-Lamp 25Watt T8 Wrap with Reflector, NPB	78
New 1x4 2-Lamp 25Watt T8 Wrap with Reflector, NPB	5
New 1x4 4-Lamp 25Watt T8 Wrap, LPB	23
New 2-13Watt Drum Fixture	3
New 3-13Watt Drum Fixture	4
Relamp if burned out, clean fixture	15
Retrofit to a 1-Lamp 17-watt T8 with LPB	2
Retrofit to a 1-Lamp 25-watt T8 with LPB	11
Retrofit to a 2-Lamp 17-watt T8 with LPB	2



Retrofit to a 2-Lamp 17-watt T8 with NPB and centering reflector kit	33
Retrofit to a 2-Lamp 25-watt T8 with HPB and centering reflector kit	417
Retrofit to a 2-Lamp 25-watt T8 with LPB	450
Retrofit to a 2-Lamp 25-watt T8 with LPB, tandem wiring two fixtures together	26
Retrofit to a 2-Lamp 28-watt T8 with NPB and centering reflector kit	48
Retrofit to a 4-Lamp 25-watt T8 with LPB	18
Grand Total	1135

Tunnel System

- The existing CFL Fixtures will be re-lamped if burned out with clean fixtures.
- The existing 1x8 1-Lamp F96Watt T8's will get new 1x8 2-Lamp 25Watt T8 Wraps with Reflectors and low power ballasts.
- The existing 100-watt Incandescent Bulbs will be retrofitted with 25-watt Compact Fluorescents.
- The existing 1x4 1-Lamp F32Watt T8's will be retrofitted to 1-Lamp 25-watt T8's with low power ballasts.

Proposed Lighting Fixture Summary for Tunnel System

Fixture Description	Total
25-watt Comp. Fluor.	30
New 1x8 2-Lamp 25Watt T8 Wrap with Reflector, HPB	101
New 1x8 2-Lamp 25Watt T8 Wrap with Reflector, LPB	22
Relamp if burned out, clean fixture	114
Retrofit to a 1-Lamp 25-watt T8 with LPB	27
Retrofit to a 3-Lamp 25-watt T8 with Low Power Ballast	1
Grand Total	295

Lighting System Overview

Ballasts

The new fluorescent lighting system will consist of high-frequency electronic ballasts with a minimum THD rating of less than 20%, a Class A sound rating and a ballast factor of at least 0.78. In addition, tandem wiring (wiring more than one fixture per ballast) has advantages in efficiency, cost effectiveness and future maintenance costs.

Lamps

As a standard for installing T8 lamps, we will provide a high-grade lamp that carries a higher CRI (75 or greater) and higher lumen output per watt than the current T12 lamps type in use. We have specified a 4100K lamp that will pass the federal guidelines relating to hazardous waste, specifically minimal mercury content, as the standard. It is due to the higher lumen per watt rating. The use of new lamps and ballasts of the newly retrofitted fixtures' will produce a higher foot-candle average than the existing system. In addition, the longer rated life and the ability of the T8 tri-phosphor lamp to maintain its lumen levels longer results in ongoing operations and maintenance savings.

Reflectors

In addition to the re-lamp and re-ballast of the straight tube fluorescent lamps, some of fixtures may warrant replacement or retrofitting with highly reflective, white aluminum reflectors. These reflectors allow for the reduction of the overall quantity of lamps in the lighting system, while maintaining or improving the light output of the luminaries. A typical recessed troffers-type fixture is easily retrofitted with a reflector. The interior depth and the mounting height of the fixture make the implementation of reflectors more difficult when a surface-mounted type fixture is used. A reflector acts as a mirror, reflecting and redirecting light that is typically lost in a fixture, thereby improving the overall efficiency of the fixture.

High Intensity Fluorescent Fixtures

The new fixtures will consist of high-power factor, high-frequency electronic ballasts with a minimum THD rating of less than 10%, a Class A sound rating and a ballast factor of at least 1.18. In addition, a reflector is used to improve the overall efficiency of the fixture; by at least 94%.

Compact Fluorescent Lamps/Fixtures

Compact fluorescent replacements were not chosen solely on a lumen-for-lumen basis. During our audit, we found fixtures containing incandescent lamps of varying wattage levels. We will provide consolidation of the lamp type in use. We have attempted to standardize compact fluorescent recommendations for two reasons:

- This option is inexpensive and readily available.
- We have the opportunity to reduce the number of different types of lamps on stock.

Fixtures/Reflectors

All lamps, ballasts, reflector retrofit kits and fixtures are type UL listed.

Hazardous Waste Disposal

We will provide all necessary and appropriate barrels and containers for proper packaging of all ballasts and lamps removed as part of this project. We have included the cost for handling, recycling and disposal of ballast and lamp waste.



2. Listing of facility areas where this measure will be implemented.

- | | | |
|--|---------------------------------|-------------------------|
| 1 Administration | 19 South Mountain House West | 32 Laundry |
| 3 East Hall – South Workshop | 24p Water Filtration Plant | 33 Boiler House |
| 5 Parkside House Berks Co. Senior Citizen | 26 East Hall – Maintenance Shop | 34 Schuylkill Center |
| 12 Chapel & Cafeteria | 27 Wayside Hall | 35 Lebanon Center |
| 13 Garage & Maintenance Office | 28 Main Kitchen | 36 Pump House |
| 14 Cold Storage, Maintenance Storeroom, Ingredient | 29 South Mountain Cafeteria | 37 Berks Center |
| 16 Firehouse | 30 Brookside Building | 25a Doc Cottage #1 |
| 18 South Mountain House East Tunnel System | 31 Hill Hall | 25b Doc Cottage #2 |
| | 25f Wertz Cottage | 25c Doc Cottage #3 |
| | | 25e Welding Shop/Lumber |

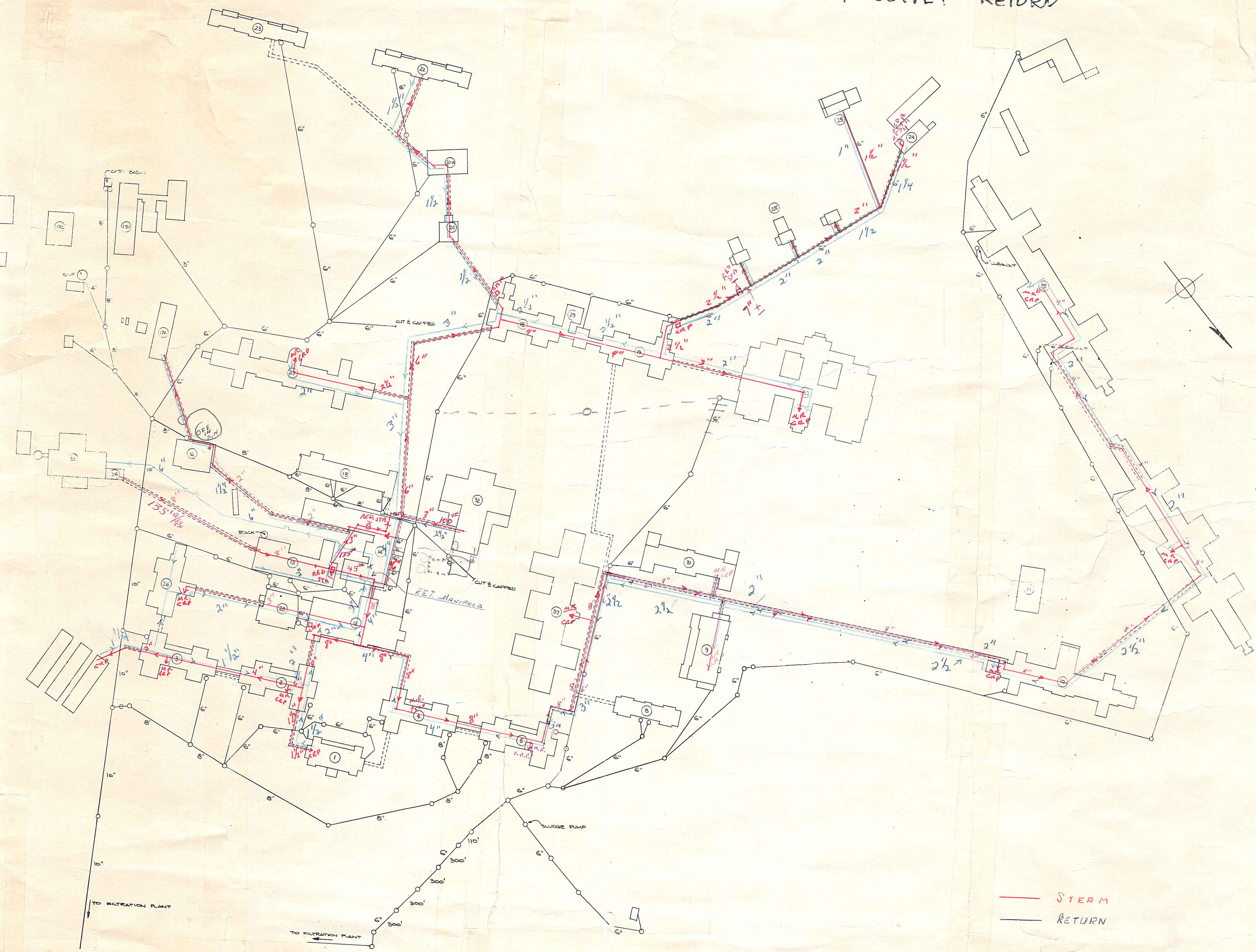
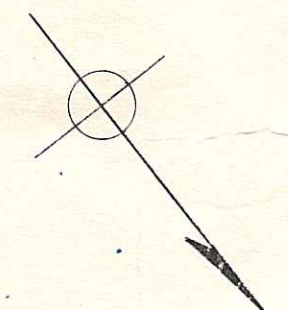
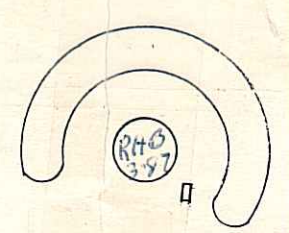
**ATTACHMENT D
to
BULLETIN 2
for
GESA 2021-2 DHS Wernersville**

WERNERSVILLE STATE HOSPITAL

SEWAGE DISPOSAL SYSTEM

REVISED: 14 AUGUST 1973

STEAM - SUPPLY - RETURN



Hospital (Whole) Steam + Return (1973)

— STEAM
— RETURN