



**STATE OF COLORADO**  
**DEPARTMENT OF HUMAN SERVICES**

**Invitation for Bid**

**ISSUE DATE:** July 31, 2013

**BID NO:** NCSJ1408013FACL

**DATE BID DUE:** August 26, 2013 2:30pm (local)  
**RETURN BID TO:** Department of Human Services  
North/Central Procurement  
7866 West Mansfield Parkway  
Denver, CO 80235

**BID TITLE OR DESCRIPTION:** 3 Phase Building Automation Panel Replacement

**DIRECT INQUIRIES TO:** Jeff Wylde, CPPB **PHONE:** 303-987-4604  
**FAX:** 303-987-4596/4610 **E-mail:** jeff.wylde@state.co.us

**FAX or EMAIL INVITATION FOR BID WILL NOT BE ACCEPTED.**

**IMPORTANT:** Vendor should read the entire Invitation for Bid document before submitting a Bid. Invitation for Bid properly marked as to INVITATION FOR BID NUMBER, DATE, and HOUR of opening, subject to the conditions herein stipulated and in accordance with the specifications set forth and/or attached hereto, will be accepted at the address listed above, prior to the date and time listed for the Bid opening. **All Invitation for Bid shall be quoted F.O.B. destination**, unless otherwise specified, to the delivery location or job site listed herein.

**Vendors must be registered on Colorado BIDS at time of opening.**

**PROPOSALS MUST BE SIGNED IN INK**

**VENDOR:**

\_\_\_\_\_  
TYPED OR PRINTED SIGNATURE

\_\_\_\_\_  
ADDRESS

\_\_\_\_\_  
Handwritten Signature by Authorized  
Officer or Agent of Vendor

\_\_\_\_\_  
ZIP

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
PHONE #

\_\_\_\_\_  
DATE

\_\_\_\_\_  
FAX #

\_\_\_\_\_  
E-mail

\_\_\_\_\_  
Terms of less than 30 calendar days  
will not be considered.

\_\_\_\_\_  
FEIN or SSN

The above Invitation for Bid is subject to attached Terms and Conditions.

**RETURN THIS PAGE**

**COLORADO DEPARTMENT OF HUMAN SERVICES**

**SEE THE COMPLETE TERMS AND CONDITIONS THAT APPLY TO THIS SOLICITATION  
FOUND ON THE COLORADO INVITATION FOR BID ANNOUNCEMENT PAGE.**

**PROCUREMENT ADMINISTRATION:**

**General.** The State of Colorado, Department of Human Services (DHS), seeks Invitation for Bids for goods or services in accordance with specifications contained in this Invitation for Bid.

**Bid Submission.** Invitation for Bid will be received in a sealed envelope, clearly marked with the bid tile, number and due date on the outside of the bid envelope, until the date and time indicated, and at that time publicly opened.

**FAX BIDS WILL NOT BE ACCEPTED.**

**Invitation for Bids** It is the responsibility of the vendor to ensure that the North/Central Procurement Office receives the Bid on or before the opening date and time. All interested parties are cordially invited to attend the official opening, if they so desire.

Vendors mailing their Invitation for Bid shall allow sufficient mail delivery time to ensure receipt of their response by the time specified.

**Pricing.** All pricing shall be FOB Destination. Vendors shall specify any minimums, special charges, restrictions, or conditions. The failure of the vendor to note any special conditions or exceptions shall be deemed a waiver of any such condition or exception.

**Bid Evaluation.** The State will be the sole judge in determining the acceptability of an offer and in determining the most beneficial offer(s) for the State. Invitation for Bid evaluation will consist primarily of comparing unit price Bid for the listed items. Evaluation of Invitation for Bid will also take into account administrative costs, payment terms, delivery conditions (any restrictions, minimum order quantity or dollar amount), and any exceptions taken to any requirement of the Bid, volumes at individual user sites, and proximity of user sites. Administrative costs include, but are not limited to, time and costs associated with ordering, receiving, stocking and paying invoices.

The State may make such investigations as may be deemed necessary to determine that the Vendor possesses or can acquire: (1) sufficient financial ability; (2) the services of properly qualified personnel; (3) the equipment, facilities and capacity necessary for adequate performance; and (4) has an overall satisfactory record in the performance of prior contracts which the Vendor may have been awarded.

**Low Tie Invitation for Bids.** Low tie Invitation for Bids shall be decided in accordance with the provision of C.R.S. Section 24-103-202.5 as it currently exists or is hereafter amended, which gives a preference to resident vendors.

**Award.** The state intends to issue a single vendor award. Awards will be made on the basis of the Bid most beneficial to the State. Vendor shall extend contract pricing to other Human Services divisions if the vendor has a presence in that area (i.e. Pueblo, Grand Junction).

**Term of Award.** The period of award made as a result of this Bid is from date of executed contract through 6/30/2014, with 2 one-year options to renew the award.

**Bid Review.** After the award is made, any vendor that wishes to recap the Bid may do so at the Department of Human Services. Please call 303-987-4600 to make an appointment to review the Bid.

**Performance/Remedies.** Winning vendors shall comply with the requirements as to brand, quality, quantity, time-frames, etc. If the winning vendor fails to perform, the State reserves the right to take remedial action (upon written notice), including canceling the original award, in whole or in part, for cause, and making an award to the next highest scoring vendor. Cause is defined as failure to meet requirements of the within specifications and conditions, or failure to correct deficiencies upon receipt of notice. Failure to maintain satisfactory performance after notice will be sufficient cause for immediate cancellation of the award.

**Additional Condition that is Applicable to All Purchase Orders and Contracts Issued to Sole Proprietors Effective Aug. 1, 2006.**

A Contractor that operates as a sole proprietor hereby swears or affirms under penalty of perjury that the Contractor (i) is a citizen of the United States or otherwise lawfully present in the United States pursuant to federal law, (ii) shall comply with the provisions of CRS 24-76.5-101 et seq, and (iii) shall produce one of the forms of identification required by CRS 24-76.5-103 prior to the effective date of this Contract. Except where exempted by federal law and except as provided in CRS 24-76.5-103(3), a Contractor that receives federal or state funds under this contract must confirm that any individual natural person eighteen years of age or older is lawfully present in the United States pursuant to CRS 24-76.5-103(4) if such individual applies for public benefits provided under this contract.

**Additional Condition that is Applicable to All Purchase Orders and Contracts for Services Effective Aug. 9, 2006.**

The Contractor certifies that the Contractor shall comply with the provisions of CRS 8-17.5-101 et seq. The Contractor shall not knowingly employ or contract with an illegal alien to perform work under this contract or enter into a contract with a subcontractor that fails to certify to the Contractor that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this contract. The Contractor represents, warrants, and agrees that it (i) has verified that it does not employ any illegal aliens, through participation in the Basic Pilot Employment Verification Program administered by the Social Security Administration and Department of Homeland Security, and (ii) otherwise will comply with the requirements of CRS 8-17.5-102(2)(b). The Contractor shall comply with all reasonable requests made in the course of an investigation under CRS 8-17.5-102 by the Colorado Department of Labor and Employment. If the Contractor fails to comply with any requirement of this provision or CRS 8-17.5-101 et seq., the State may terminate this contract for breach and the Contractor shall be liable for actual and consequential damages to the State.

**FOR GOODS ONLY:** In accordance with Procurement Code, CRS24-103-207.5 titled Purchasing Preference for Environmentally Preferable Products; bidders responding to this solicitation may seek to qualify for the preference and governmental bodies conducting this solicitation shall award a contract to a bidder who offers environmentally preferable products subject to the conditions in the Code and Procurement Rules.

## **TABLE OF CONTENTS**

<b>SECTION I:</b>	<b>Background and Project Overview</b>
<b>SECTION II:</b>	<b>Statement of Work /Requirements</b>
<b>SECTION III:</b>	<b>Response Format</b>
<b>SECTION IV:</b>	<b>Evaluation and Award</b>
<b>SECTION V:</b>	<b>Additional Technical Information</b>
<b>APPENDIX A:</b>	<b>Panel Replacement Matrix</b>

## **COLORADO DEPARTMENT OF HUMAN SERVICES**

### **3 Phase Building Automation Panel Replacement**

#### **INVITATION FOR BID #NCSJ1408013FACL**

The Department of Human Services is requesting bids for the installation, programming and replacement of 113 retired Siemens MBC and MEC panels with the current Siemens PXC platform. The general scope of the project also includes the retrofit of existing pneumatic devices to Direct Digital Control (DDC). The new panels shall be the latest product revisions and meet or exceed all the specifications required under Siemens warranties for parts and labor.

#### **Phased 3 Year Replacement Plan:**

All bid submissions will be offered in a **3 phase program**. Each panel replacement phase shall be completed within one fiscal year and cover all parts, installation, programming, services and warranties as itemized in **APPENDIX A: PANEL REPLACEMENT MATRIX**

#### **INQUIRIES:**

Unless otherwise noted, prospective offerors may make written inquiries via e-mail to ([Jeff.wylde@state.co.us](mailto:Jeff.wylde@state.co.us)) concerning the BID to obtain clarification of requirements. No inquiries will be accepted after close of business, August 16, 2013. Responses to Offeror's inquiries will be published as a modification on the State of Colorado BIDS web page.

#### **SECTION I**

##### **BACKGROUND and Project OVERVIEW**

The Building Automation System (BAS) controls and monitors all environmental and safety/security systems in the north, south and western districts of CDHS. It controls all aspects of heating/cooling systems, monitors the status of life safety equipment, boilers, lighting, utility metering, and other mechanical and security systems in approximately 4 million square feet of DHS owned property located throughout 300 buildings statewide. The automation system collects information from thousands of sensors and data collection points located throughout the state communicating through the CDHS state network.

The data is collected from temperature, humidity, pressure, flow, alarm, and various status sensors and switches located on heating/cooling units, boilers, chillers, building fire alarm systems, security control panels, etc.

The buildings monitored include high/medium/low security prisons, psychiatric facilities, youth corrections facilities and administration and maintenance facilities that are

required to be operational 24 hours/7 days a week. The occupants in these buildings are locked down and unable to be relocated to other areas if the environmental and automation systems are not operational. Therefore, it is important that the contractor accommodate all program and scheduling issues during the three year phased installations. A minimum of 2 weeks' notice will be given to youth services administrative personnel at each location prior to the commencement of work.

### **Building Automation Locations**

<b>Name</b>	<b>Address</b>	<b>City</b>	<b>Zip</b>
<b>ADAMS YOUTH SERVICES CENTER</b>	1933 E. Bridge St.	BRIGHTON	80601
<b>MENTAL HEALTH INSTITUTE AT FORT LOGAN</b>	3520 W. Oxford Ave.	DENVER	80236
<b>GILLIAM YOUTH SERVICES CENTER</b>	2844 Downing St	DENVER	80205
<b>LOOKOUT MOUNTAIN YOUTH SERVICES CENTER</b>	2901 Ford St.	GOLDEN	80401
<b>MARVIN W. FOOTE YOUTH SERVICES CENTER</b>	13500 E. Freemont Pl.	ENGLEWOOD	80112
<b>MOUNT VIEW YOUTH SERVICES CENTER</b>	7862 W. Mansfield Pkwy	DENVER	80235
<b>PLATTE VALLEY YOUTH SERVICES CENTER</b>	2220 O St.	GREELEY	80631
<b>WHEAT RIDGE REGIONAL CENTER</b>	10285 Ridge Rd.	WHEAT RIDGE	80033
<b>SUNADA LEARNING CENTER</b>	6225 Simms St.	Arvada	8004
<b>MENTAL HEALTH INSTITUTE AT PUEBLO</b>	1600 W. 24th	PUEBLO	81003
<b>PUEBLO YOUTH SERVICES CENTER (DYC)</b>	1406 W. 17th St	PUEBLO	81003
<b>PUEBLO REGIONAL CENTER</b>	270 John Powell Blvd.	PUEBLO WEST	81007
<b>SPRING CREEK YOUTH SERVICES CENTER</b>	3190 E. Las Vegas St.	COLO SPGS	80906
<b>ZEB PIKE YOUTH SERVICES CENTER</b>	1427 West Rio Grande	COLO SPGS	80906
<b>GRAND MESA YOUTH SERVICES CENTER</b>	360 28th Road	GRAND JUNC	81501
<b>GRAND JUCTION REGIONAL CENTER</b>	2800 D Road	GRAND JUNC	81501
<b>ROBERT E. DENIER YOUTH SERVICES CENTER</b>	990 E. 2nd Ave.	DURANGO	81301
<b>Colorado State Veterans Home at Florence</b>	903 Moore Drive	FLORENCE	81226

## **SECTION II**

### **REQUIREMENTS / STATEMENT OF WORK**

The contractor will be required to submit a detailed installation schedule for each phase of the project including but not limited to down time, panel installation, points wired, pneumatic conversions, peripheral device modifications, code related issues, programming, graphics, and as-built drawings. These must be approved by the Energy Administrator prior to commencing work on any phase.

Due to the proprietary nature of the building automation system's hardware and

software necessary to program the system, it is necessary that Siemens components be used and are compatible with the rest of the INSIGHT building automation system.

It is imperative that all programming be done per Siemens standards as well as DHS standards for point naming conventions. All warranties, equipment standards and installation / programming procedures must meet Siemens requirements. Installation technicians must have attended Siemens training seminars and be certified for installation.

#### **A. DHS Panel Upgrade Minimum Requirements**

The replacement system must meet the following specifications:

- MBC and MEC Panels to be replaced with Siemens manufactured PXC platform, substitutions will not be accepted, due to compatibility issues.
- Replacement panels must function and communicate on the existing P1 protocol RS-485 network.
- Replacement panels must be installed and programmed by factory certified technicians.
- Replacement panels must communicate to existing field level network devices via P2, BACNet, and MODBUS protocols.
- Replacement panels must meet DHS standards as described in the **Controls Section 15950** of the State of Colorado Department of Human Services Mechanical and Electrical Standards for Design and Construction for wiring, installation, and naming conventions as well as any applicable local codes and standards. Copies of the controls standards are available upon request.
- Bid for project must be a turn-key solution for replacement of all panels and end devices, and include programming to maintain the same level of control and visibility from the existing Insight front end.
- Replacement of all high temperature hot water valves to be Triac or SVF, all other valves and actuators to be the current Siemens 599 series valves.
- The entire project must be covered by a one year warranty from the date of substantial completion of each phase of the project. (See section F)
- All parts must be new OEM parts purchased directly from the manufacturer.
- Replacement panels must be serviced and maintained in compliance with the

existing 5 year Building Automation Service Agreement Contract **no. 37723.**

Copies available upon request.

- Scope of this project includes participating in, receiving and filing paperwork for energy rebates through local utility programs. All monetary rebates will be used to offset the cost of this project.
- A technical support proposal for the system was advertised for bid in November of 2011, and awarded to Siemens for a 5 year period. The pricing for this project is from the agreed upon pricing and discounts set forth in the maintenance agreement. The State of Colorado receives government discount rates which are equal to the list price less 50% less 20% less 10% or (list price \* 0.35). These preferred customer rates should be met or exceeded as part of this contract for parts, labor and engineering.

#### **B. AGREED UPON PROCEDURES OF CLIENT ENGAGEMENT**

Contractor and sub- contractor personnel working on Department of Human Services job sites shall submit to mandatory background checks and shall be compliant with HIPPA.

Any personnel who know clients that are incarcerated in DHS facilities need to report this to the Energy Administrator and may not be permitted to work in that locale.

Contractors will agree to meet all security requirements as outlined by youth corrections administrators which include but are not limited to items such as contraband, tool inventory, truck/equipment lockup, cleanup, dust and odor mitigation, environmental/temperature control, inspections, weapons, client engagement, reporting instances, safety and emergency reporting and evacuation procedures.

Contractor representatives agree to meet with DHS for any pre-construction meetings, project management meetings, inspections, code related issues, final close out and post construction meetings as required by DHS project managers.



**C. TIME FRAME**

**Timing and Installation Contract Period Considerations**

This contract is a three year installation contract that will consist of **3 Phases** each separately completed within the State of Colorado's fiscal years.

**Phase I      contract execution through June 30, 2014**

**Phase II     July 1, 2014 – June 30, 2015**

**Phase III    July 1, 2015 – June 30, 2016**

**D. A LIST OF KEY FACILITIES PERSONNEL WILL BE PROVIDED TO THE AWARDED OFFEROR.**

**E. GENERAL INFORMATION**

Additional information may be added to your offer relative to guarantees, product performance; provide examples of similar types of upgrades or similar successful building automation projects. Please limit your response to 1 page or less.

**F. CONTRACT, INVOICES, SUBMITALS, CONTINGENCY AND RELATED CLOSE OUT DOCUMENTS**

The Agreed Upon total contract will be for a fixed price, separated into 3 phases, each with itemized costs provided in detail. The successful offeror may submit a draw against the individual phase allotment for work/parts completed with prior written signature approval of the Energy Administrator. The State reserves the right to withhold 10 percent of the phased contract amount pending final delivery of inspections, submittal of close out documents, rectifying code compliance issues, warrantee submittals, as-built drawings, programming and graphics. Two final closeout documents will be submitted per phase, in hard copy, with accompanying electronic format.

## **SECTION III**

### **RESPONSE FORMAT**

Bid submissions must be provided on 8 1/2 by 11 inch paper and all pages should be numbered in the following manner: page\_\_\_\_\_ of \_\_\_\_\_ pages, .DOUBLE SIDED, using combed binders. Any acronyms used in the bid submission must be defined. Failure to provide the requested information may result in disqualification of the bid.

#### **A. STATE OF COLORADO SIGNATURE PAGE**

Include the State of Colorado Invitation for Bids Signature Page. An officer of the offeror who is legally authorized to bind the offeror to the submitted must sign this page in ink.

#### **B. OFFEROR's RESPONSE**

Submit a summary of the work to be performed for each phase of service being offered that includes specific acknowledgement and acceptance of each of the Section II Requirements/ Statement of Work aspects, and provide a description of the staff that will be assigned, including their qualifications.

Submit one original and one copy to the procurement office as indicated on the first page "Return Quote to:" by the due date and time. Also include one (1) separate CD containing a complete electronic version of the bid response. Late bids will not be accepted. The state is not responsible for submission errors and vendor should request verification of receipt of their bid submission.

On each page the vendor must list the following: Vendor Name; Title of Services; where services will be performed referencing Appendix A; and the offered total cost. In addition to a summary of work, vendor must submit a one-page outline of their demonstrated, relevant experience and qualifications to perform the scope of work contained in this Invitation for Bid.

Obviously, due to page limitations, brevity is a must. Please submit responses that are thorough yet succinct.

#### **C. AGREED UPON PANEL INSTALLATION**

The Agreed Upon Panel Installation proposed should present a full and complete description of the approach you will use to carry out the requirements set forth in the Statement of Work. The proposal must include a general description of the methodology, approach, tools, and resources to be used to conduct the panel

replacement. The Offeror will include an Installation Plan with monthly progress Gant charts identifying project milestones and a conclusion date.

Section II, Requirements/Statement of Work section describes the requirements that should be satisfied by your response. Restate each requirement in the same order as provided and describe how you propose to provide the services to meet each of the requirements.

#### **D. DEMONSTRATED EXPERIENCE AND CAPABILITIES**

The bid submission must:

1. Provide details (include names, addresses, contacts, and telephone/email addresses) of 2010-2013 contracts that you completed which are similar in size and scope to the work and requirements described in this IFB.
2. Give the location of the offices from which the work is to be done. Provide the qualifications and proposed staffing dedicated to this project.
3. Describe the range of activities performed by the proposed offices.
4. Describe the numbers and classifications of personnel who will work on the panel replacement.
5. Affirm that the offering contractor and proposed staff assigned to this project do not have any past history of substandard work.
6. The bid must identify the key personnel (i.e., principals, managers, and supervisors/in charges) that will work on the installation, including personnel not from the local office and any specialists to be used. The bid must include a resume of all key personnel highlighting their professional qualifications. (resumes should be included in an appendix).

#### **E. COST PROPOSAL**

The costs proposed must state the number of professional staff hours expected to complete the installation work by staff level, the hourly rate and the resulting total price/cost. The Offeror is advised that travel costs incurred in the performance of the contract is part of the total price and will not be separately reimbursed.

1. The bid must state the total fixed-price for which the work requested will be done.

**F. DELIVERY SCHEDULE**

The proposal must include a schedule for panel replacement and completion date.

**G. ADDITIONAL DATA**

Since the preceding sections are to contain information that is specifically requested, the firm may include any additional information considered essential to the bid in this section. General information publications, such as directories or client lists should not be included apart from those requested to support recent demonstrated experience and capabilities.

**H. STATE RESPONSIBILITIES**

The Department will appoint an individual as an installation liaison to the successful Offeror along with other project managers throughout the installation. This individual will attend project meetings and assist the firm in understanding DHS requirements, resolve field issues and monitor work progress. The Offeror's staff will provide their own tools and equipment to be used during the installation. The Department of Human Services has provided a replacement parts list in Appendix A.

**SECTION IV**

**EVALUATION AND AWARD**

**A. EVALUATION OF BID SUBMISSIONS**

Cost will be considered, as will responsibility and responsiveness of service provider based on the specifications and scope of work of this Invitation for Bid. Qualifications and experience will be a factor for the selection of a service provider. The summary of prior relevant work experience performed by your firm shall include the name, type of work performed, and contact person of the firm or governmental agency for similar type contracts, and will be given additional consideration.

**B. PERFORMANCE OF AWARD**

Proposed changes or exceptions to any requirement, or State's Contract Terms and Conditions (Exhibit A), may disqualify Offeror's Bid response from consideration. A completed contract is anticipated within 30 days following announcement of award. An

interim purchase order may be used in order to begin work prior to completion of a State Contract. In the event a contract is not signed (through no fault of the State) by the awarded Offeror within 30 days, and barring any protest that may delay the completion of a contract, the State may elect to cease negotiations, withdraw the award, and award to the next most advantageous Offeror.

## **SECTION V**

### **Additional Technical Information**

#### **A. Request for technical documentation.**

The winning bidder will be provided any technical documentation necessary to complete this project. It is not feasible to include all technical documentation relative to this project in this bid package.

**RETURN ALL PAGES (these pages are not included in summary page count)**

**COLORADO DEPARTMENT OF HUMAN SERVICES**  
**3-Phase Building Automation Panel Replacement**  
Invitation for Bid Number NCSJ1408013FACL

**OFFEROR INFORMATION**

1. OFFEROR name:\_\_\_\_\_

2. Name and numbers of contact person for inquiries on your Bid response:

Name:\_\_\_\_\_

Telephone number:(\_\_\_\_\_)\_\_\_\_\_

Toll free/collect number:(\_\_\_\_\_)\_\_\_\_\_ FAX number:(\_\_\_\_\_)\_\_\_\_\_

E-Mail address\_\_\_\_\_

3. Name and numbers of contact person for orders if an award to your company is subsequently made:

Name: \_\_\_\_\_

Telephone number:(\_\_\_\_\_)\_\_\_\_\_

Toll free/collect number:(\_\_\_\_\_)\_\_\_\_\_ FAX number:(\_\_\_\_\_)\_\_\_\_\_

E-Mail address\_\_\_\_\_

**RETURN THIS PAGE**

**APPENDIX A:     Panel Replacement Matrix**

Panel Name	Bldg.	GSF	Note	Valve	Valve	4"	6"	Elec	Extra	AOP	AOP
					ACT	DMP	DMP	DMP	AOV	MOD vlv	MOD DMP
CMHIP Node 50	SCC056	28,859									
CMHIP Node 51	SCC057	37,864									
CMHIP Node 52	SCC058	74,749									
CMHIP Node 53	SCC058										
CMHIP Node 54	SCC058										
CMHIP Node 55	SCC056										
CMHIP Node 56	SCC056										
CMHIP Node 58	SCC056										
CMHIP Node 28	SLV098	8,123									
CMHIP Node 29	SLV097	8,123									
CMHIP Node 60	SLV101	14,893									
CMHIP Node 61	SLV102	14,893									
CMHIP Node 62	SLV103	17,720									
CMHIP Node 63	SLV109	14,890									
CMHIP Node 64	SLV110	14,893									
CMHIP Node 65	SLV111	22,717									
CMHIP Node 66	SLV105	35,519									
CMHIP Node 67	SLV100	9,890									
CMHIP Node 68	SLV104	14,847									
CMHIP Node 69	SLV112	14,908									
CMHIP Node 70	SLV113	14,908									
CMHIP Node 71	SLV099	6,980									
CMHIP Node 09	SMH020	40,392									
CMHIP Node 10	SMH020										

CMHIP Node 11	SMH020										
CMHIP Node 40	SPY052	10,665	HEV	2	2			0		1	
CMHIP Node 41	SPY053	17,285	HEV	2	2			0		1	
CMHIP Node 46	SYS006	6,053						0			
CMHIP Node 19	SFM118	7,897	CTS	2				0		2	
CMHIP Node 01	SMH125	151,038	MAD		6	4	3	10	4	4	1
CMHIP Node 02	SMH125		MAD		7		4	8	1	5	
CMHIP Node 03	SMH125				4	2		2		4	2
CMHIP Node 04	SMH125		MAD		9		4	8	1	7	
CMHIP Node 05	SMH125		CTS	1	1			0		2	
CMHIP Node 15	SMH115	43,968			2	6		6	2	2	2
CMHIP Node 16	SMH116	44,795			2	3		3	1	1	1
CMHIP Node 17	SMH116				4	9		9	1	3	5
CMHIP Node 26	SMH131	8,134			2	10		10		2	4
CMHIP Node 27	SMH132	11,838			2	11		11		1	4
CMHIP Node 42	SMH137	9,621						0			
CMHIP Node 44	SMH116				4	3		3		4	1
CMHIP Node 45	SMH115				4	3		3		4	1
CMHIP Node 59	SMH129	19,243									
FLORENCE Node 1	SFN138	41,266									
FLORENCE Node 2	SFN138										
FLORENCE Node 3	SFN138										
FLORENCE Node 4	SFN138										
FLORENCE Node 5	SFN138										
FLORENCE Node 6	SFN138										
<b>Panel Name</b>	<b>Bldg</b>	<b>GSF</b>	<b>Note</b>	<b>Valve</b>	<b>Valve</b>	<b>4"</b>	<b>6"</b>	<b>Elec</b>	<b>Extra</b>	<b>AOP</b>	<b>AOP</b>
					<b>ACT</b>	<b>DMP</b>	<b>DMP</b>	<b>DMP</b>	<b>AOV</b>	<b>MOD vlv</b>	<b>MOD DMP</b>
CAPITAL COMPLEX. node 1	NCC???	200	EST								



FTLOGAN Node 01	NFL062	6,203									
FTLOGAN Node 02	E, F2, F3	64,794		4	4	4		4		6	
FTLOGAN Node 03	NFL00C, E	15,572		5		2		2	2		
FTLOGAN Node 04	NFL00A	37,136		3		4		4		5	2
FTLOGAN Node 05	NFL00B	36,539		3	3	4	2	8	1	3	6
FTLOGAN Node 06	NFL00D	16,135		4	4	5		5	2	6	2
FTLOGAN Node 10	NFL00J	8,035						0		1	
FTLOGAN Node 14	NFL00H	105,729						0		3	
FTLOGAN Node 20	NFL00H					6		6		2	6
FTLOGAN Node 21	NFL00H			5	5	3		3		5	2
FTLOGAN Node 22	NFL0KA	19,744		5	5			0		7	
FTLOGAN Node 23	NFL0KB	13,919		3	3	6		6	2	3	1
FTLOGAN Node 24	NFL0KE	4,895		4	4			0		4	
FTLOGAN Node 25	NFL0KA			3	3			0		3	
FTLOGAN Node 26	NFL0KF	5,102		2	2			0		2	
FTLOGAN BLN 2 FTLOGAN NODE11	NFL025	4,411									
GILLIAM Node 1	NGY117	29,409		2	2			0		2	
GILLIAM Node 2	NGY117			2	2			0		2	
GILLIAM Node 3	NGY117			2	2			0		2	
GILLIAM Node 4	NGY116	28,027		4	5		5		4	3	
GILLIAM Node 5	NGY116			3	5		5		4	3	
GILLIAM Node 6	NGY118										
LOOKOUT MOUNTAIN Node 1	NLM034	18,031									
LOOKOUT MOUNTAIN Node 2	NLM035	11,244									
LOOKOUT MOUNTAIN Node 3	NLM001	5,407									
MARVIN FOOTE Node 1	NMF100	65,129									
MARVIN FOOTE Node 2	NMF100										
MARVIN FOOTE Node 3	NMF100										
MARVIN FOOTE Node 4	NMF100										

MARVIN FOOTE Node 5	NMF100										
MARVIN FOOTE Node 6	NMF100										
MARVIN FOOTE Node 7	NMF100										
MOUNT VIEW Node 1	NMV094	11,450									
MOUNT VIEW Node 2	NMV092	11,452									
MOUNT VIEW Node 3	NMV054	21,995									
PLATTE VALLEY Node 1	NPV100	74,204									
PLATTE VALLEY Node 2	NPV100										
PLATTE VALLEY Node 3	NPV100										
PLATTE VALLEY Node 4	NPV100										
PLATTE VALLEY Node 5	NPV100										
PLATTE VALLEY Node 6	NPV100										
PLATTE VALLEY Node 7	NPV100										
SPRING CREEK Node 1	SSC001	67,568									
SPRING CREEK Node 2	SSC001										
SPRING CREEK Node 3	SSC001										
SPRING CREEK Node 4	SSC001										
SPRING CREEK Node 5	SSC001										
SPRING CREEK Node 6	SSC001										
SPRING CREEK Node 7	SSC001										
SUNADA node 01	NRC077	17,240									
WRRRC Node 09	NRC29, 30	69,395									
WRRRC Node 10	NRC029	4,024									
WRRRC Node 30	NRC029										
ZEB PIKE Node 1	SZP097,98	27,491									
MEC 41	WSH041	13,663									
MEC1	WGM045	43,600									

HINDS BLDG7	WRC007	10,782									
Meyer Node 01	WRC011	27,843									
Meyer Node 02	WRC011										
ADMIN	WRC001	13,125									
BOWERS	WRC006	17,668									
PORTER CENTER	WRC018	20,459									
PORTER NODE 08	WRC018										

<b>Notes:</b>
<b>H EV - Heat exchanger valves</b>
<b>C TS – Cooling tower sump – change to solenoid valves</b>
<b>MAD – Mix Air Dampers use cooling signal</b>