

August 15, 2013

Roberta Wagner  
Department of Administration  
Purchasing Division  
2019 Washington Street, East  
Charleston, WV 25305-013

Re: Expression of Interest RFQ#WSH14021

Dear Ms. Wagner:

CMA Engineering is pleased to submit our qualifications and interest in the proposed Open End Contract to provide commissioning agent services at William R. Sharpe Jr. Hospital. Our firm has a long and successful history of performing similar types of challenging work with very technical requirements, coordination of multiple parties, time limitations and budget constraints. We have reviewed the detailed scope of work listed in this request for expression of interest. Timothy Cox, professional mechanical engineer and president of the firm, is a Certified Building Commissioning Professional. Mr. Cox is currently providing commissioning agent services to Davis Memorial Hospital in Elkins, WV.

Our LEED design and design criteria development experience in West Virginia gives us a distinct advantage in developing this project. With offices in Charleston and Morgantown, our firm can quickly respond to any issues that develop during design and construction. We also believe that our past experience of providing engineering services for healthcare facilities will be of great benefit to the State and in the successful fulfillment of the commissioning contract.

CMA Engineering appreciates your consideration of our firm and looks forward to presenting a more comprehensive statement of our qualifications in a personal interview.

Sincerely,  
CMA Engineering



Daniel L. Ellars, P.E.  
Principal

**Charleston**  
824 Cross Lanes Drive  
Charleston, West Virginia 25313  
(304) 343-0316 tel  
(304) 343-5146 fax

**Morgantown**  
5 Riddle Court  
Morgantown, West Virginia 26505  
(304) 598-2558 tel  
(304) 598-2472 fax



State of West Virginia  
 Department of Administration  
 Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

**Solicitation**

NUMBER
WSH14021

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
ROBERTA WAGNER 304-558-0067

VENDOR

RFQ COPY  
 TYPE NAME/ADDRESS HERE

CMA Engineering  
 824 Cross Lanes Drive  
 Charleston, WV 25313

SHIP TO

HEALTH AND HUMAN RESOURCES  
 OPERATIONS  
 VARIOUS LOCALES AS INDICATED  
 ON PURCHASE ORDER

DATE PRINTED
07/17/2013

BID OPENING DATE: 08/15/2013 BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	JB		EOI		
COMMISSIONING EOI FOR WILLIAM R. SHARPE HOSPITAL						
EOI TO PROVIDE COMMISSIONING SERVICES AT WILLIAM R. SHARPE, JR. HOSPITAL, PER THE ATTACHED DETAILED SPECIFICATIONS.						
TERM OF THE CONTRACT SHALL BE FOR A FIVE (5) YEAR PERIOD WITH THE OPTION OF THREE (3) ONE YEAR RENEWALS.						
***** THIS IS THE END OF RFQ WSH14021 ***** TOTAL:						

SIGNATURE <i>Daniel L. Ellare</i>	TELEPHONE (304) 343-0316	DATE 8/15/2016
TITLE Principal	FEIN 55-0659239	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

RFQ No. WSH14021

STATE OF WEST VIRGINIA  
Purchasing Division

**PURCHASING AFFIDAVIT**

**MANDATE:** Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

**EXCEPTION:** The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

**DEFINITIONS:**

**"Debt"** means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

**"Employer default"** means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

**"Related party"** means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

**AFFIRMATION:** By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code §61-5-3*) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

**WITNESS THE FOLLOWING SIGNATURE:**

Vendor's Name: CMA Engineering

Authorized Signature: Daniel L. Ellenz Date: 8/15/2013

State of \_\_\_\_\_

County of \_\_\_\_\_, to-wit:

Taken, subscribed, and sworn to before me this \_\_\_ day of \_\_\_\_\_, 20\_\_.

My Commission expires \_\_\_\_\_, 20\_\_.

**AFFIX SEAL HERE**

**NOTARY PUBLIC** \_\_\_\_\_

**CERTIFICATION AND SIGNATURE PAGE**

By signing below, I certify that I have reviewed this Solicitation in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this bid or proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

CMA Engineering  
(Company)

Daniel L. Ellars  
(Authorized Signature)

Daniel L. Ellars, Principal  
(Representative Name, Title)

(304) 343-0316      (304) 343-5146  
(Phone Number)      (Fax Number)

8/15/2013  
(Date)

**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.: WSH14021**

**Instructions:** Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

**Acknowledgment:** I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

**Addendum Numbers Received:**

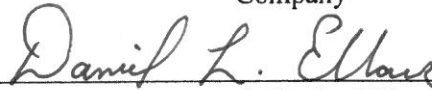
(Check the box next to each addendum received)

<input checked="" type="checkbox"/> Addendum No. 1	<input type="checkbox"/> Addendum No. 6
<input type="checkbox"/> Addendum No. 2	<input type="checkbox"/> Addendum No. 7
<input type="checkbox"/> Addendum No. 3	<input type="checkbox"/> Addendum No. 8
<input type="checkbox"/> Addendum No. 4	<input type="checkbox"/> Addendum No. 9
<input type="checkbox"/> Addendum No. 5	<input type="checkbox"/> Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

CMA Engineering

Company



Authorized Signature

8/15/2016

Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

**Expression of Interest  
For  
Commissioning Services  
At  
William R. Sharpe, Jr. Hospital  
RFQ #WSH14021**



**August 15, 2013**

<b>1</b>	<b>Project Approach</b>
<b>2</b>	<b>Commissioning Experience</b>
<b>3</b>	<b>Corporate Profile</b>
<b>4</b>	<b>Resumes</b>
<b>5</b>	<b>Project Experience</b>



## Project Approach

**Clingenpeel/McBrayer & Associates, Inc.**

CMA Engineering would approach this project similar to what we have done in the past where design is completed prior to commissioning involvement. CMA would review commissioning specification requirements in the bid documents or develop them, as necessary, and quickly involve all parties (Owner, Design Team, Contractor) to ensure the most efficient communication and coordination system is set up. It will be critical for us to meet with the design team and Owner to establish the specific intent for various systems. CMA Engineering will set up processes for the commissioning documentation on the various systems as the project starts into construction. Specific project notebooks will be developed for each system, and individual pieces of equipment within systems through the commissioning process of pre-functional check lists, functional check lists and all of the site testing and verification. CMA will be closely involved with each individual contractor through this commissioning process. At the close of the project CMA Engineering will turn over all records of the commissioning process to the Owner for future reference should any questions or future modifications arise.

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5 Riddle Court  
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[www.cmawv.com](http://www.cmawv.com)

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ENGINEERING





## Current Hospital Commissioning Experience

**Clingenpeel/McBrayer & Associates, Inc.**

CMA Engineering is currently acting as the Commissioning Agent for a significant Hospital addition project with Davis Memorial Hospital in Elkins, WV. The project is the addition of approximately 70,000 square feet of out-patient clinical space to expand current operations for the existing facility. Our team is spear-headed by our project manager, Timothy L. Cox, P.E., Mechanical Engineer and President of our firm, who is a Certified Building Commissioning Professional through AEE. Also included is our LEED accredited designer, Daniel L. Ellars, P.E., LEED AP BD&C, Matthew Corathers, P.E., a mechanical engineer, as well as our other mechanical, electrical and plumbing design team members. This commissioning project is progressing very well through our attention to detail and close relationships with the various project team members. Coordination and communication between all parties is critical to the success of the commissioning process. We feel our specific experience, knowledge, integrity and close proximity to your new facility will be a great asset to your project.

### Project and Professional References

- A. Davis Memorial Hospital, Elkins, WV  
Steve Johnson  
Director of Facilities Services  
(304) 621-6109
- B. Mylan Pharmaceuticals (various projects since 1998)  
James Dotson  
Director of Engineering  
(304) 599-2595

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**CMA**  
ENGINEERING



## Corporate Profile

**Clingenpeel/McBrayer & Associates, Inc.**



Charleston

CMA Engineering is a West Virginia based small business firm, providing services in the areas of HVAC, plumbing, fire protection and electrical engineering. With offices in Charleston and Morgantown, the staff of CMA is large enough to handle any size project, yet small enough for direct input and supervision by all key personnel. CMA Engineering has provided engineering services for over two hundred and fifty healthcare facility projects within West Virginia. Through our strong experience in hospital design, we have a solid understanding of Code requirements and healthcare facility design standards.

At CMA, we understand that Healthcare Engineering requires specific knowledge and focus regarding the special needs and conditions of each facility. Our MEP (Mechanical, Electrical, Plumbing) experience in the hospital industry is what sets our firm apart. Our familiarity with important documents such as NFPA 2010, the NEC, the Life Safety Code, ASHRAE Handbooks, and the AIA Design Guidelines for Healthcare Facilities, provide the designer with the necessary information to devise the essential systems for Healthcare Facilities.

Special needs call for specialized expertise. At CMA we understand the nuances involved in the hospital electrical environment. As time and technology push for continuous change, we know that the electrical systems must be designed to accommodate both current and future loads. Harmonics must be addressed to avoid unwanted electrical interference with data processing, laboratory and critical medical equipment. In the case of commercial power loss, it is important that essential and critical power load distributions require careful review and design to assure a seamless transition to emergency power.

Communications systems, including paging, sound, call and fire alarm systems must be designed to meet new design standards and codes while often interfacing with older existing systems. From alarm systems to lighting levels—CMA is experienced in electrical systems throughout the hospital facility.

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**CMA**  
ENGINEERING



## Corporate Profile

**Clingenpeel/McBrayer & Associates, Inc.**



Morgantown

Many areas of a Healthcare Facility require specific ventilation, pressurization and filtration systems to deliver air for comfort and indoor air quality. Specific temperatures and humidity ratios must be maintained while minimizing the energy consumption of mechanical equipment. It is our understanding of these requirements, along with our experience with the direct digital controls of the mechanical equipment, that help us adhere to strict temperature and humidity requirements, while minimizing energy costs.

Plumbing and fire protection systems must not only meet the current facility, but must also consider future facility expansion, as well. Planning and expertise is crucial—design of domestic hot and cold water systems must consider delivery temperature to avoid development of bacteria. Connection of medical wastes must be designed per EPA requirements, and fire protection systems must be applicable for the specific hazard and coverage. At CMA, our designers believe that excellent design brings excellent results.

From ambulatory care to emergency rooms, from MRI scan areas to linear accelerators, from outpatient facilities to surgical space, CMA Engineering has the diverse experience to meet your needs.

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**CMA**  
ENGINEERING



## Location

### Clingenpeel/McBrayer & Associates, Inc.



Morgantown

Clingenpeel/McBrayer & Associates, Inc., d/b/a CMA Engineering, has provided engineering design services for a myriad of projects throughout West Virginia since its inception in 1986. Projects have included design and construction management services for both renovation and new construction. We have worked with the majority of architects and contractors working within the State.

CMA opened an office in Morgantown in 1998 to provide a more viable design and construction management service to the northern portion of the State. With quick access to the project sites, to project managers and contractors, CMA has been able to expedite answers to questions during the design phase and solutions for problems which arise during the construction phase. Timothy L. Cox, P.E., President of Clingenpeel/McBrayer & Associates, Inc., is a Certified Building Commissioning Professional and will be the Commissioning Agent for this project. Timothy heads our Morgantown office which is one hour from Weston, WV. Our Charleston office, lead by Daniel L. Ellars, P.E., is approximately an hour and a half from the project site.

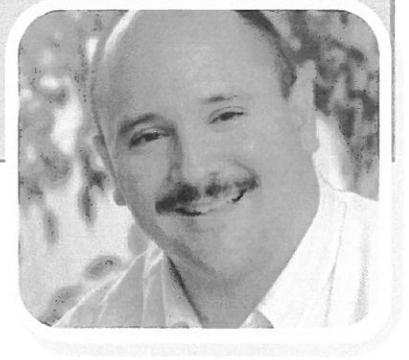
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**CMA**  
ENGINEERING

# Timothy L. Cox, P.E., CBCP



President  
Mechanical Engineer

(304) 598-2558  
tcox@cmawv.com

## EDUCATION

University of Colorado  
Boulder, Colorado  
Degree: Mechanical Engineering B.S.

## REGISTRATIONS/PROFESSIONAL AFFILIATIONS

Association of Energy Engineers-CBCP

Registered Professional Engineer in WV, VA, MD

CPD (Certified in Plumbing Engineering)

Member of ASHRAE

American Society of Plumbing Engineers

National Association of Fire Protection Engineers

WV Society of Healthcare Engineers

## EXPERIENCE

Mr. Timothy Cox, President and Senior Mechanical Engineer of CMA Engineering brings 30 years of mechanical design experience to our clients. Mr. Cox has been project manager and project engineer for a variety of projects.

## PROJECTS

### West Virginia University

Open End Contract since 1999

Boreman HVAC/Plumbing/Fire Sprinkler  
Upgrades  
Soccer Stadium  
Coliseum Life/Safety Renovations  
Coliseum Locker Room Suites  
Engineering Science Building Addition/  
Renovations  
Arnold Hall Fire Alarm/ Fire Sprinkler  
Upgrades

### West Virginia University Hospitals

WV Eye Institute-MEP systems design for  
new facility  
Cheat Clinic-MEP design for new clinical  
addition  
WVUH Emergency Department-HVAC,  
electrical, fire and communication  
systems design for new addition  
Chestnut Ridge Hospital-various MEP  
renovations  
Healthworks Rehab and Fitness -MEP  
systems design for new facility

### Davis Memorial Hospital

Endoscopy Relocation  
New Operating Suites  
Pharmacy IV Laboratory Clean Room  
New Linear Accelerator  
New 70,000sf Addition

### Mylan Pharmaceuticals, Morgantown, WV

Various projects including HVAC, plumbing,  
fire sprinkler and controls for new office  
building, fluid bed addition, north plant  
expansion, parking garage and weighing  
and packaging.

**CMA**  
ENGINEERING



# Daniel L. Ellars, P.E., LEED AP BD&C



Principal  
Electrical Engineer  
(304) 343-0316  
dellars@cmawv.com

## EDUCATION

West Virginia University Institute of Technology  
Montgomery, West Virginia.  
Bachelors of Science in Electrical Engineering

West Virginia State University  
Institute, West Virginia  
Bachelors of Science in Business Administration

## REGISTRATIONS/PROFESSIONAL AFFILIATIONS

Registered Professional Engineer in WV and PA

National Fire Protection Association (NFPA)

Institute of Electrical and Electronics Engineers (IEEE)

American Society of Heating, Refrigerating and  
Air-Conditioning Engineers (ASHRAE)

## EXPERIENCE

Mr. Daniel L. Ellars, Electrical Engineer for Clingenpeel/McBrayer & Associates, Inc. brings 23 years of electrical design experience to our clients. Mr. Ellars has been a project manager and project engineer for a variety of projects including commercial and industrial facilities as well as for both power and tele-communications utilities.

## PROJECTS

### Educational Experience

Talcott Elementary-Design of electrical systems for new facility

Fairdale Middle School-Design of electrical systems for new facility

### Healthcare Experience

West Virginia University / Ruby Memorial Hospital  
West Virginia Eye Institute—Electrical systems design for new facility.

Thomas Memorial Hospital—Electrical systems survey, upgrades and documentation.  
Standby emergency power engine generator replacement.

Roane General Hospital-Electrical design for renovations to reception area and office spaces and for emergency generator

Appalachian Regional Hospital-Electrical design for renovations

VA Hospital Clarksburg, WV-Electrical design for renovations to the second floor laboratory space, Northwest Entrance and Southwest Entrance

### Industrial Experience

Mylan Pharmaceuticals

Mylan Office & Lab Buildings—various electrical systems designs for new, existing and expanded facilities including new 23kV/12kV switchyard and grounding plain layout.

# Matthew C. Corathers, P.E.



Mechanical Engineer

(304) 598-2558

mcorathers@cmawv.com

## EDUCATION

West Virginia University  
Bachelor of Science -Mechanical Engineering

## PROFESSIONAL DEVELOPMENT

Registered Professional Engineer in WV

## EXPERIENCE

Matt joined CMA's professional staff in 2008 having previously worked for Whitman, Requardt and Associates in Baltimore, MD.

## PROJECTS

### VA Hospital, Clarksburg, WV

Mechanical design for renovations to Dental Lab

### Monongalia General Hospital

Evaluation of kitchen gas system  
Mechanical design for renovations to IT Workroom Cooling

### Mercer County Nursing Home Addition

Mechanical design for HVAC systems

### United Hospital Center

Mechanical design for MRI facility

### West Virginia University

Mechanical design for new two-story child care facility

### University High School, Morgantown, WV

Mechanical design for renovations/ upgrades to the HVAC systems

### Randolph County Building

Mechanical design for completion of two-story addition and modifications of the existing second floor to be used by the Family Court

### Monongalia County Family Court

Mechanical design for renovations to 4,850sf in existing court facility

# James A. Kerns



Mechanical/Electrical Designer

(304) 343-0316

[jakerns@cmawv.com](mailto:jakerns@cmawv.com)

## EDUCATION

West Virginia State College  
Institute, West Virginia  
Degree: Bachelor of Science in Industrial  
Technology/Building Construction

## REGISTRATIONS/PROFESSIONAL AFFILIATIONS

Member of ASHRAE

## EXPERIENCE

Mr. James A. Kerns has over 35 years experience in Mechanical and Electrical engineering design. He has been responsible for design projects in the educational, commercial, and health care fields.

Mr. Kerns has been a great asset to Clingenpeel/McBrayer & Associates. His knowledge and experience enables him to complete project designs in a clear and concise manner and in a timely fashion.

## PROJECTS

### **Thomas Memorial Hospital, South Charleston, WV**

MRI Facility, Ashton Place-New Facility  
MRI Facility Additions, Ashton Place  
Oncology Facility, Teays Valley, New Facility  
Medical Office Building South-New Facility  
Rashid Office Building-New Facility  
Main Lobby Renovation  
Emergency Room Renovations  
Nursery Department Renovations  
Intensive Care Unit Renovations

### **VA Medical Center, Clarksburg, WV**

Elevator Installation

### **United Hospital, Clarksburg, WV**

Elevator Renovation  
Medical Office Building-Variou MEP renovations

### **Charleston Area Medical Center**

Roadway Lighting-Memorial Division

### **Concord University**

New Chapel/Alumni Facility  
Fire Sprinkler Renovation of Dormitories

### **Davis Memorial Hospital**

70,000sf Addition



# Larry A. Weese



Mechanical/Plumbing Designer

(304) 343-0316

lweese@cmawv.com

## EDUCATION

West Virginia University  
Morgantown, West Virginia  
Degree: Division of Forestry BS,MS

## PROJECTS

### Medical Facilities Experience

Charleston Area Medical Center  
Women & Children's Hospital- Renovations to  
Emergency Room  
Hess Medical Office Building-New Facility  
Pinewood Medical Office Building-Renovations  
Southern West Virginia Hospice-New Facility  
NorthGate Doctor's Office Building-New Facility  
Davis Memorial Hospital-70,000sf Addition

### WV Department of Health and Human Resources

Office of Chief Medical Examiner, Charleston  
DHHR New Facility Mingo County

### Emergency Response Facilities

Randolph County 911-New Facility  
Mason County 911-New Facility  
Raleigh County 911-New Facility  
Orchard Manor Fire Station-New Facility

### Industrial Experience

Standard Laboratories-Laboratory Addition  
Dow Process Control-New Facility  
Diamond Electric-Expansion

### Commercial Experience

Bobcat of Advantage Valley-New Facility  
Allegheny Springs Restaurant

## PROFESSIONAL DEVELOPMENT

Various seminars and technical sessions

## EXPERIENCE

Mr. Larry Weese, Mechanical Designer for Clingenpeel/McBrayer & Associates, Inc. brings 20 years of mechanical design and project management experience to our clients.

## Davis Memorial Hospital, Elkins, WV

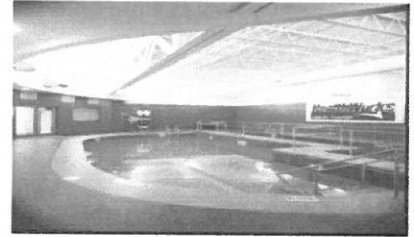


CMA Engineering has provided mechanical, electrical and plumbing design services for numerous projects at **Davis Memorial Hospital**. Projects include:

- New Cancer Center
- New 70,000sf Addition
- New Operating Suites
- Pharmacy IV Laboratory Clean Room
- New Linear Accelerator Facility
- Boiler Replacements
- Fire Suppression Renovations
- Kitchen and Dining Room Renovations
- AHU Cool Freeze Protection
- Emergency Generator Upgrades
- Laundry Exhaust Air Handler
- Kitchen Make-Up Air Unit
- Cooling Tower and Chiller  
Replacement
- Energy Audit



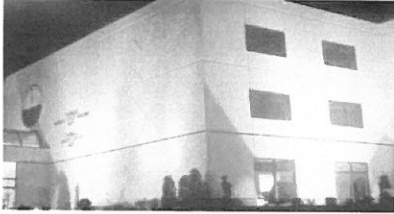
## West Virginia University Hospitals



CMA Engineering has provided mechanical, electrical, plumbing and fire protection design services for over fifty projects of varying scope and size at **West Virginia University Hospitals**. Projects have included:

- New West Virginia University Eye Institute
- Chestnut Ridge Center –HVAC upgrades to First and Second Floors
- Ruby Memorial Hospital-Addition to Emergency Room
- Ruby Memorial Fire Alarm Upgrade
- Cheat Lake Clinic– 21,000sf Addition that include examination rooms and x-rays facilities
- Physicians Office Center-Renovations and Upgrades to the First Floor for conversion to a MRI Facility
- Healthworks-new 37,000sf Physical Therapy Facility
- WVU Biomedical Research Facility-Bidding Documents for the following site utilities—chilled water supply and return steam condensate, 23kv and 480kv distribution with associated duct banks, and telephone and communication duct banks.
- WVUH-Emergency Room Expansion
- WVUH-Gamma Knife Installation
- Health Science Center-Tunnel Air Flow Study
- Health Science Center Smoke Evaluation
- WVU School of Medicine Charleston– HVAC Renovations

## Thomas Memorial Hospital, South Charleston, WV



CMA Engineering has provided engineering design services for over 80 projects at **Thomas Memorial Hospital in South Charleston, WV**. The projects have varied in scope and complexity and have included:

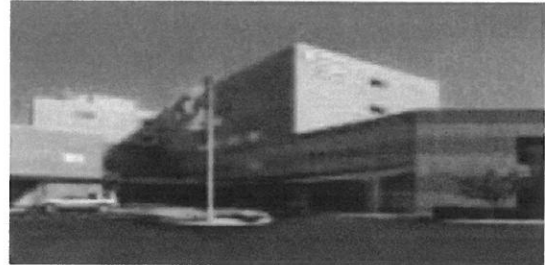
- Electrical Schedules
- HVAC Renovations in various departments
- Chiller Replacements
- Air Handler Replacements
- Renovations to the Lobby
- Renovations to the Nursery
- Renovations to the Operating Rooms
- Renovations to the Emergency Room
- Renovations to the Intensive Care Unit
- Design of Exterior Lighting
- Emergency Generator Upgrades
- New Medical Office Buildings North
- New Medical Office Building South
- New MRI Facility at Ashton Place
- New Oncology Facility in Teays Valley



## Project Experience

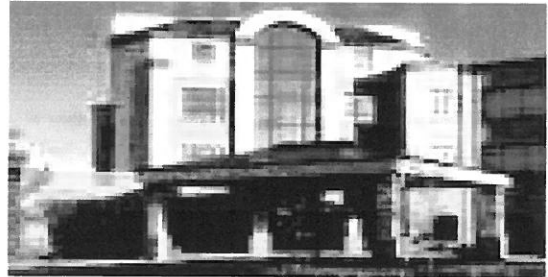
### **CAMC-Women & Children's Division**

CMA Engineering provided mechanical, electrical, plumbing, fire sprinkler, fire alarm and communication system design for renovations to the emergency room facility.



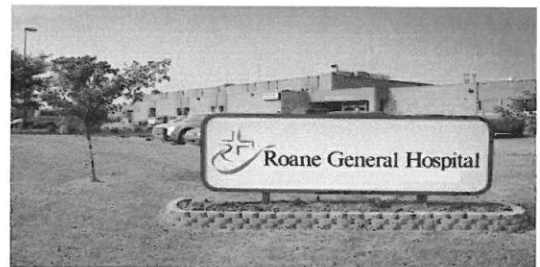
### **Princeton Community Hospital**

CMA Engineering provided mechanical, electrical and plumbing engineering services for the renovation of 3,000sf into a MRI facility with associated spaces.



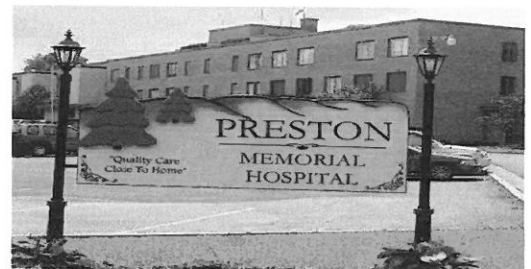
### **Roane General Hospital, Spencer, WV**

CMA Engineering is currently providing mechanical and electrical engineering services for the renovation of approximately 4,300sf of reception area and associated office space. CMA is also providing engineering design services for the installation of a second emergency power system and electrical infrastructure



### **Preston Memorial Hospital, Kingwood, WV**

CMA Engineering provided mechanical, electrical and plumbing engineering services for two new emergency isolation rooms and corresponding adjacent ante rooms.



## Project Experience



### **Engineering Science Building , WVU**

CMA Engineering provided design of new HVAC, plumbing, electrical, fire protection systems within existing space to provide three distinct clean room space (4,500sf) for WVU Engineering Department for conducting experiments on new technology. Project also include design of 2,000sf new mechanical roof top penthouse.

### **Standard Laboratories**

CMA Engineering provided design services for the HVAC, plumbing and electrical systems for the addition of a 3,300sf laboratory and testing facility and and,000sf prep facility.



### **WV DHHR-Office of Chief Medical Examiner**

CMA Engineering provided mechanical, plumbing, standard and emergency electrical power, lighting, communications and fire alarm systems design services for the renovation of 619 Virginia Street, West into the State Medical Examiners facility. Project encompassed the renovation of the first floor area

### **WV DHHR-Williamson**

CMA Engineering provided mechanical, electrical and plumbing design services for the new 20,500sf facility, consisting of administrative areas, private offices, lounges, conferences rooms and laboratory



### **Mylan Pharmaceuticals**

CMA Engineering has provided mechanical, electrical, plumbing, fire protection and communications design services for various new construction at Mylan Pharmaceuticals in Morgantown, WV. Projects include the North Plant expansion, the Quality Control Laboratory at Chestnut Ridge, the Robotics Laboratory and the new laboratory facility at Collins Ferry Road.

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