

3H-4

Agenda Item #:

PALM BEACH COUNTY
BOARD OF COUNTY COMMISSIONERS
AGENDA ITEM SUMMARY

Meeting Date: September 15, 2009 [X] Consent [] Regular
[] Workshop [] Public Hearing

Department: Facilities Development and Operations

I. EXECUTIVE BRIEF

Motion and Title: Staff recommends motion to approve: Consultant Services Authorization (CSA) No. 3 to contract with Heery International, Inc. (R2006-2219) for commissioning services for the West County Detention Facility in the amount of \$232,650.

Summary: CSA No. 3 will provide commissioning services for the new expansion to the West County Detention Center. Commissioning services provide an independent oversight and evaluation of mechanical and electrical systems to ensure the systems are contract compliant, exceed or meet all standards, and are operating as designed and intended. The services also include demonstrating the performance of equipment and systems. These services are critical for this project as once the facility is occupied there are no opportunities to take it out of service for repairs, replacements, etc. The Small Business Enterprises (SBE) participation for this project is 15%. Heery International, Inc. will be providing 0% in this CSA. Overall SBE participation is 13.5%. CSA No. 3 is funded from the Criminal Justice and Public Improvement Revenue Bond series 2008. (Capital Improvements Division) Countywide/District 6 (JM)

Background and Justification: On April 15, 2006, the Board approved proceeding with the Jail Expansion Program II consisting of the expansion of the West County Detention Facility and the Stockade and renovations to the Main Detention Center. On October 17, 2006, the Board approved the contract with Heery International, Inc. to provide Program Management Services for the West Detention Center.

Attachments:

- 1. Location Map
- 2. Budget Availability Statement
- 3. Consultant Services Authorization No. 3

Recommended by: Joe Anthony Wolf 8/25/09
Department Director Date

Recommended by: [Signature] 9/9/09
County Administrator Date

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2009	2010	2011	2012	2013
Capital Expenditures	<u>\$232,650</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Operating Costs	<u> </u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
External Revenues	<u> </u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Program Income (County)	<u> </u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
In-Kind Match (County)	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
NET FISCAL IMPACT	<u>\$232,650</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

ADDITIONAL FTE POSITIONS (Cumulative) _____

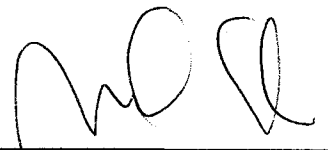
Is Item Included in Current Budget? Yes X No _____
 Budget Account No: Fund 3053 Dept 411 Unit B362 Object 6502
 Reporting Category _____

B. Recommended Sources of Funds/Summary of Fiscal Impact:


CSA No. 3 is funded from the Criminal Justice and Public Improvement Revenue Bond series 2008.

III. REVIEW COMMENTS:

A. OFMB Fiscal and/or Contract Development and Control Comments:

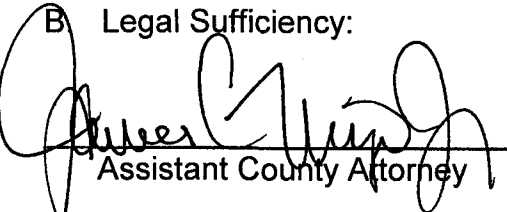


 OFMB
 9/14/09



 Contract Administrator
 9/18/09

B. Legal Sufficiency:



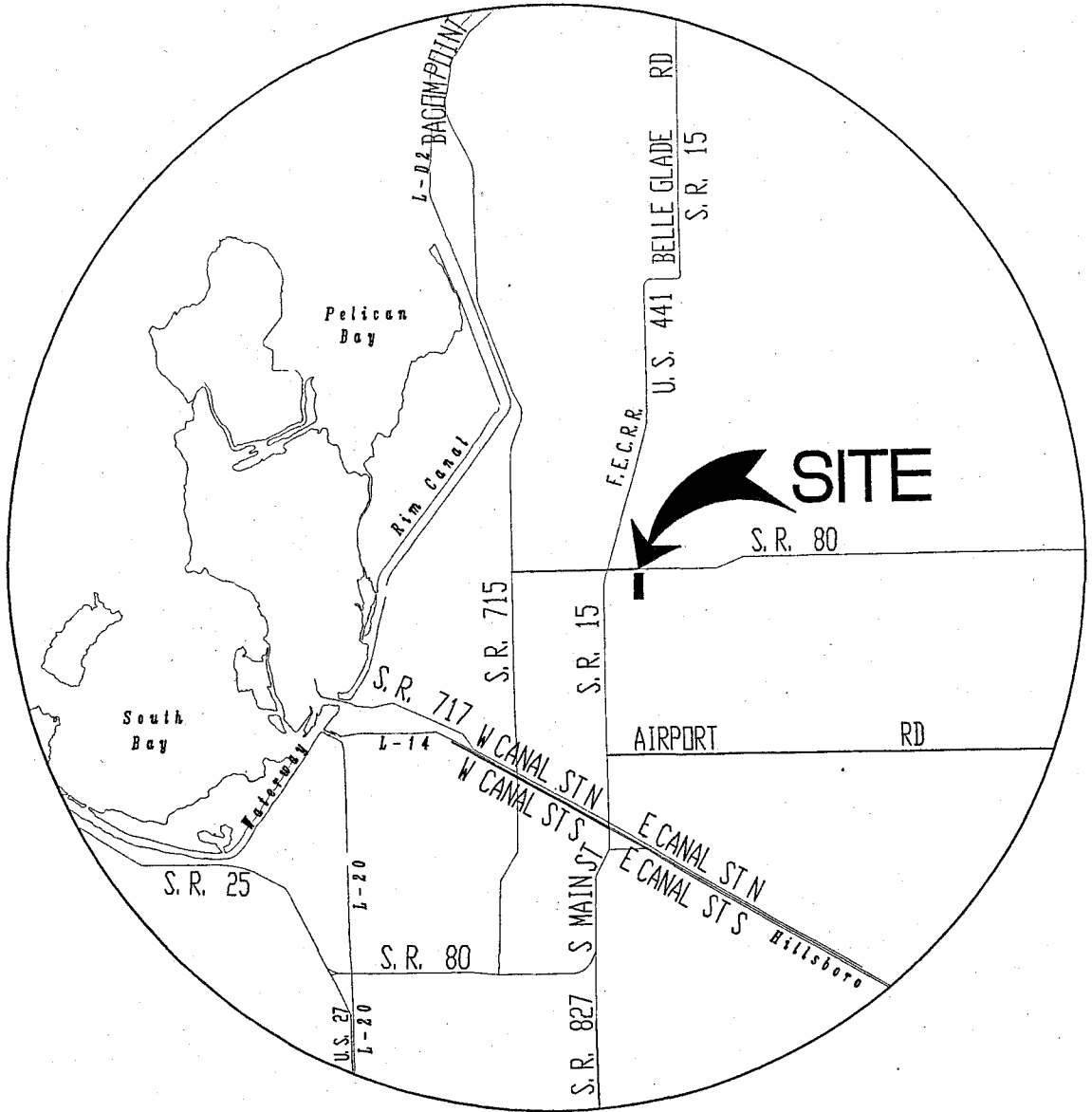
 Assistant County Attorney
 9/9/09

This item complies with current County policies.

C. Other Department Review:

 Department Director

This summary is not to be used as a basis for payment.



LOCATION MAP

N.T.S.

ATTACHMENT # 1

FACILITIES DEVELOPMENT & OPERATIONS
BUDGET AVAILABILITY STATEMENT

REQUEST DATE: 08/11/09 REQUESTED BY: Mike McPherson PHONE: 233-0278
FAX: 233-0270

PROJECT TITLE: PBC Jail Expansion Program II PROJECT NO.: 06213
(West County)

ORIGINAL CONTRACT AMOUNT: BCC RESOLUTION#:

REQUESTED AMOUNT: \$232,650.00 DATE:

CSA ~~or~~ CHANGE ORDER NUMBER: CSA No. 3

CONSULTANT/CONTRACTOR: Heery International, Inc.

PROVIDE A BRIEF STATEMENT OF THE SCOPE OF SERVICES TO BE PROVIDED BY THE CONSULTANT/CONTRACTOR:

Professional services shall include Commissioning Services for the new expansion to the West County Detention Center.

CONSTRUCTION	
PROFESSIONAL SERVICES	<u>\$232,650.00</u>
STAFF COSTS** (Design/Construction Phase)	
MISC. (permits, prints, advertising, etcetera)	
TOTAL	<u>\$232,650.00</u>

** By signing this BAS your department agrees to these staff costs and your account will be charged upon receipt of this BAS by FD&O. Unless there is a change in the scope of work, no additional staff charges will be billed.

BUDGET ACCOUNT NUMBER (IF KNOWN)

FUND: 3053 DEPT: 411 UNIT: B362 OBJ: 6502

FUNDING SOURCE (CHECK ALL THAT APPLY): AD VALOREM OTHER

FEDERAL/DAVIS BACON

BAS APPROVED BY:  DATE: 8-18-09

ENCUMBRANCE NUMBER: 113007-806

**CONSULTANT SERVICES AUTHORIZATION
HEERY INTERNATIONAL, INC.**

**JAIL EXPANSION PROGRAM II
PROJECT NO. 06213
COUNTYWIDE**

THIS AUTHORIZATION NO. 3 to the Contract dated 10/17/06 (R2006-2219) between Palm Beach County and the Consultant identified herein is for the Consultant Services described in Item 3 of this Authorization.

1. **CONSULTANT:** HEERY INTERNATIONAL, INC.
999 PEACHTREE STERREET NE
ATLANTA, GEORGIA 30309-3953

2. **Services completed to date:** Approximately 67% of their contract has been completed.

3. **Description of Services to be provided by Consultant:** Professional services include Commissioning Service for the West County Detention Facility as detailed on the attached proposal dated June 9, 2009.

4. **History:**

<u>CSA #</u>	<u>Amount</u>	<u>Date Approved</u>	<u>Approved By</u>
Original	\$2,043,104.00	10/17/06	BCC
CSA #1	\$ 710,728.00	10/16/07	BCC
CSA #2	\$3,311,688.00	07/22/08	BCC

5. **Time of Commencement:** Consultant shall begin work promptly on the requested services upon receipt of this executed document which shall constitute official "Notice to Proceed".

6. **Compensation:** The compensation to be paid to the Consultant for the requested services shall be:

Lump Sum charge of \$232,650

7. **This Authorization may be terminated by the County without cause or prior notice. In the event of termination not the fault of the Consultant, the Consultant shall be compensated for all services performed to termination date, together with reimbursable expenses (if applicable) then due.**

Consultant agrees to waive any and all claims for lost profits or anticipated future profits in the event of a termination with or without the cause under this Contract.

ATTACHMENT # 3

8. If not previously provided or for a new project, the Consultant shall provide County with an executed Conflict of Interest Disclosure Form, attached hereto and incorporated herein.
9. **EXCEPT AS HEREBY AMENDED, CHANGED OR MODIFIED**, all other terms and conditions of the original Contract remain in full force and effect.

IN WITNESS WHEREOF, this Authorization is accepted, subject to the terms and conditions of the aforementioned Contract.

COUNTY

ATTEST:
Sharon R. Bock, Clerk & Comptroller

PALM BEACH COUNTY
BOARD OF COUNTY
COMMISSIONERS

By: _____
Deputy Clerk

By: _____
Jeff Koons, Chairman

WITNESS:

Carolyn Jones

HEERY INTERNATIONAL INC.

By: _____
Name: David J. Kimmel

Carolyn Jones
Name (type or print)

Title: Vice President

Date: August 24, 2009

Approved as to Form and Legal Sufficiency

Approved as to terms and conditions

Assistant County Attorney

Army Wolf
Director - F D & O

HEERY

June 9, 2009

Richard L. Milliken
Program Manager
Heery International, Inc.
38840 1/2 State Road 80, Trailer 5
Belle Glade, Florida 33430

Architecture
Construction Management
Engineering
Facilities Management
Interior Design
Program Management

Re: **Palm Beach County Jail Expansion II, West County Facility, Additions and Renovations to Main Jail - Commissioning Services**

Dear Richard:

Heery International, Inc. is pleased to present our proposal to provide Commissioning Services for the above project.

Our commissioning team provides experience, commitment, and a history of success. Heery has completed commissioning services for numerous facilities nationwide, and we would be pleased to provide this extensive experience to meet the needs of your project. We have developed a strong team of engineering and architectural professionals that bring expertise in a cost effective manner to your project. As commissioning manager Richard Young brings over 15 years of experience working with complex mechanical and electrical and controls systems. We would propose Richard, based in our Orlando office, as the Lead Commissioning Agent for this project. Richard will be responsible for project delivery and will serve as your single point of contact to coordinate all commissioning efforts of your program. Richard will be supported by a diverse and committed team of built environment professionals to ensure that the specialist elements of the projects engineering systems, such as the security electronics, receive the necessary attention from the appropriately experienced specialized professionals.

At Heery, corrections and justice has been a specialty for over 20 years. Our reputation comes from consistently fielding the country's most experienced team of experts. The result is over twelve million square feet of detention / correction facilities. Heery has a reputation as a national leader in the criminal justice market. The firm's justice work has won multiple awards at the local and state level. The AIA Committee on Architecture has recognized the firm nationally for Justice Facilities Review four of the last five years. With the depth of resources and resultant expertise in-house, we can address and resolve the troublesome issues that accompany any significant public project.

We offer you this considerable depth of resources, both in manpower and specialist expertise not available from many other commissioning providers. The Orlando office possess the diverse experience of over 50 construction industry professionals specializing in the design of correctional, justice and healthcare facilities and be can be further supported by additional specialized experts across the country. The Heery commissioning group operates nationwide out of 8 office locations and consists of 24 commissioning professionals, 6 based in Florida, dedicated solely to providing commissioning services. Neil Ross and Louis Starr, based in our Portland Oregon, office possess extensive experience in the commissioning of correctional facilities and associated specialist electronic systems. Neil and Louis will assist Richard in the review of all associated technical submittals and will apply their expertise and experience in assisting in developing the system specific functional test plans for these systems. It is not anticipated that Neil or Louis will be required to visit site and their input will be limited to remote desk top review and document development.

Heery International, Inc.

A group of professional service practices

4700 Millenia Boulevard, Suite 550 Orlando, Florida 32839
Telephone 407 992 6300 Fax 407 992 6399

A00002293 / EB0000176

ATLANTA BALTIMORE BLVD, OR BOSTON CHARLOTTE CHICAGO CLEVELAND DALLAS DENVER HOUSTON IOWA CITY
JACKSONVILLE LONG BEACH LOS ANGELES MIAMI NASHVILLE NEW YORK ORLANDO PHILADELPHIA PHOENIX PORTLAND
RICHMOND SACRAMENTO ST. LOUIS TACOMA THE WOODBRIDGE TUCSON WASHINGTON, DC YOUNGSTOWN, OH

Heery has provided commissioning services to clients in the US since 1999, over this time Heery have served a variety of clients, successfully commissioning over 200 projects across all sectors of the building industry. Commissioning services have been provided by Heery in Europe since the early 1990's. The Heery commissioning group is recognized as a national leading commissioning provider. Heery maintains commissioning accreditation with BCA and USGBC through its LEED program and is recognized as an approved commissioning provider by the Department of Energy.

While working as part of the team, we never forget that we are the owner's representative and advocate for a functional and operational facility delivered at project completion. We know it is essential that all project participants form a team, with successful project completion the common goal.

Our approach is simple. We listen, then respond to your needs and deliver effective solutions that will achieve your goals.

The enclosed proposed scope of work details our recommended level of services for a project of this nature and complexity. We have modified our proposal from our original submittal. Per your advice we have limited our commissioning scope to cover commissioning of the new Main Jail. As per your instructions we have omitted commissioning services relating to the outbuildings and renovation of the existing jail and we have removed post occupancy commissioning services (warranty phase).

We recognize that a Field Mechanical Inspector is appointed to the project PM team. We have limited our usual full scope of commissioning services accordingly to ensure that we do not duplicate efforts of the Field Mechanical Inspector. We have allowed for liaising fully with this valuable team member and to direct, assist and advise them with respect to commissioning related elements of the construction effort.

Areas we identify as the responsibility of the Mechanical Inspector which do not form part of our proposed Commissioning Agent scope of work include:-

- Witnessing of all mechanical systems static tests would be the sole responsibility of the Mechanical Inspector.
- Witnessing of mechanical systems dynamic testing and balance would be the responsibility of the Mechanical Inspector. We will of course assist the Mechanical Inspector with regards to commissioning related items.

Our proposal recognizes that the specifications call for factory testing of equipment, specifically the chillers, AHU's, ATS and Generator. An allowance is incorporated in our proposal for attending, witnessing and reporting on these factory tests. If this service is deemed as not required our compensation would be adjusted accordingly. We have incorporated \$11,800.00 in our fee proposal to cover both labor and associated travel and subsistence expenses to carry out this element of the work.

Our Labor fee for providing commissioning services as defined in the attached scope of commissioning services document, would be \$232,650.00 (Two Hundred and Thirty Two Thousand Six Hundred and Fifty Dollars). Our offer is valid and open for acceptance for a period of thirty days.

Our proposed Labor fee is inclusive of expenses incurred in undertaking duties as described in the attached scope of work. This figure anticipates that all meetings will take place at the project site.

Our proposed fee is broken down as follows:

• Review Phase	\$ 23,701.00
• Construction Phase	\$ 80,520.00
• Acceptance Phase	\$ 128,429.00
• Warranty Phase	Excluded
• Cx Total	\$ 232,650.00

We understand the County's preference to let contracts on a lump sum not to exceed basis, payments being prorated on a monthly basis throughout the duration of the contract.

Hourly compensation applied to the Agreement would be \$165.43 including expenses for year 2009 & 2010, if additional services are required and agreed they would be billed on an approved time spent basis against this hourly rate.

Hourly rate increase for each additional year shall be negotiated with the owner with a minimum escalation of 3%.

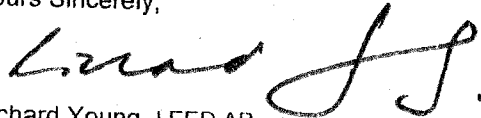
We understand that testing, adjusting and balancing (TAB) of the systems will be undertaken under a separate contract, maintaining the CxA's third party independence with respect to these activities. Our proposed scope allows for assisting with the managing and interfacing with the separate TAB contractor on behalf of the Owner.

In addition to witnessing the activities of the TAB agency, this proposal includes for Heery to independently validate the as installed systems recorded performance. Utilizing our own staff and equipment, we will replicate a representative sample of the Test & Balance Engineers recorded test results, checking for measurement repeatability and stable system control. Our independent field data will be compared to the TAB data recorded in the final test and balance report.

The attached scope of work lists the proposed engineering systems to be managed and commissioned by Heery in providing services as the Commissioning Agent for this project.

We trust our response to your enquiry meets your requirements. If however, you require any clarification, additional information, or if we can be of any further assistance please do not hesitate to contact the undersigned.

Yours Sincerely,

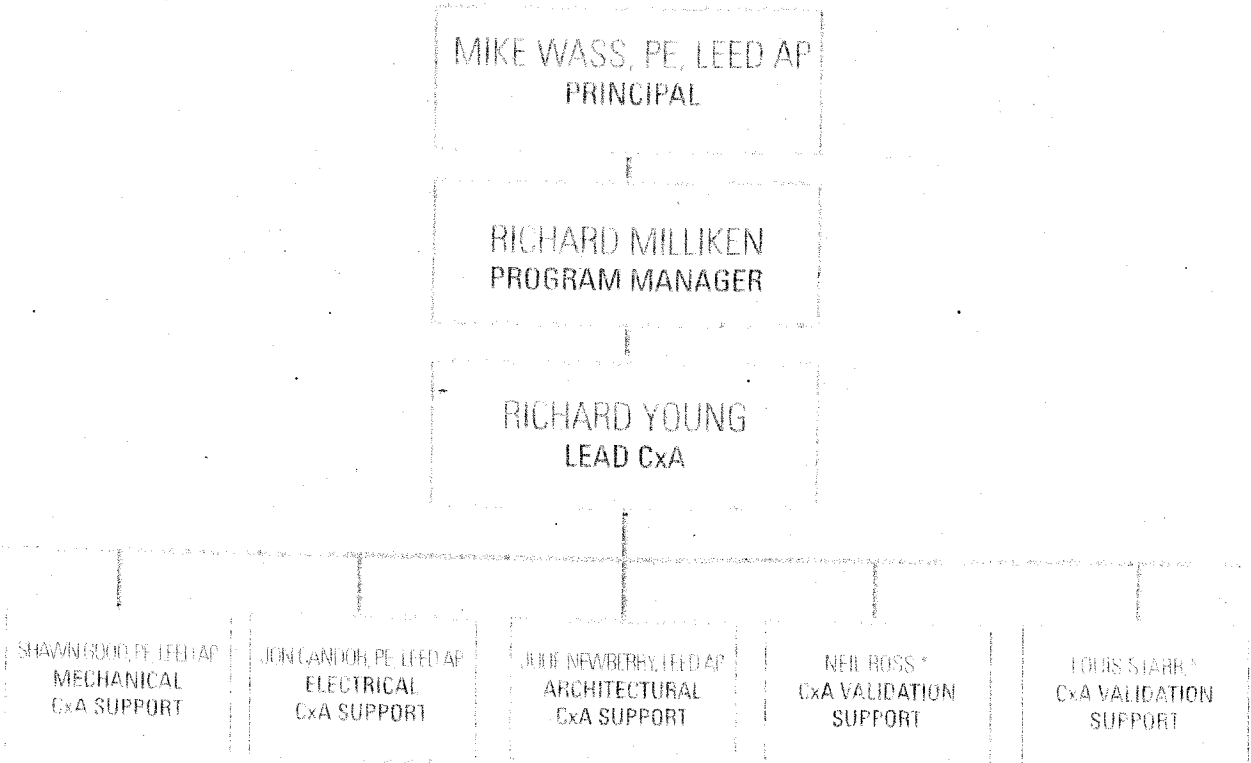


Richard Young, LEED AP

RDY:MJW:cam



**PALM BEACH COUNTY JAIL EXPANSION II
WEST COUNTY FACILITY - COMMISSIONING
PROJECT ORGANIZATION CHART**

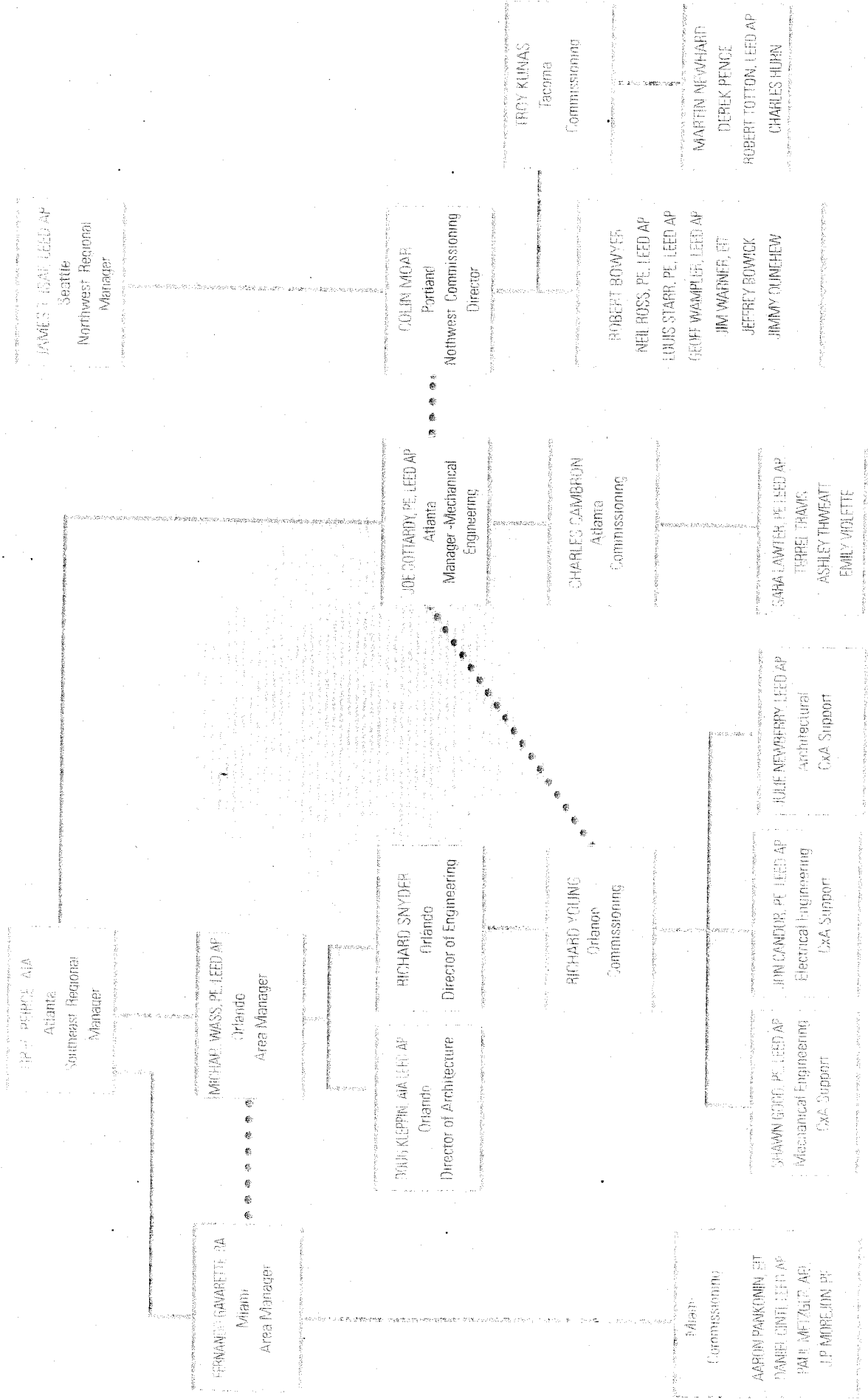


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- Remote CxA support from Portland office.
- Assist in production of specialist functional test plans.
- Assist in review of contractors specialist submittals.



COMMISSIONING GROUP



SCOPE OF COMMISSIONING SERVICES

1.0 General

The Owner is committed to commissioning the Project with the intent that all systems are complete and functioning properly prior to project completion and that facility staff has adequate system documentation and training.

The Commissioning process shall oversee and coordinate the traditionally separate functions of design & operational review, equipment startup, system performance verification, testing and balancing, control system program testing and calibration, construction and system handover documentation, and facilities operations training.

Specific requirements of the Commissioning process and responsibilities, duties, and obligations of the Commissioning Authority (CxA) team are described in Section 2, Commissioning Tasks. To accomplish these tasks, the CxA shall be required to coordinate his or her activities with other entities. The Commissioning process does not take away from or reduce the responsibility of the project designers or installing contractors to provide a finished and fully functioning product. It is noted that the services of the Owner, Design Professional, Construction Manager, and various subcontractors are not provided for under this Scope of Work and the CxA is not responsible for providing their services.

The primary role of the CxA shall be to review the design documents, develop the Commissioning Specification and Plan and coordinate the execution of activities to meet that plan; observe and document the installation, verify checkout of installed components, witness & verify start-up and equipment / system testing to establish that equipment and systems are functioning in accordance with the owner's requirements and the Contract Documents. The CxA will undertake direct validation of the installing contractors test results by means of replicating an agreed percentage of tests using his own staff and his own calibrated equipment. The CxA will assist the Using Agency and Owner in developing correct and complete documentation of the construction effort. The CxA will not be responsible for design concept, design criteria, compliance with codes, design, or general construction scheduling, cost estimating, construction management, or construction supervision. The CxA may assist the Project Team with resolution of issues, problem solving, or the correction of construction non-conformance or deficiencies, but ultimate responsibility for meeting the project objectives and acceptance of the installations resides with the A/E team, the Construction Manager and installation contractors.

2.0 Commissioning Tasks

The County is currently expanding its West County Jail Facility in Belle Glade Florida. The Commissioning scope for the program is limited to the new Addition to the Main Jail - West County Facility, Belle Glade, Florida.

Palm Beach County
Jail Expansion II – West County Facility
Additions and Renovations to Main Jail
Preliminary Scope for Commissioning Services

At the request of the program manager for the project the following out building facilities are not to be commissioned and are not included under this proposed commissioning scope of work.

- The new Drug Farm.
- The new Eagle Academy.
- The new Palm Tran Facility.
- The new Fueling Depot.
- The new Impound Building.

The element of work associated with the refurbishment of the existing facility is also excluded from this commissioning scope.

The basis of this scope of work has been developed utilizing the 100% Design Development documents issued 30th November 2007.

2.1 Typical Systems to Commission

The specific systems that shall be commissioned include:

- Central Heating Systems, boilers, internal distribution pipework, secondary pumping and control.
- Central Chilled water distribution system, chillers, chilled water distribution pipework, pumping and control.
- HVAC Systems.
- Air handling units.
- Fan coil units.
- Local A/C.
- Ductwork systems.
- Smoke and Fire Dampers.
- Terminal Units.
- VAV Reheat.
- Air distribution devices.
- General Exhaust systems.
- Toilet, locker room and janitor closet exhaust systems.
- Kitchen ventilation systems.
- Smoke control and evacuation systems.
- Building automation systems, including linkages to remote monitoring and control interface sites energy monitoring & management systems.
- Domestic cold water systems, including water distribution pipework.
- Domestic hot water systems, water heaters, circulating pumps and distribution pipework.
- Drainage, sanitary and rain water systems.
- Plumbing fixtures.
- Natural gas system.
- Sprinkler systems, pumps and monitoring.

Palm Beach County
Jail Expansion II – West County Facility
Additions and Renovations to Main Jail
Preliminary Scope for Commissioning Services

- Chemical water treatment and pipework flushing / cleaning and chlorination.
- Electrical distribution systems.
- Emergency power system, generator set, auto transfer switches.
- Lighting systems including lighting controls.
- Lightning protection.
- Voice and data structured cabling system.
- Fire alarm system.
- Security and access control.
- Security electronics.
- CCTV and Digital Recording.
- Intercom systems.
- Paging system.
- Door Control and Monitoring.
- Staff Duress system.
- Irrigation system.

Areas identified as the responsibility of the Mechanical Inspector and as such not forming part of this Commissioning Agent scope of work.

- Installation inspection of HVAC systems during construction, we have assumed this to fall within the responsibility of the Mechanical Inspector. We will of course assist the Mechanical Inspector with regards commissioning related items. The CxA's site inspections shall be limited to items relating to commissionability.
- Witnessing of all mechanical systems static tests would be the sole responsibility of the Mechanical Inspector.
- Witnessing of mechanical systems dynamic test and balance (TAB) would be the responsibility of the Mechanical Inspector.

Commissioning, testing and validation of Laundry Equipment and Food Service Equipment is not included. Commissioning of these items shall be the responsibility of others. The CxA has allowed for commissioning infrastructure services (HVAC, water, gas and electrical services) to this equipment up to the point of equipment connection.

2.2 Design Phase

- The CxA shall prepare a Project Commissioning Plan to outline the process, relationships and scope of work for commissioning the project. The document will be issued within two weeks of appointment. The plan shall:
 - Define the systems included in the project commissioning process,
 - Provide procedures for coordinating work to permit documented verification of installation and start up.
 - Define the scope & responsibilities for Operational & Functional Testing.
 - Provide a general schedule for commissioning milestones for incorporation by the Construction Manager into the master schedule.
 - Define scope & responsibilities for Owner's Operator Training

- Define procedures for reporting, deficiency resolution, and testing methods.
- The CxA will conduct a commissioning-focused review of the GMP set of design documents. Focus shall be on commissioning requirements in documents, commissioning provisions included in the design, energy efficiency, maintainability and operations.
- Prepare a draft outline set of equipment and system functional acceptance testing documents to be used by the commissioning team for verification purposes during the testing phase of the project. These will be finalized and issued to the design team and contractors for comment during construction and will form part of the project acceptance close out documentation.

2.3 Construction Phase

Commissioning during the construction phase is intended to verify for the Owner and the Using Agency that the project requirements, as defined by the contract documents, are met. The CxA shall complete the following tasks during the construction phase:

- Conduct a partnering meeting with Owner, Owner's Rep, Construction Manager and the construction team to discuss Commissioning scope, plan, and schedule.
- Coordinate the Commissioning work and, with the Construction Manager (CM), agree the estimated durations or milestones of Commissioning activities that are being input into the master schedule.
- Monitor the continuous update of progress against the master schedule and commissioning coordination throughout construction.
- Monitor and update the Commissioning Plan during the construction phase as required with coordination and activities for CxA, Owner, CM and Contractor review.
- Review and comment on normal contractor submittals applicable to systems being commissioned for compliance with commissioning requirements.
- Attend and witness specified factory testing of Chillers, AHU's, ATS and Generator, per clauses 236426 2.1 B, 237313 2.8 B, 263600 2.6 A, 263213 2.13 B respectively.
- Confirm that data or cut sheets and O&M material is submitted to the project team by the contractor in a timely manner. This material will be needed to assist in finalizing start-up and testing procedures.
- Review training plans by contractors and vendors. Confirm compliance with bid specs.
- Finalize pre-functional and final functional test procedures for the equipment and systems specific to the equipment being installed.
- Prepare and submit finalized Functional Acceptance Test procedures to the Design team and contractor for comment.
- Coordinate with the contractor to witness and verify startup of major equipment by manufacturer's reps or specialist contractors.
- Review and approve TAB execution plan prepared by the Contractor.
- Review and approve Contractors equipment start up plans.
- Perform site inspection during rough-in of systems and equipment; provide observation reports and installation verification of commissioning equipment and testing arrangements.
- Maintain & distribute a Commissioning Observation Deficiency log.
- Attend Monthly on-site meetings during the Construction phase for review of progress, coordination, and issues resolution.

- Witness a sample of pipe pressure tests and flushing procedures, sufficient to be confident that proper test pressures, velocity measurements, clean & dirty samples and chemical cleaning procedures were followed.
- Witness a sample of electrical mains, distribution cable LV systems end-to-end testing, Fire Alarm checkout, HVAC TAB, BAS point by point and calibration of controls.

2.4 Acceptance Phase

Commissioning during the acceptance phase is intended to demonstrate and verify, by replicating the installing contractors tests, the performance of the equipment and systems installed during the construction phase. That the systems operate and function correctly when interfaced with each other, meeting the requirements of the Design Intent and Contract Documents. The CxA shall complete the following tasks during the acceptance phase:

- Continue to monitor commissioning update of the master schedule and coordination throughout construction with CM and multi-prime Sub-Contractors.
- Obtain pre-functional reports from Contractors with inspection sign-offs that the systems have been checked out.
- Perform independent pre-startup inspection checks.
- Observe first contractors pre-functional test of each type of system, including mechanical, controls, electrical, and specialty systems.
- Oversee the Test, Adjust and Balance (TAB) of the hydronic and air systems. Witnessing checks of flow and pressure readings at circuit setters, terminal devices, AHU's, fans, pumps, and main plant equipment shall be undertaken by the Mechanical Inspector. The CxA shall document any discrepancies. The CxA shall review and discuss the preliminary and final TAB report and assist in resolving any identified discrepancies.
- Validate the contractors TAB commissioning results by independently replicating separately an agreed percentage of recorded tests utilizing the CxA's own staff and equipment calibrated to nationally traceable standards. The CxA shall replicate a minimum of 15% of TAB tests.
- Direct and verify / witness Functional Acceptance Testing of each system and major piece of equipment to demonstrate that each item of equipment and system is operating according to the Design Intent and contract documents. Functional Acceptance Testing shall include operating the system and components through each of the written sequences of operation against the functional test plans developed by the CxA. Functional testing shall be performed on all control points once the contractor's point by point records have been submitted and reviewed.
- Provide troubleshooting to assist in resolving commissioning and control problems, as they are uncovered.
- Check the EMS / DDC controls system graphics to verify all graphic pages are developed and display the data in a format that is easily understood and useful to the operations department. Check a sample of points mapped to the graphics to confirm they are correct and units and system descriptors are displayed correctly. At a minimum all of the central plant and major equipment / system pages will be verified and 10% of the terminal units.
- Keep a detailed report audit log of testing for each piece of equipment.

- Maintain a commissioning observation deficiency log of any items found to be a problem, poorly installed, or discrepancies. Provide the log and test results to the Owner, GC, and Contractor with recommended actions. Keep the Actions Required AR log in a format that records the closeout of the issues identified.
- Coordinate retesting as necessary. The CxA has allowed for witnessing one functional retest per system as part of normal checkout. More than one retest due to incomplete work or installation discrepancy will be considered work outside the normal scope of work and will be duly compensated as additional service.
- Notify the Owner, Owner's Rep, Design Professional and Contractor of unacceptable findings if 10% of identical pieces of validated equipment fail to perform to the requirements of the contract documents because of manufacturing or installation defects which do not allow it to meet the submitted performance spec, request an explanation of the problem and proposed solution from the Contractor; and then review the proposed solutions.
- Chair and hold regular meetings while on-site through the acceptance phase.
- Review O & M documentation for commissioning information completeness. This review shall be in parallel with the A/E team's review of the O & M documentation for conformance to the project specifications.
- Review the detailed equipment training of the operating and maintenance personnel by the contractor. Confirm appropriate level, documentation and thoroughness of training.
- Provide three hard copy and three CD-ROM electronic copies of the Commissioning Final Report. The report shall include an executive summary, list of participants and roles, brief system descriptions, and the following sections:
 - a. Design Intent and Basis of design
 - b. Commissioning Agents Design review reports
 - c. Pre-functional checklists completed
 - d. Functional Acceptance checklists completed
 - e. TAB reports
 - f. System schematics
 - g. Control point by point records, control program strategies and set points
 - h. Commissioning Observation Deficiency Log highlighting any AR's outstanding

3.0 Schedule

The duration of services to be provided is from April 2009 through to owner occupation anticipated at August 2010. Extension to the project duration shall be compensated by negotiation.

4.0 Test Equipment

Tools, test equipment, portable data-loggers, instrumentation and the like supplied and temporarily installed by the CxA to facilitate testing and validation of system and equipment performance shall remain the property of the CxA and will be provided exclusively for use by the CxA. The CxA shall not be responsible for provision of tools or equipment for use by any third party.

5.0 Site Visits.

To discharge responsibilities as defined by this commissioning scope of work the CxA has included for the following visits to site. CxA site attendance shall be agreed in advance between the Owners Program Manager and the Senior CxA.

Generally, to regularly attend meetings and undertake installation inspection reviews.

- 1 visit per month February 2009 through March 2010. 14 CxA site days.
- 2 visits per month through April and May 2010. 4 CxA site days.
- 1 weekly visit to site through June and July 2010. 9 CxA site days.

General 27 Visits.

The CxA will visit site as required once notified in writing by the Program Manger to undertake the following specific Cx activities as follows. These Cx activities should be scheduled accordingly by the Construction Manager. Activities may be undertaken by multiple CxA staff attending site concurrently as required and dictated by schedule.

- Construction Phase Commissioning partnering meeting 1 CxA site day.
- Perform Independent pre-startup equipment installation checks 10 CxA site days.
- Independent CxA validation of the HVAC TAB report 6 CxA site days.
- Observe contractors equipment start up of major plant items. 5 CxA days
- Functional Acceptance Testing Mechanical systems 18 CxA site days.
- Functional Acceptance Testing Electrical systems 6 CxA site days.
- Functional Acceptance Testing Security systems 10 CxA site days.
- Retesting of identified FAT deficiencies 3 CxA site days.
- Observe facilities staff training provided by the contractor 5 CxA site days

Specific CxA Activities 64 CxA site days.

Total CxA site attendance allowance 91 CxA site days.



Richard Young, Senior Commissioning & Building Services

Responsibility:
Commissioning

Education:
HND Mechanical Engineering,
Thames Polytechnic
Foundation course in Building
Services Engineering, Bath
Technical College

CERTIFICATIONS

CSCS - contract manager
Construction Health and
Safety Group, Construction
Supervisors Safety Module 1 &
Module 2, 2001
Construction Health and Safety
Group, M & E Managers Safety,
2001
Fire Service College, Fire
Awareness course FAC-1D
01/01, 2001

EXPERIENCE

15 years

Richard Young brings to Heery 15 years of commissioning and building services experience in the construction industry. Richard has broad MEP facilities experience from design, commissioning and technical project management work in the United Kingdom. Richard has been a member of the Facilities Services group of the Northwest Region since September 2006 and is now the lead commissioning and building services manager for all Heery Florida commissioning projects. Richard brings to all his projects the ability to quickly identify the system issues and possesses the knowledge and skill to take a proactive approach to achieve solutions. His client experience includes; education, corporate, healthcare, industrial, research, defense, retail and residential.

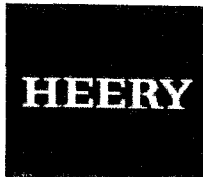
Commissioning Management. Commissioning manager including, owner interface and liaison, design team liaison, owners facilities management liaison, management of the commissioning process, oversight & management of the Heery commissioning team, QA/QC, the development of commissioning plans and schedules, production of commissioning specifications, commissionability reviews, system and equipment checkout, coordination of startup tests. Development and implementation of functional test plans, Production and review of commissioning method statements, chairing commissioning meetings, Installation monitoring and tracking against schedule. Commissioning report writing, management of pipework flushing and cleaning, witnessing of static and dynamic testing, O&M review and coordination of user training. Troubleshooting and operational defect resolution. Project handover and post occupancy review. Richard is also responsible for business development and bid management and estimating for new work in the South Florida Area.

Regional Building Services Manager. Responsible for the delivery of all the building services elements of design build at risk construction projects from bid to handover for a national general contractor. Client liaison. Assisting bid teams to secure projects and business development. Review of employer's requirements, design intent and construction bid packages, estimating and bidding. Management of all aspects of the MEP installations including, bid management and award of the MEP sub contracts. Construction scheduling (in relation to building services) through all project phases from design, installation, commissioning through the handover and warranty inspection phases, design management including selection of the MEP designers. Cost and change control. Project and Contract management.

Building Services Design Management. Selection of design consultants, development of the project plan of work, design deliverables and information required. Liaison with local authority and statutory utility service providers advice to estimating team, management of design process and assisting in the production of contractor's proposals, client interviews and bid presentations.

Building Services Construction Management. Selection of building services subcontractors. Preparation of subcontract documentation including, scope of work, division of responsibilities, commissioning plans, inspection and test planning, contract programming, and close out procedures. On site contract management including client interface, responsibility in areas of safety, quality, schedule and cost management.

Mechanical Designer. The development of client brief to a fully designed, integrated and coordinated scheme, including preparation of detailed engineering drawings, schematics and specifications. Budget estimate production and MEP bid analysis Dilapidation surveys, existing services reports, development of design performance criteria, management and production of site progress, performance, safety, quality and defects reports. Development of conceptual designs and space plans through the use of integrated modeling software and virtual reality techniques.



[knowledge, innovation, experience]

**University of Miami Biomedical Research Building, Miller School of Medicine
Miami, Florida**

Lead Commissioning Team Manager responsible for the commissioning activities on a new nine-story 182,000 square foot research facility. The project is working to achieve USGBC LEED Silver. Heery has provided technical review of all electrical, mechanical, plumbing, and life safety system documentation and drawings, commissioning specifications have been developed and integrated in to the contract documents and Heery are providing the Commissioning Plan as required by the USGBC LEED initiative. Construction Phase commissioning services such as system inspections, pre start checks and functional performance testing are due to be provided as construction progresses. Warranty Phase commissioning services will also be provided for the project. The project will provide world leading state of the art wet lab research space, core laboratories, vivariums, conference space and offices. Project value \$94 Million

**University of Miami Central Chilled Water Plant, Miller School of Medicine
Miami, Florida**

Heery are providing full commissioning services for the University on this complex project. The Project includes new central chilled water plant and distribution to 17 existing campus buildings. Initially 3 new water cooled chillers, associated cooling towers, pumping, controls and underground distribution pipework will provide 12,000 tons of cooling for the campus. The plant is expandable to 20,000 to accommodate connection of future buildings. Richard acts as lead commissioning manager for the University managing the commissioning effort through design, construction, validation and handover. Being an existing fully operational campus the project demands a high level of owner and user coordination and interface to ensure the commissioning activities present minimal impact on the owners critical operations.

Jackson Memorial Hospital, Hurricane Preparedness, Miami, Florida.

Heery were appointed by the PHT to undertake review and study of the existing services installations and equipment at Jackson Memorial Main Campus. The focus of the commissioning effort was to identify deficiencies in the current facility installations and to identify remedial efforts to ensure in the event of an emergency situation (primarily hurricane) the hospital will be able to maintain its provision of first class care to the community during an emergency event. Richard was responsible for managing this effort and implementing and managing construction programs to eliminate the deficiencies identified.

University of Miami Alumni Center, Coral Gables, Florida.

Responsible for completing the commissioning activities on a new four-story 68,000 square foot Alumni Center located at the UM main Coral Gables Campus. Heery are assisting the University of Miami in their efforts to achieve a LEED Silver certification. Heery are providing technical review of all electrical, mechanical, plumbing, and life safety system documentation and drawings, development of commissioning specifications and the Commissioning Plan as required by the USGBC LEED initiative. Construction Phase commissioning services such as system inspections pre start checks and functional performance testing will be provided as construction progresses. Warranty Phase commissioning services are to be provided for the project. The facility will provide mixed use flexible space for Alumni activities, offices, conference rooms, library, kitchen and café. In order to facilitate future needs the 3rd and 4th floors are currently being developed as shell space. Richard is responsible for managing the commissioning effort for the University on this project.



HEERY

[knowledge, innovation, experience]

University of Miami, Multi Specialty Practice Building, Miller School of Medicine, Miami, Florida.

Heery were appointed by the University to provide commissioning services for this state of the art 200 bed hospital tower through design to handover and occupation. The facility included extensive out patient facilities. Richard managed the provision of pre construction commissioning services including the development and provision of commissioning specifications and design document reviews in accordance with the requirements of the USGBC LEED program. The project did not reach construction phase following the Universities acquisition of Cedars Medical Facility adjacent to the Miller School of Medicine Campus.

QinetiQ Malvern, Conference Centre and Restaurant.

Two storey restaurant and conference facility including kitchens and 500 cover dining hall. 200 seat theatre, seminar rooms and administration space. Richard acted as the building services manager for this project with responsibility for the delivery of MEP services through design, procurement, installation and commissioning.

Radstock Schools Renaissance

The design and construction of 2 new elementary schools. The Owners brief dictated sustainability and energy efficiency were high priority. Building Services Manager.

QinetiQ Farnborough, Cody Gate.

Design and Construction of new gate house and central security control centre for QinetiQ's Farnborough secure research facility. Building Services Manager.

Paramount Swindon.

Design and construction for remodel and change of use of 4 story office building to 7 story 300 high end apartments, shell and core construction. Richard acted as the building services manager for this project with responsibility for the delivery of MEP services through design, procurement, installation and commissioning. Building Services Manager.

RAF Fairford, B2 maintenance hanger and erection of SS shelter. Construction of fully air-conditioned maintenance hanger to service United States Air Force stealth bomber. Erection of temporary portable shelter for B2 maintenance. All works were specified to be installed to satisfy US codes and engineering principals. Building Services Manager.

University of Bristol, Project Blade. Research and teaching facility including the refurbishment of engineering faculty and construction of two new build labs, which included a state of art world leading earthquake test lab. The construction was undertaken whilst the university maintained occupation of the existing building. Building Services Manager.

Kingsmead Leisure Development Bath. Shell and core construction of 10 screen multiplex cinema, including basement swimming pool and health club and five restaurant units. Building Services Manager.

Green Park business development, Reading. Construction management of three buildings providing 150,000 sq. ft. Class A office space as part of the development of the UK's largest business park. Building Services Manager.



HEERY

{knowledge innovation, experience}

Richard Young, Senior Commissioning & Building Services

Sun Microsystems, Thames Valley Consolidation. Project Manager. Office campus development consisting of five buildings rationalizing Sun's European Operation and headquarters building. Building Services Manager.

DERA, Relocation of Centre for Human Sciences, Farnborough. Commissioning Manager.

DERA, Cody site rationalization, Farnborough. Commissioning Manager.

DERA, Winfrith cooling upgrade. Commissioning Manager.

Oxford University, Social Sciences Faculty Library. Commissioning Manager.

Bath University, Laboratories and Clean Room. Services design and project management.

Foster & Partners, Riverside London. Dilapidation report and review of existing services installations, including Lord Foster's personal penthouse. Services redesign for remedial defect correction work.

Avon and Gloucester College of Health, Student Accommodation. Services design and project management for SWRHA. Refurbishment and change of use of listed building to nursing college and student residential accommodation.

Southmead Hospital, Children's Ward. Services design and project management for new construction and remodel areas.

Southmead Hospital, Rationalization and modernization of steam district heating plant. Services design for central utilities plant.

Clarks Shoes, Retail Units and Factory refurbishments countrywide. Services design and project management for Clarks Shoes retail stores, term contract nationwide.



[knowledge innovation. experience]



Louis Starr, PE, LEED Accredited Professional | Commissioning Agent

Education:

Bachelor of Science,
Mechanical Engineering,
Oklahoma State University

Registrations/Certifications:

NCEES Certified
Oregon PE
Washington PE
California PE
Idaho PE
Colorado PE
LEED AP

Affiliations:

American Society of
Heating, Refrigeration and
Air Conditioning Engineers
(ASHRAE)
Portland LEED® User Group
(PLUG) Member

Experience:

15 years

As a Professional Engineer and LEED Accredited Professional with 15 years of experience, Louis Starr brings extensive knowledge and experience to his commissioning projects. His skills range from construction document administration, specification and drawing production, value engineering and control-system trouble shooting, to management of building management system technicians in the testing of control systems. Louis has experience in mechanical design, control-system design, and construction administration, in addition to his broad experience in commercial, educational, and hospital facilities, where he has designed complex HVAC systems to meet comfort and code requirements. His extensive experience in designing mechanical systems for innovative and challenging projects makes him a valuable technical and design resource to the Heery commissioning team.

Project Experience:

DOWA Office Relocation – Portland, OR

Heery is providing commissioning services for this Portland Architecture Firm's corporate office relocation, which involves LEED CI fundamental and enhanced commissioning services for the lighting and HVAC systems on the existing 7,500 SF space.

Oregon Department of Corrections Deer Ridge Corrections Facility, Medium-Security Facility – Madras, OR

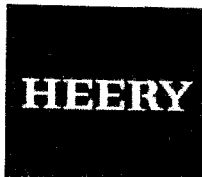
Heery provided commissioning services for new medium and minimum security areas under construction in this new, \$191 million prison facility. Louis was Commissioning Agent on the 19-building, 368,000 SF, 1,240-bed, medium-security prison complex. He is providing progressive site and system installation inspection; functional testing and hands-free, 30-day operational tracking for key building systems. The scope of work included design and construction drawings and specification review, site coordination and inspection, commissioning planning, functional testing and monitoring for all mechanical, electrical, plumbing, low voltage and security systems and post-contract warranty review.

Central Oregon Community College – Bend, OR

Louis is acting as Commissioning Agent on this new, two-story, 31,000 SF, \$11.1 million mixed-use educational building located on the Central Oregon Community College Campus. The scope of work includes design and construction drawings and specification review, site coordination and inspection, commissioning planning, functional testing and monitoring for all mechanical, electrical, plumbing, low voltage, fire alarm and security systems and post-contract warranty review. The review of the construction schedule with review of commissioning milestones is being provided to assure occupancy of the building in 2009.

Microsoft Building 92 – Seattle, WA

Louis provided commissioning services for this project, which involved the commissioning of mechanical systems for office space. The project used chilled water produced by a temporary chiller pending the connection to the central plant. Heery provided full commissioning management, which included functionally testing air handlers, terminal units, chillers, pumps, exhaust fans, in addition to the coordination of issues and resolution through weekly issue logs and site observations report.



[knowledge, innovation, experience]

Louis Starr, PE, LEED® Accredited Professional (Commissioning)

Intel Jones Farm 4 PDL/Saphire Laboratories – Hillsboro, OR

Louis provided commissioning services for this project, which involved the addition of two new labs and adding mechanical systems to two existing labs. The project's central chiller plant capacity was increased with the addition of a 1,000-ton chiller and associated primary chilled-water pump, condenser pump and cooling tower, and the control system for the three

Stoller Winery – Dayton, OR

Louis' responsibilities on this new, \$9.7 million, 23,800 SF wine-making facility included completing commissioning review of all mechanical and process systems design and construction drawings and specifications and equipment submittal review. Louis also assisted in the writing and production of the commissioning plan and specification and performed site/system inspections and functional performance testing. Stoller was the first Gold LEED®-certified winery in the United States.

Department of Administrative Services DEQ Laboratory – Hillsboro, OR

Louis was responsible for monitoring the day-to-day commissioning services for this 88,000 SF laboratory and administrative building for the Department of Environmental Quality and the Public Health Department. This remodel of an empty shell and core development building on a 5.9-acre lot consisted of two, single-story structures – an office/lab building and an 11,000 SF auxiliary building and covered parking area. The facility houses 150 state employees, with analytical laboratories, support areas and offices for both of the agencies. Heery's commissioning services included commissionability and constructability reviews of the design intent document, as well as the Design Document and Construction Document drawings and specifications, site inspections, submittal reviews, functional testing, warranty review and training of laboratory staff.

Salem-Keizer School District Bush Elementary School – Salem, OR

As Support Commissioning Agent, Louis provided controls and technical support for this new, \$8 million, two-story, wood-framed, 42,500 SF replacement elementary school in Salem, Oregon. He identified several BMS controls design flaws, as well as mechanical construction flaws for the supplied packaged air conditioning units while assisting the lead commissioning agent in providing full commissioning, energy analysis and modeling services. Although the project did not seek the certification, it encompassed all of the sustainable building practices required to achieve a LEED Silver rating.

Domaine Serene Winery – Dayton, OR

Heery provided commissioning services on this new, \$14 million, 35,000 SF wine production and distribution facility, in addition to administrative offices and a separate private residence. Heery investigated the under-performance of the process heating and cooling systems; assisted in the redesign, contract award and site supervision of the subsequent corrective action project; produced a full commissioning report with and maintenance recommendations; and conducted staff training in operating the HVAC, process, mechanical and control systems. A complete, correctly-operating system was delivered in ten weeks during the winery summer shutdown period, prior to the 2003 harvest.



HEERY

[knowledge, innovation, experience]



Neil Ross, PE, LEED Accredited Professional Commissioning Agent

Education:

Bachelor of Science,
Mechanical Engineering,
Oregon State University

Registrations/Certifications:

Oregon Registered
Professional Engineer
#13000

LEED® Accredited
Professional

Oregon Department of
Energy State Energy
Efficient Design (SEED)
Award Recipient for the
Oregon Department of
Corrections Warner Creek
Prison project

Affiliations:

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

Experience:

28 years

Professional Engineer and LEED Accredited Professional Neil Ross has over 28 years of experience in testing, balancing and commissioning of HVAC systems. His commissioning skills range from design review of construction plans and documents; development of specifications; value engineering; on-site inspections and problem-solving; and Owner training; to detailed DDC control system logic and functional performance reviews. Neil has been involved in HVAC commissioning since 1991 with emphasis on hospitals, office facilities, schools and correctional facilities.

He is a solid addition to any project team. Neil has experience in all aspects of project management from crew supervision, financial estimation and cost accountability, to close-out and hand over. Neil has broad experience in hospital, educational, office, correctional and semi-conductor cleanroom facilities, where he adjusted all air and hydronic systems to meet Owner needs and comfort. He has extensive experience with large complex air systems where hundreds of individual units need to work together and control environments to ½° F tolerance.

Project Experience:

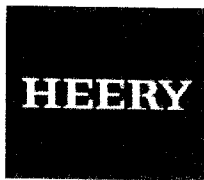
General Services Administration Edith Green/Wendell Wyatt and Pioneer Courthouse Federal Buildings Commissioning Studies – Portland, OR
Heery is providing retro-commissioning services on two federal buildings – a 61,000 SF historic 1875 courthouse and a 512,000 SF federal office building. The project scope involves retro-commissioning building HVAC and controls systems and providing recommendations of energy conservation measures (ECMs) with associated cost payback analysis, plus re-commissioning the systems afterwards to determine the success of the implemented ECMs. The project is scheduled for completion in summer 2009.

Oregon Department of Corrections Deer Ridge Corrections Facility – Madras, OR

As Senior Commissioning Agent, Neil's responsibilities included completing commissioning for new medium and minimum security areas under construction. Currently we are providing progressive site and system installation inspections. Scope of work included design and construction drawings and specification review, site coordination and inspection, commissioning planning, functional testing and monitoring for all mechanical, electrical, plumbing, low voltage and security systems. Warranty Phase extended until November 2008 with Neil continuing his responsibilities.

University of Miami Miller School of Medicine Biomedical Research Building – Miami, FL

Heery's Portland office is currently providing commissioning activities on this new nine-story, 182,000 SF research facility that will provide world-leading, state-of-the-art, wet-lab research space, core laboratories, vivariums, conference space and offices. Heery has provided technical review of all electrical, mechanical, plumbing, and life safety system documentation and drawings and commissioning specifications have been developed and integrated in to the contract documents. This project is pursuing a LEED Silver certification from the USGBC with Heery's project-specific commissioning plan. Additional commissioning services, such as system inspections, pre-start checks, functional performance testing and warranty phase services will be provided as the project progresses.



{knowledge innovation, experience}

City of West Hollywood Library – West Hollywood, CA

Neil acting as Senior Commissioning Agent for the Heery team's commissioning services on this new, LEED Silver certified library and parking structure. The 42,000 SF replacement library will include public meeting rooms and showcase the city's archive of historic materials. The Library is part of the city complex that includes a city hall, park and theater arts center. The parking garage will have 333 spaces for municipal parking and tennis courts on its roof. The Library will also house the City Council public meeting room with full telecommunications capabilities. Heery's commissioning team has completed reviews of the design documents and is preparing for the construction phase in early 2009. Heery met LEED requirements for design document reviews by performing them at various stages of development with many comments or suggestions incorporated in the final bidding documents. The library will utilize many energy savings strategies and technologies in their mechanical, plumbing and lighting systems.

Central Oregon Community College Campus Center Building – Bend, OR

As senior commissioning agent for new showpiece building on the campus, Neil will perform commissioning of all HVAC, lighting, and life safety systems. To date the design and equipment submittal has been completed and the construction is scheduled to complete in April 2009.

Intel Hawthorn Farms Cooling Tower Replacement, Hillsboro, OR

Neil performed commissioning services and staff augmentation for the client in their project to upgrade and modernize their chiller plant serving a 700,000 SF campus. Neil was able to save the project a substantial cost by directing changes to plant operation during the phased construction period to keep the plant in operating without the need for supplemental rental equipment. This project completed in August 2008.

Linfield College Health Education & Fitness Center – McMinnville, OR

Contracted to perform commissioning services for new building next to football stadium and have a large elevated deck overlooking the field. Building requirements are that it contains a sports training facility, educational classrooms, and office areas. The classroom area will have removable walls so that large alumni and fund raising functions can be held in the building. Project is currently in the design conception phase and completion date is anticipated in 2010.

Linfield College Northup Hall – McMinnville, OR

Contracted to perform commissioning services for a remodel and HVAC upgrade to this existing building which is currently in design conception. Completion date is anticipated in 2012.

Umpqua Community College – Roseburg, OR

As Commissioning Agent, Neil provided facilities assessment of 18 buildings owned by the college with emphasis on Building Automation System, functionality and repairs needed to main air and water systems, and resolved numerous comfort issues.

West Linn-Wilsonville School District – West Linn, OR

As Assistant Commissioning Agent, Neil provided commissioning and retro-commissioning on one of 12 school remodels in the district with emphasis on SB1149 funded energy efficiency upgrades.

Madras Aquatic Center – Madras, OR

As Senior Commissioning Agent, Neil oversaw and managed the commissioning activities of Heery commissioning agents through design and construction phases.



HEERY

Neil Ross, PE, LEED Accredited Professional Commissioning

Columbia Gorge Community College – The Dalles and Hood River, OR

Heery provided full commissioning services for a mixture of new construction, modernization work, infrastructure-improvement projects on two campuses that support more than 5,000 students. The scope includes a new health science building at The Dalles campus and a new classroom/laboratory building at what has been designated Hood River Indian Creek Campus. Design review, construction inspection and startup services were provided, along with functional testing and submittal reviews.

McMinnville School District, Sue Buel Elementary School – McMinnville, OR

As Senior Commissioning Agent, Neil oversaw and managed the commissioning activities of Heery commissioning agents for a proposed LEED Gold certified school that included commissioning of heat recovery and solar systems.

Ada County Plaza Tenant Improvement – Boise, ID

As commissioning agent for two separate office projects in adjacent buildings, Neil provided functional testing of six Mitsubishi “Citi-Multi” systems and associated makeup air systems. In addition the extensive lighting and daylighting controls were successfully commissioned for this repeat client. The project was completed in August 2008 and obtained LEED Commercial Interior Gold certification.

Boise City Watershed – Boise, ID

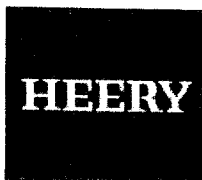
Performed commissioning services for new interpretive center at their main wastewater facility. Innovative use of waste water was used in the buildings heat pump systems to provide the space temperature conditioning. The building also incorporated lighting/daylighting and natural ventilation controls to further enhance the energy efficiency. This building went operational in June 2008 and obtained LEED Platinum certification.

Department of Administrative Services Central Data Center – Salem, OR

Heery provided a full range of commissioning services for this new, \$110 million computer data processing and storage center supporting nine state agencies. The highly complex and intensively-serviced building is a major process hub operating night and day. The fast-paced design/build project was constructed to meet the Oregon SEED energy and environmental performance standards – standards equivalent to those of a LEED Silver certified building. Due to the vital nature of the facility, the mechanical and electrical systems were designed to Uptime Institute’s TIER III standards, with requirements for N+1 redundancy and multiple paths/routing of piping and electrical supplies from source to individual pieces of equipment. As a result, the facility’s infrastructure is extremely reliable, meeting the requirements of the State. Heery provided in-depth technical review and verification of all design documentation and submittals and identified potential problems that would have prevented safe operation of the facility. The infrastructure was designed to support up to 55-watts/SF of data hall loading, with built-in infrastructure to support expansion to 110-watts/SF.

Stoller Winery – Dayton, OR

Heery provided commissioning services for this new, \$9.7 million, 23,800 SF wine-making facility, constructed in Oregon’s Willamette Valley. Integrating gravity-flow wine-making techniques, energy-efficient heating and cooling, and waste-water reclamation reducing negative environmental impact, Stoller was the first Gold LEED®-certified winery in the United States. Commissioning scope included design review, installation checks, and startup and performance verifications of the building systems. All services on the facility were completed as required to obtain its LEED Gold certification, including installing the wine-process equipment so that service would be provided by the primary HVAC system.



[knowledge, innovation, experience]



Jonathan, PE, LEED Accredited Professional, Electrical Engineer

Responsibility:
Electrical Engineer

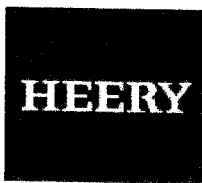
Education:
B.S. Electrical Engineering,
Florida Institute of Technology
1990

Registrations:
Registered Professional
Engineer:
Florida #49493
Alabama #21656
Georgia # 23544
Texas # 89912
LEED AP

Professional Associations:
Institute of Electrical and Elec-
tronics Engineers - Industry
Applications Society
IESNA

Years With Firm:
10 years

Years With Other Firms:
10 years



{knowledge, innovation, experience}

Jonathan is a senior member of our Orlando office's electrical design team. Since joining the firm, Jon has shared his knowledge in power distribution, lighting, grounding/lightning protection, and related areas of electrical engineering. His areas of specialty include courts, retail, hospitality, and healthcare projects.

Polk County, South County Dormitory, Frostproof, Florida

Electrical engineering for two new dormitory style units at the existing 1,008-bed facility. The design of the new units embraced the latest in correctional design trends. The concept of an open inmate dormitory environment that allows functional flexibility, a healthy environment and better overall security is present in all aspects of the building. The design also maximizes the officer-to-inmate ratio allowing better cost efficiency and lowering operation expenditures. Increased levels of natural daylight are also provided to allow the reduction of electrical lighting during daytime operations.

Special Needs Unit - Iowa Medical and Classification Center, State of Iowa, Oakdale, IA

New construction and renovation work at IMCC. New construction includes a 122,600 SF Special Needs Unit, 37,100 SF Powerhouse, and a new 8,000 SF subterranean tunnel connecting both new buildings back to the existing facility core.

Athens-Clarke County Police Sub-Stations, Athens, Georgia

The Athens-Clarke County Police Sub-Station is a prototype facility that is placed in areas of the County in order to establish a visible presence of law enforcement. These 5000 SF facilities were envisioned with the goal of designing healthy buildings which would blend with the traditional architecture of the city Athens and the University, while acting as satellites to support officers in their involvement with the community.

Osceola County Sheriff's Operation Centers, Kissimmee, Florida

Electrical Engineer on this new Sheriff's operation center for the rapidly growing county of Osceola. The major functions/departments planned for the new complex are: Administration; Patrol Division; Criminal Investigation Division; Evidence Division; Training Division; Special Operations; and, Forensics Division.

Carroll County District Courthouse, Westminster, Maryland

Electrical Engineer on this new courthouse project. The new three-story, 41,500-square-foot, \$8,000,000 complex is being designed to replace the existing District Court facility that has outgrown its space.

United States Courthouse, Richmond, Virginia

Electrical Engineer on this new 336,000-square-foot courthouse to include five district courtrooms, two magistrate courtrooms, two bankruptcy courtrooms, and additional space for court-support agencies.

United States Courthouse, Orlando, Florida

Electrical Engineer on this new, 260,000-square-foot federal courthouse annex located adjacent to the existing 1973 federal building and courthouse. This project includes eight U.S. District courtrooms and chambers, six U.S. Magistrate courtrooms and chambers, and space for the U.S. Marshals service, U.S. District Clerk, U.S. Pretrial Services, U.S. Probation, and a Circuit Court Satellite Library.



Shawn Good, PE, LEED Accredited Professional Mechanical Engineer

Responsibility
Mechanical Engineering,
LEED

Education:
BAE Architectural
Engineering, Pennsylvania
State University

Registration:
Professional Engineer
Florida
LEED AP

Years With Firm
9 years

Mr. Good has a variety of HVAC design experience in both new construction and renovations of healthcare, criminal justice, and office buildings as a project mechanical engineer. In addition to HVAC design, Mr. Good has performed energy analysis, facility assessment and master planning for existing projects. As a LEED accredited professional, Mr. Good has experience in sustainable building design.

New River Valley Regional Jail, Dublin, Virginia

Mechanical Engineering & design on this joint venture between Heery Design and Thompson + Litton, to assist the New River Valley Planning District Commission in preparing a pre-planning study for submission to the Commonwealth of Virginia for funding approval. The New River Regional Jail will serve Giles, Pulaski and Grayson Counties, and the City of Radford. The facility is designed for 348 beds, with a support core sized for 600 beds to accommodate future growth.

Osceola County Sheriff's Administration Office: Kissimmee, Florida

Mechanical engineer to implement a design for new administration offices for the Osceola County Sheriff's Department. The budget for the projects was set at \$14 million. The project features a new, freestanding facility constructed using a precast concrete tilt-wall system with a thin-brick veneer. Located adjacent to a FEMA flood zone containing wetlands, the site posed numerous challenges for the design team. The project includes the consolidation of a number of departments, including forensics, criminal investigations, patrol division, special operations, and human resources. The facility will also feature a fitness center, briefing rooms, an evidence storage facility, and shell space for future expansion within the facility.

Richmond Federal Courthouse: Richmond, Virginia

Mechanical Engineer for a new Federal courthouse to include five district courtrooms, two magistrate courtrooms, two bankruptcy courtrooms, and additional space for court-support agencies. The courthouse has two major components: a 100-foot high north-facing atrium and a seven-story courthouse and office facility to the south. The building contains 20 detention cells and 10 prisoner interview rooms. The design provides a state-of-the-art facility with an emphasis on incorporation of latest technologies and flexibility for adaptability to future technological advances and incorporates sustainable concepts to attain Silver LEED rating for the facility.

George C. Young Federal Courthouse Annex - Orlando: Orlando, Florida

Mechanical design and engineering for this new federal courthouse annex is a six-story, 355,000 SF building with 15 courtrooms that overlooks a two-acre adjoining park and is located adjacent to the existing 1973 federal building and courthouse. This project includes eight U.S. District courtrooms and chambers, six U.S. Magistrate courtrooms and chambers, and space for the U.S. Marshals Service, U.S. District Clerk, U.S. Pretrial Services, U.S. Probation and a Circuit Court satellite library. All courtrooms and departments enter off the five-story main atrium, visible from the street.

United States Courthouse, Jacksonville, Florida

Mechanical designer for this new 15-story, 420,000-square-foot federal courthouse. The new courthouse, with Hemming Plaza in the foreground, provides a judicial statement that is appropriate for the position of the U.S. Courts within the city of Jacksonville. Challenged by the constraints of a tight site, this design utilizes a modified collegial floor organization. As a result of the high frequency of travel between chambers and courtrooms for the magistrate and bankruptcy judges, a traditional arrangement is utilized for these floors. The district and appeals chambers are co-located on two common floors. This reduced the building footprint enabling the building to achieve a greater setback on the site, and an increase in security.



[knowledge, innovation, experience]



Julie Newberry (LEED) Accredited Professional (Construction Administration)

Education:
University of Florida
Bachelor of Design, 1988

Registrations:
LEED AP

Years with Firm:
10 years

With a background in state judicial facilities, Julie brings over 15 years experience to the team. Her expertise covers all aspects of project management, and construction administration. Julie has the proven ability of managing complex projects, dealing with multiple tasks and working in the field with owners and contractors.

Experience includes:

Tax Collector/Property Appraiser Facility, Lake County - Tavares, Florida
Construction Administration

United States Courthouse, Jacksonville, Florida
Construction Administrator for this new \$80M, 420,000-square-foot, 15-story courthouse.

United States Courthouse, Orlando, Florida
Full-time, on site Construction Administrator for this new \$100M courthouse and parking deck, completed July 2007.

United States Courthouse, Richmond, Virginia
Developed the Courtroom millwork package, oversaw the detailing and courtroom coordination.

Various Projects, Florida Department of Juvenile Justice, Tallahassee, FL.*
Construction Projects Administrator for this state department, she negotiated and administered contracts in excess of 15 million dollars.

Five 50 -bed Design Build Detention Facilities, Various Sites, Florida*
Project/ contract manager for the Florida Department of Juvenile Justice.

185-Bed Multilevel Lease Purchase Facility, Hastings, Florida*
Project and Construction Manager for the Florida Department of Juvenile Justice.

Greenville Hills Multi-Purpose Facility, Greenville, Florida*
Project Manager on this 32-bed moderate risk juvenile facility.

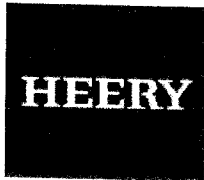
Pasco Detention Center, San Antonio, Florida*
Project Manager for this 9,400-square-foot addition/ renovation project.

Veterans Benefits Administration Office Complex, Bay Pines, Florida*
Specifications Writer on this 172,000-square-foot office complex.

Tallahassee Community College, Admin. & Library Buildings, Tallahassee, FL.*
Specifications Writer, 41,500-square-foot office building and a 55,000-square-foot library.

Various Projects, Leon County Building Department, Tallahassee, Florida*
Project Manager/ Specifications Writer

*Experience obtained prior to joining Heery Design



[knowledge innovation, experience]

SCHEDULE 1

LIST OF PROPOSED SBE-M/WBE SUBCONTRACTORS

PROJECT NAME: Palm Beach County Jail Expansion Project - II PROJECT NO. 04202

NAME OF GENERAL CONTRACTOR: Heery International, Inc. CONTACT PERSON: Richard Young PHONE NO: 407-992-6300

DESCRIPTION OF WORK: Commissioning Services

PLEASE IDENTIFY ALL APPLICABLE CATEGORIES OF SUBCONTRACTORS

Name, Address and Phone Number	(Check one or both Categories)		Subcontract Amount					
	Minority Business	Small Business	Black	Hispanic	Women	Caucasian	Other (Please Specify)	
Heery International, Inc. 4700 Millenia Boulevard, Suite 550 1. Orlando, Florida 32839			\$	\$	\$	\$	\$ <u>232,650.00</u>	
2.			\$	\$	\$	\$	\$	
3.			\$	\$	\$	\$	\$	
4.			\$	\$	\$	\$	\$	
5.			\$	\$	\$	\$	\$	
(Please use additional sheets if necessary)			Total	\$	\$	\$	\$	\$ <u>232,650.00</u>

Total Price \$ 232,650.00 Participation \$ 0.00 Total M/WBE % 0.0%

- Note:
- The amounts listed on this form must be supported by the Subconsultant prices included on Schedule 2 in order to be counted toward goal attainment.
 - Firms may be certified by Palm Beach County as an SBE and/or M/WBE. If firms are certified as both an SBE and M/WBE, please indicate the dollar amount under the appropriate category.
 - M/WBE information is being collected for tracking purposes only.