PERALTA COMMUNITY COLLEGE DISTRICT

Board of Trustees Agenda Report

For the Trustee Meeting Date of June 9, 2015

ITEM TITLE:

Consider Approval of Contract Amendment No.1 to an Existing Agreement with Quantum Energy Services & Technologies (QUEST) to Provide Engineering Services for the Districtwide Monitoring Based Commissioning (MBCx) Project.

SPECIFIC BOARD ACTION REQUESTED:

Approval is requested for contract Amendment No.1 with Quantum Energy Services & Technologies (QUEST) to provide professional engineering services for the Districtwide Monitoring Based Commissioning (MBCx) Project Phase I, in the amount not-to-exceed $226,698.

ITEM SUMMARY:

Under this Amendment, QUEST will complete the following tasks:

- Develop a metering scope for procurement; Determine metering needs for Laney College, Merritt College, College of Alameda, and District Administrative Center;
- Develop design drawings for metering and scope of work for metering installation;
- Investigate specified buildings at each college; Assess building operations; and
- Measure indices to identify savings opportunities within each building.

The requested amount breakdown is as follows:

Description	Fee Breakdown
Amendment No. 1 - 2nd Year Term	$210,000.00
Completed additional services work (identification of projects in 2015/2016 funding cycle).	$16,698.32
Accumulative Subtotal for January 2, 2015 to December 31, 2015:	**$226,698.32**

Approval of this Amendment No. 1 is time sensitive because the District needs to show a progress report to the Proposition 39 Bond Funding for energy efficiency. This is a professional engineering service for which SB 854 Department of Industrial Relations (DIR) registration does not apply.

The Chancellor recommends approval.

SOURCE OF FUNDS (AND FISCAL/BUDGETARY IMPACT):

Energy-efficiency projects will be funded by California Proposition 39, the CCC/IOU partnership program, and technical assistance grants.

BACKGROUND/ANALYSIS:

The District has an existing contract with QUEST for a period of three (3) years from January 2, 2014 to December 31, 2016. If approved by the Board of Trustees, this amount of $226,698, together with the previously board approved contract of $205,000 totals $431,698. Under the original Request for Proposal No. 13-14/17, the District conducted a formal competitive bid to procure QUEST services. This RFP indicated potential project types, which included Monitoring Based Commissioning (MBCx). The “best value” evaluative method was used to assess the submitted proposals from three (3) firms: QUEST,

Alliance Management Partners, and Enovity. The contract was awarded to QUEST because they received the highest score of 277 points. The Board of Trustees approved this contract award on January 21, 2013. Therefore, the administration is requesting for approval of Amendment No. 1 under the original RFP No. 13-14/17 and the Agreement.

The Department of General Services (DGS) issued RFP No. 13-14/17 for professional engineering services for the District-wide Energy Retrofit Projects. A formal Request for Proposal (RFP) was advertised in newspaper publications of general circulation on Tuesday, November 19, 2013 and Tuesday, November 26, 2013. On December 12, 2013, the Purchasing Department received three (3) proposals from qualified firms with energy efficiency retrofit experience. On December 13, 2013, the staff evaluated proposal submissions according to the evaluation criteria.

On December 20, 2013, the Chancellor approved for the District to enter into an original agreement with QUEST. On January 21, 2014, the Board of Trustees ratified the original Agreement with QUEST for Professional Engineering Services on the District-wide Proposition 39 Energy Retrofit Projects (RFP No. 13-14/17). The term of the original Agreement was as follows for a period of three (3) years, with an option to renew services in the 4th and 5th years. If the District renews the Agreement for the 4th and 5th terms, the total contract amount is $541,000.

ANNUAL YEAR	DATES	Fee
1st Year	January 2, 2014 – December 31, 2014	$79,000.00
2nd Year	January 2, 2015 – December 31, 2015	$63,000.00
	Amendment No. 1	$210,000.00
3rd Year	January 2, 2016 – December 31, 2016	$63,000.00
	SUBTOTAL:	**$415,000.00**
4th Year	January 2, 2017 – December 31, 2017	$63,000.00
5th Year	January 2, 2018 – December 31, 2018	$63,000.00
	TOTAL:	**$541,000.00**

For the first year funding cycle, the District received $658,748 and in the second year funding cycle the District received $505,306 Proposition 39 allocation from the CCCCO to complete the District-wide Energy Retrofit Projects. The first two (2) funding cycle amounts total $1,164,054. The anticipated amount in the third year funding cycle is $404,245. In addition to this fund, the District used CCC/IOU rebates to augment its Proposition 39 funding. Under the original Agreement, QUEST assisted the District with the following:

- Identifying, assessing, and prioritizing energy-retrofit projects,
- Proposition 39 application forms,
- CCC/IOU application,
- CEC technical assistance application,
- Input to Colleges for workforce improvement grant application,
- Create job-shadowing opportunities for sustainability students from the District's Career Technical Education programs

DELIVERABLES AND SCOPE OF WORK:
Under Amendment No. 1, QUEST will complete the project tasks outlined under the Item Summary.

ANTICIPATED COMPLETION DATE:
The anticipated completion date of these projects is July 30, 2015.

ALTERNATIVES/OPTIONS:
Not applicable

EVALUATION AND RECOMMENDED ACTION:
The administration recommends approval of this Amendment for QUEST to complete the project tasks to meet the California Community Colleges Chancellor's Office (CCCCO) deadline.

OTHER DEPARTMENTS IMPACTED BY THIS ACTION (E.G. INFORMATION TECHNOLOGY):
YES _____ **NO** ____X_____

COMMENTS: Not applicable

WHO WILL BE PRESENTING THIS ITEM AT THE BOARD MEETING? Vice Chancellor Ikharo

(*****Board contract approval is subject to negotiation and execution by the Chancellor.)

DOCUMENT PREPARED BY:
Prepared by: *Dr. Sadiq B. Ikharo* Date: June 1, 2015
Vice Chancellor of General Services

DOCUMENT PRESENTED AND APPROVED BY:

Presented and approved by: *Dr. Sadiq B. Ikharo* Date: June 1, 2015
Vice Chancellor of General Services

FINANCE DEPARTMENT REVIEW

__X__ Finance review required _____ Finance review *not* required

If Finance review is required, determination is: __X__ Approved ____ Not Approved

If not approved, please give reason: _____

_____

Signature: *Susan Rinne*
Susan Rinne, Interim Vice Chancellor for Finance and Administration

GENERAL COUNSEL (Legality and Format/adherence to Education Codes):

__X__ Legal review required _____ Legal review *not* required

If Legal review is required, determination is: _X_ Approved ____ Not Approved

Signature: *Thuy Thi Nguyen*
Thuy Thi Nguyen, General Counsel

CHANCELLOR'S OFFICE APPROVAL

_X_ Approved, and Place on Agenda ____ Not Approved, but Place on Agenda

Signature: *José M. Ortiz*
Dr. José M. Ortiz, Chancellor

Peralta MBCx Support

Purpose

This project is broken into two components: Development of a metering scope and detailed specification for procurement of whole building energy metering in support of Peralta's participation in the California Community College Investor Owned Utility Monitoring Based Commissioning Program for ten buildings at Laney and Merritt Colleges; and development of commissioning based measures for six Laney College buildings. The buildings where the metering (Merritt and Laney) and measure identification (Laney only) are described in Table 1 below:

Table 1
Selected Monitoring-based Commissioning Buildings

Bldg No.	Campus	Building	Square Footage
1	Merritt College	Merritt College - Building R	53,889
2	Merritt College	Merritt College - Building P	44,537
3	Merritt College	Merritt College - Building A	46,201
4	Merritt College	Merritt College - Building D	75,493
5	Laney College	Laney College - Theater	44,537
6	Laney College	Laney College - Student Center	46,201
7	Laney College	Laney College - Library	75,493
8	Laney College	Laney College - Bldg A	53,889
9	Laney College	Laney College - Building B	43,002
10	Laney College	Laney College - Admin Tower	53,988
11	College of Alameda	CoA – Library	44,500
12	District Administrative Center	Administration Bldg	30,300

Task 1 – Develop Metering Scope for Procurement

The objective of this task is to develop a metering scope of work, to support the California Community Colleges Investor Owned Utility (CCC/IOU) Partnership Monitoring Based Commissioning (MBCx) Program for twelve buildings at Laney (6) and Merritt (4) campuses, College of Alameda Library (1), Peralta General Admin Building (1). We have identified three subtasks required to meet this goal.

Task 1.1 – Determine Metering Needs for Laney and Merritt

Based on the MBCx requirements to provide a minimum of accurate hourly data collection for all energy inputs, QuEST will walk each of the 10 sites described above and:

1. Review the preliminary MBCx measures
2. Develop metering requirements for each building, based on proposed MBCx measures including meter specifications (make, model, sampling rate, accuracy, enclosures). Metering requirements will meet the MBCx program. Software and hardware requirements will be outlined in the actual RFP.
3. Review existing electrical, plumbing, and mechanical drawings
4. Walk each building to determine energy feeds (natural gas, electricity, chilled water, and hot water) and to confirm metering requirements
5. Determine if metering, for each building, can take place at the distribution level
6. Assess existing metering resources and determine if they meet MBCx program requirements
7. Develop list of new metering points, which when combined with the existing metering resources meet the metering requirements. For each building define the metering points, existing and new.
8. Some of the PCCD's buildings were constructed in the 1970s. So there is a chance that asbestos are present in some buildings. To the extent of its in-house capabilities, QuEST will make a layperson (i.e., non-hazmat expert) determination if asbestos is present in a metering location. If there is not a viable alternate location, QuEST's determination will be confirmed by experts. The District will be responsible for the cost of confirmation and abatement work. A separate scope will be issued to cover the necessary work.

Deliverable 1.1 – For each building, a table mapping its metering requirements and whether the metering requirements are met by existing metering resources, or new resources.

Task 1.2 – Develop Design Drawings for Metering

Based on existing single line diagrams and a site walk-through, QuEST will produce single line diagrams and floor plans for each building where metering will be installed. The single diagrams will specify the location of each MBCx meter, new or existing, for each building. QuEST will create equipment schedules for each building detailing the specific meter, the output of the meter, and whether the meter is new or existing. Existing and newly installed meters must communicate and seamlessly transfer data. If that is not possible, for purposes of this installation, the existing meter will be considered obsolete, and a new replacement meter will be installed. These requirements will be clearly documented in the RFP.

Diagrams will show all needed piping, conduit, enclosures, wiring, etc, required to install the meters and for the accurate transmission of the data collected.

Deliverable 1.2 – For each building, 1) single line diagrams detailing the electric and signal requirements, 2) floor plan including location of all MBCx-metering, and 3) an equipment schedule detailing the specific equipment required for the building.

Task 1.3 – Develop Scope of Work for Metering Installation

QuEST will develop the scope of work using deliverables from Tasks 1 and 2 including data collection, storage and visualization platforms.

Deliverable 1.3 – Detailed scope of work and specifications for Tasks 1.1 and 1.2.

Task 2 - Investigation Laney Buildings

Following the CCC/IOU MBCx Partnership Guidelines, the energy savings benefits and costs of potential energy efficiency improvements will be quantified. This project will use a thorough commissioning process to systematically investigate the operations of mechanical, electrical, and controls systems at the selected buildings on the Laney Campus, identify flaws that prevent optimum system performance, and quantify the benefits and costs of correcting them.

Task 2.1 – Building Assessment

QuEST will evaluate building operations and trended points through EMS to identify operational deficiencies and energy efficiency opportunities in each building.

Task 2.2 – Review Preliminary Measures

QuEST will review the preliminary measures and determine whether they are still appropriate measures to investigate.

Task 2.3 – Measure Identification

QuEST will use above-mentioned data sources to identify savings opportunities within each building. For each energy improvement opportunity identified, QuEST will estimate the electric, natural gas, chilled water, and steam energy savings, electric demand savings (defined as average demand reduction over the peak period), and the costs of installing them. For each recommendation, QuEST will write a measure description in accordance with the outline in Appendix A. QuEST will submit the measures to PCCD for approval. Each measure will also have an M&V plan identifying the approach, including data sources, projected savings.

Deliverable 2– Detailed scope of work and procurement-ready specifications for all identified and approved measures, by building. A total of 6 scopes (Laney Campus only) and specification documents will be developed for bidding.

Task 3 - Investigation Merritt Buildings

Following the CCC/IOU MBCx Partnership Guidelines, the energy savings benefits and costs of potential energy efficiency improvements will be quantified. This project will use a thorough commissioning process to systematically investigate the operations of mechanical, electrical, and controls systems at the selected buildings on the Merritt Campus, identify flaws that prevent optimum system performance, and quantify the benefits and costs of correcting them.

Task 3.1 – Building Assessment

QuEST will evaluate building operations and trended points through EMS to identify operational deficiencies and energy efficiency opportunities in each building.

Task 3.2 – Review Preliminary Measures

QuEST will review the preliminary measures and determine whether they are still appropriate measures to investigate.

Task 3.3 – Measure Identification

QuEST will use above-mentioned data sources to identify savings opportunities within each building. For each energy improvement opportunity identified, QuEST will estimate the electric, natural gas, chilled water, and steam energy savings, electric demand savings (defined as average demand reduction over the peak period), and the costs of installing them. For each recommendation, QuEST will write a measure description in accordance with the outline in Appendix A. QuEST will submit the measures to PCCD for approval. Each measure will also have an M&V plan identifying the approach, including data sources, projected savings.

Deliverable 3– Detailed scope of work and procurement-ready specifications for all identified and approved measures, by building. A total of 4 scopes (Merritt Campus only) and specification documents will be developed for bidding.

Task 4 - Investigation CoA Library and General Services Administration Buildings

Following the CCC/IOU MBCx Partnership Guidelines, the energy savings benefits and costs of potential energy efficiency improvements will be quantified. This project will use a thorough commissioning process to systematically investigate the operations of mechanical, electrical, and controls systems at the selected buildings on the CoA Library and GSA buildings, identify flaws that prevent optimum system performance, and quantify the benefits and costs of correcting them.

Task 4.1 – Building Assessment

QuEST will evaluate building operations and trended points through EMS to identify operational deficiencies and energy efficiency opportunities in each building.

Task 4.2 – Review Preliminary Measures

QuEST will review the preliminary measures and determine whether they are still appropriate measures to investigate.

Task 4.3 – Measure Identification

QuEST will use above-mentioned data sources to identify savings opportunities within each building. For each energy improvement opportunity identified, QuEST will estimate the electric, natural gas, chilled water, and steam energy savings, electric demand savings (defined as average demand reduction over the peak period), and the costs of installing them. For each recommendation, QuEST will write a measure description in accordance with the outline in Appendix A. QuEST will submit the measures to PCCD for approval. Each measure will also have an M&V plan identifying the approach, including data sources, projected savings.

Deliverable 4– Detailed scope of work and procurement-ready specifications for all identified and approved measures, by building. A total of 2 scopes (CoA Library and GSA building only) and specification documents will be developed for bidding.

Task 5 – Develop Pre-Installation Baseline

The MBCx program uses whole building metering data to develop pre-installation baselines for each building in the program. As part of this task QuEST will use the interval energy data to develop a pre-installation baseline for the four (4) Merritt Buildings, six (6) Laney Buildings, the Library at CoA, and the General Services Administration building. Baselines will be develop in accordance with the CCC/IOU MBCx Partnership Guidelines.

Deliverable 5– Whole Building Energy baselines for each of the 12 buildings. All baselines must pass review by the CCC/IOU MBCx Partnership Administrator.

Scope Exclusions

a. Hazardous material mitigation is excluded from the scope of this project.
b. Permits or other government fees
c. Connections to life safety devices
d. Power wiring above 30 volts
e. Motor starters and disconnects
f. Installation of any wells, taps, valves, dampers, flow switches/meters or other piping devices
g. Any items not listed in the attached scope of work

Project Costs

Based on review of preliminary measures and our understanding of the CCC/IOU MBCx Guidelines QuEST has developed the following fixed prices for each task described above. The prices are fixed and will be billed upon task completion.

Task Description	Per Unit	Quantity	Total
1. Metering Scope	$18,000	1	$18,000
2. Laney EEM Investigation	$11,500	6	$69,000
3. Merritt EEM Investigation	$11,500	4	$46,000
4. CoA and GSA EEM Investigation	$11,500	2	$23,000
5. Energy Baselines	$4,500	12	$54,000
TOTAL			$210,000

Schedule

Deliverables above will be completed according to the following schedule.

Deliverable 1.1 – Contract execution date + 20 business days

Deliverable 1.2 – Contract execution date + 20 business days

Deliverable 1.3 – Contract execution date + 20 business days

Deliverable 2.0 – Contract execution date + 30 business days

Deliverable 3.0 – Contract execution date + 30 business days

Deliverable 4.0 – Contract execution date + 50 business days

Deliverable 5.0 – End of Pre-Installation Metering Period + 30 business days

APPENDIX A

TABLES DESCRIBING INFORMATION TO BE INCLUDED IN DELIVERABLES

Information that Shall be Included in the Findings Log

- Measure Description
- Recommended Action to Address Issue
- Type of Improvement Opportunity
    - O&M
    - Repair
    - Capital Improvement
    - Other
- Estimated Impacts of Improvement Opportunity:
    - annual electric savings (kWh and $)
    - annual gas savings (therms and $)
    - peak demand savings (kW)
    - O&M savings ($)
    - other non-energy savings ($)
- Estimated Implementation Cost ($)
- Estimated Simple Payback (years)
- Relevant trends and monitoring points.
- Recommendation for Implementation Priority
- Notes

Information that Shall be Included in the RCx Plan

- Initial building assessment
- Operational requirements
- A list of requirements, features and systems to commission
- Identification of primary MBCx participants and their responsibilities.
- Monitoring and trending plans for monitoring activities

QuEST
QUANTUM ENERGY SERVICES & TECHNOLOGIES, INC.
2001 Addison Street, Suite 300, Berkeley, California 94704

Prop 39 Project Development 2014-2015

General Description

Peralta Community College District (District) is participating in California's Proposition 39 (Prop 39), Clean Energy Jobs Act. Through it's Prop 39 funding, the District has made the decision to investment in a variety of energy efficiency projects from LED exterior lighting at Laney College, Merritt College, and College of Alameda, retrofits of the Laney Pool heaters, LED lighting at Berkeley City College, Monitoring-based commissioning, and other projects. In its role as Prop 39 consultant to the district QuEST developed these projects, assisted in the bidding, and oversaw the completion of these projects.

Purpose

This project is identifies energy efficiency opportunities for campuses within the Peralta Community College district including development of cost benefit analysis, submission of Prop 39 and PG&E program applications, development of scopes of work for projects, and assists with vendor selection.

Task 1 – Develop Prop 39 Energy Efficiency Projects for Peralta Campuses

QuEST will develop energy projects and prepare the Prop 39 documentation in order to receive project approval and funding from the Community College Chancellor's Office and PG&E/Alameda Power. Under this task QuEST will supplement previous activities related to project development.

Deliverable – Approved project applications for Prop 39 Program Year 1 and 2.

Summary of Costs

Activities related to Task 1 will be completed for **$16,932.32**