AGREEMENT

THIS AGREEMENT, made, executed, and entered into this Fourth day of December 2014, by and between the City of Menlo Park a Municipal Corporation, hereinafter referred to as the City, and Knorr Systems, Inc., hereinafter referred to as the Contractor.

WITNESSETH

ARTICLE 1. That for and in consideration of the payments and agreements hereinafter mentioned to be made and performed by the City, the Contractor agrees at its own cost and expense to do all the work and furnish all materials necessary to complete in a good workmanlike and substantial manner all that certain work involved and concerned with the "BELLE HAVEN POOL VARIABLE FREQUENCY DRIVE UPGRADES". Said work shall be done in manner and in accordance with the terms of the Contract as the same is defined in Article 4 herein.

ARTICLE 2. Said Contractor agrees to receive and accept the prices stated in the Contractor's Proposal to the City Council, entitled "EXHIBIT 'A', "Proposal to the City Council" and attached hereto, as full compensation for furnishing all materials and doing all the work contemplated and embraced in this agreement; also for all loss or damage arising out of the nature of the work aforesaid, or from the acts of the elements, or from any unforeseen difficulties or obstructions which may arise or be encountered in the prosecution of the work until its acceptance by the City and for all risks of every description connected with the work; also for all expenses incurred by or in consequence of the suspension or discontinuance of the work and for well and faithfully completing the work and the whole thereof, in the manner and according to the Plans and/or Drawings and the Special Provisions.

ARTICLE 3. The City hereby promises and agrees with the Contractor, to employ, and does employ, hereby, said Contractor to provide the materials and to do the work according to the terms and conditions herein contained and referred to, for the prices aforesaid, and hereby contracts to pay the same at the time, in the manner and upon the conditions above set forth; and the said parties for themselves, their heirs, executors, administrators, successors, and assigns, do hereby agree to the full performance of the covenants herein contained.

ARTICLE 4. The complete Contract consists of the following documents: Notice to Bidders, Proposal, Minority Employment Program, Agreement, Contract Provisions and Plans and/or Drawings. The rights and obligations of the parties herein are governed by all of said documents, which are to be construed as a single Contract. The decision of the Engineering Services Manager of the City of Menlo Park as to the interpretation of said Contract shall be final and binding on the parties hereto.

ARTICLE 5. It is expressly stipulated and agreed that all legal and statutory requirements relating to the execution of this Agreement and the notice inviting bids have been met. Any alleged defect or omission in the proceedings preceding the execution of this Agreement is hereby waived by the Contractor.
ARTICLE 6. In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the contractor or subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the contractor, without further acknowledgment by the parties.

ARTICLE 7. Waivers of a breach or default under this Agreement shall not constitute a continuing waiver or a waiver of a subsequent breach of the same or any other provision of this Agreement.

ARTICLE 8. In the event that any term or portion of this Agreement is held invalid by a court of competent jurisdiction, the Agreement shall be construed as not containing that term or portion, and the remainder of this Agreement shall remain in full force and effect.

ARTICLE 9. The interpretation, validity, and enforcement of this Agreement shall be governed by and construed under the laws of the State of California. Any suit, claim, or legal proceeding of any kind relating to this Agreement shall be filed and heard in a court of competent jurisdiction in the County of San Mateo.

IN WITNESS WHEREOF, the parties have executed this instrument the year and date first above written.

CITY OF MENLO PARK
A Municipal Corporation

Alex D. McIntyre
City Manager

ATTEST:

City Clerk, City of Menlo Park

CONTRACTOR (Name): [Signature]

By: Michelle Dukes

Title: Senior Project Manager
NOTARIAL ACKNOWLEDGMENT OF PRINCIPAL FOR THE CONTRACTOR

STATE OF CALIFORNIA

COUNTY OF Orange

On 12/4/14, before me, Jammie A. Scolaro, a Notary Public, personally appeared Michelle Dukes, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Jammie A. Scolaro
Notary Public
EXHIBIT “A” PROPOSAL

CITY OF MENLO PARK
STATE OF CALIFORNIA

FOR

BELLE HAVEN POOL
VARIABLE FREQUENCY DRIVE UPGRADES
PROJECT NO. 27-033

NAME OF BIDDER: Knorr Systems, Inc.

BUSINESS ADDRESS: 2221 S. Standard Ave

CITY, STATE, ZIP: Santa Ana, CA 92707

LICENSE NO.: 562312 CLASS: C41/D35 EXP. DATE: 3/31/2015 / 3/31/17

TAX I.D. NO.: 95-325-3963

TELEPHONE NO: (714) 754-4044 FAX NO: (714) 754-7791

E-MAIL: michelleed@knorrsystems.com

The work for which this Proposal is submitted is for construction in accordance with the Contract Documents, including the Special Provisions, the Agreement, the project Plans described below, and the State of California Department of Transportation Standard Specifications, May 2009 Edition. The Contract Book shall be used in conjunction with the above documents, and the State of California Department of Transportation Labor Surcharge and Equipment Rental Rates, and the State Department of Industrial Relations General Prevailing Wage Rates current at the bid opening date.

The project Plans for the work to be done are entitled “BELLE HAVEN POOL VARIABLE FREQUENCY DRIVE UPGRADES”, AND are incorporated in the Special Provisions.
BID FORMS

The project consists of furnishing all labor, materials, equipment, and performing all work necessary and incidental to install and startup of Variable Frequency Drive (VFD) systems on the Belle Haven main pool.

The project shall be awarded to the lowest responsible bidder who meets all of the Proposal Requirements, and the requirements of the Contract Documents.

1. The RFP Documents have been thoroughly examined and the work site has been visited.

2. The Proposal is being submitted without collusion with any other Proposer.

3. Prices quoted include labor, materials, use of tools and construction equipment, supervision and administration, payroll and sales taxes, insurance, overhead and profit, permits and fees; and any and all other costs that are necessary and appropriate to the proper and timely performance of the work. Prices are valid for 90 days.

The Bidder shall set forth for each item of work a unit price and a total for the item, and for each lump sum item a total for the item, all in clearly legible figures in the respective spaces provided for this purpose. In the case of unit basis items, the amount set forth under the "Total" column shall be the extension of the item price bid on the basis of the estimated quantity for the item.

In case of conflict between an item price in words and the price in figures, the price in words shall prevail. In case of discrepancy between an item price and the total set forth for a unit basis item, the item price shall prevail. However, if the amount set forth as an item price is ambiguous, illegible or uncertain for any cause, or is omitted, or is the same amount as the entry in the "Total" column, then the amount set forth in the "Total" column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the item price.

Failure to provide the required information, or if information provided is subsequently proved false, the Proposal shall be considered as non-responsive and shall be grounds for rejection of the bid.

The undersigned, as Bidder, declares that the only persons or parties interested in this Proposal as principals are those named herein; that this Proposal is made without collusion with any other person, firm or corporation; careful examination of the location of the proposed work, and the annexed proposed form of Contract, and the Plans therein referred to; and the undersigned proposes and agrees, if this Proposal is accepted, and that they will Contract with the City of Menlo Park in the form of the copy of the Contract annexed hereto, to provide all necessary machinery, tools, apparatus and other means of construction, and to do all the work and furnish all the materials specified in the Contract, in the manner and time therein prescribed, and according to the requirements of the Engineer as therein set forth, and they will take in full payment therefore in the amounts shown on the following Item Price Schedule, to wit:
ITEM PRICE SCHEDULE

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item Description</th>
<th>Item Price</th>
<th>Total Contract Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The project consists of furnishing all labor, materials, equipment, and performing all work necessary and incidental for the installation and startup of (1) new Energy Efficient Retrofit Variable Frequency Drive System (Danfoss VLT Drive FC102 or FC202) in accordance to these specifications and all codes that govern this work.</td>
<td>Fourteen Thousand Nine Hundred Ninety Eight DOLLARS</td>
<td>$ 14,998.00</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>DOLLARS</td>
<td>$ 14,998.00</td>
</tr>
</tbody>
</table>

(Abbreviations: LF=linear feet, SF=square feet, SY=square yards, CY=cubic yards, TN=tons, LS=lump sum, EA=each)

Prices shall be good for 60 days from opening of bids.
The undersigned, representing Knorr Systems, Inc., hereby certifies that the information presented on the preceding pages is a true and correct Bid for the project identified as the:

"BELLE HAVEN POOL VARIABLE FREQUENCY DRIVE UPGRADES",

and they agree to the stipulations contained in this proposal package.

SIGNATURE OF COMPANY REPRESENTATIVE: Michelle Dukes

NAME OF COMPANY REPRESENTATIVE: Michelle Dukes

TITLE OF COMPANY REPRESENTATIVE: Project Manager

DATE EXECUTED: October 13, 2014
EXPERIENCE QUALIFICATIONS

The bidder has been engaged in the contracting business under State License No. 562312 for a period of 26 years.

The bidder's three most recently completed Contracts are:

1. **Title of Project:** Sonoma State University Athletic Pool Heater Replacement
   
   **Owner:** Sonoma State University
   
   **Address:** 1801 Cotati Ave, Rohnert Park, CA 94928
   
   **Telephone No.:** (707) 664-2932
   
   **Engineer in Charge:** Craig Dawson
   
   **Date Accepted:** May 1, 2014
2. **Title of Project:** Waterworks Swim School, San Jose
   
   **Owner:** Waterworks Aquatics
   
   **Address:** 1120 Bascom Ave, San Jose, CA 95128
   
   **Telephone No.:** (949) 450-0777
   
   **Engineer in Charge:** Jon Alpert
   
   **Date Accepted:** August 31, 2014

3. **Title of Project:** Clovis USD SPCS and BECS
   
   **Owner:** Clovis USD
   
   **Address:** 1450 Herdon Ave, Clovis, CA 93611
   
   **Telephone No.:** (559) 327-9795
   
   **Engineer in Charge:** Dennis Berkshire, Aquatic Design Group
   
   **Date Accepted:** November 22, 2013
CASHIER'S CHECK

PAY TO THE ORDER OF  ***CITY OF MENLO PARK***
***RE: BELLE HAVEN***

***One thousand five hundred dollars and no cents***

WELLS FARGO BANK, N.A.
3825 S BRISTOL ST
SANTA ANA, CA 92704
FOR INQUIRIES CALL (480) 394-3122

October 13, 2014

**$1,500.00**

VOID IF OVER USS 1,500 00

Michael Long
CONTROLLER
CITY OF MENLO PARK
STATE OF CALIFORNIA

ALTERNATE FORM OF BID DEPOSIT

Note: Bidders may use this form as the Bid Deposit to accompany proposals when submitting a cashier's check or a certified check, which must accompany this form.

KNOW ALL PERSONS BY THESE PRESENTS, that we, Knorr Systems, Inc., as Principal, are held and firmly bound unto the City of Menlo Park, hereinafter called "City", in penal sum of ten percent (10%) OF THE TOTAL AMOUNT OF THE BID OF THE PRINCIPAL submitted to the said City for the work described below for the payment of which sum in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE EXACT FORM OF THIS DEPOSIT is as hereby described as: Cashier's Check

THE CONDITION OF THIS OBLIGATION IS SUCH that, whereas the Principal has submitted the accompanying Proposal dated 10/13, 2014, for the "BELLE HAVEN POOL VARIABLE FREQUENCY DRIVE UPGRADES",

NOW, THEREFORE, if the Principal shall not withdraw said Proposal prior to the date and time for the opening of bids, and if the Principal is awarded the Contract and shall within the period specified in the Proposal after receiving notice that the Contract has been awarded and the prescribed forms are presented to him/her for signature, enter in a written Contract with the City, in accordance with the Proposal as accepted and give insurance and bond with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such Contract and for the payment for labor and materials used for the performance of the Contract, or in the event of the withdrawal of said Proposal within the period specified or the failure to enter into such Contract and give such City bonds, within the time specified, if the Principal shall pay the City the difference between the amount specified in said Proposal and the amount for which the City may procure the required work and/or supplies, if the latter amount be in excess of the former, together with all costs incurred by the City in again calling for bids, then the above obligation shall be voided and of no effect, otherwise to remain in full force and virtue.

Principal hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract on the call for bids, or to the work to be performed thereunder, or the specifications accompanying the same, shall in anywise affect its obligation, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of said Contract or the call for bids, or to the work, or to the specifications.

In the event suit is brought upon this Deposit by the City and judgment is recovered, all costs incurred by the City in such suit, including a reasonable attorney's fee to be fixed by the court shall also be added to the judgment award and be payable from the funds or instrument constituting this Deposit.
IN WITNESS WHEREOF, the above-bounded party has executed this instrument on this 13th day of October 2014, the name, and corporate seal if a corporation, being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

(Corporate Seal)

Principal:

By: 

Title: Project Manager

(Acknowledgment)

NOTARIAL ACKNOWLEDGMENT

STATE OF CALIFORNIA )
COUNTY OF Orange ) ss:

On Oct. 13th 2014, before me, Young Suk Kim, Notary Public, personally appeared Michelle Dupee, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under penalty of perjury under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature

[Signature]

[Seal]
ADDENDUM NO. 1

BURGESS AQUATIC CENTER LAP AND INSTRUCTIONAL POOLS AND BELLE HAVEN POOL VARIABLE FREQUENCY DRIVE UPGRADES

INVITATION FOR INFORMAL BID (IFIB)
DUE DATE: TUESDAY, OCTOBER 14, 2014 AT 2:00 P.M.

TO ALL PROSPECTIVE BIDDERS

Addendum No. 1 for the above project consists of the following:

1. This acknowledgement form (see important notice below)

2. Bid walk through questions and further clarification on equipment and installation.

NOTICE: THIS FORM MUST BE SIGNED AND RETURNED WITH EACH ONE OF YOUR BIDS. FAILURE TO INCLUDE OR ACKNOWLEDGE A CLARIFICATION MAY RESULT IN THE BID BEING REJECTED AS NOT RESPONSIVE.

[Signature]

Ruben Nino, Assistant Public Works Director

CONTRACTOR: Knorr Systems, Inc.
SIGNATURE OF BIDDER: [Signature]
DATE: October 13, 2014
The following information is provided to answer questions raised by potential bidders.

1. Q: Under the section, Page 42: The Scope of Work for the Belle Haven Pool (same for Burgess) VFD Upgrades consists of: “The VFD should provide other power conditioning features that protect the pump motor and extends the pump life.” What does this mean, that is, what are other power conditioning features? Could you specifically define these features?

   A: The Danfoss VFD (as may be similar to other VFDs) has various power conditioning and protection features provided as standard equipment that the City wants. These are:

   1. 5% DC-link reactors or 5% AC line reactors for harmonic mitigation
   2. Thermal motor protection against overload
   3. Ground fault protection
   4. Power Line Surge Protection
   5. Short-circuit protection
   6. Current Limiting Circuit
   7. Motor stall protection
   8. Pump low/no-flow and dry run protection
   9. Adjustable switching frequency to minimize motor noise
   10. Energy Monitoring & (Totalizing of kWh used)
   11. Output Current Measurement

   Any proposed VFD substitution should provide like features built in or added externally. You can find more information about these features online from Danfoss.

2. Q: There is a call out in the Burgess Pool specification for a backwash flow rate speed. Does the speed change or backwash flow rate have to occur automatically or must it be selected by the operator once backwash mode is selected (manually or automatically) on the filter system?

   A: The backwash speed should be triggered manually. A switch should be provided on the control panel to override the automatic (time clock and timer switch) scheduled operating speeds. After backwashing, the switch would be set back to automatic control. No interface with the pool filter controller is necessary as staff does not now and does not expect to use the automatic backwash feature of the filter controller.
Note: The heater and chemical controller are required to be shut down automatically when backwashing or if the VFD shuts down the main pump. Therefore, the backwash speed switch can also be used to shut down the heater and chemical controller automatically.

3. Q: According to the bid specifications for the Burgess Instructional pool the “right-sized” flow rate should be based on a six hour turnover rate. Although health code finds this flow rate acceptable this is not the flow rate that the swimming pool was originally designed for by pool architect, Aquatic Design Group. The pool has been running at and the architect calls out a 4 hour turn over and a flow rate of 557 gpm minimum. This requirement is posted in the pump room on the chemical controller for the instructional pool by the original pool contractor. Is the high bather load flow rate for the instructional pool to be based on a 4 hour turnover rate or a 6 hour rate?

A: A 6-hour turnover rate. The designer must assume maximum bather loads and worst case scenario but pools are rarely operated under those conditions. The Instruction pool is used primarily for training and lap swimming rather than general recreation so the bather loads are more in line with the lap pool.

4. Q: At Belle Haven Pool, are additional flow meters required on the 4” return lines to safely balance the water flow through each return line?

A: No. To our knowledge, the butterfly valves on the lines are not being used to balance flow but simply to reduce the flow rate to code. Contractor would be expected to open valves fully and control the flow rate with the VFD.

Note that a flow meter is required on the heater secondary pipe loop.

5. Q: Do existing electronic flow meters need to be replaced with ones with 4-20 mA outputs?

A: No. They are not required to be connected to the controller or VFD. The VFDs will be operated at preset constant speeds, not at constant flow. Flow rates will be allowed to vary with filter loading.

6. Q: Please review the UV sanitizer retrofit and interface required for the Instructional Pool system.

A: The UV sanitizer manufactured by ETS was installed to reduce the chloramine buildup that occurs when an inflatable dome covers the pool during the winter months (from Nov. 1 to March 31.) The model installed is designed to deliver the industry recommended UV dosage for chloramine removal of 60 mJ/cm2 at an 800 gpm flow rate. It is greatly oversized for the pool at both the actual or required flow rate.

The UV unit uses two 2 kW lamps. The manufacturer says that the lamps can be individually turned on and off. One lamp will provide the proper dosage for up to 400 gpm. The 6-hour turnover rate is about 374 gpm so one of the two UV lamps in the unit can be turned off all the time. The remaining lamp can also be run at half power when the pool is closed and the flow rate is reduced by about 55% (206 gpm.)
One lamp should be turned off when the VFD retrofit is complete and operating. The aquatic controller/VFD should be interfaced with the UV controller to set the remaining lamp to lower power operation when the pool is closed and flow is reduced. This will reduce energy usage of the UV unit from 4 kW operating 24 hours per day year around to 2 kW operating during pool open hours and about 1 kW when the pool is closed. Under this scenario, the UV unit will still be operating above the minimum recommended dosage.

Like the heater and chemical controller, the UV system also should shut down automatically when backwashing (see question 2 above) and when the VFD shuts down the pump.

7. Q: Does the solar system controller on the Burgess Lap pool need to be interfaced with the control system?

A: The solar system is currently not working and does not need to be interfaced as part of the work. However, while omitted in the original RFP, the City would like the option to interface the solar system in the future. The interface required would be the same as for the conventional heater – shutting the solar system (booster pump) down when the pump is switched to backwash speed or the VFD shuts down the main pump, and raising the flow rate when the pool is closed (minimum speed) to a “heater priority” speed.

8. Q: Please explain the required “wire swap VFD bypass terminal blocks in NEMA 3R enclosure.”

A: This is a physical method of bypassing the VFD in the event the VFD fails and cannot be returned to service quickly. The wire pull box can be located directly below the VFD and should contain two high voltage 3 phase terminal blocks, one connecting the power to the VFD and the other connecting the VFD to the motor. The box should be large enough and the wires long enough that in the event of a VFD failure, the motor wires can be swapped with the VFD wires to connect directly to power and bypass the VFD.

The City does not want a bypass switch on the VFD that allows anyone to return the pump to full speed (pre-retrofit) operation if there is a problem or assumed to be a problem with the VFD. This could result in a significant loss of energy savings and potential problems with other equipment that might have been calibrated for lower flows. The wire swap VFD bypass would only be done by qualified city personnel.

9. Q: Either Danfoss VLT drives FC102 or FC202 are listed but the FC202 (Aqua Drive) does not have BACnet capability.

A: Yes. Only the FC102 has embedded BACnet. The FC202 doesn’t nor can Danfoss’ optional BACnet MCA 109 plug-in be used with the FC202. If you intend to use the FC202 drive, you will need to include an external conversion device. This can be in the controller used or a separate conversion gateway that can translate between the VFD and BACnet.

Note: If using the FC102, the embedded BACnet that comes standard with the FC102 is sufficient. You do not need to include the optional MCA 109 “advanced” BACnet plug-in.
10. Q: Since the rebate applications have already been submitted and approved, are we still required to “provide documentation of energy savings calculations acceptable to PG&E and their 3rd party consultants”? Who are the 3rd party consultants?

A: While the initial rebate applications have been approved by PG&E, you are still required to provide energy savings calculations and documentation. The City may revisit with PG&E the baseline for savings once the new impellers are installed in order to obtain a larger rebate. Your calculation methodology and documentation would be used for any new submittal. The original baseline information and estimated percent reductions in pump speeds included with this document should provide you with enough data to prepare your own savings calculations. The 3rd party consultants are generally engineering firms hired by PG&E to perform the pre and post inspections, review the adequacy of the assumptions and calculation and accuracy of the savings estimates for application approval and final determination of rebate to be paid.

11. Q: Please provide more detail on the filter required for “replumb and add a 100 sq ft cartridge filter for the chemical controller to ensure proper operation at low speeds.”

A: The cartridge filter should be NSF certified and the filter element should be made of polyester, not paper. The feed for the chemical sensor will need to be rerouted to pull water ahead of the sand filters at the Burgess swim center in order to have sufficient flow at low speeds.

Note: It is not necessary for the Belle Haven pool (Vacuum DE filter.) There should be sufficient pressure even at low speeds. Remove the filter requirement from the Belle Haven bid.

12. Q: Does the City accept and install equipment that is not UL listed?

A: The City stated that “the design, installation and operation of the complete system shall comply with all applicable laws, codes and standards that govern the work at these facilities. The City of Menlo Park is relying upon the Proposer to be knowledgeable of all such requirements and have included compliance with same in the proposal price.”

This may mean some equipment such as high voltage equipment may require UL or alternative rating and other equipment may not. The City is relying on and will hold the Proposer accountable for using materials and performing work to applicable laws, codes and standards.
Additional Notes from the Walk-Through

1. Belle Haven Pool: The scope of work calls for new flow meters, vacuum and pressure gauges. A new electronic flow meter, vacuum and pressure gauges have already been installed on their own panel. You do not need to replace these. However, the City would like them moved to the new control panel. A new flow meter should be installed on the heater loop. It does not have to be electronic.

2. The time clock (whether standalone or built into a controller) should not lose programming in event of a power failure. It should maintain the correct time and scheduling that should resume automatically when power is restored. It should either have a built-in battery backup or external UPS.

3. Any controller used to control the VFD and interface with other equipment should be able to automatically reboot after a power outage and resume normal operation.

4. The voltage to the motor at Belle Haven is 212 VAC, not 460. The VFD should be rated for 200-240 VAC, not 460 VAC as it says on page 42 of the Belle Haven RFP. The specification should read “Danfoss VLT Drive FC102 or FC202, VFD, NEMA 12, 25HP, 200-240 VAC, 3 phase and...”

Clarifications to the Burgess and Belle Haven RFPs handed out during the walk-through:

Statement (from page 41 in the RFP):

1. Current Language (both RFPs):

The new equipment will interface with a new Energy Management System being installed under a separate contract. VFD to be BACNet communication capable either through native ability or BACNET communications card for interfacing with new EE management equipment.

Add:

The purpose of the interface is to provide the ability to:

- change the pool schedules from the new Energy Management System (EMS) in order to switch between the open high bather, low bather and pool closed flow rates. (The EMS should not be able to change the pump speeds but simply select the correct speed preprogrammed into the VFD.)

- log energy, other data and alarm states generated by the VFD.

The contractor is not required to do the EMS BACNet programming.

2. Burgess RFP:

Language from Belle Haven RFP added to Burgess RFP to provide a consistent description. Bidders should propose control systems and equipment used for each pool that are the same where applicable.
1. Install and commission a new Aquatic Energy Management System (AEMS) that will include:

- A program logic controller and related equipment in NEMA 3R rated enclosures custom designed, built, installed and commissioned for the specific energy management needs of the facility.

- Danfoss VLT Drives FC102 or FC202, VFD, NEMA 12, 20HP (Instructional Pool) and 25HP (Lap Pool), 460 VAC, 3 phase and includes:
  - Factory 5-year onsite parts and labor warranty.
  - Above unit to include factory conformal coating option.

(Note: The Burgess pool pumps operate at 460 VAC, Belle Haven pool operates at 212 VAC.)

3. Item 4, both RFPs:

“The hydraulic system is to be tuned-up to reduce system pressure to be done ahead of the utility rebate pre-inspection for the VFD retrofit.”

Note: Pre-inspections have already occurred. However, PG&E may reassess base case after impellers have been replaced. There may be a new pre-inspection or a new base case established at post-inspection with VFD running at full speed.

Information Requested on Energy Savings Calculation Assumptions

Burgess Pools:

### Instructional Pool

<table>
<thead>
<tr>
<th></th>
<th>Flow Rates</th>
<th></th>
<th>% of Code (6 hour turn)</th>
<th>GPM</th>
<th>%RPM</th>
<th>Hz</th>
<th>Assumed hours of Operation</th>
<th>Measured kW</th>
</tr>
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<tbody>
<tr>
<td>Base Case</td>
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### Lap Pool

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<th>% of Code (6 hour turn)</th>
<th>GPM</th>
<th>%RPM</th>
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<td>810</td>
<td>100%</td>
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<td>8760</td>
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<td></td>
<td></td>
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<td>802</td>
<td>99%</td>
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<tr>
<td>Low Bather</td>
<td></td>
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<td></td>
<td>601</td>
<td>74%</td>
<td>45</td>
<td>631</td>
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<tr>
<td>Closed</td>
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<td>401</td>
<td>50%</td>
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<td>8,760</td>
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Belle Haven Pool:

### Belle Haven

<table>
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<tr>
<th></th>
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<th>% of Code (8 hour turn)</th>
<th>GPM</th>
<th>%RPM</th>
<th>Hz</th>
<th>Assumed hours of Operation</th>
<th>Measured kW</th>
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<tbody>
<tr>
<td><strong>Clean Flow</strong></td>
<td></td>
<td>100%</td>
<td>583</td>
<td>100%</td>
<td>60</td>
<td>8,760</td>
<td>13.8</td>
</tr>
<tr>
<td><strong>High Bather (Right Size)</strong></td>
<td></td>
<td>100%</td>
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<td>100%</td>
<td>60</td>
<td>3,168</td>
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<td>74%</td>
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<td>781</td>
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</tr>
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<td>292</td>
<td>57%</td>
<td>34</td>
<td>4,811</td>
<td></td>
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**Notes:**

1. The currently approved PG&E rebate for the Burgess Pools project is for savings of 107,575 kWh. That includes 86,597 for both pool pump retrofits and 20,978 for the UV sanitizer retrofit.

2. The currently approved PG&E rebate for the Belle Haven Pool project is for savings of 58,183 kwhs.

3. The measured kW was obtained using an RMS power meter and adjusted to reflect the average kW across the filter cycle.

4. The flow rates at reduced speeds are based on the manufacturer's pump curve for each pump and impeller trim. The flow rates are assumed to be set when the filter is clean (maximum flow rate for filter cycle.) The variation in the percentage reduction in the code required flow rate from the percent reduction in pump speed reflects the level of pump oversizing.

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As stated during the walk-through, nighttime (closed pool) heater operation was assumed to be 2 hours per night 6 winter months and 1 hour per night 6 summer months. However, as stated above, this has already been accounted for in the provided hours of operation at each speed. Pool covers are used and the instructional pool is enclosed by an inflatable dome in the winter, generally reducing the amount of heat loss and runtime of the heaters.
ADDENDUM NO. 1

BURGESS AQUATIC CENTER LAP AND INSTRUCTIONAL POOLS AND BELLE HAVEN POOL VARIABLE FREQUENCY DRIVE UPGRADES

INVITATION FOR INFORMAL BID (IFIB)
DUE DATE: TUESDAY, OCTOBER 14, 2014 AT 2:00 P.M.

TO ALL PROSPECTIVE BIDDERS

Addendum No. 1 for the above project consists of the following:

1. This acknowledgement form (see important notice below)

2. Bid walk through questions and further clarification on equipment and installation.

NOTICE: THIS FORM MUST BE SIGNED AND RETURNED WITH EACH ONE OF YOUR BIDS. FAILURE TO INCLUDE OR ACKNOWLEDGE A CLARIFICATION MAY RESULT IN THE BID BEING REJECTED AS NOT RESPONSIVE.

__________________________
Ruben Nino, Assistant Public Works Director

__________________________
CONTRACTOR:

__________________________
SIGNATURE OF BIDDER:

__________________________
DATE:

Addendum #1
The following information is provided to answer questions raised by potential bidders.

1. Q: Under the section, Page 42: The Scope of Work for the Belle Haven Pool (same for Burgess) VFD Upgrades consists of: "The VFD should provide other power conditioning features that protect the pump motor and extends the pump life." What does this mean, that is, what are other power conditioning features? Could you specifically define these features?

A: The Danfoss VFD (as may be similar to other VFDs) has various power conditioning and protection features provided as standard equipment that the City wants. These are:

   1. 5% DC-link reactors or 5% AC line reactors for harmonic mitigation
   2. Thermal motor protection against overload
   3. Ground fault protection
   4. Power Line Surge Protection
   5. Short-circuit protection
   6. Current Limiting Circuit
   7. Motor stall protection
   8. Pump low/no-flow and dry run protection
   9. Adjustable switching frequency to minimize motor noise
   10. Energy Monitoring & (Totalizing of kWh used)
   11. Output Current Measurement

   Any proposed VFD substitution should provide like features built in or added externally. You can find more information about these features online from Danfoss.

2. Q: There is a call out in the Burgess Pool specification for a backwash flow rate speed. Does the speed change or backwash flow rate have to occur automatically or must it be selected by the operator once backwash mode is selected (manually or automatically) on the filter system?

A: The backwash speed should be triggered manually. A switch should be provided on the control panel to override the automatic (time clock and timer switch) scheduled operating speeds. After backwashing, the switch would be set back to automatic control. No interface with the pool filter controller is necessary as staff does not now and does not expect to use the automatic backwash feature of the filter controller.
Note: The heater and chemical controller are required to be shut down automatically when backwashing or if the VFD shuts down the main pump. Therefore, the backwash speed switch can also be used to shut down the heater and chemical controller automatically.

3. Q: According to the bid specifications for the Burgess Instructional pool the “right-sized” flow rate should be based on a six hour turnover rate. Although health code finds this flow rate acceptable this is not the flow rate that the swimming pool was originally designed for by pool architect, Aquatic Design Group. The pool has been running at and the architect calls out a 4 hour turn over and a flow rate of 557 gpm minimum. This requirement is posted in the pump room on the chemical controller for the instructional pool by the original pool contractor. Is the high bather load flow rate for the instructional pool to be based on a 4 hour turnover rate or a 6 hour rate?

A: A 6-hour turnover rate. The designer must assume maximum bather loads and worst case scenario but pools are rarely operated under those conditions. The instruction pool is used primarily for training and lap swimming rather than general recreation so the bather loads are more in line with the lap pool.

4. Q: At Belle Haven Pool, are additional flow meters required on the 4” return lines to safely balance the water flow through each return line?

A: No. To our knowledge, the butterfly valves on the lines are not being used to balance flow but simply to reduce the flow rate to code. Contractor would be expected to open valves fully and control the flow rate with the VFD.

Note that a flow meter is required on the heater secondary pipe loop.

5. Q: Do existing electronic flow meters need to be replaced with ones with 4-20 mA outputs?

A: No. They are not required to be connected to the controller or VFD. The VFDs will be operated at preset constant speeds, not at constant flow. Flow rates will be allowed to vary with filter loading.

6. Q: Please review the UV sanitizer retrofit and interface required for the Instructional Pool system.

A: The UV sanitizer manufactured by ETS was installed to reduce the chloramine buildup that occurs when an inflatable dome covers the pool during the winter months (from Nov. 1 to March 31.) The model installed is designed to deliver the industry recommended UV dosage for chloramine removal of 60 mJ/cm2 at an 800 gpm flow rate. It is greatly oversized for the pool at both the actual or required flow rate.

The UV unit uses two 2 kW lamps. The manufacturer says that the lamps can be individually turned on and off. One lamp will provide the proper dosage for up to 400 gpm. The 6-hour turnover rate is about 374 gpm so one of the two UV lamps in the unit can be turned off all the time. The remaining lamp can also be run at half power when the pool is closed and the flow rate is reduced by about 55% (206 gpm.)
One lamp should be turned off when the VFD retrofit is complete and operating. The aquatic controller/VFD should be interfaced with the UV controller to set the remaining lamp to lower power operation when the pool is closed and flow is reduced. This will reduce energy usage of the UV unit from 4 kW operating 24 hours per day year around to 2 kW operating during pool open hours and about 1 kW when the pool is closed. Under this scenario, the UV unit will still be operating above the minimum recommended dosage.

Like the heater and chemical controller, the UV system also should shut down automatically when backwashing (see question 2 above) and when the VFD shuts down the pump.

7. Q: Does the solar system controller on the Burgess Lap pool need to be interfaced with the control system?

A: The solar system is currently not working and does not need to be interfaced as part of the work. However, while omitted in the original RFP, the City would like the option to interface the solar system in the future. The interface required would be the same as for the conventional heater – shutting the solar system (booster pump) down when the pump is switched to backwash speed or the VFD shuts down the main pump, and raising the flow rate when the pool is closed (minimum speed) to a "heater priority" speed.

8. Q: Please explain the required "wire swap VFD bypass terminal blocks in NEMA 3R enclosure."

A: This is a physical method of bypassing the VFD in the event the VFD fails and cannot be returned to service quickly. The wire pull box can be located directly below the VFD and should contain two high voltage 3 phase terminal blocks, one connecting the power to the VFD and the other connecting the VFD to the motor. The box should be large enough and the wires long enough that in the event of a VFD failure, the motor wires can be swapped with the VFD wires to connect directly to power and bypass the VFD.

The City does not want a bypass switch on the VFD that allows anyone to return the pump to full speed (pre-retrofit) operation if there is a problem or assumed to be a problem with the VFD. This could result in a significant loss of energy savings and potential problems with other equipment that might have been calibrated for lower flows. The wire swap VFD bypass would only be done by qualified city personnel.

9. Q: Either Danfoss VLT drives FC102 or FC202 are listed but the FC202 (Aqua Drive) does not have BACnet capability.

A: Yes. Only the FC102 has embedded BACnet. The FC202 doesn’t nor can Danfoss’ optional BACnet MCA 109 plug-in be used with the FC202. If you intend to use the FC202 drive, you will need to include an external conversion device. This can be in the controller used or a separate conversion gateway that can translate between the VFD and BACnet.

Note: If using the FC102, the embedded BACnet that comes standard with the FC102 is sufficient. You do not need to include the optional MCA 109 “advanced” BACnet plug-in.
10. Q: Since the rebate applications have already been submitted and approved, are we still required to “provide documentation of energy savings calculations acceptable to PG&E and their 3rd party consultants“? Who are the 3rd party consultants?

A: While the initial rebate applications have been approved by PG&E, you are still required to provide energy savings calculations and documentation. The City may revisit with PG&E the baseline for savings once the new impellers are installed in order to obtain a larger rebate. Your calculation methodology and documentation would be used for any new submittal. The original baseline information and estimated percent reductions in pump speeds included with this document should provide you with enough data to prepare your own savings calculations. The 3rd party consultants are generally engineering firms hired by PG&E to perform the pre and post inspections, review the adequacy of the assumptions and calculation and accuracy of the savings estimates for application approval and final determination of rebate to be paid.

11. Q: Please provide more detail on the filter required for “replumb and add a 100 sq ft cartridge filter for the chemical controller to ensure proper operation at low speeds.”

A: The cartridge filter should be NSF certified and the filter element should be made of polyester, not paper. The feed for the chemical sensor will need to be rerouted to pull water ahead of the sand filters at the Burgess swim center in order to have sufficient flow at low speeds.

Note: It is not necessary for the Belle Haven pool (Vacuum DE filter.) There should be sufficient pressure even at low speeds. Remove the filter requirement from the Belle Haven bid.

12. Q: Does the City accept and install equipment that is not UL listed?

A: The City stated that “the design, installation and operation of the complete system shall comply with all applicable laws, codes and standards that govern the work at these facilities. The City of Menlo Park is relying upon the Proposer to be knowledgeable of all such requirements and have included compliance with same in the proposal price.”

This may mean some equipment such as high voltage equipment may require UL or alternative rating and other equipment may not. The City is relying on and will hold the Proposer accountable for using materials and performing work to applicable laws, codes and standards.
Additional Notes from the Walk-Through

1. Belle Haven Pool: The scope of work calls for new flow meters, vacuum and pressure gauges. A new electronic flow meter, vacuum and pressure gauges have already been installed on their own panel. You do not need to replace these. However, the City would like them moved to the new control panel. A new flow meter should be installed on the heater loop. It does not have to be electronic.

2. The time clock (whether standalone or built into a controller) should not lose programming in event of a power failure. It should maintain the correct time and scheduling that should resume automatically when power is restored. It should either have a built-in battery backup or external UPS.

3. Any controller used to control the VFD and interface with other equipment should be able to automatically reboot after a power outage and resume normal operation.

4. The voltage to the motor at Belle Haven is 212 VAC, not 460. The VFD should be rated for 200-240 VAC, not 460 VAC as it says on page 42 of the Belle Haven RFP. The specification should read “Danfoss VLT Drive FC102 or FC202, VFD, NEMA 12, 25HP, 200-240 VAC, 3 phase and…”

Clarifications to the Burgess and Belle Haven RFPs handed out during the walk-through:

Statement (from page 41 in the RFP):

1. Current Language (both RFPs):

   The new equipment will interface with a new Energy Management System being installed under a separate contract. VFD to be BACNet communication capable either through native ability or BACNET communications card for interfacing with new EE management equipment.

   Add:

   The purpose of the interface is to provide the ability to:

   - change the pool schedules from the new Energy Management System (EMS) in order to switch between the open high bather, low bather and pool closed flow rates. (The EMS should not be able to change the pump speeds but simply select the correct speed preprogrammed into the VFD.)

   - log energy, other data and alarm states generated by the VFD.

   The contractor is not required to do the EMS BACnet programming.

2. Burgess RFP:

   Language from Belle Haven RFP added to Burgess RFP to provide a consistent description. Bidders should propose control systems and equipment used for each pool that are the same where applicable.
1. Install and commission a new Aquatic Energy Management System (AEMS) that will include:

- A program logic controller and related equipment in NEMA 3R rated enclosures custom designed, built, installed and commissioned for the specific energy management needs of the facility.

- Danfoss VLT Drives FC102 or FC202, VFD, NEMA 12, 20HP (Instructional Pool) and 25HP (Lap Pool), 460 VAC, 3 phase and includes:
  - Factory 5-year onsite parts and labor warranty.
  - Above unit to include factory conformal coating option.

(Note: The Burgess pool pumps operate at 460 VAC, Belle Haven pool operates at 212 VAC.)

3. Item 4, both RFPs:

"The hydraulic system is to be tuned-up to reduce system pressure to be done ahead of the utility rebate pre-inspection for the VFD retrofit."

Note: Pre-inspections have already occurred. However, PG&E may reassess base case after impellers have been replaced. There may be a new pre-inspection or a new base case established at post-inspection with VFD running at full speed.

Information Requested on Energy Savings Calculation Assumptions

Burgess Pools:

### Instructional Pool

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<thead>
<tr>
<th>Flow Rates</th>
<th>% of Code (6 hour turn)</th>
<th>GPM</th>
<th>%RPM</th>
<th>Hz</th>
<th>Assumed hours of Operation</th>
<th>Measured kW</th>
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<td>Base Case</td>
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### Lap Pool

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<th>%RPM</th>
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Belle Haven Pool:

Belle Haven

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<tr>
<td>Clean Flow</td>
<td>100%</td>
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<td>100%</td>
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<td>8,760</td>
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PROPOSALS MUST BE SUBMITTED ON THE FOLLOWING FORMS TITLED
"BID FORMS"

EXHIBIT "A"
PROPOSAL

CITY OF MENLO PARK
STATE OF CALIFORNIA

FOR

BURGESS AQUATIC CENTER LAP AND INSTRUCTIONAL POOLS
VARIABLE FREQUENCY DRIVE UPGRADES
PROJECT NO. 27-033

NAME OF BIDDER: Knorr Systems, Inc.

BUSINESS ADDRESS: 2221 S. Standard Ave

CITY, STATE, ZIP: Santa Ana, CA 92707


TAX I.D. NO.: 95-3253963

TELEPHONE NO: (714) 754-4044 FAX NO: (714) 754-7791

E-MAIL: michelled@knorrsystems.com

The work for which this Proposal is submitted is for construction in accordance with the Contract Documents, including the Special Provisions, the Agreement, the project Plans described below, and the State of California Department of Transportation Standard Specifications, May 2009 Edition. The Contract Book shall be used in conjunction with the above documents, and the State of California Department of Transportation Labor Surcharge and Equipment Rental Rates, and the State Department of Industrial Relations General Prevailing Wage Rates current at the bid opening date.

The project Plans for the work to be done are entitled "BURGESS AQUATIC CENTER LAP AND INSTRUCTIONAL POOLS VARIABLE FREQUENCY DRIVE UPGRADES", AND are incorporated in the Special Provisions.
BID FORMS

The project consists of furnishing all labor, materials, equipment, and performing all work necessary and incidental to install and startup of Variable Frequency Drive (VFD) systems and install new impellers on each pump of the Lap and Instructional Pools at the Burgess Aquatic Center.

The project shall be awarded to the lowest responsible bidder who meets all of the Proposal Requirements, and the requirements of the Contract Documents.

1. The RFP Documents have been thoroughly examined and the work site has been visited.

2. The Proposal is being submitted without collusion with any other Proposer.

3. Prices quoted include labor, materials, use of tools and construction equipment, supervision and administration, payroll and sales taxes, insurance, overhead and profit, permits and fees; and any and all other costs that are necessary and appropriate to the proper and timely performance of the work. Prices are valid for 90 days.

The Bidder shall set forth for each item of work a unit price and a total for the item, and for each lump sum item a total for the item, all in clearly legible figures in the respective spaces provided for this purpose. In the case of unit basis items, the amount set forth under the "Total" column shall be the extension of the item price bid on the basis of the estimated quantity for the item.

In case of conflict between an item price in words and the price in figures, the price in words shall prevail. In case of discrepancy between an item price and the total set forth for a unit basis item, the item price shall prevail. However, if the amount set forth as an item price is ambiguous, illegible or uncertain for any cause, or is omitted, or is the same amount as the entry in the "Total" column, then the amount set forth in the "Total" column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the item price.

Failure to provide the required information, or if information provided is subsequently proved false, the Proposal shall be considered as non-responsive and shall be grounds for rejection of the bid.

The undersigned, as Bidder, declares that the only persons or parties interested in this Proposal as principals are those named herein; that this Proposal is made without collusion with any other person, firm or corporation; careful examination of the location of the proposed work, and the annexed proposed form of Contract, and the Plans therein referred to; and the undersigned proposes and agrees, if this Proposal is accepted, and that they will Contract with the City of Menlo Park in the form of the copy of the Contract annexed hereto, to provide all necessary machinery, tools, apparatus and other means of construction, and to do all the work and furnish all the materials specified in the Contract, in the manner and time therein prescribed, and according to the requirements of the Engineer as therein set forth, and they will take in full payment therefore in the amounts shown on the following Item Price Schedule, to wit:
## ITEM PRICE SCHEDULE

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item Description</th>
<th>Item Price (In words)</th>
<th>Total Contract Sum (In figures)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The project consists of furnishing all labor, materials, equipment, and performing all work necessary and incidental for the installation and start up of (2) new Energy Efficient Retrofit Variable Frequency Drive Systems (Danfoss VLT Drive FC102 or FC202) and install new impellers on each pump in accordance to these specifications and all codes that govern this work.</td>
<td>Forth Thousand Two Hundred Seventy Four DOLLARS</td>
<td>$40,274.00</td>
</tr>
</tbody>
</table>

**TOTAL**                                             | DOLLARS                                                                                     | $40,274.00                     |

(Abbreviations: LF=linear feet, SF=square feet, SY=square yards, CY=cubic yards, TN=tons, LS=lump sum, EA=each)

Prices shall be good for 60 days from opening of bids.
EXHIBIT "A" PROPOSAL

PROPOSAL – SIGNATURES PAGE

The undersigned, representing Knorr Systems, Inc., hereby certifies that the information presented on the preceding pages is a true and correct Bid for the project identified as the:

"BURGESS AQUATIC CENTER LAP AND INSTRUCTIONAL POOLS VARIABLE FREQUENCY DRIVE UPGRADES",

and they agree to the stipulations contained in this proposal package.

SIGNATURE OF COMPANY REPRESENTATIVE: [Signature]

NAME OF COMPANY REPRESENTATIVE: Michelle Dukes

TITLE OF COMPANY REPRESENTATIVE: Project Manager

DATE EXECUTED: October 13, 2014
EXPERIENCE QUALIFICATIONS

The bidder has been engaged in the contracting business under State License No. 562312 for a period of 26 years.

The bidder's three most recently completed Contracts are:

1. **Title of Project**: Sonoma State University Athletic Pool Heater Replacement  
   **Owner**: Sonoma State University  
   **Address**: 1801 Cotati Ave, Rohnert Park, CA 94928  
   **Telephone No.**: (707) 664-2932  
   **Engineer in Charge**: Craig Dawson  
   **Date Accepted**: May 1, 2014
EXPERIENCE QUALIFICATIONS CONTINUED

2. **Title of Project:** Waterworks Swim School, San Jose
   
   **Owner:** Waterworks Aquatics
   
   **Address:** 1120 Bascom Ave, San Jose, CA 95128
   
   **Telephone No.:** (949) 450-0777
   
   **Engineer in Charge:** Jon Alpert
   
   **Date Accepted:** August 31, 2014

3. **Title of Project:** Clovis USD SPCS and BECS
   
   **Owner:** Clovis USD
   
   **Address:** 1450 Herndon Ave, Clovis, CA 93611
   
   **Telephone No.:** (559) 327-9795
   
   **Engineer in Charge:** Dennis Berkshire, Aquatic Design Group
   
   **Date Accepted:** November 22, 2014
CASHIER'S CHECK

0400101936

October 13, 2014

**$5,000.00**

PAY TO THE ORDER OF  ***CITY OF MENLO PARK***
***RE: BURGESS***

***Five thousand dollars and no cents***

WELLS FARGO BANK, N.A.
3925 S BRISTOL ST
SANTA ANA, CA 92704
FOR INQUIRIES CALL (888) 394-3122

Michael Long
CONTROLLER

VOID IF OVER US $ 5,000.00

0004021
Office AU # 12100(B)
Operator ID cu019003
CITY OF MENLO PARK  
STATE OF CALIFORNIA

ALTERNATE FORM OF BID DEPOSIT

Note: Bidders may use this form as the Bid Deposit to accompany proposals when submitting a cashier's check or a certified check, which must accompany this form.

KNOW ALL PERSONS BY THESE PRESENTS, that we, Knorr Systems, Inc. ________________, as Principal, are held and firmly bound unto the City of Menlo Park, hereinafter called "City", in penal sum of ten percent (10%) OF THE TOTAL AMOUNT OF THE BID OF THE PRINCIPAL submitted to the said City for the work described below for the payment of which sum in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE EXACT FORM OF THIS DEPOSIT is as hereby described as: Cashier's Check

THE CONDITION OF THIS OBLIGATION IS SUCH that, whereas the Principal has submitted the accompanying Proposal dated 10/13, 2014, for the "BURGESS AQUATIC CENTER LAP AND INSTRUCTIONAL POOLS VARIABLE FREQUENCY DRIVE UPGRADES."

NOW, THEREFORE, if the Principal shall not withdraw said Proposal prior to the date and time for the opening of bids, and if the Principal is awarded the Contract and shall within the period specified in the Proposal after receiving notice that the Contract has been awarded and the prescribed forms are presented to him/her for signature, enter in a written Contract with the City, in accordance with the Proposal as accepted and give insurance and bond with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such Contract and for the payment for labor and materials used for the performance of the Contract, or in the event of the withdrawal of said Proposal within the period specified or the failure to enter into such Contract and give such City bonds, within the time specified, if the Principal shall pay the City the difference between the amount specified in said Proposal and the amount for which the City may procure the required work and/or supplies, if the latter amount be in excess of the former, together with all costs incurred by the City in again calling for bids, then the above obligation shall be voided and of no effect, otherwise to remain in full force and virtue.

Principal hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract on the call for bids, or to the work to be performed thereunder, or the specifications accompanying the same, shall in anywise affect its obligation, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of said Contract or the call for bids, or to the work, or to the specifications.

In the event suit is brought upon this Deposit by the City and judgment is recovered, all costs incurred by the City in such suit, including a reasonable attorney's fee to be fixed by the court shall also be added to the judgment award and be payable from the funds or instrument constituting this Deposit.
IN WITNESS WHEREOF, the above-bounded party has executed this instrument on this 13th day of October, 2014, the name, and corporate seal if a corporation, being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

(Corporate Seal)

Principal:

By: [Signature]

Title: Project Manager

(Acknowledgment)

NOTARIAL ACKNOWLEDGMENT

STATE OF CALIFORNIA )
COUNTY OF [County] ) ss:

On Oct. 13th 2014, before me, [Name], Notary Public, personally appeared [Name], who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under penalty of perjury under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature [Signature]

[Notary Seal]
ADDENDUM NO. 1

BURGESS AQUATIC CENTER LAP AND INSTRUCTIONAL POOLS AND BELLE HAVEN POOL VARIABLE FREQUENCY DRIVE UPGRADES

INVITATION FOR INFORMAL BID (IFIB)
DUE DATE: TUESDAY, OCTOBER 14, 2014 AT 2:00 P.M.

TO ALL PROSPECTIVE BIDDERS

Addendum No. 1 for the above project consists of the following:

1. This acknowledgement form (see important notice below)

2. Bid walk through questions and further clarification on equipment and installation.

NOTICE: THIS FORM MUST BE SIGNED AND RETURNED WITH EACH ONE OF YOUR BIDS. FAILURE TO INCLUDE OR ACKNOWLEDGE A CLARIFICATION MAY RESULT IN THE BID BEING REJECTED AS NOT RESPONSIVE.

DATE: October 8, 2014

Ruben Nino, Assistant Public Works Director

CONTRACTOR: Knap Systems, Inc.

SIGNATURE OF BIDDER: [Signature]

DATE: October 13, 2014
The following information is provided to answer questions raised by potential bidders.

1. Q: Under the section, Page 42: The Scope of Work for the Belle Haven Pool (same for Burgess) VFD Upgrades consists of: “The VFD should provide other power conditioning features that protect the pump motor and extends the pump life.” What does this mean, that is, what are other power conditioning features? Could you specifically define these features?

   A: The Danfoss VFD (as may be similar to other VFDs) has various power conditioning and protection features provided as standard equipment that the City wants. These are:

   1. 5% DC-link reactors or 5% AC line reactors for harmonic mitigation
   2. Thermal motor protection against overload
   3. Ground fault protection
   4. Power Line Surge Protection
   5. Short-circuit protection
   6. Current Limiting Circuit
   7. Motor stall protection
   8. Pump low/no-flow and dry run protection
   9. Adjustable switching frequency to minimize motor noise
   10. Energy Monitoring & (Totalizing of kWh used)
   11. Output Current Measurement

   Any proposed VFD substitution should provide like features built in or added externally. You can find more information about these features online from Danfoss.

2. Q: There is a call out in the Burgess Pool specification for a backwash flow rate speed. Does the speed change or back wash flow rate have to occur automatically or must it be selected by the operator once backwash mode is selected (manually or automatically) on the filter system?

   A: The backwash speed should be triggered manually. A switch should be provided on the control panel to override the automatic (time clock and timer switch) scheduled operating speeds. After backwashing, the switch would be set back to automatic control. No interface with the pool filter controller is necessary as staff does not now and does not expect to use the automatic backwash feature of the filter controller.
Note: The heater and chemical controller are required to be shut down automatically when backwashing or if the VFD shuts down the main pump. Therefore, the backwash speed switch can also be used to shut down the heater and chemical controller automatically.

3. Q: According to the bid specifications for the Burgess Instructional pool the “right-sized” flow rate should be based on a six hour turnover rate. Although health code finds this flow rate acceptable this is not the flow rate that the swimming pool was originally designed for by pool architect, Aquatic Design Group. The pool has been running at and the architect calls out a 4 hour turn over and a flow rate of 557 gpm minimum. This requirement is posted in the pump room on the chemical controller for the instructional pool by the original pool contractor. Is the high bather load flow rate for the instructional pool to be based on a 4 hour turnover rate or a 6 hour rate?

A: A 6-hour turnover rate. The designer must assume maximum bather loads and worst case scenario but pools are rarely operated under those conditions. The instruction pool is used primarily for training and lap swimming rather than general recreation so the bather loads are more in line with the lap pool.

4. Q: At Belle Haven Pool, are additional flow meters required on the 4’’ return lines to safely balance the water flow through each return line?

A: No. To our knowledge, the butterfly valves on the lines are not being used to balance flow but simply to reduce the flow rate to code. Contractor would be expected to use valves fully and control the flow rate with the VFD.

Note that a flow meter is required on the heater secondary pipe loop.

5. Q: Do existing electronic flow meters need to be replaced with ones with 4-20 mA outputs?

A: No. They are not required to be connected to the controller or VFD. The VFDs will be operated at preset constant speeds, not at constant flow. Flow rates will be allowed to vary with filter loading.

6. Q: Please review the UV sanitizer retrofit and interface required for the Instructional Pool system.

A: The UV sanitizer manufactured by ETS was installed to reduce the chloramine buildup that occurs when an inflatable dome covers the pool during the winter months (from Nov. 1 to March 31.) The model installed is designed to deliver the industry recommended UV dosage for chloramine removal of 60 mJ/cm2 at an 800 gpm flow rate. It is greatly oversized for the pool at both the actual or required flow rate.

The UV unit uses two 2 kW lamps. The manufacturer says that the lamps can be individually turned on and off. One lamp will provide the proper dosage for up to 400 gpm. The 6-hour turnover rate is about 374 gpm so one of the two UV lamps in the unit can be turned off all the time. The remaining lamp can also be run at half power when the pool is closed and the flow rate is reduced by about 55% (206 gpm.)
One lamp should be turned off when the VFD retrofit is complete and operating. The aquatic controller/VFD should be interfaced with the UV controller to set the remaining lamp to lower power operation when the pool is closed and flow is reduced. This will reduce energy usage of the UV unit from 4 kW operating 24 hours per day year around to 2 kW operating during pool open hours and about 1 kW when the pool is closed. Under this scenario, the UV unit will still be operating above the minimum recommended dosage.

Like the heater and chemical controller, the UV system also should shut down automatically when backwashing (see question 2 above) and when the VFD shuts down the pump.

7. Q: Does the solar system controller on the Burgess Lap pool need to be interfaced with the control system?

A: The solar system is currently not working and does not need to be interfaced as part of the work. However, while omitted in the original RFP, the City would like the option to interface the solar system in the future. The interface required would be the same as for the conventional heater – shutting the solar system (booster pump) down when the pump is switched to backwash speed or the VFD shuts down the main pump, and raising the flow rate when the pool is closed (minimum speed) to a “heater priority” speed.

8. Q: Please explain the required “wire swap VFD bypass terminal blocks in NEMA 3R enclosure.”

A: This is a physical method of bypassing the VFD in the event the VFD fails and cannot be returned to service quickly. The wire pull box can be located directly below the VFD and should contain two high voltage 3 phase terminal blocks, one connecting the power to the VFD and the other connecting the VFD to the motor. The box should be large enough and the wires long enough that in the event of a VFD failure, the motor wires can be swapped with the VFD wires to connect directly to power and bypass the VFD.

The City does not want a bypass switch on the VFD that allows anyone to return the pump to full speed (pre-retrofit) operation if there is a problem or assumed to be a problem with the VFD. This could result in a significant loss of energy savings and potential problems with other equipment that might have been calibrated for lower flows. The wire swap VFD bypass would only be done by qualified city personnel.

9. Q: Either Danfoss VLT drives FC102 or FC202 are listed but the FC202 (Aqua Drive) does not have BACnet capability.

A: Yes. Only the FC102 has embedded BACnet. The FC202 doesn’t nor can Danfoss’ optional BACnet MCA 109 plug-in be used with the FC202. If you intend to use the FC202 drive, you will need to include an external conversion device. This can be in the controller used or a separate conversion gateway that can translate between the VFD and BACnet.

Note: If using the FC102, the embedded BACnet that comes standard with the FC102 is sufficient. You do not need to include the optional MCA 109 “advanced” BACnet plug-in.
10. Q: Since the rebate applications have already been submitted and approved, are we still required to “provide documentation of energy savings calculations acceptable to PG&E and their 3rd party consultants”? Who are the 3rd party consultants?

A: While the initial rebate applications have been approved by PG&E, you are still required to provide energy savings calculations and documentation. The City may revisit with PG&E the baseline for savings once the new impellers are installed in order to obtain a larger rebate. Your calculation methodology and documentation would be used for any new submittal. The original baseline information and estimated percent reductions in pump speeds included with this document should provide you with enough data to prepare your own savings calculations. The 3rd party consultants are generally engineering firms hired by PG&E to perform the pre and post inspections, review the adequacy of the assumptions and calculation and accuracy of the savings estimates for application approval and final determination of rebate to be paid.

11. Q: Please provide more detail on the filter required for “replumb and add a 100 sq ft cartridge filter for the chemical controller to ensure proper operation at low speeds.”

A: The cartridge filter should be NSF certified and the filter element should be made of polyester, not paper. The feed for the chemical sensor will need to be rerouted to pull water ahead of the sand filters at the Burgess swim center in order to have sufficient flow at low speeds.

Note: It is not necessary for the Belle Haven pool (Vacuum DE filter.) There should be sufficient pressure even at low speeds. Remove the filter requirement from the Belle Haven bid.

12. Q: Does the City accept and install equipment that is not UL listed?

A: The City stated that “the design, installation and operation of the complete system shall comply with all applicable laws, codes and standards that govern the work at these facilities. The City of Menlo Park is relying upon the Proposer to be knowledgeable of all such requirements and have included compliance with same in the proposal price.”

This may mean some equipment such as high voltage equipment may require UL or alternative rating and other equipment may not. The City is relying on and will hold the Proposer accountable for using materials and performing work to applicable laws, codes and standards.
**Additional Notes from the Walk-Through**

1. Belle Haven Pool: The scope of work calls for new flow meters, vacuum and pressure gauges. A new electronic flow meter, vacuum and pressure gauges have already been installed on their own panel. You do not need to replace these. However, the City would like them moved to the new control panel. A new flow meter should be installed on the heater loop. It does not have to be electronic.

2. The time clock (whether standalone or built into a controller) should not lose programming in event of a power failure. It should maintain the correct time and scheduling that should resume automatically when power is restored. It should either have a built-in battery backup or external UPS.

3. Any controller used to control the VFD and interface with other equipment should be able to automatically reboot after a power outage and resume normal operation.

4. The voltage to the motor at Belle Haven is 212 VAC, not 460. The VFD should be rated for 200-240 VAC, not 460 VAC as it says on page 42 of the Belle Haven RFP. The specification should read “Danfoss VLT Drive FC102 or FC202, VFD, NEMA 12, 25HP, 200-240 VAC, 3 phase and...”

**Clarifications to the Burgess and Belle Haven RFPs handed out during the walk-through:**

Statement (from page 41 in the RFP):

1. **Current Language (both RFPs):**

   *The new equipment will interface with a new Energy Management System being installed under a separate contract. VFD to be BACnet communication capable either through native ability or BACNET communications card for interfacing with new EE management equipment.*

Add:

The purpose of the interface is to provide the ability to:

- change the pool schedules from the new Energy Management System (EMS) in order to switch between the open high bather, low bather and pool closed flow rates. (The EMS should not be able to change the pump speeds but simply select the correct speed preprogrammed into the VFD.)

- log energy, other data and alarm states generated by the VFD.

The contractor is not required to do the EMS BACNet programming.

2. **Burgess RFP:**

Language from Belle Haven RFP added to Burgess RFP to provide a consistent description. Bidders should propose control systems and equipment used for each pool that are the same where applicable.
1. Install and commission a new Aquatic Energy Management System (AEMS) that will include:

- A program logic controller and related equipment in NEMA 3R rated enclosures custom designed, built, installed and commissioned for the specific energy management needs of the facility.

- Danfoss VLT Drives FC102 or FC202, VFD, NEMA 12, 20HP (Instructional Pool) and 25HP (Lap Pool), 460 VAC, 3 phase and includes:
  - Factory 5-year onsite parts and labor warranty.
  - Above unit to include factory conformal coating option.

(Note: The Burgess pool pumps operate at 460 VAC, Belle Haven pool operates at 212 VAC.)

3. Item 4, both RFPs:

"The hydraulic system is to be tuned-up to reduce system pressure to be done ahead of the utility rebate pre-inspection for the VFD retrofit."

Note: Pre-inspections have already occurred. However, PG&E may reassess base case after impellers have been replaced. There may be a new pre-inspection or a new base case established at post-inspection with VFD running at full speed.

Information Requested on Energy Savings Calculation Assumptions

Burgess Pools:

### Instructional Pool

<table>
<thead>
<tr>
<th>Flow Rates</th>
<th>% of Code (6 hour turn)</th>
<th>GPM</th>
<th>%RPM</th>
<th>Hz</th>
<th>Assumed hours of Operation</th>
<th>Measured kW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Case</td>
<td>122%</td>
<td>456</td>
<td>100%</td>
<td>60</td>
<td>8760</td>
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<td>High Bather (Right Size)</td>
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<tr>
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<td>27</td>
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</tr>
</tbody>
</table>

### Lap Pool

<table>
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<th>Flow Rates</th>
<th>% of Code (6 hour turn)</th>
<th>GPM</th>
<th>%RPM</th>
<th>Hz</th>
<th>Assumed hours of Operation</th>
<th>Measured kW</th>
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</thead>
<tbody>
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<td>401</td>
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<td>30</td>
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</tr>
</tbody>
</table>

Burgess Aquatic Center Lap and Instructional Pools and Belle Haven Pool Variable Frequency Drive Upgrades
Belle Haven Pool:

<table>
<thead>
<tr>
<th>Flow Rates</th>
<th>% of Code (8 hour turn)</th>
<th>GPM</th>
<th>%RPM</th>
<th>Hz</th>
<th>Assumed hours of Operation</th>
<th>Measured kW</th>
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<td>High Bather (Right Size)</td>
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</table>

Notes:
1. The currently approved PG&E rebate for the Burgess Pools project is for savings of 107,575 kWh. That includes 86,597 for both pool pump retrofits and 20,978 for the UV sanitizer retrofit.

2. The currently approved PG&E rebate for the Belle Haven Pool project is for savings of 58,183 kwhs.

3. The measured kW was obtained using an RMS power meter and adjusted to reflect the average kW across the filter cycle.

4. The flow rates at reduced speeds are based on the manufacturer’s pump curve for each pump and impeller trim. The flow rates are assumed to be set when the filter is clean (maximum flow rate for filter cycle.) The variation in the percentage reduction in the code required flow rate from the percent reduction in pump speed reflects the level of pump oversizing.

5. For purposes of the rebate application, the heater priority speed when the pool is closed was assumed to be the low bather speed. Therefore, in the tables above, the annual hours of operation at low bather speed already include the nighttime (closed pool) operation of the heaters. These hours of operation have already been accepted by PG&E and will be used for the final energy savings calculations.

When the retrofit equipment is commissioned, the heater priority speed may be able to be set lower for increased energy savings.

As stated during the walk-through, nighttime (closed pool) heater operation was assumed to be 2 hours per night 6 winter months and 1 hour per night 6 summer months. However, as stated above, this has already been accounted for in the provided hours of operation at each speed. Pool covers are used and the Instructional pool is enclosed by an inflatable dome in the winter, generally reducing the amount of heat loss and runtime of the heaters.
EXHIBIT “B”

DISPUTE RESOLUTION

B1.0 All claims, disputes and other matters in question between the FIRST PARTY and CITY arising out of, or relating to, the contract documents or the breach thereof, shall be resolved as follows:

B2.0 Mediation

B2.1 The parties shall attempt in good faith first to mediate such dispute and use their best efforts to reach agreement on the matters in dispute. After a written demand for non-binding mediation, which shall specify in detail the facts of the dispute, and within ten (10) days from the date of delivery of the demand, the matter shall be submitted to a mutually agreeable mediator. The Mediator shall hear the matter and provide an informal opinion and advice, none of which shall be binding upon the parties, but is expected by the parties to help resolve the dispute. Said informal opinion and advice shall be submitted to the parties within twenty (20) days following written demand for mediation. The Mediator’s fee shall be shared equally by the parties. If the dispute has not been resolved, the matter shall be submitted to arbitration in accordance with Paragraph 3.1.

B3.0 Arbitration

B3.1 Any dispute between the parties that is to be resolved by arbitration as provided in Paragraph 2.1 shall be settled and decided by arbitration conducted by the American Arbitration Association in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association, as then in effect, except as provided below. Any such arbitration shall be held before three arbitrators who shall be selected by mutual agreement of the parties; if agreement is not reached on the selection of the arbitrators within fifteen (15) days, then such arbitrator(s) shall be appointed by the presiding Judge of the court of jurisdiction of the contract.

B3.2 The provisions of the Construction Industry Arbitration Rules of the American Arbitration Association shall apply and govern such arbitration, subject, however, to the following:

B3.3 Any demand for arbitration shall be writing and must be made within a reasonable time after the claim, dispute or other matter in question as arisen. In no event shall the demand for arbitration be made after the date that institution of legal or equitable proceedings based on such claim, dispute or other matter would be barred by the applicable statute of limitations.

B3.4 The arbitrator or arbitrators appointed must be former or retired judges, or attorneys at law with last ten (10) years’ experience in construction litigation.

B3.5 All proceedings involving the parties shall be reported by a certified shorthand court reporter, and written transcripts of the proceedings shall be prepared and made available to the parties.

B3.6 The arbitrator or arbitrators must be made within and provide to the parties factual findings and the reasons on which the decisions of the arbitrator or arbitrators is based.

B3.7 Final decision by the arbitrator or arbitrators must be made within ninety (90) days from the date of the arbitration proceedings are initiated.

B3.8 The prevailing party shall be awarded reasonable attorneys’ fees, expert and non-expert witness costs and expenses, and other costs and expenses incurred in connection with the arbitration, unless the arbitrator or arbitrators for good cause determine otherwise.

B3.9 Costs and fees of the arbitrator or arbitrators shall be borne by the non-prevailing party, unless the arbitrator or arbitrators for good cause determine otherwise.

B3.10 The award or decision of the arbitrator or arbitrators, which may include equitable relief, shall be final, and judgment may be entered on it in accordance with applicable law in any court having jurisdiction over the matter.
CITY OF MENLO PARK  
STATE OF CALIFORNIA

PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS:

WHEREAS, the City of Menlo Park, California, a municipal corporation, has awarded to ________________ Knorr Systems, Inc., hereinafter designated as the "Principal," a Contract for the "BELLE HAVEN POOL VARIABLE FREQUENCY DRIVE UPGRADES AND BURGESS AQUATIC CENTER LAP AND INSTRUCTIONAL POOLS VARIABLE FREQUENCY DRIVE UPGRADES", and,

WHEREAS, said Principal is required to furnish a bond in connection with said Contract, to secure payment of claims of laborers, mechanics, or material persons employed on work under said Contract, as provided by law,

NOW, THEREFORE, we the undersigned Principal and ________________ WESTERN SURETY COMPANY as Surety, are held and firmly bound unto the City of Menlo Park in the sum of ________________ Sixty Thousand and no/100 DOLLARS ($60,000.00), said sum being equal to the estimated amount payable by said City of Menlo Park under the terms of the Contract, for which payment well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, or assigns jointly and severally, firmly by these presents.

THE CONDITIONS OF THIS OBLIGATION ARE SUCH that if said Principal, his/her or its heirs, executors, administrators, successors, or assigns, or subcontractors shall fail to pay for any material, provisions, provender or other supplies, implements or machinery used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or for amounts due under the Unemployment Insurance Code with respect to such work or labor or for any amounts required to be deducted, withheld, and paid over to the Franchise Tax Board from the wages of employees of the Contractor and his/her subcontractors pursuant to the Revenue and Taxation Code, with respect to such work and labor, the Surety or Sureties hereon will pay for the same in an amount not exceeding the sum specified in this bond, otherwise the above obligation shall be voided. In case suit is brought upon this bond, said Surety will pay a reasonable attorney's fee to be fixed by the court.

This bond shall inure to the benefit of any and all persons, companies and corporations entitled to file claims under Section 3181 of the Civil Code of the State of California so as to give a right of action to them or their assigns in any suit brought upon this bond.

Said Surety, for value received, hereby stipulates and agrees that, in accordance with the Plan, Standard Specifications, Special Provisions and other Contract Documents, no change, extension of time, alteration or addition to the terms of the Contract, or to the work to be performed thereunder, or to the specifications accompanying the same, shall in anywise affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the specifications.
IN WITNESS WHEREOF, the above-bounded parties have executed this instrument under their seals this 19th day of November, 2014, the name and corporate seals of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

(Corporate Seal)  Principal: Knorr Systems, Inc.

By: [Signature]

Title: [Name]

(Acknowledgment)  Surety: WESTERN SURETY COMPANY

By: [Signature]

Attorneys-in-fact

Title: [Name]

(Corporate Seal)  (Witness)

(Acknowledgment)  (Witness)

(Signature)

(Witness)

Approved as to form on behalf of "City":

Signature

Title of official: 
NOTE TO SURETY COMPANY: The following form of acknowledgment should be used. If any other form of acknowledgment is used, there must be submitted a certified copy of unrevoked resolution of authority for the attorney-in-fact.

NOTARIAL ACKNOWLEDGMENT OF ATTORNEY-IN-FACT OF SURETY

South Dakota
STATE OF

} ss.
COUNTY OF Minnehaha

On November 19, 2014, before me, a Notary Public, personally appeared B. Arp, Ass't Sec., personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

C. BENDT
My Commission Expires 6-27-2017
Notary Public

(Seal)
POWER OF ATTORNEY - CERTIFIED COPY

Know All Men By These Presents, that WESTERN SURETY COMPANY, a corporation duly organized and existing under the laws of the State of South Dakota, and having its principal office in Sioux Falls, South Dakota (the "Company"), does by these presents make, constitute and appoint [Name] its true and lawful attorney(s)-in-fact, with full power and authority hereby conferred, to execute, acknowledge and deliver for and on its behalf as Surety, bonds for:

Principal: Knorr Systems, Inc.
Obligee: City of Menlo Park
Amount: $500,000.00

and to bind the Company thereby as fully and to the same extent as if such bonds were signed by the Senior Vice President, sealed with the corporate seal of the Company and duly attested by its Secretary, hereby ratifying and confirming all that the said attorney(s)-in-fact may do within the above stated limitations. Said appointment is made under and by authority of the following bylaw of Western Surety Company which remains in full force and effect.

"Section 7. All bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, any Assistant Secretary, Treasurer, or any Vice President or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile."

All authority hereby conferred shall expire and terminate, without notice, unless used before midnight of [Date], 2015, but until such time shall be irrevocable and in full force and effect.

In Witness Whereof, Western Surety Company has caused these presents to be signed by its Vice President, Paul T. Bruflat, and its corporate seal to be affixed this [Day] day of [Month], 2014.

WESTERN SURETY COMPANY

Paul T. Bruflat, Vice President

STATE OF SOUTH DAKOTA
COUNTY OF MINNEHAHA

On this [Day] day of [Month], in the year [Year], before me, a notary public, personally appeared Paul T. Bruflat, who being to me duly sworn, acknowledged that he signed the above Power of Attorney as the aforesaid officer of WESTERN SURETY COMPANY and acknowledged said instrument to be the voluntary act and deed of said corporation.

Notary Public - South Dakota

I the undersigned officer of Western Surety Company, a stock corporation of the State of South Dakota, do hereby certify that the attached Power of Attorney is in full force and effect and is irrevocable, and furthermore, that Section 7 of the bylaws of the Company as set forth in the Power of Attorney is now in force.

In testimony whereof, I have hereunto set my hand and seal of Western Surety Company this [Day] day of [Month], 2014.

WESTERN SURETY COMPANY

Paul T. Bruflat, Vice President
CITY OF MENLO PARK
STATE OF CALIFORNIA

PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS:

WHEREAS, the City of Menlo Park, California, a municipal corporation, has awarded to _____________________________

Knorr Systems, Inc., hereinafter designated as the "Principal," a Contract for the "BELLE HAVEN POOL VARIABLE FREQUENCY DRIVE UPGRADES

AND BURGESS AQUATIC CENTER LAP AND INSTRUCTIONAL POOLS VARIABLE FREQUENCY

DRIVE UPGRADES"; and,

WHEREAS, said Principal is required under the terms of said Contract to furnish a bond for the faithful performance of said Contract,

NOW, THEREFORE, we the Principal, and _________________ as Surety, are held and firmly bound unto the City of Menlo Park in the penal sum of _________________

Sixty Thousand and no/100 DOLLARS ($ 60,000.00),

lawful money of the United States for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, or assigns jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the above bounded Principal, his/her or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in said Contract and any alteration thereof made as therein provided, on his/her or their part, to be kept and performed at the time and in the manner therein specified and in all respects according to their true intent and meaning; and shall defend, indemnify and save harmless the City of Menlo Park, its officers and agents as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and virtue.

Surety, for value received hereby stipulates and agrees that, in accordance with the Plans, Standard Specifications, Contract Provisions and other Contract Documents, no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the specifications accompanying the same shall in any wise affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or additions to the terms of the Contract or to the work or to the specifications.
Approved as to form on behalf of "City": [Signature]

Title of official: [City Attorney]

IN WITNESS WHEREOF, the above bounded parties have executed this instrument under their seals this 19th day of November, 2014, the name and corporate seals of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

(Corporate Seal)

Principal: Knorr Systems, Inc.

By: [Signature]

Title: ________________________________

(Acknowledgment)

(Corporate Seal)

Surety: WESTERN SURETY COMPANY

By: [Signature]

Attorneys-in-fact

Title: B. Arp, Ass't Sec.

(Acknowledgment)

NOTE TO SURETY COMPANY: The following form of acknowledgment should be used. If any other form of acknowledgment is used, there must be submitted a certified copy of unrevoked resolution of authority for the attorney-in-fact.

NOTARIAL ACKNOWLEDGMENT OF ATTORNEY-IN-FACT OF SURETY

STATE OF CALIFORNIA

COUNTY OF Minnehaha

On November 19, 2014, before me, C. Bendt, a Notary Public, personally appeared, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that /they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

(Seal)

C. Bendt
Notary Public

My Commission Expires 6-27-2017
POWER OF ATTORNEY - CERTIFIED COPY

Know All Men By These Presents, that WESTERN SURETY COMPANY, a corporation duly organized and existing under the laws of the State of South Dakota, and having its principal office in Sioux Falls, South Dakota (the “Company”), does by these presents make, constitute and appoint E. Arp, its true and lawful attorney(s)-in-fact, with full power and authority hereby conferred, to execute, acknowledge and deliver for and on its behalf as Surety, bonds for:

Principal: Knorr Systems, Inc.

Obligee: City of Menlo Park

Amount: $500,000.00

and to bind the Company thereby as fully and to the same extent as if such bonds were signed by the Senior Vice President, sealed with the corporate seal of the Company and duly attested by its Secretary, hereby ratifying and confirming all that the said attorney(s)-in-fact may do within the above stated limitations. Said appointment is made under and by authority of the following bylaw of Western Surety Company which remains in full force and effect.

"Section 7. All bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, any Assistant Secretary, Treasurer, or any Vice President or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile."

All authority hereby conferred shall expire and terminate, without notice, unless used before midnight of April 20, 2015, but until such time shall be irrevocable and in full force and effect.

In Witness Whereof, Western Surety Company has caused these presents to be signed by its Vice President, Paul T. Bruflat, and its corporate seal to be affixed this 19th day of November, 2014.

WESTERN SURETY COMPANY

Paul T. Bruflat, Vice President

STATE OF SOUTH DAKOTA
COUNTY OF MINNEHAHA

On this 19th day of November, in the year 2014, before me, a notary public, personally appeared Paul T. Bruflat, who being to me duly sworn, acknowledged that he signed the above Power of Attorney as the aforesaid officer of WESTERN SURETY COMPANY and acknowledged said instrument to be the voluntary act and deed of said corporation.

S. PETRIK
NOTARY PUBLIC - SOUTH DAKOTA

My Commission Expires August 11, 2016

I the undersigned officer of Western Surety Company, a stock corporation of the State of South Dakota, do hereby certify that the attached Power of Attorney is in full force and effect and is irrevocable, and furthermore, that Section 7 of the bylaws of the Company as set forth in the Power of Attorney is now in force.

In testimony whereof, I have hereunto set my hand and seal of Western Surety Company this 19th day of November, 2014.

WESTERN SURETY COMPANY

Paul T. Bruflat, Vice President
**CERTIFICATE OF LIABILITY INSURANCE**

**DATE (MMDDYYYY)**: 11/13/2014

**PRODUCER**

DFI - DiGerolamo Family Insurance Services  
2027 Hamner Ave  
Norco, CA 92860  
License #: 0D26889

**INSURED**

KNORR SYSTEMS, INC.  
2221 S Standard Ave  
Santa Ana, CA 92707

**COVERAGES**

<table>
<thead>
<tr>
<th>TYPE OF INSURANCE</th>
<th>POLICY NUMBER</th>
<th>LIMITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A COMMERCIAL GENERAL LIABILITY X CLAIMS-MADE X OCCUR</td>
<td>Y HGL0038558</td>
<td>06/23/2014</td>
</tr>
<tr>
<td>X CONTRACTUAL</td>
<td></td>
<td></td>
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<tr>
<td>X XCU-BF PD</td>
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<td>06/23/2014</td>
</tr>
<tr>
<td>X HIRED AUTOS SCHEDULED AUTOS NON-OWNED AUTOS</td>
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<td></td>
</tr>
<tr>
<td>C UMBRELLA LIABILITY X OCCUR CLAIMS-MADE</td>
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<td>06/23/2014</td>
</tr>
<tr>
<td>X EXCESS LIABILITY</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D WORKERS COMPENSATION AND EMPLOYER'S LIABILITY</td>
<td>3300067030-141</td>
<td>06/06/2014</td>
</tr>
</tbody>
</table>

**CERTIFICATE HOLDER**

City of Menlo Park  
Public Works  
701 Laurel St  
Menlo Park, CA 94025

**CANCELLATION**

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

**AUTHORIZED REPRESENTATIVE**

Suzie Marie Motes

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COMMERCIAL AUTO GOLD ENDORSEMENT

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

SECTION II – LIABILITY COVERAGE

A. COVERAGE

1. WHO IS AN INSURED

The following is added:

d. Any organization, other than a partnership or joint venture, over which you maintain ownership or a majority interest on the effective date of this Coverage Form, if there is no similar insurance available to that organization.

e. Any organization you newly acquire or form other than a partnership or joint venture, and over which you maintain ownership of a majority interest. However, coverage under this provision does not apply:

(1) If there is similar insurance or a self-insured retention plan available to that organization; or

(2) To “bodily injury” or “property damage” that occurred before you acquired or formed the organization.

f. Any volunteer or employee of yours while using a covered "auto" you do not own, hire or borrow in your business or your personal affairs. Insurance provided by this endorsement is excess over any other insurance available to any volunteer or employee.

g. Any person, organization, trustee, estate or governmental entity with respect to the operation, maintenance or use of a covered “auto” by an insured, if:

(1) You are obligated to add that person, organization, trustee, estate or governmental entity as an additional insured to this policy by:

(a) an expressed provision of an “insured contract”, or written agreement; or

(b) an expressed condition of a written permit issued to you by a governmental or public authority.

(2) The “bodily injury” or “property damage” is caused by an “accident” which takes place after:

(a) You executed the “insured contract” or written agreement; or

(b) the permit has been issued to you.

2. COVERAGE EXTENSIONS

a. Supplementary Payments.

Subparagraphs (2) and (4) are amended as follows:

(2) Up to $2500 for cost of bail bonds (including bonds for related traffic law violations) required because of an “accident” we cover. We do not have to furnish these bonds.

(4) All reasonable expenses incurred by the “Insured” at our request, including actual loss of earning up to $500 a day because of time off from work.
SECTION III – PHYSICAL DAMAGE COVERAGE

A. COVERAGE

The following is added:

5. Hired Auto Physical Damage

   a. Any "auto" you lease, hire, rent or borrow from someone other than your employees or partners or
      members of their household is a covered "auto" for each of your physical damage coverages.

   b. The most we will pay for "loss" in any one "accident" is the smallest of:

      (1) $50,000

      (2) The actual cash value of the damaged or stolen property as of the time of the "loss"; or

      (3) The cost of repairing or replacing the damaged or stolen property with other property of like
          kind and quality.

      If you are liable for the "accident", we will also pay up to $500 per "accident" for the actual loss of
      use to the owner of the covered "auto".

   c. Our obligation to pay for, repair, return or replace damaged or stolen property will be reduced by
      an amount that is equal to the amount of the largest deductible shown for any owned "auto" for
      that coverage. However, any Comprehensive Coverage deductible shown in the Declarations
      does not apply to "loss" caused by fire or lightning.

   d. For this coverage, the insurance provided is primary for any covered "auto" you hire without a
      driver and excess over any other collectible insurance for any covered "auto" that you hire with a
      driver.

6. Rental Reimbursement Coverage

   We will pay up to $75 per day for up to 30 days, for rental reimbursement expenses incurred by you
   for the rental of an "auto" because of "loss" to a covered "auto". Rental Reimbursement will be based
   on the rental of a comparable vehicle, which in many cases may be substantially less than $75 per
   day, and will only be allowed for a period of time it should take to repair or replace the vehicle with
   reasonable speed and similar quality, up to a maximum of 30 days. We will also pay up to $500 for
   reasonable and necessary expenses incurred by you to remove and replace your materials and
   equipment from the covered "auto".

   If "loss" results from the total theft of a covered "auto" of the private passenger type, we will pay under
   this coverage only that amount of your rental reimbursement expenses which is not already provided
   under paragraph 4. Coverage Extension.

7. Lease Gap Coverage

   If a long-term leased "auto" is a covered "auto" and the lessor is named as an Additional Insured –
   Lessor, In the event of a total loss, we will pay your additional legal obligation to the lessor for any
   difference between the actual cash value of the "auto" at the time of the loss and the "outstanding
   balance" of the lease.

   "Outstanding balance" means the amount you owe on the lease at the time of loss less any amounts
   representing taxes; overdue payments; penalties, interest or charges resulting from overdue
   payments; additional mileage charges; excess wear and tear charges; and lease termination fees.

B. EXCLUSIONS

The following is added to Paragraph 3

The exclusion for "loss" caused by or resulting from mechanical or electrical breakdown does not
apply to the accidental discharge of an airbag.
Paragraph 4 is replaced with the following:

4. We will not pay for "loss" to any of the following:

   a. Tapes, records, disks or other similar audio, visual or data electronic devices designed for use
      with audio, visual or data electronic equipment.
   b. Equipment designed or used for the detection or location of radar.
   c. Any electronic equipment that receives or transmits audio, visual or data signals.

Exclusion 4.c does not apply to:

(1) Electronic equipment that receives or transmits audio, visual or data signals, whether or not
    designed solely for the reproduction of sound, if the equipment is permanently installed in the
    covered "auto" at the time of the "loss" and such equipment is designed to be solely operated
    by use of the power from the "auto's" electrical system, in or upon the covered "auto";

(2) Any other electronic equipment that is:

   (a) Necessary for the normal operation of the covered "auto" or the monitoring of the covered
       "auto's" operating system; or
   (b) An integral part of the same unit housing any sound reproducing equipment described in (1)
       above and permanently installed in the opening of the dash or console of the covered "auto"
       normally used by the manufacturer for installation of a radio.

D. DEDUCTIBLE

The following is added: No deductible applies to glass damage if the glass is repaired rather than replaced.

SECTION IV. BUSINESS AUTO CONDITIONS

A. LOSS CONDITIONS

Item 2.a. and b. are replaced with:

2. Duties In The Event of Accident, Claim, Suit, or Loss

   a. You must promptly notify us. Your duty to promptly notify us is effective when any of your
      executive officers, partners, members, or legal representatives is aware of the accident, claim,
      "suit", or loss. Knowledge of an accident, claim, "suit", or loss, by other employee(s) does not
      imply you also have such knowledge.

   b. To the extent possible, notice to us should include:

      (1) How, when and where the accident or loss took place;
      (2) The names and addresses of any injured persons and witnesses; and
      (3) The nature and location of any injury or damage arising out of the accident or loss.

The following is added to 5.

We waive any right of recovery we may have against any additional insured under Coverage A. 1. Who Is An Insured g., but only as respects loss arising out of the operation, maintenance or use of a
covered "auto" pursuant to the provisions of the "insured contract", written agreement, or permit.

B. GENERAL CONDITIONS

9. is added

9. UNINTENTIONAL FAILURE TO DISCLOSE HAZARDS

Your unintentional failure to disclose any hazards existing at the effective date of your policy will
not prejudice the coverage afforded. However, we have the right to collect additional premium for
any such hazard.

COMMON POLICY CONDITIONS

2.b. is replaced by the following:

   b. 60 days before the effective date of cancellation if we cancel for any other reason.
THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – SCHEDULED PERSON OR ORGANIZATION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

<table>
<thead>
<tr>
<th>Name Of Additional Insured Person(s) Or Organization(s):</th>
<th>Location(s) Of Covered Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANY PERSON OR ORGANIZATION WITH WHOM YOU HAVE AGREED IN A WRITTEN CONTRACT, THAT SUCH PERSON OR ORGANIZATION SHOULD BE ADDED AS AN ADDITIONAL INSURED ON YOUR POLICY, PROVIDED SUCH WRITTEN CONTRACT IS FULLY EXECUTED PRIOR TO AN &quot;OCURRENCE&quot; IN WHICH COVERAGE IS SOUGHT UNDER THIS POLICY.</td>
<td>Any and all covered locations</td>
</tr>
</tbody>
</table>

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

A. Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.
THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

DESIGNATED CONSTRUCTION PROJECT(S) GENERAL AGGREGATE LIMIT AND GENERAL AGGREGATE FOR ALL CONSTRUCTION PROJECTS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

<table>
<thead>
<tr>
<th>SCHEDULE</th>
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<tbody>
<tr>
<td><strong>Designated Construction Projects:</strong></td>
</tr>
<tr>
<td><strong>Limits:</strong></td>
</tr>
<tr>
<td>Designated Construction Project General Aggregate Limit</td>
</tr>
<tr>
<td>General Aggregate For All Projects Combined</td>
</tr>
</tbody>
</table>

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

A. For all sums which the insured becomes legally obligated to pay as damages caused by “occurrences” under COVERAGE A (SECTION I), and for all medical expenses caused by accidents under COVERAGE C (SECTION I), which can be attributed only to ongoing operations at a single designated construction project shown in the Schedule above:

1. A separate Designated Construction Project General Aggregate Limit applies to each designated construction project, and that limit is equal to the amount of the General Aggregate Limit shown in the Declarations.

2. The Designated Construction Project General Aggregate Limit is the most we will pay for the sum of all damages under COVERAGE A, except damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard", and for medical expenses under COVERAGE C regardless of the number of:
   a. Insureds;
   b. Claims made or "suits" brought; or
   c. Persons or organizations making claims or bringing "suits".
3. Any payments made under COVERAGE A for damages or under COVERAGE C for medical expenses shall reduce the Designated Construction Project General Aggregate Limit for that designated construction project. Such payments shall not reduce the General Aggregate Limit shown in the Declarations nor shall they reduce any other Designated Construction Project General Aggregate Limit for any other designated construction project shown in the Schedule above.

4. The limits shown in the Declarations for Each Occurrence, Damage To Premises Rented To You and Medical Expense continue to apply. However, instead of being subject to the General Aggregate Limit shown in the Declarations, such limits will be subject to the applicable Designated Construction Project General Aggregate Limit.

B. For all sums which the insured becomes legally obligated to pay as damages caused by "occurrences" under COVERAGE A (SECTION I), and for all medical expenses caused by accidents under COVERAGE C (SECTION II), which cannot be attributed only to ongoing operations at a single designated construction project shown in the Schedule above:

1. Any payments made under COVERAGE A for damages or under COVERAGE C for medical expenses shall reduce the amount available under the General Aggregate Limit or the Products-Completed Operations Aggregate Limit, whichever is applicable; and

2. Such payments shall not reduce any Designated Construction Project General Aggregate Limit.

C. The most we will pay as damages caused by "occurrences" for all Construction Projects whether designated or not is the General Aggregate For All Construction Projects Combined Limit shown in the Schedule above.

D. When coverage for liability arising out of the "products-completed operations hazard" is provided, any payments for damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard" will reduce the Products-Completed Operations Aggregate Limit, and not reduce the General Aggregate Limit nor the Designated Construction Project General Aggregate Limit.

E. If the applicable designated construction project has been abandoned, delayed, or abandoned and then restarted, or if the authorized contracting parties deviate from plans, blueprints, designs, specifications or timetables, the project will still be deemed to be the same construction project.

F. The provisions of Limits Of Insurance (SECTION III) not otherwise modified by this endorsement shall continue to apply as stipulated.
THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

AMENDMENT – OTHER INSURANCE
(PRIMARY AND NON-CONTRIBUTORY COVERAGE)

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS-COMPLETED OPERATIONS LIABILITY COVERAGE PART

Schedule of Additional Insured(s):

Any person or organization named in an Additional Insured endorsement attached to this policy with whom you have agreed, in a written contract, that such person or organization should be provided primary and non-contributory coverage, but only when such written contract is fully executed prior to an "occurrence" in which coverage is sought under this policy.

A. Paragraph C. of this endorsement replaces paragraph 4. Other Insurance of Section IV-Commercial General Liability Conditions, but only with respect to the insurance afforded to the additional insured(s) scheduled above.

B. Paragraph C. of this endorsement replaces paragraph 4. Other Insurance of Section IV-Products-Completed Operations Liability Conditions, but only with respect to the insurance afforded to the additional insured(s) scheduled above.

C. Other Insurance
Notwithstanding other valid and collectible insurance available to the insured for a loss we cover under the applicable Coverage Part to which this endorsement is modifying, this insurance is primary and non-contributory. However, this endorsement:

1. Applies only when you are required by contract, agreement or permit to provide primary and non-contributory coverage for the additional insured, provided such written contract, agreement or permit is fully executed prior to an "occurrence" in which coverage is sought under this policy, and

2. Does not apply to any claim, loss or liability due to the sole negligence of the additional insured.